



Full wwPDB X-ray Structure Validation Report ⓘ

Apr 5, 2026 – 05:55 AM UTC

PDB ID : 10PX / pdb_000010px
Title : Crystal structure of the wild-type *Thermus thermophilus* 70S ribosome in complex with benzoxaborole derivative of azithromycin (AZI-BB2), mRNA, aminoacylated A-site Phe-tRNA^{phe}, aminoacylated P-site fMet-tRNA^{met}, and deacylated E-site tRNA^{phe} at 2.45Å resolution
Authors : Chen, C.-W.; Volynkina, I.A.; Bortyazh, M.O.; Tereshchenkov, A.G.; Karakchieva, A.O.; Lukianov, D.A.; Komarova, E.S.; Tupikin, A.E.; Skvortsov, D.A.; Tevyashova, A.N.; Tikhomirov, A.S.; Tashlitsky, V.N.; Kabilov, M.R.; Shchekotikhin, A.E.; Dontsova, O.A.; Sergiev, P.V.; Polikanov, Y.S.
Deposited on : 2026-02-01
Resolution : 2.45 Å(reported)

This is a Full wwPDB X-ray Structure 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/XrayValidationReportHelp>

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:

MolProbity	: 4-5-2 with Phenix2.0
Mogul	: 2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	: 2.0
EDS	: 3.0
Buster-report	: wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	: 20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	: 9.0.010 (Gargrove)

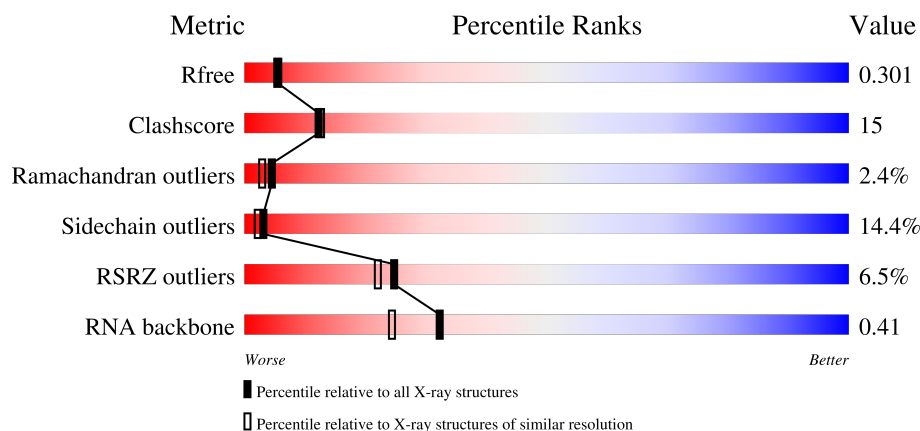
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.45 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)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	1190 (2.46-2.46)
Clashscore	190562	1229 (2.46-2.46)
Ramachandran outliers	187476	1218 (2.46-2.46)
Sidechain outliers	187428	1218 (2.46-2.46)
RSRZ outliers	180081	1190 (2.46-2.46)
RNA backbone	3983	1023 (2.72-2.20)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower 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 electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	1A	2915	

Continued on next page...




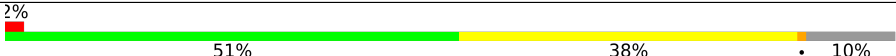

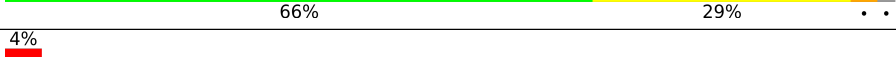



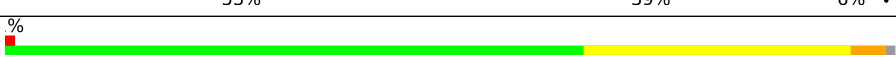
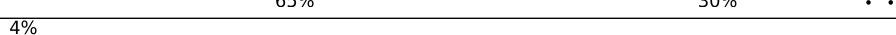



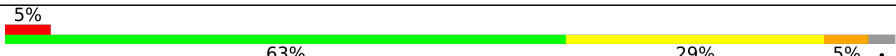

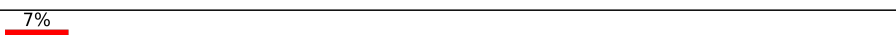
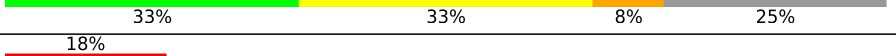
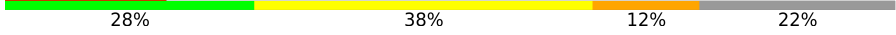




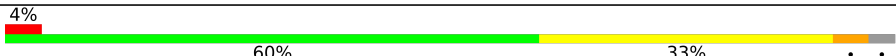
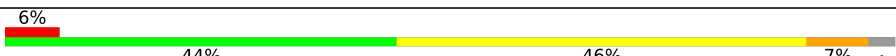
Density-Fitness : 1.0.12
 Ideal geometry (proteins) : Engh & Huber (2001)
 Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
 Validation Pipeline (wwPDB-VP) : 2.49

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	2A	2915	
2	1B	121	
2	2B	121	
3	1D	276	
3	2D	276	
4	1E	206	
4	2E	206	
5	1F	210	
5	2F	210	
6	1G	182	
6	2G	182	
7	1H	180	
7	2H	180	
8	1I	148	
8	2I	148	
9	1N	140	
9	2N	140	
10	1O	122	
10	2O	122	
11	1P	150	
11	2P	150	
12	1Q	141	
12	2Q	141	
13	1R	118	
13	2R	118	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
14	1S	112	
14	2S	112	
15	1T	146	
15	2T	146	
16	1U	118	
16	2U	118	
17	1V	101	
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
20	1Y	110	
20	2Y	110	
21	1Z	206	
21	2Z	206	
22	10	85	
22	20	85	
23	11	98	
23	21	98	
24	12	72	
24	22	72	
25	13	60	
25	23	60	
26	14	71	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
26	24	71	
27	15	60	
27	25	60	
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	




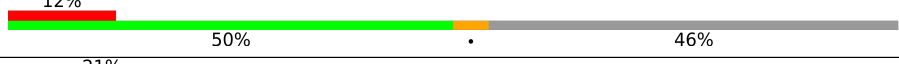
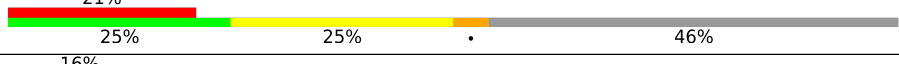
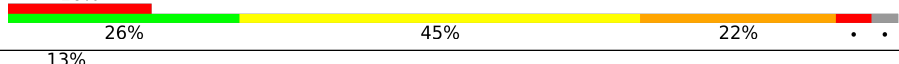
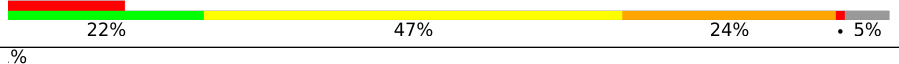

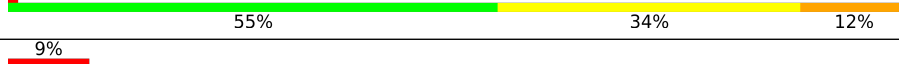
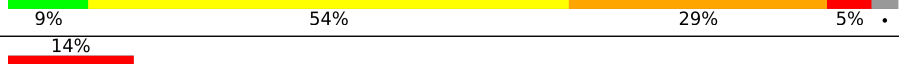
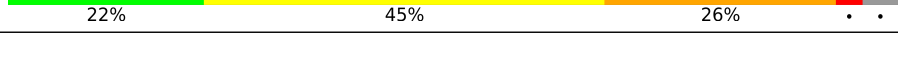
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
39	1h	138	
39	2h	138	
40	1i	128	
40	2i	128	
41	1j	105	
41	2j	105	
42	1k	129	
42	2k	129	
43	1l	132	
43	2l	132	
44	1m	126	
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
46	2o	89	
47	1p	88	
47	2p	88	
48	1q	105	
48	2q	105	
49	1r	88	
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
51	2t	106	
52	1u	27	
52	2u	27	
53	1v	24	
53	2v	24	
54	1w	76	
54	2w	76	
55	1x	77	
55	2x	77	
56	1y	76	
56	2y	76	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
57	MG	29	101	-	-	-	X

2 Entry composition

There are 62 unique types of molecules in this entry. The entry contains 300377 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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 RNA chain called 23S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1A	2871	Total	C	N	O	P	0	0	0
			61852	27531	11572	19878	2871			
1	2A	2800	Total	C	N	O	P	0	0	0
			60322	26848	11284	19390	2800			

- Molecule 2 is a RNA chain called 5S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	1B	120	Total	C	N	O	P	0	0	0
			2577	1146	476	835	120			
2	2B	120	Total	C	N	O	P	0	0	0
			2575	1146	476	833	120			

- Molecule 3 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	1D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			
3	2D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			

- Molecule 4 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	1E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			
4	2E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			

- Molecule 5 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	1F	203	Total	C	N	O	S	0	0	1
			1584	1009	298	275	2			
5	2F	203	Total	C	N	O	S	0	0	1
			1580	1007	297	274	2			

- Molecule 6 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	1G	181	Total	C	N	O	S	0	0	0
			1423	913	253	253	4			
6	2G	181	Total	C	N	O	S	0	0	0
			1428	913	258	253	4			

- Molecule 7 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	1H	174	Total	C	N	O	S	0	0	0
			1330	845	248	236	1			
7	2H	174	Total	C	N	O	S	0	0	0
			1330	845	248	236	1			

- Molecule 8 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	1I	146	Total	C	N	O	S	0	0	0
			1097	701	191	204	1			
8	2I	146	Total	C	N	O	S	0	0	0
			1064	681	186	196	1			

- Molecule 9 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	1N	140	Total	C	N	O	S	0	0	0
			1117	719	207	187	4			
9	2N	140	Total	C	N	O	S	0	0	0
			1117	719	207	187	4			

- Molecule 10 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	1O	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	2O	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

- Molecule 11 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	1P	149	Total	C	N	O	S	0	0	0
			1135	706	230	196	3			
11	2P	149	Total	C	N	O	S	0	0	0
			1135	706	230	196	3			

- Molecule 12 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	1Q	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			
12	2Q	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			

- Molecule 13 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	1R	118	Total	C	N	O	S	0	0	0
			968	604	203	160	1			
13	2R	118	Total	C	N	O	S	0	0	0
			968	604	203	160	1			

- Molecule 14 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	1S	110	Total	C	N	O	0	0	0
			873	550	174	149			
14	2S	110	Total	C	N	O	0	0	0
			870	549	173	148			

- Molecule 15 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	1T	131	Total	C	N	O	S	0	0	0
			1091	680	225	185	1			
15	2T	131	Total	C	N	O	S	0	0	0
			1083	675	224	183	1			

- Molecule 16 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	1U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			
16	2U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			

- Molecule 17 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	1V	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			
17	2V	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			

- Molecule 18 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	1W	112	Total	C	N	O	S	0	0	0
			886	557	174	153	2			
18	2W	112	Total	C	N	O	S	0	0	0
			886	557	174	153	2			

- Molecule 19 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	1X	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			
19	2X	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			

- Molecule 20 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	1Y	107	Total	C	N	O	S	0	0	0
			806	517	152	131	6			
20	2Y	107	Total	C	N	O	S	0	0	0
			806	517	152	131	6			

- Molecule 21 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	1Z	154	Total	C	N	O	S	0	0	0
			1240	795	222	220	3			
21	2Z	160	Total	C	N	O	S	0	0	0
			1271	814	228	227	2			

- Molecule 22 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	10	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			
22	20	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			

- Molecule 23 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	11	97	Total	C	N	O	S	0	0	0
			755	475	148	131	1			
23	21	97	Total	C	N	O	S	0	0	0
			755	475	148	131	1			

- Molecule 24 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	12	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			
24	22	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			

- Molecule 25 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
25	13	59	Total	C	N	O	0	0	0
			469	298	90	81			
25	23	59	Total	C	N	O	0	0	0
			464	296	90	78			

- Molecule 26 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	14	69	Total	C	N	O	S	0	0	0
			552	349	99	99	5			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	24	69	Total	C	N	O	S	0	0	0
			532	339	97	91	5			

- Molecule 27 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	15	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			
27	25	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			

- Molecule 28 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	16	53	Total	C	N	O	S	0	0	0
			453	281	91	77	4			
28	26	53	Total	C	N	O	S	0	0	0
			449	279	91	75	4			

- Molecule 29 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	17	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			
29	27	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			

- Molecule 30 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	18	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			
30	28	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			

- Molecule 31 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	19	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			
31	29	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			

- Molecule 32 is a RNA chain called 16S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	1a	1500	Total	C	N	O	P	0	0	0
			32246	14358	5975	10413	1500			
32	2a	1503	Total	C	N	O	P	0	0	0
			32327	14396	5990	10438	1503			

- Molecule 33 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	1b	231	Total	C	N	O	S	0	0	0
			1846	1179	331	331	5			
33	2b	231	Total	C	N	O	S	0	0	0
			1825	1167	326	327	5			

- Molecule 34 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	1c	206	Total	C	N	O	S	0	0	0
			1548	973	301	273	1			
34	2c	206	Total	C	N	O	S	0	0	0
			1542	968	300	273	1			

- Molecule 35 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	1d	208	Total	C	N	O	S	0	0	0
			1655	1038	326	284	7			
35	2d	208	Total	C	N	O	S	0	0	0
			1674	1050	333	284	7			

- Molecule 36 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	1e	148	Total	C	N	O	S	0	0	0
			1129	714	213	198	4			
36	2e	148	Total	C	N	O	S	0	0	0
			1133	716	214	199	4			

- Molecule 37 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	1f	100	Total	C	N	O	S	0	0	0
			810	514	144	149	3			
37	2f	100	Total	C	N	O	S	0	0	0
			816	516	146	151	3			

- Molecule 38 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	1g	155	Total	C	N	O	S	0	0	0
			1231	766	243	216	6			
38	2g	155	Total	C	N	O	S	0	0	0
			1235	769	244	216	6			

- Molecule 39 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	1h	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			
39	2h	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			

- Molecule 40 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	1i	127	Total	C	N	O	0	0	0
			983	623	193	167			
40	2i	127	Total	C	N	O	0	0	0
			978	619	190	169			

- Molecule 41 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
41	1j	97	Total	C	N	O	0	0	0
			709	440	138	131			
41	2j	96	Total	C	N	O	0	0	0
			714	445	138	131			

- Molecule 42 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	1k	114	Total	C	N	O	S	0	0	0
			829	516	155	155	3			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	2k	114	Total	C	N	O	S	0	0	0
			833	519	156	155	3			

- Molecule 43 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	1l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			
43	2l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			

- Molecule 44 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	1m	123	Total	C	N	O	S	0	0	0
			958	592	198	166	2			
44	2m	122	Total	C	N	O	S	0	0	0
			950	586	197	165	2			

- Molecule 45 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	1n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			
45	2n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			

- Molecule 46 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	1o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			
46	2o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			

- Molecule 47 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	1p	82	Total	C	N	O	S	0	0	0
			681	433	134	113	1			
47	2p	82	Total	C	N	O	S	0	0	0
			677	430	133	113	1			

- Molecule 48 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	1q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			
48	2q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			

- Molecule 49 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	1r	68	Total	C	N	O		0	0	0
			555	355	108	92				
49	2r	68	Total	C	N	O		0	0	0
			555	355	108	92				

- Molecule 50 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	1s	83	Total	C	N	O	S	0	0	0
			652	417	120	113	2			
50	2s	83	Total	C	N	O	S	0	0	0
			646	412	119	113	2			

- Molecule 51 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	1t	96	Total	C	N	O	S	0	0	0
			728	446	156	124	2			
51	2t	96	Total	C	N	O	S	0	0	0
			727	446	155	124	2			

- Molecule 52 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
52	1u	23	Total	C	N	O	0	0	0
			199	122	48	29			
52	2u	23	Total	C	N	O	0	0	0
			199	122	48	29			

- Molecule 53 is a RNA chain called MET-PHE-mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1v	13	Total	C	N	O	P	0	0	0
			277	125	51	88	13			
53	2v	13	Total	C	N	O	P	0	0	0
			277	125	51	88	13			

- Molecule 54 is a RNA chain called A-site Aminoacylated Phe-tRNA^{phe}.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	74	Total	C	N	O	P	S	0	0	0
			1603	722	287	518	74	2			
54	2w	72	Total	C	N	O	P	S	0	0	0
			1555	699	280	502	72	2			

- Molecule 55 is a RNA chain called P-site Aminoacylated fMet-tRNA^{met}.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
55	1x	77	Total	C	N	O	P	S	0	0	0
			1656	740	299	538	77	2			
55	2x	77	Total	C	N	O	P	S	0	0	0
			1656	740	299	538	77	2			

- Molecule 56 is a RNA chain called E-site Deacylated tRNA^{phe}.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
56	1y	74	Total	C	N	O	P	S	0	0	0
			1585	707	285	518	74	1			
56	2y	73	Total	C	N	O	P	S	0	0	0
			1565	698	283	510	73	1			

- Molecule 57 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	1A	1099	Total	Mg	0	0
			1099	1099		
57	1B	36	Total	Mg	0	0
			36	36		
57	1D	13	Total	Mg	0	0
			13	13		
57	1E	14	Total	Mg	0	0
			14	14		
57	1F	12	Total	Mg	0	0
			12	12		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	1G	5	Total 5	Mg 5	0	0
57	1H	1	Total 1	Mg 1	0	0
57	1I	1	Total 1	Mg 1	0	0
57	1N	6	Total 6	Mg 6	0	0
57	1O	5	Total 5	Mg 5	0	0
57	1P	3	Total 3	Mg 3	0	0
57	1Q	7	Total 7	Mg 7	0	0
57	1R	4	Total 4	Mg 4	0	0
57	1S	3	Total 3	Mg 3	0	0
57	1T	4	Total 4	Mg 4	0	0
57	1U	10	Total 10	Mg 10	0	0
57	1V	10	Total 10	Mg 10	0	0
57	1W	8	Total 8	Mg 8	0	0
57	1X	7	Total 7	Mg 7	0	0
57	1Y	3	Total 3	Mg 3	0	0
57	1Z	4	Total 4	Mg 4	0	0
57	10	8	Total 8	Mg 8	0	0
57	11	5	Total 5	Mg 5	0	0
57	12	2	Total 2	Mg 2	0	0
57	13	5	Total 5	Mg 5	0	0
57	14	1	Total 1	Mg 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	15	9	Total 9	Mg 9	0	0
57	16	2	Total 2	Mg 2	0	0
57	17	7	Total 7	Mg 7	0	0
57	18	5	Total 5	Mg 5	0	0
57	1a	213	Total 213	Mg 213	0	0
57	1b	1	Total 1	Mg 1	0	0
57	1d	1	Total 1	Mg 1	0	0
57	1e	2	Total 2	Mg 2	0	0
57	1f	2	Total 2	Mg 2	0	0
57	1k	1	Total 1	Mg 1	0	0
57	1l	2	Total 2	Mg 2	0	0
57	1m	2	Total 2	Mg 2	0	0
57	1n	3	Total 3	Mg 3	0	0
57	1t	1	Total 1	Mg 1	0	0
57	1v	2	Total 2	Mg 2	0	0
57	1w	8	Total 8	Mg 8	0	0
57	1x	14	Total 14	Mg 14	0	0
57	1y	1	Total 1	Mg 1	0	0
57	2A	883	Total 883	Mg 883	0	0
57	2B	20	Total 20	Mg 20	0	0
57	2D	8	Total 8	Mg 8	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	2E	7	Total 7	Mg 7	0	0
57	2F	6	Total 6	Mg 6	0	0
57	2G	1	Total 1	Mg 1	0	0
57	2N	1	Total 1	Mg 1	0	0
57	2O	1	Total 1	Mg 1	0	0
57	2P	3	Total 3	Mg 3	0	0
57	2Q	3	Total 3	Mg 3	0	0
57	2R	3	Total 3	Mg 3	0	0
57	2T	3	Total 3	Mg 3	0	0
57	2U	1	Total 1	Mg 1	0	0
57	2V	2	Total 2	Mg 2	0	0
57	2W	3	Total 3	Mg 3	0	0
57	2X	2	Total 2	Mg 2	0	0
57	2Z	1	Total 1	Mg 1	0	0
57	20	2	Total 2	Mg 2	0	0
57	21	1	Total 1	Mg 1	0	0
57	23	1	Total 1	Mg 1	0	0
57	25	5	Total 5	Mg 5	0	0
57	27	2	Total 2	Mg 2	0	0
57	28	4	Total 4	Mg 4	0	0
57	29	1	Total 1	Mg 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	2a	234	Total Mg 234 234	0	0
57	2d	2	Total Mg 2 2	0	0
57	2e	1	Total Mg 1 1	0	0
57	2f	1	Total Mg 1 1	0	0
57	2g	1	Total Mg 1 1	0	0
57	2i	1	Total Mg 1 1	0	0
57	2j	2	Total Mg 2 2	0	0
57	2k	1	Total Mg 1 1	0	0
57	2l	4	Total Mg 4 4	0	0
57	2m	1	Total Mg 1 1	0	0
57	2p	1	Total Mg 1 1	0	0
57	2q	2	Total Mg 2 2	0	0
57	2r	2	Total Mg 2 2	0	0
57	2t	1	Total Mg 1 1	0	0
57	2v	3	Total Mg 3 3	0	0
57	2w	9	Total Mg 9 9	0	0
57	2x	6	Total Mg 6 6	0	0
57	2y	6	Total Mg 6 6	0	0

- Molecule 58 is POTASSIUM ION (CCD ID: K) (formula: K).

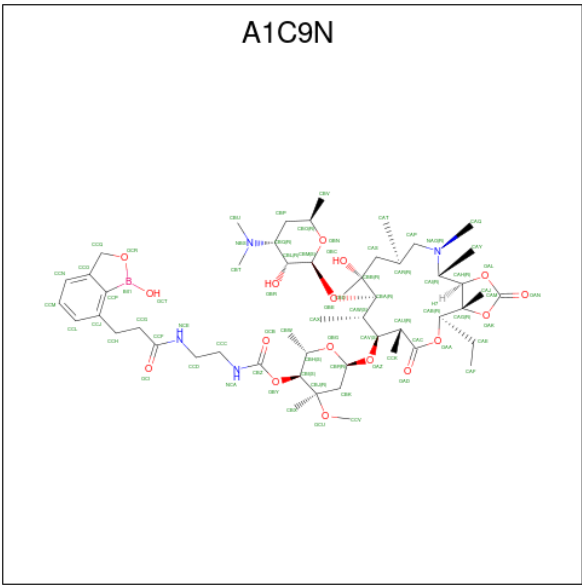
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1A	1	Total K 1 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	2A	1	Total K 1 1	0	0

- Molecule 59 is AZI-BB2 (CCD ID: A1C9N) (formula: C₅₂H₈₅BN₄O₁₇) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1A	1	Total B C N O 74 1 52 4 17	0	0
59	2A	1	Total B C N O 74 1 52 4 17	0	0

- Molecule 60 is ZINC ION (CCD ID: ZN) (formula: Zn).

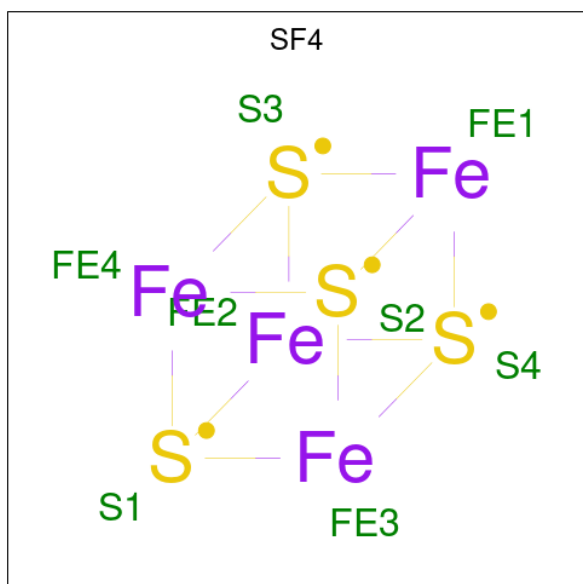
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1Y	1	Total Zn 1 1	0	0
60	14	1	Total Zn 1 1	0	0
60	15	1	Total Zn 1 1	0	0
60	16	1	Total Zn 1 1	0	0
60	19	1	Total Zn 1 1	0	0
60	1n	1	Total Zn 1 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	2Y	1	Total	Zn	0	0
			1	1		
60	24	1	Total	Zn	0	0
			1	1		
60	25	1	Total	Zn	0	0
			1	1		
60	26	1	Total	Zn	0	0
			1	1		
60	29	1	Total	Zn	0	0
			1	1		
60	2n	1	Total	Zn	0	0
			1	1		

- Molecule 61 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
61	1d	1	Total	Fe	S	0	0
			8	4	4		
61	2d	1	Total	Fe	S	0	0
			8	4	4		

- Molecule 62 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	1A	1997	Total	O	0	0
			1997	1997		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	1B	63	Total 63	O 63	0	0
62	1D	30	Total 30	O 30	0	0
62	1E	31	Total 31	O 31	0	0
62	1F	16	Total 16	O 16	0	0
62	1G	5	Total 5	O 5	0	0
62	1H	2	Total 2	O 2	0	0
62	1I	1	Total 1	O 1	0	0
62	1N	8	Total 8	O 8	0	0
62	1O	5	Total 5	O 5	0	0
62	1P	24	Total 24	O 24	0	0
62	1Q	8	Total 8	O 8	0	0
62	1R	11	Total 11	O 11	0	0
62	1S	5	Total 5	O 5	0	0
62	1T	9	Total 9	O 9	0	0
62	1U	9	Total 9	O 9	0	0
62	1V	9	Total 9	O 9	0	0
62	1W	8	Total 8	O 8	0	0
62	1X	5	Total 5	O 5	0	0
62	1Y	4	Total 4	O 4	0	0
62	1Z	1	Total 1	O 1	0	0
62	10	10	Total 10	O 10	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	11	14	Total 14	O 14	0	0
62	12	2	Total 2	O 2	0	0
62	13	3	Total 3	O 3	0	0
62	15	6	Total 6	O 6	0	0
62	16	4	Total 4	O 4	0	0
62	17	9	Total 9	O 9	0	0
62	18	10	Total 10	O 10	0	0
62	1a	379	Total 379	O 379	0	0
62	1b	1	Total 1	O 1	0	0
62	1e	1	Total 1	O 1	0	0
62	1f	1	Total 1	O 1	0	0
62	1i	1	Total 1	O 1	0	0
62	1l	7	Total 7	O 7	0	0
62	1p	1	Total 1	O 1	0	0
62	1q	2	Total 2	O 2	0	0
62	1u	1	Total 1	O 1	0	0
62	1v	5	Total 5	O 5	0	0
62	1w	13	Total 13	O 13	0	0
62	1x	15	Total 15	O 15	0	0
62	1y	2	Total 2	O 2	0	0
62	2A	1156	Total 1156	O 1156	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	2B	24	Total 24	O 24	0	0
62	2D	22	Total 22	O 22	0	0
62	2E	14	Total 14	O 14	0	0
62	2F	12	Total 12	O 12	0	0
62	2I	3	Total 3	O 3	0	0
62	2N	1	Total 1	O 1	0	0
62	2O	3	Total 3	O 3	0	0
62	2P	12	Total 12	O 12	0	0
62	2Q	1	Total 1	O 1	0	0
62	2R	6	Total 6	O 6	0	0
62	2T	5	Total 5	O 5	0	0
62	2U	3	Total 3	O 3	0	0
62	2V	1	Total 1	O 1	0	0
62	2W	1	Total 1	O 1	0	0
62	2X	3	Total 3	O 3	0	0
62	2Z	1	Total 1	O 1	0	0
62	20	3	Total 3	O 3	0	0
62	21	12	Total 12	O 12	0	0
62	23	2	Total 2	O 2	0	0
62	25	2	Total 2	O 2	0	0
62	27	4	Total 4	O 4	0	0

Continued on next page...

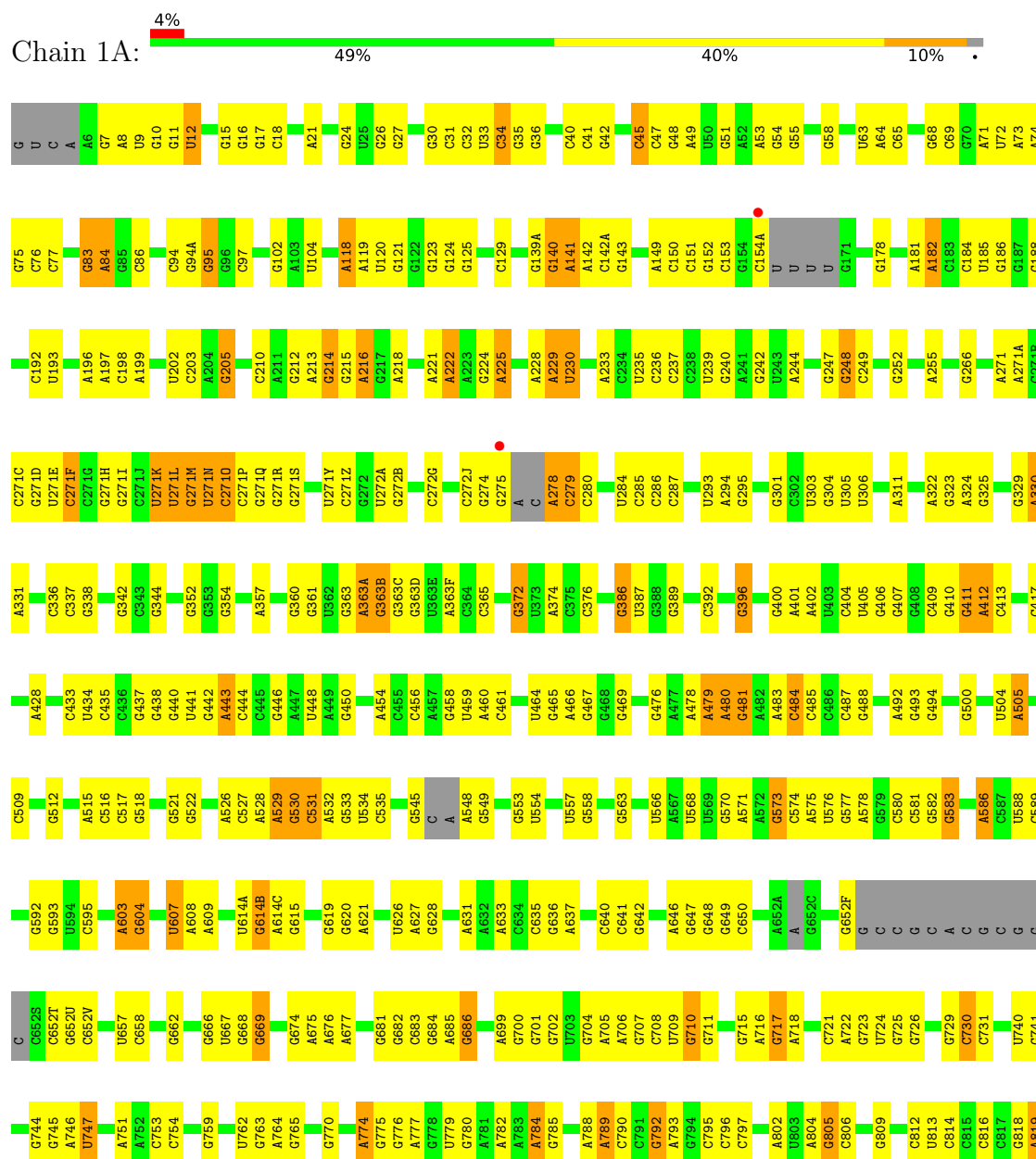
Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	28	3	Total 3	O 3	0	0
62	29	1	Total 1	O 1	0	0
62	2a	267	Total 267	O 267	0	0
62	2c	1	Total 1	O 1	0	0
62	2d	1	Total 1	O 1	0	0
62	2f	1	Total 1	O 1	0	0
62	2j	3	Total 3	O 3	0	0
62	2l	6	Total 6	O 6	0	0
62	2o	1	Total 1	O 1	0	0
62	2p	2	Total 2	O 2	0	0
62	2t	2	Total 2	O 2	0	0
62	2v	2	Total 2	O 2	0	0
62	2w	3	Total 3	O 3	0	0
62	2x	6	Total 6	O 6	0	0
62	2y	8	Total 8	O 8	0	0

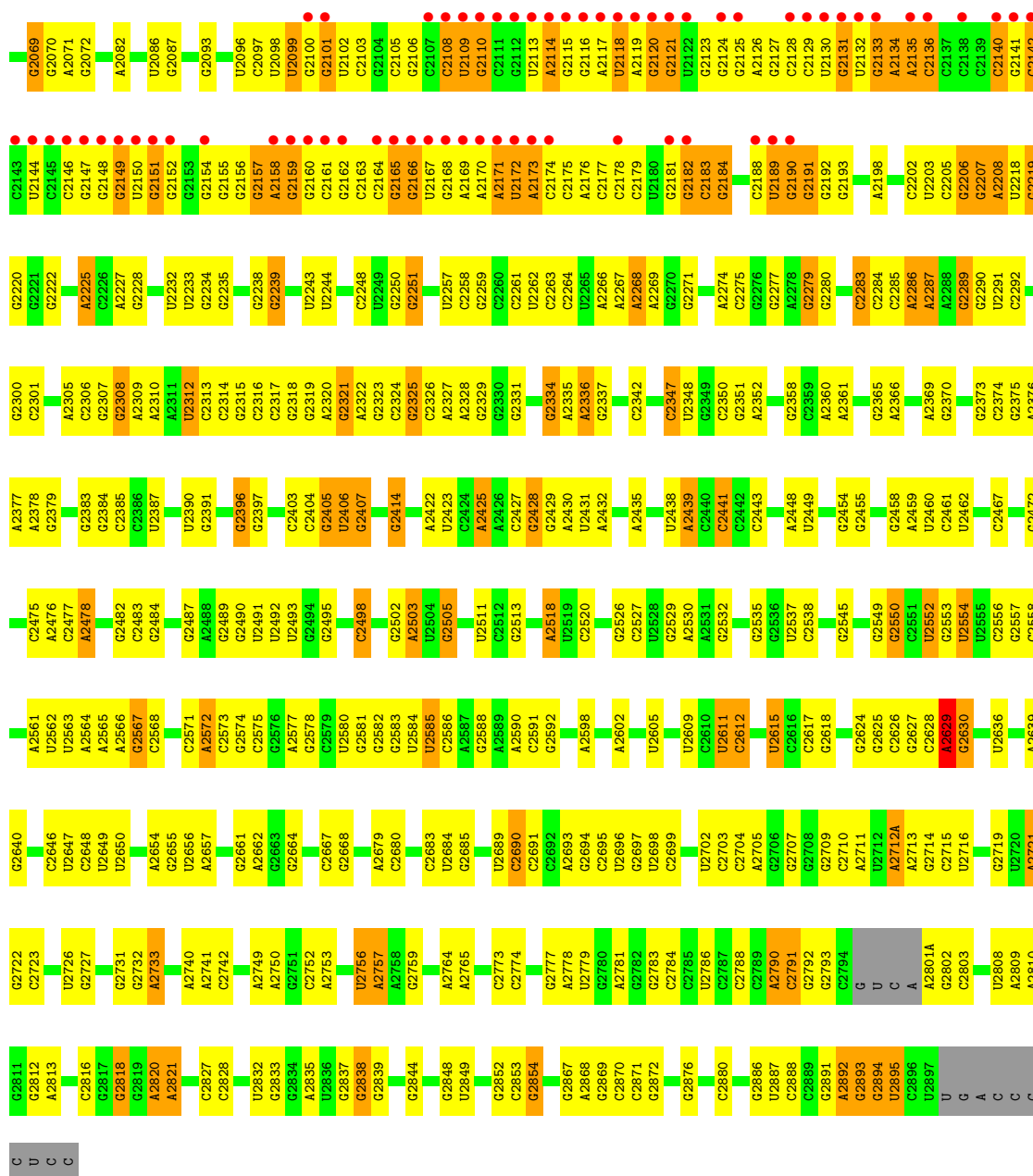
3 Residue-property plots

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

• Molecule 1: 23S Ribosomal RNA

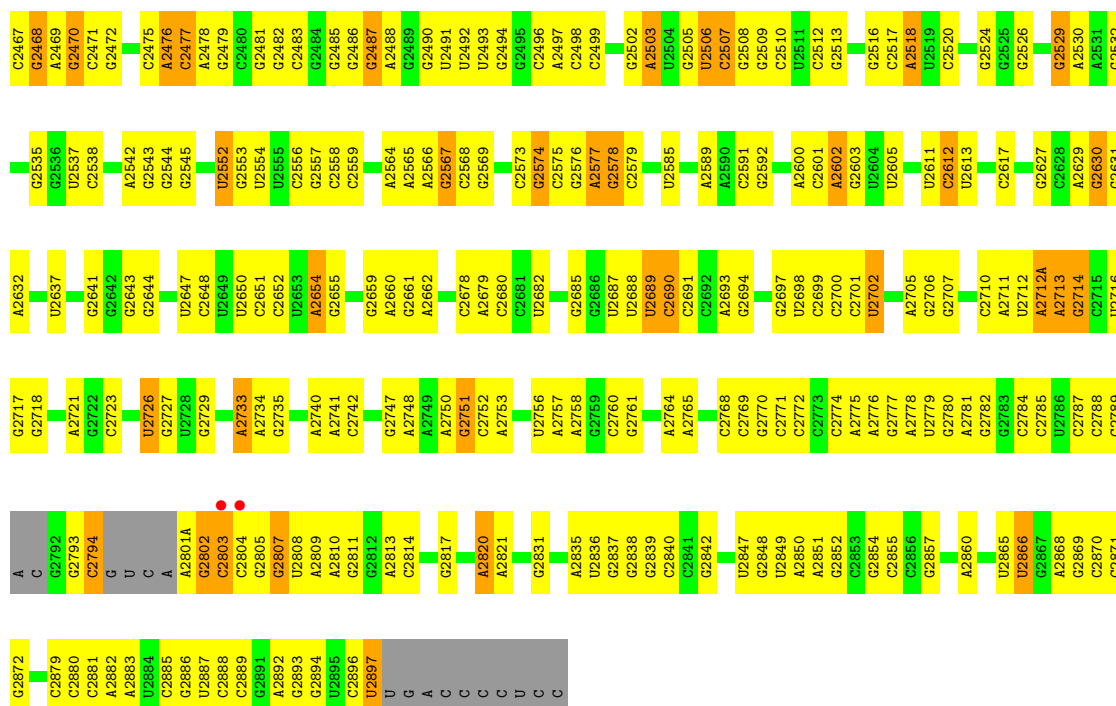


A1971	A1889	C1782	A1669	G1568	A1477	G1388	A1213	A1128	U1066	C993	A900	A820
A1972	A1890	A1783	C1670	A1569	G1482	G1389	C1224	A1129	A1067	C994	A901	A821
G1985	C1891	A1784	U1673	A1570	G1484	U1312	G1225	U1130	A1068	C995	A902	
A1986	A1786	A1785	G1674	A1571	G1485	U1394	G1226	U1131	A1069	A966	C902	A824
G1699	G1699	A1767	G1675	A1572	C1314	C1315	U1229	U1132	A1070	C997	C904	C825
A1900	A1900	C1768	A1676	U1578	A1486	U1396	G1230	U1135	A1071	C998	U907	U826
U1991	U1991	A1769	A1677	A1579	G1488	C1399	G1230	G1135	C1072	U999	U907	U827
G1903	G1903	C1790	U1680	A1580	G1489	G1400	G1230	G1136	A1073	A1000	U828	U828
G1904	G1904	A1791	G1681	G1581	A1490	G1401	G1236	G1137	G1074	G1003	A910	A829
C1905	C1905	U1794	G1682	A1583	C1493	C1402	G1236	U1138	C1076	C912	C912	G830
G1906	G1906	C1795	A1683	A1584	A1494	C1403	G1237	G1139	A1077	U913	U913	G831
G1907	G1907	U1796	A1684	A1586	A1495	U1405	G1238	C1140	C1078	U914	C914	U839
C1908	C1908	C1797	C1685	A1587	A1496	U1406	G1239	U1141	C1079	C1005	C915	C840
G2000	G2000	U1798	C1686	A1588	U1497	U1407	U1240	U1142	C1080	C1006	C915	C840
A2001	A2001	G1687	U1687	C1588	A1498	C1408	U1240	A1142	C1081	C1007		
G2002	G2002	U1688	U1688	C1589	G1502	C1409	G1244	A1143	U1082	G1011	U922	A841
A2005	A2005	G1801	U1688	G1593	C1503	C1410	G1244	A1144	U1083	U1012	C923	G842
G2012	G2012	A1802	U1683	G1594	C1504	G1411	G1248	U1148	U1084	C1013	G931	C846
A2013	A2013	C1804	G1696	G1595	U1508	A1412	U1248	A1149	A1085	A1020	G932	U847
A2014	A2014	U1805	C1696	C1599	C1509	G1416	G1250	C1150	A1086	U1021	G942	C848
U2017	U2017	C1806	A1700	A1603	A1509A	C1417	G1251	G1151	U1087	U1022		A849
G2018	G2018	A1810	A1701	G1603	A1509B	C1418	G1252	C1153	G1089	G1024	A945	C856
A2019	A2019	G1811	G1719	C1607	G1510	A1419	A1254	A1156	U1090	U1025	G946	U858
A2020	A2020	A1812	U1720	A1608	C1511	U1420	U1255	C1161	C1092	U1026	G947	C859
C2021	C2021	G1813	G1721	A1610	U1512	G1421	G1256	G1162	U1094	A1027	G950	U860
G2023	G2023	A1814	A1722	A1610	C1513	G1426	C1261	G1163	A1095	A1028	C951	A861
A1936	A1936	A1815	U1738	A1614	G1515	A1427	G1264	G1164	A1096	U1033	C952	A863
A1937	A1937	G1816	G1740	C1615	U1518	C1428	U1265	U1165	U1097	G1036	C954	C865
A1938	A1938	A1616	A1741	A1616	G1519	G1429	A1266	C1166	U1098	G1037	C955	A866
U1939	U1939	C1617	G1742	A1617	G1520	C1430	U1267	U1167	G1099	C1038	G956	
U1940	U1940	A1618	G1745A	A1618	U1523	C1432	A1268	G1170	C1100	C1039	A957	U871
G1941	G1941	G1823	C1745A	G1622	U1527	U1433	A1269	G1171	U1101	C1040	U958	
C1942	C1942	C1827	G1746	G1622	A1528	A1434	C1270	G1173	A1103	G1041	A959	G875
G1945	G1945	G1828	A1749	G1628	A1528A	G1435	G1271	G1173	C1104	G1042	A960	C876
U1946	U1946	A1829	G1750	A1634	G1532	A1439	A1272	U1175	U1105	C1043	C961	U877
C1947	C1947	C1837	C1754	G1635	U	G1441	U1273	G1176	U1106	A1045	U963	C879
U1951	U1951	A1847	A1755	G1635	A	G1442	U1273	A1177	G1107	A1046	C964	C880
U1955	U1955	G1850	G1756	A1641	C	A1445	A1278	G1178	U1108	G1047	G881	G881
U1956	U1956	U1851	A1759	A1642	G1537	C1370	G1283	G1187	C1110	A1048	U969	G882
C1957	C1957	C1852	C1761	G1647	G1538	C1445A	G1283	U1188	G1112	C1052	C970	C883
G1958	G1958	G1648	G1762	G1648	G1539	U1372	A1286	U1189	U1113	C1053	C971	C884
G1959	G1959	G1649	G1763	G1649	U1540	G1447	A1287	A1189	G1114	A1054	A973	C885
C2055	C2055	G1861	G1764	G1650	G1541	C1374	A1287	G1190	G1115	C1055	G974	A887
G2056	G2056	C1866	U1773	G1651	U1453	U1455	U1292	G1191	C1116	G1056	C975	C888
A2059	A2059	A1866	A1773	A1652	C1543	G1466	C1293	G1192	G1117	A1057	G975A	C889
C2060	C2060	A1876	C1774	A1655	G1555	C1467	C1297	G1193	C1118	U	C976	A890
G2061	G2061	G1877	U1775	C1656	C1556	C1468	U1297	C1200	G1059	G1058	A981	C892
C1967	C1967	C1879	U1778	C1663	G1557	A1472	U1300	C1201	C1119	U1060	A983	C893
G1968	G1968	C1886	A1780	A1664	A1558	G1473	U1301	C1209	G1120	G1062	G989	C894
A1969	A1969	C2065	C1781		A1567		U1302		C1124	G1063		U895
C2066	C2066						G1303		G1125	C1064		A896
									A1127	U1065		C898
												A899



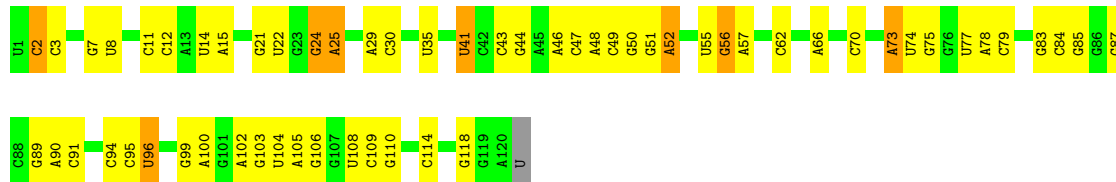


G1344	G1422	G1501	G1589	G1666	G1767	G1845	U1939	A2033	G2115	G2175	U2262	A2328	G2400
C1345	G1423	C1502	U1590	G1667	C1767	G1846	U1940	U2034	G2116	A2176	C2263	G2329	G2401
A1354	G1424	U1503	G1591	A1668	A1773	A1847	C1941	G2035	G2117	C2177	C2264	G2330	C2402
G1356	G1425	C1507	G1592	A1669	U1777	A1848	C1942	G2036	U2118	C2178	A2268	U2332	C2403
G1357	G1426	A1506	G1594	G1670	U1778	G1849	G1945	G2037	A2219	G2181	A2269	U2333	
G1358	A1427	A1508	G1595	U1671	U1779	U1851	U1946	C2040	G2120	C2182	A2273	G2334	U2406
A1359	C1428	A1509	A1596	G1674	A1780	C1852	G1954	U2041	G2121	C2183	A2274	A2335	G2407
A1360	G1429	A1509A	U1602	G1683	C1781	G1857	G1955	A2042	U2122	A2184	A2275	A2336	U2408
	U1431	A1509B	G1603	C1684	C1782	G1858	U1956	C2044	G2123	C2185	G2276	G2337	G2409
	A1434		A1603	U1689	A1786	A1859	C1962		G2124	A2186	G2277	G2341	G2410
			U1517		A1787	G1860	U1963	G2049	G2125	C2187	C2188	C2342	A2411
			U1518		C1788	G1861	U1967	C2050	G2126	C2189	U2189	C2343	A2412
			U1519		A1789	G1865	U1968	A2051	G2127	G2190	G2191	U2344	G2413
			C1530		C1790	G1866	G1969	G2052	C2128	G2192	G2193	A2345	
			C1531		A1791	A1876	U1970	G2055	G2129	G2194	G2195	A2346	
			G1532		U1794	A1877	A1971	G2056	U2130	C2196	A2287	A2347	
			G1533		C1795	G1878	A1972		G2131	C2197	A2288	C2348	
		U			U1796		G1973	A2059	G2132	A2198	A2289	G2349	
		A			C1797		G1974	A2060	G2133	C2199	A2290	A2350	
		C1536			U1798		A1981	G2061	G2134	A2199	A2291	G2351	
		C1537			U1799		G1985	A2062	G2135	C2202	A2292	G2352	
		G1541			C1800		C1986	A2063	G2136	U2203	C2293	G2353	
		A1542			G1801		C1987	G2064	G2137	C2204	C2294	G2354	
		C1547			A1802		C1988	C2065	G2138	U2205	C2295	G2355	
					A1803		C1989	C2066	G2139	C2206	C2296	G2356	
					C1804		C1990		G2140	C2207	C2297	G2357	
					U1905		U1991		G2141	C2208	C2298	G2358	
					C1628		G1896		G2142	C2209	C2299	G2359	
					U1629		G1897		G2143	C2210	C2300	G2360	
					G1630		U1900		G2144	C2211		G2361	
					C1631		A1901		U2144	C2212		G2362	
					A1631A		G1902		G2145	C2213		G2363	
					A1632		U1903		G2146	C2214		G2364	
							G1904		G2147	C2215		G2365	
							C1905		G2148	C2216		A2366	
							G1906		G2149	C2217		G2367	
							U1911		U2150	C2218		G2368	
							A1912		G2151	C2219		G2369	
							C1913		G2152	C2220		G2370	
							U1914		G2153	C2221		G2371	
							U1915		G2154	C2222		G2372	
							A1916		G2155	C2223		G2373	
							U1917		G2156	C2224		G2374	
							G1920		G2157	C2225		G2375	
							C1924		G2158	C2226		A2376	
							A1927		G2159	C2227		A2377	
							U1834		G2160	C2228		A2378	
							G1928		C2161	C2229		G2379	
							U1929		G2162	C2230		C2380	
							G1930		G2163	C2231		G2381	
							U1936		G2164	C2232		G2382	
							A1937		G2165	C2233		G2383	
							U1938		G2166	C2234		G2384	
							G2032		G2167	C2235		G2385	
							U2022		G2168	C2236		G2386	
							G2023		G2169	C2237		G2387	
							C2024		G2170	C2238		U2388	
							A1927		G2171	C2239		G2389	
							U1927		G2172	C2240		U2390	
							G1928		G2173	C2241		G2391	
							U1929		G2174	C2242		G2392	
							G1930		G2175	C2243		G2393	
							U1936		G2176	C2244		G2394	
							A1937		G2177	C2245		G2395	
							U1938		G2178	C2246		G2396	
							G2032		G2179	C2247		G2397	
							U2022		G2180	C2248		G2398	
							G2023		G2181	C2249		G2399	
							C2024		G2182	C2250		G2400	
							A1927		G2183	C2251		G2401	
							U1927		G2184	C2252		G2402	
							G1928		G2185	C2253		G2403	
							U1929		G2186	C2254		G2404	
							G1930		G2187	C2255		G2405	
							U1936		G2188	C2256		G2406	
							A1937		G2189	C2257		G2407	
							U1938		G2190	C2258		G2408	
							G2032		G2191	C2259		G2409	
							U2022		G2192	C2260		G2410	
							G2023		G2193	C2261		G2411	
							C2024		G2194	C2262		G2412	
							A1927		G2195	C2263		G2413	
							U1927		G2196	C2264		G2414	
							G1928		G2197	C2265		G2415	
							U1929		G2198	C2266		G2416	
							G1930		G2199	C2267		G2417	
							U1936		G2200	C2268		G2418	
							A1937		G2201	C2269		G2419	
							U1938		G2202	C2270		G2420	
							G2032		G2203	C2271		G2421	
							U2022		G2204	C2272		G2422	
							G2023		G2205	C2273		G2423	
							C2024		G2206	C2274		G2424	
							A1927		G2207	C2275		G2425	
							U1927		G2208	C2276		G2426	
							G1928		G2209	C2277		G2427	
							U1929		G2210	C2278		G2428	
							G1930		G2211	C2279		G2429	
							U1936		G2212	C2280		G2430	
							A1937		G2213	C2281		G2431	
							U1938		G2214	C2282		G2432	
							G2032		G2215	C2283		G2433	
							U2022		G2216	C2284		G2434	
							G2023		G2217	C2285		G2435	
							C2024		G2218	C2286		G2436	
							A1927		G2219	C2287		G2437	
							U1927		G2220	C2288		G2438	
							G1928		G2221	C2289		G2439	
							U1929		G2222	C2290		G2440	
							G1930		G2223	C2291		G2441	
							U1936		G2224	C2292		G2442	
							A1937		G2225	C2293		G2443	
							G2032		G2226	C2294		G2444	
							U2022		G2227	C2295		G2445	
							G2023		G2228	C2296		G2446	
							C2024		G2229	C2297		G2447	
							A1927		G2230	C2298		G2448	
							U1927		G2231	C2299		G2449	
							G1928		G2232	C2300		G2450	
							U1929		G2233	C2301		G2451	
							G1930		G2234	C2302		G2452	
							U1936		G2235	C2303		G2453	
							A1937		G2236	C2304		G2454	
							G2032		G2237	C2305		G2455	
							U2022		G2238	C2306		G2456	
							G2023		G2239	C2307		G2457	
							C2024		G2240	C2308		G2458	
							A1927		G2241	C2309		G2459	
							U1927		G2242	C2310		G2460	
							G1928		G2243	C2311		G2461	
							U1929		G2244	C2312		G2462	
							G1930		G2245	C2313		G2463	
							U1936		G2246	C2314		G2464	
							A1937		G2247	C2315		G2465	
							G2032		G2248	C2316		G2466	
							U2022		G2249	C2317		G2467	
							G2023		G2250	C2318		G2468	
							C2024		G2251	C2319		G2469	
							A1927		G2252	C2320		G2470	
							U1927		G2253	C2321		G2471	
							G1928		G2254	C2322		G2472	



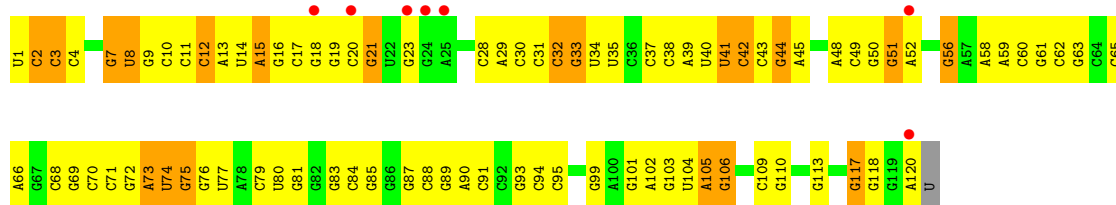
• Molecule 2: 5S Ribosomal RNA

Chain 1B: 50% 42% 7% .



• Molecule 2: 5S Ribosomal RNA

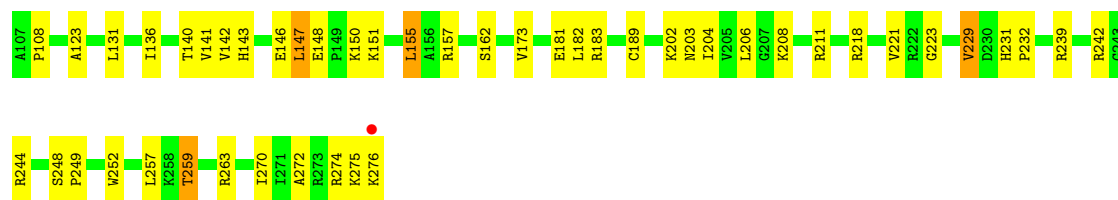
Chain 2B: 6% 26% 56% 17% .



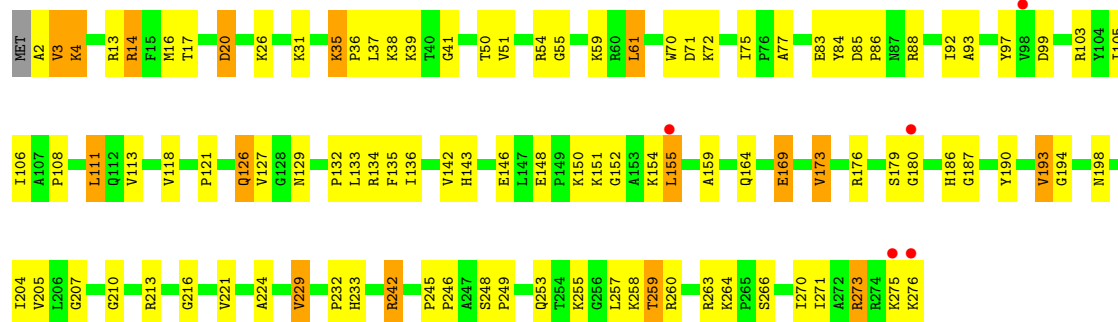
• Molecule 3: 50S ribosomal protein L2

Chain 1D: 68% 29% .

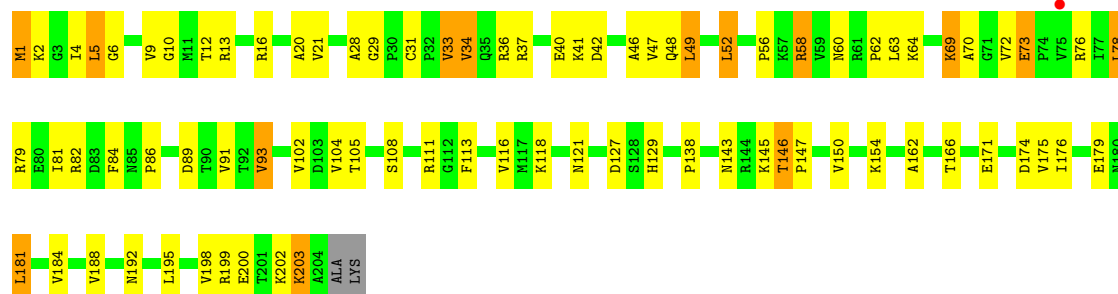




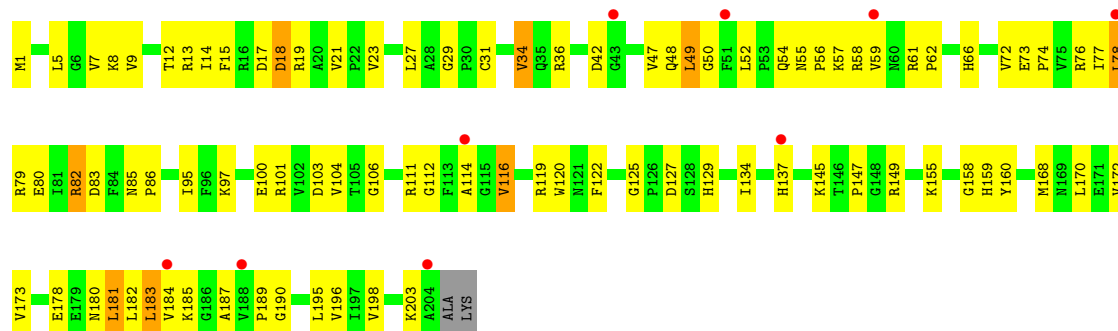
• Molecule 3: 50S ribosomal protein L2



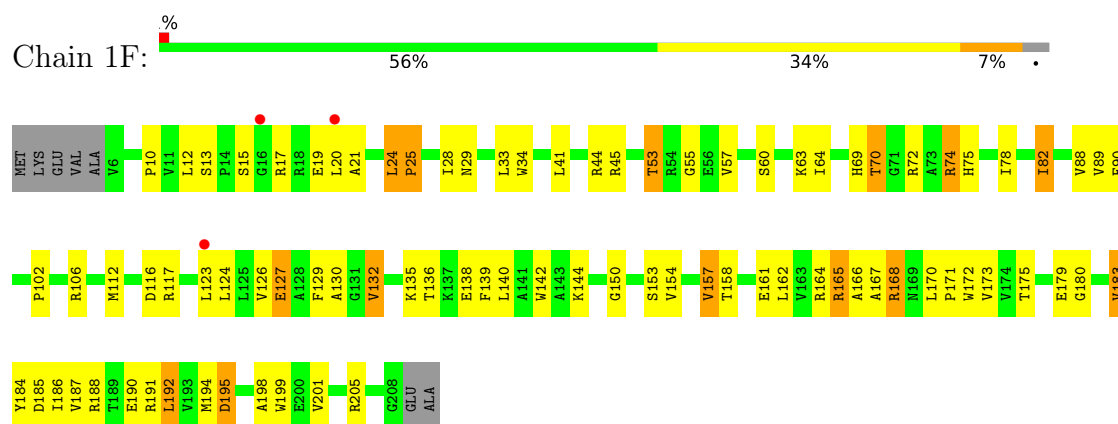
• Molecule 4: 50S ribosomal protein L3



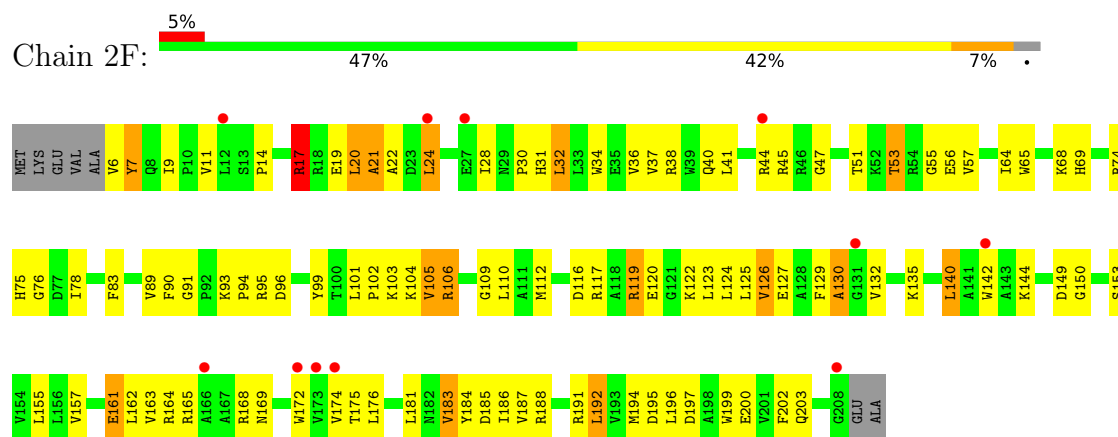
• Molecule 4: 50S ribosomal protein L3



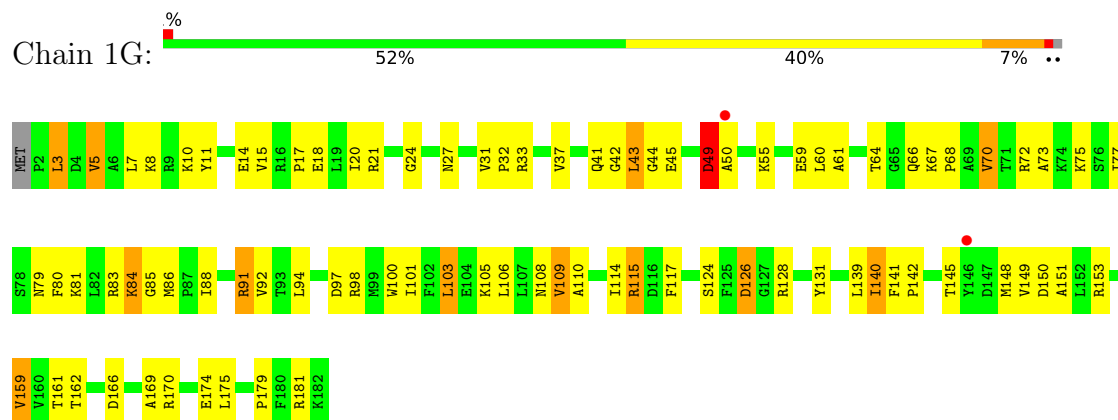
• Molecule 5: 50S ribosomal protein L4



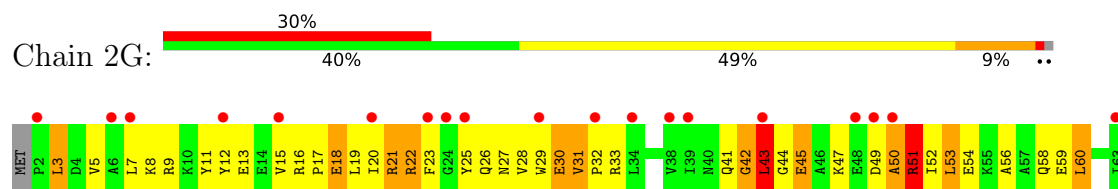
• Molecule 5: 50S ribosomal protein L4

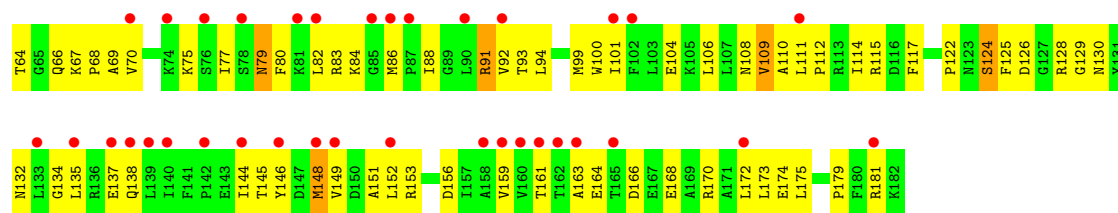


• Molecule 6: 50S ribosomal protein L5

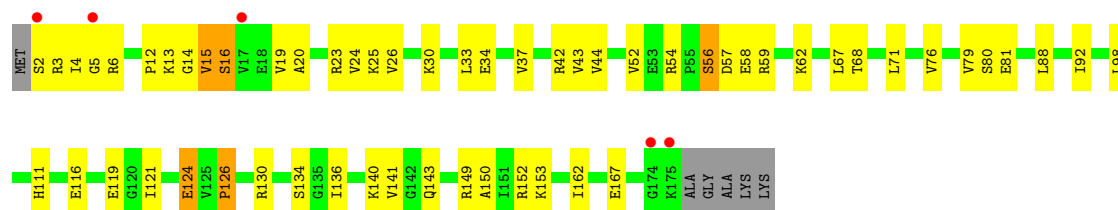


• Molecule 6: 50S ribosomal protein L5

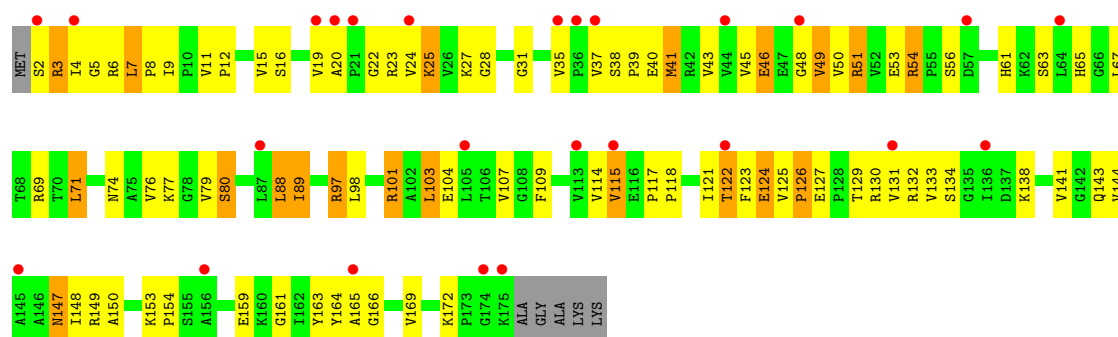




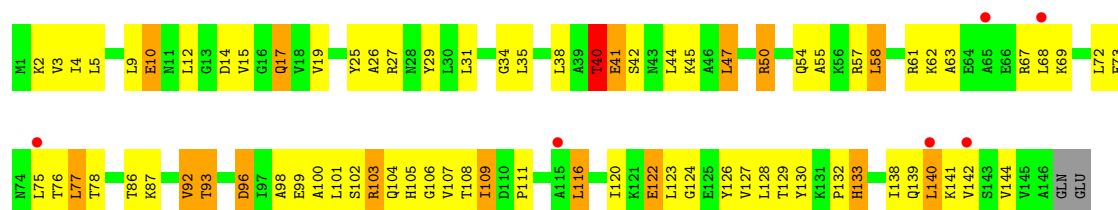
• Molecule 7: 50S ribosomal protein L6



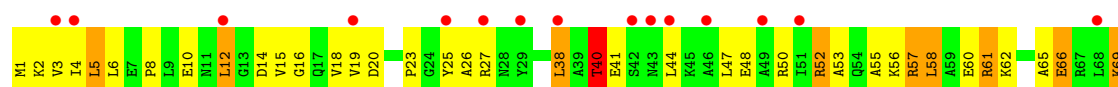
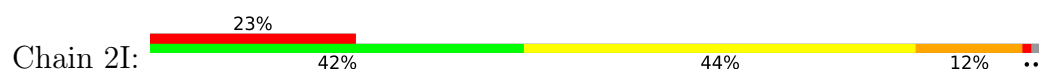
• Molecule 7: 50S ribosomal protein L6

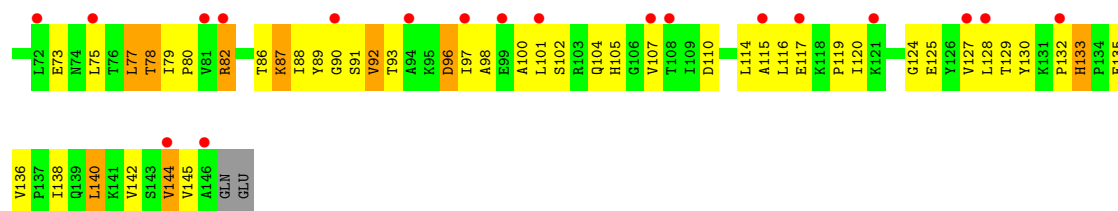


• Molecule 8: 50S ribosomal protein L9

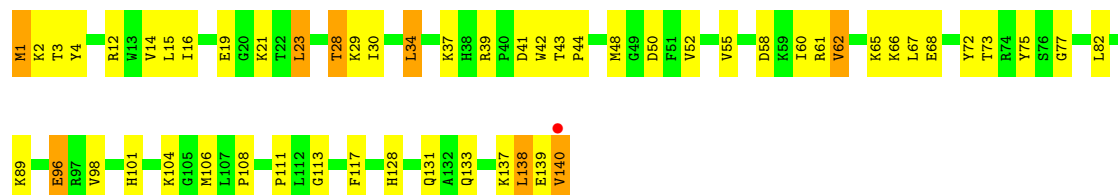


• Molecule 8: 50S ribosomal protein L9

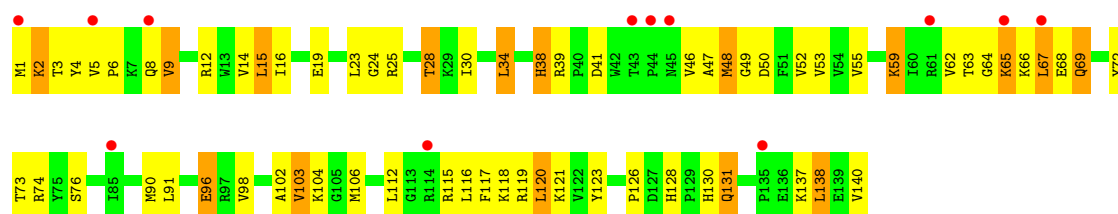




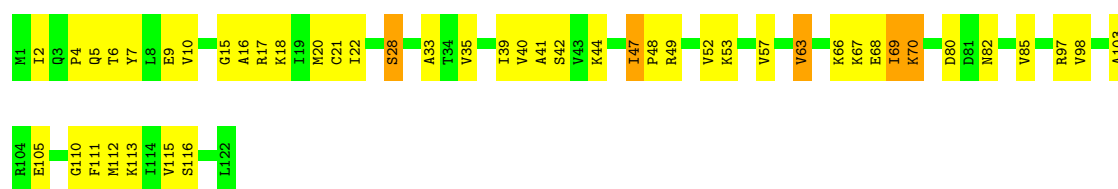
• Molecule 9: 50S ribosomal protein L13



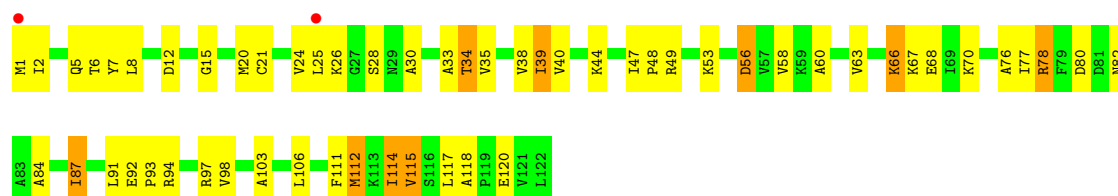
• Molecule 9: 50S ribosomal protein L13



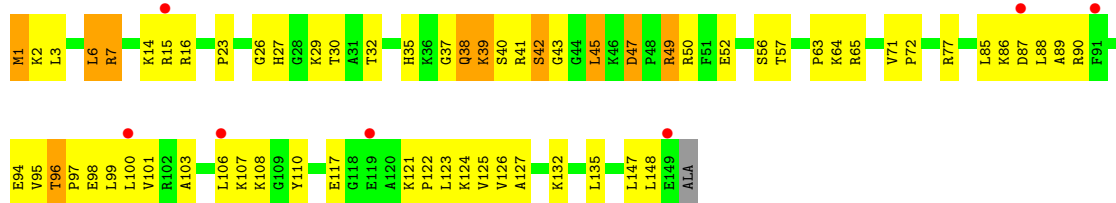
• Molecule 10: 50S ribosomal protein L14



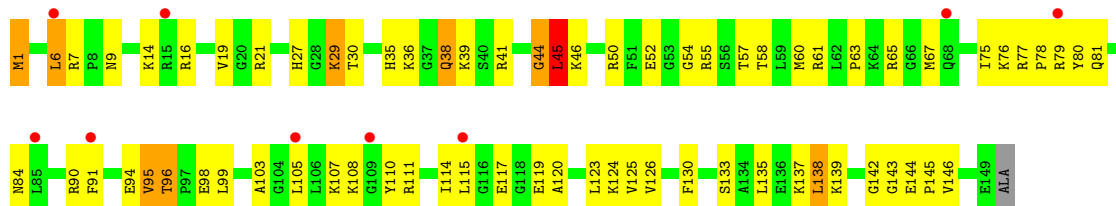
• Molecule 10: 50S ribosomal protein L14



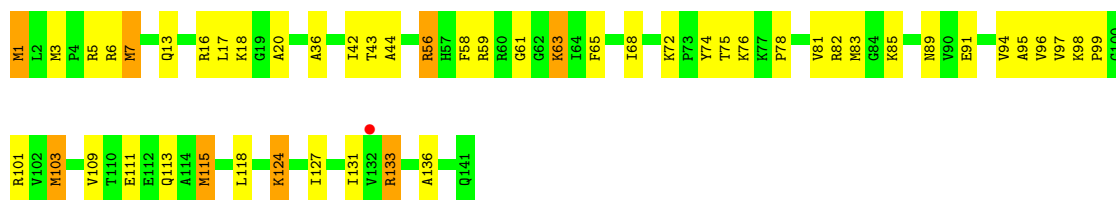
• Molecule 11: 50S ribosomal protein L15



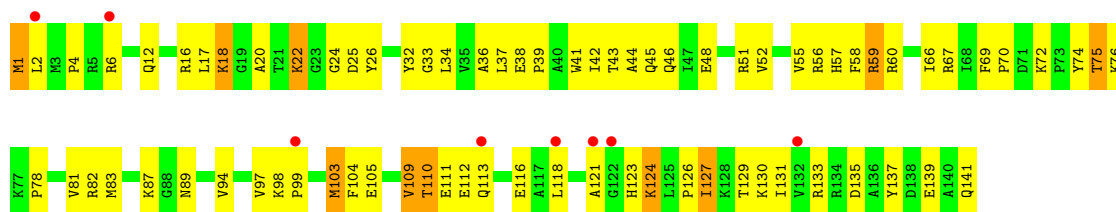
• Molecule 11: 50S ribosomal protein L15



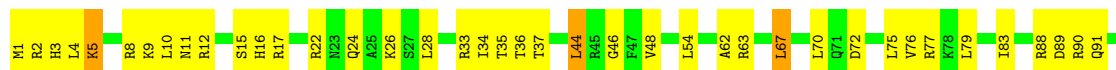
• Molecule 12: 50S ribosomal protein L16



• Molecule 12: 50S ribosomal protein L16

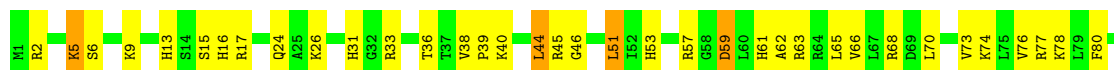


• Molecule 13: 50S ribosomal protein L17

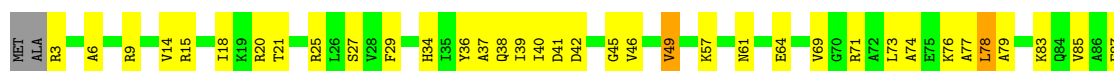




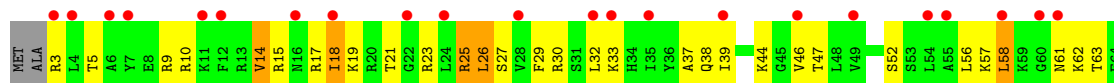
- Molecule 13: 50S ribosomal protein L17



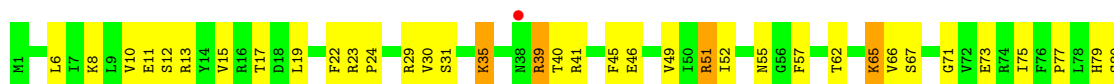
- Molecule 14: 50S ribosomal protein L18



- Molecule 14: 50S ribosomal protein L18

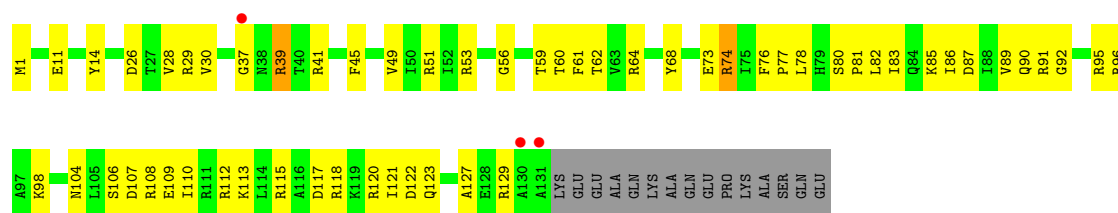


- Molecule 15: 50S ribosomal protein L19



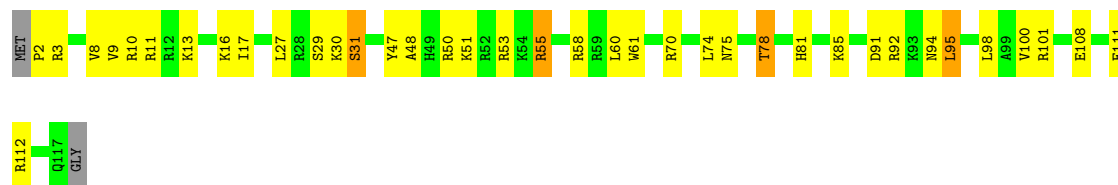
- Molecule 15: 50S ribosomal protein L19





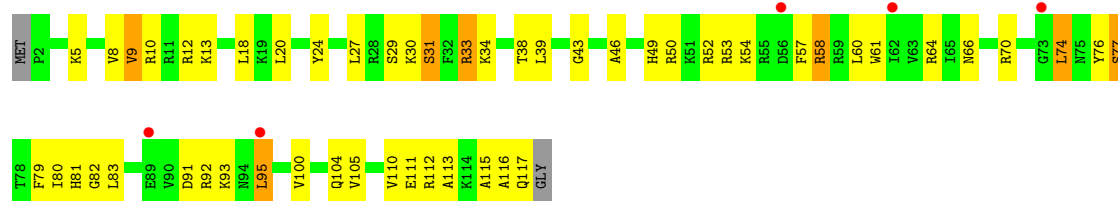
• Molecule 16: 50S ribosomal protein L20

Chain 1U: 66% 29% . .



