



Full wwPDB EM Validation Report ⓘ

Apr 30, 2026 – 10:18 pm BST

PDB ID : 9QWQ / pdb_00009qwq
EMDB ID : EMD-53423
Title : Human vault protein - committed conformation
Authors : Lapenta, F.; Marechal, N.; Durand, A.; Aupic, J.; Cassetta, A.
Deposited on : 2025-04-15
Resolution : 4.45 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

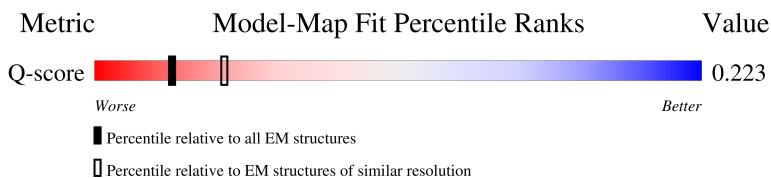
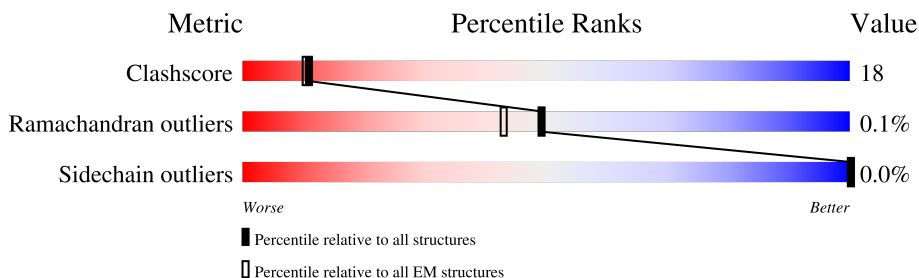
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 4.45 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.




























| Metric | Whole archive (#Entries) | EM structures (#Entries) | Similar EM resolution (#Entries, resolution range(Å)) |
|-----------------------|-----------------------------|-----------------------------|--|
| Clashscore | 229148 | 23984 | - |
| Ramachandran outliers | 224038 | 23583 | - |
| Sidechain outliers | 223484 | 23102 | - |
| Q-score | - | 25397 | 3027 (3.95 - 4.95) |

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 1 | A | 893 | 58% 30% 13% |
| 1 | AA | 893 | 58% 29% 13% |
| 1 | AB | 893 | 57% 30% 13% |
| 1 | AC | 893 | 57% 30% 13% |


























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| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|--|
| 1 | B | 893 |  |
| 1 | BA | 893 |  |
| 1 | BB | 893 |  |
| 1 | C | 893 |  |
| 1 | CA | 893 |  |
| 1 | CB | 893 |  |
| 1 | D | 893 |  |
| 1 | DA | 893 |  |
| 1 | DB | 893 |  |
| 1 | E | 893 |  |
| 1 | EA | 893 |  |
| 1 | EB | 893 |  |
| 1 | F | 893 |  |
| 1 | FA | 893 |  |
| 1 | FB | 893 |  |
| 1 | G | 893 |  |
| 1 | GA | 893 |  |
| 1 | GB | 893 |  |
| 1 | H | 893 |  |
| 1 | HA | 893 |  |
| 1 | HB | 893 |  |
| 1 | I | 893 |  |
| 1 | IA | 893 |  |
| 1 | IB | 893 |  |
| 1 | J | 893 |  |




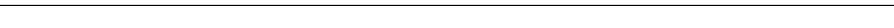
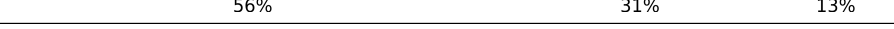









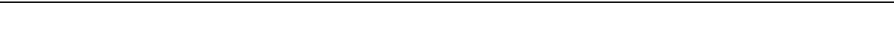



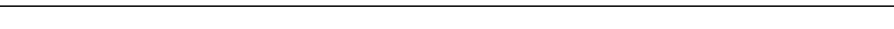





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| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|--|
| 1 | JA | 893 |  |
| 1 | JB | 893 |  |
| 1 | K | 893 |  |
| 1 | KA | 893 |  |
| 1 | KB | 893 |  |
| 1 | L | 893 |  |
| 1 | LA | 893 |  |
| 1 | LB | 893 |  |
| 1 | M | 893 |  |
| 1 | MA | 893 |  |
| 1 | MB | 893 |  |
| 1 | N | 893 |  |
| 1 | NA | 893 |  |
| 1 | NB | 893 |  |
| 1 | O | 893 |  |
| 1 | OA | 893 |  |
| 1 | OB | 893 |  |
| 1 | P | 893 |  |
| 1 | PA | 893 |  |
| 1 | PB | 893 |  |
| 1 | Q | 893 |  |
| 1 | QA | 893 |  |
| 1 | QB | 893 |  |
| 1 | R | 893 |  |
| 1 | RA | 893 |  |

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| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|--|
| 1 | RB | 893 |  |
| 1 | S | 893 |  |
| 1 | SA | 893 |  |
| 1 | SB | 893 |  |
| 1 | T | 893 |  |
| 1 | TA | 893 |  |
| 1 | TB | 893 |  |
| 1 | UA | 893 |  |
| 1 | UB | 893 |  |
| 1 | V | 893 |  |
| 1 | VA | 893 |  |
| 1 | VB | 893 |  |
| 1 | W | 893 |  |
| 1 | WA | 893 |  |
| 1 | WB | 893 |  |
| 1 | X | 893 |  |
| 1 | XA | 893 |  |
| 1 | XB | 893 |  |
| 1 | Y | 893 |  |
| 1 | YA | 893 |  |
| 1 | YB | 893 |  |
| 1 | Z | 893 |  |
| 1 | ZA | 893 |  |
| 1 | ZB | 893 |  |

2 Entry composition [i](#)

There is only 1 type of molecule in this entry. The entry contains 482118 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called Major vault protein.

| Mol | Chain | Residues | Atoms | | | | | AltConf | Trace |
|-----|-------|----------|---------------|-----------|-----------|-----------|---------|---------|-------|
| 1 | A | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | AA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | AB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | AC | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | B | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | BA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | BB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | C | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | CA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | CB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | D | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | DA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | DB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | E | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | EA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | EB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | F | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |

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| Mol | Chain | Residues | Atoms | | | | | AltConf | Trace |
|-----|-------|----------|---------------|-----------|-----------|-----------|---------|---------|-------|
| 1 | FA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | FB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | G | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | GA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | GB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | H | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | HA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | HB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | I | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | IA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | IB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | J | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | JA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | JB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | K | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | KA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | KB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | L | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | LA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | LB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | M | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |

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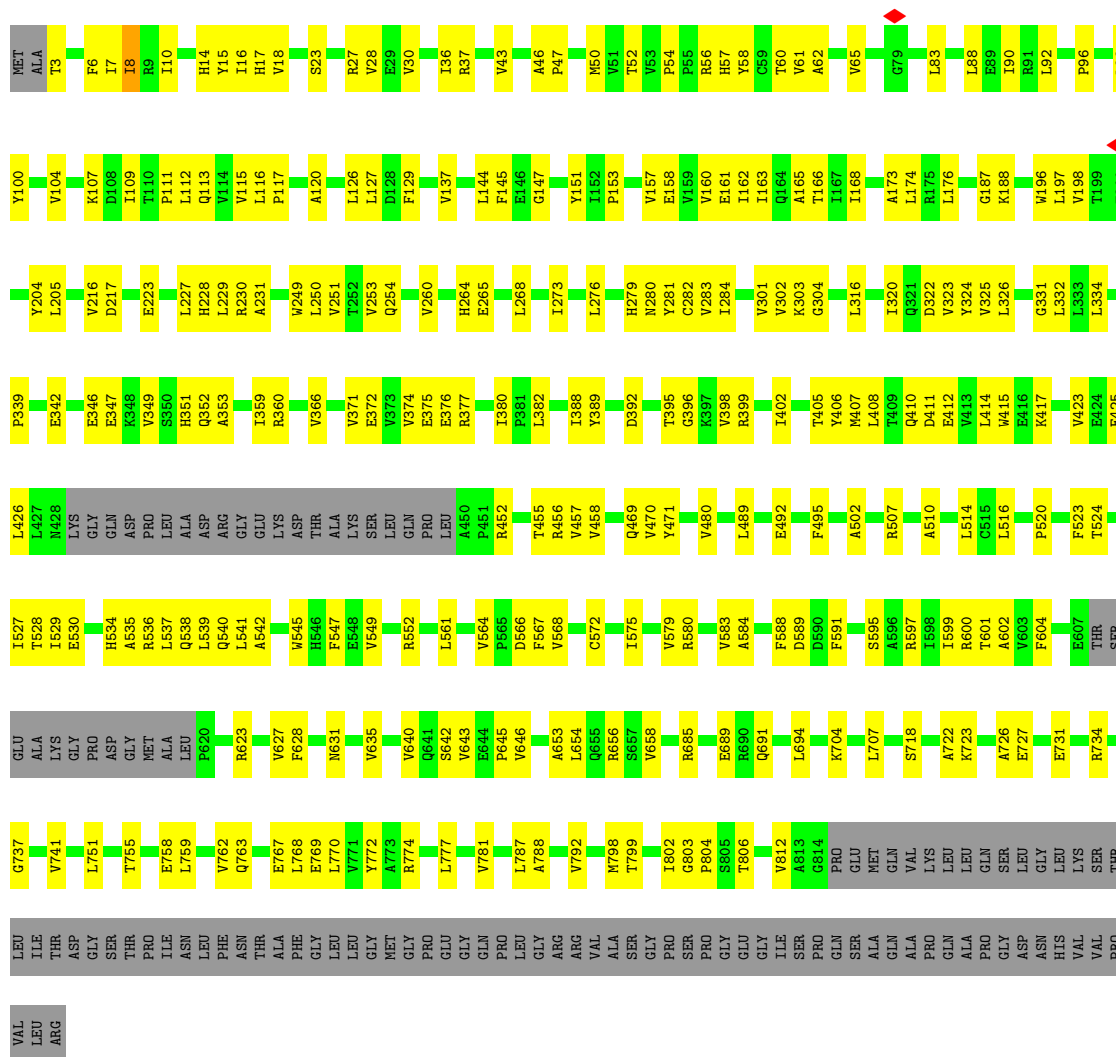
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| Mol | Chain | Residues | Atoms | | | | | AltConf | Trace |
|-----|-------|----------|---------------|-----------|-----------|-----------|---------|---------|-------|
| 1 | MA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | MB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | N | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | NA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | NB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | O | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | OA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | OB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | P | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | PA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | PB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | Q | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | QA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | QB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | R | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | RA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | RB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | S | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | SA | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | SB | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |
| 1 | T | 779 | Total 6181 | C 3890 | N 1105 | O 1176 | S 10 | 0 | 0 |

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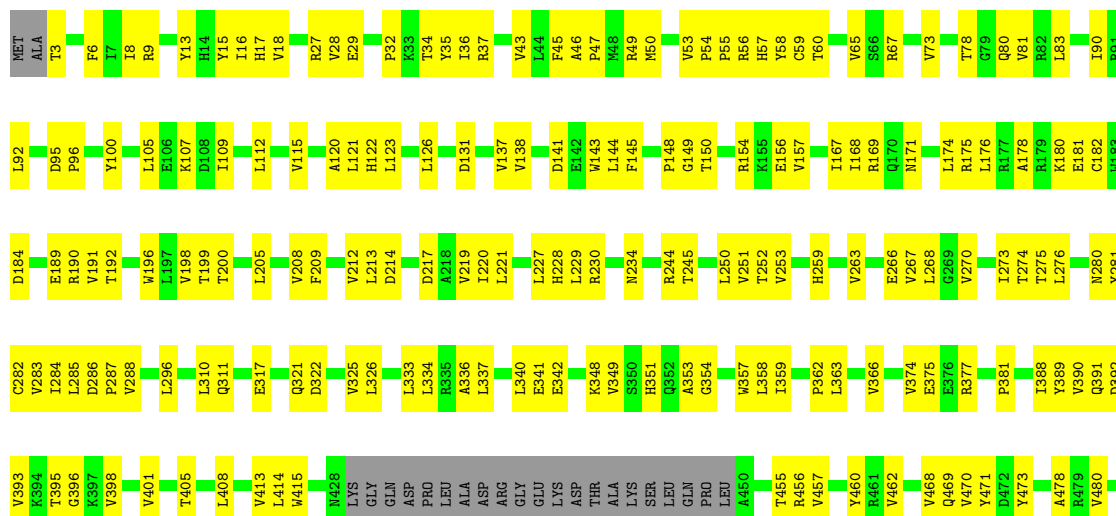
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| Mol | Chain | Residues | Atoms | | | | | AltConf | Trace |
|-----|-------|----------|-------|------|------|------|----|---------|-------|
| 1 | TA | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | TB | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | UA | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | UB | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | V | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | VA | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | VB | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | W | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | WA | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | WB | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | X | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | XA | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | XB | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | Y | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | YA | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | YB | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | Z | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | ZA | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |
| 1 | ZB | 779 | Total | C | N | O | S | 0 | 0 |
| | | | 6181 | 3890 | 1105 | 1176 | 10 | | |



• Molecule 1: Major vault protein

Chain AB:





| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| VAL | LEU | ARG | LEU | THR | ASP | GLY | SER | THR | PRO | ILE | ASN | PHE | THR | ALA | PHE | GLY | LEU | LEU | GLY | MET | GLY | PRO | GLU | GLY | GLY | ARG | ARG | VAL | ALA | SER | GLY | PRO | SER | PRO | GLN | SER | ALA | GLN | ALA | VAL | PRO | GLN | ALA | GLY | ASN | HIS | VAL | VAL | PRO | | | | |
| Q678 | V564 | Q682 | R685 | I575 | V579 | R580 | V583 | A584 | T587 | F588 | D589 | D590 | F591 | S595 | E607 | THR | SER | GLU | ALA | LYS | P505 | K506 | R507 | A510 | A513 | D521 | F522 | V526 | I529 | E530 | T531 | H534 | A535 | R536 | L537 | D538 | L539 | Q540 | Y543 | F547 | P548 | V549 | R552 | | | | | | | | | | |
| V470 | G396 | V471 | R479 | V480 | V481 | F482 | G483 | P484 | E485 | L486 | V487 | S488 | L489 | Q494 | F495 | T496 | V497 | S498 | L499 | L500 | S501 | A502 | P505 | K506 | R507 | A510 | A513 | D521 | F522 | V526 | I529 | E530 | T531 | H534 | A535 | R536 | L537 | D538 | L539 | Q540 | Y543 | F547 | P548 | V549 | R552 | | | | | | | | |
| P96 | L285 | D286 | P287 | R300 | V301 | V302 | F309 | Q315 | L326 | G331 | L332 | L333 | L334 | R335 | A336 | L337 | E424 | E425 | L426 | L427 | M428 | LYS | S350 | R233 | G127 | P235 | Q352 | A353 | L358 | I359 | R360 | G361 | P362 | Y365 | V366 | V374 | E375 | E376 | R377 | I380 | P381 | L382 | D383 | E384 | I388 | Y389 | V390 | R461 | V462 | P463 | H464 | A466 | |
| F97 | K188 | T192 | Y196 | L197 | A203 | Y204 | L205 | P206 | K207 | D208 | I109 | T110 | P111 | L112 | Q113 | V114 | V115 | L116 | T119 | A120 | H121 | H122 | L123 | L126 | L127 | D128 | F129 | V137 | L144 | F145 | E146 | G147 | I152 | V160 | E161 | I162 | I163 | A165 | T166 | I167 | I168 | Q172 | A173 | L174 | R175 | L176 | K180 | G187 | | | | | |
| E5 | L99 | E4 | Y100 | E103 | V104 | L105 | E106 | K107 | D108 | I109 | T110 | P111 | L112 | Q113 | V114 | V115 | L116 | T119 | A120 | H121 | H122 | L123 | L126 | L127 | D128 | F129 | V137 | L144 | F145 | E146 | G147 | I152 | V160 | E161 | I162 | I163 | A165 | T166 | I167 | I168 | Q172 | A173 | L174 | R175 | L176 | K180 | G187 | | | | | | |
| F6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| I7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| I8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| I10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Y13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| H14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Y15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| H17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| V28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| V30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| G31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R37 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P47 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| M50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| V51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T52 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| V53 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| H57 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C59 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| V61 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

• Molecule 1: Major vault protein

Chain BA:  55% 32% 13%

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| MET | ALA | T3 | F6 | I7 | I8 | R9 | I10 | Y13 | H14 | Y15 | I16 | H17 | R27 | V28 | E29 | V30 | G31 | P32 | I36 | V43 | L44 | F45 | A46 | P47 | M48 | R49 | M50 | V53 | H57 | T60 | N63 | P64 | V65 | S66 | R67 | A69 | L72 | V73 | L74 | V81 | R82 | L83 | A86 | I90 | | | | | | | | | | | |
| L92 | P96 | F97 | P101 | V104 | L105 | E106 | K107 | D108 | I109 | T110 | P111 | L112 | V115 | L116 | A120 | L121 | L126 | L127 | E146 | T150 | V159 | V160 | E161 | I163 | I168 | R169 | Q170 | N171 | Q172 | A173 | L174 | R175 | G187 | K188 | L197 | V198 | T199 | T200 | V201 | Y204 | L205 | P206 | A207 | V208 | | | | | | | | | | | |
| V212 | L213 | D214 | L215 | V216 | L221 | L227 | H228 | L229 | V251 | G243 | T256 | D262 | V263 | H264 | E265 | L268 | G269 | V270 | T273 | T274 | L275 | L276 | Y281 | C282 | V283 | L284 | L285 | V288 | N294 | R300 | V301 | V302 | S307 | L310 | E314 | Q315 | L316 | E317 | Q318 | G319 | L320 | Q321 | V325 | L326 | | | | | | | | | | | |
| Q329 | Q330 | G331 | L332 | L333 | L334 | R335 | A336 | P339 | L340 | E341 | E342 | G343 | E344 | E347 | H351 | Q352 | A353 | V357 | L358 | T359 | R360 | L363 | E364 | V365 | V366 | V374 | E375 | E376 | R377 | L382 | E386 | G387 | V388 | V389 | Q391 | V398 | A400 | V401 | L402 | G403 | S404 | T405 | V406 | M407 | L408 | T409 | Q410 | | | | | | | | |
| D411 | E412 | V413 | L414 | V415 | L419 | N428 | LYS | GLY | GLN | ASP | PRO | LEU | ALA | ASP | ARG | GLY | GLU | LYS | THR | ALA | LYS | SER | LEU | GLN | PRO | LEU | A4650 | P4651 | R4652 | N4653 | K4654 | T4655 | R4656 | V4657 | V4658 | S4659 | Y4660 | R4661 | V4662 | P4663 | H4664 | N4665 | A4666 | A4667 | V4668 | Q4669 | V4670 | Y4671 | D4672 | G4683 | P4684 | E4685 | L4686 | V4687 | S4688 |

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| L489 | G490 | P491 | E492 | E493 | Q494 | F495 | T496 | S501 | R507 | P508 | L514 | C515 | L516 | L517 | L518 | D521 | F522 | F523 | T524 | D525 | V526 | I527 | T528 | I529 | E530 | H534 | Q538 | L539 | Q540 | L541 | A542 | Y543 | N544 | H545 | H546 | F547 | E548 | V549 | F567 | K573 | A574 | I575 | A576 | S577 | R578 | V579 | R580 | G581 | A582 | V583 | A584 |
| S585 | V586 | F587 | F588 | D589 | A596 | I599 | R600 | T601 | F604 | E607 | THR | SER | GLU | ALA | LYS | GLY | PRO | ASP | GLY | MET | ALA | LEU | R620 | R621 | P622 | R623 | F628 | L633 | V634 | V635 | S636 | S637 | V638 | D639 | V640 | Q641 | S642 | V643 | E644 | V645 | V646 | T650 | L654 | V658 | I662 | T666 | R679 | | | | |
| L680 | R687 | R690 | Q691 | L694 | E705 | E708 | A732 | I735 | V741 | A744 | K745 | L746 | K747 | A750 | L751 | E754 | E758 | V762 | Q763 | R764 | R765 | R766 | E767 | L768 | E769 | L770 | V771 | Y772 | V781 | S782 | Q786 | L787 | A788 | E789 | V790 | E791 | V792 | I802 | G803 | I807 | R808 | | | | | | | | | | |
| G814 | PRO | GLU | MET | GLN | ALA | LYS | LEU | GLN | SER | LEU | GLY | LYS | SER | THR | LEU | ILE | THR | PHE | GLY | ALA | ASN | LEU | LEU | ASN | THR | ALA | GLY | LEU | LEU | GLY | PRO | GLN | ARG | ARG | VAL | ALA | SER | GLY | PRO | PRO | GLY | GLU | ILE | SER | | | | | | | |
| PRO | GLN | SER | ALA | GLN | ALA | PRO | GLN | ALA | ASP | ASN | HIS | VAL | VAL | PRO | PRO | VAL | ARG | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

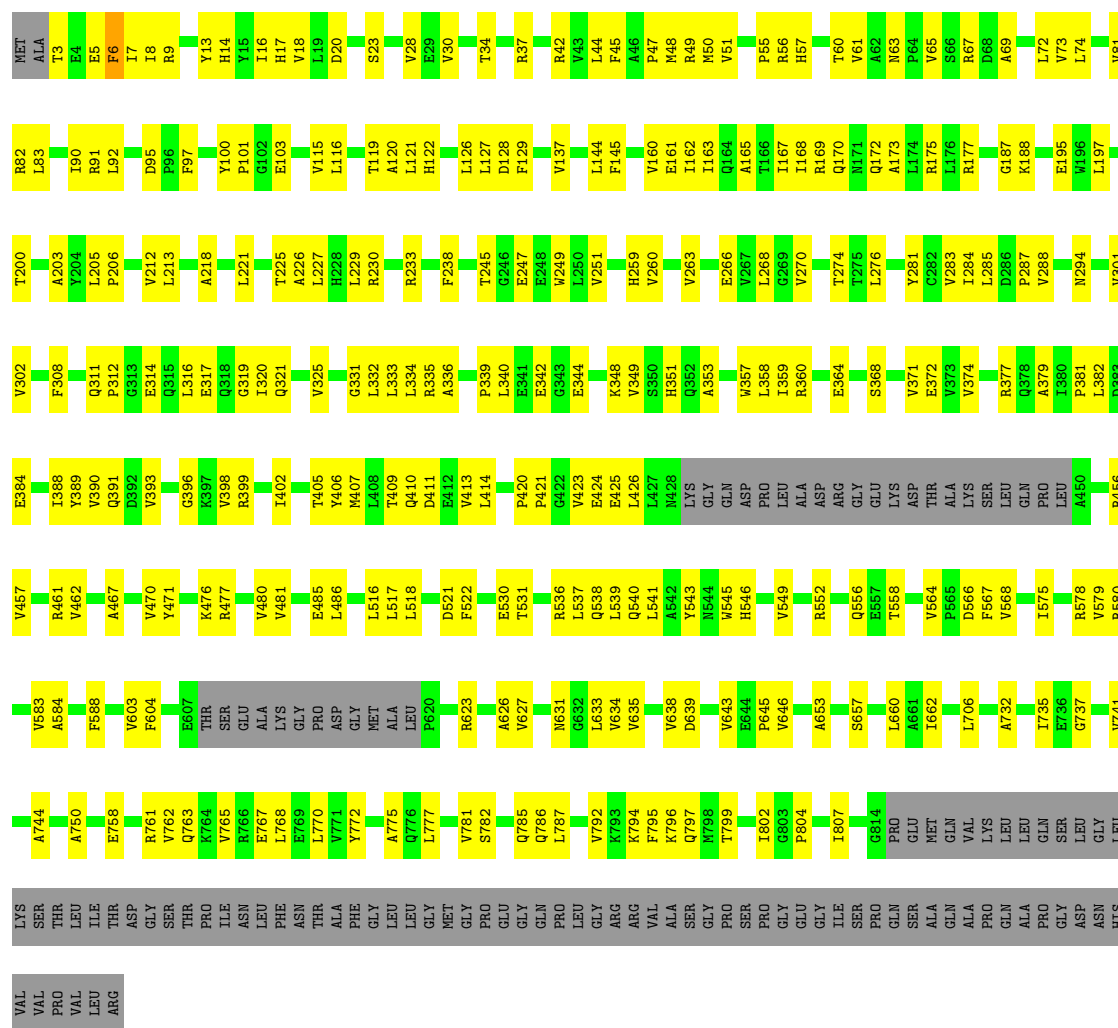
- Molecule 1: Major vault protein

Chain BB:  58% 30% 13%

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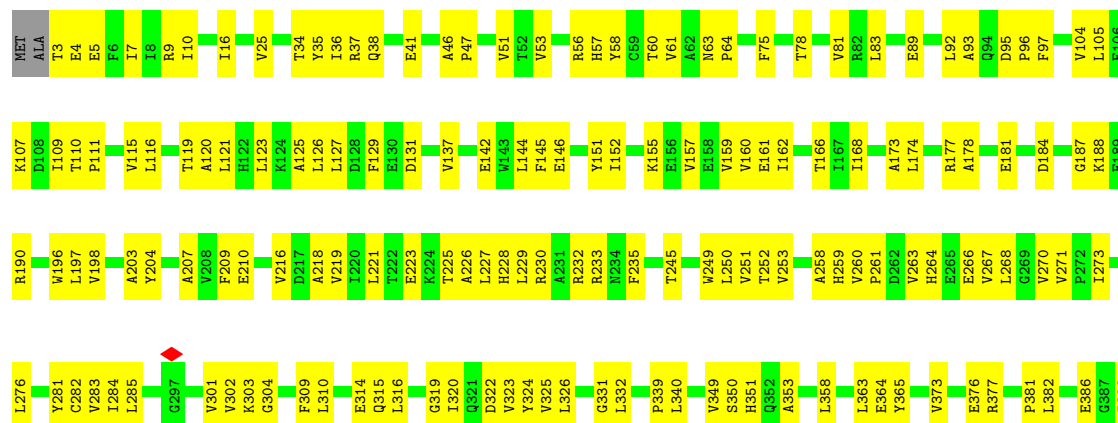
- Molecule 1: Major vault protein

Chain C:  57% 30% 13%



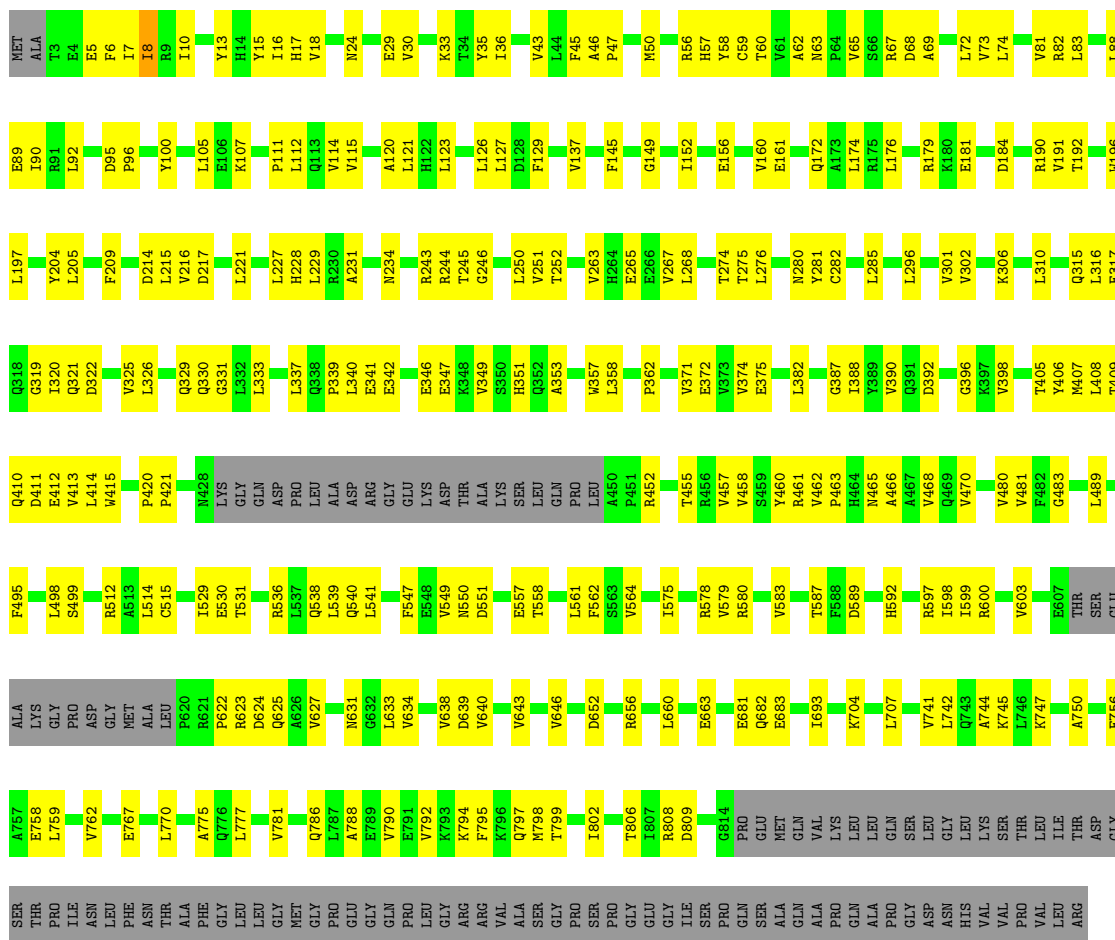
- Molecule 1: Major vault protein

Chain CA:  56% 31% 13%



- Molecule 1: Major vault protein

Chain CB: 



- Molecule 1: Major vault protein

Chain D:  56% 31% 13%


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| MET | ALA | T3 | E4 | E5 | F6 | F7 | F8 | F9 | F10 | F11 | F12 | F13 | F14 | F15 | F16 | F17 | F18 | F19 | F20 | F21 | F22 | F23 | F24 | F25 | F26 | F27 | F28 | F29 | F30 | F31 | F32 | F33 | F34 | F35 | F36 | F37 | F38 | F39 | F40 | F41 | F42 | F43 | F44 | F45 | F46 | F47 | F48 | F49 | F50 | F51 | F52 | F53 | F54 | F55 | F56 | F57 | F58 | F59 | F60 | F61 | F62 | F63 | F64 | F65 | F66 | F67 | F68 | F69 | F70 | F71 | F72 | F73 | F74 | F75 | F76 | F77 | F78 | F79 | F80 | F81 | F82 | F83 | F84 | F85 | F86 | F87 | F88 | F89 | F90 | F91 | F92 | F93 | F94 | F95 | F96 | F97 | F98 | F99 | F100 | F101 | F102 | F103 | F104 | F105 | F106 | F107 | F108 | F109 | F110 | F111 | F112 | F113 | F114 | F115 | F116 | F117 | F118 | F119 | F120 | F121 | F122 | F123 | F124 | F125 | F126 | F127 | F128 | F129 | F130 | F131 | F132 | F133 | F134 | F135 | F136 | F137 | F138 | F139 | F140 | F141 | F142 | F143 | F144 | F145 | F146 | F147 | F148 | F149 | F150 | F151 | F152 | F153 | F154 | F155 | F156 | F157 | F158 | F159 | F160 | F161 | F162 | F163 | F164 | F165 | F166 | F167 | F168 | F169 | F170 | F171 | F172 | F173 | F174 | F175 | F176 | F177 | F178 | F179 | F180 | F181 | F182 | F183 | F184 | F185 | F186 | F187 | F188 | F189 | F190 | F191 | F192 | F193 | F194 | F195 | F196 | F197 | F198 | F199 | F200 | F201 | F202 | F203 | F204 | F205 | F206 | F207 | F208 | F209 | F210 | F211 | F212 | F213 | F214 | F215 | F216 | F217 | F218 | F219 | F220 | F221 | F222 | F223 | F224 | F225 | F226 | F227 | F228 | F229 | F230 | F231 | F232 | F233 | F234 | F235 | F236 | F237 | F238 | F239 | F240 | F241 | F242 | F243 | F244 | F245 | F246 | F247 | F248 | F249 | F250 | F251 | F252 | F253 | F254 | F255 | F256 | F257 | F258 | F259 | F260 | F261 | F262 | F263 | F264 | F265 | F266 | F267 | F268 | F269 | F270 | F271 | F272 | F273 | F274 | F275 | F276 | F277 | F278 | F279 | F280 | F281 | F282 | F283 | F284 | F285 | F286 | F287 | F288 | F289 | F290 | F291 | F292 | F293 | F294 | F295 | F296 | F297 | F298 | F299 | F300 | F301 | F302 | F303 | F304 | F305 | F306 | F307 | F308 | F309 | F310 | F311 | F312 | F313 | F314 | F315 | F316 | F317 | F318 | F319 | F320 | F321 | F322 | F323 | F324 | F325 | F326 | F327 | F328 | F329 | F330 | F331 | F332 | F333 | F334 | F335 | F336 | F337 | F338 | F339 | F340 | F341 | F342 | F343 | F344 | F345 | F346 | F347 | F348 | F349 | F350 | F351 | F352 | F353 | F354 | F355 | F356 | F357 | F358 | F359 | F360 | F361 | F362 | F363 | F364 | F365 | F366 | F367 | F368 | F369 | F370 | F371 | F372 | F373 | F374 | F375 | F376 | F377 | F378 | F379 | F380 | F381 | F382 | F383 | F384 | F385 | F386 | F387 | F388 | F389 | F390 | F391 | F392 | F393 | F394 | F395 | F396 | F397 | F398 | F399 | F400 | F401 | F402 | F403 | F404 | F405 | F406 | F407 | F408 | F409 | F410 | F411 | F412 | F413 | F414 | F415 | F416 | F417 | F418 | F419 | F420 | F421 | F422 | F423 | F424 | F425 | F426 | F427 | F428 | F429 | F430 | F431 | F432 | F433 | F434 | F435 | F436 | F437 | F438 | F439 | F440 | F441 | F442 | F443 | F444 | F445 | F446 | F447 | F448 | F449 | F450 | F451 | F452 | F453 | F454 | F455 | F456 | F457 | F458 | F459 | F460 | F461 | F462 | F463 | F464 | F465 | F466 | F467 | F468 | F469 | F470 | F471 | F472 | F473 | F474 | F475 | F476 | F477 | F478 | F479 | F480 | F481 | F482 | F483 | F484 | F485 | F486 | F487 | F488 | F489 | F490 | F491 | F492 | F493 | F494 | F495 | F496 | F497 | F498 | F499 | F500 | F501 | F502 | F503 | F504 | F505 | F506 | F507 | F508 | F509 | F510 | F511 | F512 | F513 | F514 | F515 | F516 | F517 | F518 | F519 | F520 | F521 | F522 | F523 | F524 | F525 | F526 | F527 | F528 | F529 | F530 | F531 | F532 | F533 | F534 | F535 | F536 | F537 | F538 | F539 | F540 | F541 | F542 | F543 | F544 | F545 | F546 | F547 | F548 | F549 | F550 | F551 | F552 | F553 | F554 | F555 | F556 | F557 | F558 | F559 | F560 | F561 | F562 | F563 | F564 | F565 | F566 | F567 | F568 | F569 | F570 | F571 | F572 | F573 | F574 | F575 | F576 | F577 | F578 | F579 | F580 | F581 | F582 | F583 | F584 | F585 | F586 | F587 | F588 | F589 | F590 | F591 | F592 | F593 | F594 | F595 | F596 | F597 | F598 | F599 | F600 | F601 | F602 | F603 | F604 | F605 | F606 | F607 | F608 | F609 | F610 | F611 | F612 | F613 | F614 | F615 | F616 | F617 | F618 | F619 | F620 | F621 | F622 | F623 | F624 | F625 | F626 | F627 | F628 | F629 | F630 | F631 | F632 | F633 | F634 | F635 | F636 | F637 | F638 | F639 | F640 | F641 | F642 | F643 | F644 | F645 | F646 | F647 | F648 | F649 | F650 | F651 | F652 | F653 | F654 | F655 | F656 | F657 | F658 | F659 | F660 | F661 | F662 | F663 | F664 | F665 | F666 | F667 | F668 | F669 | F670 | F671 | F672 | F673 | F674 | F675 | F676 | F677 | F678 | F679 | F680 | F681 | F682 | F683 | F684 | F685 | F686 | F687 | F688 | F689 | F690 | F691 | F692 | F693 | F694 | F695 | F696 | F697 | F698 | F699 | F700 | F701 | F702 | F703 | F704 | F705 | F706 | F707 | F708 | F709 | F710 | F711 | F712 | F713 | F714 | F715 | F716 | F717 | F718 | F719 | F720 | F721 | F722 | F723 | F724 | F725 | F726 | F727 | F728 | F729 | F730 | F731 | F732 | F733 | F734 | F735 | F736 | F737 | F738 | F739 | F740 | F741 | F742 | F743 | F744 | F745 | F746 | F747 | F748 | F749 | F750 | F751 | F752 | F753 | F754 | F755 | F756 | F757 | F758 | F759 | F760 | F761 | F762 | F763 | F764 | F765 | F766 | F767 | F768 | F769 | F770 | F771 | F772 | F773 | F774 | F775 | F776 | F777 | F778 | F779 | F780 | F781 | F782 | F783 | F784 | F785 | F786 | F787 | F788 | F789 | F790 | F791 | F792 | F793 | F794 | F795 | F796 | F797 | F798 | F799 | F800 | F801 | F802 | F803 | F804 | F805 | F806 | F807 | F808 | F809 | F810 | F811 | F812 | F813 | F814 | F815 | F816 | F817 | F818 | F819 | F820 | F821 | F822 | F823 | F824 | F825 | F826 | F827 | F828 | F829 | F830 | F831 | F832 | F833 | F834 | F835 | F836 | F837 | F838 | F839 | F840 | F841 | F842 | F843 | F844 | F845 | F846 | F847 | F848 | F849 | F850 | F851 | F852 | F853 | F854 | F855 | F856 | F857 | F858 | F859 | F860 | F861 | F862 | F863 | F864 | F865 | F866 | F867 | F868 | F869 | F870 | F871 | F872 | F873 | F874 | F875 | F876 | F877 | F878 | F879 | F880 | F881 | F882 | F883 | F884 | F885 | F886 | F887 | F888 | F889 | F890 | F891 | F892 | F893 | F894 | F895 | F896 | F897 | F898 | F899 | F900 | F901 | F902 | F903 | F904 | F905 | F906 | F907 | F908 | F909 | F910 | F911 | F912 | F913 | F914 | F915 | F916 | F917 | F918 | F919 | F920 | F921 | F922 | F923 | F924 | F925 | F926 | F927 | F928 | F929 | F930 | F931 | F932 | F933 | F934 | F935 | F936 | F937 | F938 | F939 | F940 | F941 | F942 | F943 | F944 | F945 | F946 | F947 | F948 | F949 | F950 | F951 | F952 | F953 | F954 | F955 | F956 | F957 | F958 | F959 | F960 | F961 | F962 | F963 | F964 | F965 | F966 | F967 | F968 | F969 | F970 | F971 | F972 | F973 | F974 | F975 | F976 | F977 | F978 | F979 | F980 | F981 | F982 | F983 | F984 | F985 | F986 | F987 | F988 | F989 | F990 | F991 | F992 | F993 | F994 | F995 | F996 | F997 | F998 | F999 | F1000 | F1001 | F1002 | F1003 | F1004 | F1005 | F1006 | F1007 | F1008 | F1009 | F1010 | F1011 | F1012 | F1013 | F1014 | F1015 | F1016 | F1017 | F1018 | F1019 | F1020 | F1021 | F1022 | F1023 | F1024 | F1025 | F1026 | F1027 | F1028 | F1029 | F1030 | F1031 | F1032 | F1033 | F1034 | F1035 | F1036 | F1037 | F1038 | F1039 | F1040 | F1041 | F1042 | F1043 | F1044 | F1045 | F1046 | F1047 | F1048 | F1049 | F1050 | F1051 | F1052 | F1053 | F1054 | F1055 | F1056 | F1057 | F1058 | F1059 | F1060 | F1061 | F1062 | F1063 | F1064 | F1065 | F1066 | F1067 | F1068 | F1069 | F1070 | F1071 | F1072 | F1073 | F1074 | F1075 | F1076 | F1077 | F1078 | F1079 | F1080 | F1081 | F1082 | F1083 | F1084 | F1085 | F1086 | F1087 | F1088 | F1089 | F1090 | F1091 | F1092 | F1093 | F1094 | F1095 | F1096 | F1097 | F1098 | F1099 | F1100 | F1101 | F1102 | F1103 | F1104 | F1105 | F1106 | F1107 | F1108 | F1109 | F1110 | F1111 | F1112 | F1113 | F1114 | F1115 | F1116 | F1117 | F1118 | F1119 | F1120 | F1121 | F1122 | F1123 | F1124 | F1125 | F1126 | F1127 | F1128 | F1129 | F1130 | F1131 | F1132 | F1133 | F1134 | F1135 | F1136 | F1137 | F1138 | F1139 | F1140 | F1141 | F1142 | F1143 | F1144 | F1145 | F1146 | F1147 | F1148 | F1149 | F1150 | F1151 | F1152 | F1153 | F1154 | F1155 | F1156 | F1157 | F1158 | F1159 | F1160 | F1161 | F1162 | F1163 | F1164 | F1165 | F1166 | F1167 | F1168 | F1169 | F1170 | F1171 | F1172 | F1173 | F1174 | F1175 | F1176 | F1177 | F1178 | F1179 | F1180 | F1181 | F1182 | F1183 | F1184 | F1185 | F1186 | F1187 | F1188 | F1189 | F1190 | F1191 | F1192 | F1193 | F1194 | F1195 | F1196 | F1197 | F1198 | F1199 | F1200 | F1201 | F1202 | F1203 | F1204 | F1205 | F1206 | F1207 | F1208 | F1209 | F1210 | F1211 | F1212 | F1213 | F1214 | F1215 | F1216 | F1217 | F1218 | F1219 | F1220 | F1221 | F1222 | F1223 | F1224 | F1225 | F1226 | F1227 | F1228 | F1229 | F1230 | F1231 | F1232 | F1233 | F1234 | F1235 | F1236 | F1237 | F1238 | F1239 | F1240 | F1241 | F1242 | F1243 | F1244 | F1245 | F1246 | F1247 | F1248 | F1249 | F1250 | F1251 | F1252 | F1253 | F1254 | F1255 | F1256 | F1257 | F1258 | F1259 | F1260 | F1261 | F1262 | F1263 | F1264 | F1265 | F1266 | F1267 | F1268 | F1269 | F1270 | F1271 | F1272 | F1273 | F1274 | F1275 | F1276 | F1277 | F1278 | F1279 | F1280 | F1281 | F1282 | F1283 | F1284 | F1285 | F1286 | F1287 | F1288 | F1289 | F1290 | F1291 | F1292 | F1293 | F1294 | F1295 | F1296 | F1297 | F1298 | F1299 | F1300 | F1301 | F1302 | F1303 | F1304 | F1305 | F1306 | F1307 | F1308 | F1309 | F1310 | F1311 | F1312 | F1313 | F1314 | F1315 | F1316 | F1317 | F1318 | F1319 | F1320 | F1321 | F1322 | F1323 | F1324 | F1325 | F1326 | F1327 | F1328 | F1329 | F1330 | F1331 | F1332 | F1333 | F1334 | F1335 | F1336 | F1337 | F1338 | F1339 | F1340 | F1341 | F1342 | F1343 | F1344 | F1345 | F1346 | F1347 | F1348 | F1349 | F1350 | F1351 | F1352 | F1353 | F1354 | F1355 | F1356 | F1357 | F1358 | F1359 | F1360 | F1361 | F1362 | F1363 | F1364 | F1365 | F1366 | F1367 | F1368 | F1369 | F1370 | F1371 | F1372 | F1373 | F1374 | F1375 | F1376 | F1377 | F1378 | F1379 | F1380 | F1381 | F1382 | F1383 | F1384 | F1385 | F1386 | F1387 | F1388 | F1389 | F1390 | F1391 | F1392 | F1393 | F1394 | F1395 | F1396 | F1397 | F1398 | F1399 | F1400 | F1401 | F1402 | F1403 | F1404 | F1405 | F1406 | F1407 | F1408 | F1409 | F1410 | F1411 | F1412 | F1413 | F1414 | F1415 | F1416 | F1417 | F1418 | F1419 | F1420 | F1421 | F1422 | F1423 | F1424 | F1425 | F1426 | F1427 | F1428 | F1429 | F1430 | F1431 | F1432 | F1433 | F1434 | F1435 | F1436 | F1437 | F1438 | F1439 | F1440 | F1441 | F1442 | F1443 | F1444 | F1445 | F1446 | F1447 | F1448 | F1449 | F1450 | F1451 | F1452 | F1453 | F1454 | F1455 | F1456 | F1457 | F1458 | F1459 | F1460 | F1461 | F1462 | F1463 | F1464 | F1465 | F1466 | F1467 | F1468 | F1469 | F1470 | F1471 | F1472 |
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| K348 | V349 | ASP | GLN | F523 | GLY | R761 | PHE |
| H351 | L350 | PRD | ASP | V526 | MET | V762 | ASN |
| Q352 | ALA | LEU | PRD | I529 | ALA | V765 | THR |
| A353 | ASP | ARG | ASP | E530 | P620 | E767 | ALA |
| W357 | GLY | GLY | ARG | H534 | R623 | L768 | PHE |
| L358 | LYS | GLU | GLY | A535 | V627 | L769 | LEU |
| I359 | ASP | LYS | ASP | R536 | F628 | L770 | LEU |
| E364 | THR | THR | THR | L537 | W771 | Y772 | GLY |
| V371 | ALA | ALA | ALA | Q538 | N631 | A773 | GLU |
| E372 | SER | LYS | LYS | L539 | L633 | | GLY |
| V373 | SER | LEU | SER | Q540 | V634 | L779 | GLN |
| V374 | GLN | LEU | GLN | L541 | V638 | E780 | PRD |
| E375 | PRO | PRO | GLN | A542 | D639 | W781 | LEU |
| E376 | LEU | LEU | LEU | W544 | V640 | S782 | GLY |
| R377 | LEU | LEU | LEU | W545 | Q641 | Q785 | ARG |
| I380 | P451 | R452 | P451 | L561 | S642 | A788 | VAL |
| P381 | R456 | V457 | R456 | S563 | E644 | E789 | SER |
| L382 | V457 | V458 | V456 | V564 | L654 | V792 | GLY |
| G387 | V458 | V459 | V457 | F567 | S657 | I802 | SER |
| I388 | V459 | V460 | V458 | V568 | V658 | I807 | GLY |
| Y389 | V460 | Y461 | V459 | G569 | Q659 | L810 | GLU |
| Q391 | A467 | Y471 | Y460 | I575 | L660 | G814 | GLY |
| K394 | V468 | Y472 | A467 | V579 | A661 | PRO | GLN |
| I395 | Q469 | Y473 | Q468 | R580 | I662 | GLU | ALA |
| G396 | Y471 | Y473 | Y469 | V583 | E663 | MET | ALA |
| V401 | D472 | Y473 | D472 | A584 | I664 | GLN | ALA |
| I402 | G403 | G403 | I402 | F588 | E689 | VAL | ALA |
| G403 | S404 | S404 | G403 | D589 | Q691 | LYS | ALA |
| S404 | T405 | T405 | S404 | L694 | I693 | LEU | PRO |
| T405 | Y406 | Y406 | T405 | F591 | L694 | ALA | GLN |
| M407 | L408 | L408 | M407 | S595 | E705 | LEU | ALA |
| L408 | W409 | W409 | L408 | I599 | E708 | SER | ASP |
| Q410 | S488 | S488 | Q410 | G737 | G737 | GLY | ASN |
| D411 | L489 | L489 | D411 | V603 | V741 | LEU | HIS |
| E412 | E493 | E493 | E412 | F604 | A744 | LEU | VAL |
| V413 | Q494 | Q494 | V413 | G605 | T747 | ILE | VAL |
| L414 | L498 | L498 | L414 | E607 | K747 | LEU | LEU |
| W415 | S499 | S499 | W415 | THR | A750 | ASP | ARG |
| E416 | E418 | E418 | E416 | SER | L751 | GLY | THR |
| K417 | L500 | L500 | K417 | ALA | E754 | PRO | THR |
| L419 | R511 | R511 | L419 | LYS | ASN | ILE | ASN |
| W423 | R512 | R512 | W423 | GLY | L516 | LEU | GLY |
| M428 | A513 | A513 | M428 | ASP | L517 | | |
| L428 | | | L428 | | | | |
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| L419 | | | L419 | | | | |
| W423 | | | W423 | | | | |
| M428 | | | M428 | | | | |
| L428 | | | L428 | | | | |
| E418 | | | E418 | | | | |
| K417 | | | K417 | | | | |
| L419 | | | L419 | | | | |
| W423 | | | W423 | | | | |
| M428 | | | M428 | | | | |
| L428 | | | L428 | | | | |
| E418 | | | E418 | | | | |
| K417 | | | K417 | | | | |
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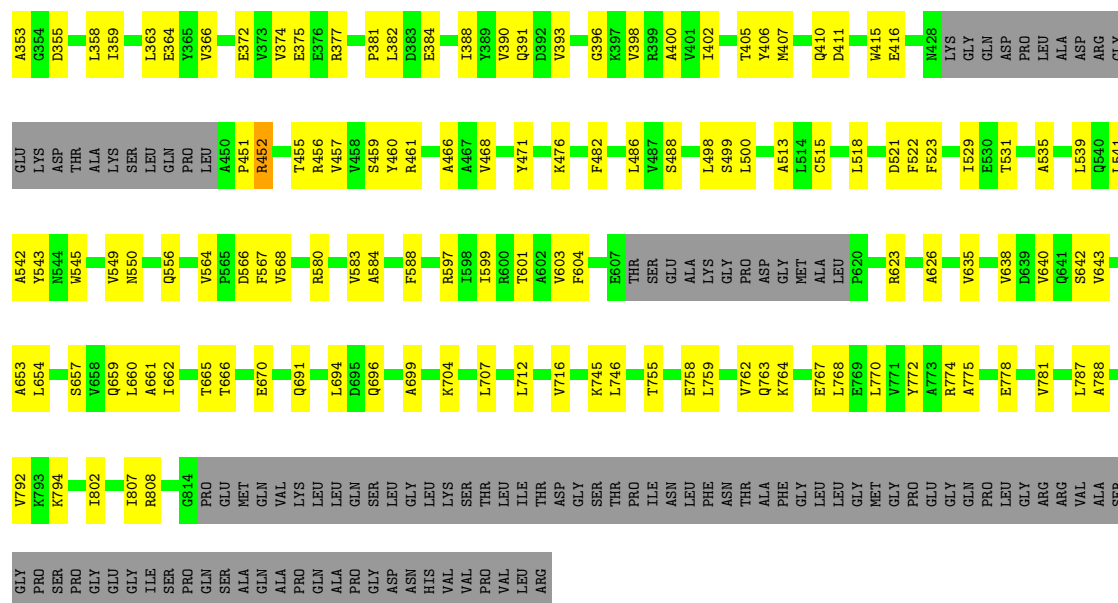
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| ILE | THR | ASP | GLY | SER | THR | PRO | ILE | ASN | PHE | ASN | THR | ALA | PHE | GLY | LEU | LEU | GLY | MET | PRO | GLU | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY | GLY 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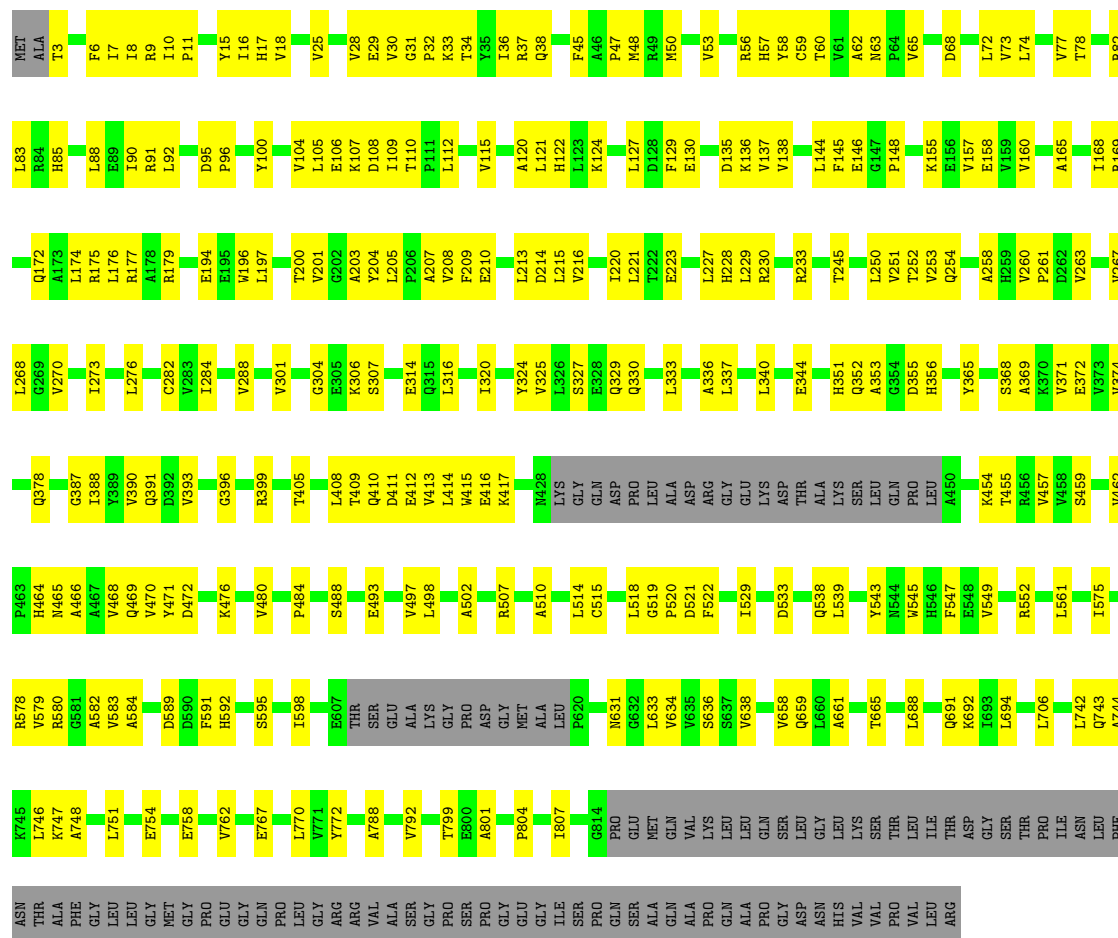
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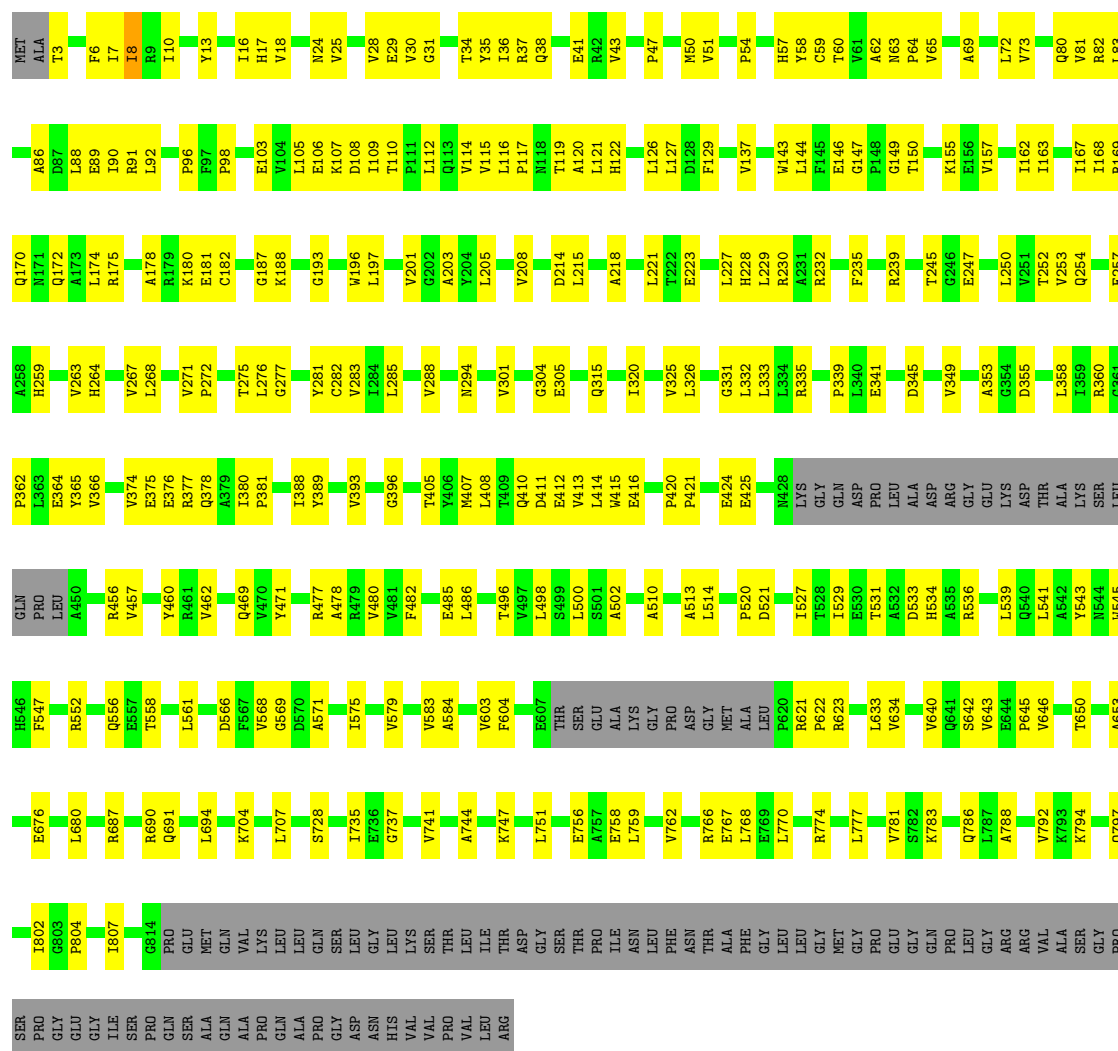
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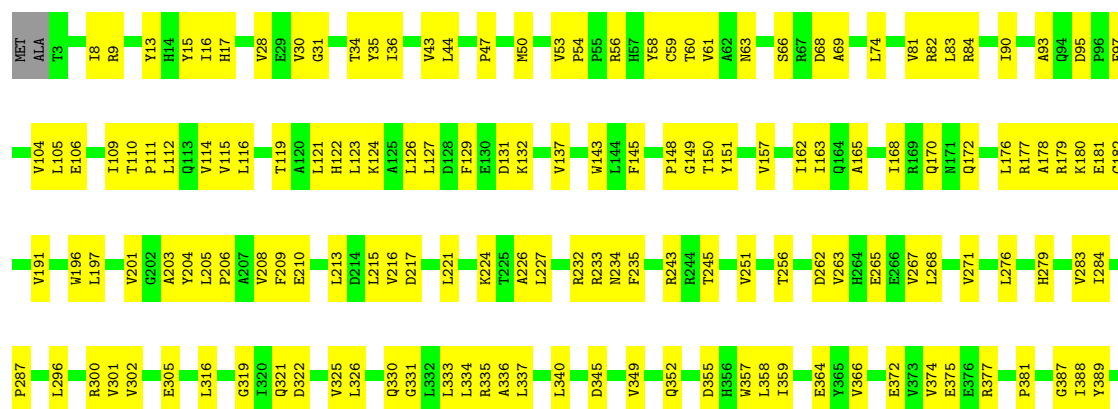
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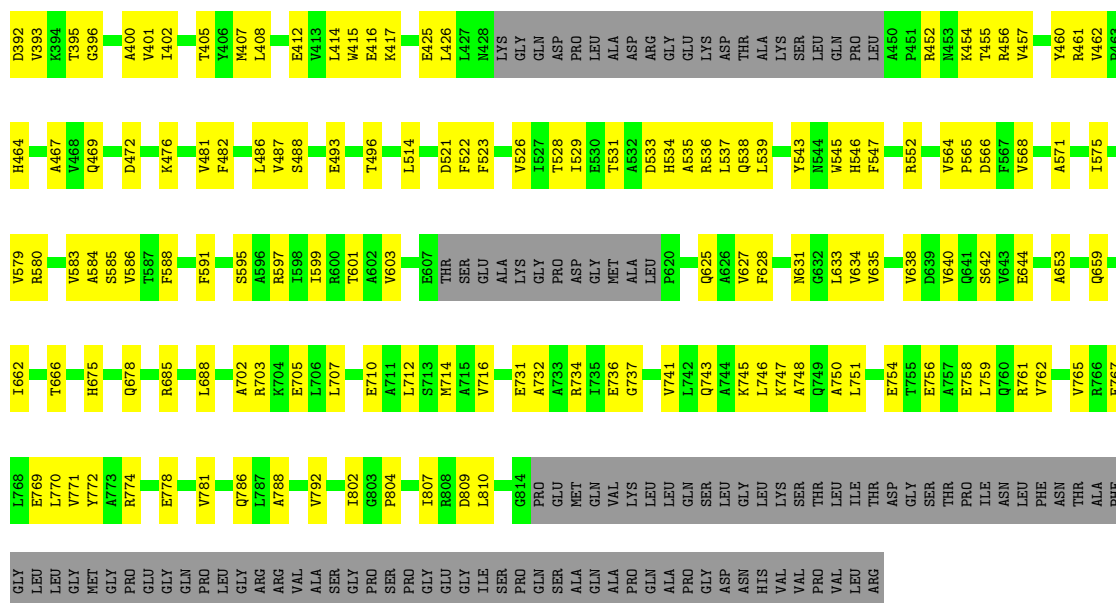
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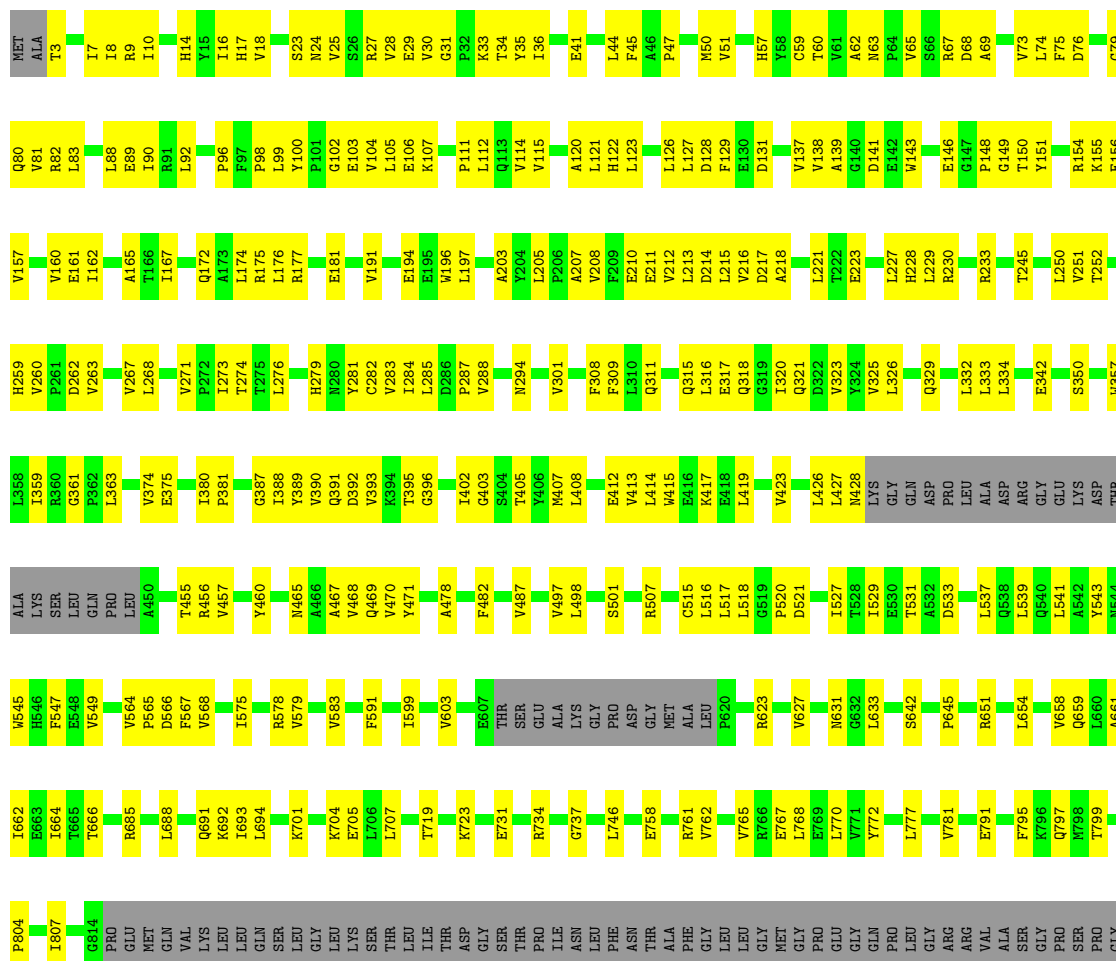
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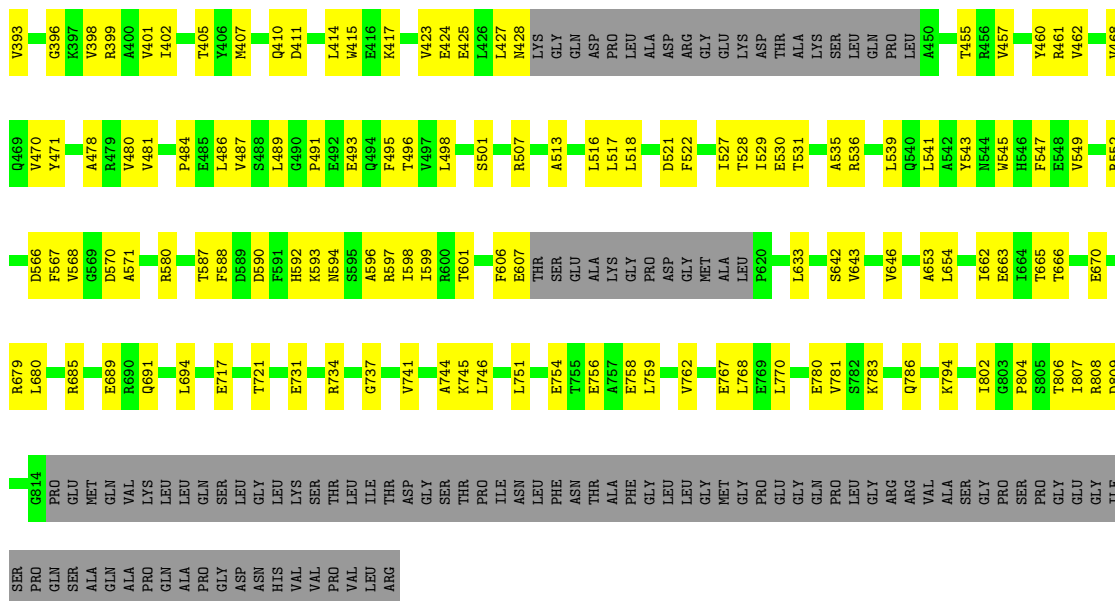




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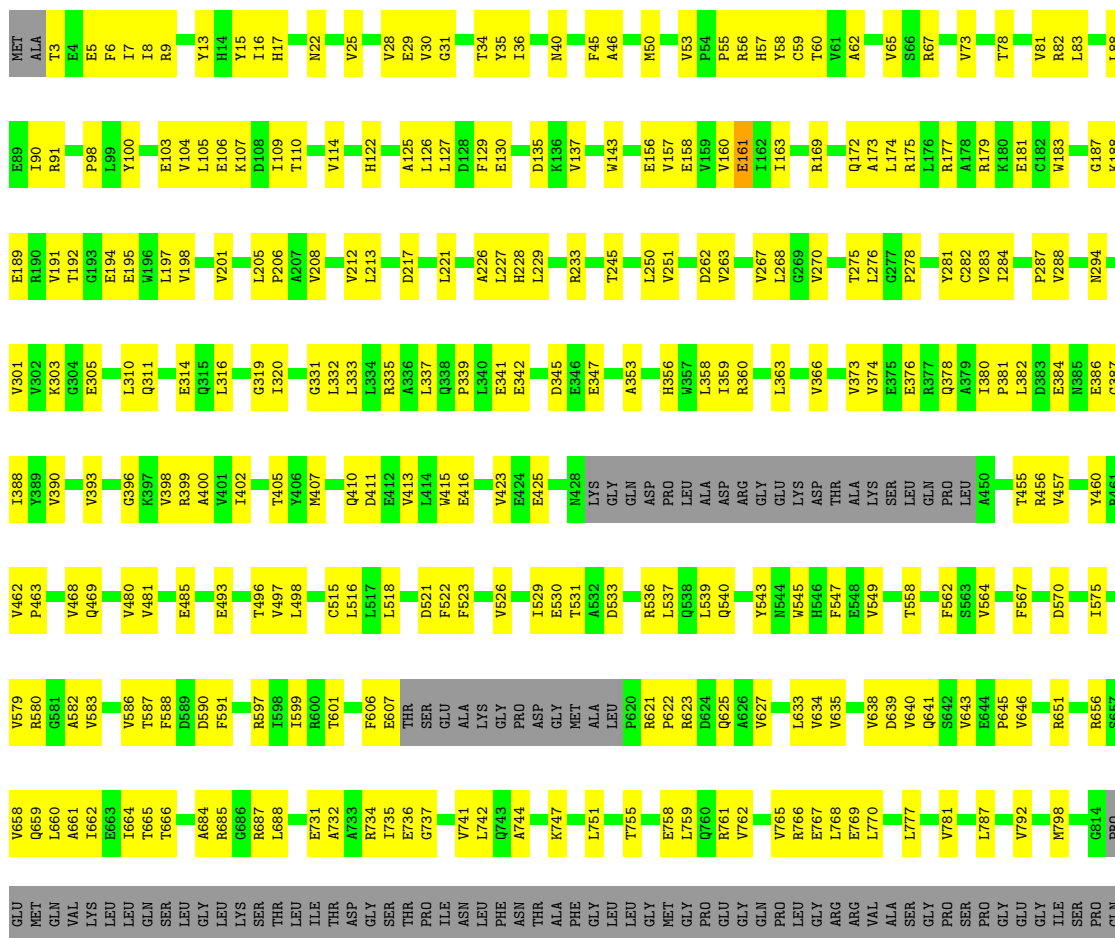
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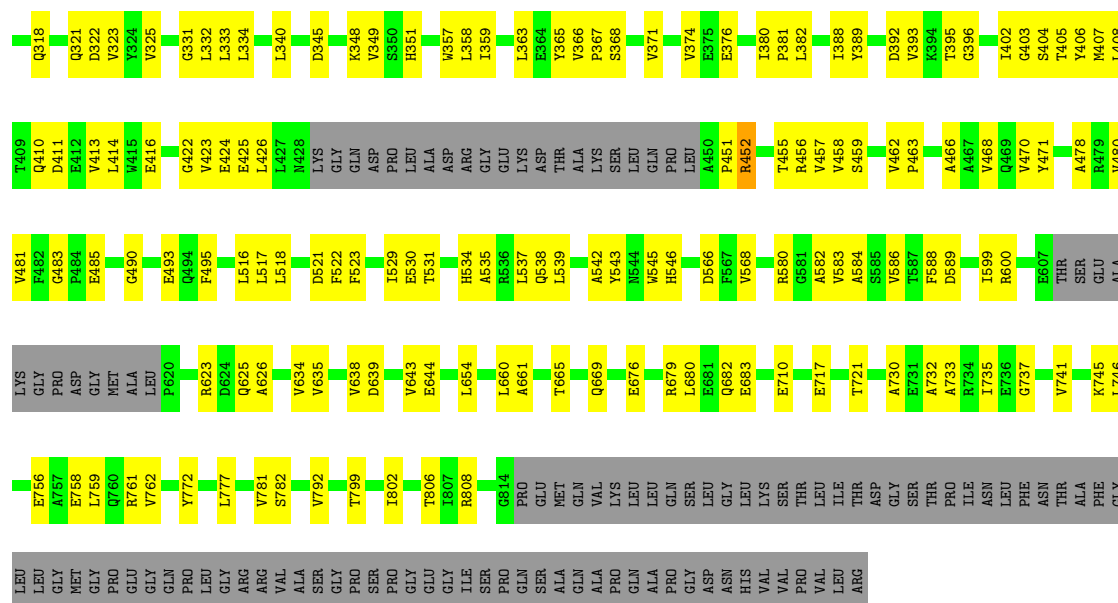




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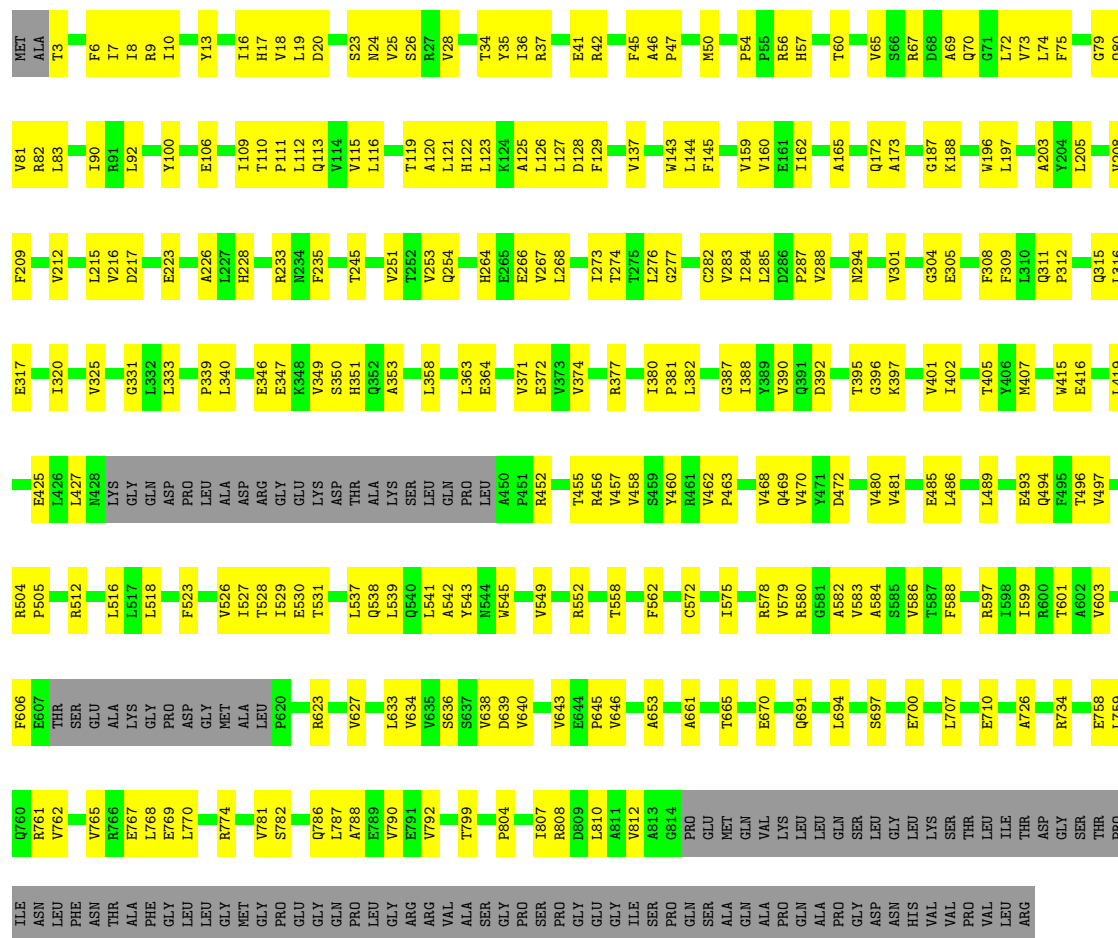
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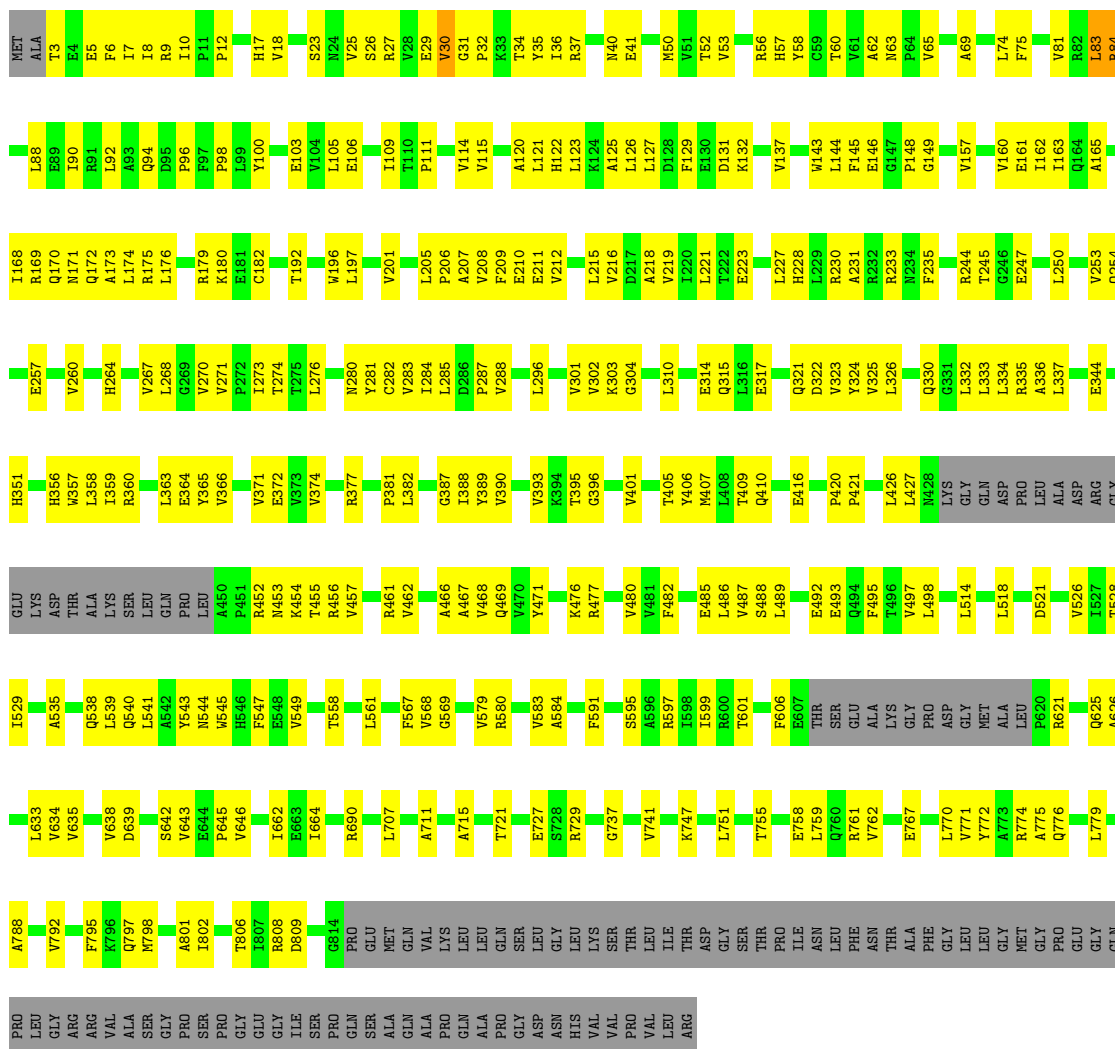
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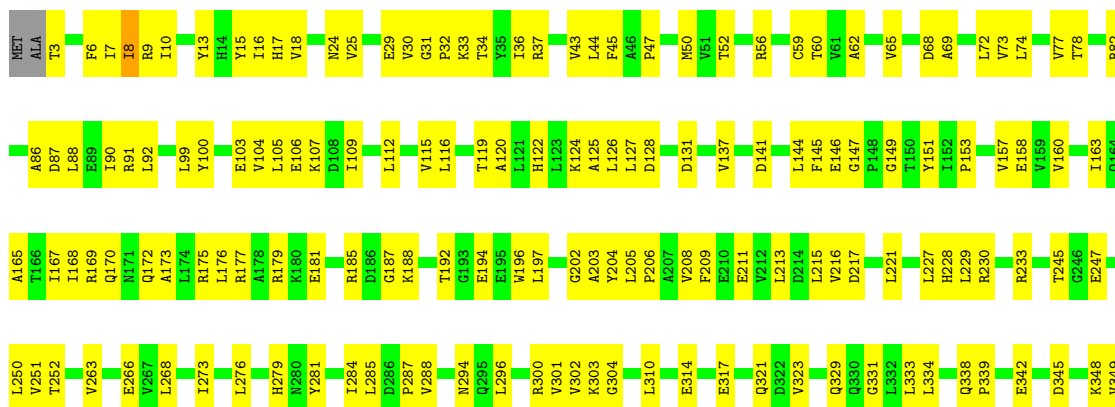
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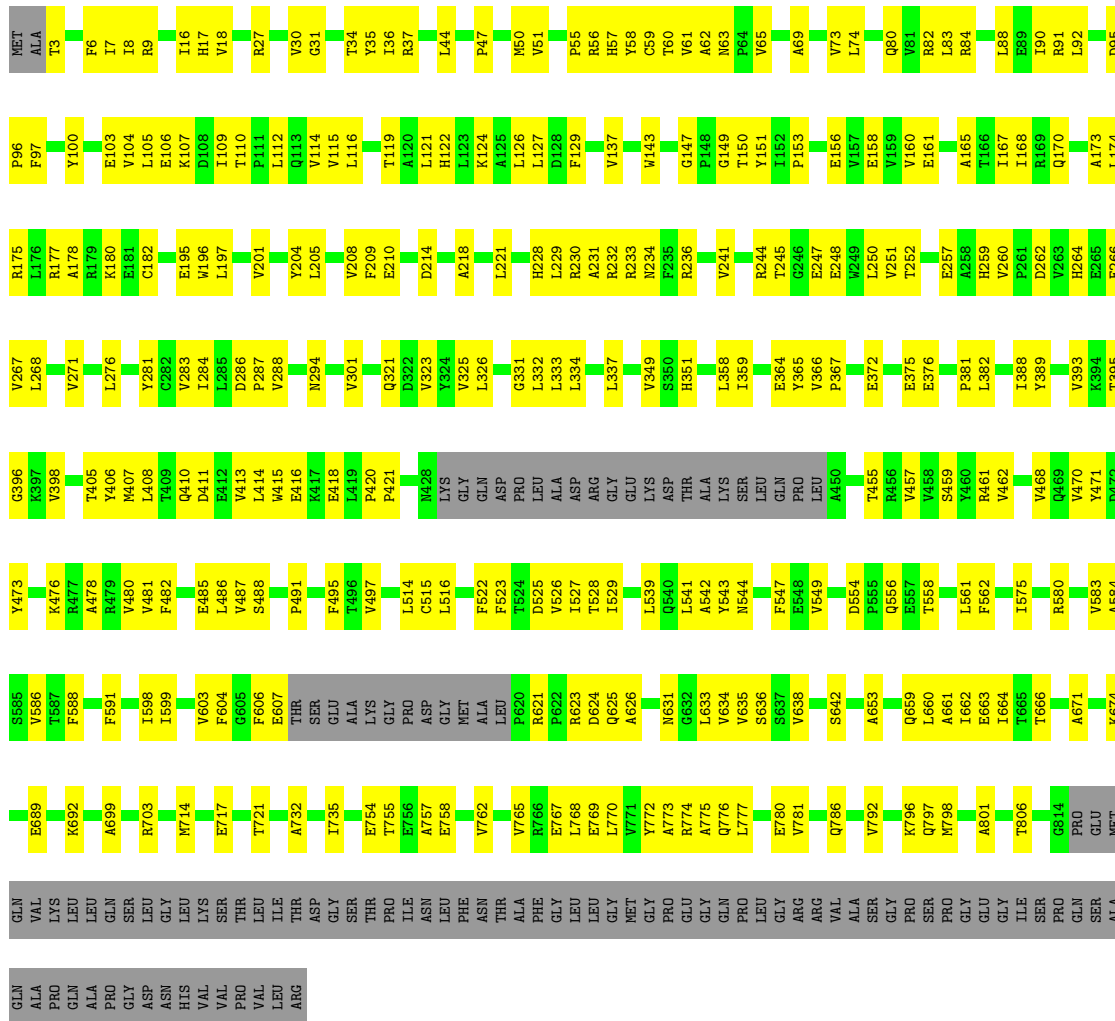
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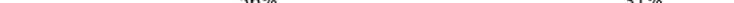
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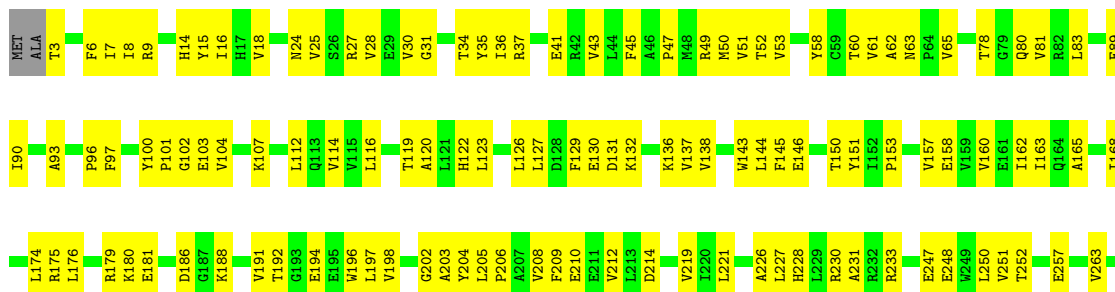
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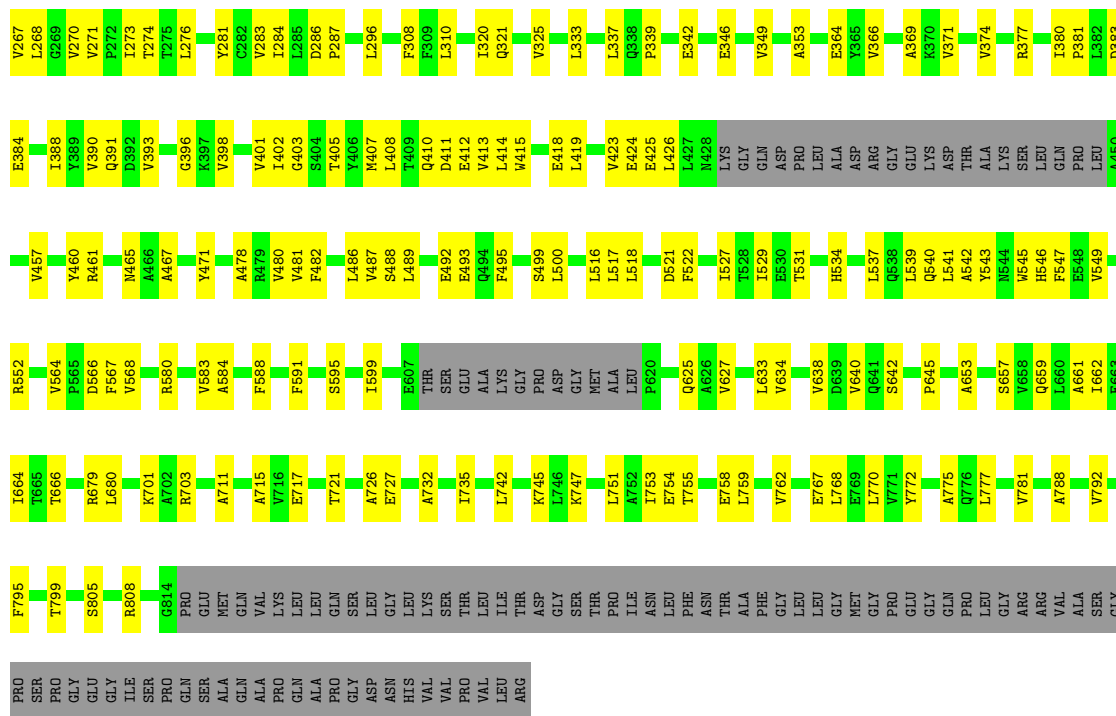
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| Y389 | V390 | Q391 | D392 | V393 | G396 | R399 | F482 | A400 | V401 | T405 | L408 | T409 | V603 | D411 | V412 | V413 | L414 | W415 | E416 | L419 | G422 | N428 | LYS | GLY | GLN | ASP | PRO | LEU | ALA | ASP | ARG | GLY | LYS | GLU | LYS | ASP | THR | ALA | LYS | SER | LEU | GLN | LEU | PRO | A450 | P451 | R452 | N453 | T454 | R455 | R456 | V457 | S459 |
| K293 | N294 | V301 | V302 | K303 | G304 | E305 | K306 | S307 | F308 | F309 | L310 | Q311 | P312 | I320 | Q321 | L332 | L333 | L334 | R335 | E341 | E342 | E346 | E347 | K348 | V349 | S350 | H351 | D355 | H356 | W357 | L358 | L359 | ASP | THR | L363 | E364 | V365 | V366 | P367 | S368 | L373 | T274 | T275 | L276 | G277 | Y281 | C282 | V283 | I284 | P287 | V288 | | |
| D87 | L88 | E89 | I90 | R91 | P98 | L99 | P101 | L105 | E106 | T110 | L112 | V115 | L116 | T119 | A120 | L121 | H122 | L123 | K124 | A125 | L126 | L127 | D128 | F129 | E130 | D131 | K132 | V137 | W143 | L144 | F145 | E146 | G147 | V160 | E161 | I162 | I163 | T174 | Q170 | G171 | N171 | Q172 | A173 | L174 | R175 | V181 | R82 | L83 | | | | | |
| MET | ALA | E4 | E5 | F6 | I7 | R9 | Y15 | I16 | H17 | V18 | L19 | D20 | R27 | V28 | E29 | G31 | T34 | Y35 | I36 | R37 | E41 | R42 | V43 | L44 | F45 | A46 | P47 | M50 | V51 | R56 | H57 | Y58 | C59 | T60 | V61 | A62 | P64 | I63 | V65 | S66 | R67 | D68 | A69 | Q70 | G71 | L72 | V81 | R82 | L83 | | | | |

Chain J: 56% 32% 13%



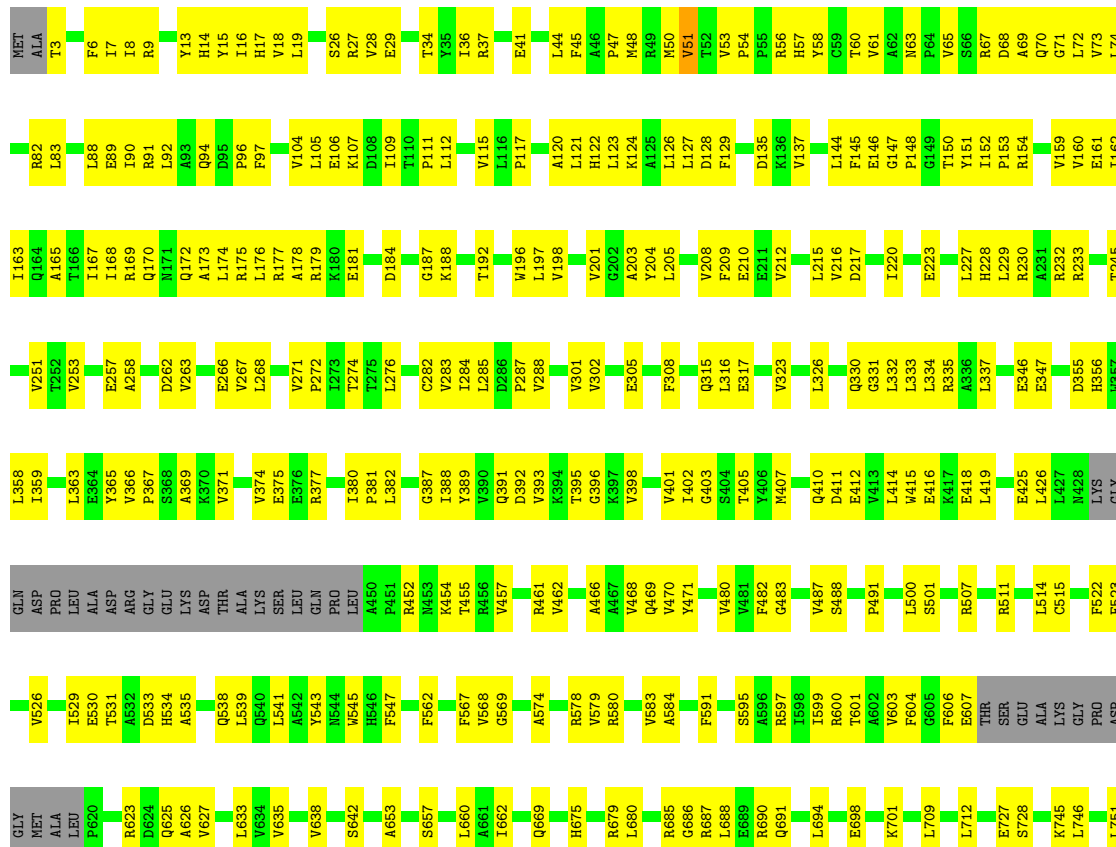
Chain JA: 

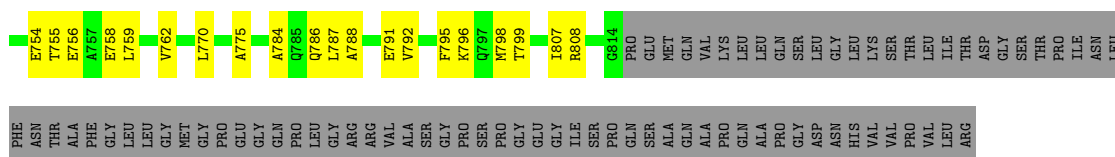




• Molecule 1: Major vault protein

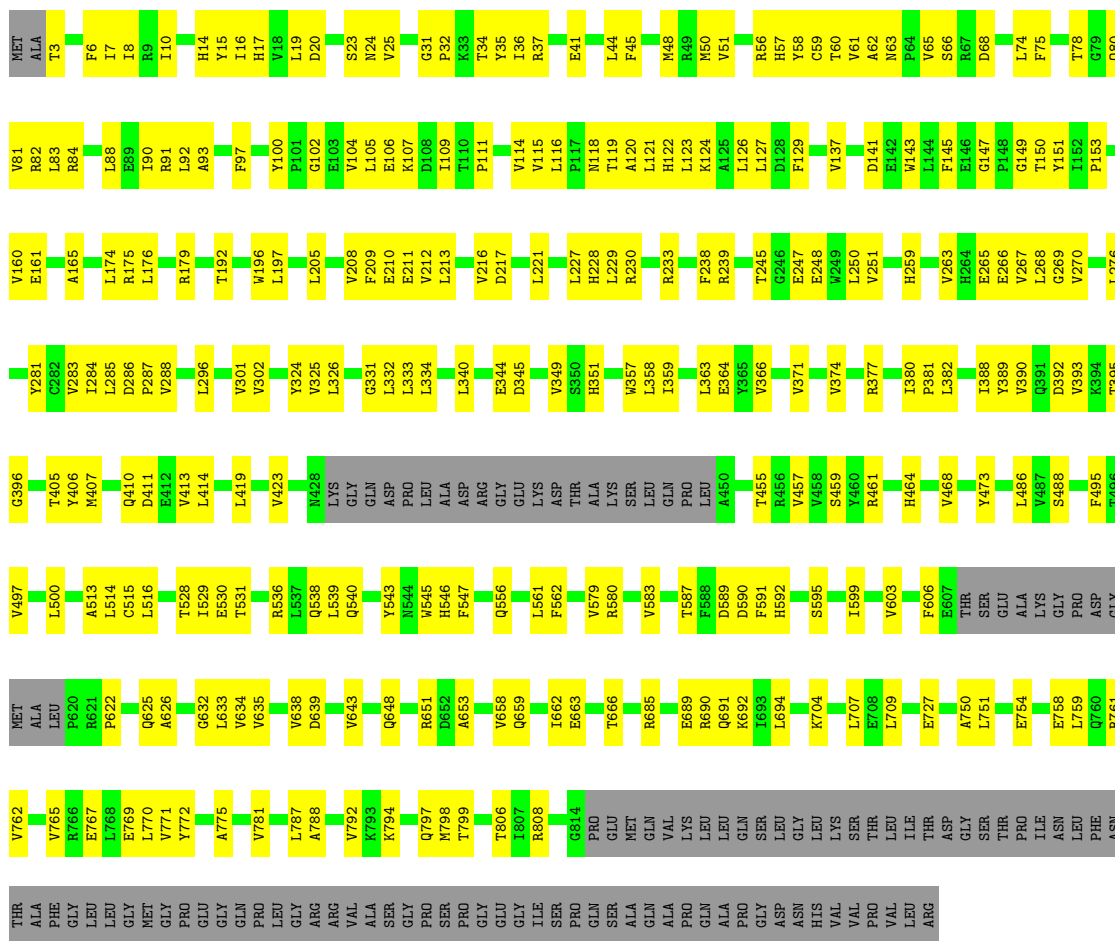
Chain JB: 52% 35% 13%





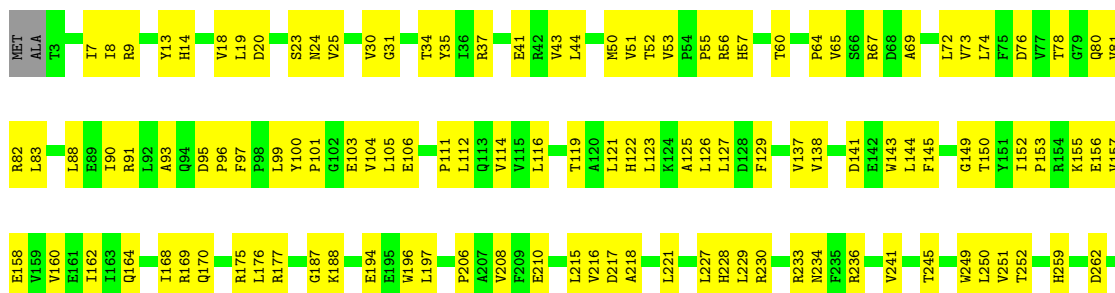
• Molecule 1: Major vault protein

Chain K: 57% 30% 13%



• Molecule 1: Major vault protein

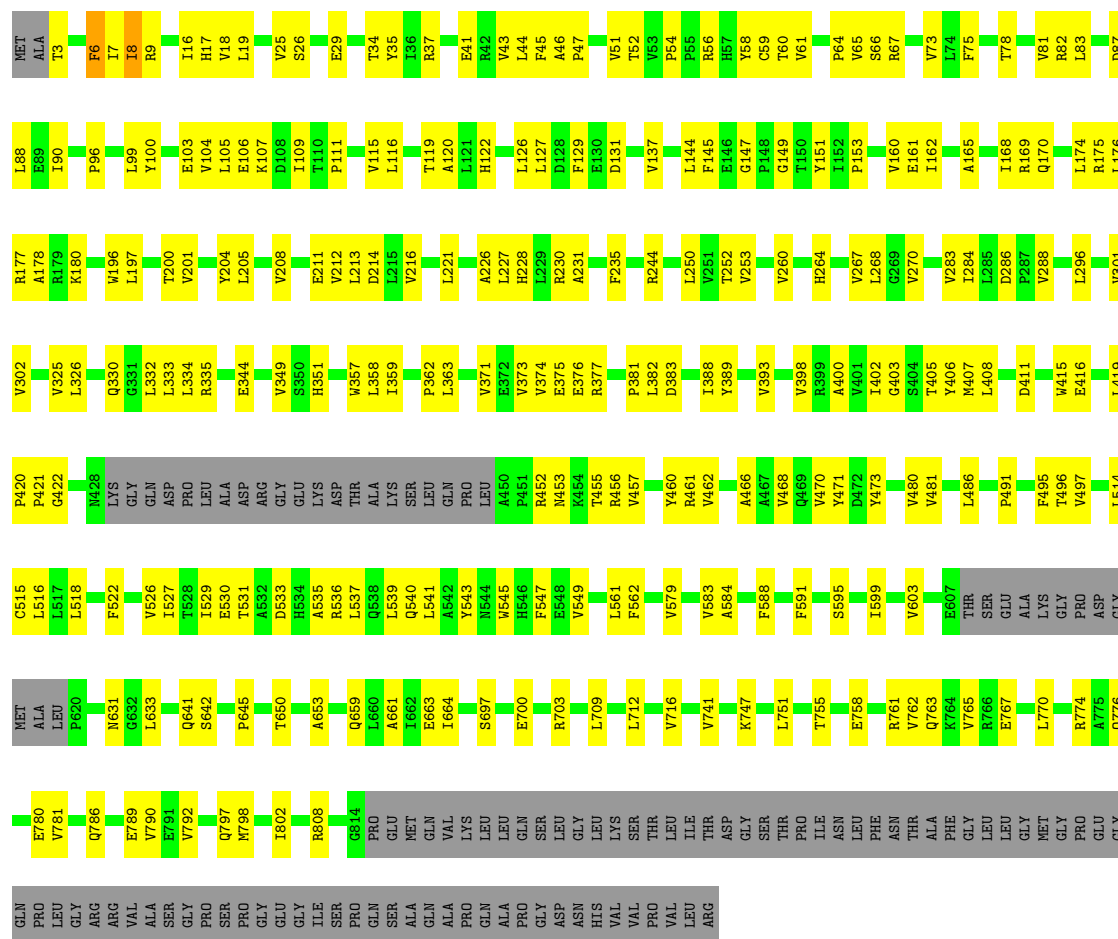
Chain KA: 57% 30% 13%

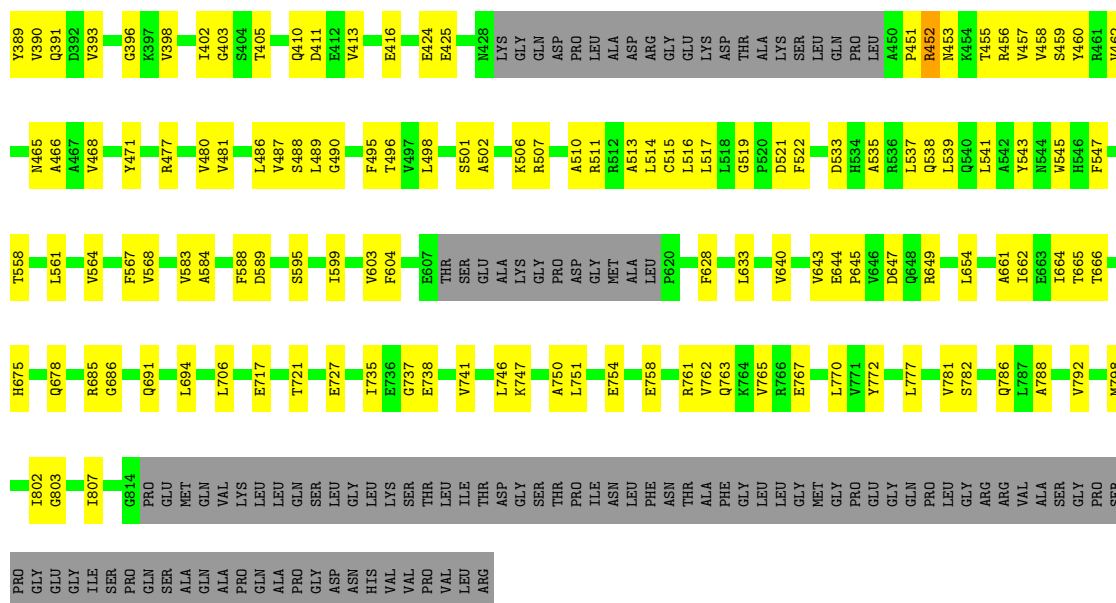


GLN
ALA
PRO
GLN
ALA
PRO
GLY
ASP
ASN
HIS
VAL
VAL
PRO
VAL
LEU
ARG

• Molecule 1: Major vault protein

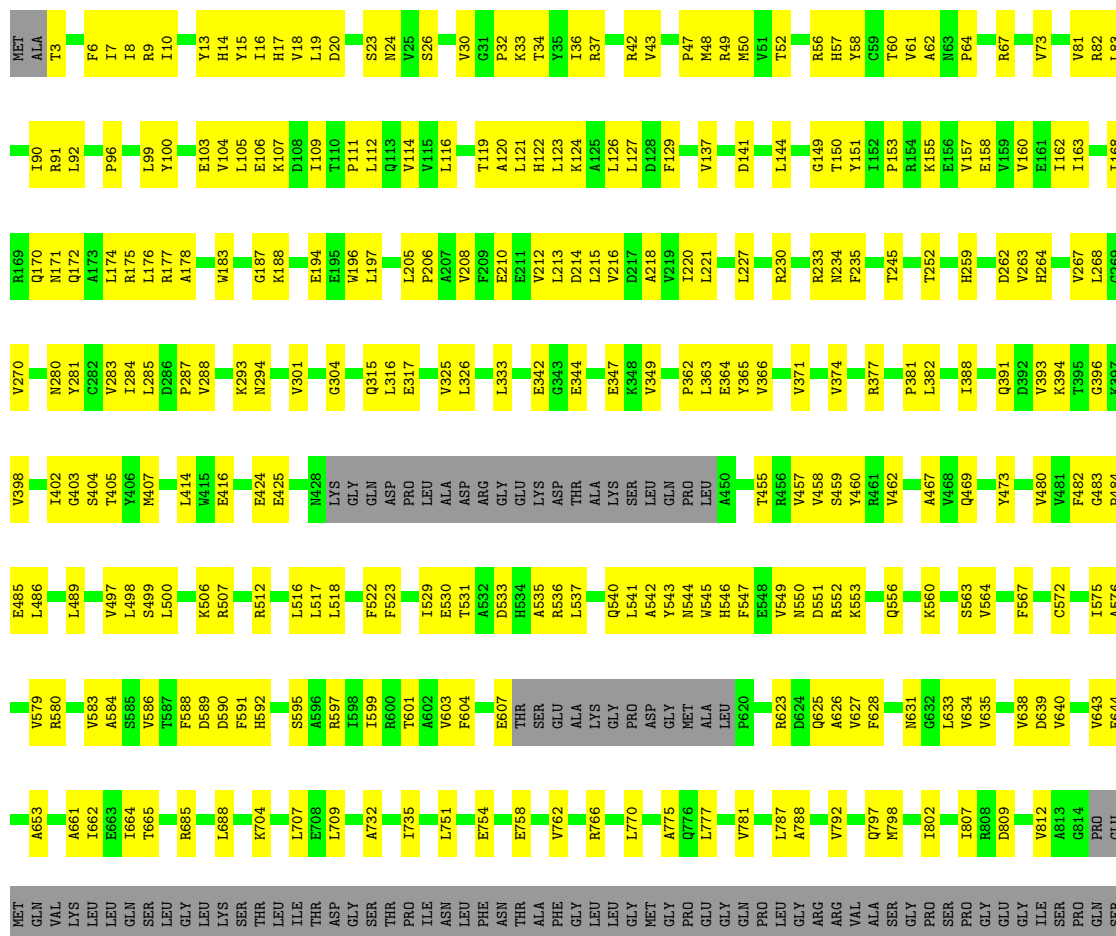
Chain L:  59% 28% 13%





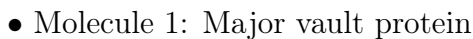
• Molecule 1: Major vault protein

Chain LB: 55% 32% 13%



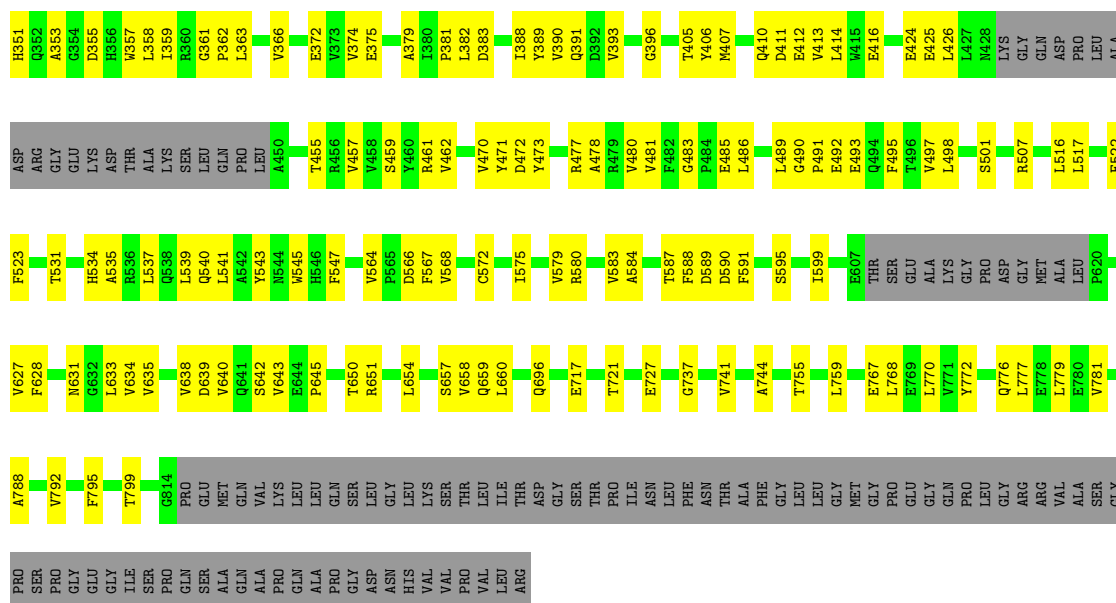
- Molecule 1: Major vault protein

| Response | Percentage |
|------------|------------|
| Yes | 59% |
| No | 28% |
| Don't know | 13% |



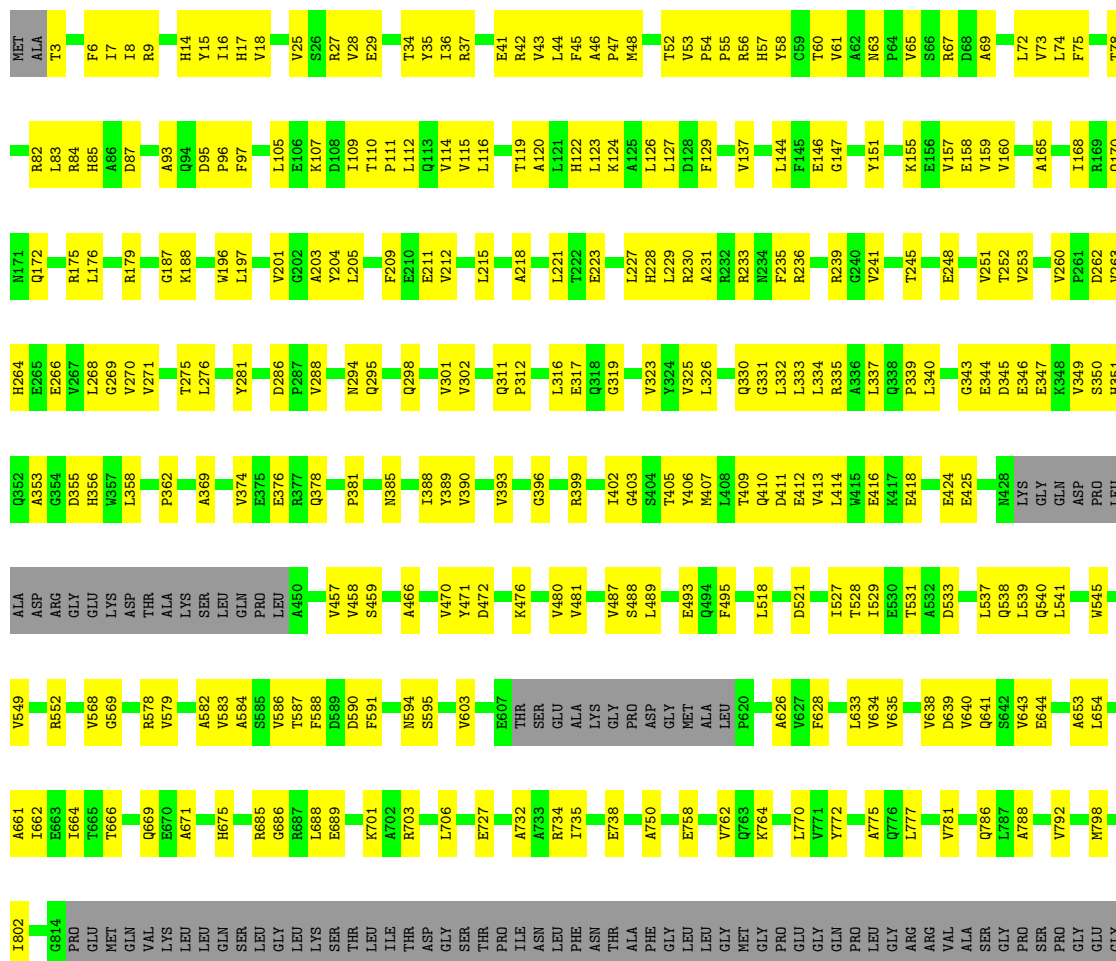
| Response | Percentage |
|------------|------------|
| Used | 55% |
| Not used | 33% |
| Don't know | 13% |





• Molecule 1: Major vault protein

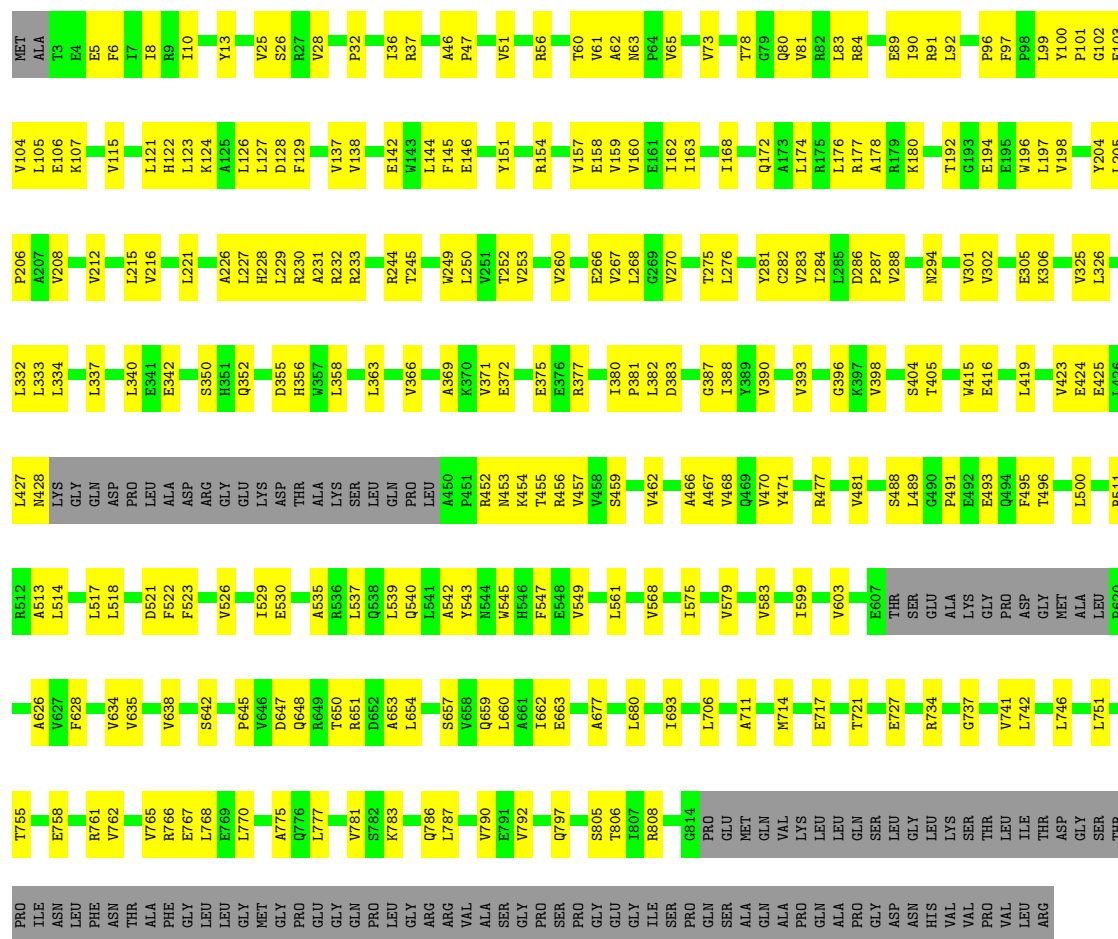
Chain MB: 55% 32% 13%



ILE
SER
PRO
GLN
SER
ALA
GLN
ALA
PRO
GLY
ASP
HIS
VAL
VAL
PRO
VAL
LEU
ARG

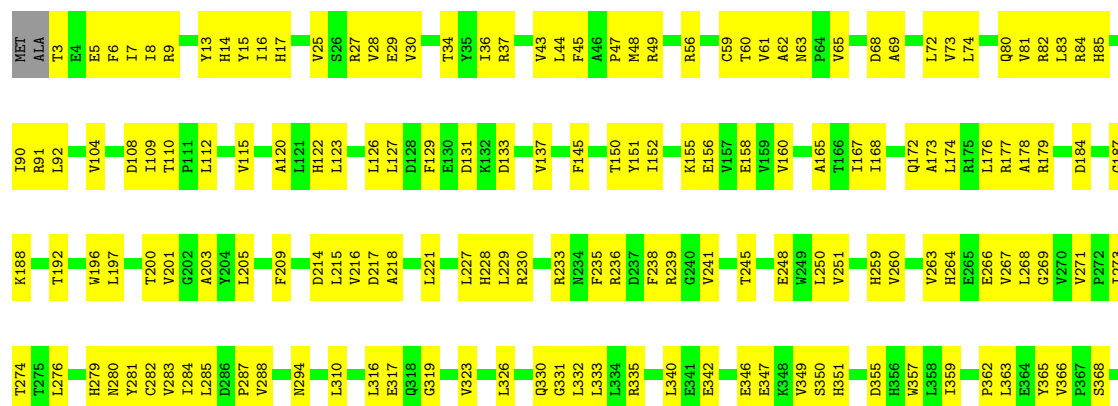
• Molecule 1: Major vault protein

Chain N:  58% 29% 13%



• Molecule 1: Major vault protein

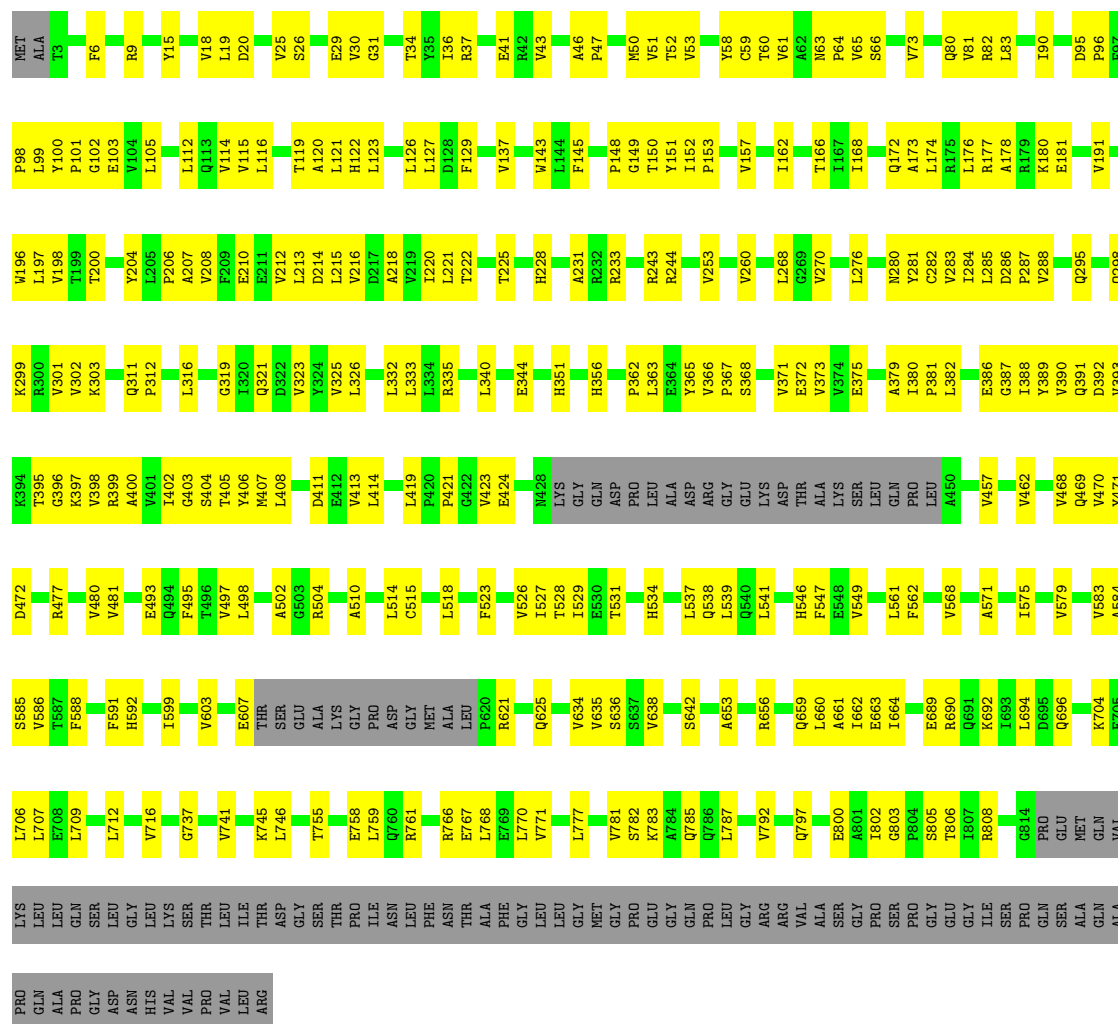
Chain NA:  55% 32% 13%



GLN
ALA
PRO
GLN
ALA
PRO
PRO
GLY
ASP
ASN
HIS
VAL
VAL
PRO
VAL
LEU
ARG

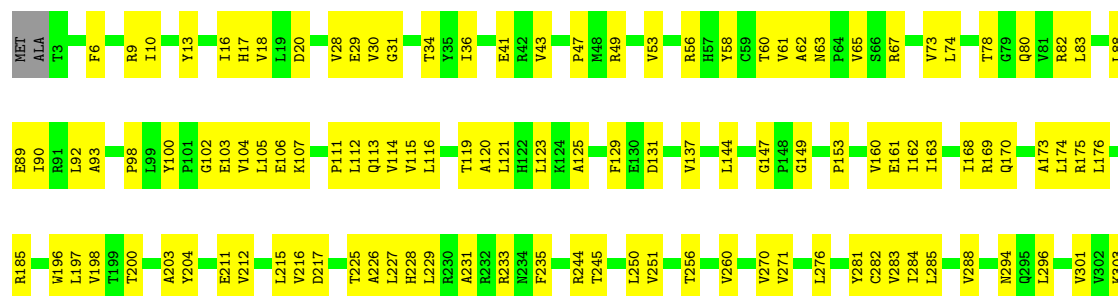
• Molecule 1: Major vault protein

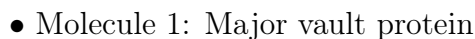
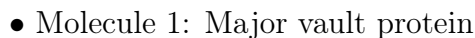
Chain O: 56% 32% 13%



• Molecule 1: Major vault protein

Chain OA: 56% 31% 13%





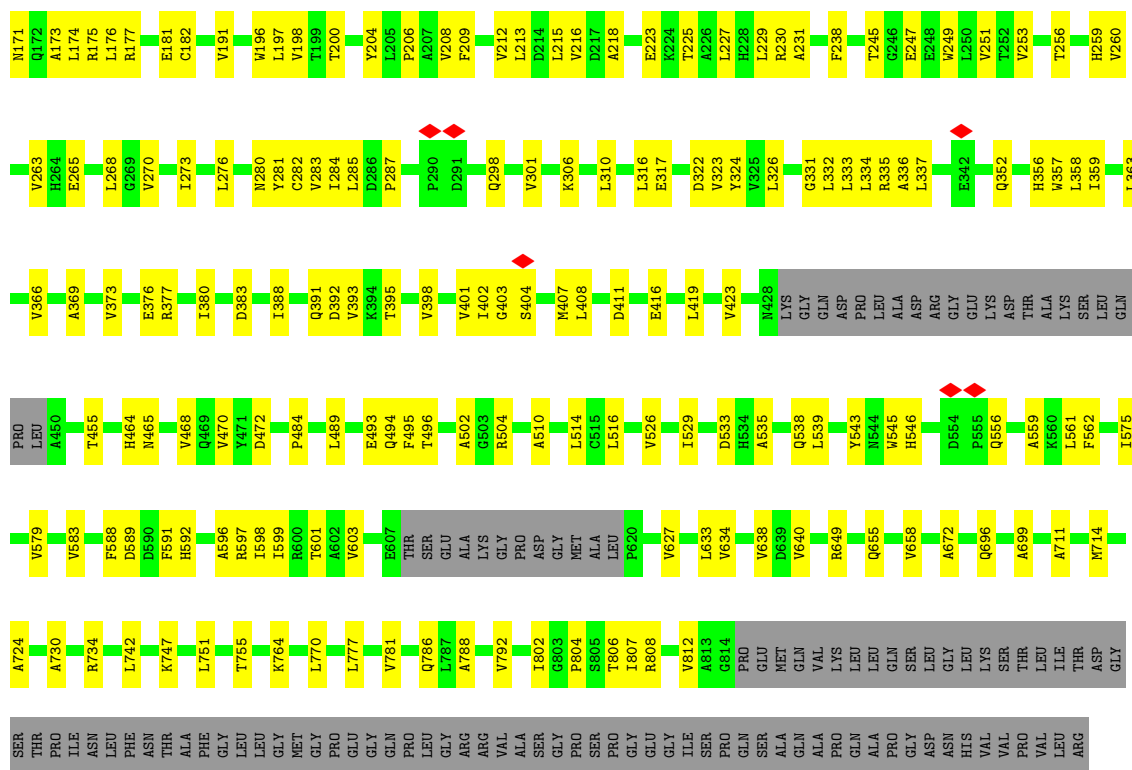
[illegible]

Chain Q:  59% 28% 13%

| | | | | | | | |
|-----|------|------|------|------|------|------|------|
| GLY | W771 | THR | L489 | L408 | V301 | R177 | A83 |
| | LEU | SER | E493 | T409 | S307 | C182 | P96 |
| | LEU | GLU | E493 | Q410 | S307 | C182 | P96 |
| | GLY | ALA | F495 | L414 | L310 | W183 | L39 |
| | GLY | GLY | | L419 | L316 | T192 | P101 |
| | PRO | PRO | L514 | P420 | E317 | W196 | G102 |
| | GLU | ASP | C515 | P421 | Q321 | W196 | E103 |
| | GLY | GLY | L517 | E424 | Q321 | W196 | E103 |
| | GLN | MET | L518 | E424 | Q321 | W196 | E103 |
| | PRO | ALA | L518 | E424 | Q321 | W196 | E103 |
| | LEU | LEU | L518 | E424 | Q321 | W196 | E103 |
| | GLY | P620 | D521 | H428 | Y324 | G202 | I109 |
| | ARG | | LYS | GLY | G331 | Y204 | |
| | ARG | A626 | T529 | GLN | L332 | L205 | L112 |
| | VAL | | E530 | GLN | L333 | L205 | L112 |
| | F795 | V634 | T531 | ASP | L334 | V208 | Q113 |
| | SER | V635 | | PRO | R335 | F209 | V114 |
| | GLY | S636 | L537 | LEU | | E210 | V115 |
| | PRO | | A542 | ALA | E347 | E211 | |
| | SER | D639 | P640 | ASP | ASP | V212 | T119 |
| PRO | P640 | | ARG | ARG | L213 | A120 | |
| GLY | P645 | | H546 | GLY | D214 | L121 | |
| GLY | | | H546 | GLY | L215 | H122 | |
| ILE | V812 | A661 | E548 | LYS | V216 | L123 | |
| SER | A813 | | T549 | THR | L227 | H123 | |
| PRO | G814 | L664 | D554 | LYS | L229 | D128 | |
| GLY | | A677 | | SER | R230 | F129 | |
| GLN | PRO | | | GLN | T245 | G134 | |
| ALA | MET | L680 | T558 | LEU | G246 | | |
| GLN | VAL | L709 | L561 | PRO | E247 | | |
| LEU | LEU | | F567 | LEU | V137 | | |
| ALA | LEU | A730 | V568 | A450 | L250 | | |
| PRO | GLN | | | T455 | W143 | | |
| GLY | SER | A733 | R580 | R456 | L144 | | |
| ASP | LEU | G581 | G581 | V457 | P261 | | |
| ASN | GLY | L742 | A582 | V458 | G147 | | |
| HIS | LEU | Q743 | V583 | | | | |
| VAL | LYS | | A584 | R461 | T150 | | |
| VAL | SER | L746 | | V462 | G269 | | |
| THR | THR | L751 | T587 | I388 | K155 | | |
| VAL | LEU | | F588 | V389 | E156 | | |
| VAL | ILE | | D589 | V390 | E157 | | |
| THR | THR | T755 | D590 | V468 | T274 | | |
| ASP | ASP | | F591 | Q469 | T275 | | |
| GLY | GLY | L759 | | V470 | | | |
| SER | SER | Q760 | N594 | Y471 | W280 | | |
| THR | THR | R761 | R761 | G396 | T281 | | |
| PRO | PRO | Q762 | S595 | | C282 | | |
| ILE | ILE | Q763 | | K397 | V283 | | |
| ASN | ASN | K764 | I598 | V398 | L284 | | |
| LEU | LEU | V765 | I599 | R399 | L285 | | |
| PHE | PHE | R766 | R600 | A400 | D286 | | |
| ASN | ASN | E767 | T601 | V401 | P287 | | |
| THR | THR | L768 | V603 | | V288 | | |
| ALA | ALA | E769 | L486 | T405 | A173 | | |
| THR | THR | L770 | C182 | Y406 | L174 | | |
| | | | E187 | M402 | R177 | | |

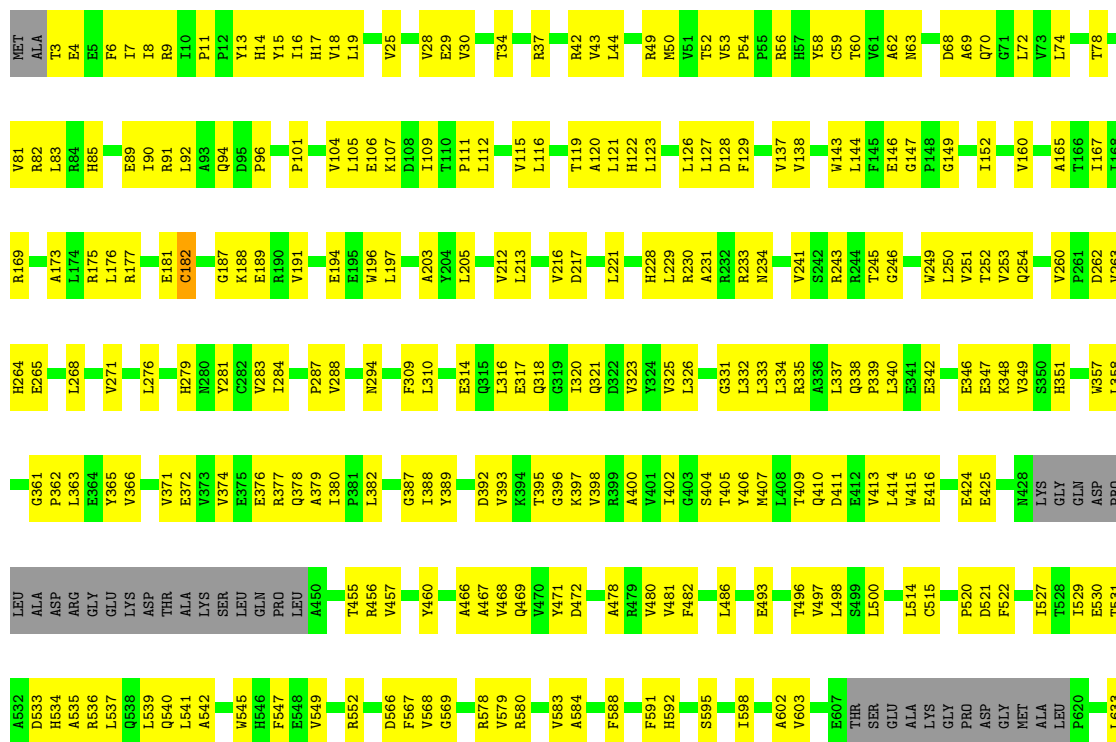
Chain QA:  54% 33% 13%

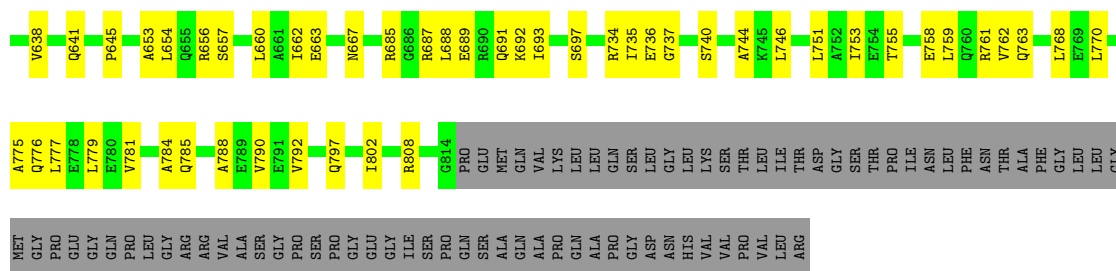
[illegible]



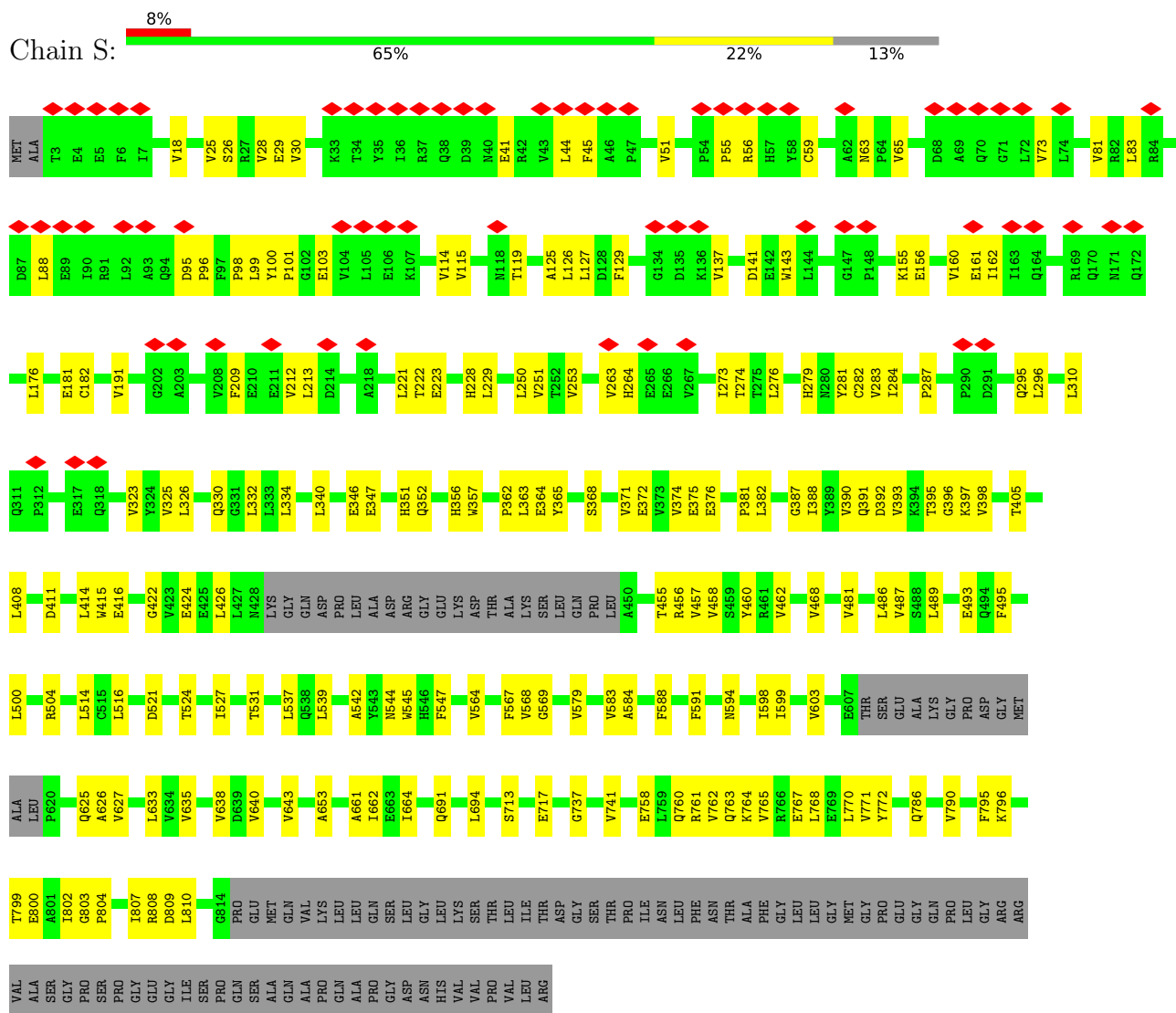
• Molecule 1: Major vault protein

Chain RB:

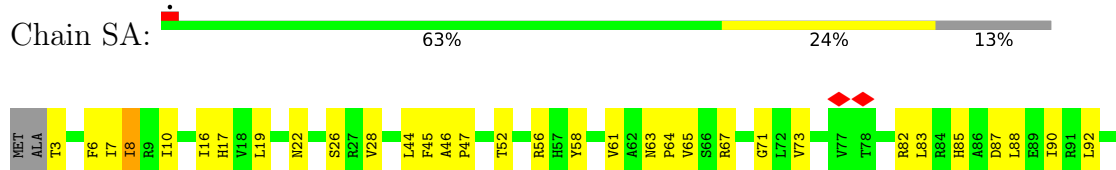


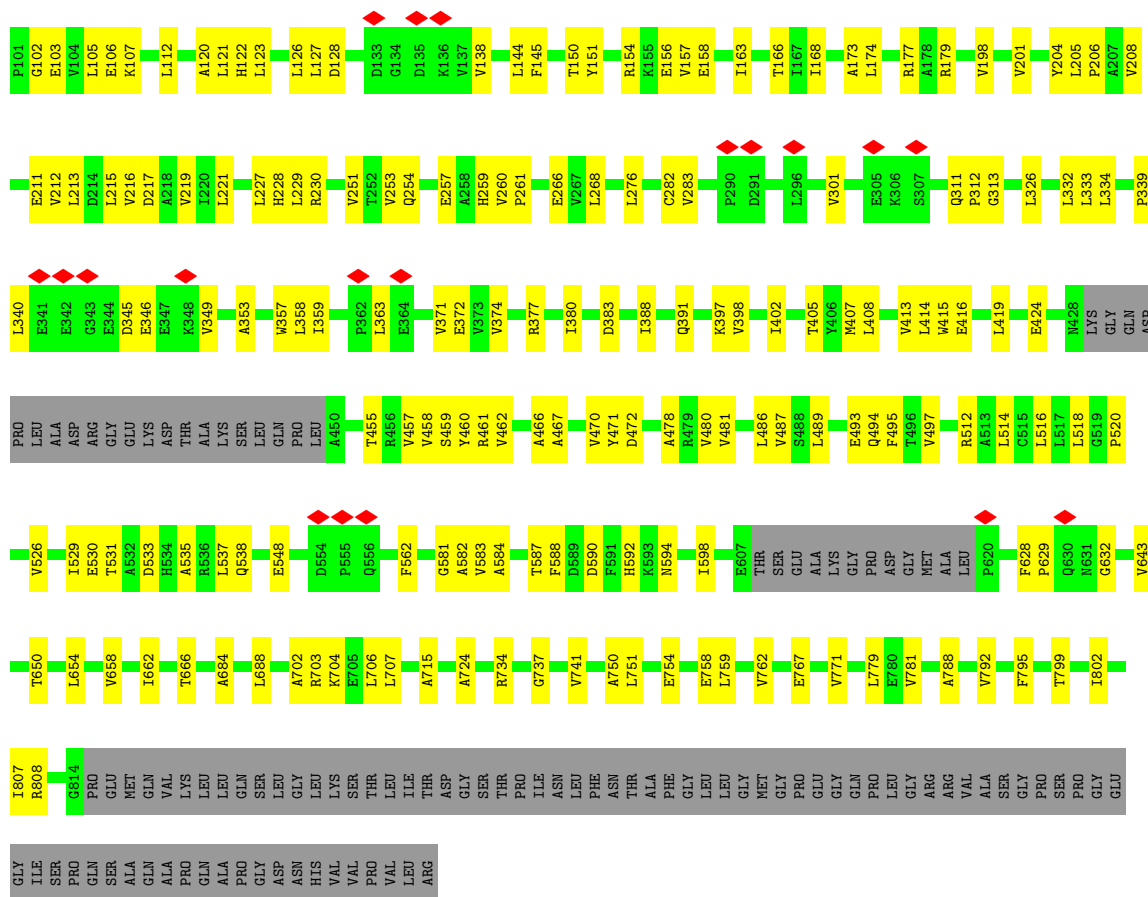


• Molecule 1: Major vault protein



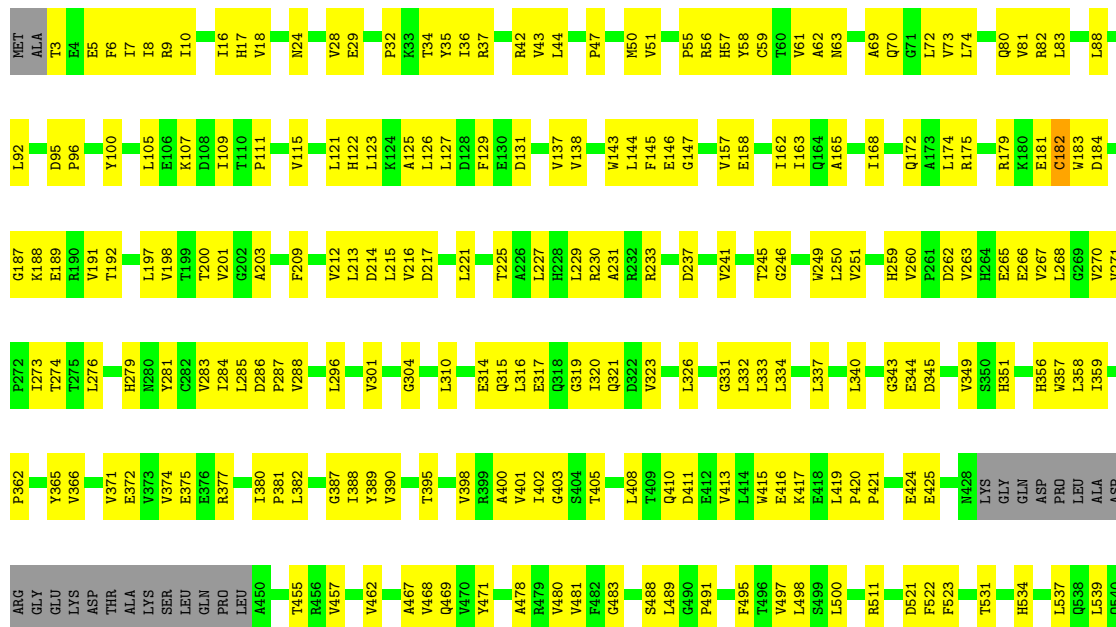
• Molecule 1: Major vault protein

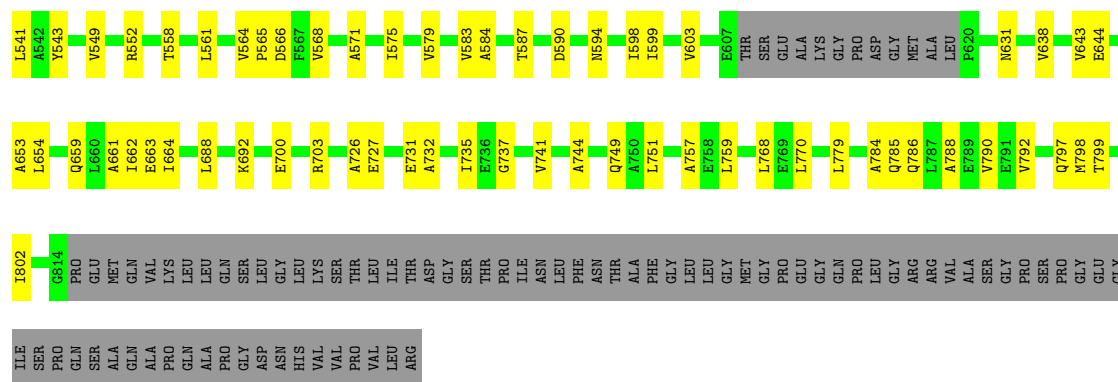




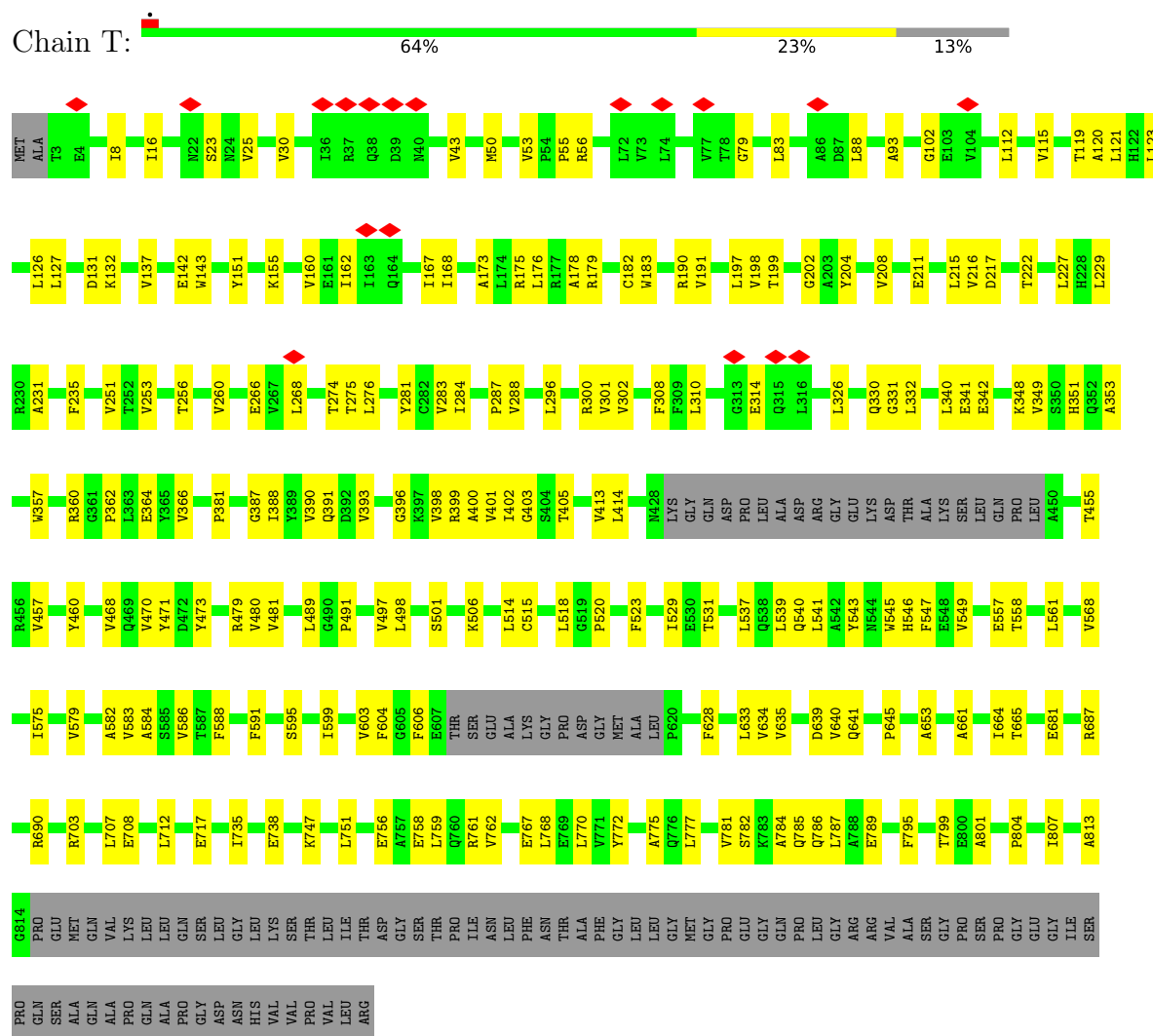
• Molecule 1: Major vault protein

Chain SB: 56% 31% 13%



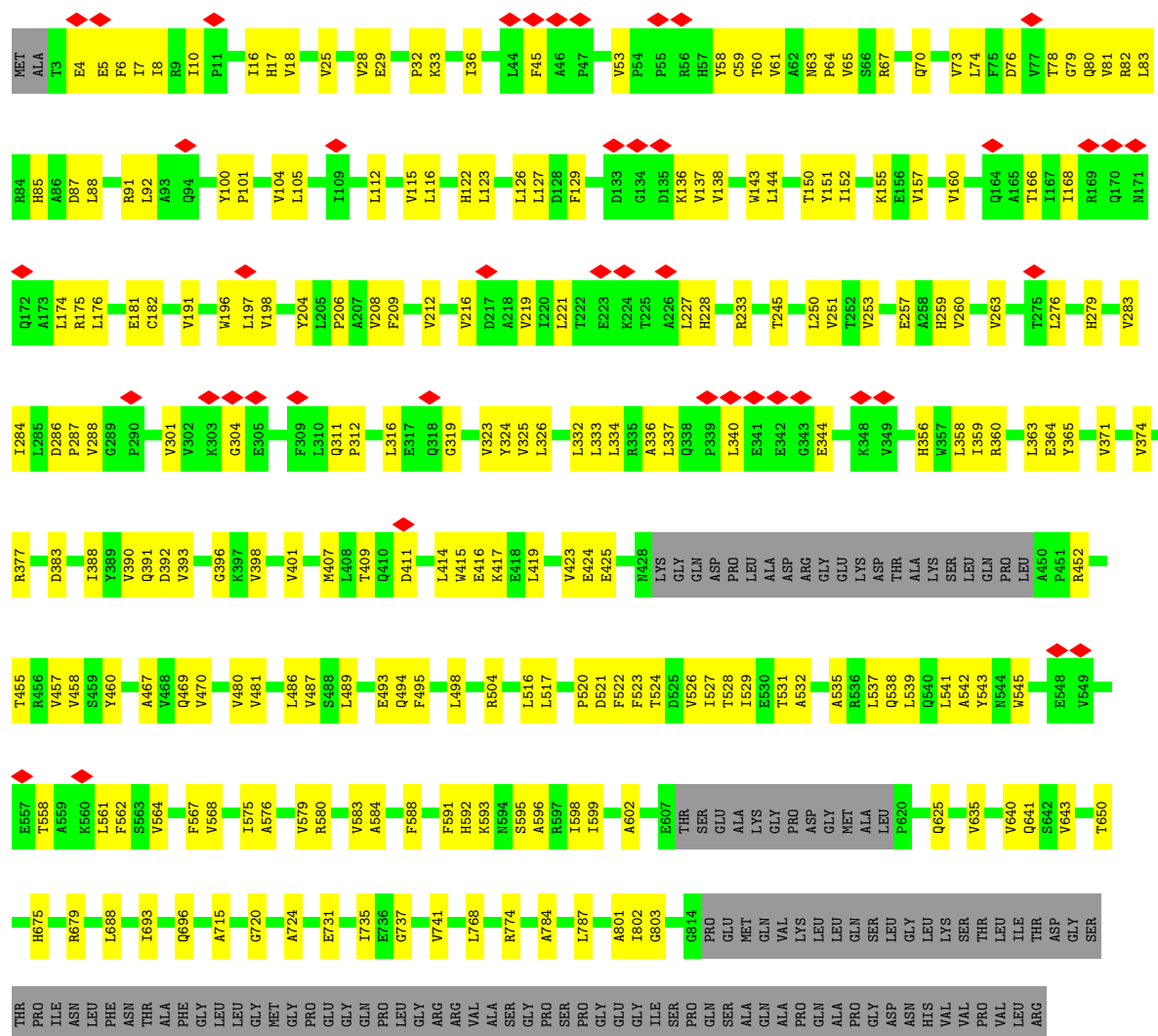


• Molecule 1: Major vault protein



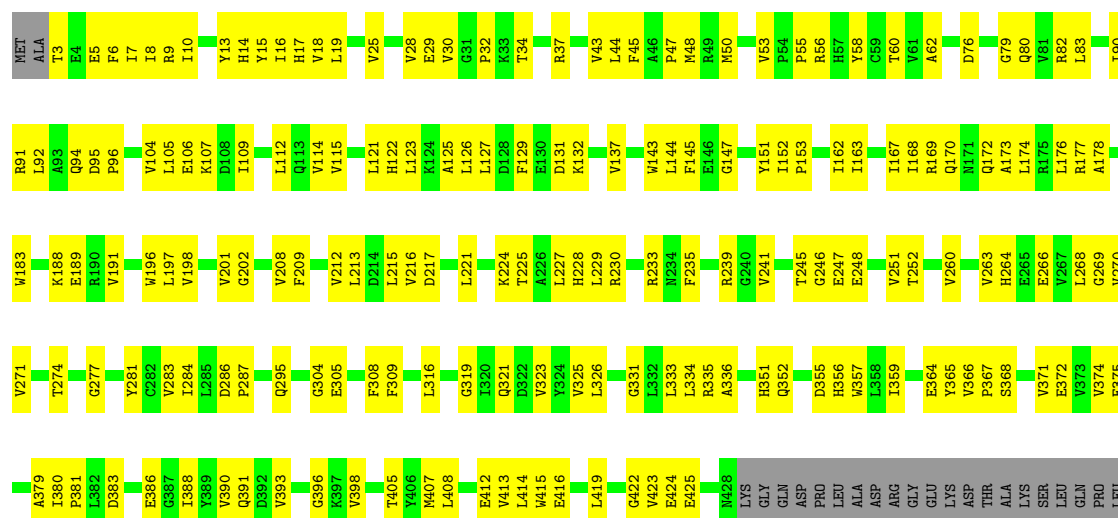
• Molecule 1: Major vault protein



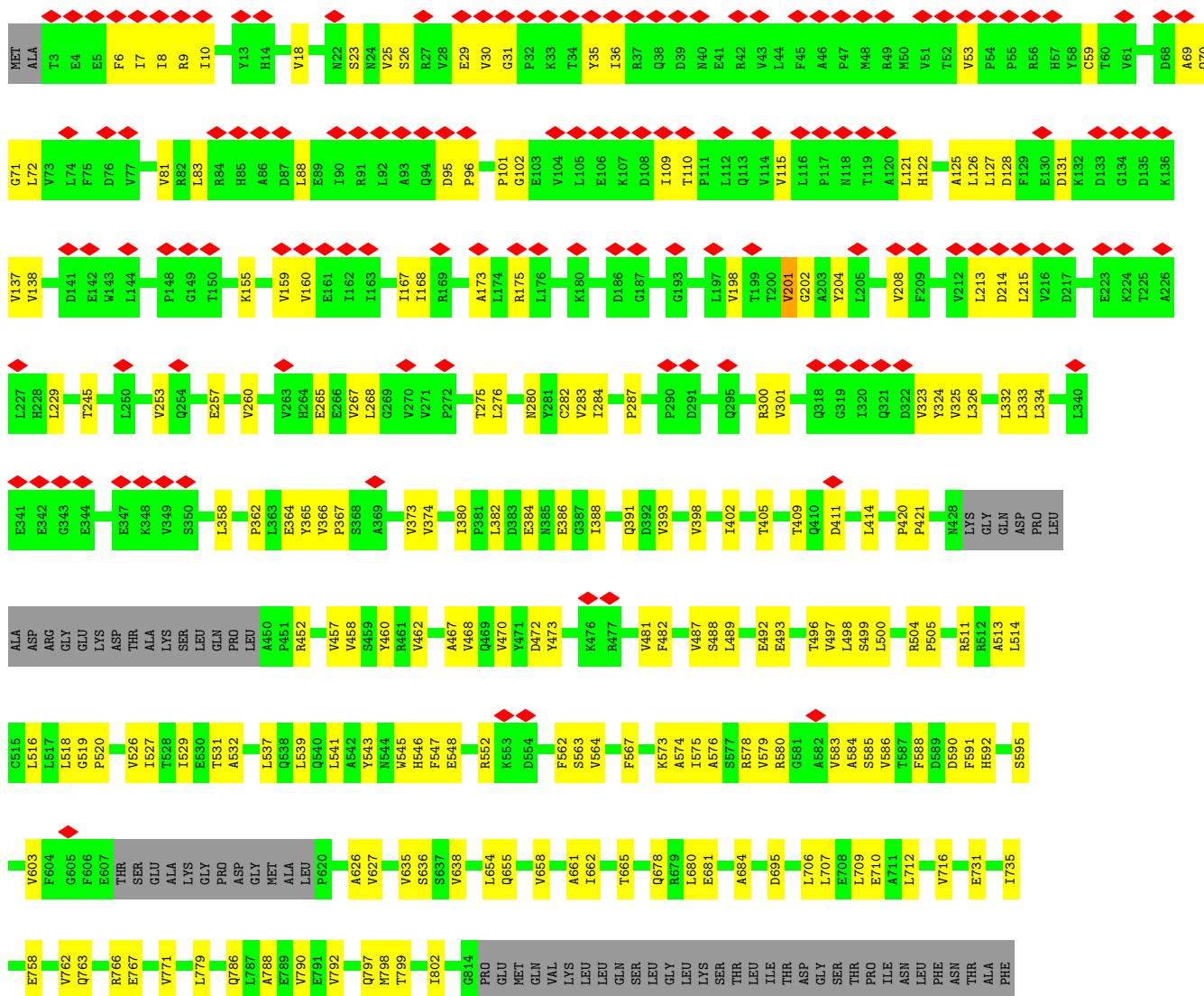


• Molecule 1: Major vault protein

Chain TB: 55% 32% 13%



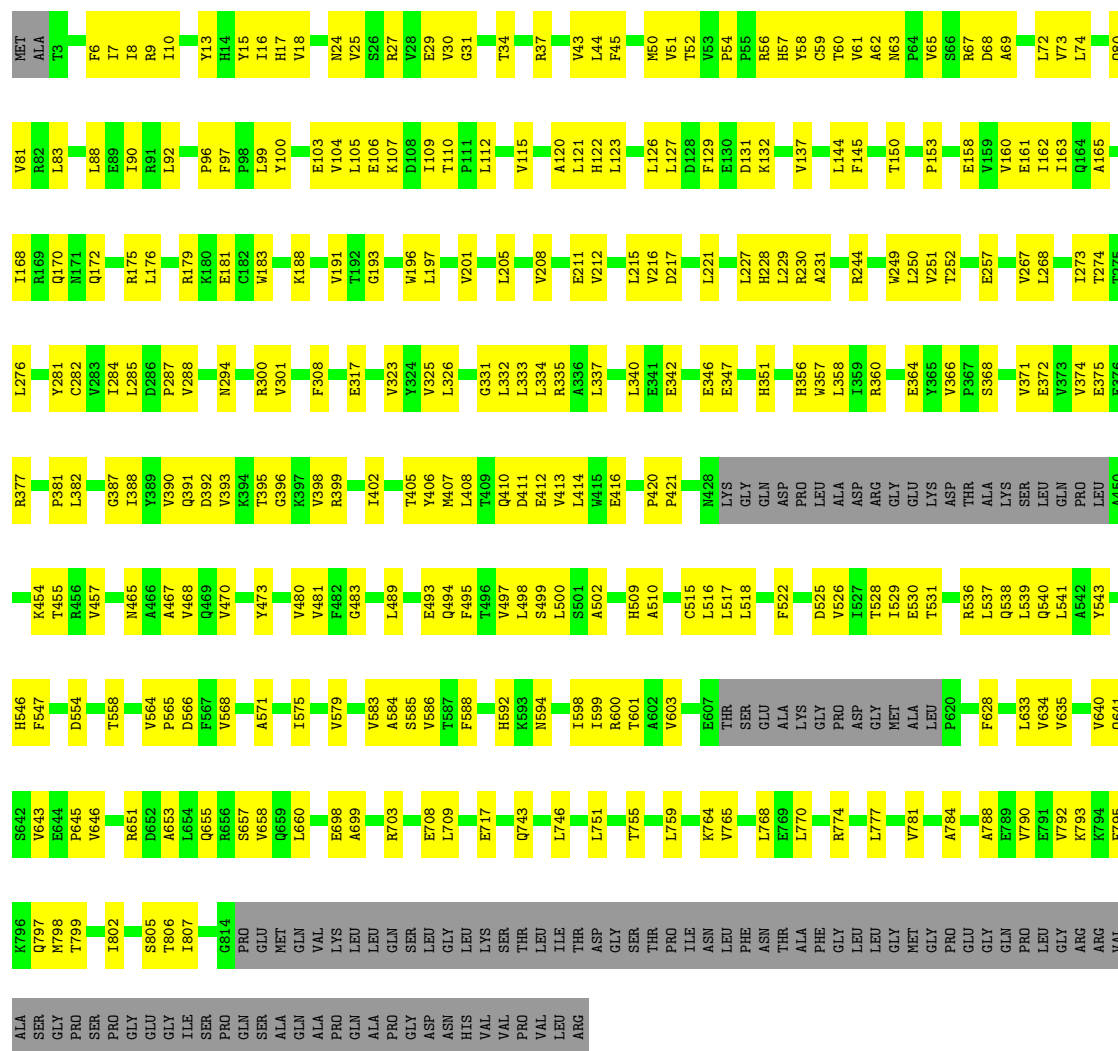
- Molecule 1: Major vault protein



GLY LEU LEU GLY MET GLY PRO PRO GLY GLN PRO LEU LEU GLY ARG ARG VAL ALA SER SER GLY PRO SER PRO GLY GLY GLY ILE SER SER PRO GLN SER SER ALA ALA ALA PRO GLN ALA ALA PRO GLY GLY ASP ASN HIS VAL VAL PRO VAL LEU ARG

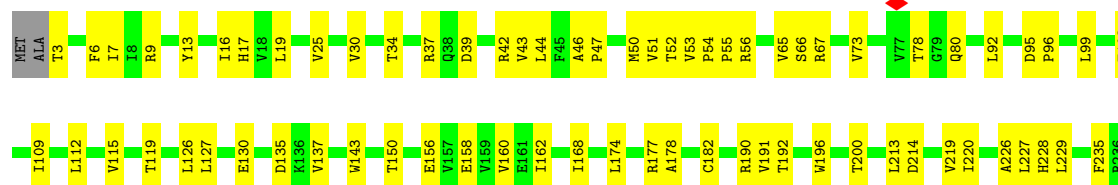
• Molecule 1: Major vault protein

Chain UB:  55% 32% 13%

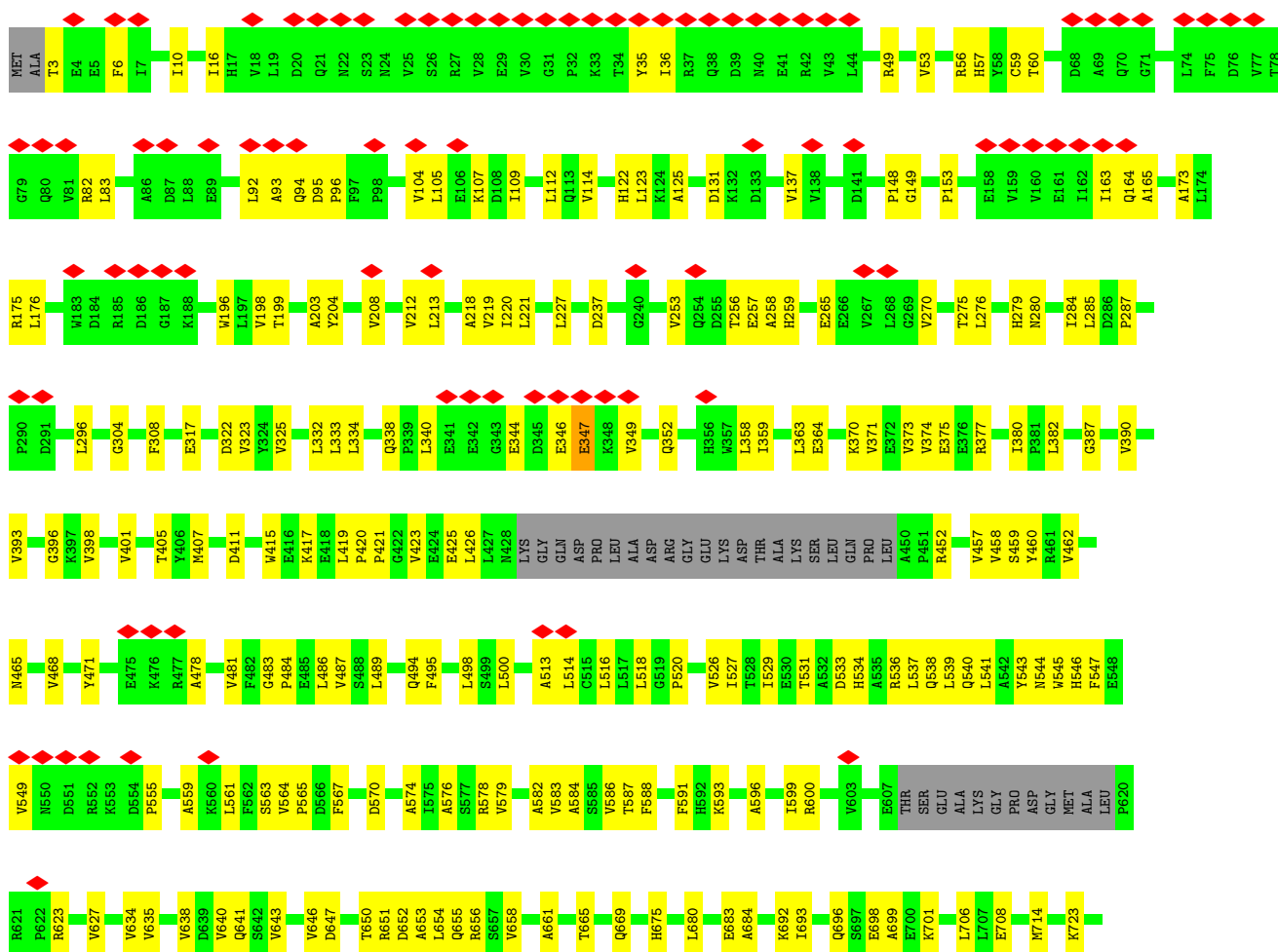


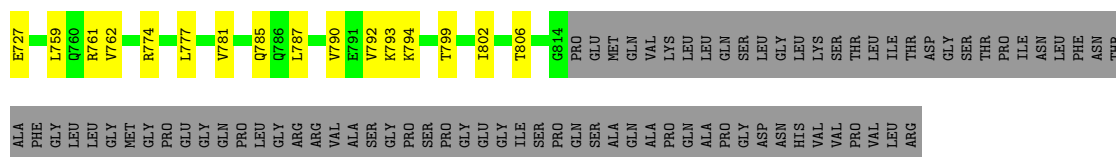
• Molecule 1: Major vault protein

Chain V:  64% 23% 13%



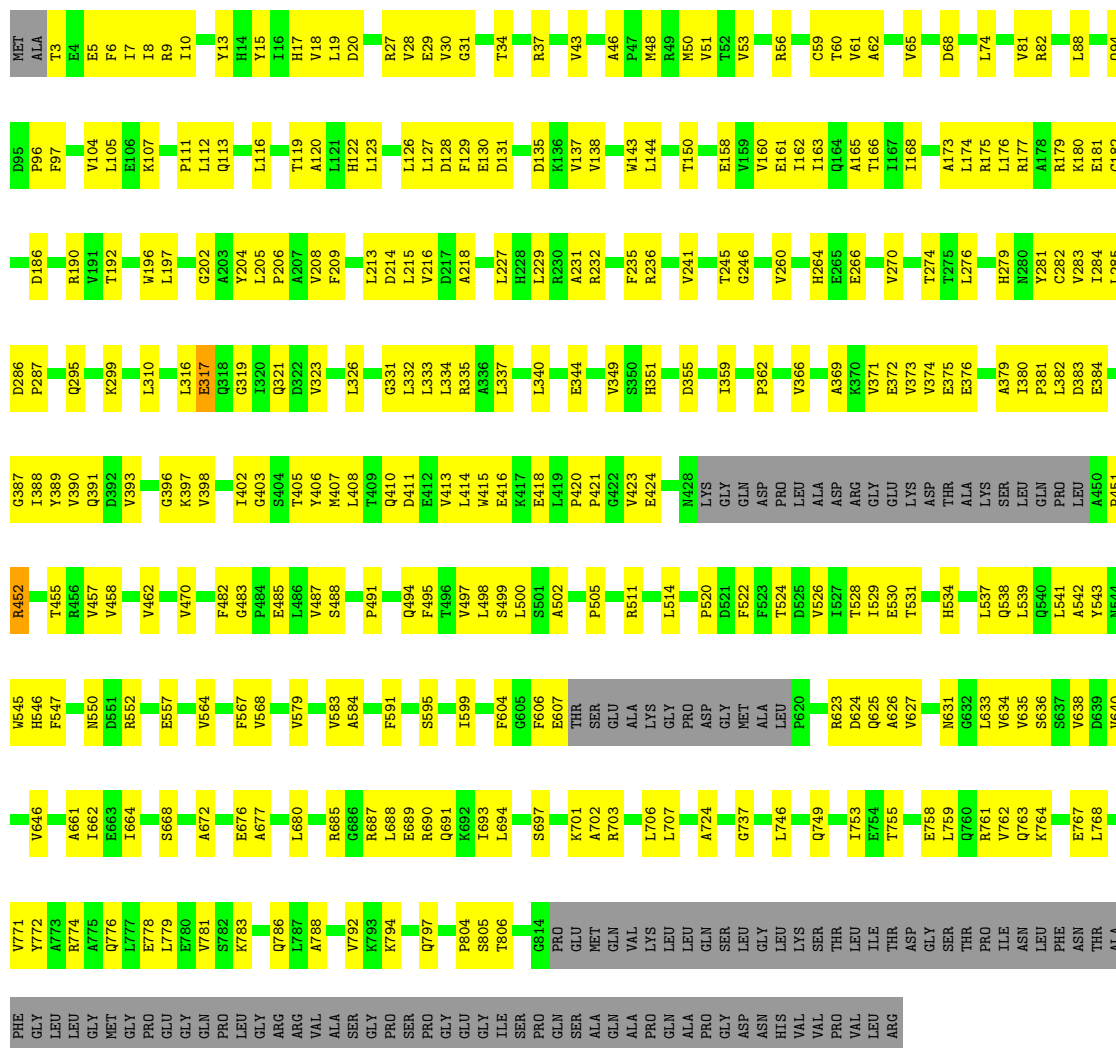
- Molecule 1: Major vault protein





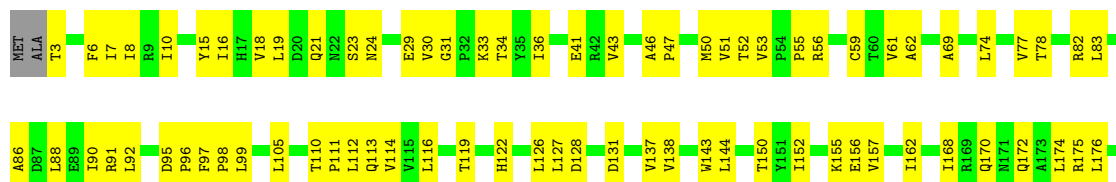
• Molecule 1: Major vault protein

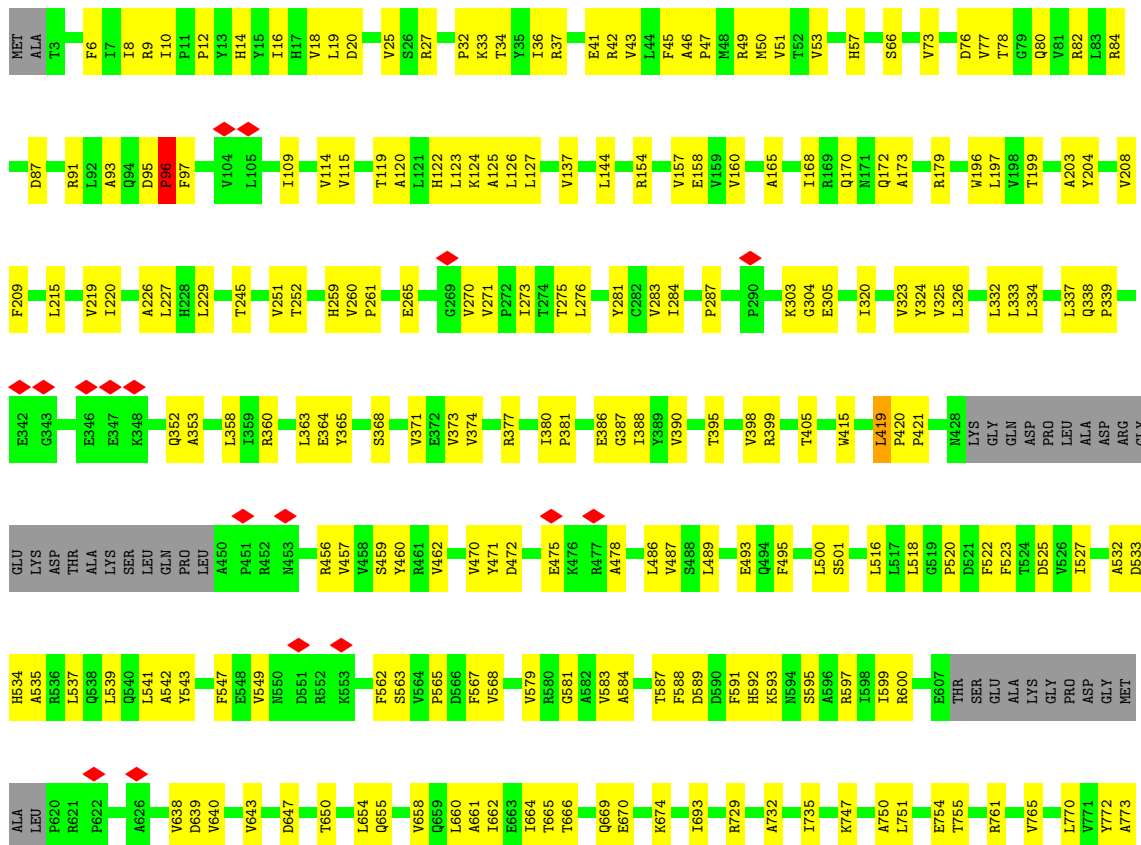
Chain VB: 53% 34% 13%

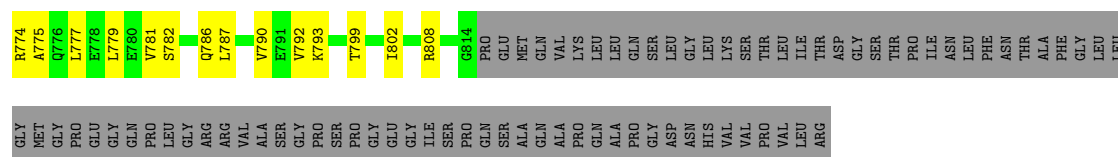


• Molecule 1: Major vault protein

Chain W: 60% 27% 13%

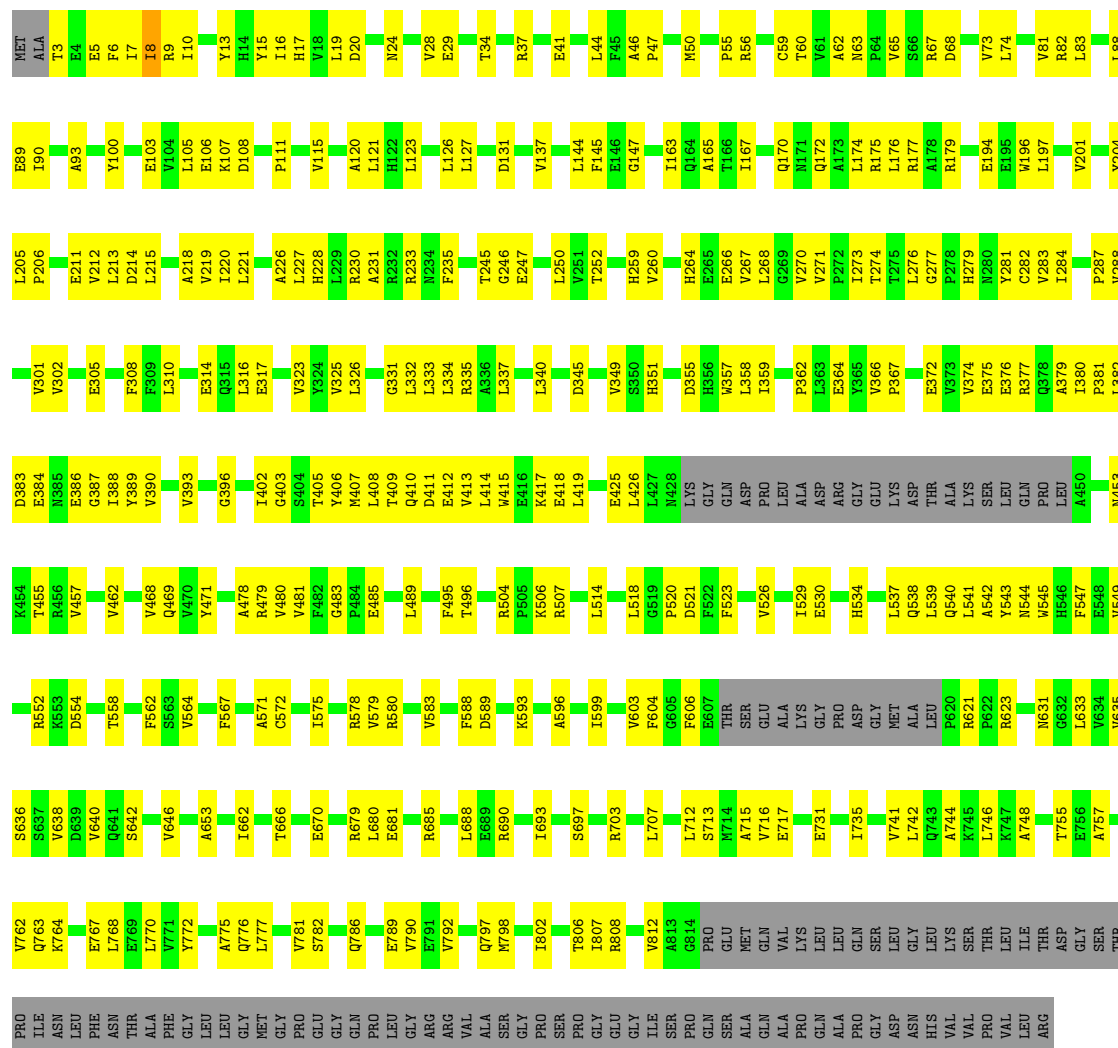






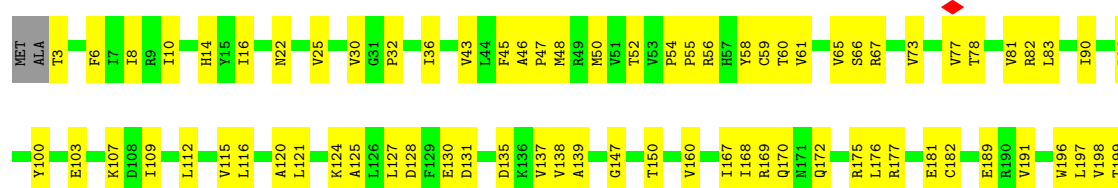
• Molecule 1: Major vault protein

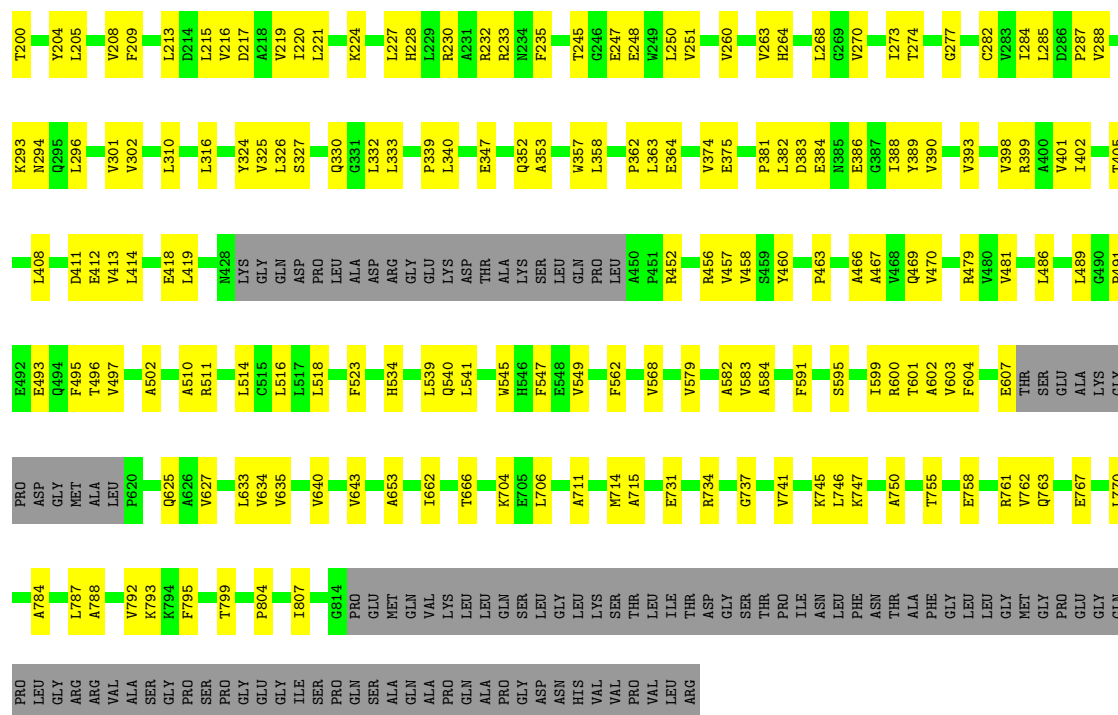
Chain WB: 53% 34% 13%



• Molecule 1: Major vault protein

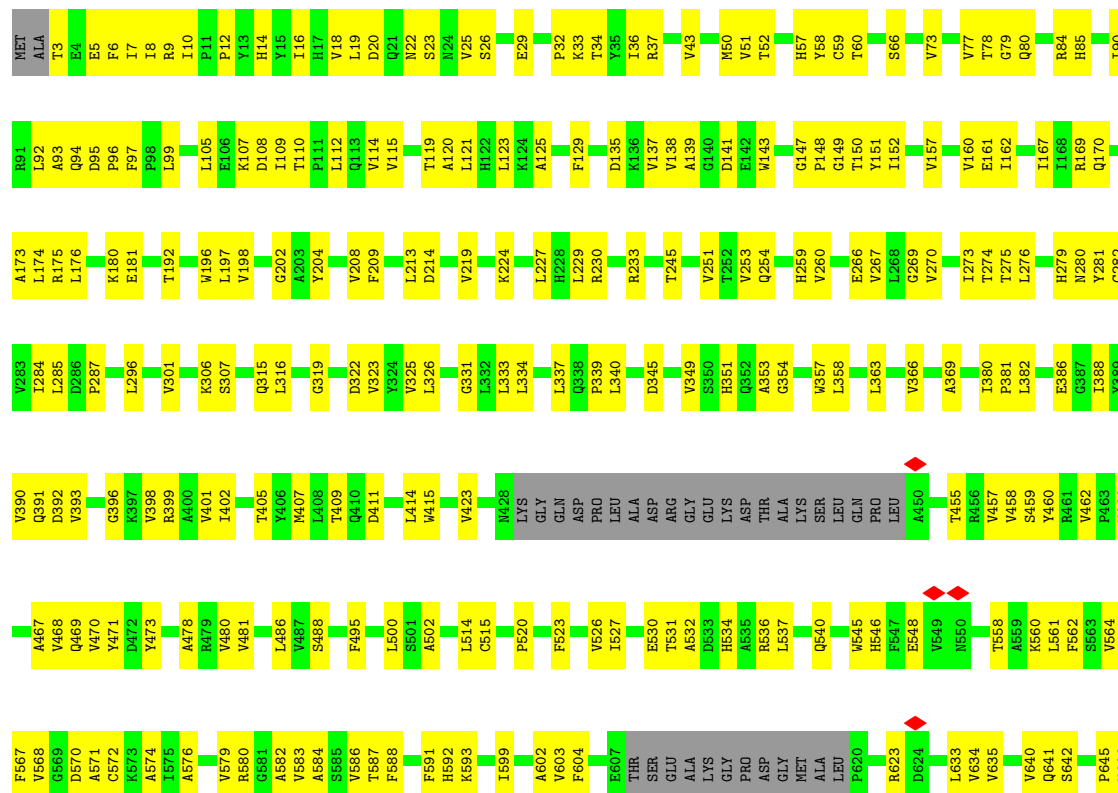
Chain X: 60% 27% 13%

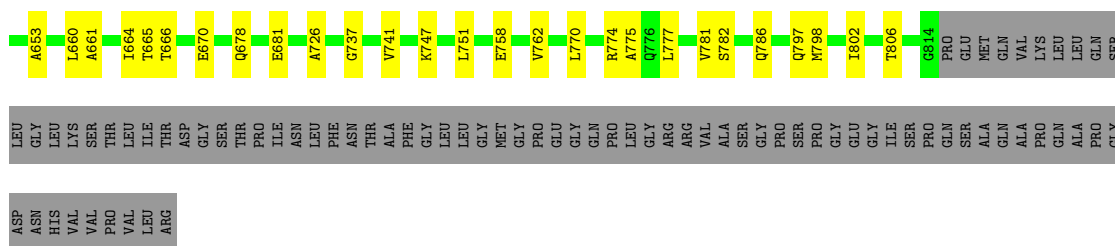




• Molecule 1: Major vault protein

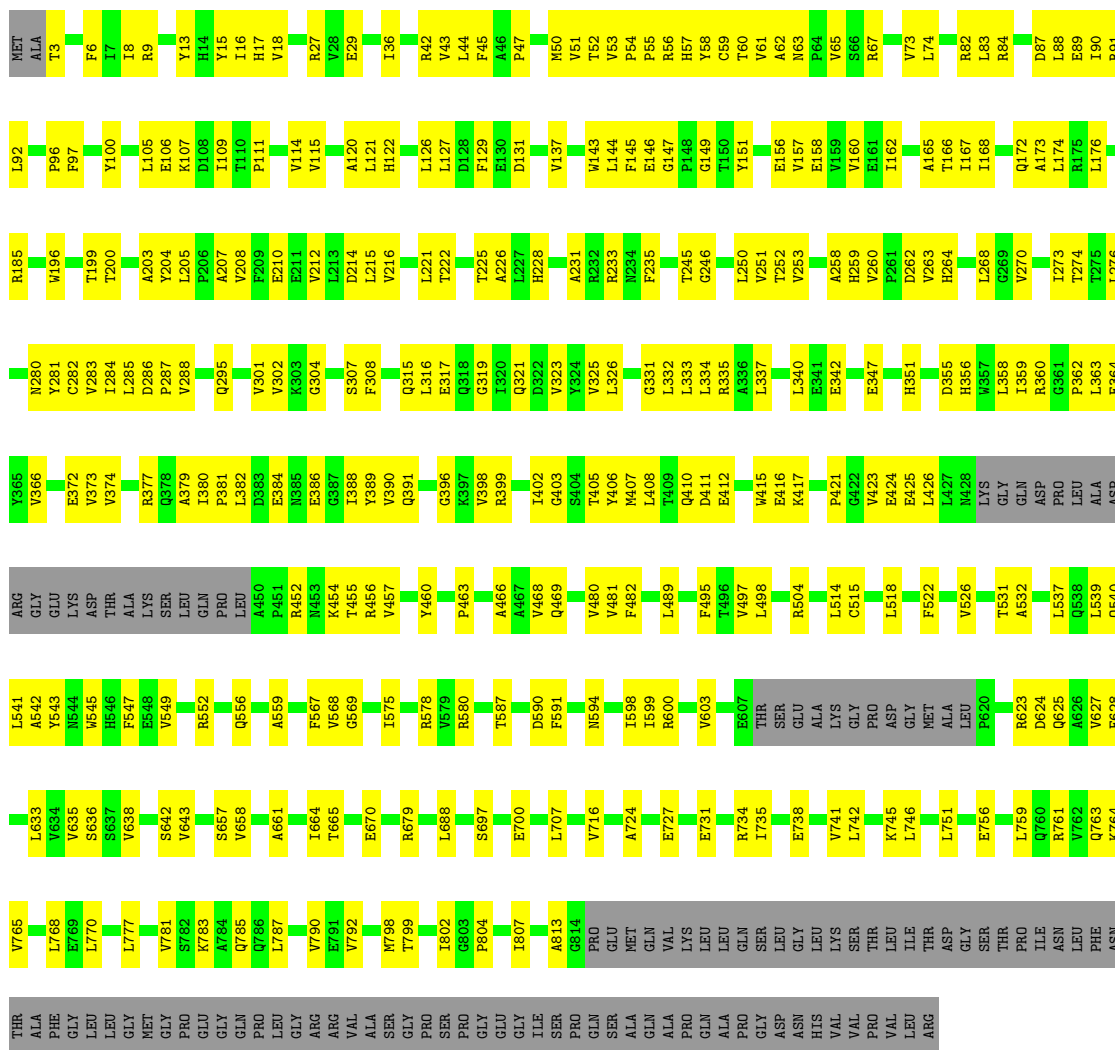
Chain XA: 57% 30% 13%





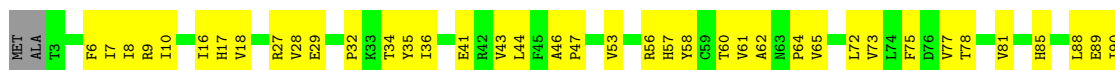
• Molecule 1: Major vault protein

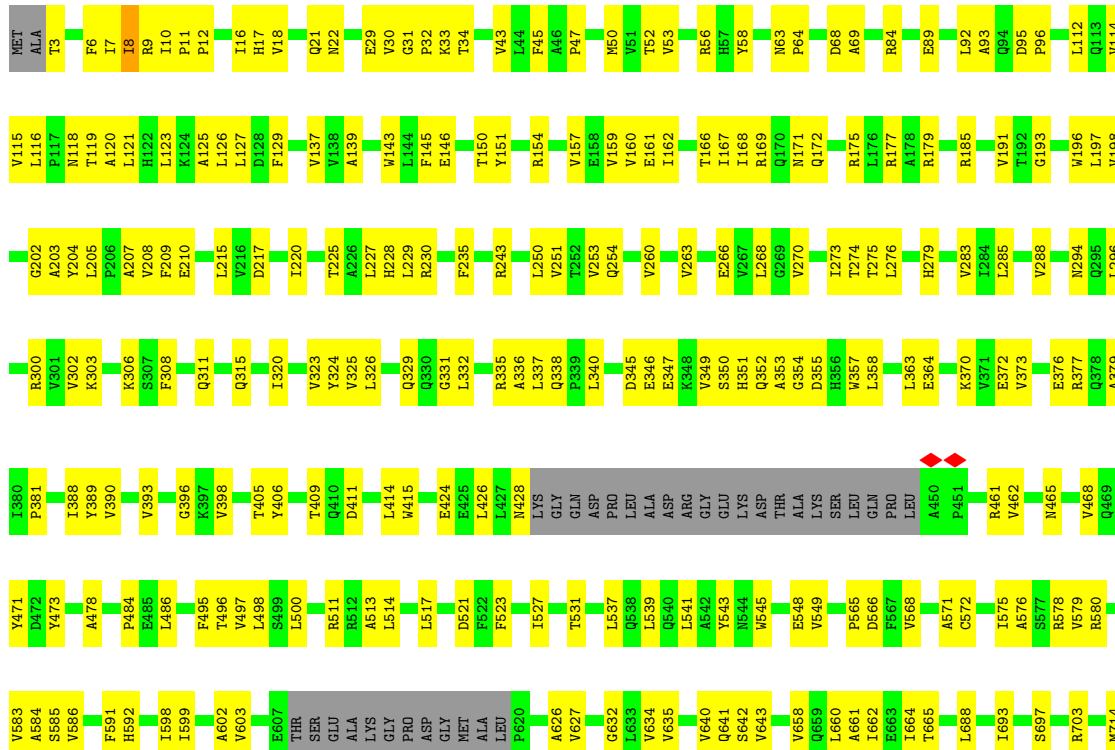
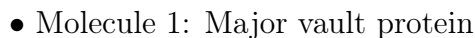
Chain XB: 53% 34% 13%

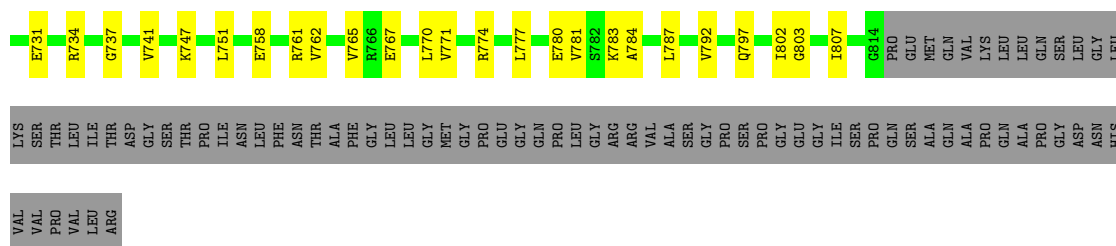


• Molecule 1: Major vault protein

Chain Y: 58% 29% 13%

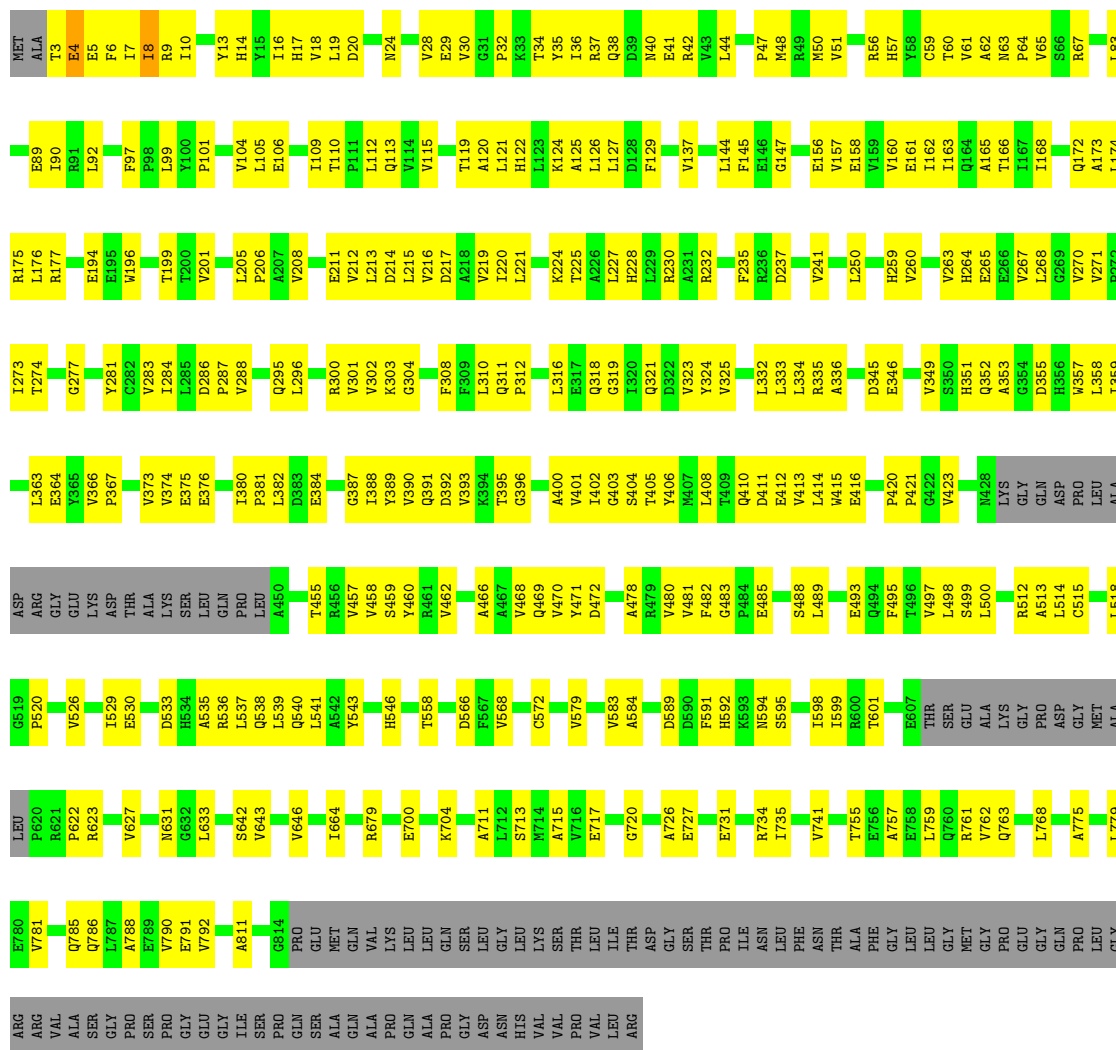






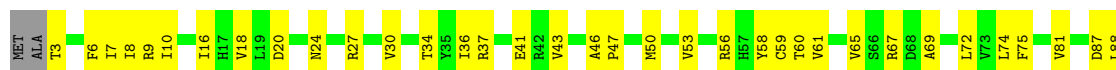
• Molecule 1: Major vault protein

Chain YB: 53% 34% 13%



• Molecule 1: Major vault protein

Chain Z: 57% 30% 13%



4 Experimental information

| Property | Value | Source |
|--------------------------------------|---|-----------|
| EM reconstruction method | SINGLE PARTICLE | Depositor |
| Imposed symmetry | POINT, Not provided | |
| Number of particles used | 23998 | Depositor |
| Resolution determination method | FSC 0.143 CUT-OFF | Depositor |
| CTF correction method | PHASE FLIPPING AND AMPLITUDE CORRECTION | Depositor |
| Microscope | TFS KRIOS | Depositor |
| Voltage (kV) | 300 | Depositor |
| Electron dose ($e^-/\text{\AA}^2$) | 50.15 | Depositor |
| Minimum defocus (nm) | 551 | Depositor |
| Maximum defocus (nm) | 2330 | Depositor |
| Magnification | 81000 | Depositor |
| Image detector | GATAN K3 BIOQUANTUM (6k x 4k) | Depositor |
| Maximum map value | 1.709 | Depositor |
| Minimum map value | -0.418 | Depositor |
| Average map value | 0.004 | Depositor |
| Map value standard deviation | 0.095 | Depositor |
| Recommended contour level | 0.35 | Depositor |
| Map size (Å) | 861.7984, 861.7984, 861.7984 | wwPDB |
| Map dimensions | 1024, 1024, 1024 | wwPDB |
| Map angles (°) | 90.0, 90.0, 90.0 | wwPDB |
| Pixel spacing (Å) | 0.8416, 0.8416, 0.8416 | Depositor |

5 Model quality

5.1 Standard geometry

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

| Mol | Chain | Bond lengths | | Bond angles | |
|-----|-------|--------------|---------|-------------|---------------|
| | | RMSZ | # Z >5 | RMSZ | # Z >5 |
| 1 | A | 0.24 | 0/6291 | 0.45 | 0/8533 |
| 1 | AA | 0.19 | 0/6291 | 0.44 | 0/8533 |
| 1 | AB | 0.17 | 0/6291 | 0.45 | 0/8533 |
| 1 | AC | 0.17 | 0/6291 | 0.45 | 0/8533 |
| 1 | B | 0.23 | 0/6291 | 0.45 | 0/8533 |
| 1 | BA | 0.20 | 0/6291 | 0.45 | 0/8533 |
| 1 | BB | 0.17 | 0/6291 | 0.43 | 0/8533 |
| 1 | C | 0.24 | 0/6291 | 0.46 | 0/8533 |
| 1 | CA | 0.20 | 0/6291 | 0.46 | 0/8533 |
| 1 | CB | 0.18 | 0/6291 | 0.43 | 0/8533 |
| 1 | D | 0.24 | 0/6291 | 0.45 | 0/8533 |
| 1 | DA | 0.21 | 0/6291 | 0.46 | 0/8533 |
| 1 | DB | 0.19 | 0/6291 | 0.44 | 0/8533 |
| 1 | E | 0.24 | 0/6291 | 0.46 | 0/8533 |
| 1 | EA | 0.22 | 0/6291 | 0.45 | 0/8533 |
| 1 | EB | 0.20 | 0/6291 | 0.45 | 0/8533 |
| 1 | F | 0.23 | 0/6291 | 0.46 | 0/8533 |
| 1 | FA | 0.23 | 0/6291 | 0.45 | 0/8533 |
| 1 | FB | 0.20 | 0/6291 | 0.44 | 0/8533 |
| 1 | G | 0.22 | 0/6291 | 0.45 | 0/8533 |
| 1 | GA | 0.22 | 0/6291 | 0.45 | 0/8533 |
| 1 | GB | 0.21 | 0/6291 | 0.45 | 0/8533 |
| 1 | H | 0.24 | 0/6291 | 0.46 | 1/8533 (0.0%) |
| 1 | HA | 0.23 | 0/6291 | 0.45 | 0/8533 |
| 1 | HB | 0.21 | 0/6291 | 0.44 | 0/8533 |
| 1 | I | 0.23 | 0/6291 | 0.48 | 2/8533 (0.0%) |
| 1 | IA | 0.23 | 0/6291 | 0.45 | 0/8533 |
| 1 | IB | 0.22 | 0/6291 | 0.46 | 0/8533 |
| 1 | J | 0.21 | 0/6291 | 0.45 | 0/8533 |
| 1 | JA | 0.23 | 0/6291 | 0.45 | 0/8533 |
| 1 | JB | 0.22 | 0/6291 | 0.46 | 0/8533 |
| 1 | K | 0.20 | 0/6291 | 0.44 | 0/8533 |
| 1 | KA | 0.23 | 0/6291 | 0.45 | 0/8533 |
| 1 | KB | 0.22 | 0/6291 | 0.45 | 0/8533 |

| Mol | Chain | Bond lengths | | Bond angles | |
|-----|-------|--------------|---------|-------------|---------|
| | | RMSZ | # Z >5 | RMSZ | # Z >5 |
| 1 | L | 0.20 | 0/6291 | 0.44 | 0/8533 |
| 1 | LA | 0.23 | 0/6291 | 0.45 | 0/8533 |
| 1 | LB | 0.23 | 0/6291 | 0.46 | 0/8533 |
| 1 | M | 0.19 | 0/6291 | 0.44 | 0/8533 |
| 1 | MA | 0.24 | 0/6291 | 0.46 | 0/8533 |
| 1 | MB | 0.22 | 0/6291 | 0.45 | 0/8533 |
| 1 | N | 0.19 | 0/6291 | 0.44 | 0/8533 |
| 1 | NA | 0.24 | 0/6291 | 0.45 | 0/8533 |
| 1 | NB | 0.23 | 0/6291 | 0.45 | 0/8533 |
| 1 | O | 0.18 | 0/6291 | 0.44 | 0/8533 |
| 1 | OA | 0.16 | 0/6291 | 0.44 | 0/8533 |
| 1 | OB | 0.22 | 0/6291 | 0.44 | 0/8533 |
| 1 | P | 0.18 | 0/6291 | 0.43 | 0/8533 |
| 1 | PA | 0.16 | 0/6291 | 0.44 | 0/8533 |
| 1 | PB | 0.22 | 0/6291 | 0.45 | 0/8533 |
| 1 | Q | 0.19 | 0/6291 | 0.45 | 0/8533 |
| 1 | QA | 0.16 | 0/6291 | 0.45 | 0/8533 |
| 1 | QB | 0.22 | 0/6291 | 0.45 | 0/8533 |
| 1 | R | 0.16 | 0/6291 | 0.43 | 0/8533 |
| 1 | RA | 0.15 | 0/6291 | 0.43 | 0/8533 |
| 1 | RB | 0.21 | 0/6291 | 0.44 | 0/8533 |
| 1 | S | 0.16 | 0/6291 | 0.41 | 0/8533 |
| 1 | SA | 0.17 | 0/6291 | 0.43 | 0/8533 |
| 1 | SB | 0.22 | 0/6291 | 0.45 | 0/8533 |
| 1 | T | 0.16 | 0/6291 | 0.42 | 0/8533 |
| 1 | TA | 0.14 | 0/6291 | 0.41 | 0/8533 |
| 1 | TB | 0.21 | 0/6291 | 0.45 | 0/8533 |
| 1 | UA | 0.14 | 0/6291 | 0.41 | 0/8533 |
| 1 | UB | 0.21 | 0/6291 | 0.45 | 0/8533 |
| 1 | V | 0.17 | 0/6291 | 0.43 | 0/8533 |
| 1 | VA | 0.14 | 0/6291 | 0.43 | 0/8533 |
| 1 | VB | 0.21 | 0/6291 | 0.45 | 0/8533 |
| 1 | W | 0.17 | 0/6291 | 0.44 | 0/8533 |
| 1 | WA | 0.17 | 0/6291 | 0.46 | 0/8533 |
| 1 | WB | 0.20 | 0/6291 | 0.45 | 0/8533 |
| 1 | X | 0.17 | 0/6291 | 0.43 | 0/8533 |
| 1 | XA | 0.16 | 0/6291 | 0.44 | 0/8533 |
| 1 | XB | 0.19 | 0/6291 | 0.46 | 0/8533 |
| 1 | Y | 0.18 | 0/6291 | 0.43 | 0/8533 |
| 1 | YA | 0.16 | 0/6291 | 0.45 | 0/8533 |
| 1 | YB | 0.18 | 0/6291 | 0.45 | 0/8533 |
| 1 | Z | 0.19 | 0/6291 | 0.44 | 0/8533 |
| 1 | ZA | 0.16 | 0/6291 | 0.44 | 0/8533 |

| Mol | Chain | Bond lengths | | Bond angles | |
|-----|-------|--------------|----------|-------------|-----------------|
| | | RMSZ | # Z >5 | RMSZ | # Z >5 |
| 1 | ZB | 0.17 | 0/6291 | 0.44 | 0/8533 |
| All | All | 0.20 | 0/490698 | 0.45 | 3/665574 (0.0%) |

There are no bond length outliers.

All (3) bond angle outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|----------|-------|-------------|----------|
| 1 | I | 84 | ARG | N-CA-C | -6.73 | 102.17 | 110.65 |
| 1 | H | 411 | ASP | CA-CB-CG | 5.23 | 117.83 | 112.60 |
| 1 | I | 83 | LEU | N-CA-CB | -5.22 | 102.05 | 110.81 |

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts [i](#)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 1 | A | 6181 | 0 | 6203 | 231 | 0 |
| 1 | AA | 6181 | 0 | 6203 | 249 | 0 |
| 1 | AB | 6181 | 0 | 6203 | 261 | 0 |
| 1 | AC | 6181 | 0 | 6203 | 261 | 0 |
| 1 | B | 6181 | 0 | 6203 | 236 | 0 |
| 1 | BA | 6181 | 0 | 6203 | 270 | 0 |
| 1 | BB | 6181 | 0 | 6203 | 230 | 0 |
| 1 | C | 6181 | 0 | 6203 | 247 | 0 |
| 1 | CA | 6181 | 0 | 6203 | 258 | 0 |
| 1 | CB | 6181 | 0 | 6203 | 237 | 0 |
| 1 | D | 6181 | 0 | 6203 | 266 | 0 |
| 1 | DA | 6181 | 0 | 6203 | 299 | 0 |
| 1 | DB | 6181 | 0 | 6203 | 203 | 0 |
| 1 | E | 6181 | 0 | 6203 | 250 | 0 |
| 1 | EA | 6181 | 0 | 6203 | 241 | 0 |
| 1 | EB | 6181 | 0 | 6203 | 217 | 0 |
| 1 | F | 6181 | 0 | 6203 | 238 | 0 |
| 1 | FA | 6181 | 0 | 6203 | 248 | 0 |

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| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 1 | FB | 6181 | 0 | 6203 | 234 | 0 |
| 1 | G | 6181 | 0 | 6203 | 236 | 0 |
| 1 | GA | 6181 | 0 | 6203 | 229 | 0 |
| 1 | GB | 6181 | 0 | 6203 | 250 | 0 |
| 1 | H | 6181 | 0 | 6203 | 266 | 0 |
| 1 | HA | 6181 | 0 | 6203 | 229 | 0 |
| 1 | HB | 6181 | 0 | 6203 | 220 | 0 |
| 1 | I | 6181 | 0 | 6203 | 279 | 0 |
| 1 | IA | 6181 | 0 | 6203 | 242 | 0 |
| 1 | IB | 6181 | 0 | 6203 | 264 | 0 |
| 1 | J | 6181 | 0 | 6203 | 259 | 0 |
| 1 | JA | 6181 | 0 | 6203 | 229 | 0 |
| 1 | JB | 6181 | 0 | 6203 | 291 | 0 |
| 1 | K | 6181 | 0 | 6203 | 269 | 0 |
| 1 | KA | 6181 | 0 | 6203 | 224 | 0 |
| 1 | KB | 6181 | 0 | 6203 | 262 | 0 |
| 1 | L | 6181 | 0 | 6203 | 210 | 0 |
| 1 | LA | 6181 | 0 | 6203 | 253 | 0 |
| 1 | LB | 6181 | 0 | 6203 | 248 | 0 |
| 1 | M | 6181 | 0 | 6203 | 222 | 0 |
| 1 | MA | 6181 | 0 | 6203 | 262 | 0 |
| 1 | MB | 6181 | 0 | 6203 | 255 | 0 |
| 1 | N | 6181 | 0 | 6203 | 232 | 0 |
| 1 | NA | 6181 | 0 | 6203 | 255 | 0 |
| 1 | NB | 6181 | 0 | 6203 | 259 | 0 |
| 1 | O | 6181 | 0 | 6203 | 259 | 0 |
| 1 | OA | 6181 | 0 | 6203 | 317 | 0 |
| 1 | OB | 6181 | 0 | 6203 | 259 | 0 |
| 1 | P | 6181 | 0 | 6203 | 236 | 0 |
| 1 | PA | 6181 | 0 | 6203 | 288 | 0 |
| 1 | PB | 6181 | 0 | 6203 | 259 | 0 |
| 1 | Q | 6181 | 0 | 6203 | 228 | 0 |
| 1 | QA | 6181 | 0 | 6203 | 289 | 0 |
| 1 | QB | 6181 | 0 | 6203 | 232 | 0 |
| 1 | R | 6181 | 0 | 6203 | 180 | 0 |
| 1 | RA | 6181 | 0 | 6203 | 241 | 0 |
| 1 | RB | 6181 | 0 | 6203 | 262 | 0 |
| 1 | S | 6181 | 0 | 6203 | 174 | 0 |
| 1 | SA | 6181 | 0 | 6203 | 182 | 0 |
| 1 | SB | 6181 | 0 | 6203 | 241 | 0 |
| 1 | T | 6181 | 0 | 6203 | 176 | 0 |
| 1 | TA | 6181 | 0 | 6203 | 212 | 0 |

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| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|--------|----------|----------|---------|--------------|
| 1 | TB | 6181 | 0 | 6203 | 264 | 0 |
| 1 | UA | 6181 | 0 | 6203 | 191 | 0 |
| 1 | UB | 6181 | 0 | 6203 | 276 | 0 |
| 1 | V | 6181 | 0 | 6203 | 201 | 0 |
| 1 | VA | 6181 | 0 | 6203 | 220 | 0 |
| 1 | VB | 6181 | 0 | 6203 | 277 | 0 |
| 1 | W | 6181 | 0 | 6203 | 256 | 0 |
| 1 | WA | 6181 | 0 | 6203 | 244 | 0 |
| 1 | WB | 6181 | 0 | 6203 | 298 | 0 |
| 1 | X | 6181 | 0 | 6203 | 229 | 0 |
| 1 | XA | 6181 | 0 | 6203 | 267 | 0 |
| 1 | XB | 6181 | 0 | 6203 | 303 | 0 |
| 1 | Y | 6181 | 0 | 6203 | 235 | 0 |
| 1 | YA | 6181 | 0 | 6203 | 253 | 0 |
| 1 | YB | 6181 | 0 | 6203 | 326 | 0 |
| 1 | Z | 6181 | 0 | 6203 | 244 | 0 |
| 1 | ZA | 6181 | 0 | 6203 | 244 | 0 |
| 1 | ZB | 6181 | 0 | 6203 | 267 | 0 |
| All | All | 482118 | 0 | 483834 | 17748 | 0 |

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 18.