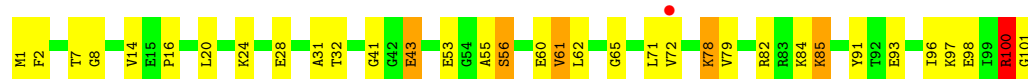
• Molecule 16: 50S ribosomal protein L20

Chain 2U: 4% 53% 39% 6% .



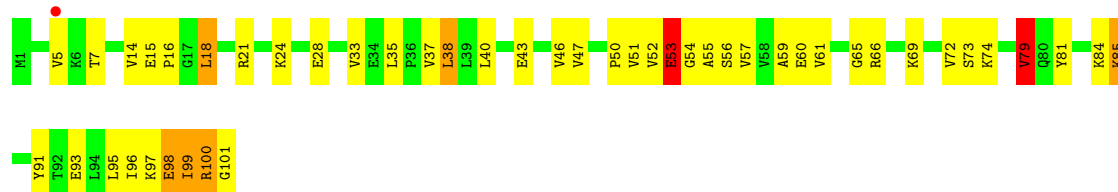
• Molecule 17: 50S ribosomal protein L21

Chain 1V: % 66% 28% 5% .



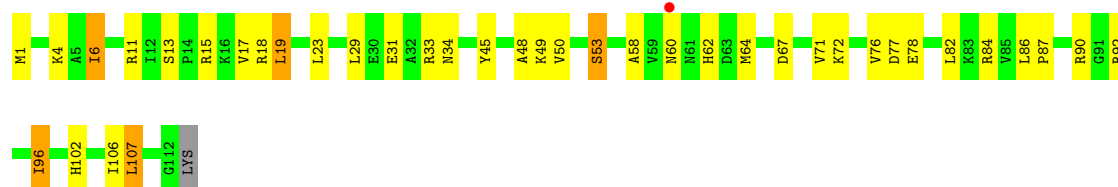
• Molecule 17: 50S ribosomal protein L21

Chain 2V: % 53% 39% 6% .

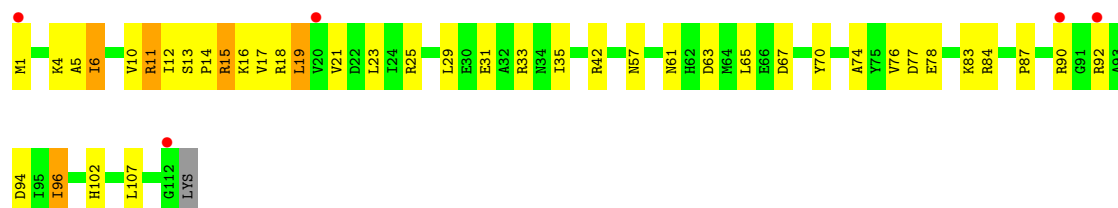


• Molecule 18: 50S ribosomal protein L22

Chain 1W: % 65% 30% . .



- Molecule 18: 50S ribosomal protein L22



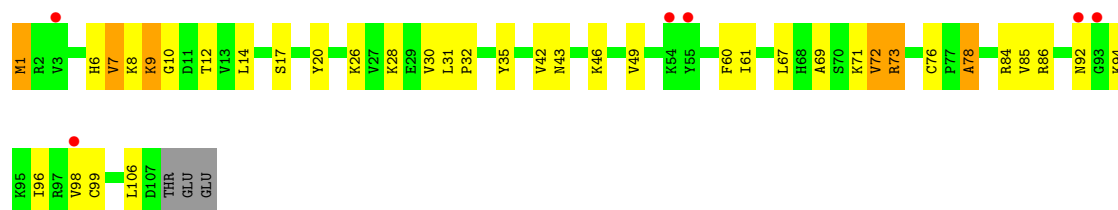
- Molecule 19: 50S ribosomal protein L23



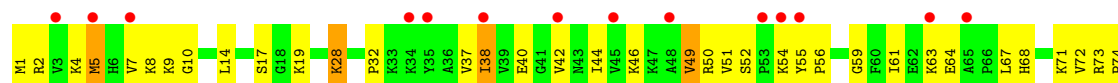
- Molecule 19: 50S ribosomal protein L23

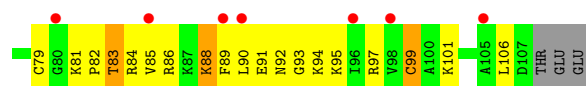


- Molecule 20: 50S ribosomal protein L24

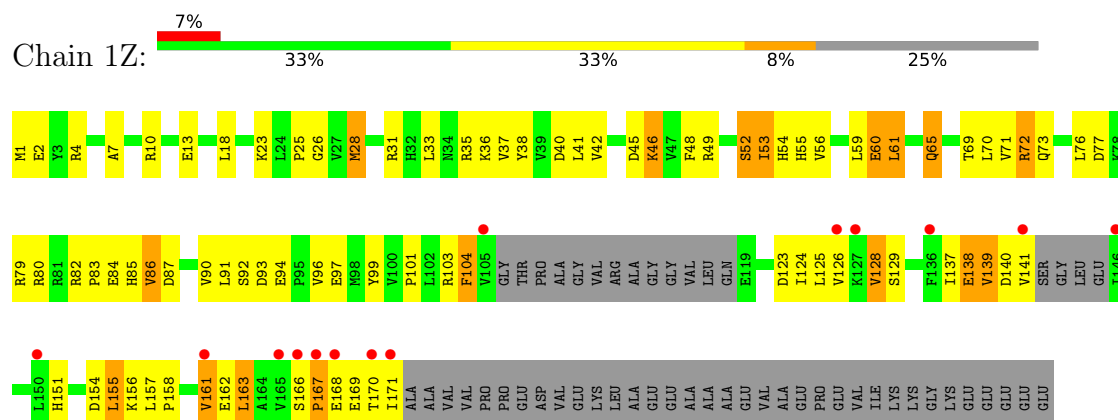


- Molecule 20: 50S ribosomal protein L24

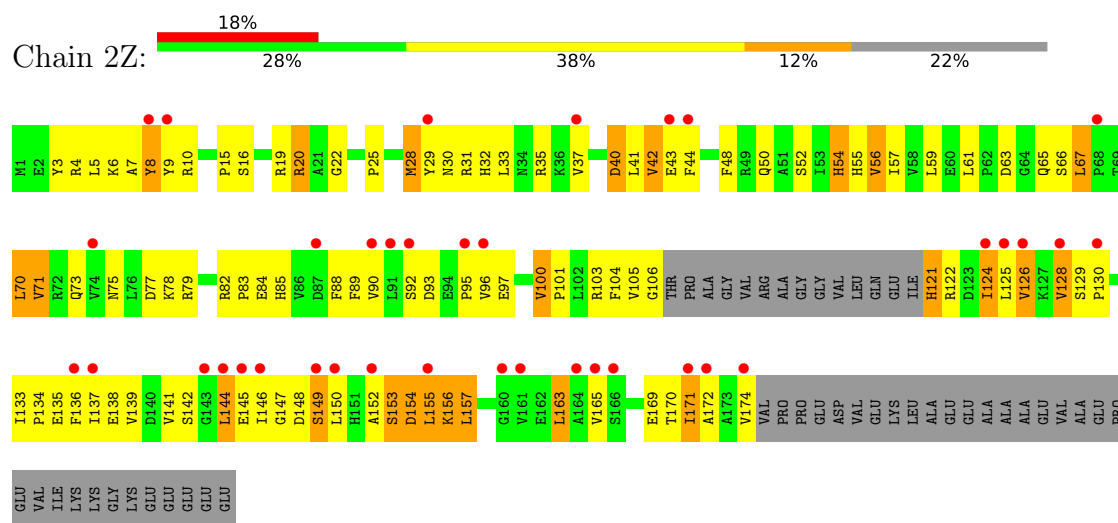




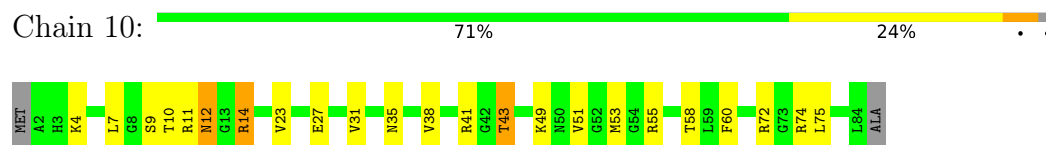
• Molecule 21: 50S ribosomal protein L25



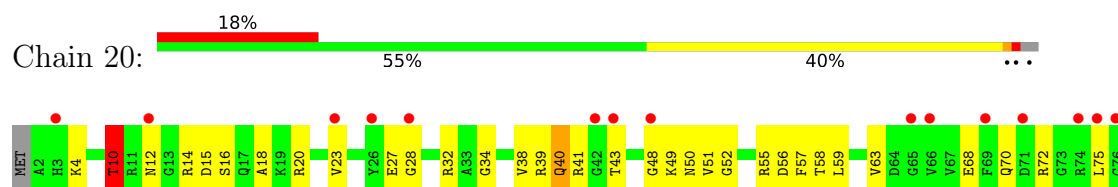
• Molecule 21: 50S ribosomal protein L25

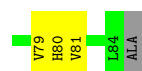


• Molecule 22: 50S ribosomal protein L27



• Molecule 22: 50S ribosomal protein L27

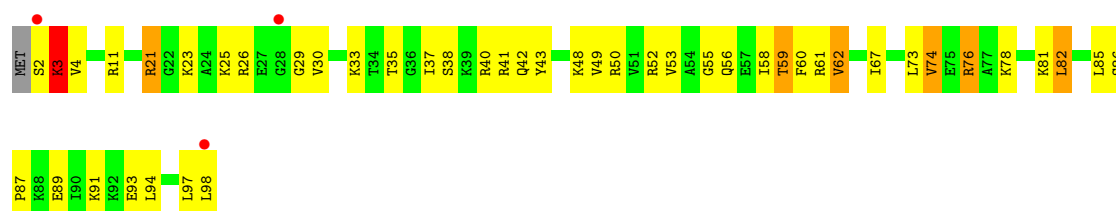




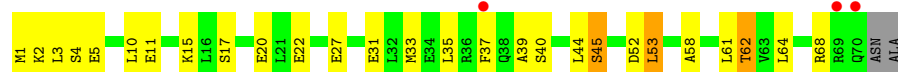
- Molecule 23: 50S ribosomal protein L28



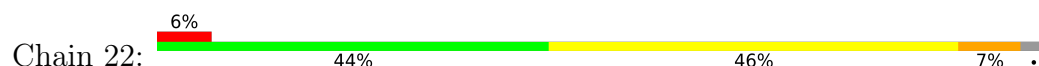
- Molecule 23: 50S ribosomal protein L28



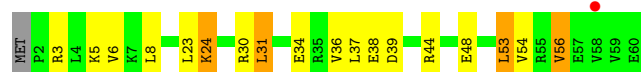
- Molecule 24: 50S ribosomal protein L29



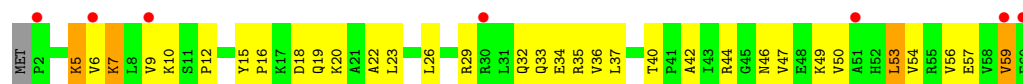
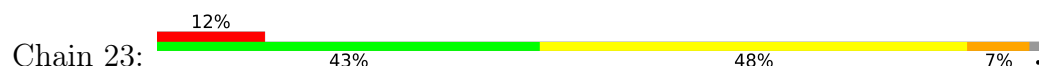
- Molecule 24: 50S ribosomal protein L29



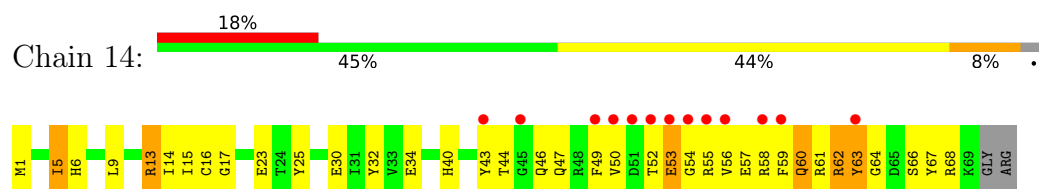
- Molecule 25: 50S ribosomal protein L30



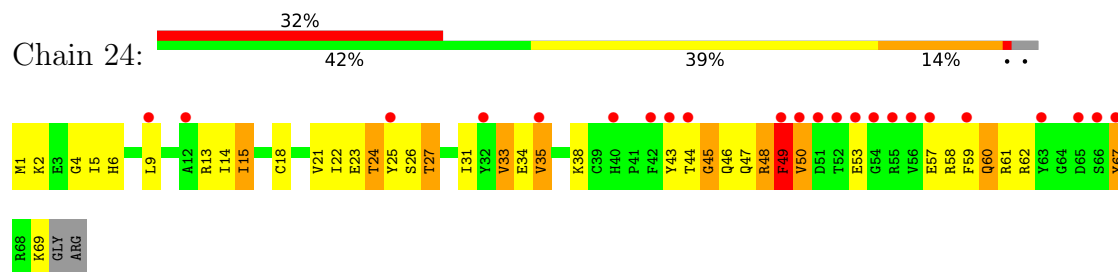
- Molecule 25: 50S ribosomal protein L30



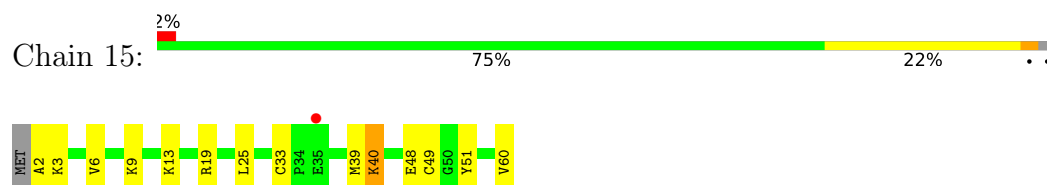
- Molecule 26: 50S ribosomal protein L31



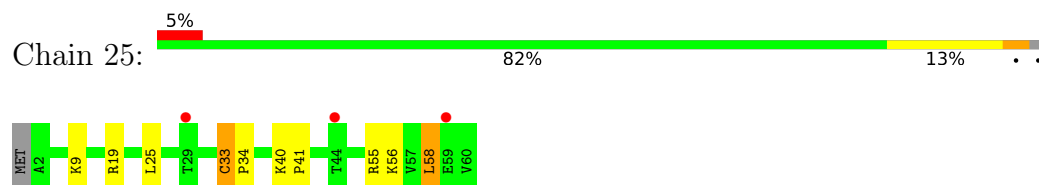
- Molecule 26: 50S ribosomal protein L31



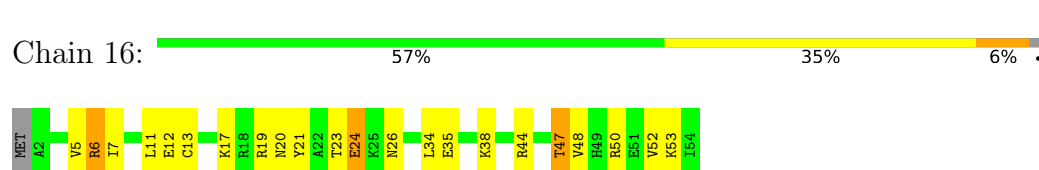
- Molecule 27: 50S ribosomal protein L32



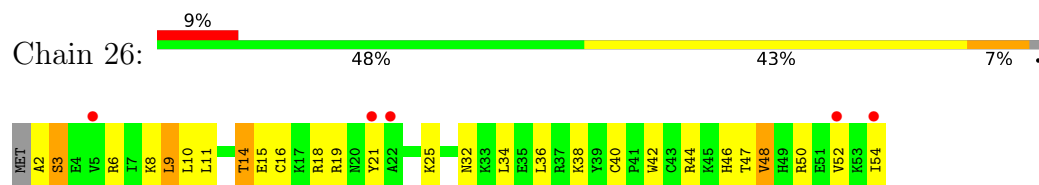
- Molecule 27: 50S ribosomal protein L32



- Molecule 28: 50S ribosomal protein L33

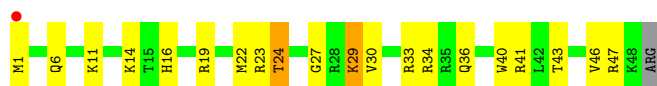


- Molecule 28: 50S ribosomal protein L33

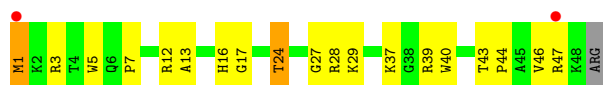


- Molecule 29: 50S ribosomal protein L34





- Molecule 29: 50S ribosomal protein L34



- Molecule 30: 50S ribosomal protein L35



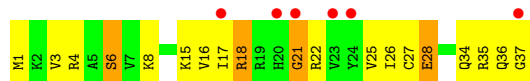
- Molecule 30: 50S ribosomal protein L35



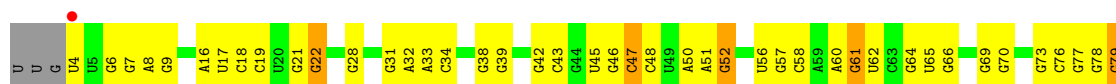
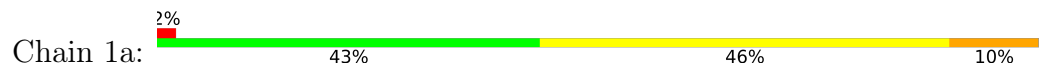
- Molecule 31: 50S ribosomal protein L36



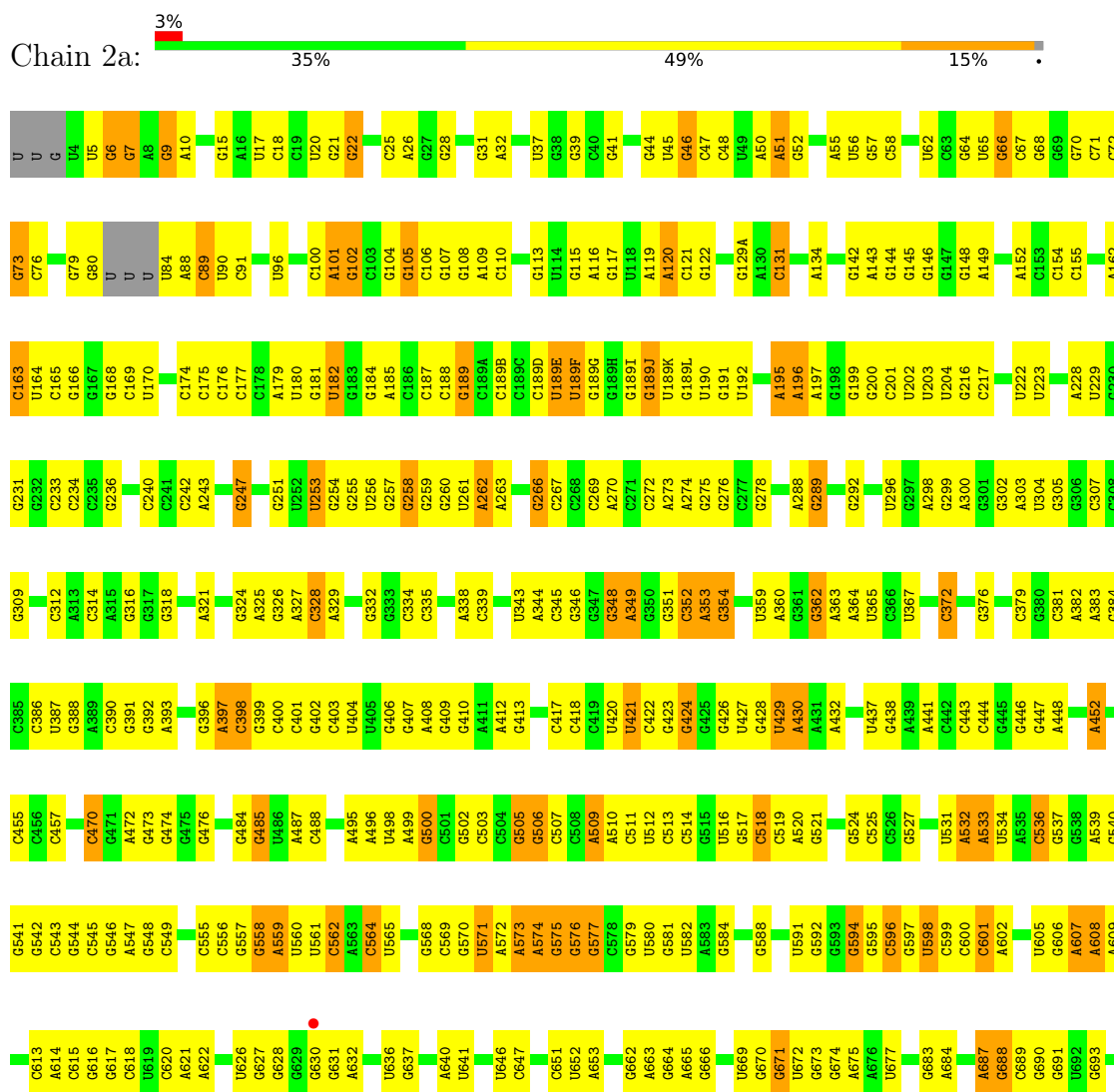
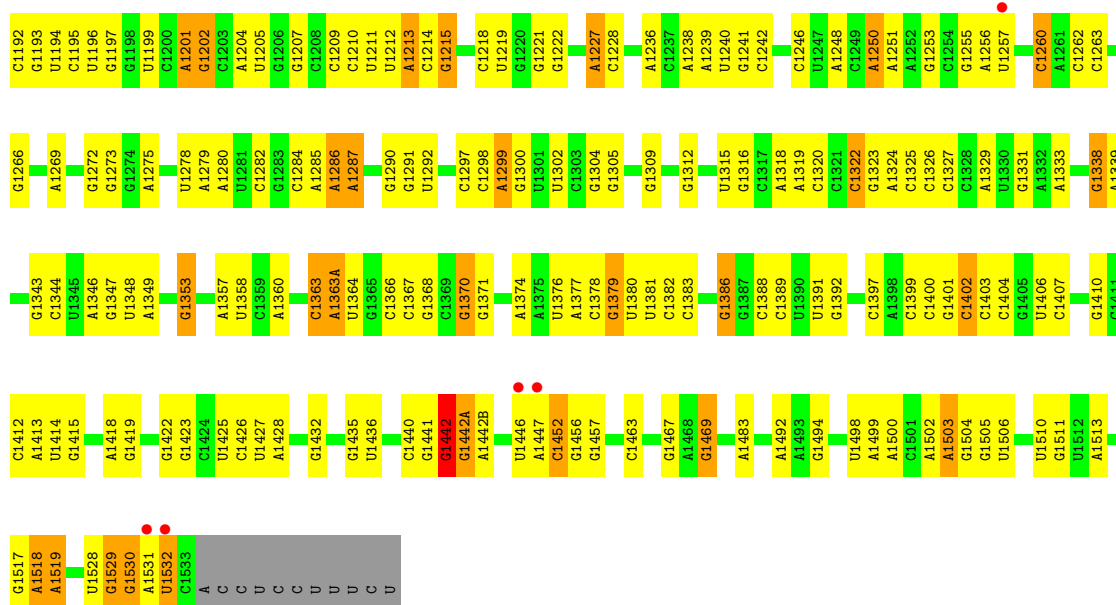
- Molecule 31: 50S ribosomal protein L36

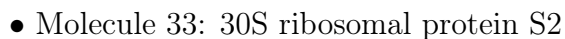


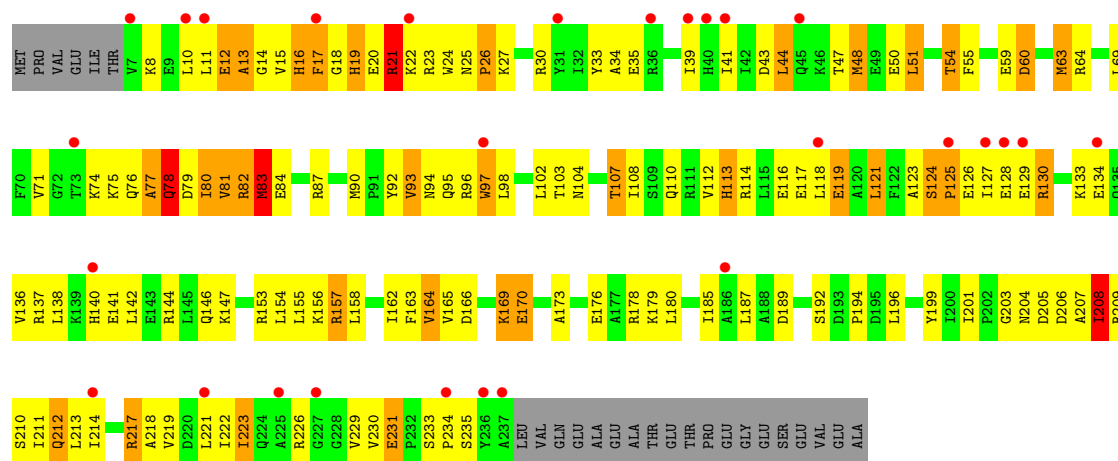
- Molecule 32: 16S Ribosomal RNA



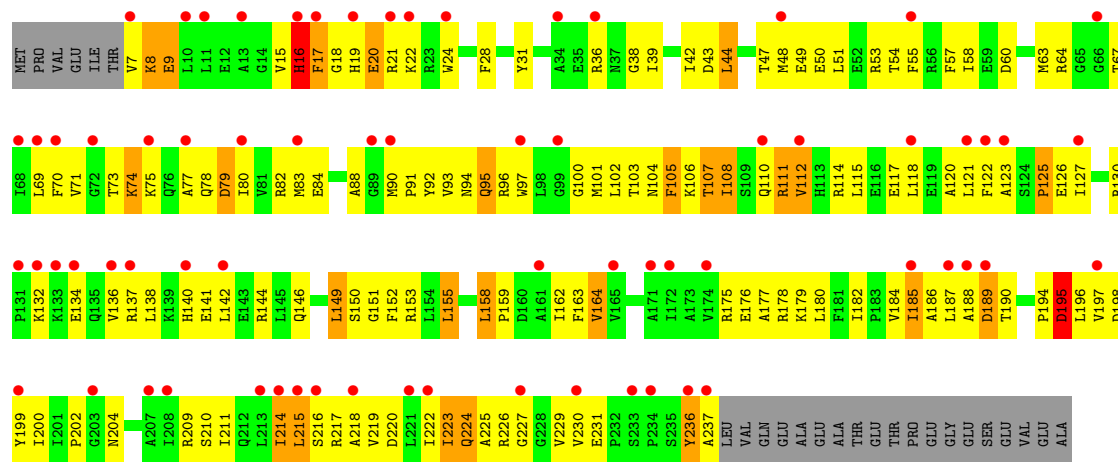
A1111	G1034	G973	U804	A716	A640	G558	U486	G406	C322	C235	U164	G
C1118	G1036	A975	G809	C717	A641	A559	A487	G407	U323	C236	C165	U
C1119	C1037	G976	G909	G718	A642	U560	C488	A408	G324	G166	U	
U1122	C1038	A977	C812	U723	A648	U561	C489	G409	A325	G167	U	
A1123	C1039	A978	U813	G724	G649	A562	G492	G410	C326	G168	U	
A1123	C1040	C979	U814	G724	G650	C564	G493	A411	A327	C169	A	
U1125	G1042	C980	A815	A728	C651	C567	U494	A412	C328	U170	C	
C1129	C1043	U981	A816	A729	U652	G567	A495	G416	A329	A171	U90	
C1129	A1044	A983	C817	G730	A653	C569	U498	G417	G331	A172	C91	
A1130	C984	C984	G821	G731	C656	G570	A499	C418	G332	C174	G93	
G1131	C985	C985	G821	G731	C656	U570	A499	C418	G333	G175	U96	
G1132	A986	A986	G824	C735	G657	U571	G500	C419	C339	G176	C97	
G1133	U1052	G987	C824	C735	G658	A572	C501	C422	U340	C177	G98	
G1134	G1053	U920	G825	C736	U659	A573	C502	G423	U340	C178	U99	
U1135	C1054	U921	C826	A737	G660	A574	C503	G423	C341	A179	C100	
U1136	A1055	U922	U827	C738	G661	G575	C504	G424	C342	U180	A101	
C1137	U1056	G993	A828	C739	G664	G576	G505	G425	U343	G259	G102	
C1137	U1056	A994	G829	U740	G664	G577	A509	G426	A344	U182	C103	
C1138	G1057	C995	G829	G741	A665	C578	A510	U427	C345	G183	G104	
G1139	U1058	A996	U833	G742	G666	G579	A510	G428	G346	A262	C106	
U1140	C1059	G997	C834	U743	G667	U580	C511	U429	G347	G184		
C1141	U1060	G998	U835	C744	G667	G581	U512	A430	G348	A185		
G1142	G1061	C999	G836	C749	U672	U582	C513	A431	A349	G189		
G1143	U1062	U1000	G837	U749	G673	U583	C514	A432	G350	C189A		
C1144	C1063	A1001	G838	G755	G674	G584	C515	C433	G351	G111		
G1145	G1064	G1001A	G839	G755	A675	G585	U516	U434	C352	C189B		
A1146	U1065	G1002	C840	G760	A676	G592	G517	C435	A353	C271		
C1147	C1066	G1003	U841	G760	U677	G592	G518	C436	G354	C272		
U1148	A1067	A1004	C848	G761	U678	C596	G519	U437	C355	A273		
C1149	U1068	C940	C849	G762	U678	C597	A520	G438	A356	G189J		
U1150	C1006	C1006	U850	G763	C680	U598	G521	A439	G357	U189K		
A1151	G1071	C1007	G851	G763	C680	U598	C522	A441	U367	C277		
A1152	U1072	C1008	G852	A766	G683	C599	A523	C442	G278	U189L		
U1073	G1073	G947	G853	A767	G683	C599	G524	C443	C280	U190		
A1157	G1074	G948	C848	A768	A687	A607	G524	C444	G281	G191		
C1158	U1075	C949	C849	A768	A687	A607	G524	C444	G281	U192		
U1159	A1014	A1014	A949	G769	G688	A608	G527	C445	C284	C193		
C1163	A1080	A1015	G951	C770	C689	C613	G530	C446	C194	C194		
G1164	G1081	A1016	G951	G771	G690	C613	G530	G447	A288	U133		
C1164	G1082	G1017	U952	U772	G691	A614	U531	A448	G289	A195		
U1083	G953	G953	A864	G773	G692	A532	A532	A448	C289	U133		
C1172	U1084	U1020	A865	G774	G693	C618	A533	A452	A197	A134		
G1173	U1085	G1021	C866	G774	G694	U619	A533	A452	U197	G142		
C1174	U1086	G1022	C867	A777	A694	U619	C536	C457	G296	G198		
G1175	U1087	G1023	U957	A777	A695	C620	C536	C458	G297	G199		
A1176	U1024	G1024	U870	C784	A696	A621	G537	G200	A298	G200		
G1177	G1024	U1025	U871	G784	G697	A621	G538	G201	G299	C201		
U1094	U1095	U1025	A872	C784	G698	C624	A539	A461	A300	U202		
C1096	C1096	G1026	A872	A787	G698	G625	G540	C470	G301	U203		
G1181	U1099	C1027	C875	U788	A702	U626	G541	C470	G301	U204		
G1182	U1099	C1028	C876	A790	G703	G627	G542	C471	G309	G216		
C1183	U1099	G1029	C877	A790	G703	G628	G542	C472	G309	C217		
A1176	U1099	C1030	C877	G791	C707	G629	C545	G474	G311	C218		
G1184	A1101	C1030	C877	A792	C708	G630	G545	G475	C312	C219		
C1184	A1101	G1030A	A865	U793	G709	G631	A547	C475	A313	G220		
C1187	A1102	C1030B	G881	U793	G709	G631	A547	C475	A313	G220		
A1188	C1103	G967	G881	A794	G710	A632	G550	C479	C314	C221		
C1189	C1103	C1030C	G881	A794	G710	A632	G550	C479	C314	C221		
G1190	G1106	A969	U891	C796	A712	G636	C555	A482	G318	U222		
C1190	C1107	C970	A892	C796	A712	G636	C555	A482	G318	U223		
A1191	C1107	G1032	C893	G799	G714	G638	C556	C483	C320	A228		
C1191	C1107	C1032	C894	G799	A715	C520	C557	C484	A324	U228		



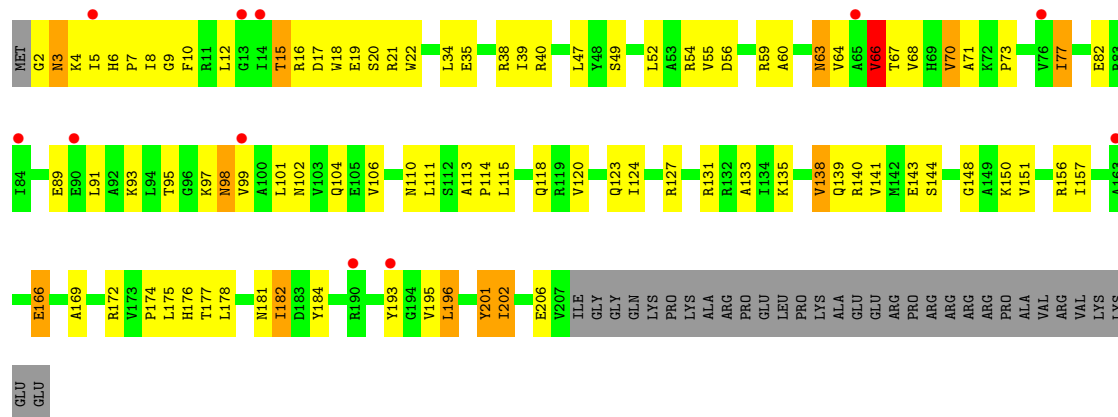




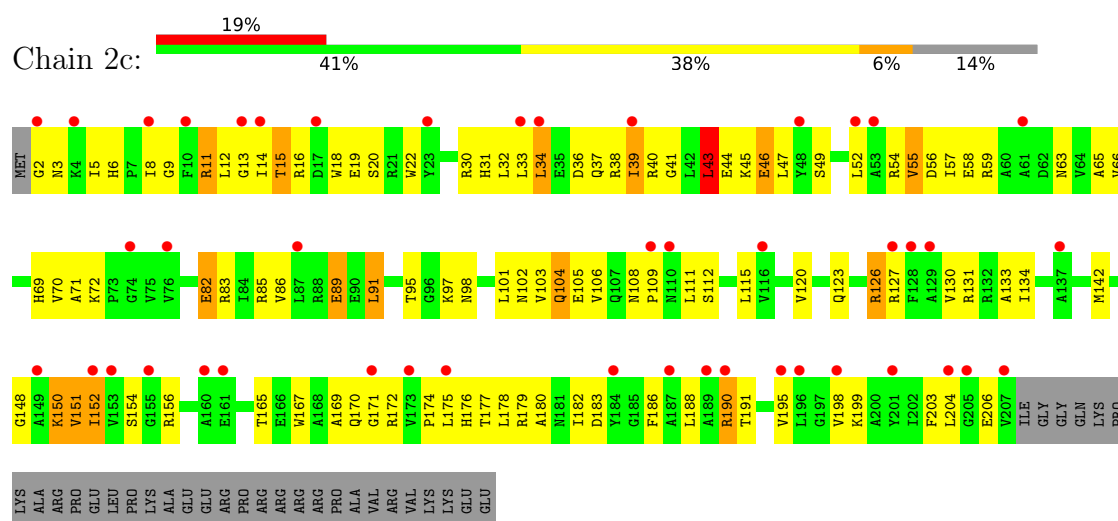
• Molecule 33: 30S ribosomal protein S2



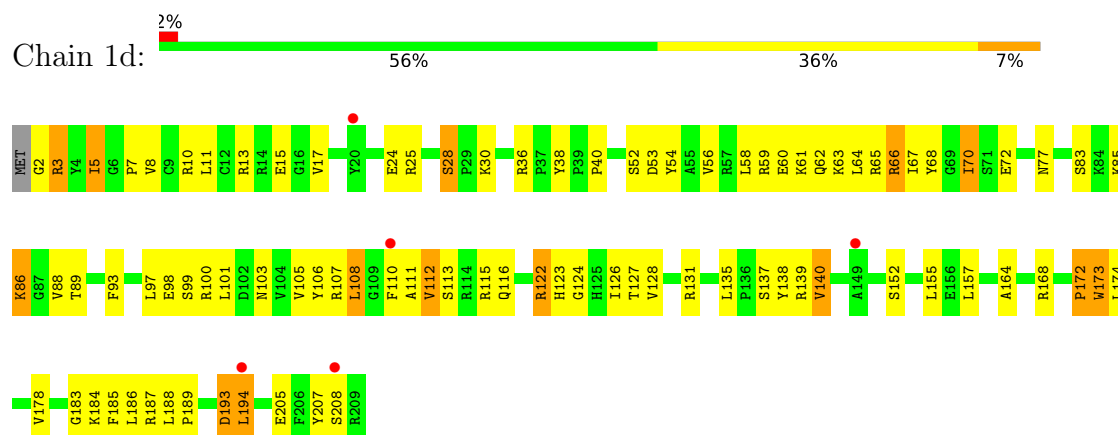
• Molecule 34: 30S ribosomal protein S3



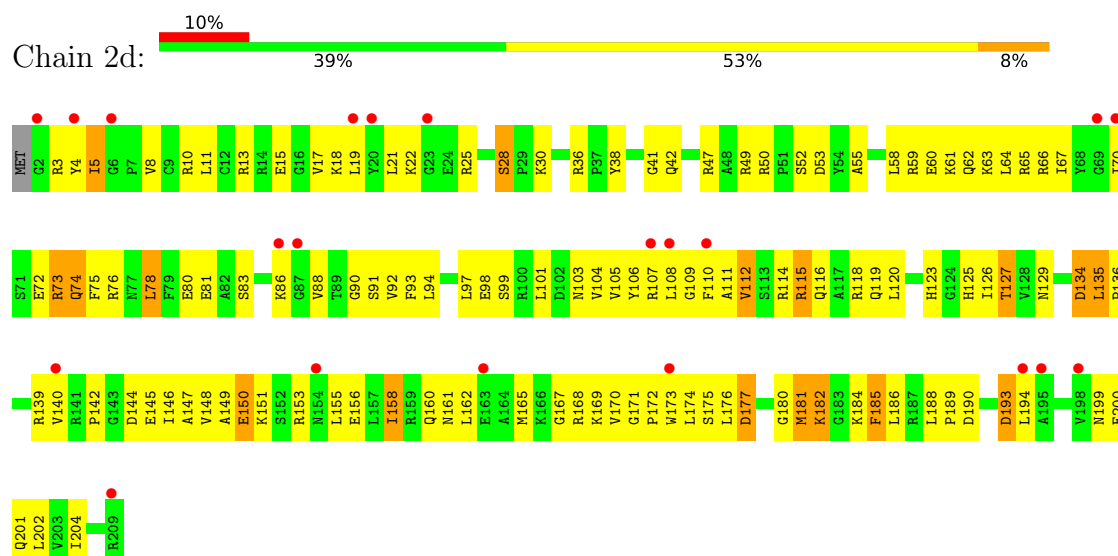
• Molecule 34: 30S ribosomal protein S3



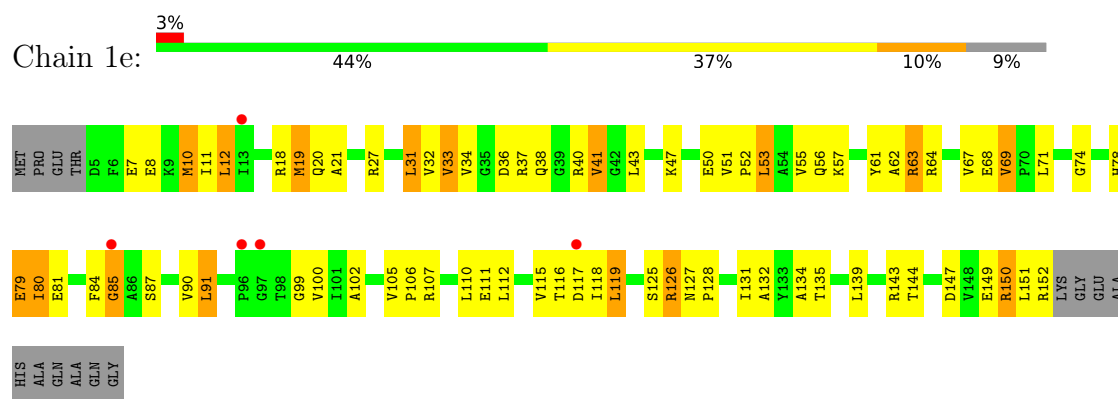
• Molecule 35: 30S ribosomal protein S4



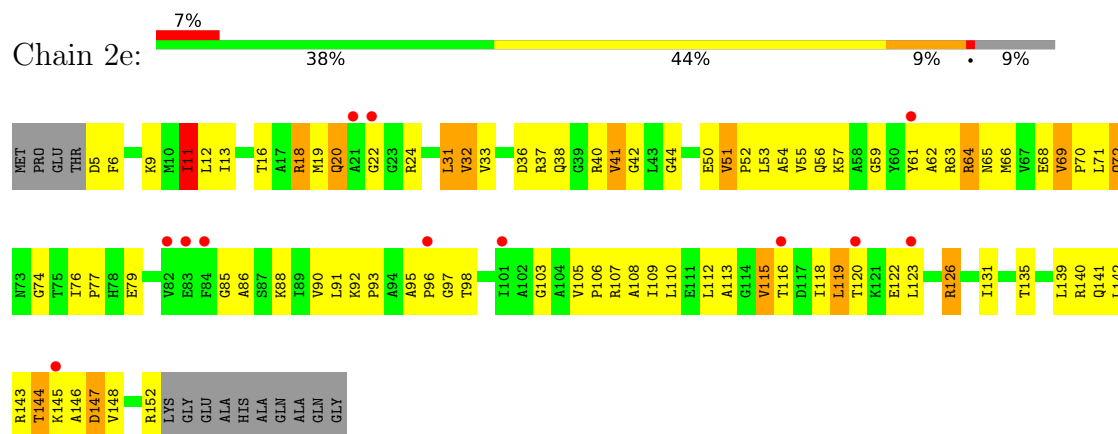
• Molecule 35: 30S ribosomal protein S4



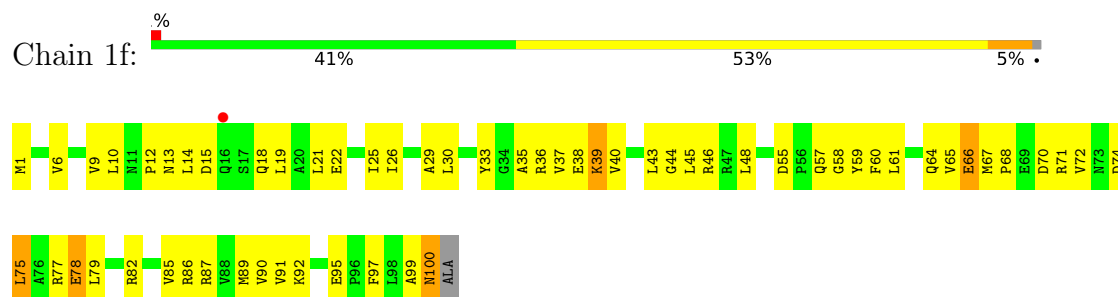
• Molecule 36: 30S ribosomal protein S5



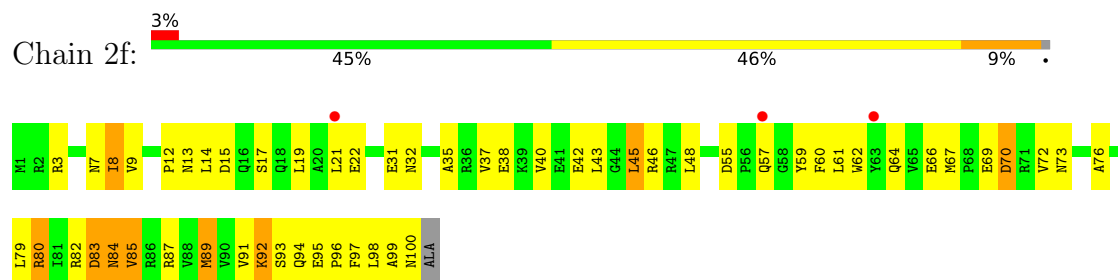
• Molecule 36: 30S ribosomal protein S5



• Molecule 37: 30S ribosomal protein S6

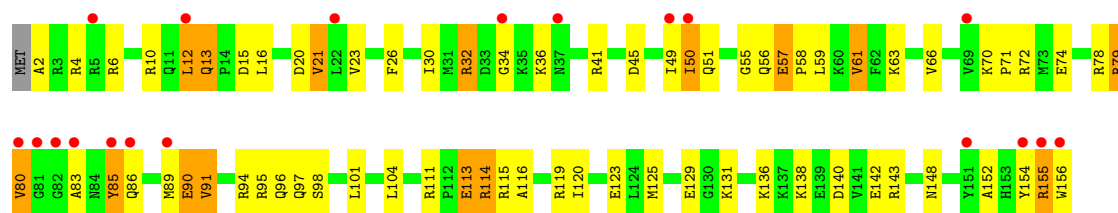


• Molecule 37: 30S ribosomal protein S6

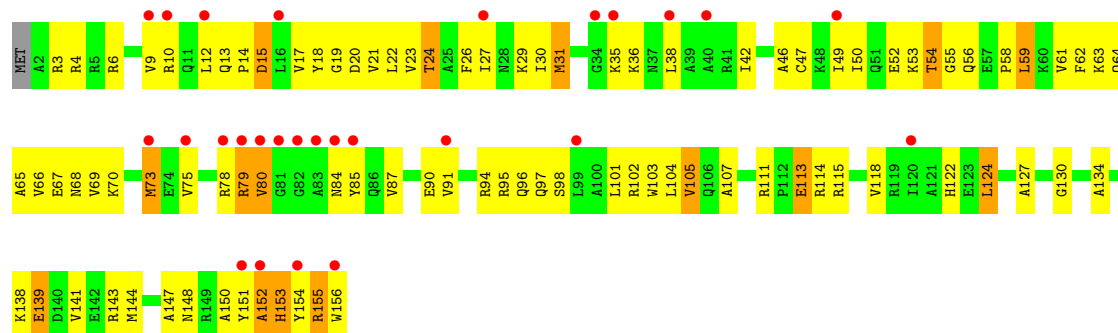


• Molecule 38: 30S ribosomal protein S7

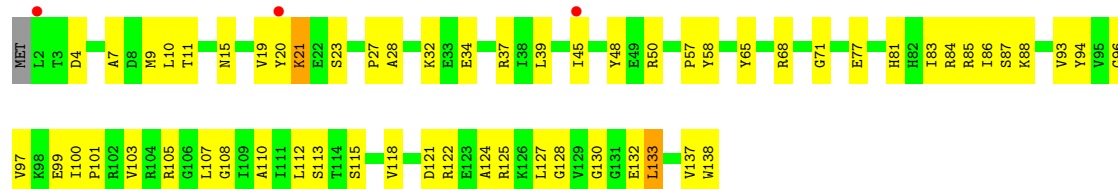




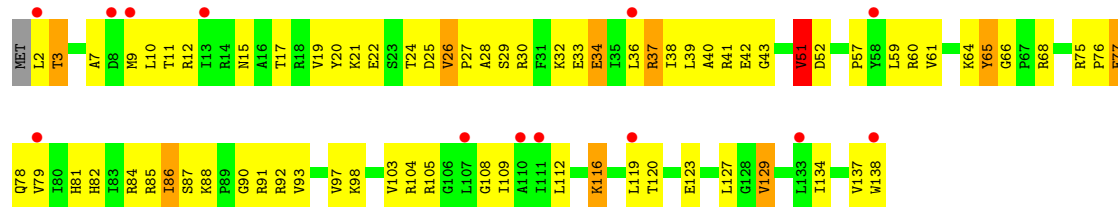
• Molecule 38: 30S ribosomal protein S7



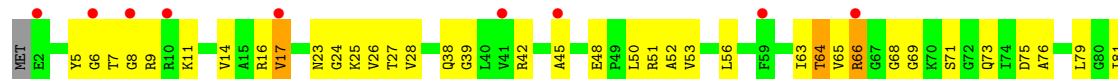
• Molecule 39: 30S ribosomal protein S8



• Molecule 39: 30S ribosomal protein S8

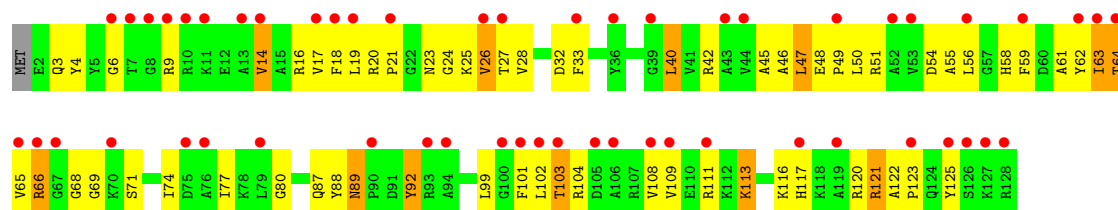
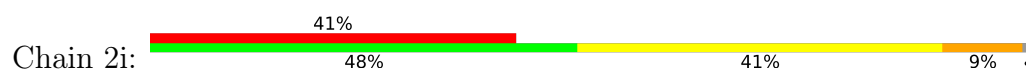


• Molecule 40: 30S ribosomal protein S9

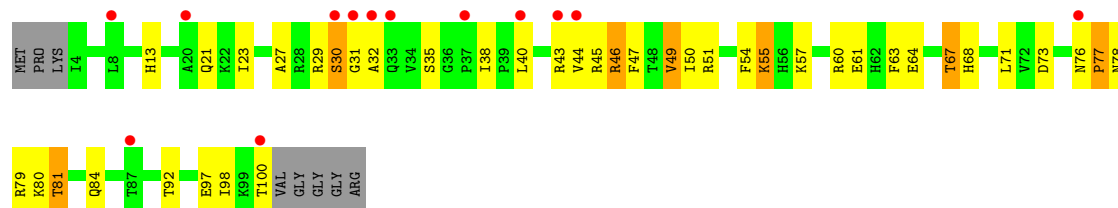




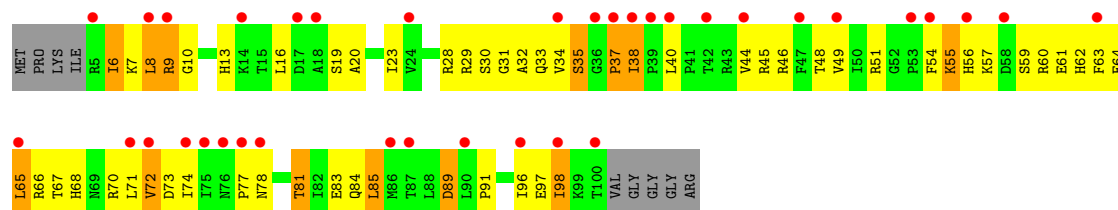
• Molecule 40: 30S ribosomal protein S9



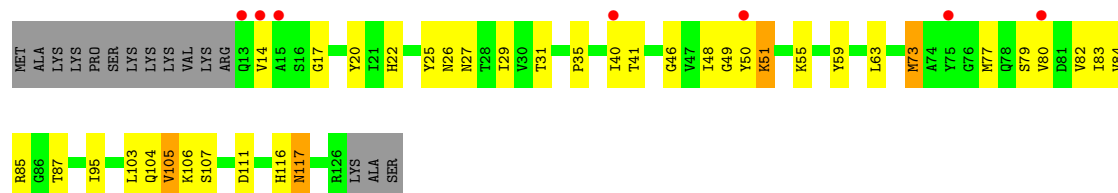
• Molecule 41: 30S ribosomal protein S10



• Molecule 41: 30S ribosomal protein S10

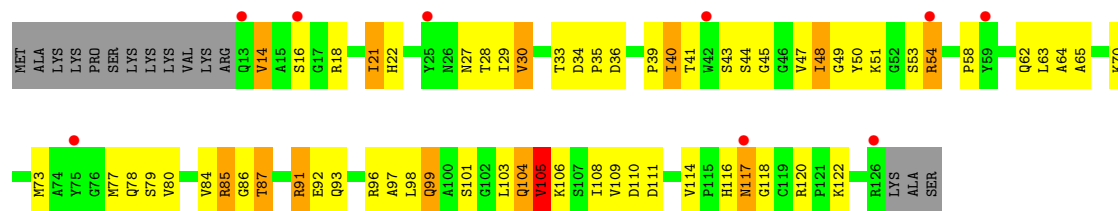


• Molecule 42: 30S ribosomal protein S11

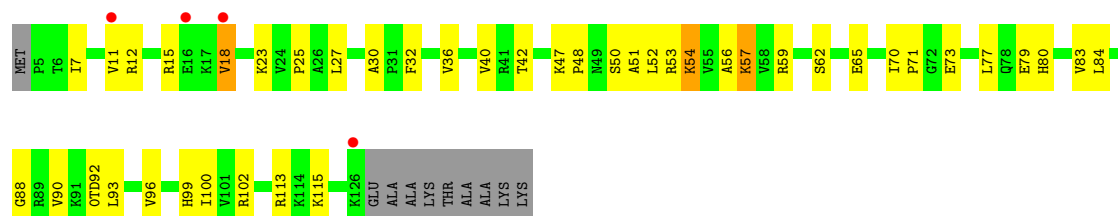


• Molecule 42: 30S ribosomal protein S11

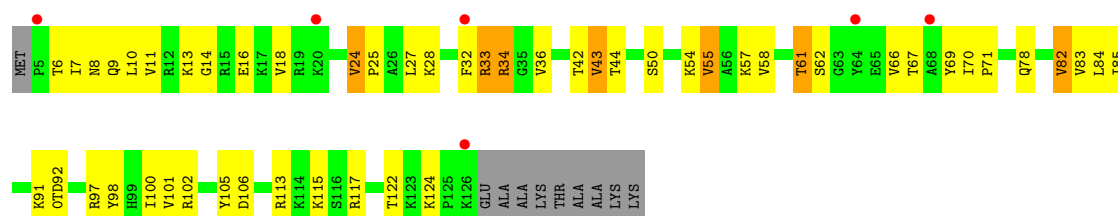




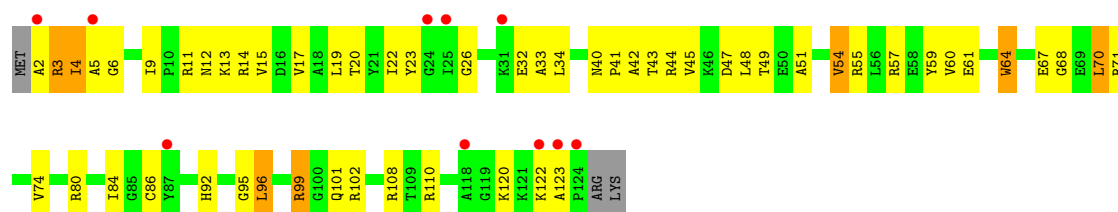
- Molecule 43: 30S ribosomal protein S12



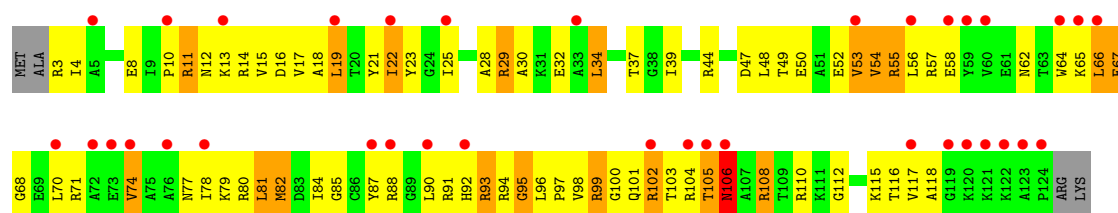
- Molecule 43: 30S ribosomal protein S12



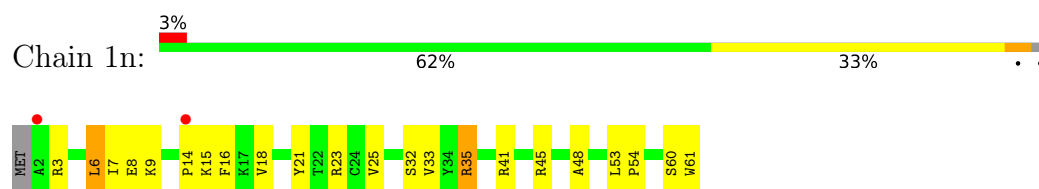
- Molecule 44: 30S ribosomal protein S13



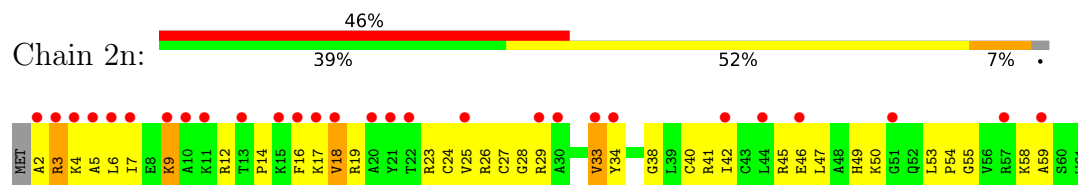
- Molecule 44: 30S ribosomal protein S13



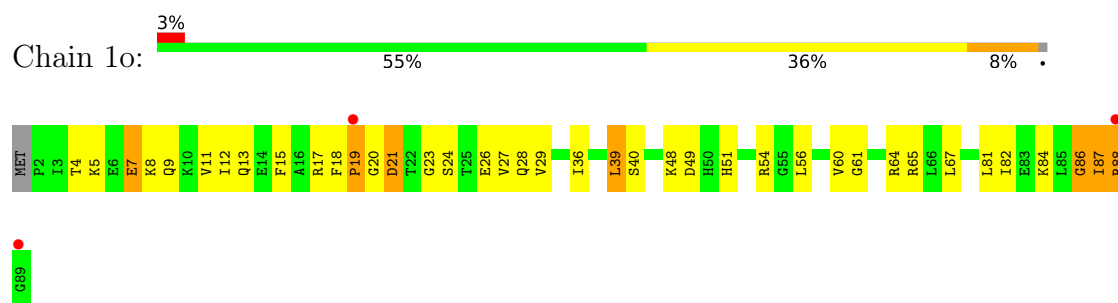
- Molecule 45: 30S ribosomal protein S14 type Z



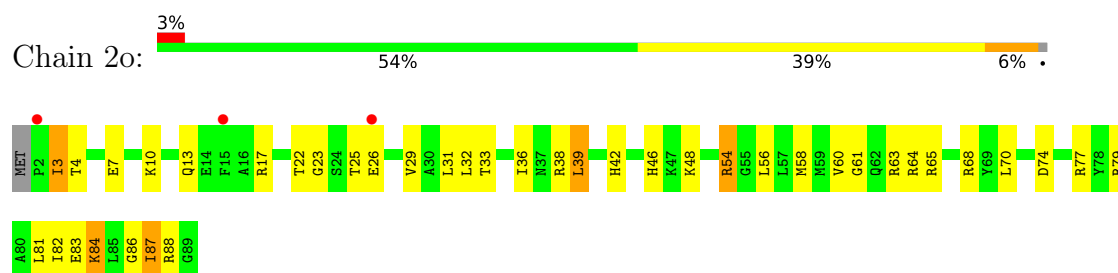
- Molecule 45: 30S ribosomal protein S14 type Z



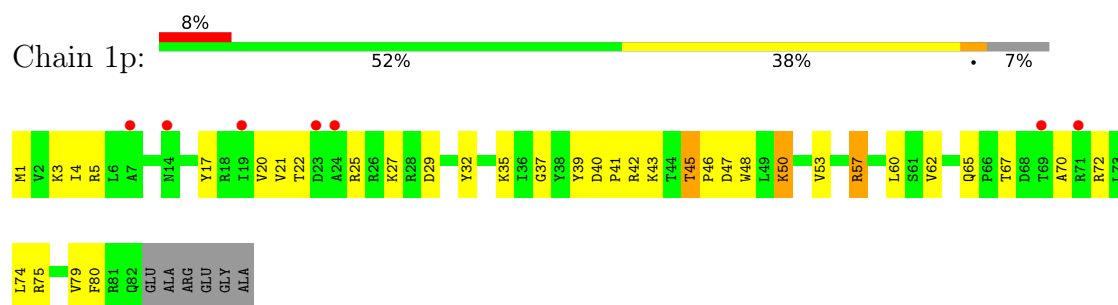
- Molecule 46: 30S ribosomal protein S15



- Molecule 46: 30S ribosomal protein S15



- Molecule 47: 30S ribosomal protein S16

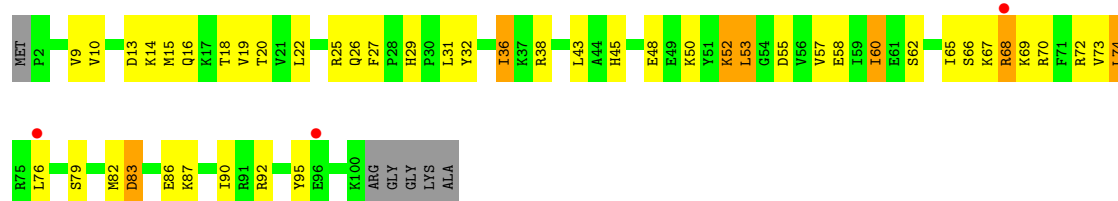


- Molecule 47: 30S ribosomal protein S16





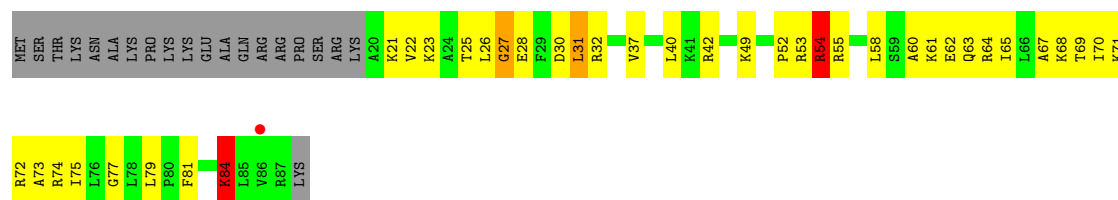
- Molecule 48: 30S ribosomal protein S17



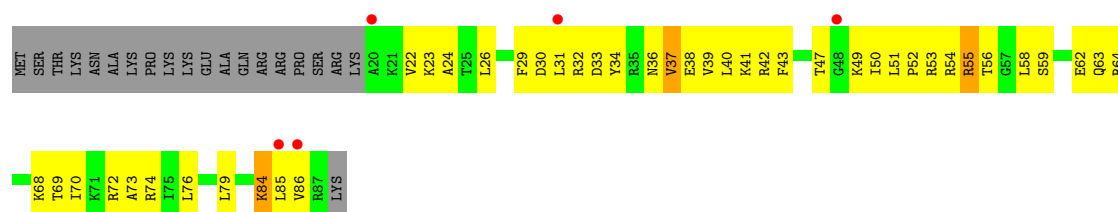
- Molecule 48: 30S ribosomal protein S17



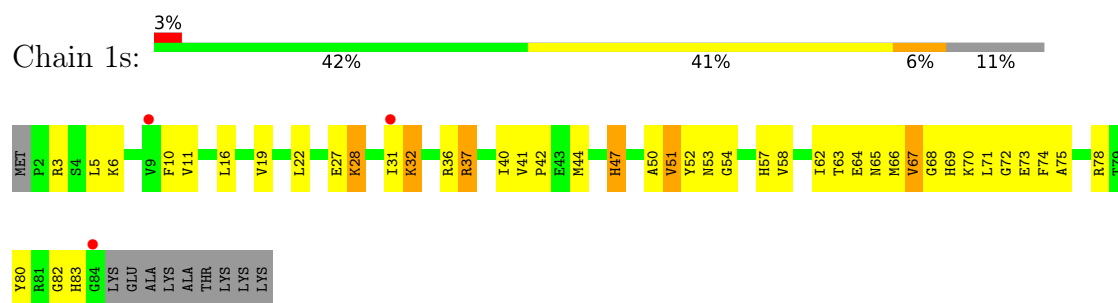
- Molecule 49: 30S ribosomal protein S18



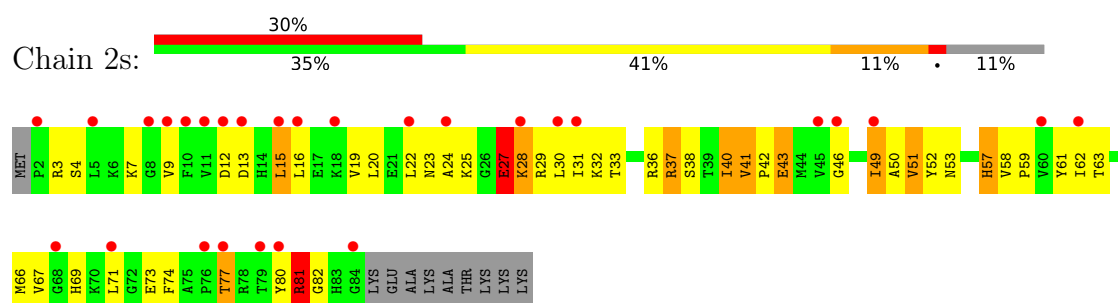
- Molecule 49: 30S ribosomal protein S18



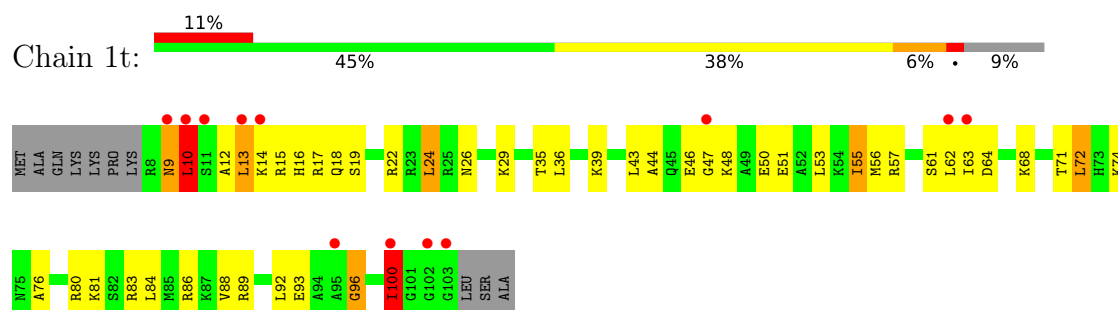
- Molecule 50: 30S ribosomal protein S19



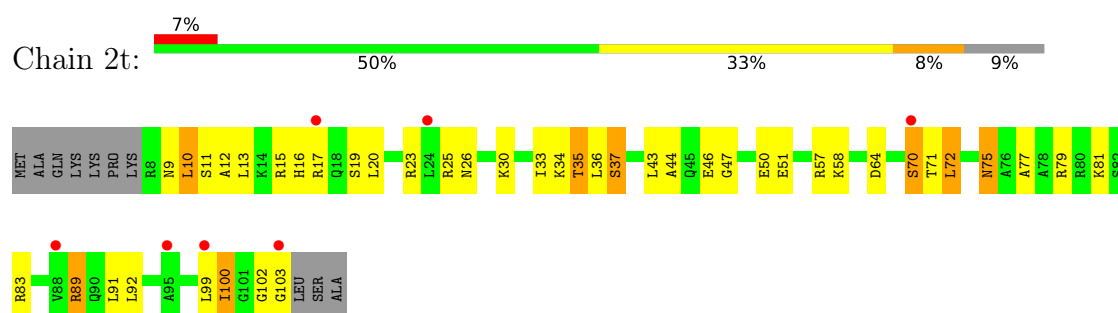
- Molecule 50: 30S ribosomal protein S19



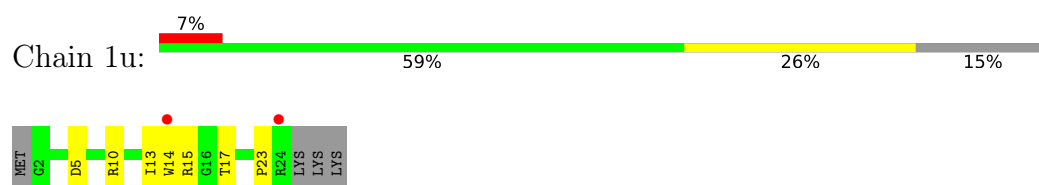
- Molecule 51: 30S ribosomal protein S20



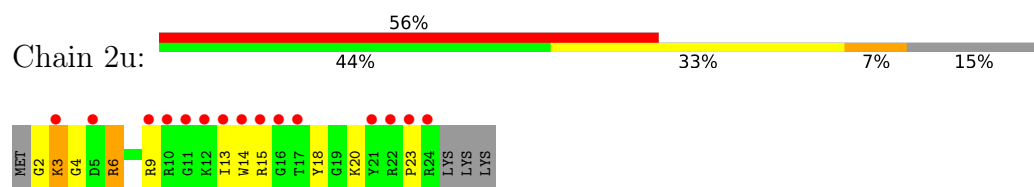
- Molecule 51: 30S ribosomal protein S20



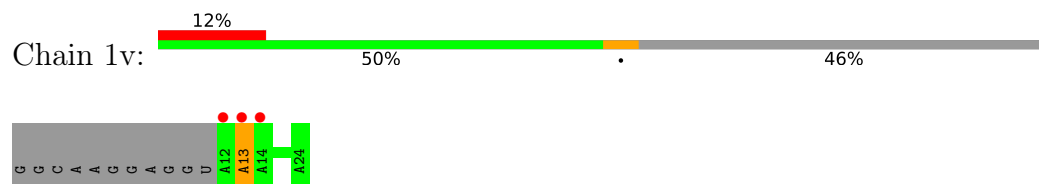
- Molecule 52: 30S ribosomal protein Thx



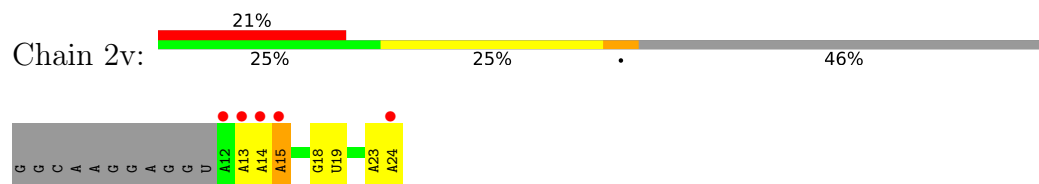
- Molecule 52: 30S ribosomal protein Thx



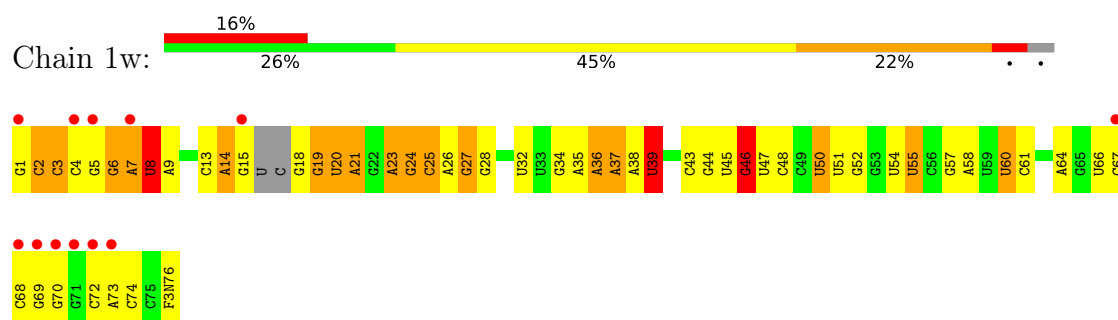
- Molecule 53: MET-PHE-mRNA



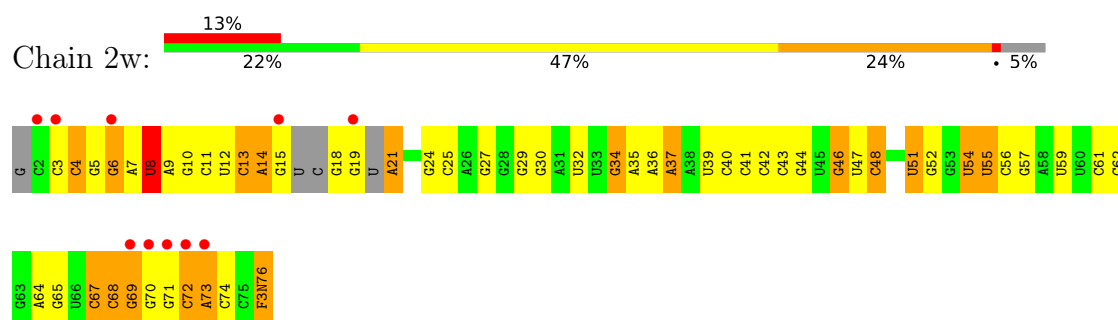
- Molecule 53: MET-PHE-mRNA



- Molecule 54: A-site Aminoacylated Phe-tRNAphe

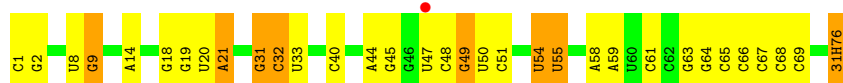


- Molecule 54: A-site Aminoacylated Phe-tRNAphe

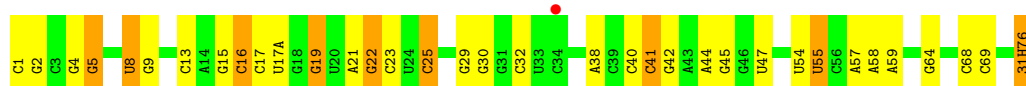


- Molecule 55: P-site Aminoacylated fMet-tRNAmet

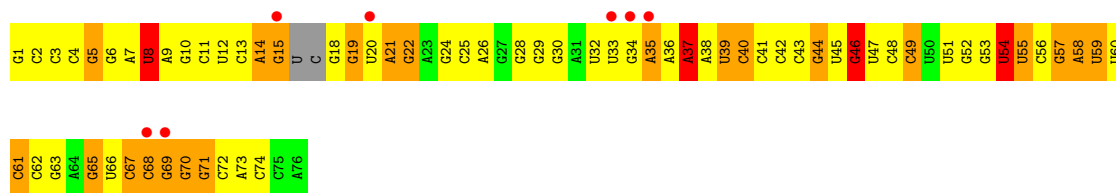
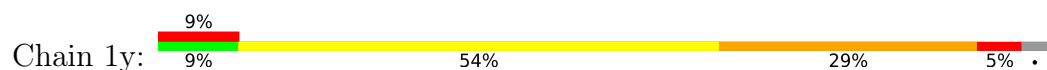




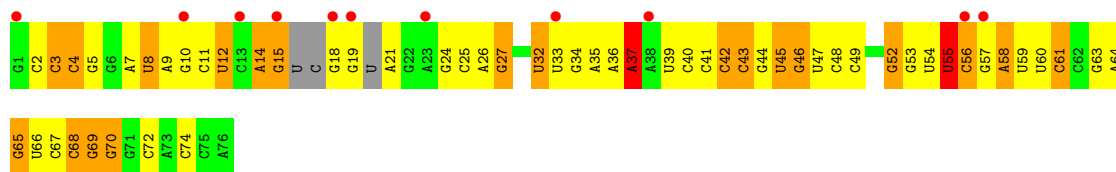
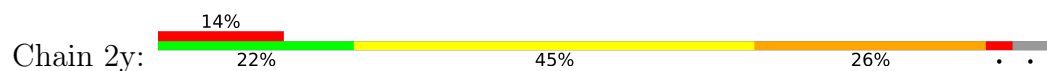
- Molecule 55: P-site Aminoacylated fMet-tRNA^{Met}



- Molecule 56: E-site Deacylated tRNA^{phe}



- Molecule 56: E-site Deacylated tRNA^{phe}



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	208.22Å 446.66Å 615.32Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	121.11 – 2.45 121.11 – 2.45	Depositor EDS
% Data completeness (in resolution range)	99.9 (121.11-2.45) 99.9 (121.11-2.45)	Depositor EDS
R_{merge}	0.28	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.17 (at 2.45Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.245 , 0.300 0.247 , 0.301	Depositor DCC
R_{free} test set	103653 reflections (5.01%)	wwPDB-VP
Wilson B-factor (Å ²)	44.9	Xtriage
Anisotropy	0.138	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.31 , 51.2	EDS
L-test for twinning ²	$\langle L \rangle = 0.34$, $\langle L^2 \rangle = 0.16$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.89	EDS
Total number of atoms	300377	wwPDB-VP
Average B, all atoms (Å ²)	50.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.66% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: OMC, A1C9N, M2G, MG, K, ZN, MIA, 0TD, F3N, 4SU, OMU, 2MA, OMG, SF4, 5MC, G7M, UR3, 5MU, 2MG, PSU, MA6, 31H, 4OC

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	1A	0.54	0/69011	0.74	5/107720 (0.0%)
1	2A	0.41	0/67295	0.63	2/105042 (0.0%)
2	1B	0.46	0/2882	0.68	0/4494
2	2B	0.37	0/2879	0.58	0/4487
3	1D	0.57	0/2186	0.79	3/2944 (0.1%)
3	2D	0.43	0/2186	0.67	0/2944
4	1E	0.49	0/1592	0.76	0/2149
4	2E	0.43	0/1592	0.64	0/2149
5	1F	0.51	0/1619	0.72	0/2193
5	2F	0.38	0/1615	0.65	0/2188
6	1G	0.41	0/1448	0.67	0/1957
6	2G	0.38	0/1453	0.63	0/1963
7	1H	0.43	0/1356	0.65	0/1834
7	2H	0.34	0/1356	0.53	0/1834
8	1I	0.39	0/1112	0.62	0/1514
8	2I	0.37	0/1079	0.66	0/1475
9	1N	0.49	0/1144	0.71	0/1543
9	2N	0.37	0/1144	0.66	0/1543
10	1O	0.50	0/943	0.70	0/1269
10	2O	0.41	0/943	0.71	0/1269
11	1P	0.50	0/1152	0.78	0/1533
11	2P	0.39	0/1152	0.72	0/1533
12	1Q	0.52	0/1143	0.74	0/1527
12	2Q	0.40	0/1143	0.67	0/1527
13	1R	0.55	0/982	0.81	0/1312
13	2R	0.43	0/982	0.66	0/1312
14	1S	0.43	0/883	0.69	0/1176
14	2S	0.38	0/880	0.62	0/1172
15	1T	0.46	0/1105	0.67	0/1477
15	2T	0.39	0/1097	0.64	0/1468
16	1U	0.53	0/977	0.72	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	2U	0.39	0/977	0.58	0/1301
17	1V	0.51	0/782	0.67	0/1049
17	2V	0.36	0/782	0.62	0/1049
18	1W	0.54	0/897	0.73	0/1205
18	2W	0.43	0/897	0.63	0/1205
19	1X	0.53	0/764	0.80	0/1025
19	2X	0.39	0/764	0.65	0/1025
20	1Y	0.45	0/819	0.67	0/1095
20	2Y	0.40	0/819	0.64	0/1095
21	1Z	0.41	0/1267	0.65	0/1717
21	2Z	0.41	0/1299	0.66	0/1763
22	10	0.53	0/662	0.85	2/881 (0.2%)
22	20	0.40	0/662	0.65	0/881
23	11	0.51	0/762	0.72	0/1014
23	21	0.40	0/762	0.64	0/1014
24	12	0.46	0/590	0.64	0/781
24	22	0.41	0/590	0.57	0/781
25	13	0.50	0/474	0.71	0/635
25	23	0.35	0/469	0.62	0/630
26	14	0.46	0/565	0.79	0/761
26	24	0.42	0/545	0.64	0/737
27	15	0.58	0/469	0.78	0/635
27	25	0.45	0/469	0.74	0/635
28	16	0.51	0/460	0.73	0/613
28	26	0.40	0/456	0.66	0/608
29	17	0.61	0/426	0.83	0/561
29	27	0.49	0/426	0.69	0/561
30	18	0.50	0/525	0.69	0/691
30	28	0.39	0/525	0.59	0/691
31	19	0.57	0/310	0.83	0/407
31	29	0.38	0/310	0.60	0/407
32	1a	0.40	0/35795	0.61	4/55864 (0.0%)
32	2a	0.37	0/35886	0.59	4/56005 (0.0%)
33	1b	0.40	0/1881	0.71	0/2542
33	2b	0.41	0/1860	0.67	0/2518
34	1c	0.38	0/1572	0.63	1/2126 (0.0%)
34	2c	0.38	0/1566	0.60	0/2119
35	1d	0.37	0/1685	0.63	0/2262
35	2d	0.39	0/1704	0.65	0/2284
36	1e	0.40	0/1145	0.63	0/1543
36	2e	0.37	0/1149	0.67	0/1548
37	1f	0.44	0/823	0.62	0/1115
37	2f	0.38	0/829	0.56	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	1g	0.38	0/1250	0.59	0/1679
38	2g	0.38	0/1254	0.55	0/1683
39	1h	0.36	0/1108	0.60	0/1494
39	2h	0.35	0/1108	0.56	0/1494
40	1i	0.38	0/1002	0.70	0/1346
40	2i	0.39	0/997	0.63	0/1343
41	1j	0.36	0/722	0.59	0/982
41	2j	0.41	0/727	0.66	0/988
42	1k	0.37	0/844	0.65	0/1145
42	2k	0.34	0/848	0.53	0/1149
43	1l	0.42	0/937	0.65	0/1260
43	2l	0.36	0/937	0.61	0/1260
44	1m	0.39	0/969	0.62	0/1302
44	2m	0.41	0/961	0.66	0/1291
45	1n	0.36	0/501	0.68	0/664
45	2n	0.31	0/501	0.59	0/664
46	1o	0.41	0/739	0.63	0/985
46	2o	0.34	0/739	0.56	0/985
47	1p	0.35	0/697	0.61	0/939
47	2p	0.41	0/693	0.62	0/935
48	1q	0.39	0/836	0.59	0/1117
48	2q	0.36	0/836	0.61	0/1117
49	1r	0.44	0/560	0.64	0/746
49	2r	0.36	0/560	0.61	0/746
50	1s	0.37	0/667	0.65	0/900
50	2s	0.41	0/661	0.69	0/893
51	1t	0.37	0/730	0.66	0/965
51	2t	0.37	0/729	0.68	0/965
52	1u	0.36	0/203	0.61	0/266
52	2u	0.49	0/203	0.68	0/266
53	1v	0.45	0/310	0.56	0/480
53	2v	0.40	0/310	0.52	0/480
54	1w	0.46	1/1581 (0.1%)	0.62	0/2458
54	2w	0.47	2/1531 (0.1%)	0.61	0/2379
55	1x	0.47	0/1723	0.66	0/2684
55	2x	0.41	1/1723 (0.1%)	0.60	0/2684
56	1y	0.50	2/1606 (0.1%)	0.62	0/2497
56	2y	0.54	2/1583 (0.1%)	0.61	0/2459
All	All	0.44	8/316636 (0.0%)	0.66	21/474041 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a

sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
5	2F	0	1
6	1G	0	1
22	10	0	1
25	13	0	1
26	14	0	1
33	1b	0	2
All	All	0	7

All (8) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	2y	46	G7M	O3'-P	6.24	1.62	1.56
54	2w	8	4SU	O3'-P	6.11	1.62	1.56
54	2w	46	G7M	O3'-P	5.87	1.62	1.56
55	2x	8	4SU	O3'-P	5.84	1.62	1.56
56	2y	8	4SU	O3'-P	5.78	1.62	1.56
56	1y	8	4SU	O3'-P	5.58	1.61	1.56
54	1w	8	4SU	O3'-P	5.56	1.61	1.56
56	1y	46	G7M	O3'-P	5.31	1.61	1.56

All (21) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	1992	G	C2'-C3'-O3'	7.48	120.72	109.50
1	1A	1992	G	C2'-C3'-O3'	7.39	120.58	109.50
32	1a	266	G	C2'-C3'-O3'	6.41	119.11	109.50
1	1A	2629	A	P-O3'-C3'	6.18	129.47	120.20
3	1D	98	VAL	N-CA-C	-6.18	104.92	112.76
32	2a	1263	C	N1-C2-O2	6.01	136.92	118.90
22	10	9	SER	CA-C-N	5.76	130.62	122.09
22	10	9	SER	C-N-CA	5.76	130.62	122.09
32	2a	1272	G	N1-C2-N2	-5.76	98.92	116.20
1	1A	961	C	O5'-P-OP2	-5.73	90.80	108.00
32	1a	1442	G	P-O3'-C3'	5.43	126.22	119.70
32	2a	1272	G	N3-C2-N2	5.41	136.13	119.90
1	1A	443	A	O3'-P-O5'	-5.38	95.94	104.00
1	1A	2629	A	C2'-C3'-O3'	5.36	117.55	109.50
3	1D	275	LYS	CA-C-N	5.30	131.24	121.70
3	1D	275	LYS	C-N-CA	5.30	131.24	121.70
1	2A	752	A	C2'-C3'-O3'	5.23	117.34	109.50
32	1a	266	G	P-O3'-C3'	5.21	128.02	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	1c	15	THR	N-CA-C	-5.21	108.68	114.62
32	2a	115	G	P-O3'-C3'	5.19	127.99	120.20
32	1a	1067	A	P-O3'-C3'	5.17	127.95	120.20

There are no chirality outliers.

All (7) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
22	10	12	ASN	Peptide
25	13	53	LEU	Peptide
26	14	67	TYR	Peptide
6	1G	50	ALA	Peptide
33	1b	125	PRO	Peptide
33	1b	130	ARG	Peptide
5	2F	21	ALA	Peptide

5.2 Too-close contacts

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	1A	61852	0	31189	1084	0
1	2A	60322	0	30421	1282	0
2	1B	2577	0	1305	54	0
2	2B	2575	0	1303	74	0
3	1D	2136	0	2218	58	0
3	2D	2136	0	2218	86	0
4	1E	1559	0	1618	64	0
4	2E	1559	0	1618	63	0
5	1F	1584	0	1625	58	0
5	2F	1580	0	1619	79	0
6	1G	1423	0	1436	63	0
6	2G	1428	0	1438	93	0
7	1H	1330	0	1407	30	0
7	2H	1330	0	1407	62	0
8	1I	1097	0	1140	49	0
8	2I	1064	0	1082	57	1
9	1N	1117	0	1184	34	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
9	2N	1117	0	1184	50	0
10	1O	933	0	996	30	0
10	2O	933	0	996	43	0
11	1P	1135	0	1212	71	0
11	2P	1135	0	1212	62	0
12	1Q	1122	0	1179	41	0
12	2Q	1122	0	1179	60	0
13	1R	968	0	1033	41	0
13	2R	968	0	1033	44	0
14	1S	873	0	927	29	0
14	2S	870	0	923	54	0
15	1T	1091	0	1151	33	0
15	2T	1083	0	1136	44	0
16	1U	959	0	1019	30	0
16	2U	959	0	1019	41	0
17	1V	771	0	830	21	0
17	2V	771	0	830	34	0
18	1W	886	0	940	24	0
18	2W	886	0	940	28	0
19	1X	750	0	814	31	0
19	2X	750	0	814	28	0
20	1Y	806	0	881	23	0
20	2Y	806	0	881	40	0
21	1Z	1240	0	1240	68	0
21	2Z	1271	0	1273	82	0
22	10	653	0	674	23	0
22	20	653	0	674	30	0
23	11	755	0	826	27	0
23	21	755	0	826	37	0
24	12	588	0	643	20	0
24	22	588	0	643	32	0
25	13	469	0	518	10	0
25	23	464	0	514	20	0
26	14	552	0	533	24	0
26	24	532	0	503	50	0
27	15	455	0	465	13	0
27	25	455	0	464	8	0
28	16	453	0	473	15	0
28	26	449	0	469	20	0
29	17	418	0	467	20	0
29	27	418	0	467	21	0
30	18	517	0	582	19	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
30	28	517	0	582	23	0
31	19	307	0	335	13	0
31	29	307	0	335	13	0
32	1a	32246	0	16294	640	1
32	2a	32327	0	16338	822	0
33	1b	1846	0	1867	105	0
33	2b	1825	0	1828	105	0
34	1c	1548	0	1535	73	0
34	2c	1542	0	1517	82	0
35	1d	1655	0	1672	67	0
35	2d	1674	0	1714	90	0
36	1e	1129	0	1185	64	0
36	2e	1133	0	1191	60	0
37	1f	810	0	804	49	0
37	2f	816	0	808	37	0
38	1g	1231	0	1238	55	0
38	2g	1235	0	1249	84	0
39	1h	1088	0	1126	36	0
39	2h	1088	0	1126	55	0
40	1i	983	0	986	38	0
40	2i	978	0	965	53	0
41	1j	709	0	650	28	0
41	2j	714	0	672	47	0
42	1k	829	0	825	23	0
42	2k	833	0	836	43	0
43	1l	932	0	981	31	0
43	2l	932	0	979	30	0
44	1m	958	0	1002	49	0
44	2m	950	0	988	78	0
45	1n	492	0	529	17	0
45	2n	492	0	529	46	0
46	1o	728	0	760	22	0
46	2o	728	0	760	29	0
47	1p	681	0	697	26	0
47	2p	677	0	686	37	0
48	1q	823	0	891	43	0
48	2q	823	0	891	38	0
49	1r	555	0	618	28	0
49	2r	555	0	618	38	0
50	1s	652	0	662	34	0
50	2s	646	0	644	53	0
51	1t	728	0	798	42	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
51	2t	727	0	796	33	0
52	1u	199	0	208	5	0
52	2u	199	0	208	8	0
53	1v	277	0	140	2	0
53	2v	277	0	140	6	0
54	1w	1603	0	828	53	0
54	2w	1555	0	797	38	0
55	1x	1656	0	848	20	0
55	2x	1656	0	849	23	0
56	1y	1585	0	803	62	0
56	2y	1565	0	794	56	0
57	10	8	0	0	0	0
57	11	5	0	0	0	0
57	12	2	0	0	0	0
57	13	5	0	0	0	0
57	14	1	0	0	0	0
57	15	9	0	0	0	0
57	16	2	0	0	0	0
57	17	7	0	0	0	0
57	18	5	0	0	0	0
57	1A	1099	0	0	0	0
57	1B	36	0	0	0	0
57	1D	13	0	0	0	0
57	1E	14	0	0	0	0
57	1F	12	0	0	0	0
57	1G	5	0	0	0	0
57	1H	1	0	0	0	0
57	1I	1	0	0	0	0
57	1N	6	0	0	0	0
57	1O	5	0	0	0	0
57	1P	3	0	0	0	0
57	1Q	7	0	0	0	0
57	1R	4	0	0	0	0
57	1S	3	0	0	0	0
57	1T	4	0	0	0	0
57	1U	10	0	0	0	0
57	1V	10	0	0	0	0
57	1W	8	0	0	0	0
57	1X	7	0	0	0	0
57	1Y	3	0	0	0	0
57	1Z	4	0	0	0	0
57	1a	213	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
57	1b	1	0	0	0	0
57	1d	1	0	0	0	0
57	1e	2	0	0	0	0
57	1f	2	0	0	0	0
57	1k	1	0	0	0	0
57	1l	2	0	0	0	0
57	1m	2	0	0	0	0
57	1n	3	0	0	0	0
57	1t	1	0	0	0	0
57	1v	2	0	0	0	0
57	1w	8	0	0	0	0
57	1x	14	0	0	0	0
57	1y	1	0	0	0	0
57	20	2	0	0	0	0
57	21	1	0	0	0	0
57	23	1	0	0	0	0
57	25	5	0	0	0	0
57	27	2	0	0	0	0
57	28	4	0	0	0	0
57	29	1	0	0	0	0
57	2A	883	0	0	0	0
57	2B	20	0	0	0	0
57	2D	8	0	0	0	0
57	2E	7	0	0	0	0
57	2F	6	0	0	0	0
57	2G	1	0	0	0	0
57	2N	1	0	0	0	0
57	2O	1	0	0	0	0
57	2P	3	0	0	0	0
57	2Q	3	0	0	0	0
57	2R	3	0	0	0	0
57	2T	3	0	0	0	0
57	2U	1	0	0	0	0
57	2V	2	0	0	0	0
57	2W	3	0	0	0	0
57	2X	2	0	0	0	0
57	2Z	1	0	0	0	0
57	2a	234	0	0	0	0
57	2d	2	0	0	0	0
57	2e	1	0	0	0	0
57	2f	1	0	0	0	0
57	2g	1	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
57	2i	1	0	0	0	0
57	2j	2	0	0	0	0
57	2k	1	0	0	0	0
57	2l	4	0	0	0	0
57	2m	1	0	0	0	0
57	2p	1	0	0	0	0
57	2q	2	0	0	0	0
57	2r	2	0	0	0	0
57	2t	1	0	0	0	0
57	2v	3	0	0	0	0
57	2w	9	0	0	0	0
57	2x	6	0	0	0	0
57	2y	6	0	0	0	0
58	1A	1	0	0	0	0
58	2A	1	0	0	0	0
59	1A	74	0	0	1	0
59	2A	74	0	0	0	0
60	14	1	0	0	0	0
60	15	1	0	0	0	0
60	16	1	0	0	0	0
60	19	1	0	0	0	0
60	1Y	1	0	0	0	0
60	1n	1	0	0	0	0
60	24	1	0	0	0	0
60	25	1	0	0	0	0
60	26	1	0	0	0	0
60	29	1	0	0	0	0
60	2Y	1	0	0	0	0
60	2n	1	0	0	0	0
61	1d	8	0	0	0	0
61	2d	8	0	0	0	0
62	10	10	0	0	1	0
62	11	14	0	0	0	0
62	12	2	0	0	0	0
62	13	3	0	0	1	0
62	15	6	0	0	1	0
62	16	4	0	0	0	0
62	17	9	0	0	3	0
62	18	10	0	0	0	0
62	1A	1997	0	0	151	0
62	1B	63	0	0	3	0
62	1D	30	0	0	1	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
62	1E	31	0	0	4	0
62	1F	16	0	0	1	0
62	1G	5	0	0	1	0
62	1H	2	0	0	1	0
62	1I	1	0	0	0	0
62	1N	8	0	0	1	0
62	1O	5	0	0	0	0
62	1P	24	0	0	6	0
62	1Q	8	0	0	0	0
62	1R	11	0	0	0	0
62	1S	5	0	0	0	0
62	1T	9	0	0	0	0
62	1U	9	0	0	0	0
62	1V	9	0	0	0	0
62	1W	8	0	0	1	0
62	1X	5	0	0	0	0
62	1Y	4	0	0	0	0
62	1Z	1	0	0	0	0
62	1a	379	0	0	30	0
62	1b	1	0	0	0	0
62	1e	1	0	0	0	0
62	1f	1	0	0	0	0
62	1i	1	0	0	0	0
62	1l	7	0	0	0	0
62	1p	1	0	0	0	0
62	1q	2	0	0	0	0
62	1u	1	0	0	1	0
62	1v	5	0	0	0	0
62	1w	13	0	0	1	0
62	1x	15	0	0	1	0
62	1y	2	0	0	0	0
62	20	3	0	0	0	0
62	21	12	0	0	1	0
62	23	2	0	0	0	0
62	25	2	0	0	0	0
62	27	4	0	0	0	0
62	28	3	0	0	1	0
62	29	1	0	0	0	0
62	2A	1156	0	0	135	0
62	2B	24	0	0	4	0
62	2D	22	0	0	3	0
62	2E	14	0	0	6	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
62	2F	12	0	0	0	0
62	2I	3	0	0	0	0
62	2N	1	0	0	0	0
62	2O	3	0	0	0	0
62	2P	12	0	0	3	0
62	2Q	1	0	0	0	0
62	2R	6	0	0	0	0
62	2T	5	0	0	0	0
62	2U	3	0	0	1	0
62	2V	1	0	0	0	0
62	2W	1	0	0	0	0
62	2X	3	0	0	2	0
62	2Z	1	0	0	0	0
62	2a	267	0	0	22	0
62	2c	1	0	0	0	0
62	2d	1	0	0	0	0
62	2f	1	0	0	0	0
62	2j	3	0	0	1	0
62	2l	6	0	0	1	0
62	2o	1	0	0	0	0
62	2p	2	0	0	0	0
62	2t	2	0	0	0	0
62	2v	2	0	0	0	0
62	2w	3	0	0	1	0
62	2x	6	0	0	0	0
62	2y	8	0	0	0	0
All	All	300377	0	196733	7374	1

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 15.

All (7374) 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)
1:1A:1082:U:H3	1:1A:1086:A:N6	1.15	1.37
1:1A:1082:U:N3	1:1A:1086:A:N6	1.94	1.13
54:1w:27:G:H1	54:1w:43:C:N4	1.50	1.08
54:1w:3:C:H42	54:1w:70:G:H1	1.05	1.02
32:2a:664:G:H22	32:2a:741:G:H1	1.07	1.01
53:2v:23:A:H4'	53:2v:24:A:H5'	1.42	1.01
1:2A:1798:U:H5'	3:2D:259:THR:HG22	1.43	1.00