All (17748) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:QB:18:VAL:HG12 | 1:QB:43:VAL:HG12 | 1.29 | 1.14 |
| 1:C:81:VAL:HG13 | 1:C:83:LEU:HD11 | 1.33 | 1.07 |
| 1:P:215:LEU:O | 1:P:215:LEU:HD12 | 1.54 | 1.07 |
| 1:UA:470:VAL:HG13 | 1:UA:481:VAL:HG21 | 1.35 | 1.01 |
| 1:D:529:ILE:HD12 | 1:D:583:VAL:HG21 | 1.39 | 1.00 |
| 1:RA:283:VAL:HG22 | 1:RA:301:VAL:HG23 | 1.43 | 0.99 |
| 1:BB:115:VAL:HG11 | 1:BB:121:LEU:HD11 | 1.42 | 0.99 |
| 1:R:65:VAL:HG23 | 1:R:73:VAL:HG11 | 1.45 | 0.99 |
| 1:AA:205:LEU:HD23 | 1:AA:205:LEU:H | 1.30 | 0.97 |
| 1:VA:325:VAL:HG23 | 1:WA:353:ALA:HB1 | 1.44 | 0.96 |
| 1:W:326:LEU:HD21 | 1:W:332:LEU:HD12 | 1.45 | 0.96 |
| 1:WB:120:ALA:HB1 | 1:WB:144:LEU:HD13 | 1.46 | 0.96 |
| 1:AA:205:LEU:O | 1:AA:205:LEU:HG | 1.68 | 0.94 |
| 1:OB:13:TYR:HA | 1:OB:50:MET:HE1 | 1.50 | 0.93 |
| 1:KA:69:ALA:HB2 | 1:KA:74:LEU:HD21 | 1.50 | 0.92 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:ZA:13:TYR:HA | 1:ZA:50:MET:HE1 | 1.52 | 0.91 |
| 1:QA:599:ILE:HD13 | 1:QA:640:VAL:HG22 | 1.50 | 0.91 |
| 1:XB:765:VAL:HG22 | 1:YB:759:LEU:HD21 | 1.53 | 0.90 |
| 1:BA:283:VAL:HG13 | 1:BA:301:VAL:HG22 | 1.54 | 0.90 |
| 1:FA:333:LEU:HD23 | 1:FA:374:VAL:HG11 | 1.53 | 0.90 |
| 1:RA:121:LEU:HD23 | 1:RA:162:ILE:HG12 | 1.54 | 0.90 |
| 1:UB:120:ALA:HB1 | 1:UB:144:LEU:HD13 | 1.54 | 0.89 |
| 1:HA:529:ILE:HD12 | 1:HA:583:VAL:HG21 | 1.54 | 0.88 |
| 1:WB:120:ALA:HB2 | 1:WB:205:LEU:HD21 | 1.54 | 0.88 |
| 1:LA:168:ILE:HG22 | 1:LA:215:LEU:HD13 | 1.54 | 0.88 |
| 1:Y:60:THR:HG22 | 1:Y:90:ILE:HD13 | 1.55 | 0.88 |
| 1:IB:390:VAL:HG11 | 1:IB:408:LEU:HD21 | 1.55 | 0.88 |
| 1:TB:227:LEU:HD13 | 1:TB:270:VAL:HG22 | 1.55 | 0.88 |
| 1:L:3:THR:HG22 | 1:L:43:VAL:HG23 | 1.55 | 0.88 |
| 1:OB:381:PRO:HA | 1:OB:405:THR:HG22 | 1.56 | 0.87 |
| 1:IA:333:LEU:HD23 | 1:IA:374:VAL:HG11 | 1.56 | 0.87 |
| 1:BB:120:ALA:HB2 | 1:BB:205:LEU:HD21 | 1.56 | 0.87 |
| 1:QA:358:LEU:HD13 | 1:QA:409:THR:HG22 | 1.54 | 0.87 |
| 1:B:62:ALA:HB3 | 1:B:104:VAL:HG13 | 1.57 | 0.87 |
| 1:KA:364:GLU:OE1 | 1:LA:353:ALA:HB1 | 1.75 | 0.87 |
| 1:BA:377:ARG:HB2 | 1:BA:407:MET:HE3 | 1.57 | 0.86 |
| 1:QA:59:CYS:SG | 1:QA:105:LEU:HD11 | 2.16 | 0.86 |
| 1:XB:222:THR:HA | 1:XB:253:VAL:HG13 | 1.55 | 0.86 |
| 1:S:388:ILE:HD12 | 1:S:414:LEU:HD21 | 1.58 | 0.86 |
| 1:RA:166:THR:HG21 | 1:RA:174:LEU:HD13 | 1.57 | 0.86 |
| 1:P:229:LEU:HD12 | 1:P:251:VAL:HG11 | 1.57 | 0.86 |
| 1:F:283:VAL:HG22 | 1:F:301:VAL:HG12 | 1.58 | 0.85 |
| 1:CB:468:VAL:HG13 | 1:CB:514:LEU:HD11 | 1.58 | 0.85 |
| 1:NB:527:ILE:HD11 | 1:NB:541:LEU:HD13 | 1.59 | 0.85 |
| 1:MB:527:ILE:HD11 | 1:MB:541:LEU:HD13 | 1.58 | 0.85 |
| 1:TB:333:LEU:HD23 | 1:TB:374:VAL:HG11 | 1.58 | 0.84 |
| 1:JA:381:PRO:HA | 1:JA:405:THR:HG22 | 1.58 | 0.84 |
| 1:QB:765:VAL:HG22 | 1:RB:759:LEU:HD21 | 1.60 | 0.84 |
| 1:JB:662:ILE:HG21 | 1:KB:653:ALA:HB1 | 1.58 | 0.84 |
| 1:VA:599:ILE:HG21 | 1:VA:638:VAL:HG11 | 1.60 | 0.84 |
| 1:FB:333:LEU:HD23 | 1:FB:374:VAL:HG11 | 1.57 | 0.84 |
| 1:A:227:LEU:HD13 | 1:A:270:VAL:HG22 | 1.60 | 0.84 |
| 1:VB:599:ILE:HD13 | 1:VB:640:VAL:HG21 | 1.57 | 0.83 |
| 1:UB:59:CYS:HB3 | 1:UB:105:LEU:HD11 | 1.60 | 0.83 |
| 1:WA:10:ILE:HG23 | 1:WA:47:PRO:HB3 | 1.58 | 0.83 |
| 1:AA:173:ALA:HB3 | 1:AA:197:LEU:HD23 | 1.57 | 0.83 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:Q:549:VAL:HG11 | 1:Q:561:LEU:HD11 | 1.60 | 0.83 |
| 1:DA:332:LEU:HD21 | 1:DA:373:VAL:HG13 | 1.61 | 0.83 |
| 1:R:801:ALA:HB1 | 1:S:799:THR:HG21 | 1.60 | 0.83 |
| 1:P:603:VAL:HG11 | 1:P:638:VAL:HG21 | 1.59 | 0.83 |
| 1:R:603:VAL:HG11 | 1:R:638:VAL:HG21 | 1.60 | 0.83 |
| 1:L:65:VAL:HG11 | 1:L:100:TYR:HB2 | 1.59 | 0.82 |
| 1:LB:381:PRO:HA | 1:LB:405:THR:HG22 | 1.60 | 0.82 |
| 1:BA:112:LEU:HD23 | 1:BA:150:THR:HG23 | 1.60 | 0.82 |
| 1:CB:325:VAL:HG23 | 1:DB:353:ALA:HB1 | 1.59 | 0.82 |
| 1:DA:802:ILE:HG21 | 1:DA:807:ILE:HD11 | 1.61 | 0.82 |
| 1:PB:500:LEU:HD11 | 1:PB:513:ALA:HB2 | 1.60 | 0.82 |
| 1:FB:529:ILE:HG23 | 1:FB:583:VAL:HG11 | 1.60 | 0.82 |
| 1:R:65:VAL:HG11 | 1:R:81:VAL:HG23 | 1.60 | 0.82 |
| 1:I:250:LEU:HD13 | 1:I:271:VAL:HG21 | 1.62 | 0.82 |
| 1:UA:467:ALA:HB2 | 1:UA:518:LEU:HD11 | 1.62 | 0.81 |
| 1:OA:529:ILE:HD12 | 1:OA:583:VAL:HG21 | 1.61 | 0.81 |
| 1:YB:529:ILE:HD12 | 1:YB:583:VAL:HG21 | 1.60 | 0.81 |
| 1:YB:462:VAL:HG21 | 1:YB:481:VAL:HG21 | 1.60 | 0.81 |
| 1:TA:219:VAL:HG11 | 1:TA:227:LEU:HD22 | 1.61 | 0.81 |
| 1:YB:536:ARG:HG3 | 1:YB:646:VAL:HG23 | 1.63 | 0.81 |
| 1:I:333:LEU:HD23 | 1:I:374:VAL:HG11 | 1.61 | 0.81 |
| 1:LA:381:PRO:HA | 1:LA:405:THR:HG22 | 1.62 | 0.81 |
| 1:QB:381:PRO:HA | 1:QB:405:THR:HG22 | 1.63 | 0.81 |
| 1:TB:381:PRO:HA | 1:TB:405:THR:HG22 | 1.62 | 0.81 |
| 1:AC:340:LEU:HD22 | 1:AC:344:GLU:HB2 | 1.63 | 0.81 |
| 1:M:28:VAL:HG11 | 1:M:100:TYR:CE1 | 2.16 | 0.81 |
| 1:Q:382:LEU:HD21 | 1:Q:388:ILE:HG13 | 1.62 | 0.81 |
| 1:X:168:ILE:HG22 | 1:X:215:LEU:HD13 | 1.63 | 0.80 |
| 1:K:115:VAL:HG23 | 1:K:147:GLY:O | 1.81 | 0.80 |
| 1:DB:115:VAL:HG11 | 1:DB:121:LEU:HD11 | 1.63 | 0.80 |
| 1:WA:227:LEU:HD23 | 1:WA:229:LEU:HD21 | 1.64 | 0.80 |
| 1:W:325:VAL:HG23 | 1:X:353:ALA:HB1 | 1.63 | 0.80 |
| 1:N:62:ALA:HB3 | 1:N:104:VAL:HG13 | 1.62 | 0.80 |
| 1:SB:662:ILE:HG21 | 1:TB:653:ALA:HB1 | 1.62 | 0.80 |
| 1:SB:69:ALA:HB3 | 1:SB:72:LEU:HB3 | 1.64 | 0.80 |
| 1:SB:69:ALA:HB2 | 1:SB:74:LEU:HD21 | 1.63 | 0.80 |
| 1:FA:81:VAL:HG13 | 1:FA:83:LEU:HD11 | 1.64 | 0.80 |
| 1:BB:529:ILE:HD12 | 1:BB:583:VAL:HG21 | 1.64 | 0.79 |
| 1:IB:115:VAL:HG12 | 1:IB:121:LEU:HD13 | 1.62 | 0.79 |
| 1:QB:119:THR:HG23 | 1:QB:162:ILE:HD11 | 1.64 | 0.79 |
| 1:E:337:LEU:HD21 | 1:E:372:GLU:HB2 | 1.64 | 0.79 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XA:640:VAL:HG12 | 1:YA:580:ARG:HD2 | 1.65 | 0.79 |
| 1:EB:561:LEU:HD23 | 1:EB:631:ASN:O | 1.82 | 0.79 |
| 1:PA:658:VAL:HG21 | 1:QA:535:ALA:HB2 | 1.64 | 0.79 |
| 1:ZB:471:TYR:CD2 | 1:ZB:478:ALA:HB2 | 2.18 | 0.79 |
| 1:BA:643:VAL:HG21 | 1:CA:580:ARG:HE | 1.48 | 0.79 |
| 1:JA:662:ILE:HG21 | 1:KA:653:ALA:HB1 | 1.65 | 0.79 |
| 1:E:172:GLN:HG2 | 1:E:215:LEU:HD11 | 1.63 | 0.79 |
| 1:LA:339:PRO:HD3 | 1:LA:353:ALA:HB2 | 1.65 | 0.79 |
| 1:LB:60:THR:HG23 | 1:LB:106:GLU:HB3 | 1.64 | 0.79 |
| 1:NA:333:LEU:HD23 | 1:NA:374:VAL:HG11 | 1.63 | 0.79 |
| 1:OA:452:ARG:HH12 | 1:OA:458:VAL:HG22 | 1.48 | 0.79 |
| 1:PB:381:PRO:HA | 1:PB:405:THR:HG22 | 1.64 | 0.79 |
| 1:P:215:LEU:HD12 | 1:P:215:LEU:C | 2.08 | 0.78 |
| 1:X:381:PRO:HA | 1:X:405:THR:HG22 | 1.66 | 0.78 |
| 1:T:381:PRO:HA | 1:T:405:THR:HG22 | 1.65 | 0.78 |
| 1:WA:470:VAL:HG21 | 1:WA:487:VAL:HG21 | 1.64 | 0.78 |
| 1:QA:786:GLN:OE1 | 1:RA:781:VAL:HG11 | 1.83 | 0.78 |
| 1:EA:227:LEU:HD13 | 1:EA:270:VAL:HG22 | 1.63 | 0.78 |
| 1:YB:717:GLU:HA | 1:ZB:711:ALA:HB2 | 1.65 | 0.78 |
| 1:CB:81:VAL:HG13 | 1:CB:83:LEU:HD11 | 1.65 | 0.78 |
| 1:L:381:PRO:HA | 1:L:405:THR:HG22 | 1.65 | 0.78 |
| 1:YA:325:VAL:HG23 | 1:ZA:353:ALA:HB1 | 1.65 | 0.78 |
| 1:IB:599:ILE:HD13 | 1:IB:640:VAL:HG21 | 1.67 | 0.78 |
| 1:O:531:THR:HA | 1:O:583:VAL:HG22 | 1.66 | 0.78 |
| 1:WB:68:ASP:HB2 | 1:WB:74:LEU:HD12 | 1.64 | 0.77 |
| 1:JB:282:CYS:HB2 | 1:JB:316:LEU:HD11 | 1.67 | 0.77 |
| 1:DB:227:LEU:HD13 | 1:DB:270:VAL:HG22 | 1.66 | 0.77 |
| 1:OA:334:LEU:HD11 | 1:OA:359:ILE:HG22 | 1.67 | 0.77 |
| 1:BB:7:ILE:HG22 | 1:BB:36:ILE:HD12 | 1.67 | 0.77 |
| 1:VB:333:LEU:HD23 | 1:VB:374:VAL:HG11 | 1.65 | 0.77 |
| 1:IB:123:LEU:HD11 | 1:IB:145:PHE:HB2 | 1.67 | 0.77 |
| 1:KB:81:VAL:HG13 | 1:KB:83:LEU:HD11 | 1.65 | 0.77 |
| 1:QA:120:ALA:HB1 | 1:QA:144:LEU:HD13 | 1.66 | 0.77 |
| 1:AB:761:ARG:HG2 | 1:BB:755:THR:HG21 | 1.67 | 0.77 |
| 1:QA:65:VAL:HG11 | 1:QA:100:TYR:HB2 | 1.64 | 0.77 |
| 1:TA:398:VAL:HG21 | 1:TA:415:TRP:CE3 | 2.19 | 0.77 |
| 1:AA:640:VAL:HG12 | 1:BA:580:ARG:HH21 | 1.50 | 0.77 |
| 1:JB:68:ASP:OD1 | 1:JB:74:LEU:HD12 | 1.85 | 0.77 |
| 1:Z:389:TYR:CE1 | 1:Z:457:VAL:HG22 | 2.20 | 0.77 |
| 1:DA:390:VAL:HG11 | 1:DA:408:LEU:HD21 | 1.67 | 0.77 |
| 1:NA:758:GLU:O | 1:NA:762:VAL:HG22 | 1.83 | 0.76 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:V:220:ILE:HD12 | 1:W:245:THR:HG21 | 1.67 | 0.76 |
| 1:FB:758:GLU:O | 1:FB:762:VAL:HG22 | 1.86 | 0.76 |
| 1:PA:65:VAL:HG11 | 1:PA:100:TYR:HB2 | 1.68 | 0.76 |
| 1:EA:65:VAL:HG21 | 1:EA:73:VAL:HG13 | 1.66 | 0.76 |
| 1:MB:227:LEU:HD21 | 1:MB:229:LEU:HD21 | 1.66 | 0.76 |
| 1:QB:131:ASP:HB3 | 1:QB:137:VAL:HG23 | 1.67 | 0.76 |
| 1:B:108:ASP:O | 1:B:110:THR:HG23 | 1.84 | 0.76 |
| 1:J:662:ILE:HG21 | 1:K:653:ALA:HB1 | 1.65 | 0.76 |
| 1:M:529:ILE:HB | 1:M:583:VAL:HG11 | 1.67 | 0.76 |
| 1:TB:419:LEU:HD23 | 1:TB:424:GLU:OE2 | 1.85 | 0.76 |
| 1:VB:131:ASP:HB3 | 1:VB:137:VAL:HG23 | 1.67 | 0.76 |
| 1:FA:545:TRP:HB2 | 1:FA:633:LEU:HD11 | 1.66 | 0.76 |
| 1:VA:125:ALA:HB3 | 1:VA:137:VAL:HG21 | 1.68 | 0.76 |
| 1:W:56:ARG:HD2 | 1:X:127:LEU:HD22 | 1.67 | 0.76 |
| 1:AC:377:ARG:HB2 | 1:AC:407:MET:HE1 | 1.68 | 0.76 |
| 1:M:531:THR:HG21 | 1:M:588:PHE:HA | 1.66 | 0.76 |
| 1:R:65:VAL:HG12 | 1:R:82:ARG:O | 1.86 | 0.76 |
| 1:WA:203:ALA:HB3 | 1:XA:192:THR:HB | 1.67 | 0.76 |
| 1:O:285:LEU:HD23 | 1:O:299:LYS:HG2 | 1.66 | 0.76 |
| 1:YA:227:LEU:HA | 1:YA:270:VAL:HG22 | 1.67 | 0.76 |
| 1:GA:168:ILE:HG22 | 1:GA:215:LEU:HD13 | 1.68 | 0.76 |
| 1:XB:283:VAL:HG22 | 1:XB:301:VAL:HA | 1.68 | 0.76 |
| 1:FA:60:THR:HG22 | 1:FA:90:ILE:HG13 | 1.68 | 0.76 |
| 1:FA:802:ILE:HD13 | 1:FA:807:ILE:HD11 | 1.68 | 0.76 |
| 1:K:662:ILE:HG21 | 1:L:653:ALA:HB1 | 1.66 | 0.76 |
| 1:B:627:VAL:HG12 | 1:B:634:VAL:HG22 | 1.67 | 0.75 |
| 1:BB:414:LEU:HD13 | 1:BB:455:THR:HG21 | 1.65 | 0.75 |
| 1:EB:767:GLU:HA | 1:EB:770:LEU:HD12 | 1.67 | 0.75 |
| 1:M:65:VAL:HG13 | 1:M:103:GLU:HB2 | 1.68 | 0.75 |
| 1:N:81:VAL:HG13 | 1:N:83:LEU:HD11 | 1.67 | 0.75 |
| 1:AA:326:LEU:HD21 | 1:AA:332:LEU:HG | 1.68 | 0.75 |
| 1:GB:65:VAL:HG13 | 1:GB:103:GLU:OE1 | 1.87 | 0.75 |
| 1:SA:702:ALA:HB3 | 1:TA:693:ILE:HD12 | 1.67 | 0.75 |
| 1:ZA:599:ILE:O | 1:ZA:603:VAL:HG23 | 1.84 | 0.75 |
| 1:AB:340:LEU:HD12 | 1:AB:351:HIS:ND1 | 2.02 | 0.75 |
| 1:LB:662:ILE:HG21 | 1:MB:653:ALA:HB1 | 1.67 | 0.75 |
| 1:Q:529:ILE:HD12 | 1:Q:583:VAL:HG21 | 1.66 | 0.75 |
| 1:AC:529:ILE:HB | 1:AC:583:VAL:HG11 | 1.69 | 0.75 |
| 1:G:500:LEU:HD11 | 1:G:513:ALA:HB2 | 1.67 | 0.75 |
| 1:KB:129:PHE:CZ | 1:KB:137:VAL:HG11 | 2.21 | 0.75 |
| 1:NA:227:LEU:HD21 | 1:NA:267:VAL:HG22 | 1.68 | 0.75 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UA:462:VAL:HG21 | 1:UA:481:VAL:O | 1.86 | 0.75 |
| 1:YB:768:LEU:HD11 | 1:ZB:762:VAL:HG23 | 1.68 | 0.75 |
| 1:X:339:PRO:HD3 | 1:X:353:ALA:HB2 | 1.68 | 0.75 |
| 1:D:69:ALA:HB2 | 1:D:74:LEU:HD21 | 1.68 | 0.75 |
| 1:DB:468:VAL:HG22 | 1:DB:515:CYS:HB3 | 1.68 | 0.75 |
| 1:EB:233:ARG:HA | 1:EB:245:THR:HG23 | 1.69 | 0.75 |
| 1:GA:326:LEU:HD11 | 1:GA:332:LEU:HD23 | 1.67 | 0.75 |
| 1:HA:333:LEU:HD23 | 1:HA:374:VAL:HG11 | 1.69 | 0.75 |
| 1:GA:381:PRO:HA | 1:GA:405:THR:HG22 | 1.69 | 0.75 |
| 1:QA:54:PRO:HG2 | 1:QA:109:ILE:HD12 | 1.69 | 0.75 |
| 1:AB:396:GLY:N | 1:ZA:405:THR:HG23 | 2.01 | 0.74 |
| 1:FA:460:TYR:O | 1:FA:486:LEU:HD12 | 1.87 | 0.74 |
| 1:LB:62:ALA:HB3 | 1:LB:104:VAL:HG13 | 1.69 | 0.74 |
| 1:W:777:LEU:O | 1:W:781:VAL:HG22 | 1.87 | 0.74 |
| 1:A:228:HIS:CE1 | 1:A:268:LEU:HD22 | 2.20 | 0.74 |
| 1:D:18:VAL:HG22 | 1:D:41:GLU:HB3 | 1.68 | 0.74 |
| 1:KB:60:THR:HG22 | 1:KB:90:ILE:CG1 | 2.17 | 0.74 |
| 1:N:467:ALA:HB2 | 1:N:518:LEU:HD11 | 1.69 | 0.74 |
| 1:O:391:GLN:O | 1:O:413:VAL:HG12 | 1.87 | 0.74 |
| 1:RA:358:LEU:HD11 | 1:RA:407:MET:HE2 | 1.69 | 0.74 |
| 1:AC:516:LEU:HD13 | 1:AC:562:PHE:CE2 | 2.22 | 0.74 |
| 1:EA:227:LEU:O | 1:EA:251:VAL:HG22 | 1.86 | 0.74 |
| 1:FA:381:PRO:HA | 1:FA:405:THR:HG22 | 1.69 | 0.74 |
| 1:GA:596:ALA:HA | 1:GA:599:ILE:HD12 | 1.69 | 0.74 |
| 1:I:250:LEU:HD11 | 1:I:310:LEU:O | 1.87 | 0.74 |
| 1:P:627:VAL:HG12 | 1:P:634:VAL:HG22 | 1.69 | 0.74 |
| 1:Q:518:LEU:HD21 | 1:Q:549:VAL:HG22 | 1.69 | 0.74 |
| 1:VA:53:VAL:HG22 | 1:VA:109:ILE:HD12 | 1.69 | 0.74 |
| 1:L:115:VAL:HG23 | 1:L:147:GLY:O | 1.86 | 0.74 |
| 1:C:381:PRO:HA | 1:C:405:THR:HG22 | 1.69 | 0.74 |
| 1:CB:561:LEU:HD23 | 1:CB:631:ASN:O | 1.88 | 0.74 |
| 1:I:798:MET:CE | 1:J:792:VAL:HG23 | 2.18 | 0.74 |
| 1:NB:732:ALA:HA | 1:NB:735:ILE:HD12 | 1.67 | 0.74 |
| 1:O:112:LEU:HD11 | 1:O:152:ILE:HD13 | 1.69 | 0.74 |
| 1:SB:381:PRO:HA | 1:SB:405:THR:HG22 | 1.69 | 0.74 |
| 1:WA:10:ILE:HG22 | 1:WA:14:HIS:HB2 | 1.68 | 0.74 |
| 1:XA:583:VAL:HG12 | 1:XA:591:PHE:CE1 | 2.23 | 0.74 |
| 1:Z:539:LEU:HD13 | 1:Z:643:VAL:HG12 | 1.69 | 0.74 |
| 1:BA:419:LEU:HD23 | 1:BA:494:GLN:HE22 | 1.52 | 0.74 |
| 1:JB:358:LEU:HD23 | 1:JB:410:GLN:N | 2.02 | 0.74 |
| 1:UA:30:VAL:HG12 | 1:UA:72:LEU:HD11 | 1.67 | 0.74 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:VB:381:PRO:HA | 1:VB:405:THR:HG22 | 1.68 | 0.74 |
| 1:WB:123:LEU:HD11 | 1:WB:145:PHE:HB2 | 1.70 | 0.74 |
| 1:Y:767:GLU:HA | 1:Y:770:LEU:HD12 | 1.70 | 0.74 |
| 1:K:58:TYR:CD2 | 1:K:90:ILE:HG21 | 2.21 | 0.74 |
| 1:KA:381:PRO:HA | 1:KA:405:THR:HG22 | 1.69 | 0.74 |
| 1:O:529:ILE:HD13 | 1:O:579:VAL:HG12 | 1.69 | 0.74 |
| 1:W:168:ILE:HG22 | 1:W:215:LEU:HD13 | 1.68 | 0.74 |
| 1:BA:3:THR:HG22 | 1:BA:43:VAL:HG23 | 1.69 | 0.74 |
| 1:C:737:GLY:O | 1:C:741:VAL:HG23 | 1.87 | 0.74 |
| 1:CA:282:CYS:SG | 1:CA:316:LEU:HD11 | 2.27 | 0.74 |
| 1:CB:539:LEU:HD21 | 1:CB:541:LEU:HD21 | 1.70 | 0.74 |
| 1:D:735:ILE:HD13 | 1:E:727:GLU:OE2 | 1.86 | 0.74 |
| 1:OA:61:VAL:HG21 | 1:OA:103:GLU:OE2 | 1.88 | 0.74 |
| 1:HA:382:LEU:HD12 | 1:HA:404:SER:O | 1.88 | 0.74 |
| 1:JA:6:PHE:O | 1:JA:7:ILE:HD13 | 1.88 | 0.74 |
| 1:O:50:MET:O | 1:O:52:THR:HG23 | 1.87 | 0.74 |
| 1:Q:52:THR:HG22 | 1:Q:96:PRO:HG3 | 1.70 | 0.74 |
| 1:S:390:VAL:HG11 | 1:S:408:LEU:HD21 | 1.70 | 0.74 |
| 1:VB:500:LEU:HD12 | 1:VB:511:ARG:HD2 | 1.70 | 0.74 |
| 1:W:221:LEU:HD13 | 1:W:251:VAL:O | 1.87 | 0.74 |
| 1:XA:670:GLU:HG3 | 1:YA:664:ILE:HD11 | 1.69 | 0.74 |
| 1:Y:325:VAL:HG23 | 1:Z:353:ALA:HB1 | 1.69 | 0.74 |
| 1:AB:3:THR:HG22 | 1:AB:43:VAL:HG23 | 1.70 | 0.74 |
| 1:E:788:ALA:O | 1:E:792:VAL:HG23 | 1.88 | 0.74 |
| 1:FB:423:VAL:HA | 1:FB:426:LEU:HD12 | 1.69 | 0.74 |
| 1:IA:390:VAL:HG22 | 1:IA:399:ARG:O | 1.87 | 0.74 |
| 1:J:228:HIS:CE1 | 1:J:268:LEU:HD22 | 2.22 | 0.74 |
| 1:LA:691:GLN:HA | 1:LA:694:LEU:HD12 | 1.70 | 0.74 |
| 1:FB:129:PHE:CE1 | 1:FB:137:VAL:HG11 | 2.23 | 0.73 |
| 1:LA:223:GLU:O | 1:LA:273:ILE:HD12 | 1.87 | 0.73 |
| 1:V:326:LEU:HD21 | 1:V:332:LEU:CD1 | 2.19 | 0.73 |
| 1:YA:8:ILE:HG21 | 1:YA:16:ILE:HD12 | 1.70 | 0.73 |
| 1:G:25:VAL:HG13 | 1:G:80:GLN:OE1 | 1.88 | 0.73 |
| 1:XA:459:SER:HB2 | 1:XA:486:LEU:HD21 | 1.70 | 0.73 |
| 1:XB:332:LEU:HD21 | 1:XB:373:VAL:HG13 | 1.70 | 0.73 |
| 1:BB:325:VAL:HG23 | 1:CB:353:ALA:HB1 | 1.69 | 0.73 |
| 1:CA:529:ILE:HD12 | 1:CA:583:VAL:HB | 1.69 | 0.73 |
| 1:PA:471:TYR:CD2 | 1:PA:478:ALA:HB2 | 2.24 | 0.73 |
| 1:KB:60:THR:HG22 | 1:KB:90:ILE:HD11 | 1.70 | 0.73 |
| 1:S:414:LEU:HB3 | 1:S:455:THR:HG21 | 1.69 | 0.73 |
| 1:TA:640:VAL:O | 1:UA:576:ALA:HB1 | 1.88 | 0.73 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:ZA:567:PHE:HB2 | 1:ZA:633:LEU:HD22 | 1.70 | 0.73 |
| 1:DB:59:CYS:SG | 1:DB:105:LEU:HD11 | 2.28 | 0.73 |
| 1:IA:783:LYS:HA | 1:JA:777:LEU:HD11 | 1.71 | 0.73 |
| 1:QA:168:ILE:HG22 | 1:QA:215:LEU:CD1 | 2.17 | 0.73 |
| 1:UA:380:ILE:HG21 | 1:UA:388:ILE:HD13 | 1.71 | 0.73 |
| 1:V:325:VAL:HG23 | 1:W:353:ALA:HB1 | 1.68 | 0.73 |
| 1:YB:414:LEU:HD22 | 1:YB:455:THR:HB | 1.70 | 0.73 |
| 1:CA:276:LEU:HD11 | 1:CA:282:CYS:SG | 2.28 | 0.73 |
| 1:GA:758:GLU:O | 1:GA:762:VAL:HG22 | 1.88 | 0.73 |
| 1:IA:462:VAL:HG12 | 1:IA:483:GLY:O | 1.88 | 0.73 |
| 1:K:468:VAL:HG22 | 1:K:515:CYS:HA | 1.69 | 0.73 |
| 1:M:181:GLU:OE1 | 1:M:191:VAL:HG12 | 1.89 | 0.73 |
| 1:MB:112:LEU:HD21 | 1:MB:151:TYR:O | 1.88 | 0.73 |
| 1:XA:229:LEU:HD23 | 1:XA:267:VAL:HG22 | 1.69 | 0.73 |
| 1:BA:333:LEU:HD23 | 1:BA:374:VAL:HG11 | 1.68 | 0.73 |
| 1:EA:228:HIS:CE1 | 1:EA:268:LEU:HD22 | 2.23 | 0.73 |
| 1:KA:405:THR:HG23 | 1:LA:396:GLY:CA | 2.19 | 0.73 |
| 1:QA:529:ILE:HB | 1:QA:583:VAL:HG11 | 1.69 | 0.73 |
| 1:XA:114:VAL:HG21 | 1:YA:139:ALA:O | 1.86 | 0.73 |
| 1:Y:340:LEU:HD12 | 1:Y:351:HIS:ND1 | 2.04 | 0.73 |
| 1:A:340:LEU:HD12 | 1:A:351:HIS:ND1 | 2.04 | 0.73 |
| 1:J:30:VAL:HG23 | 1:J:50:MET:HE1 | 1.69 | 0.73 |
| 1:JB:691:GLN:HA | 1:JB:694:LEU:HD12 | 1.69 | 0.73 |
| 1:S:537:LEU:HD11 | 1:S:588:PHE:HB2 | 1.70 | 0.73 |
| 1:AB:531:THR:HA | 1:AB:583:VAL:HG22 | 1.71 | 0.73 |
| 1:BA:518:LEU:HD12 | 1:BA:547:PHE:HB2 | 1.70 | 0.73 |
| 1:DA:767:GLU:HA | 1:DA:770:LEU:HD12 | 1.69 | 0.73 |
| 1:IB:123:LEU:HD11 | 1:IB:145:PHE:CB | 2.19 | 0.73 |
| 1:LB:541:LEU:HD11 | 1:LB:638:VAL:CG1 | 2.19 | 0.73 |
| 1:MB:227:LEU:O | 1:MB:251:VAL:HG22 | 1.87 | 0.73 |
| 1:O:316:LEU:HD21 | 1:O:319:GLY:HA2 | 1.70 | 0.73 |
| 1:QA:61:VAL:HG23 | 1:QA:64:PRO:HB3 | 1.71 | 0.73 |
| 1:UB:468:VAL:HG22 | 1:UB:515:CYS:CB | 2.19 | 0.73 |
| 1:X:81:VAL:HG13 | 1:X:83:LEU:HD11 | 1.71 | 0.73 |
| 1:Z:767:GLU:HA | 1:Z:770:LEU:HD12 | 1.70 | 0.73 |
| 1:BB:541:LEU:HD23 | 1:BB:640:VAL:HG22 | 1.71 | 0.73 |
| 1:IA:802:ILE:HG21 | 1:IA:807:ILE:HD11 | 1.70 | 0.73 |
| 1:MB:531:THR:HG21 | 1:MB:588:PHE:HB3 | 1.69 | 0.73 |
| 1:NB:99:LEU:HD21 | 1:NB:103:GLU:O | 1.87 | 0.73 |
| 1:OA:458:VAL:HG11 | 1:OA:489:LEU:HD12 | 1.71 | 0.73 |
| 1:RA:539:LEU:HD11 | 1:RA:640:VAL:HG13 | 1.70 | 0.73 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:A:56:ARG:NH1 | 1:B:126:LEU:HD13 | 2.03 | 0.72 |
| 1:AC:60:THR:HG23 | 1:AC:107:LYS:HD3 | 1.71 | 0.72 |
| 1:E:768:LEU:HD23 | 1:F:766:ARG:NH2 | 2.04 | 0.72 |
| 1:H:381:PRO:HA | 1:H:405:THR:HG22 | 1.70 | 0.72 |
| 1:JA:63:ASN:HD21 | 1:JA:83:LEU:HD23 | 1.54 | 0.72 |
| 1:PB:333:LEU:HD23 | 1:PB:374:VAL:HG11 | 1.70 | 0.72 |
| 1:RB:279:HIS:O | 1:RB:323:VAL:HG13 | 1.89 | 0.72 |
| 1:SB:18:VAL:HG12 | 1:SB:43:VAL:HG22 | 1.70 | 0.72 |
| 1:V:777:LEU:O | 1:V:781:VAL:HG22 | 1.88 | 0.72 |
| 1:ZA:63:ASN:OD1 | 1:ZA:83:LEU:HD23 | 1.89 | 0.72 |
| 1:AA:549:VAL:CG1 | 1:AA:561:LEU:HD11 | 2.20 | 0.72 |
| 1:D:120:ALA:HB2 | 1:D:205:LEU:HD21 | 1.71 | 0.72 |
| 1:GA:37:ARG:NE | 1:GA:43:VAL:HG21 | 2.05 | 0.72 |
| 1:NB:531:THR:HA | 1:NB:583:VAL:HG22 | 1.71 | 0.72 |
| 1:OB:283:VAL:HG22 | 1:OB:301:VAL:HG12 | 1.69 | 0.72 |
| 1:Z:53:VAL:HG21 | 1:Z:91:ARG:HB3 | 1.72 | 0.72 |
| 1:MA:25:VAL:HG21 | 1:MA:78:THR:O | 1.88 | 0.72 |
| 1:P:220:ILE:HD12 | 1:Q:245:THR:HG21 | 1.72 | 0.72 |
| 1:YA:599:ILE:O | 1:YA:603:VAL:HG23 | 1.89 | 0.72 |
| 1:H:129:PHE:CE1 | 1:H:137:VAL:HG11 | 2.24 | 0.72 |
| 1:HB:539:LEU:HD13 | 1:HB:643:VAL:HG22 | 1.71 | 0.72 |
| 1:KB:82:ARG:C | 1:KB:83:LEU:HD12 | 2.14 | 0.72 |
| 1:LB:363:LEU:HA | 1:MB:353:ALA:HB3 | 1.71 | 0.72 |
| 1:RA:603:VAL:HG11 | 1:RA:638:VAL:HG21 | 1.71 | 0.72 |
| 1:VB:279:HIS:O | 1:VB:323:VAL:HG22 | 1.88 | 0.72 |
| 1:Y:531:THR:HG22 | 1:Y:535:ALA:HB3 | 1.72 | 0.72 |
| 1:Z:531:THR:HG21 | 1:Z:588:PHE:HA | 1.69 | 0.72 |
| 1:ZB:471:TYR:HD2 | 1:ZB:478:ALA:HB2 | 1.54 | 0.72 |
| 1:BB:275:THR:HG21 | 1:CB:296:LEU:HB3 | 1.71 | 0.72 |
| 1:GA:61:VAL:HG22 | 1:GA:89:GLU:O | 1.88 | 0.72 |
| 1:I:381:PRO:HA | 1:I:405:THR:HG22 | 1.70 | 0.72 |
| 1:EB:120:ALA:HB1 | 1:EB:144:LEU:HD13 | 1.70 | 0.72 |
| 1:OA:227:LEU:HD21 | 1:OA:229:LEU:HD21 | 1.70 | 0.72 |
| 1:X:405:THR:HG23 | 1:Y:396:GLY:CA | 2.20 | 0.72 |
| 1:GB:529:ILE:HB | 1:GB:583:VAL:HG11 | 1.71 | 0.72 |
| 1:N:462:VAL:HG21 | 1:N:481:VAL:HG21 | 1.72 | 0.72 |
| 1:C:69:ALA:HB2 | 1:C:74:LEU:HD21 | 1.72 | 0.72 |
| 1:D:333:LEU:HD23 | 1:D:374:VAL:HG11 | 1.72 | 0.72 |
| 1:DA:339:PRO:HG3 | 1:DA:353:ALA:HB2 | 1.71 | 0.72 |
| 1:E:732:ALA:HA | 1:E:735:ILE:HD12 | 1.71 | 0.72 |
| 1:J:798:MET:CE | 1:K:792:VAL:HG13 | 2.20 | 0.72 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:RB:542:ALA:O | 1:RB:638:VAL:HG13 | 1.89 | 0.72 |
| 1:G:334:LEU:HD12 | 1:G:357:TRP:NE1 | 2.05 | 0.72 |
| 1:J:158:GLU:OE2 | 1:J:160:VAL:HG22 | 1.90 | 0.72 |
| 1:NB:335:ARG:HH22 | 1:NB:337:LEU:HD23 | 1.54 | 0.72 |
| 1:UB:333:LEU:HD23 | 1:UB:374:VAL:HG11 | 1.71 | 0.72 |
| 1:V:539:LEU:HD12 | 1:V:642:SER:O | 1.90 | 0.72 |
| 1:XB:52:THR:HG22 | 1:XB:96:PRO:HB3 | 1.71 | 0.72 |
| 1:Y:758:GLU:O | 1:Y:762:VAL:HG22 | 1.90 | 0.72 |
| 1:H:539:LEU:HD12 | 1:H:540:GLN:H | 1.55 | 0.72 |
| 1:J:797:GLN:OE1 | 1:K:792:VAL:HG11 | 1.90 | 0.72 |
| 1:KA:25:VAL:HG21 | 1:KA:78:THR:O | 1.88 | 0.72 |
| 1:PA:529:ILE:HB | 1:PA:583:VAL:HG11 | 1.72 | 0.72 |
| 1:T:137:VAL:HG21 | 1:T:143:TRP:CE3 | 2.25 | 0.72 |
| 1:XA:579:VAL:HG13 | 1:XA:599:ILE:HG23 | 1.72 | 0.72 |
| 1:FA:531:THR:HG21 | 1:FA:588:PHE:HB3 | 1.72 | 0.71 |
| 1:I:223:GLU:OE2 | 1:I:253:VAL:HG21 | 1.90 | 0.71 |
| 1:JB:17:HIS:O | 1:JB:44:LEU:HD23 | 1.90 | 0.71 |
| 1:R:60:THR:HG22 | 1:R:90:ILE:HG23 | 1.72 | 0.71 |
| 1:T:115:VAL:HG11 | 1:T:121:LEU:HD11 | 1.72 | 0.71 |
| 1:MB:333:LEU:HD23 | 1:MB:374:VAL:HG11 | 1.73 | 0.71 |
| 1:NB:228:HIS:CE1 | 1:NB:268:LEU:HD22 | 2.25 | 0.71 |
| 1:SA:529:ILE:HD12 | 1:SA:583:VAL:HG11 | 1.71 | 0.71 |
| 1:Y:339:PRO:HD3 | 1:Y:353:ALA:HB2 | 1.71 | 0.71 |
| 1:CA:561:LEU:HD23 | 1:CA:631:ASN:O | 1.90 | 0.71 |
| 1:DB:115:VAL:CG2 | 1:DB:119:THR:HG21 | 2.19 | 0.71 |
| 1:HA:81:VAL:HG13 | 1:HA:83:LEU:HD11 | 1.72 | 0.71 |
| 1:NB:767:GLU:HA | 1:NB:770:LEU:HD12 | 1.72 | 0.71 |
| 1:OA:414:LEU:HD22 | 1:OA:455:THR:HB | 1.72 | 0.71 |
| 1:PA:65:VAL:HG13 | 1:PA:103:GLU:HB2 | 1.69 | 0.71 |
| 1:PA:227:LEU:O | 1:PA:251:VAL:HG22 | 1.90 | 0.71 |
| 1:PB:529:ILE:HD12 | 1:PB:583:VAL:HB | 1.72 | 0.71 |
| 1:AB:229:LEU:CD2 | 1:AB:267:VAL:HG22 | 2.20 | 0.71 |
| 1:BA:788:ALA:O | 1:BA:792:VAL:HG23 | 1.90 | 0.71 |
| 1:CA:144:LEU:HD13 | 1:CA:146:GLU:HB3 | 1.72 | 0.71 |
| 1:P:65:VAL:CG2 | 1:P:73:VAL:HG11 | 2.19 | 0.71 |
| 1:YB:408:LEU:HD23 | 1:YB:412:GLU:O | 1.90 | 0.71 |
| 1:CB:539:LEU:HD13 | 1:CB:643:VAL:CG1 | 2.19 | 0.71 |
| 1:H:228:HIS:HA | 1:H:250:LEU:HD23 | 1.72 | 0.71 |
| 1:HA:6:PHE:O | 1:HA:7:ILE:HD13 | 1.91 | 0.71 |
| 1:I:52:THR:HG22 | 1:I:96:PRO:HG3 | 1.72 | 0.71 |
| 1:Q:28:VAL:HG11 | 1:Q:100:TYR:CE2 | 2.26 | 0.71 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:Q:661:ALA:HA | 1:Q:664:ILE:HD12 | 1.72 | 0.71 |
| 1:X:172:GLN:HB3 | 1:X:215:LEU:HD11 | 1.71 | 0.71 |
| 1:Z:460:TYR:O | 1:Z:486:LEU:HD12 | 1.91 | 0.71 |
| 1:AA:229:LEU:HD12 | 1:AA:251:VAL:HG11 | 1.73 | 0.71 |
| 1:CB:530:GLU:O | 1:CB:583:VAL:HG13 | 1.91 | 0.71 |
| 1:EB:276:LEU:HD11 | 1:EB:282:CYS:SG | 2.31 | 0.71 |
| 1:LB:18:VAL:HG12 | 1:LB:43:VAL:HA | 1.72 | 0.71 |
| 1:M:28:VAL:HG11 | 1:M:100:TYR:CZ | 2.25 | 0.71 |
| 1:PA:176:LEU:HD23 | 1:PA:196:TRP:O | 1.91 | 0.71 |
| 1:A:129:PHE:CE1 | 1:A:137:VAL:HG21 | 2.26 | 0.71 |
| 1:AB:408:LEU:HD21 | 1:AB:414:LEU:HD21 | 1.72 | 0.71 |
| 1:B:267:VAL:C | 1:B:268:LEU:HD12 | 2.15 | 0.71 |
| 1:BA:283:VAL:HG13 | 1:BA:301:VAL:CG2 | 2.21 | 0.71 |
| 1:I:175:ARG:HA | 1:I:197:LEU:HD23 | 1.73 | 0.71 |
| 1:KB:228:HIS:CE1 | 1:KB:268:LEU:HD22 | 2.25 | 0.71 |
| 1:KB:340:LEU:HD13 | 1:KB:345:ASP:HB2 | 1.72 | 0.71 |
| 1:L:529:ILE:HB | 1:L:583:VAL:HG21 | 1.72 | 0.71 |
| 1:T:703:ARG:NH2 | 1:T:707:LEU:HD11 | 2.06 | 0.71 |
| 1:WA:32:PRO:O | 1:XA:77:VAL:HG23 | 1.89 | 0.71 |
| 1:Y:405:THR:HG23 | 1:Z:396:GLY:CA | 2.21 | 0.71 |
| 1:K:58:TYR:CG | 1:K:90:ILE:HG21 | 2.25 | 0.71 |
| 1:NA:767:GLU:HA | 1:NA:770:LEU:HD12 | 1.73 | 0.71 |
| 1:I:539:LEU:HD13 | 1:I:642:SER:O | 1.90 | 0.71 |
| 1:JA:83:LEU:HD21 | 1:JA:102:GLY:HA3 | 1.71 | 0.71 |
| 1:KA:691:GLN:OE1 | 1:KA:694:LEU:HD12 | 1.90 | 0.71 |
| 1:M:468:VAL:HG22 | 1:M:515:CYS:HA | 1.71 | 0.71 |
| 1:MB:325:VAL:HG21 | 1:NB:335:ARG:HH11 | 1.56 | 0.71 |
| 1:N:56:ARG:NE | 1:O:126:LEU:HD13 | 2.05 | 0.71 |
| 1:O:129:PHE:CE1 | 1:O:137:VAL:HG11 | 2.25 | 0.71 |
| 1:OA:390:VAL:HG12 | 1:OA:414:LEU:HA | 1.73 | 0.71 |
| 1:TA:596:ALA:HB1 | 1:UA:580:ARG:O | 1.91 | 0.71 |
| 1:WB:233:ARG:HA | 1:WB:245:THR:HG23 | 1.73 | 0.71 |
| 1:AB:181:GLU:HG3 | 1:AB:191:VAL:HG12 | 1.72 | 0.71 |
| 1:AB:388:ILE:HD13 | 1:AB:456:ARG:HA | 1.72 | 0.71 |
| 1:CA:332:LEU:HD23 | 1:CA:365:TYR:OH | 1.91 | 0.71 |
| 1:K:690:ARG:HE | 1:K:694:LEU:HD11 | 1.55 | 0.71 |
| 1:Q:795:PHE:O | 1:Q:799:THR:HG23 | 1.90 | 0.71 |
| 1:YB:388:ILE:HD12 | 1:YB:414:LEU:HD21 | 1.71 | 0.71 |
| 1:YB:529:ILE:HB | 1:YB:583:VAL:HG11 | 1.73 | 0.71 |
| 1:D:176:LEU:HD21 | 1:D:196:TRP:CD1 | 2.26 | 0.70 |
| 1:EB:175:ARG:HA | 1:EB:197:LEU:HD23 | 1.71 | 0.70 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:FA:405:THR:HG21 | 1:GA:393:VAL:O | 1.91 | 0.70 |
| 1:FB:408:LEU:HD22 | 1:FB:414:LEU:HD22 | 1.73 | 0.70 |
| 1:GB:53:VAL:HG21 | 1:GB:58:TYR:CD1 | 2.26 | 0.70 |
| 1:GB:60:THR:HG22 | 1:GB:90:ILE:HG13 | 1.71 | 0.70 |
| 1:GB:575:ILE:O | 1:GB:579:VAL:HG23 | 1.91 | 0.70 |
| 1:JB:425:GLU:HG3 | 1:JB:514:LEU:HD22 | 1.73 | 0.70 |
| 1:VB:337:LEU:HD21 | 1:VB:372:GLU:HB3 | 1.71 | 0.70 |
| 1:W:221:LEU:HD12 | 1:W:256:THR:O | 1.90 | 0.70 |
| 1:XA:405:THR:HG23 | 1:YA:396:GLY:N | 2.06 | 0.70 |
| 1:OA:331:GLY:N | 1:OA:407:MET:HE1 | 2.07 | 0.70 |
| 1:TA:358:LEU:HD22 | 1:TA:377:ARG:NH2 | 2.06 | 0.70 |
| 1:AA:30:VAL:HG23 | 1:AA:50:MET:SD | 2.31 | 0.70 |
| 1:G:333:LEU:HD23 | 1:G:374:VAL:HG11 | 1.73 | 0.70 |
| 1:GB:333:LEU:HD13 | 1:GB:358:LEU:HD12 | 1.74 | 0.70 |
| 1:I:389:TYR:CD1 | 1:I:457:VAL:HG22 | 2.24 | 0.70 |
| 1:UB:381:PRO:HA | 1:UB:405:THR:HG22 | 1.71 | 0.70 |
| 1:V:539:LEU:HD11 | 1:V:640:VAL:CG1 | 2.21 | 0.70 |
| 1:XA:358:LEU:HD23 | 1:XA:409:THR:HG22 | 1.73 | 0.70 |
| 1:EA:17:HIS:HB3 | 1:EA:44:LEU:HD12 | 1.72 | 0.70 |
| 1:G:92:LEU:O | 1:G:92:LEU:HD12 | 1.91 | 0.70 |
| 1:GA:18:VAL:HG12 | 1:GA:43:VAL:HG22 | 1.72 | 0.70 |
| 1:KB:221:LEU:HD13 | 1:KB:252:THR:O | 1.91 | 0.70 |
| 1:M:283:VAL:HG22 | 1:M:301:VAL:HA | 1.73 | 0.70 |
| 1:NB:288:VAL:HG12 | 1:NB:294:ASN:N | 2.06 | 0.70 |
| 1:QB:25:VAL:HG21 | 1:QB:78:THR:O | 1.91 | 0.70 |
| 1:Y:227:LEU:O | 1:Y:251:VAL:HG22 | 1.90 | 0.70 |
| 1:B:531:THR:HG21 | 1:B:588:PHE:CB | 2.22 | 0.70 |
| 1:GA:129:PHE:CZ | 1:GA:137:VAL:HG11 | 2.27 | 0.70 |
| 1:NB:798:MET:HE2 | 1:OB:792:VAL:HG13 | 1.73 | 0.70 |
| 1:OA:334:LEU:HD12 | 1:OA:357:TRP:NE1 | 2.06 | 0.70 |
| 1:OB:470:VAL:HG22 | 1:OB:495:PHE:HA | 1.73 | 0.70 |
| 1:R:65:VAL:CG2 | 1:R:73:VAL:HG11 | 2.21 | 0.70 |
| 1:VA:221:LEU:HD12 | 1:VA:256:THR:O | 1.92 | 0.70 |
| 1:W:761:ARG:HB2 | 1:X:755:THR:HG21 | 1.73 | 0.70 |
| 1:XA:339:PRO:HD3 | 1:XA:353:ALA:HB2 | 1.73 | 0.70 |
| 1:J:65:VAL:HG11 | 1:J:100:TYR:HB2 | 1.73 | 0.70 |
| 1:J:116:LEU:HB2 | 1:J:119:THR:HG22 | 1.72 | 0.70 |
| 1:LA:65:VAL:HG11 | 1:LA:100:TYR:CD2 | 2.27 | 0.70 |
| 1:PB:129:PHE:CE1 | 1:PB:137:VAL:HG11 | 2.26 | 0.70 |
| 1:Y:60:THR:HG23 | 1:Y:107:LYS:HE3 | 1.73 | 0.70 |
| 1:ZB:497:VAL:HA | 1:ZB:514:LEU:HD12 | 1.74 | 0.70 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:D:288:VAL:HG12 | 1:D:294:ASN:N | 2.05 | 0.70 |
| 1:HB:691:GLN:HA | 1:HB:694:LEU:HD12 | 1.73 | 0.70 |
| 1:KA:788:ALA:O | 1:KA:792:VAL:HG23 | 1.92 | 0.70 |
| 1:KB:128:ASP:OD2 | 1:KB:138:VAL:HG12 | 1.92 | 0.70 |
| 1:M:168:ILE:HG22 | 1:M:215:LEU:HD13 | 1.73 | 0.70 |
| 1:M:283:VAL:HG22 | 1:M:301:VAL:HG23 | 1.71 | 0.70 |
| 1:MB:540:GLN:C | 1:MB:541:LEU:HD12 | 2.17 | 0.70 |
| 1:P:228:HIS:CD2 | 1:P:268:LEU:HD22 | 2.26 | 0.70 |
| 1:R:416:GLU:OE2 | 1:R:455:THR:HG23 | 1.92 | 0.70 |
| 1:SA:126:LEU:HD12 | 1:SA:156:GLU:HA | 1.73 | 0.70 |
| 1:C:657:SER:HA | 1:C:660:LEU:HD12 | 1.74 | 0.70 |
| 1:GA:662:ILE:O | 1:GA:666:THR:HG23 | 1.92 | 0.70 |
| 1:JB:74:LEU:HD13 | 1:JB:82:ARG:NH2 | 2.07 | 0.70 |
| 1:KA:333:LEU:HD23 | 1:KA:374:VAL:HG11 | 1.74 | 0.70 |
| 1:L:65:VAL:HG13 | 1:L:103:GLU:HB2 | 1.73 | 0.70 |
| 1:L:460:TYR:O | 1:L:486:LEU:HD12 | 1.91 | 0.70 |
| 1:OB:460:TYR:O | 1:OB:486:LEU:HD12 | 1.91 | 0.70 |
| 1:S:627:VAL:HG12 | 1:S:633:LEU:C | 2.17 | 0.70 |
| 1:VA:588:PHE:CE1 | 1:VA:643:VAL:HG12 | 2.27 | 0.70 |
| 1:VB:227:LEU:HD23 | 1:VB:229:LEU:HD21 | 1.74 | 0.70 |
| 1:X:599:ILE:O | 1:X:603:VAL:HG23 | 1.92 | 0.70 |
| 1:XA:358:LEU:HD21 | 1:XA:407:MET:HG2 | 1.74 | 0.70 |
| 1:YA:579:VAL:HG22 | 1:YA:603:VAL:HA | 1.73 | 0.70 |
| 1:YB:61:VAL:HG22 | 1:YB:89:GLU:O | 1.91 | 0.70 |
| 1:ZB:276:LEU:HD11 | 1:ZB:282:CYS:SG | 2.31 | 0.70 |
| 1:G:382:LEU:HD12 | 1:G:404:SER:O | 1.91 | 0.70 |
| 1:JA:460:TYR:O | 1:JA:486:LEU:HD12 | 1.91 | 0.70 |
| 1:JA:788:ALA:O | 1:JA:792:VAL:HG23 | 1.91 | 0.70 |
| 1:JB:53:VAL:HG22 | 1:JB:94:GLN:O | 1.92 | 0.70 |
| 1:KB:691:GLN:HA | 1:KB:694:LEU:HD12 | 1.73 | 0.70 |
| 1:NB:35:TYR:O | 1:NB:36:ILE:HD13 | 1.92 | 0.70 |
| 1:QA:358:LEU:HD11 | 1:QA:407:MET:HE3 | 1.74 | 0.70 |
| 1:CA:261:PRO:HB3 | 1:CA:267:VAL:HG21 | 1.72 | 0.70 |
| 1:XB:333:LEU:HD11 | 1:XB:356:HIS:CE1 | 2.27 | 0.70 |
| 1:YA:332:LEU:HD23 | 1:YA:376:GLU:HA | 1.73 | 0.70 |
| 1:DB:777:LEU:O | 1:DB:781:VAL:HG22 | 1.92 | 0.69 |
| 1:G:388:ILE:HG21 | 1:G:414:LEU:HD22 | 1.73 | 0.69 |
| 1:J:122:HIS:CD2 | 1:J:208:VAL:HG12 | 2.26 | 0.69 |
| 1:M:174:LEU:HD12 | 1:M:214:ASP:O | 1.91 | 0.69 |
| 1:R:414:LEU:HD22 | 1:R:455:THR:HB | 1.74 | 0.69 |
| 1:SA:65:VAL:HG13 | 1:SA:103:GLU:HB2 | 1.74 | 0.69 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UA:500:LEU:HD21 | 1:UA:567:PHE:CE2 | 2.27 | 0.69 |
| 1:X:181:GLU:HG3 | 1:X:191:VAL:HG12 | 1.73 | 0.69 |
| 1:XB:661:ALA:O | 1:XB:665:THR:HG23 | 1.92 | 0.69 |
| 1:YA:784:ALA:HA | 1:YA:787:LEU:HD12 | 1.74 | 0.69 |
| 1:Z:227:LEU:O | 1:Z:251:VAL:HG22 | 1.92 | 0.69 |
| 1:AB:393:VAL:O | 1:ZA:405:THR:HG21 | 1.92 | 0.69 |
| 1:AC:730:ALA:CB | 1:ZB:735:ILE:HG22 | 2.22 | 0.69 |
| 1:E:657:SER:HA | 1:E:660:LEU:HD12 | 1.73 | 0.69 |
| 1:EB:758:GLU:O | 1:EB:762:VAL:HG22 | 1.92 | 0.69 |
| 1:GA:82:ARG:C | 1:GA:83:LEU:HD12 | 2.16 | 0.69 |
| 1:IB:17:HIS:NE2 | 1:IB:28:VAL:HG23 | 2.06 | 0.69 |
| 1:QA:173:ALA:HB2 | 1:QA:199:THR:HG22 | 1.72 | 0.69 |
| 1:R:599:ILE:O | 1:R:603:VAL:HG23 | 1.92 | 0.69 |
| 1:V:541:LEU:CD2 | 1:V:640:VAL:HG22 | 2.22 | 0.69 |
| 1:Y:539:LEU:HD13 | 1:Y:643:VAL:HG12 | 1.74 | 0.69 |
| 1:C:735:ILE:HD11 | 1:D:723:LYS:HG3 | 1.74 | 0.69 |
| 1:CA:332:LEU:HD21 | 1:CA:373:VAL:HG13 | 1.72 | 0.69 |
| 1:DA:539:LEU:HD13 | 1:DA:642:SER:O | 1.92 | 0.69 |
| 1:EA:17:HIS:CB | 1:EA:44:LEU:HD12 | 2.22 | 0.69 |
| 1:FB:174:LEU:HD12 | 1:FB:214:ASP:C | 2.17 | 0.69 |
| 1:FB:579:VAL:O | 1:FB:583:VAL:HG12 | 1.91 | 0.69 |
| 1:IB:761:ARG:HB2 | 1:JB:755:THR:HG21 | 1.73 | 0.69 |
| 1:JB:53:VAL:HG23 | 1:JB:96:PRO:HD3 | 1.72 | 0.69 |
| 1:LA:767:GLU:HA | 1:LA:770:LEU:HD12 | 1.73 | 0.69 |
| 1:LB:288:VAL:HG12 | 1:LB:294:ASN:N | 2.07 | 0.69 |
| 1:N:25:VAL:HG21 | 1:N:78:THR:O | 1.93 | 0.69 |
| 1:O:197:LEU:HD22 | 1:O:216:VAL:HG11 | 1.73 | 0.69 |
| 1:PA:662:ILE:O | 1:PA:666:THR:HG23 | 1.93 | 0.69 |
| 1:XB:302:VAL:HG11 | 1:XB:308:PHE:CE1 | 2.27 | 0.69 |
| 1:ZA:19:LEU:HD12 | 1:ZA:25:VAL:O | 1.91 | 0.69 |
| 1:ZB:129:PHE:CE1 | 1:ZB:137:VAL:HG21 | 2.28 | 0.69 |
| 1:AB:523:PHE:HE2 | 1:AB:635:VAL:HG22 | 1.56 | 0.69 |
| 1:C:767:GLU:HA | 1:C:770:LEU:HD12 | 1.74 | 0.69 |
| 1:LB:467:ALA:HB2 | 1:LB:518:LEU:HD11 | 1.74 | 0.69 |
| 1:LB:541:LEU:HD11 | 1:LB:638:VAL:HG12 | 1.73 | 0.69 |
| 1:N:529:ILE:HB | 1:N:583:VAL:HG11 | 1.75 | 0.69 |
| 1:QA:529:ILE:HG21 | 1:QA:579:VAL:HG12 | 1.73 | 0.69 |
| 1:R:398:VAL:HG11 | 1:R:415:TRP:CE3 | 2.27 | 0.69 |
| 1:V:34:THR:HG21 | 1:W:21:GLN:O | 1.92 | 0.69 |
| 1:ZA:227:LEU:HD11 | 1:ZA:267:VAL:HG13 | 1.73 | 0.69 |
| 1:EA:227:LEU:HD21 | 1:EA:229:LEU:HD21 | 1.74 | 0.69 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:G:279:HIS:O | 1:G:323:VAL:HG13 | 1.92 | 0.69 |
| 1:JA:60:THR:HG22 | 1:JA:90:ILE:HG13 | 1.74 | 0.69 |
| 1:LB:129:PHE:CZ | 1:LB:137:VAL:HG21 | 2.28 | 0.69 |
| 1:LB:405:THR:HG23 | 1:MB:396:GLY:CA | 2.22 | 0.69 |
| 1:O:58:TYR:CZ | 1:O:112:LEU:HD12 | 2.27 | 0.69 |
| 1:O:531:THR:HG21 | 1:O:588:PHE:HA | 1.75 | 0.69 |
| 1:SA:61:VAL:HG21 | 1:SA:103:GLU:OE2 | 1.91 | 0.69 |
| 1:BB:174:LEU:HD21 | 1:BB:212:VAL:HG12 | 1.74 | 0.69 |
| 1:JA:405:THR:HG23 | 1:KA:396:GLY:CA | 2.22 | 0.69 |
| 1:MA:17:HIS:HB2 | 1:MA:44:LEU:HD12 | 1.74 | 0.69 |
| 1:O:326:LEU:HD11 | 1:O:332:LEU:HB2 | 1.73 | 0.69 |
| 1:PA:285:LEU:HD23 | 1:PA:299:LYS:HG2 | 1.74 | 0.69 |
| 1:Q:382:LEU:HD22 | 1:Q:386:GLU:O | 1.93 | 0.69 |
| 1:Q:583:VAL:HG23 | 1:Q:591:PHE:CE2 | 2.27 | 0.69 |
| 1:AB:126:LEU:HD12 | 1:AB:156:GLU:HA | 1.75 | 0.69 |
| 1:C:65:VAL:HG13 | 1:C:103:GLU:OE2 | 1.92 | 0.69 |
| 1:GA:81:VAL:HG13 | 1:GA:83:LEU:HD11 | 1.73 | 0.69 |
| 1:IB:333:LEU:HD23 | 1:IB:374:VAL:HG11 | 1.74 | 0.69 |
| 1:JB:468:VAL:O | 1:JB:480:VAL:HG13 | 1.93 | 0.69 |
| 1:KA:112:LEU:HD21 | 1:KA:152:ILE:HD13 | 1.75 | 0.69 |
| 1:LA:758:GLU:O | 1:LA:762:VAL:HG22 | 1.92 | 0.69 |
| 1:LA:761:ARG:HG3 | 1:MA:755:THR:HG21 | 1.75 | 0.69 |
| 1:OB:777:LEU:O | 1:OB:781:VAL:HG22 | 1.91 | 0.69 |
| 1:V:174:LEU:HD12 | 1:V:214:ASP:O | 1.91 | 0.69 |
| 1:Z:402:ILE:HG13 | 1:Z:457:VAL:HG21 | 1.73 | 0.69 |
| 1:BB:112:LEU:HD21 | 1:BB:150:THR:HG21 | 1.74 | 0.69 |
| 1:EA:122:HIS:CD2 | 1:EA:208:VAL:HG12 | 2.27 | 0.69 |
| 1:H:758:GLU:O | 1:H:762:VAL:HG22 | 1.93 | 0.69 |
| 1:I:230:ARG:H | 1:I:268:LEU:HD13 | 1.56 | 0.69 |
| 1:J:62:ALA:HA | 1:J:88:LEU:HD23 | 1.73 | 0.69 |
| 1:J:332:LEU:HD12 | 1:J:375:GLU:O | 1.93 | 0.69 |
| 1:K:17:HIS:HB3 | 1:K:44:LEU:HD22 | 1.74 | 0.69 |
| 1:K:497:VAL:HA | 1:K:514:LEU:HD12 | 1.75 | 0.69 |
| 1:N:662:ILE:HG21 | 1:O:653:ALA:HB1 | 1.73 | 0.69 |
| 1:O:468:VAL:HG22 | 1:O:515:CYS:HA | 1.74 | 0.69 |
| 1:P:531:THR:HG21 | 1:P:588:PHE:HA | 1.75 | 0.69 |
| 1:QA:228:HIS:CD2 | 1:QA:268:LEU:HD22 | 2.28 | 0.69 |
| 1:QB:566:ASP:OD1 | 1:QB:568:VAL:HG12 | 1.92 | 0.69 |
| 1:RA:63:ASN:HD21 | 1:RA:83:LEU:HD23 | 1.57 | 0.69 |
| 1:S:415:TRP:O | 1:S:455:THR:HG22 | 1.91 | 0.69 |
| 1:V:326:LEU:HD21 | 1:V:332:LEU:HD12 | 1.75 | 0.69 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:V:798:MET:HE1 | 1:W:795:PHE:HB3 | 1.72 | 0.69 |
| 1:VB:541:LEU:CD2 | 1:VB:640:VAL:HG22 | 2.22 | 0.69 |
| 1:WB:777:LEU:O | 1:WB:781:VAL:HG22 | 1.93 | 0.69 |
| 1:X:382:LEU:HD21 | 1:X:388:ILE:HG23 | 1.75 | 0.69 |
| 1:XA:84:ARG:HG2 | 1:XA:85:HIS:H | 1.58 | 0.69 |
| 1:XA:531:THR:HG21 | 1:XA:537:LEU:HD12 | 1.74 | 0.69 |
| 1:XB:333:LEU:HD13 | 1:XB:377:ARG:HH11 | 1.58 | 0.69 |
| 1:ZA:13:TYR:CA | 1:ZA:50:MET:HE1 | 2.22 | 0.69 |
| 1:ZA:219:VAL:HG11 | 1:ZA:227:LEU:HD22 | 1.75 | 0.69 |
| 1:AA:489:LEU:HD11 | 1:AA:495:PHE:CE1 | 2.28 | 0.69 |
| 1:CB:539:LEU:HD13 | 1:CB:643:VAL:HG12 | 1.73 | 0.69 |
| 1:E:381:PRO:HA | 1:E:405:THR:HG22 | 1.75 | 0.69 |
| 1:EA:331:GLY:CA | 1:EA:407:MET:HE1 | 2.23 | 0.69 |
| 1:JB:228:HIS:CE1 | 1:JB:268:LEU:HD22 | 2.28 | 0.69 |
| 1:LB:704:LYS:HA | 1:LB:707:LEU:HD12 | 1.73 | 0.69 |
| 1:MB:221:LEU:HD13 | 1:MB:252:THR:C | 2.18 | 0.69 |
| 1:QA:390:VAL:HG22 | 1:QA:399:ARG:O | 1.93 | 0.69 |
| 1:VB:677:ALA:HA | 1:VB:680:LEU:HD12 | 1.74 | 0.69 |
| 1:WB:175:ARG:HA | 1:WB:197:LEU:HD23 | 1.74 | 0.69 |
| 1:XB:423:VAL:HA | 1:XB:426:LEU:HD12 | 1.73 | 0.69 |
| 1:BB:34:THR:HG23 | 1:CB:24:ASN:OD1 | 1.93 | 0.69 |
| 1:CA:331:GLY:HA3 | 1:CA:358:LEU:HD21 | 1.75 | 0.69 |
| 1:EA:3:THR:HG22 | 1:EA:43:VAL:HG23 | 1.75 | 0.69 |
| 1:FB:541:LEU:HD13 | 1:FB:543:TYR:OH | 1.93 | 0.69 |
| 1:IB:120:ALA:HB1 | 1:IB:144:LEU:HD11 | 1.75 | 0.69 |
| 1:JA:529:ILE:HD12 | 1:JA:583:VAL:HG21 | 1.75 | 0.69 |
| 1:K:6:PHE:O | 1:K:7:ILE:HD13 | 1.92 | 0.69 |
| 1:MA:657:SER:HA | 1:MA:660:LEU:HD12 | 1.73 | 0.69 |
| 1:OA:358:LEU:HD21 | 1:OA:407:MET:HE3 | 1.75 | 0.69 |
| 1:VA:583:VAL:HG23 | 1:VA:591:PHE:CG | 2.28 | 0.69 |
| 1:WB:65:VAL:HG21 | 1:WB:73:VAL:HG22 | 1.75 | 0.69 |
| 1:D:17:HIS:CB | 1:D:44:LEU:HD12 | 2.23 | 0.68 |
| 1:F:8:ILE:HD12 | 1:F:37:ARG:HG3 | 1.76 | 0.68 |
| 1:N:405:THR:HG21 | 1:O:393:VAL:O | 1.93 | 0.68 |
| 1:O:526:VAL:HG13 | 1:O:539:LEU:O | 1.93 | 0.68 |
| 1:OB:657:SER:HA | 1:OB:660:LEU:HD12 | 1.74 | 0.68 |
| 1:PB:468:VAL:HG22 | 1:PB:515:CYS:HA | 1.75 | 0.68 |
| 1:QA:360:ARG:NE | 1:QA:407:MET:HE2 | 2.09 | 0.68 |
| 1:VA:221:LEU:HD11 | 1:VA:259:HIS:HB2 | 1.75 | 0.68 |
| 1:HA:59:CYS:SG | 1:HA:109:ILE:HD13 | 2.32 | 0.68 |
| 1:HB:69:ALA:HB2 | 1:HB:74:LEU:HD21 | 1.73 | 0.68 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:LA:661:ALA:HA | 1:LA:664:ILE:HD12 | 1.76 | 0.68 |
| 1:MA:172:GLN:HB3 | 1:MA:215:LEU:HD11 | 1.74 | 0.68 |
| 1:OB:712:LEU:O | 1:OB:716:VAL:HG23 | 1.93 | 0.68 |
| 1:S:405:THR:HG21 | 1:T:393:VAL:O | 1.93 | 0.68 |
| 1:TA:520:PRO:O | 1:UA:564:VAL:HG22 | 1.93 | 0.68 |
| 1:CB:575:ILE:HD13 | 1:CB:578:ARG:HH11 | 1.58 | 0.68 |
| 1:EA:129:PHE:CE1 | 1:EA:137:VAL:HG11 | 2.28 | 0.68 |
| 1:EB:691:GLN:HA | 1:EB:694:LEU:HD12 | 1.75 | 0.68 |
| 1:F:558:THR:HA | 1:F:561:LEU:HD12 | 1.75 | 0.68 |
| 1:F:777:LEU:O | 1:F:781:VAL:HG22 | 1.92 | 0.68 |
| 1:GB:34:THR:HG23 | 1:HB:24:ASN:OD1 | 1.93 | 0.68 |
| 1:K:75:PHE:CD1 | 1:K:81:VAL:HG23 | 2.29 | 0.68 |
| 1:K:129:PHE:CZ | 1:K:137:VAL:HG11 | 2.28 | 0.68 |
| 1:KA:316:LEU:HD12 | 1:KA:317:GLU:H | 1.58 | 0.68 |
| 1:VA:220:ILE:HG23 | 1:WA:245:THR:HG22 | 1.75 | 0.68 |
| 1:Z:627:VAL:HG12 | 1:Z:634:VAL:HG22 | 1.76 | 0.68 |
| 1:ZA:326:LEU:HD12 | 1:ZA:363:LEU:HD21 | 1.74 | 0.68 |
| 1:BB:579:VAL:HG13 | 1:BB:599:ILE:HG23 | 1.75 | 0.68 |
| 1:EA:5:GLU:O | 1:EA:7:ILE:HD12 | 1.93 | 0.68 |
| 1:EB:788:ALA:O | 1:EB:792:VAL:HG23 | 1.93 | 0.68 |
| 1:G:499:SER:O | 1:G:500:LEU:HD23 | 1.93 | 0.68 |
| 1:IB:288:VAL:HG12 | 1:IB:294:ASN:N | 2.08 | 0.68 |
| 1:VB:168:ILE:HG22 | 1:VB:215:LEU:CD1 | 2.23 | 0.68 |
| 1:W:788:ALA:O | 1:W:792:VAL:HG23 | 1.93 | 0.68 |
| 1:AC:232:ARG:O | 1:AC:245:THR:HG23 | 1.94 | 0.68 |
| 1:BA:732:ALA:HA | 1:BA:735:ILE:HD12 | 1.74 | 0.68 |
| 1:BB:382:LEU:HD12 | 1:BB:406:TYR:HB3 | 1.75 | 0.68 |
| 1:C:334:LEU:HD11 | 1:C:359:ILE:HG22 | 1.75 | 0.68 |
| 1:CB:60:THR:HG22 | 1:CB:90:ILE:CG1 | 2.23 | 0.68 |
| 1:CB:120:ALA:CB | 1:CB:205:LEU:HD21 | 2.23 | 0.68 |
| 1:CB:539:LEU:HD12 | 1:CB:540:GLN:H | 1.59 | 0.68 |
| 1:NB:413:VAL:HG22 | 1:NB:414:LEU:HD23 | 1.74 | 0.68 |
| 1:P:215:LEU:O | 1:P:215:LEU:CD1 | 2.39 | 0.68 |
| 1:QA:575:ILE:O | 1:QA:579:VAL:HG23 | 1.94 | 0.68 |
| 1:S:599:ILE:O | 1:S:603:VAL:HG23 | 1.94 | 0.68 |
| 1:TB:221:LEU:HD21 | 1:TB:251:VAL:HG23 | 1.76 | 0.68 |
| 1:V:196:TRP:HA | 1:V:263:VAL:HG11 | 1.75 | 0.68 |
| 1:CA:276:LEU:HD13 | 1:CA:281:TYR:HA | 1.76 | 0.68 |
| 1:EA:767:GLU:HA | 1:EA:770:LEU:HD12 | 1.75 | 0.68 |
| 1:FB:529:ILE:CG2 | 1:FB:583:VAL:HG11 | 2.23 | 0.68 |
| 1:GB:13:TYR:HB3 | 1:GB:50:MET:HE1 | 1.76 | 0.68 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:J:90:ILE:HD11 | 1:J:153:PRO:O | 1.93 | 0.68 |
| 1:OA:529:ILE:HB | 1:OA:583:VAL:HG11 | 1.74 | 0.68 |
| 1:X:761:ARG:HG3 | 1:Y:755:THR:HG21 | 1.75 | 0.68 |
| 1:XB:115:VAL:HG23 | 1:XB:147:GLY:O | 1.93 | 0.68 |
| 1:AC:61:VAL:HG12 | 1:AC:105:LEU:HD12 | 1.75 | 0.68 |
| 1:EB:529:ILE:HB | 1:EB:583:VAL:HG11 | 1.75 | 0.68 |
| 1:GB:339:PRO:HG3 | 1:GB:353:ALA:HB2 | 1.76 | 0.68 |
| 1:K:381:PRO:HA | 1:K:405:THR:HG22 | 1.75 | 0.68 |
| 1:KB:227:LEU:HD21 | 1:KB:229:LEU:HD21 | 1.75 | 0.68 |
| 1:KB:288:VAL:HG12 | 1:KB:294:ASN:N | 2.08 | 0.68 |
| 1:MB:405:THR:HG23 | 1:NB:396:GLY:CA | 2.24 | 0.68 |
| 1:N:657:SER:HA | 1:N:660:LEU:HD12 | 1.76 | 0.68 |
| 1:NB:469:GLN:HA | 1:NB:480:VAL:HG22 | 1.75 | 0.68 |
| 1:S:326:LEU:HD21 | 1:S:332:LEU:HG | 1.76 | 0.68 |
| 1:W:53:VAL:HG23 | 1:W:97:PHE:CE2 | 2.29 | 0.68 |
| 1:WB:529:ILE:HB | 1:WB:583:VAL:HG11 | 1.76 | 0.68 |
| 1:AB:340:LEU:HD11 | 1:AB:357:TRP:CH2 | 2.29 | 0.68 |
| 1:CB:120:ALA:HB3 | 1:CB:205:LEU:HD21 | 1.75 | 0.68 |
| 1:D:597:ARG:O | 1:D:601:THR:HG23 | 1.94 | 0.68 |
| 1:D:788:ALA:O | 1:D:792:VAL:HG23 | 1.92 | 0.68 |
| 1:F:691:GLN:HA | 1:F:694:LEU:HD12 | 1.75 | 0.68 |
| 1:HB:761:ARG:O | 1:HB:765:VAL:HG23 | 1.94 | 0.68 |
| 1:IB:516:LEU:HD11 | 1:IB:547:PHE:CE2 | 2.28 | 0.68 |
| 1:L:122:HIS:CD2 | 1:L:208:VAL:HG12 | 2.27 | 0.68 |
| 1:LB:267:VAL:C | 1:LB:268:LEU:HD12 | 2.19 | 0.68 |
| 1:O:549:VAL:HG22 | 1:O:561:LEU:HD11 | 1.76 | 0.68 |
| 1:S:527:ILE:HD11 | 1:S:539:LEU:HD23 | 1.76 | 0.68 |
| 1:SA:198:VAL:HG11 | 1:SA:204:TYR:CD2 | 2.29 | 0.68 |
| 1:X:758:GLU:O | 1:X:762:VAL:HG22 | 1.94 | 0.68 |
| 1:XA:135:ASP:O | 1:XA:138:VAL:HG13 | 1.93 | 0.68 |
| 1:AB:391:GLN:HB2 | 1:AB:398:VAL:HG22 | 1.75 | 0.68 |
| 1:B:50:MET:HE2 | 1:B:96:PRO:O | 1.94 | 0.68 |
| 1:J:65:VAL:HG13 | 1:J:103:GLU:HB2 | 1.75 | 0.68 |
| 1:J:497:VAL:HA | 1:J:514:LEU:HD12 | 1.74 | 0.68 |
| 1:KB:599:ILE:O | 1:KB:603:VAL:HG23 | 1.94 | 0.68 |
| 1:M:122:HIS:CD2 | 1:M:208:VAL:HG12 | 2.29 | 0.68 |
| 1:OA:62:ALA:HB2 | 1:OA:106:GLU:HG2 | 1.76 | 0.68 |
| 1:T:582:ALA:O | 1:T:586:VAL:HG22 | 1.93 | 0.68 |
| 1:DA:331:GLY:C | 1:DA:358:LEU:HD11 | 2.19 | 0.68 |
| 1:EA:377:ARG:O | 1:EA:407:MET:HE3 | 1.93 | 0.68 |
| 1:HB:452:ARG:HH12 | 1:HB:458:VAL:HG22 | 1.59 | 0.68 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:HB:661:ALA:O | 1:HB:665:THR:HG23 | 1.94 | 0.68 |
| 1:IA:542:ALA:HB3 | 1:IA:639:ASP:OD1 | 1.94 | 0.68 |
| 1:IB:468:VAL:HG22 | 1:IB:515:CYS:HA | 1.76 | 0.68 |
| 1:OA:175:ARG:HA | 1:OA:197:LEU:HD23 | 1.76 | 0.68 |
| 1:PB:405:THR:HG23 | 1:QB:396:GLY:CA | 2.23 | 0.68 |
| 1:UB:392:ASP:OD2 | 1:UB:395:THR:HG22 | 1.94 | 0.68 |
| 1:V:761:ARG:HB2 | 1:W:755:THR:HG21 | 1.76 | 0.68 |
| 1:W:489:LEU:HD11 | 1:W:495:PHE:CE2 | 2.29 | 0.68 |
| 1:YB:120:ALA:HB2 | 1:YB:205:LEU:HD11 | 1.75 | 0.68 |
| 1:BA:382:LEU:HD12 | 1:BA:406:TYR:H | 1.60 | 0.67 |
| 1:DA:282:CYS:HB2 | 1:DA:316:LEU:HD11 | 1.77 | 0.67 |
| 1:FA:54:PRO:HD2 | 1:FA:109:ILE:HD12 | 1.75 | 0.67 |
| 1:G:468:VAL:HG22 | 1:G:515:CYS:HA | 1.76 | 0.67 |
| 1:IA:279:HIS:O | 1:IA:323:VAL:HG22 | 1.94 | 0.67 |
| 1:JA:221:LEU:HD21 | 1:JA:251:VAL:HG23 | 1.75 | 0.67 |
| 1:M:88:LEU:HD22 | 1:M:106:GLU:OE1 | 1.93 | 0.67 |
| 1:NA:368:SER:OG | 1:NA:371:VAL:HG23 | 1.94 | 0.67 |
| 1:O:115:VAL:CG1 | 1:O:119:THR:HG23 | 2.23 | 0.67 |
| 1:S:545:TRP:HE3 | 1:S:633:LEU:HD11 | 1.58 | 0.67 |
| 1:YA:168:ILE:HG22 | 1:YA:168:ILE:O | 1.93 | 0.67 |
| 1:YB:480:VAL:HG21 | 1:YB:558:THR:HB | 1.76 | 0.67 |
| 1:ZA:732:ALA:HA | 1:ZA:735:ILE:HD12 | 1.75 | 0.67 |
| 1:ZB:81:VAL:HG11 | 1:ZB:100:TYR:HD2 | 1.58 | 0.67 |
| 1:B:129:PHE:CE1 | 1:B:137:VAL:HG11 | 2.28 | 0.67 |
| 1:FB:233:ARG:HA | 1:FB:245:THR:HG23 | 1.76 | 0.67 |
| 1:GA:804:PRO:HA | 1:GA:807:ILE:HD12 | 1.76 | 0.67 |
| 1:HB:120:ALA:HB2 | 1:HB:205:LEU:HD21 | 1.76 | 0.67 |
| 1:L:67:ARG:HG3 | 1:L:73:VAL:HG22 | 1.74 | 0.67 |
| 1:LA:175:ARG:HA | 1:LA:197:LEU:HD23 | 1.76 | 0.67 |
| 1:MA:340:LEU:HD12 | 1:MA:351:HIS:ND1 | 2.09 | 0.67 |
| 1:N:172:GLN:HB3 | 1:N:215:LEU:HD11 | 1.75 | 0.67 |
| 1:NB:335:ARG:NH2 | 1:NB:337:LEU:HD23 | 2.08 | 0.67 |
| 1:OB:81:VAL:HG13 | 1:OB:83:LEU:HD11 | 1.76 | 0.67 |
| 1:PA:469:GLN:HE21 | 1:PA:478:ALA:HB1 | 1.59 | 0.67 |
| 1:QA:743:GLN:HA | 1:QA:746:LEU:HD12 | 1.76 | 0.67 |
| 1:SB:82:ARG:C | 1:SB:83:LEU:HD12 | 2.19 | 0.67 |
| 1:W:198:VAL:HG11 | 1:W:204:TYR:CD2 | 2.30 | 0.67 |
| 1:ZB:228:HIS:HA | 1:ZB:250:LEU:HD23 | 1.75 | 0.67 |
| 1:AA:549:VAL:HG11 | 1:AA:561:LEU:HD11 | 1.75 | 0.67 |
| 1:D:122:HIS:CD2 | 1:D:208:VAL:HG12 | 2.30 | 0.67 |
| 1:F:120:ALA:CB | 1:F:205:LEU:HD21 | 2.24 | 0.67 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:FA:227:LEU:O | 1:FA:251:VAL:HG22 | 1.95 | 0.67 |
| 1:QB:786:GLN:OE1 | 1:RB:781:VAL:HG11 | 1.94 | 0.67 |
| 1:XB:777:LEU:O | 1:XB:781:VAL:HG22 | 1.93 | 0.67 |
| 1:YA:405:THR:HG21 | 1:ZA:393:VAL:O | 1.94 | 0.67 |
| 1:AA:228:HIS:CE1 | 1:AA:268:LEU:HD22 | 2.30 | 0.67 |
| 1:AC:785:GLN:HG2 | 1:ZB:790:VAL:HG21 | 1.76 | 0.67 |
| 1:BA:408:LEU:HD11 | 1:BA:414:LEU:HD21 | 1.76 | 0.67 |
| 1:CA:677:ALA:HA | 1:CA:680:LEU:HD12 | 1.77 | 0.67 |
| 1:EA:542:ALA:O | 1:EA:638:VAL:HG13 | 1.93 | 0.67 |
| 1:FB:662:ILE:O | 1:FB:666:THR:HG23 | 1.95 | 0.67 |
| 1:IB:122:HIS:CD2 | 1:IB:208:VAL:HG12 | 2.28 | 0.67 |
| 1:JB:333:LEU:HD12 | 1:JB:334:LEU:H | 1.60 | 0.67 |
| 1:KB:531:THR:CG2 | 1:KB:537:LEU:HD11 | 2.25 | 0.67 |
| 1:RB:326:LEU:HD13 | 1:RB:331:GLY:HA2 | 1.77 | 0.67 |
| 1:SB:316:LEU:HD21 | 1:SB:319:GLY:C | 2.19 | 0.67 |
| 1:UB:228:HIS:HA | 1:UB:250:LEU:HD23 | 1.77 | 0.67 |
| 1:ZB:539:LEU:HD12 | 1:ZB:642:SER:O | 1.94 | 0.67 |
| 1:BA:767:GLU:HA | 1:BA:770:LEU:HD12 | 1.75 | 0.67 |
| 1:D:126:LEU:HD21 | 1:D:158:GLU:HB2 | 1.76 | 0.67 |
| 1:E:112:LEU:HD23 | 1:E:150:THR:HG23 | 1.75 | 0.67 |
| 1:J:603:VAL:HG11 | 1:J:638:VAL:HG11 | 1.75 | 0.67 |
| 1:JB:172:GLN:HB3 | 1:JB:215:LEU:HD11 | 1.75 | 0.67 |
| 1:KA:288:VAL:HG12 | 1:KA:294:ASN:N | 2.10 | 0.67 |
| 1:KA:531:THR:HG21 | 1:KA:588:PHE:HB2 | 1.76 | 0.67 |
| 1:P:66:SER:C | 1:P:73:VAL:HG13 | 2.18 | 0.67 |
| 1:PA:340:LEU:HD11 | 1:PA:357:TRP:CH2 | 2.29 | 0.67 |
| 1:Q:489:LEU:HD13 | 1:Q:493:GLU:O | 1.94 | 0.67 |
| 1:TA:595:SER:HA | 1:TA:598:ILE:HG22 | 1.76 | 0.67 |
| 1:TB:17:HIS:HB3 | 1:TB:44:LEU:HD22 | 1.76 | 0.67 |
| 1:V:543:TYR:HB3 | 1:V:638:VAL:HG22 | 1.75 | 0.67 |
| 1:XA:460:TYR:CZ | 1:XA:514:LEU:HD22 | 2.30 | 0.67 |
| 1:XA:560:LYS:O | 1:XA:564:VAL:HG23 | 1.95 | 0.67 |
| 1:A:175:ARG:HA | 1:A:197:LEU:HD23 | 1.76 | 0.67 |
| 1:CA:417:LYS:HE3 | 1:CA:419:LEU:HD21 | 1.77 | 0.67 |
| 1:EB:129:PHE:CZ | 1:EB:137:VAL:HG11 | 2.30 | 0.67 |
| 1:EB:547:PHE:CD2 | 1:EB:561:LEU:HD22 | 2.30 | 0.67 |
| 1:HB:333:LEU:HD23 | 1:HB:374:VAL:HG11 | 1.75 | 0.67 |
| 1:IB:60:THR:HG22 | 1:IB:90:ILE:HG13 | 1.76 | 0.67 |
| 1:JB:410:GLN:O | 1:JB:411:ASP:OD1 | 2.13 | 0.67 |
| 1:LB:177:ARG:HH12 | 1:LB:213:LEU:HD11 | 1.59 | 0.67 |
| 1:MB:221:LEU:HD21 | 1:MB:251:VAL:HG23 | 1.76 | 0.67 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:N:198:VAL:HG21 | 1:N:204:TYR:CD1 | 2.30 | 0.67 |
| 1:NB:662:ILE:HG21 | 1:OB:653:ALA:HB1 | 1.75 | 0.67 |
| 1:OB:390:VAL:HG22 | 1:OB:399:ARG:O | 1.94 | 0.67 |
| 1:VA:460:TYR:O | 1:VA:486:LEU:HD12 | 1.95 | 0.67 |
| 1:VB:337:LEU:HD12 | 1:VB:369:ALA:O | 1.94 | 0.67 |
| 1:Y:129:PHE:CE1 | 1:Y:137:VAL:HG11 | 2.30 | 0.67 |
| 1:DB:382:LEU:HD21 | 1:DB:388:ILE:HG13 | 1.77 | 0.67 |
| 1:I:737:GLY:O | 1:I:741:VAL:HG23 | 1.93 | 0.67 |
| 1:K:495:PHE:CB | 1:K:514:LEU:HD11 | 2.24 | 0.67 |
| 1:MB:288:VAL:HG12 | 1:MB:294:ASN:N | 2.09 | 0.67 |
| 1:N:81:VAL:HG11 | 1:N:102:GLY:H | 1.60 | 0.67 |
| 1:Q:587:THR:HG23 | 1:Q:590:ASP:H | 1.58 | 0.67 |
| 1:T:767:GLU:HA | 1:T:770:LEU:HD12 | 1.75 | 0.67 |
| 1:VA:538:GLN:O | 1:VA:643:VAL:HG13 | 1.94 | 0.67 |
| 1:YB:380:ILE:HD13 | 1:YB:408:LEU:HD13 | 1.75 | 0.67 |
| 1:ZA:523:PHE:HE2 | 1:ZA:635:VAL:HG22 | 1.59 | 0.67 |
| 1:CB:756:GLU:HA | 1:CB:759:LEU:HD12 | 1.76 | 0.67 |
| 1:E:7:ILE:HG22 | 1:E:36:ILE:HG13 | 1.77 | 0.67 |
| 1:KB:332:LEU:HD12 | 1:KB:376:GLU:HB2 | 1.77 | 0.67 |
| 1:LB:364:GLU:CD | 1:MB:353:ALA:HB1 | 2.19 | 0.67 |
| 1:LB:735:ILE:HD13 | 1:MB:727:GLU:HG2 | 1.77 | 0.67 |
| 1:M:65:VAL:HG13 | 1:M:103:GLU:CB | 2.25 | 0.67 |
| 1:OB:53:VAL:HG21 | 1:OB:91:ARG:HB3 | 1.76 | 0.67 |
| 1:OB:628:PHE:HE2 | 1:OB:635:VAL:HG23 | 1.58 | 0.67 |
| 1:RB:34:THR:HG23 | 1:SB:24:ASN:OD1 | 1.95 | 0.67 |
| 1:Z:3:THR:HG22 | 1:Z:43:VAL:HG23 | 1.77 | 0.67 |
| 1:Z:529:ILE:HD12 | 1:Z:583:VAL:HG21 | 1.76 | 0.67 |
| 1:AB:541:LEU:HD23 | 1:AB:640:VAL:HG22 | 1.77 | 0.67 |
| 1:B:566:ASP:OD1 | 1:B:568:VAL:HG12 | 1.94 | 0.67 |
| 1:G:405:THR:HG23 | 1:H:396:GLY:CA | 2.24 | 0.67 |
| 1:HA:626:ALA:HB3 | 1:HA:635:VAL:HB | 1.77 | 0.67 |
| 1:IB:410:GLN:O | 1:IB:411:ASP:OD1 | 2.13 | 0.67 |
| 1:M:470:VAL:HG22 | 1:M:495:PHE:HA | 1.76 | 0.67 |
| 1:P:221:LEU:O | 1:P:253:VAL:HG12 | 1.95 | 0.67 |
| 1:RA:17:HIS:CD2 | 1:RA:28:VAL:HG23 | 2.29 | 0.67 |
| 1:RB:761:ARG:CD | 1:SB:751:LEU:HD12 | 2.25 | 0.67 |
| 1:T:804:PRO:HA | 1:T:807:ILE:HD12 | 1.77 | 0.67 |
| 1:TA:529:ILE:HB | 1:TA:583:VAL:HG11 | 1.75 | 0.67 |
| 1:TB:173:ALA:O | 1:TB:215:LEU:HD12 | 1.95 | 0.67 |
| 1:W:51:VAL:HG21 | 1:W:99:LEU:HD12 | 1.77 | 0.67 |
| 1:X:539:LEU:HD13 | 1:X:643:VAL:HG12 | 1.77 | 0.67 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:Z:326:LEU:HD13 | 1:Z:331:GLY:HA2 | 1.76 | 0.67 |
| 1:CB:60:THR:HG23 | 1:CB:107:LYS:HD3 | 1.77 | 0.67 |
| 1:J:381:PRO:HA | 1:J:405:THR:HG22 | 1.77 | 0.67 |
| 1:LB:82:ARG:C | 1:LB:83:LEU:HD12 | 2.20 | 0.67 |
| 1:M:549:VAL:HG13 | 1:M:552:ARG:CZ | 2.25 | 0.67 |
| 1:OA:358:LEU:O | 1:OA:358:LEU:HD23 | 1.94 | 0.67 |
| 1:RA:516:LEU:HD11 | 1:RA:562:PHE:CE1 | 2.30 | 0.67 |
| 1:S:276:LEU:HD13 | 1:S:281:TYR:HA | 1.76 | 0.67 |
| 1:TA:391:GLN:HA | 1:TA:398:VAL:HG22 | 1.78 | 0.67 |
| 1:UB:61:VAL:HG12 | 1:UB:105:LEU:HD12 | 1.77 | 0.67 |
| 1:V:326:LEU:HD13 | 1:V:331:GLY:HA2 | 1.76 | 0.67 |
| 1:VB:688:LEU:HD13 | 1:WB:679:ARG:CG | 2.25 | 0.67 |
| 1:ZA:115:VAL:HG23 | 1:ZA:147:GLY:O | 1.95 | 0.67 |
| 1:CB:285:LEU:HD12 | 1:CB:315:GLN:OE1 | 1.94 | 0.66 |
| 1:F:227:LEU:HD21 | 1:F:229:LEU:HD21 | 1.76 | 0.66 |
| 1:GA:25:VAL:HG21 | 1:GA:78:THR:O | 1.95 | 0.66 |
| 1:GB:758:GLU:O | 1:GB:762:VAL:HG22 | 1.94 | 0.66 |
| 1:L:468:VAL:HG22 | 1:L:515:CYS:HA | 1.77 | 0.66 |
| 1:Q:531:THR:HG21 | 1:Q:588:PHE:HA | 1.77 | 0.66 |
| 1:QA:579:VAL:HG22 | 1:QA:603:VAL:HG13 | 1.77 | 0.66 |
| 1:BA:489:LEU:HD11 | 1:BA:495:PHE:HE1 | 1.60 | 0.66 |
| 1:CB:767:GLU:HA | 1:CB:770:LEU:HD12 | 1.75 | 0.66 |
| 1:DA:227:LEU:O | 1:DA:251:VAL:HG22 | 1.96 | 0.66 |
| 1:DB:758:GLU:O | 1:DB:762:VAL:HG22 | 1.94 | 0.66 |
| 1:EB:82:ARG:C | 1:EB:83:LEU:HD12 | 2.20 | 0.66 |
| 1:FB:65:VAL:HG11 | 1:FB:100:TYR:HB3 | 1.77 | 0.66 |
| 1:FB:283:VAL:HG22 | 1:FB:301:VAL:HA | 1.75 | 0.66 |
| 1:IB:170:GLN:N | 1:IB:201:VAL:HG13 | 2.09 | 0.66 |
| 1:IB:175:ARG:HA | 1:IB:197:LEU:HD23 | 1.76 | 0.66 |
| 1:JB:316:LEU:HD12 | 1:JB:317:GLU:H | 1.60 | 0.66 |
| 1:L:54:PRO:HD2 | 1:L:109:ILE:HD12 | 1.76 | 0.66 |
| 1:LA:67:ARG:HG2 | 1:LA:73:VAL:HG22 | 1.78 | 0.66 |
| 1:M:115:VAL:HG23 | 1:M:147:GLY:O | 1.96 | 0.66 |
| 1:OA:603:VAL:HG11 | 1:OA:638:VAL:HG21 | 1.77 | 0.66 |
| 1:X:767:GLU:HA | 1:X:770:LEU:HD12 | 1.77 | 0.66 |
| 1:DA:414:LEU:HB3 | 1:DA:455:THR:HG21 | 1.77 | 0.66 |
| 1:DB:120:ALA:HB2 | 1:DB:205:LEU:HD11 | 1.76 | 0.66 |
| 1:G:381:PRO:HA | 1:G:405:THR:HG22 | 1.76 | 0.66 |
| 1:HA:323:VAL:HG12 | 1:HA:366:VAL:HB | 1.76 | 0.66 |
| 1:HB:545:TRP:HB2 | 1:HB:633:LEU:HD11 | 1.77 | 0.66 |
| 1:IB:3:THR:HG22 | 1:IB:6:PHE:CD1 | 2.31 | 0.66 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:K:121:LEU:HD12 | 1:K:121:LEU:O | 1.95 | 0.66 |
| 1:L:344:GLU:OE1 | 1:L:371:VAL:HG23 | 1.94 | 0.66 |
| 1:N:228:HIS:HA | 1:N:250:LEU:HD23 | 1.76 | 0.66 |
| 1:OA:60:THR:HG22 | 1:OA:90:ILE:CA | 2.25 | 0.66 |
| 1:OB:758:GLU:O | 1:OB:762:VAL:HG22 | 1.95 | 0.66 |
| 1:QA:168:ILE:HG22 | 1:QA:215:LEU:HD13 | 1.78 | 0.66 |
| 1:Z:331:GLY:CA | 1:Z:407:MET:HE1 | 2.25 | 0.66 |
| 1:ZA:502:ALA:HB2 | 1:ZA:510:ALA:CB | 2.25 | 0.66 |
| 1:CA:9:ARG:CB | 1:CA:34:THR:HG22 | 2.26 | 0.66 |
| 1:HA:283:VAL:HG22 | 1:HA:301:VAL:HA | 1.77 | 0.66 |
| 1:KA:340:LEU:HD12 | 1:KA:351:HIS:ND1 | 2.10 | 0.66 |
| 1:LA:498:LEU:HB2 | 1:LA:513:ALA:HB3 | 1.78 | 0.66 |
| 1:MA:547:PHE:CE1 | 1:MA:633:LEU:HD13 | 2.30 | 0.66 |
| 1:RA:65:VAL:HB | 1:RA:73:VAL:HG11 | 1.78 | 0.66 |
| 1:UB:657:SER:HA | 1:UB:660:LEU:HD12 | 1.76 | 0.66 |
| 1:VA:529:ILE:HD13 | 1:VA:539:LEU:HD22 | 1.76 | 0.66 |
| 1:Y:53:VAL:HG13 | 1:Y:109:ILE:HG23 | 1.76 | 0.66 |
| 1:ZB:195:GLU:O | 1:ZB:263:VAL:HG21 | 1.95 | 0.66 |
| 1:C:67:ARG:HE | 1:C:73:VAL:HG22 | 1.58 | 0.66 |
| 1:E:658:VAL:HG23 | 1:F:533:ASP:OD2 | 1.96 | 0.66 |
| 1:FB:381:PRO:HA | 1:FB:405:THR:HG22 | 1.77 | 0.66 |
| 1:H:223:GLU:O | 1:H:273:ILE:HD12 | 1.95 | 0.66 |
| 1:JA:112:LEU:HD12 | 1:JA:151:TYR:O | 1.96 | 0.66 |
| 1:K:63:ASN:OD1 | 1:K:83:LEU:HD23 | 1.94 | 0.66 |
| 1:L:81:VAL:HG13 | 1:L:83:LEU:HD11 | 1.76 | 0.66 |
| 1:MA:381:PRO:HA | 1:MA:405:THR:HG22 | 1.77 | 0.66 |
| 1:OA:197:LEU:HD22 | 1:OA:216:VAL:HG11 | 1.77 | 0.66 |
| 1:P:388:ILE:HD12 | 1:P:414:LEU:HD21 | 1.75 | 0.66 |
| 1:PA:283:VAL:HG22 | 1:PA:301:VAL:HG23 | 1.76 | 0.66 |
| 1:QA:340:LEU:HD11 | 1:QA:371:VAL:CG2 | 2.25 | 0.66 |
| 1:R:405:THR:HG21 | 1:S:393:VAL:C | 2.20 | 0.66 |
| 1:SB:489:LEU:HD21 | 1:SB:495:PHE:CZ | 2.31 | 0.66 |
| 1:V:227:LEU:HA | 1:V:270:VAL:HG22 | 1.77 | 0.66 |
| 1:VA:543:TYR:CE1 | 1:VA:638:VAL:HG13 | 2.31 | 0.66 |
| 1:CA:809:ASP:O | 1:CA:810:LEU:HD23 | 1.96 | 0.66 |
| 1:DA:3:THR:HG22 | 1:DA:43:VAL:HG23 | 1.78 | 0.66 |
| 1:H:284:ILE:HD12 | 1:H:287:PRO:HB3 | 1.78 | 0.66 |
| 1:MA:587:THR:HG23 | 1:MA:590:ASP:OD1 | 1.96 | 0.66 |
| 1:S:381:PRO:HA | 1:S:405:THR:HG22 | 1.77 | 0.66 |
| 1:WA:10:ILE:HD11 | 1:WA:16:ILE:HG22 | 1.78 | 0.66 |
| 1:WB:8:ILE:HD12 | 1:WB:37:ARG:HD3 | 1.75 | 0.66 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:Y:168:ILE:HG22 | 1:Y:215:LEU:HD13 | 1.78 | 0.66 |
| 1:ZA:221:LEU:HD12 | 1:ZA:256:THR:O | 1.96 | 0.66 |
| 1:C:288:VAL:HG12 | 1:C:294:ASN:N | 2.10 | 0.66 |
| 1:D:601:THR:HG22 | 1:D:607:GLU:HG2 | 1.77 | 0.66 |
| 1:EB:53:VAL:HG11 | 1:EB:58:TYR:CD2 | 2.31 | 0.66 |
| 1:FB:273:ILE:O | 1:FB:273:ILE:HG23 | 1.95 | 0.66 |
| 1:HA:221:LEU:HD13 | 1:HA:252:THR:O | 1.96 | 0.66 |
| 1:I:69:ALA:HB2 | 1:I:74:LEU:HD21 | 1.76 | 0.66 |
| 1:I:122:HIS:CD2 | 1:I:208:VAL:HG12 | 2.31 | 0.66 |
| 1:K:495:PHE:HB3 | 1:K:514:LEU:HD11 | 1.76 | 0.66 |
| 1:L:170:GLN:HA | 1:L:201:VAL:HG22 | 1.78 | 0.66 |
| 1:MA:173:ALA:HB1 | 1:MA:197:LEU:HD12 | 1.77 | 0.66 |
| 1:MB:223:GLU:OE1 | 1:MB:253:VAL:HG21 | 1.96 | 0.66 |
| 1:OA:9:ARG:CB | 1:OA:34:THR:HG22 | 2.25 | 0.66 |
| 1:PB:788:ALA:O | 1:PB:792:VAL:HG23 | 1.96 | 0.66 |
| 1:Q:786:GLN:OE1 | 1:R:781:VAL:HG21 | 1.94 | 0.66 |
| 1:T:227:LEU:HB3 | 1:T:251:VAL:HG23 | 1.77 | 0.66 |
| 1:TB:228:HIS:CE1 | 1:TB:268:LEU:HD22 | 2.31 | 0.66 |
| 1:W:413:VAL:HG22 | 1:W:414:LEU:H | 1.60 | 0.66 |
| 1:WB:65:VAL:HG13 | 1:WB:103:GLU:OE1 | 1.96 | 0.66 |
| 1:YA:661:ALA:HA | 1:YA:664:ILE:HD12 | 1.78 | 0.66 |
| 1:D:657:SER:HA | 1:D:660:LEU:HD12 | 1.78 | 0.66 |
| 1:GA:227:LEU:O | 1:GA:251:VAL:HG22 | 1.96 | 0.66 |
| 1:GB:529:ILE:HD12 | 1:GB:583:VAL:HB | 1.77 | 0.66 |
| 1:H:223:GLU:OE2 | 1:H:253:VAL:HG21 | 1.96 | 0.66 |
| 1:I:389:TYR:CE1 | 1:I:457:VAL:HG22 | 2.31 | 0.66 |
| 1:IB:120:ALA:HB2 | 1:IB:205:LEU:HD21 | 1.76 | 0.66 |
| 1:N:579:VAL:O | 1:N:583:VAL:HG12 | 1.96 | 0.66 |
| 1:UB:59:CYS:CB | 1:UB:105:LEU:HD11 | 2.26 | 0.66 |
| 1:XB:233:ARG:HA | 1:XB:245:THR:HG23 | 1.77 | 0.66 |
| 1:Z:358:LEU:HD11 | 1:Z:407:MET:HE2 | 1.78 | 0.66 |
| 1:Z:804:PRO:HA | 1:Z:807:ILE:HD12 | 1.77 | 0.66 |
| 1:ZA:381:PRO:HA | 1:ZA:405:THR:HG22 | 1.76 | 0.66 |
| 1:C:16:ILE:HD11 | 1:C:47:PRO:CD | 2.26 | 0.66 |
| 1:CA:225:THR:HB | 1:CA:270:VAL:HG12 | 1.78 | 0.66 |
| 1:EA:691:GLN:HA | 1:EA:694:LEU:HD12 | 1.78 | 0.66 |
| 1:EB:16:ILE:HD11 | 1:EB:47:PRO:HD3 | 1.77 | 0.66 |
| 1:GB:529:ILE:HD13 | 1:GB:579:VAL:HG12 | 1.76 | 0.66 |
| 1:IB:538:GLN:OE1 | 1:IB:646:VAL:HG22 | 1.95 | 0.66 |
| 1:JB:176:LEU:HD21 | 1:JB:196:TRP:CD1 | 2.30 | 0.66 |
| 1:KA:122:HIS:CD2 | 1:KA:208:VAL:HG12 | 2.31 | 0.66 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:LB:177:ARG:NH1 | 1:LB:213:LEU:HD11 | 2.11 | 0.66 |
| 1:LB:221:LEU:HD13 | 1:LB:252:THR:C | 2.19 | 0.66 |
| 1:N:579:VAL:HG22 | 1:N:599:ILE:HD11 | 1.77 | 0.66 |
| 1:T:405:THR:HG21 | 1:V:393:VAL:O | 1.96 | 0.66 |
| 1:UA:788:ALA:O | 1:UA:792:VAL:HG23 | 1.95 | 0.66 |
| 1:VA:462:VAL:HG21 | 1:VA:481:VAL:HG21 | 1.78 | 0.66 |
| 1:AA:388:ILE:HG22 | 1:AA:456:ARG:HA | 1.78 | 0.66 |
| 1:CA:645:PRO:HB3 | 1:CA:650:THR:HG21 | 1.78 | 0.66 |
| 1:GB:480:VAL:HG21 | 1:GB:558:THR:HB | 1.78 | 0.66 |
| 1:H:176:LEU:HD23 | 1:H:196:TRP:O | 1.96 | 0.66 |
| 1:IA:405:THR:HG21 | 1:JA:393:VAL:O | 1.96 | 0.66 |
| 1:JB:120:ALA:HB1 | 1:JB:144:LEU:HD13 | 1.77 | 0.66 |
| 1:JB:529:ILE:HB | 1:JB:583:VAL:HG21 | 1.78 | 0.66 |
| 1:N:599:ILE:O | 1:N:603:VAL:HG23 | 1.95 | 0.66 |
| 1:O:115:VAL:HG12 | 1:O:119:THR:HG23 | 1.78 | 0.66 |
| 1:QB:6:PHE:O | 1:QB:7:ILE:HD13 | 1.96 | 0.66 |
| 1:YA:758:GLU:O | 1:YA:762:VAL:HG22 | 1.94 | 0.66 |
| 1:C:531:THR:HG21 | 1:C:588:PHE:HA | 1.78 | 0.65 |
| 1:DA:388:ILE:N | 1:DA:457:VAL:HG23 | 2.11 | 0.65 |
| 1:EA:405:THR:HG23 | 1:FA:396:GLY:CA | 2.27 | 0.65 |
| 1:FA:334:LEU:HD12 | 1:FA:357:TRP:NE1 | 2.11 | 0.65 |
| 1:IB:539:LEU:HD12 | 1:IB:642:SER:O | 1.94 | 0.65 |
| 1:JB:333:LEU:HD11 | 1:JB:356:HIS:HB3 | 1.77 | 0.65 |
| 1:NB:381:PRO:HA | 1:NB:405:THR:HG22 | 1.77 | 0.65 |
| 1:OB:112:LEU:HD11 | 1:OB:153:PRO:HD3 | 1.77 | 0.65 |
| 1:PA:173:ALA:HB3 | 1:PA:216:VAL:HG13 | 1.78 | 0.65 |
| 1:PB:288:VAL:HG12 | 1:PB:294:ASN:N | 2.10 | 0.65 |
| 1:QA:658:VAL:HG21 | 1:RA:535:ALA:HA | 1.76 | 0.65 |
| 1:TA:419:LEU:HD23 | 1:TA:494:GLN:OE1 | 1.95 | 0.65 |
| 1:UB:546:HIS:O | 1:UB:633:LEU:HD12 | 1.96 | 0.65 |
| 1:XB:539:LEU:HD11 | 1:XB:541:LEU:HD21 | 1.78 | 0.65 |
| 1:C:334:LEU:HD11 | 1:C:359:ILE:CG2 | 2.26 | 0.65 |
| 1:CA:273:ILE:HG23 | 1:CA:273:ILE:O | 1.96 | 0.65 |
| 1:D:227:LEU:HG | 1:D:270:VAL:HG22 | 1.78 | 0.65 |
| 1:DA:807:ILE:O | 1:DA:810:LEU:HD13 | 1.94 | 0.65 |
| 1:EA:331:GLY:HA3 | 1:EA:407:MET:HE1 | 1.78 | 0.65 |
| 1:G:30:VAL:HG21 | 1:G:50:MET:SD | 2.37 | 0.65 |
| 1:JB:539:LEU:HD12 | 1:JB:642:SER:O | 1.95 | 0.65 |
| 1:LB:599:ILE:HD13 | 1:LB:640:VAL:HG21 | 1.78 | 0.65 |
| 1:MA:337:LEU:HD21 | 1:MA:372:GLU:HB3 | 1.79 | 0.65 |
| 1:N:13:TYR:HE2 | 1:O:83:LEU:HD22 | 1.59 | 0.65 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:O:393:VAL:HG22 | 1:O:411:ASP:C | 2.21 | 0.65 |
| 1:OA:579:VAL:O | 1:OA:583:VAL:HG12 | 1.95 | 0.65 |
| 1:PA:746:LEU:HD13 | 1:QA:737:GLY:HA3 | 1.78 | 0.65 |
| 1:QB:737:GLY:O | 1:QB:741:VAL:HG23 | 1.97 | 0.65 |
| 1:RB:333:LEU:HD23 | 1:RB:374:VAL:HG11 | 1.77 | 0.65 |
| 1:YA:275:THR:HG23 | 1:ZA:297:GLY:N | 2.11 | 0.65 |
| 1:B:460:TYR:O | 1:B:486:LEU:HD12 | 1.96 | 0.65 |
| 1:C:516:LEU:HD12 | 1:C:517:LEU:H | 1.62 | 0.65 |
| 1:C:732:ALA:HA | 1:C:735:ILE:HD12 | 1.79 | 0.65 |
| 1:D:284:ILE:HD12 | 1:D:287:PRO:HB3 | 1.78 | 0.65 |
| 1:F:788:ALA:O | 1:F:792:VAL:HG23 | 1.97 | 0.65 |
| 1:G:285:LEU:HD21 | 1:G:317:GLU:HA | 1.78 | 0.65 |
| 1:JA:537:LEU:HD23 | 1:JA:645:PRO:HA | 1.77 | 0.65 |
| 1:KA:175:ARG:HA | 1:KA:197:LEU:HD23 | 1.78 | 0.65 |
| 1:NA:131:ASP:HB3 | 1:NA:137:VAL:HG23 | 1.77 | 0.65 |
| 1:NA:176:LEU:HD21 | 1:NA:196:TRP:CD1 | 2.31 | 0.65 |
| 1:NA:469:GLN:HA | 1:NA:480:VAL:HG22 | 1.77 | 0.65 |
| 1:NB:9:ARG:HB3 | 1:NB:34:THR:HG22 | 1.77 | 0.65 |
| 1:RA:806:THR:HG23 | 1:SA:808:ARG:HD2 | 1.78 | 0.65 |
| 1:T:735:ILE:HD12 | 1:T:738:GLU:OE1 | 1.96 | 0.65 |
| 1:TA:25:VAL:HG22 | 1:TA:78:THR:O | 1.97 | 0.65 |
| 1:V:786:GLN:HB2 | 1:W:781:VAL:HG11 | 1.79 | 0.65 |
| 1:VA:380:ILE:O | 1:VA:405:THR:HG21 | 1.95 | 0.65 |
| 1:W:599:ILE:HD13 | 1:W:640:VAL:HG21 | 1.78 | 0.65 |
| 1:X:539:LEU:HD21 | 1:X:541:LEU:HD11 | 1.78 | 0.65 |
| 1:XB:168:ILE:HD11 | 1:XB:204:TYR:HB3 | 1.79 | 0.65 |
| 1:AC:770:LEU:HD22 | 1:ZB:775:ALA:HB3 | 1.77 | 0.65 |
| 1:B:405:THR:HG21 | 1:C:393:VAL:O | 1.95 | 0.65 |
| 1:BB:575:ILE:O | 1:BB:579:VAL:HG23 | 1.96 | 0.65 |
| 1:CB:60:THR:HG22 | 1:CB:90:ILE:HG13 | 1.78 | 0.65 |
| 1:E:10:ILE:HG22 | 1:E:47:PRO:HG3 | 1.79 | 0.65 |
| 1:FB:18:VAL:HG22 | 1:FB:27:ARG:O | 1.96 | 0.65 |
| 1:L:709:LEU:HA | 1:L:712:LEU:HD12 | 1.78 | 0.65 |
| 1:MA:52:THR:O | 1:MA:109:ILE:HD11 | 1.96 | 0.65 |
| 1:SA:470:VAL:HG13 | 1:SA:494:GLN:O | 1.97 | 0.65 |
| 1:UB:120:ALA:HB2 | 1:UB:205:LEU:HD21 | 1.77 | 0.65 |
| 1:XA:469:GLN:HA | 1:XA:480:VAL:HG22 | 1.77 | 0.65 |
| 1:YB:470:VAL:HG12 | 1:YB:495:PHE:HA | 1.77 | 0.65 |
| 1:YB:790:VAL:HG22 | 1:ZB:785:GLN:HG2 | 1.78 | 0.65 |
| 1:CA:467:ALA:HB2 | 1:CA:518:LEU:HB2 | 1.78 | 0.65 |
| 1:D:16:ILE:HD11 | 1:D:47:PRO:HD3 | 1.78 | 0.65 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:D:18:VAL:HG23 | 1:D:42:ARG:C | 2.22 | 0.65 |
| 1:EA:175:ARG:NH2 | 1:EA:263:VAL:HG12 | 2.11 | 0.65 |
| 1:FA:746:LEU:HD13 | 1:GA:737:GLY:HA3 | 1.79 | 0.65 |
| 1:H:539:LEU:HD11 | 1:H:640:VAL:HG23 | 1.78 | 0.65 |
| 1:HB:382:LEU:HD21 | 1:HB:387:GLY:HA2 | 1.77 | 0.65 |
| 1:O:18:VAL:HG11 | 1:O:37:ARG:NE | 2.10 | 0.65 |
| 1:O:181:GLU:OE2 | 1:O:191:VAL:HG12 | 1.97 | 0.65 |
| 1:S:545:TRP:CE3 | 1:S:633:LEU:HD11 | 2.31 | 0.65 |
| 1:SB:480:VAL:HG21 | 1:SB:558:THR:HB | 1.77 | 0.65 |
| 1:T:198:VAL:HG11 | 1:T:204:TYR:CE1 | 2.32 | 0.65 |
| 1:YA:326:LEU:HD12 | 1:YA:363:LEU:HD21 | 1.77 | 0.65 |
| 1:C:16:ILE:HD11 | 1:C:47:PRO:HD3 | 1.79 | 0.65 |
| 1:C:60:THR:HG22 | 1:C:90:ILE:HG13 | 1.79 | 0.65 |
| 1:LA:662:ILE:O | 1:LA:666:THR:HG23 | 1.97 | 0.65 |
| 1:OB:129:PHE:CZ | 1:OB:137:VAL:HG11 | 2.32 | 0.65 |
| 1:OB:709:LEU:HA | 1:OB:712:LEU:HD12 | 1.77 | 0.65 |
| 1:TA:784:ALA:HA | 1:TA:787:LEU:HD12 | 1.77 | 0.65 |
| 1:VB:806:THR:HG23 | 1:WB:808:ARG:HB3 | 1.78 | 0.65 |
| 1:Y:174:LEU:HD21 | 1:Y:212:VAL:CG1 | 2.27 | 0.65 |
| 1:YB:334:LEU:HD12 | 1:YB:357:TRP:NE1 | 2.12 | 0.65 |
| 1:YB:381:PRO:HA | 1:YB:405:THR:HG22 | 1.78 | 0.65 |
| 1:ZA:226:ALA:HB2 | 1:ZA:252:THR:HG22 | 1.77 | 0.65 |
| 1:AB:174:LEU:HD12 | 1:AB:214:ASP:O | 1.96 | 0.65 |
| 1:C:65:VAL:HG12 | 1:C:83:LEU:HG | 1.78 | 0.65 |
| 1:CA:452:ARG:NH1 | 1:CA:458:VAL:HG22 | 2.12 | 0.65 |
| 1:CB:539:LEU:HD11 | 1:CB:640:VAL:HG13 | 1.79 | 0.65 |
| 1:H:51:VAL:O | 1:H:51:VAL:HG23 | 1.97 | 0.65 |
| 1:I:168:ILE:HG22 | 1:I:215:LEU:HD13 | 1.78 | 0.65 |
| 1:I:597:ARG:O | 1:I:601:THR:HG23 | 1.97 | 0.65 |
| 1:IB:30:VAL:HG21 | 1:IB:50:MET:SD | 2.37 | 0.65 |
| 1:K:691:GLN:HA | 1:K:694:LEU:HD12 | 1.78 | 0.65 |
| 1:KB:60:THR:HG22 | 1:KB:90:ILE:CD1 | 2.27 | 0.65 |
| 1:OA:200:THR:HG21 | 1:OA:204:TYR:HB2 | 1.79 | 0.65 |
| 1:SA:326:LEU:HD11 | 1:SA:332:LEU:CD1 | 2.27 | 0.65 |
| 1:XA:460:TYR:CE1 | 1:XA:468:VAL:HG21 | 2.32 | 0.65 |
| 1:ZB:174:LEU:HD12 | 1:ZB:214:ASP:C | 2.21 | 0.65 |
| 1:BB:516:LEU:HD21 | 1:BB:547:PHE:CZ | 2.32 | 0.65 |
| 1:C:391:GLN:O | 1:C:413:VAL:HG12 | 1.97 | 0.65 |
| 1:CA:123:LEU:HD22 | 1:CA:157:VAL:CG1 | 2.27 | 0.65 |
| 1:DA:332:LEU:HD21 | 1:DA:373:VAL:CG1 | 2.26 | 0.65 |
| 1:FA:564:VAL:HG21 | 1:FA:631:ASN:HB3 | 1.79 | 0.65 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:I:276:LEU:HD11 | 1:I:302:VAL:HG12 | 1.78 | 0.65 |
| 1:J:114:VAL:HG23 | 1:J:149:GLY:C | 2.21 | 0.65 |
| 1:JB:469:GLN:HA | 1:JB:480:VAL:HG22 | 1.79 | 0.65 |
| 1:L:175:ARG:HA | 1:L:197:LEU:HD23 | 1.77 | 0.65 |
| 1:M:283:VAL:HG13 | 1:M:300:ARG:C | 2.21 | 0.65 |
| 1:Q:28:VAL:HG21 | 1:Q:100:TYR:CD1 | 2.32 | 0.65 |
| 1:QB:405:THR:HG23 | 1:RB:396:GLY:CA | 2.27 | 0.65 |
| 1:RA:516:LEU:HD11 | 1:RA:562:PHE:HE1 | 1.62 | 0.65 |
| 1:VB:688:LEU:HD13 | 1:WB:679:ARG:HG2 | 1.78 | 0.65 |
| 1:WB:596:ALA:HA | 1:WB:599:ILE:HD12 | 1.79 | 0.65 |
| 1:Y:61:VAL:HG23 | 1:Y:64:PRO:HB3 | 1.78 | 0.65 |
| 1:YA:586:VAL:HG23 | 1:YA:591:PHE:HB2 | 1.77 | 0.65 |
| 1:YB:63:ASN:OD1 | 1:YB:83:LEU:HD22 | 1.96 | 0.65 |
| 1:Z:416:GLU:OE2 | 1:Z:455:THR:HG23 | 1.95 | 0.65 |
| 1:AA:388:ILE:HD12 | 1:AA:414:LEU:HD22 | 1.79 | 0.65 |
| 1:B:230:ARG:HG2 | 1:B:268:LEU:HD11 | 1.79 | 0.65 |
| 1:D:65:VAL:HG23 | 1:D:67:ARG:HG3 | 1.79 | 0.65 |
| 1:D:216:VAL:HG22 | 1:D:217:ASP:H | 1.62 | 0.65 |
| 1:DA:105:LEU:HD21 | 1:DA:107:LYS:O | 1.96 | 0.65 |
| 1:DB:116:LEU:O | 1:DB:119:THR:HG22 | 1.96 | 0.65 |
| 1:I:276:LEU:CD1 | 1:I:302:VAL:HG12 | 2.27 | 0.65 |
| 1:LB:758:GLU:O | 1:LB:762:VAL:HG22 | 1.97 | 0.65 |
| 1:M:539:LEU:HD12 | 1:M:642:SER:O | 1.96 | 0.65 |
| 1:NA:579:VAL:HG22 | 1:NA:599:ILE:HD11 | 1.79 | 0.65 |
| 1:NB:115:VAL:HG11 | 1:NB:121:LEU:HD11 | 1.78 | 0.65 |
| 1:O:115:VAL:HG22 | 1:O:121:LEU:CD1 | 2.27 | 0.65 |
| 1:P:56:ARG:NH2 | 1:Q:127:LEU:HD11 | 2.11 | 0.65 |
| 1:QA:358:LEU:HD12 | 1:QA:377:ARG:NE | 2.11 | 0.65 |
| 1:SA:461:ARG:HG3 | 1:SA:486:LEU:HD13 | 1.77 | 0.65 |
| 1:UB:284:ILE:HD12 | 1:UB:287:PRO:HB3 | 1.79 | 0.65 |
| 1:VA:10:ILE:HG23 | 1:VA:16:ILE:HG21 | 1.77 | 0.65 |
| 1:YB:462:VAL:HG21 | 1:YB:481:VAL:CG2 | 2.27 | 0.65 |
| 1:A:488:SER:C | 1:A:489:LEU:HD22 | 2.22 | 0.65 |
| 1:A:792:VAL:HG11 | 1:NA:797:GLN:OE1 | 1.97 | 0.65 |
| 1:F:786:GLN:OE1 | 1:G:781:VAL:HG11 | 1.97 | 0.65 |
| 1:KA:227:LEU:HD13 | 1:KA:270:VAL:HG22 | 1.78 | 0.65 |
| 1:MA:410:GLN:O | 1:MA:411:ASP:OD1 | 2.14 | 0.65 |
| 1:N:790:VAL:HG22 | 1:O:785:GLN:CG | 2.27 | 0.65 |
| 1:OA:176:LEU:HD21 | 1:OA:196:TRP:NE1 | 2.12 | 0.65 |
| 1:QA:464:HIS:HB2 | 1:RA:496:THR:HG23 | 1.78 | 0.65 |
| 1:RA:336:ALA:HB3 | 1:RA:352:GLN:O | 1.97 | 0.65 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:RB:9:ARG:HB3 | 1:RB:34:THR:HG22 | 1.79 | 0.65 |
| 1:S:416:GLU:OE2 | 1:S:455:THR:HG23 | 1.96 | 0.65 |
| 1:V:737:GLY:O | 1:V:741:VAL:HG23 | 1.97 | 0.65 |
| 1:VB:177:ARG:HH12 | 1:VB:213:LEU:HD11 | 1.61 | 0.65 |
| 1:VB:524:THR:HG22 | 1:VB:542:ALA:HA | 1.79 | 0.65 |
| 1:WB:170:GLN:HA | 1:WB:201:VAL:HG13 | 1.79 | 0.65 |
| 1:X:228:HIS:CE1 | 1:X:268:LEU:HD23 | 2.32 | 0.65 |
| 1:ZA:502:ALA:HB3 | 1:ZA:507:ARG:HB3 | 1.79 | 0.65 |
| 1:C:575:ILE:O | 1:C:579:VAL:HG23 | 1.98 | 0.64 |
| 1:DB:61:VAL:HG12 | 1:DB:105:LEU:HD12 | 1.79 | 0.64 |
| 1:EB:16:ILE:HD11 | 1:EB:47:PRO:CD | 2.27 | 0.64 |
| 1:EB:144:LEU:HD12 | 1:EB:146:GLU:OE1 | 1.97 | 0.64 |
| 1:G:25:VAL:HG22 | 1:G:80:GLN:HE22 | 1.61 | 0.64 |
| 1:GB:529:ILE:HD13 | 1:GB:579:VAL:CG1 | 2.28 | 0.64 |
| 1:H:90:ILE:HD13 | 1:H:153:PRO:HB3 | 1.78 | 0.64 |
| 1:HB:285:LEU:HD12 | 1:HB:315:GLN:HB3 | 1.78 | 0.64 |
| 1:J:175:ARG:HA | 1:J:197:LEU:HD23 | 1.79 | 0.64 |
| 1:J:543:TYR:CD1 | 1:J:638:VAL:HG12 | 2.33 | 0.64 |
| 1:LA:62:ALA:HA | 1:LA:88:LEU:HD23 | 1.78 | 0.64 |
| 1:N:806:THR:HG23 | 1:O:808:ARG:CZ | 2.27 | 0.64 |
| 1:NB:756:GLU:OE1 | 1:NB:759:LEU:HD12 | 1.97 | 0.64 |
| 1:PB:340:LEU:HD12 | 1:PB:351:HIS:ND1 | 2.11 | 0.64 |
| 1:W:539:LEU:HD11 | 1:W:640:VAL:HG13 | 1.79 | 0.64 |
| 1:WA:525:ASP:HB3 | 1:WA:541:LEU:HD12 | 1.79 | 0.64 |
| 1:WB:65:VAL:HG12 | 1:WB:83:LEU:CD2 | 2.28 | 0.64 |
| 1:XA:495:PHE:CG | 1:XA:514:LEU:HD21 | 2.32 | 0.64 |
| 1:Y:643:VAL:HG13 | 1:Z:580:ARG:HH12 | 1.63 | 0.64 |
| 1:YA:688:LEU:HD22 | 1:ZA:675:HIS:NE2 | 2.12 | 0.64 |
| 1:A:662:ILE:HG21 | 1:B:653:ALA:HB1 | 1.78 | 0.64 |
| 1:B:390:VAL:HG22 | 1:B:399:ARG:O | 1.98 | 0.64 |
| 1:C:284:ILE:HD12 | 1:C:287:PRO:HB3 | 1.78 | 0.64 |
| 1:DB:5:GLU:O | 1:DB:7:ILE:HD12 | 1.98 | 0.64 |
| 1:F:223:GLU:OE2 | 1:F:253:VAL:HG21 | 1.96 | 0.64 |
| 1:G:323:VAL:HG12 | 1:G:366:VAL:HG21 | 1.78 | 0.64 |
| 1:G:633:LEU:HD12 | 1:G:634:VAL:H | 1.61 | 0.64 |
| 1:GA:405:THR:HG21 | 1:HA:393:VAL:O | 1.98 | 0.64 |
| 1:GA:460:TYR:O | 1:GA:486:LEU:HD12 | 1.96 | 0.64 |
| 1:I:579:VAL:O | 1:I:583:VAL:HG22 | 1.97 | 0.64 |
| 1:IA:175:ARG:HA | 1:IA:197:LEU:HD23 | 1.79 | 0.64 |
| 1:JA:267:VAL:C | 1:JA:268:LEU:HD12 | 2.21 | 0.64 |
| 1:LA:81:VAL:HG13 | 1:LA:83:LEU:HD11 | 1.79 | 0.64 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OA:276:LEU:HD13 | 1:OA:281:TYR:HA | 1.78 | 0.64 |
| 1:OA:661:ALA:O | 1:OA:665:THR:HG23 | 1.97 | 0.64 |
| 1:PB:540:GLN:C | 1:PB:541:LEU:HD12 | 2.22 | 0.64 |
| 1:Q:129:PHE:CE1 | 1:Q:157:VAL:HG22 | 2.33 | 0.64 |
| 1:QA:28:VAL:HG11 | 1:QA:100:TYR:CD1 | 2.32 | 0.64 |
| 1:QA:489:LEU:HD11 | 1:QA:495:PHE:CD2 | 2.31 | 0.64 |
| 1:SA:326:LEU:HD11 | 1:SA:332:LEU:HD11 | 1.78 | 0.64 |
| 1:T:480:VAL:HG21 | 1:T:558:THR:HG21 | 1.78 | 0.64 |
| 1:TA:53:VAL:HG11 | 1:TA:58:TYR:HA | 1.79 | 0.64 |
| 1:UB:288:VAL:HG12 | 1:UB:294:ASN:N | 2.13 | 0.64 |
| 1:VB:405:THR:HG23 | 1:WB:396:GLY:CA | 2.27 | 0.64 |
| 1:VB:626:ALA:HB3 | 1:VB:635:VAL:HB | 1.78 | 0.64 |
| 1:XA:119:THR:OG1 | 1:XA:162:ILE:HG22 | 1.97 | 0.64 |
| 1:XB:82:ARG:O | 1:XB:83:LEU:HD12 | 1.98 | 0.64 |
| 1:B:65:VAL:HG23 | 1:B:67:ARG:HG3 | 1.79 | 0.64 |
| 1:B:526:VAL:HG22 | 1:B:540:GLN:HA | 1.79 | 0.64 |
| 1:CA:662:ILE:O | 1:CA:666:THR:HG23 | 1.96 | 0.64 |
| 1:F:536:ARG:O | 1:F:646:VAL:HG23 | 1.97 | 0.64 |
| 1:J:468:VAL:HG22 | 1:J:515:CYS:HA | 1.79 | 0.64 |
| 1:K:283:VAL:HG22 | 1:K:301:VAL:HA | 1.79 | 0.64 |
| 1:M:231:ALA:HB3 | 1:M:246:GLY:N | 2.12 | 0.64 |
| 1:MB:58:TYR:HE2 | 1:MB:112:LEU:HD22 | 1.61 | 0.64 |
| 1:N:797:GLN:HB2 | 1:O:792:VAL:HG11 | 1.80 | 0.64 |
| 1:NA:389:TYR:CE1 | 1:NA:457:VAL:HG22 | 2.32 | 0.64 |
| 1:OA:777:LEU:O | 1:OA:781:VAL:HG22 | 1.97 | 0.64 |
| 1:P:541:LEU:HD11 | 1:P:638:VAL:CG1 | 2.27 | 0.64 |
| 1:P:599:ILE:O | 1:P:603:VAL:HG23 | 1.97 | 0.64 |
| 1:PA:575:ILE:O | 1:PA:579:VAL:HG23 | 1.97 | 0.64 |
| 1:PA:626:ALA:HB3 | 1:PA:635:VAL:HB | 1.79 | 0.64 |
| 1:PB:334:LEU:HD12 | 1:PB:357:TRP:NE1 | 2.12 | 0.64 |
| 1:WA:460:TYR:O | 1:WA:486:LEU:HD12 | 1.97 | 0.64 |
| 1:ZB:81:VAL:HG21 | 1:ZB:100:TYR:CD2 | 2.32 | 0.64 |
| 1:A:105:LEU:HD11 | 1:A:107:LYS:O | 1.97 | 0.64 |
| 1:BA:547:PHE:CE1 | 1:BA:633:LEU:HD13 | 2.32 | 0.64 |
| 1:DB:61:VAL:HG22 | 1:DB:89:GLU:O | 1.97 | 0.64 |
| 1:JA:284:ILE:HD12 | 1:JA:287:PRO:HB3 | 1.79 | 0.64 |
| 1:JB:787:LEU:HD21 | 1:KB:781:VAL:HG12 | 1.79 | 0.64 |
| 1:KA:168:ILE:HG22 | 1:KA:215:LEU:CD1 | 2.27 | 0.64 |
| 1:N:513:ALA:C | 1:N:514:LEU:HD12 | 2.22 | 0.64 |
| 1:NA:68:ASP:OD2 | 1:NA:74:LEU:HD12 | 1.98 | 0.64 |
| 1:P:547:PHE:CD1 | 1:P:633:LEU:HD13 | 2.32 | 0.64 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:PA:65:VAL:HG11 | 1:PA:100:TYR:CB | 2.27 | 0.64 |
| 1:V:112:LEU:HD23 | 1:V:150:THR:HG21 | 1.79 | 0.64 |
| 1:VA:588:PHE:HE1 | 1:VA:643:VAL:HG12 | 1.60 | 0.64 |
| 1:XA:8:ILE:HD12 | 1:XA:37:ARG:NE | 2.12 | 0.64 |
| 1:XA:797:GLN:OE1 | 1:YA:792:VAL:HG11 | 1.97 | 0.64 |
| 1:BA:300:ARG:O | 1:BA:302:VAL:HG23 | 1.98 | 0.64 |
| 1:BB:601:THR:HG22 | 1:BB:622:PRO:HD3 | 1.78 | 0.64 |
| 1:FA:388:ILE:HG22 | 1:FA:456:ARG:HA | 1.78 | 0.64 |
| 1:FB:804:PRO:HA | 1:FB:807:ILE:HD12 | 1.79 | 0.64 |
| 1:GB:662:ILE:HD13 | 1:HB:588:PHE:CZ | 2.32 | 0.64 |
| 1:GB:767:GLU:HA | 1:GB:770:LEU:HD12 | 1.78 | 0.64 |
| 1:L:176:LEU:HD21 | 1:L:196:TRP:CD1 | 2.33 | 0.64 |
| 1:LB:529:ILE:HB | 1:LB:583:VAL:HG11 | 1.79 | 0.64 |
| 1:MA:547:PHE:HE1 | 1:MA:633:LEU:HD13 | 1.63 | 0.64 |
| 1:O:65:VAL:HG23 | 1:O:73:VAL:HG21 | 1.78 | 0.64 |
| 1:P:205:LEU:HD12 | 1:P:206:PRO:HD2 | 1.80 | 0.64 |
| 1:PA:758:GLU:O | 1:PA:762:VAL:HG22 | 1.97 | 0.64 |
| 1:R:122:HIS:CE1 | 1:R:160:VAL:HG11 | 2.32 | 0.64 |
| 1:RB:500:LEU:HD23 | 1:RB:566:ASP:HA | 1.79 | 0.64 |
| 1:SA:529:ILE:HD11 | 1:SA:537:LEU:HD11 | 1.80 | 0.64 |
| 1:TB:777:LEU:O | 1:TB:781:VAL:HG22 | 1.97 | 0.64 |
| 1:YB:579:VAL:O | 1:YB:583:VAL:HG12 | 1.97 | 0.64 |
| 1:Z:229:LEU:HD12 | 1:Z:251:VAL:HG11 | 1.79 | 0.64 |
| 1:ZA:390:VAL:O | 1:ZA:390:VAL:HG23 | 1.96 | 0.64 |
| 1:ZB:516:LEU:HD13 | 1:ZB:562:PHE:CE2 | 2.33 | 0.64 |
| 1:AB:138:VAL:HG22 | 1:AB:141:ASP:HB2 | 1.80 | 0.64 |
| 1:AC:18:VAL:HG23 | 1:AC:27:ARG:NH1 | 2.12 | 0.64 |
| 1:AC:173:ALA:O | 1:AC:215:LEU:HD12 | 1.97 | 0.64 |
| 1:CB:82:ARG:C | 1:CB:83:LEU:HD12 | 2.22 | 0.64 |
| 1:DB:382:LEU:H | 1:DB:405:THR:HG22 | 1.61 | 0.64 |
| 1:EA:99:LEU:HD11 | 1:EA:105:LEU:HD22 | 1.79 | 0.64 |
| 1:EA:531:THR:HG21 | 1:EA:588:PHE:HB3 | 1.79 | 0.64 |
| 1:FB:288:VAL:HG12 | 1:FB:294:ASN:N | 2.12 | 0.64 |
| 1:GB:387:GLY:C | 1:GB:457:VAL:HG23 | 2.22 | 0.64 |
| 1:H:391:GLN:O | 1:H:413:VAL:HG12 | 1.98 | 0.64 |
| 1:HB:80:GLN:HE21 | 1:HB:81:VAL:HG12 | 1.63 | 0.64 |
| 1:J:495:PHE:HB3 | 1:J:514:LEU:HD11 | 1.78 | 0.64 |
| 1:LA:737:GLY:O | 1:LA:741:VAL:HG23 | 1.98 | 0.64 |
| 1:M:340:LEU:HD22 | 1:M:344:GLU:HG3 | 1.80 | 0.64 |
| 1:NA:129:PHE:CE1 | 1:NA:137:VAL:HG11 | 2.32 | 0.64 |
| 1:P:382:LEU:HD13 | 1:P:387:GLY:HA2 | 1.80 | 0.64 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:RA:60:THR:HB | 1:RA:88:LEU:HD13 | 1.78 | 0.64 |
| 1:SB:18:VAL:CG1 | 1:SB:43:VAL:HG22 | 2.27 | 0.64 |
| 1:TA:416:GLU:OE2 | 1:TA:455:THR:HG23 | 1.97 | 0.64 |
| 1:V:539:LEU:CD2 | 1:V:541:LEU:HD21 | 2.28 | 0.64 |
| 1:WB:578:ARG:CB | 1:WB:603:VAL:HG22 | 2.28 | 0.64 |
| 1:AC:546:HIS:O | 1:AC:633:LEU:HD12 | 1.97 | 0.64 |
| 1:DA:123:LEU:HD22 | 1:DA:157:VAL:CG1 | 2.28 | 0.64 |
| 1:EA:13:TYR:HA | 1:EA:50:MET:HE2 | 1.80 | 0.64 |
| 1:EA:659:GLN:HA | 1:EA:662:ILE:HD12 | 1.79 | 0.64 |
| 1:GB:384:GLU:O | 1:GB:402:ILE:HG22 | 1.97 | 0.64 |
| 1:H:323:VAL:HG23 | 1:H:364:GLU:OE2 | 1.98 | 0.64 |
| 1:J:16:ILE:HD11 | 1:J:47:PRO:N | 2.12 | 0.64 |
| 1:J:495:PHE:CB | 1:J:514:LEU:HD11 | 2.27 | 0.64 |
| 1:JB:271:VAL:HG22 | 1:JB:272:PRO:O | 1.97 | 0.64 |
| 1:LA:112:LEU:HD11 | 1:LA:153:PRO:HD3 | 1.79 | 0.64 |
| 1:M:381:PRO:HA | 1:M:405:THR:HG22 | 1.79 | 0.64 |
| 1:O:709:LEU:HA | 1:O:712:LEU:HD12 | 1.79 | 0.64 |
| 1:OA:537:LEU:HD22 | 1:OA:643:VAL:HG12 | 1.79 | 0.64 |
| 1:PB:539:LEU:HD21 | 1:PB:541:LEU:HD13 | 1.79 | 0.64 |
| 1:TB:176:LEU:HD21 | 1:TB:196:TRP:NE1 | 2.12 | 0.64 |
| 1:TB:326:LEU:HD13 | 1:TB:331:GLY:HA2 | 1.78 | 0.64 |
| 1:TB:537:LEU:HD23 | 1:TB:645:PRO:HA | 1.79 | 0.64 |
| 1:UA:470:VAL:HG13 | 1:UA:481:VAL:CG2 | 2.20 | 0.64 |
| 1:UB:571:ALA:O | 1:UB:575:ILE:HD12 | 1.98 | 0.64 |
| 1:V:662:ILE:HG21 | 1:W:653:ALA:HB1 | 1.78 | 0.64 |
| 1:WA:53:VAL:HG11 | 1:WA:93:ALA:CB | 2.28 | 0.64 |
| 1:Z:468:VAL:HG22 | 1:Z:515:CYS:HA | 1.80 | 0.64 |
| 1:ZA:168:ILE:HG22 | 1:ZA:215:LEU:HD13 | 1.79 | 0.64 |
| 1:ZB:495:PHE:HB3 | 1:ZB:514:LEU:HD11 | 1.78 | 0.64 |
| 1:BA:541:LEU:HD22 | 1:BA:640:VAL:HG22 | 1.80 | 0.64 |
| 1:BB:368:SER:OG | 1:BB:371:VAL:HG23 | 1.98 | 0.64 |
| 1:C:633:LEU:HD12 | 1:C:634:VAL:H | 1.63 | 0.64 |
| 1:CB:62:ALA:HA | 1:CB:88:LEU:HD23 | 1.79 | 0.64 |
| 1:DB:175:ARG:HA | 1:DB:197:LEU:HD23 | 1.79 | 0.64 |
| 1:EB:221:LEU:HD11 | 1:EB:251:VAL:HG23 | 1.78 | 0.64 |
| 1:F:410:GLN:O | 1:F:411:ASP:OD1 | 2.16 | 0.64 |
| 1:FA:804:PRO:HB3 | 1:FA:807:ILE:HD12 | 1.78 | 0.64 |
| 1:GA:691:GLN:HA | 1:GA:694:LEU:HD12 | 1.80 | 0.64 |
| 1:I:344:GLU:OE1 | 1:I:371:VAL:HG23 | 1.98 | 0.64 |
| 1:IB:233:ARG:HA | 1:IB:245:THR:HG23 | 1.79 | 0.64 |
| 1:NB:540:GLN:C | 1:NB:541:LEU:HD12 | 2.22 | 0.64 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OA:389:TYR:CE1 | 1:OA:457:VAL:HG23 | 2.32 | 0.64 |
| 1:OB:374:VAL:HG12 | 1:OB:375:GLU:H | 1.63 | 0.64 |
| 1:P:382:LEU:HD21 | 1:P:388:ILE:HG23 | 1.80 | 0.64 |
| 1:QA:120:ALA:HB2 | 1:QA:205:LEU:HD21 | 1.80 | 0.64 |
| 1:W:228:HIS:HA | 1:W:250:LEU:HD23 | 1.80 | 0.64 |
| 1:WB:63:ASN:HD21 | 1:WB:83:LEU:HD13 | 1.62 | 0.64 |
| 1:X:60:THR:HG22 | 1:X:90:ILE:HD12 | 1.79 | 0.64 |
| 1:BB:302:VAL:HG11 | 1:BB:306:LYS:CD | 2.28 | 0.64 |
| 1:HB:288:VAL:HG12 | 1:HB:294:ASN:N | 2.13 | 0.64 |
| 1:IB:56:ARG:O | 1:IB:112:LEU:HD12 | 1.97 | 0.64 |
| 1:IB:809:ASP:O | 1:IB:812:VAL:HG22 | 1.98 | 0.64 |
| 1:P:65:VAL:HG23 | 1:P:73:VAL:HG11 | 1.80 | 0.64 |
| 1:QB:60:THR:HG23 | 1:QB:106:GLU:HB3 | 1.80 | 0.64 |
| 1:TB:19:LEU:HD12 | 1:TB:25:VAL:O | 1.97 | 0.64 |
| 1:WB:337:LEU:HD21 | 1:WB:372:GLU:HB2 | 1.79 | 0.64 |
| 1:XA:532:ALA:HB3 | 1:XA:587:THR:HA | 1.80 | 0.64 |
| 1:YA:470:VAL:HG22 | 1:YA:495:PHE:HD1 | 1.63 | 0.64 |
| 1:YB:34:THR:HG23 | 1:ZB:24:ASN:OD1 | 1.98 | 0.64 |
| 1:AB:340:LEU:HD11 | 1:AB:357:TRP:CZ2 | 2.32 | 0.64 |
| 1:AB:523:PHE:CE2 | 1:AB:635:VAL:HG22 | 2.33 | 0.64 |
| 1:BB:82:ARG:O | 1:BB:83:LEU:HD12 | 1.98 | 0.64 |
| 1:CA:3:THR:HG23 | 1:CA:41:GLU:O | 1.97 | 0.64 |
| 1:CB:65:VAL:HG21 | 1:CB:73:VAL:HG22 | 1.80 | 0.64 |
| 1:D:388:ILE:CA | 1:D:457:VAL:HG23 | 2.28 | 0.64 |
| 1:D:537:LEU:HD13 | 1:D:644:GLU:O | 1.98 | 0.64 |
| 1:EA:539:LEU:HD12 | 1:EA:642:SER:O | 1.98 | 0.64 |
| 1:F:7:ILE:HG22 | 1:F:36:ILE:HD12 | 1.80 | 0.64 |
| 1:IB:15:TYR:HB3 | 1:IB:30:VAL:HG23 | 1.79 | 0.64 |
| 1:JA:131:ASP:HB3 | 1:JA:137:VAL:HG23 | 1.80 | 0.64 |
| 1:K:83:LEU:HD21 | 1:K:102:GLY:HA3 | 1.80 | 0.64 |
| 1:MB:459:SER:HA | 1:MB:489:LEU:HD23 | 1.80 | 0.64 |
| 1:SB:661:ALA:HA | 1:SB:664:ILE:HD12 | 1.79 | 0.64 |
| 1:T:661:ALA:HA | 1:T:664:ILE:HD12 | 1.80 | 0.64 |
| 1:V:238:PHE:CZ | 1:V:251:VAL:HG11 | 2.34 | 0.64 |
| 1:VB:120:ALA:HB1 | 1:VB:144:LEU:HD13 | 1.79 | 0.64 |
| 1:BA:460:TYR:CD1 | 1:BA:514:LEU:HD23 | 2.32 | 0.63 |
| 1:BA:786:GLN:O | 1:BA:790:VAL:HG23 | 1.98 | 0.63 |
| 1:CB:415:TRP:C | 1:CB:455:THR:HG22 | 2.23 | 0.63 |
| 1:D:17:HIS:HB2 | 1:D:44:LEU:HD12 | 1.80 | 0.63 |
| 1:EA:460:TYR:O | 1:EA:486:LEU:HD12 | 1.98 | 0.63 |
| 1:FA:16:ILE:HD11 | 1:FA:47:PRO:N | 2.14 | 0.63 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:IA:227:LEU:HD21 | 1:IA:229:LEU:HD21 | 1.79 | 0.63 |
| 1:IB:120:ALA:C | 1:IB:121:LEU:HD12 | 2.22 | 0.63 |
| 1:J:757:ALA:HB1 | 1:K:751:LEU:HD23 | 1.80 | 0.63 |
| 1:KB:777:LEU:O | 1:KB:781:VAL:HG13 | 1.99 | 0.63 |
| 1:LB:13:TYR:H | 1:LB:50:MET:HE3 | 1.63 | 0.63 |
| 1:MB:662:ILE:O | 1:MB:666:THR:HG23 | 1.97 | 0.63 |
| 1:N:276:LEU:HD13 | 1:N:281:TYR:HA | 1.80 | 0.63 |
| 1:OA:144:LEU:HD22 | 1:OA:163:ILE:HD11 | 1.80 | 0.63 |
| 1:OB:13:TYR:CA | 1:OB:50:MET:HE1 | 2.25 | 0.63 |
| 1:SB:174:LEU:HD12 | 1:SB:214:ASP:O | 1.97 | 0.63 |
| 1:TB:53:VAL:HG22 | 1:TB:109:ILE:HD11 | 1.80 | 0.63 |
| 1:V:779:LEU:HD21 | 1:W:774:ARG:HD2 | 1.80 | 0.63 |
| 1:VB:771:VAL:HG22 | 1:VB:774:ARG:HH11 | 1.64 | 0.63 |
| 1:WB:62:ALA:HA | 1:WB:88:LEU:HD23 | 1.80 | 0.63 |
| 1:XA:405:THR:HG21 | 1:YA:393:VAL:C | 2.23 | 0.63 |
| 1:XA:666:THR:HB | 1:YA:660:LEU:HD13 | 1.80 | 0.63 |
| 1:YB:471:TYR:CD2 | 1:YB:478:ALA:HB2 | 2.32 | 0.63 |
| 1:Z:276:LEU:HD22 | 1:Z:280:ASN:HB3 | 1.80 | 0.63 |
| 1:AB:120:ALA:HB2 | 1:AB:205:LEU:HD21 | 1.80 | 0.63 |
| 1:AB:275:THR:HG21 | 1:BB:296:LEU:HB3 | 1.81 | 0.63 |
| 1:FA:104:VAL:HG13 | 1:FA:106:GLU:OE2 | 1.97 | 0.63 |
| 1:IB:65:VAL:HG23 | 1:IB:67:ARG:CD | 2.28 | 0.63 |
| 1:M:13:TYR:CE2 | 1:N:83:LEU:HD22 | 2.33 | 0.63 |
| 1:O:528:THR:HG23 | 1:O:537:LEU:O | 1.98 | 0.63 |
| 1:R:67:ARG:HG2 | 1:R:73:VAL:HG22 | 1.80 | 0.63 |
| 1:TB:224:LYS:HG3 | 1:TB:225:THR:HG23 | 1.79 | 0.63 |
| 1:TB:388:ILE:N | 1:TB:457:VAL:HG23 | 2.13 | 0.63 |
| 1:VA:16:ILE:HG23 | 1:VA:35:TYR:OH | 1.98 | 0.63 |
| 1:ZB:529:ILE:HB | 1:ZB:583:VAL:HG21 | 1.80 | 0.63 |
| 1:A:116:LEU:HB2 | 1:A:119:THR:HG22 | 1.79 | 0.63 |
| 1:AB:408:LEU:HD21 | 1:AB:414:LEU:CD2 | 2.29 | 0.63 |
| 1:B:65:VAL:HG21 | 1:B:100:TYR:CD2 | 2.33 | 0.63 |
| 1:BB:9:ARG:HB3 | 1:BB:34:THR:HG22 | 1.79 | 0.63 |
| 1:BB:166:THR:HG21 | 1:BB:174:LEU:HD22 | 1.80 | 0.63 |
| 1:F:539:LEU:HD12 | 1:F:642:SER:O | 1.98 | 0.63 |
| 1:H:215:LEU:HD12 | 1:H:216:VAL:H | 1.63 | 0.63 |
| 1:HA:121:LEU:HB3 | 1:HA:162:ILE:HG22 | 1.81 | 0.63 |
| 1:I:382:LEU:HD13 | 1:I:387:GLY:HA2 | 1.81 | 0.63 |
| 1:LA:288:VAL:HG12 | 1:LA:294:ASN:N | 2.13 | 0.63 |
| 1:MA:284:ILE:HD12 | 1:MA:287:PRO:HB3 | 1.80 | 0.63 |
| 1:PB:25:VAL:HG13 | 1:PB:80:GLN:HG3 | 1.79 | 0.63 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:PB:172:GLN:HB3 | 1:PB:215:LEU:HD11 | 1.80 | 0.63 |
| 1:T:30:VAL:CG2 | 1:T:50:MET:HE2 | 2.29 | 0.63 |
| 1:VB:381:PRO:O | 1:VB:382:LEU:HD23 | 1.97 | 0.63 |
| 1:XA:545:TRP:HA | 1:XA:635:VAL:HG22 | 1.80 | 0.63 |
| 1:YB:790:VAL:HG22 | 1:ZB:785:GLN:CG | 2.28 | 0.63 |
| 1:ZB:677:ALA:HA | 1:ZB:680:LEU:HD12 | 1.81 | 0.63 |
| 1:AA:10:ILE:HD11 | 1:AA:14:HIS:C | 2.24 | 0.63 |
| 1:AC:174:LEU:HD23 | 1:AC:175:ARG:O | 1.98 | 0.63 |
| 1:AC:772:TYR:CD1 | 1:OA:770:LEU:HD11 | 2.33 | 0.63 |
| 1:D:228:HIS:CE1 | 1:D:268:LEU:HD22 | 2.34 | 0.63 |
| 1:DB:168:ILE:HG22 | 1:DB:168:ILE:O | 1.98 | 0.63 |
| 1:E:388:ILE:N | 1:E:457:VAL:HG23 | 2.12 | 0.63 |
| 1:EB:120:ALA:HB2 | 1:EB:205:LEU:HD21 | 1.80 | 0.63 |
| 1:F:25:VAL:HG22 | 1:F:80:GLN:OE1 | 1.97 | 0.63 |
| 1:IA:284:ILE:HD12 | 1:IA:287:PRO:HB3 | 1.79 | 0.63 |
| 1:KA:80:GLN:OE1 | 1:KA:81:VAL:HG12 | 1.99 | 0.63 |
| 1:LB:30:VAL:HG22 | 1:LB:50:MET:HE2 | 1.81 | 0.63 |
| 1:MA:16:ILE:HD11 | 1:MA:47:PRO:N | 2.13 | 0.63 |
| 1:MA:776:GLN:HE22 | 1:NA:770:LEU:HD21 | 1.63 | 0.63 |
| 1:N:267:VAL:C | 1:N:268:LEU:HD12 | 2.23 | 0.63 |
| 1:N:761:ARG:HB2 | 1:O:755:THR:HG21 | 1.81 | 0.63 |
| 1:OB:549:VAL:HG11 | 1:OB:552:ARG:HE | 1.64 | 0.63 |
| 1:Q:640:VAL:HG12 | 1:R:580:ARG:HD3 | 1.79 | 0.63 |
| 1:QA:547:PHE:CD1 | 1:QA:633:LEU:HD13 | 2.34 | 0.63 |
| 1:RA:529:ILE:HD13 | 1:RA:539:LEU:HB2 | 1.81 | 0.63 |
| 1:UB:579:VAL:O | 1:UB:583:VAL:HG12 | 1.97 | 0.63 |
| 1:VB:174:LEU:HD23 | 1:VB:175:ARG:O | 1.98 | 0.63 |
| 1:WA:486:LEU:HD13 | 1:XA:473:TYR:HB3 | 1.78 | 0.63 |
| 1:WA:747:LYS:O | 1:WA:751:LEU:HD23 | 1.98 | 0.63 |
| 1:XA:670:GLU:CG | 1:YA:664:ILE:HD11 | 2.28 | 0.63 |
| 1:XB:575:ILE:HD13 | 1:XB:578:ARG:CZ | 2.29 | 0.63 |
| 1:AA:787:LEU:CD2 | 1:BA:781:VAL:HG12 | 2.28 | 0.63 |
| 1:CA:460:TYR:O | 1:CA:486:LEU:HD12 | 1.99 | 0.63 |
| 1:DB:417:LYS:HE3 | 1:DB:489:LEU:HD13 | 1.80 | 0.63 |
| 1:EA:233:ARG:HA | 1:EA:245:THR:HG23 | 1.79 | 0.63 |
| 1:FB:80:GLN:OE1 | 1:FB:81:VAL:HG12 | 1.99 | 0.63 |
| 1:HA:129:PHE:CE1 | 1:HA:137:VAL:HG11 | 2.33 | 0.63 |
| 1:HB:282:CYS:HB2 | 1:HB:316:LEU:HD11 | 1.79 | 0.63 |
| 1:JA:65:VAL:HG11 | 1:JA:100:TYR:CD2 | 2.33 | 0.63 |
| 1:MA:176:LEU:HD21 | 1:MA:196:TRP:CD1 | 2.34 | 0.63 |
| 1:O:18:VAL:HG12 | 1:O:43:VAL:HG22 | 1.80 | 0.63 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:P:128:ASP:OD2 | 1:P:138:VAL:HG12 | 1.97 | 0.63 |
| 1:P:626:ALA:HB3 | 1:P:635:VAL:HB | 1.80 | 0.63 |
| 1:QB:579:VAL:O | 1:QB:583:VAL:HG12 | 1.98 | 0.63 |
| 1:R:389:TYR:O | 1:R:414:LEU:HD23 | 1.99 | 0.63 |
| 1:UB:547:PHE:CE1 | 1:UB:633:LEU:HD13 | 2.33 | 0.63 |
| 1:V:390:VAL:HG12 | 1:V:414:LEU:HD22 | 1.80 | 0.63 |
| 1:VA:549:VAL:HG21 | 1:VA:561:LEU:HD21 | 1.81 | 0.63 |
| 1:XB:62:ALA:HB3 | 1:XB:106:GLU:OE1 | 1.98 | 0.63 |
| 1:ZA:587:THR:HG23 | 1:ZA:590:ASP:H | 1.64 | 0.63 |
| 1:BB:521:ASP:OD1 | 1:CB:564:VAL:HG13 | 1.99 | 0.63 |
| 1:CA:61:VAL:HG22 | 1:CA:89:GLU:O | 1.98 | 0.63 |
| 1:D:172:GLN:HB3 | 1:D:215:LEU:HD11 | 1.81 | 0.63 |
| 1:EA:175:ARG:HA | 1:EA:197:LEU:HD23 | 1.79 | 0.63 |
| 1:FB:661:ALA:HA | 1:FB:664:ILE:HD12 | 1.80 | 0.63 |
| 1:G:643:VAL:HG13 | 1:H:580:ARG:HH12 | 1.64 | 0.63 |
| 1:I:69:ALA:HB2 | 1:I:74:LEU:CD2 | 2.28 | 0.63 |
| 1:IA:531:THR:HA | 1:IA:583:VAL:HG22 | 1.79 | 0.63 |
| 1:IB:633:LEU:HD12 | 1:IB:634:VAL:H | 1.63 | 0.63 |
| 1:IB:761:ARG:CZ | 1:JB:751:LEU:HD12 | 2.29 | 0.63 |
| 1:JB:283:VAL:HG22 | 1:JB:301:VAL:HA | 1.80 | 0.63 |
| 1:OA:113:GLN:HG3 | 1:OA:121:LEU:HD22 | 1.81 | 0.63 |
| 1:OB:288:VAL:HG12 | 1:OB:294:ASN:N | 2.14 | 0.63 |
| 1:OB:794:LYS:HG2 | 1:PB:792:VAL:HG22 | 1.81 | 0.63 |
| 1:Q:274:THR:HG21 | 1:Q:310:LEU:HD21 | 1.80 | 0.63 |
| 1:RA:88:LEU:HD11 | 1:RA:155:LYS:HB3 | 1.79 | 0.63 |
| 1:SA:52:THR:HG21 | 1:TA:85:HIS:CE1 | 2.33 | 0.63 |
| 1:SB:316:LEU:HD21 | 1:SB:319:GLY:O | 1.99 | 0.63 |
| 1:V:220:ILE:CD1 | 1:W:245:THR:HG21 | 2.29 | 0.63 |
| 1:V:405:THR:HG21 | 1:W:393:VAL:O | 1.98 | 0.63 |
| 1:VB:175:ARG:HA | 1:VB:197:LEU:HD23 | 1.81 | 0.63 |
| 1:WB:504:ARG:HD3 | 1:WB:526:VAL:HG23 | 1.79 | 0.63 |
| 1:WB:688:LEU:HD13 | 1:XB:679:ARG:HG2 | 1.81 | 0.63 |
| 1:X:227:LEU:HA | 1:X:270:VAL:HG22 | 1.81 | 0.63 |
| 1:XA:460:TYR:HE1 | 1:XA:468:VAL:HG21 | 1.64 | 0.63 |
| 1:A:539:LEU:HD23 | 1:A:540:GLN:N | 2.13 | 0.63 |
| 1:AC:460:TYR:CZ | 1:AC:514:LEU:HD11 | 2.34 | 0.63 |
| 1:EA:499:SER:O | 1:EA:500:LEU:HD23 | 1.99 | 0.63 |
| 1:FB:405:THR:HG23 | 1:GB:396:GLY:CA | 2.29 | 0.63 |
| 1:H:116:LEU:HB2 | 1:H:119:THR:HG22 | 1.81 | 0.63 |
| 1:JA:123:LEU:HD11 | 1:JA:145:PHE:HB2 | 1.81 | 0.63 |
| 1:JB:230:ARG:HH22 | 1:JB:268:LEU:HD21 | 1.63 | 0.63 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OA:250:LEU:HD11 | 1:OA:271:VAL:CG1 | 2.29 | 0.63 |
| 1:OA:334:LEU:HD11 | 1:OA:359:ILE:CG2 | 2.28 | 0.63 |
| 1:RB:116:LEU:HB2 | 1:RB:119:THR:HG22 | 1.81 | 0.63 |
| 1:VA:53:VAL:HG22 | 1:VA:109:ILE:CD1 | 2.28 | 0.63 |
| 1:AA:65:VAL:HG12 | 1:AA:83:LEU:CD2 | 2.29 | 0.63 |
| 1:AA:112:LEU:HD11 | 1:AA:153:PRO:HD3 | 1.81 | 0.63 |
| 1:CB:73:VAL:HG21 | 1:CB:100:TYR:CZ | 2.34 | 0.63 |
| 1:E:56:ARG:NH2 | 1:F:127:LEU:HD21 | 2.13 | 0.63 |
| 1:GA:228:HIS:C | 1:GA:229:LEU:HD22 | 2.24 | 0.63 |
| 1:GA:360:ARG:NH1 | 1:GA:407:MET:HE3 | 2.13 | 0.63 |
| 1:JB:323:VAL:HG12 | 1:JB:366:VAL:HG23 | 1.79 | 0.63 |
| 1:JB:333:LEU:HD13 | 1:JB:358:LEU:HD22 | 1.79 | 0.63 |
| 1:L:126:LEU:O | 1:L:127:LEU:HD22 | 1.99 | 0.63 |
| 1:MB:410:GLN:O | 1:MB:411:ASP:OD1 | 2.17 | 0.63 |
| 1:QA:518:LEU:HD21 | 1:QA:549:VAL:HG22 | 1.80 | 0.63 |
| 1:TB:221:LEU:HD13 | 1:TB:252:THR:C | 2.22 | 0.63 |
| 1:VB:495:PHE:HB3 | 1:VB:514:LEU:HD11 | 1.80 | 0.63 |
| 1:Z:75:PHE:HA | 1:Z:81:VAL:HG23 | 1.80 | 0.63 |
| 1:ZA:784:ALA:HA | 1:ZA:787:LEU:HD12 | 1.81 | 0.63 |
| 1:A:69:ALA:HB3 | 1:A:72:LEU:HB3 | 1.80 | 0.63 |
| 1:AB:353:ALA:HB3 | 1:ZA:363:LEU:C | 2.23 | 0.63 |
| 1:AC:410:GLN:O | 1:AC:411:ASP:OD1 | 2.17 | 0.63 |
| 1:B:60:THR:HG22 | 1:B:90:ILE:HG13 | 1.80 | 0.63 |
| 1:BA:10:ILE:HG12 | 1:BA:16:ILE:HD12 | 1.79 | 0.63 |
| 1:DB:53:VAL:HG13 | 1:DB:57:HIS:O | 1.98 | 0.63 |
| 1:E:391:GLN:HB2 | 1:E:398:VAL:HG22 | 1.80 | 0.63 |
| 1:GB:543:TYR:HB3 | 1:GB:638:VAL:HG22 | 1.81 | 0.63 |
| 1:K:63:ASN:CG | 1:K:83:LEU:HD23 | 2.23 | 0.63 |
| 1:L:547:PHE:CD1 | 1:L:561:LEU:HD22 | 2.34 | 0.63 |
| 1:M:393:VAL:HG22 | 1:M:411:ASP:C | 2.24 | 0.63 |
| 1:MB:168:ILE:HG22 | 1:MB:215:LEU:HD11 | 1.81 | 0.63 |
| 1:P:163:ILE:HG13 | 1:P:205:LEU:HD11 | 1.81 | 0.63 |
| 1:R:275:THR:HG21 | 1:S:296:LEU:HD13 | 1.80 | 0.63 |
| 1:RB:228:HIS:CE1 | 1:RB:268:LEU:HD22 | 2.34 | 0.63 |
| 1:WB:744:ALA:O | 1:WB:748:ALA:HB3 | 1.98 | 0.63 |
| 1:XA:323:VAL:HG12 | 1:XA:366:VAL:CG2 | 2.29 | 0.63 |
| 1:XA:468:VAL:HG22 | 1:XA:515:CYS:HA | 1.79 | 0.63 |
| 1:XB:731:GLU:OE2 | 1:XB:735:ILE:HD11 | 1.99 | 0.63 |
| 1:Z:16:ILE:HG22 | 1:Z:18:VAL:HG13 | 1.81 | 0.63 |
| 1:A:661:ALA:HA | 1:A:664:ILE:HD12 | 1.81 | 0.62 |
| 1:B:60:THR:HG23 | 1:B:107:LYS:HD3 | 1.81 | 0.62 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:C:173:ALA:HB3 | 1:C:260:VAL:HG21 | 1.80 | 0.62 |
| 1:CB:172:GLN:HB3 | 1:CB:215:LEU:HD11 | 1.81 | 0.62 |
| 1:CB:531:THR:HA | 1:CB:583:VAL:HG22 | 1.80 | 0.62 |
| 1:D:16:ILE:HD11 | 1:D:47:PRO:CD | 2.29 | 0.62 |
| 1:DA:30:VAL:HG23 | 1:DA:50:MET:CE | 2.29 | 0.62 |
| 1:DA:415:TRP:C | 1:DA:455:THR:HG22 | 2.23 | 0.62 |
| 1:DB:540:GLN:O | 1:DB:640:VAL:HG13 | 1.98 | 0.62 |
| 1:G:540:GLN:C | 1:G:541:LEU:HD12 | 2.24 | 0.62 |
| 1:HA:65:VAL:HG13 | 1:HA:103:GLU:OE1 | 1.99 | 0.62 |
| 1:M:539:LEU:HD11 | 1:M:541:LEU:HD21 | 1.80 | 0.62 |
| 1:NB:529:ILE:HD13 | 1:NB:579:VAL:HG12 | 1.80 | 0.62 |
| 1:PA:65:VAL:HG21 | 1:PA:100:TYR:HB2 | 1.79 | 0.62 |
| 1:PB:50:MET:O | 1:PB:52:THR:HG23 | 1.99 | 0.62 |
| 1:QB:223:GLU:OE2 | 1:QB:253:VAL:HG21 | 1.98 | 0.62 |
| 1:RA:66:SER:C | 1:RA:73:VAL:HG13 | 2.22 | 0.62 |
| 1:SB:564:VAL:HG12 | 1:SB:565:PRO:O | 1.98 | 0.62 |
| 1:V:386:GLU:OE1 | 1:V:456:ARG:HD2 | 1.99 | 0.62 |
| 1:W:112:LEU:O | 1:W:114:VAL:HG23 | 1.99 | 0.62 |
| 1:WA:120:ALA:CB | 1:WA:144:LEU:HD13 | 2.29 | 0.62 |
| 1:XB:57:HIS:ND1 | 1:XB:109:ILE:HG22 | 2.13 | 0.62 |
| 1:Z:196:TRP:C | 1:Z:197:LEU:HD12 | 2.24 | 0.62 |
| 1:Z:541:LEU:HG | 1:Z:640:VAL:HG22 | 1.81 | 0.62 |
| 1:G:547:PHE:CE1 | 1:G:633:LEU:HD13 | 2.34 | 0.62 |
| 1:GB:547:PHE:CE1 | 1:GB:633:LEU:HD13 | 2.34 | 0.62 |
| 1:H:779:LEU:HD21 | 1:I:774:ARG:HD2 | 1.82 | 0.62 |
| 1:I:121:LEU:HD12 | 1:I:121:LEU:O | 1.99 | 0.62 |
| 1:KB:68:ASP:HB2 | 1:KB:74:LEU:HD12 | 1.80 | 0.62 |
| 1:LA:50:MET:O | 1:LA:52:THR:HG23 | 1.99 | 0.62 |
| 1:NA:82:ARG:C | 1:NA:83:LEU:HD12 | 2.24 | 0.62 |
| 1:P:587:THR:HG23 | 1:P:590:ASP:H | 1.64 | 0.62 |
| 1:QB:267:VAL:C | 1:QB:268:LEU:HD12 | 2.23 | 0.62 |
| 1:RA:57:HIS:CD2 | 1:RA:109:ILE:HG22 | 2.33 | 0.62 |
| 1:VA:599:ILE:CG2 | 1:VA:638:VAL:HG11 | 2.29 | 0.62 |
| 1:XB:122:HIS:CD2 | 1:XB:208:VAL:HG12 | 2.34 | 0.62 |
| 1:YB:9:ARG:CB | 1:YB:34:THR:HG22 | 2.27 | 0.62 |
| 1:YB:42:ARG:O | 1:YB:44:LEU:HD22 | 1.99 | 0.62 |
| 1:YB:120:ALA:HB1 | 1:YB:144:LEU:HD13 | 1.81 | 0.62 |
| 1:Z:500:LEU:HD12 | 1:Z:511:ARG:HG2 | 1.80 | 0.62 |
| 1:ZB:381:PRO:HA | 1:ZB:405:THR:HG22 | 1.81 | 0.62 |
| 1:AA:588:PHE:CE2 | 1:Z:662:ILE:HD13 | 2.35 | 0.62 |
| 1:B:758:GLU:O | 1:B:762:VAL:HG22 | 1.98 | 0.62 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:CA:249:TRP:O | 1:CA:250:LEU:HD12 | 1.98 | 0.62 |
| 1:FA:284:ILE:HD12 | 1:FA:287:PRO:HB3 | 1.80 | 0.62 |
| 1:FB:174:LEU:HD12 | 1:FB:214:ASP:O | 1.98 | 0.62 |
| 1:HB:758:GLU:O | 1:HB:762:VAL:HG22 | 2.00 | 0.62 |
| 1:IB:531:THR:HG21 | 1:IB:588:PHE:HB3 | 1.80 | 0.62 |
| 1:IB:761:ARG:NE | 1:JB:751:LEU:HD12 | 2.14 | 0.62 |
| 1:L:65:VAL:HG13 | 1:L:103:GLU:CB | 2.29 | 0.62 |
| 1:MB:764:LYS:HE2 | 1:NB:759:LEU:HD11 | 1.80 | 0.62 |
| 1:OA:83:LEU:HD21 | 1:OA:102:GLY:HA3 | 1.80 | 0.62 |
| 1:OB:16:ILE:HD11 | 1:OB:47:PRO:CD | 2.29 | 0.62 |
| 1:Q:746:LEU:HD13 | 1:R:737:GLY:HA3 | 1.81 | 0.62 |
| 1:V:758:GLU:O | 1:V:762:VAL:HG13 | 1.99 | 0.62 |
| 1:VA:541:LEU:HD23 | 1:VA:640:VAL:HG22 | 1.81 | 0.62 |
| 1:Y:288:VAL:HG12 | 1:Y:294:ASN:N | 2.13 | 0.62 |
| 1:YA:523:PHE:CE2 | 1:YA:571:ALA:HB3 | 2.34 | 0.62 |
| 1:YA:575:ILE:HG13 | 1:YA:635:VAL:HG21 | 1.82 | 0.62 |
| 1:AB:245:THR:HG21 | 1:ZA:220:ILE:CD1 | 2.30 | 0.62 |
| 1:AC:227:LEU:O | 1:AC:251:VAL:HG22 | 2.00 | 0.62 |
| 1:C:168:ILE:HD12 | 1:C:200:THR:C | 2.24 | 0.62 |
| 1:GA:460:TYR:O | 1:GA:487:VAL:HG12 | 2.00 | 0.62 |
| 1:HB:284:ILE:HD12 | 1:HB:287:PRO:HB3 | 1.82 | 0.62 |
| 1:I:65:VAL:HG11 | 1:I:100:TYR:HB2 | 1.80 | 0.62 |
| 1:IA:221:LEU:HD21 | 1:IA:251:VAL:HG23 | 1.82 | 0.62 |
| 1:KA:323:VAL:HG12 | 1:KA:366:VAL:HB | 1.81 | 0.62 |
| 1:LB:129:PHE:CE2 | 1:LB:137:VAL:HG11 | 2.34 | 0.62 |
| 1:LB:531:THR:HG21 | 1:LB:588:PHE:HA | 1.81 | 0.62 |
| 1:LB:541:LEU:HD12 | 1:LB:639:ASP:O | 1.99 | 0.62 |
| 1:NB:16:ILE:HD11 | 1:NB:47:PRO:N | 2.13 | 0.62 |
| 1:O:198:VAL:HG21 | 1:O:204:TYR:CD1 | 2.35 | 0.62 |
| 1:OA:18:VAL:HG12 | 1:OA:43:VAL:HG22 | 1.80 | 0.62 |
| 1:P:220:ILE:HD12 | 1:Q:245:THR:CG2 | 2.28 | 0.62 |
| 1:P:500:LEU:HD23 | 1:P:568:VAL:HG12 | 1.81 | 0.62 |
| 1:PB:737:GLY:O | 1:PB:741:VAL:HG23 | 1.99 | 0.62 |
| 1:Q:324:TYR:CD2 | 1:Q:332:LEU:HD11 | 2.35 | 0.62 |
| 1:S:539:LEU:HD12 | 1:S:643:VAL:HG22 | 1.81 | 0.62 |
| 1:SA:758:GLU:O | 1:SA:762:VAL:HG22 | 1.98 | 0.62 |
| 1:TB:13:TYR:HA | 1:TB:50:MET:HE1 | 1.80 | 0.62 |
| 1:UB:54:PRO:HD3 | 1:UB:109:ILE:HD12 | 1.82 | 0.62 |
| 1:W:677:ALA:HA | 1:W:680:LEU:HD12 | 1.81 | 0.62 |
| 1:X:82:ARG:C | 1:X:83:LEU:HD12 | 2.25 | 0.62 |
| 1:XB:207:ALA:HB3 | 1:XB:210:GLU:HG3 | 1.81 | 0.62 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XB:285:LEU:HD12 | 1:XB:315:GLN:CD | 2.24 | 0.62 |
| 1:ZA:575:ILE:HG23 | 1:ZA:603:VAL:HG13 | 1.81 | 0.62 |
| 1:AC:388:ILE:N | 1:AC:457:VAL:HG23 | 2.15 | 0.62 |
| 1:D:250:LEU:HD11 | 1:D:310:LEU:O | 1.99 | 0.62 |
| 1:EB:804:PRO:HA | 1:EB:807:ILE:HD12 | 1.81 | 0.62 |
| 1:F:288:VAL:HG12 | 1:F:294:ASN:N | 2.14 | 0.62 |
| 1:FA:267:VAL:C | 1:FA:268:LEU:HD12 | 2.25 | 0.62 |
| 1:G:406:TYR:OH | 1:G:409:THR:HG23 | 1.99 | 0.62 |
| 1:G:662:ILE:HG21 | 1:H:653:ALA:HB1 | 1.79 | 0.62 |
| 1:H:405:THR:HG23 | 1:I:396:GLY:CA | 2.30 | 0.62 |
| 1:JA:9:ARG:CB | 1:JA:34:THR:HG22 | 2.29 | 0.62 |
| 1:L:398:VAL:HG12 | 1:L:491:PRO:HB3 | 1.81 | 0.62 |
| 1:LA:99:LEU:HD11 | 1:LA:103:GLU:O | 2.00 | 0.62 |
| 1:PA:333:LEU:HD23 | 1:PA:374:VAL:HG11 | 1.82 | 0.62 |
| 1:QA:115:VAL:HG22 | 1:QA:121:LEU:HD12 | 1.80 | 0.62 |
| 1:QA:331:GLY:HA3 | 1:QA:407:MET:HE1 | 1.80 | 0.62 |
| 1:UB:390:VAL:HG12 | 1:UB:414:LEU:HA | 1.81 | 0.62 |
| 1:VB:68:ASP:OD1 | 1:VB:74:LEU:HD12 | 1.99 | 0.62 |
| 1:VB:231:ALA:HB3 | 1:VB:246:GLY:N | 2.14 | 0.62 |
| 1:W:285:LEU:HD21 | 1:W:317:GLU:OE2 | 1.99 | 0.62 |
| 1:XB:168:ILE:HD12 | 1:XB:200:THR:O | 1.99 | 0.62 |
| 1:Y:340:LEU:HD22 | 1:Y:344:GLU:HG3 | 1.82 | 0.62 |
| 1:YB:115:VAL:HG23 | 1:YB:147:GLY:O | 2.00 | 0.62 |
| 1:YB:220:ILE:HD12 | 1:ZB:245:THR:HG21 | 1.81 | 0.62 |
| 1:AC:416:GLU:N | 1:AC:455:THR:HG22 | 2.13 | 0.62 |
| 1:BB:529:ILE:CD1 | 1:BB:583:VAL:HG21 | 2.29 | 0.62 |
| 1:BB:538:GLN:C | 1:BB:539:LEU:HD12 | 2.25 | 0.62 |
| 1:CA:547:PHE:CE1 | 1:CA:633:LEU:HD13 | 2.34 | 0.62 |
| 1:DB:424:GLU:HG3 | 1:DB:514:LEU:HD22 | 1.80 | 0.62 |
| 1:DB:526:VAL:HG22 | 1:DB:540:GLN:HA | 1.81 | 0.62 |
| 1:FA:662:ILE:O | 1:FA:666:THR:HG23 | 1.98 | 0.62 |
| 1:GA:333:LEU:HD21 | 1:GA:356:HIS:HE2 | 1.65 | 0.62 |
| 1:GB:9:ARG:CB | 1:GB:34:THR:HG22 | 2.29 | 0.62 |
| 1:HB:804:PRO:HA | 1:HB:807:ILE:HD12 | 1.82 | 0.62 |
| 1:JB:405:THR:HG23 | 1:KB:396:GLY:CA | 2.29 | 0.62 |
| 1:M:115:VAL:HG22 | 1:M:149:GLY:O | 2.00 | 0.62 |
| 1:M:757:ALA:HB1 | 1:N:751:LEU:HD23 | 1.80 | 0.62 |
| 1:N:579:VAL:HG13 | 1:N:599:ILE:HD13 | 1.80 | 0.62 |
| 1:OB:126:LEU:HD21 | 1:OB:158:GLU:HB3 | 1.82 | 0.62 |
| 1:PB:122:HIS:CD2 | 1:PB:208:VAL:HG12 | 2.34 | 0.62 |
| 1:PB:227:LEU:HD13 | 1:PB:270:VAL:HG22 | 1.82 | 0.62 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:RB:221:LEU:HD21 | 1:RB:251:VAL:HG23 | 1.82 | 0.62 |
| 1:SA:174:LEU:HD12 | 1:SA:215:LEU:HD13 | 1.80 | 0.62 |
| 1:SB:735:ILE:HD13 | 1:TB:727:GLU:HG3 | 1.80 | 0.62 |
| 1:TB:129:PHE:CE2 | 1:TB:137:VAL:HG11 | 2.33 | 0.62 |
| 1:TB:168:ILE:HG22 | 1:TB:215:LEU:HD13 | 1.81 | 0.62 |
| 1:TB:335:ARG:C | 1:TB:371:VAL:HG13 | 2.24 | 0.62 |
| 1:TB:529:ILE:HB | 1:TB:583:VAL:HG21 | 1.82 | 0.62 |
| 1:VA:275:THR:O | 1:VA:275:THR:HG23 | 2.00 | 0.62 |
| 1:VB:177:ARG:NH1 | 1:VB:213:LEU:HD11 | 2.14 | 0.62 |
| 1:WA:10:ILE:HD12 | 1:WA:33:LYS:H | 1.64 | 0.62 |
| 1:YA:393:VAL:HG22 | 1:YA:411:ASP:C | 2.24 | 0.62 |
| 1:AB:229:LEU:HD12 | 1:AB:251:VAL:HG11 | 1.79 | 0.62 |
| 1:AC:227:LEU:HD13 | 1:AC:270:VAL:HG22 | 1.80 | 0.62 |
| 1:CA:324:TYR:CE2 | 1:CA:373:VAL:HG21 | 2.34 | 0.62 |
| 1:CB:758:GLU:O | 1:CB:762:VAL:HG22 | 1.99 | 0.62 |
| 1:EB:390:VAL:HG21 | 1:EB:399:ARG:NH1 | 2.15 | 0.62 |
| 1:FA:767:GLU:HA | 1:FA:770:LEU:HD12 | 1.82 | 0.62 |
| 1:H:120:ALA:O | 1:H:162:ILE:HG23 | 2.00 | 0.62 |
| 1:IA:582:ALA:O | 1:IA:586:VAL:HG22 | 1.99 | 0.62 |
| 1:IB:758:GLU:O | 1:IB:762:VAL:HG22 | 2.00 | 0.62 |
| 1:NA:365:TYR:OH | 1:NA:371:VAL:HG21 | 2.00 | 0.62 |
| 1:Q:65:VAL:HB | 1:Q:73:VAL:HG11 | 1.81 | 0.62 |
| 1:Q:382:LEU:HD22 | 1:Q:386:GLU:C | 2.25 | 0.62 |
| 1:Q:462:VAL:HG21 | 1:Q:481:VAL:HG23 | 1.81 | 0.62 |
| 1:R:126:LEU:O | 1:R:139:ALA:HB2 | 2.00 | 0.62 |
| 1:S:65:VAL:HA | 1:S:83:LEU:HD23 | 1.80 | 0.62 |
| 1:S:405:THR:HG23 | 1:T:396:GLY:N | 2.14 | 0.62 |
| 1:SB:55:PRO:C | 1:SB:56:ARG:HD3 | 2.24 | 0.62 |
| 1:UB:326:LEU:HD13 | 1:UB:360:ARG:HA | 1.80 | 0.62 |
| 1:V:178:ALA:HB2 | 1:V:190:ARG:HB2 | 1.81 | 0.62 |
| 1:V:363:LEU:HA | 1:W:353:ALA:HB3 | 1.80 | 0.62 |
| 1:VB:786:GLN:NE2 | 1:WB:781:VAL:HG23 | 2.14 | 0.62 |
| 1:WB:10:ILE:HG22 | 1:WB:47:PRO:HB3 | 1.81 | 0.62 |
| 1:WB:332:LEU:HD23 | 1:WB:333:LEU:O | 1.99 | 0.62 |
| 1:XB:120:ALA:HB1 | 1:XB:144:LEU:HD13 | 1.82 | 0.62 |
| 1:Y:168:ILE:HG22 | 1:Y:215:LEU:CD1 | 2.29 | 0.62 |
| 1:CB:126:LEU:O | 1:CB:127:LEU:HD22 | 2.00 | 0.62 |
| 1:CB:339:PRO:HD3 | 1:CB:353:ALA:HB2 | 1.81 | 0.62 |
| 1:EB:121:LEU:O | 1:EB:121:LEU:HD12 | 1.99 | 0.62 |
| 1:FA:129:PHE:CE1 | 1:FA:137:VAL:HG11 | 2.35 | 0.62 |
| 1:FB:417:LYS:HE3 | 1:FB:419:LEU:HD21 | 1.80 | 0.62 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:J:482:PHE:HE1 | 1:J:549:VAL:HG21 | 1.64 | 0.62 |
| 1:K:74:LEU:HD13 | 1:K:82:ARG:HH21 | 1.64 | 0.62 |
| 1:KB:52:THR:HG22 | 1:KB:96:PRO:HG3 | 1.81 | 0.62 |
| 1:L:52:THR:HG22 | 1:L:96:PRO:HG3 | 1.81 | 0.62 |
| 1:MB:531:THR:HA | 1:MB:583:VAL:HG22 | 1.81 | 0.62 |
| 1:NA:382:LEU:H | 1:NA:405:THR:HG22 | 1.65 | 0.62 |
| 1:RA:229:LEU:HD22 | 1:RA:265:GLU:HB3 | 1.81 | 0.62 |
| 1:S:460:TYR:CD1 | 1:S:514:LEU:HD23 | 2.35 | 0.62 |
| 1:SA:61:VAL:HG23 | 1:SA:64:PRO:HB3 | 1.80 | 0.62 |
| 1:T:460:TYR:CE1 | 1:T:514:LEU:HD13 | 2.35 | 0.62 |
| 1:VA:382:LEU:HD12 | 1:VA:405:THR:HG22 | 1.80 | 0.62 |
| 1:XB:325:VAL:HG23 | 1:YB:353:ALA:HB1 | 1.81 | 0.62 |
| 1:YB:301:VAL:HG21 | 1:YB:366:VAL:HG21 | 1.82 | 0.62 |
| 1:AB:353:ALA:HB1 | 1:ZA:325:VAL:HG23 | 1.82 | 0.62 |
| 1:B:122:HIS:CD2 | 1:B:208:VAL:HG12 | 2.35 | 0.62 |
| 1:CA:228:HIS:CE1 | 1:CA:268:LEU:HD22 | 2.34 | 0.62 |
| 1:CA:364:GLU:CD | 1:DA:353:ALA:HB1 | 2.24 | 0.62 |
| 1:DA:758:GLU:O | 1:DA:762:VAL:HG22 | 2.00 | 0.62 |
| 1:EB:229:LEU:CD2 | 1:EB:267:VAL:HG22 | 2.30 | 0.62 |
| 1:HA:284:ILE:HD12 | 1:HA:287:PRO:HB3 | 1.82 | 0.62 |
| 1:HA:582:ALA:O | 1:HA:586:VAL:HG22 | 1.99 | 0.62 |
| 1:IA:549:VAL:HG22 | 1:IA:552:ARG:NH1 | 2.15 | 0.62 |
| 1:IB:516:LEU:HD11 | 1:IB:547:PHE:CZ | 2.35 | 0.62 |
| 1:KA:388:ILE:CA | 1:KA:457:VAL:HG23 | 2.30 | 0.62 |
| 1:M:340:LEU:HD11 | 1:M:357:TRP:CH2 | 2.34 | 0.62 |
| 1:NA:174:LEU:HD12 | 1:NA:214:ASP:C | 2.24 | 0.62 |
| 1:NB:333:LEU:HD23 | 1:NB:374:VAL:HG11 | 1.80 | 0.62 |
| 1:NB:388:ILE:CA | 1:NB:457:VAL:HG23 | 2.30 | 0.62 |
| 1:O:220:ILE:CG2 | 1:O:222:THR:HG23 | 2.30 | 0.62 |
| 1:P:122:HIS:CD2 | 1:P:208:VAL:HG12 | 2.34 | 0.62 |
| 1:P:541:LEU:HD11 | 1:P:638:VAL:HG12 | 1.82 | 0.62 |
| 1:Y:528:THR:HG22 | 1:Y:536:ARG:HH11 | 1.64 | 0.62 |
| 1:YA:154:ARG:HB3 | 1:YA:157:VAL:HG23 | 1.82 | 0.62 |
| 1:B:747:LYS:O | 1:B:751:LEU:HD23 | 2.00 | 0.62 |
| 1:C:116:LEU:HB2 | 1:C:119:THR:HG22 | 1.81 | 0.62 |
| 1:FA:81:VAL:HG13 | 1:FA:83:LEU:CD1 | 2.30 | 0.62 |
| 1:FB:221:LEU:HD13 | 1:FB:252:THR:O | 2.00 | 0.62 |
| 1:FB:529:ILE:HG21 | 1:FB:583:VAL:HG21 | 1.82 | 0.62 |
| 1:I:267:VAL:C | 1:I:268:LEU:HD12 | 2.25 | 0.62 |
| 1:J:801:ALA:HB1 | 1:K:799:THR:HG21 | 1.82 | 0.62 |
| 1:JA:546:HIS:O | 1:JA:633:LEU:HD12 | 2.00 | 0.62 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:K:788:ALA:O | 1:K:792:VAL:HG23 | 1.99 | 0.62 |
| 1:KB:176:LEU:HD21 | 1:KB:196:TRP:CD1 | 2.35 | 0.62 |
| 1:KB:340:LEU:HD12 | 1:KB:351:HIS:ND1 | 2.14 | 0.62 |
| 1:P:206:PRO:HB3 | 1:P:212:VAL:HG22 | 1.81 | 0.62 |
| 1:PA:777:LEU:O | 1:PA:781:VAL:HG22 | 2.00 | 0.62 |
| 1:QA:124:LYS:HB2 | 1:QA:160:VAL:HG21 | 1.82 | 0.62 |
| 1:QA:717:GLU:O | 1:QA:721:THR:HG23 | 1.99 | 0.62 |
| 1:R:798:MET:O | 1:R:802:ILE:HG22 | 1.99 | 0.62 |
| 1:RB:284:ILE:HD12 | 1:RB:287:PRO:HB3 | 1.81 | 0.62 |
| 1:SA:702:ALA:HB3 | 1:TA:693:ILE:CD1 | 2.30 | 0.62 |
| 1:TB:16:ILE:HD11 | 1:TB:47:PRO:CD | 2.30 | 0.62 |
| 1:UB:228:HIS:CE1 | 1:UB:268:LEU:HD22 | 2.34 | 0.62 |
| 1:V:13:TYR:HA | 1:V:50:MET:HE1 | 1.81 | 0.62 |
| 1:VB:332:LEU:HD23 | 1:VB:333:LEU:O | 2.00 | 0.62 |
| 1:W:82:ARG:C | 1:W:83:LEU:HD12 | 2.25 | 0.62 |
| 1:WA:12:PRO:HB3 | 1:XA:80:GLN:OE1 | 2.00 | 0.62 |
| 1:BA:628:PHE:HB2 | 1:BA:633:LEU:HD23 | 1.82 | 0.61 |
| 1:CA:658:VAL:HG22 | 1:CA:662:ILE:CD1 | 2.30 | 0.61 |
| 1:DA:30:VAL:HG23 | 1:DA:50:MET:HE1 | 1.81 | 0.61 |
| 1:DB:25:VAL:HG21 | 1:DB:78:THR:O | 1.99 | 0.61 |
| 1:E:121:LEU:HD23 | 1:E:159:VAL:HG13 | 1.81 | 0.61 |
| 1:E:175:ARG:HA | 1:E:197:LEU:HD23 | 1.82 | 0.61 |
| 1:E:406:TYR:OH | 1:E:409:THR:HG23 | 1.99 | 0.61 |
| 1:EB:221:LEU:HD13 | 1:EB:252:THR:O | 1.99 | 0.61 |
| 1:H:530:GLU:O | 1:H:583:VAL:HG22 | 1.99 | 0.61 |
| 1:I:223:GLU:O | 1:I:273:ILE:HD12 | 2.00 | 0.61 |
| 1:IA:18:VAL:HA | 1:IA:44:LEU:HD23 | 1.82 | 0.61 |
| 1:J:16:ILE:HD11 | 1:J:47:PRO:CD | 2.30 | 0.61 |
| 1:KA:368:SER:OG | 1:KA:371:VAL:HG23 | 2.00 | 0.61 |
| 1:NA:16:ILE:C | 1:NA:28:VAL:HG23 | 2.25 | 0.61 |
| 1:NA:326:LEU:HD21 | 1:NA:332:LEU:HG | 1.82 | 0.61 |
| 1:NB:9:ARG:CB | 1:NB:34:THR:HG22 | 2.30 | 0.61 |
| 1:P:393:VAL:HG22 | 1:P:411:ASP:C | 2.24 | 0.61 |
| 1:PB:126:LEU:HD12 | 1:PB:155:LYS:O | 2.00 | 0.61 |
| 1:PB:758:GLU:O | 1:PB:762:VAL:HG13 | 1.99 | 0.61 |
| 1:QA:360:ARG:CZ | 1:QA:407:MET:HE2 | 2.30 | 0.61 |
| 1:QA:460:TYR:OH | 1:QA:468:VAL:HG21 | 2.00 | 0.61 |
| 1:RA:358:LEU:HD12 | 1:RA:408:LEU:O | 2.00 | 0.61 |
| 1:RB:13:TYR:OH | 1:SB:83:LEU:HD13 | 2.00 | 0.61 |
| 1:SB:537:LEU:HD23 | 1:SB:643:VAL:CG1 | 2.30 | 0.61 |
| 1:WB:797:GLN:CD | 1:XB:792:VAL:HG13 | 2.25 | 0.61 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XA:758:GLU:O | 1:XA:762:VAL:HG22 | 2.00 | 0.61 |
| 1:Y:166:THR:HG21 | 1:Y:174:LEU:HD22 | 1.81 | 0.61 |
| 1:AA:539:LEU:HD12 | 1:AA:642:SER:O | 2.00 | 0.61 |
| 1:B:575:ILE:O | 1:B:579:VAL:HG23 | 2.00 | 0.61 |
| 1:C:197:LEU:HD21 | 1:C:263:VAL:HG13 | 1.81 | 0.61 |
| 1:C:540:GLN:C | 1:C:541:LEU:HD22 | 2.25 | 0.61 |
| 1:CA:529:ILE:HD12 | 1:CA:583:VAL:CB | 2.30 | 0.61 |
| 1:DB:518:LEU:HD12 | 1:DB:547:PHE:HB2 | 1.82 | 0.61 |
| 1:E:468:VAL:HG23 | 1:E:515:CYS:SG | 2.39 | 0.61 |
| 1:F:267:VAL:C | 1:F:268:LEU:HD12 | 2.25 | 0.61 |
| 1:FA:392:ASP:OD2 | 1:FA:395:THR:HG22 | 1.99 | 0.61 |
| 1:LA:405:THR:HG21 | 1:MA:393:VAL:O | 2.00 | 0.61 |
| 1:NB:107:LYS:NZ | 1:NB:110:THR:HG22 | 2.16 | 0.61 |
| 1:NB:334:LEU:HD12 | 1:NB:357:TRP:NE1 | 2.15 | 0.61 |
| 1:PB:36:ILE:O | 1:PB:36:ILE:HG23 | 2.00 | 0.61 |
| 1:PB:221:LEU:HD11 | 1:PB:251:VAL:HG23 | 1.82 | 0.61 |
| 1:Q:129:PHE:CZ | 1:Q:157:VAL:HG22 | 2.34 | 0.61 |
| 1:S:397:LYS:O | 1:S:398:VAL:HG23 | 1.99 | 0.61 |
| 1:SA:458:VAL:HG21 | 1:SA:489:LEU:HG | 1.82 | 0.61 |
| 1:UB:489:LEU:HD21 | 1:UB:495:PHE:CD1 | 2.35 | 0.61 |
| 1:W:462:VAL:HG21 | 1:W:481:VAL:CG2 | 2.30 | 0.61 |
| 1:XB:51:VAL:HG12 | 1:XB:53:VAL:HG22 | 1.82 | 0.61 |
| 1:CA:460:TYR:CE1 | 1:CA:514:LEU:HD23 | 2.36 | 0.61 |
| 1:DB:7:ILE:HG22 | 1:DB:7:ILE:O | 1.99 | 0.61 |
| 1:E:112:LEU:HD23 | 1:E:150:THR:CG2 | 2.30 | 0.61 |
| 1:F:333:LEU:HD23 | 1:F:374:VAL:HG11 | 1.81 | 0.61 |
| 1:FA:316:LEU:HD21 | 1:FA:319:GLY:HA2 | 1.81 | 0.61 |
| 1:GA:282:CYS:O | 1:GA:301:VAL:HG23 | 2.00 | 0.61 |
| 1:GA:398:VAL:HG11 | 1:GA:415:TRP:CE3 | 2.36 | 0.61 |
| 1:HA:531:THR:HG21 | 1:HA:588:PHE:HA | 1.82 | 0.61 |
| 1:HB:65:VAL:HG11 | 1:HB:100:TYR:CD2 | 2.35 | 0.61 |
| 1:I:405:THR:HG21 | 1:J:393:VAL:O | 2.00 | 0.61 |
| 1:KA:661:ALA:HA | 1:KA:664:ILE:HD12 | 1.81 | 0.61 |
| 1:PB:253:VAL:HG23 | 1:PB:254:GLN:OE1 | 1.99 | 0.61 |
| 1:QB:123:LEU:HD11 | 1:QB:145:PHE:HB2 | 1.81 | 0.61 |
| 1:SA:684:ALA:HB3 | 1:TA:675:HIS:HB2 | 1.81 | 0.61 |
| 1:SB:3:THR:HG22 | 1:SB:6:PHE:CD1 | 2.35 | 0.61 |
| 1:W:112:LEU:HD23 | 1:X:139:ALA:CB | 2.29 | 0.61 |
| 1:WA:363:LEU:C | 1:XA:353:ALA:HB3 | 2.26 | 0.61 |
| 1:XB:59:CYS:CB | 1:XB:105:LEU:HD11 | 2.30 | 0.61 |
| 1:A:643:VAL:O | 1:A:643:VAL:HG23 | 2.00 | 0.61 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AA:17:HIS:CD2 | 1:AA:28:VAL:HG23 | 2.35 | 0.61 |
| 1:AC:60:THR:HG22 | 1:AC:90:ILE:HG13 | 1.81 | 0.61 |
| 1:AC:460:TYR:CE2 | 1:AC:514:LEU:HD11 | 2.35 | 0.61 |
| 1:DB:460:TYR:HE2 | 1:DB:514:LEU:HD23 | 1.65 | 0.61 |
| 1:EB:229:LEU:HD23 | 1:EB:267:VAL:HG22 | 1.82 | 0.61 |
| 1:GB:530:GLU:O | 1:GB:583:VAL:HG22 | 2.01 | 0.61 |
| 1:HA:55:PRO:O | 1:HA:56:ARG:HD3 | 1.99 | 0.61 |
| 1:HB:233:ARG:HA | 1:HB:245:THR:HG23 | 1.81 | 0.61 |
| 1:K:758:GLU:O | 1:K:762:VAL:HG22 | 2.01 | 0.61 |
| 1:KA:176:LEU:HD21 | 1:KA:196:TRP:CD1 | 2.35 | 0.61 |
| 1:N:62:ALA:HB2 | 1:N:106:GLU:HG3 | 1.83 | 0.61 |
| 1:OA:175:ARG:CA | 1:OA:197:LEU:HD23 | 2.30 | 0.61 |
| 1:OA:416:GLU:OE2 | 1:OA:455:THR:HG23 | 2.00 | 0.61 |
| 1:OB:480:VAL:HG21 | 1:OB:558:THR:HB | 1.81 | 0.61 |
| 1:PA:452:ARG:NH2 | 1:PA:458:VAL:HG22 | 2.14 | 0.61 |
| 1:R:126:LEU:O | 1:R:127:LEU:HD22 | 1.99 | 0.61 |
| 1:T:340:LEU:HD12 | 1:T:351:HIS:ND1 | 2.14 | 0.61 |
| 1:TB:284:ILE:HD12 | 1:TB:287:PRO:HB3 | 1.83 | 0.61 |
| 1:TB:525:ASP:HB3 | 1:TB:541:LEU:HD12 | 1.81 | 0.61 |
| 1:UB:122:HIS:CD2 | 1:UB:208:VAL:HG12 | 2.35 | 0.61 |
| 1:V:119:THR:HG23 | 1:V:162:ILE:HG23 | 1.82 | 0.61 |
| 1:WA:325:VAL:O | 1:WA:325:VAL:HG13 | 2.01 | 0.61 |
| 1:YA:381:PRO:HA | 1:YA:405:THR:HG22 | 1.81 | 0.61 |
| 1:YB:3:THR:HG22 | 1:YB:6:PHE:CE1 | 2.35 | 0.61 |
| 1:AA:197:LEU:HD21 | 1:AA:216:VAL:CG1 | 2.31 | 0.61 |
| 1:AC:461:ARG:CG | 1:AC:486:LEU:HD13 | 2.30 | 0.61 |
| 1:BB:597:ARG:O | 1:BB:601:THR:HG23 | 2.00 | 0.61 |
| 1:C:340:LEU:HD12 | 1:C:351:HIS:ND1 | 2.16 | 0.61 |
| 1:CA:452:ARG:HH12 | 1:CA:458:VAL:HG22 | 1.64 | 0.61 |
| 1:DB:626:ALA:HB3 | 1:DB:635:VAL:HB | 1.82 | 0.61 |
| 1:FB:691:GLN:HA | 1:FB:694:LEU:HD12 | 1.82 | 0.61 |
| 1:GB:416:GLU:OE2 | 1:GB:455:THR:HG23 | 1.99 | 0.61 |
| 1:H:228:HIS:CA | 1:H:250:LEU:HD23 | 2.29 | 0.61 |
| 1:KA:19:LEU:HD12 | 1:KA:25:VAL:O | 2.00 | 0.61 |
| 1:PB:488:SER:C | 1:PB:489:LEU:HD12 | 2.26 | 0.61 |
| 1:S:661:ALA:HA | 1:S:664:ILE:HD12 | 1.80 | 0.61 |
| 1:SA:402:ILE:O | 1:SA:402:ILE:HG23 | 1.99 | 0.61 |
| 1:T:326:LEU:HD21 | 1:T:332:LEU:HG | 1.81 | 0.61 |
| 1:TA:579:VAL:O | 1:TA:583:VAL:HG12 | 2.00 | 0.61 |
| 1:UA:707:LEU:HD23 | 1:UA:710:GLU:OE1 | 2.01 | 0.61 |
| 1:UB:168:ILE:HG22 | 1:UB:215:LEU:HD13 | 1.80 | 0.61 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:W:275:THR:O | 1:W:320:ILE:HD13 | 2.00 | 0.61 |
| 1:X:282:CYS:SG | 1:X:316:LEU:HD11 | 2.40 | 0.61 |
| 1:DA:173:ALA:CB | 1:DA:197:LEU:HD12 | 2.31 | 0.61 |
| 1:DB:91:ARG:C | 1:DB:92:LEU:HD12 | 2.26 | 0.61 |
| 1:GA:368:SER:OG | 1:GA:371:VAL:HG23 | 1.99 | 0.61 |
| 1:HA:172:GLN:CD | 1:HA:215:LEU:HD21 | 2.26 | 0.61 |
| 1:IB:65:VAL:HG23 | 1:IB:67:ARG:HD3 | 1.83 | 0.61 |
| 1:JA:122:HIS:ND1 | 1:JA:160:VAL:HG21 | 2.15 | 0.61 |
| 1:LA:73:VAL:HG21 | 1:LA:100:TYR:HE2 | 1.64 | 0.61 |
| 1:LA:338:GLN:HB2 | 1:LA:370:LYS:HD2 | 1.82 | 0.61 |
| 1:NA:389:TYR:CD1 | 1:NA:457:VAL:HG22 | 2.36 | 0.61 |
| 1:NA:539:LEU:HD12 | 1:NA:642:SER:O | 2.01 | 0.61 |
| 1:O:176:LEU:HD21 | 1:O:196:TRP:CD1 | 2.35 | 0.61 |
| 1:RB:69:ALA:HB3 | 1:RB:72:LEU:HB3 | 1.82 | 0.61 |
| 1:ZA:310:LEU:HD21 | 1:ZA:316:LEU:CD1 | 2.30 | 0.61 |
| 1:AA:788:ALA:O | 1:AA:792:VAL:HG23 | 2.01 | 0.61 |
| 1:DA:18:VAL:HG12 | 1:DA:43:VAL:HG22 | 1.82 | 0.61 |
| 1:E:284:ILE:HD12 | 1:E:287:PRO:HB3 | 1.82 | 0.61 |
| 1:HA:325:VAL:O | 1:HA:325:VAL:HG13 | 2.00 | 0.61 |
| 1:I:9:ARG:HB3 | 1:I:34:THR:HG22 | 1.83 | 0.61 |
| 1:I:358:LEU:HD23 | 1:I:359:ILE:N | 2.16 | 0.61 |
| 1:IA:539:LEU:HD12 | 1:IA:642:SER:O | 2.00 | 0.61 |
| 1:KB:768:LEU:HD23 | 1:LB:766:ARG:NH2 | 2.14 | 0.61 |
| 1:L:87:ASP:C | 1:L:88:LEU:HD12 | 2.26 | 0.61 |
| 1:LB:316:LEU:HD12 | 1:LB:317:GLU:H | 1.65 | 0.61 |
| 1:MA:17:HIS:CB | 1:MA:44:LEU:HD12 | 2.31 | 0.61 |
| 1:O:220:ILE:HG22 | 1:O:222:THR:HG23 | 1.82 | 0.61 |
| 1:O:221:LEU:O | 1:O:253:VAL:HG13 | 2.01 | 0.61 |
| 1:OA:529:ILE:HG12 | 1:OA:539:LEU:HD13 | 1.82 | 0.61 |
| 1:OA:802:ILE:CD1 | 1:PA:799:THR:HG21 | 2.30 | 0.61 |
| 1:OB:405:THR:HG23 | 1:PB:396:GLY:CA | 2.30 | 0.61 |
| 1:PA:640:VAL:HG21 | 1:QA:581:GLY:HA3 | 1.83 | 0.61 |
| 1:PA:779:LEU:HD21 | 1:QA:774:ARG:CG | 2.30 | 0.61 |
| 1:QB:336:ALA:HB3 | 1:QB:355:ASP:H | 1.66 | 0.61 |
| 1:RA:526:VAL:HG13 | 1:RA:538:GLN:OE1 | 2.00 | 0.61 |
| 1:UB:129:PHE:CE1 | 1:UB:137:VAL:HG11 | 2.35 | 0.61 |
| 1:X:288:VAL:HG12 | 1:X:294:ASN:N | 2.16 | 0.61 |
| 1:AA:806:THR:HG23 | 1:BA:808:ARG:HG2 | 1.83 | 0.61 |
| 1:B:798:MET:HE3 | 1:C:792:VAL:HG22 | 1.82 | 0.61 |
| 1:DA:115:VAL:HG11 | 1:DA:145:PHE:CD2 | 2.36 | 0.61 |
| 1:FB:3:THR:HG22 | 1:FB:3:THR:O | 1.99 | 0.61 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:FB:591:PHE:HZ | 1:FB:599:ILE:HD11 | 1.66 | 0.61 |
| 1:HA:288:VAL:HG12 | 1:HA:294:ASN:N | 2.16 | 0.61 |
| 1:IB:65:VAL:HG11 | 1:IB:100:TYR:CD2 | 2.36 | 0.61 |
| 1:JA:175:ARG:CZ | 1:JA:263:VAL:HG12 | 2.29 | 0.61 |
| 1:KB:73:VAL:HG21 | 1:KB:100:TYR:CZ | 2.35 | 0.61 |
| 1:NB:333:LEU:HD12 | 1:NB:334:LEU:H | 1.66 | 0.61 |
| 1:O:283:VAL:HG22 | 1:O:301:VAL:HA | 1.81 | 0.61 |
| 1:PB:285:LEU:HD11 | 1:PB:317:GLU:HA | 1.82 | 0.61 |
| 1:Q:18:VAL:HG21 | 1:Q:27:ARG:HH11 | 1.64 | 0.61 |
| 1:QA:198:VAL:HG21 | 1:QA:204:TYR:CE2 | 2.36 | 0.61 |
| 1:RA:9:ARG:HB3 | 1:RA:34:THR:HG22 | 1.82 | 0.61 |
| 1:S:765:VAL:HG22 | 1:T:759:LEU:HD21 | 1.81 | 0.61 |
| 1:SB:337:LEU:HD21 | 1:SB:372:GLU:CD | 2.26 | 0.61 |
| 1:T:468:VAL:HG22 | 1:T:515:CYS:HB3 | 1.82 | 0.61 |
| 1:TA:60:THR:HG21 | 1:TA:155:LYS:HB3 | 1.82 | 0.61 |
| 1:TB:25:VAL:HG13 | 1:TB:79:GLY:HA3 | 1.81 | 0.61 |
| 1:XB:332:LEU:HD23 | 1:XB:334:LEU:CD2 | 2.30 | 0.61 |
| 1:XB:599:ILE:O | 1:XB:603:VAL:HG23 | 2.00 | 0.61 |
| 1:YB:530:GLU:O | 1:YB:583:VAL:HG22 | 2.00 | 0.61 |
| 1:A:109:ILE:HG23 | 1:A:109:ILE:O | 1.99 | 0.61 |
| 1:B:635:VAL:O | 1:B:635:VAL:HG13 | 2.01 | 0.61 |
| 1:G:795:PHE:CZ | 1:G:799:THR:HG21 | 2.36 | 0.61 |
| 1:GA:173:ALA:HB1 | 1:GA:197:LEU:HD12 | 1.83 | 0.61 |
| 1:JA:405:THR:HG21 | 1:KA:393:VAL:O | 2.00 | 0.61 |
| 1:JB:388:ILE:CA | 1:JB:457:VAL:HG23 | 2.31 | 0.61 |
| 1:K:599:ILE:O | 1:K:603:VAL:HG23 | 2.01 | 0.61 |
| 1:MA:772:TYR:CD1 | 1:NA:770:LEU:HD11 | 2.36 | 0.61 |
| 1:MB:661:ALA:HA | 1:MB:664:ILE:HD12 | 1.82 | 0.61 |
| 1:NB:380:ILE:HD12 | 1:NB:406:TYR:O | 2.01 | 0.61 |
| 1:OB:662:ILE:HG22 | 1:PB:588:PHE:CZ | 2.36 | 0.61 |
| 1:PB:332:LEU:O | 1:PB:358:LEU:HD12 | 2.01 | 0.61 |
| 1:QA:481:VAL:HG21 | 1:QA:485:GLU:HG2 | 1.83 | 0.61 |
| 1:XA:173:ALA:HB1 | 1:XA:197:LEU:HD23 | 1.82 | 0.61 |
| 1:ZA:531:THR:HG22 | 1:ZA:583:VAL:HG22 | 1.81 | 0.61 |
| 1:AB:73:VAL:HG11 | 1:AB:81:VAL:HG13 | 1.82 | 0.61 |
| 1:AB:174:LEU:O | 1:AB:198:VAL:HG12 | 2.01 | 0.61 |
| 1:B:284:ILE:HD12 | 1:B:287:PRO:HB3 | 1.83 | 0.61 |
| 1:BA:643:VAL:HG11 | 1:CA:580:ARG:HH11 | 1.66 | 0.61 |
| 1:BA:758:GLU:O | 1:BA:762:VAL:HG22 | 2.01 | 0.61 |
| 1:BB:784:ALA:HA | 1:BB:787:LEU:HD12 | 1.83 | 0.61 |
| 1:D:797:GLN:OE1 | 1:E:792:VAL:HG11 | 2.01 | 0.61 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:F:460:TYR:O | 1:F:486:LEU:HD12 | 2.00 | 0.61 |
| 1:F:539:LEU:HD11 | 1:F:541:LEU:HD21 | 1.83 | 0.61 |
| 1:FA:599:ILE:HD13 | 1:FA:640:VAL:HG21 | 1.83 | 0.61 |
| 1:IA:540:GLN:C | 1:IA:541:LEU:HD22 | 2.26 | 0.61 |
| 1:J:358:LEU:HD22 | 1:J:408:LEU:O | 2.00 | 0.61 |
| 1:JA:661:ALA:HA | 1:JA:664:ILE:HD12 | 1.81 | 0.61 |
| 1:KB:530:GLU:O | 1:KB:583:VAL:HG22 | 2.01 | 0.61 |
| 1:KB:541:LEU:HD11 | 1:KB:543:TYR:CZ | 2.35 | 0.61 |
| 1:MA:223:GLU:O | 1:MA:273:ILE:HD12 | 1.99 | 0.61 |
| 1:N:470:VAL:HG22 | 1:N:495:PHE:HD1 | 1.66 | 0.61 |
| 1:NA:522:PHE:HE2 | 1:NA:524:THR:HG23 | 1.65 | 0.61 |
| 1:NB:176:LEU:HD23 | 1:NB:196:TRP:O | 2.01 | 0.61 |
| 1:OA:461:ARG:HA | 1:OA:486:LEU:HD12 | 1.83 | 0.61 |
| 1:PA:743:GLN:HA | 1:PA:746:LEU:HD12 | 1.82 | 0.61 |
| 1:PA:779:LEU:HD21 | 1:QA:774:ARG:HG3 | 1.82 | 0.61 |
| 1:SA:520:PRO:O | 1:TA:564:VAL:HG13 | 2.00 | 0.61 |
| 1:TA:336:ALA:O | 1:TA:337:LEU:HD23 | 2.00 | 0.61 |
| 1:VA:125:ALA:CB | 1:VA:137:VAL:HG21 | 2.31 | 0.61 |
| 1:VB:176:LEU:HD23 | 1:VB:196:TRP:O | 2.01 | 0.61 |
| 1:W:59:CYS:HB3 | 1:W:105:LEU:HD11 | 1.83 | 0.61 |
| 1:W:388:ILE:N | 1:W:457:VAL:HG23 | 2.16 | 0.61 |
| 1:W:575:ILE:O | 1:W:579:VAL:HG23 | 2.00 | 0.61 |
| 1:WA:398:VAL:HG21 | 1:WA:415:TRP:CD2 | 2.35 | 0.61 |
| 1:WA:520:PRO:HB2 | 1:XA:564:VAL:HG13 | 1.81 | 0.61 |
| 1:XB:333:LEU:O | 1:XB:334:LEU:HD23 | 2.01 | 0.61 |
| 1:AB:296:LEU:HD22 | 1:ZA:273:ILE:HG21 | 1.82 | 0.60 |
| 1:BA:401:VAL:O | 1:BA:401:VAL:HG23 | 2.01 | 0.60 |
| 1:G:129:PHE:CD1 | 1:G:137:VAL:HG11 | 2.36 | 0.60 |
| 1:GB:537:LEU:HD23 | 1:GB:645:PRO:HA | 1.82 | 0.60 |
| 1:HA:173:ALA:HB1 | 1:HA:197:LEU:HD22 | 1.83 | 0.60 |
| 1:HB:810:LEU:HD21 | 1:IB:808:ARG:HA | 1.82 | 0.60 |
| 1:JB:625:GLN:OE1 | 1:JB:627:VAL:HG13 | 2.01 | 0.60 |
| 1:LB:215:LEU:HD12 | 1:LB:216:VAL:H | 1.66 | 0.60 |
| 1:MB:764:LYS:CE | 1:NB:759:LEU:HD11 | 2.31 | 0.60 |
| 1:N:221:LEU:O | 1:N:253:VAL:HG12 | 2.01 | 0.60 |
| 1:NB:758:GLU:O | 1:NB:762:VAL:HG22 | 2.01 | 0.60 |
| 1:PB:34:THR:HG23 | 1:QB:24:ASN:OD1 | 2.01 | 0.60 |
| 1:Q:771:VAL:HG22 | 1:Q:774:ARG:HH11 | 1.66 | 0.60 |
| 1:QA:391:GLN:O | 1:QA:413:VAL:HG12 | 2.00 | 0.60 |
| 1:RA:230:ARG:HB2 | 1:RA:268:LEU:HD21 | 1.83 | 0.60 |
| 1:S:625:GLN:HG2 | 1:S:627:VAL:HG13 | 1.83 | 0.60 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:TB:126:LEU:C | 1:TB:127:LEU:HD22 | 2.26 | 0.60 |
| 1:VB:59:CYS:SG | 1:VB:105:LEU:HD11 | 2.41 | 0.60 |
| 1:WA:10:ILE:HG22 | 1:WA:14:HIS:CB | 2.31 | 0.60 |
| 1:WA:19:LEU:HD13 | 1:WA:80:GLN:OE1 | 2.01 | 0.60 |
| 1:WA:470:VAL:HG22 | 1:WA:495:PHE:CE1 | 2.36 | 0.60 |
| 1:WB:221:LEU:HD13 | 1:WB:252:THR:O | 2.01 | 0.60 |
| 1:XA:500:LEU:HD21 | 1:XA:567:PHE:CD2 | 2.36 | 0.60 |
| 1:Y:166:THR:CG2 | 1:Y:174:LEU:HD22 | 2.31 | 0.60 |
| 1:ZA:61:VAL:HG23 | 1:ZA:64:PRO:HB3 | 1.83 | 0.60 |
| 1:AC:69:ALA:HB2 | 1:AC:74:LEU:HD11 | 1.83 | 0.60 |
| 1:BA:645:PRO:CG | 1:BA:650:THR:HG21 | 2.31 | 0.60 |
| 1:D:126:LEU:HD21 | 1:D:158:GLU:CB | 2.32 | 0.60 |
| 1:DA:120:ALA:CB | 1:DA:205:LEU:HD21 | 2.31 | 0.60 |
| 1:DB:9:ARG:CB | 1:DB:34:THR:HG22 | 2.31 | 0.60 |
| 1:IA:126:LEU:O | 1:IA:127:LEU:HD22 | 2.00 | 0.60 |
| 1:IB:388:ILE:CA | 1:IB:457:VAL:HG23 | 2.31 | 0.60 |
| 1:JB:220:ILE:HD13 | 1:JB:258:ALA:HB2 | 1.83 | 0.60 |
| 1:K:528:THR:HG22 | 1:K:536:ARG:NH1 | 2.16 | 0.60 |
| 1:K:787:LEU:CD2 | 1:L:781:VAL:HG12 | 2.30 | 0.60 |
| 1:KB:626:ALA:HB3 | 1:KB:635:VAL:HB | 1.83 | 0.60 |
| 1:NA:788:ALA:O | 1:NA:792:VAL:HG23 | 2.01 | 0.60 |
| 1:OB:285:LEU:HD12 | 1:OB:315:GLN:HB3 | 1.83 | 0.60 |
| 1:QA:160:VAL:HG12 | 1:QA:161:GLU:H | 1.64 | 0.60 |
| 1:QA:219:VAL:HG22 | 1:QA:259:HIS:O | 2.01 | 0.60 |
| 1:QA:388:ILE:N | 1:QA:457:VAL:HG23 | 2.17 | 0.60 |
| 1:QB:69:ALA:HB3 | 1:QB:72:LEU:HB3 | 1.83 | 0.60 |
| 1:R:518:LEU:HD12 | 1:R:547:PHE:HB2 | 1.82 | 0.60 |
| 1:RB:768:LEU:HD11 | 1:SB:759:LEU:O | 2.01 | 0.60 |
| 1:TA:388:ILE:N | 1:TA:457:VAL:HG23 | 2.16 | 0.60 |
| 1:TA:481:VAL:HG11 | 1:TA:487:VAL:HB | 1.82 | 0.60 |
| 1:VA:227:LEU:HA | 1:VA:270:VAL:HG22 | 1.83 | 0.60 |
| 1:WB:284:ILE:HD12 | 1:WB:287:PRO:HB3 | 1.83 | 0.60 |
| 1:XA:137:VAL:O | 1:XA:137:VAL:HG12 | 2.01 | 0.60 |
| 1:XB:761:ARG:O | 1:XB:765:VAL:HG23 | 2.01 | 0.60 |
| 1:XB:799:THR:HA | 1:XB:802:ILE:HG22 | 1.83 | 0.60 |
| 1:BA:121:LEU:HD13 | 1:BA:159:VAL:HG13 | 1.83 | 0.60 |
| 1:C:360:ARG:NH1 | 1:C:407:MET:HE3 | 2.17 | 0.60 |
| 1:DA:3:THR:CG2 | 1:DA:43:VAL:HG23 | 2.30 | 0.60 |
| 1:DA:228:HIS:HA | 1:DA:250:LEU:HD23 | 1.83 | 0.60 |
| 1:E:18:VAL:HG12 | 1:E:43:VAL:HG22 | 1.83 | 0.60 |
| 1:E:750:ALA:HB2 | 1:F:741:VAL:HG22 | 1.83 | 0.60 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:F:227:LEU:CD2 | 1:F:229:LEU:HD21 | 2.31 | 0.60 |
| 1:FA:712:LEU:O | 1:FA:716:VAL:HG23 | 2.00 | 0.60 |
| 1:GA:175:ARG:HH21 | 1:GA:263:VAL:HG12 | 1.66 | 0.60 |
| 1:H:389:TYR:CE1 | 1:H:457:VAL:HG22 | 2.36 | 0.60 |
| 1:HB:530:GLU:O | 1:HB:583:VAL:HG22 | 2.01 | 0.60 |
| 1:I:721:THR:HA | 1:J:714:MET:HE1 | 1.82 | 0.60 |
| 1:IA:531:THR:HG21 | 1:IA:588:PHE:CB | 2.31 | 0.60 |
| 1:IB:597:ARG:O | 1:IB:601:THR:HG23 | 2.01 | 0.60 |
| 1:JA:81:VAL:HG13 | 1:JA:83:LEU:HD11 | 1.82 | 0.60 |
| 1:MA:462:VAL:HG12 | 1:MA:483:GLY:O | 2.01 | 0.60 |
| 1:OB:121:LEU:HB3 | 1:OB:162:ILE:HG22 | 1.84 | 0.60 |
| 1:QA:54:PRO:CG | 1:QA:109:ILE:HD12 | 2.31 | 0.60 |
| 1:R:772:TYR:HD1 | 1:S:770:LEU:HD11 | 1.66 | 0.60 |
| 1:VA:777:LEU:O | 1:VA:781:VAL:HG22 | 2.01 | 0.60 |
| 1:WB:414:LEU:HD13 | 1:WB:455:THR:HG22 | 1.83 | 0.60 |
| 1:WB:567:PHE:CD2 | 1:WB:633:LEU:HD22 | 2.37 | 0.60 |
| 1:X:284:ILE:HD12 | 1:X:287:PRO:HB3 | 1.82 | 0.60 |
| 1:Y:18:VAL:HG23 | 1:Y:18:VAL:O | 2.00 | 0.60 |
| 1:YA:275:THR:OG1 | 1:ZA:296:LEU:HD23 | 2.02 | 0.60 |
| 1:YB:61:VAL:HG23 | 1:YB:64:PRO:HB3 | 1.82 | 0.60 |
| 1:AB:502:ALA:HB3 | 1:AB:507:ARG:HG2 | 1.83 | 0.60 |
| 1:AC:460:TYR:O | 1:AC:486:LEU:HD12 | 2.01 | 0.60 |
| 1:BA:229:LEU:HD13 | 1:BA:265:GLU:OE1 | 2.00 | 0.60 |
| 1:BA:310:LEU:HD22 | 1:BA:314:GLU:O | 2.01 | 0.60 |
| 1:BA:470:VAL:HG13 | 1:BA:494:GLN:C | 2.26 | 0.60 |
| 1:D:392:ASP:OD2 | 1:D:395:THR:HG22 | 2.02 | 0.60 |
| 1:DB:661:ALA:O | 1:DB:665:THR:HG23 | 2.02 | 0.60 |
| 1:F:529:ILE:HB | 1:F:583:VAL:HG11 | 1.82 | 0.60 |
| 1:FA:16:ILE:HD11 | 1:FA:47:PRO:CD | 2.32 | 0.60 |
| 1:FB:797:GLN:HB2 | 1:GB:792:VAL:HG11 | 1.81 | 0.60 |
| 1:G:81:VAL:HG13 | 1:G:83:LEU:HD12 | 1.83 | 0.60 |
| 1:HB:196:TRP:O | 1:HB:197:LEU:HD22 | 2.01 | 0.60 |
| 1:HB:381:PRO:HA | 1:HB:405:THR:HG22 | 1.83 | 0.60 |
| 1:J:625:GLN:HG3 | 1:J:634:VAL:HG13 | 1.82 | 0.60 |
| 1:L:67:ARG:CG | 1:L:73:VAL:HG22 | 2.32 | 0.60 |
| 1:M:228:HIS:HA | 1:M:250:LEU:HD23 | 1.83 | 0.60 |
| 1:MA:126:LEU:C | 1:MA:127:LEU:HD22 | 2.25 | 0.60 |
| 1:N:783:LYS:HB2 | 1:O:777:LEU:HD11 | 1.81 | 0.60 |
| 1:O:599:ILE:O | 1:O:603:VAL:HG23 | 2.00 | 0.60 |
| 1:PA:357:TRP:CH2 | 1:PA:371:VAL:HG13 | 2.36 | 0.60 |
| 1:TA:81:VAL:HG23 | 1:TA:83:LEU:CD1 | 2.31 | 0.60 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:W:128:ASP:OD2 | 1:W:138:VAL:HG12 | 2.02 | 0.60 |
| 1:XA:60:THR:HG22 | 1:XA:90:ILE:HG12 | 1.82 | 0.60 |
| 1:AA:408:LEU:HD11 | 1:AA:414:LEU:CD2 | 2.31 | 0.60 |
| 1:AC:786:GLN:OE1 | 1:OA:781:VAL:HG11 | 2.02 | 0.60 |
| 1:EA:416:GLU:CG | 1:EA:455:THR:HG22 | 2.32 | 0.60 |
| 1:FB:10:ILE:HG23 | 1:FB:14:HIS:HB2 | 1.84 | 0.60 |
| 1:FB:529:ILE:CG2 | 1:FB:583:VAL:HG21 | 2.32 | 0.60 |
| 1:FB:537:LEU:HD23 | 1:FB:645:PRO:HA | 1.84 | 0.60 |
| 1:G:470:VAL:HG12 | 1:G:493:GLU:CG | 2.32 | 0.60 |
| 1:KA:547:PHE:CE2 | 1:KA:633:LEU:HD13 | 2.36 | 0.60 |
| 1:NA:543:TYR:HA | 1:NA:638:VAL:HG22 | 1.83 | 0.60 |
| 1:PB:381:PRO:CA | 1:PB:405:THR:HG22 | 2.32 | 0.60 |
| 1:QA:52:THR:HG22 | 1:QA:96:PRO:HB3 | 1.82 | 0.60 |
| 1:R:129:PHE:CZ | 1:R:157:VAL:HG22 | 2.36 | 0.60 |
| 1:VA:529:ILE:HB | 1:VA:583:VAL:HG11 | 1.82 | 0.60 |
| 1:ZB:786:GLN:O | 1:ZB:790:VAL:HG23 | 2.01 | 0.60 |
| 1:BA:28:VAL:HG11 | 1:BA:101:PRO:HD3 | 1.84 | 0.60 |
| 1:C:662:ILE:HG21 | 1:D:653:ALA:HB1 | 1.84 | 0.60 |
| 1:CB:181:GLU:OE2 | 1:CB:191:VAL:HG12 | 2.02 | 0.60 |
| 1:CB:539:LEU:HD12 | 1:CB:540:GLN:N | 2.17 | 0.60 |
| 1:DA:69:ALA:HB2 | 1:DA:74:LEU:HG | 1.83 | 0.60 |
| 1:EA:69:ALA:HB2 | 1:EA:74:LEU:HD21 | 1.84 | 0.60 |
| 1:FB:746:LEU:HD13 | 1:GB:737:GLY:HA3 | 1.83 | 0.60 |
| 1:IB:388:ILE:C | 1:IB:457:VAL:HG23 | 2.25 | 0.60 |
| 1:KA:81:VAL:HG13 | 1:KA:83:LEU:HD11 | 1.82 | 0.60 |
| 1:LB:122:HIS:HD2 | 1:LB:208:VAL:HG12 | 1.66 | 0.60 |
| 1:M:405:THR:HG23 | 1:N:396:GLY:HA3 | 1.83 | 0.60 |
| 1:MB:405:THR:HG21 | 1:NB:393:VAL:O | 2.01 | 0.60 |
| 1:OA:62:ALA:HA | 1:OA:88:LEU:HD23 | 1.83 | 0.60 |
| 1:OA:174:LEU:HD23 | 1:OA:175:ARG:O | 2.01 | 0.60 |
| 1:Q:51:VAL:HG12 | 1:Q:53:VAL:HG23 | 1.83 | 0.60 |
| 1:Q:227:LEU:HA | 1:Q:270:VAL:HG22 | 1.81 | 0.60 |
| 1:RB:326:LEU:HD21 | 1:RB:332:LEU:HG | 1.82 | 0.60 |
| 1:TB:398:VAL:HG11 | 1:TB:415:TRP:CE3 | 2.36 | 0.60 |
| 1:TB:546:HIS:O | 1:TB:633:LEU:HD12 | 2.01 | 0.60 |
| 1:UB:99:LEU:HD22 | 1:UB:103:GLU:O | 2.01 | 0.60 |
| 1:VA:175:ARG:HE | 1:VA:213:LEU:HB3 | 1.66 | 0.60 |
| 1:WB:121:LEU:HD12 | 1:WB:121:LEU:O | 2.00 | 0.60 |
| 1:WB:571:ALA:O | 1:WB:575:ILE:HD12 | 2.02 | 0.60 |
| 1:X:284:ILE:HD12 | 1:X:287:PRO:CB | 2.31 | 0.60 |
| 1:XB:144:LEU:HD12 | 1:XB:146:GLU:OE1 | 2.01 | 0.60 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XB:765:VAL:CG2 | 1:YB:759:LEU:HD21 | 2.29 | 0.60 |
| 1:Y:61:VAL:HG22 | 1:Y:89:GLU:O | 2.01 | 0.60 |
| 1:YA:95:ASP:OD1 | 1:YA:96:PRO:HD2 | 2.01 | 0.60 |
| 1:ZB:696:GLN:HA | 1:ZB:699:ALA:HB3 | 1.82 | 0.60 |
| 1:A:67:ARG:HG3 | 1:A:73:VAL:HG22 | 1.82 | 0.60 |
| 1:AA:276:LEU:HD23 | 1:AA:320:ILE:HG23 | 1.84 | 0.60 |
| 1:C:405:THR:HG23 | 1:D:396:GLY:CA | 2.32 | 0.60 |
| 1:DB:531:THR:HG21 | 1:DB:588:PHE:HB2 | 1.84 | 0.60 |
| 1:E:126:LEU:C | 1:E:127:LEU:HD22 | 2.26 | 0.60 |
| 1:EA:599:ILE:O | 1:EA:603:VAL:HG23 | 2.01 | 0.60 |
| 1:F:91:ARG:O | 1:F:92:LEU:HD22 | 2.01 | 0.60 |
| 1:GA:393:VAL:HG22 | 1:GA:411:ASP:O | 2.01 | 0.60 |
| 1:GB:529:ILE:HD12 | 1:GB:583:VAL:CB | 2.31 | 0.60 |
| 1:H:175:ARG:NH2 | 1:H:263:VAL:HG12 | 2.17 | 0.60 |
| 1:I:284:ILE:HD12 | 1:I:287:PRO:HB3 | 1.83 | 0.60 |
| 1:IB:359:ILE:HG23 | 1:IB:359:ILE:O | 1.99 | 0.60 |
| 1:JB:405:THR:HG23 | 1:KB:396:GLY:HA3 | 1.83 | 0.60 |
| 1:NA:176:LEU:HD21 | 1:NA:196:TRP:NE1 | 2.17 | 0.60 |
| 1:NA:269:GLY:O | 1:NA:271:VAL:HG13 | 2.01 | 0.60 |
| 1:OA:36:ILE:O | 1:OA:36:ILE:HG23 | 2.01 | 0.60 |
| 1:RB:776:GLN:OE1 | 1:RB:779:LEU:HD12 | 2.01 | 0.60 |
| 1:RB:788:ALA:O | 1:RB:792:VAL:HG23 | 2.00 | 0.60 |
| 1:SA:56:ARG:HD3 | 1:TA:127:LEU:HD11 | 1.83 | 0.60 |
| 1:W:10:ILE:HD11 | 1:W:33:LYS:HB3 | 1.84 | 0.60 |
| 1:WA:799:THR:HA | 1:WA:802:ILE:HG22 | 1.82 | 0.60 |
| 1:Y:112:LEU:HD23 | 1:Y:150:THR:HG21 | 1.83 | 0.60 |
| 1:YA:167:ILE:CG1 | 1:ZA:192:THR:HG22 | 2.31 | 0.60 |
| 1:Z:758:GLU:O | 1:Z:762:VAL:HG22 | 2.02 | 0.60 |
| 1:ZA:523:PHE:CD1 | 1:ZA:568:VAL:HG23 | 2.37 | 0.60 |
| 1:A:67:ARG:CG | 1:A:73:VAL:HG22 | 2.32 | 0.60 |
| 1:AC:746:LEU:HD13 | 1:OA:737:GLY:C | 2.27 | 0.60 |
| 1:B:285:LEU:HD12 | 1:B:315:GLN:HB3 | 1.84 | 0.60 |
| 1:B:471:TYR:CD2 | 1:B:478:ALA:HB2 | 2.36 | 0.60 |
| 1:B:488:SER:C | 1:B:489:LEU:HD22 | 2.26 | 0.60 |
| 1:CA:777:LEU:O | 1:CA:781:VAL:HG22 | 2.02 | 0.60 |
| 1:CB:575:ILE:HD13 | 1:CB:578:ARG:NH1 | 2.15 | 0.60 |
| 1:GA:60:THR:HG23 | 1:GA:107:LYS:HD2 | 1.83 | 0.60 |
| 1:GB:543:TYR:CB | 1:GB:638:VAL:HG22 | 2.32 | 0.60 |
| 1:H:388:ILE:CA | 1:H:457:VAL:HG23 | 2.32 | 0.60 |
| 1:HA:806:THR:HG22 | 1:HA:806:THR:O | 2.01 | 0.60 |
| 1:K:414:LEU:HD12 | 1:K:455:THR:OG1 | 2.00 | 0.60 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:LB:91:ARG:C | 1:LB:92:LEU:HD12 | 2.27 | 0.60 |
| 1:LB:126:LEU:C | 1:LB:127:LEU:HD22 | 2.27 | 0.60 |
| 1:NB:59:CYS:HB2 | 1:NB:109:ILE:HD13 | 1.83 | 0.60 |
| 1:PA:126:LEU:O | 1:PA:127:LEU:HD22 | 2.02 | 0.60 |
| 1:QA:229:LEU:HD12 | 1:QA:251:VAL:HG11 | 1.83 | 0.60 |
| 1:S:374:VAL:HG12 | 1:S:375:GLU:H | 1.66 | 0.60 |
| 1:SA:276:LEU:HD11 | 1:SA:282:CYS:HB2 | 1.84 | 0.60 |
| 1:UA:716:VAL:HG21 | 1:VA:708:GLU:CG | 2.31 | 0.60 |
| 1:V:802:ILE:CG2 | 1:V:807:ILE:HD11 | 2.31 | 0.60 |
| 1:VB:120:ALA:CB | 1:VB:205:LEU:HD21 | 2.31 | 0.60 |
| 1:AA:253:VAL:HG23 | 1:AA:254:GLN:OE1 | 2.02 | 0.60 |
| 1:AC:777:LEU:O | 1:AC:781:VAL:HG22 | 2.02 | 0.60 |
| 1:EB:91:ARG:C | 1:EB:92:LEU:HD12 | 2.27 | 0.60 |
| 1:F:704:LYS:HA | 1:F:707:LEU:HD12 | 1.82 | 0.60 |
| 1:FA:59:CYS:SG | 1:FA:109:ILE:HD13 | 2.42 | 0.60 |
| 1:FA:330:GLN:C | 1:FA:407:MET:HE1 | 2.26 | 0.60 |
| 1:G:549:VAL:HG12 | 1:G:552:ARG:NH1 | 2.16 | 0.60 |
| 1:HB:599:ILE:O | 1:HB:603:VAL:HG23 | 2.01 | 0.60 |
| 1:IA:227:LEU:O | 1:IA:251:VAL:HG22 | 2.01 | 0.60 |
| 1:JA:659:GLN:HA | 1:JA:662:ILE:HD12 | 1.83 | 0.60 |
| 1:L:25:VAL:HG21 | 1:L:78:THR:O | 2.02 | 0.60 |
| 1:N:326:LEU:HD11 | 1:N:332:LEU:HG | 1.83 | 0.60 |
| 1:O:368:SER:OG | 1:O:371:VAL:HG23 | 2.02 | 0.60 |
| 1:OA:173:ALA:HB3 | 1:OA:216:VAL:HG13 | 1.84 | 0.60 |
| 1:OB:15:TYR:HB3 | 1:OB:30:VAL:HG23 | 1.84 | 0.60 |
| 1:Q:123:LEU:HD23 | 1:Q:159:VAL:HG13 | 1.83 | 0.60 |
| 1:TA:176:LEU:HD21 | 1:TA:196:TRP:CD1 | 2.36 | 0.60 |
| 1:W:62:ALA:HA | 1:W:88:LEU:HD23 | 1.84 | 0.60 |
| 1:WB:542:ALA:O | 1:WB:638:VAL:HG22 | 2.02 | 0.60 |
| 1:WB:575:ILE:HG23 | 1:WB:603:VAL:HG11 | 1.84 | 0.60 |
| 1:XB:3:THR:HG21 | 1:XB:8:ILE:HD11 | 1.84 | 0.60 |
| 1:XB:790:VAL:HG22 | 1:YB:785:GLN:CD | 2.27 | 0.60 |
| 1:YB:6:PHE:HB3 | 1:YB:36:ILE:HG23 | 1.84 | 0.60 |
| 1:ZA:331:GLY:HA3 | 1:ZA:407:MET:HE1 | 1.83 | 0.60 |
| 1:ZA:522:PHE:HA | 1:ZA:544:ASN:HA | 1.83 | 0.60 |
| 1:A:81:VAL:HG13 | 1:A:83:LEU:HD11 | 1.84 | 0.60 |
| 1:BB:323:VAL:HG21 | 1:BB:364:GLU:OE2 | 2.00 | 0.60 |
| 1:CB:15:TYR:HB3 | 1:CB:30:VAL:HG23 | 1.84 | 0.60 |
| 1:D:529:ILE:CD1 | 1:D:583:VAL:HG21 | 2.23 | 0.60 |
| 1:F:227:LEU:HD12 | 1:F:228:HIS:H | 1.67 | 0.60 |
| 1:FA:788:ALA:O | 1:FA:792:VAL:HG23 | 2.02 | 0.60 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:FB:227:LEU:HD21 | 1:FB:229:LEU:HD21 | 1.84 | 0.60 |
| 1:FB:547:PHE:CE1 | 1:FB:633:LEU:HD13 | 2.37 | 0.60 |
| 1:GA:802:ILE:CG2 | 1:GA:807:ILE:HD11 | 2.32 | 0.60 |
| 1:H:468:VAL:HG22 | 1:H:515:CYS:HA | 1.83 | 0.60 |
| 1:HB:670:GLU:OE2 | 1:IB:660:LEU:HD13 | 2.02 | 0.60 |
| 1:IA:68:ASP:OD1 | 1:IA:74:LEU:HD12 | 2.02 | 0.60 |
| 1:J:88:LEU:HD22 | 1:J:106:GLU:OE2 | 2.02 | 0.60 |
| 1:LB:325:VAL:O | 1:LB:325:VAL:HG13 | 2.02 | 0.60 |
| 1:MB:579:VAL:O | 1:MB:583:VAL:HG12 | 2.01 | 0.60 |
| 1:NA:539:LEU:HD21 | 1:NA:541:LEU:HD21 | 1.84 | 0.60 |
| 1:O:114:VAL:HG23 | 1:O:150:THR:HB | 1.83 | 0.60 |
| 1:SA:460:TYR:CZ | 1:SA:462:VAL:HG22 | 2.36 | 0.60 |
| 1:UA:712:LEU:O | 1:UA:716:VAL:HG23 | 2.02 | 0.60 |
| 1:UB:468:VAL:HG22 | 1:UB:515:CYS:HB2 | 1.84 | 0.60 |
| 1:VA:579:VAL:O | 1:VA:583:VAL:HG12 | 2.01 | 0.60 |
| 1:W:77:VAL:HG23 | 1:W:78:THR:HG23 | 1.84 | 0.60 |
| 1:WA:487:VAL:O | 1:WA:487:VAL:HG13 | 2.02 | 0.60 |
| 1:XA:570:ASP:HA | 1:XA:574:ALA:HB3 | 1.84 | 0.60 |
| 1:XB:543:TYR:HA | 1:XB:638:VAL:HG22 | 1.84 | 0.60 |
| 1:Y:227:LEU:HD21 | 1:Y:229:LEU:HD21 | 1.82 | 0.60 |
| 1:AB:575:ILE:HD11 | 1:AB:635:VAL:HG21 | 1.83 | 0.59 |
| 1:AC:175:ARG:HA | 1:AC:197:LEU:HD23 | 1.84 | 0.59 |
| 1:BB:279:HIS:O | 1:BB:323:VAL:HG13 | 2.02 | 0.59 |
| 1:E:63:ASN:HD21 | 1:E:83:LEU:HD23 | 1.65 | 0.59 |
| 1:E:91:ARG:O | 1:E:92:LEU:HD22 | 2.01 | 0.59 |
| 1:FB:17:HIS:HB2 | 1:FB:44:LEU:HD12 | 1.83 | 0.59 |
| 1:HA:221:LEU:HD13 | 1:HA:252:THR:C | 2.26 | 0.59 |
| 1:J:112:LEU:HD21 | 1:J:151:TYR:O | 2.02 | 0.59 |
| 1:J:276:LEU:HD13 | 1:J:281:TYR:HA | 1.82 | 0.59 |
| 1:N:398:VAL:HG12 | 1:N:491:PRO:HB3 | 1.83 | 0.59 |
| 1:OA:173:ALA:HB3 | 1:OA:260:VAL:HG21 | 1.84 | 0.59 |
| 1:P:380:ILE:HD11 | 1:P:408:LEU:HB2 | 1.83 | 0.59 |
| 1:PA:16:ILE:HD11 | 1:PA:47:PRO:HG3 | 1.84 | 0.59 |
| 1:PB:174:LEU:HD12 | 1:PB:214:ASP:O | 2.01 | 0.59 |
| 1:QA:680:LEU:HD22 | 1:RA:672:ALA:HB2 | 1.84 | 0.59 |
| 1:QB:539:LEU:HD11 | 1:QB:541:LEU:HD21 | 1.83 | 0.59 |
| 1:RA:168:ILE:HD11 | 1:RA:200:THR:O | 2.02 | 0.59 |
| 1:RB:9:ARG:CB | 1:RB:34:THR:HG22 | 2.32 | 0.59 |
| 1:SA:201:VAL:HG12 | 1:TA:191:VAL:HG21 | 1.84 | 0.59 |
| 1:T:758:GLU:O | 1:T:762:VAL:HG22 | 2.02 | 0.59 |
| 1:VB:18:VAL:HG12 | 1:VB:43:VAL:HA | 1.84 | 0.59 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:YA:531:THR:HG23 | 1:YA:537:LEU:CD1 | 2.32 | 0.59 |
| 1:YB:380:ILE:H | 1:YB:380:ILE:HD12 | 1.67 | 0.59 |
| 1:EA:77:VAL:HG13 | 1:EA:82:ARG:NH1 | 2.17 | 0.59 |
| 1:FA:114:VAL:HG23 | 1:FA:149:GLY:O | 2.01 | 0.59 |
| 1:I:126:LEU:C | 1:I:127:LEU:HD22 | 2.27 | 0.59 |
| 1:KB:227:LEU:HB2 | 1:KB:270:VAL:HG22 | 1.82 | 0.59 |
| 1:L:168:ILE:HD11 | 1:L:204:TYR:HB2 | 1.83 | 0.59 |
| 1:N:790:VAL:HG22 | 1:O:785:GLN:HG2 | 1.84 | 0.59 |
| 1:O:390:VAL:HG22 | 1:O:399:ARG:O | 2.02 | 0.59 |
| 1:OA:131:ASP:HB3 | 1:OA:137:VAL:HG21 | 1.84 | 0.59 |
| 1:PB:126:LEU:C | 1:PB:127:LEU:HD22 | 2.27 | 0.59 |
| 1:R:531:THR:HG21 | 1:R:588:PHE:CB | 2.32 | 0.59 |
| 1:UA:198:VAL:HG11 | 1:UA:204:TYR:CD2 | 2.37 | 0.59 |
| 1:VA:407:MET:HE2 | 1:VA:407:MET:N | 2.17 | 0.59 |
| 1:W:198:VAL:HG21 | 1:W:204:TYR:CE1 | 2.38 | 0.59 |
| 1:WA:533:ASP:OD2 | 1:WA:535:ALA:HB3 | 2.02 | 0.59 |
| 1:XA:26:SER:HG | 1:XA:80:GLN:CD | 2.09 | 0.59 |
| 1:XA:173:ALA:CB | 1:XA:197:LEU:HD23 | 2.32 | 0.59 |
| 1:XA:582:ALA:HB2 | 1:XA:602:ALA:HB3 | 1.84 | 0.59 |
| 1:XB:115:VAL:HG22 | 1:XB:149:GLY:O | 2.02 | 0.59 |
| 1:Y:228:HIS:CE1 | 1:Y:268:LEU:HD22 | 2.36 | 0.59 |
| 1:YB:623:ARG:NE | 1:YB:627:VAL:HG13 | 2.17 | 0.59 |
| 1:ZA:8:ILE:H | 1:ZA:8:ILE:HD12 | 1.67 | 0.59 |
| 1:ZB:227:LEU:HD11 | 1:ZB:267:VAL:HG23 | 1.84 | 0.59 |
| 1:AB:221:LEU:HB2 | 1:AB:253:VAL:HG22 | 1.83 | 0.59 |
| 1:D:489:LEU:HD11 | 1:D:495:PHE:CE2 | 2.37 | 0.59 |
| 1:FA:17:HIS:CB | 1:FA:44:LEU:HD22 | 2.32 | 0.59 |
| 1:GA:60:THR:HG22 | 1:GA:90:ILE:CG1 | 2.33 | 0.59 |
| 1:HA:756:GLU:OE1 | 1:HA:759:LEU:HD12 | 2.01 | 0.59 |
| 1:J:410:GLN:O | 1:J:411:ASP:OD1 | 2.19 | 0.59 |
| 1:K:60:THR:HB | 1:K:90:ILE:HG13 | 1.84 | 0.59 |
| 1:KA:405:THR:HG21 | 1:LA:393:VAL:O | 2.03 | 0.59 |
| 1:KB:284:ILE:HD12 | 1:KB:287:PRO:HB3 | 1.84 | 0.59 |
| 1:LA:36:ILE:O | 1:LA:36:ILE:HG23 | 2.03 | 0.59 |
| 1:LA:120:ALA:CB | 1:LA:205:LEU:HD21 | 2.32 | 0.59 |
| 1:LB:122:HIS:CD2 | 1:LB:208:VAL:HG12 | 2.37 | 0.59 |
| 1:MA:772:TYR:HD1 | 1:NA:770:LEU:HD11 | 1.67 | 0.59 |
| 1:PA:580:ARG:HA | 1:PA:583:VAL:HG12 | 1.85 | 0.59 |
| 1:PB:10:ILE:HD13 | 1:PB:29:GLU:HG3 | 1.83 | 0.59 |
| 1:R:772:TYR:CD1 | 1:S:770:LEU:HD11 | 2.37 | 0.59 |
| 1:TA:81:VAL:HG21 | 1:TA:101:PRO:HD2 | 1.83 | 0.59 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UB:221:LEU:HD11 | 1:UB:251:VAL:HG23 | 1.85 | 0.59 |
| 1:UB:525:ASP:HB3 | 1:UB:541:LEU:HD21 | 1.84 | 0.59 |
| 1:W:767:GLU:HA | 1:W:770:LEU:HD12 | 1.82 | 0.59 |
| 1:XB:65:VAL:HG23 | 1:XB:67:ARG:HG3 | 1.85 | 0.59 |
| 1:YB:115:VAL:HG13 | 1:YB:121:LEU:HD23 | 1.85 | 0.59 |
| 1:ZB:388:ILE:N | 1:ZB:457:VAL:HG23 | 2.18 | 0.59 |
| 1:BA:283:VAL:HG11 | 1:BA:318:GLN:HE21 | 1.67 | 0.59 |
| 1:CB:529:ILE:HB | 1:CB:583:VAL:HG11 | 1.83 | 0.59 |
| 1:G:223:GLU:HG3 | 1:G:253:VAL:HG21 | 1.85 | 0.59 |
| 1:H:126:LEU:C | 1:H:127:LEU:HD22 | 2.28 | 0.59 |
| 1:J:9:ARG:CB | 1:J:34:THR:HG22 | 2.32 | 0.59 |
| 1:JB:626:ALA:HB3 | 1:JB:635:VAL:HB | 1.84 | 0.59 |
| 1:K:531:THR:HA | 1:K:583:VAL:HG22 | 1.83 | 0.59 |
| 1:N:526:VAL:HG22 | 1:N:540:GLN:HG3 | 1.84 | 0.59 |
| 1:O:531:THR:HG22 | 1:O:583:VAL:CG2 | 2.33 | 0.59 |
| 1:OB:549:VAL:HG11 | 1:OB:552:ARG:NE | 2.18 | 0.59 |
| 1:PA:340:LEU:HD11 | 1:PA:357:TRP:CZ2 | 2.37 | 0.59 |
| 1:RB:768:LEU:HD13 | 1:SB:759:LEU:HD22 | 1.85 | 0.59 |
| 1:S:516:LEU:HD11 | 1:S:547:PHE:CE1 | 2.38 | 0.59 |
| 1:SA:383:ASP:OD1 | 1:TA:398:VAL:HG23 | 2.03 | 0.59 |
| 1:TA:196:TRP:C | 1:TA:197:LEU:HD12 | 2.28 | 0.59 |
| 1:TA:458:VAL:HG12 | 1:TA:460:TYR:H | 1.66 | 0.59 |
| 1:WB:228:HIS:CE1 | 1:WB:268:LEU:HD22 | 2.37 | 0.59 |
| 1:X:65:VAL:HG11 | 1:X:100:TYR:CD2 | 2.38 | 0.59 |
| 1:YA:32:PRO:O | 1:ZA:78:THR:HG21 | 2.01 | 0.59 |
| 1:ZA:178:ALA:HB1 | 1:ZA:182:CYS:SG | 2.42 | 0.59 |
| 1:A:462:VAL:HG12 | 1:A:483:GLY:O | 2.03 | 0.59 |
| 1:A:750:ALA:HB2 | 1:B:741:VAL:HG22 | 1.85 | 0.59 |
| 1:C:331:GLY:N | 1:C:407:MET:HE1 | 2.17 | 0.59 |
| 1:D:3:THR:HG21 | 1:D:37:ARG:HB3 | 1.85 | 0.59 |
| 1:D:57:HIS:HB3 | 1:D:109:ILE:HG22 | 1.84 | 0.59 |
| 1:DA:144:LEU:CD1 | 1:DA:163:ILE:HD11 | 2.33 | 0.59 |
| 1:F:126:LEU:C | 1:F:127:LEU:HD22 | 2.28 | 0.59 |
| 1:F:804:PRO:HA | 1:F:807:ILE:HD12 | 1.83 | 0.59 |
| 1:FB:279:HIS:O | 1:FB:323:VAL:HG22 | 2.03 | 0.59 |
| 1:G:60:THR:HB | 1:G:88:LEU:HD21 | 1.84 | 0.59 |
| 1:I:29:GLU:O | 1:I:30:VAL:HG22 | 2.03 | 0.59 |
| 1:IA:662:ILE:HD12 | 1:JA:653:ALA:CB | 2.33 | 0.59 |
| 1:KA:393:VAL:HG22 | 1:KA:411:ASP:C | 2.27 | 0.59 |
| 1:KB:531:THR:HG23 | 1:KB:537:LEU:HD11 | 1.82 | 0.59 |
| 1:O:462:VAL:HG21 | 1:O:481:VAL:HG21 | 1.84 | 0.59 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OB:348:LYS:O | 1:OB:349:VAL:HG23 | 2.02 | 0.59 |
| 1:PA:197:LEU:HD21 | 1:PA:216:VAL:HG11 | 1.84 | 0.59 |
| 1:SB:332:LEU:HD23 | 1:SB:375:GLU:O | 2.03 | 0.59 |
| 1:SB:571:ALA:O | 1:SB:575:ILE:HD12 | 2.02 | 0.59 |
| 1:T:260:VAL:O | 1:T:260:VAL:HG13 | 2.03 | 0.59 |
| 1:TB:227:LEU:HD12 | 1:TB:228:HIS:H | 1.67 | 0.59 |
| 1:VA:165:ALA:HB3 | 1:VA:203:ALA:HB1 | 1.84 | 0.59 |
| 1:VB:749:GLN:OE1 | 1:WB:741:VAL:HG13 | 2.02 | 0.59 |
| 1:ZB:452:ARG:CZ | 1:ZB:458:VAL:HG22 | 2.33 | 0.59 |
| 1:AC:170:GLN:CD | 1:AC:201:VAL:HG22 | 2.28 | 0.59 |
| 1:BA:288:VAL:HG12 | 1:BA:294:ASN:HA | 1.85 | 0.59 |
| 1:D:176:LEU:HD21 | 1:D:196:TRP:NE1 | 2.18 | 0.59 |
| 1:D:529:ILE:HD12 | 1:D:583:VAL:CG2 | 2.26 | 0.59 |
| 1:DA:419:LEU:HD11 | 1:DA:458:VAL:HG21 | 1.84 | 0.59 |
| 1:F:758:GLU:O | 1:F:762:VAL:HG22 | 2.03 | 0.59 |
| 1:G:174:LEU:HD11 | 1:G:213:LEU:O | 2.03 | 0.59 |
| 1:H:742:LEU:HD11 | 1:H:746:LEU:HD21 | 1.83 | 0.59 |
| 1:IA:77:VAL:HG13 | 1:IA:82:ARG:NH1 | 2.18 | 0.59 |
| 1:J:122:HIS:ND1 | 1:J:160:VAL:HG11 | 2.18 | 0.59 |
| 1:KB:316:LEU:HD21 | 1:KB:319:GLY:C | 2.27 | 0.59 |
| 1:MB:3:THR:HG22 | 1:MB:6:PHE:CD1 | 2.37 | 0.59 |
| 1:MB:735:ILE:HD13 | 1:NB:727:GLU:HG2 | 1.84 | 0.59 |
| 1:OB:333:LEU:HD23 | 1:OB:374:VAL:CG1 | 2.32 | 0.59 |
| 1:P:549:VAL:CG2 | 1:P:561:LEU:HD11 | 2.33 | 0.59 |
| 1:PB:120:ALA:HB3 | 1:PB:205:LEU:HD21 | 1.84 | 0.59 |
| 1:QB:462:VAL:HG12 | 1:QB:483:GLY:O | 2.02 | 0.59 |
| 1:SA:391:GLN:HB2 | 1:SA:398:VAL:HG22 | 1.83 | 0.59 |
| 1:TA:516:LEU:HD13 | 1:TA:567:PHE:CZ | 2.38 | 0.59 |
| 1:UA:333:LEU:HD23 | 1:UA:374:VAL:HG11 | 1.85 | 0.59 |
| 1:UA:520:PRO:O | 1:VA:564:VAL:HG22 | 2.03 | 0.59 |
| 1:XB:176:LEU:HD21 | 1:XB:196:TRP:CD1 | 2.37 | 0.59 |
| 1:YB:388:ILE:CA | 1:YB:457:VAL:HG23 | 2.33 | 0.59 |
| 1:YB:497:VAL:HG22 | 1:YB:512:ARG:NH1 | 2.17 | 0.59 |
| 1:Z:30:VAL:HG23 | 1:Z:50:MET:SD | 2.42 | 0.59 |
| 1:ZA:543:TYR:CE2 | 1:ZA:638:VAL:HG13 | 2.38 | 0.59 |
| 1:ZB:690:ARG:HH22 | 1:ZB:694:LEU:HD11 | 1.67 | 0.59 |
| 1:AA:388:ILE:HD12 | 1:AA:414:LEU:CD2 | 2.33 | 0.59 |
| 1:B:662:ILE:HG21 | 1:C:653:ALA:HB1 | 1.85 | 0.59 |
| 1:CB:285:LEU:HD11 | 1:CB:317:GLU:HA | 1.85 | 0.59 |
| 1:D:767:GLU:HA | 1:D:770:LEU:HD12 | 1.85 | 0.59 |
| 1:E:603:VAL:HG21 | 1:E:638:VAL:HG11 | 1.85 | 0.59 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:K:60:THR:HG23 | 1:K:106:GLU:CD | 2.27 | 0.59 |
| 1:KA:316:LEU:HD12 | 1:KA:317:GLU:N | 2.18 | 0.59 |
| 1:KB:381:PRO:HA | 1:KB:405:THR:HG22 | 1.84 | 0.59 |
| 1:LA:65:VAL:HG13 | 1:LA:103:GLU:OE2 | 2.03 | 0.59 |
| 1:LB:462:VAL:HG12 | 1:LB:483:GLY:O | 2.03 | 0.59 |
| 1:N:283:VAL:HG22 | 1:N:301:VAL:HA | 1.85 | 0.59 |
| 1:NA:129:PHE:CZ | 1:NA:137:VAL:HG11 | 2.38 | 0.59 |
| 1:NA:388:ILE:CA | 1:NA:457:VAL:HG23 | 2.32 | 0.59 |
| 1:O:518:LEU:HD11 | 1:O:549:VAL:HG23 | 1.84 | 0.59 |
| 1:OB:6:PHE:O | 1:OB:7:ILE:HD13 | 2.02 | 0.59 |
| 1:OB:529:ILE:HD12 | 1:OB:583:VAL:HB | 1.84 | 0.59 |
| 1:P:13:TYR:HA | 1:P:50:MET:HE2 | 1.84 | 0.59 |
| 1:PA:543:TYR:CE1 | 1:PA:638:VAL:HG13 | 2.37 | 0.59 |
| 1:T:275:THR:HB | 1:V:296:LEU:HD22 | 1.84 | 0.59 |
| 1:W:233:ARG:HA | 1:W:245:THR:HG23 | 1.84 | 0.59 |
| 1:W:626:ALA:HB3 | 1:W:635:VAL:HB | 1.84 | 0.59 |
| 1:WA:599:ILE:HD13 | 1:WA:640:VAL:HG21 | 1.83 | 0.59 |
| 1:X:131:ASP:HB3 | 1:X:137:VAL:HG23 | 1.84 | 0.59 |
| 1:X:386:GLU:C | 1:X:402:ILE:HG23 | 2.28 | 0.59 |
| 1:XB:658:VAL:HG23 | 1:YB:533:ASP:CG | 2.28 | 0.59 |
| 1:Y:18:VAL:HG21 | 1:Y:41:GLU:OE1 | 2.03 | 0.59 |
| 1:YB:115:VAL:CG1 | 1:YB:121:LEU:HD23 | 2.33 | 0.59 |
| 1:YB:219:VAL:HG12 | 1:YB:259:HIS:O | 2.01 | 0.59 |
| 1:Z:87:ASP:C | 1:Z:88:LEU:HD12 | 2.27 | 0.59 |
| 1:Z:377:ARG:C | 1:Z:407:MET:HE3 | 2.28 | 0.59 |
| 1:A:334:LEU:HD12 | 1:A:357:TRP:NE1 | 2.18 | 0.59 |
| 1:BB:63:ASN:OD1 | 1:BB:83:LEU:HD23 | 2.02 | 0.59 |
| 1:DA:405:THR:HG23 | 1:EA:396:GLY:CA | 2.32 | 0.59 |
| 1:EA:410:GLN:O | 1:EA:411:ASP:OD1 | 2.20 | 0.59 |
| 1:EB:340:LEU:HD12 | 1:EB:351:HIS:ND1 | 2.17 | 0.59 |
| 1:FB:564:VAL:HG12 | 1:FB:565:PRO:O | 2.02 | 0.59 |
| 1:H:775:ALA:HB1 | 1:I:770:LEU:HD22 | 1.85 | 0.59 |
| 1:HA:227:LEU:HD13 | 1:HA:270:VAL:HG22 | 1.85 | 0.59 |
| 1:HB:69:ALA:HB3 | 1:HB:72:LEU:HB3 | 1.84 | 0.59 |
| 1:J:9:ARG:HB3 | 1:J:34:THR:HG22 | 1.85 | 0.59 |
| 1:KA:69:ALA:HB3 | 1:KA:72:LEU:HB3 | 1.84 | 0.59 |
| 1:KA:228:HIS:HA | 1:KA:250:LEU:HD23 | 1.83 | 0.59 |
| 1:KA:284:ILE:HD12 | 1:KA:287:PRO:HB3 | 1.84 | 0.59 |
| 1:L:73:VAL:HG21 | 1:L:100:TYR:CE2 | 2.38 | 0.59 |
| 1:LA:82:ARG:C | 1:LA:83:LEU:HD12 | 2.27 | 0.59 |
| 1:M:579:VAL:O | 1:M:583:VAL:HG12 | 2.03 | 0.59 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:M:772:TYR:CD1 | 1:N:770:LEU:HD11 | 2.38 | 0.59 |
| 1:NA:221:LEU:HD21 | 1:NA:251:VAL:HG23 | 1.84 | 0.59 |
| 1:NA:331:GLY:N | 1:NA:407:MET:HE1 | 2.18 | 0.59 |
| 1:OA:389:TYR:CZ | 1:OA:457:VAL:HG23 | 2.37 | 0.59 |
| 1:PA:67:ARG:HA | 1:PA:73:VAL:HG22 | 1.85 | 0.59 |
| 1:PA:786:GLN:NE2 | 1:QA:781:VAL:HG11 | 2.18 | 0.59 |
| 1:QA:230:ARG:NH1 | 1:QA:268:LEU:HD21 | 2.18 | 0.59 |
| 1:QA:601:THR:HG22 | 1:QA:622:PRO:HB3 | 1.84 | 0.59 |
| 1:QA:633:LEU:HD12 | 1:QA:634:VAL:H | 1.67 | 0.59 |
| 1:RA:144:LEU:HD22 | 1:RA:163:ILE:HD11 | 1.84 | 0.59 |
| 1:TA:417:LYS:NZ | 1:TA:419:LEU:HD21 | 2.17 | 0.59 |
| 1:TB:779:LEU:HD21 | 1:UB:774:ARG:CG | 2.33 | 0.59 |
| 1:VB:176:LEU:HD21 | 1:VB:196:TRP:CE2 | 2.38 | 0.59 |
| 1:VB:783:LYS:HA | 1:WB:781:VAL:HG11 | 1.83 | 0.59 |
| 1:W:325:VAL:O | 1:W:325:VAL:HG13 | 2.03 | 0.59 |
| 1:XB:688:LEU:HD13 | 1:YB:679:ARG:HG2 | 1.85 | 0.59 |
| 1:Y:743:GLN:HA | 1:Y:746:LEU:HD12 | 1.84 | 0.59 |
| 1:Z:377:ARG:O | 1:Z:407:MET:HE3 | 2.02 | 0.59 |
| 1:AA:787:LEU:HD21 | 1:BA:781:VAL:HG12 | 1.85 | 0.59 |
| 1:B:121:LEU:O | 1:B:121:LEU:HD12 | 2.03 | 0.59 |
| 1:CA:284:ILE:O | 1:CA:285:LEU:HD23 | 2.03 | 0.59 |
| 1:DA:498:LEU:HB2 | 1:DA:513:ALA:HB3 | 1.84 | 0.59 |
| 1:FA:284:ILE:HG23 | 1:FA:302:VAL:CG2 | 2.33 | 0.59 |
| 1:GA:126:LEU:C | 1:GA:127:LEU:HD22 | 2.27 | 0.59 |
| 1:IB:58:TYR:CE2 | 1:IB:112:LEU:HD11 | 2.38 | 0.59 |
| 1:JA:50:MET:HE3 | 1:JA:96:PRO:HB2 | 1.84 | 0.59 |
| 1:KB:122:HIS:CD2 | 1:KB:208:VAL:HG12 | 2.38 | 0.59 |
| 1:LA:564:VAL:HG11 | 1:LA:567:PHE:HA | 1.85 | 0.59 |
| 1:LB:458:VAL:HB | 1:LB:489:LEU:HD22 | 1.84 | 0.59 |
| 1:MB:582:ALA:O | 1:MB:586:VAL:HG22 | 2.03 | 0.59 |
| 1:N:232:ARG:HH12 | 1:N:267:VAL:HG23 | 1.68 | 0.59 |
| 1:NA:391:GLN:HB2 | 1:NA:398:VAL:HG22 | 1.85 | 0.59 |
| 1:OA:712:LEU:O | 1:OA:716:VAL:HG23 | 2.02 | 0.59 |
| 1:Q:62:ALA:O | 1:Q:104:VAL:HG13 | 2.03 | 0.59 |
| 1:Q:390:VAL:HG22 | 1:Q:399:ARG:O | 2.03 | 0.59 |
| 1:QA:458:VAL:HG12 | 1:QA:460:TYR:H | 1.68 | 0.59 |
| 1:RA:10:ILE:HG23 | 1:RA:47:PRO:HB3 | 1.83 | 0.59 |
| 1:RB:288:VAL:HG12 | 1:RB:294:ASN:N | 2.17 | 0.59 |
| 1:TA:283:VAL:HG22 | 1:TA:301:VAL:HG23 | 1.84 | 0.59 |
| 1:TB:530:GLU:O | 1:TB:583:VAL:HG22 | 2.02 | 0.59 |
| 1:UA:88:LEU:HD12 | 1:UA:155:LYS:HD2 | 1.84 | 0.59 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UB:230:ARG:HH22 | 1:UB:268:LEU:HD21 | 1.68 | 0.59 |
| 1:UB:628:PHE:HE2 | 1:UB:635:VAL:HG23 | 1.68 | 0.59 |
| 1:XB:173:ALA:HA | 1:XB:199:THR:HG22 | 1.85 | 0.59 |
| 1:YB:462:VAL:HG12 | 1:YB:466:ALA:HB3 | 1.85 | 0.59 |
| 1:ZA:338:GLN:HA | 1:ZA:353:ALA:HB2 | 1.83 | 0.59 |
| 1:AA:564:VAL:HG23 | 1:AA:631:ASN:HD21 | 1.68 | 0.59 |
| 1:AC:175:ARG:CA | 1:AC:197:LEU:HD23 | 2.33 | 0.59 |
| 1:BA:36:ILE:HG23 | 1:BA:36:ILE:O | 2.03 | 0.59 |
| 1:BA:273:ILE:O | 1:BA:273:ILE:HG23 | 2.03 | 0.59 |
| 1:BA:283:VAL:HG11 | 1:BA:318:GLN:HB2 | 1.85 | 0.59 |
| 1:D:732:ALA:HA | 1:D:735:ILE:HD12 | 1.85 | 0.59 |
| 1:DA:120:ALA:HB3 | 1:DA:205:LEU:HD21 | 1.85 | 0.59 |
| 1:E:536:ARG:HD2 | 1:E:646:VAL:HG21 | 1.85 | 0.59 |
| 1:EB:706:LEU:HD22 | 1:FB:693:ILE:HG23 | 1.84 | 0.59 |
| 1:HB:129:PHE:CE1 | 1:HB:137:VAL:HG11 | 2.38 | 0.59 |
| 1:JA:34:THR:HG23 | 1:KA:24:ASN:OD1 | 2.03 | 0.59 |
| 1:JB:122:HIS:CD2 | 1:JB:208:VAL:HG12 | 2.38 | 0.59 |
| 1:JB:416:GLU:OE1 | 1:JB:455:THR:HG23 | 2.02 | 0.59 |
| 1:L:228:HIS:HA | 1:L:250:LEU:HD23 | 1.84 | 0.59 |
| 1:OA:82:ARG:O | 1:OA:83:LEU:HD12 | 2.02 | 0.59 |
| 1:OB:332:LEU:HD23 | 1:OB:333:LEU:N | 2.18 | 0.59 |
| 1:OB:633:LEU:HD12 | 1:OB:634:VAL:H | 1.67 | 0.59 |
| 1:PA:469:GLN:NE2 | 1:PA:478:ALA:HB1 | 2.18 | 0.59 |
| 1:T:537:LEU:HD23 | 1:T:645:PRO:HA | 1.85 | 0.59 |
| 1:TA:65:VAL:HG11 | 1:TA:100:TYR:CB | 2.33 | 0.59 |
| 1:W:112:LEU:HD23 | 1:X:139:ALA:HB2 | 1.85 | 0.59 |
| 1:WA:66:SER:O | 1:WA:73:VAL:HG13 | 2.03 | 0.59 |
| 1:Z:331:GLY:N | 1:Z:407:MET:HE1 | 2.17 | 0.59 |
| 1:AB:580:ARG:HH21 | 1:ZA:643:VAL:HG22 | 1.68 | 0.58 |
| 1:AB:737:GLY:O | 1:AB:741:VAL:HG23 | 2.03 | 0.58 |
| 1:AB:764:LYS:O | 1:AB:768:LEU:HD23 | 2.03 | 0.58 |
| 1:AC:746:LEU:HD13 | 1:OA:737:GLY:HA3 | 1.84 | 0.58 |
| 1:B:392:ASP:OD2 | 1:B:395:THR:HG22 | 2.03 | 0.58 |
| 1:BA:197:LEU:CD1 | 1:BA:263:VAL:HG13 | 2.33 | 0.58 |
| 1:CB:413:VAL:HG22 | 1:CB:414:LEU:H | 1.67 | 0.58 |
| 1:D:537:LEU:HD13 | 1:D:644:GLU:C | 2.28 | 0.58 |
| 1:DA:60:THR:HB | 1:DA:88:LEU:HD21 | 1.85 | 0.58 |
| 1:E:179:ARG:HE | 1:E:209:PHE:HA | 1.68 | 0.58 |
| 1:G:288:VAL:HG12 | 1:G:294:ASN:N | 2.17 | 0.58 |
| 1:GB:468:VAL:HG22 | 1:GB:515:CYS:HA | 1.85 | 0.58 |
| 1:JB:72:LEU:HD23 | 1:JB:73:VAL:N | 2.18 | 0.58 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:KB:62:ALA:HA | 1:KB:88:LEU:HD23 | 1.85 | 0.58 |
| 1:L:373:VAL:O | 1:L:373:VAL:HG13 | 2.03 | 0.58 |
| 1:OB:392:ASP:OD2 | 1:OB:395:THR:HG22 | 2.02 | 0.58 |
| 1:QB:18:VAL:CG1 | 1:QB:43:VAL:HG12 | 2.20 | 0.58 |
| 1:QB:405:THR:HG21 | 1:RB:393:VAL:O | 2.04 | 0.58 |
| 1:R:807:ILE:HG22 | 1:R:807:ILE:O | 2.02 | 0.58 |
| 1:SA:788:ALA:O | 1:SA:792:VAL:HG23 | 2.02 | 0.58 |
| 1:SB:55:PRO:O | 1:SB:56:ARG:HD3 | 2.03 | 0.58 |
| 1:W:768:LEU:HD11 | 1:X:763:GLN:HB2 | 1.85 | 0.58 |
| 1:Y:17:HIS:HD2 | 1:Y:28:VAL:HG23 | 1.67 | 0.58 |
| 1:Y:325:VAL:HG23 | 1:Y:364:GLU:HB2 | 1.85 | 0.58 |
| 1:Z:10:ILE:HG23 | 1:Z:16:ILE:HD12 | 1.85 | 0.58 |
| 1:AA:120:ALA:HB1 | 1:AA:145:PHE:O | 2.03 | 0.58 |
| 1:AA:580:ARG:O | 1:AA:583:VAL:HG12 | 2.03 | 0.58 |
| 1:AB:227:LEU:HD12 | 1:AB:228:HIS:H | 1.67 | 0.58 |
| 1:AC:785:GLN:CG | 1:ZB:790:VAL:HG21 | 2.32 | 0.58 |
| 1:B:418:GLU:C | 1:B:419:LEU:HD12 | 2.28 | 0.58 |
| 1:CB:398:VAL:HG11 | 1:CB:415:TRP:CE3 | 2.38 | 0.58 |
| 1:D:56:ARG:NH2 | 1:E:127:LEU:HD21 | 2.17 | 0.58 |
| 1:D:175:ARG:HA | 1:D:197:LEU:HD23 | 1.84 | 0.58 |
| 1:EA:77:VAL:HG13 | 1:EA:82:ARG:HH12 | 1.68 | 0.58 |
| 1:FA:389:TYR:CE1 | 1:FA:457:VAL:HG22 | 2.38 | 0.58 |
| 1:IB:168:ILE:HG22 | 1:IB:215:LEU:HD11 | 1.85 | 0.58 |
| 1:J:34:THR:HG23 | 1:K:24:ASN:OD1 | 2.03 | 0.58 |
| 1:MB:25:VAL:HG21 | 1:MB:78:THR:O | 2.02 | 0.58 |
| 1:NB:13:TYR:HA | 1:NB:50:MET:HE2 | 1.85 | 0.58 |
| 1:NB:794:LYS:HE3 | 1:NB:798:MET:HE3 | 1.84 | 0.58 |
| 1:OA:231:ALA:HB1 | 1:OA:235:PHE:HE1 | 1.68 | 0.58 |
| 1:OA:325:VAL:HG11 | 1:PA:335:ARG:HH12 | 1.68 | 0.58 |
| 1:OB:340:LEU:HD12 | 1:OB:351:HIS:ND1 | 2.18 | 0.58 |
| 1:P:679:ARG:NH1 | 1:P:680:LEU:HD23 | 2.18 | 0.58 |
| 1:PB:471:TYR:CD2 | 1:PB:478:ALA:HB2 | 2.38 | 0.58 |
| 1:Q:17:HIS:CD2 | 1:Q:28:VAL:HG23 | 2.38 | 0.58 |
| 1:Q:468:VAL:HG22 | 1:Q:515:CYS:HA | 1.85 | 0.58 |
| 1:QA:19:LEU:HB2 | 1:QA:44:LEU:HD21 | 1.85 | 0.58 |
| 1:RA:3:THR:HG23 | 1:RA:42:ARG:C | 2.28 | 0.58 |
| 1:RA:168:ILE:HD11 | 1:RA:200:THR:C | 2.28 | 0.58 |
| 1:S:802:ILE:CG2 | 1:S:807:ILE:HD11 | 2.33 | 0.58 |
| 1:SA:424:GLU:HB2 | 1:SA:514:LEU:HD12 | 1.85 | 0.58 |
| 1:SB:468:VAL:O | 1:SB:481:VAL:HG22 | 2.03 | 0.58 |
| 1:TB:759:LEU:HA | 1:TB:762:VAL:HG22 | 1.84 | 0.58 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UB:768:LEU:HD11 | 1:VB:763:GLN:HB2 | 1.83 | 0.58 |
| 1:XB:756:GLU:HA | 1:XB:759:LEU:HD12 | 1.85 | 0.58 |
| 1:Y:538:GLN:HG2 | 1:Y:646:VAL:HG22 | 1.85 | 0.58 |
| 1:YA:121:LEU:HD11 | 1:YA:151:TYR:CD2 | 2.37 | 0.58 |
| 1:AC:539:LEU:HD13 | 1:AC:643:VAL:HG12 | 1.83 | 0.58 |
| 1:B:9:ARG:HG3 | 1:B:34:THR:HG23 | 1.85 | 0.58 |
| 1:BA:398:VAL:HG11 | 1:BA:415:TRP:CE3 | 2.37 | 0.58 |
| 1:CA:767:GLU:HA | 1:CA:770:LEU:HD12 | 1.84 | 0.58 |
| 1:D:65:VAL:HG13 | 1:D:103:GLU:CD | 2.28 | 0.58 |
| 1:D:227:LEU:O | 1:D:251:VAL:HG22 | 2.03 | 0.58 |
| 1:DB:529:ILE:HD12 | 1:DB:583:VAL:HG21 | 1.84 | 0.58 |
| 1:F:112:LEU:HD23 | 1:F:150:THR:HG21 | 1.84 | 0.58 |
| 1:FB:332:LEU:HD23 | 1:FB:333:LEU:N | 2.19 | 0.58 |
| 1:G:334:LEU:HD21 | 1:G:359:ILE:HG22 | 1.83 | 0.58 |
| 1:I:129:PHE:CE1 | 1:I:137:VAL:HG11 | 2.38 | 0.58 |
| 1:IA:547:PHE:CZ | 1:IA:633:LEU:HD13 | 2.38 | 0.58 |
| 1:JB:415:TRP:C | 1:JB:455:THR:HG22 | 2.28 | 0.58 |
| 1:KB:333:LEU:HD12 | 1:KB:334:LEU:H | 1.67 | 0.58 |
| 1:M:65:VAL:HG11 | 1:M:100:TYR:HB2 | 1.85 | 0.58 |
| 1:MB:276:LEU:HD13 | 1:MB:281:TYR:HA | 1.85 | 0.58 |
| 1:MB:381:PRO:HA | 1:MB:405:THR:HG22 | 1.83 | 0.58 |
| 1:O:538:GLN:C | 1:O:539:LEU:HD22 | 2.28 | 0.58 |
| 1:O:546:HIS:NE2 | 1:O:634:VAL:HG11 | 2.18 | 0.58 |
| 1:OA:579:VAL:CG2 | 1:OA:603:VAL:HG22 | 2.33 | 0.58 |
| 1:PA:174:LEU:HD23 | 1:PA:175:ARG:O | 2.02 | 0.58 |
| 1:RA:173:ALA:HB3 | 1:RA:260:VAL:HG21 | 1.84 | 0.58 |
| 1:RA:392:ASP:OD2 | 1:RA:395:THR:HG22 | 2.04 | 0.58 |
| 1:RB:128:ASP:OD2 | 1:RB:138:VAL:HG12 | 2.03 | 0.58 |
| 1:UB:282:CYS:O | 1:UB:301:VAL:HG23 | 2.02 | 0.58 |
| 1:VA:529:ILE:HD12 | 1:VA:583:VAL:HG21 | 1.84 | 0.58 |
| 1:X:230:ARG:CZ | 1:X:268:LEU:HD21 | 2.33 | 0.58 |
| 1:X:382:LEU:HD11 | 1:X:388:ILE:HG12 | 1.85 | 0.58 |
| 1:YB:104:VAL:HG22 | 1:YB:105:LEU:H | 1.67 | 0.58 |
| 1:AC:340:LEU:HD23 | 1:AC:370:LYS:HB2 | 1.85 | 0.58 |
| 1:CA:401:VAL:O | 1:CA:401:VAL:HG23 | 2.02 | 0.58 |
| 1:FB:90:ILE:HD11 | 1:FB:155:LYS:H | 1.68 | 0.58 |
| 1:GB:640:VAL:HG12 | 1:HB:580:ARG:HD3 | 1.84 | 0.58 |
| 1:HA:176:LEU:HD21 | 1:HA:196:TRP:CD1 | 2.37 | 0.58 |
| 1:IA:424:GLU:HA | 1:IA:427:LEU:HD12 | 1.83 | 0.58 |
| 1:IB:175:ARG:CA | 1:IB:197:LEU:HD23 | 2.32 | 0.58 |
| 1:J:482:PHE:CE1 | 1:J:549:VAL:HG21 | 2.38 | 0.58 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:K:389:TYR:CE1 | 1:K:457:VAL:HG22 | 2.38 | 0.58 |
| 1:L:388:ILE:HG22 | 1:L:456:ARG:HA | 1.85 | 0.58 |
| 1:MB:126:LEU:C | 1:MB:127:LEU:HD22 | 2.27 | 0.58 |
| 1:MB:388:ILE:CA | 1:MB:457:VAL:HG23 | 2.33 | 0.58 |
| 1:OB:53:VAL:HG12 | 1:OB:93:ALA:HA | 1.85 | 0.58 |
| 1:P:17:HIS:CD2 | 1:P:28:VAL:HG22 | 2.37 | 0.58 |
| 1:P:549:VAL:HG21 | 1:P:561:LEU:HD11 | 1.85 | 0.58 |
| 1:PA:658:VAL:CG2 | 1:QA:535:ALA:HB2 | 2.31 | 0.58 |
| 1:R:73:VAL:HG12 | 1:R:74:LEU:N | 2.17 | 0.58 |
| 1:RA:334:LEU:HD13 | 1:RA:359:ILE:HG22 | 1.84 | 0.58 |
| 1:S:786:GLN:HB2 | 1:T:781:VAL:HG11 | 1.83 | 0.58 |
| 1:SB:405:THR:HG23 | 1:TB:396:GLY:HA3 | 1.84 | 0.58 |
| 1:TA:333:LEU:HD23 | 1:TA:374:VAL:HG11 | 1.84 | 0.58 |
| 1:TA:358:LEU:HD21 | 1:TA:407:MET:HE1 | 1.86 | 0.58 |
| 1:UA:53:VAL:HG22 | 1:UA:109:ILE:HD11 | 1.85 | 0.58 |
| 1:YB:168:ILE:HG22 | 1:YB:215:LEU:CD1 | 2.34 | 0.58 |
| 1:ZB:708:GLU:O | 1:ZB:711:ALA:HB3 | 2.03 | 0.58 |
| 1:AA:495:PHE:CG | 1:AA:514:LEU:HD11 | 2.38 | 0.58 |
| 1:C:126:LEU:C | 1:C:127:LEU:HD22 | 2.28 | 0.58 |
| 1:CA:115:VAL:C | 1:CA:116:LEU:HD22 | 2.29 | 0.58 |
| 1:DB:382:LEU:HD22 | 1:DB:386:GLU:O | 2.04 | 0.58 |
| 1:DB:756:GLU:HA | 1:DB:759:LEU:HD12 | 1.84 | 0.58 |
| 1:E:250:LEU:HD13 | 1:E:271:VAL:HG11 | 1.85 | 0.58 |
| 1:EB:165:ALA:O | 1:EB:203:ALA:HB1 | 2.04 | 0.58 |
| 1:F:579:VAL:O | 1:F:583:VAL:HG12 | 2.03 | 0.58 |
| 1:FB:772:TYR:CD1 | 1:GB:770:LEU:HD11 | 2.38 | 0.58 |
| 1:GB:7:ILE:HG22 | 1:GB:36:ILE:HD12 | 1.86 | 0.58 |
| 1:HA:126:LEU:C | 1:HA:127:LEU:HD22 | 2.29 | 0.58 |
| 1:J:122:HIS:HD2 | 1:J:208:VAL:HG12 | 1.68 | 0.58 |
| 1:J:395:THR:HG22 | 1:J:395:THR:O | 2.02 | 0.58 |
| 1:J:633:LEU:HD12 | 1:J:634:VAL:H | 1.67 | 0.58 |
| 1:K:122:HIS:CD2 | 1:K:208:VAL:HG12 | 2.39 | 0.58 |
| 1:LA:460:TYR:O | 1:LA:486:LEU:HD12 | 2.03 | 0.58 |
| 1:LB:497:VAL:HG22 | 1:LB:512:ARG:HH11 | 1.68 | 0.58 |
| 1:MA:220:ILE:O | 1:MA:221:LEU:HD22 | 2.03 | 0.58 |
| 1:N:383:ASP:OD1 | 1:O:398:VAL:HG23 | 2.03 | 0.58 |
| 1:NA:60:THR:HG22 | 1:NA:90:ILE:HG13 | 1.86 | 0.58 |
| 1:O:83:LEU:HD21 | 1:O:102:GLY:HA3 | 1.85 | 0.58 |
| 1:O:172:GLN:HB3 | 1:O:215:LEU:HD11 | 1.84 | 0.58 |
| 1:O:198:VAL:HG21 | 1:O:204:TYR:CE1 | 2.39 | 0.58 |
| 1:O:462:VAL:HG21 | 1:O:481:VAL:CG2 | 2.34 | 0.58 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OB:221:LEU:HD11 | 1:OB:251:VAL:HG23 | 1.85 | 0.58 |
| 1:PA:274:THR:HG21 | 1:PA:310:LEU:HD21 | 1.84 | 0.58 |
| 1:QB:349:VAL:O | 1:QB:349:VAL:HG12 | 2.03 | 0.58 |
| 1:S:229:LEU:HD11 | 1:S:251:VAL:HG13 | 1.85 | 0.58 |
| 1:SB:288:VAL:HG22 | 1:SB:314:GLU:OE2 | 2.02 | 0.58 |
| 1:TA:358:LEU:HD23 | 1:TA:409:THR:HA | 1.85 | 0.58 |
| 1:UB:405:THR:HG23 | 1:VB:396:GLY:CA | 2.33 | 0.58 |
| 1:WB:405:THR:HG23 | 1:XB:396:GLY:CA | 2.34 | 0.58 |
| 1:Y:599:ILE:O | 1:Y:603:VAL:HG23 | 2.04 | 0.58 |
| 1:YA:802:ILE:HG23 | 1:YA:803:GLY:N | 2.18 | 0.58 |
| 1:ZA:83:LEU:HD21 | 1:ZA:102:GLY:HA3 | 1.85 | 0.58 |
| 1:AA:580:ARG:HH12 | 1:Z:643:VAL:HG13 | 1.69 | 0.58 |
| 1:BA:284:ILE:HG22 | 1:BA:310:LEU:HD21 | 1.86 | 0.58 |
| 1:BA:377:ARG:CB | 1:BA:407:MET:HE3 | 2.31 | 0.58 |
| 1:EA:529:ILE:HB | 1:EA:583:VAL:HG21 | 1.85 | 0.58 |
| 1:F:643:VAL:HG13 | 1:G:580:ARG:HH12 | 1.69 | 0.58 |
| 1:FA:333:LEU:HD22 | 1:FA:377:ARG:NH1 | 2.19 | 0.58 |
| 1:GB:381:PRO:O | 1:GB:382:LEU:HD23 | 2.04 | 0.58 |
| 1:HA:69:ALA:HB2 | 1:HA:74:LEU:HD21 | 1.85 | 0.58 |
| 1:IA:126:LEU:C | 1:IA:127:LEU:HD22 | 2.28 | 0.58 |
| 1:JA:18:VAL:HG22 | 1:JA:27:ARG:O | 2.04 | 0.58 |
| 1:JA:81:VAL:HG13 | 1:JA:83:LEU:CD1 | 2.33 | 0.58 |
| 1:K:129:PHE:CE1 | 1:K:137:VAL:HG11 | 2.38 | 0.58 |
| 1:M:123:LEU:HD11 | 1:M:145:PHE:HB2 | 1.84 | 0.58 |
| 1:MA:168:ILE:HD11 | 1:MA:200:THR:O | 2.04 | 0.58 |
| 1:N:522:PHE:CE2 | 1:N:542:ALA:HB1 | 2.38 | 0.58 |
| 1:NB:575:ILE:HD13 | 1:NB:578:ARG:NH1 | 2.19 | 0.58 |
| 1:P:679:ARG:HH11 | 1:P:680:LEU:HD23 | 1.69 | 0.58 |
| 1:S:489:LEU:HD21 | 1:S:495:PHE:CE1 | 2.38 | 0.58 |
| 1:V:747:LYS:O | 1:V:751:LEU:HD23 | 2.03 | 0.58 |
| 1:VA:334:LEU:HD22 | 1:VA:371:VAL:CG1 | 2.33 | 0.58 |
| 1:VA:546:HIS:NE2 | 1:VA:634:VAL:HG11 | 2.18 | 0.58 |
| 1:WA:460:TYR:HE2 | 1:WA:462:VAL:HG22 | 1.67 | 0.58 |
| 1:WA:489:LEU:HD21 | 1:WA:495:PHE:CE2 | 2.39 | 0.58 |
| 1:Z:160:VAL:HG12 | 1:Z:161:GLU:H | 1.68 | 0.58 |
| 1:Z:174:LEU:HD21 | 1:Z:212:VAL:HG12 | 1.86 | 0.58 |
| 1:Z:279:HIS:C | 1:Z:323:VAL:HG22 | 2.28 | 0.58 |
| 1:AA:282:CYS:HB2 | 1:AA:316:LEU:HD11 | 1.85 | 0.58 |
| 1:AC:16:ILE:HG22 | 1:AC:17:HIS:N | 2.18 | 0.58 |
| 1:AC:461:ARG:HG2 | 1:AC:486:LEU:HD13 | 1.84 | 0.58 |
| 1:C:316:LEU:HD12 | 1:C:317:GLU:H | 1.69 | 0.58 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:C:643:VAL:HG13 | 1:D:580:ARG:HH12 | 1.69 | 0.58 |
| 1:C:758:GLU:O | 1:C:762:VAL:HG22 | 2.04 | 0.58 |
| 1:E:526:VAL:HG13 | 1:E:539:LEU:O | 2.03 | 0.58 |
| 1:EB:466:ALA:HB1 | 1:EB:515:CYS:SG | 2.44 | 0.58 |
| 1:H:527:ILE:HD11 | 1:H:539:LEU:HD23 | 1.86 | 0.58 |
| 1:HA:732:ALA:HA | 1:HA:735:ILE:HD12 | 1.84 | 0.58 |
| 1:HB:538:GLN:HB2 | 1:HB:646:VAL:HG23 | 1.85 | 0.58 |
| 1:IA:221:LEU:HD13 | 1:IA:252:THR:C | 2.29 | 0.58 |
| 1:JA:61:VAL:HG22 | 1:JA:89:GLU:O | 2.04 | 0.58 |
| 1:MA:7:ILE:HG21 | 1:OB:7:ILE:HD11 | 1.84 | 0.58 |
| 1:MB:325:VAL:HG11 | 1:NB:335:ARG:NH1 | 2.18 | 0.58 |
| 1:MB:798:MET:O | 1:MB:802:ILE:HG22 | 2.04 | 0.58 |
| 1:O:60:THR:HG22 | 1:O:90:ILE:HG13 | 1.85 | 0.58 |
| 1:OA:9:ARG:HB2 | 1:OA:34:THR:HG22 | 1.84 | 0.58 |
| 1:QB:388:ILE:N | 1:QB:457:VAL:HG23 | 2.18 | 0.58 |
| 1:SA:662:ILE:O | 1:SA:666:THR:HG23 | 2.04 | 0.58 |
| 1:TB:227:LEU:O | 1:TB:251:VAL:HG22 | 2.03 | 0.58 |
| 1:UA:527:ILE:HD12 | 1:UA:576:ALA:HA | 1.85 | 0.58 |
| 1:UB:377:ARG:C | 1:UB:407:MET:HE3 | 2.28 | 0.58 |
| 1:W:218:ALA:HB3 | 1:W:258:ALA:HB1 | 1.85 | 0.58 |
| 1:W:531:THR:HG21 | 1:W:588:PHE:HA | 1.85 | 0.58 |
| 1:XB:539:LEU:HD12 | 1:XB:642:SER:O | 2.04 | 0.58 |
| 1:A:761:ARG:HG3 | 1:B:755:THR:HG21 | 1.86 | 0.58 |
| 1:C:82:ARG:C | 1:C:83:LEU:HD12 | 2.29 | 0.58 |
| 1:CB:704:LYS:HA | 1:CB:707:LEU:HD12 | 1.86 | 0.58 |
| 1:D:122:HIS:ND1 | 1:D:160:VAL:HG11 | 2.19 | 0.58 |
| 1:DA:405:THR:HG21 | 1:EA:393:VAL:O | 2.03 | 0.58 |
| 1:DA:410:GLN:O | 1:DA:411:ASP:OD1 | 2.22 | 0.58 |
| 1:DB:221:LEU:HD22 | 1:DB:226:ALA:HA | 1.85 | 0.58 |
| 1:F:120:ALA:HB2 | 1:F:205:LEU:HD21 | 1.86 | 0.58 |
| 1:G:539:LEU:HD21 | 1:G:541:LEU:HD11 | 1.85 | 0.58 |
| 1:H:274:THR:HG21 | 1:H:310:LEU:HG | 1.85 | 0.58 |
| 1:HA:679:ARG:O | 1:HA:683:GLU:OE1 | 2.22 | 0.58 |
| 1:IB:81:VAL:HG13 | 1:IB:83:LEU:HD11 | 1.86 | 0.58 |
| 1:JA:60:THR:HG22 | 1:JA:90:ILE:CG1 | 2.34 | 0.58 |
| 1:JA:662:ILE:O | 1:JA:666:THR:HG23 | 2.03 | 0.58 |
| 1:M:419:LEU:HD13 | 1:M:423:VAL:HA | 1.84 | 0.58 |
| 1:MA:176:LEU:HD23 | 1:MA:196:TRP:O | 2.04 | 0.58 |
| 1:N:81:VAL:HG13 | 1:N:83:LEU:CD1 | 2.33 | 0.58 |
| 1:O:197:LEU:CD2 | 1:O:216:VAL:HG11 | 2.33 | 0.58 |
| 1:O:316:LEU:HD21 | 1:O:319:GLY:CA | 2.34 | 0.58 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OA:231:ALA:HB3 | 1:OA:244:ARG:O | 2.03 | 0.58 |
| 1:RA:777:LEU:O | 1:RA:781:VAL:HG22 | 2.04 | 0.58 |
| 1:SB:231:ALA:HB3 | 1:SB:246:GLY:N | 2.19 | 0.58 |
| 1:T:405:THR:HG23 | 1:V:396:GLY:CA | 2.34 | 0.58 |
| 1:TB:325:VAL:O | 1:TB:325:VAL:HG13 | 2.03 | 0.58 |
| 1:V:279:HIS:O | 1:V:323:VAL:HG13 | 2.02 | 0.58 |
| 1:W:143:TRP:HH2 | 1:W:157:VAL:HG22 | 1.69 | 0.58 |
| 1:X:115:VAL:HG13 | 1:X:121:LEU:HD12 | 1.86 | 0.58 |
| 1:X:643:VAL:O | 1:X:643:VAL:HG23 | 2.03 | 0.58 |
| 1:XB:74:LEU:HD13 | 1:XB:82:ARG:HH12 | 1.66 | 0.58 |
| 1:A:333:LEU:O | 1:A:334:LEU:HD23 | 2.04 | 0.58 |
| 1:AB:333:LEU:HD23 | 1:AB:374:VAL:HG11 | 1.86 | 0.58 |
| 1:AB:487:VAL:O | 1:AB:487:VAL:HG13 | 2.04 | 0.58 |
| 1:BB:382:LEU:HD11 | 1:BB:388:ILE:HG23 | 1.85 | 0.58 |
| 1:EA:325:VAL:HG22 | 1:FA:335:ARG:HH12 | 1.68 | 0.58 |
| 1:F:767:GLU:HA | 1:F:770:LEU:HD12 | 1.85 | 0.58 |
| 1:FA:405:THR:HG23 | 1:GA:396:GLY:N | 2.19 | 0.58 |
| 1:FA:640:VAL:HG12 | 1:GA:580:ARG:NH1 | 2.19 | 0.58 |
| 1:G:337:LEU:HD21 | 1:G:372:GLU:HB2 | 1.85 | 0.58 |
| 1:I:758:GLU:O | 1:I:762:VAL:HG22 | 2.04 | 0.58 |
| 1:IB:174:LEU:HD23 | 1:IB:175:ARG:O | 2.03 | 0.58 |
| 1:JB:176:LEU:HD23 | 1:JB:196:TRP:O | 2.04 | 0.58 |
| 1:K:3:THR:HG22 | 1:K:6:PHE:CD1 | 2.39 | 0.58 |
| 1:K:61:VAL:HG12 | 1:K:105:LEU:HA | 1.86 | 0.58 |
| 1:LB:112:LEU:HD23 | 1:LB:150:THR:HG21 | 1.84 | 0.58 |
| 1:N:227:LEU:HA | 1:N:270:VAL:HG22 | 1.86 | 0.58 |
| 1:P:232:ARG:HH12 | 1:P:267:VAL:HG23 | 1.69 | 0.58 |
| 1:PB:223:GLU:OE2 | 1:PB:253:VAL:HG21 | 2.04 | 0.58 |
| 1:QA:195:GLU:HB3 | 1:QA:263:VAL:HG11 | 1.86 | 0.58 |
| 1:R:468:VAL:HG22 | 1:R:515:CYS:HA | 1.85 | 0.58 |
| 1:RA:742:LEU:HD21 | 1:SA:734:ARG:HG3 | 1.85 | 0.58 |
| 1:SB:388:ILE:CA | 1:SB:457:VAL:HG23 | 2.33 | 0.58 |
| 1:SB:583:VAL:HG13 | 1:SB:584:ALA:H | 1.68 | 0.58 |
| 1:UA:716:VAL:HG11 | 1:VA:708:GLU:HA | 1.86 | 0.58 |
| 1:XA:405:THR:HG21 | 1:YA:393:VAL:O | 2.03 | 0.58 |
| 1:XB:587:THR:HG23 | 1:XB:590:ASP:H | 1.69 | 0.58 |
| 1:Z:59:CYS:HB3 | 1:Z:109:ILE:HD13 | 1.85 | 0.58 |
| 1:Z:415:TRP:C | 1:Z:455:THR:HG22 | 2.29 | 0.58 |
| 1:AA:126:LEU:C | 1:AA:127:LEU:HD22 | 2.29 | 0.58 |
| 1:AA:529:ILE:HG13 | 1:AA:583:VAL:HG21 | 1.86 | 0.58 |
| 1:AB:175:ARG:HH12 | 1:AB:213:LEU:HD23 | 1.67 | 0.58 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AC:276:LEU:HD21 | 1:AC:320:ILE:HG12 | 1.84 | 0.58 |
| 1:D:125:ALA:O | 1:D:126:LEU:HD23 | 2.04 | 0.58 |
| 1:DA:221:LEU:HD21 | 1:DA:251:VAL:HG23 | 1.86 | 0.58 |
| 1:G:388:ILE:CA | 1:G:457:VAL:HG23 | 2.34 | 0.58 |
| 1:G:539:LEU:CD1 | 1:G:643:VAL:HG12 | 2.33 | 0.58 |
| 1:GB:174:LEU:HD21 | 1:GB:212:VAL:HB | 1.86 | 0.58 |
| 1:IB:227:LEU:HD21 | 1:IB:229:LEU:HD21 | 1.86 | 0.58 |
| 1:J:121:LEU:O | 1:J:121:LEU:HD12 | 2.04 | 0.58 |
| 1:JA:25:VAL:HG21 | 1:JA:78:THR:O | 2.04 | 0.58 |
| 1:JA:114:VAL:HG23 | 1:JA:150:THR:HB | 1.86 | 0.58 |
| 1:KB:25:VAL:HG22 | 1:KB:78:THR:O | 2.04 | 0.58 |
| 1:KB:349:VAL:HG12 | 1:KB:349:VAL:O | 2.04 | 0.58 |
| 1:LB:497:VAL:C | 1:LB:498:LEU:HD22 | 2.29 | 0.58 |
| 1:M:389:TYR:CZ | 1:M:457:VAL:HG22 | 2.39 | 0.58 |
| 1:NB:3:THR:HG23 | 1:NB:43:VAL:HG23 | 1.86 | 0.58 |
| 1:PA:746:LEU:HD13 | 1:QA:737:GLY:CA | 2.34 | 0.58 |
| 1:PB:233:ARG:HA | 1:PB:245:THR:HG23 | 1.86 | 0.58 |
| 1:PB:539:LEU:HD21 | 1:PB:541:LEU:CD1 | 2.34 | 0.58 |
| 1:R:457:VAL:HG13 | 1:R:489:LEU:O | 2.04 | 0.58 |
| 1:SA:83:LEU:HD21 | 1:SA:102:GLY:HA3 | 1.86 | 0.58 |
| 1:T:541:LEU:HA | 1:T:640:VAL:HG22 | 1.86 | 0.58 |
| 1:UB:331:GLY:CA | 1:UB:407:MET:HE1 | 2.34 | 0.58 |
| 1:V:95:ASP:OD1 | 1:V:96:PRO:HD2 | 2.04 | 0.58 |
| 1:VA:583:VAL:HG23 | 1:VA:591:PHE:CD1 | 2.39 | 0.58 |
| 1:W:540:GLN:O | 1:W:541:LEU:HD23 | 2.04 | 0.58 |
| 1:X:176:LEU:HD22 | 1:X:198:VAL:HG12 | 1.85 | 0.58 |
| 1:X:388:ILE:HG22 | 1:X:456:ARG:HA | 1.86 | 0.58 |
| 1:Y:330:GLN:HA | 1:Y:376:GLU:OE2 | 2.04 | 0.58 |
| 1:AB:625:GLN:HB2 | 1:AB:634:VAL:HG13 | 1.84 | 0.57 |
| 1:AC:728:SER:OG | 1:OA:722:ALA:HB3 | 2.04 | 0.57 |
| 1:DA:333:LEU:HD23 | 1:DA:374:VAL:HG11 | 1.85 | 0.57 |
| 1:EB:120:ALA:HB2 | 1:EB:205:LEU:HD11 | 1.86 | 0.57 |
| 1:EB:575:ILE:HD13 | 1:EB:578:ARG:NH1 | 2.19 | 0.57 |
| 1:FB:28:VAL:O | 1:FB:28:VAL:HG13 | 2.03 | 0.57 |
| 1:GA:61:VAL:HA | 1:GA:105:LEU:HA | 1.86 | 0.57 |
| 1:MA:333:LEU:HD23 | 1:MA:374:VAL:HG11 | 1.85 | 0.57 |
| 1:OB:72:LEU:HD23 | 1:OB:73:VAL:O | 2.03 | 0.57 |
| 1:OB:529:ILE:HD12 | 1:OB:583:VAL:CB | 2.35 | 0.57 |
| 1:PB:168:ILE:HG22 | 1:PB:215:LEU:HD13 | 1.86 | 0.57 |
| 1:Q:172:GLN:CD | 1:Q:215:LEU:HD21 | 2.29 | 0.57 |
| 1:QB:575:ILE:O | 1:QB:579:VAL:HG23 | 2.02 | 0.57 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:S:176:LEU:HA | 1:S:213:LEU:HD13 | 1.84 | 0.57 |
| 1:S:761:ARG:O | 1:S:765:VAL:HG23 | 2.03 | 0.57 |
| 1:UA:168:ILE:HD12 | 1:UA:198:VAL:O | 2.04 | 0.57 |
| 1:UA:470:VAL:CG1 | 1:UA:481:VAL:HG21 | 2.24 | 0.57 |
| 1:UB:489:LEU:HD21 | 1:UB:495:PHE:HD1 | 1.69 | 0.57 |
| 1:VA:531:THR:HG22 | 1:VA:583:VAL:HG22 | 1.86 | 0.57 |
| 1:VA:541:LEU:HD11 | 1:VA:579:VAL:HG11 | 1.86 | 0.57 |
| 1:W:122:HIS:CE1 | 1:W:208:VAL:HG12 | 2.38 | 0.57 |
| 1:W:288:VAL:HG12 | 1:W:294:ASN:N | 2.19 | 0.57 |
| 1:WA:227:LEU:CD2 | 1:WA:229:LEU:HD21 | 2.34 | 0.57 |
| 1:X:706:LEU:HD13 | 1:Y:697:SER:HA | 1.85 | 0.57 |
| 1:YB:17:HIS:CD2 | 1:YB:28:VAL:HG23 | 2.39 | 0.57 |
| 1:AA:62:ALA:HA | 1:AA:88:LEU:HD23 | 1.86 | 0.57 |
| 1:AA:276:LEU:HD13 | 1:AA:281:TYR:HA | 1.86 | 0.57 |
| 1:AC:144:LEU:CB | 1:AC:163:ILE:HD11 | 2.34 | 0.57 |
| 1:BB:107:LYS:CE | 1:BB:110:THR:HG21 | 2.34 | 0.57 |
| 1:DA:212:VAL:O | 1:DA:212:VAL:HG23 | 2.04 | 0.57 |
| 1:FA:547:PHE:CD1 | 1:FA:633:LEU:HD13 | 2.40 | 0.57 |
| 1:G:549:VAL:HG12 | 1:G:552:ARG:HH11 | 1.68 | 0.57 |
| 1:HA:9:ARG:CB | 1:HA:34:THR:HG22 | 2.34 | 0.57 |
| 1:HB:790:VAL:HG22 | 1:IB:785:GLN:HG3 | 1.86 | 0.57 |
| 1:IB:168:ILE:HG22 | 1:IB:215:LEU:CD1 | 2.34 | 0.57 |
| 1:IB:368:SER:O | 1:IB:371:VAL:HG12 | 2.05 | 0.57 |
| 1:LA:227:LEU:HD12 | 1:LA:228:HIS:H | 1.68 | 0.57 |
| 1:M:53:VAL:HG23 | 1:M:94:GLN:H | 1.68 | 0.57 |
| 1:NA:65:VAL:HG11 | 1:NA:81:VAL:HG21 | 1.85 | 0.57 |
| 1:OB:16:ILE:HD11 | 1:OB:47:PRO:N | 2.20 | 0.57 |
| 1:Q:482:PHE:HE2 | 1:Q:549:VAL:HG21 | 1.68 | 0.57 |
| 1:QA:501:SER:OG | 1:QA:568:VAL:HG23 | 2.03 | 0.57 |
| 1:R:771:VAL:HG22 | 1:R:774:ARG:NH2 | 2.19 | 0.57 |
| 1:RA:198:VAL:HG21 | 1:RA:204:TYR:CZ | 2.40 | 0.57 |
| 1:SA:65:VAL:HG11 | 1:SA:100:TYR:HB2 | 1.86 | 0.57 |
| 1:T:83:LEU:HD11 | 1:T:102:GLY:HA3 | 1.86 | 0.57 |
| 1:VA:459:SER:HA | 1:VA:486:LEU:HD11 | 1.86 | 0.57 |
| 1:VA:533:ASP:OD2 | 1:VA:650:THR:HG23 | 2.03 | 0.57 |
| 1:W:462:VAL:HG21 | 1:W:481:VAL:HG21 | 1.86 | 0.57 |
| 1:WB:504:ARG:CD | 1:WB:526:VAL:HG23 | 2.34 | 0.57 |
| 1:WB:540:GLN:O | 1:WB:640:VAL:HG22 | 2.04 | 0.57 |
| 1:Y:168:ILE:HG21 | 1:Y:174:LEU:H | 1.69 | 0.57 |
| 1:Y:198:VAL:HG11 | 1:Y:204:TYR:CD2 | 2.39 | 0.57 |
| 1:YA:121:LEU:HD21 | 1:YA:151:TYR:CZ | 2.39 | 0.57 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:YA:405:THR:HG21 | 1:ZA:393:VAL:C | 2.29 | 0.57 |
| 1:YB:250:LEU:HD13 | 1:YB:271:VAL:HG21 | 1.85 | 0.57 |
| 1:YB:413:VAL:HG22 | 1:YB:414:LEU:H | 1.68 | 0.57 |
| 1:YB:423:VAL:HG22 | 1:YB:423:VAL:O | 2.04 | 0.57 |
| 1:Z:324:TYR:CG | 1:Z:332:LEU:HD11 | 2.38 | 0.57 |
| 1:B:758:GLU:O | 1:B:762:VAL:HG13 | 2.05 | 0.57 |
| 1:C:73:VAL:HG21 | 1:C:100:TYR:OH | 2.04 | 0.57 |
| 1:D:538:GLN:C | 1:D:539:LEU:HD22 | 2.29 | 0.57 |
| 1:DB:32:PRO:O | 1:EB:78:THR:HG21 | 2.05 | 0.57 |
| 1:DB:283:VAL:HG22 | 1:DB:301:VAL:HG23 | 1.86 | 0.57 |
| 1:EA:661:ALA:O | 1:EA:665:THR:HG23 | 2.04 | 0.57 |
| 1:EB:3:THR:HG23 | 1:EB:37:ARG:CB | 2.34 | 0.57 |
| 1:F:756:GLU:HA | 1:F:759:LEU:HD12 | 1.85 | 0.57 |
| 1:FA:122:HIS:CD2 | 1:FA:208:VAL:HG12 | 2.39 | 0.57 |
| 1:I:9:ARG:CB | 1:I:34:THR:HG22 | 2.35 | 0.57 |
| 1:I:276:LEU:HD13 | 1:I:281:TYR:HA | 1.85 | 0.57 |
| 1:IB:175:ARG:NH2 | 1:IB:263:VAL:HG13 | 2.19 | 0.57 |
| 1:JB:144:LEU:O | 1:JB:144:LEU:HD12 | 2.05 | 0.57 |
| 1:K:539:LEU:HD13 | 1:K:643:VAL:HG12 | 1.85 | 0.57 |
| 1:KA:388:ILE:HD11 | 1:KA:455:THR:OG1 | 2.04 | 0.57 |
| 1:LB:126:LEU:HD12 | 1:LB:155:LYS:O | 2.04 | 0.57 |
| 1:LB:175:ARG:HA | 1:LB:197:LEU:HD23 | 1.86 | 0.57 |
| 1:N:677:ALA:HA | 1:N:680:LEU:HD12 | 1.85 | 0.57 |
| 1:NB:398:VAL:HG11 | 1:NB:415:TRP:CE3 | 2.39 | 0.57 |
| 1:OA:539:LEU:HG | 1:OA:643:VAL:HG13 | 1.86 | 0.57 |
| 1:QA:470:VAL:HG22 | 1:QA:495:PHE:HB3 | 1.87 | 0.57 |
| 1:QB:529:ILE:HB | 1:QB:583:VAL:HG21 | 1.85 | 0.57 |
| 1:RA:36:ILE:HG23 | 1:RA:36:ILE:O | 2.03 | 0.57 |
| 1:RB:122:HIS:ND1 | 1:RB:160:VAL:HG21 | 2.20 | 0.57 |
| 1:RB:761:ARG:HD2 | 1:SB:751:LEU:HD12 | 1.85 | 0.57 |
| 1:V:286:ASP:CG | 1:V:296:LEU:HD23 | 2.30 | 0.57 |
| 1:VB:416:GLU:CG | 1:VB:455:THR:HG22 | 2.33 | 0.57 |
| 1:W:758:GLU:O | 1:W:762:VAL:HG22 | 2.04 | 0.57 |
| 1:WB:19:LEU:HB2 | 1:WB:44:LEU:HD21 | 1.85 | 0.57 |
| 1:WB:326:LEU:HD13 | 1:WB:331:GLY:HA2 | 1.86 | 0.57 |
| 1:YA:121:LEU:HD11 | 1:YA:151:TYR:CE2 | 2.39 | 0.57 |
| 1:YB:713:SER:HB3 | 1:ZB:707:LEU:HD12 | 1.85 | 0.57 |
| 1:ZA:83:LEU:HD21 | 1:ZA:102:GLY:CA | 2.34 | 0.57 |
| 1:ZA:219:VAL:HG11 | 1:ZA:227:LEU:CD2 | 2.34 | 0.57 |
| 1:AA:534:HIS:CG | 1:Z:654:LEU:HD22 | 2.40 | 0.57 |
| 1:BA:46:ALA:HB1 | 1:BA:47:PRO:CD | 2.35 | 0.57 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:BA:334:LEU:HD11 | 1:BA:359:ILE:HB | 1.86 | 0.57 |
| 1:D:30:VAL:HG21 | 1:D:50:MET:HE3 | 1.85 | 0.57 |
| 1:DA:69:ALA:HB3 | 1:DA:72:LEU:HB2 | 1.87 | 0.57 |
| 1:FA:232:ARG:O | 1:FA:245:THR:HG23 | 2.04 | 0.57 |
| 1:FB:405:THR:HG21 | 1:GB:393:VAL:O | 2.04 | 0.57 |
| 1:H:325:VAL:HG23 | 1:H:364:GLU:HB2 | 1.87 | 0.57 |
| 1:IA:294:ASN:O | 1:IA:296:LEU:HD22 | 2.05 | 0.57 |
| 1:K:90:ILE:HG22 | 1:K:91:ARG:N | 2.18 | 0.57 |
| 1:K:227:LEU:O | 1:K:251:VAL:HG22 | 2.04 | 0.57 |
| 1:LA:235:PHE:CD1 | 1:LA:264:HIS:HB3 | 2.40 | 0.57 |
| 1:LA:537:LEU:HD23 | 1:LA:645:PRO:HA | 1.86 | 0.57 |
| 1:LA:772:TYR:CE1 | 1:MA:770:LEU:HD21 | 2.39 | 0.57 |
| 1:LB:592:HIS:O | 1:MB:584:ALA:HB1 | 2.05 | 0.57 |
| 1:M:18:VAL:HG12 | 1:M:43:VAL:HA | 1.86 | 0.57 |
| 1:M:526:VAL:HG22 | 1:M:540:GLN:CD | 2.30 | 0.57 |
| 1:MB:8:ILE:H | 1:MB:8:ILE:HD12 | 1.69 | 0.57 |
| 1:MB:332:LEU:HD23 | 1:MB:333:LEU:O | 2.03 | 0.57 |
| 1:MB:337:LEU:HD12 | 1:MB:369:ALA:O | 2.04 | 0.57 |
| 1:O:497:VAL:C | 1:O:498:LEU:HD12 | 2.28 | 0.57 |
| 1:QA:358:LEU:HD23 | 1:QA:359:ILE:N | 2.18 | 0.57 |
| 1:QA:469:GLN:HB2 | 1:QA:480:VAL:HG22 | 1.86 | 0.57 |
| 1:RA:599:ILE:O | 1:RA:603:VAL:HG23 | 2.04 | 0.57 |
| 1:RB:388:ILE:HD11 | 1:RB:456:ARG:NH2 | 2.19 | 0.57 |
| 1:UA:543:TYR:CD2 | 1:UA:638:VAL:HG22 | 2.39 | 0.57 |
| 1:UB:746:LEU:HD13 | 1:VB:737:GLY:HA3 | 1.84 | 0.57 |
| 1:V:228:HIS:HA | 1:V:250:LEU:HD23 | 1.86 | 0.57 |
| 1:WB:768:LEU:HD11 | 1:XB:763:GLN:HB2 | 1.86 | 0.57 |
| 1:X:65:VAL:HB | 1:X:73:VAL:HG11 | 1.86 | 0.57 |
| 1:Y:537:LEU:HD23 | 1:Y:645:PRO:HA | 1.85 | 0.57 |
| 1:ZB:53:VAL:HG22 | 1:ZB:59:CYS:SG | 2.44 | 0.57 |
| 1:ZB:82:ARG:O | 1:ZB:83:LEU:HD12 | 2.04 | 0.57 |
| 1:C:9:ARG:HB3 | 1:C:34:THR:HG22 | 1.87 | 0.57 |
| 1:DA:336:ALA:HA | 1:DA:371:VAL:HG22 | 1.85 | 0.57 |
| 1:EA:539:LEU:HD11 | 1:EA:541:LEU:HD21 | 1.85 | 0.57 |
| 1:FA:408:LEU:HD22 | 1:FA:412:GLU:HB3 | 1.87 | 0.57 |
| 1:G:166:THR:HG21 | 1:G:174:LEU:HD22 | 1.85 | 0.57 |
| 1:GB:13:TYR:CA | 1:GB:50:MET:HE1 | 2.34 | 0.57 |
| 1:HA:121:LEU:HD12 | 1:HA:121:LEU:O | 2.05 | 0.57 |
| 1:IA:633:LEU:HD12 | 1:IA:634:VAL:H | 1.69 | 0.57 |
| 1:JB:16:ILE:HD11 | 1:JB:47:PRO:CD | 2.35 | 0.57 |
| 1:L:82:ARG:C | 1:L:83:LEU:HD12 | 2.29 | 0.57 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:LB:633:LEU:HD12 | 1:LB:634:VAL:H | 1.70 | 0.57 |
| 1:OB:334:LEU:HD21 | 1:OB:359:ILE:HG22 | 1.86 | 0.57 |
| 1:OB:732:ALA:HA | 1:OB:735:ILE:HD12 | 1.87 | 0.57 |
| 1:P:126:LEU:C | 1:P:127:LEU:HD22 | 2.29 | 0.57 |
| 1:P:338:GLN:O | 1:P:340:LEU:HD23 | 2.05 | 0.57 |
| 1:RB:54:PRO:HD2 | 1:RB:109:ILE:HD12 | 1.86 | 0.57 |
| 1:S:222:THR:O | 1:S:253:VAL:HG21 | 2.04 | 0.57 |
| 1:SA:212:VAL:O | 1:SA:212:VAL:HG23 | 2.04 | 0.57 |
| 1:TB:408:LEU:HD13 | 1:TB:412:GLU:O | 2.03 | 0.57 |
| 1:UB:500:LEU:HD12 | 1:UB:568:VAL:HG12 | 1.86 | 0.57 |
| 1:VA:417:LYS:HE3 | 1:VA:419:LEU:HD21 | 1.86 | 0.57 |
| 1:X:333:LEU:HB2 | 1:X:358:LEU:HD12 | 1.85 | 0.57 |
| 1:XA:390:VAL:O | 1:XA:390:VAL:HG23 | 2.04 | 0.57 |
| 1:AB:530:GLU:OE1 | 1:ZA:643:VAL:HG23 | 2.05 | 0.57 |
| 1:B:405:THR:HG23 | 1:C:396:GLY:CA | 2.34 | 0.57 |
| 1:BA:419:LEU:HD23 | 1:BA:494:GLN:NE2 | 2.19 | 0.57 |
| 1:D:172:GLN:OE1 | 1:D:215:LEU:HD21 | 2.04 | 0.57 |
| 1:DB:382:LEU:HD23 | 1:DB:386:GLU:CD | 2.30 | 0.57 |
| 1:G:51:VAL:HG21 | 1:G:105:LEU:HD13 | 1.85 | 0.57 |
| 1:J:8:ILE:H | 1:J:8:ILE:HD12 | 1.68 | 0.57 |
| 1:J:325:VAL:O | 1:J:325:VAL:HG13 | 2.04 | 0.57 |
| 1:KA:81:VAL:HG13 | 1:KA:83:LEU:CD1 | 2.35 | 0.57 |
| 1:LB:105:LEU:HD12 | 1:LB:106:GLU:N | 2.20 | 0.57 |
| 1:LB:579:VAL:O | 1:LB:583:VAL:HG12 | 2.05 | 0.57 |
| 1:LB:788:ALA:O | 1:LB:792:VAL:HG23 | 2.04 | 0.57 |
| 1:N:777:LEU:O | 1:N:781:VAL:HG22 | 2.05 | 0.57 |
| 1:O:63:ASN:HD21 | 1:O:83:LEU:HD23 | 1.69 | 0.57 |
| 1:OA:231:ALA:HB1 | 1:OA:235:PHE:CE1 | 2.40 | 0.57 |
| 1:OA:603:VAL:CG1 | 1:OA:638:VAL:HG21 | 2.34 | 0.57 |
| 1:PA:520:PRO:HA | 1:PA:545:TRP:O | 2.05 | 0.57 |
| 1:QA:661:ALA:O | 1:QA:665:THR:HG23 | 2.04 | 0.57 |
| 1:QA:777:LEU:O | 1:QA:781:VAL:HG22 | 2.04 | 0.57 |
| 1:SB:283:VAL:HG22 | 1:SB:301:VAL:HA | 1.85 | 0.57 |
| 1:UB:382:LEU:HD12 | 1:UB:406:TYR:N | 2.19 | 0.57 |
| 1:VA:398:VAL:HG21 | 1:VA:415:TRP:CE3 | 2.40 | 0.57 |
| 1:WA:523:PHE:CE1 | 1:WA:568:VAL:HG23 | 2.39 | 0.57 |
| 1:Y:233:ARG:HA | 1:Y:245:THR:HG23 | 1.85 | 0.57 |
| 1:YB:539:LEU:HD21 | 1:YB:541:LEU:HD21 | 1.87 | 0.57 |
| 1:A:173:ALA:O | 1:A:215:LEU:HD12 | 2.05 | 0.57 |
| 1:AA:332:LEU:HD23 | 1:AA:376:GLU:HB2 | 1.87 | 0.57 |
| 1:AC:598:ILE:O | 1:AC:602:ALA:HB3 | 2.03 | 0.57 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:B:88:LEU:HD22 | 1:B:106:GLU:OE2 | 2.05 | 0.57 |
| 1:B:333:LEU:HD23 | 1:B:374:VAL:HG11 | 1.86 | 0.57 |
| 1:B:339:PRO:HD3 | 1:B:353:ALA:HB2 | 1.85 | 0.57 |
| 1:C:390:VAL:O | 1:C:398:VAL:HG13 | 2.05 | 0.57 |
| 1:CB:16:ILE:HG23 | 1:CB:45:PHE:O | 2.04 | 0.57 |
| 1:F:276:LEU:HD13 | 1:F:281:TYR:HA | 1.86 | 0.57 |
| 1:HA:340:LEU:HD12 | 1:HA:351:HIS:ND1 | 2.20 | 0.57 |
| 1:I:115:VAL:HG21 | 1:I:145:PHE:CE2 | 2.39 | 0.57 |
| 1:KB:18:VAL:HG23 | 1:KB:27:ARG:HD3 | 1.85 | 0.57 |
| 1:LB:591:PHE:HE2 | 1:LB:643:VAL:HG11 | 1.70 | 0.57 |
| 1:MB:116:LEU:HB2 | 1:MB:119:THR:HG22 | 1.87 | 0.57 |
| 1:MB:640:VAL:HG12 | 1:NB:580:ARG:CD | 2.34 | 0.57 |
| 1:PA:335:ARG:HA | 1:PA:356:HIS:HA | 1.86 | 0.57 |
| 1:PB:284:ILE:HD12 | 1:PB:287:PRO:HB3 | 1.86 | 0.57 |
| 1:QA:27:ARG:HG2 | 1:QA:28:VAL:H | 1.68 | 0.57 |
| 1:QA:323:VAL:HG12 | 1:QA:366:VAL:HG22 | 1.86 | 0.57 |
| 1:QB:175:ARG:HA | 1:QB:197:LEU:HD23 | 1.85 | 0.57 |
| 1:TB:323:VAL:HG12 | 1:TB:366:VAL:HA | 1.85 | 0.57 |
| 1:WA:34:THR:HG21 | 1:XA:23:SER:HA | 1.87 | 0.57 |
| 1:XA:196:TRP:C | 1:XA:197:LEU:HD12 | 2.29 | 0.57 |
| 1:XA:325:VAL:HG11 | 1:YA:337:LEU:HD23 | 1.86 | 0.57 |
| 1:AA:223:GLU:OE1 | 1:AA:253:VAL:HG21 | 2.05 | 0.57 |
| 1:B:121:LEU:HD11 | 1:B:145:PHE:HB3 | 1.87 | 0.57 |
| 1:BB:542:ALA:O | 1:BB:638:VAL:HG13 | 2.04 | 0.57 |
| 1:CB:58:TYR:HD2 | 1:CB:112:LEU:HD13 | 1.69 | 0.57 |
| 1:D:662:ILE:O | 1:D:666:THR:HG23 | 2.04 | 0.57 |
| 1:DB:458:VAL:HB | 1:DB:489:LEU:HD12 | 1.86 | 0.57 |
| 1:E:91:ARG:C | 1:E:92:LEU:HD22 | 2.29 | 0.57 |
| 1:EB:579:VAL:O | 1:EB:583:VAL:HG12 | 2.04 | 0.57 |
| 1:FB:120:ALA:O | 1:FB:162:ILE:HG23 | 2.05 | 0.57 |
| 1:H:82:ARG:C | 1:H:83:LEU:HD12 | 2.30 | 0.57 |
| 1:HA:53:VAL:HG23 | 1:HA:97:PHE:HE1 | 1.70 | 0.57 |
| 1:I:767:GLU:O | 1:I:771:VAL:HG23 | 2.05 | 0.57 |
| 1:JB:751:LEU:HD13 | 1:JB:754:GLU:OE2 | 2.05 | 0.57 |
| 1:JB:798:MET:SD | 1:JB:799:THR:HG23 | 2.45 | 0.57 |
| 1:LA:65:VAL:HG13 | 1:LA:103:GLU:CD | 2.30 | 0.57 |
| 1:M:50:MET:HB2 | 1:M:96:PRO:HB3 | 1.87 | 0.57 |
| 1:M:83:LEU:HD21 | 1:M:102:GLY:HA3 | 1.87 | 0.57 |
| 1:MB:758:GLU:O | 1:MB:762:VAL:HG22 | 2.04 | 0.57 |
| 1:N:522:PHE:CZ | 1:N:542:ALA:HB1 | 2.40 | 0.57 |
| 1:P:531:THR:HG21 | 1:P:588:PHE:CA | 2.35 | 0.57 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:PB:626:ALA:HB3 | 1:PB:635:VAL:HB | 1.85 | 0.57 |
| 1:RB:531:THR:HG21 | 1:RB:588:PHE:HB2 | 1.86 | 0.57 |
| 1:RB:578:ARG:HB3 | 1:RB:603:VAL:HG22 | 1.87 | 0.57 |
| 1:S:340:LEU:HD12 | 1:S:351:HIS:ND1 | 2.19 | 0.57 |
| 1:SA:470:VAL:HG11 | 1:SA:489:LEU:HD22 | 1.87 | 0.57 |
| 1:SA:658:VAL:HG21 | 1:TA:532:ALA:O | 2.04 | 0.57 |
| 1:TB:9:ARG:CB | 1:TB:34:THR:HG22 | 2.35 | 0.57 |
| 1:VA:531:THR:CG2 | 1:VA:583:VAL:HG22 | 2.35 | 0.57 |
| 1:W:275:THR:HB | 1:X:296:LEU:HD23 | 1.87 | 0.57 |
| 1:WA:325:VAL:HG23 | 1:XA:353:ALA:HB1 | 1.87 | 0.57 |
| 1:X:52:THR:HG22 | 1:X:96:PRO:HA | 1.87 | 0.57 |
| 1:XA:381:PRO:HA | 1:XA:405:THR:HG22 | 1.87 | 0.57 |
| 1:XB:284:ILE:HD12 | 1:XB:287:PRO:HB3 | 1.87 | 0.57 |
| 1:YB:121:LEU:HA | 1:YB:162:ILE:HA | 1.87 | 0.57 |
| 1:ZA:172:GLN:HB3 | 1:ZA:215:LEU:HD11 | 1.86 | 0.57 |
| 1:ZB:115:VAL:HG11 | 1:ZB:121:LEU:HG | 1.86 | 0.57 |
| 1:AB:502:ALA:HB2 | 1:AB:510:ALA:HB3 | 1.86 | 0.57 |
| 1:AC:393:VAL:HG22 | 1:AC:411:ASP:O | 2.05 | 0.57 |
| 1:BA:691:GLN:HA | 1:BA:694:LEU:HD12 | 1.86 | 0.57 |
| 1:C:325:VAL:O | 1:C:325:VAL:HG13 | 2.05 | 0.57 |
| 1:C:626:ALA:HB3 | 1:C:635:VAL:HB | 1.86 | 0.57 |
| 1:DB:539:LEU:HB3 | 1:DB:643:VAL:HG13 | 1.87 | 0.57 |
| 1:E:388:ILE:HD11 | 1:E:455:THR:OG1 | 2.05 | 0.57 |
| 1:FA:633:LEU:HD12 | 1:FA:634:VAL:H | 1.70 | 0.57 |
| 1:FB:276:LEU:CD2 | 1:FB:320:ILE:HG23 | 2.35 | 0.57 |
| 1:FB:332:LEU:HD21 | 1:FB:374:VAL:O | 2.05 | 0.57 |
| 1:GB:201:VAL:HG12 | 1:GB:201:VAL:O | 2.04 | 0.57 |
| 1:H:123:LEU:HD11 | 1:H:145:PHE:HB2 | 1.87 | 0.57 |
| 1:HB:765:VAL:HG22 | 1:IB:759:LEU:HD21 | 1.85 | 0.57 |
| 1:IB:524:THR:HG22 | 1:IB:542:ALA:HB2 | 1.85 | 0.57 |
| 1:J:129:PHE:CE1 | 1:J:137:VAL:HG11 | 2.40 | 0.57 |
| 1:KB:16:ILE:HD11 | 1:KB:47:PRO:CD | 2.34 | 0.57 |
| 1:L:58:TYR:OH | 1:L:90:ILE:HG22 | 2.04 | 0.57 |
| 1:MB:587:THR:HG23 | 1:MB:590:ASP:OD1 | 2.05 | 0.57 |
| 1:N:142:GLU:HB2 | 1:N:208:VAL:HG21 | 1.87 | 0.57 |
| 1:OA:709:LEU:HD13 | 1:PA:701:LYS:HB2 | 1.86 | 0.57 |
| 1:PA:336:ALA:HB1 | 1:PA:338:GLN:O | 2.05 | 0.57 |
| 1:PB:262:ASP:OD1 | 1:PB:263:VAL:HG22 | 2.05 | 0.57 |
| 1:PB:284:ILE:HD11 | 1:PB:300:ARG:HB3 | 1.85 | 0.57 |
| 1:QA:60:THR:HG22 | 1:QA:107:LYS:CG | 2.35 | 0.57 |
| 1:RA:88:LEU:HD12 | 1:RA:88:LEU:O | 2.05 | 0.57 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:S:340:LEU:HD11 | 1:S:357:TRP:CH2 | 2.39 | 0.57 |
| 1:SA:198:VAL:HG21 | 1:SA:204:TYR:CD1 | 2.40 | 0.57 |
| 1:TB:405:THR:HG21 | 1:UB:393:VAL:O | 2.05 | 0.57 |
| 1:UB:50:MET:O | 1:UB:52:THR:HG23 | 2.05 | 0.57 |
| 1:UB:541:LEU:HD22 | 1:UB:543:TYR:OH | 2.04 | 0.57 |
| 1:WB:670:GLU:OE2 | 1:XB:664:ILE:HD11 | 2.05 | 0.57 |
| 1:X:388:ILE:HD12 | 1:X:414:LEU:CD2 | 2.35 | 0.57 |
| 1:XA:10:ILE:HG12 | 1:XA:16:ILE:HD12 | 1.87 | 0.57 |
| 1:XB:340:LEU:HD12 | 1:XB:351:HIS:ND1 | 2.20 | 0.57 |
| 1:YA:465:ASN:O | 1:YA:517:LEU:HD13 | 2.05 | 0.57 |
| 1:YB:334:LEU:HD12 | 1:YB:357:TRP:HE1 | 1.69 | 0.57 |
| 1:YB:405:THR:HG23 | 1:ZB:396:GLY:CA | 2.35 | 0.57 |
| 1:ZB:487:VAL:HG11 | 1:ZB:495:PHE:HE1 | 1.70 | 0.57 |
| 1:AB:229:LEU:HD23 | 1:AB:267:VAL:HG22 | 1.87 | 0.57 |
| 1:AC:766:ARG:HD2 | 1:ZB:768:LEU:HD11 | 1.87 | 0.57 |
| 1:D:8:ILE:H | 1:D:8:ILE:HD12 | 1.70 | 0.57 |
| 1:D:25:VAL:HG22 | 1:D:80:GLN:OE1 | 2.05 | 0.57 |
| 1:FA:123:LEU:HD11 | 1:FA:145:PHE:HB2 | 1.87 | 0.57 |
| 1:H:167:ILE:HA | 1:H:203:ALA:HA | 1.87 | 0.57 |
| 1:HA:643:VAL:O | 1:HA:643:VAL:HG23 | 2.04 | 0.57 |
| 1:I:579:VAL:HG22 | 1:I:599:ILE:HD11 | 1.87 | 0.57 |
| 1:IB:643:VAL:HG22 | 1:JB:580:ARG:NH1 | 2.20 | 0.57 |
| 1:JB:227:LEU:O | 1:JB:251:VAL:HG22 | 2.04 | 0.57 |
| 1:KB:175:ARG:HH21 | 1:KB:263:VAL:HG12 | 1.69 | 0.57 |
| 1:LA:802:ILE:CG2 | 1:LA:807:ILE:HD11 | 2.35 | 0.57 |
| 1:LB:333:LEU:HD23 | 1:LB:374:VAL:HG11 | 1.86 | 0.57 |
| 1:MA:173:ALA:CB | 1:MA:197:LEU:HD12 | 2.35 | 0.57 |
| 1:MA:175:ARG:HH21 | 1:MA:263:VAL:HG12 | 1.70 | 0.57 |
| 1:N:467:ALA:HB3 | 1:N:518:LEU:HD21 | 1.87 | 0.57 |
| 1:OA:112:LEU:HD12 | 1:OA:153:PRO:HD3 | 1.87 | 0.57 |
| 1:OB:129:PHE:CE2 | 1:OB:137:VAL:HG11 | 2.39 | 0.57 |
| 1:OB:390:VAL:O | 1:OB:398:VAL:HG13 | 2.04 | 0.57 |
| 1:OB:628:PHE:CE2 | 1:OB:635:VAL:HG23 | 2.39 | 0.57 |
| 1:OB:662:ILE:HD12 | 1:PB:653:ALA:CB | 2.35 | 0.57 |
| 1:PA:539:LEU:HD11 | 1:PA:541:LEU:HD21 | 1.86 | 0.57 |
| 1:QA:468:VAL:HG22 | 1:QA:514:LEU:O | 2.04 | 0.57 |
| 1:SA:359:ILE:HG12 | 1:SA:363:LEU:HD11 | 1.86 | 0.57 |
| 1:SB:790:VAL:HG22 | 1:TB:785:GLN:CG | 2.35 | 0.57 |
| 1:T:785:GLN:O | 1:T:789:GLU:OE1 | 2.23 | 0.57 |
| 1:WA:777:LEU:O | 1:WA:781:VAL:HG22 | 2.05 | 0.57 |
| 1:XB:73:VAL:HG21 | 1:XB:100:TYR:CZ | 2.40 | 0.57 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:YA:121:LEU:HD12 | 1:YA:145:PHE:HB3 | 1.85 | 0.57 |
| 1:ZA:579:VAL:HG13 | 1:ZA:598:ILE:O | 2.04 | 0.57 |
| 1:ZB:126:LEU:C | 1:ZB:127:LEU:HD22 | 2.29 | 0.57 |
| 1:ZB:812:VAL:O | 1:ZB:812:VAL:HG23 | 2.05 | 0.57 |
| 1:AA:217:ASP:O | 1:AA:260:VAL:HG23 | 2.05 | 0.56 |
| 1:AA:396:GLY:CA | 1:Z:405:THR:HG23 | 2.34 | 0.56 |
| 1:B:531:THR:HA | 1:B:583:VAL:HG22 | 1.86 | 0.56 |
| 1:B:801:ALA:HB1 | 1:C:799:THR:HG21 | 1.87 | 0.56 |
| 1:C:539:LEU:CD1 | 1:C:643:VAL:HG12 | 2.34 | 0.56 |
| 1:CA:121:LEU:N | 1:CA:162:ILE:HG23 | 2.20 | 0.56 |
| 1:D:228:HIS:ND1 | 1:D:268:LEU:HD22 | 2.20 | 0.56 |
| 1:DB:405:THR:HG23 | 1:EB:396:GLY:CA | 2.35 | 0.56 |
| 1:EB:120:ALA:CB | 1:EB:205:LEU:HD11 | 2.34 | 0.56 |
| 1:F:91:ARG:C | 1:F:92:LEU:HD22 | 2.29 | 0.56 |
| 1:FA:283:VAL:HA | 1:FA:302:VAL:HG23 | 1.87 | 0.56 |
| 1:FA:325:VAL:O | 1:FA:325:VAL:HG13 | 2.05 | 0.56 |
| 1:FA:336:ALA:HB3 | 1:FA:352:GLN:O | 2.05 | 0.56 |
| 1:FB:62:ALA:HB2 | 1:FB:106:GLU:CG | 2.34 | 0.56 |
| 1:G:30:VAL:HG21 | 1:G:50:MET:CG | 2.35 | 0.56 |
| 1:G:52:THR:HG21 | 1:H:85:HIS:CE1 | 2.40 | 0.56 |
| 1:GB:388:ILE:N | 1:GB:457:VAL:HG23 | 2.20 | 0.56 |
| 1:IB:333:LEU:N | 1:IB:358:LEU:HD13 | 2.19 | 0.56 |
| 1:J:388:ILE:CA | 1:J:457:VAL:HG23 | 2.34 | 0.56 |
| 1:JA:123:LEU:HD12 | 1:JA:143:TRP:NE1 | 2.19 | 0.56 |
| 1:K:658:VAL:HG23 | 1:L:533:ASP:OD2 | 2.05 | 0.56 |
| 1:MA:287:PRO:O | 1:MA:295:GLN:NE2 | 2.39 | 0.56 |
| 1:MB:626:ALA:HB3 | 1:MB:635:VAL:HB | 1.87 | 0.56 |
| 1:NA:61:VAL:O | 1:NA:61:VAL:HG23 | 2.03 | 0.56 |
| 1:NA:661:ALA:HA | 1:NA:664:ILE:HD12 | 1.86 | 0.56 |
| 1:PA:9:ARG:HB3 | 1:PA:34:THR:HG22 | 1.87 | 0.56 |
| 1:R:537:LEU:HD11 | 1:R:588:PHE:HB2 | 1.86 | 0.56 |
| 1:V:276:LEU:HD22 | 1:V:281:TYR:O | 2.03 | 0.56 |
| 1:V:767:GLU:HA | 1:V:770:LEU:HD12 | 1.87 | 0.56 |
| 1:VA:799:THR:HA | 1:VA:802:ILE:HG22 | 1.86 | 0.56 |
| 1:VB:529:ILE:HB | 1:VB:583:VAL:HG21 | 1.86 | 0.56 |
| 1:WA:460:TYR:CE2 | 1:WA:462:VAL:HG22 | 2.40 | 0.56 |
| 1:WB:767:GLU:HA | 1:WB:770:LEU:HD12 | 1.87 | 0.56 |
| 1:X:325:VAL:HG23 | 1:Y:353:ALA:HB1 | 1.86 | 0.56 |
| 1:Y:414:LEU:HB2 | 1:Y:455:THR:HG21 | 1.85 | 0.56 |
| 1:Y:599:ILE:HD13 | 1:Y:640:VAL:HG21 | 1.85 | 0.56 |
| 1:ZB:227:LEU:HD13 | 1:ZB:270:VAL:HG22 | 1.86 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:A:797:GLN:OE1 | 1:B:792:VAL:HG11 | 2.05 | 0.56 |
| 1:AC:794:LYS:HA | 1:OA:792:VAL:HG22 | 1.87 | 0.56 |
| 1:E:115:VAL:HG23 | 1:E:147:GLY:O | 2.05 | 0.56 |
| 1:E:331:GLY:C | 1:E:358:LEU:HD11 | 2.30 | 0.56 |
| 1:EB:661:ALA:O | 1:EB:665:THR:HG23 | 2.05 | 0.56 |
| 1:HA:9:ARG:HB3 | 1:HA:34:THR:HG22 | 1.87 | 0.56 |
| 1:IA:388:ILE:CA | 1:IA:457:VAL:HG23 | 2.35 | 0.56 |
| 1:JA:62:ALA:HB3 | 1:JA:104:VAL:HG13 | 1.87 | 0.56 |
| 1:JB:227:LEU:HD21 | 1:JB:229:LEU:HD21 | 1.87 | 0.56 |
| 1:K:358:LEU:HD23 | 1:K:410:GLN:N | 2.20 | 0.56 |
| 1:LA:120:ALA:HB2 | 1:LA:205:LEU:HD21 | 1.85 | 0.56 |
| 1:LA:337:LEU:HD21 | 1:LA:372:GLU:HB2 | 1.87 | 0.56 |
| 1:LB:344:GLU:OE1 | 1:LB:371:VAL:HG23 | 2.04 | 0.56 |
| 1:MA:173:ALA:O | 1:MA:215:LEU:HD12 | 2.04 | 0.56 |
| 1:NB:223:GLU:O | 1:NB:273:ILE:HD12 | 2.05 | 0.56 |
| 1:OA:469:GLN:HA | 1:OA:480:VAL:HG22 | 1.87 | 0.56 |
| 1:P:28:VAL:HG21 | 1:P:100:TYR:CD2 | 2.40 | 0.56 |
| 1:P:382:LEU:HD11 | 1:P:388:ILE:HG12 | 1.86 | 0.56 |
| 1:Q:405:THR:HG21 | 1:R:393:VAL:O | 2.04 | 0.56 |
| 1:Q:677:ALA:HA | 1:Q:680:LEU:HD12 | 1.85 | 0.56 |
| 1:QA:518:LEU:HD21 | 1:QA:549:VAL:CG2 | 2.34 | 0.56 |
| 1:R:626:ALA:HB3 | 1:R:635:VAL:HB | 1.86 | 0.56 |
| 1:RA:28:VAL:HG21 | 1:RA:100:TYR:CD1 | 2.40 | 0.56 |
| 1:TB:482:PHE:HZ | 1:TB:558:THR:HG22 | 1.70 | 0.56 |
| 1:TB:489:LEU:HD21 | 1:TB:495:PHE:CD1 | 2.40 | 0.56 |
| 1:UB:60:THR:HG22 | 1:UB:107:LYS:HB2 | 1.86 | 0.56 |
| 1:UB:583:VAL:HG13 | 1:UB:584:ALA:H | 1.70 | 0.56 |
| 1:X:66:SER:C | 1:X:73:VAL:HG13 | 2.30 | 0.56 |
| 1:XB:661:ALA:HA | 1:XB:664:ILE:HD12 | 1.86 | 0.56 |
| 1:Y:174:LEU:HD21 | 1:Y:212:VAL:HG12 | 1.86 | 0.56 |
| 1:Y:325:VAL:CG2 | 1:Z:353:ALA:HB1 | 2.33 | 0.56 |
| 1:Z:227:LEU:HA | 1:Z:270:VAL:HG22 | 1.86 | 0.56 |
| 1:AB:804:PRO:HA | 1:AB:807:ILE:HD12 | 1.87 | 0.56 |
| 1:AC:405:THR:HG22 | 1:OA:396:GLY:CA | 2.35 | 0.56 |
| 1:BA:283:VAL:HG21 | 1:BA:321:GLN:OE1 | 2.06 | 0.56 |
| 1:CA:129:PHE:CZ | 1:CA:137:VAL:HG11 | 2.40 | 0.56 |
| 1:CA:459:SER:HB2 | 1:CA:486:LEU:HD11 | 1.87 | 0.56 |
| 1:CB:498:LEU:HD11 | 1:CB:562:PHE:CD2 | 2.41 | 0.56 |
| 1:DA:60:THR:HG22 | 1:DA:90:ILE:HG13 | 1.87 | 0.56 |
| 1:DA:529:ILE:HG21 | 1:DA:583:VAL:CG2 | 2.35 | 0.56 |
| 1:DB:529:ILE:HB | 1:DB:583:VAL:HG11 | 1.87 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:E:175:ARG:NH2 | 1:E:197:LEU:HD21 | 2.20 | 0.56 |
| 1:E:389:TYR:CE1 | 1:E:457:VAL:HG22 | 2.40 | 0.56 |
| 1:EA:261:PRO:HG2 | 1:EA:267:VAL:HG22 | 1.86 | 0.56 |
| 1:EB:387:GLY:C | 1:EB:457:VAL:HG23 | 2.30 | 0.56 |
| 1:F:167:ILE:HA | 1:F:203:ALA:HA | 1.87 | 0.56 |
| 1:FB:325:VAL:O | 1:FB:325:VAL:HG13 | 2.04 | 0.56 |
| 1:HA:381:PRO:HA | 1:HA:405:THR:HG22 | 1.87 | 0.56 |
| 1:HA:388:ILE:CA | 1:HA:457:VAL:HG23 | 2.34 | 0.56 |
| 1:HB:416:GLU:N | 1:HB:455:THR:HG22 | 2.21 | 0.56 |
| 1:IA:228:HIS:ND1 | 1:IA:268:LEU:HD22 | 2.21 | 0.56 |
| 1:IB:540:GLN:O | 1:IB:541:LEU:HD12 | 2.05 | 0.56 |
| 1:J:758:GLU:O | 1:J:762:VAL:HG22 | 2.04 | 0.56 |
| 1:JA:174:LEU:HD12 | 1:JA:214:ASP:O | 2.05 | 0.56 |
| 1:K:59:CYS:HA | 1:K:107:LYS:HD2 | 1.87 | 0.56 |
| 1:K:227:LEU:HD12 | 1:K:228:HIS:H | 1.70 | 0.56 |
| 1:KA:126:LEU:O | 1:KA:127:LEU:HD22 | 2.06 | 0.56 |
| 1:KA:381:PRO:CA | 1:KA:405:THR:HG22 | 2.35 | 0.56 |
| 1:KB:50:MET:O | 1:KB:52:THR:HG23 | 2.05 | 0.56 |
| 1:KB:176:LEU:HD21 | 1:KB:196:TRP:NE1 | 2.21 | 0.56 |
| 1:L:126:LEU:C | 1:L:127:LEU:HD22 | 2.31 | 0.56 |
| 1:L:400:ALA:O | 1:L:402:ILE:HD12 | 2.04 | 0.56 |
| 1:LA:405:THR:HG23 | 1:MA:396:GLY:CA | 2.35 | 0.56 |
| 1:M:423:VAL:HG22 | 1:M:423:VAL:O | 2.04 | 0.56 |
| 1:M:732:ALA:HA | 1:M:735:ILE:HD12 | 1.86 | 0.56 |
| 1:MA:112:LEU:HD23 | 1:MA:150:THR:OG1 | 2.05 | 0.56 |
| 1:MA:116:LEU:HB2 | 1:MA:119:THR:HG22 | 1.87 | 0.56 |
| 1:MA:489:LEU:HD11 | 1:MA:495:PHE:CD2 | 2.40 | 0.56 |
| 1:MA:788:ALA:O | 1:MA:792:VAL:HG23 | 2.06 | 0.56 |
| 1:NB:340:LEU:HD12 | 1:NB:351:HIS:HB2 | 1.87 | 0.56 |
| 1:O:51:VAL:HG21 | 1:O:99:LEU:HD21 | 1.87 | 0.56 |
| 1:OA:276:LEU:HD11 | 1:OA:282:CYS:SG | 2.46 | 0.56 |
| 1:OB:413:VAL:HG22 | 1:OB:414:LEU:H | 1.69 | 0.56 |
| 1:PA:596:ALA:HB2 | 1:QA:581:GLY:C | 2.30 | 0.56 |
| 1:PA:758:GLU:OE1 | 1:PA:762:VAL:HG21 | 2.04 | 0.56 |
| 1:PB:116:LEU:HB2 | 1:PB:119:THR:HG22 | 1.88 | 0.56 |
| 1:PB:529:ILE:HG13 | 1:PB:583:VAL:HG21 | 1.86 | 0.56 |
| 1:QA:579:VAL:O | 1:QA:583:VAL:HG12 | 2.04 | 0.56 |
| 1:QB:180:LYS:HD2 | 1:QB:181:GLU:O | 2.05 | 0.56 |
| 1:SA:126:LEU:C | 1:SA:127:LEU:HD22 | 2.30 | 0.56 |
| 1:TA:801:ALA:HB1 | 1:UA:799:THR:HG21 | 1.87 | 0.56 |
| 1:TB:30:VAL:CG2 | 1:TB:50:MET:HE3 | 2.35 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:TB:235:PHE:CD1 | 1:TB:264:HIS:HB3 | 2.40 | 0.56 |
| 1:TB:540:GLN:O | 1:TB:541:LEU:HD23 | 2.05 | 0.56 |
| 1:TB:779:LEU:HD23 | 1:UB:777:LEU:HD23 | 1.86 | 0.56 |
| 1:UA:790:VAL:HG21 | 1:VA:785:GLN:HG3 | 1.87 | 0.56 |
| 1:UB:583:VAL:HG13 | 1:UB:584:ALA:N | 2.20 | 0.56 |
| 1:V:3:THR:HG22 | 1:V:6:PHE:H | 1.71 | 0.56 |
| 1:VA:56:ARG:HH12 | 1:VA:112:LEU:HD22 | 1.70 | 0.56 |
| 1:W:3:THR:HG21 | 1:W:41:GLU:O | 2.05 | 0.56 |
| 1:WA:124:LYS:HB2 | 1:WA:160:VAL:HG21 | 1.88 | 0.56 |
| 1:WA:750:ALA:HB2 | 1:XA:741:VAL:HG13 | 1.87 | 0.56 |
| 1:WB:176:LEU:HD23 | 1:WB:176:LEU:H | 1.71 | 0.56 |
| 1:WB:471:TYR:CD2 | 1:WB:478:ALA:HB2 | 2.40 | 0.56 |
| 1:WB:489:LEU:HD21 | 1:WB:495:PHE:CE1 | 2.40 | 0.56 |
| 1:XA:325:VAL:HG11 | 1:YA:337:LEU:HA | 1.86 | 0.56 |
| 1:XA:532:ALA:HB3 | 1:XA:587:THR:N | 2.20 | 0.56 |
| 1:XB:221:LEU:HD22 | 1:XB:251:VAL:HG23 | 1.87 | 0.56 |
| 1:Y:90:ILE:HD11 | 1:Y:155:LYS:HB2 | 1.87 | 0.56 |
| 1:Z:46:ALA:HB1 | 1:Z:47:PRO:HD2 | 1.87 | 0.56 |
| 1:ZA:228:HIS:HA | 1:ZA:250:LEU:HD23 | 1.86 | 0.56 |
| 1:ZA:229:LEU:CD2 | 1:ZA:267:VAL:HG22 | 2.36 | 0.56 |
| 1:A:390:VAL:HG22 | 1:A:391:GLN:N | 2.21 | 0.56 |
| 1:A:643:VAL:HG22 | 1:B:580:ARG:NH2 | 2.19 | 0.56 |
| 1:AC:336:ALA:HB3 | 1:AC:352:GLN:O | 2.06 | 0.56 |
| 1:C:543:TYR:CD1 | 1:C:575:ILE:HD13 | 2.41 | 0.56 |
| 1:E:626:ALA:HB3 | 1:E:635:VAL:HB | 1.87 | 0.56 |
| 1:EA:9:ARG:CB | 1:EA:34:THR:HG22 | 2.35 | 0.56 |
| 1:EB:3:THR:HG23 | 1:EB:37:ARG:HB2 | 1.87 | 0.56 |
| 1:FA:625:GLN:NE2 | 1:FA:627:VAL:HG12 | 2.20 | 0.56 |
| 1:G:126:LEU:C | 1:G:127:LEU:HD22 | 2.29 | 0.56 |
| 1:GA:221:LEU:HD21 | 1:GA:251:VAL:HG23 | 1.88 | 0.56 |
| 1:H:91:ARG:O | 1:H:92:LEU:HD22 | 2.05 | 0.56 |
| 1:H:112:LEU:HD12 | 1:H:151:TYR:O | 2.04 | 0.56 |
| 1:HB:82:ARG:O | 1:HB:83:LEU:HD12 | 2.06 | 0.56 |
| 1:IA:16:ILE:HG22 | 1:IA:17:HIS:N | 2.20 | 0.56 |
| 1:J:126:LEU:C | 1:J:127:LEU:HD22 | 2.30 | 0.56 |
| 1:JB:120:ALA:HB3 | 1:JB:205:LEU:HD11 | 1.86 | 0.56 |
| 1:K:17:HIS:CB | 1:K:44:LEU:HD22 | 2.35 | 0.56 |
| 1:KA:489:LEU:HD11 | 1:KA:495:PHE:CE2 | 2.40 | 0.56 |
| 1:LA:172:GLN:OE1 | 1:LA:215:LEU:HD21 | 2.06 | 0.56 |
| 1:NB:15:TYR:HB3 | 1:NB:30:VAL:HG23 | 1.88 | 0.56 |
| 1:NB:17:HIS:C | 1:NB:44:LEU:HD13 | 2.30 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:NB:794:LYS:HB2 | 1:OB:792:VAL:HG21 | 1.88 | 0.56 |
| 1:P:129:PHE:CZ | 1:P:157:VAL:HG22 | 2.41 | 0.56 |
| 1:P:495:PHE:CD2 | 1:P:514:LEU:HD11 | 2.40 | 0.56 |
| 1:PA:539:LEU:HD11 | 1:PA:541:LEU:CD2 | 2.34 | 0.56 |
| 1:PB:405:THR:HG23 | 1:QB:396:GLY:HA3 | 1.87 | 0.56 |
| 1:Q:112:LEU:HD23 | 1:Q:150:THR:CG2 | 2.36 | 0.56 |
| 1:RA:336:ALA:O | 1:RA:337:LEU:HD23 | 2.05 | 0.56 |
| 1:RB:176:LEU:HD21 | 1:RB:196:TRP:CD1 | 2.40 | 0.56 |
| 1:SA:724:ALA:HB1 | 1:TA:715:ALA:HA | 1.87 | 0.56 |
| 1:SB:340:LEU:HD13 | 1:SB:345:ASP:HB2 | 1.86 | 0.56 |
| 1:TB:227:LEU:HD13 | 1:TB:270:VAL:CG2 | 2.32 | 0.56 |
| 1:TB:379:ALA:HA | 1:TB:407:MET:HG2 | 1.87 | 0.56 |
| 1:V:804:PRO:HA | 1:V:807:ILE:HD12 | 1.86 | 0.56 |
| 1:VB:661:ALA:HA | 1:VB:664:ILE:HD12 | 1.87 | 0.56 |
| 1:WB:635:VAL:HG11 | 1:WB:638:VAL:HG23 | 1.88 | 0.56 |
| 1:Y:62:ALA:HA | 1:Y:88:LEU:HD23 | 1.87 | 0.56 |
| 1:YB:283:VAL:HG22 | 1:YB:301:VAL:HG23 | 1.87 | 0.56 |
| 1:ZA:526:VAL:HG22 | 1:ZA:540:GLN:HA | 1.88 | 0.56 |
| 1:A:65:VAL:HG11 | 1:A:100:TYR:CD2 | 2.39 | 0.56 |
| 1:BB:16:ILE:HD11 | 1:BB:47:PRO:CD | 2.36 | 0.56 |
| 1:BB:227:LEU:HD13 | 1:BB:270:VAL:HG22 | 1.86 | 0.56 |
| 1:DB:415:TRP:C | 1:DB:455:THR:HG22 | 2.30 | 0.56 |
| 1:J:575:ILE:HG23 | 1:J:603:VAL:HG13 | 1.87 | 0.56 |
| 1:KB:65:VAL:HG23 | 1:KB:67:ARG:HG3 | 1.87 | 0.56 |
| 1:L:599:ILE:O | 1:L:603:VAL:HG23 | 2.05 | 0.56 |
| 1:M:15:TYR:HB3 | 1:M:50:MET:HE1 | 1.87 | 0.56 |
| 1:MA:13:TYR:OH | 1:NA:83:LEU:HD13 | 2.05 | 0.56 |
| 1:NB:82:ARG:C | 1:NB:83:LEU:HD12 | 2.31 | 0.56 |
| 1:P:166:THR:HG21 | 1:P:174:LEU:HD22 | 1.88 | 0.56 |
| 1:P:381:PRO:HA | 1:P:405:THR:HG22 | 1.86 | 0.56 |
| 1:P:416:GLU:OE1 | 1:P:455:THR:HG23 | 2.06 | 0.56 |
| 1:SA:643:VAL:HG22 | 1:TA:580:ARG:NH2 | 2.19 | 0.56 |
| 1:SB:549:VAL:HG11 | 1:SB:552:ARG:NE | 2.20 | 0.56 |
| 1:TA:143:TRP:O | 1:TA:208:VAL:HG11 | 2.05 | 0.56 |
| 1:TB:43:VAL:C | 1:TB:44:LEU:HD12 | 2.31 | 0.56 |
| 1:TB:413:VAL:HG22 | 1:TB:414:LEU:H | 1.70 | 0.56 |
| 1:VA:276:LEU:HD12 | 1:VA:304:GLY:HA2 | 1.86 | 0.56 |
| 1:VB:126:LEU:HD21 | 1:VB:158:GLU:CB | 2.35 | 0.56 |
| 1:W:654:LEU:HD22 | 1:X:534:HIS:ND1 | 2.20 | 0.56 |
| 1:WA:203:ALA:HB3 | 1:XA:192:THR:CB | 2.35 | 0.56 |
| 1:WB:334:LEU:HD12 | 1:WB:357:TRP:NE1 | 2.21 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XA:8:ILE:HG22 | 1:XA:16:ILE:HD13 | 1.87 | 0.56 |
| 1:XA:782:SER:OG | 1:YA:777:LEU:HD21 | 2.05 | 0.56 |
| 1:Y:181:GLU:OE2 | 1:Y:191:VAL:HG12 | 2.06 | 0.56 |
| 1:YA:662:ILE:HD12 | 1:ZA:654:LEU:HD21 | 1.88 | 0.56 |
| 1:ZA:112:LEU:HD11 | 1:ZA:150:THR:HG21 | 1.86 | 0.56 |
| 1:AA:276:LEU:CD2 | 1:AA:320:ILE:HG23 | 2.35 | 0.56 |
| 1:AA:452:ARG:CZ | 1:AA:458:VAL:HG22 | 2.36 | 0.56 |
| 1:B:381:PRO:HA | 1:B:405:THR:HG22 | 1.86 | 0.56 |
| 1:C:283:VAL:O | 1:C:316:LEU:HD12 | 2.06 | 0.56 |
| 1:DB:275:THR:C | 1:DB:276:LEU:HD12 | 2.31 | 0.56 |
| 1:DB:751:LEU:HD13 | 1:DB:754:GLU:OE2 | 2.06 | 0.56 |
| 1:EA:388:ILE:HG22 | 1:EA:456:ARG:HA | 1.88 | 0.56 |
| 1:EA:788:ALA:O | 1:EA:792:VAL:HG23 | 2.05 | 0.56 |
| 1:FA:388:ILE:C | 1:FA:457:VAL:HG23 | 2.30 | 0.56 |
| 1:GA:288:VAL:HG12 | 1:GA:294:ASN:N | 2.20 | 0.56 |
| 1:GB:53:VAL:O | 1:GB:53:VAL:HG13 | 2.05 | 0.56 |
| 1:J:547:PHE:CD1 | 1:J:633:LEU:HD13 | 2.40 | 0.56 |
| 1:JA:405:THR:HG23 | 1:KA:396:GLY:N | 2.21 | 0.56 |
| 1:KA:60:THR:HB | 1:KA:88:LEU:HD21 | 1.87 | 0.56 |
| 1:KB:175:ARG:NH2 | 1:KB:263:VAL:HG12 | 2.21 | 0.56 |
| 1:LA:92:LEU:HD23 | 1:LA:92:LEU:H | 1.71 | 0.56 |
| 1:P:712:LEU:O | 1:P:716:VAL:HG23 | 2.06 | 0.56 |
| 1:PA:177:ARG:H | 1:PA:213:LEU:HD23 | 1.70 | 0.56 |
| 1:PA:666:THR:HG22 | 1:QA:657:SER:HB2 | 1.86 | 0.56 |
| 1:PB:9:ARG:HB3 | 1:PB:34:THR:HG22 | 1.88 | 0.56 |
| 1:PB:267:VAL:C | 1:PB:268:LEU:HD12 | 2.30 | 0.56 |
| 1:QA:524:THR:HG23 | 1:QA:524:THR:O | 2.06 | 0.56 |
| 1:QA:627:VAL:HG12 | 1:QA:634:VAL:HG22 | 1.87 | 0.56 |
| 1:R:662:ILE:HG21 | 1:S:653:ALA:HB1 | 1.87 | 0.56 |
| 1:RA:206:PRO:HG3 | 1:RA:212:VAL:HG11 | 1.87 | 0.56 |
| 1:TA:481:VAL:HG11 | 1:TA:487:VAL:CB | 2.36 | 0.56 |
| 1:TB:197:LEU:CD2 | 1:TB:263:VAL:HG13 | 2.35 | 0.56 |
| 1:UB:17:HIS:C | 1:UB:44:LEU:HD13 | 2.31 | 0.56 |
| 1:VB:120:ALA:HB3 | 1:VB:205:LEU:HD21 | 1.87 | 0.56 |
| 1:VB:388:ILE:N | 1:VB:457:VAL:HG23 | 2.21 | 0.56 |
| 1:W:285:LEU:HD21 | 1:W:317:GLU:CD | 2.31 | 0.56 |
| 1:WB:176:LEU:HD21 | 1:WB:196:TRP:NE1 | 2.20 | 0.56 |
| 1:WB:731:GLU:OE2 | 1:WB:735:ILE:HD11 | 2.05 | 0.56 |
| 1:B:388:ILE:CA | 1:B:457:VAL:HG23 | 2.36 | 0.56 |
| 1:BB:415:TRP:C | 1:BB:455:THR:HG22 | 2.31 | 0.56 |
| 1:CB:538:GLN:HB2 | 1:CB:646:VAL:HG22 | 1.88 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:D:112:LEU:HD23 | 1:D:150:THR:CG2 | 2.36 | 0.56 |
| 1:E:7:ILE:HG22 | 1:E:36:ILE:CG1 | 2.34 | 0.56 |
| 1:E:772:TYR:HD1 | 1:F:770:LEU:HD11 | 1.70 | 0.56 |
| 1:EA:324:TYR:CB | 1:EA:332:LEU:HD11 | 2.36 | 0.56 |
| 1:EB:746:LEU:HD13 | 1:FB:737:GLY:HA3 | 1.88 | 0.56 |
| 1:FA:331:GLY:O | 1:FA:358:LEU:HD11 | 2.06 | 0.56 |
| 1:FB:68:ASP:HB2 | 1:FB:74:LEU:HD12 | 1.88 | 0.56 |
| 1:HA:69:ALA:HB3 | 1:HA:72:LEU:HB3 | 1.88 | 0.56 |
| 1:HB:390:VAL:O | 1:HB:390:VAL:HG23 | 2.06 | 0.56 |
| 1:I:405:THR:HG23 | 1:J:396:GLY:CA | 2.36 | 0.56 |
| 1:IA:284:ILE:HD12 | 1:IA:287:PRO:CB | 2.36 | 0.56 |
| 1:IB:8:ILE:H | 1:IB:8:ILE:HD12 | 1.71 | 0.56 |
| 1:JB:115:VAL:HG11 | 1:JB:145:PHE:CD2 | 2.41 | 0.56 |
| 1:LA:9:ARG:CB | 1:LA:34:THR:HG22 | 2.35 | 0.56 |
| 1:LB:531:THR:HG21 | 1:LB:588:PHE:CA | 2.36 | 0.56 |
| 1:M:415:TRP:O | 1:M:455:THR:HG22 | 2.05 | 0.56 |
| 1:MA:228:HIS:O | 1:MA:229:LEU:HD23 | 2.06 | 0.56 |
| 1:MA:416:GLU:HG2 | 1:MA:455:THR:HG22 | 1.87 | 0.56 |
| 1:MB:529:ILE:HD12 | 1:MB:583:VAL:HG21 | 1.88 | 0.56 |
| 1:NB:516:LEU:C | 1:NB:517:LEU:HD22 | 2.31 | 0.56 |
| 1:P:333:LEU:HD11 | 1:P:356:HIS:HB2 | 1.88 | 0.56 |
| 1:QA:531:THR:OG1 | 1:QA:535:ALA:HB3 | 2.05 | 0.56 |
| 1:SB:389:TYR:CE1 | 1:SB:457:VAL:HG22 | 2.41 | 0.56 |
| 1:TB:17:HIS:CB | 1:TB:44:LEU:HD22 | 2.34 | 0.56 |
| 1:UB:131:ASP:HB3 | 1:UB:137:VAL:HG23 | 1.88 | 0.56 |
| 1:V:665:THR:HG21 | 1:W:589:ASP:CG | 2.31 | 0.56 |
| 1:VB:316:LEU:HD11 | 1:VB:319:GLY:O | 2.06 | 0.56 |
| 1:WA:486:LEU:HD22 | 1:XA:473:TYR:O | 2.05 | 0.56 |
| 1:WB:567:PHE:HD2 | 1:WB:633:LEU:HD22 | 1.69 | 0.56 |
| 1:XA:393:VAL:HG22 | 1:XA:411:ASP:HA | 1.86 | 0.56 |
| 1:XB:495:PHE:HB3 | 1:XB:514:LEU:HD11 | 1.86 | 0.56 |
| 1:YA:52:THR:HG21 | 1:ZA:85:HIS:CB | 2.36 | 0.56 |
| 1:Z:165:ALA:HB1 | 1:Z:203:ALA:O | 2.05 | 0.56 |
| 1:BB:56:ARG:HH12 | 1:CB:126:LEU:HD23 | 1.71 | 0.56 |
| 1:BB:761:ARG:O | 1:BB:765:VAL:HG23 | 2.05 | 0.56 |
| 1:D:531:THR:HG21 | 1:D:588:PHE:CA | 2.35 | 0.56 |
| 1:F:380:ILE:H | 1:F:380:ILE:HD12 | 1.70 | 0.56 |
| 1:FB:527:ILE:HG12 | 1:FB:541:LEU:HD11 | 1.87 | 0.56 |
| 1:G:129:PHE:CE1 | 1:G:137:VAL:HG21 | 2.41 | 0.56 |
| 1:HA:388:ILE:C | 1:HA:457:VAL:HG23 | 2.31 | 0.56 |
| 1:I:662:ILE:HG21 | 1:J:653:ALA:HB1 | 1.87 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:JA:175:ARG:NH1 | 1:JA:263:VAL:HG12 | 2.21 | 0.56 |
| 1:JA:537:LEU:HD23 | 1:JA:645:PRO:CA | 2.35 | 0.56 |
| 1:KA:65:VAL:HG23 | 1:KA:67:ARG:HG3 | 1.87 | 0.56 |
| 1:LB:16:ILE:HD11 | 1:LB:47:PRO:HA | 1.88 | 0.56 |
| 1:O:60:THR:O | 1:O:105:LEU:HD12 | 2.05 | 0.56 |
| 1:OA:67:ARG:HG2 | 1:OA:73:VAL:HG22 | 1.88 | 0.56 |
| 1:OA:229:LEU:HD12 | 1:OA:251:VAL:HG11 | 1.86 | 0.56 |
| 1:OA:389:TYR:OH | 1:OA:457:VAL:HG23 | 2.05 | 0.56 |
| 1:OB:365:TYR:OH | 1:OB:371:VAL:HG21 | 2.06 | 0.56 |
| 1:PB:526:VAL:HG13 | 1:PB:538:GLN:HE21 | 1.70 | 0.56 |
| 1:QA:460:TYR:OH | 1:QA:462:VAL:HG22 | 2.06 | 0.56 |
| 1:QA:489:LEU:HD22 | 1:QA:493:GLU:O | 2.06 | 0.56 |
| 1:QB:207:ALA:HB3 | 1:QB:210:GLU:CD | 2.30 | 0.56 |
| 1:QB:706:LEU:HD13 | 1:RB:697:SER:HA | 1.87 | 0.56 |
| 1:SB:566:ASP:OD1 | 1:SB:568:VAL:HG12 | 2.06 | 0.56 |
| 1:SB:768:LEU:HD13 | 1:TB:763:GLN:OE1 | 2.05 | 0.56 |
| 1:UA:168:ILE:HG22 | 1:UA:215:LEU:HD11 | 1.88 | 0.56 |
| 1:UA:592:HIS:O | 1:VA:584:ALA:HB1 | 2.06 | 0.56 |
| 1:W:260:VAL:O | 1:W:260:VAL:HG13 | 2.04 | 0.56 |
| 1:WA:535:ALA:HB1 | 1:WA:650:THR:OG1 | 2.06 | 0.56 |
| 1:X:388:ILE:HD12 | 1:X:414:LEU:HD21 | 1.87 | 0.56 |
| 1:XA:532:ALA:HB3 | 1:XA:587:THR:CA | 2.35 | 0.56 |
| 1:XA:580:ARG:HA | 1:XA:583:VAL:HG22 | 1.88 | 0.56 |
| 1:XB:526:VAL:HG22 | 1:XB:540:GLN:CG | 2.36 | 0.56 |
| 1:YB:126:LEU:HD21 | 1:YB:158:GLU:HG2 | 1.88 | 0.56 |
| 1:YB:168:ILE:HG22 | 1:YB:215:LEU:HD12 | 1.88 | 0.56 |
| 1:YB:768:LEU:CD1 | 1:ZB:762:VAL:HG23 | 2.36 | 0.56 |
| 1:Z:339:PRO:HD3 | 1:Z:353:ALA:HB2 | 1.87 | 0.56 |
| 1:Z:806:THR:HG22 | 1:Z:806:THR:O | 2.06 | 0.56 |
| 1:ZA:331:GLY:CA | 1:ZA:407:MET:HE1 | 2.36 | 0.56 |
| 1:A:804:PRO:HA | 1:A:807:ILE:HD12 | 1.87 | 0.56 |
| 1:AA:250:LEU:HD23 | 1:AA:250:LEU:H | 1.71 | 0.56 |
| 1:AA:320:ILE:HG22 | 1:AA:320:ILE:O | 2.06 | 0.56 |
| 1:AC:482:PHE:CZ | 1:AC:518:LEU:HD13 | 2.40 | 0.56 |
| 1:AC:746:LEU:HD13 | 1:OA:737:GLY:CA | 2.35 | 0.56 |
| 1:DB:172:GLN:HB3 | 1:DB:215:LEU:HD11 | 1.88 | 0.56 |
| 1:E:530:GLU:O | 1:E:583:VAL:HG22 | 2.06 | 0.56 |
| 1:F:126:LEU:O | 1:F:127:LEU:HD22 | 2.05 | 0.56 |
| 1:FA:82:ARG:C | 1:FA:83:LEU:HD12 | 2.30 | 0.56 |
| 1:FA:388:ILE:HD12 | 1:FA:414:LEU:CD2 | 2.36 | 0.56 |
| 1:G:67:ARG:HG2 | 1:G:73:VAL:HG13 | 1.86 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:GB:163:ILE:HD11 | 1:GB:205:LEU:HD21 | 1.88 | 0.56 |
| 1:HA:81:VAL:HG13 | 1:HA:83:LEU:CD1 | 2.36 | 0.56 |
| 1:HB:267:VAL:C | 1:HB:268:LEU:HD12 | 2.30 | 0.56 |
| 1:I:406:TYR:OH | 1:I:409:THR:HG23 | 2.06 | 0.56 |
| 1:JA:388:ILE:N | 1:JA:457:VAL:HG23 | 2.20 | 0.56 |
| 1:K:229:LEU:HD12 | 1:K:265:GLU:HB3 | 1.88 | 0.56 |
| 1:KB:34:THR:HG23 | 1:LB:24:ASN:OD1 | 2.05 | 0.56 |
| 1:KB:121:LEU:HD11 | 1:KB:145:PHE:HB3 | 1.86 | 0.56 |
| 1:LB:382:LEU:HD12 | 1:LB:404:SER:O | 2.05 | 0.56 |
| 1:LB:388:ILE:HA | 1:LB:457:VAL:HG23 | 1.88 | 0.56 |
| 1:NA:176:LEU:HD23 | 1:NA:196:TRP:O | 2.05 | 0.56 |
| 1:O:382:LEU:HD12 | 1:O:404:SER:O | 2.06 | 0.56 |
| 1:O:518:LEU:HD12 | 1:O:547:PHE:CB | 2.35 | 0.56 |
| 1:OA:62:ALA:HB3 | 1:OA:104:VAL:CG1 | 2.36 | 0.56 |
| 1:P:388:ILE:N | 1:P:457:VAL:HG23 | 2.21 | 0.56 |
| 1:PA:58:TYR:CE2 | 1:PA:90:ILE:HG12 | 2.41 | 0.56 |
| 1:PA:579:VAL:O | 1:PA:583:VAL:HG12 | 2.06 | 0.56 |
| 1:QA:65:VAL:HG13 | 1:QA:103:GLU:CB | 2.36 | 0.56 |
| 1:QA:372:GLU:O | 1:QA:374:VAL:HG23 | 2.06 | 0.56 |
| 1:R:165:ALA:HB3 | 1:R:203:ALA:HB1 | 1.88 | 0.56 |
| 1:SB:500:LEU:HD23 | 1:SB:511:ARG:NE | 2.21 | 0.56 |
| 1:T:775:ALA:HB1 | 1:V:770:LEU:HD22 | 1.87 | 0.56 |
| 1:V:401:VAL:HG11 | 1:V:406:TYR:CE1 | 2.40 | 0.56 |
| 1:VB:323:VAL:HG23 | 1:VB:323:VAL:O | 2.06 | 0.56 |
| 1:W:227:LEU:O | 1:W:251:VAL:HG22 | 2.06 | 0.56 |
| 1:Z:212:VAL:HG23 | 1:Z:212:VAL:O | 2.05 | 0.56 |
| 1:ZB:388:ILE:HD12 | 1:ZB:414:LEU:CD2 | 2.36 | 0.56 |
| 1:AA:502:ALA:HB3 | 1:AA:510:ALA:HB3 | 1.87 | 0.56 |
| 1:BB:302:VAL:HG11 | 1:BB:306:LYS:HD2 | 1.88 | 0.56 |
| 1:BB:388:ILE:N | 1:BB:457:VAL:HG23 | 2.21 | 0.56 |
| 1:CA:249:TRP:C | 1:CA:250:LEU:HD12 | 2.30 | 0.56 |
| 1:DB:390:VAL:O | 1:DB:390:VAL:HG13 | 2.05 | 0.56 |
| 1:EB:468:VAL:O | 1:EB:480:VAL:HG13 | 2.06 | 0.56 |
| 1:EB:507:ARG:HG3 | 1:EB:510:ALA:HB2 | 1.87 | 0.56 |
| 1:F:331:GLY:C | 1:F:358:LEU:HD11 | 2.31 | 0.56 |
| 1:FA:69:ALA:HB2 | 1:FA:74:LEU:HD21 | 1.87 | 0.56 |
| 1:FA:579:VAL:O | 1:FA:583:VAL:HG12 | 2.06 | 0.56 |
| 1:FB:60:THR:HB | 1:FB:88:LEU:HD21 | 1.88 | 0.56 |
| 1:HA:250:LEU:HD11 | 1:HA:310:LEU:O | 2.06 | 0.56 |
| 1:J:539:LEU:HD12 | 1:J:642:SER:O | 2.06 | 0.56 |
| 1:JA:339:PRO:HD3 | 1:JA:353:ALA:HB2 | 1.88 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:K:68:ASP:CG | 1:K:74:LEU:HD12 | 2.31 | 0.56 |
| 1:KA:8:ILE:H | 1:KA:8:ILE:HD12 | 1.71 | 0.56 |
| 1:KB:8:ILE:H | 1:KB:8:ILE:HD12 | 1.71 | 0.56 |
| 1:L:518:LEU:HD11 | 1:L:549:VAL:CG2 | 2.36 | 0.56 |
| 1:LB:388:ILE:CA | 1:LB:457:VAL:HG23 | 2.36 | 0.56 |
| 1:MA:174:LEU:C | 1:MA:197:LEU:HD13 | 2.31 | 0.56 |
| 1:NB:129:PHE:CE1 | 1:NB:137:VAL:HG11 | 2.40 | 0.56 |
| 1:OA:358:LEU:HD21 | 1:OA:407:MET:CE | 2.35 | 0.56 |
| 1:PA:126:LEU:C | 1:PA:127:LEU:HD22 | 2.31 | 0.56 |
| 1:R:168:ILE:HD11 | 1:R:174:LEU:HB3 | 1.88 | 0.56 |
| 1:R:547:PHE:CZ | 1:R:633:LEU:HD13 | 2.41 | 0.56 |
| 1:RB:19:LEU:HD12 | 1:RB:25:VAL:O | 2.06 | 0.56 |
| 1:S:424:GLU:HG3 | 1:S:514:LEU:HD13 | 1.88 | 0.56 |
| 1:T:137:VAL:HG11 | 1:T:143:TRP:CZ3 | 2.41 | 0.56 |
| 1:TB:761:ARG:HA | 1:UB:755:THR:HG23 | 1.87 | 0.56 |
| 1:UB:181:GLU:CD | 1:UB:191:VAL:HG12 | 2.31 | 0.56 |
| 1:UB:391:GLN:NE2 | 1:UB:398:VAL:HG23 | 2.20 | 0.56 |
| 1:VA:57:HIS:HD2 | 1:VA:109:ILE:HG22 | 1.70 | 0.56 |
| 1:VB:61:VAL:O | 1:VB:61:VAL:HG23 | 2.05 | 0.56 |
| 1:W:326:LEU:HD22 | 1:W:331:GLY:N | 2.21 | 0.56 |
| 1:WB:120:ALA:CB | 1:WB:144:LEU:HD13 | 2.29 | 0.56 |
| 1:XB:16:ILE:HD11 | 1:XB:47:PRO:N | 2.21 | 0.56 |
| 1:ZB:423:VAL:O | 1:ZB:423:VAL:HG12 | 2.05 | 0.56 |
| 1:BB:357:TRP:CH2 | 1:BB:371:VAL:HG13 | 2.41 | 0.55 |
| 1:DA:52:THR:HG22 | 1:DA:96:PRO:HG3 | 1.88 | 0.55 |
| 1:DA:285:LEU:HD21 | 1:DA:317:GLU:OE1 | 2.05 | 0.55 |
| 1:F:283:VAL:HG22 | 1:F:301:VAL:CG1 | 2.35 | 0.55 |
| 1:FB:276:LEU:HD13 | 1:FB:281:TYR:HA | 1.87 | 0.55 |
| 1:GB:5:GLU:HG2 | 1:GB:7:ILE:HG12 | 1.88 | 0.55 |
| 1:GB:129:PHE:CE1 | 1:GB:137:VAL:HG11 | 2.41 | 0.55 |
| 1:HB:126:LEU:C | 1:HB:127:LEU:HD22 | 2.32 | 0.55 |
| 1:I:388:ILE:HG23 | 1:I:456:ARG:HA | 1.88 | 0.55 |
| 1:JA:679:ARG:NH1 | 1:JA:680:LEU:HD23 | 2.21 | 0.55 |
| 1:JB:787:LEU:CD2 | 1:KB:781:VAL:HG12 | 2.36 | 0.55 |
| 1:K:358:LEU:HD21 | 1:K:377:ARG:NH1 | 2.21 | 0.55 |
| 1:KA:571:ALA:O | 1:KA:575:ILE:HD12 | 2.06 | 0.55 |
| 1:L:170:GLN:N | 1:L:201:VAL:HG13 | 2.20 | 0.55 |
| 1:NA:340:LEU:HD12 | 1:NA:351:HIS:ND1 | 2.22 | 0.55 |
| 1:NA:388:ILE:C | 1:NA:457:VAL:HG23 | 2.31 | 0.55 |
| 1:NB:801:ALA:HB1 | 1:OB:799:THR:HG21 | 1.87 | 0.55 |
| 1:OB:500:LEU:HD12 | 1:OB:511:ARG:HG2 | 1.88 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:P:704:LYS:HA | 1:P:707:LEU:HD12 | 1.86 | 0.55 |
| 1:PA:16:ILE:HD12 | 1:PA:37:ARG:HH11 | 1.70 | 0.55 |
| 1:PA:82:ARG:O | 1:PA:83:LEU:HD12 | 2.06 | 0.55 |
| 1:PA:112:LEU:HD21 | 1:PA:152:ILE:HD13 | 1.86 | 0.55 |
| 1:PA:388:ILE:HG13 | 1:PA:390:VAL:HG13 | 1.88 | 0.55 |
| 1:Q:119:THR:HG23 | 1:Q:162:ILE:CG2 | 2.36 | 0.55 |
| 1:QA:126:LEU:HD23 | 1:QA:127:LEU:HD22 | 1.88 | 0.55 |
| 1:R:391:GLN:O | 1:R:413:VAL:HG12 | 2.06 | 0.55 |
| 1:SB:488:SER:C | 1:SB:489:LEU:HD22 | 2.31 | 0.55 |
| 1:SB:583:VAL:HG13 | 1:SB:584:ALA:N | 2.21 | 0.55 |
| 1:V:282:CYS:SG | 1:V:284:ILE:HG23 | 2.46 | 0.55 |
| 1:VA:471:TYR:HD2 | 1:VA:478:ALA:HB2 | 1.71 | 0.55 |
| 1:W:340:LEU:HD13 | 1:W:371:VAL:HG22 | 1.88 | 0.55 |
| 1:W:539:LEU:HD12 | 1:W:642:SER:O | 2.06 | 0.55 |
| 1:WA:18:VAL:HG11 | 1:WA:37:ARG:NE | 2.20 | 0.55 |
| 1:Y:658:VAL:HG23 | 1:Z:533:ASP:OD2 | 2.06 | 0.55 |
| 1:YA:461:ARG:HA | 1:YA:486:LEU:HD12 | 1.87 | 0.55 |
| 1:ZA:540:GLN:O | 1:ZA:640:VAL:HG22 | 2.06 | 0.55 |
| 1:A:806:THR:HG23 | 1:B:808:ARG:CZ | 2.36 | 0.55 |
| 1:AA:58:TYR:CZ | 1:AA:92:LEU:HD23 | 2.42 | 0.55 |
| 1:AA:115:VAL:C | 1:AA:116:LEU:HD22 | 2.31 | 0.55 |
| 1:AB:516:LEU:HD11 | 1:AB:545:TRP:CH2 | 2.41 | 0.55 |
| 1:AC:333:LEU:HD23 | 1:AC:374:VAL:HG11 | 1.88 | 0.55 |
| 1:B:384:GLU:O | 1:B:402:ILE:HG22 | 2.05 | 0.55 |
| 1:BA:310:LEU:HD11 | 1:BA:316:LEU:HB2 | 1.88 | 0.55 |
| 1:BB:381:PRO:HA | 1:BB:405:THR:HG22 | 1.88 | 0.55 |
| 1:BB:416:GLU:OE2 | 1:BB:455:THR:HG23 | 2.06 | 0.55 |
| 1:DA:415:TRP:O | 1:DA:455:THR:HG22 | 2.06 | 0.55 |
| 1:DB:115:VAL:HG23 | 1:DB:119:THR:HG21 | 1.89 | 0.55 |
| 1:EB:10:ILE:HD11 | 1:EB:33:LYS:HB2 | 1.87 | 0.55 |
| 1:F:58:TYR:OH | 1:F:90:ILE:HA | 2.05 | 0.55 |
| 1:FA:284:ILE:HG23 | 1:FA:302:VAL:HG22 | 1.87 | 0.55 |
| 1:FB:172:GLN:HB3 | 1:FB:215:LEU:HD11 | 1.86 | 0.55 |
| 1:G:334:LEU:HD11 | 1:G:359:ILE:HB | 1.88 | 0.55 |
| 1:H:658:VAL:HG21 | 1:I:535:ALA:HB2 | 1.88 | 0.55 |
| 1:HB:388:ILE:N | 1:HB:457:VAL:HG23 | 2.21 | 0.55 |
| 1:IA:163:ILE:HD12 | 1:IA:206:PRO:HG2 | 1.87 | 0.55 |
| 1:J:626:ALA:HB3 | 1:J:635:VAL:HB | 1.88 | 0.55 |
| 1:KB:758:GLU:O | 1:KB:762:VAL:HG22 | 2.07 | 0.55 |
| 1:MA:332:LEU:HD11 | 1:MA:374:VAL:O | 2.06 | 0.55 |
| 1:MB:65:VAL:HG23 | 1:MB:67:ARG:HG3 | 1.88 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:MB:129:PHE:CE1 | 1:MB:137:VAL:HG11 | 2.41 | 0.55 |
| 1:N:196:TRP:C | 1:N:197:LEU:HD12 | 2.30 | 0.55 |
| 1:NA:17:HIS:HD1 | 1:NA:45:PHE:HZ | 1.53 | 0.55 |
| 1:NA:112:LEU:HD23 | 1:NA:150:THR:HG21 | 1.88 | 0.55 |
| 1:NB:547:PHE:CE1 | 1:NB:633:LEU:HD13 | 2.41 | 0.55 |
| 1:OA:233:ARG:HA | 1:OA:245:THR:HG23 | 1.88 | 0.55 |
| 1:Q:788:ALA:O | 1:Q:792:VAL:HG23 | 2.06 | 0.55 |
| 1:QB:392:ASP:OD2 | 1:QB:395:THR:HG22 | 2.07 | 0.55 |
| 1:R:92:LEU:HD21 | 1:R:112:LEU:HD13 | 1.88 | 0.55 |
| 1:S:119:THR:CG2 | 1:S:162:ILE:HD11 | 2.36 | 0.55 |
| 1:SB:16:ILE:HD11 | 1:SB:47:PRO:N | 2.22 | 0.55 |
| 1:TB:405:THR:HG23 | 1:UB:396:GLY:CA | 2.36 | 0.55 |
| 1:VB:702:ALA:HB2 | 1:WB:690:ARG:CZ | 2.36 | 0.55 |
| 1:WA:95:ASP:O | 1:WA:96:PRO:C | 2.47 | 0.55 |
| 1:WB:73:VAL:CG1 | 1:WB:81:VAL:HG23 | 2.35 | 0.55 |
| 1:X:539:LEU:HD12 | 1:X:540:GLN:H | 1.71 | 0.55 |
| 1:ZA:58:TYR:HE1 | 1:ZA:112:LEU:HD13 | 1.70 | 0.55 |
| 1:AB:579:VAL:O | 1:AB:583:VAL:HG12 | 2.05 | 0.55 |
| 1:AC:564:VAL:HG22 | 1:ZB:520:PRO:O | 2.06 | 0.55 |
| 1:AC:725:GLU:OE2 | 1:OA:722:ALA:HB2 | 2.06 | 0.55 |
| 1:BA:146:GLU:N | 1:BA:146:GLU:OE1 | 2.40 | 0.55 |
| 1:BA:331:GLY:O | 1:BA:407:MET:HE1 | 2.06 | 0.55 |
| 1:C:516:LEU:HD12 | 1:C:517:LEU:N | 2.20 | 0.55 |
| 1:CA:129:PHE:CE2 | 1:CA:137:VAL:HG11 | 2.42 | 0.55 |
| 1:CA:529:ILE:HB | 1:CA:583:VAL:HG11 | 1.88 | 0.55 |
| 1:CB:126:LEU:C | 1:CB:127:LEU:HD22 | 2.31 | 0.55 |
| 1:D:126:LEU:C | 1:D:127:LEU:HD22 | 2.30 | 0.55 |
| 1:FA:807:ILE:O | 1:FA:810:LEU:HD12 | 2.06 | 0.55 |
| 1:G:196:TRP:C | 1:G:197:LEU:HD22 | 2.30 | 0.55 |
| 1:H:288:VAL:HG22 | 1:H:314:GLU:OE2 | 2.05 | 0.55 |
| 1:HB:228:HIS:CE1 | 1:HB:268:LEU:HD22 | 2.41 | 0.55 |
| 1:I:8:ILE:H | 1:I:8:ILE:HD12 | 1.70 | 0.55 |
| 1:JA:65:VAL:HG13 | 1:JA:103:GLU:CD | 2.31 | 0.55 |
| 1:K:116:LEU:HB2 | 1:K:119:THR:HG22 | 1.88 | 0.55 |
| 1:KA:633:LEU:HD12 | 1:KA:634:VAL:H | 1.72 | 0.55 |
| 1:LA:122:HIS:ND1 | 1:LA:160:VAL:HG11 | 2.21 | 0.55 |
| 1:LA:126:LEU:O | 1:LA:127:LEU:HD22 | 2.07 | 0.55 |
| 1:M:591:PHE:O | 1:M:595:SER:N | 2.40 | 0.55 |
| 1:MB:489:LEU:HD11 | 1:MB:495:PHE:CE1 | 2.41 | 0.55 |
| 1:NB:16:ILE:HD11 | 1:NB:47:PRO:CD | 2.36 | 0.55 |
| 1:OA:73:VAL:HG21 | 1:OA:100:TYR:HE2 | 1.71 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OA:604:PHE:CE1 | 1:OA:638:VAL:HG23 | 2.41 | 0.55 |
| 1:OB:65:VAL:HG11 | 1:OB:100:TYR:CG | 2.41 | 0.55 |
| 1:QB:73:VAL:HG21 | 1:QB:100:TYR:CZ | 2.41 | 0.55 |
| 1:SA:737:GLY:O | 1:SA:741:VAL:HG23 | 2.05 | 0.55 |
| 1:T:387:GLY:C | 1:T:457:VAL:HG23 | 2.31 | 0.55 |
| 1:UA:8:ILE:HG22 | 1:UA:9:ARG:H | 1.71 | 0.55 |
| 1:UB:325:VAL:O | 1:UB:325:VAL:HG13 | 2.05 | 0.55 |
| 1:UB:340:LEU:HD12 | 1:UB:351:HIS:ND1 | 2.20 | 0.55 |
| 1:V:9:ARG:CG | 1:V:34:THR:HG22 | 2.36 | 0.55 |
| 1:VA:198:VAL:HG21 | 1:VA:204:TYR:CE1 | 2.41 | 0.55 |
| 1:X:58:TYR:HB2 | 1:X:107:LYS:HZ1 | 1.71 | 0.55 |
| 1:XB:120:ALA:CB | 1:XB:205:LEU:HD21 | 2.36 | 0.55 |
| 1:XB:337:LEU:HD21 | 1:XB:372:GLU:HB2 | 1.86 | 0.55 |
| 1:Y:228:HIS:HA | 1:Y:250:LEU:HD23 | 1.87 | 0.55 |
| 1:Y:538:GLN:CG | 1:Y:646:VAL:HG22 | 2.35 | 0.55 |
| 1:YB:124:LYS:HB2 | 1:YB:160:VAL:HG21 | 1.88 | 0.55 |
| 1:Z:390:VAL:HG11 | 1:Z:408:LEU:HD21 | 1.87 | 0.55 |
| 1:AA:392:ASP:OD2 | 1:AA:395:THR:HG22 | 2.06 | 0.55 |
| 1:AA:528:THR:HG22 | 1:AA:536:ARG:NH1 | 2.20 | 0.55 |
| 1:AA:654:LEU:O | 1:AA:658:VAL:HG12 | 2.07 | 0.55 |
| 1:AB:580:ARG:NH2 | 1:ZA:643:VAL:HG22 | 2.22 | 0.55 |
| 1:AC:250:LEU:HD21 | 1:AC:271:VAL:CG2 | 2.36 | 0.55 |
| 1:AC:276:LEU:HD13 | 1:AC:281:TYR:HA | 1.88 | 0.55 |
| 1:AC:535:ALA:HA | 1:ZB:658:VAL:HG21 | 1.87 | 0.55 |
| 1:B:65:VAL:HG23 | 1:B:67:ARG:CG | 2.36 | 0.55 |
| 1:BA:68:ASP:OD1 | 1:BA:74:LEU:HD12 | 2.05 | 0.55 |
| 1:BA:221:LEU:HD12 | 1:BA:256:THR:HG23 | 1.87 | 0.55 |
| 1:DB:53:VAL:HG11 | 1:DB:58:TYR:CD1 | 2.40 | 0.55 |
| 1:F:69:ALA:HB3 | 1:F:72:LEU:HB3 | 1.88 | 0.55 |
| 1:F:129:PHE:CE1 | 1:F:137:VAL:HG11 | 2.41 | 0.55 |
| 1:IA:172:GLN:CD | 1:IA:215:LEU:HD11 | 2.32 | 0.55 |
| 1:IB:143:TRP:HA | 1:IB:208:VAL:HG11 | 1.88 | 0.55 |
| 1:JB:175:ARG:HA | 1:JB:197:LEU:HD23 | 1.89 | 0.55 |
| 1:KB:9:ARG:CB | 1:KB:34:THR:HG22 | 2.36 | 0.55 |
| 1:KB:65:VAL:HG23 | 1:KB:67:ARG:CG | 2.35 | 0.55 |
| 1:L:398:VAL:HG11 | 1:L:415:TRP:CE3 | 2.42 | 0.55 |
| 1:LA:69:ALA:HB2 | 1:LA:74:LEU:HD21 | 1.89 | 0.55 |
| 1:N:123:LEU:HD11 | 1:N:145:PHE:HB2 | 1.89 | 0.55 |
| 1:NA:572:CYS:HA | 1:NA:575:ILE:HD12 | 1.89 | 0.55 |
| 1:OA:115:VAL:HG13 | 1:OA:121:LEU:HD23 | 1.87 | 0.55 |
| 1:QB:121:LEU:HD13 | 1:QB:159:VAL:CG2 | 2.37 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:R:212:VAL:HG23 | 1:R:212:VAL:O | 2.07 | 0.55 |
| 1:RA:56:ARG:NH2 | 1:SA:127:LEU:HD21 | 2.22 | 0.55 |
| 1:S:422:GLY:O | 1:S:426:LEU:HD13 | 2.07 | 0.55 |
| 1:SB:790:VAL:HG22 | 1:TB:785:GLN:HG2 | 1.88 | 0.55 |
| 1:T:115:VAL:HG12 | 1:T:119:THR:HG21 | 1.89 | 0.55 |
| 1:TA:480:VAL:HG11 | 1:TA:558:THR:HB | 1.88 | 0.55 |
| 1:UA:121:LEU:HD13 | 1:UA:159:VAL:HG11 | 1.89 | 0.55 |
| 1:WA:489:LEU:HD21 | 1:WA:495:PHE:CZ | 2.40 | 0.55 |
| 1:YB:225:THR:HB | 1:YB:270:VAL:HG12 | 1.89 | 0.55 |
| 1:AB:579:VAL:HA | 1:AB:602:ALA:HB1 | 1.88 | 0.55 |
| 1:AC:55:PRO:O | 1:AC:56:ARG:HD3 | 2.06 | 0.55 |
| 1:BB:469:GLN:HA | 1:BB:480:VAL:HG22 | 1.89 | 0.55 |
| 1:E:575:ILE:HD11 | 1:E:603:VAL:HG22 | 1.89 | 0.55 |
| 1:EA:7:ILE:HG22 | 1:EA:7:ILE:O | 2.06 | 0.55 |
| 1:EA:772:TYR:CD1 | 1:FA:770:LEU:HD11 | 2.42 | 0.55 |
| 1:EB:462:VAL:HG12 | 1:EB:466:ALA:HB3 | 1.87 | 0.55 |
| 1:EB:799:THR:HA | 1:EB:807:ILE:HD11 | 1.87 | 0.55 |
| 1:FB:651:ARG:HE | 1:FB:654:LEU:HD12 | 1.71 | 0.55 |
| 1:GB:13:TYR:CB | 1:GB:50:MET:HE1 | 2.36 | 0.55 |
| 1:IB:227:LEU:CD2 | 1:IB:229:LEU:HD21 | 2.37 | 0.55 |
| 1:JB:115:VAL:HG12 | 1:JB:121:LEU:HD22 | 1.89 | 0.55 |
| 1:K:115:VAL:HG22 | 1:K:149:GLY:O | 2.07 | 0.55 |
| 1:KB:709:LEU:HA | 1:KB:712:LEU:HD12 | 1.88 | 0.55 |
| 1:L:388:ILE:CA | 1:L:457:VAL:HG23 | 2.37 | 0.55 |
| 1:LA:388:ILE:C | 1:LA:457:VAL:HG23 | 2.31 | 0.55 |
| 1:N:91:ARG:C | 1:N:92:LEU:HD12 | 2.32 | 0.55 |
| 1:OB:333:LEU:HD23 | 1:OB:374:VAL:HG11 | 1.87 | 0.55 |
| 1:QB:530:GLU:O | 1:QB:583:VAL:HG22 | 2.05 | 0.55 |
| 1:RA:223:GLU:OE2 | 1:RA:253:VAL:HG22 | 2.07 | 0.55 |
| 1:S:83:LEU:HD21 | 1:S:101:PRO:O | 2.07 | 0.55 |
| 1:SA:121:LEU:HD12 | 1:SA:151:TYR:CE1 | 2.42 | 0.55 |
| 1:TA:123:LEU:HD22 | 1:TA:157:VAL:CG1 | 2.35 | 0.55 |
| 1:TA:123:LEU:HD22 | 1:TA:157:VAL:HG13 | 1.87 | 0.55 |
| 1:UB:628:PHE:CE2 | 1:UB:635:VAL:HG23 | 2.42 | 0.55 |
| 1:XA:279:HIS:O | 1:XA:323:VAL:HG13 | 2.05 | 0.55 |
| 1:XB:221:LEU:HD11 | 1:XB:259:HIS:HB3 | 1.88 | 0.55 |
| 1:YB:217:ASP:O | 1:YB:260:VAL:HG23 | 2.05 | 0.55 |
| 1:YB:489:LEU:HD21 | 1:YB:495:PHE:CZ | 2.42 | 0.55 |
| 1:Z:46:ALA:HB1 | 1:Z:47:PRO:CD | 2.37 | 0.55 |
| 1:A:808:ARG:HB2 | 1:NA:806:THR:HG22 | 1.87 | 0.55 |
| 1:AA:792:VAL:HG22 | 1:Z:794:LYS:HG2 | 1.89 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AC:170:GLN:HB2 | 1:AC:201:VAL:HG13 | 1.86 | 0.55 |
| 1:C:81:VAL:HG13 | 1:C:83:LEU:CD1 | 2.22 | 0.55 |
| 1:CA:425:GLU:HA | 1:CA:514:LEU:HD22 | 1.88 | 0.55 |
| 1:CA:658:VAL:O | 1:CA:662:ILE:HD12 | 2.06 | 0.55 |
| 1:D:405:THR:HG23 | 1:E:396:GLY:HA3 | 1.88 | 0.55 |
| 1:DB:19:LEU:HB3 | 1:DB:44:LEU:HD21 | 1.88 | 0.55 |
| 1:EB:223:GLU:OE1 | 1:EB:253:VAL:HG21 | 2.06 | 0.55 |
| 1:FB:83:LEU:HD21 | 1:FB:102:GLY:HA3 | 1.87 | 0.55 |
| 1:G:212:VAL:O | 1:G:213:LEU:HD22 | 2.07 | 0.55 |
| 1:GA:227:LEU:HD23 | 1:GA:229:LEU:HD21 | 1.89 | 0.55 |
| 1:HB:788:ALA:O | 1:HB:792:VAL:HG23 | 2.05 | 0.55 |
| 1:I:798:MET:HE2 | 1:J:792:VAL:HG23 | 1.89 | 0.55 |
| 1:IA:628:PHE:CE1 | 1:IA:635:VAL:HG23 | 2.41 | 0.55 |
| 1:JB:69:ALA:O | 1:JB:70:GLN:HG3 | 2.07 | 0.55 |
| 1:K:68:ASP:OD1 | 1:K:74:LEU:HD12 | 2.06 | 0.55 |
| 1:L:770:LEU:HD22 | 1:L:774:ARG:NH1 | 2.21 | 0.55 |
| 1:LA:115:VAL:HG22 | 1:LA:149:GLY:O | 2.07 | 0.55 |
| 1:M:587:THR:HG23 | 1:M:590:ASP:H | 1.70 | 0.55 |
| 1:MA:388:ILE:CA | 1:MA:457:VAL:HG23 | 2.37 | 0.55 |
| 1:MB:114:VAL:O | 1:MB:114:VAL:HG13 | 2.06 | 0.55 |
| 1:N:104:VAL:HG22 | 1:N:105:LEU:H | 1.70 | 0.55 |
| 1:N:416:GLU:OE2 | 1:N:455:THR:HG23 | 2.07 | 0.55 |
| 1:OA:174:LEU:HD21 | 1:OA:212:VAL:HB | 1.89 | 0.55 |
| 1:P:419:LEU:HD11 | 1:P:452:ARG:NH1 | 2.22 | 0.55 |
| 1:P:529:ILE:HB | 1:P:583:VAL:HG11 | 1.89 | 0.55 |
| 1:RA:126:LEU:C | 1:RA:127:LEU:HD22 | 2.32 | 0.55 |
| 1:S:65:VAL:HG11 | 1:S:100:TYR:CB | 2.36 | 0.55 |
| 1:S:276:LEU:HD11 | 1:S:282:CYS:SG | 2.46 | 0.55 |
| 1:SA:82:ARG:C | 1:SA:83:LEU:HD12 | 2.31 | 0.55 |
| 1:SB:157:VAL:HG12 | 1:SB:158:GLU:O | 2.07 | 0.55 |
| 1:SB:181:GLU:O | 1:SB:182:CYS:HB3 | 2.06 | 0.55 |
| 1:TA:401:VAL:HG23 | 1:TA:401:VAL:O | 2.07 | 0.55 |
| 1:TB:564:VAL:HG11 | 1:TB:567:PHE:HA | 1.89 | 0.55 |
| 1:UB:585:SER:OG | 1:UB:586:VAL:HG13 | 2.07 | 0.55 |
| 1:VB:276:LEU:HD13 | 1:VB:281:TYR:HA | 1.88 | 0.55 |
| 1:WA:10:ILE:CD1 | 1:WA:16:ILE:HG22 | 2.37 | 0.55 |
| 1:WA:650:THR:O | 1:WA:654:LEU:HD12 | 2.06 | 0.55 |
| 1:WB:539:LEU:HD12 | 1:WB:640:VAL:HG11 | 1.89 | 0.55 |
| 1:X:219:VAL:HG11 | 1:X:227:LEU:HD22 | 1.87 | 0.55 |
| 1:XB:526:VAL:HG22 | 1:XB:540:GLN:HG3 | 1.88 | 0.55 |
| 1:YB:402:ILE:HG22 | 1:YB:403:GLY:N | 2.22 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:YB:537:LEU:HD23 | 1:YB:538:GLN:O | 2.06 | 0.55 |
| 1:AA:196:TRP:C | 1:AA:197:LEU:HD12 | 2.32 | 0.55 |
| 1:AA:423:VAL:HA | 1:AA:426:LEU:HD12 | 1.89 | 0.55 |
| 1:BA:46:ALA:HB1 | 1:BA:47:PRO:HD2 | 1.88 | 0.55 |
| 1:D:219:VAL:HG11 | 1:D:227:LEU:CD1 | 2.37 | 0.55 |
| 1:DA:788:ALA:O | 1:DA:792:VAL:HG23 | 2.07 | 0.55 |
| 1:EB:105:LEU:HD23 | 1:EB:106:GLU:N | 2.21 | 0.55 |
| 1:FA:16:ILE:HG21 | 1:FA:43:VAL:HG13 | 1.89 | 0.55 |
| 1:G:267:VAL:C | 1:G:268:LEU:HD12 | 2.32 | 0.55 |
| 1:G:470:VAL:HG12 | 1:G:493:GLU:HG2 | 1.87 | 0.55 |
| 1:GB:390:VAL:HG21 | 1:GB:399:ARG:NH1 | 2.21 | 0.55 |
| 1:HA:284:ILE:HD11 | 1:HA:300:ARG:HD2 | 1.88 | 0.55 |
| 1:HB:529:ILE:HB | 1:HB:583:VAL:HG11 | 1.89 | 0.55 |
| 1:I:325:VAL:O | 1:I:325:VAL:HG13 | 2.06 | 0.55 |
| 1:IA:165:ALA:HB2 | 1:IA:205:LEU:HB2 | 1.89 | 0.55 |
| 1:KB:662:ILE:HD13 | 1:LB:588:PHE:CZ | 2.42 | 0.55 |
| 1:LA:25:VAL:HG21 | 1:LA:78:THR:O | 2.06 | 0.55 |
| 1:M:61:VAL:HG21 | 1:M:103:GLU:OE2 | 2.06 | 0.55 |
| 1:M:626:ALA:HB3 | 1:M:635:VAL:HB | 1.89 | 0.55 |
| 1:MB:82:ARG:C | 1:MB:83:LEU:HD12 | 2.31 | 0.55 |
| 1:NA:122:HIS:ND1 | 1:NA:160:VAL:HG21 | 2.22 | 0.55 |
| 1:NA:173:ALA:CB | 1:NA:197:LEU:HD12 | 2.36 | 0.55 |
| 1:O:787:LEU:CD2 | 1:P:781:VAL:HG12 | 2.36 | 0.55 |
| 1:PB:170:GLN:N | 1:PB:201:VAL:HG13 | 2.21 | 0.55 |
| 1:QA:173:ALA:HB3 | 1:QA:260:VAL:HG21 | 1.88 | 0.55 |
| 1:R:579:VAL:O | 1:R:583:VAL:HG12 | 2.06 | 0.55 |
| 1:T:283:VAL:HG13 | 1:T:300:ARG:O | 2.05 | 0.55 |
| 1:UB:60:THR:HG22 | 1:UB:107:LYS:CB | 2.36 | 0.55 |
| 1:V:53:VAL:HG11 | 1:V:92:LEU:HA | 1.89 | 0.55 |
| 1:VA:325:VAL:O | 1:VA:325:VAL:HG13 | 2.05 | 0.55 |
| 1:VA:541:LEU:HD13 | 1:VA:543:TYR:OH | 2.07 | 0.55 |
| 1:WA:196:TRP:C | 1:WA:197:LEU:HD12 | 2.32 | 0.55 |
| 1:Y:115:VAL:HG23 | 1:Y:148:PRO:C | 2.31 | 0.55 |
| 1:YA:575:ILE:HD11 | 1:YA:626:ALA:CB | 2.36 | 0.55 |
| 1:YA:643:VAL:HG12 | 1:YA:643:VAL:O | 2.07 | 0.55 |
| 1:YB:757:ALA:O | 1:ZB:751:LEU:HD22 | 2.07 | 0.55 |
| 1:ZA:173:ALA:O | 1:ZA:215:LEU:HD12 | 2.06 | 0.55 |
| 1:A:547:PHE:CE1 | 1:A:633:LEU:HD13 | 2.42 | 0.55 |
| 1:B:165:ALA:HB1 | 1:B:203:ALA:O | 2.06 | 0.55 |
| 1:B:331:GLY:N | 1:B:407:MET:HE3 | 2.22 | 0.55 |
| 1:BA:468:VAL:HG13 | 1:BA:514:LEU:O | 2.07 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:BB:212:VAL:O | 1:BB:212:VAL:HG23 | 2.07 | 0.55 |
| 1:BB:229:LEU:HD23 | 1:BB:267:VAL:HG22 | 1.89 | 0.55 |
| 1:CA:732:ALA:HA | 1:CA:735:ILE:HD12 | 1.89 | 0.55 |
| 1:D:390:VAL:HG11 | 1:D:408:LEU:HD21 | 1.89 | 0.55 |
| 1:G:74:LEU:O | 1:G:81:VAL:HG23 | 2.07 | 0.55 |
| 1:GA:405:THR:HG23 | 1:HA:396:GLY:CA | 2.37 | 0.55 |
| 1:IB:390:VAL:HG12 | 1:IB:414:LEU:HD23 | 1.87 | 0.55 |
| 1:MA:65:VAL:HG11 | 1:MA:100:TYR:HB2 | 1.87 | 0.55 |
| 1:O:65:VAL:CG2 | 1:O:73:VAL:HG21 | 2.36 | 0.55 |
| 1:OA:415:TRP:C | 1:OA:455:THR:HG22 | 2.32 | 0.55 |
| 1:OB:9:ARG:CB | 1:OB:34:THR:HG22 | 2.37 | 0.55 |
| 1:Q:405:THR:HG23 | 1:R:396:GLY:N | 2.21 | 0.55 |
| 1:R:274:THR:HG21 | 1:R:310:LEU:HD21 | 1.88 | 0.55 |
| 1:RA:416:GLU:OE1 | 1:RA:455:THR:HG23 | 2.07 | 0.55 |
| 1:TA:233:ARG:HA | 1:TA:245:THR:HG23 | 1.88 | 0.55 |
| 1:W:18:VAL:HG12 | 1:W:43:VAL:HG22 | 1.89 | 0.55 |
| 1:WB:221:LEU:HD13 | 1:WB:252:THR:C | 2.32 | 0.55 |
| 1:WB:388:ILE:N | 1:WB:457:VAL:HG23 | 2.21 | 0.55 |
| 1:XA:114:VAL:HG23 | 1:XA:149:GLY:C | 2.32 | 0.55 |
| 1:XA:358:LEU:HD21 | 1:XA:407:MET:CG | 2.37 | 0.55 |
| 1:YA:283:VAL:HG13 | 1:YA:300:ARG:O | 2.06 | 0.55 |
| 1:YB:3:THR:HG21 | 1:YB:38:GLN:O | 2.07 | 0.55 |
| 1:YB:113:GLN:HG3 | 1:YB:121:LEU:HD22 | 1.89 | 0.55 |
| 1:ZA:58:TYR:CE1 | 1:ZA:112:LEU:HD13 | 2.42 | 0.55 |
| 1:ZB:504:ARG:HB3 | 1:ZB:526:VAL:HG23 | 1.89 | 0.55 |
| 1:CB:549:VAL:HG12 | 1:CB:551:ASP:O | 2.07 | 0.55 |
| 1:FB:129:PHE:CE1 | 1:FB:156:GLU:HB3 | 2.42 | 0.55 |
| 1:GA:489:LEU:HD21 | 1:GA:495:PHE:CD1 | 2.42 | 0.55 |
| 1:HA:539:LEU:HD12 | 1:HA:643:VAL:HG12 | 1.89 | 0.55 |
| 1:LA:126:LEU:C | 1:LA:127:LEU:HD22 | 2.31 | 0.55 |
| 1:LA:229:LEU:HD12 | 1:LA:251:VAL:HG11 | 1.88 | 0.55 |
| 1:MA:566:ASP:OD1 | 1:MA:568:VAL:HG12 | 2.07 | 0.55 |
| 1:NA:108:ASP:O | 1:NA:110:THR:HG23 | 2.07 | 0.55 |
| 1:OA:225:THR:HB | 1:OA:270:VAL:HG12 | 1.89 | 0.55 |
| 1:OB:517:LEU:C | 1:OB:518:LEU:HD12 | 2.31 | 0.55 |
| 1:PA:176:LEU:HD21 | 1:PA:196:TRP:NE1 | 2.22 | 0.55 |
| 1:PA:539:LEU:HD13 | 1:PA:643:VAL:HG22 | 1.89 | 0.55 |
| 1:QA:176:LEU:HD21 | 1:QA:196:TRP:NE1 | 2.22 | 0.55 |
| 1:R:227:LEU:HD21 | 1:R:229:LEU:HD21 | 1.89 | 0.55 |
| 1:RA:30:VAL:HG23 | 1:RA:98:PRO:HG3 | 1.89 | 0.55 |
| 1:RA:105:LEU:HD23 | 1:RA:107:LYS:H | 1.72 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:RB:228:HIS:ND1 | 1:RB:268:LEU:HD22 | 2.22 | 0.55 |
| 1:V:276:LEU:HD23 | 1:V:320:ILE:HG23 | 1.89 | 0.55 |
| 1:VA:500:LEU:HD13 | 1:VA:513:ALA:HB3 | 1.89 | 0.55 |
| 1:WA:368:SER:OG | 1:WA:371:VAL:HG23 | 2.07 | 0.55 |
| 1:WB:384:GLU:O | 1:WB:402:ILE:HG22 | 2.07 | 0.55 |
| 1:XB:55:PRO:O | 1:XB:56:ARG:HD3 | 2.06 | 0.55 |
| 1:XB:121:LEU:O | 1:XB:121:LEU:HD12 | 2.06 | 0.55 |
| 1:Y:16:ILE:HD11 | 1:Y:47:PRO:N | 2.21 | 0.55 |
| 1:AA:727:GLU:HG2 | 1:Z:735:ILE:HD13 | 1.88 | 0.55 |
| 1:AB:60:THR:OG1 | 1:AB:107:LYS:HB2 | 2.07 | 0.55 |
| 1:B:233:ARG:HA | 1:B:245:THR:HG23 | 1.89 | 0.55 |
| 1:B:275:THR:HG23 | 1:B:275:THR:O | 2.06 | 0.55 |
| 1:B:564:VAL:HG11 | 1:B:567:PHE:HA | 1.89 | 0.55 |
| 1:CB:228:HIS:HA | 1:CB:250:LEU:HD23 | 1.88 | 0.55 |
| 1:D:388:ILE:N | 1:D:457:VAL:HG23 | 2.22 | 0.55 |
| 1:DB:400:ALA:O | 1:DB:402:ILE:HD12 | 2.07 | 0.55 |
| 1:E:144:LEU:HD23 | 1:E:144:LEU:H | 1.72 | 0.55 |
| 1:F:115:VAL:HG23 | 1:F:147:GLY:O | 2.06 | 0.55 |
| 1:FA:284:ILE:HD12 | 1:FA:287:PRO:CB | 2.37 | 0.55 |
| 1:GA:174:LEU:C | 1:GA:197:LEU:HD13 | 2.32 | 0.55 |
| 1:H:331:GLY:O | 1:H:358:LEU:HD11 | 2.06 | 0.55 |
| 1:JA:9:ARG:HB3 | 1:JA:34:THR:HG22 | 1.89 | 0.55 |
| 1:JA:126:LEU:O | 1:JA:127:LEU:HD22 | 2.07 | 0.55 |
| 1:JB:233:ARG:HA | 1:JB:245:THR:HG23 | 1.88 | 0.55 |
| 1:KA:65:VAL:HG11 | 1:KA:100:TYR:HB2 | 1.89 | 0.55 |
| 1:KA:126:LEU:C | 1:KA:127:LEU:HD22 | 2.31 | 0.55 |
| 1:KA:325:VAL:HA | 1:KA:364:GLU:HG3 | 1.89 | 0.55 |
| 1:KB:227:LEU:CD2 | 1:KB:229:LEU:HD21 | 2.36 | 0.55 |
| 1:L:216:VAL:HG22 | 1:L:260:VAL:CG2 | 2.38 | 0.55 |
| 1:LA:99:LEU:HD11 | 1:LA:103:GLU:C | 2.32 | 0.55 |
| 1:LA:332:LEU:HD12 | 1:LA:375:GLU:O | 2.07 | 0.55 |
| 1:LB:787:LEU:CD2 | 1:MB:781:VAL:HG12 | 2.37 | 0.55 |
| 1:M:735:ILE:HD13 | 1:N:727:GLU:HG2 | 1.88 | 0.55 |
| 1:MA:165:ALA:HB2 | 1:MA:205:LEU:HB2 | 1.89 | 0.55 |
| 1:MA:227:LEU:HD13 | 1:MA:270:VAL:HG23 | 1.87 | 0.55 |
| 1:NB:107:LYS:HZ2 | 1:NB:110:THR:HG22 | 1.72 | 0.55 |
| 1:O:231:ALA:HB2 | 1:O:243:ARG:HB3 | 1.89 | 0.55 |
| 1:O:690:ARG:HE | 1:O:694:LEU:HD21 | 1.70 | 0.55 |
| 1:OA:176:LEU:HD23 | 1:OA:196:TRP:O | 2.06 | 0.55 |
| 1:OB:69:ALA:HB2 | 1:OB:74:LEU:HD21 | 1.88 | 0.55 |
| 1:OB:172:GLN:HB3 | 1:OB:215:LEU:HD11 | 1.88 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OB:642:SER:O | 1:OB:643:VAL:HG13 | 2.07 | 0.55 |
| 1:P:798:MET:HE1 | 1:Q:791:GLU:OE2 | 2.06 | 0.55 |
| 1:PA:389:TYR:HE2 | 1:PA:458:VAL:HG23 | 1.71 | 0.55 |
| 1:QB:288:VAL:HG12 | 1:QB:294:ASN:N | 2.22 | 0.55 |
| 1:SA:221:LEU:O | 1:SA:253:VAL:HG12 | 2.07 | 0.55 |
| 1:SB:537:LEU:HD23 | 1:SB:643:VAL:HG12 | 1.87 | 0.55 |
| 1:TA:176:LEU:HD21 | 1:TA:196:TRP:NE1 | 2.22 | 0.55 |
| 1:UB:539:LEU:HD21 | 1:UB:640:VAL:HG22 | 1.88 | 0.55 |
| 1:V:219:VAL:O | 1:V:219:VAL:HG13 | 2.07 | 0.55 |
| 1:VB:758:GLU:O | 1:VB:762:VAL:HG22 | 2.05 | 0.55 |
| 1:W:526:VAL:HG22 | 1:W:540:GLN:HG2 | 1.89 | 0.55 |
| 1:X:112:LEU:HD21 | 1:X:150:THR:HG21 | 1.88 | 0.55 |
| 1:X:198:VAL:O | 1:X:198:VAL:HG13 | 2.07 | 0.55 |
| 1:XA:3:THR:HA | 1:XA:8:ILE:HD11 | 1.88 | 0.55 |
| 1:XB:735:ILE:HD12 | 1:YB:726:ALA:HB3 | 1.87 | 0.55 |
| 1:YB:144:LEU:O | 1:YB:144:LEU:HD12 | 2.07 | 0.55 |
| 1:ZB:367:PRO:HB3 | 1:ZB:373:VAL:HG23 | 1.88 | 0.55 |
| 1:ZB:468:VAL:HG22 | 1:ZB:515:CYS:HA | 1.89 | 0.55 |
| 1:AB:16:ILE:HG23 | 1:AB:45:PHE:O | 2.07 | 0.54 |
| 1:AB:192:THR:O | 1:ZA:203:ALA:HB2 | 2.07 | 0.54 |
| 1:AB:245:THR:HG21 | 1:ZA:220:ILE:HD12 | 1.88 | 0.54 |
| 1:AC:732:ALA:HA | 1:AC:735:ILE:HD12 | 1.88 | 0.54 |
| 1:BA:388:ILE:HG22 | 1:BA:456:ARG:HA | 1.89 | 0.54 |
| 1:D:61:VAL:O | 1:D:61:VAL:HG23 | 2.08 | 0.54 |
| 1:DA:125:ALA:HB2 | 1:DA:137:VAL:HG13 | 1.88 | 0.54 |
| 1:EB:405:THR:HG21 | 1:FB:393:VAL:O | 2.07 | 0.54 |
| 1:F:735:ILE:HD13 | 1:G:727:GLU:HG2 | 1.89 | 0.54 |
| 1:FB:267:VAL:C | 1:FB:268:LEU:HD12 | 2.32 | 0.54 |
| 1:G:368:SER:OG | 1:G:371:VAL:HG23 | 2.06 | 0.54 |
| 1:J:662:ILE:O | 1:J:666:THR:HG23 | 2.05 | 0.54 |
| 1:JA:539:LEU:HD12 | 1:JA:642:SER:O | 2.07 | 0.54 |
| 1:K:389:TYR:CD1 | 1:K:457:VAL:HG22 | 2.42 | 0.54 |
| 1:K:547:PHE:CD1 | 1:K:561:LEU:HD22 | 2.43 | 0.54 |
| 1:P:112:LEU:HD12 | 1:P:153:PRO:HD3 | 1.89 | 0.54 |
| 1:PB:500:LEU:HD12 | 1:PB:511:ARG:HG2 | 1.89 | 0.54 |
| 1:QB:470:VAL:HG11 | 1:QB:489:LEU:HD23 | 1.89 | 0.54 |
| 1:QB:786:GLN:CD | 1:RB:781:VAL:HG21 | 2.32 | 0.54 |
| 1:S:713:SER:O | 1:T:707:LEU:HD13 | 2.07 | 0.54 |
| 1:SA:65:VAL:HG21 | 1:SA:73:VAL:HG21 | 1.89 | 0.54 |
| 1:T:25:VAL:HG22 | 1:T:79:GLY:O | 2.07 | 0.54 |
| 1:T:531:THR:HG21 | 1:T:588:PHE:HA | 1.88 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UA:8:ILE:HG22 | 1:UA:9:ARG:N | 2.22 | 0.54 |
| 1:UA:109:ILE:O | 1:UA:110:THR:HG23 | 2.07 | 0.54 |
| 1:UA:284:ILE:HD12 | 1:UA:287:PRO:HB3 | 1.88 | 0.54 |
| 1:UA:758:GLU:O | 1:UA:762:VAL:HG22 | 2.06 | 0.54 |
| 1:ZA:10:ILE:HD12 | 1:ZA:16:ILE:HD12 | 1.89 | 0.54 |
| 1:ZB:808:ARG:O | 1:ZB:808:ARG:HG2 | 2.07 | 0.54 |
| 1:A:227:LEU:O | 1:A:251:VAL:HG22 | 2.07 | 0.54 |
| 1:AB:480:VAL:HG21 | 1:AB:558:THR:HB | 1.90 | 0.54 |
| 1:BA:174:LEU:HD23 | 1:BA:175:ARG:O | 2.06 | 0.54 |
| 1:C:538:GLN:N | 1:C:646:VAL:HG23 | 2.23 | 0.54 |
| 1:CB:65:VAL:CG2 | 1:CB:73:VAL:HG22 | 2.37 | 0.54 |
| 1:D:331:GLY:HA3 | 1:D:407:MET:HE1 | 1.88 | 0.54 |
| 1:DA:767:GLU:O | 1:DA:771:VAL:HG23 | 2.07 | 0.54 |
| 1:DA:785:GLN:O | 1:DA:789:GLU:OE1 | 2.25 | 0.54 |
| 1:E:537:LEU:HD23 | 1:E:645:PRO:HA | 1.88 | 0.54 |
| 1:GB:163:ILE:CD1 | 1:GB:205:LEU:HD21 | 2.36 | 0.54 |
| 1:IA:250:LEU:HD11 | 1:IA:310:LEU:O | 2.07 | 0.54 |
| 1:IB:405:THR:HG21 | 1:JB:393:VAL:O | 2.08 | 0.54 |
| 1:IB:595:SER:O | 1:IB:599:ILE:HD12 | 2.08 | 0.54 |
| 1:JA:230:ARG:HG2 | 1:JA:268:LEU:HD11 | 1.88 | 0.54 |
| 1:KA:43:VAL:C | 1:KA:44:LEU:HD22 | 2.32 | 0.54 |
| 1:KB:541:LEU:C | 1:KB:541:LEU:HD12 | 2.31 | 0.54 |
| 1:LA:599:ILE:HD13 | 1:LA:640:VAL:HG21 | 1.89 | 0.54 |
| 1:MA:3:THR:HG22 | 1:MA:6:PHE:CD1 | 2.42 | 0.54 |
| 1:MB:170:GLN:N | 1:MB:201:VAL:HG13 | 2.22 | 0.54 |
| 1:MB:549:VAL:HG21 | 1:MB:552:ARG:NH1 | 2.22 | 0.54 |
| 1:NA:419:LEU:HD13 | 1:NA:424:GLU:OE2 | 2.08 | 0.54 |
| 1:OB:65:VAL:HG13 | 1:OB:103:GLU:OE2 | 2.06 | 0.54 |
| 1:PB:786:GLN:HB2 | 1:QB:781:VAL:HG11 | 1.89 | 0.54 |
| 1:Q:83:LEU:HD21 | 1:Q:102:GLY:O | 2.08 | 0.54 |
| 1:Q:126:LEU:HD23 | 1:Q:158:GLU:OE1 | 2.06 | 0.54 |
| 1:QA:807:ILE:HG22 | 1:QA:807:ILE:O | 2.07 | 0.54 |
| 1:RA:119:THR:OG1 | 1:RA:162:ILE:HG22 | 2.07 | 0.54 |
| 1:RA:283:VAL:HG22 | 1:RA:301:VAL:CG2 | 2.29 | 0.54 |
| 1:RB:241:VAL:HG11 | 1:RB:243:ARG:CZ | 2.37 | 0.54 |
| 1:SA:3:THR:HG22 | 1:SA:3:THR:O | 2.07 | 0.54 |
| 1:SB:390:VAL:HG23 | 1:SB:413:VAL:O | 2.06 | 0.54 |
| 1:SB:400:ALA:HB1 | 1:SB:457:VAL:HG21 | 1.88 | 0.54 |
| 1:TB:25:VAL:HG13 | 1:TB:79:GLY:CA | 2.36 | 0.54 |
| 1:TB:527:ILE:HG12 | 1:TB:541:LEU:HD21 | 1.88 | 0.54 |
| 1:V:344:GLU:HB3 | 1:V:371:VAL:HG23 | 1.89 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:WA:260:VAL:O | 1:WA:260:VAL:HG23 | 2.07 | 0.54 |
| 1:XB:216:VAL:HG22 | 1:XB:260:VAL:CG2 | 2.37 | 0.54 |
| 1:XB:408:LEU:HD23 | 1:XB:412:GLU:O | 2.07 | 0.54 |
| 1:Y:168:ILE:HD11 | 1:Y:200:THR:OG1 | 2.07 | 0.54 |
| 1:YA:227:LEU:HB3 | 1:YA:251:VAL:HG23 | 1.88 | 0.54 |
| 1:AA:398:VAL:HG11 | 1:AA:492:GLU:OE2 | 2.06 | 0.54 |
| 1:B:60:THR:HG22 | 1:B:90:ILE:CG1 | 2.37 | 0.54 |
| 1:B:176:LEU:HD21 | 1:B:196:TRP:NE1 | 2.23 | 0.54 |
| 1:BA:468:VAL:HG22 | 1:BA:515:CYS:HB3 | 1.89 | 0.54 |
| 1:BB:540:GLN:HG3 | 1:BB:641:GLN:H | 1.73 | 0.54 |
| 1:D:204:TYR:HH | 1:D:210:GLU:CD | 2.16 | 0.54 |
| 1:DB:60:THR:HG22 | 1:DB:90:ILE:CG1 | 2.37 | 0.54 |
| 1:E:284:ILE:HG23 | 1:E:302:VAL:HG21 | 1.88 | 0.54 |
| 1:EB:136:LYS:O | 1:EB:138:VAL:HG13 | 2.08 | 0.54 |
| 1:GA:65:VAL:HG12 | 1:GA:83:LEU:HG | 1.89 | 0.54 |
| 1:H:56:ARG:O | 1:H:111:PRO:HA | 2.06 | 0.54 |
| 1:H:166:THR:HG21 | 1:H:174:LEU:CD2 | 2.36 | 0.54 |
| 1:JB:380:ILE:HD12 | 1:JB:380:ILE:H | 1.72 | 0.54 |
| 1:M:276:LEU:CD1 | 1:M:302:VAL:HG12 | 2.37 | 0.54 |
| 1:N:129:PHE:CZ | 1:N:137:VAL:HG11 | 2.43 | 0.54 |
| 1:N:228:HIS:CA | 1:N:250:LEU:HD23 | 2.37 | 0.54 |
| 1:NA:530:GLU:O | 1:NA:583:VAL:HG22 | 2.06 | 0.54 |
| 1:OA:741:VAL:HG12 | 1:OA:745:LYS:HE2 | 1.89 | 0.54 |
| 1:OB:368:SER:OG | 1:OB:371:VAL:HG23 | 2.06 | 0.54 |
| 1:PB:413:VAL:HG22 | 1:PB:414:LEU:H | 1.71 | 0.54 |
| 1:QA:73:VAL:HG11 | 1:QA:100:TYR:CD2 | 2.41 | 0.54 |
| 1:R:801:ALA:CB | 1:S:799:THR:HG21 | 2.35 | 0.54 |
| 1:SB:382:LEU:HD13 | 1:SB:387:GLY:HA2 | 1.89 | 0.54 |
| 1:SB:405:THR:HG23 | 1:TB:396:GLY:CA | 2.37 | 0.54 |
| 1:V:592:HIS:HD2 | 1:V:643:VAL:HG11 | 1.73 | 0.54 |
| 1:W:804:PRO:HA | 1:W:807:ILE:HD12 | 1.89 | 0.54 |
| 1:WA:390:VAL:HG23 | 1:WA:390:VAL:O | 2.06 | 0.54 |
| 1:WA:523:PHE:CD1 | 1:WA:568:VAL:HG23 | 2.42 | 0.54 |
| 1:YA:8:ILE:HG22 | 1:YA:10:ILE:HG23 | 1.88 | 0.54 |
| 1:YA:541:LEU:HD23 | 1:YA:640:VAL:HG22 | 1.90 | 0.54 |
| 1:YB:99:LEU:HD11 | 1:YB:105:LEU:HD23 | 1.88 | 0.54 |
| 1:ZA:410:GLN:O | 1:ZA:411:ASP:OD1 | 2.26 | 0.54 |
| 1:AA:205:LEU:H | 1:AA:205:LEU:CD2 | 2.11 | 0.54 |
| 1:B:50:MET:HE3 | 1:B:98:PRO:HD3 | 1.89 | 0.54 |
| 1:BB:274:THR:HG21 | 1:BB:310:LEU:HD13 | 1.89 | 0.54 |
| 1:G:112:LEU:HD12 | 1:G:151:TYR:O | 2.07 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:GA:751:LEU:HD13 | 1:GA:754:GLU:OE2 | 2.07 | 0.54 |
| 1:IA:564:VAL:HG23 | 1:IA:631:ASN:HB3 | 1.90 | 0.54 |
| 1:IB:18:VAL:C | 1:IB:44:LEU:HD23 | 2.32 | 0.54 |
| 1:J:63:ASN:HD21 | 1:J:83:LEU:HD23 | 1.72 | 0.54 |
| 1:J:624:ASP:OD1 | 1:J:625:GLN:OE1 | 2.25 | 0.54 |
| 1:JB:19:LEU:HB2 | 1:JB:44:LEU:HD21 | 1.90 | 0.54 |
| 1:JB:267:VAL:C | 1:JB:268:LEU:HD12 | 2.33 | 0.54 |
| 1:K:81:VAL:HG21 | 1:K:100:TYR:CD2 | 2.43 | 0.54 |
| 1:M:795:PHE:CZ | 1:M:799:THR:HG21 | 2.43 | 0.54 |
| 1:NA:68:ASP:CG | 1:NA:74:LEU:HD12 | 2.33 | 0.54 |
| 1:NB:62:ALA:HB3 | 1:NB:104:VAL:HG13 | 1.89 | 0.54 |
| 1:O:126:LEU:C | 1:O:127:LEU:HD22 | 2.31 | 0.54 |
| 1:OB:9:ARG:HB3 | 1:OB:34:THR:HG22 | 1.89 | 0.54 |
| 1:OB:112:LEU:HD11 | 1:OB:153:PRO:CD | 2.37 | 0.54 |
| 1:PA:707:LEU:O | 1:PA:707:LEU:HD23 | 2.08 | 0.54 |
| 1:RA:724:ALA:HB1 | 1:SA:715:ALA:HA | 1.89 | 0.54 |
| 1:RB:253:VAL:HG23 | 1:RB:254:GLN:OE1 | 2.07 | 0.54 |
| 1:SA:359:ILE:CG1 | 1:SA:363:LEU:HD11 | 2.38 | 0.54 |
| 1:SB:579:VAL:O | 1:SB:583:VAL:HG12 | 2.07 | 0.54 |
| 1:TB:775:ALA:CB | 1:UB:770:LEU:HD22 | 2.37 | 0.54 |
| 1:UA:487:VAL:O | 1:UA:487:VAL:HG13 | 2.08 | 0.54 |
| 1:UB:489:LEU:HD22 | 1:UB:493:GLU:O | 2.07 | 0.54 |
| 1:V:284:ILE:HD12 | 1:V:287:PRO:HB3 | 1.88 | 0.54 |
| 1:V:390:VAL:HG11 | 1:V:406:TYR:CE2 | 2.41 | 0.54 |
| 1:VA:794:LYS:HG2 | 1:WA:792:VAL:HG22 | 1.90 | 0.54 |
| 1:VB:129:PHE:CE1 | 1:VB:137:VAL:HG11 | 2.43 | 0.54 |
| 1:WB:418:GLU:O | 1:WB:419:LEU:HD22 | 2.08 | 0.54 |
| 1:X:59:CYS:SG | 1:X:109:ILE:HD13 | 2.48 | 0.54 |
| 1:XB:273:ILE:O | 1:XB:273:ILE:HG23 | 2.05 | 0.54 |
| 1:B:62:ALA:HB3 | 1:B:104:VAL:CG1 | 2.34 | 0.54 |
| 1:B:126:LEU:O | 1:B:127:LEU:HD22 | 2.07 | 0.54 |
| 1:B:391:GLN:NE2 | 1:B:398:VAL:HG23 | 2.23 | 0.54 |
| 1:B:737:GLY:O | 1:B:741:VAL:HG23 | 2.07 | 0.54 |
| 1:BA:363:LEU:HA | 1:CA:353:ALA:HB3 | 1.89 | 0.54 |
| 1:BA:543:TYR:HD1 | 1:BA:638:VAL:HG13 | 1.72 | 0.54 |
| 1:CA:126:LEU:O | 1:CA:127:LEU:HD22 | 2.07 | 0.54 |
| 1:EA:262:ASP:OD1 | 1:EA:263:VAL:HG22 | 2.07 | 0.54 |
| 1:EA:400:ALA:O | 1:EA:402:ILE:HD12 | 2.07 | 0.54 |
| 1:F:802:ILE:CG2 | 1:F:807:ILE:HD11 | 2.37 | 0.54 |
| 1:G:126:LEU:O | 1:G:127:LEU:HD22 | 2.08 | 0.54 |
| 1:HA:416:GLU:CG | 1:HA:455:THR:HG22 | 2.37 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:HB:395:THR:HG23 | 1:HB:397:LYS:HG2 | 1.89 | 0.54 |
| 1:IA:115:VAL:HG23 | 1:IA:147:GLY:O | 2.07 | 0.54 |
| 1:IA:158:GLU:OE2 | 1:IA:160:VAL:HG23 | 2.07 | 0.54 |
| 1:KA:99:LEU:HD11 | 1:KA:103:GLU:O | 2.08 | 0.54 |
| 1:L:227:LEU:HD13 | 1:L:270:VAL:HG22 | 1.89 | 0.54 |
| 1:NA:72:LEU:HD23 | 1:NA:73:VAL:O | 2.06 | 0.54 |
| 1:NB:131:ASP:HB3 | 1:NB:137:VAL:HG23 | 1.90 | 0.54 |
| 1:O:9:ARG:CB | 1:O:34:THR:HG22 | 2.36 | 0.54 |
| 1:P:794:LYS:HD3 | 1:P:798:MET:HE3 | 1.90 | 0.54 |
| 1:QB:3:THR:HG22 | 1:QB:6:PHE:CD1 | 2.43 | 0.54 |
| 1:QB:709:LEU:HA | 1:QB:712:LEU:HD12 | 1.89 | 0.54 |
| 1:RB:126:LEU:C | 1:RB:127:LEU:HD22 | 2.31 | 0.54 |
| 1:RB:175:ARG:HA | 1:RB:197:LEU:HD23 | 1.88 | 0.54 |
| 1:RB:221:LEU:HD13 | 1:RB:252:THR:C | 2.33 | 0.54 |
| 1:T:758:GLU:O | 1:T:762:VAL:HG13 | 2.08 | 0.54 |
| 1:V:539:LEU:HD21 | 1:V:541:LEU:HD21 | 1.90 | 0.54 |
| 1:VA:10:ILE:CG2 | 1:VA:16:ILE:HG21 | 2.37 | 0.54 |
| 1:VB:531:THR:HA | 1:VB:583:VAL:HG22 | 1.88 | 0.54 |
| 1:Y:28:VAL:HG21 | 1:Y:98:PRO:HB2 | 1.89 | 0.54 |
| 1:YB:543:TYR:HD2 | 1:YB:572:CYS:HG | 1.56 | 0.54 |
| 1:Z:16:ILE:CG2 | 1:Z:18:VAL:HG13 | 2.38 | 0.54 |
| 1:AC:336:ALA:HB2 | 1:AC:357:TRP:HZ3 | 1.72 | 0.54 |
| 1:C:332:LEU:HD23 | 1:C:333:LEU:O | 2.08 | 0.54 |
| 1:D:339:PRO:HD3 | 1:D:353:ALA:HB2 | 1.89 | 0.54 |
| 1:EA:531:THR:HG21 | 1:EA:588:PHE:CB | 2.37 | 0.54 |
| 1:EB:221:LEU:HD21 | 1:EB:227:LEU:H | 1.72 | 0.54 |
| 1:FA:165:ALA:HB2 | 1:FA:205:LEU:HB2 | 1.89 | 0.54 |
| 1:FB:221:LEU:HD21 | 1:FB:251:VAL:HG23 | 1.90 | 0.54 |
| 1:G:125:ALA:CB | 1:G:137:VAL:HG13 | 2.38 | 0.54 |
| 1:G:801:ALA:HB3 | 1:H:795:PHE:CE2 | 2.43 | 0.54 |
| 1:GA:545:TRP:HB2 | 1:GA:633:LEU:HD11 | 1.89 | 0.54 |
| 1:HA:228:HIS:HA | 1:HA:250:LEU:HD23 | 1.89 | 0.54 |
| 1:HA:334:LEU:HD11 | 1:HA:359:ILE:HG22 | 1.89 | 0.54 |
| 1:I:303:LYS:HD2 | 1:I:304:GLY:O | 2.06 | 0.54 |
| 1:IB:129:PHE:CE1 | 1:IB:137:VAL:HG21 | 2.42 | 0.54 |
| 1:J:65:VAL:HG13 | 1:J:103:GLU:CB | 2.37 | 0.54 |
| 1:J:90:ILE:H | 1:J:90:ILE:HD12 | 1.72 | 0.54 |
| 1:K:115:VAL:CG1 | 1:K:121:LEU:HD23 | 2.38 | 0.54 |
| 1:MB:228:HIS:NE2 | 1:MB:248:GLU:HB3 | 2.22 | 0.54 |
| 1:N:126:LEU:C | 1:N:127:LEU:HD22 | 2.32 | 0.54 |
| 1:OA:63:ASN:OD1 | 1:OA:83:LEU:HD23 | 2.06 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:PA:531:THR:HG21 | 1:PA:588:PHE:HA | 1.90 | 0.54 |
| 1:PA:531:THR:CG2 | 1:PA:537:LEU:HD11 | 2.37 | 0.54 |
| 1:QA:18:VAL:HG21 | 1:QA:27:ARG:NH1 | 2.23 | 0.54 |
| 1:QA:250:LEU:HD22 | 1:QA:271:VAL:HG21 | 1.90 | 0.54 |
| 1:QB:121:LEU:HD13 | 1:QB:159:VAL:HG23 | 1.89 | 0.54 |
| 1:RB:176:LEU:HD23 | 1:RB:196:TRP:O | 2.07 | 0.54 |
| 1:RB:578:ARG:CB | 1:RB:603:VAL:HG22 | 2.37 | 0.54 |
| 1:UB:575:ILE:O | 1:UB:579:VAL:HG23 | 2.07 | 0.54 |
| 1:V:453:ASN:O | 1:V:456:ARG:HB3 | 2.08 | 0.54 |
| 1:W:131:ASP:OD2 | 1:W:137:VAL:HG23 | 2.07 | 0.54 |
| 1:WA:19:LEU:HD12 | 1:WA:25:VAL:O | 2.08 | 0.54 |
| 1:WA:539:LEU:HD13 | 1:WA:591:PHE:CZ | 2.42 | 0.54 |
| 1:YA:461:ARG:HE | 1:YA:486:LEU:HD13 | 1.72 | 0.54 |
| 1:YB:51:VAL:HG11 | 1:YB:97:PHE:CZ | 2.41 | 0.54 |
| 1:B:115:VAL:HG23 | 1:B:147:GLY:O | 2.08 | 0.54 |
| 1:C:175:ARG:HA | 1:C:197:LEU:HD23 | 1.88 | 0.54 |
| 1:C:578:ARG:HB2 | 1:C:603:VAL:HG22 | 1.89 | 0.54 |
| 1:CA:121:LEU:HA | 1:CA:162:ILE:HA | 1.90 | 0.54 |
| 1:CA:654:LEU:HD22 | 1:DA:534:HIS:CB | 2.37 | 0.54 |
| 1:CB:468:VAL:CG1 | 1:CB:514:LEU:HD11 | 2.34 | 0.54 |
| 1:DA:511:ARG:HH11 | 1:DA:568:VAL:HG12 | 1.73 | 0.54 |
| 1:EA:65:VAL:HG21 | 1:EA:73:VAL:CG1 | 2.38 | 0.54 |
| 1:EB:502:ALA:HB3 | 1:EB:510:ALA:HB3 | 1.90 | 0.54 |
| 1:G:229:LEU:HD12 | 1:G:251:VAL:HG13 | 1.89 | 0.54 |
| 1:JA:165:ALA:HB1 | 1:JA:203:ALA:O | 2.07 | 0.54 |
| 1:K:25:VAL:HG21 | 1:K:78:THR:O | 2.08 | 0.54 |
| 1:KA:168:ILE:HG22 | 1:KA:215:LEU:HD13 | 1.88 | 0.54 |
| 1:KA:227:LEU:CD1 | 1:KA:270:VAL:HG22 | 2.37 | 0.54 |
| 1:L:389:TYR:CD1 | 1:L:457:VAL:HG22 | 2.43 | 0.54 |
| 1:M:549:VAL:HG12 | 1:M:549:VAL:O | 2.08 | 0.54 |
| 1:MA:65:VAL:HG12 | 1:MA:83:LEU:HD11 | 1.90 | 0.54 |
| 1:N:162:ILE:HD12 | 1:N:162:ILE:H | 1.72 | 0.54 |
| 1:OA:74:LEU:HD13 | 1:OA:82:ARG:NH2 | 2.22 | 0.54 |
| 1:OB:121:LEU:HD12 | 1:OB:121:LEU:O | 2.07 | 0.54 |
| 1:P:112:LEU:HD23 | 1:P:150:THR:HG21 | 1.89 | 0.54 |
| 1:P:283:VAL:HG13 | 1:P:300:ARG:C | 2.33 | 0.54 |
| 1:PA:388:ILE:N | 1:PA:457:VAL:HG23 | 2.23 | 0.54 |
| 1:PA:502:ALA:HB3 | 1:PA:510:ALA:HB3 | 1.89 | 0.54 |
| 1:PB:777:LEU:O | 1:PB:781:VAL:HG22 | 2.08 | 0.54 |
| 1:QB:753:ILE:HG21 | 1:RB:744:ALA:C | 2.32 | 0.54 |
| 1:RA:60:THR:CG2 | 1:RA:88:LEU:HD13 | 2.37 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:RA:231:ALA:HB2 | 1:RA:249:TRP:CZ3 | 2.42 | 0.54 |
| 1:RB:662:ILE:HG21 | 1:SB:653:ALA:HB1 | 1.88 | 0.54 |
| 1:T:537:LEU:HD11 | 1:T:588:PHE:CD1 | 2.41 | 0.54 |
| 1:TA:18:VAL:HG11 | 1:TA:29:GLU:OE2 | 2.08 | 0.54 |
| 1:TA:383:ASP:OD1 | 1:UA:398:VAL:HG23 | 2.08 | 0.54 |
| 1:UA:662:ILE:HG21 | 1:VA:653:ALA:HB1 | 1.90 | 0.54 |
| 1:V:633:LEU:HD12 | 1:V:634:VAL:H | 1.72 | 0.54 |
| 1:VB:470:VAL:HG22 | 1:VB:495:PHE:HD1 | 1.73 | 0.54 |
| 1:W:413:VAL:HG22 | 1:W:414:LEU:N | 2.22 | 0.54 |
| 1:WA:489:LEU:HD22 | 1:WA:493:GLU:O | 2.08 | 0.54 |
| 1:WA:516:LEU:HD13 | 1:WA:562:PHE:CD2 | 2.43 | 0.54 |
| 1:WA:532:ALA:HB3 | 1:WA:587:THR:HA | 1.89 | 0.54 |
| 1:WB:65:VAL:HG23 | 1:WB:67:ARG:HG3 | 1.89 | 0.54 |
| 1:Y:17:HIS:CD2 | 1:Y:28:VAL:HG23 | 2.42 | 0.54 |
| 1:YA:3:THR:OG1 | 1:YA:43:VAL:HG23 | 2.08 | 0.54 |
| 1:YB:126:LEU:C | 1:YB:127:LEU:HD22 | 2.32 | 0.54 |
| 1:A:10:ILE:HG22 | 1:A:47:PRO:HG3 | 1.90 | 0.54 |
| 1:A:16:ILE:HG22 | 1:A:17:HIS:N | 2.23 | 0.54 |
| 1:A:69:ALA:HB2 | 1:A:74:LEU:HG | 1.89 | 0.54 |
| 1:BA:538:GLN:HB2 | 1:BA:646:VAL:HG22 | 1.89 | 0.54 |
| 1:C:260:VAL:O | 1:C:260:VAL:HG13 | 2.07 | 0.54 |
| 1:CB:640:VAL:HG12 | 1:DB:580:ARG:HH12 | 1.72 | 0.54 |
| 1:E:123:LEU:HD11 | 1:E:145:PHE:HB2 | 1.90 | 0.54 |
| 1:EB:3:THR:HG21 | 1:EB:38:GLN:C | 2.33 | 0.54 |
| 1:FA:182:CYS:SG | 1:FA:209:PHE:CD1 | 3.00 | 0.54 |
| 1:FA:737:GLY:O | 1:FA:741:VAL:HG23 | 2.08 | 0.54 |
| 1:FB:30:VAL:HG22 | 1:FB:31:GLY:N | 2.23 | 0.54 |
| 1:G:125:ALA:HB1 | 1:G:137:VAL:HG13 | 1.90 | 0.54 |
| 1:H:61:VAL:O | 1:H:61:VAL:HG23 | 2.07 | 0.54 |
| 1:H:284:ILE:HD12 | 1:H:287:PRO:CB | 2.37 | 0.54 |
| 1:H:285:LEU:HD21 | 1:H:317:GLU:HA | 1.88 | 0.54 |
| 1:IA:69:ALA:HB3 | 1:IA:72:LEU:HB3 | 1.90 | 0.54 |
| 1:IA:144:LEU:HD12 | 1:IA:146:GLU:OE1 | 2.08 | 0.54 |
| 1:IA:783:LYS:CA | 1:JA:777:LEU:HD11 | 2.36 | 0.54 |
| 1:JB:65:VAL:CG2 | 1:JB:67:ARG:HE | 2.21 | 0.54 |
| 1:K:547:PHE:CG | 1:K:561:LEU:HD22 | 2.42 | 0.54 |
| 1:KB:109:ILE:HG23 | 1:KB:109:ILE:O | 2.07 | 0.54 |
| 1:M:215:LEU:HD12 | 1:M:216:VAL:H | 1.71 | 0.54 |
| 1:N:325:VAL:O | 1:N:325:VAL:HG13 | 2.07 | 0.54 |
| 1:NA:380:ILE:HD12 | 1:NA:380:ILE:H | 1.71 | 0.54 |
| 1:NA:537:LEU:HD23 | 1:NA:645:PRO:N | 2.22 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:NB:539:LEU:HD12 | 1:NB:642:SER:O | 2.08 | 0.54 |
| 1:OA:746:LEU:HD13 | 1:PA:737:GLY:HA3 | 1.90 | 0.54 |
| 1:OA:758:GLU:O | 1:OA:762:VAL:HG22 | 2.08 | 0.54 |
| 1:PB:16:ILE:HG22 | 1:PB:17:HIS:N | 2.23 | 0.54 |
| 1:RB:165:ALA:O | 1:RB:203:ALA:HB1 | 2.08 | 0.54 |
| 1:RB:212:VAL:O | 1:RB:212:VAL:HG23 | 2.07 | 0.54 |
| 1:S:717:GLU:HB2 | 1:T:707:LEU:HD22 | 1.89 | 0.54 |
| 1:S:758:GLU:O | 1:S:762:VAL:HG22 | 2.08 | 0.54 |
| 1:S:767:GLU:O | 1:S:771:VAL:HG23 | 2.08 | 0.54 |
| 1:SA:198:VAL:HG21 | 1:SA:204:TYR:CG | 2.43 | 0.54 |
| 1:TA:358:LEU:HD22 | 1:TA:377:ARG:HH21 | 1.73 | 0.54 |
| 1:TB:541:LEU:HA | 1:TB:640:VAL:HG22 | 1.89 | 0.54 |
| 1:UA:59:CYS:SG | 1:UA:109:ILE:HD13 | 2.48 | 0.54 |
| 1:XA:325:VAL:HG13 | 1:YA:335:ARG:HH12 | 1.72 | 0.54 |
| 1:Z:273:ILE:O | 1:Z:273:ILE:HG23 | 2.08 | 0.54 |
| 1:A:122:HIS:CE1 | 1:A:160:VAL:HG21 | 2.42 | 0.54 |
| 1:AB:167:ILE:HG22 | 1:AB:169:ARG:H | 1.73 | 0.54 |
| 1:AC:464:HIS:HB2 | 1:OA:496:THR:HG23 | 1.90 | 0.54 |
| 1:B:489:LEU:HD21 | 1:B:495:PHE:CE1 | 2.43 | 0.54 |
| 1:CB:58:TYR:CD2 | 1:CB:112:LEU:HD13 | 2.43 | 0.54 |
| 1:D:124:LYS:H | 1:D:160:VAL:HG23 | 1.72 | 0.54 |
| 1:DA:638:VAL:HG22 | 1:DA:639:ASP:H | 1.73 | 0.54 |
| 1:E:536:ARG:CD | 1:E:646:VAL:HG21 | 2.38 | 0.54 |
| 1:EB:62:ALA:HB3 | 1:EB:104:VAL:HG13 | 1.89 | 0.54 |
| 1:F:621:ARG:HD3 | 1:F:622:PRO:O | 2.08 | 0.54 |
| 1:FA:366:VAL:O | 1:FA:366:VAL:HG13 | 2.08 | 0.54 |
| 1:GA:462:VAL:HG21 | 1:GA:481:VAL:CG2 | 2.38 | 0.54 |
| 1:GB:276:LEU:HD23 | 1:GB:320:ILE:HG23 | 1.90 | 0.54 |
| 1:H:737:GLY:O | 1:H:741:VAL:HG23 | 2.08 | 0.54 |
| 1:HA:25:VAL:HG21 | 1:HA:78:THR:O | 2.08 | 0.54 |
| 1:HB:787:LEU:CD2 | 1:IB:781:VAL:HG12 | 2.38 | 0.54 |
| 1:I:50:MET:O | 1:I:52:THR:HG23 | 2.07 | 0.54 |
| 1:IB:16:ILE:HG23 | 1:IB:45:PHE:O | 2.08 | 0.54 |
| 1:JA:539:LEU:HD11 | 1:JA:541:LEU:HD11 | 1.88 | 0.54 |
| 1:JB:72:LEU:HD23 | 1:JB:73:VAL:O | 2.08 | 0.54 |
| 1:K:798:MET:HE3 | 1:L:792:VAL:HG22 | 1.89 | 0.54 |
| 1:MA:8:ILE:H | 1:MA:8:ILE:HD12 | 1.73 | 0.54 |
| 1:N:380:ILE:H | 1:N:380:ILE:HD12 | 1.72 | 0.54 |
| 1:OA:334:LEU:HB3 | 1:OA:371:VAL:HG13 | 1.90 | 0.54 |
| 1:OA:768:LEU:HD11 | 1:PA:763:GLN:NE2 | 2.22 | 0.54 |
| 1:OB:126:LEU:HD21 | 1:OB:158:GLU:CB | 2.38 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:P:168:ILE:HD11 | 1:P:204:TYR:HB2 | 1.90 | 0.54 |
| 1:PA:470:VAL:HG12 | 1:PA:495:PHE:HA | 1.90 | 0.54 |
| 1:PA:599:ILE:HD12 | 1:PA:640:VAL:HG22 | 1.89 | 0.54 |
| 1:PA:709:LEU:HD23 | 1:PA:712:LEU:HD12 | 1.90 | 0.54 |
| 1:PB:802:ILE:HG21 | 1:PB:807:ILE:HD11 | 1.89 | 0.54 |
| 1:Q:212:VAL:O | 1:Q:212:VAL:HG23 | 2.08 | 0.54 |
| 1:R:742:LEU:HD12 | 1:R:745:LYS:NZ | 2.23 | 0.54 |
| 1:S:458:VAL:HB | 1:S:489:LEU:HD12 | 1.90 | 0.54 |
| 1:UA:391:GLN:HG3 | 1:UA:398:VAL:HG22 | 1.89 | 0.54 |
| 1:UB:16:ILE:HG22 | 1:UB:17:HIS:N | 2.22 | 0.54 |
| 1:UB:420:PRO:O | 1:UB:421:PRO:C | 2.50 | 0.54 |
| 1:V:126:LEU:C | 1:V:127:LEU:HD22 | 2.33 | 0.54 |
| 1:VA:344:GLU:OE1 | 1:VA:371:VAL:HG23 | 2.07 | 0.54 |
| 1:VB:497:VAL:O | 1:VB:498:LEU:HD23 | 2.07 | 0.54 |
| 1:XB:174:LEU:HD12 | 1:XB:214:ASP:O | 2.07 | 0.54 |
| 1:YA:34:THR:HG21 | 1:ZA:22:ASN:O | 2.08 | 0.54 |
| 1:YA:592:HIS:O | 1:ZA:584:ALA:HB3 | 2.08 | 0.54 |
| 1:YB:405:THR:HG21 | 1:ZB:393:VAL:O | 2.08 | 0.54 |
| 1:ZB:310:LEU:HD22 | 1:ZB:315:GLN:C | 2.32 | 0.54 |
| 1:A:122:HIS:ND1 | 1:A:160:VAL:HG21 | 2.23 | 0.54 |
| 1:AB:131:ASP:OD2 | 1:AB:137:VAL:HG23 | 2.08 | 0.54 |
| 1:AC:16:ILE:HG23 | 1:AC:45:PHE:O | 2.08 | 0.54 |
| 1:AC:424:GLU:HB2 | 1:AC:514:LEU:HD23 | 1.90 | 0.54 |
| 1:AC:526:VAL:HG22 | 1:AC:540:GLN:CD | 2.31 | 0.54 |
| 1:AC:579:VAL:HG22 | 1:AC:603:VAL:CG2 | 2.37 | 0.54 |
| 1:C:268:LEU:HD12 | 1:C:268:LEU:N | 2.23 | 0.54 |
| 1:C:480:VAL:HG21 | 1:C:558:THR:HB | 1.89 | 0.54 |
| 1:EA:176:LEU:HD21 | 1:EA:196:TRP:CD1 | 2.43 | 0.54 |
| 1:GA:756:GLU:HA | 1:GA:759:LEU:HD12 | 1.89 | 0.54 |
| 1:H:215:LEU:HD12 | 1:H:216:VAL:N | 2.23 | 0.54 |
| 1:H:645:PRO:CB | 1:H:650:THR:HG21 | 2.38 | 0.54 |
| 1:HA:122:HIS:ND1 | 1:HA:160:VAL:HG21 | 2.23 | 0.54 |
| 1:I:65:VAL:HG13 | 1:I:103:GLU:HB2 | 1.90 | 0.54 |
| 1:I:798:MET:O | 1:I:802:ILE:HG22 | 2.08 | 0.54 |
| 1:IA:65:VAL:HG11 | 1:IA:100:TYR:CG | 2.42 | 0.54 |
| 1:J:331:GLY:C | 1:J:358:LEU:HD11 | 2.33 | 0.54 |
| 1:J:405:THR:HG23 | 1:K:396:GLY:CA | 2.38 | 0.54 |
| 1:K:114:VAL:O | 1:K:114:VAL:HG13 | 2.08 | 0.54 |
| 1:K:392:ASP:OD2 | 1:K:395:THR:HG22 | 2.06 | 0.54 |
| 1:KB:597:ARG:O | 1:KB:601:THR:HG23 | 2.08 | 0.54 |
| 1:O:634:VAL:HG12 | 1:O:636:SER:H | 1.72 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:P:380:ILE:HD12 | 1:P:406:TYR:O | 2.08 | 0.54 |
| 1:QA:158:GLU:O | 1:QA:160:VAL:HG23 | 2.07 | 0.54 |
| 1:TA:393:VAL:HG22 | 1:TA:411:ASP:C | 2.33 | 0.54 |
| 1:UA:661:ALA:O | 1:UA:665:THR:HG23 | 2.08 | 0.54 |
| 1:UB:333:LEU:CD2 | 1:UB:374:VAL:HG11 | 2.38 | 0.54 |
| 1:V:654:LEU:HD22 | 1:W:534:HIS:CG | 2.43 | 0.54 |
| 1:VA:220:ILE:HG23 | 1:WA:245:THR:CG2 | 2.37 | 0.54 |
| 1:WA:10:ILE:HD11 | 1:WA:16:ILE:CG2 | 2.38 | 0.54 |
| 1:WB:408:LEU:HD13 | 1:WB:413:VAL:HA | 1.89 | 0.54 |
| 1:X:364:GLU:HG3 | 1:Y:353:ALA:HB1 | 1.89 | 0.54 |
| 1:XB:57:HIS:O | 1:XB:109:ILE:HG23 | 2.08 | 0.54 |
| 1:Y:582:ALA:O | 1:Y:586:VAL:HG22 | 2.08 | 0.54 |
| 1:YA:196:TRP:O | 1:YA:197:LEU:HD12 | 2.08 | 0.54 |
| 1:AA:529:ILE:HD12 | 1:AA:583:VAL:HB | 1.89 | 0.53 |
| 1:AA:691:GLN:CD | 1:AA:694:LEU:HD12 | 2.32 | 0.53 |
| 1:AC:486:LEU:HD12 | 1:AC:487:VAL:H | 1.72 | 0.53 |
| 1:B:165:ALA:HB2 | 1:B:205:LEU:HB2 | 1.90 | 0.53 |
| 1:BA:758:GLU:O | 1:BA:762:VAL:HG13 | 2.07 | 0.53 |
| 1:CB:229:LEU:HD23 | 1:CB:267:VAL:HG22 | 1.89 | 0.53 |
| 1:D:122:HIS:HD2 | 1:D:208:VAL:HG12 | 1.73 | 0.53 |
| 1:DA:283:VAL:HG22 | 1:DA:301:VAL:HA | 1.90 | 0.53 |
| 1:DB:709:LEU:HD13 | 1:DB:712:LEU:HD12 | 1.89 | 0.53 |
| 1:EB:62:ALA:HA | 1:EB:88:LEU:HD23 | 1.89 | 0.53 |
| 1:GA:60:THR:HG22 | 1:GA:90:ILE:HG12 | 1.90 | 0.53 |
| 1:H:661:ALA:O | 1:H:665:THR:HG23 | 2.07 | 0.53 |
| 1:HA:7:ILE:HD11 | 1:TB:7:ILE:CG2 | 2.39 | 0.53 |
| 1:HB:470:VAL:HG13 | 1:HB:494:GLN:O | 2.06 | 0.53 |
| 1:IA:742:LEU:HD11 | 1:IA:746:LEU:HD21 | 1.89 | 0.53 |
| 1:J:17:HIS:C | 1:J:44:LEU:HD13 | 2.33 | 0.53 |
| 1:JA:388:ILE:CA | 1:JA:457:VAL:HG23 | 2.38 | 0.53 |
| 1:JB:13:TYR:HA | 1:JB:50:MET:HE2 | 1.90 | 0.53 |
| 1:KB:16:ILE:HD11 | 1:KB:47:PRO:HD3 | 1.90 | 0.53 |
| 1:KB:126:LEU:C | 1:KB:127:LEU:HD22 | 2.33 | 0.53 |
| 1:KB:333:LEU:HD12 | 1:KB:357:TRP:O | 2.08 | 0.53 |
| 1:MA:331:GLY:HA3 | 1:MA:358:LEU:HD21 | 1.90 | 0.53 |
| 1:MA:537:LEU:HD13 | 1:MA:643:VAL:HG13 | 1.90 | 0.53 |
| 1:MA:717:GLU:O | 1:MA:721:THR:HG23 | 2.07 | 0.53 |
| 1:MB:168:ILE:HG22 | 1:MB:215:LEU:CD1 | 2.37 | 0.53 |
| 1:MB:333:LEU:HD11 | 1:MB:356:HIS:HB3 | 1.90 | 0.53 |
| 1:OB:530:GLU:O | 1:OB:583:VAL:HG22 | 2.07 | 0.53 |
| 1:PA:627:VAL:HG12 | 1:PA:634:VAL:HG22 | 1.89 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:PB:530:GLU:O | 1:PB:583:VAL:HG22 | 2.08 | 0.53 |
| 1:QB:470:VAL:HG13 | 1:QB:494:GLN:C | 2.32 | 0.53 |
| 1:R:546:HIS:O | 1:R:633:LEU:HD12 | 2.08 | 0.53 |
| 1:RB:25:VAL:HG22 | 1:RB:78:THR:O | 2.08 | 0.53 |
| 1:RB:129:PHE:CE2 | 1:RB:137:VAL:HG11 | 2.43 | 0.53 |
| 1:SB:9:ARG:CB | 1:SB:34:THR:HG22 | 2.37 | 0.53 |
| 1:SB:659:GLN:O | 1:SB:663:GLU:OE1 | 2.26 | 0.53 |
| 1:UB:121:LEU:C | 1:UB:121:LEU:HD12 | 2.33 | 0.53 |
| 1:UB:231:ALA:HB3 | 1:UB:244:ARG:O | 2.07 | 0.53 |
| 1:UB:405:THR:HG23 | 1:VB:396:GLY:HA3 | 1.90 | 0.53 |
| 1:VB:333:LEU:HD12 | 1:VB:334:LEU:H | 1.73 | 0.53 |
| 1:W:10:ILE:HD13 | 1:W:29:GLU:O | 2.08 | 0.53 |
| 1:WB:65:VAL:HG12 | 1:WB:83:LEU:HD23 | 1.90 | 0.53 |
| 1:XB:545:TRP:HA | 1:XB:636:SER:H | 1.74 | 0.53 |
| 1:Y:470:VAL:HG22 | 1:Y:494:GLN:O | 2.08 | 0.53 |
| 1:Y:539:LEU:CD1 | 1:Y:643:VAL:HG12 | 2.38 | 0.53 |
| 1:YB:489:LEU:HD11 | 1:YB:495:PHE:CE1 | 2.42 | 0.53 |
| 1:Z:324:TYR:CD1 | 1:Z:332:LEU:HD11 | 2.42 | 0.53 |
| 1:Z:388:ILE:N | 1:Z:457:VAL:HG23 | 2.23 | 0.53 |
| 1:Z:414:LEU:HB3 | 1:Z:455:THR:HG21 | 1.89 | 0.53 |
| 1:ZA:227:LEU:HD11 | 1:ZA:267:VAL:CG1 | 2.37 | 0.53 |
| 1:BA:340:LEU:HD12 | 1:BA:351:HIS:ND1 | 2.23 | 0.53 |
| 1:C:382:LEU:HD12 | 1:C:406:TYR:N | 2.22 | 0.53 |
| 1:C:388:ILE:CA | 1:C:457:VAL:HG23 | 2.38 | 0.53 |
| 1:CA:468:VAL:HG22 | 1:CA:515:CYS:HA | 1.91 | 0.53 |
| 1:E:529:ILE:HB | 1:E:583:VAL:HG11 | 1.89 | 0.53 |
| 1:EB:223:GLU:O | 1:EB:273:ILE:HD12 | 2.08 | 0.53 |
| 1:GA:330:GLN:C | 1:GA:407:MET:HE1 | 2.33 | 0.53 |
| 1:GA:331:GLY:N | 1:GA:407:MET:HE1 | 2.24 | 0.53 |
| 1:GA:516:LEU:C | 1:GA:517:LEU:HD22 | 2.33 | 0.53 |
| 1:GB:382:LEU:H | 1:GB:405:THR:HG22 | 1.73 | 0.53 |
| 1:I:358:LEU:HD21 | 1:I:360:ARG:HB3 | 1.88 | 0.53 |
| 1:IA:60:THR:HG22 | 1:IA:107:LYS:HB3 | 1.90 | 0.53 |
| 1:IA:529:ILE:HD12 | 1:IA:583:VAL:HG21 | 1.90 | 0.53 |
| 1:IB:806:THR:HG23 | 1:JB:808:ARG:HE | 1.73 | 0.53 |
| 1:JA:227:LEU:HD13 | 1:JA:270:VAL:HG22 | 1.90 | 0.53 |
| 1:JB:121:LEU:HD12 | 1:JB:159:VAL:HG13 | 1.90 | 0.53 |
| 1:L:389:TYR:CE1 | 1:L:457:VAL:HG22 | 2.43 | 0.53 |
| 1:MA:99:LEU:HD11 | 1:MA:104:VAL:HA | 1.90 | 0.53 |
| 1:MA:229:LEU:HD11 | 1:MA:251:VAL:HG13 | 1.90 | 0.53 |
| 1:N:539:LEU:HD12 | 1:N:642:SER:O | 2.08 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:NA:25:VAL:HG22 | 1:NA:80:GLN:HB2 | 1.90 | 0.53 |
| 1:OA:489:LEU:HD11 | 1:OA:495:PHE:CD2 | 2.43 | 0.53 |
| 1:PA:221:LEU:HD12 | 1:PA:256:THR:CG2 | 2.38 | 0.53 |
| 1:PB:176:LEU:HD21 | 1:PB:196:TRP:CE2 | 2.44 | 0.53 |
| 1:Q:381:PRO:HA | 1:Q:405:THR:HG22 | 1.90 | 0.53 |
| 1:Q:549:VAL:O | 1:Q:549:VAL:HG23 | 2.07 | 0.53 |
| 1:QA:68:ASP:OD1 | 1:QA:74:LEU:HD12 | 2.08 | 0.53 |
| 1:S:274:THR:HG23 | 1:S:310:LEU:HG | 1.90 | 0.53 |
| 1:SB:797:GLN:HB2 | 1:TB:792:VAL:HG21 | 1.90 | 0.53 |
| 1:T:288:VAL:O | 1:T:288:VAL:HG23 | 2.07 | 0.53 |
| 1:TB:229:LEU:HD13 | 1:TB:266:GLU:O | 2.09 | 0.53 |
| 1:VA:627:VAL:O | 1:VA:627:VAL:HG23 | 2.08 | 0.53 |
| 1:WA:662:ILE:HG21 | 1:XA:653:ALA:O | 2.08 | 0.53 |
| 1:XA:462:VAL:HG21 | 1:XA:481:VAL:HG21 | 1.90 | 0.53 |
| 1:Y:18:VAL:HG22 | 1:Y:27:ARG:O | 2.08 | 0.53 |
| 1:Y:335:ARG:HH12 | 1:Y:337:LEU:HD23 | 1.73 | 0.53 |
| 1:YA:121:LEU:HD22 | 1:YA:123:LEU:HD21 | 1.89 | 0.53 |
| 1:YB:119:THR:OG1 | 1:YB:162:ILE:HG22 | 2.08 | 0.53 |
| 1:Z:18:VAL:HG23 | 1:Z:27:ARG:HB2 | 1.90 | 0.53 |
| 1:ZA:627:VAL:O | 1:ZA:627:VAL:HG23 | 2.07 | 0.53 |
| 1:AC:719:THR:HG23 | 1:AC:723:LYS:HD3 | 1.90 | 0.53 |
| 1:BB:580:ARG:HA | 1:BB:583:VAL:HG12 | 1.90 | 0.53 |
| 1:CA:382:LEU:HD12 | 1:CA:406:TYR:N | 2.23 | 0.53 |
| 1:EA:260:VAL:O | 1:EA:260:VAL:HG13 | 2.08 | 0.53 |
| 1:EB:547:PHE:HE1 | 1:EB:633:LEU:HD13 | 1.73 | 0.53 |
| 1:FB:23:SER:OG | 1:FB:25:VAL:HG23 | 2.08 | 0.53 |
| 1:FB:63:ASN:OD1 | 1:FB:83:LEU:HD23 | 2.09 | 0.53 |
| 1:G:778:GLU:HA | 1:G:781:VAL:HG22 | 1.90 | 0.53 |
| 1:GA:393:VAL:HG22 | 1:GA:411:ASP:C | 2.34 | 0.53 |
| 1:H:250:LEU:HD22 | 1:H:271:VAL:HG21 | 1.89 | 0.53 |
| 1:H:366:VAL:O | 1:H:366:VAL:HG13 | 2.07 | 0.53 |
| 1:HA:53:VAL:HG23 | 1:HA:97:PHE:CE1 | 2.43 | 0.53 |
| 1:HB:56:ARG:O | 1:HB:111:PRO:HA | 2.09 | 0.53 |
| 1:IA:380:ILE:H | 1:IA:380:ILE:HD12 | 1.71 | 0.53 |
| 1:IB:462:VAL:HG12 | 1:IB:483:GLY:O | 2.08 | 0.53 |
| 1:IB:774:ARG:O | 1:IB:778:GLU:OE1 | 2.26 | 0.53 |
| 1:J:323:VAL:HG12 | 1:J:366:VAL:HG23 | 1.90 | 0.53 |
| 1:JA:407:MET:HE2 | 1:JA:407:MET:HA | 1.90 | 0.53 |
| 1:JB:121:LEU:HA | 1:JB:162:ILE:HA | 1.90 | 0.53 |
| 1:KA:546:HIS:O | 1:KA:633:LEU:HD12 | 2.07 | 0.53 |
| 1:KB:363:LEU:HD23 | 1:KB:363:LEU:H | 1.73 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:KB:797:GLN:OE1 | 1:LB:792:VAL:HG11 | 2.07 | 0.53 |
| 1:L:115:VAL:HG22 | 1:L:149:GLY:C | 2.34 | 0.53 |
| 1:LA:50:MET:HE2 | 1:LA:96:PRO:C | 2.33 | 0.53 |
| 1:LA:115:VAL:HG21 | 1:LA:145:PHE:CE1 | 2.43 | 0.53 |
| 1:LB:67:ARG:CG | 1:LB:73:VAL:HG22 | 2.38 | 0.53 |
| 1:LB:67:ARG:HG3 | 1:LB:73:VAL:HG22 | 1.89 | 0.53 |
| 1:MB:129:PHE:CZ | 1:MB:137:VAL:HG11 | 2.44 | 0.53 |
| 1:NB:398:VAL:HG12 | 1:NB:491:PRO:HB3 | 1.90 | 0.53 |
| 1:O:176:LEU:HD23 | 1:O:196:TRP:O | 2.09 | 0.53 |
| 1:O:340:LEU:HD12 | 1:O:351:HIS:ND1 | 2.23 | 0.53 |
| 1:QA:260:VAL:O | 1:QA:260:VAL:HG13 | 2.06 | 0.53 |
| 1:QB:333:LEU:HD12 | 1:QB:334:LEU:H | 1.72 | 0.53 |
| 1:RA:175:ARG:HH21 | 1:RA:263:VAL:HG12 | 1.74 | 0.53 |
| 1:RB:230:ARG:NH2 | 1:RB:268:LEU:HD21 | 2.23 | 0.53 |
| 1:RB:460:TYR:C | 1:RB:486:LEU:HD12 | 2.33 | 0.53 |
| 1:SA:531:THR:HG21 | 1:SA:537:LEU:HD23 | 1.89 | 0.53 |
| 1:SA:799:THR:HA | 1:SA:802:ILE:HG22 | 1.88 | 0.53 |
| 1:SB:201:VAL:O | 1:SB:201:VAL:HG12 | 2.08 | 0.53 |
| 1:SB:731:GLU:OE2 | 1:SB:735:ILE:HD11 | 2.08 | 0.53 |
| 1:TA:16:ILE:HG22 | 1:TA:17:HIS:N | 2.23 | 0.53 |
| 1:TA:168:ILE:CD1 | 1:TA:198:VAL:HG13 | 2.37 | 0.53 |
| 1:TA:539:LEU:O | 1:TA:539:LEU:HD23 | 2.08 | 0.53 |
| 1:TB:167:ILE:HG21 | 1:UB:193:GLY:HA3 | 1.91 | 0.53 |
| 1:UA:81:VAL:O | 1:UA:81:VAL:HG13 | 2.09 | 0.53 |
| 1:UB:227:LEU:CD2 | 1:UB:229:LEU:HD21 | 2.39 | 0.53 |
| 1:V:545:TRP:HB2 | 1:V:633:LEU:HD11 | 1.90 | 0.53 |
| 1:VA:114:VAL:HG23 | 1:VA:149:GLY:N | 2.23 | 0.53 |
| 1:VA:349:VAL:O | 1:VA:349:VAL:HG12 | 2.08 | 0.53 |
| 1:VB:276:LEU:HD11 | 1:VB:282:CYS:SG | 2.47 | 0.53 |
| 1:VB:528:THR:HG23 | 1:VB:537:LEU:O | 2.08 | 0.53 |
| 1:XA:198:VAL:HG11 | 1:XA:204:TYR:CZ | 2.43 | 0.53 |
| 1:XA:326:LEU:HD12 | 1:XA:363:LEU:HD21 | 1.89 | 0.53 |
| 1:XA:523:PHE:CE2 | 1:XA:568:VAL:HG23 | 2.44 | 0.53 |
| 1:Y:273:ILE:HG21 | 1:Z:296:LEU:HD22 | 1.90 | 0.53 |
| 1:Z:802:ILE:CG2 | 1:Z:807:ILE:HD11 | 2.38 | 0.53 |
| 1:A:8:ILE:HD12 | 1:A:37:ARG:HD3 | 1.91 | 0.53 |
| 1:A:388:ILE:CA | 1:A:457:VAL:HG23 | 2.38 | 0.53 |
| 1:AA:196:TRP:O | 1:AA:197:LEU:HD12 | 2.09 | 0.53 |
| 1:AB:180:LYS:HD2 | 1:AB:181:GLU:O | 2.09 | 0.53 |
| 1:AC:730:ALA:HB2 | 1:ZB:735:ILE:HG22 | 1.90 | 0.53 |
| 1:BA:30:VAL:HG22 | 1:BA:32:PRO:HD2 | 1.90 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:C:165:ALA:HB2 | 1:C:205:LEU:HB2 | 1.91 | 0.53 |
| 1:C:413:VAL:HG13 | 1:C:414:LEU:O | 2.07 | 0.53 |
| 1:CB:81:VAL:HG13 | 1:CB:83:LEU:CD1 | 2.37 | 0.53 |
| 1:DA:232:ARG:HH12 | 1:DA:267:VAL:HG23 | 1.73 | 0.53 |
| 1:E:126:LEU:O | 1:E:127:LEU:HD22 | 2.07 | 0.53 |
| 1:F:17:HIS:CD2 | 1:F:28:VAL:HG23 | 2.43 | 0.53 |
| 1:FA:226:ALA:HB1 | 1:FA:251:VAL:O | 2.09 | 0.53 |
| 1:FA:333:LEU:HD23 | 1:FA:374:VAL:CG1 | 2.31 | 0.53 |
| 1:FB:122:HIS:CD2 | 1:FB:208:VAL:HG12 | 2.44 | 0.53 |
| 1:GA:366:VAL:O | 1:GA:366:VAL:HG13 | 2.09 | 0.53 |
| 1:GB:518:LEU:HD11 | 1:GB:549:VAL:HG21 | 1.89 | 0.53 |
| 1:H:25:VAL:HG22 | 1:H:80:GLN:OE1 | 2.09 | 0.53 |
| 1:HB:126:LEU:O | 1:HB:127:LEU:HD22 | 2.07 | 0.53 |
| 1:I:122:HIS:ND1 | 1:I:160:VAL:HG11 | 2.23 | 0.53 |
| 1:I:143:TRP:HA | 1:I:208:VAL:HG11 | 1.90 | 0.53 |
| 1:IA:541:LEU:HD12 | 1:IA:638:VAL:HG12 | 1.91 | 0.53 |
| 1:IB:775:ALA:HB1 | 1:JB:770:LEU:HD22 | 1.91 | 0.53 |
| 1:KA:400:ALA:HB1 | 1:KA:457:VAL:HG21 | 1.89 | 0.53 |
| 1:KB:662:ILE:HG21 | 1:LB:653:ALA:HB1 | 1.90 | 0.53 |
| 1:LA:271:VAL:HG23 | 1:LA:309:PHE:CD2 | 2.43 | 0.53 |
| 1:LB:777:LEU:O | 1:LB:781:VAL:HG22 | 2.08 | 0.53 |
| 1:M:405:THR:HG21 | 1:N:393:VAL:O | 2.08 | 0.53 |
| 1:M:802:ILE:CG2 | 1:M:807:ILE:HD11 | 2.39 | 0.53 |
| 1:MB:65:VAL:HG21 | 1:MB:73:VAL:HG22 | 1.90 | 0.53 |
| 1:N:737:GLY:O | 1:N:741:VAL:HG23 | 2.07 | 0.53 |
| 1:NB:16:ILE:HG22 | 1:NB:17:HIS:O | 2.07 | 0.53 |
| 1:NB:176:LEU:HD21 | 1:NB:196:TRP:CD1 | 2.44 | 0.53 |
| 1:NB:340:LEU:HD13 | 1:NB:345:ASP:HB2 | 1.90 | 0.53 |
| 1:O:335:ARG:HA | 1:O:356:HIS:HA | 1.90 | 0.53 |
| 1:O:468:VAL:C | 1:O:480:VAL:HG13 | 2.33 | 0.53 |
| 1:OA:283:VAL:HG22 | 1:OA:301:VAL:HA | 1.90 | 0.53 |
| 1:OA:388:ILE:HA | 1:OA:456:ARG:HA | 1.90 | 0.53 |
| 1:OB:336:ALA:HB2 | 1:OB:357:TRP:CH2 | 2.43 | 0.53 |
| 1:P:81:VAL:HG13 | 1:P:83:LEU:HD12 | 1.91 | 0.53 |
| 1:PB:221:LEU:HD13 | 1:PB:252:THR:C | 2.33 | 0.53 |
| 1:PB:276:LEU:HD13 | 1:PB:281:TYR:HA | 1.89 | 0.53 |
| 1:Q:285:LEU:HD11 | 1:Q:317:GLU:OE1 | 2.09 | 0.53 |
| 1:QA:526:VAL:HG22 | 1:QA:540:GLN:HG3 | 1.90 | 0.53 |
| 1:QB:662:ILE:HD11 | 1:RB:654:LEU:HD23 | 1.90 | 0.53 |
| 1:R:468:VAL:HG22 | 1:R:515:CYS:CA | 2.38 | 0.53 |
| 1:RA:333:LEU:HD23 | 1:RA:356:HIS:CD2 | 2.44 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:RA:529:ILE:HD12 | 1:RA:591:PHE:CE1 | 2.43 | 0.53 |
| 1:S:363:LEU:HD23 | 1:S:365:TYR:N | 2.23 | 0.53 |
| 1:T:460:TYR:CE2 | 1:T:514:LEU:HD22 | 2.43 | 0.53 |
| 1:TB:772:TYR:CD2 | 1:UB:770:LEU:HD21 | 2.43 | 0.53 |
| 1:VB:331:GLY:HA3 | 1:VB:407:MET:HE1 | 1.90 | 0.53 |
| 1:WB:578:ARG:HB2 | 1:WB:603:VAL:HG13 | 1.91 | 0.53 |
| 1:XA:514:LEU:O | 1:XA:514:LEU:HD23 | 2.08 | 0.53 |
| 1:XA:661:ALA:O | 1:XA:665:THR:HG23 | 2.08 | 0.53 |
| 1:XB:82:ARG:C | 1:XB:83:LEU:HD12 | 2.33 | 0.53 |
| 1:Y:90:ILE:HD11 | 1:Y:155:LYS:CB | 2.39 | 0.53 |
| 1:Y:489:LEU:HD11 | 1:Y:495:PHE:CE2 | 2.44 | 0.53 |
| 1:ZA:326:LEU:HD13 | 1:ZA:331:GLY:HA2 | 1.90 | 0.53 |
| 1:AA:751:LEU:HD12 | 1:Z:761:ARG:CD | 2.39 | 0.53 |
| 1:AC:679:ARG:HA | 1:ZB:688:LEU:HD13 | 1.89 | 0.53 |
| 1:B:531:THR:HG21 | 1:B:588:PHE:HB3 | 1.90 | 0.53 |
| 1:BA:390:VAL:O | 1:BA:390:VAL:HG23 | 2.08 | 0.53 |
| 1:BA:470:VAL:HG13 | 1:BA:494:GLN:O | 2.08 | 0.53 |
| 1:C:390:VAL:HG22 | 1:C:399:ARG:O | 2.08 | 0.53 |
| 1:CA:7:ILE:HG22 | 1:CA:36:ILE:HG13 | 1.89 | 0.53 |
| 1:CA:271:VAL:HG23 | 1:CA:309:PHE:HD2 | 1.73 | 0.53 |
| 1:D:19:LEU:HD12 | 1:D:25:VAL:O | 2.08 | 0.53 |
| 1:D:176:LEU:HD23 | 1:D:176:LEU:H | 1.73 | 0.53 |
| 1:DA:276:LEU:CD1 | 1:DA:302:VAL:HG12 | 2.39 | 0.53 |
| 1:EB:115:VAL:HG12 | 1:EB:121:LEU:HD23 | 1.91 | 0.53 |
| 1:F:82:ARG:C | 1:F:83:LEU:HD12 | 2.34 | 0.53 |
| 1:F:388:ILE:CA | 1:F:457:VAL:HG23 | 2.38 | 0.53 |
| 1:GB:73:VAL:HG21 | 1:GB:100:TYR:CZ | 2.44 | 0.53 |
| 1:HA:518:LEU:H | 1:HA:518:LEU:HD23 | 1.73 | 0.53 |
| 1:HB:799:THR:HA | 1:HB:807:ILE:HD11 | 1.91 | 0.53 |
| 1:IA:90:ILE:HG22 | 1:IA:91:ARG:N | 2.23 | 0.53 |
| 1:J:221:LEU:HD13 | 1:J:252:THR:O | 2.09 | 0.53 |
| 1:J:408:LEU:HD13 | 1:J:413:VAL:HA | 1.91 | 0.53 |
| 1:K:233:ARG:HA | 1:K:245:THR:HG23 | 1.90 | 0.53 |
| 1:KB:388:ILE:CA | 1:KB:457:VAL:HG23 | 2.39 | 0.53 |
| 1:KB:712:LEU:O | 1:KB:716:VAL:HG23 | 2.09 | 0.53 |
| 1:M:73:VAL:HG11 | 1:M:81:VAL:HG23 | 1.90 | 0.53 |
| 1:MA:374:VAL:HG12 | 1:MA:375:GLU:N | 2.23 | 0.53 |
| 1:N:398:VAL:HG11 | 1:N:415:TRP:CE3 | 2.44 | 0.53 |
| 1:N:758:GLU:O | 1:N:762:VAL:HG22 | 2.07 | 0.53 |
| 1:NA:269:GLY:C | 1:NA:271:VAL:HG13 | 2.33 | 0.53 |
| 1:NB:60:THR:HG23 | 1:NB:106:GLU:HB3 | 1.90 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:O:380:ILE:HG21 | 1:O:388:ILE:HD12 | 1.90 | 0.53 |
| 1:O:381:PRO:HA | 1:O:405:THR:HG22 | 1.90 | 0.53 |
| 1:O:518:LEU:HD11 | 1:O:549:VAL:CG2 | 2.39 | 0.53 |
| 1:OA:60:THR:HG22 | 1:OA:90:ILE:HB | 1.90 | 0.53 |
| 1:OB:645:PRO:HB2 | 1:OB:650:THR:HG21 | 1.90 | 0.53 |
| 1:PB:405:THR:HG21 | 1:QB:393:VAL:O | 2.09 | 0.53 |
| 1:R:87:ASP:O | 1:R:88:LEU:HD23 | 2.08 | 0.53 |
| 1:S:415:TRP:C | 1:S:455:THR:HG22 | 2.33 | 0.53 |
| 1:SB:523:PHE:CZ | 1:SB:568:VAL:HG23 | 2.43 | 0.53 |
| 1:UB:285:LEU:HD21 | 1:UB:317:GLU:HB2 | 1.90 | 0.53 |
| 1:UB:331:GLY:N | 1:UB:407:MET:HE1 | 2.24 | 0.53 |
| 1:V:526:VAL:HG12 | 1:V:538:GLN:HG2 | 1.89 | 0.53 |
| 1:VA:462:VAL:HG22 | 1:VA:468:VAL:CG2 | 2.38 | 0.53 |
| 1:VB:688:LEU:HD12 | 1:VB:688:LEU:O | 2.07 | 0.53 |
| 1:W:582:ALA:O | 1:W:586:VAL:HG22 | 2.09 | 0.53 |
| 1:XB:121:LEU:HA | 1:XB:162:ILE:HA | 1.89 | 0.53 |
| 1:Y:500:LEU:HD12 | 1:Y:511:ARG:HH22 | 1.74 | 0.53 |
| 1:YB:105:LEU:C | 1:YB:105:LEU:HD12 | 2.34 | 0.53 |
| 1:Z:500:LEU:HD11 | 1:Z:513:ALA:HB3 | 1.91 | 0.53 |
| 1:ZB:392:ASP:OD2 | 1:ZB:395:THR:HG22 | 2.07 | 0.53 |
| 1:ZB:399:ARG:NH1 | 1:ZB:401:VAL:HG11 | 2.24 | 0.53 |
| 1:AA:377:ARG:O | 1:AA:407:MET:HE1 | 2.07 | 0.53 |
| 1:AB:469:GLN:HA | 1:AB:480:VAL:HG22 | 1.90 | 0.53 |
| 1:AC:174:LEU:HD21 | 1:AC:212:VAL:HB | 1.89 | 0.53 |
| 1:B:53:VAL:HG11 | 1:B:95:ASP:O | 2.09 | 0.53 |
| 1:CA:126:LEU:C | 1:CA:127:LEU:HD22 | 2.33 | 0.53 |
| 1:CA:415:TRP:C | 1:CA:455:THR:HG22 | 2.33 | 0.53 |
| 1:DA:126:LEU:C | 1:DA:127:LEU:HD22 | 2.34 | 0.53 |
| 1:DA:539:LEU:HD12 | 1:DA:540:GLN:N | 2.24 | 0.53 |
| 1:EA:539:LEU:HD11 | 1:EA:541:LEU:CD2 | 2.37 | 0.53 |
| 1:F:228:HIS:HA | 1:F:250:LEU:HD23 | 1.91 | 0.53 |
| 1:FA:17:HIS:HB2 | 1:FA:44:LEU:HD22 | 1.91 | 0.53 |
| 1:G:10:ILE:HD11 | 1:G:33:LYS:HB2 | 1.91 | 0.53 |
| 1:G:212:VAL:C | 1:G:213:LEU:HD22 | 2.34 | 0.53 |
| 1:H:276:LEU:CD1 | 1:H:302:VAL:HG12 | 2.38 | 0.53 |
| 1:HB:81:VAL:HG13 | 1:HB:83:LEU:CD1 | 2.38 | 0.53 |
| 1:JA:662:ILE:HD13 | 1:KA:653:ALA:CB | 2.38 | 0.53 |
| 1:JB:333:LEU:HD12 | 1:JB:334:LEU:N | 2.22 | 0.53 |
| 1:JB:543:TYR:HD1 | 1:JB:638:VAL:HG22 | 1.73 | 0.53 |
| 1:KA:358:LEU:HD13 | 1:KA:377:ARG:NH1 | 2.24 | 0.53 |
| 1:KB:333:LEU:HD23 | 1:KB:374:VAL:HG11 | 1.91 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:KB:462:VAL:HG12 | 1:KB:483:GLY:O | 2.08 | 0.53 |
| 1:L:52:THR:O | 1:L:109:ILE:HD11 | 2.08 | 0.53 |
| 1:L:382:LEU:HD21 | 1:L:388:ILE:HG23 | 1.91 | 0.53 |
| 1:LA:9:ARG:HB3 | 1:LA:34:THR:HG22 | 1.90 | 0.53 |
| 1:LA:391:GLN:HB2 | 1:LA:398:VAL:HG22 | 1.90 | 0.53 |
| 1:LB:546:HIS:O | 1:LB:633:LEU:HD12 | 2.07 | 0.53 |
| 1:MA:599:ILE:HD13 | 1:MA:640:VAL:HG21 | 1.90 | 0.53 |
| 1:NA:126:LEU:HD21 | 1:NA:158:GLU:HB2 | 1.91 | 0.53 |
| 1:O:46:ALA:HB1 | 1:O:47:PRO:HD2 | 1.91 | 0.53 |
| 1:OA:529:ILE:CD1 | 1:OA:583:VAL:HG21 | 2.37 | 0.53 |
| 1:OB:144:LEU:HD12 | 1:OB:146:GLU:OE1 | 2.09 | 0.53 |
| 1:PB:390:VAL:HG22 | 1:PB:399:ARG:O | 2.08 | 0.53 |
| 1:PB:529:ILE:HD12 | 1:PB:583:VAL:CB | 2.38 | 0.53 |
| 1:PB:768:LEU:HD13 | 1:QB:759:LEU:CD2 | 2.39 | 0.53 |
| 1:RA:788:ALA:O | 1:RA:792:VAL:HG23 | 2.07 | 0.53 |
| 1:RB:18:VAL:HA | 1:RB:44:LEU:HD23 | 1.91 | 0.53 |
| 1:RB:81:VAL:HG12 | 1:RB:101:PRO:O | 2.08 | 0.53 |
| 1:SB:8:ILE:H | 1:SB:8:ILE:HD12 | 1.74 | 0.53 |
| 1:T:168:ILE:HG23 | 1:T:202:GLY:HA2 | 1.90 | 0.53 |
| 1:TA:332:LEU:CD2 | 1:TA:363:LEU:HD11 | 2.38 | 0.53 |
| 1:UA:496:THR:HG21 | 1:UA:562:PHE:CG | 2.44 | 0.53 |
| 1:UB:526:VAL:HG12 | 1:UB:526:VAL:O | 2.08 | 0.53 |
| 1:V:168:ILE:O | 1:V:168:ILE:HG23 | 2.08 | 0.53 |
| 1:VA:529:ILE:CD1 | 1:VA:583:VAL:HG21 | 2.38 | 0.53 |
| 1:W:326:LEU:HD21 | 1:W:332:LEU:CD1 | 2.27 | 0.53 |
| 1:WA:666:THR:HB | 1:XA:660:LEU:HD13 | 1.91 | 0.53 |
| 1:WB:170:GLN:CA | 1:WB:201:VAL:HG13 | 2.38 | 0.53 |
| 1:X:3:THR:HG22 | 1:X:3:THR:O | 2.09 | 0.53 |
| 1:X:54:PRO:HD2 | 1:X:109:ILE:HG23 | 1.89 | 0.53 |
| 1:X:273:ILE:HG23 | 1:X:273:ILE:O | 2.09 | 0.53 |
| 1:XA:129:PHE:CZ | 1:XA:137:VAL:HG11 | 2.44 | 0.53 |
| 1:XA:747:LYS:O | 1:XA:751:LEU:HD23 | 2.07 | 0.53 |
| 1:XB:316:LEU:HD11 | 1:XB:319:GLY:O | 2.08 | 0.53 |
| 1:ZA:168:ILE:CG2 | 1:ZA:215:LEU:HD13 | 2.38 | 0.53 |
| 1:A:633:LEU:HD12 | 1:A:634:VAL:H | 1.73 | 0.53 |
| 1:AA:549:VAL:O | 1:AA:549:VAL:HG23 | 2.09 | 0.53 |
| 1:CB:498:LEU:HD11 | 1:CB:562:PHE:HD2 | 1.73 | 0.53 |
| 1:DA:691:GLN:HA | 1:DA:694:LEU:HD12 | 1.91 | 0.53 |
| 1:DB:325:VAL:HG23 | 1:EB:353:ALA:HB1 | 1.90 | 0.53 |
| 1:E:408:LEU:HD13 | 1:E:413:VAL:HA | 1.90 | 0.53 |
| 1:F:381:PRO:HA | 1:F:405:THR:HG22 | 1.89 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:G:330:GLN:C | 1:G:407:MET:HE1 | 2.33 | 0.53 |
| 1:GB:3:THR:HG22 | 1:GB:3:THR:O | 2.09 | 0.53 |
| 1:H:633:LEU:HD12 | 1:H:634:VAL:H | 1.74 | 0.53 |
| 1:HB:325:VAL:HA | 1:HB:364:GLU:HA | 1.91 | 0.53 |
| 1:IA:540:GLN:O | 1:IA:541:LEU:HD22 | 2.08 | 0.53 |
| 1:JA:401:VAL:C | 1:JA:402:ILE:HD12 | 2.33 | 0.53 |
| 1:KA:480:VAL:HG21 | 1:KA:558:THR:HB | 1.90 | 0.53 |
| 1:L:531:THR:HG23 | 1:L:535:ALA:HB3 | 1.90 | 0.53 |
| 1:LA:120:ALA:HB1 | 1:LA:145:PHE:O | 2.08 | 0.53 |
| 1:LA:227:LEU:CD2 | 1:LA:229:LEU:HD21 | 2.38 | 0.53 |
| 1:MB:540:GLN:O | 1:MB:541:LEU:HD12 | 2.09 | 0.53 |
| 1:N:129:PHE:CE1 | 1:N:137:VAL:HG11 | 2.44 | 0.53 |
| 1:NA:330:GLN:C | 1:NA:407:MET:HE1 | 2.34 | 0.53 |
| 1:NA:747:LYS:O | 1:NA:751:LEU:HD23 | 2.08 | 0.53 |
| 1:NB:25:VAL:HG13 | 1:NB:80:GLN:HB2 | 1.91 | 0.53 |
| 1:OB:227:LEU:HD13 | 1:OB:270:VAL:HG22 | 1.91 | 0.53 |
| 1:P:51:VAL:CG2 | 1:P:99:LEU:HD11 | 2.38 | 0.53 |
| 1:P:383:ASP:OD1 | 1:Q:398:VAL:HG23 | 2.09 | 0.53 |
| 1:PA:340:LEU:HD12 | 1:PA:351:HIS:H | 1.73 | 0.53 |
| 1:QA:535:ALA:HB1 | 1:QA:537:LEU:HD21 | 1.90 | 0.53 |
| 1:QB:121:LEU:HD12 | 1:QB:121:LEU:C | 2.33 | 0.53 |
| 1:R:116:LEU:O | 1:R:119:THR:HG22 | 2.07 | 0.53 |
| 1:SA:3:THR:HG22 | 1:SA:6:PHE:CD1 | 2.43 | 0.53 |
| 1:SB:405:THR:HG21 | 1:TB:393:VAL:O | 2.09 | 0.53 |
| 1:UB:60:THR:HG23 | 1:UB:106:GLU:HG2 | 1.91 | 0.53 |
| 1:V:25:VAL:HG22 | 1:V:80:GLN:HB2 | 1.90 | 0.53 |
| 1:V:137:VAL:HG21 | 1:V:143:TRP:CZ3 | 2.43 | 0.53 |
| 1:V:539:LEU:HD11 | 1:V:640:VAL:HG13 | 1.89 | 0.53 |
| 1:W:285:LEU:HD23 | 1:W:299:LYS:HD2 | 1.91 | 0.53 |
| 1:WA:76:ASP:HB3 | 1:WA:82:ARG:HA | 1.91 | 0.53 |
| 1:WB:3:THR:HG22 | 1:WB:6:PHE:CD1 | 2.44 | 0.53 |
| 1:XB:567:PHE:CD2 | 1:XB:633:LEU:HD22 | 2.44 | 0.53 |
| 1:YB:3:THR:HG23 | 1:YB:37:ARG:CB | 2.38 | 0.53 |
| 1:Z:59:CYS:CB | 1:Z:109:ILE:HD13 | 2.38 | 0.53 |
| 1:Z:782:SER:HA | 1:Z:785:GLN:OE1 | 2.09 | 0.53 |
| 1:ZB:423:VAL:HG13 | 1:ZB:426:LEU:HD23 | 1.91 | 0.53 |
| 1:A:381:PRO:HA | 1:A:405:THR:HG22 | 1.91 | 0.53 |
| 1:A:537:LEU:HD23 | 1:A:644:GLU:C | 2.34 | 0.53 |
| 1:A:770:LEU:HD21 | 1:NA:772:TYR:CE1 | 2.43 | 0.53 |
| 1:AA:129:PHE:CE2 | 1:AA:137:VAL:HG21 | 2.44 | 0.53 |
| 1:AC:283:VAL:HG11 | 1:AC:317:GLU:OE1 | 2.09 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:B:416:GLU:CG | 1:B:455:THR:HG22 | 2.39 | 0.53 |
| 1:C:9:ARG:CB | 1:C:34:THR:HG22 | 2.39 | 0.53 |
| 1:CA:61:VAL:HG23 | 1:CA:89:GLU:OE1 | 2.09 | 0.53 |
| 1:D:466:ALA:HB1 | 1:D:515:CYS:SG | 2.49 | 0.53 |
| 1:DA:273:ILE:HD11 | 1:DA:307:SER:HB3 | 1.91 | 0.53 |
| 1:DB:126:LEU:C | 1:DB:127:LEU:HD22 | 2.34 | 0.53 |
| 1:E:285:LEU:HD12 | 1:E:315:GLN:HB3 | 1.89 | 0.53 |
| 1:E:417:LYS:HZ3 | 1:E:491:PRO:C | 2.16 | 0.53 |
| 1:EA:62:ALA:HA | 1:EA:88:LEU:HD23 | 1.90 | 0.53 |
| 1:EA:712:LEU:O | 1:EA:716:VAL:HG23 | 2.08 | 0.53 |
| 1:EB:25:VAL:HG21 | 1:EB:78:THR:O | 2.09 | 0.53 |
| 1:F:529:ILE:HD12 | 1:F:583:VAL:HB | 1.89 | 0.53 |
| 1:FA:176:LEU:HD21 | 1:FA:196:TRP:CD1 | 2.44 | 0.53 |
| 1:FB:564:VAL:HG11 | 1:FB:631:ASN:ND2 | 2.24 | 0.53 |
| 1:GB:60:THR:HG1 | 1:GB:106:GLU:C | 2.15 | 0.53 |
| 1:GB:114:VAL:O | 1:GB:114:VAL:HG13 | 2.07 | 0.53 |
| 1:H:90:ILE:HD13 | 1:H:153:PRO:CB | 2.38 | 0.53 |
| 1:H:174:LEU:HD12 | 1:H:214:ASP:C | 2.33 | 0.53 |
| 1:HA:174:LEU:C | 1:HA:197:LEU:HD23 | 2.33 | 0.53 |
| 1:IA:13:TYR:HA | 1:IA:50:MET:SD | 2.49 | 0.53 |
| 1:IB:250:LEU:HD23 | 1:IB:312:PRO:HD3 | 1.91 | 0.53 |
| 1:JA:36:ILE:HG23 | 1:JA:36:ILE:O | 2.08 | 0.53 |
| 1:JB:414:LEU:H | 1:JB:414:LEU:HD12 | 1.74 | 0.53 |
| 1:K:530:GLU:O | 1:K:583:VAL:HG13 | 2.09 | 0.53 |
| 1:KB:129:PHE:CE2 | 1:KB:137:VAL:HG11 | 2.44 | 0.53 |
| 1:KB:175:ARG:HA | 1:KB:197:LEU:HD23 | 1.90 | 0.53 |
| 1:KB:233:ARG:HA | 1:KB:245:THR:HG23 | 1.91 | 0.53 |
| 1:L:388:ILE:C | 1:L:457:VAL:HG23 | 2.33 | 0.53 |
| 1:MA:405:THR:HG21 | 1:NA:393:VAL:O | 2.09 | 0.53 |
| 1:MB:537:LEU:HD12 | 1:MB:643:VAL:HG22 | 1.90 | 0.53 |
| 1:N:717:GLU:O | 1:N:721:THR:HG23 | 2.09 | 0.53 |
| 1:P:275:THR:C | 1:P:276:LEU:HD12 | 2.34 | 0.53 |
| 1:PA:786:GLN:O | 1:PA:790:VAL:HG23 | 2.08 | 0.53 |
| 1:PB:216:VAL:HG22 | 1:PB:217:ASP:H | 1.73 | 0.53 |
| 1:PB:798:MET:O | 1:PB:802:ILE:HG22 | 2.09 | 0.53 |
| 1:QB:176:LEU:HD23 | 1:QB:196:TRP:O | 2.09 | 0.53 |
| 1:QB:761:ARG:HG3 | 1:RB:751:LEU:HD11 | 1.89 | 0.53 |
| 1:R:109:ILE:O | 1:R:110:THR:HG23 | 2.08 | 0.53 |
| 1:RA:363:LEU:H | 1:RA:363:LEU:HD23 | 1.74 | 0.53 |
| 1:S:591:PHE:HA | 1:S:598:ILE:HD13 | 1.91 | 0.53 |
| 1:SA:10:ILE:HD11 | 1:SA:16:ILE:HB | 1.90 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:TA:7:ILE:HG22 | 1:TA:36:ILE:HG12 | 1.91 | 0.53 |
| 1:TB:176:LEU:HD21 | 1:TB:196:TRP:CD1 | 2.43 | 0.53 |
| 1:UA:716:VAL:HG21 | 1:VA:708:GLU:HG3 | 1.91 | 0.53 |
| 1:UB:516:LEU:HD12 | 1:UB:517:LEU:N | 2.24 | 0.53 |
| 1:VA:462:VAL:HG22 | 1:VA:468:VAL:HG21 | 1.91 | 0.53 |
| 1:WA:543:TYR:CD1 | 1:WA:638:VAL:HG22 | 2.44 | 0.53 |
| 1:XB:158:GLU:OE1 | 1:XB:160:VAL:HG23 | 2.08 | 0.53 |
| 1:Y:566:ASP:OD1 | 1:Y:568:VAL:HG12 | 2.08 | 0.53 |
| 1:A:529:ILE:HB | 1:A:583:VAL:HG21 | 1.91 | 0.53 |
| 1:A:691:GLN:HA | 1:A:694:LEU:HD12 | 1.90 | 0.53 |
| 1:AA:205:LEU:O | 1:AA:205:LEU:CG | 2.49 | 0.53 |
| 1:AB:393:VAL:HG13 | 1:AB:413:VAL:HG12 | 1.91 | 0.53 |
| 1:AC:587:THR:HG23 | 1:AC:590:ASP:H | 1.73 | 0.53 |
| 1:AC:777:LEU:HD22 | 1:ZB:779:LEU:HD23 | 1.90 | 0.53 |
| 1:C:5:GLU:O | 1:C:7:ILE:N | 2.42 | 0.53 |
| 1:C:65:VAL:HG13 | 1:C:103:GLU:CD | 2.34 | 0.53 |
| 1:CB:115:VAL:HG21 | 1:CB:145:PHE:CE2 | 2.43 | 0.53 |
| 1:CB:539:LEU:HD13 | 1:CB:643:VAL:HG13 | 1.91 | 0.53 |
| 1:D:126:LEU:O | 1:D:127:LEU:HD22 | 2.09 | 0.53 |
| 1:D:541:LEU:HD22 | 1:D:640:VAL:HG22 | 1.91 | 0.53 |
| 1:EB:63:ASN:OD1 | 1:EB:83:LEU:HD23 | 2.09 | 0.53 |
| 1:EB:325:VAL:HG13 | 1:EB:325:VAL:O | 2.08 | 0.53 |
| 1:H:529:ILE:HD12 | 1:H:583:VAL:HG21 | 1.90 | 0.53 |
| 1:IB:51:VAL:CG2 | 1:IB:99:LEU:HD21 | 2.38 | 0.53 |
| 1:J:599:ILE:O | 1:J:603:VAL:HG23 | 2.08 | 0.53 |
| 1:J:768:LEU:HD13 | 1:K:759:LEU:HD23 | 1.91 | 0.53 |
| 1:JA:8:ILE:H | 1:JA:8:ILE:HD12 | 1.74 | 0.53 |
| 1:JA:547:PHE:CZ | 1:JA:633:LEU:HD13 | 2.44 | 0.53 |
| 1:JB:109:ILE:HG22 | 1:JB:109:ILE:O | 2.09 | 0.53 |
| 1:KB:571:ALA:O | 1:KB:575:ILE:HD12 | 2.09 | 0.53 |
| 1:LA:788:ALA:O | 1:LA:792:VAL:HG23 | 2.09 | 0.53 |
| 1:MB:662:ILE:HD13 | 1:NB:588:PHE:CZ | 2.44 | 0.53 |
| 1:O:50:MET:HE3 | 1:O:98:PRO:HD3 | 1.90 | 0.53 |
| 1:O:583:VAL:HG23 | 1:O:591:PHE:CD2 | 2.44 | 0.53 |
| 1:PB:470:VAL:HG22 | 1:PB:495:PHE:HA | 1.90 | 0.53 |
| 1:QA:658:VAL:HG23 | 1:RA:533:ASP:CG | 2.34 | 0.53 |
| 1:RA:28:VAL:HG11 | 1:RA:100:TYR:CE1 | 2.44 | 0.53 |
| 1:SA:402:ILE:HD13 | 1:SA:457:VAL:HG11 | 1.90 | 0.53 |
| 1:T:178:ALA:HB2 | 1:T:190:ARG:HB2 | 1.91 | 0.53 |
| 1:TA:390:VAL:O | 1:TA:398:VAL:HG22 | 2.09 | 0.53 |
| 1:TA:595:SER:OG | 1:TA:599:ILE:HD11 | 2.09 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UA:276:LEU:HD11 | 1:UA:282:CYS:SG | 2.49 | 0.53 |
| 1:VA:325:VAL:HG21 | 1:WA:337:LEU:C | 2.34 | 0.53 |
| 1:W:53:VAL:HG23 | 1:W:97:PHE:HE2 | 1.74 | 0.53 |
| 1:W:56:ARG:HG3 | 1:X:127:LEU:HD13 | 1.90 | 0.53 |
| 1:W:276:LEU:HD23 | 1:W:281:TYR:HA | 1.91 | 0.53 |
| 1:WA:587:THR:HG23 | 1:WA:589:ASP:H | 1.73 | 0.53 |
| 1:XB:176:LEU:HD21 | 1:XB:196:TRP:NE1 | 2.24 | 0.53 |
| 1:YA:220:ILE:HG23 | 1:ZA:245:THR:HG22 | 1.91 | 0.53 |
| 1:YA:274:THR:HG21 | 1:YA:308:PHE:CZ | 2.44 | 0.53 |
| 1:YA:326:LEU:HD13 | 1:YA:331:GLY:HA2 | 1.91 | 0.53 |
| 1:Z:126:LEU:C | 1:Z:127:LEU:HD22 | 2.34 | 0.53 |
| 1:Z:468:VAL:HG11 | 1:Z:495:PHE:CD1 | 2.44 | 0.53 |
| 1:ZB:196:TRP:C | 1:ZB:197:LEU:HD12 | 2.34 | 0.53 |
| 1:A:566:ASP:OD1 | 1:A:568:VAL:HG12 | 2.09 | 0.53 |
| 1:B:175:ARG:HA | 1:B:197:LEU:HD23 | 1.90 | 0.53 |
| 1:CA:462:VAL:HB | 1:CA:485:GLU:O | 2.09 | 0.53 |
| 1:D:219:VAL:HG11 | 1:D:227:LEU:HD12 | 1.91 | 0.53 |
| 1:DB:216:VAL:HG22 | 1:DB:217:ASP:N | 2.24 | 0.53 |
| 1:DB:391:GLN:HB2 | 1:DB:398:VAL:HG22 | 1.91 | 0.53 |
| 1:EA:787:LEU:CD2 | 1:FA:781:VAL:HG12 | 2.39 | 0.53 |
| 1:FA:170:GLN:HB3 | 1:GA:233:ARG:HE | 1.74 | 0.53 |
| 1:GA:665:THR:HG21 | 1:HA:589:ASP:OD2 | 2.09 | 0.53 |
| 1:HA:53:VAL:HG21 | 1:HA:91:ARG:HB2 | 1.91 | 0.53 |
| 1:HA:58:TYR:HE2 | 1:HA:112:LEU:HD22 | 1.74 | 0.53 |
| 1:I:283:VAL:HG12 | 1:I:284:ILE:N | 2.24 | 0.53 |
| 1:I:540:GLN:C | 1:I:541:LEU:HD12 | 2.34 | 0.53 |
| 1:IA:524:THR:HG22 | 1:IA:542:ALA:HB2 | 1.91 | 0.53 |
| 1:J:165:ALA:HB2 | 1:J:205:LEU:HB2 | 1.90 | 0.53 |
| 1:JA:460:TYR:O | 1:JA:487:VAL:HG12 | 2.08 | 0.53 |
| 1:JB:3:THR:HG22 | 1:JB:6:PHE:CD1 | 2.44 | 0.53 |
| 1:K:806:THR:HG23 | 1:L:808:ARG:CD | 2.39 | 0.53 |
| 1:KA:144:LEU:H | 1:KA:144:LEU:HD23 | 1.74 | 0.53 |
| 1:KB:99:LEU:HD11 | 1:KB:105:LEU:HB3 | 1.91 | 0.53 |
| 1:KB:262:ASP:OD1 | 1:KB:263:VAL:HG22 | 2.08 | 0.53 |
| 1:MA:779:LEU:HD21 | 1:NA:774:ARG:HE | 1.73 | 0.53 |
| 1:MB:144:LEU:HD23 | 1:MB:144:LEU:H | 1.74 | 0.53 |
| 1:N:547:PHE:CD1 | 1:N:561:LEU:HD22 | 2.44 | 0.53 |
| 1:NB:52:THR:O | 1:NB:109:ILE:HD11 | 2.09 | 0.53 |
| 1:NB:65:VAL:HG13 | 1:NB:103:GLU:OE1 | 2.09 | 0.53 |
| 1:O:391:GLN:HB2 | 1:O:398:VAL:HG22 | 1.91 | 0.53 |
| 1:OA:34:THR:HG21 | 1:PA:23:SER:HA | 1.91 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OA:336:ALA:HB2 | 1:OA:357:TRP:HH2 | 1.74 | 0.53 |
| 1:PA:137:VAL:HG11 | 1:PA:157:VAL:HG22 | 1.91 | 0.53 |
| 1:Q:119:THR:HG23 | 1:Q:162:ILE:HG23 | 1.90 | 0.53 |
| 1:Q:389:TYR:CE1 | 1:Q:457:VAL:HG22 | 2.44 | 0.53 |
| 1:Q:599:ILE:O | 1:Q:603:VAL:HG23 | 2.09 | 0.53 |
| 1:R:405:THR:HG23 | 1:S:396:GLY:N | 2.23 | 0.53 |
| 1:RA:301:VAL:HG21 | 1:RA:366:VAL:CG1 | 2.38 | 0.53 |
| 1:RB:382:LEU:H | 1:RB:405:THR:HG22 | 1.73 | 0.53 |
| 1:S:462:VAL:HG23 | 1:S:487:VAL:HG12 | 1.91 | 0.53 |
| 1:SA:166:THR:HG21 | 1:SA:174:LEU:HD13 | 1.91 | 0.53 |
| 1:TA:61:VAL:HG12 | 1:TA:105:LEU:HD12 | 1.91 | 0.53 |
| 1:TB:16:ILE:HD11 | 1:TB:47:PRO:N | 2.24 | 0.53 |
| 1:UA:498:LEU:HD11 | 1:UA:516:LEU:HD12 | 1.91 | 0.53 |
| 1:V:326:LEU:O | 1:V:362:PRO:HA | 2.09 | 0.53 |
| 1:W:458:VAL:HB | 1:W:489:LEU:HD12 | 1.90 | 0.53 |
| 1:WA:535:ALA:HB1 | 1:WA:650:THR:HG23 | 1.91 | 0.53 |
| 1:XB:43:VAL:O | 1:XB:43:VAL:HG13 | 2.09 | 0.53 |
| 1:YA:329:GLN:NE2 | 1:ZA:393:VAL:O | 2.42 | 0.53 |
| 1:YA:497:VAL:O | 1:YA:497:VAL:HG13 | 2.09 | 0.53 |
| 1:Z:18:VAL:HG12 | 1:Z:43:VAL:HG22 | 1.90 | 0.53 |
| 1:ZB:408:LEU:HD23 | 1:ZB:412:GLU:O | 2.09 | 0.53 |
| 1:A:284:ILE:HD11 | 1:A:300:ARG:HB3 | 1.91 | 0.52 |
| 1:BA:285:LEU:HD12 | 1:BA:315:GLN:HB3 | 1.91 | 0.52 |
| 1:BA:495:PHE:CG | 1:BA:514:LEU:HD11 | 2.44 | 0.52 |
| 1:CB:60:THR:HG22 | 1:CB:90:ILE:HG12 | 1.91 | 0.52 |
| 1:CB:337:LEU:HD21 | 1:CB:372:GLU:OE1 | 2.10 | 0.52 |
| 1:CB:390:VAL:O | 1:CB:398:VAL:HG13 | 2.09 | 0.52 |
| 1:D:197:LEU:HD21 | 1:D:263:VAL:HG13 | 1.91 | 0.52 |
| 1:DB:273:ILE:O | 1:DB:273:ILE:HG23 | 2.09 | 0.52 |
| 1:EA:388:ILE:HD12 | 1:EA:390:VAL:CG1 | 2.39 | 0.52 |
| 1:EA:416:GLU:HG3 | 1:EA:455:THR:HG22 | 1.91 | 0.52 |
| 1:FA:786:GLN:HB2 | 1:GA:781:VAL:HG11 | 1.90 | 0.52 |
| 1:FB:10:ILE:HD12 | 1:FB:29:GLU:HB3 | 1.91 | 0.52 |
| 1:FB:405:THR:HG23 | 1:GB:396:GLY:HA3 | 1.91 | 0.52 |
| 1:FB:566:ASP:OD1 | 1:FB:568:VAL:HG12 | 2.09 | 0.52 |
| 1:G:811:ALA:CB | 1:H:811:ALA:HB1 | 2.39 | 0.52 |
| 1:GA:112:LEU:HD23 | 1:GA:150:THR:HG21 | 1.89 | 0.52 |
| 1:GA:235:PHE:CB | 1:GA:264:HIS:HD1 | 2.21 | 0.52 |
| 1:H:779:LEU:HD21 | 1:I:774:ARG:CD | 2.39 | 0.52 |
| 1:IA:643:VAL:HG22 | 1:JA:580:ARG:HH22 | 1.73 | 0.52 |
| 1:IB:28:VAL:HG22 | 1:IB:28:VAL:O | 2.09 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:JA:63:ASN:ND2 | 1:JA:83:LEU:HD23 | 2.23 | 0.52 |
| 1:JA:381:PRO:CA | 1:JA:405:THR:HG22 | 2.36 | 0.52 |
| 1:JB:50:MET:HB3 | 1:JB:97:PHE:C | 2.34 | 0.52 |
| 1:K:413:VAL:HG22 | 1:K:414:LEU:HD23 | 1.90 | 0.52 |
| 1:KB:121:LEU:C | 1:KB:121:LEU:HD12 | 2.34 | 0.52 |
| 1:LB:14:HIS:HA | 1:LB:48:MET:O | 2.09 | 0.52 |
| 1:N:163:ILE:HG13 | 1:N:205:LEU:HD11 | 1.91 | 0.52 |
| 1:OA:131:ASP:CB | 1:OA:137:VAL:HG21 | 2.38 | 0.52 |
| 1:Q:742:LEU:HD21 | 1:R:734:ARG:HG3 | 1.91 | 0.52 |
| 1:QA:60:THR:HG22 | 1:QA:107:LYS:HG3 | 1.90 | 0.52 |
| 1:QB:221:LEU:HD13 | 1:QB:252:THR:C | 2.35 | 0.52 |
| 1:QB:460:TYR:O | 1:QB:486:LEU:HD12 | 2.08 | 0.52 |
| 1:RA:177:ARG:H | 1:RA:213:LEU:HD23 | 1.73 | 0.52 |
| 1:S:26:SER:OG | 1:S:81:VAL:HG11 | 2.09 | 0.52 |
| 1:TB:177:ARG:H | 1:TB:213:LEU:HD23 | 1.74 | 0.52 |
| 1:UA:798:MET:SD | 1:UA:799:THR:HG23 | 2.49 | 0.52 |
| 1:V:390:VAL:HG12 | 1:V:414:LEU:CD2 | 2.39 | 0.52 |
| 1:VB:126:LEU:HD21 | 1:VB:158:GLU:HB2 | 1.91 | 0.52 |
| 1:W:6:PHE:O | 1:W:36:ILE:HA | 2.09 | 0.52 |
| 1:XA:316:LEU:HD12 | 1:XA:319:GLY:O | 2.09 | 0.52 |
| 1:XA:558:THR:HA | 1:XA:561:LEU:HD12 | 1.91 | 0.52 |
| 1:XB:531:THR:HG23 | 1:XB:537:LEU:CD1 | 2.38 | 0.52 |
| 1:YA:548:GLU:HG2 | 1:YA:634:VAL:HG21 | 1.91 | 0.52 |
| 1:ZA:531:THR:HG22 | 1:ZA:583:VAL:CG2 | 2.39 | 0.52 |
| 1:A:761:ARG:CG | 1:B:755:THR:HG21 | 2.39 | 0.52 |
| 1:AB:55:PRO:O | 1:AB:56:ARG:HD3 | 2.09 | 0.52 |
| 1:AB:120:ALA:CB | 1:AB:205:LEU:HD21 | 2.40 | 0.52 |
| 1:AC:495:PHE:CD2 | 1:AC:514:LEU:HD22 | 2.44 | 0.52 |
| 1:BA:126:LEU:O | 1:BA:127:LEU:HD22 | 2.08 | 0.52 |
| 1:C:413:VAL:HG22 | 1:C:414:LEU:N | 2.25 | 0.52 |
| 1:CA:388:ILE:N | 1:CA:457:VAL:HG23 | 2.24 | 0.52 |
| 1:CA:633:LEU:HD12 | 1:CA:634:VAL:H | 1.73 | 0.52 |
| 1:CB:660:LEU:HD23 | 1:CB:663:GLU:OE1 | 2.09 | 0.52 |
| 1:DA:9:ARG:HB3 | 1:DA:34:THR:HG23 | 1.92 | 0.52 |
| 1:DB:233:ARG:HA | 1:DB:245:THR:HG23 | 1.92 | 0.52 |
| 1:EA:137:VAL:HG12 | 1:EA:138:VAL:N | 2.24 | 0.52 |
| 1:EA:382:LEU:H | 1:EA:405:THR:HG22 | 1.74 | 0.52 |
| 1:F:88:LEU:HD11 | 1:F:106:GLU:HG3 | 1.91 | 0.52 |
| 1:G:498:LEU:HB2 | 1:G:513:ALA:HB3 | 1.90 | 0.52 |
| 1:H:331:GLY:N | 1:H:407:MET:HE3 | 2.25 | 0.52 |
| 1:H:392:ASP:OD2 | 1:H:395:THR:HG22 | 2.10 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:H:529:ILE:HB | 1:H:583:VAL:HG11 | 1.90 | 0.52 |
| 1:HB:9:ARG:CD | 1:HB:34:THR:HG23 | 2.39 | 0.52 |
| 1:IB:579:VAL:O | 1:IB:583:VAL:HG12 | 2.09 | 0.52 |
| 1:JA:390:VAL:HG12 | 1:JA:414:LEU:HD23 | 1.91 | 0.52 |
| 1:JB:775:ALA:HB1 | 1:KB:770:LEU:HD22 | 1.91 | 0.52 |
| 1:LB:48:MET:SD | 1:LB:49:ARG:N | 2.82 | 0.52 |
| 1:LB:547:PHE:CD2 | 1:LB:633:LEU:HD13 | 2.44 | 0.52 |
| 1:M:802:ILE:HD13 | 1:M:807:ILE:HG12 | 1.91 | 0.52 |
| 1:MB:266:GLU:O | 1:MB:268:LEU:HD12 | 2.08 | 0.52 |
| 1:N:142:GLU:CB | 1:N:208:VAL:HG21 | 2.39 | 0.52 |
| 1:N:388:ILE:N | 1:N:457:VAL:HG23 | 2.23 | 0.52 |
| 1:N:765:VAL:HG22 | 1:O:759:LEU:HD21 | 1.91 | 0.52 |
| 1:OB:391:GLN:HB2 | 1:OB:398:VAL:HG22 | 1.90 | 0.52 |
| 1:P:662:ILE:O | 1:P:666:THR:HG23 | 2.09 | 0.52 |
| 1:PA:137:VAL:O | 1:PA:137:VAL:HG12 | 2.09 | 0.52 |
| 1:PA:173:ALA:O | 1:PA:215:LEU:HD12 | 2.09 | 0.52 |
| 1:PB:643:VAL:O | 1:PB:643:VAL:HG23 | 2.09 | 0.52 |
| 1:Q:489:LEU:HD11 | 1:Q:495:PHE:CE2 | 2.43 | 0.52 |
| 1:QB:73:VAL:CG1 | 1:QB:81:VAL:HG23 | 2.39 | 0.52 |
| 1:T:628:PHE:HE2 | 1:T:635:VAL:HG23 | 1.74 | 0.52 |
| 1:UA:122:HIS:HB2 | 1:UA:208:VAL:HG21 | 1.91 | 0.52 |
| 1:UA:513:ALA:C | 1:UA:514:LEU:HD12 | 2.34 | 0.52 |
| 1:UA:654:LEU:HD12 | 1:VA:534:HIS:CE1 | 2.44 | 0.52 |
| 1:V:95:ASP:OD1 | 1:V:96:PRO:CD | 2.57 | 0.52 |
| 1:W:284:ILE:HD12 | 1:W:287:PRO:HB3 | 1.91 | 0.52 |
| 1:WA:333:LEU:HD22 | 1:WA:377:ARG:HH12 | 1.75 | 0.52 |
| 1:X:115:VAL:C | 1:X:116:LEU:HD22 | 2.34 | 0.52 |
| 1:YA:125:ALA:HB2 | 1:YA:137:VAL:HG12 | 1.91 | 0.52 |
| 1:Z:802:ILE:HG23 | 1:Z:807:ILE:HD11 | 1.91 | 0.52 |
| 1:B:126:LEU:C | 1:B:127:LEU:HD22 | 2.34 | 0.52 |
| 1:BA:336:ALA:HB2 | 1:BA:357:TRP:HZ3 | 1.75 | 0.52 |
| 1:BA:588:PHE:CG | 1:BA:589:ASP:N | 2.77 | 0.52 |
| 1:BB:172:GLN:HB3 | 1:BB:215:LEU:HD11 | 1.92 | 0.52 |
| 1:BB:195:GLU:HG2 | 1:BB:263:VAL:HG11 | 1.91 | 0.52 |
| 1:C:706:LEU:HD21 | 1:D:696:GLN:OE1 | 2.09 | 0.52 |
| 1:CA:123:LEU:HD22 | 1:CA:157:VAL:HG11 | 1.91 | 0.52 |
| 1:DA:34:THR:HG22 | 1:DA:34:THR:O | 2.10 | 0.52 |
| 1:DA:172:GLN:CD | 1:DA:215:LEU:HD21 | 2.34 | 0.52 |
| 1:DB:331:GLY:O | 1:DB:358:LEU:HD11 | 2.10 | 0.52 |
| 1:EA:391:GLN:HB2 | 1:EA:398:VAL:HG22 | 1.89 | 0.52 |
| 1:FA:17:HIS:CD2 | 1:FA:28:VAL:HG23 | 2.44 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:FB:30:VAL:HG13 | 1:FB:33:LYS:HE2 | 1.92 | 0.52 |
| 1:G:332:LEU:O | 1:G:358:LEU:HD12 | 2.09 | 0.52 |
| 1:GA:61:VAL:O | 1:GA:61:VAL:HG23 | 2.10 | 0.52 |
| 1:GB:81:VAL:HG13 | 1:GB:83:LEU:HD11 | 1.92 | 0.52 |
| 1:H:401:VAL:O | 1:H:401:VAL:HG23 | 2.09 | 0.52 |
| 1:H:811:ALA:O | 1:H:812:VAL:HG13 | 2.09 | 0.52 |
| 1:HA:348:LYS:O | 1:HA:349:VAL:HG23 | 2.09 | 0.52 |
| 1:K:633:LEU:HD12 | 1:K:634:VAL:H | 1.74 | 0.52 |
| 1:LA:227:LEU:HD21 | 1:LA:229:LEU:HD21 | 1.91 | 0.52 |
| 1:LB:60:THR:HG22 | 1:LB:107:LYS:CG | 2.40 | 0.52 |
| 1:LB:798:MET:O | 1:LB:802:ILE:HG22 | 2.10 | 0.52 |
| 1:M:758:GLU:O | 1:M:762:VAL:HG22 | 2.08 | 0.52 |
| 1:MA:229:LEU:HD11 | 1:MA:251:VAL:CG1 | 2.38 | 0.52 |
| 1:MA:229:LEU:HD12 | 1:MA:249:TRP:CE2 | 2.43 | 0.52 |
| 1:MB:175:ARG:HA | 1:MB:197:LEU:HD23 | 1.90 | 0.52 |
| 1:OA:326:LEU:HD11 | 1:OA:332:LEU:HD13 | 1.91 | 0.52 |
| 1:OA:496:THR:HG21 | 1:OA:562:PHE:HB3 | 1.92 | 0.52 |
| 1:P:794:LYS:HG2 | 1:Q:792:VAL:HG22 | 1.91 | 0.52 |
| 1:PA:18:VAL:HG13 | 1:PA:29:GLU:OE1 | 2.10 | 0.52 |
| 1:PA:334:LEU:HD11 | 1:PA:359:ILE:HG22 | 1.91 | 0.52 |
| 1:Q:28:VAL:HG11 | 1:Q:100:TYR:CD2 | 2.44 | 0.52 |
| 1:Q:362:PRO:C | 1:R:353:ALA:HB3 | 2.34 | 0.52 |
| 1:R:67:ARG:HG2 | 1:R:73:VAL:CG2 | 2.39 | 0.52 |
| 1:RA:19:LEU:HB2 | 1:RA:44:LEU:HD21 | 1.92 | 0.52 |
| 1:S:772:TYR:CD1 | 1:T:770:LEU:HD11 | 2.44 | 0.52 |
| 1:TA:4:GLU:HG3 | 1:TA:8:ILE:HD11 | 1.91 | 0.52 |
| 1:UA:260:VAL:O | 1:UA:260:VAL:HG13 | 2.09 | 0.52 |
| 1:UB:633:LEU:HD12 | 1:UB:634:VAL:H | 1.73 | 0.52 |
| 1:VB:323:VAL:HG12 | 1:VB:366:VAL:HB | 1.91 | 0.52 |
| 1:VB:761:ARG:HB2 | 1:WB:755:THR:HG21 | 1.91 | 0.52 |
| 1:WB:390:VAL:HG23 | 1:WB:390:VAL:O | 2.09 | 0.52 |
| 1:X:324:TYR:CB | 1:X:332:LEU:HD11 | 2.40 | 0.52 |
| 1:Y:53:VAL:HG12 | 1:Y:57:HIS:O | 2.09 | 0.52 |
| 1:Y:547:PHE:CE1 | 1:Y:633:LEU:HD13 | 2.43 | 0.52 |
| 1:YB:388:ILE:C | 1:YB:457:VAL:HG23 | 2.34 | 0.52 |
| 1:ZA:66:SER:C | 1:ZA:73:VAL:HG13 | 2.33 | 0.52 |
| 1:AA:324:TYR:CD2 | 1:AA:332:LEU:HD21 | 2.45 | 0.52 |
| 1:AB:227:LEU:HD12 | 1:AB:228:HIS:N | 2.23 | 0.52 |
| 1:AB:325:VAL:HG21 | 1:BB:337:LEU:HA | 1.91 | 0.52 |
| 1:AC:301:VAL:O | 1:AC:301:VAL:HG13 | 2.10 | 0.52 |
| 1:AC:783:LYS:HZ2 | 1:OA:781:VAL:HG13 | 1.74 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:B:389:TYR:CE1 | 1:B:457:VAL:HG22 | 2.45 | 0.52 |
| 1:BA:360:ARG:NH2 | 1:BA:407:MET:SD | 2.82 | 0.52 |
| 1:C:379:ALA:N | 1:C:407:MET:HE2 | 2.23 | 0.52 |
| 1:CA:271:VAL:HG23 | 1:CA:309:PHE:CD2 | 2.45 | 0.52 |
| 1:CB:65:VAL:HG23 | 1:CB:67:ARG:HG3 | 1.90 | 0.52 |
| 1:EA:388:ILE:HG23 | 1:EA:456:ARG:CZ | 2.40 | 0.52 |
| 1:G:17:HIS:CD2 | 1:G:28:VAL:HG23 | 2.44 | 0.52 |
| 1:G:129:PHE:HD1 | 1:G:137:VAL:HG11 | 1.74 | 0.52 |
| 1:GA:285:LEU:HD12 | 1:GA:315:GLN:HB3 | 1.91 | 0.52 |
| 1:GB:416:GLU:N | 1:GB:455:THR:HG22 | 2.25 | 0.52 |
| 1:H:51:VAL:HG22 | 1:H:97:PHE:O | 2.08 | 0.52 |
| 1:H:175:ARG:N | 1:H:197:LEU:HD13 | 2.25 | 0.52 |
| 1:HB:415:TRP:C | 1:HB:455:THR:HG22 | 2.34 | 0.52 |
| 1:I:633:LEU:HD12 | 1:I:634:VAL:H | 1.73 | 0.52 |
| 1:JB:176:LEU:HD21 | 1:JB:196:TRP:NE1 | 2.24 | 0.52 |
| 1:JB:366:VAL:O | 1:JB:366:VAL:HG13 | 2.09 | 0.52 |
| 1:KB:18:VAL:HA | 1:KB:44:LEU:HD23 | 1.89 | 0.52 |
| 1:L:226:ALA:HB2 | 1:L:252:THR:HG22 | 1.90 | 0.52 |
| 1:LB:112:LEU:HD23 | 1:LB:150:THR:CG2 | 2.39 | 0.52 |
| 1:LB:122:HIS:HA | 1:LB:144:LEU:HA | 1.92 | 0.52 |
| 1:MA:121:LEU:O | 1:MA:121:LEU:HD12 | 2.09 | 0.52 |
| 1:MB:176:LEU:HD21 | 1:MB:196:TRP:CE2 | 2.45 | 0.52 |
| 1:N:537:LEU:HA | 1:N:645:PRO:HA | 1.90 | 0.52 |
| 1:OB:489:LEU:HD21 | 1:OB:495:PHE:HD1 | 1.75 | 0.52 |
| 1:P:163:ILE:HD12 | 1:P:206:PRO:O | 2.09 | 0.52 |
| 1:Q:168:ILE:HG22 | 1:Q:215:LEU:HD12 | 1.91 | 0.52 |
| 1:QB:165:ALA:O | 1:QB:203:ALA:HB1 | 2.10 | 0.52 |
| 1:R:285:LEU:HD21 | 1:R:317:GLU:OE2 | 2.09 | 0.52 |
| 1:RA:326:LEU:HD21 | 1:RA:376:GLU:HG2 | 1.92 | 0.52 |
| 1:RA:326:LEU:HD22 | 1:RA:332:LEU:HG | 1.91 | 0.52 |
| 1:SA:537:LEU:HD22 | 1:SA:588:PHE:HD1 | 1.74 | 0.52 |
| 1:UB:112:LEU:HD23 | 1:UB:150:THR:HG21 | 1.91 | 0.52 |
| 1:UB:530:GLU:O | 1:UB:583:VAL:HG22 | 2.09 | 0.52 |
| 1:WA:381:PRO:HG3 | 1:XA:393:VAL:HG12 | 1.91 | 0.52 |
| 1:X:804:PRO:HA | 1:X:807:ILE:HD12 | 1.91 | 0.52 |
| 1:XB:468:VAL:HG12 | 1:XB:469:GLN:N | 2.25 | 0.52 |
| 1:Y:263:VAL:HG23 | 1:Y:264:HIS:CE1 | 2.43 | 0.52 |
| 1:YA:16:ILE:HD11 | 1:YA:47:PRO:CD | 2.39 | 0.52 |
| 1:Z:487:VAL:HG22 | 1:Z:488:SER:N | 2.24 | 0.52 |
| 1:B:381:PRO:O | 1:B:382:LEU:HD23 | 2.10 | 0.52 |
| 1:BB:527:ILE:CD1 | 1:BB:541:LEU:HD11 | 2.40 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:CA:377:ARG:O | 1:CA:407:MET:HE1 | 2.10 | 0.52 |
| 1:D:17:HIS:CD2 | 1:D:28:VAL:HG23 | 2.45 | 0.52 |
| 1:D:525:ASP:CG | 1:D:527:ILE:HD11 | 2.34 | 0.52 |
| 1:DB:50:MET:HE1 | 1:DB:98:PRO:HB3 | 1.92 | 0.52 |
| 1:EB:60:THR:HG22 | 1:EB:90:ILE:HD11 | 1.92 | 0.52 |
| 1:FA:547:PHE:CE1 | 1:FA:633:LEU:HD13 | 2.44 | 0.52 |
| 1:GA:263:VAL:HG23 | 1:GA:264:HIS:CD2 | 2.44 | 0.52 |
| 1:GB:88:LEU:HD11 | 1:GB:106:GLU:HG2 | 1.91 | 0.52 |
| 1:IB:419:LEU:HD23 | 1:IB:422:GLY:HA2 | 1.91 | 0.52 |
| 1:IB:499:SER:HA | 1:IB:512:ARG:HE | 1.75 | 0.52 |
| 1:J:732:ALA:HA | 1:J:735:ILE:HD12 | 1.92 | 0.52 |
| 1:JA:16:ILE:HD11 | 1:JA:47:PRO:N | 2.24 | 0.52 |
| 1:JA:231:ALA:HB1 | 1:JA:233:ARG:O | 2.10 | 0.52 |
| 1:JA:717:GLU:O | 1:JA:721:THR:HG23 | 2.10 | 0.52 |
| 1:JB:332:LEU:CD2 | 1:JB:334:LEU:HD21 | 2.39 | 0.52 |
| 1:K:197:LEU:HD11 | 1:K:263:VAL:HG13 | 1.92 | 0.52 |
| 1:KB:461:ARG:HE | 1:KB:486:LEU:HB2 | 1.74 | 0.52 |
| 1:M:575:ILE:O | 1:M:579:VAL:HG23 | 2.10 | 0.52 |
| 1:OB:489:LEU:HD21 | 1:OB:495:PHE:CD1 | 2.44 | 0.52 |
| 1:PA:464:HIS:CG | 1:QA:496:THR:HG23 | 2.44 | 0.52 |
| 1:PA:764:LYS:HE2 | 1:QA:759:LEU:HD13 | 1.92 | 0.52 |
| 1:PB:469:GLN:HB2 | 1:PB:480:VAL:HG22 | 1.91 | 0.52 |
| 1:QA:276:LEU:HD11 | 1:QA:282:CYS:SG | 2.49 | 0.52 |
| 1:QB:253:VAL:HG23 | 1:QB:254:GLN:OE1 | 2.08 | 0.52 |
| 1:R:768:LEU:C | 1:R:768:LEU:HD23 | 2.35 | 0.52 |
| 1:S:390:VAL:O | 1:S:390:VAL:HG23 | 2.09 | 0.52 |
| 1:SA:17:HIS:CD2 | 1:SA:28:VAL:HG22 | 2.44 | 0.52 |
| 1:SB:654:LEU:HD22 | 1:TB:534:HIS:CG | 2.44 | 0.52 |
| 1:T:168:ILE:HD12 | 1:T:215:LEU:HD11 | 1.90 | 0.52 |
| 1:TA:7:ILE:HG22 | 1:TA:36:ILE:CG1 | 2.39 | 0.52 |
| 1:UA:799:THR:HA | 1:UA:802:ILE:HG22 | 1.92 | 0.52 |
| 1:V:25:VAL:HG13 | 1:V:80:GLN:HA | 1.91 | 0.52 |
| 1:VB:3:THR:HG22 | 1:VB:6:PHE:HA | 1.90 | 0.52 |
| 1:VB:374:VAL:HG12 | 1:VB:375:GLU:N | 2.23 | 0.52 |
| 1:W:288:VAL:HG12 | 1:W:293:LYS:C | 2.34 | 0.52 |
| 1:WB:578:ARG:HB3 | 1:WB:603:VAL:HG22 | 1.92 | 0.52 |
| 1:XB:333:LEU:C | 1:XB:334:LEU:HD23 | 2.35 | 0.52 |
| 1:Y:16:ILE:HG23 | 1:Y:43:VAL:HG13 | 1.91 | 0.52 |
| 1:YA:120:ALA:C | 1:YA:162:ILE:HG23 | 2.35 | 0.52 |
| 1:YA:329:GLN:NE2 | 1:YA:379:ALA:HB3 | 2.24 | 0.52 |
| 1:Z:120:ALA:HB3 | 1:Z:205:LEU:HD21 | 1.90 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:ZA:479:ARG:NH1 | 1:ZA:489:LEU:HD23 | 2.24 | 0.52 |
| 1:A:389:TYR:CE1 | 1:A:457:VAL:HG22 | 2.45 | 0.52 |
| 1:AC:176:LEU:HD22 | 1:AC:198:VAL:HG13 | 1.91 | 0.52 |
| 1:AC:276:LEU:HD11 | 1:AC:282:CYS:SG | 2.50 | 0.52 |
| 1:BA:405:THR:HG23 | 1:CA:396:GLY:CA | 2.38 | 0.52 |
| 1:C:144:LEU:HD12 | 1:C:144:LEU:O | 2.09 | 0.52 |
| 1:D:227:LEU:HD23 | 1:D:228:HIS:N | 2.24 | 0.52 |
| 1:E:537:LEU:HD11 | 1:E:588:PHE:HD1 | 1.74 | 0.52 |
| 1:E:655:GLN:HA | 1:E:658:VAL:HG12 | 1.91 | 0.52 |
| 1:EB:538:GLN:C | 1:EB:539:LEU:HD12 | 2.34 | 0.52 |
| 1:GA:340:LEU:HD12 | 1:GA:351:HIS:ND1 | 2.24 | 0.52 |
| 1:GB:798:MET:HE1 | 1:HB:792:VAL:HA | 1.92 | 0.52 |
| 1:HA:176:LEU:HD23 | 1:HA:196:TRP:O | 2.10 | 0.52 |
| 1:HB:80:GLN:NE2 | 1:HB:81:VAL:HG12 | 2.24 | 0.52 |
| 1:IA:410:GLN:O | 1:IA:411:ASP:OD1 | 2.27 | 0.52 |
| 1:IB:30:VAL:HG22 | 1:IB:31:GLY:N | 2.24 | 0.52 |
| 1:IB:144:LEU:CD2 | 1:IB:163:ILE:HD11 | 2.39 | 0.52 |
| 1:IB:405:THR:HG23 | 1:JB:396:GLY:HA3 | 1.92 | 0.52 |
| 1:J:267:VAL:C | 1:J:268:LEU:HD12 | 2.35 | 0.52 |
| 1:JA:625:GLN:HB2 | 1:JA:634:VAL:HG13 | 1.91 | 0.52 |
| 1:JB:90:ILE:HD12 | 1:JB:153:PRO:HG2 | 1.92 | 0.52 |
| 1:K:62:ALA:HA | 1:K:88:LEU:HD23 | 1.92 | 0.52 |
| 1:KB:53:VAL:HG11 | 1:KB:58:TYR:CD1 | 2.44 | 0.52 |
| 1:L:411:ASP:OD1 | 1:L:411:ASP:C | 2.52 | 0.52 |
| 1:L:518:LEU:HD12 | 1:L:547:PHE:CB | 2.40 | 0.52 |
| 1:L:661:ALA:HA | 1:L:664:ILE:HD12 | 1.90 | 0.52 |
| 1:LA:122:HIS:HD2 | 1:LA:208:VAL:HG12 | 1.74 | 0.52 |
| 1:LB:60:THR:HG22 | 1:LB:107:LYS:HG3 | 1.90 | 0.52 |
| 1:MA:516:LEU:HD23 | 1:MA:517:LEU:N | 2.25 | 0.52 |
| 1:MB:529:ILE:HD13 | 1:MB:579:VAL:CG1 | 2.39 | 0.52 |
| 1:N:382:LEU:HD11 | 1:N:388:ILE:HG22 | 1.92 | 0.52 |
| 1:O:382:LEU:HD13 | 1:O:386:GLU:O | 2.10 | 0.52 |
| 1:OA:125:ALA:HB1 | 1:OA:137:VAL:HG12 | 1.90 | 0.52 |
| 1:OA:549:VAL:HG12 | 1:OA:549:VAL:O | 2.10 | 0.52 |
| 1:P:66:SER:O | 1:P:73:VAL:HG13 | 2.10 | 0.52 |
| 1:PA:371:VAL:HG12 | 1:PA:372:GLU:H | 1.75 | 0.52 |
| 1:PB:388:ILE:CA | 1:PB:457:VAL:HG23 | 2.40 | 0.52 |
| 1:QB:9:ARG:HA | 1:QB:34:THR:HG22 | 1.90 | 0.52 |
| 1:QB:123:LEU:HD12 | 1:QB:143:TRP:NE1 | 2.24 | 0.52 |
| 1:RA:331:GLY:HA3 | 1:RA:407:MET:HE1 | 1.91 | 0.52 |
| 1:RB:176:LEU:HD21 | 1:RB:196:TRP:NE1 | 2.25 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:S:392:ASP:OD2 | 1:S:395:THR:HG22 | 2.09 | 0.52 |
| 1:S:495:PHE:CD2 | 1:S:514:LEU:HD11 | 2.45 | 0.52 |
| 1:SB:262:ASP:OD1 | 1:SB:263:VAL:HG22 | 2.09 | 0.52 |
| 1:TA:423:VAL:HG13 | 1:TA:424:GLU:H | 1.75 | 0.52 |
| 1:V:168:ILE:HD12 | 1:V:174:LEU:HB2 | 1.91 | 0.52 |
| 1:V:238:PHE:HZ | 1:V:251:VAL:HG11 | 1.73 | 0.52 |
| 1:V:516:LEU:HD21 | 1:V:547:PHE:CZ | 2.45 | 0.52 |
| 1:V:665:THR:HG21 | 1:W:589:ASP:OD1 | 2.10 | 0.52 |
| 1:VA:175:ARG:HE | 1:VA:213:LEU:CB | 2.23 | 0.52 |
| 1:VA:536:ARG:O | 1:VA:646:VAL:HG22 | 2.10 | 0.52 |
| 1:WA:419:LEU:H | 1:WA:420:PRO:CD | 2.23 | 0.52 |
| 1:YB:349:VAL:HG11 | 1:YB:351:HIS:CE1 | 2.44 | 0.52 |
| 1:ZB:466:ALA:HB1 | 1:ZB:515:CYS:SG | 2.49 | 0.52 |
| 1:ZB:575:ILE:O | 1:ZB:579:VAL:HG23 | 2.10 | 0.52 |
| 1:AA:223:GLU:CD | 1:AA:253:VAL:HG21 | 2.34 | 0.52 |
| 1:B:374:VAL:HG12 | 1:B:375:GLU:N | 2.24 | 0.52 |
| 1:BA:283:VAL:HG11 | 1:BA:318:GLN:NE2 | 2.24 | 0.52 |
| 1:CB:325:VAL:CG2 | 1:DB:353:ALA:HB1 | 2.35 | 0.52 |
| 1:D:275:THR:O | 1:D:275:THR:HG23 | 2.09 | 0.52 |
| 1:DB:276:LEU:HG | 1:DB:320:ILE:HG23 | 1.91 | 0.52 |
| 1:EA:162:ILE:HG22 | 1:EA:163:ILE:N | 2.24 | 0.52 |
| 1:EA:182:CYS:SG | 1:EA:209:PHE:CD1 | 3.03 | 0.52 |
| 1:F:737:GLY:O | 1:F:741:VAL:HG23 | 2.10 | 0.52 |
| 1:G:5:GLU:O | 1:G:8:ILE:HD12 | 2.09 | 0.52 |
| 1:G:233:ARG:HA | 1:G:245:THR:HG23 | 1.92 | 0.52 |
| 1:H:174:LEU:O | 1:H:198:VAL:HG12 | 2.09 | 0.52 |
| 1:H:337:LEU:HD21 | 1:H:372:GLU:HB2 | 1.91 | 0.52 |
| 1:HB:125:ALA:HB2 | 1:HB:143:TRP:HZ3 | 1.74 | 0.52 |
| 1:IA:221:LEU:HD13 | 1:IA:252:THR:O | 2.10 | 0.52 |
| 1:IA:349:VAL:HG11 | 1:IA:351:HIS:CD2 | 2.44 | 0.52 |
| 1:IA:377:ARG:O | 1:IA:407:MET:HE1 | 2.09 | 0.52 |
| 1:JA:541:LEU:HD23 | 1:JA:638:VAL:HG11 | 1.91 | 0.52 |
| 1:JB:543:TYR:CD1 | 1:JB:638:VAL:HG22 | 2.45 | 0.52 |
| 1:JB:669:GLN:HE21 | 1:KB:660:LEU:HD12 | 1.75 | 0.52 |
| 1:K:60:THR:HG22 | 1:K:107:LYS:CB | 2.39 | 0.52 |
| 1:K:227:LEU:HD13 | 1:K:270:VAL:HG22 | 1.91 | 0.52 |
| 1:KA:746:LEU:HD13 | 1:LA:737:GLY:HA3 | 1.90 | 0.52 |
| 1:KB:165:ALA:O | 1:KB:203:ALA:HB1 | 2.10 | 0.52 |
| 1:LA:168:ILE:HG22 | 1:LA:215:LEU:CD1 | 2.33 | 0.52 |
| 1:MA:167:ILE:HG13 | 1:MA:203:ALA:HB2 | 1.92 | 0.52 |
| 1:MB:671:ALA:HB1 | 1:MB:675:HIS:CE1 | 2.45 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:NA:408:LEU:HD22 | 1:NA:412:GLU:CB | 2.39 | 0.52 |
| 1:NA:489:LEU:HD11 | 1:NA:495:PHE:CZ | 2.45 | 0.52 |
| 1:P:112:LEU:HD11 | 1:P:152:ILE:HD13 | 1.90 | 0.52 |
| 1:P:129:PHE:CZ | 1:P:137:VAL:HG11 | 2.45 | 0.52 |
| 1:PA:462:VAL:HG21 | 1:PA:481:VAL:HG21 | 1.92 | 0.52 |
| 1:Q:16:ILE:HG22 | 1:Q:17:HIS:N | 2.24 | 0.52 |
| 1:R:326:LEU:HD22 | 1:R:331:GLY:HA2 | 1.92 | 0.52 |
| 1:T:120:ALA:O | 1:T:162:ILE:HG23 | 2.10 | 0.52 |
| 1:TB:126:LEU:O | 1:TB:127:LEU:HD22 | 2.09 | 0.52 |
| 1:UB:72:LEU:HD23 | 1:UB:73:VAL:O | 2.08 | 0.52 |
| 1:UB:390:VAL:HG22 | 1:UB:399:ARG:O | 2.08 | 0.52 |
| 1:VA:95:ASP:O | 1:VA:96:PRO:C | 2.53 | 0.52 |
| 1:W:10:ILE:HD11 | 1:W:33:LYS:CB | 2.39 | 0.52 |
| 1:WB:782:SER:O | 1:WB:786:GLN:OE1 | 2.28 | 0.52 |
| 1:XA:545:TRP:CA | 1:XA:635:VAL:HG22 | 2.39 | 0.52 |
| 1:XB:6:PHE:O | 1:XB:36:ILE:HA | 2.09 | 0.52 |
| 1:YB:277:GLY:O | 1:YB:304:GLY:HA3 | 2.10 | 0.52 |
| 1:ZB:738:GLU:O | 1:ZB:742:LEU:HD13 | 2.10 | 0.52 |
| 1:AB:405:THR:HG21 | 1:BB:393:VAL:O | 2.09 | 0.52 |
| 1:AC:504:ARG:O | 1:AC:526:VAL:HG23 | 2.10 | 0.52 |
| 1:BB:174:LEU:HD21 | 1:BB:212:VAL:CG1 | 2.40 | 0.52 |
| 1:C:777:LEU:O | 1:C:781:VAL:HG22 | 2.10 | 0.52 |
| 1:CA:9:ARG:HB2 | 1:CA:34:THR:HG22 | 1.91 | 0.52 |
| 1:CA:658:VAL:HG21 | 1:DA:535:ALA:HB2 | 1.92 | 0.52 |
| 1:CB:747:LYS:O | 1:CB:750:ALA:HB3 | 2.10 | 0.52 |
| 1:EA:9:ARG:HA | 1:EA:34:THR:HA | 1.92 | 0.52 |
| 1:EB:221:LEU:HD22 | 1:EB:252:THR:HA | 1.91 | 0.52 |
| 1:EB:337:LEU:HD12 | 1:EB:369:ALA:O | 2.10 | 0.52 |
| 1:F:529:ILE:HG13 | 1:F:583:VAL:HG21 | 1.92 | 0.52 |
| 1:FA:197:LEU:HD11 | 1:FA:263:VAL:HG13 | 1.91 | 0.52 |
| 1:FB:388:ILE:N | 1:FB:457:VAL:HG23 | 2.24 | 0.52 |
| 1:GB:181:GLU:CD | 1:GB:191:VAL:HG12 | 2.35 | 0.52 |
| 1:GB:282:CYS:C | 1:GB:301:VAL:HG23 | 2.34 | 0.52 |
| 1:HA:58:TYR:CE2 | 1:HA:112:LEU:HD22 | 2.45 | 0.52 |
| 1:HA:284:ILE:HD12 | 1:HA:287:PRO:CB | 2.40 | 0.52 |
| 1:HA:471:TYR:CD2 | 1:HA:478:ALA:HB2 | 2.44 | 0.52 |
| 1:IA:788:ALA:O | 1:IA:792:VAL:HG23 | 2.10 | 0.52 |
| 1:J:525:ASP:HB3 | 1:J:541:LEU:HD21 | 1.92 | 0.52 |
| 1:JB:539:LEU:HD11 | 1:JB:541:LEU:HD21 | 1.92 | 0.52 |
| 1:K:528:THR:HG22 | 1:K:536:ARG:HH11 | 1.73 | 0.52 |
| 1:LB:109:ILE:HG22 | 1:LB:109:ILE:O | 2.08 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:M:8:ILE:HD12 | 1:M:8:ILE:H | 1.75 | 0.52 |
| 1:M:468:VAL:O | 1:M:480:VAL:HG13 | 2.10 | 0.52 |
| 1:NB:228:HIS:ND1 | 1:NB:268:LEU:HD22 | 2.25 | 0.52 |
| 1:NB:527:ILE:HD12 | 1:NB:579:VAL:HG11 | 1.90 | 0.52 |
| 1:O:9:ARG:HB3 | 1:O:34:THR:HG22 | 1.91 | 0.52 |
| 1:PA:777:LEU:O | 1:PA:781:VAL:HG13 | 2.09 | 0.52 |
| 1:TA:176:LEU:HD23 | 1:TA:176:LEU:H | 1.75 | 0.52 |
| 1:TA:489:LEU:HD22 | 1:TA:493:GLU:HB3 | 1.92 | 0.52 |
| 1:TA:598:ILE:HG12 | 1:TA:602:ALA:HB3 | 1.91 | 0.52 |
| 1:UB:645:PRO:HG2 | 1:UB:651:ARG:HD3 | 1.92 | 0.52 |
| 1:UB:746:LEU:HD13 | 1:VB:737:GLY:CA | 2.40 | 0.52 |
| 1:W:388:ILE:HD12 | 1:W:414:LEU:HD21 | 1.90 | 0.52 |
| 1:WB:120:ALA:HB3 | 1:WB:163:ILE:CG1 | 2.40 | 0.52 |
| 1:WB:126:LEU:C | 1:WB:127:LEU:HD22 | 2.34 | 0.52 |
| 1:YA:121:LEU:HD13 | 1:YA:123:LEU:HD11 | 1.90 | 0.52 |
| 1:YB:9:ARG:HB3 | 1:YB:34:THR:HG22 | 1.91 | 0.52 |
| 1:YB:172:GLN:HB3 | 1:YB:215:LEU:HD11 | 1.92 | 0.52 |
| 1:YB:460:TYR:CE2 | 1:YB:462:VAL:HG22 | 2.45 | 0.52 |
| 1:YB:489:LEU:HD22 | 1:YB:493:GLU:O | 2.10 | 0.52 |
| 1:Z:160:VAL:HG12 | 1:Z:161:GLU:N | 2.25 | 0.52 |
| 1:A:751:LEU:HD13 | 1:A:754:GLU:OE2 | 2.10 | 0.52 |
| 1:AA:46:ALA:HB1 | 1:AA:47:PRO:HD2 | 1.91 | 0.52 |
| 1:AB:123:LEU:HD12 | 1:AB:143:TRP:NE1 | 2.24 | 0.52 |
| 1:AB:144:LEU:HD12 | 1:AB:208:VAL:HG12 | 1.91 | 0.52 |
| 1:AB:374:VAL:HG12 | 1:AB:375:GLU:N | 2.24 | 0.52 |
| 1:AB:522:PHE:HA | 1:AB:544:ASN:HA | 1.92 | 0.52 |
| 1:AC:231:ALA:HB2 | 1:AC:249:TRP:HH2 | 1.74 | 0.52 |
| 1:CB:221:LEU:HD13 | 1:CB:252:THR:C | 2.34 | 0.52 |
| 1:D:531:THR:HG21 | 1:D:588:PHE:HA | 1.92 | 0.52 |
| 1:DA:336:ALA:HB2 | 1:DA:357:TRP:CZ3 | 2.45 | 0.52 |
| 1:E:284:ILE:HD12 | 1:E:287:PRO:CB | 2.39 | 0.52 |
| 1:EB:77:VAL:HG23 | 1:EB:78:THR:HG23 | 1.92 | 0.52 |
| 1:F:388:ILE:HA | 1:F:457:VAL:HG23 | 1.91 | 0.52 |
| 1:FA:115:VAL:HG22 | 1:FA:150:THR:N | 2.25 | 0.52 |
| 1:G:541:LEU:HD23 | 1:G:638:VAL:HG12 | 1.92 | 0.52 |
| 1:G:547:PHE:CZ | 1:G:633:LEU:HD13 | 2.45 | 0.52 |
| 1:H:389:TYR:CD1 | 1:H:457:VAL:HG22 | 2.45 | 0.52 |
| 1:HB:470:VAL:HG13 | 1:HB:494:GLN:C | 2.35 | 0.52 |
| 1:HB:539:LEU:CD1 | 1:HB:643:VAL:HG22 | 2.38 | 0.52 |
| 1:IA:68:ASP:CG | 1:IA:74:LEU:HD12 | 2.35 | 0.52 |
| 1:IB:662:ILE:HG21 | 1:JB:653:ALA:HB1 | 1.91 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:JA:126:LEU:C | 1:JA:127:LEU:HD22 | 2.35 | 0.52 |
| 1:K:176:LEU:HA | 1:K:213:LEU:HD23 | 1.91 | 0.52 |
| 1:KB:18:VAL:HG21 | 1:KB:29:GLU:OE2 | 2.10 | 0.52 |
| 1:LA:88:LEU:HD22 | 1:LA:106:GLU:HG2 | 1.91 | 0.52 |
| 1:M:767:GLU:HA | 1:M:770:LEU:HD12 | 1.91 | 0.52 |
| 1:MA:65:VAL:HG11 | 1:MA:100:TYR:CB | 2.40 | 0.52 |
| 1:N:388:ILE:CA | 1:N:457:VAL:HG23 | 2.40 | 0.52 |
| 1:NA:129:PHE:CE2 | 1:NA:137:VAL:HG21 | 2.45 | 0.52 |
| 1:NB:633:LEU:HD12 | 1:NB:634:VAL:H | 1.75 | 0.52 |
| 1:O:231:ALA:HB3 | 1:O:244:ARG:O | 2.09 | 0.52 |
| 1:OA:332:LEU:HD23 | 1:OA:373:VAL:CG1 | 2.39 | 0.52 |
| 1:OB:334:LEU:HD11 | 1:OB:359:ILE:HB | 1.90 | 0.52 |
| 1:RA:163:ILE:HD12 | 1:RA:206:PRO:O | 2.09 | 0.52 |
| 1:RB:7:ILE:HG22 | 1:RB:7:ILE:O | 2.10 | 0.52 |
| 1:S:30:VAL:HG23 | 1:S:98:PRO:HD3 | 1.91 | 0.52 |
| 1:SB:267:VAL:C | 1:SB:268:LEU:HD12 | 2.35 | 0.52 |
| 1:SB:326:LEU:HD13 | 1:SB:331:GLY:HA2 | 1.92 | 0.52 |
| 1:TB:662:ILE:HG21 | 1:UB:653:ALA:HB1 | 1.91 | 0.52 |
| 1:UB:411:ASP:OD1 | 1:UB:411:ASP:C | 2.53 | 0.52 |
| 1:W:283:VAL:HG13 | 1:W:300:ARG:O | 2.10 | 0.52 |
| 1:WB:406:TYR:OH | 1:WB:409:THR:HG23 | 2.09 | 0.52 |
| 1:YA:112:LEU:HD23 | 1:YA:150:THR:HG23 | 1.91 | 0.52 |
| 1:YB:468:VAL:HG13 | 1:YB:514:LEU:O | 2.09 | 0.52 |
| 1:Z:115:VAL:C | 1:Z:116:LEU:HD22 | 2.34 | 0.52 |
| 1:AA:599:ILE:HD13 | 1:AA:640:VAL:HG22 | 1.92 | 0.52 |
| 1:AA:804:PRO:HB2 | 1:Z:806:THR:HG21 | 1.92 | 0.52 |
| 1:AB:54:PRO:HB2 | 1:AB:57:HIS:ND1 | 2.24 | 0.52 |
| 1:AB:353:ALA:HB3 | 1:ZA:363:LEU:CA | 2.40 | 0.52 |
| 1:B:61:VAL:HG12 | 1:B:105:LEU:HD12 | 1.92 | 0.52 |
| 1:BB:123:LEU:HD23 | 1:BB:159:VAL:HA | 1.91 | 0.52 |
| 1:C:564:VAL:HG23 | 1:C:631:ASN:HB3 | 1.93 | 0.52 |
| 1:DA:599:ILE:HG23 | 1:DA:603:VAL:HG21 | 1.92 | 0.52 |
| 1:E:113:GLN:HG2 | 1:E:121:LEU:HD21 | 1.92 | 0.52 |
| 1:E:390:VAL:HG23 | 1:E:390:VAL:O | 2.10 | 0.52 |
| 1:EA:16:ILE:HG22 | 1:EA:17:HIS:N | 2.24 | 0.52 |
| 1:FA:599:ILE:O | 1:FA:603:VAL:HG23 | 2.10 | 0.52 |
| 1:FB:334:LEU:HD21 | 1:FB:359:ILE:HG22 | 1.91 | 0.52 |
| 1:GA:228:HIS:O | 1:GA:229:LEU:HD22 | 2.10 | 0.52 |
| 1:GA:415:TRP:O | 1:GA:455:THR:HG22 | 2.10 | 0.52 |
| 1:GB:660:LEU:O | 1:GB:664:ILE:HG22 | 2.10 | 0.52 |
| 1:HA:3:THR:HG22 | 1:HA:6:PHE:CD1 | 2.45 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:HB:580:ARG:HA | 1:HB:583:VAL:HG12 | 1.90 | 0.52 |
| 1:IA:288:VAL:HG12 | 1:IA:294:ASN:N | 2.24 | 0.52 |
| 1:IB:126:LEU:C | 1:IB:127:LEU:HD22 | 2.35 | 0.52 |
| 1:JA:30:VAL:HG22 | 1:JA:31:GLY:N | 2.25 | 0.52 |
| 1:LA:34:THR:HG23 | 1:MA:24:ASN:OD1 | 2.10 | 0.52 |
| 1:MA:65:VAL:HG21 | 1:MA:100:TYR:CD2 | 2.45 | 0.52 |
| 1:MA:112:LEU:HD21 | 1:MA:151:TYR:O | 2.10 | 0.52 |
| 1:MB:643:VAL:HG12 | 1:NB:580:ARG:NH2 | 2.25 | 0.52 |
| 1:MB:788:ALA:O | 1:MB:792:VAL:HG23 | 2.10 | 0.52 |
| 1:N:790:VAL:HG22 | 1:O:785:GLN:HG3 | 1.91 | 0.52 |
| 1:OA:539:LEU:HG | 1:OA:643:VAL:HG22 | 1.92 | 0.52 |
| 1:PA:340:LEU:HD21 | 1:PA:371:VAL:HG22 | 1.91 | 0.52 |
| 1:PB:529:ILE:HB | 1:PB:583:VAL:HG11 | 1.91 | 0.52 |
| 1:QA:489:LEU:HD11 | 1:QA:495:PHE:HD2 | 1.75 | 0.52 |
| 1:QB:325:VAL:O | 1:QB:325:VAL:HG13 | 2.09 | 0.52 |
| 1:RB:410:GLN:O | 1:RB:411:ASP:OD1 | 2.27 | 0.52 |
| 1:T:460:TYR:CZ | 1:T:514:LEU:HD22 | 2.45 | 0.52 |
| 1:UA:458:VAL:HG12 | 1:UA:460:TYR:H | 1.74 | 0.52 |
| 1:UA:537:LEU:HD13 | 1:UA:591:PHE:CG | 2.45 | 0.52 |
| 1:UB:717:GLU:CG | 1:VB:707:LEU:HD22 | 2.40 | 0.52 |
| 1:V:3:THR:HG21 | 1:V:37:ARG:HB2 | 1.91 | 0.52 |
| 1:VA:641:GLN:HB2 | 1:WA:527:ILE:HG22 | 1.92 | 0.52 |
| 1:W:53:VAL:HG21 | 1:W:91:ARG:HB2 | 1.91 | 0.52 |
| 1:W:56:ARG:CG | 1:X:127:LEU:HD13 | 2.40 | 0.52 |
| 1:WB:230:ARG:NH2 | 1:WB:268:LEU:HD21 | 2.24 | 0.52 |
| 1:XA:8:ILE:HD12 | 1:XA:37:ARG:HE | 1.75 | 0.52 |
| 1:XA:325:VAL:HG23 | 1:XA:363:LEU:O | 2.10 | 0.52 |
| 1:XB:16:ILE:HD11 | 1:XB:47:PRO:CD | 2.39 | 0.52 |
| 1:XB:768:LEU:HD11 | 1:YB:763:GLN:HB2 | 1.92 | 0.52 |
| 1:ZA:229:LEU:HD23 | 1:ZA:267:VAL:HG22 | 1.92 | 0.52 |
| 1:ZA:538:GLN:NE2 | 1:ZA:646:VAL:HG22 | 2.25 | 0.52 |
| 1:A:334:LEU:HD11 | 1:A:359:ILE:HG22 | 1.90 | 0.51 |
| 1:AA:458:VAL:HB | 1:AA:489:LEU:HD12 | 1.92 | 0.51 |
| 1:AC:405:THR:HG22 | 1:OA:396:GLY:HA2 | 1.92 | 0.51 |
| 1:AC:547:PHE:CE2 | 1:AC:633:LEU:HD13 | 2.45 | 0.51 |
| 1:BA:340:LEU:HD13 | 1:BA:344:GLU:HB2 | 1.92 | 0.51 |
| 1:BB:107:LYS:HE2 | 1:BB:110:THR:HG21 | 1.92 | 0.51 |
| 1:BB:405:THR:HG23 | 1:CB:396:GLY:N | 2.25 | 0.51 |
| 1:C:276:LEU:HD13 | 1:C:281:TYR:HA | 1.93 | 0.51 |
| 1:CB:115:VAL:HG21 | 1:CB:145:PHE:HE2 | 1.75 | 0.51 |
| 1:CB:275:THR:HG21 | 1:DB:296:LEU:HB3 | 1.91 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:CB:536:ARG:NH2 | 1:CB:646:VAL:HG11 | 2.25 | 0.51 |
| 1:DB:471:TYR:CZ | 1:DB:476:LYS:HA | 2.45 | 0.51 |
| 1:FA:17:HIS:HB3 | 1:FA:44:LEU:HD22 | 1.91 | 0.51 |
| 1:G:408:LEU:HD22 | 1:G:412:GLU:HB3 | 1.91 | 0.51 |
| 1:GB:303:LYS:HD2 | 1:GB:366:VAL:HG23 | 1.92 | 0.51 |
| 1:GB:530:GLU:C | 1:GB:583:VAL:HG22 | 2.35 | 0.51 |
| 1:H:388:ILE:C | 1:H:457:VAL:HG23 | 2.34 | 0.51 |
| 1:H:669:GLN:HE22 | 1:I:664:ILE:HD13 | 1.75 | 0.51 |
| 1:H:704:LYS:HA | 1:H:707:LEU:HD12 | 1.92 | 0.51 |
| 1:HB:54:PRO:HD2 | 1:HB:109:ILE:HD12 | 1.92 | 0.51 |
| 1:I:58:TYR:C | 1:I:90:ILE:HG23 | 2.35 | 0.51 |
| 1:IB:51:VAL:HG21 | 1:IB:99:LEU:HD21 | 1.91 | 0.51 |
| 1:IB:170:GLN:HA | 1:IB:201:VAL:HG22 | 1.92 | 0.51 |
| 1:JA:424:GLU:HG2 | 1:JA:425:GLU:N | 2.23 | 0.51 |
| 1:KB:58:TYR:CE2 | 1:KB:90:ILE:HA | 2.45 | 0.51 |
| 1:KB:325:VAL:HA | 1:KB:364:GLU:HA | 1.90 | 0.51 |
| 1:L:16:ILE:HG22 | 1:L:17:HIS:N | 2.25 | 0.51 |
| 1:L:712:LEU:O | 1:L:716:VAL:HG23 | 2.10 | 0.51 |
| 1:N:60:THR:HG22 | 1:N:90:ILE:HA | 1.92 | 0.51 |
| 1:NA:756:GLU:HA | 1:NA:759:LEU:HD12 | 1.92 | 0.51 |
| 1:NB:99:LEU:HD23 | 1:NB:100:TYR:O | 2.10 | 0.51 |
| 1:NB:235:PHE:CE1 | 1:NB:264:HIS:HB3 | 2.45 | 0.51 |
| 1:O:225:THR:HB | 1:O:270:VAL:HG12 | 1.92 | 0.51 |
| 1:O:531:THR:CA | 1:O:583:VAL:HG22 | 2.39 | 0.51 |
| 1:R:603:VAL:CG1 | 1:R:638:VAL:HG21 | 2.35 | 0.51 |
| 1:RA:66:SER:O | 1:RA:73:VAL:HG13 | 2.10 | 0.51 |
| 1:S:65:VAL:HG13 | 1:S:103:GLU:HB2 | 1.91 | 0.51 |
| 1:SA:416:GLU:OE2 | 1:SA:455:THR:HG23 | 2.10 | 0.51 |
| 1:SB:179:ARG:O | 1:SB:192:THR:HG23 | 2.09 | 0.51 |
| 1:TA:25:VAL:HG13 | 1:TA:79:GLY:HA3 | 1.92 | 0.51 |
| 1:V:390:VAL:O | 1:V:390:VAL:HG23 | 2.10 | 0.51 |
| 1:V:788:ALA:O | 1:V:792:VAL:HG23 | 2.10 | 0.51 |
| 1:VB:387:GLY:C | 1:VB:457:VAL:HG23 | 2.34 | 0.51 |
| 1:VB:405:THR:HG23 | 1:WB:396:GLY:N | 2.26 | 0.51 |
| 1:WA:203:ALA:HB3 | 1:XA:192:THR:CG2 | 2.40 | 0.51 |
| 1:WA:273:ILE:HG23 | 1:WA:273:ILE:O | 2.10 | 0.51 |
| 1:WA:275:THR:OG1 | 1:XA:296:LEU:HD23 | 2.10 | 0.51 |
| 1:WB:55:PRO:HA | 1:WB:93:ALA:HB2 | 1.92 | 0.51 |
| 1:X:340:LEU:HD11 | 1:X:357:TRP:CH2 | 2.45 | 0.51 |
| 1:XB:174:LEU:HD11 | 1:XB:212:VAL:HB | 1.92 | 0.51 |
| 1:XB:332:LEU:HD23 | 1:XB:334:LEU:HD21 | 1.92 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:Y:6:PHE:O | 1:Y:36:ILE:HA | 2.10 | 0.51 |
| 1:YA:52:THR:HG21 | 1:ZA:85:HIS:HB3 | 1.91 | 0.51 |
| 1:ZB:144:LEU:H | 1:ZB:144:LEU:HD23 | 1.75 | 0.51 |
| 1:ZB:185:ARG:HE | 1:ZB:204:TYR:HE2 | 1.57 | 0.51 |
| 1:AB:221:LEU:HD21 | 1:AB:227:LEU:HB2 | 1.91 | 0.51 |
| 1:AC:62:ALA:HA | 1:AC:88:LEU:HD23 | 1.93 | 0.51 |
| 1:AC:743:GLN:HA | 1:AC:746:LEU:HD12 | 1.93 | 0.51 |
| 1:B:798:MET:CE | 1:C:792:VAL:HG22 | 2.40 | 0.51 |
| 1:BA:310:LEU:HD13 | 1:BA:314:GLU:O | 2.10 | 0.51 |
| 1:BA:601:THR:HG22 | 1:BA:622:PRO:HB3 | 1.92 | 0.51 |
| 1:BB:65:VAL:HG11 | 1:BB:100:TYR:HB2 | 1.92 | 0.51 |
| 1:CA:46:ALA:HB1 | 1:CA:47:PRO:CD | 2.41 | 0.51 |
| 1:CA:121:LEU:CD1 | 1:CA:159:VAL:HG13 | 2.40 | 0.51 |
| 1:CA:174:LEU:H | 1:CA:198:VAL:HG12 | 1.75 | 0.51 |
| 1:CA:310:LEU:HD22 | 1:CA:314:GLU:HB3 | 1.92 | 0.51 |
| 1:CA:516:LEU:HD21 | 1:CA:547:PHE:CD2 | 2.45 | 0.51 |
| 1:CA:746:LEU:HD13 | 1:DA:737:GLY:HA3 | 1.92 | 0.51 |
| 1:DB:122:HIS:CD2 | 1:DB:208:VAL:HG12 | 2.46 | 0.51 |
| 1:DB:228:HIS:HA | 1:DB:250:LEU:HD23 | 1.92 | 0.51 |
| 1:EA:65:VAL:HG21 | 1:EA:73:VAL:HG22 | 1.92 | 0.51 |
| 1:EA:366:VAL:O | 1:EA:366:VAL:HG13 | 2.10 | 0.51 |
| 1:EB:169:ARG:HA | 1:EB:201:VAL:O | 2.10 | 0.51 |
| 1:EB:543:TYR:HD1 | 1:EB:638:VAL:HG13 | 1.76 | 0.51 |
| 1:GB:342:GLU:HB3 | 1:GB:347:GLU:HA | 1.92 | 0.51 |
| 1:GB:390:VAL:HG23 | 1:GB:390:VAL:O | 2.10 | 0.51 |
| 1:HA:462:VAL:HG12 | 1:HA:483:GLY:O | 2.09 | 0.51 |
| 1:I:461:ARG:HA | 1:I:486:LEU:HD12 | 1.92 | 0.51 |
| 1:I:643:VAL:HG13 | 1:J:580:ARG:HH12 | 1.75 | 0.51 |
| 1:IA:179:ARG:HG3 | 1:IA:211:GLU:HG3 | 1.92 | 0.51 |
| 1:IA:381:PRO:HA | 1:IA:405:THR:HG22 | 1.92 | 0.51 |
| 1:IA:751:LEU:HD13 | 1:IA:754:GLU:OE2 | 2.10 | 0.51 |
| 1:IB:61:VAL:HG23 | 1:IB:61:VAL:O | 2.10 | 0.51 |
| 1:IB:116:LEU:HB2 | 1:IB:119:THR:HG22 | 1.91 | 0.51 |
| 1:JA:176:LEU:HD23 | 1:JA:196:TRP:O | 2.10 | 0.51 |
| 1:JA:546:HIS:NE2 | 1:JA:634:VAL:HG11 | 2.25 | 0.51 |
| 1:JB:212:VAL:O | 1:JB:212:VAL:HG23 | 2.10 | 0.51 |
| 1:JB:545:TRP:HB3 | 1:JB:635:VAL:HA | 1.92 | 0.51 |
| 1:K:74:LEU:HD13 | 1:K:82:ARG:NH2 | 2.24 | 0.51 |
| 1:K:228:HIS:CE1 | 1:K:268:LEU:HD22 | 2.46 | 0.51 |
| 1:KB:599:ILE:HD13 | 1:KB:640:VAL:HG21 | 1.92 | 0.51 |
| 1:KB:628:PHE:CD2 | 1:KB:633:LEU:HD23 | 2.45 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:L:325:VAL:O | 1:L:325:VAL:HG13 | 2.10 | 0.51 |
| 1:LB:60:THR:HG23 | 1:LB:106:GLU:CB | 2.37 | 0.51 |
| 1:N:662:ILE:HG21 | 1:O:653:ALA:CB | 2.39 | 0.51 |
| 1:OA:498:LEU:HD21 | 1:OA:562:PHE:HD1 | 1.76 | 0.51 |
| 1:PB:389:TYR:CE1 | 1:PB:457:VAL:HG22 | 2.45 | 0.51 |
| 1:Q:594:ASN:CB | 1:Q:598:ILE:HD12 | 2.39 | 0.51 |
| 1:RA:160:VAL:HG12 | 1:RA:161:GLU:H | 1.75 | 0.51 |
| 1:S:221:LEU:CB | 1:S:253:VAL:HG22 | 2.40 | 0.51 |
| 1:S:804:PRO:HA | 1:S:807:ILE:HD12 | 1.91 | 0.51 |
| 1:SB:462:VAL:HG12 | 1:SB:483:GLY:O | 2.10 | 0.51 |
| 1:TB:807:ILE:HG23 | 1:UB:807:ILE:HG21 | 1.92 | 0.51 |
| 1:UA:30:VAL:CG1 | 1:UA:72:LEU:HD11 | 2.39 | 0.51 |
| 1:UA:767:GLU:O | 1:UA:771:VAL:HG23 | 2.10 | 0.51 |
| 1:UB:276:LEU:HD13 | 1:UB:281:TYR:HA | 1.91 | 0.51 |
| 1:UB:554:ASP:O | 1:UB:558:THR:HG23 | 2.11 | 0.51 |
| 1:W:273:ILE:HG21 | 1:X:296:LEU:HD22 | 1.92 | 0.51 |
| 1:W:742:LEU:HD23 | 1:X:734:ARG:HG3 | 1.92 | 0.51 |
| 1:WA:53:VAL:HG11 | 1:WA:93:ALA:HB1 | 1.92 | 0.51 |
| 1:WA:419:LEU:H | 1:WA:420:PRO:HD2 | 1.75 | 0.51 |
| 1:X:405:THR:HG23 | 1:Y:396:GLY:HA3 | 1.92 | 0.51 |
| 1:XA:275:THR:OG1 | 1:YA:296:LEU:HD22 | 2.10 | 0.51 |
| 1:Y:219:VAL:HG12 | 1:Y:259:HIS:O | 2.10 | 0.51 |
| 1:Y:627:VAL:O | 1:Y:627:VAL:HG23 | 2.10 | 0.51 |
| 1:YA:777:LEU:O | 1:YA:781:VAL:HG22 | 2.09 | 0.51 |
| 1:YB:6:PHE:O | 1:YB:37:ARG:HG2 | 2.10 | 0.51 |
| 1:YB:482:PHE:CD1 | 1:YB:518:LEU:HD13 | 2.45 | 0.51 |
| 1:Z:599:ILE:HD13 | 1:Z:640:VAL:HG23 | 1.92 | 0.51 |
| 1:ZA:537:LEU:HD23 | 1:ZA:645:PRO:HA | 1.91 | 0.51 |
| 1:AA:144:LEU:HD22 | 1:AA:163:ILE:CD1 | 2.40 | 0.51 |
| 1:AB:115:VAL:HG23 | 1:AB:148:PRO:C | 2.35 | 0.51 |
| 1:AB:582:ALA:CB | 1:AB:602:ALA:HB2 | 2.40 | 0.51 |
| 1:B:411:ASP:OD1 | 1:B:411:ASP:C | 2.54 | 0.51 |
| 1:BA:227:LEU:HD13 | 1:BA:270:VAL:HG22 | 1.93 | 0.51 |
| 1:CB:539:LEU:CD2 | 1:CB:541:LEU:HD21 | 2.39 | 0.51 |
| 1:E:9:ARG:CB | 1:E:34:THR:HG22 | 2.41 | 0.51 |
| 1:E:18:VAL:HG12 | 1:E:43:VAL:CG2 | 2.41 | 0.51 |
| 1:E:777:LEU:O | 1:E:781:VAL:HG22 | 2.09 | 0.51 |
| 1:EA:381:PRO:O | 1:EA:382:LEU:HD23 | 2.10 | 0.51 |
| 1:FA:571:ALA:O | 1:FA:575:ILE:HD12 | 2.10 | 0.51 |
| 1:FB:115:VAL:HG23 | 1:FB:148:PRO:C | 2.34 | 0.51 |
| 1:G:276:LEU:HD13 | 1:G:281:TYR:HA | 1.92 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:GB:195:GLU:HG2 | 1:GB:213:LEU:HD11 | 1.92 | 0.51 |
| 1:GB:331:GLY:O | 1:GB:358:LEU:HD11 | 2.09 | 0.51 |
| 1:GB:787:LEU:CD2 | 1:HB:781:VAL:HG12 | 2.41 | 0.51 |
| 1:H:735:ILE:HD13 | 1:I:727:GLU:HG2 | 1.93 | 0.51 |
| 1:HA:271:VAL:HG13 | 1:HA:309:PHE:CD2 | 2.45 | 0.51 |
| 1:HA:331:GLY:C | 1:HA:358:LEU:HD11 | 2.36 | 0.51 |
| 1:HB:16:ILE:HG23 | 1:HB:45:PHE:O | 2.10 | 0.51 |
| 1:HB:65:VAL:HG12 | 1:HB:83:LEU:HD11 | 1.92 | 0.51 |
| 1:JB:115:VAL:HG21 | 1:JB:145:PHE:CE2 | 2.45 | 0.51 |
| 1:K:8:ILE:H | 1:K:8:ILE:HD12 | 1.76 | 0.51 |
| 1:LA:30:VAL:HG22 | 1:LA:31:GLY:N | 2.25 | 0.51 |
| 1:MB:531:THR:HG23 | 1:MB:537:LEU:HD23 | 1.91 | 0.51 |
| 1:OA:325:VAL:O | 1:OA:325:VAL:HG13 | 2.10 | 0.51 |
| 1:OA:564:VAL:HG21 | 1:OA:630:GLN:HB3 | 1.91 | 0.51 |
| 1:P:167:ILE:HD12 | 1:Q:192:THR:CG2 | 2.41 | 0.51 |
| 1:Q:27:ARG:HG2 | 1:Q:28:VAL:H | 1.76 | 0.51 |
| 1:Q:288:VAL:HG13 | 1:Q:294:ASN:OD1 | 2.10 | 0.51 |
| 1:RA:25:VAL:HG21 | 1:RA:78:THR:O | 2.10 | 0.51 |
| 1:RA:273:ILE:O | 1:RA:273:ILE:HG23 | 2.10 | 0.51 |
| 1:RB:230:ARG:HH22 | 1:RB:268:LEU:HD21 | 1.75 | 0.51 |
| 1:RB:424:GLU:HG2 | 1:RB:425:GLU:N | 2.25 | 0.51 |
| 1:TB:176:LEU:HD23 | 1:TB:176:LEU:H | 1.76 | 0.51 |
| 1:TB:388:ILE:CA | 1:TB:457:VAL:HG23 | 2.40 | 0.51 |
| 1:UA:504:ARG:O | 1:UA:526:VAL:HG23 | 2.10 | 0.51 |
| 1:UB:806:THR:O | 1:UB:806:THR:HG22 | 2.10 | 0.51 |
| 1:VB:162:ILE:HG22 | 1:VB:163:ILE:N | 2.26 | 0.51 |
| 1:W:53:VAL:HG23 | 1:W:97:PHE:CZ | 2.45 | 0.51 |
| 1:W:53:VAL:HG22 | 1:W:59:CYS:SG | 2.49 | 0.51 |
| 1:X:46:ALA:HB1 | 1:X:47:PRO:HD2 | 1.92 | 0.51 |
| 1:XB:73:VAL:HG21 | 1:XB:100:TYR:CE2 | 2.45 | 0.51 |
| 1:XB:90:ILE:O | 1:XB:90:ILE:HG23 | 2.11 | 0.51 |
| 1:XB:410:GLN:O | 1:XB:411:ASP:OD1 | 2.29 | 0.51 |
| 1:Y:516:LEU:HD12 | 1:Y:517:LEU:N | 2.25 | 0.51 |
| 1:YA:58:TYR:CE2 | 1:YA:112:LEU:HD13 | 2.46 | 0.51 |
| 1:YA:120:ALA:HB2 | 1:YA:205:LEU:HD21 | 1.93 | 0.51 |
| 1:YA:260:VAL:O | 1:YA:260:VAL:HG13 | 2.11 | 0.51 |
| 1:YB:122:HIS:CD2 | 1:YB:208:VAL:HG12 | 2.44 | 0.51 |
| 1:YB:129:PHE:CZ | 1:YB:157:VAL:HG22 | 2.46 | 0.51 |
| 1:YB:406:TYR:HH | 1:YB:412:GLU:CD | 2.19 | 0.51 |
| 1:YB:601:THR:HG22 | 1:YB:622:PRO:HG3 | 1.92 | 0.51 |
| 1:A:9:ARG:HB3 | 1:A:34:THR:HG22 | 1.93 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AA:174:LEU:HB3 | 1:AA:198:VAL:HG12 | 1.91 | 0.51 |
| 1:AA:489:LEU:HD11 | 1:AA:495:PHE:HE1 | 1.73 | 0.51 |
| 1:AB:137:VAL:HG12 | 1:AB:138:VAL:N | 2.25 | 0.51 |
| 1:AC:334:LEU:HD11 | 1:AC:359:ILE:CG2 | 2.40 | 0.51 |
| 1:BA:470:VAL:HG12 | 1:BA:493:GLU:HB3 | 1.92 | 0.51 |
| 1:BA:489:LEU:HD11 | 1:BA:495:PHE:CE1 | 2.44 | 0.51 |
| 1:BA:539:LEU:HD12 | 1:BA:642:SER:O | 2.10 | 0.51 |
| 1:BB:5:GLU:OE1 | 1:BB:8:ILE:HG13 | 2.11 | 0.51 |
| 1:BB:23:SER:HB3 | 1:BB:25:VAL:HG23 | 1.91 | 0.51 |
| 1:BB:538:GLN:O | 1:BB:539:LEU:HD12 | 2.11 | 0.51 |
| 1:CA:121:LEU:HD11 | 1:CA:159:VAL:HG22 | 1.91 | 0.51 |
| 1:CB:72:LEU:HD23 | 1:CB:73:VAL:O | 2.10 | 0.51 |
| 1:D:17:HIS:HB3 | 1:D:44:LEU:HD12 | 1.91 | 0.51 |
| 1:D:30:VAL:HG22 | 1:D:31:GLY:N | 2.25 | 0.51 |
| 1:FA:336:ALA:HB2 | 1:FA:357:TRP:CH2 | 2.45 | 0.51 |
| 1:FB:282:CYS:HB2 | 1:FB:316:LEU:HD11 | 1.92 | 0.51 |
| 1:HB:18:VAL:HG23 | 1:HB:42:ARG:C | 2.35 | 0.51 |
| 1:IA:233:ARG:HA | 1:IA:245:THR:HG23 | 1.93 | 0.51 |
| 1:IB:379:ALA:O | 1:IB:380:ILE:C | 2.53 | 0.51 |
| 1:J:230:ARG:HH22 | 1:J:268:LEU:HD21 | 1.74 | 0.51 |
| 1:JB:144:LEU:HD12 | 1:JB:144:LEU:C | 2.36 | 0.51 |
| 1:KA:384:GLU:O | 1:KA:402:ILE:HG22 | 2.09 | 0.51 |
| 1:LA:62:ALA:HB3 | 1:LA:104:VAL:HG13 | 1.92 | 0.51 |
| 1:M:325:VAL:O | 1:M:325:VAL:HG13 | 2.10 | 0.51 |
| 1:MA:13:TYR:HB2 | 1:MA:49:ARG:NH1 | 2.25 | 0.51 |
| 1:MA:531:THR:HG21 | 1:MA:588:PHE:HA | 1.92 | 0.51 |
| 1:MA:779:LEU:HD21 | 1:NA:774:ARG:CD | 2.39 | 0.51 |
| 1:N:462:VAL:HG21 | 1:N:481:VAL:CG2 | 2.39 | 0.51 |
| 1:PA:384:GLU:O | 1:PA:402:ILE:HD11 | 2.10 | 0.51 |
| 1:PA:539:LEU:HD12 | 1:PA:642:SER:O | 2.11 | 0.51 |
| 1:PB:271:VAL:HG23 | 1:PB:309:PHE:HD2 | 1.75 | 0.51 |
| 1:Q:261:PRO:HB3 | 1:Q:267:VAL:HG22 | 1.91 | 0.51 |
| 1:QB:776:GLN:CD | 1:RB:770:LEU:HD21 | 2.35 | 0.51 |
| 1:RB:115:VAL:HG13 | 1:RB:147:GLY:O | 2.10 | 0.51 |
| 1:S:181:GLU:HG3 | 1:S:191:VAL:HG12 | 1.92 | 0.51 |
| 1:T:276:LEU:HD13 | 1:T:281:TYR:HA | 1.93 | 0.51 |
| 1:T:784:ALA:HA | 1:T:787:LEU:HD12 | 1.91 | 0.51 |
| 1:TA:543:TYR:HE1 | 1:TA:575:ILE:HG21 | 1.75 | 0.51 |
| 1:UA:18:VAL:HG23 | 1:UA:26:SER:HA | 1.91 | 0.51 |
| 1:UB:536:ARG:NH1 | 1:UB:646:VAL:HG11 | 2.25 | 0.51 |
| 1:VB:340:LEU:HD12 | 1:VB:351:HIS:ND1 | 2.25 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:W:46:ALA:HB1 | 1:W:47:PRO:HD2 | 1.92 | 0.51 |
| 1:WA:520:PRO:HG2 | 1:XA:564:VAL:HG22 | 1.91 | 0.51 |
| 1:XB:185:ARG:NH1 | 1:XB:207:ALA:HB2 | 2.25 | 0.51 |
| 1:Y:267:VAL:C | 1:Y:268:LEU:HD12 | 2.35 | 0.51 |
| 1:YA:324:TYR:CZ | 1:YA:373:VAL:HG11 | 2.45 | 0.51 |
| 1:YB:768:LEU:HD21 | 1:ZB:766:ARG:HE | 1.76 | 0.51 |
| 1:YB:786:GLN:O | 1:YB:790:VAL:HG23 | 2.11 | 0.51 |
| 1:A:175:ARG:HE | 1:A:213:LEU:CB | 2.23 | 0.51 |
| 1:A:628:PHE:HE1 | 1:A:635:VAL:HG23 | 1.74 | 0.51 |
| 1:AA:353:ALA:HB2 | 1:Z:364:GLU:OE2 | 2.11 | 0.51 |
| 1:AB:175:ARG:NH1 | 1:AB:213:LEU:HD23 | 2.24 | 0.51 |
| 1:AB:220:ILE:CD1 | 1:BB:245:THR:HG21 | 2.41 | 0.51 |
| 1:AB:795:PHE:O | 1:AB:799:THR:HG23 | 2.10 | 0.51 |
| 1:B:65:VAL:HG13 | 1:B:103:GLU:HB2 | 1.92 | 0.51 |
| 1:B:172:GLN:HB3 | 1:B:215:LEU:HD11 | 1.93 | 0.51 |
| 1:B:537:LEU:HD23 | 1:B:645:PRO:HA | 1.92 | 0.51 |
| 1:BA:468:VAL:HG22 | 1:BA:515:CYS:CB | 2.40 | 0.51 |
| 1:BB:16:ILE:HD11 | 1:BB:47:PRO:N | 2.26 | 0.51 |
| 1:C:212:VAL:C | 1:C:213:LEU:HD22 | 2.36 | 0.51 |
| 1:DB:143:TRP:HH2 | 1:DB:157:VAL:HG22 | 1.76 | 0.51 |
| 1:DB:339:PRO:HD3 | 1:DB:353:ALA:HB2 | 1.93 | 0.51 |
| 1:E:167:ILE:HG23 | 1:F:193:GLY:HA3 | 1.91 | 0.51 |
| 1:E:772:TYR:CD1 | 1:F:770:LEU:HD11 | 2.45 | 0.51 |
| 1:FA:53:VAL:HG11 | 1:FA:93:ALA:N | 2.25 | 0.51 |
| 1:GB:398:VAL:HG11 | 1:GB:415:TRP:CE3 | 2.46 | 0.51 |
| 1:H:303:LYS:HD2 | 1:H:304:GLY:O | 2.10 | 0.51 |
| 1:HB:212:VAL:O | 1:HB:212:VAL:HG23 | 2.09 | 0.51 |
| 1:J:772:TYR:CD1 | 1:K:770:LEU:HD11 | 2.45 | 0.51 |
| 1:JB:398:VAL:HG11 | 1:JB:415:TRP:CE3 | 2.45 | 0.51 |
| 1:K:229:LEU:HD13 | 1:K:266:GLU:O | 2.11 | 0.51 |
| 1:K:325:VAL:O | 1:K:325:VAL:HG13 | 2.10 | 0.51 |
| 1:KA:388:ILE:HA | 1:KA:457:VAL:HG23 | 1.92 | 0.51 |
| 1:KA:549:VAL:HG21 | 1:KA:552:ARG:HE | 1.74 | 0.51 |
| 1:KB:641:GLN:HA | 1:LB:580:ARG:HE | 1.76 | 0.51 |
| 1:L:332:LEU:HD12 | 1:L:376:GLU:HA | 1.92 | 0.51 |
| 1:LB:497:VAL:HG22 | 1:LB:512:ARG:NH1 | 2.25 | 0.51 |
| 1:MA:215:LEU:HD12 | 1:MA:216:VAL:H | 1.76 | 0.51 |
| 1:MB:331:GLY:C | 1:MB:358:LEU:HD11 | 2.35 | 0.51 |
| 1:MB:640:VAL:HG12 | 1:NB:580:ARG:HD2 | 1.93 | 0.51 |
| 1:N:83:LEU:HD21 | 1:N:102:GLY:HA3 | 1.91 | 0.51 |
| 1:NA:591:PHE:O | 1:NA:595:SER:N | 2.44 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OB:16:ILE:HD11 | 1:OB:47:PRO:HD3 | 1.93 | 0.51 |
| 1:P:761:ARG:HA | 1:Q:755:THR:HG21 | 1.91 | 0.51 |
| 1:PB:95:ASP:O | 1:PB:96:PRO:C | 2.52 | 0.51 |
| 1:PB:709:LEU:HA | 1:PB:712:LEU:HD12 | 1.91 | 0.51 |
| 1:QB:337:LEU:HD11 | 1:QB:371:VAL:O | 2.11 | 0.51 |
| 1:R:29:GLU:OE2 | 1:R:36:ILE:HB | 2.10 | 0.51 |
| 1:S:63:ASN:O | 1:S:83:LEU:HD22 | 2.11 | 0.51 |
| 1:T:142:GLU:OE2 | 1:T:160:VAL:HG21 | 2.10 | 0.51 |
| 1:TA:325:VAL:O | 1:TA:325:VAL:HG13 | 2.10 | 0.51 |
| 1:TB:16:ILE:HD11 | 1:TB:47:PRO:HD3 | 1.92 | 0.51 |
| 1:TB:591:PHE:O | 1:TB:595:SER:N | 2.44 | 0.51 |
| 1:UB:212:VAL:O | 1:UB:212:VAL:HG23 | 2.10 | 0.51 |
| 1:V:279:HIS:O | 1:V:323:VAL:HG22 | 2.11 | 0.51 |
| 1:V:388:ILE:N | 1:V:457:VAL:HG23 | 2.26 | 0.51 |
| 1:VA:219:VAL:HG12 | 1:VA:259:HIS:HB3 | 1.92 | 0.51 |
| 1:VB:30:VAL:HG22 | 1:VB:31:GLY:N | 2.25 | 0.51 |
| 1:W:326:LEU:HD13 | 1:W:331:GLY:HA2 | 1.91 | 0.51 |
| 1:WA:229:LEU:HD22 | 1:WA:265:GLU:HB3 | 1.92 | 0.51 |
| 1:WA:539:LEU:HD11 | 1:WA:640:VAL:CG2 | 2.40 | 0.51 |
| 1:WB:15:TYR:HB3 | 1:WB:50:MET:HE1 | 1.93 | 0.51 |
| 1:Y:212:VAL:O | 1:Y:212:VAL:HG23 | 2.09 | 0.51 |
| 1:Y:332:LEU:HD23 | 1:Y:333:LEU:O | 2.10 | 0.51 |
| 1:YB:380:ILE:O | 1:YB:382:LEU:HD12 | 2.11 | 0.51 |
| 1:Z:179:ARG:HE | 1:Z:209:PHE:HA | 1.76 | 0.51 |
| 1:ZB:267:VAL:C | 1:ZB:268:LEU:HD12 | 2.35 | 0.51 |
| 1:AA:227:LEU:HD21 | 1:AA:229:LEU:HD21 | 1.93 | 0.51 |
| 1:AA:377:ARG:C | 1:AA:407:MET:HE1 | 2.36 | 0.51 |
| 1:AB:390:VAL:O | 1:AB:390:VAL:HG23 | 2.09 | 0.51 |
| 1:AC:60:THR:HG23 | 1:AC:107:LYS:CD | 2.38 | 0.51 |
| 1:B:61:VAL:HG23 | 1:B:61:VAL:O | 2.09 | 0.51 |
| 1:B:549:VAL:HG11 | 1:B:552:ARG:NH1 | 2.26 | 0.51 |
| 1:BB:401:VAL:HG21 | 1:BB:406:TYR:CG | 2.46 | 0.51 |
| 1:C:333:LEU:HD23 | 1:C:374:VAL:HG11 | 1.93 | 0.51 |
| 1:C:787:LEU:HD21 | 1:D:781:VAL:HG12 | 1.93 | 0.51 |
| 1:DA:46:ALA:HB1 | 1:DA:47:PRO:HD2 | 1.92 | 0.51 |
| 1:DA:467:ALA:HB3 | 1:DA:516:LEU:HD22 | 1.92 | 0.51 |
| 1:DB:123:LEU:HD11 | 1:DB:145:PHE:HB2 | 1.91 | 0.51 |
| 1:E:53:VAL:HG13 | 1:E:57:HIS:O | 2.11 | 0.51 |
| 1:EA:90:ILE:HD11 | 1:EA:155:LYS:H | 1.76 | 0.51 |
| 1:EA:468:VAL:HG22 | 1:EA:515:CYS:HA | 1.93 | 0.51 |
| 1:EA:662:ILE:HG21 | 1:FA:653:ALA:HB1 | 1.91 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:EB:30:VAL:HG22 | 1:EB:31:GLY:N | 2.26 | 0.51 |
| 1:GB:233:ARG:HA | 1:GB:245:THR:HG23 | 1.92 | 0.51 |
| 1:GB:339:PRO:HB2 | 1:GB:341:GLU:OE2 | 2.10 | 0.51 |
| 1:H:52:THR:O | 1:H:109:ILE:HG21 | 2.10 | 0.51 |
| 1:IA:73:VAL:HG21 | 1:IA:100:TYR:CZ | 2.46 | 0.51 |
| 1:IA:116:LEU:HB2 | 1:IA:119:THR:HG22 | 1.93 | 0.51 |
| 1:JB:104:VAL:HG22 | 1:JB:105:LEU:H | 1.74 | 0.51 |
| 1:KA:105:LEU:HD23 | 1:KA:105:LEU:H | 1.74 | 0.51 |
| 1:KA:126:LEU:HD12 | 1:KA:155:LYS:O | 2.11 | 0.51 |
| 1:KA:221:LEU:HD13 | 1:KA:252:THR:C | 2.36 | 0.51 |
| 1:KA:389:TYR:CE1 | 1:KA:457:VAL:HG22 | 2.46 | 0.51 |
| 1:LA:502:ALA:HB2 | 1:LA:511:ARG:HE | 1.74 | 0.51 |
| 1:LB:129:PHE:CD2 | 1:LB:137:VAL:HG11 | 2.45 | 0.51 |
| 1:M:124:LYS:CB | 1:M:160:VAL:HG23 | 2.41 | 0.51 |
| 1:M:276:LEU:HD12 | 1:M:302:VAL:HG12 | 1.92 | 0.51 |
| 1:MA:115:VAL:HG23 | 1:MA:148:PRO:C | 2.35 | 0.51 |
| 1:MB:124:LYS:N | 1:MB:160:VAL:HG23 | 2.25 | 0.51 |
| 1:N:427:LEU:HD12 | 1:N:428:ASN:H | 1.76 | 0.51 |
| 1:NA:59:CYS:HB2 | 1:NA:109:ILE:HD13 | 1.93 | 0.51 |
| 1:O:115:VAL:HG23 | 1:O:149:GLY:O | 2.11 | 0.51 |
| 1:OA:173:ALA:HB1 | 1:OA:198:VAL:O | 2.10 | 0.51 |
| 1:OA:582:ALA:O | 1:OA:586:VAL:HG22 | 2.11 | 0.51 |
| 1:PA:23:SER:OG | 1:PA:25:VAL:HG23 | 2.10 | 0.51 |
| 1:PA:260:VAL:O | 1:PA:260:VAL:HG13 | 2.10 | 0.51 |
| 1:QB:129:PHE:CE2 | 1:QB:137:VAL:HG11 | 2.46 | 0.51 |
| 1:RB:379:ALA:O | 1:RB:380:ILE:C | 2.54 | 0.51 |
| 1:S:65:VAL:HG12 | 1:S:101:PRO:O | 2.11 | 0.51 |
| 1:SA:217:ASP:O | 1:SA:260:VAL:HG23 | 2.10 | 0.51 |
| 1:SA:470:VAL:HG12 | 1:SA:493:GLU:CG | 2.41 | 0.51 |
| 1:T:326:LEU:O | 1:T:362:PRO:HA | 2.10 | 0.51 |
| 1:TA:136:LYS:HZ2 | 1:TA:143:TRP:CD1 | 2.28 | 0.51 |
| 1:TA:323:VAL:HG21 | 1:TA:364:GLU:OE2 | 2.11 | 0.51 |
| 1:TB:212:VAL:C | 1:TB:213:LEU:HD22 | 2.36 | 0.51 |
| 1:TB:545:TRP:HB2 | 1:TB:634:VAL:O | 2.11 | 0.51 |
| 1:UB:144:LEU:C | 1:UB:144:LEU:HD12 | 2.35 | 0.51 |
| 1:VA:425:GLU:OE2 | 1:VA:458:VAL:HG13 | 2.10 | 0.51 |
| 1:WA:19:LEU:HD23 | 1:WA:42:ARG:NE | 2.26 | 0.51 |
| 1:WA:398:VAL:HG21 | 1:WA:415:TRP:CG | 2.46 | 0.51 |
| 1:WB:60:THR:HA | 1:WB:89:GLU:O | 2.10 | 0.51 |
| 1:WB:165:ALA:HA | 1:WB:205:LEU:HA | 1.93 | 0.51 |
| 1:WB:489:LEU:HD11 | 1:WB:495:PHE:CE1 | 2.45 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:X:197:LEU:HD11 | 1:X:263:VAL:HG13 | 1.92 | 0.51 |
| 1:X:228:HIS:HA | 1:X:250:LEU:HD23 | 1.91 | 0.51 |
| 1:YA:323:VAL:HG21 | 1:YA:364:GLU:CD | 2.35 | 0.51 |
| 1:YB:623:ARG:CD | 1:YB:627:VAL:HG13 | 2.41 | 0.51 |
| 1:AB:267:VAL:C | 1:AB:268:LEU:HD12 | 2.35 | 0.51 |
| 1:AB:388:ILE:CG2 | 1:AB:414:LEU:HD22 | 2.41 | 0.51 |
| 1:AB:500:LEU:HD12 | 1:AB:513:ALA:HB2 | 1.91 | 0.51 |
| 1:AC:777:LEU:HD22 | 1:ZB:779:LEU:CD2 | 2.41 | 0.51 |
| 1:AC:786:GLN:O | 1:AC:790:VAL:HG23 | 2.10 | 0.51 |
| 1:C:566:ASP:OD1 | 1:C:568:VAL:HG12 | 2.09 | 0.51 |
| 1:CA:105:LEU:HD11 | 1:CA:107:LYS:O | 2.10 | 0.51 |
| 1:CA:462:VAL:HG23 | 1:CA:487:VAL:HG22 | 1.93 | 0.51 |
| 1:CB:181:GLU:CD | 1:CB:191:VAL:HG12 | 2.35 | 0.51 |
| 1:DA:115:VAL:HG11 | 1:DA:145:PHE:HD2 | 1.76 | 0.51 |
| 1:DA:121:LEU:CD1 | 1:DA:123:LEU:HD21 | 2.41 | 0.51 |
| 1:DA:288:VAL:HG13 | 1:DA:294:ASN:ND2 | 2.26 | 0.51 |
| 1:DA:529:ILE:HG22 | 1:DA:530:GLU:N | 2.26 | 0.51 |
| 1:DB:105:LEU:HD21 | 1:DB:107:LYS:O | 2.10 | 0.51 |
| 1:DB:594:ASN:HB3 | 1:DB:598:ILE:HD12 | 1.92 | 0.51 |
| 1:E:122:HIS:CD2 | 1:E:208:VAL:HG12 | 2.46 | 0.51 |
| 1:E:265:GLU:N | 1:E:265:GLU:OE1 | 2.44 | 0.51 |
| 1:E:418:GLU:O | 1:E:419:LEU:HD23 | 2.11 | 0.51 |
| 1:E:424:GLU:HG2 | 1:E:425:GLU:N | 2.26 | 0.51 |
| 1:FA:115:VAL:HG12 | 1:FA:121:LEU:HD22 | 1.93 | 0.51 |
| 1:FB:221:LEU:HD13 | 1:FB:252:THR:C | 2.36 | 0.51 |
| 1:GB:333:LEU:HD21 | 1:GB:356:HIS:HE1 | 1.75 | 0.51 |
| 1:GB:411:ASP:OD1 | 1:GB:411:ASP:C | 2.54 | 0.51 |
| 1:H:15:TYR:HA | 1:H:29:GLU:O | 2.11 | 0.51 |
| 1:IA:56:ARG:NH1 | 1:JA:126:LEU:HD13 | 2.24 | 0.51 |
| 1:IB:381:PRO:HA | 1:IB:405:THR:HG22 | 1.91 | 0.51 |
| 1:K:580:ARG:O | 1:K:583:VAL:HG12 | 2.10 | 0.51 |
| 1:KB:3:THR:HG22 | 1:KB:6:PHE:CD1 | 2.46 | 0.51 |
| 1:KB:522:PHE:HA | 1:KB:543:TYR:O | 2.11 | 0.51 |
| 1:L:767:GLU:HA | 1:L:770:LEU:HD12 | 1.91 | 0.51 |
| 1:L:776:GLN:O | 1:L:780:GLU:OE1 | 2.27 | 0.51 |
| 1:LA:43:VAL:C | 1:LA:44:LEU:HD22 | 2.36 | 0.51 |
| 1:LA:285:LEU:HD21 | 1:LA:317:GLU:HA | 1.92 | 0.51 |
| 1:M:49:ARG:HH11 | 1:M:50:MET:HB2 | 1.76 | 0.51 |
| 1:NA:326:LEU:HD13 | 1:NA:331:GLY:HA2 | 1.92 | 0.51 |
| 1:NB:120:ALA:CB | 1:NB:205:LEU:HD21 | 2.40 | 0.51 |
| 1:O:469:GLN:HA | 1:O:480:VAL:HG22 | 1.92 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OB:233:ARG:HA | 1:OB:245:THR:HG23 | 1.92 | 0.51 |
| 1:Q:177:ARG:HB2 | 1:Q:213:LEU:HD21 | 1.93 | 0.51 |
| 1:QA:46:ALA:HB1 | 1:QA:47:PRO:CD | 2.41 | 0.51 |
| 1:QA:123:LEU:HD11 | 1:QA:145:PHE:HB2 | 1.93 | 0.51 |
| 1:R:112:LEU:HD12 | 1:R:152:ILE:CG1 | 2.40 | 0.51 |
| 1:RA:60:THR:CB | 1:RA:88:LEU:HD13 | 2.41 | 0.51 |
| 1:RA:334:LEU:HG | 1:RA:373:VAL:HG22 | 1.93 | 0.51 |
| 1:RB:265:GLU:N | 1:RB:265:GLU:OE1 | 2.44 | 0.51 |
| 1:RB:657:SER:HA | 1:RB:660:LEU:HD12 | 1.92 | 0.51 |
| 1:SB:488:SER:O | 1:SB:489:LEU:HD22 | 2.09 | 0.51 |
| 1:T:256:THR:O | 1:T:256:THR:HG23 | 2.10 | 0.51 |
| 1:TA:276:LEU:HD12 | 1:TA:304:GLY:O | 2.10 | 0.51 |
| 1:TB:547:PHE:CD1 | 1:TB:633:LEU:HD13 | 2.45 | 0.51 |
| 1:UB:531:THR:HG21 | 1:UB:588:PHE:HA | 1.92 | 0.51 |
| 1:VA:489:LEU:HD11 | 1:VA:495:PHE:CE2 | 2.46 | 0.51 |
| 1:VB:316:LEU:O | 1:VB:317:GLU:C | 2.53 | 0.51 |
| 1:W:168:ILE:HG21 | 1:W:174:LEU:HB2 | 1.91 | 0.51 |
| 1:WB:797:GLN:NE2 | 1:XB:792:VAL:HG13 | 2.25 | 0.51 |
| 1:X:363:LEU:C | 1:Y:353:ALA:HB3 | 2.35 | 0.51 |
| 1:XB:466:ALA:HB1 | 1:XB:515:CYS:SG | 2.51 | 0.51 |
| 1:XB:670:GLU:HG2 | 1:YB:664:ILE:HD11 | 1.93 | 0.51 |
| 1:Y:340:LEU:HD11 | 1:Y:357:TRP:CH2 | 2.45 | 0.51 |
| 1:Y:423:VAL:HG13 | 1:Y:424:GLU:N | 2.26 | 0.51 |
| 1:YA:95:ASP:OD1 | 1:YA:96:PRO:CD | 2.57 | 0.51 |
| 1:ZB:173:ALA:HB1 | 1:ZB:197:LEU:HB3 | 1.93 | 0.51 |
| 1:A:144:LEU:HD23 | 1:A:144:LEU:H | 1.76 | 0.51 |
| 1:AA:16:ILE:HG23 | 1:AA:43:VAL:HG13 | 1.91 | 0.51 |
| 1:AA:758:GLU:O | 1:AA:762:VAL:HG22 | 2.11 | 0.51 |
| 1:AB:460:TYR:CE2 | 1:AB:462:VAL:HG22 | 2.46 | 0.51 |
| 1:AC:700:GLU:HB2 | 1:ZB:706:LEU:HD12 | 1.92 | 0.51 |
| 1:B:176:LEU:HD21 | 1:B:196:TRP:CE2 | 2.46 | 0.51 |
| 1:BA:464:HIS:CE1 | 1:CA:496:THR:HG23 | 2.45 | 0.51 |
| 1:FA:523:PHE:CG | 1:FA:568:VAL:HG23 | 2.46 | 0.51 |
| 1:G:405:THR:HG23 | 1:H:396:GLY:HA3 | 1.93 | 0.51 |
| 1:GA:65:VAL:HG13 | 1:GA:103:GLU:OE1 | 2.11 | 0.51 |
| 1:GA:284:ILE:HD11 | 1:GA:300:ARG:HD2 | 1.92 | 0.51 |
| 1:GB:597:ARG:O | 1:GB:601:THR:HG23 | 2.10 | 0.51 |
| 1:H:323:VAL:HG12 | 1:H:366:VAL:HG23 | 1.93 | 0.51 |
| 1:H:645:PRO:HB2 | 1:H:650:THR:HG21 | 1.93 | 0.51 |
| 1:HB:623:ARG:HH22 | 1:HB:627:VAL:HG22 | 1.75 | 0.51 |
| 1:I:175:ARG:CA | 1:I:197:LEU:HD23 | 2.40 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:I:761:ARG:HH22 | 1:I:762:VAL:HG12 | 1.75 | 0.51 |
| 1:IB:249:TRP:C | 1:IB:250:LEU:HD22 | 2.36 | 0.51 |
| 1:JA:122:HIS:CD2 | 1:JA:208:VAL:HG12 | 2.46 | 0.51 |
| 1:JA:325:VAL:HA | 1:JA:364:GLU:HA | 1.93 | 0.51 |
| 1:K:196:TRP:C | 1:K:197:LEU:HD12 | 2.36 | 0.51 |
| 1:KB:798:MET:O | 1:KB:802:ILE:HG22 | 2.11 | 0.51 |
| 1:LA:516:LEU:C | 1:LA:517:LEU:HD22 | 2.35 | 0.51 |
| 1:LB:388:ILE:C | 1:LB:457:VAL:HG23 | 2.36 | 0.51 |
| 1:M:661:ALA:HA | 1:M:664:ILE:HD12 | 1.92 | 0.51 |
| 1:MB:27:ARG:HE | 1:MB:28:VAL:H | 1.59 | 0.51 |
| 1:MB:325:VAL:HG21 | 1:NB:335:ARG:NH1 | 2.24 | 0.51 |
| 1:N:575:ILE:O | 1:N:579:VAL:HG23 | 2.10 | 0.51 |
| 1:O:52:THR:HG22 | 1:O:96:PRO:HG3 | 1.93 | 0.51 |
| 1:OA:802:ILE:HD11 | 1:PA:799:THR:HG21 | 1.93 | 0.51 |
| 1:P:198:VAL:HG21 | 1:P:204:TYR:CD1 | 2.46 | 0.51 |
| 1:P:480:VAL:HG12 | 1:P:481:VAL:N | 2.26 | 0.51 |
| 1:PA:83:LEU:HD11 | 1:PA:101:PRO:O | 2.10 | 0.51 |
| 1:PA:802:ILE:HD11 | 1:QA:807:ILE:HD12 | 1.92 | 0.51 |
| 1:Q:595:SER:C | 1:Q:599:ILE:HD12 | 2.35 | 0.51 |
| 1:QA:60:THR:HG23 | 1:QA:106:GLU:CD | 2.36 | 0.51 |
| 1:R:67:ARG:HH12 | 1:R:99:LEU:HD23 | 1.76 | 0.51 |
| 1:RB:392:ASP:OD2 | 1:RB:395:THR:HG22 | 2.10 | 0.51 |
| 1:RB:540:GLN:HG3 | 1:RB:641:GLN:HB2 | 1.93 | 0.51 |
| 1:TA:166:THR:OG1 | 1:TA:174:LEU:HD13 | 2.11 | 0.51 |
| 1:UB:390:VAL:O | 1:UB:398:VAL:HG13 | 2.11 | 0.51 |
| 1:UB:541:LEU:HD13 | 1:UB:543:TYR:CZ | 2.46 | 0.51 |
| 1:V:408:LEU:H | 1:V:408:LEU:HD23 | 1.76 | 0.51 |
| 1:VA:549:VAL:CG2 | 1:VA:561:LEU:HD21 | 2.41 | 0.51 |
| 1:VA:582:ALA:O | 1:VA:586:VAL:HG22 | 2.10 | 0.51 |
| 1:VA:669:GLN:NE2 | 1:WA:664:ILE:HD11 | 2.25 | 0.51 |
| 1:VB:62:ALA:HA | 1:VB:88:LEU:HD23 | 1.93 | 0.51 |
| 1:VB:374:VAL:HG12 | 1:VB:375:GLU:H | 1.76 | 0.51 |
| 1:VB:772:TYR:CD1 | 1:WB:770:LEU:HD11 | 2.46 | 0.51 |
| 1:X:30:VAL:HG23 | 1:X:50:MET:CE | 2.41 | 0.51 |
| 1:X:65:VAL:HG23 | 1:X:67:ARG:HG3 | 1.93 | 0.51 |
| 1:XA:536:ARG:CZ | 1:XA:646:VAL:HG11 | 2.40 | 0.51 |
| 1:Z:741:VAL:O | 1:Z:744:ALA:HB3 | 2.11 | 0.51 |
| 1:AA:402:ILE:HG13 | 1:AA:457:VAL:HG21 | 1.93 | 0.51 |
| 1:AB:175:ARG:HG3 | 1:AB:263:VAL:HG12 | 1.93 | 0.51 |
| 1:BA:7:ILE:O | 1:BA:8:ILE:C | 2.54 | 0.51 |
| 1:BA:523:PHE:O | 1:BA:524:THR:HG23 | 2.11 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:C:531:THR:HG21 | 1:C:588:PHE:CA | 2.40 | 0.51 |
| 1:CB:58:TYR:CE1 | 1:CB:92:LEU:HD13 | 2.45 | 0.51 |
| 1:EB:465:ASN:HA | 1:EB:518:LEU:HD23 | 1.93 | 0.51 |
| 1:F:232:ARG:O | 1:F:245:THR:HG23 | 2.11 | 0.51 |
| 1:FB:25:VAL:HG13 | 1:FB:79:GLY:C | 2.36 | 0.51 |
| 1:G:529:ILE:HB | 1:G:583:VAL:HG11 | 1.92 | 0.51 |
| 1:GB:173:ALA:HB1 | 1:GB:197:LEU:HD11 | 1.93 | 0.51 |
| 1:GB:282:CYS:O | 1:GB:301:VAL:HG23 | 2.11 | 0.51 |
| 1:GB:386:GLU:C | 1:GB:402:ILE:HG23 | 2.36 | 0.51 |
| 1:H:90:ILE:HG22 | 1:H:91:ARG:N | 2.25 | 0.51 |
| 1:HB:121:LEU:HD11 | 1:HB:159:VAL:HG13 | 1.93 | 0.51 |
| 1:I:176:LEU:HD21 | 1:I:196:TRP:CD1 | 2.46 | 0.51 |
| 1:IA:643:VAL:HG22 | 1:JA:580:ARG:NH2 | 2.26 | 0.51 |
| 1:IB:633:LEU:HD12 | 1:IB:634:VAL:N | 2.25 | 0.51 |
| 1:IB:790:VAL:HG11 | 1:JB:784:ALA:HB1 | 1.93 | 0.51 |
| 1:J:260:VAL:O | 1:J:260:VAL:HG13 | 2.10 | 0.51 |
| 1:JB:756:GLU:HA | 1:JB:759:LEU:HD12 | 1.91 | 0.51 |
| 1:K:528:THR:HG23 | 1:K:538:GLN:HA | 1.93 | 0.51 |
| 1:L:197:LEU:HD22 | 1:L:216:VAL:HG11 | 1.92 | 0.51 |
| 1:MA:654:LEU:HD22 | 1:NA:534:HIS:CG | 2.46 | 0.51 |
| 1:NB:265:GLU:N | 1:NB:265:GLU:OE1 | 2.44 | 0.51 |
| 1:NB:288:VAL:HG12 | 1:NB:293:LYS:C | 2.36 | 0.51 |
| 1:NB:325:VAL:HA | 1:NB:364:GLU:HA | 1.92 | 0.51 |
| 1:OA:334:LEU:CD2 | 1:OA:373:VAL:HG22 | 2.41 | 0.51 |
| 1:OA:543:TYR:CE2 | 1:OA:575:ILE:HG21 | 2.46 | 0.51 |
| 1:OB:16:ILE:C | 1:OB:28:VAL:HG23 | 2.36 | 0.51 |
| 1:P:174:LEU:HD12 | 1:P:214:ASP:O | 2.10 | 0.51 |
| 1:PA:380:ILE:H | 1:PA:380:ILE:HD12 | 1.76 | 0.51 |
| 1:Q:388:ILE:HG21 | 1:Q:414:LEU:HD22 | 1.92 | 0.51 |
| 1:R:112:LEU:HD12 | 1:R:152:ILE:HG13 | 1.92 | 0.51 |
| 1:RA:377:ARG:HB2 | 1:RA:407:MET:HE3 | 1.93 | 0.51 |
| 1:RB:500:LEU:HD22 | 1:RB:568:VAL:HG12 | 1.91 | 0.51 |
| 1:S:25:VAL:HA | 1:S:81:VAL:HG13 | 1.93 | 0.51 |
| 1:T:549:VAL:HG22 | 1:T:557:GLU:CD | 2.35 | 0.51 |
| 1:T:813:ALA:HB3 | 1:V:813:ALA:HB3 | 1.93 | 0.51 |
| 1:TA:28:VAL:HG11 | 1:TA:101:PRO:HD3 | 1.92 | 0.51 |
| 1:VA:498:LEU:HD22 | 1:VA:567:PHE:HE2 | 1.76 | 0.51 |
| 1:X:8:ILE:HG21 | 1:X:16:ILE:CD1 | 2.39 | 0.51 |
| 1:X:788:ALA:O | 1:X:792:VAL:HG23 | 2.11 | 0.51 |
| 1:XB:172:GLN:CD | 1:XB:215:LEU:HD21 | 2.36 | 0.51 |
| 1:YB:336:ALA:HB2 | 1:YB:351:HIS:HB3 | 1.92 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:A:18:VAL:HG22 | 1:A:29:GLU:OE2 | 2.10 | 0.51 |
| 1:A:331:GLY:N | 1:A:407:MET:HE1 | 2.25 | 0.51 |
| 1:AA:18:VAL:HG12 | 1:AA:43:VAL:HG22 | 1.92 | 0.51 |
| 1:AA:579:VAL:HG22 | 1:AA:602:ALA:HB3 | 1.92 | 0.51 |
| 1:AB:471:TYR:HD2 | 1:AB:478:ALA:HB2 | 1.76 | 0.51 |
| 1:BA:205:LEU:HD12 | 1:BA:206:PRO:HD2 | 1.93 | 0.51 |
| 1:BB:326:LEU:O | 1:BB:362:PRO:HA | 2.11 | 0.51 |
| 1:CA:654:LEU:HD22 | 1:DA:534:HIS:CG | 2.46 | 0.51 |
| 1:D:389:TYR:CZ | 1:D:457:VAL:HA | 2.46 | 0.51 |
| 1:DA:591:PHE:O | 1:DA:595:SER:N | 2.43 | 0.51 |
| 1:DA:662:ILE:HG21 | 1:EA:653:ALA:HB1 | 1.92 | 0.51 |
| 1:DB:460:TYR:CE2 | 1:DB:514:LEU:HD23 | 2.45 | 0.51 |
| 1:DB:543:TYR:CD1 | 1:DB:638:VAL:HG13 | 2.46 | 0.51 |
| 1:EA:279:HIS:O | 1:EA:323:VAL:HG22 | 2.11 | 0.51 |
| 1:F:28:VAL:HG21 | 1:F:98:PRO:HB2 | 1.93 | 0.51 |
| 1:FA:121:LEU:HA | 1:FA:162:ILE:HA | 1.92 | 0.51 |
| 1:FB:460:TYR:O | 1:FB:487:VAL:HG12 | 2.09 | 0.51 |
| 1:GA:9:ARG:HA | 1:GA:34:THR:HA | 1.93 | 0.51 |
| 1:GB:9:ARG:HB3 | 1:GB:34:THR:HG22 | 1.92 | 0.51 |
| 1:H:112:LEU:HD11 | 1:H:150:THR:HG23 | 1.92 | 0.51 |
| 1:HB:583:VAL:HG13 | 1:HB:584:ALA:N | 2.26 | 0.51 |
| 1:IB:144:LEU:HD22 | 1:IB:163:ILE:HD11 | 1.92 | 0.51 |
| 1:J:30:VAL:CG2 | 1:J:50:MET:HE1 | 2.39 | 0.51 |
| 1:J:112:LEU:HD11 | 1:J:153:PRO:HD3 | 1.92 | 0.51 |
| 1:JB:120:ALA:HB2 | 1:JB:205:LEU:HD21 | 1.93 | 0.51 |
| 1:JB:382:LEU:H | 1:JB:405:THR:HG22 | 1.76 | 0.51 |
| 1:K:539:LEU:HD12 | 1:K:540:GLN:H | 1.75 | 0.51 |
| 1:K:787:LEU:HD21 | 1:L:781:VAL:HG12 | 1.93 | 0.51 |
| 1:KA:14:HIS:N | 1:KA:50:MET:HE3 | 2.26 | 0.51 |
| 1:KA:176:LEU:HD23 | 1:KA:196:TRP:O | 2.11 | 0.51 |
| 1:KB:529:ILE:HB | 1:KB:583:VAL:HG11 | 1.93 | 0.51 |
| 1:LB:57:HIS:HA | 1:LB:111:PRO:HA | 1.93 | 0.51 |
| 1:MB:176:LEU:HD23 | 1:MB:196:TRP:O | 2.10 | 0.51 |
| 1:N:654:LEU:HD22 | 1:O:534:HIS:CG | 2.46 | 0.51 |
| 1:NA:216:VAL:HG13 | 1:NA:260:VAL:CG2 | 2.41 | 0.51 |
| 1:NA:529:ILE:HD13 | 1:NA:539:LEU:HB2 | 1.92 | 0.51 |
| 1:O:61:VAL:HG23 | 1:O:64:PRO:HB3 | 1.93 | 0.51 |
| 1:O:73:VAL:HG11 | 1:O:81:VAL:CG2 | 2.40 | 0.51 |
| 1:OA:30:VAL:HG23 | 1:OA:98:PRO:HG3 | 1.92 | 0.51 |
| 1:Q:51:VAL:CG1 | 1:Q:53:VAL:HG23 | 2.40 | 0.51 |
| 1:QA:46:ALA:HB1 | 1:QA:47:PRO:HD2 | 1.92 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:QA:383:ASP:OD1 | 1:RA:398:VAL:HG23 | 2.11 | 0.51 |
| 1:QB:176:LEU:HD21 | 1:QB:196:TRP:CE2 | 2.45 | 0.51 |
| 1:RB:759:LEU:O | 1:RB:762:VAL:HG22 | 2.10 | 0.51 |
| 1:S:221:LEU:HB3 | 1:S:253:VAL:HG22 | 1.93 | 0.51 |
| 1:S:462:VAL:HG21 | 1:S:481:VAL:CG2 | 2.41 | 0.51 |
| 1:SA:462:VAL:HG12 | 1:SA:466:ALA:HB3 | 1.92 | 0.51 |
| 1:T:756:GLU:HA | 1:T:759:LEU:HD12 | 1.92 | 0.51 |
| 1:V:518:LEU:HD11 | 1:V:549:VAL:HB | 1.92 | 0.51 |
| 1:VB:9:ARG:HA | 1:VB:34:THR:HA | 1.92 | 0.51 |
| 1:W:379:ALA:HB1 | 1:W:405:THR:HG22 | 1.93 | 0.51 |
| 1:WA:172:GLN:HB3 | 1:WA:215:LEU:HD11 | 1.93 | 0.51 |
| 1:X:52:THR:HG22 | 1:X:96:PRO:CA | 2.41 | 0.51 |
| 1:Y:16:ILE:HD11 | 1:Y:47:PRO:CD | 2.41 | 0.51 |
| 1:YA:626:ALA:HB3 | 1:YA:635:VAL:HB | 1.93 | 0.51 |
| 1:ZA:45:PHE:CD1 | 1:ZA:48:MET:HE1 | 2.46 | 0.51 |
| 1:ZB:325:VAL:O | 1:ZB:325:VAL:HG13 | 2.10 | 0.51 |
| 1:ZB:498:LEU:HD11 | 1:ZB:516:LEU:HD12 | 1.93 | 0.51 |
| 1:A:167:ILE:HA | 1:A:203:ALA:HA | 1.93 | 0.50 |
| 1:AA:46:ALA:HB1 | 1:AA:47:PRO:CD | 2.41 | 0.50 |
| 1:AA:623:ARG:NH2 | 1:AA:627:VAL:HG22 | 2.27 | 0.50 |
| 1:AB:348:LYS:O | 1:AB:349:VAL:HG23 | 2.12 | 0.50 |
| 1:AB:547:PHE:CZ | 1:AB:561:LEU:HD23 | 2.45 | 0.50 |
| 1:AC:30:VAL:HG23 | 1:AC:50:MET:HE1 | 1.93 | 0.50 |
| 1:AC:728:SER:CB | 1:OA:722:ALA:HB3 | 2.41 | 0.50 |
| 1:C:163:ILE:HD12 | 1:C:206:PRO:HG2 | 1.92 | 0.50 |
| 1:C:349:VAL:HG11 | 1:C:351:HIS:CD2 | 2.46 | 0.50 |
| 1:CA:227:LEU:N | 1:CA:270:VAL:HG13 | 2.25 | 0.50 |
| 1:CA:407:MET:HE3 | 1:CA:408:LEU:N | 2.25 | 0.50 |
| 1:CA:599:ILE:HG13 | 1:CA:603:VAL:HG21 | 1.93 | 0.50 |
| 1:D:228:HIS:HA | 1:D:250:LEU:HD23 | 1.93 | 0.50 |
| 1:DA:173:ALA:HB1 | 1:DA:197:LEU:HD12 | 1.93 | 0.50 |
| 1:DB:52:THR:HG22 | 1:DB:96:PRO:CA | 2.41 | 0.50 |
| 1:DB:227:LEU:HD11 | 1:DB:267:VAL:HG13 | 1.93 | 0.50 |
| 1:FA:352:GLN:O | 1:FA:355:ASP:HB3 | 2.11 | 0.50 |
| 1:FB:363:LEU:C | 1:GB:353:ALA:HB3 | 2.35 | 0.50 |
| 1:FB:392:ASP:HB3 | 1:FB:395:THR:HG22 | 1.92 | 0.50 |
| 1:GA:126:LEU:O | 1:GA:127:LEU:HD22 | 2.11 | 0.50 |
| 1:GA:498:LEU:HB2 | 1:GA:513:ALA:HB3 | 1.91 | 0.50 |
| 1:H:162:ILE:HG22 | 1:H:164:GLN:HE22 | 1.76 | 0.50 |
| 1:HB:582:ALA:O | 1:HB:586:VAL:HG22 | 2.11 | 0.50 |
| 1:I:390:VAL:HG23 | 1:I:390:VAL:O | 2.10 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:IB:767:GLU:HA | 1:IB:770:LEU:HD12 | 1.93 | 0.50 |
| 1:JA:402:ILE:HG22 | 1:JA:403:GLY:N | 2.26 | 0.50 |
| 1:LA:62:ALA:HB2 | 1:LA:106:GLU:HG2 | 1.92 | 0.50 |
| 1:LA:777:LEU:O | 1:LA:781:VAL:HG22 | 2.11 | 0.50 |
| 1:MA:267:VAL:C | 1:MA:268:LEU:HD12 | 2.35 | 0.50 |
| 1:MB:120:ALA:CB | 1:MB:205:LEU:HD21 | 2.41 | 0.50 |
| 1:MB:269:GLY:C | 1:MB:271:VAL:HG13 | 2.36 | 0.50 |
| 1:MB:409:THR:HG1 | 1:MB:412:GLU:CD | 2.19 | 0.50 |
| 1:NA:7:ILE:O | 1:NA:8:ILE:C | 2.54 | 0.50 |
| 1:NA:495:PHE:HD2 | 1:NA:514:LEU:HD11 | 1.76 | 0.50 |
| 1:P:388:ILE:CA | 1:P:457:VAL:HG23 | 2.41 | 0.50 |
| 1:PA:197:LEU:CD2 | 1:PA:216:VAL:HG11 | 2.41 | 0.50 |
| 1:PA:460:TYR:HE2 | 1:PA:468:VAL:HG11 | 1.76 | 0.50 |
| 1:PB:500:LEU:HD11 | 1:PB:513:ALA:CB | 2.38 | 0.50 |
| 1:Q:143:TRP:CA | 1:Q:208:VAL:HG11 | 2.41 | 0.50 |
| 1:Q:389:TYR:CD1 | 1:Q:457:VAL:HG22 | 2.46 | 0.50 |
| 1:QA:69:ALA:HB2 | 1:QA:74:LEU:HD23 | 1.93 | 0.50 |
| 1:QB:8:ILE:H | 1:QB:8:ILE:HD12 | 1.75 | 0.50 |
| 1:RA:285:LEU:HD12 | 1:RA:317:GLU:HA | 1.92 | 0.50 |
| 1:RB:380:ILE:CG2 | 1:RB:388:ILE:HD12 | 2.42 | 0.50 |
| 1:RB:388:ILE:CA | 1:RB:457:VAL:HG23 | 2.41 | 0.50 |
| 1:SB:276:LEU:HD13 | 1:SB:281:TYR:HA | 1.93 | 0.50 |
| 1:T:55:PRO:O | 1:T:56:ARG:HD3 | 2.11 | 0.50 |
| 1:TA:516:LEU:HD23 | 1:TA:561:LEU:HB3 | 1.93 | 0.50 |
| 1:TB:114:VAL:O | 1:TB:114:VAL:HG13 | 2.12 | 0.50 |
| 1:UA:283:VAL:HG22 | 1:UA:301:VAL:HG23 | 1.92 | 0.50 |
| 1:UA:583:VAL:HG21 | 1:UA:591:PHE:HD2 | 1.76 | 0.50 |
| 1:UB:489:LEU:HD22 | 1:UB:493:GLU:C | 2.37 | 0.50 |
| 1:VB:406:TYR:HE2 | 1:VB:408:LEU:HD23 | 1.76 | 0.50 |
| 1:XB:62:ALA:HB3 | 1:XB:106:GLU:CD | 2.36 | 0.50 |
| 1:XB:813:ALA:HB2 | 1:YB:811:ALA:O | 2.10 | 0.50 |
| 1:Y:522:PHE:HA | 1:Y:543:TYR:O | 2.11 | 0.50 |
| 1:YB:173:ALA:O | 1:YB:215:LEU:HD12 | 2.11 | 0.50 |
| 1:ZA:366:VAL:O | 1:ZA:366:VAL:HG13 | 2.11 | 0.50 |
| 1:ZA:408:LEU:HD21 | 1:ZA:414:LEU:HD21 | 1.92 | 0.50 |
| 1:ZB:759:LEU:HA | 1:ZB:762:VAL:HG22 | 1.93 | 0.50 |
| 1:AA:7:ILE:O | 1:AA:8:ILE:C | 2.53 | 0.50 |
| 1:AB:763:GLN:HB3 | 1:ZA:768:LEU:HD11 | 1.92 | 0.50 |
| 1:AC:130:GLU:HG2 | 1:AC:135:ASP:H | 1.76 | 0.50 |
| 1:AC:160:VAL:HG12 | 1:AC:161:GLU:H | 1.75 | 0.50 |
| 1:AC:386:GLU:C | 1:AC:402:ILE:HG23 | 2.35 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AC:702:ALA:HB1 | 1:OA:693:ILE:CG2 | 2.41 | 0.50 |
| 1:BB:115:VAL:HG23 | 1:BB:147:GLY:O | 2.10 | 0.50 |
| 1:DA:65:VAL:HG11 | 1:DA:100:TYR:HB2 | 1.92 | 0.50 |
| 1:E:123:LEU:HD13 | 1:E:151:TYR:CE1 | 2.46 | 0.50 |
| 1:FB:65:VAL:HG13 | 1:FB:103:GLU:HB2 | 1.93 | 0.50 |
| 1:FB:363:LEU:HA | 1:GB:353:ALA:HB3 | 1.93 | 0.50 |
| 1:FB:575:ILE:HD13 | 1:FB:578:ARG:NH1 | 2.27 | 0.50 |
| 1:GA:547:PHE:CD1 | 1:GA:633:LEU:HD13 | 2.46 | 0.50 |
| 1:H:332:LEU:HD23 | 1:H:333:LEU:O | 2.12 | 0.50 |
| 1:HB:173:ALA:CB | 1:HB:197:LEU:HD12 | 2.41 | 0.50 |
| 1:I:56:ARG:O | 1:I:111:PRO:HA | 2.11 | 0.50 |
| 1:I:462:VAL:HG12 | 1:I:466:ALA:HB3 | 1.92 | 0.50 |
| 1:IA:531:THR:HG21 | 1:IA:588:PHE:HB3 | 1.93 | 0.50 |
| 1:IB:389:TYR:CZ | 1:IB:457:VAL:HG22 | 2.46 | 0.50 |
| 1:IB:702:ALA:HB2 | 1:JB:690:ARG:NE | 2.26 | 0.50 |
| 1:L:160:VAL:HG12 | 1:L:161:GLU:N | 2.26 | 0.50 |
| 1:LA:50:MET:HE2 | 1:LA:96:PRO:O | 2.11 | 0.50 |
| 1:M:129:PHE:CZ | 1:M:157:VAL:HG22 | 2.47 | 0.50 |
| 1:MB:82:ARG:O | 1:MB:83:LEU:HD12 | 2.11 | 0.50 |
| 1:N:382:LEU:HD13 | 1:N:387:GLY:HA2 | 1.92 | 0.50 |
| 1:NB:16:ILE:HG21 | 1:NB:43:VAL:HG13 | 1.92 | 0.50 |
| 1:P:288:VAL:HG13 | 1:P:294:ASN:ND2 | 2.26 | 0.50 |
| 1:PA:121:LEU:HA | 1:PA:162:ILE:HA | 1.93 | 0.50 |
| 1:PA:497:VAL:O | 1:PA:498:LEU:HD23 | 2.12 | 0.50 |
| 1:Q:804:PRO:HA | 1:Q:807:ILE:HD12 | 1.94 | 0.50 |
| 1:RB:228:HIS:HA | 1:RB:250:LEU:HD23 | 1.92 | 0.50 |
| 1:S:65:VAL:HG11 | 1:S:100:TYR:HB3 | 1.93 | 0.50 |
| 1:S:325:VAL:O | 1:S:325:VAL:HG13 | 2.11 | 0.50 |
| 1:UB:374:VAL:HG12 | 1:UB:375:GLU:N | 2.25 | 0.50 |
| 1:UB:526:VAL:HG12 | 1:UB:538:GLN:HB2 | 1.93 | 0.50 |
| 1:VB:116:LEU:HB2 | 1:VB:119:THR:HG22 | 1.93 | 0.50 |
| 1:VB:688:LEU:HD13 | 1:WB:679:ARG:HG3 | 1.93 | 0.50 |
| 1:W:393:VAL:HG13 | 1:W:413:VAL:HG12 | 1.93 | 0.50 |
| 1:WA:114:VAL:HG21 | 1:XA:139:ALA:C | 2.37 | 0.50 |
| 1:WB:526:VAL:HG22 | 1:WB:540:GLN:HA | 1.93 | 0.50 |
| 1:XA:175:ARG:HE | 1:XA:213:LEU:HB3 | 1.76 | 0.50 |
| 1:Y:633:LEU:HD12 | 1:Y:634:VAL:H | 1.75 | 0.50 |
| 1:ZA:235:PHE:CE1 | 1:ZA:243:ARG:HB2 | 2.46 | 0.50 |
| 1:ZA:502:ALA:HB2 | 1:ZA:510:ALA:HB2 | 1.91 | 0.50 |
| 1:ZB:324:TYR:CE2 | 1:ZB:373:VAL:HG11 | 2.47 | 0.50 |
| 1:ZB:482:PHE:HB2 | 1:ZB:518:LEU:HD13 | 1.93 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:A:220:ILE:HG22 | 1:A:221:LEU:N | 2.26 | 0.50 |
| 1:AA:36:ILE:HG22 | 1:AA:37:ARG:N | 2.27 | 0.50 |
| 1:AA:408:LEU:HD13 | 1:AA:412:GLU:OE1 | 2.11 | 0.50 |
| 1:AA:798:MET:O | 1:AA:802:ILE:HG22 | 2.11 | 0.50 |
| 1:AB:276:LEU:HD13 | 1:AB:281:TYR:HA | 1.92 | 0.50 |
| 1:BA:104:VAL:HG22 | 1:BA:105:LEU:H | 1.75 | 0.50 |
| 1:BA:462:VAL:N | 1:BA:485:GLU:O | 2.45 | 0.50 |
| 1:BB:405:THR:HG23 | 1:CB:396:GLY:CA | 2.41 | 0.50 |
| 1:CA:119:THR:OG1 | 1:CA:162:ILE:HG22 | 2.12 | 0.50 |
| 1:CB:349:VAL:HG11 | 1:CB:351:HIS:NE2 | 2.26 | 0.50 |
| 1:DA:408:LEU:HD13 | 1:DA:412:GLU:O | 2.11 | 0.50 |
| 1:E:172:GLN:CG | 1:E:215:LEU:HD11 | 2.39 | 0.50 |
| 1:I:205:LEU:HD23 | 1:I:206:PRO:O | 2.10 | 0.50 |
| 1:IB:541:LEU:HD11 | 1:IB:640:VAL:HG13 | 1.93 | 0.50 |
| 1:JA:175:ARG:HA | 1:JA:197:LEU:HD23 | 1.94 | 0.50 |
| 1:JB:410:GLN:O | 1:JB:412:GLU:HG3 | 2.11 | 0.50 |
| 1:JB:468:VAL:HG22 | 1:JB:515:CYS:HA | 1.93 | 0.50 |
| 1:K:45:PHE:CZ | 1:K:48:MET:HE2 | 2.46 | 0.50 |
| 1:LB:187:GLY:O | 1:LB:188:LYS:C | 2.53 | 0.50 |
| 1:LB:775:ALA:HB1 | 1:MB:770:LEU:HD22 | 1.93 | 0.50 |
| 1:M:349:VAL:O | 1:M:349:VAL:HG23 | 2.11 | 0.50 |
| 1:MA:14:HIS:HA | 1:MA:48:MET:O | 2.11 | 0.50 |
| 1:MA:349:VAL:HG11 | 1:MA:351:HIS:CD2 | 2.46 | 0.50 |
| 1:NB:176:LEU:HD21 | 1:NB:196:TRP:NE1 | 2.26 | 0.50 |
| 1:O:276:LEU:HD11 | 1:O:282:CYS:SG | 2.51 | 0.50 |
| 1:P:541:LEU:HD12 | 1:P:639:ASP:O | 2.11 | 0.50 |
| 1:PB:16:ILE:HG21 | 1:PB:43:VAL:HG13 | 1.93 | 0.50 |
| 1:PB:579:VAL:O | 1:PB:583:VAL:HG12 | 2.11 | 0.50 |
| 1:Q:542:ALA:HB3 | 1:Q:639:ASP:O | 2.12 | 0.50 |
| 1:QA:356:HIS:HE1 | 1:QA:374:VAL:HG21 | 1.76 | 0.50 |
| 1:QB:181:GLU:O | 1:QB:182:CYS:SG | 2.69 | 0.50 |
| 1:R:651:ARG:CZ | 1:R:654:LEU:HD12 | 2.42 | 0.50 |
| 1:RA:465:ASN:H | 1:RA:484:PRO:HD3 | 1.77 | 0.50 |
| 1:RB:395:THR:HG23 | 1:RB:397:LYS:HG3 | 1.92 | 0.50 |
| 1:SA:487:VAL:O | 1:SA:487:VAL:HG13 | 2.11 | 0.50 |
| 1:SB:326:LEU:O | 1:SB:362:PRO:HA | 2.11 | 0.50 |
| 1:SB:420:PRO:HG2 | 1:SB:421:PRO:HD3 | 1.94 | 0.50 |
| 1:SB:599:ILE:O | 1:SB:603:VAL:HG23 | 2.12 | 0.50 |
| 1:VB:332:LEU:HD12 | 1:VB:376:GLU:HB2 | 1.93 | 0.50 |
| 1:W:523:PHE:CD2 | 1:W:568:VAL:HG23 | 2.46 | 0.50 |
| 1:X:3:THR:OG1 | 1:X:43:VAL:HG23 | 2.12 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XA:545:TRP:HB2 | 1:XA:633:LEU:HD11 | 1.93 | 0.50 |
| 1:Y:60:THR:HG23 | 1:Y:107:LYS:CE | 2.40 | 0.50 |
| 1:YB:470:VAL:O | 1:YB:478:ALA:HB1 | 2.10 | 0.50 |
| 1:ZA:221:LEU:HD13 | 1:ZA:251:VAL:O | 2.11 | 0.50 |
| 1:A:653:ALA:HB1 | 1:NA:662:ILE:HG21 | 1.92 | 0.50 |
| 1:AA:325:VAL:O | 1:AA:325:VAL:HG13 | 2.10 | 0.50 |
| 1:AB:398:VAL:HG21 | 1:AB:415:TRP:CE3 | 2.46 | 0.50 |
| 1:AC:81:VAL:O | 1:AC:83:LEU:HD12 | 2.11 | 0.50 |
| 1:AC:340:LEU:HD22 | 1:AC:344:GLU:CB | 2.39 | 0.50 |
| 1:BA:120:ALA:O | 1:BA:162:ILE:HG23 | 2.11 | 0.50 |
| 1:BA:325:VAL:HA | 1:BA:364:GLU:HG2 | 1.92 | 0.50 |
| 1:BA:654:LEU:HD22 | 1:CA:534:HIS:HB3 | 1.94 | 0.50 |
| 1:BB:358:LEU:HD21 | 1:BB:360:ARG:HB3 | 1.92 | 0.50 |
| 1:C:61:VAL:HG23 | 1:C:61:VAL:O | 2.12 | 0.50 |
| 1:CB:462:VAL:HG12 | 1:CB:466:ALA:HB3 | 1.92 | 0.50 |
| 1:D:144:LEU:HD22 | 1:D:208:VAL:HG13 | 1.92 | 0.50 |
| 1:D:284:ILE:HD12 | 1:D:287:PRO:CB | 2.41 | 0.50 |
| 1:DB:60:THR:HG22 | 1:DB:90:ILE:HG13 | 1.91 | 0.50 |
| 1:EA:174:LEU:HD12 | 1:EA:214:ASP:O | 2.11 | 0.50 |
| 1:FB:65:VAL:HG11 | 1:FB:100:TYR:CB | 2.41 | 0.50 |
| 1:FB:82:ARG:O | 1:FB:83:LEU:HD12 | 2.11 | 0.50 |
| 1:G:81:VAL:HG13 | 1:G:83:LEU:CD1 | 2.41 | 0.50 |
| 1:G:753:ILE:HG21 | 1:H:744:ALA:C | 2.37 | 0.50 |
| 1:GB:53:VAL:HG23 | 1:GB:109:ILE:HD12 | 1.92 | 0.50 |
| 1:HA:55:PRO:C | 1:HA:56:ARG:HD3 | 2.37 | 0.50 |
| 1:I:121:LEU:HA | 1:I:162:ILE:HG22 | 1.93 | 0.50 |
| 1:I:215:LEU:HD12 | 1:I:216:VAL:H | 1.76 | 0.50 |
| 1:IA:564:VAL:HG11 | 1:IA:567:PHE:HA | 1.94 | 0.50 |
| 1:IB:283:VAL:HG22 | 1:IB:301:VAL:HB | 1.92 | 0.50 |
| 1:IB:539:LEU:HD11 | 1:IB:541:LEU:CD1 | 2.42 | 0.50 |
| 1:JB:414:LEU:HB3 | 1:JB:455:THR:HG21 | 1.93 | 0.50 |
| 1:K:529:ILE:HB | 1:K:583:VAL:HG11 | 1.92 | 0.50 |
| 1:K:761:ARG:HD3 | 1:L:755:THR:HG23 | 1.94 | 0.50 |
| 1:LB:414:LEU:HD12 | 1:LB:455:THR:HG21 | 1.94 | 0.50 |
| 1:NA:63:ASN:ND2 | 1:NA:83:LEU:HD23 | 2.26 | 0.50 |
| 1:NA:411:ASP:OD1 | 1:NA:411:ASP:C | 2.54 | 0.50 |
| 1:O:662:ILE:HG21 | 1:P:653:ALA:HB1 | 1.93 | 0.50 |
| 1:OA:599:ILE:HG21 | 1:OA:640:VAL:CG1 | 2.42 | 0.50 |
| 1:P:143:TRP:CA | 1:P:208:VAL:HG11 | 2.42 | 0.50 |
| 1:P:405:THR:HG23 | 1:Q:396:GLY:N | 2.26 | 0.50 |
| 1:PA:498:LEU:HD22 | 1:PA:565:PRO:HB3 | 1.93 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:PB:82:ARG:C | 1:PB:83:LEU:HD12 | 2.36 | 0.50 |
| 1:Q:363:LEU:N | 1:R:353:ALA:HB3 | 2.26 | 0.50 |
| 1:R:165:ALA:HB1 | 1:R:204:TYR:O | 2.11 | 0.50 |
| 1:R:326:LEU:HD22 | 1:R:331:GLY:CA | 2.42 | 0.50 |
| 1:SA:377:ARG:HB2 | 1:SA:407:MET:HE1 | 1.93 | 0.50 |
| 1:SA:470:VAL:HG12 | 1:SA:493:GLU:OE2 | 2.11 | 0.50 |
| 1:SB:122:HIS:CG | 1:SB:123:LEU:N | 2.80 | 0.50 |
| 1:TA:67:ARG:HG2 | 1:TA:73:VAL:HG22 | 1.92 | 0.50 |
| 1:TA:123:LEU:HD21 | 1:TA:151:TYR:OH | 2.12 | 0.50 |
| 1:TB:233:ARG:HA | 1:TB:245:THR:HG23 | 1.93 | 0.50 |