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2099:U:H3	1:1A:2190:G:H1	1.08	0.97
1:1A:1603:A:OP1	62:1A:4204:HOH:O	1.79	0.97
45:2n:23:ARG:NH1	45:2n:28:GLY:O	1.97	0.97
1:2A:2430:A:OP2	62:2A:3903:HOH:O	1.81	0.97
42:2k:99:GLN:HG3	42:2k:105:VAL:HG21	1.43	0.97
1:2A:195:A:N7	62:2A:3906:HOH:O	1.98	0.97
1:1A:1648:C:OP1	62:1A:4205:HOH:O	1.84	0.95
1:2A:627:A:H62	11:2P:84:ASN:HD21	1.06	0.95
1:2A:1671:U:OP2	62:2A:3905:HOH:O	1.85	0.94
10:1O:48:PRO:HB3	32:1a:1422:G:H5''	1.45	0.94
32:1a:504:C:OP1	62:1a:1903:HOH:O	1.83	0.94
1:1A:1071:G:H1'	1:1A:1089:G:H2'	1.49	0.94
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.00	0.94
1:1A:11:G:H2'	1:1A:12:U:H5''	1.49	0.94
56:1y:19:G:N2	56:1y:56:C:N3	2.16	0.93
1:2A:330:A:H2	1:2A:1210:A:HO2'	1.02	0.93
1:2A:1973:G:OP1	62:2A:3904:HOH:O	1.85	0.93
29:27:24:THR:HG22	29:27:27:GLY:H	1.35	0.92
11:1P:38:GLN:O	11:1P:40:SER:N	2.03	0.91
22:10:11:ARG:O	22:10:14:ARG:NH2	2.02	0.91
54:2w:18:G:O2'	54:2w:57:G:N2	2.03	0.91
56:2y:18:G:H22	56:2y:55:PSU:HN3	1.14	0.91
1:1A:2550:G:OP1	62:1A:4206:HOH:O	1.87	0.91
1:1A:505:A:OP2	62:1A:4207:HOH:O	1.88	0.91
3:1D:206:LEU:HD22	3:1D:211:ARG:HG2	1.50	0.90
1:2A:2379:G:O2'	14:2S:17:ARG:NH2	2.05	0.90
22:10:10:THR:HG22	22:10:12:ASN:H	1.34	0.90
1:2A:1670:C:OP1	62:2A:3905:HOH:O	1.88	0.90
1:1A:2427:C:OP1	62:1A:4208:HOH:O	1.88	0.89
38:1g:50:ILE:HG13	38:1g:61:VAL:HG11	1.54	0.89
5:1F:53:THR:HG22	5:1F:55:GLY:H	1.37	0.89
32:2a:1399:C:H4'	32:2a:1400:5MC:H5'	1.55	0.89
22:20:70:GLN:HE21	22:20:72:ARG:HD2	1.36	0.89
1:1A:1082:U:O4	1:1A:1086:A:N1	2.05	0.89
33:1b:82:ARG:NH1	33:1b:92:TYR:OH	2.06	0.89
25:13:39:ASP:OD1	25:13:44:ARG:NH1	2.06	0.89
2:2B:7:G:H21	14:2S:38:GLN:HE22	1.21	0.88
17:2V:40:LEU:HB2	17:2V:46:VAL:HG12	1.54	0.88
32:2a:289:G:OP2	62:2a:1902:HOH:O	1.92	0.88
23:21:3:LYS:HB2	23:21:61:ARG:HH12	1.38	0.88
1:1A:1082:U:H3	1:1A:1086:A:H61	1.01	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1253:A:OP1	62:2A:3907:HOH:O	1.92	0.87
22:20:18:ALA:O	22:20:20:ARG:NH1	2.07	0.87
18:2W:23:LEU:HD21	27:25:25:LEU:HB2	1.53	0.87
56:1y:53:G:H1	56:1y:61:C:H42	1.20	0.87
32:2a:363:A:OP2	43:2l:34:ARG:NH2	2.08	0.87
29:17:24:THR:HG22	29:17:27:GLY:H	1.40	0.87
10:1O:2:ILE:HD12	10:1O:6:THR:HG21	1.56	0.87
32:1a:64:G:O6	32:1a:100:C:N4	2.07	0.87
36:1e:78:HIS:HE1	36:1e:143:ARG:H	1.22	0.87
1:2A:2298:A:H62	1:2A:2318:G:H8	1.22	0.87
51:2t:10:LEU:HG	51:2t:12:ALA:H	1.39	0.87
32:1a:324:G:N7	62:1a:1906:HOH:O	2.08	0.86
1:2A:2099:U:H3	1:2A:2190:G:H1	0.89	0.86
32:2a:998:G:H1	32:2a:1043:C:H42	1.23	0.86
21:2Z:138:GLU:H	21:2Z:156:LYS:HE2	1.38	0.86
32:2a:1129:C:O2'	32:2a:1130:A:N7	2.08	0.86
32:2a:1075:C:H4'	33:2b:175:ARG:HH22	1.40	0.86
32:1a:664:G:H22	32:1a:741:G:H1	1.24	0.86
1:2A:1622:G:OP2	62:2A:3908:HOH:O	1.94	0.86
54:1w:3:C:N4	54:1w:70:G:H1	1.73	0.86
1:2A:198:C:OP2	62:2A:3906:HOH:O	1.92	0.85
1:1A:2136:C:N3	1:1A:2155:G:C2	2.43	0.85
2:1B:3:C:N4	2:1B:118:G:O6	2.09	0.85
1:1A:994:C:OP1	16:1U:53:ARG:NH2	2.09	0.85
1:1A:744:G:OP1	62:1A:4210:HOH:O	1.93	0.85
54:1w:27:G:N2	54:1w:43:C:N3	2.25	0.85
1:1A:2096:U:H3	1:1A:2193:G:H1	1.21	0.85
32:2a:673:G:H2'	32:2a:674:G:C8	2.11	0.85
1:2A:2115:G:O2'	1:2A:2117:A:N7	2.10	0.85
32:2a:1025:U:H3	32:2a:1036:G:H1	1.23	0.85
1:1A:631:A:OP1	11:1P:65:ARG:NH1	2.10	0.84
1:1A:745:G:O6	62:1A:4211:HOH:O	1.94	0.84
35:1d:60:GLU:OE2	35:1d:63:LYS:NZ	2.10	0.84
48:1q:53:LEU:HB3	48:1q:82:MET:HE1	1.59	0.84
34:1c:172:ARG:NH2	34:1c:206:GLU:OE2	2.10	0.84
32:2a:1086:U:H3	32:2a:1099:G:H22	1.25	0.84
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.59	0.84
1:2A:661:C:OP1	5:2F:38:ARG:NH2	2.10	0.84
1:1A:2136:C:N4	1:1A:2155:G:C6	2.46	0.84
1:2A:2451:A:N7	62:2A:3945:HOH:O	2.11	0.84
41:2j:98:ILE:O	62:2j:301:HOH:O	1.94	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1128:C:H1'	32:2a:1147:C:H42	1.42	0.84
1:2A:1356:G:OP1	62:2A:3910:HOH:O	1.95	0.84
32:2a:837:G:H1	32:2a:849:C:H42	1.24	0.84
1:2A:2448:A:OP1	62:2A:3912:HOH:O	1.96	0.84
1:2A:1647:G:OP1	62:2A:3911:HOH:O	1.96	0.83
1:1A:411:G:OP1	62:1A:4212:HOH:O	1.95	0.83
1:1A:1418:G:OP2	62:1A:4213:HOH:O	1.96	0.83
56:2y:18:G:N2	56:2y:55:PSU:HN3	1.76	0.83
1:2A:1395:A:OP1	62:2A:3914:HOH:O	1.97	0.83
2:2B:51:G:N7	14:2S:62:LYS:NZ	2.25	0.83
2:2B:21:G:N2	2:2B:62:C:O2	2.11	0.83
32:2a:588:G:OP2	62:2a:1904:HOH:O	1.97	0.83
32:2a:737:A:H1'	37:2f:73:ASN:HD21	1.44	0.83
32:1a:953:G:H5'	32:1a:965:A:H61	1.44	0.83
32:1a:1182:G:H4'	32:1a:1183:A:H5''	1.61	0.83
4:2E:127:ASP:OD2	62:2E:401:HOH:O	1.95	0.83
55:1x:76:31H:OP2	62:1x:201:HOH:O	1.97	0.83
1:2A:2100:G:H2'	1:2A:2101:G:H8	1.44	0.83
26:24:15:ILE:HG23	26:24:21:VAL:HG22	1.61	0.83
1:1A:826:U:OP1	62:1A:4208:HOH:O	1.97	0.82
1:1A:2598:A:OP2	62:1A:4214:HOH:O	1.97	0.82
1:1A:846:C:O2'	62:1A:4217:HOH:O	1.97	0.82
17:1V:55:ALA:HA	17:1V:101:GLY:HA2	1.61	0.82
32:2a:596:C:OP2	62:2a:1903:HOH:O	1.96	0.82
1:1A:2832:U:OP2	62:1A:4215:HOH:O	1.97	0.82
56:1y:19:G:N1	56:1y:56:C:N4	2.26	0.82
10:2O:24:VAL:HG13	10:2O:33:ALA:HB2	1.60	0.82
25:23:5:LYS:NZ	25:23:34:GLU:OE2	2.13	0.82
1:2A:910:A:OP1	62:2A:3917:HOH:O	1.98	0.82
1:2A:2788:C:OP1	4:2E:61:ARG:NH2	2.13	0.82
1:1A:152:G:H2'	1:1A:153:C:C6	2.15	0.81
32:1a:975:A:H5'	32:1a:975:A:H8	1.45	0.81
1:2A:1371:G:OP2	62:2A:3913:HOH:O	1.96	0.81
1:1A:881:G:N2	1:1A:897:C:O2	2.11	0.81
2:1B:103:G:H21	21:1Z:73:GLN:HE22	1.25	0.81
1:2A:963:U:OP2	62:2A:3915:HOH:O	1.97	0.81
44:2m:15:VAL:HG22	44:2m:48:LEU:HD11	1.60	0.81
1:2A:2353:G:H5''	22:20:32:ARG:HH11	1.46	0.81
1:1A:2156:G:H2'	1:1A:2157:G:C2	2.16	0.81
1:2A:962:G:OP1	62:2A:3915:HOH:O	1.97	0.81
1:2A:1812:A:OP2	62:2A:3916:HOH:O	1.97	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1058:G:H1	1:1A:1080:C:H42	1.24	0.81
1:1A:1280:G:O6	62:1A:4216:HOH:O	1.97	0.81
6:2G:67:LYS:HE3	26:24:5:ILE:HD12	1.61	0.81
34:1c:131:ARG:HH11	34:1c:166:GLU:HG3	1.46	0.81
32:2a:426:G:O6	62:2a:1905:HOH:O	1.99	0.81
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.61	0.81
13:2R:51:LEU:HD13	13:2R:66:VAL:HG13	1.63	0.81
23:21:56:GLN:HE21	23:21:87:PRO:HG3	1.44	0.81
1:2A:2166:G:H3'	1:2A:2167:U:H5''	1.61	0.81
32:2a:598:U:O4	62:2a:1903:HOH:O	1.97	0.81
40:2i:21:PRO:HA	40:2i:59:PHE:HA	1.63	0.81
1:1A:1265:A:OP2	62:1A:4218:HOH:O	1.97	0.80
32:1a:473:G:OP2	47:1p:75:ARG:NH1	2.14	0.80
1:2A:1970:A:OP1	62:2A:3918:HOH:O	1.99	0.80
1:1A:2222:G:O6	62:1A:4219:HOH:O	1.99	0.80
35:2d:103:ASN:OD1	35:2d:114:ARG:NE	2.12	0.80
41:2j:51:ARG:O	45:2n:45:ARG:NH1	2.14	0.80
10:2O:48:PRO:HB3	32:2a:1422:G:H5''	1.62	0.80
47:2p:18:ARG:HD3	47:2p:35:LYS:HD2	1.60	0.80
32:2a:544:G:OP1	35:2d:59:ARG:NH2	2.15	0.80
1:2A:1016:G:O6	62:2A:3920:HOH:O	2.00	0.80
32:2a:1429:C:O2	32:2a:1471:G:N2	2.15	0.80
1:1A:365:C:OP2	62:1A:4220:HOH:O	1.99	0.80
32:2a:974:A:OP2	45:2n:29:ARG:NH2	2.15	0.80
32:2a:1314:C:OP2	50:2s:4:SER:OG	1.99	0.80
1:1A:2183:C:H2'	1:1A:2184:G:H8	1.46	0.80
1:2A:2134:A:O2'	1:2A:2159:G:N2	2.15	0.80
38:2g:113:GLU:OE2	38:2g:122:HIS:ND1	2.13	0.80
1:1A:410:G:O6	1:1A:417:C:N4	2.14	0.79
5:1F:72:ARG:O	62:1F:401:HOH:O	2.00	0.79
26:14:55:ARG:H	26:14:56:VAL:HA	1.46	0.79
38:1g:70:LYS:HG2	38:1g:96:GLN:HB3	1.63	0.79
1:2A:2431:U:OP2	62:2A:3919:HOH:O	1.99	0.79
5:1F:10:PRO:HB3	5:1F:17:ARG:HH21	1.46	0.79
32:1a:975:A:H4'	32:1a:976:G:H5''	1.64	0.79
32:2a:966:M2G:HM23	32:2a:967:5MC:H1'	1.64	0.79
1:2A:2049:G:OP2	62:2A:3923:HOH:O	2.01	0.79
6:2G:161:THR:HG22	6:2G:163:ALA:H	1.45	0.79
1:1A:342:G:N7	62:1A:4260:HOH:O	2.14	0.79
1:1A:792:G:O6	62:1A:4222:HOH:O	2.00	0.79
15:2T:26:ASP:OD1	15:2T:120:ARG:NH2	2.15	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:2c:43:LEU:HA	34:2c:46:GLU:HG2	1.63	0.79
1:1A:884:C:N4	1:1A:893:C:O2	2.16	0.79
1:2A:570:G:O6	62:2A:3912:HOH:O	1.99	0.79
1:2A:1693:U:O2'	3:2D:14:ARG:NH2	2.15	0.79
5:2F:53:THR:HG23	5:2F:55:GLY:H	1.46	0.79
33:1b:12:GLU:HG2	33:1b:16:HIS:HE1	1.48	0.79
1:2A:2714:G:OP2	62:2A:3924:HOH:O	2.01	0.79
1:1A:1024:G:OP2	62:1A:4209:HOH:O	2.02	0.78
17:1V:98:GLU:OE2	17:1V:100:ARG:NH1	2.16	0.78
41:1j:38:ILE:HD11	41:1j:71:LEU:HD23	1.66	0.78
26:14:59:PHE:O	26:14:62:ARG:NH1	2.16	0.78
1:2A:1325:G:OP1	62:2A:3922:HOH:O	2.00	0.78
16:2U:29:SER:OG	16:2U:30:LYS:NZ	2.16	0.78
1:1A:818:G:OP2	62:1A:4221:HOH:O	2.00	0.78
1:1A:1622:G:OP2	62:1A:4225:HOH:O	2.01	0.78
37:1f:89:MET:HE1	49:1r:72:ARG:HB3	1.66	0.78
1:2A:2727:G:O2'	10:2O:70:LYS:NZ	2.17	0.78
5:2F:20:LEU:HD23	5:2F:21:ALA:H	1.48	0.78
23:21:59:THR:O	23:21:91:LYS:NZ	2.17	0.78
46:2o:25:THR:HG21	46:2o:70:LEU:HB2	1.65	0.78
28:16:13:CYS:SG	28:16:47:THR:HG21	2.24	0.78
3:2D:180:GLY:HA3	3:2D:275:LYS:HG2	1.65	0.78
1:1A:1332:G:OP1	62:1A:4223:HOH:O	2.01	0.78
1:1A:1764:G:N7	62:1A:4275:HOH:O	2.17	0.78
7:1H:111:HIS:O	62:1H:301:HOH:O	2.02	0.78
1:2A:2144:U:O2'	1:2A:2147:G:O6	2.01	0.78
39:2h:12:ARG:HD3	39:2h:26:VAL:HG13	1.66	0.78
32:2a:1223:C:H5''	32:2a:1224:G:H5''	1.65	0.78
1:1A:1166:C:O2'	62:1A:4224:HOH:O	2.01	0.78
49:1r:22:VAL:O	49:1r:25:THR:OG1	2.01	0.78
1:2A:422:A:OP2	62:2A:3921:HOH:O	2.00	0.78
42:2k:85:ARG:NH2	42:2k:111:ASP:OD2	2.15	0.78
34:2c:11:ARG:HE	34:2c:180:ALA:HB3	1.48	0.78
44:2m:53:VAL:HG23	44:2m:57:ARG:HH12	1.48	0.78
12:1Q:111:GLU:OE2	12:1Q:133:ARG:NH2	2.18	0.77
1:2A:1603:A:OP1	62:2A:3914:HOH:O	2.01	0.77
25:13:5:LYS:HG3	25:13:36:VAL:HG22	1.65	0.77
44:1m:3:ARG:HG3	44:1m:4:ILE:HG22	1.64	0.77
50:1s:28:LYS:HB3	50:1s:47:HIS:HD2	1.49	0.77
1:2A:370:G:OP1	1:2A:403:U:N3	2.13	0.77
16:2U:82:GLY:HA3	16:2U:113:ALA:HB1	1.65	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:407:G:OP1	35:2d:115:ARG:NH2	2.17	0.77
32:2a:1316:G:H5''	45:2n:17:LYS:HD3	1.66	0.77
35:1d:107:ARG:HH21	35:1d:194:LEU:HD21	1.50	0.77
1:2A:34:C:N4	1:2A:454:A:O2'	2.17	0.77
19:2X:32:PRO:HA	19:2X:77:LYS:HD2	1.67	0.77
44:2m:13:LYS:NZ	44:2m:21:TYR:OH	2.18	0.77
1:1A:582:G:OP2	62:1A:4226:HOH:O	2.03	0.77
32:1a:636:U:H2'	32:1a:637:G:H8	1.50	0.77
9:2N:123:TYR:OH	9:2N:130:HIS:NE2	2.10	0.77
17:2V:55:ALA:HA	17:2V:101:GLY:HA2	1.67	0.77
1:1A:2206:G:H3'	1:1A:2207:G:C8	2.20	0.77
16:1U:8:VAL:HG23	16:1U:11:ARG:HH21	1.49	0.77
37:1f:15:ASP:OD1	37:1f:18:GLN:N	2.16	0.77
1:2A:1689:A:H62	1:2A:1698:A:H2	1.31	0.77
1:2A:2136:C:N4	1:2A:2155:G:H1	1.81	0.77
34:2c:30:ARG:HH21	45:2n:38:GLY:HA2	1.48	0.77
38:2g:46:ALA:HA	38:2g:49:ILE:HG12	1.66	0.77
1:1A:759:G:OP1	62:1A:4227:HOH:O	2.03	0.77
32:1a:1030:C:H42	32:1a:1031:G:H1	1.29	0.77
56:2y:9:A:O2'	56:2y:11:C:N4	2.15	0.77
32:1a:1381:U:H1'	38:1g:79:ARG:HG2	1.66	0.77
32:1a:1530:G:H2'	32:1a:1531:A:C8	2.20	0.77
1:2A:248:G:OP1	62:2A:3925:HOH:O	2.02	0.77
45:2n:12:ARG:HH12	45:2n:14:PRO:HA	1.49	0.77
40:2i:4:TYR:HB2	40:2i:19:LEU:HB2	1.67	0.76
38:1g:12:LEU:HB2	38:1g:21:VAL:HG12	1.65	0.76
56:1y:54:5MU:O2	56:1y:58:A:N7	2.19	0.76
20:1Y:12:THR:OG1	20:1Y:26:LYS:NZ	2.16	0.76
1:2A:300:A:N7	62:2A:3986:HOH:O	2.18	0.76
1:2A:1188:U:H4'	17:2V:79:VAL:HG22	1.68	0.76
1:1A:7:G:H2'	1:1A:8:A:C8	2.21	0.76
1:1A:1065:U:O2	1:1A:1073:A:N6	2.16	0.76
1:1A:2100:G:H1	1:1A:2189:U:H3	0.81	0.76
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	1.67	0.76
1:2A:80:G:N7	62:2A:3987:HOH:O	2.19	0.76
1:2A:333:G:N7	62:2A:3976:HOH:O	2.17	0.76
21:2Z:171:ILE:HD12	21:2Z:172:ALA:H	1.48	0.76
1:1A:1968:G:OP1	62:1A:4230:HOH:O	2.04	0.76
32:1a:1029:C:N4	32:1a:1031:G:O6	2.18	0.76
47:2p:21:VAL:HG23	47:2p:33:ILE:HB	1.65	0.76
1:1A:2250:G:OP1	12:1Q:85:LYS:NZ	2.16	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1B:99:G:OP2	62:1B:301:HOH:O	2.04	0.76
21:1Z:156:LYS:HE3	21:1Z:158:PRO:HD3	1.66	0.76
1:2A:674:G:H1'	5:2F:74:ARG:HD3	1.66	0.76
32:1a:683:G:N7	62:1a:1921:HOH:O	2.18	0.76
33:1b:69:LEU:HB3	33:1b:162:ILE:HG22	1.68	0.76
1:2A:1837:C:O2'	1:2A:1927:A:N3	2.18	0.76
19:2X:60:ARG:HH12	29:27:47:ARG:HH12	1.34	0.76
1:1A:1271:G:OP2	62:1A:4205:HOH:O	2.03	0.76
32:1a:809:G:OP2	46:1o:48:LYS:NZ	2.15	0.76
35:1d:112:VAL:HG23	35:1d:116:GLN:HE22	1.51	0.76
12:2Q:137:TYR:O	12:2Q:141:GLN:NE2	2.18	0.76
12:1Q:20:ALA:HB2	21:1Z:79:ARG:HG3	1.68	0.75
41:1j:78:ASN:O	41:1j:80:LYS:N	2.18	0.75
33:2b:16:HIS:HB3	33:2b:210:SER:HB2	1.68	0.75
32:1a:405:U:O4	35:1d:2:GLY:N	2.19	0.75
48:1q:68:ARG:H	48:1q:70:ARG:HH12	1.33	0.75
1:2A:568:U:O4	62:2A:3927:HOH:O	2.04	0.75
1:2A:880:G:H2'	1:2A:881:G:H8	1.52	0.75
1:2A:948:G:OP1	62:2A:3915:HOH:O	2.05	0.75
12:2Q:76:LYS:O	55:2x:1:C:N4	2.17	0.75
32:1a:159:G:O2'	32:1a:161:A:N7	2.18	0.75
32:1a:538:G:O6	62:1a:1905:HOH:O	2.04	0.75
1:2A:662:G:H5''	11:2P:16:ARG:HG2	1.68	0.75
23:21:73:LEU:HB3	23:21:94:LEU:HD22	1.68	0.75
32:2a:984:C:H2'	32:2a:985:C:H6	1.51	0.75
1:1A:1069:A:H1'	1:1A:1096:A:H4'	1.69	0.75
1:2A:852:G:H2'	1:2A:853:G:H8	1.52	0.75
32:2a:1057:G:OP1	34:2c:154:SER:OG	2.04	0.75
1:1A:882:G:H1	1:1A:894:C:H42	1.34	0.75
1:1A:952:G:OP1	12:1Q:16:ARG:NH2	2.20	0.75
8:2I:82:ARG:CZ	8:2I:82:ARG:H	1.98	0.75
10:2O:67:LYS:NZ	10:2O:68:GLU:OE2	2.19	0.75
1:1A:1997:G:N7	62:1A:4294:HOH:O	2.20	0.75
35:1d:98:GLU:OE1	35:1d:103:ASN:ND2	2.17	0.75
1:2A:2693:A:H2'	1:2A:2694:G:H8	1.52	0.75
1:2A:2701:C:N4	1:2A:2706:G:O6	2.18	0.75
24:22:13:ALA:HB1	24:22:21:LEU:HD21	1.68	0.75
1:1A:301:G:OP2	20:1Y:84:ARG:NH2	2.20	0.75
1:1A:1670:C:OP2	62:1A:4206:HOH:O	2.05	0.75
32:1a:448:A:OP2	32:1a:485:G:N1	2.16	0.75
38:1g:78:ARG:HH21	38:1g:79:ARG:HH11	1.35	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1354:A:OP2	62:2A:3930:HOH:O	2.05	0.75
35:2d:153:ARG:NH2	35:2d:180:GLY:O	2.20	0.75
32:1a:376:G:H5''	47:1p:5:ARG:HB3	1.67	0.75
1:2A:300:A:OP1	20:2Y:86:ARG:NH2	2.20	0.75
32:1a:691:G:OP2	42:1k:26:ASN:ND2	2.20	0.74
32:1a:890:G:O2'	32:1a:906:G:O6	2.04	0.74
2:2B:72:G:O2'	2:2B:105:A:N6	2.21	0.74
23:21:23:LYS:HB2	56:2y:74:C:H4'	1.69	0.74
32:2a:1164:G:H1	32:2a:1172:C:H42	1.33	0.74
33:2b:200:ILE:HG22	33:2b:202:PRO:HD3	1.69	0.74
35:2d:109:GLY:HA3	35:2d:165:MET:HE3	1.68	0.74
48:2q:58:GLU:HB3	48:2q:74:LEU:HD23	1.70	0.74
1:1A:568:U:O4	62:1A:4229:HOH:O	2.04	0.74
41:1j:57:LYS:HE2	41:1j:60:ARG:NH2	2.03	0.74
44:1m:80:ARG:NH1	50:1s:65:ASN:O	2.20	0.74
1:2A:72:U:OP1	62:2A:3928:HOH:O	2.05	0.74
1:2A:483:A:OP2	1:2A:484:C:N4	2.12	0.74
2:2B:103:G:O6	62:2B:301:HOH:O	2.04	0.74
33:2b:104:ASN:OD1	33:2b:107:THR:OG1	2.04	0.74
1:1A:947:G:OP2	62:1A:4232:HOH:O	2.05	0.74
1:1A:1287:A:H8	13:1R:104:ARG:HD3	1.51	0.74
1:1A:1918:A:N6	62:1A:4297:HOH:O	2.20	0.74
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.04	0.74
1:1A:993:G:OP1	16:1U:50:ARG:NH2	2.19	0.74
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.22	0.74
32:1a:354:G:N7	62:1a:1923:HOH:O	2.20	0.74
37:1f:74:ASP:OD1	37:1f:77:ARG:NH2	2.20	0.74
1:2A:2721:A:OP1	62:2A:3932:HOH:O	2.05	0.74
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.68	0.74
32:2a:677:U:H3	32:2a:713:G:H22	1.35	0.74
40:2i:71:SER:HA	40:2i:74:ILE:HD12	1.68	0.74
1:2A:887:A:O2'	1:2A:889:C:OP2	2.05	0.74
6:2G:68:PRO:HB3	6:2G:92:VAL:HB	1.70	0.74
10:2O:35:VAL:HG11	10:2O:103:ALA:HB3	1.69	0.74
35:2d:103:ASN:O	35:2d:103:ASN:ND2	2.20	0.74
38:2g:94:ARG:NH1	38:2g:98:SER:OG	2.19	0.74
1:2A:414:C:H2'	1:2A:415:A:C8	2.23	0.74
32:2a:359:U:H2'	32:2a:360:A:H8	1.52	0.74
1:1A:954:G:H5''	12:1Q:13:GLN:HB3	1.70	0.74
1:1A:1405:U:H2'	1:1A:1406:U:H6	1.52	0.74
26:14:55:ARG:N	26:14:56:VAL:HA	2.01	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:304:G:O6	62:2A:3929:HOH:O	2.05	0.74
1:2A:1420:U:O2'	1:2A:1421:G:OP1	2.06	0.74
33:2b:16:HIS:HB2	33:2b:204:ASN:HB3	1.69	0.74
1:1A:1669:A:OP2	62:1A:4206:HOH:O	2.05	0.74
16:1U:75:ASN:OD1	16:1U:78:THR:OG1	2.05	0.74
1:2A:686:G:OP2	62:2A:3933:HOH:O	2.06	0.74
32:2a:1514:C:OP1	62:2a:1906:HOH:O	2.05	0.74
1:2A:2237:G:OP1	62:2A:3931:HOH:O	2.05	0.74
39:2h:41:ARG:NH2	39:2h:42:GLU:OE2	2.20	0.74
1:1A:1803:A:O2'	3:1D:259:THR:HG21	1.88	0.73
32:2a:1525:G:OP1	42:2k:120:ARG:NH2	2.21	0.73
38:2g:78:ARG:HH21	38:2g:79:ARG:HH11	1.36	0.73
32:1a:409:G:N2	32:1a:433:C:O2	2.16	0.73
33:1b:80:ILE:HD13	33:1b:211:ILE:HG22	1.70	0.73
32:2a:217:C:O2'	32:2a:470:C:N4	2.18	0.73
54:1w:5:G:H2'	54:1w:6:G:H8	1.52	0.73
6:1G:145:THR:OG1	6:1G:148:MET:SD	2.44	0.73
1:2A:141:A:H8	1:2A:1408:C:HO2'	1.37	0.73
1:2A:2028:U:O4	62:2A:3926:HOH:O	2.03	0.73
32:2a:1309:G:OP1	44:2m:88:ARG:NH2	2.22	0.73
1:1A:2518:A:OP1	62:1A:4233:HOH:O	2.06	0.73
33:2b:15:VAL:HG12	33:2b:209:ARG:HD2	1.68	0.73
1:1A:1023:U:OP2	62:1A:4209:HOH:O	2.06	0.73
1:1A:2274:A:OP2	62:1A:4231:HOH:O	2.05	0.73
1:1A:2070:G:OP1	62:1A:4235:HOH:O	2.06	0.73
1:1A:1453:U:OP1	13:1R:77:ARG:NH1	2.22	0.73
1:1A:2183:C:H2'	1:1A:2184:G:C8	2.23	0.73
1:2A:1313:U:OP1	62:2A:3934:HOH:O	2.07	0.73
1:2A:1341:U:OP2	1:2A:1394:U:O2'	2.07	0.73
1:2A:1800:C:OP1	3:2D:260:ARG:NH2	2.21	0.73
12:2Q:26:TYR:O	12:2Q:67:ARG:NH1	2.20	0.73
32:1a:1004:A:N6	32:1a:1037:C:N3	2.36	0.73
1:2A:2134:A:H62	1:2A:2157:G:H4'	1.54	0.73
6:2G:54:GLU:O	6:2G:58:GLN:N	2.14	0.73
37:2f:76:ALA:HA	37:2f:79:LEU:HD12	1.69	0.73
6:1G:126:ASP:HB3	6:1G:128:ARG:H	1.53	0.72
1:2A:307:G:H21	1:2A:330:A:H62	1.36	0.72
32:2a:1070:U:OP1	36:2e:18:ARG:NH2	2.22	0.72
32:2a:1456:G:N1	51:2t:51:GLU:OE2	2.22	0.72
1:1A:1007:C:OP2	62:1A:4237:HOH:O	2.07	0.72
1:2A:500:G:H22	1:2A:503:A:H5'	1.54	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:40:THR:OG1	8:2I:41:GLU:N	2.18	0.72
4:1E:12:THR:HG22	4:1E:13:ARG:H	1.54	0.72
6:1G:114:ILE:HA	6:1G:140:ILE:HD11	1.71	0.72
28:16:53:LYS:NZ	56:1y:1:G:OP1	2.20	0.72
32:1a:113:G:H1'	32:1a:354:G:H5'	1.70	0.72
32:2a:737:A:H2'	32:2a:738:C:C6	2.24	0.72
44:2m:52:GLU:HA	44:2m:55:ARG:HH21	1.53	0.72
1:2A:1648:C:OP1	62:2A:3911:HOH:O	2.06	0.72
5:2F:17:ARG:NH2	5:2F:19:GLU:OE2	2.23	0.72
11:1P:117:GLU:OE1	62:1P:301:HOH:O	2.07	0.72
34:2c:85:ARG:O	34:2c:89:GLU:N	2.23	0.72
42:2k:34:ASP:OD1	42:2k:36:ASP:N	2.19	0.72
34:1c:71:ALA:HA	34:1c:106:VAL:HG22	1.72	0.72
32:2a:1295:G:O2'	44:2m:14:ARG:NH1	2.22	0.72
44:2m:84:ILE:HB	50:2s:66:MET:HE2	1.70	0.72
47:2p:19:ILE:HD11	47:2p:73:LEU:HD23	1.70	0.72
32:1a:165:C:H2'	32:1a:166:G:H8	1.55	0.72
39:1h:101:PRO:O	39:1h:125:ARG:NH2	2.23	0.72
1:2A:95:G:OP1	24:22:45:SER:OG	2.08	0.72
1:2A:1817:G:OP1	3:2D:88:ARG:NH2	2.20	0.72
47:2p:22:THR:HA	47:2p:33:ILE:HG13	1.70	0.72
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.24	0.72
32:2a:255:G:OP1	48:2q:69:LYS:NZ	2.17	0.72
50:2s:80:TYR:O	50:2s:82:GLY:N	2.22	0.72
5:1F:140:LEU:HD11	5:1F:170:LEU:HD21	1.72	0.72
12:1Q:68:ILE:HD13	12:1Q:103:MET:HG2	1.71	0.72
12:1Q:81:VAL:HB	22:10:7:LEU:HD21	1.71	0.72
17:1V:60:GLU:HB2	17:1V:97:LYS:HE2	1.72	0.72
9:2N:128:HIS:O	9:2N:131:GLN:NE2	2.23	0.72
42:2k:79:SER:HA	42:2k:104:GLN:HB3	1.71	0.72
32:1a:1353:G:OP1	52:1u:10:ARG:NH1	2.23	0.72
38:1g:78:ARG:NH1	38:1g:154:TYR:O	2.23	0.72
7:2H:9:ILE:HB	7:2H:50:VAL:HB	1.71	0.72
56:2y:18:G:N2	56:2y:55:PSU:N3	2.36	0.72
32:1a:200:G:H1	32:1a:217:C:H42	1.37	0.71
54:1w:7:A:H61	54:1w:66:U:H3	1.38	0.71
1:2A:827:U:OP1	62:2A:3903:HOH:O	2.08	0.71
1:2A:2613:U:O2'	62:2A:3909:HOH:O	1.95	0.71
4:2E:54:GLN:OE1	62:2E:402:HOH:O	2.06	0.71
32:2a:307:C:OP1	62:2a:1907:HOH:O	2.08	0.71
42:2k:22:HIS:HB3	42:2k:29:ILE:HB	1.72	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1647:G:OP1	62:1A:4205:HOH:O	2.08	0.71
1:2A:370:G:OP2	62:2A:3921:HOH:O	2.07	0.71
1:2A:483:A:O2'	20:2Y:49:VAL:O	2.07	0.71
35:2d:175:SER:OG	35:2d:176:LEU:N	2.21	0.71
38:2g:26:PHE:HE1	38:2g:105:VAL:HG22	1.54	0.71
1:2A:1021:A:H62	1:2A:1141:U:H3	1.37	0.71
32:2a:1279:A:H4'	32:2a:1280:A:OP1	1.90	0.71
33:2b:195:ASP:O	39:2h:68:ARG:NH2	2.23	0.71
8:1I:77:LEU:HG	8:1I:101:LEU:HD13	1.72	0.71
11:1P:126:VAL:HG12	11:1P:148:LEU:HD22	1.70	0.71
1:2A:2847:U:OP1	15:2T:98:LYS:NZ	2.22	0.71
1:1A:1798:U:H5'	3:1D:259:THR:HG22	1.72	0.71
1:1A:2513:G:O2'	4:1E:154:LYS:NZ	2.24	0.71
19:2X:8:ILE:O	24:22:36:ARG:NH2	2.22	0.71
32:2a:44:G:N7	62:2a:1919:HOH:O	2.23	0.71
1:1A:998:C:OP1	62:1A:4236:HOH:O	2.06	0.71
32:1a:1192:C:OP2	34:1c:4:LYS:NZ	2.21	0.71
32:2a:977:A:O2'	32:2a:980:C:N4	2.23	0.71
1:2A:744:G:OP1	62:2A:3936:HOH:O	2.09	0.71
20:2Y:28:LYS:NZ	20:2Y:64:GLU:OE1	2.23	0.71
32:1a:254:G:H21	48:1q:16:GLN:NE2	1.88	0.71
12:2Q:39:PRO:HD3	12:2Q:99:PRO:HG3	1.72	0.71
32:2a:1400:5MC:H6	32:2a:1400:5MC:H5''	1.53	0.71
34:2c:112:SER:HB3	34:2c:115:LEU:HD22	1.73	0.71
1:1A:2168:G:N1	1:1A:2171:A:N7	2.38	0.71
34:1c:39:ILE:HG23	34:1c:91:LEU:HD11	1.73	0.71
32:2a:542:G:P	35:2d:10:ARG:HH22	2.14	0.71
32:2a:1183:A:H3'	32:2a:1184:G:H5''	1.73	0.71
32:2a:1226:C:OP2	44:2m:91:ARG:NH1	2.23	0.71
1:1A:1635:G:OP1	62:1A:4238:HOH:O	2.08	0.71
7:1H:3:ARG:HH11	7:1H:4:ILE:H	1.38	0.71
26:14:56:VAL:O	26:14:60:GLN:HG2	1.90	0.71
32:1a:1246:C:H42	32:1a:1291:G:H1	1.39	0.71
38:1g:26:PHE:HB2	38:1g:101:LEU:HD22	1.72	0.71
1:2A:1345:C:OP2	62:2A:3939:HOH:O	2.09	0.71
1:2A:2345:G:H4'	1:2A:2346:A:H5''	1.72	0.71
1:2A:2365:G:N7	30:28:39:LYS:NZ	2.39	0.71
1:1A:123:G:OP2	62:1A:4242:HOH:O	2.09	0.70
21:2Z:153:SER:O	21:2Z:155:LEU:N	2.23	0.70
1:1A:574:C:N3	4:1E:145:LYS:NZ	2.39	0.70
25:13:6:VAL:HG22	25:13:56:VAL:HG13	1.73	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1027:A:C2	1:2A:2488:A:H5'	2.26	0.70
2:2B:104:U:O2'	21:2Z:29:TYR:OH	2.09	0.70
20:2Y:52:SER:OG	20:2Y:55:TYR:HB2	1.90	0.70
49:1r:53:ARG:HG2	49:1r:63:GLN:HE21	1.57	0.70
1:2A:1469:A:H2'	1:2A:1470:G:O4'	1.91	0.70
8:2I:40:THR:O	8:2I:44:LEU:HB2	1.91	0.70
34:2c:16:ARG:NH2	34:2c:183:ASP:OD1	2.23	0.70
51:2t:33:ILE:O	51:2t:37:SER:OG	2.08	0.70
24:12:22:GLU:OE2	24:12:68:ARG:NH2	2.24	0.70
1:2A:1714:G:H1	1:2A:1745(A):C:H42	1.37	0.70
32:2a:1286:A:C8	32:2a:1287:A:H4'	2.26	0.70
36:2e:9:LYS:HB2	36:2e:112:LEU:HD11	1.73	0.70
1:1A:642:G:OP1	62:1A:4239:HOH:O	2.08	0.70
1:1A:982:C:OP2	62:1A:4243:HOH:O	2.09	0.70
1:1A:2407:G:OP1	62:1A:4212:HOH:O	2.10	0.70
32:1a:1250:A:H4'	40:1i:68:GLY:H	1.55	0.70
32:2a:617:G:OP2	62:2a:1908:HOH:O	2.09	0.70
32:2a:1397:C:OP2	36:2e:24:ARG:NH2	2.24	0.70
41:2j:49:VAL:HG23	45:2n:41:ARG:HB2	1.72	0.70
42:2k:73:MET:HG2	42:2k:103:LEU:HD21	1.74	0.70
1:1A:2169:A:H1'	56:1y:56:C:H5'	1.73	0.70
37:1f:35:ALA:HB2	37:1f:67:MET:HE2	1.71	0.70
1:2A:781:A:OP1	62:2A:3938:HOH:O	2.09	0.70
37:1f:38:GLU:OE1	37:1f:64:GLN:NE2	2.23	0.70
54:1w:26:A:H61	54:1w:44:G:H1	1.40	0.70
54:1w:27:G:H1	54:1w:43:C:H42	0.77	0.70
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.26	0.70
4:2E:125:GLY:O	62:2E:403:HOH:O	2.10	0.70
32:2a:1316:G:N2	32:2a:1319:A:OP2	2.24	0.70
33:2b:187:LEU:HD12	33:2b:214:ILE:HG21	1.73	0.70
34:2c:178:LEU:C	34:2c:180:ALA:H	2.00	0.70
37:2f:13:ASN:ND2	37:2f:55:ASP:OD2	2.25	0.70
38:2g:50:ILE:HD11	38:2g:58:PRO:HA	1.73	0.70
4:2E:76:ARG:NH1	62:2E:402:HOH:O	2.23	0.70
1:1A:907:U:O2'	12:1Q:101:ARG:NH2	2.24	0.70
1:1A:1156:A:OP1	16:1U:55:ARG:NH1	2.24	0.70
1:1A:1235:G:O6	62:1A:4240:HOH:O	2.08	0.70
1:1A:2316:C:O2'	6:1G:128:ARG:NH2	2.24	0.70
32:1a:1040:U:H2'	32:1a:1041:A:H8	1.57	0.70
34:1c:56:ASP:O	34:1c:66:VAL:HA	1.92	0.70
8:2I:78:THR:O	8:2I:104:GLN:NE2	2.24	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:2Q:34:LEU:HD11	12:2Q:129:THR:HB	1.74	0.70
32:2a:1132:C:H2'	32:2a:1133:G:C8	2.27	0.70
32:1a:1036:G:OP2	32:1a:1037:C:N4	2.24	0.70
1:2A:441:U:H2'	1:2A:442:G:C8	2.27	0.70
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.27	0.70
54:2w:40:C:OP1	62:2w:201:HOH:O	2.09	0.70
4:1E:47:VAL:HG11	4:1E:86:PRO:HD2	1.72	0.69
1:2A:2518:A:OP2	62:2A:3937:HOH:O	2.09	0.69
1:2A:2682:U:OP2	62:2A:3940:HOH:O	2.10	0.69
32:2a:993:G:H1	32:2a:1045:C:H42	1.40	0.69
20:1Y:86:ARG:HB2	20:1Y:98:VAL:HG23	1.72	0.69
32:1a:946:A:H2'	32:1a:947:G:C8	2.28	0.69
26:24:61:ARG:HH22	50:2s:9:VAL:HG11	1.55	0.69
1:1A:2123:G:H2'	1:1A:2124:G:C8	2.26	0.69
1:1A:2709:G:N3	62:1A:4320:HOH:O	2.23	0.69
23:11:23:LYS:HB3	23:11:29:GLY:HA3	1.75	0.69
32:1a:148:G:H2'	32:1a:149:A:C8	2.27	0.69
32:1a:148:G:H2'	32:1a:149:A:H8	1.56	0.69
32:1a:1075:C:OP1	33:1b:179:LYS:NZ	2.20	0.69
34:1c:5:ILE:HD13	34:1c:10:PHE:HB2	1.74	0.69
1:2A:2110:G:H3'	1:2A:2111:C:H5'	1.73	0.69
15:2T:41:ARG:NH1	32:2a:346:G:OP1	2.24	0.69
35:1d:106:TYR:HE2	35:1d:107:ARG:HH11	1.38	0.69
44:1m:11:ARG:HA	44:1m:45:VAL:HB	1.74	0.69
4:2E:12:THR:HG22	4:2E:13:ARG:H	1.57	0.69
10:2O:68:GLU:OE1	10:2O:78:ARG:NH1	2.26	0.69
11:2P:35:HIS:O	62:2P:301:HOH:O	2.09	0.69
24:22:38:GLN:HG2	24:22:43:GLN:HB2	1.73	0.69
34:2c:6:HIS:HB3	45:2n:49:HIS:CD2	2.27	0.69
38:2g:22:LEU:HD11	38:2g:101:LEU:HD21	1.73	0.69
1:1A:2871:C:N3	62:1A:4330:HOH:O	2.25	0.69
4:1E:48:GLN:HE21	4:1E:78:LEU:HG	1.58	0.69
32:1a:1133:G:H1	32:1a:1141:C:H42	1.38	0.69
32:1a:1500:A:OP2	62:1a:1907:HOH:O	2.10	0.69
1:2A:2472:G:H2'	1:2A:2475:C:H42	1.55	0.69
32:2a:1129:C:OP1	40:2i:66:ARG:NH1	2.26	0.69
44:2m:66:LEU:HA	44:2m:70:LEU:HD12	1.75	0.69
1:1A:890:A:H2'	1:1A:892:G:O4'	1.92	0.69
1:1A:2134:A:N3	1:1A:2159:G:O2'	2.24	0.69
32:1a:953:G:H5'	32:1a:965:A:N6	2.05	0.69
1:2A:631:A:OP1	11:2P:65:ARG:NH1	2.24	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:157:LEU:HD21	21:2Z:163:LEU:HB2	1.75	0.69
32:2a:533:A:OP1	62:2a:1909:HOH:O	2.10	0.69
35:2d:8:VAL:HA	35:2d:11:LEU:HD13	1.74	0.69
1:1A:1336:A:OP2	19:1X:64:LYS:NZ	2.25	0.69
1:1A:2123:G:H2'	1:1A:2124:G:H8	1.57	0.69
32:1a:16:A:OP1	62:1a:1909:HOH:O	2.10	0.69
39:1h:4:ASP:OD1	39:1h:7:ALA:N	2.24	0.69
51:1t:83:ARG:HA	51:1t:86:ARG:HH11	1.56	0.69
1:2A:1406:U:H2'	1:2A:1407:C:C6	2.27	0.69
1:2A:2352:A:N6	1:2A:2365:G:O2'	2.24	0.69
32:2a:984:C:H2'	32:2a:985:C:C6	2.27	0.69
49:2r:53:ARG:HH21	49:2r:59:SER:HA	1.57	0.69
1:1A:1374:G:H2'	1:1A:1375:C:C6	2.27	0.69
1:1A:1664:A:OP1	62:1A:4248:HOH:O	2.10	0.69
1:1A:2227:A:OP2	62:1A:4251:HOH:O	2.11	0.69
1:1A:2719:G:OP2	62:1A:4246:HOH:O	2.10	0.69
15:1T:30:VAL:HG22	15:1T:86:ILE:HG12	1.75	0.69
37:1f:82:ARG:HB2	37:1f:85:VAL:HG23	1.75	0.69
51:1t:43:LEU:HD13	51:1t:51:GLU:HG2	1.75	0.69
5:2F:196:LEU:HA	5:2F:199:TRP:HB3	1.74	0.69
17:2V:57:VAL:HG22	17:2V:99:ILE:HG23	1.75	0.69
21:2Z:19:ARG:NH1	21:2Z:84:GLU:O	2.26	0.69
21:2Z:128:VAL:HG22	21:2Z:129:SER:H	1.58	0.69
24:22:64:LEU:HD11	24:22:68:ARG:HH21	1.55	0.69
38:2g:13:GLN:O	38:2g:24:THR:HG21	1.93	0.69
1:1A:1251:C:OP1	62:1A:4245:HOH:O	2.10	0.69
2:2B:93:G:OP1	21:2Z:79:ARG:NH2	2.26	0.69
10:2O:49:ARG:NH1	32:2a:1422:G:O3'	2.26	0.69
32:2a:575:G:N2	32:2a:576:G:N7	2.37	0.69
34:2c:82:GLU:O	34:2c:86:VAL:N	2.19	0.69
44:2m:108:ARG:NH1	44:2m:112:GLY:O	2.26	0.69
32:1a:557:G:OP1	62:1a:1913:HOH:O	2.11	0.69
1:2A:2831:G:OP1	4:2E:58:ARG:NH2	2.26	0.69
2:2B:56:G:H5'	6:2G:27:ASN:ND2	2.07	0.69
32:2a:154:C:H2'	32:2a:155:C:C6	2.28	0.69
50:2s:49:ILE:HG22	50:2s:62:ILE:HD11	1.73	0.69
1:1A:621:A:OP2	11:1P:108:LYS:NZ	2.22	0.68
1:1A:2575:C:OP2	62:1A:4247:HOH:O	2.10	0.68
32:1a:673:G:H2'	32:1a:674:G:C8	2.27	0.68
54:1w:4:C:H42	54:1w:69:G:H1	1.41	0.68
1:2A:2064:C:OP2	62:2A:3950:HOH:O	2.11	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:11:VAL:HG22	5:2F:125:LEU:HD12	1.74	0.68
5:2F:101:LEU:O	5:2F:106:ARG:NH1	2.26	0.68
6:2G:114:ILE:HB	6:2G:117:PHE:HB2	1.76	0.68
36:2e:76:ILE:HG23	36:2e:115:VAL:HG21	1.74	0.68
1:1A:2428:G:OP1	62:1A:4208:HOH:O	2.10	0.68
4:1E:162:ALA:O	62:1E:401:HOH:O	2.11	0.68
41:1j:13:HIS:HB3	41:1j:68:HIS:CD2	2.29	0.68
1:2A:500:G:N1	1:2A:503:A:OP2	2.24	0.68
1:2A:1187:G:O6	62:2A:3941:HOH:O	2.10	0.68
1:2A:2110:G:OP1	1:2A:2118:U:N3	2.27	0.68
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.28	0.68
11:2P:54:GLY:O	62:2P:302:HOH:O	2.10	0.68
14:2S:58:LEU:HD13	14:2S:65:VAL:HG12	1.74	0.68
1:1A:668:G:H5'	1:1A:669:G:OP2	1.94	0.68
8:1I:40:THR:O	8:1I:44:LEU:HB2	1.94	0.68
18:1W:31:GLU:OE1	62:1W:301:HOH:O	2.12	0.68
32:1a:567:G:N3	62:1a:1928:HOH:O	2.26	0.68
32:1a:1083:U:OP1	62:1a:1910:HOH:O	2.11	0.68
19:2X:40:LYS:HG3	19:2X:51:VAL:HB	1.75	0.68
34:2c:63:ASN:HB3	34:2c:98:ASN:HD22	1.59	0.68
35:2d:61:LYS:NZ	35:2d:72:GLU:OE1	2.25	0.68
44:2m:37:THR:HG21	44:2m:56:LEU:HD13	1.75	0.68
1:1A:83:G:N7	62:1A:4338:HOH:O	2.26	0.68
1:1A:884:C:H3'	1:1A:885:C:H4'	1.74	0.68
32:1a:1002:G:H3'	32:1a:1003:G:H4'	1.76	0.68
1:2A:890:A:H2'	1:2A:892:G:H8	1.58	0.68
1:2A:2183:C:H2'	1:2A:2184:G:C8	2.29	0.68
1:2A:2218:U:H1'	23:21:52:ARG:HH12	1.59	0.68
26:24:24:THR:OG1	26:24:25:TYR:N	2.25	0.68
32:2a:898:G:N7	62:2a:1927:HOH:O	2.26	0.68
37:2f:3:ARG:NE	37:2f:38:GLU:OE2	2.26	0.68
54:2w:67:C:H2'	54:2w:68:C:C6	2.28	0.68
1:1A:2044:C:N4	1:1A:2624:G:O6	2.15	0.68
11:1P:42:SER:OG	62:1P:302:HOH:O	2.10	0.68
37:1f:48:LEU:HD22	49:1r:77:GLY:HA3	1.76	0.68
48:1q:68:ARG:H	48:1q:70:ARG:NH1	1.91	0.68
1:2A:908:C:OP1	12:2Q:22:LYS:HB3	1.93	0.68
1:2A:2711:A:OP2	62:2A:3924:HOH:O	2.10	0.68
4:2E:147:PRO:O	62:2E:404:HOH:O	2.10	0.68
32:2a:909:A:N3	32:2a:1413:A:O2'	2.25	0.68
35:2d:129:ASN:OD1	35:2d:145:GLU:N	2.25	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:878:A:N6	1:1A:899:A:O2'	2.26	0.68
1:1A:1420:U:O2'	1:1A:1421:G:OP1	2.11	0.68
21:1Z:138:GLU:H	21:1Z:156:LYS:HZ3	1.41	0.68
32:1a:689:C:OP2	42:1k:55:LYS:NZ	2.21	0.68
36:1e:91:LEU:HG	36:1e:118:ILE:HD11	1.75	0.68
56:1y:53:G:H1	56:1y:61:C:N4	1.91	0.68
20:2Y:55:TYR:CZ	20:2Y:61:ILE:HG21	2.29	0.68
32:2a:833:U:H2'	32:2a:834:C:H6	1.57	0.68
33:2b:189:ASP:N	33:2b:189:ASP:OD1	2.26	0.68
11:1P:52:GLU:HG3	11:1P:57:THR:HG22	1.75	0.68
1:2A:1815:A:OP2	3:2D:54:ARG:NH2	2.26	0.68
56:2y:14:A:O2'	56:2y:15:G:OP1	2.10	0.68
1:1A:387:U:O4	62:1A:4244:HOH:O	2.10	0.68
1:1A:2404:C:O3'	11:1P:77:ARG:NH2	2.27	0.68
32:1a:165:C:H2'	32:1a:166:G:C8	2.27	0.68
32:1a:1136:U:H5''	32:1a:1137:C:N3	2.09	0.68
32:1a:1304:G:OP2	62:1a:1908:HOH:O	2.10	0.68
46:1o:82:ILE:O	46:1o:86:GLY:N	2.26	0.68
10:2O:120:GLU:HB2	15:2T:68:TYR:HE2	1.58	0.68
15:2T:106:SER:N	15:2T:109:GLU:OE1	2.22	0.68
33:2b:94:ASN:ND2	33:2b:94:ASN:O	2.27	0.68
1:1A:2384:G:N7	62:1A:4352:HOH:O	2.27	0.68
1:1A:2431:U:OP2	62:1A:4252:HOH:O	2.11	0.68
1:1A:2592:G:OP1	62:1A:4230:HOH:O	2.12	0.68
54:1w:18:G:O2'	54:1w:57:G:N2	2.20	0.68
1:2A:2298:A:N6	1:2A:2318:G:H8	1.92	0.68
12:2Q:75:THR:HG21	12:2Q:87:LYS:NZ	2.09	0.68
23:21:85:LEU:HD23	23:21:89:GLU:HB3	1.76	0.68
32:2a:438:G:N1	32:2a:495:A:OP2	2.19	0.68
32:2a:1119:C:OP2	40:2i:9:ARG:NH2	2.26	0.68
51:2t:64:ASP:CG	51:2t:81:LYS:HZ2	2.02	0.68
1:1A:1951:U:O4	62:1A:4249:HOH:O	2.11	0.68
1:2A:307:G:N7	62:2A:4031:HOH:O	2.27	0.68
1:2A:779:U:O4	62:2A:3947:HOH:O	2.11	0.68
1:2A:1193:G:N7	62:2A:4020:HOH:O	2.25	0.68
1:2A:1809:A:OP1	62:2A:3944:HOH:O	2.10	0.68
1:2A:2127:G:O2'	1:2A:2173:A:N3	2.26	0.68
47:2p:2:VAL:HG13	47:2p:64:ALA:HA	1.75	0.68
1:1A:2342:C:O2'	1:1A:2374:C:OP1	2.12	0.67
1:1A:2697:G:O6	62:1A:4250:HOH:O	2.11	0.67
32:2a:263:A:OP1	51:2t:79:ARG:NH1	2.26	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:953:G:H5'	32:2a:965:A:H61	1.59	0.67
1:1A:1406:U:H2'	1:1A:1407:C:C6	2.28	0.67
1:1A:2032:G:OP2	1:1A:2454:G:O2'	2.11	0.67
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.29	0.67
23:11:22:GLY:O	23:11:32:LYS:NZ	2.26	0.67
32:1a:1469:G:N7	62:1a:1932:HOH:O	2.27	0.67
32:1a:1499:A:OP2	62:1a:1911:HOH:O	2.11	0.67
33:1b:15:VAL:HB	33:1b:209:ARG:HG3	1.76	0.67
36:1e:12:LEU:HB3	36:1e:31:LEU:HB2	1.76	0.67
1:2A:253:C:O2'	62:2A:3953:HOH:O	2.12	0.67
1:2A:818:G:OP2	62:2A:3941:HOH:O	2.12	0.67
1:2A:1376:C:OP1	62:2A:3949:HOH:O	2.11	0.67
6:2G:126:ASP:HB3	6:2G:128:ARG:H	1.58	0.67
13:2R:87:TYR:HB3	13:2R:90:ARG:HB3	1.74	0.67
24:22:35:LEU:HD13	24:22:50:ILE:HG12	1.75	0.67
32:2a:1124:G:N7	32:2a:1145:C:O2'	2.28	0.67
1:1A:152:G:H2'	1:1A:153:C:H6	1.56	0.67
1:1A:1696:G:N7	62:1A:4337:HOH:O	2.26	0.67
1:1A:2239:G:OP2	62:1A:4253:HOH:O	2.11	0.67
32:1a:354:G:O2'	32:1a:389:A:OP1	2.12	0.67
33:1b:83:MET:HG3	33:1b:234:PRO:HG3	1.76	0.67
34:1c:17:ASP:O	34:1c:54:ARG:NH2	2.25	0.67
38:1g:51:GLN:NE2	38:1g:56:GLN:O	2.28	0.67
2:2B:50:G:OP1	14:2S:63:THR:OG1	2.11	0.67
6:2G:77:ILE:N	6:2G:82:LEU:O	2.20	0.67
32:2a:9:G:H1	32:2a:25:C:H42	1.42	0.67
36:2e:11:ILE:HB	36:2e:31:LEU:HB3	1.77	0.67
44:2m:85:GLY:HA2	44:2m:93:ARG:HH22	1.58	0.67
1:1A:1174:A:H4'	1:1A:1175:U:OP1	1.93	0.67
12:1Q:78:PRO:HD3	55:1x:1:C:N3	2.09	0.67
32:1a:116:A:OP1	62:1a:1912:HOH:O	2.11	0.67
32:1a:1133:G:H1	32:1a:1141:C:N4	1.93	0.67
32:1a:1343:G:H2'	32:1a:1344:C:C6	2.29	0.67
40:1i:79:LEU:HG	40:1i:83:ARG:HD2	1.75	0.67
1:2A:887:A:H4'	1:2A:888:C:C5	2.29	0.67
48:2q:6:LEU:HB2	48:2q:59:ILE:HG12	1.75	0.67
1:1A:904:C:O2'	21:1Z:169:GLU:OE2	2.11	0.67
1:1A:2347:C:OP1	28:16:38:LYS:NZ	2.28	0.67
35:1d:99:SER:OG	35:1d:140:VAL:O	2.13	0.67
56:1y:11:C:H42	56:1y:24:G:H1	1.41	0.67
1:2A:1254:A:OP2	62:2A:3951:HOH:O	2.12	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1446:C:H42	1:2A:1465:G:H1	1.41	0.67
1:2A:1481:U:H3	1:2A:1510:G:H1	1.43	0.67
1:2A:2637:U:OP1	4:2E:82:ARG:NH1	2.27	0.67
7:2H:125:VAL:HG22	7:2H:131:VAL:HG13	1.77	0.67
8:2I:65:ALA:O	8:2I:69:LYS:N	2.27	0.67
1:1A:2022:U:OP1	62:1A:4254:HOH:O	2.12	0.67
17:1V:72:VAL:HB	17:1V:85:LYS:HB3	1.77	0.67
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.29	0.67
24:22:35:LEU:HD12	24:22:53:LEU:HD12	1.76	0.67
34:2c:131:ARG:HH21	36:2e:50:GLU:HG3	1.59	0.67
36:2e:107:ARG:O	36:2e:110:LEU:N	2.26	0.67
41:2j:8:LEU:HD11	41:2j:20:ALA:HB2	1.76	0.67
35:1d:28:SER:HG	35:1d:30:LYS:H	1.43	0.67
40:1i:128:ARG:NH2	55:1x:33:U:OP2	2.27	0.67
1:2A:855:G:O2'	22:20:27:GLU:OE2	2.12	0.67
7:2H:28:GLY:HA3	7:2H:79:VAL:HB	1.77	0.67
32:2a:739:C:HO2'	46:2o:42:HIS:HD1	1.43	0.67
32:2a:768:A:N7	62:2a:1925:HOH:O	2.26	0.67
1:1A:607:U:OP1	5:1F:102:PRO:HA	1.94	0.67
32:1a:28:G:O2'	32:1a:296:U:OP1	2.09	0.67
1:2A:1385:G:O2'	1:2A:1396:U:O2	2.09	0.67
1:2A:1387:C:H2'	1:2A:1388:G:H8	1.59	0.67
23:21:41:ARG:NH1	23:21:43:TYR:OH	2.28	0.67
1:1A:668:G:N7	62:1A:4355:HOH:O	2.27	0.67
1:1A:1938:A:OP2	62:1A:4259:HOH:O	2.13	0.67
1:1A:2331:G:H4'	22:10:43:THR:H	1.59	0.67
5:1F:12:LEU:HB2	5:1F:124:LEU:HD11	1.77	0.67
6:1G:11:TYR:OH	6:1G:32:PRO:O	2.10	0.67
21:1Z:52:SER:O	21:1Z:54:HIS:N	2.27	0.67
32:1a:1027:C:C2	32:1a:1034:G:N2	2.58	0.67
1:2A:1636:C:OP2	62:2A:3957:HOH:O	2.13	0.67
1:2A:2379:G:HO2'	14:2S:17:ARG:HH22	1.39	0.67
26:24:13:ARG:HG2	26:24:23:GLU:HG2	1.77	0.67
33:2b:54:THR:HG23	33:2b:199:TYR:HB3	1.75	0.67
44:2m:79:LYS:HA	44:2m:82:MET:HG3	1.76	0.67
1:2A:154(A):C:H42	1:2A:171:G:H1	1.43	0.66
1:2A:518:G:H4'	18:2W:18:ARG:HE	1.60	0.66
1:2A:1567:A:OP2	3:2D:84:TYR:OH	2.11	0.66
6:2G:41:GLN:NE2	6:2G:153:ARG:HB3	2.10	0.66
33:2b:88:ALA:HB2	33:2b:219:VAL:HG13	1.77	0.66
37:2f:95:GLU:O	49:2r:32:ARG:NH1	2.28	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:2r:58:LEU:HD22	49:2r:62:GLU:HB3	1.76	0.66
16:1U:81:HIS:CE1	16:1U:85:LYS:HD2	2.30	0.66
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	1.77	0.66
54:1w:1:G:H2'	54:1w:2:C:C6	2.31	0.66
1:2A:2319:G:N2	14:2S:3:ARG:HD2	2.10	0.66
15:2T:45:PHE:CE1	15:2T:74:ARG:HD3	2.30	0.66
32:2a:324:G:N1	32:2a:327:A:OP2	2.28	0.66
32:2a:1309:G:OP2	44:2m:99:ARG:NH2	2.27	0.66
1:1A:2373:G:N7	62:1A:4351:HOH:O	2.27	0.66
43:1l:52:LEU:O	43:1l:54:LYS:NZ	2.24	0.66
39:2h:20:TYR:HE2	39:2h:75:ARG:HD2	1.61	0.66
1:1A:202:U:OP1	62:1A:4256:HOH:O	2.12	0.66
1:1A:271(K):U:O2'	1:1A:271(M):G:N2	2.27	0.66
1:1A:1778:U:H2'	1:1A:1784:A:N6	2.10	0.66
32:1a:945:G:OP1	62:1a:1914:HOH:O	2.12	0.66
32:1a:1002:G:C5	32:1a:1003:G:H1'	2.31	0.66
1:2A:242:G:N2	1:2A:254:G:H2'	2.11	0.66
1:2A:243:U:OP1	30:28:6:THR:OG1	2.14	0.66
1:2A:397:G:N7	62:2A:4039:HOH:O	2.28	0.66
1:2A:798:G:N7	62:2A:4037:HOH:O	2.28	0.66
1:2A:1264:G:O6	62:2A:3948:HOH:O	2.11	0.66
1:2A:1324:G:N7	62:2A:4038:HOH:O	2.28	0.66
1:2A:2134:A:HO2'	1:2A:2159:G:N2	1.91	0.66
7:2H:3:ARG:NH2	7:2H:5:GLY:H	1.93	0.66
7:2H:51:ARG:NH1	7:2H:53:GLU:OE2	2.25	0.66
9:2N:30:ILE:HG23	9:2N:52:VAL:HG11	1.78	0.66
32:2a:998:G:H1	32:2a:1043:C:N4	1.92	0.66
36:2e:74:GLY:HA3	36:2e:116:THR:HG22	1.77	0.66
49:2r:32:ARG:HA	49:2r:69:THR:HG21	1.77	0.66
1:1A:842:G:N7	62:1A:4346:HOH:O	2.27	0.66
15:1T:35:LYS:HB2	15:1T:40:THR:HG22	1.76	0.66
1:2A:375:C:H2'	1:2A:376:C:C6	2.31	0.66
19:2X:94:GLY:HA3	19:2X:95:LEU:HB2	1.76	0.66
31:29:18:ARG:NH2	31:29:21:GLY:O	2.26	0.66
1:2A:624:C:OP1	62:2A:3955:HOH:O	2.13	0.66
1:2A:775:G:O2'	62:2A:3956:HOH:O	2.13	0.66
1:2A:2630:G:H1	1:2A:2788:C:H42	1.44	0.66
36:2e:77:PRO:HD2	36:2e:142:LEU:HD13	1.78	0.66
33:1b:163:PHE:HD1	33:1b:185:ILE:HG13	1.61	0.66
38:1g:78:ARG:HD3	38:1g:80:VAL:HG23	1.77	0.66
1:2A:311:A:OP2	62:2A:3954:HOH:O	2.13	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:2H:19:VAL:HG13	7:2H:24:VAL:HG12	1.77	0.66
31:29:15:LYS:HD3	31:29:26:ILE:HD11	1.77	0.66
44:2m:94:ARG:O	44:2m:96:LEU:N	2.28	0.66
1:1A:129:C:O3'	62:1A:4257:HOH:O	2.13	0.66
1:1A:279:C:H42	1:1A:361:G:H1	1.44	0.66
1:1A:2334:G:H5'	14:1S:9:ARG:HG2	1.77	0.66
1:1A:2839:G:H5''	13:1R:46:GLY:HA2	1.77	0.66
10:1O:20:MET:HE3	10:1O:44:LYS:HE3	1.77	0.66
6:2G:29:TRP:O	6:2G:33:ARG:NH1	2.23	0.66
21:2Z:152:ALA:HB2	21:2Z:169:GLU:HB3	1.77	0.66
42:2k:79:SER:HB2	42:2k:106:LYS:HD3	1.78	0.66
4:1E:111:ARG:HG2	4:1E:118:LYS:HD3	1.77	0.66
33:1b:134:GLU:HA	33:1b:137:ARG:HE	1.61	0.66
41:1j:40:LEU:HD11	41:1j:71:LEU:HB2	1.78	0.66
1:2A:1139:G:H5'	9:2N:102:ALA:HB2	1.78	0.66
23:21:76:ARG:HB2	23:21:97:LEU:HD13	1.78	0.66
54:1w:4:C:N4	54:1w:69:G:H1	1.94	0.66
1:2A:271(O):C:H2'	1:2A:271(P):C:C6	2.30	0.66
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.29	0.66
6:2G:53:LEU:HD12	6:2G:56:ALA:H	1.61	0.66
32:1a:1040:U:H2'	32:1a:1041:A:C8	2.31	0.65
56:1y:24:G:H2'	56:1y:25:C:C6	2.30	0.65
1:2A:2006:C:OP2	62:2A:3960:HOH:O	2.13	0.65
1:2A:2218:U:N3	23:21:55:GLY:O	2.29	0.65
5:2F:9:ILE:HD13	5:2F:123:LEU:HD23	1.78	0.65
32:2a:28:G:O2'	32:2a:296:U:OP1	2.10	0.65
32:2a:1039:C:C2	32:2a:1040:U:H1'	2.31	0.65
1:1A:360:G:H2'	1:1A:361:G:C8	2.31	0.65
1:1A:1062:G:P	1:1A:1070:A:H1'	2.35	0.65
5:1F:154:VAL:HG22	5:1F:191:ARG:HB2	1.78	0.65
21:2Z:138:GLU:N	21:2Z:156:LYS:HE2	2.11	0.65
34:2c:127:ARG:HH12	34:2c:191:THR:HG22	1.59	0.65
42:2k:87:THR:O	42:2k:87:THR:OG1	2.13	0.65
13:1R:117:VAL:HG12	13:1R:118:GLU:H	1.60	0.65
33:1b:60:ASP:OD1	33:1b:64:ARG:NH2	2.27	0.65
51:1t:18:GLN:O	51:1t:22:ARG:HG3	1.96	0.65
1:2A:407:G:H1	1:2A:420:C:H42	1.43	0.65
1:2A:2154:G:N7	1:2A:2156:G:N2	2.44	0.65
1:2A:2163:C:OP1	1:2A:2165:G:N2	2.29	0.65
5:2F:53:THR:HG22	5:2F:56:GLU:HG3	1.77	0.65
1:1A:249:C:O2	30:18:12:LYS:NZ	2.26	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2711:A:N3	62:1A:4369:HOH:O	2.29	0.65
32:1a:1376:U:OP1	38:1g:98:SER:OG	2.07	0.65
36:1e:144:THR:H	36:1e:147:ASP:HB2	1.61	0.65
4:2E:77:ILE:HD13	4:2E:195:LEU:HD22	1.78	0.65
32:2a:1203:C:OP1	45:2n:3:ARG:NH1	2.27	0.65
32:2a:1226:C:H4'	50:2s:80:TYR:CZ	2.31	0.65
33:2b:15:VAL:O	33:2b:17:PHE:N	2.28	0.65
32:1a:952:U:H2'	32:1a:953:G:H8	1.59	0.65
33:1b:8:LYS:O	33:1b:217:ARG:NH2	2.17	0.65
20:2Y:44:ILE:HA	20:2Y:63:LYS:O	1.96	0.65
20:2Y:83:THR:HG21	20:2Y:99:CYS:HB2	1.77	0.65
8:1I:100:ALA:HA	8:1I:103:ARG:HD2	1.79	0.65
13:1R:26:LYS:HE2	13:1R:70:LEU:O	1.96	0.65
3:2D:276:LYS:NZ	32:2a:776:G:N7	2.45	0.65
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.30	0.65
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.32	0.65
5:1F:185:ASP:HA	5:1F:188:ARG:HD3	1.78	0.65
6:1G:170:ARG:NH2	6:1G:174:GLU:OE2	2.30	0.65
32:1a:636:U:H2'	32:1a:637:G:C8	2.32	0.65
32:1a:964:A:OP1	62:1a:1916:HOH:O	2.13	0.65
32:1a:1505:G:OP2	62:1a:1911:HOH:O	2.15	0.65
1:2A:372:G:N2	1:2A:373:U:O4	2.20	0.65
1:2A:481:G:N7	62:2A:4048:HOH:O	2.29	0.65
4:2E:12:THR:HG21	15:2T:11:GLU:HG2	1.78	0.65
19:2X:1:MET:HE1	24:22:26:ARG:HH21	1.62	0.65
23:21:53:VAL:HG22	23:21:74:VAL:HG13	1.77	0.65
45:2n:14:PRO:HG2	45:2n:16:PHE:O	1.96	0.65
1:1A:897:C:N3	1:1A:898:C:N4	2.45	0.65
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.30	0.65
51:1t:36:LEU:HD23	51:1t:39:LYS:HD2	1.79	0.65
1:2A:81:G:N7	62:2A:4044:HOH:O	2.29	0.65
6:2G:137:GLU:HG2	6:2G:152:LEU:HD23	1.79	0.65
25:23:26:LEU:HD21	25:23:46:ASN:HB3	1.77	0.65
32:2a:410:G:OP1	35:2d:30:LYS:NZ	2.22	0.65
32:2a:1207:2MG:H2'	32:2a:1208:C:C6	2.32	0.65
1:1A:796:C:H2'	1:1A:797:C:C6	2.32	0.65
1:1A:816:C:OP2	62:1A:4258:HOH:O	2.13	0.65
1:1A:1128:A:O2'	1:1A:2490:G:OP1	2.12	0.65
1:1A:2690:C:OP1	13:1R:17:ARG:NH2	2.28	0.65
8:1I:40:THR:OG1	8:1I:41:GLU:N	2.28	0.65
13:1R:24:GLN:HB3	13:1R:44:LEU:HD11	1.79	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:166:ASP:HB3	33:1b:169:LYS:HB2	1.79	0.65
1:2A:958:U:OP1	12:2Q:74:TYR:OH	2.13	0.65
1:2A:1912:A:OP1	62:2A:3965:HOH:O	2.14	0.65
3:2D:36:PRO:HA	3:2D:61:LEU:HD12	1.77	0.65
5:2F:110:LEU:HD21	5:2F:181:LEU:HD23	1.77	0.65
8:2I:66:GLU:HA	8:2I:69:LYS:HB3	1.79	0.65
10:2O:111:PHE:HB3	10:2O:114:ILE:HG13	1.78	0.65
32:2a:757:U:O2'	32:2a:879:C:O2	2.15	0.65
51:2t:75:ASN:HD22	51:2t:75:ASN:N	1.95	0.65
1:1A:2261:C:O2	1:1A:2279:G:N2	2.15	0.65
33:1b:74:LYS:NZ	33:1b:205:ASP:O	2.29	0.65
1:2A:1938:A:OP2	62:2A:3967:HOH:O	2.15	0.65
1:2A:2294:C:OP2	14:2S:89:ARG:NH2	2.24	0.65
23:21:23:LYS:HB3	23:21:29:GLY:HA3	1.77	0.65
32:2a:1239:A:H62	32:2a:1299:A:N6	1.94	0.65
42:2k:103:LEU:O	42:2k:105:VAL:N	2.29	0.65
1:1A:1058:G:H1	1:1A:1080:C:N4	1.95	0.64
21:1Z:77:ASP:OD2	21:1Z:80:ARG:NH1	2.30	0.64
1:2A:749:C:O2	1:2A:1618:A:H2'	1.97	0.64
2:2B:81:G:OP2	62:2B:302:HOH:O	2.14	0.64
32:2a:524:G:H2'	32:2a:525:C:C6	2.32	0.64
32:2a:996:A:N1	32:2a:1045:C:O2'	2.29	0.64
33:2b:164:VAL:HG23	33:2b:186:ALA:HB2	1.78	0.64
35:2d:88:VAL:HG22	36:2e:97:GLY:HA2	1.77	0.64
35:2d:104:VAL:HG21	35:2d:140:VAL:HG21	1.78	0.64
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.29	0.64
1:1A:2820:A:OP1	13:1R:2:ARG:NH2	2.30	0.64
56:1y:19:G:H5''	56:1y:60:U:O4	1.97	0.64
1:2A:1327:C:OP2	62:2A:3963:HOH:O	2.14	0.64
1:2A:1501:C:H2'	1:2A:1502:C:H6	1.62	0.64
1:2A:1971:A:OP1	62:2A:3918:HOH:O	2.15	0.64
1:2A:2482:G:HO2'	54:2w:64:A:HO2'	1.40	0.64
15:2T:85:LYS:NZ	15:2T:87:ASP:OD2	2.21	0.64
32:2a:259:G:OP2	51:2t:83:ARG:NH1	2.30	0.64
1:1A:2786:U:OP1	4:1E:69:LYS:HE2	1.97	0.64
1:1A:2801(A):A:H1'	1:1A:2895:U:H1'	1.80	0.64
1:2A:1823:G:OP1	3:2D:54:ARG:NH1	2.29	0.64
1:2A:2176:A:H2'	1:2A:2177:C:C6	2.32	0.64
1:2A:2693:A:H2'	1:2A:2694:G:C8	2.31	0.64
3:2D:108:PRO:HB3	3:2D:143:HIS:CE1	2.32	0.64
8:2I:93:THR:HG22	8:2I:119:PRO:HB3	1.77	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:2N:65:LYS:O	9:2N:69:GLN:HB2	1.97	0.64
32:2a:811:C:O2'	32:2a:901:A:N1	2.30	0.64
33:2b:178:ARG:NH1	33:2b:196:LEU:O	2.30	0.64
54:2w:29:G:H1	54:2w:41:C:H42	1.45	0.64
1:1A:360:G:H2'	1:1A:361:G:H8	1.61	0.64
1:1A:2206:G:H3'	1:1A:2207:G:H8	1.60	0.64
1:1A:2741:A:OP1	31:19:22:ARG:NH2	2.30	0.64
32:1a:925:G:H1'	32:1a:1502:A:C4	2.32	0.64
34:1c:139:GLN:HE21	34:1c:143:GLU:HG3	1.62	0.64
37:1f:14:LEU:HD22	37:1f:18:GLN:HB3	1.79	0.64
43:1l:71:PRO:O	43:1l:102:ARG:NH1	2.31	0.64
50:1s:36:ARG:NH1	50:1s:52:TYR:O	2.30	0.64
1:2A:1116:C:H2'	1:2A:1117:G:C8	2.33	0.64
3:2D:108:PRO:HG2	3:2D:111:LEU:HD13	1.78	0.64
14:2S:30:ARG:HE	14:2S:98:VAL:HG23	1.62	0.64
32:2a:509:A:H5''	35:2d:55:ALA:HB2	1.80	0.64
32:2a:627:G:H2'	32:2a:628:G:H8	1.61	0.64
40:2i:28:VAL:HG22	40:2i:63:ILE:HB	1.79	0.64
1:1A:467:G:OP1	29:17:33:ARG:NH1	2.29	0.64
14:1S:34:HIS:O	14:1S:97:ARG:NH2	2.31	0.64
18:1W:4:LYS:HD3	18:1W:6:ILE:HD11	1.80	0.64
56:1y:19:G:H1	56:1y:56:C:N4	1.95	0.64
1:2A:1849:G:H2'	1:2A:1850:G:H8	1.62	0.64
1:2A:2100:G:H2'	1:2A:2101:G:C8	2.30	0.64
15:2T:92:GLY:O	15:2T:120:ARG:NH2	2.28	0.64
32:2a:1309:G:O2'	44:2m:77:ASN:ND2	2.31	0.64
1:1A:1200:C:H1'	16:1U:2:PRO:HG3	1.78	0.64
1:1A:2618:G:H21	4:1E:150:VAL:HG21	1.63	0.64
32:1a:542:G:OP1	35:1d:10:ARG:NH2	2.30	0.64
32:1a:656:C:O2'	46:1o:28:GLN:OE1	2.15	0.64
32:1a:1003:G:C4	32:1a:1004:A:H2	2.15	0.64
34:1c:16:ARG:HH21	34:1c:54:ARG:HH12	1.45	0.64
1:2A:1026:U:OP1	62:2A:3961:HOH:O	2.14	0.64
1:2A:2049:G:N7	62:2A:4061:HOH:O	2.30	0.64
1:2A:2227:A:OP1	3:2D:263:ARG:NH1	2.31	0.64
1:2A:2359:C:H2'	1:2A:2360:A:O4'	1.97	0.64
1:2A:2886:G:H2'	1:2A:2887:U:C6	2.33	0.64
32:2a:1347:G:H22	32:2a:1373:G:H2'	1.62	0.64
42:2k:14:VAL:HG11	42:2k:35:PRO:HD3	1.78	0.64
45:2n:27:CYS:SG	45:2n:29:ARG:HB2	2.38	0.64
54:2w:4:C:H42	54:2w:69:G:H1	1.43	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1O:110:GLY:HA2	10:1O:112:MET:HE2	1.78	0.64
20:1Y:7:VAL:HG21	20:1Y:72:VAL:HG12	1.79	0.64
32:1a:189(L):G:H2'	32:1a:190:U:C6	2.33	0.64
32:1a:658:G:OP1	46:1o:8:LYS:NZ	2.29	0.64
41:1j:49:VAL:HG23	45:1n:41:ARG:HB2	1.80	0.64
1:2A:812:C:H2'	1:2A:813:U:H6	1.62	0.64
32:2a:662:G:H1	32:2a:743:U:H3	1.46	0.64
32:2a:1307:U:OP1	44:2m:101:GLN:NE2	2.30	0.64
33:2b:70:PHE:HE2	33:2b:90:MET:HB2	1.62	0.64
38:2g:103:TRP:HZ3	38:2g:138:LYS:HA	1.62	0.64
44:2m:85:GLY:HA2	44:2m:93:ARG:NH2	2.13	0.64
1:1A:570:G:H2'	1:1A:2030:A:N7	2.13	0.64
6:1G:83:ARG:O	6:1G:86:MET:HG3	1.98	0.64
26:14:16:CYS:SG	26:14:17:GLY:N	2.71	0.64
1:2A:969:U:O4	62:2A:3946:HOH:O	2.11	0.64
1:2A:2269:A:OP1	62:2A:3966:HOH:O	2.15	0.64
32:2a:1263:C:H1'	32:2a:1273:G:N2	2.13	0.64
34:2c:183:ASP:HB2	34:2c:204:LEU:HD11	1.80	0.64
50:2s:51:VAL:O	50:2s:58:VAL:N	2.31	0.64
1:1A:684:G:O2'	1:1A:788:A:N7	2.31	0.64
32:1a:1323:G:H2'	32:1a:1324:A:C8	2.33	0.64
1:2A:2705:A:O2'	1:2A:2852:G:OP1	2.16	0.64
32:2a:1318:A:OP1	50:2s:3:ARG:NH2	2.31	0.64
44:2m:54:VAL:HA	44:2m:57:ARG:HB3	1.80	0.64
56:2y:11:C:H2'	56:2y:12:U:C6	2.33	0.64
32:1a:7:G:H5'	32:1a:298:A:O4'	1.98	0.64
32:1a:574:A:OP2	62:1a:1918:HOH:O	2.16	0.64
1:2A:568:U:H5'	1:2A:945:A:N1	2.13	0.64
32:2a:1347:G:N2	32:2a:1373:G:H2'	2.13	0.64
33:2b:18:GLY:HA2	33:2b:42:ILE:HB	1.79	0.64
37:2f:83:ASP:N	37:2f:83:ASP:OD1	2.32	0.64
38:2g:38:LEU:O	38:2g:42:ILE:HG13	1.98	0.64
32:1a:279:A:OP2	48:1q:95:TYR:OH	2.14	0.63
1:2A:674:G:C1'	5:2F:74:ARG:HD3	2.29	0.63
1:2A:1394:U:OP1	62:2A:3968:HOH:O	2.15	0.63
32:2a:838:G:H1	32:2a:848:C:H42	1.46	0.63
32:2a:1004:A:H61	32:2a:1037:C:H1'	1.61	0.63
32:2a:1164:G:H1	32:2a:1172:C:N4	1.97	0.63
1:1A:2069:G:O5'	62:1A:4261:HOH:O	2.15	0.63
32:1a:952:U:H2'	32:1a:953:G:C8	2.32	0.63