| 1:TB:527:ILE:HG23 | 1:TB:541:LEU:HD11 | 1.92 | 0.50 |
| 1:UA:388:ILE:HD12 | 1:UA:414:LEU:HD22 | 1.94 | 0.50 |
| 1:UA:527:ILE:HD13 | 1:UA:541:LEU:HD11 | 1.94 | 0.50 |
| 1:VA:165:ALA:HB1 | 1:VA:204:TYR:O | 2.12 | 0.50 |
| 1:VA:714:MET:HA | 1:VA:714:MET:HE3 | 1.92 | 0.50 |
| 1:VB:285:LEU:HD21 | 1:VB:317:GLU:HA | 1.93 | 0.50 |
| 1:VB:746:LEU:HB3 | 1:WB:741:VAL:HG23 | 1.92 | 0.50 |
| 1:WA:542:ALA:HB3 | 1:WA:639:ASP:HB2 | 1.94 | 0.50 |
| 1:X:61:VAL:O | 1:X:61:VAL:HG23 | 2.12 | 0.50 |
| 1:X:746:LEU:HD13 | 1:Y:737:GLY:HA3 | 1.93 | 0.50 |
| 1:X:761:ARG:CG | 1:Y:755:THR:HG21 | 2.41 | 0.50 |
| 1:XA:349:VAL:HG11 | 1:XA:351:HIS:CE1 | 2.46 | 0.50 |
| 1:XB:120:ALA:CB | 1:XB:144:LEU:HD13 | 2.42 | 0.50 |
| 1:XB:143:TRP:HA | 1:XB:208:VAL:HG11 | 1.94 | 0.50 |
| 1:XB:228:HIS:ND1 | 1:XB:268:LEU:HD23 | 2.27 | 0.50 |
| 1:XB:274:THR:N | 1:XB:308:PHE:O | 2.45 | 0.50 |
| 1:XB:333:LEU:HD13 | 1:XB:377:ARG:NH1 | 2.26 | 0.50 |
| 1:Y:274:THR:HG21 | 1:Y:310:LEU:HD12 | 1.93 | 0.50 |
| 1:YA:167:ILE:HG12 | 1:ZA:192:THR:HG22 | 1.92 | 0.50 |
| 1:YB:480:VAL:HG12 | 1:YB:481:VAL:N | 2.26 | 0.50 |
| 1:Z:410:GLN:O | 1:Z:411:ASP:OD1 | 2.30 | 0.50 |
| 1:ZB:225:THR:HB | 1:ZB:270:VAL:HG12 | 1.93 | 0.50 |
| 1:ZB:227:LEU:CD1 | 1:ZB:270:VAL:HG22 | 2.42 | 0.50 |
| 1:A:126:LEU:C | 1:A:127:LEU:HD22 | 2.36 | 0.50 |
| 1:AB:150:THR:O | 1:AB:150:THR:HG23 | 2.12 | 0.50 |
| 1:AC:763:GLN:OE1 | 1:ZB:768:LEU:HD12 | 2.12 | 0.50 |
| 1:BA:276:LEU:HD21 | 1:BA:320:ILE:HG12 | 1.94 | 0.50 |
| 1:CA:144:LEU:C | 1:CA:144:LEU:HD12 | 2.36 | 0.50 |
| 1:CB:625:GLN:HG3 | 1:CB:634:VAL:HG13 | 1.94 | 0.50 |
| 1:D:410:GLN:O | 1:D:411:ASP:OD1 | 2.30 | 0.50 |
| 1:D:418:GLU:C | 1:D:419:LEU:HD22 | 2.37 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:E:58:TYR:CE2 | 1:E:90:ILE:HA | 2.47 | 0.50 |
| 1:EB:168:ILE:HG22 | 1:EB:215:LEU:HD13 | 1.93 | 0.50 |
| 1:FA:283:VAL:CA | 1:FA:302:VAL:HG23 | 2.41 | 0.50 |
| 1:FA:388:ILE:HD12 | 1:FA:414:LEU:HD21 | 1.93 | 0.50 |
| 1:FB:177:ARG:H | 1:FB:213:LEU:HD23 | 1.76 | 0.50 |
| 1:GA:333:LEU:HD22 | 1:GA:377:ARG:CZ | 2.42 | 0.50 |
| 1:GA:746:LEU:HD13 | 1:HA:737:GLY:HA3 | 1.93 | 0.50 |
| 1:GB:8:ILE:H | 1:GB:8:ILE:HD12 | 1.76 | 0.50 |
| 1:GB:55:PRO:O | 1:GB:56:ARG:HG2 | 2.11 | 0.50 |
| 1:H:228:HIS:CE1 | 1:H:268:LEU:HD22 | 2.47 | 0.50 |
| 1:HA:9:ARG:HA | 1:HA:34:THR:HG22 | 1.94 | 0.50 |
| 1:I:75:PHE:CE1 | 1:I:81:VAL:HG23 | 2.47 | 0.50 |
| 1:IA:284:ILE:HD11 | 1:IA:300:ARG:HB3 | 1.93 | 0.50 |
| 1:IA:338:GLN:HB2 | 1:IA:370:LYS:HD2 | 1.94 | 0.50 |
| 1:JB:174:LEU:O | 1:JB:198:VAL:HG12 | 2.11 | 0.50 |
| 1:JB:795:PHE:CE2 | 1:JB:799:THR:HG21 | 2.47 | 0.50 |
| 1:KA:51:VAL:HG23 | 1:KA:97:PHE:O | 2.12 | 0.50 |
| 1:KA:746:LEU:HD11 | 1:LA:738:GLU:OE2 | 2.11 | 0.50 |
| 1:KB:283:VAL:O | 1:KB:316:LEU:HD12 | 2.11 | 0.50 |
| 1:L:535:ALA:HB1 | 1:L:537:LEU:HD23 | 1.94 | 0.50 |
| 1:MA:580:ARG:HA | 1:MA:583:VAL:HG12 | 1.93 | 0.50 |
| 1:MB:72:LEU:HD23 | 1:MB:73:VAL:O | 2.11 | 0.50 |
| 1:O:325:VAL:O | 1:O:325:VAL:HG13 | 2.12 | 0.50 |
| 1:OA:579:VAL:HG22 | 1:OA:603:VAL:HG22 | 1.94 | 0.50 |
| 1:OB:346:GLU:O | 1:OB:347:GLU:HG3 | 2.11 | 0.50 |
| 1:P:398:VAL:HG11 | 1:P:415:TRP:CE3 | 2.46 | 0.50 |
| 1:QA:775:ALA:HB1 | 1:RA:770:LEU:HD22 | 1.93 | 0.50 |
| 1:R:545:TRP:HE3 | 1:R:633:LEU:HD11 | 1.76 | 0.50 |
| 1:RB:335:ARG:HH12 | 1:RB:337:LEU:HD23 | 1.76 | 0.50 |
| 1:S:591:PHE:CZ | 1:S:599:ILE:HD11 | 2.47 | 0.50 |
| 1:TA:526:VAL:HG22 | 1:TA:538:GLN:NE2 | 2.27 | 0.50 |
| 1:TB:539:LEU:HD11 | 1:TB:640:VAL:HG11 | 1.92 | 0.50 |
| 1:V:633:LEU:HD12 | 1:V:634:VAL:N | 2.27 | 0.50 |
| 1:VB:567:PHE:HD2 | 1:VB:633:LEU:HD22 | 1.76 | 0.50 |
| 1:W:537:LEU:HD23 | 1:W:645:PRO:HA | 1.92 | 0.50 |
| 1:W:579:VAL:O | 1:W:583:VAL:HG12 | 2.12 | 0.50 |
| 1:WA:173:ALA:HA | 1:WA:199:THR:HG22 | 1.92 | 0.50 |
| 1:WA:787:LEU:CD2 | 1:XA:781:VAL:HG12 | 2.41 | 0.50 |
| 1:WB:120:ALA:HB1 | 1:WB:144:LEU:CD1 | 2.32 | 0.50 |
| 1:XA:464:HIS:HD1 | 1:YA:496:THR:HA | 1.77 | 0.50 |
| 1:XA:579:VAL:HG23 | 1:XA:603:VAL:HA | 1.93 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:ZB:788:ALA:O | 1:ZB:792:VAL:HG23 | 2.11 | 0.50 |
| 1:B:405:THR:HG23 | 1:C:396:GLY:HA3 | 1.94 | 0.50 |
| 1:B:772:TYR:HD1 | 1:C:770:LEU:HD11 | 1.77 | 0.50 |
| 1:BA:487:VAL:HG22 | 1:BA:488:SER:N | 2.26 | 0.50 |
| 1:BA:802:ILE:HD13 | 1:BA:807:ILE:HG12 | 1.94 | 0.50 |
| 1:BB:283:VAL:HG22 | 1:BB:301:VAL:HB | 1.92 | 0.50 |
| 1:C:5:GLU:OE1 | 1:C:8:ILE:HG13 | 2.11 | 0.50 |
| 1:CA:10:ILE:HG22 | 1:CA:47:PRO:HG3 | 1.92 | 0.50 |
| 1:CB:331:GLY:N | 1:CB:407:MET:HE1 | 2.27 | 0.50 |
| 1:CB:529:ILE:HG22 | 1:CB:580:ARG:HG3 | 1.92 | 0.50 |
| 1:D:165:ALA:HB2 | 1:D:205:LEU:HD13 | 1.93 | 0.50 |
| 1:D:216:VAL:HG22 | 1:D:217:ASP:N | 2.27 | 0.50 |
| 1:DA:402:ILE:HG22 | 1:DA:403:GLY:N | 2.26 | 0.50 |
| 1:DA:541:LEU:HD22 | 1:DA:640:VAL:HG22 | 1.93 | 0.50 |
| 1:DB:260:VAL:O | 1:DB:260:VAL:HG13 | 2.10 | 0.50 |
| 1:E:10:ILE:HG21 | 1:E:16:ILE:HG13 | 1.91 | 0.50 |
| 1:E:212:VAL:O | 1:E:212:VAL:HG23 | 2.11 | 0.50 |
| 1:EA:16:ILE:HG23 | 1:EA:45:PHE:O | 2.12 | 0.50 |
| 1:EA:115:VAL:HG23 | 1:EA:147:GLY:O | 2.11 | 0.50 |
| 1:EA:120:ALA:CB | 1:EA:205:LEU:HD21 | 2.41 | 0.50 |
| 1:EB:223:GLU:CD | 1:EB:253:VAL:HG21 | 2.36 | 0.50 |
| 1:F:10:ILE:HG22 | 1:F:47:PRO:HG3 | 1.94 | 0.50 |
| 1:F:175:ARG:HA | 1:F:197:LEU:HD23 | 1.94 | 0.50 |
| 1:FB:114:VAL:O | 1:FB:114:VAL:HG13 | 2.12 | 0.50 |
| 1:HB:60:THR:HG22 | 1:HB:90:ILE:CA | 2.41 | 0.50 |
| 1:I:62:ALA:HA | 1:I:88:LEU:HD23 | 1.93 | 0.50 |
| 1:IA:424:GLU:HG2 | 1:IA:425:GLU:N | 2.27 | 0.50 |
| 1:IB:333:LEU:O | 1:IB:334:LEU:HD23 | 2.11 | 0.50 |
| 1:JA:221:LEU:HD13 | 1:JA:252:THR:C | 2.37 | 0.50 |
| 1:JB:381:PRO:HA | 1:JB:405:THR:HG22 | 1.94 | 0.50 |
| 1:KB:3:THR:HG22 | 1:KB:3:THR:O | 2.11 | 0.50 |
| 1:LB:8:ILE:HD12 | 1:LB:8:ILE:H | 1.75 | 0.50 |
| 1:LB:530:GLU:HA | 1:LB:535:ALA:O | 2.12 | 0.50 |
| 1:N:806:THR:HG23 | 1:O:808:ARG:NE | 2.27 | 0.50 |
| 1:NB:332:LEU:HD11 | 1:NB:374:VAL:O | 2.11 | 0.50 |
| 1:O:388:ILE:N | 1:O:457:VAL:HG23 | 2.26 | 0.50 |
| 1:OA:489:LEU:HD11 | 1:OA:495:PHE:CE2 | 2.47 | 0.50 |
| 1:OB:53:VAL:HG22 | 1:OB:109:ILE:CD1 | 2.42 | 0.50 |
| 1:OB:662:ILE:HD12 | 1:PB:653:ALA:HB1 | 1.93 | 0.50 |
| 1:P:174:LEU:HD21 | 1:P:212:VAL:HB | 1.93 | 0.50 |
| 1:P:405:THR:HG21 | 1:Q:393:VAL:O | 2.11 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:PA:703:ARG:HA | 1:QA:693:ILE:HG21 | 1.94 | 0.50 |
| 1:QA:27:ARG:HG2 | 1:QA:28:VAL:N | 2.27 | 0.50 |
| 1:RB:340:LEU:HD12 | 1:RB:351:HIS:ND1 | 2.26 | 0.50 |
| 1:T:56:ARG:HD2 | 1:V:127:LEU:HD21 | 1.93 | 0.50 |
| 1:UB:59:CYS:SG | 1:UB:109:ILE:HD13 | 2.51 | 0.50 |
| 1:UB:743:GLN:HA | 1:UB:746:LEU:HD12 | 1.94 | 0.50 |
| 1:V:453:ASN:HB3 | 1:V:456:ARG:HB3 | 1.93 | 0.50 |
| 1:VA:59:CYS:HB3 | 1:VA:105:LEU:HD13 | 1.92 | 0.50 |
| 1:W:119:THR:HG21 | 1:W:162:ILE:HG23 | 1.93 | 0.50 |
| 1:WB:276:LEU:CD1 | 1:WB:302:VAL:HG12 | 2.42 | 0.50 |
| 1:X:220:ILE:CD1 | 1:Y:245:THR:HG21 | 2.42 | 0.50 |
| 1:X:227:LEU:O | 1:X:251:VAL:HG22 | 2.11 | 0.50 |
| 1:XA:115:VAL:O | 1:XA:148:PRO:HA | 2.11 | 0.50 |
| 1:XB:567:PHE:CE2 | 1:XB:633:LEU:HD22 | 2.47 | 0.50 |
| 1:YA:167:ILE:HG23 | 1:ZA:193:GLY:HA3 | 1.94 | 0.50 |
| 1:ZA:575:ILE:HD12 | 1:ZA:603:VAL:HG13 | 1.93 | 0.50 |
| 1:ZA:763:GLN:NE2 | 1:ZA:764:LYS:HG3 | 2.27 | 0.50 |
| 1:ZB:469:GLN:HB2 | 1:ZB:480:VAL:HG22 | 1.93 | 0.50 |
| 1:A:105:LEU:HD11 | 1:A:107:LYS:C | 2.37 | 0.50 |
| 1:AA:772:TYR:CE1 | 1:BA:770:LEU:HD11 | 2.47 | 0.50 |
| 1:AA:792:VAL:HG13 | 1:Z:798:MET:CE | 2.42 | 0.50 |
| 1:AB:168:ILE:HD13 | 1:AB:198:VAL:HG13 | 1.94 | 0.50 |
| 1:AB:337:LEU:HB3 | 1:ZA:279:HIS:CD2 | 2.46 | 0.50 |
| 1:AB:529:ILE:HD12 | 1:AB:583:VAL:HG21 | 1.93 | 0.50 |
| 1:AC:129:PHE:CE1 | 1:AC:137:VAL:HG21 | 2.47 | 0.50 |
| 1:AC:144:LEU:HD22 | 1:AC:163:ILE:CD1 | 2.42 | 0.50 |
| 1:B:16:ILE:HG22 | 1:B:17:HIS:O | 2.12 | 0.50 |
| 1:BB:516:LEU:HD21 | 1:BB:547:PHE:CE1 | 2.46 | 0.50 |
| 1:CA:226:ALA:C | 1:CA:270:VAL:HG13 | 2.36 | 0.50 |
| 1:DA:201:VAL:O | 1:DA:201:VAL:HG12 | 2.12 | 0.50 |
| 1:DB:104:VAL:HG22 | 1:DB:105:LEU:H | 1.76 | 0.50 |
| 1:DB:502:ALA:HB2 | 1:DB:511:ARG:HB2 | 1.94 | 0.50 |
| 1:E:227:LEU:HD13 | 1:E:270:VAL:HG22 | 1.92 | 0.50 |
| 1:EA:9:ARG:HB3 | 1:EA:34:THR:HG22 | 1.94 | 0.50 |
| 1:EA:116:LEU:HB2 | 1:EA:119:THR:HG22 | 1.94 | 0.50 |
| 1:EA:398:VAL:HG21 | 1:EA:415:TRP:CD2 | 2.46 | 0.50 |
| 1:EB:68:ASP:OD1 | 1:EB:74:LEU:HD12 | 2.12 | 0.50 |
| 1:FB:17:HIS:HA | 1:FB:28:VAL:HA | 1.94 | 0.50 |
| 1:HA:717:GLU:O | 1:HA:721:THR:HG23 | 2.11 | 0.50 |
| 1:I:131:ASP:O | 1:I:132:LYS:CG | 2.59 | 0.50 |
| 1:J:167:ILE:O | 1:J:167:ILE:HG13 | 2.12 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:K:211:GLU:HG2 | 1:K:213:LEU:HD22 | 1.92 | 0.50 |
| 1:KA:221:LEU:HD13 | 1:KA:252:THR:O | 2.12 | 0.50 |
| 1:KB:227:LEU:O | 1:KB:251:VAL:HG22 | 2.12 | 0.50 |
| 1:L:349:VAL:HG11 | 1:L:351:HIS:NE2 | 2.26 | 0.50 |
| 1:LB:162:ILE:HG22 | 1:LB:163:ILE:N | 2.27 | 0.50 |
| 1:N:628:PHE:CE1 | 1:N:635:VAL:HG23 | 2.47 | 0.50 |
| 1:Q:53:VAL:HG11 | 1:Q:93:ALA:HB1 | 1.92 | 0.50 |
| 1:Q:260:VAL:O | 1:Q:260:VAL:HG13 | 2.11 | 0.50 |
| 1:QB:30:VAL:HG22 | 1:QB:31:GLY:N | 2.27 | 0.50 |
| 1:QB:227:LEU:HD23 | 1:QB:229:LEU:HD21 | 1.94 | 0.50 |
| 1:QB:470:VAL:HG13 | 1:QB:494:GLN:O | 2.12 | 0.50 |
| 1:R:393:VAL:HG22 | 1:R:411:ASP:C | 2.37 | 0.50 |
| 1:RA:658:VAL:HG23 | 1:SA:533:ASP:HB2 | 1.93 | 0.50 |
| 1:RB:539:LEU:HD11 | 1:RB:541:LEU:HD21 | 1.93 | 0.50 |
| 1:SA:495:PHE:CG | 1:SA:514:LEU:HD11 | 2.47 | 0.50 |
| 1:T:281:TYR:CE1 | 1:T:283:VAL:HG23 | 2.47 | 0.50 |
| 1:T:546:HIS:CE1 | 1:T:634:VAL:HG11 | 2.47 | 0.50 |
| 1:UA:539:LEU:HD22 | 1:UA:579:VAL:HG11 | 1.93 | 0.50 |
| 1:V:9:ARG:HG2 | 1:V:34:THR:HG22 | 1.93 | 0.50 |
| 1:VA:212:VAL:O | 1:VA:212:VAL:HG23 | 2.12 | 0.50 |
| 1:VB:410:GLN:O | 1:VB:411:ASP:OD1 | 2.30 | 0.50 |
| 1:VB:416:GLU:HG2 | 1:VB:455:THR:HG22 | 1.94 | 0.50 |
| 1:W:168:ILE:HD11 | 1:W:200:THR:OG1 | 2.11 | 0.50 |
| 1:W:220:ILE:CD1 | 1:X:245:THR:HG21 | 2.41 | 0.50 |
| 1:XA:107:LYS:HD3 | 1:XA:108:ASP:O | 2.11 | 0.50 |
| 1:XA:381:PRO:C | 1:XA:382:LEU:HD12 | 2.37 | 0.50 |
| 1:XB:16:ILE:HG23 | 1:XB:45:PHE:O | 2.12 | 0.50 |
| 1:YA:500:LEU:HD12 | 1:YA:513:ALA:HB2 | 1.93 | 0.50 |
| 1:YB:157:VAL:HG12 | 1:YB:158:GLU:N | 2.26 | 0.50 |
| 1:YB:166:THR:HG21 | 1:YB:174:LEU:HD22 | 1.94 | 0.50 |
| 1:Z:56:ARG:O | 1:Z:111:PRO:HA | 2.12 | 0.50 |
| 1:Z:749:GLN:O | 1:Z:753:ILE:HD12 | 2.12 | 0.50 |
| 1:AA:324:TYR:HD2 | 1:AA:332:LEU:HD11 | 1.77 | 0.50 |
| 1:AA:458:VAL:CG1 | 1:AA:489:LEU:HD12 | 2.42 | 0.50 |
| 1:AB:221:LEU:CD2 | 1:AB:270:VAL:HG13 | 2.42 | 0.50 |
| 1:AB:392:ASP:OD1 | 1:AB:395:THR:HG22 | 2.11 | 0.50 |
| 1:AC:167:ILE:HA | 1:AC:203:ALA:HB1 | 1.94 | 0.50 |
| 1:AC:336:ALA:HB2 | 1:AC:357:TRP:CZ3 | 2.46 | 0.50 |
| 1:C:13:TYR:HB2 | 1:C:49:ARG:NH1 | 2.27 | 0.50 |
| 1:CA:405:THR:HG23 | 1:DA:396:GLY:CA | 2.41 | 0.50 |
| 1:CA:418:GLU:O | 1:CA:419:LEU:HD23 | 2.11 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:CB:341:GLU:O | 1:CB:342:GLU:HB2 | 2.12 | 0.50 |
| 1:CB:382:LEU:HD22 | 1:CB:387:GLY:HA2 | 1.94 | 0.50 |
| 1:D:382:LEU:H | 1:D:405:THR:HG22 | 1.77 | 0.50 |
| 1:D:416:GLU:HG2 | 1:D:455:THR:HG22 | 1.94 | 0.50 |
| 1:E:334:LEU:HD12 | 1:E:357:TRP:NE1 | 2.26 | 0.50 |
| 1:F:114:VAL:O | 1:F:114:VAL:HG13 | 2.11 | 0.50 |
| 1:FB:374:VAL:HG12 | 1:FB:375:GLU:N | 2.26 | 0.50 |
| 1:FB:539:LEU:HD12 | 1:FB:642:SER:O | 2.12 | 0.50 |
| 1:G:7:ILE:O | 1:G:8:ILE:C | 2.54 | 0.50 |
| 1:G:121:LEU:HD11 | 1:G:123:LEU:HD21 | 1.93 | 0.50 |
| 1:GB:60:THR:HB | 1:GB:88:LEU:HD21 | 1.94 | 0.50 |
| 1:GB:122:HIS:CD2 | 1:GB:208:VAL:HG12 | 2.47 | 0.50 |
| 1:GB:661:ALA:HB1 | 1:HB:588:PHE:HE1 | 1.76 | 0.50 |
| 1:GB:768:LEU:HD23 | 1:GB:769:GLU:N | 2.27 | 0.50 |
| 1:H:273:ILE:HD13 | 1:I:296:LEU:CD1 | 2.42 | 0.50 |
| 1:HA:115:VAL:HG23 | 1:HA:147:GLY:O | 2.11 | 0.50 |
| 1:HA:411:ASP:OD1 | 1:HA:411:ASP:C | 2.55 | 0.50 |
| 1:HA:416:GLU:HG3 | 1:HA:455:THR:HG22 | 1.94 | 0.50 |
| 1:HB:480:VAL:HG21 | 1:HB:558:THR:HB | 1.94 | 0.50 |
| 1:I:772:TYR:CD1 | 1:J:770:LEU:HD11 | 2.47 | 0.50 |
| 1:IB:340:LEU:HD12 | 1:IB:351:HIS:ND1 | 2.27 | 0.50 |
| 1:JB:165:ALA:HA | 1:JB:205:LEU:HA | 1.94 | 0.50 |
| 1:JB:285:LEU:HD11 | 1:JB:317:GLU:HA | 1.93 | 0.50 |
| 1:JB:523:PHE:CZ | 1:JB:568:VAL:HG23 | 2.47 | 0.50 |
| 1:KA:333:LEU:HD23 | 1:KA:374:VAL:CG1 | 2.42 | 0.50 |
| 1:KB:61:VAL:O | 1:KB:61:VAL:HG23 | 2.12 | 0.50 |
| 1:LB:482:PHE:CE2 | 1:LB:549:VAL:HG11 | 2.47 | 0.50 |
| 1:M:301:VAL:O | 1:M:301:VAL:HG13 | 2.12 | 0.50 |
| 1:MA:179:ARG:O | 1:MA:192:THR:HG23 | 2.12 | 0.50 |
| 1:MA:779:LEU:HD21 | 1:NA:774:ARG:NE | 2.27 | 0.50 |
| 1:MB:531:THR:HG21 | 1:MB:588:PHE:CB | 2.39 | 0.50 |
| 1:MB:583:VAL:HG13 | 1:MB:584:ALA:N | 2.27 | 0.50 |
| 1:NA:179:ARG:HE | 1:NA:209:PHE:HA | 1.76 | 0.50 |
| 1:NA:549:VAL:HG21 | 1:NA:552:ARG:NH2 | 2.27 | 0.50 |
| 1:NB:126:LEU:C | 1:NB:127:LEU:HD22 | 2.37 | 0.50 |
| 1:OB:533:ASP:OD1 | 1:OB:535:ALA:HB2 | 2.11 | 0.50 |
| 1:P:19:LEU:HB2 | 1:P:44:LEU:HD21 | 1.93 | 0.50 |
| 1:P:333:LEU:HD12 | 1:P:357:TRP:C | 2.37 | 0.50 |
| 1:PA:358:LEU:HD21 | 1:PA:360:ARG:HB2 | 1.93 | 0.50 |
| 1:PA:502:ALA:HB2 | 1:PA:511:ARG:HD3 | 1.93 | 0.50 |
| 1:PB:790:VAL:HG22 | 1:QB:785:GLN:HG2 | 1.93 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:R:346:GLU:O | 1:R:347:GLU:CB | 2.59 | 0.50 |
| 1:RA:212:VAL:O | 1:RA:212:VAL:HG23 | 2.12 | 0.50 |
| 1:RA:229:LEU:HD13 | 1:RA:265:GLU:OE1 | 2.11 | 0.50 |
| 1:RB:460:TYR:O | 1:RB:486:LEU:HD12 | 2.12 | 0.50 |
| 1:S:795:PHE:O | 1:S:799:THR:HG23 | 2.12 | 0.50 |
| 1:TB:540:GLN:O | 1:TB:640:VAL:HG13 | 2.12 | 0.50 |
| 1:VB:56:ARG:HD3 | 1:WB:127:LEU:HD21 | 1.93 | 0.50 |
| 1:VB:380:ILE:HD12 | 1:VB:380:ILE:H | 1.77 | 0.50 |
| 1:VB:537:LEU:C | 1:VB:646:VAL:HG23 | 2.37 | 0.50 |
| 1:WA:533:ASP:O | 1:WA:534:HIS:HB3 | 2.12 | 0.50 |
| 1:WA:761:ARG:O | 1:WA:765:VAL:HG23 | 2.12 | 0.50 |
| 1:WB:798:MET:O | 1:WB:802:ILE:HG22 | 2.11 | 0.50 |
| 1:WB:812:VAL:HG23 | 1:WB:812:VAL:O | 2.11 | 0.50 |
| 1:X:6:PHE:O | 1:X:36:ILE:HA | 2.12 | 0.50 |
| 1:YA:276:LEU:HD22 | 1:YA:303:LYS:O | 2.11 | 0.50 |
| 1:YA:539:LEU:HD11 | 1:YA:640:VAL:HG12 | 1.93 | 0.50 |
| 1:YB:283:VAL:HG13 | 1:YB:300:ARG:C | 2.37 | 0.50 |
| 1:YB:489:LEU:HD11 | 1:YB:495:PHE:CZ | 2.47 | 0.50 |
| 1:Z:541:LEU:CG | 1:Z:640:VAL:HG22 | 2.42 | 0.50 |
| 1:ZB:105:LEU:HD21 | 1:ZB:108:ASP:HA | 1.93 | 0.50 |
| 1:ZB:542:ALA:HB3 | 1:ZB:639:ASP:OD1 | 2.12 | 0.50 |
| 1:A:276:LEU:HD13 | 1:A:281:TYR:HA | 1.92 | 0.50 |
| 1:A:547:PHE:CZ | 1:A:633:LEU:HD13 | 2.47 | 0.50 |
| 1:AA:273:ILE:O | 1:AA:273:ILE:HG23 | 2.12 | 0.50 |
| 1:AA:529:ILE:CG1 | 1:AA:583:VAL:HG21 | 2.42 | 0.50 |
| 1:AA:654:LEU:HD22 | 1:BA:534:HIS:CG | 2.47 | 0.50 |
| 1:AB:251:VAL:O | 1:AB:251:VAL:HG23 | 2.11 | 0.50 |
| 1:AB:381:PRO:HA | 1:AB:405:THR:HG22 | 1.93 | 0.50 |
| 1:AC:144:LEU:HD12 | 1:AC:145:PHE:N | 2.27 | 0.50 |
| 1:AC:166:THR:HG22 | 1:AC:204:TYR:O | 2.12 | 0.50 |
| 1:B:13:TYR:HA | 1:B:50:MET:SD | 2.52 | 0.50 |
| 1:BA:316:LEU:HD21 | 1:BA:320:ILE:HG13 | 1.94 | 0.50 |
| 1:BA:643:VAL:CG2 | 1:CA:580:ARG:HE | 2.22 | 0.50 |
| 1:BA:741:VAL:O | 1:BA:744:ALA:HB3 | 2.11 | 0.50 |
| 1:C:388:ILE:N | 1:C:457:VAL:HG23 | 2.27 | 0.50 |
| 1:CA:53:VAL:HG21 | 1:CA:93:ALA:C | 2.37 | 0.50 |
| 1:CB:56:ARG:O | 1:CB:111:PRO:HA | 2.12 | 0.50 |
| 1:CB:529:ILE:CG1 | 1:CB:583:VAL:HG11 | 2.41 | 0.50 |
| 1:D:6:PHE:O | 1:D:37:ARG:N | 2.45 | 0.50 |
| 1:E:271:VAL:HG22 | 1:E:272:PRO:O | 2.12 | 0.50 |
| 1:E:529:ILE:HD12 | 1:E:583:VAL:HG21 | 1.93 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:EA:73:VAL:HG21 | 1:EA:100:TYR:CE2 | 2.46 | 0.50 |
| 1:EA:224:LYS:CD | 1:FA:296:LEU:HD11 | 2.42 | 0.50 |
| 1:F:13:TYR:HA | 1:F:50:MET:SD | 2.52 | 0.50 |
| 1:F:389:TYR:HD2 | 1:F:457:VAL:HG22 | 1.76 | 0.50 |
| 1:G:60:THR:HG22 | 1:G:90:ILE:HG13 | 1.92 | 0.50 |
| 1:GA:786:GLN:HB2 | 1:HA:781:VAL:HG11 | 1.94 | 0.50 |
| 1:GB:331:GLY:O | 1:GB:332:LEU:C | 2.55 | 0.50 |
| 1:H:276:LEU:HD11 | 1:H:302:VAL:HG12 | 1.94 | 0.50 |
| 1:I:228:HIS:HA | 1:I:250:LEU:HD23 | 1.92 | 0.50 |
| 1:I:281:TYR:HB3 | 1:I:323:VAL:HG13 | 1.93 | 0.50 |
| 1:I:366:VAL:O | 1:I:366:VAL:HG13 | 2.10 | 0.50 |
| 1:I:758:GLU:O | 1:I:762:VAL:HG13 | 2.11 | 0.50 |
| 1:IB:529:ILE:HD12 | 1:IB:583:VAL:HG21 | 1.94 | 0.50 |
| 1:IB:645:PRO:HB3 | 1:IB:650:THR:HG21 | 1.94 | 0.50 |
| 1:J:221:LEU:HD11 | 1:J:251:VAL:HG23 | 1.92 | 0.50 |
| 1:JB:67:ARG:HA | 1:JB:73:VAL:HA | 1.93 | 0.50 |
| 1:K:19:LEU:HB2 | 1:K:44:LEU:HD11 | 1.94 | 0.50 |
| 1:K:81:VAL:HG21 | 1:K:100:TYR:HD2 | 1.77 | 0.50 |
| 1:K:212:VAL:O | 1:K:212:VAL:HG23 | 2.12 | 0.50 |
| 1:LB:73:VAL:HG21 | 1:LB:100:TYR:CE2 | 2.47 | 0.50 |
| 1:M:173:ALA:O | 1:M:215:LEU:HD12 | 2.12 | 0.50 |
| 1:MA:137:VAL:HG12 | 1:MA:138:VAL:N | 2.27 | 0.50 |
| 1:MB:654:LEU:HD22 | 1:NB:534:HIS:CE1 | 2.47 | 0.50 |
| 1:O:53:VAL:HG22 | 1:O:59:CYS:SG | 2.52 | 0.50 |
| 1:O:129:PHE:CZ | 1:O:137:VAL:HG11 | 2.47 | 0.50 |
| 1:O:311:GLN:HB3 | 1:O:312:PRO:HD2 | 1.94 | 0.50 |
| 1:O:518:LEU:HD12 | 1:O:547:PHE:HB3 | 1.94 | 0.50 |
| 1:O:539:LEU:HD13 | 1:O:642:SER:O | 2.12 | 0.50 |
| 1:OA:6:PHE:O | 1:OA:36:ILE:HD12 | 2.11 | 0.50 |
| 1:OA:425:GLU:HG3 | 1:OA:458:VAL:HG13 | 1.93 | 0.50 |
| 1:PA:221:LEU:HD12 | 1:PA:256:THR:HG23 | 1.93 | 0.50 |
| 1:PA:389:TYR:CE2 | 1:PA:458:VAL:HG23 | 2.47 | 0.50 |
| 1:PA:627:VAL:O | 1:PA:627:VAL:HG23 | 2.11 | 0.50 |
| 1:QB:126:LEU:HD21 | 1:QB:158:GLU:HB3 | 1.93 | 0.50 |
| 1:RA:115:VAL:HG23 | 1:RA:147:GLY:O | 2.11 | 0.50 |
| 1:RA:529:ILE:HA | 1:RA:583:VAL:HG11 | 1.94 | 0.50 |
| 1:S:627:VAL:HG12 | 1:S:633:LEU:O | 2.12 | 0.50 |
| 1:SA:88:LEU:HD22 | 1:SA:106:GLU:OE1 | 2.12 | 0.50 |
| 1:SA:333:LEU:HD13 | 1:SA:377:ARG:NH1 | 2.27 | 0.50 |
| 1:TA:206:PRO:HG3 | 1:TA:212:VAL:HG13 | 1.94 | 0.50 |
| 1:TB:336:ALA:HA | 1:TB:371:VAL:HG22 | 1.94 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UA:71:GLY:O | 1:UA:72:LEU:HD12 | 2.11 | 0.50 |
| 1:UA:473:TYR:HB2 | 1:UA:492:GLU:HG3 | 1.92 | 0.50 |
| 1:UB:175:ARG:HA | 1:UB:197:LEU:HD23 | 1.94 | 0.50 |
| 1:UB:539:LEU:HD23 | 1:UB:539:LEU:C | 2.36 | 0.50 |
| 1:V:115:VAL:HG12 | 1:V:119:THR:HG21 | 1.94 | 0.50 |
| 1:VB:767:GLU:OE2 | 1:VB:771:VAL:HG21 | 2.12 | 0.50 |
| 1:WA:787:LEU:HD23 | 1:XA:781:VAL:HG12 | 1.94 | 0.50 |
| 1:WB:105:LEU:C | 1:WB:105:LEU:HD23 | 2.37 | 0.50 |
| 1:X:539:LEU:HD12 | 1:X:540:GLN:N | 2.27 | 0.50 |
| 1:XA:502:ALA:HA | 1:XA:568:VAL:HG21 | 1.93 | 0.50 |
| 1:XA:531:THR:CG2 | 1:XA:537:LEU:HD12 | 2.42 | 0.50 |
| 1:XB:283:VAL:HG22 | 1:XB:301:VAL:CA | 2.40 | 0.50 |
| 1:YA:405:THR:HG23 | 1:ZA:396:GLY:N | 2.27 | 0.50 |
| 1:YB:310:LEU:HD11 | 1:YB:316:LEU:H | 1.77 | 0.50 |
| 1:YB:392:ASP:OD2 | 1:YB:395:THR:HG22 | 2.11 | 0.50 |
| 1:Z:281:TYR:HB3 | 1:Z:323:VAL:HG12 | 1.92 | 0.50 |
| 1:ZB:229:LEU:C | 1:ZB:268:LEU:HD13 | 2.37 | 0.50 |
| 1:AA:737:GLY:O | 1:AA:741:VAL:HG23 | 2.11 | 0.49 |
| 1:AB:230:ARG:HB2 | 1:AB:268:LEU:HD13 | 1.94 | 0.49 |
| 1:AB:337:LEU:HA | 1:ZA:325:VAL:HG21 | 1.92 | 0.49 |
| 1:AC:415:TRP:O | 1:AC:455:THR:HA | 2.12 | 0.49 |
| 1:B:462:VAL:HG12 | 1:B:483:GLY:O | 2.12 | 0.49 |
| 1:BB:461:ARG:HA | 1:BB:486:LEU:HA | 1.94 | 0.49 |
| 1:C:7:ILE:O | 1:C:8:ILE:C | 2.55 | 0.49 |
| 1:C:18:VAL:HA | 1:C:44:LEU:HD23 | 1.94 | 0.49 |
| 1:CA:104:VAL:HG22 | 1:CA:105:LEU:N | 2.27 | 0.49 |
| 1:DB:591:PHE:HA | 1:DB:594:ASN:HB2 | 1.94 | 0.49 |
| 1:E:628:PHE:HB2 | 1:E:633:LEU:HB3 | 1.94 | 0.49 |
| 1:FA:758:GLU:O | 1:FA:762:VAL:HG22 | 2.12 | 0.49 |
| 1:FB:207:ALA:HB3 | 1:FB:210:GLU:HG3 | 1.93 | 0.49 |
| 1:FB:227:LEU:O | 1:FB:251:VAL:HG22 | 2.12 | 0.49 |
| 1:G:801:ALA:HB3 | 1:H:795:PHE:HE2 | 1.76 | 0.49 |
| 1:H:130:GLU:HA | 1:H:135:ASP:HA | 1.93 | 0.49 |
| 1:H:248:GLU:OE2 | 1:H:268:LEU:HD21 | 2.12 | 0.49 |
| 1:HB:121:LEU:HA | 1:HB:162:ILE:HA | 1.94 | 0.49 |
| 1:IA:60:THR:HG22 | 1:IA:107:LYS:CB | 2.42 | 0.49 |
| 1:IA:179:ARG:HE | 1:IA:209:PHE:HA | 1.77 | 0.49 |
| 1:IA:179:ARG:O | 1:IA:192:THR:HG23 | 2.12 | 0.49 |
| 1:JA:80:GLN:NE2 | 1:JA:81:VAL:HG12 | 2.28 | 0.49 |
| 1:JB:104:VAL:HG22 | 1:JB:105:LEU:N | 2.27 | 0.49 |
| 1:KA:123:LEU:HD11 | 1:KA:145:PHE:HB2 | 1.94 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:KA:137:VAL:HG12 | 1:KA:138:VAL:N | 2.27 | 0.49 |
| 1:KA:176:LEU:HD21 | 1:KA:196:TRP:NE1 | 2.27 | 0.49 |
| 1:KB:168:ILE:O | 1:KB:168:ILE:HG23 | 2.12 | 0.49 |
| 1:KB:778:GLU:HA | 1:KB:781:VAL:HG22 | 1.93 | 0.49 |
| 1:LB:37:ARG:N | 1:LB:37:ARG:HD2 | 2.27 | 0.49 |
| 1:M:154:ARG:HB3 | 1:M:157:VAL:HG23 | 1.93 | 0.49 |
| 1:M:205:LEU:HD12 | 1:M:206:PRO:HD2 | 1.94 | 0.49 |
| 1:MB:176:LEU:HD21 | 1:MB:196:TRP:CD1 | 2.47 | 0.49 |
| 1:NA:37:ARG:HG2 | 1:NA:43:VAL:HG21 | 1.94 | 0.49 |
| 1:NA:359:ILE:O | 1:NA:359:ILE:HG23 | 2.12 | 0.49 |
| 1:NB:410:GLN:O | 1:NB:411:ASP:OD1 | 2.30 | 0.49 |
| 1:OB:530:GLU:HA | 1:OB:535:ALA:O | 2.12 | 0.49 |
| 1:PB:331:GLY:C | 1:PB:358:LEU:HD11 | 2.37 | 0.49 |
| 1:PB:334:LEU:HD21 | 1:PB:359:ILE:HG21 | 1.94 | 0.49 |
| 1:PB:750:ALA:HB2 | 1:QB:741:VAL:HG22 | 1.94 | 0.49 |
| 1:QA:28:VAL:HG22 | 1:QA:29:GLU:O | 2.12 | 0.49 |
| 1:QA:81:VAL:HG13 | 1:QA:83:LEU:HD11 | 1.93 | 0.49 |
| 1:QB:60:THR:HG22 | 1:QB:107:LYS:HB2 | 1.93 | 0.49 |
| 1:R:405:THR:HG23 | 1:S:395:THR:C | 2.37 | 0.49 |
| 1:S:772:TYR:HD1 | 1:T:770:LEU:HD11 | 1.76 | 0.49 |
| 1:SA:227:LEU:HD21 | 1:SA:229:LEU:HD21 | 1.94 | 0.49 |
| 1:SB:757:ALA:HB2 | 1:TB:748:ALA:HB1 | 1.94 | 0.49 |
| 1:TB:537:LEU:HD23 | 1:TB:645:PRO:CA | 2.41 | 0.49 |
| 1:UA:7:ILE:HA | 1:UA:36:ILE:HD13 | 1.93 | 0.49 |
| 1:VB:366:VAL:O | 1:VB:366:VAL:HG13 | 2.12 | 0.49 |
| 1:W:363:LEU:HA | 1:X:353:ALA:HB3 | 1.93 | 0.49 |
| 1:W:769:GLU:O | 1:W:772:TYR:HB3 | 2.12 | 0.49 |
| 1:WB:468:VAL:HG12 | 1:WB:469:GLN:N | 2.28 | 0.49 |
| 1:XA:414:LEU:HD22 | 1:XA:455:THR:HB | 1.93 | 0.49 |
| 1:Y:16:ILE:CG2 | 1:Y:43:VAL:HG13 | 2.42 | 0.49 |
| 1:YA:388:ILE:HG13 | 1:YA:390:VAL:HG13 | 1.93 | 0.49 |
| 1:YB:3:THR:HG22 | 1:YB:6:PHE:CD1 | 2.47 | 0.49 |
| 1:ZB:221:LEU:HD12 | 1:ZB:256:THR:O | 2.12 | 0.49 |
| 1:ZB:283:VAL:HG22 | 1:ZB:301:VAL:HA | 1.93 | 0.49 |
| 1:ZB:541:LEU:HD11 | 1:ZB:638:VAL:CG1 | 2.42 | 0.49 |
| 1:ZB:541:LEU:HD13 | 1:ZB:640:VAL:HG22 | 1.92 | 0.49 |
| 1:A:526:VAL:HG13 | 1:A:539:LEU:O | 2.12 | 0.49 |
| 1:AC:3:THR:N | 1:AC:43:VAL:HG23 | 2.27 | 0.49 |
| 1:AC:470:VAL:HG22 | 1:AC:495:PHE:HD1 | 1.77 | 0.49 |
| 1:BB:228:HIS:HA | 1:BB:250:LEU:HD23 | 1.94 | 0.49 |
| 1:CB:777:LEU:O | 1:CB:781:VAL:HG22 | 2.11 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:D:599:ILE:O | 1:D:603:VAL:HG12 | 2.12 | 0.49 |
| 1:DA:627:VAL:HG12 | 1:DA:634:VAL:HG22 | 1.93 | 0.49 |
| 1:EA:50:MET:HE3 | 1:EA:96:PRO:O | 2.13 | 0.49 |
| 1:EB:549:VAL:HG11 | 1:EB:552:ARG:HE | 1.77 | 0.49 |
| 1:EB:658:VAL:HG23 | 1:FB:533:ASP:HB3 | 1.94 | 0.49 |
| 1:F:3:THR:HG21 | 1:F:38:GLN:O | 2.12 | 0.49 |
| 1:F:121:LEU:HA | 1:F:162:ILE:HA | 1.94 | 0.49 |
| 1:G:120:ALA:HB3 | 1:G:205:LEU:HD21 | 1.93 | 0.49 |
| 1:GA:121:LEU:HD23 | 1:GA:162:ILE:HG12 | 1.92 | 0.49 |
| 1:GB:341:GLU:O | 1:GB:342:GLU:HB2 | 2.12 | 0.49 |
| 1:GB:742:LEU:HD21 | 1:HB:734:ARG:HG3 | 1.93 | 0.49 |
| 1:I:63:ASN:O | 1:I:63:ASN:CG | 2.55 | 0.49 |
| 1:I:122:HIS:HD2 | 1:I:208:VAL:HG12 | 1.73 | 0.49 |
| 1:I:662:ILE:HD13 | 1:J:588:PHE:CZ | 2.47 | 0.49 |
| 1:IB:794:LYS:HD3 | 1:JB:788:ALA:HB1 | 1.93 | 0.49 |
| 1:J:575:ILE:CG2 | 1:J:603:VAL:HG13 | 2.41 | 0.49 |
| 1:JA:564:VAL:HG11 | 1:JA:567:PHE:HA | 1.94 | 0.49 |
| 1:JB:8:ILE:H | 1:JB:8:ILE:HD12 | 1.78 | 0.49 |
| 1:JB:335:ARG:HA | 1:JB:355:ASP:O | 2.12 | 0.49 |
| 1:JB:462:VAL:HG23 | 1:JB:487:VAL:H | 1.76 | 0.49 |
| 1:KA:393:VAL:HG22 | 1:KA:411:ASP:O | 2.12 | 0.49 |
| 1:M:143:TRP:CA | 1:M:208:VAL:HG11 | 2.42 | 0.49 |
| 1:M:737:GLY:O | 1:M:741:VAL:HG23 | 2.12 | 0.49 |
| 1:O:712:LEU:O | 1:O:716:VAL:HG23 | 2.12 | 0.49 |
| 1:OA:61:VAL:O | 1:OA:61:VAL:HG23 | 2.12 | 0.49 |
| 1:OA:387:GLY:N | 1:OA:457:VAL:HG12 | 2.27 | 0.49 |
| 1:OB:61:VAL:O | 1:OB:61:VAL:HG23 | 2.11 | 0.49 |
| 1:P:762:VAL:HB | 1:P:766:ARG:HE | 1.77 | 0.49 |
| 1:PB:459:SER:HB2 | 1:PB:486:LEU:HD21 | 1.93 | 0.49 |
| 1:QB:7:ILE:HG22 | 1:QB:34:THR:HB | 1.94 | 0.49 |
| 1:RA:301:VAL:HG21 | 1:RA:366:VAL:HG11 | 1.93 | 0.49 |
| 1:S:393:VAL:HG22 | 1:S:411:ASP:O | 2.12 | 0.49 |
| 1:TA:425:GLU:OE2 | 1:TA:458:VAL:HG11 | 2.13 | 0.49 |
| 1:TB:334:LEU:O | 1:TB:356:HIS:HA | 2.13 | 0.49 |
| 1:UA:198:VAL:HG11 | 1:UA:204:TYR:CE2 | 2.47 | 0.49 |
| 1:UB:536:ARG:HH12 | 1:UB:646:VAL:HG11 | 1.77 | 0.49 |
| 1:UB:806:THR:HG23 | 1:VB:805:SER:HA | 1.93 | 0.49 |
| 1:V:51:VAL:CG1 | 1:V:109:ILE:HD11 | 2.41 | 0.49 |
| 1:V:219:VAL:HG11 | 1:V:227:LEU:CD2 | 2.42 | 0.49 |
| 1:VA:593:LYS:HD2 | 1:VA:593:LYS:N | 2.27 | 0.49 |
| 1:VA:661:ALA:O | 1:VA:665:THR:HG23 | 2.11 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:W:543:TYR:CD1 | 1:W:638:VAL:HG13 | 2.47 | 0.49 |
| 1:W:662:ILE:HG21 | 1:X:653:ALA:HB1 | 1.94 | 0.49 |
| 1:WB:662:ILE:O | 1:WB:666:THR:HG23 | 2.12 | 0.49 |
| 1:XA:196:TRP:O | 1:XA:197:LEU:HD12 | 2.12 | 0.49 |
| 1:XB:235:PHE:CE1 | 1:XB:264:HIS:HB3 | 2.47 | 0.49 |
| 1:XB:301:VAL:O | 1:XB:301:VAL:HG13 | 2.11 | 0.49 |
| 1:Y:528:THR:HG22 | 1:Y:536:ARG:NH1 | 2.25 | 0.49 |
| 1:YA:52:THR:HG22 | 1:YA:96:PRO:HA | 1.95 | 0.49 |
| 1:YB:274:THR:N | 1:YB:308:PHE:O | 2.45 | 0.49 |
| 1:AB:78:THR:HG23 | 1:ZA:32:PRO:HG2 | 1.94 | 0.49 |
| 1:AB:80:GLN:OE1 | 1:ZA:12:PRO:HG3 | 2.12 | 0.49 |
| 1:AB:285:LEU:HD21 | 1:AB:317:GLU:CD | 2.36 | 0.49 |
| 1:AC:326:LEU:HD11 | 1:AC:332:LEU:H | 1.77 | 0.49 |
| 1:BA:579:VAL:O | 1:BA:583:VAL:HG12 | 2.12 | 0.49 |
| 1:BB:9:ARG:CB | 1:BB:34:THR:HG22 | 2.42 | 0.49 |
| 1:BB:77:VAL:HG23 | 1:BB:78:THR:HG23 | 1.94 | 0.49 |
| 1:BB:408:LEU:HD23 | 1:BB:408:LEU:H | 1.77 | 0.49 |
| 1:CA:402:ILE:HD11 | 1:CA:457:VAL:HG11 | 1.93 | 0.49 |
| 1:CA:768:LEU:HD23 | 1:CA:768:LEU:C | 2.37 | 0.49 |
| 1:CB:184:ASP:HB3 | 1:CB:190:ARG:HG2 | 1.94 | 0.49 |
| 1:CB:452:ARG:NE | 1:CB:458:VAL:HG22 | 2.27 | 0.49 |
| 1:DA:381:PRO:HA | 1:DA:405:THR:HG22 | 1.94 | 0.49 |
| 1:EA:402:ILE:HD11 | 1:EA:457:VAL:HG21 | 1.94 | 0.49 |
| 1:EA:704:LYS:HA | 1:EA:707:LEU:HD12 | 1.94 | 0.49 |
| 1:EB:413:VAL:HG22 | 1:EB:414:LEU:N | 2.28 | 0.49 |
| 1:F:174:LEU:HD12 | 1:F:214:ASP:O | 2.12 | 0.49 |
| 1:FA:59:CYS:CB | 1:FA:105:LEU:HD11 | 2.42 | 0.49 |
| 1:FA:416:GLU:CG | 1:FA:455:THR:HG22 | 2.42 | 0.49 |
| 1:FA:703:ARG:O | 1:FA:707:LEU:HD23 | 2.12 | 0.49 |
| 1:FB:402:ILE:HG22 | 1:FB:403:GLY:N | 2.28 | 0.49 |
| 1:H:121:LEU:C | 1:H:121:LEU:HD12 | 2.37 | 0.49 |
| 1:H:325:VAL:HG21 | 1:I:335:ARG:NH1 | 2.27 | 0.49 |
| 1:HB:125:ALA:HB2 | 1:HB:143:TRP:CZ3 | 2.47 | 0.49 |
| 1:HB:226:ALA:HB1 | 1:HB:251:VAL:O | 2.12 | 0.49 |
| 1:IA:128:ASP:OD1 | 1:IA:137:VAL:O | 2.29 | 0.49 |
| 1:IA:628:PHE:HE1 | 1:IA:635:VAL:HG23 | 1.76 | 0.49 |
| 1:IA:662:ILE:HD12 | 1:JA:653:ALA:HB1 | 1.94 | 0.49 |
| 1:J:51:VAL:HG23 | 1:J:97:PHE:O | 2.12 | 0.49 |
| 1:J:470:VAL:HG12 | 1:J:471:TYR:N | 2.28 | 0.49 |
| 1:JB:170:GLN:HA | 1:JB:201:VAL:HG22 | 1.93 | 0.49 |
| 1:KB:165:ALA:HB1 | 1:KB:203:ALA:O | 2.12 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:KB:221:LEU:HD21 | 1:KB:251:VAL:HG23 | 1.94 | 0.49 |
| 1:L:174:LEU:HD12 | 1:L:214:ASP:O | 2.11 | 0.49 |
| 1:LA:388:ILE:CA | 1:LA:457:VAL:HG23 | 2.42 | 0.49 |
| 1:M:217:ASP:O | 1:M:260:VAL:HG23 | 2.12 | 0.49 |
| 1:NA:123:LEU:HD11 | 1:NA:145:PHE:HB2 | 1.95 | 0.49 |
| 1:NA:201:VAL:HG22 | 1:NA:201:VAL:O | 2.12 | 0.49 |
| 1:OA:176:LEU:HD21 | 1:OA:196:TRP:CE2 | 2.46 | 0.49 |
| 1:P:25:VAL:HG22 | 1:P:78:THR:O | 2.11 | 0.49 |
| 1:PA:333:LEU:N | 1:PA:358:LEU:HD12 | 2.26 | 0.49 |
| 1:PA:709:LEU:HA | 1:PA:712:LEU:HD12 | 1.93 | 0.49 |
| 1:QA:82:ARG:C | 1:QA:83:LEU:HD12 | 2.37 | 0.49 |
| 1:QA:745:LYS:O | 1:QA:749:GLN:OE1 | 2.30 | 0.49 |
| 1:RB:52:THR:HG22 | 1:RB:96:PRO:HD3 | 1.92 | 0.49 |
| 1:S:65:VAL:HB | 1:S:73:VAL:HG22 | 1.94 | 0.49 |
| 1:S:625:GLN:CG | 1:S:627:VAL:HG13 | 2.41 | 0.49 |
| 1:SA:28:VAL:HG21 | 1:SA:100:TYR:HA | 1.94 | 0.49 |
| 1:SA:177:ARG:H | 1:SA:213:LEU:HD23 | 1.76 | 0.49 |
| 1:T:137:VAL:O | 1:T:137:VAL:HG13 | 2.12 | 0.49 |
| 1:T:772:TYR:CD1 | 1:V:770:LEU:HD11 | 2.46 | 0.49 |
| 1:TA:531:THR:HG22 | 1:TA:583:VAL:CG2 | 2.42 | 0.49 |
| 1:UB:516:LEU:HD12 | 1:UB:517:LEU:H | 1.78 | 0.49 |
| 1:V:288:VAL:O | 1:V:288:VAL:HG23 | 2.12 | 0.49 |
| 1:VA:646:VAL:HG23 | 1:VA:647:ASP:N | 2.28 | 0.49 |
| 1:VB:227:LEU:CD2 | 1:VB:229:LEU:HD21 | 2.42 | 0.49 |
| 1:VB:462:VAL:HG12 | 1:VB:483:GLY:O | 2.12 | 0.49 |
| 1:WB:735:ILE:HD13 | 1:XB:727:GLU:HG2 | 1.94 | 0.49 |
| 1:XA:340:LEU:HD12 | 1:XA:351:HIS:ND1 | 2.27 | 0.49 |
| 1:Y:56:ARG:HG3 | 1:Z:127:LEU:HD21 | 1.93 | 0.49 |
| 1:Y:168:ILE:HG21 | 1:Y:174:LEU:N | 2.27 | 0.49 |
| 1:YA:112:LEU:CD2 | 1:YA:150:THR:HG23 | 2.42 | 0.49 |
| 1:YA:802:ILE:HG21 | 1:YA:807:ILE:HD11 | 1.93 | 0.49 |
| 1:YB:735:ILE:HG21 | 1:ZB:726:ALA:C | 2.38 | 0.49 |
| 1:A:405:THR:HG21 | 1:B:393:VAL:O | 2.13 | 0.49 |
| 1:AA:530:GLU:O | 1:AA:583:VAL:HG22 | 2.12 | 0.49 |
| 1:AC:235:PHE:CZ | 1:AC:264:HIS:HB3 | 2.47 | 0.49 |
| 1:BA:174:LEU:HD21 | 1:BA:212:VAL:HB | 1.93 | 0.49 |
| 1:BA:400:ALA:HB1 | 1:BA:402:ILE:HD11 | 1.95 | 0.49 |
| 1:BA:600:ARG:HG3 | 1:BA:601:THR:HG23 | 1.94 | 0.49 |
| 1:CA:4:GLU:HG2 | 1:CA:5:GLU:H | 1.76 | 0.49 |
| 1:CA:125:ALA:HA | 1:CA:157:VAL:HA | 1.93 | 0.49 |
| 1:DA:588:PHE:CG | 1:DA:589:ASP:N | 2.81 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:DB:331:GLY:N | 1:DB:407:MET:HE1 | 2.27 | 0.49 |
| 1:DB:405:THR:HG23 | 1:EB:396:GLY:N | 2.27 | 0.49 |
| 1:EB:276:LEU:HD13 | 1:EB:304:GLY:H | 1.77 | 0.49 |
| 1:F:547:PHE:CE1 | 1:F:633:LEU:HD13 | 2.47 | 0.49 |
| 1:FA:531:THR:HG21 | 1:FA:588:PHE:CB | 2.41 | 0.49 |
| 1:H:60:THR:HG22 | 1:H:90:ILE:HA | 1.94 | 0.49 |
| 1:H:179:ARG:HE | 1:H:209:PHE:HA | 1.78 | 0.49 |
| 1:H:539:LEU:HD12 | 1:H:540:GLN:N | 2.24 | 0.49 |
| 1:HA:67:ARG:HG2 | 1:HA:73:VAL:HG22 | 1.93 | 0.49 |
| 1:HA:334:LEU:HD12 | 1:HA:357:TRP:NE1 | 2.28 | 0.49 |
| 1:I:288:VAL:HG22 | 1:I:314:GLU:OE2 | 2.13 | 0.49 |
| 1:I:558:THR:HA | 1:I:561:LEU:HD12 | 1.95 | 0.49 |
| 1:IB:46:ALA:HB1 | 1:IB:47:PRO:HD2 | 1.95 | 0.49 |
| 1:IB:782:SER:HA | 1:IB:785:GLN:OE1 | 2.12 | 0.49 |
| 1:JA:268:LEU:HD12 | 1:JA:268:LEU:N | 2.27 | 0.49 |
| 1:JA:627:VAL:HG12 | 1:JA:634:VAL:HG22 | 1.94 | 0.49 |
| 1:JB:3:THR:HG22 | 1:JB:3:THR:O | 2.12 | 0.49 |
| 1:JB:398:VAL:HG12 | 1:JB:491:PRO:HB3 | 1.93 | 0.49 |
| 1:K:333:LEU:N | 1:K:358:LEU:HD13 | 2.27 | 0.49 |
| 1:K:380:ILE:HD12 | 1:K:406:TYR:O | 2.11 | 0.49 |
| 1:KB:284:ILE:HD12 | 1:KB:287:PRO:CB | 2.42 | 0.49 |
| 1:KB:365:TYR:OH | 1:KB:371:VAL:HG21 | 2.13 | 0.49 |
| 1:L:531:THR:HG21 | 1:L:588:PHE:CA | 2.43 | 0.49 |
| 1:M:15:TYR:CD1 | 1:M:50:MET:HE2 | 2.47 | 0.49 |
| 1:MA:168:ILE:HG22 | 1:MA:215:LEU:HD13 | 1.94 | 0.49 |
| 1:MA:176:LEU:HD21 | 1:MA:196:TRP:NE1 | 2.27 | 0.49 |
| 1:MA:391:GLN:O | 1:MA:413:VAL:HG12 | 2.12 | 0.49 |
| 1:NB:30:VAL:HG22 | 1:NB:31:GLY:N | 2.26 | 0.49 |
| 1:NB:388:ILE:C | 1:NB:457:VAL:HG23 | 2.36 | 0.49 |
| 1:O:46:ALA:HB1 | 1:O:47:PRO:CD | 2.42 | 0.49 |
| 1:O:407:MET:HE3 | 1:O:408:LEU:N | 2.27 | 0.49 |
| 1:OA:17:HIS:CD2 | 1:OA:28:VAL:HG23 | 2.47 | 0.49 |
| 1:Q:531:THR:HG21 | 1:Q:588:PHE:CA | 2.41 | 0.49 |
| 1:QA:759:LEU:HA | 1:QA:762:VAL:HG22 | 1.93 | 0.49 |
| 1:R:16:ILE:HB | 1:R:29:GLU:HB2 | 1.95 | 0.49 |
| 1:R:625:GLN:HA | 1:R:635:VAL:O | 2.12 | 0.49 |
| 1:RA:383:ASP:CG | 1:SA:398:VAL:HG23 | 2.38 | 0.49 |
| 1:RB:16:ILE:C | 1:RB:28:VAL:HG23 | 2.37 | 0.49 |
| 1:S:790:VAL:HG21 | 1:T:785:GLN:HG3 | 1.93 | 0.49 |
| 1:T:137:VAL:HG21 | 1:T:143:TRP:HE3 | 1.75 | 0.49 |
| 1:TA:65:VAL:HG11 | 1:TA:100:TYR:HB3 | 1.92 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:TA:531:THR:HG21 | 1:TA:588:PHE:HA | 1.93 | 0.49 |
| 1:UA:500:LEU:HD21 | 1:UA:567:PHE:CD2 | 2.48 | 0.49 |
| 1:UB:62:ALA:HA | 1:UB:88:LEU:HD23 | 1.94 | 0.49 |
| 1:UB:92:LEU:HD12 | 1:UB:92:LEU:N | 2.26 | 0.49 |
| 1:UB:170:GLN:N | 1:UB:201:VAL:HG13 | 2.28 | 0.49 |
| 1:V:251:VAL:HG12 | 1:V:255:ASP:OD2 | 2.13 | 0.49 |
| 1:VB:283:VAL:HG12 | 1:VB:284:ILE:N | 2.27 | 0.49 |
| 1:VB:625:GLN:HG3 | 1:VB:634:VAL:HG13 | 1.94 | 0.49 |
| 1:W:225:THR:HB | 1:W:270:VAL:HG12 | 1.94 | 0.49 |
| 1:WB:276:LEU:HD12 | 1:WB:302:VAL:HG12 | 1.94 | 0.49 |
| 1:WB:495:PHE:CD2 | 1:WB:514:LEU:HD11 | 2.47 | 0.49 |
| 1:X:54:PRO:HD3 | 1:X:109:ILE:HD12 | 1.95 | 0.49 |
| 1:X:497:VAL:HG23 | 1:X:514:LEU:HA | 1.94 | 0.49 |
| 1:XB:173:ALA:CA | 1:XB:199:THR:HG22 | 2.43 | 0.49 |
| 1:YA:196:TRP:C | 1:YA:197:LEU:HD12 | 2.38 | 0.49 |
| 1:YA:632:GLY:O | 1:YA:634:VAL:HG23 | 2.12 | 0.49 |
| 1:YB:333:LEU:HA | 1:YB:358:LEU:HA | 1.93 | 0.49 |
| 1:ZA:468:VAL:HG22 | 1:ZA:515:CYS:HA | 1.94 | 0.49 |
| 1:ZB:283:VAL:HG12 | 1:ZB:284:ILE:N | 2.27 | 0.49 |
| 1:AA:173:ALA:CB | 1:AA:197:LEU:HD23 | 2.36 | 0.49 |
| 1:AB:250:LEU:HD11 | 1:AB:311:GLN:HA | 1.93 | 0.49 |
| 1:AB:769:GLU:OE2 | 1:AB:773:ALA:HB2 | 2.13 | 0.49 |
| 1:BB:220:ILE:CD1 | 1:CB:245:THR:HG22 | 2.42 | 0.49 |
| 1:C:221:LEU:HD11 | 1:C:251:VAL:HG23 | 1.93 | 0.49 |
| 1:CB:18:VAL:HG22 | 1:CB:29:GLU:OE2 | 2.13 | 0.49 |
| 1:CB:357:TRP:CH2 | 1:CB:371:VAL:HG13 | 2.48 | 0.49 |
| 1:D:411:ASP:OD1 | 1:D:411:ASP:C | 2.54 | 0.49 |
| 1:DB:43:VAL:C | 1:DB:44:LEU:HD22 | 2.37 | 0.49 |
| 1:E:779:LEU:HD21 | 1:F:774:ARG:HD2 | 1.95 | 0.49 |
| 1:EA:3:THR:O | 1:EA:6:PHE:CG | 2.65 | 0.49 |
| 1:EA:161:GLU:OE1 | 1:EA:162:ILE:O | 2.30 | 0.49 |
| 1:EB:60:THR:HG23 | 1:EB:107:LYS:HD2 | 1.94 | 0.49 |
| 1:EB:261:PRO:HG3 | 1:EB:267:VAL:HG21 | 1.95 | 0.49 |
| 1:F:172:GLN:NE2 | 1:F:215:LEU:HD21 | 2.28 | 0.49 |
| 1:F:728:SER:OG | 1:G:722:ALA:HB3 | 2.12 | 0.49 |
| 1:FB:271:VAL:HG23 | 1:FB:309:PHE:CD2 | 2.48 | 0.49 |
| 1:GA:226:ALA:HB1 | 1:GA:251:VAL:O | 2.12 | 0.49 |
| 1:H:798:MET:O | 1:H:802:ILE:HG22 | 2.13 | 0.49 |
| 1:HB:460:TYR:O | 1:HB:486:LEU:HD12 | 2.11 | 0.49 |
| 1:I:174:LEU:HD23 | 1:I:175:ARG:O | 2.11 | 0.49 |
| 1:IB:56:ARG:O | 1:IB:111:PRO:HA | 2.11 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:IB:303:LYS:HD2 | 1:IB:304:GLY:O | 2.12 | 0.49 |
| 1:J:121:LEU:HD12 | 1:J:121:LEU:C | 2.38 | 0.49 |
| 1:K:176:LEU:CA | 1:K:213:LEU:HD23 | 2.43 | 0.49 |
| 1:L:60:THR:HG23 | 1:L:106:GLU:OE2 | 2.12 | 0.49 |
| 1:LA:331:GLY:O | 1:LA:358:LEU:HD11 | 2.12 | 0.49 |
| 1:MB:488:SER:C | 1:MB:489:LEU:HD22 | 2.37 | 0.49 |
| 1:N:500:LEU:HD12 | 1:N:511:ARG:CD | 2.43 | 0.49 |
| 1:NA:36:ILE:HG23 | 1:NA:36:ILE:O | 2.12 | 0.49 |
| 1:NB:333:LEU:CD2 | 1:NB:374:VAL:HG11 | 2.42 | 0.49 |
| 1:OA:176:LEU:HD22 | 1:OA:198:VAL:HG13 | 1.94 | 0.49 |
| 1:OB:336:ALA:HB2 | 1:OB:357:TRP:HH2 | 1.77 | 0.49 |
| 1:PA:374:VAL:HG12 | 1:PA:375:GLU:N | 2.27 | 0.49 |
| 1:PB:285:LEU:HD12 | 1:PB:315:GLN:HG3 | 1.93 | 0.49 |
| 1:PB:402:ILE:HG22 | 1:PB:403:GLY:N | 2.27 | 0.49 |
| 1:Q:469:GLN:HA | 1:Q:480:VAL:HG22 | 1.94 | 0.49 |
| 1:QB:126:LEU:C | 1:QB:127:LEU:HD22 | 2.38 | 0.49 |
| 1:QB:365:TYR:OH | 1:QB:371:VAL:HG21 | 2.12 | 0.49 |
| 1:QB:538:GLN:NE2 | 1:QB:646:VAL:HG22 | 2.27 | 0.49 |
| 1:RA:198:VAL:HG21 | 1:RA:204:TYR:CE2 | 2.48 | 0.49 |
| 1:RA:529:ILE:O | 1:RA:529:ILE:HG13 | 2.12 | 0.49 |
| 1:RA:579:VAL:O | 1:RA:583:VAL:HG12 | 2.12 | 0.49 |
| 1:RB:53:VAL:HG21 | 1:RB:91:ARG:HG2 | 1.94 | 0.49 |
| 1:RB:529:ILE:HB | 1:RB:583:VAL:HG21 | 1.95 | 0.49 |
| 1:SB:331:GLY:C | 1:SB:358:LEU:HD11 | 2.37 | 0.49 |
| 1:SB:779:LEU:HD23 | 1:TB:777:LEU:HD13 | 1.94 | 0.49 |
| 1:TA:58:TYR:HA | 1:TA:91:ARG:O | 2.12 | 0.49 |
| 1:TA:284:ILE:HG22 | 1:TA:316:LEU:HD12 | 1.94 | 0.49 |
| 1:UA:496:THR:HG21 | 1:UA:562:PHE:CD1 | 2.48 | 0.49 |
| 1:UB:267:VAL:C | 1:UB:268:LEU:HD12 | 2.38 | 0.49 |
| 1:UB:480:VAL:HG12 | 1:UB:481:VAL:N | 2.28 | 0.49 |
| 1:V:286:ASP:OD2 | 1:V:296:LEU:HD23 | 2.12 | 0.49 |
| 1:VA:175:ARG:HD2 | 1:VA:176:LEU:N | 2.27 | 0.49 |
| 1:VB:168:ILE:HD11 | 1:VB:204:TYR:HB2 | 1.95 | 0.49 |
| 1:W:595:SER:O | 1:W:599:ILE:HD12 | 2.13 | 0.49 |
| 1:WA:324:TYR:HB3 | 1:WA:332:LEU:HD11 | 1.95 | 0.49 |
| 1:WB:126:LEU:O | 1:WB:127:LEU:HD22 | 2.13 | 0.49 |
| 1:X:405:THR:HG21 | 1:Y:393:VAL:O | 2.13 | 0.49 |
| 1:XA:59:CYS:HB2 | 1:XA:109:ILE:HD13 | 1.95 | 0.49 |
| 1:XB:539:LEU:HD11 | 1:XB:541:LEU:CD2 | 2.41 | 0.49 |
| 1:XB:742:LEU:HD21 | 1:YB:734:ARG:HB2 | 1.95 | 0.49 |
| 1:Y:793:LYS:O | 1:Y:796:LYS:HG2 | 2.12 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:YB:174:LEU:HD21 | 1:YB:212:VAL:HB | 1.95 | 0.49 |
| 1:ZA:310:LEU:HD21 | 1:ZA:316:LEU:HD11 | 1.93 | 0.49 |
| 1:ZA:598:ILE:O | 1:ZA:602:ALA:HB3 | 2.12 | 0.49 |
| 1:ZB:690:ARG:NH2 | 1:ZB:694:LEU:HD11 | 2.26 | 0.49 |
| 1:A:253:VAL:HG23 | 1:A:254:GLN:OE1 | 2.12 | 0.49 |
| 1:A:424:GLU:HG2 | 1:A:425:GLU:N | 2.27 | 0.49 |
| 1:AA:704:LYS:HA | 1:AA:707:LEU:HD12 | 1.94 | 0.49 |
| 1:AB:122:HIS:HA | 1:AB:144:LEU:HG | 1.95 | 0.49 |
| 1:AB:144:LEU:CD1 | 1:AB:208:VAL:HG12 | 2.42 | 0.49 |
| 1:AB:284:ILE:HD12 | 1:AB:287:PRO:HB3 | 1.94 | 0.49 |
| 1:AC:391:GLN:HB2 | 1:AC:398:VAL:HG22 | 1.95 | 0.49 |
| 1:BA:221:LEU:CD1 | 1:BA:256:THR:HG23 | 2.42 | 0.49 |
| 1:BB:90:ILE:HG22 | 1:BB:92:LEU:HG | 1.95 | 0.49 |
| 1:C:340:LEU:HD22 | 1:C:344:GLU:HB2 | 1.94 | 0.49 |
| 1:CA:660:LEU:HD23 | 1:CA:663:GLU:OE1 | 2.12 | 0.49 |
| 1:DA:16:ILE:HD11 | 1:DA:47:PRO:N | 2.26 | 0.49 |
| 1:E:223:GLU:O | 1:E:273:ILE:HD12 | 2.12 | 0.49 |
| 1:EA:466:ALA:HB1 | 1:EA:515:CYS:SG | 2.52 | 0.49 |
| 1:EB:60:THR:HG22 | 1:EB:90:ILE:HG13 | 1.93 | 0.49 |
| 1:EB:411:ASP:OD1 | 1:EB:411:ASP:C | 2.54 | 0.49 |
| 1:F:469:GLN:HB2 | 1:F:480:VAL:HG22 | 1.95 | 0.49 |
| 1:FA:743:GLN:HA | 1:FA:746:LEU:HD12 | 1.93 | 0.49 |
| 1:FB:104:VAL:HG22 | 1:FB:105:LEU:HD23 | 1.94 | 0.49 |
| 1:G:388:ILE:C | 1:G:457:VAL:HG23 | 2.38 | 0.49 |
| 1:GB:275:THR:O | 1:GB:275:THR:HG23 | 2.12 | 0.49 |
| 1:HB:235:PHE:CE1 | 1:HB:264:HIS:HB3 | 2.48 | 0.49 |
| 1:IB:228:HIS:CE1 | 1:IB:268:LEU:HD22 | 2.47 | 0.49 |
| 1:IB:393:VAL:HG13 | 1:IB:413:VAL:HG12 | 1.94 | 0.49 |
| 1:JB:230:ARG:H | 1:JB:268:LEU:HD13 | 1.77 | 0.49 |
| 1:KA:216:VAL:HG22 | 1:KA:217:ASP:N | 2.27 | 0.49 |
| 1:KA:416:GLU:HG2 | 1:KA:455:THR:HG22 | 1.94 | 0.49 |
| 1:LA:750:ALA:O | 1:LA:754:GLU:HG2 | 2.13 | 0.49 |
| 1:LB:541:LEU:HD13 | 1:LB:640:VAL:HG22 | 1.94 | 0.49 |
| 1:MA:537:LEU:HD23 | 1:MA:645:PRO:HA | 1.95 | 0.49 |
| 1:MB:60:THR:HG22 | 1:MB:107:LYS:HB2 | 1.94 | 0.49 |
| 1:NA:374:VAL:HG12 | 1:NA:375:GLU:N | 2.28 | 0.49 |
| 1:NB:3:THR:HG22 | 1:NB:6:PHE:CD1 | 2.47 | 0.49 |
| 1:NB:122:HIS:ND1 | 1:NB:160:VAL:HG11 | 2.27 | 0.49 |
| 1:NB:208:VAL:HG13 | 1:NB:209:PHE:N | 2.28 | 0.49 |
| 1:OB:65:VAL:HG13 | 1:OB:103:GLU:CD | 2.37 | 0.49 |
| 1:PA:333:LEU:HD12 | 1:PA:334:LEU:H | 1.77 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:PA:371:VAL:HG12 | 1:PA:372:GLU:N | 2.27 | 0.49 |
| 1:PB:99:LEU:HD11 | 1:PB:103:GLU:O | 2.12 | 0.49 |
| 1:PB:388:ILE:HG22 | 1:PB:389:TYR:O | 2.13 | 0.49 |
| 1:Q:730:ALA:O | 1:Q:733:ALA:HB3 | 2.13 | 0.49 |
| 1:QA:340:LEU:HD11 | 1:QA:371:VAL:HG22 | 1.94 | 0.49 |
| 1:QA:688:LEU:O | 1:QA:692:LYS:HB2 | 2.13 | 0.49 |
| 1:R:99:LEU:HD21 | 1:R:105:LEU:HD21 | 1.95 | 0.49 |
| 1:R:543:TYR:CB | 1:R:638:VAL:HG22 | 2.42 | 0.49 |
| 1:RB:379:ALA:HB2 | 1:RB:407:MET:HE2 | 1.94 | 0.49 |
| 1:SB:221:LEU:HD21 | 1:SB:251:VAL:HG23 | 1.93 | 0.49 |
| 1:SB:225:THR:HB | 1:SB:270:VAL:HG11 | 1.94 | 0.49 |
| 1:SB:285:LEU:HD21 | 1:SB:317:GLU:HA | 1.93 | 0.49 |
| 1:T:708:GLU:OE2 | 1:T:712:LEU:HD11 | 2.12 | 0.49 |
| 1:TA:802:ILE:HG23 | 1:TA:803:GLY:N | 2.28 | 0.49 |
| 1:UA:531:THR:HG21 | 1:UA:537:LEU:HD12 | 1.95 | 0.49 |
| 1:UA:575:ILE:CG2 | 1:UA:579:VAL:HG23 | 2.42 | 0.49 |
| 1:VA:471:TYR:CD2 | 1:VA:478:ALA:HB2 | 2.48 | 0.49 |
| 1:VB:413:VAL:HG22 | 1:VB:414:LEU:H | 1.77 | 0.49 |
| 1:WA:532:ALA:HB3 | 1:WA:587:THR:CA | 2.42 | 0.49 |
| 1:WA:662:ILE:HG21 | 1:XA:653:ALA:C | 2.38 | 0.49 |
| 1:X:30:VAL:HG23 | 1:X:50:MET:HE1 | 1.95 | 0.49 |
| 1:XA:114:VAL:HG23 | 1:XA:149:GLY:O | 2.13 | 0.49 |
| 1:YA:7:ILE:HD11 | 1:YA:9:ARG:NH1 | 2.26 | 0.49 |
| 1:YA:228:HIS:CE1 | 1:YA:268:LEU:HD13 | 2.48 | 0.49 |
| 1:YA:500:LEU:HD13 | 1:YA:511:ARG:NH1 | 2.27 | 0.49 |
| 1:Z:459:SER:HB2 | 1:Z:486:LEU:HD11 | 1.95 | 0.49 |
| 1:ZA:583:VAL:HG23 | 1:ZA:591:PHE:CD2 | 2.48 | 0.49 |
| 1:AA:56:ARG:O | 1:AA:111:PRO:HA | 2.12 | 0.49 |
| 1:AB:13:TYR:HA | 1:AB:50:MET:HE2 | 1.94 | 0.49 |
| 1:AB:123:LEU:HD11 | 1:AB:145:PHE:HB2 | 1.94 | 0.49 |
| 1:B:122:HIS:ND1 | 1:B:160:VAL:HG11 | 2.28 | 0.49 |
| 1:B:144:LEU:HD23 | 1:B:144:LEU:H | 1.76 | 0.49 |
| 1:B:537:LEU:HD23 | 1:B:645:PRO:CA | 2.42 | 0.49 |
| 1:BB:540:GLN:O | 1:BB:541:LEU:HD23 | 2.13 | 0.49 |
| 1:C:388:ILE:HG23 | 1:C:456:ARG:HA | 1.94 | 0.49 |
| 1:CB:7:ILE:O | 1:CB:8:ILE:C | 2.54 | 0.49 |
| 1:CB:234:ASN:HA | 1:CB:243:ARG:O | 2.13 | 0.49 |
| 1:DA:226:ALA:HB1 | 1:DA:251:VAL:O | 2.12 | 0.49 |
| 1:DB:470:VAL:HG12 | 1:DB:471:TYR:N | 2.27 | 0.49 |
| 1:EB:230:ARG:CZ | 1:EB:268:LEU:HD11 | 2.43 | 0.49 |
| 1:EB:388:ILE:N | 1:EB:457:VAL:HG23 | 2.27 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:EB:543:TYR:CD1 | 1:EB:638:VAL:HG13 | 2.48 | 0.49 |
| 1:F:221:LEU:HD21 | 1:F:252:THR:C | 2.37 | 0.49 |
| 1:FA:425:GLU:HG3 | 1:FA:514:LEU:HD22 | 1.94 | 0.49 |
| 1:FA:597:ARG:O | 1:FA:601:THR:HG23 | 2.12 | 0.49 |
| 1:G:216:VAL:HG22 | 1:G:217:ASP:N | 2.28 | 0.49 |
| 1:GA:60:THR:HG22 | 1:GA:90:ILE:HG13 | 1.93 | 0.49 |
| 1:GB:662:ILE:O | 1:GB:666:THR:HG23 | 2.12 | 0.49 |
| 1:GB:761:ARG:O | 1:GB:765:VAL:HG23 | 2.13 | 0.49 |
| 1:H:357:TRP:HA | 1:H:410:GLN:HB3 | 1.94 | 0.49 |
| 1:HA:260:VAL:HG13 | 1:HA:260:VAL:O | 2.13 | 0.49 |
| 1:HB:808:ARG:O | 1:HB:812:VAL:HG22 | 2.13 | 0.49 |
| 1:IA:173:ALA:O | 1:IA:215:LEU:HD12 | 2.13 | 0.49 |
| 1:J:389:TYR:CE1 | 1:J:457:VAL:HG22 | 2.47 | 0.49 |
| 1:J:777:LEU:O | 1:J:781:VAL:HG22 | 2.13 | 0.49 |
| 1:JA:116:LEU:HB2 | 1:JA:119:THR:HG22 | 1.94 | 0.49 |
| 1:JA:228:HIS:HA | 1:JA:250:LEU:HD23 | 1.95 | 0.49 |
| 1:JB:14:HIS:HA | 1:JB:48:MET:O | 2.13 | 0.49 |
| 1:L:60:THR:HG22 | 1:L:107:LYS:HB3 | 1.95 | 0.49 |
| 1:LA:468:VAL:HG22 | 1:LA:515:CYS:HA | 1.95 | 0.49 |
| 1:LA:486:LEU:HD12 | 1:LA:487:VAL:H | 1.78 | 0.49 |
| 1:LB:460:TYR:O | 1:LB:486:LEU:HD12 | 2.12 | 0.49 |
| 1:LB:564:VAL:HG11 | 1:LB:567:PHE:HA | 1.95 | 0.49 |
| 1:M:250:LEU:HD22 | 1:M:271:VAL:HG21 | 1.95 | 0.49 |
| 1:M:526:VAL:HG22 | 1:M:540:GLN:CG | 2.43 | 0.49 |
| 1:MA:311:GLN:HB3 | 1:MA:312:PRO:HD2 | 1.94 | 0.49 |
| 1:MB:9:ARG:HB3 | 1:MB:34:THR:HG23 | 1.95 | 0.49 |
| 1:MB:640:VAL:HG12 | 1:NB:580:ARG:HD3 | 1.94 | 0.49 |
| 1:NA:36:ILE:HD11 | 1:NB:7:ILE:HG21 | 1.93 | 0.49 |
| 1:NB:502:ALA:HB3 | 1:NB:510:ALA:HB3 | 1.95 | 0.49 |
| 1:OB:331:GLY:O | 1:OB:358:LEU:HD11 | 2.13 | 0.49 |
| 1:P:166:THR:CG2 | 1:P:174:LEU:HD22 | 2.42 | 0.49 |
| 1:P:176:LEU:HB3 | 1:P:212:VAL:HG12 | 1.93 | 0.49 |
| 1:P:274:THR:O | 1:P:276:LEU:HD12 | 2.13 | 0.49 |
| 1:PA:524:THR:O | 1:PA:524:THR:HG23 | 2.13 | 0.49 |
| 1:PB:10:ILE:HG22 | 1:PB:47:PRO:HB3 | 1.95 | 0.49 |
| 1:QA:797:GLN:OE1 | 1:RA:792:VAL:HG21 | 2.13 | 0.49 |
| 1:QB:69:ALA:HB2 | 1:QB:74:LEU:HD21 | 1.94 | 0.49 |
| 1:QB:197:LEU:HD11 | 1:QB:262:ASP:HA | 1.94 | 0.49 |
| 1:RA:83:LEU:HD21 | 1:RA:102:GLY:HA3 | 1.94 | 0.49 |
| 1:SA:377:ARG:CB | 1:SA:407:MET:HE1 | 2.43 | 0.49 |
| 1:TB:471:TYR:CD2 | 1:TB:478:ALA:HB2 | 2.48 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UB:387:GLY:HA3 | 1:UB:402:ILE:HG22 | 1.94 | 0.49 |
| 1:V:30:VAL:HG23 | 1:V:50:MET:SD | 2.53 | 0.49 |
| 1:V:526:VAL:HG22 | 1:V:540:GLN:HA | 1.93 | 0.49 |
| 1:VB:522:PHE:CD1 | 1:VB:524:THR:HG23 | 2.48 | 0.49 |
| 1:W:363:LEU:CA | 1:X:353:ALA:HB3 | 2.43 | 0.49 |
| 1:WA:16:ILE:HD11 | 1:WA:43:VAL:HG11 | 1.94 | 0.49 |
| 1:WA:592:HIS:CE1 | 1:XA:534:HIS:HA | 2.47 | 0.49 |
| 1:WB:228:HIS:HA | 1:WB:250:LEU:HD23 | 1.94 | 0.49 |
| 1:WB:496:THR:HG21 | 1:WB:562:PHE:CD1 | 2.48 | 0.49 |
| 1:X:518:LEU:HD21 | 1:X:549:VAL:HG22 | 1.93 | 0.49 |
| 1:XB:333:LEU:HD11 | 1:XB:356:HIS:HE1 | 1.74 | 0.49 |
| 1:Y:405:THR:HG23 | 1:Z:396:GLY:HA2 | 1.95 | 0.49 |
| 1:YB:62:ALA:HB2 | 1:YB:106:GLU:OE1 | 2.12 | 0.49 |
| 1:YB:391:GLN:O | 1:YB:413:VAL:HG12 | 2.12 | 0.49 |
| 1:Z:114:VAL:O | 1:Z:114:VAL:HG13 | 2.12 | 0.49 |
| 1:ZA:543:TYR:CZ | 1:ZA:575:ILE:HG21 | 2.47 | 0.49 |
| 1:A:60:THR:O | 1:A:105:LEU:HD12 | 2.13 | 0.49 |
| 1:AA:528:THR:HG23 | 1:AA:538:GLN:HA | 1.95 | 0.49 |
| 1:AB:792:VAL:HG21 | 1:ZA:794:LYS:HG2 | 1.95 | 0.49 |
| 1:AB:802:ILE:HG23 | 1:AB:807:ILE:HD11 | 1.95 | 0.49 |
| 1:AC:275:THR:HB | 1:OA:296:LEU:HD13 | 1.95 | 0.49 |
| 1:AC:709:LEU:HD23 | 1:AC:712:LEU:HD12 | 1.94 | 0.49 |
| 1:BB:172:GLN:HG2 | 1:BB:217:ASP:OD1 | 2.13 | 0.49 |
| 1:BB:410:GLN:O | 1:BB:411:ASP:OD1 | 2.30 | 0.49 |
| 1:CB:57:HIS:HA | 1:CB:111:PRO:HA | 1.95 | 0.49 |
| 1:D:168:ILE:HG22 | 1:D:215:LEU:HD13 | 1.94 | 0.49 |
| 1:DA:332:LEU:C | 1:DA:358:LEU:HD12 | 2.37 | 0.49 |
| 1:E:398:VAL:HG11 | 1:E:415:TRP:CE3 | 2.48 | 0.49 |
| 1:E:638:VAL:HG22 | 1:E:639:ASP:N | 2.28 | 0.49 |
| 1:EA:657:SER:HA | 1:EA:660:LEU:HD12 | 1.95 | 0.49 |
| 1:FA:116:LEU:HB2 | 1:FA:119:THR:HG22 | 1.94 | 0.49 |
| 1:FB:591:PHE:CZ | 1:FB:599:ILE:HD11 | 2.48 | 0.49 |
| 1:G:54:PRO:HD2 | 1:G:109:ILE:HD12 | 1.95 | 0.49 |
| 1:G:56:ARG:HD3 | 1:H:127:LEU:HD21 | 1.94 | 0.49 |
| 1:GB:130:GLU:HA | 1:GB:135:ASP:HA | 1.93 | 0.49 |
| 1:GB:376:GLU:OE2 | 1:GB:378:GLN:HA | 2.12 | 0.49 |
| 1:HB:18:VAL:HG22 | 1:HB:41:GLU:HB3 | 1.94 | 0.49 |
| 1:I:579:VAL:HG22 | 1:I:599:ILE:CD1 | 2.43 | 0.49 |
| 1:J:204:TYR:HH | 1:J:210:GLU:CD | 2.20 | 0.49 |
| 1:JA:499:SER:O | 1:JA:500:LEU:HD23 | 2.13 | 0.49 |
| 1:JA:549:VAL:HG11 | 1:JA:552:ARG:NE | 2.28 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:JB:358:LEU:HD23 | 1:JB:410:GLN:CA | 2.43 | 0.49 |
| 1:KA:267:VAL:C | 1:KA:268:LEU:HD12 | 2.37 | 0.49 |
| 1:KA:388:ILE:C | 1:KA:457:VAL:HG23 | 2.38 | 0.49 |
| 1:KA:409:THR:HG1 | 1:KA:412:GLU:CD | 2.21 | 0.49 |
| 1:L:405:THR:HG23 | 1:M:396:GLY:CA | 2.43 | 0.49 |
| 1:M:68:ASP:CG | 1:M:74:LEU:HD12 | 2.37 | 0.49 |
| 1:M:283:VAL:O | 1:M:317:GLU:HB3 | 2.13 | 0.49 |
| 1:MA:65:VAL:HG12 | 1:MA:83:LEU:CD1 | 2.41 | 0.49 |
| 1:N:783:LYS:HG2 | 1:N:787:LEU:HD11 | 1.95 | 0.49 |
| 1:NA:517:LEU:O | 1:NA:517:LEU:HG | 2.12 | 0.49 |
| 1:NB:115:VAL:HG11 | 1:NB:121:LEU:CD1 | 2.42 | 0.49 |
| 1:O:30:VAL:HG22 | 1:O:31:GLY:N | 2.27 | 0.49 |
| 1:OA:10:ILE:HD12 | 1:OA:31:GLY:O | 2.13 | 0.49 |
| 1:OB:527:ILE:HD13 | 1:OB:579:VAL:HG11 | 1.95 | 0.49 |
| 1:OB:539:LEU:HD21 | 1:OB:541:LEU:HD11 | 1.95 | 0.49 |
| 1:P:25:VAL:HG13 | 1:P:78:THR:O | 2.12 | 0.49 |
| 1:P:197:LEU:HD21 | 1:P:263:VAL:HG13 | 1.94 | 0.49 |
| 1:PA:178:ALA:HB1 | 1:PA:182:CYS:SG | 2.53 | 0.49 |
| 1:PB:374:VAL:HG12 | 1:PB:375:GLU:H | 1.78 | 0.49 |
| 1:Q:414:LEU:HB3 | 1:Q:455:THR:HB | 1.94 | 0.49 |
| 1:QA:498:LEU:HD13 | 1:QA:565:PRO:HA | 1.94 | 0.49 |
| 1:QA:751:LEU:HD12 | 1:QA:754:GLU:OE2 | 2.13 | 0.49 |
| 1:QB:405:THR:HG23 | 1:RB:396:GLY:HA3 | 1.94 | 0.49 |
| 1:QB:654:LEU:HD22 | 1:RB:534:HIS:CD2 | 2.48 | 0.49 |
| 1:RA:225:THR:HB | 1:RA:270:VAL:HG12 | 1.95 | 0.49 |
| 1:SA:166:THR:CG2 | 1:SA:174:LEU:HD13 | 2.43 | 0.49 |
| 1:T:326:LEU:HD22 | 1:T:330:GLN:HB3 | 1.95 | 0.49 |
| 1:WA:655:GLN:O | 1:WA:658:VAL:HG12 | 2.12 | 0.49 |
| 1:X:502:ALA:HB3 | 1:X:510:ALA:HB3 | 1.93 | 0.49 |
| 1:XA:125:ALA:HB3 | 1:XA:141:ASP:H | 1.78 | 0.49 |
| 1:XA:532:ALA:HB2 | 1:XA:584:ALA:O | 2.13 | 0.49 |
| 1:XB:783:LYS:HG3 | 1:YB:781:VAL:HG13 | 1.95 | 0.49 |
| 1:YA:143:TRP:CH2 | 1:YA:157:VAL:HG22 | 2.48 | 0.49 |
| 1:YB:144:LEU:HD12 | 1:YB:144:LEU:C | 2.38 | 0.49 |
| 1:YB:318:GLN:HG3 | 1:YB:321:GLN:NE2 | 2.28 | 0.49 |
| 1:A:206:PRO:HG3 | 1:A:212:VAL:HG11 | 1.95 | 0.49 |
| 1:AB:742:LEU:HD12 | 1:AB:745:LYS:HE3 | 1.95 | 0.49 |
| 1:BA:172:GLN:HB3 | 1:BA:215:LEU:HD11 | 1.93 | 0.49 |
| 1:D:37:ARG:N | 1:D:37:ARG:HD2 | 2.27 | 0.49 |
| 1:D:543:TYR:HD1 | 1:D:638:VAL:HG13 | 1.77 | 0.49 |
| 1:E:115:VAL:HG22 | 1:E:149:GLY:O | 2.13 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:E:326:LEU:O | 1:E:362:PRO:HA | 2.13 | 0.49 |
| 1:E:564:VAL:HG11 | 1:E:567:PHE:HA | 1.95 | 0.49 |
| 1:EB:122:HIS:ND1 | 1:EB:160:VAL:HG11 | 2.27 | 0.49 |
| 1:GA:3:THR:HG22 | 1:GA:6:PHE:CZ | 2.47 | 0.49 |
| 1:GA:643:VAL:O | 1:GA:643:VAL:HG23 | 2.12 | 0.49 |
| 1:GB:6:PHE:O | 1:GB:36:ILE:HA | 2.13 | 0.49 |
| 1:GB:405:THR:HG23 | 1:HB:396:GLY:CA | 2.42 | 0.49 |
| 1:HA:69:ALA:HB2 | 1:HA:74:LEU:CD2 | 2.43 | 0.49 |
| 1:I:358:LEU:HD12 | 1:I:377:ARG:CZ | 2.43 | 0.49 |
| 1:I:381:PRO:HA | 1:I:405:THR:CG2 | 2.41 | 0.49 |
| 1:IA:65:VAL:HG13 | 1:IA:103:GLU:CD | 2.38 | 0.49 |
| 1:IB:393:VAL:HG13 | 1:IB:413:VAL:CG1 | 2.43 | 0.49 |
| 1:IB:405:THR:HG23 | 1:JB:396:GLY:CA | 2.42 | 0.49 |
| 1:IB:583:VAL:HG13 | 1:IB:584:ALA:N | 2.28 | 0.49 |
| 1:J:541:LEU:C | 1:J:541:LEU:HD12 | 2.38 | 0.49 |
| 1:JA:3:THR:HG22 | 1:JA:6:PHE:CD1 | 2.47 | 0.49 |
| 1:JA:137:VAL:HG12 | 1:JA:138:VAL:N | 2.28 | 0.49 |
| 1:JA:276:LEU:HD13 | 1:JA:281:TYR:HA | 1.93 | 0.49 |
| 1:JA:599:ILE:HD13 | 1:JA:640:VAL:HG21 | 1.95 | 0.49 |
| 1:K:423:VAL:HG22 | 1:K:423:VAL:O | 2.12 | 0.49 |
| 1:KA:732:ALA:HA | 1:KA:735:ILE:HD12 | 1.94 | 0.49 |
| 1:KB:122:HIS:ND1 | 1:KB:160:VAL:HG11 | 2.28 | 0.49 |
| 1:KB:529:ILE:HD12 | 1:KB:583:VAL:HB | 1.95 | 0.49 |
| 1:LA:106:GLU:O | 1:LA:106:GLU:CD | 2.56 | 0.49 |
| 1:LA:411:ASP:OD1 | 1:LA:411:ASP:C | 2.55 | 0.49 |
| 1:LB:366:VAL:O | 1:LB:366:VAL:HG13 | 2.12 | 0.49 |
| 1:LB:537:LEU:HD23 | 1:LB:644:GLU:C | 2.37 | 0.49 |
| 1:M:388:ILE:C | 1:M:457:VAL:HG23 | 2.38 | 0.49 |
| 1:N:215:LEU:HD12 | 1:N:216:VAL:H | 1.77 | 0.49 |
| 1:NA:120:ALA:CB | 1:NA:205:LEU:HD21 | 2.43 | 0.49 |
| 1:NA:216:VAL:HG13 | 1:NA:260:VAL:HG21 | 1.95 | 0.49 |
| 1:NA:333:LEU:CD2 | 1:NA:374:VAL:HG11 | 2.40 | 0.49 |
| 1:OA:470:VAL:HG12 | 1:OA:493:GLU:HG3 | 1.94 | 0.49 |
| 1:OB:165:ALA:O | 1:OB:203:ALA:HB1 | 2.12 | 0.49 |
| 1:OB:564:VAL:HG23 | 1:OB:631:ASN:HB3 | 1.94 | 0.49 |
| 1:P:416:GLU:OE1 | 1:P:454:LYS:HB2 | 2.12 | 0.49 |
| 1:PA:374:VAL:HG12 | 1:PA:375:GLU:H | 1.78 | 0.49 |
| 1:PA:539:LEU:HD12 | 1:PA:540:GLN:N | 2.27 | 0.49 |
| 1:PA:666:THR:HG22 | 1:QA:657:SER:CB | 2.42 | 0.49 |
| 1:PB:388:ILE:HG23 | 1:PB:456:ARG:HA | 1.95 | 0.49 |
| 1:Q:787:LEU:CD2 | 1:R:781:VAL:HG12 | 2.43 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:QB:177:ARG:H | 1:QB:213:LEU:HD23 | 1.78 | 0.49 |
| 1:QB:366:VAL:O | 1:QB:366:VAL:HG13 | 2.12 | 0.49 |
| 1:QB:480:VAL:HG12 | 1:QB:481:VAL:N | 2.28 | 0.49 |
| 1:R:227:LEU:HA | 1:R:270:VAL:HG22 | 1.95 | 0.49 |
| 1:R:536:ARG:O | 1:R:646:VAL:HG23 | 2.12 | 0.49 |
| 1:RA:122:HIS:CG | 1:RA:160:VAL:HB | 2.48 | 0.49 |
| 1:RA:730:ALA:HB1 | 1:RA:734:ARG:NH1 | 2.28 | 0.49 |
| 1:RA:786:GLN:CB | 1:SA:781:VAL:HG11 | 2.43 | 0.49 |
| 1:S:326:LEU:O | 1:S:362:PRO:HA | 2.13 | 0.49 |
| 1:SB:115:VAL:HG12 | 1:SB:121:LEU:CD1 | 2.42 | 0.49 |
| 1:SB:531:THR:HG22 | 1:SB:583:VAL:HG23 | 1.95 | 0.49 |
| 1:T:16:ILE:CG2 | 1:T:43:VAL:HG13 | 2.43 | 0.49 |
| 1:T:717:GLU:HB2 | 1:V:707:LEU:HD22 | 1.95 | 0.49 |
| 1:TB:283:VAL:O | 1:TB:316:LEU:HD12 | 2.13 | 0.49 |
| 1:UA:467:ALA:CB | 1:UA:518:LEU:HD11 | 2.40 | 0.49 |
| 1:UA:481:VAL:O | 1:UA:481:VAL:HG23 | 2.13 | 0.49 |
| 1:UA:575:ILE:HD13 | 1:UA:578:ARG:NH1 | 2.27 | 0.49 |
| 1:UB:120:ALA:HB2 | 1:UB:205:LEU:CD2 | 2.43 | 0.49 |
| 1:V:127:LEU:HD23 | 1:V:156:GLU:HG2 | 1.94 | 0.49 |
| 1:VA:218:ALA:CB | 1:VA:258:ALA:HB1 | 2.43 | 0.49 |
| 1:WB:274:THR:N | 1:WB:308:PHE:O | 2.46 | 0.49 |
| 1:WB:666:THR:HG22 | 1:XB:657:SER:OG | 2.12 | 0.49 |
| 1:X:408:LEU:HD23 | 1:X:412:GLU:O | 2.12 | 0.49 |
| 1:X:460:TYR:O | 1:X:486:LEU:HD12 | 2.13 | 0.49 |
| 1:X:662:ILE:O | 1:X:666:THR:HG23 | 2.12 | 0.49 |
| 1:XA:593:LYS:HA | 1:YA:585:SER:HA | 1.95 | 0.49 |
| 1:Y:256:THR:HG21 | 1:Y:259:HIS:HB2 | 1.95 | 0.49 |
| 1:Y:333:LEU:HD13 | 1:Y:410:GLN:HA | 1.95 | 0.49 |
| 1:Z:137:VAL:O | 1:Z:137:VAL:HG13 | 2.13 | 0.49 |
| 1:Z:205:LEU:HD12 | 1:Z:206:PRO:HD2 | 1.95 | 0.49 |
| 1:Z:333:LEU:N | 1:Z:358:LEU:HD12 | 2.27 | 0.49 |
| 1:A:583:VAL:HG13 | 1:A:584:ALA:N | 2.28 | 0.49 |
| 1:B:488:SER:O | 1:B:489:LEU:HD22 | 2.13 | 0.49 |
| 1:BB:175:ARG:HA | 1:BB:197:LEU:HD23 | 1.94 | 0.49 |
| 1:BB:273:ILE:O | 1:BB:273:ILE:HG23 | 2.12 | 0.49 |
| 1:C:276:LEU:HD22 | 1:C:281:TYR:N | 2.27 | 0.49 |
| 1:CA:233:ARG:HA | 1:CA:245:THR:HG23 | 1.95 | 0.49 |
| 1:D:626:ALA:HB3 | 1:D:635:VAL:HB | 1.95 | 0.49 |
| 1:DB:747:LYS:O | 1:DB:751:LEU:HD23 | 2.13 | 0.49 |
| 1:EA:288:VAL:HG13 | 1:EA:314:GLU:HG3 | 1.95 | 0.49 |
| 1:F:575:ILE:HG23 | 1:F:603:VAL:HG21 | 1.95 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:G:276:LEU:HD11 | 1:G:282:CYS:SG | 2.53 | 0.49 |
| 1:G:349:VAL:HG11 | 1:G:351:HIS:CD2 | 2.47 | 0.49 |
| 1:HA:402:ILE:HG22 | 1:HA:403:GLY:N | 2.28 | 0.49 |
| 1:IB:358:LEU:HD23 | 1:IB:410:GLN:N | 2.28 | 0.49 |
| 1:K:500:LEU:HD11 | 1:K:513:ALA:HB3 | 1.95 | 0.49 |
| 1:KA:112:LEU:CD2 | 1:KA:152:ILE:HD13 | 2.42 | 0.49 |
| 1:KB:228:HIS:ND1 | 1:KB:268:LEU:HD22 | 2.27 | 0.49 |
| 1:LA:331:GLY:C | 1:LA:358:LEU:HD11 | 2.38 | 0.49 |
| 1:LA:340:LEU:HD12 | 1:LA:351:HIS:ND1 | 2.27 | 0.49 |
| 1:LB:120:ALA:CB | 1:LB:205:LEU:HD21 | 2.43 | 0.49 |
| 1:M:68:ASP:OD2 | 1:M:74:LEU:HD12 | 2.12 | 0.49 |
| 1:M:114:VAL:O | 1:M:114:VAL:HG13 | 2.13 | 0.49 |
| 1:M:531:THR:HG21 | 1:M:588:PHE:CA | 2.41 | 0.49 |
| 1:N:468:VAL:HG22 | 1:N:514:LEU:O | 2.13 | 0.49 |
| 1:O:206:PRO:HB3 | 1:O:212:VAL:HG13 | 1.94 | 0.49 |
| 1:OA:388:ILE:HB | 1:OA:414:LEU:HD21 | 1.93 | 0.49 |
| 1:OB:122:HIS:CE1 | 1:OB:160:VAL:HG21 | 2.48 | 0.49 |
| 1:P:256:THR:HG21 | 1:P:259:HIS:CB | 2.42 | 0.49 |
| 1:PA:333:LEU:HD12 | 1:PA:357:TRP:C | 2.38 | 0.49 |
| 1:PB:389:TYR:CZ | 1:PB:457:VAL:HA | 2.48 | 0.49 |
| 1:Q:66:SER:HB3 | 1:Q:73:VAL:HG13 | 1.95 | 0.49 |
| 1:R:126:LEU:C | 1:R:127:LEU:HD22 | 2.38 | 0.49 |
| 1:SA:58:TYR:CE1 | 1:SA:112:LEU:HD13 | 2.48 | 0.49 |
| 1:SA:346:GLU:HB2 | 1:SA:363:LEU:HD12 | 1.94 | 0.49 |
| 1:SA:407:MET:HE3 | 1:SA:408:LEU:O | 2.13 | 0.49 |
| 1:TA:168:ILE:O | 1:TA:168:ILE:HG13 | 2.13 | 0.49 |
| 1:UB:777:LEU:O | 1:UB:781:VAL:HG22 | 2.12 | 0.49 |
| 1:V:814:GLY:C | 1:W:812:VAL:HG23 | 2.37 | 0.49 |
| 1:WA:460:TYR:C | 1:WA:486:LEU:HD12 | 2.37 | 0.49 |
| 1:X:737:GLY:O | 1:X:741:VAL:HG23 | 2.13 | 0.49 |
| 1:Y:547:PHE:HE1 | 1:Y:633:LEU:HD13 | 1.78 | 0.49 |
| 1:YA:250:LEU:HD11 | 1:YA:311:GLN:HA | 1.95 | 0.49 |
| 1:YA:325:VAL:O | 1:YA:325:VAL:HG13 | 2.13 | 0.49 |
| 1:YB:4:GLU:HG3 | 1:YB:5:GLU:H | 1.78 | 0.49 |
| 1:YB:387:GLY:O | 1:YB:388:ILE:HG23 | 2.13 | 0.49 |
| 1:Z:9:ARG:HD3 | 1:Z:34:THR:HG22 | 1.95 | 0.49 |
| 1:ZB:30:VAL:HG23 | 1:ZB:50:MET:HE1 | 1.95 | 0.49 |
| 1:AB:18:VAL:O | 1:AB:18:VAL:HG23 | 2.13 | 0.48 |
| 1:AB:60:THR:HG22 | 1:AB:90:ILE:HG12 | 1.95 | 0.48 |
| 1:AB:374:VAL:HG12 | 1:AB:375:GLU:H | 1.78 | 0.48 |
| 1:AB:538:GLN:HB2 | 1:AB:646:VAL:HG23 | 1.94 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AB:758:GLU:O | 1:AB:762:VAL:HG13 | 2.13 | 0.48 |
| 1:AC:216:VAL:HG22 | 1:AC:217:ASP:H | 1.77 | 0.48 |
| 1:B:223:GLU:O | 1:B:273:ILE:HD12 | 2.13 | 0.48 |
| 1:BA:228:HIS:CE1 | 1:BA:268:LEU:HD22 | 2.48 | 0.48 |
| 1:CB:6:PHE:O | 1:CB:36:ILE:HA | 2.12 | 0.48 |
| 1:CB:741:VAL:O | 1:CB:744:ALA:HB3 | 2.13 | 0.48 |
| 1:D:115:VAL:HG22 | 1:D:149:GLY:C | 2.38 | 0.48 |
| 1:DA:115:VAL:HG21 | 1:DA:145:PHE:CE2 | 2.48 | 0.48 |
| 1:EA:15:TYR:OH | 1:EA:99:LEU:HD12 | 2.13 | 0.48 |
| 1:EB:470:VAL:HG12 | 1:EB:471:TYR:N | 2.27 | 0.48 |
| 1:G:28:VAL:O | 1:G:28:VAL:HG13 | 2.13 | 0.48 |
| 1:G:772:TYR:CD1 | 1:H:770:LEU:HD11 | 2.48 | 0.48 |
| 1:GA:168:ILE:HG22 | 1:GA:215:LEU:CD1 | 2.39 | 0.48 |
| 1:GB:175:ARG:HG2 | 1:GB:213:LEU:HD12 | 1.94 | 0.48 |
| 1:GB:656:ARG:HA | 1:GB:659:GLN:HB2 | 1.95 | 0.48 |
| 1:H:408:LEU:HD22 | 1:H:412:GLU:HB3 | 1.94 | 0.48 |
| 1:H:539:LEU:HD21 | 1:H:541:LEU:HD11 | 1.94 | 0.48 |
| 1:HA:625:GLN:HG3 | 1:HA:634:VAL:HG13 | 1.93 | 0.48 |
| 1:HB:767:GLU:HA | 1:HB:770:LEU:HD12 | 1.94 | 0.48 |
| 1:I:160:VAL:HG12 | 1:I:161:GLU:N | 2.28 | 0.48 |
| 1:IA:112:LEU:HD11 | 1:IA:151:TYR:O | 2.13 | 0.48 |
| 1:IB:332:LEU:C | 1:IB:358:LEU:HD13 | 2.38 | 0.48 |
| 1:J:105:LEU:H | 1:J:105:LEU:HD23 | 1.77 | 0.48 |
| 1:JB:56:ARG:HE | 1:KB:127:LEU:HD21 | 1.78 | 0.48 |
| 1:JB:223:GLU:OE2 | 1:JB:253:VAL:HG11 | 2.13 | 0.48 |
| 1:JB:232:ARG:CZ | 1:JB:266:GLU:HA | 2.43 | 0.48 |
| 1:JB:374:VAL:HG12 | 1:JB:375:GLU:N | 2.28 | 0.48 |
| 1:JB:418:GLU:O | 1:JB:419:LEU:HD23 | 2.13 | 0.48 |
| 1:JB:599:ILE:O | 1:JB:603:VAL:HG23 | 2.13 | 0.48 |
| 1:LA:458:VAL:HG12 | 1:LA:459:SER:N | 2.28 | 0.48 |
| 1:LB:227:LEU:HD13 | 1:LB:270:VAL:HG22 | 1.94 | 0.48 |
| 1:M:662:ILE:HG21 | 1:N:653:ALA:HB1 | 1.93 | 0.48 |
| 1:MA:424:GLU:HG2 | 1:MA:425:GLU:N | 2.28 | 0.48 |
| 1:MB:176:LEU:HD21 | 1:MB:196:TRP:NE1 | 2.28 | 0.48 |
| 1:MB:266:GLU:CG | 1:MB:268:LEU:HD11 | 2.43 | 0.48 |
| 1:NA:9:ARG:HA | 1:NA:34:THR:HA | 1.94 | 0.48 |
| 1:O:60:THR:HG22 | 1:O:90:ILE:CG1 | 2.43 | 0.48 |
| 1:O:518:LEU:HD12 | 1:O:547:PHE:HB2 | 1.95 | 0.48 |
| 1:OA:60:THR:HG22 | 1:OA:90:ILE:HA | 1.92 | 0.48 |
| 1:OA:78:THR:HG23 | 1:OA:80:GLN:H | 1.77 | 0.48 |
| 1:OA:212:VAL:O | 1:OA:212:VAL:HG23 | 2.12 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OB:65:VAL:HG11 | 1:OB:100:TYR:CD1 | 2.48 | 0.48 |
| 1:OB:122:HIS:ND1 | 1:OB:160:VAL:HG21 | 2.28 | 0.48 |
| 1:OB:227:LEU:HD12 | 1:OB:228:HIS:H | 1.78 | 0.48 |
| 1:RA:807:ILE:HG22 | 1:RA:807:ILE:O | 2.13 | 0.48 |
| 1:S:125:ALA:HB1 | 1:S:129:PHE:CE1 | 2.48 | 0.48 |
| 1:UA:583:VAL:HG23 | 1:UA:591:PHE:HA | 1.94 | 0.48 |
| 1:UB:416:GLU:CG | 1:UB:455:THR:HG22 | 2.43 | 0.48 |
| 1:VA:390:VAL:O | 1:VA:390:VAL:HG23 | 2.12 | 0.48 |
| 1:VB:179:ARG:C | 1:VB:192:THR:HG23 | 2.37 | 0.48 |
| 1:W:504:ARG:HB3 | 1:W:526:VAL:HG23 | 1.95 | 0.48 |
| 1:WB:417:LYS:HZ1 | 1:WB:489:LEU:HB3 | 1.77 | 0.48 |
| 1:YA:747:LYS:O | 1:YA:751:LEU:HD23 | 2.12 | 0.48 |
| 1:Z:113:GLN:HG2 | 1:Z:121:LEU:HD21 | 1.93 | 0.48 |
| 1:Z:777:LEU:O | 1:Z:781:VAL:HG22 | 2.13 | 0.48 |
| 1:AB:123:LEU:HD12 | 1:AB:143:TRP:HE1 | 1.77 | 0.48 |
| 1:AB:123:LEU:HB3 | 1:AB:157:VAL:HG13 | 1.95 | 0.48 |
| 1:AB:353:ALA:HB2 | 1:ZA:364:GLU:OE1 | 2.13 | 0.48 |
| 1:AC:137:VAL:HG13 | 1:AC:141:ASP:HB3 | 1.95 | 0.48 |
| 1:AC:231:ALA:HB2 | 1:AC:249:TRP:CH2 | 2.47 | 0.48 |
| 1:AC:283:VAL:HG22 | 1:AC:301:VAL:HA | 1.95 | 0.48 |
| 1:BA:8:ILE:HG22 | 1:BA:16:ILE:HD11 | 1.94 | 0.48 |
| 1:BA:411:ASP:OD1 | 1:BA:411:ASP:C | 2.56 | 0.48 |
| 1:BB:135:ASP:O | 1:BB:138:VAL:HG13 | 2.13 | 0.48 |
| 1:C:543:TYR:CE1 | 1:C:575:ILE:HD13 | 2.48 | 0.48 |
| 1:D:174:LEU:HD12 | 1:D:214:ASP:O | 2.13 | 0.48 |
| 1:D:333:LEU:HD12 | 1:D:334:LEU:H | 1.78 | 0.48 |
| 1:DA:564:VAL:HG23 | 1:DA:631:ASN:HB3 | 1.95 | 0.48 |
| 1:E:57:HIS:HA | 1:E:110:THR:O | 2.13 | 0.48 |
| 1:EB:59:CYS:HG | 1:EB:108:ASP:C | 2.21 | 0.48 |
| 1:FA:756:GLU:HA | 1:FA:759:LEU:HD12 | 1.95 | 0.48 |
| 1:FB:531:THR:CG2 | 1:FB:537:LEU:HD11 | 2.42 | 0.48 |
| 1:GA:401:VAL:C | 1:GA:402:ILE:HD12 | 2.37 | 0.48 |
| 1:GB:160:VAL:O | 1:GB:161:GLU:O | 2.31 | 0.48 |
| 1:GB:732:ALA:HA | 1:GB:735:ILE:HD12 | 1.94 | 0.48 |
| 1:H:527:ILE:HD11 | 1:H:539:LEU:CD2 | 2.43 | 0.48 |
| 1:HA:176:LEU:HD21 | 1:HA:196:TRP:CE2 | 2.48 | 0.48 |
| 1:HA:233:ARG:HA | 1:HA:245:THR:HG23 | 1.94 | 0.48 |
| 1:HB:419:LEU:HD11 | 1:HB:458:VAL:HG21 | 1.95 | 0.48 |
| 1:IA:131:ASP:CG | 1:IA:137:VAL:HG23 | 2.38 | 0.48 |
| 1:IA:526:VAL:HG23 | 1:IA:526:VAL:O | 2.13 | 0.48 |
| 1:IA:549:VAL:HG13 | 1:IA:552:ARG:NH1 | 2.28 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:IB:219:VAL:HG12 | 1:IB:259:HIS:O | 2.13 | 0.48 |
| 1:JA:410:GLN:O | 1:JA:411:ASP:OD1 | 2.31 | 0.48 |
| 1:JB:16:ILE:HD11 | 1:JB:47:PRO:HD3 | 1.94 | 0.48 |
| 1:KB:53:VAL:HG11 | 1:KB:58:TYR:HD1 | 1.78 | 0.48 |
| 1:KB:165:ALA:HB2 | 1:KB:205:LEU:HB2 | 1.95 | 0.48 |
| 1:LA:58:TYR:CZ | 1:LA:90:ILE:HG23 | 2.48 | 0.48 |
| 1:LB:36:ILE:O | 1:LB:36:ILE:HG23 | 2.13 | 0.48 |
| 1:M:129:PHE:CE1 | 1:M:137:VAL:HG11 | 2.48 | 0.48 |
| 1:MA:16:ILE:HG22 | 1:MA:17:HIS:O | 2.13 | 0.48 |
| 1:N:6:PHE:O | 1:N:36:ILE:HA | 2.14 | 0.48 |
| 1:N:231:ALA:HB3 | 1:N:244:ARG:O | 2.13 | 0.48 |
| 1:NA:316:LEU:HD12 | 1:NA:317:GLU:H | 1.78 | 0.48 |
| 1:NB:215:LEU:HD12 | 1:NB:216:VAL:H | 1.76 | 0.48 |
| 1:O:115:VAL:HG11 | 1:O:119:THR:O | 2.13 | 0.48 |
| 1:OA:176:LEU:HA | 1:OA:211:GLU:O | 2.13 | 0.48 |
| 1:PA:25:VAL:HG13 | 1:PA:80:GLN:HG2 | 1.94 | 0.48 |
| 1:PB:60:THR:HG22 | 1:PB:90:ILE:CG1 | 2.43 | 0.48 |
| 1:Q:767:GLU:O | 1:Q:771:VAL:HG23 | 2.13 | 0.48 |
| 1:QA:181:GLU:HG2 | 1:QA:191:VAL:HG12 | 1.94 | 0.48 |
| 1:QA:761:ARG:HG2 | 1:RA:755:THR:HG23 | 1.95 | 0.48 |
| 1:QB:65:VAL:HG13 | 1:QB:103:GLU:CD | 2.38 | 0.48 |
| 1:QB:162:ILE:O | 1:QB:163:ILE:HG23 | 2.13 | 0.48 |
| 1:SB:340:LEU:HD12 | 1:SB:351:HIS:HB2 | 1.95 | 0.48 |
| 1:T:275:THR:CB | 1:V:296:LEU:HD22 | 2.42 | 0.48 |
| 1:TA:288:VAL:HG11 | 1:TA:311:GLN:HB3 | 1.96 | 0.48 |
| 1:TB:316:LEU:HD11 | 1:TB:319:GLY:O | 2.13 | 0.48 |
| 1:TB:624:ASP:OD1 | 1:TB:625:GLN:HG2 | 2.13 | 0.48 |
| 1:TB:633:LEU:HD12 | 1:TB:634:VAL:H | 1.78 | 0.48 |
| 1:UA:518:LEU:O | 1:UA:546:HIS:HB2 | 2.13 | 0.48 |
| 1:UB:25:VAL:HG22 | 1:UB:80:GLN:HE21 | 1.78 | 0.48 |
| 1:UB:61:VAL:O | 1:UB:61:VAL:HG23 | 2.13 | 0.48 |
| 1:VA:358:LEU:HD22 | 1:VA:377:ARG:HH22 | 1.78 | 0.48 |
| 1:VA:543:TYR:CD1 | 1:VA:638:VAL:HG22 | 2.48 | 0.48 |
| 1:VA:634:VAL:HG12 | 1:VA:635:VAL:N | 2.28 | 0.48 |
| 1:WA:53:VAL:CG1 | 1:WA:57:HIS:HB2 | 2.42 | 0.48 |
| 1:WB:539:LEU:HD11 | 1:WB:640:VAL:HG21 | 1.95 | 0.48 |
| 1:WB:768:LEU:HD11 | 1:XB:759:LEU:O | 2.13 | 0.48 |
| 1:X:382:LEU:HD13 | 1:X:402:ILE:HA | 1.95 | 0.48 |
| 1:XA:18:VAL:HG12 | 1:XA:19:LEU:N | 2.29 | 0.48 |
| 1:Y:806:THR:HG22 | 1:Y:806:THR:O | 2.13 | 0.48 |
| 1:YA:279:HIS:CD2 | 1:ZA:337:LEU:HB3 | 2.47 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:YB:273:ILE:O | 1:YB:273:ILE:HG23 | 2.13 | 0.48 |
| 1:Z:802:ILE:HG23 | 1:Z:803:GLY:N | 2.28 | 0.48 |
| 1:ZA:402:ILE:HG22 | 1:ZA:403:GLY:N | 2.28 | 0.48 |
| 1:ZB:340:LEU:HD12 | 1:ZB:345:ASP:HB2 | 1.95 | 0.48 |
| 1:ZB:358:LEU:HD21 | 1:ZB:407:MET:SD | 2.53 | 0.48 |
| 1:A:408:LEU:HD22 | 1:A:412:GLU:HB3 | 1.95 | 0.48 |
| 1:AA:415:TRP:CH2 | 1:AA:417:LYS:HA | 2.48 | 0.48 |
| 1:AA:751:LEU:HD12 | 1:Z:761:ARG:NE | 2.28 | 0.48 |
| 1:AB:325:VAL:HG23 | 1:BB:354:GLY:N | 2.28 | 0.48 |
| 1:AB:633:LEU:HD12 | 1:AB:634:VAL:N | 2.29 | 0.48 |
| 1:AC:416:GLU:OE2 | 1:AC:455:THR:HG23 | 2.13 | 0.48 |
| 1:AC:461:ARG:HG3 | 1:AC:486:LEU:HD13 | 1.95 | 0.48 |
| 1:AC:537:LEU:HD11 | 1:AC:588:PHE:HD1 | 1.79 | 0.48 |
| 1:B:579:VAL:O | 1:B:583:VAL:HG12 | 2.13 | 0.48 |
| 1:BA:197:LEU:HD21 | 1:BA:216:VAL:HG11 | 1.94 | 0.48 |
| 1:C:233:ARG:HA | 1:C:245:THR:HG23 | 1.95 | 0.48 |
| 1:C:311:GLN:HB3 | 1:C:312:PRO:HD2 | 1.93 | 0.48 |
| 1:C:424:GLU:HG2 | 1:C:425:GLU:N | 2.27 | 0.48 |
| 1:C:638:VAL:HG12 | 1:C:639:ASP:N | 2.28 | 0.48 |
| 1:DB:371:VAL:O | 1:DB:371:VAL:HG13 | 2.13 | 0.48 |
| 1:EA:384:GLU:O | 1:EA:402:ILE:HG22 | 2.13 | 0.48 |
| 1:EB:221:LEU:HD11 | 1:EB:251:VAL:CG2 | 2.43 | 0.48 |
| 1:EB:469:GLN:HG3 | 1:EB:480:VAL:HG22 | 1.95 | 0.48 |
| 1:F:275:THR:HG23 | 1:F:275:THR:O | 2.14 | 0.48 |
| 1:FB:390:VAL:HG21 | 1:FB:412:GLU:OE2 | 2.12 | 0.48 |
| 1:G:366:VAL:HG13 | 1:G:367:PRO:HD2 | 1.95 | 0.48 |
| 1:GA:18:VAL:CG1 | 1:GA:43:VAL:HG22 | 2.40 | 0.48 |
| 1:GA:388:ILE:N | 1:GA:457:VAL:HG23 | 2.28 | 0.48 |
| 1:GB:335:ARG:HH12 | 1:GB:337:LEU:HD23 | 1.78 | 0.48 |
| 1:GB:777:LEU:CD1 | 1:GB:781:VAL:HG13 | 2.43 | 0.48 |
| 1:H:143:TRP:O | 1:H:144:LEU:HD12 | 2.13 | 0.48 |
| 1:H:233:ARG:HA | 1:H:245:THR:HG23 | 1.95 | 0.48 |
| 1:HA:34:THR:HG23 | 1:IA:24:ASN:OD1 | 2.13 | 0.48 |
| 1:HA:126:LEU:O | 1:HA:127:LEU:HD22 | 2.13 | 0.48 |
| 1:IB:388:ILE:HG22 | 1:IB:456:ARG:HA | 1.95 | 0.48 |
| 1:JB:90:ILE:O | 1:JB:91:ARG:C | 2.56 | 0.48 |
| 1:K:411:ASP:C | 1:K:411:ASP:OD1 | 2.56 | 0.48 |
| 1:KA:405:THR:HG23 | 1:LA:396:GLY:HA3 | 1.95 | 0.48 |
| 1:L:333:LEU:HA | 1:L:358:LEU:HD12 | 1.95 | 0.48 |
| 1:LB:809:ASP:HA | 1:LB:812:VAL:HG22 | 1.94 | 0.48 |
| 1:M:804:PRO:HA | 1:M:807:ILE:HD12 | 1.95 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:MA:65:VAL:HG23 | 1:MA:67:ARG:CG | 2.43 | 0.48 |
| 1:MB:228:HIS:HB3 | 1:MB:269:GLY:HA3 | 1.94 | 0.48 |
| 1:NA:90:ILE:HG22 | 1:NA:91:ARG:N | 2.28 | 0.48 |
| 1:NB:411:ASP:OD1 | 1:NB:411:ASP:C | 2.56 | 0.48 |
| 1:OA:116:LEU:HB2 | 1:OA:119:THR:HG22 | 1.94 | 0.48 |
| 1:OB:504:ARG:HB3 | 1:OB:526:VAL:HG21 | 1.95 | 0.48 |
| 1:PB:223:GLU:O | 1:PB:273:ILE:HD12 | 2.13 | 0.48 |
| 1:PB:282:CYS:O | 1:PB:301:VAL:HG23 | 2.13 | 0.48 |
| 1:Q:379:ALA:HA | 1:Q:407:MET:HA | 1.95 | 0.48 |
| 1:QA:65:VAL:HG13 | 1:QA:103:GLU:HB3 | 1.93 | 0.48 |
| 1:QA:756:GLU:HA | 1:QA:759:LEU:HD12 | 1.95 | 0.48 |
| 1:R:387:GLY:O | 1:R:388:ILE:HG23 | 2.13 | 0.48 |
| 1:RA:58:TYR:CE2 | 1:RA:92:LEU:HD22 | 2.47 | 0.48 |
| 1:RA:166:THR:HG23 | 1:RA:168:ILE:HG23 | 1.95 | 0.48 |
| 1:RA:764:LYS:HD2 | 1:SA:759:LEU:HD11 | 1.95 | 0.48 |
| 1:RB:591:PHE:O | 1:RB:595:SER:N | 2.46 | 0.48 |
| 1:RB:735:ILE:HG23 | 1:SB:727:GLU:OE2 | 2.13 | 0.48 |
| 1:S:374:VAL:HG12 | 1:S:375:GLU:N | 2.29 | 0.48 |
| 1:S:457:VAL:HG13 | 1:S:489:LEU:O | 2.13 | 0.48 |
| 1:T:16:ILE:HG23 | 1:T:43:VAL:HG13 | 1.95 | 0.48 |
| 1:TA:65:VAL:HG12 | 1:TA:82:ARG:O | 2.14 | 0.48 |
| 1:TA:415:TRP:C | 1:TA:455:THR:HG22 | 2.39 | 0.48 |
| 1:TA:527:ILE:HG21 | 1:TA:576:ALA:HB2 | 1.95 | 0.48 |
| 1:TB:7:ILE:O | 1:TB:8:ILE:C | 2.57 | 0.48 |
| 1:TB:374:VAL:HG12 | 1:TB:375:GLU:N | 2.27 | 0.48 |
| 1:UA:7:ILE:HG22 | 1:UA:7:ILE:O | 2.13 | 0.48 |
| 1:UB:790:VAL:HG13 | 1:VB:788:ALA:HB2 | 1.95 | 0.48 |
| 1:V:56:ARG:HG2 | 1:V:56:ARG:O | 2.13 | 0.48 |
| 1:VA:787:LEU:CD2 | 1:WA:781:VAL:HG12 | 2.43 | 0.48 |
| 1:VB:190:ARG:HH22 | 1:VB:196:TRP:HB3 | 1.78 | 0.48 |
| 1:VB:390:VAL:O | 1:VB:398:VAL:HG13 | 2.13 | 0.48 |
| 1:W:198:VAL:HG11 | 1:W:204:TYR:CE2 | 2.47 | 0.48 |
| 1:WB:807:ILE:HG22 | 1:WB:807:ILE:O | 2.13 | 0.48 |
| 1:X:625:GLN:CG | 1:X:634:VAL:HG13 | 2.43 | 0.48 |
| 1:XA:115:VAL:HG23 | 1:XA:147:GLY:O | 2.13 | 0.48 |
| 1:XB:388:ILE:HG22 | 1:XB:456:ARG:HA | 1.95 | 0.48 |
| 1:YA:543:TYR:HB3 | 1:YA:635:VAL:HG13 | 1.94 | 0.48 |
| 1:AA:411:ASP:OD1 | 1:AA:411:ASP:C | 2.57 | 0.48 |
| 1:AC:346:GLU:HG2 | 1:AC:346:GLU:O | 2.13 | 0.48 |
| 1:AC:401:VAL:HG23 | 1:AC:401:VAL:O | 2.12 | 0.48 |
| 1:B:231:ALA:HB3 | 1:B:246:GLY:N | 2.28 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:B:393:VAL:HG22 | 1:B:411:ASP:HA | 1.95 | 0.48 |
| 1:B:424:GLU:HG2 | 1:B:425:GLU:N | 2.28 | 0.48 |
| 1:BA:107:LYS:HD2 | 1:BA:108:ASP:N | 2.28 | 0.48 |
| 1:BB:113:GLN:O | 1:BB:115:VAL:HG13 | 2.12 | 0.48 |
| 1:CA:281:TYR:HB2 | 1:CA:302:VAL:O | 2.13 | 0.48 |
| 1:CA:485:GLU:O | 1:DA:473:TYR:CE2 | 2.66 | 0.48 |
| 1:CA:804:PRO:HA | 1:CA:807:ILE:HD12 | 1.95 | 0.48 |
| 1:CB:390:VAL:O | 1:CB:398:VAL:HA | 2.13 | 0.48 |
| 1:D:53:VAL:HG13 | 1:D:58:TYR:HA | 1.94 | 0.48 |
| 1:D:758:GLU:O | 1:D:762:VAL:HG22 | 2.12 | 0.48 |
| 1:DA:120:ALA:CB | 1:DA:144:LEU:HD12 | 2.44 | 0.48 |
| 1:DA:175:ARG:HE | 1:DA:213:LEU:HB3 | 1.78 | 0.48 |
| 1:DA:177:ARG:HG2 | 1:DA:213:LEU:HD21 | 1.95 | 0.48 |
| 1:DA:303:LYS:HD2 | 1:DA:304:GLY:O | 2.13 | 0.48 |
| 1:DA:405:THR:HG23 | 1:EA:396:GLY:HA2 | 1.95 | 0.48 |
| 1:DB:19:LEU:CB | 1:DB:44:LEU:HD21 | 2.44 | 0.48 |
| 1:EA:626:ALA:HB3 | 1:EA:635:VAL:HB | 1.94 | 0.48 |
| 1:EB:30:VAL:CG2 | 1:EB:50:MET:SD | 3.02 | 0.48 |
| 1:F:276:LEU:HD11 | 1:F:282:CYS:HB3 | 1.96 | 0.48 |
| 1:F:304:GLY:O | 1:F:305:GLU:HG3 | 2.14 | 0.48 |
| 1:F:498:LEU:HB2 | 1:F:513:ALA:HB3 | 1.94 | 0.48 |
| 1:FA:115:VAL:HG22 | 1:FA:150:THR:CA | 2.44 | 0.48 |
| 1:FB:175:ARG:HA | 1:FB:197:LEU:HD23 | 1.95 | 0.48 |
| 1:FB:468:VAL:HG22 | 1:FB:515:CYS:CB | 2.43 | 0.48 |
| 1:G:775:ALA:HB1 | 1:H:770:LEU:HD22 | 1.96 | 0.48 |
| 1:GA:489:LEU:HD22 | 1:GA:493:GLU:C | 2.38 | 0.48 |
| 1:GB:125:ALA:HB2 | 1:GB:143:TRP:HZ3 | 1.78 | 0.48 |
| 1:IA:172:GLN:OE1 | 1:IA:215:LEU:HD21 | 2.14 | 0.48 |
| 1:IB:16:ILE:HG22 | 1:IB:17:HIS:O | 2.13 | 0.48 |
| 1:IB:62:ALA:HA | 1:IB:88:LEU:HD23 | 1.94 | 0.48 |
| 1:JB:124:LYS:H | 1:JB:160:VAL:HG23 | 1.77 | 0.48 |
| 1:L:18:VAL:HG22 | 1:L:29:GLU:OE2 | 2.13 | 0.48 |
| 1:L:283:VAL:HG22 | 1:L:301:VAL:HA | 1.96 | 0.48 |
| 1:LA:106:GLU:O | 1:LA:107:LYS:HB2 | 2.13 | 0.48 |
| 1:LA:216:VAL:HG22 | 1:LA:217:ASP:N | 2.29 | 0.48 |
| 1:LB:405:THR:HG23 | 1:MB:396:GLY:HA2 | 1.95 | 0.48 |
| 1:LB:732:ALA:HA | 1:LB:735:ILE:HD12 | 1.96 | 0.48 |
| 1:MA:316:LEU:HD21 | 1:MA:319:GLY:C | 2.38 | 0.48 |
| 1:MB:227:LEU:CD2 | 1:MB:229:LEU:HD21 | 2.42 | 0.48 |
| 1:N:523:PHE:CZ | 1:N:568:VAL:HG23 | 2.48 | 0.48 |
| 1:NB:37:ARG:HD2 | 1:NB:37:ARG:N | 2.29 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OB:276:LEU:HD13 | 1:OB:281:TYR:HA | 1.95 | 0.48 |
| 1:OB:583:VAL:HG13 | 1:OB:584:ALA:N | 2.27 | 0.48 |
| 1:P:545:TRP:CE3 | 1:P:633:LEU:HD11 | 2.49 | 0.48 |
| 1:PA:10:ILE:HD12 | 1:PA:31:GLY:O | 2.13 | 0.48 |
| 1:PA:82:ARG:C | 1:PA:83:LEU:HD12 | 2.39 | 0.48 |
| 1:PA:599:ILE:CD1 | 1:PA:640:VAL:HG22 | 2.43 | 0.48 |
| 1:PB:541:LEU:HG | 1:PB:640:VAL:HA | 1.95 | 0.48 |
| 1:QA:358:LEU:HD23 | 1:QA:358:LEU:C | 2.38 | 0.48 |
| 1:QB:757:ALA:HB1 | 1:RB:751:LEU:HD23 | 1.95 | 0.48 |
| 1:QB:783:LYS:HD2 | 1:RB:777:LEU:HD13 | 1.96 | 0.48 |
| 1:RA:126:LEU:O | 1:RA:127:LEU:HD22 | 2.12 | 0.48 |
| 1:RB:378:GLN:O | 1:RB:380:ILE:HD12 | 2.13 | 0.48 |
| 1:RB:768:LEU:HD13 | 1:SB:759:LEU:CD2 | 2.42 | 0.48 |
| 1:S:95:ASP:HB3 | 1:S:96:PRO:HD2 | 1.94 | 0.48 |
| 1:S:390:VAL:CG1 | 1:S:408:LEU:HD21 | 2.42 | 0.48 |
| 1:S:625:GLN:HA | 1:S:635:VAL:O | 2.13 | 0.48 |
| 1:SB:181:GLU:OE2 | 1:SB:191:VAL:HG12 | 2.13 | 0.48 |
| 1:SB:274:THR:HG21 | 1:SB:310:LEU:HG | 1.95 | 0.48 |
| 1:SB:539:LEU:HD21 | 1:SB:541:LEU:HD11 | 1.94 | 0.48 |
| 1:T:795:PHE:O | 1:T:799:THR:HG23 | 2.13 | 0.48 |
| 1:TA:520:PRO:C | 1:UA:564:VAL:HG22 | 2.39 | 0.48 |
| 1:V:95:ASP:O | 1:V:96:PRO:C | 2.56 | 0.48 |
| 1:VB:17:HIS:HD2 | 1:VB:28:VAL:HG23 | 1.78 | 0.48 |
| 1:VB:335:ARG:NH1 | 1:VB:337:LEU:HD23 | 2.28 | 0.48 |
| 1:VB:522:PHE:HD1 | 1:VB:524:THR:HG23 | 1.77 | 0.48 |
| 1:WB:411:ASP:OD1 | 1:WB:411:ASP:C | 2.54 | 0.48 |
| 1:WB:529:ILE:HD13 | 1:WB:539:LEU:HD22 | 1.96 | 0.48 |
| 1:WB:579:VAL:HG23 | 1:WB:603:VAL:HG21 | 1.96 | 0.48 |
| 1:X:582:ALA:HB3 | 1:X:602:ALA:HB2 | 1.95 | 0.48 |
| 1:XB:452:ARG:HE | 1:XB:454:LYS:HB3 | 1.78 | 0.48 |
| 1:XB:460:TYR:HB2 | 1:XB:495:PHE:CZ | 2.48 | 0.48 |
| 1:YA:496:THR:HG22 | 1:YA:497:VAL:N | 2.28 | 0.48 |
| 1:YB:160:VAL:HG12 | 1:YB:161:GLU:OE1 | 2.13 | 0.48 |
| 1:Z:331:GLY:O | 1:Z:407:MET:HE1 | 2.13 | 0.48 |
| 1:ZB:495:PHE:CB | 1:ZB:514:LEU:HD11 | 2.44 | 0.48 |
| 1:A:65:VAL:HG11 | 1:A:100:TYR:CG | 2.47 | 0.48 |
| 1:A:514:LEU:HD12 | 1:A:515:CYS:N | 2.29 | 0.48 |
| 1:A:531:THR:HG23 | 1:A:535:ALA:HB3 | 1.96 | 0.48 |
| 1:AA:331:GLY:N | 1:AA:407:MET:HE2 | 2.29 | 0.48 |
| 1:AA:540:GLN:O | 1:AA:541:LEU:HD23 | 2.13 | 0.48 |
| 1:AA:588:PHE:CZ | 1:Z:662:ILE:HD13 | 2.48 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AB:73:VAL:CG1 | 1:AB:81:VAL:HG13 | 2.43 | 0.48 |
| 1:AB:413:VAL:HG22 | 1:AB:414:LEU:H | 1.77 | 0.48 |
| 1:AB:415:TRP:C | 1:AB:455:THR:HG22 | 2.39 | 0.48 |
| 1:AC:56:ARG:O | 1:AC:111:PRO:HA | 2.13 | 0.48 |
| 1:AC:284:ILE:O | 1:AC:299:LYS:HA | 2.13 | 0.48 |
| 1:AC:389:TYR:CD1 | 1:AC:400:ALA:HB2 | 2.47 | 0.48 |
| 1:B:408:LEU:H | 1:B:408:LEU:HD12 | 1.77 | 0.48 |
| 1:BB:65:VAL:HG23 | 1:BB:67:ARG:HG3 | 1.94 | 0.48 |
| 1:CB:411:ASP:OD1 | 1:CB:411:ASP:C | 2.56 | 0.48 |
| 1:D:522:PHE:HA | 1:D:543:TYR:O | 2.14 | 0.48 |
| 1:DB:426:LEU:HD23 | 1:DB:426:LEU:H | 1.78 | 0.48 |
| 1:EA:774:ARG:O | 1:EA:778:GLU:OE1 | 2.31 | 0.48 |
| 1:FA:401:VAL:C | 1:FA:402:ILE:HD12 | 2.38 | 0.48 |
| 1:FA:533:ASP:OD1 | 1:FA:535:ALA:HB2 | 2.14 | 0.48 |
| 1:FB:230:ARG:H | 1:FB:268:LEU:HD13 | 1.77 | 0.48 |
| 1:G:462:VAL:N | 1:G:485:GLU:O | 2.46 | 0.48 |
| 1:G:597:ARG:O | 1:G:601:THR:HG23 | 2.14 | 0.48 |
| 1:GB:531:THR:HG21 | 1:GB:588:PHE:CA | 2.43 | 0.48 |
| 1:HA:56:ARG:O | 1:HA:111:PRO:HA | 2.13 | 0.48 |
| 1:I:235:PHE:CD1 | 1:I:264:HIS:HB3 | 2.49 | 0.48 |
| 1:IB:60:THR:OG1 | 1:IB:106:GLU:O | 2.32 | 0.48 |
| 1:IB:69:ALA:HB3 | 1:IB:72:LEU:HB3 | 1.94 | 0.48 |
| 1:IB:143:TRP:CA | 1:IB:208:VAL:HG11 | 2.44 | 0.48 |
| 1:IB:288:VAL:HG12 | 1:IB:293:LYS:C | 2.38 | 0.48 |
| 1:JB:9:ARG:HA | 1:JB:34:THR:HA | 1.95 | 0.48 |
| 1:K:59:CYS:N | 1:K:90:ILE:HG23 | 2.29 | 0.48 |
| 1:K:331:GLY:N | 1:K:407:MET:HE3 | 2.29 | 0.48 |
| 1:KA:587:THR:HG23 | 1:KA:590:ASP:H | 1.78 | 0.48 |
| 1:L:59:CYS:SG | 1:L:109:ILE:HD13 | 2.54 | 0.48 |
| 1:L:591:PHE:O | 1:L:595:SER:N | 2.46 | 0.48 |
| 1:LA:170:GLN:N | 1:LA:201:VAL:HG13 | 2.28 | 0.48 |
| 1:MA:326:LEU:O | 1:MA:362:PRO:HA | 2.13 | 0.48 |
| 1:MB:75:PHE:HA | 1:MB:82:ARG:H | 1.78 | 0.48 |
| 1:MB:402:ILE:HG22 | 1:MB:403:GLY:N | 2.29 | 0.48 |
| 1:MB:489:LEU:HD21 | 1:MB:495:PHE:CZ | 2.47 | 0.48 |
| 1:MB:527:ILE:O | 1:MB:529:ILE:HG23 | 2.14 | 0.48 |
| 1:N:453:ASN:CG | 1:N:455:THR:HG1 | 2.21 | 0.48 |
| 1:O:301:VAL:O | 1:O:301:VAL:HG13 | 2.13 | 0.48 |
| 1:OA:115:VAL:HG23 | 1:OA:147:GLY:O | 2.13 | 0.48 |
| 1:PA:226:ALA:HB2 | 1:PA:309:PHE:CE1 | 2.48 | 0.48 |
| 1:PA:283:VAL:HG22 | 1:PA:301:VAL:HA | 1.94 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:PA:283:VAL:HG12 | 1:PA:284:ILE:N | 2.29 | 0.48 |
| 1:PA:340:LEU:HD12 | 1:PA:351:HIS:N | 2.27 | 0.48 |
| 1:PB:10:ILE:HG21 | 1:PB:29:GLU:HG3 | 1.96 | 0.48 |
| 1:QB:626:ALA:HB3 | 1:QB:635:VAL:HB | 1.95 | 0.48 |
| 1:R:166:THR:CG2 | 1:R:215:LEU:HD22 | 2.43 | 0.48 |
| 1:RA:231:ALA:HB2 | 1:RA:249:TRP:HZ3 | 1.78 | 0.48 |
| 1:RA:504:ARG:HB3 | 1:RA:526:VAL:HG23 | 1.95 | 0.48 |
| 1:RB:59:CYS:SG | 1:RB:109:ILE:HD13 | 2.53 | 0.48 |
| 1:S:279:HIS:HA | 1:S:323:VAL:HG22 | 1.95 | 0.48 |
| 1:SB:69:ALA:HB2 | 1:SB:74:LEU:CD2 | 2.40 | 0.48 |
| 1:T:460:TYR:CE2 | 1:T:468:VAL:HG21 | 2.48 | 0.48 |
| 1:T:579:VAL:O | 1:T:583:VAL:HG12 | 2.12 | 0.48 |
| 1:TA:333:LEU:HD11 | 1:TA:356:HIS:C | 2.38 | 0.48 |
| 1:TB:172:GLN:HB3 | 1:TB:215:LEU:HD11 | 1.95 | 0.48 |
| 1:UB:121:LEU:HD12 | 1:UB:121:LEU:O | 2.13 | 0.48 |
| 1:V:55:PRO:O | 1:V:56:ARG:HD3 | 2.12 | 0.48 |
| 1:V:238:PHE:CE1 | 1:V:259:HIS:CD2 | 3.01 | 0.48 |
| 1:VB:168:ILE:HG22 | 1:VB:215:LEU:HD13 | 1.95 | 0.48 |
| 1:VB:764:LYS:O | 1:VB:768:LEU:HD23 | 2.14 | 0.48 |
| 1:WB:230:ARG:NH2 | 1:WB:268:LEU:HD11 | 2.29 | 0.48 |
| 1:X:112:LEU:CD2 | 1:X:150:THR:HG21 | 2.43 | 0.48 |
| 1:X:470:VAL:HG22 | 1:X:495:PHE:CD1 | 2.48 | 0.48 |
| 1:XA:25:VAL:HG22 | 1:XA:79:GLY:HA3 | 1.95 | 0.48 |
| 1:XB:126:LEU:C | 1:XB:127:LEU:HD22 | 2.38 | 0.48 |
| 1:XB:522:PHE:CD2 | 1:XB:542:ALA:HB1 | 2.49 | 0.48 |
| 1:XB:670:GLU:CG | 1:YB:664:ILE:HD11 | 2.43 | 0.48 |
| 1:Y:804:PRO:HA | 1:Y:807:ILE:HD12 | 1.96 | 0.48 |
| 1:Y:809:ASP:HB2 | 1:Z:808:ARG:HE | 1.77 | 0.48 |
| 1:YA:288:VAL:HG13 | 1:YA:294:ASN:ND2 | 2.28 | 0.48 |
| 1:YB:228:HIS:HA | 1:YB:250:LEU:HD23 | 1.96 | 0.48 |
| 1:YB:468:VAL:HG22 | 1:YB:515:CYS:HA | 1.94 | 0.48 |
| 1:YB:768:LEU:CD2 | 1:ZB:766:ARG:HE | 2.26 | 0.48 |
| 1:ZB:144:LEU:HD12 | 1:ZB:163:ILE:CD1 | 2.43 | 0.48 |
| 1:AA:3:THR:HG22 | 1:AA:43:VAL:HG23 | 1.93 | 0.48 |
| 1:AA:174:LEU:O | 1:AA:176:LEU:HD22 | 2.14 | 0.48 |
| 1:AA:205:LEU:HD23 | 1:AA:205:LEU:N | 2.11 | 0.48 |
| 1:AA:591:PHE:O | 1:AA:595:SER:N | 2.47 | 0.48 |
| 1:AB:326:LEU:O | 1:AB:362:PRO:HA | 2.12 | 0.48 |
| 1:AB:599:ILE:HG23 | 1:AB:600:ARG:N | 2.28 | 0.48 |
| 1:AC:55:PRO:C | 1:AC:56:ARG:HD3 | 2.38 | 0.48 |
| 1:AC:211:GLU:O | 1:AC:213:LEU:HD12 | 2.13 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:BB:382:LEU:HD21 | 1:BB:388:ILE:HG23 | 1.96 | 0.48 |
| 1:CA:662:ILE:HD12 | 1:CA:662:ILE:H | 1.79 | 0.48 |
| 1:DA:162:ILE:HG22 | 1:DA:163:ILE:N | 2.29 | 0.48 |
| 1:DA:163:ILE:HD12 | 1:DA:205:LEU:HG | 1.94 | 0.48 |
| 1:DA:387:GLY:HA3 | 1:DA:401:VAL:O | 2.13 | 0.48 |
| 1:DB:131:ASP:HB3 | 1:DB:137:VAL:HG21 | 1.95 | 0.48 |
| 1:F:116:LEU:HB2 | 1:F:119:THR:HG22 | 1.96 | 0.48 |
| 1:FB:329:GLN:O | 1:FB:407:MET:HE1 | 2.13 | 0.48 |
| 1:GB:282:CYS:HB2 | 1:GB:316:LEU:HD11 | 1.95 | 0.48 |
| 1:HB:60:THR:HG22 | 1:HB:90:ILE:HB | 1.96 | 0.48 |
| 1:I:163:ILE:HD11 | 1:I:205:LEU:HD21 | 1.96 | 0.48 |
| 1:I:388:ILE:CA | 1:I:457:VAL:HG23 | 2.43 | 0.48 |
| 1:I:489:LEU:HD11 | 1:I:495:PHE:CE2 | 2.49 | 0.48 |
| 1:I:779:LEU:HD12 | 1:J:774:ARG:HE | 1.78 | 0.48 |
| 1:IA:165:ALA:HB1 | 1:IA:203:ALA:O | 2.13 | 0.48 |
| 1:IB:61:VAL:HA | 1:IB:105:LEU:HA | 1.96 | 0.48 |
| 1:IB:349:VAL:HG11 | 1:IB:351:HIS:CD2 | 2.48 | 0.48 |
| 1:J:115:VAL:HG23 | 1:J:147:GLY:O | 2.13 | 0.48 |
| 1:JA:333:LEU:HD23 | 1:JA:374:VAL:HG11 | 1.95 | 0.48 |
| 1:K:332:LEU:C | 1:K:358:LEU:HD13 | 2.38 | 0.48 |
| 1:LA:480:VAL:HG12 | 1:LA:481:VAL:N | 2.29 | 0.48 |
| 1:M:124:LYS:HB3 | 1:M:160:VAL:HG23 | 1.95 | 0.48 |
| 1:M:413:VAL:HG22 | 1:M:414:LEU:N | 2.28 | 0.48 |
| 1:MA:410:GLN:O | 1:MA:412:GLU:HG3 | 2.14 | 0.48 |
| 1:MB:172:GLN:CD | 1:MB:215:LEU:HD21 | 2.39 | 0.48 |
| 1:N:381:PRO:HA | 1:N:405:THR:HG22 | 1.96 | 0.48 |
| 1:NB:15:TYR:HA | 1:NB:29:GLU:O | 2.13 | 0.48 |
| 1:OA:16:ILE:CG2 | 1:OA:43:VAL:HG13 | 2.43 | 0.48 |
| 1:OA:325:VAL:HA | 1:OA:364:GLU:OE1 | 2.13 | 0.48 |
| 1:OA:545:TRP:HA | 1:OA:636:SER:H | 1.79 | 0.48 |
| 1:P:340:LEU:HD22 | 1:P:344:GLU:CB | 2.43 | 0.48 |
| 1:PA:116:LEU:HB2 | 1:PA:119:THR:HG22 | 1.94 | 0.48 |
| 1:PB:10:ILE:HD12 | 1:PB:31:GLY:O | 2.14 | 0.48 |
| 1:PB:223:GLU:CD | 1:PB:253:VAL:HG21 | 2.37 | 0.48 |
| 1:Q:489:LEU:HD11 | 1:Q:495:PHE:CZ | 2.49 | 0.48 |
| 1:QB:604:PHE:O | 1:QB:623:ARG:NE | 2.46 | 0.48 |
| 1:QB:758:GLU:OE2 | 1:RB:751:LEU:HD13 | 2.13 | 0.48 |
| 1:SA:105:LEU:HD11 | 1:SA:107:LYS:O | 2.14 | 0.48 |
| 1:SA:414:LEU:HB3 | 1:SA:455:THR:HG21 | 1.96 | 0.48 |
| 1:TA:531:THR:CG2 | 1:TA:537:LEU:HD11 | 2.43 | 0.48 |
| 1:TB:3:THR:HG22 | 1:TB:6:PHE:CD1 | 2.48 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UA:81:VAL:O | 1:UA:83:LEU:HD12 | 2.14 | 0.48 |
| 1:UA:460:TYR:CD2 | 1:UA:487:VAL:HG13 | 2.49 | 0.48 |
| 1:V:16:ILE:HG23 | 1:V:43:VAL:HG13 | 1.95 | 0.48 |
| 1:VB:7:ILE:O | 1:VB:8:ILE:C | 2.57 | 0.48 |
| 1:VB:175:ARG:HA | 1:VB:196:TRP:O | 2.12 | 0.48 |
| 1:VB:282:CYS:HB2 | 1:VB:316:LEU:HD11 | 1.95 | 0.48 |
| 1:WA:6:PHE:O | 1:WA:36:ILE:HA | 2.13 | 0.48 |
| 1:WA:77:VAL:HG23 | 1:WA:78:THR:N | 2.29 | 0.48 |
| 1:WA:595:SER:O | 1:WA:599:ILE:HD12 | 2.14 | 0.48 |
| 1:WA:790:VAL:HG13 | 1:WA:793:LYS:HE3 | 1.95 | 0.48 |
| 1:X:382:LEU:HD23 | 1:X:456:ARG:NH2 | 2.28 | 0.48 |
| 1:XA:107:LYS:HD3 | 1:XA:108:ASP:N | 2.29 | 0.48 |
| 1:XB:716:VAL:HG12 | 1:YB:711:ALA:CB | 2.44 | 0.48 |
| 1:XB:741:VAL:HG12 | 1:XB:745:LYS:HE2 | 1.94 | 0.48 |
| 1:Y:405:THR:HG23 | 1:Z:396:GLY:HA3 | 1.96 | 0.48 |
| 1:YA:6:PHE:C | 1:YA:8:ILE:HD12 | 2.38 | 0.48 |
| 1:YA:406:TYR:OH | 1:YA:409:THR:HG23 | 2.14 | 0.48 |
| 1:YA:737:GLY:O | 1:YA:741:VAL:HG23 | 2.13 | 0.48 |
| 1:Z:531:THR:HG21 | 1:Z:588:PHE:CA | 2.40 | 0.48 |
| 1:A:18:VAL:HG22 | 1:A:29:GLU:CD | 2.38 | 0.48 |
| 1:A:411:ASP:OD1 | 1:A:411:ASP:C | 2.57 | 0.48 |
| 1:A:462:VAL:N | 1:A:485:GLU:O | 2.46 | 0.48 |
| 1:AB:53:VAL:HG13 | 1:AB:109:ILE:HG23 | 1.95 | 0.48 |
| 1:BB:365:TYR:OH | 1:BB:371:VAL:HG11 | 2.14 | 0.48 |
| 1:CA:9:ARG:HB3 | 1:CA:34:THR:HG22 | 1.96 | 0.48 |
| 1:CA:232:ARG:HB2 | 1:CA:263:VAL:O | 2.14 | 0.48 |
| 1:D:276:LEU:HD13 | 1:D:281:TYR:HA | 1.95 | 0.48 |
| 1:DA:333:LEU:HD23 | 1:DA:374:VAL:CG1 | 2.43 | 0.48 |
| 1:DA:638:VAL:HG22 | 1:DA:639:ASP:N | 2.28 | 0.48 |
| 1:DB:410:GLN:O | 1:DB:411:ASP:OD1 | 2.32 | 0.48 |
| 1:E:10:ILE:O | 1:E:10:ILE:HG13 | 2.14 | 0.48 |
| 1:EB:276:LEU:HD23 | 1:EB:320:ILE:HG23 | 1.94 | 0.48 |
| 1:FA:56:ARG:O | 1:FA:111:PRO:HA | 2.14 | 0.48 |
| 1:FA:284:ILE:HG12 | 1:FA:300:ARG:O | 2.14 | 0.48 |
| 1:FA:460:TYR:O | 1:FA:487:VAL:HG12 | 2.13 | 0.48 |
| 1:FB:17:HIS:HD1 | 1:FB:45:PHE:HZ | 1.61 | 0.48 |
| 1:FB:154:ARG:HD2 | 1:FB:157:VAL:HG23 | 1.95 | 0.48 |
| 1:G:471:TYR:HD2 | 1:G:478:ALA:HB2 | 1.77 | 0.48 |
| 1:GA:53:VAL:HG23 | 1:GA:97:PHE:CZ | 2.49 | 0.48 |
| 1:GA:643:VAL:HG22 | 1:HA:580:ARG:HH12 | 1.77 | 0.48 |
| 1:GB:380:ILE:H | 1:GB:380:ILE:HD12 | 1.79 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:H:126:LEU:O | 1:H:127:LEU:HD22 | 2.13 | 0.48 |
| 1:H:276:LEU:HD13 | 1:H:281:TYR:HA | 1.95 | 0.48 |
| 1:I:115:VAL:HG11 | 1:I:145:PHE:CD2 | 2.49 | 0.48 |
| 1:I:219:VAL:HG11 | 1:I:227:LEU:HD22 | 1.94 | 0.48 |
| 1:IA:50:MET:O | 1:IA:52:THR:HG23 | 2.14 | 0.48 |
| 1:IA:411:ASP:OD1 | 1:IA:411:ASP:C | 2.55 | 0.48 |
| 1:IA:521:ASP:O | 1:IA:545:TRP:CD1 | 2.67 | 0.48 |
| 1:J:529:ILE:HB | 1:J:583:VAL:HG21 | 1.96 | 0.48 |
| 1:J:541:LEU:HD13 | 1:J:543:TYR:CZ | 2.48 | 0.48 |
| 1:JA:51:VAL:O | 1:JA:96:PRO:HA | 2.13 | 0.48 |
| 1:JA:58:TYR:CD2 | 1:JA:112:LEU:HD22 | 2.49 | 0.48 |
| 1:JB:58:TYR:CG | 1:JB:92:LEU:HA | 2.49 | 0.48 |
| 1:JB:228:HIS:ND1 | 1:JB:268:LEU:HD22 | 2.28 | 0.48 |
| 1:K:529:ILE:HD13 | 1:K:579:VAL:HG12 | 1.95 | 0.48 |
| 1:KA:286:ASP:OD2 | 1:KA:296:LEU:HD13 | 2.14 | 0.48 |
| 1:KB:332:LEU:HA | 1:KB:376:GLU:HA | 1.94 | 0.48 |
| 1:LA:177:ARG:HH11 | 1:LA:213:LEU:HD11 | 1.79 | 0.48 |
| 1:LB:116:LEU:HB2 | 1:LB:119:THR:HG22 | 1.96 | 0.48 |
| 1:LB:172:GLN:HB3 | 1:LB:215:LEU:HD11 | 1.95 | 0.48 |
| 1:LB:544:ASN:O | 1:LB:635:VAL:HG13 | 2.14 | 0.48 |
| 1:LB:549:VAL:HG12 | 1:LB:549:VAL:O | 2.14 | 0.48 |
| 1:M:115:VAL:HG22 | 1:M:149:GLY:C | 2.39 | 0.48 |
| 1:MB:52:THR:O | 1:MB:109:ILE:HD11 | 2.14 | 0.48 |
| 1:N:275:THR:O | 1:N:275:THR:HG23 | 2.12 | 0.48 |
| 1:NB:172:GLN:HB3 | 1:NB:215:LEU:HD11 | 1.95 | 0.48 |
| 1:OA:18:VAL:HG12 | 1:OA:43:VAL:HA | 1.96 | 0.48 |
| 1:OA:63:ASN:ND2 | 1:OA:83:LEU:HD23 | 2.29 | 0.48 |
| 1:OB:227:LEU:O | 1:OB:251:VAL:HG22 | 2.13 | 0.48 |
| 1:OB:798:MET:O | 1:OB:802:ILE:HG22 | 2.14 | 0.48 |
| 1:PA:61:VAL:O | 1:PA:61:VAL:HG23 | 2.13 | 0.48 |
| 1:PB:374:VAL:HG12 | 1:PB:375:GLU:N | 2.28 | 0.48 |
| 1:QA:356:HIS:CE1 | 1:QA:374:VAL:HG21 | 2.49 | 0.48 |
| 1:QB:388:ILE:CA | 1:QB:457:VAL:HG23 | 2.44 | 0.48 |
| 1:QB:583:VAL:HG13 | 1:QB:584:ALA:N | 2.28 | 0.48 |
| 1:RB:173:ALA:O | 1:RB:216:VAL:HG12 | 2.13 | 0.48 |
| 1:RB:466:ALA:HB1 | 1:RB:515:CYS:SG | 2.53 | 0.48 |
| 1:S:155:LYS:HG3 | 1:S:156:GLU:H | 1.79 | 0.48 |
| 1:SB:62:ALA:HA | 1:SB:88:LEU:HD23 | 1.94 | 0.48 |
| 1:SB:786:GLN:OE1 | 1:TB:781:VAL:HG11 | 2.14 | 0.48 |
| 1:T:539:LEU:CD2 | 1:T:640:VAL:HG11 | 2.43 | 0.48 |
| 1:TB:704:LYS:HA | 1:TB:707:LEU:HD12 | 1.96 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UA:122:HIS:CB | 1:UA:208:VAL:HG21 | 2.44 | 0.48 |
| 1:UA:167:ILE:HG22 | 1:UA:167:ILE:O | 2.14 | 0.48 |
| 1:VA:484:PRO:HB2 | 1:WA:471:TYR:CG | 2.49 | 0.48 |
| 1:VB:34:THR:HG23 | 1:WB:24:ASN:OD1 | 2.13 | 0.48 |
| 1:W:15:TYR:HA | 1:W:29:GLU:O | 2.13 | 0.48 |
| 1:W:126:LEU:C | 1:W:127:LEU:HD22 | 2.39 | 0.48 |
| 1:W:326:LEU:HD22 | 1:W:331:GLY:CA | 2.43 | 0.48 |
| 1:WB:175:ARG:HE | 1:WB:213:LEU:CB | 2.26 | 0.48 |
| 1:WB:526:VAL:HG12 | 1:WB:538:GLN:CD | 2.39 | 0.48 |
| 1:Y:46:ALA:HB1 | 1:Y:47:PRO:HD2 | 1.95 | 0.48 |
| 1:Y:812:VAL:O | 1:Y:812:VAL:HG23 | 2.13 | 0.48 |
| 1:YB:10:ILE:O | 1:YB:10:ILE:HG13 | 2.13 | 0.48 |
| 1:YB:158:GLU:OE2 | 1:YB:160:VAL:HG22 | 2.13 | 0.48 |
| 1:YB:458:VAL:O | 1:YB:489:LEU:HD12 | 2.13 | 0.48 |
| 1:Z:341:GLU:O | 1:Z:342:GLU:HB2 | 2.14 | 0.48 |
| 1:ZA:580:ARG:HA | 1:ZA:583:VAL:HG12 | 1.96 | 0.48 |
| 1:ZB:273:ILE:HD12 | 1:ZB:308:PHE:O | 2.13 | 0.48 |
| 1:ZB:545:TRP:HA | 1:ZB:636:SER:H | 1.78 | 0.48 |
| 1:A:115:VAL:HG11 | 1:A:145:PHE:CD2 | 2.49 | 0.48 |
| 1:AA:758:GLU:O | 1:AA:762:VAL:HG13 | 2.13 | 0.48 |
| 1:AB:55:PRO:C | 1:AB:56:ARG:HD3 | 2.39 | 0.48 |
| 1:AB:366:VAL:O | 1:AB:366:VAL:HG13 | 2.14 | 0.48 |
| 1:AB:541:LEU:HD23 | 1:AB:640:VAL:CG2 | 2.42 | 0.48 |
| 1:AC:105:LEU:HD11 | 1:AC:107:LYS:O | 2.14 | 0.48 |
| 1:BA:460:TYR:CE1 | 1:BA:514:LEU:HD23 | 2.49 | 0.48 |
| 1:BA:679:ARG:NH1 | 1:BA:680:LEU:HD21 | 2.29 | 0.48 |
| 1:BB:795:PHE:O | 1:BB:799:THR:HG23 | 2.13 | 0.48 |
| 1:C:30:VAL:HG23 | 1:C:50:MET:HE1 | 1.96 | 0.48 |
| 1:C:126:LEU:O | 1:C:127:LEU:HD22 | 2.13 | 0.48 |
| 1:CA:414:LEU:HB2 | 1:CA:455:THR:HG21 | 1.94 | 0.48 |
| 1:CA:415:TRP:CH2 | 1:CA:417:LYS:HA | 2.49 | 0.48 |
| 1:D:288:VAL:HG12 | 1:D:293:LYS:C | 2.38 | 0.48 |
| 1:D:326:LEU:O | 1:D:362:PRO:HA | 2.14 | 0.48 |
| 1:DA:174:LEU:C | 1:DA:197:LEU:HD13 | 2.39 | 0.48 |
| 1:DA:460:TYR:O | 1:DA:486:LEU:HD12 | 2.14 | 0.48 |
| 1:EA:175:ARG:HH21 | 1:EA:263:VAL:HG12 | 1.77 | 0.48 |
| 1:FB:122:HIS:ND1 | 1:FB:160:VAL:HG11 | 2.29 | 0.48 |
| 1:FB:467:ALA:HA | 1:FB:482:PHE:HA | 1.95 | 0.48 |
| 1:FB:719:THR:HG22 | 1:FB:723:LYS:HE3 | 1.96 | 0.48 |
| 1:G:235:PHE:CD1 | 1:G:264:HIS:HB3 | 2.49 | 0.48 |
| 1:GB:81:VAL:HG13 | 1:GB:83:LEU:CD1 | 2.43 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:GB:125:ALA:CB | 1:GB:137:VAL:HG13 | 2.44 | 0.48 |
| 1:HA:65:VAL:HG23 | 1:HA:67:ARG:HG3 | 1.95 | 0.48 |
| 1:HA:176:LEU:HD21 | 1:HA:196:TRP:NE1 | 2.29 | 0.48 |
| 1:HB:3:THR:HG22 | 1:HB:6:PHE:HA | 1.95 | 0.48 |
| 1:HB:46:ALA:HB1 | 1:HB:47:PRO:CD | 2.44 | 0.48 |
| 1:HB:311:GLN:HB3 | 1:HB:312:PRO:HD2 | 1.96 | 0.48 |
| 1:I:37:ARG:N | 1:I:37:ARG:HD2 | 2.29 | 0.48 |
| 1:I:53:VAL:HG23 | 1:I:94:GLN:O | 2.13 | 0.48 |
| 1:I:274:THR:HG21 | 1:I:310:LEU:HG | 1.94 | 0.48 |
| 1:I:497:VAL:HG22 | 1:I:498:LEU:H | 1.79 | 0.48 |
| 1:IA:165:ALA:O | 1:IA:203:ALA:HB1 | 2.14 | 0.48 |
| 1:IB:30:VAL:HG22 | 1:IB:31:GLY:H | 1.78 | 0.48 |
| 1:IB:189:GLU:OE1 | 1:IB:189:GLU:O | 2.32 | 0.48 |
| 1:JA:15:TYR:HB3 | 1:JA:30:VAL:HG23 | 1.96 | 0.48 |
| 1:JA:398:VAL:HG11 | 1:JA:415:TRP:CD2 | 2.48 | 0.48 |
| 1:JA:777:LEU:O | 1:JA:781:VAL:HG22 | 2.13 | 0.48 |
| 1:K:221:LEU:HD11 | 1:K:251:VAL:HB | 1.96 | 0.48 |
| 1:KA:112:LEU:HD11 | 1:KA:153:PRO:CD | 2.44 | 0.48 |
| 1:KA:424:GLU:HG2 | 1:KA:425:GLU:N | 2.28 | 0.48 |
| 1:L:405:THR:HG23 | 1:M:396:GLY:HA3 | 1.96 | 0.48 |
| 1:LA:205:LEU:HD12 | 1:LA:206:PRO:HD2 | 1.96 | 0.48 |
| 1:MA:61:VAL:O | 1:MA:61:VAL:HG13 | 2.11 | 0.48 |
| 1:MA:160:VAL:HG12 | 1:MA:161:GLU:H | 1.79 | 0.48 |
| 1:MA:583:VAL:HG13 | 1:MA:584:ALA:N | 2.29 | 0.48 |
| 1:MB:16:ILE:HG22 | 1:MB:17:HIS:N | 2.29 | 0.48 |
| 1:MB:539:LEU:HD11 | 1:MB:541:LEU:HD11 | 1.94 | 0.48 |
| 1:MB:666:THR:HG22 | 1:NB:657:SER:HB2 | 1.96 | 0.48 |
| 1:MB:750:ALA:HB2 | 1:NB:741:VAL:HG22 | 1.96 | 0.48 |
| 1:NA:316:LEU:HD21 | 1:NA:319:GLY:C | 2.39 | 0.48 |
| 1:NB:422:GLY:N | 1:NB:424:GLU:OE1 | 2.46 | 0.48 |
| 1:O:523:PHE:CE2 | 1:O:568:VAL:HG23 | 2.49 | 0.48 |
| 1:OA:331:GLY:CA | 1:OA:407:MET:HE1 | 2.44 | 0.48 |
| 1:OB:75:PHE:CD1 | 1:OB:81:VAL:HA | 2.48 | 0.48 |
| 1:P:499:SER:C | 1:P:500:LEU:HD12 | 2.38 | 0.48 |
| 1:P:606:PHE:HB2 | 1:P:623:ARG:HE | 1.78 | 0.48 |
| 1:PA:201:VAL:O | 1:PA:201:VAL:HG12 | 2.14 | 0.48 |
| 1:PB:65:VAL:HG11 | 1:PB:100:TYR:CB | 2.43 | 0.48 |
| 1:PB:605:GLY:O | 1:PB:623:ARG:HG3 | 2.14 | 0.48 |
| 1:PB:802:ILE:CG2 | 1:PB:807:ILE:HD11 | 2.44 | 0.48 |
| 1:QB:349:VAL:HG12 | 1:QB:351:HIS:CE1 | 2.48 | 0.48 |
| 1:R:63:ASN:H | 1:R:88:LEU:HD23 | 1.78 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:R:73:VAL:CG1 | 1:R:74:LEU:N | 2.77 | 0.48 |
| 1:RA:495:PHE:CE1 | 1:RA:514:LEU:HD11 | 2.48 | 0.48 |
| 1:RB:262:ASP:OD2 | 1:RB:263:VAL:HG22 | 2.14 | 0.48 |
| 1:S:481:VAL:HG11 | 1:S:487:VAL:HG23 | 1.94 | 0.48 |
| 1:SA:311:GLN:HB3 | 1:SA:312:PRO:CD | 2.43 | 0.48 |
| 1:TA:541:LEU:HD13 | 1:TA:543:TYR:OH | 2.14 | 0.48 |
| 1:TB:459:SER:HB2 | 1:TB:486:LEU:HD21 | 1.95 | 0.48 |
| 1:UB:112:LEU:HD11 | 1:UB:153:PRO:HD3 | 1.95 | 0.48 |
| 1:VB:451:PRO:C | 1:VB:452:ARG:HD3 | 2.39 | 0.48 |
| 1:WA:53:VAL:HG13 | 1:WA:109:ILE:HG23 | 1.95 | 0.48 |
| 1:WA:220:ILE:HD12 | 1:XA:245:THR:HG21 | 1.96 | 0.48 |
| 1:WA:786:GLN:OE1 | 1:XA:777:LEU:HD21 | 2.14 | 0.48 |
| 1:WB:59:CYS:SG | 1:WB:107:LYS:O | 2.71 | 0.48 |
| 1:X:418:GLU:C | 1:X:419:LEU:HD12 | 2.38 | 0.48 |
| 1:XB:168:ILE:HG22 | 1:XB:168:ILE:O | 2.12 | 0.48 |
| 1:Y:126:LEU:HD23 | 1:Y:127:LEU:HD22 | 1.96 | 0.48 |
| 1:Y:274:THR:HG21 | 1:Y:310:LEU:CD1 | 2.44 | 0.48 |
| 1:YA:30:VAL:HG22 | 1:YA:31:GLY:N | 2.29 | 0.48 |
| 1:YA:575:ILE:O | 1:YA:579:VAL:HG23 | 2.14 | 0.48 |
| 1:YB:389:TYR:CE1 | 1:YB:457:VAL:HG22 | 2.49 | 0.48 |
| 1:Z:123:LEU:HD23 | 1:Z:159:VAL:HA | 1.96 | 0.48 |
| 1:ZB:125:ALA:HA | 1:ZB:157:VAL:HA | 1.96 | 0.48 |
| 1:ZB:241:VAL:HG11 | 1:ZB:243:ARG:CZ | 2.43 | 0.48 |
| 1:AA:61:VAL:HG23 | 1:AA:61:VAL:O | 2.12 | 0.48 |
| 1:AA:549:VAL:HG23 | 1:AA:552:ARG:HE | 1.79 | 0.48 |
| 1:AB:168:ILE:HB | 1:AB:200:THR:O | 2.14 | 0.48 |
| 1:B:106:GLU:CD | 1:B:106:GLU:O | 2.57 | 0.48 |
| 1:BB:325:VAL:O | 1:BB:325:VAL:HG13 | 2.14 | 0.48 |
| 1:C:165:ALA:HB1 | 1:C:203:ALA:O | 2.14 | 0.48 |
| 1:CA:64:PRO:O | 1:CA:83:LEU:HD12 | 2.14 | 0.48 |
| 1:CA:229:LEU:HD12 | 1:CA:251:VAL:HG13 | 1.96 | 0.48 |
| 1:D:125:ALA:HB2 | 1:D:143:TRP:CZ3 | 2.49 | 0.48 |
| 1:DA:3:THR:N | 1:DA:42:ARG:HE | 2.12 | 0.48 |
| 1:DA:46:ALA:HB1 | 1:DA:47:PRO:CD | 2.43 | 0.48 |
| 1:DA:69:ALA:HB2 | 1:DA:74:LEU:CG | 2.43 | 0.48 |
| 1:DA:394:LYS:HD2 | 1:DA:395:THR:HG23 | 1.96 | 0.48 |
| 1:DA:604:PHE:HB3 | 1:DA:623:ARG:HB3 | 1.95 | 0.48 |
| 1:E:120:ALA:CB | 1:E:205:LEU:HD21 | 2.44 | 0.48 |
| 1:E:172:GLN:NE2 | 1:E:215:LEU:HD21 | 2.29 | 0.48 |
| 1:E:401:VAL:O | 1:E:401:VAL:HG23 | 2.14 | 0.48 |
| 1:E:662:ILE:HG21 | 1:F:653:ALA:HB1 | 1.95 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:EA:405:THR:HG23 | 1:FA:396:GLY:N | 2.29 | 0.48 |
| 1:EA:564:VAL:HG11 | 1:EA:567:PHE:HA | 1.95 | 0.48 |
| 1:EB:53:VAL:CG1 | 1:EB:57:HIS:O | 2.62 | 0.48 |
| 1:FA:221:LEU:HD21 | 1:FA:251:VAL:HG23 | 1.96 | 0.48 |
| 1:FB:30:VAL:HG23 | 1:FB:98:PRO:HB3 | 1.95 | 0.48 |
| 1:FB:701:LYS:O | 1:FB:705:GLU:OE1 | 2.32 | 0.48 |
| 1:G:691:GLN:HA | 1:G:694:LEU:HD12 | 1.95 | 0.48 |
| 1:HA:221:LEU:HD11 | 1:HA:251:VAL:HG23 | 1.96 | 0.48 |
| 1:HB:172:GLN:HB3 | 1:HB:215:LEU:HD11 | 1.96 | 0.48 |
| 1:HB:530:GLU:C | 1:HB:583:VAL:HG22 | 2.39 | 0.48 |
| 1:I:144:LEU:C | 1:I:144:LEU:HD12 | 2.38 | 0.48 |
| 1:I:336:ALA:HB2 | 1:I:357:TRP:CZ3 | 2.49 | 0.48 |
| 1:IB:82:ARG:C | 1:IB:83:LEU:HD12 | 2.38 | 0.48 |
| 1:J:486:LEU:C | 1:J:486:LEU:HD23 | 2.39 | 0.48 |
| 1:JB:425:GLU:CG | 1:JB:514:LEU:HD22 | 2.43 | 0.48 |
| 1:KB:227:LEU:HD12 | 1:KB:268:LEU:O | 2.12 | 0.48 |
| 1:KB:742:LEU:HD11 | 1:KB:746:LEU:HD21 | 1.96 | 0.48 |
| 1:LA:73:VAL:HG21 | 1:LA:100:TYR:CE2 | 2.45 | 0.48 |
| 1:LB:3:THR:HG22 | 1:LB:6:PHE:CD1 | 2.49 | 0.48 |
| 1:LB:13:TYR:N | 1:LB:50:MET:HE3 | 2.27 | 0.48 |
| 1:MA:539:LEU:HD11 | 1:MA:640:VAL:CG1 | 2.43 | 0.48 |
| 1:N:28:VAL:HG21 | 1:N:100:TYR:HD2 | 1.79 | 0.48 |
| 1:N:358:LEU:HD12 | 1:N:377:ARG:HE | 1.78 | 0.48 |
| 1:N:405:THR:HG23 | 1:O:396:GLY:N | 2.28 | 0.48 |
| 1:N:452:ARG:HG3 | 1:N:456:ARG:NH1 | 2.29 | 0.48 |
| 1:NA:487:VAL:HG22 | 1:NA:488:SER:N | 2.29 | 0.48 |
| 1:NA:795:PHE:O | 1:NA:799:THR:HG23 | 2.14 | 0.48 |
| 1:NB:18:VAL:O | 1:NB:18:VAL:HG23 | 2.14 | 0.48 |
| 1:O:61:VAL:HG23 | 1:O:61:VAL:O | 2.14 | 0.48 |
| 1:OB:418:GLU:C | 1:OB:419:LEU:HD22 | 2.38 | 0.48 |
| 1:OB:530:GLU:HB3 | 1:OB:534:HIS:HA | 1.95 | 0.48 |
| 1:OB:579:VAL:O | 1:OB:583:VAL:HG12 | 2.13 | 0.48 |
| 1:PB:9:ARG:CB | 1:PB:34:THR:HG22 | 2.43 | 0.48 |
| 1:Q:19:LEU:HA | 1:Q:25:VAL:O | 2.14 | 0.48 |
| 1:Q:400:ALA:HB1 | 1:Q:457:VAL:HG21 | 1.95 | 0.48 |
| 1:QA:115:VAL:CG2 | 1:QA:121:LEU:HD12 | 2.44 | 0.48 |
| 1:QA:777:LEU:O | 1:QA:781:VAL:HG13 | 2.14 | 0.48 |
| 1:QB:229:LEU:HD11 | 1:QB:251:VAL:HG13 | 1.95 | 0.48 |
| 1:QB:533:ASP:O | 1:QB:534:HIS:HB2 | 2.14 | 0.48 |
| 1:SA:229:LEU:HD12 | 1:SA:251:VAL:CG1 | 2.43 | 0.48 |
| 1:SA:587:THR:HG23 | 1:SA:590:ASP:H | 1.79 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:T:520:PRO:HA | 1:T:545:TRP:O | 2.13 | 0.48 |
| 1:TA:253:VAL:HG12 | 1:TA:257:GLU:HA | 1.95 | 0.48 |
| 1:TB:422:GLY:N | 1:TB:424:GLU:OE1 | 2.47 | 0.48 |
| 1:UA:253:VAL:HG13 | 1:UA:257:GLU:HA | 1.95 | 0.48 |
| 1:UA:334:LEU:HA | 1:UA:374:VAL:HG23 | 1.95 | 0.48 |
| 1:UA:382:LEU:HD12 | 1:UA:405:THR:HA | 1.94 | 0.48 |
| 1:UA:388:ILE:HD12 | 1:UA:414:LEU:CD2 | 2.44 | 0.48 |
| 1:UA:709:LEU:HD13 | 1:VA:701:LYS:HG3 | 1.96 | 0.48 |
| 1:UB:57:HIS:HB3 | 1:UB:109:ILE:HG23 | 1.94 | 0.48 |
| 1:UB:798:MET:SD | 1:UB:798:MET:C | 2.97 | 0.48 |
| 1:VA:587:THR:OG1 | 1:VA:654:LEU:HD11 | 2.14 | 0.48 |
| 1:VA:790:VAL:HG13 | 1:VA:793:LYS:HE2 | 1.96 | 0.48 |
| 1:VB:18:VAL:HG12 | 1:VB:43:VAL:HG22 | 1.96 | 0.48 |
| 1:WB:282:CYS:HB2 | 1:WB:316:LEU:HD11 | 1.95 | 0.48 |
| 1:WB:578:ARG:HB2 | 1:WB:603:VAL:HG22 | 1.96 | 0.48 |
| 1:XA:568:VAL:HA | 1:XA:571:ALA:HB3 | 1.95 | 0.48 |
| 1:YB:7:ILE:O | 1:YB:8:ILE:C | 2.55 | 0.48 |
| 1:YB:16:ILE:HG22 | 1:YB:17:HIS:O | 2.14 | 0.48 |
| 1:YB:325:VAL:HG11 | 1:ZB:335:ARG:HH12 | 1.78 | 0.48 |
| 1:ZA:260:VAL:O | 1:ZA:260:VAL:HG13 | 2.14 | 0.48 |
| 1:ZB:112:LEU:HD11 | 1:ZB:152:ILE:HA | 1.95 | 0.48 |
| 1:A:122:HIS:ND1 | 1:A:160:VAL:HG11 | 2.28 | 0.48 |
| 1:A:488:SER:O | 1:A:489:LEU:HD22 | 2.14 | 0.48 |
| 1:AA:349:VAL:HG11 | 1:AA:351:HIS:CD2 | 2.48 | 0.48 |
| 1:AC:357:TRP:CH2 | 1:AC:371:VAL:HG13 | 2.49 | 0.48 |
| 1:B:176:LEU:HD23 | 1:B:196:TRP:O | 2.13 | 0.48 |
| 1:B:227:LEU:HD12 | 1:B:228:HIS:N | 2.29 | 0.48 |
| 1:BB:3:THR:HG22 | 1:BB:43:VAL:HG23 | 1.95 | 0.48 |
| 1:C:81:VAL:CG1 | 1:C:83:LEU:HD11 | 2.24 | 0.48 |
| 1:C:168:ILE:HD12 | 1:C:200:THR:O | 2.13 | 0.48 |
| 1:C:546:HIS:O | 1:C:633:LEU:HD12 | 2.14 | 0.48 |
| 1:CB:176:LEU:HD21 | 1:CB:196:TRP:CD1 | 2.49 | 0.48 |
| 1:D:160:VAL:HG12 | 1:D:161:GLU:N | 2.29 | 0.48 |
| 1:D:797:GLN:CD | 1:E:792:VAL:HG11 | 2.38 | 0.48 |
| 1:EA:451:PRO:C | 1:EA:452:ARG:HD3 | 2.39 | 0.48 |
| 1:EB:91:ARG:O | 1:EB:92:LEU:HD12 | 2.14 | 0.48 |
| 1:FA:761:ARG:HE | 1:GA:751:LEU:HD12 | 1.79 | 0.48 |
| 1:G:229:LEU:HD12 | 1:G:251:VAL:CG1 | 2.43 | 0.48 |
| 1:G:539:LEU:HD21 | 1:G:541:LEU:CD1 | 2.44 | 0.48 |
| 1:GB:227:LEU:HD12 | 1:GB:268:LEU:O | 2.13 | 0.48 |
| 1:H:61:VAL:HG22 | 1:H:91:ARG:HH22 | 1.79 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:HA:368:SER:OG | 1:HA:371:VAL:HG23 | 2.14 | 0.48 |
| 1:HA:480:VAL:HG12 | 1:HA:481:VAL:N | 2.29 | 0.48 |
| 1:HB:497:VAL:HG21 | 1:HB:512:ARG:HH11 | 1.78 | 0.48 |
| 1:IA:418:GLU:C | 1:IA:419:LEU:HD12 | 2.39 | 0.48 |
| 1:IB:121:LEU:H | 1:IB:144:LEU:HD11 | 1.79 | 0.48 |
| 1:J:228:HIS:HA | 1:J:250:LEU:HD23 | 1.96 | 0.48 |
| 1:J:487:VAL:HG22 | 1:J:488:SER:H | 1.78 | 0.48 |
| 1:J:765:VAL:HG22 | 1:K:759:LEU:HD21 | 1.96 | 0.48 |
| 1:JA:90:ILE:HG21 | 1:JA:153:PRO:CB | 2.44 | 0.48 |
| 1:JA:489:LEU:HD21 | 1:JA:495:PHE:CD1 | 2.49 | 0.48 |
| 1:JB:331:GLY:N | 1:JB:407:MET:HE3 | 2.29 | 0.48 |
| 1:KB:349:VAL:HG12 | 1:KB:351:HIS:CE1 | 2.49 | 0.48 |
| 1:LA:15:TYR:HA | 1:LA:29:GLU:O | 2.14 | 0.48 |
| 1:LB:99:LEU:HD23 | 1:LB:100:TYR:O | 2.13 | 0.48 |
| 1:N:122:HIS:CG | 1:N:160:VAL:HB | 2.49 | 0.48 |
| 1:N:337:LEU:HD12 | 1:N:369:ALA:O | 2.13 | 0.48 |
| 1:NB:114:VAL:HA | 1:NB:150:THR:HA | 1.96 | 0.48 |
| 1:O:758:GLU:OE2 | 1:P:751:LEU:HD12 | 2.14 | 0.48 |
| 1:OA:58:TYR:CD1 | 1:OA:92:LEU:HA | 2.49 | 0.48 |
| 1:OA:61:VAL:HG12 | 1:OA:105:LEU:HA | 1.95 | 0.48 |
| 1:OA:283:VAL:HB | 1:OA:317:GLU:HB3 | 1.96 | 0.48 |
| 1:OB:231:ALA:HB3 | 1:OB:246:GLY:N | 2.28 | 0.48 |
| 1:P:16:ILE:O | 1:P:29:GLU:N | 2.47 | 0.48 |
| 1:P:67:ARG:HG2 | 1:P:67:ARG:O | 2.14 | 0.48 |
| 1:P:462:VAL:O | 1:P:484:PRO:HA | 2.14 | 0.48 |
| 1:PB:413:VAL:HG13 | 1:PB:414:LEU:O | 2.13 | 0.48 |
| 1:PB:419:LEU:HD21 | 1:PB:494:GLN:OE1 | 2.14 | 0.48 |
| 1:PB:521:ASP:O | 1:PB:545:TRP:CD1 | 2.67 | 0.48 |
| 1:PB:654:LEU:HD22 | 1:QB:534:HIS:CG | 2.49 | 0.48 |
| 1:Q:282:CYS:HB2 | 1:Q:316:LEU:HD11 | 1.95 | 0.48 |
| 1:SB:17:HIS:C | 1:SB:44:LEU:HD13 | 2.39 | 0.48 |
| 1:SB:144:LEU:HD12 | 1:SB:146:GLU:OE1 | 2.14 | 0.48 |
| 1:SB:654:LEU:HD22 | 1:TB:534:HIS:ND1 | 2.29 | 0.48 |
| 1:T:173:ALA:HA | 1:T:199:THR:HG22 | 1.96 | 0.48 |
| 1:T:331:GLY:HA2 | 1:T:360:ARG:HA | 1.95 | 0.48 |
| 1:T:717:GLU:CB | 1:V:707:LEU:HD22 | 2.44 | 0.48 |
| 1:T:768:LEU:HD23 | 1:T:768:LEU:C | 2.37 | 0.48 |
| 1:TA:92:LEU:HD21 | 1:TA:152:ILE:HG13 | 1.96 | 0.48 |
| 1:TA:221:LEU:HD12 | 1:TA:259:HIS:HB3 | 1.95 | 0.48 |
| 1:UB:112:LEU:HD23 | 1:UB:150:THR:CG2 | 2.44 | 0.48 |
| 1:UB:416:GLU:HG2 | 1:UB:455:THR:HG22 | 1.96 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:V:333:LEU:HD12 | 1:V:357:TRP:O | 2.13 | 0.48 |
| 1:VA:332:LEU:HD21 | 1:VA:334:LEU:HD21 | 1.96 | 0.48 |
| 1:W:15:TYR:OH | 1:W:51:VAL:HG23 | 2.13 | 0.48 |
| 1:W:379:ALA:HB1 | 1:W:405:THR:CG2 | 2.44 | 0.48 |
| 1:WA:599:ILE:CD1 | 1:WA:640:VAL:HG21 | 2.44 | 0.48 |
| 1:WA:779:LEU:HD11 | 1:XA:774:ARG:HD2 | 1.95 | 0.48 |
| 1:XA:520:PRO:HA | 1:XA:546:HIS:HB3 | 1.95 | 0.48 |
| 1:XB:764:LYS:HD3 | 1:YB:755:THR:HG21 | 1.95 | 0.48 |
| 1:Y:150:THR:HG23 | 1:Y:150:THR:O | 2.14 | 0.48 |
| 1:YA:50:MET:O | 1:YA:52:THR:HG23 | 2.14 | 0.48 |
| 1:YA:349:VAL:HG11 | 1:YA:351:HIS:NE2 | 2.29 | 0.48 |
| 1:YA:541:LEU:CD2 | 1:YA:640:VAL:HG22 | 2.44 | 0.48 |
| 1:YB:19:LEU:HD23 | 1:YB:20:ASP:O | 2.14 | 0.48 |
| 1:A:402:ILE:HG22 | 1:A:403:GLY:N | 2.29 | 0.47 |
| 1:AA:231:ALA:HA | 1:AA:264:HIS:O | 2.14 | 0.47 |
| 1:AA:366:VAL:O | 1:AA:366:VAL:HG13 | 2.14 | 0.47 |
| 1:AA:410:GLN:O | 1:AA:411:ASP:CG | 2.56 | 0.47 |
| 1:AC:658:VAL:HG21 | 1:OA:535:ALA:HB2 | 1.96 | 0.47 |
| 1:AC:694:LEU:HA | 1:ZB:702:ALA:HB1 | 1.96 | 0.47 |
| 1:B:228:HIS:HA | 1:B:250:LEU:HD23 | 1.96 | 0.47 |
| 1:BA:229:LEU:HD12 | 1:BA:251:VAL:CG1 | 2.44 | 0.47 |
| 1:BB:16:ILE:HD11 | 1:BB:47:PRO:HD3 | 1.95 | 0.47 |
| 1:C:230:ARG:HG2 | 1:C:266:GLU:CB | 2.44 | 0.47 |
| 1:C:537:LEU:HD11 | 1:C:643:VAL:O | 2.14 | 0.47 |
| 1:CA:120:ALA:C | 1:CA:162:ILE:HG23 | 2.39 | 0.47 |
| 1:CA:339:PRO:HA | 1:CA:351:HIS:O | 2.14 | 0.47 |
| 1:CA:389:TYR:CE2 | 1:CA:457:VAL:HA | 2.49 | 0.47 |
| 1:DA:174:LEU:HD12 | 1:DA:214:ASP:O | 2.13 | 0.47 |
| 1:DA:523:PHE:O | 1:DA:542:ALA:HA | 2.14 | 0.47 |
| 1:DA:661:ALA:HA | 1:DA:664:ILE:HD12 | 1.95 | 0.47 |
| 1:EB:95:ASP:HB2 | 1:EB:96:PRO:HD2 | 1.96 | 0.47 |
| 1:F:197:LEU:HD21 | 1:F:263:VAL:HG13 | 1.95 | 0.47 |
| 1:FA:123:LEU:HD11 | 1:FA:145:PHE:CB | 2.43 | 0.47 |
| 1:FA:583:VAL:HG13 | 1:FA:584:ALA:N | 2.29 | 0.47 |
| 1:HA:405:THR:HG21 | 1:IA:393:VAL:O | 2.13 | 0.47 |
| 1:HA:521:ASP:O | 1:HA:545:TRP:CD1 | 2.67 | 0.47 |
| 1:HB:371:VAL:HG12 | 1:HB:372:GLU:N | 2.29 | 0.47 |
| 1:IB:64:PRO:HD3 | 1:IB:87:ASP:O | 2.14 | 0.47 |
| 1:J:129:PHE:HE1 | 1:J:137:VAL:HG11 | 1.79 | 0.47 |
| 1:J:160:VAL:HG12 | 1:J:161:GLU:N | 2.29 | 0.47 |
| 1:J:413:VAL:HG22 | 1:J:414:LEU:H | 1.79 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:JA:162:ILE:HG22 | 1:JA:163:ILE:N | 2.29 | 0.47 |
| 1:JA:529:ILE:HD13 | 1:JA:539:LEU:HD22 | 1.96 | 0.47 |
| 1:JA:755:THR:HG22 | 1:JA:759:LEU:CD1 | 2.43 | 0.47 |
| 1:JB:466:ALA:O | 1:JB:482:PHE:HB2 | 2.14 | 0.47 |
| 1:JB:698:GLU:HA | 1:JB:701:LYS:HE3 | 1.96 | 0.47 |
| 1:K:340:LEU:HD22 | 1:K:344:GLU:CB | 2.44 | 0.47 |
| 1:KB:316:LEU:HD21 | 1:KB:319:GLY:O | 2.13 | 0.47 |
| 1:LB:288:VAL:HG12 | 1:LB:293:LYS:C | 2.39 | 0.47 |
| 1:MA:235:PHE:CD1 | 1:MA:264:HIS:HB3 | 2.49 | 0.47 |
| 1:MA:388:ILE:N | 1:MA:457:VAL:HG23 | 2.29 | 0.47 |
| 1:MB:123:LEU:HD23 | 1:MB:159:VAL:HA | 1.95 | 0.47 |
| 1:NA:37:ARG:HD2 | 1:NA:37:ARG:N | 2.29 | 0.47 |
| 1:NB:374:VAL:HG12 | 1:NB:375:GLU:N | 2.29 | 0.47 |
| 1:O:168:ILE:HD11 | 1:O:200:THR:N | 2.29 | 0.47 |
| 1:O:176:LEU:HD21 | 1:O:196:TRP:NE1 | 2.29 | 0.47 |
| 1:P:175:ARG:HD2 | 1:P:176:LEU:N | 2.29 | 0.47 |
| 1:P:335:ARG:HB3 | 1:P:372:GLU:HB3 | 1.96 | 0.47 |
| 1:PA:114:VAL:HG23 | 1:PA:149:GLY:O | 2.14 | 0.47 |
| 1:PA:416:GLU:CD | 1:PA:455:THR:HG23 | 2.39 | 0.47 |
| 1:PB:92:LEU:HD12 | 1:PB:92:LEU:N | 2.29 | 0.47 |
| 1:PB:462:VAL:N | 1:PB:485:GLU:O | 2.47 | 0.47 |
| 1:Q:518:LEU:HD12 | 1:Q:547:PHE:CB | 2.44 | 0.47 |
| 1:QA:390:VAL:O | 1:QA:398:VAL:HA | 2.15 | 0.47 |
| 1:QA:489:LEU:HD13 | 1:QA:493:GLU:O | 2.13 | 0.47 |
| 1:R:231:ALA:HB2 | 1:R:243:ARG:HB3 | 1.96 | 0.47 |
| 1:RA:34:THR:HG21 | 1:SA:22:ASN:O | 2.14 | 0.47 |
| 1:RA:229:LEU:HD12 | 1:RA:251:VAL:HG11 | 1.96 | 0.47 |
| 1:RB:121:LEU:HD23 | 1:RB:121:LEU:H | 1.78 | 0.47 |
| 1:S:387:GLY:O | 1:S:456:ARG:HA | 2.14 | 0.47 |
| 1:SB:165:ALA:O | 1:SB:203:ALA:HB1 | 2.14 | 0.47 |
| 1:SB:233:ARG:HA | 1:SB:245:THR:HG23 | 1.95 | 0.47 |
| 1:SB:388:ILE:N | 1:SB:457:VAL:HG23 | 2.29 | 0.47 |
| 1:SB:420:PRO:HG2 | 1:SB:421:PRO:CD | 2.44 | 0.47 |
| 1:T:123:LEU:HD12 | 1:T:143:TRP:NE1 | 2.29 | 0.47 |
| 1:T:558:THR:HA | 1:T:561:LEU:HD12 | 1.95 | 0.47 |
| 1:TB:34:THR:HG23 | 1:UB:24:ASN:OD1 | 2.14 | 0.47 |
| 1:TB:162:ILE:H | 1:TB:162:ILE:HD12 | 1.79 | 0.47 |
| 1:TB:372:GLU:OE1 | 1:TB:374:VAL:HG22 | 2.14 | 0.47 |
| 1:UA:706:LEU:HD13 | 1:VA:696:GLN:O | 2.14 | 0.47 |
| 1:VB:402:ILE:HG22 | 1:VB:403:GLY:N | 2.29 | 0.47 |
| 1:WB:414:LEU:C | 1:WB:414:LEU:HD12 | 2.39 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XB:114:VAL:O | 1:XB:114:VAL:HG13 | 2.13 | 0.47 |
| 1:YA:56:ARG:HG2 | 1:YA:112:LEU:HB2 | 1.96 | 0.47 |
| 1:YA:579:VAL:HG12 | 1:YA:579:VAL:O | 2.13 | 0.47 |
| 1:YB:284:ILE:CD1 | 1:YB:287:PRO:HB3 | 2.44 | 0.47 |
| 1:A:464:HIS:CE1 | 1:B:496:THR:HG23 | 2.49 | 0.47 |
| 1:AA:23:SER:HA | 1:Z:34:THR:HG21 | 1.97 | 0.47 |
| 1:AB:17:HIS:HA | 1:AB:27:ARG:O | 2.14 | 0.47 |
| 1:AB:245:THR:CG2 | 1:ZA:220:ILE:HD12 | 2.43 | 0.47 |
| 1:BA:170:GLN:CD | 1:BA:201:VAL:HG11 | 2.39 | 0.47 |
| 1:BB:423:VAL:HG22 | 1:BB:423:VAL:O | 2.15 | 0.47 |
| 1:BB:643:VAL:HG13 | 1:CB:580:ARG:NH1 | 2.29 | 0.47 |
| 1:BB:717:GLU:O | 1:BB:721:THR:HG23 | 2.14 | 0.47 |
| 1:C:539:LEU:HD11 | 1:C:643:VAL:HG12 | 1.95 | 0.47 |
| 1:CA:303:LYS:HD2 | 1:CA:304:GLY:O | 2.14 | 0.47 |
| 1:DA:61:VAL:O | 1:DA:61:VAL:HG23 | 2.13 | 0.47 |
| 1:DA:769:GLU:O | 1:DA:773:ALA:N | 2.47 | 0.47 |
| 1:DB:362:PRO:HB2 | 1:EB:352:GLN:HB2 | 1.96 | 0.47 |
| 1:E:349:VAL:HG12 | 1:E:350:SER:N | 2.29 | 0.47 |
| 1:EB:88:LEU:H | 1:EB:155:LYS:HD3 | 1.79 | 0.47 |
| 1:EB:168:ILE:HD11 | 1:EB:200:THR:OG1 | 2.14 | 0.47 |
| 1:F:196:TRP:O | 1:F:197:LEU:HD23 | 2.14 | 0.47 |
| 1:F:388:ILE:CG2 | 1:F:389:TYR:N | 2.77 | 0.47 |
| 1:FA:267:VAL:O | 1:FA:268:LEU:HD12 | 2.14 | 0.47 |
| 1:FB:69:ALA:HB2 | 1:FB:74:LEU:HD11 | 1.96 | 0.47 |
| 1:FB:167:ILE:HA | 1:FB:203:ALA:HA | 1.96 | 0.47 |
| 1:GA:56:ARG:O | 1:GA:111:PRO:HA | 2.14 | 0.47 |
| 1:GA:281:TYR:CZ | 1:GA:321:GLN:HB2 | 2.50 | 0.47 |
| 1:GB:126:LEU:C | 1:GB:127:LEU:HD22 | 2.39 | 0.47 |
| 1:HB:16:ILE:HG22 | 1:HB:17:HIS:N | 2.29 | 0.47 |
| 1:I:143:TRP:CA | 1:I:208:VAL:HG11 | 2.44 | 0.47 |
| 1:IA:16:ILE:HA | 1:IA:45:PHE:CE1 | 2.49 | 0.47 |
| 1:IB:18:VAL:HG12 | 1:IB:19:LEU:N | 2.30 | 0.47 |
| 1:IB:60:THR:HG22 | 1:IB:90:ILE:HA | 1.96 | 0.47 |
| 1:IB:374:VAL:HG12 | 1:IB:375:GLU:N | 2.29 | 0.47 |
| 1:J:57:HIS:HB3 | 1:J:109:ILE:HG23 | 1.95 | 0.47 |
| 1:J:60:THR:HG22 | 1:J:90:ILE:HG13 | 1.96 | 0.47 |
| 1:J:168:ILE:HG21 | 1:J:174:LEU:HB2 | 1.96 | 0.47 |
| 1:J:283:VAL:HG22 | 1:J:301:VAL:CB | 2.44 | 0.47 |
| 1:J:332:LEU:C | 1:J:358:LEU:HD12 | 2.39 | 0.47 |
| 1:JB:65:VAL:HG12 | 1:JB:83:LEU:HD23 | 1.97 | 0.47 |
| 1:JB:657:SER:HA | 1:JB:660:LEU:HD12 | 1.96 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:K:324:TYR:O | 1:K:364:GLU:HB2 | 2.14 | 0.47 |
| 1:KB:162:ILE:HG22 | 1:KB:163:ILE:N | 2.29 | 0.47 |
| 1:L:326:LEU:HD22 | 1:L:330:GLN:C | 2.39 | 0.47 |
| 1:M:283:VAL:HG22 | 1:M:301:VAL:CG2 | 2.43 | 0.47 |
| 1:MA:539:LEU:HG | 1:MA:541:LEU:HD21 | 1.96 | 0.47 |
| 1:MB:85:HIS:O | 1:MB:87:ASP:N | 2.47 | 0.47 |
| 1:MB:175:ARG:HH21 | 1:MB:263:VAL:HG12 | 1.79 | 0.47 |
| 1:N:81:VAL:HG11 | 1:N:102:GLY:N | 2.25 | 0.47 |
| 1:N:340:LEU:HD11 | 1:N:371:VAL:HG22 | 1.96 | 0.47 |
| 1:NA:288:VAL:HG12 | 1:NA:294:ASN:N | 2.29 | 0.47 |
| 1:NA:470:VAL:HG12 | 1:NA:471:TYR:N | 2.28 | 0.47 |
| 1:NB:390:VAL:HG22 | 1:NB:399:ARG:O | 2.14 | 0.47 |
| 1:O:63:ASN:ND2 | 1:O:83:LEU:HD23 | 2.28 | 0.47 |
| 1:OA:60:THR:HG22 | 1:OA:90:ILE:CB | 2.44 | 0.47 |
| 1:OB:388:ILE:CA | 1:OB:457:VAL:HG23 | 2.44 | 0.47 |
| 1:OB:468:VAL:HG22 | 1:OB:515:CYS:HA | 1.96 | 0.47 |
| 1:PB:162:ILE:HG22 | 1:PB:163:ILE:N | 2.29 | 0.47 |
| 1:Q:10:ILE:HG13 | 1:Q:16:ILE:HD12 | 1.95 | 0.47 |
| 1:Q:458:VAL:O | 1:Q:488:SER:HA | 2.14 | 0.47 |
| 1:R:633:LEU:HD12 | 1:R:634:VAL:H | 1.78 | 0.47 |
| 1:RA:358:LEU:HD23 | 1:RA:359:ILE:N | 2.29 | 0.47 |
| 1:SB:270:VAL:HG12 | 1:SB:271:VAL:N | 2.28 | 0.47 |
| 1:TA:340:LEU:HD13 | 1:TA:344:GLU:HG3 | 1.96 | 0.47 |
| 1:TA:528:THR:O | 1:TA:529:ILE:HG23 | 2.15 | 0.47 |
| 1:UB:388:ILE:N | 1:UB:457:VAL:HG23 | 2.30 | 0.47 |
| 1:V:178:ALA:HB1 | 1:V:182:CYS:SG | 2.54 | 0.47 |
| 1:V:386:GLU:C | 1:V:402:ILE:HG23 | 2.39 | 0.47 |
| 1:VA:346:GLU:O | 1:VA:347:GLU:HG3 | 2.13 | 0.47 |
| 1:VB:56:ARG:O | 1:VB:111:PRO:HA | 2.14 | 0.47 |
| 1:WA:165:ALA:O | 1:WA:203:ALA:HB1 | 2.14 | 0.47 |
| 1:WA:539:LEU:HD11 | 1:WA:640:VAL:HG22 | 1.96 | 0.47 |
| 1:XB:65:VAL:HG23 | 1:XB:67:ARG:CG | 2.44 | 0.47 |
| 1:XB:122:HIS:HB3 | 1:XB:160:VAL:HB | 1.96 | 0.47 |
| 1:YA:527:ILE:HD13 | 1:YA:576:ALA:O | 2.13 | 0.47 |
| 1:YB:57:HIS:HA | 1:YB:110:THR:O | 2.15 | 0.47 |
| 1:YB:384:GLU:O | 1:YB:402:ILE:HG22 | 2.14 | 0.47 |
| 1:Z:220:ILE:HG22 | 1:Z:221:LEU:N | 2.29 | 0.47 |
| 1:A:20:ASP:O | 1:A:23:SER:O | 2.33 | 0.47 |
| 1:AC:175:ARG:HH22 | 1:AC:263:VAL:HG12 | 1.78 | 0.47 |
| 1:BA:229:LEU:HD12 | 1:BA:251:VAL:HG13 | 1.96 | 0.47 |
| 1:BA:529:ILE:HD13 | 1:BA:579:VAL:HG11 | 1.95 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:BA:643:VAL:HG21 | 1:CA:580:ARG:NE | 2.25 | 0.47 |
| 1:C:283:VAL:HG12 | 1:C:284:ILE:N | 2.29 | 0.47 |
| 1:C:333:LEU:HD23 | 1:C:374:VAL:CG1 | 2.44 | 0.47 |
| 1:CA:777:LEU:CD1 | 1:CA:781:VAL:HG13 | 2.44 | 0.47 |
| 1:CB:46:ALA:HB1 | 1:CB:47:PRO:CD | 2.44 | 0.47 |
| 1:CB:129:PHE:CE1 | 1:CB:137:VAL:HG11 | 2.49 | 0.47 |
| 1:D:137:VAL:HG12 | 1:D:138:VAL:N | 2.28 | 0.47 |
| 1:D:389:TYR:CE1 | 1:D:457:VAL:HG22 | 2.49 | 0.47 |
| 1:DA:325:VAL:O | 1:DA:325:VAL:HG13 | 2.13 | 0.47 |
| 1:DA:468:VAL:HG12 | 1:DA:469:GLN:N | 2.30 | 0.47 |
| 1:E:160:VAL:HG12 | 1:E:161:GLU:N | 2.29 | 0.47 |
| 1:EA:16:ILE:O | 1:EA:29:GLU:OE1 | 2.33 | 0.47 |
| 1:EA:227:LEU:CD2 | 1:EA:229:LEU:HD21 | 2.43 | 0.47 |
| 1:EA:521:ASP:O | 1:EA:545:TRP:CD1 | 2.67 | 0.47 |
| 1:F:413:VAL:HG22 | 1:F:414:LEU:N | 2.28 | 0.47 |
| 1:FB:121:LEU:HD12 | 1:FB:123:LEU:HG | 1.96 | 0.47 |
| 1:FB:415:TRP:CH2 | 1:FB:417:LYS:HA | 2.50 | 0.47 |
| 1:G:281:TYR:CZ | 1:G:321:GLN:HB2 | 2.49 | 0.47 |
| 1:G:284:ILE:C | 1:G:285:LEU:HD23 | 2.40 | 0.47 |
| 1:G:332:LEU:C | 1:G:358:LEU:HD12 | 2.39 | 0.47 |
| 1:GA:326:LEU:HD13 | 1:GA:330:GLN:C | 2.39 | 0.47 |
| 1:H:337:LEU:HD12 | 1:H:369:ALA:O | 2.15 | 0.47 |
| 1:HA:301:VAL:HG22 | 1:HA:302:VAL:H | 1.79 | 0.47 |
| 1:HB:266:GLU:O | 1:HB:268:LEU:HD12 | 2.15 | 0.47 |
| 1:I:121:LEU:HA | 1:I:162:ILE:HA | 1.97 | 0.47 |
| 1:IB:90:ILE:HG22 | 1:IB:91:ARG:N | 2.28 | 0.47 |
| 1:IB:120:ALA:CB | 1:IB:205:LEU:HD21 | 2.44 | 0.47 |
| 1:JA:768:LEU:HD13 | 1:KA:759:LEU:HD22 | 1.97 | 0.47 |
| 1:JB:57:HIS:HA | 1:JB:111:PRO:HA | 1.96 | 0.47 |
| 1:JB:416:GLU:OE1 | 1:JB:454:LYS:HB2 | 2.14 | 0.47 |
| 1:K:228:HIS:C | 1:K:229:LEU:HD22 | 2.39 | 0.47 |
| 1:KA:82:ARG:C | 1:KA:83:LEU:HD12 | 2.39 | 0.47 |
| 1:KA:138:VAL:H | 1:KA:141:ASP:HB2 | 1.79 | 0.47 |
| 1:KB:531:THR:HG22 | 1:KB:537:LEU:HD11 | 1.94 | 0.47 |
| 1:L:416:GLU:CG | 1:L:455:THR:HG22 | 2.44 | 0.47 |
| 1:L:460:TYR:C | 1:L:486:LEU:HD12 | 2.39 | 0.47 |
| 1:LA:746:LEU:HD13 | 1:MA:737:GLY:HA3 | 1.96 | 0.47 |
| 1:LB:120:ALA:HB3 | 1:LB:205:LEU:HD21 | 1.97 | 0.47 |
| 1:LB:549:VAL:O | 1:LB:550:ASN:C | 2.58 | 0.47 |
| 1:MA:91:ARG:C | 1:MA:92:LEU:HD22 | 2.39 | 0.47 |
| 1:MB:643:VAL:HG12 | 1:NB:580:ARG:HH22 | 1.80 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:N:115:VAL:HG12 | 1:N:121:LEU:HG | 1.96 | 0.47 |
| 1:N:154:ARG:HB2 | 1:N:157:VAL:HG23 | 1.95 | 0.47 |
| 1:NB:120:ALA:HB3 | 1:NB:205:LEU:HD21 | 1.95 | 0.47 |
| 1:NB:583:VAL:HG13 | 1:NB:584:ALA:N | 2.30 | 0.47 |
| 1:OA:598:ILE:O | 1:OA:602:ALA:HB3 | 2.13 | 0.47 |
| 1:P:288:VAL:HG13 | 1:P:294:ASN:HD21 | 1.80 | 0.47 |
| 1:PA:10:ILE:HD11 | 1:PA:33:LYS:HB2 | 1.96 | 0.47 |
| 1:Q:7:ILE:HG23 | 1:Q:34:THR:HB | 1.96 | 0.47 |
| 1:R:627:VAL:HA | 1:R:633:LEU:O | 2.14 | 0.47 |
| 1:RA:336:ALA:HB2 | 1:RA:357:TRP:CZ3 | 2.50 | 0.47 |
| 1:RB:115:VAL:HG12 | 1:RB:149:GLY:O | 2.14 | 0.47 |
| 1:RB:583:VAL:HG13 | 1:RB:584:ALA:N | 2.29 | 0.47 |
| 1:S:489:LEU:HD22 | 1:S:493:GLU:O | 2.14 | 0.47 |
| 1:SA:419:LEU:HD13 | 1:SA:495:PHE:CE2 | 2.48 | 0.47 |
| 1:SB:17:HIS:CE1 | 1:SB:28:VAL:HG23 | 2.50 | 0.47 |
| 1:T:523:PHE:CD2 | 1:T:568:VAL:HG23 | 2.49 | 0.47 |
| 1:TA:73:VAL:HG12 | 1:TA:74:LEU:N | 2.29 | 0.47 |
| 1:TB:174:LEU:HB3 | 1:TB:198:VAL:HG12 | 1.95 | 0.47 |
| 1:UA:420:PRO:N | 1:UA:421:PRO:HD2 | 2.29 | 0.47 |
| 1:UB:18:VAL:HG22 | 1:UB:27:ARG:O | 2.13 | 0.47 |
| 1:VB:547:PHE:HE1 | 1:VB:633:LEU:HD13 | 1.79 | 0.47 |
| 1:VB:579:VAL:O | 1:VB:583:VAL:HG12 | 2.14 | 0.47 |
| 1:W:408:LEU:HD21 | 1:W:414:LEU:HD21 | 1.96 | 0.47 |
| 1:W:772:TYR:HD1 | 1:X:770:LEU:HD11 | 1.79 | 0.47 |
| 1:WB:10:ILE:HG22 | 1:WB:47:PRO:CB | 2.43 | 0.47 |
| 1:XA:405:THR:HG23 | 1:YA:396:GLY:CA | 2.44 | 0.47 |
| 1:XB:166:THR:O | 1:XB:203:ALA:HA | 2.14 | 0.47 |
| 1:Y:732:ALA:HA | 1:Y:735:ILE:HD12 | 1.95 | 0.47 |
| 1:Y:772:TYR:CD1 | 1:Z:770:LEU:HD11 | 2.48 | 0.47 |
| 1:YA:302:VAL:HG11 | 1:YA:308:PHE:CE1 | 2.49 | 0.47 |
| 1:YA:484:PRO:HB2 | 1:ZA:471:TYR:CG | 2.49 | 0.47 |
| 1:YA:714:MET:HE2 | 1:YA:714:MET:HA | 1.95 | 0.47 |
| 1:Z:390:VAL:HG12 | 1:Z:414:LEU:HA | 1.95 | 0.47 |
| 1:ZB:458:VAL:HB | 1:ZB:489:LEU:HB2 | 1.96 | 0.47 |
| 1:AB:180:LYS:HD2 | 1:AB:181:GLU:N | 2.29 | 0.47 |
| 1:BA:81:VAL:HG13 | 1:BA:83:LEU:HD12 | 1.96 | 0.47 |
| 1:BA:170:GLN:NE2 | 1:BA:201:VAL:HG11 | 2.29 | 0.47 |
| 1:BA:518:LEU:HD11 | 1:BA:549:VAL:HG23 | 1.97 | 0.47 |
| 1:BA:604:PHE:HB3 | 1:BA:623:ARG:HB3 | 1.95 | 0.47 |
| 1:BB:348:LYS:O | 1:BB:349:VAL:HG23 | 2.14 | 0.47 |
| 1:CA:516:LEU:C | 1:CA:516:LEU:HD23 | 2.40 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:CB:73:VAL:HG21 | 1:CB:100:TYR:CE2 | 2.50 | 0.47 |
| 1:CB:280:ASN:HA | 1:CB:322:ASP:HA | 1.96 | 0.47 |
| 1:CB:480:VAL:HG12 | 1:CB:481:VAL:N | 2.29 | 0.47 |
| 1:D:18:VAL:HG22 | 1:D:41:GLU:CB | 2.41 | 0.47 |
| 1:D:168:ILE:HD11 | 1:D:204:TYR:HB2 | 1.96 | 0.47 |
| 1:D:177:ARG:HA | 1:D:194:GLU:O | 2.14 | 0.47 |
| 1:DA:121:LEU:HD12 | 1:DA:121:LEU:O | 2.14 | 0.47 |
| 1:DB:326:LEU:O | 1:DB:362:PRO:HA | 2.15 | 0.47 |
| 1:EA:778:GLU:HA | 1:EA:781:VAL:HG22 | 1.96 | 0.47 |
| 1:EB:60:THR:HG22 | 1:EB:90:ILE:CD1 | 2.45 | 0.47 |
| 1:EB:288:VAL:HG22 | 1:EB:314:GLU:OE2 | 2.14 | 0.47 |
| 1:EB:514:LEU:H | 1:EB:514:LEU:HD12 | 1.79 | 0.47 |
| 1:EB:529:ILE:HD12 | 1:EB:583:VAL:HG21 | 1.96 | 0.47 |
| 1:F:421:PRO:O | 1:F:424:GLU:OE1 | 2.32 | 0.47 |
| 1:FA:8:ILE:H | 1:FA:8:ILE:HD12 | 1.79 | 0.47 |
| 1:FA:464:HIS:CD2 | 1:GA:496:THR:HG23 | 2.50 | 0.47 |
| 1:FB:9:ARG:CB | 1:FB:34:THR:HG22 | 2.44 | 0.47 |
| 1:FB:390:VAL:HG12 | 1:FB:408:LEU:HD21 | 1.96 | 0.47 |
| 1:HA:388:ILE:HD12 | 1:HA:414:LEU:HD21 | 1.97 | 0.47 |
| 1:HB:122:HIS:CD2 | 1:HB:208:VAL:HG12 | 2.50 | 0.47 |
| 1:HB:283:VAL:HG22 | 1:HB:301:VAL:HA | 1.96 | 0.47 |
| 1:J:231:ALA:HB3 | 1:J:244:ARG:O | 2.13 | 0.47 |
| 1:JB:543:TYR:O | 1:JB:545:TRP:CD1 | 2.68 | 0.47 |
| 1:K:59:CYS:O | 1:K:90:ILE:HG23 | 2.15 | 0.47 |
| 1:K:114:VAL:HA | 1:K:150:THR:HA | 1.96 | 0.47 |
| 1:K:529:ILE:CD1 | 1:K:579:VAL:HG12 | 2.44 | 0.47 |
| 1:K:658:VAL:HG21 | 1:L:535:ALA:HA | 1.96 | 0.47 |
| 1:KA:410:GLN:O | 1:KA:411:ASP:OD1 | 2.31 | 0.47 |
| 1:LA:331:GLY:HA3 | 1:LA:358:LEU:HD21 | 1.95 | 0.47 |
| 1:LA:765:VAL:HG22 | 1:MA:759:LEU:HD21 | 1.96 | 0.47 |
| 1:M:115:VAL:CG1 | 1:M:121:LEU:HD12 | 2.44 | 0.47 |
| 1:M:311:GLN:HB3 | 1:M:312:PRO:HD2 | 1.96 | 0.47 |
| 1:MB:69:ALA:HB2 | 1:MB:74:LEU:HD21 | 1.96 | 0.47 |
| 1:MB:223:GLU:CD | 1:MB:253:VAL:HG21 | 2.40 | 0.47 |
| 1:N:56:ARG:CZ | 1:O:126:LEU:HD13 | 2.44 | 0.47 |
| 1:N:233:ARG:HA | 1:N:245:THR:HG23 | 1.96 | 0.47 |
| 1:NA:165:ALA:O | 1:NA:203:ALA:HB1 | 2.14 | 0.47 |
| 1:NA:187:GLY:O | 1:NA:188:LYS:C | 2.57 | 0.47 |
| 1:NB:227:LEU:CD2 | 1:NB:229:LEU:HD21 | 2.44 | 0.47 |
| 1:OA:326:LEU:HD22 | 1:OA:330:GLN:HB2 | 1.96 | 0.47 |
| 1:OB:638:VAL:HG12 | 1:OB:639:ASP:N | 2.28 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:P:112:LEU:HD23 | 1:P:150:THR:CG2 | 2.44 | 0.47 |
| 1:PA:452:ARG:HH22 | 1:PA:458:VAL:HG22 | 1.78 | 0.47 |
| 1:PB:638:VAL:HG12 | 1:PB:639:ASP:N | 2.30 | 0.47 |
| 1:R:504:ARG:HA | 1:R:504:ARG:HE | 1.80 | 0.47 |
| 1:R:761:ARG:O | 1:R:765:VAL:HG23 | 2.14 | 0.47 |
| 1:RA:786:GLN:HB2 | 1:SA:781:VAL:HG11 | 1.96 | 0.47 |
| 1:SB:3:THR:HG22 | 1:SB:3:THR:O | 2.14 | 0.47 |
| 1:SB:175:ARG:HA | 1:SB:197:LEU:HD23 | 1.95 | 0.47 |
| 1:T:340:LEU:HD11 | 1:T:357:TRP:CH2 | 2.49 | 0.47 |
| 1:TA:316:LEU:HD11 | 1:TA:319:GLY:O | 2.14 | 0.47 |
| 1:TB:228:HIS:ND1 | 1:TB:268:LEU:HD22 | 2.29 | 0.47 |
| 1:UA:81:VAL:HG11 | 1:UA:101:PRO:HB2 | 1.96 | 0.47 |
| 1:UA:332:LEU:HD23 | 1:UA:333:LEU:O | 2.14 | 0.47 |
| 1:UA:735:ILE:HD11 | 1:VA:723:LYS:HG3 | 1.97 | 0.47 |
| 1:UA:790:VAL:HG21 | 1:VA:785:GLN:CG | 2.43 | 0.47 |
| 1:UB:56:ARG:O | 1:UB:112:LEU:N | 2.48 | 0.47 |
| 1:V:235:PHE:CE2 | 1:V:265:GLU:HG2 | 2.49 | 0.47 |
| 1:V:349:VAL:HG12 | 1:V:350:SER:N | 2.29 | 0.47 |
| 1:V:388:ILE:CA | 1:V:457:VAL:HG23 | 2.45 | 0.47 |
| 1:V:390:VAL:HG11 | 1:V:406:TYR:CZ | 2.49 | 0.47 |
| 1:V:580:ARG:HA | 1:V:583:VAL:HG12 | 1.96 | 0.47 |
| 1:VB:281:TYR:CG | 1:VB:366:VAL:HG23 | 2.50 | 0.47 |
| 1:W:228:HIS:HD1 | 1:W:268:LEU:HD22 | 1.79 | 0.47 |
| 1:W:543:TYR:HD1 | 1:W:638:VAL:HG13 | 1.80 | 0.47 |
| 1:WA:380:ILE:O | 1:WA:405:THR:HG22 | 2.14 | 0.47 |
| 1:WB:3:THR:HG22 | 1:WB:3:THR:O | 2.14 | 0.47 |
| 1:X:46:ALA:HB1 | 1:X:47:PRO:CD | 2.45 | 0.47 |
| 1:XB:398:VAL:HG13 | 1:XB:415:TRP:CD2 | 2.49 | 0.47 |
| 1:Y:137:VAL:O | 1:Y:138:VAL:HG13 | 2.15 | 0.47 |
| 1:Y:709:LEU:HD21 | 1:Z:701:LYS:HB2 | 1.95 | 0.47 |
| 1:Y:736:GLU:OE2 | 1:Z:726:ALA:HB1 | 2.15 | 0.47 |
| 1:YA:119:THR:OG1 | 1:YA:162:ILE:HG22 | 2.14 | 0.47 |
| 1:YA:767:GLU:O | 1:YA:771:VAL:HG23 | 2.13 | 0.47 |
| 1:YB:500:LEU:HD12 | 1:YB:568:VAL:CG1 | 2.44 | 0.47 |
| 1:ZB:82:ARG:C | 1:ZB:83:LEU:HD12 | 2.39 | 0.47 |
| 1:A:737:GLY:O | 1:A:741:VAL:HG23 | 2.15 | 0.47 |
| 1:AA:36:ILE:H | 1:AA:36:ILE:HD12 | 1.79 | 0.47 |
| 1:AA:470:VAL:HG12 | 1:AA:471:TYR:N | 2.29 | 0.47 |
| 1:AB:95:ASP:HB3 | 1:AB:96:PRO:HD2 | 1.97 | 0.47 |
| 1:AC:68:ASP:OD1 | 1:AC:74:LEU:HD12 | 2.15 | 0.47 |
| 1:AC:231:ALA:HB1 | 1:AC:235:PHE:CE1 | 2.50 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:BA:545:TRP:HA | 1:BA:635:VAL:HA | 1.96 | 0.47 |
| 1:BA:662:ILE:O | 1:BA:666:THR:HG23 | 2.14 | 0.47 |
| 1:CA:46:ALA:HB1 | 1:CA:47:PRO:HD2 | 1.96 | 0.47 |
| 1:CA:125:ALA:H | 1:CA:142:GLU:HG2 | 1.79 | 0.47 |
| 1:CB:197:LEU:HD21 | 1:CB:263:VAL:HG13 | 1.97 | 0.47 |
| 1:CB:276:LEU:HD23 | 1:CB:320:ILE:HG23 | 1.96 | 0.47 |
| 1:CB:795:PHE:O | 1:CB:799:THR:HG23 | 2.14 | 0.47 |
| 1:D:3:THR:HG22 | 1:D:3:THR:O | 2.14 | 0.47 |
| 1:D:212:VAL:C | 1:D:213:LEU:HD22 | 2.39 | 0.47 |
| 1:D:794:LYS:HG2 | 1:E:792:VAL:HG22 | 1.95 | 0.47 |
| 1:DA:76:ASP:N | 1:DA:80:GLN:O | 2.48 | 0.47 |
| 1:DA:349:VAL:HG11 | 1:DA:351:HIS:NE2 | 2.29 | 0.47 |
| 1:EA:339:PRO:HB2 | 1:EA:341:GLU:OE2 | 2.13 | 0.47 |
| 1:EA:794:LYS:HG2 | 1:FA:792:VAL:HG22 | 1.96 | 0.47 |
| 1:EB:60:THR:HG22 | 1:EB:90:ILE:CG1 | 2.45 | 0.47 |
| 1:EB:521:ASP:O | 1:EB:545:TRP:CD1 | 2.67 | 0.47 |
| 1:F:122:HIS:CD2 | 1:F:208:VAL:HG12 | 2.49 | 0.47 |
| 1:FB:285:LEU:HD21 | 1:FB:317:GLU:HA | 1.97 | 0.47 |
| 1:GA:172:GLN:HB3 | 1:GA:215:LEU:HD11 | 1.96 | 0.47 |
| 1:GA:802:ILE:HG21 | 1:GA:807:ILE:HD11 | 1.97 | 0.47 |
| 1:GB:227:LEU:HD13 | 1:GB:270:VAL:HG22 | 1.97 | 0.47 |
| 1:H:173:ALA:CB | 1:H:197:LEU:HD12 | 2.45 | 0.47 |
| 1:HA:758:GLU:O | 1:HA:762:VAL:HG22 | 2.14 | 0.47 |
| 1:IA:527:ILE:HD11 | 1:IA:543:TYR:OH | 2.14 | 0.47 |
| 1:IB:284:ILE:HG22 | 1:IB:310:LEU:HD21 | 1.96 | 0.47 |
| 1:J:480:VAL:HG12 | 1:J:481:VAL:N | 2.30 | 0.47 |
| 1:K:419:LEU:HD12 | 1:K:423:VAL:HG23 | 1.97 | 0.47 |
| 1:KB:14:HIS:HA | 1:KB:48:MET:O | 2.15 | 0.47 |
| 1:KB:32:PRO:C | 1:KB:33:LYS:HD2 | 2.39 | 0.47 |
| 1:KB:60:THR:CG2 | 1:KB:90:ILE:HD11 | 2.43 | 0.47 |
| 1:L:790:VAL:HG22 | 1:M:785:GLN:HG2 | 1.96 | 0.47 |
| 1:LA:227:LEU:HD12 | 1:LA:228:HIS:N | 2.29 | 0.47 |
| 1:LA:229:LEU:HD12 | 1:LA:251:VAL:CG1 | 2.44 | 0.47 |
| 1:LA:772:TYR:CD1 | 1:MA:770:LEU:HD21 | 2.50 | 0.47 |
| 1:LB:61:VAL:HG23 | 1:LB:64:PRO:HB3 | 1.96 | 0.47 |
| 1:LB:177:ARG:HA | 1:LB:194:GLU:O | 2.15 | 0.47 |
| 1:M:19:LEU:HD11 | 1:M:24:ASN:HA | 1.96 | 0.47 |
| 1:MA:80:GLN:NE2 | 1:MA:81:VAL:HG12 | 2.30 | 0.47 |
| 1:MA:599:ILE:CD1 | 1:MA:640:VAL:HG21 | 2.45 | 0.47 |
| 1:NA:129:PHE:CE1 | 1:NA:156:GLU:HB3 | 2.50 | 0.47 |
| 1:O:388:ILE:CA | 1:O:457:VAL:HG23 | 2.44 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OA:16:ILE:CG2 | 1:OA:17:HIS:N | 2.77 | 0.47 |
| 1:OA:176:LEU:HD21 | 1:OA:196:TRP:CD1 | 2.49 | 0.47 |
| 1:OB:411:ASP:OD1 | 1:OB:411:ASP:C | 2.56 | 0.47 |
| 1:PA:336:ALA:HB3 | 1:PA:352:GLN:O | 2.14 | 0.47 |
| 1:PB:176:LEU:HD23 | 1:PB:176:LEU:H | 1.79 | 0.47 |
| 1:PB:490:GLY:H | 1:PB:493:GLU:CD | 2.23 | 0.47 |
| 1:RA:324:TYR:CD2 | 1:RA:332:LEU:HD11 | 2.49 | 0.47 |
| 1:RA:596:ALA:HB2 | 1:SA:582:ALA:HA | 1.96 | 0.47 |
| 1:RA:747:LYS:O | 1:RA:751:LEU:HD23 | 2.13 | 0.47 |
| 1:RB:3:THR:HG22 | 1:RB:3:THR:O | 2.13 | 0.47 |
| 1:RB:317:GLU:HG3 | 1:RB:318:GLN:H | 1.80 | 0.47 |
| 1:S:212:VAL:C | 1:S:213:LEU:HD12 | 2.39 | 0.47 |
| 1:SB:273:ILE:HG23 | 1:SB:273:ILE:O | 2.14 | 0.47 |
| 1:TA:423:VAL:HG13 | 1:TA:424:GLU:N | 2.28 | 0.47 |
| 1:TB:10:ILE:HD12 | 1:TB:30:VAL:C | 2.39 | 0.47 |
| 1:UA:173:ALA:O | 1:UA:215:LEU:HD12 | 2.13 | 0.47 |
| 1:UB:273:ILE:O | 1:UB:273:ILE:HG23 | 2.14 | 0.47 |
| 1:V:226:ALA:HB2 | 1:V:252:THR:CG2 | 2.45 | 0.47 |
| 1:WB:175:ARG:CA | 1:WB:197:LEU:HD23 | 2.43 | 0.47 |
| 1:WB:345:ASP:OD2 | 1:WB:349:VAL:HB | 2.14 | 0.47 |
| 1:WB:462:VAL:HG12 | 1:WB:483:GLY:O | 2.14 | 0.47 |
| 1:XA:398:VAL:HG21 | 1:XA:415:TRP:CD2 | 2.50 | 0.47 |
| 1:XB:58:TYR:CD1 | 1:XB:92:LEU:HD23 | 2.50 | 0.47 |
| 1:XB:388:ILE:N | 1:XB:457:VAL:HG23 | 2.29 | 0.47 |
| 1:YA:279:HIS:NE2 | 1:ZA:337:LEU:HD13 | 2.30 | 0.47 |
| 1:YB:211:GLU:O | 1:YB:213:LEU:HD22 | 2.15 | 0.47 |
| 1:Z:332:LEU:HD22 | 1:Z:373:VAL:HG13 | 1.96 | 0.47 |
| 1:Z:761:ARG:O | 1:Z:765:VAL:HG23 | 2.14 | 0.47 |
| 1:ZB:374:VAL:HG12 | 1:ZB:375:GLU:H | 1.79 | 0.47 |
| 1:A:529:ILE:HD13 | 1:A:539:LEU:CD1 | 2.45 | 0.47 |
| 1:AA:567:PHE:CG | 1:AA:568:VAL:N | 2.82 | 0.47 |
| 1:B:176:LEU:HD21 | 1:B:196:TRP:CD1 | 2.50 | 0.47 |
| 1:B:402:ILE:HG22 | 1:B:403:GLY:N | 2.29 | 0.47 |
| 1:B:536:ARG:O | 1:B:645:PRO:HA | 2.14 | 0.47 |
| 1:C:120:ALA:HB1 | 1:C:144:LEU:HD13 | 1.97 | 0.47 |
| 1:CB:529:ILE:HG21 | 1:CB:579:VAL:HG12 | 1.96 | 0.47 |
| 1:CB:599:ILE:O | 1:CB:603:VAL:HG23 | 2.14 | 0.47 |
| 1:DA:583:VAL:HG23 | 1:DA:584:ALA:N | 2.29 | 0.47 |
| 1:DB:368:SER:O | 1:DB:371:VAL:HG12 | 2.13 | 0.47 |
| 1:EA:143:TRP:HA | 1:EA:208:VAL:HG11 | 1.95 | 0.47 |
| 1:EA:334:LEU:C | 1:EA:374:VAL:HG23 | 2.39 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:EB:220:ILE:HD13 | 1:EB:258:ALA:HB2 | 1.97 | 0.47 |
| 1:FB:121:LEU:HD12 | 1:FB:121:LEU:O | 2.14 | 0.47 |
| 1:G:36:ILE:HG22 | 1:G:37:ARG:O | 2.15 | 0.47 |
| 1:GB:276:LEU:HD13 | 1:GB:281:TYR:HA | 1.97 | 0.47 |
| 1:H:281:TYR:CE1 | 1:H:321:GLN:HB2 | 2.49 | 0.47 |
| 1:HA:228:HIS:CE1 | 1:HA:268:LEU:HD22 | 2.49 | 0.47 |
| 1:I:3:THR:HG21 | 1:I:41:GLU:O | 2.14 | 0.47 |
| 1:I:426:LEU:HD23 | 1:I:427:LEU:HD22 | 1.95 | 0.47 |
| 1:IA:157:VAL:HG12 | 1:IA:158:GLU:O | 2.15 | 0.47 |
| 1:J:58:TYR:CG | 1:J:92:LEU:HA | 2.50 | 0.47 |
| 1:JA:16:ILE:HD11 | 1:JA:47:PRO:CD | 2.45 | 0.47 |
| 1:JA:747:LYS:O | 1:JA:751:LEU:HD23 | 2.15 | 0.47 |
| 1:KA:464:HIS:CD2 | 1:LA:496:THR:HG23 | 2.50 | 0.47 |
| 1:KA:583:VAL:HG13 | 1:KA:584:ALA:N | 2.30 | 0.47 |
| 1:KB:283:VAL:HG22 | 1:KB:301:VAL:HB | 1.95 | 0.47 |
| 1:L:16:ILE:HG23 | 1:L:45:PHE:O | 2.15 | 0.47 |
| 1:L:81:VAL:HG13 | 1:L:83:LEU:CD1 | 2.44 | 0.47 |
| 1:L:326:LEU:CD1 | 1:L:359:ILE:HG23 | 2.44 | 0.47 |
| 1:LA:798:MET:HE2 | 1:LA:798:MET:N | 2.30 | 0.47 |
| 1:M:206:PRO:HB3 | 1:M:212:VAL:HG11 | 1.97 | 0.47 |
| 1:N:424:GLU:N | 1:N:424:GLU:OE1 | 2.48 | 0.47 |
| 1:NA:266:GLU:HG2 | 1:NA:268:LEU:HD11 | 1.96 | 0.47 |
| 1:NB:408:LEU:HD22 | 1:NB:412:GLU:O | 2.14 | 0.47 |
| 1:OA:18:VAL:HG22 | 1:OA:29:GLU:OE2 | 2.14 | 0.47 |
| 1:OA:666:THR:HG22 | 1:PA:657:SER:CB | 2.45 | 0.47 |
| 1:P:596:ALA:HB3 | 1:Q:581:GLY:HA3 | 1.96 | 0.47 |
| 1:PA:363:LEU:O | 1:PA:363:LEU:HG | 2.14 | 0.47 |
| 1:PB:5:GLU:HG2 | 1:PB:7:ILE:HG22 | 1.97 | 0.47 |
| 1:PB:529:ILE:HD13 | 1:PB:579:VAL:CG1 | 2.44 | 0.47 |
| 1:RA:3:THR:HG22 | 1:RA:43:VAL:HB | 1.97 | 0.47 |
| 1:RA:160:VAL:HG12 | 1:RA:161:GLU:N | 2.29 | 0.47 |
| 1:RB:16:ILE:O | 1:RB:28:VAL:HG23 | 2.15 | 0.47 |
| 1:S:796:LYS:O | 1:S:800:GLU:OE1 | 2.33 | 0.47 |
| 1:SA:339:PRO:HD3 | 1:SA:353:ALA:HB2 | 1.96 | 0.47 |
| 1:T:281:TYR:HE1 | 1:T:283:VAL:HG23 | 1.79 | 0.47 |
| 1:TA:260:VAL:O | 1:TA:260:VAL:HG13 | 2.15 | 0.47 |
| 1:TA:625:GLN:HA | 1:TA:635:VAL:O | 2.15 | 0.47 |
| 1:TB:9:ARG:HB3 | 1:TB:34:THR:HG22 | 1.96 | 0.47 |
| 1:UB:58:TYR:CD1 | 1:UB:92:LEU:HA | 2.50 | 0.47 |
| 1:UB:522:PHE:HA | 1:UB:543:TYR:O | 2.14 | 0.47 |
| 1:UB:709:LEU:HD13 | 1:VB:701:LYS:HB2 | 1.97 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:VB:753:ILE:HG21 | 1:WB:744:ALA:C | 2.40 | 0.47 |
| 1:WA:154:ARG:HB3 | 1:WA:157:VAL:HG23 | 1.96 | 0.47 |
| 1:WA:220:ILE:CD1 | 1:XA:245:THR:HG21 | 2.45 | 0.47 |
| 1:WA:333:LEU:HD23 | 1:WA:374:VAL:HG23 | 1.97 | 0.47 |
| 1:WB:115:VAL:HG23 | 1:WB:147:GLY:O | 2.14 | 0.47 |
| 1:WB:621:ARG:NH2 | 1:WB:623:ARG:HA | 2.30 | 0.47 |
| 1:XA:10:ILE:HB | 1:XA:33:LYS:H | 1.78 | 0.47 |
| 1:Y:742:LEU:HG | 1:Y:746:LEU:HD11 | 1.97 | 0.47 |
| 1:YA:58:TYR:CD1 | 1:YA:92:LEU:HD23 | 2.50 | 0.47 |
| 1:YA:168:ILE:HD12 | 1:YA:204:TYR:CB | 2.44 | 0.47 |
| 1:YB:642:SER:O | 1:YB:643:VAL:HG13 | 2.15 | 0.47 |
| 1:AA:597:ARG:O | 1:AA:601:THR:HG23 | 2.15 | 0.47 |
| 1:AB:227:LEU:HD11 | 1:AB:267:VAL:HG13 | 1.97 | 0.47 |
| 1:AB:334:LEU:HD12 | 1:AB:357:TRP:NE1 | 2.30 | 0.47 |
| 1:AC:276:LEU:CD2 | 1:AC:320:ILE:HG23 | 2.45 | 0.47 |
| 1:AC:386:GLU:O | 1:AC:402:ILE:HG23 | 2.14 | 0.47 |
| 1:B:121:LEU:HD13 | 1:B:123:LEU:HD21 | 1.97 | 0.47 |
| 1:B:388:ILE:C | 1:B:457:VAL:HG23 | 2.39 | 0.47 |
| 1:BA:546:HIS:O | 1:BA:633:LEU:HD12 | 2.14 | 0.47 |
| 1:BB:233:ARG:HA | 1:BB:245:THR:HG23 | 1.95 | 0.47 |
| 1:BB:546:HIS:CE1 | 1:BB:634:VAL:HG21 | 2.49 | 0.47 |
| 1:C:197:LEU:HD21 | 1:C:263:VAL:CG1 | 2.45 | 0.47 |
| 1:C:230:ARG:HA | 1:C:247:GLU:O | 2.15 | 0.47 |
| 1:C:549:VAL:HG11 | 1:C:552:ARG:NE | 2.29 | 0.47 |
| 1:CB:470:VAL:HG22 | 1:CB:495:PHE:HD1 | 1.79 | 0.47 |
| 1:D:112:LEU:HD11 | 1:D:153:PRO:CD | 2.45 | 0.47 |
| 1:DA:65:VAL:HG11 | 1:DA:100:TYR:CB | 2.45 | 0.47 |
| 1:DA:541:LEU:HB2 | 1:DA:543:TYR:CE1 | 2.50 | 0.47 |
| 1:E:566:ASP:OD1 | 1:E:568:VAL:HG12 | 2.15 | 0.47 |
| 1:EA:172:GLN:CD | 1:EA:215:LEU:HD21 | 2.40 | 0.47 |
| 1:EA:250:LEU:HD11 | 1:EA:311:GLN:HA | 1.96 | 0.47 |
| 1:EA:337:LEU:HD21 | 1:EA:372:GLU:CB | 2.45 | 0.47 |
| 1:EB:3:THR:HG22 | 1:EB:6:PHE:CZ | 2.50 | 0.47 |
| 1:EB:633:LEU:HD12 | 1:EB:634:VAL:H | 1.79 | 0.47 |
| 1:F:59:CYS:SG | 1:F:105:LEU:HD11 | 2.55 | 0.47 |
| 1:FA:59:CYS:HB3 | 1:FA:105:LEU:HD11 | 1.96 | 0.47 |
| 1:FB:332:LEU:HD23 | 1:FB:332:LEU:C | 2.39 | 0.47 |
| 1:FB:761:ARG:HG3 | 1:GB:755:THR:HG21 | 1.97 | 0.47 |
| 1:G:3:THR:HG21 | 1:G:37:ARG:HB2 | 1.95 | 0.47 |
| 1:G:331:GLY:C | 1:G:358:LEU:HD11 | 2.40 | 0.47 |
| 1:G:543:TYR:O | 1:G:545:TRP:HD1 | 1.98 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:G:633:LEU:HD12 | 1:G:634:VAL:N | 2.29 | 0.47 |
| 1:GA:196:TRP:O | 1:GA:197:LEU:HD22 | 2.15 | 0.47 |
| 1:GA:276:LEU:HD13 | 1:GA:304:GLY:HA2 | 1.96 | 0.47 |
| 1:GB:174:LEU:O | 1:GB:198:VAL:HG12 | 2.15 | 0.47 |
| 1:GB:633:LEU:HD12 | 1:GB:634:VAL:N | 2.30 | 0.47 |
| 1:GB:736:GLU:OE2 | 1:HB:726:ALA:HB1 | 2.15 | 0.47 |
| 1:H:91:ARG:C | 1:H:92:LEU:HD22 | 2.40 | 0.47 |
| 1:HA:3:THR:HG22 | 1:HA:3:THR:O | 2.13 | 0.47 |
| 1:HA:90:ILE:HG22 | 1:HA:91:ARG:N | 2.30 | 0.47 |
| 1:HA:177:ARG:HH22 | 1:HA:213:LEU:HD11 | 1.80 | 0.47 |
| 1:HA:388:ILE:HA | 1:HA:457:VAL:HG23 | 1.94 | 0.47 |
| 1:I:171:ASN:OD1 | 1:I:171:ASN:C | 2.58 | 0.47 |
| 1:I:285:LEU:HD12 | 1:I:315:GLN:HG2 | 1.97 | 0.47 |
| 1:I:567:PHE:CG | 1:I:568:VAL:N | 2.83 | 0.47 |
| 1:I:775:ALA:HB1 | 1:J:770:LEU:HD22 | 1.96 | 0.47 |
| 1:I:797:GLN:CB | 1:J:792:VAL:HG21 | 2.44 | 0.47 |
| 1:IA:158:GLU:CD | 1:IA:160:VAL:HG23 | 2.40 | 0.47 |
| 1:IA:345:ASP:HB3 | 1:IA:349:VAL:O | 2.14 | 0.47 |
| 1:IB:273:ILE:O | 1:IB:273:ILE:HG23 | 2.14 | 0.47 |
| 1:IB:758:GLU:O | 1:IB:762:VAL:HG13 | 2.14 | 0.47 |
| 1:J:16:ILE:HD11 | 1:J:47:PRO:HD3 | 1.97 | 0.47 |
| 1:J:382:LEU:HD12 | 1:J:406:TYR:N | 2.30 | 0.47 |
| 1:J:486:LEU:HD23 | 1:J:487:VAL:N | 2.28 | 0.47 |
| 1:JA:179:ARG:HE | 1:JA:209:PHE:HA | 1.79 | 0.47 |
| 1:JB:56:ARG:HD3 | 1:KB:127:LEU:HD11 | 1.95 | 0.47 |
| 1:JB:285:LEU:HD12 | 1:JB:315:GLN:OE1 | 2.14 | 0.47 |
| 1:JB:301:VAL:HG22 | 1:JB:302:VAL:N | 2.29 | 0.47 |
| 1:JB:591:PHE:O | 1:JB:595:SER:N | 2.48 | 0.47 |
| 1:JB:709:LEU:HD13 | 1:JB:712:LEU:HD12 | 1.96 | 0.47 |
| 1:K:333:LEU:HD13 | 1:K:358:LEU:HD22 | 1.95 | 0.47 |
| 1:K:333:LEU:HD23 | 1:K:374:VAL:HG11 | 1.95 | 0.47 |
| 1:KB:266:GLU:O | 1:KB:268:LEU:HD12 | 2.15 | 0.47 |
| 1:KB:402:ILE:HG22 | 1:KB:403:GLY:N | 2.30 | 0.47 |
| 1:KB:529:ILE:HG13 | 1:KB:583:VAL:HG21 | 1.96 | 0.47 |
| 1:L:561:LEU:HD23 | 1:L:631:ASN:O | 2.14 | 0.47 |
| 1:LA:276:LEU:HD13 | 1:LA:281:TYR:HA | 1.95 | 0.47 |
| 1:LA:334:LEU:HD12 | 1:LA:357:TRP:NE1 | 2.30 | 0.47 |
| 1:LA:459:SER:HB2 | 1:LA:486:LEU:HD11 | 1.97 | 0.47 |
| 1:LB:15:TYR:HB3 | 1:LB:30:VAL:HA | 1.96 | 0.47 |
| 1:LB:126:LEU:O | 1:LB:127:LEU:HD22 | 2.14 | 0.47 |
| 1:MB:233:ARG:HA | 1:MB:245:THR:HG23 | 1.96 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:MB:685:ARG:O | 1:MB:689:GLU:OE1 | 2.33 | 0.47 |
| 1:N:129:PHE:CZ | 1:N:157:VAL:HG22 | 2.49 | 0.47 |
| 1:NA:126:LEU:C | 1:NA:127:LEU:HD22 | 2.40 | 0.47 |
| 1:NB:160:VAL:HG12 | 1:NB:161:GLU:N | 2.30 | 0.47 |
| 1:O:218:ALA:HA | 1:O:260:VAL:HA | 1.97 | 0.47 |
| 1:O:367:PRO:HB3 | 1:O:373:VAL:HG22 | 1.97 | 0.47 |
| 1:O:806:THR:HG23 | 1:P:808:ARG:HD3 | 1.97 | 0.47 |
| 1:OA:83:LEU:HD21 | 1:OA:102:GLY:CA | 2.43 | 0.47 |
| 1:OA:203:ALA:HB3 | 1:PA:192:THR:HB | 1.96 | 0.47 |
| 1:OB:121:LEU:HD12 | 1:OB:121:LEU:C | 2.39 | 0.47 |
| 1:OB:122:HIS:CD2 | 1:OB:123:LEU:N | 2.83 | 0.47 |
| 1:OB:547:PHE:CE2 | 1:OB:633:LEU:HD13 | 2.50 | 0.47 |
| 1:PA:418:GLU:C | 1:PA:419:LEU:HD12 | 2.40 | 0.47 |
| 1:PB:16:ILE:HG21 | 1:PB:43:VAL:CG1 | 2.45 | 0.47 |
| 1:PB:337:LEU:HD21 | 1:PB:372:GLU:HB3 | 1.97 | 0.47 |
| 1:Q:143:TRP:C | 1:Q:208:VAL:HG11 | 2.40 | 0.47 |
| 1:QA:122:HIS:HB2 | 1:QA:163:ILE:HD11 | 1.97 | 0.47 |
| 1:QA:175:ARG:HH21 | 1:QA:263:VAL:HG12 | 1.79 | 0.47 |
| 1:QA:340:LEU:HD11 | 1:QA:371:VAL:HG23 | 1.96 | 0.47 |
| 1:QA:358:LEU:HD21 | 1:QA:360:ARG:HB3 | 1.97 | 0.47 |
| 1:QB:60:THR:H | 1:QB:107:LYS:HB3 | 1.80 | 0.47 |
| 1:QB:241:VAL:HG11 | 1:QB:243:ARG:CZ | 2.45 | 0.47 |
| 1:QB:786:GLN:NE2 | 1:RB:781:VAL:HG21 | 2.30 | 0.47 |
| 1:R:325:VAL:HG13 | 1:R:325:VAL:O | 2.15 | 0.47 |
| 1:RA:276:LEU:HD11 | 1:RA:282:CYS:SG | 2.53 | 0.47 |
| 1:RA:599:ILE:HG21 | 1:RA:640:VAL:HG22 | 1.96 | 0.47 |
| 1:S:51:VAL:HG13 | 1:S:59:CYS:SG | 2.55 | 0.47 |
| 1:SA:333:LEU:HD12 | 1:SA:358:LEU:HB2 | 1.97 | 0.47 |
| 1:SB:10:ILE:O | 1:SB:32:PRO:HA | 2.14 | 0.47 |
| 1:SB:181:GLU:OE1 | 1:SB:191:VAL:HG12 | 2.14 | 0.47 |
| 1:SB:788:ALA:O | 1:SB:792:VAL:HG23 | 2.14 | 0.47 |
| 1:T:283:VAL:HG22 | 1:T:301:VAL:CG2 | 2.44 | 0.47 |
| 1:T:388:ILE:HD12 | 1:T:414:LEU:HD21 | 1.97 | 0.47 |
| 1:TA:137:VAL:HG12 | 1:TA:138:VAL:N | 2.30 | 0.47 |
| 1:TA:198:VAL:HG11 | 1:TA:204:TYR:CG | 2.49 | 0.47 |
| 1:TA:737:GLY:O | 1:TA:741:VAL:HG23 | 2.14 | 0.47 |
| 1:TB:230:ARG:HA | 1:TB:247:GLU:O | 2.14 | 0.47 |
| 1:TB:277:GLY:C | 1:TB:305:GLU:H | 2.22 | 0.47 |
| 1:TB:405:THR:HG23 | 1:UB:396:GLY:HA3 | 1.97 | 0.47 |
| 1:TB:416:GLU:HG2 | 1:TB:455:THR:HG23 | 1.96 | 0.47 |
| 1:TB:625:GLN:OE1 | 1:TB:634:VAL:HG11 | 2.15 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UA:324:TYR:HB3 | 1:UA:326:LEU:HD21 | 1.95 | 0.47 |
| 1:UA:325:VAL:O | 1:UA:325:VAL:HG13 | 2.14 | 0.47 |
| 1:UA:531:THR:HA | 1:UA:584:ALA:HA | 1.96 | 0.47 |
| 1:UB:65:VAL:HG23 | 1:UB:67:ARG:HG3 | 1.96 | 0.47 |
| 1:UB:68:ASP:OD1 | 1:UB:74:LEU:HD12 | 2.14 | 0.47 |
| 1:UB:797:GLN:HB2 | 1:VB:792:VAL:HG21 | 1.96 | 0.47 |
| 1:V:480:VAL:HG12 | 1:V:481:VAL:N | 2.29 | 0.47 |
| 1:VA:334:LEU:HD23 | 1:VA:373:VAL:HA | 1.97 | 0.47 |
| 1:VA:340:LEU:HD12 | 1:VA:349:VAL:HG12 | 1.96 | 0.47 |
| 1:VA:374:VAL:HG12 | 1:VA:375:GLU:H | 1.79 | 0.47 |
| 1:VA:468:VAL:HG11 | 1:VA:487:VAL:HG11 | 1.96 | 0.47 |
| 1:VA:514:LEU:C | 1:VA:514:LEU:HD23 | 2.40 | 0.47 |
| 1:VB:59:CYS:SG | 1:VB:107:LYS:C | 2.98 | 0.47 |
| 1:VB:81:VAL:HG22 | 1:VB:82:ARG:O | 2.15 | 0.47 |
| 1:VB:127:LEU:HD23 | 1:VB:128:ASP:O | 2.15 | 0.47 |
| 1:VB:326:LEU:O | 1:VB:362:PRO:HA | 2.15 | 0.47 |
| 1:W:51:VAL:HG21 | 1:W:99:LEU:CD1 | 2.43 | 0.47 |
| 1:W:59:CYS:CB | 1:W:105:LEU:HD11 | 2.45 | 0.47 |
| 1:W:116:LEU:N | 1:W:119:THR:HG22 | 2.29 | 0.47 |
| 1:W:228:HIS:CA | 1:W:250:LEU:HD23 | 2.44 | 0.47 |
| 1:W:529:ILE:HG13 | 1:W:537:LEU:HB2 | 1.97 | 0.47 |
| 1:W:763:GLN:NE2 | 1:W:764:LYS:HG3 | 2.29 | 0.47 |
| 1:W:772:TYR:CE1 | 1:X:770:LEU:HD21 | 2.49 | 0.47 |
| 1:W:777:LEU:CD1 | 1:W:781:VAL:HG13 | 2.44 | 0.47 |
| 1:WA:126:LEU:C | 1:WA:127:LEU:HD22 | 2.38 | 0.47 |
| 1:WB:325:VAL:O | 1:WB:325:VAL:HG13 | 2.15 | 0.47 |
| 1:WB:480:VAL:HG12 | 1:WB:481:VAL:N | 2.30 | 0.47 |
| 1:XA:150:THR:HB | 1:YA:139:ALA:HB3 | 1.97 | 0.47 |
| 1:XA:467:ALA:HB3 | 1:XA:562:PHE:CE1 | 2.50 | 0.47 |
| 1:XB:54:PRO:HG2 | 1:XB:57:HIS:NE2 | 2.30 | 0.47 |
| 1:XB:480:VAL:HG12 | 1:XB:481:VAL:N | 2.29 | 0.47 |
| 1:XB:518:LEU:O | 1:XB:547:PHE:HB2 | 2.14 | 0.47 |
| 1:XB:746:LEU:O | 1:YB:741:VAL:HG21 | 2.15 | 0.47 |
| 1:Y:423:VAL:HG13 | 1:Y:424:GLU:H | 1.80 | 0.47 |
| 1:Y:523:PHE:CD1 | 1:Y:568:VAL:HG23 | 2.50 | 0.47 |
| 1:YA:325:VAL:HG21 | 1:ZA:337:LEU:HA | 1.96 | 0.47 |
| 1:YA:531:THR:HG23 | 1:YA:537:LEU:HD11 | 1.96 | 0.47 |
| 1:YB:10:ILE:HG22 | 1:YB:47:PRO:HG3 | 1.97 | 0.47 |
| 1:YB:720:GLY:HA3 | 1:ZB:711:ALA:HB1 | 1.97 | 0.47 |
| 1:YB:775:ALA:HB1 | 1:ZB:774:ARG:HH12 | 1.80 | 0.47 |
| 1:Z:61:VAL:HG23 | 1:Z:61:VAL:O | 2.15 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:Z:802:ILE:HD11 | 1:Z:806:THR:O | 2.14 | 0.47 |
| 1:ZB:400:ALA:O | 1:ZB:402:ILE:HD12 | 2.13 | 0.47 |
| 1:ZB:468:VAL:HG12 | 1:ZB:469:GLN:N | 2.29 | 0.47 |
| 1:ZB:480:VAL:HG21 | 1:ZB:558:THR:HB | 1.96 | 0.47 |
| 1:A:30:VAL:CG2 | 1:A:50:MET:HE2 | 2.45 | 0.47 |
| 1:A:529:ILE:HD13 | 1:A:539:LEU:HD12 | 1.97 | 0.47 |
| 1:AA:303:LYS:HD2 | 1:AA:304:GLY:O | 2.15 | 0.47 |
| 1:AA:734:ARG:HG3 | 1:Z:742:LEU:HD21 | 1.97 | 0.47 |
| 1:AA:812:VAL:HG21 | 1:Z:813:ALA:O | 2.15 | 0.47 |
| 1:AC:144:LEU:HB2 | 1:AC:163:ILE:HD11 | 1.96 | 0.47 |
| 1:B:120:ALA:CB | 1:B:205:LEU:HD21 | 2.44 | 0.47 |
| 1:BA:107:LYS:HD2 | 1:BA:108:ASP:O | 2.15 | 0.47 |
| 1:BA:596:ALA:HA | 1:BA:599:ILE:HD12 | 1.97 | 0.47 |
| 1:BB:18:VAL:HG23 | 1:BB:27:ARG:HB3 | 1.96 | 0.47 |
| 1:BB:129:PHE:CD1 | 1:BB:156:GLU:HB3 | 2.49 | 0.47 |
| 1:BB:174:LEU:HD11 | 1:BB:212:VAL:HB | 1.96 | 0.47 |
| 1:C:144:LEU:HD12 | 1:C:144:LEU:C | 2.40 | 0.47 |
| 1:C:364:GLU:HG3 | 1:D:353:ALA:HB1 | 1.97 | 0.47 |
| 1:CB:274:THR:HG21 | 1:CB:310:LEU:HD11 | 1.96 | 0.47 |
| 1:D:65:VAL:HG11 | 1:D:100:TYR:CG | 2.50 | 0.47 |
| 1:D:460:TYR:O | 1:D:486:LEU:HD12 | 2.15 | 0.47 |
| 1:DA:58:TYR:HB3 | 1:DA:92:LEU:HD23 | 1.95 | 0.47 |
| 1:DA:126:LEU:O | 1:DA:127:LEU:HD22 | 2.15 | 0.47 |
| 1:DB:471:TYR:HA | 1:DB:478:ALA:HA | 1.97 | 0.47 |
| 1:EA:51:VAL:HG23 | 1:EA:97:PHE:O | 2.15 | 0.47 |
| 1:EA:772:TYR:CE1 | 1:FA:770:LEU:HD11 | 2.49 | 0.47 |
| 1:EB:53:VAL:HG13 | 1:EB:57:HIS:O | 2.15 | 0.47 |
| 1:FA:16:ILE:CG2 | 1:FA:43:VAL:HG13 | 2.45 | 0.47 |
| 1:FB:262:ASP:OD1 | 1:FB:263:VAL:HG22 | 2.15 | 0.47 |
| 1:GA:414:LEU:HB3 | 1:GA:455:THR:HG21 | 1.97 | 0.47 |
| 1:GA:518:LEU:HD23 | 1:GA:518:LEU:H | 1.80 | 0.47 |
| 1:HA:7:ILE:HD12 | 1:HA:36:ILE:HG13 | 1.96 | 0.47 |
| 1:HA:15:TYR:HA | 1:HA:29:GLU:O | 2.15 | 0.47 |
| 1:HB:276:LEU:CD2 | 1:HB:320:ILE:HG23 | 2.44 | 0.47 |
| 1:HB:638:VAL:HG12 | 1:HB:639:ASP:N | 2.29 | 0.47 |
| 1:I:172:GLN:HB3 | 1:I:215:LEU:HD11 | 1.97 | 0.47 |
| 1:IB:389:TYR:CE1 | 1:IB:457:VAL:HG22 | 2.50 | 0.47 |
| 1:J:30:VAL:HG22 | 1:J:31:GLY:N | 2.30 | 0.47 |
| 1:JA:212:VAL:O | 1:JA:212:VAL:HG23 | 2.15 | 0.47 |
| 1:JB:121:LEU:HD21 | 1:JB:145:PHE:HB3 | 1.97 | 0.47 |
| 1:K:461:ARG:HA | 1:K:486:LEU:HA | 1.96 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:K:806:THR:HG22 | 1:K:806:THR:O | 2.15 | 0.47 |
| 1:KA:88:LEU:HD21 | 1:KA:106:GLU:OE2 | 2.15 | 0.47 |
| 1:KA:543:TYR:HD1 | 1:KA:638:VAL:HG13 | 1.79 | 0.47 |
| 1:L:326:LEU:O | 1:L:362:PRO:HA | 2.14 | 0.47 |
| 1:LB:81:VAL:HG23 | 1:LB:100:TYR:HD2 | 1.80 | 0.47 |
| 1:M:182:CYS:HG | 1:M:209:PHE:HD1 | 1.62 | 0.47 |
| 1:M:389:TYR:CE2 | 1:M:457:VAL:HG22 | 2.50 | 0.47 |
| 1:M:495:PHE:HB2 | 1:M:514:LEU:HD11 | 1.97 | 0.47 |
| 1:MA:390:VAL:O | 1:MA:390:VAL:HG23 | 2.14 | 0.47 |
| 1:NB:175:ARG:HA | 1:NB:197:LEU:HD23 | 1.97 | 0.47 |
| 1:NB:366:VAL:O | 1:NB:366:VAL:HG13 | 2.15 | 0.47 |
| 1:O:389:TYR:CE2 | 1:O:457:VAL:HA | 2.50 | 0.47 |
| 1:O:802:ILE:HG23 | 1:O:803:GLY:N | 2.30 | 0.47 |
| 1:OA:63:ASN:HD21 | 1:OA:83:LEU:HD23 | 1.80 | 0.47 |
| 1:OA:543:TYR:CZ | 1:OA:575:ILE:HG21 | 2.50 | 0.47 |
| 1:OB:61:VAL:HG22 | 1:OB:91:ARG:NH2 | 2.30 | 0.47 |
| 1:OB:81:VAL:HG13 | 1:OB:83:LEU:CD1 | 2.43 | 0.47 |
| 1:OB:546:HIS:O | 1:OB:633:LEU:HD12 | 2.14 | 0.47 |
| 1:OB:547:PHE:CZ | 1:OB:633:LEU:HD13 | 2.50 | 0.47 |
| 1:P:765:VAL:CG2 | 1:Q:759:LEU:HD21 | 2.45 | 0.47 |
| 1:PA:188:LYS:HZ2 | 1:PA:190:ARG:HD3 | 1.80 | 0.47 |
| 1:PA:567:PHE:CG | 1:PA:568:VAL:N | 2.83 | 0.47 |
| 1:PB:59:CYS:HB3 | 1:PB:105:LEU:HD21 | 1.97 | 0.47 |
| 1:PB:521:ASP:CG | 1:PB:522:PHE:N | 2.73 | 0.47 |
| 1:Q:125:ALA:HB2 | 1:Q:137:VAL:CG1 | 2.45 | 0.47 |
| 1:QA:69:ALA:HB2 | 1:QA:74:LEU:CD2 | 2.45 | 0.47 |
| 1:QA:529:ILE:HG21 | 1:QA:579:VAL:CG1 | 2.41 | 0.47 |
| 1:QB:223:GLU:CD | 1:QB:253:VAL:HG21 | 2.40 | 0.47 |
| 1:QB:229:LEU:C | 1:QB:268:LEU:HD13 | 2.40 | 0.47 |
| 1:R:332:LEU:HD23 | 1:R:376:GLU:HA | 1.96 | 0.47 |
| 1:RA:358:LEU:CD1 | 1:RA:407:MET:HE2 | 2.42 | 0.47 |
| 1:S:579:VAL:O | 1:S:583:VAL:HG12 | 2.15 | 0.47 |
| 1:SB:28:VAL:HG22 | 1:SB:29:GLU:N | 2.30 | 0.47 |
| 1:SB:115:VAL:HG23 | 1:SB:147:GLY:O | 2.15 | 0.47 |
| 1:SB:737:GLY:O | 1:SB:741:VAL:HG23 | 2.15 | 0.47 |
| 1:T:391:GLN:CG | 1:T:398:VAL:HG22 | 2.44 | 0.47 |
| 1:TA:334:LEU:HD12 | 1:TA:359:ILE:HG21 | 1.95 | 0.47 |
| 1:TB:55:PRO:O | 1:TB:56:ARG:HG2 | 2.14 | 0.47 |
| 1:UA:71:GLY:C | 1:UA:72:LEU:HD12 | 2.39 | 0.47 |
| 1:UB:162:ILE:HG22 | 1:UB:163:ILE:N | 2.30 | 0.47 |
| 1:VA:401:VAL:O | 1:VA:401:VAL:HG23 | 2.15 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:VB:165:ALA:HA | 1:VB:205:LEU:HA | 1.97 | 0.47 |
| 1:VB:173:ALA:HB1 | 1:VB:197:LEU:HB3 | 1.96 | 0.47 |
| 1:VB:583:VAL:HG13 | 1:VB:584:ALA:N | 2.29 | 0.47 |
| 1:W:518:LEU:HD11 | 1:W:547:PHE:O | 2.15 | 0.47 |
| 1:W:761:ARG:CB | 1:X:755:THR:HG21 | 2.44 | 0.47 |
| 1:WA:122:HIS:CD2 | 1:WA:208:VAL:HG12 | 2.50 | 0.47 |
| 1:WB:121:LEU:CD1 | 1:WB:123:LEU:HD21 | 2.44 | 0.47 |
| 1:WB:144:LEU:HD12 | 1:WB:144:LEU:O | 2.14 | 0.47 |
| 1:WB:230:ARG:HA | 1:WB:247:GLU:O | 2.15 | 0.47 |
| 1:WB:357:TRP:O | 1:WB:357:TRP:CG | 2.67 | 0.47 |
| 1:WB:790:VAL:HG22 | 1:XB:785:GLN:CG | 2.45 | 0.47 |
| 1:XA:10:ILE:HG22 | 1:XA:14:HIS:HB2 | 1.96 | 0.47 |
| 1:XA:775:ALA:HB1 | 1:YA:770:LEU:HD22 | 1.97 | 0.47 |
| 1:XB:285:LEU:HD11 | 1:XB:317:GLU:HA | 1.97 | 0.47 |
| 1:Y:219:VAL:HG11 | 1:Y:227:LEU:CD2 | 2.45 | 0.47 |
| 1:Y:808:ARG:HG2 | 1:Y:808:ARG:O | 2.15 | 0.47 |
| 1:YA:121:LEU:HD21 | 1:YA:151:TYR:OH | 2.14 | 0.47 |
| 1:YB:90:ILE:HG22 | 1:YB:92:LEU:CD1 | 2.45 | 0.47 |
| 1:YB:359:ILE:O | 1:YB:359:ILE:HG23 | 2.14 | 0.47 |
| 1:ZA:56:ARG:HB2 | 1:ZA:112:LEU:HB2 | 1.97 | 0.47 |
| 1:ZB:233:ARG:HA | 1:ZB:245:THR:HG23 | 1.95 | 0.47 |
| 1:ZB:282:CYS:HA | 1:ZB:321:GLN:OE1 | 2.15 | 0.47 |
| 1:ZB:462:VAL:HG21 | 1:ZB:481:VAL:HG21 | 1.97 | 0.47 |
| 1:ZB:470:VAL:HG23 | 1:ZB:479:ARG:HG2 | 1.96 | 0.47 |
| 1:ZB:497:VAL:HG22 | 1:ZB:498:LEU:H | 1.80 | 0.47 |
| 1:A:3:THR:HG22 | 1:A:6:PHE:CD1 | 2.50 | 0.47 |
| 1:A:777:LEU:HD13 | 1:NA:783:LYS:HB3 | 1.96 | 0.47 |
| 1:AA:166:THR:HG23 | 1:AA:168:ILE:HG23 | 1.97 | 0.47 |
| 1:AC:387:GLY:O | 1:AC:456:ARG:HA | 2.15 | 0.47 |
| 1:BA:388:ILE:HD12 | 1:BA:414:LEU:HD22 | 1.97 | 0.47 |
| 1:BA:466:ALA:HB1 | 1:BA:515:CYS:SG | 2.55 | 0.47 |
| 1:C:91:ARG:C | 1:C:92:LEU:HD12 | 2.40 | 0.47 |
| 1:CA:75:PHE:CD1 | 1:CA:81:VAL:HG23 | 2.49 | 0.47 |
| 1:CB:16:ILE:CG2 | 1:CB:17:HIS:N | 2.78 | 0.47 |
| 1:CB:541:LEU:HD22 | 1:CB:640:VAL:HG22 | 1.96 | 0.47 |
| 1:D:105:LEU:HD21 | 1:D:107:LYS:O | 2.15 | 0.47 |
| 1:DA:304:GLY:C | 1:DA:305:GLU:HG3 | 2.40 | 0.47 |
| 1:DB:160:VAL:HG12 | 1:DB:161:GLU:N | 2.30 | 0.47 |
| 1:DB:401:VAL:O | 1:DB:401:VAL:HG23 | 2.14 | 0.47 |
| 1:EA:325:VAL:HA | 1:EA:364:GLU:HA | 1.97 | 0.47 |
| 1:F:332:LEU:HD23 | 1:F:333:LEU:O | 2.15 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:F:539:LEU:HD11 | 1:F:640:VAL:HG13 | 1.96 | 0.47 |
| 1:FA:126:LEU:C | 1:FA:127:LEU:HD22 | 2.39 | 0.47 |
| 1:FB:176:LEU:HD23 | 1:FB:196:TRP:O | 2.15 | 0.47 |
| 1:FB:521:ASP:O | 1:FB:545:TRP:CD1 | 2.68 | 0.47 |
| 1:G:18:VAL:O | 1:G:18:VAL:HG23 | 2.15 | 0.47 |
| 1:G:228:HIS:CE1 | 1:G:268:LEU:HD22 | 2.50 | 0.47 |
| 1:G:541:LEU:HD23 | 1:G:638:VAL:CG1 | 2.44 | 0.47 |
| 1:GA:587:THR:HG23 | 1:GA:590:ASP:H | 1.80 | 0.47 |
| 1:H:74:LEU:HB3 | 1:H:82:ARG:HH21 | 1.79 | 0.47 |
| 1:H:341:GLU:OE1 | 1:H:341:GLU:O | 2.33 | 0.47 |
| 1:H:654:LEU:O | 1:H:658:VAL:HG12 | 2.15 | 0.47 |
| 1:HB:276:LEU:HB3 | 1:HB:304:GLY:HA2 | 1.95 | 0.47 |
| 1:I:253:VAL:HG23 | 1:I:254:GLN:NE2 | 2.29 | 0.47 |
| 1:IA:69:ALA:HB2 | 1:IA:74:LEU:HG | 1.97 | 0.47 |
| 1:IB:227:LEU:HD12 | 1:IB:228:HIS:N | 2.30 | 0.47 |
| 1:IB:794:LYS:HG3 | 1:JB:792:VAL:CG2 | 2.45 | 0.47 |
| 1:JB:792:VAL:HG12 | 1:JB:796:LYS:HD3 | 1.96 | 0.47 |
| 1:K:56:ARG:O | 1:K:111:PRO:HA | 2.15 | 0.47 |
| 1:K:123:LEU:HD13 | 1:K:143:TRP:NE1 | 2.29 | 0.47 |
| 1:K:126:LEU:C | 1:K:127:LEU:HD22 | 2.40 | 0.47 |
| 1:K:238:PHE:CE2 | 1:K:239:ARG:HD2 | 2.50 | 0.47 |
| 1:KA:276:LEU:HD22 | 1:KA:281:TYR:N | 2.30 | 0.47 |
| 1:KA:427:LEU:O | 1:KA:428:ASN:C | 2.58 | 0.47 |
| 1:LA:172:GLN:HB3 | 1:LA:215:LEU:HD11 | 1.96 | 0.47 |
| 1:LA:260:VAL:O | 1:LA:260:VAL:HG13 | 2.15 | 0.47 |
| 1:LA:488:SER:O | 1:LA:489:LEU:HD22 | 2.15 | 0.47 |
| 1:LB:212:VAL:C | 1:LB:213:LEU:HD22 | 2.39 | 0.47 |
| 1:LB:221:LEU:HD13 | 1:LB:252:THR:O | 2.15 | 0.47 |
| 1:M:387:GLY:O | 1:M:456:ARG:HD3 | 2.15 | 0.47 |
| 1:M:778:GLU:HA | 1:M:781:VAL:HG22 | 1.97 | 0.47 |
| 1:M:792:VAL:HG12 | 1:M:796:LYS:HE2 | 1.97 | 0.47 |
| 1:N:340:LEU:CD1 | 1:N:371:VAL:HG22 | 2.44 | 0.47 |
| 1:NB:392:ASP:HB3 | 1:NB:395:THR:HG22 | 1.96 | 0.47 |
| 1:O:120:ALA:HB1 | 1:O:145:PHE:O | 2.15 | 0.47 |
| 1:OB:288:VAL:HG12 | 1:OB:293:LYS:C | 2.40 | 0.47 |
| 1:OB:408:LEU:HD13 | 1:OB:413:VAL:HA | 1.97 | 0.47 |
| 1:OB:408:LEU:HD22 | 1:OB:412:GLU:HB3 | 1.97 | 0.47 |
| 1:P:83:LEU:HD21 | 1:P:102:GLY:HA3 | 1.95 | 0.47 |
| 1:P:531:THR:HG22 | 1:P:583:VAL:CG2 | 2.44 | 0.47 |
| 1:PB:536:ARG:O | 1:PB:646:VAL:HG23 | 2.15 | 0.47 |
| 1:Q:70:GLN:HG2 | 1:Q:71:GLY:H | 1.79 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:QB:130:GLU:HA | 1:QB:135:ASP:HA | 1.96 | 0.47 |
| 1:QB:424:GLU:HG2 | 1:QB:425:GLU:N | 2.30 | 0.47 |
| 1:R:635:VAL:O | 1:R:635:VAL:HG12 | 2.14 | 0.47 |
| 1:RB:388:ILE:HG22 | 1:RB:389:TYR:O | 2.15 | 0.47 |
| 1:RB:413:VAL:HG22 | 1:RB:414:LEU:N | 2.29 | 0.47 |
| 1:SA:17:HIS:HB2 | 1:SA:44:LEU:HB2 | 1.96 | 0.47 |
| 1:SB:105:LEU:HD23 | 1:SB:105:LEU:H | 1.80 | 0.47 |
| 1:SB:229:LEU:C | 1:SB:268:LEU:HD13 | 2.40 | 0.47 |
| 1:SB:735:ILE:HD12 | 1:TB:726:ALA:HB3 | 1.96 | 0.47 |
| 1:T:341:GLU:O | 1:T:342:GLU:HB2 | 2.14 | 0.47 |
| 1:TA:526:VAL:HG22 | 1:TA:538:GLN:HE22 | 1.80 | 0.47 |
| 1:TB:543:TYR:HB3 | 1:TB:638:VAL:HG13 | 1.97 | 0.47 |
| 1:UA:462:VAL:HG13 | 1:UA:468:VAL:HG23 | 1.97 | 0.47 |
| 1:UA:583:VAL:HG21 | 1:UA:591:PHE:CD2 | 2.50 | 0.47 |
| 1:UB:81:VAL:HG13 | 1:UB:83:LEU:CD1 | 2.45 | 0.47 |
| 1:UB:497:VAL:HG22 | 1:UB:498:LEU:N | 2.30 | 0.47 |
| 1:UB:798:MET:SD | 1:UB:802:ILE:HD12 | 2.55 | 0.47 |
| 1:V:219:VAL:HG13 | 1:V:259:HIS:HB3 | 1.96 | 0.47 |
| 1:VA:393:VAL:HG22 | 1:VA:411:ASP:C | 2.39 | 0.47 |
| 1:VA:759:LEU:HA | 1:VA:762:VAL:HG22 | 1.96 | 0.47 |
| 1:VB:182:CYS:HB3 | 1:VB:190:ARG:HB2 | 1.97 | 0.47 |
| 1:WA:8:ILE:HD12 | 1:WA:37:ARG:HE | 1.78 | 0.47 |
| 1:WA:390:VAL:HG21 | 1:WA:399:ARG:CZ | 2.45 | 0.47 |
| 1:WB:640:VAL:HG12 | 1:XB:580:ARG:NH1 | 2.30 | 0.47 |
| 1:XA:537:LEU:HD11 | 1:XA:588:PHE:CD1 | 2.50 | 0.47 |
| 1:XB:333:LEU:HA | 1:XB:358:LEU:HA | 1.97 | 0.47 |
| 1:Z:121:LEU:O | 1:Z:144:LEU:HA | 2.15 | 0.47 |
| 1:ZB:334:LEU:HB2 | 1:ZB:357:TRP:O | 2.14 | 0.47 |
| 1:A:6:PHE:HA | 1:A:37:ARG:HB2 | 1.95 | 0.47 |
| 1:A:271:VAL:HG23 | 1:A:309:PHE:CD2 | 2.50 | 0.47 |
| 1:AA:129:PHE:O | 1:AA:137:VAL:HG23 | 2.15 | 0.47 |
| 1:AA:187:GLY:O | 1:AA:188:LYS:C | 2.56 | 0.47 |
| 1:AA:229:LEU:HD12 | 1:AA:251:VAL:CG1 | 2.44 | 0.47 |
| 1:AA:283:VAL:HG22 | 1:AA:301:VAL:HA | 1.96 | 0.47 |
| 1:AA:382:LEU:HD21 | 1:AA:388:ILE:HG23 | 1.96 | 0.47 |
| 1:AA:469:GLN:HA | 1:AA:480:VAL:HG22 | 1.97 | 0.47 |
| 1:AA:643:VAL:O | 1:AA:643:VAL:HG23 | 2.15 | 0.47 |
| 1:AB:333:LEU:HD23 | 1:AB:374:VAL:CG1 | 2.45 | 0.47 |
| 1:AC:812:VAL:O | 1:OA:812:VAL:HG12 | 2.15 | 0.47 |
| 1:B:121:LEU:HD12 | 1:B:121:LEU:C | 2.40 | 0.47 |
| 1:BA:386:GLU:OE2 | 1:BA:457:VAL:N | 2.48 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:BA:541:LEU:CD2 | 1:BA:640:VAL:HG22 | 2.43 | 0.47 |
| 1:BB:539:LEU:HD21 | 1:BB:591:PHE:HZ | 1.80 | 0.47 |
| 1:CA:227:LEU:HA | 1:CA:270:VAL:HA | 1.96 | 0.47 |
| 1:CB:16:ILE:HG22 | 1:CB:17:HIS:N | 2.29 | 0.47 |
| 1:DB:56:ARG:O | 1:DB:111:PRO:HA | 2.15 | 0.47 |
| 1:E:174:LEU:O | 1:E:198:VAL:HG12 | 2.15 | 0.47 |
| 1:EA:61:VAL:HA | 1:EA:105:LEU:HA | 1.96 | 0.47 |
| 1:EA:122:HIS:ND1 | 1:EA:160:VAL:HG11 | 2.30 | 0.47 |
| 1:EB:197:LEU:HG | 1:EB:263:VAL:HG13 | 1.96 | 0.47 |
| 1:F:197:LEU:HD21 | 1:F:263:VAL:CG1 | 2.45 | 0.47 |
| 1:FB:391:GLN:O | 1:FB:413:VAL:HG12 | 2.15 | 0.47 |
| 1:G:18:VAL:HA | 1:G:44:LEU:HD23 | 1.96 | 0.47 |
| 1:GA:379:ALA:N | 1:GA:407:MET:HE2 | 2.30 | 0.47 |
| 1:GA:498:LEU:CB | 1:GA:513:ALA:HB3 | 2.45 | 0.47 |
| 1:H:283:VAL:HA | 1:H:302:VAL:HG23 | 1.96 | 0.47 |
| 1:H:541:LEU:HD23 | 1:H:638:VAL:HG12 | 1.97 | 0.47 |
| 1:H:558:THR:HA | 1:H:561:LEU:HD12 | 1.96 | 0.47 |
| 1:H:777:LEU:O | 1:H:781:VAL:HG22 | 2.15 | 0.47 |
| 1:HA:7:ILE:HD11 | 1:TB:7:ILE:HG21 | 1.96 | 0.47 |
| 1:HA:165:ALA:HB2 | 1:HA:205:LEU:HB2 | 1.97 | 0.47 |
| 1:HB:208:VAL:HG23 | 1:HB:209:PHE:N | 2.30 | 0.47 |
| 1:JA:165:ALA:HB2 | 1:JA:205:LEU:HB2 | 1.97 | 0.47 |
| 1:JB:276:LEU:O | 1:JB:305:GLU:HA | 2.14 | 0.47 |
| 1:K:115:VAL:HG22 | 1:K:149:GLY:C | 2.40 | 0.47 |
| 1:K:358:LEU:HD21 | 1:K:377:ARG:CZ | 2.45 | 0.47 |
| 1:K:643:VAL:HG23 | 1:K:643:VAL:O | 2.15 | 0.47 |
| 1:KA:73:VAL:HG21 | 1:KA:100:TYR:CZ | 2.49 | 0.47 |
| 1:KA:169:ARG:O | 1:KA:170:GLN:C | 2.58 | 0.47 |
| 1:KB:579:VAL:O | 1:KB:583:VAL:HG12 | 2.14 | 0.47 |
| 1:KB:591:PHE:CZ | 1:KB:599:ILE:HD11 | 2.49 | 0.47 |
| 1:L:54:PRO:CD | 1:L:109:ILE:HD12 | 2.44 | 0.47 |
| 1:L:176:LEU:HD21 | 1:L:196:TRP:NE1 | 2.30 | 0.47 |
| 1:L:645:PRO:HB3 | 1:L:650:THR:HG21 | 1.97 | 0.47 |
| 1:LA:50:MET:HE3 | 1:LA:98:PRO:HD3 | 1.97 | 0.47 |
| 1:LA:167:ILE:HD12 | 1:LA:167:ILE:N | 2.30 | 0.47 |
| 1:MA:25:VAL:HG22 | 1:MA:80:GLN:HB2 | 1.96 | 0.47 |
| 1:MB:732:ALA:HA | 1:MB:735:ILE:HD12 | 1.96 | 0.47 |
| 1:N:783:LYS:CB | 1:O:777:LEU:HD11 | 2.44 | 0.47 |
| 1:NA:92:LEU:HD12 | 1:NA:92:LEU:N | 2.30 | 0.47 |
| 1:NA:276:LEU:HD22 | 1:NA:280:ASN:O | 2.14 | 0.47 |
| 1:NB:276:LEU:HD13 | 1:NB:281:TYR:HA | 1.97 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:NB:379:ALA:HA | 1:NB:407:MET:SD | 2.55 | 0.47 |
| 1:NB:405:THR:HG21 | 1:OB:393:VAL:O | 2.14 | 0.47 |
| 1:NB:772:TYR:CG | 1:OB:766:ARG:HD3 | 2.50 | 0.47 |
| 1:O:423:VAL:HG13 | 1:O:424:GLU:N | 2.30 | 0.47 |
| 1:OA:120:ALA:C | 1:OA:162:ILE:HG23 | 2.40 | 0.47 |
| 1:OA:470:VAL:HG13 | 1:OA:495:PHE:N | 2.29 | 0.47 |
| 1:OB:241:VAL:HG11 | 1:OB:243:ARG:CZ | 2.45 | 0.47 |
| 1:P:3:THR:HG23 | 1:P:37:ARG:HB2 | 1.97 | 0.47 |
| 1:Q:16:ILE:HG23 | 1:Q:45:PHE:O | 2.14 | 0.47 |
| 1:QA:461:ARG:NE | 1:QA:486:LEU:HD12 | 2.30 | 0.47 |
| 1:R:261:PRO:HB3 | 1:R:267:VAL:HG22 | 1.96 | 0.47 |
| 1:RA:324:TYR:CG | 1:RA:332:LEU:HD11 | 2.50 | 0.47 |
| 1:S:18:VAL:HG21 | 1:S:41:GLU:OE1 | 2.15 | 0.47 |
| 1:SB:59:CYS:SG | 1:SB:109:ILE:HD13 | 2.55 | 0.47 |
| 1:SB:137:VAL:HG12 | 1:SB:138:VAL:N | 2.30 | 0.47 |
| 1:T:768:LEU:HD21 | 1:V:766:ARG:HE | 1.80 | 0.47 |
| 1:TA:593:LYS:HA | 1:UA:585:SER:HA | 1.96 | 0.47 |
| 1:TB:122:HIS:HA | 1:TB:144:LEU:HA | 1.96 | 0.47 |
| 1:UB:115:VAL:HG21 | 1:UB:145:PHE:CE2 | 2.50 | 0.47 |
| 1:V:779:LEU:HD21 | 1:W:774:ARG:CD | 2.45 | 0.47 |
| 1:VB:65:VAL:HB | 1:VB:81:VAL:HG21 | 1.96 | 0.47 |
| 1:W:775:ALA:HB1 | 1:X:770:LEU:HD22 | 1.95 | 0.47 |
| 1:XA:274:THR:O | 1:XA:307:SER:HA | 2.15 | 0.47 |
| 1:XA:537:LEU:HA | 1:XA:645:PRO:HA | 1.96 | 0.47 |
| 1:XB:51:VAL:HG12 | 1:XB:53:VAL:CG2 | 2.44 | 0.47 |
| 1:XB:276:LEU:HD13 | 1:XB:281:TYR:HA | 1.97 | 0.47 |
| 1:YB:363:LEU:HA | 1:ZB:353:ALA:HB3 | 1.97 | 0.47 |
| 1:ZA:10:ILE:HG23 | 1:ZA:31:GLY:O | 2.15 | 0.47 |
| 1:ZA:392:ASP:HB3 | 1:ZA:395:THR:HG22 | 1.97 | 0.47 |
| 1:ZA:531:THR:HG21 | 1:ZA:588:PHE:HA | 1.97 | 0.47 |
| 1:ZB:301:VAL:O | 1:ZB:301:VAL:HG13 | 2.14 | 0.47 |
| 1:A:169:ARG:O | 1:A:172:GLN:HB2 | 2.15 | 0.46 |
| 1:A:405:THR:HG23 | 1:B:396:GLY:CA | 2.45 | 0.46 |
| 1:AA:10:ILE:HD12 | 1:AA:16:ILE:HG13 | 1.97 | 0.46 |
| 1:AA:726:ALA:HB1 | 1:Z:736:GLU:OE2 | 2.15 | 0.46 |
| 1:AB:16:ILE:HG22 | 1:AB:17:HIS:N | 2.30 | 0.46 |
| 1:AB:35:TYR:O | 1:AB:37:ARG:NH2 | 2.47 | 0.46 |
| 1:AC:759:LEU:HD11 | 1:ZB:761:ARG:HG3 | 1.97 | 0.46 |
| 1:CB:72:LEU:HD23 | 1:CB:73:VAL:N | 2.30 | 0.46 |
| 1:CB:326:LEU:HD22 | 1:CB:330:GLN:HB3 | 1.97 | 0.46 |
| 1:D:9:ARG:CB | 1:D:34:THR:HG22 | 2.45 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:D:50:MET:HE3 | 1:D:98:PRO:HD3 | 1.96 | 0.46 |
| 1:D:50:MET:HE2 | 1:D:96:PRO:C | 2.40 | 0.46 |
| 1:DA:57:HIS:HA | 1:DA:110:THR:O | 2.15 | 0.46 |
| 1:DA:105:LEU:C | 1:DA:105:LEU:HD23 | 2.40 | 0.46 |
| 1:DA:137:VAL:O | 1:DA:137:VAL:HG12 | 2.14 | 0.46 |
| 1:DA:810:LEU:HD12 | 1:EA:808:ARG:HG3 | 1.96 | 0.46 |
| 1:DB:30:VAL:HG23 | 1:DB:50:MET:HE3 | 1.97 | 0.46 |
| 1:DB:405:THR:HG21 | 1:EB:393:VAL:HA | 1.96 | 0.46 |
| 1:DB:411:ASP:OD1 | 1:DB:411:ASP:C | 2.57 | 0.46 |
| 1:EB:124:LYS:HB3 | 1:EB:158:GLU:OE2 | 2.15 | 0.46 |
| 1:F:604:PHE:HB3 | 1:F:623:ARG:HB3 | 1.97 | 0.46 |
| 1:FA:529:ILE:HD12 | 1:FA:583:VAL:HG21 | 1.96 | 0.46 |
| 1:FB:8:ILE:H | 1:FB:8:ILE:HD12 | 1.80 | 0.46 |
| 1:FB:67:ARG:HG2 | 1:FB:73:VAL:HG22 | 1.97 | 0.46 |
| 1:FB:181:GLU:HG2 | 1:FB:191:VAL:HG12 | 1.97 | 0.46 |
| 1:G:53:VAL:HG13 | 1:G:57:HIS:O | 2.15 | 0.46 |
| 1:GA:527:ILE:HD11 | 1:GA:541:LEU:HD23 | 1.97 | 0.46 |
| 1:GB:360:ARG:CZ | 1:GB:407:MET:HE2 | 2.45 | 0.46 |
| 1:HA:55:PRO:HD2 | 1:IA:86:ALA:HB1 | 1.98 | 0.46 |
| 1:HA:281:TYR:CZ | 1:HA:321:GLN:HB2 | 2.51 | 0.46 |
| 1:HA:599:ILE:O | 1:HA:600:ARG:C | 2.58 | 0.46 |
| 1:HB:17:HIS:CD2 | 1:HB:28:VAL:HG23 | 2.50 | 0.46 |
| 1:I:221:LEU:O | 1:I:253:VAL:HG12 | 2.15 | 0.46 |
| 1:I:260:VAL:O | 1:I:260:VAL:HG13 | 2.15 | 0.46 |
| 1:I:755:THR:HG22 | 1:I:759:LEU:HD12 | 1.96 | 0.46 |
| 1:IB:7:ILE:O | 1:IB:8:ILE:C | 2.57 | 0.46 |
| 1:J:160:VAL:HG12 | 1:J:161:GLU:H | 1.78 | 0.46 |
| 1:JA:325:VAL:O | 1:JA:325:VAL:HG13 | 2.15 | 0.46 |
| 1:JB:13:TYR:HA | 1:JB:50:MET:CE | 2.45 | 0.46 |
| 1:KA:116:LEU:HB2 | 1:KA:119:THR:HG22 | 1.97 | 0.46 |
| 1:KB:204:TYR:HH | 1:KB:210:GLU:CD | 2.23 | 0.46 |
| 1:KB:767:GLU:HA | 1:KB:770:LEU:HD12 | 1.97 | 0.46 |
| 1:L:497:VAL:HA | 1:L:514:LEU:HD13 | 1.97 | 0.46 |
| 1:LA:88:LEU:HD22 | 1:LA:106:GLU:CG | 2.45 | 0.46 |
| 1:LA:366:VAL:O | 1:LA:366:VAL:HG13 | 2.15 | 0.46 |
| 1:LA:583:VAL:HG13 | 1:LA:584:ALA:N | 2.30 | 0.46 |
| 1:M:285:LEU:HD23 | 1:M:298:GLN:O | 2.14 | 0.46 |
| 1:M:326:LEU:HD13 | 1:M:360:ARG:HA | 1.96 | 0.46 |
| 1:NA:165:ALA:HB1 | 1:NA:203:ALA:O | 2.15 | 0.46 |
| 1:NA:424:GLU:N | 1:NA:424:GLU:OE1 | 2.48 | 0.46 |
| 1:NB:6:PHE:O | 1:NB:36:ILE:HA | 2.16 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:NB:14:HIS:HA | 1:NB:48:MET:O | 2.15 | 0.46 |
| 1:O:408:LEU:HD11 | 1:O:414:LEU:HG | 1.98 | 0.46 |
| 1:OB:7:ILE:O | 1:OB:8:ILE:C | 2.58 | 0.46 |
| 1:OB:30:VAL:HG22 | 1:OB:31:GLY:N | 2.29 | 0.46 |
| 1:OB:56:ARG:O | 1:OB:112:LEU:N | 2.47 | 0.46 |
| 1:P:8:ILE:H | 1:P:8:ILE:HD12 | 1.80 | 0.46 |
| 1:PB:10:ILE:HD11 | 1:PB:33:LYS:HB2 | 1.97 | 0.46 |
| 1:PB:16:ILE:HG22 | 1:PB:17:HIS:H | 1.80 | 0.46 |
| 1:PB:227:LEU:HD12 | 1:PB:228:HIS:H | 1.80 | 0.46 |
| 1:PB:485:GLU:HG3 | 1:PB:486:LEU:N | 2.29 | 0.46 |
| 1:Q:125:ALA:HB2 | 1:Q:137:VAL:HG13 | 1.98 | 0.46 |
| 1:QA:460:TYR:HH | 1:QA:468:VAL:HG21 | 1.79 | 0.46 |
| 1:QB:500:LEU:HD22 | 1:QB:566:ASP:OD1 | 2.15 | 0.46 |
| 1:RA:54:PRO:HD2 | 1:RA:109:ILE:HG23 | 1.97 | 0.46 |
| 1:RA:696:GLN:HA | 1:RA:699:ALA:HB3 | 1.97 | 0.46 |
| 1:RA:711:ALA:O | 1:RA:714:MET:HE3 | 2.16 | 0.46 |
| 1:SA:7:ILE:O | 1:SA:8:ILE:C | 2.58 | 0.46 |
| 1:SA:592:HIS:O | 1:TA:584:ALA:HB1 | 2.15 | 0.46 |
| 1:T:603:VAL:HG13 | 1:T:604:PHE:N | 2.30 | 0.46 |
| 1:TA:81:VAL:HG23 | 1:TA:83:LEU:HD13 | 1.96 | 0.46 |
| 1:TA:470:VAL:HG22 | 1:TA:495:PHE:CE1 | 2.50 | 0.46 |
| 1:UB:536:ARG:C | 1:UB:537:LEU:HD12 | 2.40 | 0.46 |
| 1:VA:545:TRP:HB2 | 1:VA:634:VAL:O | 2.14 | 0.46 |
| 1:W:275:THR:O | 1:W:275:THR:HG23 | 2.15 | 0.46 |
| 1:W:284:ILE:HD12 | 1:W:287:PRO:CB | 2.44 | 0.46 |
| 1:W:452:ARG:NE | 1:W:458:VAL:HG22 | 2.30 | 0.46 |
| 1:W:539:LEU:HD21 | 1:W:541:LEU:HD21 | 1.97 | 0.46 |
| 1:WB:383:ASP:N | 1:WB:403:GLY:O | 2.48 | 0.46 |
| 1:WB:575:ILE:HD12 | 1:WB:575:ILE:H | 1.79 | 0.46 |
| 1:X:452:ARG:NE | 1:X:458:VAL:HG22 | 2.30 | 0.46 |
| 1:XA:175:ARG:C | 1:XA:176:LEU:HD22 | 2.41 | 0.46 |
| 1:XA:340:LEU:HD13 | 1:XA:345:ASP:HB2 | 1.97 | 0.46 |
| 1:XB:658:VAL:HG23 | 1:YB:533:ASP:OD2 | 2.15 | 0.46 |
| 1:YA:16:ILE:HG23 | 1:YA:45:PHE:O | 2.15 | 0.46 |
| 1:YA:63:ASN:HA | 1:YA:84:ARG:O | 2.13 | 0.46 |
| 1:YA:761:ARG:O | 1:YA:765:VAL:HG23 | 2.14 | 0.46 |
| 1:YB:416:GLU:HG2 | 1:YB:455:THR:HG22 | 1.96 | 0.46 |
| 1:YB:457:VAL:HG12 | 1:YB:457:VAL:O | 2.14 | 0.46 |
| 1:Z:187:GLY:O | 1:Z:188:LYS:C | 2.58 | 0.46 |
| 1:Z:392:ASP:OD2 | 1:Z:395:THR:HG22 | 2.15 | 0.46 |
| 1:ZA:539:LEU:HD12 | 1:ZA:640:VAL:HG11 | 1.95 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:ZB:388:ILE:C | 1:ZB:457:VAL:HG23 | 2.40 | 0.46 |
| 1:A:388:ILE:N | 1:A:457:VAL:HG23 | 2.30 | 0.46 |
| 1:AA:260:VAL:O | 1:AA:260:VAL:HG13 | 2.15 | 0.46 |
| 1:AA:382:LEU:CD2 | 1:AA:388:ILE:HG23 | 2.46 | 0.46 |
| 1:AB:489:LEU:HD21 | 1:AB:495:PHE:CE1 | 2.51 | 0.46 |
| 1:AC:316:LEU:HD11 | 1:AC:319:GLY:O | 2.16 | 0.46 |
| 1:B:9:ARG:CG | 1:B:34:THR:HG23 | 2.45 | 0.46 |
| 1:BA:541:LEU:HB2 | 1:BA:543:TYR:CE1 | 2.51 | 0.46 |
| 1:C:578:ARG:CB | 1:C:603:VAL:HG22 | 2.45 | 0.46 |
| 1:CA:187:GLY:O | 1:CA:188:LYS:C | 2.57 | 0.46 |
| 1:CA:496:THR:HG22 | 1:CA:496:THR:O | 2.16 | 0.46 |
| 1:CA:727:GLU:O | 1:CA:728:SER:C | 2.58 | 0.46 |
| 1:CB:579:VAL:O | 1:CB:583:VAL:HG12 | 2.15 | 0.46 |
| 1:DA:230:ARG:H | 1:DA:268:LEU:HD13 | 1.80 | 0.46 |
| 1:DB:316:LEU:HD21 | 1:DB:319:GLY:HA2 | 1.96 | 0.46 |
| 1:E:227:LEU:HD21 | 1:E:229:LEU:HD21 | 1.97 | 0.46 |
| 1:EB:115:VAL:HG11 | 1:EB:145:PHE:CD2 | 2.50 | 0.46 |
| 1:EB:130:GLU:HA | 1:EB:135:ASP:HA | 1.97 | 0.46 |
| 1:EB:228:HIS:HA | 1:EB:250:LEU:HA | 1.96 | 0.46 |
| 1:EB:417:LYS:HZ3 | 1:EB:493:GLU:H | 1.63 | 0.46 |
| 1:F:73:VAL:CG1 | 1:F:81:VAL:HG23 | 2.45 | 0.46 |
| 1:F:121:LEU:O | 1:F:121:LEU:HD12 | 2.14 | 0.46 |
| 1:F:543:TYR:CD1 | 1:F:575:ILE:HD13 | 2.50 | 0.46 |
| 1:FB:160:VAL:HG12 | 1:FB:161:GLU:N | 2.30 | 0.46 |
| 1:G:529:ILE:HD11 | 1:G:539:LEU:HD13 | 1.97 | 0.46 |
| 1:GB:741:VAL:O | 1:GB:744:ALA:HB3 | 2.15 | 0.46 |
| 1:HB:75:PHE:CD1 | 1:HB:81:VAL:HG23 | 2.50 | 0.46 |
| 1:I:35:TYR:O | 1:I:37:ARG:NH2 | 2.48 | 0.46 |
| 1:IA:525:ASP:O | 1:IA:527:ILE:HD12 | 2.14 | 0.46 |
| 1:IB:20:ASP:HA | 1:IB:41:GLU:HG3 | 1.97 | 0.46 |
| 1:JA:521:ASP:O | 1:JA:545:TRP:CD1 | 2.69 | 0.46 |
| 1:JB:60:THR:HA | 1:JB:89:GLU:O | 2.15 | 0.46 |
| 1:KA:283:VAL:HA | 1:KA:302:VAL:HG23 | 1.97 | 0.46 |
| 1:M:413:VAL:HG22 | 1:M:414:LEU:H | 1.80 | 0.46 |
| 1:N:198:VAL:HG21 | 1:N:204:TYR:CE1 | 2.50 | 0.46 |
| 1:N:363:LEU:HD23 | 1:N:363:LEU:H | 1.80 | 0.46 |
| 1:NA:3:THR:HG22 | 1:NA:6:PHE:CD1 | 2.51 | 0.46 |
| 1:NA:216:VAL:HG22 | 1:NA:217:ASP:N | 2.31 | 0.46 |
| 1:NB:654:LEU:HD22 | 1:OB:534:HIS:CD2 | 2.49 | 0.46 |
| 1:OA:115:VAL:HG22 | 1:OA:149:GLY:O | 2.15 | 0.46 |
| 1:OA:470:VAL:HA | 1:OA:495:PHE:HA | 1.97 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OB:105:LEU:C | 1:OB:105:LEU:HD12 | 2.41 | 0.46 |
| 1:OB:105:LEU:HD12 | 1:OB:106:GLU:N | 2.29 | 0.46 |
| 1:OB:374:VAL:HG12 | 1:OB:375:GLU:N | 2.27 | 0.46 |
| 1:PB:176:LEU:HD23 | 1:PB:196:TRP:O | 2.15 | 0.46 |
| 1:PB:747:LYS:O | 1:PB:751:LEU:HD23 | 2.15 | 0.46 |
| 1:QA:10:ILE:HG23 | 1:QA:16:ILE:HD12 | 1.97 | 0.46 |
| 1:QA:15:TYR:OH | 1:QA:99:LEU:HD12 | 2.15 | 0.46 |
| 1:QB:216:VAL:HG22 | 1:QB:217:ASP:H | 1.80 | 0.46 |
| 1:QB:468:VAL:O | 1:QB:480:VAL:HA | 2.15 | 0.46 |
| 1:RA:151:TYR:OH | 1:RA:157:VAL:HG21 | 2.16 | 0.46 |
| 1:RB:332:LEU:HD23 | 1:RB:376:GLU:HG2 | 1.97 | 0.46 |
| 1:S:737:GLY:O | 1:S:741:VAL:HG23 | 2.15 | 0.46 |
| 1:SA:154:ARG:HB2 | 1:SA:157:VAL:HG23 | 1.98 | 0.46 |
| 1:SB:35:TYR:O | 1:SB:37:ARG:NH2 | 2.48 | 0.46 |
| 1:T:302:VAL:HG11 | 1:T:308:PHE:CD1 | 2.51 | 0.46 |
| 1:TB:333:LEU:CD2 | 1:TB:374:VAL:HG11 | 2.37 | 0.46 |
| 1:UA:386:GLU:O | 1:UA:457:VAL:HB | 2.16 | 0.46 |
| 1:UB:6:PHE:HB3 | 1:UB:37:ARG:N | 2.31 | 0.46 |
| 1:V:280:ASN:HB3 | 1:V:320:ILE:HG22 | 1.97 | 0.46 |
| 1:VA:332:LEU:HB3 | 1:VA:359:ILE:HG23 | 1.97 | 0.46 |
| 1:VB:51:VAL:O | 1:VB:96:PRO:HA | 2.15 | 0.46 |
| 1:VB:702:ALA:C | 1:WB:693:ILE:HG21 | 2.40 | 0.46 |
| 1:W:231:ALA:HB3 | 1:W:244:ARG:O | 2.16 | 0.46 |
| 1:W:364:GLU:OE1 | 1:X:353:ALA:HB2 | 2.16 | 0.46 |
| 1:WB:90:ILE:O | 1:WB:90:ILE:HG23 | 2.13 | 0.46 |
| 1:WB:176:LEU:HD21 | 1:WB:196:TRP:CD1 | 2.50 | 0.46 |
| 1:WB:405:THR:HG23 | 1:XB:396:GLY:N | 2.29 | 0.46 |
| 1:X:197:LEU:O | 1:X:199:THR:HG23 | 2.15 | 0.46 |
| 1:XB:13:TYR:HA | 1:XB:50:MET:SD | 2.55 | 0.46 |
| 1:XB:228:HIS:CA | 1:XB:250:LEU:HD23 | 2.45 | 0.46 |
| 1:XB:363:LEU:HA | 1:YB:353:ALA:HB3 | 1.95 | 0.46 |
| 1:XB:411:ASP:OD1 | 1:XB:411:ASP:C | 2.57 | 0.46 |
| 1:Y:390:VAL:HA | 1:Y:414:LEU:HD23 | 1.97 | 0.46 |
| 1:YA:500:LEU:HD23 | 1:YA:566:ASP:HA | 1.96 | 0.46 |
| 1:YB:384:GLU:HA | 1:YB:403:GLY:HA2 | 1.97 | 0.46 |
| 1:Z:342:GLU:HA | 1:Z:345:ASP:HB3 | 1.96 | 0.46 |
| 1:ZA:326:LEU:O | 1:ZA:362:PRO:HA | 2.16 | 0.46 |
| 1:ZA:331:GLY:HA2 | 1:ZA:360:ARG:HA | 1.98 | 0.46 |
| 1:ZA:489:LEU:HD11 | 1:ZA:495:PHE:CD2 | 2.50 | 0.46 |
| 1:A:230:ARG:HH22 | 1:A:268:LEU:HD21 | 1.80 | 0.46 |
| 1:A:751:LEU:HD12 | 1:NA:761:ARG:CD | 2.46 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AA:18:VAL:HG22 | 1:AA:27:ARG:O | 2.14 | 0.46 |
| 1:AC:715:ALA:N | 1:ZB:724:ALA:HB1 | 2.30 | 0.46 |
| 1:AC:728:SER:HB3 | 1:OA:722:ALA:HB3 | 1.97 | 0.46 |
| 1:BA:6:PHE:HB2 | 1:BA:36:ILE:HD11 | 1.97 | 0.46 |
| 1:BA:112:LEU:HD23 | 1:BA:150:THR:CG2 | 2.40 | 0.46 |
| 1:CA:216:VAL:HG21 | 1:CA:261:PRO:HB2 | 1.96 | 0.46 |
| 1:CA:417:LYS:CE | 1:CA:419:LEU:HD21 | 2.44 | 0.46 |
| 1:CA:487:VAL:O | 1:CA:487:VAL:HG23 | 2.15 | 0.46 |
| 1:CB:281:TYR:CZ | 1:CB:321:GLN:HB2 | 2.51 | 0.46 |
| 1:D:423:VAL:O | 1:D:426:LEU:HB2 | 2.15 | 0.46 |
| 1:DA:658:VAL:HG21 | 1:EA:535:ALA:HB2 | 1.97 | 0.46 |
| 1:EA:17:HIS:HB2 | 1:EA:44:LEU:HD12 | 1.97 | 0.46 |
| 1:EB:177:ARG:H | 1:EB:213:LEU:HD23 | 1.81 | 0.46 |
| 1:EB:744:ALA:O | 1:EB:748:ALA:HB2 | 2.15 | 0.46 |
| 1:F:388:ILE:HG12 | 1:F:456:ARG:HA | 1.97 | 0.46 |
| 1:F:420:PRO:HB2 | 1:F:421:PRO:HD3 | 1.98 | 0.46 |
| 1:FB:273:ILE:O | 1:FB:273:ILE:CG2 | 2.63 | 0.46 |
| 1:FB:471:TYR:HD2 | 1:FB:478:ALA:HB2 | 1.80 | 0.46 |
| 1:FB:791:GLU:O | 1:FB:795:PHE:HB3 | 2.15 | 0.46 |
| 1:GB:342:GLU:HA | 1:GB:345:ASP:HB3 | 1.97 | 0.46 |
| 1:HA:195:GLU:O | 1:HA:263:VAL:HG21 | 2.15 | 0.46 |
| 1:HB:19:LEU:HD12 | 1:HB:20:ASP:H | 1.81 | 0.46 |
| 1:HB:75:PHE:HD1 | 1:HB:81:VAL:HG23 | 1.80 | 0.46 |
| 1:HB:273:ILE:O | 1:HB:273:ILE:HG23 | 2.16 | 0.46 |
| 1:I:17:HIS:HA | 1:I:27:ARG:O | 2.14 | 0.46 |
| 1:I:492:GLU:O | 1:I:492:GLU:HG3 | 2.14 | 0.46 |
| 1:IB:462:VAL:N | 1:IB:485:GLU:O | 2.47 | 0.46 |
| 1:J:288:VAL:O | 1:J:288:VAL:HG23 | 2.16 | 0.46 |
| 1:JA:567:PHE:CG | 1:JA:568:VAL:N | 2.83 | 0.46 |
| 1:JB:51:VAL:HG11 | 1:JB:97:PHE:CE1 | 2.50 | 0.46 |
| 1:JB:57:HIS:HB3 | 1:JB:109:ILE:C | 2.40 | 0.46 |
| 1:JB:685:ARG:O | 1:JB:688:LEU:HB3 | 2.14 | 0.46 |
| 1:K:90:ILE:CG2 | 1:K:91:ARG:N | 2.78 | 0.46 |
| 1:K:120:ALA:HB1 | 1:K:145:PHE:O | 2.15 | 0.46 |
| 1:KA:91:ARG:CZ | 1:KA:91:ARG:HA | 2.45 | 0.46 |
| 1:KA:579:VAL:O | 1:KA:583:VAL:HG12 | 2.15 | 0.46 |
| 1:L:407:MET:HE3 | 1:L:408:LEU:N | 2.30 | 0.46 |
| 1:LA:212:VAL:O | 1:LA:212:VAL:HG23 | 2.13 | 0.46 |
| 1:LB:405:THR:HG21 | 1:MB:393:VAL:O | 2.16 | 0.46 |
| 1:M:60:THR:OG1 | 1:M:106:GLU:CG | 2.63 | 0.46 |
| 1:MA:197:LEU:CD2 | 1:MA:263:VAL:HG13 | 2.45 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:MA:628:PHE:HE2 | 1:MA:635:VAL:HG23 | 1.80 | 0.46 |
| 1:MB:18:VAL:HA | 1:MB:44:LEU:HD23 | 1.97 | 0.46 |
| 1:MB:95:ASP:O | 1:MB:97:PHE:CD2 | 2.69 | 0.46 |
| 1:MB:316:LEU:HD12 | 1:MB:317:GLU:H | 1.79 | 0.46 |
| 1:MB:413:VAL:HG22 | 1:MB:414:LEU:N | 2.30 | 0.46 |
| 1:N:46:ALA:HB1 | 1:N:47:PRO:CD | 2.45 | 0.46 |
| 1:N:205:LEU:HD12 | 1:N:206:PRO:HD2 | 1.97 | 0.46 |
| 1:O:231:ALA:HB1 | 1:O:233:ARG:O | 2.15 | 0.46 |
| 1:O:706:LEU:HD13 | 1:P:697:SER:HA | 1.97 | 0.46 |
| 1:OA:114:VAL:HG22 | 1:OA:115:VAL:N | 2.31 | 0.46 |
| 1:OA:537:LEU:HD22 | 1:OA:643:VAL:CG1 | 2.43 | 0.46 |
| 1:P:333:LEU:HD23 | 1:P:374:VAL:HG11 | 1.96 | 0.46 |
| 1:PA:358:LEU:HD23 | 1:PA:359:ILE:N | 2.30 | 0.46 |
| 1:PA:560:LYS:O | 1:PA:631:ASN:HA | 2.14 | 0.46 |
| 1:PA:724:ALA:HB2 | 1:QA:715:ALA:HB2 | 1.97 | 0.46 |
| 1:PB:216:VAL:HG22 | 1:PB:217:ASP:N | 2.30 | 0.46 |
| 1:PB:600:ARG:O | 1:PB:604:PHE:HB3 | 2.15 | 0.46 |
| 1:Q:364:GLU:CD | 1:R:353:ALA:HB2 | 2.40 | 0.46 |
| 1:Q:583:VAL:HG23 | 1:Q:591:PHE:HE2 | 1.77 | 0.46 |
| 1:QA:276:LEU:HD13 | 1:QA:303:LYS:O | 2.16 | 0.46 |
| 1:QB:706:LEU:O | 1:QB:706:LEU:HD12 | 2.16 | 0.46 |
| 1:R:53:VAL:HG13 | 1:R:57:HIS:O | 2.14 | 0.46 |
| 1:R:677:ALA:HA | 1:R:680:LEU:HD12 | 1.96 | 0.46 |
| 1:RA:43:VAL:O | 1:RA:43:VAL:HG13 | 2.15 | 0.46 |
| 1:RA:176:LEU:HD21 | 1:RA:196:TRP:NE1 | 2.31 | 0.46 |
| 1:RB:60:THR:HA | 1:RB:89:GLU:O | 2.16 | 0.46 |
| 1:SA:703:ARG:HB2 | 1:TA:693:ILE:HG21 | 1.97 | 0.46 |
| 1:SB:522:PHE:HA | 1:SB:543:TYR:O | 2.15 | 0.46 |
| 1:T:401:VAL:O | 1:T:401:VAL:HG23 | 2.15 | 0.46 |
| 1:T:661:ALA:O | 1:T:665:THR:HG23 | 2.15 | 0.46 |
| 1:TB:764:LYS:HB2 | 1:UB:759:LEU:HD13 | 1.96 | 0.46 |
| 1:UA:6:PHE:O | 1:UA:36:ILE:HG21 | 2.14 | 0.46 |
| 1:UA:69:ALA:O | 1:UA:70:GLN:HG3 | 2.14 | 0.46 |
| 1:UB:565:PRO:O | 1:UB:566:ASP:C | 2.58 | 0.46 |
| 1:V:168:ILE:HG23 | 1:V:200:THR:OG1 | 2.15 | 0.46 |
| 1:VA:363:LEU:C | 1:WA:353:ALA:HB3 | 2.40 | 0.46 |
| 1:VB:423:VAL:HG13 | 1:VB:424:GLU:N | 2.31 | 0.46 |
| 1:VB:606:PHE:O | 1:VB:607:GLU:C | 2.57 | 0.46 |
| 1:XA:337:LEU:HD12 | 1:XA:369:ALA:O | 2.15 | 0.46 |
| 1:XB:53:VAL:HG11 | 1:XB:58:TYR:CD2 | 2.51 | 0.46 |
| 1:XB:53:VAL:CG1 | 1:XB:58:TYR:CD2 | 2.98 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XB:363:LEU:CA | 1:YB:353:ALA:HB3 | 2.46 | 0.46 |
| 1:Y:168:ILE:CG2 | 1:Y:215:LEU:HD13 | 2.45 | 0.46 |
| 1:Y:284:ILE:HG22 | 1:Y:310:LEU:HD21 | 1.96 | 0.46 |
| 1:Y:359:ILE:O | 1:Y:359:ILE:HG23 | 2.15 | 0.46 |
| 1:Y:529:ILE:HD13 | 1:Y:539:LEU:HB2 | 1.97 | 0.46 |
| 1:YA:9:ARG:HA | 1:YA:34:THR:HG22 | 1.97 | 0.46 |
| 1:YB:10:ILE:O | 1:YB:32:PRO:HA | 2.16 | 0.46 |
| 1:YB:460:TYR:CE2 | 1:YB:468:VAL:HG21 | 2.51 | 0.46 |
| 1:YB:499:SER:C | 1:YB:500:LEU:HD22 | 2.39 | 0.46 |
| 1:YB:759:LEU:HA | 1:YB:762:VAL:HG12 | 1.96 | 0.46 |
| 1:ZB:16:ILE:HG22 | 1:ZB:17:HIS:N | 2.29 | 0.46 |
| 1:ZB:28:VAL:HG22 | 1:ZB:29:GLU:N | 2.31 | 0.46 |
| 1:ZB:166:THR:HG23 | 1:ZB:168:ILE:HD12 | 1.97 | 0.46 |
| 1:ZB:410:GLN:O | 1:ZB:411:ASP:OD1 | 2.33 | 0.46 |
| 1:A:179:ARG:HE | 1:A:209:PHE:HA | 1.79 | 0.46 |
| 1:A:179:ARG:O | 1:A:192:THR:HG23 | 2.15 | 0.46 |
| 1:A:221:LEU:HD21 | 1:A:251:VAL:HG23 | 1.97 | 0.46 |
| 1:AB:502:ALA:HB2 | 1:AB:510:ALA:CB | 2.45 | 0.46 |
| 1:AC:489:LEU:HD21 | 1:AC:495:PHE:CD1 | 2.51 | 0.46 |
| 1:AC:735:ILE:HG21 | 1:OA:726:ALA:O | 2.15 | 0.46 |
| 1:BB:30:VAL:HG22 | 1:BB:31:GLY:N | 2.30 | 0.46 |
| 1:BB:107:LYS:HE3 | 1:BB:110:THR:HG21 | 1.96 | 0.46 |
| 1:BB:135:ASP:OD2 | 1:BB:138:VAL:HG12 | 2.16 | 0.46 |
| 1:BB:390:VAL:O | 1:BB:390:VAL:HG23 | 2.15 | 0.46 |
| 1:CA:643:VAL:HG13 | 1:DA:580:ARG:HH11 | 1.80 | 0.46 |
| 1:CB:121:LEU:HD11 | 1:CB:123:LEU:HD21 | 1.96 | 0.46 |
| 1:D:336:ALA:HA | 1:D:371:VAL:HG13 | 1.97 | 0.46 |
| 1:D:336:ALA:HA | 1:D:371:VAL:HG22 | 1.98 | 0.46 |
| 1:DA:65:VAL:HG13 | 1:DA:103:GLU:HB2 | 1.98 | 0.46 |
| 1:DA:143:TRP:CH2 | 1:DA:157:VAL:HG13 | 2.50 | 0.46 |
| 1:DA:529:ILE:HG21 | 1:DA:583:VAL:HG21 | 1.97 | 0.46 |
| 1:DB:28:VAL:O | 1:DB:28:VAL:HG13 | 2.15 | 0.46 |
| 1:DB:197:LEU:HD21 | 1:DB:263:VAL:HG13 | 1.98 | 0.46 |
| 1:E:3:THR:O | 1:E:6:PHE:HD1 | 1.98 | 0.46 |
| 1:E:58:TYR:CG | 1:E:59:CYS:N | 2.84 | 0.46 |
| 1:E:275:THR:O | 1:E:320:ILE:HD11 | 2.15 | 0.46 |
| 1:EA:55:PRO:HA | 1:EA:93:ALA:HB2 | 1.98 | 0.46 |
| 1:FA:115:VAL:O | 1:FA:148:PRO:HA | 2.16 | 0.46 |
| 1:FA:325:VAL:HA | 1:FA:364:GLU:HA | 1.96 | 0.46 |
| 1:FB:176:LEU:HB2 | 1:FB:211:GLU:O | 2.15 | 0.46 |
| 1:G:395:THR:HG22 | 1:G:395:THR:O | 2.15 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:G:539:LEU:HD11 | 1:G:643:VAL:HG12 | 1.98 | 0.46 |
| 1:GA:91:ARG:C | 1:GA:92:LEU:HD12 | 2.40 | 0.46 |
| 1:GB:333:LEU:HD23 | 1:GB:374:VAL:HG12 | 1.97 | 0.46 |
| 1:GB:587:THR:HG23 | 1:GB:590:ASP:H | 1.80 | 0.46 |
| 1:H:332:LEU:HA | 1:H:376:GLU:HA | 1.96 | 0.46 |
| 1:HA:583:VAL:HG13 | 1:HA:584:ALA:N | 2.31 | 0.46 |
| 1:HA:737:GLY:O | 1:HA:741:VAL:HG23 | 2.15 | 0.46 |
| 1:HB:13:TYR:HA | 1:HB:50:MET:SD | 2.55 | 0.46 |
| 1:I:29:GLU:C | 1:I:30:VAL:HG22 | 2.41 | 0.46 |
| 1:I:638:VAL:HG12 | 1:I:639:ASP:N | 2.29 | 0.46 |
| 1:IB:176:LEU:HA | 1:IB:211:GLU:O | 2.15 | 0.46 |
| 1:IB:480:VAL:HG12 | 1:IB:481:VAL:N | 2.30 | 0.46 |
| 1:J:717:GLU:O | 1:J:721:THR:HG23 | 2.16 | 0.46 |
| 1:JA:3:THR:HG22 | 1:JA:3:THR:O | 2.15 | 0.46 |
| 1:JA:703:ARG:N | 1:KA:693:ILE:HG21 | 2.30 | 0.46 |
| 1:JB:112:LEU:HG | 1:JB:153:PRO:HD3 | 1.98 | 0.46 |
| 1:JB:758:GLU:O | 1:JB:762:VAL:HG13 | 2.16 | 0.46 |
| 1:K:15:TYR:CD1 | 1:K:50:MET:HE2 | 2.51 | 0.46 |
| 1:KB:125:ALA:HB3 | 1:KB:141:ASP:H | 1.80 | 0.46 |
| 1:KB:150:THR:O | 1:KB:150:THR:HG23 | 2.15 | 0.46 |
| 1:KB:541:LEU:HB2 | 1:KB:639:ASP:O | 2.15 | 0.46 |
| 1:LA:7:ILE:O | 1:LA:7:ILE:HG13 | 2.15 | 0.46 |
| 1:LA:160:VAL:HG12 | 1:LA:161:GLU:H | 1.81 | 0.46 |
| 1:LB:56:ARG:HA | 1:LB:58:TYR:CE2 | 2.51 | 0.46 |
| 1:MA:30:VAL:CG2 | 1:MA:50:MET:HE3 | 2.45 | 0.46 |
| 1:MA:115:VAL:HG21 | 1:MA:145:PHE:CE2 | 2.51 | 0.46 |
| 1:NA:379:ALA:H | 1:NA:407:MET:HE2 | 1.79 | 0.46 |
| 1:O:280:ASN:HA | 1:O:321:GLN:O | 2.16 | 0.46 |
| 1:O:286:ASP:HA | 1:O:295:GLN:O | 2.16 | 0.46 |
| 1:OA:28:VAL:HG21 | 1:OA:98:PRO:HB2 | 1.96 | 0.46 |
| 1:OB:115:VAL:HG23 | 1:OB:147:GLY:O | 2.15 | 0.46 |
| 1:OB:165:ALA:HB2 | 1:OB:205:LEU:HD13 | 1.97 | 0.46 |
| 1:OB:413:VAL:HG22 | 1:OB:414:LEU:N | 2.30 | 0.46 |
| 1:PA:212:VAL:O | 1:PA:212:VAL:HG23 | 2.16 | 0.46 |
| 1:PB:413:VAL:HG22 | 1:PB:414:LEU:N | 2.30 | 0.46 |
| 1:QA:125:ALA:HB2 | 1:QA:137:VAL:HG13 | 1.97 | 0.46 |
| 1:QB:231:ALA:HB3 | 1:QB:246:GLY:N | 2.31 | 0.46 |
| 1:R:129:PHE:CE2 | 1:R:157:VAL:HG22 | 2.49 | 0.46 |
| 1:R:423:VAL:HG23 | 1:R:426:LEU:HD12 | 1.98 | 0.46 |
| 1:RA:423:VAL:HG22 | 1:RA:423:VAL:O | 2.15 | 0.46 |
| 1:RA:468:VAL:HG13 | 1:RA:514:LEU:HB3 | 1.96 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:RB:654:LEU:HD22 | 1:SB:534:HIS:CG | 2.50 | 0.46 |
| 1:S:325:VAL:HA | 1:S:364:GLU:HA | 1.97 | 0.46 |
| 1:SA:65:VAL:HG13 | 1:SA:103:GLU:CB | 2.43 | 0.46 |
| 1:SA:221:LEU:HD22 | 1:SA:251:VAL:HG23 | 1.97 | 0.46 |
| 1:T:468:VAL:O | 1:T:481:VAL:HG22 | 2.15 | 0.46 |
| 1:TA:126:LEU:CB | 1:TA:127:LEU:HD12 | 2.46 | 0.46 |
| 1:TB:162:ILE:HG22 | 1:TB:163:ILE:N | 2.29 | 0.46 |
| 1:TB:286:ASP:HA | 1:TB:295:GLN:O | 2.15 | 0.46 |
| 1:TB:471:TYR:HD2 | 1:TB:478:ALA:HB2 | 1.80 | 0.46 |
| 1:V:758:GLU:O | 1:V:762:VAL:HG22 | 2.16 | 0.46 |
| 1:VB:144:LEU:O | 1:VB:144:LEU:HD12 | 2.15 | 0.46 |
| 1:WA:9:ARG:HA | 1:WA:34:THR:HG22 | 1.97 | 0.46 |
| 1:WB:489:LEU:HD21 | 1:WB:495:PHE:CD1 | 2.50 | 0.46 |
| 1:XB:323:VAL:O | 1:XB:323:VAL:HG23 | 2.15 | 0.46 |
| 1:Y:382:LEU:HD13 | 1:Y:387:GLY:HA2 | 1.96 | 0.46 |
| 1:YA:470:VAL:HG22 | 1:YA:495:PHE:CD1 | 2.48 | 0.46 |
| 1:Z:231:ALA:HB3 | 1:Z:244:ARG:O | 2.15 | 0.46 |
| 1:Z:606:PHE:HB3 | 1:Z:621:ARG:O | 2.15 | 0.46 |
| 1:ZA:331:GLY:N | 1:ZA:407:MET:HE1 | 2.30 | 0.46 |
| 1:ZB:333:LEU:HA | 1:ZB:358:LEU:HA | 1.98 | 0.46 |
| 1:A:19:LEU:HD11 | 1:A:24:ASN:HA | 1.98 | 0.46 |
| 1:A:53:VAL:HB | 1:A:94:GLN:O | 2.16 | 0.46 |
| 1:AA:640:VAL:HG12 | 1:BA:580:ARG:NH2 | 2.26 | 0.46 |
| 1:AC:57:HIS:HB3 | 1:AC:109:ILE:HG23 | 1.98 | 0.46 |
| 1:BB:7:ILE:O | 1:BB:8:ILE:C | 2.57 | 0.46 |
| 1:BB:281:TYR:CE2 | 1:BB:321:GLN:HB2 | 2.51 | 0.46 |
| 1:CA:554:ASP:O | 1:CA:558:THR:HG23 | 2.16 | 0.46 |
| 1:CB:640:VAL:HG12 | 1:DB:580:ARG:NH1 | 2.31 | 0.46 |
| 1:DA:17:HIS:HB2 | 1:DA:44:LEU:HB2 | 1.97 | 0.46 |
| 1:DA:539:LEU:HD21 | 1:DA:541:LEU:HD21 | 1.98 | 0.46 |
| 1:E:54:PRO:O | 1:E:55:PRO:C | 2.57 | 0.46 |
| 1:E:357:TRP:O | 1:E:357:TRP:CG | 2.68 | 0.46 |
| 1:EB:15:TYR:HA | 1:EB:29:GLU:O | 2.16 | 0.46 |
| 1:EB:72:LEU:HD23 | 1:EB:73:VAL:O | 2.16 | 0.46 |
| 1:FA:109:ILE:O | 1:FA:110:THR:HG23 | 2.15 | 0.46 |
| 1:FB:30:VAL:HG22 | 1:FB:31:GLY:H | 1.79 | 0.46 |
| 1:G:25:VAL:HG22 | 1:G:80:GLN:NE2 | 2.30 | 0.46 |
| 1:G:223:GLU:OE2 | 1:G:253:VAL:HG21 | 2.15 | 0.46 |
| 1:GA:16:ILE:HD11 | 1:GA:47:PRO:CD | 2.45 | 0.46 |
| 1:GA:92:LEU:HD12 | 1:GA:92:LEU:N | 2.30 | 0.46 |
| 1:GA:131:ASP:HB3 | 1:GA:137:VAL:HG23 | 1.97 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:GA:549:VAL:HG11 | 1:GA:552:ARG:HD3 | 1.98 | 0.46 |
| 1:H:63:ASN:O | 1:H:63:ASN:CG | 2.58 | 0.46 |
| 1:HA:30:VAL:HG23 | 1:HA:50:MET:CE | 2.46 | 0.46 |
| 1:HA:81:VAL:HG22 | 1:HA:82:ARG:N | 2.30 | 0.46 |
| 1:HA:406:TYR:HE2 | 1:HA:408:LEU:HD23 | 1.80 | 0.46 |
| 1:HA:546:HIS:NE2 | 1:HA:634:VAL:HG11 | 2.31 | 0.46 |
| 1:I:273:ILE:O | 1:I:273:ILE:HG23 | 2.16 | 0.46 |
| 1:I:324:TYR:O | 1:I:364:GLU:HA | 2.15 | 0.46 |
| 1:IA:358:LEU:HD21 | 1:IA:360:ARG:HB3 | 1.98 | 0.46 |
| 1:J:221:LEU:HD11 | 1:J:251:VAL:CG2 | 2.45 | 0.46 |
| 1:JA:337:LEU:HD12 | 1:JA:369:ALA:O | 2.15 | 0.46 |
| 1:KA:526:VAL:HG13 | 1:KA:538:GLN:HG2 | 1.96 | 0.46 |
| 1:KA:575:ILE:HD12 | 1:KA:575:ILE:H | 1.80 | 0.46 |
| 1:KB:625:GLN:N | 1:KB:625:GLN:OE1 | 2.49 | 0.46 |
| 1:LA:221:LEU:HD21 | 1:LA:251:VAL:HG23 | 1.96 | 0.46 |
| 1:LA:410:GLN:O | 1:LA:411:ASP:OD1 | 2.34 | 0.46 |
| 1:LA:643:VAL:HG23 | 1:MA:580:ARG:HH12 | 1.81 | 0.46 |
| 1:LB:16:ILE:HD11 | 1:LB:47:PRO:CA | 2.45 | 0.46 |
| 1:LB:235:PHE:CD1 | 1:LB:264:HIS:HB3 | 2.49 | 0.46 |
| 1:LB:497:VAL:O | 1:LB:498:LEU:HD22 | 2.15 | 0.46 |
| 1:MB:55:PRO:O | 1:MB:56:ARG:HB2 | 2.15 | 0.46 |
| 1:MB:323:VAL:O | 1:MB:323:VAL:HG23 | 2.14 | 0.46 |
| 1:MB:521:ASP:O | 1:MB:545:TRP:CD1 | 2.69 | 0.46 |
| 1:MB:578:ARG:HB2 | 1:MB:603:VAL:HG22 | 1.97 | 0.46 |
| 1:N:467:ALA:HB1 | 1:N:481:VAL:O | 2.16 | 0.46 |
| 1:NA:69:ALA:HB2 | 1:NA:74:LEU:HD21 | 1.97 | 0.46 |
| 1:NA:174:LEU:HD12 | 1:NA:214:ASP:O | 2.15 | 0.46 |
| 1:NA:227:LEU:HA | 1:NA:269:GLY:O | 2.14 | 0.46 |
| 1:NA:227:LEU:O | 1:NA:251:VAL:HG22 | 2.16 | 0.46 |
| 1:NA:228:HIS:HB3 | 1:NA:269:GLY:HA3 | 1.97 | 0.46 |
| 1:NB:768:LEU:HD11 | 1:OB:763:GLN:HB2 | 1.98 | 0.46 |
| 1:O:768:LEU:HD23 | 1:O:768:LEU:C | 2.41 | 0.46 |
| 1:OA:16:ILE:HD11 | 1:OA:47:PRO:HD3 | 1.97 | 0.46 |
| 1:OA:160:VAL:HG12 | 1:OA:161:GLU:N | 2.30 | 0.46 |
| 1:OA:568:VAL:HG22 | 1:OA:568:VAL:O | 2.16 | 0.46 |
| 1:OB:51:VAL:HG21 | 1:OB:97:PHE:CE1 | 2.50 | 0.46 |
| 1:P:17:HIS:HA | 1:P:27:ARG:O | 2.16 | 0.46 |
| 1:P:529:ILE:HG22 | 1:P:580:ARG:HG2 | 1.97 | 0.46 |
| 1:P:811:ALA:O | 1:Q:812:VAL:HG21 | 2.15 | 0.46 |
| 1:PA:173:ALA:HB2 | 1:PA:260:VAL:HG11 | 1.98 | 0.46 |
| 1:PA:527:ILE:O | 1:PA:539:LEU:O | 2.34 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:PB:25:VAL:HG21 | 1:PB:78:THR:O | 2.16 | 0.46 |
| 1:PB:473:TYR:N | 1:PB:492:GLU:HG3 | 2.30 | 0.46 |
| 1:PB:787:LEU:CD2 | 1:QB:781:VAL:HG12 | 2.46 | 0.46 |
| 1:QA:123:LEU:HB2 | 1:QA:143:TRP:CE2 | 2.50 | 0.46 |
| 1:RA:276:LEU:HD12 | 1:RA:306:LYS:H | 1.81 | 0.46 |
| 1:RA:391:GLN:HA | 1:RA:398:VAL:HG22 | 1.97 | 0.46 |
| 1:RA:484:PRO:HG2 | 1:SA:471:TYR:CD2 | 2.51 | 0.46 |
| 1:RB:281:TYR:CZ | 1:RB:321:GLN:HB2 | 2.50 | 0.46 |
| 1:S:371:VAL:HG12 | 1:S:372:GLU:N | 2.30 | 0.46 |
| 1:SA:391:GLN:OE1 | 1:SA:413:VAL:HG12 | 2.14 | 0.46 |
| 1:SA:495:PHE:HB3 | 1:SA:514:LEU:HD11 | 1.97 | 0.46 |
| 1:SB:276:LEU:CD2 | 1:SB:320:ILE:HG23 | 2.45 | 0.46 |
| 1:SB:398:VAL:HG11 | 1:SB:415:TRP:CE3 | 2.51 | 0.46 |
| 1:T:176:LEU:HD13 | 1:T:204:TYR:OH | 2.16 | 0.46 |
| 1:T:393:VAL:CG1 | 1:T:413:VAL:HG12 | 2.46 | 0.46 |
| 1:TA:332:LEU:HD21 | 1:TA:363:LEU:HD11 | 1.97 | 0.46 |
| 1:TB:462:VAL:N | 1:TB:485:GLU:O | 2.48 | 0.46 |
| 1:UB:168:ILE:HG22 | 1:UB:215:LEU:CD1 | 2.46 | 0.46 |
| 1:UB:284:ILE:HD11 | 1:UB:300:ARG:HB3 | 1.96 | 0.46 |
| 1:V:16:ILE:CG2 | 1:V:43:VAL:HG13 | 2.46 | 0.46 |
| 1:VA:806:THR:HG22 | 1:WA:808:ARG:HG2 | 1.97 | 0.46 |
| 1:VB:236:ARG:HA | 1:VB:241:VAL:O | 2.16 | 0.46 |
| 1:W:19:LEU:HD11 | 1:W:24:ASN:HA | 1.98 | 0.46 |
| 1:W:92:LEU:HD21 | 1:W:152:ILE:HD12 | 1.96 | 0.46 |
| 1:W:181:GLU:OE2 | 1:W:191:VAL:HG12 | 2.15 | 0.46 |
| 1:WA:541:LEU:HD13 | 1:WA:543:TYR:OH | 2.15 | 0.46 |
| 1:WB:177:ARG:HA | 1:WB:194:GLU:O | 2.15 | 0.46 |
| 1:WB:283:VAL:HG12 | 1:WB:284:ILE:N | 2.30 | 0.46 |
| 1:WB:366:VAL:HG22 | 1:WB:367:PRO:HD2 | 1.97 | 0.46 |
| 1:WB:381:PRO:HA | 1:WB:405:THR:HG22 | 1.98 | 0.46 |
| 1:XB:421:PRO:O | 1:XB:424:GLU:OE1 | 2.34 | 0.46 |
| 1:XB:735:ILE:HD13 | 1:YB:727:GLU:HG2 | 1.96 | 0.46 |
| 1:Y:223:GLU:O | 1:Y:273:ILE:HD12 | 2.15 | 0.46 |
| 1:YB:30:VAL:HG23 | 1:YB:50:MET:SD | 2.55 | 0.46 |
| 1:YB:499:SER:HA | 1:YB:512:ARG:HE | 1.80 | 0.46 |
| 1:ZB:97:PHE:CD1 | 1:ZB:100:TYR:HE1 | 2.34 | 0.46 |
| 1:ZB:411:ASP:OD1 | 1:ZB:411:ASP:C | 2.58 | 0.46 |
| 1:AA:382:LEU:H | 1:AA:405:THR:HG22 | 1.80 | 0.46 |
| 1:AB:220:ILE:O | 1:AB:221:LEU:HD23 | 2.15 | 0.46 |
| 1:AB:473:TYR:HB3 | 1:ZA:486:LEU:HB2 | 1.98 | 0.46 |
| 1:AC:524:THR:HG22 | 1:AC:542:ALA:HB2 | 1.97 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AC:759:LEU:HA | 1:AC:762:VAL:HG22 | 1.98 | 0.46 |
| 1:AC:770:LEU:HD22 | 1:ZB:775:ALA:CB | 2.43 | 0.46 |
| 1:AC:795:PHE:O | 1:AC:799:THR:HG23 | 2.15 | 0.46 |
| 1:BA:468:VAL:HG12 | 1:BA:469:GLN:N | 2.31 | 0.46 |
| 1:C:775:ALA:HB1 | 1:D:770:LEU:HD22 | 1.97 | 0.46 |
| 1:CA:276:LEU:CD2 | 1:CA:320:ILE:HG23 | 2.46 | 0.46 |
| 1:CA:331:GLY:CA | 1:CA:358:LEU:HD21 | 2.45 | 0.46 |
| 1:CB:46:ALA:HB1 | 1:CB:47:PRO:HD2 | 1.97 | 0.46 |
| 1:D:606:PHE:HB3 | 1:D:621:ARG:O | 2.15 | 0.46 |
| 1:DA:63:ASN:OD1 | 1:DA:83:LEU:HD23 | 2.15 | 0.46 |
| 1:DA:388:ILE:HA | 1:DA:455:THR:O | 2.16 | 0.46 |
| 1:E:20:ASP:O | 1:E:23:SER:O | 2.34 | 0.46 |
| 1:E:122:HIS:ND1 | 1:E:160:VAL:HG11 | 2.31 | 0.46 |
| 1:E:162:ILE:HG22 | 1:E:163:ILE:N | 2.30 | 0.46 |
| 1:EA:18:VAL:HG22 | 1:EA:29:GLU:OE2 | 2.15 | 0.46 |
| 1:EB:260:VAL:O | 1:EB:260:VAL:HG13 | 2.15 | 0.46 |
| 1:EB:468:VAL:HG22 | 1:EB:515:CYS:HA | 1.98 | 0.46 |
| 1:F:143:TRP:HH2 | 1:F:157:VAL:HG22 | 1.79 | 0.46 |
| 1:FA:30:VAL:HG22 | 1:FA:31:GLY:N | 2.31 | 0.46 |
| 1:FA:226:ALA:HB3 | 1:FA:271:VAL:CG2 | 2.45 | 0.46 |
| 1:FA:710:GLU:O | 1:FA:714:MET:HG3 | 2.15 | 0.46 |
| 1:FB:16:ILE:HG21 | 1:FB:45:PHE:O | 2.15 | 0.46 |
| 1:G:5:GLU:OE1 | 1:G:8:ILE:HG13 | 2.15 | 0.46 |
| 1:G:462:VAL:HG12 | 1:G:483:GLY:O | 2.15 | 0.46 |
| 1:GA:57:HIS:C | 1:GA:58:TYR:CG | 2.93 | 0.46 |
| 1:GB:684:ALA:HA | 1:GB:687:ARG:HE | 1.79 | 0.46 |
| 1:H:689:GLU:HA | 1:H:692:LYS:HD2 | 1.97 | 0.46 |
| 1:HB:36:ILE:C | 1:HB:37:ARG:HD3 | 2.40 | 0.46 |
| 1:HB:123:LEU:HD11 | 1:HB:145:PHE:HB2 | 1.97 | 0.46 |
| 1:IA:7:ILE:HG13 | 1:IA:8:ILE:N | 2.31 | 0.46 |
| 1:IA:99:LEU:HD11 | 1:IA:104:VAL:HA | 1.97 | 0.46 |
| 1:IA:601:THR:O | 1:IA:607:GLU:OE2 | 2.32 | 0.46 |
| 1:IB:18:VAL:HG12 | 1:IB:19:LEU:H | 1.80 | 0.46 |
| 1:IB:657:SER:HA | 1:IB:660:LEU:HD12 | 1.98 | 0.46 |
| 1:IB:684:ALA:O | 1:IB:688:LEU:HB2 | 2.15 | 0.46 |
| 1:J:541:LEU:HD13 | 1:J:543:TYR:CE2 | 2.51 | 0.46 |
| 1:JA:60:THR:HG23 | 1:JA:107:LYS:HD3 | 1.96 | 0.46 |
| 1:JB:50:MET:O | 1:JB:51:VAL:C | 2.58 | 0.46 |
| 1:JB:63:ASN:OD1 | 1:JB:83:LEU:HD22 | 2.16 | 0.46 |
| 1:JB:337:LEU:HD12 | 1:JB:369:ALA:O | 2.16 | 0.46 |
| 1:K:82:ARG:C | 1:K:83:LEU:HD12 | 2.41 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:K:90:ILE:HG22 | 1:K:91:ARG:O | 2.16 | 0.46 |
| 1:KB:120:ALA:HB3 | 1:KB:205:LEU:HD11 | 1.98 | 0.46 |
| 1:LB:283:VAL:HG12 | 1:LB:284:ILE:N | 2.31 | 0.46 |
| 1:LB:541:LEU:CD1 | 1:LB:640:VAL:HG22 | 2.46 | 0.46 |
| 1:LB:597:ARG:O | 1:LB:601:THR:HG23 | 2.15 | 0.46 |
| 1:M:46:ALA:HB1 | 1:M:47:PRO:HD2 | 1.97 | 0.46 |
| 1:MA:564:VAL:HG23 | 1:MA:631:ASN:HB3 | 1.98 | 0.46 |
| 1:MA:591:PHE:O | 1:MA:595:SER:N | 2.49 | 0.46 |
| 1:MA:737:GLY:O | 1:MA:741:VAL:HG23 | 2.15 | 0.46 |
| 1:MB:588:PHE:C | 1:MB:588:PHE:CD1 | 2.93 | 0.46 |
| 1:MB:777:LEU:O | 1:MB:781:VAL:HG22 | 2.15 | 0.46 |
| 1:NA:177:ARG:HG2 | 1:NA:178:ALA:N | 2.30 | 0.46 |
| 1:NA:283:VAL:O | 1:NA:316:LEU:HD12 | 2.16 | 0.46 |
| 1:O:805:SER:HA | 1:O:808:ARG:HH22 | 1.80 | 0.46 |
| 1:OA:226:ALA:HB3 | 1:OA:250:LEU:CD2 | 2.46 | 0.46 |
| 1:OA:227:LEU:HD13 | 1:OA:270:VAL:HG22 | 1.97 | 0.46 |
| 1:P:775:ALA:HB1 | 1:Q:770:LEU:CD1 | 2.45 | 0.46 |
| 1:PB:3:THR:HG22 | 1:PB:6:PHE:HA | 1.98 | 0.46 |
| 1:PB:233:ARG:HH22 | 1:PB:263:VAL:HG23 | 1.80 | 0.46 |
| 1:Q:62:ALA:O | 1:Q:63:ASN:C | 2.58 | 0.46 |
| 1:QA:498:LEU:HD11 | 1:QA:562:PHE:HD1 | 1.80 | 0.46 |
| 1:QA:545:TRP:HB2 | 1:QA:633:LEU:HD21 | 1.97 | 0.46 |
| 1:QA:658:VAL:HG21 | 1:RA:535:ALA:CA | 2.43 | 0.46 |
| 1:QB:539:LEU:CD1 | 1:QB:541:LEU:HD21 | 2.46 | 0.46 |
| 1:QB:797:GLN:OE1 | 1:RB:792:VAL:HG11 | 2.16 | 0.46 |
| 1:RA:280:ASN:HA | 1:RA:322:ASP:HA | 1.98 | 0.46 |
| 1:RB:30:VAL:HG23 | 1:RB:50:MET:SD | 2.56 | 0.46 |
| 1:RB:216:VAL:HG13 | 1:RB:260:VAL:HG21 | 1.96 | 0.46 |
| 1:RB:472:ASP:HA | 1:RB:493:GLU:HA | 1.98 | 0.46 |
| 1:S:126:LEU:C | 1:S:127:LEU:HD22 | 2.41 | 0.46 |
| 1:SA:219:VAL:HG12 | 1:SA:259:HIS:O | 2.15 | 0.46 |
| 1:SA:228:HIS:C | 1:SA:268:LEU:HB2 | 2.40 | 0.46 |
| 1:SA:530:GLU:HB2 | 1:SA:584:ALA:HB2 | 1.97 | 0.46 |
| 1:T:23:SER:OG | 1:T:25:VAL:HG23 | 2.15 | 0.46 |
| 1:TA:10:ILE:HD12 | 1:TA:33:LYS:O | 2.16 | 0.46 |
| 1:TA:279:HIS:C | 1:TA:323:VAL:HG22 | 2.41 | 0.46 |
| 1:TB:5:GLU:O | 1:TB:8:ILE:HG13 | 2.14 | 0.46 |
| 1:TB:216:VAL:HG13 | 1:TB:260:VAL:HG21 | 1.98 | 0.46 |
| 1:TB:336:ALA:N | 1:TB:371:VAL:HG13 | 2.30 | 0.46 |
| 1:TB:717:GLU:O | 1:TB:721:THR:HG23 | 2.15 | 0.46 |
| 1:UA:452:ARG:NH1 | 1:UA:458:VAL:HG22 | 2.31 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UA:496:THR:HG22 | 1:UA:497:VAL:N | 2.31 | 0.46 |
| 1:UB:600:ARG:HG3 | 1:UB:601:THR:N | 2.31 | 0.46 |
| 1:UB:765:VAL:HG23 | 1:VB:759:LEU:HD21 | 1.96 | 0.46 |
| 1:VA:340:LEU:HD13 | 1:VA:344:GLU:HG3 | 1.98 | 0.46 |
| 1:VB:6:PHE:HB3 | 1:VB:37:ARG:N | 2.31 | 0.46 |
| 1:VB:487:VAL:HG22 | 1:VB:488:SER:N | 2.31 | 0.46 |
| 1:W:10:ILE:HD12 | 1:W:31:GLY:O | 2.15 | 0.46 |
| 1:W:53:VAL:HG21 | 1:W:91:ARG:CB | 2.45 | 0.46 |
| 1:W:181:GLU:HA | 1:W:191:VAL:HA | 1.98 | 0.46 |
| 1:WB:172:GLN:HB3 | 1:WB:215:LEU:HD11 | 1.97 | 0.46 |
| 1:WB:267:VAL:C | 1:WB:268:LEU:HD12 | 2.40 | 0.46 |
| 1:X:77:VAL:HG23 | 1:X:78:THR:HG23 | 1.97 | 0.46 |
| 1:XA:66:SER:O | 1:XA:73:VAL:HG13 | 2.16 | 0.46 |
| 1:XA:120:ALA:C | 1:XA:162:ILE:HG23 | 2.41 | 0.46 |
| 1:XA:227:LEU:HD21 | 1:XA:267:VAL:HG13 | 1.97 | 0.46 |
| 1:XB:55:PRO:C | 1:XB:56:ARG:HD3 | 2.41 | 0.46 |
| 1:XB:390:VAL:HG21 | 1:XB:399:ARG:NH1 | 2.30 | 0.46 |
| 1:Y:175:ARG:HG3 | 1:Y:263:VAL:HG12 | 1.96 | 0.46 |
| 1:Y:276:LEU:CD2 | 1:Y:320:ILE:HG23 | 2.46 | 0.46 |
| 1:YA:115:VAL:O | 1:YA:116:LEU:HD22 | 2.16 | 0.46 |
| 1:YA:207:ALA:HB3 | 1:YA:210:GLU:HG3 | 1.98 | 0.46 |
| 1:YA:274:THR:O | 1:YA:276:LEU:HD12 | 2.14 | 0.46 |
| 1:YB:59:CYS:SG | 1:YB:105:LEU:HB2 | 2.55 | 0.46 |
| 1:YB:129:PHE:CZ | 1:YB:137:VAL:HG11 | 2.51 | 0.46 |
| 1:YB:301:VAL:HG21 | 1:YB:366:VAL:CG2 | 2.45 | 0.46 |
| 1:YB:495:PHE:CE2 | 1:YB:514:LEU:HD23 | 2.50 | 0.46 |
| 1:Z:326:LEU:HD12 | 1:Z:363:LEU:HD11 | 1.98 | 0.46 |
| 1:Z:500:LEU:HD11 | 1:Z:513:ALA:CB | 2.46 | 0.46 |
| 1:Z:521:ASP:O | 1:Z:545:TRP:CD1 | 2.69 | 0.46 |
| 1:ZA:216:VAL:HG22 | 1:ZA:217:ASP:N | 2.31 | 0.46 |
| 1:ZB:225:THR:C | 1:ZB:270:VAL:HG12 | 2.40 | 0.46 |
| 1:AA:10:ILE:HD11 | 1:AA:14:HIS:O | 2.15 | 0.46 |
| 1:AA:162:ILE:HG22 | 1:AA:163:ILE:N | 2.31 | 0.46 |
| 1:AA:759:LEU:O | 1:AA:763:GLN:HG3 | 2.16 | 0.46 |
| 1:AB:6:PHE:O | 1:AB:36:ILE:HA | 2.15 | 0.46 |
| 1:AB:325:VAL:HG22 | 1:BB:335:ARG:NH1 | 2.30 | 0.46 |
| 1:AC:125:ALA:HA | 1:AC:157:VAL:HA | 1.98 | 0.46 |
| 1:AC:390:VAL:HG11 | 1:AC:408:LEU:HD12 | 1.96 | 0.46 |
| 1:B:82:ARG:C | 1:B:83:LEU:HD12 | 2.41 | 0.46 |
| 1:B:174:LEU:HD12 | 1:B:214:ASP:C | 2.41 | 0.46 |
| 1:B:583:VAL:HG13 | 1:B:584:ALA:N | 2.30 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:B:751:LEU:HD13 | 1:B:754:GLU:OE2 | 2.15 | 0.46 |
| 1:BA:14:HIS:HA | 1:BA:48:MET:O | 2.16 | 0.46 |
| 1:BA:115:VAL:C | 1:BA:116:LEU:HD22 | 2.40 | 0.46 |
| 1:CA:57:HIS:HA | 1:CA:110:THR:O | 2.16 | 0.46 |
| 1:D:7:ILE:O | 1:D:8:ILE:C | 2.59 | 0.46 |
| 1:D:143:TRP:CA | 1:D:208:VAL:HG11 | 2.46 | 0.46 |
| 1:DA:82:ARG:C | 1:DA:83:LEU:HD12 | 2.41 | 0.46 |
| 1:DA:94:GLN:HG3 | 1:DA:95:ASP:O | 2.15 | 0.46 |
| 1:DA:282:CYS:HB3 | 1:DA:320:ILE:HA | 1.97 | 0.46 |
| 1:DA:539:LEU:HD12 | 1:DA:540:GLN:H | 1.81 | 0.46 |
| 1:DB:115:VAL:HB | 1:DB:119:THR:HG21 | 1.98 | 0.46 |
| 1:DB:405:THR:HG23 | 1:EB:396:GLY:HA2 | 1.98 | 0.46 |
| 1:EA:56:ARG:O | 1:EA:111:PRO:HA | 2.15 | 0.46 |
| 1:EB:7:ILE:O | 1:EB:8:ILE:C | 2.58 | 0.46 |
| 1:EB:201:VAL:HG13 | 1:FB:191:VAL:HG21 | 1.96 | 0.46 |
| 1:F:285:LEU:HD23 | 1:F:315:GLN:O | 2.16 | 0.46 |
| 1:FA:176:LEU:HA | 1:FA:213:LEU:HD23 | 1.98 | 0.46 |
| 1:FA:389:TYR:CD1 | 1:FA:457:VAL:HG22 | 2.51 | 0.46 |
| 1:FB:772:TYR:CE1 | 1:GB:770:LEU:HD11 | 2.50 | 0.46 |
| 1:GA:480:VAL:HG12 | 1:GA:481:VAL:N | 2.31 | 0.46 |
| 1:GA:606:PHE:O | 1:GA:607:GLU:C | 2.58 | 0.46 |
| 1:GB:205:LEU:HD23 | 1:GB:206:PRO:O | 2.16 | 0.46 |
| 1:GB:267:VAL:C | 1:GB:268:LEU:HD12 | 2.41 | 0.46 |
| 1:HA:388:ILE:HG22 | 1:HA:456:ARG:HA | 1.98 | 0.46 |
| 1:HA:462:VAL:N | 1:HA:485:GLU:O | 2.49 | 0.46 |
| 1:HB:65:VAL:HG12 | 1:HB:83:LEU:CD1 | 2.46 | 0.46 |
| 1:HB:405:THR:HG23 | 1:IB:396:GLY:CA | 2.46 | 0.46 |
| 1:IB:7:ILE:HG22 | 1:IB:36:ILE:HG23 | 1.98 | 0.46 |
| 1:J:388:ILE:N | 1:J:457:VAL:HG23 | 2.31 | 0.46 |
| 1:JA:257:GLU:HG3 | 1:KA:245:THR:HB | 1.97 | 0.46 |
| 1:JA:531:THR:HG21 | 1:JA:588:PHE:HB2 | 1.97 | 0.46 |
| 1:JB:88:LEU:HD22 | 1:JB:106:GLU:OE2 | 2.16 | 0.46 |
| 1:K:7:ILE:HG22 | 1:K:34:THR:HG22 | 1.97 | 0.46 |
| 1:K:165:ALA:HB2 | 1:K:205:LEU:HB2 | 1.98 | 0.46 |
| 1:K:625:GLN:NE2 | 1:K:634:VAL:HG13 | 2.31 | 0.46 |
| 1:KA:566:ASP:OD1 | 1:KA:568:VAL:HG12 | 2.16 | 0.46 |
| 1:L:122:HIS:ND1 | 1:L:160:VAL:HG11 | 2.30 | 0.46 |
| 1:LA:25:VAL:HG22 | 1:LA:78:THR:OG1 | 2.16 | 0.46 |
| 1:LA:221:LEU:HD13 | 1:LA:256:THR:O | 2.15 | 0.46 |
| 1:LA:567:PHE:CG | 1:LA:568:VAL:N | 2.83 | 0.46 |
| 1:LB:60:THR:HB | 1:LB:90:ILE:HG13 | 1.97 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:LB:122:HIS:CG | 1:LB:123:LEU:N | 2.83 | 0.46 |
| 1:M:6:PHE:O | 1:M:36:ILE:HA | 2.16 | 0.46 |
| 1:M:15:TYR:HB3 | 1:M:50:MET:CE | 2.46 | 0.46 |
| 1:MA:165:ALA:HB1 | 1:MA:203:ALA:O | 2.15 | 0.46 |
| 1:MA:627:VAL:HG12 | 1:MA:634:VAL:HG22 | 1.98 | 0.46 |
| 1:MB:197:LEU:HD11 | 1:MB:262:ASP:HA | 1.98 | 0.46 |
| 1:NA:276:LEU:HD21 | 1:NA:282:CYS:HB3 | 1.98 | 0.46 |
| 1:NA:769:GLU:O | 1:NA:772:TYR:HB3 | 2.16 | 0.46 |
| 1:NB:45:PHE:HE1 | 1:NB:48:MET:HB2 | 1.80 | 0.46 |
| 1:NB:349:VAL:HG12 | 1:NB:349:VAL:O | 2.16 | 0.46 |
| 1:OA:115:VAL:HB | 1:OA:119:THR:HG23 | 1.97 | 0.46 |
| 1:OA:216:VAL:HG13 | 1:OA:260:VAL:HG21 | 1.96 | 0.46 |
| 1:OA:216:VAL:HG22 | 1:OA:217:ASP:H | 1.80 | 0.46 |
| 1:OB:215:LEU:HD12 | 1:OB:216:VAL:N | 2.30 | 0.46 |
| 1:OB:316:LEU:HD21 | 1:OB:319:GLY:C | 2.40 | 0.46 |
| 1:P:105:LEU:O | 1:P:105:LEU:HD23 | 2.15 | 0.46 |
| 1:P:232:ARG:NH1 | 1:P:267:VAL:HG23 | 2.29 | 0.46 |
| 1:P:233:ARG:HA | 1:P:245:THR:HG23 | 1.96 | 0.46 |
| 1:P:379:ALA:HA | 1:P:407:MET:HA | 1.96 | 0.46 |
| 1:PA:335:ARG:O | 1:PA:372:GLU:N | 2.49 | 0.46 |
| 1:PB:518:LEU:HD21 | 1:PB:552:ARG:NH1 | 2.31 | 0.46 |
| 1:QB:90:ILE:H | 1:QB:90:ILE:HD12 | 1.81 | 0.46 |
| 1:QB:115:VAL:HG23 | 1:QB:147:GLY:O | 2.15 | 0.46 |
| 1:QB:221:LEU:HD11 | 1:QB:251:VAL:HG23 | 1.97 | 0.46 |
| 1:R:196:TRP:C | 1:R:197:LEU:HD12 | 2.40 | 0.46 |
| 1:RA:28:VAL:HG12 | 1:RA:75:PHE:HZ | 1.81 | 0.46 |
| 1:RA:121:LEU:HD22 | 1:RA:159:VAL:CG1 | 2.45 | 0.46 |
| 1:RA:181:GLU:OE1 | 1:RA:191:VAL:HG12 | 2.16 | 0.46 |
| 1:RB:13:TYR:HA | 1:RB:50:MET:HE3 | 1.97 | 0.46 |
| 1:SB:250:LEU:HD11 | 1:SB:310:LEU:O | 2.15 | 0.46 |
| 1:SB:402:ILE:HG22 | 1:SB:403:GLY:N | 2.31 | 0.46 |
| 1:T:167:ILE:HG23 | 1:V:192:THR:HG22 | 1.97 | 0.46 |
| 1:T:388:ILE:HD12 | 1:T:414:LEU:CD2 | 2.46 | 0.46 |
| 1:TA:504:ARG:NH1 | 1:TA:524:THR:HG21 | 2.31 | 0.46 |
| 1:TB:390:VAL:HG22 | 1:TB:391:GLN:N | 2.31 | 0.46 |
| 1:UA:458:VAL:HG11 | 1:UA:489:LEU:HD12 | 1.97 | 0.46 |
| 1:UB:72:LEU:HD23 | 1:UB:73:VAL:N | 2.30 | 0.46 |
| 1:UB:126:LEU:HD21 | 1:UB:158:GLU:HB3 | 1.97 | 0.46 |
| 1:V:53:VAL:HG22 | 1:V:109:ILE:HG12 | 1.98 | 0.46 |
| 1:V:504:ARG:HA | 1:V:504:ARG:HE | 1.80 | 0.46 |
| 1:VA:284:ILE:HD12 | 1:VA:287:PRO:HB3 | 1.97 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:VA:537:LEU:HD13 | 1:VA:588:PHE:HD1 | 1.79 | 0.46 |
| 1:WB:120:ALA:HB3 | 1:WB:163:ILE:HG13 | 1.97 | 0.46 |
| 1:WB:526:VAL:HG13 | 1:WB:539:LEU:C | 2.40 | 0.46 |
| 1:X:325:VAL:O | 1:X:325:VAL:HG13 | 2.15 | 0.46 |
| 1:XB:65:VAL:HB | 1:XB:73:VAL:HG13 | 1.98 | 0.46 |
| 1:XB:333:LEU:HD23 | 1:XB:374:VAL:HG11 | 1.98 | 0.46 |
| 1:XB:382:LEU:H | 1:XB:405:THR:HG22 | 1.81 | 0.46 |
| 1:Y:633:LEU:HD12 | 1:Y:634:VAL:N | 2.30 | 0.46 |
| 1:YB:50:MET:O | 1:YB:51:VAL:C | 2.59 | 0.46 |
| 1:YB:325:VAL:O | 1:YB:325:VAL:HG13 | 2.16 | 0.46 |
| 1:ZA:643:VAL:HG23 | 1:ZA:643:VAL:O | 2.14 | 0.46 |
| 1:ZB:175:ARG:HG3 | 1:ZB:213:LEU:HB2 | 1.98 | 0.46 |
| 1:A:587:THR:HG23 | 1:A:590:ASP:H | 1.80 | 0.46 |
| 1:AA:144:LEU:HD22 | 1:AA:163:ILE:HD11 | 1.97 | 0.46 |
| 1:AA:276:LEU:HD21 | 1:AA:282:CYS:HB3 | 1.97 | 0.46 |
| 1:AB:212:VAL:HG23 | 1:AB:212:VAL:O | 2.16 | 0.46 |
| 1:AB:219:VAL:HG21 | 1:AB:270:VAL:HG21 | 1.97 | 0.46 |
| 1:AB:354:GLY:C | 1:ZA:327:SER:HA | 2.41 | 0.46 |
| 1:AB:468:VAL:O | 1:AB:480:VAL:HG13 | 2.16 | 0.46 |
| 1:AC:61:VAL:O | 1:AC:61:VAL:HG23 | 2.16 | 0.46 |
| 1:B:500:LEU:HD11 | 1:B:513:ALA:HB2 | 1.96 | 0.46 |
| 1:BA:645:PRO:CB | 1:BA:650:THR:HG21 | 2.46 | 0.46 |
| 1:C:3:THR:HG21 | 1:C:42:ARG:HH11 | 1.81 | 0.46 |
| 1:CA:284:ILE:C | 1:CA:285:LEU:HD23 | 2.41 | 0.46 |
| 1:CA:349:VAL:HG11 | 1:CA:351:HIS:CD2 | 2.51 | 0.46 |
| 1:CA:539:LEU:CD2 | 1:CA:643:VAL:HA | 2.46 | 0.46 |
| 1:CA:640:VAL:HG12 | 1:DA:580:ARG:CZ | 2.45 | 0.46 |
| 1:CB:10:ILE:HD12 | 1:CB:30:VAL:C | 2.41 | 0.46 |
| 1:CB:331:GLY:C | 1:CB:358:LEU:HD11 | 2.41 | 0.46 |
| 1:D:114:VAL:O | 1:D:114:VAL:HG13 | 2.16 | 0.46 |
| 1:D:176:LEU:HD23 | 1:D:196:TRP:O | 2.16 | 0.46 |
| 1:E:316:LEU:HD12 | 1:E:317:GLU:H | 1.81 | 0.46 |
| 1:E:604:PHE:HB3 | 1:E:623:ARG:HB2 | 1.97 | 0.46 |
| 1:EB:589:ASP:HA | 1:EB:592:HIS:CD2 | 2.51 | 0.46 |
| 1:FA:56:ARG:HA | 1:FA:58:TYR:CZ | 2.51 | 0.46 |
| 1:FA:633:LEU:HD12 | 1:FA:634:VAL:N | 2.31 | 0.46 |
| 1:FB:565:PRO:O | 1:FB:566:ASP:C | 2.58 | 0.46 |
| 1:FB:765:VAL:HG22 | 1:GB:759:LEU:HD21 | 1.97 | 0.46 |
| 1:G:37:ARG:CD | 1:G:37:ARG:N | 2.79 | 0.46 |
| 1:G:172:GLN:CD | 1:G:215:LEU:HD21 | 2.41 | 0.46 |
| 1:G:276:LEU:CD2 | 1:G:320:ILE:HG23 | 2.46 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:GA:489:LEU:HD21 | 1:GA:495:PHE:HD1 | 1.79 | 0.46 |
| 1:H:90:ILE:HG22 | 1:H:91:ARG:H | 1.80 | 0.46 |
| 1:HA:120:ALA:HB3 | 1:HA:205:LEU:HD11 | 1.98 | 0.46 |
| 1:HB:395:THR:HG23 | 1:HB:397:LYS:CG | 2.44 | 0.46 |
| 1:I:58:TYR:CG | 1:I:92:LEU:HA | 2.51 | 0.46 |
| 1:I:493:GLU:N | 1:I:493:GLU:OE1 | 2.49 | 0.46 |
| 1:IA:16:ILE:HD11 | 1:IA:47:PRO:N | 2.30 | 0.46 |
| 1:IA:377:ARG:O | 1:IA:407:MET:CE | 2.63 | 0.46 |
| 1:IA:541:LEU:HD13 | 1:IA:639:ASP:O | 2.16 | 0.46 |
| 1:J:413:VAL:HG13 | 1:J:414:LEU:O | 2.16 | 0.46 |
| 1:J:659:GLN:O | 1:J:663:GLU:OE1 | 2.34 | 0.46 |
| 1:JA:6:PHE:C | 1:JA:7:ILE:HD13 | 2.41 | 0.46 |
| 1:JB:480:VAL:HG11 | 1:JB:562:PHE:CE1 | 2.50 | 0.46 |
| 1:KA:735:ILE:HD13 | 1:LA:727:GLU:HG2 | 1.97 | 0.46 |
| 1:KB:91:ARG:C | 1:KB:92:LEU:HD12 | 2.41 | 0.46 |
| 1:M:583:VAL:HG13 | 1:M:584:ALA:N | 2.31 | 0.46 |
| 1:MA:212:VAL:HG23 | 1:MA:212:VAL:O | 2.15 | 0.46 |
| 1:NA:112:LEU:HD11 | 1:NA:151:TYR:O | 2.16 | 0.46 |
| 1:NB:801:ALA:HB2 | 1:OB:796:LYS:HD2 | 1.97 | 0.46 |
| 1:O:419:LEU:HD23 | 1:O:421:PRO:HD2 | 1.97 | 0.46 |
| 1:OB:30:VAL:HG22 | 1:OB:31:GLY:H | 1.81 | 0.46 |
| 1:OB:82:ARG:C | 1:OB:83:LEU:HD12 | 2.41 | 0.46 |
| 1:OB:380:ILE:H | 1:OB:380:ILE:HD12 | 1.81 | 0.46 |
| 1:P:126:LEU:HG | 1:P:158:GLU:HB3 | 1.97 | 0.46 |
| 1:P:755:THR:HG22 | 1:P:759:LEU:HD12 | 1.97 | 0.46 |
| 1:PA:83:LEU:HD21 | 1:PA:102:GLY:HA3 | 1.97 | 0.46 |
| 1:PA:199:THR:HG22 | 1:PA:199:THR:O | 2.16 | 0.46 |
| 1:PA:336:ALA:HA | 1:PA:370:LYS:O | 2.16 | 0.46 |
| 1:Q:144:LEU:C | 1:Q:144:LEU:HD12 | 2.41 | 0.46 |
| 1:QA:160:VAL:HG12 | 1:QA:161:GLU:N | 2.30 | 0.46 |
| 1:QA:223:GLU:CD | 1:QA:253:VAL:HG22 | 2.40 | 0.46 |
| 1:QA:461:ARG:HA | 1:QA:486:LEU:HA | 1.97 | 0.46 |
| 1:QA:658:VAL:HG13 | 1:QA:659:GLN:N | 2.31 | 0.46 |
| 1:QB:176:LEU:HD21 | 1:QB:196:TRP:NE1 | 2.30 | 0.46 |
| 1:R:65:VAL:HG22 | 1:R:103:GLU:CG | 2.46 | 0.46 |
| 1:S:160:VAL:HG12 | 1:S:161:GLU:N | 2.29 | 0.46 |
| 1:SB:81:VAL:HG22 | 1:SB:82:ARG:O | 2.15 | 0.46 |
| 1:SB:468:VAL:HG12 | 1:SB:469:GLN:O | 2.16 | 0.46 |
| 1:TA:720:GLY:O | 1:TA:724:ALA:HB2 | 2.16 | 0.46 |
| 1:TB:304:GLY:C | 1:TB:305:GLU:HG3 | 2.40 | 0.46 |
| 1:TB:325:VAL:HA | 1:TB:364:GLU:HA | 1.97 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:TB:802:ILE:HD11 | 1:UB:805:SER:O | 2.15 | 0.46 |
| 1:UA:122:HIS:CG | 1:UA:208:VAL:HG21 | 2.50 | 0.46 |
| 1:V:46:ALA:HB1 | 1:V:47:PRO:HD2 | 1.98 | 0.46 |
| 1:V:713:SER:O | 1:W:707:LEU:HD13 | 2.15 | 0.46 |
| 1:W:452:ARG:CZ | 1:W:458:VAL:HG22 | 2.46 | 0.46 |
| 1:WB:131:ASP:HB3 | 1:WB:137:VAL:HG21 | 1.98 | 0.46 |
| 1:WB:266:GLU:O | 1:WB:268:LEU:HD12 | 2.15 | 0.46 |
| 1:XA:50:MET:O | 1:XA:52:THR:HG23 | 2.16 | 0.46 |
| 1:XA:548:GLU:HB2 | 1:XA:634:VAL:HG21 | 1.98 | 0.46 |
| 1:XB:55:PRO:HA | 1:XB:58:TYR:HE1 | 1.81 | 0.46 |
| 1:Y:325:VAL:HG21 | 1:Z:337:LEU:O | 2.16 | 0.46 |
| 1:Y:392:ASP:OD2 | 1:Y:395:THR:HG22 | 2.16 | 0.46 |
| 1:Y:625:GLN:NE2 | 1:Y:634:VAL:HG22 | 2.31 | 0.46 |
| 1:YA:523:PHE:HB3 | 1:YA:572:CYS:SG | 2.55 | 0.46 |
| 1:YA:658:VAL:HA | 1:ZA:533:ASP:HB3 | 1.98 | 0.46 |
| 1:YB:205:LEU:HD23 | 1:YB:206:PRO:O | 2.16 | 0.46 |
| 1:YB:325:VAL:HA | 1:YB:364:GLU:HG3 | 1.98 | 0.46 |
| 1:YB:497:VAL:HG23 | 1:YB:513:ALA:C | 2.41 | 0.46 |
| 1:YB:540:GLN:H | 1:YB:642:SER:HB3 | 1.81 | 0.46 |
| 1:ZA:419:LEU:HD12 | 1:ZA:452:ARG:CZ | 2.46 | 0.46 |
| 1:AB:761:ARG:CG | 1:BB:755:THR:HG21 | 2.40 | 0.46 |
| 1:AB:770:LEU:HD21 | 1:ZA:772:TYR:CE1 | 2.51 | 0.46 |
| 1:AC:382:LEU:H | 1:AC:405:THR:HA | 1.81 | 0.46 |
| 1:AC:766:ARG:CD | 1:ZB:768:LEU:HD11 | 2.46 | 0.46 |
| 1:B:326:LEU:O | 1:B:362:PRO:HA | 2.16 | 0.46 |
| 1:B:801:ALA:HB2 | 1:C:796:LYS:CE | 2.46 | 0.46 |
| 1:BA:747:LYS:O | 1:BA:751:LEU:HD23 | 2.16 | 0.46 |
| 1:BB:502:ALA:HB3 | 1:BB:510:ALA:HB3 | 1.98 | 0.46 |
| 1:C:411:ASP:OD1 | 1:C:411:ASP:C | 2.59 | 0.46 |
| 1:CB:541:LEU:HD23 | 1:CB:640:VAL:HA | 1.98 | 0.46 |
| 1:D:62:ALA:HA | 1:D:88:LEU:HD23 | 1.98 | 0.46 |
| 1:D:541:LEU:CD2 | 1:D:640:VAL:HG22 | 2.46 | 0.46 |
| 1:DA:175:ARG:HE | 1:DA:213:LEU:CB | 2.28 | 0.46 |
| 1:DA:529:ILE:HG12 | 1:DA:580:ARG:HG2 | 1.97 | 0.46 |
| 1:E:326:LEU:HD13 | 1:E:331:GLY:HA2 | 1.96 | 0.46 |
| 1:EA:25:VAL:HA | 1:EA:80:GLN:OE1 | 2.15 | 0.46 |
| 1:EA:58:TYR:CG | 1:EA:59:CYS:N | 2.83 | 0.46 |
| 1:EA:201:VAL:HG21 | 1:EA:204:TYR:HB2 | 1.97 | 0.46 |
| 1:EA:500:LEU:HD22 | 1:EA:566:ASP:OD1 | 2.16 | 0.46 |
| 1:EA:549:VAL:O | 1:EA:550:ASN:C | 2.59 | 0.46 |
| 1:FB:467:ALA:O | 1:FB:516:LEU:N | 2.48 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:G:16:ILE:HD11 | 1:G:47:PRO:CD | 2.45 | 0.46 |
| 1:G:170:GLN:N | 1:G:201:VAL:HG13 | 2.30 | 0.46 |
| 1:GA:388:ILE:CA | 1:GA:457:VAL:HG23 | 2.46 | 0.46 |
| 1:GA:530:GLU:HA | 1:GA:535:ALA:O | 2.15 | 0.46 |
| 1:GB:65:VAL:HG23 | 1:GB:67:ARG:CG | 2.46 | 0.46 |
| 1:GB:468:VAL:O | 1:GB:480:VAL:HA | 2.16 | 0.46 |
| 1:GB:536:ARG:O | 1:GB:646:VAL:HG23 | 2.16 | 0.46 |
| 1:GB:582:ALA:O | 1:GB:586:VAL:HG22 | 2.16 | 0.46 |
| 1:HB:25:VAL:HG11 | 1:HB:79:GLY:C | 2.41 | 0.46 |
| 1:I:105:LEU:HD23 | 1:I:105:LEU:H | 1.80 | 0.46 |
| 1:I:358:LEU:HD23 | 1:I:359:ILE:CA | 2.45 | 0.46 |
| 1:IA:480:VAL:HG12 | 1:IA:481:VAL:N | 2.31 | 0.46 |
| 1:IB:8:ILE:N | 1:IB:37:ARG:NH1 | 2.64 | 0.46 |
| 1:IB:172:GLN:CD | 1:IB:215:LEU:HD21 | 2.41 | 0.46 |
| 1:IB:778:GLU:HA | 1:IB:781:VAL:HG22 | 1.97 | 0.46 |
| 1:J:82:ARG:C | 1:J:83:LEU:HD12 | 2.41 | 0.46 |
| 1:J:90:ILE:HG22 | 1:J:91:ARG:N | 2.31 | 0.46 |
| 1:J:332:LEU:HD12 | 1:J:375:GLU:C | 2.40 | 0.46 |
| 1:JA:283:VAL:HG12 | 1:JA:284:ILE:N | 2.30 | 0.46 |
| 1:JB:786:GLN:CD | 1:KB:781:VAL:HG11 | 2.40 | 0.46 |
| 1:K:65:VAL:HA | 1:K:83:LEU:HA | 1.96 | 0.46 |
| 1:K:333:LEU:HD12 | 1:K:334:LEU:H | 1.80 | 0.46 |
| 1:KA:333:LEU:CA | 1:KA:358:LEU:HD12 | 2.45 | 0.46 |
| 1:KA:390:VAL:HG21 | 1:KA:408:LEU:HD22 | 1.98 | 0.46 |
| 1:KB:88:LEU:O | 1:KB:155:LYS:HE3 | 2.16 | 0.46 |
| 1:KB:529:ILE:HD12 | 1:KB:583:VAL:CB | 2.45 | 0.46 |
| 1:LA:502:ALA:HB3 | 1:LA:510:ALA:CB | 2.46 | 0.46 |
| 1:LB:459:SER:HB2 | 1:LB:486:LEU:HD11 | 1.98 | 0.46 |
| 1:MA:531:THR:OG1 | 1:MA:535:ALA:HB3 | 2.16 | 0.46 |
| 1:MB:3:THR:HG23 | 1:MB:37:ARG:HB3 | 1.98 | 0.46 |
| 1:MB:63:ASN:HA | 1:MB:84:ARG:O | 2.16 | 0.46 |
| 1:MB:458:VAL:HG12 | 1:MB:459:SER:N | 2.29 | 0.46 |
| 1:NA:14:HIS:HA | 1:NA:48:MET:O | 2.16 | 0.46 |
| 1:NA:115:VAL:HG11 | 1:NA:145:PHE:CE2 | 2.50 | 0.46 |
| 1:NA:165:ALA:HB2 | 1:NA:205:LEU:HB2 | 1.97 | 0.46 |
| 1:NA:335:ARG:HA | 1:NA:355:ASP:O | 2.16 | 0.46 |
| 1:O:228:HIS:ND1 | 1:O:268:LEU:HD22 | 2.31 | 0.46 |
| 1:OA:121:LEU:HD13 | 1:OA:123:LEU:HD21 | 1.98 | 0.46 |
| 1:OA:427:LEU:CD2 | 1:OA:514:LEU:HD13 | 2.46 | 0.46 |
| 1:P:591:PHE:HA | 1:P:598:ILE:HD13 | 1.97 | 0.46 |
| 1:P:801:ALA:HB1 | 1:Q:799:THR:HG21 | 1.98 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:PA:53:VAL:HG12 | 1:PA:93:ALA:HA | 1.97 | 0.46 |
| 1:PA:173:ALA:CB | 1:PA:260:VAL:HG11 | 2.46 | 0.46 |
| 1:PB:389:TYR:CD1 | 1:PB:457:VAL:HG22 | 2.51 | 0.46 |
| 1:Q:143:TRP:HA | 1:Q:208:VAL:HG11 | 1.98 | 0.46 |
| 1:Q:743:GLN:HA | 1:Q:746:LEU:HD12 | 1.98 | 0.46 |
| 1:QA:58:TYR:CE2 | 1:QA:152:ILE:HG23 | 2.51 | 0.46 |
| 1:QA:83:LEU:HD21 | 1:QA:103:GLU:N | 2.31 | 0.46 |
| 1:QB:395:THR:HG23 | 1:QB:397:LYS:HG3 | 1.98 | 0.46 |
| 1:R:28:VAL:CG2 | 1:R:101:PRO:HD3 | 2.45 | 0.46 |
| 1:R:367:PRO:HB3 | 1:R:373:VAL:HG21 | 1.98 | 0.46 |
| 1:RB:229:LEU:HD12 | 1:RB:249:TRP:NE1 | 2.31 | 0.46 |
| 1:RB:758:GLU:O | 1:RB:762:VAL:HG13 | 2.16 | 0.46 |
| 1:SB:333:LEU:HD23 | 1:SB:374:VAL:HG11 | 1.97 | 0.46 |
| 1:T:801:ALA:HB2 | 1:V:796:LYS:HG2 | 1.97 | 0.46 |
| 1:TA:324:TYR:HD1 | 1:TA:326:LEU:HD11 | 1.81 | 0.46 |
| 1:TA:467:ALA:HB3 | 1:TA:562:PHE:HZ | 1.80 | 0.46 |
| 1:TA:591:PHE:O | 1:TA:595:SER:HB3 | 2.16 | 0.46 |
| 1:UA:518:LEU:H | 1:UA:518:LEU:HD12 | 1.79 | 0.46 |
| 1:UB:126:LEU:C | 1:UB:127:LEU:HD22 | 2.40 | 0.46 |
| 1:UB:575:ILE:HD12 | 1:UB:575:ILE:H | 1.80 | 0.46 |
| 1:UB:703:ARG:N | 1:VB:693:ILE:HG21 | 2.30 | 0.46 |
| 1:UB:788:ALA:O | 1:UB:792:VAL:HG23 | 2.15 | 0.46 |
| 1:VA:163:ILE:HG22 | 1:VA:164:GLN:N | 2.31 | 0.46 |
| 1:VB:413:VAL:HG13 | 1:VB:414:LEU:O | 2.15 | 0.46 |
| 1:W:181:GLU:CD | 1:W:191:VAL:HG12 | 2.41 | 0.46 |
| 1:WA:10:ILE:HB | 1:WA:32:PRO:HA | 1.98 | 0.46 |
| 1:WB:334:LEU:HD12 | 1:WB:357:TRP:CD1 | 2.51 | 0.46 |
| 1:X:208:VAL:HG23 | 1:X:209:PHE:N | 2.30 | 0.46 |
| 1:XB:122:HIS:HD2 | 1:XB:208:VAL:HG12 | 1.78 | 0.46 |
| 1:Y:333:LEU:HD12 | 1:Y:334:LEU:H | 1.81 | 0.46 |
| 1:Y:531:THR:HG21 | 1:Y:588:PHE:HB3 | 1.97 | 0.46 |
| 1:Y:543:TYR:HA | 1:Y:638:VAL:HG22 | 1.98 | 0.46 |
| 1:YA:780:GLU:O | 1:YA:783:LYS:HG2 | 2.15 | 0.46 |
| 1:YB:301:VAL:HG22 | 1:YB:302:VAL:N | 2.31 | 0.46 |
| 1:YB:336:ALA:HB3 | 1:YB:352:GLN:O | 2.16 | 0.46 |
| 1:YB:468:VAL:HG22 | 1:YB:515:CYS:CB | 2.46 | 0.46 |
| 1:Z:60:THR:HG22 | 1:Z:90:ILE:HG13 | 1.97 | 0.46 |
| 1:ZA:471:TYR:CZ | 1:ZA:476:LYS:HA | 2.51 | 0.46 |
| 1:ZA:630:GLN:HG2 | 1:ZA:631:ASN:N | 2.31 | 0.46 |
| 1:A:16:ILE:HG23 | 1:A:45:PHE:O | 2.15 | 0.46 |
| 1:A:18:VAL:HA | 1:A:42:ARG:O | 2.16 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:A:643:VAL:HG22 | 1:B:580:ARG:HH22 | 1.81 | 0.46 |
| 1:AA:799:THR:HA | 1:AA:802:ILE:HG22 | 1.98 | 0.46 |
| 1:AB:388:ILE:N | 1:AB:457:VAL:HG23 | 2.31 | 0.46 |
| 1:AC:283:VAL:HG12 | 1:AC:284:ILE:N | 2.30 | 0.46 |
| 1:B:14:HIS:HB3 | 1:B:47:PRO:CB | 2.46 | 0.46 |
| 1:B:176:LEU:HD11 | 1:B:196:TRP:CZ2 | 2.51 | 0.46 |
| 1:BA:69:ALA:HB3 | 1:BA:72:LEU:HB3 | 1.97 | 0.46 |
| 1:BB:742:LEU:HD12 | 1:BB:745:LYS:HE3 | 1.98 | 0.46 |
| 1:C:18:VAL:HA | 1:C:42:ARG:O | 2.16 | 0.46 |
| 1:C:37:ARG:HD2 | 1:C:37:ARG:N | 2.31 | 0.46 |
| 1:C:390:VAL:O | 1:C:398:VAL:HA | 2.16 | 0.46 |
| 1:CB:62:ALA:O | 1:CB:63:ASN:C | 2.59 | 0.46 |
| 1:DA:129:PHE:CE1 | 1:DA:137:VAL:HG11 | 2.51 | 0.46 |
| 1:DA:750:ALA:O | 1:DA:754:GLU:OE1 | 2.34 | 0.46 |
| 1:EB:56:ARG:HA | 1:EB:112:LEU:HD13 | 1.97 | 0.46 |
| 1:EB:122:HIS:CD2 | 1:EB:208:VAL:HG12 | 2.51 | 0.46 |
| 1:EB:519:GLY:O | 1:EB:520:PRO:C | 2.59 | 0.46 |
| 1:EB:801:ALA:HB1 | 1:FB:799:THR:OG1 | 2.16 | 0.46 |
| 1:F:129:PHE:CZ | 1:F:137:VAL:HG21 | 2.51 | 0.46 |
| 1:F:326:LEU:O | 1:F:362:PRO:HA | 2.16 | 0.46 |
| 1:FA:179:ARG:HE | 1:FA:209:PHE:HA | 1.81 | 0.46 |
| 1:FB:223:GLU:O | 1:FB:273:ILE:HD12 | 2.16 | 0.46 |
| 1:FB:471:TYR:CD2 | 1:FB:478:ALA:HB2 | 2.51 | 0.46 |
| 1:GA:121:LEU:HD11 | 1:GA:123:LEU:HD21 | 1.98 | 0.46 |
| 1:GB:16:ILE:HG23 | 1:GB:45:PHE:O | 2.16 | 0.46 |
| 1:GB:228:HIS:CE1 | 1:GB:268:LEU:HD22 | 2.51 | 0.46 |
| 1:GB:469:GLN:HB2 | 1:GB:480:VAL:HG22 | 1.98 | 0.46 |
| 1:H:3:THR:HG21 | 1:H:37:ARG:O | 2.15 | 0.46 |
| 1:H:67:ARG:HG2 | 1:H:73:VAL:HG22 | 1.97 | 0.46 |
| 1:HA:53:VAL:HG13 | 1:HA:57:HIS:O | 2.16 | 0.46 |
| 1:HA:363:LEU:HD23 | 1:HA:363:LEU:H | 1.81 | 0.46 |
| 1:HB:529:ILE:HG21 | 1:HB:579:VAL:HG12 | 1.98 | 0.46 |
| 1:IA:175:ARG:CA | 1:IA:197:LEU:HD23 | 2.45 | 0.46 |
| 1:IA:187:GLY:O | 1:IA:188:LYS:C | 2.59 | 0.46 |
| 1:IA:527:ILE:N | 1:IA:539:LEU:O | 2.49 | 0.46 |
| 1:IB:366:VAL:O | 1:IB:366:VAL:HG13 | 2.16 | 0.46 |
| 1:J:62:ALA:CA | 1:J:88:LEU:HD23 | 2.42 | 0.46 |
| 1:J:332:LEU:HA | 1:J:376:GLU:HA | 1.97 | 0.46 |
| 1:J:786:GLN:CB | 1:K:781:VAL:HG11 | 2.46 | 0.46 |
| 1:JA:755:THR:HG22 | 1:JA:759:LEU:HD12 | 1.97 | 0.46 |
| 1:K:772:TYR:HA | 1:K:775:ALA:HB3 | 1.97 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:KA:72:LEU:HD23 | 1:KA:73:VAL:O | 2.15 | 0.46 |
| 1:KA:221:LEU:HD11 | 1:KA:251:VAL:HG23 | 1.97 | 0.46 |
| 1:KA:547:PHE:CZ | 1:KA:633:LEU:HD13 | 2.51 | 0.46 |
| 1:KB:176:LEU:HA | 1:KB:211:GLU:O | 2.16 | 0.46 |
| 1:L:335:ARG:HA | 1:L:357:TRP:CZ3 | 2.51 | 0.46 |
| 1:L:452:ARG:O | 1:L:453:ASN:C | 2.59 | 0.46 |
| 1:L:522:PHE:HA | 1:L:543:TYR:O | 2.16 | 0.46 |
| 1:LA:162:ILE:HG22 | 1:LA:163:ILE:N | 2.31 | 0.46 |
| 1:LA:462:VAL:HG12 | 1:LA:466:ALA:HB3 | 1.98 | 0.46 |
| 1:LA:468:VAL:HG23 | 1:LA:515:CYS:SG | 2.56 | 0.46 |
| 1:LB:583:VAL:HG13 | 1:LB:584:ALA:N | 2.31 | 0.46 |
| 1:MA:339:PRO:HD3 | 1:MA:353:ALA:HB2 | 1.98 | 0.46 |
| 1:NA:229:LEU:O | 1:NA:248:GLU:HA | 2.15 | 0.46 |
| 1:NA:416:GLU:CG | 1:NA:455:THR:HG22 | 2.46 | 0.46 |
| 1:NB:187:GLY:O | 1:NB:188:LYS:C | 2.59 | 0.46 |
| 1:OB:126:LEU:C | 1:OB:127:LEU:HD22 | 2.40 | 0.46 |
| 1:P:50:MET:HB3 | 1:P:97:PHE:N | 2.30 | 0.46 |
| 1:P:221:LEU:C | 1:P:253:VAL:HG12 | 2.41 | 0.46 |
| 1:P:405:THR:HG23 | 1:Q:395:THR:C | 2.41 | 0.46 |
| 1:PA:65:VAL:HG13 | 1:PA:103:GLU:CB | 2.40 | 0.46 |
| 1:PA:779:LEU:HD23 | 1:QA:777:LEU:HD22 | 1.98 | 0.46 |
| 1:Q:51:VAL:HG21 | 1:Q:99:LEU:HD21 | 1.99 | 0.46 |
| 1:QA:564:VAL:HG21 | 1:QA:631:ASN:HB3 | 1.98 | 0.46 |
| 1:RA:121:LEU:HD12 | 1:RA:151:TYR:HB3 | 1.97 | 0.46 |
| 1:RA:283:VAL:HG12 | 1:RA:284:ILE:N | 2.31 | 0.46 |
| 1:RA:543:TYR:CE1 | 1:RA:575:ILE:HG21 | 2.50 | 0.46 |
| 1:RB:90:ILE:HD12 | 1:RB:90:ILE:H | 1.80 | 0.46 |
| 1:RB:181:GLU:CD | 1:RB:191:VAL:HA | 2.41 | 0.46 |
| 1:SA:594:ASN:O | 1:SA:598:ILE:HG22 | 2.16 | 0.46 |
| 1:SB:230:ARG:CG | 1:SB:266:GLU:HB3 | 2.46 | 0.46 |
| 1:SB:417:LYS:HZ3 | 1:SB:491:PRO:C | 2.23 | 0.46 |
| 1:SB:732:ALA:HA | 1:SB:735:ILE:HD12 | 1.98 | 0.46 |
| 1:TB:189:GLU:O | 1:TB:191:VAL:HG13 | 2.16 | 0.46 |
| 1:TB:790:VAL:HG11 | 1:UB:784:ALA:O | 2.16 | 0.46 |
| 1:UB:54:PRO:CD | 1:UB:109:ILE:HD12 | 2.45 | 0.46 |
| 1:UB:57:HIS:HA | 1:UB:110:THR:O | 2.16 | 0.46 |
| 1:VA:333:LEU:HD23 | 1:VA:374:VAL:HG11 | 1.96 | 0.46 |
| 1:VB:546:HIS:CD2 | 1:VB:634:VAL:HG11 | 2.51 | 0.46 |
| 1:W:61:VAL:HG12 | 1:W:105:LEU:HA | 1.98 | 0.46 |
| 1:W:339:PRO:HD3 | 1:W:353:ALA:HB2 | 1.97 | 0.46 |
| 1:WA:51:VAL:HG12 | 1:WA:53:VAL:CG2 | 2.45 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:WA:395:THR:HG22 | 1:WA:395:THR:O | 2.16 | 0.46 |
| 1:WA:405:THR:HG23 | 1:XA:396:GLY:N | 2.30 | 0.46 |
| 1:WB:273:ILE:O | 1:WB:273:ILE:HG23 | 2.16 | 0.46 |
| 1:WB:543:TYR:HA | 1:WB:638:VAL:HG22 | 1.98 | 0.46 |
| 1:X:130:GLU:HA | 1:X:135:ASP:HA | 1.98 | 0.46 |
| 1:X:260:VAL:O | 1:X:260:VAL:HG13 | 2.16 | 0.46 |
| 1:XB:87:ASP:C | 1:XB:88:LEU:HD12 | 2.41 | 0.46 |
| 1:XB:221:LEU:H | 1:XB:258:ALA:HA | 1.81 | 0.46 |
| 1:XB:373:VAL:HG12 | 1:XB:373:VAL:O | 2.15 | 0.46 |
| 1:YA:115:VAL:C | 1:YA:116:LEU:HD22 | 2.41 | 0.46 |
| 1:YB:220:ILE:HG22 | 1:YB:221:LEU:N | 2.31 | 0.46 |
| 1:YB:497:VAL:HG23 | 1:YB:513:ALA:O | 2.16 | 0.46 |
| 1:ZA:169:ARG:HD2 | 1:ZA:170:GLN:O | 2.16 | 0.46 |
| 1:ZA:470:VAL:HG12 | 1:ZA:471:TYR:N | 2.31 | 0.46 |
| 1:ZA:502:ALA:HB2 | 1:ZA:510:ALA:HB3 | 1.97 | 0.46 |
| 1:ZB:9:ARG:HG3 | 1:ZB:34:THR:OG1 | 2.15 | 0.46 |
| 1:ZB:167:ILE:O | 1:ZB:169:ARG:HD3 | 2.15 | 0.46 |
| 1:A:109:ILE:O | 1:A:109:ILE:CG2 | 2.63 | 0.45 |
| 1:A:137:VAL:HG12 | 1:A:138:VAL:N | 2.31 | 0.45 |
| 1:AA:160:VAL:HG12 | 1:AA:161:GLU:H | 1.81 | 0.45 |
| 1:AA:767:GLU:HA | 1:AA:770:LEU:HD12 | 1.98 | 0.45 |
| 1:B:761:ARG:O | 1:B:765:VAL:HG23 | 2.16 | 0.45 |
| 1:B:797:GLN:OE1 | 1:C:792:VAL:HG21 | 2.16 | 0.45 |
| 1:BA:410:GLN:O | 1:BA:411:ASP:OD1 | 2.34 | 0.45 |
| 1:BB:128:ASP:OD1 | 1:BB:138:VAL:HG12 | 2.16 | 0.45 |
| 1:BB:238:PHE:HZ | 1:BB:251:VAL:HG11 | 1.81 | 0.45 |
| 1:CA:460:TYR:HB3 | 1:CA:487:VAL:HG23 | 1.98 | 0.45 |
| 1:CA:747:LYS:O | 1:CA:751:LEU:HD23 | 2.16 | 0.45 |
| 1:D:761:ARG:O | 1:D:765:VAL:HG23 | 2.16 | 0.45 |
| 1:DA:606:PHE:HB3 | 1:DA:623:ARG:N | 2.31 | 0.45 |
| 1:DB:144:LEU:HD23 | 1:DB:208:VAL:HG13 | 1.98 | 0.45 |
| 1:DB:187:GLY:O | 1:DB:188:LYS:C | 2.59 | 0.45 |
| 1:DB:224:LYS:O | 1:DB:272:PRO:HA | 2.16 | 0.45 |
| 1:DB:662:ILE:O | 1:DB:666:THR:HG23 | 2.16 | 0.45 |
| 1:EA:325:VAL:O | 1:EA:325:VAL:HG13 | 2.15 | 0.45 |
| 1:EA:768:LEU:C | 1:EA:768:LEU:HD23 | 2.40 | 0.45 |
| 1:EB:216:VAL:HG22 | 1:EB:260:VAL:HG23 | 1.97 | 0.45 |
| 1:G:540:GLN:O | 1:G:541:LEU:HD12 | 2.15 | 0.45 |
| 1:GA:227:LEU:HD13 | 1:GA:270:VAL:HG22 | 1.98 | 0.45 |
| 1:GA:597:ARG:O | 1:GA:601:THR:HG23 | 2.16 | 0.45 |
| 1:GB:276:LEU:CD2 | 1:GB:320:ILE:HG23 | 2.45 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:H:286:ASP:N | 1:H:287:PRO:HD3 | 2.32 | 0.45 |
| 1:HA:60:THR:HB | 1:HA:88:LEU:HD21 | 1.97 | 0.45 |
| 1:HA:423:VAL:O | 1:HA:424:GLU:C | 2.59 | 0.45 |
| 1:HB:388:ILE:CA | 1:HB:457:VAL:HG23 | 2.47 | 0.45 |
| 1:HB:768:LEU:HD23 | 1:HB:769:GLU:N | 2.31 | 0.45 |
| 1:I:333:LEU:HD11 | 1:I:356:HIS:HB3 | 1.97 | 0.45 |
| 1:IA:168:ILE:HG13 | 1:IA:202:GLY:O | 2.16 | 0.45 |
| 1:J:283:VAL:HG22 | 1:J:301:VAL:HB | 1.99 | 0.45 |
| 1:J:288:VAL:HG13 | 1:J:294:ASN:ND2 | 2.31 | 0.45 |
| 1:JA:391:GLN:HB2 | 1:JA:398:VAL:HG22 | 1.96 | 0.45 |
| 1:JB:19:LEU:HD13 | 1:JB:26:SER:OG | 2.16 | 0.45 |
| 1:K:160:VAL:HG12 | 1:K:161:GLU:H | 1.82 | 0.45 |
| 1:K:345:ASP:HB3 | 1:K:349:VAL:HG23 | 1.98 | 0.45 |
| 1:KA:349:VAL:HG11 | 1:KA:351:HIS:CD2 | 2.51 | 0.45 |
| 1:L:420:PRO:HB2 | 1:L:421:PRO:HD3 | 1.98 | 0.45 |
| 1:LA:402:ILE:HG22 | 1:LA:403:GLY:N | 2.31 | 0.45 |
| 1:MA:480:VAL:HG12 | 1:MA:481:VAL:N | 2.31 | 0.45 |
| 1:MA:537:LEU:HD23 | 1:MA:645:PRO:CA | 2.46 | 0.45 |
| 1:MA:767:GLU:HA | 1:MA:770:LEU:HD12 | 1.98 | 0.45 |
| 1:MA:777:LEU:O | 1:MA:781:VAL:HG22 | 2.16 | 0.45 |
| 1:MB:591:PHE:O | 1:MB:595:SER:N | 2.49 | 0.45 |
| 1:NA:470:VAL:HG12 | 1:NA:471:TYR:H | 1.81 | 0.45 |
| 1:NA:591:PHE:HA | 1:NA:598:ILE:HD12 | 1.98 | 0.45 |
| 1:O:115:VAL:HG11 | 1:O:119:THR:C | 2.41 | 0.45 |
| 1:O:365:TYR:OH | 1:O:371:VAL:HG21 | 2.15 | 0.45 |
| 1:O:575:ILE:H | 1:O:575:ILE:HD12 | 1.81 | 0.45 |
| 1:OA:606:PHE:O | 1:OA:607:GLU:HG2 | 2.17 | 0.45 |
| 1:OB:626:ALA:HB3 | 1:OB:635:VAL:HB | 1.98 | 0.45 |
| 1:P:340:LEU:HD22 | 1:P:344:GLU:HG3 | 1.98 | 0.45 |
| 1:PA:25:VAL:HG12 | 1:PA:27:ARG:HH21 | 1.81 | 0.45 |
| 1:PA:548:GLU:HB2 | 1:PA:634:VAL:HG21 | 1.98 | 0.45 |
| 1:PA:549:VAL:HG22 | 1:PA:557:GLU:HG2 | 1.98 | 0.45 |
| 1:Q:382:LEU:HD11 | 1:Q:388:ILE:HD12 | 1.97 | 0.45 |
| 1:QA:137:VAL:HG13 | 1:QA:143:TRP:CH2 | 2.51 | 0.45 |
| 1:RA:358:LEU:HD11 | 1:RA:407:MET:CE | 2.43 | 0.45 |
| 1:RA:556:GLN:O | 1:RA:559:ALA:HB3 | 2.16 | 0.45 |
| 1:RB:283:VAL:HG12 | 1:RB:284:ILE:N | 2.30 | 0.45 |
| 1:RB:530:GLU:O | 1:RB:583:VAL:HG22 | 2.17 | 0.45 |
| 1:S:603:VAL:HG11 | 1:S:638:VAL:HG21 | 1.98 | 0.45 |
| 1:SA:168:ILE:O | 1:SA:168:ILE:HG13 | 2.17 | 0.45 |
| 1:SB:489:LEU:HD11 | 1:SB:495:PHE:CE1 | 2.50 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:SB:735:ILE:HG21 | 1:TB:726:ALA:C | 2.41 | 0.45 |
| 1:T:173:ALA:O | 1:T:215:LEU:HD12 | 2.16 | 0.45 |
| 1:TB:413:VAL:HG13 | 1:TB:414:LEU:O | 2.16 | 0.45 |
| 1:V:25:VAL:HG21 | 1:V:78:THR:O | 2.15 | 0.45 |
| 1:V:158:GLU:OE2 | 1:V:160:VAL:HG23 | 2.15 | 0.45 |
| 1:W:50:MET:HE2 | 1:W:96:PRO:O | 2.15 | 0.45 |
| 1:WA:53:VAL:HG12 | 1:WA:57:HIS:HB2 | 1.97 | 0.45 |
| 1:WA:96:PRO:O | 1:WA:97:PHE:C | 2.58 | 0.45 |
| 1:X:604:PHE:HE1 | 1:X:625:GLN:C | 2.24 | 0.45 |
| 1:XB:333:LEU:HD23 | 1:XB:374:VAL:CG1 | 2.47 | 0.45 |
| 1:Z:337:LEU:HD21 | 1:Z:372:GLU:CB | 2.46 | 0.45 |
| 1:Z:424:GLU:HG2 | 1:Z:425:GLU:N | 2.31 | 0.45 |
| 1:ZA:273:ILE:O | 1:ZA:273:ILE:HG23 | 2.15 | 0.45 |
| 1:ZA:325:VAL:O | 1:ZA:325:VAL:HG13 | 2.15 | 0.45 |
| 1:ZB:527:ILE:HG22 | 1:ZB:528:THR:N | 2.31 | 0.45 |
| 1:A:233:ARG:HA | 1:A:245:THR:HG23 | 1.98 | 0.45 |
| 1:AA:408:LEU:HD11 | 1:AA:414:LEU:HD21 | 1.98 | 0.45 |
| 1:AA:527:ILE:O | 1:AA:539:LEU:HB3 | 2.17 | 0.45 |
| 1:AB:65:VAL:HG11 | 1:AB:100:TYR:CD1 | 2.51 | 0.45 |
| 1:AC:172:GLN:HB3 | 1:AC:215:LEU:HD11 | 1.97 | 0.45 |
| 1:B:345:ASP:OD2 | 1:B:349:VAL:HB | 2.16 | 0.45 |
| 1:BA:326:LEU:HD13 | 1:BA:331:GLY:HA2 | 1.98 | 0.45 |
| 1:BA:402:ILE:HD11 | 1:BA:457:VAL:HG21 | 1.97 | 0.45 |
| 1:BB:643:VAL:HG13 | 1:CB:580:ARG:HH11 | 1.80 | 0.45 |
| 1:CB:333:LEU:HD23 | 1:CB:374:VAL:CG1 | 2.46 | 0.45 |
| 1:D:119:THR:CG2 | 1:D:162:ILE:HD11 | 2.45 | 0.45 |
| 1:D:423:VAL:HG13 | 1:D:424:GLU:N | 2.32 | 0.45 |
| 1:DA:16:ILE:HD11 | 1:DA:47:PRO:CD | 2.47 | 0.45 |
| 1:DA:260:VAL:O | 1:DA:260:VAL:HG13 | 2.17 | 0.45 |
| 1:E:219:VAL:HG11 | 1:E:227:LEU:HD22 | 1.97 | 0.45 |
| 1:EA:221:LEU:O | 1:EA:253:VAL:HG22 | 2.16 | 0.45 |
| 1:EB:688:LEU:HD11 | 1:EB:692:LYS:HE3 | 1.99 | 0.45 |
| 1:F:122:HIS:NE2 | 1:F:208:VAL:HG12 | 2.31 | 0.45 |
| 1:G:661:ALA:O | 1:G:665:THR:HG23 | 2.15 | 0.45 |
| 1:GA:115:VAL:HG21 | 1:GA:145:PHE:CE2 | 2.51 | 0.45 |
| 1:GA:410:GLN:N | 1:GA:410:GLN:OE1 | 2.50 | 0.45 |
| 1:GA:717:GLU:O | 1:GA:721:THR:HG23 | 2.16 | 0.45 |
| 1:GA:794:LYS:HB2 | 1:HA:792:VAL:HG21 | 1.98 | 0.45 |
| 1:GB:65:VAL:HG12 | 1:GB:83:LEU:HG | 1.98 | 0.45 |
| 1:GB:187:GLY:O | 1:GB:188:LYS:C | 2.59 | 0.45 |
| 1:H:174:LEU:C | 1:H:197:LEU:HD13 | 2.41 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:HB:67:ARG:HA | 1:HB:73:VAL:HA | 1.98 | 0.45 |
| 1:HB:633:LEU:HD12 | 1:HB:634:VAL:H | 1.81 | 0.45 |
| 1:I:57:HIS:CB | 1:I:109:ILE:HG23 | 2.46 | 0.45 |
| 1:I:625:GLN:N | 1:I:625:GLN:OE1 | 2.49 | 0.45 |
| 1:IA:104:VAL:HG22 | 1:IA:105:LEU:N | 2.31 | 0.45 |
| 1:IA:115:VAL:HG11 | 1:IA:145:PHE:CD2 | 2.51 | 0.45 |
| 1:IA:228:HIS:HD1 | 1:IA:268:LEU:HD22 | 1.81 | 0.45 |
| 1:IB:57:HIS:HA | 1:IB:110:THR:O | 2.16 | 0.45 |
| 1:J:266:GLU:HG3 | 1:J:268:LEU:HD11 | 1.98 | 0.45 |
| 1:JA:50:MET:O | 1:JA:52:THR:HG23 | 2.17 | 0.45 |
| 1:K:340:LEU:HD12 | 1:K:351:HIS:ND1 | 2.31 | 0.45 |
| 1:KA:52:THR:HG22 | 1:KA:96:PRO:HG3 | 1.99 | 0.45 |
| 1:KA:122:HIS:CG | 1:KA:123:LEU:N | 2.84 | 0.45 |
| 1:KA:276:LEU:CD1 | 1:KA:302:VAL:HG12 | 2.45 | 0.45 |
| 1:KB:216:VAL:HG22 | 1:KB:217:ASP:N | 2.31 | 0.45 |
| 1:LA:798:MET:HE1 | 1:MA:792:VAL:HG13 | 1.98 | 0.45 |
| 1:LB:57:HIS:HB3 | 1:LB:109:ILE:HG22 | 1.99 | 0.45 |
| 1:LB:625:GLN:HG2 | 1:LB:625:GLN:O | 2.16 | 0.45 |
| 1:M:13:TYR:HE2 | 1:N:83:LEU:HD22 | 1.77 | 0.45 |
| 1:M:402:ILE:HG22 | 1:M:403:GLY:N | 2.31 | 0.45 |
| 1:M:790:VAL:HG13 | 1:M:793:LYS:NZ | 2.31 | 0.45 |
| 1:MA:523:PHE:CZ | 1:MA:545:TRP:CE2 | 3.04 | 0.45 |
| 1:MB:786:GLN:CB | 1:NB:781:VAL:HG11 | 2.45 | 0.45 |
| 1:N:25:VAL:HG13 | 1:N:80:GLN:N | 2.31 | 0.45 |
| 1:NA:165:ALA:HB2 | 1:NA:205:LEU:HD13 | 1.98 | 0.45 |
| 1:NA:398:VAL:HG11 | 1:NA:415:TRP:CE3 | 2.52 | 0.45 |
| 1:NB:283:VAL:HG22 | 1:NB:301:VAL:HB | 1.98 | 0.45 |
| 1:NB:334:LEU:HD11 | 1:NB:359:ILE:CG2 | 2.46 | 0.45 |
| 1:O:95:ASP:HB3 | 1:O:96:PRO:HD2 | 1.98 | 0.45 |
| 1:O:112:LEU:HD11 | 1:O:152:ILE:CD1 | 2.42 | 0.45 |
| 1:O:480:VAL:HG11 | 1:O:562:PHE:CE1 | 2.52 | 0.45 |
| 1:PA:18:VAL:HG13 | 1:PA:29:GLU:CD | 2.41 | 0.45 |
| 1:PA:516:LEU:HD13 | 1:PA:561:LEU:HD13 | 1.98 | 0.45 |
| 1:PA:782:SER:OG | 1:QA:777:LEU:HD11 | 2.16 | 0.45 |
| 1:PB:363:LEU:HD23 | 1:PB:363:LEU:N | 2.32 | 0.45 |
| 1:QA:53:VAL:HG12 | 1:QA:93:ALA:HA | 1.98 | 0.45 |
| 1:QA:168:ILE:HD12 | 1:QA:172:GLN:O | 2.16 | 0.45 |
| 1:QA:285:LEU:HD23 | 1:QA:299:LYS:HB3 | 1.98 | 0.45 |
| 1:R:283:VAL:HG12 | 1:R:284:ILE:N | 2.31 | 0.45 |
| 1:R:329:GLN:NE2 | 1:S:393:VAL:HG23 | 2.31 | 0.45 |
| 1:R:405:THR:HG21 | 1:S:393:VAL:O | 2.15 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:RA:333:LEU:HD12 | 1:RA:358:LEU:HA | 1.98 | 0.45 |
| 1:RA:472:ASP:HA | 1:RA:493:GLU:HA | 1.99 | 0.45 |
| 1:RB:81:VAL:HG13 | 1:RB:83:LEU:CD1 | 2.46 | 0.45 |
| 1:RB:520:PRO:HA | 1:RB:545:TRP:O | 2.15 | 0.45 |
| 1:S:125:ALA:HB2 | 1:S:143:TRP:HZ3 | 1.81 | 0.45 |
| 1:SB:58:TYR:CD2 | 1:SB:92:LEU:HD13 | 2.51 | 0.45 |
| 1:SB:333:LEU:HD12 | 1:SB:334:LEU:H | 1.81 | 0.45 |
| 1:T:198:VAL:HG11 | 1:T:204:TYR:CZ | 2.51 | 0.45 |
| 1:T:310:LEU:HD23 | 1:T:314:GLU:OE1 | 2.16 | 0.45 |
| 1:T:391:GLN:HG2 | 1:T:398:VAL:HG22 | 1.98 | 0.45 |
| 1:T:398:VAL:HG12 | 1:T:399:ARG:N | 2.31 | 0.45 |
| 1:TA:520:PRO:O | 1:UA:563:SER:O | 2.34 | 0.45 |
| 1:UA:126:LEU:C | 1:UA:127:LEU:HD22 | 2.40 | 0.45 |
| 1:UA:541:LEU:HD22 | 1:UA:603:VAL:HG13 | 1.97 | 0.45 |
| 1:UA:575:ILE:HG22 | 1:UA:579:VAL:HG23 | 1.98 | 0.45 |
| 1:UA:655:GLN:HA | 1:UA:658:VAL:HG12 | 1.98 | 0.45 |
| 1:UB:65:VAL:HB | 1:UB:81:VAL:HG21 | 1.98 | 0.45 |
| 1:UB:467:ALA:HB2 | 1:UB:518:LEU:HD23 | 1.97 | 0.45 |
| 1:VA:398:VAL:HG21 | 1:VA:415:TRP:CD2 | 2.51 | 0.45 |
| 1:VB:122:HIS:HA | 1:VB:144:LEU:HA | 1.97 | 0.45 |
| 1:VB:381:PRO:C | 1:VB:382:LEU:HD23 | 2.40 | 0.45 |
| 1:W:176:LEU:HD12 | 1:W:210:GLU:HB3 | 1.98 | 0.45 |
| 1:WA:10:ILE:HD12 | 1:WA:33:LYS:N | 2.31 | 0.45 |
| 1:X:168:ILE:HD12 | 1:X:200:THR:O | 2.15 | 0.45 |
| 1:XA:58:TYR:HA | 1:XA:93:ALA:HB3 | 1.98 | 0.45 |
| 1:XB:176:LEU:HA | 1:XB:212:VAL:HA | 1.97 | 0.45 |
| 1:XB:765:VAL:HG22 | 1:YB:759:LEU:CD2 | 2.36 | 0.45 |
| 1:YA:523:PHE:CE1 | 1:YA:545:TRP:CD1 | 3.04 | 0.45 |
| 1:YB:591:PHE:O | 1:YB:595:SER:N | 2.49 | 0.45 |
| 1:Z:374:VAL:HG12 | 1:Z:375:GLU:N | 2.31 | 0.45 |
| 1:ZB:172:GLN:C | 1:ZB:215:LEU:HD11 | 2.41 | 0.45 |
| 1:A:125:ALA:HB3 | 1:A:141:ASP:HB3 | 1.97 | 0.45 |
| 1:A:203:ALA:HB2 | 1:B:192:THR:HB | 1.98 | 0.45 |
| 1:A:599:ILE:O | 1:A:600:ARG:C | 2.59 | 0.45 |
| 1:AA:777:LEU:CD1 | 1:AA:781:VAL:HG13 | 2.47 | 0.45 |
| 1:AB:65:VAL:HG23 | 1:AB:67:ARG:HG3 | 1.98 | 0.45 |
| 1:AB:391:GLN:HA | 1:AB:398:VAL:HA | 1.98 | 0.45 |
| 1:AC:227:LEU:HA | 1:AC:270:VAL:HA | 1.98 | 0.45 |
| 1:BA:526:VAL:O | 1:BA:527:ILE:HG23 | 2.16 | 0.45 |
| 1:BB:19:LEU:HD12 | 1:BB:25:VAL:C | 2.42 | 0.45 |
| 1:BB:124:LYS:HB3 | 1:BB:158:GLU:OE2 | 2.16 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:BB:160:VAL:HG12 | 1:BB:161:GLU:N | 2.31 | 0.45 |
| 1:C:804:PRO:HA | 1:C:807:ILE:HD12 | 1.98 | 0.45 |
| 1:CA:121:LEU:HD12 | 1:CA:159:VAL:HG13 | 1.97 | 0.45 |
| 1:CB:221:LEU:HD11 | 1:CB:251:VAL:HG23 | 1.98 | 0.45 |
| 1:CB:282:CYS:O | 1:CB:301:VAL:HG23 | 2.17 | 0.45 |
| 1:DA:56:ARG:O | 1:DA:111:PRO:HA | 2.16 | 0.45 |
| 1:DA:336:ALA:HB2 | 1:DA:357:TRP:HZ3 | 1.81 | 0.45 |
| 1:DA:772:TYR:CD1 | 1:EA:770:LEU:HD11 | 2.51 | 0.45 |
| 1:DB:61:VAL:O | 1:DB:61:VAL:HG23 | 2.15 | 0.45 |
| 1:DB:145:PHE:CG | 1:DB:146:GLU:N | 2.84 | 0.45 |
| 1:E:54:PRO:HA | 1:F:86:ALA:HB1 | 1.98 | 0.45 |
| 1:F:57:HIS:HB3 | 1:F:109:ILE:HG22 | 1.98 | 0.45 |
| 1:FB:658:VAL:HG13 | 1:FB:659:GLN:N | 2.32 | 0.45 |
| 1:GA:16:ILE:HD11 | 1:GA:47:PRO:N | 2.31 | 0.45 |
| 1:GA:427:LEU:HD12 | 1:GA:428:ASN:N | 2.30 | 0.45 |
| 1:H:597:ARG:O | 1:H:601:THR:HG23 | 2.15 | 0.45 |
| 1:HA:36:ILE:HD12 | 1:HA:36:ILE:N | 2.31 | 0.45 |
| 1:HA:121:LEU:HD13 | 1:HA:123:LEU:HD21 | 1.98 | 0.45 |
| 1:HA:165:ALA:HB1 | 1:HA:203:ALA:O | 2.16 | 0.45 |
| 1:HA:168:ILE:O | 1:HA:168:ILE:HG13 | 2.16 | 0.45 |
| 1:HA:340:LEU:HD13 | 1:HA:345:ASP:HB2 | 1.97 | 0.45 |
| 1:HB:122:HIS:ND1 | 1:HB:160:VAL:HB | 2.32 | 0.45 |
| 1:HB:458:VAL:HB | 1:HB:489:LEU:HD12 | 1.97 | 0.45 |
| 1:I:267:VAL:O | 1:I:268:LEU:HD12 | 2.15 | 0.45 |
| 1:IA:60:THR:HB | 1:IA:90:ILE:HG13 | 1.98 | 0.45 |
| 1:IA:338:GLN:HB3 | 1:IA:339:PRO:HD2 | 1.99 | 0.45 |
| 1:IB:539:LEU:HD11 | 1:IB:541:LEU:HD11 | 1.98 | 0.45 |
| 1:J:124:LYS:N | 1:J:160:VAL:HG23 | 2.32 | 0.45 |
| 1:JA:226:ALA:O | 1:JA:271:VAL:HG22 | 2.16 | 0.45 |
| 1:JA:388:ILE:C | 1:JA:457:VAL:HG23 | 2.42 | 0.45 |
| 1:JB:109:ILE:HD12 | 1:JB:109:ILE:N | 2.30 | 0.45 |
| 1:JB:120:ALA:CB | 1:JB:205:LEU:HD21 | 2.46 | 0.45 |
| 1:JB:187:GLY:O | 1:JB:188:LYS:C | 2.60 | 0.45 |
| 1:JB:426:LEU:C | 1:JB:426:LEU:HD23 | 2.41 | 0.45 |
| 1:JB:522:PHE:HA | 1:JB:543:TYR:O | 2.16 | 0.45 |
| 1:K:51:VAL:HG11 | 1:K:97:PHE:CE2 | 2.52 | 0.45 |
| 1:KA:326:LEU:O | 1:KA:362:PRO:HA | 2.16 | 0.45 |
| 1:KB:51:VAL:O | 1:KB:96:PRO:HA | 2.15 | 0.45 |
| 1:KB:212:VAL:O | 1:KB:212:VAL:HG23 | 2.15 | 0.45 |
| 1:L:288:VAL:O | 1:L:288:VAL:HG23 | 2.17 | 0.45 |
| 1:L:406:TYR:CG | 1:L:407:MET:N | 2.84 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:L:419:LEU:HB2 | 1:L:422:GLY:O | 2.16 | 0.45 |
| 1:LA:388:ILE:HA | 1:LA:457:VAL:HG23 | 1.99 | 0.45 |
| 1:LB:3:THR:HG23 | 1:LB:43:VAL:HG23 | 1.98 | 0.45 |
| 1:LB:326:LEU:O | 1:LB:362:PRO:HA | 2.16 | 0.45 |
| 1:M:472:ASP:HA | 1:M:493:GLU:HA | 1.98 | 0.45 |
| 1:MA:15:TYR:CD1 | 1:MA:48:MET:O | 2.70 | 0.45 |
| 1:N:168:ILE:HG22 | 1:N:215:LEU:HD13 | 1.98 | 0.45 |
| 1:NA:176:LEU:HD21 | 1:NA:196:TRP:CE2 | 2.51 | 0.45 |
| 1:NA:471:TYR:HD2 | 1:NA:478:ALA:HB2 | 1.81 | 0.45 |
| 1:NB:7:ILE:O | 1:NB:8:ILE:C | 2.60 | 0.45 |
| 1:NB:633:LEU:HD12 | 1:NB:634:VAL:N | 2.32 | 0.45 |
| 1:OA:398:VAL:HG22 | 1:OA:415:TRP:CD1 | 2.51 | 0.45 |
| 1:PB:704:LYS:HA | 1:PB:707:LEU:HD12 | 1.98 | 0.45 |
| 1:QA:173:ALA:CB | 1:QA:199:THR:HG22 | 2.45 | 0.45 |
| 1:QA:195:GLU:CB | 1:QA:263:VAL:HG11 | 2.46 | 0.45 |
| 1:QB:227:LEU:HA | 1:QB:270:VAL:HG22 | 1.98 | 0.45 |
| 1:QB:230:ARG:CG | 1:QB:231:ALA:N | 2.78 | 0.45 |
| 1:RA:198:VAL:HG11 | 1:RA:204:TYR:CD2 | 2.52 | 0.45 |
| 1:RA:281:TYR:HB3 | 1:RA:323:VAL:HG12 | 1.97 | 0.45 |
| 1:RA:495:PHE:CG | 1:RA:514:LEU:HD21 | 2.52 | 0.45 |
| 1:S:802:ILE:HG23 | 1:S:803:GLY:N | 2.31 | 0.45 |
| 1:SA:283:VAL:HG22 | 1:SA:301:VAL:HG23 | 1.97 | 0.45 |
| 1:SA:459:SER:HA | 1:SA:486:LEU:HD11 | 1.98 | 0.45 |
| 1:T:178:ALA:HB1 | 1:T:182:CYS:SG | 2.56 | 0.45 |
| 1:TA:221:LEU:HD21 | 1:TA:227:LEU:HB3 | 1.98 | 0.45 |
| 1:TA:731:GLU:OE2 | 1:TA:735:ILE:HD11 | 2.16 | 0.45 |
| 1:TA:768:LEU:HD13 | 1:UA:763:GLN:OE1 | 2.17 | 0.45 |
| 1:TB:767:GLU:O | 1:TB:771:VAL:HG23 | 2.15 | 0.45 |
| 1:UB:62:ALA:HB2 | 1:UB:106:GLU:OE1 | 2.17 | 0.45 |
| 1:UB:229:LEU:HD12 | 1:UB:251:VAL:HG13 | 1.97 | 0.45 |
| 1:V:54:PRO:HA | 1:W:86:ALA:HB1 | 1.98 | 0.45 |
| 1:VB:635:VAL:O | 1:VB:636:SER:C | 2.60 | 0.45 |
| 1:W:218:ALA:HB1 | 1:W:259:HIS:O | 2.15 | 0.45 |
| 1:WA:527:ILE:HD11 | 1:WA:539:LEU:HD23 | 1.98 | 0.45 |
| 1:WA:535:ALA:CB | 1:WA:650:THR:HG23 | 2.46 | 0.45 |
| 1:WB:5:GLU:O | 1:WB:8:ILE:HG13 | 2.16 | 0.45 |
| 1:XA:260:VAL:O | 1:XA:260:VAL:HG13 | 2.16 | 0.45 |
| 1:XA:269:GLY:O | 1:XA:270:VAL:HG23 | 2.15 | 0.45 |
| 1:XB:222:THR:O | 1:XB:252:THR:HG22 | 2.16 | 0.45 |
| 1:XB:380:ILE:H | 1:XB:380:ILE:HD12 | 1.80 | 0.45 |
| 1:XB:724:ALA:HB2 | 1:YB:715:ALA:HA | 1.99 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XB:807:ILE:HG22 | 1:XB:807:ILE:O | 2.17 | 0.45 |
| 1:YA:175:ARG:HH21 | 1:YA:263:VAL:HG12 | 1.81 | 0.45 |
| 1:YA:208:VAL:HG23 | 1:YA:209:PHE:CD2 | 2.51 | 0.45 |
| 1:YA:641:GLN:HG2 | 1:YA:641:GLN:O | 2.16 | 0.45 |
| 1:Z:643:VAL:HG23 | 1:Z:643:VAL:O | 2.16 | 0.45 |
| 1:A:106:GLU:N | 1:A:106:GLU:OE1 | 2.50 | 0.45 |
| 1:AA:52:THR:HG22 | 1:AA:96:PRO:HG3 | 1.98 | 0.45 |
| 1:AA:528:THR:HG22 | 1:AA:536:ARG:HH11 | 1.82 | 0.45 |
| 1:AC:16:ILE:O | 1:AC:29:GLU:HB2 | 2.16 | 0.45 |
| 1:AC:168:ILE:HD12 | 1:AC:172:GLN:O | 2.15 | 0.45 |
| 1:AC:215:LEU:HD12 | 1:AC:216:VAL:H | 1.81 | 0.45 |
| 1:AC:810:LEU:HD21 | 1:OA:808:ARG:HG3 | 1.98 | 0.45 |
| 1:B:175:ARG:HH21 | 1:B:263:VAL:HG12 | 1.81 | 0.45 |
| 1:B:522:PHE:HA | 1:B:543:TYR:O | 2.17 | 0.45 |
| 1:BB:601:THR:HG21 | 1:BB:620:PRO:CB | 2.45 | 0.45 |
| 1:C:121:LEU:HD12 | 1:C:121:LEU:C | 2.42 | 0.45 |
| 1:CA:468:VAL:HG12 | 1:CA:469:GLN:N | 2.32 | 0.45 |
| 1:CB:333:LEU:HD23 | 1:CB:374:VAL:HG11 | 1.98 | 0.45 |
| 1:D:69:ALA:HB2 | 1:D:74:LEU:CD2 | 2.40 | 0.45 |
| 1:D:543:TYR:CD1 | 1:D:638:VAL:HG13 | 2.51 | 0.45 |
| 1:DA:63:ASN:CG | 1:DA:83:LEU:HD23 | 2.41 | 0.45 |
| 1:DA:106:GLU:N | 1:DA:106:GLU:OE1 | 2.49 | 0.45 |
| 1:DB:175:ARG:HE | 1:DB:213:LEU:CB | 2.30 | 0.45 |
| 1:DB:175:ARG:HE | 1:DB:213:LEU:HB3 | 1.82 | 0.45 |
| 1:E:3:THR:O | 1:E:4:GLU:C | 2.58 | 0.45 |
| 1:EA:18:VAL:HG21 | 1:EA:41:GLU:OE1 | 2.16 | 0.45 |
| 1:EA:257:GLU:HG3 | 1:FA:245:THR:HB | 1.98 | 0.45 |
| 1:EA:324:TYR:HB3 | 1:EA:332:LEU:HD11 | 1.98 | 0.45 |
| 1:F:520:PRO:HA | 1:F:545:TRP:O | 2.16 | 0.45 |
| 1:F:676:GLU:OE2 | 1:F:680:LEU:HD23 | 2.16 | 0.45 |
| 1:FA:575:ILE:HD12 | 1:FA:575:ILE:H | 1.82 | 0.45 |
| 1:G:69:ALA:N | 1:G:74:LEU:HD11 | 2.32 | 0.45 |
| 1:G:405:THR:HG23 | 1:H:396:GLY:HA2 | 1.98 | 0.45 |
| 1:GA:122:HIS:CG | 1:GA:123:LEU:N | 2.84 | 0.45 |
| 1:GA:157:VAL:HG12 | 1:GA:158:GLU:N | 2.31 | 0.45 |
| 1:GB:172:GLN:HA | 1:GB:217:ASP:OD1 | 2.17 | 0.45 |
| 1:GB:643:VAL:O | 1:GB:643:VAL:HG23 | 2.16 | 0.45 |
| 1:H:54:PRO:O | 1:H:55:PRO:C | 2.58 | 0.45 |
| 1:HA:318:GLN:O | 1:HA:318:GLN:HG2 | 2.16 | 0.45 |
| 1:HB:18:VAL:O | 1:HB:18:VAL:HG13 | 2.15 | 0.45 |
| 1:HB:768:LEU:HD23 | 1:HB:768:LEU:C | 2.42 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:I:201:VAL:O | 1:I:201:VAL:HG12 | 2.16 | 0.45 |
| 1:I:358:LEU:HD23 | 1:I:359:ILE:C | 2.41 | 0.45 |
| 1:I:462:VAL:HB | 1:I:485:GLU:HB3 | 1.98 | 0.45 |
| 1:IA:92:LEU:HD12 | 1:IA:92:LEU:N | 2.32 | 0.45 |
| 1:IB:9:ARG:HB3 | 1:IB:34:THR:HG23 | 1.97 | 0.45 |
| 1:IB:744:ALA:O | 1:IB:748:ALA:HB2 | 2.15 | 0.45 |
| 1:J:95:ASP:O | 1:J:96:PRO:C | 2.59 | 0.45 |
| 1:J:526:VAL:HG23 | 1:J:526:VAL:O | 2.16 | 0.45 |
| 1:JA:180:LYS:HA | 1:JA:192:THR:OG1 | 2.16 | 0.45 |
| 1:JB:105:LEU:H | 1:JB:105:LEU:HD23 | 1.82 | 0.45 |
| 1:JB:332:LEU:O | 1:JB:359:ILE:HG22 | 2.17 | 0.45 |
| 1:K:228:HIS:ND1 | 1:K:268:LEU:HD22 | 2.32 | 0.45 |
| 1:KA:283:VAL:HG12 | 1:KA:284:ILE:N | 2.30 | 0.45 |
| 1:L:301:VAL:HG22 | 1:L:302:VAL:N | 2.32 | 0.45 |
| 1:LA:628:PHE:HB2 | 1:LA:633:LEU:HB3 | 1.97 | 0.45 |
| 1:LB:391:GLN:HA | 1:LB:398:VAL:HA | 1.99 | 0.45 |
| 1:LB:473:TYR:N | 1:LB:473:TYR:CD1 | 2.84 | 0.45 |
| 1:LB:572:CYS:O | 1:LB:576:ALA:HB2 | 2.16 | 0.45 |
| 1:NA:218:ALA:HA | 1:NA:260:VAL:HA | 1.98 | 0.45 |
| 1:NA:235:PHE:CE1 | 1:NA:264:HIS:HB3 | 2.50 | 0.45 |
| 1:NB:8:ILE:H | 1:NB:8:ILE:HD12 | 1.81 | 0.45 |
| 1:NB:384:GLU:O | 1:NB:402:ILE:HG22 | 2.16 | 0.45 |
| 1:O:625:GLN:OE1 | 1:O:634:VAL:HG13 | 2.17 | 0.45 |
| 1:OA:30:VAL:HG23 | 1:OA:98:PRO:HD3 | 1.98 | 0.45 |
| 1:OA:67:ARG:CD | 1:OA:73:VAL:HG22 | 2.47 | 0.45 |
| 1:OB:383:ASP:HB3 | 1:OB:386:GLU:HB3 | 1.98 | 0.45 |
| 1:OB:410:GLN:O | 1:OB:411:ASP:OD1 | 2.35 | 0.45 |
| 1:OB:425:GLU:HA | 1:OB:514:LEU:HD21 | 1.98 | 0.45 |
| 1:P:633:LEU:HD12 | 1:P:634:VAL:H | 1.81 | 0.45 |
| 1:Q:280:ASN:HA | 1:Q:321:GLN:O | 2.16 | 0.45 |
| 1:QA:467:ALA:O | 1:QA:516:LEU:HB3 | 2.16 | 0.45 |
| 1:QB:10:ILE:HD11 | 1:QB:33:LYS:HB2 | 1.99 | 0.45 |
| 1:QB:176:LEU:HD23 | 1:QB:176:LEU:H | 1.80 | 0.45 |
| 1:QB:339:PRO:HD3 | 1:QB:353:ALA:HB2 | 1.98 | 0.45 |
| 1:RA:283:VAL:CG2 | 1:RA:301:VAL:HG23 | 2.30 | 0.45 |
| 1:RB:8:ILE:H | 1:RB:8:ILE:HD12 | 1.82 | 0.45 |
| 1:RB:480:VAL:HG12 | 1:RB:481:VAL:N | 2.30 | 0.45 |
| 1:SA:63:ASN:HA | 1:SA:85:HIS:HA | 1.98 | 0.45 |
| 1:SA:122:HIS:CD2 | 1:SA:208:VAL:HG11 | 2.52 | 0.45 |
| 1:SA:480:VAL:HG12 | 1:SA:481:VAL:N | 2.31 | 0.45 |
| 1:SB:16:ILE:HD11 | 1:SB:47:PRO:CD | 2.46 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:SB:55:PRO:O | 1:SB:57:HIS:N | 2.50 | 0.45 |
| 1:TA:358:LEU:HD13 | 1:TA:377:ARG:HD3 | 1.98 | 0.45 |
| 1:TB:169:ARG:O | 1:TB:170:GLN:C | 2.59 | 0.45 |
| 1:UB:172:GLN:HB3 | 1:UB:215:LEU:HD11 | 1.99 | 0.45 |
| 1:UB:537:LEU:CD2 | 1:UB:643:VAL:HG12 | 2.46 | 0.45 |
| 1:UB:793:LYS:HB2 | 1:VB:788:ALA:HB1 | 1.97 | 0.45 |
| 1:V:531:THR:HG21 | 1:V:588:PHE:HA | 1.99 | 0.45 |
| 1:V:761:ARG:CB | 1:W:755:THR:HG21 | 2.46 | 0.45 |
| 1:VA:564:VAL:HG11 | 1:VA:570:ASP:HB2 | 1.97 | 0.45 |
| 1:VB:284:ILE:CD1 | 1:VB:287:PRO:HB3 | 2.46 | 0.45 |
| 1:VB:703:ARG:N | 1:WB:693:ILE:HG21 | 2.30 | 0.45 |
| 1:WB:530:GLU:O | 1:WB:583:VAL:HG22 | 2.16 | 0.45 |
| 1:WB:606:PHE:O | 1:WB:606:PHE:CG | 2.70 | 0.45 |
| 1:WB:681:GLU:CD | 1:WB:685:ARG:HE | 2.24 | 0.45 |
| 1:X:215:LEU:HD12 | 1:X:216:VAL:H | 1.81 | 0.45 |
| 1:X:220:ILE:HD12 | 1:Y:245:THR:HG21 | 1.99 | 0.45 |
| 1:X:221:LEU:HD11 | 1:X:251:VAL:HG23 | 1.98 | 0.45 |
| 1:XA:167:ILE:HG21 | 1:YA:193:GLY:HA3 | 1.98 | 0.45 |
| 1:XA:380:ILE:O | 1:XA:382:LEU:HD12 | 2.17 | 0.45 |
| 1:XB:250:LEU:O | 1:XB:251:VAL:HG13 | 2.17 | 0.45 |
| 1:XB:262:ASP:OD1 | 1:XB:263:VAL:HG22 | 2.17 | 0.45 |
| 1:XB:489:LEU:HD11 | 1:XB:495:PHE:CE2 | 2.51 | 0.45 |
| 1:Y:384:GLU:O | 1:Y:402:ILE:HG22 | 2.16 | 0.45 |
| 1:YA:235:PHE:CE1 | 1:YA:243:ARG:HB2 | 2.51 | 0.45 |
| 1:YA:279:HIS:CE1 | 1:ZA:337:LEU:HD13 | 2.52 | 0.45 |
| 1:YB:273:ILE:O | 1:YB:273:ILE:CG2 | 2.65 | 0.45 |
| 1:YB:410:GLN:O | 1:YB:411:ASP:OD1 | 2.33 | 0.45 |
| 1:ZB:331:GLY:O | 1:ZB:358:LEU:HD11 | 2.16 | 0.45 |
| 1:ZB:468:VAL:H | 1:ZB:481:VAL:HG23 | 1.81 | 0.45 |
| 1:A:55:PRO:O | 1:A:56:ARG:HG2 | 2.17 | 0.45 |
| 1:A:104:VAL:HG22 | 1:A:105:LEU:N | 2.30 | 0.45 |
| 1:AA:57:HIS:HB3 | 1:AA:109:ILE:HG23 | 1.99 | 0.45 |
| 1:AA:230:ARG:CZ | 1:AA:268:LEU:HD21 | 2.46 | 0.45 |
| 1:AA:374:VAL:HG12 | 1:AA:375:GLU:H | 1.82 | 0.45 |
| 1:AB:123:LEU:HB2 | 1:AB:143:TRP:CE2 | 2.52 | 0.45 |
| 1:AC:688:LEU:HD22 | 1:OA:679:ARG:HA | 1.99 | 0.45 |
| 1:B:380:ILE:H | 1:B:380:ILE:HD12 | 1.80 | 0.45 |
| 1:B:567:PHE:CG | 1:B:568:VAL:N | 2.85 | 0.45 |
| 1:BA:31:GLY:N | 1:BA:32:PRO:HD2 | 2.32 | 0.45 |
| 1:BB:374:VAL:HG12 | 1:BB:375:GLU:N | 2.32 | 0.45 |
| 1:C:120:ALA:HB3 | 1:C:205:LEU:HD21 | 1.97 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:CA:459:SER:HA | 1:CA:488:SER:HA | 1.98 | 0.45 |
| 1:D:5:GLU:OE1 | 1:D:8:ILE:N | 2.50 | 0.45 |
| 1:D:180:LYS:HD2 | 1:D:181:GLU:O | 2.16 | 0.45 |
| 1:D:368:SER:HB3 | 1:D:371:VAL:HB | 1.99 | 0.45 |
| 1:D:549:VAL:CG2 | 1:D:561:LEU:HD11 | 2.47 | 0.45 |
| 1:DA:516:LEU:HD23 | 1:DA:517:LEU:N | 2.30 | 0.45 |
| 1:DA:747:LYS:O | 1:DA:751:LEU:HD23 | 2.17 | 0.45 |
| 1:DB:326:LEU:HD22 | 1:DB:330:GLN:HB3 | 1.99 | 0.45 |
| 1:E:471:TYR:HA | 1:E:477:ARG:O | 2.16 | 0.45 |
| 1:EA:143:TRP:CH2 | 1:EA:157:VAL:HG13 | 2.52 | 0.45 |
| 1:EB:176:LEU:HD21 | 1:EB:196:TRP:CD1 | 2.51 | 0.45 |
| 1:F:168:ILE:O | 1:F:168:ILE:HG13 | 2.17 | 0.45 |
| 1:F:783:LYS:HB3 | 1:G:777:LEU:HD13 | 1.99 | 0.45 |
| 1:FA:460:TYR:CG | 1:FA:461:ARG:N | 2.83 | 0.45 |
| 1:FA:521:ASP:CG | 1:FA:522:PHE:N | 2.74 | 0.45 |
| 1:FB:126:LEU:C | 1:FB:127:LEU:HD22 | 2.41 | 0.45 |
| 1:G:218:ALA:HA | 1:G:260:VAL:HA | 1.98 | 0.45 |
| 1:G:333:LEU:HD12 | 1:G:334:LEU:N | 2.32 | 0.45 |
| 1:GA:424:GLU:HG2 | 1:GA:425:GLU:N | 2.31 | 0.45 |
| 1:GB:480:VAL:HG12 | 1:GB:481:VAL:N | 2.31 | 0.45 |
| 1:HB:165:ALA:O | 1:HB:203:ALA:HB1 | 2.17 | 0.45 |
| 1:I:126:LEU:O | 1:I:127:LEU:HD22 | 2.16 | 0.45 |
| 1:IA:358:LEU:O | 1:IA:358:LEU:HD23 | 2.16 | 0.45 |
| 1:IA:495:PHE:CD2 | 1:IA:514:LEU:HD11 | 2.51 | 0.45 |
| 1:IB:390:VAL:HG12 | 1:IB:414:LEU:HA | 1.98 | 0.45 |
| 1:IB:643:VAL:O | 1:IB:643:VAL:HG23 | 2.16 | 0.45 |
| 1:J:326:LEU:HD11 | 1:J:359:ILE:HG23 | 1.99 | 0.45 |
| 1:J:769:GLU:O | 1:J:773:ALA:N | 2.50 | 0.45 |
| 1:JA:175:ARG:NE | 1:JA:263:VAL:HG12 | 2.32 | 0.45 |
| 1:JA:751:LEU:HD22 | 1:JA:754:GLU:OE2 | 2.17 | 0.45 |
| 1:JA:775:ALA:HB1 | 1:KA:770:LEU:HD22 | 1.98 | 0.45 |
| 1:K:301:VAL:HG22 | 1:K:302:VAL:N | 2.31 | 0.45 |
| 1:K:388:ILE:C | 1:K:457:VAL:HG23 | 2.42 | 0.45 |
| 1:KA:67:ARG:HA | 1:KA:73:VAL:HA | 1.99 | 0.45 |
| 1:KB:7:ILE:O | 1:KB:8:ILE:C | 2.59 | 0.45 |
| 1:LA:405:THR:HG23 | 1:MA:396:GLY:HA3 | 1.98 | 0.45 |
| 1:LA:735:ILE:HD13 | 1:MA:727:GLU:HG2 | 1.98 | 0.45 |
| 1:LB:233:ARG:HA | 1:LB:245:THR:HG23 | 1.99 | 0.45 |
| 1:MA:81:VAL:HG13 | 1:MA:83:LEU:CD1 | 2.47 | 0.45 |
| 1:MA:143:TRP:CH2 | 1:MA:157:VAL:HG13 | 2.51 | 0.45 |
| 1:MA:539:LEU:HD12 | 1:MA:642:SER:O | 2.17 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:MB:126:LEU:HD12 | 1:MB:155:LYS:O | 2.16 | 0.45 |
| 1:N:197:LEU:CD2 | 1:N:216:VAL:HG11 | 2.47 | 0.45 |
| 1:OA:288:VAL:HA | 1:OA:294:ASN:HA | 1.97 | 0.45 |
| 1:OA:392:ASP:O | 1:OA:396:GLY:N | 2.50 | 0.45 |
| 1:OA:763:GLN:HA | 1:OA:766:ARG:HB2 | 1.99 | 0.45 |
| 1:OB:218:ALA:HA | 1:OB:260:VAL:HA | 1.97 | 0.45 |
| 1:OB:239:ARG:HA | 1:OB:239:ARG:NE | 2.31 | 0.45 |
| 1:P:6:PHE:O | 1:P:36:ILE:HA | 2.17 | 0.45 |
| 1:P:167:ILE:HD12 | 1:Q:192:THR:HG21 | 1.99 | 0.45 |
| 1:PA:95:ASP:OD1 | 1:PA:95:ASP:C | 2.59 | 0.45 |
| 1:PA:113:GLN:NE2 | 1:PA:159:VAL:HG11 | 2.32 | 0.45 |
| 1:PA:753:ILE:HG23 | 1:QA:748:ALA:HB2 | 1.97 | 0.45 |
| 1:PB:65:VAL:HG11 | 1:PB:100:TYR:HB2 | 1.97 | 0.45 |
| 1:Q:115:VAL:HG23 | 1:Q:147:GLY:O | 2.17 | 0.45 |
| 1:QA:539:LEU:HD12 | 1:QA:642:SER:O | 2.17 | 0.45 |
| 1:QB:230:ARG:HB3 | 1:QB:268:LEU:HD11 | 1.98 | 0.45 |
| 1:RA:17:HIS:HB2 | 1:RA:44:LEU:HB2 | 1.99 | 0.45 |
| 1:RA:380:ILE:HD12 | 1:RA:380:ILE:H | 1.81 | 0.45 |
| 1:RB:521:ASP:O | 1:RB:545:TRP:CD1 | 2.70 | 0.45 |
| 1:S:137:VAL:O | 1:S:137:VAL:HG13 | 2.17 | 0.45 |
| 1:S:489:LEU:HD13 | 1:S:493:GLU:O | 2.17 | 0.45 |
| 1:SA:46:ALA:HB1 | 1:SA:47:PRO:HD2 | 1.97 | 0.45 |
| 1:SB:262:ASP:H | 1:SB:265:GLU:HB2 | 1.81 | 0.45 |
| 1:SB:497:VAL:HG22 | 1:SB:498:LEU:N | 2.30 | 0.45 |
| 1:T:531:THR:HG21 | 1:T:588:PHE:CA | 2.47 | 0.45 |
| 1:TB:227:LEU:HD12 | 1:TB:269:GLY:O | 2.17 | 0.45 |
| 1:TB:573:LYS:HG3 | 1:TB:574:ALA:N | 2.32 | 0.45 |
| 1:UB:15:TYR:HA | 1:UB:29:GLU:O | 2.16 | 0.45 |
| 1:VA:173:ALA:HA | 1:VA:199:THR:HG22 | 1.98 | 0.45 |
| 1:VB:218:ALA:HA | 1:VB:260:VAL:HA | 1.98 | 0.45 |
| 1:VB:545:TRP:HA | 1:VB:636:SER:H | 1.82 | 0.45 |
| 1:W:155:LYS:HG3 | 1:W:156:GLU:CD | 2.41 | 0.45 |
| 1:WA:219:VAL:HG12 | 1:WA:261:PRO:HD3 | 1.98 | 0.45 |
| 1:WA:227:LEU:HA | 1:WA:270:VAL:HG22 | 1.99 | 0.45 |
| 1:WA:523:PHE:CZ | 1:WA:568:VAL:HG23 | 2.51 | 0.45 |
| 1:WB:235:PHE:CE1 | 1:WB:264:HIS:HB3 | 2.51 | 0.45 |
| 1:WB:316:LEU:HD12 | 1:WB:317:GLU:H | 1.81 | 0.45 |
| 1:WB:334:LEU:HD11 | 1:WB:359:ILE:CG2 | 2.47 | 0.45 |
| 1:WB:806:THR:HG22 | 1:WB:806:THR:O | 2.16 | 0.45 |
| 1:X:167:ILE:HG12 | 1:Y:192:THR:HG22 | 1.98 | 0.45 |
| 1:XA:586:VAL:HG23 | 1:XA:591:PHE:HB2 | 1.98 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XB:216:VAL:HG13 | 1:XB:260:VAL:HG21 | 1.98 | 0.45 |
| 1:Y:516:LEU:HD13 | 1:Y:567:PHE:CE2 | 2.52 | 0.45 |
| 1:YB:16:ILE:O | 1:YB:29:GLU:N | 2.49 | 0.45 |
| 1:YB:121:LEU:HD21 | 1:YB:145:PHE:HD2 | 1.81 | 0.45 |
| 1:YB:230:ARG:H | 1:YB:268:LEU:HD13 | 1.80 | 0.45 |
| 1:YB:391:GLN:O | 1:YB:413:VAL:O | 2.34 | 0.45 |
| 1:Z:65:VAL:HG23 | 1:Z:67:ARG:HD3 | 1.98 | 0.45 |
| 1:ZA:227:LEU:HD12 | 1:ZA:228:HIS:N | 2.31 | 0.45 |
| 1:ZB:625:GLN:HB2 | 1:ZB:635:VAL:O | 2.16 | 0.45 |
| 1:AA:127:LEU:HD11 | 1:Z:56:ARG:HG3 | 1.99 | 0.45 |
| 1:AA:792:VAL:HA | 1:Z:798:MET:HE1 | 1.99 | 0.45 |
| 1:AB:9:ARG:HB3 | 1:AB:34:THR:HG22 | 1.99 | 0.45 |
| 1:AB:59:CYS:SG | 1:AB:105:LEU:HD11 | 2.57 | 0.45 |
| 1:AB:182:CYS:HB2 | 1:AB:209:PHE:CE1 | 2.52 | 0.45 |
| 1:AC:166:THR:O | 1:AC:166:THR:HG23 | 2.16 | 0.45 |
| 1:B:34:THR:HG22 | 1:B:34:THR:O | 2.17 | 0.45 |
| 1:BA:74:LEU:HD13 | 1:BA:82:ARG:HH21 | 1.82 | 0.45 |
| 1:BA:126:LEU:C | 1:BA:127:LEU:HD22 | 2.41 | 0.45 |
| 1:BA:262:ASP:OD1 | 1:BA:263:VAL:HG22 | 2.17 | 0.45 |
| 1:BA:357:TRP:O | 1:BA:357:TRP:CG | 2.69 | 0.45 |
| 1:BA:658:VAL:HG23 | 1:BA:662:ILE:HD13 | 1.99 | 0.45 |
| 1:BA:687:ARG:O | 1:BA:690:ARG:HB3 | 2.17 | 0.45 |
| 1:BB:363:LEU:C | 1:CB:353:ALA:HB3 | 2.42 | 0.45 |
| 1:BB:498:LEU:HD11 | 1:BB:515:CYS:C | 2.42 | 0.45 |
| 1:C:16:ILE:HD11 | 1:C:47:PRO:N | 2.32 | 0.45 |
| 1:CB:329:GLN:O | 1:CB:407:MET:HE3 | 2.16 | 0.45 |
| 1:CB:405:THR:HG21 | 1:DB:393:VAL:O | 2.16 | 0.45 |
| 1:D:633:LEU:HD12 | 1:D:634:VAL:H | 1.82 | 0.45 |
| 1:DA:53:VAL:HB | 1:DA:94:GLN:O | 2.16 | 0.45 |
| 1:E:416:GLU:CD | 1:E:455:THR:HG23 | 2.42 | 0.45 |
| 1:EA:168:ILE:O | 1:EA:202:GLY:HA2 | 2.16 | 0.45 |
| 1:EB:157:VAL:HG12 | 1:EB:158:GLU:N | 2.31 | 0.45 |
| 1:EB:223:GLU:OE2 | 1:EB:253:VAL:HG21 | 2.17 | 0.45 |
| 1:F:144:LEU:HD22 | 1:F:163:ILE:HD11 | 1.98 | 0.45 |
| 1:FA:112:LEU:HD12 | 1:FA:151:TYR:O | 2.16 | 0.45 |
| 1:FA:802:ILE:HG21 | 1:FA:807:ILE:HD11 | 1.99 | 0.45 |
| 1:GB:57:HIS:HA | 1:GB:110:THR:O | 2.16 | 0.45 |
| 1:GB:531:THR:HG21 | 1:GB:588:PHE:HA | 1.98 | 0.45 |
| 1:H:174:LEU:HD12 | 1:H:214:ASP:O | 2.17 | 0.45 |
| 1:H:381:PRO:HA | 1:H:405:THR:CG2 | 2.43 | 0.45 |
| 1:H:679:ARG:NH2 | 1:H:680:LEU:HD23 | 2.31 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:HA:516:LEU:HD23 | 1:HA:516:LEU:C | 2.42 | 0.45 |
| 1:HB:121:LEU:CA | 1:HB:162:ILE:HG22 | 2.46 | 0.45 |
| 1:HB:606:PHE:O | 1:HB:606:PHE:CG | 2.70 | 0.45 |
| 1:I:40:ASN:OD1 | 1:I:41:GLU:N | 2.49 | 0.45 |
| 1:I:606:PHE:HB2 | 1:I:621:ARG:O | 2.17 | 0.45 |
| 1:IA:122:HIS:HD2 | 1:IA:208:VAL:HG12 | 1.82 | 0.45 |
| 1:IA:666:THR:O | 1:IA:669:GLN:HG2 | 2.15 | 0.45 |
| 1:IB:9:ARG:HA | 1:IB:34:THR:HA | 1.99 | 0.45 |
| 1:IB:271:VAL:HG23 | 1:IB:309:PHE:CD2 | 2.51 | 0.45 |
| 1:IB:742:LEU:HD11 | 1:IB:746:LEU:HD21 | 1.99 | 0.45 |
| 1:JA:247:GLU:HG2 | 1:JA:248:GLU:N | 2.30 | 0.45 |
| 1:JB:579:VAL:HG23 | 1:JB:580:ARG:N | 2.32 | 0.45 |
| 1:K:15:TYR:CZ | 1:K:48:MET:HE3 | 2.52 | 0.45 |
| 1:K:160:VAL:HG12 | 1:K:161:GLU:N | 2.31 | 0.45 |
| 1:K:267:VAL:C | 1:K:268:LEU:HD12 | 2.41 | 0.45 |
| 1:KA:363:LEU:HA | 1:LA:353:ALA:HB3 | 1.99 | 0.45 |
| 1:KA:735:ILE:HG23 | 1:LA:727:GLU:OE1 | 2.17 | 0.45 |
| 1:KA:747:LYS:O | 1:KA:750:ALA:HB3 | 2.16 | 0.45 |
| 1:KB:90:ILE:HD13 | 1:KB:153:PRO:HB2 | 1.99 | 0.45 |
| 1:KB:122:HIS:CG | 1:KB:123:LEU:N | 2.84 | 0.45 |
| 1:L:526:VAL:O | 1:L:527:ILE:HG23 | 2.17 | 0.45 |
| 1:LA:802:ILE:HG21 | 1:LA:807:ILE:HD11 | 1.97 | 0.45 |
| 1:LB:52:THR:HG22 | 1:LB:96:PRO:HG3 | 1.98 | 0.45 |
| 1:LB:218:ALA:HB1 | 1:LB:259:HIS:CA | 2.46 | 0.45 |
| 1:MB:349:VAL:C | 1:MB:351:HIS:N | 2.75 | 0.45 |
| 1:NB:260:VAL:O | 1:NB:260:VAL:HG13 | 2.17 | 0.45 |
| 1:NB:462:VAL:N | 1:NB:485:GLU:O | 2.50 | 0.45 |
| 1:NB:529:ILE:HD12 | 1:NB:583:VAL:HB | 1.98 | 0.45 |
| 1:NB:747:LYS:O | 1:NB:751:LEU:HD23 | 2.17 | 0.45 |
| 1:OA:333:LEU:HA | 1:OA:358:LEU:HA | 1.99 | 0.45 |
| 1:OA:416:GLU:N | 1:OA:455:THR:HG22 | 2.32 | 0.45 |
| 1:OA:599:ILE:O | 1:OA:603:VAL:HG23 | 2.15 | 0.45 |
| 1:P:500:LEU:HD12 | 1:P:500:LEU:N | 2.32 | 0.45 |
| 1:P:774:ARG:O | 1:P:777:LEU:HB3 | 2.16 | 0.45 |
| 1:PB:334:LEU:HD11 | 1:PB:359:ILE:HB | 1.98 | 0.45 |
| 1:Q:27:ARG:HG2 | 1:Q:28:VAL:N | 2.31 | 0.45 |
| 1:Q:600:ARG:HG3 | 1:Q:601:THR:N | 2.32 | 0.45 |
| 1:QA:395:THR:HG23 | 1:QA:397:LYS:HG3 | 1.98 | 0.45 |
| 1:QB:768:LEU:HD21 | 1:RB:763:GLN:OE1 | 2.16 | 0.45 |
| 1:RA:61:VAL:O | 1:RA:61:VAL:HG23 | 2.15 | 0.45 |
| 1:RB:43:VAL:C | 1:RB:44:LEU:HD22 | 2.41 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:S:662:ILE:HG21 | 1:T:653:ALA:HB1 | 1.98 | 0.45 |
| 1:S:768:LEU:HD23 | 1:S:768:LEU:C | 2.41 | 0.45 |
| 1:SA:460:TYR:CE2 | 1:SA:462:VAL:HG22 | 2.52 | 0.45 |
| 1:SB:125:ALA:HB2 | 1:SB:143:TRP:CZ3 | 2.51 | 0.45 |
| 1:SB:471:TYR:CD2 | 1:SB:478:ALA:HB2 | 2.52 | 0.45 |
| 1:TA:498:LEU:HD11 | 1:TA:562:PHE:HB3 | 1.98 | 0.45 |
| 1:TA:517:LEU:HD12 | 1:UA:563:SER:HA | 1.98 | 0.45 |
| 1:TB:470:VAL:HG12 | 1:TB:471:TYR:N | 2.32 | 0.45 |
| 1:UA:519:GLY:HA3 | 1:VA:563:SER:HB3 | 1.99 | 0.45 |
| 1:UB:175:ARG:CA | 1:UB:197:LEU:HD23 | 2.47 | 0.45 |
| 1:UB:465:ASN:N | 1:UB:483:GLY:HA2 | 2.31 | 0.45 |
| 1:UB:802:ILE:HA | 1:VB:804:PRO:HB2 | 1.99 | 0.45 |
| 1:V:51:VAL:HG13 | 1:V:109:ILE:HD11 | 1.99 | 0.45 |
| 1:V:284:ILE:HD12 | 1:V:287:PRO:CB | 2.46 | 0.45 |
| 1:VA:555:PRO:O | 1:VA:559:ALA:HB2 | 2.16 | 0.45 |
| 1:VB:179:ARG:HE | 1:VB:209:PHE:HA | 1.81 | 0.45 |
| 1:VB:462:VAL:N | 1:VB:485:GLU:O | 2.50 | 0.45 |
| 1:VB:499:SER:O | 1:VB:500:LEU:HD23 | 2.17 | 0.45 |
| 1:VB:706:LEU:HD13 | 1:WB:697:SER:HA | 1.99 | 0.45 |
| 1:WA:751:LEU:HD13 | 1:WA:754:GLU:OE2 | 2.17 | 0.45 |
| 1:WB:679:ARG:NH1 | 1:WB:680:LEU:HD23 | 2.31 | 0.45 |
| 1:WB:772:TYR:HA | 1:XB:770:LEU:HD11 | 1.99 | 0.45 |
| 1:X:224:LYS:HB3 | 1:X:273:ILE:HG22 | 1.99 | 0.45 |
| 1:X:599:ILE:HD13 | 1:X:640:VAL:HG21 | 1.98 | 0.45 |
| 1:XA:253:VAL:HG23 | 1:XA:254:GLN:NE2 | 2.32 | 0.45 |
| 1:XA:458:VAL:HG12 | 1:XA:459:SER:N | 2.30 | 0.45 |
| 1:XB:735:ILE:HD13 | 1:YB:727:GLU:CD | 2.42 | 0.45 |
| 1:Y:706:LEU:HD22 | 1:Z:696:GLN:HB2 | 1.99 | 0.45 |
| 1:Y:731:GLU:CD | 1:Y:734:ARG:HE | 2.25 | 0.45 |
| 1:YB:325:VAL:HA | 1:YB:364:GLU:CG | 2.47 | 0.45 |
| 1:YB:460:TYR:HE2 | 1:YB:462:VAL:HG22 | 1.81 | 0.45 |
| 1:Z:121:LEU:HD23 | 1:Z:162:ILE:CG1 | 2.46 | 0.45 |
| 1:A:579:VAL:O | 1:A:583:VAL:HG12 | 2.16 | 0.45 |
| 1:AA:120:ALA:HB1 | 1:AA:144:LEU:HD13 | 1.97 | 0.45 |
| 1:AA:144:LEU:C | 1:AA:144:LEU:HD12 | 2.42 | 0.45 |
| 1:AA:398:VAL:HG12 | 1:AA:399:ARG:N | 2.31 | 0.45 |
| 1:AB:32:PRO:CA | 1:BB:24:ASN:HB2 | 2.46 | 0.45 |
| 1:AB:274:THR:HG21 | 1:AB:310:LEU:HG | 1.99 | 0.45 |
| 1:AC:357:TRP:HH2 | 1:AC:371:VAL:HG22 | 1.82 | 0.45 |
| 1:BA:364:GLU:CD | 1:BA:365:TYR:N | 2.74 | 0.45 |
| 1:BA:462:VAL:HG12 | 1:BA:466:ALA:HB3 | 1.98 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:BA:529:ILE:CG2 | 1:BA:583:VAL:HG11 | 2.46 | 0.45 |
| 1:BB:679:ARG:NH1 | 1:BB:680:LEU:HD23 | 2.32 | 0.45 |
| 1:BB:806:THR:HG23 | 1:CB:808:ARG:HB2 | 1.99 | 0.45 |
| 1:C:331:GLY:HA2 | 1:C:360:ARG:HA | 1.98 | 0.45 |
| 1:C:768:LEU:HD23 | 1:C:768:LEU:C | 2.42 | 0.45 |
| 1:CA:281:TYR:CE1 | 1:CA:322:ASP:C | 2.95 | 0.45 |
| 1:CA:382:LEU:HD12 | 1:CA:406:TYR:H | 1.81 | 0.45 |
| 1:DA:120:ALA:HB3 | 1:DA:144:LEU:HD12 | 1.99 | 0.45 |
| 1:DA:469:GLN:HB2 | 1:DA:562:PHE:CZ | 2.52 | 0.45 |
| 1:E:112:LEU:HG | 1:E:151:TYR:O | 2.17 | 0.45 |
| 1:E:166:THR:HG21 | 1:E:174:LEU:HD22 | 1.99 | 0.45 |
| 1:E:416:GLU:OE1 | 1:E:454:LYS:HB2 | 2.17 | 0.45 |
| 1:E:728:SER:O | 1:E:732:ALA:HB2 | 2.16 | 0.45 |
| 1:EA:764:LYS:HE2 | 1:FA:759:LEU:HD13 | 1.98 | 0.45 |
| 1:F:34:THR:O | 1:F:34:THR:HG23 | 2.17 | 0.45 |
| 1:F:64:PRO:HB3 | 1:F:89:GLU:HB2 | 1.98 | 0.45 |
| 1:F:187:GLY:O | 1:F:188:LYS:C | 2.59 | 0.45 |
| 1:F:230:ARG:HA | 1:F:247:GLU:O | 2.16 | 0.45 |
| 1:F:381:PRO:HA | 1:F:405:THR:CG2 | 2.47 | 0.45 |
| 1:FA:235:PHE:CE1 | 1:FA:243:ARG:HB2 | 2.51 | 0.45 |
| 1:FB:227:LEU:CD2 | 1:FB:229:LEU:HD21 | 2.46 | 0.45 |
| 1:G:16:ILE:HG23 | 1:G:45:PHE:O | 2.17 | 0.45 |
| 1:GA:34:THR:HG23 | 1:HA:24:ASN:OD1 | 2.16 | 0.45 |
| 1:GA:227:LEU:HD11 | 1:GA:268:LEU:O | 2.17 | 0.45 |
| 1:GB:388:ILE:HG22 | 1:GB:456:ARG:HA | 1.99 | 0.45 |
| 1:GB:462:VAL:N | 1:GB:485:GLU:O | 2.50 | 0.45 |
| 1:GB:586:VAL:HG21 | 1:GB:591:PHE:HB2 | 1.98 | 0.45 |
| 1:IA:462:VAL:N | 1:IA:485:GLU:O | 2.50 | 0.45 |
| 1:IA:516:LEU:C | 1:IA:516:LEU:HD12 | 2.42 | 0.45 |
| 1:J:580:ARG:HA | 1:J:583:VAL:HG22 | 1.98 | 0.45 |
| 1:JA:174:LEU:O | 1:JA:198:VAL:HG12 | 2.17 | 0.45 |
| 1:JA:273:ILE:HG13 | 1:JA:308:PHE:O | 2.16 | 0.45 |
| 1:JA:539:LEU:HG | 1:JA:541:LEU:CD1 | 2.46 | 0.45 |
| 1:JA:754:GLU:O | 1:JA:758:GLU:HG3 | 2.17 | 0.45 |
| 1:JB:61:VAL:HA | 1:JB:105:LEU:HA | 1.98 | 0.45 |
| 1:JB:129:PHE:CE1 | 1:JB:137:VAL:HG21 | 2.52 | 0.45 |
| 1:JB:284:ILE:HD12 | 1:JB:287:PRO:HB3 | 1.99 | 0.45 |
| 1:K:174:LEU:HD23 | 1:K:175:ARG:O | 2.15 | 0.45 |
| 1:K:238:PHE:CD2 | 1:K:239:ARG:HD2 | 2.52 | 0.45 |
| 1:K:349:VAL:HG23 | 1:K:349:VAL:O | 2.15 | 0.45 |
| 1:K:529:ILE:HG13 | 1:K:583:VAL:HG21 | 1.98 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:K:648:GLN:HA | 1:K:651:ARG:HG2 | 1.99 | 0.45 |
| 1:KA:51:VAL:HG11 | 1:KA:97:PHE:CZ | 2.51 | 0.45 |
| 1:KA:162:ILE:H | 1:KA:162:ILE:HD12 | 1.81 | 0.45 |
| 1:KB:280:ASN:C | 1:KB:323:VAL:HG13 | 2.42 | 0.45 |
| 1:L:7:ILE:HG13 | 1:L:8:ILE:N | 2.31 | 0.45 |
| 1:L:9:ARG:CB | 1:L:34:THR:HG22 | 2.47 | 0.45 |
| 1:L:526:VAL:HG12 | 1:L:527:ILE:N | 2.32 | 0.45 |
| 1:LA:218:ALA:HA | 1:LA:260:VAL:HA | 1.98 | 0.45 |
| 1:LB:522:PHE:HA | 1:LB:543:TYR:O | 2.17 | 0.45 |
| 1:M:383:ASP:OD1 | 1:N:398:VAL:HG23 | 2.16 | 0.45 |
| 1:MA:233:ARG:HA | 1:MA:245:THR:HG23 | 1.98 | 0.45 |
| 1:NA:227:LEU:CD2 | 1:NA:267:VAL:HG22 | 2.43 | 0.45 |
| 1:NA:531:THR:HG23 | 1:NA:535:ALA:HB3 | 1.99 | 0.45 |
| 1:O:126:LEU:O | 1:O:127:LEU:HD22 | 2.17 | 0.45 |
| 1:OA:420:PRO:HB2 | 1:OA:421:PRO:HD3 | 1.98 | 0.45 |
| 1:OB:538:GLN:HE22 | 1:OB:540:GLN:HG3 | 1.81 | 0.45 |
| 1:P:129:PHE:CE2 | 1:P:157:VAL:HG22 | 2.52 | 0.45 |
| 1:P:143:TRP:HA | 1:P:208:VAL:HG11 | 1.98 | 0.45 |
| 1:PB:60:THR:HG22 | 1:PB:90:ILE:HG12 | 1.98 | 0.45 |
| 1:PB:175:ARG:HA | 1:PB:197:LEU:HD23 | 1.98 | 0.45 |
| 1:PB:381:PRO:HA | 1:PB:405:THR:HA | 1.98 | 0.45 |
| 1:Q:61:VAL:HG21 | 1:Q:91:ARG:HD3 | 1.98 | 0.45 |
| 1:Q:529:ILE:CD1 | 1:Q:583:VAL:HG21 | 2.43 | 0.45 |
| 1:QA:657:SER:O | 1:QA:661:ALA:HB2 | 2.16 | 0.45 |
| 1:QB:340:LEU:HD22 | 1:QB:344:GLU:HB3 | 1.98 | 0.45 |
| 1:QB:496:THR:HG21 | 1:QB:562:PHE:CD2 | 2.52 | 0.45 |
| 1:RA:65:VAL:HG12 | 1:RA:83:LEU:HA | 1.98 | 0.45 |
| 1:RA:166:THR:HG21 | 1:RA:174:LEU:CD1 | 2.40 | 0.45 |
| 1:S:524:THR:HG22 | 1:S:542:ALA:HA | 1.99 | 0.45 |
| 1:SA:112:LEU:HD23 | 1:SA:150:THR:HG21 | 1.99 | 0.45 |
| 1:SB:283:VAL:HG22 | 1:SB:301:VAL:CA | 2.45 | 0.45 |
| 1:T:131:ASP:O | 1:T:132:LYS:HB2 | 2.16 | 0.45 |
| 1:TA:311:GLN:HB3 | 1:TA:312:PRO:HD2 | 1.99 | 0.45 |
| 1:TB:144:LEU:HD23 | 1:TB:144:LEU:H | 1.81 | 0.45 |
| 1:TB:779:LEU:HD21 | 1:UB:774:ARG:HG2 | 1.98 | 0.45 |
| 1:UB:126:LEU:HD21 | 1:UB:158:GLU:CB | 2.47 | 0.45 |
| 1:W:597:ARG:O | 1:W:601:THR:HG23 | 2.17 | 0.45 |
| 1:WA:772:TYR:O | 1:WA:775:ALA:HB3 | 2.17 | 0.45 |
| 1:XA:66:SER:HB3 | 1:XA:84:ARG:HB2 | 1.98 | 0.45 |
| 1:YA:53:VAL:HB | 1:YA:93:ALA:HA | 1.99 | 0.45 |
| 1:Z:591:PHE:O | 1:Z:595:SER:N | 2.49 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:ZA:127:LEU:HB2 | 1:ZA:156:GLU:HB3 | 1.97 | 0.45 |
| 1:ZB:414:LEU:HB3 | 1:ZB:455:THR:HB | 1.98 | 0.45 |
| 1:A:405:THR:HG23 | 1:B:396:GLY:N | 2.32 | 0.45 |
| 1:A:499:SER:O | 1:A:500:LEU:HD23 | 2.17 | 0.45 |
| 1:AA:388:ILE:N | 1:AA:457:VAL:HG23 | 2.32 | 0.45 |
| 1:AA:538:GLN:N | 1:AA:646:VAL:HG23 | 2.32 | 0.45 |
| 1:AB:9:ARG:CB | 1:AB:34:THR:HG22 | 2.47 | 0.45 |
| 1:AB:149:GLY:O | 1:BB:140:GLY:HA3 | 2.16 | 0.45 |
| 1:AB:168:ILE:HG22 | 1:AB:168:ILE:O | 2.17 | 0.45 |
| 1:AC:380:ILE:H | 1:AC:380:ILE:HD12 | 1.82 | 0.45 |
| 1:BA:30:VAL:HG22 | 1:BA:32:PRO:CD | 2.47 | 0.45 |
| 1:BA:387:GLY:HA3 | 1:BA:401:VAL:O | 2.17 | 0.45 |
| 1:BA:768:LEU:HD23 | 1:BA:768:LEU:C | 2.41 | 0.45 |
| 1:C:3:THR:O | 1:C:3:THR:HG22 | 2.16 | 0.45 |
| 1:C:30:VAL:HG23 | 1:C:50:MET:CE | 2.47 | 0.45 |
| 1:C:92:LEU:HD12 | 1:C:92:LEU:N | 2.31 | 0.45 |
| 1:CB:229:LEU:CD2 | 1:CB:267:VAL:HG22 | 2.47 | 0.45 |
| 1:CB:587:THR:HG23 | 1:CB:589:ASP:OD1 | 2.17 | 0.45 |
| 1:CB:589:ASP:HA | 1:CB:592:HIS:CE1 | 2.51 | 0.45 |
| 1:D:14:HIS:HA | 1:D:48:MET:O | 2.17 | 0.45 |
| 1:D:23:SER:HB3 | 1:D:25:VAL:HG23 | 1.99 | 0.45 |
| 1:D:58:TYR:CE2 | 1:D:90:ILE:HA | 2.52 | 0.45 |
| 1:D:326:LEU:HD13 | 1:D:331:GLY:HA2 | 1.98 | 0.45 |
| 1:DA:423:VAL:HG22 | 1:DA:423:VAL:O | 2.16 | 0.45 |
| 1:DA:575:ILE:H | 1:DA:575:ILE:HD12 | 1.82 | 0.45 |
| 1:E:15:TYR:CD1 | 1:E:48:MET:O | 2.70 | 0.45 |
| 1:E:543:TYR:HD1 | 1:E:638:VAL:HG23 | 1.82 | 0.45 |
| 1:E:583:VAL:HG13 | 1:E:584:ALA:N | 2.32 | 0.45 |
| 1:EA:16:ILE:HD11 | 1:EA:47:PRO:HD3 | 1.99 | 0.45 |
| 1:EA:339:PRO:HG3 | 1:EA:353:ALA:HB2 | 1.97 | 0.45 |
| 1:F:8:ILE:HG21 | 1:F:16:ILE:CD1 | 2.47 | 0.45 |
| 1:FA:538:GLN:HB3 | 1:FA:644:GLU:HB2 | 1.99 | 0.45 |
| 1:FA:565:PRO:O | 1:FA:566:ASP:C | 2.60 | 0.45 |
| 1:FB:332:LEU:HD23 | 1:FB:333:LEU:C | 2.41 | 0.45 |
| 1:GA:536:ARG:O | 1:GA:646:VAL:HG23 | 2.16 | 0.45 |
| 1:GB:59:CYS:SG | 1:GB:106:GLU:O | 2.75 | 0.45 |
| 1:GB:105:LEU:C | 1:GB:105:LEU:HD12 | 2.41 | 0.45 |
| 1:GB:523:PHE:HB2 | 1:GB:543:TYR:CE1 | 2.52 | 0.45 |
| 1:H:480:VAL:HG12 | 1:H:481:VAL:N | 2.32 | 0.45 |
| 1:HB:526:VAL:HG12 | 1:HB:527:ILE:N | 2.31 | 0.45 |
| 1:HB:531:THR:HG23 | 1:HB:537:LEU:HD12 | 1.98 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:I:165:ALA:HB2 | 1:I:205:LEU:HB2 | 1.99 | 0.45 |
| 1:IA:15:TYR:HA | 1:IA:29:GLU:O | 2.17 | 0.45 |
| 1:IA:542:ALA:O | 1:IA:638:VAL:HG13 | 2.16 | 0.45 |
| 1:IB:131:ASP:O | 1:IB:132:LYS:HB2 | 2.16 | 0.45 |
| 1:J:35:TYR:O | 1:J:37:ARG:NH2 | 2.50 | 0.45 |
| 1:JA:274:THR:HG21 | 1:JA:310:LEU:HG | 1.99 | 0.45 |
| 1:JB:18:VAL:HG13 | 1:JB:29:GLU:OE2 | 2.17 | 0.45 |
| 1:JB:177:ARG:HG2 | 1:JB:178:ALA:N | 2.32 | 0.45 |
| 1:K:301:VAL:HG22 | 1:K:302:VAL:H | 1.81 | 0.45 |
| 1:K:326:LEU:HD13 | 1:K:359:ILE:O | 2.16 | 0.45 |
| 1:K:389:TYR:CE2 | 1:K:457:VAL:HA | 2.51 | 0.45 |
| 1:K:405:THR:HG21 | 1:L:393:VAL:O | 2.17 | 0.45 |
| 1:K:464:HIS:CD2 | 1:L:496:THR:HG23 | 2.52 | 0.45 |
| 1:KB:72:LEU:HD23 | 1:KB:73:VAL:O | 2.16 | 0.45 |
| 1:KB:73:VAL:HG21 | 1:KB:100:TYR:CE2 | 2.52 | 0.45 |
| 1:KB:230:ARG:NH2 | 1:KB:268:LEU:HD21 | 2.32 | 0.45 |
| 1:L:221:LEU:O | 1:L:253:VAL:HG22 | 2.17 | 0.45 |
| 1:L:326:LEU:HD11 | 1:L:359:ILE:HG23 | 1.99 | 0.45 |
| 1:LA:747:LYS:O | 1:LA:751:LEU:HD23 | 2.17 | 0.45 |
| 1:LB:365:TYR:OH | 1:LB:371:VAL:HG21 | 2.16 | 0.45 |
| 1:M:177:ARG:HA | 1:M:194:GLU:O | 2.17 | 0.45 |
| 1:MA:126:LEU:O | 1:MA:127:LEU:HD22 | 2.17 | 0.45 |
| 1:MA:276:LEU:HD13 | 1:MA:281:TYR:HA | 1.99 | 0.45 |
| 1:MA:522:PHE:HA | 1:MA:543:TYR:O | 2.17 | 0.45 |
| 1:MA:564:VAL:HG11 | 1:MA:567:PHE:HA | 1.99 | 0.45 |
| 1:NA:349:VAL:HG11 | 1:NA:351:HIS:CE1 | 2.51 | 0.45 |
| 1:NA:408:LEU:HD22 | 1:NA:412:GLU:HB3 | 1.99 | 0.45 |
| 1:OA:345:ASP:OD1 | 1:OA:349:VAL:HG21 | 2.17 | 0.45 |
| 1:OA:377:ARG:HA | 1:OA:377:ARG:NE | 2.32 | 0.45 |
| 1:OA:377:ARG:HB2 | 1:OA:407:MET:HE3 | 1.98 | 0.45 |
| 1:OA:537:LEU:HB3 | 1:OA:539:LEU:HD11 | 1.97 | 0.45 |
| 1:OA:658:VAL:HG13 | 1:OA:659:GLN:N | 2.31 | 0.45 |
| 1:OA:786:GLN:O | 1:OA:790:VAL:HG23 | 2.17 | 0.45 |
| 1:OB:520:PRO:HA | 1:OB:545:TRP:O | 2.17 | 0.45 |
| 1:OB:527:ILE:HD11 | 1:OB:539:LEU:HD23 | 1.99 | 0.45 |
| 1:P:51:VAL:HG21 | 1:P:99:LEU:HD11 | 1.98 | 0.45 |
| 1:P:62:ALA:HA | 1:P:88:LEU:HD23 | 1.97 | 0.45 |
| 1:P:661:ALA:O | 1:P:665:THR:HG23 | 2.17 | 0.45 |
| 1:PA:227:LEU:HD12 | 1:PA:269:GLY:O | 2.16 | 0.45 |
| 1:PA:363:LEU:HD23 | 1:PA:363:LEU:H | 1.82 | 0.45 |
| 1:PA:419:LEU:HD22 | 1:PA:425:GLU:HA | 1.99 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:PA:784:ALA:O | 1:PA:788:ALA:HB2 | 2.16 | 0.45 |
| 1:PB:105:LEU:HD23 | 1:PB:107:LYS:H | 1.82 | 0.45 |
| 1:PB:262:ASP:H | 1:PB:265:GLU:HB2 | 1.82 | 0.45 |
| 1:Q:53:VAL:HG12 | 1:Q:54:PRO:O | 2.17 | 0.45 |
| 1:Q:73:VAL:HG21 | 1:Q:100:TYR:HB2 | 1.99 | 0.45 |
| 1:SA:230:ARG:HG2 | 1:SA:266:GLU:HB3 | 1.99 | 0.45 |
| 1:SA:415:TRP:C | 1:SA:455:THR:HG22 | 2.42 | 0.45 |
| 1:SA:767:GLU:O | 1:SA:771:VAL:HG23 | 2.17 | 0.45 |
| 1:SB:181:GLU:CD | 1:SB:191:VAL:HG12 | 2.41 | 0.45 |
| 1:TA:219:VAL:CG1 | 1:TA:227:LEU:HD22 | 2.41 | 0.45 |
| 1:TB:91:ARG:C | 1:TB:92:LEU:HD12 | 2.42 | 0.45 |
| 1:TB:676:GLU:CD | 1:TB:679:ARG:HE | 2.24 | 0.45 |
| 1:UB:502:ALA:HB3 | 1:UB:510:ALA:CB | 2.47 | 0.45 |
| 1:V:759:LEU:O | 1:V:763:GLN:HG3 | 2.16 | 0.45 |
| 1:VA:359:ILE:HG23 | 1:VA:359:ILE:O | 2.17 | 0.45 |
| 1:VA:527:ILE:HG21 | 1:VA:576:ALA:HA | 1.98 | 0.45 |
| 1:VB:9:ARG:CB | 1:VB:34:THR:HG22 | 2.47 | 0.45 |
| 1:VB:541:LEU:HD23 | 1:VB:640:VAL:HG22 | 1.98 | 0.45 |
| 1:W:758:GLU:O | 1:W:762:VAL:HG13 | 2.17 | 0.45 |
| 1:WA:535:ALA:HB1 | 1:WA:650:THR:CG2 | 2.47 | 0.45 |
| 1:WA:735:ILE:HD13 | 1:XA:726:ALA:HB3 | 1.98 | 0.45 |
| 1:X:374:VAL:HG12 | 1:X:375:GLU:N | 2.32 | 0.45 |
| 1:XA:281:TYR:CD1 | 1:XA:366:VAL:HG13 | 2.52 | 0.45 |
| 1:XB:424:GLU:HG2 | 1:XB:425:GLU:N | 2.32 | 0.45 |
| 1:Y:221:LEU:HD11 | 1:Y:251:VAL:HG23 | 1.98 | 0.45 |
| 1:Y:415:TRP:O | 1:Y:455:THR:HG22 | 2.16 | 0.45 |
| 1:YA:583:VAL:HG13 | 1:YA:584:ALA:N | 2.32 | 0.45 |
| 1:Z:360:ARG:CZ | 1:Z:407:MET:HB3 | 2.46 | 0.45 |
| 1:ZB:122:HIS:ND1 | 1:ZB:160:VAL:HG11 | 2.32 | 0.45 |
| 1:ZB:408:LEU:HD23 | 1:ZB:412:GLU:C | 2.42 | 0.45 |
| 1:A:51:VAL:O | 1:A:96:PRO:HA | 2.17 | 0.45 |
| 1:A:333:LEU:C | 1:A:374:VAL:HB | 2.42 | 0.45 |
| 1:A:497:VAL:HG22 | 1:A:498:LEU:N | 2.31 | 0.45 |
| 1:A:541:LEU:HB2 | 1:A:543:TYR:CE1 | 2.52 | 0.45 |
| 1:A:701:LYS:HG3 | 1:NA:709:LEU:HD13 | 1.99 | 0.45 |
| 1:AA:520:PRO:HA | 1:AA:545:TRP:O | 2.17 | 0.45 |
| 1:AB:358:LEU:HD13 | 1:AB:377:ARG:HD2 | 1.98 | 0.45 |
| 1:AC:17:HIS:HA | 1:AC:29:GLU:OE1 | 2.17 | 0.45 |
| 1:AC:176:LEU:HD23 | 1:AC:196:TRP:O | 2.17 | 0.45 |
| 1:AC:770:LEU:HD11 | 1:ZB:772:TYR:HA | 1.99 | 0.45 |
| 1:B:282:CYS:O | 1:B:301:VAL:HA | 2.17 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:B:333:LEU:CD2 | 1:B:374:VAL:HG11 | 2.47 | 0.45 |
| 1:BA:635:VAL:O | 1:BA:636:SER:C | 2.60 | 0.45 |
| 1:BB:60:THR:HG23 | 1:BB:107:LYS:HD3 | 1.99 | 0.45 |
| 1:BB:227:LEU:HD21 | 1:BB:229:LEU:HD21 | 1.98 | 0.45 |
| 1:BB:601:THR:HG21 | 1:BB:620:PRO:HB2 | 1.99 | 0.45 |
| 1:C:225:THR:HB | 1:C:270:VAL:HG11 | 1.99 | 0.45 |
| 1:C:750:ALA:HB2 | 1:D:741:VAL:HG22 | 1.99 | 0.45 |
| 1:CA:58:TYR:CG | 1:CA:92:LEU:HA | 2.52 | 0.45 |
| 1:CA:207:ALA:HB3 | 1:CA:210:GLU:OE1 | 2.17 | 0.45 |
| 1:CA:410:GLN:O | 1:CA:411:ASP:OD1 | 2.35 | 0.45 |
| 1:CB:547:PHE:CZ | 1:CB:633:LEU:HD13 | 2.52 | 0.45 |
| 1:DA:90:ILE:HG22 | 1:DA:92:LEU:HD23 | 1.97 | 0.45 |
| 1:E:73:VAL:HG11 | 1:E:81:VAL:HG23 | 1.99 | 0.45 |
| 1:E:537:LEU:HD11 | 1:E:588:PHE:CD1 | 2.52 | 0.45 |
| 1:EA:382:LEU:HD12 | 1:EA:406:TYR:H | 1.82 | 0.45 |
| 1:EB:174:LEU:HD12 | 1:EB:214:ASP:O | 2.17 | 0.45 |
| 1:EB:175:ARG:CA | 1:EB:197:LEU:HD23 | 2.41 | 0.45 |
| 1:EB:742:LEU:HD21 | 1:FB:734:ARG:HG3 | 1.99 | 0.45 |
| 1:EB:747:LYS:O | 1:EB:751:LEU:HD23 | 2.17 | 0.45 |
| 1:FB:374:VAL:HG12 | 1:FB:375:GLU:H | 1.82 | 0.45 |
| 1:G:30:VAL:HG22 | 1:G:31:GLY:N | 2.31 | 0.45 |
| 1:I:227:LEU:HD11 | 1:I:268:LEU:O | 2.16 | 0.45 |
| 1:IA:709:LEU:HD23 | 1:JA:701:LYS:HG3 | 1.99 | 0.45 |
| 1:IA:768:LEU:C | 1:IA:768:LEU:HD23 | 2.41 | 0.45 |
| 1:IB:115:VAL:HG23 | 1:IB:147:GLY:O | 2.17 | 0.45 |
| 1:IB:124:LYS:CG | 1:IB:125:ALA:N | 2.80 | 0.45 |
| 1:IB:679:ARG:NH2 | 1:IB:680:LEU:HD23 | 2.32 | 0.45 |
| 1:J:69:ALA:HB2 | 1:J:74:LEU:HD23 | 1.98 | 0.45 |
| 1:J:413:VAL:HG22 | 1:J:414:LEU:N | 2.32 | 0.45 |
| 1:J:516:LEU:HD13 | 1:J:562:PHE:CE2 | 2.52 | 0.45 |
| 1:JA:489:LEU:HD11 | 1:JA:495:PHE:CE1 | 2.52 | 0.45 |
| 1:JA:549:VAL:HG11 | 1:JA:552:ARG:CD | 2.46 | 0.45 |
| 1:JB:533:ASP:OD1 | 1:JB:535:ALA:HB2 | 2.17 | 0.45 |
| 1:K:60:THR:HG23 | 1:K:106:GLU:OE2 | 2.17 | 0.45 |
| 1:KA:750:ALA:O | 1:KA:754:GLU:HG2 | 2.17 | 0.45 |
| 1:KB:591:PHE:CD1 | 1:KB:591:PHE:C | 2.94 | 0.45 |
| 1:LA:7:ILE:O | 1:LA:8:ILE:C | 2.58 | 0.45 |
| 1:LA:640:VAL:HG12 | 1:MA:580:ARG:CZ | 2.47 | 0.45 |
| 1:M:230:ARG:CG | 1:M:231:ALA:N | 2.80 | 0.45 |
| 1:MB:14:HIS:HA | 1:MB:48:MET:O | 2.17 | 0.45 |
| 1:MB:212:VAL:HG23 | 1:MB:212:VAL:O | 2.16 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:N:128:ASP:OD2 | 1:N:138:VAL:HG12 | 2.17 | 0.45 |
| 1:N:281:TYR:HE2 | 1:N:283:VAL:HG23 | 1.82 | 0.45 |
| 1:N:459:SER:HA | 1:N:488:SER:HA | 1.99 | 0.45 |
| 1:NA:13:TYR:HB2 | 1:NA:49:ARG:NH1 | 2.32 | 0.45 |
| 1:NA:589:ASP:O | 1:NA:590:ASP:C | 2.60 | 0.45 |
| 1:NB:160:VAL:HG12 | 1:NB:161:GLU:H | 1.82 | 0.45 |
| 1:NB:172:GLN:HG2 | 1:NB:215:LEU:HD11 | 1.98 | 0.45 |
| 1:O:333:LEU:HD23 | 1:O:375:GLU:OE2 | 2.17 | 0.45 |
| 1:O:405:THR:HG21 | 1:P:393:VAL:O | 2.17 | 0.45 |
| 1:OA:73:VAL:HG21 | 1:OA:100:TYR:CE2 | 2.52 | 0.45 |
| 1:OA:227:LEU:CD2 | 1:OA:229:LEU:HD21 | 2.44 | 0.45 |
| 1:OA:390:VAL:HG12 | 1:OA:414:LEU:HD23 | 1.98 | 0.45 |
| 1:OA:472:ASP:HA | 1:OA:493:GLU:HA | 1.98 | 0.45 |
| 1:OB:72:LEU:HD23 | 1:OB:73:VAL:N | 2.31 | 0.45 |
| 1:P:81:VAL:HG12 | 1:P:101:PRO:HG2 | 1.98 | 0.45 |
| 1:P:283:VAL:HG12 | 1:P:317:GLU:OE2 | 2.17 | 0.45 |
| 1:PA:65:VAL:HG23 | 1:PA:67:ARG:HG3 | 1.99 | 0.45 |
| 1:PB:746:LEU:HD22 | 1:QB:738:GLU:HG3 | 1.98 | 0.45 |
| 1:Q:274:THR:HG21 | 1:Q:310:LEU:CD2 | 2.45 | 0.45 |
| 1:Q:283:VAL:HG22 | 1:Q:301:VAL:HA | 1.98 | 0.45 |
| 1:QB:176:LEU:HD21 | 1:QB:196:TRP:CD1 | 2.51 | 0.45 |
| 1:QB:453:ASN:O | 1:QB:456:ARG:HG2 | 2.17 | 0.45 |
| 1:QB:538:GLN:HE21 | 1:QB:646:VAL:HG22 | 1.82 | 0.45 |
| 1:QB:541:LEU:HD23 | 1:QB:640:VAL:HA | 1.99 | 0.45 |
| 1:RA:333:LEU:HD23 | 1:RA:356:HIS:HD2 | 1.81 | 0.45 |
| 1:RB:371:VAL:HG22 | 1:RB:372:GLU:N | 2.32 | 0.45 |
| 1:RB:467:ALA:HA | 1:RB:482:PHE:HA | 1.98 | 0.45 |
| 1:S:481:VAL:HG11 | 1:S:487:VAL:CG2 | 2.47 | 0.45 |
| 1:S:531:THR:HG21 | 1:S:588:PHE:HB3 | 1.99 | 0.45 |
| 1:SB:126:LEU:C | 1:SB:127:LEU:HD22 | 2.42 | 0.45 |
| 1:SB:144:LEU:HD12 | 1:SB:144:LEU:O | 2.16 | 0.45 |
| 1:TA:129:PHE:CE1 | 1:TA:137:VAL:HG11 | 2.51 | 0.45 |
| 1:TA:334:LEU:HD13 | 1:TA:371:VAL:HG11 | 1.98 | 0.45 |
| 1:TB:271:VAL:HG23 | 1:TB:309:PHE:HD2 | 1.82 | 0.45 |
| 1:TB:334:LEU:HD11 | 1:TB:359:ILE:HG22 | 1.98 | 0.45 |
| 1:UA:488:SER:O | 1:UA:489:LEU:C | 2.60 | 0.45 |
| 1:UB:413:VAL:HG22 | 1:UB:414:LEU:N | 2.32 | 0.45 |
| 1:UB:502:ALA:HB3 | 1:UB:510:ALA:HB3 | 1.99 | 0.45 |
| 1:V:282:CYS:O | 1:V:301:VAL:HG23 | 2.17 | 0.45 |
| 1:V:798:MET:HE3 | 1:W:792:VAL:HA | 1.99 | 0.45 |
| 1:VA:543:TYR:CE1 | 1:VA:638:VAL:HG22 | 2.52 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:VB:50:MET:HB3 | 1:VB:97:PHE:C | 2.41 | 0.45 |
| 1:VB:53:VAL:HG23 | 1:VB:94:GLN:O | 2.17 | 0.45 |
| 1:WA:168:ILE:HG22 | 1:WA:215:LEU:HD13 | 1.99 | 0.45 |
| 1:WA:332:LEU:HB3 | 1:WA:373:VAL:HG13 | 1.99 | 0.45 |
| 1:WA:470:VAL:HG22 | 1:WA:495:PHE:CD1 | 2.51 | 0.45 |
| 1:WA:661:ALA:O | 1:WA:665:THR:HG23 | 2.17 | 0.45 |
| 1:WB:335:ARG:HB2 | 1:WB:374:VAL:CG2 | 2.46 | 0.45 |
| 1:X:52:THR:HG21 | 1:Y:85:HIS:HB2 | 1.99 | 0.45 |
| 1:XA:160:VAL:HG12 | 1:XA:161:GLU:N | 2.31 | 0.45 |
| 1:XA:579:VAL:CG2 | 1:XA:603:VAL:HG22 | 2.47 | 0.45 |
| 1:XB:307:SER:HB2 | 1:YB:296:LEU:HD13 | 1.98 | 0.45 |
| 1:YA:115:VAL:HG21 | 1:YA:145:PHE:CE2 | 2.51 | 0.45 |
| 1:YA:225:THR:HB | 1:YA:270:VAL:HG11 | 1.98 | 0.45 |
| 1:YA:462:VAL:HG22 | 1:YA:468:VAL:CG2 | 2.47 | 0.45 |
| 1:YA:703:ARG:NH2 | 1:ZA:693:ILE:HD11 | 2.32 | 0.45 |
| 1:YB:469:GLN:HB2 | 1:YB:480:VAL:HG22 | 1.98 | 0.45 |
| 1:YB:589:ASP:HA | 1:YB:592:HIS:HD1 | 1.82 | 0.45 |
| 1:Z:228:HIS:HA | 1:Z:250:LEU:HD23 | 1.98 | 0.45 |
| 1:ZA:460:TYR:CG | 1:ZA:461:ARG:N | 2.85 | 0.45 |
| 1:ZB:57:HIS:HA | 1:ZB:111:PRO:HA | 1.99 | 0.45 |
| 1:ZB:225:THR:HA | 1:ZB:272:PRO:HA | 1.99 | 0.45 |
| 1:ZB:398:VAL:HG22 | 1:ZB:415:TRP:CG | 2.51 | 0.45 |
| 1:AA:568:VAL:HG22 | 1:AA:572:CYS:SG | 2.57 | 0.45 |
| 1:AB:767:GLU:OE2 | 1:AB:768:LEU:HD22 | 2.17 | 0.45 |
| 1:AC:389:TYR:CE1 | 1:AC:400:ALA:HB2 | 2.52 | 0.45 |
| 1:AC:415:TRP:C | 1:AC:455:THR:HG22 | 2.42 | 0.45 |
| 1:BA:7:ILE:HG23 | 1:BA:8:ILE:N | 2.32 | 0.45 |
| 1:BA:765:VAL:HG22 | 1:CA:759:LEU:HD21 | 1.99 | 0.45 |
| 1:BB:60:THR:OG1 | 1:BB:107:LYS:HB2 | 2.17 | 0.45 |
| 1:BB:302:VAL:HG11 | 1:BB:306:LYS:HD3 | 1.98 | 0.45 |
| 1:C:162:ILE:HG22 | 1:C:163:ILE:N | 2.32 | 0.45 |
| 1:C:177:ARG:HA | 1:C:195:GLU:HG3 | 1.99 | 0.45 |
| 1:C:633:LEU:HD12 | 1:C:634:VAL:N | 2.30 | 0.45 |
| 1:CA:63:ASN:N | 1:CA:64:PRO:HD3 | 2.32 | 0.45 |
| 1:CA:273:ILE:O | 1:CA:273:ILE:CG2 | 2.64 | 0.45 |
| 1:CA:382:LEU:H | 1:CA:405:THR:HG22 | 1.81 | 0.45 |
| 1:CA:809:ASP:C | 1:CA:810:LEU:HD23 | 2.42 | 0.45 |
| 1:CB:231:ALA:HB3 | 1:CB:244:ARG:O | 2.17 | 0.45 |
| 1:CB:529:ILE:CB | 1:CB:583:VAL:HG11 | 2.47 | 0.45 |
| 1:CB:549:VAL:O | 1:CB:550:ASN:C | 2.60 | 0.45 |
| 1:D:267:VAL:C | 1:D:268:LEU:HD12 | 2.42 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:D:575:ILE:O | 1:D:579:VAL:HG23 | 2.17 | 0.45 |
| 1:D:778:GLU:HA | 1:D:781:VAL:HG22 | 1.99 | 0.45 |
| 1:DB:388:ILE:HG22 | 1:DB:389:TYR:N | 2.31 | 0.45 |
| 1:EA:114:VAL:O | 1:EA:114:VAL:HG13 | 2.17 | 0.45 |
| 1:EA:173:ALA:HB2 | 1:EA:199:THR:HG22 | 1.98 | 0.45 |
| 1:EA:216:VAL:HG22 | 1:EA:217:ASP:N | 2.32 | 0.45 |
| 1:EB:591:PHE:O | 1:EB:595:SER:N | 2.49 | 0.45 |
| 1:F:583:VAL:HG13 | 1:F:584:ALA:N | 2.31 | 0.45 |
| 1:FA:233:ARG:HA | 1:FA:245:THR:HG23 | 1.99 | 0.45 |
| 1:FA:337:LEU:HD21 | 1:FA:372:GLU:HB2 | 1.99 | 0.45 |
| 1:FA:467:ALA:HA | 1:FA:482:PHE:HA | 1.99 | 0.45 |
| 1:G:8:ILE:HD12 | 1:G:8:ILE:H | 1.82 | 0.45 |
| 1:G:786:GLN:HB3 | 1:H:781:VAL:HG11 | 1.98 | 0.45 |
| 1:GA:531:THR:HG21 | 1:GA:588:PHE:N | 2.31 | 0.45 |
| 1:GB:58:TYR:HB3 | 1:GB:91:ARG:O | 2.17 | 0.45 |
| 1:GB:496:THR:HG21 | 1:GB:562:PHE:CD2 | 2.52 | 0.45 |
| 1:GB:765:VAL:HG22 | 1:HB:759:LEU:HD21 | 1.99 | 0.45 |
| 1:H:461:ARG:HD3 | 1:H:486:LEU:HD12 | 1.99 | 0.45 |
| 1:HA:165:ALA:HB2 | 1:HA:205:LEU:HD13 | 1.99 | 0.45 |
| 1:HA:471:TYR:HD2 | 1:HA:478:ALA:HB2 | 1.81 | 0.45 |
| 1:HB:46:ALA:HB1 | 1:HB:47:PRO:HD2 | 1.99 | 0.45 |
| 1:HB:549:VAL:HG21 | 1:HB:552:ARG:NH1 | 2.31 | 0.45 |
| 1:IA:288:VAL:HG22 | 1:IA:314:GLU:OE2 | 2.16 | 0.45 |
| 1:IA:549:VAL:HG13 | 1:IA:552:ARG:HE | 1.82 | 0.45 |
| 1:IB:121:LEU:O | 1:IB:144:LEU:HD12 | 2.17 | 0.45 |
| 1:JA:276:LEU:CD2 | 1:JA:320:ILE:HG23 | 2.47 | 0.45 |
| 1:JB:597:ARG:O | 1:JB:601:THR:HG23 | 2.17 | 0.45 |
| 1:KA:57:HIS:HA | 1:KA:111:PRO:HA | 1.99 | 0.45 |
| 1:KA:125:ALA:HB2 | 1:KA:143:TRP:CZ3 | 2.52 | 0.45 |
| 1:KA:402:ILE:HG22 | 1:KA:403:GLY:N | 2.32 | 0.45 |
| 1:KA:638:VAL:HG12 | 1:KA:639:ASP:N | 2.31 | 0.45 |
| 1:KB:405:THR:HG21 | 1:LB:393:VAL:O | 2.16 | 0.45 |
| 1:L:129:PHE:CE1 | 1:L:137:VAL:HG11 | 2.51 | 0.45 |
| 1:LB:10:ILE:O | 1:LB:32:PRO:HA | 2.17 | 0.45 |
| 1:LB:122:HIS:ND1 | 1:LB:160:VAL:HG11 | 2.32 | 0.45 |
| 1:LB:283:VAL:HG22 | 1:LB:301:VAL:HA | 1.98 | 0.45 |
| 1:M:406:TYR:CG | 1:M:407:MET:N | 2.85 | 0.45 |
| 1:MA:18:VAL:HG12 | 1:MA:37:ARG:HE | 1.82 | 0.45 |
| 1:MA:57:HIS:HB3 | 1:MA:111:PRO:HA | 1.99 | 0.45 |
| 1:MA:366:VAL:O | 1:MA:366:VAL:HG13 | 2.17 | 0.45 |
| 1:MB:15:TYR:CD2 | 1:MB:48:MET:O | 2.70 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:MB:18:VAL:HG12 | 1:MB:43:VAL:HA | 1.99 | 0.45 |
| 1:MB:388:ILE:HA | 1:MB:457:VAL:HG23 | 1.98 | 0.45 |
| 1:N:462:VAL:HG12 | 1:N:466:ALA:HB3 | 1.98 | 0.45 |
| 1:NA:471:TYR:CD2 | 1:NA:478:ALA:HB2 | 2.52 | 0.45 |
| 1:NB:547:PHE:O | 1:NB:549:VAL:HG23 | 2.17 | 0.45 |
| 1:O:143:TRP:N | 1:O:208:VAL:HG11 | 2.32 | 0.45 |
| 1:O:283:VAL:HG22 | 1:O:301:VAL:CA | 2.47 | 0.45 |
| 1:OA:387:GLY:H | 1:OA:457:VAL:HG12 | 1.82 | 0.45 |
| 1:OA:548:GLU:HB3 | 1:OA:634:VAL:HG23 | 1.98 | 0.45 |
| 1:OB:466:ALA:O | 1:OB:482:PHE:HA | 2.17 | 0.45 |
| 1:PA:208:VAL:HG23 | 1:PA:209:PHE:N | 2.32 | 0.45 |
| 1:PA:523:PHE:CE1 | 1:PA:568:VAL:HG23 | 2.52 | 0.45 |
| 1:Q:65:VAL:HG12 | 1:Q:83:LEU:CD1 | 2.47 | 0.45 |
| 1:QA:282:CYS:O | 1:QA:302:VAL:HB | 2.17 | 0.45 |
| 1:QA:745:LYS:O | 1:QA:748:ALA:HB3 | 2.17 | 0.45 |
| 1:QB:183:TRP:HA | 1:QB:189:GLU:HA | 1.98 | 0.45 |
| 1:R:16:ILE:HG23 | 1:R:45:PHE:O | 2.17 | 0.45 |
| 1:R:65:VAL:HG12 | 1:R:82:ARG:C | 2.41 | 0.45 |
| 1:R:216:VAL:HG22 | 1:R:217:ASP:N | 2.31 | 0.45 |
| 1:RA:334:LEU:HG | 1:RA:373:VAL:HG13 | 1.99 | 0.45 |
| 1:S:55:PRO:O | 1:S:56:ARG:HD3 | 2.16 | 0.45 |
| 1:SB:216:VAL:HG22 | 1:SB:217:ASP:N | 2.32 | 0.45 |
| 1:SB:587:THR:HG23 | 1:SB:590:ASP:H | 1.82 | 0.45 |
| 1:T:348:LYS:O | 1:T:349:VAL:HG23 | 2.16 | 0.45 |
| 1:TA:228:HIS:HA | 1:TA:250:LEU:HD12 | 1.98 | 0.45 |
| 1:TA:470:VAL:HG22 | 1:TA:495:PHE:CD1 | 2.52 | 0.45 |
| 1:TA:487:VAL:O | 1:TA:487:VAL:HG13 | 2.16 | 0.45 |
| 1:TB:413:VAL:HG22 | 1:TB:414:LEU:N | 2.31 | 0.45 |
| 1:TB:716:VAL:HG11 | 1:UB:708:GLU:HG3 | 1.98 | 0.45 |
| 1:UA:627:VAL:HG23 | 1:UA:627:VAL:O | 2.17 | 0.45 |
| 1:UB:30:VAL:HG22 | 1:UB:31:GLY:N | 2.32 | 0.45 |
| 1:VA:123:LEU:HD21 | 1:VA:153:PRO:HG2 | 1.97 | 0.45 |
| 1:VA:692:LYS:O | 1:VA:696:GLN:N | 2.50 | 0.45 |
| 1:VB:383:ASP:O | 1:VB:384:GLU:C | 2.60 | 0.45 |
| 1:VB:405:THR:HG21 | 1:WB:393:VAL:O | 2.16 | 0.45 |
| 1:W:69:ALA:HB2 | 1:W:74:LEU:HD21 | 1.99 | 0.45 |
| 1:W:462:VAL:HG21 | 1:W:481:VAL:HG23 | 1.98 | 0.45 |
| 1:WA:275:THR:HG22 | 1:WA:276:LEU:N | 2.31 | 0.45 |
| 1:WA:420:PRO:N | 1:WA:421:PRO:HD2 | 2.31 | 0.45 |
| 1:WB:538:GLN:HA | 1:WB:538:GLN:OE1 | 2.17 | 0.45 |
| 1:X:120:ALA:HB2 | 1:X:205:LEU:HD21 | 1.99 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:X:382:LEU:HD23 | 1:X:456:ARG:HH22 | 1.82 | 0.45 |
| 1:X:579:VAL:HA | 1:X:602:ALA:HB1 | 1.99 | 0.45 |
| 1:XA:10:ILE:HD11 | 1:XA:29:GLU:HB2 | 1.99 | 0.45 |
| 1:XA:340:LEU:HD11 | 1:XA:357:TRP:CH2 | 2.52 | 0.45 |
| 1:XB:697:SER:O | 1:XB:700:GLU:HB3 | 2.17 | 0.45 |
| 1:Y:34:THR:O | 1:Y:35:TYR:C | 2.59 | 0.45 |
| 1:Y:227:LEU:HA | 1:Y:270:VAL:HG22 | 1.98 | 0.45 |
| 1:Y:794:LYS:HB2 | 1:Z:792:VAL:HG21 | 1.99 | 0.45 |
| 1:Z:36:ILE:HG22 | 1:Z:37:ARG:N | 2.32 | 0.45 |
| 1:Z:166:THR:HG21 | 1:Z:174:LEU:HD22 | 1.98 | 0.45 |
| 1:Z:284:ILE:HG22 | 1:Z:310:LEU:HD21 | 1.99 | 0.45 |
| 1:ZA:6:PHE:O | 1:ZA:36:ILE:HA | 2.17 | 0.45 |
| 1:ZA:138:VAL:O | 1:ZA:139:ALA:C | 2.60 | 0.45 |
| 1:ZA:501:SER:HA | 1:ZA:508:PRO:HA | 1.99 | 0.45 |
| 1:ZA:528:THR:HG23 | 1:ZA:537:LEU:O | 2.16 | 0.45 |
| 1:ZB:472:ASP:HA | 1:ZB:493:GLU:HA | 1.99 | 0.45 |
| 1:A:58:TYR:HA | 1:A:109:ILE:HD12 | 1.98 | 0.44 |
| 1:A:212:VAL:C | 1:A:213:LEU:HD22 | 2.41 | 0.44 |
| 1:AB:280:ASN:HA | 1:AB:322:ASP:HA | 1.99 | 0.44 |
| 1:BA:65:VAL:HG23 | 1:BA:67:ARG:HG3 | 1.98 | 0.44 |
| 1:BA:104:VAL:HG22 | 1:BA:105:LEU:N | 2.32 | 0.44 |
| 1:BA:336:ALA:HB2 | 1:BA:357:TRP:CZ3 | 2.53 | 0.44 |
| 1:BA:529:ILE:HG21 | 1:BA:583:VAL:HG11 | 1.99 | 0.44 |
| 1:BB:121:LEU:O | 1:BB:144:LEU:HA | 2.16 | 0.44 |
| 1:BB:729:ARG:CZ | 1:BB:729:ARG:HB2 | 2.47 | 0.44 |
| 1:C:281:TYR:CE1 | 1:C:321:GLN:HG2 | 2.52 | 0.44 |
| 1:C:564:VAL:HG11 | 1:C:567:PHE:HA | 1.98 | 0.44 |
| 1:D:227:LEU:HA | 1:D:270:VAL:HA | 1.98 | 0.44 |
| 1:DA:228:HIS:ND1 | 1:DA:268:LEU:HD23 | 2.32 | 0.44 |
| 1:DA:401:VAL:O | 1:DA:401:VAL:HG23 | 2.17 | 0.44 |
| 1:DA:761:ARG:O | 1:DA:765:VAL:HG23 | 2.17 | 0.44 |
| 1:DB:96:PRO:HD3 | 1:EB:85:HIS:CG | 2.52 | 0.44 |
| 1:DB:539:LEU:HD12 | 1:DB:541:LEU:HD11 | 1.99 | 0.44 |
| 1:E:325:VAL:O | 1:E:325:VAL:HG13 | 2.18 | 0.44 |
| 1:E:592:HIS:CE1 | 1:F:534:HIS:HD1 | 2.35 | 0.44 |
| 1:EA:227:LEU:HD12 | 1:EA:228:HIS:N | 2.32 | 0.44 |
| 1:EA:666:THR:O | 1:EA:670:GLU:HG3 | 2.18 | 0.44 |
| 1:EB:9:ARG:HB3 | 1:EB:34:THR:HG22 | 1.98 | 0.44 |
| 1:EB:268:LEU:N | 1:EB:268:LEU:HD12 | 2.32 | 0.44 |
| 1:F:178:ALA:HB1 | 1:F:182:CYS:SG | 2.57 | 0.44 |
| 1:F:257:GLU:HG3 | 1:G:245:THR:HB | 1.99 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:FA:388:ILE:HA | 1:FA:456:ARG:HA | 1.99 | 0.44 |
| 1:FA:415:TRP:CH2 | 1:FA:417:LYS:HA | 2.52 | 0.44 |
| 1:FA:469:GLN:OE1 | 1:FA:496:THR:HG21 | 2.17 | 0.44 |
| 1:G:250:LEU:HD11 | 1:G:311:GLN:HA | 1.98 | 0.44 |
| 1:G:389:TYR:CE1 | 1:G:457:VAL:HG22 | 2.52 | 0.44 |
| 1:G:400:ALA:HB1 | 1:G:457:VAL:HG21 | 1.99 | 0.44 |
| 1:G:405:THR:HG21 | 1:H:393:VAL:O | 2.16 | 0.44 |
| 1:G:666:THR:HG22 | 1:H:657:SER:HB2 | 1.99 | 0.44 |
| 1:GA:32:PRO:HB2 | 1:HA:24:ASN:HB2 | 1.98 | 0.44 |
| 1:GB:173:ALA:C | 1:GB:197:LEU:HD11 | 2.42 | 0.44 |
| 1:GB:332:LEU:HD21 | 1:GB:373:VAL:HG13 | 1.99 | 0.44 |
| 1:GB:526:VAL:HG22 | 1:GB:540:GLN:HG3 | 1.99 | 0.44 |
| 1:H:540:GLN:C | 1:H:541:LEU:HD12 | 2.41 | 0.44 |
| 1:HA:7:ILE:O | 1:HA:8:ILE:C | 2.61 | 0.44 |
| 1:HA:331:GLY:N | 1:HA:407:MET:HE3 | 2.32 | 0.44 |
| 1:HA:413:VAL:HG22 | 1:HA:414:LEU:N | 2.32 | 0.44 |
| 1:HB:333:LEU:HA | 1:HB:358:LEU:HA | 1.99 | 0.44 |
| 1:I:121:LEU:HD13 | 1:I:123:LEU:HD21 | 1.98 | 0.44 |
| 1:I:143:TRP:CH2 | 1:I:157:VAL:HG13 | 2.52 | 0.44 |
| 1:I:359:ILE:O | 1:I:359:ILE:HG23 | 2.17 | 0.44 |
| 1:I:747:LYS:O | 1:I:751:LEU:HD23 | 2.17 | 0.44 |
| 1:IA:3:THR:HG22 | 1:IA:6:PHE:CD1 | 2.52 | 0.44 |
| 1:IB:129:PHE:CD1 | 1:IB:137:VAL:HG11 | 2.52 | 0.44 |
| 1:IB:666:THR:HG22 | 1:JB:657:SER:OG | 2.17 | 0.44 |
| 1:JB:332:LEU:HD11 | 1:JB:374:VAL:O | 2.15 | 0.44 |
| 1:JB:365:TYR:CZ | 1:JB:366:VAL:O | 2.70 | 0.44 |
| 1:K:68:ASP:OD2 | 1:K:74:LEU:HD12 | 2.16 | 0.44 |
| 1:K:662:ILE:HG21 | 1:L:653:ALA:CB | 2.41 | 0.44 |
| 1:KA:333:LEU:CD2 | 1:KA:374:VAL:HG11 | 2.45 | 0.44 |
| 1:KA:405:THR:HG23 | 1:LA:396:GLY:HA2 | 1.96 | 0.44 |
| 1:L:122:HIS:HD2 | 1:L:208:VAL:HG12 | 1.80 | 0.44 |
| 1:LA:665:THR:HG21 | 1:MA:589:ASP:OD2 | 2.17 | 0.44 |
| 1:LB:171:ASN:O | 1:LB:172:GLN:HG2 | 2.18 | 0.44 |
| 1:LB:402:ILE:HG22 | 1:LB:403:GLY:N | 2.31 | 0.44 |
| 1:LB:458:VAL:HG12 | 1:LB:459:SER:N | 2.32 | 0.44 |
| 1:LB:685:ARG:O | 1:LB:688:LEU:HB3 | 2.17 | 0.44 |
| 1:M:462:VAL:HG21 | 1:M:481:VAL:CG2 | 2.47 | 0.44 |
| 1:MA:16:ILE:HD11 | 1:MA:47:PRO:CD | 2.48 | 0.44 |
| 1:MA:539:LEU:HD11 | 1:MA:640:VAL:HG11 | 1.98 | 0.44 |
| 1:N:579:VAL:HG13 | 1:N:599:ILE:CD1 | 2.46 | 0.44 |
| 1:NB:35:TYR:CG | 1:NB:36:ILE:N | 2.84 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:NB:316:LEU:HD21 | 1:NB:319:GLY:C | 2.42 | 0.44 |
| 1:NB:497:VAL:HG22 | 1:NB:498:LEU:N | 2.32 | 0.44 |
| 1:NB:529:ILE:HD13 | 1:NB:579:VAL:CG1 | 2.46 | 0.44 |
| 1:O:571:ALA:O | 1:O:575:ILE:HD12 | 2.18 | 0.44 |
| 1:OA:61:VAL:HG12 | 1:OA:105:LEU:HD12 | 1.99 | 0.44 |
| 1:OA:63:ASN:CG | 1:OA:83:LEU:HD23 | 2.42 | 0.44 |
| 1:OA:185:ARG:HG2 | 1:OA:204:TYR:OH | 2.16 | 0.44 |
| 1:OB:68:ASP:HB2 | 1:OB:74:LEU:HD12 | 1.98 | 0.44 |
| 1:OB:462:VAL:HB | 1:OB:485:GLU:O | 2.17 | 0.44 |
| 1:PA:480:VAL:HG21 | 1:PA:558:THR:HG21 | 1.98 | 0.44 |
| 1:PA:746:LEU:HD21 | 1:QA:738:GLU:CG | 2.47 | 0.44 |
| 1:Q:333:LEU:HA | 1:Q:358:LEU:HA | 1.98 | 0.44 |
| 1:Q:471:TYR:HA | 1:Q:477:ARG:O | 2.17 | 0.44 |
| 1:Q:762:VAL:HB | 1:Q:766:ARG:HE | 1.81 | 0.44 |
| 1:QA:58:TYR:CE2 | 1:QA:92:LEU:HG | 2.52 | 0.44 |
| 1:QB:115:VAL:HG22 | 1:QB:149:GLY:O | 2.17 | 0.44 |
| 1:QB:770:LEU:O | 1:QB:774:ARG:HD3 | 2.16 | 0.44 |
| 1:RA:419:LEU:HD23 | 1:RA:494:GLN:OE1 | 2.18 | 0.44 |
| 1:RB:338:GLN:HB3 | 1:RB:339:PRO:HD2 | 1.99 | 0.44 |
| 1:RB:689:GLU:HA | 1:RB:692:LYS:HD2 | 1.99 | 0.44 |
| 1:TA:365:TYR:HE2 | 1:TA:371:VAL:HG11 | 1.81 | 0.44 |
| 1:TB:233:ARG:HG2 | 1:TB:264:HIS:HA | 1.99 | 0.44 |
| 1:UA:529:ILE:HG21 | 1:UA:583:VAL:HG11 | 1.99 | 0.44 |
| 1:UB:530:GLU:C | 1:UB:583:VAL:HG22 | 2.42 | 0.44 |
| 1:V:7:ILE:O | 1:V:7:ILE:HG13 | 2.16 | 0.44 |
| 1:VA:237:ASP:HB2 | 1:VA:265:GLU:OE2 | 2.17 | 0.44 |
| 1:VA:426:LEU:HD21 | 1:VA:452:ARG:HB2 | 1.97 | 0.44 |
| 1:WA:16:ILE:HG13 | 1:WA:45:PHE:O | 2.17 | 0.44 |
| 1:WB:802:ILE:HA | 1:XB:804:PRO:HA | 1.98 | 0.44 |
| 1:X:177:ARG:HB2 | 1:X:213:LEU:HD21 | 1.99 | 0.44 |
| 1:X:274:THR:HG21 | 1:X:310:LEU:HD21 | 1.99 | 0.44 |
| 1:X:452:ARG:CD | 1:X:458:VAL:HG22 | 2.47 | 0.44 |
| 1:XA:340:LEU:HD12 | 1:XA:351:HIS:HB2 | 1.99 | 0.44 |
| 1:XB:57:HIS:CB | 1:XB:111:PRO:HA | 2.47 | 0.44 |
| 1:XB:331:GLY:HA2 | 1:XB:360:ARG:HA | 1.99 | 0.44 |
| 1:XB:391:GLN:HB2 | 1:XB:415:TRP:HB2 | 1.99 | 0.44 |
| 1:YA:125:ALA:HB1 | 1:YA:129:PHE:CE2 | 2.52 | 0.44 |
| 1:YA:175:ARG:HG3 | 1:YA:263:VAL:HG12 | 1.99 | 0.44 |
| 1:YA:346:GLU:C | 1:YA:347:GLU:HG3 | 2.42 | 0.44 |
| 1:Z:174:LEU:HA | 1:Z:214:ASP:O | 2.17 | 0.44 |
| 1:ZA:160:VAL:HG12 | 1:ZA:161:GLU:H | 1.82 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:ZA:329:GLN:NE2 | 1:ZA:379:ALA:HB3 | 2.32 | 0.44 |
| 1:ZB:8:ILE:H | 1:ZB:8:ILE:HD12 | 1.82 | 0.44 |
| 1:ZB:34:THR:HG22 | 1:ZB:34:THR:O | 2.16 | 0.44 |
| 1:ZB:57:HIS:HA | 1:ZB:110:THR:C | 2.43 | 0.44 |
| 1:ZB:167:ILE:O | 1:ZB:167:ILE:HG22 | 2.17 | 0.44 |
| 1:A:3:THR:HG22 | 1:A:3:THR:O | 2.17 | 0.44 |
| 1:A:175:ARG:HE | 1:A:213:LEU:HB3 | 1.81 | 0.44 |
| 1:AC:405:THR:O | 1:AC:405:THR:HG23 | 2.17 | 0.44 |
| 1:AC:761:ARG:NH2 | 1:OA:759:LEU:HD21 | 2.32 | 0.44 |
| 1:B:230:ARG:HB2 | 1:B:248:GLU:OE2 | 2.17 | 0.44 |
| 1:B:360:ARG:HE | 1:B:407:MET:HG2 | 1.82 | 0.44 |
| 1:B:801:ALA:HB3 | 1:C:795:PHE:CE2 | 2.52 | 0.44 |
| 1:BA:762:VAL:HG23 | 1:BA:763:GLN:N | 2.32 | 0.44 |
| 1:BB:777:LEU:O | 1:BB:781:VAL:HG22 | 2.18 | 0.44 |
| 1:C:316:LEU:HD21 | 1:C:319:GLY:HA2 | 1.99 | 0.44 |
| 1:CA:325:VAL:O | 1:CA:325:VAL:HG13 | 2.17 | 0.44 |
| 1:CA:411:ASP:OD1 | 1:CA:411:ASP:C | 2.60 | 0.44 |
| 1:CA:414:LEU:CB | 1:CA:455:THR:HG21 | 2.48 | 0.44 |
| 1:CB:326:LEU:O | 1:CB:362:PRO:HA | 2.17 | 0.44 |
| 1:D:406:TYR:CG | 1:D:407:MET:N | 2.84 | 0.44 |
| 1:D:417:LYS:HZ3 | 1:D:491:PRO:C | 2.25 | 0.44 |
| 1:DA:58:TYR:CG | 1:DA:92:LEU:HA | 2.52 | 0.44 |
| 1:DA:122:HIS:NE2 | 1:DA:208:VAL:HG12 | 2.32 | 0.44 |
| 1:DA:318:GLN:HB2 | 1:DA:321:GLN:CG | 2.48 | 0.44 |
| 1:DB:13:TYR:C | 1:DB:50:MET:HG2 | 2.42 | 0.44 |
| 1:DB:643:VAL:HG23 | 1:EB:580:ARG:HH12 | 1.82 | 0.44 |
| 1:DB:761:ARG:O | 1:DB:765:VAL:HG23 | 2.17 | 0.44 |
| 1:E:651:ARG:CZ | 1:E:654:LEU:HD13 | 2.47 | 0.44 |
| 1:EA:227:LEU:HA | 1:EA:270:VAL:HA | 1.99 | 0.44 |
| 1:EA:643:VAL:O | 1:EA:643:VAL:HG23 | 2.17 | 0.44 |
| 1:F:253:VAL:HG23 | 1:F:254:GLN:OE1 | 2.17 | 0.44 |
| 1:FB:520:PRO:HA | 1:FB:545:TRP:O | 2.17 | 0.44 |
| 1:GA:8:ILE:H | 1:GA:8:ILE:HD12 | 1.81 | 0.44 |
| 1:GB:284:ILE:HD12 | 1:GB:287:PRO:HB3 | 1.98 | 0.44 |
| 1:H:208:VAL:HG23 | 1:H:209:PHE:N | 2.33 | 0.44 |
| 1:H:273:ILE:HG23 | 1:H:273:ILE:O | 2.16 | 0.44 |
| 1:H:482:PHE:CZ | 1:H:552:ARG:HB3 | 2.53 | 0.44 |
| 1:HA:332:LEU:HD12 | 1:HA:376:GLU:HB2 | 1.99 | 0.44 |
| 1:HA:679:ARG:O | 1:HA:682:GLN:HB3 | 2.17 | 0.44 |
| 1:HB:196:TRP:C | 1:HB:197:LEU:HD22 | 2.42 | 0.44 |
| 1:I:227:LEU:HD13 | 1:I:270:VAL:HG22 | 1.99 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:I:388:ILE:HA | 1:I:457:VAL:HG23 | 1.99 | 0.44 |
| 1:IA:9:ARG:CB | 1:IA:34:THR:HG22 | 2.47 | 0.44 |
| 1:IA:120:ALA:HB3 | 1:IA:205:LEU:HD21 | 1.99 | 0.44 |
| 1:IA:167:ILE:HG22 | 1:IA:203:ALA:HB2 | 1.98 | 0.44 |
| 1:IA:487:VAL:HG22 | 1:IA:488:SER:N | 2.32 | 0.44 |
| 1:IB:468:VAL:HG11 | 1:IB:495:PHE:HD2 | 1.81 | 0.44 |
| 1:IB:599:ILE:O | 1:IB:603:VAL:HG23 | 2.17 | 0.44 |
| 1:IB:604:PHE:HB3 | 1:IB:623:ARG:HB2 | 2.00 | 0.44 |
| 1:J:398:VAL:HG12 | 1:J:491:PRO:HB3 | 1.99 | 0.44 |
| 1:J:487:VAL:HG22 | 1:J:488:SER:N | 2.31 | 0.44 |
| 1:JA:767:GLU:HA | 1:JA:770:LEU:HD12 | 1.99 | 0.44 |
| 1:JB:7:ILE:O | 1:JB:8:ILE:C | 2.61 | 0.44 |
| 1:K:638:VAL:HG12 | 1:K:639:ASP:N | 2.30 | 0.44 |
| 1:K:690:ARG:NE | 1:K:694:LEU:HD11 | 2.28 | 0.44 |
| 1:KA:20:ASP:O | 1:KA:23:SER:O | 2.35 | 0.44 |
| 1:KA:121:LEU:C | 1:KA:121:LEU:HD12 | 2.42 | 0.44 |
| 1:KA:229:LEU:HD12 | 1:KA:249:TRP:NE1 | 2.32 | 0.44 |
| 1:KA:281:TYR:CD2 | 1:KA:282:CYS:N | 2.85 | 0.44 |
| 1:KB:279:HIS:C | 1:KB:323:VAL:HG22 | 2.43 | 0.44 |
| 1:L:144:LEU:HD12 | 1:L:144:LEU:C | 2.42 | 0.44 |
| 1:L:283:VAL:HG22 | 1:L:301:VAL:HG23 | 1.99 | 0.44 |
| 1:L:334:LEU:HD12 | 1:L:357:TRP:CD1 | 2.53 | 0.44 |
| 1:LA:105:LEU:C | 1:LA:105:LEU:HD12 | 2.42 | 0.44 |
| 1:LA:206:PRO:HA | 1:LA:210:GLU:OE1 | 2.18 | 0.44 |
| 1:LB:540:GLN:CD | 1:LB:540:GLN:C | 2.85 | 0.44 |
| 1:M:114:VAL:HA | 1:M:150:THR:HA | 1.99 | 0.44 |
| 1:MA:65:VAL:HG23 | 1:MA:67:ARG:HG3 | 1.98 | 0.44 |
| 1:MA:382:LEU:HD11 | 1:MA:406:TYR:HB3 | 1.98 | 0.44 |
| 1:MB:157:VAL:HG12 | 1:MB:158:GLU:N | 2.32 | 0.44 |
| 1:MB:424:GLU:HG2 | 1:MB:425:GLU:N | 2.32 | 0.44 |
| 1:NB:169:ARG:NH2 | 1:NB:170:GLN:O | 2.50 | 0.44 |
| 1:NB:218:ALA:HB1 | 1:NB:259:HIS:C | 2.43 | 0.44 |
| 1:NB:529:ILE:HD12 | 1:NB:583:VAL:CB | 2.47 | 0.44 |
| 1:NB:643:VAL:HG13 | 1:OB:580:ARG:NH2 | 2.31 | 0.44 |
| 1:NB:792:VAL:HG12 | 1:NB:792:VAL:O | 2.17 | 0.44 |
| 1:O:112:LEU:HG | 1:O:153:PRO:HD3 | 1.98 | 0.44 |
| 1:OB:104:VAL:HG22 | 1:OB:105:LEU:N | 2.32 | 0.44 |
| 1:OB:125:ALA:HB2 | 1:OB:143:TRP:CZ3 | 2.52 | 0.44 |
| 1:OB:366:VAL:O | 1:OB:366:VAL:HG13 | 2.16 | 0.44 |
| 1:OB:382:LEU:HD22 | 1:OB:387:GLY:HA2 | 1.98 | 0.44 |
| 1:P:531:THR:HG21 | 1:P:588:PHE:CB | 2.48 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:PA:349:VAL:HG11 | 1:PA:357:TRP:NE1 | 2.32 | 0.44 |
| 1:PA:513:ALA:C | 1:PA:514:LEU:HD12 | 2.43 | 0.44 |
| 1:PA:746:LEU:HD21 | 1:QA:738:GLU:HG2 | 1.99 | 0.44 |
| 1:PB:8:ILE:HD12 | 1:PB:8:ILE:H | 1.82 | 0.44 |
| 1:PB:276:LEU:HD22 | 1:PB:281:TYR:N | 2.32 | 0.44 |
| 1:PB:381:PRO:CB | 1:PB:405:THR:HG22 | 2.47 | 0.44 |
| 1:PB:523:PHE:CZ | 1:PB:545:TRP:CE2 | 3.05 | 0.44 |
| 1:QA:28:VAL:HG11 | 1:QA:100:TYR:CG | 2.53 | 0.44 |
| 1:QA:91:ARG:C | 1:QA:92:LEU:HD12 | 2.42 | 0.44 |
| 1:QA:227:LEU:HD23 | 1:QA:228:HIS:C | 2.42 | 0.44 |
| 1:QB:50:MET:HB3 | 1:QB:97:PHE:N | 2.32 | 0.44 |
| 1:QB:207:ALA:HB3 | 1:QB:210:GLU:OE2 | 2.18 | 0.44 |
| 1:QB:516:LEU:HD23 | 1:QB:517:LEU:N | 2.33 | 0.44 |
| 1:R:184:ASP:HB3 | 1:R:196:TRP:CZ2 | 2.52 | 0.44 |
| 1:RB:400:ALA:O | 1:RB:402:ILE:HD12 | 2.17 | 0.44 |
| 1:S:182:CYS:SG | 1:S:209:PHE:HB3 | 2.58 | 0.44 |
| 1:S:539:LEU:HD11 | 1:S:640:VAL:HG11 | 1.99 | 0.44 |
| 1:SB:37:ARG:N | 1:SB:37:ARG:HD2 | 2.32 | 0.44 |
| 1:SB:50:MET:O | 1:SB:51:VAL:C | 2.60 | 0.44 |
| 1:SB:334:LEU:HD11 | 1:SB:359:ILE:HG22 | 1.99 | 0.44 |
| 1:SB:351:HIS:CE1 | 1:SB:357:TRP:CD2 | 3.05 | 0.44 |
| 1:SB:365:TYR:CG | 1:SB:366:VAL:N | 2.86 | 0.44 |
| 1:T:229:LEU:HD23 | 1:T:266:GLU:O | 2.17 | 0.44 |
| 1:TA:216:VAL:HG13 | 1:TA:260:VAL:CG2 | 2.47 | 0.44 |
| 1:TA:545:TRP:HA | 1:TA:635:VAL:HA | 2.00 | 0.44 |
| 1:TB:151:TYR:O | 1:TB:152:ILE:HD13 | 2.17 | 0.44 |
| 1:TB:215:LEU:HD12 | 1:TB:216:VAL:H | 1.81 | 0.44 |
| 1:UB:65:VAL:HG11 | 1:UB:100:TYR:CB | 2.47 | 0.44 |
| 1:UB:170:GLN:HA | 1:UB:201:VAL:HG22 | 1.99 | 0.44 |
| 1:UB:547:PHE:CD1 | 1:UB:633:LEU:HD13 | 2.53 | 0.44 |
| 1:V:66:SER:O | 1:V:73:VAL:HG13 | 2.17 | 0.44 |
| 1:VA:3:THR:HG22 | 1:VA:3:THR:O | 2.18 | 0.44 |
| 1:W:229:LEU:HD12 | 1:W:251:VAL:CG1 | 2.46 | 0.44 |
| 1:W:777:LEU:HD12 | 1:W:781:VAL:HG13 | 1.99 | 0.44 |
| 1:WA:275:THR:O | 1:WA:320:ILE:HD13 | 2.16 | 0.44 |
| 1:WA:470:VAL:HG12 | 1:WA:471:TYR:N | 2.32 | 0.44 |
| 1:WA:592:HIS:CE1 | 1:XA:530:GLU:HB3 | 2.52 | 0.44 |
| 1:WB:37:ARG:N | 1:WB:37:ARG:HD2 | 2.32 | 0.44 |
| 1:WB:81:VAL:HG22 | 1:WB:82:ARG:O | 2.17 | 0.44 |
| 1:XA:7:ILE:HG23 | 1:XA:36:ILE:CD1 | 2.46 | 0.44 |
| 1:XA:167:ILE:HG22 | 1:XA:169:ARG:HD2 | 1.99 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XB:323:VAL:HG12 | 1:XB:366:VAL:HB | 1.99 | 0.44 |
| 1:XB:334:LEU:HD11 | 1:XB:359:ILE:HB | 1.99 | 0.44 |
| 1:XB:379:ALA:HA | 1:XB:407:MET:HG3 | 1.98 | 0.44 |
| 1:XB:568:VAL:HG13 | 1:XB:569:GLY:N | 2.32 | 0.44 |
| 1:YB:175:ARG:NH2 | 1:YB:263:VAL:HG12 | 2.33 | 0.44 |
| 1:YB:283:VAL:HA | 1:YB:301:VAL:HA | 1.98 | 0.44 |
| 1:YB:382:LEU:HB2 | 1:YB:404:SER:O | 2.18 | 0.44 |
| 1:YB:768:LEU:HD11 | 1:ZB:763:GLN:N | 2.32 | 0.44 |
| 1:Z:143:TRP:CH2 | 1:Z:157:VAL:HG13 | 2.52 | 0.44 |
| 1:ZA:231:ALA:HB3 | 1:ZA:244:ARG:O | 2.18 | 0.44 |
| 1:A:531:THR:HG21 | 1:A:588:PHE:HB3 | 1.99 | 0.44 |
| 1:AC:176:LEU:HD21 | 1:AC:196:TRP:NE1 | 2.33 | 0.44 |
| 1:AC:230:ARG:HB3 | 1:AC:266:GLU:HB2 | 2.00 | 0.44 |
| 1:AC:391:GLN:O | 1:AC:413:VAL:HG12 | 2.17 | 0.44 |
| 1:BB:498:LEU:HD12 | 1:BB:513:ALA:CB | 2.47 | 0.44 |
| 1:BB:679:ARG:HH11 | 1:BB:680:LEU:HD23 | 1.81 | 0.44 |
| 1:C:388:ILE:HG22 | 1:C:389:TYR:O | 2.17 | 0.44 |
| 1:CA:25:VAL:HG21 | 1:CA:78:THR:O | 2.17 | 0.44 |
| 1:CA:400:ALA:HB1 | 1:CA:457:VAL:HG21 | 2.00 | 0.44 |
| 1:CB:414:LEU:HB3 | 1:CB:455:THR:HG21 | 1.99 | 0.44 |
| 1:CB:794:LYS:HB2 | 1:DB:792:VAL:HG21 | 1.98 | 0.44 |
| 1:D:13:TYR:HA | 1:D:50:MET:SD | 2.56 | 0.44 |
| 1:D:20:ASP:O | 1:D:23:SER:O | 2.35 | 0.44 |
| 1:D:189:GLU:CD | 1:D:189:GLU:N | 2.76 | 0.44 |
| 1:D:276:LEU:HD12 | 1:D:302:VAL:HG12 | 1.98 | 0.44 |
| 1:DA:455:THR:O | 1:DA:456:ARG:C | 2.59 | 0.44 |
| 1:E:176:LEU:HD21 | 1:E:196:TRP:NE1 | 2.33 | 0.44 |
| 1:EA:334:LEU:HD11 | 1:EA:359:ILE:CG2 | 2.47 | 0.44 |
| 1:EA:451:PRO:O | 1:EA:452:ARG:O | 2.34 | 0.44 |
| 1:EA:482:PHE:HB2 | 1:EA:518:LEU:HD23 | 1.98 | 0.44 |
| 1:EB:340:LEU:HD13 | 1:EB:344:GLU:HB2 | 1.98 | 0.44 |
| 1:EB:633:LEU:HD12 | 1:EB:634:VAL:N | 2.32 | 0.44 |
| 1:F:741:VAL:O | 1:F:744:ALA:HB3 | 2.18 | 0.44 |
| 1:FB:121:LEU:CD1 | 1:FB:123:LEU:HD21 | 2.48 | 0.44 |
| 1:G:391:GLN:HB3 | 1:G:413:VAL:HG13 | 1.99 | 0.44 |
| 1:G:787:LEU:CD2 | 1:H:781:VAL:HG12 | 2.46 | 0.44 |
| 1:GA:58:TYR:CZ | 1:GA:112:LEU:HD13 | 2.53 | 0.44 |
| 1:GA:341:GLU:HA | 1:GA:350:SER:OG | 2.18 | 0.44 |
| 1:GB:366:VAL:O | 1:GB:366:VAL:HG13 | 2.17 | 0.44 |
| 1:H:176:LEU:HA | 1:H:211:GLU:O | 2.17 | 0.44 |
| 1:HA:451:PRO:O | 1:HA:452:ARG:O | 2.35 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:HB:120:ALA:CB | 1:HB:205:LEU:HD21 | 2.46 | 0.44 |
| 1:HB:304:GLY:C | 1:HB:305:GLU:HG3 | 2.42 | 0.44 |
| 1:HB:623:ARG:NH2 | 1:HB:627:VAL:HG13 | 2.32 | 0.44 |
| 1:I:466:ALA:O | 1:I:482:PHE:HA | 2.17 | 0.44 |
| 1:IA:543:TYR:O | 1:IA:545:TRP:HD1 | 2.01 | 0.44 |
| 1:IB:392:ASP:O | 1:IB:396:GLY:N | 2.50 | 0.44 |
| 1:J:528:THR:HG22 | 1:J:529:ILE:N | 2.32 | 0.44 |
| 1:JA:516:LEU:O | 1:JA:517:LEU:HD22 | 2.18 | 0.44 |
| 1:JB:184:ASP:OD1 | 1:JB:184:ASP:C | 2.60 | 0.44 |
| 1:K:60:THR:HG22 | 1:K:107:LYS:HB3 | 1.97 | 0.44 |
| 1:KA:112:LEU:HD11 | 1:KA:153:PRO:HD3 | 2.00 | 0.44 |
| 1:KB:13:TYR:OH | 1:LB:83:LEU:HD13 | 2.17 | 0.44 |
| 1:KB:160:VAL:HG12 | 1:KB:161:GLU:N | 2.32 | 0.44 |
| 1:LA:16:ILE:HD11 | 1:LA:47:PRO:N | 2.32 | 0.44 |
| 1:LA:502:ALA:HB3 | 1:LA:510:ALA:HB3 | 1.98 | 0.44 |
| 1:LA:502:ALA:CB | 1:LA:511:ARG:HE | 2.30 | 0.44 |
| 1:M:116:LEU:N | 1:M:119:THR:HG22 | 2.33 | 0.44 |
| 1:M:405:THR:HG23 | 1:N:396:GLY:CA | 2.47 | 0.44 |
| 1:MA:54:PRO:HB2 | 1:MA:57:HIS:CE1 | 2.52 | 0.44 |
| 1:MA:286:ASP:OD2 | 1:MA:296:LEU:HD13 | 2.17 | 0.44 |
| 1:MA:333:LEU:HD23 | 1:MA:374:VAL:CG1 | 2.47 | 0.44 |
| 1:MA:374:VAL:HG12 | 1:MA:375:GLU:H | 1.81 | 0.44 |
| 1:N:28:VAL:HG22 | 1:N:101:PRO:HD3 | 1.99 | 0.44 |
| 1:NA:131:ASP:OD1 | 1:NA:133:ASP:O | 2.34 | 0.44 |
| 1:NA:236:ARG:HA | 1:NA:241:VAL:O | 2.16 | 0.44 |
| 1:NA:530:GLU:C | 1:NA:583:VAL:HG22 | 2.42 | 0.44 |
| 1:NA:638:VAL:HG12 | 1:NA:639:ASP:N | 2.33 | 0.44 |
| 1:NB:391:GLN:NE2 | 1:NB:398:VAL:HG23 | 2.32 | 0.44 |
| 1:O:276:LEU:HD13 | 1:O:281:TYR:HA | 2.00 | 0.44 |
| 1:O:335:ARG:C | 1:O:372:GLU:HB3 | 2.42 | 0.44 |
| 1:O:704:LYS:HA | 1:O:707:LEU:HD12 | 1.99 | 0.44 |
| 1:OA:227:LEU:HD12 | 1:OA:228:HIS:H | 1.82 | 0.44 |
| 1:OA:527:ILE:CD1 | 1:OA:541:LEU:HD12 | 2.48 | 0.44 |
| 1:OA:606:PHE:HB2 | 1:OA:623:ARG:HB2 | 1.99 | 0.44 |
| 1:P:406:TYR:CZ | 1:P:407:MET:O | 2.70 | 0.44 |
| 1:PB:765:VAL:HG22 | 1:QB:759:LEU:HD21 | 1.98 | 0.44 |
| 1:PB:790:VAL:HG22 | 1:QB:785:GLN:CG | 2.47 | 0.44 |
| 1:Q:18:VAL:HB | 1:Q:27:ARG:HB3 | 1.99 | 0.44 |
| 1:Q:763:GLN:NE2 | 1:Q:764:LYS:HG3 | 2.32 | 0.44 |
| 1:QA:115:VAL:HG12 | 1:QA:119:THR:HG23 | 1.97 | 0.44 |
| 1:QA:390:VAL:HG23 | 1:QA:412:GLU:OE2 | 2.18 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:QA:405:THR:HG21 | 1:RA:393:VAL:HA | 1.99 | 0.44 |
| 1:QB:35:TYR:O | 1:QB:37:ARG:NH2 | 2.51 | 0.44 |
| 1:QB:212:VAL:C | 1:QB:213:LEU:HD22 | 2.42 | 0.44 |
| 1:RA:63:ASN:ND2 | 1:RA:83:LEU:HD23 | 2.27 | 0.44 |
| 1:RA:112:LEU:HG | 1:RA:150:THR:OG1 | 2.17 | 0.44 |
| 1:RA:182:CYS:SG | 1:RA:209:PHE:CD1 | 3.10 | 0.44 |
| 1:RA:260:VAL:O | 1:RA:260:VAL:HG13 | 2.17 | 0.44 |
| 1:RB:144:LEU:C | 1:RB:144:LEU:HD12 | 2.42 | 0.44 |
| 1:S:125:ALA:HB1 | 1:S:129:PHE:HE1 | 1.81 | 0.44 |
| 1:SA:472:ASP:HA | 1:SA:493:GLU:HA | 1.99 | 0.44 |
| 1:SB:115:VAL:HG11 | 1:SB:145:PHE:CD2 | 2.52 | 0.44 |
| 1:SB:187:GLY:O | 1:SB:188:LYS:C | 2.60 | 0.44 |
| 1:TB:176:LEU:HD23 | 1:TB:196:TRP:O | 2.18 | 0.44 |
| 1:V:714:MET:SD | 1:V:714:MET:C | 3.01 | 0.44 |
| 1:V:775:ALA:HB1 | 1:W:770:LEU:HD22 | 2.00 | 0.44 |
| 1:VA:387:GLY:C | 1:VA:457:VAL:HG23 | 2.41 | 0.44 |
| 1:VB:197:LEU:HD22 | 1:VB:216:VAL:HG11 | 1.99 | 0.44 |
| 1:VB:379:ALA:HA | 1:VB:407:MET:HB2 | 1.99 | 0.44 |
| 1:VB:550:ASN:N | 1:VB:557:GLU:OE2 | 2.51 | 0.44 |
| 1:W:174:LEU:C | 1:W:197:LEU:HD23 | 2.41 | 0.44 |
| 1:WA:76:ASP:HB3 | 1:WA:82:ARG:CA | 2.46 | 0.44 |
| 1:WA:220:ILE:HD12 | 1:XA:245:THR:CG2 | 2.47 | 0.44 |
| 1:WA:501:SER:OG | 1:WA:568:VAL:HG13 | 2.18 | 0.44 |
| 1:WB:16:ILE:HG22 | 1:WB:17:HIS:O | 2.17 | 0.44 |
| 1:WB:144:LEU:HD12 | 1:WB:144:LEU:C | 2.42 | 0.44 |
| 1:WB:379:ALA:HA | 1:WB:407:MET:HB2 | 2.00 | 0.44 |
| 1:WB:764:LYS:HD3 | 1:XB:759:LEU:HD11 | 2.00 | 0.44 |
| 1:X:16:ILE:CG2 | 1:X:43:VAL:HG13 | 2.47 | 0.44 |
| 1:XB:143:TRP:CA | 1:XB:208:VAL:HG11 | 2.46 | 0.44 |
| 1:XB:168:ILE:HB | 1:XB:200:THR:O | 2.17 | 0.44 |
| 1:XB:549:VAL:O | 1:XB:549:VAL:HG23 | 2.17 | 0.44 |
| 1:XB:591:PHE:HZ | 1:XB:599:ILE:HD11 | 1.82 | 0.44 |
| 1:XB:643:VAL:O | 1:XB:643:VAL:HG23 | 2.17 | 0.44 |
| 1:YA:539:LEU:HG | 1:YA:640:VAL:HG13 | 2.00 | 0.44 |
| 1:YB:303:LYS:HE3 | 1:YB:323:VAL:HG11 | 2.00 | 0.44 |
| 1:Z:6:PHE:O | 1:Z:36:ILE:HA | 2.16 | 0.44 |
| 1:Z:143:TRP:CH2 | 1:Z:157:VAL:HG22 | 2.52 | 0.44 |
| 1:Z:392:ASP:CG | 1:Z:395:THR:HG22 | 2.42 | 0.44 |
| 1:Z:539:LEU:HD12 | 1:Z:642:SER:O | 2.17 | 0.44 |
| 1:ZA:145:PHE:CG | 1:ZA:146:GLU:N | 2.86 | 0.44 |
| 1:ZB:283:VAL:HA | 1:ZB:301:VAL:HA | 2.00 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AA:8:ILE:HG22 | 1:AA:8:ILE:O | 2.17 | 0.44 |
| 1:AA:280:ASN:HA | 1:AA:322:ASP:HA | 1.99 | 0.44 |
| 1:AA:774:ARG:HE | 1:Z:779:LEU:HD21 | 1.82 | 0.44 |
| 1:AB:8:ILE:H | 1:AB:8:ILE:HD12 | 1.83 | 0.44 |
| 1:AC:537:LEU:HA | 1:AC:645:PRO:HA | 1.98 | 0.44 |
| 1:B:51:VAL:O | 1:B:96:PRO:HA | 2.16 | 0.44 |
| 1:B:197:LEU:HD21 | 1:B:263:VAL:HG13 | 1.99 | 0.44 |
| 1:BB:352:GLN:O | 1:BB:353:ALA:C | 2.60 | 0.44 |
| 1:BB:475:GLU:HB3 | 1:BB:477:ARG:HE | 1.82 | 0.44 |
| 1:BB:487:VAL:HG13 | 1:BB:495:PHE:CZ | 2.52 | 0.44 |
| 1:BB:525:ASP:OD2 | 1:BB:527:ILE:HG23 | 2.17 | 0.44 |
| 1:C:165:ALA:O | 1:C:203:ALA:HB1 | 2.17 | 0.44 |
| 1:C:175:ARG:NH2 | 1:C:263:VAL:HG11 | 2.32 | 0.44 |
| 1:CA:173:ALA:HB1 | 1:CA:197:LEU:HD11 | 1.98 | 0.44 |
| 1:CA:223:GLU:CD | 1:CA:253:VAL:HG11 | 2.42 | 0.44 |
| 1:CA:742:LEU:HD12 | 1:CA:745:LYS:HE3 | 1.98 | 0.44 |
| 1:CA:772:TYR:O | 1:CA:776:GLN:HG2 | 2.18 | 0.44 |
| 1:CB:282:CYS:HB2 | 1:CB:316:LEU:HD21 | 1.98 | 0.44 |
| 1:D:284:ILE:HD11 | 1:D:300:ARG:HD2 | 2.00 | 0.44 |
| 1:DA:10:ILE:HG13 | 1:DA:33:LYS:H | 1.81 | 0.44 |
| 1:DA:65:VAL:HA | 1:DA:83:LEU:HA | 1.98 | 0.44 |
| 1:DA:112:LEU:HB2 | 1:DA:151:TYR:O | 2.16 | 0.44 |
| 1:DA:417:LYS:HE3 | 1:DA:489:LEU:HD13 | 1.99 | 0.44 |
| 1:DA:500:LEU:HB2 | 1:DA:511:ARG:CZ | 2.48 | 0.44 |
| 1:DA:523:PHE:CZ | 1:DA:545:TRP:CE2 | 3.05 | 0.44 |
| 1:DA:526:VAL:HG13 | 1:DA:538:GLN:HE21 | 1.82 | 0.44 |
| 1:DA:654:LEU:O | 1:DA:658:VAL:HG12 | 2.17 | 0.44 |
| 1:DB:35:TYR:O | 1:DB:37:ARG:NH2 | 2.50 | 0.44 |
| 1:DB:658:VAL:HG23 | 1:EB:533:ASP:CB | 2.48 | 0.44 |
| 1:E:633:LEU:HD12 | 1:E:634:VAL:H | 1.81 | 0.44 |
| 1:EA:20:ASP:O | 1:EA:23:SER:O | 2.35 | 0.44 |
| 1:EB:57:HIS:HB3 | 1:EB:109:ILE:HG22 | 1.99 | 0.44 |
| 1:EB:60:THR:OG1 | 1:EB:107:LYS:HB2 | 2.17 | 0.44 |
| 1:F:218:ALA:HB1 | 1:F:259:HIS:C | 2.42 | 0.44 |
| 1:FA:585:SER:OG | 1:FA:586:VAL:HG13 | 2.18 | 0.44 |
| 1:FB:7:ILE:HG21 | 1:H:36:ILE:CD1 | 2.47 | 0.44 |
| 1:G:121:LEU:HD12 | 1:G:122:HIS:O | 2.18 | 0.44 |
| 1:G:172:GLN:NE2 | 1:G:215:LEU:HD21 | 2.33 | 0.44 |
| 1:GA:6:PHE:O | 1:GA:36:ILE:HA | 2.18 | 0.44 |
| 1:GA:95:ASP:O | 1:GA:97:PHE:CD2 | 2.70 | 0.44 |
| 1:GB:17:HIS:HD2 | 1:GB:28:VAL:HG23 | 1.82 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:GB:250:LEU:HD11 | 1:GB:311:GLN:HA | 1.98 | 0.44 |
| 1:GB:316:LEU:HD11 | 1:GB:319:GLY:O | 2.17 | 0.44 |
| 1:GB:537:LEU:HD23 | 1:GB:645:PRO:CA | 2.45 | 0.44 |
| 1:H:770:LEU:O | 1:H:774:ARG:HD2 | 2.18 | 0.44 |
| 1:H:777:LEU:HD12 | 1:H:781:VAL:HG13 | 1.99 | 0.44 |
| 1:HB:285:LEU:HD12 | 1:HB:315:GLN:CB | 2.46 | 0.44 |
| 1:I:10:ILE:HD12 | 1:I:31:GLY:O | 2.17 | 0.44 |
| 1:I:276:LEU:HD11 | 1:I:302:VAL:CG1 | 2.45 | 0.44 |
| 1:I:467:ALA:HA | 1:I:482:PHE:HA | 1.99 | 0.44 |
| 1:J:170:GLN:HA | 1:J:201:VAL:HG22 | 1.98 | 0.44 |
| 1:J:244:ARG:O | 1:J:247:GLU:HB3 | 2.17 | 0.44 |
| 1:J:283:VAL:HA | 1:J:301:VAL:HA | 1.99 | 0.44 |
| 1:JA:206:PRO:HA | 1:JA:210:GLU:OE1 | 2.18 | 0.44 |
| 1:JA:273:ILE:O | 1:JA:273:ILE:HG23 | 2.18 | 0.44 |
| 1:JA:408:LEU:HD22 | 1:JA:412:GLU:HB3 | 1.99 | 0.44 |
| 1:JA:467:ALA:HA | 1:JA:482:PHE:HA | 1.99 | 0.44 |
| 1:JB:175:ARG:HA | 1:JB:196:TRP:O | 2.16 | 0.44 |
| 1:JB:179:ARG:HE | 1:JB:209:PHE:HA | 1.81 | 0.44 |
| 1:JB:323:VAL:CG1 | 1:JB:366:VAL:HG23 | 2.46 | 0.44 |
| 1:K:118:ASN:HD21 | 1:L:180:LYS:HA | 1.82 | 0.44 |
| 1:KA:88:LEU:C | 1:KA:88:LEU:HD23 | 2.42 | 0.44 |
| 1:KA:99:LEU:HD11 | 1:KA:103:GLU:C | 2.43 | 0.44 |
| 1:KB:60:THR:HG22 | 1:KB:90:ILE:HG13 | 1.98 | 0.44 |
| 1:LA:43:VAL:HG12 | 1:LA:44:LEU:N | 2.32 | 0.44 |
| 1:LA:83:LEU:HD21 | 1:LA:103:GLU:N | 2.33 | 0.44 |
| 1:LB:516:LEU:HD11 | 1:LB:547:PHE:CZ | 2.53 | 0.44 |
| 1:M:286:ASP:HA | 1:M:295:GLN:O | 2.18 | 0.44 |
| 1:M:761:ARG:HG3 | 1:N:755:THR:HG23 | 1.99 | 0.44 |
| 1:MB:3:THR:HG22 | 1:MB:3:THR:O | 2.17 | 0.44 |
| 1:MB:6:PHE:HA | 1:MB:37:ARG:HB2 | 1.99 | 0.44 |
| 1:MB:165:ALA:HB2 | 1:MB:205:LEU:HB2 | 2.00 | 0.44 |
| 1:MB:218:ALA:HA | 1:MB:260:VAL:HA | 1.99 | 0.44 |
| 1:MB:333:LEU:HD12 | 1:MB:334:LEU:H | 1.82 | 0.44 |
| 1:MB:350:SER:O | 1:MB:351:HIS:C | 2.60 | 0.44 |
| 1:N:286:ASP:N | 1:N:287:PRO:CD | 2.80 | 0.44 |
| 1:NA:16:ILE:HD11 | 1:NA:47:PRO:N | 2.32 | 0.44 |
| 1:NA:531:THR:HG21 | 1:NA:588:PHE:HA | 2.00 | 0.44 |
| 1:O:178:ALA:HB1 | 1:O:180:LYS:O | 2.17 | 0.44 |
| 1:O:402:ILE:HG22 | 1:O:403:GLY:N | 2.32 | 0.44 |
| 1:O:783:LYS:HG3 | 1:P:777:LEU:HD13 | 1.99 | 0.44 |
| 1:OA:304:GLY:C | 1:OA:305:GLU:HG3 | 2.42 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OA:392:ASP:HA | 1:OA:411:ASP:O | 2.18 | 0.44 |
| 1:OA:527:ILE:HG12 | 1:OA:541:LEU:HD12 | 1.99 | 0.44 |
| 1:OB:187:GLY:O | 1:OB:188:LYS:C | 2.59 | 0.44 |
| 1:P:539:LEU:HD13 | 1:P:640:VAL:HG13 | 1.98 | 0.44 |
| 1:P:765:VAL:HG22 | 1:Q:759:LEU:HD21 | 1.99 | 0.44 |
| 1:P:775:ALA:HB1 | 1:Q:770:LEU:HD13 | 1.99 | 0.44 |
| 1:PA:176:LEU:HD21 | 1:PA:196:TRP:CD1 | 2.53 | 0.44 |
| 1:PA:802:ILE:CD1 | 1:QA:807:ILE:HD12 | 2.47 | 0.44 |
| 1:PA:805:SER:C | 1:PA:807:ILE:HD12 | 2.42 | 0.44 |
| 1:PB:271:VAL:HG23 | 1:PB:309:PHE:CD2 | 2.52 | 0.44 |
| 1:PB:583:VAL:HG13 | 1:PB:584:ALA:N | 2.32 | 0.44 |
| 1:PB:787:LEU:HA | 1:PB:790:VAL:HG23 | 1.99 | 0.44 |
| 1:Q:18:VAL:CG1 | 1:Q:41:GLU:HB3 | 2.48 | 0.44 |
| 1:Q:129:PHE:CZ | 1:Q:137:VAL:HG11 | 2.52 | 0.44 |
| 1:QA:168:ILE:HD11 | 1:QA:200:THR:O | 2.17 | 0.44 |
| 1:QA:201:VAL:HG12 | 1:QA:202:GLY:N | 2.33 | 0.44 |
| 1:QA:382:LEU:N | 1:QA:405:THR:HG22 | 2.33 | 0.44 |
| 1:QB:116:LEU:HB2 | 1:QB:119:THR:CG2 | 2.48 | 0.44 |
| 1:RB:105:LEU:C | 1:RB:105:LEU:HD12 | 2.42 | 0.44 |
| 1:RB:411:ASP:OD1 | 1:RB:411:ASP:C | 2.60 | 0.44 |
| 1:RB:802:ILE:HB | 1:SB:799:THR:HG21 | 1.99 | 0.44 |
| 1:S:391:GLN:HA | 1:S:397:LYS:O | 2.18 | 0.44 |
| 1:SA:380:ILE:O | 1:SA:405:THR:HG22 | 2.16 | 0.44 |
| 1:SA:706:LEU:HD13 | 1:TA:696:GLN:O | 2.17 | 0.44 |
| 1:SB:36:ILE:HD12 | 1:SB:36:ILE:N | 2.32 | 0.44 |
| 1:T:364:GLU:HG3 | 1:V:353:ALA:HB1 | 2.00 | 0.44 |
| 1:T:390:VAL:O | 1:T:390:VAL:HG13 | 2.17 | 0.44 |
| 1:T:747:LYS:O | 1:T:751:LEU:HD23 | 2.17 | 0.44 |
| 1:TA:537:LEU:HD22 | 1:TA:588:PHE:CZ | 2.53 | 0.44 |
| 1:UB:7:ILE:O | 1:UB:8:ILE:C | 2.61 | 0.44 |
| 1:UB:594:ASN:HB2 | 1:UB:598:ILE:HD11 | 1.99 | 0.44 |
| 1:VA:6:PHE:O | 1:VA:6:PHE:CG | 2.70 | 0.44 |
| 1:VA:761:ARG:NH1 | 1:WA:755:THR:OG1 | 2.51 | 0.44 |
| 1:VB:180:LYS:HD2 | 1:VB:181:GLU:C | 2.42 | 0.44 |
| 1:WA:84:ARG:HB3 | 1:WA:87:ASP:OD1 | 2.17 | 0.44 |
| 1:WA:226:ALA:HB1 | 1:WA:252:THR:HG22 | 1.98 | 0.44 |
| 1:WA:770:LEU:O | 1:WA:773:ALA:HB3 | 2.18 | 0.44 |
| 1:WB:542:ALA:O | 1:WB:638:VAL:HG13 | 2.17 | 0.44 |
| 1:X:383:ASP:CG | 1:X:384:GLU:N | 2.75 | 0.44 |
| 1:X:390:VAL:HG13 | 1:X:401:VAL:HG22 | 2.00 | 0.44 |
| 1:XA:786:GLN:OE1 | 1:YA:781:VAL:HG21 | 2.17 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:Y:323:VAL:HB | 1:Y:364:GLU:OE2 | 2.18 | 0.44 |
| 1:Z:250:LEU:HD11 | 1:Z:310:LEU:O | 2.18 | 0.44 |
| 1:ZA:16:ILE:HG22 | 1:ZA:17:HIS:O | 2.18 | 0.44 |
| 1:ZA:804:PRO:HA | 1:ZA:807:ILE:HD12 | 1.99 | 0.44 |
| 1:AA:276:LEU:HD11 | 1:AA:282:CYS:SG | 2.57 | 0.44 |
| 1:AC:395:THR:HG22 | 1:AC:395:THR:O | 2.18 | 0.44 |
| 1:B:215:LEU:HD12 | 1:B:216:VAL:N | 2.33 | 0.44 |
| 1:BA:347:GLU:OE1 | 1:BA:347:GLU:O | 2.34 | 0.44 |
| 1:BA:408:LEU:HD21 | 1:BA:414:LEU:HD21 | 1.99 | 0.44 |
| 1:BB:59:CYS:SG | 1:BB:60:THR:N | 2.91 | 0.44 |
| 1:CA:36:ILE:O | 1:CA:38:GLN:OE1 | 2.36 | 0.44 |
| 1:CA:95:ASP:O | 1:CA:96:PRO:C | 2.59 | 0.44 |
| 1:D:466:ALA:HA | 1:D:516:LEU:O | 2.18 | 0.44 |
| 1:D:661:ALA:O | 1:D:665:THR:HG23 | 2.17 | 0.44 |
| 1:DA:18:VAL:HG23 | 1:DA:27:ARG:H | 1.82 | 0.44 |
| 1:DA:389:TYR:CZ | 1:DA:457:VAL:HA | 2.53 | 0.44 |
| 1:DA:537:LEU:HD23 | 1:DA:538:GLN:O | 2.17 | 0.44 |
| 1:E:13:TYR:HB3 | 1:E:49:ARG:CZ | 2.48 | 0.44 |
| 1:E:422:GLY:N | 1:E:424:GLU:OE1 | 2.51 | 0.44 |
| 1:EB:11:PRO:HD2 | 1:EB:47:PRO:HB2 | 1.99 | 0.44 |
| 1:F:65:VAL:O | 1:F:65:VAL:HG23 | 2.18 | 0.44 |
| 1:F:603:VAL:HG13 | 1:F:604:PHE:N | 2.31 | 0.44 |
| 1:F:768:LEU:C | 1:F:768:LEU:HD23 | 2.42 | 0.44 |
| 1:FA:283:VAL:HG22 | 1:FA:301:VAL:HA | 1.98 | 0.44 |
| 1:G:75:PHE:HA | 1:G:81:VAL:HA | 1.99 | 0.44 |
| 1:GA:10:ILE:HD12 | 1:GA:31:GLY:O | 2.18 | 0.44 |
| 1:GA:427:LEU:HD12 | 1:GA:428:ASN:H | 1.82 | 0.44 |
| 1:GB:173:ALA:HB1 | 1:GB:197:LEU:HD21 | 1.98 | 0.44 |
| 1:GB:310:LEU:HD22 | 1:GB:314:GLU:HB3 | 1.99 | 0.44 |
| 1:GB:493:GLU:N | 1:GB:493:GLU:OE1 | 2.51 | 0.44 |
| 1:GB:658:VAL:HA | 1:GB:661:ALA:HB3 | 2.00 | 0.44 |
| 1:HA:63:ASN:HA | 1:HA:84:ARG:O | 2.17 | 0.44 |
| 1:HA:105:LEU:HD21 | 1:HA:108:ASP:HA | 2.00 | 0.44 |
| 1:HA:334:LEU:HD11 | 1:HA:359:ILE:CG2 | 2.47 | 0.44 |
| 1:HA:490:GLY:H | 1:HA:493:GLU:HB2 | 1.82 | 0.44 |
| 1:HA:710:GLU:CD | 1:HA:710:GLU:C | 2.86 | 0.44 |
| 1:HB:516:LEU:HD23 | 1:HB:518:LEU:N | 2.32 | 0.44 |
| 1:I:53:VAL:HB | 1:I:58:TYR:CD1 | 2.52 | 0.44 |
| 1:I:798:MET:HE3 | 1:J:792:VAL:HG23 | 1.99 | 0.44 |
| 1:IA:675:HIS:HA | 1:IA:678:GLN:OE1 | 2.18 | 0.44 |
| 1:IB:126:LEU:O | 1:IB:127:LEU:HD22 | 2.17 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:IB:189:GLU:O | 1:IB:189:GLU:CD | 2.61 | 0.44 |
| 1:IB:626:ALA:HB3 | 1:IB:635:VAL:HB | 2.00 | 0.44 |
| 1:J:104:VAL:HG22 | 1:J:105:LEU:N | 2.33 | 0.44 |
| 1:J:143:TRP:CA | 1:J:208:VAL:HG11 | 2.47 | 0.44 |
| 1:J:173:ALA:HB2 | 1:J:260:VAL:HG11 | 2.00 | 0.44 |
| 1:J:230:ARG:CG | 1:J:231:ALA:N | 2.80 | 0.44 |
| 1:J:604:PHE:CG | 1:J:623:ARG:O | 2.71 | 0.44 |
| 1:JA:460:TYR:CG | 1:JA:461:ARG:N | 2.85 | 0.44 |
| 1:K:10:ILE:HD12 | 1:K:31:GLY:O | 2.18 | 0.44 |
| 1:KA:82:ARG:O | 1:KA:83:LEU:HD12 | 2.18 | 0.44 |
| 1:KA:374:VAL:HG12 | 1:KA:375:GLU:N | 2.32 | 0.44 |
| 1:KB:120:ALA:CB | 1:KB:205:LEU:HD21 | 2.48 | 0.44 |
| 1:KB:121:LEU:HD12 | 1:KB:121:LEU:O | 2.17 | 0.44 |
| 1:KB:144:LEU:HD23 | 1:KB:144:LEU:H | 1.83 | 0.44 |
| 1:KB:480:VAL:HG12 | 1:KB:481:VAL:N | 2.33 | 0.44 |
| 1:KB:529:ILE:HG13 | 1:KB:537:LEU:HD12 | 1.98 | 0.44 |
| 1:KB:660:LEU:HA | 1:KB:663:GLU:OE1 | 2.17 | 0.44 |
| 1:L:530:GLU:HA | 1:L:535:ALA:O | 2.17 | 0.44 |
| 1:L:595:SER:O | 1:L:599:ILE:HD12 | 2.18 | 0.44 |
| 1:M:63:ASN:O | 1:M:103:GLU:HA | 2.18 | 0.44 |
| 1:M:144:LEU:HD22 | 1:M:163:ILE:HD11 | 1.99 | 0.44 |
| 1:MA:13:TYR:HE2 | 1:NA:83:LEU:HD22 | 1.83 | 0.44 |
| 1:MB:179:ARG:HE | 1:MB:209:PHE:HA | 1.82 | 0.44 |
| 1:MB:346:GLU:C | 1:MB:347:GLU:HG3 | 2.43 | 0.44 |
| 1:MB:786:GLN:HB3 | 1:NB:781:VAL:HG11 | 2.00 | 0.44 |
| 1:N:305:GLU:OE2 | 1:O:298:GLN:HG3 | 2.17 | 0.44 |
| 1:N:526:VAL:HG13 | 1:N:539:LEU:O | 2.18 | 0.44 |
| 1:N:767:GLU:HA | 1:N:770:LEU:HD12 | 1.99 | 0.44 |
| 1:NB:35:TYR:C | 1:NB:36:ILE:HD13 | 2.43 | 0.44 |
| 1:NB:76:ASP:N | 1:NB:80:GLN:O | 2.51 | 0.44 |
| 1:O:26:SER:O | 1:O:80:GLN:HA | 2.17 | 0.44 |
| 1:O:61:VAL:HG21 | 1:O:103:GLU:OE2 | 2.17 | 0.44 |
| 1:O:166:THR:HG21 | 1:O:174:LEU:HD22 | 1.99 | 0.44 |
| 1:OA:53:VAL:HG12 | 1:OA:93:ALA:HA | 1.99 | 0.44 |
| 1:P:25:VAL:HG12 | 1:P:26:SER:N | 2.33 | 0.44 |
| 1:P:183:TRP:O | 1:P:209:PHE:CE1 | 2.71 | 0.44 |
| 1:PA:122:HIS:HB3 | 1:PA:161:GLU:O | 2.18 | 0.44 |
| 1:PA:527:ILE:HG21 | 1:PA:576:ALA:HB2 | 2.00 | 0.44 |
| 1:PB:59:CYS:O | 1:PB:90:ILE:HG23 | 2.18 | 0.44 |
| 1:PB:60:THR:HA | 1:PB:90:ILE:HA | 1.99 | 0.44 |
| 1:Q:25:VAL:HA | 1:Q:78:THR:O | 2.17 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:QA:175:ARG:HA | 1:QA:196:TRP:O | 2.17 | 0.44 |
| 1:QA:197:LEU:HD22 | 1:QA:216:VAL:HG11 | 2.00 | 0.44 |
| 1:QA:334:LEU:HG | 1:QA:357:TRP:CE2 | 2.52 | 0.44 |
| 1:QB:276:LEU:HB3 | 1:QB:304:GLY:HA2 | 2.00 | 0.44 |
| 1:QB:703:ARG:N | 1:RB:693:ILE:HG21 | 2.33 | 0.44 |
| 1:QB:779:LEU:HG | 1:RB:777:LEU:HD22 | 1.99 | 0.44 |
| 1:R:129:PHE:HB3 | 1:R:156:GLU:HB2 | 1.99 | 0.44 |
| 1:RB:406:TYR:OH | 1:RB:409:THR:HG23 | 2.18 | 0.44 |
| 1:S:521:ASP:O | 1:S:544:ASN:HA | 2.17 | 0.44 |
| 1:S:568:VAL:HG13 | 1:S:569:GLY:N | 2.32 | 0.44 |
| 1:SB:594:ASN:HB2 | 1:SB:598:ILE:HD11 | 2.00 | 0.44 |
| 1:SB:798:MET:SD | 1:TB:792:VAL:HG23 | 2.57 | 0.44 |
| 1:TB:599:ILE:HG23 | 1:TB:600:ARG:N | 2.33 | 0.44 |
| 1:UB:16:ILE:HG21 | 1:UB:43:VAL:HG13 | 1.98 | 0.44 |
| 1:VA:693:ILE:HD13 | 1:VA:696:GLN:OE1 | 2.17 | 0.44 |
| 1:VB:13:TYR:HB3 | 1:VB:50:MET:HE2 | 1.99 | 0.44 |
| 1:VB:411:ASP:OD1 | 1:VB:411:ASP:C | 2.60 | 0.44 |
| 1:VB:530:GLU:OE2 | 1:VB:534:HIS:HA | 2.18 | 0.44 |
| 1:W:30:VAL:HG22 | 1:W:31:GLY:N | 2.31 | 0.44 |
| 1:WA:660:LEU:O | 1:WA:664:ILE:HD12 | 2.17 | 0.44 |
| 1:WB:231:ALA:HB3 | 1:WB:246:GLY:N | 2.32 | 0.44 |
| 1:WB:635:VAL:CG1 | 1:WB:638:VAL:HG23 | 2.47 | 0.44 |
| 1:X:230:ARG:HA | 1:X:247:GLU:O | 2.18 | 0.44 |
| 1:XA:84:ARG:HG2 | 1:XA:85:HIS:N | 2.28 | 0.44 |
| 1:XB:15:TYR:HA | 1:XB:29:GLU:O | 2.17 | 0.44 |
| 1:XB:36:ILE:H | 1:XB:36:ILE:HD12 | 1.81 | 0.44 |
| 1:XB:167:ILE:H | 1:XB:167:ILE:HD12 | 1.83 | 0.44 |
| 1:XB:362:PRO:O | 1:YB:352:GLN:CB | 2.66 | 0.44 |
| 1:XB:482:PHE:CZ | 1:XB:552:ARG:HB3 | 2.53 | 0.44 |
| 1:Y:58:TYR:CD1 | 1:Y:92:LEU:HA | 2.53 | 0.44 |
| 1:Y:382:LEU:HD21 | 1:Y:388:ILE:HG23 | 2.00 | 0.44 |
| 1:YA:145:PHE:CG | 1:YA:146:GLU:N | 2.86 | 0.44 |
| 1:Z:176:LEU:HA | 1:Z:211:GLU:O | 2.17 | 0.44 |
| 1:Z:221:LEU:HD11 | 1:Z:227:LEU:H | 1.83 | 0.44 |
| 1:ZB:284:ILE:O | 1:ZB:299:LYS:HA | 2.18 | 0.44 |
| 1:A:122:HIS:CD2 | 1:A:123:LEU:N | 2.86 | 0.44 |
| 1:A:301:VAL:HG22 | 1:A:302:VAL:N | 2.33 | 0.44 |
| 1:A:410:GLN:O | 1:A:411:ASP:OD1 | 2.35 | 0.44 |
| 1:AA:406:TYR:CZ | 1:AA:407:MET:O | 2.70 | 0.44 |
| 1:AB:16:ILE:HA | 1:AB:45:PHE:CE2 | 2.52 | 0.44 |
| 1:AB:763:GLN:NE2 | 1:AB:764:LYS:HG3 | 2.33 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:B:121:LEU:HA | 1:B:162:ILE:HA | 1.98 | 0.44 |
| 1:BA:281:TYR:HB2 | 1:BA:302:VAL:O | 2.17 | 0.44 |
| 1:C:368:SER:O | 1:C:371:VAL:HG12 | 2.18 | 0.44 |
| 1:C:537:LEU:HA | 1:C:645:PRO:HA | 2.00 | 0.44 |
| 1:CB:59:CYS:SG | 1:CB:105:LEU:HD21 | 2.57 | 0.44 |
| 1:CB:339:PRO:CD | 1:CB:353:ALA:HB2 | 2.47 | 0.44 |
| 1:CB:547:PHE:CD2 | 1:CB:561:LEU:HD22 | 2.53 | 0.44 |
| 1:CB:549:VAL:HG22 | 1:CB:557:GLU:HG2 | 1.99 | 0.44 |
| 1:D:8:ILE:O | 1:D:37:ARG:NH2 | 2.51 | 0.44 |
| 1:D:424:GLU:HG2 | 1:D:425:GLU:N | 2.33 | 0.44 |
| 1:D:737:GLY:O | 1:D:741:VAL:HG23 | 2.17 | 0.44 |
| 1:DA:349:VAL:HG11 | 1:DA:351:HIS:CE1 | 2.52 | 0.44 |
| 1:DB:30:VAL:HG23 | 1:DB:50:MET:CE | 2.47 | 0.44 |
| 1:DB:529:ILE:CD1 | 1:DB:583:VAL:HG21 | 2.47 | 0.44 |
| 1:E:112:LEU:HD11 | 1:E:153:PRO:HD3 | 1.99 | 0.44 |
| 1:E:463:PRO:O | 1:E:466:ALA:HB3 | 2.17 | 0.44 |
| 1:EA:113:GLN:HG2 | 1:EA:121:LEU:HD11 | 1.99 | 0.44 |
| 1:F:339:PRO:HB2 | 1:F:341:GLU:OE2 | 2.18 | 0.44 |
| 1:FA:172:GLN:HA | 1:FA:217:ASP:HA | 2.00 | 0.44 |
| 1:FA:321:GLN:N | 1:FA:321:GLN:OE1 | 2.51 | 0.44 |
| 1:GB:386:GLU:N | 1:GB:402:ILE:HG23 | 2.31 | 0.44 |
| 1:GB:390:VAL:HA | 1:GB:413:VAL:O | 2.18 | 0.44 |
| 1:H:15:TYR:CD1 | 1:H:50:MET:HG2 | 2.53 | 0.44 |
| 1:H:316:LEU:HD11 | 1:H:319:GLY:O | 2.18 | 0.44 |
| 1:HA:366:VAL:O | 1:HA:366:VAL:HG13 | 2.18 | 0.44 |
| 1:HB:274:THR:N | 1:HB:308:PHE:O | 2.51 | 0.44 |
| 1:HB:427:LEU:C | 1:HB:427:LEU:HD23 | 2.43 | 0.44 |
| 1:I:10:ILE:O | 1:I:32:PRO:HA | 2.18 | 0.44 |
| 1:I:215:LEU:HD12 | 1:I:216:VAL:N | 2.32 | 0.44 |
| 1:IA:6:PHE:O | 1:IA:36:ILE:HA | 2.17 | 0.44 |
| 1:IA:73:VAL:HG21 | 1:IA:100:TYR:CE2 | 2.52 | 0.44 |
| 1:IB:46:ALA:HB1 | 1:IB:47:PRO:CD | 2.48 | 0.44 |
| 1:J:73:VAL:HG21 | 1:J:100:TYR:CZ | 2.53 | 0.44 |
| 1:J:165:ALA:HB2 | 1:J:205:LEU:HD13 | 2.00 | 0.44 |
| 1:JB:15:TYR:CD1 | 1:JB:50:MET:HG2 | 2.53 | 0.44 |
| 1:JB:568:VAL:HG13 | 1:JB:569:GLY:N | 2.32 | 0.44 |
| 1:K:75:PHE:CE1 | 1:K:81:VAL:HG23 | 2.53 | 0.44 |
| 1:K:709:LEU:HD22 | 1:L:697:SER:O | 2.18 | 0.44 |
| 1:KA:129:PHE:CD1 | 1:KA:156:GLU:HB2 | 2.53 | 0.44 |
| 1:KB:65:VAL:HG11 | 1:KB:81:VAL:HG21 | 2.00 | 0.44 |
| 1:KB:523:PHE:O | 1:KB:524:THR:HG23 | 2.18 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:KB:583:VAL:HG13 | 1:KB:584:ALA:N | 2.32 | 0.44 |
| 1:LA:3:THR:HG23 | 1:LA:43:VAL:HG23 | 1.99 | 0.44 |
| 1:LA:451:PRO:O | 1:LA:452:ARG:O | 2.35 | 0.44 |
| 1:LA:588:PHE:O | 1:LA:589:ASP:C | 2.61 | 0.44 |
| 1:LB:15:TYR:CZ | 1:LB:48:MET:CE | 3.00 | 0.44 |
| 1:LB:177:ARG:HG2 | 1:LB:178:ALA:N | 2.32 | 0.44 |
| 1:M:56:ARG:O | 1:M:111:PRO:HA | 2.18 | 0.44 |
| 1:M:537:LEU:HA | 1:M:645:PRO:HA | 2.00 | 0.44 |
| 1:MA:413:VAL:HG22 | 1:MA:414:LEU:N | 2.32 | 0.44 |
| 1:MB:227:LEU:HD13 | 1:MB:270:VAL:HG22 | 1.99 | 0.44 |
| 1:N:25:VAL:O | 1:N:25:VAL:HG12 | 2.17 | 0.44 |
| 1:N:467:ALA:CB | 1:N:518:LEU:HD11 | 2.45 | 0.44 |
| 1:NA:115:VAL:HG21 | 1:NA:145:PHE:CE2 | 2.52 | 0.44 |
| 1:NA:172:GLN:HB3 | 1:NA:215:LEU:HD11 | 2.00 | 0.44 |
| 1:NB:402:ILE:HG22 | 1:NB:403:GLY:N | 2.33 | 0.44 |
| 1:OA:529:ILE:HD12 | 1:OA:583:VAL:CG2 | 2.40 | 0.44 |
| 1:OA:717:GLU:HB2 | 1:PA:707:LEU:HD21 | 1.99 | 0.44 |
| 1:OB:334:LEU:HD12 | 1:OB:357:TRP:NE1 | 2.32 | 0.44 |
| 1:OB:529:ILE:HD12 | 1:OB:583:VAL:CG2 | 2.48 | 0.44 |
| 1:P:776:GLN:HB3 | 1:P:780:GLU:OE2 | 2.18 | 0.44 |
| 1:PA:798:MET:HG2 | 1:QA:792:VAL:HG22 | 2.00 | 0.44 |
| 1:PB:91:ARG:C | 1:PB:92:LEU:HD12 | 2.42 | 0.44 |
| 1:Q:176:LEU:HD11 | 1:Q:210:GLU:OE2 | 2.18 | 0.44 |
| 1:QA:124:LYS:CB | 1:QA:160:VAL:HG21 | 2.47 | 0.44 |
| 1:QB:181:GLU:O | 1:QB:182:CYS:CB | 2.65 | 0.44 |
| 1:QB:191:VAL:HG22 | 1:QB:194:GLU:HB2 | 1.99 | 0.44 |
| 1:QB:487:VAL:HG22 | 1:QB:488:SER:N | 2.33 | 0.44 |
| 1:RA:276:LEU:HD13 | 1:RA:281:TYR:HA | 1.99 | 0.44 |
| 1:RA:401:VAL:O | 1:RA:401:VAL:HG13 | 2.18 | 0.44 |
| 1:RA:470:VAL:HG13 | 1:RA:489:LEU:HD22 | 2.00 | 0.44 |
| 1:RA:802:ILE:HD12 | 1:SA:795:PHE:HZ | 1.82 | 0.44 |
| 1:SB:276:LEU:HB3 | 1:SB:304:GLY:HA2 | 1.99 | 0.44 |
| 1:SB:575:ILE:HD12 | 1:SB:575:ILE:H | 1.83 | 0.44 |
| 1:T:641:GLN:NE2 | 1:V:573:LYS:HB2 | 2.33 | 0.44 |
| 1:TB:58:TYR:CZ | 1:TB:92:LEU:HA | 2.53 | 0.44 |
| 1:UB:806:THR:HG23 | 1:VB:805:SER:CA | 2.48 | 0.44 |
| 1:V:130:GLU:HA | 1:V:135:ASP:HA | 1.99 | 0.44 |
| 1:V:262:ASP:HB3 | 1:V:265:GLU:HG3 | 2.00 | 0.44 |
| 1:VB:162:ILE:H | 1:VB:162:ILE:HD12 | 1.82 | 0.44 |
| 1:W:323:VAL:HG12 | 1:W:366:VAL:HB | 1.99 | 0.44 |
| 1:W:390:VAL:HG12 | 1:W:408:LEU:HD21 | 1.98 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:WA:115:VAL:HG11 | 1:WA:119:THR:HG23 | 1.98 | 0.44 |
| 1:X:10:ILE:O | 1:X:32:PRO:HA | 2.17 | 0.44 |
| 1:XB:54:PRO:O | 1:XB:58:TYR:CE1 | 2.71 | 0.44 |
| 1:XB:531:THR:HG23 | 1:XB:537:LEU:HD12 | 1.99 | 0.44 |
| 1:Y:46:ALA:HB1 | 1:Y:47:PRO:CD | 2.48 | 0.44 |
| 1:YA:169:ARG:NH2 | 1:ZA:233:ARG:HE | 2.16 | 0.44 |
| 1:YA:578:ARG:O | 1:YA:602:ALA:HB1 | 2.17 | 0.44 |
| 1:YB:65:VAL:HG23 | 1:YB:67:ARG:HG3 | 1.99 | 0.44 |
| 1:YB:332:LEU:HA | 1:YB:376:GLU:HA | 1.98 | 0.44 |
| 1:YB:393:VAL:HG22 | 1:YB:411:ASP:HA | 2.00 | 0.44 |
| 1:YB:466:ALA:HB1 | 1:YB:515:CYS:SG | 2.58 | 0.44 |
| 1:YB:583:VAL:HG13 | 1:YB:584:ALA:N | 2.32 | 0.44 |
| 1:YB:731:GLU:OE2 | 1:YB:735:ILE:HD11 | 2.18 | 0.44 |
| 1:YB:735:ILE:HG22 | 1:ZB:730:ALA:CB | 2.48 | 0.44 |
| 1:Z:261:PRO:HG2 | 1:Z:267:VAL:HG23 | 2.00 | 0.44 |
| 1:Z:406:TYR:OH | 1:Z:409:THR:HG23 | 2.17 | 0.44 |
| 1:ZA:25:VAL:HG11 | 1:ZA:27:ARG:HE | 1.83 | 0.44 |
| 1:ZB:64:PRO:HB3 | 1:ZB:89:GLU:HB2 | 2.00 | 0.44 |
| 1:ZB:606:PHE:O | 1:ZB:606:PHE:CG | 2.70 | 0.44 |
| 1:A:388:ILE:C | 1:A:457:VAL:HG23 | 2.43 | 0.44 |
| 1:AA:204:TYR:CD1 | 1:AA:205:LEU:HD23 | 2.53 | 0.44 |
| 1:AB:90:ILE:CG2 | 1:AB:92:LEU:HD21 | 2.47 | 0.44 |
| 1:AB:154:ARG:HB3 | 1:AB:157:VAL:HB | 1.99 | 0.44 |
| 1:AC:514:LEU:C | 1:AC:514:LEU:HD12 | 2.43 | 0.44 |
| 1:B:587:THR:HG23 | 1:B:590:ASP:H | 1.82 | 0.44 |
| 1:B:754:GLU:HG3 | 1:B:755:THR:N | 2.33 | 0.44 |
| 1:BA:317:GLU:HG2 | 1:BA:318:GLN:OE1 | 2.17 | 0.44 |
| 1:BB:7:ILE:HG22 | 1:BB:36:ILE:CD1 | 2.44 | 0.44 |
| 1:BB:122:HIS:ND1 | 1:BB:160:VAL:HG11 | 2.32 | 0.44 |
| 1:BB:250:LEU:HD21 | 1:BB:312:PRO:HD3 | 2.00 | 0.44 |
| 1:BB:462:VAL:N | 1:BB:485:GLU:O | 2.51 | 0.44 |
| 1:BB:781:VAL:HG23 | 1:BB:782:SER:N | 2.33 | 0.44 |
| 1:C:122:HIS:ND1 | 1:C:160:VAL:HG21 | 2.33 | 0.44 |
| 1:CA:523:PHE:CZ | 1:CA:545:TRP:CE2 | 3.06 | 0.44 |
| 1:CB:121:LEU:HD23 | 1:CB:121:LEU:H | 1.83 | 0.44 |
| 1:CB:387:GLY:O | 1:CB:388:ILE:HG23 | 2.17 | 0.44 |
| 1:DA:59:CYS:CB | 1:DA:105:LEU:HD11 | 2.48 | 0.44 |
| 1:DA:342:GLU:H | 1:DA:350:SER:HA | 1.83 | 0.44 |
| 1:DB:9:ARG:HB3 | 1:DB:34:THR:HG22 | 1.98 | 0.44 |
| 1:E:46:ALA:HB1 | 1:E:47:PRO:CD | 2.47 | 0.44 |
| 1:E:112:LEU:HD11 | 1:E:153:PRO:CD | 2.47 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:E:122:HIS:O | 1:E:160:VAL:N | 2.51 | 0.44 |
| 1:EA:7:ILE:O | 1:EA:8:ILE:C | 2.60 | 0.44 |
| 1:EA:241:VAL:HG11 | 1:EA:243:ARG:CZ | 2.48 | 0.44 |
| 1:EA:498:LEU:HB2 | 1:EA:513:ALA:HB3 | 1.99 | 0.44 |
| 1:EA:523:PHE:CD2 | 1:EA:568:VAL:HG23 | 2.53 | 0.44 |
| 1:EA:640:VAL:HG12 | 1:FA:580:ARG:CZ | 2.48 | 0.44 |
| 1:EB:179:ARG:HE | 1:EB:209:PHE:HA | 1.82 | 0.44 |
| 1:EB:207:ALA:HB3 | 1:EB:210:GLU:HG3 | 1.99 | 0.44 |
| 1:FB:7:ILE:HG22 | 1:FB:36:ILE:HG12 | 2.00 | 0.44 |
| 1:FB:75:PHE:CD1 | 1:FB:81:VAL:HG23 | 2.53 | 0.44 |
| 1:FB:120:ALA:HB3 | 1:FB:205:LEU:HD21 | 1.98 | 0.44 |
| 1:FB:138:VAL:HG22 | 1:FB:141:ASP:HB2 | 2.00 | 0.44 |
| 1:FB:497:VAL:HG22 | 1:FB:498:LEU:N | 2.32 | 0.44 |
| 1:G:15:TYR:HB3 | 1:G:30:VAL:HG23 | 1.99 | 0.44 |
| 1:G:281:TYR:CD1 | 1:G:366:VAL:HG11 | 2.53 | 0.44 |
| 1:G:389:TYR:CD1 | 1:G:457:VAL:HG22 | 2.53 | 0.44 |
| 1:GB:580:ARG:HA | 1:GB:583:VAL:HG12 | 1.99 | 0.44 |
| 1:GB:646:VAL:N | 1:GB:651:ARG:HH22 | 2.16 | 0.44 |
| 1:HA:538:GLN:CD | 1:HA:538:GLN:C | 2.86 | 0.44 |
| 1:HB:20:ASP:O | 1:HB:23:SER:O | 2.36 | 0.44 |
| 1:HB:697:SER:O | 1:HB:700:GLU:HB3 | 2.18 | 0.44 |
| 1:I:358:LEU:HD13 | 1:I:409:THR:HA | 1.99 | 0.44 |
| 1:I:528:THR:HG22 | 1:I:529:ILE:N | 2.32 | 0.44 |
| 1:IA:52:THR:O | 1:IA:109:ILE:HD11 | 2.18 | 0.44 |
| 1:IA:775:ALA:CB | 1:JA:770:LEU:HD13 | 2.48 | 0.44 |
| 1:IB:6:PHE:O | 1:IB:37:ARG:N | 2.51 | 0.44 |
| 1:J:50:MET:HE3 | 1:J:97:PHE:C | 2.43 | 0.44 |
| 1:J:57:HIS:HA | 1:J:110:THR:O | 2.18 | 0.44 |
| 1:J:59:CYS:HA | 1:J:107:LYS:CG | 2.48 | 0.44 |
| 1:J:406:TYR:CG | 1:J:407:MET:N | 2.86 | 0.44 |
| 1:JA:14:HIS:HB3 | 1:JA:47:PRO:HB3 | 2.00 | 0.44 |
| 1:JA:408:LEU:HD11 | 1:JA:414:LEU:HD21 | 2.00 | 0.44 |
| 1:JB:687:ARG:O | 1:JB:691:GLN:OE1 | 2.36 | 0.44 |
| 1:JB:795:PHE:CZ | 1:JB:799:THR:HG21 | 2.53 | 0.44 |
| 1:KA:466:ALA:O | 1:KA:482:PHE:HA | 2.18 | 0.44 |
| 1:KB:326:LEU:HD22 | 1:KB:330:GLN:HB3 | 1.99 | 0.44 |
| 1:KB:704:LYS:HA | 1:KB:707:LEU:HD12 | 2.00 | 0.44 |
| 1:L:176:LEU:HA | 1:L:211:GLU:O | 2.18 | 0.44 |
| 1:LA:276:LEU:O | 1:LA:305:GLU:HA | 2.18 | 0.44 |
| 1:LA:333:LEU:HD23 | 1:LA:374:VAL:HG11 | 1.99 | 0.44 |
| 1:LA:647:ASP:OD2 | 1:LA:649:ARG:HB2 | 2.18 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:LB:7:ILE:O | 1:LB:8:ILE:C | 2.61 | 0.44 |
| 1:LB:8:ILE:O | 1:LB:37:ARG:NH2 | 2.51 | 0.44 |
| 1:LB:32:PRO:C | 1:LB:33:LYS:HD2 | 2.43 | 0.44 |
| 1:LB:758:GLU:O | 1:LB:762:VAL:HG13 | 2.17 | 0.44 |
| 1:M:158:GLU:HG3 | 1:M:158:GLU:O | 2.18 | 0.44 |
| 1:MA:489:LEU:HD11 | 1:MA:495:PHE:CE2 | 2.52 | 0.44 |
| 1:MA:490:GLY:O | 1:MA:491:PRO:C | 2.61 | 0.44 |
| 1:MB:187:GLY:O | 1:MB:188:LYS:C | 2.59 | 0.44 |
| 1:N:61:VAL:HG23 | 1:N:89:GLU:HB2 | 2.00 | 0.44 |
| 1:N:105:LEU:HD21 | 1:N:107:LYS:O | 2.17 | 0.44 |
| 1:NA:388:ILE:HG22 | 1:NA:456:ARG:HA | 1.99 | 0.44 |
| 1:NA:425:GLU:N | 1:NA:425:GLU:OE1 | 2.51 | 0.44 |
| 1:NA:599:ILE:O | 1:NA:603:VAL:HG23 | 2.17 | 0.44 |
| 1:NB:176:LEU:HD21 | 1:NB:196:TRP:CE2 | 2.53 | 0.44 |
| 1:NB:471:TYR:HA | 1:NB:477:ARG:O | 2.18 | 0.44 |
| 1:O:20:ASP:HA | 1:O:41:GLU:HA | 2.00 | 0.44 |
| 1:O:123:LEU:HD11 | 1:O:145:PHE:HB2 | 1.98 | 0.44 |
| 1:O:468:VAL:HG22 | 1:O:515:CYS:CA | 2.47 | 0.44 |
| 1:OA:106:GLU:OE2 | 1:OA:107:LYS:HG2 | 2.18 | 0.44 |
| 1:OA:303:LYS:HD2 | 1:OA:304:GLY:O | 2.17 | 0.44 |
| 1:OA:323:VAL:CG2 | 1:OA:364:GLU:OE2 | 2.66 | 0.44 |
| 1:OA:398:VAL:HG13 | 1:OA:415:TRP:CE3 | 2.53 | 0.44 |
| 1:OA:528:THR:HG23 | 1:OA:538:GLN:HA | 1.99 | 0.44 |
| 1:OB:326:LEU:O | 1:OB:362:PRO:HA | 2.18 | 0.44 |
| 1:OB:413:VAL:HG13 | 1:OB:414:LEU:O | 2.17 | 0.44 |
| 1:P:256:THR:HG21 | 1:P:259:HIS:HB2 | 1.98 | 0.44 |
| 1:PA:16:ILE:HG23 | 1:PA:43:VAL:CG2 | 2.47 | 0.44 |
| 1:PA:301:VAL:O | 1:PA:301:VAL:HG13 | 2.17 | 0.44 |
| 1:PB:130:GLU:HA | 1:PB:135:ASP:HA | 2.00 | 0.44 |
| 1:PB:177:ARG:H | 1:PB:213:LEU:HD23 | 1.82 | 0.44 |
| 1:PB:768:LEU:HD13 | 1:QB:759:LEU:HD23 | 1.99 | 0.44 |
| 1:Q:69:ALA:O | 1:Q:70:GLN:HG2 | 2.18 | 0.44 |
| 1:Q:554:ASP:O | 1:Q:558:THR:HG23 | 2.18 | 0.44 |
| 1:QA:627:VAL:HG12 | 1:QA:634:VAL:HG13 | 2.00 | 0.44 |
| 1:QA:790:VAL:HG13 | 1:QA:793:LYS:NZ | 2.33 | 0.44 |
| 1:QB:496:THR:HG21 | 1:QB:562:PHE:HD2 | 1.83 | 0.44 |
| 1:QB:526:VAL:HG22 | 1:QB:540:GLN:HB2 | 1.98 | 0.44 |
| 1:QB:564:VAL:HG11 | 1:QB:567:PHE:HA | 1.99 | 0.44 |
| 1:QB:638:VAL:HG12 | 1:QB:639:ASP:N | 2.33 | 0.44 |
| 1:R:359:ILE:HD11 | 1:R:363:LEU:HD11 | 1.99 | 0.44 |
| 1:R:391:GLN:HB2 | 1:R:398:VAL:HG22 | 2.00 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:R:543:TYR:HB2 | 1:R:638:VAL:HG22 | 1.99 | 0.44 |
| 1:RA:7:ILE:HD13 | 1:W:6:PHE:HD2 | 1.82 | 0.44 |
| 1:RA:18:VAL:O | 1:RA:44:LEU:HD23 | 2.17 | 0.44 |
| 1:RA:88:LEU:HD12 | 1:RA:88:LEU:C | 2.42 | 0.44 |
| 1:RB:176:LEU:HD21 | 1:RB:196:TRP:CE2 | 2.53 | 0.44 |
| 1:RB:568:VAL:HG13 | 1:RB:569:GLY:N | 2.32 | 0.44 |
| 1:RB:753:ILE:HB | 1:SB:744:ALA:HB1 | 2.00 | 0.44 |
| 1:S:51:VAL:HB | 1:S:99:LEU:HD21 | 1.99 | 0.44 |
| 1:S:263:VAL:HG23 | 1:S:264:HIS:N | 2.33 | 0.44 |
| 1:SA:467:ALA:HB3 | 1:SA:516:LEU:HD23 | 2.00 | 0.44 |
| 1:T:681:GLU:CD | 1:T:681:GLU:C | 2.86 | 0.44 |
| 1:TA:227:LEU:O | 1:TA:251:VAL:HG22 | 2.17 | 0.44 |
| 1:TB:60:THR:HG23 | 1:TB:107:LYS:HD3 | 2.00 | 0.44 |
| 1:TB:351:HIS:CE1 | 1:TB:357:TRP:CE2 | 3.06 | 0.44 |
| 1:V:335:ARG:HG2 | 1:V:336:ALA:H | 1.82 | 0.44 |
| 1:VA:363:LEU:HA | 1:WA:352:GLN:HG3 | 1.99 | 0.44 |
| 1:VA:520:PRO:HA | 1:VA:545:TRP:O | 2.18 | 0.44 |
| 1:VA:596:ALA:HB3 | 1:WA:581:GLY:CA | 2.48 | 0.44 |
| 1:VA:623:ARG:HG2 | 1:VA:623:ARG:O | 2.16 | 0.44 |
| 1:VB:175:ARG:CA | 1:VB:197:LEU:HD23 | 2.46 | 0.44 |
| 1:VB:349:VAL:HG12 | 1:VB:349:VAL:O | 2.17 | 0.44 |
| 1:W:61:VAL:CG1 | 1:W:105:LEU:HD12 | 2.47 | 0.44 |
| 1:WA:91:ARG:HG2 | 1:WA:91:ARG:HH21 | 1.83 | 0.44 |
| 1:WB:46:ALA:HB1 | 1:WB:47:PRO:CD | 2.47 | 0.44 |
| 1:WB:380:ILE:O | 1:WB:382:LEU:HG | 2.18 | 0.44 |
| 1:WB:712:LEU:O | 1:WB:716:VAL:HG23 | 2.18 | 0.44 |
| 1:X:463:PRO:O | 1:X:466:ALA:HB3 | 2.18 | 0.44 |
| 1:X:523:PHE:CG | 1:X:568:VAL:HG23 | 2.53 | 0.44 |
| 1:X:539:LEU:HD13 | 1:X:643:VAL:CG1 | 2.46 | 0.44 |
| 1:XA:325:VAL:CG1 | 1:YA:337:LEU:HD23 | 2.47 | 0.44 |
| 1:XA:381:PRO:CA | 1:XA:405:THR:HG22 | 2.48 | 0.44 |
| 1:XA:414:LEU:HB3 | 1:XA:455:THR:HB | 2.00 | 0.44 |
| 1:XA:467:ALA:HB3 | 1:XA:562:PHE:CZ | 2.53 | 0.44 |
| 1:XA:599:ILE:O | 1:XA:603:VAL:HG23 | 2.17 | 0.44 |
| 1:XB:522:PHE:HD2 | 1:XB:542:ALA:HB1 | 1.81 | 0.44 |
| 1:Y:90:ILE:HG22 | 1:Y:91:ARG:N | 2.33 | 0.44 |
| 1:Y:201:VAL:O | 1:Y:201:VAL:HG12 | 2.17 | 0.44 |
| 1:Y:522:PHE:CD1 | 1:Y:524:THR:HG23 | 2.52 | 0.44 |
| 1:Y:786:GLN:HB2 | 1:Z:781:VAL:HG11 | 2.00 | 0.44 |
| 1:YA:336:ALA:HB2 | 1:YA:357:TRP:HZ3 | 1.83 | 0.44 |
| 1:YA:797:GLN:OE1 | 1:ZA:792:VAL:HG11 | 2.16 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:YB:17:HIS:C | 1:YB:44:LEU:HD23 | 2.42 | 0.44 |
| 1:ZB:7:ILE:O | 1:ZB:8:ILE:C | 2.61 | 0.44 |
| 1:ZB:468:VAL:HG13 | 1:ZB:514:LEU:O | 2.17 | 0.44 |
| 1:A:521:ASP:O | 1:A:545:TRP:CD1 | 2.71 | 0.44 |
| 1:A:777:LEU:CD1 | 1:A:781:VAL:HG13 | 2.47 | 0.44 |
| 1:AB:470:VAL:HG12 | 1:AB:471:TYR:N | 2.33 | 0.44 |
| 1:AC:51:VAL:HG11 | 1:AC:97:PHE:CZ | 2.52 | 0.44 |
| 1:AC:138:VAL:O | 1:AC:139:ALA:C | 2.61 | 0.44 |
| 1:B:30:VAL:HG22 | 1:B:31:GLY:N | 2.33 | 0.44 |
| 1:B:62:ALA:HA | 1:B:88:LEU:HD23 | 2.00 | 0.44 |
| 1:B:463:PRO:O | 1:B:466:ALA:HB3 | 2.17 | 0.44 |
| 1:B:505:PRO:O | 1:B:507:ARG:HD3 | 2.18 | 0.44 |
| 1:BA:413:VAL:HG22 | 1:BA:414:LEU:N | 2.33 | 0.44 |
| 1:BA:452:ARG:NH1 | 1:BA:458:VAL:HG22 | 2.33 | 0.44 |
| 1:BA:543:TYR:CD1 | 1:BA:638:VAL:HG13 | 2.50 | 0.44 |
| 1:BB:220:ILE:HG23 | 1:CB:246:GLY:HA3 | 1.99 | 0.44 |
| 1:CA:221:LEU:HD23 | 1:CA:252:THR:O | 2.17 | 0.44 |
| 1:CB:775:ALA:HB1 | 1:DB:770:LEU:HD22 | 2.00 | 0.44 |
| 1:CB:799:THR:HA | 1:CB:802:ILE:HG22 | 2.00 | 0.44 |
| 1:D:104:VAL:HG22 | 1:D:105:LEU:N | 2.33 | 0.44 |
| 1:DA:374:VAL:HG12 | 1:DA:375:GLU:N | 2.33 | 0.44 |
| 1:DA:772:TYR:HD1 | 1:EA:770:LEU:HD11 | 1.82 | 0.44 |
| 1:DB:115:VAL:CB | 1:DB:119:THR:HG21 | 2.48 | 0.44 |
| 1:DB:543:TYR:HD1 | 1:DB:638:VAL:HG13 | 1.82 | 0.44 |
| 1:E:333:LEU:HD23 | 1:E:374:VAL:HG11 | 1.99 | 0.44 |
| 1:EA:284:ILE:CG2 | 1:EA:310:LEU:HD21 | 2.46 | 0.44 |
| 1:EB:215:LEU:HD12 | 1:EB:216:VAL:H | 1.83 | 0.44 |
| 1:FA:54:PRO:CD | 1:FA:109:ILE:HD12 | 2.45 | 0.44 |
| 1:FA:452:ARG:CZ | 1:FA:454:LYS:HB3 | 2.47 | 0.44 |
| 1:FA:591:PHE:O | 1:FA:595:SER:N | 2.50 | 0.44 |
| 1:FA:807:ILE:O | 1:FA:809:ASP:N | 2.51 | 0.44 |
| 1:FB:88:LEU:HD23 | 1:FB:89:GLU:N | 2.33 | 0.44 |
| 1:FB:191:VAL:HG22 | 1:FB:194:GLU:OE1 | 2.17 | 0.44 |
| 1:FB:380:ILE:HD12 | 1:FB:380:ILE:H | 1.81 | 0.44 |
| 1:FB:768:LEU:HD23 | 1:FB:768:LEU:C | 2.43 | 0.44 |
| 1:G:14:HIS:HA | 1:G:48:MET:O | 2.17 | 0.44 |
| 1:GA:398:VAL:HG11 | 1:GA:415:TRP:CD2 | 2.53 | 0.44 |
| 1:GA:522:PHE:HA | 1:GA:543:TYR:O | 2.17 | 0.44 |
| 1:GA:528:THR:O | 1:GA:529:ILE:HG23 | 2.18 | 0.44 |
| 1:GB:50:MET:HG3 | 1:GB:98:PRO:HA | 1.99 | 0.44 |
| 1:GB:402:ILE:CG1 | 1:GB:457:VAL:HG21 | 2.48 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:GB:768:LEU:HD23 | 1:GB:768:LEU:C | 2.42 | 0.44 |
| 1:H:368:SER:OG | 1:H:371:VAL:HG12 | 2.17 | 0.44 |
| 1:HA:53:VAL:HG12 | 1:HA:93:ALA:N | 2.33 | 0.44 |
| 1:I:6:PHE:O | 1:I:36:ILE:HA | 2.17 | 0.44 |
| 1:IA:44:LEU:HB3 | 1:IA:45:PHE:CD2 | 2.53 | 0.44 |
| 1:IA:59:CYS:SG | 1:IA:109:ILE:HD13 | 2.58 | 0.44 |
| 1:IB:60:THR:HA | 1:IB:89:GLU:O | 2.18 | 0.44 |
| 1:J:284:ILE:HD11 | 1:J:287:PRO:HB3 | 2.00 | 0.44 |
| 1:JA:633:LEU:HD12 | 1:JA:634:VAL:H | 1.83 | 0.44 |
| 1:JB:135:ASP:OD1 | 1:JB:135:ASP:C | 2.61 | 0.44 |
| 1:K:92:LEU:O | 1:K:93:ALA:C | 2.61 | 0.44 |
| 1:K:175:ARG:HA | 1:K:196:TRP:O | 2.17 | 0.44 |
| 1:KA:206:PRO:HA | 1:KA:210:GLU:OE1 | 2.16 | 0.44 |
| 1:KB:333:LEU:HD11 | 1:KB:356:HIS:HB3 | 2.00 | 0.44 |
| 1:KB:470:VAL:HG11 | 1:KB:489:LEU:HD23 | 2.00 | 0.44 |
| 1:KB:501:SER:HA | 1:KB:507:ARG:O | 2.17 | 0.44 |
| 1:L:19:LEU:HB2 | 1:L:44:LEU:HD11 | 2.00 | 0.44 |
| 1:L:786:GLN:HA | 1:L:789:GLU:OE1 | 2.18 | 0.44 |
| 1:LA:216:VAL:HG13 | 1:LA:260:VAL:HG21 | 1.99 | 0.44 |
| 1:LB:99:LEU:HD21 | 1:LB:103:GLU:O | 2.18 | 0.44 |
| 1:LB:547:PHE:CE2 | 1:LB:633:LEU:HD13 | 2.52 | 0.44 |
| 1:M:53:VAL:HB | 1:M:58:TYR:HA | 1.98 | 0.44 |
| 1:M:285:LEU:HD21 | 1:M:299:LYS:HG3 | 2.00 | 0.44 |
| 1:M:323:VAL:HG12 | 1:M:366:VAL:HG23 | 2.00 | 0.44 |
| 1:M:340:LEU:HD12 | 1:M:351:HIS:ND1 | 2.33 | 0.44 |
| 1:MA:73:VAL:HG12 | 1:MA:74:LEU:N | 2.33 | 0.44 |
| 1:MB:16:ILE:HA | 1:MB:45:PHE:CE1 | 2.53 | 0.44 |
| 1:MB:18:VAL:HB | 1:MB:41:GLU:HG3 | 2.00 | 0.44 |
| 1:MB:72:LEU:HD23 | 1:MB:73:VAL:N | 2.33 | 0.44 |
| 1:MB:362:PRO:O | 1:NB:352:GLN:HG3 | 2.18 | 0.44 |
| 1:N:122:HIS:CD2 | 1:N:122:HIS:C | 2.96 | 0.44 |
| 1:N:659:GLN:O | 1:N:663:GLU:OE1 | 2.36 | 0.44 |
| 1:NB:172:GLN:CG | 1:NB:215:LEU:HD11 | 2.48 | 0.44 |
| 1:NB:262:ASP:HB3 | 1:NB:265:GLU:OE1 | 2.18 | 0.44 |
| 1:NB:325:VAL:O | 1:NB:325:VAL:HG13 | 2.18 | 0.44 |
| 1:O:63:ASN:OD1 | 1:O:83:LEU:HD23 | 2.18 | 0.44 |
| 1:OA:216:VAL:HG22 | 1:OA:217:ASP:N | 2.33 | 0.44 |
| 1:OA:575:ILE:HG23 | 1:OA:603:VAL:HG13 | 2.00 | 0.44 |
| 1:OB:57:HIS:HB3 | 1:OB:109:ILE:HG22 | 1.98 | 0.44 |
| 1:OB:284:ILE:HD12 | 1:OB:287:PRO:HB3 | 2.00 | 0.44 |
| 1:OB:480:VAL:HG12 | 1:OB:481:VAL:N | 2.33 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OB:529:ILE:HD12 | 1:OB:583:VAL:HG21 | 1.99 | 0.44 |
| 1:PA:168:ILE:HA | 1:PA:215:LEU:HD11 | 2.00 | 0.44 |
| 1:PA:325:VAL:O | 1:PA:325:VAL:HG13 | 2.17 | 0.44 |
| 1:PA:626:ALA:HB3 | 1:PA:635:VAL:CB | 2.47 | 0.44 |
| 1:PA:746:LEU:HD23 | 1:PA:749:GLN:NE2 | 2.32 | 0.44 |
| 1:PB:129:PHE:CD1 | 1:PB:156:GLU:HB2 | 2.53 | 0.44 |
| 1:PB:543:TYR:HD1 | 1:PB:638:VAL:HG13 | 1.83 | 0.44 |
| 1:Q:53:VAL:HG22 | 1:Q:109:ILE:CD1 | 2.47 | 0.44 |
| 1:QA:659:GLN:CB | 1:RA:649:ARG:HE | 2.30 | 0.44 |
| 1:QB:165:ALA:HB2 | 1:QB:205:LEU:HD13 | 2.00 | 0.44 |
| 1:QB:332:LEU:O | 1:QB:359:ILE:HG22 | 2.17 | 0.44 |
| 1:QB:401:VAL:C | 1:QB:402:ILE:HD12 | 2.43 | 0.44 |
| 1:R:174:LEU:HD23 | 1:R:204:TYR:CD2 | 2.52 | 0.44 |
| 1:R:470:VAL:HG11 | 1:R:479:ARG:NE | 2.33 | 0.44 |
| 1:R:489:LEU:HD22 | 1:R:493:GLU:O | 2.17 | 0.44 |
| 1:R:625:GLN:HB2 | 1:R:634:VAL:HG13 | 2.00 | 0.44 |
| 1:RA:58:TYR:CE1 | 1:RA:112:LEU:HD13 | 2.53 | 0.44 |
| 1:RA:259:HIS:CE1 | 1:RA:260:VAL:O | 2.71 | 0.44 |
| 1:RB:279:HIS:HA | 1:RB:323:VAL:HG22 | 2.00 | 0.44 |
| 1:RB:746:LEU:O | 1:SB:741:VAL:HG22 | 2.18 | 0.44 |
| 1:S:583:VAL:HG13 | 1:S:584:ALA:N | 2.33 | 0.44 |
| 1:S:809:ASP:O | 1:S:810:LEU:HD23 | 2.18 | 0.44 |
| 1:SA:65:VAL:HG22 | 1:SA:103:GLU:OE1 | 2.18 | 0.44 |
| 1:SA:345:ASP:OD2 | 1:SA:359:ILE:HD13 | 2.18 | 0.44 |
| 1:SB:144:LEU:HD12 | 1:SB:144:LEU:C | 2.42 | 0.44 |
| 1:SB:333:LEU:CD2 | 1:SB:374:VAL:HG11 | 2.47 | 0.44 |
| 1:T:121:LEU:HG | 1:T:162:ILE:HD13 | 2.00 | 0.44 |
| 1:T:402:ILE:HG22 | 1:T:403:GLY:N | 2.32 | 0.44 |
| 1:T:772:TYR:HD1 | 1:V:770:LEU:HD11 | 1.82 | 0.44 |
| 1:TA:392:ASP:HB3 | 1:TA:396:GLY:O | 2.18 | 0.44 |
| 1:TA:516:LEU:HD13 | 1:TA:567:PHE:HZ | 1.81 | 0.44 |
| 1:TA:520:PRO:HA | 1:TA:545:TRP:O | 2.18 | 0.44 |
| 1:TB:566:ASP:OD1 | 1:TB:568:VAL:HG12 | 2.17 | 0.44 |
| 1:UA:301:VAL:HG21 | 1:UA:366:VAL:HG22 | 1.99 | 0.44 |
| 1:UB:216:VAL:HG22 | 1:UB:217:ASP:N | 2.33 | 0.44 |
| 1:V:238:PHE:CE1 | 1:V:259:HIS:NE2 | 2.86 | 0.44 |
| 1:VA:122:HIS:NE2 | 1:VA:208:VAL:HG12 | 2.32 | 0.44 |
| 1:VA:131:ASP:CG | 1:VA:137:VAL:HG23 | 2.42 | 0.44 |
| 1:VA:332:LEU:CD2 | 1:VA:334:LEU:HD21 | 2.47 | 0.44 |
| 1:VB:160:VAL:HG12 | 1:VB:161:GLU:N | 2.33 | 0.44 |
| 1:VB:771:VAL:HG22 | 1:VB:774:ARG:NH1 | 2.31 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:W:112:LEU:HD23 | 1:X:139:ALA:HB3 | 1.99 | 0.44 |
| 1:W:330:GLN:HB3 | 1:W:376:GLU:OE2 | 2.18 | 0.44 |
| 1:WA:326:LEU:HD21 | 1:WA:332:LEU:HG | 2.00 | 0.44 |
| 1:WB:226:ALA:O | 1:WB:271:VAL:HG22 | 2.17 | 0.44 |
| 1:WB:380:ILE:HD12 | 1:WB:406:TYR:O | 2.18 | 0.44 |
| 1:WB:703:ARG:NH2 | 1:WB:707:LEU:HD11 | 2.33 | 0.44 |
| 1:XA:9:ARG:NE | 1:YA:21:GLN:O | 2.50 | 0.44 |
| 1:XA:121:LEU:N | 1:XA:162:ILE:HG23 | 2.33 | 0.44 |
| 1:XA:570:ASP:O | 1:XA:571:ALA:C | 2.61 | 0.44 |
| 1:XA:737:GLY:O | 1:XA:741:VAL:HG23 | 2.17 | 0.44 |
| 1:Y:388:ILE:N | 1:Y:457:VAL:HG23 | 2.32 | 0.44 |
| 1:YB:3:THR:HG23 | 1:YB:37:ARG:HB2 | 2.00 | 0.44 |
| 1:YB:177:ARG:HA | 1:YB:194:GLU:O | 2.18 | 0.44 |
| 1:YB:271:VAL:HG23 | 1:YB:271:VAL:O | 2.18 | 0.44 |
| 1:ZA:176:LEU:HB2 | 1:ZA:211:GLU:O | 2.18 | 0.44 |
| 1:ZB:228:HIS:CA | 1:ZB:250:LEU:HD23 | 2.42 | 0.44 |
| 1:A:337:LEU:HD21 | 1:A:372:GLU:HB2 | 1.99 | 0.44 |
| 1:AA:334:LEU:HD11 | 1:AA:359:ILE:CG2 | 2.48 | 0.44 |
| 1:AA:722:ALA:O | 1:AA:723:LYS:C | 2.61 | 0.44 |
| 1:AB:56:ARG:HG2 | 1:AB:56:ARG:O | 2.17 | 0.44 |
| 1:AB:90:ILE:HG21 | 1:AB:92:LEU:HD21 | 2.00 | 0.44 |
| 1:AB:191:VAL:O | 1:AB:192:THR:C | 2.59 | 0.44 |
| 1:AB:388:ILE:HG22 | 1:AB:389:TYR:N | 2.32 | 0.44 |
| 1:AB:390:VAL:HG12 | 1:AB:414:LEU:CD2 | 2.47 | 0.44 |
| 1:AC:126:LEU:C | 1:AC:127:LEU:HD22 | 2.42 | 0.44 |
| 1:AC:218:ALA:HA | 1:AC:260:VAL:HG23 | 2.00 | 0.44 |
| 1:AC:520:PRO:O | 1:OA:564:VAL:HG22 | 2.18 | 0.44 |
| 1:AC:763:GLN:HA | 1:AC:766:ARG:HD2 | 2.00 | 0.44 |
| 1:B:51:VAL:N | 1:B:97:PHE:O | 2.51 | 0.44 |
| 1:B:389:TYR:CD1 | 1:B:457:VAL:HG22 | 2.53 | 0.44 |
| 1:B:638:VAL:HG12 | 1:B:639:ASP:N | 2.33 | 0.44 |
| 1:BB:703:ARG:N | 1:CB:693:ILE:HG21 | 2.33 | 0.44 |
| 1:C:20:ASP:O | 1:C:23:SER:O | 2.36 | 0.44 |
| 1:C:360:ARG:NH1 | 1:C:379:ALA:HB2 | 2.32 | 0.44 |
| 1:CA:131:ASP:OD1 | 1:CA:131:ASP:N | 2.51 | 0.44 |
| 1:CA:221:LEU:HD13 | 1:CA:258:ALA:C | 2.42 | 0.44 |
| 1:CA:283:VAL:HG22 | 1:CA:301:VAL:HA | 2.00 | 0.44 |
| 1:CA:391:GLN:H | 1:CA:414:LEU:HA | 1.83 | 0.44 |
| 1:CB:409:THR:O | 1:CB:410:GLN:C | 2.61 | 0.44 |
| 1:D:3:THR:O | 1:D:6:PHE:CG | 2.71 | 0.44 |
| 1:D:15:TYR:HA | 1:D:29:GLU:O | 2.18 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:DA:16:ILE:HG23 | 1:DA:45:PHE:O | 2.17 | 0.44 |
| 1:DA:277:GLY:C | 1:DA:305:GLU:H | 2.26 | 0.44 |
| 1:DB:223:GLU:O | 1:DB:273:ILE:HD12 | 2.18 | 0.44 |
| 1:E:10:ILE:HG22 | 1:E:47:PRO:CG | 2.48 | 0.44 |
| 1:E:547:PHE:CE1 | 1:E:633:LEU:HD13 | 2.53 | 0.44 |
| 1:E:772:TYR:CE1 | 1:F:770:LEU:HD21 | 2.53 | 0.44 |
| 1:EA:556:GLN:N | 1:EA:556:GLN:CD | 2.75 | 0.44 |
| 1:EB:3:THR:HG23 | 1:EB:37:ARG:HB3 | 1.99 | 0.44 |
| 1:F:59:CYS:SG | 1:F:108:ASP:C | 3.01 | 0.44 |
| 1:FA:165:ALA:HB1 | 1:FA:203:ALA:O | 2.18 | 0.44 |
| 1:FA:209:PHE:CE1 | 1:FA:210:GLU:HG3 | 2.53 | 0.44 |
| 1:FA:426:LEU:C | 1:FA:426:LEU:HD23 | 2.43 | 0.44 |
| 1:FB:284:ILE:HD12 | 1:FB:287:PRO:HB3 | 2.00 | 0.44 |
| 1:GA:63:ASN:OD1 | 1:GA:83:LEU:HB3 | 2.18 | 0.44 |
| 1:GA:336:ALA:HB3 | 1:GA:355:ASP:H | 1.82 | 0.44 |
| 1:GA:423:VAL:HG13 | 1:GA:424:GLU:N | 2.32 | 0.44 |
| 1:GA:528:THR:HG22 | 1:GA:529:ILE:N | 2.33 | 0.44 |
| 1:H:162:ILE:H | 1:H:162:ILE:HD12 | 1.83 | 0.44 |
| 1:HA:517:LEU:HD12 | 1:HA:517:LEU:O | 2.18 | 0.44 |
| 1:IA:216:VAL:HG22 | 1:IA:217:ASP:H | 1.83 | 0.44 |
| 1:IA:537:LEU:HA | 1:IA:645:PRO:HA | 1.99 | 0.44 |
| 1:IB:28:VAL:HG22 | 1:IB:98:PRO:HB2 | 1.98 | 0.44 |
| 1:IB:90:ILE:H | 1:IB:90:ILE:HD12 | 1.82 | 0.44 |
| 1:IB:459:SER:HA | 1:IB:488:SER:HA | 2.00 | 0.44 |
| 1:IB:522:PHE:HA | 1:IB:543:TYR:O | 2.18 | 0.44 |
| 1:IB:707:LEU:O | 1:IB:711:ALA:HB2 | 2.18 | 0.44 |
| 1:JA:53:VAL:HG11 | 1:JA:93:ALA:N | 2.33 | 0.44 |
| 1:JA:460:TYR:C | 1:JA:486:LEU:HD12 | 2.43 | 0.44 |
| 1:JB:274:THR:N | 1:JB:308:PHE:O | 2.51 | 0.44 |
| 1:JB:606:PHE:O | 1:JB:607:GLU:C | 2.61 | 0.44 |
| 1:K:59:CYS:C | 1:K:90:ILE:HG23 | 2.43 | 0.44 |
| 1:K:662:ILE:O | 1:K:666:THR:HG23 | 2.18 | 0.44 |
| 1:KA:76:ASP:N | 1:KA:80:GLN:O | 2.51 | 0.44 |
| 1:KB:542:ALA:O | 1:KB:638:VAL:HG13 | 2.17 | 0.44 |
| 1:L:579:VAL:O | 1:L:583:VAL:HG12 | 2.18 | 0.44 |
| 1:LA:168:ILE:HG21 | 1:LA:174:LEU:HB2 | 1.99 | 0.44 |
| 1:LA:541:LEU:CD2 | 1:LA:640:VAL:HG22 | 2.47 | 0.44 |
| 1:LB:626:ALA:HB3 | 1:LB:635:VAL:HB | 2.00 | 0.44 |
| 1:M:174:LEU:HD12 | 1:M:214:ASP:C | 2.43 | 0.44 |
| 1:MA:60:THR:HG22 | 1:MA:90:ILE:HG23 | 2.00 | 0.44 |
| 1:MA:250:LEU:HD12 | 1:MA:250:LEU:N | 2.33 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:MA:331:GLY:N | 1:MA:407:MET:HE3 | 2.32 | 0.44 |
| 1:MA:640:VAL:HG12 | 1:NA:580:ARG:NH1 | 2.33 | 0.44 |
| 1:MB:165:ALA:HA | 1:MB:205:LEU:HA | 2.00 | 0.44 |
| 1:N:337:LEU:HG | 1:N:372:GLU:N | 2.33 | 0.44 |
| 1:NA:5:GLU:O | 1:NA:8:ILE:CD1 | 2.66 | 0.44 |
| 1:NA:536:ARG:O | 1:NA:645:PRO:HA | 2.16 | 0.44 |
| 1:NB:423:VAL:O | 1:NB:424:GLU:C | 2.60 | 0.44 |
| 1:NB:425:GLU:O | 1:NB:426:LEU:C | 2.60 | 0.44 |
| 1:NB:467:ALA:HA | 1:NB:482:PHE:HA | 2.00 | 0.44 |
| 1:NB:527:ILE:O | 1:NB:529:ILE:HG23 | 2.18 | 0.44 |
| 1:O:115:VAL:HG12 | 1:O:116:LEU:N | 2.33 | 0.44 |
| 1:O:379:ALA:O | 1:O:380:ILE:C | 2.61 | 0.44 |
| 1:O:546:HIS:O | 1:O:634:VAL:HB | 2.18 | 0.44 |
| 1:O:737:GLY:O | 1:O:741:VAL:HG23 | 2.18 | 0.44 |
| 1:P:768:LEU:HD23 | 1:P:768:LEU:C | 2.43 | 0.44 |
| 1:Q:495:PHE:CE2 | 1:Q:514:LEU:HD11 | 2.52 | 0.44 |
| 1:Q:567:PHE:CG | 1:Q:568:VAL:N | 2.86 | 0.44 |
| 1:Q:787:LEU:HD23 | 1:R:781:VAL:HG12 | 1.99 | 0.44 |
| 1:QA:337:LEU:HG | 1:QA:372:GLU:CA | 2.48 | 0.44 |
| 1:QA:758:GLU:OE2 | 1:QA:762:VAL:HG11 | 2.18 | 0.44 |
| 1:QB:233:ARG:HA | 1:QB:245:THR:HG23 | 1.99 | 0.44 |
| 1:R:260:VAL:O | 1:R:260:VAL:HG13 | 2.18 | 0.44 |
| 1:RA:28:VAL:HG22 | 1:RA:29:GLU:N | 2.32 | 0.44 |
| 1:RA:230:ARG:HA | 1:RA:247:GLU:O | 2.18 | 0.44 |
| 1:RB:514:LEU:HD12 | 1:RB:514:LEU:N | 2.33 | 0.44 |
| 1:S:28:VAL:HG22 | 1:S:29:GLU:N | 2.33 | 0.44 |
| 1:S:283:VAL:HG12 | 1:S:284:ILE:N | 2.33 | 0.44 |
| 1:SA:19:LEU:HA | 1:SA:26:SER:HA | 2.00 | 0.44 |
| 1:T:398:VAL:HG11 | 1:T:491:PRO:HB3 | 2.00 | 0.44 |
| 1:T:518:LEU:H | 1:T:518:LEU:HD12 | 1.83 | 0.44 |
| 1:TA:115:VAL:HG12 | 1:TA:116:LEU:N | 2.33 | 0.44 |
| 1:TB:16:ILE:HA | 1:TB:45:PHE:CE2 | 2.53 | 0.44 |
| 1:UA:159:VAL:HG12 | 1:UA:160:VAL:N | 2.33 | 0.44 |
| 1:UA:513:ALA:O | 1:UA:514:LEU:HD12 | 2.18 | 0.44 |
| 1:UA:716:VAL:HG11 | 1:VA:708:GLU:HG3 | 1.99 | 0.44 |
| 1:UB:16:ILE:CG2 | 1:UB:17:HIS:N | 2.80 | 0.44 |
| 1:UB:230:ARG:CG | 1:UB:231:ALA:N | 2.81 | 0.44 |
| 1:UB:764:LYS:O | 1:UB:768:LEU:HB3 | 2.17 | 0.44 |
| 1:V:237:ASP:HB2 | 1:V:265:GLU:OE2 | 2.17 | 0.44 |
| 1:V:786:GLN:CB | 1:W:781:VAL:HG11 | 2.45 | 0.44 |
| 1:VB:128:ASP:OD2 | 1:VB:138:VAL:HG12 | 2.18 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:VB:235:PHE:CE1 | 1:VB:264:HIS:HB3 | 2.52 | 0.44 |
| 1:VB:279:HIS:CD2 | 1:VB:279:HIS:H | 2.34 | 0.44 |
| 1:VB:389:TYR:HE2 | 1:VB:458:VAL:HG23 | 1.82 | 0.44 |
| 1:VB:526:VAL:HG12 | 1:VB:538:GLN:HG3 | 2.00 | 0.44 |
| 1:VB:690:ARG:HH21 | 1:VB:694:LEU:HD12 | 1.82 | 0.44 |
| 1:W:228:HIS:ND1 | 1:W:268:LEU:HD22 | 2.32 | 0.44 |
| 1:WA:273:ILE:HG23 | 1:XA:296:LEU:HD22 | 2.00 | 0.44 |
| 1:WA:549:VAL:HG12 | 1:WA:549:VAL:O | 2.17 | 0.44 |
| 1:WA:579:VAL:O | 1:WA:583:VAL:HG12 | 2.18 | 0.44 |
| 1:WB:554:ASP:O | 1:WB:558:THR:HG23 | 2.18 | 0.44 |
| 1:X:398:VAL:HG12 | 1:X:399:ARG:N | 2.33 | 0.44 |
| 1:XB:166:THR:O | 1:XB:166:THR:HG23 | 2.18 | 0.44 |
| 1:Y:77:VAL:HG23 | 1:Y:78:THR:HG23 | 2.00 | 0.44 |
| 1:Y:230:ARG:HG2 | 1:Y:231:ALA:N | 2.33 | 0.44 |
| 1:YA:112:LEU:HD12 | 1:YA:151:TYR:O | 2.17 | 0.44 |
| 1:YA:171:ASN:O | 1:YA:217:ASP:HA | 2.17 | 0.44 |
| 1:YA:531:THR:HG22 | 1:YA:583:VAL:HG22 | 1.99 | 0.44 |
| 1:YB:165:ALA:HA | 1:YB:205:LEU:HA | 1.99 | 0.44 |
| 1:YB:173:ALA:HB1 | 1:YB:199:THR:HG22 | 2.00 | 0.44 |
| 1:YB:316:LEU:HD11 | 1:YB:319:GLY:O | 2.18 | 0.44 |
| 1:YB:335:ARG:HA | 1:YB:355:ASP:O | 2.18 | 0.44 |
| 1:Z:415:TRP:CH2 | 1:Z:417:LYS:HA | 2.53 | 0.44 |
| 1:ZA:737:GLY:O | 1:ZA:741:VAL:HG23 | 2.17 | 0.44 |
| 1:A:470:VAL:HG22 | 1:A:495:PHE:HA | 2.00 | 0.43 |
| 1:AA:60:THR:HG23 | 1:AA:107:LYS:HE3 | 2.00 | 0.43 |
| 1:AA:777:LEU:HD12 | 1:AA:781:VAL:HG13 | 2.00 | 0.43 |
| 1:AB:28:VAL:HG22 | 1:AB:29:GLU:N | 2.33 | 0.43 |
| 1:AB:473:TYR:CD1 | 1:ZA:461:ARG:HG3 | 2.53 | 0.43 |
| 1:B:163:ILE:HD12 | 1:B:206:PRO:HG2 | 1.99 | 0.43 |
| 1:BA:31:GLY:N | 1:BA:32:PRO:CD | 2.81 | 0.43 |
| 1:BB:56:ARG:O | 1:BB:56:ARG:HG2 | 2.18 | 0.43 |
| 1:CA:786:GLN:HB2 | 1:DA:781:VAL:HG11 | 1.99 | 0.43 |
| 1:CB:16:ILE:CG2 | 1:CB:43:VAL:HG13 | 2.48 | 0.43 |
| 1:D:380:ILE:HD12 | 1:D:380:ILE:H | 1.83 | 0.43 |
| 1:D:797:GLN:HA | 1:D:800:GLU:CD | 2.43 | 0.43 |
| 1:DA:6:PHE:O | 1:DA:36:ILE:HA | 2.18 | 0.43 |
| 1:DA:16:ILE:O | 1:DA:29:GLU:HG2 | 2.18 | 0.43 |
| 1:DA:459:SER:HA | 1:DA:488:SER:HA | 2.00 | 0.43 |
| 1:DA:539:LEU:HD13 | 1:DA:642:SER:C | 2.43 | 0.43 |
| 1:E:15:TYR:CD1 | 1:E:50:MET:HG2 | 2.53 | 0.43 |
| 1:E:19:LEU:HD13 | 1:E:26:SER:HB3 | 2.00 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:E:56:ARG:HB3 | 1:E:112:LEU:HB2 | 1.99 | 0.43 |
| 1:E:173:ALA:O | 1:E:216:VAL:HG12 | 2.18 | 0.43 |
| 1:E:333:LEU:HD11 | 1:E:356:HIS:HB3 | 1.99 | 0.43 |
| 1:EA:58:TYR:CE2 | 1:EA:90:ILE:HA | 2.53 | 0.43 |
| 1:EA:114:VAL:HA | 1:EA:150:THR:HA | 1.99 | 0.43 |
| 1:EA:762:VAL:HG23 | 1:EA:763:GLN:N | 2.33 | 0.43 |
| 1:EB:333:LEU:HD23 | 1:EB:374:VAL:HG11 | 2.00 | 0.43 |
| 1:F:230:ARG:HG2 | 1:F:268:LEU:HD11 | 2.00 | 0.43 |
| 1:FA:408:LEU:HD11 | 1:FA:414:LEU:HG | 2.00 | 0.43 |
| 1:FA:528:THR:HG22 | 1:FA:536:ARG:NH1 | 2.33 | 0.43 |
| 1:FA:659:GLN:HA | 1:FA:662:ILE:HD12 | 1.99 | 0.43 |
| 1:FA:662:ILE:HG21 | 1:GA:653:ALA:HB1 | 2.00 | 0.43 |
| 1:FB:547:PHE:O | 1:FB:549:VAL:HG23 | 2.17 | 0.43 |
| 1:FB:623:ARG:HH22 | 1:FB:627:VAL:HG22 | 1.82 | 0.43 |
| 1:FB:731:GLU:CD | 1:FB:734:ARG:HE | 2.26 | 0.43 |
| 1:G:150:THR:O | 1:G:150:THR:HG23 | 2.18 | 0.43 |
| 1:G:761:ARG:NE | 1:H:751:LEU:HD11 | 2.33 | 0.43 |
| 1:GA:165:ALA:HB1 | 1:GA:204:TYR:C | 2.43 | 0.43 |
| 1:GA:498:LEU:HB2 | 1:GA:513:ALA:O | 2.18 | 0.43 |
| 1:GB:15:TYR:HB3 | 1:GB:30:VAL:HG23 | 2.00 | 0.43 |
| 1:H:157:VAL:HG12 | 1:H:158:GLU:N | 2.33 | 0.43 |
| 1:H:230:ARG:HB3 | 1:H:266:GLU:HB3 | 1.99 | 0.43 |
| 1:H:231:ALA:HB3 | 1:H:244:ARG:O | 2.18 | 0.43 |
| 1:HA:241:VAL:HG11 | 1:HA:243:ARG:CZ | 2.47 | 0.43 |
| 1:HA:333:LEU:HD12 | 1:HA:334:LEU:H | 1.83 | 0.43 |
| 1:HB:57:HIS:HA | 1:HB:110:THR:O | 2.18 | 0.43 |
| 1:I:90:ILE:H | 1:I:90:ILE:HD12 | 1.83 | 0.43 |
| 1:I:301:VAL:HG22 | 1:I:302:VAL:H | 1.83 | 0.43 |
| 1:IA:215:LEU:HD12 | 1:IA:216:VAL:H | 1.83 | 0.43 |
| 1:IA:780:GLU:O | 1:IA:783:LYS:HB3 | 2.17 | 0.43 |
| 1:IB:554:ASP:O | 1:IB:558:THR:HG23 | 2.18 | 0.43 |
| 1:J:420:PRO:HB2 | 1:J:421:PRO:HD3 | 1.99 | 0.43 |
| 1:J:735:ILE:HG23 | 1:K:727:GLU:OE1 | 2.18 | 0.43 |
| 1:JB:117:PRO:HA | 1:JB:147:GLY:HA2 | 2.00 | 0.43 |
| 1:JB:533:ASP:OD1 | 1:JB:533:ASP:C | 2.60 | 0.43 |
| 1:JB:583:VAL:HG13 | 1:JB:584:ALA:N | 2.34 | 0.43 |
| 1:K:15:TYR:OH | 1:K:48:MET:HE3 | 2.18 | 0.43 |
| 1:K:371:VAL:O | 1:K:371:VAL:HG13 | 2.17 | 0.43 |
| 1:K:410:GLN:O | 1:K:411:ASP:OD1 | 2.36 | 0.43 |
| 1:K:561:LEU:HD21 | 1:K:632:GLY:O | 2.18 | 0.43 |
| 1:KA:383:ASP:H | 1:KA:386:GLU:HB3 | 1.82 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:KA:423:VAL:O | 1:KA:424:GLU:C | 2.61 | 0.43 |
| 1:KA:564:VAL:HG11 | 1:KA:567:PHE:HA | 2.00 | 0.43 |
| 1:KB:726:ALA:O | 1:KB:730:ALA:HB2 | 2.17 | 0.43 |
| 1:L:6:PHE:O | 1:L:35:TYR:O | 2.36 | 0.43 |
| 1:L:168:ILE:HD12 | 1:L:200:THR:O | 2.19 | 0.43 |
| 1:L:230:ARG:CG | 1:L:231:ALA:N | 2.81 | 0.43 |
| 1:LA:56:ARG:NH1 | 1:MA:126:LEU:HA | 2.32 | 0.43 |
| 1:LB:9:ARG:CB | 1:LB:34:THR:HG22 | 2.47 | 0.43 |
| 1:LB:267:VAL:O | 1:LB:268:LEU:HD12 | 2.17 | 0.43 |
| 1:LB:589:ASP:OD1 | 1:LB:590:ASP:N | 2.50 | 0.43 |
| 1:M:794:LYS:HG3 | 1:N:792:VAL:HG23 | 2.00 | 0.43 |
| 1:MA:638:VAL:HG12 | 1:MA:639:ASP:N | 2.33 | 0.43 |
| 1:MB:56:ARG:O | 1:MB:111:PRO:HA | 2.17 | 0.43 |
| 1:MB:301:VAL:HG22 | 1:MB:302:VAL:N | 2.33 | 0.43 |
| 1:MB:326:LEU:HA | 1:MB:330:GLN:HB2 | 1.99 | 0.43 |
| 1:N:176:LEU:HG | 1:N:196:TRP:CE2 | 2.53 | 0.43 |
| 1:N:390:VAL:O | 1:N:390:VAL:HG13 | 2.18 | 0.43 |
| 1:NA:178:ALA:HB3 | 1:NA:192:THR:HA | 2.00 | 0.43 |
| 1:NA:184:ASP:OD1 | 1:NA:184:ASP:C | 2.61 | 0.43 |
| 1:NA:501:SER:HA | 1:NA:507:ARG:O | 2.18 | 0.43 |
| 1:NA:583:VAL:HG13 | 1:NA:584:ALA:N | 2.33 | 0.43 |
| 1:OA:144:LEU:CD2 | 1:OA:163:ILE:HD11 | 2.47 | 0.43 |
| 1:OA:633:LEU:HG | 1:OA:634:VAL:H | 1.82 | 0.43 |
| 1:OA:802:ILE:HD13 | 1:PA:799:THR:HG21 | 1.99 | 0.43 |
| 1:OB:575:ILE:HD12 | 1:OB:603:VAL:HG11 | 2.01 | 0.43 |
| 1:P:168:ILE:HG21 | 1:P:174:LEU:HB2 | 2.00 | 0.43 |
| 1:PB:227:LEU:HD12 | 1:PB:228:HIS:N | 2.33 | 0.43 |
| 1:PB:358:LEU:HD12 | 1:PB:359:ILE:H | 1.82 | 0.43 |
| 1:Q:230:ARG:HA | 1:Q:247:GLU:O | 2.17 | 0.43 |
| 1:Q:549:VAL:CG1 | 1:Q:561:LEU:HD11 | 2.41 | 0.43 |
| 1:QA:166:THR:O | 1:QA:166:THR:HG23 | 2.18 | 0.43 |
| 1:QA:564:VAL:HG12 | 1:QA:567:PHE:HA | 2.00 | 0.43 |
| 1:QB:335:ARG:NH1 | 1:QB:372:GLU:OE2 | 2.51 | 0.43 |
| 1:R:340:LEU:HD11 | 1:R:371:VAL:HG22 | 2.00 | 0.43 |
| 1:R:374:VAL:HG12 | 1:R:375:GLU:H | 1.83 | 0.43 |
| 1:R:545:TRP:HA | 1:R:635:VAL:HA | 2.00 | 0.43 |
| 1:RA:18:VAL:O | 1:RA:26:SER:HA | 2.17 | 0.43 |
| 1:RA:238:PHE:CE2 | 1:RA:256:THR:HG22 | 2.52 | 0.43 |
| 1:RA:283:VAL:HA | 1:RA:301:VAL:HA | 1.99 | 0.43 |
| 1:RB:63:ASN:CG | 1:RB:85:HIS:HA | 2.42 | 0.43 |
| 1:RB:281:TYR:O | 1:RB:320:ILE:HG23 | 2.18 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:RB:333:LEU:HD12 | 1:RB:357:TRP:C | 2.43 | 0.43 |
| 1:S:691:GLN:HA | 1:S:694:LEU:HD12 | 2.00 | 0.43 |
| 1:SA:58:TYR:OH | 1:SA:92:LEU:HD13 | 2.17 | 0.43 |
| 1:SA:179:ARG:HD3 | 1:SA:211:GLU:HB2 | 2.00 | 0.43 |
| 1:SA:334:LEU:HB2 | 1:SA:357:TRP:CE2 | 2.53 | 0.43 |
| 1:SA:495:PHE:CB | 1:SA:514:LEU:HD11 | 2.48 | 0.43 |
| 1:SB:115:VAL:HG21 | 1:SB:145:PHE:CE2 | 2.53 | 0.43 |
| 1:SB:286:ASP:CG | 1:SB:296:LEU:HA | 2.43 | 0.43 |
| 1:SB:371:VAL:HG22 | 1:SB:372:GLU:N | 2.33 | 0.43 |
| 1:T:703:ARG:CZ | 1:T:707:LEU:HD11 | 2.48 | 0.43 |
| 1:TA:16:ILE:HG23 | 1:TA:45:PHE:O | 2.17 | 0.43 |
| 1:TA:527:ILE:HD13 | 1:TA:541:LEU:HD12 | 2.00 | 0.43 |
| 1:TB:18:VAL:HA | 1:TB:44:LEU:HD13 | 2.00 | 0.43 |
| 1:TB:76:ASP:HB3 | 1:TB:80:GLN:O | 2.18 | 0.43 |
| 1:TB:123:LEU:HB2 | 1:TB:143:TRP:CE2 | 2.52 | 0.43 |
| 1:UA:10:ILE:HD13 | 1:UA:35:TYR:H | 1.82 | 0.43 |
| 1:UB:518:LEU:C | 1:UB:518:LEU:HD12 | 2.43 | 0.43 |
| 1:V:363:LEU:CA | 1:W:353:ALA:HB3 | 2.47 | 0.43 |
| 1:V:391:GLN:HB3 | 1:V:413:VAL:O | 2.18 | 0.43 |
| 1:VB:130:GLU:HA | 1:VB:135:ASP:HA | 2.00 | 0.43 |
| 1:VB:524:THR:HG22 | 1:VB:542:ALA:CB | 2.48 | 0.43 |
| 1:VB:702:ALA:HB1 | 1:WB:693:ILE:HB | 2.00 | 0.43 |
| 1:W:3:THR:OG1 | 1:W:43:VAL:HG23 | 2.18 | 0.43 |
| 1:W:220:ILE:HD12 | 1:X:245:THR:HG21 | 2.00 | 0.43 |
| 1:W:305:GLU:HG2 | 1:W:305:GLU:O | 2.18 | 0.43 |
| 1:W:338:GLN:HB3 | 1:W:339:PRO:HD2 | 2.00 | 0.43 |
| 1:WB:688:LEU:HD13 | 1:XB:679:ARG:CG | 2.46 | 0.43 |
| 1:XB:735:ILE:HD12 | 1:YB:726:ALA:CB | 2.48 | 0.43 |
| 1:YA:336:ALA:HB3 | 1:YA:354:GLY:N | 2.33 | 0.43 |
| 1:YB:6:PHE:C | 1:YB:8:ILE:HD12 | 2.42 | 0.43 |
| 1:YB:10:ILE:CG2 | 1:YB:16:ILE:HD12 | 2.48 | 0.43 |
| 1:YB:60:THR:HG22 | 1:YB:90:ILE:HG13 | 1.99 | 0.43 |
| 1:YB:61:VAL:HG23 | 1:YB:61:VAL:O | 2.18 | 0.43 |
| 1:YB:163:ILE:HD12 | 1:YB:206:PRO:O | 2.18 | 0.43 |
| 1:YB:212:VAL:O | 1:YB:212:VAL:HG23 | 2.18 | 0.43 |
| 1:YB:324:TYR:O | 1:YB:364:GLU:HA | 2.18 | 0.43 |
| 1:Z:90:ILE:H | 1:Z:90:ILE:HD12 | 1.81 | 0.43 |
| 1:ZB:81:VAL:HG21 | 1:ZB:100:TYR:CE2 | 2.53 | 0.43 |
| 1:ZB:174:LEU:HB3 | 1:ZB:198:VAL:HG12 | 2.00 | 0.43 |
| 1:ZB:281:TYR:CE1 | 1:ZB:321:GLN:HB3 | 2.53 | 0.43 |
| 1:ZB:520:PRO:HB3 | 1:ZB:546:HIS:HB3 | 2.00 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:A:127:LEU:HD21 | 1:NA:56:ARG:HE | 1.83 | 0.43 |
| 1:A:227:LEU:HB3 | 1:A:251:VAL:CG2 | 2.48 | 0.43 |
| 1:AA:410:GLN:O | 1:AA:411:ASP:OD1 | 2.35 | 0.43 |
| 1:AB:802:ILE:CG2 | 1:AB:807:ILE:HD11 | 2.47 | 0.43 |
| 1:AC:348:LYS:HG3 | 1:AC:349:VAL:HG23 | 2.00 | 0.43 |
| 1:AC:398:VAL:HG13 | 1:AC:415:TRP:CE3 | 2.53 | 0.43 |
| 1:AC:518:LEU:HD11 | 1:AC:547:PHE:O | 2.18 | 0.43 |
| 1:AC:730:ALA:O | 1:AC:733:ALA:HB3 | 2.18 | 0.43 |
| 1:B:81:VAL:HG13 | 1:B:83:LEU:CD1 | 2.49 | 0.43 |
| 1:BA:465:ASN:HA | 1:BA:483:GLY:HA2 | 2.00 | 0.43 |
| 1:BB:43:VAL:HG12 | 1:BB:44:LEU:N | 2.33 | 0.43 |
| 1:BB:801:ALA:HB3 | 1:CB:795:PHE:HE1 | 1.83 | 0.43 |
| 1:C:218:ALA:HA | 1:C:260:VAL:HA | 2.00 | 0.43 |
| 1:C:423:VAL:HG13 | 1:C:424:GLU:N | 2.33 | 0.43 |
| 1:CA:56:ARG:HH21 | 1:DA:127:LEU:HD21 | 1.83 | 0.43 |
| 1:CA:168:ILE:HD13 | 1:CA:198:VAL:HG21 | 2.00 | 0.43 |
| 1:CA:658:VAL:HG22 | 1:CA:662:ILE:HD11 | 1.98 | 0.43 |
| 1:CB:58:TYR:CD1 | 1:CB:92:LEU:HA | 2.53 | 0.43 |
| 1:D:10:ILE:HD12 | 1:D:30:VAL:C | 2.44 | 0.43 |
| 1:D:58:TYR:CZ | 1:D:59:CYS:O | 2.71 | 0.43 |
| 1:DA:175:ARG:N | 1:DA:197:LEU:HD13 | 2.34 | 0.43 |
| 1:DA:387:GLY:C | 1:DA:457:VAL:HG23 | 2.42 | 0.43 |
| 1:DB:56:ARG:HD3 | 1:EB:127:LEU:HD13 | 2.00 | 0.43 |
| 1:E:227:LEU:HD12 | 1:E:228:HIS:N | 2.32 | 0.43 |
| 1:EA:65:VAL:CG2 | 1:EA:73:VAL:HG22 | 2.47 | 0.43 |
| 1:EA:802:ILE:CG2 | 1:EA:807:ILE:HD11 | 2.48 | 0.43 |
| 1:EB:273:ILE:O | 1:EB:273:ILE:HG23 | 2.17 | 0.43 |
| 1:F:16:ILE:HG21 | 1:F:43:VAL:HG13 | 2.00 | 0.43 |
| 1:F:121:LEU:HA | 1:F:162:ILE:HG22 | 2.00 | 0.43 |
| 1:F:235:PHE:CE1 | 1:F:264:HIS:HB3 | 2.53 | 0.43 |
| 1:F:360:ARG:HB2 | 1:F:407:MET:HE1 | 1.98 | 0.43 |
| 1:FA:16:ILE:HD11 | 1:FA:47:PRO:HD3 | 1.99 | 0.43 |
| 1:FA:747:LYS:O | 1:FA:751:LEU:HD23 | 2.17 | 0.43 |
| 1:FB:274:THR:N | 1:FB:308:PHE:O | 2.50 | 0.43 |
| 1:FB:761:ARG:O | 1:FB:765:VAL:HG23 | 2.18 | 0.43 |
| 1:FB:767:GLU:HA | 1:FB:770:LEU:HD12 | 2.00 | 0.43 |
| 1:G:523:PHE:O | 1:G:524:THR:HG23 | 2.18 | 0.43 |
| 1:G:645:PRO:HB2 | 1:G:650:THR:HG21 | 2.00 | 0.43 |
| 1:H:225:THR:HB | 1:H:270:VAL:HG12 | 1.99 | 0.43 |
| 1:H:754:GLU:O | 1:H:755:THR:C | 2.60 | 0.43 |
| 1:HB:331:GLY:HA3 | 1:HB:358:LEU:HD21 | 1.99 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:HB:504:ARG:HB3 | 1:HB:505:PRO:CD | 2.47 | 0.43 |
| 1:HB:575:ILE:HD13 | 1:HB:578:ARG:NH1 | 2.32 | 0.43 |
| 1:HB:786:GLN:O | 1:HB:790:VAL:HG23 | 2.18 | 0.43 |
| 1:I:29:GLU:O | 1:I:30:VAL:CG2 | 2.67 | 0.43 |
| 1:I:120:ALA:HA | 1:I:146:GLU:HA | 2.00 | 0.43 |
| 1:I:333:LEU:HB2 | 1:I:377:ARG:CZ | 2.48 | 0.43 |
| 1:I:336:ALA:HB2 | 1:I:357:TRP:CH2 | 2.53 | 0.43 |
| 1:IA:10:ILE:HD13 | 1:IA:29:GLU:O | 2.18 | 0.43 |
| 1:IA:333:LEU:HA | 1:IA:358:LEU:HA | 1.99 | 0.43 |
| 1:IB:227:LEU:HD12 | 1:IB:228:HIS:H | 1.81 | 0.43 |
| 1:IB:387:GLY:CA | 1:IB:401:VAL:O | 2.65 | 0.43 |
| 1:IB:788:ALA:O | 1:IB:792:VAL:HG12 | 2.18 | 0.43 |
| 1:J:114:VAL:HA | 1:J:150:THR:HA | 2.00 | 0.43 |
| 1:JA:529:ILE:CD1 | 1:JA:539:LEU:HD22 | 2.47 | 0.43 |
| 1:JB:153:PRO:O | 1:JB:154:ARG:C | 2.60 | 0.43 |
| 1:JB:470:VAL:HG12 | 1:JB:471:TYR:N | 2.33 | 0.43 |
| 1:JB:530:GLU:HG3 | 1:JB:534:HIS:HA | 2.00 | 0.43 |
| 1:K:228:HIS:NE2 | 1:K:248:GLU:HB3 | 2.33 | 0.43 |
| 1:KA:768:LEU:HD23 | 1:KA:768:LEU:C | 2.43 | 0.43 |
| 1:KB:382:LEU:HD12 | 1:KB:404:SER:O | 2.17 | 0.43 |
| 1:KB:504:ARG:NE | 1:KB:504:ARG:HA | 2.33 | 0.43 |
| 1:L:16:ILE:CG2 | 1:L:17:HIS:N | 2.81 | 0.43 |
| 1:LA:231:ALA:HB1 | 1:LA:233:ARG:O | 2.18 | 0.43 |
| 1:LB:92:LEU:HD12 | 1:LB:92:LEU:N | 2.32 | 0.43 |
| 1:LB:218:ALA:HB1 | 1:LB:259:HIS:C | 2.43 | 0.43 |
| 1:M:16:ILE:HG23 | 1:M:45:PHE:O | 2.18 | 0.43 |
| 1:M:179:ARG:CG | 1:M:211:GLU:HG3 | 2.48 | 0.43 |
| 1:M:231:ALA:HB3 | 1:M:246:GLY:H | 1.80 | 0.43 |
| 1:MA:10:ILE:O | 1:MA:32:PRO:HA | 2.18 | 0.43 |
| 1:MA:81:VAL:HG22 | 1:MA:82:ARG:N | 2.33 | 0.43 |
| 1:MA:461:ARG:HD2 | 1:NA:473:TYR:CZ | 2.53 | 0.43 |