32:1a:1376:U:H2'	32:1a:1377:A:C8	2.33	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:78:HIS:CE1	36:1e:143:ARG:H	2.12	0.63
1:2A:924:C:H2'	1:2A:925:C:C6	2.33	0.63
1:2A:2627:G:O2'	1:2A:2781:A:N1	2.27	0.63
1:2A:2787:C:H1'	4:2E:62:PRO:HG3	1.79	0.63
19:2X:60:ARG:HH12	29:27:47:ARG:NH1	1.96	0.63
8:2I:124:GLY:H	8:2I:144:VAL:HG23	1.64	0.63
33:2b:39:ILE:H	33:2b:39:ILE:HD12	1.63	0.63
33:2b:97:TRP:HH2	33:2b:102:LEU:HD13	1.64	0.63
1:1A:2375:G:N2	1:1A:2378:A:OP2	2.30	0.63
32:1a:624:C:H2'	32:1a:625:G:C8	2.34	0.63
1:2A:355:G:H2'	1:2A:356:G:H8	1.62	0.63
4:2E:31:CYS:HB3	4:2E:49:LEU:HG	1.80	0.63
14:2S:38:GLN:NE2	14:2S:47:THR:OG1	2.30	0.63
21:2Z:31:ARG:HG3	21:2Z:32:HIS:CD2	2.34	0.63
32:2a:890:G:O2'	32:2a:906:G:O6	2.10	0.63
35:2d:173:TRP:CD1	35:2d:174:LEU:HG	2.34	0.63
40:2i:121:ARG:NH1	40:2i:122:ALA:O	2.32	0.63
1:1A:1762:A:H2'	62:1A:5832:HOH:O	1.97	0.63
32:1a:870:U:H4'	32:1a:871:U:H5''	1.80	0.63
33:1b:78:GLN:NE2	33:1b:94:ASN:O	2.32	0.63
22:20:23:VAL:HG22	22:20:38:VAL:HG22	1.80	0.63
32:2a:1151:A:O2'	32:2a:1152:A:O5'	2.15	0.63
1:1A:882:G:H4'	54:1w:19:G:C6	2.33	0.63
1:1A:1677:A:N7	62:1A:4373:HOH:O	2.30	0.63
1:1A:2052:G:H4'	4:1E:143:ASN:O	1.98	0.63
1:1A:2790:A:H3'	1:1A:2790:A:N3	2.14	0.63
51:1t:83:ARG:HA	51:1t:86:ARG:NH1	2.13	0.63
5:2F:53:THR:HG23	5:2F:55:GLY:N	2.13	0.63
32:2a:222:U:H2'	32:2a:223:U:C6	2.33	0.63
32:2a:1084:G:H5'	32:2a:1102:A:OP2	1.99	0.63
3:1D:146:GLU:HB2	3:1D:189:CYS:HB3	1.81	0.63
6:1G:49:ASP:N	6:1G:49:ASP:OD1	2.28	0.63
6:1G:106:LEU:HA	6:1G:110:ALA:HB3	1.80	0.63
21:1Z:31:ARG:NE	21:1Z:94:GLU:OE2	2.32	0.63
32:1a:1037:C:H2'	32:1a:1038:C:H6	1.64	0.63
33:1b:25:ASN:O	33:1b:27:LYS:N	2.31	0.63
40:1i:17:VAL:HB	40:1i:63:ILE:HG23	1.80	0.63
50:1s:32:LYS:HA	50:1s:50:ALA:HB3	1.79	0.63
51:1t:47:GLY:H	51:1t:48:LYS:HB2	1.63	0.63
56:1y:8:4SU:O2'	56:1y:21:A:N1	2.27	0.63
1:2A:880:G:H2'	1:2A:881:G:C8	2.32	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1254:C:H5''	41:2j:45:ARG:HH21	1.64	0.63
35:2d:59:ARG:HH12	35:2d:66:ARG:HH12	1.46	0.63
37:2f:46:ARG:HB2	37:2f:60:PHE:CE1	2.34	0.63
36:1e:10:MET:HA	36:1e:32:VAL:HG22	1.80	0.63
36:1e:102:ALA:O	36:1e:107:ARG:NH2	2.32	0.63
43:1l:42:THR:HG22	43:1l:54:LYS:HG3	1.80	0.63
44:1m:44:ARG:O	44:1m:47:ASP:N	2.31	0.63
1:2A:2577:A:H5''	1:2A:2578:G:H5'	1.81	0.63
1:2A:2660:A:H8	1:2A:2660:A:OP1	1.82	0.63
3:2D:77:ALA:HB2	3:2D:97:TYR:CD1	2.34	0.63
8:2I:93:THR:H	8:2I:96:ASP:HB2	1.63	0.63
32:2a:1346:A:OP1	40:2i:120:ARG:NH1	2.28	0.63
32:2a:1349:A:H2'	32:2a:1350:A:H8	1.63	0.63
8:1I:129:THR:HG22	8:1I:139:GLN:HE22	1.63	0.63
20:1Y:99:CYS:HB2	20:1Y:106:LEU:HD21	1.79	0.63
33:1b:71:VAL:HB	33:1b:164:VAL:HG13	1.79	0.63
33:1b:178:ARG:NH2	39:1h:71:GLY:O	2.22	0.63
37:1f:67:MET:HE1	37:1f:75:LEU:HD12	1.80	0.63
32:2a:1135:U:H2'	32:2a:1137:C:C4	2.33	0.63
34:2c:8:ILE:HG23	34:2c:16:ARG:HG2	1.81	0.63
35:2d:60:GLU:OE2	35:2d:63:LYS:NZ	2.32	0.63
1:1A:1243:G:O2'	11:1P:7:ARG:NH2	2.32	0.62
1:1A:2023:G:H5'	1:1A:2617:C:H4'	1.80	0.62
32:1a:1086:U:H3	32:1a:1099:G:H22	1.45	0.62
32:1a:1250:A:H4'	40:1i:68:GLY:N	2.13	0.62
1:2A:627:A:N6	11:2P:84:ASN:HD21	1.88	0.62
14:2S:68:GLN:HA	14:2S:71:ARG:HD3	1.81	0.62
35:2d:111:ALA:HB2	35:2d:120:LEU:HD12	1.80	0.62
1:1A:1878:G:H2'	1:1A:1879:C:C6	2.34	0.62
11:1P:63:PRO:HD3	30:18:27:THR:HG22	1.80	0.62
11:1P:95:VAL:HG22	11:1P:125:VAL:HG12	1.81	0.62
32:1a:599:C:H4'	39:1h:130:GLY:C	2.24	0.62
32:1a:1021:G:O2'	32:1a:1022:G:O5'	2.17	0.62
33:1b:187:LEU:HD13	33:1b:214:ILE:HG21	1.82	0.62
1:2A:297:C:OP2	62:2A:3970:HOH:O	2.15	0.62
32:2a:1080:A:H5'	36:2e:16:THR:HG21	1.80	0.62
32:2a:1376:U:P	38:2g:94:ARG:HH22	2.22	0.62
1:1A:1434:A:H2'	1:1A:1435:G:C8	2.34	0.62
1:1A:1503:U:H2'	1:1A:1504:C:C6	2.34	0.62
32:1a:1124:G:N7	32:1a:1145:C:O2'	2.32	0.62
34:1c:98:ASN:N	34:1c:98:ASN:OD1	2.31	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:84:ILE:HB	50:1s:66:MET:HE2	1.80	0.62
1:2A:321:G:O2'	1:2A:340:A:O2'	2.18	0.62
1:2A:2099:U:O4	1:2A:2190:G:O6	2.18	0.62
32:2a:584:G:H1	32:2a:757:U:H3	1.48	0.62
39:2h:21:LYS:O	39:2h:65:TYR:OH	2.17	0.62
42:2k:62:GLN:HG3	42:2k:97:ALA:HB2	1.80	0.62
45:2n:24:CYS:HB3	45:2n:29:ARG:H	1.64	0.62
49:2r:52:PRO:HB2	49:2r:54:ARG:HG2	1.81	0.62
21:1Z:151:HIS:CE1	21:1Z:170:THR:HG22	2.34	0.62
35:1d:105:VAL:HG13	35:1d:110:PHE:HB2	1.81	0.62
36:1e:143:ARG:NH2	39:1h:77:GLU:OE1	2.28	0.62
12:2Q:37:LEU:HD21	12:2Q:130:LYS:HB3	1.81	0.62
1:1A:9:U:H3	1:1A:2629:A:H2	1.44	0.62
1:1A:2315:G:H2'	1:1A:2316:C:C6	2.35	0.62
50:1s:67:VAL:O	50:1s:69:HIS:N	2.33	0.62
1:2A:1607:C:O2	62:2A:3958:HOH:O	2.13	0.62
4:2E:54:GLN:HB2	4:2E:76:ARG:HG3	1.82	0.62
6:2G:79:ASN:OD1	6:2G:79:ASN:N	2.31	0.62
32:2a:1132:C:H2'	32:2a:1133:G:H8	1.64	0.62
32:2a:1366:C:H2'	32:2a:1367:C:C6	2.35	0.62
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.64	0.62
1:1A:2313:C:H2'	1:1A:2314:C:H6	1.65	0.62
6:1G:67:LYS:HD3	26:14:5:ILE:HD12	1.82	0.62
21:1Z:92:SER:O	21:1Z:94:GLU:N	2.32	0.62
1:2A:184:C:H2'	1:2A:185:U:C6	2.35	0.62
1:2A:731:C:H5''	62:2A:4015:HOH:O	1.98	0.62
1:2A:859:G:N2	1:2A:917:A:OP2	2.32	0.62
1:2A:1131:G:O6	1:2A:2040:C:H1'	2.00	0.62
1:2A:1796:U:H2'	1:2A:1797:C:H6	1.62	0.62
1:2A:2206:G:H5''	1:2A:2207:G:N7	2.14	0.62
6:2G:50:ALA:O	6:2G:52:ILE:N	2.33	0.62
32:2a:499:A:H4'	32:2a:500:G:H5'	1.82	0.62
32:2a:809:G:OP2	46:2o:48:LYS:NZ	2.27	0.62
35:2d:106:TYR:O	35:2d:109:GLY:N	2.23	0.62
38:2g:65:ALA:HB1	38:2g:127:ALA:HB3	1.82	0.62
40:2i:99:LEU:HB3	40:2i:101:PHE:CE2	2.35	0.62
52:2u:6:ARG:HD3	52:2u:15:ARG:HE	1.64	0.62
1:1A:1357:U:H2'	1:1A:1358:G:O4'	2.00	0.62
1:1A:1815:A:P	3:1D:54:ARG:HH22	2.22	0.62
4:1E:49:LEU:HD21	4:1E:91:VAL:HG21	1.80	0.62
32:1a:194:C:H2'	32:1a:195:A:H5''	1.81	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:1o:39:LEU:HD13	46:1o:56:LEU:HB2	1.81	0.62
1:2A:859:G:O2'	1:2A:916:G:O6	2.17	0.62
40:2i:4:TYR:CE1	40:2i:88:TYR:HA	2.35	0.62
56:2y:15:G:N2	56:2y:21:A:H1'	2.14	0.62
1:1A:715:G:OP1	46:1o:64:ARG:NH2	2.33	0.62
32:1a:975:A:H5'	32:1a:975:A:C8	2.33	0.62
34:1c:34:LEU:O	34:1c:38:ARG:HG3	1.99	0.62
1:2A:607:U:OP1	5:2F:102:PRO:HA	2.00	0.62
1:2A:1264:G:OP1	27:25:19:ARG:NH2	2.33	0.62
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.82	0.62
39:2h:28:ALA:HB3	39:2h:57:PRO:HB2	1.81	0.62
1:1A:11:G:C2'	1:1A:12:U:H5''	2.27	0.62
1:1A:229:A:H5''	1:1A:230:U:H5'	1.80	0.62
32:1a:841:U:C4	32:1a:848:C:H1'	2.35	0.62
35:1d:108:LEU:HD21	35:1d:183:GLY:HA3	1.81	0.62
39:1h:86:ILE:HD12	39:1h:133:LEU:HD22	1.80	0.62
1:2A:1239:G:H2'	1:2A:1240:U:O4'	2.00	0.62
1:2A:1376:C:O2'	62:2A:3973:HOH:O	2.16	0.62
1:2A:1387:C:H2'	1:2A:1388:G:C8	2.34	0.62
1:2A:1889:A:H2'	1:2A:1890:A:C8	2.35	0.62
1:2A:2133:G:O2'	1:2A:2157:G:N2	2.33	0.62
11:2P:84:ASN:OD1	11:2P:117:GLU:N	2.30	0.62
14:2S:30:ARG:HH21	14:2S:92:TYR:HB3	1.63	0.62
20:2Y:88:LYS:HD2	20:2Y:89:PHE:H	1.63	0.62
1:1A:249:C:O2'	11:1P:64:LYS:NZ	2.24	0.62
1:1A:1068:G:H1'	1:1A:1096:A:N3	2.15	0.62
32:1a:1183:A:O2'	32:1a:1184:G:OP1	2.17	0.62
1:2A:81:G:O6	62:2A:3964:HOH:O	2.14	0.62
1:2A:319:C:H2'	1:2A:320:A:O4'	2.00	0.62
1:2A:576:U:H2'	1:2A:577:G:C8	2.34	0.62
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	1.82	0.62
8:2I:114:LEU:HD13	8:2I:130:TYR:HD1	1.63	0.62
26:24:33:VAL:HG13	26:24:35:VAL:H	1.65	0.62
32:2a:67:C:H2'	32:2a:68:G:C8	2.34	0.62
39:2h:17:THR:C	39:2h:78:GLN:HE22	2.07	0.62
41:2j:6:ILE:HD12	41:2j:72:VAL:HG22	1.80	0.62
50:2s:19:VAL:O	50:2s:23:ASN:ND2	2.33	0.62
1:1A:961:C:OP2	62:1A:4263:HOH:O	2.16	0.61
8:1I:26:ALA:HB1	8:1I:31:LEU:HD13	1.82	0.61
34:1c:89:GLU:O	34:1c:93:LYS:N	2.30	0.61
50:1s:50:ALA:HB1	50:1s:57:HIS:HB3	1.80	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2143:C:H2'	1:2A:2144:U:O4'	2.00	0.61
1:2A:2701:C:H2'	1:2A:2702:U:H2'	1.82	0.61
6:2G:101:ILE:HG12	26:24:25:TYR:HB2	1.80	0.61
48:2q:95:TYR:O	48:2q:97:SER:N	2.33	0.61
1:1A:710:G:H1	1:1A:721:C:H42	1.47	0.61
9:1N:96:GLU:OE2	9:1N:96:GLU:N	2.28	0.61
10:1O:35:VAL:HG11	10:1O:103:ALA:HB3	1.81	0.61
22:10:31:VAL:HG12	22:10:35:ASN:HD22	1.65	0.61
1:2A:402:A:H2'	1:2A:403:U:H5'	1.83	0.61
1:2A:852:G:H2'	1:2A:853:G:C8	2.35	0.61
1:2A:1163:G:OP1	17:2V:24:LYS:NZ	2.33	0.61
1:2A:2306:C:N4	6:2G:42:GLY:O	2.33	0.61
22:20:38:VAL:HG12	22:20:40:GLN:HG2	1.82	0.61
32:2a:707:C:H5''	42:2k:85:ARG:NH1	2.15	0.61
11:1P:35:HIS:ND1	62:1P:304:HOH:O	2.29	0.61
32:1a:737:A:H2'	32:1a:738:C:C6	2.35	0.61
33:1b:50:GLU:O	33:1b:54:THR:OG1	2.18	0.61
33:1b:208:ILE:HD13	33:1b:208:ILE:H	1.65	0.61
36:1e:43:LEU:HD21	36:1e:132:ALA:HB1	1.81	0.61
1:2A:1020:A:N1	1:2A:1141:U:O2'	2.31	0.61
32:2a:1239:A:H62	32:2a:1299:A:H61	1.48	0.61
34:2c:120:VAL:HG11	34:2c:134:ILE:HD13	1.82	0.61
9:1N:138:LEU:HD23	9:1N:139:GLU:H	1.64	0.61
35:1d:7:PRO:HB2	35:1d:10:ARG:HD2	1.83	0.61
56:1y:11:C:N4	56:1y:24:G:H1	1.97	0.61
56:1y:51:U:H3	56:1y:63:G:H1	1.47	0.61
1:2A:375:C:H2'	1:2A:376:C:H6	1.64	0.61
1:2A:811:U:H2'	11:2P:21:ARG:HA	1.83	0.61
1:2A:1042:G:N7	1:2A:1114:G:N2	2.48	0.61
18:2W:83:LYS:O	18:2W:84:ARG:NH1	2.26	0.61
21:2Z:121:HIS:N	21:2Z:172:ALA:HB2	2.15	0.61
24:22:41:ILE:HG13	24:22:43:GLN:HG2	1.82	0.61
1:1A:1048:A:OP2	1:1A:1110:G:N2	2.25	0.61
1:1A:1356:G:OP1	62:1A:4267:HOH:O	2.16	0.61
1:1A:2646:C:H2'	1:1A:2647:U:O4'	2.00	0.61
1:1A:2870:C:H2'	1:1A:2871:C:O4'	1.99	0.61
21:1Z:69:THR:HG22	21:1Z:90:VAL:HA	1.82	0.61
43:1l:56:ALA:HB3	43:1l:100:ILE:HD11	1.82	0.61
1:2A:1022:G:H22	1:2A:1142(A):A:H2	1.43	0.61
2:2B:11:C:OP2	2:2B:12:C:N4	2.33	0.61
2:2B:102:A:OP2	62:2B:303:HOH:O	2.16	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:26:PHE:CE1	38:2g:105:VAL:HG22	2.36	0.61
1:1A:185:U:H2'	1:1A:186:G:H8	1.65	0.61
1:1A:218:A:H2	1:1A:235:U:H4'	1.65	0.61
1:1A:1057:A:H61	1:1A:1081:U:H3	1.49	0.61
2:1B:55:U:O2'	6:1G:27:ASN:ND2	2.25	0.61
13:1R:1:MET:HG2	13:1R:3:HIS:CE1	2.35	0.61
28:16:44:ARG:HG2	28:16:44:ARG:HH11	1.65	0.61
31:19:25:VAL:HB	31:19:34:GLN:HB2	1.83	0.61
32:1a:1047:G:O2'	32:1a:1215:G:O2'	2.19	0.61
1:2A:2552:OMU:H6	1:2A:2552:OMU:O5'	2.01	0.61
1:2A:2857:G:N2	1:2A:2860:A:OP2	2.31	0.61
7:2H:3:ARG:HG2	7:2H:6:ARG:HE	1.65	0.61
1:1A:534:U:H2'	1:1A:535:C:C6	2.36	0.61
1:1A:1693:U:O2'	3:1D:14:ARG:NH2	2.33	0.61
32:1a:1142:G:H2'	32:1a:1143:G:O4'	2.00	0.61
1:2A:1501:C:H2'	1:2A:1502:C:C6	2.34	0.61
1:2A:1711:C:H2'	1:2A:1712:C:H6	1.66	0.61
10:2O:15:GLY:O	10:2O:47:ILE:HG12	1.99	0.61
12:2Q:78:PRO:HG2	12:2Q:81:VAL:HG11	1.83	0.61
14:2S:15:ARG:O	14:2S:19:LYS:HG2	2.01	0.61
32:2a:664:G:N2	32:2a:741:G:H1	1.90	0.61
56:2y:15:G:O6	56:2y:48:C:O2	2.17	0.61
1:1A:7:G:H2'	1:1A:8:A:H8	1.65	0.61
6:1G:11:TYR:HA	6:1G:15:VAL:HB	1.83	0.61
18:1W:71:VAL:HA	18:1W:107:LEU:HD23	1.82	0.61
39:1h:34:GLU:HB3	39:1h:118:VAL:HG21	1.83	0.61
5:2F:64:ILE:HG21	5:2F:78:ILE:HG23	1.83	0.61
21:2Z:75:ASN:O	21:2Z:84:GLU:HB2	2.01	0.61
23:21:3:LYS:HB2	23:21:61:ARG:NH1	2.13	0.61
32:2a:84:U:H4'	32:2a:89:C:C4	2.36	0.61
33:2b:74:LYS:HB2	33:2b:77:ALA:HB3	1.81	0.61
33:2b:149:LEU:HD22	33:2b:152:PHE:HB3	1.83	0.61
55:2x:8:4SU:O5'	55:2x:8:4SU:H6	2.00	0.61
1:1A:376:C:OP1	62:1A:4264:HOH:O	2.16	0.61
12:1Q:89:ASN:HB2	55:1x:1:C:N3	2.16	0.61
36:1e:152:ARG:NH2	39:1h:107:LEU:O	2.31	0.61
1:2A:324:A:N6	1:2A:338:G:O2'	2.30	0.61
1:2A:534:U:O2'	16:2U:49:HIS:ND1	2.25	0.61
1:2A:2318:G:H21	14:2S:3:ARG:HE	1.46	0.61
1:2A:2748:A:N3	7:2H:63:SER:HB3	2.16	0.61
25:23:40:THR:HG22	25:23:42:ALA:H	1.64	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:28:20:GLY:O	30:28:59:LYS:NZ	2.32	0.61
32:2a:555:C:H2'	32:2a:556:C:C6	2.34	0.61
32:2a:707:C:H5''	42:2k:85:ARG:HH11	1.66	0.61
52:2u:9:ARG:HE	52:2u:13:ILE:HD11	1.64	0.61
2:1B:11:C:OP2	22:10:72:ARG:NH2	2.34	0.61
28:16:35:GLU:OE2	28:16:50:ARG:NH2	2.31	0.61
1:2A:299:A:OP1	20:2Y:86:ARG:NH1	2.34	0.61
14:2S:58:LEU:HD21	14:2S:68:GLN:HG2	1.82	0.61
32:2a:539:A:OP2	43:2l:115:LYS:NZ	2.32	0.61
32:2a:865:A:H5'	32:2a:1078:U:C5	2.36	0.61
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.00	0.61
1:2A:776:G:N2	1:2A:2241:A:OP1	2.32	0.60
1:2A:981:A:N1	1:2A:2027:G:O2'	2.24	0.60
19:2X:54:VAL:HG22	19:2X:81:VAL:HG12	1.81	0.60
21:2Z:138:GLU:H	21:2Z:156:LYS:CE	2.13	0.60
24:22:25:VAL:HG11	24:22:61:LEU:HD21	1.83	0.60
26:24:9:LEU:HD23	26:24:27:THR:HG23	1.81	0.60
40:2i:16:ARG:HH21	40:2i:18:PHE:HZ	1.47	0.60
1:1A:2615:U:OP1	62:1A:4218:HOH:O	2.17	0.60
4:1E:105:THR:OG1	4:1E:199:ARG:NH2	2.34	0.60
32:1a:171:A:H2'	32:1a:172:A:C8	2.36	0.60
1:2A:2888:C:H2'	1:2A:2889:C:C6	2.35	0.60
7:2H:124:GLU:HG2	7:2H:132:ARG:HB3	1.83	0.60
17:2V:16:PRO:HD3	17:2V:99:ILE:HD11	1.83	0.60
36:2e:143:ARG:NH2	39:2h:77:GLU:OE1	2.17	0.60
37:2f:22:GLU:OE2	37:2f:82:ARG:NH2	2.29	0.60
39:2h:120:THR:H	39:2h:123:GLU:HB2	1.66	0.60
1:1A:2886:G:N7	62:1A:4382:HOH:O	2.31	0.60
8:1I:76:THR:HG22	8:1I:141:LYS:HE2	1.84	0.60
31:19:32:HIS:O	31:19:34:GLN:HG3	2.02	0.60
32:1a:789:U:O2'	32:1a:791:G:N7	2.27	0.60
32:1a:1386:G:N7	62:1a:1938:HOH:O	2.31	0.60
33:1b:10:LEU:HA	33:1b:48:MET:HE1	1.83	0.60
38:1g:74:GLU:HG2	38:1g:91:VAL:HG22	1.83	0.60
1:2A:731:C:OP2	62:2A:3972:HOH:O	2.16	0.60
26:24:26:SER:OG	26:24:27:THR:N	2.29	0.60
36:2e:32:VAL:HG11	36:2e:59:GLY:HA2	1.83	0.60
38:2g:153:HIS:CE1	42:2k:58:PRO:HD2	2.35	0.60
47:2p:53:VAL:HG13	47:2p:79:VAL:HG13	1.83	0.60
1:1A:1095:A:H62	1:1A:1097:U:H3	1.49	0.60
1:1A:1783:A:OP2	62:1A:4271:HOH:O	2.16	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1205:U:H4'	34:1c:195:VAL:HG21	1.83	0.60
54:1w:4:C:H2'	54:1w:5:G:C8	2.36	0.60
54:1w:13:C:C2'	54:1w:14:A:H5''	2.31	0.60
1:2A:2032:G:OP2	1:2A:2454:G:O2'	2.19	0.60
1:2A:2431:U:O2'	1:2A:2433:A:N7	2.29	0.60
32:2a:973:G:H3'	32:2a:974:A:H5''	1.82	0.60
44:2m:82:MET:HE3	44:2m:92:HIS:HB3	1.82	0.60
1:1A:2784:C:H1'	4:1E:37:ARG:HH12	1.66	0.60
19:1X:60:ARG:HH22	29:17:47:ARG:HH12	1.50	0.60
26:14:15:ILE:HD12	26:14:32:TYR:CE1	2.37	0.60
33:1b:116:GLU:HG3	33:1b:153:ARG:HH11	1.65	0.60
50:1s:80:TYR:CZ	50:1s:82:GLY:HA2	2.37	0.60
1:2A:1747(A):G:H2'	1:2A:1748:G:H8	1.66	0.60
32:2a:338:A:H2'	32:2a:339:C:C6	2.37	0.60
32:2a:1022:G:H4'	32:2a:1022:G:OP1	2.00	0.60
32:2a:1318:A:H1'	50:2s:37:ARG:HE	1.65	0.60
1:1A:1193:G:OP1	11:1P:14:LYS:NZ	2.34	0.60
1:1A:2467:C:OP2	62:1A:4265:HOH:O	2.16	0.60
5:1F:136:THR:O	5:1F:140:LEU:HD13	2.01	0.60
32:1a:1016:A:H2'	32:1a:1017:G:O4'	2.02	0.60
43:1l:32:PHE:HB3	43:1l:84:LEU:HD11	1.83	0.60
49:1r:40:LEU:HD22	49:1r:70:ILE:HG12	1.84	0.60
5:2F:192:LEU:HD13	5:2F:194:MET:HE2	1.83	0.60
32:2a:359:U:H2'	32:2a:360:A:C8	2.34	0.60
32:2a:582:U:OP1	46:2o:68:ARG:NH2	2.33	0.60
54:2w:51:U:H2'	54:2w:52:G:C8	2.36	0.60
21:1Z:138:GLU:H	21:1Z:156:LYS:NZ	1.98	0.60
32:1a:613:C:H2'	32:1a:614:A:H8	1.66	0.60
41:1j:61:GLU:OE1	45:1n:45:ARG:NE	2.28	0.60
45:1n:48:ALA:HB2	45:1n:53:LEU:HD12	1.84	0.60
1:2A:441:U:H2'	1:2A:442:G:H8	1.67	0.60
1:2A:805:G:OP1	62:2A:3975:HOH:O	2.17	0.60
5:2F:103:LYS:HA	5:2F:106:ARG:HG3	1.82	0.60
19:2X:2:LYS:NZ	19:2X:38:GLU:OE2	2.29	0.60
26:24:46:GLN:HE21	26:24:48:ARG:HD3	1.66	0.60
32:2a:256:U:OP1	48:2q:17:LYS:NZ	2.34	0.60
32:2a:979:C:OP1	32:2a:1223:C:N4	2.35	0.60
32:2a:1013:G:N2	32:2a:1016:A:OP2	2.29	0.60
32:2a:1086:U:H3	32:2a:1099:G:N2	1.99	0.60
32:2a:1216:G:H5''	45:2n:5:ALA:HB2	1.84	0.60
32:2a:1292:U:H2'	32:2a:1293:G:C8	2.37	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:90:GLY:O	35:2d:94:LEU:HD12	2.01	0.60
1:1A:185:U:H2'	1:1A:186:G:C8	2.37	0.60
1:1A:1992:G:O2'	1:1A:1993:U:OP2	2.15	0.60
3:1D:147:LEU:HD22	3:1D:155:LEU:HD11	1.82	0.60
3:1D:183:ARG:HG3	3:1D:270:ILE:HD13	1.82	0.60
12:1Q:82:ARG:NH1	22:10:4:LYS:HE3	2.17	0.60
32:1a:1031:G:H2'	32:1a:1032:G:C8	2.36	0.60
33:1b:185:ILE:HG22	33:1b:199:TYR:HD2	1.66	0.60
12:2Q:83:MET:HE2	12:2Q:83:MET:HA	1.83	0.60
31:29:6:SER:O	31:29:6:SER:OG	2.18	0.60
32:2a:596:C:H6	32:2a:596:C:H5'	1.67	0.60
34:2c:11:ARG:HG2	34:2c:15:THR:OG1	2.02	0.60
40:2i:99:LEU:HB3	40:2i:101:PHE:HE2	1.65	0.60
55:2x:15:G:H2'	55:2x:59:A:N1	2.17	0.60
1:1A:1511:C:H2'	1:1A:1512:U:H6	1.66	0.60
1:1A:1986:A:OP1	62:1A:4274:HOH:O	2.17	0.60
1:1A:2331:G:O2'	1:1A:2336:A:N1	2.31	0.60
1:1A:2753:A:N3	31:19:15:LYS:NZ	2.50	0.60
7:1H:3:ARG:NH1	7:1H:4:ILE:H	1.97	0.60
8:1I:63:ALA:O	8:1I:67:ARG:N	2.34	0.60
15:1T:24:PRO:HD3	15:1T:52:ILE:HD12	1.83	0.60
38:1g:78:ARG:NH2	38:1g:79:ARG:HH11	2.00	0.60
1:2A:2291:U:H2'	1:2A:2292:C:C6	2.37	0.60
1:2A:2836:U:H2'	1:2A:2837:G:H8	1.64	0.60
32:2a:253:U:OP2	48:2q:67:LYS:NZ	2.32	0.60
32:2a:1146:A:H2'	32:2a:1147:C:O4'	2.02	0.60
44:2m:78:ILE:HA	44:2m:81:LEU:HD12	1.82	0.60
1:1A:784:A:C6	3:1D:229:VAL:HG11	2.36	0.60
1:1A:1352:U:OP1	62:1A:4269:HOH:O	2.16	0.60
5:1F:183:VAL:O	5:1F:187:VAL:HG23	2.02	0.60
32:1a:8:A:N6	35:1d:205:GLU:O	2.34	0.60
32:1a:1305:G:N7	62:1a:1939:HOH:O	2.31	0.60
32:1a:1377:A:HO2'	38:1g:2:ALA:N	1.99	0.60
1:2A:271(K):U:O2	8:2I:50:ARG:HD3	2.02	0.60
12:2Q:38:GLU:HB2	12:2Q:127:ILE:HG22	1.83	0.60
13:2R:118:GLU:N	13:2R:118:GLU:OE1	2.34	0.60
21:2Z:55:HIS:CE1	21:2Z:135:GLU:HB2	2.37	0.60
22:20:10:THR:HG22	22:20:12:ASN:H	1.66	0.60
35:2d:150:GLU:OE1	35:2d:151:LYS:N	2.28	0.60
1:1A:185:U:H4'	1:1A:218:A:H4'	1.84	0.59
1:1A:286:C:H2'	1:1A:287:C:C6	2.37	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:958:U:OP1	12:1Q:74:TYR:OH	2.15	0.59
1:2A:27:G:N2	1:2A:512:G:H1'	2.17	0.59
1:2A:686:G:N2	1:2A:788:A:H61	2.00	0.59
1:2A:709:U:H2'	1:2A:710:G:C8	2.37	0.59
1:2A:1019:U:H2'	1:2A:1020:A:H8	1.67	0.59
1:2A:1151:G:H4'	16:2U:81:HIS:ND1	2.17	0.59
1:2A:1495:A:H2'	1:2A:1496:A:C8	2.37	0.59
8:2I:140:LEU:HD23	8:2I:142:VAL:HG22	1.84	0.59
11:2P:95:VAL:HA	11:2P:99:LEU:HD23	1.82	0.59
32:2a:1029:C:N4	32:2a:1032:G:N1	2.50	0.59
32:2a:1102:A:O3'	33:2b:96:ARG:NH2	2.35	0.59
32:2a:1400:5MC:H5''	32:2a:1400:5MC:C6	2.37	0.59
35:2d:140:VAL:HG11	35:2d:146:ILE:HD11	1.84	0.59
39:2h:103:VAL:HG21	39:2h:109:ILE:C	2.27	0.59
44:2m:58:GLU:O	44:2m:62:ASN:ND2	2.35	0.59
49:2r:37:VAL:O	49:2r:41:LYS:N	2.31	0.59
1:1A:271(L):U:OP1	8:1I:50:ARG:NH1	2.35	0.59
1:1A:1359:A:H2	1:1A:1372:U:O4	1.85	0.59
4:1E:121:ASN:ND2	62:1E:404:HOH:O	2.35	0.59
21:1Z:163:LEU:HD23	21:1Z:167:PRO:HG3	1.83	0.59
1:2A:2390:U:OP2	30:28:35:GLN:NE2	2.30	0.59
12:2Q:89:ASN:HB2	55:2x:1:C:C4	2.37	0.59
15:2T:60:THR:HG22	15:2T:77:PRO:HA	1.84	0.59
32:2a:1425:U:H3	32:2a:1475:G:H1	1.48	0.59
41:2j:63:PHE:HE1	45:2n:58:LYS:HG2	1.67	0.59
47:2p:57:ARG:O	47:2p:61:SER:N	2.30	0.59
1:1A:856:C:H5'	22:10:27:GLU:OE2	2.02	0.59
1:1A:2683:C:H4'	4:1E:13:ARG:NH2	2.18	0.59
33:1b:12:GLU:O	33:1b:15:VAL:HG22	2.03	0.59
43:1l:70:ILE:HG12	43:1l:100:ILE:HD12	1.83	0.59
1:2A:31:C:OP1	62:2A:3969:HOH:O	2.15	0.59
1:2A:801:G:O6	5:2F:53:THR:OG1	2.21	0.59
1:2A:1153:C:OP1	16:2U:92:ARG:NH2	2.30	0.59
1:2A:2477:C:H5''	1:2A:2479:G:O6	2.02	0.59
7:2H:25:LYS:HD3	7:2H:27:LYS:HE3	1.82	0.59
56:2y:15:G:N1	56:2y:48:C:N3	2.50	0.59
1:1A:64:A:C5	19:1X:66:LEU:HD13	2.36	0.59
1:1A:677:A:OP1	62:1A:4270:HOH:O	2.16	0.59
2:1B:43:C:H5''	26:14:1:MET:HE3	1.83	0.59
32:1a:102:G:O2'	32:1a:151:A:N3	2.33	0.59
36:1e:8:GLU:OE2	36:1e:63:ARG:NH2	2.36	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:109:VAL:HG12	26:24:33:VAL:HG11	1.83	0.59
12:2Q:78:PRO:HD3	55:2x:1:C:C4	2.36	0.59
50:2s:28:LYS:HB3	50:2s:29:ARG:CA	2.32	0.59
55:2x:15:G:OP2	55:2x:16:C:N4	2.32	0.59
1:1A:588:U:H2'	1:1A:589:C:C6	2.38	0.59
1:1A:2142:C:N3	1:1A:2149:G:O6	2.35	0.59
1:1A:2327:A:H2'	1:1A:2328:A:C8	2.37	0.59
1:2A:518:G:H4'	18:2W:18:ARG:NE	2.17	0.59
1:2A:2304:G:N2	6:2G:156:ASP:OD2	2.33	0.59
4:2E:12:THR:HG22	4:2E:13:ARG:N	2.17	0.59
6:2G:12:TYR:O	6:2G:17:PRO:HD3	2.02	0.59
6:2G:44:GLY:N	6:2G:88:ILE:O	2.35	0.59
9:2N:15:LEU:O	9:2N:16:ILE:HG13	2.03	0.59
9:2N:103:VAL:HG11	9:2N:120:LEU:HD22	1.83	0.59
13:2R:83:ILE:HG12	13:2R:86:ARG:NH1	2.18	0.59
23:21:82:LEU:HA	23:21:85:LEU:HD13	1.85	0.59
36:2e:147:ASP:OD1	36:2e:147:ASP:N	2.36	0.59
56:2y:26:A:H2'	56:2y:27:G:H5'	1.84	0.59
1:1A:1411:C:H2'	1:1A:1412:A:H8	1.67	0.59
1:1A:2319:G:H1	14:1S:3:ARG:HA	1.66	0.59
2:1B:2:C:H2'	2:1B:3:C:C6	2.37	0.59
32:1a:1358:U:OP1	45:1n:35:ARG:HG3	2.02	0.59
1:2A:796:C:H2'	1:2A:797:C:C6	2.36	0.59
15:2T:91:ARG:HD2	15:2T:120:ARG:NH1	2.17	0.59
32:2a:1029:C:N4	32:2a:1032:G:H1	2.00	0.59
1:1A:34:C:H5''	1:1A:35:G:OP2	2.03	0.59
26:14:57:GLU:OE2	26:14:58:ARG:NH1	2.36	0.59
32:1a:64:G:OP1	32:1a:382:A:N6	2.36	0.59
32:1a:689:C:OP1	42:1k:27:ASN:ND2	2.29	0.59
33:1b:84:GLU:HB3	33:1b:219:VAL:HG21	1.84	0.59
40:1i:42:ARG:NH1	40:1i:71:SER:OG	2.29	0.59
1:2A:271(R):G:H5''	23:21:97:LEU:HD21	1.84	0.59
1:2A:340:A:H2'	1:2A:341:G:O4'	2.02	0.59
1:2A:646:A:H2'	1:2A:647:G:O4'	2.02	0.59
1:2A:1342:A:O2'	1:2A:1344:G:OP2	2.18	0.59
1:2A:2238:G:H4'	1:2A:2239:G:OP1	2.03	0.59
1:2A:2537:U:H2'	1:2A:2538:C:C6	2.38	0.59
36:2e:92:LYS:HD3	36:2e:119:LEU:HD13	1.85	0.59
47:2p:8:ARG:HB3	47:2p:28:ARG:NH1	2.18	0.59
8:1I:116:LEU:HD12	8:1I:128:LEU:HD13	1.84	0.59
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.38	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:157:ILE:HD13	34:1c:166:GLU:HB2	1.84	0.59
1:2A:657:U:H2'	1:2A:658:C:C6	2.38	0.59
1:2A:1031:G:N3	31:29:36:GLN:NE2	2.50	0.59
1:2A:2183:C:H2'	1:2A:2184:G:H8	1.68	0.59
32:2a:666:G:H5'	32:2a:726:C:H1'	1.85	0.59
32:2a:1428:A:H2'	32:2a:1429:C:O4'	2.03	0.59
38:2g:62:PHE:HA	38:2g:124:LEU:HD21	1.85	0.59
50:2s:41:VAL:HG13	50:2s:43:GLU:H	1.68	0.59
1:1A:181:A:H5''	29:17:36:GLN:NE2	2.17	0.59
1:1A:488:G:O2'	18:1W:49:LYS:NZ	2.28	0.59
1:1A:839:U:H2'	1:1A:840:C:C6	2.38	0.59
7:1H:3:ARG:NH1	7:1H:5:GLY:H	2.01	0.59
7:1H:67:LEU:O	7:1H:71:LEU:HG	2.03	0.59
32:1a:321:A:N7	32:1a:328:C:O2'	2.35	0.59
51:1t:14:LYS:HE2	51:1t:18:GLN:NE2	2.18	0.59
32:2a:683:G:H2'	32:2a:684:A:C8	2.38	0.59
32:2a:1131:G:H1	32:2a:1143:G:H21	1.51	0.59
32:2a:1328:C:OP1	52:2u:20:LYS:HE3	2.03	0.59
39:2h:82:HIS:NE2	39:2h:84:ARG:HG2	2.17	0.59
50:2s:12:ASP:OD2	50:2s:37:ARG:HD2	2.02	0.59
54:2w:73:A:H3'	54:2w:73:A:OP2	2.03	0.59
1:1A:1472:A:H2'	1:1A:1473:G:O4'	2.02	0.59
3:1D:4:LYS:HB3	3:1D:18:VAL:HG23	1.84	0.59
32:1a:79:G:H1'	32:1a:91:C:O2	2.03	0.59
1:2A:236:C:H2'	1:2A:237:C:H6	1.68	0.59
1:2A:2470:G:O6	1:2A:2481:G:N2	2.36	0.59
1:2A:2574:G:H2'	1:2A:2575:C:C6	2.38	0.59
1:2A:2591:C:H2'	1:2A:2592:G:C8	2.38	0.59
5:2F:161:GLU:HG2	5:2F:164:ARG:HH22	1.68	0.59
36:2e:42:GLY:HA2	36:2e:65:ASN:O	2.03	0.59
1:1A:1495:A:OP2	62:1A:4276:HOH:O	2.17	0.58
1:1A:2108:C:H2'	1:1A:2109:U:H6	1.68	0.58
1:1A:2683:C:O2	10:1O:70:LYS:NZ	2.30	0.58
33:1b:164:VAL:HG12	33:1b:165:VAL:H	1.68	0.58
1:2A:700:G:O2'	1:2A:1632:A:N3	2.27	0.58
1:2A:1569:A:O5'	3:2D:59:LYS:NZ	2.29	0.58
1:2A:2700:C:H42	1:2A:2707:G:H1	1.49	0.58
9:2N:4:TYR:CD2	16:2U:100:VAL:HG11	2.38	0.58
9:2N:74:ARG:HH12	9:2N:90:MET:HE1	1.68	0.58
10:2O:80:ASP:OD2	15:2T:64:ARG:NH2	2.35	0.58
15:2T:127:ALA:C	15:2T:129:ARG:H	2.11	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.36	0.58
32:2a:1004:A:C8	32:2a:1005:A:H4'	2.38	0.58
32:2a:1261:A:H5'	32:2a:1284:C:OP1	2.02	0.58
56:2y:18:G:O6	56:2y:56:C:N4	2.35	0.58
1:1A:2163:C:OP2	1:1A:2164:C:N4	2.37	0.58
2:1B:14:U:OP2	2:1B:70:C:O2'	2.20	0.58
14:1S:20:ARG:NH2	22:10:51:VAL:O	2.35	0.58
32:1a:411:A:OP2	35:1d:25:ARG:NH2	2.26	0.58
32:1a:438:G:N1	32:1a:495:A:OP2	2.24	0.58
32:1a:922:G:H4'	36:1e:20:GLN:HA	1.85	0.58
32:1a:950:U:H5	44:1m:102:ARG:HD3	1.69	0.58
33:1b:18:GLY:HA2	33:1b:204:ASN:HB2	1.85	0.58
50:1s:22:LEU:HB3	50:1s:27:GLU:HB3	1.86	0.58
1:2A:321:G:HO2'	1:2A:340:A:HO2'	1.51	0.58
1:2A:2712:U:OP1	1:2A:2714:G:H4'	2.03	0.58
9:2N:116:LEU:HA	9:2N:119:ARG:HG3	1.84	0.58
17:2V:5:VAL:HG13	17:2V:14:VAL:HG21	1.84	0.58
19:2X:11:PRO:HG2	19:2X:13:LEU:HD21	1.84	0.58
32:2a:113:G:H1'	32:2a:354:G:H5'	1.84	0.58
47:2p:61:SER:OG	47:2p:62:VAL:N	2.34	0.58
1:1A:1608:A:H1'	1:1A:1610:A:OP2	2.02	0.58
1:1A:2142:C:O2	1:1A:2149:G:N1	2.31	0.58
1:1A:2315:G:H2'	1:1A:2316:C:H6	1.66	0.58
20:1Y:92:ASN:HB3	20:1Y:94:LYS:H	1.67	0.58
21:1Z:126:VAL:HG11	21:1Z:161:VAL:HB	1.84	0.58
48:1q:18:THR:OG1	48:1q:69:LYS:NZ	2.27	0.58
1:2A:752:A:H3'	29:27:1:MET:HE1	1.86	0.58
1:2A:854:G:H2'	1:2A:855:G:H8	1.68	0.58
2:2B:3:C:H2'	2:2B:4:C:C6	2.39	0.58
3:2D:242:ARG:O	62:2D:401:HOH:O	2.17	0.58
9:2N:138:LEU:HB3	9:2N:140:VAL:HG13	1.85	0.58
13:2R:24:GLN:HB3	13:2R:44:LEU:HD11	1.85	0.58
32:2a:933:G:H1	32:2a:1384:C:H42	1.52	0.58
33:2b:15:VAL:HB	33:2b:209:ARG:HB3	1.85	0.58
33:2b:215:LEU:O	33:2b:219:VAL:HG23	2.03	0.58
50:2s:31:ILE:O	50:2s:49:ILE:HG13	2.02	0.58
51:2t:57:ARG:HH12	51:2t:100:ILE:HD12	1.69	0.58
4:1E:28:ALA:HB3	4:1E:93:VAL:HG12	1.84	0.58
32:1a:8:A:N7	35:1d:208:SER:OG	2.34	0.58
32:1a:1189:C:H5''	34:1c:5:ILE:HD12	1.85	0.58
32:1a:1414:U:O4	62:1a:1917:HOH:O	2.15	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1445(A):C:H42	1:2A:1466:G:H1	1.50	0.58
2:2B:51:G:OP2	14:2S:61:ASN:HA	2.03	0.58
24:22:2:LYS:O	24:22:5:GLU:N	2.37	0.58
32:2a:736:C:H5''	49:2r:72:ARG:HH21	1.68	0.58
32:2a:1272:G:N2	32:2a:1273:G:C5	2.72	0.58
1:1A:1445(A):C:OP2	1:1A:1445(A):C:OP2	2.03	0.58
14:1S:95:HIS:O	14:1S:98:VAL:HG23	2.03	0.58
40:1i:53:VAL:HG11	40:1i:92:TYR:CE1	2.38	0.58
1:2A:1029:A:N6	1:2A:1125:G:O2'	2.35	0.58
1:2A:2506:U:O2'	54:2w:76:F3N:H4'	2.04	0.58
1:2A:2802:G:C4	1:2A:2803:C:H1'	2.37	0.58
17:2V:21:ARG:HD3	17:2V:91:TYR:CD1	2.38	0.58
17:2V:59:ALA:HB2	17:2V:96:ILE:HD13	1.84	0.58
33:2b:79:ASP:O	33:2b:82:ARG:N	2.36	0.58
38:2g:68:ASN:ND2	38:2g:127:ALA:O	2.35	0.58
1:1A:2285:C:OP2	28:16:6:ARG:NH1	2.36	0.58
1:1A:2887:U:H2'	1:1A:2888:C:C6	2.38	0.58
9:1N:42:TRP:CH2	9:1N:44:PRO:HB3	2.38	0.58
18:1W:82:LEU:HD13	18:1W:84:ARG:NH2	2.19	0.58
49:1r:21:LYS:NZ	49:1r:54:ARG:O	2.37	0.58
1:2A:1354:A:H4'	3:2D:38:LYS:HE3	1.85	0.58
1:2A:1786:A:H1'	1:2A:1938:A:N6	2.18	0.58
1:2A:2753:A:N3	31:29:15:LYS:NZ	2.49	0.58
32:2a:325:A:OP2	51:2t:70:SER:HB3	2.03	0.58
32:2a:770:C:OP1	62:2a:1911:HOH:O	2.17	0.58
32:2a:1263:C:N3	32:2a:1272:G:O6	2.36	0.58
34:2c:39:ILE:HD12	34:2c:57:ILE:HD13	1.83	0.58
39:2h:81:HIS:ND1	39:2h:138:TRP:OXT	2.33	0.58
51:2t:50:GLU:HA	51:2t:100:ILE:HG12	1.86	0.58
1:1A:278:A:H2'	1:1A:279:C:C6	2.39	0.58
1:1A:1684:C:H2'	1:1A:1685:C:C6	2.38	0.58
1:1A:1799:G:O2'	3:1D:181:GLU:OE2	2.19	0.58
32:1a:1004:A:H5''	32:1a:1025:U:C5	2.39	0.58
1:2A:309:G:N3	1:2A:329:G:O2'	2.34	0.58
1:2A:1461:G:H2'	1:2A:1462:C:H6	1.69	0.58
1:2A:2507:C:H2'	1:2A:2508:G:O4'	2.03	0.58
21:2Z:63:ASP:OD1	21:2Z:65:GLN:HB2	2.04	0.58
32:2a:1029:C:N3	32:2a:1032:G:N2	2.46	0.58
33:2b:118:LEU:HD11	33:2b:138:LEU:HD23	1.85	0.58
43:2l:66:VAL:HG21	43:2l:98:TYR:CE2	2.38	0.58
46:2o:7:GLU:OE1	46:2o:38:ARG:NH2	2.36	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:2q:81:ARG:HB3	48:2q:84:LEU:HG	1.85	0.58
1:1A:2086:U:H2'	1:1A:2087:G:C8	2.39	0.58
4:1E:46:ALA:HB2	4:1E:82:ARG:HA	1.86	0.58
11:1P:127:ALA:O	11:1P:148:LEU:HD23	2.03	0.58
15:1T:118:ARG:HG2	32:1a:1442(A):G:C8	2.39	0.58
45:1n:14:PRO:HG2	45:1n:16:PHE:O	2.03	0.58
1:2A:764:A:O4'	3:2D:213:ARG:HG3	2.03	0.58
1:2A:2376:A:H3'	1:2A:2377:A:H8	1.69	0.58
7:2H:5:GLY:HA2	7:2H:69:ARG:HB2	1.85	0.58
21:2Z:154:ASP:N	21:2Z:154:ASP:OD1	2.34	0.58
32:2a:253:U:H2'	32:2a:254:G:C8	2.38	0.58
32:2a:743:U:O4	62:2a:1910:HOH:O	2.16	0.58
32:2a:1026:G:H5'	32:2a:1027:C:O5'	2.04	0.58
32:2a:1135:U:HO2'	32:2a:1136:U:H5	1.52	0.58
32:2a:1317:C:H42	45:2n:19:ARG:HH21	1.51	0.58
33:2b:28:PHE:CD2	33:2b:190:THR:HA	2.39	0.58
35:2d:171:GLY:C	35:2d:173:TRP:H	2.11	0.58
51:2t:50:GLU:HG3	51:2t:100:ILE:HD13	1.85	0.58
1:1A:336:C:H2'	1:1A:337:C:H6	1.69	0.58
1:1A:1087:G:H2'	1:1A:1089:G:C8	2.39	0.58
26:14:50:VAL:HG11	44:1m:64:TRP:HA	1.85	0.58
37:1f:97:PHE:N	49:1r:30:ASP:OD1	2.33	0.58
1:2A:362:U:O2'	1:2A:363:G:H5'	2.04	0.58
3:2D:2:ALA:N	3:2D:20:ASP:OD1	2.36	0.58
5:2F:31:HIS:HB2	11:2P:9:ASN:OD1	2.04	0.58
5:2F:122:LYS:HA	5:2F:191:ARG:NH1	2.19	0.58
7:2H:56:SER:HB3	7:2H:61:HIS:ND1	2.18	0.58
21:2Z:70:LEU:HD12	21:2Z:71:VAL:N	2.17	0.58
32:2a:1207:2MG:H2'	32:2a:1208:C:H6	1.68	0.58
50:2s:28:LYS:HB3	50:2s:29:ARG:HA	1.84	0.58
1:1A:729:G:C6	3:1D:208:LYS:HB2	2.39	0.58
50:1s:70:LYS:HB2	50:1s:73:GLU:HG3	1.86	0.58
54:1w:18:G:HO2'	54:1w:57:G:H22	1.51	0.58
1:2A:2033:A:OP1	62:2A:3926:HOH:O	2.17	0.58
1:2A:2136:C:H42	1:2A:2155:G:H1	1.51	0.58
1:2A:2184:G:H2'	1:2A:2185:C:C6	2.39	0.58
15:2T:39:ARG:NH2	15:2T:41:ARG:HD3	2.19	0.58
20:2Y:88:LYS:HD2	20:2Y:89:PHE:N	2.18	0.58
40:2i:48:GLU:O	40:2i:51:ARG:N	2.31	0.58
49:2r:43:PHE:HD1	49:2r:56:THR:HG22	1.67	0.58
54:2w:68:C:H2'	54:2w:69:G:C8	2.39	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2155:G:H2'	1:1A:2155:G:N3	2.19	0.57
1:1A:2182:G:H2'	1:1A:2183:C:C6	2.39	0.57
1:1A:2628:C:O2	62:1A:4266:HOH:O	2.16	0.57
13:1R:67:LEU:HD13	13:1R:76:VAL:HG21	1.85	0.57
32:1a:579:G:O2'	46:1o:54:ARG:NE	2.37	0.57
32:1a:620:C:H2'	32:1a:621:A:O4'	2.04	0.57
32:1a:865:A:H2	32:1a:918:A:H4'	1.69	0.57
32:1a:920:U:H2'	32:1a:921:U:C6	2.39	0.57
32:1a:923:A:H5'	36:1e:21:ALA:HB2	1.84	0.57
32:1a:1030(A):G:H3'	32:1a:1030(B):C:H5''	1.85	0.57
32:1a:1201:A:H4'	32:1a:1202:G:O5'	2.04	0.57
32:1a:1318:A:H5''	50:1s:3:ARG:HH12	1.69	0.57
33:1b:212:GLN:NE2	33:1b:235:SER:HA	2.19	0.57
37:1f:60:PHE:C	37:1f:61:LEU:HD12	2.29	0.57
44:1m:51:ALA:O	44:1m:55:ARG:HB2	2.04	0.57
1:2A:144:C:H2'	1:2A:145:G:H8	1.69	0.57
1:2A:1423:G:H1	1:2A:1575:C:H42	1.49	0.57
1:2A:2098:U:H2'	1:2A:2099:U:O4'	2.04	0.57
5:2F:28:ILE:HG21	11:2P:1:MET:HE1	1.85	0.57
16:2U:9:VAL:HG13	16:2U:13:LYS:HE3	1.85	0.57
16:2U:83:LEU:HD12	16:2U:113:ALA:HB2	1.86	0.57
25:23:7:LYS:HE3	25:23:32:GLN:HE21	1.68	0.57
32:2a:1026:G:O6	32:2a:1036:G:N2	2.37	0.57
32:2a:1157:A:H4'	32:2a:1158:C:O5'	2.04	0.57
33:2b:82:ARG:HG2	33:2b:83:MET:HG3	1.86	0.57
54:2w:43:C:H2'	54:2w:44:G:C8	2.39	0.57
1:1A:819:A:H5'	1:1A:819:A:H8	1.66	0.57
1:1A:899:A:H2'	1:1A:899:A:N3	2.18	0.57
12:1Q:103:MET:HE1	12:1Q:127:ILE:HD11	1.86	0.57
32:1a:45:U:H2'	32:1a:46:G:C8	2.39	0.57
32:1a:132:C:H2'	32:1a:133:U:H6	1.69	0.57
1:2A:24:G:O2'	18:2W:78:GLU:O	2.22	0.57
1:2A:479:A:N3	1:2A:481:G:H5''	2.18	0.57
1:2A:1429:G:H2'	1:2A:1430:C:C6	2.39	0.57
1:2A:2099:U:O2	1:2A:2190:G:N2	2.35	0.57
1:2A:2135:A:H2'	1:2A:2136:C:C5	2.40	0.57
2:2B:75:G:H5''	2:2B:75:G:H8	1.68	0.57
6:2G:41:GLN:O	6:2G:43:LEU:N	2.37	0.57
8:2I:116:LEU:HD11	8:2I:120:ILE:HG13	1.85	0.57
9:2N:96:GLU:CD	9:2N:96:GLU:H	2.11	0.57
21:2Z:54:HIS:HB3	21:2Z:101:PRO:HD3	1.85	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:21:86:SER:HB3	23:21:89:GLU:HG3	1.86	0.57
38:2g:22:LEU:HD21	38:2g:66:VAL:HG21	1.85	0.57
56:2y:15:G:H22	56:2y:21:A:H1'	1.69	0.57
1:1A:2266:A:H8	1:1A:2266:A:OP1	1.88	0.57
8:1I:4:ILE:HG21	8:1I:47:LEU:HG	1.86	0.57
11:1P:2:LYS:HG2	11:1P:3:LEU:N	2.20	0.57
22:10:43:THR:O	22:10:43:THR:HG23	2.03	0.57
32:1a:1172:C:H2'	32:1a:1173:G:H8	1.69	0.57
34:1c:5:ILE:HG12	34:1c:6:HIS:N	2.19	0.57
1:2A:2106:G:H2'	1:2A:2107:C:O4'	2.04	0.57
32:2a:751:U:H2'	32:2a:752:G:O4'	2.03	0.57
32:2a:1255:G:OP2	41:2j:45:ARG:NH2	2.36	0.57
1:1A:528:A:OP1	62:1A:4272:HOH:O	2.17	0.57
1:1A:1187:G:O6	62:1A:4221:HOH:O	2.17	0.57
1:1A:1794:U:H2'	1:1A:1795:C:H6	1.70	0.57
1:1A:2784:C:H1'	4:1E:37:ARG:NH1	2.19	0.57
2:1B:8:U:O3'	14:1S:25:ARG:NH2	2.35	0.57
32:1a:767:A:H2'	32:1a:768:A:O4'	2.05	0.57
33:1b:157:ARG:HG2	33:1b:158:LEU:N	2.19	0.57
41:1j:46:ARG:NH2	41:1j:64:GLU:OE1	2.37	0.57
44:1m:86:CYS:HB3	50:1s:74:PHE:CE1	2.40	0.57
1:2A:185:U:H2'	1:2A:186:G:H8	1.70	0.57
6:2G:20:ILE:HG23	6:2G:25:TYR:HB2	1.86	0.57
22:20:40:GLN:HE21	22:20:57:PHE:HB3	1.68	0.57
32:2a:7:G:H5'	32:2a:298:A:O4'	2.04	0.57
32:2a:532:A:OP1	62:2a:1912:HOH:O	2.17	0.57
32:2a:975:A:H4'	32:2a:976:G:H5''	1.87	0.57
32:2a:1004:A:N6	32:2a:1037:C:H1'	2.19	0.57
34:2c:123:GLN:HA	34:2c:126:ARG:HH11	1.69	0.57
52:2u:3:LYS:HB3	52:2u:14:TRP:CD1	2.38	0.57
1:1A:24:G:O2'	18:1W:78:GLU:O	2.21	0.57
1:1A:973:A:H5'	1:1A:1188:U:H1'	1.86	0.57
1:1A:1164:G:H2'	1:1A:1165:U:C6	2.38	0.57
1:1A:1740:G:H2'	1:1A:1741:A:C8	2.39	0.57
1:1A:1803:A:H4'	3:1D:259:THR:HG23	1.85	0.57
32:1a:430:A:OP2	35:1d:8:VAL:HG12	2.04	0.57
36:1e:81:GLU:HG2	36:1e:90:VAL:HG22	1.86	0.57
44:1m:23:TYR:CE2	44:1m:71:ARG:HG3	2.40	0.57
49:1r:67:ALA:O	49:1r:71:LYS:HG3	2.05	0.57
49:1r:70:ILE:HG23	49:1r:79:LEU:HD13	1.85	0.57
1:2A:1125:G:H5''	1:2A:1126:A:H5''	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:120:ALA:O	33:2b:125:PRO:HD2	2.05	0.57
35:2d:74:GLN:O	35:2d:78:LEU:HB2	2.05	0.57
35:2d:101:LEU:HA	35:2d:104:VAL:HG22	1.86	0.57
38:2g:69:VAL:HG21	38:2g:104:LEU:HD21	1.87	0.57
1:1A:2571:C:O2'	4:1E:146:THR:O	2.22	0.57
32:1a:1425:U:H2'	32:1a:1426:C:C6	2.40	0.57
35:1d:103:ASN:O	35:1d:107:ARG:HG2	2.05	0.57
56:1y:58:A:H2	56:1y:60:U:C2	2.22	0.57
1:2A:271(L):U:O2	62:2A:3959:HOH:O	2.13	0.57
1:2A:833:U:O2	11:2P:55:ARG:NH2	2.36	0.57
1:2A:2156:G:H2'	1:2A:2157:G:C4	2.40	0.57
3:2D:26:LYS:O	3:2D:83:GLU:HG2	2.04	0.57
4:2E:27:LEU:HD22	15:2T:1:MET:SD	2.45	0.57
12:2Q:111:GLU:OE2	12:2Q:133:ARG:NH2	2.37	0.57
32:2a:1127:G:H5'	32:2a:1280:A:O2'	2.05	0.57
1:1A:1128:A:N1	62:1A:4392:HOH:O	2.33	0.57
3:1D:148:GLU:OE1	3:1D:151:LYS:NZ	2.29	0.57
11:1P:29:LYS:HD3	11:1P:30:THR:HG23	1.87	0.57
15:1T:127:ALA:C	15:1T:129:ARG:H	2.12	0.57
26:14:40:HIS:HB3	26:14:43:TYR:HB2	1.86	0.57
38:1g:78:ARG:HH21	38:1g:79:ARG:NH1	2.02	0.57
1:2A:626:U:O4	11:2P:81:GLN:NE2	2.38	0.57
6:2G:41:GLN:HE21	6:2G:153:ARG:HB3	1.66	0.57
20:2Y:90:LEU:O	20:2Y:93:GLY:N	2.33	0.57
32:2a:55:A:OP2	32:2a:352:C:N4	2.37	0.57
42:2k:27:ASN:OD1	42:2k:28:THR:N	2.38	0.57
50:2s:32:LYS:HB2	50:2s:57:HIS:CE1	2.40	0.57
9:1N:58:ASP:OD1	9:1N:58:ASP:N	2.37	0.57
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.87	0.57
1:2A:1169:G:H1	1:2A:1180:C:H42	1.52	0.57
1:2A:1814:G:H4'	3:2D:51:VAL:HG21	1.87	0.57
7:2H:118:PRO:HD2	7:2H:121:ILE:HB	1.87	0.57
21:2Z:16:SER:O	21:2Z:20:ARG:HB2	2.05	0.57
28:26:14:THR:HG21	28:26:50:ARG:NH2	2.20	0.57
32:2a:1118:C:OP1	40:2i:104:ARG:NH1	2.38	0.57
34:2c:120:VAL:HG13	34:2c:133:ALA:HB1	1.86	0.57
41:2j:54:PHE:O	41:2j:56:HIS:N	2.31	0.57
15:1T:15:VAL:HG13	15:1T:79:HIS:CE1	2.40	0.57
31:19:27:CYS:SG	31:19:28:GLU:N	2.78	0.57
1:2A:276:A:H5''	1:2A:277:C:H5'	1.86	0.57
1:2A:443:A:H1'	1:2A:1201:C:O4'	2.05	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:636:G:C5	11:2P:115:LEU:HD21	2.40	0.57
1:2A:995:C:OP2	16:2U:54:LYS:NZ	2.29	0.57
1:2A:2131:G:C8	1:2A:2133:G:C2	2.93	0.57
32:2a:545:C:O2'	32:2a:549:C:OP1	2.20	0.57
32:2a:562:C:O2	43:2l:16:GLU:N	2.37	0.57
4:1E:56:PRO:C	4:1E:58:ARG:H	2.13	0.57
21:1Z:26:GLY:HA3	21:1Z:86:VAL:HG23	1.87	0.57
32:1a:1004:A:H5''	32:1a:1025:U:H5	1.70	0.57
36:1e:100:VAL:HG22	36:1e:118:ILE:HG22	1.86	0.57
38:1g:16:LEU:HD11	40:1i:45:ALA:HB2	1.86	0.57
41:1j:35:SER:HB3	41:1j:73:ASP:HB2	1.87	0.57
51:1t:63:ILE:HG21	51:1t:81:LYS:HG3	1.86	0.57
1:2A:210:C:OP2	29:27:29:LYS:NZ	2.36	0.57
1:2A:1025:G:C4	1:2A:1135:C:H1'	2.40	0.57
1:2A:1899:G:H1'	62:2A:4789:HOH:O	2.03	0.57
20:2Y:83:THR:OG1	20:2Y:84:ARG:O	2.23	0.57
24:22:36:ARG:O	24:22:39:ALA:N	2.35	0.57
32:2a:304:U:H2'	32:2a:305:G:C8	2.40	0.57
32:2a:421:U:H5''	32:2a:422:C:H5	1.70	0.57
32:2a:1122:U:C4	32:2a:1123:A:N7	2.72	0.57
38:2g:80:VAL:HG21	38:2g:154:TYR:CE1	2.40	0.57
1:1A:86:C:H4'	1:1A:104:U:H1'	1.87	0.56
1:1A:2306:C:N4	6:1G:42:GLY:O	2.34	0.56
19:1X:61:GLY:HA3	19:1X:73:ARG:O	2.05	0.56
33:1b:192:SER:O	33:1b:194:PRO:HD3	2.04	0.56
1:2A:892:G:H3'	1:2A:893:C:C5'	2.35	0.56
1:2A:2389:G:H5''	1:2A:2390:U:O4'	2.05	0.56
9:2N:9:VAL:HG21	9:2N:39:ARG:HH12	1.70	0.56
32:2a:1003:G:H2'	32:2a:1004:A:O4'	2.04	0.56
33:2b:8:LYS:HA	33:2b:217:ARG:HE	1.69	0.56
40:2i:17:VAL:HG22	40:2i:63:ILE:HD13	1.86	0.56
1:1A:303:U:O4	62:1A:4268:HOH:O	2.16	0.56
1:1A:2612:C:OP2	27:15:2:ALA:N	2.38	0.56
1:1A:2788:C:O2'	1:1A:2809:A:N3	2.38	0.56
19:1X:31:HIS:CD2	19:1X:33:LYS:H	2.23	0.56
32:1a:1452:C:O2'	32:1a:1456:G:H5''	2.05	0.56
38:1g:90:GLU:CD	38:1g:90:GLU:H	2.12	0.56
1:2A:400:G:N7	62:2A:4075:HOH:O	2.33	0.56
1:2A:580:C:H2'	1:2A:581:C:C6	2.40	0.56
1:2A:656:G:H2'	1:2A:657:U:O4'	2.05	0.56
1:2A:1703:G:H2'	1:2A:1704:G:C8	2.39	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:105:VAL:N	21:2Z:139:VAL:O	2.38	0.56
26:24:46:GLN:NE2	26:24:48:ARG:HD3	2.20	0.56
32:2a:662:G:H2'	32:2a:663:A:C8	2.40	0.56
33:2b:60:ASP:O	33:2b:64:ARG:HG2	2.05	0.56
38:2g:15:ASP:OD1	38:2g:19:GLY:N	2.38	0.56
56:2y:8:4SU:H1'	56:2y:48:C:H1'	1.87	0.56
1:1A:184:C:H2'	1:1A:185:U:C6	2.39	0.56
1:1A:1047:G:H2'	1:1A:1110:G:N2	2.19	0.56
1:1A:1312:U:O4	19:1X:60:ARG:HD3	2.05	0.56
1:1A:1684:C:H2'	1:1A:1685:C:H6	1.68	0.56
1:1A:1794:U:H2'	1:1A:1795:C:C6	2.39	0.56
2:1B:103:G:N2	21:1Z:73:GLN:HE22	2.01	0.56
3:1D:77:ALA:HB2	3:1D:97:TYR:CD1	2.40	0.56
8:1I:14:ASP:O	8:1I:17:GLN:HB3	2.05	0.56
9:1N:30:ILE:HG22	9:1N:34:LEU:HD22	1.86	0.56
13:1R:36:THR:HG22	13:1R:37:THR:H	1.70	0.56
32:1a:330:C:O2	62:1a:1915:HOH:O	2.13	0.56
32:1a:371:G:N2	32:1a:390:C:N3	2.52	0.56
32:1a:437:U:H5''	35:1d:155:LEU:HD11	1.86	0.56
32:1a:707:C:OP1	42:1k:85:ARG:NH1	2.36	0.56
34:1c:5:ILE:HG12	34:1c:6:HIS:H	1.69	0.56
36:1e:11:ILE:N	36:1e:31:LEU:O	2.36	0.56
37:1f:68:PRO:HG2	37:1f:71:ARG:HD2	1.87	0.56
37:1f:100:ASN:HB2	49:1r:27:GLY:O	2.05	0.56
46:1o:8:LYS:O	46:1o:12:ILE:HG13	2.05	0.56
1:2A:1490:A:O2'	3:2D:99:ASP:OD1	2.24	0.56
1:2A:1902:C:H5'	3:2D:246:PRO:HD3	1.87	0.56
1:2A:2102:U:H2'	1:2A:2103:C:C6	2.40	0.56
1:2A:2313:C:H4'	6:2G:91:ARG:HG3	1.88	0.56
1:2A:2632:A:O2'	1:2A:2811:G:O2'	2.11	0.56
3:2D:93:ALA:HB3	3:2D:105:ILE:HG13	1.86	0.56
7:2H:97:ARG:NE	7:2H:104:GLU:OE1	2.38	0.56
10:2O:120:GLU:HB2	15:2T:68:TYR:CE2	2.40	0.56
11:2P:124:LYS:HG3	11:2P:144:GLU:HB3	1.87	0.56
12:2Q:20:ALA:HB2	21:2Z:79:ARG:HG3	1.87	0.56
12:2Q:75:THR:HG21	12:2Q:87:LYS:HZ2	1.68	0.56
25:23:6:VAL:HG22	25:23:56:VAL:HG22	1.86	0.56
30:28:30:ARG:NH1	62:28:201:HOH:O	2.36	0.56
32:2a:148:G:H2'	32:2a:149:A:C8	2.40	0.56
32:2a:253:U:H2'	32:2a:254:G:H8	1.69	0.56
32:2a:448:A:OP2	32:2a:485:G:N2	2.34	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:664:G:OP1	49:2r:64:ARG:NE	2.25	0.56
32:2a:901:A:O2'	32:2a:1513:A:OP1	2.18	0.56
33:2b:105:PHE:O	33:2b:108:ILE:N	2.35	0.56
33:2b:155:LEU:HD11	33:2b:159:PRO:HB3	1.87	0.56
37:2f:97:PHE:HD2	49:2r:31:LEU:HD11	1.70	0.56
42:2k:48:ILE:HD11	42:2k:64:ALA:HA	1.87	0.56
54:2w:29:G:H2'	54:2w:30:G:H8	1.70	0.56
54:2w:72:C:H2'	54:2w:73:A:C8	2.40	0.56
56:2y:41:C:H2'	56:2y:42:C:C6	2.40	0.56
1:1A:338:G:OP2	62:1A:4281:HOH:O	2.18	0.56
1:1A:396:G:H1'	23:11:42:GLN:HB3	1.86	0.56
1:1A:1650:G:OP2	62:1A:4280:HOH:O	2.18	0.56
8:1I:93:THR:H	8:1I:96:ASP:HB2	1.71	0.56
33:1b:163:PHE:CD1	33:1b:185:ILE:HG13	2.40	0.56
34:1c:6:HIS:HD2	34:1c:8:ILE:H	1.52	0.56
1:2A:355:G:H2'	1:2A:356:G:C8	2.41	0.56
1:2A:443:A:C6	5:2F:45:ARG:HD2	2.40	0.56
21:2Z:55:HIS:HE1	21:2Z:135:GLU:HB2	1.69	0.56
32:2a:292:G:O2'	32:2a:608:A:N6	2.38	0.56
32:2a:792:A:O2'	32:2a:794:A:N7	2.27	0.56
33:2b:31:TYR:HE2	33:2b:200:ILE:HG21	1.69	0.56
35:2d:107:ARG:HH12	35:2d:194:LEU:HD23	1.69	0.56
38:2g:90:GLU:OE1	38:2g:90:GLU:N	2.35	0.56
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.41	0.56
1:1A:1173:G:OP2	1:1A:1173:G:H2'	2.06	0.56
1:1A:2035:G:H4'	1:1A:2036:C:OP2	2.04	0.56
20:1Y:20:TYR:CE2	20:1Y:43:ASN:HA	2.41	0.56
50:1s:51:VAL:HB	50:1s:75:ALA:HB2	1.86	0.56
51:1t:10:LEU:HD12	51:1t:12:ALA:H	1.70	0.56
1:2A:2138:C:H42	1:2A:2153:G:H1	1.54	0.56
2:2B:89:G:H2'	2:2B:90:A:C8	2.40	0.56
17:2V:72:VAL:HB	17:2V:85:LYS:HB3	1.88	0.56
32:2a:1030(A):G:N2	32:2a:1030(D):A:C8	2.74	0.56
32:2a:1144:G:N2	32:2a:1146:A:H62	2.04	0.56
32:2a:1318:A:H5''	50:2s:3:ARG:NH2	2.21	0.56
39:2h:9:MET:HG3	39:2h:26:VAL:HG11	1.87	0.56
51:2t:79:ARG:O	51:2t:83:ARG:HG3	2.05	0.56
1:1A:557:U:H2'	1:1A:558:G:C8	2.40	0.56
1:1A:2228:G:P	3:1D:263:ARG:HH12	2.29	0.56
4:1E:13:ARG:HD2	4:1E:20:ALA:HB1	1.88	0.56
9:1N:30:ILE:HG23	9:1N:52:VAL:HG11	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:1U:50:ARG:HG2	16:1U:53:ARG:NH2	2.20	0.56
21:1Z:52:SER:C	21:1Z:54:HIS:H	2.12	0.56
32:1a:132:C:H2'	32:1a:133:U:C6	2.41	0.56
32:1a:1006:C:H2'	32:1a:1007:C:C6	2.41	0.56
45:1n:3:ARG:HH21	45:1n:3:ARG:HA	1.71	0.56
1:2A:384:U:H2'	1:2A:385:C:H6	1.70	0.56
1:2A:2472:G:O2'	1:2A:2478:A:N6	2.37	0.56
4:2E:173:VAL:N	4:2E:183:LEU:O	2.35	0.56
6:2G:124:SER:O	6:2G:124:SER:OG	2.23	0.56
10:2O:76:ALA:O	15:2T:74:ARG:HG3	2.06	0.56
15:2T:26:ASP:O	15:2T:49:VAL:HG23	2.05	0.56
32:2a:921:U:O2'	36:2e:19:MET:O	2.21	0.56
32:2a:1466:C:H2'	32:2a:1467:G:O4'	2.06	0.56
1:1A:583:G:OP2	16:1U:10:ARG:NH1	2.33	0.56
1:1A:686:G:N2	1:1A:788:A:H61	2.04	0.56
3:1D:19:ALA:HB3	3:1D:21:PHE:CE1	2.41	0.56
16:1U:50:ARG:HG2	16:1U:53:ARG:HH22	1.70	0.56
1:2A:980:A:N3	1:2A:2037:G:O2'	2.37	0.56
1:2A:1003:G:N2	1:2A:1153:C:C2	2.73	0.56
1:2A:2274:A:O2'	1:2A:2276:G:OP1	2.20	0.56
32:2a:184:G:H2'	32:2a:185:A:H8	1.71	0.56
32:2a:708:C:H2'	32:2a:709:G:H8	1.69	0.56
32:2a:828:A:N6	32:2a:858:G:O2'	2.37	0.56
32:2a:1002:G:C2	32:2a:1003:G:H1'	2.40	0.56
32:2a:1439:C:H42	32:2a:1462:G:H1	1.54	0.56
44:2m:97:PRO:HA	44:2m:110:ARG:HD3	1.87	0.56
1:1A:1866:C:H2'	1:1A:1876:A:O4'	2.06	0.56
1:1A:2069:G:O2'	62:1A:4228:HOH:O	2.04	0.56
8:1I:92:VAL:HG22	8:1I:120:ILE:HD12	1.86	0.56
10:1O:49:ARG:HH12	32:1a:1423:G:P	2.29	0.56
44:1m:34:LEU:HD13	44:1m:41:PRO:HA	1.87	0.56
1:2A:458:G:O2'	29:27:39:ARG:HD3	2.06	0.56
1:2A:1406:U:H2'	1:2A:1407:C:H6	1.69	0.56
1:2A:2035:G:OP1	62:2A:3977:HOH:O	2.18	0.56
1:2A:2320:A:N3	1:2A:2320:A:H2'	2.20	0.56
7:2H:76:VAL:O	7:2H:80:SER:OG	2.24	0.56
24:22:13:ALA:HA	24:22:16:LEU:HD12	1.87	0.56
48:2q:13:ASP:OD1	48:2q:14:LYS:NZ	2.31	0.56
1:1A:84:A:H5''	20:1Y:8:LYS:HG2	1.88	0.56
1:1A:459:U:H5''	29:17:40:TRP:CD2	2.41	0.56
1:1A:1268:A:H2'	1:1A:1269:A:O4'	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2124:G:H2'	1:1A:2125:G:O4'	2.06	0.56
8:1I:132:PRO:HG3	8:1I:138:ILE:HD11	1.88	0.56
32:1a:1315:U:H2'	32:1a:1316:G:O4'	2.05	0.56
43:1I:113:ARG:NE	43:1I:115:LYS:O	2.39	0.56
1:2A:2353:G:H5''	22:20:32:ARG:NH1	2.19	0.56
1:2A:2896:C:H2'	1:2A:2897:U:C6	2.41	0.56
3:2D:106:ILE:O	3:2D:108:PRO:HD3	2.06	0.56
12:2Q:109:VAL:HG22	12:2Q:113:GLN:CD	2.31	0.56
32:2a:427:U:OP1	35:2d:13:ARG:NH1	2.34	0.56
1:1A:27:G:N2	1:1A:512:G:H1'	2.20	0.56
1:1A:124:G:OP1	1:1A:1376:C:O2'	2.17	0.56
9:1N:12:ARG:HB3	9:1N:50:ASP:OD1	2.05	0.56
11:1P:85:LEU:O	11:1P:88:LEU:HB2	2.06	0.56
24:12:64:LEU:HD11	24:12:68:ARG:HE	1.68	0.56
32:1a:841:U:P	32:1a:841:U:H6	2.28	0.56
32:1a:983:A:H5'	32:1a:984:C:OP2	2.06	0.56
32:1a:1412:C:H2'	32:1a:1413:A:C8	2.40	0.56
41:1j:27:ALA:HA	41:1j:81:THR:HG21	1.88	0.56
48:1q:27:PHE:CE1	48:1q:36:ILE:HD11	2.41	0.56
11:2P:120:ALA:HB1	11:2P:138:LEU:HA	1.88	0.56
1:1A:1028:A:N6	1:1A:1125:G:H2'	2.21	0.55
1:1A:1056:G:H5''	1:1A:1057:A:O4'	2.05	0.55
1:1A:1087:G:H2'	1:1A:1089:G:O4'	2.06	0.55
1:1A:1170:G:H8	1:1A:1170:G:H5''	1.71	0.55
11:1P:89:ALA:HA	11:1P:121:LYS:HD3	1.87	0.55
32:1a:618:C:H5'	32:1a:619:U:H5''	1.88	0.55
32:1a:1260:C:OP1	32:1a:1284:C:O2'	2.20	0.55
36:1e:105:VAL:HB	36:1e:106:PRO:HD3	1.88	0.55
36:1e:127:ASN:O	36:1e:131:ILE:HG12	2.07	0.55
8:2I:38:LEU:HB2	8:2I:40:THR:HG22	1.86	0.55
32:2a:176:C:H2'	32:2a:177:C:H6	1.72	0.55
23:11:70:VAL:O	23:11:73:LEU:N	2.39	0.55
32:1a:1291:G:H4'	40:1i:39:GLY:HA3	1.89	0.55
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.41	0.55
34:1c:17:ASP:CG	34:1c:21:ARG:HH21	2.14	0.55
1:2A:127:A:H5''	1:2A:128:C:C6	2.41	0.55
1:2A:621:A:OP2	11:2P:108:LYS:NZ	2.39	0.55
1:2A:1141:U:H6	9:2N:63:THR:HG1	1.53	0.55
1:2A:1434:A:H61	1:2A:1558:A:H62	1.54	0.55
3:2D:146:GLU:HG2	3:2D:152:GLY:C	2.31	0.55
12:2Q:48:GLU:O	12:2Q:52:VAL:HG23	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:2X:72:LYS:NZ	19:2X:75:ASP:OD1	2.34	0.55
32:2a:420:U:H2'	32:2a:422:C:C5	2.41	0.55
32:2a:1002:G:N1	32:2a:1003:G:H8	2.04	0.55
32:2a:1076:C:H2'	32:2a:1077:G:H5''	1.88	0.55
38:2g:35:LYS:HE3	38:2g:38:LEU:HD23	1.87	0.55
1:1A:2844:G:O6	62:1A:4273:HOH:O	2.17	0.55
2:1B:78:A:H2'	2:1B:79:C:O4'	2.06	0.55
32:1a:381:C:H2'	32:1a:382:A:O4'	2.06	0.55
46:1o:26:GLU:HG3	46:1o:81:LEU:HD13	1.89	0.55
51:1t:92:LEU:O	51:1t:96:GLY:HA2	2.06	0.55
1:2A:668:G:H5'	1:2A:669:G:OP2	2.05	0.55
5:2F:183:VAL:O	5:2F:187:VAL:HG23	2.06	0.55
6:2G:64:THR:HB	6:2G:94:LEU:HD21	1.88	0.55
12:2Q:137:TYR:CE1	21:2Z:83:PRO:HG3	2.42	0.55
16:2U:66:ASN:O	16:2U:70:ARG:HG3	2.07	0.55
21:2Z:106:GLY:HA3	21:2Z:141:VAL:HB	1.89	0.55
48:2q:95:TYR:HA	48:2q:98:LEU:HD12	1.88	0.55
51:2t:16:HIS:O	51:2t:19:SER:OG	2.22	0.55
6:1G:77:ILE:HD13	6:1G:80:PHE:CD2	2.41	0.55
9:1N:108:PRO:O	9:1N:113:GLY:HA3	2.06	0.55
32:1a:123:C:OP1	32:1a:311:C:O2'	2.19	0.55
32:1a:371:G:H1	32:1a:390:C:H42	1.52	0.55
38:1g:140:ASP:OD1	56:1y:41:C:O2'	2.24	0.55
51:1t:44:ALA:HB2	51:1t:88:VAL:HG13	1.88	0.55
56:1y:1:G:H1	56:1y:72:C:H42	1.54	0.55
1:2A:632:A:H2'	1:2A:633:A:C8	2.42	0.55
1:2A:1592:C:H2'	1:2A:1593:G:H8	1.71	0.55
1:2A:2774:C:H2'	1:2A:2775:A:O4'	2.06	0.55
16:2U:91:ASP:O	16:2U:95:LEU:HB2	2.06	0.55
27:25:40:LYS:NZ	27:25:41:PRO:O	2.39	0.55
32:2a:188:C:H2'	32:2a:189:G:O4'	2.06	0.55
32:2a:443:C:H2'	32:2a:444:C:H6	1.71	0.55
32:2a:737:A:H2'	32:2a:738:C:H6	1.70	0.55
32:2a:1020:U:H2'	32:2a:1021:G:C8	2.42	0.55
32:2a:1074:G:H4'	33:2b:103:THR:O	2.06	0.55
32:2a:1260:C:P	32:2a:1284:C:H4'	2.46	0.55
32:2a:1349:A:H2'	32:2a:1350:A:C8	2.42	0.55
43:2l:24:VAL:HG12	43:2l:98:TYR:CE1	2.41	0.55
1:1A:2567:G:H2'	1:1A:2568:C:C6	2.41	0.55
6:1G:166:ASP:O	6:1G:169:ALA:N	2.38	0.55
32:1a:737:A:H2'	32:1a:738:C:H6	1.71	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:157:ARG:HG2	33:1b:158:LEU:H	1.71	0.55
34:1c:8:ILE:HD12	34:1c:16:ARG:HG3	1.87	0.55
1:2A:925:C:H2'	1:2A:926:A:H8	1.71	0.55
3:2D:127:VAL:HG22	3:2D:194:GLY:HA3	1.88	0.55
5:2F:14:PRO:HD2	5:2F:127:GLU:OE1	2.06	0.55
7:2H:88:LEU:N	7:2H:163:TYR:O	2.35	0.55
40:2i:88:TYR:HD2	40:2i:89:ASN:HB2	1.72	0.55
1:1A:530:G:N1	1:1A:2023:G:OP1	2.30	0.55
7:1H:30:LYS:HB2	7:1H:79:VAL:HA	1.87	0.55
21:1Z:72:ARG:NH2	21:1Z:97:GLU:O	2.40	0.55
27:15:48:GLU:O	27:15:60:VAL:HG11	2.05	0.55
32:1a:1329:A:H5''	44:1m:26:GLY:H	1.71	0.55
33:1b:16:HIS:HB3	33:1b:210:SER:HB2	1.88	0.55
48:1q:29:HIS:HB2	48:1q:36:ILE:HD13	1.88	0.55
1:2A:221:A:N1	1:2A:265:A:O2'	2.40	0.55
1:2A:995:C:O2	9:2N:3:THR:OG1	2.23	0.55
1:2A:1822:G:O6	62:2A:3974:HOH:O	2.16	0.55
1:2A:2506:U:H1'	54:2w:76:F3N:HD2	1.87	0.55
1:2A:2751:G:H8	7:2H:2:SER:N	2.05	0.55
10:2O:97:ARG:NH1	32:2a:339:C:OP2	2.32	0.55
14:2S:14:VAL:O	14:2S:17:ARG:HB3	2.06	0.55
32:2a:381:C:H2'	32:2a:382:A:O4'	2.07	0.55
36:2e:122:GLU:OE1	36:2e:131:ILE:HG13	2.07	0.55
47:2p:4:ILE:HG12	47:2p:21:VAL:HG12	1.88	0.55
1:1A:1012:U:C5	9:1N:28:THR:HG21	2.41	0.55
1:1A:2059:A:O2'	5:1F:69:HIS:HD2	1.90	0.55
1:1A:2257:U:O2'	1:1A:2258:C:H5'	2.06	0.55
1:1A:2487:G:O6	62:1A:4283:HOH:O	2.18	0.55
1:1A:2703:C:H2'	1:1A:2704:C:H6	1.71	0.55
2:1B:21:G:H2'	2:1B:22:U:H6	1.71	0.55
10:1O:15:GLY:HA2	10:1O:47:ILE:HD11	1.89	0.55
34:1c:148:GLY:HA3	34:1c:172:ARG:O	2.06	0.55
49:1r:32:ARG:HA	49:1r:69:THR:HG21	1.89	0.55
3:2D:108:PRO:HB3	3:2D:143:HIS:HE1	1.71	0.55
6:2G:23:PHE:HB2	6:2G:25:TYR:CE2	2.41	0.55
23:21:56:GLN:HE21	23:21:87:PRO:CG	2.18	0.55
32:2a:864:A:H5'	36:2e:86:ALA:HB2	1.88	0.55
32:2a:1030(A):G:N1	32:2a:1030(D):A:OP2	2.38	0.55
32:2a:1049:U:C5	32:2a:1201:A:H5'	2.42	0.55
32:2a:1277:C:C2'	32:2a:1279:A:H8	2.20	0.55
32:2a:1401:G:OP1	53:2v:18:G:O2'	2.16	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:2m:29:ARG:HD3	44:2m:64:TRP:CE2	2.42	0.55
46:2o:29:VAL:O	46:2o:33:THR:OG1	2.23	0.55
1:1A:2262:U:OP1	1:1A:2387:U:O2'	2.23	0.55
1:1A:2322:A:N6	62:1A:4445:HOH:O	2.39	0.55
1:1A:2693:A:H2'	1:1A:2694:G:H8	1.72	0.55
32:1a:403:C:OP1	35:1d:137:SER:OG	2.18	0.55
32:1a:1318:A:H5''	50:1s:3:ARG:NH1	2.22	0.55
35:1d:112:VAL:H	35:1d:116:GLN:NE2	2.04	0.55
37:1f:100:ASN:C	49:1r:28:GLU:HG3	2.32	0.55
1:2A:8:A:H2'	1:2A:9:U:H6	1.71	0.55
1:2A:583:G:OP2	16:2U:10:ARG:NH1	2.40	0.55
1:2A:2303:G:O2'	6:2G:132:ASN:HB2	2.06	0.55
1:2A:2849:U:OP2	15:2T:95:ARG:NH1	2.39	0.55
3:2D:121:PRO:HB3	3:2D:135:PHE:CE2	2.42	0.55
5:2F:89:VAL:HG12	5:2F:90:PHE:CD2	2.41	0.55
26:24:45:GLY:C	26:24:47:GLN:H	2.14	0.55
32:2a:1216:G:OP1	45:2n:2:ALA:HA	2.06	0.55
1:1A:1616:A:H4'	1:1A:1617:C:OP2	2.06	0.55
1:1A:2628:C:H1'	1:1A:2781:A:H2'	1.89	0.55
3:1D:9:TYR:CD1	3:1D:10:THR:HG23	2.42	0.55
5:1F:184:TYR:O	5:1F:188:ARG:HG3	2.06	0.55
34:1c:150:LYS:HG3	34:1c:169:ALA:HB2	1.88	0.55
54:1w:13:C:H2'	54:1w:14:A:H5''	1.87	0.55
1:2A:185:U:H2'	1:2A:186:G:C8	2.42	0.55
1:2A:1034:G:O6	62:2A:3984:HOH:O	2.18	0.55
1:2A:2123:G:H2'	1:2A:2124:G:C8	2.42	0.55
1:2A:2383:G:OP2	30:28:37:SER:HB2	2.07	0.55
1:2A:2592:G:OP1	62:2A:3983:HOH:O	2.18	0.55
21:2Z:25:PRO:HD2	21:2Z:84:GLU:O	2.07	0.55
34:2c:40:ARG:O	34:2c:44:GLU:N	2.30	0.55
1:1A:667:U:O2	30:18:2:PRO:HD2	2.06	0.55
1:1A:1058:G:N2	1:1A:1080:C:N3	2.50	0.55
1:1A:2365:G:O6	30:18:39:LYS:HE2	2.07	0.55
32:1a:458:C:H42	32:1a:473:G:H1	1.53	0.55
32:1a:1391:U:O2'	32:1a:1532:U:OP1	2.21	0.55
56:1y:72:C:H2'	56:1y:73:A:O4'	2.05	0.55
1:2A:903:C:H2'	1:2A:904:C:C6	2.42	0.55
1:2A:2019:A:N7	27:25:9:LYS:HE2	2.22	0.55
1:2A:2051:A:H5'	1:2A:2578:G:O4'	2.06	0.55
1:2A:2419:U:H2'	1:2A:2420:C:C6	2.41	0.55
8:2I:82:ARG:H	8:2I:82:ARG:NH1	2.05	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:50:GLU:O	33:2b:54:THR:N	2.24	0.55
33:2b:111:ARG:HH11	33:2b:114:ARG:HB2	1.71	0.55
33:2b:194:PRO:O	33:2b:196:LEU:N	2.40	0.55
43:2l:28:LYS:HG3	43:2l:62:SER:HB2	1.88	0.55
1:1A:271(H):G:H2'	1:1A:271(I):G:C8	2.42	0.54
1:1A:1287:A:C8	13:1R:104:ARG:HD3	2.38	0.54
1:1A:2820:A:OP2	1:1A:2821:A:N6	2.36	0.54
9:1N:15:LEU:HD12	9:1N:16:ILE:H	1.72	0.54
10:1O:10:VAL:HG11	10:1O:16:ALA:HB3	1.88	0.54
41:1j:49:VAL:CG2	45:1n:41:ARG:HB2	2.37	0.54
49:1r:31:LEU:HD23	49:1r:31:LEU:H	1.71	0.54
1:2A:1740:G:H2'	1:2A:1740:G:N3	2.22	0.54
1:2A:2698:U:H2'	1:2A:2699:C:C6	2.42	0.54
2:2B:30:C:H5	14:2S:32:LEU:HD13	1.72	0.54
7:2H:38:SER:HB3	7:2H:41:MET:HG3	1.89	0.54
7:2H:97:ARG:HG2	7:2H:104:GLU:HB3	1.90	0.54
12:2Q:139:GLU:OE2	21:2Z:122:ARG:HD3	2.07	0.54
32:2a:837:G:H1	32:2a:849:C:N4	2.00	0.54
41:2j:64:GLU:HG2	45:2n:59:ALA:HB2	1.88	0.54
56:2y:8:4SU:O2'	56:2y:21:A:N1	2.39	0.54
56:2y:36:A:H2'	56:2y:37:MIA:O4'	2.07	0.54
1:1A:1112:G:C6	1:1A:1113:U:C4	2.95	0.54
1:1A:2869:G:H2'	1:1A:2870:C:O4'	2.06	0.54
4:1E:40:GLU:CD	4:1E:40:GLU:H	2.15	0.54
32:1a:179:A:H2'	32:1a:180:U:C6	2.42	0.54
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.23	0.54
37:1f:10:LEU:HD23	37:1f:61:LEU:HD13	1.89	0.54
37:1f:36:ARG:HB3	37:1f:36:ARG:CZ	2.36	0.54
40:1i:65:VAL:HB	40:1i:73:GLN:HG2	1.89	0.54
1:2A:2012:G:H4'	18:2W:96:ILE:HD13	1.88	0.54
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.42	0.54
1:2A:2557:G:H2'	1:2A:2558:C:C6	2.42	0.54
14:2S:10:ARG:O	14:2S:14:VAL:HG23	2.08	0.54
15:2T:29:ARG:HB3	15:2T:87:ASP:HB2	1.88	0.54
26:24:1:MET:HE2	26:24:6:HIS:CE1	2.43	0.54
26:24:44:THR:O	26:24:46:GLN:N	2.33	0.54
32:2a:288:A:H2'	32:2a:289:G:H4'	1.88	0.54
33:2b:163:PHE:HA	33:2b:185:ILE:O	2.07	0.54
42:2k:110:ASP:HB2	49:2r:85:LEU:HD22	1.89	0.54
54:2w:29:G:H2'	54:2w:30:G:C8	2.42	0.54
1:1A:880:G:H8	1:1A:880:G:OP2	1.89	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:992:C:OP1	16:1U:47:TYR:OH	2.15	0.54
1:1A:1012:U:H5	9:1N:28:THR:HG21	1.70	0.54
1:1A:1120:G:O6	62:1A:4262:HOH:O	2.15	0.54
1:1A:2439:A:H5'	1:1A:2439:A:C8	2.43	0.54
7:1H:20:ALA:HB3	7:1H:23:ARG:HB2	1.89	0.54
11:1P:95:VAL:HA	11:1P:99:LEU:HD23	1.88	0.54
32:1a:1456:G:O3'	51:1t:39:LYS:NZ	2.40	0.54
32:1a:1529:G:H4'	32:1a:1530:G:OP2	2.07	0.54
32:1a:1530:G:H4'	32:1a:1530:G:OP1	2.08	0.54
1:2A:2888:C:H2'	1:2A:2889:C:H6	1.70	0.54
3:2D:133:LEU:HB3	3:2D:173:VAL:HG11	1.89	0.54
13:2R:74:LYS:HG2	13:2R:77:ARG:NH2	2.21	0.54
32:2a:683:G:H2'	32:2a:684:A:H8	1.71	0.54
32:2a:1026:G:N2	32:2a:1027:C:O4'	2.39	0.54
36:2e:145:LYS:HA	36:2e:148:VAL:HB	1.89	0.54
37:2f:96:PRO:HB3	49:2r:30:ASP:OD2	2.08	0.54
51:2t:77:ALA:O	51:2t:81:LYS:HG3	2.07	0.54
1:1A:686:G:OP1	29:17:11:LYS:NZ	2.41	0.54
1:1A:717:G:H2'	1:1A:718:A:O4'	2.08	0.54
1:1A:1509(A):A:H2'	1:1A:1509(B):A:O4'	2.07	0.54
1:1A:2365:G:H4'	22:10:60:PHE:CZ	2.41	0.54
12:1Q:89:ASN:HB2	55:1x:1:C:C4	2.41	0.54
32:1a:1432:G:N7	62:1a:1943:HOH:O	2.34	0.54
35:1d:173:TRP:N	35:1d:173:TRP:CD1	2.76	0.54
38:1g:16:LEU:HD21	40:1i:42:ARG:HG2	1.88	0.54
41:1j:29:ARG:O	41:1j:31:GLY:N	2.40	0.54
51:1t:39:LYS:HG2	51:1t:55:ILE:HG21	1.90	0.54
1:2A:643:A:N1	1:2A:2369:A:O2'	2.40	0.54
1:2A:2024:G:H2'	1:2A:2025:C:H6	1.71	0.54
1:2A:2280:G:N7	62:2A:4081:HOH:O	2.33	0.54
2:2B:41:U:H5	6:2G:70:VAL:N	2.06	0.54
5:2F:185:ASP:HA	5:2F:188:ARG:HD3	1.90	0.54
21:2Z:40:ASP:OD2	21:2Z:43:GLU:HG3	2.06	0.54
35:2d:170:VAL:HG11	35:2d:176:LEU:HD22	1.90	0.54
35:2d:176:LEU:HD12	35:2d:182:LYS:O	2.08	0.54
37:2f:99:ALA:HB3	49:2r:29:PHE:CZ	2.42	0.54
1:1A:960:A:C8	1:1A:962:G:C8	2.95	0.54
1:1A:2105:C:H2'	1:1A:2106:G:C8	2.43	0.54
1:1A:2378:A:H8	1:1A:2378:A:O5'	1.90	0.54
4:1E:111:ARG:HG3	13:1R:1:MET:SD	2.48	0.54
6:1G:15:VAL:HG22	6:1G:175:LEU:HB3	1.89	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:1G:124:SER:HB2	6:1G:131:TYR:CE1	2.42	0.54
7:1H:149:ARG:NH1	7:1H:167:GLU:OE1	2.40	0.54
22:10:72:ARG:HB2	22:10:75:LEU:HB2	1.90	0.54
33:1b:16:HIS:HB2	33:1b:204:ASN:HB3	1.90	0.54
33:1b:233:SER:HB2	33:1b:234:PRO:HD2	1.90	0.54
36:1e:85:GLY:C	36:1e:87:SER:H	2.15	0.54
38:1g:113:GLU:HG2	38:1g:119:ARG:HG2	1.90	0.54
49:1r:26:LEU:HD11	49:1r:42:ARG:HD3	1.88	0.54
54:1w:2:C:H2'	54:1w:3:C:C6	2.43	0.54
1:2A:863:A:H2'	1:2A:864:G:H8	1.71	0.54
1:2A:1152:C:H2'	1:2A:1153:C:H6	1.72	0.54
1:2A:2024:G:H2'	1:2A:2025:C:C6	2.43	0.54
1:2A:2526:G:H5'	1:2A:2742:C:O2'	2.08	0.54
1:2A:2659:G:O2'	1:2A:2661:G:N7	2.29	0.54
2:2B:88:C:H2'	2:2B:89:G:O4'	2.07	0.54
22:20:70:GLN:NE2	22:20:72:ARG:HD2	2.14	0.54
32:2a:1014:A:H2	32:2a:1219:U:H1'	1.72	0.54
32:2a:1452:C:O2'	32:2a:1456:G:H5''	2.08	0.54
44:2m:28:ALA:C	44:2m:30:ALA:H	2.14	0.54
44:2m:95:GLY:O	44:2m:110:ARG:HG2	2.08	0.54
1:1A:1007:C:OP1	9:1N:37:LYS:HE2	2.06	0.54
1:1A:1058:G:N2	1:1A:1081:U:O2	2.41	0.54
1:1A:2492:U:H2'	1:1A:2493:U:C6	2.43	0.54
16:1U:8:VAL:HG23	16:1U:11:ARG:NH2	2.18	0.54
19:1X:34:ALA:O	19:1X:77:LYS:NZ	2.40	0.54
32:1a:976:G:O2'	62:1a:1904:HOH:O	2.03	0.54
32:1a:1180:A:OP1	40:1i:103:THR:HB	2.07	0.54
34:1c:114:PRO:O	34:1c:118:GLN:NE2	2.38	0.54
36:1e:84:PHE:HB3	36:1e:134:ALA:HB2	1.89	0.54
38:1g:78:ARG:HE	38:1g:79:ARG:HH11	1.56	0.54
50:1s:27:GLU:HG3	50:1s:28:LYS:HE3	1.89	0.54
54:1w:3:C:H5	62:1w:209:HOH:O	1.91	0.54
1:2A:450:G:OP1	62:2A:3978:HOH:O	2.18	0.54
1:2A:1139:G:O3'	9:2N:24:GLY:HA3	2.07	0.54
1:2A:2158:A:H2	1:2A:2159:G:C6	2.25	0.54
4:2E:5:LEU:HD11	4:2E:79:ARG:HB2	1.90	0.54
16:2U:112:ARG:CZ	17:2V:47:VAL:HB	2.38	0.54
21:2Z:50:GLN:OE1	21:2Z:50:GLN:N	2.41	0.54
32:2a:1277:C:H2'	32:2a:1279:A:H8	1.72	0.54
39:2h:116:LYS:HG3	39:2h:129:VAL:HG11	1.88	0.54
44:2m:28:ALA:O	44:2m:30:ALA:N	2.39	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:2y:15:G:N2	56:2y:48:C:H42	2.05	0.54
1:1A:1026:U:OP1	62:1A:4209:HOH:O	2.19	0.54
1:1A:2532:G:O2'	1:1A:2657:A:N1	2.39	0.54
1:1A:2552:OMU:OP2	62:1A:4277:HOH:O	2.17	0.54
24:12:1:MET:N	24:12:52:ASP:OD2	2.28	0.54
32:1a:204:U:P	32:1a:204:U:H3'	2.48	0.54
32:1a:445:G:H1	32:1a:489:C:H42	1.56	0.54
32:1a:976:G:OP2	32:1a:1358:U:O2'	2.24	0.54
34:1c:16:ARG:HH21	34:1c:54:ARG:NH1	2.04	0.54
1:2A:2104:G:H1	1:2A:2185:C:H42	1.55	0.54
3:2D:118:VAL:N	3:2D:129:ASN:OD1	2.36	0.54
21:2Z:4:ARG:NH2	21:2Z:66:SER:OG	2.41	0.54
32:2a:673:G:H5''	37:2f:87:ARG:CZ	2.38	0.54
32:2a:1123:A:H4'	41:2j:37:PRO:HD2	1.88	0.54
32:2a:1513:A:H2'	32:2a:1514:C:C6	2.43	0.54
40:2i:6:GLY:HA3	40:2i:80:GLY:O	2.08	0.54
1:1A:218:A:C2	1:1A:235:U:H4'	2.42	0.54
1:1A:969:U:H2'	1:1A:970:C:C6	2.42	0.54
1:1A:1139:G:OP1	9:1N:101:HIS:ND1	2.40	0.54
1:1A:1417:C:H2'	1:1A:1418:G:O4'	2.08	0.54
1:1A:1798:U:H5'	3:1D:259:THR:CG2	2.38	0.54
1:1A:1878:G:H2'	1:1A:1879:C:H6	1.72	0.54
6:1G:43:LEU:C	6:1G:45:GLU:H	2.16	0.54
7:1H:121:ILE:HD11	7:1H:140:LYS:HG2	1.89	0.54
8:1I:130:TYR:HB3	8:1I:138:ILE:HB	1.90	0.54
32:1a:1157:A:H4'	32:1a:1158:C:O5'	2.08	0.54
33:1b:74:LYS:HD2	33:1b:166:ASP:HB2	1.89	0.54
34:1c:6:HIS:CD2	34:1c:8:ILE:H	2.25	0.54
1:2A:1225:G:OP1	17:2V:69:LYS:NZ	2.36	0.54
1:2A:1803:A:O2'	3:2D:259:THR:HG21	2.07	0.54
2:2B:7:G:N2	14:2S:38:GLN:HE22	1.99	0.54
5:2F:197:ASP:O	5:2F:200:GLU:HB3	2.08	0.54
10:2O:49:ARG:HH12	32:2a:1423:G:P	2.30	0.54
12:2Q:110:THR:HB	12:2Q:113:GLN:H	1.73	0.54
30:28:6:THR:HG22	30:28:63:PRO:HD2	1.89	0.54
32:2a:51:A:H61	32:2a:314:C:H1'	1.72	0.54
32:2a:781:A:OP1	32:2a:1523:G:H5'	2.08	0.54
34:2c:130:VAL:O	34:2c:134:ILE:HG12	2.08	0.54
39:2h:12:ARG:NH1	39:2h:25:ASP:O	2.40	0.54
43:2l:34:ARG:O	43:2l:61:THR:HG23	2.07	0.54
1:1A:84:A:C5'	20:1Y:8:LYS:HG2	2.38	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2561:A:H2'	1:1A:2562:U:O4'	2.08	0.54
32:1a:56:U:H2'	32:1a:57:G:C8	2.43	0.54
32:1a:237:C:H5''	48:1q:25:ARG:NE	2.23	0.54
33:1b:60:ASP:HA	33:1b:63:MET:HE3	1.89	0.54
38:1g:89:MET:SD	38:1g:155:ARG:HB2	2.48	0.54
56:1y:60:U:O2'	56:1y:61:C:H5'	2.08	0.54
1:2A:35:G:H1'	1:2A:454:A:C4	2.43	0.54
1:2A:271(D):G:H1	1:2A:271(T):C:H42	1.55	0.54
1:2A:1568:G:N7	62:2A:4077:HOH:O	2.33	0.54
1:2A:1667:G:O2'	1:2A:1991:U:O4	2.17	0.54
1:2A:1849:G:H2'	1:2A:1850:G:C8	2.43	0.54
1:2A:1999:C:H2'	1:2A:2000:G:O4'	2.08	0.54
1:2A:2286:A:H4'	1:2A:2287:A:O5'	2.07	0.54
5:2F:109:GLY:HA2	5:2F:112:MET:HE3	1.89	0.54
7:2H:35:VAL:HG13	7:2H:71:LEU:HD13	1.89	0.54
13:2R:33:ARG:HB2	13:2R:115:GLU:HB3	1.89	0.54
32:2a:673:G:O3'	37:2f:87:ARG:NH2	2.40	0.54
32:2a:830:G:C6	32:2a:831:U:C4	2.96	0.54
36:2e:106:PRO:O	36:2e:110:LEU:HG	2.08	0.54
1:1A:1051:G:H2'	1:1A:1052:C:O4'	2.07	0.54
1:1A:1652:A:N6	13:1R:11:ASN:OD1	2.34	0.54
1:1A:2108:C:H2'	1:1A:2109:U:C6	2.43	0.54
31:19:7:VAL:HG12	31:19:34:GLN:HB3	1.88	0.54
32:1a:250:A:H4'	32:1a:251:G:O5'	2.08	0.54
32:1a:1241:G:H2'	32:1a:1242:C:C6	2.42	0.54
54:1w:3:C:N3	54:1w:70:G:N2	2.50	0.54
1:2A:1012:U:O4	9:2N:28:THR:HG21	2.07	0.54
1:2A:2287:A:C8	1:2A:2289:G:C8	2.96	0.54
1:2A:2838:G:C6	1:2A:2839:G:C5	2.96	0.54
3:2D:164:GLN:OE1	3:2D:176:ARG:NH1	2.41	0.54
4:2E:147:PRO:HB2	4:2E:149:ARG:HG2	1.89	0.54
48:2q:22:LEU:HD13	48:2q:41:LYS:HG2	1.89	0.54
1:1A:242:G:C8	30:18:5:LYS:HG2	2.43	0.53
1:1A:1045:A:OP1	1:1A:1045:A:H4'	2.08	0.53
1:1A:2001:A:H2'	1:1A:2002:G:C8	2.43	0.53
1:1A:2693:A:H2'	1:1A:2694:G:C8	2.43	0.53
9:1N:23:LEU:HA	9:1N:60:ILE:HD11	1.90	0.53
11:1P:98:GLU:O	11:1P:101:VAL:HG12	2.08	0.53
12:1Q:1:MET:HG2	12:1Q:44:ALA:HB1	1.91	0.53
13:1R:79:LEU:HD12	13:1R:83:ILE:HB	1.90	0.53
21:1Z:7:ALA:HB2	21:1Z:59:LEU:HD22	1.89	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:62:U:O4	62:1a:1919:HOH:O	2.17	0.53
32:1a:1322:C:OP1	50:1s:78:ARG:NH2	2.39	0.53
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.22	0.53
45:1n:15:LYS:HB3	45:1n:16:PHE:CE2	2.43	0.53
54:1w:20:U:OP1	54:1w:20:U:H4'	2.06	0.53
54:1w:38:A:H2'	54:1w:39:PSU:O4'	2.08	0.53
1:2A:660:G:H5'	5:2F:99:TYR:CE1	2.43	0.53
1:2A:975:C:O2'	62:2A:3943:HOH:O	2.10	0.53
1:2A:2108:C:H2'	1:2A:2109:U:C6	2.43	0.53
12:2Q:57:HIS:C	12:2Q:59:ARG:H	2.15	0.53
38:2g:103:TRP:HH2	38:2g:141:VAL:HG21	1.73	0.53
42:2k:62:GLN:OE1	42:2k:93:GLN:NE2	2.40	0.53
1:1A:676:A:H2	1:1A:2069:G:N3	2.06	0.53
1:1A:1082:U:C2	1:1A:1086:A:N6	2.76	0.53
4:1E:4:ILE:HD12	4:1E:91:VAL:HG12	1.91	0.53
10:1O:7:TYR:HE2	10:1O:20:MET:HE2	1.73	0.53
19:1X:11:PRO:HD3	24:12:37:PHE:CD1	2.43	0.53
32:1a:471:G:H2'	32:1a:472:A:H8	1.74	0.53
32:1a:1030:C:N3	32:1a:1031:G:N2	2.56	0.53
32:1a:1503:A:N3	53:1v:13:A:N6	2.56	0.53
33:1b:21:ARG:O	33:1b:23:ARG:N	2.40	0.53
36:1e:74:GLY:HA3	36:1e:116:THR:HG22	1.89	0.53
39:1h:27:PRO:HG3	39:1h:58:TYR:HE1	1.74	0.53
44:1m:11:ARG:NH1	44:1m:11:ARG:HB3	2.23	0.53
1:2A:118:A:N3	1:2A:178:G:H1'	2.23	0.53
1:2A:996:A:C2	1:2A:997:G:C8	2.96	0.53
1:2A:1818:U:O2'	3:2D:154:LYS:O	2.21	0.53
2:2B:50:G:OP1	14:2S:63:THR:N	2.41	0.53
12:2Q:51:ARG:NH2	54:2w:54:5MU:H5''	2.23	0.53
32:2a:1366:C:H2'	32:2a:1367:C:H6	1.73	0.53
32:2a:1519:MA6:H102	32:2a:1520:G:O2'	2.07	0.53
43:2l:43:VAL:HG12	43:2l:44:THR:H	1.73	0.53
1:1A:586:A:N1	1:1A:809:G:O2'	2.36	0.53
1:1A:1071:G:H1'	1:1A:1089:G:C2'	2.30	0.53
1:1A:1395:A:OP1	62:1A:4204:HOH:O	2.19	0.53
32:1a:1309:G:OP1	44:1m:92:HIS:HE1	1.91	0.53
46:1o:9:GLN:O	46:1o:13:GLN:HG3	2.08	0.53
1:2A:1042:G:H3'	1:2A:1043:C:C6	2.43	0.53
1:2A:1990:C:H2'	1:2A:1991:U:O4'	2.09	0.53
1:2A:2751:G:H4'	7:2H:4:ILE:HD11	1.91	0.53
10:2O:21:CYS:HB2	10:2O:39:ILE:HD12	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:27:24:THR:HG22	29:27:27:GLY:N	2.16	0.53
32:2a:1020:U:H2'	32:2a:1021:G:H8	1.74	0.53
36:2e:61:TYR:HA	36:2e:64:ARG:HD3	1.90	0.53
38:2g:147:ALA:HB1	56:2y:40:C:O3'	2.08	0.53
40:2i:111:ARG:O	40:2i:113:LYS:HE2	2.07	0.53
44:2m:13:LYS:HA	44:2m:44:ARG:HH11	1.74	0.53
45:2n:7:ILE:HG12	45:2n:28:GLY:HA3	1.89	0.53
1:1A:17:G:H2'	1:1A:18:C:C6	2.43	0.53
1:1A:142(A):C:H2'	1:1A:143:G:O4'	2.08	0.53
1:1A:324:A:N6	1:1A:338:G:O2'	2.40	0.53
1:1A:1086:A:O3'	1:1A:1087:G:H8	1.92	0.53
1:1A:1093:G:H3'	1:1A:1094:U:H5''	1.90	0.53
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.44	0.53
1:1A:2031:A:N3	1:1A:2455:G:O2'	2.36	0.53
32:1a:262:A:H2'	32:1a:263:A:C8	2.44	0.53
40:1i:64:THR:CG2	40:1i:66:ARG:HH12	2.20	0.53
1:2A:37:C:H4'	1:2A:451:C:OP1	2.08	0.53
1:2A:212:G:H2'	1:2A:213:A:O4'	2.09	0.53
1:2A:468:G:OP2	29:27:37:LYS:NZ	2.40	0.53
1:2A:724:U:H2'	1:2A:725:G:O4'	2.09	0.53
1:2A:2028:U:H2'	1:2A:2029:G:O4'	2.09	0.53
3:2D:129:ASN:O	3:2D:193:VAL:HG23	2.09	0.53
4:2E:58:ARG:NH1	62:2E:402:HOH:O	2.37	0.53
7:2H:35:VAL:HG22	7:2H:71:LEU:HD22	1.91	0.53
8:2I:4:ILE:HG12	8:2I:18:VAL:HG22	1.89	0.53
12:2Q:2:LEU:HB3	12:2Q:69:PHE:CE1	2.43	0.53
15:2T:62:THR:HA	15:2T:74:ARG:O	2.08	0.53
21:2Z:100:VAL:HG21	21:2Z:134:PRO:HG2	1.89	0.53
21:2Z:121:HIS:N	21:2Z:171:ILE:O	2.41	0.53
32:2a:399:G:H2'	32:2a:400:C:C6	2.43	0.53
32:2a:739:C:O2'	46:2o:42:HIS:ND1	2.36	0.53
32:2a:778:G:H2'	32:2a:779:C:O4'	2.09	0.53
32:2a:960:U:H1'	32:2a:1222:G:O2'	2.08	0.53
32:2a:1205:U:H2'	32:2a:1206:G:H8	1.73	0.53
32:2a:1531:A:H3'	32:2a:1532:U:C6	2.44	0.53
1:1A:2556:C:H2'	1:1A:2557:G:O4'	2.09	0.53
32:1a:38:G:H22	32:1a:397:A:H5''	1.73	0.53
33:1b:77:ALA:O	33:1b:81:VAL:HG22	2.09	0.53
37:1f:12:PRO:HG2	37:1f:13:ASN:ND2	2.24	0.53
44:1m:40:ASN:ND2	44:1m:43:THR:HG23	2.23	0.53
1:2A:236:C:H2'	1:2A:237:C:C6	2.43	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:531:C:OP1	1:2A:561:G:N1	2.41	0.53
1:2A:1141:U:C5	9:2N:64:GLY:HA3	2.43	0.53
1:2A:1315:C:O2'	1:2A:1392:A:N3	2.36	0.53
1:2A:1857:G:C6	1:2A:1858:G:N1	2.77	0.53
1:2A:2344:U:O2'	28:26:36:LEU:HB3	2.08	0.53
1:2A:2483:C:N3	12:2Q:124:LYS:NZ	2.56	0.53
1:2A:2782:G:OP2	62:2A:3980:HOH:O	2.18	0.53
16:2U:43:GLY:HA3	17:2V:73:SER:HB3	1.89	0.53
23:21:48:LYS:HA	23:21:60:PHE:O	2.08	0.53
32:2a:189(D):C:H2'	32:2a:189(E):U:O4'	2.09	0.53
32:2a:1219:U:OP1	45:2n:19:ARG:NH1	2.28	0.53
33:2b:18:GLY:O	33:2b:19:HIS:HB2	2.07	0.53
34:2c:20:SER:OG	34:2c:36:ASP:OD2	2.17	0.53
38:2g:152:ALA:O	38:2g:154:TYR:N	2.41	0.53
40:2i:3:GLN:HG3	40:2i:20:ARG:HG2	1.90	0.53
54:2w:8:4SU:S4	54:2w:14:A:N7	2.82	0.53
1:1A:1138:G:N3	9:1N:106:MET:HE2	2.24	0.53
1:1A:1740:G:H2'	1:1A:1741:A:H8	1.72	0.53
1:1A:2066:C:H5''	62:1A:5312:HOH:O	2.07	0.53
1:1A:2286:A:N6	28:16:23:THR:OG1	2.42	0.53
1:1A:2347:C:H2'	1:1A:2348:U:C6	2.43	0.53
1:1A:2461:C:H2'	1:1A:2462:U:C6	2.44	0.53
5:1F:150:GLY:HA2	5:1F:172:TRP:CD2	2.43	0.53
15:1T:77:PRO:HG2	15:1T:80:SER:HB2	1.91	0.53
22:10:53:MET:HA	22:10:58:THR:O	2.08	0.53
28:16:35:GLU:CD	28:16:50:ARG:HH22	2.14	0.53
32:1a:258:G:H2'	32:1a:259:G:H8	1.73	0.53
32:1a:792:A:H4'	32:1a:793:U:H5''	1.89	0.53
32:1a:865:A:C2	32:1a:918:A:H4'	2.44	0.53
33:1b:162:ILE:O	33:1b:185:ILE:HG12	2.08	0.53
1:2A:94(A):G:O2'	24:22:47:ASN:ND2	2.41	0.53
1:2A:300:A:P	20:2Y:86:ARG:HH22	2.32	0.53
1:2A:2316:C:H2'	1:2A:2317:C:H6	1.73	0.53
3:2D:70:TRP:CE2	3:2D:150:LYS:HD3	2.43	0.53
12:2Q:25:ASP:OD2	21:2Z:78:LYS:HG2	2.08	0.53
13:2R:61:HIS:O	13:2R:65:LEU:HG	2.08	0.53
32:2a:266:G:O3'	48:2q:67:LYS:HB2	2.08	0.53
34:2c:63:ASN:HB3	34:2c:98:ASN:ND2	2.22	0.53
35:2d:173:TRP:O	35:2d:186:LEU:N	2.40	0.53
47:2p:28:ARG:NH1	47:2p:29:ASP:OD1	2.42	0.53
1:1A:819:A:H5'	1:1A:819:A:C8	2.43	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1420:U:HO2'	1:1A:1421:G:P	2.30	0.53
4:1E:29:GLY:HA3	62:1E:403:HOH:O	2.07	0.53
6:1G:41:GLN:NE2	6:1G:153:ARG:HB3	2.24	0.53
8:1I:58:LEU:O	8:1I:61:ARG:N	2.41	0.53
21:1Z:4:ARG:HH21	21:1Z:60:GLU:CG	2.21	0.53
33:1b:118:LEU:HB3	33:1b:142:LEU:HD12	1.91	0.53
43:1l:59:ARG:HD3	43:1l:65:GLU:OE1	2.09	0.53
55:1x:68:C:H2'	55:1x:69:C:C6	2.43	0.53
1:2A:41:C:H2'	1:2A:42:G:C8	2.43	0.53
1:2A:1924:C:H4'	55:2x:13:C:O2'	2.08	0.53
1:2A:2784:C:O2'	4:2E:42:ASP:OD1	2.16	0.53
6:2G:83:ARG:O	6:2G:86:MET:HG3	2.08	0.53
6:2G:106:LEU:HA	6:2G:110:ALA:HB3	1.89	0.53
12:2Q:12:GLN:NE2	12:2Q:72:LYS:HG3	2.24	0.53
12:2Q:44:ALA:HB3	12:2Q:45:GLN:NE2	2.24	0.53
16:2U:76:TYR:O	16:2U:80:ILE:HG12	2.08	0.53
18:2W:12:ILE:HG13	18:2W:42:ARG:NH1	2.24	0.53
25:23:5:LYS:HB3	25:23:57:GLU:HG2	1.90	0.53
32:2a:935:A:N6	38:2g:3:ARG:HG3	2.23	0.53
32:2a:1212:U:H5'	32:2a:1213:A:C8	2.44	0.53
1:1A:12:U:C6	1:1A:12:U:H5'	2.44	0.53
1:1A:95:G:H4'	24:12:45:SER:O	2.09	0.53
1:1A:1166:C:H2'	1:1A:1167:U:C6	2.44	0.53
62:1A:4531:HOH:O	16:1U:16:LYS:HD3	2.09	0.53
2:1B:104:U:O2'	21:1Z:72:ARG:HG3	2.08	0.53
5:1F:29:ASN:H	5:1F:112:MET:CE	2.22	0.53
14:1S:106:ARG:HG3	14:1S:112:PHE:CE2	2.43	0.53
32:1a:69:G:H2'	32:1a:70:G:H8	1.74	0.53
32:1a:570:G:H2'	32:1a:571:U:C6	2.43	0.53
32:1a:1030(B):C:H2'	32:1a:1030(C):G:H5'	1.90	0.53
32:1a:1209:C:O2'	32:1a:1214:C:N4	2.41	0.53
33:1b:12:GLU:OE2	33:1b:13:ALA:N	2.42	0.53
34:1c:193:TYR:HE1	34:1c:196:LEU:HD21	1.73	0.53
40:1i:8:GLY:HA3	40:1i:76:ALA:O	2.08	0.53
42:1k:48:ILE:O	42:1k:50:TYR:N	2.42	0.53
44:1m:11:ARG:HB3	44:1m:11:ARG:HH11	1.74	0.53
1:2A:627:A:H62	11:2P:84:ASN:ND2	1.90	0.53
1:2A:1022:G:OP2	9:2N:69:GLN:NE2	2.34	0.53
1:2A:1181:C:H2'	1:2A:1182:A:C8	2.44	0.53
1:2A:2243:U:H2'	1:2A:2244:U:C6	2.43	0.53
8:2I:4:ILE:HD13	8:2I:47:LEU:HD22	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:38:LEU:HB2	8:2I:40:THR:CG2	2.39	0.53
9:2N:104:LYS:HB2	9:2N:117:PHE:CD1	2.44	0.53
13:2R:70:LEU:HD12	13:2R:76:VAL:HG22	1.91	0.53
14:2S:18:ILE:O	14:2S:21:THR:OG1	2.19	0.53
32:2a:636:U:H2'	32:2a:637:G:C8	2.43	0.53
34:2c:182:ILE:HG22	34:2c:203:PHE:CD1	2.44	0.53
44:2m:50:GLU:O	44:2m:54:VAL:HG13	2.09	0.53
49:2r:70:ILE:HG22	49:2r:74:ARG:HD2	1.91	0.53
1:1A:1080:C:H5'	1:1A:1081:U:OP2	2.09	0.53
1:1A:1508:A:O2'	1:1A:1509:C:OP1	2.21	0.53
1:1A:2773:C:H2'	1:1A:2774:C:H6	1.72	0.53
7:1H:25:LYS:HG3	7:1H:34:GLU:HG2	1.90	0.53
32:1a:161:A:N1	32:1a:347:G:O2'	2.42	0.53
35:1d:107:ARG:HH22	35:1d:194:LEU:HD11	1.73	0.53
39:1h:11:THR:HG22	39:1h:15:ASN:HD21	1.74	0.53
51:1t:50:GLU:HG3	51:1t:100:ILE:HD13	1.91	0.53
1:2A:394:A:C6	1:2A:395:U:C4	2.97	0.53
1:2A:974:G:OP1	1:2A:1187:G:O2'	2.23	0.53
1:2A:1149:G:H2'	1:2A:1150:C:C6	2.44	0.53
3:2D:266:SER:O	3:2D:270:ILE:HG13	2.08	0.53
32:2a:165:C:H2'	32:2a:166:G:C8	2.44	0.53
32:2a:256:U:H2'	32:2a:257:G:C8	2.44	0.53
32:2a:1040:U:H2'	32:2a:1041:A:H8	1.74	0.53
32:2a:1060:C:H5'	45:2n:45:ARG:HH12	1.72	0.53
32:2a:1187:G:H5'	40:2i:113:LYS:NZ	2.24	0.53
38:2g:91:VAL:HG13	38:2g:95:ARG:HG2	1.89	0.53
8:1I:69:LYS:HG3	8:1I:138:ILE:HG12	1.91	0.53
11:1P:88:LEU:HD22	11:1P:95:VAL:HG11	1.91	0.53
34:1c:6:HIS:CD2	34:1c:9:GLY:H	2.26	0.53
37:1f:91:VAL:HG12	37:1f:92:LYS:O	2.09	0.53
38:1g:20:ASP:OD2	38:1g:63:LYS:NZ	2.35	0.53
1:2A:919:G:N2	1:2A:2269:A:OP2	2.42	0.53
1:2A:975(A):G:H1'	1:2A:990:A:C2	2.44	0.53
1:2A:2150:U:H2'	1:2A:2151:G:H8	1.74	0.53
1:2A:2316:C:O2'	6:2G:128:ARG:NH2	2.42	0.53
32:2a:1004:A:H5''	32:2a:1024:G:H22	1.74	0.53
32:2a:1509:C:H2'	32:2a:1510:U:O4'	2.09	0.53
42:2k:21:ILE:HG12	42:2k:30:VAL:HG13	1.91	0.53
1:1A:997:G:OP1	16:1U:92:ARG:NH1	2.38	0.52
1:1A:1113:U:H2'	1:1A:1114:G:C8	2.44	0.52
1:1A:1593:G:H2'	1:1A:1594:G:C8	2.44	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1805:U:O2	3:1D:50:THR:HB	2.09	0.52
10:1O:22:ILE:HG12	10:1O:40:VAL:O	2.09	0.52
14:1S:93:LYS:HG2	14:1S:95:HIS:HB2	1.91	0.52
17:1V:31:ALA:O	17:1V:61:VAL:HG12	2.09	0.52
21:1Z:45:ASP:O	21:1Z:49:ARG:HG3	2.09	0.52
32:1a:377:G:OP1	47:1p:3:LYS:HD3	2.09	0.52
32:1a:1518:MA6:H93	32:1a:1519:MA6:H92	1.91	0.52
33:1b:12:GLU:HG2	33:1b:16:HIS:CE1	2.38	0.52
54:1w:26:A:N6	54:1w:44:G:H1	2.05	0.52
1:2A:2600:A:OP2	62:2A:3989:HOH:O	2.19	0.52
4:2E:106:GLY:HA3	4:2E:189:PRO:HB2	1.91	0.52
9:2N:46:VAL:HG23	9:2N:48:MET:HG2	1.91	0.52
25:23:12:PRO:O	25:23:15:TYR:HB2	2.09	0.52
32:2a:273:A:O2'	32:2a:274:A:H5'	2.10	0.52
32:2a:954:G:H2'	32:2a:955:U:O4'	2.09	0.52
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.74	0.52
32:2a:1272:G:N2	32:2a:1273:G:N7	2.57	0.52
32:2a:1402:4OC:HM22	32:2a:1403:C:H5'	1.91	0.52
38:2g:54:THR:O	38:2g:56:GLN:N	2.35	0.52
38:2g:118:VAL:HG13	38:2g:122:HIS:CE1	2.44	0.52
40:2i:40:LEU:HD22	40:2i:42:ARG:HB2	1.91	0.52
49:2r:73:ALA:HB3	49:2r:79:LEU:HD12	1.91	0.52
1:1A:1054:A:OP1	1:1A:1054:A:H4'	2.09	0.52
1:1A:1261:C:O2	62:1A:4287:HOH:O	2.19	0.52
1:1A:2482:G:HO2'	54:1w:64:A:HO2'	1.55	0.52
6:1G:67:LYS:H	26:14:6:HIS:CE1	2.27	0.52
8:1I:98:ALA:HB2	8:1I:111:PRO:HB3	1.91	0.52
32:1a:273:A:H1'	48:1q:16:GLN:NE2	2.24	0.52
32:1a:390:C:H2'	32:1a:391:G:C8	2.44	0.52
32:1a:444:C:H2'	32:1a:445:G:H8	1.75	0.52
32:1a:893:C:H2'	32:1a:894:G:O4'	2.09	0.52
39:1h:28:ALA:HB3	39:1h:57:PRO:HB2	1.90	0.52
51:1t:56:MET:HG3	51:1t:84:LEU:HD22	1.92	0.52
54:1w:7:A:N6	54:1w:66:U:H3	2.05	0.52
1:2A:787:U:OP2	62:2A:3985:HOH:O	2.18	0.52
5:2F:32:LEU:HD22	5:2F:112:MET:HE1	1.91	0.52
6:2G:7:LEU:HD23	6:2G:100:TRP:HE3	1.74	0.52
6:2G:33:ARG:O	6:2G:161:THR:HG23	2.09	0.52
8:2I:75:LEU:HD13	8:2I:105:HIS:CD2	2.43	0.52
12:2Q:33:GLY:O	12:2Q:131:ILE:HG23	2.09	0.52
15:2T:108:ARG:HD3	15:2T:112:ARG:HH12	1.74	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1001(A):G:C5	32:2a:1002:G:H1'	2.44	0.52
32:2a:1105:A:H2'	32:2a:1106:G:C8	2.44	0.52
44:2m:50:GLU:O	44:2m:53:VAL:HG22	2.08	0.52
1:1A:1039:G:C2'	1:1A:1040:C:H5'	2.40	0.52
1:1A:1354:A:H2'	1:1A:1355:G:O4'	2.10	0.52
1:1A:1607:C:H4'	1:1A:1608:A:O5'	2.09	0.52
7:1H:33:LEU:HD11	7:1H:136:ILE:O	2.09	0.52
10:1O:66:LYS:N	10:1O:82:ASN:OD1	2.36	0.52
32:1a:426:G:OP1	35:1d:38:TYR:OH	2.26	0.52
32:1a:972:C:O2'	41:1j:55:LYS:O	2.28	0.52
34:1c:174:PRO:HD2	34:1c:182:ILE:HD11	1.91	0.52
56:1y:18:G:O2'	56:1y:57:G:O6	2.21	0.52
1:2A:10:G:H1'	1:2A:2801(A):A:N7	2.24	0.52
1:2A:1138:G:N3	9:2N:106:MET:HE2	2.24	0.52
1:2A:2558:C:H2'	1:2A:2559:C:O4'	2.10	0.52
1:2A:2729:G:N3	62:2A:4083:HOH:O	2.34	0.52
6:2G:179:PRO:HG3	26:24:43:TYR:CZ	2.45	0.52
21:2Z:40:ASP:OD2	21:2Z:42:VAL:HG13	2.09	0.52
32:2a:262:A:H4'	51:2t:75:ASN:HB2	1.91	0.52
32:2a:922:G:H4'	36:2e:20:GLN:HA	1.91	0.52
37:2f:9:VAL:HA	37:2f:59:TYR:O	2.09	0.52
43:2l:6:THR:OG1	43:2l:9:GLN:HG3	2.10	0.52
44:2m:22:ILE:HG21	44:2m:25:ILE:HD12	1.91	0.52
44:2m:91:ARG:HA	44:2m:96:LEU:HB2	1.91	0.52
1:1A:1003:G:N2	1:1A:1153:C:C2	2.78	0.52
11:1P:39:LYS:H	11:1P:45:LEU:HD13	1.74	0.52
32:1a:192:U:H4'	51:1t:57:ARG:HD3	1.91	0.52
32:1a:235:C:H5'	48:1q:70:ARG:HG3	1.92	0.52
32:1a:405:U:H3'	32:1a:406:G:H5'	1.90	0.52
33:1b:33:TYR:HB2	33:1b:43:ASP:HB2	1.91	0.52
35:1d:108:LEU:HD12	35:1d:174:LEU:HD13	1.90	0.52
35:1d:173:TRP:C	35:1d:186:LEU:HD12	2.34	0.52
36:1e:85:GLY:O	36:1e:87:SER:N	2.41	0.52
54:1w:27:G:H2'	54:1w:28:G:C8	2.45	0.52
56:1y:67:C:H2'	56:1y:68:C:O4'	2.10	0.52
1:2A:528:A:H4'	1:2A:529:A:OP1	2.08	0.52
1:2A:828:U:H2'	1:2A:829:A:C8	2.45	0.52
1:2A:942:G:H4'	1:2A:1190:G:H5'	1.91	0.52
1:2A:2412:A:H2'	1:2A:2413:G:O4'	2.09	0.52
3:2D:186:HIS:ND1	3:2D:187:GLY:N	2.57	0.52
7:2H:11:VAL:HB	7:2H:48:GLY:C	2.34	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:2O:63:VAL:HA	10:2O:106:LEU:HD11	1.90	0.52
13:2R:95:THR:HG22	13:2R:116:LEU:HD23	1.92	0.52
21:2Z:28:MET:O	21:2Z:35:ARG:N	2.40	0.52
21:2Z:70:LEU:HD12	21:2Z:71:VAL:H	1.73	0.52
21:2Z:97:GLU:HA	21:2Z:126:VAL:O	2.10	0.52
30:28:62:LEU:HB3	30:28:65:GLU:HG2	1.90	0.52
32:2a:448:A:P	32:2a:485:G:H22	2.33	0.52
32:2a:1280:A:OP1	32:2a:1281:U:H5	1.92	0.52
38:2g:12:LEU:H	38:2g:12:LEU:HD12	1.74	0.52
43:2l:32:PHE:HB3	43:2l:84:LEU:HD11	1.92	0.52
50:2s:22:LEU:HD22	50:2s:31:ILE:HD11	1.90	0.52
1:1A:248:G:OP1	62:1A:4284:HOH:O	2.19	0.52
1:1A:1360:A:H2'	1:1A:1361:G:O4'	2.09	0.52
1:1A:2312:U:H5'	6:1G:88:ILE:HD11	1.91	0.52
1:1A:2867:G:OP2	15:1T:119:LYS:NZ	2.24	0.52
8:1I:25:TYR:O	8:1I:29:TYR:HB3	2.10	0.52
11:1P:127:ALA:C	11:1P:148:LEU:HD23	2.34	0.52
13:1R:12:ARG:HB3	13:1R:16:HIS:HB3	1.92	0.52
32:1a:254:G:H21	48:1q:16:GLN:HE22	1.56	0.52
32:1a:399:G:H2'	32:1a:400:C:C6	2.44	0.52
32:1a:437:U:O2'	35:1d:123:HIS:HD2	1.92	0.52
32:1a:1191:A:H5''	34:1c:4:LYS:NZ	2.24	0.52
35:1d:64:LEU:HA	35:1d:67:ILE:HD12	1.92	0.52
36:1e:71:LEU:HD22	36:1e:74:GLY:HA2	1.91	0.52
1:2A:857:C:N4	1:2A:858:U:O4	2.43	0.52
1:2A:946:G:H2'	1:2A:947:G:H8	1.75	0.52
1:2A:1507:A:O2'	1:2A:1508:A:O4'	2.28	0.52
19:2X:5:TYR:CZ	24:22:30:ARG:HD2	2.45	0.52
21:2Z:150:LEU:O	21:2Z:171:ILE:HG13	2.10	0.52
29:27:12:ARG:CZ	29:27:44:PRO:HB3	2.40	0.52
33:2b:8:LYS:HE3	33:2b:51:LEU:HD13	1.91	0.52
33:2b:28:PHE:HD1	33:2b:194:PRO:HG3	1.74	0.52
49:2r:38:GLU:O	49:2r:41:LYS:HG2	2.10	0.52
56:2y:68:C:H2'	56:2y:69:G:O4'	2.09	0.52
1:1A:2390:U:P	30:18:35:GLN:HE22	2.33	0.52
1:1A:2590:A:H2'	1:1A:2591:C:C6	2.44	0.52
1:1A:2731:G:O3'	4:1E:203:LYS:NZ	2.39	0.52
2:1B:66:A:H61	2:1B:108:U:H2'	1.75	0.52
8:1I:75:LEU:HD22	8:1I:105:HIS:CD2	2.44	0.52
32:1a:202:U:H5''	32:1a:203:U:H5	1.74	0.52
32:1a:578:C:O2'	32:1a:728:A:N3	2.40	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:864:A:H2'	32:1a:865:A:C8	2.43	0.52
54:1w:5:G:H2'	54:1w:6:G:C8	2.40	0.52
1:2A:154(A):C:N4	1:2A:171:G:H1	2.06	0.52
1:2A:307:G:H22	1:2A:310:A:P	2.33	0.52
1:2A:411:G:OP2	1:2A:2406:U:O2'	2.26	0.52
1:2A:2443:C:H5''	5:2F:68:LYS:HD2	1.92	0.52
4:2E:82:ARG:HH11	4:2E:82:ARG:HG3	1.74	0.52
5:2F:157:VAL:HB	5:2F:194:MET:HG2	1.91	0.52
7:2H:24:VAL:HG13	7:2H:37:VAL:HG21	1.92	0.52
8:2I:56:LYS:O	8:2I:60:GLU:N	2.33	0.52
9:2N:59:LYS:HZ2	9:2N:59:LYS:HB2	1.73	0.52
39:2h:15:ASN:O	39:2h:19:VAL:HG22	2.09	0.52
39:2h:87:SER:HB2	39:2h:93:VAL:HB	1.92	0.52
41:2j:13:HIS:HB3	41:2j:68:HIS:CD2	2.45	0.52
55:2x:55:PSU:N3	55:2x:58:A:OP2	2.36	0.52
1:1A:2055:C:H5'	1:1A:2056:G:O5'	2.10	0.52
1:1A:2627:G:N2	1:1A:2777:G:OP2	2.39	0.52
1:1A:2679:A:O2'	1:1A:2680:C:H5'	2.10	0.52
2:1B:55:U:H2'	2:1B:56:G:O4'	2.10	0.52
19:1X:53:LYS:HB3	19:1X:82:GLN:HB3	1.92	0.52
32:1a:642:A:N3	39:1h:113:SER:OG	2.25	0.52
32:1a:1298:C:C4	38:1g:114:ARG:HD2	2.45	0.52
39:1h:83:ILE:HG13	39:1h:137:VAL:HG22	1.91	0.52
46:1o:61:GLY:O	46:1o:65:ARG:HG3	2.09	0.52
1:2A:414:C:H2'	1:2A:415:A:H8	1.73	0.52
1:2A:1780:A:N7	62:2A:4078:HOH:O	2.33	0.52
8:2I:93:THR:N	8:2I:96:ASP:HB2	2.25	0.52
9:2N:30:ILE:HG22	9:2N:34:LEU:HD22	1.91	0.52
11:2P:39:LYS:HB2	11:2P:45:LEU:HD13	1.89	0.52
12:2Q:97:VAL:HG21	12:2Q:103:MET:HE3	1.92	0.52
32:2a:601:C:H2'	32:2a:602:A:C8	2.45	0.52
37:2f:48:LEU:HD12	37:2f:55:ASP:O	2.10	0.52
1:1A:865:C:H4'	1:1A:866:A:N7	2.25	0.52
1:1A:1025:G:O2'	62:1A:4209:HOH:O	1.90	0.52
1:1A:2647:U:H2'	1:1A:2648:C:H6	1.75	0.52
5:1F:170:LEU:HD13	5:1F:172:TRP:CZ2	2.45	0.52
14:1S:39:ILE:HB	14:1S:49:VAL:HG13	1.91	0.52
32:1a:760:G:H3'	32:1a:761:G:H8	1.74	0.52
36:1e:7:GLU:OE2	36:1e:37:ARG:NH2	2.43	0.52
48:1q:83:ASP:OD1	48:1q:83:ASP:N	2.37	0.52
1:2A:41:C:H2'	1:2A:42:G:H8	1.75	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:83:G:N2	1:2A:102:G:H1'	2.23	0.52
1:2A:84:A:N1	1:2A:98:G:O2'	2.38	0.52
5:2F:34:TRP:HB2	11:2P:6:LEU:HD22	1.91	0.52
6:2G:15:VAL:HG11	6:2G:172:LEU:HD12	1.92	0.52
6:2G:75:LYS:HA	6:2G:84:LYS:HB2	1.92	0.52
11:2P:52:GLU:HG3	11:2P:57:THR:HG22	1.91	0.52
26:24:61:ARG:HG2	50:2s:42:PRO:HG2	1.91	0.52
30:28:11:LYS:HE3	30:28:65:GLU:OE1	2.08	0.52
34:2c:91:LEU:HD22	34:2c:101:LEU:HB2	1.90	0.52
35:2d:108:LEU:HD13	35:2d:176:LEU:HD13	1.92	0.52
41:2j:32:ALA:HB1	41:2j:33:GLN:HA	1.90	0.52
1:1A:372:G:O2'	1:1A:400:G:O6	2.28	0.52
15:1T:92:GLY:O	15:1T:120:ARG:NH2	2.43	0.52
20:1Y:12:THR:HG1	20:1Y:26:LYS:HZ3	1.53	0.52
32:1a:178:C:H2'	32:1a:179:A:O4'	2.10	0.52
32:1a:1073:U:O2'	33:1b:104:ASN:OD1	2.23	0.52
32:1a:1427:U:H2'	32:1a:1428:A:C8	2.44	0.52
35:1d:173:TRP:CD1	35:1d:173:TRP:H	2.27	0.52
43:1l:90:VAL:HG11	43:1l:93:LEU:HD12	1.92	0.52
47:1p:57:ARG:NH2	47:1p:79:VAL:O	2.39	0.52
1:2A:242:G:H22	1:2A:254:G:H2'	1.73	0.52
1:2A:971:C:H2'	1:2A:972:G:O4'	2.09	0.52
1:2A:1580:A:H8	1:2A:1580:A:OP2	1.93	0.52
6:2G:146:TYR:HB3	44:2m:11:ARG:HH22	1.75	0.52
32:2a:889:A:H8	32:2a:889:A:OP1	1.91	0.52
32:2a:1077:G:H2'	32:2a:1079:G:N7	2.24	0.52
37:2f:7:ASN:HB2	37:2f:89:MET:HB3	1.91	0.52
1:1A:1268:A:C2	1:1A:2013:A:C4	2.98	0.52
1:1A:2564:A:C2	1:1A:2647:U:H4'	2.45	0.52
2:1B:48:A:H2'	2:1B:49:C:C6	2.45	0.52
14:1S:87:PHE:HB2	14:1S:112:PHE:CD1	2.44	0.52
18:1W:77:ASP:HB2	18:1W:102:HIS:HB2	1.92	0.52
23:11:76:ARG:NH1	23:11:97:LEU:O	2.43	0.52
26:14:63:TYR:N	26:14:64:GLY:HA2	2.24	0.52
29:17:33:ARG:NH2	62:17:201:HOH:O	2.42	0.52
33:1b:118:LEU:HD22	33:1b:138:LEU:HB3	1.91	0.52
33:1b:128:GLU:O	33:1b:130:ARG:N	2.36	0.52
40:1i:7:THR:O	40:1i:83:ARG:HD3	2.09	0.52
51:1t:36:LEU:HD12	51:1t:62:LEU:HD11	1.92	0.52
1:2A:2262:U:OP2	22:20:16:SER:OG	2.17	0.52
1:2A:2408:U:H2'	1:2A:2409:G:C8	2.45	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2467:C:H4'	12:2Q:123:HIS:CD2	2.45	0.52
1:2A:2543:G:H2'	1:2A:2544:G:C8	2.44	0.52
1:2A:2630:G:N2	1:2A:2788:C:N3	2.43	0.52
2:2B:43:C:H5'	26:24:1:MET:HG2	1.92	0.52
3:2D:70:TRP:CZ2	3:2D:150:LYS:HA	2.46	0.52
18:2W:25:ARG:NH2	18:2W:74:ALA:O	2.29	0.52
26:24:15:ILE:HD13	26:24:21:VAL:HG13	1.91	0.52
26:24:45:GLY:O	26:24:47:GLN:N	2.33	0.52
32:2a:967:5MC:H2'	32:2a:968:A:C8	2.45	0.52
1:1A:2118:U:C4	1:1A:2149:G:H1'	2.45	0.51
5:1F:34:TRP:HA	11:1P:6:LEU:HD13	1.91	0.51
12:1Q:18:LYS:O	12:1Q:98:LYS:NZ	2.19	0.51
32:1a:427:U:OP1	35:1d:13:ARG:NH1	2.43	0.51
32:1a:946:A:H2'	32:1a:947:G:H8	1.74	0.51
32:1a:1145:C:H4'	32:1a:1146:A:H5'	1.92	0.51
34:1c:64:VAL:HG13	34:1c:99:VAL:HA	1.91	0.51
35:1d:173:TRP:CE3	35:1d:189:PRO:HG3	2.44	0.51
35:1d:187:ARG:NH2	35:1d:193:ASP:OD2	2.43	0.51
37:1f:86:ARG:O	37:1f:87:ARG:HG2	2.10	0.51
44:1m:95:GLY:O	44:1m:110:ARG:HG3	2.11	0.51
49:1r:58:LEU:HD22	49:1r:62:GLU:HB3	1.92	0.51
1:2A:2680:C:H1'	4:2E:187:ALA:HB1	1.91	0.51
12:2Q:16:ARG:HG2	12:2Q:18:LYS:HZ2	1.75	0.51
12:2Q:66:ILE:HG12	12:2Q:104:PHE:CE1	2.44	0.51
14:2S:67:ARG:HG2	14:2S:71:ARG:HD2	1.92	0.51
16:2U:27:LEU:HD22	16:2U:31:SER:HB3	1.91	0.51
26:24:47:GLN:O	26:24:49:PHE:HD1	1.93	0.51
26:24:58:ARG:O	26:24:61:ARG:N	2.43	0.51
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.10	0.51
33:2b:73:THR:HB	33:2b:95:GLN:O	2.10	0.51
55:2x:55:PSU:O2'	55:2x:57:A:N7	2.39	0.51
56:2y:43:C:O2'	56:2y:44:G:H5'	2.10	0.51
1:1A:27:G:C2	1:1A:512:G:N3	2.78	0.51
1:1A:1020:A:N6	1:1A:1142:U:OP2	2.34	0.51
1:1A:2591:C:OP1	3:1D:239:ARG:HB2	2.11	0.51
6:1G:45:GLU:OE2	62:1G:301:HOH:O	2.19	0.51
6:1G:77:ILE:HD13	6:1G:80:PHE:HD2	1.75	0.51
22:10:11:ARG:C	22:10:14:ARG:HH22	2.05	0.51
32:1a:61:G:H2'	32:1a:62:U:O4'	2.10	0.51
32:1a:176:C:OP1	51:1t:29:LYS:NZ	2.25	0.51
32:1a:1037:C:H2'	32:1a:1038:C:C6	2.44	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1146:A:H2'	32:1a:1147:C:O4'	2.09	0.51
34:1c:47:LEU:HD13	34:1c:68:VAL:HG11	1.91	0.51
38:1g:143:ARG:NH2	56:1y:42:C:H5'	2.25	0.51
51:1t:22:ARG:O	51:1t:26:ASN:N	2.43	0.51
56:1y:2:C:H2'	56:1y:3:C:C6	2.45	0.51
1:2A:195:A:OP2	62:2A:3990:HOH:O	2.19	0.51
1:2A:271(L):U:H5'	8:2I:50:ARG:NH1	2.26	0.51
1:2A:1615:C:H2'	1:2A:1617:C:C5	2.45	0.51
4:2E:8:LYS:NZ	4:2E:190:GLY:O	2.36	0.51
8:2I:23:PRO:HB3	8:2I:27:ARG:HH21	1.75	0.51
32:2a:1310:G:H5'	44:2m:77:ASN:HD21	1.75	0.51
34:2c:172:ARG:HH21	34:2c:174:PRO:HG3	1.74	0.51
38:2g:78:ARG:HB2	38:2g:87:VAL:HG21	1.90	0.51
1:1A:252:G:P	11:1P:50:ARG:HH12	2.33	0.51
1:1A:593:G:H1'	30:18:4:MET:HE2	1.91	0.51
1:1A:649:G:H2'	1:1A:650:C:C6	2.45	0.51
1:1A:657:U:H2'	1:1A:658:C:C6	2.46	0.51
1:1A:1685:C:H2'	1:1A:1686:C:H6	1.74	0.51
1:1A:2334:G:H4'	1:1A:2335:A:OP2	2.09	0.51
1:1A:2611:U:H5'	1:1A:2611:U:H6	1.75	0.51
5:1F:116:ASP:OD2	11:1P:1:MET:N	2.27	0.51
32:1a:145:G:H1	32:1a:177:C:H42	1.59	0.51
32:1a:179:A:H2'	32:1a:180:U:H6	1.74	0.51
32:1a:333:G:H4'	51:1t:16:HIS:CD2	2.46	0.51
32:1a:513:C:H2'	32:1a:514:C:C6	2.46	0.51
38:1g:152:ALA:O	38:1g:155:ARG:HB3	2.10	0.51
43:1l:57:LYS:NZ	43:1l:65:GLU:OE2	2.38	0.51
1:2A:71:A:N7	19:2X:31:HIS:HE1	2.07	0.51
1:2A:199:A:OP1	62:2A:3991:HOH:O	2.19	0.51
1:2A:2456:C:N4	62:2A:4133:HOH:O	2.42	0.51
1:2A:2849:U:H4'	1:2A:2868:A:C2	2.46	0.51
3:2D:108:PRO:HD2	3:2D:111:LEU:HD22	1.91	0.51
13:2R:92:GLY:HA2	13:2R:94:TYR:CE2	2.45	0.51
25:23:22:ALA:HB2	25:23:49:LYS:HD3	1.93	0.51
28:26:18:ARG:HD3	28:26:42:TRP:CE2	2.45	0.51
38:2g:22:LEU:HG	38:2g:62:PHE:HE2	1.74	0.51
1:1A:1315:C:OP2	62:1A:4223:HOH:O	2.18	0.51
15:1T:73:GLU:OE1	15:1T:103:ARG:NH2	2.43	0.51
32:1a:222:U:H2'	32:1a:223:U:H6	1.75	0.51
32:1a:457:C:H2'	32:1a:458:C:C6	2.45	0.51
32:1a:573:A:OP2	62:1a:1918:HOH:O	2.19	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1071:C:H2'	32:1a:1072:G:C8	2.46	0.51
48:1q:52:LYS:NZ	48:1q:79:SER:OG	2.43	0.51
54:1w:35:A:H2'	54:1w:36:A:O4'	2.10	0.51
1:2A:1218:C:H42	1:2A:1231:G:H1	1.57	0.51
1:2A:1379:A:H4'	1:2A:1380:G:OP2	2.09	0.51
1:2A:1814:G:O6	62:2A:3981:HOH:O	2.18	0.51
5:2F:126:VAL:HG21	5:2F:129:PHE:CZ	2.46	0.51
5:2F:126:VAL:HG23	5:2F:195:ASP:HA	1.92	0.51
32:2a:1352:C:O2	32:2a:1371:G:C2	2.62	0.51
34:2c:15:THR:OG1	34:2c:178:LEU:O	2.19	0.51
38:2g:151:TYR:OH	42:2k:54:ARG:HD3	2.11	0.51
44:2m:14:ARG:HB3	44:2m:16:ASP:OD1	2.11	0.51
44:2m:23:TYR:CE2	44:2m:70:LEU:HD22	2.46	0.51
1:1A:805:G:OP2	11:1P:41:ARG:HG3	2.10	0.51
1:1A:1266:G:O2'	1:1A:2012:G:O6	2.26	0.51
1:1A:1670:C:O2	4:1E:129:HIS:NE2	2.34	0.51
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.46	0.51
1:1A:2839:G:C5'	13:1R:46:GLY:HA2	2.41	0.51
13:1R:54:LEU:O	13:1R:62:ALA:HB1	2.11	0.51
13:1R:97:VAL:HG22	13:1R:114:VAL:HG13	1.93	0.51
20:1Y:42:VAL:HG12	20:1Y:67:LEU:HD11	1.93	0.51
32:1a:444:C:H2'	32:1a:445:G:C8	2.45	0.51
32:1a:458:C:H2'	32:1a:460:G:O4'	2.10	0.51
32:1a:921:U:O2	36:1e:19:MET:HB2	2.11	0.51
34:1c:17:ASP:OD2	34:1c:21:ARG:NH2	2.38	0.51
1:2A:191:A:H2'	1:2A:192:C:C6	2.44	0.51
1:2A:823:G:C2'	1:2A:824:A:H5'	2.41	0.51
1:2A:946:G:H2'	1:2A:947:G:C8	2.45	0.51
1:2A:2108:C:H2'	1:2A:2109:U:H6	1.75	0.51
1:2A:2690:C:OP1	13:2R:17:ARG:NH2	2.44	0.51
2:2B:52:A:N6	14:2S:33:LYS:HG2	2.25	0.51
6:2G:125:PHE:HB3	6:2G:166:ASP:CG	2.35	0.51
10:2O:77:ILE:HD12	15:2T:74:ARG:HD2	1.93	0.51
13:2R:26:LYS:HE2	13:2R:70:LEU:O	2.10	0.51
32:2a:790:A:H2'	32:2a:791:G:C8	2.45	0.51
32:2a:1317:C:N4	45:2n:19:ARG:HH21	2.08	0.51
33:2b:54:THR:O	33:2b:57:PHE:HB3	2.10	0.51
33:2b:105:PHE:O	33:2b:107:THR:N	2.44	0.51
54:2w:24:G:C6	54:2w:25:C:C4	2.98	0.51
1:1A:725:G:C6	1:1A:726:G:N1	2.78	0.51
1:1A:1006:C:C2	1:1A:1138:G:N2	2.78	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1105:U:H2'	1:1A:1106:G:C8	2.44	0.51
1:1A:2350:C:H2'	1:1A:2351:G:O4'	2.11	0.51
6:1G:101:ILE:HG22	6:1G:105:LYS:HE2	1.91	0.51
9:1N:1:MET:HE1	16:1U:94:ASN:ND2	2.26	0.51
13:1R:33:ARG:NH2	13:1R:115:GLU:OE1	2.43	0.51
21:1Z:45:ASP:OD1	21:1Z:49:ARG:NE	2.43	0.51
32:1a:189(F):U:C4	48:1q:72:ARG:NH2	2.78	0.51
32:1a:1441:G:H5''	32:1a:1442:G:O5'	2.11	0.51
32:1a:1457:G:H5''	51:1t:35:THR:HG21	1.93	0.51
38:1g:129:GLU:O	38:1g:131:LYS:HG3	2.10	0.51
45:1n:6:LEU:HG	45:1n:23:ARG:NH2	2.26	0.51
1:2A:563:G:OP2	62:2A:3982:HOH:O	2.18	0.51
1:2A:1022:G:O2'	1:2A:1024:G:O6	2.29	0.51
1:2A:1790:C:H5''	1:2A:1791:A:OP1	2.09	0.51
1:2A:1893:C:H2'	1:2A:1894:C:O4'	2.10	0.51
1:2A:2196:C:OP2	62:2A:3988:HOH:O	2.19	0.51
32:2a:260:G:H2'	32:2a:261:U:C6	2.46	0.51
32:2a:701:C:O2	32:2a:703:G:N1	2.44	0.51
32:2a:719:C:O2'	49:2r:49:LYS:HB3	2.10	0.51
32:2a:1040:U:O4	32:2a:1041:A:N6	2.43	0.51
32:2a:1068:G:H8	32:2a:1068:G:OP2	1.93	0.51
32:2a:1318:A:H1'	50:2s:37:ARG:HH21	1.76	0.51
36:2e:152:ARG:HG2	39:2h:43:GLY:O	2.10	0.51
37:2f:91:VAL:HG12	37:2f:92:LYS:O	2.11	0.51
40:2i:23:ASN:OD1	40:2i:25:LYS:HG2	2.10	0.51
50:2s:33:THR:CG2	50:2s:49:ILE:HD11	2.40	0.51
1:1A:2158:A:N3	1:1A:2159:G:H1'	2.25	0.51
2:1B:8:U:O2'	14:1S:40:ILE:HD13	2.10	0.51
26:14:62:ARG:HB2	26:14:63:TYR:CE1	2.46	0.51
32:1a:144:G:H1	32:1a:178:C:N4	2.09	0.51
32:1a:144:G:H1	32:1a:178:C:H42	1.58	0.51
32:1a:1004:A:N6	32:1a:1037:C:C2	2.79	0.51
34:1c:120:VAL:O	34:1c:124:ILE:HG23	2.10	0.51
35:1d:59:ARG:NH1	35:1d:62:GLN:HG3	2.26	0.51
41:1j:54:PHE:O	41:1j:55:LYS:HB3	2.11	0.51
51:1t:13:LEU:HD12	51:1t:17:ARG:HH21	1.76	0.51
1:2A:1028:A:N3	1:2A:2486:G:O2'	2.40	0.51
1:2A:1747(A):G:H2'	1:2A:1748:G:C8	2.43	0.51
1:2A:2461:C:H2'	1:2A:2462:U:H6	1.76	0.51
8:2I:92:VAL:HG13	8:2I:120:ILE:HB	1.93	0.51
10:2O:66:LYS:HG3	10:2O:82:ASN:ND2	2.26	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2P:94:GLU:HG2	11:2P:95:VAL:N	2.26	0.51
18:2W:31:GLU:O	18:2W:35:ILE:HG13	2.11	0.51
37:2f:67:MET:HE3	37:2f:72:VAL:HG22	1.93	0.51
1:1A:182:A:H8	1:1A:182:A:H5''	1.75	0.51
1:1A:213:A:H2'	1:1A:214:G:O4'	2.11	0.51
1:1A:1815:A:H8	1:1A:1815:A:OP1	1.93	0.51
1:1A:1851:U:H2'	1:1A:1852:C:O4'	2.11	0.51
1:1A:2018:G:OP1	27:15:9:LYS:NZ	2.41	0.51
1:1A:2752:C:O5'	1:1A:2752:C:H6	1.94	0.51
32:1a:1194:U:H2'	32:1a:1195:C:C6	2.45	0.51
1:2A:328:U:H4'	20:2Y:68:HIS:CE1	2.46	0.51
1:2A:2726:U:O2'	1:2A:2727:G:H8	1.94	0.51
2:2B:101:G:OP2	62:2B:304:HOH:O	2.19	0.51
7:2H:5:GLY:HA3	7:2H:65:HIS:CD2	2.46	0.51
12:2Q:137:TYR:HE1	21:2Z:83:PRO:HG3	1.76	0.51
22:20:50:ASN:HD22	22:20:63:VAL:HG21	1.75	0.51
30:28:63:PRO:HG2	30:28:64:TYR:CD2	2.46	0.51
32:2a:51:A:N1	32:2a:314:C:O2'	2.42	0.51
32:2a:1055:A:H62	32:2a:1200:C:H42	1.59	0.51
32:2a:1298:C:C5	38:2g:114:ARG:HD3	2.45	0.51
32:2a:1518:MA6:H93	32:2a:1519:MA6:H92	1.93	0.51
45:2n:24:CYS:O	45:2n:26:ARG:N	2.43	0.51
1:1A:141:A:C6	1:1A:142:A:N1	2.79	0.51
1:1A:214:G:N2	1:1A:216:A:N3	2.59	0.51
1:1A:441:U:H2'	1:1A:442:G:C8	2.46	0.51
1:1A:1062:G:H1'	1:1A:1088:A:C8	2.46	0.51
1:1A:1720:U:H2'	1:1A:1721:G:O4'	2.11	0.51
6:1G:72:ARG:HA	6:1G:86:MET:O	2.11	0.51
15:1T:92:GLY:HA2	15:1T:115:ARG:O	2.11	0.51
31:19:12:ASP:OD1	31:19:13:LYS:N	2.44	0.51
48:1q:65:ILE:HG21	48:1q:69:LYS:HE2	1.92	0.51
1:2A:407:G:H1	1:2A:420:C:N4	2.08	0.51
1:2A:763:G:O2'	1:2A:765:G:H5'	2.11	0.51
1:2A:1019:U:HO2'	1:2A:1021:A:H2	1.52	0.51
1:2A:1587:A:H2'	1:2A:1588:C:C6	2.45	0.51
1:2A:1913:A:C8	32:2a:1494:G:H4'	2.46	0.51
1:2A:2123:G:H2'	1:2A:2124:G:H8	1.75	0.51
9:2N:41:ASP:O	9:2N:48:MET:HE1	2.11	0.51
25:23:46:ASN:O	25:23:50:VAL:HG22	2.11	0.51
32:2a:266:G:H2'	32:2a:266:G:N3	2.26	0.51
32:2a:328:C:H4'	32:2a:329:A:H5'	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1277:C:O2'	32:2a:1279:A:H8	1.94	0.51
32:2a:1308:U:OP1	44:2m:98:VAL:N	2.41	0.51
33:2b:80:ILE:HD13	33:2b:211:ILE:HB	1.92	0.51
37:2f:100:ASN:HD21	49:2r:23:LYS:HE3	1.76	0.51
1:1A:478:A:N1	1:1A:500:G:H4'	2.26	0.51
1:1A:2287:A:O2'	1:1A:2289:G:N7	2.33	0.51
1:1A:2300:G:H2'	1:1A:2301:C:H6	1.76	0.51
1:1A:2649:U:H2'	1:1A:2650:U:H6	1.76	0.51
8:1I:5:LEU:H	8:1I:5:LEU:HD12	1.76	0.51
19:1X:60:ARG:NH2	29:17:47:ARG:HH12	2.08	0.51
30:18:39:LYS:O	30:18:43:GLN:HG3	2.11	0.51
33:1b:133:LYS:O	33:1b:136:VAL:HG22	2.11	0.51
36:1e:53:LEU:HA	36:1e:56:GLN:NE2	2.25	0.51
1:2A:108:U:H2'	1:2A:109:G:H8	1.75	0.51
1:2A:832:G:H2'	1:2A:833:U:C6	2.46	0.51
1:2A:2103:C:O2	1:2A:2187:G:C2	2.64	0.51
2:2B:17:C:H2'	2:2B:18:G:O4'	2.11	0.51
7:2H:39:PRO:C	7:2H:41:MET:H	2.19	0.51
8:2I:61:ARG:HB2	8:2I:61:ARG:HH11	1.77	0.51
10:2O:7:TYR:CE2	10:2O:20:MET:HB2	2.45	0.51
17:2V:35:LEU:HB2	17:2V:57:VAL:HB	1.93	0.51
17:2V:98:GLU:OE2	17:2V:100:ARG:NH1	2.43	0.51
24:22:32:LEU:O	24:22:36:ARG:HG3	2.11	0.51
31:29:25:VAL:HB	31:29:34:GLN:HB2	1.92	0.51
32:2a:89:C:H2'	32:2a:90:U:O4'	2.10	0.51
32:2a:447:G:O6	32:2a:485:G:O2'	2.27	0.51
32:2a:828:A:OP1	39:2h:21:LYS:NZ	2.43	0.51
32:2a:1145:C:H4'	32:2a:1146:A:H5'	1.92	0.51
32:2a:1190:G:H4'	34:2c:176:HIS:HE1	1.76	0.51
32:2a:1321:C:O2'	50:2s:77:THR:HG21	2.11	0.51
33:2b:224:GLN:O	33:2b:226:ARG:N	2.38	0.51
34:2c:33:LEU:HD21	45:2n:53:LEU:HD22	1.93	0.51
34:2c:108:ASN:HB3	34:2c:111:LEU:HB2	1.93	0.51
37:2f:46:ARG:HH22	49:2r:37:VAL:HG11	1.75	0.51
40:2i:24:GLY:HA2	40:2i:59:PHE:O	2.12	0.51
41:2j:8:LEU:HB3	41:2j:96:ILE:HG23	1.93	0.51
56:2y:58:A:H1'	56:2y:60:U:H3	1.76	0.51
1:1A:981:A:N1	1:1A:2027:G:O2'	2.44	0.50
1:1A:1379:A:H4'	1:1A:1380:G:OP2	2.11	0.50
12:1Q:115:MET:HE3	12:1Q:131:ILE:HD12	1.91	0.50
21:1Z:28:MET:HE2	21:1Z:35:ARG:HB2	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1Z:101:PRO:HA	21:1Z:123:ASP:HB3	1.92	0.50
30:18:33:ASN:HA	30:18:36:LYS:HD2	1.92	0.50
32:1a:584:G:OP2	48:1q:87:LYS:NZ	2.43	0.50
32:1a:1266:G:N2	32:1a:1269:A:OP2	2.32	0.50
35:1d:122:ARG:C	35:1d:124:GLY:H	2.19	0.50
42:1k:22:HIS:HD2	42:1k:29:ILE:HD12	1.76	0.50
44:1m:3:ARG:CG	44:1m:4:ILE:HG22	2.39	0.50
51:1t:47:GLY:HA2	51:1t:48:LYS:C	2.36	0.50
1:2A:1541:G:OP2	1:2A:1542:A:O2'	2.26	0.50
1:2A:1613:G:C2	1:2A:1619:G:C5	2.99	0.50
1:2A:2220:G:H2'	1:2A:2221:G:H8	1.75	0.50
1:2A:2317:C:H2'	1:2A:2318:G:H5'	1.94	0.50
2:2B:9:G:OP1	14:2S:25:ARG:NH2	2.43	0.50
2:2B:94:C:H2'	2:2B:95:C:H6	1.75	0.50
4:2E:48:GLN:NE2	4:2E:78:LEU:HG	2.25	0.50
10:2O:112:MET:N	10:2O:112:MET:SD	2.84	0.50
12:2Q:66:ILE:HG12	12:2Q:104:PHE:CD1	2.46	0.50
32:2a:62:U:O2'	32:2a:379:C:O2	2.29	0.50
32:2a:1237:C:O3'	32:2a:1300:G:N2	2.40	0.50
36:2e:19:MET:SD	36:2e:24:ARG:HB3	2.50	0.50
36:2e:51:VAL:O	36:2e:54:ALA:HB3	2.11	0.50
39:2h:40:ALA:C	39:2h:42:GLU:H	2.19	0.50
40:2i:4:TYR:HA	40:2i:87:GLN:HE22	1.76	0.50
40:2i:4:TYR:CE2	40:2i:88:TYR:HD1	2.30	0.50
43:2l:24:VAL:HG12	43:2l:98:TYR:HE1	1.74	0.50
47:2p:26:ARG:NE	47:2p:31:LYS:O	2.44	0.50
47:2p:28:ARG:HG2	47:2p:29:ASP:OD1	2.10	0.50
54:2w:29:G:H1	54:2w:41:C:N4	2.10	0.50
1:1A:1374:G:H2'	1:1A:1375:C:H6	1.74	0.50
1:1A:1508:A:H4'	1:1A:1509(A):A:C5	2.46	0.50
1:1A:2121:G:H1	1:1A:2177:C:H42	1.58	0.50
1:1A:2176:A:H2'	1:1A:2177:C:C6	2.46	0.50
8:1I:129:THR:HG22	8:1I:139:GLN:NE2	2.27	0.50
12:1Q:76:LYS:HB3	12:1Q:91:GLU:HG3	1.93	0.50
32:1a:19:C:H4'	32:1a:864:A:O4'	2.12	0.50
32:1a:624:C:H2'	32:1a:625:G:H8	1.74	0.50
32:1a:1246:C:N4	32:1a:1291:G:H1	2.06	0.50
34:1c:35:GLU:CD	34:1c:59:ARG:HH22	2.20	0.50
38:1g:15:ASP:OD1	38:1g:15:ASP:N	2.45	0.50
42:1k:111:ASP:OD1	49:1r:84:LYS:HE2	2.12	0.50
47:1p:39:TYR:CE2	47:1p:41:PRO:HB3	2.47	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:1y:36:A:H2'	56:1y:37:MIA:O4'	2.11	0.50
1:2A:879:G:C6	1:2A:880:G:C2	3.00	0.50
1:2A:1478:G:H2'	1:2A:1479:G:H8	1.75	0.50
1:2A:2432:A:H5''	62:2A:4703:HOH:O	2.11	0.50
13:2R:36:THR:HG22	13:2R:40:LYS:HB2	1.94	0.50
21:2Z:29:TYR:O	21:2Z:89:PHE:HD1	1.93	0.50
38:2g:113:GLU:HG3	38:2g:118:VAL:HG12	1.93	0.50
43:2l:28:LYS:HB2	43:2l:33:ARG:HH21	1.77	0.50
1:1A:1701:A:OP2	62:1A:4288:HOH:O	2.19	0.50
1:1A:1965:C:OP1	1:1A:1966:A:O2'	2.26	0.50
1:1A:2710:C:H2'	1:1A:2711:A:C8	2.46	0.50
7:1H:16:SER:O	7:1H:26:VAL:HA	2.12	0.50
7:1H:56:SER:OG	7:1H:57:ASP:N	2.43	0.50
21:1Z:25:PRO:O	21:1Z:85:HIS:HA	2.12	0.50
32:1a:1014:A:H2'	32:1a:1015:A:C8	2.47	0.50