| 1:MA:540:GLN:O | 1:MA:541:LEU:HD23 | 2.17 | 0.43 |
| 1:MB:339:PRO:HB3 | 1:MB:353:ALA:N | 2.33 | 0.43 |
| 1:MB:471:TYR:CZ | 1:MB:476:LYS:HA | 2.52 | 0.43 |
| 1:NA:279:HIS:HA | 1:NA:323:VAL:HG22 | 1.99 | 0.43 |
| 1:NB:233:ARG:N | 1:NB:245:THR:HG23 | 2.33 | 0.43 |
| 1:NB:276:LEU:HD22 | 1:NB:281:TYR:N | 2.32 | 0.43 |
| 1:O:83:LEU:HD21 | 1:O:102:GLY:CA | 2.48 | 0.43 |
| 1:O:123:LEU:HD12 | 1:O:143:TRP:HE1 | 1.82 | 0.43 |
| 1:O:282:CYS:HA | 1:O:321:GLN:OE1 | 2.17 | 0.43 |
| 1:O:546:HIS:CE1 | 1:O:634:VAL:HG11 | 2.53 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OA:392:ASP:OD1 | 1:OA:392:ASP:C | 2.61 | 0.43 |
| 1:OB:471:TYR:CE1 | 1:OB:476:LYS:HA | 2.54 | 0.43 |
| 1:OB:698:GLU:OE1 | 1:PB:690:ARG:HD3 | 2.18 | 0.43 |
| 1:P:606:PHE:HB3 | 1:P:623:ARG:HG3 | 1.99 | 0.43 |
| 1:PA:393:VAL:HG13 | 1:PA:413:VAL:HG12 | 2.00 | 0.43 |
| 1:PA:606:PHE:HB3 | 1:PA:622:PRO:HA | 2.00 | 0.43 |
| 1:PB:55:PRO:O | 1:PB:56:ARG:CG | 2.66 | 0.43 |
| 1:PB:578:ARG:HB3 | 1:PB:603:VAL:HA | 2.00 | 0.43 |
| 1:Q:113:GLN:HG3 | 1:Q:121:LEU:HD11 | 2.00 | 0.43 |
| 1:Q:517:LEU:HD23 | 1:Q:521:ASP:HB2 | 1.99 | 0.43 |
| 1:Q:529:ILE:HD12 | 1:Q:583:VAL:CG2 | 2.42 | 0.43 |
| 1:QA:227:LEU:HA | 1:QA:270:VAL:HA | 1.99 | 0.43 |
| 1:QB:499:SER:O | 1:QB:500:LEU:HD23 | 2.18 | 0.43 |
| 1:R:334:LEU:HD11 | 1:R:359:ILE:CG2 | 2.48 | 0.43 |
| 1:RA:337:LEU:HD12 | 1:RA:369:ALA:O | 2.18 | 0.43 |
| 1:RA:403:GLY:O | 1:RA:404:SER:C | 2.59 | 0.43 |
| 1:RB:497:VAL:HG22 | 1:RB:498:LEU:N | 2.32 | 0.43 |
| 1:SB:343:GLY:O | 1:SB:344:GLU:C | 2.61 | 0.43 |
| 1:T:639:ASP:O | 1:T:640:VAL:C | 2.62 | 0.43 |
| 1:TA:181:GLU:OE1 | 1:TA:191:VAL:HG12 | 2.18 | 0.43 |
| 1:TA:469:GLN:HA | 1:TA:480:VAL:HG22 | 2.00 | 0.43 |
| 1:V:383:ASP:HB3 | 1:V:386:GLU:HB3 | 2.00 | 0.43 |
| 1:VA:340:LEU:HD22 | 1:VA:370:LYS:HB2 | 2.00 | 0.43 |
| 1:VA:533:ASP:CG | 1:VA:650:THR:HG23 | 2.43 | 0.43 |
| 1:VB:388:ILE:CA | 1:VB:457:VAL:HG23 | 2.47 | 0.43 |
| 1:W:340:LEU:HD11 | 1:W:357:TRP:CH2 | 2.53 | 0.43 |
| 1:WA:338:GLN:HB3 | 1:WA:339:PRO:CD | 2.47 | 0.43 |
| 1:WA:775:ALA:HB1 | 1:XA:770:LEU:HD22 | 1.99 | 0.43 |
| 1:WB:521:ASP:O | 1:WB:545:TRP:CD1 | 2.71 | 0.43 |
| 1:X:125:ALA:HB2 | 1:X:137:VAL:HG13 | 2.00 | 0.43 |
| 1:X:390:VAL:HG22 | 1:X:401:VAL:HG13 | 2.00 | 0.43 |
| 1:X:643:VAL:HG22 | 1:Y:580:ARG:HH12 | 1.83 | 0.43 |
| 1:XA:137:VAL:HG13 | 1:XA:143:TRP:CZ3 | 2.54 | 0.43 |
| 1:XB:280:ASN:O | 1:XB:304:GLY:HA3 | 2.17 | 0.43 |
| 1:XB:364:GLU:OE1 | 1:YB:353:ALA:HB2 | 2.18 | 0.43 |
| 1:Y:470:VAL:HG11 | 1:Y:479:ARG:NH1 | 2.33 | 0.43 |
| 1:YB:13:TYR:HA | 1:YB:50:MET:HE3 | 1.99 | 0.43 |
| 1:YB:530:GLU:HA | 1:YB:536:ARG:HA | 1.99 | 0.43 |
| 1:Z:337:LEU:HD21 | 1:Z:372:GLU:HB2 | 1.99 | 0.43 |
| 1:ZA:345:ASP:OD2 | 1:ZA:349:VAL:HG12 | 2.17 | 0.43 |
| 1:ZA:539:LEU:CD1 | 1:ZA:640:VAL:HG11 | 2.48 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:ZA:598:ILE:O | 1:ZA:598:ILE:HG22 | 2.18 | 0.43 |
| 1:ZB:16:ILE:O | 1:ZB:29:GLU:HG2 | 2.19 | 0.43 |
| 1:ZB:69:ALA:HB3 | 1:ZB:72:LEU:HB3 | 2.00 | 0.43 |
| 1:ZB:92:LEU:HD21 | 1:ZB:152:ILE:HD12 | 1.99 | 0.43 |
| 1:ZB:751:LEU:C | 1:ZB:751:LEU:HD23 | 2.43 | 0.43 |
| 1:A:9:ARG:CB | 1:A:34:THR:HG22 | 2.47 | 0.43 |
| 1:A:173:ALA:O | 1:A:216:VAL:HG12 | 2.18 | 0.43 |
| 1:A:187:GLY:O | 1:A:188:LYS:C | 2.61 | 0.43 |
| 1:AB:791:GLU:O | 1:AB:794:LYS:HB3 | 2.18 | 0.43 |
| 1:AC:547:PHE:CD2 | 1:AC:633:LEU:HD13 | 2.53 | 0.43 |
| 1:BA:386:GLU:N | 1:BA:402:ILE:HG23 | 2.33 | 0.43 |
| 1:BB:61:VAL:O | 1:BB:61:VAL:HG23 | 2.18 | 0.43 |
| 1:BB:65:VAL:HG23 | 1:BB:67:ARG:CG | 2.48 | 0.43 |
| 1:BB:74:LEU:HD13 | 1:BB:82:ARG:NH2 | 2.33 | 0.43 |
| 1:BB:169:ARG:HD2 | 1:BB:170:GLN:O | 2.17 | 0.43 |
| 1:BB:666:THR:O | 1:BB:669:GLN:HG2 | 2.19 | 0.43 |
| 1:C:60:THR:HG22 | 1:C:90:ILE:CG1 | 2.48 | 0.43 |
| 1:C:175:ARG:HH21 | 1:C:263:VAL:HG11 | 1.82 | 0.43 |
| 1:C:274:THR:N | 1:C:308:PHE:O | 2.52 | 0.43 |
| 1:C:522:PHE:HA | 1:C:543:TYR:O | 2.19 | 0.43 |
| 1:CA:377:ARG:C | 1:CA:407:MET:HE1 | 2.43 | 0.43 |
| 1:CA:453:ASN:OD1 | 1:CA:455:THR:HG23 | 2.18 | 0.43 |
| 1:CB:489:LEU:HD21 | 1:CB:495:PHE:CD1 | 2.54 | 0.43 |
| 1:D:57:HIS:HB3 | 1:D:109:ILE:CG2 | 2.46 | 0.43 |
| 1:D:489:LEU:HD11 | 1:D:495:PHE:CD2 | 2.53 | 0.43 |
| 1:DA:58:TYR:HB3 | 1:DA:91:ARG:O | 2.19 | 0.43 |
| 1:DA:230:ARG:N | 1:DA:268:LEU:HD22 | 2.33 | 0.43 |
| 1:DA:281:TYR:CD2 | 1:DA:282:CYS:N | 2.86 | 0.43 |
| 1:DA:326:LEU:HD11 | 1:DA:359:ILE:HG23 | 2.00 | 0.43 |
| 1:E:6:PHE:O | 1:E:36:ILE:HA | 2.18 | 0.43 |
| 1:E:305:GLU:OE1 | 1:E:305:GLU:O | 2.35 | 0.43 |
| 1:EA:124:LYS:N | 1:EA:160:VAL:HG23 | 2.32 | 0.43 |
| 1:EA:303:LYS:HD2 | 1:EA:304:GLY:O | 2.18 | 0.43 |
| 1:EA:363:LEU:HD23 | 1:EA:363:LEU:N | 2.34 | 0.43 |
| 1:EB:57:HIS:HA | 1:EB:110:THR:O | 2.19 | 0.43 |
| 1:EB:329:GLN:HB3 | 1:EB:378:GLN:OE1 | 2.17 | 0.43 |
| 1:F:325:VAL:O | 1:F:325:VAL:HG13 | 2.18 | 0.43 |
| 1:F:471:TYR:HA | 1:F:477:ARG:O | 2.18 | 0.43 |
| 1:F:471:TYR:CD2 | 1:F:478:ALA:HB2 | 2.53 | 0.43 |
| 1:FA:35:TYR:CG | 1:FA:36:ILE:N | 2.86 | 0.43 |
| 1:FA:95:ASP:O | 1:FA:97:PHE:HD1 | 2.01 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:FA:168:ILE:HG22 | 1:FA:215:LEU:HD13 | 1.99 | 0.43 |
| 1:FA:374:VAL:HG12 | 1:FA:375:GLU:N | 2.32 | 0.43 |
| 1:FA:546:HIS:CE1 | 1:FA:634:VAL:HG21 | 2.53 | 0.43 |
| 1:FA:702:ALA:HA | 1:FA:705:GLU:HG2 | 1.99 | 0.43 |
| 1:G:3:THR:HG22 | 1:G:3:THR:O | 2.18 | 0.43 |
| 1:GA:3:THR:HA | 1:GA:37:ARG:HD3 | 2.00 | 0.43 |
| 1:GA:593:LYS:HD2 | 1:GA:593:LYS:N | 2.34 | 0.43 |
| 1:GB:423:VAL:HG22 | 1:GB:423:VAL:O | 2.18 | 0.43 |
| 1:H:176:LEU:HD21 | 1:H:196:TRP:CE2 | 2.53 | 0.43 |
| 1:H:382:LEU:HB2 | 1:H:404:SER:O | 2.18 | 0.43 |
| 1:H:640:VAL:HG13 | 1:I:580:ARG:NH2 | 2.32 | 0.43 |
| 1:HA:106:GLU:N | 1:HA:106:GLU:OE1 | 2.51 | 0.43 |
| 1:HB:115:VAL:HG11 | 1:HB:145:PHE:HD2 | 1.83 | 0.43 |
| 1:I:182:CYS:SG | 1:I:209:PHE:CD1 | 3.11 | 0.43 |
| 1:I:257:GLU:HG3 | 1:J:245:THR:HB | 2.01 | 0.43 |
| 1:IA:167:ILE:HA | 1:IA:203:ALA:HA | 2.00 | 0.43 |
| 1:IA:666:THR:HG22 | 1:JA:657:SER:HB2 | 1.99 | 0.43 |
| 1:IB:533:ASP:OD2 | 1:IB:588:PHE:CD2 | 2.71 | 0.43 |
| 1:IB:547:PHE:O | 1:IB:549:VAL:HG23 | 2.19 | 0.43 |
| 1:J:178:ALA:HB1 | 1:J:180:LYS:O | 2.18 | 0.43 |
| 1:J:806:THR:HG23 | 1:K:808:ARG:HE | 1.82 | 0.43 |
| 1:JA:219:VAL:HG11 | 1:JA:227:LEU:HD22 | 2.00 | 0.43 |
| 1:JB:6:PHE:O | 1:JB:36:ILE:HA | 2.18 | 0.43 |
| 1:JB:121:LEU:HD23 | 1:JB:121:LEU:H | 1.83 | 0.43 |
| 1:JB:262:ASP:OD1 | 1:JB:263:VAL:N | 2.52 | 0.43 |
| 1:K:6:PHE:O | 1:K:37:ARG:HD2 | 2.18 | 0.43 |
| 1:K:151:TYR:CZ | 1:K:153:PRO:HA | 2.54 | 0.43 |
| 1:K:591:PHE:O | 1:K:595:SER:N | 2.52 | 0.43 |
| 1:K:689:GLU:HA | 1:K:692:LYS:HD2 | 2.00 | 0.43 |
| 1:KA:112:LEU:HD23 | 1:KA:150:THR:CG2 | 2.49 | 0.43 |
| 1:KA:331:GLY:HA3 | 1:KA:407:MET:HE1 | 2.00 | 0.43 |
| 1:KB:405:THR:HG23 | 1:LB:396:GLY:CA | 2.48 | 0.43 |
| 1:L:17:HIS:CB | 1:L:44:LEU:HD22 | 2.49 | 0.43 |
| 1:L:144:LEU:HD12 | 1:L:145:PHE:N | 2.33 | 0.43 |
| 1:L:165:ALA:HA | 1:L:205:LEU:HA | 2.00 | 0.43 |
| 1:LA:348:LYS:O | 1:LA:349:VAL:HG23 | 2.18 | 0.43 |
| 1:LA:489:LEU:HD21 | 1:LA:495:PHE:CE1 | 2.53 | 0.43 |
| 1:LB:160:VAL:HG12 | 1:LB:160:VAL:O | 2.18 | 0.43 |
| 1:M:235:PHE:CG | 1:M:264:HIS:HB2 | 2.53 | 0.43 |
| 1:M:283:VAL:HG13 | 1:M:301:VAL:N | 2.33 | 0.43 |
| 1:M:283:VAL:HB | 1:M:318:GLN:NE2 | 2.33 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:M:453:ASN:O | 1:M:456:ARG:HB3 | 2.18 | 0.43 |
| 1:MB:115:VAL:HG22 | 1:MB:147:GLY:O | 2.18 | 0.43 |
| 1:MB:311:GLN:HB3 | 1:MB:312:PRO:HD2 | 2.00 | 0.43 |
| 1:MB:335:ARG:HA | 1:MB:355:ASP:O | 2.19 | 0.43 |
| 1:MB:390:VAL:HG22 | 1:MB:399:ARG:O | 2.18 | 0.43 |
| 1:MB:472:ASP:O | 1:MB:476:LYS:HA | 2.18 | 0.43 |
| 1:MB:603:VAL:O | 1:MB:603:VAL:HG12 | 2.17 | 0.43 |
| 1:N:282:CYS:O | 1:N:302:VAL:HB | 2.18 | 0.43 |
| 1:N:660:LEU:HA | 1:N:663:GLU:OE1 | 2.19 | 0.43 |
| 1:NA:276:LEU:HD22 | 1:NA:280:ASN:C | 2.42 | 0.43 |
| 1:NB:122:HIS:CD2 | 1:NB:143:TRP:O | 2.71 | 0.43 |
| 1:NB:206:PRO:HG3 | 1:NB:212:VAL:HG11 | 1.99 | 0.43 |
| 1:O:65:VAL:HG21 | 1:O:100:TYR:HB2 | 2.00 | 0.43 |
| 1:O:122:HIS:CE1 | 1:O:208:VAL:HG12 | 2.53 | 0.43 |
| 1:O:400:ALA:HB1 | 1:O:457:VAL:HG21 | 2.00 | 0.43 |
| 1:O:495:PHE:HB2 | 1:O:514:LEU:HD11 | 2.00 | 0.43 |
| 1:OA:283:VAL:HG12 | 1:OA:284:ILE:N | 2.32 | 0.43 |
| 1:OA:405:THR:HG23 | 1:OA:405:THR:O | 2.19 | 0.43 |
| 1:OA:790:VAL:HG21 | 1:PA:785:GLN:HG2 | 1.99 | 0.43 |
| 1:P:176:LEU:HD21 | 1:P:196:TRP:NE1 | 2.33 | 0.43 |
| 1:P:216:VAL:HG22 | 1:P:217:ASP:N | 2.33 | 0.43 |
| 1:PA:81:VAL:HG12 | 1:PA:101:PRO:HB2 | 2.00 | 0.43 |
| 1:PA:318:GLN:HB2 | 1:PA:321:GLN:NE2 | 2.33 | 0.43 |
| 1:PA:802:ILE:HG23 | 1:PA:803:GLY:N | 2.33 | 0.43 |
| 1:PB:25:VAL:HG22 | 1:PB:80:GLN:HE21 | 1.83 | 0.43 |
| 1:PB:268:LEU:HD12 | 1:PB:268:LEU:N | 2.33 | 0.43 |
| 1:Q:123:LEU:HD22 | 1:Q:159:VAL:HG22 | 1.99 | 0.43 |
| 1:Q:227:LEU:CA | 1:Q:270:VAL:HG22 | 2.48 | 0.43 |
| 1:Q:768:LEU:HD23 | 1:Q:768:LEU:C | 2.43 | 0.43 |
| 1:QA:115:VAL:HG22 | 1:QA:121:LEU:CD1 | 2.45 | 0.43 |
| 1:QA:423:VAL:HG22 | 1:QA:423:VAL:O | 2.19 | 0.43 |
| 1:QA:474:ARG:HB2 | 1:QA:492:GLU:HB2 | 2.00 | 0.43 |
| 1:QB:391:GLN:HA | 1:QB:398:VAL:HA | 2.00 | 0.43 |
| 1:R:520:PRO:HB2 | 1:S:564:VAL:HG22 | 2.00 | 0.43 |
| 1:R:764:LYS:HA | 1:R:767:GLU:HG3 | 2.00 | 0.43 |
| 1:RA:58:TYR:CZ | 1:RA:92:LEU:HD22 | 2.54 | 0.43 |
| 1:RA:334:LEU:HD12 | 1:RA:334:LEU:N | 2.33 | 0.43 |
| 1:RA:516:LEU:HD13 | 1:RA:561:LEU:CD1 | 2.48 | 0.43 |
| 1:RA:597:ARG:O | 1:RA:601:THR:HG23 | 2.18 | 0.43 |
| 1:RB:326:LEU:O | 1:RB:362:PRO:HA | 2.19 | 0.43 |
| 1:S:95:ASP:O | 1:S:96:PRO:C | 2.60 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:S:114:VAL:HG22 | 1:S:115:VAL:H | 1.83 | 0.43 |
| 1:S:545:TRP:HA | 1:S:635:VAL:HA | 2.00 | 0.43 |
| 1:SA:311:GLN:O | 1:SA:313:GLY:N | 2.51 | 0.43 |
| 1:SB:80:GLN:CG | 1:SB:81:VAL:N | 2.82 | 0.43 |
| 1:SB:237:ASP:OD1 | 1:SB:241:VAL:N | 2.51 | 0.43 |
| 1:SB:565:PRO:O | 1:SB:566:ASP:C | 2.61 | 0.43 |
| 1:TA:112:LEU:HD11 | 1:TA:152:ILE:HG12 | 2.00 | 0.43 |
| 1:TA:168:ILE:HD13 | 1:TA:198:VAL:HG13 | 2.00 | 0.43 |
| 1:TA:388:ILE:HD12 | 1:TA:414:LEU:HD22 | 2.01 | 0.43 |
| 1:TB:28:VAL:HG22 | 1:TB:29:GLU:N | 2.32 | 0.43 |
| 1:TB:547:PHE:CE1 | 1:TB:633:LEU:HD13 | 2.54 | 0.43 |
| 1:UA:175:ARG:HH11 | 1:UA:213:LEU:HD22 | 1.83 | 0.43 |
| 1:UA:267:VAL:C | 1:UA:268:LEU:HD12 | 2.43 | 0.43 |
| 1:V:137:VAL:O | 1:V:137:VAL:HG13 | 2.17 | 0.43 |
| 1:V:365:TYR:OH | 1:V:371:VAL:HG11 | 2.18 | 0.43 |
| 1:VA:518:LEU:HD12 | 1:VA:547:PHE:HB3 | 2.00 | 0.43 |
| 1:VA:593:LYS:HE2 | 1:WA:532:ALA:HA | 1.99 | 0.43 |
| 1:VB:281:TYR:CD1 | 1:VB:282:CYS:N | 2.87 | 0.43 |
| 1:VB:373:VAL:O | 1:VB:373:VAL:HG13 | 2.18 | 0.43 |
| 1:WB:121:LEU:HD12 | 1:WB:121:LEU:C | 2.44 | 0.43 |
| 1:WB:227:LEU:HD13 | 1:WB:270:VAL:HG22 | 2.00 | 0.43 |
| 1:WB:746:LEU:HD13 | 1:XB:738:GLU:HG3 | 2.00 | 0.43 |
| 1:XA:540:GLN:N | 1:XA:642:SER:HB3 | 2.33 | 0.43 |
| 1:XB:18:VAL:HG22 | 1:XB:27:ARG:O | 2.18 | 0.43 |
| 1:XB:51:VAL:CG1 | 1:XB:53:VAL:HG22 | 2.48 | 0.43 |
| 1:Y:528:THR:HG23 | 1:Y:537:LEU:O | 2.18 | 0.43 |
| 1:YA:114:VAL:HG23 | 1:ZA:139:ALA:C | 2.43 | 0.43 |
| 1:YB:227:LEU:HD13 | 1:YB:270:VAL:HG22 | 1.99 | 0.43 |
| 1:Z:105:LEU:HD23 | 1:Z:105:LEU:C | 2.42 | 0.43 |
| 1:ZA:690:ARG:HA | 1:ZA:693:ILE:HD12 | 1.99 | 0.43 |
| 1:ZB:51:VAL:O | 1:ZB:96:PRO:HA | 2.18 | 0.43 |
| 1:ZB:232:ARG:N | 1:ZB:264:HIS:O | 2.51 | 0.43 |
| 1:ZB:263:VAL:HG23 | 1:ZB:264:HIS:CD2 | 2.53 | 0.43 |
| 1:ZB:345:ASP:O | 1:ZB:346:GLU:C | 2.62 | 0.43 |
| 1:A:276:LEU:HD23 | 1:A:320:ILE:HG23 | 2.00 | 0.43 |
| 1:AA:54:PRO:O | 1:AA:57:HIS:O | 2.36 | 0.43 |
| 1:AA:223:GLU:OE2 | 1:AA:253:VAL:HG21 | 2.19 | 0.43 |
| 1:AA:425:GLU:HA | 1:AA:514:LEU:HD22 | 1.99 | 0.43 |
| 1:AB:95:ASP:O | 1:AB:96:PRO:C | 2.61 | 0.43 |
| 1:AB:539:LEU:HA | 1:AB:643:VAL:HG13 | 2.00 | 0.43 |
| 1:AB:783:LYS:O | 1:AB:787:LEU:HG | 2.19 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AC:759:LEU:HD12 | 1:ZB:764:LYS:CE | 2.49 | 0.43 |
| 1:B:301:VAL:HG22 | 1:B:302:VAL:N | 2.34 | 0.43 |
| 1:BA:30:VAL:HG13 | 1:BA:32:PRO:HD2 | 1.99 | 0.43 |
| 1:BB:68:ASP:OD1 | 1:BB:74:LEU:HD12 | 2.18 | 0.43 |
| 1:C:160:VAL:HG12 | 1:C:161:GLU:N | 2.33 | 0.43 |
| 1:C:425:GLU:HG2 | 1:C:426:LEU:N | 2.33 | 0.43 |
| 1:C:538:GLN:CD | 1:C:538:GLN:C | 2.86 | 0.43 |
| 1:C:797:GLN:CD | 1:D:792:VAL:HG11 | 2.43 | 0.43 |
| 1:CA:123:LEU:HD22 | 1:CA:157:VAL:HG12 | 1.97 | 0.43 |
| 1:CA:339:PRO:HD3 | 1:CA:353:ALA:HB2 | 2.00 | 0.43 |
| 1:CA:416:GLU:N | 1:CA:455:THR:HG22 | 2.33 | 0.43 |
| 1:CA:599:ILE:HG23 | 1:CA:600:ARG:N | 2.34 | 0.43 |
| 1:DA:123:LEU:HD23 | 1:DA:159:VAL:HA | 1.99 | 0.43 |
| 1:DA:144:LEU:HD12 | 1:DA:163:ILE:HD11 | 2.00 | 0.43 |
| 1:DA:452:ARG:CZ | 1:DA:458:VAL:HG22 | 2.47 | 0.43 |
| 1:DA:537:LEU:HA | 1:DA:644:GLU:O | 2.18 | 0.43 |
| 1:DB:276:LEU:HD11 | 1:DB:320:ILE:HG12 | 2.00 | 0.43 |
| 1:E:405:THR:HG21 | 1:F:393:VAL:HA | 2.01 | 0.43 |
| 1:E:643:VAL:O | 1:E:643:VAL:HG23 | 2.17 | 0.43 |
| 1:E:775:ALA:HB1 | 1:F:770:LEU:HD22 | 1.99 | 0.43 |
| 1:EA:580:ARG:HA | 1:EA:583:VAL:HG12 | 2.00 | 0.43 |
| 1:EB:7:ILE:HG22 | 1:EB:36:ILE:HG13 | 2.00 | 0.43 |
| 1:F:571:ALA:O | 1:F:575:ILE:HD12 | 2.19 | 0.43 |
| 1:F:633:LEU:HD12 | 1:F:634:VAL:H | 1.83 | 0.43 |
| 1:FA:767:GLU:O | 1:FA:771:VAL:HG23 | 2.18 | 0.43 |
| 1:FB:387:GLY:C | 1:FB:457:VAL:HG23 | 2.44 | 0.43 |
| 1:FB:685:ARG:O | 1:FB:688:LEU:HB3 | 2.19 | 0.43 |
| 1:G:234:ASN:N | 1:G:245:THR:OG1 | 2.52 | 0.43 |
| 1:GB:25:VAL:HG21 | 1:GB:78:THR:O | 2.18 | 0.43 |
| 1:GB:65:VAL:HG11 | 1:GB:100:TYR:CG | 2.53 | 0.43 |
| 1:GB:179:ARG:O | 1:GB:192:THR:HG23 | 2.19 | 0.43 |
| 1:GB:758:GLU:O | 1:GB:762:VAL:HG13 | 2.18 | 0.43 |
| 1:H:546:HIS:O | 1:H:633:LEU:HD12 | 2.18 | 0.43 |
| 1:HB:116:LEU:HB2 | 1:HB:119:THR:HG22 | 1.99 | 0.43 |
| 1:HB:277:GLY:C | 1:HB:305:GLU:H | 2.27 | 0.43 |
| 1:HB:531:THR:HG21 | 1:HB:588:PHE:CA | 2.49 | 0.43 |
| 1:I:5:GLU:HG2 | 1:I:7:ILE:H | 1.82 | 0.43 |
| 1:I:218:ALA:HA | 1:I:260:VAL:HA | 2.00 | 0.43 |
| 1:I:326:LEU:HD21 | 1:I:332:LEU:HG | 2.01 | 0.43 |
| 1:I:497:VAL:HG23 | 1:I:514:LEU:HB2 | 2.00 | 0.43 |
| 1:IA:216:VAL:HG22 | 1:IA:217:ASP:N | 2.34 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:IB:742:LEU:HA | 1:IB:745:LYS:CE | 2.48 | 0.43 |
| 1:K:10:ILE:O | 1:K:32:PRO:HA | 2.18 | 0.43 |
| 1:K:227:LEU:HD12 | 1:K:269:GLY:O | 2.19 | 0.43 |
| 1:K:286:ASP:OD1 | 1:K:296:LEU:HD13 | 2.19 | 0.43 |
| 1:KB:358:LEU:HD12 | 1:KB:359:ILE:N | 2.33 | 0.43 |
| 1:KB:368:SER:OG | 1:KB:371:VAL:HG23 | 2.19 | 0.43 |
| 1:L:7:ILE:O | 1:L:8:ILE:C | 2.61 | 0.43 |
| 1:L:335:ARG:HB3 | 1:L:374:VAL:HG11 | 2.01 | 0.43 |
| 1:LA:56:ARG:O | 1:LA:111:PRO:HA | 2.18 | 0.43 |
| 1:LA:706:LEU:HD22 | 1:MA:696:GLN:HB2 | 2.00 | 0.43 |
| 1:LB:16:ILE:HG22 | 1:LB:17:HIS:N | 2.33 | 0.43 |
| 1:LB:284:ILE:HD12 | 1:LB:287:PRO:HB3 | 1.99 | 0.43 |
| 1:LB:551:ASP:OD1 | 1:LB:553:LYS:HG2 | 2.18 | 0.43 |
| 1:M:340:LEU:HD13 | 1:M:344:GLU:HB2 | 2.00 | 0.43 |
| 1:M:588:PHE:CG | 1:M:589:ASP:N | 2.86 | 0.43 |
| 1:MA:206:PRO:HA | 1:MA:210:GLU:OE1 | 2.18 | 0.43 |
| 1:MA:477:ARG:CZ | 1:MA:477:ARG:HA | 2.49 | 0.43 |
| 1:MA:768:LEU:C | 1:MA:768:LEU:HD23 | 2.43 | 0.43 |
| 1:MB:227:LEU:HA | 1:MB:269:GLY:O | 2.18 | 0.43 |
| 1:MB:628:PHE:HE2 | 1:MB:635:VAL:HG23 | 1.83 | 0.43 |
| 1:N:227:LEU:HB2 | 1:N:270:VAL:HG22 | 1.99 | 0.43 |
| 1:N:424:GLU:O | 1:N:425:GLU:C | 2.61 | 0.43 |
| 1:N:775:ALA:HB1 | 1:O:770:LEU:HD13 | 2.00 | 0.43 |
| 1:NA:15:TYR:HB2 | 1:NA:29:GLU:O | 2.18 | 0.43 |
| 1:NA:233:ARG:HA | 1:NA:245:THR:HG23 | 1.99 | 0.43 |
| 1:NB:35:TYR:O | 1:NB:37:ARG:NH2 | 2.51 | 0.43 |
| 1:NB:172:GLN:HA | 1:NB:217:ASP:OD1 | 2.18 | 0.43 |
| 1:NB:788:ALA:O | 1:NB:792:VAL:HG23 | 2.18 | 0.43 |
| 1:O:689:GLU:HA | 1:O:692:LYS:HD2 | 2.00 | 0.43 |
| 1:OA:593:LYS:HD2 | 1:OA:593:LYS:N | 2.33 | 0.43 |
| 1:OB:73:VAL:HG12 | 1:OB:74:LEU:N | 2.34 | 0.43 |
| 1:OB:349:VAL:HG11 | 1:OB:351:HIS:CD2 | 2.53 | 0.43 |
| 1:OB:626:ALA:HB1 | 1:OB:628:PHE:CZ | 2.53 | 0.43 |
| 1:P:13:TYR:O | 1:P:49:ARG:HA | 2.18 | 0.43 |
| 1:PA:286:ASP:N | 1:PA:287:PRO:CD | 2.82 | 0.43 |
| 1:PA:526:VAL:HG22 | 1:PA:540:GLN:HG3 | 2.01 | 0.43 |
| 1:PB:276:LEU:HD11 | 1:PB:282:CYS:SG | 2.58 | 0.43 |
| 1:Q:120:ALA:HB3 | 1:Q:205:LEU:HD21 | 2.01 | 0.43 |
| 1:Q:165:ALA:HA | 1:Q:205:LEU:HA | 2.00 | 0.43 |
| 1:Q:380:ILE:HG21 | 1:Q:388:ILE:HD11 | 1.99 | 0.43 |
| 1:Q:640:VAL:HG12 | 1:R:580:ARG:CD | 2.45 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:QA:228:HIS:HD2 | 1:QA:268:LEU:HD22 | 1.77 | 0.43 |
| 1:QB:285:LEU:HD11 | 1:QB:317:GLU:N | 2.34 | 0.43 |
| 1:QB:790:VAL:HG22 | 1:RB:785:GLN:CG | 2.49 | 0.43 |
| 1:RB:13:TYR:HA | 1:RB:50:MET:CE | 2.48 | 0.43 |
| 1:RB:169:ARG:HD3 | 1:RB:169:ARG:H | 1.83 | 0.43 |
| 1:SA:173:ALA:HB3 | 1:SA:260:VAL:HG21 | 1.98 | 0.43 |
| 1:SB:229:LEU:HD12 | 1:SB:249:TRP:CE2 | 2.53 | 0.43 |
| 1:SB:537:LEU:HD12 | 1:SB:537:LEU:N | 2.33 | 0.43 |
| 1:T:501:SER:OG | 1:T:506:LYS:HB3 | 2.18 | 0.43 |
| 1:T:514:LEU:HD23 | 1:T:514:LEU:C | 2.43 | 0.43 |
| 1:TB:183:TRP:CE3 | 1:TB:188:LYS:O | 2.71 | 0.43 |
| 1:TB:263:VAL:HG23 | 1:TB:264:HIS:N | 2.32 | 0.43 |
| 1:TB:472:ASP:HB2 | 1:TB:493:GLU:HG2 | 2.01 | 0.43 |
| 1:UA:543:TYR:CD2 | 1:UA:635:VAL:HG21 | 2.54 | 0.43 |
| 1:UA:543:TYR:OH | 1:UA:575:ILE:HG13 | 2.19 | 0.43 |
| 1:UB:62:ALA:HB3 | 1:UB:104:VAL:HG13 | 2.00 | 0.43 |
| 1:UB:368:SER:OG | 1:UB:371:VAL:HG23 | 2.18 | 0.43 |
| 1:UB:388:ILE:CA | 1:UB:457:VAL:HG23 | 2.48 | 0.43 |
| 1:VA:280:ASN:HA | 1:VA:322:ASP:HA | 2.00 | 0.43 |
| 1:VB:274:THR:HG21 | 1:VB:310:LEU:HD21 | 2.01 | 0.43 |
| 1:VB:420:PRO:N | 1:VB:421:PRO:HD2 | 2.33 | 0.43 |
| 1:VB:564:VAL:HG23 | 1:VB:631:ASN:HB3 | 2.01 | 0.43 |
| 1:VB:778:GLU:HA | 1:VB:781:VAL:HG22 | 2.00 | 0.43 |
| 1:W:10:ILE:CG2 | 1:W:16:ILE:CD1 | 2.97 | 0.43 |
| 1:W:408:LEU:HD21 | 1:W:414:LEU:CD2 | 2.48 | 0.43 |
| 1:W:529:ILE:HD13 | 1:W:539:LEU:HB2 | 2.01 | 0.43 |
| 1:WA:45:PHE:CD1 | 1:WA:46:ALA:O | 2.72 | 0.43 |
| 1:WA:387:GLY:O | 1:WA:456:ARG:HG3 | 2.18 | 0.43 |
| 1:X:150:THR:HB | 1:Y:139:ALA:HB3 | 1.99 | 0.43 |
| 1:X:285:LEU:HD11 | 1:X:316:LEU:O | 2.18 | 0.43 |
| 1:X:389:TYR:CE1 | 1:X:457:VAL:HG22 | 2.52 | 0.43 |
| 1:XA:99:LEU:HD13 | 1:XA:105:LEU:HD13 | 2.01 | 0.43 |
| 1:XA:114:VAL:HG21 | 1:YA:139:ALA:C | 2.43 | 0.43 |
| 1:XB:120:ALA:HB3 | 1:XB:205:LEU:HD21 | 1.99 | 0.43 |
| 1:XB:121:LEU:HD11 | 1:XB:145:PHE:HB3 | 2.01 | 0.43 |
| 1:XB:623:ARG:NE | 1:XB:627:VAL:HG13 | 2.33 | 0.43 |
| 1:Y:628:PHE:HB2 | 1:Y:633:LEU:HB3 | 2.01 | 0.43 |
| 1:Y:775:ALA:HB1 | 1:Z:770:LEU:HD22 | 2.00 | 0.43 |
| 1:YA:198:VAL:HG11 | 1:YA:204:TYR:CE2 | 2.53 | 0.43 |
| 1:YA:349:VAL:HG12 | 1:YA:350:SER:N | 2.32 | 0.43 |
| 1:YB:201:VAL:HG12 | 1:YB:201:VAL:O | 2.17 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:YB:390:VAL:O | 1:YB:390:VAL:HG23 | 2.17 | 0.43 |
| 1:Z:176:LEU:HG | 1:Z:196:TRP:CE2 | 2.53 | 0.43 |
| 1:Z:530:GLU:HA | 1:Z:535:ALA:O | 2.18 | 0.43 |
| 1:Z:688:LEU:HD23 | 1:Z:692:LYS:NZ | 2.33 | 0.43 |
| 1:ZA:56:ARG:O | 1:ZA:111:PRO:HA | 2.19 | 0.43 |
| 1:ZA:382:LEU:HD13 | 1:ZA:387:GLY:HA2 | 1.99 | 0.43 |
| 1:ZA:399:ARG:HE | 1:ZA:401:VAL:HG12 | 1.83 | 0.43 |
| 1:ZA:420:PRO:HB2 | 1:ZA:421:PRO:HD2 | 1.99 | 0.43 |
| 1:ZB:69:ALA:HB2 | 1:ZB:74:LEU:HD21 | 2.00 | 0.43 |
| 1:ZB:349:VAL:HG12 | 1:ZB:350:SER:N | 2.34 | 0.43 |
| 1:A:53:VAL:HG12 | 1:A:58:TYR:HE1 | 1.83 | 0.43 |
| 1:A:176:LEU:H | 1:A:176:LEU:HD23 | 1.84 | 0.43 |
| 1:A:206:PRO:HA | 1:A:210:GLU:OE1 | 2.19 | 0.43 |
| 1:A:490:GLY:O | 1:A:491:PRO:C | 2.61 | 0.43 |
| 1:AA:160:VAL:HG12 | 1:AA:161:GLU:N | 2.33 | 0.43 |
| 1:AA:360:ARG:NH2 | 1:AA:407:MET:SD | 2.92 | 0.43 |
| 1:AB:16:ILE:HG22 | 1:AB:17:HIS:O | 2.18 | 0.43 |
| 1:AB:168:ILE:HG21 | 1:AB:199:THR:HA | 2.00 | 0.43 |
| 1:AB:680:LEU:HD23 | 1:AB:683:GLU:OE2 | 2.19 | 0.43 |
| 1:AC:60:THR:H | 1:AC:107:LYS:HD3 | 1.83 | 0.43 |
| 1:AC:393:VAL:HG22 | 1:AC:411:ASP:HA | 2.01 | 0.43 |
| 1:B:339:PRO:HA | 1:B:351:HIS:O | 2.18 | 0.43 |
| 1:BA:548:GLU:HB2 | 1:BA:634:VAL:HG21 | 2.00 | 0.43 |
| 1:BA:573:LYS:O | 1:BA:576:ALA:HB3 | 2.18 | 0.43 |
| 1:BB:56:ARG:HG2 | 1:BB:112:LEU:CB | 2.47 | 0.43 |
| 1:CA:230:ARG:HB3 | 1:CA:266:GLU:HB3 | 2.01 | 0.43 |
| 1:CB:160:VAL:HG12 | 1:CB:161:GLU:N | 2.33 | 0.43 |
| 1:CB:346:GLU:O | 1:CB:347:GLU:HG3 | 2.18 | 0.43 |
| 1:D:276:LEU:HD22 | 1:D:281:TYR:N | 2.33 | 0.43 |
| 1:DA:18:VAL:HG21 | 1:DA:27:ARG:CZ | 2.49 | 0.43 |
| 1:DA:168:ILE:O | 1:DA:200:THR:O | 2.37 | 0.43 |
| 1:DA:741:VAL:O | 1:DA:744:ALA:HB3 | 2.19 | 0.43 |
| 1:E:333:LEU:HD12 | 1:E:334:LEU:H | 1.82 | 0.43 |
| 1:E:798:MET:CE | 1:F:792:VAL:HG13 | 2.49 | 0.43 |
| 1:EA:281:TYR:CE1 | 1:EA:321:GLN:HB2 | 2.54 | 0.43 |
| 1:EA:763:GLN:O | 1:EA:767:GLU:HG3 | 2.19 | 0.43 |
| 1:EB:658:VAL:HG13 | 1:EB:659:GLN:N | 2.33 | 0.43 |
| 1:F:120:ALA:HB3 | 1:F:205:LEU:HD21 | 1.99 | 0.43 |
| 1:F:271:VAL:HG22 | 1:F:272:PRO:O | 2.18 | 0.43 |
| 1:F:339:PRO:HD3 | 1:F:353:ALA:HB2 | 2.01 | 0.43 |
| 1:FA:675:HIS:HA | 1:FA:678:GLN:OE1 | 2.19 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:FB:465:ASN:O | 1:FB:517:LEU:O | 2.36 | 0.43 |
| 1:FB:578:ARG:HB3 | 1:FB:603:VAL:HA | 2.00 | 0.43 |
| 1:G:131:ASP:CG | 1:G:132:LYS:H | 2.27 | 0.43 |
| 1:G:249:TRP:O | 1:G:250:LEU:HD23 | 2.18 | 0.43 |
| 1:G:349:VAL:HG11 | 1:G:351:HIS:NE2 | 2.33 | 0.43 |
| 1:G:470:VAL:HG13 | 1:G:494:GLN:O | 2.18 | 0.43 |
| 1:G:811:ALA:HB2 | 1:H:811:ALA:HB1 | 2.00 | 0.43 |
| 1:GA:216:VAL:HG22 | 1:GA:217:ASP:N | 2.34 | 0.43 |
| 1:GA:380:ILE:H | 1:GA:380:ILE:HD12 | 1.84 | 0.43 |
| 1:GA:531:THR:HG21 | 1:GA:588:PHE:CA | 2.49 | 0.43 |
| 1:GB:129:PHE:CD1 | 1:GB:137:VAL:HG11 | 2.53 | 0.43 |
| 1:GB:226:ALA:C | 1:GB:270:VAL:HG13 | 2.43 | 0.43 |
| 1:H:114:VAL:HA | 1:H:150:THR:HA | 2.01 | 0.43 |
| 1:H:180:LYS:HD2 | 1:H:181:GLU:O | 2.19 | 0.43 |
| 1:H:367:PRO:HB3 | 1:H:373:VAL:HG21 | 2.00 | 0.43 |
| 1:H:460:TYR:CG | 1:H:461:ARG:N | 2.87 | 0.43 |
| 1:HA:261:PRO:HG2 | 1:HA:267:VAL:HG22 | 1.99 | 0.43 |
| 1:HB:516:LEU:HD23 | 1:HB:516:LEU:C | 2.44 | 0.43 |
| 1:I:131:ASP:O | 1:I:132:LYS:HG2 | 2.18 | 0.43 |
| 1:I:276:LEU:HD12 | 1:I:302:VAL:HG12 | 1.99 | 0.43 |
| 1:I:591:PHE:O | 1:I:595:SER:N | 2.51 | 0.43 |
| 1:IA:228:HIS:CD2 | 1:IA:229:LEU:N | 2.87 | 0.43 |
| 1:IA:388:ILE:C | 1:IA:457:VAL:HG23 | 2.42 | 0.43 |
| 1:IA:654:LEU:HD22 | 1:JA:534:HIS:CD2 | 2.53 | 0.43 |
| 1:IB:5:GLU:HG2 | 1:IB:7:ILE:H | 1.83 | 0.43 |
| 1:IB:19:LEU:HB2 | 1:IB:44:LEU:HD21 | 2.01 | 0.43 |
| 1:IB:381:PRO:CA | 1:IB:405:THR:HG22 | 2.48 | 0.43 |
| 1:IB:392:ASP:OD1 | 1:IB:392:ASP:C | 2.62 | 0.43 |
| 1:J:523:PHE:O | 1:J:542:ALA:HA | 2.18 | 0.43 |
| 1:J:623:ARG:HG2 | 1:J:625:GLN:H | 1.83 | 0.43 |
| 1:JA:58:TYR:CE2 | 1:JA:112:LEU:HD22 | 2.54 | 0.43 |
| 1:JA:151:TYR:CZ | 1:JA:153:PRO:HA | 2.53 | 0.43 |
| 1:JB:28:VAL:HG22 | 1:JB:29:GLU:N | 2.34 | 0.43 |
| 1:JB:94:GLN:HG3 | 1:JB:97:PHE:CD1 | 2.54 | 0.43 |
| 1:JB:126:LEU:C | 1:JB:127:LEU:HD22 | 2.43 | 0.43 |
| 1:JB:144:LEU:HD13 | 1:JB:146:GLU:HB3 | 2.01 | 0.43 |
| 1:JB:388:ILE:HA | 1:JB:457:VAL:HG23 | 1.99 | 0.43 |
| 1:JB:462:VAL:HG12 | 1:JB:483:GLY:O | 2.19 | 0.43 |
| 1:K:285:LEU:HD12 | 1:K:285:LEU:N | 2.33 | 0.43 |
| 1:K:382:LEU:HD13 | 1:K:406:TYR:N | 2.34 | 0.43 |
| 1:KA:459:SER:HA | 1:KA:488:SER:HA | 2.01 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:KB:58:TYR:CD1 | 1:KB:91:ARG:O | 2.72 | 0.43 |
| 1:KB:685:ARG:O | 1:KB:688:LEU:HB3 | 2.17 | 0.43 |
| 1:LA:325:VAL:O | 1:LA:325:VAL:HG13 | 2.18 | 0.43 |
| 1:LA:365:TYR:CZ | 1:LA:366:VAL:O | 2.71 | 0.43 |
| 1:LB:19:LEU:HA | 1:LB:26:SER:HA | 2.01 | 0.43 |
| 1:LB:176:LEU:HD21 | 1:LB:196:TRP:CD1 | 2.54 | 0.43 |
| 1:LB:388:ILE:HA | 1:LB:457:VAL:H | 1.84 | 0.43 |
| 1:LB:424:GLU:N | 1:LB:424:GLU:OE1 | 2.51 | 0.43 |
| 1:LB:575:ILE:HG23 | 1:LB:603:VAL:CG1 | 2.48 | 0.43 |
| 1:M:61:VAL:O | 1:M:61:VAL:HG23 | 2.18 | 0.43 |
| 1:M:335:ARG:HA | 1:M:355:ASP:O | 2.19 | 0.43 |
| 1:MB:266:GLU:HG3 | 1:MB:268:LEU:HD11 | 2.01 | 0.43 |
| 1:N:226:ALA:HB2 | 1:N:252:THR:HG22 | 2.01 | 0.43 |
| 1:N:286:ASP:HB3 | 1:N:294:ASN:HB3 | 2.01 | 0.43 |
| 1:N:500:LEU:HD12 | 1:N:511:ARG:HD3 | 2.00 | 0.43 |
| 1:N:530:GLU:O | 1:N:583:VAL:HG22 | 2.18 | 0.43 |
| 1:N:648:GLN:HA | 1:N:651:ARG:HG2 | 2.01 | 0.43 |
| 1:NA:525:ASP:O | 1:NA:540:GLN:HA | 2.18 | 0.43 |
| 1:O:340:LEU:HD22 | 1:O:344:GLU:HB2 | 2.00 | 0.43 |
| 1:O:380:ILE:HB | 1:O:406:TYR:O | 2.19 | 0.43 |
| 1:OA:226:ALA:HB3 | 1:OA:250:LEU:HD21 | 2.00 | 0.43 |
| 1:OB:346:GLU:O | 1:OB:348:LYS:HG3 | 2.19 | 0.43 |
| 1:OB:487:VAL:HG22 | 1:OB:488:SER:N | 2.33 | 0.43 |
| 1:P:276:LEU:HD22 | 1:P:304:GLY:HA2 | 2.01 | 0.43 |
| 1:P:332:LEU:HD23 | 1:P:376:GLU:N | 2.32 | 0.43 |
| 1:P:380:ILE:O | 1:P:405:THR:HA | 2.19 | 0.43 |
| 1:PA:142:GLU:HB3 | 1:PA:208:VAL:HG21 | 1.99 | 0.43 |
| 1:PA:336:ALA:HB2 | 1:PA:340:LEU:HG | 2.00 | 0.43 |
| 1:PB:59:CYS:SG | 1:PB:109:ILE:HD13 | 2.58 | 0.43 |
| 1:PB:564:VAL:HG21 | 1:PB:631:ASN:HB3 | 1.99 | 0.43 |
| 1:Q:469:GLN:O | 1:Q:470:VAL:HG23 | 2.18 | 0.43 |
| 1:QA:536:ARG:O | 1:QA:646:VAL:HG22 | 2.18 | 0.43 |
| 1:QB:114:VAL:O | 1:QB:114:VAL:HG13 | 2.19 | 0.43 |
| 1:R:387:GLY:HA2 | 1:R:402:ILE:HA | 2.01 | 0.43 |
| 1:RA:45:PHE:HD1 | 1:RA:46:ALA:O | 2.01 | 0.43 |
| 1:RB:181:GLU:OE2 | 1:RB:191:VAL:HG12 | 2.19 | 0.43 |
| 1:RB:187:GLY:O | 1:RB:188:LYS:C | 2.62 | 0.43 |
| 1:RB:234:ASN:N | 1:RB:245:THR:OG1 | 2.51 | 0.43 |
| 1:RB:471:TYR:CD2 | 1:RB:478:ALA:HB2 | 2.53 | 0.43 |
| 1:S:594:ASN:C | 1:S:598:ILE:HD12 | 2.44 | 0.43 |
| 1:SA:229:LEU:HD12 | 1:SA:251:VAL:HG13 | 2.00 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:SB:377:ARG:HD3 | 1:SB:408:LEU:HB2 | 2.00 | 0.43 |
| 1:T:8:ILE:HG21 | 1:T:16:ILE:CD1 | 2.48 | 0.43 |
| 1:T:639:ASP:O | 1:T:641:GLN:NE2 | 2.51 | 0.43 |
| 1:TA:7:ILE:O | 1:TA:8:ILE:C | 2.62 | 0.43 |
| 1:TA:640:VAL:HG11 | 1:TA:643:VAL:CG2 | 2.49 | 0.43 |
| 1:TB:805:SER:O | 1:TB:808:ARG:HD2 | 2.18 | 0.43 |
| 1:UA:23:SER:OG | 1:UA:25:VAL:HG23 | 2.19 | 0.43 |
| 1:UB:228:HIS:CA | 1:UB:250:LEU:HD23 | 2.47 | 0.43 |
| 1:UB:500:LEU:HD13 | 1:UB:566:ASP:CG | 2.44 | 0.43 |
| 1:V:791:GLU:CD | 1:V:791:GLU:C | 2.86 | 0.43 |
| 1:VB:321:GLN:N | 1:VB:321:GLN:OE1 | 2.52 | 0.43 |
| 1:VB:389:TYR:HB2 | 1:VB:415:TRP:O | 2.18 | 0.43 |
| 1:W:7:ILE:O | 1:W:8:ILE:C | 2.61 | 0.43 |
| 1:W:34:THR:HG21 | 1:X:22:ASN:O | 2.18 | 0.43 |
| 1:WA:334:LEU:HD22 | 1:WA:365:TYR:OH | 2.19 | 0.43 |
| 1:WA:386:GLU:O | 1:WA:457:VAL:HB | 2.17 | 0.43 |
| 1:WB:65:VAL:HA | 1:WB:83:LEU:HD23 | 1.99 | 0.43 |
| 1:X:175:ARG:HE | 1:X:213:LEU:CB | 2.30 | 0.43 |
| 1:X:221:LEU:HD13 | 1:X:251:VAL:O | 2.19 | 0.43 |
| 1:XA:95:ASP:O | 1:XA:96:PRO:C | 2.61 | 0.43 |
| 1:XB:342:GLU:HB3 | 1:XB:347:GLU:HA | 2.01 | 0.43 |
| 1:XB:389:TYR:CZ | 1:XB:457:VAL:HA | 2.54 | 0.43 |
| 1:Y:530:GLU:OE2 | 1:Y:536:ARG:HA | 2.19 | 0.43 |
| 1:Y:587:THR:HG23 | 1:Y:590:ASP:H | 1.82 | 0.43 |
| 1:YA:168:ILE:HD12 | 1:YA:204:TYR:HB2 | 2.00 | 0.43 |
| 1:YA:345:ASP:HB2 | 1:YA:349:VAL:O | 2.18 | 0.43 |
| 1:YA:548:GLU:CG | 1:YA:634:VAL:HG21 | 2.49 | 0.43 |
| 1:YB:63:ASN:OD1 | 1:YB:83:LEU:HB3 | 2.18 | 0.43 |
| 1:YB:497:VAL:HA | 1:YB:514:LEU:HA | 2.00 | 0.43 |
| 1:Z:382:LEU:H | 1:Z:405:THR:HG22 | 1.83 | 0.43 |
| 1:ZA:180:LYS:HD2 | 1:ZA:181:GLU:C | 2.44 | 0.43 |
| 1:ZA:521:ASP:HB3 | 1:ZA:545:TRP:CZ2 | 2.53 | 0.43 |
| 1:ZB:388:ILE:CA | 1:ZB:457:VAL:HG23 | 2.48 | 0.43 |
| 1:A:588:PHE:CZ | 1:NA:662:ILE:HD13 | 2.54 | 0.43 |
| 1:AA:507:ARG:CZ | 1:AA:510:ALA:HB1 | 2.48 | 0.43 |
| 1:AA:691:GLN:OE1 | 1:AA:694:LEU:HD12 | 2.19 | 0.43 |
| 1:AA:802:ILE:HG23 | 1:AA:803:GLY:N | 2.34 | 0.43 |
| 1:AB:266:GLU:OE2 | 1:AB:268:LEU:HD11 | 2.18 | 0.43 |
| 1:AC:53:VAL:O | 1:AC:53:VAL:HG13 | 2.19 | 0.43 |
| 1:AC:250:LEU:HD21 | 1:AC:271:VAL:HG23 | 2.01 | 0.43 |
| 1:BA:65:VAL:HG22 | 1:BA:67:ARG:CZ | 2.47 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:BA:69:ALA:HB2 | 1:BA:74:LEU:HG | 2.00 | 0.43 |
| 1:BA:523:PHE:CZ | 1:BA:545:TRP:CE2 | 3.05 | 0.43 |
| 1:BB:230:ARG:HA | 1:BB:247:GLU:O | 2.18 | 0.43 |
| 1:BB:741:VAL:HG12 | 1:BB:745:LYS:HE2 | 1.99 | 0.43 |
| 1:BB:772:TYR:O | 1:BB:775:ALA:HB3 | 2.17 | 0.43 |
| 1:C:129:PHE:O | 1:C:137:VAL:HB | 2.19 | 0.43 |
| 1:C:333:LEU:HA | 1:C:358:LEU:HD12 | 2.00 | 0.43 |
| 1:C:539:LEU:HD12 | 1:C:643:VAL:HA | 2.00 | 0.43 |
| 1:CA:363:LEU:HB2 | 1:DA:353:ALA:HB3 | 2.01 | 0.43 |
| 1:CA:654:LEU:HD22 | 1:DA:534:HIS:HB3 | 2.00 | 0.43 |
| 1:CA:689:GLU:HA | 1:CA:692:LYS:HD2 | 2.00 | 0.43 |
| 1:CB:50:MET:HE2 | 1:CB:96:PRO:O | 2.18 | 0.43 |
| 1:CB:388:ILE:HD12 | 1:CB:414:LEU:HD21 | 2.01 | 0.43 |
| 1:CB:798:MET:O | 1:CB:802:ILE:HG22 | 2.18 | 0.43 |
| 1:D:19:LEU:HD12 | 1:D:25:VAL:C | 2.44 | 0.43 |
| 1:D:129:PHE:CE1 | 1:D:137:VAL:HG21 | 2.54 | 0.43 |
| 1:D:220:ILE:HG22 | 1:D:221:LEU:N | 2.33 | 0.43 |
| 1:D:543:TYR:O | 1:D:545:TRP:CD1 | 2.71 | 0.43 |
| 1:D:806:THR:HG22 | 1:D:806:THR:O | 2.18 | 0.43 |
| 1:D:808:ARG:HD3 | 1:D:808:ARG:H | 1.83 | 0.43 |
| 1:DA:14:HIS:N | 1:DA:50:MET:HE2 | 2.33 | 0.43 |
| 1:DA:382:LEU:H | 1:DA:405:THR:HG22 | 1.82 | 0.43 |
| 1:DB:72:LEU:HD23 | 1:DB:73:VAL:O | 2.19 | 0.43 |
| 1:DB:487:VAL:HG22 | 1:DB:488:SER:H | 1.83 | 0.43 |
| 1:DB:589:ASP:O | 1:DB:592:HIS:ND1 | 2.51 | 0.43 |
| 1:E:144:LEU:CD1 | 1:E:163:ILE:HD11 | 2.48 | 0.43 |
| 1:E:229:LEU:HD23 | 1:E:267:VAL:HA | 1.99 | 0.43 |
| 1:E:333:LEU:HA | 1:E:358:LEU:HA | 2.00 | 0.43 |
| 1:EA:275:THR:HA | 1:EA:307:SER:HA | 1.99 | 0.43 |
| 1:EA:331:GLY:N | 1:EA:407:MET:HE1 | 2.33 | 0.43 |
| 1:EA:583:VAL:HG13 | 1:EA:584:ALA:N | 2.33 | 0.43 |
| 1:F:7:ILE:HG13 | 1:F:8:ILE:H | 1.83 | 0.43 |
| 1:F:126:LEU:HD12 | 1:F:155:LYS:O | 2.19 | 0.43 |
| 1:FA:340:LEU:HD12 | 1:FA:345:ASP:HB2 | 2.00 | 0.43 |
| 1:FB:60:THR:HA | 1:FB:89:GLU:O | 2.18 | 0.43 |
| 1:G:57:HIS:HA | 1:G:111:PRO:HA | 2.01 | 0.43 |
| 1:G:471:TYR:CD2 | 1:G:478:ALA:HB2 | 2.53 | 0.43 |
| 1:GA:332:LEU:HD22 | 1:GA:376:GLU:CG | 2.49 | 0.43 |
| 1:GA:567:PHE:CG | 1:GA:568:VAL:N | 2.87 | 0.43 |
| 1:GB:53:VAL:HG11 | 1:GB:58:TYR:CE1 | 2.53 | 0.43 |
| 1:GB:331:GLY:HA3 | 1:GB:407:MET:CE | 2.48 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:H:105:LEU:HD23 | 1:H:105:LEU:H | 1.83 | 0.43 |
| 1:H:253:VAL:HG23 | 1:H:254:GLN:NE2 | 2.33 | 0.43 |
| 1:H:702:ALA:HB2 | 1:I:690:ARG:HE | 1.84 | 0.43 |
| 1:H:717:GLU:HB2 | 1:I:707:LEU:HD22 | 2.00 | 0.43 |
| 1:HB:597:ARG:O | 1:HB:601:THR:HG23 | 2.18 | 0.43 |
| 1:I:170:GLN:O | 1:I:171:ASN:OD1 | 2.37 | 0.43 |
| 1:I:281:TYR:CE1 | 1:I:321:GLN:HB2 | 2.54 | 0.43 |
| 1:I:395:THR:HG22 | 1:I:395:THR:O | 2.19 | 0.43 |
| 1:I:453:ASN:O | 1:I:456:ARG:HB3 | 2.19 | 0.43 |
| 1:I:541:LEU:HD23 | 1:I:638:VAL:HG11 | 2.01 | 0.43 |
| 1:I:808:ARG:HG2 | 1:I:808:ARG:O | 2.19 | 0.43 |
| 1:IA:204:TYR:CZ | 1:IA:205:LEU:O | 2.72 | 0.43 |
| 1:J:660:LEU:HA | 1:J:663:GLU:OE1 | 2.18 | 0.43 |
| 1:J:661:ALA:HA | 1:J:664:ILE:HD12 | 2.01 | 0.43 |
| 1:JA:168:ILE:HG13 | 1:JA:202:GLY:O | 2.18 | 0.43 |
| 1:JA:487:VAL:HG22 | 1:JA:488:SER:N | 2.34 | 0.43 |
| 1:JA:543:TYR:HD1 | 1:JA:638:VAL:HG13 | 1.83 | 0.43 |
| 1:JB:16:ILE:HD11 | 1:JB:47:PRO:N | 2.34 | 0.43 |
| 1:K:751:LEU:HD12 | 1:K:754:GLU:OE2 | 2.19 | 0.43 |
| 1:KB:388:ILE:N | 1:KB:457:VAL:HG23 | 2.34 | 0.43 |
| 1:KB:529:ILE:CG1 | 1:KB:583:VAL:HG21 | 2.48 | 0.43 |
| 1:L:65:VAL:HG22 | 1:L:103:GLU:CD | 2.44 | 0.43 |
| 1:LA:173:ALA:O | 1:LA:216:VAL:HG12 | 2.19 | 0.43 |
| 1:LA:363:LEU:HD23 | 1:LA:363:LEU:N | 2.33 | 0.43 |
| 1:LB:227:LEU:CD1 | 1:LB:270:VAL:HG22 | 2.49 | 0.43 |
| 1:M:60:THR:HG22 | 1:M:90:ILE:HG23 | 2.00 | 0.43 |
| 1:M:529:ILE:HG22 | 1:M:580:ARG:HG3 | 2.01 | 0.43 |
| 1:MB:53:VAL:HG11 | 1:MB:93:ALA:H | 1.82 | 0.43 |
| 1:MB:122:HIS:HA | 1:MB:144:LEU:HA | 2.01 | 0.43 |
| 1:MB:638:VAL:HG12 | 1:MB:639:ASP:N | 2.34 | 0.43 |
| 1:N:382:LEU:HB2 | 1:N:404:SER:O | 2.19 | 0.43 |
| 1:NA:346:GLU:C | 1:NA:347:GLU:HG3 | 2.44 | 0.43 |
| 1:NA:346:GLU:O | 1:NA:347:GLU:HG3 | 2.19 | 0.43 |
| 1:NB:521:ASP:CG | 1:NB:522:PHE:H | 2.26 | 0.43 |
| 1:NB:568:VAL:HG13 | 1:NB:569:GLY:N | 2.34 | 0.43 |
| 1:NB:791:GLU:O | 1:NB:795:PHE:HB3 | 2.19 | 0.43 |
| 1:O:326:LEU:HD21 | 1:O:332:LEU:N | 2.34 | 0.43 |
| 1:OA:58:TYR:HB2 | 1:OA:90:ILE:HD11 | 2.01 | 0.43 |
| 1:OA:326:LEU:HD22 | 1:OA:330:GLN:CB | 2.48 | 0.43 |
| 1:OB:51:VAL:CG1 | 1:OB:53:VAL:HG23 | 2.48 | 0.43 |
| 1:OB:424:GLU:HG2 | 1:OB:514:LEU:HD11 | 2.01 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:P:174:LEU:HD11 | 1:P:212:VAL:HB | 2.00 | 0.43 |
| 1:P:335:ARG:HA | 1:P:356:HIS:HA | 2.00 | 0.43 |
| 1:P:545:TRP:HE3 | 1:P:633:LEU:HD11 | 1.83 | 0.43 |
| 1:P:794:LYS:CG | 1:Q:792:VAL:HG22 | 2.48 | 0.43 |
| 1:PA:9:ARG:CB | 1:PA:34:THR:HG22 | 2.48 | 0.43 |
| 1:PA:658:VAL:HG21 | 1:QA:535:ALA:CB | 2.43 | 0.43 |
| 1:Q:81:VAL:O | 1:Q:81:VAL:HG23 | 2.17 | 0.43 |
| 1:QA:9:ARG:HB3 | 1:QA:34:THR:HG22 | 1.99 | 0.43 |
| 1:QA:100:TYR:HB3 | 1:QA:101:PRO:HD2 | 1.99 | 0.43 |
| 1:QA:501:SER:HG | 1:QA:568:VAL:HG23 | 1.84 | 0.43 |
| 1:QA:746:LEU:HA | 1:QA:749:GLN:OE1 | 2.18 | 0.43 |
| 1:QB:3:THR:HG22 | 1:QB:3:THR:O | 2.18 | 0.43 |
| 1:QB:58:TYR:CE2 | 1:QB:112:LEU:HD22 | 2.54 | 0.43 |
| 1:R:332:LEU:C | 1:R:358:LEU:HD12 | 2.43 | 0.43 |
| 1:R:806:THR:HG23 | 1:S:808:ARG:HB3 | 2.01 | 0.43 |
| 1:RA:65:VAL:CG2 | 1:RA:73:VAL:HG11 | 2.49 | 0.43 |
| 1:RA:174:LEU:HD21 | 1:RA:212:VAL:CB | 2.49 | 0.43 |
| 1:RA:227:LEU:HA | 1:RA:270:VAL:HA | 1.99 | 0.43 |
| 1:RA:812:VAL:O | 1:RA:812:VAL:HG23 | 2.19 | 0.43 |
| 1:RB:49:ARG:NH2 | 1:RB:49:ARG:HA | 2.33 | 0.43 |
| 1:RB:233:ARG:HG2 | 1:RB:264:HIS:ND1 | 2.34 | 0.43 |
| 1:S:273:ILE:HD13 | 1:T:296:LEU:CD1 | 2.48 | 0.43 |
| 1:SA:67:ARG:NH2 | 1:SA:71:GLY:O | 2.52 | 0.43 |
| 1:SB:543:TYR:HD1 | 1:SB:638:VAL:HG13 | 1.83 | 0.43 |
| 1:TA:181:GLU:OE2 | 1:TA:191:VAL:HG12 | 2.19 | 0.43 |
| 1:TB:82:ARG:C | 1:TB:83:LEU:HD12 | 2.44 | 0.43 |
| 1:TB:208:VAL:HG13 | 1:TB:209:PHE:N | 2.33 | 0.43 |
| 1:TB:239:ARG:O | 1:TB:241:VAL:HG23 | 2.18 | 0.43 |
| 1:UA:201:VAL:HG12 | 1:UA:202:GLY:N | 2.32 | 0.43 |
| 1:UA:362:PRO:HB2 | 1:VA:352:GLN:HB2 | 2.01 | 0.43 |
| 1:UA:586:VAL:HB | 1:UA:590:ASP:HB3 | 2.01 | 0.43 |
| 1:V:9:ARG:HG3 | 1:V:34:THR:HG22 | 2.01 | 0.43 |
| 1:VA:114:VAL:HG23 | 1:VA:148:PRO:C | 2.44 | 0.43 |
| 1:VA:680:LEU:O | 1:VA:684:ALA:HB2 | 2.17 | 0.43 |
| 1:VB:15:TYR:HB3 | 1:VB:30:VAL:HG23 | 2.00 | 0.43 |
| 1:VB:334:LEU:HD11 | 1:VB:359:ILE:HG22 | 2.00 | 0.43 |
| 1:W:579:VAL:HA | 1:W:603:VAL:HG13 | 2.01 | 0.43 |
| 1:WB:65:VAL:HG11 | 1:WB:100:TYR:CD2 | 2.53 | 0.43 |
| 1:WB:537:LEU:C | 1:WB:646:VAL:HG23 | 2.43 | 0.43 |
| 1:X:61:VAL:HG21 | 1:X:103:GLU:OE1 | 2.18 | 0.43 |
| 1:X:232:ARG:O | 1:X:245:THR:HG23 | 2.18 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:X:327:SER:H | 1:X:330:GLN:HB2 | 1.83 | 0.43 |
| 1:XA:34:THR:HG21 | 1:YA:22:ASN:O | 2.18 | 0.43 |
| 1:XA:604:PHE:CE2 | 1:XA:623:ARG:O | 2.72 | 0.43 |
| 1:XB:9:ARG:HB2 | 1:YB:24:ASN:HB3 | 2.00 | 0.43 |
| 1:XB:105:LEU:HD21 | 1:XB:107:LYS:O | 2.18 | 0.43 |
| 1:XB:406:TYR:HH | 1:XB:412:GLU:CD | 2.26 | 0.43 |
| 1:Y:72:LEU:HD11 | 1:Y:75:PHE:HZ | 1.83 | 0.43 |
| 1:YA:56:ARG:HG2 | 1:YA:56:ARG:O | 2.18 | 0.43 |
| 1:YA:273:ILE:CG2 | 1:ZA:296:LEU:HD22 | 2.48 | 0.43 |
| 1:YB:56:ARG:O | 1:YB:112:LEU:N | 2.50 | 0.43 |
| 1:YB:405:THR:HG23 | 1:ZB:396:GLY:N | 2.33 | 0.43 |
| 1:YB:420:PRO:HB2 | 1:YB:421:PRO:HD3 | 2.00 | 0.43 |
| 1:Z:583:VAL:HG13 | 1:Z:584:ALA:N | 2.33 | 0.43 |
| 1:ZA:281:TYR:CZ | 1:ZA:321:GLN:HB2 | 2.54 | 0.43 |
| 1:ZB:50:MET:HE3 | 1:ZB:98:PRO:CD | 2.48 | 0.43 |
| 1:ZB:470:VAL:HA | 1:ZB:494:GLN:O | 2.18 | 0.43 |
| 1:A:157:VAL:HG12 | 1:A:158:GLU:N | 2.34 | 0.43 |
| 1:A:262:ASP:OD1 | 1:A:263:VAL:N | 2.51 | 0.43 |
| 1:A:333:LEU:HD23 | 1:A:374:VAL:HG11 | 1.99 | 0.43 |
| 1:AA:575:ILE:HD11 | 1:AA:628:PHE:CE1 | 2.54 | 0.43 |
| 1:AC:489:LEU:HD22 | 1:AC:494:GLN:CA | 2.49 | 0.43 |
| 1:AC:546:HIS:C | 1:AC:633:LEU:HD12 | 2.43 | 0.43 |
| 1:AC:810:LEU:HD21 | 1:OA:808:ARG:HB2 | 2.01 | 0.43 |
| 1:B:3:THR:HG22 | 1:B:6:PHE:CD1 | 2.54 | 0.43 |
| 1:B:114:VAL:HG22 | 1:B:115:VAL:N | 2.32 | 0.43 |
| 1:B:410:GLN:O | 1:B:411:ASP:CG | 2.62 | 0.43 |
| 1:B:530:GLU:OE1 | 1:B:536:ARG:HA | 2.19 | 0.43 |
| 1:BA:60:THR:H | 1:BA:107:LYS:HB3 | 1.84 | 0.43 |
| 1:BA:521:ASP:HB3 | 1:BA:545:TRP:CE2 | 2.54 | 0.43 |
| 1:BA:641:GLN:N | 1:BA:641:GLN:CD | 2.77 | 0.43 |
| 1:BB:56:ARG:HB2 | 1:CB:127:LEU:HD21 | 1.99 | 0.43 |
| 1:C:3:THR:HG22 | 1:C:6:PHE:CE1 | 2.53 | 0.43 |
| 1:CA:121:LEU:HD21 | 1:CA:123:LEU:HD23 | 2.01 | 0.43 |
| 1:CA:679:ARG:HH12 | 1:CA:680:LEU:HD23 | 1.84 | 0.43 |
| 1:CB:216:VAL:HG22 | 1:CB:217:ASP:N | 2.34 | 0.43 |
| 1:CB:276:LEU:CD2 | 1:CB:320:ILE:HG23 | 2.49 | 0.43 |
| 1:CB:374:VAL:HG12 | 1:CB:375:GLU:N | 2.34 | 0.43 |
| 1:D:360:ARG:CZ | 1:D:407:MET:HE2 | 2.48 | 0.43 |
| 1:DA:657:SER:HA | 1:DA:660:LEU:HD12 | 2.00 | 0.43 |
| 1:E:174:LEU:HD12 | 1:E:214:ASP:O | 2.19 | 0.43 |
| 1:E:179:ARG:HG3 | 1:E:211:GLU:HG3 | 1.99 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:EA:115:VAL:HG22 | 1:EA:149:GLY:O | 2.18 | 0.43 |
| 1:EA:333:LEU:N | 1:EA:375:GLU:O | 2.51 | 0.43 |
| 1:EA:597:ARG:O | 1:EA:601:THR:HG23 | 2.18 | 0.43 |
| 1:EA:696:GLN:HA | 1:EA:699:ALA:HB3 | 2.01 | 0.43 |
| 1:F:335:ARG:HA | 1:F:355:ASP:O | 2.18 | 0.43 |
| 1:FA:63:ASN:O | 1:FA:63:ASN:CG | 2.61 | 0.43 |
| 1:FA:163:ILE:HD12 | 1:FA:206:PRO:HG2 | 2.01 | 0.43 |
| 1:G:179:ARG:HE | 1:G:209:PHE:HA | 1.84 | 0.43 |
| 1:H:735:ILE:HG23 | 1:I:727:GLU:OE1 | 2.19 | 0.43 |
| 1:HA:363:LEU:HD23 | 1:HA:363:LEU:N | 2.34 | 0.43 |
| 1:HA:761:ARG:NH2 | 1:IA:755:THR:HG23 | 2.34 | 0.43 |
| 1:HB:10:ILE:HG22 | 1:HB:47:PRO:HG3 | 2.01 | 0.43 |
| 1:HB:387:GLY:C | 1:HB:457:VAL:HG23 | 2.43 | 0.43 |
| 1:I:543:TYR:CD1 | 1:I:638:VAL:HG13 | 2.54 | 0.43 |
| 1:IA:120:ALA:CB | 1:IA:205:LEU:HD21 | 2.47 | 0.43 |
| 1:IA:531:THR:HG22 | 1:IA:583:VAL:HG23 | 2.01 | 0.43 |
| 1:IB:160:VAL:HG12 | 1:IB:161:GLU:N | 2.33 | 0.43 |
| 1:IB:335:ARG:HA | 1:IB:355:ASP:O | 2.19 | 0.43 |
| 1:IB:591:PHE:O | 1:IB:595:SER:N | 2.52 | 0.43 |
| 1:J:234:ASN:N | 1:J:245:THR:OG1 | 2.52 | 0.43 |
| 1:J:337:LEU:HD21 | 1:J:372:GLU:HB2 | 2.01 | 0.43 |
| 1:J:459:SER:HB2 | 1:J:486:LEU:HD21 | 2.00 | 0.43 |
| 1:J:495:PHE:CD2 | 1:J:514:LEU:HD21 | 2.54 | 0.43 |
| 1:JA:204:TYR:CZ | 1:JA:205:LEU:O | 2.72 | 0.43 |
| 1:JA:383:ASP:O | 1:JA:384:GLU:C | 2.61 | 0.43 |
| 1:JB:18:VAL:HB | 1:JB:41:GLU:CG | 2.49 | 0.43 |
| 1:JB:122:HIS:HA | 1:JB:144:LEU:HB3 | 2.00 | 0.43 |
| 1:JB:152:ILE:O | 1:JB:153:PRO:C | 2.62 | 0.43 |
| 1:JB:332:LEU:HD21 | 1:JB:334:LEU:HD21 | 2.01 | 0.43 |
| 1:JB:603:VAL:O | 1:JB:603:VAL:HG12 | 2.19 | 0.43 |
| 1:K:765:VAL:O | 1:K:769:GLU:HG2 | 2.19 | 0.43 |
| 1:K:772:TYR:CE1 | 1:L:770:LEU:HD11 | 2.53 | 0.43 |
| 1:KA:53:VAL:HG11 | 1:KA:93:ALA:HA | 2.00 | 0.43 |
| 1:KA:571:ALA:O | 1:KA:572:CYS:C | 2.62 | 0.43 |
| 1:KB:596:ALA:HA | 1:KB:599:ILE:HD12 | 2.01 | 0.43 |
| 1:L:18:VAL:O | 1:L:26:SER:HA | 2.19 | 0.43 |
| 1:L:176:LEU:HA | 1:L:213:LEU:HD23 | 2.01 | 0.43 |
| 1:LA:83:LEU:HD12 | 1:LA:83:LEU:N | 2.34 | 0.43 |
| 1:LA:389:TYR:HH | 1:LA:490:GLY:C | 2.25 | 0.43 |
| 1:LA:522:PHE:HA | 1:LA:543:TYR:O | 2.18 | 0.43 |
| 1:LB:661:ALA:O | 1:LB:665:THR:HG23 | 2.18 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:M:115:VAL:HB | 1:M:119:THR:HG23 | 2.00 | 0.43 |
| 1:M:374:VAL:HG12 | 1:M:375:GLU:N | 2.33 | 0.43 |
| 1:MA:65:VAL:HG13 | 1:MA:103:GLU:HB2 | 2.01 | 0.43 |
| 1:MA:459:SER:HB2 | 1:MA:486:LEU:HD21 | 2.01 | 0.43 |
| 1:MA:501:SER:HA | 1:MA:507:ARG:O | 2.19 | 0.43 |
| 1:MA:645:PRO:O | 1:MA:651:ARG:CZ | 2.66 | 0.43 |
| 1:MB:18:VAL:HA | 1:MB:42:ARG:O | 2.19 | 0.43 |
| 1:MB:286:ASP:OD1 | 1:MB:298:GLN:O | 2.36 | 0.43 |
| 1:MB:405:THR:HG23 | 1:NB:396:GLY:N | 2.33 | 0.43 |
| 1:MB:416:GLU:HB3 | 1:MB:418:GLU:OE2 | 2.18 | 0.43 |
| 1:N:197:LEU:HD21 | 1:N:216:VAL:HG11 | 2.00 | 0.43 |
| 1:NA:68:ASP:N | 1:NA:68:ASP:OD1 | 2.52 | 0.43 |
| 1:NA:129:PHE:O | 1:NA:137:VAL:HB | 2.18 | 0.43 |
| 1:NA:363:LEU:H | 1:NA:363:LEU:HD23 | 1.83 | 0.43 |
| 1:NA:410:GLN:O | 1:NA:411:ASP:OD1 | 2.36 | 0.43 |
| 1:NA:567:PHE:CG | 1:NA:568:VAL:N | 2.86 | 0.43 |
| 1:NB:30:VAL:HG22 | 1:NB:31:GLY:H | 1.83 | 0.43 |
| 1:NB:654:LEU:HD22 | 1:OB:534:HIS:CG | 2.54 | 0.43 |
| 1:O:174:LEU:HD12 | 1:O:214:ASP:O | 2.19 | 0.43 |
| 1:O:387:GLY:HA3 | 1:O:402:ILE:HG13 | 1.99 | 0.43 |
| 1:O:531:THR:HG22 | 1:O:583:VAL:HG23 | 2.01 | 0.43 |
| 1:O:583:VAL:HG13 | 1:O:584:ALA:N | 2.34 | 0.43 |
| 1:OA:30:VAL:HG23 | 1:OA:98:PRO:CD | 2.49 | 0.43 |
| 1:OA:228:HIS:HA | 1:OA:250:LEU:HA | 2.01 | 0.43 |
| 1:OA:392:ASP:OD1 | 1:OA:411:ASP:O | 2.36 | 0.43 |
| 1:OB:514:LEU:HD12 | 1:OB:514:LEU:N | 2.34 | 0.43 |
| 1:OB:621:ARG:NH2 | 1:OB:623:ARG:HA | 2.33 | 0.43 |
| 1:P:325:VAL:O | 1:P:325:VAL:HG13 | 2.19 | 0.43 |
| 1:PA:531:THR:HG23 | 1:PA:537:LEU:HD11 | 2.00 | 0.43 |
| 1:PA:658:VAL:HG13 | 1:PA:659:GLN:N | 2.34 | 0.43 |
| 1:QA:329:GLN:HA | 1:QA:379:ALA:HB2 | 2.01 | 0.43 |
| 1:RB:262:ASP:HB3 | 1:RB:265:GLU:OE1 | 2.19 | 0.43 |
| 1:RB:331:GLY:HA3 | 1:RB:358:LEU:HD21 | 2.00 | 0.43 |
| 1:RB:424:GLU:HB2 | 1:RB:514:LEU:HD11 | 2.00 | 0.43 |
| 1:S:55:PRO:C | 1:S:56:ARG:HD3 | 2.43 | 0.43 |
| 1:S:460:TYR:CE2 | 1:S:468:VAL:HG21 | 2.54 | 0.43 |
| 1:T:216:VAL:HG22 | 1:T:217:ASP:N | 2.34 | 0.43 |
| 1:T:390:VAL:HA | 1:T:414:LEU:HA | 2.00 | 0.43 |
| 1:TA:65:VAL:HA | 1:TA:82:ARG:O | 2.19 | 0.43 |
| 1:TB:196:TRP:C | 1:TB:197:LEU:HD22 | 2.44 | 0.43 |
| 1:TB:405:THR:HG23 | 1:UB:396:GLY:N | 2.34 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UA:83:LEU:HD11 | 1:UA:102:GLY:HA3 | 2.00 | 0.43 |
| 1:UA:175:ARG:HE | 1:UA:213:LEU:HD22 | 1.83 | 0.43 |
| 1:UA:332:LEU:HD21 | 1:UA:373:VAL:HG23 | 2.00 | 0.43 |
| 1:UA:384:GLU:HG3 | 1:UA:402:ILE:HG22 | 2.01 | 0.43 |
| 1:UB:16:ILE:HG23 | 1:UB:45:PHE:O | 2.17 | 0.43 |
| 1:VA:276:LEU:HD11 | 1:VA:308:PHE:HE1 | 1.83 | 0.43 |
| 1:VA:462:VAL:HG13 | 1:VA:468:VAL:HG23 | 2.01 | 0.43 |
| 1:VA:537:LEU:HD13 | 1:VA:588:PHE:CD1 | 2.53 | 0.43 |
| 1:VB:282:CYS:HA | 1:VB:321:GLN:OE1 | 2.19 | 0.43 |
| 1:VB:286:ASP:HA | 1:VB:295:GLN:O | 2.19 | 0.43 |
| 1:VB:797:GLN:H | 1:WB:792:VAL:CG2 | 2.31 | 0.43 |
| 1:W:90:ILE:HG22 | 1:W:91:ARG:N | 2.34 | 0.43 |
| 1:W:212:VAL:O | 1:W:212:VAL:HG23 | 2.19 | 0.43 |
| 1:W:379:ALA:HB2 | 1:W:407:MET:HG3 | 2.00 | 0.43 |
| 1:WA:390:VAL:HG21 | 1:WA:399:ARG:NH1 | 2.33 | 0.43 |
| 1:X:115:VAL:HG23 | 1:X:147:GLY:O | 2.19 | 0.43 |
| 1:X:627:VAL:O | 1:X:627:VAL:HG23 | 2.19 | 0.43 |
| 1:X:745:LYS:O | 1:X:746:LEU:C | 2.62 | 0.43 |
| 1:X:784:ALA:HA | 1:X:787:LEU:HD12 | 2.01 | 0.43 |
| 1:XA:208:VAL:HG23 | 1:XA:209:PHE:N | 2.34 | 0.43 |
| 1:XA:273:ILE:O | 1:XA:273:ILE:HG23 | 2.19 | 0.43 |
| 1:XA:391:GLN:HB3 | 1:XA:398:VAL:HG22 | 2.00 | 0.43 |
| 1:XA:399:ARG:HE | 1:XA:401:VAL:HG22 | 1.82 | 0.43 |
| 1:XB:281:TYR:CD2 | 1:XB:282:CYS:N | 2.87 | 0.43 |
| 1:XB:787:LEU:HD21 | 1:YB:781:VAL:HG12 | 2.01 | 0.43 |
| 1:Y:57:HIS:HA | 1:Y:110:THR:O | 2.19 | 0.43 |
| 1:Y:73:VAL:HG11 | 1:Y:81:VAL:CG2 | 2.49 | 0.43 |
| 1:YA:285:LEU:HD12 | 1:YA:315:GLN:CD | 2.44 | 0.43 |
| 1:Z:523:PHE:O | 1:Z:542:ALA:HA | 2.19 | 0.43 |
| 1:Z:781:VAL:O | 1:Z:784:ALA:HB3 | 2.19 | 0.43 |
| 1:ZA:83:LEU:HB2 | 1:ZA:85:HIS:CE1 | 2.53 | 0.43 |
| 1:ZA:219:VAL:HG12 | 1:ZA:259:HIS:O | 2.18 | 0.43 |
| 1:ZA:529:ILE:HD13 | 1:ZA:539:LEU:HB2 | 1.99 | 0.43 |
| 1:ZB:319:GLY:O | 1:ZB:321:GLN:OE1 | 2.37 | 0.43 |
| 1:A:283:VAL:O | 1:A:316:LEU:HD12 | 2.19 | 0.43 |
| 1:A:546:HIS:NE2 | 1:A:634:VAL:HG11 | 2.33 | 0.43 |
| 1:AB:283:VAL:HG12 | 1:AB:284:ILE:N | 2.34 | 0.43 |
| 1:AB:701:LYS:O | 1:AB:704:LYS:HB3 | 2.18 | 0.43 |
| 1:B:59:CYS:SG | 1:B:105:LEU:HD21 | 2.58 | 0.43 |
| 1:B:167:ILE:HA | 1:B:203:ALA:HA | 2.00 | 0.43 |
| 1:BA:227:LEU:HA | 1:BA:270:VAL:HA | 2.01 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:BA:374:VAL:HG12 | 1:BA:375:GLU:N | 2.34 | 0.43 |
| 1:BA:802:ILE:HG23 | 1:BA:803:GLY:N | 2.34 | 0.43 |
| 1:BB:15:TYR:HB3 | 1:BB:50:MET:HE1 | 2.00 | 0.43 |
| 1:BB:15:TYR:HD2 | 1:BB:28:VAL:HG23 | 1.84 | 0.43 |
| 1:C:28:VAL:HB | 1:C:101:PRO:HD3 | 2.01 | 0.43 |
| 1:C:95:ASP:O | 1:C:97:PHE:CD2 | 2.71 | 0.43 |
| 1:CA:599:ILE:HG21 | 1:CA:640:VAL:HG21 | 2.01 | 0.43 |
| 1:CB:302:VAL:HG11 | 1:CB:306:LYS:HE2 | 2.01 | 0.43 |
| 1:D:221:LEU:HD13 | 1:D:252:THR:C | 2.44 | 0.43 |
| 1:D:334:LEU:HD12 | 1:D:357:TRP:NE1 | 2.34 | 0.43 |
| 1:D:380:ILE:HD12 | 1:D:407:MET:HA | 2.01 | 0.43 |
| 1:DA:145:PHE:CD2 | 1:DA:151:TYR:HB2 | 2.53 | 0.43 |
| 1:DA:277:GLY:H | 1:DA:280:ASN:HB2 | 1.84 | 0.43 |
| 1:DB:63:ASN:HA | 1:DB:84:ARG:O | 2.19 | 0.43 |
| 1:DB:129:PHE:CE1 | 1:DB:137:VAL:HG11 | 2.53 | 0.43 |
| 1:E:121:LEU:HD23 | 1:E:159:VAL:CG1 | 2.48 | 0.43 |
| 1:E:131:ASP:OD2 | 1:E:137:VAL:HG23 | 2.18 | 0.43 |
| 1:E:236:ARG:HA | 1:E:241:VAL:O | 2.19 | 0.43 |
| 1:F:6:PHE:O | 1:F:37:ARG:N | 2.51 | 0.43 |
| 1:F:57:HIS:HB3 | 1:F:109:ILE:CG2 | 2.49 | 0.43 |
| 1:F:500:LEU:HD23 | 1:F:566:ASP:HA | 2.00 | 0.43 |
| 1:FA:66:SER:HA | 1:FA:84:ARG:NE | 2.33 | 0.43 |
| 1:FA:201:VAL:HG22 | 1:FA:201:VAL:O | 2.19 | 0.43 |
| 1:FB:99:LEU:HD11 | 1:FB:103:GLU:O | 2.18 | 0.43 |
| 1:G:60:THR:CB | 1:G:88:LEU:HD21 | 2.49 | 0.43 |
| 1:GA:6:PHE:CD1 | 1:GA:37:ARG:HB2 | 2.54 | 0.43 |
| 1:GA:13:TYR:HA | 1:GA:50:MET:CE | 2.48 | 0.43 |
| 1:GA:363:LEU:N | 1:GA:363:LEU:HD23 | 2.34 | 0.43 |
| 1:H:120:ALA:HB3 | 1:H:163:ILE:HG13 | 2.01 | 0.43 |
| 1:H:333:LEU:HA | 1:H:358:LEU:HA | 2.00 | 0.43 |
| 1:H:410:GLN:C | 1:H:412:GLU:H | 2.26 | 0.43 |
| 1:H:521:ASP:O | 1:H:545:TRP:CD1 | 2.71 | 0.43 |
| 1:HA:233:ARG:HH22 | 1:HA:263:VAL:HG23 | 1.84 | 0.43 |
| 1:HB:7:ILE:O | 1:HB:8:ILE:C | 2.62 | 0.43 |
| 1:HB:16:ILE:CG2 | 1:HB:17:HIS:N | 2.81 | 0.43 |
| 1:HB:333:LEU:CD2 | 1:HB:374:VAL:HG11 | 2.47 | 0.43 |
| 1:I:58:TYR:CD1 | 1:I:92:LEU:HA | 2.54 | 0.43 |
| 1:I:547:PHE:CD1 | 1:I:633:LEU:HD13 | 2.53 | 0.43 |
| 1:IA:331:GLY:O | 1:IA:358:LEU:HD11 | 2.18 | 0.43 |
| 1:IA:522:PHE:HA | 1:IA:543:TYR:O | 2.18 | 0.43 |
| 1:IB:3:THR:O | 1:IB:6:PHE:CG | 2.72 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:IB:538:GLN:CD | 1:IB:646:VAL:HG22 | 2.43 | 0.43 |
| 1:IB:707:LEU:HA | 1:IB:710:GLU:HB3 | 2.01 | 0.43 |
| 1:J:55:PRO:HA | 1:J:58:TYR:CE1 | 2.54 | 0.43 |
| 1:J:73:VAL:HG12 | 1:J:74:LEU:O | 2.19 | 0.43 |
| 1:J:405:THR:HG21 | 1:K:393:VAL:O | 2.18 | 0.43 |
| 1:J:459:SER:HA | 1:J:488:SER:HA | 2.01 | 0.43 |
| 1:J:522:PHE:HA | 1:J:544:ASN:HA | 2.00 | 0.43 |
| 1:JB:160:VAL:HG12 | 1:JB:161:GLU:N | 2.33 | 0.43 |
| 1:JB:220:ILE:HD13 | 1:JB:258:ALA:CB | 2.48 | 0.43 |
| 1:JB:257:GLU:HG3 | 1:KB:245:THR:HB | 2.00 | 0.43 |
| 1:K:626:ALA:HB3 | 1:K:635:VAL:HB | 2.01 | 0.43 |
| 1:KA:73:VAL:HG21 | 1:KA:100:TYR:CE2 | 2.54 | 0.43 |
| 1:KA:282:CYS:SG | 1:KA:302:VAL:HG21 | 2.58 | 0.43 |
| 1:KA:390:VAL:HG21 | 1:KA:408:LEU:CD2 | 2.48 | 0.43 |
| 1:KB:57:HIS:HA | 1:KB:110:THR:O | 2.19 | 0.43 |
| 1:KB:65:VAL:HG13 | 1:KB:103:GLU:OE1 | 2.19 | 0.43 |
| 1:KB:75:PHE:HA | 1:KB:81:VAL:HA | 2.00 | 0.43 |
| 1:KB:165:ALA:HA | 1:KB:205:LEU:HA | 2.00 | 0.43 |
| 1:L:541:LEU:HD12 | 1:L:543:TYR:OH | 2.19 | 0.43 |
| 1:LA:227:LEU:HD13 | 1:LA:270:VAL:HG22 | 2.00 | 0.43 |
| 1:LA:335:ARG:NE | 1:LA:372:GLU:OE1 | 2.52 | 0.43 |
| 1:LA:685:ARG:O | 1:LA:686:GLY:C | 2.61 | 0.43 |
| 1:LB:262:ASP:OD1 | 1:LB:263:VAL:N | 2.52 | 0.43 |
| 1:LB:377:ARG:O | 1:LB:407:MET:HE1 | 2.18 | 0.43 |
| 1:M:152:ILE:O | 1:M:154:ARG:HG2 | 2.19 | 0.43 |
| 1:M:219:VAL:HG12 | 1:M:259:HIS:O | 2.18 | 0.43 |
| 1:M:388:ILE:HG22 | 1:M:456:ARG:HA | 2.00 | 0.43 |
| 1:MA:176:LEU:HD21 | 1:MA:196:TRP:CE2 | 2.54 | 0.43 |
| 1:MB:16:ILE:CG2 | 1:MB:17:HIS:N | 2.81 | 0.43 |
| 1:MB:235:PHE:CE1 | 1:MB:264:HIS:HB3 | 2.54 | 0.43 |
| 1:MB:295:GLN:C | 1:MB:298:GLN:OE1 | 2.62 | 0.43 |
| 1:MB:332:LEU:HA | 1:MB:376:GLU:HA | 2.00 | 0.43 |
| 1:MB:349:VAL:C | 1:MB:351:HIS:H | 2.27 | 0.43 |
| 1:MB:772:TYR:CE1 | 1:NB:770:LEU:HD11 | 2.53 | 0.43 |
| 1:N:711:ALA:HA | 1:N:714:MET:HE2 | 2.00 | 0.43 |
| 1:NA:365:TYR:CG | 1:NA:366:VAL:N | 2.87 | 0.43 |
| 1:NB:383:ASP:H | 1:NB:386:GLU:HB3 | 1.84 | 0.43 |
| 1:NB:621:ARG:HD3 | 1:NB:622:PRO:O | 2.19 | 0.43 |
| 1:O:541:LEU:HD12 | 1:O:541:LEU:N | 2.33 | 0.43 |
| 1:OA:389:TYR:CE1 | 1:OA:400:ALA:HB1 | 2.53 | 0.43 |
| 1:OB:123:LEU:HD11 | 1:OB:145:PHE:HB2 | 2.01 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OB:544:ASN:O | 1:OB:635:VAL:HG13 | 2.18 | 0.43 |
| 1:P:115:VAL:HG22 | 1:P:121:LEU:HD12 | 2.01 | 0.43 |
| 1:P:490:GLY:N | 1:P:493:GLU:HB2 | 2.34 | 0.43 |
| 1:PA:471:TYR:C | 1:PA:493:GLU:HG3 | 2.43 | 0.43 |
| 1:PA:497:VAL:O | 1:PA:497:VAL:HG13 | 2.19 | 0.43 |
| 1:PA:709:LEU:HD23 | 1:PA:712:LEU:CD1 | 2.49 | 0.43 |
| 1:PA:758:GLU:C | 1:PA:762:VAL:HG22 | 2.43 | 0.43 |
| 1:PB:43:VAL:C | 1:PB:44:LEU:HD22 | 2.44 | 0.43 |
| 1:PB:51:VAL:O | 1:PB:96:PRO:HA | 2.19 | 0.43 |
| 1:PB:180:LYS:HA | 1:PB:192:THR:HG23 | 2.00 | 0.43 |
| 1:PB:335:ARG:HG3 | 1:PB:356:HIS:NE2 | 2.34 | 0.43 |
| 1:PB:373:VAL:HG22 | 1:PB:374:VAL:N | 2.34 | 0.43 |
| 1:PB:470:VAL:HG13 | 1:PB:494:GLN:N | 2.34 | 0.43 |
| 1:PB:541:LEU:HD21 | 1:PB:599:ILE:HD13 | 2.00 | 0.43 |
| 1:Q:112:LEU:HD23 | 1:Q:150:THR:HG21 | 2.01 | 0.43 |
| 1:QA:17:HIS:HA | 1:QA:27:ARG:O | 2.18 | 0.43 |
| 1:QA:382:LEU:H | 1:QA:405:THR:HG22 | 1.84 | 0.43 |
| 1:QB:104:VAL:HG22 | 1:QB:105:LEU:HD23 | 2.01 | 0.43 |
| 1:QB:640:VAL:HG12 | 1:RB:580:ARG:NH1 | 2.33 | 0.43 |
| 1:QB:742:LEU:HD21 | 1:RB:734:ARG:HG3 | 2.00 | 0.43 |
| 1:R:152:ILE:HG23 | 1:R:153:PRO:HD2 | 2.01 | 0.43 |
| 1:R:533:ASP:OD2 | 1:R:588:PHE:CD2 | 2.72 | 0.43 |
| 1:RA:168:ILE:HG22 | 1:RA:215:LEU:HD13 | 2.00 | 0.43 |
| 1:RA:393:VAL:HG22 | 1:RA:411:ASP:C | 2.44 | 0.43 |
| 1:RB:276:LEU:HD13 | 1:RB:281:TYR:HA | 2.00 | 0.43 |
| 1:RB:334:LEU:HB3 | 1:RB:371:VAL:HG21 | 2.01 | 0.43 |
| 1:RB:533:ASP:OD1 | 1:RB:535:ALA:HB2 | 2.18 | 0.43 |
| 1:SB:174:LEU:HD12 | 1:SB:214:ASP:C | 2.42 | 0.43 |
| 1:SB:549:VAL:HG21 | 1:SB:552:ARG:HH11 | 1.83 | 0.43 |
| 1:T:126:LEU:C | 1:T:127:LEU:HD22 | 2.43 | 0.43 |
| 1:T:231:ALA:HB1 | 1:T:235:PHE:CE2 | 2.54 | 0.43 |
| 1:T:284:ILE:HD12 | 1:T:287:PRO:HB3 | 2.00 | 0.43 |
| 1:T:777:LEU:O | 1:T:781:VAL:HG22 | 2.19 | 0.43 |
| 1:TA:65:VAL:HG12 | 1:TA:83:LEU:HD12 | 2.01 | 0.43 |
| 1:TA:521:ASP:HB3 | 1:TA:545:TRP:CZ2 | 2.53 | 0.43 |
| 1:TA:531:THR:OG1 | 1:TA:535:ALA:HB3 | 2.18 | 0.43 |
| 1:TB:216:VAL:HG22 | 1:TB:217:ASP:N | 2.34 | 0.43 |
| 1:TB:227:LEU:HD12 | 1:TB:228:HIS:N | 2.31 | 0.43 |
| 1:TB:521:ASP:O | 1:TB:545:TRP:CD1 | 2.72 | 0.43 |
| 1:UA:213:LEU:HD23 | 1:UA:213:LEU:C | 2.43 | 0.43 |
| 1:UA:573:LYS:HD2 | 1:UA:574:ALA:N | 2.34 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UB:10:ILE:O | 1:UB:10:ILE:HG13 | 2.18 | 0.43 |
| 1:UB:470:VAL:HG11 | 1:UB:489:LEU:CD2 | 2.49 | 0.43 |
| 1:UB:746:LEU:HD13 | 1:VB:737:GLY:C | 2.43 | 0.43 |
| 1:V:178:ALA:HB3 | 1:V:191:VAL:O | 2.19 | 0.43 |
| 1:VA:333:LEU:C | 1:VA:374:VAL:HB | 2.43 | 0.43 |
| 1:VB:62:ALA:HB3 | 1:VB:104:VAL:HG13 | 2.01 | 0.43 |
| 1:VB:166:THR:HG21 | 1:VB:174:LEU:CD1 | 2.49 | 0.43 |
| 1:VB:668:SER:O | 1:VB:672:ALA:HB2 | 2.19 | 0.43 |
| 1:W:56:ARG:O | 1:W:111:PRO:HA | 2.19 | 0.43 |
| 1:WA:32:PRO:O | 1:XA:78:THR:HG23 | 2.18 | 0.43 |
| 1:WA:281:TYR:HE2 | 1:WA:283:VAL:HG23 | 1.84 | 0.43 |
| 1:WA:597:ARG:O | 1:WA:600:ARG:HG2 | 2.19 | 0.43 |
| 1:WB:281:TYR:CD1 | 1:WB:282:CYS:N | 2.86 | 0.43 |
| 1:WB:340:LEU:HD12 | 1:WB:351:HIS:ND1 | 2.34 | 0.43 |
| 1:X:25:VAL:HG21 | 1:X:78:THR:O | 2.18 | 0.43 |
| 1:X:54:PRO:CD | 1:X:109:ILE:HG23 | 2.48 | 0.43 |
| 1:X:235:PHE:CD1 | 1:X:264:HIS:HB3 | 2.53 | 0.43 |
| 1:X:301:VAL:HG22 | 1:X:302:VAL:N | 2.34 | 0.43 |
| 1:X:496:THR:HG21 | 1:X:562:PHE:CD2 | 2.53 | 0.43 |
| 1:XA:12:PRO:HA | 1:XA:32:PRO:HB3 | 2.00 | 0.43 |
| 1:XA:592:HIS:HD1 | 1:YA:584:ALA:HB1 | 1.84 | 0.43 |
| 1:XB:131:ASP:HB3 | 1:XB:137:VAL:HG21 | 2.00 | 0.43 |
| 1:XB:497:VAL:HA | 1:XB:514:LEU:HD12 | 2.00 | 0.43 |
| 1:Y:530:GLU:OE2 | 1:Y:536:ARG:NH1 | 2.52 | 0.43 |
| 1:Y:531:THR:HG22 | 1:Y:535:ALA:CB | 2.45 | 0.43 |
| 1:Y:709:LEU:HD21 | 1:Z:701:LYS:CA | 2.49 | 0.43 |
| 1:YA:185:ARG:HG3 | 1:YA:207:ALA:HB2 | 2.00 | 0.43 |
| 1:YA:358:LEU:HD12 | 1:YA:377:ARG:HD3 | 2.01 | 0.43 |
| 1:YA:627:VAL:O | 1:YA:627:VAL:HG13 | 2.18 | 0.43 |
| 1:YB:411:ASP:OD1 | 1:YB:411:ASP:C | 2.62 | 0.43 |
| 1:YB:520:PRO:HA | 1:YB:546:HIS:HA | 1.99 | 0.43 |
| 1:Z:470:VAL:HG12 | 1:Z:471:TYR:N | 2.34 | 0.43 |
| 1:ZA:276:LEU:HD12 | 1:ZA:303:LYS:O | 2.18 | 0.43 |
| 1:ZB:5:GLU:O | 1:ZB:8:ILE:HD12 | 2.19 | 0.43 |
| 1:A:380:ILE:H | 1:A:380:ILE:HD12 | 1.83 | 0.43 |
| 1:A:604:PHE:HB3 | 1:A:623:ARG:HB3 | 2.00 | 0.43 |
| 1:AA:99:LEU:HD22 | 1:AA:104:VAL:HA | 2.00 | 0.43 |
| 1:AB:121:LEU:HD12 | 1:AB:121:LEU:N | 2.33 | 0.43 |
| 1:AB:182:CYS:N | 1:AB:189:GLU:O | 2.51 | 0.43 |
| 1:AB:219:VAL:HG12 | 1:AB:259:HIS:O | 2.18 | 0.43 |
| 1:B:66:SER:HA | 1:B:84:ARG:NE | 2.34 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:B:227:LEU:HD13 | 1:B:270:VAL:HG22 | 2.00 | 0.43 |
| 1:B:465:ASN:N | 1:B:483:GLY:HA2 | 2.34 | 0.43 |
| 1:B:502:ALA:HB3 | 1:B:510:ALA:HB3 | 2.01 | 0.43 |
| 1:B:643:VAL:HG23 | 1:C:580:ARG:HH12 | 1.84 | 0.43 |
| 1:B:750:ALA:HB2 | 1:C:741:VAL:HG22 | 2.01 | 0.43 |
| 1:BA:30:VAL:HG22 | 1:BA:31:GLY:H | 1.83 | 0.43 |
| 1:BA:53:VAL:HG11 | 1:BA:57:HIS:O | 2.18 | 0.43 |
| 1:BA:284:ILE:HG12 | 1:BA:300:ARG:O | 2.18 | 0.43 |
| 1:BA:331:GLY:C | 1:BA:407:MET:HE1 | 2.44 | 0.43 |
| 1:BA:583:VAL:HG13 | 1:BA:584:ALA:N | 2.34 | 0.43 |
| 1:BB:756:GLU:HA | 1:BB:759:LEU:HD12 | 2.01 | 0.43 |
| 1:BB:775:ALA:HB1 | 1:CB:770:LEU:HD22 | 2.00 | 0.43 |
| 1:C:55:PRO:O | 1:C:57:HIS:ND1 | 2.52 | 0.43 |
| 1:C:55:PRO:O | 1:C:56:ARG:HG2 | 2.19 | 0.43 |
| 1:C:334:LEU:HB2 | 1:C:357:TRP:CE2 | 2.54 | 0.43 |
| 1:CA:10:ILE:HG23 | 1:CA:16:ILE:HD12 | 2.00 | 0.43 |
| 1:CA:769:GLU:O | 1:CA:773:ALA:N | 2.51 | 0.43 |
| 1:CB:229:LEU:HD22 | 1:CB:265:GLU:HB3 | 2.01 | 0.43 |
| 1:CB:349:VAL:HB | 1:CB:351:HIS:CE1 | 2.54 | 0.43 |
| 1:DA:177:ARG:HA | 1:DA:194:GLU:O | 2.18 | 0.43 |
| 1:DA:606:PHE:HB2 | 1:DA:623:ARG:CZ | 2.49 | 0.43 |
| 1:DA:689:GLU:HA | 1:DA:692:LYS:HD2 | 2.00 | 0.43 |
| 1:DA:802:ILE:HD13 | 1:DA:807:ILE:HG12 | 2.00 | 0.43 |
| 1:DB:462:VAL:N | 1:DB:485:GLU:O | 2.52 | 0.43 |
| 1:E:65:VAL:HG13 | 1:E:103:GLU:CD | 2.44 | 0.43 |
| 1:E:77:VAL:HG13 | 1:E:78:THR:HG23 | 2.00 | 0.43 |
| 1:E:262:ASP:HB3 | 1:E:265:GLU:OE1 | 2.19 | 0.43 |
| 1:E:283:VAL:HG12 | 1:E:284:ILE:N | 2.32 | 0.43 |
| 1:E:423:VAL:O | 1:E:424:GLU:C | 2.61 | 0.43 |
| 1:E:497:VAL:HG22 | 1:E:498:LEU:N | 2.34 | 0.43 |
| 1:E:599:ILE:CD1 | 1:E:640:VAL:HG21 | 2.49 | 0.43 |
| 1:EA:81:VAL:HG12 | 1:EA:101:PRO:HB2 | 2.00 | 0.43 |
| 1:EA:787:LEU:HD23 | 1:FA:781:VAL:HG12 | 1.99 | 0.43 |
| 1:EB:16:ILE:HG22 | 1:EB:17:HIS:O | 2.18 | 0.43 |
| 1:EB:77:VAL:HG23 | 1:EB:78:THR:N | 2.33 | 0.43 |
| 1:EB:165:ALA:HA | 1:EB:204:TYR:O | 2.19 | 0.43 |
| 1:EB:507:ARG:CG | 1:EB:510:ALA:HB2 | 2.49 | 0.43 |
| 1:FA:526:VAL:HA | 1:FA:539:LEU:O | 2.19 | 0.43 |
| 1:FA:603:VAL:HG11 | 1:FA:638:VAL:CG2 | 2.49 | 0.43 |
| 1:FB:51:VAL:O | 1:FB:96:PRO:HA | 2.19 | 0.43 |
| 1:FB:128:ASP:OD1 | 1:FB:139:ALA:N | 2.52 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:FB:516:LEU:CD1 | 1:FB:567:PHE:CE2 | 3.02 | 0.43 |
| 1:G:176:LEU:HD23 | 1:G:196:TRP:O | 2.19 | 0.43 |
| 1:GA:174:LEU:O | 1:GA:197:LEU:HD13 | 2.19 | 0.43 |
| 1:GA:539:LEU:HD12 | 1:GA:642:SER:O | 2.18 | 0.43 |
| 1:GB:601:THR:HG22 | 1:GB:607:GLU:OE2 | 2.19 | 0.43 |
| 1:GB:643:VAL:HG13 | 1:HB:580:ARG:NH2 | 2.33 | 0.43 |
| 1:H:232:ARG:NH2 | 1:H:266:GLU:HA | 2.34 | 0.43 |
| 1:H:250:LEU:HD22 | 1:H:271:VAL:CG2 | 2.49 | 0.43 |
| 1:H:388:ILE:O | 1:H:401:VAL:HG22 | 2.19 | 0.43 |
| 1:H:462:VAL:HB | 1:H:485:GLU:O | 2.18 | 0.43 |
| 1:HA:273:ILE:O | 1:HA:273:ILE:HG23 | 2.19 | 0.43 |
| 1:HA:669:GLN:NE2 | 1:IA:661:ALA:HB2 | 2.34 | 0.43 |
| 1:I:467:ALA:O | 1:I:468:VAL:HG23 | 2.19 | 0.43 |
| 1:IA:169:ARG:NH2 | 1:IA:170:GLN:O | 2.52 | 0.43 |
| 1:IA:215:LEU:HD12 | 1:IA:216:VAL:N | 2.34 | 0.43 |
| 1:IB:284:ILE:HD12 | 1:IB:287:PRO:HB3 | 2.00 | 0.43 |
| 1:J:232:ARG:HG3 | 1:J:266:GLU:HB2 | 2.00 | 0.43 |
| 1:J:767:GLU:HA | 1:J:770:LEU:HD12 | 2.00 | 0.43 |
| 1:JA:768:LEU:HD23 | 1:JA:768:LEU:C | 2.43 | 0.43 |
| 1:JB:90:ILE:HD13 | 1:JB:154:ARG:N | 2.34 | 0.43 |
| 1:JB:165:ALA:O | 1:JB:203:ALA:HB1 | 2.18 | 0.43 |
| 1:JB:285:LEU:HD21 | 1:JB:317:GLU:OE1 | 2.19 | 0.43 |
| 1:JB:600:ARG:O | 1:JB:604:PHE:CD2 | 2.71 | 0.43 |
| 1:K:283:VAL:HG22 | 1:K:301:VAL:CA | 2.46 | 0.43 |
| 1:K:806:THR:HG23 | 1:L:808:ARG:HD2 | 2.00 | 0.43 |
| 1:KA:472:ASP:HB2 | 1:KA:493:GLU:HG2 | 2.00 | 0.43 |
| 1:KB:69:ALA:HB2 | 1:KB:74:LEU:HG | 1.99 | 0.43 |
| 1:KB:521:ASP:O | 1:KB:545:TRP:CD1 | 2.71 | 0.43 |
| 1:KB:775:ALA:CB | 1:LB:770:LEU:HD13 | 2.49 | 0.43 |
| 1:L:176:LEU:HD23 | 1:L:196:TRP:O | 2.18 | 0.43 |
| 1:L:231:ALA:HB3 | 1:L:244:ARG:O | 2.18 | 0.43 |
| 1:L:333:LEU:CA | 1:L:358:LEU:HD12 | 2.48 | 0.43 |
| 1:L:334:LEU:HD12 | 1:L:357:TRP:NE1 | 2.33 | 0.43 |
| 1:L:383:ASP:O | 1:L:403:GLY:HA2 | 2.19 | 0.43 |
| 1:L:518:LEU:HD12 | 1:L:547:PHE:HB3 | 2.01 | 0.43 |
| 1:L:583:VAL:HG13 | 1:L:584:ALA:N | 2.33 | 0.43 |
| 1:LA:233:ARG:HA | 1:LA:245:THR:HG23 | 2.01 | 0.43 |
| 1:LA:365:TYR:CG | 1:LA:366:VAL:N | 2.87 | 0.43 |
| 1:LA:533:ASP:OD1 | 1:LA:535:ALA:HB2 | 2.19 | 0.43 |
| 1:LB:482:PHE:HE2 | 1:LB:549:VAL:HG11 | 1.82 | 0.43 |
| 1:MA:36:ILE:HD12 | 1:MA:36:ILE:N | 2.34 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:MB:528:THR:HG23 | 1:MB:538:GLN:HA | 2.01 | 0.43 |
| 1:N:61:VAL:HG23 | 1:N:61:VAL:O | 2.18 | 0.43 |
| 1:N:168:ILE:HG21 | 1:N:174:LEU:HB2 | 1.99 | 0.43 |
| 1:N:549:VAL:HG22 | 1:N:561:LEU:HD21 | 2.01 | 0.43 |
| 1:NA:72:LEU:HD23 | 1:NA:73:VAL:N | 2.34 | 0.43 |
| 1:NA:250:LEU:HD11 | 1:NA:310:LEU:C | 2.43 | 0.43 |
| 1:NB:301:VAL:HG22 | 1:NB:302:VAL:N | 2.33 | 0.43 |
| 1:NB:665:THR:O | 1:NB:666:THR:C | 2.61 | 0.43 |
| 1:NB:737:GLY:O | 1:NB:741:VAL:HG23 | 2.18 | 0.43 |
| 1:O:767:GLU:O | 1:O:771:VAL:HG23 | 2.19 | 0.43 |
| 1:OA:16:ILE:HG23 | 1:OA:43:VAL:HG13 | 2.00 | 0.43 |
| 1:OA:173:ALA:O | 1:OA:215:LEU:HD12 | 2.19 | 0.43 |
| 1:OA:294:ASN:OD1 | 1:OA:314:GLU:HG3 | 2.18 | 0.43 |
| 1:OA:539:LEU:HD12 | 1:OA:539:LEU:N | 2.34 | 0.43 |
| 1:OA:779:LEU:HD11 | 1:PA:773:ALA:HB3 | 2.00 | 0.43 |
| 1:OB:37:ARG:N | 1:OB:37:ARG:HD2 | 2.34 | 0.43 |
| 1:OB:51:VAL:O | 1:OB:96:PRO:HA | 2.19 | 0.43 |
| 1:OB:144:LEU:HD12 | 1:OB:144:LEU:O | 2.19 | 0.43 |
| 1:OB:342:GLU:O | 1:OB:346:GLU:HA | 2.18 | 0.43 |
| 1:P:175:ARG:HA | 1:P:197:LEU:HD23 | 2.00 | 0.43 |
| 1:PA:324:TYR:O | 1:PA:364:GLU:HB2 | 2.19 | 0.43 |
| 1:PA:518:LEU:HA | 1:PA:547:PHE:HB2 | 2.01 | 0.43 |
| 1:PA:806:THR:N | 1:PA:807:ILE:HD12 | 2.34 | 0.43 |
| 1:PB:335:ARG:HB2 | 1:PB:374:VAL:HG21 | 2.01 | 0.43 |
| 1:PB:762:VAL:HG23 | 1:PB:763:GLN:N | 2.34 | 0.43 |
| 1:Q:333:LEU:O | 1:Q:334:LEU:HD23 | 2.19 | 0.43 |
| 1:Q:531:THR:HA | 1:Q:583:VAL:HG22 | 2.00 | 0.43 |
| 1:QA:147:GLY:N | 1:QA:148:PRO:HD2 | 2.34 | 0.43 |
| 1:QA:537:LEU:HA | 1:QA:645:PRO:HA | 2.01 | 0.43 |
| 1:QA:761:ARG:CG | 1:RA:755:THR:HG23 | 2.49 | 0.43 |
| 1:QB:472:ASP:O | 1:QB:476:LYS:HA | 2.19 | 0.43 |
| 1:R:333:LEU:HA | 1:R:358:LEU:HA | 2.00 | 0.43 |
| 1:RA:174:LEU:HD21 | 1:RA:212:VAL:HB | 2.01 | 0.43 |
| 1:RB:736:GLU:OE2 | 1:SB:726:ALA:O | 2.37 | 0.43 |
| 1:RB:797:GLN:HG2 | 1:SB:792:VAL:HG22 | 2.01 | 0.43 |
| 1:S:56:ARG:O | 1:S:56:ARG:HG2 | 2.18 | 0.43 |
| 1:S:88:LEU:HD11 | 1:S:155:LYS:HA | 2.00 | 0.43 |
| 1:SA:16:ILE:HG23 | 1:SA:45:PHE:O | 2.19 | 0.43 |
| 1:SA:163:ILE:HD12 | 1:SA:206:PRO:O | 2.18 | 0.43 |
| 1:SA:526:VAL:HG13 | 1:SA:538:GLN:OE1 | 2.19 | 0.43 |
| 1:SB:17:HIS:O | 1:SB:44:LEU:HD13 | 2.18 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:SB:59:CYS:HB3 | 1:SB:107:LYS:O | 2.19 | 0.43 |
| 1:SB:179:ARG:HE | 1:SB:209:PHE:HA | 1.84 | 0.43 |
| 1:T:88:LEU:HD11 | 1:T:155:LYS:HA | 2.00 | 0.43 |
| 1:TA:522:PHE:CZ | 1:TA:524:THR:HG22 | 2.53 | 0.43 |
| 1:TB:5:GLU:O | 1:TB:7:ILE:N | 2.52 | 0.43 |
| 1:TB:125:ALA:HB2 | 1:TB:143:TRP:CZ3 | 2.54 | 0.43 |
| 1:TB:198:VAL:O | 1:TB:198:VAL:HG13 | 2.19 | 0.43 |
| 1:TB:230:ARG:HE | 1:TB:268:LEU:HD21 | 1.83 | 0.43 |
| 1:TB:424:GLU:HG2 | 1:TB:425:GLU:N | 2.34 | 0.43 |
| 1:UA:472:ASP:HA | 1:UA:493:GLU:HA | 2.01 | 0.43 |
| 1:UA:779:LEU:HD11 | 1:VA:774:ARG:NE | 2.34 | 0.43 |
| 1:V:34:THR:HG23 | 1:W:23:SER:C | 2.44 | 0.43 |
| 1:VA:82:ARG:O | 1:VA:83:LEU:HD12 | 2.19 | 0.43 |
| 1:VA:374:VAL:HG12 | 1:VA:375:GLU:N | 2.33 | 0.43 |
| 1:VB:28:VAL:HG22 | 1:VB:29:GLU:N | 2.34 | 0.43 |
| 1:VB:82:ARG:HD3 | 1:VB:82:ARG:H | 1.83 | 0.43 |
| 1:VB:424:GLU:N | 1:VB:424:GLU:OE1 | 2.52 | 0.43 |
| 1:VB:543:TYR:HD1 | 1:VB:638:VAL:HG13 | 1.84 | 0.43 |
| 1:WB:163:ILE:HD12 | 1:WB:206:PRO:HG2 | 2.01 | 0.43 |
| 1:WB:301:VAL:HG22 | 1:WB:302:VAL:N | 2.33 | 0.43 |
| 1:WB:386:GLU:O | 1:WB:402:ILE:HG23 | 2.19 | 0.43 |
| 1:WB:425:GLU:O | 1:WB:426:LEU:C | 2.62 | 0.43 |
| 1:X:662:ILE:HD13 | 1:Y:588:PHE:CZ | 2.54 | 0.43 |
| 1:XA:281:TYR:CD1 | 1:XA:282:CYS:N | 2.86 | 0.43 |
| 1:XB:16:ILE:HG22 | 1:XB:17:HIS:O | 2.18 | 0.43 |
| 1:XB:65:VAL:CG2 | 1:XB:73:VAL:HG13 | 2.48 | 0.43 |
| 1:Y:179:ARG:HE | 1:Y:211:GLU:HB2 | 1.83 | 0.43 |
| 1:YA:159:VAL:HG12 | 1:YA:160:VAL:N | 2.33 | 0.43 |
| 1:YA:166:THR:O | 1:YA:203:ALA:HA | 2.19 | 0.43 |
| 1:YB:346:GLU:O | 1:YB:346:GLU:HG2 | 2.19 | 0.43 |
| 1:Z:8:ILE:HB | 1:Z:37:ARG:HE | 1.84 | 0.43 |
| 1:Z:516:LEU:HD11 | 1:Z:567:PHE:CE1 | 2.54 | 0.43 |
| 1:ZA:332:LEU:HA | 1:ZA:376:GLU:HA | 2.01 | 0.43 |
| 1:ZA:390:VAL:HG12 | 1:ZA:408:LEU:CD2 | 2.49 | 0.43 |
| 1:ZA:722:ALA:O | 1:ZA:723:LYS:C | 2.62 | 0.43 |
| 1:AB:250:LEU:O | 1:AB:252:THR:HG23 | 2.19 | 0.43 |
| 1:AB:336:ALA:HB3 | 1:AB:354:GLY:N | 2.33 | 0.43 |
| 1:AB:604:PHE:HB3 | 1:AB:623:ARG:HE | 1.83 | 0.43 |
| 1:AB:790:VAL:HG21 | 1:BB:785:GLN:HG2 | 2.01 | 0.43 |
| 1:AC:144:LEU:HD22 | 1:AC:163:ILE:HD12 | 2.00 | 0.43 |
| 1:B:107:LYS:CG | 1:B:108:ASP:N | 2.82 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:B:122:HIS:CG | 1:B:123:LEU:N | 2.87 | 0.43 |
| 1:B:129:PHE:CD1 | 1:B:137:VAL:HG11 | 2.53 | 0.43 |
| 1:B:168:ILE:O | 1:B:168:ILE:HG13 | 2.18 | 0.43 |
| 1:B:180:LYS:HA | 1:B:192:THR:OG1 | 2.19 | 0.43 |
| 1:B:236:ARG:HA | 1:B:241:VAL:O | 2.19 | 0.43 |
| 1:BA:283:VAL:CG1 | 1:BA:301:VAL:HG22 | 2.38 | 0.43 |
| 1:BA:333:LEU:HD12 | 1:BA:334:LEU:H | 1.83 | 0.43 |
| 1:BA:341:GLU:O | 1:BA:342:GLU:HB2 | 2.18 | 0.43 |
| 1:BA:358:LEU:HD23 | 1:BA:359:ILE:N | 2.34 | 0.43 |
| 1:BA:398:VAL:HG11 | 1:BA:415:TRP:CD2 | 2.53 | 0.43 |
| 1:BA:398:VAL:HG12 | 1:BA:491:PRO:HB3 | 2.01 | 0.43 |
| 1:BB:130:GLU:HA | 1:BB:135:ASP:HA | 2.01 | 0.43 |
| 1:C:8:ILE:H | 1:C:8:ILE:HD12 | 1.84 | 0.43 |
| 1:C:221:LEU:HD11 | 1:C:251:VAL:CG2 | 2.49 | 0.43 |
| 1:C:285:LEU:HD21 | 1:C:317:GLU:HA | 2.01 | 0.43 |
| 1:CA:10:ILE:O | 1:CA:10:ILE:HG13 | 2.18 | 0.43 |
| 1:CA:166:THR:HG22 | 1:CA:204:TYR:O | 2.18 | 0.43 |
| 1:CA:203:ALA:HB2 | 1:DA:192:THR:HB | 2.01 | 0.43 |
| 1:CA:388:ILE:HG13 | 1:CA:401:VAL:HG22 | 2.01 | 0.43 |
| 1:CA:462:VAL:HG12 | 1:CA:466:ALA:HB3 | 2.00 | 0.43 |
| 1:D:115:VAL:HG23 | 1:D:147:GLY:O | 2.18 | 0.43 |
| 1:D:589:ASP:C | 1:D:593:LYS:HZ3 | 2.27 | 0.43 |
| 1:D:696:GLN:HA | 1:D:699:ALA:HB3 | 2.01 | 0.43 |
| 1:DA:346:GLU:O | 1:DA:347:GLU:HG3 | 2.19 | 0.43 |
| 1:DA:471:TYR:CZ | 1:DA:476:LYS:HA | 2.54 | 0.43 |
| 1:DB:511:ARG:NH2 | 1:DB:513:ALA:HB2 | 2.34 | 0.43 |
| 1:EA:604:PHE:HB3 | 1:EA:623:ARG:HB3 | 2.01 | 0.43 |
| 1:EB:3:THR:O | 1:EB:6:PHE:CD2 | 2.72 | 0.43 |
| 1:EB:464:HIS:CG | 1:EB:484:PRO:HB3 | 2.53 | 0.43 |
| 1:F:58:TYR:CE1 | 1:F:59:CYS:O | 2.72 | 0.43 |
| 1:F:227:LEU:HD12 | 1:F:228:HIS:N | 2.33 | 0.43 |
| 1:F:556:GLN:N | 1:F:556:GLN:CD | 2.76 | 0.43 |
| 1:FA:545:TRP:HA | 1:FA:634:VAL:O | 2.19 | 0.43 |
| 1:FA:765:VAL:O | 1:FA:769:GLU:HG3 | 2.18 | 0.43 |
| 1:FB:260:VAL:O | 1:FB:260:VAL:HG13 | 2.18 | 0.43 |
| 1:FB:517:LEU:O | 1:FB:518:LEU:HB3 | 2.19 | 0.43 |
| 1:G:530:GLU:OE1 | 1:G:530:GLU:HA | 2.19 | 0.43 |
| 1:GA:54:PRO:HA | 1:HA:86:ALA:HB1 | 2.00 | 0.43 |
| 1:GA:233:ARG:HA | 1:GA:245:THR:HG23 | 2.01 | 0.43 |
| 1:GA:468:VAL:O | 1:GA:480:VAL:HA | 2.19 | 0.43 |
| 1:GA:731:GLU:CD | 1:GA:734:ARG:HE | 2.27 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:GB:641:GLN:N | 1:GB:641:GLN:OE1 | 2.52 | 0.43 |
| 1:H:68:ASP:OD1 | 1:H:74:LEU:HD12 | 2.19 | 0.43 |
| 1:H:123:LEU:HB2 | 1:H:143:TRP:CE2 | 2.54 | 0.43 |
| 1:HA:280:ASN:HA | 1:HA:322:ASP:OD1 | 2.19 | 0.43 |
| 1:HB:472:ASP:HA | 1:HB:493:GLU:OE1 | 2.18 | 0.43 |
| 1:I:8:ILE:N | 1:I:37:ARG:NH2 | 2.66 | 0.43 |
| 1:I:521:ASP:O | 1:I:545:TRP:CD1 | 2.72 | 0.43 |
| 1:IA:170:GLN:HB3 | 1:JA:233:ARG:HE | 1.83 | 0.43 |
| 1:IA:523:PHE:O | 1:IA:543:TYR:CD2 | 2.72 | 0.43 |
| 1:IA:527:ILE:HD12 | 1:IA:527:ILE:H | 1.84 | 0.43 |
| 1:IB:15:TYR:HA | 1:IB:30:VAL:HA | 2.00 | 0.43 |
| 1:J:126:LEU:HD21 | 1:J:158:GLU:HB3 | 1.99 | 0.43 |
| 1:J:126:LEU:O | 1:J:127:LEU:HD22 | 2.18 | 0.43 |
| 1:J:174:LEU:HD12 | 1:J:214:ASP:O | 2.18 | 0.43 |
| 1:J:556:GLN:N | 1:J:556:GLN:CD | 2.77 | 0.43 |
| 1:J:671:ALA:HA | 1:J:674:LYS:HE3 | 2.01 | 0.43 |
| 1:JA:122:HIS:HA | 1:JA:144:LEU:HA | 2.01 | 0.43 |
| 1:JA:540:GLN:C | 1:JA:541:LEU:HD12 | 2.44 | 0.43 |
| 1:K:197:LEU:CD1 | 1:K:263:VAL:HG13 | 2.48 | 0.43 |
| 1:K:497:VAL:CA | 1:K:514:LEU:HD12 | 2.46 | 0.43 |
| 1:K:659:GLN:O | 1:K:663:GLU:OE1 | 2.36 | 0.43 |
| 1:KA:786:GLN:OE1 | 1:LA:781:VAL:HG11 | 2.18 | 0.43 |
| 1:KB:218:ALA:HA | 1:KB:260:VAL:HA | 2.00 | 0.43 |
| 1:KB:358:LEU:HD12 | 1:KB:359:ILE:H | 1.84 | 0.43 |
| 1:KB:459:SER:HB2 | 1:KB:486:LEU:HD21 | 2.00 | 0.43 |
| 1:L:747:LYS:O | 1:L:751:LEU:HD23 | 2.18 | 0.43 |
| 1:LA:465:ASN:O | 1:LA:517:LEU:HD13 | 2.19 | 0.43 |
| 1:LB:157:VAL:HG12 | 1:LB:158:GLU:N | 2.33 | 0.43 |
| 1:LB:506:LYS:O | 1:LB:507:ARG:C | 2.62 | 0.43 |
| 1:LB:516:LEU:HD12 | 1:LB:517:LEU:H | 1.82 | 0.43 |
| 1:M:398:VAL:HG11 | 1:M:415:TRP:CE3 | 2.54 | 0.43 |
| 1:M:529:ILE:HD13 | 1:M:579:VAL:HG12 | 2.01 | 0.43 |
| 1:MB:165:ALA:HB1 | 1:MB:203:ALA:O | 2.18 | 0.43 |
| 1:N:144:LEU:HD23 | 1:N:144:LEU:N | 2.33 | 0.43 |
| 1:N:151:TYR:OH | 1:N:154:ARG:HG3 | 2.18 | 0.43 |
| 1:NA:473:TYR:N | 1:NA:473:TYR:CD1 | 2.87 | 0.43 |
| 1:NA:606:PHE:HB2 | 1:NA:623:ARG:CZ | 2.49 | 0.43 |
| 1:NB:326:LEU:O | 1:NB:362:PRO:HA | 2.19 | 0.43 |
| 1:NB:704:LYS:HA | 1:NB:707:LEU:HD12 | 2.00 | 0.43 |
| 1:O:51:VAL:O | 1:O:96:PRO:HA | 2.19 | 0.43 |
| 1:O:326:LEU:O | 1:O:362:PRO:HA | 2.19 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OA:496:THR:HG21 | 1:OA:562:PHE:CB | 2.48 | 0.43 |
| 1:OB:460:TYR:O | 1:OB:487:VAL:HG12 | 2.19 | 0.43 |
| 1:P:17:HIS:HB2 | 1:P:44:LEU:HB2 | 2.01 | 0.43 |
| 1:PA:46:ALA:HB1 | 1:PA:47:PRO:HD2 | 2.00 | 0.43 |
| 1:PA:50:MET:O | 1:PA:52:THR:HG23 | 2.19 | 0.43 |
| 1:PA:417:LYS:NZ | 1:PA:489:LEU:HD13 | 2.34 | 0.43 |
| 1:PA:746:LEU:HD13 | 1:QA:737:GLY:C | 2.43 | 0.43 |
| 1:PB:332:LEU:HD23 | 1:PB:333:LEU:C | 2.44 | 0.43 |
| 1:PB:416:GLU:CG | 1:PB:455:THR:HG22 | 2.49 | 0.43 |
| 1:Q:169:ARG:HA | 1:Q:202:GLY:H | 1.84 | 0.43 |
| 1:QA:349:VAL:HG11 | 1:QA:357:TRP:NE1 | 2.34 | 0.43 |
| 1:QA:606:PHE:HB2 | 1:QA:622:PRO:HA | 2.00 | 0.43 |
| 1:QA:795:PHE:CD2 | 1:QA:799:THR:HG21 | 2.54 | 0.43 |
| 1:QB:165:ALA:HB2 | 1:QB:205:LEU:HB2 | 2.01 | 0.43 |
| 1:QB:776:GLN:NE2 | 1:RB:770:LEU:HD21 | 2.34 | 0.43 |
| 1:SB:389:TYR:CZ | 1:SB:457:VAL:HA | 2.53 | 0.43 |
| 1:TA:176:LEU:HD23 | 1:TA:196:TRP:O | 2.18 | 0.43 |
| 1:TB:37:ARG:N | 1:TB:37:ARG:HD2 | 2.34 | 0.43 |
| 1:TB:53:VAL:HG22 | 1:TB:109:ILE:CD1 | 2.48 | 0.43 |
| 1:TB:121:LEU:C | 1:TB:121:LEU:HD12 | 2.44 | 0.43 |
| 1:UB:181:GLU:OE2 | 1:UB:191:VAL:HG12 | 2.18 | 0.43 |
| 1:UB:323:VAL:HG12 | 1:UB:366:VAL:HB | 2.00 | 0.43 |
| 1:V:499:SER:HB2 | 1:V:512:ARG:HE | 1.83 | 0.43 |
| 1:VB:423:VAL:HG13 | 1:VB:424:GLU:H | 1.84 | 0.43 |
| 1:VB:502:ALA:O | 1:VB:505:PRO:O | 2.37 | 0.43 |
| 1:W:99:LEU:HD11 | 1:W:105:LEU:HB2 | 2.00 | 0.43 |
| 1:W:128:ASP:HA | 1:W:138:VAL:HA | 2.01 | 0.43 |
| 1:W:539:LEU:HD11 | 1:W:640:VAL:CG1 | 2.46 | 0.43 |
| 1:WA:522:PHE:CD2 | 1:WA:542:ALA:HB1 | 2.54 | 0.43 |
| 1:WB:174:LEU:HD12 | 1:WB:214:ASP:C | 2.44 | 0.43 |
| 1:WB:462:VAL:N | 1:WB:485:GLU:O | 2.51 | 0.43 |
| 1:WB:530:GLU:HG2 | 1:WB:534:HIS:HA | 2.01 | 0.43 |
| 1:XA:229:LEU:HD21 | 1:XA:259:HIS:HE2 | 1.84 | 0.43 |
| 1:XA:251:VAL:HG21 | 1:XA:259:HIS:CD2 | 2.53 | 0.43 |
| 1:XA:279:HIS:CD2 | 1:YA:337:LEU:HB3 | 2.54 | 0.43 |
| 1:XB:226:ALA:C | 1:XB:270:VAL:HG13 | 2.44 | 0.43 |
| 1:XB:624:ASP:OD1 | 1:XB:625:GLN:OE1 | 2.36 | 0.43 |
| 1:Y:224:LYS:HG2 | 1:Z:296:LEU:HD21 | 1.99 | 0.43 |
| 1:Y:228:HIS:HB3 | 1:Y:269:GLY:O | 2.19 | 0.43 |
| 1:Y:390:VAL:HG22 | 1:Y:391:GLN:N | 2.33 | 0.43 |
| 1:Y:549:VAL:HG11 | 1:Y:552:ARG:HE | 1.84 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:YA:3:THR:HG22 | 1:YA:3:THR:O | 2.18 | 0.43 |
| 1:YA:389:TYR:O | 1:YA:414:LEU:HA | 2.19 | 0.43 |
| 1:YB:16:ILE:HG22 | 1:YB:17:HIS:N | 2.33 | 0.43 |
| 1:YB:106:GLU:OE1 | 1:YB:106:GLU:N | 2.51 | 0.43 |
| 1:YB:173:ALA:HB3 | 1:YB:216:VAL:HG13 | 2.01 | 0.43 |
| 1:Z:58:TYR:CE1 | 1:Z:92:LEU:HB2 | 2.54 | 0.43 |
| 1:Z:60:THR:HA | 1:Z:89:GLU:O | 2.19 | 0.43 |
| 1:A:68:ASP:OD1 | 1:A:74:LEU:HD12 | 2.19 | 0.42 |
| 1:A:628:PHE:CE1 | 1:A:635:VAL:HG23 | 2.54 | 0.42 |
| 1:A:747:LYS:O | 1:A:751:LEU:HD23 | 2.19 | 0.42 |
| 1:AA:380:ILE:H | 1:AA:380:ILE:HD12 | 1.84 | 0.42 |
| 1:AA:566:ASP:OD1 | 1:AA:568:VAL:HG12 | 2.18 | 0.42 |
| 1:AA:769:GLU:HA | 1:BA:766:ARG:HH22 | 1.84 | 0.42 |
| 1:AB:15:TYR:HB3 | 1:AB:50:MET:HG2 | 2.00 | 0.42 |
| 1:AB:359:ILE:O | 1:AB:359:ILE:HG23 | 2.19 | 0.42 |
| 1:AC:166:THR:O | 1:AC:203:ALA:HB1 | 2.19 | 0.42 |
| 1:AC:524:THR:HG21 | 1:AC:641:GLN:NE2 | 2.34 | 0.42 |
| 1:B:61:VAL:HG12 | 1:B:105:LEU:CD1 | 2.49 | 0.42 |
| 1:B:227:LEU:HD12 | 1:B:228:HIS:H | 1.84 | 0.42 |
| 1:BA:408:LEU:HD21 | 1:BA:414:LEU:CD2 | 2.49 | 0.42 |
| 1:BA:516:LEU:HD13 | 1:BA:567:PHE:CE1 | 2.54 | 0.42 |
| 1:BA:521:ASP:CG | 1:BA:522:PHE:H | 2.26 | 0.42 |
| 1:BB:121:LEU:O | 1:BB:123:LEU:HG | 2.19 | 0.42 |
| 1:C:17:HIS:CD2 | 1:C:28:VAL:HG23 | 2.54 | 0.42 |
| 1:CA:332:LEU:HA | 1:CA:376:GLU:HA | 2.01 | 0.42 |
| 1:CB:325:VAL:O | 1:CB:325:VAL:HG13 | 2.19 | 0.42 |
| 1:CB:390:VAL:HG12 | 1:CB:408:LEU:HD21 | 2.00 | 0.42 |
| 1:D:209:PHE:CE1 | 1:D:210:GLU:HG2 | 2.54 | 0.42 |
| 1:D:384:GLU:O | 1:D:402:ILE:HG22 | 2.18 | 0.42 |
| 1:DA:8:ILE:H | 1:DA:8:ILE:HD12 | 1.84 | 0.42 |
| 1:DB:229:LEU:CD2 | 1:DB:267:VAL:HG22 | 2.49 | 0.42 |
| 1:DB:487:VAL:HG22 | 1:DB:488:SER:N | 2.34 | 0.42 |
| 1:DB:731:GLU:O | 1:DB:734:ARG:HB3 | 2.19 | 0.42 |
| 1:DB:784:ALA:HA | 1:DB:787:LEU:HD12 | 2.01 | 0.42 |
| 1:E:575:ILE:HD11 | 1:E:603:VAL:HA | 2.00 | 0.42 |
| 1:E:797:GLN:OE1 | 1:F:792:VAL:HG11 | 2.19 | 0.42 |
| 1:EA:174:LEU:HD12 | 1:EA:214:ASP:C | 2.44 | 0.42 |
| 1:F:117:PRO:HA | 1:F:147:GLY:HA2 | 2.00 | 0.42 |
| 1:G:50:MET:HB3 | 1:G:97:PHE:H | 1.84 | 0.42 |
| 1:G:59:CYS:SG | 1:G:109:ILE:HD13 | 2.58 | 0.42 |
| 1:GA:318:GLN:HB2 | 1:GA:321:GLN:HE21 | 1.84 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:GA:471:TYR:HD2 | 1:GA:478:ALA:HB2 | 1.84 | 0.42 |
| 1:GB:129:PHE:CE1 | 1:GB:156:GLU:HB2 | 2.54 | 0.42 |
| 1:GB:388:ILE:O | 1:GB:400:ALA:HA | 2.19 | 0.42 |
| 1:GB:625:GLN:HA | 1:GB:635:VAL:O | 2.19 | 0.42 |
| 1:H:13:TYR:HA | 1:H:50:MET:HE2 | 2.00 | 0.42 |
| 1:H:331:GLY:HA2 | 1:H:360:ARG:HA | 2.00 | 0.42 |
| 1:HA:530:GLU:HA | 1:HA:535:ALA:O | 2.19 | 0.42 |
| 1:HA:661:ALA:O | 1:HA:665:THR:HG23 | 2.19 | 0.42 |
| 1:HB:19:LEU:O | 1:HB:41:GLU:HA | 2.19 | 0.42 |
| 1:I:360:ARG:CZ | 1:I:407:MET:HB3 | 2.49 | 0.42 |
| 1:I:568:VAL:HG13 | 1:I:569:GLY:N | 2.34 | 0.42 |
| 1:IA:124:LYS:HG3 | 1:IA:141:ASP:O | 2.19 | 0.42 |
| 1:IA:405:THR:HG23 | 1:JA:396:GLY:N | 2.34 | 0.42 |
| 1:IB:15:TYR:HB3 | 1:IB:30:VAL:CG2 | 2.47 | 0.42 |
| 1:J:8:ILE:N | 1:J:37:ARG:NH2 | 2.67 | 0.42 |
| 1:J:411:ASP:OD1 | 1:J:411:ASP:C | 2.62 | 0.42 |
| 1:JB:181:GLU:HG2 | 1:JB:192:THR:H | 1.83 | 0.42 |
| 1:K:62:ALA:N | 1:K:104:VAL:O | 2.52 | 0.42 |
| 1:K:546:HIS:NE2 | 1:K:634:VAL:HG11 | 2.33 | 0.42 |
| 1:KA:122:HIS:HD2 | 1:KA:208:VAL:HG12 | 1.81 | 0.42 |
| 1:KA:177:ARG:HA | 1:KA:194:GLU:O | 2.19 | 0.42 |
| 1:KA:489:LEU:HD11 | 1:KA:495:PHE:CD2 | 2.54 | 0.42 |
| 1:KB:406:TYR:CG | 1:KB:407:MET:N | 2.86 | 0.42 |
| 1:KB:425:GLU:HG2 | 1:KB:426:LEU:N | 2.34 | 0.42 |
| 1:L:81:VAL:O | 1:L:83:LEU:HD12 | 2.19 | 0.42 |
| 1:L:377:ARG:HB3 | 1:L:407:MET:HE1 | 2.01 | 0.42 |
| 1:L:388:ILE:HA | 1:L:457:VAL:HG23 | 2.01 | 0.42 |
| 1:L:389:TYR:CE2 | 1:L:457:VAL:HA | 2.54 | 0.42 |
| 1:LA:59:CYS:SG | 1:LA:109:ILE:HD13 | 2.59 | 0.42 |
| 1:LA:471:TYR:HA | 1:LA:477:ARG:O | 2.19 | 0.42 |
| 1:M:60:THR:HG23 | 1:M:107:LYS:HE3 | 2.01 | 0.42 |
| 1:M:457:VAL:HG13 | 1:M:489:LEU:O | 2.19 | 0.42 |
| 1:M:464:HIS:ND1 | 1:N:496:THR:HG23 | 2.34 | 0.42 |
| 1:M:790:VAL:HG13 | 1:M:793:LYS:HZ1 | 1.84 | 0.42 |
| 1:MA:18:VAL:O | 1:MA:26:SER:HA | 2.18 | 0.42 |
| 1:MA:122:HIS:ND1 | 1:MA:123:LEU:N | 2.67 | 0.42 |
| 1:MA:590:ASP:OD1 | 1:MA:590:ASP:N | 2.51 | 0.42 |
| 1:N:333:LEU:HB3 | 1:N:375:GLU:O | 2.19 | 0.42 |
| 1:N:758:GLU:O | 1:N:762:VAL:HG13 | 2.18 | 0.42 |
| 1:NB:15:TYR:HE1 | 1:NB:50:MET:HA | 1.84 | 0.42 |
| 1:NB:230:ARG:HB3 | 1:NB:266:GLU:HB3 | 2.01 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:NB:405:THR:HG23 | 1:OB:396:GLY:CA | 2.49 | 0.42 |
| 1:NB:470:VAL:HG22 | 1:NB:495:PHE:HA | 2.01 | 0.42 |
| 1:OA:471:TYR:CE1 | 1:OA:476:LYS:HA | 2.54 | 0.42 |
| 1:OA:806:THR:HG22 | 1:OA:806:THR:O | 2.19 | 0.42 |
| 1:OB:5:GLU:CD | 1:OB:8:ILE:HD13 | 2.44 | 0.42 |
| 1:OB:14:HIS:HA | 1:OB:48:MET:O | 2.18 | 0.42 |
| 1:OB:173:ALA:HA | 1:OB:198:VAL:O | 2.19 | 0.42 |
| 1:OB:227:LEU:HD12 | 1:OB:228:HIS:N | 2.34 | 0.42 |
| 1:OB:325:VAL:HG11 | 1:PB:335:ARG:NH1 | 2.34 | 0.42 |
| 1:OB:332:LEU:HD23 | 1:OB:333:LEU:C | 2.44 | 0.42 |
| 1:OB:794:LYS:CG | 1:PB:792:VAL:HG22 | 2.48 | 0.42 |
| 1:P:333:LEU:HD13 | 1:P:410:GLN:HB3 | 2.01 | 0.42 |
| 1:PA:502:ALA:HB3 | 1:PA:510:ALA:CB | 2.48 | 0.42 |
| 1:PA:531:THR:HG21 | 1:PA:588:PHE:CA | 2.49 | 0.42 |
| 1:PA:684:ALA:O | 1:PA:688:LEU:HD23 | 2.19 | 0.42 |
| 1:PB:9:ARG:HA | 1:PB:34:THR:HG22 | 2.01 | 0.42 |
| 1:PB:768:LEU:HD13 | 1:QB:759:LEU:HD22 | 2.00 | 0.42 |
| 1:Q:24:ASN:O | 1:Q:80:GLN:NE2 | 2.52 | 0.42 |
| 1:QA:65:VAL:HG13 | 1:QA:103:GLU:HB2 | 2.01 | 0.42 |
| 1:QA:392:ASP:CG | 1:QA:395:THR:HG22 | 2.44 | 0.42 |
| 1:QB:531:THR:HG21 | 1:QB:588:PHE:HB2 | 2.01 | 0.42 |
| 1:R:587:THR:HG23 | 1:R:590:ASP:H | 1.83 | 0.42 |
| 1:RA:112:LEU:HD11 | 1:RA:152:ILE:HD13 | 2.01 | 0.42 |
| 1:RA:326:LEU:HD21 | 1:RA:376:GLU:CG | 2.49 | 0.42 |
| 1:RB:62:ALA:O | 1:RB:104:VAL:O | 2.37 | 0.42 |
| 1:RB:388:ILE:N | 1:RB:457:VAL:HG23 | 2.34 | 0.42 |
| 1:S:137:VAL:HG23 | 1:S:141:ASP:HB3 | 2.01 | 0.42 |
| 1:SB:168:ILE:CD1 | 1:SB:200:THR:HG23 | 2.49 | 0.42 |
| 1:SB:703:ARG:HH21 | 1:TB:693:ILE:HD11 | 1.83 | 0.42 |
| 1:T:178:ALA:HB3 | 1:T:191:VAL:O | 2.19 | 0.42 |
| 1:TA:595:SER:OG | 1:TA:599:ILE:CD1 | 2.67 | 0.42 |
| 1:TB:626:ALA:HB3 | 1:TB:635:VAL:HB | 2.01 | 0.42 |
| 1:TB:712:LEU:O | 1:TB:716:VAL:HG23 | 2.18 | 0.42 |
| 1:UA:175:ARG:NH1 | 1:UA:213:LEU:HD22 | 2.34 | 0.42 |
| 1:UA:284:ILE:HD11 | 1:UA:300:ARG:HB2 | 2.00 | 0.42 |
| 1:UB:470:VAL:HG13 | 1:UB:494:GLN:C | 2.44 | 0.42 |
| 1:UB:655:GLN:HA | 1:UB:658:VAL:HG12 | 2.00 | 0.42 |
| 1:V:238:PHE:CE2 | 1:V:239:ARG:HD2 | 2.54 | 0.42 |
| 1:VA:49:ARG:HH22 | 1:WA:77:VAL:HG22 | 1.83 | 0.42 |
| 1:VA:323:VAL:HG21 | 1:WA:338:GLN:HG2 | 2.00 | 0.42 |
| 1:VA:364:GLU:HB2 | 1:WA:339:PRO:HD3 | 2.01 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:VA:544:ASN:O | 1:VA:635:VAL:HA | 2.19 | 0.42 |
| 1:VA:574:ALA:O | 1:VA:578:ARG:HD3 | 2.19 | 0.42 |
| 1:W:10:ILE:HG22 | 1:W:16:ILE:CD1 | 2.48 | 0.42 |
| 1:W:52:THR:HG22 | 1:W:96:PRO:CA | 2.49 | 0.42 |
| 1:W:359:ILE:O | 1:W:359:ILE:HG23 | 2.17 | 0.42 |
| 1:WA:144:LEU:C | 1:WA:144:LEU:HD12 | 2.44 | 0.42 |
| 1:WA:227:LEU:HD12 | 1:WA:270:VAL:HG22 | 2.01 | 0.42 |
| 1:WB:580:ARG:HA | 1:WB:583:VAL:HG12 | 2.01 | 0.42 |
| 1:X:340:LEU:HD11 | 1:X:357:TRP:CZ2 | 2.54 | 0.42 |
| 1:X:363:LEU:CA | 1:Y:353:ALA:HB3 | 2.49 | 0.42 |
| 1:XA:7:ILE:HG23 | 1:XA:36:ILE:HD11 | 2.01 | 0.42 |
| 1:XB:17:HIS:HB2 | 1:XB:44:LEU:HB2 | 2.00 | 0.42 |
| 1:XB:109:ILE:H | 1:XB:109:ILE:HD12 | 1.84 | 0.42 |
| 1:XB:504:ARG:O | 1:XB:526:VAL:HG23 | 2.19 | 0.42 |
| 1:Y:536:ARG:HG3 | 1:Y:646:VAL:HB | 2.01 | 0.42 |
| 1:YA:302:VAL:HG12 | 1:YA:303:LYS:N | 2.34 | 0.42 |
| 1:YA:337:LEU:HD21 | 1:YA:372:GLU:OE1 | 2.19 | 0.42 |
| 1:YA:424:GLU:HG2 | 1:YA:514:LEU:HD22 | 2.00 | 0.42 |
| 1:YB:18:VAL:HB | 1:YB:41:GLU:HB3 | 1.99 | 0.42 |
| 1:YB:405:THR:HG23 | 1:ZB:396:GLY:HA3 | 2.00 | 0.42 |
| 1:YB:483:GLY:H | 1:YB:518:LEU:HD22 | 1.84 | 0.42 |
| 1:YB:790:VAL:HG22 | 1:ZB:785:GLN:HG3 | 1.99 | 0.42 |
| 1:Z:528:THR:HG23 | 1:Z:646:VAL:HG21 | 2.01 | 0.42 |
| 1:Z:541:LEU:HD23 | 1:Z:638:VAL:HG12 | 2.01 | 0.42 |
| 1:Z:580:ARG:HA | 1:Z:583:VAL:HG12 | 2.01 | 0.42 |
| 1:ZA:121:LEU:HA | 1:ZA:162:ILE:HG12 | 2.01 | 0.42 |
| 1:ZA:131:ASP:OD2 | 1:ZA:137:VAL:HG23 | 2.19 | 0.42 |
| 1:ZA:190:ARG:HB3 | 1:ZA:196:TRP:CZ3 | 2.54 | 0.42 |
| 1:AA:197:LEU:HD21 | 1:AA:216:VAL:HG11 | 2.01 | 0.42 |
| 1:AB:276:LEU:HD22 | 1:AB:280:ASN:HB3 | 2.01 | 0.42 |
| 1:AB:462:VAL:N | 1:AB:485:GLU:O | 2.52 | 0.42 |
| 1:AB:758:GLU:O | 1:AB:762:VAL:HG22 | 2.19 | 0.42 |
| 1:AC:16:ILE:CG2 | 1:AC:17:HIS:N | 2.82 | 0.42 |
| 1:AC:276:LEU:HD22 | 1:AC:281:TYR:CA | 2.49 | 0.42 |
| 1:AC:708:GLU:HG3 | 1:ZB:716:VAL:HG11 | 2.00 | 0.42 |
| 1:AC:764:LYS:O | 1:AC:768:LEU:HB2 | 2.20 | 0.42 |
| 1:B:17:HIS:HD2 | 1:B:28:VAL:HG23 | 1.84 | 0.42 |
| 1:B:66:SER:C | 1:B:73:VAL:HG13 | 2.44 | 0.42 |
| 1:B:112:LEU:HD11 | 1:B:152:ILE:HA | 2.01 | 0.42 |
| 1:B:460:TYR:C | 1:B:486:LEU:HD12 | 2.44 | 0.42 |
| 1:BA:679:ARG:HH12 | 1:BA:680:LEU:HD21 | 1.84 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:BA:768:LEU:HD11 | 1:CA:763:GLN:HB3 | 2.00 | 0.42 |
| 1:BB:207:ALA:HB3 | 1:BB:210:GLU:HG3 | 1.99 | 0.42 |
| 1:BB:416:GLU:HG2 | 1:BB:455:THR:HG23 | 2.01 | 0.42 |
| 1:C:9:ARG:HA | 1:C:34:THR:HA | 2.00 | 0.42 |
| 1:C:467:ALA:HB2 | 1:C:518:LEU:HD23 | 2.01 | 0.42 |
| 1:CA:56:ARG:O | 1:CA:111:PRO:HA | 2.19 | 0.42 |
| 1:CA:315:GLN:CG | 1:CA:316:LEU:N | 2.82 | 0.42 |
| 1:CB:69:ALA:HB2 | 1:CB:74:LEU:HG | 2.00 | 0.42 |
| 1:D:556:GLN:CD | 1:D:556:GLN:N | 2.77 | 0.42 |
| 1:D:638:VAL:HG12 | 1:D:639:ASP:N | 2.32 | 0.42 |
| 1:DA:13:TYR:HB2 | 1:DA:49:ARG:NH1 | 2.34 | 0.42 |
| 1:DA:628:PHE:CD1 | 1:DA:633:LEU:HD23 | 2.53 | 0.42 |
| 1:DB:92:LEU:O | 1:DB:93:ALA:C | 2.62 | 0.42 |
| 1:DB:423:VAL:HG13 | 1:DB:424:GLU:OE1 | 2.18 | 0.42 |
| 1:E:82:ARG:C | 1:E:83:LEU:HD12 | 2.44 | 0.42 |
| 1:E:168:ILE:HD12 | 1:E:200:THR:O | 2.19 | 0.42 |
| 1:E:326:LEU:HD22 | 1:E:330:GLN:HB3 | 2.01 | 0.42 |
| 1:EA:358:LEU:HD23 | 1:EA:359:ILE:N | 2.34 | 0.42 |
| 1:F:107:LYS:HE3 | 1:F:110:THR:HG21 | 2.02 | 0.42 |
| 1:F:527:ILE:O | 1:F:539:LEU:N | 2.51 | 0.42 |
| 1:FB:497:VAL:HG22 | 1:FB:498:LEU:H | 1.82 | 0.42 |
| 1:G:323:VAL:HB | 1:G:364:GLU:OE2 | 2.18 | 0.42 |
| 1:GA:325:VAL:HA | 1:GA:364:GLU:HA | 2.01 | 0.42 |
| 1:GA:415:TRP:C | 1:GA:455:THR:HG22 | 2.44 | 0.42 |
| 1:GB:30:VAL:HG22 | 1:GB:31:GLY:N | 2.35 | 0.42 |
| 1:GB:227:LEU:HA | 1:GB:270:VAL:HA | 2.01 | 0.42 |
| 1:H:60:THR:HG22 | 1:H:90:ILE:HG12 | 2.00 | 0.42 |
| 1:H:371:VAL:O | 1:H:371:VAL:HG13 | 2.20 | 0.42 |
| 1:H:647:ASP:OD2 | 1:H:649:ARG:HB2 | 2.19 | 0.42 |
| 1:H:688:LEU:HA | 1:H:691:GLN:OE1 | 2.18 | 0.42 |
| 1:HA:262:ASP:HB3 | 1:HA:265:GLU:OE1 | 2.19 | 0.42 |
| 1:HB:113:GLN:HG2 | 1:HB:121:LEU:HD22 | 2.00 | 0.42 |
| 1:HB:128:ASP:OD1 | 1:HB:129:PHE:N | 2.51 | 0.42 |
| 1:HB:187:GLY:O | 1:HB:188:LYS:C | 2.59 | 0.42 |
| 1:HB:543:TYR:HD1 | 1:HB:638:VAL:HG13 | 1.85 | 0.42 |
| 1:I:114:VAL:HG23 | 1:I:149:GLY:O | 2.19 | 0.42 |
| 1:I:526:VAL:HG12 | 1:I:538:GLN:NE2 | 2.34 | 0.42 |
| 1:IB:115:VAL:HG11 | 1:IB:145:PHE:CD2 | 2.54 | 0.42 |
| 1:IB:334:LEU:O | 1:IB:357:TRP:CE3 | 2.72 | 0.42 |
| 1:JB:57:HIS:HB3 | 1:JB:109:ILE:O | 2.20 | 0.42 |
| 1:JB:425:GLU:O | 1:JB:426:LEU:C | 2.61 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:K:6:PHE:O | 1:K:36:ILE:HA | 2.19 | 0.42 |
| 1:K:363:LEU:HD23 | 1:K:363:LEU:H | 1.85 | 0.42 |
| 1:K:750:ALA:O | 1:K:754:GLU:OE1 | 2.37 | 0.42 |
| 1:KA:262:ASP:HB3 | 1:KA:265:GLU:OE1 | 2.19 | 0.42 |
| 1:KB:32:PRO:HB2 | 1:LB:24:ASN:HB2 | 2.01 | 0.42 |
| 1:KB:242:SER:HB3 | 1:KB:244:ARG:HH12 | 1.84 | 0.42 |
| 1:L:66:SER:O | 1:L:73:VAL:HA | 2.20 | 0.42 |
| 1:L:106:GLU:N | 1:L:106:GLU:OE1 | 2.51 | 0.42 |
| 1:LA:115:VAL:CG1 | 1:LA:121:LEU:HD11 | 2.49 | 0.42 |
| 1:LA:334:LEU:HD11 | 1:LA:359:ILE:CG2 | 2.49 | 0.42 |
| 1:LB:604:PHE:HB2 | 1:LB:607:GLU:OE2 | 2.19 | 0.42 |
| 1:M:13:TYR:HB3 | 1:M:49:ARG:NH1 | 2.34 | 0.42 |
| 1:M:228:HIS:CA | 1:M:250:LEU:HD23 | 2.48 | 0.42 |
| 1:M:282:CYS:O | 1:M:302:VAL:N | 2.52 | 0.42 |
| 1:M:772:TYR:HD1 | 1:N:770:LEU:HD11 | 1.82 | 0.42 |
| 1:MA:174:LEU:HD12 | 1:MA:214:ASP:O | 2.18 | 0.42 |
| 1:MA:285:LEU:HD21 | 1:MA:317:GLU:HB2 | 1.99 | 0.42 |
| 1:MA:286:ASP:OD1 | 1:MA:298:GLN:O | 2.35 | 0.42 |
| 1:MA:497:VAL:HG22 | 1:MA:498:LEU:N | 2.34 | 0.42 |
| 1:MB:487:VAL:O | 1:MB:487:VAL:HG13 | 2.18 | 0.42 |
| 1:N:65:VAL:C | 1:N:84:ARG:HE | 2.27 | 0.42 |
| 1:NA:230:ARG:HB2 | 1:NA:248:GLU:OE2 | 2.19 | 0.42 |
| 1:NA:413:VAL:HG22 | 1:NA:414:LEU:N | 2.32 | 0.42 |
| 1:NB:10:ILE:HD12 | 1:NB:30:VAL:C | 2.44 | 0.42 |
| 1:NB:188:LYS:O | 1:NB:189:GLU:C | 2.62 | 0.42 |
| 1:NB:790:VAL:HG22 | 1:OB:785:GLN:HG2 | 2.02 | 0.42 |
| 1:OA:471:TYR:HA | 1:OA:477:ARG:O | 2.18 | 0.42 |
| 1:OA:604:PHE:HZ | 1:OA:638:VAL:N | 2.17 | 0.42 |
| 1:OA:728:SER:HA | 1:PA:719:THR:HG23 | 2.01 | 0.42 |
| 1:OB:7:ILE:HG23 | 1:OB:36:ILE:HG13 | 2.02 | 0.42 |
| 1:OB:20:ASP:O | 1:OB:23:SER:O | 2.37 | 0.42 |
| 1:P:54:PRO:CB | 1:P:55:PRO:CD | 2.98 | 0.42 |
| 1:P:452:ARG:HD3 | 1:P:452:ARG:H | 1.84 | 0.42 |
| 1:PA:75:PHE:HA | 1:PA:81:VAL:HA | 2.00 | 0.42 |
| 1:PA:326:LEU:HD13 | 1:PA:331:GLY:HA2 | 2.01 | 0.42 |
| 1:PA:332:LEU:HB3 | 1:PA:376:GLU:HB2 | 2.01 | 0.42 |
| 1:PA:333:LEU:C | 1:PA:374:VAL:HB | 2.45 | 0.42 |
| 1:PA:602:ALA:HB2 | 1:PA:607:GLU:OE2 | 2.18 | 0.42 |
| 1:PB:345:ASP:OD2 | 1:PB:349:VAL:HB | 2.19 | 0.42 |
| 1:PB:349:VAL:HB | 1:PB:351:HIS:CE1 | 2.54 | 0.42 |
| 1:PB:380:ILE:H | 1:PB:380:ILE:HD12 | 1.83 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:Q:275:THR:HA | 1:Q:307:SER:HA | 2.02 | 0.42 |
| 1:Q:462:VAL:HG11 | 1:Q:467:ALA:HA | 2.00 | 0.42 |
| 1:Q:765:VAL:HG22 | 1:R:759:LEU:HD21 | 2.01 | 0.42 |
| 1:QA:178:ALA:HB1 | 1:QA:182:CYS:SG | 2.58 | 0.42 |
| 1:QA:770:LEU:HB3 | 1:QA:774:ARG:HE | 1.83 | 0.42 |
| 1:QB:589:ASP:OD1 | 1:QB:590:ASP:N | 2.52 | 0.42 |
| 1:R:26:SER:HB2 | 1:R:44:LEU:HD13 | 2.01 | 0.42 |
| 1:R:280:ASN:HA | 1:R:321:GLN:O | 2.19 | 0.42 |
| 1:R:388:ILE:N | 1:R:457:VAL:HG23 | 2.33 | 0.42 |
| 1:RA:802:ILE:HD11 | 1:SA:807:ILE:HD13 | 2.00 | 0.42 |
| 1:S:500:LEU:HD13 | 1:S:567:PHE:HE1 | 1.84 | 0.42 |
| 1:SA:128:ASP:OD2 | 1:SA:138:VAL:HG12 | 2.18 | 0.42 |
| 1:SA:253:VAL:HG23 | 1:SA:254:GLN:N | 2.33 | 0.42 |
| 1:SA:688:LEU:HD13 | 1:TA:679:ARG:HG3 | 2.01 | 0.42 |
| 1:TA:122:HIS:ND1 | 1:TA:160:VAL:HG11 | 2.34 | 0.42 |
| 1:TB:183:TRP:HA | 1:TB:188:LYS:O | 2.18 | 0.42 |
| 1:TB:775:ALA:HB1 | 1:UB:770:LEU:HD22 | 2.01 | 0.42 |
| 1:UA:626:ALA:HB3 | 1:UA:635:VAL:HB | 2.01 | 0.42 |
| 1:UB:698:GLU:HG3 | 1:UB:699:ALA:N | 2.35 | 0.42 |
| 1:V:54:PRO:CA | 1:W:86:ALA:HB1 | 2.48 | 0.42 |
| 1:V:219:VAL:HG11 | 1:V:227:LEU:HD22 | 2.00 | 0.42 |
| 1:VA:516:LEU:HD22 | 1:VA:561:LEU:HD13 | 2.00 | 0.42 |
| 1:VA:527:ILE:CD1 | 1:VA:541:LEU:HD12 | 2.49 | 0.42 |
| 1:VB:205:LEU:HD12 | 1:VB:206:PRO:HD2 | 2.00 | 0.42 |
| 1:VB:685:ARG:O | 1:VB:689:GLU:HG2 | 2.19 | 0.42 |
| 1:W:15:TYR:HB3 | 1:W:30:VAL:HG23 | 2.01 | 0.42 |
| 1:W:387:GLY:C | 1:W:457:VAL:HG23 | 2.45 | 0.42 |
| 1:W:537:LEU:HD11 | 1:W:588:PHE:CD1 | 2.53 | 0.42 |
| 1:W:583:VAL:HG13 | 1:W:584:ALA:N | 2.33 | 0.42 |
| 1:W:750:ALA:O | 1:W:754:GLU:HG2 | 2.19 | 0.42 |
| 1:WB:56:ARG:O | 1:WB:111:PRO:HA | 2.19 | 0.42 |
| 1:WB:523:PHE:CE1 | 1:WB:545:TRP:NE1 | 2.88 | 0.42 |
| 1:WB:564:VAL:HG23 | 1:WB:631:ASN:HB3 | 2.01 | 0.42 |
| 1:WB:579:VAL:CG2 | 1:WB:603:VAL:HG21 | 2.49 | 0.42 |
| 1:WB:713:SER:HB2 | 1:XB:700:GLU:OE2 | 2.20 | 0.42 |
| 1:XA:230:ARG:N | 1:XA:266:GLU:O | 2.53 | 0.42 |
| 1:XA:333:LEU:HD12 | 1:XA:357:TRP:O | 2.19 | 0.42 |
| 1:XA:486:LEU:HD23 | 1:XA:486:LEU:C | 2.43 | 0.42 |
| 1:XA:486:LEU:CB | 1:YA:473:TYR:HB3 | 2.50 | 0.42 |
| 1:XA:526:VAL:O | 1:XA:527:ILE:HG23 | 2.19 | 0.42 |
| 1:XB:65:VAL:HG21 | 1:XB:73:VAL:HG22 | 2.02 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XB:460:TYR:CE1 | 1:XB:514:LEU:HD23 | 2.54 | 0.42 |
| 1:YA:68:ASP:OD1 | 1:YA:69:ALA:N | 2.52 | 0.42 |
| 1:YA:177:ARG:CZ | 1:YA:193:GLY:HA2 | 2.49 | 0.42 |
| 1:YA:203:ALA:HB2 | 1:ZA:192:THR:HB | 2.01 | 0.42 |
| 1:YA:658:VAL:O | 1:YA:662:ILE:HB | 2.19 | 0.42 |
| 1:YB:237:ASP:OD1 | 1:YB:241:VAL:N | 2.52 | 0.42 |
| 1:YB:400:ALA:HB1 | 1:YB:457:VAL:HG21 | 2.00 | 0.42 |
| 1:Z:326:LEU:HD21 | 1:Z:332:LEU:HG | 2.02 | 0.42 |
| 1:ZB:5:GLU:O | 1:ZB:8:ILE:CD1 | 2.67 | 0.42 |
| 1:ZB:398:VAL:HG22 | 1:ZB:415:TRP:CD1 | 2.54 | 0.42 |
| 1:ZB:526:VAL:HA | 1:ZB:540:GLN:HA | 2.01 | 0.42 |
| 1:A:17:HIS:HA | 1:A:27:ARG:O | 2.19 | 0.42 |
| 1:A:60:THR:HA | 1:A:89:GLU:O | 2.19 | 0.42 |
| 1:A:160:VAL:HG12 | 1:A:161:GLU:N | 2.34 | 0.42 |
| 1:AA:157:VAL:HG12 | 1:AA:158:GLU:N | 2.34 | 0.42 |
| 1:AA:283:VAL:HG12 | 1:AA:284:ILE:N | 2.33 | 0.42 |
| 1:AB:49:ARG:NH1 | 1:BB:85:HIS:CG | 2.87 | 0.42 |
| 1:AB:280:ASN:HA | 1:AB:321:GLN:O | 2.19 | 0.42 |
| 1:AB:353:ALA:O | 1:ZA:326:LEU:O | 2.37 | 0.42 |
| 1:AB:401:VAL:O | 1:AB:401:VAL:HG23 | 2.18 | 0.42 |
| 1:AB:405:THR:HG23 | 1:BB:396:GLY:CA | 2.49 | 0.42 |
| 1:AB:770:LEU:HD22 | 1:ZA:775:ALA:HB1 | 2.02 | 0.42 |
| 1:AC:162:ILE:HD12 | 1:AC:162:ILE:H | 1.85 | 0.42 |
| 1:AC:579:VAL:HG22 | 1:AC:603:VAL:HG21 | 2.01 | 0.42 |
| 1:B:60:THR:OG1 | 1:B:106:GLU:O | 2.37 | 0.42 |
| 1:BA:168:ILE:O | 1:BA:168:ILE:HG13 | 2.19 | 0.42 |
| 1:BA:329:GLN:C | 1:BA:360:ARG:HH22 | 2.27 | 0.42 |
| 1:BA:772:TYR:HD1 | 1:CA:770:LEU:HD11 | 1.83 | 0.42 |
| 1:BB:413:VAL:O | 1:BB:413:VAL:HG13 | 2.19 | 0.42 |
| 1:C:187:GLY:O | 1:C:188:LYS:C | 2.63 | 0.42 |
| 1:CA:60:THR:O | 1:CA:105:LEU:HD12 | 2.19 | 0.42 |
| 1:CA:276:LEU:HD21 | 1:CA:320:ILE:HG23 | 2.00 | 0.42 |
| 1:CA:381:PRO:HA | 1:CA:405:THR:HG22 | 2.01 | 0.42 |
| 1:CB:204:TYR:CG | 1:CB:205:LEU:N | 2.87 | 0.42 |
| 1:CB:227:LEU:HD21 | 1:CB:229:LEU:HD21 | 2.01 | 0.42 |
| 1:D:230:ARG:HG2 | 1:D:231:ALA:H | 1.84 | 0.42 |
| 1:DA:10:ILE:CG2 | 1:DA:16:ILE:HD12 | 2.49 | 0.42 |
| 1:DA:73:VAL:HG21 | 1:DA:100:TYR:CZ | 2.53 | 0.42 |
| 1:DA:177:ARG:HD3 | 1:DA:195:GLU:OE2 | 2.19 | 0.42 |
| 1:DA:408:LEU:HD22 | 1:DA:412:GLU:HB3 | 2.01 | 0.42 |
| 1:DB:391:GLN:HA | 1:DB:398:VAL:HA | 2.01 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:E:57:HIS:HB3 | 1:E:109:ILE:HG22 | 2.01 | 0.42 |
| 1:E:262:ASP:CG | 1:E:263:VAL:H | 2.27 | 0.42 |
| 1:E:554:ASP:O | 1:E:558:THR:HG23 | 2.19 | 0.42 |
| 1:E:779:LEU:HD21 | 1:F:774:ARG:CD | 2.49 | 0.42 |
| 1:EB:227:LEU:HD12 | 1:EB:270:VAL:HG22 | 2.00 | 0.42 |
| 1:EB:282:CYS:O | 1:EB:301:VAL:HA | 2.19 | 0.42 |
| 1:F:170:GLN:N | 1:F:201:VAL:HG13 | 2.33 | 0.42 |
| 1:F:568:VAL:HG13 | 1:F:569:GLY:N | 2.35 | 0.42 |
| 1:FA:326:LEU:HD22 | 1:FA:330:GLN:C | 2.44 | 0.42 |
| 1:FA:381:PRO:CA | 1:FA:405:THR:HG22 | 2.46 | 0.42 |
| 1:FB:143:TRP:N | 1:FB:208:VAL:HG11 | 2.34 | 0.42 |
| 1:G:471:TYR:HA | 1:G:477:ARG:O | 2.19 | 0.42 |
| 1:GA:303:LYS:HD2 | 1:GA:304:GLY:O | 2.19 | 0.42 |
| 1:GA:417:LYS:HZ3 | 1:GA:491:PRO:C | 2.27 | 0.42 |
| 1:GB:606:PHE:O | 1:GB:606:PHE:CG | 2.73 | 0.42 |
| 1:H:541:LEU:HG | 1:H:640:VAL:HA | 2.01 | 0.42 |
| 1:HA:7:ILE:HD13 | 1:HA:36:ILE:HA | 2.00 | 0.42 |
| 1:IA:333:LEU:HD12 | 1:IA:334:LEU:H | 1.84 | 0.42 |
| 1:IB:389:TYR:CE1 | 1:IB:400:ALA:HB2 | 2.53 | 0.42 |
| 1:J:283:VAL:HG12 | 1:J:284:ILE:N | 2.34 | 0.42 |
| 1:JA:418:GLU:O | 1:JA:419:LEU:HD23 | 2.19 | 0.42 |
| 1:JB:16:ILE:HA | 1:JB:45:PHE:CE1 | 2.54 | 0.42 |
| 1:K:65:VAL:HG11 | 1:K:100:TYR:CB | 2.49 | 0.42 |
| 1:K:123:LEU:HD11 | 1:K:145:PHE:CG | 2.54 | 0.42 |
| 1:K:230:ARG:HA | 1:K:247:GLU:O | 2.20 | 0.42 |
| 1:K:797:GLN:OE1 | 1:L:792:VAL:HG21 | 2.19 | 0.42 |
| 1:KA:114:VAL:HG23 | 1:KA:149:GLY:O | 2.19 | 0.42 |
| 1:KB:77:VAL:HG23 | 1:KB:78:THR:HG23 | 2.00 | 0.42 |
| 1:KB:218:ALA:HB1 | 1:KB:259:HIS:C | 2.44 | 0.42 |
| 1:KB:529:ILE:HD12 | 1:KB:583:VAL:HG21 | 2.01 | 0.42 |
| 1:L:8:ILE:O | 1:L:8:ILE:HG22 | 2.19 | 0.42 |
| 1:L:212:VAL:O | 1:L:212:VAL:HG23 | 2.19 | 0.42 |
| 1:L:797:GLN:HB2 | 1:M:792:VAL:HG11 | 2.00 | 0.42 |
| 1:LA:25:VAL:HG13 | 1:LA:80:GLN:N | 2.34 | 0.42 |
| 1:LA:230:ARG:HA | 1:LA:247:GLU:O | 2.19 | 0.42 |
| 1:M:177:ARG:HG3 | 1:M:211:GLU:HB2 | 2.00 | 0.42 |
| 1:MA:286:ASP:CG | 1:MA:296:LEU:HA | 2.43 | 0.42 |
| 1:MA:383:ASP:HA | 1:NA:396:GLY:O | 2.18 | 0.42 |
| 1:MA:461:ARG:HH22 | 1:NA:494:GLN:HG3 | 1.84 | 0.42 |
| 1:MB:126:LEU:O | 1:MB:127:LEU:HD22 | 2.20 | 0.42 |
| 1:MB:345:ASP:HB3 | 1:MB:349:VAL:HG11 | 2.01 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:MB:533:ASP:OD2 | 1:MB:588:PHE:CD2 | 2.71 | 0.42 |
| 1:MB:568:VAL:HG13 | 1:MB:569:GLY:N | 2.33 | 0.42 |
| 1:N:60:THR:HB | 1:N:89:GLU:O | 2.19 | 0.42 |
| 1:N:65:VAL:HG23 | 1:N:73:VAL:HG21 | 2.01 | 0.42 |
| 1:NA:273:ILE:O | 1:NA:273:ILE:HG23 | 2.20 | 0.42 |
| 1:NA:537:LEU:HD23 | 1:NA:645:PRO:CA | 2.48 | 0.42 |
| 1:NB:16:ILE:HD11 | 1:NB:47:PRO:HD3 | 2.00 | 0.42 |
| 1:NB:365:TYR:OH | 1:NB:371:VAL:HG11 | 2.19 | 0.42 |
| 1:NB:469:GLN:HB3 | 1:NB:496:THR:HG21 | 2.01 | 0.42 |
| 1:NB:471:TYR:CD2 | 1:NB:478:ALA:HB2 | 2.54 | 0.42 |
| 1:O:504:ARG:HB3 | 1:O:526:VAL:HG21 | 2.01 | 0.42 |
| 1:OA:16:ILE:HD11 | 1:OA:47:PRO:CD | 2.49 | 0.42 |
| 1:OB:157:VAL:HG12 | 1:OB:158:GLU:N | 2.34 | 0.42 |
| 1:PA:274:THR:CG2 | 1:PA:310:LEU:HD21 | 2.48 | 0.42 |
| 1:PA:336:ALA:N | 1:PA:357:TRP:HZ3 | 2.17 | 0.42 |
| 1:PB:60:THR:HA | 1:PB:89:GLU:O | 2.19 | 0.42 |
| 1:PB:529:ILE:CG1 | 1:PB:583:VAL:HG21 | 2.49 | 0.42 |
| 1:PB:606:PHE:HB3 | 1:PB:621:ARG:O | 2.19 | 0.42 |
| 1:QA:175:ARG:HE | 1:QA:213:LEU:CB | 2.33 | 0.42 |
| 1:QB:13:TYR:HA | 1:QB:50:MET:HE2 | 2.00 | 0.42 |
| 1:QB:625:GLN:O | 1:QB:627:VAL:HG13 | 2.18 | 0.42 |
| 1:R:457:VAL:HG11 | 1:R:488:SER:HB2 | 2.01 | 0.42 |
| 1:RA:17:HIS:NE2 | 1:RA:28:VAL:HG23 | 2.33 | 0.42 |
| 1:RA:65:VAL:CB | 1:RA:73:VAL:HG11 | 2.46 | 0.42 |
| 1:RA:336:ALA:HB2 | 1:RA:357:TRP:HZ3 | 1.83 | 0.42 |
| 1:RB:146:GLU:N | 1:RB:146:GLU:OE1 | 2.53 | 0.42 |
| 1:RB:325:VAL:O | 1:RB:325:VAL:HG13 | 2.18 | 0.42 |
| 1:RB:333:LEU:HA | 1:RB:358:LEU:HA | 2.01 | 0.42 |
| 1:SB:63:ASN:O | 1:SB:63:ASN:CG | 2.61 | 0.42 |
| 1:SB:349:VAL:CG1 | 1:SB:351:HIS:CE1 | 3.03 | 0.42 |
| 1:SB:700:GLU:HA | 1:SB:703:ARG:HB3 | 2.01 | 0.42 |
| 1:TB:105:LEU:HD21 | 1:TB:107:LYS:O | 2.19 | 0.42 |
| 1:TB:374:VAL:HG12 | 1:TB:375:GLU:HG3 | 2.01 | 0.42 |
| 1:TB:523:PHE:CZ | 1:TB:545:TRP:CE2 | 3.07 | 0.42 |
| 1:TB:527:ILE:HG12 | 1:TB:541:LEU:HD11 | 2.01 | 0.42 |
| 1:UA:797:GLN:OE1 | 1:VA:792:VAL:HG11 | 2.19 | 0.42 |
| 1:UB:30:VAL:HG23 | 1:UB:50:MET:SD | 2.59 | 0.42 |
| 1:UB:60:THR:HB | 1:UB:90:ILE:HG13 | 2.01 | 0.42 |
| 1:UB:405:THR:HG21 | 1:VB:393:VAL:O | 2.18 | 0.42 |
| 1:UB:500:LEU:HD13 | 1:UB:566:ASP:OD1 | 2.19 | 0.42 |
| 1:V:39:ASP:O | 1:V:42:ARG:NH2 | 2.52 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:V:46:ALA:HB1 | 1:V:47:PRO:CD | 2.48 | 0.42 |
| 1:V:51:VAL:HG21 | 1:V:99:LEU:HD21 | 2.00 | 0.42 |
| 1:V:65:VAL:HG23 | 1:V:67:ARG:NH2 | 2.35 | 0.42 |
| 1:V:305:GLU:HG2 | 1:V:305:GLU:O | 2.18 | 0.42 |
| 1:V:606:PHE:O | 1:V:606:PHE:CG | 2.72 | 0.42 |
| 1:VA:806:THR:HG22 | 1:VA:806:THR:O | 2.19 | 0.42 |
| 1:VB:120:ALA:CB | 1:VB:144:LEU:HD13 | 2.48 | 0.42 |
| 1:VB:806:THR:HG22 | 1:VB:806:THR:O | 2.19 | 0.42 |
| 1:W:55:PRO:O | 1:W:56:ARG:HB2 | 2.19 | 0.42 |
| 1:W:522:PHE:HA | 1:W:543:TYR:O | 2.19 | 0.42 |
| 1:W:531:THR:HA | 1:W:583:VAL:HG22 | 2.01 | 0.42 |
| 1:W:763:GLN:O | 1:W:767:GLU:HG3 | 2.19 | 0.42 |
| 1:WA:49:ARG:HD3 | 1:WA:50:MET:N | 2.34 | 0.42 |
| 1:WA:227:LEU:HD22 | 1:WA:259:HIS:NE2 | 2.34 | 0.42 |
| 1:WA:352:GLN:O | 1:WA:353:ALA:C | 2.63 | 0.42 |
| 1:WA:537:LEU:HD22 | 1:WA:588:PHE:CE1 | 2.55 | 0.42 |
| 1:WB:335:ARG:C | 1:WB:335:ARG:HD3 | 2.44 | 0.42 |
| 1:XA:121:LEU:HD11 | 1:XA:151:TYR:OH | 2.20 | 0.42 |
| 1:XA:138:VAL:O | 1:XA:139:ALA:C | 2.63 | 0.42 |
| 1:Y:7:ILE:O | 1:Y:8:ILE:C | 2.62 | 0.42 |
| 1:Y:174:LEU:HD21 | 1:Y:212:VAL:HB | 2.01 | 0.42 |
| 1:YB:594:ASN:HB2 | 1:YB:598:ILE:HD12 | 2.00 | 0.42 |
| 1:YB:735:ILE:HG22 | 1:ZB:730:ALA:HB2 | 2.01 | 0.42 |
| 1:YB:761:ARG:NH2 | 1:ZB:759:LEU:HD21 | 2.34 | 0.42 |
| 1:Z:228:HIS:CE1 | 1:Z:268:LEU:HD23 | 2.54 | 0.42 |
| 1:ZB:387:GLY:HA3 | 1:ZB:402:ILE:HG13 | 2.01 | 0.42 |
| 1:A:227:LEU:CD1 | 1:A:270:VAL:HG22 | 2.40 | 0.42 |
| 1:A:349:VAL:HG11 | 1:A:351:HIS:NE2 | 2.34 | 0.42 |
| 1:A:554:ASP:O | 1:A:558:THR:HG23 | 2.19 | 0.42 |
| 1:AA:371:VAL:HG12 | 1:AA:372:GLU:N | 2.33 | 0.42 |
| 1:AA:523:PHE:O | 1:AA:524:THR:HG23 | 2.18 | 0.42 |
| 1:AB:46:ALA:HB1 | 1:AB:47:PRO:HD2 | 2.00 | 0.42 |
| 1:AB:541:LEU:HD22 | 1:AB:599:ILE:HD11 | 2.00 | 0.42 |
| 1:AC:333:LEU:HA | 1:AC:358:LEU:HA | 2.01 | 0.42 |
| 1:AC:496:THR:OG1 | 1:ZB:464:HIS:CE1 | 2.72 | 0.42 |
| 1:AC:571:ALA:O | 1:AC:575:ILE:HD12 | 2.19 | 0.42 |
| 1:AC:704:LYS:HD2 | 1:ZB:712:LEU:HB3 | 2.01 | 0.42 |
| 1:B:8:ILE:N | 1:B:37:ARG:HH12 | 2.18 | 0.42 |
| 1:B:122:HIS:C | 1:B:160:VAL:HB | 2.45 | 0.42 |
| 1:B:300:ARG:HG2 | 1:B:301:VAL:N | 2.34 | 0.42 |
| 1:B:480:VAL:HG12 | 1:B:481:VAL:N | 2.35 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:B:530:GLU:HG3 | 1:B:534:HIS:HA | 2.00 | 0.42 |
| 1:C:63:ASN:O | 1:C:103:GLU:HG2 | 2.20 | 0.42 |
| 1:C:339:PRO:HG3 | 1:C:353:ALA:HB2 | 2.02 | 0.42 |
| 1:C:461:ARG:HA | 1:C:486:LEU:HA | 2.01 | 0.42 |
| 1:C:470:VAL:HG12 | 1:C:471:TYR:N | 2.34 | 0.42 |
| 1:CA:223:GLU:OE2 | 1:CA:253:VAL:HG11 | 2.19 | 0.42 |
| 1:CA:762:VAL:HG23 | 1:CA:763:GLN:N | 2.34 | 0.42 |
| 1:D:13:TYR:HB2 | 1:D:49:ARG:NH1 | 2.34 | 0.42 |
| 1:DA:15:TYR:HA | 1:DA:29:GLU:O | 2.20 | 0.42 |
| 1:DA:115:VAL:HG23 | 1:DA:148:PRO:O | 2.19 | 0.42 |
| 1:DA:257:GLU:HG3 | 1:EA:245:THR:HB | 2.01 | 0.42 |
| 1:DA:377:ARG:O | 1:DA:407:MET:SD | 2.77 | 0.42 |
| 1:DB:529:ILE:HD12 | 1:DB:583:VAL:HG11 | 2.00 | 0.42 |
| 1:DB:568:VAL:HG13 | 1:DB:569:GLY:N | 2.34 | 0.42 |
| 1:E:63:ASN:ND2 | 1:E:83:LEU:HD23 | 2.33 | 0.42 |
| 1:EA:123:LEU:HB2 | 1:EA:143:TRP:O | 2.20 | 0.42 |
| 1:EA:160:VAL:HG12 | 1:EA:161:GLU:N | 2.34 | 0.42 |
| 1:EA:745:LYS:O | 1:EA:746:LEU:C | 2.62 | 0.42 |
| 1:EA:758:GLU:O | 1:EA:762:VAL:HG22 | 2.19 | 0.42 |
| 1:F:10:ILE:O | 1:F:10:ILE:HG13 | 2.19 | 0.42 |
| 1:F:25:VAL:HG13 | 1:F:80:GLN:HG3 | 2.02 | 0.42 |
| 1:F:51:VAL:O | 1:F:96:PRO:HA | 2.19 | 0.42 |
| 1:F:62:ALA:O | 1:F:103:GLU:HA | 2.19 | 0.42 |
| 1:F:65:VAL:HA | 1:F:83:LEU:HA | 2.01 | 0.42 |
| 1:F:469:GLN:CB | 1:F:480:VAL:HG22 | 2.48 | 0.42 |
| 1:FA:123:LEU:HB2 | 1:FA:143:TRP:CE2 | 2.54 | 0.42 |
| 1:FA:221:LEU:HD12 | 1:FA:256:THR:O | 2.18 | 0.42 |
| 1:FB:390:VAL:CG1 | 1:FB:408:LEU:HD21 | 2.50 | 0.42 |
| 1:G:5:GLU:O | 1:G:8:ILE:CD1 | 2.68 | 0.42 |
| 1:G:333:LEU:HA | 1:G:358:LEU:HA | 2.00 | 0.42 |
| 1:G:358:LEU:HD23 | 1:G:409:THR:HA | 2.02 | 0.42 |
| 1:G:514:LEU:O | 1:G:514:LEU:HD12 | 2.19 | 0.42 |
| 1:G:627:VAL:HG12 | 1:G:634:VAL:HG22 | 2.00 | 0.42 |
| 1:GA:20:ASP:O | 1:GA:23:SER:O | 2.37 | 0.42 |
| 1:GA:57:HIS:HA | 1:GA:110:THR:O | 2.18 | 0.42 |
| 1:GA:588:PHE:O | 1:GA:592:HIS:HB2 | 2.19 | 0.42 |
| 1:GA:806:THR:HG22 | 1:HA:808:ARG:NH2 | 2.34 | 0.42 |
| 1:H:381:PRO:HA | 1:H:405:THR:HA | 2.01 | 0.42 |
| 1:H:467:ALA:HA | 1:H:482:PHE:HA | 2.00 | 0.42 |
| 1:HA:392:ASP:HB3 | 1:HA:395:THR:HG22 | 2.02 | 0.42 |
| 1:HA:545:TRP:CE3 | 1:HA:546:HIS:N | 2.88 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:HA:623:ARG:CZ | 1:HA:626:ALA:HA | 2.49 | 0.42 |
| 1:HB:223:GLU:OE2 | 1:HB:253:VAL:HG11 | 2.19 | 0.42 |
| 1:HB:480:VAL:HG12 | 1:HB:481:VAL:N | 2.34 | 0.42 |
| 1:HB:541:LEU:HD23 | 1:HB:639:ASP:O | 2.19 | 0.42 |
| 1:I:233:ARG:HA | 1:I:245:THR:HG23 | 2.01 | 0.42 |
| 1:I:626:ALA:HB3 | 1:I:635:VAL:HB | 2.00 | 0.42 |
| 1:IA:16:ILE:CG2 | 1:IA:17:HIS:N | 2.83 | 0.42 |
| 1:IA:36:ILE:HG22 | 1:IA:37:ARG:N | 2.35 | 0.42 |
| 1:IA:181:GLU:HG2 | 1:IA:181:GLU:O | 2.20 | 0.42 |
| 1:IA:329:GLN:HB3 | 1:IA:378:GLN:OE1 | 2.19 | 0.42 |
| 1:IA:523:PHE:O | 1:IA:542:ALA:HA | 2.19 | 0.42 |
| 1:IA:770:LEU:O | 1:IA:773:ALA:HB3 | 2.19 | 0.42 |
| 1:IB:218:ALA:HA | 1:IB:260:VAL:CA | 2.50 | 0.42 |
| 1:IB:283:VAL:HG22 | 1:IB:301:VAL:CB | 2.48 | 0.42 |
| 1:IB:342:GLU:HG3 | 1:IB:348:LYS:N | 2.35 | 0.42 |
| 1:IB:504:ARG:HA | 1:IB:504:ARG:NE | 2.34 | 0.42 |
| 1:J:3:THR:O | 1:J:6:PHE:CD2 | 2.72 | 0.42 |
| 1:J:257:GLU:HG3 | 1:K:245:THR:HB | 2.02 | 0.42 |
| 1:J:333:LEU:HD12 | 1:J:334:LEU:H | 1.85 | 0.42 |
| 1:J:583:VAL:HG23 | 1:J:584:ALA:N | 2.34 | 0.42 |
| 1:JA:286:ASP:CG | 1:JA:296:LEU:HA | 2.44 | 0.42 |
| 1:JA:337:LEU:HD11 | 1:JA:371:VAL:O | 2.20 | 0.42 |
| 1:JA:549:VAL:HG11 | 1:JA:552:ARG:HE | 1.83 | 0.42 |
| 1:JB:6:PHE:HA | 1:JB:37:ARG:HB2 | 2.00 | 0.42 |
| 1:JB:53:VAL:HG23 | 1:JB:96:PRO:CD | 2.47 | 0.42 |
| 1:JB:288:VAL:O | 1:JB:288:VAL:HG23 | 2.18 | 0.42 |
| 1:JB:363:LEU:N | 1:JB:363:LEU:HD23 | 2.35 | 0.42 |
| 1:K:516:LEU:HD13 | 1:K:562:PHE:CE1 | 2.55 | 0.42 |
| 1:KA:329:GLN:CD | 1:KA:329:GLN:N | 2.78 | 0.42 |
| 1:KA:423:VAL:HG22 | 1:KA:427:LEU:CD2 | 2.49 | 0.42 |
| 1:KA:543:TYR:CD1 | 1:KA:638:VAL:HG13 | 2.53 | 0.42 |
| 1:KB:180:LYS:HD2 | 1:KB:181:GLU:O | 2.19 | 0.42 |
| 1:KB:575:ILE:HD12 | 1:KB:575:ILE:H | 1.84 | 0.42 |
| 1:KB:795:PHE:HA | 1:KB:798:MET:HB3 | 2.01 | 0.42 |
| 1:L:762:VAL:HG23 | 1:L:763:GLN:N | 2.34 | 0.42 |
| 1:LA:15:TYR:HB3 | 1:LA:30:VAL:HG23 | 2.01 | 0.42 |
| 1:LA:61:VAL:HA | 1:LA:105:LEU:HA | 2.02 | 0.42 |
| 1:LA:114:VAL:HG22 | 1:LA:115:VAL:H | 1.85 | 0.42 |
| 1:LA:160:VAL:HG12 | 1:LA:161:GLU:N | 2.34 | 0.42 |
| 1:LA:495:PHE:CD2 | 1:LA:514:LEU:HD11 | 2.54 | 0.42 |
| 1:LA:547:PHE:CZ | 1:LA:633:LEU:HB2 | 2.53 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:LB:206:PRO:HA | 1:LB:210:GLU:OE1 | 2.20 | 0.42 |
| 1:M:802:ILE:HG23 | 1:M:807:ILE:HD11 | 2.01 | 0.42 |
| 1:MA:346:GLU:O | 1:MA:347:GLU:HG3 | 2.19 | 0.42 |
| 1:MA:459:SER:CB | 1:MA:486:LEU:HD21 | 2.48 | 0.42 |
| 1:MB:633:LEU:HD12 | 1:MB:634:VAL:H | 1.85 | 0.42 |
| 1:N:352:GLN:O | 1:N:355:ASP:HB3 | 2.19 | 0.42 |
| 1:NA:108:ASP:CG | 1:NA:109:ILE:N | 2.77 | 0.42 |
| 1:NB:61:VAL:HA | 1:NB:106:GLU:H | 1.84 | 0.42 |
| 1:NB:68:ASP:HB2 | 1:NB:74:LEU:HD11 | 2.01 | 0.42 |
| 1:NB:380:ILE:HD12 | 1:NB:380:ILE:H | 1.85 | 0.42 |
| 1:O:82:ARG:C | 1:O:83:LEU:HD12 | 2.43 | 0.42 |
| 1:O:114:VAL:HG22 | 1:O:115:VAL:H | 1.84 | 0.42 |
| 1:O:174:LEU:HD21 | 1:O:212:VAL:CG1 | 2.49 | 0.42 |
| 1:O:178:ALA:HB3 | 1:O:191:VAL:O | 2.19 | 0.42 |
| 1:O:363:LEU:H | 1:O:363:LEU:HD23 | 1.84 | 0.42 |
| 1:O:470:VAL:HG12 | 1:O:471:TYR:N | 2.34 | 0.42 |
| 1:OA:56:ARG:O | 1:OA:111:PRO:HA | 2.19 | 0.42 |
| 1:OB:61:VAL:HG22 | 1:OB:91:ARG:HH22 | 1.84 | 0.42 |
| 1:P:325:VAL:HG23 | 1:Q:353:ALA:HB1 | 2.00 | 0.42 |
| 1:PA:728:SER:HB2 | 1:QA:719:THR:HG23 | 2.01 | 0.42 |
| 1:PB:56:ARG:O | 1:PB:111:PRO:HA | 2.19 | 0.42 |
| 1:PB:227:LEU:HA | 1:PB:270:VAL:HA | 2.02 | 0.42 |
| 1:QA:198:VAL:HG21 | 1:QA:204:TYR:CD2 | 2.54 | 0.42 |
| 1:QA:335:ARG:HG2 | 1:QA:336:ALA:H | 1.84 | 0.42 |
| 1:QA:489:LEU:HD11 | 1:QA:495:PHE:CE2 | 2.54 | 0.42 |
| 1:QB:15:TYR:HA | 1:QB:29:GLU:O | 2.19 | 0.42 |
| 1:QB:323:VAL:HG12 | 1:QB:366:VAL:HB | 2.02 | 0.42 |
| 1:R:80:GLN:O | 1:R:81:VAL:C | 2.62 | 0.42 |
| 1:R:416:GLU:OE1 | 1:R:454:LYS:HB2 | 2.19 | 0.42 |
| 1:RA:310:LEU:HD21 | 1:RA:316:LEU:HD13 | 2.01 | 0.42 |
| 1:RA:402:ILE:O | 1:RA:402:ILE:HG13 | 2.19 | 0.42 |
| 1:RB:191:VAL:HG22 | 1:RB:194:GLU:HB2 | 2.01 | 0.42 |
| 1:RB:271:VAL:HG23 | 1:RB:309:PHE:CD2 | 2.54 | 0.42 |
| 1:RB:310:LEU:HD22 | 1:RB:314:GLU:HB3 | 2.01 | 0.42 |
| 1:RB:318:GLN:HG2 | 1:RB:318:GLN:O | 2.20 | 0.42 |
| 1:RB:687:ARG:O | 1:RB:691:GLN:OE1 | 2.37 | 0.42 |
| 1:SA:123:LEU:HD12 | 1:SA:145:PHE:HB2 | 2.02 | 0.42 |
| 1:SB:5:GLU:HG2 | 1:SB:7:ILE:H | 1.84 | 0.42 |
| 1:SB:56:ARG:O | 1:SB:111:PRO:HA | 2.19 | 0.42 |
| 1:SB:168:ILE:HD11 | 1:SB:200:THR:HG23 | 2.02 | 0.42 |
| 1:TA:539:LEU:HD22 | 1:TA:579:VAL:HG11 | 2.00 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:TA:542:ALA:HB2 | 1:TA:641:GLN:HG2 | 2.00 | 0.42 |
| 1:TB:176:LEU:HD21 | 1:TB:196:TRP:CE2 | 2.54 | 0.42 |
| 1:TB:333:LEU:HD12 | 1:TB:357:TRP:C | 2.44 | 0.42 |
| 1:TB:368:SER:HB3 | 1:TB:371:VAL:HB | 2.01 | 0.42 |
| 1:UA:786:GLN:O | 1:UA:790:VAL:HG23 | 2.19 | 0.42 |
| 1:UB:18:VAL:HG12 | 1:UB:43:VAL:HG22 | 2.01 | 0.42 |
| 1:VB:144:LEU:HD22 | 1:VB:163:ILE:HD11 | 2.02 | 0.42 |
| 1:VB:186:ASP:OD1 | 1:VB:186:ASP:O | 2.38 | 0.42 |
| 1:VB:482:PHE:CD1 | 1:VB:552:ARG:HD3 | 2.54 | 0.42 |
| 1:VB:543:TYR:CD1 | 1:VB:638:VAL:HG13 | 2.54 | 0.42 |
| 1:W:50:MET:HE3 | 1:W:98:PRO:HD3 | 2.02 | 0.42 |
| 1:W:267:VAL:C | 1:W:268:LEU:HD12 | 2.44 | 0.42 |
| 1:W:390:VAL:HG13 | 1:W:401:VAL:HG22 | 2.00 | 0.42 |
| 1:WA:34:THR:HG21 | 1:XA:22:ASN:O | 2.19 | 0.42 |
| 1:WA:522:PHE:HA | 1:WA:543:TYR:O | 2.19 | 0.42 |
| 1:WB:220:ILE:HD12 | 1:XB:245:THR:HG22 | 2.02 | 0.42 |
| 1:WB:276:LEU:HD22 | 1:WB:281:TYR:N | 2.34 | 0.42 |
| 1:X:288:VAL:HG12 | 1:X:293:LYS:C | 2.44 | 0.42 |
| 1:XA:6:PHE:O | 1:XA:37:ARG:HD2 | 2.19 | 0.42 |
| 1:XA:224:LYS:HD2 | 1:YA:294:ASN:OD1 | 2.19 | 0.42 |
| 1:XA:363:LEU:N | 1:YA:353:ALA:O | 2.53 | 0.42 |
| 1:XA:502:ALA:N | 1:XA:568:VAL:HG11 | 2.34 | 0.42 |
| 1:XA:798:MET:O | 1:XA:802:ILE:HD12 | 2.19 | 0.42 |
| 1:XB:231:ALA:HB3 | 1:XB:246:GLY:N | 2.34 | 0.42 |
| 1:XB:335:ARG:HH12 | 1:XB:337:LEU:HD23 | 1.84 | 0.42 |
| 1:Y:17:HIS:HB2 | 1:Y:44:LEU:HB2 | 2.00 | 0.42 |
| 1:Y:65:VAL:HG11 | 1:Y:100:TYR:CD2 | 2.53 | 0.42 |
| 1:YB:35:TYR:CG | 1:YB:36:ILE:N | 2.88 | 0.42 |
| 1:YB:104:VAL:HG22 | 1:YB:105:LEU:N | 2.33 | 0.42 |
| 1:YB:388:ILE:N | 1:YB:457:VAL:HG23 | 2.34 | 0.42 |
| 1:YB:389:TYR:CD1 | 1:YB:457:VAL:HG22 | 2.55 | 0.42 |
| 1:Z:230:ARG:O | 1:Z:266:GLU:N | 2.52 | 0.42 |
| 1:ZA:84:ARG:C | 1:ZA:85:HIS:CD2 | 2.97 | 0.42 |
| 1:ZA:547:PHE:HE1 | 1:ZA:633:LEU:HD13 | 1.85 | 0.42 |
| 1:ZB:60:THR:HG22 | 1:ZB:90:ILE:HA | 2.01 | 0.42 |
| 1:ZB:500:LEU:HD11 | 1:ZB:565:PRO:O | 2.19 | 0.42 |
| 1:A:67:ARG:HG2 | 1:A:73:VAL:HG22 | 2.00 | 0.42 |
| 1:AA:768:LEU:C | 1:AA:768:LEU:HD23 | 2.45 | 0.42 |
| 1:AB:234:ASN:ND2 | 1:AB:244:ARG:HE | 2.18 | 0.42 |
| 1:AB:353:ALA:HB3 | 1:ZA:363:LEU:HA | 2.01 | 0.42 |
| 1:AB:568:VAL:HG13 | 1:AB:569:GLY:N | 2.35 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AC:9:ARG:CB | 1:AC:34:THR:HG22 | 2.50 | 0.42 |
| 1:AC:393:VAL:HG22 | 1:AC:411:ASP:CA | 2.49 | 0.42 |
| 1:AC:414:LEU:HB3 | 1:AC:455:THR:CB | 2.49 | 0.42 |
| 1:AC:538:GLN:HB2 | 1:AC:646:VAL:HG22 | 2.01 | 0.42 |
| 1:BA:168:ILE:HD13 | 1:BA:204:TYR:HB2 | 2.01 | 0.42 |
| 1:BA:601:THR:HG22 | 1:BA:622:PRO:CB | 2.50 | 0.42 |
| 1:BA:781:VAL:HG23 | 1:BA:782:SER:N | 2.35 | 0.42 |
| 1:BB:184:ASP:HB3 | 1:BB:190:ARG:NE | 2.34 | 0.42 |
| 1:BB:539:LEU:HD21 | 1:BB:591:PHE:CZ | 2.54 | 0.42 |
| 1:C:14:HIS:N | 1:C:50:MET:HE3 | 2.35 | 0.42 |
| 1:C:81:VAL:HG22 | 1:C:82:ARG:N | 2.34 | 0.42 |
| 1:C:794:LYS:CG | 1:D:792:VAL:HG22 | 2.50 | 0.42 |
| 1:D:364:GLU:HG3 | 1:E:353:ALA:HB1 | 2.00 | 0.42 |
| 1:D:405:THR:HG23 | 1:E:396:GLY:CA | 2.48 | 0.42 |
| 1:D:529:ILE:HG12 | 1:D:537:LEU:O | 2.19 | 0.42 |
| 1:DA:60:THR:CG2 | 1:DA:90:ILE:HG13 | 2.49 | 0.42 |
| 1:DB:212:VAL:O | 1:DB:212:VAL:HG23 | 2.20 | 0.42 |
| 1:DB:216:VAL:HG13 | 1:DB:260:VAL:HG21 | 2.01 | 0.42 |
| 1:DB:365:TYR:OH | 1:DB:371:VAL:HG11 | 2.19 | 0.42 |
| 1:DB:571:ALA:O | 1:DB:575:ILE:HG12 | 2.19 | 0.42 |
| 1:E:176:LEU:HD21 | 1:E:196:TRP:CD1 | 2.54 | 0.42 |
| 1:E:230:ARG:CG | 1:E:266:GLU:HB3 | 2.50 | 0.42 |
| 1:E:335:ARG:HB2 | 1:E:374:VAL:CG2 | 2.50 | 0.42 |
| 1:EA:112:LEU:HD12 | 1:EA:151:TYR:O | 2.19 | 0.42 |
| 1:EA:471:TYR:CZ | 1:EA:476:LYS:HA | 2.54 | 0.42 |
| 1:EB:409:THR:O | 1:EB:410:GLN:C | 2.63 | 0.42 |
| 1:EB:497:VAL:HG22 | 1:EB:498:LEU:H | 1.84 | 0.42 |
| 1:F:62:ALA:O | 1:F:63:ASN:C | 2.62 | 0.42 |
| 1:F:529:ILE:CG1 | 1:F:583:VAL:HG21 | 2.49 | 0.42 |
| 1:FA:262:ASP:H | 1:FA:265:GLU:HB2 | 1.85 | 0.42 |
| 1:FB:112:LEU:HG | 1:FB:150:THR:OG1 | 2.19 | 0.42 |
| 1:FB:501:SER:HA | 1:FB:507:ARG:O | 2.19 | 0.42 |
| 1:G:61:VAL:O | 1:G:61:VAL:HG23 | 2.19 | 0.42 |
| 1:G:326:LEU:HD13 | 1:G:331:GLY:HA2 | 2.01 | 0.42 |
| 1:G:501:SER:HA | 1:G:507:ARG:O | 2.18 | 0.42 |
| 1:GA:28:VAL:O | 1:GA:28:VAL:HG13 | 2.19 | 0.42 |
| 1:GB:516:LEU:HD23 | 1:GB:518:LEU:N | 2.34 | 0.42 |
| 1:GB:529:ILE:HD12 | 1:GB:583:VAL:CG2 | 2.50 | 0.42 |
| 1:GB:638:VAL:HG12 | 1:GB:639:ASP:N | 2.33 | 0.42 |
| 1:H:323:VAL:HG23 | 1:H:364:GLU:CD | 2.44 | 0.42 |
| 1:HA:410:GLN:O | 1:HA:411:ASP:OD1 | 2.36 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:HB:19:LEU:HA | 1:HB:26:SER:CB | 2.50 | 0.42 |
| 1:HB:496:THR:HG21 | 1:HB:562:PHE:HB3 | 2.01 | 0.42 |
| 1:HB:531:THR:CG2 | 1:HB:537:LEU:HD12 | 2.49 | 0.42 |
| 1:I:60:THR:HB | 1:I:90:ILE:HG13 | 2.01 | 0.42 |
| 1:I:84:ARG:HD2 | 1:I:84:ARG:HA | 1.89 | 0.42 |
| 1:I:175:ARG:HA | 1:I:196:TRP:O | 2.18 | 0.42 |
| 1:I:797:GLN:HB2 | 1:J:792:VAL:HG21 | 2.01 | 0.42 |
| 1:IA:104:VAL:HG22 | 1:IA:105:LEU:H | 1.85 | 0.42 |
| 1:IA:177:ARG:HA | 1:IA:194:GLU:O | 2.18 | 0.42 |
| 1:IA:331:GLY:O | 1:IA:376:GLU:HG2 | 2.20 | 0.42 |
| 1:IB:274:THR:N | 1:IB:308:PHE:O | 2.52 | 0.42 |
| 1:IB:276:LEU:CD2 | 1:IB:320:ILE:HG23 | 2.49 | 0.42 |
| 1:K:60:THR:HG22 | 1:K:107:LYS:HB2 | 2.01 | 0.42 |
| 1:KA:95:ASP:O | 1:KA:97:PHE:CD2 | 2.72 | 0.42 |
| 1:KA:499:SER:O | 1:KA:500:LEU:HD23 | 2.20 | 0.42 |
| 1:KA:580:ARG:HA | 1:KA:583:VAL:HG12 | 2.02 | 0.42 |
| 1:KB:284:ILE:HD11 | 1:KB:300:ARG:HB3 | 2.00 | 0.42 |
| 1:KB:301:VAL:HG22 | 1:KB:302:VAL:N | 2.34 | 0.42 |
| 1:KB:767:GLU:CD | 1:KB:768:LEU:N | 2.78 | 0.42 |
| 1:L:286:ASP:OD1 | 1:L:296:LEU:HA | 2.19 | 0.42 |
| 1:L:495:PHE:HB3 | 1:L:514:LEU:HD11 | 2.02 | 0.42 |
| 1:L:539:LEU:HG | 1:L:642:SER:O | 2.19 | 0.42 |
| 1:LA:112:LEU:HD11 | 1:LA:153:PRO:CD | 2.47 | 0.42 |
| 1:LB:42:ARG:HA | 1:LB:42:ARG:NE | 2.34 | 0.42 |
| 1:LB:114:VAL:HG23 | 1:LB:149:GLY:O | 2.20 | 0.42 |
| 1:LB:151:TYR:CE2 | 1:LB:153:PRO:HA | 2.55 | 0.42 |
| 1:LB:549:VAL:HG12 | 1:LB:552:ARG:HA | 2.01 | 0.42 |
| 1:LB:661:ALA:HA | 1:LB:664:ILE:HD12 | 2.02 | 0.42 |
| 1:M:377:ARG:O | 1:M:407:MET:HE1 | 2.20 | 0.42 |
| 1:M:526:VAL:HG22 | 1:M:540:GLN:HG3 | 2.02 | 0.42 |
| 1:M:530:GLU:HA | 1:M:535:ALA:O | 2.19 | 0.42 |
| 1:MA:36:ILE:HD12 | 1:MA:36:ILE:H | 1.84 | 0.42 |
| 1:MA:121:LEU:CD1 | 1:MA:123:LEU:HD21 | 2.49 | 0.42 |
| 1:MA:167:ILE:HG12 | 1:NA:192:THR:HG23 | 2.02 | 0.42 |
| 1:MA:169:ARG:O | 1:MA:170:GLN:C | 2.62 | 0.42 |
| 1:MB:16:ILE:HG23 | 1:MB:45:PHE:O | 2.19 | 0.42 |
| 1:MB:95:ASP:HB3 | 1:MB:96:PRO:HD2 | 2.01 | 0.42 |
| 1:N:230:ARG:HB3 | 1:N:266:GLU:HB3 | 2.02 | 0.42 |
| 1:NA:36:ILE:HD11 | 1:NB:7:ILE:CG2 | 2.50 | 0.42 |
| 1:NA:250:LEU:HD11 | 1:NA:310:LEU:O | 2.20 | 0.42 |
| 1:NA:389:TYR:CZ | 1:NA:457:VAL:HA | 2.54 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:NB:490:GLY:H | 1:NB:493:GLU:HB2 | 1.84 | 0.42 |
| 1:O:549:VAL:HG22 | 1:O:561:LEU:CD1 | 2.48 | 0.42 |
| 1:OA:129:PHE:CZ | 1:OA:137:VAL:HG11 | 2.55 | 0.42 |
| 1:OA:393:VAL:HG13 | 1:OA:413:VAL:HG11 | 2.00 | 0.42 |
| 1:OA:583:VAL:HG13 | 1:OA:584:ALA:N | 2.34 | 0.42 |
| 1:OA:596:ALA:HB3 | 1:PA:581:GLY:HA2 | 2.01 | 0.42 |
| 1:OA:809:ASP:O | 1:OA:810:LEU:HD23 | 2.19 | 0.42 |
| 1:OB:18:VAL:HA | 1:OB:44:LEU:HD23 | 2.02 | 0.42 |
| 1:OB:257:GLU:HG3 | 1:PB:245:THR:O | 2.19 | 0.42 |
| 1:OB:470:VAL:HA | 1:OB:494:GLN:O | 2.20 | 0.42 |
| 1:P:333:LEU:HD12 | 1:P:357:TRP:O | 2.19 | 0.42 |
| 1:P:387:GLY:HA2 | 1:P:401:VAL:O | 2.19 | 0.42 |
| 1:P:543:TYR:CB | 1:P:638:VAL:HG22 | 2.50 | 0.42 |
| 1:P:546:HIS:C | 1:P:633:LEU:HD12 | 2.44 | 0.42 |
| 1:P:689:GLU:HA | 1:P:692:LYS:HD2 | 2.01 | 0.42 |
| 1:P:761:ARG:HE | 1:Q:751:LEU:CD1 | 2.33 | 0.42 |
| 1:PA:58:TYR:HB3 | 1:PA:153:PRO:HG2 | 2.00 | 0.42 |
| 1:PA:175:ARG:HA | 1:PA:196:TRP:O | 2.19 | 0.42 |
| 1:PA:288:VAL:HA | 1:PA:294:ASN:HA | 2.01 | 0.42 |
| 1:PB:76:ASP:N | 1:PB:80:GLN:O | 2.52 | 0.42 |
| 1:PB:468:VAL:HG12 | 1:PB:469:GLN:N | 2.34 | 0.42 |
| 1:Q:104:VAL:HG13 | 1:Q:104:VAL:O | 2.18 | 0.42 |
| 1:QA:90:ILE:O | 1:QA:90:ILE:HG23 | 2.20 | 0.42 |
| 1:QA:366:VAL:HG13 | 1:QA:367:PRO:HD2 | 2.01 | 0.42 |
| 1:QA:523:PHE:CZ | 1:QA:568:VAL:HG12 | 2.54 | 0.42 |
| 1:QA:797:GLN:CD | 1:RA:792:VAL:HG21 | 2.45 | 0.42 |
| 1:QB:388:ILE:O | 1:QB:401:VAL:HG22 | 2.19 | 0.42 |
| 1:QB:464:HIS:CE1 | 1:RB:496:THR:HG23 | 2.54 | 0.42 |
| 1:R:175:ARG:C | 1:R:213:LEU:HB2 | 2.45 | 0.42 |
| 1:R:606:PHE:O | 1:R:606:PHE:CG | 2.72 | 0.42 |
| 1:RB:68:ASP:OD1 | 1:RB:74:LEU:HD12 | 2.19 | 0.42 |
| 1:RB:90:ILE:HG22 | 1:RB:91:ARG:N | 2.34 | 0.42 |
| 1:RB:500:LEU:HD21 | 1:RB:567:PHE:HD1 | 1.84 | 0.42 |
| 1:SA:340:LEU:HD21 | 1:SA:371:VAL:HG22 | 2.02 | 0.42 |
| 1:SA:750:ALA:HB2 | 1:TA:741:VAL:HG22 | 2.00 | 0.42 |
| 1:SA:751:LEU:HD13 | 1:SA:754:GLU:OE2 | 2.20 | 0.42 |
| 1:SB:73:VAL:HG21 | 1:SB:100:TYR:CZ | 2.54 | 0.42 |
| 1:SB:749:GLN:OE1 | 1:TB:741:VAL:HG11 | 2.20 | 0.42 |
| 1:TB:91:ARG:HE | 1:TB:94:GLN:HG2 | 1.84 | 0.42 |
| 1:TB:379:ALA:CA | 1:TB:407:MET:HG2 | 2.50 | 0.42 |
| 1:TB:383:ASP:N | 1:TB:386:GLU:HB3 | 2.34 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:TB:547:PHE:CG | 1:TB:633:LEU:HD13 | 2.54 | 0.42 |
| 1:UA:30:VAL:HG22 | 1:UA:31:GLY:N | 2.34 | 0.42 |
| 1:UB:257:GLU:HG3 | 1:VB:245:THR:HB | 2.01 | 0.42 |
| 1:VB:122:HIS:CD2 | 1:VB:208:VAL:HG12 | 2.54 | 0.42 |
| 1:VB:232:ARG:HE | 1:VB:266:GLU:HA | 1.85 | 0.42 |
| 1:W:16:ILE:HD11 | 1:W:47:PRO:CA | 2.49 | 0.42 |
| 1:W:119:THR:CB | 1:W:162:ILE:HG23 | 2.50 | 0.42 |
| 1:WB:351:HIS:CE1 | 1:WB:357:TRP:CE2 | 3.08 | 0.42 |
| 1:WB:571:ALA:O | 1:WB:572:CYS:C | 2.62 | 0.42 |
| 1:X:333:LEU:HD23 | 1:X:374:VAL:HG11 | 2.01 | 0.42 |
| 1:XA:112:LEU:HB2 | 1:YA:127:LEU:CD1 | 2.49 | 0.42 |
| 1:XA:587:THR:O | 1:XA:591:PHE:N | 2.52 | 0.42 |
| 1:XB:127:LEU:HD23 | 1:XB:156:GLU:HA | 2.01 | 0.42 |
| 1:XB:556:GLN:O | 1:XB:559:ALA:HB3 | 2.19 | 0.42 |
| 1:Y:273:ILE:O | 1:Y:273:ILE:HG23 | 2.18 | 0.42 |
| 1:YA:10:ILE:HG12 | 1:YA:33:LYS:O | 2.20 | 0.42 |
| 1:YA:179:ARG:HE | 1:YA:209:PHE:HA | 1.84 | 0.42 |
| 1:YA:253:VAL:HG23 | 1:YA:254:GLN:OE1 | 2.19 | 0.42 |
| 1:YA:539:LEU:HD21 | 1:YA:640:VAL:HG11 | 2.01 | 0.42 |
| 1:YB:334:LEU:HD21 | 1:YB:359:ILE:HG22 | 2.01 | 0.42 |
| 1:ZB:126:LEU:O | 1:ZB:127:LEU:HD22 | 2.18 | 0.42 |
| 1:A:15:TYR:HA | 1:A:29:GLU:O | 2.18 | 0.42 |
| 1:A:122:HIS:HA | 1:A:144:LEU:HA | 2.02 | 0.42 |
| 1:A:389:TYR:CD1 | 1:A:457:VAL:HG22 | 2.54 | 0.42 |
| 1:A:389:TYR:CZ | 1:A:457:VAL:HA | 2.55 | 0.42 |
| 1:A:541:LEU:CD2 | 1:A:640:VAL:HG22 | 2.50 | 0.42 |
| 1:A:567:PHE:CG | 1:A:568:VAL:N | 2.88 | 0.42 |
| 1:AA:792:VAL:HG22 | 1:Z:794:LYS:CG | 2.49 | 0.42 |
| 1:AB:228:HIS:CD2 | 1:AB:228:HIS:C | 2.98 | 0.42 |
| 1:AB:296:LEU:HD21 | 1:ZA:224:LYS:HE3 | 2.02 | 0.42 |
| 1:AB:326:LEU:O | 1:BB:353:ALA:O | 2.38 | 0.42 |
| 1:AB:599:ILE:O | 1:AB:603:VAL:HG23 | 2.19 | 0.42 |
| 1:AC:57:HIS:HA | 1:AC:110:THR:O | 2.19 | 0.42 |
| 1:AC:174:LEU:HD12 | 1:AC:215:LEU:HB2 | 2.02 | 0.42 |
| 1:AC:230:ARG:HA | 1:AC:247:GLU:O | 2.19 | 0.42 |
| 1:AC:284:ILE:HA | 1:AC:315:GLN:O | 2.19 | 0.42 |
| 1:AC:334:LEU:O | 1:AC:356:HIS:HA | 2.19 | 0.42 |
| 1:AC:541:LEU:HD22 | 1:AC:638:VAL:CG1 | 2.50 | 0.42 |
| 1:AC:580:ARG:HA | 1:AC:583:VAL:HG12 | 2.01 | 0.42 |
| 1:B:187:GLY:O | 1:B:188:LYS:C | 2.61 | 0.42 |
| 1:BA:339:PRO:HD3 | 1:BA:353:ALA:HB2 | 2.01 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:BB:112:LEU:HG | 1:BB:150:THR:OG1 | 2.19 | 0.42 |
| 1:BB:382:LEU:O | 1:CB:396:GLY:HA3 | 2.20 | 0.42 |
| 1:BB:411:ASP:OD1 | 1:BB:411:ASP:C | 2.61 | 0.42 |
| 1:C:51:VAL:HB | 1:C:97:PHE:CE1 | 2.55 | 0.42 |
| 1:C:413:VAL:HG22 | 1:C:414:LEU:H | 1.82 | 0.42 |
| 1:C:583:VAL:HG13 | 1:C:584:ALA:N | 2.34 | 0.42 |
| 1:C:761:ARG:O | 1:C:765:VAL:HG23 | 2.20 | 0.42 |
| 1:CA:166:THR:HG23 | 1:CA:168:ILE:HG23 | 2.00 | 0.42 |
| 1:CB:221:LEU:HD13 | 1:CB:252:THR:O | 2.19 | 0.42 |
| 1:CB:351:HIS:NE2 | 1:CB:357:TRP:CG | 2.87 | 0.42 |
| 1:CB:463:PRO:HB2 | 1:CB:466:ALA:HB2 | 2.01 | 0.42 |
| 1:D:57:HIS:HA | 1:D:110:THR:O | 2.19 | 0.42 |
| 1:D:259:HIS:CG | 1:D:260:VAL:N | 2.88 | 0.42 |
| 1:DA:45:PHE:CD1 | 1:DA:48:MET:HG2 | 2.55 | 0.42 |
| 1:DA:217:ASP:O | 1:DA:260:VAL:HG23 | 2.20 | 0.42 |
| 1:DA:232:ARG:NH1 | 1:DA:267:VAL:HG23 | 2.34 | 0.42 |
| 1:DA:659:GLN:O | 1:DA:663:GLU:OE1 | 2.38 | 0.42 |
| 1:DB:160:VAL:HG12 | 1:DB:161:GLU:H | 1.82 | 0.42 |
| 1:DB:274:THR:N | 1:DB:308:PHE:O | 2.53 | 0.42 |
| 1:E:227:LEU:HD11 | 1:E:267:VAL:HG13 | 2.00 | 0.42 |
| 1:EA:58:TYR:CE2 | 1:EA:60:THR:HA | 2.54 | 0.42 |
| 1:EA:124:LYS:HA | 1:EA:141:ASP:O | 2.20 | 0.42 |
| 1:EA:173:ALA:HB2 | 1:EA:260:VAL:HG11 | 2.01 | 0.42 |
| 1:EA:220:ILE:HD12 | 1:FA:245:THR:HG22 | 2.02 | 0.42 |
| 1:FA:115:VAL:HG21 | 1:FA:145:PHE:CE2 | 2.55 | 0.42 |
| 1:FA:472:ASP:O | 1:FA:476:LYS:HA | 2.20 | 0.42 |
| 1:FA:536:ARG:HE | 1:FA:537:LEU:N | 2.17 | 0.42 |
| 1:FB:9:ARG:HB3 | 1:FB:34:THR:HG22 | 2.01 | 0.42 |
| 1:FB:216:VAL:HG22 | 1:FB:217:ASP:N | 2.34 | 0.42 |
| 1:FB:342:GLU:H | 1:FB:350:SER:HA | 1.85 | 0.42 |
| 1:FB:455:THR:O | 1:FB:456:ARG:C | 2.63 | 0.42 |
| 1:FB:521:ASP:O | 1:FB:545:TRP:N | 2.53 | 0.42 |
| 1:G:283:VAL:HG12 | 1:G:284:ILE:N | 2.35 | 0.42 |
| 1:G:521:ASP:O | 1:G:545:TRP:CD1 | 2.73 | 0.42 |
| 1:GA:318:GLN:HB2 | 1:GA:321:GLN:NE2 | 2.35 | 0.42 |
| 1:GA:338:GLN:HB3 | 1:GA:339:PRO:HD2 | 2.02 | 0.42 |
| 1:GA:741:VAL:O | 1:GA:744:ALA:HB3 | 2.19 | 0.42 |
| 1:H:58:TYR:HD1 | 1:H:91:ARG:O | 2.03 | 0.42 |
| 1:H:236:ARG:HA | 1:H:241:VAL:O | 2.20 | 0.42 |
| 1:H:487:VAL:HG21 | 1:H:495:PHE:CE1 | 2.54 | 0.42 |
| 1:H:523:PHE:O | 1:H:542:ALA:HA | 2.20 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:HA:425:GLU:O | 1:HA:426:LEU:C | 2.61 | 0.42 |
| 1:I:212:VAL:O | 1:I:212:VAL:HG23 | 2.18 | 0.42 |
| 1:I:471:TYR:CZ | 1:I:476:LYS:HA | 2.55 | 0.42 |
| 1:IB:333:LEU:HD23 | 1:IB:374:VAL:CG1 | 2.44 | 0.42 |
| 1:IB:346:GLU:O | 1:IB:347:GLU:HG3 | 2.20 | 0.42 |
| 1:J:114:VAL:HG23 | 1:J:149:GLY:O | 2.19 | 0.42 |
| 1:J:283:VAL:HG22 | 1:J:301:VAL:HA | 2.01 | 0.42 |
| 1:J:699:ALA:O | 1:J:703:ARG:CB | 2.68 | 0.42 |
| 1:J:754:GLU:O | 1:J:758:GLU:HG2 | 2.19 | 0.42 |
| 1:JA:772:TYR:CD1 | 1:KA:766:ARG:HG2 | 2.54 | 0.42 |
| 1:JB:371:VAL:O | 1:JB:371:VAL:HG13 | 2.18 | 0.42 |
| 1:JB:402:ILE:HG22 | 1:JB:403:GLY:N | 2.34 | 0.42 |
| 1:K:351:HIS:CE1 | 1:K:357:TRP:CD1 | 3.07 | 0.42 |
| 1:KA:390:VAL:HG23 | 1:KA:413:VAL:O | 2.19 | 0.42 |
| 1:KB:212:VAL:C | 1:KB:213:LEU:HD22 | 2.45 | 0.42 |
| 1:KB:320:ILE:O | 1:KB:320:ILE:HG22 | 2.19 | 0.42 |
| 1:L:46:ALA:HB1 | 1:L:47:PRO:HD2 | 2.01 | 0.42 |
| 1:L:131:ASP:HB3 | 1:L:137:VAL:HG21 | 2.02 | 0.42 |
| 1:LA:382:LEU:HD13 | 1:LA:387:GLY:HA2 | 2.01 | 0.42 |
| 1:LB:176:LEU:HA | 1:LB:213:LEU:HD23 | 2.02 | 0.42 |
| 1:LB:469:GLN:HB2 | 1:LB:480:VAL:HG22 | 2.01 | 0.42 |
| 1:LB:531:THR:HG23 | 1:LB:535:ALA:HB3 | 2.01 | 0.42 |
| 1:LB:564:VAL:HG23 | 1:LB:631:ASN:HB3 | 2.02 | 0.42 |
| 1:MA:10:ILE:O | 1:MA:10:ILE:HG13 | 2.19 | 0.42 |
| 1:MA:76:ASP:N | 1:MA:80:GLN:O | 2.53 | 0.42 |
| 1:MA:196:TRP:O | 1:MA:197:LEU:HD22 | 2.20 | 0.42 |
| 1:MA:230:ARG:N | 1:MA:268:LEU:HD13 | 2.34 | 0.42 |
| 1:MA:470:VAL:HG22 | 1:MA:495:PHE:HA | 2.01 | 0.42 |
| 1:MA:471:TYR:HD2 | 1:MA:478:ALA:HB2 | 1.84 | 0.42 |
| 1:NA:388:ILE:HA | 1:NA:457:VAL:N | 2.35 | 0.42 |
| 1:NA:607:GLU:HB3 | 1:NA:622:PRO:HB3 | 2.02 | 0.42 |
| 1:NB:414:LEU:HD23 | 1:NB:414:LEU:H | 1.85 | 0.42 |
| 1:O:66:SER:O | 1:O:73:VAL:HG13 | 2.19 | 0.42 |
| 1:OA:374:VAL:HG23 | 1:OA:375:GLU:N | 2.35 | 0.42 |
| 1:OA:545:TRP:HA | 1:OA:634:VAL:O | 2.20 | 0.42 |
| 1:OA:604:PHE:CZ | 1:OA:638:VAL:HG23 | 2.55 | 0.42 |
| 1:OA:727:GLU:O | 1:OA:731:GLU:HB3 | 2.19 | 0.42 |
| 1:OB:529:ILE:HB | 1:OB:583:VAL:HG11 | 2.00 | 0.42 |
| 1:P:20:ASP:HA | 1:P:41:GLU:HA | 2.02 | 0.42 |
| 1:P:260:VAL:O | 1:P:260:VAL:HG13 | 2.19 | 0.42 |
| 1:P:332:LEU:HD23 | 1:P:375:GLU:C | 2.44 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:PA:596:ALA:HB2 | 1:QA:582:ALA:N | 2.35 | 0.42 |
| 1:PB:530:GLU:HA | 1:PB:535:ALA:O | 2.20 | 0.42 |
| 1:Q:786:GLN:HA | 1:Q:789:GLU:OE1 | 2.19 | 0.42 |
| 1:QA:62:ALA:N | 1:QA:106:GLU:OE1 | 2.52 | 0.42 |
| 1:QA:126:LEU:HD23 | 1:QA:127:LEU:CD2 | 2.49 | 0.42 |
| 1:QA:169:ARG:O | 1:QA:170:GLN:C | 2.62 | 0.42 |
| 1:QA:241:VAL:HG11 | 1:QA:243:ARG:CZ | 2.50 | 0.42 |
| 1:QB:174:LEU:HD21 | 1:QB:212:VAL:HG23 | 2.01 | 0.42 |
| 1:QB:286:ASP:HA | 1:QB:298:GLN:O | 2.20 | 0.42 |
| 1:R:524:THR:HA | 1:R:541:LEU:O | 2.20 | 0.42 |
| 1:R:751:LEU:HD23 | 1:R:754:GLU:OE2 | 2.19 | 0.42 |
| 1:SA:58:TYR:HE1 | 1:SA:112:LEU:HD13 | 1.83 | 0.42 |
| 1:SA:779:LEU:HD21 | 1:TA:774:ARG:NH2 | 2.33 | 0.42 |
| 1:SB:284:ILE:HD12 | 1:SB:287:PRO:HB3 | 2.01 | 0.42 |
| 1:TA:59:CYS:HB2 | 1:TA:105:LEU:HD11 | 2.02 | 0.42 |
| 1:UA:29:GLU:HG2 | 1:UA:35:TYR:HE1 | 1.84 | 0.42 |
| 1:UA:588:PHE:CD1 | 1:UA:588:PHE:O | 2.72 | 0.42 |
| 1:UB:160:VAL:HG12 | 1:UB:161:GLU:N | 2.35 | 0.42 |
| 1:UB:331:GLY:HA3 | 1:UB:407:MET:HE1 | 2.01 | 0.42 |
| 1:UB:333:LEU:HD23 | 1:UB:374:VAL:CG1 | 2.43 | 0.42 |
| 1:UB:537:LEU:HA | 1:UB:645:PRO:HA | 2.01 | 0.42 |
| 1:V:177:ARG:HG2 | 1:V:213:LEU:HD21 | 2.00 | 0.42 |
| 1:V:280:ASN:HA | 1:V:321:GLN:O | 2.19 | 0.42 |
| 1:V:391:GLN:HB2 | 1:V:415:TRP:HB2 | 2.02 | 0.42 |
| 1:VA:94:GLN:O | 1:VA:95:ASP:C | 2.63 | 0.42 |
| 1:VA:364:GLU:HB2 | 1:WA:353:ALA:HB2 | 2.01 | 0.42 |
| 1:VB:413:VAL:HG22 | 1:VB:414:LEU:N | 2.34 | 0.42 |
| 1:VB:693:ILE:O | 1:VB:697:SER:N | 2.53 | 0.42 |
| 1:W:362:PRO:O | 1:X:352:GLN:HB3 | 2.18 | 0.42 |
| 1:WA:208:VAL:HG23 | 1:WA:209:PHE:N | 2.35 | 0.42 |
| 1:WA:387:GLY:O | 1:WA:388:ILE:HG23 | 2.20 | 0.42 |
| 1:WA:388:ILE:HD12 | 1:WA:390:VAL:CG1 | 2.50 | 0.42 |
| 1:WA:500:LEU:HD21 | 1:WA:567:PHE:CE2 | 2.54 | 0.42 |
| 1:WB:335:ARG:HA | 1:WB:355:ASP:O | 2.19 | 0.42 |
| 1:WB:410:GLN:O | 1:WB:411:ASP:CG | 2.62 | 0.42 |
| 1:WB:775:ALA:CB | 1:XB:770:LEU:HD22 | 2.50 | 0.42 |
| 1:X:220:ILE:HD12 | 1:Y:245:THR:CG2 | 2.50 | 0.42 |
| 1:X:277:GLY:HA2 | 1:Y:297:GLY:O | 2.19 | 0.42 |
| 1:X:393:VAL:HG22 | 1:X:411:ASP:O | 2.19 | 0.42 |
| 1:X:633:LEU:HD12 | 1:X:634:VAL:H | 1.83 | 0.42 |
| 1:XA:174:LEU:HD12 | 1:XA:214:ASP:O | 2.19 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XA:180:LYS:HD2 | 1:XA:181:GLU:C | 2.45 | 0.42 |
| 1:XA:500:LEU:HD21 | 1:XA:567:PHE:CE2 | 2.53 | 0.42 |
| 1:XB:55:PRO:O | 1:XB:57:HIS:HD2 | 2.01 | 0.42 |
| 1:XB:384:GLU:HA | 1:XB:403:GLY:HA2 | 2.01 | 0.42 |
| 1:XB:416:GLU:OE1 | 1:XB:455:THR:N | 2.53 | 0.42 |
| 1:XB:688:LEU:HD12 | 1:XB:688:LEU:O | 2.19 | 0.42 |
| 1:Y:175:ARG:HA | 1:Y:197:LEU:HD23 | 2.01 | 0.42 |
| 1:Y:398:VAL:HG12 | 1:Y:399:ARG:N | 2.35 | 0.42 |
| 1:YA:126:LEU:C | 1:YA:127:LEU:HD22 | 2.44 | 0.42 |
| 1:YB:36:ILE:N | 1:YB:36:ILE:HD12 | 2.34 | 0.42 |
| 1:YB:311:GLN:HB3 | 1:YB:312:PRO:HD2 | 2.02 | 0.42 |
| 1:YB:788:ALA:O | 1:YB:792:VAL:HB | 2.18 | 0.42 |
| 1:Z:524:THR:HA | 1:Z:541:LEU:O | 2.19 | 0.42 |
| 1:Z:604:PHE:HB3 | 1:Z:623:ARG:HB3 | 2.01 | 0.42 |
| 1:Z:779:LEU:O | 1:Z:782:SER:HB3 | 2.20 | 0.42 |
| 1:ZA:198:VAL:HG21 | 1:ZA:204:TYR:CD2 | 2.55 | 0.42 |
| 1:ZA:327:SER:H | 1:ZA:330:GLN:HB2 | 1.84 | 0.42 |
| 1:ZB:69:ALA:HB2 | 1:ZB:74:LEU:CG | 2.50 | 0.42 |
| 1:ZB:105:LEU:O | 1:ZB:105:LEU:HD23 | 2.20 | 0.42 |
| 1:ZB:160:VAL:HG12 | 1:ZB:161:GLU:N | 2.35 | 0.42 |
| 1:ZB:345:ASP:HB3 | 1:ZB:349:VAL:O | 2.19 | 0.42 |
| 1:A:9:ARG:HA | 1:A:34:THR:HG22 | 2.02 | 0.42 |
| 1:AA:231:ALA:HB2 | 1:AA:249:TRP:CZ3 | 2.55 | 0.42 |
| 1:AA:583:VAL:HG13 | 1:AA:584:ALA:N | 2.34 | 0.42 |
| 1:AA:762:VAL:HG23 | 1:AA:763:GLN:N | 2.35 | 0.42 |
| 1:AB:777:LEU:HD12 | 1:AB:781:VAL:HG13 | 2.00 | 0.42 |
| 1:AC:199:THR:HG22 | 1:AC:199:THR:O | 2.20 | 0.42 |
| 1:AC:688:LEU:HD13 | 1:OA:679:ARG:HA | 2.01 | 0.42 |
| 1:B:335:ARG:HD2 | 1:B:336:ALA:H | 1.85 | 0.42 |
| 1:B:588:PHE:CG | 1:B:589:ASP:N | 2.86 | 0.42 |
| 1:B:661:ALA:HA | 1:B:664:ILE:HD12 | 2.02 | 0.42 |
| 1:BA:575:ILE:HA | 1:BA:578:ARG:HD3 | 2.00 | 0.42 |
| 1:C:115:VAL:HG12 | 1:C:121:LEU:HD23 | 2.02 | 0.42 |
| 1:CA:51:VAL:HB | 1:CA:97:PHE:CE1 | 2.55 | 0.42 |
| 1:CA:151:TYR:CG | 1:CA:152:ILE:N | 2.87 | 0.42 |
| 1:CA:218:ALA:HA | 1:CA:260:VAL:HA | 2.02 | 0.42 |
| 1:CA:480:VAL:HG12 | 1:CA:481:VAL:N | 2.34 | 0.42 |
| 1:CA:633:LEU:HD12 | 1:CA:634:VAL:N | 2.35 | 0.42 |
| 1:CB:10:ILE:HD11 | 1:CB:33:LYS:HB2 | 2.02 | 0.42 |
| 1:CB:786:GLN:O | 1:CB:790:VAL:HG23 | 2.19 | 0.42 |
| 1:D:13:TYR:HB2 | 1:D:49:ARG:HH11 | 1.84 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:D:227:LEU:HD23 | 1:D:227:LEU:C | 2.45 | 0.42 |
| 1:D:301:VAL:HG22 | 1:D:302:VAL:N | 2.34 | 0.42 |
| 1:DA:90:ILE:HD11 | 1:DA:155:LYS:HB3 | 2.00 | 0.42 |
| 1:DA:167:ILE:HG23 | 1:EA:193:GLY:HA3 | 2.01 | 0.42 |
| 1:DA:782:SER:HA | 1:DA:785:GLN:CD | 2.44 | 0.42 |
| 1:DB:121:LEU:O | 1:DB:144:LEU:HB2 | 2.19 | 0.42 |
| 1:DB:277:GLY:O | 1:DB:304:GLY:HA3 | 2.19 | 0.42 |
| 1:E:56:ARG:HB3 | 1:E:112:LEU:H | 1.84 | 0.42 |
| 1:E:176:LEU:HA | 1:E:211:GLU:O | 2.20 | 0.42 |
| 1:E:177:ARG:HG2 | 1:E:178:ALA:N | 2.33 | 0.42 |
| 1:E:334:LEU:HD12 | 1:E:357:TRP:CD1 | 2.54 | 0.42 |
| 1:E:388:ILE:CA | 1:E:457:VAL:HG23 | 2.50 | 0.42 |
| 1:E:772:TYR:CE1 | 1:F:766:ARG:HG3 | 2.55 | 0.42 |
| 1:EA:388:ILE:C | 1:EA:457:VAL:HG23 | 2.44 | 0.42 |
| 1:EB:337:LEU:HD21 | 1:EB:372:GLU:HB2 | 2.02 | 0.42 |
| 1:EB:405:THR:HG23 | 1:FB:396:GLY:CA | 2.49 | 0.42 |
| 1:F:106:GLU:N | 1:F:106:GLU:OE1 | 2.52 | 0.42 |
| 1:F:277:GLY:C | 1:F:305:GLU:H | 2.27 | 0.42 |
| 1:F:365:TYR:CZ | 1:F:366:VAL:O | 2.72 | 0.42 |
| 1:FB:16:ILE:HD11 | 1:FB:47:PRO:CD | 2.50 | 0.42 |
| 1:FB:114:VAL:HG23 | 1:FB:149:GLY:O | 2.20 | 0.42 |
| 1:GA:387:GLY:C | 1:GA:457:VAL:HG23 | 2.44 | 0.42 |
| 1:GA:679:ARG:NH1 | 1:GA:680:LEU:HD23 | 2.34 | 0.42 |
| 1:GB:221:LEU:HD21 | 1:GB:251:VAL:HG23 | 2.02 | 0.42 |
| 1:GB:664:ILE:HG23 | 1:GB:665:THR:N | 2.34 | 0.42 |
| 1:H:30:VAL:HG22 | 1:H:31:GLY:N | 2.34 | 0.42 |
| 1:HA:232:ARG:HG3 | 1:HA:263:VAL:O | 2.20 | 0.42 |
| 1:HA:405:THR:HG23 | 1:IA:396:GLY:N | 2.35 | 0.42 |
| 1:HB:346:GLU:C | 1:HB:347:GLU:HG3 | 2.45 | 0.42 |
| 1:I:169:ARG:O | 1:I:170:GLN:C | 2.62 | 0.42 |
| 1:I:244:ARG:O | 1:I:247:GLU:HB3 | 2.20 | 0.42 |
| 1:I:301:VAL:HG22 | 1:I:302:VAL:N | 2.34 | 0.42 |
| 1:I:416:GLU:OE2 | 1:I:455:THR:HG23 | 2.19 | 0.42 |
| 1:I:498:LEU:HD12 | 1:I:498:LEU:C | 2.44 | 0.42 |
| 1:I:583:VAL:HG23 | 1:I:584:ALA:N | 2.34 | 0.42 |
| 1:IB:17:HIS:HA | 1:IB:27:ARG:O | 2.19 | 0.42 |
| 1:IB:274:THR:O | 1:IB:307:SER:HA | 2.19 | 0.42 |
| 1:J:7:ILE:O | 1:J:8:ILE:C | 2.62 | 0.42 |
| 1:J:233:ARG:HA | 1:J:245:THR:HG23 | 2.01 | 0.42 |
| 1:J:554:ASP:O | 1:J:558:THR:HG23 | 2.19 | 0.42 |
| 1:JA:146:GLU:N | 1:JA:146:GLU:OE1 | 2.53 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:JA:377:ARG:HB3 | 1:JA:407:MET:HE1 | 2.01 | 0.42 |
| 1:JB:625:GLN:HA | 1:JB:635:VAL:O | 2.20 | 0.42 |
| 1:JB:791:GLU:OE2 | 1:JB:795:PHE:HB2 | 2.20 | 0.42 |
| 1:JB:799:THR:HG22 | 1:JB:807:ILE:HD13 | 2.02 | 0.42 |
| 1:K:216:VAL:HG22 | 1:K:217:ASP:N | 2.34 | 0.42 |
| 1:K:333:LEU:CD2 | 1:K:374:VAL:HG11 | 2.49 | 0.42 |
| 1:K:543:TYR:O | 1:K:545:TRP:HD1 | 2.02 | 0.42 |
| 1:K:704:LYS:HA | 1:K:707:LEU:HD12 | 2.02 | 0.42 |
| 1:KA:65:VAL:HG11 | 1:KA:100:TYR:CB | 2.49 | 0.42 |
| 1:KA:122:HIS:ND1 | 1:KA:160:VAL:HG21 | 2.35 | 0.42 |
| 1:KA:276:LEU:HD13 | 1:KA:281:TYR:HA | 2.02 | 0.42 |
| 1:KA:589:ASP:O | 1:KA:592:HIS:HB3 | 2.20 | 0.42 |
| 1:L:169:ARG:HA | 1:L:201:VAL:O | 2.19 | 0.42 |
| 1:MA:274:THR:HG21 | 1:MA:310:LEU:HD21 | 2.02 | 0.42 |
| 1:MB:406:TYR:CG | 1:MB:407:MET:N | 2.87 | 0.42 |
| 1:NA:16:ILE:HG21 | 1:NA:45:PHE:O | 2.19 | 0.42 |
| 1:NA:126:LEU:HD12 | 1:NA:155:LYS:O | 2.20 | 0.42 |
| 1:NA:274:THR:HG21 | 1:NA:310:LEU:HD21 | 2.02 | 0.42 |
| 1:NB:530:GLU:HB3 | 1:NB:534:HIS:HA | 2.02 | 0.42 |
| 1:OA:412:GLU:O | 1:OA:413:VAL:C | 2.62 | 0.42 |
| 1:OA:685:ARG:O | 1:OA:689:GLU:HG3 | 2.19 | 0.42 |
| 1:OB:120:ALA:HB3 | 1:OB:205:LEU:HD11 | 2.00 | 0.42 |
| 1:OB:311:GLN:HB3 | 1:OB:312:PRO:HD2 | 2.01 | 0.42 |
| 1:PB:60:THR:H | 1:PB:107:LYS:HB3 | 1.84 | 0.42 |
| 1:PB:228:HIS:CE1 | 1:PB:268:LEU:HD22 | 2.54 | 0.42 |
| 1:PB:365:TYR:CZ | 1:PB:366:VAL:O | 2.73 | 0.42 |
| 1:Q:65:VAL:HG12 | 1:Q:83:LEU:HD11 | 2.00 | 0.42 |
| 1:Q:216:VAL:O | 1:Q:216:VAL:HG13 | 2.18 | 0.42 |
| 1:Q:419:LEU:HD21 | 1:Q:424:GLU:OE2 | 2.19 | 0.42 |
| 1:Q:424:GLU:HG3 | 1:Q:514:LEU:HB2 | 2.02 | 0.42 |
| 1:QA:123:LEU:O | 1:QA:143:TRP:CE3 | 2.72 | 0.42 |
| 1:QA:806:THR:HA | 1:RA:808:ARG:HD3 | 2.01 | 0.42 |
| 1:QB:8:ILE:HD12 | 1:QB:37:ARG:HH11 | 1.83 | 0.42 |
| 1:R:332:LEU:O | 1:R:358:LEU:HD12 | 2.20 | 0.42 |
| 1:RA:58:TYR:OH | 1:RA:152:ILE:HG23 | 2.19 | 0.42 |
| 1:RA:331:GLY:CA | 1:RA:407:MET:HE1 | 2.49 | 0.42 |
| 1:RB:167:ILE:HA | 1:RB:203:ALA:HA | 2.02 | 0.42 |
| 1:RB:279:HIS:N | 1:RB:279:HIS:ND1 | 2.68 | 0.42 |
| 1:RB:387:GLY:HA3 | 1:RB:402:ILE:HG13 | 2.01 | 0.42 |
| 1:SB:95:ASP:O | 1:SB:96:PRO:C | 2.62 | 0.42 |
| 1:SB:183:TRP:HA | 1:SB:189:GLU:HA | 2.01 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:SB:227:LEU:HD13 | 1:SB:270:VAL:HG22 | 2.01 | 0.42 |
| 1:SB:390:VAL:HG23 | 1:SB:413:VAL:C | 2.45 | 0.42 |
| 1:SB:390:VAL:HG21 | 1:SB:408:LEU:HD22 | 2.01 | 0.42 |
| 1:SB:424:GLU:HG2 | 1:SB:425:GLU:N | 2.33 | 0.42 |
| 1:SB:790:VAL:HG22 | 1:TB:785:GLN:HG3 | 2.00 | 0.42 |
| 1:T:268:LEU:C | 1:T:268:LEU:HD12 | 2.45 | 0.42 |
| 1:T:281:TYR:CZ | 1:T:366:VAL:HG23 | 2.54 | 0.42 |
| 1:T:480:VAL:HG12 | 1:T:481:VAL:N | 2.35 | 0.42 |
| 1:T:781:VAL:HG23 | 1:T:782:SER:N | 2.35 | 0.42 |
| 1:TA:61:VAL:HA | 1:TA:104:VAL:O | 2.20 | 0.42 |
| 1:TA:112:LEU:HD23 | 1:TA:150:THR:CG2 | 2.49 | 0.42 |
| 1:TB:13:TYR:HA | 1:TB:50:MET:CE | 2.48 | 0.42 |
| 1:TB:18:VAL:CA | 1:TB:44:LEU:HD13 | 2.49 | 0.42 |
| 1:TB:112:LEU:HD12 | 1:TB:153:PRO:HD3 | 2.02 | 0.42 |
| 1:UA:588:PHE:HB3 | 1:UA:654:LEU:HD11 | 1.99 | 0.42 |
| 1:UB:13:TYR:HA | 1:UB:50:MET:HE2 | 2.01 | 0.42 |
| 1:UB:795:PHE:O | 1:UB:799:THR:HG23 | 2.20 | 0.42 |
| 1:VB:17:HIS:CD2 | 1:VB:28:VAL:HG23 | 2.54 | 0.42 |
| 1:VB:470:VAL:HA | 1:VB:494:GLN:O | 2.20 | 0.42 |
| 1:W:229:LEU:HD11 | 1:W:259:HIS:CD2 | 2.55 | 0.42 |
| 1:WA:16:ILE:HD11 | 1:WA:43:VAL:CG1 | 2.49 | 0.42 |
| 1:WA:18:VAL:HG21 | 1:WA:27:ARG:NH1 | 2.34 | 0.42 |
| 1:WA:51:VAL:HG12 | 1:WA:53:VAL:HG23 | 2.00 | 0.42 |
| 1:WA:303:LYS:CE | 1:WA:323:VAL:HG11 | 2.49 | 0.42 |
| 1:WA:500:LEU:HD23 | 1:WA:565:PRO:O | 2.20 | 0.42 |
| 1:WA:729:ARG:O | 1:WA:732:ALA:HB3 | 2.20 | 0.42 |
| 1:WB:8:ILE:HG22 | 1:WB:8:ILE:O | 2.19 | 0.42 |
| 1:X:10:ILE:HD12 | 1:X:30:VAL:C | 2.45 | 0.42 |
| 1:XA:7:ILE:O | 1:XA:8:ILE:C | 2.63 | 0.42 |
| 1:XA:10:ILE:HG12 | 1:XA:16:ILE:CD1 | 2.49 | 0.42 |
| 1:XA:276:LEU:HB2 | 1:XA:306:LYS:O | 2.19 | 0.42 |
| 1:XB:55:PRO:HA | 1:XB:58:TYR:CE1 | 2.55 | 0.42 |
| 1:XB:56:ARG:HD2 | 1:YB:127:LEU:HD11 | 2.02 | 0.42 |
| 1:XB:121:LEU:HD21 | 1:XB:151:TYR:CD1 | 2.54 | 0.42 |
| 1:XB:600:ARG:HA | 1:XB:600:ARG:HE | 1.85 | 0.42 |
| 1:Y:363:LEU:CA | 1:Z:353:ALA:HB3 | 2.50 | 0.42 |
| 1:Y:363:LEU:HA | 1:Z:353:ALA:HB3 | 2.02 | 0.42 |
| 1:YA:521:ASP:OD1 | 1:ZA:565:PRO:HD2 | 2.20 | 0.42 |
| 1:YB:284:ILE:HD12 | 1:YB:287:PRO:HB3 | 2.02 | 0.42 |
| 1:Z:511:ARG:CG | 1:Z:512:ARG:N | 2.83 | 0.42 |
| 1:ZA:226:ALA:CB | 1:ZA:252:THR:HG22 | 2.48 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:ZA:335:ARG:HA | 1:ZA:356:HIS:HA | 2.02 | 0.42 |
| 1:ZA:352:GLN:O | 1:ZA:353:ALA:C | 2.63 | 0.42 |
| 1:ZB:467:ALA:HA | 1:ZB:482:PHE:HA | 2.00 | 0.42 |
| 1:A:35:TYR:O | 1:A:37:ARG:NH2 | 2.52 | 0.42 |
| 1:A:351:HIS:NE2 | 1:A:357:TRP:CG | 2.88 | 0.42 |
| 1:AA:198:VAL:O | 1:AA:198:VAL:HG13 | 2.19 | 0.42 |
| 1:AB:65:VAL:HG23 | 1:AB:67:ARG:CG | 2.50 | 0.42 |
| 1:AB:539:LEU:HD21 | 1:AB:541:LEU:HD21 | 2.02 | 0.42 |
| 1:AB:627:VAL:HA | 1:AB:633:LEU:O | 2.19 | 0.42 |
| 1:AC:384:GLU:OE2 | 1:AC:402:ILE:HG22 | 2.20 | 0.42 |
| 1:B:67:ARG:HA | 1:B:73:VAL:HA | 2.02 | 0.42 |
| 1:B:216:VAL:HG22 | 1:B:217:ASP:N | 2.34 | 0.42 |
| 1:BA:27:ARG:HA | 1:BA:27:ARG:NE | 2.34 | 0.42 |
| 1:BA:750:ALA:O | 1:BA:754:GLU:HG3 | 2.19 | 0.42 |
| 1:BB:374:VAL:HG12 | 1:BB:375:GLU:H | 1.84 | 0.42 |
| 1:BB:767:GLU:HA | 1:BB:770:LEU:HD12 | 2.01 | 0.42 |
| 1:C:741:VAL:O | 1:C:744:ALA:HB3 | 2.20 | 0.42 |
| 1:CA:168:ILE:H | 1:CA:203:ALA:HA | 1.84 | 0.42 |
| 1:CA:644:GLU:N | 1:CA:644:GLU:OE1 | 2.53 | 0.42 |
| 1:CA:750:ALA:O | 1:CA:754:GLU:HG3 | 2.20 | 0.42 |
| 1:CA:763:GLN:NE2 | 1:CA:764:LYS:HG3 | 2.34 | 0.42 |
| 1:CB:50:MET:HE2 | 1:CB:96:PRO:C | 2.45 | 0.42 |
| 1:D:23:SER:CB | 1:D:25:VAL:HG23 | 2.49 | 0.42 |
| 1:D:466:ALA:O | 1:D:482:PHE:HA | 2.20 | 0.42 |
| 1:DA:160:VAL:HG12 | 1:DA:161:GLU:CD | 2.44 | 0.42 |
| 1:DA:228:HIS:NE2 | 1:DA:248:GLU:HB3 | 2.34 | 0.42 |
| 1:DA:539:LEU:HD12 | 1:DA:642:SER:OG | 2.19 | 0.42 |
| 1:DB:5:GLU:O | 1:DB:6:PHE:HB2 | 2.20 | 0.42 |
| 1:E:18:VAL:O | 1:E:26:SER:HB2 | 2.20 | 0.42 |
| 1:E:87:ASP:O | 1:E:88:LEU:HD23 | 2.19 | 0.42 |
| 1:E:220:ILE:HG22 | 1:E:221:LEU:N | 2.35 | 0.42 |
| 1:EA:459:SER:HA | 1:EA:488:SER:HA | 2.01 | 0.42 |
| 1:EA:763:GLN:NE2 | 1:EA:764:LYS:HG3 | 2.35 | 0.42 |
| 1:EB:129:PHE:CE1 | 1:EB:137:VAL:HG11 | 2.54 | 0.42 |
| 1:EB:146:GLU:OE1 | 1:EB:146:GLU:N | 2.53 | 0.42 |
| 1:EB:582:ALA:HB1 | 1:EB:598:ILE:HG22 | 2.01 | 0.42 |
| 1:F:30:VAL:CG2 | 1:F:50:MET:SD | 3.08 | 0.42 |
| 1:F:276:LEU:HD23 | 1:F:320:ILE:HG23 | 2.02 | 0.42 |
| 1:F:364:GLU:OE2 | 1:G:338:GLN:HA | 2.20 | 0.42 |
| 1:F:531:THR:OG1 | 1:F:533:ASP:OD1 | 2.37 | 0.42 |
| 1:G:53:VAL:HG12 | 1:G:93:ALA:HA | 2.01 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:G:92:LEU:O | 1:G:92:LEU:CD1 | 2.65 | 0.42 |
| 1:G:334:LEU:O | 1:G:356:HIS:HA | 2.20 | 0.42 |
| 1:GA:234:ASN:N | 1:GA:245:THR:OG1 | 2.52 | 0.42 |
| 1:GB:59:CYS:CB | 1:GB:109:ILE:HD13 | 2.50 | 0.42 |
| 1:GB:183:TRP:CD1 | 1:GB:183:TRP:N | 2.88 | 0.42 |
| 1:H:60:THR:HA | 1:H:89:GLU:O | 2.20 | 0.42 |
| 1:H:151:TYR:CZ | 1:H:153:PRO:HA | 2.54 | 0.42 |
| 1:H:174:LEU:HB3 | 1:H:198:VAL:CG1 | 2.50 | 0.42 |
| 1:H:280:ASN:O | 1:H:304:GLY:HA3 | 2.20 | 0.42 |
| 1:H:325:VAL:HA | 1:H:364:GLU:HA | 2.01 | 0.42 |
| 1:HA:57:HIS:HA | 1:HA:110:THR:O | 2.20 | 0.42 |
| 1:HA:116:LEU:HB2 | 1:HA:119:THR:HG22 | 2.02 | 0.42 |
| 1:HB:363:LEU:HD23 | 1:HB:363:LEU:N | 2.35 | 0.42 |
| 1:I:163:ILE:CD1 | 1:I:205:LEU:HD21 | 2.50 | 0.42 |
| 1:I:518:LEU:HD11 | 1:I:549:VAL:HG21 | 2.02 | 0.42 |
| 1:IA:62:ALA:N | 1:IA:106:GLU:HB2 | 2.34 | 0.42 |
| 1:IA:549:VAL:HG13 | 1:IA:552:ARG:NE | 2.34 | 0.42 |
| 1:IB:257:GLU:HG3 | 1:JB:245:THR:HB | 2.02 | 0.42 |
| 1:IB:277:GLY:C | 1:IB:305:GLU:H | 2.28 | 0.42 |
| 1:IB:390:VAL:HG11 | 1:IB:408:LEU:CD2 | 2.38 | 0.42 |
| 1:IB:714:MET:HA | 1:IB:717:GLU:HB3 | 2.01 | 0.42 |
| 1:J:18:VAL:O | 1:J:27:ARG:N | 2.53 | 0.42 |
| 1:J:218:ALA:HB1 | 1:J:259:HIS:C | 2.45 | 0.42 |
| 1:J:461:ARG:CB | 1:J:486:LEU:HD12 | 2.50 | 0.42 |
| 1:JA:18:VAL:HG21 | 1:JA:41:GLU:OE2 | 2.19 | 0.42 |
| 1:JA:758:GLU:O | 1:JA:762:VAL:HG22 | 2.20 | 0.42 |
| 1:JB:168:ILE:O | 1:JB:168:ILE:HG13 | 2.20 | 0.42 |
| 1:JB:173:ALA:HA | 1:JB:198:VAL:O | 2.20 | 0.42 |
| 1:JB:333:LEU:CA | 1:JB:358:LEU:HD13 | 2.49 | 0.42 |
| 1:JB:679:ARG:NH2 | 1:JB:680:LEU:HD23 | 2.34 | 0.42 |
| 1:K:176:LEU:HD21 | 1:K:196:TRP:CD1 | 2.54 | 0.42 |
| 1:K:227:LEU:HD11 | 1:K:268:LEU:O | 2.20 | 0.42 |
| 1:KA:13:TYR:C | 1:KA:50:MET:HE3 | 2.44 | 0.42 |
| 1:KA:81:VAL:HG11 | 1:KA:101:PRO:O | 2.19 | 0.42 |
| 1:KA:104:VAL:HG22 | 1:KA:105:LEU:N | 2.34 | 0.42 |
| 1:KA:501:SER:HA | 1:KA:507:ARG:O | 2.19 | 0.42 |
| 1:KA:521:ASP:O | 1:KA:545:TRP:CD1 | 2.73 | 0.42 |
| 1:KA:737:GLY:O | 1:KA:741:VAL:HG23 | 2.20 | 0.42 |
| 1:KB:151:TYR:CE1 | 1:KB:152:ILE:O | 2.72 | 0.42 |
| 1:KB:230:ARG:HA | 1:KB:247:GLU:O | 2.20 | 0.42 |
| 1:KB:274:THR:N | 1:KB:308:PHE:O | 2.53 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:L:480:VAL:HG12 | 1:L:481:VAL:N | 2.35 | 0.42 |
| 1:L:536:ARG:NE | 1:L:536:ARG:HA | 2.35 | 0.42 |
| 1:LA:501:SER:HA | 1:LA:507:ARG:O | 2.19 | 0.42 |
| 1:M:126:LEU:HG | 1:M:158:GLU:HB3 | 2.00 | 0.42 |
| 1:M:285:LEU:HB3 | 1:M:315:GLN:NE2 | 2.35 | 0.42 |
| 1:MA:90:ILE:HD11 | 1:MA:155:LYS:HB3 | 2.01 | 0.42 |
| 1:MA:572:CYS:HA | 1:MA:575:ILE:HD12 | 2.00 | 0.42 |
| 1:MB:316:LEU:HD21 | 1:MB:319:GLY:O | 2.20 | 0.42 |
| 1:MB:385:ASN:OD1 | 1:MB:385:ASN:C | 2.63 | 0.42 |
| 1:MB:703:ARG:N | 1:NB:693:ILE:HG21 | 2.34 | 0.42 |
| 1:N:177:ARG:HA | 1:N:194:GLU:O | 2.20 | 0.42 |
| 1:N:416:GLU:OE1 | 1:N:454:LYS:HB2 | 2.19 | 0.42 |
| 1:N:470:VAL:HG12 | 1:N:471:TYR:N | 2.34 | 0.42 |
| 1:N:768:LEU:C | 1:N:768:LEU:HD23 | 2.45 | 0.42 |
| 1:NA:84:ARG:O | 1:NA:85:HIS:C | 2.63 | 0.42 |
| 1:NA:151:TYR:CG | 1:NA:152:ILE:N | 2.88 | 0.42 |
| 1:NA:167:ILE:H | 1:NA:167:ILE:HD12 | 1.84 | 0.42 |
| 1:NA:168:ILE:HD12 | 1:NA:200:THR:O | 2.19 | 0.42 |
| 1:NA:351:HIS:CE1 | 1:NA:357:TRP:CD1 | 3.07 | 0.42 |
| 1:NA:423:VAL:HA | 1:NA:426:LEU:HD12 | 2.01 | 0.42 |
| 1:NA:564:VAL:HG11 | 1:NA:567:PHE:HA | 2.01 | 0.42 |
| 1:NB:144:LEU:N | 1:NB:144:LEU:HD23 | 2.35 | 0.42 |
| 1:O:284:ILE:HD12 | 1:O:287:PRO:HB3 | 2.02 | 0.42 |
| 1:O:592:HIS:HE1 | 1:P:531:THR:O | 2.03 | 0.42 |
| 1:OA:60:THR:HA | 1:OA:89:GLU:O | 2.20 | 0.42 |
| 1:OA:498:LEU:HD21 | 1:OA:562:PHE:CD1 | 2.54 | 0.42 |
| 1:OA:786:GLN:OE1 | 1:PA:781:VAL:HG11 | 2.19 | 0.42 |
| 1:OB:130:GLU:HA | 1:OB:135:ASP:HA | 2.01 | 0.42 |
| 1:OB:516:LEU:HD12 | 1:OB:517:LEU:H | 1.85 | 0.42 |
| 1:OB:662:ILE:HG13 | 1:OB:663:GLU:N | 2.34 | 0.42 |
| 1:P:806:THR:HG22 | 1:Q:808:ARG:HB2 | 2.01 | 0.42 |
| 1:PA:230:ARG:HA | 1:PA:247:GLU:O | 2.19 | 0.42 |
| 1:PA:332:LEU:HD11 | 1:PA:373:VAL:HG23 | 2.02 | 0.42 |
| 1:PA:529:ILE:HG13 | 1:PA:537:LEU:HD12 | 2.01 | 0.42 |
| 1:PA:792:VAL:HG12 | 1:PA:796:LYS:HD3 | 2.01 | 0.42 |
| 1:PB:329:GLN:O | 1:PB:407:MET:HE1 | 2.19 | 0.42 |
| 1:PB:424:GLU:HG2 | 1:PB:425:GLU:N | 2.34 | 0.42 |
| 1:Q:184:ASP:HB2 | 1:Q:196:TRP:NE1 | 2.34 | 0.42 |
| 1:Q:286:ASP:N | 1:Q:287:PRO:CD | 2.83 | 0.42 |
| 1:Q:347:GLU:O | 1:Q:347:GLU:OE1 | 2.37 | 0.42 |
| 1:Q:362:PRO:HB2 | 1:R:352:GLN:HB2 | 2.02 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:Q:382:LEU:HD13 | 1:Q:401:VAL:O | 2.20 | 0.42 |
| 1:QA:42:ARG:HA | 1:QA:42:ARG:NE | 2.35 | 0.42 |
| 1:QA:799:THR:O | 1:QA:802:ILE:HG22 | 2.20 | 0.42 |
| 1:QB:390:VAL:HG12 | 1:QB:414:LEU:HD23 | 2.02 | 0.42 |
| 1:R:521:ASP:O | 1:R:545:TRP:CD1 | 2.73 | 0.42 |
| 1:RA:115:VAL:HG11 | 1:RA:145:PHE:O | 2.20 | 0.42 |
| 1:RA:197:LEU:HD22 | 1:RA:216:VAL:HG11 | 2.02 | 0.42 |
| 1:RA:655:GLN:O | 1:RA:658:VAL:HG12 | 2.19 | 0.42 |
| 1:RB:233:ARG:NH2 | 1:RB:263:VAL:HG23 | 2.35 | 0.42 |
| 1:RB:592:HIS:CD2 | 1:RB:592:HIS:C | 2.98 | 0.42 |
| 1:RB:755:THR:HG22 | 1:RB:759:LEU:HD12 | 2.01 | 0.42 |
| 1:SA:372:GLU:CD | 1:SA:374:VAL:HG11 | 2.45 | 0.42 |
| 1:SB:387:GLY:HA2 | 1:SB:401:VAL:O | 2.20 | 0.42 |
| 1:T:179:ARG:HE | 1:T:211:GLU:HB2 | 1.84 | 0.42 |
| 1:T:782:SER:O | 1:T:785:GLN:HB2 | 2.19 | 0.42 |
| 1:TA:182:CYS:SG | 1:TA:209:PHE:CD1 | 3.07 | 0.42 |
| 1:TA:688:LEU:HD21 | 1:UA:678:GLN:HB3 | 2.02 | 0.42 |
| 1:TB:92:LEU:HD12 | 1:TB:92:LEU:N | 2.34 | 0.42 |
| 1:TB:281:TYR:CZ | 1:TB:321:GLN:HB2 | 2.53 | 0.42 |
| 1:UA:175:ARG:NE | 1:UA:213:LEU:HD22 | 2.35 | 0.42 |
| 1:UA:731:GLU:OE2 | 1:UA:735:ILE:HD11 | 2.19 | 0.42 |
| 1:UB:51:VAL:O | 1:UB:96:PRO:HA | 2.20 | 0.42 |
| 1:UB:144:LEU:HD12 | 1:UB:144:LEU:O | 2.20 | 0.42 |
| 1:VA:105:LEU:HD11 | 1:VA:107:LYS:HB3 | 2.00 | 0.42 |
| 1:VA:253:VAL:HA | 1:VA:257:GLU:HA | 2.01 | 0.42 |
| 1:VA:465:ASN:HA | 1:VA:483:GLY:HA2 | 2.01 | 0.42 |
| 1:VA:564:VAL:O | 1:VA:565:PRO:C | 2.62 | 0.42 |
| 1:VA:593:LYS:HG3 | 1:WA:584:ALA:HB1 | 2.01 | 0.42 |
| 1:VB:416:GLU:HB3 | 1:VB:418:GLU:OE2 | 2.20 | 0.42 |
| 1:W:390:VAL:CG1 | 1:W:401:VAL:HG22 | 2.50 | 0.42 |
| 1:WB:204:TYR:CG | 1:WB:205:LEU:N | 2.87 | 0.42 |
| 1:X:497:VAL:HG23 | 1:X:514:LEU:HD12 | 2.01 | 0.42 |
| 1:X:599:ILE:CD1 | 1:X:640:VAL:HG21 | 2.49 | 0.42 |
| 1:XA:224:LYS:N | 1:XA:224:LYS:HD3 | 2.34 | 0.42 |
| 1:XA:326:LEU:HD13 | 1:XA:331:GLY:HA2 | 2.02 | 0.42 |
| 1:XA:331:GLY:HA3 | 1:XA:407:MET:HE3 | 2.01 | 0.42 |
| 1:XB:335:ARG:HA | 1:XB:355:ASP:O | 2.19 | 0.42 |
| 1:XB:389:TYR:N | 1:XB:455:THR:O | 2.53 | 0.42 |
| 1:Y:363:LEU:C | 1:Z:353:ALA:HB3 | 2.45 | 0.42 |
| 1:Y:802:ILE:HG23 | 1:Y:803:GLY:N | 2.34 | 0.42 |
| 1:YB:28:VAL:O | 1:YB:28:VAL:HG13 | 2.20 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:YB:472:ASP:HB2 | 1:YB:493:GLU:OE1 | 2.20 | 0.42 |
| 1:YB:500:LEU:HD13 | 1:YB:566:ASP:OD1 | 2.20 | 0.42 |
| 1:Z:170:GLN:HA | 1:Z:201:VAL:HG22 | 2.01 | 0.42 |
| 1:Z:285:LEU:HD11 | 1:Z:317:GLU:N | 2.35 | 0.42 |
| 1:Z:468:VAL:O | 1:Z:480:VAL:HG13 | 2.20 | 0.42 |
| 1:ZA:36:ILE:HD12 | 1:ZA:36:ILE:N | 2.35 | 0.42 |
| 1:ZB:166:THR:HG21 | 1:ZB:174:LEU:HD22 | 2.00 | 0.42 |
| 1:ZB:235:PHE:CD1 | 1:ZB:264:HIS:HB3 | 2.54 | 0.42 |
| 1:ZB:497:VAL:HG22 | 1:ZB:498:LEU:N | 2.35 | 0.42 |
| 1:ZB:542:ALA:HB2 | 1:ZB:641:GLN:HE22 | 1.85 | 0.42 |
| 1:A:460:TYR:O | 1:A:486:LEU:HD12 | 2.20 | 0.42 |
| 1:AA:6:PHE:O | 1:AA:36:ILE:HA | 2.20 | 0.42 |
| 1:AA:10:ILE:HD11 | 1:AA:15:TYR:N | 2.35 | 0.42 |
| 1:AB:112:LEU:HG | 1:AB:150:THR:OG1 | 2.20 | 0.42 |
| 1:AB:405:THR:HG21 | 1:BB:393:VAL:HA | 2.02 | 0.42 |
| 1:AC:56:ARG:O | 1:AC:57:HIS:ND1 | 2.53 | 0.42 |
| 1:AC:658:VAL:HG21 | 1:OA:535:ALA:HA | 2.02 | 0.42 |
| 1:BA:50:MET:O | 1:BA:96:PRO:CB | 2.68 | 0.42 |
| 1:BA:175:ARG:HE | 1:BA:213:LEU:CB | 2.33 | 0.42 |
| 1:BA:391:GLN:HB2 | 1:BA:415:TRP:HB2 | 2.00 | 0.42 |
| 1:BB:527:ILE:HD13 | 1:BB:541:LEU:HD11 | 2.01 | 0.42 |
| 1:C:461:ARG:HB2 | 1:C:486:LEU:HD12 | 2.02 | 0.42 |
| 1:C:521:ASP:O | 1:C:545:TRP:CD2 | 2.73 | 0.42 |
| 1:C:772:TYR:O | 1:C:775:ALA:HB3 | 2.18 | 0.42 |
| 1:CA:60:THR:HG21 | 1:CA:155:LYS:CE | 2.50 | 0.42 |
| 1:CA:545:TRP:CD2 | 1:CA:545:TRP:C | 2.98 | 0.42 |
| 1:CB:809:ASP:O | 1:DB:812:VAL:HG12 | 2.19 | 0.42 |
| 1:D:286:ASP:CG | 1:D:296:LEU:HA | 2.45 | 0.42 |
| 1:D:518:LEU:HD12 | 1:D:519:GLY:N | 2.34 | 0.42 |
| 1:DA:121:LEU:HD12 | 1:DA:123:LEU:HG | 2.02 | 0.42 |
| 1:DA:380:ILE:H | 1:DA:380:ILE:HD12 | 1.85 | 0.42 |
| 1:DB:583:VAL:HG13 | 1:DB:584:ALA:N | 2.35 | 0.42 |
| 1:EA:411:ASP:OD1 | 1:EA:411:ASP:C | 2.63 | 0.42 |
| 1:EB:253:VAL:HG23 | 1:EB:254:GLN:OE1 | 2.20 | 0.42 |
| 1:EB:336:ALA:HB3 | 1:EB:352:GLN:O | 2.19 | 0.42 |
| 1:EB:583:VAL:HG13 | 1:EB:584:ALA:N | 2.35 | 0.42 |
| 1:F:172:GLN:HE22 | 1:F:215:LEU:HD21 | 1.84 | 0.42 |
| 1:F:425:GLU:HG2 | 1:F:514:LEU:HD21 | 2.01 | 0.42 |
| 1:FA:115:VAL:HG22 | 1:FA:150:THR:HA | 2.02 | 0.42 |
| 1:FA:121:LEU:H | 1:FA:121:LEU:HD23 | 1.85 | 0.42 |
| 1:FA:482:PHE:CZ | 1:FA:552:ARG:HB3 | 2.55 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:G:452:ARG:HE | 1:G:454:LYS:HA | 1.84 | 0.42 |
| 1:G:658:VAL:HG23 | 1:H:533:ASP:HB3 | 2.01 | 0.42 |
| 1:GA:390:VAL:HG22 | 1:GA:399:ARG:O | 2.19 | 0.42 |
| 1:GA:802:ILE:HG23 | 1:GA:807:ILE:HD11 | 2.01 | 0.42 |
| 1:GB:81:VAL:HG22 | 1:GB:82:ARG:N | 2.35 | 0.42 |
| 1:GB:523:PHE:CZ | 1:GB:545:TRP:CE2 | 3.07 | 0.42 |
| 1:H:423:VAL:O | 1:H:424:GLU:C | 2.62 | 0.42 |
| 1:H:750:ALA:HB2 | 1:I:741:VAL:HA | 2.01 | 0.42 |
| 1:HA:365:TYR:CE2 | 1:HA:367:PRO:HA | 2.55 | 0.42 |
| 1:HA:537:LEU:HD12 | 1:HA:644:GLU:C | 2.45 | 0.42 |
| 1:HB:349:VAL:HG12 | 1:HB:351:HIS:N | 2.35 | 0.42 |
| 1:HB:526:VAL:HG12 | 1:HB:527:ILE:H | 1.84 | 0.42 |
| 1:I:58:TYR:O | 1:I:90:ILE:HG23 | 2.20 | 0.42 |
| 1:I:173:ALA:O | 1:I:216:VAL:HG12 | 2.20 | 0.42 |
| 1:I:323:VAL:HB | 1:I:364:GLU:OE2 | 2.20 | 0.42 |
| 1:I:711:ALA:O | 1:I:715:ALA:HB2 | 2.20 | 0.42 |
| 1:I:795:PHE:O | 1:I:798:MET:HB2 | 2.20 | 0.42 |
| 1:IA:25:VAL:HG21 | 1:IA:78:THR:O | 2.19 | 0.42 |
| 1:IB:17:HIS:HE2 | 1:IB:28:VAL:HG23 | 1.82 | 0.42 |
| 1:IB:173:ALA:O | 1:IB:216:VAL:HG12 | 2.20 | 0.42 |
| 1:IB:221:LEU:C | 1:IB:253:VAL:HG22 | 2.45 | 0.42 |
| 1:J:61:VAL:HG23 | 1:J:61:VAL:O | 2.20 | 0.42 |
| 1:J:365:TYR:CE2 | 1:J:367:PRO:HA | 2.55 | 0.42 |
| 1:J:366:VAL:O | 1:J:366:VAL:HG13 | 2.20 | 0.42 |
| 1:JA:130:GLU:CD | 1:JA:132:LYS:H | 2.28 | 0.42 |
| 1:JA:492:GLU:O | 1:JA:492:GLU:CD | 2.63 | 0.42 |
| 1:JB:151:TYR:CZ | 1:JB:152:ILE:O | 2.73 | 0.42 |
| 1:JB:501:SER:O | 1:JB:511:ARG:NE | 2.53 | 0.42 |
| 1:K:7:ILE:HG22 | 1:K:7:ILE:O | 2.20 | 0.42 |
| 1:K:63:ASN:ND2 | 1:K:83:LEU:HD23 | 2.33 | 0.42 |
| 1:K:227:LEU:HD12 | 1:K:228:HIS:N | 2.34 | 0.42 |
| 1:K:228:HIS:O | 1:K:229:LEU:HD22 | 2.20 | 0.42 |
| 1:K:556:GLN:CD | 1:K:556:GLN:N | 2.78 | 0.42 |
| 1:KB:56:ARG:O | 1:KB:111:PRO:HA | 2.20 | 0.42 |
| 1:L:333:LEU:HB3 | 1:L:375:GLU:O | 2.20 | 0.42 |
| 1:LA:451:PRO:C | 1:LA:452:ARG:HD3 | 2.45 | 0.42 |
| 1:LB:15:TYR:CZ | 1:LB:48:MET:HE3 | 2.55 | 0.42 |
| 1:LB:121:LEU:HD12 | 1:LB:122:HIS:O | 2.19 | 0.42 |
| 1:LB:533:ASP:OD1 | 1:LB:533:ASP:C | 2.62 | 0.42 |
| 1:M:14:HIS:HA | 1:M:48:MET:O | 2.20 | 0.42 |
| 1:M:53:VAL:HG23 | 1:M:53:VAL:O | 2.20 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:M:229:LEU:O | 1:M:248:GLU:HA | 2.20 | 0.42 |
| 1:M:468:VAL:C | 1:M:480:VAL:HG13 | 2.44 | 0.42 |
| 1:M:787:LEU:CD2 | 1:N:781:VAL:HG12 | 2.50 | 0.42 |
| 1:MA:30:VAL:HG22 | 1:MA:31:GLY:N | 2.35 | 0.42 |
| 1:MA:472:ASP:HA | 1:MA:492:GLU:O | 2.19 | 0.42 |
| 1:MA:589:ASP:O | 1:MA:590:ASP:C | 2.61 | 0.42 |
| 1:N:8:ILE:HD12 | 1:N:37:ARG:NH1 | 2.35 | 0.42 |
| 1:N:62:ALA:O | 1:N:63:ASN:C | 2.63 | 0.42 |
| 1:N:65:VAL:HB | 1:N:73:VAL:HG11 | 2.02 | 0.42 |
| 1:N:157:VAL:CG1 | 1:N:159:VAL:HG22 | 2.50 | 0.42 |
| 1:N:288:VAL:O | 1:N:288:VAL:HG23 | 2.20 | 0.42 |
| 1:N:334:LEU:O | 1:N:356:HIS:HA | 2.20 | 0.42 |
| 1:NA:172:GLN:OE1 | 1:NA:215:LEU:HD21 | 2.20 | 0.42 |
| 1:NA:263:VAL:HG23 | 1:NA:264:HIS:N | 2.35 | 0.42 |
| 1:NA:554:ASP:O | 1:NA:558:THR:HG23 | 2.19 | 0.42 |
| 1:NB:126:LEU:HD21 | 1:NB:158:GLU:OE1 | 2.20 | 0.42 |
| 1:NB:410:GLN:O | 1:NB:411:ASP:CG | 2.63 | 0.42 |
| 1:O:112:LEU:C | 1:O:112:LEU:HD23 | 2.45 | 0.42 |
| 1:O:143:TRP:CA | 1:O:208:VAL:HG11 | 2.50 | 0.42 |
| 1:OA:65:VAL:HG11 | 1:OA:100:TYR:HB3 | 2.02 | 0.42 |
| 1:OB:522:PHE:CD2 | 1:OB:523:PHE:N | 2.87 | 0.42 |
| 1:OB:529:ILE:HG13 | 1:OB:583:VAL:HG21 | 2.02 | 0.42 |
| 1:PA:244:ARG:O | 1:PA:247:GLU:CB | 2.68 | 0.42 |
| 1:PA:261:PRO:HB2 | 1:PA:267:VAL:HG22 | 2.01 | 0.42 |
| 1:PA:728:SER:CB | 1:QA:719:THR:HG23 | 2.49 | 0.42 |
| 1:PA:757:ALA:CB | 1:QA:751:LEU:HD21 | 2.50 | 0.42 |
| 1:PB:10:ILE:O | 1:PB:10:ILE:HG13 | 2.20 | 0.42 |
| 1:PB:15:TYR:C | 1:PB:16:ILE:HG13 | 2.44 | 0.42 |
| 1:PB:58:TYR:HE1 | 1:PB:93:ALA:HB2 | 1.85 | 0.42 |
| 1:PB:377:ARG:HG3 | 1:PB:407:MET:SD | 2.59 | 0.42 |
| 1:Q:54:PRO:HD2 | 1:Q:109:ILE:HD12 | 2.02 | 0.42 |
| 1:Q:335:ARG:HA | 1:Q:355:ASP:O | 2.20 | 0.42 |
| 1:QA:168:ILE:O | 1:QA:168:ILE:HG13 | 2.20 | 0.42 |
| 1:QA:806:THR:HG21 | 1:RA:804:PRO:O | 2.20 | 0.42 |
| 1:QB:365:TYR:CG | 1:QB:366:VAL:N | 2.88 | 0.42 |
| 1:QB:810:LEU:HD23 | 1:RB:808:ARG:HA | 2.01 | 0.42 |
| 1:R:334:LEU:HD12 | 1:R:357:TRP:NE1 | 2.35 | 0.42 |
| 1:RA:231:ALA:HB3 | 1:RA:245:THR:HA | 2.02 | 0.42 |
| 1:RA:358:LEU:HD23 | 1:RA:358:LEU:C | 2.44 | 0.42 |
| 1:RA:592:HIS:O | 1:SA:584:ALA:HB1 | 2.20 | 0.42 |
| 1:RB:91:ARG:NE | 1:RB:94:GLN:HB2 | 2.35 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:RB:120:ALA:HB3 | 1:RB:205:LEU:HD21 | 2.02 | 0.42 |
| 1:RB:260:VAL:O | 1:RB:260:VAL:HG13 | 2.20 | 0.42 |
| 1:RB:790:VAL:HG11 | 1:SB:784:ALA:HB1 | 2.01 | 0.42 |
| 1:S:119:THR:HG21 | 1:S:162:ILE:HD11 | 2.01 | 0.42 |
| 1:SB:61:VAL:HA | 1:SB:105:LEU:HA | 2.01 | 0.42 |
| 1:SB:279:HIS:O | 1:SB:323:VAL:HG22 | 2.20 | 0.42 |
| 1:T:222:THR:O | 1:T:253:VAL:HG11 | 2.20 | 0.42 |
| 1:T:470:VAL:HG11 | 1:T:479:ARG:HE | 1.85 | 0.42 |
| 1:TA:221:LEU:CD1 | 1:TA:259:HIS:HB3 | 2.49 | 0.42 |
| 1:TA:336:ALA:CB | 1:TA:340:LEU:HD11 | 2.49 | 0.42 |
| 1:TB:104:VAL:HG22 | 1:TB:105:LEU:N | 2.33 | 0.42 |
| 1:TB:334:LEU:O | 1:TB:357:TRP:CE3 | 2.73 | 0.42 |
| 1:TB:537:LEU:HD11 | 1:TB:588:PHE:CD1 | 2.54 | 0.42 |
| 1:UA:482:PHE:CB | 1:UA:552:ARG:HE | 2.33 | 0.42 |
| 1:UA:635:VAL:HG12 | 1:UA:636:SER:N | 2.34 | 0.42 |
| 1:UB:18:VAL:HG13 | 1:UB:29:GLU:OE2 | 2.20 | 0.42 |
| 1:UB:332:LEU:O | 1:UB:358:LEU:HD12 | 2.19 | 0.42 |
| 1:UB:346:GLU:O | 1:UB:347:GLU:HG3 | 2.20 | 0.42 |
| 1:UB:540:GLN:OE1 | 1:UB:641:GLN:HB2 | 2.20 | 0.42 |
| 1:UB:541:LEU:C | 1:UB:541:LEU:HD12 | 2.44 | 0.42 |
| 1:V:768:LEU:C | 1:V:768:LEU:HD23 | 2.45 | 0.42 |
| 1:VB:398:VAL:HG12 | 1:VB:491:PRO:HB3 | 2.00 | 0.42 |
| 1:VB:529:ILE:HG21 | 1:VB:539:LEU:HD22 | 2.02 | 0.42 |
| 1:VB:567:PHE:CG | 1:VB:568:VAL:N | 2.88 | 0.42 |
| 1:W:207:ALA:H | 1:W:210:GLU:HB2 | 1.84 | 0.42 |
| 1:W:716:VAL:HG23 | 1:X:704:LYS:NZ | 2.34 | 0.42 |
| 1:WA:226:ALA:O | 1:WA:271:VAL:HG22 | 2.20 | 0.42 |
| 1:WA:284:ILE:HD12 | 1:WA:287:PRO:HB3 | 2.02 | 0.42 |
| 1:WA:643:VAL:HG23 | 1:XA:530:GLU:HG2 | 2.01 | 0.42 |
| 1:WB:218:ALA:HA | 1:WB:260:VAL:CA | 2.49 | 0.42 |
| 1:WB:230:ARG:O | 1:WB:266:GLU:HG2 | 2.20 | 0.42 |
| 1:WB:506:LYS:O | 1:WB:507:ARG:C | 2.62 | 0.42 |
| 1:WB:717:GLU:HG2 | 1:XB:707:LEU:HD22 | 2.01 | 0.42 |
| 1:X:131:ASP:CB | 1:X:137:VAL:HG23 | 2.50 | 0.42 |
| 1:XA:167:ILE:H | 1:XA:167:ILE:HD12 | 1.84 | 0.42 |
| 1:XA:579:VAL:HG22 | 1:XA:599:ILE:HG23 | 2.01 | 0.42 |
| 1:XB:8:ILE:HD12 | 1:XB:8:ILE:H | 1.85 | 0.42 |
| 1:XB:42:ARG:HA | 1:XB:42:ARG:NE | 2.35 | 0.42 |
| 1:XB:405:THR:HG23 | 1:YB:396:GLY:N | 2.34 | 0.42 |
| 1:XB:635:VAL:O | 1:XB:636:SER:C | 2.62 | 0.42 |
| 1:XB:658:VAL:HG21 | 1:YB:535:ALA:HB2 | 2.00 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:Y:95:ASP:HB3 | 1:Y:96:PRO:HD2 | 2.00 | 0.42 |
| 1:YA:471:TYR:HD2 | 1:YA:478:ALA:HB2 | 1.85 | 0.42 |
| 1:YA:575:ILE:CG1 | 1:YA:635:VAL:HG21 | 2.47 | 0.42 |
| 1:YB:126:LEU:O | 1:YB:127:LEU:HD22 | 2.20 | 0.42 |
| 1:YB:174:LEU:HD12 | 1:YB:214:ASP:O | 2.20 | 0.42 |
| 1:YB:267:VAL:C | 1:YB:268:LEU:HD12 | 2.44 | 0.42 |
| 1:YB:283:VAL:HG13 | 1:YB:300:ARG:O | 2.19 | 0.42 |
| 1:YB:288:VAL:O | 1:YB:288:VAL:HG23 | 2.19 | 0.42 |
| 1:Z:280:ASN:HA | 1:Z:322:ASP:HA | 2.02 | 0.42 |
| 1:ZA:413:VAL:O | 1:ZA:413:VAL:HG13 | 2.18 | 0.42 |
| 1:ZA:539:LEU:CD2 | 1:ZA:541:LEU:HD21 | 2.49 | 0.42 |
| 1:ZA:799:THR:HA | 1:ZA:802:ILE:HG22 | 2.01 | 0.42 |
| 1:ZB:379:ALA:O | 1:ZB:380:ILE:C | 2.63 | 0.42 |
| 1:A:16:ILE:HA | 1:A:45:PHE:CE1 | 2.55 | 0.42 |
| 1:A:60:THR:HG22 | 1:A:90:ILE:HA | 2.01 | 0.42 |
| 1:A:181:GLU:HG2 | 1:A:191:VAL:HA | 2.00 | 0.42 |
| 1:A:416:GLU:CG | 1:A:455:THR:HG22 | 2.50 | 0.42 |
| 1:AA:523:PHE:O | 1:AA:542:ALA:CB | 2.68 | 0.42 |
| 1:AA:718:SER:HB3 | 1:Z:728:SER:HB2 | 2.02 | 0.42 |
| 1:AC:250:LEU:HD21 | 1:AC:271:VAL:HG21 | 2.01 | 0.42 |
| 1:AC:545:TRP:HB2 | 1:AC:633:LEU:HD11 | 2.02 | 0.42 |
| 1:AC:688:LEU:HD11 | 1:OA:682:GLN:HB3 | 2.02 | 0.42 |
| 1:B:116:LEU:HB2 | 1:B:119:THR:HG22 | 2.02 | 0.42 |
| 1:BA:13:TYR:HA | 1:BA:50:MET:CE | 2.50 | 0.42 |
| 1:BA:187:GLY:O | 1:BA:188:LYS:C | 2.63 | 0.42 |
| 1:BA:388:ILE:HD12 | 1:BA:414:LEU:CD2 | 2.50 | 0.42 |
| 1:BA:542:ALA:H | 1:BA:641:GLN:HE22 | 1.67 | 0.42 |
| 1:BB:531:THR:HB | 1:BB:586:VAL:O | 2.20 | 0.42 |
| 1:C:762:VAL:HG23 | 1:C:763:GLN:N | 2.35 | 0.42 |
| 1:CA:174:LEU:C | 1:CA:197:LEU:HD12 | 2.45 | 0.42 |
| 1:CB:625:GLN:HG2 | 1:CB:627:VAL:HG13 | 2.01 | 0.42 |
| 1:D:607:GLU:N | 1:D:607:GLU:CD | 2.78 | 0.42 |
| 1:DA:56:ARG:O | 1:DA:112:LEU:N | 2.53 | 0.42 |
| 1:DA:273:ILE:HA | 1:DA:309:PHE:CE2 | 2.55 | 0.42 |
| 1:DA:333:LEU:HA | 1:DA:358:LEU:HA | 2.01 | 0.42 |
| 1:DA:561:LEU:HD23 | 1:DA:631:ASN:O | 2.20 | 0.42 |
| 1:DA:705:GLU:HA | 1:DA:708:GLU:CD | 2.45 | 0.42 |
| 1:DB:234:ASN:HA | 1:DB:243:ARG:O | 2.20 | 0.42 |
| 1:DB:288:VAL:HG23 | 1:DB:288:VAL:O | 2.19 | 0.42 |
| 1:DB:579:VAL:O | 1:DB:583:VAL:HG12 | 2.19 | 0.42 |
| 1:E:65:VAL:HG23 | 1:E:67:ARG:HG3 | 2.02 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:E:119:THR:OG1 | 1:E:162:ILE:HG21 | 2.20 | 0.42 |
| 1:E:276:LEU:HD22 | 1:E:281:TYR:N | 2.34 | 0.42 |
| 1:E:419:LEU:O | 1:E:420:PRO:C | 2.63 | 0.42 |
| 1:EA:224:LYS:HD3 | 1:FA:296:LEU:HD11 | 2.02 | 0.42 |
| 1:EA:281:TYR:O | 1:EA:321:GLN:O | 2.38 | 0.42 |
| 1:EB:169:ARG:HD3 | 1:EB:172:GLN:HG3 | 2.02 | 0.42 |
| 1:F:18:VAL:HB | 1:F:41:GLU:HG3 | 2.02 | 0.42 |
| 1:F:144:LEU:HD12 | 1:F:146:GLU:OE1 | 2.20 | 0.42 |
| 1:F:378:GLN:C | 1:F:407:MET:HG2 | 2.44 | 0.42 |
| 1:F:462:VAL:N | 1:F:485:GLU:O | 2.52 | 0.42 |
| 1:FA:178:ALA:HB3 | 1:FA:191:VAL:O | 2.20 | 0.42 |
| 1:FA:774:ARG:O | 1:FA:778:GLU:CD | 2.63 | 0.42 |
| 1:FB:228:HIS:CE1 | 1:FB:268:LEU:HD23 | 2.55 | 0.42 |
| 1:FB:262:ASP:OD1 | 1:FB:263:VAL:N | 2.53 | 0.42 |
| 1:FB:276:LEU:HD23 | 1:FB:320:ILE:HG23 | 2.02 | 0.42 |
| 1:FB:301:VAL:O | 1:FB:301:VAL:HG13 | 2.19 | 0.42 |
| 1:G:91:ARG:HD3 | 1:G:97:PHE:CE1 | 2.55 | 0.42 |
| 1:G:123:LEU:N | 1:G:143:TRP:O | 2.52 | 0.42 |
| 1:G:230:ARG:H | 1:G:268:LEU:HD13 | 1.84 | 0.42 |
| 1:G:355:ASP:OD1 | 1:G:355:ASP:C | 2.63 | 0.42 |
| 1:G:470:VAL:CG1 | 1:G:493:GLU:HG2 | 2.50 | 0.42 |
| 1:G:527:ILE:N | 1:G:539:LEU:O | 2.53 | 0.42 |
| 1:G:772:TYR:CE1 | 1:H:766:ARG:HB3 | 2.55 | 0.42 |
| 1:GA:75:PHE:CD1 | 1:GA:81:VAL:HG23 | 2.55 | 0.42 |
| 1:GB:22:ASN:ND2 | 1:GB:40:ASN:HD22 | 2.18 | 0.42 |
| 1:H:181:GLU:CD | 1:H:181:GLU:C | 2.88 | 0.42 |
| 1:HA:55:PRO:O | 1:HA:57:HIS:N | 2.53 | 0.42 |
| 1:HA:158:GLU:OE2 | 1:HA:160:VAL:HG23 | 2.20 | 0.42 |
| 1:HA:730:ALA:O | 1:HA:733:ALA:HB3 | 2.20 | 0.42 |
| 1:HB:468:VAL:O | 1:HB:480:VAL:HA | 2.20 | 0.42 |
| 1:HB:537:LEU:HA | 1:HB:645:PRO:HA | 2.02 | 0.42 |
| 1:I:160:VAL:HG12 | 1:I:161:GLU:H | 1.83 | 0.42 |
| 1:IA:30:VAL:HG22 | 1:IA:31:GLY:N | 2.33 | 0.42 |
| 1:IA:32:PRO:HB2 | 1:JA:24:ASN:HB2 | 2.02 | 0.42 |
| 1:IA:342:GLU:OE1 | 1:IA:348:LYS:N | 2.53 | 0.42 |
| 1:IA:567:PHE:CG | 1:IA:568:VAL:N | 2.88 | 0.42 |
| 1:IB:416:GLU:OE1 | 1:IB:454:LYS:HB2 | 2.20 | 0.42 |
| 1:IB:645:PRO:CB | 1:IB:650:THR:HG21 | 2.50 | 0.42 |
| 1:J:63:ASN:HA | 1:J:84:ARG:O | 2.20 | 0.42 |
| 1:J:591:PHE:HD2 | 1:J:598:ILE:HG21 | 1.85 | 0.42 |
| 1:JA:805:SER:HA | 1:JA:808:ARG:HH22 | 1.84 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:JB:365:TYR:CE2 | 1:JB:367:PRO:HA | 2.54 | 0.42 |
| 1:JB:526:VAL:HG13 | 1:JB:538:GLN:HE21 | 1.84 | 0.42 |
| 1:JB:685:ARG:O | 1:JB:686:GLY:C | 2.63 | 0.42 |
| 1:K:19:LEU:CB | 1:K:44:LEU:HD11 | 2.49 | 0.42 |
| 1:K:209:PHE:CE2 | 1:K:210:GLU:HG2 | 2.55 | 0.42 |
| 1:KA:157:VAL:HG12 | 1:KA:158:GLU:N | 2.34 | 0.42 |
| 1:KB:89:GLU:HA | 1:KB:155:LYS:HE2 | 2.02 | 0.42 |
| 1:L:460:TYR:CG | 1:L:461:ARG:N | 2.88 | 0.42 |
| 1:L:540:GLN:HB3 | 1:L:641:GLN:NE2 | 2.35 | 0.42 |
| 1:LA:50:MET:HG2 | 1:LA:97:PHE:N | 2.35 | 0.42 |
| 1:LA:176:LEU:HD21 | 1:LA:196:TRP:CD1 | 2.55 | 0.42 |
| 1:LA:539:LEU:HD13 | 1:LA:643:VAL:HG22 | 2.02 | 0.42 |
| 1:LB:364:GLU:OE2 | 1:MB:353:ALA:HB1 | 2.18 | 0.42 |
| 1:LB:425:GLU:N | 1:LB:425:GLU:OE1 | 2.53 | 0.42 |
| 1:LB:591:PHE:O | 1:LB:595:SER:N | 2.53 | 0.42 |
| 1:M:393:VAL:HG22 | 1:M:411:ASP:O | 2.19 | 0.42 |
| 1:M:658:VAL:HG21 | 1:N:535:ALA:HB2 | 2.02 | 0.42 |
| 1:M:768:LEU:HD21 | 1:N:766:ARG:HD3 | 2.02 | 0.42 |
| 1:MA:276:LEU:HD12 | 1:MA:302:VAL:HG12 | 2.02 | 0.42 |
| 1:MA:425:GLU:HG2 | 1:MA:426:LEU:N | 2.34 | 0.42 |
| 1:MA:489:LEU:HD22 | 1:MA:493:GLU:O | 2.20 | 0.42 |
| 1:MB:57:HIS:HA | 1:MB:110:THR:C | 2.45 | 0.42 |
| 1:N:419:LEU:HD13 | 1:N:424:GLU:OE2 | 2.19 | 0.42 |
| 1:NA:521:ASP:O | 1:NA:545:TRP:CD1 | 2.72 | 0.42 |
| 1:NB:18:VAL:HG23 | 1:NB:27:ARG:HD3 | 2.01 | 0.42 |
| 1:NB:67:ARG:CG | 1:NB:73:VAL:HG22 | 2.49 | 0.42 |
| 1:NB:670:GLU:HG2 | 1:OB:664:ILE:HD11 | 2.01 | 0.42 |
| 1:O:15:TYR:HB2 | 1:O:29:GLU:O | 2.20 | 0.42 |
| 1:O:797:GLN:HA | 1:O:800:GLU:CD | 2.45 | 0.42 |
| 1:OA:498:LEU:HD23 | 1:OA:565:PRO:HB3 | 2.01 | 0.42 |
| 1:OA:520:PRO:HA | 1:OA:545:TRP:O | 2.18 | 0.42 |
| 1:OA:526:VAL:HA | 1:OA:540:GLN:HA | 2.02 | 0.42 |
| 1:OB:211:GLU:OE2 | 1:OB:213:LEU:HD21 | 2.20 | 0.42 |
| 1:OB:229:LEU:HD11 | 1:OB:251:VAL:HG11 | 2.01 | 0.42 |
| 1:OB:539:LEU:CD1 | 1:OB:642:SER:O | 2.68 | 0.42 |
| 1:P:134:GLY:O | 1:P:135:ASP:C | 2.63 | 0.42 |
| 1:P:502:ALA:N | 1:P:510:ALA:HB3 | 2.35 | 0.42 |
| 1:PB:223:GLU:OE1 | 1:PB:253:VAL:HG21 | 2.20 | 0.42 |
| 1:PB:388:ILE:C | 1:PB:457:VAL:HG23 | 2.45 | 0.42 |
| 1:PB:753:ILE:HG21 | 1:QB:744:ALA:C | 2.45 | 0.42 |
| 1:PB:755:THR:HG22 | 1:PB:759:LEU:HD12 | 2.01 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:Q:120:ALA:CB | 1:Q:205:LEU:HD21 | 2.50 | 0.42 |
| 1:Q:174:LEU:HD21 | 1:Q:212:VAL:HG12 | 2.01 | 0.42 |
| 1:Q:176:LEU:HD21 | 1:Q:196:TRP:CD1 | 2.55 | 0.42 |
| 1:QA:178:ALA:O | 1:QA:192:THR:HA | 2.20 | 0.42 |
| 1:R:137:VAL:HG12 | 1:R:143:TRP:CZ3 | 2.55 | 0.42 |
| 1:R:517:LEU:HD22 | 1:R:545:TRP:CH2 | 2.55 | 0.42 |
| 1:RA:81:VAL:HG21 | 1:RA:100:TYR:HD2 | 1.85 | 0.42 |
| 1:RA:144:LEU:C | 1:RA:144:LEU:HD12 | 2.44 | 0.42 |
| 1:S:486:LEU:N | 1:T:473:TYR:HD2 | 2.18 | 0.42 |
| 1:SA:257:GLU:HG3 | 1:TA:245:THR:HB | 2.02 | 0.42 |
| 1:SA:535:ALA:HB1 | 1:SA:650:THR:HG21 | 2.02 | 0.42 |
| 1:SA:583:VAL:O | 1:SA:583:VAL:HG12 | 2.18 | 0.42 |
| 1:SB:212:VAL:O | 1:SB:212:VAL:HG23 | 2.19 | 0.42 |
| 1:T:55:PRO:C | 1:T:56:ARG:HD3 | 2.45 | 0.42 |
| 1:T:471:TYR:CE2 | 1:T:473:TYR:HA | 2.55 | 0.42 |
| 1:T:761:ARG:NH2 | 1:T:762:VAL:HG12 | 2.35 | 0.42 |
| 1:TA:5:GLU:O | 1:TA:6:PHE:HB2 | 2.20 | 0.42 |
| 1:TA:126:LEU:C | 1:TA:127:LEU:HD12 | 2.45 | 0.42 |
| 1:TA:175:ARG:HH21 | 1:TA:263:VAL:HG23 | 1.84 | 0.42 |
| 1:TA:390:VAL:HG12 | 1:TA:414:LEU:HD23 | 2.02 | 0.42 |
| 1:TB:115:VAL:HG11 | 1:TB:145:PHE:CD2 | 2.55 | 0.42 |
| 1:TB:246:GLY:O | 1:TB:248:GLU:OE1 | 2.38 | 0.42 |
| 1:TB:281:TYR:CD1 | 1:TB:281:TYR:C | 2.98 | 0.42 |
| 1:TB:415:TRP:O | 1:TB:455:THR:HA | 2.20 | 0.42 |
| 1:TB:469:GLN:OE1 | 1:TB:496:THR:HG21 | 2.20 | 0.42 |
| 1:TB:601:THR:O | 1:TB:607:GLU:CD | 2.63 | 0.42 |
| 1:UA:358:LEU:HD13 | 1:UA:409:THR:HA | 2.01 | 0.42 |
| 1:UA:504:ARG:HB2 | 1:UA:505:PRO:HD3 | 2.02 | 0.42 |
| 1:UA:680:LEU:O | 1:UA:684:ALA:HB3 | 2.20 | 0.42 |
| 1:UA:695:ASP:OD2 | 1:VA:683:GLU:HA | 2.20 | 0.42 |
| 1:UB:52:THR:HG22 | 1:UB:96:PRO:HG3 | 2.01 | 0.42 |
| 1:V:398:VAL:HG12 | 1:V:399:ARG:N | 2.35 | 0.42 |
| 1:VA:176:LEU:HD21 | 1:VA:196:TRP:CD1 | 2.55 | 0.42 |
| 1:VB:299:LYS:HD2 | 1:VB:317:GLU:OE1 | 2.20 | 0.42 |
| 1:VB:524:THR:HG22 | 1:VB:542:ALA:CA | 2.49 | 0.42 |
| 1:VB:591:PHE:O | 1:VB:595:SER:N | 2.53 | 0.42 |
| 1:VB:633:LEU:HD12 | 1:VB:634:VAL:N | 2.35 | 0.42 |
| 1:W:229:LEU:HD12 | 1:W:251:VAL:HG11 | 2.01 | 0.42 |
| 1:WA:20:ASP:HA | 1:WA:41:GLU:HA | 2.02 | 0.42 |
| 1:WA:325:VAL:HG22 | 1:XA:354:GLY:CA | 2.50 | 0.42 |
| 1:WA:543:TYR:HD1 | 1:WA:638:VAL:HG22 | 1.85 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:WB:540:GLN:HB2 | 1:WB:642:SER:OG | 2.20 | 0.42 |
| 1:XA:57:HIS:HA | 1:XA:110:THR:O | 2.20 | 0.42 |
| 1:XA:604:PHE:CD2 | 1:XA:623:ARG:O | 2.73 | 0.42 |
| 1:XA:678:GLN:O | 1:XA:681:GLU:HB3 | 2.19 | 0.42 |
| 1:XB:52:THR:HG22 | 1:XB:96:PRO:CB | 2.46 | 0.42 |
| 1:XB:176:LEU:HD23 | 1:XB:196:TRP:O | 2.20 | 0.42 |
| 1:Y:34:THR:HG23 | 1:Z:24:ASN:OD1 | 2.20 | 0.42 |
| 1:Y:172:GLN:CD | 1:Y:215:LEU:HD11 | 2.44 | 0.42 |
| 1:Y:281:TYR:CE1 | 1:Y:321:GLN:HB2 | 2.55 | 0.42 |
| 1:Y:538:GLN:HE21 | 1:Y:646:VAL:HG22 | 1.85 | 0.42 |
| 1:Y:575:ILE:HG23 | 1:Y:603:VAL:HG13 | 2.02 | 0.42 |
| 1:YA:693:ILE:O | 1:YA:697:SER:N | 2.53 | 0.42 |
| 1:YB:468:VAL:O | 1:YB:480:VAL:HA | 2.20 | 0.42 |
| 1:Z:143:TRP:HH2 | 1:Z:157:VAL:HG22 | 1.85 | 0.42 |
| 1:Z:176:LEU:HD21 | 1:Z:196:TRP:CD1 | 2.55 | 0.42 |
| 1:ZA:177:ARG:H | 1:ZA:213:LEU:HD23 | 1.84 | 0.42 |
| 1:ZA:777:LEU:O | 1:ZA:781:VAL:HG22 | 2.20 | 0.42 |
| 1:ZB:275:THR:HA | 1:ZB:307:SER:OG | 2.19 | 0.42 |
| 1:ZB:373:VAL:O | 1:ZB:373:VAL:HG12 | 2.20 | 0.42 |
| 1:ZB:516:LEU:HD13 | 1:ZB:562:PHE:CZ | 2.55 | 0.42 |
| 1:A:223:GLU:CD | 1:A:253:VAL:HG21 | 2.44 | 0.41 |
| 1:A:390:VAL:HG12 | 1:A:399:ARG:O | 2.19 | 0.41 |
| 1:A:416:GLU:HG2 | 1:A:455:THR:HG22 | 2.02 | 0.41 |
| 1:A:761:ARG:HD2 | 1:B:751:LEU:HD12 | 2.02 | 0.41 |
| 1:AA:538:GLN:H | 1:AA:646:VAL:HG23 | 1.85 | 0.41 |
| 1:AB:171:ASN:O | 1:AB:217:ASP:HA | 2.20 | 0.41 |
| 1:AB:413:VAL:HG22 | 1:AB:414:LEU:N | 2.35 | 0.41 |
| 1:AB:747:LYS:O | 1:AB:751:LEU:HD23 | 2.20 | 0.41 |
| 1:B:234:ASN:N | 1:B:245:THR:OG1 | 2.53 | 0.41 |
| 1:B:271:VAL:HG23 | 1:B:309:PHE:CD2 | 2.55 | 0.41 |
| 1:BA:333:LEU:N | 1:BA:358:LEU:HD12 | 2.35 | 0.41 |
| 1:BA:472:ASP:HA | 1:BA:493:GLU:HG3 | 2.02 | 0.41 |
| 1:BA:523:PHE:HB2 | 1:BA:543:TYR:CD2 | 2.55 | 0.41 |
| 1:BA:539:LEU:CD1 | 1:BA:643:VAL:HG22 | 2.50 | 0.41 |
| 1:C:229:LEU:HD12 | 1:C:249:TRP:NE1 | 2.35 | 0.41 |
| 1:C:480:VAL:HG12 | 1:C:481:VAL:N | 2.35 | 0.41 |
| 1:C:567:PHE:CG | 1:C:568:VAL:N | 2.86 | 0.41 |
| 1:CA:3:THR:HG23 | 1:CA:41:GLU:C | 2.45 | 0.41 |
| 1:CA:588:PHE:CG | 1:CA:589:ASP:N | 2.87 | 0.41 |
| 1:CA:658:VAL:O | 1:CA:661:ALA:HB3 | 2.19 | 0.41 |
| 1:CA:714:MET:HA | 1:CA:717:GLU:HB3 | 2.00 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:CA:767:GLU:O | 1:CA:771:VAL:HG23 | 2.20 | 0.41 |
| 1:CB:466:ALA:HB1 | 1:CB:515:CYS:HB2 | 2.01 | 0.41 |
| 1:CB:536:ARG:NH2 | 1:CB:646:VAL:HG21 | 2.35 | 0.41 |
| 1:CB:638:VAL:HG12 | 1:CB:639:ASP:N | 2.34 | 0.41 |
| 1:D:227:LEU:HD22 | 1:D:229:LEU:HD21 | 2.02 | 0.41 |
| 1:DA:8:ILE:H | 1:DA:37:ARG:HH12 | 1.67 | 0.41 |
| 1:DA:181:GLU:HG3 | 1:DA:191:VAL:HA | 2.02 | 0.41 |
| 1:DA:516:LEU:HD23 | 1:DA:516:LEU:C | 2.45 | 0.41 |
| 1:DB:52:THR:HG22 | 1:DB:96:PRO:HA | 2.01 | 0.41 |
| 1:DB:364:GLU:HG2 | 1:DB:364:GLU:O | 2.20 | 0.41 |
| 1:E:342:GLU:HA | 1:E:345:ASP:HB3 | 2.02 | 0.41 |
| 1:E:591:PHE:O | 1:E:595:SER:N | 2.52 | 0.41 |
| 1:EA:522:PHE:HA | 1:EA:543:TYR:O | 2.19 | 0.41 |
| 1:EB:65:VAL:HG11 | 1:EB:100:TYR:HB3 | 2.01 | 0.41 |
| 1:F:115:VAL:HG22 | 1:F:149:GLY:C | 2.45 | 0.41 |
| 1:F:377:ARG:HD2 | 1:F:408:LEU:O | 2.20 | 0.41 |
| 1:FA:53:VAL:HG11 | 1:FA:93:ALA:H | 1.85 | 0.41 |
| 1:FA:131:ASP:O | 1:FA:132:LYS:HB2 | 2.20 | 0.41 |
| 1:FA:460:TYR:C | 1:FA:486:LEU:HD12 | 2.45 | 0.41 |
| 1:FA:462:VAL:HG21 | 1:FA:481:VAL:HG23 | 2.01 | 0.41 |
| 1:FA:522:PHE:HA | 1:FA:543:TYR:O | 2.20 | 0.41 |
| 1:G:387:GLY:HA3 | 1:G:402:ILE:HG13 | 2.01 | 0.41 |
| 1:GA:69:ALA:O | 1:GA:72:LEU:HB3 | 2.20 | 0.41 |
| 1:GA:176:LEU:HD21 | 1:GA:196:TRP:CD1 | 2.55 | 0.41 |
| 1:GA:284:ILE:HD12 | 1:GA:287:PRO:HB3 | 2.01 | 0.41 |
| 1:GA:471:TYR:CD2 | 1:GA:478:ALA:HB2 | 2.55 | 0.41 |
| 1:GA:528:THR:HG22 | 1:GA:529:ILE:H | 1.85 | 0.41 |
| 1:GB:65:VAL:HG23 | 1:GB:67:ARG:HG2 | 2.01 | 0.41 |
| 1:GB:283:VAL:HG12 | 1:GB:284:ILE:N | 2.34 | 0.41 |
| 1:GB:283:VAL:O | 1:GB:316:LEU:HD12 | 2.20 | 0.41 |
| 1:GB:333:LEU:CD1 | 1:GB:358:LEU:HD12 | 2.46 | 0.41 |
| 1:GB:537:LEU:HA | 1:GB:645:PRO:HA | 2.02 | 0.41 |
| 1:GB:731:GLU:CD | 1:GB:734:ARG:HE | 2.28 | 0.41 |
| 1:HA:63:ASN:HB3 | 1:HA:103:GLU:HA | 2.02 | 0.41 |
| 1:HA:121:LEU:HD12 | 1:HA:121:LEU:C | 2.44 | 0.41 |
| 1:HA:388:ILE:HG22 | 1:HA:456:ARG:HG3 | 2.01 | 0.41 |
| 1:HA:566:ASP:OD1 | 1:HA:568:VAL:HG12 | 2.20 | 0.41 |
| 1:HB:350:SER:O | 1:HB:351:HIS:C | 2.60 | 0.41 |
| 1:I:544:ASN:O | 1:I:635:VAL:HG13 | 2.19 | 0.41 |
| 1:IA:43:VAL:C | 1:IA:44:LEU:HD22 | 2.45 | 0.41 |
| 1:IA:151:TYR:OH | 1:IA:153:PRO:HA | 2.20 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:IA:285:LEU:HD11 | 1:IA:317:GLU:HA | 2.02 | 0.41 |
| 1:IA:342:GLU:OE1 | 1:IA:349:VAL:N | 2.53 | 0.41 |
| 1:IA:349:VAL:HB | 1:IA:351:HIS:CE1 | 2.55 | 0.41 |
| 1:IA:388:ILE:N | 1:IA:457:VAL:HG23 | 2.34 | 0.41 |
| 1:IA:583:VAL:HG13 | 1:IA:584:ALA:N | 2.35 | 0.41 |
| 1:IB:540:GLN:C | 1:IB:541:LEU:HD12 | 2.44 | 0.41 |
| 1:J:143:TRP:N | 1:J:143:TRP:CE3 | 2.88 | 0.41 |
| 1:J:398:VAL:HG11 | 1:J:415:TRP:CD2 | 2.55 | 0.41 |
| 1:J:583:VAL:O | 1:J:586:VAL:O | 2.38 | 0.41 |
| 1:J:765:VAL:CG2 | 1:K:759:LEU:HD21 | 2.49 | 0.41 |
| 1:JA:500:LEU:HD22 | 1:JA:566:ASP:OD1 | 2.20 | 0.41 |
| 1:JA:527:ILE:O | 1:JA:539:LEU:HB3 | 2.20 | 0.41 |
| 1:JB:51:VAL:HG23 | 1:JB:97:PHE:O | 2.20 | 0.41 |
| 1:JB:69:ALA:C | 1:JB:71:GLY:H | 2.28 | 0.41 |
| 1:JB:144:LEU:HD12 | 1:JB:146:GLU:OE1 | 2.20 | 0.41 |
| 1:JB:326:LEU:HD22 | 1:JB:330:GLN:HB3 | 2.02 | 0.41 |
| 1:JB:531:THR:OG1 | 1:JB:533:ASP:OD1 | 2.38 | 0.41 |
| 1:JB:727:GLU:O | 1:JB:728:SER:C | 2.63 | 0.41 |
| 1:K:20:ASP:N | 1:K:41:GLU:HG3 | 2.36 | 0.41 |
| 1:K:60:THR:HA | 1:K:90:ILE:HA | 2.01 | 0.41 |
| 1:K:122:HIS:CG | 1:K:123:LEU:N | 2.87 | 0.41 |
| 1:KA:7:ILE:O | 1:KA:8:ILE:C | 2.63 | 0.41 |
| 1:KA:745:LYS:O | 1:KA:746:LEU:C | 2.63 | 0.41 |
| 1:KB:276:LEU:HD23 | 1:KB:320:ILE:HG23 | 2.02 | 0.41 |
| 1:KB:316:LEU:HD12 | 1:KB:317:GLU:H | 1.84 | 0.41 |
| 1:L:119:THR:O | 1:L:147:GLY:CA | 2.68 | 0.41 |
| 1:LA:717:GLU:OE2 | 1:LA:721:THR:HG21 | 2.20 | 0.41 |
| 1:LB:124:LYS:HG3 | 1:LB:141:ASP:O | 2.20 | 0.41 |
| 1:LB:499:SER:O | 1:LB:500:LEU:HD23 | 2.19 | 0.41 |
| 1:LB:625:GLN:HG2 | 1:LB:627:VAL:HG13 | 2.02 | 0.41 |
| 1:M:46:ALA:HB1 | 1:M:47:PRO:CD | 2.49 | 0.41 |
| 1:M:543:TYR:O | 1:M:545:TRP:HD1 | 2.02 | 0.41 |
| 1:MA:462:VAL:N | 1:MA:485:GLU:O | 2.53 | 0.41 |
| 1:MA:473:TYR:CD2 | 1:MA:492:GLU:OE2 | 2.73 | 0.41 |
| 1:MA:741:VAL:O | 1:MA:744:ALA:HB3 | 2.20 | 0.41 |
| 1:MB:204:TYR:CZ | 1:MB:205:LEU:O | 2.72 | 0.41 |
| 1:MB:268:LEU:HD12 | 1:MB:268:LEU:N | 2.35 | 0.41 |
| 1:MB:685:ARG:O | 1:MB:686:GLY:C | 2.63 | 0.41 |
| 1:NA:43:VAL:HG12 | 1:NA:44:LEU:N | 2.35 | 0.41 |
| 1:NA:281:TYR:HB3 | 1:NA:323:VAL:HG12 | 2.01 | 0.41 |
| 1:NA:537:LEU:HD23 | 1:NA:644:GLU:C | 2.45 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:NA:588:PHE:HA | 1:NA:591:PHE:CE2 | 2.55 | 0.41 |
| 1:NB:276:LEU:O | 1:NB:305:GLU:HA | 2.19 | 0.41 |
| 1:NB:607:GLU:HG3 | 1:NB:622:PRO:HB3 | 2.02 | 0.41 |
| 1:O:151:TYR:HH | 1:O:157:VAL:HG21 | 1.85 | 0.41 |
| 1:O:634:VAL:HG12 | 1:O:636:SER:N | 2.35 | 0.41 |
| 1:OA:60:THR:HG22 | 1:OA:90:ILE:N | 2.34 | 0.41 |
| 1:OA:325:VAL:C | 1:OA:326:LEU:HD23 | 2.45 | 0.41 |
| 1:OB:181:GLU:HA | 1:OB:190:ARG:O | 2.20 | 0.41 |
| 1:PA:176:LEU:HD12 | 1:PA:210:GLU:HB3 | 2.01 | 0.41 |
| 1:PB:121:LEU:HD23 | 1:PB:121:LEU:H | 1.85 | 0.41 |
| 1:PB:388:ILE:N | 1:PB:457:VAL:HG23 | 2.34 | 0.41 |
| 1:Q:112:LEU:O | 1:Q:113:GLN:C | 2.63 | 0.41 |
| 1:QB:7:ILE:HG22 | 1:QB:7:ILE:O | 2.19 | 0.41 |
| 1:QB:468:VAL:HG22 | 1:QB:515:CYS:HA | 2.01 | 0.41 |
| 1:QB:742:LEU:HD21 | 1:RB:734:ARG:CD | 2.50 | 0.41 |
| 1:R:379:ALA:HA | 1:R:407:MET:HA | 2.02 | 0.41 |
| 1:RA:53:VAL:HB | 1:RA:94:GLN:H | 1.84 | 0.41 |
| 1:RA:591:PHE:HA | 1:RA:598:ILE:HD13 | 2.02 | 0.41 |
| 1:RB:112:LEU:HD21 | 1:RB:152:ILE:HD13 | 2.02 | 0.41 |
| 1:RB:182:CYS:O | 1:RB:189:GLU:HA | 2.20 | 0.41 |
| 1:RB:216:VAL:HG22 | 1:RB:217:ASP:N | 2.35 | 0.41 |
| 1:RB:316:LEU:HG | 1:RB:317:GLU:N | 2.35 | 0.41 |
| 1:S:334:LEU:HD12 | 1:S:357:TRP:NE1 | 2.35 | 0.41 |
| 1:S:340:LEU:HD12 | 1:S:351:HIS:CG | 2.55 | 0.41 |
| 1:S:382:LEU:HD21 | 1:S:388:ILE:HG23 | 2.02 | 0.41 |
| 1:S:763:GLN:NE2 | 1:S:764:LYS:HG3 | 2.35 | 0.41 |
| 1:SA:497:VAL:O | 1:SA:497:VAL:HG13 | 2.20 | 0.41 |
| 1:SB:174:LEU:HB3 | 1:SB:198:VAL:CG1 | 2.50 | 0.41 |
| 1:SB:333:LEU:HD12 | 1:SB:357:TRP:C | 2.45 | 0.41 |
| 1:T:523:PHE:HB2 | 1:T:543:TYR:CE1 | 2.55 | 0.41 |
| 1:T:782:SER:O | 1:T:786:GLN:NE2 | 2.53 | 0.41 |
| 1:TA:452:ARG:HD3 | 1:TA:458:VAL:HG22 | 2.01 | 0.41 |
| 1:TA:522:PHE:CE1 | 1:TA:542:ALA:HB1 | 2.55 | 0.41 |
| 1:TB:365:TYR:CE2 | 1:TB:367:PRO:HA | 2.55 | 0.41 |
| 1:TB:467:ALA:HA | 1:TB:481:VAL:O | 2.19 | 0.41 |
| 1:TB:583:VAL:HG13 | 1:TB:584:ALA:N | 2.35 | 0.41 |
| 1:UA:115:VAL:HG22 | 1:UA:121:LEU:HD12 | 2.02 | 0.41 |
| 1:UA:301:VAL:HG21 | 1:UA:367:PRO:O | 2.20 | 0.41 |
| 1:UB:81:VAL:HG13 | 1:UB:83:LEU:HD12 | 2.01 | 0.41 |
| 1:UB:112:LEU:HD11 | 1:UB:153:PRO:CD | 2.50 | 0.41 |
| 1:UB:334:LEU:O | 1:UB:356:HIS:HA | 2.19 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UB:406:TYR:HH | 1:UB:412:GLU:CD | 2.26 | 0.41 |
| 1:V:405:THR:HG23 | 1:W:396:GLY:CA | 2.50 | 0.41 |
| 1:V:526:VAL:HG22 | 1:V:540:GLN:HG3 | 2.02 | 0.41 |
| 1:V:762:VAL:HG23 | 1:V:763:GLN:N | 2.35 | 0.41 |
| 1:VA:419:LEU:HD21 | 1:VA:489:LEU:HD13 | 2.02 | 0.41 |
| 1:VA:583:VAL:O | 1:VA:586:VAL:O | 2.37 | 0.41 |
| 1:VB:5:GLU:O | 1:VB:8:ILE:CD1 | 2.68 | 0.41 |
| 1:VB:227:LEU:HA | 1:VB:270:VAL:HA | 2.01 | 0.41 |
| 1:VB:391:GLN:OE1 | 1:VB:397:LYS:N | 2.53 | 0.41 |
| 1:W:170:GLN:HB3 | 1:X:233:ARG:HD2 | 2.02 | 0.41 |
| 1:W:228:HIS:CE1 | 1:W:268:LEU:HD22 | 2.55 | 0.41 |
| 1:WA:123:LEU:HD23 | 1:WA:158:GLU:O | 2.20 | 0.41 |
| 1:WB:379:ALA:O | 1:WB:380:ILE:C | 2.63 | 0.41 |
| 1:WB:545:TRP:HA | 1:WB:636:SER:H | 1.84 | 0.41 |
| 1:WB:588:PHE:CG | 1:WB:589:ASP:N | 2.88 | 0.41 |
| 1:X:65:VAL:HG23 | 1:X:67:ARG:CG | 2.50 | 0.41 |
| 1:X:120:ALA:CB | 1:X:205:LEU:HD21 | 2.50 | 0.41 |
| 1:X:150:THR:O | 1:X:150:THR:HG23 | 2.19 | 0.41 |
| 1:X:216:VAL:HG22 | 1:X:217:ASP:N | 2.35 | 0.41 |
| 1:XA:58:TYR:HA | 1:XA:93:ALA:CB | 2.49 | 0.41 |
| 1:XA:388:ILE:N | 1:XA:457:VAL:HG23 | 2.34 | 0.41 |
| 1:XB:326:LEU:O | 1:XB:362:PRO:HA | 2.20 | 0.41 |
| 1:Y:219:VAL:HG11 | 1:Y:227:LEU:HD23 | 2.02 | 0.41 |
| 1:Y:219:VAL:HG21 | 1:Y:227:LEU:HD22 | 2.01 | 0.41 |
| 1:YA:228:HIS:CG | 1:YA:250:LEU:HD23 | 2.55 | 0.41 |
| 1:YA:229:LEU:C | 1:YA:268:LEU:HD12 | 2.45 | 0.41 |
| 1:YA:498:LEU:HD13 | 1:YA:565:PRO:HG3 | 2.02 | 0.41 |
| 1:Z:381:PRO:HA | 1:Z:405:THR:HG22 | 2.02 | 0.41 |
| 1:ZA:173:ALA:C | 1:ZA:215:LEU:HD12 | 2.45 | 0.41 |
| 1:ZA:791:GLU:O | 1:ZA:794:LYS:HB3 | 2.20 | 0.41 |
| 1:ZB:591:PHE:O | 1:ZB:595:SER:N | 2.53 | 0.41 |
| 1:A:16:ILE:O | 1:A:29:GLU:N | 2.52 | 0.41 |
| 1:A:425:GLU:N | 1:A:425:GLU:OE1 | 2.52 | 0.41 |
| 1:AA:16:ILE:CG2 | 1:AA:17:HIS:N | 2.83 | 0.41 |
| 1:AA:279:HIS:HA | 1:AA:323:VAL:HG22 | 2.01 | 0.41 |
| 1:AA:392:ASP:CG | 1:AA:395:THR:HG22 | 2.45 | 0.41 |
| 1:AA:588:PHE:CD2 | 1:AA:589:ASP:N | 2.88 | 0.41 |
| 1:AB:176:LEU:HD11 | 1:AB:196:TRP:CZ2 | 2.55 | 0.41 |
| 1:AC:181:GLU:HA | 1:AC:190:ARG:O | 2.20 | 0.41 |
| 1:AC:506:LYS:HE2 | 1:AC:568:VAL:HG22 | 2.02 | 0.41 |
| 1:B:235:PHE:CD1 | 1:B:264:HIS:HB3 | 2.56 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:BA:453:ASN:CG | 1:BA:455:THR:HG1 | 2.27 | 0.41 |
| 1:BB:65:VAL:HG11 | 1:BB:100:TYR:CD1 | 2.55 | 0.41 |
| 1:BB:226:ALA:C | 1:BB:270:VAL:HG13 | 2.45 | 0.41 |
| 1:BB:365:TYR:CG | 1:BB:366:VAL:N | 2.88 | 0.41 |
| 1:C:122:HIS:CE1 | 1:C:160:VAL:HG21 | 2.54 | 0.41 |
| 1:C:167:ILE:HD12 | 1:C:167:ILE:H | 1.85 | 0.41 |
| 1:C:227:LEU:CD2 | 1:C:229:LEU:HD21 | 2.50 | 0.41 |
| 1:C:320:ILE:HG22 | 1:C:321:GLN:N | 2.35 | 0.41 |
| 1:C:462:VAL:HB | 1:C:485:GLU:O | 2.20 | 0.41 |
| 1:C:604:PHE:CD1 | 1:C:623:ARG:O | 2.73 | 0.41 |
| 1:CA:221:LEU:HD11 | 1:CA:259:HIS:HB3 | 2.01 | 0.41 |
| 1:CB:58:TYR:CE1 | 1:CB:92:LEU:HA | 2.55 | 0.41 |
| 1:CB:392:ASP:O | 1:CB:396:GLY:N | 2.53 | 0.41 |
| 1:CB:420:PRO:N | 1:CB:421:PRO:HD2 | 2.35 | 0.41 |
| 1:CB:797:GLN:OE1 | 1:DB:792:VAL:HG11 | 2.20 | 0.41 |
| 1:D:283:VAL:HG12 | 1:D:284:ILE:N | 2.35 | 0.41 |
| 1:D:420:PRO:N | 1:D:421:PRO:CD | 2.83 | 0.41 |
| 1:D:768:LEU:HD23 | 1:D:768:LEU:C | 2.45 | 0.41 |
| 1:DA:538:GLN:O | 1:DA:644:GLU:HB3 | 2.21 | 0.41 |
| 1:DA:568:VAL:HG13 | 1:DA:569:GLY:N | 2.35 | 0.41 |
| 1:DB:9:ARG:HA | 1:DB:34:THR:HG22 | 2.02 | 0.41 |
| 1:DB:606:PHE:O | 1:DB:622:PRO:HA | 2.20 | 0.41 |
| 1:DB:746:LEU:HA | 1:DB:749:GLN:OE1 | 2.20 | 0.41 |
| 1:DB:767:GLU:HA | 1:DB:770:LEU:HD12 | 2.02 | 0.41 |
| 1:E:325:VAL:HA | 1:E:364:GLU:HA | 2.01 | 0.41 |
| 1:EA:16:ILE:CG2 | 1:EA:17:HIS:N | 2.83 | 0.41 |
| 1:EA:75:PHE:HA | 1:EA:81:VAL:HA | 2.01 | 0.41 |
| 1:EB:459:SER:HA | 1:EB:488:SER:HA | 2.02 | 0.41 |
| 1:F:18:VAL:HG22 | 1:F:29:GLU:OE2 | 2.20 | 0.41 |
| 1:F:58:TYR:OH | 1:F:90:ILE:HG23 | 2.20 | 0.41 |
| 1:F:305:GLU:O | 1:F:305:GLU:CD | 2.64 | 0.41 |
| 1:F:543:TYR:O | 1:F:545:TRP:HD1 | 2.03 | 0.41 |
| 1:FA:388:ILE:HA | 1:FA:457:VAL:H | 1.85 | 0.41 |
| 1:FA:772:TYR:CD1 | 1:GA:770:LEU:HD11 | 2.55 | 0.41 |
| 1:FB:92:LEU:HD12 | 1:FB:92:LEU:C | 2.45 | 0.41 |
| 1:FB:218:ALA:HB1 | 1:FB:259:HIS:C | 2.45 | 0.41 |
| 1:G:56:ARG:O | 1:G:111:PRO:HA | 2.20 | 0.41 |
| 1:GB:62:ALA:HB3 | 1:GB:104:VAL:HG13 | 2.02 | 0.41 |
| 1:GB:425:GLU:OE2 | 1:GB:460:TYR:HA | 2.20 | 0.41 |
| 1:GB:539:LEU:HD13 | 1:GB:640:VAL:HG13 | 2.02 | 0.41 |
| 1:GB:747:LYS:O | 1:GB:751:LEU:HD23 | 2.20 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:H:301:VAL:HG22 | 1:H:302:VAL:N | 2.35 | 0.41 |
| 1:H:385:ASN:OD1 | 1:H:386:GLU:N | 2.54 | 0.41 |
| 1:H:768:LEU:HD13 | 1:I:759:LEU:HD22 | 2.03 | 0.41 |
| 1:HB:106:GLU:N | 1:HB:106:GLU:OE1 | 2.52 | 0.41 |
| 1:HB:115:VAL:HG21 | 1:HB:145:PHE:CE2 | 2.55 | 0.41 |
| 1:HB:380:ILE:H | 1:HB:380:ILE:HD12 | 1.85 | 0.41 |
| 1:HB:527:ILE:HB | 1:HB:539:LEU:HB3 | 2.03 | 0.41 |
| 1:I:452:ARG:NH1 | 1:I:454:LYS:HA | 2.35 | 0.41 |
| 1:I:801:ALA:HB2 | 1:J:796:LYS:HG3 | 2.01 | 0.41 |
| 1:IA:185:ARG:NH1 | 1:IA:205:LEU:O | 2.53 | 0.41 |
| 1:IA:358:LEU:HD23 | 1:IA:358:LEU:C | 2.45 | 0.41 |
| 1:IA:549:VAL:HG13 | 1:IA:552:ARG:HH11 | 1.84 | 0.41 |
| 1:J:56:ARG:O | 1:J:112:LEU:N | 2.53 | 0.41 |
| 1:J:236:ARG:HA | 1:J:241:VAL:O | 2.19 | 0.41 |
| 1:J:349:VAL:HB | 1:J:351:HIS:CE1 | 2.55 | 0.41 |
| 1:J:405:THR:HG23 | 1:K:396:GLY:HA3 | 2.01 | 0.41 |
| 1:J:470:VAL:O | 1:J:478:ALA:HA | 2.20 | 0.41 |
| 1:J:561:LEU:HD23 | 1:J:631:ASN:O | 2.20 | 0.41 |
| 1:JA:583:VAL:HG13 | 1:JA:584:ALA:N | 2.35 | 0.41 |
| 1:JB:580:ARG:HA | 1:JB:583:VAL:HG12 | 2.01 | 0.41 |
| 1:JB:745:LYS:O | 1:JB:746:LEU:C | 2.64 | 0.41 |
| 1:KA:64:PRO:HA | 1:KA:103:GLU:OE2 | 2.20 | 0.41 |
| 1:KA:236:ARG:HA | 1:KA:241:VAL:O | 2.20 | 0.41 |
| 1:KA:423:VAL:HG22 | 1:KA:427:LEU:HD23 | 2.01 | 0.41 |
| 1:KA:628:PHE:CE2 | 1:KA:635:VAL:HG23 | 2.55 | 0.41 |
| 1:KB:14:HIS:HB3 | 1:KB:47:PRO:HB3 | 2.02 | 0.41 |
| 1:KB:129:PHE:CE1 | 1:KB:156:GLU:HB3 | 2.54 | 0.41 |
| 1:KB:241:VAL:HG11 | 1:KB:243:ARG:CZ | 2.50 | 0.41 |
| 1:KB:333:LEU:HD12 | 1:KB:334:LEU:N | 2.34 | 0.41 |
| 1:L:284:ILE:O | 1:L:284:ILE:HG13 | 2.20 | 0.41 |
| 1:LA:215:LEU:HD12 | 1:LA:216:VAL:H | 1.84 | 0.41 |
| 1:LA:340:LEU:C | 1:LA:341:GLU:OE1 | 2.62 | 0.41 |
| 1:LA:519:GLY:HA3 | 1:LA:545:TRP:CH2 | 2.55 | 0.41 |
| 1:LA:735:ILE:HG23 | 1:MA:727:GLU:OE1 | 2.20 | 0.41 |
| 1:LB:802:ILE:HG21 | 1:LB:807:ILE:HD11 | 2.01 | 0.41 |
| 1:M:391:GLN:NE2 | 1:M:398:VAL:HG23 | 2.35 | 0.41 |
| 1:MA:268:LEU:HD12 | 1:MA:268:LEU:N | 2.35 | 0.41 |
| 1:MB:7:ILE:O | 1:MB:8:ILE:C | 2.61 | 0.41 |
| 1:MB:17:HIS:O | 1:MB:44:LEU:HB2 | 2.20 | 0.41 |
| 1:MB:685:ARG:O | 1:MB:688:LEU:N | 2.52 | 0.41 |
| 1:N:283:VAL:HG22 | 1:N:301:VAL:HG23 | 2.02 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:N:423:VAL:HG13 | 1:N:424:GLU:N | 2.35 | 0.41 |
| 1:N:786:GLN:O | 1:N:790:VAL:HG23 | 2.19 | 0.41 |
| 1:NA:91:ARG:C | 1:NA:92:LEU:HD12 | 2.44 | 0.41 |
| 1:NA:333:LEU:HD23 | 1:NA:374:VAL:CG1 | 2.41 | 0.41 |
| 1:NB:162:ILE:HG22 | 1:NB:163:ILE:N | 2.34 | 0.41 |
| 1:NB:518:LEU:H | 1:NB:518:LEU:HD12 | 1.84 | 0.41 |
| 1:NB:521:ASP:O | 1:NB:545:TRP:CD1 | 2.73 | 0.41 |
| 1:OA:168:ILE:HG22 | 1:OA:215:LEU:HD11 | 2.02 | 0.41 |
| 1:OA:521:ASP:OD1 | 1:PA:564:VAL:HG13 | 2.21 | 0.41 |
| 1:OB:15:TYR:CD1 | 1:OB:50:MET:HG3 | 2.54 | 0.41 |
| 1:OB:35:TYR:CG | 1:OB:36:ILE:N | 2.89 | 0.41 |
| 1:OB:776:GLN:OE1 | 1:PB:770:LEU:HD21 | 2.20 | 0.41 |
| 1:P:229:LEU:CD1 | 1:P:251:VAL:HG11 | 2.39 | 0.41 |
| 1:P:539:LEU:CD1 | 1:P:640:VAL:HG13 | 2.50 | 0.41 |
| 1:P:623:ARG:HH22 | 1:P:626:ALA:HA | 1.84 | 0.41 |
| 1:PA:462:VAL:HB | 1:PA:485:GLU:HB3 | 2.02 | 0.41 |
| 1:PA:621:ARG:N | 1:PA:622:PRO:CD | 2.83 | 0.41 |
| 1:PA:775:ALA:HB1 | 1:QA:770:LEU:HD22 | 2.02 | 0.41 |
| 1:PB:23:SER:OG | 1:PB:25:VAL:HG23 | 2.20 | 0.41 |
| 1:PB:530:GLU:HB3 | 1:PB:534:HIS:HA | 2.02 | 0.41 |
| 1:Q:228:HIS:HA | 1:Q:250:LEU:HD23 | 2.03 | 0.41 |
| 1:Q:283:VAL:HG12 | 1:Q:284:ILE:N | 2.35 | 0.41 |
| 1:Q:458:VAL:HG21 | 1:Q:489:LEU:HD12 | 2.02 | 0.41 |
| 1:QA:6:PHE:O | 1:QA:36:ILE:HG23 | 2.20 | 0.41 |
| 1:QA:521:ASP:O | 1:QA:545:TRP:CD1 | 2.73 | 0.41 |
| 1:QA:579:VAL:O | 1:QA:583:VAL:CG1 | 2.68 | 0.41 |
| 1:QA:803:GLY:O | 1:QA:805:SER:N | 2.53 | 0.41 |
| 1:QB:34:THR:O | 1:QB:35:TYR:C | 2.63 | 0.41 |
| 1:QB:365:TYR:CZ | 1:QB:366:VAL:O | 2.73 | 0.41 |
| 1:RA:122:HIS:HA | 1:RA:208:VAL:HG11 | 2.01 | 0.41 |
| 1:RA:596:ALA:HB2 | 1:SA:581:GLY:C | 2.46 | 0.41 |
| 1:RB:126:LEU:O | 1:RB:127:LEU:HD22 | 2.19 | 0.41 |
| 1:RB:388:ILE:HD11 | 1:RB:456:ARG:HH21 | 1.85 | 0.41 |
| 1:RB:536:ARG:O | 1:RB:645:PRO:HA | 2.19 | 0.41 |
| 1:S:802:ILE:HG21 | 1:S:807:ILE:HD11 | 2.00 | 0.41 |
| 1:SA:121:LEU:O | 1:SA:144:LEU:HA | 2.20 | 0.41 |
| 1:SA:126:LEU:HG | 1:SA:158:GLU:HG3 | 2.01 | 0.41 |
| 1:SB:42:ARG:NE | 1:SB:42:ARG:HA | 2.35 | 0.41 |
| 1:SB:388:ILE:HA | 1:SB:457:VAL:HG23 | 2.02 | 0.41 |
| 1:T:547:PHE:CE1 | 1:T:633:LEU:HA | 2.55 | 0.41 |
| 1:TA:73:VAL:HG11 | 1:TA:100:TYR:CE2 | 2.55 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:TB:167:ILE:HG23 | 1:TB:202:GLY:C | 2.45 | 0.41 |
| 1:TB:168:ILE:O | 1:TB:201:VAL:HA | 2.20 | 0.41 |
| 1:TB:785:GLN:HA | 1:TB:788:ALA:HB3 | 2.02 | 0.41 |
| 1:UA:364:GLU:O | 1:UA:365:TYR:C | 2.63 | 0.41 |
| 1:UA:779:LEU:HD21 | 1:VA:774:ARG:HE | 1.85 | 0.41 |
| 1:UB:179:ARG:HG3 | 1:UB:211:GLU:CG | 2.50 | 0.41 |
| 1:V:65:VAL:HG22 | 1:V:103:GLU:CD | 2.45 | 0.41 |
| 1:VA:279:HIS:O | 1:VA:323:VAL:HG22 | 2.19 | 0.41 |
| 1:VA:537:LEU:CD1 | 1:VA:588:PHE:HD1 | 2.33 | 0.41 |
| 1:VA:651:ARG:O | 1:VA:655:GLN:CB | 2.68 | 0.41 |
| 1:VB:131:ASP:CB | 1:VB:137:VAL:HG23 | 2.43 | 0.41 |
| 1:VB:599:ILE:CD1 | 1:VB:640:VAL:HG21 | 2.41 | 0.41 |
| 1:VB:772:TYR:HD1 | 1:WB:770:LEU:HD11 | 1.84 | 0.41 |
| 1:VB:794:LYS:HA | 1:WB:792:VAL:HB | 2.01 | 0.41 |
| 1:W:61:VAL:HG13 | 1:W:105:LEU:HD12 | 2.01 | 0.41 |
| 1:W:175:ARG:N | 1:W:197:LEU:HD23 | 2.35 | 0.41 |
| 1:WA:325:VAL:HA | 1:WA:364:GLU:HA | 2.02 | 0.41 |
| 1:WB:277:GLY:C | 1:WB:305:GLU:H | 2.28 | 0.41 |
| 1:WB:453:ASN:CG | 1:WB:455:THR:HG1 | 2.28 | 0.41 |
| 1:WB:471:TYR:HD2 | 1:WB:478:ALA:HB2 | 1.82 | 0.41 |
| 1:WB:518:LEU:O | 1:WB:547:PHE:HB2 | 2.20 | 0.41 |
| 1:WB:526:VAL:HA | 1:WB:539:LEU:O | 2.20 | 0.41 |
| 1:WB:757:ALA:HB1 | 1:XB:751:LEU:HB2 | 2.02 | 0.41 |
| 1:WB:762:VAL:HG23 | 1:WB:763:GLN:N | 2.35 | 0.41 |
| 1:X:470:VAL:HG11 | 1:X:479:ARG:NH1 | 2.34 | 0.41 |
| 1:X:516:LEU:HD12 | 1:X:516:LEU:C | 2.44 | 0.41 |
| 1:XA:5:GLU:HG2 | 1:XA:7:ILE:CG1 | 2.50 | 0.41 |
| 1:XA:7:ILE:HB | 1:XA:34:THR:HB | 2.02 | 0.41 |
| 1:XA:471:TYR:HD2 | 1:XA:478:ALA:HB2 | 1.84 | 0.41 |
| 1:XB:288:VAL:O | 1:XB:288:VAL:HG23 | 2.19 | 0.41 |
| 1:XB:340:LEU:HG | 1:XB:351:HIS:HB2 | 2.01 | 0.41 |
| 1:XB:381:PRO:O | 1:XB:382:LEU:HD23 | 2.20 | 0.41 |
| 1:XB:417:LYS:HE2 | 1:XB:489:LEU:HB3 | 2.03 | 0.41 |
| 1:Y:230:ARG:HA | 1:Y:247:GLU:O | 2.20 | 0.41 |
| 1:YB:18:VAL:HA | 1:YB:42:ARG:O | 2.20 | 0.41 |
| 1:YB:358:LEU:O | 1:YB:358:LEU:HD23 | 2.20 | 0.41 |
| 1:YB:374:VAL:HG12 | 1:YB:375:GLU:H | 1.85 | 0.41 |
| 1:YB:387:GLY:HA2 | 1:YB:401:VAL:O | 2.20 | 0.41 |
| 1:YB:462:VAL:HB | 1:YB:485:GLU:O | 2.20 | 0.41 |
| 1:YB:591:PHE:HZ | 1:YB:599:ILE:HD11 | 1.84 | 0.41 |
| 1:Z:459:SER:HA | 1:Z:488:SER:HA | 2.02 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:ZA:3:THR:O | 1:ZA:3:THR:HG22 | 2.21 | 0.41 |
| 1:ZA:179:ARG:HE | 1:ZA:209:PHE:HA | 1.86 | 0.41 |
| 1:ZA:410:GLN:O | 1:ZA:411:ASP:CG | 2.63 | 0.41 |
| 1:ZB:105:LEU:HD23 | 1:ZB:105:LEU:C | 2.44 | 0.41 |
| 1:ZB:250:LEU:O | 1:ZB:251:VAL:HG13 | 2.20 | 0.41 |
| 1:ZB:284:ILE:HD12 | 1:ZB:314:GLU:CD | 2.44 | 0.41 |
| 1:A:15:TYR:O | 1:A:47:PRO:HA | 2.19 | 0.41 |
| 1:A:55:PRO:O | 1:A:57:HIS:CD2 | 2.72 | 0.41 |
| 1:A:60:THR:HG22 | 1:A:90:ILE:HG13 | 2.02 | 0.41 |
| 1:A:390:VAL:CG1 | 1:A:401:VAL:HG13 | 2.50 | 0.41 |
| 1:AA:165:ALA:HA | 1:AA:205:LEU:HA | 2.01 | 0.41 |
| 1:AA:332:LEU:HD23 | 1:AA:376:GLU:CB | 2.49 | 0.41 |
| 1:AA:455:THR:O | 1:AA:456:ARG:C | 2.64 | 0.41 |
| 1:AA:537:LEU:HA | 1:AA:645:PRO:HA | 2.02 | 0.41 |
| 1:AA:538:GLN:HB2 | 1:AA:646:VAL:HG22 | 2.02 | 0.41 |
| 1:AB:53:VAL:HG11 | 1:AB:57:HIS:O | 2.20 | 0.41 |
| 1:AB:620:PRO:O | 1:AB:622:PRO:HD3 | 2.20 | 0.41 |
| 1:AC:288:VAL:HA | 1:AC:294:ASN:HA | 2.02 | 0.41 |
| 1:AC:389:TYR:OH | 1:AC:458:VAL:HG23 | 2.20 | 0.41 |
| 1:AC:810:LEU:HD21 | 1:OA:808:ARG:CG | 2.50 | 0.41 |
| 1:B:215:LEU:HD12 | 1:B:216:VAL:H | 1.86 | 0.41 |
| 1:BA:10:ILE:HG23 | 1:BA:47:PRO:HB3 | 2.02 | 0.41 |
| 1:BB:176:LEU:HB2 | 1:BB:211:GLU:O | 2.21 | 0.41 |
| 1:BB:471:TYR:HA | 1:BB:477:ARG:O | 2.20 | 0.41 |
| 1:C:169:ARG:NH2 | 1:C:172:GLN:HG3 | 2.35 | 0.41 |
| 1:C:521:ASP:CG | 1:C:522:PHE:N | 2.78 | 0.41 |
| 1:C:543:TYR:CD1 | 1:C:638:VAL:HG13 | 2.55 | 0.41 |
| 1:CB:56:ARG:HA | 1:CB:58:TYR:CE2 | 2.55 | 0.41 |
| 1:CB:316:LEU:HD23 | 1:CB:319:GLY:HA2 | 2.02 | 0.41 |
| 1:D:374:VAL:HG12 | 1:D:375:GLU:N | 2.35 | 0.41 |
| 1:DA:125:ALA:CB | 1:DA:137:VAL:HG13 | 2.50 | 0.41 |
| 1:DA:174:LEU:HD12 | 1:DA:214:ASP:C | 2.46 | 0.41 |
| 1:DA:273:ILE:HG23 | 1:DA:273:ILE:O | 2.20 | 0.41 |
| 1:DA:281:TYR:CE1 | 1:DA:321:GLN:HB2 | 2.54 | 0.41 |
| 1:DA:416:GLU:CD | 1:DA:455:THR:HG23 | 2.46 | 0.41 |
| 1:E:19:LEU:CD1 | 1:E:26:SER:HB3 | 2.50 | 0.41 |
| 1:E:46:ALA:HB1 | 1:E:47:PRO:HD2 | 2.01 | 0.41 |
| 1:E:392:ASP:O | 1:E:396:GLY:HA2 | 2.21 | 0.41 |
| 1:EA:172:GLN:HG2 | 1:EA:215:LEU:HD11 | 2.02 | 0.41 |
| 1:EA:176:LEU:HB2 | 1:EA:211:GLU:O | 2.21 | 0.41 |
| 1:EA:755:THR:HG22 | 1:EA:759:LEU:HD11 | 2.02 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:F:121:LEU:CA | 1:F:162:ILE:HG22 | 2.51 | 0.41 |
| 1:F:169:ARG:O | 1:F:170:GLN:C | 2.62 | 0.41 |
| 1:F:345:ASP:OD2 | 1:F:349:VAL:HB | 2.19 | 0.41 |
| 1:F:496:THR:O | 1:F:498:LEU:HG | 2.21 | 0.41 |
| 1:F:794:LYS:HA | 1:F:797:GLN:OE1 | 2.20 | 0.41 |
| 1:FA:180:LYS:O | 1:FA:181:GLU:C | 2.63 | 0.41 |
| 1:FB:527:ILE:CG1 | 1:FB:541:LEU:HD11 | 2.50 | 0.41 |
| 1:GA:170:GLN:HG2 | 1:HA:233:ARG:CB | 2.50 | 0.41 |
| 1:GA:351:HIS:CE1 | 1:GA:357:TRP:CE2 | 3.09 | 0.41 |
| 1:GA:808:ARG:NH2 | 1:GA:809:ASP:OD1 | 2.53 | 0.41 |
| 1:GB:157:VAL:HG12 | 1:GB:158:GLU:N | 2.36 | 0.41 |
| 1:H:424:GLU:HG2 | 1:H:425:GLU:N | 2.35 | 0.41 |
| 1:H:545:TRP:HB2 | 1:H:634:VAL:O | 2.20 | 0.41 |
| 1:H:567:PHE:CG | 1:H:568:VAL:N | 2.88 | 0.41 |
| 1:HA:90:ILE:HG22 | 1:HA:91:ARG:H | 1.84 | 0.41 |
| 1:HA:543:TYR:O | 1:HA:545:TRP:HD1 | 2.02 | 0.41 |
| 1:HA:654:LEU:HD22 | 1:IA:534:HIS:CG | 2.56 | 0.41 |
| 1:HB:69:ALA:O | 1:HB:70:GLN:HB2 | 2.20 | 0.41 |
| 1:HB:545:TRP:HA | 1:HB:636:SER:H | 1.86 | 0.41 |
| 1:I:761:ARG:HG3 | 1:J:755:THR:HG23 | 2.01 | 0.41 |
| 1:IA:230:ARG:HG3 | 1:IA:247:GLU:O | 2.20 | 0.41 |
| 1:IB:28:VAL:HB | 1:IB:101:PRO:HD3 | 2.02 | 0.41 |
| 1:IB:688:LEU:HA | 1:IB:691:GLN:OE1 | 2.20 | 0.41 |
| 1:J:175:ARG:HA | 1:J:196:TRP:O | 2.20 | 0.41 |
| 1:J:229:LEU:HD12 | 1:J:251:VAL:CG1 | 2.50 | 0.41 |
| 1:J:230:ARG:HA | 1:J:247:GLU:O | 2.20 | 0.41 |
| 1:J:768:LEU:HD13 | 1:K:759:LEU:CD2 | 2.50 | 0.41 |
| 1:JA:489:LEU:HD23 | 1:JA:493:GLU:O | 2.20 | 0.41 |
| 1:JA:711:ALA:O | 1:JA:715:ALA:HB2 | 2.20 | 0.41 |
| 1:JB:115:VAL:HG23 | 1:JB:148:PRO:C | 2.46 | 0.41 |
| 1:JB:170:GLN:N | 1:JB:201:VAL:HG13 | 2.35 | 0.41 |
| 1:K:495:PHE:HB2 | 1:K:514:LEU:HD11 | 2.01 | 0.41 |
| 1:K:547:PHE:CE1 | 1:K:633:LEU:HD13 | 2.54 | 0.41 |
| 1:KA:20:ASP:HA | 1:KA:41:GLU:HA | 2.01 | 0.41 |
| 1:KA:218:ALA:HB1 | 1:KA:259:HIS:C | 2.45 | 0.41 |
| 1:KB:6:PHE:O | 1:KB:37:ARG:N | 2.53 | 0.41 |
| 1:KB:45:PHE:HD1 | 1:KB:46:ALA:O | 2.02 | 0.41 |
| 1:KB:597:ARG:HG3 | 1:KB:598:ILE:N | 2.36 | 0.41 |
| 1:L:8:ILE:HD12 | 1:L:37:ARG:HD3 | 2.01 | 0.41 |
| 1:L:61:VAL:HA | 1:L:105:LEU:HA | 2.02 | 0.41 |
| 1:L:235:PHE:CD2 | 1:L:264:HIS:HB2 | 2.56 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:L:473:TYR:CD1 | 1:L:473:TYR:N | 2.88 | 0.41 |
| 1:L:700:GLU:HA | 1:L:703:ARG:HB3 | 2.02 | 0.41 |
| 1:LB:230:ARG:HG2 | 1:LB:268:LEU:HD11 | 2.02 | 0.41 |
| 1:M:179:ARG:HB2 | 1:M:209:PHE:HA | 2.03 | 0.41 |
| 1:MA:7:ILE:O | 1:MA:8:ILE:C | 2.61 | 0.41 |
| 1:MA:20:ASP:O | 1:MA:23:SER:O | 2.38 | 0.41 |
| 1:MA:59:CYS:SG | 1:MA:109:ILE:HD13 | 2.60 | 0.41 |
| 1:MA:67:ARG:HA | 1:MA:73:VAL:HA | 2.00 | 0.41 |
| 1:MB:230:ARG:HG2 | 1:MB:231:ALA:N | 2.35 | 0.41 |
| 1:N:13:TYR:CE2 | 1:O:83:LEU:HD22 | 2.47 | 0.41 |
| 1:N:180:LYS:HA | 1:N:192:THR:HG23 | 2.02 | 0.41 |
| 1:N:342:GLU:N | 1:N:350:SER:HA | 2.36 | 0.41 |
| 1:NA:16:ILE:HA | 1:NA:45:PHE:CE2 | 2.55 | 0.41 |
| 1:NA:326:LEU:O | 1:NA:362:PRO:HA | 2.20 | 0.41 |
| 1:NB:160:VAL:HG12 | 1:NB:161:GLU:CD | 2.45 | 0.41 |
| 1:NB:539:LEU:HA | 1:NB:642:SER:O | 2.21 | 0.41 |
| 1:O:168:ILE:HD11 | 1:O:200:THR:C | 2.45 | 0.41 |
| 1:O:527:ILE:HD11 | 1:O:579:VAL:HG11 | 2.01 | 0.41 |
| 1:OA:36:ILE:HD11 | 1:Z:7:ILE:CG2 | 2.50 | 0.41 |
| 1:OA:250:LEU:HD11 | 1:OA:271:VAL:HG13 | 2.02 | 0.41 |
| 1:OA:391:GLN:O | 1:OA:392:ASP:C | 2.62 | 0.41 |
| 1:OA:415:TRP:CH2 | 1:OA:417:LYS:HA | 2.55 | 0.41 |
| 1:OB:180:LYS:HA | 1:OB:192:THR:OG1 | 2.20 | 0.41 |
| 1:OB:417:LYS:HE3 | 1:OB:489:LEU:HD13 | 2.03 | 0.41 |
| 1:OB:471:TYR:HE1 | 1:OB:476:LYS:HA | 1.84 | 0.41 |
| 1:P:15:TYR:HB2 | 1:P:29:GLU:O | 2.20 | 0.41 |
| 1:P:144:LEU:HD13 | 1:P:163:ILE:HD11 | 2.03 | 0.41 |
| 1:P:778:GLU:HA | 1:P:781:VAL:HG22 | 2.02 | 0.41 |
| 1:PA:8:ILE:HD12 | 1:PA:8:ILE:H | 1.84 | 0.41 |
| 1:PA:106:GLU:N | 1:PA:106:GLU:OE1 | 2.54 | 0.41 |
| 1:PA:380:ILE:HD12 | 1:PA:407:MET:HA | 2.02 | 0.41 |
| 1:PA:420:PRO:N | 1:PA:421:PRO:HD2 | 2.36 | 0.41 |
| 1:PB:334:LEU:HD21 | 1:PB:359:ILE:CG2 | 2.50 | 0.41 |
| 1:PB:416:GLU:HG2 | 1:PB:455:THR:HG22 | 2.02 | 0.41 |
| 1:Q:30:VAL:HG22 | 1:Q:31:GLY:N | 2.36 | 0.41 |
| 1:Q:122:HIS:CD2 | 1:Q:208:VAL:HG12 | 2.56 | 0.41 |
| 1:Q:176:LEU:HA | 1:Q:213:LEU:HD23 | 2.02 | 0.41 |
| 1:QA:219:VAL:O | 1:QA:219:VAL:HG23 | 2.20 | 0.41 |
| 1:QA:499:SER:HA | 1:QA:512:ARG:HA | 2.02 | 0.41 |
| 1:QB:177:ARG:HA | 1:QB:194:GLU:O | 2.20 | 0.41 |
| 1:QB:567:PHE:CG | 1:QB:568:VAL:N | 2.87 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:RA:10:ILE:HB | 1:RA:32:PRO:HA | 2.02 | 0.41 |
| 1:RA:115:VAL:HG21 | 1:RA:145:PHE:CD1 | 2.55 | 0.41 |
| 1:RA:495:PHE:CD1 | 1:RA:514:LEU:HD21 | 2.54 | 0.41 |
| 1:RA:588:PHE:O | 1:RA:589:ASP:C | 2.63 | 0.41 |
| 1:RA:742:LEU:HD21 | 1:SA:734:ARG:CG | 2.50 | 0.41 |
| 1:RB:177:ARG:NH2 | 1:RB:213:LEU:HD21 | 2.35 | 0.41 |
| 1:RB:377:ARG:O | 1:RB:407:MET:HE1 | 2.20 | 0.41 |
| 1:RB:424:GLU:CG | 1:RB:514:LEU:HD11 | 2.50 | 0.41 |
| 1:RB:500:LEU:HD22 | 1:RB:568:VAL:CG1 | 2.50 | 0.41 |
| 1:S:160:VAL:HG12 | 1:S:161:GLU:H | 1.85 | 0.41 |
| 1:SB:129:PHE:O | 1:SB:137:VAL:HB | 2.20 | 0.41 |
| 1:SB:380:ILE:H | 1:SB:380:ILE:HD12 | 1.86 | 0.41 |
| 1:TB:10:ILE:O | 1:TB:32:PRO:HA | 2.20 | 0.41 |
| 1:UA:391:GLN:CG | 1:UA:398:VAL:HG22 | 2.50 | 0.41 |
| 1:UB:69:ALA:HB2 | 1:UB:74:LEU:HD21 | 2.02 | 0.41 |
| 1:UB:183:TRP:HA | 1:UB:188:LYS:O | 2.20 | 0.41 |
| 1:UB:592:HIS:O | 1:VB:584:ALA:HB1 | 2.19 | 0.41 |
| 1:V:754:GLU:O | 1:V:758:GLU:HG2 | 2.20 | 0.41 |
| 1:V:790:VAL:HG21 | 1:W:785:GLN:HG3 | 2.03 | 0.41 |
| 1:VA:526:VAL:HG22 | 1:VA:540:GLN:CB | 2.50 | 0.41 |
| 1:VA:600:ARG:O | 1:VA:600:ARG:CG | 2.68 | 0.41 |
| 1:W:92:LEU:CD2 | 1:W:152:ILE:HD12 | 2.50 | 0.41 |
| 1:W:326:LEU:O | 1:W:362:PRO:HA | 2.20 | 0.41 |
| 1:WA:32:PRO:C | 1:WA:33:LYS:HD3 | 2.46 | 0.41 |
| 1:WA:647:ASP:HB3 | 1:WA:650:THR:OG1 | 2.20 | 0.41 |
| 1:WB:6:PHE:O | 1:WB:7:ILE:C | 2.62 | 0.41 |
| 1:WB:20:ASP:N | 1:WB:41:GLU:HG2 | 2.35 | 0.41 |
| 1:WB:283:VAL:O | 1:WB:316:LEU:HD12 | 2.20 | 0.41 |
| 1:WB:332:LEU:HA | 1:WB:376:GLU:HA | 2.02 | 0.41 |
| 1:WB:410:GLN:O | 1:WB:411:ASP:OD1 | 2.38 | 0.41 |
| 1:WB:478:ALA:C | 1:WB:479:ARG:HD3 | 2.45 | 0.41 |
| 1:WB:489:LEU:HD23 | 1:WB:489:LEU:HA | 1.89 | 0.41 |
| 1:WB:549:VAL:HG21 | 1:WB:552:ARG:NH1 | 2.35 | 0.41 |
| 1:X:8:ILE:CD1 | 1:X:43:VAL:HG21 | 2.51 | 0.41 |
| 1:X:124:LYS:HB2 | 1:X:160:VAL:HG21 | 2.02 | 0.41 |
| 1:X:325:VAL:HA | 1:X:364:GLU:HG3 | 2.02 | 0.41 |
| 1:XA:123:LEU:HB3 | 1:XA:157:VAL:HG11 | 2.03 | 0.41 |
| 1:XA:284:ILE:HD12 | 1:XA:287:PRO:HB3 | 2.02 | 0.41 |
| 1:XA:334:LEU:HB2 | 1:XA:357:TRP:CE2 | 2.55 | 0.41 |
| 1:XA:392:ASP:OD1 | 1:XA:411:ASP:O | 2.39 | 0.41 |
| 1:XA:572:CYS:O | 1:XA:576:ALA:HB3 | 2.20 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XA:641:GLN:HA | 1:YA:580:ARG:HE | 1.85 | 0.41 |
| 1:XB:60:THR:HA | 1:XB:89:GLU:O | 2.19 | 0.41 |
| 1:XB:63:ASN:HA | 1:XB:84:ARG:O | 2.20 | 0.41 |
| 1:XB:129:PHE:CZ | 1:XB:157:VAL:HG22 | 2.55 | 0.41 |
| 1:XB:165:ALA:HA | 1:XB:205:LEU:HA | 2.02 | 0.41 |
| 1:Y:120:ALA:HB2 | 1:Y:205:LEU:HD21 | 2.01 | 0.41 |
| 1:YA:340:LEU:HD12 | 1:YA:345:ASP:CG | 2.46 | 0.41 |
| 1:YA:461:ARG:HD3 | 1:ZA:473:TYR:CD1 | 2.56 | 0.41 |
| 1:YA:586:VAL:HG21 | 1:YA:598:ILE:HD13 | 2.02 | 0.41 |
| 1:YB:60:THR:HG22 | 1:YB:90:ILE:HD11 | 2.02 | 0.41 |
| 1:YB:224:LYS:HG3 | 1:YB:225:THR:HG23 | 2.01 | 0.41 |
| 1:YB:468:VAL:HG22 | 1:YB:515:CYS:HB2 | 2.01 | 0.41 |
| 1:YB:529:ILE:HG12 | 1:YB:537:LEU:O | 2.19 | 0.41 |
| 1:YB:631:ASN:OD1 | 1:YB:633:LEU:HB3 | 2.19 | 0.41 |
| 1:ZB:416:GLU:CD | 1:ZB:454:LYS:HB2 | 2.45 | 0.41 |
| 1:A:8:ILE:HD12 | 1:A:8:ILE:H | 1.85 | 0.41 |
| 1:A:13:TYR:HA | 1:A:50:MET:HE3 | 2.02 | 0.41 |
| 1:A:69:ALA:HB2 | 1:A:74:LEU:CG | 2.50 | 0.41 |
| 1:A:288:VAL:HG22 | 1:A:314:GLU:OE2 | 2.20 | 0.41 |
| 1:AB:296:LEU:CD2 | 1:ZA:273:ILE:HG21 | 2.50 | 0.41 |
| 1:AB:405:THR:HG23 | 1:BB:396:GLY:HA2 | 2.01 | 0.41 |
| 1:AC:8:ILE:HD12 | 1:AC:37:ARG:HG3 | 2.03 | 0.41 |
| 1:AC:388:ILE:HA | 1:AC:456:ARG:HA | 2.03 | 0.41 |
| 1:AC:748:ALA:HB2 | 1:ZB:754:GLU:HA | 2.03 | 0.41 |
| 1:B:15:TYR:HB3 | 1:B:30:VAL:HG23 | 2.03 | 0.41 |
| 1:B:284:ILE:HD11 | 1:B:300:ARG:HB3 | 2.02 | 0.41 |
| 1:B:484:PRO:HB2 | 1:C:471:TYR:CG | 2.55 | 0.41 |
| 1:B:497:VAL:HG22 | 1:B:498:LEU:N | 2.35 | 0.41 |
| 1:BA:15:TYR:CD1 | 1:BA:48:MET:O | 2.74 | 0.41 |
| 1:BA:174:LEU:HB3 | 1:BA:198:VAL:HG12 | 2.03 | 0.41 |
| 1:BA:501:SER:HA | 1:BA:507:ARG:O | 2.20 | 0.41 |
| 1:BB:169:ARG:HG3 | 1:BB:172:GLN:CD | 2.46 | 0.41 |
| 1:BB:280:ASN:HA | 1:BB:321:GLN:O | 2.19 | 0.41 |
| 1:C:65:VAL:HG22 | 1:C:103:GLU:OE2 | 2.20 | 0.41 |
| 1:C:221:LEU:HD22 | 1:C:226:ALA:HA | 2.03 | 0.41 |
| 1:C:476:LYS:HD3 | 1:C:476:LYS:N | 2.35 | 0.41 |
| 1:C:543:TYR:O | 1:C:545:TRP:CD1 | 2.74 | 0.41 |
| 1:C:549:VAL:HG11 | 1:C:552:ARG:CZ | 2.50 | 0.41 |
| 1:CB:18:VAL:HG12 | 1:CB:43:VAL:HG22 | 2.02 | 0.41 |
| 1:D:16:ILE:HG22 | 1:D:17:HIS:N | 2.35 | 0.41 |
| 1:D:131:ASP:CG | 1:D:137:VAL:HG23 | 2.46 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:D:177:ARG:HG2 | 1:D:178:ALA:N | 2.36 | 0.41 |
| 1:DA:7:ILE:HG22 | 1:DA:36:ILE:HG13 | 2.02 | 0.41 |
| 1:DA:196:TRP:C | 1:DA:197:LEU:HD22 | 2.45 | 0.41 |
| 1:DA:316:LEU:HG | 1:DA:319:GLY:O | 2.20 | 0.41 |
| 1:DA:325:VAL:HG23 | 1:DA:364:GLU:HA | 2.01 | 0.41 |
| 1:DA:469:GLN:HE21 | 1:DA:478:ALA:HB1 | 1.84 | 0.41 |
| 1:DB:188:LYS:O | 1:DB:189:GLU:C | 2.63 | 0.41 |
| 1:DB:262:ASP:OD1 | 1:DB:263:VAL:HG22 | 2.19 | 0.41 |
| 1:E:10:ILE:O | 1:E:31:GLY:O | 2.39 | 0.41 |
| 1:E:53:VAL:O | 1:E:53:VAL:HG12 | 2.19 | 0.41 |
| 1:E:59:CYS:HB3 | 1:E:107:LYS:O | 2.21 | 0.41 |
| 1:E:334:LEU:HD11 | 1:E:359:ILE:HB | 2.02 | 0.41 |
| 1:E:405:THR:HG23 | 1:F:396:GLY:CA | 2.50 | 0.41 |
| 1:EA:73:VAL:HG21 | 1:EA:100:TYR:CZ | 2.55 | 0.41 |
| 1:EA:273:ILE:HG13 | 1:EA:308:PHE:O | 2.21 | 0.41 |
| 1:EB:228:HIS:HA | 1:EB:250:LEU:HG | 2.00 | 0.41 |
| 1:F:34:THR:O | 1:F:35:TYR:C | 2.62 | 0.41 |
| 1:F:62:ALA:N | 1:F:106:GLU:OE1 | 2.54 | 0.41 |
| 1:F:332:LEU:HD12 | 1:F:376:GLU:HB2 | 2.02 | 0.41 |
| 1:F:687:ARG:O | 1:F:690:ARG:HB3 | 2.21 | 0.41 |
| 1:FA:204:TYR:CG | 1:FA:205:LEU:N | 2.87 | 0.41 |
| 1:FA:334:LEU:HD11 | 1:FA:359:ILE:CG2 | 2.50 | 0.41 |
| 1:FB:50:MET:O | 1:FB:51:VAL:C | 2.64 | 0.41 |
| 1:FB:131:ASP:OD1 | 1:FB:131:ASP:N | 2.54 | 0.41 |
| 1:FB:772:TYR:CE1 | 1:GB:766:ARG:HB3 | 2.56 | 0.41 |
| 1:G:8:ILE:HB | 1:G:37:ARG:CZ | 2.50 | 0.41 |
| 1:GA:230:ARG:HA | 1:GA:248:GLU:HA | 2.01 | 0.41 |
| 1:GA:461:ARG:HA | 1:GA:486:LEU:HA | 2.00 | 0.41 |
| 1:GA:566:ASP:O | 1:GA:567:PHE:C | 2.63 | 0.41 |
| 1:GB:410:GLN:O | 1:GB:411:ASP:OD1 | 2.37 | 0.41 |
| 1:H:109:ILE:O | 1:H:109:ILE:HG13 | 2.21 | 0.41 |
| 1:H:121:LEU:HD11 | 1:H:145:PHE:HB3 | 2.02 | 0.41 |
| 1:H:405:THR:HG23 | 1:I:396:GLY:HA2 | 2.02 | 0.41 |
| 1:HA:56:ARG:NH2 | 1:HA:57:HIS:ND1 | 2.69 | 0.41 |
| 1:HA:451:PRO:C | 1:HA:452:ARG:HD3 | 2.45 | 0.41 |
| 1:HA:458:VAL:HG12 | 1:HA:459:SER:N | 2.35 | 0.41 |
| 1:HA:463:PRO:O | 1:HA:466:ALA:HB3 | 2.21 | 0.41 |
| 1:HB:67:ARG:HA | 1:HB:72:LEU:O | 2.20 | 0.41 |
| 1:HB:254:GLN:N | 1:HB:254:GLN:CD | 2.79 | 0.41 |
| 1:HB:377:ARG:O | 1:HB:407:MET:SD | 2.78 | 0.41 |
| 1:I:285:LEU:HD21 | 1:I:317:GLU:HA | 2.02 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:I:645:PRO:O | 1:I:646:VAL:C | 2.63 | 0.41 |
| 1:IA:10:ILE:HD11 | 1:IA:33:LYS:HB2 | 2.03 | 0.41 |
| 1:J:6:PHE:O | 1:J:36:ILE:HA | 2.19 | 0.41 |
| 1:JA:16:ILE:HA | 1:JA:45:PHE:CE1 | 2.54 | 0.41 |
| 1:JA:16:ILE:HG23 | 1:JA:45:PHE:O | 2.20 | 0.41 |
| 1:JA:180:LYS:HD2 | 1:JA:181:GLU:O | 2.20 | 0.41 |
| 1:JB:167:ILE:HG21 | 1:JB:169:ARG:NH1 | 2.35 | 0.41 |
| 1:K:286:ASP:N | 1:K:287:PRO:CD | 2.83 | 0.41 |
| 1:K:538:GLN:HE22 | 1:K:540:GLN:HG3 | 1.86 | 0.41 |
| 1:K:767:GLU:O | 1:K:771:VAL:HG23 | 2.20 | 0.41 |
| 1:KA:35:TYR:N | 1:KA:37:ARG:NH2 | 2.68 | 0.41 |
| 1:KA:106:GLU:N | 1:KA:106:GLU:OE1 | 2.53 | 0.41 |
| 1:KA:129:PHE:CE1 | 1:KA:137:VAL:HG11 | 2.56 | 0.41 |
| 1:KB:521:ASP:CG | 1:KB:522:PHE:N | 2.78 | 0.41 |
| 1:L:119:THR:OG1 | 1:L:162:ILE:CG2 | 2.68 | 0.41 |
| 1:L:516:LEU:HD13 | 1:L:562:PHE:CZ | 2.55 | 0.41 |
| 1:LA:20:ASP:O | 1:LA:23:SER:O | 2.38 | 0.41 |
| 1:LA:61:VAL:O | 1:LA:61:VAL:HG23 | 2.19 | 0.41 |
| 1:LA:180:LYS:HA | 1:LA:192:THR:OG1 | 2.20 | 0.41 |
| 1:LA:220:ILE:HG22 | 1:LA:221:LEU:N | 2.34 | 0.41 |
| 1:LB:458:VAL:HG12 | 1:LB:459:SER:H | 1.85 | 0.41 |
| 1:LB:735:ILE:HG23 | 1:MB:727:GLU:OE1 | 2.20 | 0.41 |
| 1:M:154:ARG:CB | 1:M:157:VAL:HG23 | 2.51 | 0.41 |
| 1:M:391:GLN:OE1 | 1:M:397:LYS:N | 2.54 | 0.41 |
| 1:MA:273:ILE:O | 1:MA:273:ILE:HG23 | 2.20 | 0.41 |
| 1:MA:333:LEU:CD2 | 1:MA:374:VAL:HG11 | 2.48 | 0.41 |
| 1:MA:340:LEU:HG | 1:MA:351:HIS:HB2 | 2.03 | 0.41 |
| 1:MB:16:ILE:O | 1:MB:29:GLU:OE1 | 2.37 | 0.41 |
| 1:MB:591:PHE:O | 1:MB:594:ASN:N | 2.54 | 0.41 |
| 1:N:10:ILE:O | 1:N:32:PRO:HA | 2.19 | 0.41 |
| 1:N:146:GLU:N | 1:N:146:GLU:OE1 | 2.54 | 0.41 |
| 1:N:177:ARG:CG | 1:N:178:ALA:N | 2.83 | 0.41 |
| 1:N:216:VAL:HG22 | 1:N:260:VAL:CG2 | 2.50 | 0.41 |
| 1:N:786:GLN:HG2 | 1:O:781:VAL:HG21 | 2.03 | 0.41 |
| 1:NA:74:LEU:HD23 | 1:NA:74:LEU:HA | 1.93 | 0.41 |
| 1:NA:173:ALA:HB3 | 1:NA:197:LEU:HD12 | 2.02 | 0.41 |
| 1:NB:286:ASP:CG | 1:NB:296:LEU:HA | 2.45 | 0.41 |
| 1:NB:480:VAL:HG12 | 1:NB:481:VAL:N | 2.36 | 0.41 |
| 1:O:58:TYR:OH | 1:O:112:LEU:HD12 | 2.20 | 0.41 |
| 1:O:656:ARG:O | 1:O:660:LEU:HG | 2.21 | 0.41 |
| 1:OA:501:SER:O | 1:OA:568:VAL:HG11 | 2.20 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OB:310:LEU:HD22 | 1:OB:314:GLU:CB | 2.49 | 0.41 |
| 1:P:23:SER:HB2 | 1:P:25:VAL:HG23 | 2.02 | 0.41 |
| 1:P:50:MET:HG3 | 1:P:98:PRO:HA | 2.03 | 0.41 |
| 1:PA:3:THR:N | 1:PA:42:ARG:HE | 2.18 | 0.41 |
| 1:PA:16:ILE:CG2 | 1:PA:17:HIS:N | 2.83 | 0.41 |
| 1:PA:60:THR:HG23 | 1:PA:90:ILE:CD1 | 2.50 | 0.41 |
| 1:PA:284:ILE:O | 1:PA:284:ILE:HG13 | 2.20 | 0.41 |
| 1:PA:460:TYR:CE2 | 1:PA:468:VAL:HG11 | 2.56 | 0.41 |
| 1:PB:11:PRO:HD2 | 1:PB:14:HIS:CG | 2.55 | 0.41 |
| 1:QA:332:LEU:O | 1:QA:358:LEU:HA | 2.20 | 0.41 |
| 1:QA:762:VAL:HG23 | 1:QA:763:GLN:N | 2.36 | 0.41 |
| 1:QB:591:PHE:O | 1:QB:595:SER:N | 2.53 | 0.41 |
| 1:R:10:ILE:HG23 | 1:R:10:ILE:O | 2.19 | 0.41 |
| 1:R:221:LEU:HD21 | 1:R:227:LEU:HB2 | 2.02 | 0.41 |
| 1:R:489:LEU:HD13 | 1:R:493:GLU:O | 2.20 | 0.41 |
| 1:RA:627:VAL:HG22 | 1:RA:634:VAL:HG22 | 2.01 | 0.41 |
| 1:RB:685:ARG:O | 1:RB:688:LEU:HB3 | 2.21 | 0.41 |
| 1:S:325:VAL:HG23 | 1:T:353:ALA:HB1 | 2.02 | 0.41 |
| 1:S:802:ILE:HG23 | 1:S:807:ILE:HD11 | 2.01 | 0.41 |
| 1:SA:358:LEU:HD11 | 1:SA:407:MET:CE | 2.50 | 0.41 |
| 1:SA:419:LEU:HD13 | 1:SA:495:PHE:CD2 | 2.55 | 0.41 |
| 1:SA:471:TYR:HD2 | 1:SA:478:ALA:HB2 | 1.85 | 0.41 |
| 1:SB:688:LEU:HD11 | 1:SB:692:LYS:HE3 | 2.03 | 0.41 |
| 1:T:529:ILE:HD12 | 1:T:583:VAL:HG21 | 2.02 | 0.41 |
| 1:TB:530:GLU:OE1 | 1:TB:536:ARG:HA | 2.20 | 0.41 |
| 1:UB:337:LEU:HD21 | 1:UB:372:GLU:HB2 | 2.01 | 0.41 |
| 1:UB:406:TYR:CG | 1:UB:407:MET:N | 2.88 | 0.41 |
| 1:VB:451:PRO:O | 1:VB:452:ARG:O | 2.39 | 0.41 |
| 1:VB:520:PRO:HA | 1:VB:545:TRP:O | 2.21 | 0.41 |
| 1:VB:662:ILE:HG21 | 1:WB:653:ALA:HB1 | 2.02 | 0.41 |
| 1:VB:687:ARG:NH2 | 1:VB:688:LEU:HB2 | 2.36 | 0.41 |
| 1:W:95:ASP:HB3 | 1:W:96:PRO:HD2 | 2.03 | 0.41 |
| 1:W:256:THR:HG21 | 1:W:259:HIS:HB2 | 2.02 | 0.41 |
| 1:WA:179:ARG:HE | 1:WA:209:PHE:HA | 1.85 | 0.41 |
| 1:WA:273:ILE:O | 1:WA:273:ILE:CG2 | 2.67 | 0.41 |
| 1:WA:358:LEU:HD23 | 1:WA:360:ARG:HD2 | 2.01 | 0.41 |
| 1:WA:593:LYS:CG | 1:XA:532:ALA:HA | 2.49 | 0.41 |
| 1:WA:669:GLN:CD | 1:XA:664:ILE:HD12 | 2.45 | 0.41 |
| 1:WA:670:GLU:O | 1:WA:674:LYS:HB2 | 2.20 | 0.41 |
| 1:WB:107:LYS:HG2 | 1:WB:108:ASP:N | 2.34 | 0.41 |
| 1:X:591:PHE:O | 1:X:595:SER:N | 2.52 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XA:129:PHE:O | 1:XA:137:VAL:HB | 2.19 | 0.41 |
| 1:XA:306:LYS:HG2 | 1:XA:307:SER:N | 2.36 | 0.41 |
| 1:XB:53:VAL:HG23 | 1:XB:97:PHE:CE1 | 2.56 | 0.41 |
| 1:Y:544:ASN:O | 1:Y:637:SER:O | 2.38 | 0.41 |
| 1:YA:118:ASN:OD1 | 1:ZA:180:LYS:HB3 | 2.20 | 0.41 |
| 1:YA:228:HIS:CD2 | 1:YA:250:LEU:HD23 | 2.55 | 0.41 |
| 1:YA:306:LYS:HG2 | 1:YA:308:PHE:HD1 | 1.85 | 0.41 |
| 1:YA:352:GLN:O | 1:YA:353:ALA:C | 2.63 | 0.41 |
| 1:YA:549:VAL:O | 1:YA:549:VAL:HG12 | 2.20 | 0.41 |
| 1:YB:57:HIS:HB3 | 1:YB:109:ILE:HG23 | 2.03 | 0.41 |
| 1:YB:594:ASN:HB2 | 1:YB:598:ILE:CD1 | 2.50 | 0.41 |
| 1:Z:128:ASP:CG | 1:Z:138:VAL:HA | 2.46 | 0.41 |
| 1:Z:174:LEU:HD21 | 1:Z:212:VAL:CG1 | 2.50 | 0.41 |
| 1:ZA:128:ASP:CB | 1:ZA:138:VAL:HG12 | 2.50 | 0.41 |
| 1:ZA:235:PHE:O | 1:ZA:243:ARG:N | 2.53 | 0.41 |
| 1:ZA:700:GLU:HA | 1:ZA:703:ARG:HB3 | 2.02 | 0.41 |
| 1:ZB:462:VAL:HG12 | 1:ZB:483:GLY:O | 2.20 | 0.41 |
| 1:A:331:GLY:O | 1:A:358:LEU:HD11 | 2.20 | 0.41 |
| 1:AA:374:VAL:HG12 | 1:AA:375:GLU:N | 2.35 | 0.41 |
| 1:AC:36:ILE:O | 1:AC:36:ILE:HG23 | 2.20 | 0.41 |
| 1:AC:546:HIS:HB3 | 1:AC:634:VAL:O | 2.21 | 0.41 |
| 1:B:59:CYS:O | 1:B:90:ILE:HA | 2.21 | 0.41 |
| 1:B:81:VAL:HG13 | 1:B:83:LEU:HD12 | 2.02 | 0.41 |
| 1:B:424:GLU:N | 1:B:424:GLU:OE1 | 2.53 | 0.41 |
| 1:BB:125:ALA:HB2 | 1:BB:137:VAL:CG1 | 2.50 | 0.41 |
| 1:BB:357:TRP:HH2 | 1:BB:371:VAL:HG13 | 1.82 | 0.41 |
| 1:C:14:HIS:HA | 1:C:48:MET:O | 2.20 | 0.41 |
| 1:C:169:ARG:O | 1:C:170:GLN:C | 2.64 | 0.41 |
| 1:CA:4:GLU:CG | 1:CA:5:GLU:H | 2.33 | 0.41 |
| 1:CA:386:GLU:OE2 | 1:CA:457:VAL:N | 2.54 | 0.41 |
| 1:CB:129:PHE:HB3 | 1:CB:156:GLU:HG2 | 2.01 | 0.41 |
| 1:CB:549:VAL:HG11 | 1:CB:558:THR:HG23 | 2.01 | 0.41 |
| 1:CB:682:GLN:O | 1:CB:683:GLU:C | 2.62 | 0.41 |
| 1:D:151:TYR:CZ | 1:D:153:PRO:HA | 2.56 | 0.41 |
| 1:D:181:GLU:CD | 1:D:181:GLU:C | 2.88 | 0.41 |
| 1:D:182:CYS:SG | 1:D:209:PHE:CD1 | 3.14 | 0.41 |
| 1:D:227:LEU:HD22 | 1:D:229:LEU:CD2 | 2.50 | 0.41 |
| 1:D:801:ALA:HB1 | 1:E:799:THR:HG21 | 2.02 | 0.41 |
| 1:DA:123:LEU:HD22 | 1:DA:157:VAL:HG11 | 2.03 | 0.41 |
| 1:DA:155:LYS:HD2 | 1:DA:156:GLU:N | 2.36 | 0.41 |
| 1:DA:276:LEU:O | 1:DA:305:GLU:HA | 2.20 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:DA:357:TRP:HA | 1:DA:410:GLN:HB3 | 2.03 | 0.41 |
| 1:DA:402:ILE:HD11 | 1:DA:457:VAL:HG21 | 2.03 | 0.41 |
| 1:DB:58:TYR:CD1 | 1:DB:91:ARG:O | 2.74 | 0.41 |
| 1:E:207:ALA:HB3 | 1:E:210:GLU:HG3 | 2.03 | 0.41 |
| 1:E:250:LEU:HD11 | 1:E:310:LEU:O | 2.20 | 0.41 |
| 1:E:762:VAL:HG23 | 1:E:763:GLN:N | 2.36 | 0.41 |
| 1:EA:88:LEU:O | 1:EA:155:LYS:HE2 | 2.20 | 0.41 |
| 1:EA:166:THR:O | 1:EA:203:ALA:HA | 2.21 | 0.41 |
| 1:EA:273:ILE:O | 1:EA:273:ILE:HG23 | 2.21 | 0.41 |
| 1:EA:323:VAL:O | 1:EA:323:VAL:HG23 | 2.19 | 0.41 |
| 1:EA:339:PRO:HG3 | 1:EA:353:ALA:N | 2.36 | 0.41 |
| 1:EB:368:SER:OG | 1:EB:371:VAL:HG23 | 2.20 | 0.41 |
| 1:F:239:ARG:HA | 1:F:239:ARG:HE | 1.85 | 0.41 |
| 1:F:374:VAL:HG12 | 1:F:375:GLU:N | 2.35 | 0.41 |
| 1:F:645:PRO:CB | 1:F:650:THR:HG21 | 2.51 | 0.41 |
| 1:F:802:ILE:HG23 | 1:F:807:ILE:HD11 | 2.01 | 0.41 |
| 1:FA:124:LYS:O | 1:FA:157:VAL:HG13 | 2.20 | 0.41 |
| 1:FA:276:LEU:O | 1:FA:305:GLU:HA | 2.20 | 0.41 |
| 1:FA:745:LYS:O | 1:FA:748:ALA:HB3 | 2.19 | 0.41 |
| 1:FB:181:GLU:HG2 | 1:FB:191:VAL:HA | 2.03 | 0.41 |
| 1:FB:250:LEU:HD11 | 1:FB:311:GLN:HA | 2.02 | 0.41 |
| 1:G:231:ALA:HB1 | 1:G:235:PHE:HE1 | 1.86 | 0.41 |
| 1:G:518:LEU:HD12 | 1:G:549:VAL:HG21 | 2.01 | 0.41 |
| 1:GA:518:LEU:HB2 | 1:GA:547:PHE:HB2 | 2.01 | 0.41 |
| 1:GB:183:TRP:CD1 | 1:GB:189:GLU:HG3 | 2.55 | 0.41 |
| 1:GB:191:VAL:HG22 | 1:GB:194:GLU:HB2 | 2.02 | 0.41 |
| 1:GB:591:PHE:HZ | 1:GB:599:ILE:HD11 | 1.84 | 0.41 |
| 1:H:180:LYS:HA | 1:H:192:THR:HG23 | 2.03 | 0.41 |
| 1:H:405:THR:HG21 | 1:I:393:VAL:O | 2.20 | 0.41 |
| 1:H:583:VAL:HG13 | 1:H:584:ALA:N | 2.35 | 0.41 |
| 1:H:638:VAL:HG12 | 1:H:639:ASP:N | 2.36 | 0.41 |
| 1:HA:91:ARG:C | 1:HA:92:LEU:HD22 | 2.44 | 0.41 |
| 1:HA:182:CYS:SG | 1:HA:209:PHE:CD1 | 3.13 | 0.41 |
| 1:HA:227:LEU:HD23 | 1:HA:229:LEU:HD21 | 2.02 | 0.41 |
| 1:HA:380:ILE:H | 1:HA:380:ILE:HD12 | 1.85 | 0.41 |
| 1:HA:381:PRO:HA | 1:HA:405:THR:CG2 | 2.49 | 0.41 |
| 1:I:121:LEU:CD1 | 1:I:123:LEU:HD21 | 2.51 | 0.41 |
| 1:IA:546:HIS:O | 1:IA:633:LEU:HD12 | 2.20 | 0.41 |
| 1:IB:6:PHE:O | 1:IB:36:ILE:HA | 2.19 | 0.41 |
| 1:IB:516:LEU:HD12 | 1:IB:517:LEU:N | 2.36 | 0.41 |
| 1:J:416:GLU:HB3 | 1:J:418:GLU:OE2 | 2.20 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:J:420:PRO:CB | 1:J:421:PRO:HD3 | 2.50 | 0.41 |
| 1:JA:50:MET:HB3 | 1:JA:97:PHE:C | 2.45 | 0.41 |
| 1:JA:461:ARG:HA | 1:JA:486:LEU:HA | 2.01 | 0.41 |
| 1:JB:16:ILE:O | 1:JB:28:VAL:HA | 2.21 | 0.41 |
| 1:JB:574:ALA:O | 1:JB:578:ARG:HG2 | 2.21 | 0.41 |
| 1:K:122:HIS:C | 1:K:160:VAL:HB | 2.45 | 0.41 |
| 1:K:124:LYS:HA | 1:K:141:ASP:O | 2.20 | 0.41 |
| 1:KA:763:GLN:O | 1:KA:767:GLU:HG3 | 2.20 | 0.41 |
| 1:KB:76:ASP:OD1 | 1:KB:76:ASP:C | 2.63 | 0.41 |
| 1:KB:423:VAL:O | 1:KB:426:LEU:HB2 | 2.21 | 0.41 |
| 1:KB:737:GLY:O | 1:KB:741:VAL:HG23 | 2.20 | 0.41 |
| 1:L:65:VAL:HG22 | 1:L:103:GLU:OE1 | 2.20 | 0.41 |
| 1:LA:338:GLN:HB3 | 1:LA:339:PRO:HD2 | 2.02 | 0.41 |
| 1:LA:424:GLU:HG2 | 1:LA:425:GLU:N | 2.34 | 0.41 |
| 1:LA:521:ASP:O | 1:LA:545:TRP:CD1 | 2.73 | 0.41 |
| 1:LA:781:VAL:HG23 | 1:LA:782:SER:N | 2.36 | 0.41 |
| 1:LB:416:GLU:CG | 1:LB:455:THR:HG22 | 2.51 | 0.41 |
| 1:LB:530:GLU:OE2 | 1:LB:536:ARG:HA | 2.21 | 0.41 |
| 1:LB:541:LEU:HD12 | 1:LB:639:ASP:C | 2.45 | 0.41 |
| 1:M:17:HIS:HA | 1:M:27:ARG:O | 2.20 | 0.41 |
| 1:M:49:ARG:HE | 1:M:50:MET:N | 2.17 | 0.41 |
| 1:MA:143:TRP:N | 1:MA:143:TRP:CE3 | 2.88 | 0.41 |
| 1:MA:285:LEU:HD21 | 1:MA:317:GLU:CB | 2.51 | 0.41 |
| 1:MA:389:TYR:CE1 | 1:MA:457:VAL:HG22 | 2.56 | 0.41 |
| 1:MB:28:VAL:HG22 | 1:MB:29:GLU:N | 2.36 | 0.41 |
| 1:MB:176:LEU:HA | 1:MB:211:GLU:O | 2.19 | 0.41 |
| 1:MB:196:TRP:O | 1:MB:197:LEU:HD23 | 2.20 | 0.41 |
| 1:MB:326:LEU:O | 1:MB:362:PRO:HA | 2.20 | 0.41 |
| 1:MB:641:GLN:N | 1:MB:641:GLN:OE1 | 2.53 | 0.41 |
| 1:MB:685:ARG:O | 1:MB:688:LEU:HB3 | 2.21 | 0.41 |
| 1:N:99:LEU:HD22 | 1:N:103:GLU:O | 2.20 | 0.41 |
| 1:N:212:VAL:HG23 | 1:N:212:VAL:O | 2.20 | 0.41 |
| 1:N:388:ILE:O | 1:N:388:ILE:HG23 | 2.21 | 0.41 |
| 1:NA:27:ARG:HG2 | 1:NA:28:VAL:N | 2.35 | 0.41 |
| 1:NB:69:ALA:O | 1:NB:70:GLN:C | 2.63 | 0.41 |
| 1:NB:810:LEU:O | 1:NB:810:LEU:HD23 | 2.21 | 0.41 |
| 1:O:9:ARG:O | 1:O:9:ARG:HG3 | 2.20 | 0.41 |
| 1:O:781:VAL:HG23 | 1:O:782:SER:N | 2.36 | 0.41 |
| 1:OA:256:THR:O | 1:OA:256:THR:HG23 | 2.19 | 0.41 |
| 1:OA:765:VAL:HG12 | 1:OA:765:VAL:O | 2.21 | 0.41 |
| 1:OB:591:PHE:O | 1:OB:595:SER:N | 2.54 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:P:144:LEU:N | 1:P:144:LEU:HD23 | 2.36 | 0.41 |
| 1:P:471:TYR:HA | 1:P:477:ARG:O | 2.20 | 0.41 |
| 1:P:531:THR:HG22 | 1:P:583:VAL:HG22 | 2.02 | 0.41 |
| 1:PA:15:TYR:HA | 1:PA:29:GLU:O | 2.20 | 0.41 |
| 1:PA:229:LEU:O | 1:PA:249:TRP:CE3 | 2.74 | 0.41 |
| 1:PA:231:ALA:HB3 | 1:PA:244:ARG:O | 2.21 | 0.41 |
| 1:PA:546:HIS:O | 1:PA:634:VAL:HB | 2.20 | 0.41 |
| 1:PA:722:ALA:O | 1:PA:726:ALA:HB2 | 2.20 | 0.41 |
| 1:PB:61:VAL:HG21 | 1:PB:64:PRO:HB3 | 2.02 | 0.41 |
| 1:Q:51:VAL:O | 1:Q:96:PRO:HA | 2.20 | 0.41 |
| 1:QA:20:ASP:HA | 1:QA:41:GLU:HA | 2.03 | 0.41 |
| 1:QA:335:ARG:O | 1:QA:371:VAL:HG13 | 2.21 | 0.41 |
| 1:QB:387:GLY:HA3 | 1:QB:402:ILE:HG13 | 2.02 | 0.41 |
| 1:R:95:ASP:O | 1:R:96:PRO:C | 2.63 | 0.41 |
| 1:R:489:LEU:HD21 | 1:R:495:PHE:CE1 | 2.54 | 0.41 |
| 1:RA:170:GLN:O | 1:RA:171:ASN:HB2 | 2.21 | 0.41 |
| 1:RB:416:GLU:CG | 1:RB:455:THR:HG22 | 2.51 | 0.41 |
| 1:RB:790:VAL:HG22 | 1:SB:785:GLN:CD | 2.45 | 0.41 |
| 1:S:460:TYR:CD2 | 1:S:468:VAL:HG21 | 2.55 | 0.41 |
| 1:S:760:GLN:O | 1:S:763:GLN:HG3 | 2.21 | 0.41 |
| 1:SA:388:ILE:N | 1:SA:457:VAL:HG23 | 2.36 | 0.41 |
| 1:T:583:VAL:HG13 | 1:T:584:ALA:N | 2.35 | 0.41 |
| 1:TA:144:LEU:HD23 | 1:TA:144:LEU:H | 1.86 | 0.41 |
| 1:TA:486:LEU:HB2 | 1:UA:473:TYR:HB3 | 2.03 | 0.41 |
| 1:TB:15:TYR:HB2 | 1:TB:29:GLU:O | 2.20 | 0.41 |
| 1:TB:115:VAL:HG23 | 1:TB:147:GLY:O | 2.20 | 0.41 |
| 1:TB:170:GLN:HA | 1:TB:201:VAL:HG21 | 2.01 | 0.41 |
| 1:TB:779:LEU:HD23 | 1:UB:777:LEU:CD2 | 2.50 | 0.41 |
| 1:UA:125:ALA:HB2 | 1:UA:137:VAL:HG12 | 2.02 | 0.41 |
| 1:UA:128:ASP:OD1 | 1:UA:138:VAL:HG12 | 2.20 | 0.41 |
| 1:UA:213:LEU:HD23 | 1:UA:214:ASP:HB3 | 2.03 | 0.41 |
| 1:UB:88:LEU:HD22 | 1:UB:106:GLU:OE2 | 2.19 | 0.41 |
| 1:UB:176:LEU:HD21 | 1:UB:196:TRP:NE1 | 2.36 | 0.41 |
| 1:V:137:VAL:HG21 | 1:V:143:TRP:HZ3 | 1.84 | 0.41 |
| 1:V:751:LEU:HD22 | 1:V:754:GLU:OE2 | 2.20 | 0.41 |
| 1:VA:92:LEU:O | 1:VA:93:ALA:HB3 | 2.20 | 0.41 |
| 1:VB:112:LEU:HG | 1:VB:150:THR:OG1 | 2.20 | 0.41 |
| 1:W:172:GLN:OE1 | 1:W:215:LEU:HD11 | 2.21 | 0.41 |
| 1:WA:12:PRO:HB3 | 1:XA:80:GLN:HB2 | 2.02 | 0.41 |
| 1:WA:66:SER:HB2 | 1:WA:82:ARG:O | 2.20 | 0.41 |
| 1:WA:227:LEU:HD22 | 1:WA:259:HIS:CD2 | 2.56 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:WA:275:THR:HG23 | 1:XA:296:LEU:C | 2.46 | 0.41 |
| 1:WA:304:GLY:O | 1:WA:305:GLU:C | 2.63 | 0.41 |
| 1:WB:28:VAL:HG22 | 1:WB:29:GLU:N | 2.35 | 0.41 |
| 1:WB:789:GLU:HA | 1:WB:792:VAL:HG12 | 2.02 | 0.41 |
| 1:X:326:LEU:O | 1:X:362:PRO:HA | 2.20 | 0.41 |
| 1:X:467:ALA:HB1 | 1:X:481:VAL:O | 2.21 | 0.41 |
| 1:X:711:ALA:O | 1:X:715:ALA:HB2 | 2.21 | 0.41 |
| 1:X:795:PHE:O | 1:X:799:THR:HG23 | 2.21 | 0.41 |
| 1:XA:579:VAL:HG22 | 1:XA:603:VAL:HG22 | 2.01 | 0.41 |
| 1:XA:777:LEU:O | 1:XA:781:VAL:HG22 | 2.20 | 0.41 |
| 1:XB:386:GLU:C | 1:XB:402:ILE:HG23 | 2.45 | 0.41 |
| 1:Y:118:ASN:O | 1:Y:205:LEU:HD13 | 2.21 | 0.41 |
| 1:YA:18:VAL:HG21 | 1:YA:29:GLU:OE2 | 2.20 | 0.41 |
| 1:YA:160:VAL:HG12 | 1:YA:161:GLU:N | 2.36 | 0.41 |
| 1:YA:168:ILE:O | 1:YA:168:ILE:CG2 | 2.64 | 0.41 |
| 1:YA:338:GLN:HB2 | 1:YA:370:LYS:HG2 | 2.03 | 0.41 |
| 1:YB:60:THR:CG2 | 1:YB:90:ILE:HG13 | 2.51 | 0.41 |
| 1:YB:235:PHE:CD1 | 1:YB:264:HIS:HB3 | 2.55 | 0.41 |
| 1:Z:284:ILE:HD12 | 1:Z:287:PRO:HB3 | 2.02 | 0.41 |
| 1:ZA:645:PRO:HG3 | 1:ZA:651:ARG:CB | 2.50 | 0.41 |
| 1:ZB:282:CYS:HB2 | 1:ZB:316:LEU:HD11 | 2.02 | 0.41 |
| 1:ZB:316:LEU:O | 1:ZB:317:GLU:C | 2.64 | 0.41 |
| 1:ZB:357:TRP:O | 1:ZB:357:TRP:CG | 2.73 | 0.41 |
| 1:ZB:364:GLU:OE1 | 1:ZB:365:TYR:N | 2.53 | 0.41 |
| 1:A:8:ILE:O | 1:A:37:ARG:NH2 | 2.53 | 0.41 |
| 1:A:30:VAL:HG22 | 1:A:31:GLY:N | 2.35 | 0.41 |
| 1:AA:65:VAL:HG11 | 1:AA:100:TYR:CG | 2.56 | 0.41 |
| 1:AB:682:GLN:CB | 1:ZA:688:LEU:HD11 | 2.51 | 0.41 |
| 1:AC:60:THR:N | 1:AC:107:LYS:HB3 | 2.35 | 0.41 |
| 1:AC:415:TRP:O | 1:AC:415:TRP:CE3 | 2.74 | 0.41 |
| 1:AC:453:ASN:OD1 | 1:AC:455:THR:HG23 | 2.20 | 0.41 |
| 1:AC:720:GLY:O | 1:AC:724:ALA:HB3 | 2.20 | 0.41 |
| 1:AC:769:GLU:HG3 | 1:ZB:772:TYR:OH | 2.21 | 0.41 |
| 1:BA:227:LEU:HD21 | 1:BA:229:LEU:HD21 | 2.02 | 0.41 |
| 1:BA:281:TYR:CD2 | 1:BA:366:VAL:HG23 | 2.55 | 0.41 |
| 1:BA:419:LEU:HD11 | 1:BA:458:VAL:HG21 | 2.02 | 0.41 |
| 1:BB:336:ALA:HB3 | 1:BB:354:GLY:H | 1.85 | 0.41 |
| 1:BB:340:LEU:HD12 | 1:BB:351:HIS:HB2 | 2.02 | 0.41 |
| 1:C:16:ILE:HG23 | 1:C:45:PHE:O | 2.20 | 0.41 |
| 1:C:122:HIS:ND1 | 1:C:160:VAL:HG11 | 2.35 | 0.41 |
| 1:CA:273:ILE:HB | 1:CA:309:PHE:CZ | 2.55 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:CA:416:GLU:OE2 | 1:CA:453:ASN:OD1 | 2.39 | 0.41 |
| 1:CA:528:THR:C | 1:CA:529:ILE:HG23 | 2.46 | 0.41 |
| 1:CB:60:THR:HA | 1:CB:89:GLU:O | 2.21 | 0.41 |
| 1:CB:228:HIS:CE1 | 1:CB:268:LEU:HB2 | 2.56 | 0.41 |
| 1:CB:413:VAL:HG22 | 1:CB:414:LEU:N | 2.33 | 0.41 |
| 1:CB:465:ASN:HA | 1:CB:483:GLY:HA2 | 2.02 | 0.41 |
| 1:CB:579:VAL:HA | 1:CB:603:VAL:HG22 | 2.03 | 0.41 |
| 1:CB:681:GLU:HA | 1:DB:675:HIS:CE1 | 2.56 | 0.41 |
| 1:CB:788:ALA:O | 1:CB:792:VAL:HG23 | 2.20 | 0.41 |
| 1:D:114:VAL:HG23 | 1:D:149:GLY:O | 2.20 | 0.41 |
| 1:D:537:LEU:HA | 1:D:644:GLU:O | 2.21 | 0.41 |
| 1:DA:20:ASP:O | 1:DA:23:SER:O | 2.37 | 0.41 |
| 1:DA:114:VAL:HA | 1:DA:150:THR:HA | 2.03 | 0.41 |
| 1:DA:160:VAL:HG12 | 1:DA:161:GLU:N | 2.36 | 0.41 |
| 1:DB:123:LEU:O | 1:DB:143:TRP:CE3 | 2.74 | 0.41 |
| 1:DB:230:ARG:O | 1:DB:266:GLU:N | 2.53 | 0.41 |
| 1:DB:320:ILE:O | 1:DB:320:ILE:HG22 | 2.20 | 0.41 |
| 1:DB:518:LEU:HD12 | 1:DB:547:PHE:CB | 2.50 | 0.41 |
| 1:E:34:THR:O | 1:E:35:TYR:C | 2.63 | 0.41 |
| 1:E:126:LEU:HD21 | 1:E:158:GLU:HB2 | 2.02 | 0.41 |
| 1:E:175:ARG:NH2 | 1:E:263:VAL:HG12 | 2.36 | 0.41 |
| 1:E:262:ASP:CG | 1:E:263:VAL:N | 2.79 | 0.41 |
| 1:EA:301:VAL:HG22 | 1:EA:302:VAL:N | 2.36 | 0.41 |
| 1:EA:461:ARG:HA | 1:EA:486:LEU:HA | 2.02 | 0.41 |
| 1:EB:115:VAL:HG23 | 1:EB:148:PRO:C | 2.45 | 0.41 |
| 1:EB:391:GLN:O | 1:EB:413:VAL:HG12 | 2.20 | 0.41 |
| 1:F:410:GLN:O | 1:F:412:GLU:HG3 | 2.21 | 0.41 |
| 1:F:521:ASP:O | 1:F:545:TRP:CD1 | 2.73 | 0.41 |
| 1:FA:487:VAL:HG22 | 1:FA:488:SER:N | 2.35 | 0.41 |
| 1:FA:732:ALA:O | 1:FA:736:GLU:HG2 | 2.21 | 0.41 |
| 1:FB:427:LEU:HD23 | 1:FB:428:ASN:N | 2.36 | 0.41 |
| 1:G:461:ARG:HA | 1:G:486:LEU:HA | 2.02 | 0.41 |
| 1:G:523:PHE:O | 1:G:542:ALA:HA | 2.20 | 0.41 |
| 1:GA:16:ILE:HA | 1:GA:45:PHE:CE2 | 2.55 | 0.41 |
| 1:GA:58:TYR:HB3 | 1:GA:90:ILE:CG2 | 2.50 | 0.41 |
| 1:GA:300:ARG:HG2 | 1:GA:301:VAL:N | 2.36 | 0.41 |
| 1:GA:332:LEU:HA | 1:GA:376:GLU:HA | 2.02 | 0.41 |
| 1:GB:45:PHE:HD1 | 1:GB:46:ALA:O | 2.04 | 0.41 |
| 1:GB:288:VAL:HG12 | 1:GB:294:ASN:HA | 2.03 | 0.41 |
| 1:H:59:CYS:HA | 1:H:107:LYS:O | 2.20 | 0.41 |
| 1:H:196:TRP:C | 1:H:197:LEU:HD22 | 2.46 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:H:392:ASP:OD1 | 1:H:392:ASP:C | 2.62 | 0.41 |
| 1:HA:30:VAL:HG23 | 1:HA:50:MET:HE1 | 2.02 | 0.41 |
| 1:HA:56:ARG:O | 1:HA:57:HIS:ND1 | 2.53 | 0.41 |
| 1:HA:301:VAL:HG22 | 1:HA:302:VAL:N | 2.35 | 0.41 |
| 1:HB:16:ILE:HA | 1:HB:45:PHE:CE1 | 2.55 | 0.41 |
| 1:HB:316:LEU:HD12 | 1:HB:317:GLU:H | 1.84 | 0.41 |
| 1:HB:425:GLU:OE2 | 1:HB:460:TYR:HD1 | 2.03 | 0.41 |
| 1:HB:640:VAL:HG12 | 1:IB:580:ARG:CD | 2.51 | 0.41 |
| 1:I:122:HIS:ND1 | 1:I:160:VAL:CG1 | 2.83 | 0.41 |
| 1:I:280:ASN:HA | 1:I:322:ASP:HA | 2.03 | 0.41 |
| 1:I:387:GLY:HA3 | 1:I:401:VAL:O | 2.21 | 0.41 |
| 1:I:420:PRO:N | 1:I:421:PRO:HD2 | 2.35 | 0.41 |
| 1:I:477:ARG:CZ | 1:I:477:ARG:HA | 2.51 | 0.41 |
| 1:IA:301:VAL:HG22 | 1:IA:302:VAL:N | 2.35 | 0.41 |
| 1:IB:363:LEU:N | 1:IB:363:LEU:HD23 | 2.36 | 0.41 |
| 1:IB:601:THR:HA | 1:IB:607:GLU:OE2 | 2.21 | 0.41 |
| 1:IB:681:GLU:HG2 | 1:JB:675:HIS:CE1 | 2.55 | 0.41 |
| 1:J:522:PHE:HA | 1:J:543:TYR:O | 2.20 | 0.41 |
| 1:J:775:ALA:HB1 | 1:K:770:LEU:HD13 | 2.02 | 0.41 |
| 1:JA:120:ALA:HB3 | 1:JA:205:LEU:HD21 | 2.02 | 0.41 |
| 1:JA:342:GLU:HG2 | 1:JA:349:VAL:N | 2.36 | 0.41 |
| 1:JA:742:LEU:HD12 | 1:JA:745:LYS:HE3 | 2.02 | 0.41 |
| 1:JB:162:ILE:HG22 | 1:JB:163:ILE:N | 2.35 | 0.41 |
| 1:JB:204:TYR:CG | 1:JB:205:LEU:N | 2.89 | 0.41 |
| 1:JB:487:VAL:HG22 | 1:JB:488:SER:N | 2.35 | 0.41 |
| 1:JB:547:PHE:CE1 | 1:JB:633:LEU:HD13 | 2.55 | 0.41 |
| 1:JB:567:PHE:CG | 1:JB:568:VAL:N | 2.88 | 0.41 |
| 1:K:6:PHE:C | 1:K:7:ILE:HD13 | 2.46 | 0.41 |
| 1:K:16:ILE:HA | 1:K:45:PHE:CE1 | 2.56 | 0.41 |
| 1:K:57:HIS:CB | 1:K:109:ILE:HG23 | 2.50 | 0.41 |
| 1:K:545:TRP:CE3 | 1:K:546:HIS:HA | 2.55 | 0.41 |
| 1:K:587:THR:HG23 | 1:K:590:ASP:H | 1.84 | 0.41 |
| 1:K:589:ASP:O | 1:K:592:HIS:HB3 | 2.21 | 0.41 |
| 1:KA:521:ASP:CG | 1:KA:522:PHE:N | 2.78 | 0.41 |
| 1:KA:595:SER:O | 1:KA:599:ILE:HD12 | 2.21 | 0.41 |
| 1:KB:106:GLU:O | 1:KB:107:LYS:CB | 2.69 | 0.41 |
| 1:KB:230:ARG:HG2 | 1:KB:231:ALA:N | 2.36 | 0.41 |
| 1:KB:459:SER:CB | 1:KB:486:LEU:HD21 | 2.51 | 0.41 |
| 1:KB:462:VAL:N | 1:KB:485:GLU:O | 2.53 | 0.41 |
| 1:L:56:ARG:O | 1:L:111:PRO:HA | 2.19 | 0.41 |
| 1:L:462:VAL:HG12 | 1:L:466:ALA:HB3 | 2.02 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:LA:388:ILE:HG13 | 1:LA:456:ARG:HA | 2.02 | 0.41 |
| 1:LA:786:GLN:CB | 1:MA:781:VAL:HG11 | 2.51 | 0.41 |
| 1:LB:281:TYR:CG | 1:LB:366:VAL:HG23 | 2.55 | 0.41 |
| 1:M:143:TRP:C | 1:M:208:VAL:HG11 | 2.45 | 0.41 |
| 1:M:745:LYS:O | 1:M:746:LEU:C | 2.64 | 0.41 |
| 1:M:758:GLU:O | 1:M:762:VAL:HG13 | 2.20 | 0.41 |
| 1:MA:68:ASP:OD1 | 1:MA:74:LEU:HD12 | 2.20 | 0.41 |
| 1:MA:137:VAL:HG12 | 1:MA:138:VAL:H | 1.86 | 0.41 |
| 1:MA:216:VAL:HG22 | 1:MA:217:ASP:N | 2.35 | 0.41 |
| 1:MA:361:GLY:O | 1:MA:363:LEU:HD23 | 2.20 | 0.41 |
| 1:MA:575:ILE:O | 1:MA:579:VAL:HG23 | 2.20 | 0.41 |
| 1:MA:645:PRO:HB3 | 1:MA:650:THR:HG21 | 2.02 | 0.41 |
| 1:MB:69:ALA:HB3 | 1:MB:72:LEU:HB3 | 2.03 | 0.41 |
| 1:MB:330:GLN:HG2 | 1:MB:378:GLN:HE22 | 1.85 | 0.41 |
| 1:N:26:SER:OG | 1:N:101:PRO:HB3 | 2.21 | 0.41 |
| 1:N:168:ILE:HD11 | 1:N:204:TYR:HB2 | 2.03 | 0.41 |
| 1:N:229:LEU:HD12 | 1:N:249:TRP:NE1 | 2.35 | 0.41 |
| 1:N:366:VAL:O | 1:N:366:VAL:HG13 | 2.21 | 0.41 |
| 1:N:768:LEU:HD21 | 1:O:766:ARG:CD | 2.51 | 0.41 |
| 1:NA:62:ALA:HB3 | 1:NA:104:VAL:HG13 | 2.03 | 0.41 |
| 1:NA:392:ASP:OD2 | 1:NA:395:THR:HG22 | 2.21 | 0.41 |
| 1:NB:151:TYR:CE2 | 1:NB:153:PRO:HA | 2.54 | 0.41 |
| 1:O:19:LEU:HA | 1:O:25:VAL:O | 2.21 | 0.41 |
| 1:O:207:ALA:HB3 | 1:O:210:GLU:HG3 | 2.03 | 0.41 |
| 1:OA:323:VAL:HG23 | 1:OA:364:GLU:OE2 | 2.20 | 0.41 |
| 1:P:593:LYS:HA | 1:Q:584:ALA:O | 2.20 | 0.41 |
| 1:PA:340:LEU:HD13 | 1:PA:349:VAL:O | 2.20 | 0.41 |
| 1:PA:522:PHE:CD1 | 1:QA:564:VAL:HG13 | 2.56 | 0.41 |
| 1:PB:284:ILE:HD11 | 1:PB:300:ARG:CB | 2.51 | 0.41 |
| 1:PB:388:ILE:HD11 | 1:PB:456:ARG:HH22 | 1.86 | 0.41 |
| 1:Q:90:ILE:HG23 | 1:Q:155:LYS:HD3 | 2.02 | 0.41 |
| 1:Q:182:CYS:SG | 1:Q:209:PHE:HB2 | 2.61 | 0.41 |
| 1:Q:333:LEU:HD13 | 1:Q:410:GLN:HB3 | 2.02 | 0.41 |
| 1:Q:546:HIS:O | 1:Q:546:HIS:CG | 2.73 | 0.41 |
| 1:QA:98:PRO:HG2 | 1:QA:100:TYR:HE1 | 1.86 | 0.41 |
| 1:QA:545:TRP:HA | 1:QA:635:VAL:HA | 2.01 | 0.41 |
| 1:QB:201:VAL:O | 1:QB:201:VAL:HG12 | 2.19 | 0.41 |
| 1:QB:216:VAL:HG22 | 1:QB:217:ASP:N | 2.34 | 0.41 |
| 1:QB:228:HIS:HA | 1:QB:250:LEU:HD23 | 2.03 | 0.41 |
| 1:QB:537:LEU:HD11 | 1:QB:588:PHE:CD1 | 2.56 | 0.41 |
| 1:QB:592:HIS:CE1 | 1:RB:531:THR:O | 2.73 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:R:195:GLU:C | 1:R:263:VAL:HG11 | 2.46 | 0.41 |
| 1:R:377:ARG:C | 1:R:407:MET:HE1 | 2.45 | 0.41 |
| 1:RA:104:VAL:HG22 | 1:RA:105:LEU:N | 2.36 | 0.41 |
| 1:RA:502:ALA:HB3 | 1:RA:510:ALA:HB1 | 2.02 | 0.41 |
| 1:RB:6:PHE:CD1 | 1:RB:6:PHE:O | 2.74 | 0.41 |
| 1:RB:11:PRO:HB2 | 1:RB:14:HIS:CE1 | 2.55 | 0.41 |
| 1:RB:122:HIS:HA | 1:RB:144:LEU:CB | 2.50 | 0.41 |
| 1:RB:176:LEU:HD23 | 1:RB:176:LEU:N | 2.36 | 0.41 |
| 1:RB:348:LYS:O | 1:RB:349:VAL:HG23 | 2.20 | 0.41 |
| 1:RB:530:GLU:C | 1:RB:583:VAL:HG22 | 2.46 | 0.41 |
| 1:RB:547:PHE:HE1 | 1:RB:633:LEU:HD13 | 1.85 | 0.41 |
| 1:S:222:THR:O | 1:S:223:GLU:C | 2.63 | 0.41 |
| 1:S:390:VAL:HG12 | 1:S:414:LEU:HD23 | 2.02 | 0.41 |
| 1:SA:87:ASP:O | 1:SA:88:LEU:HD23 | 2.20 | 0.41 |
| 1:SA:481:VAL:O | 1:SA:481:VAL:HG23 | 2.20 | 0.41 |
| 1:T:175:ARG:CZ | 1:T:197:LEU:HD21 | 2.50 | 0.41 |
| 1:TB:14:HIS:HA | 1:TB:48:MET:O | 2.20 | 0.41 |
| 1:TB:167:ILE:HG23 | 1:TB:202:GLY:HA2 | 2.01 | 0.41 |
| 1:TB:177:ARG:HG2 | 1:TB:178:ALA:H | 1.84 | 0.41 |
| 1:UA:53:VAL:HG22 | 1:UA:109:ILE:CD1 | 2.50 | 0.41 |
| 1:UA:384:GLU:CG | 1:UA:402:ILE:HG22 | 2.51 | 0.41 |
| 1:UB:121:LEU:CD1 | 1:UB:123:LEU:HD21 | 2.51 | 0.41 |
| 1:UB:335:ARG:HH12 | 1:UB:337:LEU:HD23 | 1.85 | 0.41 |
| 1:VA:104:VAL:HG22 | 1:VA:105:LEU:H | 1.85 | 0.41 |
| 1:VB:15:TYR:HB2 | 1:VB:29:GLU:O | 2.20 | 0.41 |
| 1:VB:46:ALA:O | 1:VB:48:MET:HE3 | 2.21 | 0.41 |
| 1:VB:604:PHE:O | 1:VB:623:ARG:HB3 | 2.20 | 0.41 |
| 1:VB:786:GLN:HB2 | 1:WB:781:VAL:HB | 2.03 | 0.41 |
| 1:W:114:VAL:HA | 1:W:150:THR:HA | 2.03 | 0.41 |
| 1:W:184:ASP:HB3 | 1:W:190:ARG:HG3 | 2.01 | 0.41 |
| 1:WA:472:ASP:HB3 | 1:WA:475:GLU:HG3 | 2.02 | 0.41 |
| 1:WB:5:GLU:OE2 | 1:WB:7:ILE:HG23 | 2.21 | 0.41 |
| 1:WB:179:ARG:HG2 | 1:WB:211:GLU:CG | 2.50 | 0.41 |
| 1:WB:742:LEU:HD21 | 1:XB:734:ARG:N | 2.36 | 0.41 |
| 1:X:55:PRO:O | 1:X:56:ARG:HB2 | 2.20 | 0.41 |
| 1:X:128:ASP:OD1 | 1:X:138:VAL:HG12 | 2.20 | 0.41 |
| 1:X:230:ARG:HA | 1:X:248:GLU:HA | 2.02 | 0.41 |
| 1:X:362:PRO:HB2 | 1:Y:352:GLN:HB2 | 2.03 | 0.41 |
| 1:X:383:ASP:HB3 | 1:X:386:GLU:HB2 | 2.02 | 0.41 |
| 1:X:547:PHE:CE1 | 1:X:633:LEU:HD13 | 2.55 | 0.41 |
| 1:XA:273:ILE:O | 1:XA:273:ILE:CG2 | 2.69 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XB:212:VAL:HG23 | 1:XB:212:VAL:O | 2.20 | 0.41 |
| 1:XB:282:CYS:HA | 1:XB:321:GLN:OE1 | 2.21 | 0.41 |
| 1:Y:130:GLU:HA | 1:Y:135:ASP:HA | 2.02 | 0.41 |
| 1:YA:568:VAL:O | 1:YA:572:CYS:SG | 2.79 | 0.41 |
| 1:Z:315:GLN:HG2 | 1:Z:316:LEU:H | 1.85 | 0.41 |
| 1:ZA:25:VAL:CG1 | 1:ZA:27:ARG:HE | 2.33 | 0.41 |
| 1:ZA:131:ASP:CG | 1:ZA:137:VAL:HG23 | 2.45 | 0.41 |
| 1:ZA:480:VAL:HG12 | 1:ZA:481:VAL:N | 2.35 | 0.41 |
| 1:ZB:114:VAL:HG22 | 1:ZB:115:VAL:N | 2.36 | 0.41 |
| 1:ZB:288:VAL:HG13 | 1:ZB:314:GLU:OE2 | 2.21 | 0.41 |
| 1:ZB:349:VAL:HG12 | 1:ZB:350:SER:H | 1.85 | 0.41 |
| 1:ZB:410:GLN:O | 1:ZB:412:GLU:HG3 | 2.21 | 0.41 |
| 1:A:591:PHE:O | 1:A:595:SER:N | 2.53 | 0.41 |
| 1:AA:301:VAL:HG22 | 1:AA:302:VAL:N | 2.36 | 0.41 |
| 1:AA:339:PRO:HB3 | 1:AA:352:GLN:HA | 2.03 | 0.41 |
| 1:AA:389:TYR:CZ | 1:AA:457:VAL:HA | 2.55 | 0.41 |
| 1:AA:545:TRP:HA | 1:AA:635:VAL:HA | 2.03 | 0.41 |
| 1:AB:13:TYR:CD2 | 1:BB:85:HIS:CE1 | 3.08 | 0.41 |
| 1:AB:58:TYR:O | 1:AB:109:ILE:HA | 2.21 | 0.41 |
| 1:AB:341:GLU:O | 1:AB:342:GLU:HB2 | 2.20 | 0.41 |
| 1:AC:175:ARG:HA | 1:AC:196:TRP:O | 2.20 | 0.41 |
| 1:AC:334:LEU:HD12 | 1:AC:357:TRP:NE1 | 2.36 | 0.41 |
| 1:B:389:TYR:CZ | 1:B:457:VAL:HA | 2.55 | 0.41 |
| 1:B:777:LEU:HA | 1:B:780:GLU:OE1 | 2.21 | 0.41 |
| 1:BA:529:ILE:HG22 | 1:BA:530:GLU:N | 2.36 | 0.41 |
| 1:BA:662:ILE:HD12 | 1:BA:662:ILE:H | 1.85 | 0.41 |
| 1:BA:745:LYS:O | 1:BA:746:LEU:C | 2.62 | 0.41 |
| 1:BB:166:THR:O | 1:BB:166:THR:HG23 | 2.19 | 0.41 |
| 1:BB:251:VAL:HA | 1:BB:255:ASP:OD2 | 2.20 | 0.41 |
| 1:BB:338:GLN:HB2 | 1:BB:370:LYS:HD2 | 2.01 | 0.41 |
| 1:BB:393:VAL:O | 1:BB:393:VAL:HG22 | 2.20 | 0.41 |
| 1:C:311:GLN:HB2 | 1:C:314:GLU:CD | 2.45 | 0.41 |
| 1:C:781:VAL:HG23 | 1:C:782:SER:N | 2.35 | 0.41 |
| 1:CA:363:LEU:CB | 1:DA:353:ALA:HB3 | 2.50 | 0.41 |
| 1:CA:470:VAL:HG22 | 1:CA:495:PHE:HA | 2.03 | 0.41 |
| 1:CB:5:GLU:HG2 | 1:CB:7:ILE:H | 1.86 | 0.41 |
| 1:CB:13:TYR:HA | 1:CB:50:MET:SD | 2.61 | 0.41 |
| 1:CB:600:ARG:O | 1:CB:622:PRO:HB3 | 2.21 | 0.41 |
| 1:CB:633:LEU:HD12 | 1:CB:634:VAL:H | 1.85 | 0.41 |
| 1:CB:806:THR:HG23 | 1:DB:808:ARG:HB2 | 2.03 | 0.41 |
| 1:D:123:LEU:HD11 | 1:D:145:PHE:CB | 2.50 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:D:366:VAL:O | 1:D:366:VAL:HG13 | 2.21 | 0.41 |
| 1:D:389:TYR:CD1 | 1:D:457:VAL:HG22 | 2.55 | 0.41 |
| 1:DB:60:THR:OG1 | 1:DB:107:LYS:HB2 | 2.21 | 0.41 |
| 1:DB:66:SER:HA | 1:DB:84:ARG:CD | 2.51 | 0.41 |
| 1:DB:114:VAL:HG23 | 1:DB:150:THR:HB | 2.01 | 0.41 |
| 1:DB:169:ARG:HD2 | 1:DB:169:ARG:C | 2.45 | 0.41 |
| 1:DB:227:LEU:CD2 | 1:DB:229:LEU:HD21 | 2.51 | 0.41 |
| 1:E:34:THR:HG23 | 1:F:24:ASN:OD1 | 2.21 | 0.41 |
| 1:E:99:LEU:HD13 | 1:E:104:VAL:HA | 2.03 | 0.41 |
| 1:E:115:VAL:HG21 | 1:E:145:PHE:CE2 | 2.56 | 0.41 |
| 1:E:769:GLU:HA | 1:F:766:ARG:NH2 | 2.35 | 0.41 |
| 1:EA:352:GLN:O | 1:EA:355:ASP:HB2 | 2.20 | 0.41 |
| 1:EA:382:LEU:HD12 | 1:EA:406:TYR:N | 2.36 | 0.41 |
| 1:EB:472:ASP:O | 1:EB:476:LYS:HA | 2.21 | 0.41 |
| 1:EB:521:ASP:CG | 1:EB:522:PHE:N | 2.79 | 0.41 |
| 1:EB:547:PHE:CE1 | 1:EB:633:LEU:HD13 | 2.54 | 0.41 |
| 1:EB:772:TYR:HE1 | 1:FB:770:LEU:HD21 | 1.85 | 0.41 |
| 1:F:3:THR:O | 1:F:3:THR:HG22 | 2.20 | 0.41 |
| 1:F:239:ARG:HA | 1:F:239:ARG:NE | 2.35 | 0.41 |
| 1:F:747:LYS:O | 1:F:751:LEU:HD23 | 2.20 | 0.41 |
| 1:FA:9:ARG:HA | 1:FA:34:THR:CG2 | 2.51 | 0.41 |
| 1:FB:285:LEU:HD12 | 1:FB:315:GLN:CD | 2.45 | 0.41 |
| 1:FB:363:LEU:CA | 1:GB:353:ALA:HB3 | 2.50 | 0.41 |
| 1:FB:658:VAL:HA | 1:GB:533:ASP:HB3 | 2.03 | 0.41 |
| 1:G:601:THR:O | 1:G:607:GLU:CD | 2.64 | 0.41 |
| 1:G:665:THR:O | 1:G:669:GLN:OE1 | 2.39 | 0.41 |
| 1:G:690:ARG:CD | 1:G:694:LEU:HD11 | 2.51 | 0.41 |
| 1:GA:167:ILE:HG13 | 1:GA:203:ALA:HB2 | 2.01 | 0.41 |
| 1:GA:423:VAL:O | 1:GA:424:GLU:C | 2.63 | 0.41 |
| 1:GA:767:GLU:CD | 1:GA:768:LEU:N | 2.79 | 0.41 |
| 1:GB:35:TYR:CG | 1:GB:36:ILE:N | 2.88 | 0.41 |
| 1:GB:59:CYS:HB2 | 1:GB:109:ILE:HD13 | 2.01 | 0.41 |
| 1:GB:332:LEU:HA | 1:GB:376:GLU:HA | 2.02 | 0.41 |
| 1:GB:599:ILE:HD13 | 1:GB:640:VAL:CG2 | 2.50 | 0.41 |
| 1:H:283:VAL:CG1 | 1:H:284:ILE:N | 2.83 | 0.41 |
| 1:H:284:ILE:HD11 | 1:H:300:ARG:HB2 | 2.03 | 0.41 |
| 1:H:761:ARG:HG3 | 1:I:755:THR:HG23 | 2.03 | 0.41 |
| 1:HA:20:ASP:O | 1:HA:23:SER:O | 2.39 | 0.41 |
| 1:HA:271:VAL:HG22 | 1:HA:272:PRO:O | 2.20 | 0.41 |
| 1:HA:422:GLY:C | 1:HA:424:GLU:OE1 | 2.64 | 0.41 |
| 1:HA:745:LYS:O | 1:HA:746:LEU:C | 2.62 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:HA:777:LEU:O | 1:HA:781:VAL:HG22 | 2.20 | 0.41 |
| 1:HB:462:VAL:N | 1:HB:485:GLU:O | 2.52 | 0.41 |
| 1:I:23:SER:HB3 | 1:I:25:VAL:HG23 | 2.03 | 0.41 |
| 1:I:60:THR:HA | 1:I:90:ILE:HA | 2.03 | 0.41 |
| 1:I:788:ALA:O | 1:I:792:VAL:HG23 | 2.20 | 0.41 |
| 1:IA:662:ILE:O | 1:IA:666:THR:HG23 | 2.20 | 0.41 |
| 1:IB:173:ALA:HB1 | 1:IB:197:LEU:HB3 | 2.03 | 0.41 |
| 1:IB:249:TRP:O | 1:IB:250:LEU:HD22 | 2.21 | 0.41 |
| 1:IB:516:LEU:HD12 | 1:IB:517:LEU:H | 1.86 | 0.41 |
| 1:J:321:GLN:N | 1:J:321:GLN:OE1 | 2.54 | 0.41 |
| 1:JA:35:TYR:O | 1:JA:37:ARG:NH2 | 2.54 | 0.41 |
| 1:JA:522:PHE:HB2 | 1:JA:542:ALA:HB1 | 2.03 | 0.41 |
| 1:JA:726:ALA:O | 1:JA:727:GLU:C | 2.62 | 0.41 |
| 1:JB:7:ILE:O | 1:JB:34:THR:HG22 | 2.21 | 0.41 |
| 1:JB:54:PRO:HB3 | 1:JB:57:HIS:HB2 | 2.03 | 0.41 |
| 1:JB:285:LEU:HG | 1:JB:315:GLN:O | 2.20 | 0.41 |
| 1:JB:784:ALA:O | 1:JB:788:ALA:HB3 | 2.21 | 0.41 |
| 1:K:459:SER:HA | 1:K:488:SER:HA | 2.01 | 0.41 |
| 1:KA:18:VAL:HA | 1:KA:44:LEU:HD23 | 2.02 | 0.41 |
| 1:KB:219:VAL:O | 1:KB:258:ALA:HA | 2.21 | 0.41 |
| 1:KB:234:ASN:N | 1:KB:245:THR:OG1 | 2.54 | 0.41 |
| 1:KB:416:GLU:HA | 1:KB:455:THR:HA | 2.02 | 0.41 |
| 1:KB:792:VAL:O | 1:KB:796:LYS:HB3 | 2.21 | 0.41 |
| 1:L:3:THR:HG21 | 1:L:41:GLU:O | 2.21 | 0.41 |
| 1:L:798:MET:O | 1:L:802:ILE:HG22 | 2.20 | 0.41 |
| 1:LA:416:GLU:N | 1:LA:416:GLU:OE1 | 2.53 | 0.41 |
| 1:LA:468:VAL:O | 1:LA:480:VAL:HA | 2.21 | 0.41 |
| 1:LA:603:VAL:HG23 | 1:LA:604:PHE:N | 2.34 | 0.41 |
| 1:LB:709:LEU:HD13 | 1:MB:701:LYS:HG2 | 2.01 | 0.41 |
| 1:M:279:HIS:CE1 | 1:M:280:ASN:OD1 | 2.74 | 0.41 |
| 1:M:316:LEU:HD11 | 1:M:319:GLY:N | 2.36 | 0.41 |
| 1:MA:181:GLU:HG2 | 1:MA:191:VAL:HA | 2.01 | 0.41 |
| 1:MA:643:VAL:HG23 | 1:NA:580:ARG:NH1 | 2.35 | 0.41 |
| 1:MB:61:VAL:HG12 | 1:MB:105:LEU:HA | 2.01 | 0.41 |
| 1:MB:275:THR:O | 1:MB:275:THR:HG23 | 2.20 | 0.41 |
| 1:MB:666:THR:O | 1:MB:669:GLN:HB3 | 2.20 | 0.41 |
| 1:MB:764:LYS:HE3 | 1:NB:759:LEU:HD11 | 2.01 | 0.41 |
| 1:N:51:VAL:HG11 | 1:N:97:PHE:CZ | 2.56 | 0.41 |
| 1:N:51:VAL:O | 1:N:96:PRO:HA | 2.21 | 0.41 |
| 1:NA:342:GLU:H | 1:NA:350:SER:HA | 1.86 | 0.41 |
| 1:NA:768:LEU:HD23 | 1:NA:768:LEU:C | 2.45 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:NB:6:PHE:HA | 1:NB:37:ARG:HB2 | 2.03 | 0.41 |
| 1:NB:230:ARG:HH22 | 1:NB:268:LEU:HD21 | 1.85 | 0.41 |
| 1:NB:326:LEU:HD13 | 1:NB:360:ARG:HA | 2.02 | 0.41 |
| 1:NB:387:GLY:HA2 | 1:NB:401:VAL:O | 2.21 | 0.41 |
| 1:O:129:PHE:O | 1:O:137:VAL:HB | 2.20 | 0.41 |
| 1:O:529:ILE:HD13 | 1:O:579:VAL:CG1 | 2.45 | 0.41 |
| 1:O:575:ILE:O | 1:O:579:VAL:HG23 | 2.21 | 0.41 |
| 1:OA:13:TYR:O | 1:OA:49:ARG:HA | 2.21 | 0.41 |
| 1:OB:262:ASP:OD1 | 1:OB:263:VAL:N | 2.53 | 0.41 |
| 1:OB:642:SER:O | 1:OB:643:VAL:CG1 | 2.69 | 0.41 |
| 1:P:3:THR:HG22 | 1:P:3:THR:O | 2.21 | 0.41 |
| 1:P:212:VAL:C | 1:P:213:LEU:HD22 | 2.46 | 0.41 |
| 1:P:472:ASP:HA | 1:P:493:GLU:HA | 2.03 | 0.41 |
| 1:P:776:GLN:OE1 | 1:Q:770:LEU:HD21 | 2.20 | 0.41 |
| 1:PA:779:LEU:HD21 | 1:QA:774:ARG:HG2 | 2.00 | 0.41 |
| 1:PB:334:LEU:HB2 | 1:PB:357:TRP:CE2 | 2.55 | 0.41 |
| 1:PB:661:ALA:O | 1:PB:665:THR:HG23 | 2.21 | 0.41 |
| 1:Q:61:VAL:HG13 | 1:Q:104:VAL:O | 2.21 | 0.41 |
| 1:Q:174:LEU:C | 1:Q:216:VAL:HG12 | 2.46 | 0.41 |
| 1:QA:90:ILE:HG23 | 1:QA:92:LEU:HD11 | 2.03 | 0.41 |
| 1:QA:143:TRP:O | 1:QA:208:VAL:HG11 | 2.21 | 0.41 |
| 1:QA:561:LEU:HD12 | 1:QA:562:PHE:CD1 | 2.56 | 0.41 |
| 1:QA:624:ASP:O | 1:QA:637:SER:HA | 2.20 | 0.41 |
| 1:QB:180:LYS:HA | 1:QB:192:THR:HG23 | 2.02 | 0.41 |
| 1:QB:388:ILE:HG22 | 1:QB:456:ARG:HA | 2.02 | 0.41 |
| 1:RA:380:ILE:HG12 | 1:RA:388:ILE:HD11 | 2.03 | 0.41 |
| 1:RB:6:PHE:CZ | 1:RB:37:ARG:C | 2.99 | 0.41 |
| 1:RB:16:ILE:HG22 | 1:RB:17:HIS:O | 2.21 | 0.41 |
| 1:RB:56:ARG:O | 1:RB:111:PRO:HA | 2.21 | 0.41 |
| 1:RB:342:GLU:HG3 | 1:RB:348:LYS:N | 2.36 | 0.41 |
| 1:RB:537:LEU:HA | 1:RB:645:PRO:HA | 2.03 | 0.41 |
| 1:RB:653:ALA:HA | 1:RB:656:ARG:CZ | 2.51 | 0.41 |
| 1:S:468:VAL:O | 1:S:481:VAL:HG22 | 2.20 | 0.41 |
| 1:SA:391:GLN:HA | 1:SA:397:LYS:O | 2.20 | 0.41 |
| 1:SA:628:PHE:N | 1:SA:629:PRO:CD | 2.82 | 0.41 |
| 1:SB:184:ASP:OD1 | 1:SB:184:ASP:C | 2.64 | 0.41 |
| 1:SB:410:GLN:O | 1:SB:411:ASP:HB3 | 2.20 | 0.41 |
| 1:SB:802:ILE:O | 1:TB:805:SER:HB3 | 2.19 | 0.41 |
| 1:TA:181:GLU:CD | 1:TA:191:VAL:HG12 | 2.45 | 0.41 |
| 1:TA:257:GLU:HG3 | 1:UA:245:THR:HB | 2.03 | 0.41 |
| 1:TA:286:ASP:N | 1:TA:287:PRO:CD | 2.84 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:TA:567:PHE:CG | 1:TA:568:VAL:N | 2.88 | 0.41 |
| 1:TB:5:GLU:O | 1:TB:6:PHE:C | 2.63 | 0.41 |
| 1:TB:699:ALA:O | 1:TB:703:ARG:CB | 2.69 | 0.41 |
| 1:TB:757:ALA:HB1 | 1:UB:751:LEU:HD22 | 2.02 | 0.41 |
| 1:UA:275:THR:HB | 1:VA:296:LEU:HD23 | 2.01 | 0.41 |
| 1:UA:520:PRO:HA | 1:UA:545:TRP:O | 2.20 | 0.41 |
| 1:UA:592:HIS:CE1 | 1:VA:531:THR:C | 2.98 | 0.41 |
| 1:UB:16:ILE:HA | 1:UB:45:PHE:CE1 | 2.55 | 0.41 |
| 1:UB:332:LEU:C | 1:UB:358:LEU:HD12 | 2.45 | 0.41 |
| 1:V:17:HIS:HB2 | 1:V:44:LEU:HB2 | 2.02 | 0.41 |
| 1:V:415:TRP:CZ2 | 1:V:417:LYS:HA | 2.56 | 0.41 |
| 1:V:802:ILE:HG23 | 1:V:807:ILE:HD11 | 2.00 | 0.41 |
| 1:VA:325:VAL:CG2 | 1:WA:353:ALA:HB1 | 2.33 | 0.41 |
| 1:VA:527:ILE:HD11 | 1:VA:539:LEU:HD23 | 2.03 | 0.41 |
| 1:VA:706:LEU:HD22 | 1:WA:693:ILE:HG23 | 2.01 | 0.41 |
| 1:VB:421:PRO:HA | 1:VB:424:GLU:OE1 | 2.21 | 0.41 |
| 1:VB:676:GLU:O | 1:VB:680:LEU:N | 2.54 | 0.41 |
| 1:W:773:ALA:HA | 1:W:776:GLN:HG2 | 2.03 | 0.41 |
| 1:WA:165:ALA:HB1 | 1:WA:203:ALA:C | 2.45 | 0.41 |
| 1:WA:227:LEU:HB3 | 1:WA:251:VAL:HG23 | 2.03 | 0.41 |
| 1:WB:415:TRP:HZ3 | 1:WB:417:LYS:HD3 | 1.86 | 0.41 |
| 1:X:169:ARG:O | 1:X:170:GLN:C | 2.63 | 0.41 |
| 1:XA:20:ASP:O | 1:XA:23:SER:O | 2.39 | 0.41 |
| 1:XA:169:ARG:O | 1:XA:170:GLN:C | 2.64 | 0.41 |
| 1:XA:459:SER:HA | 1:XA:488:SER:HA | 2.02 | 0.41 |
| 1:XA:802:ILE:HG22 | 1:XA:806:THR:OG1 | 2.20 | 0.41 |
| 1:XB:74:LEU:HD13 | 1:XB:82:ARG:NH1 | 2.35 | 0.41 |
| 1:XB:334:LEU:HD21 | 1:XB:359:ILE:HG22 | 2.03 | 0.41 |
| 1:Y:112:LEU:CD2 | 1:Y:150:THR:HG21 | 2.51 | 0.41 |
| 1:Y:385:ASN:OD1 | 1:Y:386:GLU:N | 2.53 | 0.41 |
| 1:YB:60:THR:HG22 | 1:YB:90:ILE:CD1 | 2.51 | 0.41 |
| 1:YB:286:ASP:HA | 1:YB:295:GLN:O | 2.19 | 0.41 |
| 1:YB:391:GLN:HB2 | 1:YB:415:TRP:HB2 | 2.02 | 0.41 |
| 1:Z:9:ARG:HA | 1:Z:34:THR:HA | 2.01 | 0.41 |
| 1:Z:301:VAL:HG22 | 1:Z:302:VAL:H | 1.86 | 0.41 |
| 1:ZA:10:ILE:HG22 | 1:ZA:33:LYS:O | 2.21 | 0.41 |
| 1:ZA:62:ALA:HA | 1:ZA:88:LEU:HD23 | 2.01 | 0.41 |
| 1:ZB:13:TYR:C | 1:ZB:50:MET:SD | 3.04 | 0.41 |
| 1:ZB:168:ILE:HG23 | 1:ZB:172:GLN:O | 2.20 | 0.41 |
| 1:ZB:498:LEU:HB3 | 1:ZB:500:LEU:HD13 | 2.02 | 0.41 |
| 1:A:527:ILE:HD11 | 1:A:539:LEU:HD22 | 2.03 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:A:595:SER:O | 1:A:599:ILE:HD12 | 2.20 | 0.41 |
| 1:AA:113:GLN:O | 1:AA:151:TYR:HB2 | 2.21 | 0.41 |
| 1:AA:229:LEU:HD22 | 1:AA:265:GLU:HB3 | 2.03 | 0.41 |
| 1:AA:516:LEU:HD21 | 1:AA:547:PHE:CE2 | 2.55 | 0.41 |
| 1:AA:529:ILE:HD12 | 1:AA:583:VAL:CB | 2.50 | 0.41 |
| 1:AB:178:ALA:HB2 | 1:AB:190:ARG:HB3 | 2.02 | 0.41 |
| 1:AB:460:TYR:O | 1:AB:487:VAL:HG12 | 2.21 | 0.41 |
| 1:AB:702:ALA:C | 1:BB:693:ILE:HG21 | 2.45 | 0.41 |
| 1:AC:175:ARG:HB3 | 1:AC:213:LEU:HB2 | 2.03 | 0.41 |
| 1:AC:176:LEU:HA | 1:AC:211:GLU:O | 2.21 | 0.41 |
| 1:AC:197:LEU:HG | 1:AC:263:VAL:CG1 | 2.51 | 0.41 |
| 1:AC:601:THR:HB | 1:AC:607:GLU:HA | 2.03 | 0.41 |
| 1:B:470:VAL:HA | 1:B:494:GLN:O | 2.20 | 0.41 |
| 1:B:682:GLN:HG2 | 1:B:685:ARG:NH1 | 2.35 | 0.41 |
| 1:BA:8:ILE:HG22 | 1:BA:8:ILE:O | 2.21 | 0.41 |
| 1:BB:121:LEU:HG | 1:BB:162:ILE:HD13 | 2.02 | 0.41 |
| 1:BB:175:ARG:HD3 | 1:BB:195:GLU:OE2 | 2.20 | 0.41 |
| 1:CA:219:VAL:N | 1:CA:259:HIS:O | 2.54 | 0.41 |
| 1:CA:235:PHE:CD1 | 1:CA:264:HIS:HB3 | 2.55 | 0.41 |
| 1:CB:95:ASP:HB3 | 1:CB:96:PRO:HD2 | 2.03 | 0.41 |
| 1:CB:627:VAL:HG12 | 1:CB:634:VAL:HG13 | 2.03 | 0.41 |
| 1:D:10:ILE:HD11 | 1:D:33:LYS:HB2 | 2.03 | 0.41 |
| 1:D:25:VAL:HG13 | 1:D:80:GLN:OE1 | 2.21 | 0.41 |
| 1:D:583:VAL:HG13 | 1:D:584:ALA:N | 2.35 | 0.41 |
| 1:DA:165:ALA:N | 1:DA:205:LEU:HD13 | 2.36 | 0.41 |
| 1:DA:218:ALA:HA | 1:DA:260:VAL:HA | 2.03 | 0.41 |
| 1:DA:523:PHE:HB2 | 1:DA:543:TYR:HD2 | 1.86 | 0.41 |
| 1:DB:107:LYS:HG2 | 1:DB:108:ASP:H | 1.86 | 0.41 |
| 1:DB:744:ALA:O | 1:DB:748:ALA:HB2 | 2.20 | 0.41 |
| 1:E:9:ARG:HA | 1:E:34:THR:HG22 | 2.01 | 0.41 |
| 1:E:276:LEU:HD21 | 1:E:320:ILE:HG23 | 2.01 | 0.41 |
| 1:E:331:GLY:HA3 | 1:E:358:LEU:HD21 | 2.03 | 0.41 |
| 1:E:406:TYR:HH | 1:E:409:THR:HG23 | 1.84 | 0.41 |
| 1:E:497:VAL:HG22 | 1:E:498:LEU:H | 1.85 | 0.41 |
| 1:EA:13:TYR:O | 1:EA:49:ARG:HA | 2.21 | 0.41 |
| 1:EA:284:ILE:O | 1:EA:299:LYS:HA | 2.21 | 0.41 |
| 1:EA:566:ASP:OD1 | 1:EA:568:VAL:HG12 | 2.20 | 0.41 |
| 1:EB:45:PHE:CD1 | 1:EB:48:MET:HG2 | 2.55 | 0.41 |
| 1:EB:545:TRP:HA | 1:EB:636:SER:H | 1.85 | 0.41 |
| 1:F:65:VAL:HG13 | 1:F:103:GLU:HB2 | 2.02 | 0.41 |
| 1:F:114:VAL:HA | 1:F:150:THR:HA | 2.03 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:F:529:ILE:HD12 | 1:F:583:VAL:CB | 2.50 | 0.41 |
| 1:F:543:TYR:CE1 | 1:F:575:ILE:HD13 | 2.56 | 0.41 |
| 1:FA:121:LEU:HG | 1:FA:123:LEU:HD21 | 2.03 | 0.41 |
| 1:FA:180:LYS:HD2 | 1:FA:181:GLU:O | 2.21 | 0.41 |
| 1:FA:333:LEU:HA | 1:FA:358:LEU:HA | 2.01 | 0.41 |
| 1:FA:778:GLU:HA | 1:FA:781:VAL:HG22 | 2.02 | 0.41 |
| 1:FB:146:GLU:N | 1:FB:146:GLU:OE1 | 2.54 | 0.41 |
| 1:G:50:MET:HE3 | 1:G:96:PRO:HB2 | 2.03 | 0.41 |
| 1:G:165:ALA:HB2 | 1:G:205:LEU:HB2 | 2.03 | 0.41 |
| 1:G:236:ARG:HA | 1:G:241:VAL:O | 2.21 | 0.41 |
| 1:GA:37:ARG:HH11 | 1:GA:43:VAL:HG11 | 1.86 | 0.41 |
| 1:GA:105:LEU:C | 1:GA:105:LEU:HD12 | 2.46 | 0.41 |
| 1:GA:470:VAL:HG22 | 1:GA:495:PHE:HA | 2.02 | 0.41 |
| 1:GB:177:ARG:HG3 | 1:GB:213:LEU:HD11 | 2.03 | 0.41 |
| 1:H:108:ASP:O | 1:H:109:ILE:C | 2.64 | 0.41 |
| 1:H:785:GLN:O | 1:H:786:GLN:C | 2.63 | 0.41 |
| 1:HB:82:ARG:C | 1:HB:83:LEU:HD12 | 2.45 | 0.41 |
| 1:I:283:VAL:CG1 | 1:I:284:ILE:N | 2.84 | 0.41 |
| 1:IA:276:LEU:HD22 | 1:IA:281:TYR:N | 2.36 | 0.41 |
| 1:IA:501:SER:HA | 1:IA:507:ARG:O | 2.21 | 0.41 |
| 1:IB:227:LEU:HA | 1:IB:270:VAL:HA | 2.02 | 0.41 |
| 1:J:129:PHE:CD1 | 1:J:156:GLU:HB2 | 2.55 | 0.41 |
| 1:K:794:LYS:HA | 1:K:797:GLN:OE1 | 2.21 | 0.41 |
| 1:KA:162:ILE:HG22 | 1:KA:164:GLN:OE1 | 2.21 | 0.41 |
| 1:KA:187:GLY:O | 1:KA:188:LYS:C | 2.63 | 0.41 |
| 1:KB:8:ILE:O | 1:KB:37:ARG:NH2 | 2.53 | 0.41 |
| 1:KB:165:ALA:HB2 | 1:KB:205:LEU:HD13 | 2.03 | 0.41 |
| 1:KB:591:PHE:O | 1:KB:595:SER:N | 2.54 | 0.41 |
| 1:KB:656:ARG:O | 1:KB:659:GLN:HB2 | 2.21 | 0.41 |
| 1:KB:741:VAL:O | 1:KB:744:ALA:HB3 | 2.20 | 0.41 |
| 1:L:160:VAL:HG12 | 1:L:161:GLU:H | 1.86 | 0.41 |
| 1:LA:262:ASP:OD1 | 1:LA:263:VAL:N | 2.53 | 0.41 |
| 1:LA:376:GLU:OE1 | 1:LA:378:GLN:OE1 | 2.39 | 0.41 |
| 1:LA:502:ALA:O | 1:LA:506:LYS:HA | 2.20 | 0.41 |
| 1:LA:595:SER:O | 1:LA:599:ILE:HD12 | 2.21 | 0.41 |
| 1:LB:162:ILE:O | 1:LB:163:ILE:HG23 | 2.20 | 0.41 |
| 1:LB:183:TRP:CD1 | 1:LB:183:TRP:N | 2.89 | 0.41 |
| 1:LB:280:ASN:O | 1:LB:304:GLY:HA3 | 2.21 | 0.41 |
| 1:LB:283:VAL:HG22 | 1:LB:301:VAL:CB | 2.50 | 0.41 |
| 1:LB:347:GLU:O | 1:LB:347:GLU:OE1 | 2.39 | 0.41 |
| 1:LB:462:VAL:N | 1:LB:485:GLU:O | 2.53 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:LB:484:PRO:HB2 | 1:MB:471:TYR:CG | 2.56 | 0.41 |
| 1:LB:542:ALA:HB3 | 1:LB:639:ASP:HB2 | 2.02 | 0.41 |
| 1:M:420:PRO:C | 1:M:422:GLY:N | 2.79 | 0.41 |
| 1:M:533:ASP:OD1 | 1:M:533:ASP:C | 2.61 | 0.41 |
| 1:M:588:PHE:HA | 1:M:591:PHE:CE1 | 2.56 | 0.41 |
| 1:MA:9:ARG:HA | 1:MA:34:THR:HG22 | 2.03 | 0.41 |
| 1:MA:388:ILE:HG23 | 1:MA:455:THR:O | 2.20 | 0.41 |
| 1:MA:388:ILE:HG23 | 1:MA:455:THR:C | 2.46 | 0.41 |
| 1:MB:6:PHE:O | 1:MB:37:ARG:N | 2.54 | 0.41 |
| 1:MB:236:ARG:HA | 1:MB:241:VAL:O | 2.21 | 0.41 |
| 1:MB:340:LEU:HB2 | 1:MB:349:VAL:O | 2.21 | 0.41 |
| 1:MB:388:ILE:C | 1:MB:457:VAL:HG23 | 2.45 | 0.41 |
| 1:MB:735:ILE:HD13 | 1:NB:727:GLU:CG | 2.50 | 0.41 |
| 1:N:104:VAL:HG22 | 1:N:105:LEU:N | 2.36 | 0.41 |
| 1:N:283:VAL:HG12 | 1:N:284:ILE:N | 2.36 | 0.41 |
| 1:NA:15:TYR:HA | 1:NA:30:VAL:HA | 2.03 | 0.41 |
| 1:NA:268:LEU:HD12 | 1:NA:268:LEU:N | 2.35 | 0.41 |
| 1:NA:284:ILE:HD12 | 1:NA:287:PRO:HB3 | 2.03 | 0.41 |
| 1:NA:285:LEU:HD21 | 1:NA:317:GLU:HG2 | 2.03 | 0.41 |
| 1:NB:30:VAL:CG2 | 1:NB:50:MET:SD | 3.09 | 0.41 |
| 1:NB:529:ILE:HD12 | 1:NB:583:VAL:HG11 | 2.03 | 0.41 |
| 1:NB:638:VAL:HG12 | 1:NB:639:ASP:N | 2.36 | 0.41 |
| 1:O:26:SER:O | 1:O:101:PRO:HG2 | 2.20 | 0.41 |
| 1:O:63:ASN:N | 1:O:64:PRO:CD | 2.84 | 0.41 |
| 1:O:81:VAL:HG21 | 1:O:100:TYR:HB3 | 2.03 | 0.41 |
| 1:O:585:SER:OG | 1:O:586:VAL:HG13 | 2.21 | 0.41 |
| 1:O:661:ALA:HA | 1:O:664:ILE:HD12 | 2.01 | 0.41 |
| 1:OA:366:VAL:HG22 | 1:OA:367:PRO:HD2 | 2.03 | 0.41 |
| 1:OA:388:ILE:HB | 1:OA:414:LEU:CD2 | 2.51 | 0.41 |
| 1:OA:543:TYR:HD1 | 1:OA:638:VAL:HG13 | 1.85 | 0.41 |
| 1:OB:212:VAL:O | 1:OB:212:VAL:HG23 | 2.20 | 0.41 |
| 1:OB:346:GLU:C | 1:OB:347:GLU:HG3 | 2.46 | 0.41 |
| 1:OB:391:GLN:HA | 1:OB:397:LYS:O | 2.21 | 0.41 |
| 1:P:81:VAL:HG11 | 1:P:101:PRO:O | 2.21 | 0.41 |
| 1:P:228:HIS:O | 1:P:268:LEU:HB2 | 2.21 | 0.41 |
| 1:P:452:ARG:HH22 | 1:P:454:LYS:CG | 2.34 | 0.41 |
| 1:PA:60:THR:HA | 1:PA:90:ILE:HA | 2.03 | 0.41 |
| 1:PA:232:ARG:HD2 | 1:PA:263:VAL:O | 2.21 | 0.41 |
| 1:PA:247:GLU:O | 1:PA:249:TRP:CE3 | 2.74 | 0.41 |
| 1:PA:692:LYS:HA | 1:QA:682:GLN:NE2 | 2.35 | 0.41 |
| 1:Q:227:LEU:HA | 1:Q:270:VAL:HA | 2.03 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:Q:331:GLY:HA2 | 1:Q:360:ARG:HA | 2.02 | 0.41 |
| 1:QB:537:LEU:HD13 | 1:QB:643:VAL:HG13 | 2.03 | 0.41 |
| 1:R:119:THR:OG1 | 1:R:162:ILE:HG22 | 2.21 | 0.41 |
| 1:R:480:VAL:HG12 | 1:R:481:VAL:N | 2.36 | 0.41 |
| 1:RA:46:ALA:O | 1:RA:47:PRO:C | 2.64 | 0.41 |
| 1:RB:106:GLU:O | 1:RB:107:LYS:HB2 | 2.20 | 0.41 |
| 1:RB:231:ALA:HB3 | 1:RB:246:GLY:N | 2.36 | 0.41 |
| 1:RB:404:SER:HA | 1:SB:395:THR:O | 2.20 | 0.41 |
| 1:RB:549:VAL:HG11 | 1:RB:552:ARG:HD3 | 2.03 | 0.41 |
| 1:RB:685:ARG:O | 1:RB:689:GLU:HG2 | 2.21 | 0.41 |
| 1:S:368:SER:OG | 1:S:371:VAL:HG23 | 2.21 | 0.41 |
| 1:SA:480:VAL:CG1 | 1:SA:481:VAL:N | 2.84 | 0.41 |
| 1:SB:72:LEU:HD23 | 1:SB:73:VAL:O | 2.21 | 0.41 |
| 1:SB:521:ASP:CG | 1:SB:522:PHE:N | 2.79 | 0.41 |
| 1:SB:768:LEU:HD11 | 1:TB:766:ARG:HD2 | 2.03 | 0.41 |
| 1:T:112:LEU:HD21 | 1:T:151:TYR:O | 2.21 | 0.41 |
| 1:T:388:ILE:HA | 1:T:455:THR:O | 2.20 | 0.41 |
| 1:T:457:VAL:HG13 | 1:T:489:LEU:O | 2.21 | 0.41 |
| 1:T:687:ARG:HA | 1:T:690:ARG:HB3 | 2.03 | 0.41 |
| 1:TA:10:ILE:HB | 1:TA:32:PRO:HA | 2.03 | 0.41 |
| 1:TA:143:TRP:C | 1:TA:208:VAL:HG11 | 2.46 | 0.41 |
| 1:TB:60:THR:HG22 | 1:TB:90:ILE:CG1 | 2.51 | 0.41 |
| 1:TB:95:ASP:HB3 | 1:TB:96:PRO:HD2 | 2.03 | 0.41 |
| 1:TB:131:ASP:O | 1:TB:132:LYS:HB2 | 2.20 | 0.41 |
| 1:UB:60:THR:HG22 | 1:UB:107:LYS:HB3 | 2.03 | 0.41 |
| 1:UB:221:LEU:HD11 | 1:UB:251:VAL:CG2 | 2.51 | 0.41 |
| 1:UB:325:VAL:HA | 1:UB:364:GLU:HA | 2.03 | 0.41 |
| 1:UB:473:TYR:CD1 | 1:UB:473:TYR:N | 2.88 | 0.41 |
| 1:UB:599:ILE:O | 1:UB:603:VAL:HG23 | 2.20 | 0.41 |
| 1:V:182:CYS:O | 1:V:190:ARG:N | 2.53 | 0.41 |
| 1:VA:36:ILE:O | 1:VA:36:ILE:HG23 | 2.21 | 0.41 |
| 1:VB:60:THR:OG1 | 1:VB:107:LYS:HB2 | 2.21 | 0.41 |
| 1:VB:123:LEU:HB2 | 1:VB:143:TRP:O | 2.20 | 0.41 |
| 1:VB:174:LEU:HG | 1:VB:214:ASP:O | 2.20 | 0.41 |
| 1:VB:335:ARG:HA | 1:VB:355:ASP:O | 2.21 | 0.41 |
| 1:VB:355:ASP:C | 1:VB:355:ASP:OD1 | 2.63 | 0.41 |
| 1:W:604:PHE:HB3 | 1:W:623:ARG:HB2 | 2.02 | 0.41 |
| 1:W:757:ALA:O | 1:W:761:ARG:HG2 | 2.21 | 0.41 |
| 1:WA:654:LEU:HD22 | 1:XA:534:HIS:HE1 | 1.86 | 0.41 |
| 1:WB:212:VAL:O | 1:WB:212:VAL:HG23 | 2.19 | 0.41 |
| 1:WB:288:VAL:O | 1:WB:288:VAL:HG23 | 2.21 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:WB:331:GLY:C | 1:WB:358:LEU:HD11 | 2.45 | 0.41 |
| 1:WB:387:GLY:HA3 | 1:WB:402:ILE:HG13 | 2.01 | 0.41 |
| 1:WB:768:LEU:C | 1:WB:768:LEU:HD23 | 2.46 | 0.41 |
| 1:X:182:CYS:O | 1:X:189:GLU:HA | 2.21 | 0.41 |
| 1:X:601:THR:HG22 | 1:X:607:GLU:OE2 | 2.21 | 0.41 |
| 1:X:625:GLN:CD | 1:X:634:VAL:HG13 | 2.46 | 0.41 |
| 1:XA:202:GLY:HA3 | 1:YA:191:VAL:HB | 2.02 | 0.41 |
| 1:XB:61:VAL:HG13 | 1:XB:61:VAL:O | 2.21 | 0.41 |
| 1:XB:63:ASN:O | 1:XB:83:LEU:HD23 | 2.21 | 0.41 |
| 1:XB:798:MET:HE1 | 1:YB:791:GLU:HB3 | 2.02 | 0.41 |
| 1:Y:56:ARG:HG2 | 1:Y:112:LEU:HD22 | 2.03 | 0.41 |
| 1:Y:284:ILE:HD12 | 1:Y:287:PRO:HB3 | 2.03 | 0.41 |
| 1:YB:459:SER:CB | 1:YB:488:SER:HA | 2.51 | 0.41 |
| 1:YB:788:ALA:HA | 1:YB:792:VAL:HG23 | 2.02 | 0.41 |
| 1:Z:781:VAL:HG23 | 1:Z:782:SER:N | 2.35 | 0.41 |
| 1:ZA:283:VAL:HA | 1:ZA:300:ARG:O | 2.20 | 0.41 |
| 1:A:230:ARG:HG2 | 1:A:231:ALA:N | 2.36 | 0.41 |
| 1:A:236:ARG:HA | 1:A:241:VAL:O | 2.21 | 0.41 |
| 1:A:373:VAL:O | 1:A:373:VAL:HG12 | 2.19 | 0.41 |
| 1:A:536:ARG:NE | 1:A:536:ARG:HA | 2.36 | 0.41 |
| 1:A:808:ARG:CB | 1:NA:806:THR:HG22 | 2.50 | 0.41 |
| 1:AA:160:VAL:HG12 | 1:AA:161:GLU:CD | 2.46 | 0.41 |
| 1:AA:176:LEU:HD23 | 1:AA:196:TRP:O | 2.20 | 0.41 |
| 1:AA:276:LEU:HD22 | 1:AA:280:ASN:HB3 | 2.02 | 0.41 |
| 1:AA:342:GLU:HG2 | 1:AA:349:VAL:N | 2.36 | 0.41 |
| 1:AA:604:PHE:CD2 | 1:AA:623:ARG:O | 2.74 | 0.41 |
| 1:AA:772:TYR:CD1 | 1:BA:770:LEU:HD11 | 2.55 | 0.41 |
| 1:AB:181:GLU:CG | 1:AB:191:VAL:HG12 | 2.47 | 0.41 |
| 1:AB:762:VAL:HG23 | 1:AB:763:GLN:N | 2.36 | 0.41 |
| 1:AC:144:LEU:HD12 | 1:AC:145:PHE:C | 2.45 | 0.41 |
| 1:AC:196:TRP:HA | 1:AC:263:VAL:HG11 | 2.03 | 0.41 |
| 1:B:160:VAL:HG12 | 1:B:161:GLU:H | 1.85 | 0.41 |
| 1:B:175:ARG:HA | 1:B:196:TRP:O | 2.20 | 0.41 |
| 1:B:358:LEU:HD23 | 1:B:359:ILE:N | 2.36 | 0.41 |
| 1:B:425:GLU:HG2 | 1:B:426:LEU:N | 2.35 | 0.41 |
| 1:B:675:HIS:HA | 1:B:678:GLN:OE1 | 2.21 | 0.41 |
| 1:BA:63:ASN:N | 1:BA:64:PRO:CD | 2.83 | 0.41 |
| 1:BA:90:ILE:HG12 | 1:BA:107:LYS:HE2 | 2.02 | 0.41 |
| 1:BA:121:LEU:O | 1:BA:121:LEU:HD12 | 2.21 | 0.41 |
| 1:BA:208:VAL:HG23 | 1:BA:209:PHE:N | 2.36 | 0.41 |
| 1:BA:275:THR:HA | 1:BA:307:SER:HA | 2.02 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:BA:340:LEU:HG | 1:BA:351:HIS:HB2 | 2.03 | 0.41 |
| 1:BA:382:LEU:HB2 | 1:BA:404:SER:O | 2.21 | 0.41 |
| 1:BA:388:ILE:HA | 1:BA:455:THR:O | 2.21 | 0.41 |
| 1:BA:658:VAL:CG2 | 1:BA:662:ILE:HD13 | 2.51 | 0.41 |
| 1:BB:57:HIS:C | 1:BB:58:TYR:CG | 2.99 | 0.41 |
| 1:BB:61:VAL:HA | 1:BB:105:LEU:HA | 2.03 | 0.41 |
| 1:BB:69:ALA:O | 1:BB:70:GLN:CD | 2.64 | 0.41 |
| 1:BB:143:TRP:CH2 | 1:BB:157:VAL:HG13 | 2.56 | 0.41 |
| 1:BB:241:VAL:HG11 | 1:BB:243:ARG:NH2 | 2.36 | 0.41 |
| 1:C:167:ILE:HG22 | 1:C:169:ARG:H | 1.86 | 0.41 |
| 1:C:284:ILE:HG23 | 1:C:302:VAL:HG21 | 2.02 | 0.41 |
| 1:C:335:ARG:HG2 | 1:C:336:ALA:H | 1.86 | 0.41 |
| 1:C:471:TYR:HA | 1:C:477:ARG:O | 2.21 | 0.41 |
| 1:CA:10:ILE:HG22 | 1:CA:47:PRO:CB | 2.51 | 0.41 |
| 1:CA:35:TYR:CZ | 1:CA:36:ILE:O | 2.74 | 0.41 |
| 1:CA:178:ALA:HA | 1:CA:209:PHE:O | 2.21 | 0.41 |
| 1:CA:227:LEU:CD2 | 1:CA:229:LEU:HD21 | 2.51 | 0.41 |
| 1:CA:325:VAL:HA | 1:CA:364:GLU:HB3 | 2.02 | 0.41 |
| 1:CA:583:VAL:HG13 | 1:CA:584:ALA:N | 2.35 | 0.41 |
| 1:CB:35:TYR:CG | 1:CB:36:ILE:N | 2.89 | 0.41 |
| 1:CB:114:VAL:HG23 | 1:CB:149:GLY:O | 2.21 | 0.41 |
| 1:CB:597:ARG:O | 1:CB:598:ILE:C | 2.63 | 0.41 |
| 1:CB:622:PRO:O | 1:CB:623:ARG:C | 2.64 | 0.41 |
| 1:D:16:ILE:HG23 | 1:D:45:PHE:O | 2.21 | 0.41 |
| 1:D:58:TYR:CG | 1:D:59:CYS:N | 2.89 | 0.41 |
| 1:D:59:CYS:SG | 1:D:109:ILE:HG12 | 2.60 | 0.41 |
| 1:D:59:CYS:SG | 1:D:108:ASP:C | 3.04 | 0.41 |
| 1:D:161:GLU:OE1 | 1:D:163:ILE:HG23 | 2.21 | 0.41 |
| 1:D:178:ALA:HB1 | 1:D:182:CYS:SG | 2.61 | 0.41 |
| 1:D:388:ILE:HD11 | 1:D:455:THR:OG1 | 2.20 | 0.41 |
| 1:D:536:ARG:O | 1:D:645:PRO:HA | 2.21 | 0.41 |
| 1:D:670:GLU:OE2 | 1:E:660:LEU:HD13 | 2.21 | 0.41 |
| 1:DA:153:PRO:O | 1:DA:154:ARG:C | 2.63 | 0.41 |
| 1:DA:498:LEU:O | 1:DA:513:ALA:N | 2.54 | 0.41 |
| 1:DA:564:VAL:HG11 | 1:DA:567:PHE:HA | 2.02 | 0.41 |
| 1:DA:633:LEU:HD12 | 1:DA:634:VAL:H | 1.86 | 0.41 |
| 1:DA:768:LEU:C | 1:DA:768:LEU:HD23 | 2.46 | 0.41 |
| 1:DB:8:ILE:N | 1:DB:37:ARG:NH2 | 2.68 | 0.41 |
| 1:DB:114:VAL:HA | 1:DB:150:THR:HA | 2.02 | 0.41 |
| 1:DB:122:HIS:ND1 | 1:DB:160:VAL:HB | 2.36 | 0.41 |
| 1:DB:286:ASP:OD1 | 1:DB:296:LEU:HA | 2.21 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:DB:346:GLU:O | 1:DB:347:GLU:HG3 | 2.21 | 0.41 |
| 1:E:334:LEU:O | 1:E:356:HIS:HA | 2.20 | 0.41 |
| 1:E:345:ASP:OD2 | 1:E:351:HIS:ND1 | 2.54 | 0.41 |
| 1:E:571:ALA:O | 1:E:575:ILE:HG22 | 2.21 | 0.41 |
| 1:EA:14:HIS:HA | 1:EA:48:MET:O | 2.20 | 0.41 |
| 1:EA:284:ILE:HG22 | 1:EA:310:LEU:HD21 | 2.03 | 0.41 |
| 1:EA:324:TYR:HB2 | 1:EA:332:LEU:HD11 | 2.03 | 0.41 |
| 1:EB:18:VAL:O | 1:EB:18:VAL:HG23 | 2.20 | 0.41 |
| 1:EB:32:PRO:O | 1:FB:24:ASN:HB2 | 2.20 | 0.41 |
| 1:EB:355:ASP:OD1 | 1:EB:356:HIS:N | 2.53 | 0.41 |
| 1:EB:408:LEU:HD13 | 1:EB:412:GLU:O | 2.21 | 0.41 |
| 1:F:54:PRO:O | 1:F:57:HIS:O | 2.39 | 0.41 |
| 1:F:88:LEU:HD21 | 1:F:106:GLU:OE2 | 2.21 | 0.41 |
| 1:F:121:LEU:O | 1:F:144:LEU:HB2 | 2.21 | 0.41 |
| 1:F:129:PHE:HE1 | 1:F:137:VAL:HG11 | 1.85 | 0.41 |
| 1:F:180:LYS:HD2 | 1:F:181:GLU:O | 2.21 | 0.41 |
| 1:F:482:PHE:HD2 | 1:F:552:ARG:CD | 2.33 | 0.41 |
| 1:FA:13:TYR:CA | 1:FA:50:MET:HG2 | 2.51 | 0.41 |
| 1:FA:176:LEU:HD23 | 1:FA:176:LEU:N | 2.36 | 0.41 |
| 1:FA:224:LYS:N | 1:FA:224:LYS:CD | 2.84 | 0.41 |
| 1:FA:387:GLY:HA2 | 1:FA:401:VAL:O | 2.20 | 0.41 |
| 1:FA:416:GLU:HG2 | 1:FA:455:THR:HG22 | 2.02 | 0.41 |
| 1:FA:417:LYS:HZ3 | 1:FA:493:GLU:N | 2.19 | 0.41 |
| 1:FB:59:CYS:HB3 | 1:FB:107:LYS:O | 2.21 | 0.41 |
| 1:FB:88:LEU:HD12 | 1:FB:106:GLU:HG3 | 2.03 | 0.41 |
| 1:FB:112:LEU:HD12 | 1:FB:151:TYR:O | 2.21 | 0.41 |
| 1:FB:174:LEU:O | 1:FB:176:LEU:HD22 | 2.20 | 0.41 |
| 1:FB:212:VAL:C | 1:FB:213:LEU:HD22 | 2.45 | 0.41 |
| 1:FB:326:LEU:O | 1:FB:361:GLY:O | 2.38 | 0.41 |
| 1:FB:334:LEU:HD12 | 1:FB:357:TRP:NE1 | 2.35 | 0.41 |
| 1:FB:777:LEU:O | 1:FB:781:VAL:HG22 | 2.21 | 0.41 |
| 1:G:60:THR:CG2 | 1:G:90:ILE:HG13 | 2.51 | 0.41 |
| 1:G:144:LEU:HD12 | 1:G:144:LEU:C | 2.46 | 0.41 |
| 1:G:174:LEU:HD12 | 1:G:215:LEU:HA | 2.03 | 0.41 |
| 1:G:281:TYR:N | 1:G:321:GLN:O | 2.54 | 0.41 |
| 1:G:326:LEU:O | 1:G:362:PRO:HA | 2.21 | 0.41 |
| 1:G:333:LEU:HD22 | 1:G:377:ARG:NH1 | 2.35 | 0.41 |
| 1:G:357:TRP:O | 1:G:357:TRP:CG | 2.74 | 0.41 |
| 1:G:591:PHE:O | 1:G:595:SER:N | 2.54 | 0.41 |
| 1:GA:13:TYR:HA | 1:GA:50:MET:HE2 | 2.03 | 0.41 |
| 1:GA:123:LEU:HB2 | 1:GA:143:TRP:O | 2.21 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:GA:161:GLU:O | 1:GA:163:ILE:HG23 | 2.21 | 0.41 |
| 1:GA:183:TRP:CD1 | 1:GA:183:TRP:N | 2.89 | 0.41 |
| 1:GA:391:GLN:NE2 | 1:GA:398:VAL:HG23 | 2.36 | 0.41 |
| 1:GA:501:SER:HA | 1:GA:507:ARG:O | 2.20 | 0.41 |
| 1:GA:594:ASN:HB2 | 1:GA:598:ILE:HD11 | 2.03 | 0.41 |
| 1:GA:666:THR:O | 1:GA:670:GLU:HG3 | 2.21 | 0.41 |
| 1:GB:15:TYR:HA | 1:GB:29:GLU:O | 2.20 | 0.41 |
| 1:GB:227:LEU:HD21 | 1:GB:229:LEU:HD21 | 2.02 | 0.41 |
| 1:GB:227:LEU:CD1 | 1:GB:270:VAL:HG22 | 2.51 | 0.41 |
| 1:GB:262:ASP:OD1 | 1:GB:263:VAL:HG22 | 2.21 | 0.41 |
| 1:GB:358:LEU:HD23 | 1:GB:359:ILE:N | 2.36 | 0.41 |
| 1:GB:386:GLU:N | 1:GB:386:GLU:OE1 | 2.54 | 0.41 |
| 1:GB:567:PHE:O | 1:GB:570:ASP:HB3 | 2.20 | 0.41 |
| 1:GB:621:ARG:CZ | 1:GB:622:PRO:O | 2.69 | 0.41 |
| 1:H:17:HIS:CD2 | 1:H:45:PHE:HE2 | 2.39 | 0.41 |
| 1:H:273:ILE:HG13 | 1:H:308:PHE:O | 2.21 | 0.41 |
| 1:H:281:TYR:HB3 | 1:H:323:VAL:HG13 | 2.03 | 0.41 |
| 1:H:326:LEU:O | 1:H:362:PRO:HA | 2.21 | 0.41 |
| 1:H:405:THR:HG23 | 1:I:396:GLY:N | 2.34 | 0.41 |
| 1:H:427:LEU:HD12 | 1:H:428:ASN:N | 2.36 | 0.41 |
| 1:H:539:LEU:HD13 | 1:H:642:SER:O | 2.21 | 0.41 |
| 1:H:554:ASP:O | 1:H:558:THR:HG23 | 2.21 | 0.41 |
| 1:H:751:LEU:O | 1:H:754:GLU:HG3 | 2.21 | 0.41 |
| 1:HA:50:MET:HE3 | 1:HA:98:PRO:HB3 | 2.03 | 0.41 |
| 1:HA:50:MET:HB3 | 1:HA:96:PRO:O | 2.21 | 0.41 |
| 1:HA:123:LEU:HD23 | 1:HA:159:VAL:HA | 2.03 | 0.41 |
| 1:HA:371:VAL:O | 1:HA:371:VAL:HG12 | 2.21 | 0.41 |
| 1:HA:522:PHE:HA | 1:HA:543:TYR:O | 2.20 | 0.41 |
| 1:HA:799:THR:HA | 1:HA:802:ILE:HG22 | 2.03 | 0.41 |
| 1:HB:125:ALA:CB | 1:HB:137:VAL:HG13 | 2.50 | 0.41 |
| 1:HB:388:ILE:HG22 | 1:HB:456:ARG:HA | 2.03 | 0.41 |
| 1:HB:523:PHE:O | 1:HB:542:ALA:HA | 2.20 | 0.41 |
| 1:HB:528:THR:C | 1:HB:529:ILE:HG23 | 2.46 | 0.41 |
| 1:HB:707:LEU:HA | 1:HB:710:GLU:HB3 | 2.02 | 0.41 |
| 1:HB:781:VAL:HG23 | 1:HB:782:SER:N | 2.36 | 0.41 |
| 1:I:12:PRO:HG3 | 1:J:80:GLN:HE22 | 1.86 | 0.41 |
| 1:I:18:VAL:O | 1:I:26:SER:HA | 2.20 | 0.41 |
| 1:I:50:MET:SD | 1:I:98:PRO:N | 2.94 | 0.41 |
| 1:I:207:ALA:HB3 | 1:I:210:GLU:HG3 | 2.03 | 0.41 |
| 1:I:230:ARG:HA | 1:I:247:GLU:O | 2.21 | 0.41 |
| 1:I:230:ARG:HG2 | 1:I:231:ALA:N | 2.35 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:I:282:CYS:O | 1:I:302:VAL:N | 2.54 | 0.41 |
| 1:I:337:LEU:HD21 | 1:I:372:GLU:HB2 | 2.03 | 0.41 |
| 1:I:351:HIS:CE1 | 1:I:357:TRP:CD1 | 3.08 | 0.41 |
| 1:I:365:TYR:CZ | 1:I:366:VAL:O | 2.73 | 0.41 |
| 1:I:452:ARG:HG2 | 1:I:453:ASN:O | 2.21 | 0.41 |
| 1:I:486:LEU:HB3 | 1:J:473:TYR:HB3 | 2.01 | 0.41 |
| 1:I:487:VAL:HG22 | 1:I:488:SER:N | 2.36 | 0.41 |
| 1:I:779:LEU:HD23 | 1:I:779:LEU:C | 2.46 | 0.41 |
| 1:IA:196:TRP:HA | 1:IA:263:VAL:HG21 | 2.01 | 0.41 |
| 1:IA:285:LEU:HD21 | 1:IA:317:GLU:HA | 2.03 | 0.41 |
| 1:IA:303:LYS:HD2 | 1:IA:304:GLY:N | 2.36 | 0.41 |
| 1:IA:468:VAL:O | 1:IA:480:VAL:HA | 2.20 | 0.41 |
| 1:IA:490:GLY:H | 1:IA:493:GLU:HB2 | 1.86 | 0.41 |
| 1:IA:643:VAL:HG13 | 1:JA:580:ARG:NH2 | 2.35 | 0.41 |
| 1:IA:688:LEU:O | 1:IA:691:GLN:HB3 | 2.21 | 0.41 |
| 1:IB:43:VAL:CG1 | 1:IB:44:LEU:N | 2.84 | 0.41 |
| 1:IB:123:LEU:HD11 | 1:IB:145:PHE:HB3 | 1.99 | 0.41 |
| 1:IB:165:ALA:HA | 1:IB:205:LEU:HA | 2.03 | 0.41 |
| 1:IB:545:TRP:HA | 1:IB:636:SER:H | 1.85 | 0.41 |
| 1:IB:710:GLU:OE2 | 1:IB:714:MET:HE1 | 2.21 | 0.41 |
| 1:IB:781:VAL:HG23 | 1:IB:782:SER:N | 2.35 | 0.41 |
| 1:J:325:VAL:HA | 1:J:364:GLU:HA | 2.02 | 0.41 |
| 1:J:462:VAL:N | 1:J:485:GLU:O | 2.54 | 0.41 |
| 1:J:471:TYR:CZ | 1:J:476:LYS:HA | 2.56 | 0.41 |
| 1:J:798:MET:HE2 | 1:K:792:VAL:HG13 | 1.98 | 0.41 |
| 1:JA:28:VAL:HB | 1:JA:101:PRO:HD3 | 2.02 | 0.41 |
| 1:JA:129:PHE:HZ | 1:JA:157:VAL:HG22 | 1.86 | 0.41 |
| 1:JA:191:VAL:HG22 | 1:JA:194:GLU:HB2 | 2.02 | 0.41 |
| 1:JA:346:GLU:O | 1:JA:346:GLU:HG2 | 2.21 | 0.41 |
| 1:JA:366:VAL:O | 1:JA:366:VAL:HG13 | 2.20 | 0.41 |
| 1:JA:413:VAL:HG22 | 1:JA:414:LEU:N | 2.36 | 0.41 |
| 1:JA:423:VAL:O | 1:JA:426:LEU:HB3 | 2.19 | 0.41 |
| 1:JA:732:ALA:HA | 1:JA:735:ILE:HD12 | 2.03 | 0.41 |
| 1:JA:795:PHE:CE2 | 1:JA:799:THR:HG21 | 2.55 | 0.41 |
| 1:JB:61:VAL:N | 1:JB:89:GLU:O | 2.53 | 0.41 |
| 1:JB:333:LEU:N | 1:JB:358:LEU:HD13 | 2.36 | 0.41 |
| 1:JB:389:TYR:CE2 | 1:JB:457:VAL:HA | 2.55 | 0.41 |
| 1:JB:405:THR:HG21 | 1:KB:393:VAL:O | 2.21 | 0.41 |
| 1:JB:501:SER:HA | 1:JB:507:ARG:O | 2.21 | 0.41 |
| 1:JB:604:PHE:CD2 | 1:JB:623:ARG:O | 2.74 | 0.41 |
| 1:K:14:HIS:HA | 1:K:48:MET:O | 2.21 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:K:121:LEU:HD11 | 1:K:145:PHE:CD2 | 2.56 | 0.41 |
| 1:K:122:HIS:ND1 | 1:K:160:VAL:HG11 | 2.36 | 0.41 |
| 1:K:228:HIS:HA | 1:K:250:LEU:HD23 | 2.02 | 0.41 |
| 1:K:238:PHE:CD1 | 1:K:259:HIS:CE1 | 3.09 | 0.41 |
| 1:K:332:LEU:HD23 | 1:K:334:LEU:HD21 | 2.02 | 0.41 |
| 1:K:750:ALA:HB2 | 1:L:741:VAL:HG22 | 2.03 | 0.41 |
| 1:KA:8:ILE:O | 1:KA:37:ARG:NH2 | 2.54 | 0.41 |
| 1:KA:9:ARG:CB | 1:KA:34:THR:HG22 | 2.50 | 0.41 |
| 1:KA:116:LEU:HB2 | 1:KA:119:THR:CG2 | 2.51 | 0.41 |
| 1:KA:125:ALA:HB2 | 1:KA:143:TRP:HZ3 | 1.86 | 0.41 |
| 1:KA:394:LYS:HG3 | 1:KA:395:THR:HG23 | 2.01 | 0.41 |
| 1:KA:544:ASN:N | 1:KA:637:SER:O | 2.54 | 0.41 |
| 1:KA:573:LYS:O | 1:KA:576:ALA:HB3 | 2.21 | 0.41 |
| 1:KB:62:ALA:HB2 | 1:KB:106:GLU:HB2 | 2.02 | 0.41 |
| 1:KB:67:ARG:HA | 1:KB:73:VAL:HA | 2.02 | 0.41 |
| 1:KB:184:ASP:OD1 | 1:KB:187:GLY:O | 2.38 | 0.41 |
| 1:KB:188:LYS:O | 1:KB:189:GLU:C | 2.64 | 0.41 |
| 1:KB:342:GLU:CG | 1:KB:348:LYS:HA | 2.51 | 0.41 |
| 1:KB:633:LEU:HD21 | 1:KB:635:VAL:HG22 | 2.02 | 0.41 |
| 1:L:19:LEU:CB | 1:L:44:LEU:HD11 | 2.51 | 0.41 |
| 1:L:61:VAL:HG23 | 1:L:64:PRO:HB3 | 2.03 | 0.41 |
| 1:L:105:LEU:HD21 | 1:L:107:LYS:C | 2.46 | 0.41 |
| 1:L:120:ALA:HB1 | 1:L:144:LEU:HD13 | 2.03 | 0.41 |
| 1:L:333:LEU:HD12 | 1:L:357:TRP:O | 2.21 | 0.41 |
| 1:L:359:ILE:HD11 | 1:L:363:LEU:HD11 | 2.03 | 0.41 |
| 1:L:405:THR:HG21 | 1:M:393:VAL:O | 2.21 | 0.41 |
| 1:L:545:TRP:CE3 | 1:L:633:LEU:HD11 | 2.56 | 0.41 |
| 1:LA:169:ARG:H | 1:LA:169:ARG:HD3 | 1.86 | 0.41 |
| 1:LA:189:GLU:N | 1:LA:189:GLU:CD | 2.79 | 0.41 |
| 1:LA:273:ILE:O | 1:LA:273:ILE:HG23 | 2.20 | 0.41 |
| 1:LA:537:LEU:HA | 1:LA:644:GLU:O | 2.20 | 0.41 |
| 1:LA:558:THR:HA | 1:LA:561:LEU:HD12 | 2.02 | 0.41 |
| 1:LB:10:ILE:O | 1:LB:10:ILE:HG13 | 2.21 | 0.41 |
| 1:LB:122:HIS:C | 1:LB:160:VAL:HB | 2.46 | 0.41 |
| 1:LB:168:ILE:HG22 | 1:LB:215:LEU:HD13 | 2.01 | 0.41 |
| 1:LB:220:ILE:HG22 | 1:LB:221:LEU:N | 2.35 | 0.41 |
| 1:LB:325:VAL:HG23 | 1:LB:364:GLU:HG3 | 2.03 | 0.41 |
| 1:LB:751:LEU:HD22 | 1:LB:754:GLU:OE2 | 2.20 | 0.41 |
| 1:M:16:ILE:HG22 | 1:M:17:HIS:N | 2.36 | 0.41 |
| 1:M:73:VAL:HG11 | 1:M:81:VAL:CG2 | 2.51 | 0.41 |
| 1:M:183:TRP:HB3 | 1:M:187:GLY:HA2 | 2.03 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:M:342:GLU:HA | 1:M:349:VAL:O | 2.21 | 0.41 |
| 1:MA:19:LEU:O | 1:MA:41:GLU:HA | 2.20 | 0.41 |
| 1:MA:122:HIS:C | 1:MA:160:VAL:HB | 2.45 | 0.41 |
| 1:MA:181:GLU:CG | 1:MA:191:VAL:HA | 2.51 | 0.41 |
| 1:MA:227:LEU:O | 1:MA:250:LEU:HA | 2.21 | 0.41 |
| 1:MA:335:ARG:HA | 1:MA:355:ASP:O | 2.21 | 0.41 |
| 1:MA:358:LEU:HD23 | 1:MA:359:ILE:N | 2.36 | 0.41 |
| 1:MA:658:VAL:HG13 | 1:MA:659:GLN:N | 2.36 | 0.41 |
| 1:MB:7:ILE:O | 1:MB:34:THR:HG22 | 2.20 | 0.41 |
| 1:MB:35:TYR:CG | 1:MB:36:ILE:N | 2.89 | 0.41 |
| 1:MB:343:GLY:O | 1:MB:344:GLU:C | 2.62 | 0.41 |
| 1:N:124:LYS:O | 1:N:158:GLU:N | 2.54 | 0.41 |
| 1:N:129:PHE:CE2 | 1:N:157:VAL:HG22 | 2.56 | 0.41 |
| 1:N:276:LEU:HD12 | 1:N:306:LYS:O | 2.21 | 0.41 |
| 1:N:283:VAL:HG13 | 1:N:301:VAL:HA | 2.02 | 0.41 |
| 1:N:521:ASP:HB3 | 1:N:545:TRP:CH2 | 2.56 | 0.41 |
| 1:N:626:ALA:O | 1:N:634:VAL:HG13 | 2.20 | 0.41 |
| 1:N:647:ASP:HB3 | 1:N:650:THR:OG1 | 2.21 | 0.41 |
| 1:N:706:LEU:HD22 | 1:O:696:GLN:HB2 | 2.03 | 0.41 |
| 1:NA:25:VAL:HG13 | 1:NA:80:GLN:HB2 | 2.03 | 0.41 |
| 1:NA:196:TRP:O | 1:NA:197:LEU:HD22 | 2.21 | 0.41 |
| 1:NA:349:VAL:HG11 | 1:NA:351:HIS:NE2 | 2.36 | 0.41 |
| 1:NA:395:THR:HG23 | 1:NA:397:LYS:HG3 | 2.02 | 0.41 |
| 1:NA:591:PHE:C | 1:NA:593:LYS:N | 2.79 | 0.41 |
| 1:NB:63:ASN:CG | 1:NB:85:HIS:HA | 2.45 | 0.41 |
| 1:NB:387:GLY:HA3 | 1:NB:402:ILE:HG13 | 2.03 | 0.41 |
| 1:NB:389:TYR:CD1 | 1:NB:457:VAL:HG22 | 2.54 | 0.41 |
| 1:NB:461:ARG:CZ | 1:OB:494:GLN:HG3 | 2.51 | 0.41 |
| 1:NB:523:PHE:O | 1:NB:542:ALA:HA | 2.21 | 0.41 |
| 1:O:123:LEU:HB2 | 1:O:143:TRP:CE2 | 2.56 | 0.41 |
| 1:O:365:TYR:CG | 1:O:366:VAL:N | 2.88 | 0.41 |
| 1:O:390:VAL:HG23 | 1:O:390:VAL:O | 2.21 | 0.41 |
| 1:O:471:TYR:HA | 1:O:477:ARG:O | 2.21 | 0.41 |
| 1:O:472:ASP:HA | 1:O:493:GLU:HA | 2.02 | 0.41 |
| 1:O:745:LYS:O | 1:O:746:LEU:C | 2.64 | 0.41 |
| 1:OA:175:ARG:HA | 1:OA:196:TRP:O | 2.21 | 0.41 |
| 1:OA:336:ALA:HB2 | 1:OA:357:TRP:CH2 | 2.55 | 0.41 |
| 1:OA:532:ALA:HB3 | 1:OA:587:THR:HG22 | 2.02 | 0.41 |
| 1:OA:709:LEU:HD12 | 1:PA:697:SER:O | 2.20 | 0.41 |
| 1:OA:759:LEU:HA | 1:OA:762:VAL:HG22 | 2.02 | 0.41 |
| 1:OB:3:THR:HG22 | 1:OB:6:PHE:CD2 | 2.56 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OB:90:ILE:HG22 | 1:OB:91:ARG:N | 2.36 | 0.41 |
| 1:OB:221:LEU:HD22 | 1:OB:226:ALA:HA | 2.02 | 0.41 |
| 1:OB:385:ASN:OD1 | 1:OB:385:ASN:C | 2.63 | 0.41 |
| 1:OB:606:PHE:O | 1:OB:607:GLU:C | 2.63 | 0.41 |
| 1:OB:660:LEU:O | 1:OB:664:ILE:HD12 | 2.21 | 0.41 |
| 1:P:390:VAL:O | 1:P:390:VAL:HG23 | 2.20 | 0.41 |
| 1:P:606:PHE:CE2 | 1:P:621:ARG:HB3 | 2.56 | 0.41 |
| 1:P:774:ARG:O | 1:P:778:GLU:OE1 | 2.38 | 0.41 |
| 1:PA:25:VAL:HG21 | 1:PA:78:THR:O | 2.21 | 0.41 |
| 1:PA:526:VAL:HG13 | 1:PA:539:LEU:O | 2.20 | 0.41 |
| 1:PA:621:ARG:O | 1:PA:621:ARG:HG3 | 2.21 | 0.41 |
| 1:PB:227:LEU:CD1 | 1:PB:270:VAL:HG22 | 2.50 | 0.41 |
| 1:PB:462:VAL:HG12 | 1:PB:466:ALA:HB3 | 2.02 | 0.41 |
| 1:PB:466:ALA:HB1 | 1:PB:515:CYS:SG | 2.61 | 0.41 |
| 1:PB:540:GLN:HB3 | 1:PB:642:SER:OG | 2.21 | 0.41 |
| 1:PB:544:ASN:HB2 | 1:PB:637:SER:N | 2.36 | 0.41 |
| 1:PB:545:TRP:HA | 1:PB:636:SER:H | 1.86 | 0.41 |
| 1:PB:645:PRO:HB3 | 1:PB:650:THR:HG21 | 2.02 | 0.41 |
| 1:PB:786:GLN:CB | 1:QB:781:VAL:HG11 | 2.51 | 0.41 |
| 1:Q:91:ARG:HG3 | 1:Q:105:LEU:HD11 | 2.02 | 0.41 |
| 1:Q:761:ARG:NH2 | 1:R:755:THR:HG23 | 2.36 | 0.41 |
| 1:QA:114:VAL:HA | 1:QA:150:THR:CB | 2.51 | 0.41 |
| 1:QA:144:LEU:C | 1:QA:144:LEU:HD12 | 2.45 | 0.41 |
| 1:QA:175:ARG:HE | 1:QA:213:LEU:HB3 | 1.86 | 0.41 |
| 1:QA:230:ARG:HH12 | 1:QA:268:LEU:HD21 | 1.84 | 0.41 |
| 1:QA:235:PHE:CD2 | 1:QA:264:HIS:HB2 | 2.55 | 0.41 |
| 1:QA:336:ALA:HB2 | 1:QA:340:LEU:HD23 | 2.03 | 0.41 |
| 1:QA:340:LEU:HD21 | 1:QA:371:VAL:HG22 | 2.02 | 0.41 |
| 1:QA:392:ASP:HA | 1:QA:412:GLU:HA | 2.01 | 0.41 |
| 1:QA:393:VAL:HG22 | 1:QA:412:GLU:N | 2.36 | 0.41 |
| 1:QA:416:GLU:OE1 | 1:QA:455:THR:HG23 | 2.20 | 0.41 |
| 1:QA:497:VAL:HG22 | 1:QA:498:LEU:N | 2.36 | 0.41 |
| 1:QB:56:ARG:O | 1:QB:111:PRO:HA | 2.21 | 0.41 |
| 1:QB:144:LEU:HD12 | 1:QB:146:GLU:OE1 | 2.20 | 0.41 |
| 1:QB:469:GLN:HA | 1:QB:479:ARG:O | 2.21 | 0.41 |
| 1:QB:758:GLU:OE2 | 1:RB:751:LEU:HD22 | 2.21 | 0.41 |
| 1:QB:761:ARG:NH2 | 1:QB:765:VAL:CG2 | 2.84 | 0.41 |
| 1:QB:790:VAL:HG21 | 1:RB:784:ALA:CB | 2.51 | 0.41 |
| 1:R:382:LEU:HD13 | 1:R:386:GLU:O | 2.21 | 0.41 |
| 1:R:389:TYR:CZ | 1:R:457:VAL:HA | 2.56 | 0.41 |
| 1:R:547:PHE:CE2 | 1:R:633:LEU:HD13 | 2.56 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:R:691:GLN:HA | 1:R:694:LEU:HD12 | 2.02 | 0.41 |
| 1:RA:218:ALA:HA | 1:RA:260:VAL:HA | 2.03 | 0.41 |
| 1:RA:383:ASP:OD2 | 1:SA:398:VAL:HG23 | 2.21 | 0.41 |
| 1:RB:3:THR:O | 1:RB:4:GLU:C | 2.63 | 0.41 |
| 1:RB:6:PHE:O | 1:RB:7:ILE:HD13 | 2.21 | 0.41 |
| 1:RB:15:TYR:HB2 | 1:RB:29:GLU:O | 2.20 | 0.41 |
| 1:RB:43:VAL:HG22 | 1:RB:44:LEU:N | 2.36 | 0.41 |
| 1:RB:129:PHE:CZ | 1:RB:137:VAL:HG11 | 2.56 | 0.41 |
| 1:RB:398:VAL:HG11 | 1:RB:415:TRP:CD2 | 2.56 | 0.41 |
| 1:RB:500:LEU:HD21 | 1:RB:567:PHE:CD1 | 2.56 | 0.41 |
| 1:S:114:VAL:HG22 | 1:S:115:VAL:N | 2.36 | 0.41 |
| 1:S:330:GLN:HB3 | 1:S:376:GLU:OE2 | 2.20 | 0.41 |
| 1:S:504:ARG:NE | 1:S:504:ARG:HA | 2.36 | 0.41 |
| 1:SA:120:ALA:HB2 | 1:SA:205:LEU:HD21 | 2.03 | 0.41 |
| 1:SA:688:LEU:HD21 | 1:TA:679:ARG:HA | 2.03 | 0.41 |
| 1:SB:8:ILE:N | 1:SB:37:ARG:NH2 | 2.68 | 0.41 |
| 1:SB:212:VAL:C | 1:SB:213:LEU:HD22 | 2.46 | 0.41 |
| 1:SB:227:LEU:CD1 | 1:SB:270:VAL:HG22 | 2.50 | 0.41 |
| 1:SB:315:GLN:N | 1:SB:315:GLN:OE1 | 2.53 | 0.41 |
| 1:SB:467:ALA:HA | 1:SB:481:VAL:O | 2.20 | 0.41 |
| 1:SB:537:LEU:HA | 1:SB:644:GLU:O | 2.21 | 0.41 |
| 1:SB:541:LEU:HB3 | 1:SB:543:TYR:CE1 | 2.55 | 0.41 |
| 1:SB:561:LEU:HD23 | 1:SB:631:ASN:O | 2.20 | 0.41 |
| 1:T:274:THR:HG22 | 1:T:276:LEU:HG | 2.02 | 0.41 |
| 1:T:537:LEU:HD11 | 1:T:588:PHE:HD1 | 1.83 | 0.41 |
| 1:T:575:ILE:HG23 | 1:T:603:VAL:HG23 | 2.03 | 0.41 |
| 1:T:606:PHE:O | 1:T:606:PHE:CG | 2.74 | 0.41 |
| 1:TA:76:ASP:HB3 | 1:TA:80:GLN:O | 2.20 | 0.41 |
| 1:TA:583:VAL:HG13 | 1:TA:584:ALA:N | 2.36 | 0.41 |
| 1:TB:56:ARG:NH2 | 1:UB:127:LEU:HD21 | 2.36 | 0.41 |
| 1:TB:352:GLN:O | 1:TB:355:ASP:HB3 | 2.21 | 0.41 |
| 1:TB:366:VAL:O | 1:TB:366:VAL:HG13 | 2.20 | 0.41 |
| 1:TB:790:VAL:HG11 | 1:UB:784:ALA:C | 2.45 | 0.41 |
| 1:UA:10:ILE:HD12 | 1:UA:36:ILE:HG12 | 2.02 | 0.41 |
| 1:UA:280:ASN:O | 1:UA:323:VAL:HG13 | 2.20 | 0.41 |
| 1:UA:393:VAL:HG22 | 1:UA:411:ASP:HB3 | 2.02 | 0.41 |
| 1:UA:460:TYR:OH | 1:UA:468:VAL:HG11 | 2.20 | 0.41 |
| 1:UA:547:PHE:O | 1:UA:548:GLU:C | 2.63 | 0.41 |
| 1:UA:564:VAL:HG12 | 1:UA:567:PHE:HA | 2.02 | 0.41 |
| 1:UB:50:MET:HB3 | 1:UB:97:PHE:C | 2.46 | 0.41 |
| 1:UB:115:VAL:HG11 | 1:UB:145:PHE:CD2 | 2.56 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UB:122:HIS:O | 1:UB:160:VAL:N | 2.54 | 0.41 |
| 1:UB:131:ASP:O | 1:UB:132:LYS:HB2 | 2.21 | 0.41 |
| 1:UB:165:ALA:HA | 1:UB:205:LEU:HA | 2.03 | 0.41 |
| 1:UB:274:THR:N | 1:UB:308:PHE:O | 2.53 | 0.41 |
| 1:UB:408:LEU:HD13 | 1:UB:413:VAL:HA | 2.02 | 0.41 |
| 1:V:325:VAL:O | 1:V:325:VAL:HG13 | 2.21 | 0.41 |
| 1:V:405:THR:HG23 | 1:W:396:GLY:HA3 | 2.02 | 0.41 |
| 1:V:468:VAL:O | 1:V:481:VAL:HG22 | 2.20 | 0.41 |
| 1:V:504:ARG:HA | 1:V:504:ARG:NE | 2.34 | 0.41 |
| 1:VA:698:GLU:CG | 1:VA:699:ALA:N | 2.84 | 0.41 |
| 1:VB:487:VAL:HG22 | 1:VB:488:SER:H | 1.85 | 0.41 |
| 1:VB:688:LEU:HA | 1:VB:691:GLN:OE1 | 2.21 | 0.41 |
| 1:W:724:ALA:HB3 | 1:X:714:MET:HE1 | 2.03 | 0.41 |
| 1:WA:281:TYR:CE2 | 1:WA:283:VAL:HG23 | 2.56 | 0.41 |
| 1:WA:459:SER:HB2 | 1:WA:486:LEU:HD11 | 2.02 | 0.41 |
| 1:WA:579:VAL:HG11 | 1:WA:599:ILE:HG23 | 2.03 | 0.41 |
| 1:WA:643:VAL:HG23 | 1:XA:530:GLU:CG | 2.50 | 0.41 |
| 1:WB:56:ARG:NH1 | 1:XB:127:LEU:HD13 | 2.36 | 0.41 |
| 1:WB:106:GLU:N | 1:WB:106:GLU:OE1 | 2.54 | 0.41 |
| 1:WB:218:ALA:HA | 1:WB:260:VAL:HA | 2.03 | 0.41 |
| 1:WB:325:VAL:HA | 1:WB:364:GLU:HA | 2.03 | 0.41 |
| 1:WB:406:TYR:HH | 1:WB:412:GLU:CD | 2.28 | 0.41 |
| 1:WB:593:LYS:HE3 | 1:XB:532:ALA:HB1 | 2.02 | 0.41 |
| 1:WB:742:LEU:CD1 | 1:WB:746:LEU:HD11 | 2.50 | 0.41 |
| 1:WB:772:TYR:CE2 | 1:WB:776:GLN:HG3 | 2.56 | 0.41 |
| 1:X:176:LEU:HD11 | 1:X:196:TRP:CZ2 | 2.56 | 0.41 |
| 1:X:198:VAL:HG21 | 1:X:204:TYR:CE1 | 2.55 | 0.41 |
| 1:X:233:ARG:HH11 | 1:X:263:VAL:HG23 | 1.86 | 0.41 |
| 1:X:398:VAL:HG11 | 1:X:491:PRO:HB3 | 2.01 | 0.41 |
| 1:X:413:VAL:HG22 | 1:X:414:LEU:N | 2.36 | 0.41 |
| 1:X:792:VAL:O | 1:X:793:LYS:C | 2.64 | 0.41 |
| 1:XA:3:THR:HG22 | 1:XA:43:VAL:HG23 | 2.01 | 0.41 |
| 1:XA:36:ILE:HG22 | 1:XA:37:ARG:O | 2.21 | 0.41 |
| 1:XA:92:LEU:HG | 1:XA:94:GLN:HB2 | 2.03 | 0.41 |
| 1:XA:280:ASN:HA | 1:XA:322:ASP:HA | 2.03 | 0.41 |
| 1:XA:282:CYS:O | 1:XA:301:VAL:HG23 | 2.21 | 0.41 |
| 1:XA:470:VAL:HG12 | 1:XA:471:TYR:N | 2.35 | 0.41 |
| 1:XB:231:ALA:HB3 | 1:XB:246:GLY:H | 1.85 | 0.41 |
| 1:XB:286:ASP:HA | 1:XB:295:GLN:O | 2.20 | 0.41 |
| 1:XB:362:PRO:O | 1:YB:352:GLN:HB2 | 2.21 | 0.41 |
| 1:XB:416:GLU:HB3 | 1:XB:454:LYS:HZ2 | 1.86 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XB:463:PRO:O | 1:XB:466:ALA:HB3 | 2.20 | 0.41 |
| 1:XB:468:VAL:CG1 | 1:XB:469:GLN:N | 2.83 | 0.41 |
| 1:XB:575:ILE:HD13 | 1:XB:578:ARG:NH2 | 2.35 | 0.41 |
| 1:Y:9:ARG:HA | 1:Y:34:THR:HA | 2.02 | 0.41 |
| 1:Y:28:VAL:HG22 | 1:Y:29:GLU:N | 2.36 | 0.41 |
| 1:Y:160:VAL:O | 1:Y:161:GLU:C | 2.63 | 0.41 |
| 1:Y:281:TYR:CZ | 1:Y:321:GLN:HB2 | 2.56 | 0.41 |
| 1:Y:588:PHE:CG | 1:Y:589:ASP:N | 2.88 | 0.41 |
| 1:YA:16:ILE:HG22 | 1:YA:17:HIS:O | 2.20 | 0.41 |
| 1:YA:539:LEU:HA | 1:YA:642:SER:OG | 2.21 | 0.41 |
| 1:YB:16:ILE:CG2 | 1:YB:17:HIS:N | 2.84 | 0.41 |
| 1:YB:28:VAL:HB | 1:YB:101:PRO:HD3 | 2.02 | 0.41 |
| 1:YB:129:PHE:HZ | 1:YB:157:VAL:HG22 | 1.85 | 0.41 |
| 1:YB:216:VAL:HG22 | 1:YB:260:VAL:CG2 | 2.51 | 0.41 |
| 1:YB:775:ALA:CB | 1:ZB:770:LEU:HD13 | 2.51 | 0.41 |
| 1:Z:69:ALA:HB2 | 1:Z:74:LEU:HD21 | 2.02 | 0.41 |
| 1:Z:92:LEU:O | 1:Z:93:ALA:C | 2.63 | 0.41 |
| 1:Z:273:ILE:O | 1:Z:273:ILE:CG2 | 2.69 | 0.41 |
| 1:Z:388:ILE:HA | 1:Z:456:ARG:HA | 2.03 | 0.41 |
| 1:Z:421:PRO:HB2 | 1:Z:424:GLU:OE1 | 2.21 | 0.41 |
| 1:Z:507:ARG:HE | 1:Z:510:ALA:HB1 | 1.84 | 0.41 |
| 1:Z:732:ALA:HA | 1:Z:735:ILE:HD12 | 2.02 | 0.41 |
| 1:ZA:233:ARG:HA | 1:ZA:245:THR:HG23 | 2.02 | 0.41 |
| 1:ZA:337:LEU:HD12 | 1:ZA:370:LYS:C | 2.46 | 0.41 |
| 1:ZA:342:GLU:HA | 1:ZA:345:ASP:O | 2.20 | 0.41 |
| 1:ZA:387:GLY:HA3 | 1:ZA:402:ILE:HG12 | 2.03 | 0.41 |
| 1:ZB:223:GLU:OE2 | 1:ZB:253:VAL:HG21 | 2.20 | 0.41 |
| 1:ZB:231:ALA:HB1 | 1:ZB:233:ARG:O | 2.21 | 0.41 |
| 1:ZB:231:ALA:HB3 | 1:ZB:244:ARG:O | 2.21 | 0.41 |
| 1:ZB:357:TRP:HH2 | 1:ZB:371:VAL:HG22 | 1.86 | 0.41 |
| 1:ZB:391:GLN:OE1 | 1:ZB:398:VAL:N | 2.54 | 0.41 |
| 1:ZB:462:VAL:HG12 | 1:ZB:466:ALA:HB3 | 2.03 | 0.41 |
| 1:ZB:537:LEU:HA | 1:ZB:645:PRO:HA | 2.03 | 0.41 |
| 1:ZB:538:GLN:N | 1:ZB:644:GLU:O | 2.54 | 0.41 |
| 1:ZB:627:VAL:HG12 | 1:ZB:634:VAL:HG22 | 2.03 | 0.41 |
| 1:A:10:ILE:O | 1:A:10:ILE:HG13 | 2.20 | 0.41 |
| 1:A:221:LEU:HD13 | 1:A:256:THR:O | 2.21 | 0.41 |
| 1:A:468:VAL:O | 1:A:480:VAL:HA | 2.21 | 0.41 |
| 1:A:564:VAL:HG23 | 1:A:631:ASN:HB3 | 2.03 | 0.41 |
| 1:A:783:LYS:HG3 | 1:A:787:LEU:HD11 | 2.03 | 0.41 |
| 1:AA:541:LEU:HD22 | 1:AA:640:VAL:HA | 2.03 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AA:755:THR:HG21 | 1:Z:761:ARG:HG3 | 2.03 | 0.41 |
| 1:AB:184:ASP:OD2 | 1:AB:190:ARG:NE | 2.54 | 0.41 |
| 1:AB:286:ASP:N | 1:AB:287:PRO:HD3 | 2.36 | 0.41 |
| 1:AB:359:ILE:HD11 | 1:AB:363:LEU:HD11 | 2.02 | 0.41 |
| 1:AB:575:ILE:HG23 | 1:AB:603:VAL:HG13 | 2.03 | 0.41 |
| 1:AC:25:VAL:HG12 | 1:AC:26:SER:N | 2.36 | 0.41 |
| 1:AC:122:HIS:O | 1:AC:123:LEU:HD23 | 2.21 | 0.41 |
| 1:AC:521:ASP:OD1 | 1:OA:564:VAL:HG13 | 2.20 | 0.41 |
| 1:B:377:ARG:NH2 | 1:B:409:THR:O | 2.54 | 0.41 |
| 1:B:547:PHE:CE1 | 1:B:633:LEU:HB2 | 2.56 | 0.41 |
| 1:B:650:THR:O | 1:B:653:ALA:HB3 | 2.21 | 0.41 |
| 1:B:772:TYR:CD1 | 1:C:770:LEU:HD11 | 2.54 | 0.41 |
| 1:BA:92:LEU:HD12 | 1:BA:92:LEU:N | 2.35 | 0.41 |
| 1:BB:65:VAL:HG12 | 1:BB:83:LEU:CD1 | 2.51 | 0.41 |
| 1:BB:178:ALA:HB1 | 1:BB:182:CYS:SG | 2.61 | 0.41 |
| 1:BB:288:VAL:HG12 | 1:BB:294:ASN:CG | 2.46 | 0.41 |
| 1:BB:342:GLU:HG2 | 1:BB:349:VAL:N | 2.36 | 0.41 |
| 1:BB:568:VAL:HG13 | 1:BB:569:GLY:N | 2.35 | 0.41 |
| 1:C:325:VAL:HA | 1:C:364:GLU:HA | 2.03 | 0.41 |
| 1:C:371:VAL:HG22 | 1:C:372:GLU:N | 2.36 | 0.41 |
| 1:C:384:GLU:O | 1:C:402:ILE:HG22 | 2.21 | 0.41 |
| 1:C:456:ARG:CZ | 1:C:456:ARG:HB2 | 2.50 | 0.41 |
| 1:CA:181:GLU:CD | 1:CA:181:GLU:C | 2.89 | 0.41 |
| 1:CA:281:TYR:CE1 | 1:CA:323:VAL:HA | 2.55 | 0.41 |
| 1:CA:326:LEU:HD11 | 1:CA:332:LEU:CB | 2.51 | 0.41 |
| 1:CA:340:LEU:HB2 | 1:CA:350:SER:HA | 2.02 | 0.41 |
| 1:CA:466:ALA:O | 1:CA:482:PHE:HA | 2.20 | 0.41 |
| 1:CB:547:PHE:CD2 | 1:CB:633:LEU:HA | 2.56 | 0.41 |
| 1:CB:624:ASP:OD1 | 1:CB:624:ASP:N | 2.54 | 0.41 |
| 1:D:160:VAL:HG12 | 1:D:161:GLU:H | 1.84 | 0.41 |
| 1:D:638:VAL:CG1 | 1:D:639:ASP:N | 2.84 | 0.41 |
| 1:DA:10:ILE:HD13 | 1:DA:29:GLU:O | 2.21 | 0.41 |
| 1:DA:81:VAL:HG13 | 1:DA:83:LEU:HD11 | 2.03 | 0.41 |
| 1:DA:402:ILE:CG1 | 1:DA:457:VAL:HG21 | 2.51 | 0.41 |
| 1:DA:537:LEU:HD23 | 1:DA:537:LEU:C | 2.46 | 0.41 |
| 1:DA:579:VAL:O | 1:DA:583:VAL:HG22 | 2.21 | 0.41 |
| 1:DB:95:ASP:OD1 | 1:DB:95:ASP:C | 2.62 | 0.41 |
| 1:E:107:LYS:HG3 | 1:E:108:ASP:N | 2.36 | 0.41 |
| 1:E:279:HIS:O | 1:E:323:VAL:HG22 | 2.21 | 0.41 |
| 1:E:772:TYR:HB2 | 1:F:766:ARG:HD3 | 2.03 | 0.41 |
| 1:EA:282:CYS:HA | 1:EA:321:GLN:OE1 | 2.21 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:EA:654:LEU:HD22 | 1:FA:534:HIS:CG | 2.56 | 0.41 |
| 1:EB:59:CYS:O | 1:EB:90:ILE:HA | 2.21 | 0.41 |
| 1:EB:168:ILE:HA | 1:EB:172:GLN:OE1 | 2.20 | 0.41 |
| 1:EB:261:PRO:CG | 1:EB:267:VAL:HG21 | 2.50 | 0.41 |
| 1:FA:15:TYR:HD1 | 1:FA:50:MET:HE2 | 1.86 | 0.41 |
| 1:FA:387:GLY:HA3 | 1:FA:402:ILE:HG13 | 2.03 | 0.41 |
| 1:FA:400:ALA:HB1 | 1:FA:457:VAL:HG21 | 2.03 | 0.41 |
| 1:FA:685:ARG:O | 1:FA:688:LEU:HB3 | 2.21 | 0.41 |
| 1:FA:731:GLU:OE1 | 1:FA:734:ARG:NE | 2.54 | 0.41 |
| 1:FA:750:ALA:O | 1:FA:754:GLU:HG2 | 2.21 | 0.41 |
| 1:FB:57:HIS:HA | 1:FB:111:PRO:HA | 2.03 | 0.41 |
| 1:FB:76:ASP:N | 1:FB:80:GLN:O | 2.54 | 0.41 |
| 1:FB:227:LEU:HB3 | 1:FB:251:VAL:CG2 | 2.51 | 0.41 |
| 1:FB:688:LEU:O | 1:FB:692:LYS:HG3 | 2.21 | 0.41 |
| 1:G:3:THR:HB | 1:G:6:PHE:CE1 | 2.56 | 0.41 |
| 1:GA:410:GLN:O | 1:GA:411:ASP:CG | 2.64 | 0.41 |
| 1:GA:662:ILE:HG23 | 1:GA:663:GLU:N | 2.36 | 0.41 |
| 1:GB:9:ARG:HA | 1:GB:34:THR:HA | 2.02 | 0.41 |
| 1:GB:174:LEU:HD21 | 1:GB:212:VAL:CB | 2.51 | 0.41 |
| 1:GB:181:GLU:OE2 | 1:GB:191:VAL:HG12 | 2.21 | 0.41 |
| 1:GB:363:LEU:HD23 | 1:GB:363:LEU:N | 2.36 | 0.41 |
| 1:GB:685:ARG:O | 1:GB:688:LEU:HB3 | 2.21 | 0.41 |
| 1:H:53:VAL:HG12 | 1:H:93:ALA:HA | 2.01 | 0.41 |
| 1:H:273:ILE:HD13 | 1:I:296:LEU:HD13 | 2.03 | 0.41 |
| 1:H:501:SER:HA | 1:H:507:ARG:O | 2.21 | 0.41 |
| 1:H:698:GLU:HB2 | 1:I:690:ARG:NH2 | 2.35 | 0.41 |
| 1:H:768:LEU:HD23 | 1:H:768:LEU:C | 2.46 | 0.41 |
| 1:HA:271:VAL:HG13 | 1:HA:309:PHE:HD2 | 1.84 | 0.41 |
| 1:HA:537:LEU:HD11 | 1:HA:643:VAL:C | 2.46 | 0.41 |
| 1:HA:676:GLU:O | 1:HA:680:LEU:HG | 2.21 | 0.41 |
| 1:HA:777:LEU:HD12 | 1:HA:781:VAL:HG13 | 2.03 | 0.41 |
| 1:HB:56:ARG:HA | 1:HB:112:LEU:HD13 | 2.03 | 0.41 |
| 1:HB:121:LEU:HA | 1:HB:162:ILE:HG22 | 2.03 | 0.41 |
| 1:HB:273:ILE:HB | 1:HB:309:PHE:CZ | 2.56 | 0.41 |
| 1:HB:339:PRO:HD3 | 1:HB:353:ALA:HB2 | 2.03 | 0.41 |
| 1:HB:460:TYR:OH | 1:HB:463:PRO:HD3 | 2.21 | 0.41 |
| 1:HB:770:LEU:HB3 | 1:HB:774:ARG:NH1 | 2.35 | 0.41 |
| 1:IA:177:ARG:HH22 | 1:IA:213:LEU:HD11 | 1.86 | 0.41 |
| 1:IA:661:ALA:HA | 1:IA:664:ILE:HD12 | 2.03 | 0.41 |
| 1:IA:767:GLU:CD | 1:IA:768:LEU:N | 2.79 | 0.41 |
| 1:IB:146:GLU:N | 1:IB:146:GLU:OE1 | 2.54 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:IB:281:TYR:CE1 | 1:IB:321:GLN:HB2 | 2.56 | 0.41 |
| 1:IB:604:PHE:O | 1:IB:623:ARG:NE | 2.54 | 0.41 |
| 1:J:182:CYS:SG | 1:J:209:PHE:CD1 | 3.13 | 0.41 |
| 1:J:527:ILE:O | 1:J:527:ILE:HG13 | 2.20 | 0.41 |
| 1:J:606:PHE:O | 1:J:607:GLU:C | 2.64 | 0.41 |
| 1:JA:157:VAL:HG12 | 1:JA:158:GLU:N | 2.35 | 0.41 |
| 1:JA:591:PHE:O | 1:JA:595:SER:N | 2.54 | 0.41 |
| 1:K:390:VAL:HG23 | 1:K:413:VAL:O | 2.21 | 0.41 |
| 1:KA:55:PRO:O | 1:KA:56:ARG:HG2 | 2.21 | 0.41 |
| 1:KB:168:ILE:HG22 | 1:KB:204:TYR:H | 1.86 | 0.41 |
| 1:KB:170:GLN:O | 1:KB:171:ASN:CG | 2.64 | 0.41 |
| 1:KB:231:ALA:HB3 | 1:KB:246:GLY:N | 2.36 | 0.41 |
| 1:KB:365:TYR:CG | 1:KB:366:VAL:N | 2.89 | 0.41 |
| 1:L:267:VAL:C | 1:L:268:LEU:HD12 | 2.46 | 0.41 |
| 1:L:470:VAL:HG22 | 1:L:471:TYR:N | 2.36 | 0.41 |
| 1:LA:99:LEU:HD12 | 1:LA:103:GLU:OE1 | 2.21 | 0.41 |
| 1:LA:116:LEU:HB2 | 1:LA:119:THR:HG22 | 2.03 | 0.41 |
| 1:LA:143:TRP:N | 1:LA:143:TRP:CE3 | 2.89 | 0.41 |
| 1:LA:390:VAL:HG23 | 1:LA:413:VAL:O | 2.20 | 0.41 |
| 1:LA:495:PHE:HD2 | 1:LA:514:LEU:HD11 | 1.85 | 0.41 |
| 1:LB:416:GLU:HG2 | 1:LB:455:THR:HG22 | 2.03 | 0.41 |
| 1:LB:797:GLN:OE1 | 1:MB:792:VAL:HG21 | 2.21 | 0.41 |
| 1:M:391:GLN:N | 1:M:415:TRP:HB2 | 2.36 | 0.41 |
| 1:M:768:LEU:HD21 | 1:N:766:ARG:CD | 2.50 | 0.41 |
| 1:MA:15:TYR:HE1 | 1:MA:50:MET:HA | 1.86 | 0.41 |
| 1:MA:124:LYS:HA | 1:MA:141:ASP:O | 2.21 | 0.41 |
| 1:MA:286:ASP:O | 1:MA:294:ASN:OD1 | 2.39 | 0.41 |
| 1:MA:301:VAL:HG22 | 1:MA:302:VAL:N | 2.36 | 0.41 |
| 1:MA:389:TYR:CZ | 1:MA:457:VAL:HA | 2.56 | 0.41 |
| 1:MB:17:HIS:CD2 | 1:MB:28:VAL:HG23 | 2.55 | 0.41 |
| 1:MB:56:ARG:O | 1:MB:112:LEU:N | 2.53 | 0.41 |
| 1:MB:466:ALA:O | 1:MB:518:LEU:HD21 | 2.20 | 0.41 |
| 1:MB:775:ALA:HB1 | 1:NB:770:LEU:HD22 | 2.03 | 0.41 |
| 1:NA:9:ARG:HB3 | 1:NA:34:THR:HG22 | 2.03 | 0.41 |
| 1:NA:28:VAL:O | 1:NA:28:VAL:HG13 | 2.21 | 0.41 |
| 1:NA:259:HIS:CG | 1:NA:260:VAL:N | 2.89 | 0.41 |
| 1:NB:358:LEU:HD12 | 1:NB:359:ILE:N | 2.36 | 0.41 |
| 1:OA:332:LEU:HD23 | 1:OA:373:VAL:HG13 | 2.02 | 0.41 |
| 1:OA:351:HIS:CE1 | 1:OA:357:TRP:CD1 | 3.08 | 0.41 |
| 1:OA:575:ILE:HD11 | 1:OA:635:VAL:HG21 | 2.03 | 0.41 |
| 1:OA:716:VAL:HB | 1:PA:707:LEU:HD22 | 2.02 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OB:7:ILE:O | 1:OB:7:ILE:HG22 | 2.21 | 0.41 |
| 1:OB:57:HIS:HA | 1:OB:110:THR:O | 2.21 | 0.41 |
| 1:OB:129:PHE:HZ | 1:OB:157:VAL:HG22 | 1.84 | 0.41 |
| 1:OB:177:ARG:H | 1:OB:213:LEU:HD23 | 1.86 | 0.41 |
| 1:OB:185:ARG:HE | 1:OB:204:TYR:HE1 | 1.68 | 0.41 |
| 1:OB:349:VAL:HG12 | 1:OB:351:HIS:N | 2.36 | 0.41 |
| 1:P:74:LEU:O | 1:P:81:VAL:HG23 | 2.21 | 0.41 |
| 1:PB:62:ALA:HB3 | 1:PB:104:VAL:O | 2.21 | 0.41 |
| 1:PB:115:VAL:HG23 | 1:PB:147:GLY:O | 2.20 | 0.41 |
| 1:PB:768:LEU:HD21 | 1:QB:766:ARG:CD | 2.51 | 0.41 |
| 1:Q:19:LEU:HB2 | 1:Q:44:LEU:HD21 | 2.02 | 0.41 |
| 1:Q:545:TRP:HA | 1:Q:636:SER:H | 1.86 | 0.41 |
| 1:QA:390:VAL:HA | 1:QA:415:TRP:H | 1.86 | 0.41 |
| 1:QA:604:PHE:CE1 | 1:QA:624:ASP:O | 2.74 | 0.41 |
| 1:QB:46:ALA:O | 1:QB:48:MET:HE3 | 2.21 | 0.41 |
| 1:R:274:THR:CG2 | 1:R:310:LEU:HD21 | 2.51 | 0.41 |
| 1:R:545:TRP:CE3 | 1:R:633:LEU:HD11 | 2.53 | 0.41 |
| 1:RA:85:HIS:CG | 1:RA:86:ALA:H | 2.39 | 0.41 |
| 1:RA:332:LEU:HB2 | 1:RA:334:LEU:HD11 | 2.02 | 0.41 |
| 1:RA:335:ARG:HB2 | 1:RA:356:HIS:ND1 | 2.35 | 0.41 |
| 1:RB:52:THR:HG22 | 1:RB:96:PRO:CD | 2.51 | 0.41 |
| 1:RB:122:HIS:CG | 1:RB:123:LEU:N | 2.89 | 0.41 |
| 1:RB:775:ALA:CB | 1:SB:770:LEU:HD13 | 2.51 | 0.41 |
| 1:S:228:HIS:HA | 1:S:250:LEU:HD23 | 2.02 | 0.41 |
| 1:SA:497:VAL:HG23 | 1:SA:512:ARG:HH11 | 1.86 | 0.41 |
| 1:SB:259:HIS:CG | 1:SB:260:VAL:N | 2.89 | 0.41 |
| 1:SB:566:ASP:OD1 | 1:SB:566:ASP:C | 2.64 | 0.41 |
| 1:T:53:VAL:HG12 | 1:T:93:ALA:H | 1.85 | 0.41 |
| 1:T:137:VAL:HG11 | 1:T:143:TRP:CE3 | 2.55 | 0.41 |
| 1:TA:391:GLN:NE2 | 1:TA:415:TRP:CD1 | 2.89 | 0.41 |
| 1:TA:591:PHE:O | 1:TA:595:SER:N | 2.54 | 0.41 |
| 1:TB:62:ALA:N | 1:TB:106:GLU:OE1 | 2.53 | 0.41 |
| 1:UA:95:ASP:O | 1:UA:96:PRO:C | 2.63 | 0.41 |
| 1:UA:575:ILE:HG22 | 1:UA:575:ILE:O | 2.21 | 0.41 |
| 1:UA:591:PHE:CD1 | 1:UA:591:PHE:C | 2.99 | 0.41 |
| 1:UB:221:LEU:HD13 | 1:UB:252:THR:C | 2.46 | 0.41 |
| 1:UB:499:SER:O | 1:UB:509:HIS:HA | 2.21 | 0.41 |
| 1:UB:528:THR:HG22 | 1:UB:529:ILE:N | 2.35 | 0.41 |
| 1:UB:564:VAL:HG12 | 1:UB:565:PRO:O | 2.21 | 0.41 |
| 1:V:19:LEU:HB2 | 1:V:44:LEU:HD21 | 2.03 | 0.41 |
| 1:VA:60:THR:O | 1:VA:105:LEU:HD12 | 2.20 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:VA:285:LEU:HD12 | 1:VA:317:GLU:HA | 2.02 | 0.41 |
| 1:VA:333:LEU:HD23 | 1:VA:374:VAL:CG1 | 2.51 | 0.41 |
| 1:VA:531:THR:CG2 | 1:VA:537:LEU:HD11 | 2.51 | 0.41 |
| 1:VB:344:GLU:OE1 | 1:VB:371:VAL:HG23 | 2.20 | 0.41 |
| 1:VB:595:SER:O | 1:VB:599:ILE:HD12 | 2.21 | 0.41 |
| 1:VB:662:ILE:HG21 | 1:WB:653:ALA:CB | 2.51 | 0.41 |
| 1:W:285:LEU:HD23 | 1:W:299:LYS:CD | 2.50 | 0.41 |
| 1:WA:120:ALA:HB1 | 1:WA:144:LEU:HD13 | 2.02 | 0.41 |
| 1:WB:375:GLU:OE2 | 1:WB:377:ARG:CD | 2.69 | 0.41 |
| 1:WB:547:PHE:CE1 | 1:WB:633:LEU:HB2 | 2.57 | 0.41 |
| 1:X:600:ARG:NE | 1:X:600:ARG:HA | 2.36 | 0.41 |
| 1:XB:58:TYR:CB | 1:XB:91:ARG:O | 2.69 | 0.41 |
| 1:Y:115:VAL:HG12 | 1:Y:121:LEU:HD11 | 2.02 | 0.41 |
| 1:Y:229:LEU:O | 1:Y:249:TRP:CD2 | 2.74 | 0.41 |
| 1:YA:275:THR:O | 1:YA:320:ILE:HD13 | 2.21 | 0.41 |
| 1:YA:426:LEU:HD11 | 1:YA:428:ASN:OD1 | 2.21 | 0.41 |
| 1:YA:770:LEU:O | 1:YA:774:ARG:HD3 | 2.21 | 0.41 |
| 1:YB:310:LEU:HD11 | 1:YB:316:LEU:N | 2.36 | 0.41 |
| 1:YB:345:ASP:HB3 | 1:YB:349:VAL:O | 2.20 | 0.41 |
| 1:YB:498:LEU:N | 1:YB:513:ALA:O | 2.54 | 0.41 |
| 1:Z:256:THR:HG23 | 1:Z:256:THR:O | 2.21 | 0.41 |
| 1:Z:340:LEU:HD12 | 1:Z:351:HIS:HB2 | 2.03 | 0.41 |
| 1:Z:351:HIS:CE1 | 1:Z:357:TRP:CD1 | 3.08 | 0.41 |
| 1:Z:522:PHE:HA | 1:Z:543:TYR:O | 2.21 | 0.41 |
| 1:ZB:387:GLY:O | 1:ZB:388:ILE:HG23 | 2.21 | 0.41 |
| 1:ZB:468:VAL:O | 1:ZB:480:VAL:HA | 2.21 | 0.41 |
| 1:ZB:641:GLN:N | 1:ZB:641:GLN:OE1 | 2.54 | 0.41 |
| 1:A:45:PHE:CD1 | 1:A:48:MET:HG2 | 2.55 | 0.40 |
| 1:A:121:LEU:HD12 | 1:A:121:LEU:O | 2.21 | 0.40 |
| 1:A:151:TYR:CE2 | 1:A:153:PRO:HA | 2.56 | 0.40 |
| 1:A:165:ALA:HA | 1:A:205:LEU:HA | 2.03 | 0.40 |
| 1:A:179:ARG:NH2 | 1:A:211:GLU:HA | 2.37 | 0.40 |
| 1:A:647:ASP:OD1 | 1:A:647:ASP:C | 2.64 | 0.40 |
| 1:AA:60:THR:HG22 | 1:AA:90:ILE:CG1 | 2.50 | 0.40 |
| 1:AA:653:ALA:O | 1:AA:656:ARG:HG2 | 2.20 | 0.40 |
| 1:AA:731:GLU:CD | 1:AA:734:ARG:HE | 2.29 | 0.40 |
| 1:AA:755:THR:HG21 | 1:Z:761:ARG:CG | 2.51 | 0.40 |
| 1:AB:353:ALA:HB3 | 1:ZA:364:GLU:N | 2.36 | 0.40 |
| 1:AB:588:PHE:CD1 | 1:ZA:661:ALA:HB1 | 2.57 | 0.40 |
| 1:AC:59:CYS:HB3 | 1:AC:105:LEU:HD11 | 2.02 | 0.40 |
| 1:AC:304:GLY:C | 1:AC:305:GLU:HG3 | 2.47 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AC:755:THR:HG23 | 1:ZB:761:ARG:HG3 | 2.02 | 0.40 |
| 1:B:20:ASP:HA | 1:B:40:ASN:O | 2.20 | 0.40 |
| 1:B:727:GLU:CD | 1:B:727:GLU:C | 2.89 | 0.40 |
| 1:BA:163:ILE:HG13 | 1:BA:205:LEU:HD11 | 2.03 | 0.40 |
| 1:BA:170:GLN:OE1 | 1:BA:201:VAL:HG11 | 2.20 | 0.40 |
| 1:BA:325:VAL:O | 1:BA:325:VAL:HG13 | 2.21 | 0.40 |
| 1:BA:576:ALA:O | 1:BA:579:VAL:HB | 2.21 | 0.40 |
| 1:BA:633:LEU:HD12 | 1:BA:634:VAL:H | 1.86 | 0.40 |
| 1:BB:203:ALA:HB2 | 1:CB:192:THR:HB | 2.03 | 0.40 |
| 1:C:301:VAL:HG22 | 1:C:302:VAL:N | 2.36 | 0.40 |
| 1:C:349:VAL:HG11 | 1:C:351:HIS:NE2 | 2.35 | 0.40 |
| 1:C:377:ARG:NH2 | 1:C:409:THR:O | 2.54 | 0.40 |
| 1:C:530:GLU:HG2 | 1:C:536:ARG:HA | 2.02 | 0.40 |
| 1:C:556:GLN:CD | 1:C:556:GLN:N | 2.79 | 0.40 |
| 1:CA:57:HIS:HB3 | 1:CA:109:ILE:HG23 | 2.03 | 0.40 |
| 1:CA:121:LEU:HB3 | 1:CA:145:PHE:HB3 | 2.02 | 0.40 |
| 1:CA:580:ARG:NH2 | 1:CA:584:ALA:HB2 | 2.36 | 0.40 |
| 1:CA:777:LEU:HD11 | 1:CA:781:VAL:HG13 | 2.03 | 0.40 |
| 1:CB:340:LEU:HD11 | 1:CB:371:VAL:HG22 | 2.02 | 0.40 |
| 1:CB:406:TYR:CG | 1:CB:407:MET:N | 2.89 | 0.40 |
| 1:CB:468:VAL:HG13 | 1:CB:514:LEU:CD1 | 2.40 | 0.40 |
| 1:CB:652:ASP:O | 1:CB:656:ARG:HD3 | 2.21 | 0.40 |
| 1:D:81:VAL:HG22 | 1:D:82:ARG:O | 2.21 | 0.40 |
| 1:D:591:PHE:O | 1:D:595:SER:N | 2.54 | 0.40 |
| 1:D:758:GLU:OE1 | 1:D:762:VAL:HG13 | 2.21 | 0.40 |
| 1:DA:493:GLU:N | 1:DA:493:GLU:OE1 | 2.54 | 0.40 |
| 1:DB:216:VAL:HG22 | 1:DB:217:ASP:H | 1.86 | 0.40 |
| 1:DB:346:GLU:C | 1:DB:347:GLU:HG3 | 2.46 | 0.40 |
| 1:E:6:PHE:N | 1:E:6:PHE:CD1 | 2.89 | 0.40 |
| 1:E:58:TYR:OH | 1:E:60:THR:HA | 2.21 | 0.40 |
| 1:E:165:ALA:O | 1:E:166:THR:C | 2.64 | 0.40 |
| 1:E:305:GLU:O | 1:E:305:GLU:CD | 2.64 | 0.40 |
| 1:EA:61:VAL:HG23 | 1:EA:61:VAL:O | 2.21 | 0.40 |
| 1:EA:76:ASP:H | 1:EA:81:VAL:HA | 1.86 | 0.40 |
| 1:EA:207:ALA:HB3 | 1:EA:210:GLU:HG3 | 2.04 | 0.40 |
| 1:EA:337:LEU:HD21 | 1:EA:372:GLU:HB2 | 2.03 | 0.40 |
| 1:EA:388:ILE:HG22 | 1:EA:456:ARG:CA | 2.51 | 0.40 |
| 1:EA:405:THR:HG21 | 1:FA:393:VAL:O | 2.21 | 0.40 |
| 1:EB:90:ILE:O | 1:EB:92:LEU:HD12 | 2.21 | 0.40 |
| 1:EB:410:GLN:O | 1:EB:411:ASP:OD1 | 2.38 | 0.40 |
| 1:EB:754:GLU:O | 1:EB:758:GLU:HG2 | 2.21 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:F:30:VAL:HG22 | 1:F:31:GLY:N | 2.37 | 0.40 |
| 1:F:389:TYR:CD1 | 1:F:415:TRP:HE3 | 2.39 | 0.40 |
| 1:F:413:VAL:HG22 | 1:F:414:LEU:H | 1.86 | 0.40 |
| 1:FA:177:ARG:HG2 | 1:FA:178:ALA:N | 2.36 | 0.40 |
| 1:FA:226:ALA:HB3 | 1:FA:271:VAL:HG23 | 2.03 | 0.40 |
| 1:FB:16:ILE:HA | 1:FB:45:PHE:CZ | 2.57 | 0.40 |
| 1:FB:228:HIS:HA | 1:FB:250:LEU:HD23 | 2.03 | 0.40 |
| 1:G:6:PHE:HB3 | 1:G:37:ARG:N | 2.36 | 0.40 |
| 1:G:60:THR:HG22 | 1:G:90:ILE:CG1 | 2.50 | 0.40 |
| 1:G:60:THR:HA | 1:G:89:GLU:O | 2.20 | 0.40 |
| 1:G:332:LEU:HD23 | 1:G:376:GLU:N | 2.36 | 0.40 |
| 1:G:472:ASP:HA | 1:G:493:GLU:HA | 2.02 | 0.40 |
| 1:GA:10:ILE:O | 1:GA:32:PRO:HA | 2.20 | 0.40 |
| 1:GA:462:VAL:O | 1:GA:484:PRO:HA | 2.21 | 0.40 |
| 1:GA:521:ASP:CG | 1:GA:522:PHE:N | 2.79 | 0.40 |
| 1:GB:129:PHE:O | 1:GB:137:VAL:HB | 2.21 | 0.40 |
| 1:GB:177:ARG:HA | 1:GB:194:GLU:O | 2.21 | 0.40 |
| 1:GB:278:PRO:HA | 1:GB:305:GLU:OE1 | 2.21 | 0.40 |
| 1:GB:497:VAL:HG22 | 1:GB:498:LEU:H | 1.85 | 0.40 |
| 1:H:175:ARG:HA | 1:H:196:TRP:O | 2.21 | 0.40 |
| 1:H:244:ARG:O | 1:H:247:GLU:HB3 | 2.22 | 0.40 |
| 1:H:275:THR:HA | 1:H:307:SER:HA | 2.03 | 0.40 |
| 1:H:750:ALA:HB2 | 1:I:741:VAL:HG22 | 2.03 | 0.40 |
| 1:H:755:THR:H | 1:H:755:THR:HG1 | 1.64 | 0.40 |
| 1:HA:676:GLU:CD | 1:HA:679:ARG:HE | 2.29 | 0.40 |
| 1:HA:772:TYR:CG | 1:IA:766:ARG:HD3 | 2.56 | 0.40 |
| 1:HB:388:ILE:HG12 | 1:HB:401:VAL:HG23 | 2.02 | 0.40 |
| 1:HB:469:GLN:HB2 | 1:HB:480:VAL:HG22 | 2.03 | 0.40 |
| 1:I:180:LYS:HA | 1:I:192:THR:OG1 | 2.21 | 0.40 |
| 1:I:486:LEU:HB2 | 1:J:473:TYR:CD2 | 2.56 | 0.40 |
| 1:IA:221:LEU:HD21 | 1:IA:251:VAL:O | 2.21 | 0.40 |
| 1:IA:541:LEU:HD11 | 1:IA:640:VAL:HG22 | 2.03 | 0.40 |
| 1:IA:745:LYS:O | 1:IA:746:LEU:C | 2.63 | 0.40 |
| 1:IB:281:TYR:CZ | 1:IB:321:GLN:HB2 | 2.56 | 0.40 |
| 1:IB:399:ARG:NE | 1:IB:400:ALA:O | 2.54 | 0.40 |
| 1:IB:754:GLU:HG2 | 1:IB:755:THR:H | 1.85 | 0.40 |
| 1:IB:769:GLU:O | 1:IB:772:TYR:HB3 | 2.22 | 0.40 |
| 1:J:177:ARG:HE | 1:J:195:GLU:HG2 | 1.86 | 0.40 |
| 1:J:262:ASP:CG | 1:J:264:HIS:HD1 | 2.29 | 0.40 |
| 1:J:606:PHE:CD2 | 1:J:621:ARG:O | 2.74 | 0.40 |
| 1:J:689:GLU:HA | 1:J:692:LYS:HD2 | 2.03 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:JA:144:LEU:HD12 | 1:JA:146:GLU:OE1 | 2.21 | 0.40 |
| 1:JA:753:ILE:HG21 | 1:KA:744:ALA:C | 2.46 | 0.40 |
| 1:JB:150:THR:HG23 | 1:JB:150:THR:O | 2.21 | 0.40 |
| 1:K:62:ALA:N | 1:K:106:GLU:OE1 | 2.54 | 0.40 |
| 1:KA:230:ARG:CG | 1:KA:266:GLU:HB3 | 2.51 | 0.40 |
| 1:KA:392:ASP:OD1 | 1:KA:392:ASP:C | 2.64 | 0.40 |
| 1:KB:16:ILE:HD11 | 1:KB:47:PRO:N | 2.36 | 0.40 |
| 1:KB:121:LEU:O | 1:KB:145:PHE:O | 2.39 | 0.40 |
| 1:KB:174:LEU:HD12 | 1:KB:214:ASP:O | 2.21 | 0.40 |
| 1:KB:228:HIS:NE2 | 1:KB:248:GLU:HB3 | 2.36 | 0.40 |
| 1:KB:452:ARG:HE | 1:KB:454:LYS:HA | 1.86 | 0.40 |
| 1:KB:543:TYR:O | 1:KB:545:TRP:HD1 | 2.04 | 0.40 |
| 1:L:65:VAL:HA | 1:L:83:LEU:HG | 2.03 | 0.40 |
| 1:LA:62:ALA:O | 1:LA:63:ASN:C | 2.64 | 0.40 |
| 1:LA:168:ILE:CG2 | 1:LA:215:LEU:HD13 | 2.36 | 0.40 |
| 1:LB:174:LEU:HD12 | 1:LB:214:ASP:O | 2.22 | 0.40 |
| 1:LB:215:LEU:HD12 | 1:LB:216:VAL:N | 2.33 | 0.40 |
| 1:LB:234:ASN:N | 1:LB:245:THR:OG1 | 2.53 | 0.40 |
| 1:LB:583:VAL:O | 1:LB:586:VAL:O | 2.38 | 0.40 |
| 1:M:757:ALA:CB | 1:N:751:LEU:HD23 | 2.48 | 0.40 |
| 1:MA:379:ALA:HB2 | 1:MA:407:MET:HB2 | 2.04 | 0.40 |
| 1:MB:168:ILE:HD11 | 1:MB:204:TYR:HB3 | 2.01 | 0.40 |
| 1:MB:734:ARG:HD3 | 1:MB:738:GLU:OE2 | 2.21 | 0.40 |
| 1:N:517:LEU:HD23 | 1:N:518:LEU:N | 2.36 | 0.40 |
| 1:NA:544:ASN:N | 1:NA:637:SER:O | 2.54 | 0.40 |
| 1:NA:727:GLU:CD | 1:NA:727:GLU:C | 2.88 | 0.40 |
| 1:NB:768:LEU:HD13 | 1:OB:759:LEU:HD22 | 2.02 | 0.40 |
| 1:O:6:PHE:O | 1:O:36:ILE:HA | 2.21 | 0.40 |
| 1:O:162:ILE:H | 1:O:162:ILE:HD12 | 1.86 | 0.40 |
| 1:O:391:GLN:O | 1:O:392:ASP:C | 2.64 | 0.40 |
| 1:OA:490:GLY:O | 1:OA:491:PRO:C | 2.64 | 0.40 |
| 1:P:326:LEU:HD13 | 1:P:359:ILE:O | 2.22 | 0.40 |
| 1:PA:10:ILE:HD13 | 1:PA:29:GLU:O | 2.21 | 0.40 |
| 1:PB:406:TYR:CG | 1:PB:407:MET:N | 2.88 | 0.40 |
| 1:PB:597:ARG:O | 1:PB:601:THR:HG23 | 2.21 | 0.40 |
| 1:Q:201:VAL:HG12 | 1:Q:202:GLY:N | 2.36 | 0.40 |
| 1:QA:10:ILE:O | 1:QA:32:PRO:HA | 2.21 | 0.40 |
| 1:QA:104:VAL:HG22 | 1:QA:105:LEU:N | 2.36 | 0.40 |
| 1:QA:283:VAL:HG12 | 1:QA:284:ILE:N | 2.35 | 0.40 |
| 1:QA:318:GLN:HB2 | 1:QA:321:GLN:NE2 | 2.37 | 0.40 |
| 1:QA:781:VAL:HG23 | 1:QA:782:SER:N | 2.36 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:QB:66:SER:O | 1:QB:73:VAL:HA | 2.21 | 0.40 |
| 1:QB:91:ARG:C | 1:QB:92:LEU:HD22 | 2.46 | 0.40 |
| 1:QB:172:GLN:HB3 | 1:QB:215:LEU:HD11 | 2.03 | 0.40 |
| 1:QB:284:ILE:HD11 | 1:QB:300:ARG:HB3 | 2.02 | 0.40 |
| 1:QB:526:VAL:HG22 | 1:QB:540:GLN:CB | 2.51 | 0.40 |
| 1:R:470:VAL:HG11 | 1:R:479:ARG:CZ | 2.51 | 0.40 |
| 1:R:543:TYR:HB3 | 1:R:638:VAL:HG22 | 2.03 | 0.40 |
| 1:R:592:HIS:CE1 | 1:S:584:ALA:HB1 | 2.55 | 0.40 |
| 1:RA:123:LEU:HD11 | 1:RA:145:PHE:HB2 | 2.04 | 0.40 |
| 1:RA:287:PRO:HD3 | 1:RA:298:GLN:O | 2.21 | 0.40 |
| 1:RA:546:HIS:O | 1:RA:634:VAL:N | 2.54 | 0.40 |
| 1:RB:42:ARG:HA | 1:RB:42:ARG:CZ | 2.51 | 0.40 |
| 1:RB:82:ARG:O | 1:RB:83:LEU:HD12 | 2.21 | 0.40 |
| 1:S:626:ALA:O | 1:S:635:VAL:HG23 | 2.22 | 0.40 |
| 1:SA:126:LEU:O | 1:SA:127:LEU:HD22 | 2.20 | 0.40 |
| 1:SA:380:ILE:H | 1:SA:380:ILE:HD12 | 1.86 | 0.40 |
| 1:SA:724:ALA:HB1 | 1:TA:715:ALA:CA | 2.51 | 0.40 |
| 1:SB:131:ASP:HB3 | 1:SB:137:VAL:HG23 | 2.02 | 0.40 |
| 1:SB:416:GLU:HG2 | 1:SB:455:THR:HG22 | 2.02 | 0.40 |
| 1:SB:469:GLN:CD | 1:SB:469:GLN:C | 2.88 | 0.40 |
| 1:SB:500:LEU:N | 1:SB:511:ARG:O | 2.54 | 0.40 |
| 1:T:56:ARG:O | 1:T:56:ARG:HG2 | 2.21 | 0.40 |
| 1:T:497:VAL:HG22 | 1:T:498:LEU:H | 1.86 | 0.40 |
| 1:T:541:LEU:HD12 | 1:T:640:VAL:HG22 | 2.03 | 0.40 |
| 1:TB:173:ALA:HA | 1:TB:198:VAL:O | 2.21 | 0.40 |
| 1:TB:274:THR:N | 1:TB:308:PHE:O | 2.54 | 0.40 |
| 1:TB:520:PRO:HA | 1:TB:545:TRP:O | 2.20 | 0.40 |
| 1:UA:735:ILE:HD13 | 1:VA:727:GLU:HG2 | 2.01 | 0.40 |
| 1:UB:60:THR:OG1 | 1:UB:88:LEU:HB3 | 2.20 | 0.40 |
| 1:UB:342:GLU:O | 1:UB:346:GLU:HA | 2.21 | 0.40 |
| 1:UB:357:TRP:O | 1:UB:357:TRP:CG | 2.74 | 0.40 |
| 1:UB:470:VAL:HG13 | 1:UB:494:GLN:O | 2.21 | 0.40 |
| 1:V:251:VAL:HA | 1:V:255:ASP:OD2 | 2.20 | 0.40 |
| 1:V:260:VAL:O | 1:V:260:VAL:HG23 | 2.21 | 0.40 |
| 1:VA:338:GLN:O | 1:VA:340:LEU:HD23 | 2.21 | 0.40 |
| 1:VA:459:SER:CA | 1:VA:486:LEU:HD11 | 2.49 | 0.40 |
| 1:VA:658:VAL:O | 1:VA:661:ALA:HB3 | 2.20 | 0.40 |
| 1:VB:122:HIS:HA | 1:VB:144:LEU:CB | 2.51 | 0.40 |
| 1:VB:755:THR:O | 1:VB:759:LEU:HD12 | 2.21 | 0.40 |
| 1:W:110:THR:HB | 1:W:113:GLN:OE1 | 2.21 | 0.40 |
| 1:W:174:LEU:HD21 | 1:W:212:VAL:HG12 | 2.02 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:W:251:VAL:O | 1:W:251:VAL:HG23 | 2.21 | 0.40 |
| 1:W:731:GLU:CD | 1:W:734:ARG:HE | 2.29 | 0.40 |
| 1:W:747:LYS:O | 1:W:750:ALA:HB3 | 2.21 | 0.40 |
| 1:WA:168:ILE:HD11 | 1:WA:204:TYR:HB2 | 2.03 | 0.40 |
| 1:WA:781:VAL:HG23 | 1:WA:782:SER:N | 2.37 | 0.40 |
| 1:WB:7:ILE:HG23 | 1:WB:8:ILE:N | 2.35 | 0.40 |
| 1:WB:7:ILE:O | 1:WB:8:ILE:C | 2.63 | 0.40 |
| 1:WB:167:ILE:HD12 | 1:WB:167:ILE:N | 2.36 | 0.40 |
| 1:WB:219:VAL:HG12 | 1:WB:259:HIS:O | 2.21 | 0.40 |
| 1:WB:310:LEU:HD22 | 1:WB:314:GLU:CB | 2.50 | 0.40 |
| 1:X:374:VAL:HG12 | 1:X:375:GLU:H | 1.87 | 0.40 |
| 1:XA:51:VAL:HB | 1:XA:97:PHE:CE1 | 2.57 | 0.40 |
| 1:XA:464:HIS:CG | 1:YA:496:THR:HG1 | 2.37 | 0.40 |
| 1:XB:225:THR:HB | 1:XB:270:VAL:HG11 | 2.03 | 0.40 |
| 1:XB:228:HIS:N | 1:XB:250:LEU:HD23 | 2.36 | 0.40 |
| 1:XB:482:PHE:HB2 | 1:XB:518:LEU:HD13 | 2.03 | 0.40 |
| 1:Y:546:HIS:CE1 | 1:Y:634:VAL:HB | 2.56 | 0.40 |
| 1:YA:11:PRO:CB | 1:YA:12:PRO:HD2 | 2.51 | 0.40 |
| 1:YA:172:GLN:HB3 | 1:YA:215:LEU:HD11 | 2.03 | 0.40 |
| 1:YA:274:THR:HG22 | 1:YA:276:LEU:HD11 | 2.02 | 0.40 |
| 1:YB:17:HIS:CE1 | 1:YB:99:LEU:O | 2.75 | 0.40 |
| 1:YB:90:ILE:HG22 | 1:YB:92:LEU:HD12 | 2.03 | 0.40 |
| 1:YB:526:VAL:HG13 | 1:YB:538:GLN:NE2 | 2.35 | 0.40 |
| 1:Z:274:THR:N | 1:Z:308:PHE:O | 2.54 | 0.40 |
| 1:Z:276:LEU:HB2 | 1:Z:304:GLY:HA2 | 2.02 | 0.40 |
| 1:Z:331:GLY:C | 1:Z:407:MET:HE1 | 2.46 | 0.40 |
| 1:ZA:224:LYS:HA | 1:ZA:273:ILE:HG22 | 2.04 | 0.40 |
| 1:ZA:300:ARG:CG | 1:ZA:301:VAL:N | 2.84 | 0.40 |
| 1:ZA:342:GLU:HA | 1:ZA:349:VAL:O | 2.21 | 0.40 |
| 1:ZB:112:LEU:HD23 | 1:ZB:150:THR:CG2 | 2.51 | 0.40 |
| 1:ZB:225:THR:CB | 1:ZB:270:VAL:HG12 | 2.51 | 0.40 |
| 1:ZB:345:ASP:OD1 | 1:ZB:346:GLU:N | 2.54 | 0.40 |
| 1:ZB:647:ASP:HB3 | 1:ZB:650:THR:OG1 | 2.21 | 0.40 |
| 1:A:53:VAL:N | 1:A:54:PRO:CD | 2.84 | 0.40 |
| 1:A:275:THR:HG23 | 1:A:275:THR:O | 2.21 | 0.40 |
| 1:A:604:PHE:CG | 1:A:623:ARG:O | 2.74 | 0.40 |
| 1:A:756:GLU:HA | 1:A:759:LEU:HD12 | 2.02 | 0.40 |
| 1:AA:346:GLU:C | 1:AA:347:GLU:HG3 | 2.45 | 0.40 |
| 1:AA:389:TYR:HB3 | 1:AA:415:TRP:HE3 | 1.85 | 0.40 |
| 1:AA:535:ALA:HB2 | 1:Z:658:VAL:HG21 | 2.03 | 0.40 |
| 1:AB:3:THR:O | 1:AB:6:PHE:CG | 2.74 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AB:65:VAL:HA | 1:AB:83:LEU:HA | 2.03 | 0.40 |
| 1:AB:583:VAL:HG13 | 1:AB:584:ALA:N | 2.36 | 0.40 |
| 1:B:120:ALA:HB1 | 1:B:144:LEU:HD12 | 2.02 | 0.40 |
| 1:B:365:TYR:CG | 1:B:366:VAL:N | 2.88 | 0.40 |
| 1:B:591:PHE:O | 1:B:595:SER:N | 2.55 | 0.40 |
| 1:BA:17:HIS:CB | 1:BA:44:LEU:HB2 | 2.51 | 0.40 |
| 1:BA:387:GLY:O | 1:BA:456:ARG:HD3 | 2.21 | 0.40 |
| 1:BA:754:GLU:O | 1:BA:758:GLU:HG2 | 2.20 | 0.40 |
| 1:BA:763:GLN:O | 1:BA:767:GLU:HG3 | 2.21 | 0.40 |
| 1:BB:27:ARG:CG | 1:BB:28:VAL:N | 2.84 | 0.40 |
| 1:BB:502:ALA:CB | 1:BB:510:ALA:HB3 | 2.50 | 0.40 |
| 1:BB:557:GLU:O | 1:BB:561:LEU:HG | 2.20 | 0.40 |
| 1:C:121:LEU:HD11 | 1:C:145:PHE:HB3 | 2.02 | 0.40 |
| 1:C:128:ASP:CG | 1:C:137:VAL:O | 2.65 | 0.40 |
| 1:C:410:GLN:O | 1:C:411:ASP:OD1 | 2.39 | 0.40 |
| 1:C:420:PRO:N | 1:C:421:PRO:CD | 2.85 | 0.40 |
| 1:C:627:VAL:O | 1:C:627:VAL:HG23 | 2.21 | 0.40 |
| 1:C:785:GLN:O | 1:C:786:GLN:C | 2.64 | 0.40 |
| 1:C:802:ILE:HG13 | 1:D:804:PRO:HB3 | 2.02 | 0.40 |
| 1:CA:10:ILE:HA | 1:CA:47:PRO:HB3 | 2.04 | 0.40 |
| 1:CA:35:TYR:O | 1:CA:37:ARG:NH2 | 2.54 | 0.40 |
| 1:CA:177:ARG:O | 1:CA:209:PHE:O | 2.39 | 0.40 |
| 1:CA:227:LEU:HA | 1:CA:270:VAL:HG22 | 2.03 | 0.40 |
| 1:CA:467:ALA:HB3 | 1:CA:516:LEU:HD22 | 2.04 | 0.40 |
| 1:CA:594:ASN:O | 1:CA:595:SER:C | 2.64 | 0.40 |
| 1:CA:712:LEU:O | 1:CA:716:VAL:HG23 | 2.22 | 0.40 |
| 1:CB:174:LEU:HD12 | 1:CB:214:ASP:O | 2.20 | 0.40 |
| 1:CB:460:TYR:CD1 | 1:CB:461:ARG:N | 2.89 | 0.40 |
| 1:DB:335:ARG:O | 1:DB:372:GLU:N | 2.55 | 0.40 |
| 1:EA:137:VAL:CG1 | 1:EA:138:VAL:N | 2.85 | 0.40 |
| 1:EB:65:VAL:HG11 | 1:EB:100:TYR:CB | 2.51 | 0.40 |
| 1:EB:221:LEU:HD13 | 1:EB:252:THR:C | 2.45 | 0.40 |
| 1:EB:284:ILE:HA | 1:EB:316:LEU:HA | 2.04 | 0.40 |
| 1:EB:416:GLU:OE1 | 1:EB:454:LYS:HB2 | 2.21 | 0.40 |
| 1:F:58:TYR:CE1 | 1:F:91:ARG:O | 2.74 | 0.40 |
| 1:F:326:LEU:HD13 | 1:F:331:GLY:HA2 | 2.03 | 0.40 |
| 1:F:416:GLU:OE1 | 1:F:416:GLU:N | 2.55 | 0.40 |
| 1:F:502:ALA:N | 1:F:510:ALA:HB3 | 2.35 | 0.40 |
| 1:FA:121:LEU:HG | 1:FA:121:LEU:O | 2.20 | 0.40 |
| 1:FA:460:TYR:O | 1:FA:487:VAL:N | 2.55 | 0.40 |
| 1:FA:628:PHE:CE1 | 1:FA:635:VAL:HG21 | 2.57 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:FB:34:THR:O | 1:FB:35:TYR:C | 2.65 | 0.40 |
| 1:FB:165:ALA:HB1 | 1:FB:203:ALA:O | 2.22 | 0.40 |
| 1:G:115:VAL:HG23 | 1:G:147:GLY:O | 2.20 | 0.40 |
| 1:G:539:LEU:CD2 | 1:G:541:LEU:CD1 | 3.00 | 0.40 |
| 1:GA:745:LYS:O | 1:GA:746:LEU:C | 2.62 | 0.40 |
| 1:GB:460:TYR:CE2 | 1:GB:463:PRO:HD3 | 2.56 | 0.40 |
| 1:H:461:ARG:HA | 1:H:486:LEU:HA | 2.03 | 0.40 |
| 1:H:502:ALA:HB3 | 1:H:510:ALA:HB3 | 2.03 | 0.40 |
| 1:H:536:ARG:O | 1:H:645:PRO:HA | 2.21 | 0.40 |
| 1:HA:332:LEU:HD23 | 1:HA:333:LEU:O | 2.21 | 0.40 |
| 1:HA:468:VAL:HG11 | 1:HA:495:PHE:HE1 | 1.86 | 0.40 |
| 1:HA:638:VAL:HG12 | 1:HA:639:ASP:N | 2.36 | 0.40 |
| 1:HB:331:GLY:O | 1:HB:377:ARG:N | 2.54 | 0.40 |
| 1:HB:340:LEU:HG | 1:HB:351:HIS:HB2 | 2.01 | 0.40 |
| 1:HB:405:THR:HG23 | 1:IB:396:GLY:HA3 | 2.02 | 0.40 |
| 1:I:88:LEU:HD22 | 1:I:106:GLU:OE2 | 2.21 | 0.40 |
| 1:I:169:ARG:HA | 1:I:201:VAL:C | 2.46 | 0.40 |
| 1:I:179:ARG:NH2 | 1:I:211:GLU:HA | 2.36 | 0.40 |
| 1:I:326:LEU:HB2 | 1:I:363:LEU:O | 2.22 | 0.40 |
| 1:I:326:LEU:HD22 | 1:I:330:GLN:C | 2.46 | 0.40 |
| 1:I:388:ILE:HG22 | 1:I:389:TYR:N | 2.37 | 0.40 |
| 1:IA:115:VAL:HG22 | 1:IA:149:GLY:O | 2.22 | 0.40 |
| 1:IA:176:LEU:HD23 | 1:IA:196:TRP:O | 2.22 | 0.40 |
| 1:IA:230:ARG:HB3 | 1:IA:266:GLU:HB3 | 2.03 | 0.40 |
| 1:IA:273:ILE:O | 1:IA:273:ILE:HG23 | 2.21 | 0.40 |
| 1:IA:540:GLN:HB2 | 1:IA:641:GLN:HG2 | 2.02 | 0.40 |
| 1:IA:604:PHE:HB3 | 1:IA:623:ARG:HB3 | 2.03 | 0.40 |
| 1:IA:755:THR:HG22 | 1:IA:759:LEU:HD12 | 2.02 | 0.40 |
| 1:IB:122:HIS:ND1 | 1:IB:160:VAL:HB | 2.35 | 0.40 |
| 1:IB:259:HIS:CG | 1:IB:260:VAL:N | 2.90 | 0.40 |
| 1:IB:638:VAL:HG12 | 1:IB:639:ASP:N | 2.36 | 0.40 |
| 1:J:271:VAL:O | 1:J:271:VAL:HG23 | 2.22 | 0.40 |
| 1:J:286:ASP:HB3 | 1:J:294:ASN:HB3 | 2.03 | 0.40 |
| 1:J:544:ASN:ND2 | 1:J:636:SER:OG | 2.55 | 0.40 |
| 1:JA:14:HIS:CE1 | 1:JA:49:ARG:NH2 | 2.90 | 0.40 |
| 1:JA:131:ASP:OD2 | 1:JA:136:LYS:HB3 | 2.21 | 0.40 |
| 1:JA:144:LEU:HD12 | 1:JA:144:LEU:C | 2.47 | 0.40 |
| 1:JA:186:ASP:OD1 | 1:JA:188:LYS:HD3 | 2.21 | 0.40 |
| 1:JA:480:VAL:HG12 | 1:JA:481:VAL:N | 2.36 | 0.40 |
| 1:JB:65:VAL:HG23 | 1:JB:67:ARG:HG3 | 2.02 | 0.40 |
| 1:JB:123:LEU:HD11 | 1:JB:145:PHE:HB2 | 2.03 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:JB:391:GLN:HB2 | 1:JB:415:TRP:HB2 | 2.04 | 0.40 |
| 1:K:25:VAL:HG13 | 1:K:80:GLN:N | 2.36 | 0.40 |
| 1:K:66:SER:HA | 1:K:84:ARG:NE | 2.36 | 0.40 |
| 1:K:276:LEU:HD13 | 1:K:281:TYR:HA | 2.02 | 0.40 |
| 1:K:366:VAL:O | 1:K:366:VAL:HG13 | 2.22 | 0.40 |
| 1:K:685:ARG:O | 1:K:689:GLU:HG2 | 2.21 | 0.40 |
| 1:KB:592:HIS:O | 1:LB:584:ALA:HB1 | 2.21 | 0.40 |
| 1:L:104:VAL:HG22 | 1:L:105:LEU:N | 2.36 | 0.40 |
| 1:L:151:TYR:CZ | 1:L:153:PRO:HA | 2.57 | 0.40 |
| 1:LA:115:VAL:HG22 | 1:LA:149:GLY:C | 2.47 | 0.40 |
| 1:LA:389:TYR:N | 1:LA:457:VAL:HG23 | 2.36 | 0.40 |
| 1:LA:538:GLN:N | 1:LA:538:GLN:OE1 | 2.54 | 0.40 |
| 1:LA:751:LEU:HD22 | 1:LA:754:GLU:OE2 | 2.22 | 0.40 |
| 1:LB:170:GLN:HB3 | 1:MB:233:ARG:HE | 1.86 | 0.40 |
| 1:LB:626:ALA:HB1 | 1:LB:628:PHE:CZ | 2.56 | 0.40 |
| 1:M:121:LEU:O | 1:M:144:LEU:HA | 2.21 | 0.40 |
| 1:M:390:VAL:HG23 | 1:M:390:VAL:O | 2.22 | 0.40 |
| 1:M:747:LYS:O | 1:M:751:LEU:HD23 | 2.21 | 0.40 |
| 1:MA:56:ARG:CZ | 1:NA:126:LEU:HB3 | 2.52 | 0.40 |
| 1:MA:60:THR:N | 1:MA:107:LYS:HB3 | 2.35 | 0.40 |
| 1:MB:54:PRO:HD2 | 1:MB:109:ILE:HG23 | 2.04 | 0.40 |
| 1:MB:389:TYR:CE2 | 1:MB:457:VAL:HA | 2.57 | 0.40 |
| 1:MB:706:LEU:HD22 | 1:NB:696:GLN:HB2 | 2.02 | 0.40 |
| 1:N:227:LEU:CA | 1:N:270:VAL:HG22 | 2.50 | 0.40 |
| 1:N:543:TYR:CD1 | 1:N:638:VAL:HG13 | 2.56 | 0.40 |
| 1:N:775:ALA:CB | 1:O:770:LEU:HD13 | 2.51 | 0.40 |
| 1:NA:461:ARG:HA | 1:NA:486:LEU:HD12 | 2.03 | 0.40 |
| 1:NA:761:ARG:O | 1:NA:765:VAL:HG23 | 2.21 | 0.40 |
| 1:NB:25:VAL:HG21 | 1:NB:78:THR:HB | 2.02 | 0.40 |
| 1:NB:56:ARG:NH1 | 1:OB:126:LEU:HD13 | 2.36 | 0.40 |
| 1:NB:60:THR:HG23 | 1:NB:106:GLU:CB | 2.51 | 0.40 |
| 1:NB:460:TYR:CE2 | 1:NB:463:PRO:HD3 | 2.56 | 0.40 |
| 1:O:115:VAL:HB | 1:O:148:PRO:HA | 2.03 | 0.40 |
| 1:O:395:THR:HG23 | 1:O:397:LYS:HB2 | 2.03 | 0.40 |
| 1:O:502:ALA:N | 1:O:510:ALA:HB3 | 2.35 | 0.40 |
| 1:O:607:GLU:HA | 1:O:621:ARG:O | 2.21 | 0.40 |
| 1:OA:60:THR:OG1 | 1:OA:107:LYS:CG | 2.69 | 0.40 |
| 1:OA:168:ILE:HG13 | 1:OA:168:ILE:O | 2.21 | 0.40 |
| 1:OA:349:VAL:HG11 | 1:OA:351:HIS:CE1 | 2.55 | 0.40 |
| 1:OA:423:VAL:O | 1:OA:423:VAL:HG13 | 2.21 | 0.40 |
| 1:OA:538:GLN:C | 1:OA:539:LEU:HD12 | 2.47 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OB:244:ARG:O | 1:OB:247:GLU:HB3 | 2.22 | 0.40 |
| 1:OB:460:TYR:CG | 1:OB:461:ARG:N | 2.89 | 0.40 |
| 1:P:176:LEU:HA | 1:P:211:GLU:O | 2.20 | 0.40 |
| 1:P:256:THR:HG21 | 1:P:259:HIS:HB3 | 2.03 | 0.40 |
| 1:P:358:LEU:HD11 | 1:P:409:THR:HA | 2.04 | 0.40 |
| 1:PA:6:PHE:O | 1:PA:36:ILE:HA | 2.22 | 0.40 |
| 1:PA:56:ARG:O | 1:PA:112:LEU:HD13 | 2.21 | 0.40 |
| 1:PA:100:TYR:O | 1:PA:101:PRO:C | 2.64 | 0.40 |
| 1:PA:105:LEU:HD21 | 1:PA:107:LYS:O | 2.21 | 0.40 |
| 1:PB:54:PRO:HD2 | 1:PB:109:ILE:HG23 | 2.03 | 0.40 |
| 1:PB:250:LEU:HD11 | 1:PB:311:GLN:HA | 2.03 | 0.40 |
| 1:PB:487:VAL:HG22 | 1:PB:488:SER:N | 2.36 | 0.40 |
| 1:Q:377:ARG:HD3 | 1:Q:408:LEU:HB2 | 2.02 | 0.40 |
| 1:Q:461:ARG:CZ | 1:Q:486:LEU:HD13 | 2.52 | 0.40 |
| 1:Q:537:LEU:HA | 1:Q:645:PRO:HA | 2.03 | 0.40 |
| 1:Q:587:THR:HG23 | 1:Q:590:ASP:N | 2.30 | 0.40 |
| 1:QA:3:THR:HG21 | 1:QA:37:ARG:HB2 | 2.02 | 0.40 |
| 1:QA:235:PHE:CG | 1:QA:264:HIS:HB2 | 2.57 | 0.40 |
| 1:QA:489:LEU:HD21 | 1:QA:495:PHE:HD2 | 1.86 | 0.40 |
| 1:QA:504:ARG:HB3 | 1:QA:505:PRO:HD3 | 2.04 | 0.40 |
| 1:R:113:GLN:HB3 | 1:R:150:THR:HA | 2.04 | 0.40 |
| 1:R:362:PRO:O | 1:S:352:GLN:HG3 | 2.21 | 0.40 |
| 1:R:390:VAL:HA | 1:R:413:VAL:O | 2.21 | 0.40 |
| 1:R:782:SER:HA | 1:R:785:GLN:CD | 2.46 | 0.40 |
| 1:RA:464:HIS:HB2 | 1:SA:562:PHE:CD1 | 2.55 | 0.40 |
| 1:RA:603:VAL:O | 1:RA:603:VAL:HG12 | 2.19 | 0.40 |
| 1:RB:56:ARG:NH2 | 1:SB:127:LEU:HD21 | 2.36 | 0.40 |
| 1:RB:58:TYR:CD2 | 1:RB:92:LEU:HD13 | 2.56 | 0.40 |
| 1:RB:346:GLU:C | 1:RB:347:GLU:HG3 | 2.46 | 0.40 |
| 1:RB:468:VAL:HG12 | 1:RB:469:GLN:N | 2.36 | 0.40 |
| 1:RB:527:ILE:HD12 | 1:RB:579:VAL:HG11 | 2.03 | 0.40 |
| 1:RB:579:VAL:O | 1:RB:583:VAL:HG12 | 2.21 | 0.40 |
| 1:S:44:LEU:HD22 | 1:S:45:PHE:CD2 | 2.56 | 0.40 |
| 1:S:287:PRO:O | 1:S:295:GLN:HG2 | 2.21 | 0.40 |
| 1:T:540:GLN:O | 1:T:640:VAL:HG13 | 2.21 | 0.40 |
| 1:TB:304:GLY:O | 1:TB:305:GLU:HG3 | 2.22 | 0.40 |
| 1:TB:380:ILE:HD12 | 1:TB:380:ILE:N | 2.35 | 0.40 |
| 1:TB:779:LEU:HD21 | 1:UB:774:ARG:HA | 2.03 | 0.40 |
| 1:UA:229:LEU:HD22 | 1:UA:265:GLU:HB3 | 2.03 | 0.40 |
| 1:UA:382:LEU:O | 1:VA:396:GLY:HA2 | 2.21 | 0.40 |
| 1:UA:681:GLU:HA | 1:VA:675:HIS:NE2 | 2.37 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:UB:9:ARG:HA | 1:UB:34:THR:HA | 2.02 | 0.40 |
| 1:UB:63:ASN:OD1 | 1:UB:83:LEU:HD23 | 2.22 | 0.40 |
| 1:UB:73:VAL:HG21 | 1:UB:100:TYR:CE2 | 2.55 | 0.40 |
| 1:UB:416:GLU:CD | 1:UB:454:LYS:HE3 | 2.46 | 0.40 |
| 1:V:52:THR:O | 1:V:109:ILE:HD13 | 2.21 | 0.40 |
| 1:V:229:LEU:HD12 | 1:V:249:TRP:NE1 | 2.36 | 0.40 |
| 1:V:326:LEU:O | 1:W:353:ALA:O | 2.40 | 0.40 |
| 1:V:530:GLU:O | 1:V:583:VAL:HG22 | 2.20 | 0.40 |
| 1:VA:420:PRO:HB2 | 1:VA:421:PRO:HD3 | 2.04 | 0.40 |
| 1:W:53:VAL:HG11 | 1:W:92:LEU:HA | 2.03 | 0.40 |
| 1:W:423:VAL:HA | 1:W:426:LEU:HD12 | 2.04 | 0.40 |
| 1:WA:518:LEU:HA | 1:WA:547:PHE:HB2 | 2.04 | 0.40 |
| 1:WA:539:LEU:HD13 | 1:WA:591:PHE:CE1 | 2.56 | 0.40 |
| 1:WB:13:TYR:CA | 1:WB:50:MET:HG2 | 2.51 | 0.40 |
| 1:WB:175:ARG:HE | 1:WB:213:LEU:HB2 | 1.86 | 0.40 |
| 1:WB:520:PRO:HA | 1:WB:545:TRP:O | 2.21 | 0.40 |
| 1:WB:526:VAL:HG13 | 1:WB:540:GLN:N | 2.35 | 0.40 |
| 1:WB:541:LEU:HD23 | 1:WB:640:VAL:HG22 | 2.02 | 0.40 |
| 1:X:16:ILE:HG23 | 1:X:45:PHE:O | 2.20 | 0.40 |
| 1:X:50:MET:SD | 1:X:96:PRO:O | 2.79 | 0.40 |
| 1:X:56:ARG:HD3 | 1:Y:128:ASP:N | 2.36 | 0.40 |
| 1:X:115:VAL:CG1 | 1:X:121:LEU:HD12 | 2.51 | 0.40 |
| 1:X:583:VAL:HG13 | 1:X:584:ALA:N | 2.36 | 0.40 |
| 1:X:731:GLU:O | 1:X:734:ARG:HB3 | 2.21 | 0.40 |
| 1:X:747:LYS:O | 1:X:750:ALA:HB3 | 2.22 | 0.40 |
| 1:XA:567:PHE:CD1 | 1:XA:567:PHE:C | 2.99 | 0.40 |
| 1:XB:59:CYS:SG | 1:XB:105:LEU:HD11 | 2.61 | 0.40 |
| 1:Y:391:GLN:HB3 | 1:Y:398:VAL:HA | 2.02 | 0.40 |
| 1:Y:460:TYR:O | 1:Y:486:LEU:HD12 | 2.21 | 0.40 |
| 1:Y:468:VAL:HG11 | 1:Y:495:PHE:CD1 | 2.55 | 0.40 |
| 1:Y:484:PRO:HB2 | 1:Z:471:TYR:CD1 | 2.57 | 0.40 |
| 1:YA:352:GLN:O | 1:YA:355:ASP:HB3 | 2.21 | 0.40 |
| 1:YA:398:VAL:HG21 | 1:YA:415:TRP:CG | 2.56 | 0.40 |
| 1:YB:127:LEU:HD23 | 1:YB:156:GLU:HA | 2.04 | 0.40 |
| 1:YB:334:LEU:HD11 | 1:YB:359:ILE:HG21 | 2.01 | 0.40 |
| 1:Z:301:VAL:HG22 | 1:Z:302:VAL:N | 2.36 | 0.40 |
| 1:Z:389:TYR:N | 1:Z:455:THR:O | 2.54 | 0.40 |
| 1:ZA:9:ARG:HB3 | 1:ZA:34:THR:HG22 | 2.02 | 0.40 |
| 1:ZA:56:ARG:HH11 | 1:ZA:111:PRO:HB2 | 1.85 | 0.40 |
| 1:ZA:337:LEU:HD12 | 1:ZA:370:LYS:O | 2.20 | 0.40 |
| 1:ZA:751:LEU:O | 1:ZA:754:GLU:HG2 | 2.21 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:ZB:58:TYR:CD1 | 1:ZB:92:LEU:HA | 2.57 | 0.40 |
| 1:ZB:175:ARG:HA | 1:ZB:197:LEU:HA | 2.04 | 0.40 |
| 1:ZB:504:ARG:HA | 1:ZB:504:ARG:NE | 2.36 | 0.40 |
| 1:A:121:LEU:HD12 | 1:A:121:LEU:C | 2.47 | 0.40 |
| 1:A:316:LEU:HD12 | 1:A:317:GLU:N | 2.36 | 0.40 |
| 1:A:323:VAL:HB | 1:A:364:GLU:OE2 | 2.21 | 0.40 |
| 1:A:671:ALA:O | 1:A:674:LYS:HG2 | 2.22 | 0.40 |
| 1:AB:126:LEU:HD12 | 1:AB:156:GLU:CA | 2.48 | 0.40 |
| 1:AB:273:ILE:CG2 | 1:BB:296:LEU:HD22 | 2.51 | 0.40 |
| 1:AB:288:VAL:HG23 | 1:AB:288:VAL:O | 2.21 | 0.40 |
| 1:B:50:MET:O | 1:B:51:VAL:C | 2.63 | 0.40 |
| 1:B:333:LEU:HD23 | 1:B:374:VAL:CG1 | 2.50 | 0.40 |
| 1:B:338:GLN:HB3 | 1:B:339:PRO:HD2 | 2.03 | 0.40 |
| 1:B:416:GLU:HG2 | 1:B:455:THR:HG22 | 2.02 | 0.40 |
| 1:B:529:ILE:HD13 | 1:B:539:LEU:HB2 | 2.03 | 0.40 |
| 1:BA:50:MET:HB3 | 1:BA:97:PHE:C | 2.46 | 0.40 |
| 1:BA:160:VAL:HG12 | 1:BA:161:GLU:N | 2.37 | 0.40 |
| 1:BA:705:GLU:HA | 1:BA:708:GLU:CD | 2.46 | 0.40 |
| 1:BB:276:LEU:HD12 | 1:BB:303:LYS:O | 2.20 | 0.40 |
| 1:C:69:ALA:HB3 | 1:C:72:LEU:HB3 | 2.03 | 0.40 |
| 1:C:238:PHE:CE1 | 1:C:259:HIS:CE1 | 3.10 | 0.40 |
| 1:C:536:ARG:HD3 | 1:C:646:VAL:HG11 | 2.02 | 0.40 |
| 1:CA:160:VAL:O | 1:CA:161:GLU:C | 2.63 | 0.40 |
| 1:CA:316:LEU:HG | 1:CA:319:GLY:O | 2.21 | 0.40 |
| 1:CB:387:GLY:C | 1:CB:457:VAL:HG23 | 2.47 | 0.40 |
| 1:D:53:VAL:HB | 1:D:94:GLN:N | 2.36 | 0.40 |
| 1:D:73:VAL:CG1 | 1:D:81:VAL:HG23 | 2.51 | 0.40 |
| 1:D:112:LEU:HD11 | 1:D:153:PRO:HD2 | 2.03 | 0.40 |
| 1:D:182:CYS:O | 1:D:189:GLU:HA | 2.21 | 0.40 |
| 1:D:389:TYR:CE1 | 1:D:489:LEU:O | 2.74 | 0.40 |
| 1:D:416:GLU:CD | 1:D:454:LYS:HB2 | 2.46 | 0.40 |
| 1:DA:25:VAL:HG13 | 1:DA:79:GLY:C | 2.47 | 0.40 |
| 1:DA:160:VAL:HG12 | 1:DA:161:GLU:H | 1.86 | 0.40 |
| 1:DA:170:GLN:HA | 1:DA:201:VAL:HG13 | 2.04 | 0.40 |
| 1:DA:391:GLN:CB | 1:DA:415:TRP:HB2 | 2.51 | 0.40 |
| 1:DA:779:LEU:HD23 | 1:DA:779:LEU:C | 2.46 | 0.40 |
| 1:DB:273:ILE:HG13 | 1:DB:308:PHE:O | 2.21 | 0.40 |
| 1:DB:281:TYR:N | 1:DB:321:GLN:O | 2.55 | 0.40 |
| 1:E:316:LEU:HD11 | 1:E:319:GLY:O | 2.21 | 0.40 |
| 1:E:346:GLU:C | 1:E:347:GLU:HG3 | 2.47 | 0.40 |
| 1:E:380:ILE:H | 1:E:380:ILE:HD12 | 1.86 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:E:413:VAL:HG22 | 1:E:414:LEU:N | 2.35 | 0.40 |
| 1:E:662:ILE:O | 1:E:666:THR:HG23 | 2.22 | 0.40 |
| 1:EA:17:HIS:CD2 | 1:EA:28:VAL:HG23 | 2.57 | 0.40 |
| 1:EA:84:ARG:HB3 | 1:EA:87:ASP:HB2 | 2.04 | 0.40 |
| 1:EB:16:ILE:HA | 1:EB:45:PHE:CE1 | 2.57 | 0.40 |
| 1:EB:59:CYS:SG | 1:EB:108:ASP:C | 3.05 | 0.40 |
| 1:EB:327:SER:H | 1:EB:330:GLN:HB2 | 1.87 | 0.40 |
| 1:EB:417:LYS:O | 1:EB:454:LYS:HB3 | 2.21 | 0.40 |
| 1:EB:743:GLN:O | 1:EB:747:LYS:CB | 2.69 | 0.40 |
| 1:F:112:LEU:HD23 | 1:F:150:THR:CG2 | 2.49 | 0.40 |
| 1:FA:68:ASP:OD1 | 1:FA:68:ASP:N | 2.53 | 0.40 |
| 1:FA:131:ASP:OD2 | 1:FA:137:VAL:HG23 | 2.20 | 0.40 |
| 1:FA:204:TYR:HE2 | 1:FA:210:GLU:OE1 | 2.04 | 0.40 |
| 1:FA:279:HIS:O | 1:FA:322:ASP:HA | 2.20 | 0.40 |
| 1:FB:704:LYS:HA | 1:FB:707:LEU:HD12 | 2.02 | 0.40 |
| 1:G:117:PRO:HA | 1:G:147:GLY:HA2 | 2.03 | 0.40 |
| 1:G:125:ALA:HA | 1:G:157:VAL:HA | 2.03 | 0.40 |
| 1:G:167:ILE:H | 1:G:167:ILE:HD12 | 1.87 | 0.40 |
| 1:G:787:LEU:HD23 | 1:H:781:VAL:HG12 | 2.04 | 0.40 |
| 1:GA:65:VAL:HA | 1:GA:83:LEU:HA | 2.03 | 0.40 |
| 1:GA:181:GLU:CD | 1:GA:181:GLU:C | 2.90 | 0.40 |
| 1:GA:257:GLU:HG3 | 1:HA:245:THR:HB | 2.03 | 0.40 |
| 1:GA:570:ASP:OD1 | 1:GA:571:ALA:N | 2.54 | 0.40 |
| 1:GB:169:ARG:HD3 | 1:GB:172:GLN:OE1 | 2.22 | 0.40 |
| 1:GB:522:PHE:HA | 1:GB:545:TRP:CD1 | 2.57 | 0.40 |
| 1:GB:662:ILE:HG21 | 1:HB:653:ALA:HB1 | 2.03 | 0.40 |
| 1:H:129:PHE:CD1 | 1:H:156:GLU:HB3 | 2.57 | 0.40 |
| 1:H:173:ALA:HB1 | 1:H:197:LEU:HD12 | 2.03 | 0.40 |
| 1:H:196:TRP:HA | 1:H:263:VAL:HG11 | 2.04 | 0.40 |
| 1:H:498:LEU:HB2 | 1:H:513:ALA:HB3 | 2.02 | 0.40 |
| 1:HA:470:VAL:HG11 | 1:HA:493:GLU:HB3 | 2.03 | 0.40 |
| 1:HA:523:PHE:O | 1:HA:542:ALA:HA | 2.20 | 0.40 |
| 1:HB:165:ALA:HB2 | 1:HB:205:LEU:HD13 | 2.03 | 0.40 |
| 1:HB:388:ILE:O | 1:HB:401:VAL:HG22 | 2.21 | 0.40 |
| 1:I:29:GLU:O | 1:I:30:VAL:O | 2.39 | 0.40 |
| 1:I:125:ALA:CB | 1:I:137:VAL:HG13 | 2.51 | 0.40 |
| 1:I:334:LEU:HB2 | 1:I:357:TRP:NE1 | 2.36 | 0.40 |
| 1:I:469:GLN:HB2 | 1:I:480:VAL:HG22 | 2.02 | 0.40 |
| 1:I:776:GLN:NE2 | 1:J:770:LEU:HD21 | 2.35 | 0.40 |
| 1:IA:43:VAL:HG22 | 1:IA:44:LEU:N | 2.37 | 0.40 |
| 1:IA:288:VAL:HG12 | 1:IA:294:ASN:CA | 2.52 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:IA:338:GLN:O | 1:IA:339:PRO:C | 2.63 | 0.40 |
| 1:IB:590:ASP:OD1 | 1:IB:591:PHE:N | 2.55 | 0.40 |
| 1:IB:781:VAL:O | 1:IB:782:SER:C | 2.64 | 0.40 |
| 1:JA:18:VAL:HG12 | 1:JA:43:VAL:HG22 | 2.03 | 0.40 |
| 1:JA:380:ILE:H | 1:JA:380:ILE:HD12 | 1.86 | 0.40 |
| 1:JB:230:ARG:NH2 | 1:JB:268:LEU:HD21 | 2.31 | 0.40 |
| 1:JB:387:GLY:CA | 1:JB:401:VAL:O | 2.69 | 0.40 |
| 1:JB:500:LEU:HD12 | 1:JB:511:ARG:NH2 | 2.37 | 0.40 |
| 1:K:20:ASP:O | 1:K:23:SER:O | 2.38 | 0.40 |
| 1:K:123:LEU:N | 1:K:143:TRP:O | 2.55 | 0.40 |
| 1:K:179:ARG:O | 1:K:192:THR:HG23 | 2.21 | 0.40 |
| 1:KA:390:VAL:O | 1:KA:390:VAL:HG13 | 2.21 | 0.40 |
| 1:L:177:ARG:HG2 | 1:L:178:ALA:N | 2.37 | 0.40 |
| 1:LA:3:THR:O | 1:LA:3:THR:HG22 | 2.22 | 0.40 |
| 1:LA:175:ARG:HE | 1:LA:213:LEU:HB3 | 1.86 | 0.40 |
| 1:LA:452:ARG:HG2 | 1:LA:453:ASN:N | 2.36 | 0.40 |
| 1:LA:763:GLN:O | 1:LA:767:GLU:HG3 | 2.22 | 0.40 |
| 1:LB:20:ASP:O | 1:LB:23:SER:O | 2.38 | 0.40 |
| 1:LB:393:VAL:HG13 | 1:LB:394:LYS:N | 2.36 | 0.40 |
| 1:LB:560:LYS:HA | 1:LB:563:SER:OG | 2.22 | 0.40 |
| 1:M:25:VAL:HG13 | 1:M:80:GLN:N | 2.35 | 0.40 |
| 1:M:28:VAL:O | 1:M:28:VAL:HG13 | 2.21 | 0.40 |
| 1:M:283:VAL:HG12 | 1:M:317:GLU:OE1 | 2.21 | 0.40 |
| 1:M:408:LEU:HD22 | 1:M:412:GLU:O | 2.22 | 0.40 |
| 1:M:702:ALA:HB3 | 1:N:693:ILE:HG21 | 2.04 | 0.40 |
| 1:MA:230:ARG:CB | 1:MA:248:GLU:HG2 | 2.52 | 0.40 |
| 1:MB:15:TYR:HB2 | 1:MB:29:GLU:O | 2.22 | 0.40 |
| 1:MB:480:VAL:HG12 | 1:MB:481:VAL:N | 2.36 | 0.40 |
| 1:MB:538:GLN:N | 1:MB:644:GLU:O | 2.54 | 0.40 |
| 1:N:805:SER:O | 1:N:808:ARG:NE | 2.54 | 0.40 |
| 1:NA:172:GLN:CB | 1:NA:215:LEU:HD11 | 2.51 | 0.40 |
| 1:NA:276:LEU:HD23 | 1:NA:276:LEU:HA | 1.95 | 0.40 |
| 1:NA:462:VAL:HG12 | 1:NA:483:GLY:O | 2.20 | 0.40 |
| 1:NB:183:TRP:CD1 | 1:NB:189:GLU:HG3 | 2.57 | 0.40 |
| 1:NB:472:ASP:HA | 1:NB:493:GLU:HA | 2.03 | 0.40 |
| 1:NB:790:VAL:HG22 | 1:OB:785:GLN:CG | 2.51 | 0.40 |
| 1:O:177:ARG:HB2 | 1:O:213:LEU:HD21 | 2.04 | 0.40 |
| 1:O:283:VAL:HG22 | 1:O:301:VAL:CB | 2.52 | 0.40 |
| 1:O:340:LEU:HD22 | 1:O:344:GLU:CB | 2.51 | 0.40 |
| 1:O:497:VAL:HG22 | 1:O:498:LEU:N | 2.37 | 0.40 |
| 1:O:603:VAL:HG11 | 1:O:638:VAL:HG21 | 2.03 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:OA:20:ASP:HA | 1:OA:41:GLU:HA | 2.03 | 0.40 |
| 1:OA:285:LEU:O | 1:OA:314:GLU:HG2 | 2.20 | 0.40 |
| 1:OA:685:ARG:HD3 | 1:PA:678:GLN:OE1 | 2.21 | 0.40 |
| 1:OB:529:ILE:CG1 | 1:OB:583:VAL:HG21 | 2.51 | 0.40 |
| 1:P:119:THR:CG2 | 1:P:162:ILE:HG23 | 2.50 | 0.40 |
| 1:P:782:SER:O | 1:P:786:GLN:OE1 | 2.40 | 0.40 |
| 1:PA:332:LEU:H | 1:PA:332:LEU:HD23 | 1.87 | 0.40 |
| 1:PA:388:ILE:HA | 1:PA:456:ARG:HA | 2.02 | 0.40 |
| 1:PA:543:TYR:HB3 | 1:PA:635:VAL:HG13 | 2.03 | 0.40 |
| 1:PB:122:HIS:HB3 | 1:PB:160:VAL:HB | 2.03 | 0.40 |
| 1:PB:146:GLU:N | 1:PB:146:GLU:OE1 | 2.54 | 0.40 |
| 1:PB:183:TRP:HA | 1:PB:189:GLU:HA | 2.02 | 0.40 |
| 1:PB:470:VAL:HG13 | 1:PB:494:GLN:O | 2.20 | 0.40 |
| 1:PB:790:VAL:HG21 | 1:QB:784:ALA:CB | 2.51 | 0.40 |
| 1:Q:67:ARG:HA | 1:Q:67:ARG:NE | 2.37 | 0.40 |
| 1:Q:362:PRO:CB | 1:R:353:ALA:O | 2.70 | 0.40 |
| 1:Q:466:ALA:HB1 | 1:Q:515:CYS:SG | 2.61 | 0.40 |
| 1:Q:780:GLU:O | 1:Q:783:LYS:HB3 | 2.22 | 0.40 |
| 1:QB:60:THR:HB | 1:QB:90:ILE:HG13 | 2.02 | 0.40 |
| 1:QB:123:LEU:HD11 | 1:QB:145:PHE:CB | 2.48 | 0.40 |
| 1:QB:126:LEU:O | 1:QB:127:LEU:HD22 | 2.21 | 0.40 |
| 1:QB:144:LEU:HD12 | 1:QB:144:LEU:C | 2.47 | 0.40 |
| 1:QB:204:TYR:CZ | 1:QB:205:LEU:O | 2.74 | 0.40 |
| 1:QB:416:GLU:CD | 1:QB:454:LYS:HB2 | 2.46 | 0.40 |
| 1:QB:746:LEU:HD13 | 1:RB:737:GLY:HA3 | 2.04 | 0.40 |
| 1:QB:758:GLU:O | 1:QB:762:VAL:HG22 | 2.20 | 0.40 |
| 1:RB:361:GLY:O | 1:RB:363:LEU:HD23 | 2.21 | 0.40 |
| 1:RB:598:ILE:O | 1:RB:602:ALA:HB2 | 2.22 | 0.40 |
| 1:RB:663:GLU:O | 1:RB:667:ASN:CG | 2.64 | 0.40 |
| 1:S:761:ARG:HE | 1:T:751:LEU:HB3 | 1.86 | 0.40 |
| 1:SA:46:ALA:O | 1:SA:47:PRO:C | 2.64 | 0.40 |
| 1:SA:650:THR:HG23 | 1:SA:654:LEU:HD23 | 2.03 | 0.40 |
| 1:SA:704:LYS:HA | 1:SA:707:LEU:HD12 | 2.04 | 0.40 |
| 1:T:400:ALA:HB1 | 1:T:402:ILE:HD11 | 2.03 | 0.40 |
| 1:TA:63:ASN:N | 1:TA:64:PRO:CD | 2.85 | 0.40 |
| 1:TA:522:PHE:CD1 | 1:TA:523:PHE:N | 2.90 | 0.40 |
| 1:UA:499:SER:HA | 1:UA:511:ARG:O | 2.21 | 0.40 |
| 1:V:460:TYR:CG | 1:V:461:ARG:N | 2.89 | 0.40 |
| 1:VA:49:ARG:HH12 | 1:WA:76:ASP:HB2 | 1.87 | 0.40 |
| 1:VA:104:VAL:HG22 | 1:VA:105:LEU:N | 2.35 | 0.40 |
| 1:VB:10:ILE:HG13 | 1:VB:10:ILE:O | 2.20 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:VB:113:GLN:O | 1:VB:113:GLN:HG2 | 2.20 | 0.40 |
| 1:VB:168:ILE:HG13 | 1:VB:202:GLY:O | 2.21 | 0.40 |
| 1:VB:316:LEU:O | 1:VB:316:LEU:HG | 2.21 | 0.40 |
| 1:VB:388:ILE:HA | 1:VB:457:VAL:N | 2.37 | 0.40 |
| 1:VB:624:ASP:N | 1:VB:624:ASP:OD1 | 2.53 | 0.40 |
| 1:VB:724:ALA:HB1 | 1:WB:715:ALA:HA | 2.03 | 0.40 |
| 1:W:302:VAL:HG12 | 1:W:303:LYS:N | 2.37 | 0.40 |
| 1:W:588:PHE:O | 1:W:589:ASP:C | 2.65 | 0.40 |
| 1:W:651:ARG:CZ | 1:W:654:LEU:HD12 | 2.52 | 0.40 |
| 1:W:662:ILE:HG21 | 1:X:653:ALA:CB | 2.51 | 0.40 |
| 1:WA:170:GLN:HG3 | 1:XA:233:ARG:HB2 | 2.04 | 0.40 |
| 1:WA:666:THR:CB | 1:XA:660:LEU:HD13 | 2.52 | 0.40 |
| 1:WB:59:CYS:HG | 1:WB:107:LYS:C | 2.26 | 0.40 |
| 1:WB:326:LEU:O | 1:WB:362:PRO:HA | 2.21 | 0.40 |
| 1:WB:380:ILE:HD12 | 1:WB:380:ILE:H | 1.86 | 0.40 |
| 1:WB:389:TYR:HE1 | 1:WB:489:LEU:O | 2.05 | 0.40 |
| 1:WB:506:LYS:C | 1:WB:507:ARG:HG2 | 2.46 | 0.40 |
| 1:X:489:LEU:HD23 | 1:X:493:GLU:HB2 | 2.03 | 0.40 |
| 1:XA:423:VAL:HG22 | 1:XA:423:VAL:O | 2.19 | 0.40 |
| 1:XB:362:PRO:O | 1:YB:353:ALA:N | 2.54 | 0.40 |
| 1:Y:10:ILE:O | 1:Y:32:PRO:HA | 2.20 | 0.40 |
| 1:Y:190:ARG:HB3 | 1:Y:196:TRP:CZ3 | 2.56 | 0.40 |
| 1:Y:778:GLU:HA | 1:Y:781:VAL:HG22 | 2.04 | 0.40 |
| 1:Y:806:THR:O | 1:Z:808:ARG:NH2 | 2.55 | 0.40 |
| 1:YA:64:PRO:HG3 | 1:YA:89:GLU:HG2 | 2.03 | 0.40 |
| 1:YA:96:PRO:HD3 | 1:ZA:85:HIS:NE2 | 2.36 | 0.40 |
| 1:YA:202:GLY:HA3 | 1:ZA:191:VAL:HB | 2.02 | 0.40 |
| 1:YA:462:VAL:HG22 | 1:YA:468:VAL:HG21 | 2.03 | 0.40 |
| 1:YB:176:LEU:HD21 | 1:YB:196:TRP:CD1 | 2.57 | 0.40 |
| 1:YB:228:HIS:CA | 1:YB:250:LEU:HD23 | 2.51 | 0.40 |
| 1:YB:367:PRO:HB3 | 1:YB:373:VAL:HG21 | 2.03 | 0.40 |
| 1:YB:495:PHE:CD2 | 1:YB:514:LEU:HD23 | 2.57 | 0.40 |
| 1:YB:700:GLU:O | 1:YB:704:LYS:N | 2.54 | 0.40 |
| 1:Z:121:LEU:HD23 | 1:Z:162:ILE:HG13 | 2.03 | 0.40 |
| 1:Z:138:VAL:HG12 | 1:Z:139:ALA:N | 2.36 | 0.40 |
| 1:Z:181:GLU:HA | 1:Z:191:VAL:HA | 2.04 | 0.40 |
| 1:Z:521:ASP:CG | 1:Z:522:PHE:N | 2.79 | 0.40 |
| 1:Z:529:ILE:HD11 | 1:Z:539:LEU:CD2 | 2.52 | 0.40 |
| 1:Z:545:TRP:HA | 1:Z:636:SER:H | 1.87 | 0.40 |
| 1:Z:756:GLU:HA | 1:Z:759:LEU:HD12 | 2.02 | 0.40 |
| 1:ZA:271:VAL:O | 1:ZA:271:VAL:HG23 | 2.21 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:ZA:411:ASP:OD1 | 1:ZA:411:ASP:C | 2.64 | 0.40 |
| 1:ZA:547:PHE:CE1 | 1:ZA:633:LEU:HD13 | 2.57 | 0.40 |
| 1:ZB:16:ILE:HA | 1:ZB:45:PHE:CZ | 2.57 | 0.40 |
| 1:ZB:50:MET:HE2 | 1:ZB:96:PRO:O | 2.21 | 0.40 |
| 1:ZB:285:LEU:O | 1:ZB:286:ASP:C | 2.64 | 0.40 |
| 1:ZB:321:GLN:OE1 | 1:ZB:321:GLN:N | 2.53 | 0.40 |
| 1:A:276:LEU:CD2 | 1:A:320:ILE:HG23 | 2.52 | 0.40 |
| 1:A:388:ILE:HA | 1:A:457:VAL:H | 1.86 | 0.40 |
| 1:A:489:LEU:HD21 | 1:A:495:PHE:CE1 | 2.56 | 0.40 |
| 1:AA:117:PRO:HA | 1:AA:147:GLY:HA2 | 2.02 | 0.40 |
| 1:AA:530:GLU:HA | 1:AA:535:ALA:O | 2.21 | 0.40 |
| 1:AA:600:ARG:HB2 | 1:AA:604:PHE:CE2 | 2.57 | 0.40 |
| 1:AA:685:ARG:O | 1:AA:689:GLU:HG2 | 2.22 | 0.40 |
| 1:AB:34:THR:HG21 | 1:BB:22:ASN:O | 2.22 | 0.40 |
| 1:AB:56:ARG:HD2 | 1:BB:127:LEU:HD13 | 2.04 | 0.40 |
| 1:AB:333:LEU:CD2 | 1:AB:374:VAL:HG11 | 2.50 | 0.40 |
| 1:AB:405:THR:HG21 | 1:BB:393:VAL:C | 2.46 | 0.40 |
| 1:AC:58:TYR:HB2 | 1:AC:90:ILE:HG23 | 2.02 | 0.40 |
| 1:AC:715:ALA:HA | 1:ZB:724:ALA:HB1 | 2.04 | 0.40 |
| 1:AC:793:LYS:CG | 1:AC:794:LYS:N | 2.85 | 0.40 |
| 1:B:57:HIS:O | 1:B:109:ILE:HG23 | 2.21 | 0.40 |
| 1:B:521:ASP:CG | 1:B:522:PHE:N | 2.78 | 0.40 |
| 1:B:750:ALA:O | 1:B:754:GLU:HG2 | 2.21 | 0.40 |
| 1:BA:57:HIS:HA | 1:BA:110:THR:O | 2.21 | 0.40 |
| 1:BA:273:ILE:O | 1:BA:273:ILE:CG2 | 2.69 | 0.40 |
| 1:BA:405:THR:HG23 | 1:CA:396:GLY:HA2 | 2.02 | 0.40 |
| 1:BA:469:GLN:OE1 | 1:BA:496:THR:HG21 | 2.22 | 0.40 |
| 1:BA:507:ARG:CZ | 1:BA:508:PRO:O | 2.69 | 0.40 |
| 1:BA:582:ALA:O | 1:BA:586:VAL:HG22 | 2.21 | 0.40 |
| 1:BB:745:LYS:O | 1:BB:746:LEU:C | 2.65 | 0.40 |
| 1:C:342:GLU:HG3 | 1:C:348:LYS:N | 2.37 | 0.40 |
| 1:CA:282:CYS:HB3 | 1:CA:320:ILE:HA | 2.02 | 0.40 |
| 1:CB:68:ASP:HB2 | 1:CB:74:LEU:HD12 | 2.02 | 0.40 |
| 1:CB:112:LEU:HD11 | 1:CB:152:ILE:HA | 2.03 | 0.40 |
| 1:CB:179:ARG:HE | 1:CB:209:PHE:HA | 1.87 | 0.40 |
| 1:CB:409:THR:O | 1:CB:412:GLU:HB2 | 2.22 | 0.40 |
| 1:CB:410:GLN:O | 1:CB:411:ASP:CG | 2.64 | 0.40 |
| 1:D:288:VAL:O | 1:D:288:VAL:HG23 | 2.21 | 0.40 |
| 1:D:547:PHE:CE1 | 1:D:633:LEU:HD13 | 2.56 | 0.40 |
| 1:D:567:PHE:CG | 1:D:568:VAL:N | 2.88 | 0.40 |
| 1:D:583:VAL:O | 1:D:586:VAL:O | 2.40 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:DA:171:ASN:OD1 | 1:EA:233:ARG:HB3 | 2.21 | 0.40 |
| 1:DA:470:VAL:HG13 | 1:DA:494:GLN:O | 2.22 | 0.40 |
| 1:DA:542:ALA:HB3 | 1:DA:639:ASP:HB2 | 2.02 | 0.40 |
| 1:DB:50:MET:HB3 | 1:DB:96:PRO:CB | 2.51 | 0.40 |
| 1:DB:281:TYR:CD1 | 1:DB:321:GLN:O | 2.75 | 0.40 |
| 1:E:462:VAL:N | 1:E:485:GLU:O | 2.54 | 0.40 |
| 1:E:781:VAL:HG23 | 1:E:782:SER:N | 2.35 | 0.40 |
| 1:E:786:GLN:HA | 1:E:789:GLU:OE1 | 2.22 | 0.40 |
| 1:EA:35:TYR:CG | 1:EA:36:ILE:N | 2.90 | 0.40 |
| 1:EB:58:TYR:CD2 | 1:EB:91:ARG:O | 2.74 | 0.40 |
| 1:EB:415:TRP:O | 1:EB:455:THR:HA | 2.21 | 0.40 |
| 1:F:6:PHE:HD1 | 1:F:37:ARG:O | 2.05 | 0.40 |
| 1:F:59:CYS:SG | 1:F:109:ILE:HD13 | 2.61 | 0.40 |
| 1:FA:176:LEU:HD21 | 1:FA:196:TRP:NE1 | 2.37 | 0.40 |
| 1:FA:216:VAL:HG22 | 1:FA:217:ASP:N | 2.37 | 0.40 |
| 1:FA:234:ASN:HA | 1:FA:243:ARG:O | 2.22 | 0.40 |
| 1:FB:60:THR:N | 1:FB:107:LYS:HB3 | 2.37 | 0.40 |
| 1:FB:281:TYR:CZ | 1:FB:321:GLN:HB3 | 2.56 | 0.40 |
| 1:FB:318:GLN:HB3 | 1:FB:321:GLN:HE21 | 1.86 | 0.40 |
| 1:FB:541:LEU:HD22 | 1:FB:543:TYR:OH | 2.21 | 0.40 |
| 1:G:16:ILE:HA | 1:G:45:PHE:CE1 | 2.56 | 0.40 |
| 1:G:50:MET:HB3 | 1:G:97:PHE:O | 2.22 | 0.40 |
| 1:G:689:GLU:HA | 1:G:692:LYS:HD2 | 2.03 | 0.40 |
| 1:GA:374:VAL:HG12 | 1:GA:375:GLU:N | 2.36 | 0.40 |
| 1:GA:654:LEU:HD13 | 1:HA:534:HIS:HD2 | 1.87 | 0.40 |
| 1:GA:670:GLU:OE2 | 1:HA:660:LEU:HD13 | 2.20 | 0.40 |
| 1:GA:685:ARG:O | 1:GA:689:GLU:HG2 | 2.20 | 0.40 |
| 1:GB:521:ASP:HB3 | 1:GB:545:TRP:CZ2 | 2.57 | 0.40 |
| 1:GB:564:VAL:HG11 | 1:GB:567:PHE:HB3 | 2.03 | 0.40 |
| 1:H:389:TYR:CZ | 1:H:457:VAL:HA | 2.56 | 0.40 |
| 1:HA:7:ILE:HG22 | 1:HA:34:THR:HB | 2.03 | 0.40 |
| 1:HA:268:LEU:N | 1:HA:268:LEU:HD12 | 2.37 | 0.40 |
| 1:HB:7:ILE:HA | 1:HB:35:TYR:O | 2.22 | 0.40 |
| 1:HB:10:ILE:HG13 | 1:HB:10:ILE:O | 2.20 | 0.40 |
| 1:HB:402:ILE:N | 1:HB:402:ILE:HD12 | 2.37 | 0.40 |
| 1:HB:543:TYR:HE2 | 1:HB:572:CYS:HA | 1.86 | 0.40 |
| 1:HB:543:TYR:N | 1:HB:543:TYR:CD1 | 2.89 | 0.40 |
| 1:I:357:TRP:HA | 1:I:410:GLN:HB3 | 2.03 | 0.40 |
| 1:I:729:ARG:CZ | 1:I:729:ARG:HB2 | 2.52 | 0.40 |
| 1:I:806:THR:HA | 1:I:809:ASP:OD2 | 2.21 | 0.40 |
| 1:IA:87:ASP:O | 1:IA:88:LEU:HD23 | 2.21 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:IA:124:LYS:HB3 | 1:IA:158:GLU:CG | 2.52 | 0.40 |
| 1:IA:125:ALA:HB2 | 1:IA:137:VAL:CG1 | 2.51 | 0.40 |
| 1:IA:539:LEU:HA | 1:IA:642:SER:O | 2.20 | 0.40 |
| 1:IB:364:GLU:OE1 | 1:IB:365:TYR:N | 2.54 | 0.40 |
| 1:IB:468:VAL:HG12 | 1:IB:469:GLN:N | 2.36 | 0.40 |
| 1:IB:607:GLU:HB3 | 1:IB:622:PRO:HB3 | 2.03 | 0.40 |
| 1:J:415:TRP:O | 1:J:455:THR:HA | 2.22 | 0.40 |
| 1:J:776:GLN:O | 1:J:780:GLU:HG3 | 2.21 | 0.40 |
| 1:JA:281:TYR:CZ | 1:JA:321:GLN:HB2 | 2.57 | 0.40 |
| 1:JA:516:LEU:C | 1:JA:517:LEU:HD22 | 2.47 | 0.40 |
| 1:JB:27:ARG:HG2 | 1:JB:28:VAL:N | 2.37 | 0.40 |
| 1:JB:60:THR:HB | 1:JB:107:LYS:HB2 | 2.04 | 0.40 |
| 1:JB:65:VAL:HG23 | 1:JB:67:ARG:CG | 2.52 | 0.40 |
| 1:JB:74:LEU:HD13 | 1:JB:82:ARG:CZ | 2.51 | 0.40 |
| 1:JB:204:TYR:HH | 1:JB:210:GLU:CD | 2.27 | 0.40 |
| 1:JB:216:VAL:HG22 | 1:JB:217:ASP:N | 2.35 | 0.40 |
| 1:JB:346:GLU:O | 1:JB:347:GLU:HG3 | 2.22 | 0.40 |
| 1:JB:358:LEU:HD11 | 1:JB:377:ARG:HD2 | 2.04 | 0.40 |
| 1:JB:395:THR:HG23 | 1:JB:396:GLY:N | 2.36 | 0.40 |
| 1:K:473:TYR:CD1 | 1:K:473:TYR:N | 2.89 | 0.40 |
| 1:KA:234:ASN:N | 1:KA:245:THR:OG1 | 2.54 | 0.40 |
| 1:KA:468:VAL:O | 1:KA:480:VAL:HA | 2.21 | 0.40 |
| 1:KA:472:ASP:OD1 | 1:KA:474:ARG:HB3 | 2.21 | 0.40 |
| 1:KB:61:VAL:HG23 | 1:KB:89:GLU:HB2 | 2.03 | 0.40 |
| 1:KB:389:TYR:CE2 | 1:KB:457:VAL:HA | 2.56 | 0.40 |
| 1:KB:541:LEU:HD12 | 1:KB:542:ALA:N | 2.37 | 0.40 |
| 1:L:75:PHE:HA | 1:L:81:VAL:HA | 2.04 | 0.40 |
| 1:L:175:ARG:HA | 1:L:196:TRP:O | 2.21 | 0.40 |
| 1:LA:337:LEU:HD11 | 1:LA:371:VAL:O | 2.22 | 0.40 |
| 1:LA:349:VAL:HG11 | 1:LA:351:HIS:CD2 | 2.56 | 0.40 |
| 1:LA:654:LEU:HD22 | 1:MA:534:HIS:CD2 | 2.56 | 0.40 |
| 1:LB:285:LEU:HD12 | 1:LB:315:GLN:HB3 | 2.04 | 0.40 |
| 1:LB:523:PHE:CE1 | 1:LB:545:TRP:CE2 | 3.09 | 0.40 |
| 1:LB:556:GLN:N | 1:LB:556:GLN:CD | 2.79 | 0.40 |
| 1:LB:604:PHE:CB | 1:LB:623:ARG:HB3 | 2.51 | 0.40 |
| 1:M:65:VAL:HG13 | 1:M:103:GLU:HB3 | 2.02 | 0.40 |
| 1:M:82:ARG:C | 1:M:83:LEU:HD12 | 2.47 | 0.40 |
| 1:M:393:VAL:CG1 | 1:M:413:VAL:HG12 | 2.51 | 0.40 |
| 1:MA:262:ASP:OD1 | 1:MA:263:VAL:N | 2.54 | 0.40 |
| 1:MA:334:LEU:HB2 | 1:MA:357:TRP:CE2 | 2.57 | 0.40 |
| 1:MA:516:LEU:HD23 | 1:MA:516:LEU:C | 2.46 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:MB:46:ALA:HB1 | 1:MB:47:PRO:HD2 | 2.02 | 0.40 |
| 1:MB:239:ARG:NE | 1:MB:239:ARG:HA | 2.36 | 0.40 |
| 1:MB:470:VAL:HG11 | 1:MB:493:GLU:HB3 | 2.02 | 0.40 |
| 1:N:5:GLU:O | 1:N:6:PHE:HB2 | 2.22 | 0.40 |
| 1:N:471:TYR:HA | 1:N:477:ARG:O | 2.21 | 0.40 |
| 1:N:489:LEU:HD22 | 1:N:493:GLU:C | 2.47 | 0.40 |
| 1:N:742:LEU:HG | 1:N:746:LEU:HD11 | 2.03 | 0.40 |
| 1:NA:238:PHE:CE2 | 1:NA:239:ARG:NH2 | 2.90 | 0.40 |
| 1:NA:460:TYR:CG | 1:NA:461:ARG:N | 2.89 | 0.40 |
| 1:NB:168:ILE:HA | 1:NB:172:GLN:OE1 | 2.21 | 0.40 |
| 1:NB:208:VAL:HG13 | 1:NB:209:PHE:H | 1.87 | 0.40 |
| 1:NB:388:ILE:HA | 1:NB:457:VAL:HG23 | 2.01 | 0.40 |
| 1:O:173:ALA:C | 1:O:216:VAL:HG12 | 2.45 | 0.40 |
| 1:O:198:VAL:HG11 | 1:O:204:TYR:CD1 | 2.56 | 0.40 |
| 1:O:288:VAL:O | 1:O:288:VAL:HG23 | 2.20 | 0.40 |
| 1:O:625:GLN:HB2 | 1:O:635:VAL:H | 1.86 | 0.40 |
| 1:O:659:GLN:O | 1:O:663:GLU:OE1 | 2.40 | 0.40 |
| 1:O:660:LEU:HA | 1:O:663:GLU:OE1 | 2.22 | 0.40 |
| 1:OA:60:THR:OG1 | 1:OA:107:LYS:HG2 | 2.21 | 0.40 |
| 1:OA:169:ARG:HD2 | 1:OA:170:GLN:O | 2.21 | 0.40 |
| 1:OA:501:SER:HA | 1:OA:510:ALA:H | 1.87 | 0.40 |
| 1:OB:418:GLU:O | 1:OB:419:LEU:HD22 | 2.21 | 0.40 |
| 1:OB:747:LYS:O | 1:OB:751:LEU:HD23 | 2.21 | 0.40 |
| 1:OB:769:GLU:O | 1:OB:773:ALA:HB2 | 2.20 | 0.40 |
| 1:P:58:TYR:CD1 | 1:P:112:LEU:HD13 | 2.56 | 0.40 |
| 1:P:211:GLU:HG3 | 1:P:213:LEU:HD21 | 2.04 | 0.40 |
| 1:P:316:LEU:HD11 | 1:P:319:GLY:O | 2.22 | 0.40 |
| 1:P:540:GLN:O | 1:P:641:GLN:HB3 | 2.21 | 0.40 |
| 1:P:640:VAL:HG12 | 1:Q:580:ARG:HD3 | 2.04 | 0.40 |
| 1:PA:17:HIS:HA | 1:PA:27:ARG:O | 2.21 | 0.40 |
| 1:PA:340:LEU:CD1 | 1:PA:349:VAL:HG12 | 2.51 | 0.40 |
| 1:PA:539:LEU:HD12 | 1:PA:540:GLN:H | 1.87 | 0.40 |
| 1:Q:15:TYR:HB2 | 1:Q:29:GLU:O | 2.22 | 0.40 |
| 1:Q:168:ILE:HD11 | 1:Q:204:TYR:HB2 | 2.03 | 0.40 |
| 1:Q:227:LEU:HD12 | 1:Q:268:LEU:O | 2.21 | 0.40 |
| 1:Q:332:LEU:HA | 1:Q:376:GLU:HA | 2.02 | 0.40 |
| 1:Q:381:PRO:HA | 1:Q:405:THR:HA | 2.03 | 0.40 |
| 1:Q:709:LEU:HD12 | 1:R:697:SER:O | 2.22 | 0.40 |
| 1:QA:60:THR:OG1 | 1:QA:88:LEU:O | 2.38 | 0.40 |
| 1:QA:106:GLU:OE1 | 1:QA:106:GLU:N | 2.54 | 0.40 |
| 1:QA:115:VAL:HG12 | 1:QA:119:THR:CG2 | 2.51 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:QA:198:VAL:O | 1:QA:198:VAL:HG13 | 2.21 | 0.40 |
| 1:QA:340:LEU:HB2 | 1:QA:351:HIS:H | 1.86 | 0.40 |
| 1:QB:545:TRP:HA | 1:QB:635:VAL:HA | 2.02 | 0.40 |
| 1:R:783:LYS:HG2 | 1:R:787:LEU:HD11 | 2.03 | 0.40 |
| 1:RA:10:ILE:HG22 | 1:RA:11:PRO:O | 2.21 | 0.40 |
| 1:RA:169:ARG:O | 1:RA:170:GLN:C | 2.65 | 0.40 |
| 1:RA:545:TRP:HB2 | 1:RA:633:LEU:HD21 | 2.04 | 0.40 |
| 1:RB:351:HIS:CE1 | 1:RB:357:TRP:CE2 | 3.09 | 0.40 |
| 1:RB:371:VAL:HG22 | 1:RB:372:GLU:H | 1.87 | 0.40 |
| 1:RB:521:ASP:CG | 1:RB:522:PHE:N | 2.79 | 0.40 |
| 1:RB:740:SER:O | 1:RB:744:ALA:HB2 | 2.22 | 0.40 |
| 1:RB:759:LEU:HD23 | 1:RB:759:LEU:HA | 1.97 | 0.40 |
| 1:S:334:LEU:O | 1:S:356:HIS:HB2 | 2.22 | 0.40 |
| 1:SA:90:ILE:HG23 | 1:SA:90:ILE:O | 2.21 | 0.40 |
| 1:SA:349:VAL:HG11 | 1:SA:359:ILE:CD1 | 2.52 | 0.40 |
| 1:SA:520:PRO:O | 1:TA:564:VAL:HG22 | 2.21 | 0.40 |
| 1:SA:548:GLU:N | 1:SA:632:GLY:O | 2.55 | 0.40 |
| 1:SB:162:ILE:HG22 | 1:SB:163:ILE:N | 2.37 | 0.40 |
| 1:SB:334:LEU:O | 1:SB:356:HIS:HA | 2.21 | 0.40 |
| 1:SB:419:LEU:HD13 | 1:SB:424:GLU:OE2 | 2.21 | 0.40 |
| 1:SB:786:GLN:HE22 | 1:TB:777:LEU:HD21 | 1.85 | 0.40 |
| 1:T:591:PHE:HZ | 1:T:599:ILE:HD11 | 1.87 | 0.40 |
| 1:TA:535:ALA:HB2 | 1:TA:650:THR:HG21 | 2.03 | 0.40 |
| 1:TA:592:HIS:CE1 | 1:UA:532:ALA:HA | 2.57 | 0.40 |
| 1:TB:423:VAL:O | 1:TB:424:GLU:C | 2.63 | 0.40 |
| 1:TB:498:LEU:HB2 | 1:TB:513:ALA:HB3 | 2.04 | 0.40 |
| 1:UA:519:GLY:O | 1:UA:545:TRP:O | 2.39 | 0.40 |
| 1:VA:218:ALA:HB1 | 1:VA:258:ALA:HB1 | 2.01 | 0.40 |
| 1:VA:460:TYR:OH | 1:VA:514:LEU:HD22 | 2.21 | 0.40 |
| 1:VA:465:ASN:HB3 | 1:WA:563:SER:OG | 2.20 | 0.40 |
| 1:VB:19:LEU:HD12 | 1:VB:20:ASP:N | 2.36 | 0.40 |
| 1:VB:37:ARG:N | 1:VB:37:ARG:HD2 | 2.36 | 0.40 |
| 1:VB:623:ARG:NH2 | 1:VB:627:VAL:HG12 | 2.37 | 0.40 |
| 1:VB:776:GLN:HA | 1:VB:779:LEU:HD12 | 2.02 | 0.40 |
| 1:W:144:LEU:HD12 | 1:W:144:LEU:C | 2.47 | 0.40 |
| 1:W:168:ILE:HG13 | 1:W:168:ILE:O | 2.21 | 0.40 |
| 1:W:198:VAL:HG21 | 1:W:204:TYR:CD1 | 2.56 | 0.40 |
| 1:W:545:TRP:HA | 1:W:635:VAL:HA | 2.04 | 0.40 |
| 1:WA:125:ALA:CB | 1:WA:137:VAL:HG21 | 2.51 | 0.40 |
| 1:WB:9:ARG:CB | 1:WB:34:THR:HG22 | 2.52 | 0.40 |
| 1:WB:333:LEU:HA | 1:WB:358:LEU:HA | 2.02 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:WB:408:LEU:HD22 | 1:WB:412:GLU:HB3 | 2.02 | 0.40 |
| 1:WB:544:ASN:O | 1:WB:635:VAL:HG13 | 2.22 | 0.40 |
| 1:WB:564:VAL:HG11 | 1:WB:567:PHE:HA | 2.03 | 0.40 |
| 1:X:469:GLN:HB2 | 1:X:562:PHE:CE1 | 2.57 | 0.40 |
| 1:X:502:ALA:HB2 | 1:X:511:ARG:HE | 1.86 | 0.40 |
| 1:X:545:TRP:HA | 1:X:635:VAL:HA | 2.03 | 0.40 |
| 1:XB:57:HIS:HB3 | 1:XB:111:PRO:HA | 2.02 | 0.40 |
| 1:XB:65:VAL:HA | 1:XB:83:LEU:HA | 2.03 | 0.40 |
| 1:XB:226:ALA:HB1 | 1:XB:250:LEU:HD22 | 2.03 | 0.40 |
| 1:XB:391:GLN:HE21 | 1:XB:398:VAL:HG22 | 1.85 | 0.40 |
| 1:XB:594:ASN:HB2 | 1:XB:598:ILE:CD1 | 2.52 | 0.40 |
| 1:XB:768:LEU:O | 1:XB:768:LEU:HD23 | 2.21 | 0.40 |
| 1:Y:244:ARG:HE | 1:Y:244:ARG:N | 2.19 | 0.40 |
| 1:Y:408:LEU:HD21 | 1:Y:414:LEU:HD21 | 2.03 | 0.40 |
| 1:YA:63:ASN:N | 1:YA:64:PRO:CD | 2.85 | 0.40 |
| 1:YA:302:VAL:HG12 | 1:YA:303:LYS:H | 1.86 | 0.40 |
| 1:YB:14:HIS:HA | 1:YB:48:MET:O | 2.21 | 0.40 |
| 1:YB:232:ARG:CZ | 1:YB:265:GLU:O | 2.69 | 0.40 |
| 1:YB:281:TYR:HB2 | 1:YB:303:LYS:HA | 2.04 | 0.40 |
| 1:YB:325:VAL:HG21 | 1:ZB:335:ARG:NH1 | 2.36 | 0.40 |
| 1:YB:779:LEU:HD23 | 1:ZB:777:LEU:HD23 | 2.04 | 0.40 |
| 1:Z:69:ALA:HB3 | 1:Z:72:LEU:HB2 | 2.03 | 0.40 |
| 1:Z:204:TYR:CG | 1:Z:205:LEU:N | 2.89 | 0.40 |
| 1:Z:335:ARG:HA | 1:Z:355:ASP:O | 2.21 | 0.40 |
| 1:Z:781:VAL:O | 1:Z:785:GLN:OE1 | 2.40 | 0.40 |
| 1:ZA:160:VAL:HG12 | 1:ZA:161:GLU:N | 2.36 | 0.40 |
| 1:ZA:171:ASN:O | 1:ZA:217:ASP:HA | 2.21 | 0.40 |
| 1:ZA:250:LEU:HD21 | 1:ZA:312:PRO:HD3 | 2.03 | 0.40 |
| 1:ZA:385:ASN:HD22 | 1:ZA:486:LEU:HD22 | 1.85 | 0.40 |
| 1:ZB:323:VAL:HB | 1:ZB:364:GLU:OE1 | 2.21 | 0.40 |
| 1:ZB:406:TYR:HH | 1:ZB:412:GLU:CD | 2.29 | 0.40 |
| 1:ZB:477:ARG:HB3 | 1:ZB:479:ARG:HH12 | 1.87 | 0.40 |
| 1:ZB:529:ILE:HG21 | 1:ZB:539:LEU:HD22 | 2.03 | 0.40 |
| 1:A:16:ILE:CG2 | 1:A:17:HIS:N | 2.85 | 0.40 |
| 1:A:131:ASP:O | 1:A:132:LYS:CG | 2.69 | 0.40 |
| 1:A:184:ASP:OD1 | 1:A:186:ASP:OD1 | 2.40 | 0.40 |
| 1:A:457:VAL:CG1 | 1:A:458:VAL:N | 2.84 | 0.40 |
| 1:AA:6:PHE:O | 1:AA:37:ARG:N | 2.55 | 0.40 |
| 1:AA:806:THR:HG22 | 1:AA:806:THR:O | 2.22 | 0.40 |
| 1:AB:115:VAL:HG21 | 1:AB:145:PHE:HE2 | 1.87 | 0.40 |
| 1:AB:276:LEU:HD11 | 1:AB:282:CYS:SG | 2.62 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:AB:523:PHE:HB2 | 1:AB:543:TYR:HB2 | 2.02 | 0.40 |
| 1:AC:390:VAL:HA | 1:AC:413:VAL:O | 2.21 | 0.40 |
| 1:B:5:GLU:HG2 | 1:B:7:ILE:H | 1.87 | 0.40 |
| 1:B:10:ILE:O | 1:B:10:ILE:HG13 | 2.21 | 0.40 |
| 1:B:60:THR:HG22 | 1:B:90:ILE:CD1 | 2.51 | 0.40 |
| 1:B:239:ARG:NE | 1:B:239:ARG:HA | 2.36 | 0.40 |
| 1:B:262:ASP:OD1 | 1:B:263:VAL:N | 2.54 | 0.40 |
| 1:BA:91:ARG:HA | 1:BA:91:ARG:CZ | 2.51 | 0.40 |
| 1:BA:633:LEU:HD12 | 1:BA:634:VAL:N | 2.36 | 0.40 |
| 1:BA:645:PRO:O | 1:BA:646:VAL:C | 2.65 | 0.40 |
| 1:BB:97:PHE:O | 1:BB:97:PHE:CG | 2.74 | 0.40 |
| 1:BB:504:ARG:NE | 1:BB:504:ARG:HA | 2.36 | 0.40 |
| 1:BB:544:ASN:HB3 | 1:BB:636:SER:OG | 2.21 | 0.40 |
| 1:CA:184:ASP:OD1 | 1:CA:184:ASP:C | 2.64 | 0.40 |
| 1:CA:190:ARG:NH1 | 1:CA:196:TRP:CD1 | 2.90 | 0.40 |
| 1:CA:496:THR:HG22 | 1:CA:498:LEU:HD21 | 2.02 | 0.40 |
| 1:CB:333:LEU:HB3 | 1:CB:375:GLU:O | 2.21 | 0.40 |
| 1:CB:499:SER:HB2 | 1:CB:512:ARG:HE | 1.87 | 0.40 |
| 1:CB:742:LEU:HD12 | 1:CB:745:LYS:HE3 | 2.03 | 0.40 |
| 1:D:3:THR:HG22 | 1:D:6:PHE:HA | 2.04 | 0.40 |
| 1:D:360:ARG:NE | 1:D:407:MET:HE2 | 2.35 | 0.40 |
| 1:D:522:PHE:CD2 | 1:E:573:LYS:HE2 | 2.57 | 0.40 |
| 1:DA:63:ASN:OD1 | 1:DA:83:LEU:HB3 | 2.22 | 0.40 |
| 1:DA:471:TYR:HA | 1:DA:478:ALA:HA | 2.03 | 0.40 |
| 1:DB:498:LEU:HD12 | 1:DB:515:CYS:CA | 2.51 | 0.40 |
| 1:E:260:VAL:HG13 | 1:E:260:VAL:O | 2.22 | 0.40 |
| 1:E:393:VAL:HG22 | 1:E:411:ASP:HA | 2.03 | 0.40 |
| 1:E:538:GLN:C | 1:E:538:GLN:CD | 2.90 | 0.40 |
| 1:E:546:HIS:NE2 | 1:E:634:VAL:HG11 | 2.37 | 0.40 |
| 1:EA:17:HIS:CE1 | 1:EA:101:PRO:HA | 2.57 | 0.40 |
| 1:EA:126:LEU:C | 1:EA:127:LEU:HD22 | 2.47 | 0.40 |
| 1:EA:775:ALA:HA | 1:EA:778:GLU:OE2 | 2.22 | 0.40 |
| 1:EB:17:HIS:CD2 | 1:EB:28:VAL:HB | 2.57 | 0.40 |
| 1:EB:177:ARG:HA | 1:EB:194:GLU:O | 2.22 | 0.40 |
| 1:EB:306:LYS:CG | 1:EB:307:SER:N | 2.85 | 0.40 |
| 1:EB:324:TYR:HB2 | 1:EB:365:TYR:CE1 | 2.57 | 0.40 |
| 1:F:58:TYR:OH | 1:F:60:THR:HA | 2.21 | 0.40 |
| 1:FA:61:VAL:O | 1:FA:61:VAL:HG23 | 2.21 | 0.40 |
| 1:FA:106:GLU:CD | 1:FA:106:GLU:N | 2.79 | 0.40 |
| 1:FA:345:ASP:OD2 | 1:FA:349:VAL:HB | 2.22 | 0.40 |
| 1:FA:539:LEU:HD12 | 1:FA:642:SER:O | 2.22 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:FB:18:VAL:HB | 1:FB:41:GLU:OE2 | 2.21 | 0.40 |
| 1:FB:389:TYR:CD2 | 1:FB:455:THR:O | 2.74 | 0.40 |
| 1:FB:469:GLN:HG3 | 1:FB:470:VAL:N | 2.36 | 0.40 |
| 1:G:64:PRO:HD3 | 1:G:88:LEU:HA | 2.02 | 0.40 |
| 1:G:122:HIS:CD2 | 1:G:208:VAL:HG12 | 2.57 | 0.40 |
| 1:G:381:PRO:CA | 1:G:405:THR:HG22 | 2.47 | 0.40 |
| 1:GA:122:HIS:HA | 1:GA:144:LEU:CB | 2.52 | 0.40 |
| 1:GA:780:GLU:O | 1:GA:783:LYS:HB3 | 2.21 | 0.40 |
| 1:GB:106:GLU:O | 1:GB:107:LYS:HB3 | 2.22 | 0.40 |
| 1:GB:623:ARG:HH21 | 1:GB:627:VAL:HG22 | 1.85 | 0.40 |
| 1:H:57:HIS:C | 1:H:58:TYR:CD2 | 3.00 | 0.40 |
| 1:H:91:ARG:NE | 1:H:91:ARG:HA | 2.36 | 0.40 |
| 1:H:244:ARG:O | 1:H:247:GLU:CB | 2.70 | 0.40 |
| 1:H:416:GLU:HG2 | 1:H:455:THR:HG22 | 2.02 | 0.40 |
| 1:H:477:ARG:CZ | 1:H:477:ARG:HA | 2.51 | 0.40 |
| 1:H:517:LEU:O | 1:H:545:TRP:HH2 | 2.04 | 0.40 |
| 1:H:545:TRP:HA | 1:H:636:SER:H | 1.85 | 0.40 |
| 1:HA:389:TYR:O | 1:HA:414:LEU:HD23 | 2.21 | 0.40 |
| 1:HA:781:VAL:HG23 | 1:HA:782:SER:N | 2.37 | 0.40 |
| 1:HB:92:LEU:N | 1:HB:92:LEU:HD12 | 2.37 | 0.40 |
| 1:HB:144:LEU:HD23 | 1:HB:144:LEU:H | 1.86 | 0.40 |
| 1:HB:216:VAL:HG22 | 1:HB:217:ASP:N | 2.37 | 0.40 |
| 1:HB:392:ASP:OD1 | 1:HB:392:ASP:C | 2.64 | 0.40 |
| 1:I:115:VAL:O | 1:I:148:PRO:HA | 2.22 | 0.40 |
| 1:I:230:ARG:CG | 1:I:231:ALA:N | 2.85 | 0.40 |
| 1:I:489:LEU:HD13 | 1:I:493:GLU:O | 2.22 | 0.40 |
| 1:IA:60:THR:HG23 | 1:IA:106:GLU:HG2 | 2.04 | 0.40 |
| 1:IA:72:LEU:HD23 | 1:IA:73:VAL:N | 2.36 | 0.40 |
| 1:IA:281:TYR:CZ | 1:IA:321:GLN:HB2 | 2.57 | 0.40 |
| 1:IA:641:GLN:N | 1:IA:641:GLN:OE1 | 2.54 | 0.40 |
| 1:IB:124:LYS:H | 1:IB:160:VAL:HG23 | 1.86 | 0.40 |
| 1:IB:530:GLU:OE2 | 1:IB:536:ARG:HG2 | 2.21 | 0.40 |
| 1:J:228:HIS:NE2 | 1:J:248:GLU:HB3 | 2.37 | 0.40 |
| 1:J:516:LEU:HD22 | 1:J:562:PHE:CE1 | 2.57 | 0.40 |
| 1:JA:465:ASN:O | 1:JA:518:LEU:HB2 | 2.22 | 0.40 |
| 1:JA:471:TYR:CD2 | 1:JA:478:ALA:HB2 | 2.57 | 0.40 |
| 1:JB:128:ASP:CG | 1:JB:137:VAL:O | 2.64 | 0.40 |
| 1:JB:228:HIS:CD2 | 1:JB:229:LEU:N | 2.90 | 0.40 |
| 1:JB:392:ASP:OD1 | 1:JB:411:ASP:O | 2.40 | 0.40 |
| 1:JB:452:ARG:HH22 | 1:JB:454:LYS:CG | 2.35 | 0.40 |
| 1:JB:461:ARG:HH22 | 1:KB:494:GLN:HG3 | 1.86 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:K:35:TYR:O | 1:K:37:ARG:NH2 | 2.54 | 0.40 |
| 1:K:283:VAL:HG12 | 1:K:284:ILE:N | 2.37 | 0.40 |
| 1:K:288:VAL:HG23 | 1:K:288:VAL:O | 2.22 | 0.40 |
| 1:K:606:PHE:HB3 | 1:K:622:PRO:HA | 2.03 | 0.40 |
| 1:KA:30:VAL:HG22 | 1:KA:31:GLY:N | 2.36 | 0.40 |
| 1:KA:60:THR:HG22 | 1:KA:90:ILE:HA | 2.01 | 0.40 |
| 1:KA:233:ARG:HA | 1:KA:245:THR:HG23 | 2.01 | 0.40 |
| 1:KA:281:TYR:CD2 | 1:KA:366:VAL:HG21 | 2.57 | 0.40 |
| 1:KB:63:ASN:OD1 | 1:KB:83:LEU:HB3 | 2.21 | 0.40 |
| 1:KB:90:ILE:O | 1:KB:90:ILE:HG22 | 2.21 | 0.40 |
| 1:KB:124:LYS:HA | 1:KB:141:ASP:O | 2.22 | 0.40 |
| 1:L:51:VAL:HG21 | 1:L:99:LEU:HG | 2.02 | 0.40 |
| 1:L:58:TYR:OH | 1:L:60:THR:HB | 2.22 | 0.40 |
| 1:L:116:LEU:O | 1:L:119:THR:HG22 | 2.21 | 0.40 |
| 1:L:659:GLN:O | 1:L:663:GLU:OE1 | 2.40 | 0.40 |
| 1:L:758:GLU:O | 1:L:762:VAL:HG13 | 2.21 | 0.40 |
| 1:L:761:ARG:NH2 | 1:L:765:VAL:CG2 | 2.85 | 0.40 |
| 1:LA:7:ILE:HD13 | 1:LA:36:ILE:HD13 | 2.03 | 0.40 |
| 1:LA:453:ASN:CG | 1:LA:455:THR:HG1 | 2.28 | 0.40 |
| 1:LA:675:HIS:HA | 1:LA:678:GLN:OE1 | 2.21 | 0.40 |
| 1:LA:802:ILE:HG23 | 1:LA:803:GLY:N | 2.37 | 0.40 |
| 1:LB:126:LEU:HD23 | 1:LB:158:GLU:OE2 | 2.21 | 0.40 |
| 1:LB:342:GLU:HG2 | 1:LB:349:VAL:N | 2.37 | 0.40 |
| 1:LB:588:PHE:CG | 1:LB:589:ASP:N | 2.90 | 0.40 |
| 1:M:283:VAL:HG22 | 1:M:301:VAL:CA | 2.48 | 0.40 |
| 1:M:518:LEU:O | 1:M:547:PHE:HB2 | 2.21 | 0.40 |
| 1:M:742:LEU:HD21 | 1:N:734:ARG:HG3 | 2.03 | 0.40 |
| 1:M:775:ALA:HB1 | 1:N:770:LEU:HD22 | 2.04 | 0.40 |
| 1:MA:6:PHE:HA | 1:MA:37:ARG:HB2 | 2.04 | 0.40 |
| 1:MA:191:VAL:O | 1:MA:194:GLU:HB3 | 2.21 | 0.40 |
| 1:MA:235:PHE:CE1 | 1:MA:264:HIS:HB3 | 2.56 | 0.40 |
| 1:MA:285:LEU:HD21 | 1:MA:317:GLU:HA | 2.04 | 0.40 |
| 1:MA:795:PHE:O | 1:MA:799:THR:HG23 | 2.21 | 0.40 |
| 1:MB:61:VAL:HA | 1:MB:105:LEU:HA | 2.02 | 0.40 |
| 1:MB:146:GLU:N | 1:MB:146:GLU:OE1 | 2.54 | 0.40 |
| 1:MB:332:LEU:O | 1:MB:358:LEU:HD12 | 2.22 | 0.40 |
| 1:NA:61:VAL:O | 1:NA:61:VAL:CG2 | 2.69 | 0.40 |
| 1:NB:17:HIS:O | 1:NB:44:LEU:HD13 | 2.21 | 0.40 |
| 1:NB:52:THR:HG22 | 1:NB:96:PRO:HB3 | 2.04 | 0.40 |
| 1:NB:167:ILE:HA | 1:NB:203:ALA:HA | 2.04 | 0.40 |
| 1:NB:222:THR:O | 1:NB:225:THR:O | 2.39 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:NB:389:TYR:CE1 | 1:NB:457:VAL:HG22 | 2.56 | 0.40 |
| 1:NB:798:MET:O | 1:NB:802:ILE:HG22 | 2.21 | 0.40 |
| 1:O:302:VAL:HG12 | 1:O:303:LYS:N | 2.37 | 0.40 |
| 1:O:323:VAL:O | 1:O:323:VAL:HG23 | 2.22 | 0.40 |
| 1:O:761:ARG:NH2 | 1:P:755:THR:HG23 | 2.36 | 0.40 |
| 1:OA:174:LEU:HD12 | 1:OA:215:LEU:HD13 | 2.02 | 0.40 |
| 1:OA:334:LEU:HD12 | 1:OA:357:TRP:CE2 | 2.57 | 0.40 |
| 1:OA:472:ASP:HB2 | 1:OA:493:GLU:OE1 | 2.21 | 0.40 |
| 1:OA:623:ARG:HG3 | 1:OA:624:ASP:N | 2.37 | 0.40 |
| 1:OA:721:THR:HG23 | 1:PA:714:MET:HE1 | 2.03 | 0.40 |
| 1:OB:60:THR:HB | 1:OB:89:GLU:O | 2.22 | 0.40 |
| 1:OB:325:VAL:HA | 1:OB:364:GLU:HA | 2.04 | 0.40 |
| 1:OB:527:ILE:CD1 | 1:OB:579:VAL:HG11 | 2.52 | 0.40 |
| 1:P:52:THR:HG22 | 1:P:96:PRO:CD | 2.52 | 0.40 |
| 1:P:60:THR:HB | 1:P:89:GLU:O | 2.22 | 0.40 |
| 1:P:67:ARG:HA | 1:P:73:VAL:HG22 | 2.04 | 0.40 |
| 1:P:219:VAL:HG12 | 1:P:259:HIS:O | 2.22 | 0.40 |
| 1:P:238:PHE:CG | 1:P:239:ARG:N | 2.90 | 0.40 |
| 1:P:285:LEU:HD23 | 1:P:298:GLN:C | 2.47 | 0.40 |
| 1:P:286:ASP:HA | 1:P:295:GLN:O | 2.22 | 0.40 |
| 1:P:782:SER:O | 1:P:785:GLN:HB2 | 2.21 | 0.40 |
| 1:PA:61:VAL:HG21 | 1:PA:103:GLU:CD | 2.47 | 0.40 |
| 1:PA:113:GLN:HG2 | 1:PA:153:PRO:HB3 | 2.03 | 0.40 |
| 1:PB:8:ILE:N | 1:PB:37:ARG:HH12 | 2.19 | 0.40 |
| 1:PB:16:ILE:HG12 | 1:PB:46:ALA:O | 2.22 | 0.40 |
| 1:PB:94:GLN:O | 1:PB:95:ASP:C | 2.64 | 0.40 |
| 1:PB:233:ARG:NH2 | 1:PB:263:VAL:HG23 | 2.37 | 0.40 |
| 1:PB:408:LEU:HD22 | 1:PB:412:GLU:O | 2.21 | 0.40 |
| 1:PB:490:GLY:O | 1:PB:491:PRO:C | 2.63 | 0.40 |
| 1:PB:527:ILE:O | 1:PB:539:LEU:HB3 | 2.22 | 0.40 |
| 1:Q:334:LEU:HD11 | 1:Q:359:ILE:CG2 | 2.51 | 0.40 |
| 1:Q:421:PRO:HB2 | 1:Q:424:GLU:OE1 | 2.21 | 0.40 |
| 1:Q:626:ALA:O | 1:Q:634:VAL:HG13 | 2.21 | 0.40 |
| 1:QB:181:GLU:OE1 | 1:QB:191:VAL:HA | 2.22 | 0.40 |
| 1:QB:338:GLN:HB3 | 1:QB:339:PRO:HD2 | 2.03 | 0.40 |
| 1:QB:659:GLN:O | 1:QB:663:GLU:HG2 | 2.22 | 0.40 |
| 1:R:374:VAL:HG12 | 1:R:375:GLU:N | 2.37 | 0.40 |
| 1:R:469:GLN:HB2 | 1:R:562:PHE:CZ | 2.56 | 0.40 |
| 1:RA:208:VAL:HG23 | 1:RA:209:PHE:N | 2.37 | 0.40 |
| 1:RA:377:ARG:CB | 1:RA:407:MET:HE3 | 2.51 | 0.40 |
| 1:RA:391:GLN:CA | 1:RA:398:VAL:HG22 | 2.51 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:RB:123:LEU:O | 1:RB:143:TRP:CE3 | 2.74 | 0.40 |
| 1:RB:365:TYR:CZ | 1:RB:366:VAL:O | 2.74 | 0.40 |
| 1:RB:688:LEU:HA | 1:RB:691:GLN:OE1 | 2.20 | 0.40 |
| 1:S:346:GLU:C | 1:S:347:GLU:HG3 | 2.46 | 0.40 |
| 1:S:489:LEU:HD21 | 1:S:495:PHE:CZ | 2.56 | 0.40 |
| 1:SA:216:VAL:HG22 | 1:SA:261:PRO:HD2 | 2.04 | 0.40 |
| 1:SB:172:GLN:HB3 | 1:SB:215:LEU:HD11 | 2.02 | 0.40 |
| 1:SB:188:LYS:O | 1:SB:189:GLU:C | 2.64 | 0.40 |
| 1:SB:281:TYR:CZ | 1:SB:321:GLN:HB3 | 2.56 | 0.40 |
| 1:T:183:TRP:CH2 | 1:T:208:VAL:HG22 | 2.55 | 0.40 |
| 1:TA:81:VAL:O | 1:TA:83:LEU:HD13 | 2.22 | 0.40 |
| 1:TA:87:ASP:O | 1:TA:88:LEU:HD12 | 2.22 | 0.40 |
| 1:TA:360:ARG:HH21 | 1:TA:409:THR:HG22 | 1.86 | 0.40 |
| 1:TA:768:LEU:HD11 | 1:UA:766:ARG:HD3 | 2.03 | 0.40 |
| 1:TB:588:PHE:CE1 | 1:TB:592:HIS:HB2 | 2.56 | 0.40 |
| 1:TB:689:GLU:HA | 1:TB:692:LYS:HB2 | 2.04 | 0.40 |
| 1:UA:382:LEU:HD21 | 1:UA:388:ILE:HG12 | 2.04 | 0.40 |
| 1:UB:231:ALA:HB2 | 1:UB:249:TRP:CZ3 | 2.56 | 0.40 |
| 1:UB:282:CYS:O | 1:UB:301:VAL:HA | 2.21 | 0.40 |
| 1:UB:374:VAL:HG12 | 1:UB:375:GLU:HG3 | 2.04 | 0.40 |
| 1:UB:410:GLN:O | 1:UB:411:ASP:OD1 | 2.39 | 0.40 |
| 1:VA:419:LEU:HD23 | 1:VA:494:GLN:CG | 2.51 | 0.40 |
| 1:VA:423:VAL:HG22 | 1:VA:423:VAL:O | 2.22 | 0.40 |
| 1:VA:498:LEU:HD22 | 1:VA:567:PHE:CE2 | 2.54 | 0.40 |
| 1:VA:537:LEU:HD22 | 1:VA:588:PHE:CD1 | 2.56 | 0.40 |
| 1:VA:579:VAL:O | 1:VA:583:VAL:CG1 | 2.69 | 0.40 |
| 1:VA:652:ASP:O | 1:VA:656:ARG:HB2 | 2.21 | 0.40 |
| 1:VB:18:VAL:HG23 | 1:VB:27:ARG:HB3 | 2.03 | 0.40 |
| 1:WA:419:LEU:N | 1:WA:420:PRO:CD | 2.84 | 0.40 |
| 1:WA:471:TYR:HD1 | 1:WA:478:ALA:HB2 | 1.86 | 0.40 |
| 1:WA:770:LEU:O | 1:WA:774:ARG:HD3 | 2.21 | 0.40 |
| 1:WB:279:HIS:O | 1:WB:323:VAL:HG13 | 2.21 | 0.40 |
| 1:WB:283:VAL:HG12 | 1:WB:284:ILE:H | 1.86 | 0.40 |
| 1:WB:383:ASP:N | 1:WB:386:GLU:HB3 | 2.37 | 0.40 |
| 1:WB:604:PHE:CG | 1:WB:623:ARG:O | 2.75 | 0.40 |
| 1:X:14:HIS:HA | 1:X:48:MET:O | 2.21 | 0.40 |
| 1:X:390:VAL:HG21 | 1:X:399:ARG:NH1 | 2.37 | 0.40 |
| 1:X:625:GLN:HA | 1:X:635:VAL:O | 2.21 | 0.40 |
| 1:XA:112:LEU:HD12 | 1:XA:152:ILE:CD1 | 2.52 | 0.40 |
| 1:XA:219:VAL:HG11 | 1:XA:227:LEU:HD13 | 2.04 | 0.40 |
| 1:XA:285:LEU:HD12 | 1:XA:315:GLN:NE2 | 2.36 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:XA:386:GLU:O | 1:XA:402:ILE:HG23 | 2.21 | 0.40 |
| 1:XB:57:HIS:HA | 1:XB:111:PRO:HA | 2.02 | 0.40 |
| 1:XB:120:ALA:HB2 | 1:XB:205:LEU:HD21 | 2.01 | 0.40 |
| 1:XB:497:VAL:HG22 | 1:XB:498:LEU:N | 2.37 | 0.40 |
| 1:XB:628:PHE:HB2 | 1:XB:633:LEU:HB3 | 2.04 | 0.40 |
| 1:Y:73:VAL:HG11 | 1:Y:81:VAL:HG23 | 2.03 | 0.40 |
| 1:Y:207:ALA:HB3 | 1:Y:210:GLU:CD | 2.47 | 0.40 |
| 1:Y:277:GLY:O | 1:Y:304:GLY:HA3 | 2.22 | 0.40 |
| 1:YA:230:ARG:O | 1:YA:266:GLU:N | 2.55 | 0.40 |
| 1:YA:665:THR:CG2 | 1:ZA:587:THR:HG21 | 2.52 | 0.40 |
| 1:YA:731:GLU:O | 1:YA:734:ARG:HB3 | 2.21 | 0.40 |
| 1:YB:125:ALA:HB1 | 1:YB:129:PHE:CE1 | 2.57 | 0.40 |
| 1:YB:216:VAL:HG13 | 1:YB:260:VAL:HG21 | 2.03 | 0.40 |
| 1:YB:391:GLN:HB3 | 1:YB:413:VAL:HG13 | 2.04 | 0.40 |
| 1:YB:755:THR:HG22 | 1:YB:759:LEU:HD12 | 2.02 | 0.40 |
| 1:Z:20:ASP:HA | 1:Z:41:GLU:HA | 2.03 | 0.40 |
| 1:Z:712:LEU:O | 1:Z:716:VAL:HG23 | 2.22 | 0.40 |
| 1:ZB:125:ALA:HB1 | 1:ZB:137:VAL:HG11 | 2.04 | 0.40 |
| 1:ZB:227:LEU:HA | 1:ZB:270:VAL:HA | 2.04 | 0.40 |
| 1:ZB:283:VAL:HB | 1:ZB:317:GLU:HB3 | 2.04 | 0.40 |
| 1:ZB:527:ILE:HB | 1:ZB:539:LEU:HD23 | 2.03 | 0.40 |

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles | |
|-----|-------|---------------|-----------|-----------|----------|-------------|-----|
| 1 | A | 773/893 (87%) | 646 (84%) | 126 (16%) | 1 (0%) | 48 | 83 |
| 1 | AA | 773/893 (87%) | 637 (82%) | 135 (18%) | 1 (0%) | 48 | 83 |
| 1 | AB | 773/893 (87%) | 650 (84%) | 123 (16%) | 0 | 100 | 100 |
| 1 | AC | 773/893 (87%) | 647 (84%) | 126 (16%) | 0 | 100 | 100 |

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| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles | |
|-----|-------|---------------|-----------|-----------|----------|-------------|-----|
| 1 | B | 773/893 (87%) | 659 (85%) | 114 (15%) | 0 | 100 | 100 |
| 1 | BA | 773/893 (87%) | 638 (82%) | 134 (17%) | 1 (0%) | 48 | 83 |
| 1 | BB | 773/893 (87%) | 672 (87%) | 101 (13%) | 0 | 100 | 100 |
| 1 | C | 773/893 (87%) | 644 (83%) | 128 (17%) | 1 (0%) | 48 | 83 |
| 1 | CA | 773/893 (87%) | 631 (82%) | 142 (18%) | 0 | 100 | 100 |
| 1 | CB | 773/893 (87%) | 640 (83%) | 132 (17%) | 1 (0%) | 48 | 83 |
| 1 | D | 773/893 (87%) | 664 (86%) | 108 (14%) | 1 (0%) | 48 | 83 |
| 1 | DA | 773/893 (87%) | 634 (82%) | 139 (18%) | 0 | 100 | 100 |
| 1 | DB | 773/893 (87%) | 654 (85%) | 119 (15%) | 0 | 100 | 100 |
| 1 | E | 773/893 (87%) | 650 (84%) | 123 (16%) | 0 | 100 | 100 |
| 1 | EA | 773/893 (87%) | 642 (83%) | 130 (17%) | 1 (0%) | 48 | 83 |
| 1 | EB | 773/893 (87%) | 649 (84%) | 124 (16%) | 0 | 100 | 100 |
| 1 | F | 773/893 (87%) | 659 (85%) | 113 (15%) | 1 (0%) | 48 | 83 |
| 1 | FA | 773/893 (87%) | 629 (81%) | 144 (19%) | 0 | 100 | 100 |
| 1 | FB | 773/893 (87%) | 648 (84%) | 125 (16%) | 0 | 100 | 100 |
| 1 | G | 773/893 (87%) | 640 (83%) | 133 (17%) | 0 | 100 | 100 |
| 1 | GA | 773/893 (87%) | 646 (84%) | 127 (16%) | 0 | 100 | 100 |
| 1 | GB | 773/893 (87%) | 640 (83%) | 132 (17%) | 1 (0%) | 48 | 83 |
| 1 | H | 773/893 (87%) | 655 (85%) | 118 (15%) | 0 | 100 | 100 |
| 1 | HA | 773/893 (87%) | 642 (83%) | 129 (17%) | 2 (0%) | 36 | 71 |
| 1 | HB | 773/893 (87%) | 655 (85%) | 118 (15%) | 0 | 100 | 100 |
| 1 | I | 773/893 (87%) | 657 (85%) | 115 (15%) | 1 (0%) | 48 | 83 |
| 1 | IA | 773/893 (87%) | 648 (84%) | 124 (16%) | 1 (0%) | 48 | 83 |
| 1 | IB | 773/893 (87%) | 649 (84%) | 122 (16%) | 2 (0%) | 36 | 71 |
| 1 | J | 773/893 (87%) | 649 (84%) | 124 (16%) | 0 | 100 | 100 |
| 1 | JA | 773/893 (87%) | 641 (83%) | 132 (17%) | 0 | 100 | 100 |
| 1 | JB | 773/893 (87%) | 647 (84%) | 125 (16%) | 1 (0%) | 48 | 83 |
| 1 | K | 773/893 (87%) | 651 (84%) | 122 (16%) | 0 | 100 | 100 |
| 1 | KA | 773/893 (87%) | 643 (83%) | 130 (17%) | 0 | 100 | 100 |
| 1 | KB | 773/893 (87%) | 666 (86%) | 107 (14%) | 0 | 100 | 100 |
| 1 | L | 773/893 (87%) | 652 (84%) | 119 (15%) | 2 (0%) | 36 | 71 |