35:1d:68:TYR:CE2	35:1d:97:LEU:HD13	2.46	0.50
39:1h:21:LYS:O	39:1h:65:TYR:OH	2.28	0.50
39:1h:103:VAL:HG12	39:1h:108:GLY:HA3	1.93	0.50
44:1m:123:ALA:HB2	54:1w:39:PSU:H1'	1.91	0.50
50:1s:40:ILE:HB	50:1s:67:VAL:O	2.11	0.50
51:1t:89:ARG:O	51:1t:93:GLU:HG2	2.12	0.50
1:2A:84:A:H5''	20:2Y:8:LYS:HE3	1.93	0.50
1:2A:800:A:H8	1:2A:800:A:OP1	1.95	0.50
1:2A:1427:A:H4'	1:2A:1428:C:O5'	2.12	0.50
1:2A:1517:G:C6	1:2A:1518:U:C4	2.99	0.50
1:2A:2807:G:N2	1:2A:2893:G:O6	2.44	0.50
3:2D:232:PRO:O	62:2D:402:HOH:O	2.19	0.50
11:2P:63:PRO:O	30:28:13:ARG:HB3	2.12	0.50
12:2Q:43:THR:N	12:2Q:46:GLN:OE1	2.35	0.50
32:2a:176:C:H2'	32:2a:177:C:C6	2.46	0.50
32:2a:309:G:O2'	32:2a:607:A:N1	2.44	0.50
32:2a:1122:U:N3	32:2a:1123:A:N7	2.59	0.50
33:2b:219:VAL:O	33:2b:223:ILE:HG12	2.12	0.50
43:2l:33:ARG:O	43:2l:84:LEU:HD12	2.12	0.50
45:2n:29:ARG:HB3	45:2n:40:CYS:HB3	1.93	0.50
56:2y:5:G:H1	56:2y:68:C:H42	1.57	0.50
1:1A:323:G:C8	5:1F:171:PRO:HG3	2.46	0.50
1:1A:434:U:H4'	1:1A:435:C:OP1	2.11	0.50
9:1N:28:THR:HG22	9:1N:29:LYS:HG2	1.94	0.50
21:1Z:61:LEU:HD23	21:1Z:65:GLN:HB3	1.93	0.50
32:1a:280:C:H4'	32:1a:281:G:OP2	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:431:A:H2'	32:1a:432:A:O4'	2.11	0.50
32:1a:826:C:H2'	32:1a:827:U:C6	2.46	0.50
37:1f:9:VAL:HB	37:1f:87:ARG:HB2	1.92	0.50
40:1i:28:VAL:HG22	40:1i:63:ILE:HB	1.93	0.50
54:1w:24:G:C6	54:1w:25:C:C4	3.00	0.50
1:2A:946:G:OP1	62:2A:3992:HOH:O	2.19	0.50
1:2A:1180:C:H2'	1:2A:1181:C:C6	2.47	0.50
1:2A:1327:C:N4	1:2A:1328:G:N1	2.60	0.50
1:2A:2052:G:O2'	62:2A:3952:HOH:O	2.12	0.50
2:2B:7:G:H4'	14:2S:29:PHE:CG	2.46	0.50
5:2F:47:GLY:O	5:2F:94:PRO:HA	2.12	0.50
5:2F:124:LEU:HG	5:2F:125:LEU:N	2.27	0.50
17:2V:65:GLY:HA3	17:2V:91:TYR:CZ	2.46	0.50
26:24:53:GLU:H	26:24:53:GLU:CD	2.20	0.50
32:2a:429:U:H1'	32:2a:430:A:H5''	1.92	0.50
40:2i:50:LEU:HB2	40:2i:55:ALA:O	2.11	0.50
41:2j:7:LYS:HD2	41:2j:9:ARG:NH2	2.25	0.50
1:1A:154(A):C:O5'	1:1A:154(A):C:H6	1.95	0.50
1:1A:674:G:H1'	5:1F:74:ARG:HD3	1.94	0.50
1:1A:1680:U:O2'	1:1A:1763:G:N7	2.33	0.50
1:1A:2810:A:H61	1:1A:2891:G:C2'	2.24	0.50
9:1N:4:TYR:CD2	16:1U:100:VAL:HG11	2.46	0.50
13:1R:12:ARG:HG2	13:1R:16:HIS:ND1	2.27	0.50
32:1a:1348:U:O2'	40:1i:120:ARG:HD2	2.12	0.50
35:1d:112:VAL:HG23	35:1d:116:GLN:NE2	2.25	0.50
37:1f:10:LEU:HB2	37:1f:59:TYR:HB3	1.92	0.50
56:1y:37:MIA:H2'	56:1y:38:A:C8	2.46	0.50
1:2A:108:U:H2'	1:2A:109:G:C8	2.47	0.50
1:2A:1010:A:H1'	1:2A:1153:C:H1'	1.93	0.50
1:2A:2273:A:H2'	1:2A:2274:A:C8	2.47	0.50
7:2H:122:THR:N	7:2H:134:SER:O	2.27	0.50
8:2I:75:LEU:HD22	8:2I:105:HIS:CD2	2.46	0.50
9:2N:9:VAL:HG11	9:2N:39:ARG:HH22	1.77	0.50
13:2R:74:LYS:HG2	13:2R:77:ARG:HH21	1.76	0.50
32:2a:254:G:OP1	48:2q:68:ARG:HB2	2.11	0.50
33:2b:103:THR:HG22	33:2b:180:LEU:HD21	1.92	0.50
35:2d:112:VAL:HG22	35:2d:161:ASN:OD1	2.12	0.50
44:2m:13:LYS:HA	44:2m:44:ARG:NH1	2.27	0.50
48:2q:6:LEU:HD12	48:2q:59:ILE:HD11	1.92	0.50
56:2y:10:G:H22	56:2y:26:A:H1'	1.77	0.50
1:1A:1656:C:O5'	1:1A:1656:C:H6	1.95	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1956:U:H2'	1:1A:1957:C:H5'	1.92	0.50
1:1A:2319:G:N1	14:1S:3:ARG:HA	2.26	0.50
1:1A:2630:G:N3	1:1A:2892:A:O2'	2.43	0.50
1:1A:2647:U:H2'	1:1A:2648:C:C6	2.47	0.50
3:1D:223:GLY:HA3	3:1D:231:HIS:CE1	2.47	0.50
32:1a:6:G:C8	36:1e:119:LEU:HD11	2.47	0.50
47:1p:57:ARG:HH21	47:1p:79:VAL:C	2.20	0.50
51:1t:10:LEU:HD12	51:1t:12:ALA:N	2.26	0.50
51:1t:76:ALA:O	51:1t:80:ARG:HB2	2.12	0.50
56:1y:61:C:H2'	56:1y:62:C:C6	2.47	0.50
1:2A:402:A:C2'	1:2A:403:U:H5'	2.40	0.50
1:2A:528:A:C2	1:2A:2043:C:H4'	2.47	0.50
1:2A:752:A:P	29:27:3:ARG:HH22	2.35	0.50
1:2A:1114:G:H2'	1:2A:1115:G:C8	2.46	0.50
1:2A:2589:A:OP2	62:2A:3979:HOH:O	2.18	0.50
9:2N:12:ARG:HB3	9:2N:50:ASP:OD1	2.11	0.50
14:2S:26:LEU:HD12	14:2S:39:ILE:HG12	1.93	0.50
14:2S:95:HIS:C	14:2S:99:LYS:HB3	2.37	0.50
25:23:12:PRO:HB2	25:23:20:LYS:HG2	1.92	0.50
32:2a:821:G:H2'	32:2a:822:C:C6	2.46	0.50
32:2a:977:A:N6	32:2a:1224:G:O5'	2.44	0.50
32:2a:1120:G:O6	32:2a:1152:A:N6	2.45	0.50
32:2a:1417:G:O6	62:2a:1913:HOH:O	2.18	0.50
32:2a:1420:C:H42	32:2a:1480:G:H1	1.60	0.50
34:2c:6:HIS:ND1	45:2n:49:HIS:HB3	2.27	0.50
41:2j:62:HIS:HB3	45:2n:59:ALA:HB3	1.93	0.50
42:2k:86:GLY:O	42:2k:91:ARG:NH1	2.44	0.50
48:2q:45:HIS:HB2	48:2q:65:ILE:HD13	1.93	0.50
48:2q:85:VAL:O	48:2q:89:LEU:HG	2.11	0.50
50:2s:30:LEU:HD11	50:2s:50:ALA:HB2	1.94	0.50
1:1A:753:C:H2'	1:1A:754:C:H6	1.77	0.50
1:1A:1518:U:H2'	1:1A:1519:G:O4'	2.12	0.50
1:1A:1823:G:OP1	3:1D:54:ARG:NH1	2.43	0.50
1:1A:1900:A:OP2	62:1A:4293:HOH:O	2.20	0.50
1:1A:2136:C:N4	1:1A:2155:G:N1	2.59	0.50
1:1A:2406:U:H2'	1:1A:2406:U:OP2	2.12	0.50
1:1A:2492:U:H2'	1:1A:2493:U:H6	1.76	0.50
3:1D:27:THR:O	3:1D:28:GLU:HG2	2.10	0.50
5:1F:64:ILE:HD11	5:1F:75:HIS:HB2	1.94	0.50
32:1a:1190:G:H5'	34:1c:176:HIS:CE1	2.47	0.50
1:2A:922:U:C4	1:2A:923:C:N4	2.80	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:940:G:N3	1:2A:1191:G:H4'	2.27	0.50
1:2A:1116:C:H2'	1:2A:1117:G:H8	1.77	0.50
1:2A:1404:C:O2'	1:2A:1405:U:H5'	2.11	0.50
1:2A:1497:U:H5''	1:2A:1498:C:H5	1.77	0.50
1:2A:2136:C:N3	1:2A:2155:G:N2	2.52	0.50
1:2A:2641:G:H5''	9:2N:76:SER:HB3	1.93	0.50
1:2A:2707:G:O3'	13:2R:68:ARG:HG2	2.12	0.50
2:2B:30:C:OP2	14:2S:32:LEU:HD11	2.11	0.50
8:2I:69:LYS:HA	8:2I:138:ILE:HD13	1.93	0.50
32:2a:573:A:N3	32:2a:883:C:O2'	2.44	0.50
32:2a:838:G:H2'	32:2a:839:U:H2'	1.93	0.50
32:2a:1152:A:H5'	41:2j:13:HIS:CD2	2.47	0.50
32:2a:1247:U:H1'	32:2a:1291:G:N2	2.27	0.50
32:2a:1375:A:H4'	38:2g:29:LYS:NZ	2.27	0.50
37:2f:15:ASP:OD1	37:2f:17:SER:HB2	2.12	0.50
37:2f:100:ASN:ND2	49:2r:23:LYS:HE3	2.27	0.50
43:2l:101:VAL:HA	62:2l:303:HOH:O	2.12	0.50
1:1A:516:C:OP1	27:15:13:LYS:NZ	2.40	0.50
1:1A:1011:G:OP2	16:1U:70:ARG:NH2	2.45	0.50
1:1A:1503:U:O2'	1:1A:1504:C:H5'	2.12	0.50
1:1A:1812:A:O2'	3:1D:45:ASN:N	2.44	0.50
5:1F:29:ASN:H	5:1F:112:MET:HE3	1.76	0.50
32:1a:881:G:P	43:1l:12:ARG:HH22	2.34	0.50
43:1l:23:LYS:C	43:1l:25:PRO:HD3	2.37	0.50
48:1q:92:ARG:HD3	48:1q:95:TYR:CE2	2.47	0.50
49:1r:73:ALA:HB3	49:1r:79:LEU:HD12	1.94	0.50
1:2A:456:C:O2'	1:2A:457:A:OP2	2.29	0.50
1:2A:1180:C:H2'	1:2A:1181:C:H6	1.77	0.50
1:2A:2268:A:OP1	62:2A:3966:HOH:O	2.20	0.50
1:2A:2373:G:H2'	1:2A:2374:C:C6	2.45	0.50
5:2F:161:GLU:HG2	5:2F:164:ARG:NH2	2.26	0.50
9:2N:34:LEU:O	9:2N:49:GLY:HA3	2.11	0.50
16:2U:115:ALA:O	16:2U:117:GLN:N	2.44	0.50
19:2X:61:GLY:HA3	19:2X:73:ARG:O	2.12	0.50
32:2a:9:G:H1	32:2a:25:C:N4	2.09	0.50
32:2a:343:U:H2'	32:2a:345:C:C5	2.47	0.50
32:2a:926:G:H22	53:2v:15:A:H3'	1.77	0.50
32:2a:1007:C:N4	32:2a:1008:C:H41	2.10	0.50
32:2a:1210:C:H2'	32:2a:1211:U:H5''	1.94	0.50
38:2g:78:ARG:HG2	38:2g:79:ARG:H	1.77	0.50
48:2q:6:LEU:HB2	48:2q:59:ILE:CG1	2.40	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:2s:33:THR:HG22	50:2s:49:ILE:HD11	1.94	0.50
1:1A:212:G:O2'	1:1A:213:A:H5'	2.12	0.50
1:1A:392:C:H5''	1:1A:409:C:H5''	1.93	0.50
1:1A:1062:G:H2'	1:1A:1063:G:C8	2.47	0.50
1:1A:1108:U:H2'	1:1A:1109:C:C6	2.47	0.50
1:1A:1174:A:H1'	1:1A:1175:U:H5''	1.94	0.50
1:1A:2135:A:N1	1:1A:2155:G:N2	2.41	0.50
1:1A:2590:A:H2'	1:1A:2591:C:H6	1.77	0.50
13:1R:22:ARG:O	13:1R:26:LYS:HG3	2.12	0.50
14:1S:74:ALA:O	14:1S:77:ALA:N	2.43	0.50
19:1X:26:TYR:CG	19:1X:89:ILE:HD12	2.47	0.50
32:1a:323:U:H2'	32:1a:324:G:O4'	2.11	0.50
32:1a:1218:C:H2'	32:1a:1219:U:C6	2.47	0.50
32:1a:1272:G:H2'	32:1a:1273:G:O4'	2.10	0.50
33:1b:208:ILE:HG12	33:1b:209:ARG:H	1.76	0.50
34:1c:111:LEU:HD21	34:1c:144:SER:HB2	1.92	0.50
35:1d:127:THR:HB	35:1d:131:ARG:H	1.77	0.50
44:1m:40:ASN:HD22	44:1m:43:THR:HG23	1.77	0.50
1:2A:252:G:P	11:2P:50:ARG:HH12	2.34	0.50
1:2A:271(H):G:H1	1:2A:271(P):C:H42	1.60	0.50
1:2A:289:A:H2'	1:2A:290:G:C8	2.47	0.50
1:2A:384:U:H2'	1:2A:385:C:C6	2.47	0.50
1:2A:577:G:C6	1:2A:578:A:C6	3.00	0.50
1:2A:828:U:H4'	1:2A:831:G:N1	2.26	0.50
1:2A:927:G:H3'	1:2A:928:G:C8	2.47	0.50
1:2A:2319:G:H21	14:2S:3:ARG:HD2	1.76	0.50
1:2A:2516:G:O6	1:2A:2517:C:N4	2.45	0.50
2:2B:79:C:H2'	2:2B:80:U:O4'	2.12	0.50
8:2I:62:LYS:HG2	8:2I:133:HIS:CE1	2.46	0.50
11:2P:29:LYS:HG3	11:2P:30:THR:H	1.75	0.50
13:2R:33:ARG:HA	13:2R:114:VAL:O	2.11	0.50
16:2U:10:ARG:NH1	62:2U:301:HOH:O	2.45	0.50
32:2a:748:C:H4'	32:2a:749:C:O5'	2.11	0.50
38:2g:62:PHE:HD1	38:2g:124:LEU:HD11	1.77	0.50
44:2m:13:LYS:HG2	44:2m:17:VAL:HG23	1.93	0.50
44:2m:34:LEU:HD23	44:2m:39:ILE:HB	1.93	0.50
1:1A:476:G:OP1	62:1A:4289:HOH:O	2.19	0.49
1:1A:710:G:H1	1:1A:721:C:N4	2.09	0.49
1:1A:1683:C:H2'	1:1A:1684:C:H6	1.77	0.49
1:1A:2279:G:O6	22:10:14:ARG:HG3	2.12	0.49
4:1E:42:ASP:O	62:1E:402:HOH:O	2.20	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:1G:77:ILE:HG21	6:1G:80:PHE:CD2	2.47	0.49
11:1P:2:LYS:HG2	11:1P:3:LEU:H	1.77	0.49
12:1Q:136:ALA:HB1	21:1Z:52:SER:CB	2.41	0.49
23:11:72:GLU:O	23:11:76:ARG:HG3	2.12	0.49
29:17:19:ARG:O	29:17:23:ARG:HG3	2.12	0.49
32:1a:1058:G:H2'	32:1a:1059:C:C6	2.46	0.49
34:1c:135:LYS:NZ	36:1e:52:PRO:HG2	2.27	0.49
36:1e:53:LEU:O	36:1e:56:GLN:HG2	2.12	0.49
37:1f:75:LEU:O	37:1f:79:LEU:HG	2.12	0.49
44:1m:12:ASN:O	44:1m:44:ARG:NH1	2.45	0.49
48:1q:52:LYS:HG3	48:1q:55:ASP:OD2	2.12	0.49
1:2A:30:G:H2'	1:2A:31:C:C6	2.46	0.49
1:2A:83:G:C2	1:2A:102:G:H1'	2.47	0.49
1:2A:272(B):G:H2'	1:2A:272(C):G:C8	2.47	0.49
1:2A:296:C:O3'	20:2Y:95:LYS:NZ	2.44	0.49
1:2A:662:G:H5'	11:2P:14:LYS:O	2.11	0.49
1:2A:1279:G:H4'	13:2R:31:HIS:CD2	2.47	0.49
1:2A:1466:G:H2'	1:2A:1547:C:C5	2.47	0.49
1:2A:1630:G:C6	1:2A:1631:C:C4	3.00	0.49
13:2R:9:LYS:O	13:2R:17:ARG:HD3	2.12	0.49
32:2a:559:A:OP1	36:2e:126:ARG:NH2	2.44	0.49
32:2a:571:U:O2	32:2a:918:A:H5'	2.12	0.49
32:2a:743:U:H2'	32:2a:744:C:C6	2.47	0.49
32:2a:903:G:OP1	62:2a:1914:HOH:O	2.19	0.49
32:2a:1112:C:N3	34:2c:177:THR:HA	2.26	0.49
32:2a:1163:C:H2'	32:2a:1164:G:C8	2.47	0.49
32:2a:1261:A:H5''	32:2a:1262:C:OP2	2.12	0.49
32:2a:1299:A:H2'	32:2a:1299:A:N3	2.26	0.49
32:2a:1443:G:H2'	32:2a:1444:C:C6	2.47	0.49
35:2d:105:VAL:HG21	35:2d:126:ILE:HG13	1.93	0.49
40:2i:62:TYR:C	40:2i:63:ILE:HG12	2.37	0.49
44:2m:25:ILE:HD11	44:2m:66:LEU:HD13	1.93	0.49
1:1A:284:U:H2'	1:1A:285:C:C6	2.47	0.49
1:1A:286:C:H2'	1:1A:287:C:H6	1.77	0.49
1:1A:1411:C:H2'	1:1A:1412:A:C8	2.47	0.49
1:1A:2051:A:O2'	62:1A:4282:HOH:O	2.18	0.49
2:1B:21:G:H2'	2:1B:22:U:C6	2.47	0.49
6:1G:10:LYS:NZ	6:1G:175:LEU:O	2.39	0.49
32:1a:163:C:H2'	32:1a:164:U:C6	2.47	0.49
32:1a:562:C:H1'	43:1l:15:ARG:HB3	1.94	0.49
32:1a:1030:C:N4	32:1a:1031:G:N1	2.58	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1279:A:O2'	32:1a:1282:C:N4	2.45	0.49
38:1g:50:ILE:HG21	38:1g:58:PRO:HA	1.95	0.49
44:1m:54:VAL:HA	44:1m:57:ARG:HB3	1.94	0.49
54:1w:27:G:H2'	54:1w:28:G:H8	1.75	0.49
1:2A:17:G:H2'	1:2A:18:C:C6	2.47	0.49
1:2A:312:G:H4'	1:2A:331:A:N3	2.27	0.49
1:2A:567:A:OP2	11:2P:29:LYS:NZ	2.45	0.49
1:2A:776:G:N7	1:2A:793:A:O2'	2.42	0.49
1:2A:1229:G:C2	1:2A:1230:C:C2	3.00	0.49
1:2A:1914:C:H2'	1:2A:1915:5MU:O4'	2.12	0.49
3:2D:126:GLN:HA	3:2D:126:GLN:NE2	2.26	0.49
9:2N:47:ALA:O	9:2N:119:ARG:NH2	2.45	0.49
22:20:48:GLY:HA3	22:20:80:HIS:ND1	2.27	0.49
32:2a:744:C:H4'	32:2a:852:G:O2'	2.12	0.49
32:2a:976:G:H5'	32:2a:1358:U:O2'	2.12	0.49
32:2a:1315:U:H2'	32:2a:1316:G:O4'	2.12	0.49
32:2a:1519:MA6:H5''	32:2a:1520:G:OP2	2.12	0.49
33:2b:18:GLY:O	33:2b:204:ASN:HB2	2.13	0.49
37:2f:7:ASN:ND2	49:2r:34:TYR:OH	2.39	0.49
37:2f:70:ASP:OD1	37:2f:70:ASP:N	2.30	0.49
41:2j:38:ILE:HG13	41:2j:71:LEU:HD23	1.94	0.49
44:2m:49:THR:O	44:2m:53:VAL:HG13	2.12	0.49
53:2v:19:U:C4	54:2w:37:MIA:H113	2.47	0.49
56:2y:52:G:OP2	56:2y:52:G:H8	1.96	0.49
1:1A:2175:C:H2'	1:1A:2176:A:C8	2.47	0.49
9:1N:73:THR:HB	9:1N:82:LEU:HD11	1.94	0.49
21:1Z:137:ILE:HA	21:1Z:156:LYS:HZ1	1.77	0.49
32:1a:313:A:H2'	32:1a:314:C:C6	2.48	0.49
32:1a:664:G:N2	32:1a:741:G:H1	2.04	0.49
32:1a:673:G:H5''	37:1f:87:ARG:CZ	2.42	0.49
35:1d:15:GLU:OE2	35:1d:66:ARG:NH1	2.45	0.49
38:1g:78:ARG:HE	38:1g:79:ARG:HE	1.60	0.49
54:1w:18:G:H4'	54:1w:60:U:C5	2.47	0.49
54:1w:19:G:OP1	54:1w:60:U:H5	1.95	0.49
1:2A:250:G:C6	1:2A:251:A:C6	3.00	0.49
1:2A:272:G:H4'	1:2A:272(A):U:H5''	1.94	0.49
1:2A:307:G:N2	1:2A:309:G:H3'	2.27	0.49
1:2A:1006:C:C2	1:2A:1138:G:N2	2.80	0.49
1:2A:1271:G:OP2	62:2A:3911:HOH:O	2.19	0.49
1:2A:1370:C:O2'	1:2A:1811:G:O2'	2.21	0.49
1:2A:2524:G:N7	62:2A:4090:HOH:O	2.35	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:163:LEU:HG	21:2Z:165:VAL:HG22	1.93	0.49
22:20:56:ASP:OD2	22:20:58:THR:OG1	2.28	0.49
32:2a:472:A:H4'	47:2p:80:PHE:O	2.12	0.49
32:2a:1040:U:H2'	32:2a:1041:A:C8	2.48	0.49
32:2a:1085:U:H3'	32:2a:1086:U:C5	2.47	0.49
35:2d:173:TRP:CD2	35:2d:189:PRO:HB3	2.47	0.49
38:2g:152:ALA:O	38:2g:155:ARG:N	2.44	0.49
56:2y:35:A:H3'	56:2y:36:A:C8	2.46	0.49
1:1A:64:A:C4	19:1X:66:LEU:HD13	2.47	0.49
1:1A:578:A:OP1	1:1A:1255:U:O2'	2.22	0.49
1:1A:1789:A:H2'	1:1A:1790:C:C6	2.47	0.49
1:1A:2646:C:OP2	1:1A:2732:G:O2'	2.29	0.49
4:1E:2:LYS:HG3	4:1E:200:GLU:HB2	1.94	0.49
10:1O:7:TYR:CE2	10:1O:20:MET:HG3	2.48	0.49
11:1P:95:VAL:HG13	11:1P:123:LEU:HD23	1.93	0.49
17:1V:2:PHE:CE2	17:1V:41:GLY:HA3	2.47	0.49
33:1b:90:MET:HE2	33:1b:90:MET:HA	1.92	0.49
1:2A:639:U:H2'	1:2A:640:C:C6	2.47	0.49
1:2A:652(T):C:H5'	1:2A:652(U):G:OP2	2.13	0.49
1:2A:784:A:C6	3:2D:229:VAL:HG11	2.47	0.49
1:2A:880:G:H22	1:2A:898:C:H1'	1.77	0.49
1:2A:996:A:OP2	16:2U:93:LYS:NZ	2.35	0.49
1:2A:1794:U:H2'	1:2A:1795:C:C6	2.48	0.49
1:2A:2061:G:H5''	1:2A:2503:2MA:C2	2.42	0.49
1:2A:2184:G:H2'	1:2A:2185:C:H6	1.76	0.49
3:2D:38:LYS:HE2	3:2D:39:LYS:O	2.13	0.49
3:2D:71:ASP:HB2	3:2D:103:ARG:HH12	1.77	0.49
6:2G:77:ILE:HG21	6:2G:80:PHE:CD2	2.47	0.49
21:2Z:171:ILE:CD1	21:2Z:172:ALA:H	2.20	0.49
28:26:40:CYS:SG	28:26:42:TRP:HB2	2.53	0.49
31:29:16:VAL:HG22	31:29:25:VAL:HG22	1.95	0.49
32:2a:73:G:C6	32:2a:76:C:C4	3.00	0.49
33:2b:187:LEU:HD23	33:2b:188:ALA:N	2.26	0.49
34:2c:45:LYS:HG3	34:2c:46:GLU:CD	2.36	0.49
39:2h:20:TYR:CE2	39:2h:75:ARG:HD2	2.43	0.49
48:2q:13:ASP:HA	48:2q:19:VAL:HG12	1.93	0.49
56:2y:15:G:H22	56:2y:48:C:H42	1.60	0.49
24:12:64:LEU:HD11	24:12:68:ARG:NE	2.27	0.49
32:1a:309:G:O2'	32:1a:607:A:N1	2.46	0.49
32:1a:350:G:O2'	32:1a:351:G:H5'	2.12	0.49
32:1a:1148:U:H2'	32:1a:1149:C:O4'	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1292:U:OP2	38:1g:41:ARG:NH2	2.45	0.49
48:1q:31:LEU:HD23	48:1q:32:TYR:CZ	2.48	0.49
48:1q:48:GLU:HB2	48:1q:50:LYS:HD2	1.94	0.49
1:2A:652(V):C:H6	1:2A:652(V):C:O5'	1.95	0.49
1:2A:1906:G:OP1	1:2A:1930:G:H8	1.95	0.49
1:2A:2066:C:H5''	62:2A:4311:HOH:O	2.11	0.49
1:2A:2424:C:O2	1:2A:2429:G:O2'	2.27	0.49
12:2Q:32:TYR:CZ	12:2Q:111:GLU:HG3	2.48	0.49
13:2R:57:ARG:NE	13:2R:59:ASP:OD1	2.46	0.49
21:2Z:30:ASN:ND2	21:2Z:90:VAL:HB	2.27	0.49
32:2a:452:A:H2	47:2p:69:THR:HG21	1.77	0.49
32:2a:689:C:H2'	32:2a:690:G:O4'	2.12	0.49
35:2d:171:GLY:O	35:2d:173:TRP:N	2.45	0.49
36:2e:110:LEU:HD13	36:2e:118:ILE:HG21	1.95	0.49
38:2g:62:PHE:C	38:2g:64:GLN:H	2.20	0.49
1:1A:76:C:O2'	1:1A:77:C:H5'	2.12	0.49
1:1A:2313:C:H2'	1:1A:2314:C:C6	2.46	0.49
1:1A:2545:G:O2'	1:1A:2565:A:N1	2.35	0.49
1:1A:2749:A:OP2	1:1A:2750:A:O2'	2.21	0.49
3:1D:202:LYS:HG3	3:1D:203:ASN:OD1	2.12	0.49
5:1F:150:GLY:HA2	5:1F:172:TRP:CE3	2.47	0.49
6:1G:37:VAL:HG22	6:1G:159:VAL:HA	1.93	0.49
6:1G:43:LEU:O	6:1G:45:GLU:N	2.45	0.49
8:1I:101:LEU:O	8:1I:106:GLY:N	2.41	0.49
33:1b:16:HIS:CG	33:1b:17:PHE:N	2.80	0.49
33:1b:97:TRP:HH2	33:1b:176:GLU:CD	2.21	0.49
34:1c:52:LEU:HD13	34:1c:70:VAL:HG23	1.93	0.49
35:1d:70:ILE:HB	35:1d:100:ARG:NH2	2.28	0.49
50:1s:19:VAL:HG21	50:1s:44:MET:HG2	1.94	0.49
1:2A:556:G:H2'	1:2A:557:U:C6	2.47	0.49
1:2A:1860:G:C6	1:2A:1883:G:N2	2.80	0.49
2:2B:30:C:H2'	2:2B:31:C:O4'	2.13	0.49
2:2B:90:A:C5	2:2B:91:C:H1'	2.48	0.49
3:2D:3:VAL:HG22	3:2D:17:THR:HB	1.94	0.49
4:2E:55:ASN:HB3	4:2E:58:ARG:HD2	1.95	0.49
10:2O:53:LYS:O	10:2O:56:ASP:HB2	2.12	0.49
32:2a:621:A:H2'	32:2a:622:A:C8	2.47	0.49
32:2a:1003:G:C5	32:2a:1004:A:C2	3.01	0.49
32:2a:1260:C:O5'	32:2a:1284:C:H4'	2.12	0.49
33:2b:92:TYR:CE2	33:2b:151:GLY:HA3	2.47	0.49
35:2d:4:TYR:O	35:2d:5:ILE:HG22	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:2l:42:THR:HG22	43:2l:54:LYS:HG3	1.92	0.49
51:2t:10:LEU:O	51:2t:13:LEU:HB2	2.13	0.49
1:1A:1903:G:O2'	1:1A:1904:G:H5'	2.13	0.49
1:1A:2572:A:N7	4:1E:145:LYS:HB2	2.28	0.49
1:1A:2712(A):A:H2'	62:1A:5505:HOH:O	2.12	0.49
21:1Z:25:PRO:HA	21:1Z:38:TYR:HA	1.94	0.49
32:1a:1058:G:H2'	32:1a:1059:C:H6	1.77	0.49
46:1o:56:LEU:O	46:1o:60:VAL:HG23	2.11	0.49
47:1p:53:VAL:HG13	47:1p:79:VAL:HG22	1.94	0.49
51:1t:22:ARG:O	51:1t:26:ASN:ND2	2.45	0.49
1:2A:736:C:O5'	1:2A:736:C:H6	1.96	0.49
1:2A:964:C:O2'	1:2A:2273:A:N3	2.40	0.49
1:2A:1399:C:H2'	1:2A:1400:G:C8	2.48	0.49
1:2A:2070:G:H2'	1:2A:2071:A:C8	2.47	0.49
1:2A:2079:U:OP1	23:21:21:ARG:NH2	2.45	0.49
1:2A:2137:C:HO2'	1:2A:2138:C:H5	1.58	0.49
1:2A:2350:C:H2'	1:2A:2351:G:O4'	2.13	0.49
2:2B:7:G:H5'	14:2S:29:PHE:CE1	2.47	0.49
3:2D:154:LYS:HB2	3:2D:155:LEU:HD13	1.93	0.49
7:2H:154:PRO:HA	7:2H:161:GLY:HA3	1.94	0.49
17:2V:38:LEU:HD23	17:2V:50:PRO:O	2.12	0.49
26:24:67:TYR:CD2	50:2s:9:VAL:HB	2.47	0.49
32:2a:302:G:C6	32:2a:303:A:C5	3.01	0.49
32:2a:1200:C:OP1	32:2a:1201:A:O2'	2.23	0.49
32:2a:1401:G:C2	32:2a:1402:4OC:H1'	2.48	0.49
32:2a:1512:U:H2'	32:2a:1513:A:C8	2.48	0.49
33:2b:17:PHE:HA	33:2b:44:LEU:HD11	1.93	0.49
51:2t:64:ASP:OD1	51:2t:81:LYS:NZ	2.44	0.49
54:2w:12:U:O4	54:2w:13:C:N4	2.46	0.49
1:1A:1092:C:H2'	1:1A:1093:G:O4'	2.13	0.49
1:1A:1784:A:H4'	1:1A:1785:A:O5'	2.13	0.49
1:1A:1851:U:H4'	56:1y:71:G:H4'	1.95	0.49
2:1B:2:C:H2'	2:1B:3:C:H6	1.76	0.49
6:1G:5:VAL:HG13	6:1G:8:LYS:HB3	1.95	0.49
12:1Q:36:ALA:O	12:1Q:99:PRO:HA	2.12	0.49
32:1a:160:A:H1'	32:1a:344:A:C8	2.47	0.49
32:1a:909:A:H2'	32:1a:910:C:O4'	2.13	0.49
32:1a:955:U:O2'	50:1s:83:HIS:HD2	1.96	0.49
33:1b:84:GLU:HA	33:1b:87:ARG:HD3	1.93	0.49
40:1i:48:GLU:CD	40:1i:51:ARG:HE	2.21	0.49
43:1l:11:VAL:HG13	48:1q:29:HIS:CD2	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:13:LYS:O	44:1m:45:VAL:HG23	2.12	0.49
1:2A:807:U:C2	1:2A:808:G:C8	3.00	0.49
1:2A:923:C:H2'	1:2A:924:C:C6	2.48	0.49
1:2A:2203:U:H2'	1:2A:2205:C:C6	2.47	0.49
1:2A:2245:U:H5''	1:2A:2246:G:H5'	1.94	0.49
1:2A:2291:U:OP1	1:2A:2380:C:O2'	2.30	0.49
2:2B:41:U:H5	6:2G:70:VAL:H	1.59	0.49
22:20:50:ASN:HB3	22:20:63:VAL:HG13	1.95	0.49
32:2a:920:U:H2'	32:2a:921:U:C6	2.47	0.49
32:2a:1004:A:C8	32:2a:1025:U:O4	2.66	0.49
34:2c:47:LEU:HD12	34:2c:70:VAL:HG11	1.95	0.49
35:2d:88:VAL:O	35:2d:92:VAL:HG12	2.13	0.49
36:2e:105:VAL:HB	36:2e:106:PRO:HD3	1.95	0.49
38:2g:147:ALA:HB2	56:2y:41:C:H5'	1.93	0.49
39:2h:66:GLY:N	39:2h:77:GLU:O	2.46	0.49
43:2l:66:VAL:HG21	43:2l:98:TYR:CD2	2.48	0.49
54:2w:15:G:N2	54:2w:59:U:O2	2.46	0.49
1:1A:295:G:H4'	20:1Y:1:MET:HE3	1.95	0.49
1:1A:570:G:H2'	1:1A:2030:A:C5	2.47	0.49
1:1A:881:G:H3'	1:1A:882:G:H8	1.77	0.49
1:1A:2190:G:C2'	1:1A:2191:G:H5'	2.43	0.49
18:1W:45:TYR:O	18:1W:48:ALA:HB3	2.13	0.49
21:1Z:10:ARG:HD3	21:1Z:38:TYR:HB3	1.95	0.49
32:1a:271:C:H2'	32:1a:272:C:H6	1.77	0.49
32:1a:675:A:H1'	42:1k:116:HIS:CG	2.48	0.49
32:1a:1066:C:O2'	32:1a:1067:A:H5'	2.12	0.49
32:1a:1418:A:H8	32:1a:1418:A:O5'	1.95	0.49
34:1c:66:VAL:HG23	34:1c:101:LEU:HD13	1.94	0.49
40:1i:5:TYR:CG	40:1i:6:GLY:N	2.81	0.49
46:1o:17:ARG:HH11	46:1o:17:ARG:HG3	1.76	0.49
52:1u:14:TRP:HE3	52:1u:15:ARG:HG2	1.77	0.49
1:2A:878:A:N6	1:2A:899:A:O2'	2.45	0.49
1:2A:897:C:OP2	1:2A:898:C:N4	2.46	0.49
1:2A:1147:C:C2	1:2A:1148:A:C8	3.01	0.49
1:2A:1423:G:H2'	1:2A:1424:G:H8	1.78	0.49
1:2A:1847:A:H4'	1:2A:1848:A:OP2	2.12	0.49
1:2A:2700:C:N4	1:2A:2707:G:H1	2.11	0.49
4:2E:15:PHE:CD2	15:2T:81:PRO:HD3	2.47	0.49
4:2E:111:ARG:HB2	4:2E:160:TYR:O	2.13	0.49
4:2E:178:GLU:N	4:2E:178:GLU:OE1	2.40	0.49
7:2H:11:VAL:HG13	7:2H:15:VAL:HG23	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:734:G:C6	32:2a:735:C:C4	3.00	0.49
32:2a:1068:G:N2	32:2a:1191:A:N3	2.59	0.49
34:2c:12:LEU:C	34:2c:14:ILE:H	2.20	0.49
34:2c:22:TRP:CH2	34:2c:32:LEU:HB3	2.48	0.49
34:2c:52:LEU:HD11	34:2c:55:VAL:HB	1.94	0.49
35:2d:153:ARG:HG2	35:2d:181:MET:HE2	1.95	0.49
36:2e:57:LYS:HG3	36:2e:61:TYR:HE2	1.78	0.49
39:2h:77:GLU:OE2	39:2h:81:HIS:NE2	2.45	0.49
41:2j:10:GLY:HA3	41:2j:16:LEU:HD21	1.95	0.49
45:2n:12:ARG:NH1	45:2n:14:PRO:HA	2.21	0.49
1:1A:271(P):C:H2'	1:1A:271(Q):G:O4'	2.13	0.49
1:1A:2331:G:O3'	22:10:43:THR:HG22	2.13	0.49
1:1A:2438:U:OP1	62:1A:4296:HOH:O	2.20	0.49
1:1A:2756:U:H1'	1:1A:2757:A:H5''	1.94	0.49
5:1F:24:LEU:HD21	5:1F:199:TRP:HH2	1.78	0.49
5:1F:161:GLU:HG2	5:1F:164:ARG:NH2	2.27	0.49
21:1Z:76:LEU:HD23	21:1Z:83:PRO:HA	1.94	0.49
23:11:50:ARG:HD2	23:11:57:GLU:OE2	2.13	0.49
24:12:17:SER:N	24:12:20:GLU:OE1	2.27	0.49
25:13:30:ARG:NH2	62:13:201:HOH:O	2.21	0.49
32:1a:982:U:H5''	45:1n:6:LEU:HD21	1.95	0.49
34:1c:110:ASN:ND2	34:1c:140:ARG:HB3	2.28	0.49
37:1f:43:LEU:HD23	37:1f:46:ARG:HD2	1.95	0.49
1:2A:885:C:H1'	1:2A:892:G:O6	2.12	0.49
1:2A:1142:U:O5'	1:2A:1142:U:H6	1.95	0.49
1:2A:1213:A:O5'	1:2A:1213:A:H8	1.95	0.49
1:2A:1364:G:P	23:21:3:LYS:HG3	2.53	0.49
1:2A:1593:G:C2	1:2A:1594:G:C4	3.01	0.49
1:2A:1814:G:C6	1:2A:1815:A:C6	3.01	0.49
1:2A:2193:G:H2'	1:2A:2194:G:H8	1.78	0.49
1:2A:2341:G:H2'	1:2A:2342:C:C6	2.48	0.49
1:2A:2516:G:C6	1:2A:2517:C:N4	2.81	0.49
1:2A:2567:G:H2'	1:2A:2568:C:C6	2.48	0.49
1:2A:2771:C:H2'	1:2A:2772:C:C6	2.48	0.49
2:2B:33:G:C6	2:2B:34:U:C4	3.01	0.49
3:2D:180:GLY:HA3	3:2D:275:LYS:CG	2.41	0.49
14:2S:30:ARG:NH2	14:2S:92:TYR:HB3	2.26	0.49
17:2V:74:LYS:HB3	17:2V:81:TYR:HE2	1.77	0.49
20:2Y:37:VAL:O	20:2Y:67:LEU:N	2.37	0.49
32:2a:675:A:H1'	42:2k:116:HIS:CG	2.48	0.49
32:2a:1218:C:H2'	32:2a:1219:U:C6	2.48	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:2h:9:MET:SD	39:2h:32:LYS:HB3	2.53	0.49
44:2m:117:VAL:HG22	44:2m:118:ALA:N	2.28	0.49
46:2o:61:GLY:O	46:2o:65:ARG:HG3	2.12	0.49
47:2p:53:VAL:O	47:2p:57:ARG:HG3	2.13	0.49
1:1A:121:G:H4'	1:1A:149:A:H5'	1.94	0.48
1:1A:236:C:H2'	1:1A:237:C:C6	2.48	0.48
1:1A:1086:A:O3'	1:1A:1087:G:C8	2.66	0.48
1:1A:1143:A:OP2	62:1A:4295:HOH:O	2.20	0.48
1:1A:2740:A:H2'	1:1A:2741:A:C8	2.48	0.48
6:1G:131:TYR:HB3	6:1G:159:VAL:HG13	1.94	0.48
13:1R:90:ARG:NH2	13:1R:118:GLU:OXT	2.46	0.48
17:1V:43:GLU:OE1	17:1V:43:GLU:N	2.36	0.48
24:12:31:GLU:HB3	24:12:53:LEU:HD11	1.94	0.48
32:1a:471:G:C4	32:1a:472:A:C8	3.01	0.48
32:1a:1250:A:H2'	32:1a:1251:A:C8	2.48	0.48
38:1g:34:GLY:O	38:1g:36:LYS:N	2.46	0.48
40:1i:110:GLU:OE2	40:1i:113:LYS:NZ	2.29	0.48
49:1r:53:ARG:C	49:1r:55:ARG:H	2.21	0.48
1:2A:195:A:OP1	11:2P:46:LYS:NZ	2.46	0.48
1:2A:1656:C:O2'	1:2A:1657:C:H5'	2.12	0.48
1:2A:2707:G:H5'	13:2R:68:ARG:HH21	1.78	0.48
1:2A:2836:U:C4	1:2A:2883:A:N6	2.80	0.48
26:24:50:VAL:HG21	44:2m:64:TRP:HA	1.94	0.48
32:2a:165:C:H2'	32:2a:166:G:H8	1.78	0.48
32:2a:236:G:OP1	48:2q:40:LYS:NZ	2.41	0.48
32:2a:1176:A:H2'	32:2a:1177:G:C8	2.48	0.48
32:2a:1221:G:H4'	50:2s:53:ASN:O	2.13	0.48
33:2b:84:GLU:HB3	33:2b:219:VAL:HG21	1.95	0.48
33:2b:126:GLU:OE1	33:2b:126:GLU:N	2.32	0.48
1:1A:893:C:N3	1:1A:894:C:N4	2.62	0.48
1:1A:1683:C:H2'	1:1A:1684:C:C6	2.48	0.48
5:1F:41:LEU:O	5:1F:44:ARG:HG2	2.14	0.48
10:1O:17:ARG:NH1	10:1O:47:ILE:HD13	2.29	0.48
21:1Z:77:ASP:OD2	21:1Z:80:ARG:HD2	2.13	0.48
29:17:30:VAL:O	29:17:34:ARG:HG3	2.13	0.48
32:1a:582:U:H2'	32:1a:583:A:C8	2.47	0.48
32:1a:866:C:C4	32:1a:867:G:H1'	2.48	0.48
32:1a:1111:A:C2	34:1c:177:THR:HG23	2.48	0.48
32:1a:1452:C:H4'	32:1a:1457:G:C8	2.48	0.48
36:1e:68:GLU:HG3	36:1e:69:VAL:N	2.28	0.48
37:1f:26:ILE:O	37:1f:30:LEU:HG	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:1j:78:ASN:C	41:1j:80:LYS:H	2.21	0.48
1:2A:76:C:O2'	24:22:59:ARG:HA	2.12	0.48
1:2A:84:A:H5'	20:2Y:8:LYS:HG2	1.95	0.48
1:2A:245:G:O6	30:28:8:LYS:NZ	2.41	0.48
1:2A:594:U:H2'	1:2A:595:C:C6	2.48	0.48
1:2A:2470:G:C2	1:2A:2471:C:C6	3.01	0.48
1:2A:2478:A:C2	1:2A:2529:G:H2'	2.48	0.48
2:2B:40:U:N3	2:2B:44:G:OP2	2.38	0.48
4:2E:47:VAL:O	4:2E:80:GLU:HA	2.13	0.48
5:2F:64:ILE:HG23	5:2F:76:GLY:O	2.12	0.48
17:2V:15:GLU:H	17:2V:18:LEU:HD22	1.77	0.48
20:2Y:54:LYS:C	20:2Y:56:PRO:HD3	2.38	0.48
21:2Z:104:PHE:HD2	21:2Z:139:VAL:HB	1.77	0.48
35:2d:106:TYR:C	35:2d:108:LEU:H	2.21	0.48
38:2g:155:ARG:HG2	38:2g:155:ARG:HH11	1.76	0.48
39:2h:29:SER:HB3	39:2h:32:LYS:HG3	1.95	0.48
40:2i:14:VAL:HG23	40:2i:66:ARG:O	2.13	0.48
40:2i:33:PHE:CZ	40:2i:47:LEU:HD21	2.48	0.48
49:2r:33:ASP:O	49:2r:40:LEU:HD11	2.13	0.48
56:2y:58:A:C1'	56:2y:60:U:H3	2.26	0.48
1:1A:363(A):A:H2'	1:1A:363(B):G:C8	2.48	0.48
1:1A:709:U:H2'	1:1A:710:G:C8	2.47	0.48
1:1A:848:G:H2'	1:1A:849:A:C8	2.48	0.48
1:1A:2849:U:H4'	1:1A:2868:A:C2	2.48	0.48
8:1I:140:LEU:HD22	8:1I:142:VAL:HG13	1.94	0.48
32:1a:397:A:H3'	32:1a:397:A:N3	2.28	0.48
37:1f:45:LEU:HD23	37:1f:57:GLN:HE22	1.77	0.48
56:1y:58:A:C2	56:1y:60:U:C2	3.02	0.48
1:2A:118:A:C8	1:2A:119:A:C8	3.00	0.48
1:2A:2343:C:O2'	1:2A:2373:G:H4'	2.13	0.48
1:2A:2461:C:H2'	1:2A:2462:U:C6	2.47	0.48
4:2E:103:ASP:OD2	4:2E:168:MET:HE3	2.13	0.48
32:2a:296:U:O2'	32:2a:556:C:O2	2.27	0.48
32:2a:408:A:H2'	32:2a:409:G:O4'	2.13	0.48
32:2a:437:U:H1'	35:2d:119:GLN:NE2	2.28	0.48
32:2a:473:G:H2'	32:2a:474:G:C8	2.49	0.48
32:2a:1015:A:H2'	32:2a:1016:A:C8	2.47	0.48
32:2a:1039:C:H2'	32:2a:1040:U:H4'	1.94	0.48
32:2a:1229:A:H2'	32:2a:1230:C:C6	2.47	0.48
33:2b:114:ARG:HA	33:2b:117:GLU:HB2	1.95	0.48
1:1A:150:C:H2'	1:1A:151:C:C6	2.48	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:247:G:H4'	1:1A:386:G:C5	2.48	0.48
1:1A:412:A:H8	1:1A:412:A:O5'	1.97	0.48
1:1A:1069:A:H4'	1:1A:1070:A:H5''	1.95	0.48
3:1D:35:LYS:HB2	3:1D:36:PRO:HD2	1.94	0.48
4:1E:6:GLY:O	4:1E:195:LEU:HD12	2.13	0.48
11:1P:42:SER:O	62:1P:303:HOH:O	2.19	0.48
22:10:23:VAL:HG22	22:10:38:VAL:HG22	1.94	0.48
32:1a:193:C:H2'	32:1a:194:C:H6	1.78	0.48
32:1a:300:A:O2'	32:1a:564:C:N3	2.36	0.48
32:1a:345:C:O4'	32:1a:346:G:C2	2.66	0.48
32:1a:441:A:H3'	32:1a:442:C:H6	1.78	0.48
32:1a:1435:G:O5'	32:1a:1435:G:H8	1.97	0.48
37:1f:6:VAL:HG22	37:1f:90:VAL:HG22	1.96	0.48
47:1p:43:LYS:HG2	47:1p:48:TRP:CD2	2.49	0.48
54:1w:15:G:H8	54:1w:15:G:O5'	1.96	0.48
56:1y:69:G:H5'	56:1y:70:G:OP2	2.13	0.48
1:2A:892:G:H3'	1:2A:893:C:H5''	1.93	0.48
1:2A:1606:G:H5''	1:2A:1607:C:OP1	2.12	0.48
1:2A:2010:G:H5''	18:2W:42:ARG:HB2	1.95	0.48
1:2A:2347:C:H2'	1:2A:2348:U:C6	2.48	0.48
2:2B:3:C:H2'	2:2B:4:C:H6	1.77	0.48
6:2G:9:ARG:HG3	6:2G:13:GLU:HG3	1.96	0.48
6:2G:134:GLY:O	6:2G:135:LEU:HD23	2.13	0.48
8:2I:132:PRO:HD2	8:2I:136:VAL:O	2.13	0.48
15:2T:118:ARG:HG2	32:2a:1442(A):G:C8	2.48	0.48
32:2a:17:U:H1'	32:2a:1080:A:N3	2.28	0.48
32:2a:1135:U:H2'	32:2a:1137:C:N3	2.28	0.48
32:2a:1179:A:H4'	40:2i:103:THR:HA	1.95	0.48
36:2e:36:ASP:OD2	36:2e:40:ARG:HB2	2.13	0.48
37:2f:97:PHE:CD2	49:2r:31:LEU:HD11	2.48	0.48
42:2k:104:GLN:HG2	42:2k:106:LYS:HG2	1.95	0.48
43:2l:57:LYS:HA	43:2l:67:THR:HA	1.95	0.48
44:2m:22:ILE:HG23	44:2m:67:GLU:OE1	2.13	0.48
44:2m:71:ARG:HA	44:2m:74:VAL:HG23	1.96	0.48
50:2s:41:VAL:HG22	50:2s:42:PRO:HD2	1.95	0.48
1:1A:479:A:N3	1:1A:481:G:H5''	2.28	0.48
1:1A:831:G:O2'	11:1P:38:GLN:OE1	2.24	0.48
1:1A:2093:G:C6	1:1A:2225:A:C8	3.02	0.48
3:1D:97:TYR:C	3:1D:99:ASP:N	2.70	0.48
4:1E:10:GLY:HA2	4:1E:192:ASN:OD1	2.13	0.48
6:1G:66:GLN:HG2	26:14:1:MET:HE1	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:75:LEU:O	8:1I:141:LYS:NZ	2.47	0.48
9:1N:39:ARG:HB3	9:1N:41:ASP:OD1	2.13	0.48
12:1Q:63:LYS:HG2	12:1Q:65:PHE:CZ	2.48	0.48
21:1Z:4:ARG:HH21	21:1Z:60:GLU:HG3	1.78	0.48
32:1a:319:G:H2'	32:1a:320:C:O4'	2.13	0.48
32:1a:688:G:O3'	42:1k:46:GLY:HA3	2.13	0.48
32:1a:833:U:H2'	32:1a:834:C:C6	2.48	0.48
35:1d:28:SER:OG	35:1d:30:LYS:N	2.33	0.48
49:1r:25:THR:C	49:1r:26:LEU:HD12	2.38	0.48
1:2A:61:G:OP1	24:22:51:ARG:NH2	2.46	0.48
1:2A:317:G:H2'	1:2A:318:C:O4'	2.13	0.48
1:2A:320:A:N6	5:2F:140:LEU:HD11	2.29	0.48
1:2A:331:A:C4	1:2A:1209:G:C6	3.01	0.48
1:2A:606:U:OP1	5:2F:104:LYS:HG3	2.13	0.48
1:2A:2065:C:H2'	1:2A:2066:C:C6	2.48	0.48
1:2A:2492:U:H2'	1:2A:2493:U:C6	2.49	0.48
4:2E:59:VAL:HG21	4:2E:74:PRO:HB3	1.95	0.48
5:2F:28:ILE:HG12	5:2F:116:ASP:HB2	1.95	0.48
7:2H:46:GLU:HB2	7:2H:49:VAL:HG12	1.95	0.48
18:2W:14:PRO:HB2	18:2W:18:ARG:HH12	1.78	0.48
24:22:70:GLN:OE1	24:22:70:GLN:N	2.38	0.48
32:2a:299:G:H8	32:2a:299:G:O5'	1.96	0.48
32:2a:792:A:H4'	32:2a:793:U:O5'	2.14	0.48
32:2a:1232:U:H2'	32:2a:1233:G:O4'	2.12	0.48
34:2c:59:ARG:HG2	34:2c:63:ASN:O	2.14	0.48
34:2c:182:ILE:HA	34:2c:203:PHE:HA	1.95	0.48
35:2d:153:ARG:NE	35:2d:181:MET:HG3	2.29	0.48
36:2e:79:GLU:CD	39:2h:104:ARG:HA	2.39	0.48
38:2g:114:ARG:HB2	38:2g:115:ARG:NH2	2.28	0.48
47:2p:28:ARG:NH1	47:2p:29:ASP:OD2	2.46	0.48
4:1E:174:ASP:OD1	4:1E:175:VAL:N	2.47	0.48
10:1O:111:PHE:O	10:1O:115:VAL:HG23	2.13	0.48
11:1P:90:ARG:HG2	11:1P:90:ARG:HH11	1.79	0.48
21:1Z:46:LYS:HE2	21:1Z:46:LYS:HB3	1.71	0.48
21:1Z:59:LEU:HD12	21:1Z:69:THR:HG21	1.95	0.48
26:14:59:PHE:C	26:14:61:ARG:H	2.22	0.48
32:1a:309:G:H1'	32:1a:608:A:C2	2.48	0.48
32:1a:406:G:H1	32:1a:436:C:H42	1.60	0.48
32:1a:824:C:H2'	32:1a:825:G:C8	2.49	0.48
32:1a:986:A:H2'	32:1a:987:G:O4'	2.14	0.48
33:1b:156:LYS:HA	33:1b:156:LYS:HD2	1.66	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:14:ARG:HG3	44:1m:44:ARG:CZ	2.44	0.48
1:2A:1261:C:OP2	18:2W:83:LYS:NZ	2.47	0.48
1:2A:1364:G:N7	23:21:3:LYS:HE2	2.29	0.48
1:2A:1656:C:H2'	1:2A:1657:C:H6	1.78	0.48
1:2A:1805:U:O2	3:2D:50:THR:HB	2.14	0.48
1:2A:2734:A:H2'	1:2A:2735:G:O4'	2.13	0.48
3:2D:258:LYS:HE2	3:2D:273:ARG:CZ	2.44	0.48
18:2W:12:ILE:HG12	18:2W:13:SER:H	1.79	0.48
18:2W:29:LEU:HD21	18:2W:33:ARG:NH2	2.28	0.48
23:21:40:ARG:NH2	23:21:42:GLN:HG2	2.28	0.48
29:27:5:TRP:CD1	29:27:7:PRO:HD3	2.48	0.48
32:2a:1168:A:N6	32:2a:1169:A:C6	2.82	0.48
32:2a:1263:C:C4	32:2a:1272:G:O6	2.66	0.48
38:2g:65:ALA:O	38:2g:69:VAL:HG23	2.14	0.48
39:2h:24:THR:HG23	39:2h:61:VAL:HB	1.96	0.48
50:2s:50:ALA:HA	50:2s:59:PRO:HA	1.95	0.48
1:1A:1407:C:O5'	1:1A:1407:C:H6	1.97	0.48
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.46	0.48
32:1a:288:A:H3'	62:1a:1944:HOH:O	2.13	0.48
32:1a:339:C:H2'	32:1a:340:U:C6	2.48	0.48
32:1a:473:G:H2'	32:1a:474:G:O4'	2.13	0.48
39:1h:81:HIS:N	39:1h:138:TRP:O	2.46	0.48
40:1i:9:ARG:O	40:1i:104:ARG:HG3	2.13	0.48
51:1t:57:ARG:HH22	51:1t:100:ILE:HD12	1.79	0.48
56:1y:24:G:H2'	56:1y:25:C:H6	1.75	0.48
1:2A:143:G:H4'	19:2X:35:THR:HG21	1.95	0.48
1:2A:571:A:H5'	1:2A:2030:A:N7	2.29	0.48
1:2A:762:U:H5'	1:2A:763:G:N2	2.28	0.48
1:2A:2319:G:H4'	1:2A:2320:A:OP1	2.12	0.48
1:2A:2689:U:H4'	1:2A:2690:C:H5'	1.96	0.48
3:2D:55:GLY:O	3:2D:216:GLY:HA2	2.13	0.48
6:2G:59:GLU:OE2	6:2G:138:GLN:NE2	2.47	0.48
10:2O:38:VAL:HG13	10:2O:87:ILE:HD11	1.96	0.48
14:2S:92:TYR:HB2	14:2S:98:VAL:HG21	1.96	0.48
18:2W:4:LYS:HD3	18:2W:6:ILE:HD11	1.94	0.48
18:2W:16:LYS:O	18:2W:19:LEU:HB2	2.14	0.48
32:2a:616:G:O2'	32:2a:617:G:H5'	2.13	0.48
32:2a:745:C:H5''	32:2a:851:G:H1'	1.96	0.48
32:2a:949:A:H61	32:2a:1232:U:H3	1.60	0.48
32:2a:1001(A):G:C4	32:2a:1002:G:H1'	2.48	0.48
35:2d:127:THR:HG23	35:2d:147:ALA:HB3	1.93	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:2f:12:PRO:HG3	37:2f:57:GLN:O	2.14	0.48
39:2h:77:GLU:HG3	39:2h:78:GLN:N	2.28	0.48
44:2m:3:ARG:N	44:2m:8:GLU:HA	2.28	0.48
44:2m:14:ARG:HG3	44:2m:44:ARG:NE	2.29	0.48
49:2r:22:VAL:O	49:2r:22:VAL:HG12	2.14	0.48
1:1A:322:A:OP1	5:1F:168:ARG:HD3	2.13	0.48
1:1A:336:C:H2'	1:1A:337:C:C6	2.47	0.48
1:1A:484:C:H2'	1:1A:485:C:C6	2.48	0.48
1:1A:784:A:OP1	1:1A:2588:G:H5''	2.14	0.48
1:1A:2307:G:H4'	1:1A:2308:G:O5'	2.13	0.48
2:1B:102:A:N7	62:1B:308:HOH:O	2.35	0.48
12:1Q:109:VAL:HG22	12:1Q:113:GLN:HB2	1.95	0.48
13:1R:44:LEU:HD22	13:1R:48:VAL:HG23	1.95	0.48
20:1Y:42:VAL:CG1	20:1Y:67:LEU:HD11	2.44	0.48
21:1Z:140:ASP:OD1	21:1Z:141:VAL:N	2.38	0.48
32:1a:6:G:N7	36:1e:119:LEU:HD11	2.29	0.48
32:1a:19:C:P	36:1e:127:ASN:HD22	2.36	0.48
32:1a:418:C:H1'	32:1a:540:G:O2'	2.12	0.48
32:1a:432:A:H3'	32:1a:433:C:C6	2.49	0.48
32:1a:518:C:H2'	32:1a:530:G:N3	2.29	0.48
34:1c:15:THR:HG21	34:1c:181:ASN:HA	1.96	0.48
50:1s:28:LYS:HB3	50:1s:47:HIS:CD2	2.39	0.48
1:2A:207:A:H2'	1:2A:208:C:O4'	2.13	0.48
1:2A:355:G:C4	1:2A:356:G:C8	3.02	0.48
1:2A:962:G:H2'	1:2A:963:U:C6	2.49	0.48
1:2A:1147:C:H2'	1:2A:1148:A:C8	2.49	0.48
1:2A:1193:G:OP1	11:2P:14:LYS:NZ	2.36	0.48
1:2A:1340:U:H4'	1:2A:1341:U:OP2	2.13	0.48
1:2A:1509(B):A:H2'	1:2A:1510:G:C8	2.48	0.48
5:2F:155:LEU:HD12	5:2F:174:VAL:O	2.13	0.48
11:2P:19:VAL:HG12	11:2P:27:HIS:HB3	1.96	0.48
19:2X:50:LYS:NZ	62:2X:201:HOH:O	2.47	0.48
24:22:10:LEU:O	24:22:13:ALA:N	2.46	0.48
29:27:12:ARG:NH2	29:27:44:PRO:HB3	2.29	0.48
32:2a:145:G:C4	32:2a:146:G:C8	3.01	0.48
32:2a:1148:U:H2'	32:2a:1149:C:O4'	2.13	0.48
33:2b:146:GLN:O	33:2b:150:SER:HB3	2.13	0.48
41:2j:46:ARG:HG2	41:2j:64:GLU:HB3	1.96	0.48
46:2o:33:THR:HA	46:2o:36:ILE:HD12	1.95	0.48
54:2w:4:C:N4	54:2w:69:G:H1	2.09	0.48
1:1A:214:G:N3	1:1A:216:A:O2'	2.41	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1253:A:OP1	62:1A:4292:HOH:O	2.20	0.48
1:1A:1301:A:O2'	1:1A:1302:A:H3'	2.14	0.48
1:1A:1579:A:C6	1:1A:1580:A:C6	3.01	0.48
5:1F:123:LEU:HD12	5:1F:124:LEU:H	1.78	0.48
9:1N:75:TYR:CE2	9:1N:77:GLY:HA2	2.48	0.48
11:1P:37:GLY:O	11:1P:38:GLN:O	2.31	0.48
20:1Y:6:HIS:HE1	20:1Y:72:VAL:O	1.97	0.48
32:1a:245:C:C2	32:1a:284:G:C2	3.02	0.48
33:1b:189:ASP:HB3	33:1b:203:GLY:O	2.13	0.48
39:1h:96:GLY:HA2	39:1h:130:GLY:HA3	1.95	0.48
55:1x:31:G:C8	55:1x:32:5MC:HM53	2.49	0.48
56:1y:21:A:H2'	56:1y:22:G:C8	2.48	0.48
1:2A:459:U:H4'	29:27:40:TRP:CZ3	2.49	0.48
1:2A:910:A:H2'	1:2A:911:A:C8	2.49	0.48
1:2A:1683:C:H2'	1:2A:1684:C:H6	1.79	0.48
1:2A:1710:C:H2'	1:2A:1711:C:H6	1.79	0.48
1:2A:2184:G:O2'	1:2A:2185:C:H5'	2.14	0.48
1:2A:2202:C:O2'	3:2D:151:LYS:NZ	2.46	0.48
4:2E:101:ARG:HA	4:2E:170:LEU:O	2.14	0.48
5:2F:32:LEU:HD11	5:2F:105:VAL:HG22	1.94	0.48
5:2F:184:TYR:CD2	5:2F:188:ARG:HD2	2.49	0.48
7:2H:11:VAL:HB	7:2H:48:GLY:O	2.14	0.48
7:2H:54:ARG:HB2	7:2H:61:HIS:HB3	1.95	0.48
8:2I:48:GLU:HG3	8:2I:52:ARG:NH1	2.29	0.48
25:23:29:ARG:N	25:23:33:GLN:OE1	2.43	0.48
26:24:61:ARG:HE	50:2s:42:PRO:CG	2.27	0.48
27:25:33:CYS:HB2	27:25:40:LYS:HD3	1.95	0.48
32:2a:833:U:O2'	32:2a:834:C:H5'	2.14	0.48
32:2a:1009:G:H2'	32:2a:1010:G:H5'	1.96	0.48
32:2a:1278:U:H5'	32:2a:1279:A:OP1	2.14	0.48
33:2b:19:HIS:CG	33:2b:20:GLU:H	2.32	0.48
36:2e:93:PRO:O	39:2h:105:ARG:NH2	2.46	0.48
38:2g:143:ARG:O	38:2g:147:ALA:N	2.47	0.48
40:2i:21:PRO:HG3	40:2i:59:PHE:CE1	2.49	0.48
44:2m:64:TRP:HB2	44:2m:66:LEU:HD21	1.96	0.48
55:2x:4:G:H2'	55:2x:5:G:H8	1.79	0.48
1:1A:224:G:H2'	1:1A:225:A:O4'	2.14	0.48
1:1A:588:U:H2'	1:1A:589:C:H6	1.78	0.48
1:1A:666:G:N2	30:18:2:PRO:O	2.47	0.48
1:1A:1229:G:H2'	1:1A:1230:C:O4'	2.14	0.48
1:1A:1641:A:H2'	1:1A:1642:G:O4'	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2023:G:H4'	1:1A:2617:C:O3'	2.14	0.48
1:1A:2100:G:H2'	1:1A:2101:G:C8	2.49	0.48
18:1W:17:VAL:HG23	18:1W:76:VAL:HG21	1.96	0.48
32:1a:150:C:O2	32:1a:171:A:N6	2.47	0.48
32:1a:160:A:H8	32:1a:160:A:OP1	1.97	0.48
32:1a:631:G:H2'	32:1a:632:A:H8	1.78	0.48
32:1a:986:A:H1'	50:1s:54:GLY:O	2.14	0.48
34:1c:113:ALA:HB2	34:1c:202:ILE:HG13	1.95	0.48
35:1d:8:VAL:O	35:1d:11:LEU:HB2	2.14	0.48
37:1f:45:LEU:HD23	37:1f:57:GLN:NE2	2.29	0.48
38:1g:111:ARG:HD2	38:1g:123:GLU:HB2	1.95	0.48
54:1w:4:C:H2'	54:1w:5:G:H8	1.77	0.48
56:1y:25:C:N4	56:1y:26:A:N6	2.62	0.48
56:1y:57:G:N3	56:1y:58:A:H5''	2.29	0.48
1:2A:332:A:O2'	1:2A:334:C:OP2	2.19	0.48
1:2A:430:G:H5''	1:2A:431:U:OP2	2.14	0.48
1:2A:987:G:O2'	1:2A:1000:A:N3	2.38	0.48
1:2A:1651:G:H4'	13:2R:39:PRO:HG2	1.96	0.48
1:2A:2429:G:O6	11:2P:61:ARG:NE	2.28	0.48
1:2A:2802:G:C2	1:2A:2803:C:H1'	2.48	0.48
2:2B:76:G:H2'	2:2B:77:U:O4'	2.13	0.48
6:2G:112:PRO:HB3	26:24:35:VAL:HG22	1.96	0.48
7:2H:144:VAL:O	7:2H:148:ILE:HG13	2.14	0.48
7:2H:164:TYR:O	7:2H:166:GLY:N	2.47	0.48
12:2Q:16:ARG:HG2	12:2Q:18:LYS:NZ	2.29	0.48
21:2Z:145:GLU:O	21:2Z:147:GLY:N	2.47	0.48
25:23:12:PRO:O	25:23:20:LYS:HE3	2.14	0.48
32:2a:421:U:H5''	32:2a:422:C:C5	2.49	0.48
32:2a:443:C:H2'	32:2a:444:C:C6	2.49	0.48
32:2a:506:G:C6	32:2a:507:C:C4	3.01	0.48
32:2a:582:U:O2'	48:2q:94:ASN:ND2	2.46	0.48
32:2a:1005:A:H5''	32:2a:1006:C:C5	2.48	0.48
32:2a:1106:G:H2'	32:2a:1107:C:H6	1.79	0.48
32:2a:1111:A:N1	34:2c:177:THR:OG1	2.41	0.48
32:2a:1154:G:H2'	32:2a:1155:G:C8	2.49	0.48
33:2b:112:VAL:HG23	33:2b:149:LEU:CD1	2.43	0.48
34:2c:30:ARG:HH21	45:2n:38:GLY:CA	2.21	0.48
44:2m:92:HIS:NE2	44:2m:98:VAL:HG21	2.29	0.48
1:1A:662:G:H5''	11:1P:16:ARG:HG2	1.95	0.47
1:1A:2375:G:O2'	1:1A:2377:A:N7	2.39	0.47
2:1B:73:A:C4	2:1B:105:A:C2	3.02	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:1S:61:ASN:HB3	14:1S:64:GLU:OE1	2.14	0.47
15:1T:45:PHE:CE1	15:1T:65:LYS:HD3	2.49	0.47
31:19:10:ILE:HG21	31:19:32:HIS:CD2	2.49	0.47
32:1a:382:A:H2'	32:1a:383:A:C8	2.48	0.47
32:1a:555:C:H2'	32:1a:556:C:H6	1.79	0.47
32:1a:592:G:N2	32:1a:648:A:C4	2.82	0.47
32:1a:828:A:OP1	39:1h:21:LYS:NZ	2.47	0.47
32:1a:995:C:H4'	45:1n:8:GLU:OE2	2.14	0.47
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.48	0.47
35:1d:164:ALA:O	35:1d:168:ARG:HG3	2.14	0.47
1:2A:271(I):G:N7	1:2A:271(J):C:N4	2.62	0.47
1:2A:1011:G:OP1	16:2U:77:SER:OG	2.14	0.47
1:2A:1576:U:H2'	1:2A:1577:C:C6	2.48	0.47
1:2A:1797:C:H4'	3:2D:257:LEU:O	2.14	0.47
1:2A:1802:A:N1	1:2A:1822:G:H1'	2.28	0.47
1:2A:1817:G:C6	1:2A:1818:U:C4	3.01	0.47
1:2A:2128:C:H2'	1:2A:2129:C:O4'	2.14	0.47
5:2F:132:VAL:HG11	5:2F:163:VAL:HG22	1.95	0.47
10:2O:34:THR:OG1	10:2O:35:VAL:N	2.47	0.47
16:2U:31:SER:OG	16:2U:34:LYS:HG2	2.13	0.47
17:2V:60:GLU:HB2	17:2V:97:LYS:HE2	1.97	0.47
22:20:43:THR:HG23	22:20:43:THR:O	2.13	0.47
32:2a:189(E):U:O2'	32:2a:189(F):U:H5'	2.14	0.47
32:2a:242:C:H2'	32:2a:243:A:H5'	1.96	0.47
32:2a:278:G:OP2	48:2q:41:LYS:NZ	2.39	0.47
32:2a:376:G:H5''	47:2p:5:ARG:HB2	1.95	0.47
32:2a:755:G:OP2	46:2o:65:ARG:HD2	2.14	0.47
32:2a:1060:C:C5	34:2c:2:GLY:HA3	2.49	0.47
32:2a:1095:U:H2'	32:2a:1096:C:C6	2.49	0.47
34:2c:36:ASP:OD1	34:2c:59:ARG:NH2	2.36	0.47
37:2f:45:LEU:HD21	37:2f:57:GLN:OE1	2.14	0.47
38:2g:52:GLU:HG2	38:2g:53:LYS:N	2.29	0.47
39:2h:33:GLU:HG3	39:2h:59:LEU:HD11	1.96	0.47
39:2h:116:LYS:NZ	39:2h:127:LEU:HD13	2.29	0.47
50:2s:28:LYS:HA	50:2s:28:LYS:HD3	1.55	0.47
1:1A:1094:U:H1'	1:1A:1097:U:C4	2.48	0.47
1:1A:2059:A:O3'	5:1F:69:HIS:HA	2.14	0.47
1:1A:2099:U:O2	1:1A:2190:G:N2	2.38	0.47
3:1D:27:THR:O	3:1D:27:THR:OG1	2.30	0.47
8:1I:124:GLY:H	8:1I:144:VAL:HG23	1.80	0.47
11:1P:3:LEU:O	11:1P:6:LEU:HB2	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:1S:25:ARG:NH1	14:1S:42:ASP:OD1	2.47	0.47
32:1a:792:A:H4'	32:1a:793:U:C5'	2.44	0.47
32:1a:954:G:H5''	44:1m:120:LYS:HD2	1.96	0.47
32:1a:1053:G:O6	32:1a:1199:U:H2'	2.13	0.47
34:1c:71:ALA:HA	34:1c:106:VAL:CG2	2.42	0.47
38:1g:71:PRO:HB3	38:1g:138:LYS:HG3	1.96	0.47
43:1l:79:GLU:HG2	43:1l:80:HIS:CD2	2.50	0.47
56:1y:21:A:H2'	56:1y:22:G:H8	1.80	0.47
1:2A:182:A:H2'	1:2A:183:C:C6	2.48	0.47
1:2A:299:A:N1	1:2A:322:A:O2'	2.38	0.47
1:2A:511:U:O4	1:2A:512:G:N1	2.47	0.47
1:2A:948:G:N1	1:2A:970:C:O2	2.47	0.47
1:2A:1019:U:O2'	1:2A:1021:A:H2	1.97	0.47
1:2A:1607:C:H4'	1:2A:1608:A:O5'	2.13	0.47
2:2B:13:A:C2	2:2B:16:G:H1'	2.50	0.47
3:2D:85:ASP:HB2	3:2D:92:ILE:HG23	1.95	0.47
5:2F:65:TRP:CZ2	5:2F:75:HIS:HD2	2.32	0.47
7:2H:150:ALA:HA	7:2H:153:LYS:HZ2	1.80	0.47
9:2N:19:GLU:HG3	9:2N:59:LYS:HD2	1.95	0.47
26:24:57:GLU:CB	26:24:58:ARG:HD3	2.44	0.47
32:2a:109:A:C6	32:2a:326:G:C6	3.02	0.47
32:2a:750:G:N3	46:2o:23:GLY:HA3	2.29	0.47
32:2a:1142:G:H2'	32:2a:1143:G:O4'	2.14	0.47
34:2c:150:LYS:HG3	34:2c:169:ALA:HB2	1.96	0.47
35:2d:99:SER:HB3	35:2d:139:ARG:HG3	1.95	0.47
35:2d:142:PRO:HA	35:2d:185:PHE:HD2	1.77	0.47
40:2i:50:LEU:O	40:2i:54:ASP:N	2.46	0.47
48:2q:68:ARG:H	48:2q:70:ARG:NH1	2.10	0.47
50:2s:40:ILE:HB	50:2s:67:VAL:O	2.14	0.47
56:2y:4:C:C4	56:2y:5:G:N7	2.82	0.47
1:1A:192:C:H2'	1:1A:193:U:H5'	1.96	0.47
1:1A:324:A:H2'	1:1A:325:G:O4'	2.14	0.47
1:1A:526:A:O2'	1:1A:2043:C:O2	2.32	0.47
1:1A:780:G:OP1	3:1D:218:ARG:NH2	2.36	0.47
1:1A:1041:C:H42	1:1A:1114:G:H1	1.62	0.47
1:1A:1779:U:OP2	1:1A:1784:A:N6	2.34	0.47
1:1A:2360:A:H8	1:1A:2360:A:O5'	1.97	0.47
5:1F:20:LEU:HG	5:1F:21:ALA:N	2.29	0.47
18:1W:1:MET:HE2	18:1W:62:HIS:ND1	2.29	0.47
21:1Z:31:ARG:HE	21:1Z:94:GLU:CD	2.23	0.47
32:1a:60:A:H4'	32:1a:61:G:H5'	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:270:A:H2'	32:1a:271:C:C6	2.49	0.47
33:1b:170:GLU:HG3	33:1b:173:ALA:HB3	1.96	0.47
35:1d:53:ASP:O	35:1d:56:VAL:HG22	2.15	0.47
38:1g:45:ASP:O	38:1g:49:ILE:HG13	2.13	0.47
1:2A:882:G:N2	1:2A:883:G:C6	2.83	0.47
1:2A:2096:U:H2'	1:2A:2097:C:C6	2.50	0.47
1:2A:2191:G:H2'	1:2A:2192:G:O4'	2.14	0.47
1:2A:2449:U:H3'	62:2A:3942:HOH:O	2.13	0.47
6:2G:69:ALA:HB3	6:2G:91:ARG:NH2	2.29	0.47
7:2H:12:PRO:O	7:2H:15:VAL:HG22	2.14	0.47
14:2S:74:ALA:HA	14:2S:110:LEU:HD22	1.97	0.47
19:2X:65:ARG:HE	19:2X:70:LEU:HD21	1.79	0.47
32:2a:73:G:H1	32:2a:96:U:H3	1.62	0.47
32:2a:134:A:H61	47:2p:25:ARG:NH1	2.12	0.47
32:2a:627:G:H2'	32:2a:628:G:C8	2.46	0.47
42:2k:34:ASP:N	42:2k:40:ILE:HD11	2.30	0.47
44:2m:29:ARG:HB3	44:2m:64:TRP:CH2	2.49	0.47
46:2o:32:LEU:O	46:2o:36:ILE:HG13	2.14	0.47
48:2q:29:HIS:HB3	48:2q:33:GLY:N	2.29	0.47
1:1A:303:U:H2'	1:1A:304:G:C8	2.50	0.47
1:1A:464:U:H2'	1:1A:465:G:O4'	2.14	0.47
1:1A:858:U:O2	1:1A:2268:A:H2'	2.14	0.47
1:1A:2779:U:H5'	1:1A:2781:A:O4'	2.14	0.47
5:1F:153:SER:N	5:1F:190:GLU:OE1	2.42	0.47
8:1I:92:VAL:HG11	8:1I:144:VAL:HG11	1.96	0.47
10:1O:2:ILE:HB	10:1O:33:ALA:HB3	1.97	0.47
17:1V:2:PHE:CZ	17:1V:41:GLY:HA3	2.50	0.47
19:1X:26:TYR:CE1	19:1X:89:ILE:HB	2.49	0.47
23:11:13:ILE:HD11	23:11:42:GLN:OE1	2.15	0.47
24:12:11:GLU:O	24:12:15:LYS:HG3	2.14	0.47
32:1a:113:G:H5''	62:1a:2073:HOH:O	2.13	0.47
32:1a:198:G:C6	32:1a:220:G:C2	3.02	0.47
32:1a:674:G:H2'	32:1a:675:A:H8	1.79	0.47
32:1a:769:G:H4'	32:1a:1513:A:H4'	1.96	0.47
32:1a:1054:C:C5	54:1w:34:G:H1'	2.49	0.47
32:1a:1212:U:OP1	32:1a:1213:A:H5'	2.15	0.47
33:1b:103:THR:HA	33:1b:180:LEU:HD11	1.96	0.47
34:1c:157:ILE:CD1	34:1c:166:GLU:HB2	2.44	0.47
36:1e:20:GLN:NE2	36:1e:21:ALA:O	2.48	0.47
44:1m:108:ARG:HD3	44:1m:108:ARG:HA	1.51	0.47
47:1p:17:TYR:CE2	47:1p:41:PRO:HG3	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:492:A:H2'	1:2A:493:G:O4'	2.14	0.47
1:2A:768:G:C6	1:2A:769:G:C5	3.02	0.47
1:2A:862:G:H2'	1:2A:863:A:O4'	2.14	0.47
1:2A:1359:A:H2	1:2A:1372:U:O4	1.98	0.47
1:2A:1359:A:N3	1:2A:1359:A:H5'	2.30	0.47
1:2A:1477:A:H2'	1:2A:1478:G:O4'	2.15	0.47
1:2A:2630:G:H1	1:2A:2788:C:N4	2.08	0.47
1:2A:2643:G:H2'	1:2A:2644:G:O4'	2.13	0.47
3:2D:16:MET:HG3	3:2D:207:GLY:HA3	1.96	0.47
5:2F:130:ALA:HB3	5:2F:142:TRP:HD1	1.80	0.47
6:2G:5:VAL:HG23	6:2G:8:LYS:H	1.79	0.47
10:2O:66:LYS:HB3	10:2O:66:LYS:HE2	1.61	0.47
19:2X:44:GLU:OE2	62:2X:201:HOH:O	2.20	0.47
32:2a:376:G:H5''	47:2p:5:ARG:HD2	1.96	0.47
32:2a:537:G:H5''	43:2l:113:ARG:NH1	2.29	0.47
32:2a:568:G:O2'	32:2a:574:A:N1	2.43	0.47
32:2a:696:A:H2'	32:2a:697:U:C6	2.49	0.47
32:2a:1502:A:C8	32:2a:1505:G:N2	2.82	0.47
33:2b:31:TYR:CE2	33:2b:200:ILE:HG21	2.49	0.47
33:2b:47:THR:HG22	33:2b:51:LEU:CD1	2.45	0.47
33:2b:185:ILE:HG22	33:2b:199:TYR:HD2	1.79	0.47
48:2q:53:LEU:HD23	48:2q:82:MET:HE1	1.97	0.47
1:1A:26:G:C6	1:1A:27:G:N1	2.83	0.47
1:1A:460:A:H2'	1:1A:461:C:O4'	2.15	0.47
1:1A:871:U:OP2	12:1Q:5:ARG:NH1	2.48	0.47
1:1A:1085:A:HO2'	1:1A:1104:C:HO2'	1.62	0.47
1:1A:1408:C:H2'	1:1A:1409:C:C6	2.49	0.47
2:1B:24:G:H4'	2:1B:25:A:N7	2.29	0.47
2:1B:46:A:H2'	2:1B:47:C:C6	2.50	0.47
32:1a:814:A:H2'	32:1a:816:A:H5'	1.97	0.47
33:1b:47:THR:HG22	33:1b:51:LEU:HD12	1.97	0.47
33:1b:219:VAL:HA	33:1b:222:ILE:HD12	1.97	0.47
39:1h:121:ASP:O	39:1h:125:ARG:HG3	2.14	0.47
43:1l:42:THR:HB	43:1l:52:LEU:HD22	1.96	0.47
44:1m:12:ASN:O	44:1m:44:ARG:HD2	2.15	0.47
56:1y:14:A:N6	56:1y:15:G:C2	2.82	0.47
1:2A:17:G:H2'	1:2A:18:C:H6	1.79	0.47
1:2A:1412:A:H61	1:2A:1590:U:H3	1.62	0.47
1:2A:2070:G:H2'	1:2A:2071:A:H8	1.79	0.47
2:2B:40:U:C6	26:24:2:LYS:HE3	2.50	0.47
5:2F:116:ASP:O	5:2F:120:GLU:HG2	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:2:LYS:HA	8:2I:20:ASP:HA	1.95	0.47
10:2O:26:LYS:O	10:2O:30:ALA:HB2	2.14	0.47
17:2V:37:VAL:HG22	17:2V:57:VAL:HG23	1.97	0.47
20:2Y:73:ARG:HH21	20:2Y:83:THR:C	2.22	0.47
21:2Z:6:LYS:HG3	21:2Z:8:TYR:HE2	1.78	0.47
32:2a:576:G:OP1	62:2a:1915:HOH:O	2.19	0.47
32:2a:789:U:O2'	32:2a:791:G:N7	2.34	0.47
32:2a:1362:C:H2'	32:2a:1363:C:H5''	1.97	0.47
32:2a:1512:U:H2'	32:2a:1513:A:H8	1.80	0.47
34:2c:148:GLY:HA2	34:2c:171:GLY:HA3	1.97	0.47
34:2c:151:VAL:O	34:2c:167:TRP:HB2	2.14	0.47
35:2d:65:ARG:HD2	35:2d:72:GLU:HA	1.96	0.47
46:2o:39:LEU:HD13	46:2o:56:LEU:HB2	1.96	0.47
1:1A:942:G:OP2	11:1P:39:LYS:HE3	2.14	0.47
1:1A:1036:G:OP1	7:1H:59:ARG:HG3	2.14	0.47
1:1A:1045:A:H1'	1:1A:1047:G:N3	2.30	0.47
1:1A:1069:A:H2'	1:1A:1073:A:N7	2.28	0.47
1:1A:1354:A:H5''	3:1D:38:LYS:HD3	1.97	0.47
1:1A:1430:C:H2'	1:1A:1431:U:C6	2.50	0.47
1:1A:2749:A:H4'	7:1H:62:LYS:HB3	1.97	0.47
2:1B:90:A:N7	2:1B:91:C:H1'	2.29	0.47
12:1Q:85:LYS:HG2	22:10:7:LEU:HB3	1.97	0.47
15:1T:127:ALA:C	15:1T:129:ARG:N	2.72	0.47
32:1a:344:A:H4'	32:1a:345:C:OP2	2.14	0.47
32:1a:509:A:H5'	35:1d:54:TYR:HD2	1.80	0.47
32:1a:693:G:H2'	32:1a:694:A:C8	2.49	0.47
32:1a:957:U:O2'	32:1a:959:A:N7	2.44	0.47
32:1a:1118:C:H2'	32:1a:1119:C:C6	2.50	0.47
36:1e:79:GLU:H	36:1e:79:GLU:CD	2.22	0.47
38:1g:85:TYR:CZ	38:1g:154:TYR:CZ	3.03	0.47
43:1l:88:GLY:O	43:1l:99:HIS:HD2	1.98	0.47
44:1m:9:ILE:HG13	44:1m:45:VAL:HG11	1.96	0.47