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| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles | |
|-----|-------|---------------|-----------|-----------|----------|-------------|-----|
| 1 | LA | 773/893 (87%) | 655 (85%) | 117 (15%) | 1 (0%) | 48 | 83 |
| 1 | LB | 773/893 (87%) | 658 (85%) | 115 (15%) | 0 | 100 | 100 |
| 1 | M | 773/893 (87%) | 655 (85%) | 118 (15%) | 0 | 100 | 100 |
| 1 | MA | 773/893 (87%) | 638 (82%) | 135 (18%) | 0 | 100 | 100 |
| 1 | MB | 773/893 (87%) | 656 (85%) | 117 (15%) | 0 | 100 | 100 |
| 1 | N | 773/893 (87%) | 657 (85%) | 116 (15%) | 0 | 100 | 100 |
| 1 | NA | 773/893 (87%) | 646 (84%) | 127 (16%) | 0 | 100 | 100 |
| 1 | NB | 773/893 (87%) | 653 (84%) | 119 (15%) | 1 (0%) | 48 | 83 |
| 1 | O | 773/893 (87%) | 652 (84%) | 121 (16%) | 0 | 100 | 100 |
| 1 | OA | 773/893 (87%) | 661 (86%) | 112 (14%) | 0 | 100 | 100 |
| 1 | OB | 773/893 (87%) | 655 (85%) | 118 (15%) | 0 | 100 | 100 |
| 1 | P | 773/893 (87%) | 668 (86%) | 105 (14%) | 0 | 100 | 100 |
| 1 | PA | 773/893 (87%) | 646 (84%) | 127 (16%) | 0 | 100 | 100 |
| 1 | PB | 773/893 (87%) | 654 (85%) | 119 (15%) | 0 | 100 | 100 |
| 1 | Q | 773/893 (87%) | 654 (85%) | 118 (15%) | 1 (0%) | 48 | 83 |
| 1 | QA | 773/893 (87%) | 640 (83%) | 133 (17%) | 0 | 100 | 100 |
| 1 | QB | 773/893 (87%) | 664 (86%) | 107 (14%) | 2 (0%) | 36 | 71 |
| 1 | R | 773/893 (87%) | 654 (85%) | 118 (15%) | 1 (0%) | 48 | 83 |
| 1 | RA | 773/893 (87%) | 655 (85%) | 118 (15%) | 0 | 100 | 100 |
| 1 | RB | 773/893 (87%) | 671 (87%) | 100 (13%) | 2 (0%) | 36 | 71 |
| 1 | S | 773/893 (87%) | 677 (88%) | 96 (12%) | 0 | 100 | 100 |
| 1 | SA | 773/893 (87%) | 681 (88%) | 90 (12%) | 2 (0%) | 36 | 71 |
| 1 | SB | 773/893 (87%) | 643 (83%) | 128 (17%) | 2 (0%) | 36 | 71 |
| 1 | T | 773/893 (87%) | 665 (86%) | 107 (14%) | 1 (0%) | 48 | 83 |
| 1 | TA | 773/893 (87%) | 679 (88%) | 93 (12%) | 1 (0%) | 48 | 83 |
| 1 | TB | 773/893 (87%) | 654 (85%) | 119 (15%) | 0 | 100 | 100 |
| 1 | UA | 773/893 (87%) | 662 (86%) | 108 (14%) | 3 (0%) | 30 | 67 |
| 1 | UB | 773/893 (87%) | 665 (86%) | 108 (14%) | 0 | 100 | 100 |
| 1 | V | 773/893 (87%) | 665 (86%) | 108 (14%) | 0 | 100 | 100 |
| 1 | VA | 773/893 (87%) | 652 (84%) | 120 (16%) | 1 (0%) | 48 | 83 |
| 1 | VB | 773/893 (87%) | 654 (85%) | 117 (15%) | 2 (0%) | 36 | 71 |

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| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles | |
|-----|-------|-------------------|-------------|------------|----------|-------------|-----|
| 1 | W | 773/893 (87%) | 647 (84%) | 126 (16%) | 0 | 100 | 100 |
| 1 | WA | 773/893 (87%) | 662 (86%) | 109 (14%) | 2 (0%) | 36 | 71 |
| 1 | WB | 773/893 (87%) | 666 (86%) | 106 (14%) | 1 (0%) | 48 | 83 |
| 1 | X | 773/893 (87%) | 656 (85%) | 116 (15%) | 1 (0%) | 48 | 83 |
| 1 | XA | 773/893 (87%) | 669 (86%) | 104 (14%) | 0 | 100 | 100 |
| 1 | XB | 773/893 (87%) | 643 (83%) | 130 (17%) | 0 | 100 | 100 |
| 1 | Y | 773/893 (87%) | 650 (84%) | 123 (16%) | 0 | 100 | 100 |
| 1 | YA | 773/893 (87%) | 654 (85%) | 118 (15%) | 1 (0%) | 48 | 83 |
| 1 | YB | 773/893 (87%) | 666 (86%) | 104 (14%) | 3 (0%) | 30 | 67 |
| 1 | Z | 773/893 (87%) | 645 (83%) | 128 (17%) | 0 | 100 | 100 |
| 1 | ZA | 773/893 (87%) | 668 (86%) | 105 (14%) | 0 | 100 | 100 |
| 1 | ZB | 773/893 (87%) | 660 (85%) | 113 (15%) | 0 | 100 | 100 |
| All | All | 60294/69654 (87%) | 50949 (84%) | 9299 (15%) | 46 (0%) | 49 | 83 |

All (46) Ramachandran outliers are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | C | 6 | PHE |
| 1 | CB | 8 | ILE |
| 1 | EA | 452 | ARG |
| 1 | GB | 161 | GLU |
| 1 | HA | 452 | ARG |
| 1 | I | 30 | VAL |
| 1 | LA | 452 | ARG |
| 1 | QB | 182 | CYS |
| 1 | R | 347 | GLU |
| 1 | SB | 182 | CYS |
| 1 | VB | 452 | ARG |
| 1 | WA | 96 | PRO |
| 1 | WA | 419 | LEU |
| 1 | YB | 4 | GLU |
| 1 | YB | 8 | ILE |
| 1 | F | 8 | ILE |
| 1 | L | 8 | ILE |
| 1 | RB | 182 | CYS |
| 1 | UA | 131 | ASP |
| 1 | VA | 347 | GLU |
| 1 | VB | 317 | GLU |

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| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | X | 347 | GLU |
| 1 | YA | 8 | ILE |
| 1 | YB | 40 | ASN |
| 1 | D | 107 | LYS |
| 1 | IA | 8 | ILE |
| 1 | IB | 70 | GLN |
| 1 | NB | 347 | GLU |
| 1 | SA | 518 | LEU |
| 1 | A | 452 | ARG |
| 1 | IB | 452 | ARG |
| 1 | QB | 347 | GLU |
| 1 | T | 595 | SER |
| 1 | TA | 70 | GLN |
| 1 | UA | 201 | VAL |
| 1 | UA | 595 | SER |
| 1 | HA | 56 | ARG |
| 1 | L | 6 | PHE |
| 1 | Q | 70 | GLN |
| 1 | RB | 70 | GLN |
| 1 | SB | 70 | GLN |
| 1 | JB | 51 | VAL |
| 1 | AA | 8 | ILE |
| 1 | BA | 8 | ILE |
| 1 | SA | 8 | ILE |
| 1 | WB | 8 | ILE |

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

| Mol | Chain | Analysed | Rotameric | Outliers | Percentiles | |
|-----|-------|---------------|------------|----------|-------------|-----|
| 1 | A | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | AA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | AB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | AC | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | B | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |

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| Mol | Chain | Analysed | Rotameric | Outliers | Percentiles | |
|-----|-------|---------------|------------|----------|-------------|-----|
| 1 | BA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | BB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | C | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | CA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | CB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | D | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | DA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | DB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | E | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | EA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | EB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | F | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | FA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | FB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | G | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | GA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | GB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | H | 666/755 (88%) | 665 (100%) | 1 (0%) | 87 | 85 |
| 1 | HA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | HB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | I | 666/755 (88%) | 665 (100%) | 1 (0%) | 87 | 85 |
| 1 | IA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | IB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | J | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | JA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | JB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | K | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | KA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | KB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | L | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | LA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |

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| Mol | Chain | Analysed | Rotameric | Outliers | Percentiles | |
|-----|-------|---------------|------------|----------|-------------|-----|
| 1 | LB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | M | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | MA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | MB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | N | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | NA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | NB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | O | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | OA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | OB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | P | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | PA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | PB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | Q | 666/755 (88%) | 665 (100%) | 1 (0%) | 87 | 85 |
| 1 | QA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | QB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | R | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | RA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | RB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | S | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | SA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | SB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | T | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | TA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | TB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | UA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | UB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | V | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | VA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | VB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | W | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |

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| Mol | Chain | Analysed | Rotameric | Outliers | Percentiles | |
|-----|-------|-------------------|--------------|----------|-------------|-----|
| 1 | WA | 666/755 (88%) | 665 (100%) | 1 (0%) | 87 | 85 |
| 1 | WB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | X | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | XA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | XB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | Y | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | YA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | YB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | Z | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | ZA | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| 1 | ZB | 666/755 (88%) | 666 (100%) | 0 | 100 | 100 |
| All | All | 51948/58890 (88%) | 51944 (100%) | 4 (0%) | 100 | 100 |

All (4) residues with a non-rotameric sidechain are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | H | 412 | GLU |
| 1 | I | 83 | LEU |
| 1 | Q | 457 | VAL |
| 1 | WA | 96 | PRO |

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (422) such sidechains are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | A | 38 | GLN |
| 1 | A | 57 | HIS |
| 1 | A | 469 | GLN |
| 1 | A | 509 | HIS |
| 1 | AA | 318 | GLN |
| 1 | AA | 391 | GLN |
| 1 | AA | 556 | GLN |
| 1 | AA | 667 | ASN |
| 1 | AB | 113 | GLN |
| 1 | AB | 279 | HIS |
| 1 | AB | 760 | GLN |
| 1 | AC | 17 | HIS |
| 1 | AC | 21 | GLN |

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| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | AC | 38 | GLN |
| 1 | AC | 294 | ASN |
| 1 | AC | 592 | HIS |
| 1 | AC | 641 | GLN |
| 1 | AC | 669 | GLN |
| 1 | AC | 678 | GLN |
| 1 | B | 17 | HIS |
| 1 | B | 279 | HIS |
| 1 | B | 428 | ASN |
| 1 | B | 464 | HIS |
| 1 | B | 469 | GLN |
| 1 | B | 509 | HIS |
| 1 | BA | 24 | ASN |
| 1 | BA | 80 | GLN |
| 1 | BA | 118 | ASN |
| 1 | BA | 464 | HIS |
| 1 | BA | 494 | GLN |
| 1 | BA | 546 | HIS |
| 1 | BA | 675 | HIS |
| 1 | BA | 763 | GLN |
| 1 | BB | 351 | HIS |
| 1 | BB | 464 | HIS |
| 1 | BB | 534 | HIS |
| 1 | C | 17 | HIS |
| 1 | C | 294 | ASN |
| 1 | C | 311 | GLN |
| 1 | C | 544 | ASN |
| 1 | CA | 24 | ASN |
| 1 | CA | 259 | HIS |
| 1 | CA | 428 | ASN |
| 1 | CB | 494 | GLN |
| 1 | CB | 538 | GLN |
| 1 | CB | 592 | HIS |
| 1 | CB | 763 | GLN |
| 1 | D | 17 | HIS |
| 1 | D | 38 | GLN |
| 1 | D | 391 | GLN |
| 1 | D | 544 | ASN |
| 1 | D | 675 | HIS |
| 1 | D | 678 | GLN |
| 1 | DA | 279 | HIS |
| 1 | DA | 294 | ASN |

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| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | DA | 469 | GLN |
| 1 | DB | 94 | GLN |
| 1 | DB | 113 | GLN |
| 1 | DB | 295 | GLN |
| 1 | DB | 464 | HIS |
| 1 | DB | 534 | HIS |
| 1 | DB | 544 | ASN |
| 1 | DB | 682 | GLN |
| 1 | E | 22 | ASN |
| 1 | E | 279 | HIS |
| 1 | E | 356 | HIS |
| 1 | E | 494 | GLN |
| 1 | EA | 17 | HIS |
| 1 | EA | 22 | ASN |
| 1 | EA | 295 | GLN |
| 1 | EA | 655 | GLN |
| 1 | EA | 669 | GLN |
| 1 | EA | 675 | HIS |
| 1 | F | 85 | HIS |
| 1 | F | 264 | HIS |
| 1 | F | 279 | HIS |
| 1 | F | 295 | GLN |
| 1 | F | 641 | GLN |
| 1 | F | 763 | GLN |
| 1 | FA | 14 | HIS |
| 1 | FA | 22 | ASN |
| 1 | FA | 294 | ASN |
| 1 | FA | 329 | GLN |
| 1 | FA | 351 | HIS |
| 1 | FA | 667 | ASN |
| 1 | FA | 763 | GLN |
| 1 | FB | 21 | GLN |
| 1 | FB | 24 | ASN |
| 1 | FB | 40 | ASN |
| 1 | FB | 294 | ASN |
| 1 | FB | 329 | GLN |
| 1 | FB | 546 | HIS |
| 1 | FB | 592 | HIS |
| 1 | FB | 669 | GLN |
| 1 | FB | 776 | GLN |
| 1 | G | 17 | HIS |
| 1 | G | 24 | ASN |

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| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | G | 311 | GLN |
| 1 | G | 321 | GLN |
| 1 | G | 464 | HIS |
| 1 | G | 540 | GLN |
| 1 | G | 544 | ASN |
| 1 | G | 592 | HIS |
| 1 | G | 667 | ASN |
| 1 | GA | 279 | HIS |
| 1 | GA | 321 | GLN |
| 1 | GA | 538 | GLN |
| 1 | GB | 17 | HIS |
| 1 | GB | 22 | ASN |
| 1 | GB | 356 | HIS |
| 1 | GB | 428 | ASN |
| 1 | GB | 776 | GLN |
| 1 | H | 17 | HIS |
| 1 | H | 38 | GLN |
| 1 | H | 85 | HIS |
| 1 | H | 118 | ASN |
| 1 | H | 164 | GLN |
| 1 | H | 546 | HIS |
| 1 | HA | 113 | GLN |
| 1 | HA | 311 | GLN |
| 1 | HA | 329 | GLN |
| 1 | HA | 356 | HIS |
| 1 | HA | 494 | GLN |
| 1 | HA | 534 | HIS |
| 1 | HA | 667 | ASN |
| 1 | HB | 85 | HIS |
| 1 | HB | 122 | HIS |
| 1 | HB | 171 | ASN |
| 1 | HB | 321 | GLN |
| 1 | HB | 351 | HIS |
| 1 | HB | 691 | GLN |
| 1 | HB | 797 | GLN |
| 1 | I | 17 | HIS |
| 1 | I | 22 | ASN |
| 1 | I | 279 | HIS |
| 1 | I | 464 | HIS |
| 1 | I | 469 | GLN |
| 1 | I | 546 | HIS |
| 1 | I | 776 | GLN |

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| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | IA | 17 | HIS |
| 1 | IA | 57 | HIS |
| 1 | IA | 118 | ASN |
| 1 | IA | 259 | HIS |
| 1 | IA | 667 | ASN |
| 1 | IB | 311 | GLN |
| 1 | IB | 329 | GLN |
| 1 | IB | 465 | ASN |
| 1 | IB | 494 | GLN |
| 1 | IB | 592 | HIS |
| 1 | IB | 594 | ASN |
| 1 | J | 80 | GLN |
| 1 | J | 294 | ASN |
| 1 | J | 352 | GLN |
| 1 | J | 509 | HIS |
| 1 | J | 538 | GLN |
| 1 | JA | 17 | HIS |
| 1 | JA | 321 | GLN |
| 1 | JA | 329 | GLN |
| 1 | JA | 356 | HIS |
| 1 | JA | 550 | ASN |
| 1 | JB | 94 | GLN |
| 1 | JB | 311 | GLN |
| 1 | JB | 469 | GLN |
| 1 | JB | 592 | HIS |
| 1 | JB | 669 | GLN |
| 1 | JB | 675 | HIS |
| 1 | K | 17 | HIS |
| 1 | K | 22 | ASN |
| 1 | K | 80 | GLN |
| 1 | K | 85 | HIS |
| 1 | K | 172 | GLN |
| 1 | K | 279 | HIS |
| 1 | K | 538 | GLN |
| 1 | K | 675 | HIS |
| 1 | KA | 21 | GLN |
| 1 | KA | 254 | GLN |
| 1 | KA | 279 | HIS |
| 1 | KA | 321 | GLN |
| 1 | KA | 330 | GLN |
| 1 | KA | 494 | GLN |
| 1 | KA | 592 | HIS |

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| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | KA | 675 | HIS |
| 1 | KB | 509 | HIS |
| 1 | KB | 544 | ASN |
| 1 | KB | 592 | HIS |
| 1 | KB | 669 | GLN |
| 1 | L | 279 | HIS |
| 1 | L | 295 | GLN |
| 1 | L | 329 | GLN |
| 1 | L | 351 | HIS |
| 1 | LA | 85 | HIS |
| 1 | LA | 264 | HIS |
| 1 | LA | 378 | GLN |
| 1 | LA | 534 | HIS |
| 1 | LA | 544 | ASN |
| 1 | LA | 776 | GLN |
| 1 | LB | 378 | GLN |
| 1 | LB | 469 | GLN |
| 1 | LB | 550 | ASN |
| 1 | LB | 641 | GLN |
| 1 | LB | 696 | GLN |
| 1 | M | 21 | GLN |
| 1 | M | 80 | GLN |
| 1 | M | 279 | HIS |
| 1 | M | 315 | GLN |
| 1 | M | 544 | ASN |
| 1 | MA | 80 | GLN |
| 1 | MA | 118 | ASN |
| 1 | MA | 164 | GLN |
| 1 | MA | 279 | HIS |
| 1 | MA | 311 | GLN |
| 1 | MA | 391 | GLN |
| 1 | MA | 550 | ASN |
| 1 | MA | 776 | GLN |
| 1 | MB | 352 | GLN |
| 1 | MB | 378 | GLN |
| 1 | MB | 465 | ASN |
| 1 | MB | 469 | GLN |
| 1 | MB | 550 | ASN |
| 1 | MB | 667 | ASN |
| 1 | N | 70 | GLN |
| 1 | N | 85 | HIS |
| 1 | N | 351 | HIS |

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| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | N | 465 | ASN |
| 1 | N | 544 | ASN |
| 1 | N | 592 | HIS |
| 1 | N | 682 | GLN |
| 1 | NA | 85 | HIS |
| 1 | NA | 294 | ASN |
| 1 | NA | 385 | ASN |
| 1 | NA | 534 | HIS |
| 1 | NA | 550 | ASN |
| 1 | NA | 786 | GLN |
| 1 | NB | 171 | ASN |
| 1 | NB | 592 | HIS |
| 1 | NB | 763 | GLN |
| 1 | NB | 786 | GLN |
| 1 | O | 122 | HIS |
| 1 | O | 295 | GLN |
| 1 | O | 321 | GLN |
| 1 | O | 329 | GLN |
| 1 | O | 534 | HIS |
| 1 | OA | 22 | ASN |
| 1 | OA | 80 | GLN |
| 1 | OA | 113 | GLN |
| 1 | OA | 321 | GLN |
| 1 | OA | 356 | HIS |
| 1 | OA | 534 | HIS |
| 1 | OA | 546 | HIS |
| 1 | OA | 641 | GLN |
| 1 | OA | 669 | GLN |
| 1 | OB | 85 | HIS |
| 1 | OB | 172 | GLN |
| 1 | OB | 329 | GLN |
| 1 | OB | 494 | GLN |
| 1 | OB | 534 | HIS |
| 1 | OB | 667 | ASN |
| 1 | OB | 675 | HIS |
| 1 | P | 22 | ASN |
| 1 | P | 228 | HIS |
| 1 | P | 294 | ASN |
| 1 | P | 494 | GLN |
| 1 | P | 763 | GLN |
| 1 | PA | 57 | HIS |
| 1 | PA | 352 | GLN |

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| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | PA | 675 | HIS |
| 1 | PA | 743 | GLN |
| 1 | PB | 57 | HIS |
| 1 | PB | 428 | ASN |
| 1 | PB | 538 | GLN |
| 1 | Q | 24 | ASN |
| 1 | Q | 57 | HIS |
| 1 | Q | 544 | ASN |
| 1 | Q | 675 | HIS |
| 1 | QA | 294 | ASN |
| 1 | QA | 391 | GLN |
| 1 | QA | 546 | HIS |
| 1 | QA | 592 | HIS |
| 1 | QB | 351 | HIS |
| 1 | QB | 465 | ASN |
| 1 | QB | 469 | GLN |
| 1 | QB | 544 | ASN |
| 1 | QB | 667 | ASN |
| 1 | QB | 760 | GLN |
| 1 | R | 22 | ASN |
| 1 | R | 40 | ASN |
| 1 | R | 63 | ASN |
| 1 | R | 94 | GLN |
| 1 | R | 264 | HIS |
| 1 | R | 465 | ASN |
| 1 | R | 641 | GLN |
| 1 | R | 743 | GLN |
| 1 | RA | 38 | GLN |
| 1 | RA | 57 | HIS |
| 1 | RA | 171 | ASN |
| 1 | RA | 330 | GLN |
| 1 | RA | 352 | GLN |
| 1 | RA | 659 | GLN |
| 1 | RA | 696 | GLN |
| 1 | RB | 655 | GLN |
| 1 | RB | 743 | GLN |
| 1 | S | 279 | HIS |
| 1 | S | 295 | GLN |
| 1 | S | 494 | GLN |
| 1 | S | 592 | HIS |
| 1 | S | 776 | GLN |
| 1 | SA | 38 | GLN |

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| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | SA | 94 | GLN |
| 1 | SA | 118 | ASN |
| 1 | SA | 294 | ASN |
| 1 | SA | 295 | GLN |
| 1 | SA | 550 | ASN |
| 1 | SB | 351 | HIS |
| 1 | SB | 469 | GLN |
| 1 | T | 17 | HIS |
| 1 | T | 85 | HIS |
| 1 | T | 352 | GLN |
| 1 | T | 464 | HIS |
| 1 | T | 641 | GLN |
| 1 | T | 667 | ASN |
| 1 | T | 786 | GLN |
| 1 | TA | 85 | HIS |
| 1 | TA | 259 | HIS |
| 1 | TA | 391 | GLN |
| 1 | TA | 469 | GLN |
| 1 | TA | 538 | GLN |
| 1 | TB | 22 | ASN |
| 1 | TB | 164 | GLN |
| 1 | TB | 294 | ASN |
| 1 | TB | 329 | GLN |
| 1 | TB | 428 | ASN |
| 1 | TB | 534 | HIS |
| 1 | TB | 667 | ASN |
| 1 | TB | 675 | HIS |
| 1 | UA | 57 | HIS |
| 1 | UA | 259 | HIS |
| 1 | UA | 391 | GLN |
| 1 | UA | 546 | HIS |
| 1 | UA | 556 | GLN |
| 1 | UB | 57 | HIS |
| 1 | UB | 80 | GLN |
| 1 | UB | 170 | GLN |
| 1 | UB | 550 | ASN |
| 1 | UB | 641 | GLN |
| 1 | V | 351 | HIS |
| 1 | V | 465 | ASN |
| 1 | V | 592 | HIS |
| 1 | V | 594 | ASN |
| 1 | V | 678 | GLN |

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| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | V | 785 | GLN |
| 1 | VA | 57 | HIS |
| 1 | VA | 469 | GLN |
| 1 | VA | 540 | GLN |
| 1 | VA | 630 | GLN |
| 1 | VB | 17 | HIS |
| 1 | VB | 228 | HIS |
| 1 | VB | 279 | HIS |
| 1 | VB | 494 | GLN |
| 1 | VB | 534 | HIS |
| 1 | VB | 550 | ASN |
| 1 | VB | 682 | GLN |
| 1 | W | 21 | GLN |
| 1 | W | 22 | ASN |
| 1 | W | 38 | GLN |
| 1 | W | 122 | HIS |
| 1 | W | 295 | GLN |
| 1 | W | 509 | HIS |
| 1 | W | 594 | ASN |
| 1 | W | 667 | ASN |
| 1 | WA | 164 | GLN |
| 1 | WA | 321 | GLN |
| 1 | WA | 356 | HIS |
| 1 | WB | 17 | HIS |
| 1 | WB | 170 | GLN |
| 1 | WB | 171 | ASN |
| 1 | WB | 259 | HIS |
| 1 | WB | 315 | GLN |
| 1 | WB | 329 | GLN |
| 1 | WB | 352 | GLN |
| 1 | WB | 509 | HIS |
| 1 | WB | 776 | GLN |
| 1 | X | 38 | GLN |
| 1 | X | 465 | ASN |
| 1 | X | 534 | HIS |
| 1 | XA | 544 | ASN |
| 1 | XB | 294 | ASN |
| 1 | XB | 295 | GLN |
| 1 | XB | 329 | GLN |
| 1 | XB | 356 | HIS |
| 1 | Y | 122 | HIS |
| 1 | Y | 164 | GLN |

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| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | Y | 534 | HIS |
| 1 | Y | 538 | GLN |
| 1 | Y | 592 | HIS |
| 1 | Y | 667 | ASN |
| 1 | YA | 259 | HIS |
| 1 | YA | 465 | ASN |
| 1 | YA | 534 | HIS |
| 1 | YA | 556 | GLN |
| 1 | YB | 17 | HIS |
| 1 | YB | 294 | ASN |
| 1 | YB | 321 | GLN |
| 1 | YB | 356 | HIS |
| 1 | YB | 391 | GLN |
| 1 | YB | 464 | HIS |
| 1 | YB | 594 | ASN |
| 1 | YB | 797 | GLN |
| 1 | Z | 356 | HIS |
| 1 | Z | 550 | ASN |
| 1 | ZA | 38 | GLN |
| 1 | ZA | 170 | GLN |
| 1 | ZA | 259 | HIS |
| 1 | ZA | 321 | GLN |
| 1 | ZA | 329 | GLN |
| 1 | ZA | 534 | HIS |
| 1 | ZA | 659 | GLN |
| 1 | ZB | 14 | HIS |
| 1 | ZB | 17 | HIS |
| 1 | ZB | 21 | GLN |
| 1 | ZB | 57 | HIS |
| 1 | ZB | 351 | HIS |
| 1 | ZB | 648 | GLN |

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

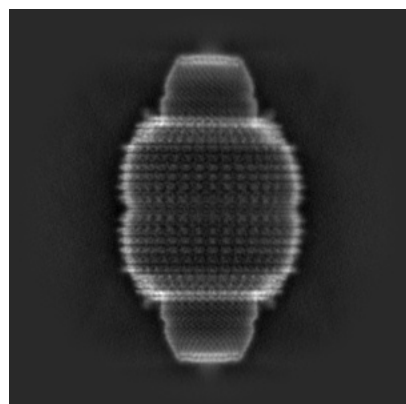
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-53423. These allow visual inspection of the internal detail of the map and identification of artifacts.

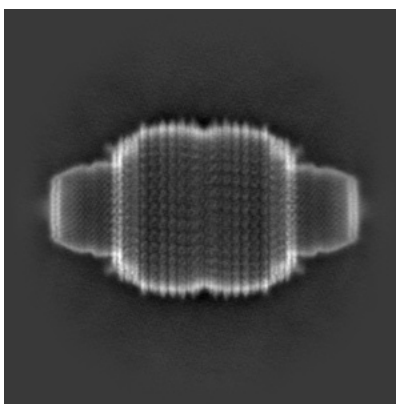
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

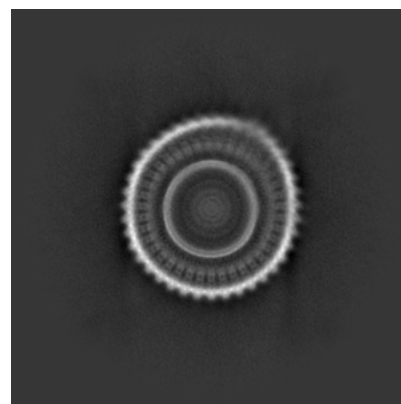
6.1.1 Primary map



X

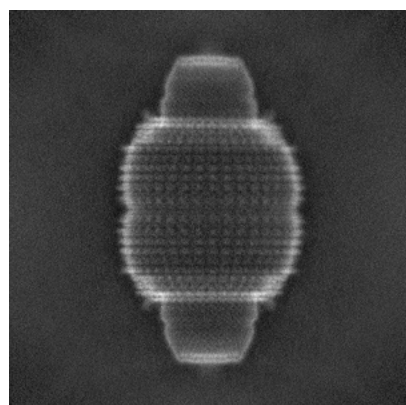


Y

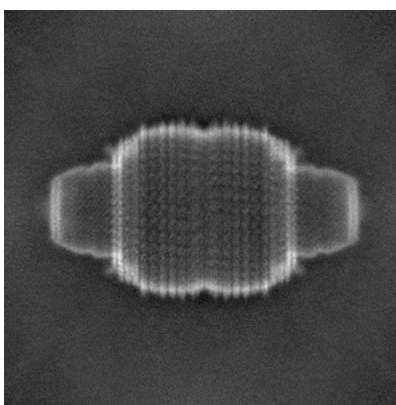


Z

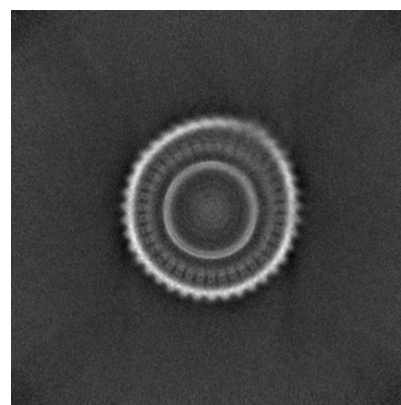
6.1.2 Raw map



X



Y

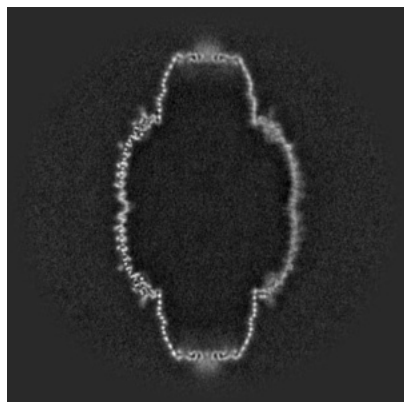


Z

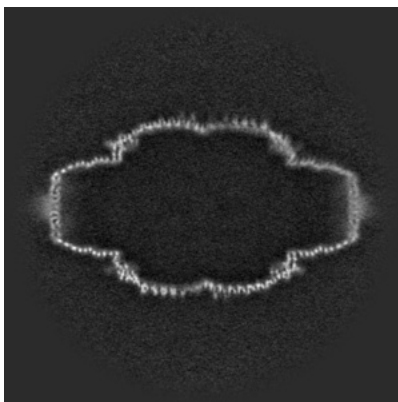
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

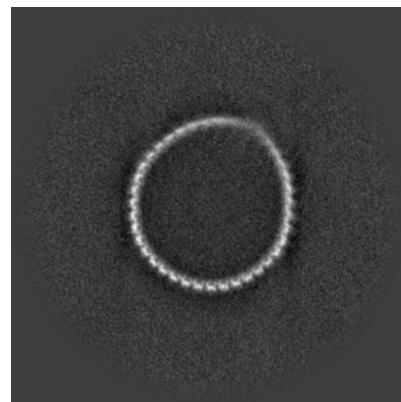
6.2.1 Primary map



X Index: 512

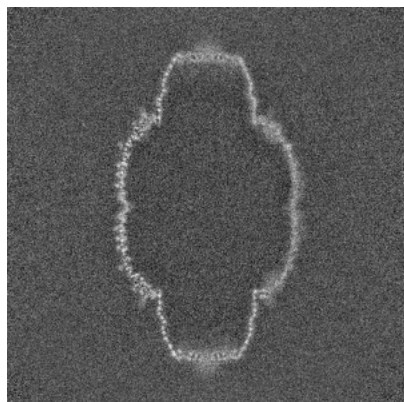


Y Index: 512

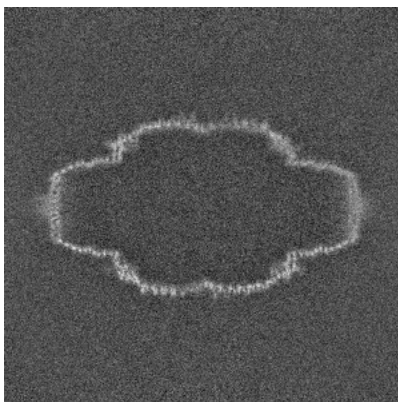


Z Index: 512

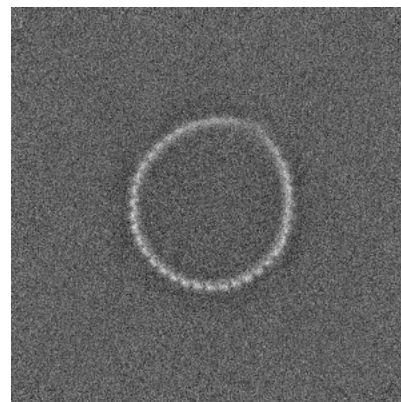
6.2.2 Raw map



X Index: 512



Y Index: 512

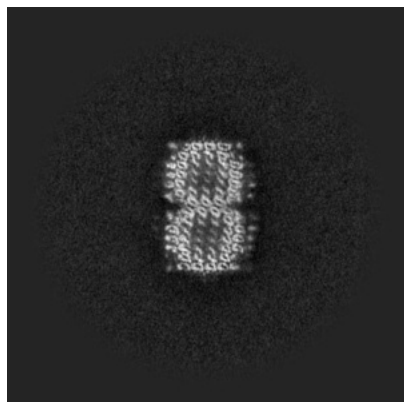


Z Index: 512

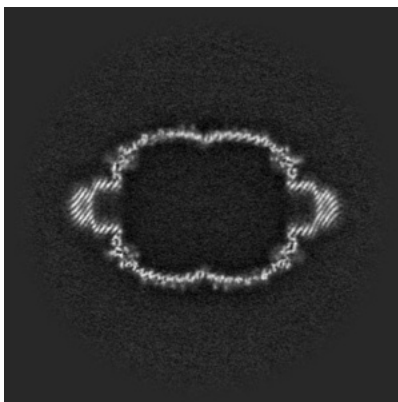
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

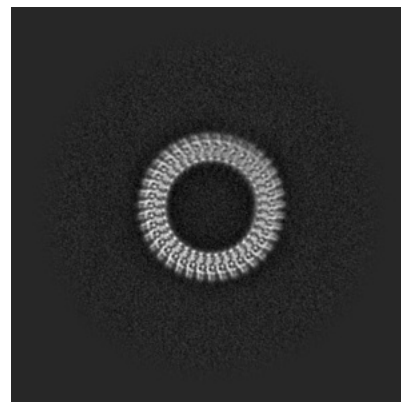
6.3.1 Primary map



X Index: 310

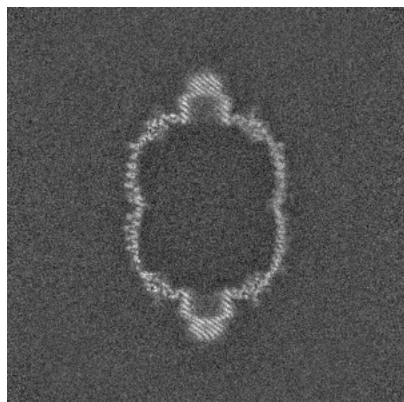


Y Index: 404

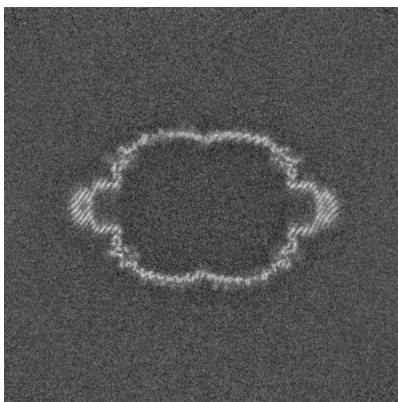


Z Index: 296

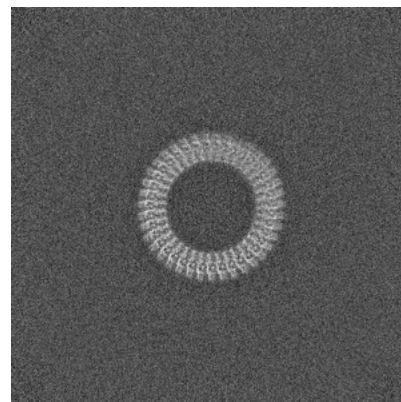
6.3.2 Raw map



X Index: 404



Y Index: 404

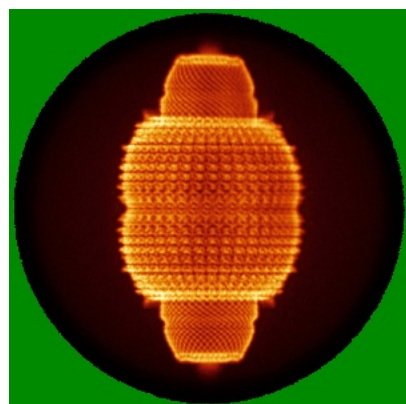


Z Index: 297

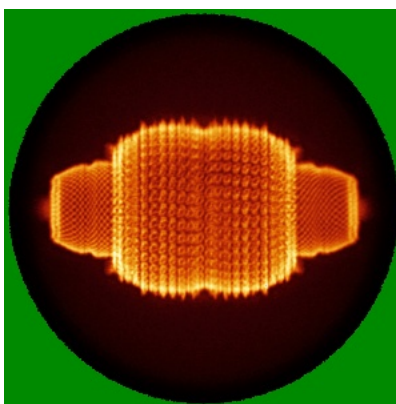
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

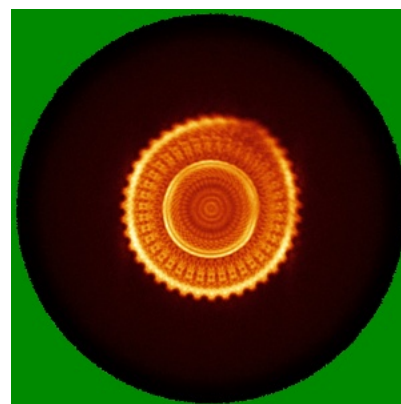
6.4.1 Primary map



X

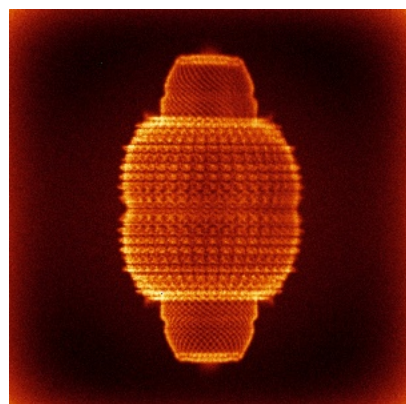


Y

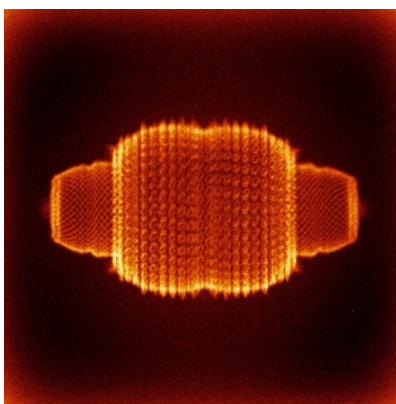


Z

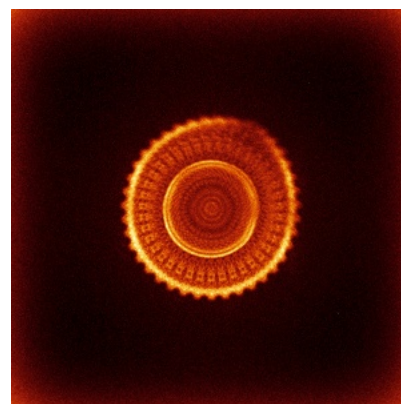
6.4.2 Raw map



X



Y



Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [i](#)

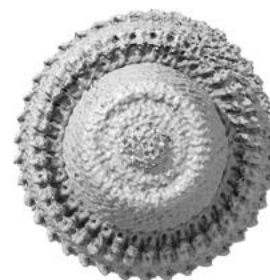
6.5.1 Primary map



X



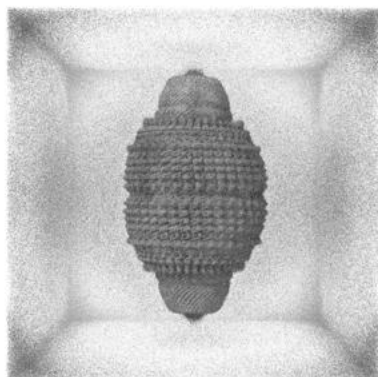
Y



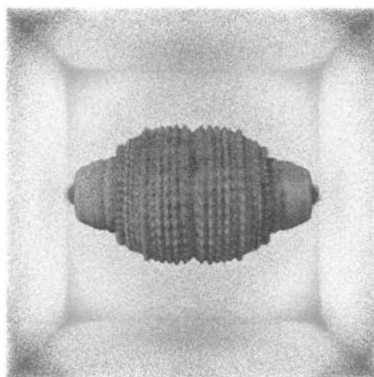
Z

The images above show the 3D surface view of the map at the recommended contour level 0.35. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

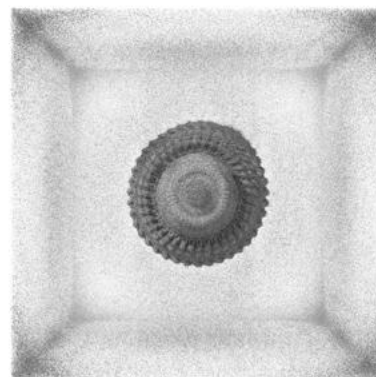
6.5.2 Raw map



X



Y



Z

These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

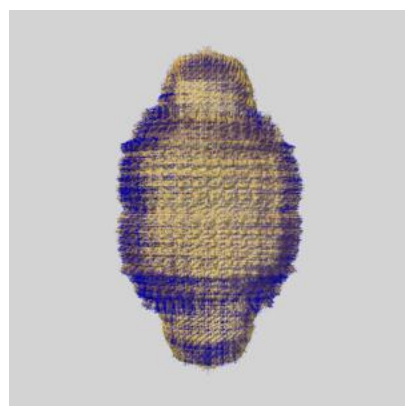
6.6 Mask visualisation [i](#)

This section shows the 3D surface view of the primary map at 50% transparency overlaid with the specified mask at 0% transparency

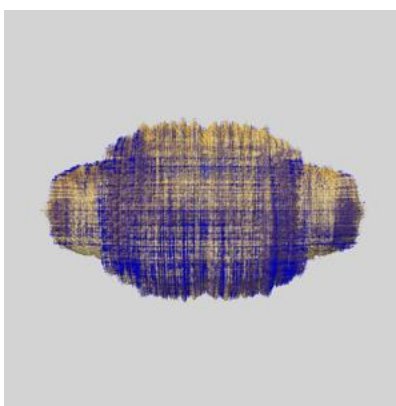
A mask typically either:

- Encompasses the whole structure
- Separates out a domain, a functional unit, a monomer or an area of interest from a larger structure

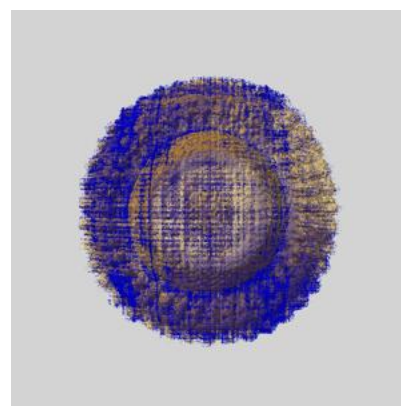
6.6.1 emd_53423_msk_1.map [i](#)



X



Y

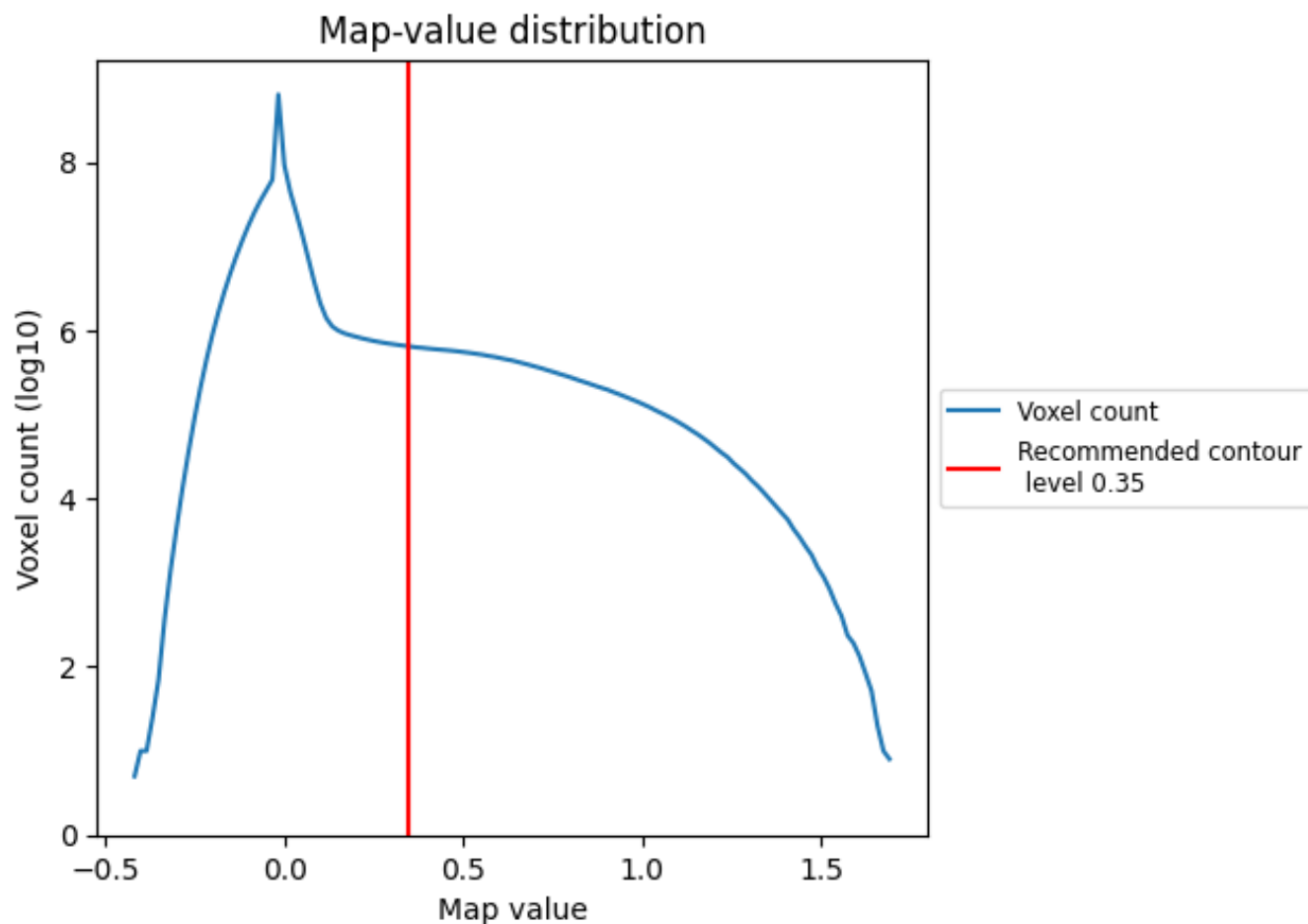


Z

7 Map analysis [i](#)

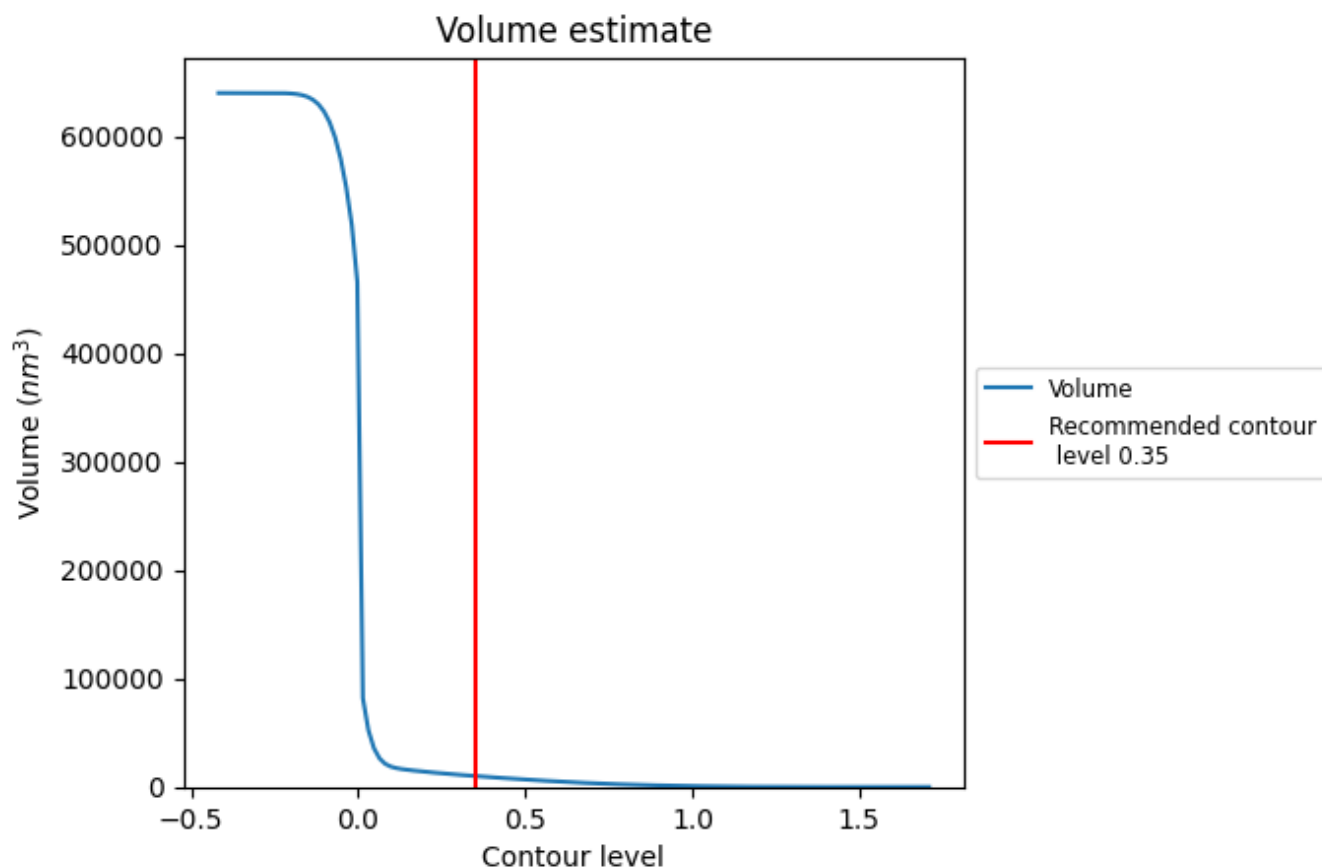
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

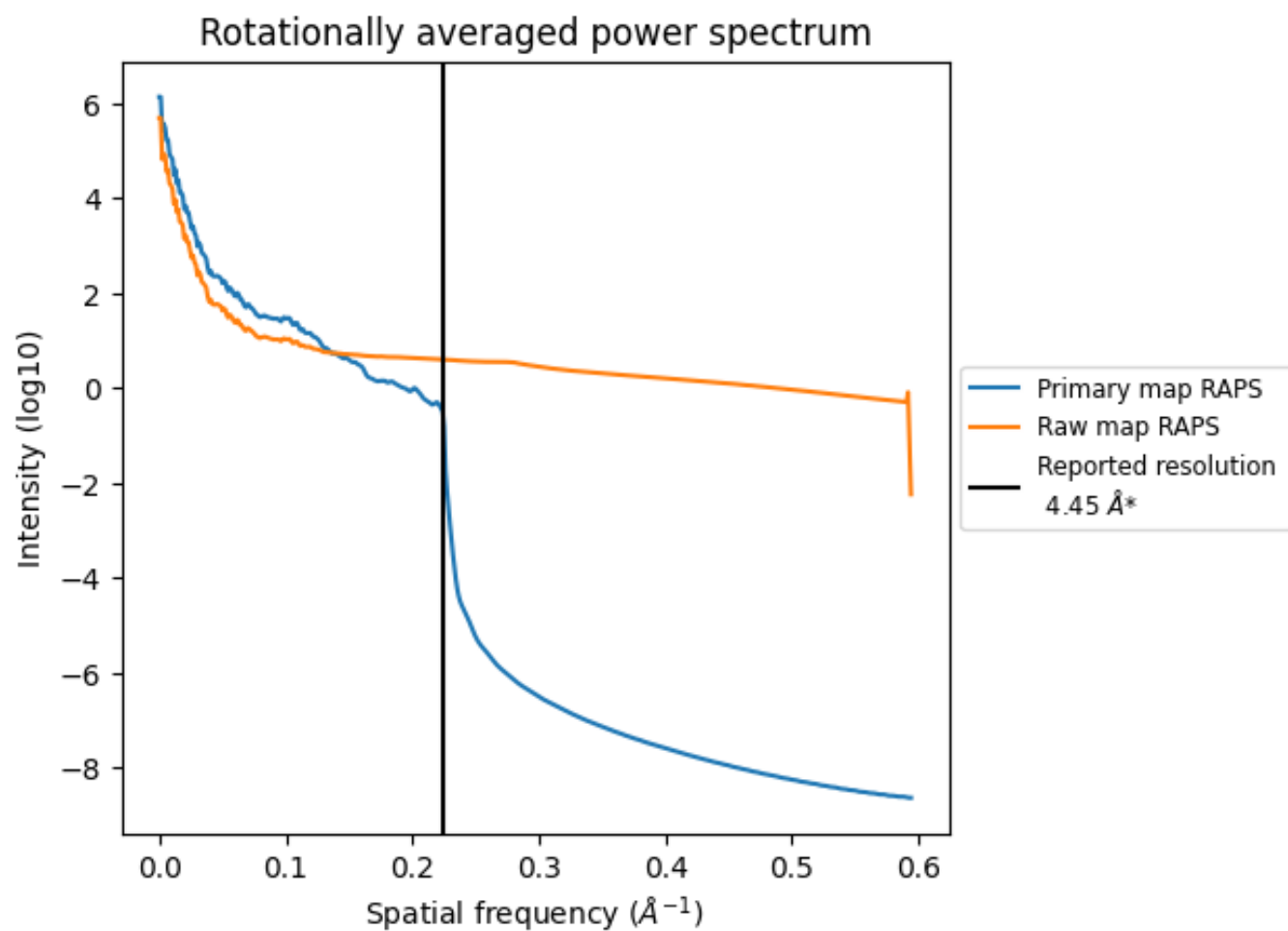
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 10088 nm^3 ; this corresponds to an approximate mass of 9113 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum ⓘ

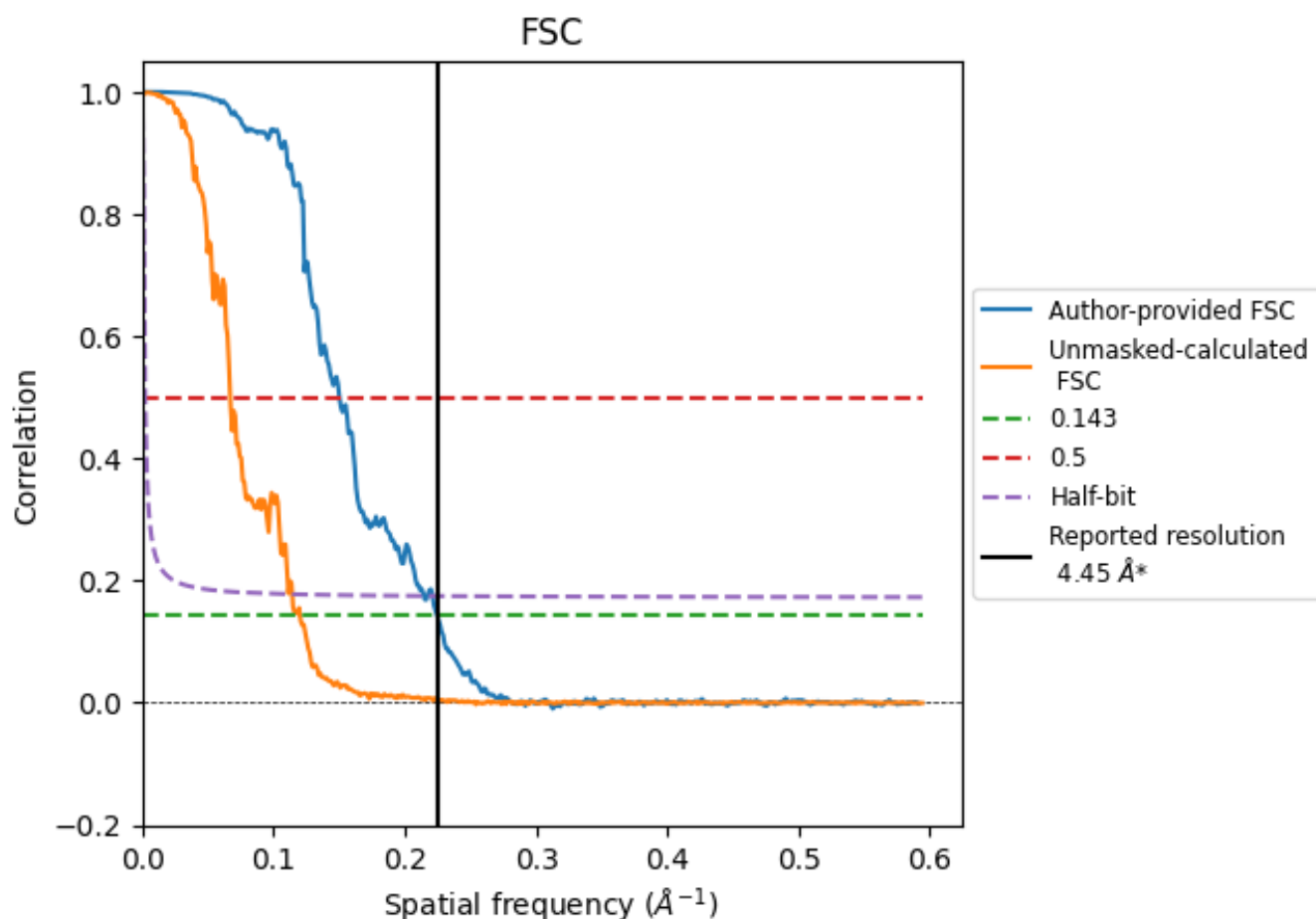


*Reported resolution corresponds to spatial frequency of 0.225 \AA^{-1}

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.225 Å⁻¹

8.2 Resolution estimates [i](#)

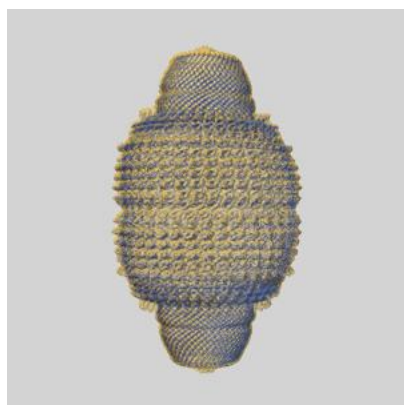
| Resolution estimate (Å) | Estimation criterion (FSC cut-off) | | |
|---------------------------|------------------------------------|-------|----------|
| | 0.143 | 0.5 | Half-bit |
| Reported by author | 4.45 | - | - |
| Author-provided FSC curve | 4.45 | 6.66 | 4.66 |
| Unmasked-calculated* | 8.32 | 14.90 | 8.76 |

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 8.32 differs from the reported value 4.45 by more than 10 %

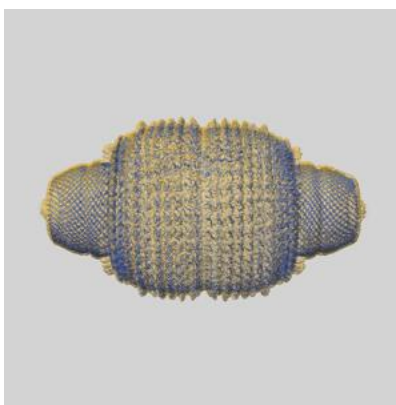
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-53423 and PDB model 9QWQ. Per-residue inclusion information can be found in [section 3](#) on [page 10](#).

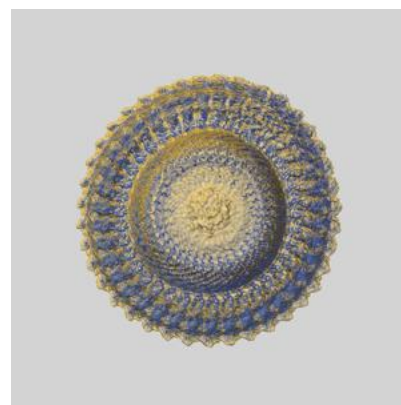
9.1 Map-model overlay [i](#)



X



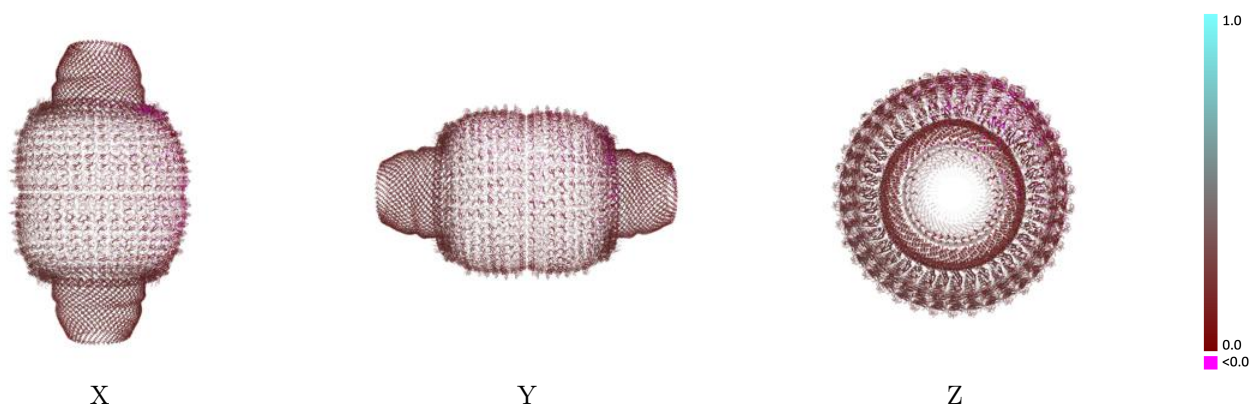
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.35 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



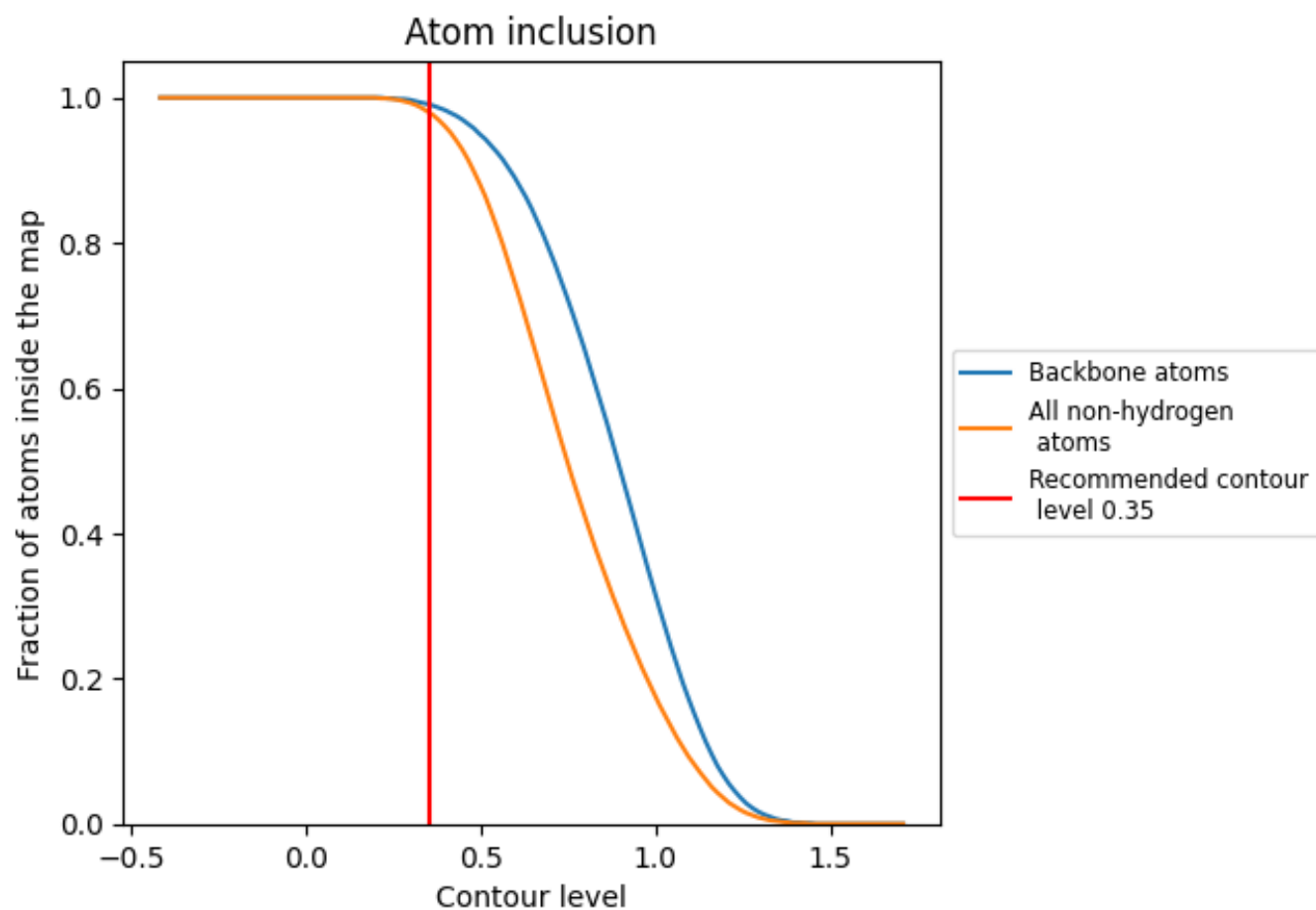
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.35).







































































9.4 Atom inclusion ⓘ



At the recommended contour level, 99% of all backbone atoms, 98% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary





















































































The table lists the average atom inclusion at the recommended contour level (0.35) and Q-score for the entire model and for each chain.

| Chain | Atom inclusion | Q-score |
|-------|--|--|
| All |  0.9800 |  0.2230 |
| A |  0.9920 |  0.2640 |
| AA |  0.9800 |  0.2250 |
| AB |  0.9940 |  0.1880 |
| AC |  0.9780 |  0.1870 |
| B |  0.9930 |  0.2640 |
| BA |  0.9760 |  0.2270 |
| BB |  0.9940 |  0.2040 |
| C |  0.9920 |  0.2630 |
| CA |  0.9820 |  0.2260 |
| CB |  0.9950 |  0.2160 |
| D |  0.9940 |  0.2620 |
| DA |  0.9910 |  0.2320 |
| DB |  0.9940 |  0.2230 |
| E |  0.9950 |  0.2540 |
| EA |  0.9940 |  0.2430 |
| EB |  0.9960 |  0.2340 |
| F |  0.9890 |  0.2530 |
| FA |  0.9940 |  0.2480 |
| FB |  0.9940 |  0.2360 |
| G |  0.9910 |  0.2520 |
| GA |  0.9910 |  0.2540 |
| GB |  0.9920 |  0.2410 |
| H |  0.9910 |  0.2430 |
| HA |  0.9920 |  0.2590 |
| HB |  0.9890 |  0.2440 |
| I |  0.9930 |  0.2380 |
| IA |  0.9920 |  0.2610 |
| IB |  0.9920 |  0.2460 |
| J |  0.9950 |  0.2370 |
| JA |  0.9880 |  0.2620 |
| JB |  0.9930 |  0.2500 |
| K |  0.9920 |  0.2360 |
| KA |  0.9910 |  0.2660 |
| KB |  0.9940 |  0.2560 |



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| Chain | Atom inclusion | Q-score |
|-------|--|--|
| L |  0.9910 |  0.2340 |
| LA |  0.9890 |  0.2630 |
| LB |  0.9930 |  0.2550 |
| M |  0.9920 |  0.2250 |
| MA |  0.9910 |  0.2640 |
| MB |  0.9910 |  0.2580 |
| N |  0.9930 |  0.2230 |
| NA |  0.9900 |  0.2650 |
| NB |  0.9910 |  0.2580 |
| O |  0.9920 |  0.2170 |
| OA |  0.9830 |  0.1810 |
| OB |  0.9910 |  0.2580 |
| P |  0.9910 |  0.2040 |
| PA |  0.9860 |  0.1750 |
| PB |  0.9890 |  0.2560 |
| Q |  0.9880 |  0.2020 |
| QA |  0.9780 |  0.1640 |
| QB |  0.9870 |  0.2560 |
| R |  0.9610 |  0.1900 |
| RA |  0.9710 |  0.1640 |
| RB |  0.9890 |  0.2510 |
| S |  0.8700 |  0.1770 |
| SA |  0.9420 |  0.1590 |
| SB |  0.9890 |  0.2500 |
| T |  0.9570 |  0.1780 |
| TA |  0.8820 |  0.1460 |
| TB |  0.9930 |  0.2500 |
| UA |  0.7690 |  0.1330 |
| UB |  0.9910 |  0.2430 |
| V |  0.9820 |  0.1810 |
| VA |  0.8320 |  0.1360 |
| VB |  0.9900 |  0.2370 |
| W |  0.9910 |  0.1900 |
| WA |  0.9540 |  0.1530 |
| WB |  0.9940 |  0.2270 |
| X |  0.9940 |  0.2080 |
| XA |  0.9770 |  0.1600 |
| XB |  0.9940 |  0.2160 |
| Y |  0.9930 |  0.2190 |
| YA |  0.9860 |  0.1680 |
| YB |  0.9960 |  0.2000 |
| Z |  0.9890 |  0.2210 |

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| Chain | Atom inclusion | Q-score |
|-------|--|--|
| ZA |  0.9930 |  0.1880 |
| ZB |  0.9880 |  0.1970 |