46:1o:29:VAL:HG11	46:1o:67:LEU:HD21	1.96	0.47
56:1y:10:G:H8	56:1y:10:G:OP1	1.98	0.47
1:2A:538:G:H2'	1:2A:539:G:H8	1.79	0.47
1:2A:845:G:OP2	1:2A:845:G:N2	2.31	0.47
1:2A:1430:C:H2'	1:2A:1431:U:C6	2.49	0.47
1:2A:1448:G:H4'	1:2A:1542:A:OP1	2.14	0.47
1:2A:2299:G:H2'	1:2A:2300:G:H8	1.80	0.47
1:2A:2482:G:O2'	54:2w:64:A:O2'	2.16	0.47
1:2A:2885:C:O2'	27:25:34:PRO:HG3	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:2H:74:ASN:OD1	7:2H:138:LYS:HD2	2.15	0.47
16:2U:8:VAL:O	16:2U:12:ARG:HG3	2.14	0.47
21:2Z:149:SER:O	21:2Z:150:LEU:HD12	2.15	0.47
32:2a:6:G:H4'	32:2a:298:A:H4'	1.97	0.47
32:2a:154:C:H2'	32:2a:155:C:H6	1.78	0.47
32:2a:976:G:C8	32:2a:1362:C:N4	2.83	0.47
36:2e:70:PRO:O	36:2e:77:PRO:HD3	2.14	0.47
37:2f:46:ARG:HB2	37:2f:60:PHE:HE1	1.77	0.47
39:2h:84:ARG:NH2	39:2h:86:ILE:HA	2.29	0.47
39:2h:97:VAL:HG13	39:2h:98:LYS:HG3	1.97	0.47
1:1A:517:C:OP2	27:15:13:LYS:HE3	2.14	0.47
1:1A:793:A:OP2	1:1A:2071:A:O2'	2.31	0.47
1:1A:1094:U:N3	1:1A:1097:U:OP2	2.47	0.47
1:1A:1899:G:N3	1:1A:1899:G:H2'	2.29	0.47
1:1A:1907:G:H2'	1:1A:1908:C:H6	1.79	0.47
1:1A:1914:C:H2'	1:1A:1915:5MU:O4'	2.15	0.47
1:1A:2131:G:N2	1:1A:2158:A:N1	2.62	0.47
1:1A:2414:G:H8	1:1A:2414:G:H5''	1.79	0.47
62:1A:4399:HOH:O	5:1F:70:THR:HG23	2.14	0.47
4:1E:52:LEU:O	4:1E:76:ARG:N	2.41	0.47
4:1E:89:ASP:OD1	4:1E:89:ASP:N	2.35	0.47
5:1F:126:VAL:HG11	5:1F:142:TRP:HZ2	1.78	0.47
6:1G:18:GLU:OE2	6:1G:21:ARG:NH1	2.47	0.47
7:1H:54:ARG:NH2	7:1H:57:ASP:OD2	2.37	0.47
8:1I:38:LEU:HD23	8:1I:38:LEU:H	1.80	0.47
9:1N:113:GLY:N	62:1N:302:HOH:O	2.40	0.47
10:1O:80:ASP:OD2	15:1T:71:GLY:HA3	2.15	0.47
16:1U:111:GLU:O	16:1U:112:ARG:C	2.56	0.47
17:1V:1:MET:HG2	17:1V:43:GLU:OE1	2.14	0.47
19:1X:60:ARG:HH22	29:17:47:ARG:HH22	1.63	0.47
20:1Y:9:LYS:HA	20:1Y:10:GLY:HA2	1.64	0.47
29:17:24:THR:HG23	62:17:203:HOH:O	2.15	0.47
32:1a:432:A:H3'	32:1a:433:C:H6	1.79	0.47
32:1a:692:U:H1'	32:1a:695:A:N7	2.29	0.47
32:1a:976:G:OP1	45:1n:32:SER:N	2.42	0.47
32:1a:1325:C:O3'	52:1u:17:THR:HG21	2.15	0.47
32:1a:1363(A):A:H4'	32:1a:1364:U:H2'	1.95	0.47
33:1b:54:THR:HG21	33:1b:201:ILE:CG1	2.45	0.47
37:1f:39:LYS:HB2	37:1f:64:GLN:HG2	1.97	0.47
39:1h:94:TYR:CE1	39:1h:132:GLU:HB2	2.49	0.47
46:1o:18:PHE:CZ	46:1o:21:ASP:HB2	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:1p:47:ASP:OD1	47:1p:47:ASP:N	2.45	0.47
50:1s:27:GLU:HB2	50:1s:28:LYS:HA	1.96	0.47
51:1t:47:GLY:N	51:1t:48:LYS:HB2	2.27	0.47
54:1w:21:A:C6	54:1w:46:G7M:C5	2.97	0.47
54:1w:51:U:H2'	54:1w:52:G:C8	2.50	0.47
55:1x:9:G:H21	55:1x:45:G:H3'	1.79	0.47
1:2A:289:A:H2'	1:2A:290:G:H8	1.79	0.47
1:2A:300:A:N1	1:2A:333:G:O2'	2.35	0.47
1:2A:764:A:H5''	3:2D:210:GLY:HA2	1.96	0.47
1:2A:1241:A:O2'	1:2A:1242:A:H5'	2.14	0.47
1:2A:1713:U:H2'	1:2A:1714:G:H8	1.80	0.47
1:2A:2227:A:H5''	3:2D:263:ARG:NH1	2.30	0.47
1:2A:2512:C:H2'	1:2A:2513:G:O4'	2.15	0.47
1:2A:2752:C:C2	1:2A:2753:A:C8	3.02	0.47
3:2D:148:GLU:HB2	3:2D:151:LYS:HD2	1.97	0.47
3:2D:264:LYS:HD3	3:2D:266:SER:OG	2.14	0.47
8:2I:101:LEU:HD12	8:2I:102:SER:N	2.29	0.47
8:2I:110:ASP:N	8:2I:130:TYR:OH	2.47	0.47
11:2P:39:LYS:HB2	11:2P:45:LEU:HD22	1.96	0.47
11:2P:103:ALA:C	11:2P:105:LEU:H	2.23	0.47
23:21:33:LYS:HD3	62:21:205:HOH:O	2.15	0.47
30:28:22:VAL:HB	30:28:55:ALA:HB1	1.96	0.47
32:2a:352:C:H4'	32:2a:354:G:OP1	2.15	0.47
32:2a:591:U:H2'	32:2a:592:G:C8	2.50	0.47
32:2a:730:G:C5	32:2a:731:G:H1'	2.50	0.47
32:2a:825:G:H21	39:2h:11:THR:HG21	1.80	0.47
32:2a:1030:C:N4	32:2a:1030(A):G:N7	2.63	0.47
32:2a:1031:G:H2'	32:2a:1032:G:C8	2.49	0.47
32:2a:1190:G:O2'	34:2c:3:ASN:HB2	2.15	0.47
32:2a:1504:G:OP1	32:2a:1507:A:H4'	2.15	0.47
34:2c:57:ILE:HG12	34:2c:66:VAL:HG22	1.97	0.47
35:2d:169:LYS:HG3	35:2d:170:VAL:H	1.79	0.47
36:2e:6:PHE:HB2	36:2e:63:ARG:NH1	2.29	0.47
36:2e:135:THR:O	36:2e:139:LEU:HG	2.15	0.47
36:2e:139:LEU:O	36:2e:142:LEU:N	2.36	0.47
38:2g:47:CYS:O	38:2g:58:PRO:HG3	2.14	0.47
38:2g:69:VAL:HG11	38:2g:134:ALA:HB1	1.96	0.47
40:2i:120:ARG:O	40:2i:122:ALA:N	2.48	0.47
43:2l:7:ILE:O	43:2l:11:VAL:HG23	2.15	0.47
44:2m:54:VAL:HA	44:2m:57:ARG:HH11	1.80	0.47
46:2o:79:ARG:O	46:2o:83:GLU:HG3	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:2q:81:ARG:NH2	48:2q:84:LEU:HD21	2.30	0.47
54:2w:21:A:C5	54:2w:48:C:C5	3.02	0.47
56:2y:35:A:C6	56:2y:36:A:C2	3.03	0.47
1:1A:139(A):G:C2'	1:1A:140:G:H5'	2.45	0.47
1:1A:862:G:N2	62:1A:4542:HOH:O	2.48	0.47
1:1A:1655:A:H1'	4:1E:113:PHE:CD2	2.50	0.47
1:1A:2664:G:O5'	1:1A:2664:G:H8	1.98	0.47
9:1N:15:LEU:HB3	9:1N:137:LYS:HA	1.96	0.47
9:1N:72:TYR:OH	9:1N:98:VAL:HG13	2.15	0.47
18:1W:1:MET:HE2	18:1W:62:HIS:HB3	1.97	0.47
32:1a:113:G:C1'	32:1a:354:G:H5'	2.42	0.47
32:1a:545:C:H2'	32:1a:546:G:O4'	2.14	0.47
32:1a:1033:G:H3'	32:1a:1034:G:H8	1.79	0.47
37:1f:36:ARG:HB2	37:1f:66:GLU:HG2	1.96	0.47
37:1f:99:ALA:HB1	49:1r:23:LYS:NZ	2.29	0.47
48:1q:58:GLU:O	48:1q:74:LEU:HB3	2.14	0.47
48:1q:62:SER:OG	48:1q:72:ARG:NE	2.47	0.47
1:2A:11:G:C2'	1:2A:12:U:H5'	2.45	0.47
1:2A:854:G:H2'	1:2A:855:G:C8	2.48	0.47
1:2A:1593:G:H2'	1:2A:1594:G:C8	2.50	0.47
3:2D:77:ALA:HB2	3:2D:97:TYR:CG	2.49	0.47
5:2F:34:TRP:HA	11:2P:6:LEU:HD13	1.97	0.47
49:2r:38:GLU:HA	49:2r:41:LYS:HD3	1.96	0.47
56:2y:41:C:H2'	56:2y:42:C:H6	1.80	0.47
1:1A:182:A:H2	1:1A:433:C:O2	1.98	0.47
1:1A:466:A:H5''	1:1A:467:G:OP2	2.15	0.47
1:1A:526:A:H5''	1:1A:527:C:OP1	2.15	0.47
1:1A:620:G:H2'	1:1A:620:G:N3	2.28	0.47
1:1A:633:A:N3	1:1A:2403:C:H4'	2.30	0.47
1:1A:847:U:OP2	62:1A:4300:HOH:O	2.21	0.47
1:1A:1063:G:C5	1:1A:1064:C:N4	2.83	0.47
1:1A:1213:A:H1'	1:1A:1238:G:N3	2.30	0.47
1:1A:1488:G:N2	1:1A:1502:C:C2	2.83	0.47
1:1A:2064:C:H2'	1:1A:2065:C:C6	2.50	0.47
1:1A:2396:G:C2	1:1A:2397:G:C8	3.03	0.47
18:1W:86:LEU:HD22	18:1W:96:ILE:HD11	1.96	0.47
27:15:2:ALA:N	62:15:202:HOH:O	2.48	0.47
32:1a:1298:C:OP2	38:1g:114:ARG:NH2	2.48	0.47
41:1j:50:ILE:HA	41:1j:60:ARG:HD3	1.97	0.47
55:1x:20:U:H5''	55:1x:21:A:OP2	2.15	0.47
1:2A:307:G:N1	1:2A:310:A:OP2	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:611:C:H2'	1:2A:612:C:C6	2.50	0.47
1:2A:702:G:H2'	1:2A:703:U:H6	1.80	0.47
1:2A:920:G:H2'	1:2A:921:G:C8	2.49	0.47
1:2A:925:C:H2'	1:2A:926:A:C8	2.49	0.47
1:2A:1366:A:H2'	1:2A:1367:A:O4'	2.15	0.47
1:2A:1455:G:OP2	62:2A:3996:HOH:O	2.20	0.47
1:2A:1601:G:O2'	1:2A:1602:U:H5'	2.15	0.47
1:2A:1852:C:H5'	56:2y:72:C:H4'	1.97	0.47
1:2A:2252:G:H2'	1:2A:2253:G:O4'	2.14	0.47
1:2A:2468:G:OP2	31:29:8:LYS:NZ	2.48	0.47
5:2F:56:GLU:OE1	5:2F:93:LYS:NZ	2.48	0.47
6:2G:126:ASP:HB2	6:2G:130:ASN:H	1.79	0.47
16:2U:79:PHE:HD2	16:2U:80:ILE:HD13	1.80	0.47
16:2U:115:ALA:C	16:2U:117:GLN:H	2.23	0.47
26:24:14:ILE:HG23	26:24:31:ILE:HG22	1.97	0.47
26:24:60:GLN:HB3	26:24:62:ARG:HG2	1.96	0.47
32:2a:17:U:H2'	32:2a:18:C:C6	2.49	0.47
32:2a:392:G:H2'	32:2a:393:A:H8	1.78	0.47
32:2a:1135:U:O2'	32:2a:1136:U:H5	1.98	0.47
32:2a:1168:A:C6	32:2a:1169:A:C6	3.02	0.47
33:2b:8:LYS:CE	33:2b:51:LEU:HD13	2.45	0.47
35:2d:129:ASN:ND2	35:2d:144:ASP:OD1	2.43	0.47
38:2g:31:MET:SD	38:2g:36:LYS:HB2	2.55	0.47
38:2g:65:ALA:HB2	38:2g:124:LEU:O	2.15	0.47
39:2h:12:ARG:CZ	39:2h:27:PRO:HD3	2.45	0.47
41:2j:9:ARG:N	41:2j:9:ARG:HD2	2.30	0.47
45:2n:47:LEU:O	45:2n:50:LYS:N	2.47	0.47
47:2p:9:PHE:CD2	47:2p:9:PHE:N	2.82	0.47
1:1A:41:C:H2'	1:1A:42:G:O4'	2.14	0.47
1:1A:1503:U:H2'	1:1A:1504:C:H6	1.79	0.47
1:1A:2324:C:H5'	1:1A:2325:G:H5'	1.97	0.47
1:1A:2482:G:O2'	54:1w:64:A:O2'	2.29	0.47
21:1Z:1:MET:H1	21:1Z:55:HIS:HB3	1.80	0.47
23:11:64:ALA:HA	23:11:67:ILE:HG13	1.97	0.47
32:1a:925:G:H1'	32:1a:1502:A:N3	2.29	0.47
32:1a:949:A:H2'	32:1a:950:U:O4'	2.15	0.47
32:1a:1528:U:C2	32:1a:1530:G:C8	3.03	0.47
34:1c:18:TRP:H	34:1c:18:TRP:HE3	1.63	0.47
39:1h:87:SER:CB	39:1h:93:VAL:H	2.27	0.47
50:1s:31:ILE:O	50:1s:50:ALA:N	2.44	0.47
50:1s:64:GLU:O	50:1s:67:VAL:HG23	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:1y:66:U:C4	56:1y:67:C:C4	3.03	0.47
1:2A:231:C:C2'	1:2A:232:G:H5'	2.45	0.47
1:2A:422:A:H2'	1:2A:423:A:C8	2.50	0.47
1:2A:530:G:C5	1:2A:2022:U:H5''	2.50	0.47
1:2A:836:G:C5	1:2A:837:C:C4	3.03	0.47
1:2A:1114:G:H2'	1:2A:1115:G:H8	1.80	0.47
1:2A:1141:U:H5''	9:2N:25:ARG:HH21	1.80	0.47
1:2A:1357:U:H2'	1:2A:1358:G:C8	2.49	0.47
1:2A:1401:G:H2'	1:2A:1402:C:O4'	2.14	0.47
1:2A:2161:C:H2'	1:2A:2162:G:O4'	2.15	0.47
1:2A:2631:G:O2'	1:2A:2809:A:N6	2.46	0.47
1:2A:2850:A:C2	1:2A:2851:A:C4	3.02	0.47
2:2B:42:C:O2	6:2G:93:THR:N	2.29	0.47
7:2H:101:ARG:NH2	7:2H:117:PRO:HG2	2.30	0.47
10:2O:97:ARG:HD3	32:2a:339:C:OP2	2.15	0.47
24:22:31:GLU:HG2	24:22:53:LEU:HD11	1.95	0.47
32:2a:580:U:H2'	32:2a:581:G:O4'	2.15	0.47
32:2a:1229:A:H2'	32:2a:1230:C:H6	1.79	0.47
32:2a:1324:A:H2'	32:2a:1325:C:C6	2.50	0.47
33:2b:177:ALA:HB1	33:2b:182:ILE:HB	1.97	0.47
35:2d:112:VAL:H	35:2d:116:GLN:NE2	2.13	0.47
46:2o:3:ILE:HG23	46:2o:38:ARG:HH21	1.80	0.47
1:1A:686:G:H8	29:17:6:GLN:O	1.98	0.46
1:1A:882:G:H1	1:1A:894:C:N4	2.06	0.46
1:1A:1401:G:H2'	1:1A:1402:C:O4'	2.14	0.46
1:1A:1741:A:H2'	1:1A:1742:G:O4'	2.15	0.46
1:1A:1786:A:H1'	1:1A:1938:A:N6	2.30	0.46
1:1A:1797:C:H4'	3:1D:257:LEU:O	2.14	0.46
1:1A:2584:U:O2	1:1A:2585:U:N3	2.48	0.46
1:1A:2818:G:OP1	1:1A:2837:G:O2'	2.25	0.46
6:1G:103:LEU:HD23	6:1G:103:LEU:HA	1.61	0.46
7:1H:30:LYS:HA	7:1H:30:LYS:HD3	1.76	0.46
9:1N:104:LYS:HB2	9:1N:117:PHE:CE1	2.50	0.46
15:1T:119:LYS:O	15:1T:123:GLN:HG3	2.15	0.46
32:1a:93:G:H2'	32:1a:96:U:O4'	2.15	0.46
32:1a:222:U:H2'	32:1a:223:U:C6	2.49	0.46
32:1a:383:A:C5	32:1a:384:G:H1'	2.49	0.46
32:1a:679:C:O2'	32:1a:680:C:H5'	2.14	0.46
32:1a:1002:G:H3'	32:1a:1003:G:C4'	2.44	0.46
32:1a:1084:G:C5	32:1a:1085:U:C4	3.04	0.46
32:1a:1103:C:P	33:1b:96:ARG:HH22	2.38	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:71:VAL:HA	33:1b:93:VAL:HG13	1.97	0.46
33:1b:97:TRP:CH2	33:1b:176:GLU:CD	2.93	0.46
44:1m:99:ARG:HB2	44:1m:101:GLN:HE22	1.79	0.46
49:1r:52:PRO:HB2	49:1r:54:ARG:HG3	1.96	0.46
51:1t:57:ARG:HH22	51:1t:100:ILE:CD1	2.28	0.46
1:2A:500:G:N2	1:2A:503:A:H5'	2.28	0.46
1:2A:768:G:O2'	1:2A:1379:A:N1	2.44	0.46
1:2A:1614:A:P	1:2A:1614:A:H8	2.38	0.46
1:2A:2346:A:C5	1:2A:2383:G:C2	3.04	0.46
1:2A:2451:A:H1'	55:2x:76:31H:O2'	2.15	0.46
1:2A:2807:G:N2	1:2A:2808:U:H1'	2.30	0.46
7:2H:117:PRO:HD3	7:2H:123:PHE:CE2	2.50	0.46
9:2N:96:GLU:CD	9:2N:96:GLU:N	2.73	0.46
24:22:56:GLN:O	24:22:59:ARG:N	2.48	0.46
25:23:35:ARG:HG2	25:23:37:LEU:HD21	1.97	0.46
32:2a:189:G:C4	32:2a:189(L):G:N2	2.83	0.46
32:2a:397:A:C6	32:2a:548:G:N7	2.83	0.46
32:2a:473:G:H2'	32:2a:474:G:H8	1.80	0.46
32:2a:1182:G:H4'	32:2a:1183:A:H5''	1.96	0.46
35:2d:15:GLU:OE2	35:2d:66:ARG:NH1	2.48	0.46
35:2d:70:ILE:HD11	35:2d:74:GLN:HB2	1.96	0.46
35:2d:148:VAL:HG11	35:2d:158:ILE:HD13	1.97	0.46
36:2e:41:VAL:HG22	36:2e:113:ALA:HA	1.97	0.46
38:2g:46:ALA:O	38:2g:50:ILE:HG23	2.15	0.46
54:2w:8:4SU:HN3	54:2w:14:A:H62	1.63	0.46
1:1A:652(U):G:H2'	1:1A:652(V):C:H6	1.80	0.46
1:1A:847:U:H5'	62:1A:4776:HOH:O	2.15	0.46
1:1A:1091:G:C6	1:1A:1092:C:C4	3.03	0.46
1:1A:1784:A:H4'	1:1A:1785:A:C5'	2.46	0.46
1:1A:2136:C:N3	1:1A:2155:G:N2	2.63	0.46
1:1A:2168:G:N1	1:1A:2171:A:C8	2.74	0.46
1:1A:2323:G:H2'	1:1A:2324:C:O4'	2.15	0.46
1:1A:2636:U:O2	1:1A:2783:G:C2	2.69	0.46
2:1B:77:U:O2'	2:1B:78:A:H5'	2.15	0.46
3:1D:85:ASP:OD2	3:1D:88:ARG:HD2	2.14	0.46
8:1I:78:THR:O	8:1I:104:GLN:NE2	2.42	0.46
11:1P:47:ASP:CG	11:1P:49:ARG:HH21	2.23	0.46
11:1P:63:PRO:HB2	30:18:30:ARG:HH21	1.79	0.46
21:1Z:41:LEU:HD21	21:1Z:82:ARG:HH21	1.78	0.46
21:1Z:166:SER:C	21:1Z:168:GLU:H	2.22	0.46
32:1a:181:G:O2'	32:1a:183:G:O6	2.31	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:184:G:H2'	32:1a:185:A:C8	2.50	0.46
32:1a:1240:U:N3	38:1g:32:ARG:HD3	2.29	0.46
32:1a:1305:G:H22	32:1a:1331:G:H1'	1.79	0.46
32:1a:1326:C:H2'	32:1a:1327:C:C6	2.49	0.46
33:1b:16:HIS:HB2	33:1b:204:ASN:CB	2.45	0.46
56:1y:55:PSU:C4	56:1y:57:G:H5'	2.50	0.46
1:2A:863:A:H2'	1:2A:864:G:C8	2.49	0.46
1:2A:910:A:N3	1:2A:2264:C:O2'	2.39	0.46
1:2A:1020:A:N6	1:2A:1142:U:OP2	2.48	0.46
1:2A:1306:C:C2	1:2A:1623:G:C2	3.04	0.46
1:2A:1794:U:H2'	1:2A:1795:C:H6	1.80	0.46
1:2A:2228:G:C6	1:2A:2229:C:C4	3.03	0.46
2:2B:75:G:H22	21:2Z:73:GLN:NE2	2.13	0.46
2:2B:103:G:H21	21:2Z:73:GLN:CD	2.23	0.46
6:2G:49:ASP:O	6:2G:51:ARG:N	2.48	0.46
7:2H:3:ARG:HH22	7:2H:5:GLY:H	1.64	0.46
7:2H:54:ARG:HD2	7:2H:56:SER:O	2.15	0.46
14:2S:15:ARG:CZ	14:2S:25:ARG:HH21	2.29	0.46
15:2T:90:GLN:OE1	15:2T:121:ILE:HD11	2.15	0.46
32:2a:163:C:H2'	32:2a:164:U:C6	2.49	0.46
32:2a:938:A:N6	32:2a:939:G:C6	2.83	0.46
32:2a:1004:A:N3	32:2a:1038:C:C2	2.83	0.46
32:2a:1120:G:H2'	32:2a:1121:U:C6	2.50	0.46
32:2a:1126:U:O4	41:2j:7:LYS:HD3	2.16	0.46
32:2a:1224:G:O2'	32:2a:1322:C:OP1	2.28	0.46
32:2a:1264:C:C4	32:2a:1272:G:O6	2.68	0.46
50:2s:28:LYS:NZ	50:2s:46:GLY:O	2.33	0.46
1:1A:271(O):C:H2'	1:1A:271(P):C:C6	2.50	0.46
1:1A:675:A:N3	1:1A:2443:C:O2'	2.46	0.46
1:1A:1148:A:H2'	1:1A:1149:G:H5''	1.98	0.46
1:1A:1190:G:H2'	1:1A:1191:G:H8	1.80	0.46
1:1A:1941:C:H3'	1:1A:1942:5MC:HM53	1.97	0.46
1:1A:2108:C:H2'	1:1A:2109:U:O4'	2.15	0.46
4:1E:12:THR:HG22	4:1E:13:ARG:N	2.27	0.46
16:1U:29:SER:OG	16:1U:30:LYS:NZ	2.42	0.46
21:1Z:26:GLY:HA2	21:1Z:85:HIS:CD2	2.51	0.46
32:1a:667:G:O2'	46:1o:49:ASP:OD1	2.27	0.46
33:1b:219:VAL:O	33:1b:222:ILE:N	2.45	0.46
36:1e:18:ARG:HD3	36:1e:27:ARG:HH12	1.79	0.46
38:1g:50:ILE:HD11	38:1g:125:MET:HG2	1.97	0.46
46:1o:36:ILE:HG23	46:1o:56:LEU:HD11	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:1w:51:U:H2'	54:1w:52:G:H8	1.80	0.46
1:2A:81:G:HO2'	1:2A:295:G:HO2'	1.60	0.46
1:2A:445:C:H2'	1:2A:446:G:O4'	2.15	0.46
1:2A:459:U:H5''	29:27:40:TRP:CD2	2.50	0.46
1:2A:556:G:H2'	1:2A:557:U:H6	1.80	0.46
1:2A:900:A:H3'	1:2A:901:A:H8	1.79	0.46
1:2A:1420:U:HO2'	1:2A:1421:G:P	2.34	0.46
1:2A:2051:A:OP1	4:2E:137:HIS:ND1	2.45	0.46
1:2A:2740:A:H2'	1:2A:2741:A:C8	2.51	0.46
1:2A:2870:C:H2'	1:2A:2871:C:O4'	2.15	0.46
2:2B:1:U:H2'	2:2B:2:C:C6	2.50	0.46
8:2I:88:ILE:HD13	8:2I:92:VAL:HG12	1.96	0.46
13:2R:98:LEU:HB2	13:2R:113:LEU:HD11	1.96	0.46
26:24:58:ARG:HH21	50:2s:69:HIS:CE1	2.33	0.46
32:2a:107:G:H2'	32:2a:108:G:O4'	2.15	0.46
32:2a:131:C:O2'	32:2a:262:A:N3	2.38	0.46
32:2a:189(B):C:H42	32:2a:189(I):G:H1	1.64	0.46
32:2a:833:U:H2'	32:2a:834:C:C6	2.44	0.46
32:2a:1055:A:C6	32:2a:1206:G:C5	3.04	0.46
34:2c:9:GLY:HA3	45:2n:49:HIS:CD2	2.51	0.46
38:2g:26:PHE:CE2	38:2g:30:ILE:HD11	2.50	0.46
1:1A:875:G:H2'	1:1A:876:C:C6	2.50	0.46
1:1A:1076:C:H4'	1:1A:1077:A:OP1	2.16	0.46
1:1A:2461:C:H2'	1:1A:2462:U:H6	1.80	0.46
2:1B:83:G:C6	2:1B:84:C:C5	3.03	0.46
4:1E:5:LEU:HD13	4:1E:79:ARG:HB2	1.98	0.46
11:1P:86:LYS:O	11:1P:88:LEU:N	2.41	0.46
32:1a:256:U:C4	32:1a:257:G:N7	2.83	0.46
32:1a:840:C:H4'	32:1a:841:U:OP1	2.14	0.46
32:1a:1064:G:H8	32:1a:1064:G:OP1	1.98	0.46
39:1h:11:THR:HG22	39:1h:15:ASN:ND2	2.30	0.46
55:1x:31:G:C2	55:1x:40:C:C2	3.03	0.46
55:1x:68:C:H2'	55:1x:69:C:H6	1.79	0.46
1:2A:388:G:H5'	23:21:25:LYS:HB2	1.96	0.46
1:2A:962:G:H2'	1:2A:963:U:H6	1.79	0.46
1:2A:1292:U:H2'	1:2A:1293:C:C6	2.51	0.46
1:2A:1798:U:OP2	3:2D:273:ARG:NH2	2.49	0.46
1:2A:2464:C:C2	1:2A:2487:G:C2	3.03	0.46
2:2B:19:G:H2'	2:2B:20:C:O4'	2.15	0.46
2:2B:88:C:O5'	2:2B:88:C:H6	1.98	0.46
4:2E:13:ARG:NH2	15:2T:77:PRO:HG3	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:2N:4:TYR:CZ	9:2N:6:PRO:HA	2.50	0.46
19:2X:35:THR:HG22	19:2X:37:THR:N	2.31	0.46
21:2Z:48:PHE:CE1	21:2Z:52:SER:HA	2.50	0.46
23:21:3:LYS:CB	23:21:61:ARG:HH12	2.20	0.46
28:26:9:LEU:HD21	28:26:25:LYS:HB3	1.96	0.46
32:2a:58:C:O2'	32:2a:388:G:N7	2.40	0.46
32:2a:134:A:H1'	32:2a:325:A:C5	2.51	0.46
32:2a:190:U:H2'	32:2a:191:G:H8	1.81	0.46
32:2a:696:A:H2'	32:2a:697:U:H6	1.79	0.46
32:2a:1024:G:H2'	32:2a:1025:U:H5''	1.98	0.46
32:2a:1049:U:C6	32:2a:1201:A:H5'	2.50	0.46
32:2a:1325:C:O2'	32:2a:1326:C:H5'	2.16	0.46
34:2c:9:GLY:HA3	45:2n:49:HIS:HD2	1.81	0.46
34:2c:152:ILE:HG13	34:2c:199:LYS:HB2	1.98	0.46
35:2d:76:ARG:O	35:2d:80:GLU:HG2	2.14	0.46
35:2d:108:LEU:HD21	35:2d:174:LEU:HB3	1.96	0.46
36:2e:36:ASP:C	36:2e:38:GLN:H	2.23	0.46
39:2h:84:ARG:HG3	39:2h:84:ARG:O	2.14	0.46
40:2i:4:TYR:HA	40:2i:87:GLN:NE2	2.30	0.46
48:2q:6:LEU:O	48:2q:58:GLU:HA	2.14	0.46
1:1A:83:G:N2	1:1A:102:G:H1'	2.31	0.46
1:1A:271(Z):C:N4	62:1A:4549:HOH:O	2.48	0.46
1:1A:330:A:O2'	1:1A:331:A:C8	2.68	0.46
1:1A:662:G:OP1	11:1P:16:ARG:NE	2.48	0.46
1:1A:710:G:N2	1:1A:721:C:N3	2.56	0.46
1:1A:1124:C:H2'	1:1A:1125:G:O4'	2.15	0.46
2:1B:41:U:H5	6:1G:70:VAL:O	1.99	0.46
17:1V:16:PRO:HB3	17:1V:97:LYS:O	2.15	0.46
21:1Z:28:MET:SD	21:1Z:37:VAL:HG11	2.55	0.46
23:11:63:ALA:C	23:11:65:SER:N	2.74	0.46
26:14:63:TYR:N	26:14:63:TYR:CD1	2.83	0.46
32:1a:743:U:H2'	32:1a:744:C:C6	2.50	0.46
32:1a:1133:G:H2'	32:1a:1134:G:C8	2.51	0.46
32:1a:1189:C:P	41:1j:51:ARG:HH22	2.37	0.46
36:1e:36:ASP:CG	36:1e:40:ARG:HB2	2.41	0.46
42:1k:79:SER:HB2	42:1k:104:GLN:HE21	1.81	0.46
47:1p:40:ASP:O	47:1p:42:ARG:N	2.48	0.46
1:2A:247:G:H4'	1:2A:386:G:C5	2.51	0.46
1:2A:775:G:C4	1:2A:794:G:C8	3.04	0.46
1:2A:1001:A:N6	1:2A:1002:G:C2	2.84	0.46
1:2A:1159:U:H2'	1:2A:1160:G:H8	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1268:A:H2'	1:2A:1269:A:O4'	2.15	0.46
1:2A:1582:C:H2'	1:2A:1583:A:C8	2.50	0.46
1:2A:1683:C:H2'	1:2A:1684:C:C6	2.50	0.46
1:2A:2160:G:H3'	1:2A:2161:C:H5''	1.97	0.46
1:2A:2166:G:H3'	1:2A:2167:U:C5'	2.40	0.46
1:2A:2450:A:N3	55:2x:76:31H:H2	2.31	0.46
1:2A:2780:G:OP2	9:2N:118:LYS:HD3	2.15	0.46
1:2A:2820:A:OP2	13:2R:2:ARG:NH2	2.49	0.46
4:2E:1:MET:HB3	4:2E:83:ASP:O	2.16	0.46
4:2E:119:ARG:HG3	4:2E:119:ARG:HH11	1.80	0.46
12:2Q:118:LEU:HA	12:2Q:121:ALA:HB3	1.98	0.46
21:2Z:144:LEU:HD12	21:2Z:150:LEU:HD13	1.97	0.46
24:22:31:GLU:O	24:22:35:LEU:HB2	2.16	0.46
32:2a:472:A:H5''	47:2p:80:PHE:HB3	1.96	0.46
32:2a:938:A:C6	32:2a:939:G:C5	3.04	0.46
32:2a:993:G:H1	32:2a:1045:C:N4	2.10	0.46
32:2a:1161:C:H2'	32:2a:1162:C:C6	2.50	0.46
32:2a:1168:A:C5	32:2a:1169:A:C5	3.04	0.46
32:2a:1399:C:H4'	32:2a:1400:5MC:C5'	2.36	0.46
35:2d:106:TYR:O	35:2d:108:LEU:N	2.49	0.46
36:2e:36:ASP:O	36:2e:38:GLN:N	2.47	0.46
41:2j:38:ILE:HG12	41:2j:71:LEU:O	2.16	0.46
42:2k:92:GLU:O	42:2k:96:ARG:HG2	2.16	0.46
1:1A:1386:C:H2'	1:1A:1387:C:C6	2.51	0.46
1:1A:2151:G:H2'	1:1A:2152:G:C8	2.51	0.46
1:1A:2695:C:H2'	1:1A:2696:U:H6	1.81	0.46
1:1A:2741:A:H2'	1:1A:2742:C:O4'	2.16	0.46
11:1P:85:LEU:HA	11:1P:88:LEU:HD12	1.97	0.46
12:1Q:115:MET:HB3	12:1Q:115:MET:HE2	1.67	0.46
13:1R:63:ARG:HG3	13:1R:76:VAL:HG11	1.96	0.46
13:1R:97:VAL:HA	13:1R:113:LEU:O	2.16	0.46
18:1W:58:ALA:HB1	18:1W:64:MET:HB2	1.97	0.46
21:1Z:23:LYS:HB3	21:1Z:38:TYR:HD1	1.80	0.46
32:1a:177:C:O2'	32:1a:178:C:H5'	2.16	0.46
32:1a:608:A:H8	32:1a:608:A:O5'	1.99	0.46
32:1a:1071:C:H2'	32:1a:1072:G:H8	1.80	0.46
32:1a:1262:C:H2'	32:1a:1263:C:C6	2.50	0.46
56:1y:3:C:H2'	56:1y:4:C:O4'	2.16	0.46
56:1y:5:G:C6	56:1y:6:G:C8	3.04	0.46
1:2A:240:G:OP2	1:2A:241:A:O2'	2.29	0.46
1:2A:285:C:O2'	1:2A:286:C:H5'	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:286:C:H2'	1:2A:287:C:H6	1.81	0.46
1:2A:489:G:H2'	1:2A:491:G:O4'	2.16	0.46
1:2A:817:C:C2	1:2A:818:G:C8	3.03	0.46
1:2A:956:G:H2'	1:2A:957:A:H2'	1.98	0.46
1:2A:995:C:C2	16:2U:57:PHE:CE1	3.04	0.46
1:2A:1151:G:H4'	16:2U:81:HIS:CG	2.50	0.46
1:2A:1425:G:H2'	1:2A:1426:G:O4'	2.15	0.46
1:2A:1754:C:H2'	1:2A:1755:A:O4'	2.15	0.46
1:2A:2307:G:H8	1:2A:2307:G:OP1	1.99	0.46
1:2A:2776:A:OP1	1:2A:2776:A:H3'	2.16	0.46
3:2D:159:ALA:HB1	3:2D:198:ASN:O	2.16	0.46
6:2G:18:GLU:HG2	6:2G:21:ARG:NH2	2.31	0.46
8:2I:50:ARG:HA	8:2I:53:ALA:HB3	1.98	0.46
13:2R:13:HIS:CE1	13:2R:16:HIS:HB2	2.51	0.46
17:2V:95:LEU:HD22	17:2V:97:LYS:HD3	1.98	0.46
18:2W:12:ILE:HD13	18:2W:17:VAL:HG13	1.98	0.46
32:2a:298:A:C6	32:2a:299:G:C2	3.04	0.46
32:2a:437:U:O2'	35:2d:123:HIS:HD2	1.99	0.46
32:2a:967:5MC:H2'	32:2a:968:A:N7	2.31	0.46
32:2a:998:G:N2	32:2a:1043:C:N3	2.55	0.46
32:2a:1118:C:H1'	32:2a:1179:A:C5	2.51	0.46
32:2a:1326:C:H5''	52:2u:18:TYR:O	2.16	0.46
33:2b:132:LYS:O	33:2b:136:VAL:HG23	2.15	0.46
38:2g:23:VAL:O	38:2g:27:ILE:HG13	2.15	0.46
38:2g:150:ALA:O	38:2g:153:HIS:HE1	1.99	0.46
39:2h:28:ALA:HA	39:2h:59:LEU:HG	1.96	0.46
44:2m:39:ILE:HD12	44:2m:56:LEU:HD22	1.98	0.46
51:2t:16:HIS:CE1	51:2t:20:LEU:HD11	2.51	0.46
1:1A:8:A:H2'	1:1A:9:U:C6	2.51	0.46
1:1A:229:A:C5	1:1A:229:A:OP2	2.68	0.46
1:1A:573:G:OP1	62:1A:4298:HOH:O	2.20	0.46
1:1A:751:A:C6	1:1A:789:A:C5	3.04	0.46
1:1A:1062:G:H5''	1:1A:1070:A:O2'	2.16	0.46
1:1A:1342:A:O2'	1:1A:1344:G:OP2	2.25	0.46
1:1A:2309:A:C6	1:1A:2310:A:C6	3.03	0.46
3:1D:68:LYS:C	3:1D:70:TRP:H	2.24	0.46
9:1N:138:LEU:HD22	9:1N:140:VAL:HG13	1.98	0.46
11:1P:126:VAL:CG1	11:1P:148:LEU:HD22	2.40	0.46
14:1S:106:ARG:O	14:1S:109:GLY:N	2.42	0.46
24:12:39:ALA:HB2	24:12:44:LEU:HD23	1.98	0.46
26:14:60:GLN:OE1	26:14:60:GLN:N	2.49	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:162:A:H8	32:1a:162:A:O5'	1.98	0.46
32:1a:613:C:H2'	32:1a:614:A:C8	2.49	0.46
32:1a:971:G:N2	32:1a:1363(A):A:OP2	2.45	0.46
32:1a:1370:G:O6	62:1a:1920:HOH:O	2.18	0.46
32:1a:1414:U:H2'	32:1a:1415:G:H8	1.80	0.46
33:1b:24:TRP:CD1	33:1b:24:TRP:H	2.33	0.46
40:1i:42:ARG:NH2	40:1i:75:ASP:OD1	2.48	0.46
47:1p:50:LYS:HA	47:1p:50:LYS:HD2	1.74	0.46
1:2A:619:G:H3'	1:2A:620:G:N2	2.31	0.46
1:2A:856:C:H5'	22:20:27:GLU:OE2	2.16	0.46
1:2A:1563:G:H2'	1:2A:1564:C:C6	2.51	0.46
1:2A:2082:A:H2'	1:2A:2083:G:O4'	2.16	0.46
1:2A:2371:G:O2'	28:26:46:HIS:ND1	2.44	0.46
1:2A:2564:A:C2	1:2A:2647:U:H4'	2.50	0.46
1:2A:2661:G:H2'	1:2A:2662:A:C8	2.51	0.46
8:2I:12:LEU:HD22	8:2I:19:VAL:HG21	1.97	0.46
21:2Z:7:ALA:C	21:2Z:8:TYR:HD2	2.23	0.46
21:2Z:44:PHE:O	21:2Z:48:PHE:HB3	2.16	0.46
21:2Z:59:LEU:N	21:2Z:67:LEU:O	2.24	0.46
23:21:21:ARG:O	23:21:33:LYS:N	2.47	0.46
28:26:11:LEU:HB2	28:26:21:TYR:HB2	1.97	0.46
32:2a:37:U:O4	62:2a:1916:HOH:O	2.20	0.46
32:2a:719:C:O2	49:2r:50:ILE:HG13	2.15	0.46
32:2a:841:U:OP2	32:2a:841:U:H6	1.99	0.46
32:2a:1263:C:H5''	32:2a:1264:C:OP2	2.16	0.46
32:2a:1272:G:H2'	32:2a:1273:G:O4'	2.16	0.46
34:2c:37:GLN:O	34:2c:41:GLY:N	2.38	0.46
38:2g:148:ASN:HB3	38:2g:151:TYR:HD2	1.81	0.46
42:2k:33:THR:HG22	42:2k:39:PRO:HA	1.98	0.46
47:2p:53:VAL:HG22	47:2p:79:VAL:HG22	1.97	0.46
1:1A:956:G:N2	1:1A:959:A:H3'	2.31	0.46
1:1A:1179:C:H2'	1:1A:1180:C:C6	2.51	0.46
1:1A:1264:G:OP1	27:15:19:ARG:NH2	2.33	0.46
1:1A:1455:G:OP2	62:1A:4299:HOH:O	2.21	0.46
1:1A:1514:U:O2'	1:1A:1558:A:OP2	2.24	0.46
1:1A:1539:G:O2'	1:1A:1540:U:O5'	2.32	0.46
1:1A:2178:C:H2'	1:1A:2179:C:C6	2.51	0.46
3:1D:108:PRO:HB3	3:1D:143:HIS:HE1	1.80	0.46
6:1G:61:ALA:HA	6:1G:66:GLN:O	2.15	0.46
13:1R:88:ARG:HG2	13:1R:89:ASP:OD1	2.16	0.46
15:1T:41:ARG:NE	32:1a:346:G:H4'	2.31	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:1V:56:SER:O	17:1V:100:ARG:HB2	2.16	0.46
32:1a:50:A:H1'	32:1a:52:G:C8	2.51	0.46
32:1a:160:A:H1'	32:1a:344:A:C5	2.51	0.46
32:1a:342:C:N3	32:1a:347:G:N2	2.59	0.46
33:1b:166:ASP:O	33:1b:170:GLU:N	2.38	0.46
34:1c:6:HIS:HD2	34:1c:8:ILE:N	2.13	0.46
38:1g:83:ALA:HB3	38:1g:85:TYR:CZ	2.51	0.46
47:1p:67:THR:HB	47:1p:70:ALA:H	1.80	0.46
1:2A:196:A:N3	1:2A:196:A:H2'	2.31	0.46
1:2A:299:A:N3	1:2A:319:C:O2'	2.46	0.46
1:2A:924:C:O5'	1:2A:924:C:H6	1.99	0.46
1:2A:927:G:H2'	1:2A:928:G:O4'	2.16	0.46
1:2A:1022:G:N2	1:2A:1142(A):A:C2	2.73	0.46
1:2A:1845:G:OP1	3:2D:258:LYS:NZ	2.42	0.46
1:2A:1927:A:C6	1:2A:1928:A:C6	3.04	0.46
1:2A:2193:G:H2'	1:2A:2194:G:C8	2.51	0.46
1:2A:2352:A:C4	1:2A:2366:A:C2	3.04	0.46
1:2A:2441:C:O2'	1:2A:2442:C:H5'	2.16	0.46
1:2A:2712:U:H1'	1:2A:2712(A):A:C8	2.51	0.46
2:2B:99:G:H8	2:2B:99:G:O5'	1.99	0.46
2:2B:117:G:H2'	2:2B:118:G:O4'	2.15	0.46
5:2F:47:GLY:HA3	5:2F:95:ARG:O	2.15	0.46
6:2G:18:GLU:OE1	6:2G:22:ARG:NH1	2.48	0.46
8:2I:82:ARG:NH2	8:2I:90:GLY:H	2.14	0.46
12:2Q:18:LYS:O	12:2Q:98:LYS:NZ	2.25	0.46
19:2X:9:LEU:HB2	19:2X:29:TRP:O	2.16	0.46
32:2a:392:G:H2'	32:2a:393:A:C8	2.51	0.46
32:2a:417:C:H2'	32:2a:418:C:C6	2.50	0.46
32:2a:420:U:H1'	32:2a:424:G:N2	2.30	0.46
32:2a:828:A:H2'	32:2a:829:G:O4'	2.16	0.46
32:2a:1343:G:O2'	40:2i:121:ARG:HD2	2.16	0.46
32:2a:1363:C:H5'	32:2a:1363(A):A:OP1	2.16	0.46
33:2b:91:PRO:HG2	33:2b:155:LEU:CD1	2.45	0.46
44:2m:66:LEU:C	44:2m:70:LEU:HB2	2.41	0.46
44:2m:81:LEU:HA	44:2m:84:ILE:HG12	1.97	0.46
1:1A:530:G:H4'	1:1A:531:C:OP1	2.15	0.46
1:1A:1426:G:O2'	1:1A:1572:A:N6	2.41	0.46
1:1A:1511:C:H2'	1:1A:1512:U:C6	2.48	0.46
1:1A:2722:G:H5'	13:1R:4:LEU:HD12	1.98	0.46
3:1D:17:THR:O	3:1D:204:ILE:HG23	2.16	0.46
3:1D:248:SER:HB3	3:1D:252:TRP:CZ3	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:1F:183:VAL:HA	5:1F:186:ILE:HD12	1.98	0.46
21:1Z:13:GLU:HB2	21:1Z:18:LEU:HD11	1.97	0.46
32:1a:692:U:H5	42:1k:26:ASN:OD1	1.98	0.46
32:1a:1144:G:N2	32:1a:1146:A:H62	2.14	0.46
32:1a:1180:A:P	40:1i:103:THR:HB	2.56	0.46
32:1a:1349:A:C2	32:1a:1374:A:C4	3.04	0.46
33:1b:90:MET:HE3	33:1b:226:ARG:HH12	1.81	0.46
33:1b:178:ARG:HH12	39:1h:68:ARG:HH22	1.64	0.46
35:1d:194:LEU:HD13	35:1d:194:LEU:HA	1.73	0.46
36:1e:11:ILE:HB	36:1e:31:LEU:HB3	1.98	0.46
43:1l:7:ILE:O	43:1l:11:VAL:HG23	2.16	0.46
52:1u:5:ASP:OD2	62:1u:101:HOH:O	2.20	0.46
1:2A:48:G:N2	1:2A:177:G:H21	2.14	0.46
1:2A:942:G:OP2	11:2P:39:LYS:NZ	2.45	0.46
1:2A:1125:G:H5'	31:29:37:GLY:HA2	1.97	0.46
1:2A:1354:A:H5''	3:2D:38:LYS:HD3	1.97	0.46
1:2A:1364:G:OP2	23:21:3:LYS:HG3	2.16	0.46
1:2A:1640:C:H2'	1:2A:1641:A:O4'	2.15	0.46
1:2A:1816:G:O6	3:2D:35:LYS:NZ	2.33	0.46
4:2E:47:VAL:HG11	4:2E:86:PRO:HD2	1.98	0.46
4:2E:183:LEU:HD12	4:2E:183:LEU:HA	1.73	0.46
7:2H:89:ILE:HB	7:2H:129:THR:HA	1.98	0.46
7:2H:149:ARG:HD2	7:2H:164:TYR:CZ	2.51	0.46
8:2I:130:TYR:CE2	8:2I:132:PRO:HB3	2.51	0.46
9:2N:15:LEU:HD23	9:2N:16:ILE:N	2.31	0.46
10:2O:6:THR:HG22	10:2O:7:TYR:O	2.16	0.46
19:2X:29:TRP:CZ3	19:2X:76:ARG:HD2	2.51	0.46
20:2Y:9:LYS:HA	20:2Y:10:GLY:HA2	1.54	0.46
21:2Z:145:GLU:HB3	21:2Z:148:ASP:CG	2.41	0.46
32:2a:184:G:H2'	32:2a:185:A:C8	2.51	0.46
32:2a:993:G:O2'	32:2a:994:A:N7	2.46	0.46
32:2a:1052:U:O2'	32:2a:1055:A:OP2	2.17	0.46
32:2a:1164:G:C6	32:2a:1165:C:N4	2.84	0.46
34:2c:83:ARG:C	34:2c:85:ARG:H	2.23	0.46
36:2e:107:ARG:O	36:2e:109:ILE:N	2.49	0.46
36:2e:139:LEU:O	36:2e:141:GLN:N	2.48	0.46
42:2k:45:GLY:O	42:2k:50:TYR:HB2	2.16	0.46
50:2s:69:HIS:HB2	50:2s:74:PHE:CE2	2.51	0.46
56:2y:69:G:C5	56:2y:70:G:C8	3.04	0.46
1:1A:192:C:O2'	1:1A:802:A:N3	2.47	0.46
1:1A:740:U:H2'	1:1A:741:G:C8	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:754:C:O2'	1:1A:1272:A:N1	2.47	0.46
6:1G:33:ARG:H	6:1G:162:THR:HG1	1.64	0.46
11:1P:26:GLY:C	11:1P:27:HIS:CD2	2.94	0.46
14:1S:41:ASP:O	14:1S:45:GLY:N	2.45	0.46
32:1a:651:C:N4	32:1a:652:U:O4	2.49	0.46
37:1f:44:GLY:HA2	37:1f:59:TYR:CD2	2.51	0.46
44:1m:67:GLU:HB3	44:1m:68:GLY:H	1.56	0.46
51:1t:14:LYS:O	51:1t:18:GLN:HG3	2.16	0.46
51:1t:84:LEU:O	51:1t:88:VAL:HG23	2.16	0.46
56:1y:19:G:C6	56:1y:56:C:N4	2.81	0.46
1:2A:223:A:O2'	1:2A:420:C:O2	2.32	0.46
1:2A:354:G:C2	1:2A:355:G:C4	3.04	0.46
1:2A:383:U:H2'	1:2A:385:C:H5	1.80	0.46
1:2A:482:A:O2'	1:2A:497:A:N1	2.34	0.46
1:2A:848:G:H2'	1:2A:849:A:C8	2.51	0.46
1:2A:1241:A:C2	1:2A:1242:A:C4	3.03	0.46
1:2A:1580:A:H3'	1:2A:1581:G:H8	1.80	0.46
1:2A:1902:C:OP2	62:2A:3995:HOH:O	2.20	0.46
1:2A:2220:G:H2'	1:2A:2221:G:C8	2.51	0.46
1:2A:2286:A:H4'	1:2A:2287:A:O4'	2.15	0.46
3:2D:75:ILE:HG21	3:2D:99:ASP:HB2	1.96	0.46
4:2E:170:LEU:HD22	4:2E:185:LYS:O	2.16	0.46
12:2Q:51:ARG:HH22	54:2w:54:5MU:H5''	1.81	0.46
19:2X:89:ILE:HG22	19:2X:92:LEU:H	1.81	0.46
21:2Z:30:ASN:HA	21:2Z:89:PHE:HE1	1.81	0.46
21:2Z:59:LEU:HD11	21:2Z:88:PHE:CG	2.51	0.46
32:2a:652:U:O4	32:2a:752:G:O2'	2.31	0.46
33:2b:216:SER:O	33:2b:220:ASP:N	2.27	0.46
39:2h:51:VAL:HG21	39:2h:60:ARG:HB2	1.98	0.46
49:2r:33:ASP:OD2	49:2r:36:ASN:HB2	2.16	0.46
56:2y:60:U:H2'	56:2y:61:C:C6	2.51	0.46
1:1A:271(E):U:H2'	1:1A:271(F):C:H6	1.82	0.45
1:1A:493:G:H2'	1:1A:494:G:O4'	2.15	0.45
1:1A:753:C:H2'	1:1A:754:C:C6	2.51	0.45
1:1A:1256:G:H1'	5:1F:82:ILE:HD11	1.97	0.45
1:1A:1489:U:O3'	1:1A:1490:A:H8	2.00	0.45
1:1A:1827:C:H2'	1:1A:1828:G:H5'	1.98	0.45
3:1D:123:ALA:HB3	3:1D:131:LEU:HG	1.98	0.45
4:1E:60:ASN:OD1	4:1E:62:PRO:HD2	2.16	0.45
4:1E:60:ASN:OD1	4:1E:63:LEU:HG	2.16	0.45
7:1H:3:ARG:HD2	7:1H:3:ARG:HA	1.78	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:1T:8:LYS:HE3	15:1T:8:LYS:HB3	1.82	0.45
32:1a:660:G:H2'	32:1a:661:G:O4'	2.17	0.45
32:1a:963:G:H5'	62:1a:2162:HOH:O	2.16	0.45
32:1a:1379:G:N1	32:1a:1380:U:C4	2.84	0.45
33:1b:12:GLU:C	33:1b:14:GLY:H	2.24	0.45
41:1j:30:SER:HB3	41:1j:81:THR:HG23	1.98	0.45
42:1k:20:TYR:CE1	42:1k:83:ILE:HD12	2.50	0.45
50:1s:36:ARG:NH1	50:1s:53:ASN:HA	2.31	0.45
51:1t:72:LEU:HD23	51:1t:72:LEU:HA	1.73	0.45
1:2A:1028:A:N6	1:2A:1125:G:H2'	2.31	0.45
1:2A:1041:C:OP2	1:2A:1041:C:H6	1.98	0.45
1:2A:1394:U:C4	1:2A:1395:A:C5	3.04	0.45
1:2A:1399:C:H2'	1:2A:1400:G:H8	1.80	0.45
1:2A:1509:C:OP1	1:2A:1509:C:H2'	2.16	0.45
1:2A:1579:A:C6	1:2A:1580:A:C6	3.04	0.45
1:2A:2206:G:H3'	1:2A:2207:G:N7	2.30	0.45
13:2R:59:ASP:OD2	13:2R:61:HIS:HB3	2.16	0.45
26:24:67:TYR:HD2	50:2s:9:VAL:HB	1.79	0.45
32:2a:199:G:N1	32:2a:200:G:C5	2.84	0.45
32:2a:640:A:N6	32:2a:641:U:O4	2.50	0.45
32:2a:979:C:OP2	32:2a:980:C:H5	2.00	0.45
32:2a:1073:U:C4	32:2a:1074:G:N7	2.85	0.45
32:2a:1298:C:N4	38:2g:114:ARG:HB3	2.32	0.45
32:2a:1317:C:H5	45:2n:18:VAL:HG21	1.80	0.45
33:2b:184:VAL:N	33:2b:198:ASP:OD2	2.49	0.45
36:2e:90:VAL:O	36:2e:120:THR:HA	2.16	0.45
45:2n:42:ILE:HG22	45:2n:46:GLU:OE2	2.16	0.45
46:2o:54:ARG:O	46:2o:58:MET:HG3	2.16	0.45
1:1A:272(G):C:C2	1:1A:363(D):G:N2	2.85	0.45
1:1A:305:U:H2'	1:1A:306:U:C6	2.51	0.45
1:1A:518:G:H4'	18:1W:18:ARG:NE	2.31	0.45
1:1A:730:C:OP1	1:1A:1775:U:O2'	2.28	0.45
1:1A:1046:A:O2'	1:1A:1047:G:OP2	2.30	0.45
1:1A:1266:G:O6	18:1W:13:SER:OG	2.32	0.45
1:1A:1850:G:O6	62:1A:4279:HOH:O	2.17	0.45
1:1A:2100:G:N2	1:1A:2189:U:O2	2.44	0.45
1:1A:2369:A:H2'	1:1A:2370:G:C8	2.51	0.45
1:1A:2526:G:C6	1:1A:2527:C:C4	3.04	0.45
5:1F:132:VAL:HA	5:1F:138:GLU:HB3	1.98	0.45
23:11:35:THR:O	23:11:35:THR:OG1	2.31	0.45
32:1a:160:A:H3'	32:1a:161:A:C8	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:978:A:C4	32:1a:1319:A:C2	3.03	0.45
33:1b:55:PHE:CD1	33:1b:221:LEU:HD22	2.51	0.45
35:1d:174:LEU:HD23	35:1d:185:PHE:HA	1.96	0.45
40:1i:24:GLY:O	40:1i:26:VAL:HG23	2.16	0.45
55:1x:64:G:H2'	55:1x:65:C:O4'	2.16	0.45
1:2A:139(A):G:O2'	1:2A:140:G:H5'	2.16	0.45
1:2A:743:G:O2'	1:2A:1659:U:OP1	2.24	0.45
1:2A:1825:A:OP1	3:2D:249:PRO:HD3	2.16	0.45
1:2A:2134:A:H2'	1:2A:2134:A:N3	2.31	0.45
10:2O:20:MET:HE3	10:2O:44:LYS:HE3	1.97	0.45
15:2T:120:ARG:HA	15:2T:123:GLN:HB2	1.97	0.45
30:28:9:GLY:O	30:28:13:ARG:HG3	2.16	0.45
32:2a:10:A:OP2	36:2e:126:ARG:HD2	2.17	0.45
32:2a:391:G:C6	32:2a:392:G:C5	3.05	0.45
32:2a:806:C:H2'	32:2a:807:A:H8	1.82	0.45
32:2a:1108:G:H5'	34:2c:176:HIS:CD2	2.50	0.45
32:2a:1442:G:H5''	32:2a:1442:G:N3	2.31	0.45
34:2c:30:ARG:O	34:2c:34:LEU:HB2	2.16	0.45
34:2c:95:THR:C	34:2c:97:LYS:H	2.24	0.45
35:2d:63:LYS:O	35:2d:67:ILE:HG13	2.15	0.45
36:2e:95:ALA:O	36:2e:97:GLY:N	2.49	0.45
38:2g:70:LYS:HG2	38:2g:96:GLN:HB3	1.98	0.45
44:2m:81:LEU:HD22	44:2m:88:ARG:HD3	1.98	0.45
51:2t:26:ASN:O	51:2t:30:LYS:HE2	2.15	0.45
54:2w:51:U:H2'	54:2w:52:G:H8	1.80	0.45
1:1A:438:G:O6	62:1A:4305:HOH:O	2.21	0.45
1:1A:636:G:OP1	11:1P:132:LYS:NZ	2.40	0.45
1:1A:922:U:H2'	1:1A:923:C:C6	2.51	0.45
1:1A:1278:A:OP1	13:1R:36:THR:HG23	2.16	0.45
1:1A:1796:U:H2'	1:1A:1797:C:H6	1.80	0.45
1:1A:2283:C:H2'	1:1A:2284:C:O4'	2.16	0.45
1:1A:2655:G:O2'	1:1A:2656:U:OP2	2.35	0.45
1:1A:2727:G:H4'	10:1O:70:LYS:HD2	1.99	0.45
1:1A:2759:G:N7	62:1A:4418:HOH:O	2.36	0.45
3:1D:274:ARG:HD3	62:1D:413:HOH:O	2.16	0.45
4:1E:48:GLN:NE2	4:1E:78:LEU:HG	2.28	0.45
4:1E:181:LEU:HD12	4:1E:181:LEU:HA	1.78	0.45
6:1G:97:ASP:HA	6:1G:100:TRP:HD1	1.81	0.45
15:1T:39:ARG:NH2	32:1a:345:C:H5''	2.31	0.45
15:1T:51:ARG:HB3	15:1T:62:THR:HB	1.98	0.45
19:1X:11:PRO:HD3	24:12:37:PHE:CE1	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:31:G:N2	32:1a:47:C:O5'	2.49	0.45
32:1a:407:G:C6	32:1a:408:A:C6	3.04	0.45
32:1a:458:C:N4	32:1a:474:G:O6	2.49	0.45
37:1f:1:MET:HA	37:1f:67:MET:O	2.16	0.45
46:1o:11:VAL:O	46:1o:15:PHE:HD2	1.99	0.45
48:1q:67:LYS:O	48:1q:68:ARG:HB2	2.16	0.45
55:1x:58:A:H4'	55:1x:59:A:OP1	2.16	0.45
1:2A:627:A:N7	11:2P:84:ASN:ND2	2.64	0.45
1:2A:1550:C:OP1	1:2A:1720:U:O2'	2.30	0.45
1:2A:1777:U:H2'	1:2A:1778:U:C6	2.52	0.45
1:2A:2019:A:OP2	27:25:9:LYS:NZ	2.46	0.45
1:2A:2820:A:P	13:2R:2:ARG:HH22	2.39	0.45
6:2G:115:ARG:CZ	6:2G:115:ARG:HB2	2.46	0.45
6:2G:122:PRO:HB3	6:2G:170:ARG:HH21	1.81	0.45
18:2W:57:ASN:O	18:2W:61:ASN:HB2	2.16	0.45
21:2Z:100:VAL:HG12	21:2Z:124:ILE:HG22	1.97	0.45
32:2a:372:C:O2'	62:2a:1917:HOH:O	2.21	0.45
32:2a:841:U:O2	32:2a:841:U:H2'	2.17	0.45
32:2a:1155:G:C6	32:2a:1156:G:C6	3.04	0.45
32:2a:1205:U:H2'	32:2a:1206:G:C8	2.52	0.45
32:2a:1276:G:H2'	32:2a:1277:C:O4'	2.16	0.45
34:2c:30:ARG:NH2	45:2n:38:GLY:HA2	2.24	0.45
47:2p:61:SER:C	47:2p:63:GLY:H	2.24	0.45
48:2q:45:HIS:HB3	48:2q:72:ARG:HG2	1.98	0.45
1:1A:27:G:H22	1:1A:512:G:H1'	1.80	0.45
1:1A:580:C:H2'	1:1A:581:C:C6	2.52	0.45
1:1A:1119:C:N4	62:1A:4393:HOH:O	2.46	0.45
1:1A:1388:G:H2'	1:1A:1389:G:H8	1.82	0.45
1:1A:1817:G:C6	1:1A:1818:U:C4	3.04	0.45
1:1A:2483:C:H2'	1:1A:2484:G:O4'	2.16	0.45
7:1H:88:LEU:HD22	7:1H:130:ARG:HG2	1.99	0.45
13:1R:9:LYS:O	13:1R:17:ARG:HD3	2.17	0.45
14:1S:87:PHE:HB2	14:1S:112:PHE:CE1	2.51	0.45
21:1Z:156:LYS:HE2	21:1Z:156:LYS:HB3	1.72	0.45
28:16:11:LEU:HB2	28:16:21:TYR:HB2	1.99	0.45
32:1a:1144:G:H21	32:1a:1146:A:H62	1.64	0.45
32:1a:1304:G:C6	32:1a:1305:G:N1	2.84	0.45
34:1c:95:THR:C	34:1c:97:LYS:H	2.24	0.45
35:1d:172:PRO:O	35:1d:174:LEU:N	2.49	0.45
39:1h:84:ARG:HG2	39:1h:85:ARG:O	2.16	0.45
48:1q:57:VAL:HG12	48:1q:76:LEU:HA	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:1y:33:U:O2'	56:1y:35:A:N7	2.41	0.45
56:1y:73:A:H2'	56:1y:74:C:O4'	2.17	0.45
1:2A:224:G:O6	1:2A:419:C:O2'	2.28	0.45
1:2A:587:C:P	11:2P:21:ARG:HH22	2.39	0.45
1:2A:957:A:C4	1:2A:959:A:C8	3.04	0.45
1:2A:1112:G:H2'	1:2A:1113:U:O4'	2.16	0.45
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.51	0.45
1:2A:2199:A:OP1	23:21:50:ARG:NH2	2.49	0.45
1:2A:2364:C:OP1	22:20:55:ARG:NH1	2.49	0.45
1:2A:2705:A:H2'	1:2A:2706:G:O4'	2.16	0.45
2:2B:60:C:C2	2:2B:61:G:C8	3.05	0.45
3:2D:132:PRO:HD3	3:2D:190:TYR:CE1	2.51	0.45
20:2Y:50:ARG:O	20:2Y:52:SER:N	2.49	0.45
26:24:61:ARG:NH2	50:2s:9:VAL:HG11	2.26	0.45
32:2a:104:G:H2'	32:2a:105:G:H5''	1.99	0.45
32:2a:107:G:C2	32:2a:108:G:H1'	2.51	0.45
32:2a:518:C:H4'	32:2a:519:C:H5''	1.98	0.45
32:2a:594:G:H2'	32:2a:595:G:O4'	2.16	0.45
32:2a:945:G:C2	32:2a:946:A:C8	3.04	0.45
32:2a:1201:A:H1'	32:2a:1202:G:OP2	2.16	0.45
32:2a:1352:C:OP1	52:2u:3:LYS:NZ	2.43	0.45
37:2f:76:ALA:O	37:2f:80:ARG:HG3	2.16	0.45
40:2i:4:TYR:CE2	40:2i:88:TYR:CD1	3.04	0.45
40:2i:116:LYS:HA	40:2i:123:PRO:HD3	1.99	0.45
41:2j:44:VAL:HG22	41:2j:66:ARG:HB3	1.98	0.45
44:2m:37:THR:O	44:2m:55:ARG:NH1	2.49	0.45
47:2p:23:ASP:OD2	47:2p:25:ARG:NH2	2.49	0.45
54:2w:24:G:H2'	54:2w:25:C:O4'	2.17	0.45
55:2x:44:A:H2'	55:2x:45:G:C8	2.52	0.45
56:2y:58:A:N3	56:2y:60:U:N3	2.64	0.45
1:1A:553:G:H2'	1:1A:554:U:C6	2.50	0.45
1:1A:571:A:O2'	17:1V:78:LYS:HE2	2.17	0.45
1:1A:626:U:O4	11:1P:107:LYS:HE2	2.16	0.45
1:1A:707:G:H2'	1:1A:708:C:H6	1.82	0.45
1:1A:2667:C:H2'	1:1A:2668:G:O4'	2.17	0.45
2:1B:41:U:C5	6:1G:70:VAL:O	2.70	0.45
7:1H:150:ALA:HA	7:1H:153:LYS:HZ2	1.81	0.45
12:1Q:43:THR:HG22	12:1Q:94:VAL:HG12	1.98	0.45
23:11:3:LYS:O	23:11:12:PRO:HD3	2.16	0.45
31:19:29:ASN:HD22	31:19:32:HIS:CE1	2.34	0.45
32:1a:193:C:H2'	32:1a:194:C:C6	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:299:G:O5'	32:1a:299:G:H8	1.98	0.45
32:1a:1030(D):A:H2'	32:1a:1031:G:H4'	1.98	0.45
1:2A:322:A:P	5:2F:169:ASN:HB2	2.56	0.45
1:2A:976:C:H5'	1:2A:1156:A:N6	2.32	0.45
1:2A:1636:C:H2'	1:2A:1637:A:C8	2.51	0.45
1:2A:2498:C:O2'	1:2A:2499:C:H5'	2.16	0.45
1:2A:2601:C:H2'	1:2A:2603:G:C8	2.52	0.45
1:2A:2881:C:O2'	13:2R:96:ARG:HA	2.16	0.45
3:2D:205:VAL:HG21	62:2D:414:HOH:O	2.17	0.45
4:2E:50:GLY:HA2	4:2E:77:ILE:O	2.16	0.45
4:2E:82:ARG:NH1	4:2E:82:ARG:HG3	2.31	0.45
6:2G:25:TYR:CE1	6:2G:31:VAL:HA	2.51	0.45
6:2G:56:ALA:O	6:2G:59:GLU:HG2	2.17	0.45
7:2H:121:ILE:HD12	7:2H:141:VAL:HG22	1.99	0.45
8:2I:57:ARG:CA	8:2I:61:ARG:HH12	2.30	0.45
11:2P:125:VAL:HG23	11:2P:145:PRO:HA	1.98	0.45
13:2R:117:VAL:HG12	13:2R:118:GLU:N	2.32	0.45
14:2S:3:ARG:HH11	14:2S:3:ARG:HA	1.80	0.45
14:2S:27:SER:O	14:2S:37:ALA:HA	2.16	0.45
15:2T:61:PHE:CE2	15:2T:76:PHE:HB2	2.51	0.45
24:22:12:GLU:HA	24:22:15:LYS:HD2	1.98	0.45
25:23:18:ASP:OD1	25:23:19:GLN:N	2.48	0.45
32:2a:15:G:C5	32:2a:1396:A:C2	3.04	0.45
32:2a:26:A:N6	32:2a:558:G:O2'	2.44	0.45
32:2a:110:C:O2'	47:2p:25:ARG:O	2.27	0.45
32:2a:181:G:N2	32:2a:182:U:O4	2.23	0.45
32:2a:1292:U:H2'	32:2a:1293:G:H8	1.79	0.45
37:2f:35:ALA:HA	37:2f:67:MET:HB3	1.98	0.45
40:2i:26:VAL:HG13	40:2i:61:ALA:HB3	1.98	0.45
41:2j:35:SER:HB3	41:2j:73:ASP:H	1.82	0.45
41:2j:44:VAL:CG1	41:2j:64:GLU:HB2	2.46	0.45
44:2m:3:ARG:HH22	44:2m:11:ARG:HB2	1.81	0.45
45:2n:45:ARG:HE	45:2n:49:HIS:HE1	1.62	0.45
49:2r:53:ARG:HA	49:2r:56:THR:OG1	2.16	0.45
1:1A:529:A:H62	1:1A:2041:U:H3	1.65	0.45
1:1A:1178:C:H2'	1:1A:1179:C:C6	2.52	0.45
1:1A:1328:G:H2'	1:1A:1330:C:C5	2.52	0.45
1:1A:1538:G:H2'	1:1A:1539:G:C8	2.51	0.45
1:1A:2019:A:H2	1:1A:2035:G:H22	1.63	0.45
1:1A:2715:C:H2'	1:1A:2716:U:C6	2.52	0.45
62:1A:4895:HOH:O	5:1F:74:ARG:HG3	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:1G:14:GLU:O	6:1G:17:PRO:HD2	2.16	0.45
24:12:1:MET:HE3	24:12:5:GLU:HB3	1.98	0.45
30:18:62:LEU:HB3	30:18:65:GLU:HG3	1.99	0.45
32:1a:482:A:H2'	32:1a:483:C:O4'	2.17	0.45
32:1a:717:C:H4'	42:1k:117:ASN:HD22	1.82	0.45
32:1a:967:5MC:H5''	32:1a:968:A:OP2	2.17	0.45
32:1a:1286:A:C8	32:1a:1287:A:H4'	2.52	0.45
36:1e:57:LYS:HG2	36:1e:61:TYR:CE2	2.51	0.45
37:1f:39:LYS:HE3	37:1f:39:LYS:HB3	1.78	0.45
37:1f:95:GLU:O	49:1r:32:ARG:NH1	2.46	0.45
46:1o:18:PHE:O	46:1o:20:GLY:N	2.49	0.45
46:1o:36:ILE:O	46:1o:40:SER:HB2	2.17	0.45
49:1r:53:ARG:O	49:1r:55:ARG:N	2.50	0.45
1:2A:601:C:O2'	1:2A:605:C:H5''	2.16	0.45
1:2A:1159:U:H2'	1:2A:1160:G:C8	2.51	0.45
1:2A:1203:G:OP2	1:2A:1204:A:O2'	2.24	0.45
1:2A:1702:G:H2'	1:2A:1703:G:O4'	2.17	0.45
1:2A:2370:G:C6	1:2A:2371:G:C6	3.05	0.45
1:2A:2654:A:H4'	1:2A:2655:G:OP1	2.16	0.45
4:2E:27:LEU:HD12	4:2E:181:LEU:CD1	2.46	0.45
8:2I:5:LEU:H	8:2I:5:LEU:HD12	1.82	0.45
9:2N:15:LEU:HD23	9:2N:16:ILE:H	1.81	0.45
12:2Q:16:ARG:HG3	12:2Q:17:LEU:H	1.81	0.45
14:2S:27:SER:HA	14:2S:88:ASP:HB3	1.98	0.45
30:28:54:GLU:OE1	30:28:57:ARG:NH1	2.36	0.45
32:2a:626:U:C2	32:2a:627:G:C8	3.05	0.45
32:2a:708:C:H2'	32:2a:709:G:C8	2.50	0.45
32:2a:1134:G:C2	32:2a:1135:U:H1'	2.51	0.45
32:2a:1168:A:H3'	32:2a:1169:A:H8	1.81	0.45
32:2a:1182:G:H4'	32:2a:1183:A:C5'	2.47	0.45
32:2a:1367:C:H4'	41:2j:48:THR:HG21	1.98	0.45
32:2a:1456:G:N2	51:2t:43:LEU:HD11	2.32	0.45
33:2b:158:LEU:HD12	33:2b:158:LEU:HA	1.61	0.45
33:2b:194:PRO:O	33:2b:197:VAL:N	2.40	0.45
38:2g:139:GLU:O	38:2g:143:ARG:N	2.41	0.45
42:2k:87:THR:HA	42:2k:91:ARG:CZ	2.47	0.45
1:1A:363(C):G:H2'	1:1A:363(D):G:O4'	2.16	0.45
1:1A:1047:G:N2	1:1A:1110:G:O2'	2.50	0.45
1:1A:1084:A:C6	1:1A:1085:A:C5	3.04	0.45
1:1A:1252:G:C2	1:1A:1253:A:C2	3.04	0.45
1:1A:2459:A:C5	1:1A:2460:U:C5	3.04	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1B:21:G:H1	2:1B:62:C:H42	1.65	0.45
25:13:44:ARG:O	25:13:48:GLU:HG3	2.17	0.45
32:1a:1005:A:H1'	32:1a:1036:G:O6	2.16	0.45
32:1a:1024:G:H2'	32:1a:1025:U:H5''	1.98	0.45
32:1a:1329:A:H5''	44:1m:26:GLY:N	2.31	0.45
32:1a:1530:G:H2'	32:1a:1531:A:H8	1.78	0.45
33:1b:10:LEU:C	33:1b:11:LEU:HD23	2.42	0.45
37:1f:25:ILE:HD13	37:1f:82:ARG:HD3	1.99	0.45
47:1p:17:TYR:HE2	47:1p:41:PRO:HG3	1.82	0.45
1:2A:144:C:H2'	1:2A:145:G:C8	2.48	0.45
1:2A:211:A:H2'	1:2A:212:G:O4'	2.17	0.45
1:2A:882:G:N2	1:2A:895:U:C2	2.85	0.45
1:2A:1128:A:H4'	1:2A:1129:A:OP1	2.17	0.45
1:2A:1188:U:C4'	17:2V:79:VAL:HG22	2.41	0.45
1:2A:2809:A:H2'	1:2A:2810:A:C8	2.52	0.45
2:2B:41:U:O3'	26:24:2:LYS:NZ	2.50	0.45
6:2G:29:TRP:C	6:2G:31:VAL:H	2.24	0.45
9:2N:112:LEU:HA	9:2N:112:LEU:HD12	1.70	0.45
10:2O:2:ILE:HG13	10:2O:8:LEU:HD21	1.98	0.45
13:2R:2:ARG:NH1	13:2R:5:LYS:O	2.49	0.45
19:2X:65:ARG:HE	19:2X:70:LEU:CD2	2.30	0.45
28:26:14:THR:OG1	28:26:48:VAL:HG13	2.17	0.45
32:2a:334:C:H2'	32:2a:335:C:C6	2.52	0.45
32:2a:426:G:H4'	35:2d:41:GLY:O	2.17	0.45
32:2a:764:C:H2'	32:2a:765:G:O4'	2.17	0.45
32:2a:1154:G:H2'	32:2a:1155:G:H8	1.82	0.45
34:2c:69:HIS:CD2	34:2c:104:GLN:HG2	2.51	0.45
35:2d:106:TYR:C	35:2d:108:LEU:N	2.74	0.45
37:2f:82:ARG:HB2	37:2f:85:VAL:HG23	1.99	0.45
38:2g:78:ARG:NH1	38:2g:156:TRP:HB3	2.31	0.45
40:2i:45:ALA:O	40:2i:48:GLU:HB2	2.17	0.45
40:2i:63:ILE:HG21	40:2i:77:ILE:HG12	1.99	0.45
46:2o:17:ARG:HH11	46:2o:17:ARG:HG3	1.82	0.45
50:2s:38:SER:HB2	50:2s:71:LEU:HD13	1.99	0.45
1:1A:58:G:O2'	1:1A:73:A:N1	2.48	0.45
1:1A:229:A:H5''	1:1A:230:U:C5'	2.45	0.45
1:1A:406:G:O5'	1:1A:406:G:H8	2.00	0.45
1:1A:825:C:H4'	1:1A:2428:G:N7	2.32	0.45
5:1F:135:LYS:O	5:1F:138:GLU:HB2	2.17	0.45
32:1a:296:U:H2'	32:1a:297:G:O4'	2.17	0.45
32:1a:457:C:H2'	32:1a:458:C:H6	1.82	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:487:A:H3'	32:1a:488:C:C6	2.52	0.45
32:1a:597:G:C6	32:1a:598:U:C2	3.04	0.45
51:1t:64:ASP:OD2	51:1t:81:LYS:NZ	2.50	0.45
1:2A:271(J):C:O2'	1:2A:271(K):U:OP2	2.32	0.45
1:2A:275:G:H2'	1:2A:276:A:O4'	2.17	0.45
1:2A:586:A:N1	1:2A:809:G:O2'	2.42	0.45
1:2A:2259:G:C2	1:2A:2282:G:C6	3.05	0.45
1:2A:2466:C:C2	1:2A:2485:G:C2	3.04	0.45
1:2A:2869:G:C2	1:2A:2870:C:C2	3.05	0.45
2:2B:28:C:C2	2:2B:29:A:C8	3.05	0.45
4:2E:34:VAL:HG11	4:2E:78:LEU:HD12	1.99	0.45
4:2E:112:GLY:O	4:2E:159:HIS:HA	2.16	0.45
4:2E:114:ALA:N	4:2E:158:GLY:O	2.46	0.45
6:2G:7:LEU:HD22	6:2G:104:GLU:N	2.32	0.45
6:2G:41:GLN:OE1	6:2G:60:LEU:HD12	2.17	0.45
7:2H:107:VAL:HG23	7:2H:109:PHE:CD2	2.52	0.45
12:2Q:1:MET:SD	12:2Q:44:ALA:HB1	2.57	0.45
19:2X:26:TYR:OH	19:2X:89:ILE:N	2.43	0.45
24:22:53:LEU:HA	24:22:53:LEU:HD23	1.71	0.45
28:26:40:CYS:O	28:26:44:ARG:N	2.46	0.45
29:27:16:HIS:HB2	29:27:44:PRO:HG2	1.98	0.45
32:2a:105:G:N2	32:2a:379:C:O3'	2.50	0.45
32:2a:1326:C:H2'	32:2a:1327:C:C6	2.51	0.45
34:2c:12:LEU:O	34:2c:14:ILE:N	2.50	0.45
35:2d:98:GLU:OE1	35:2d:103:ASN:ND2	2.49	0.45
37:2f:91:VAL:HG11	49:2r:72:ARG:NH1	2.31	0.45
38:2g:78:ARG:NH2	38:2g:79:ARG:HH11	2.10	0.45
38:2g:153:HIS:NE2	42:2k:58:PRO:HD2	2.30	0.45
1:1A:77:C:H5''	24:12:10:LEU:HD21	1.98	0.45
1:1A:571:A:H5'	1:1A:2030:A:N7	2.31	0.45
1:1A:647:G:H8	1:1A:647:G:O5'	2.00	0.45
1:1A:715:G:H2'	1:1A:716:A:O4'	2.17	0.45
1:1A:942:G:O2'	1:1A:1189:A:N3	2.41	0.45
1:1A:1226:A:OP1	17:1V:84:LYS:HE2	2.16	0.45
1:1A:1891:G:H2'	1:1A:1892:C:O4'	2.17	0.45
4:1E:104:VAL:HG22	4:1E:198:VAL:HG22	1.99	0.45
5:1F:13:SER:OG	5:1F:127:GLU:HG3	2.17	0.45
5:1F:89:VAL:HG12	5:1F:90:PHE:CD2	2.52	0.45
5:1F:167:ALA:HB1	5:1F:173:VAL:HG11	1.99	0.45
7:1H:37:VAL:HG13	7:1H:68:THR:HG23	1.99	0.45
13:1R:10:LEU:O	13:1R:11:ASN:C	2.60	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:1S:110:LEU:HA	14:1S:110:LEU:HD12	1.55	0.45
16:1U:95:LEU:HA	16:1U:98:LEU:HD12	1.98	0.45
21:1Z:155:LEU:HD13	21:1Z:155:LEU:HA	1.70	0.45
30:18:52:LYS:N	30:18:53:PRO:HD2	2.32	0.45
32:1a:939:G:C6	32:1a:940:C:N4	2.85	0.45
32:1a:1060:C:C5	34:1c:2:GLY:HA3	2.52	0.45
35:1d:52:SER:O	35:1d:56:VAL:HG13	2.17	0.45
35:1d:111:ALA:HB1	35:1d:116:GLN:HB3	1.99	0.45
43:1l:27:LEU:HD13	43:1l:30:ALA:O	2.17	0.45
55:1x:49:G:N2	55:1x:66:C:C2	2.85	0.45
55:1x:54:5MU:H2'	55:1x:55:PSU:O4'	2.17	0.45
1:2A:251:A:C5	1:2A:252:G:H1'	2.52	0.45
1:2A:857:C:C4	1:2A:858:U:C4	3.04	0.45
1:2A:1284:A:H2'	1:2A:1285:G:O4'	2.16	0.45
1:2A:1429:G:H2'	1:2A:1430:C:H6	1.81	0.45
1:2A:1628:G:H2'	1:2A:1629:U:C6	2.52	0.45
1:2A:2542:A:H4'	1:2A:2543:G:C8	2.52	0.45
4:2E:104:VAL:HG22	4:2E:198:VAL:HG13	1.97	0.45
5:2F:28:ILE:O	5:2F:30:PRO:HD3	2.16	0.45
6:2G:138:GLN:NE2	6:2G:153:ARG:HB2	2.31	0.45
11:2P:139:LYS:O	11:2P:142:GLY:N	2.50	0.45
16:2U:104:GLN:HG2	16:2U:105:VAL:N	2.31	0.45
21:2Z:19:ARG:HG2	21:2Z:25:PRO:HD3	1.98	0.45
22:20:51:VAL:HG22	22:20:81:VAL:HG23	1.98	0.45
32:2a:162:A:H8	32:2a:162:A:O5'	2.00	0.45
32:2a:401:C:H2'	32:2a:402:G:C8	2.51	0.45
32:2a:446:G:H1	32:2a:488:C:H42	1.63	0.45
32:2a:825:G:H2'	32:2a:826:C:C6	2.52	0.45
32:2a:953:G:C6	32:2a:954:G:C5	3.05	0.45
32:2a:959:A:H5''	32:2a:960:U:OP2	2.17	0.45
32:2a:971:G:O6	32:2a:1364:U:O2'	2.31	0.45
32:2a:1330:U:H5''	44:2m:23:TYR:HA	1.99	0.45
35:2d:25:ARG:HA	35:2d:28:SER:HB3	1.98	0.45
38:2g:18:TYR:HB3	38:2g:59:LEU:HD13	1.99	0.45
45:2n:34:TYR:O	45:2n:38:GLY:N	2.44	0.45
50:2s:12:ASP:CG	50:2s:37:ARG:HD2	2.41	0.45
1:1A:30:G:H2'	1:1A:31:C:C6	2.52	0.45
1:1A:582:G:H2'	1:1A:583:G:C8	2.52	0.45
1:1A:821:A:H62	1:1A:972:G:H21	1.65	0.45
1:1A:1399:C:OP1	19:1X:25:LYS:NZ	2.50	0.45
1:1A:1811:G:N7	62:1A:4421:HOH:O	2.36	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2406:U:H2'	1:1A:2406:U:H6	1.52	0.45
2:1B:52:A:OP2	2:1B:52:A:H8	2.00	0.45
2:1B:74:U:H2'	2:1B:75:G:O4'	2.16	0.45
4:1E:181:LEU:HD11	15:1T:6:LEU:HD22	1.98	0.45
6:1G:77:ILE:HG22	6:1G:80:PHE:H	1.80	0.45
6:1G:151:ALA:HB3	6:1G:153:ARG:NH1	2.31	0.45
10:1O:69:ILE:HD11	10:1O:105:GLU:CD	2.42	0.45
18:1W:18:ARG:NH2	18:1W:76:VAL:O	2.49	0.45
21:1Z:48:PHE:CE1	21:1Z:71:VAL:HG11	2.52	0.45
21:1Z:73:GLN:HB3	21:1Z:87:ASP:CG	2.42	0.45
23:11:77:ALA:HB2	23:11:94:LEU:HD21	2.00	0.45
27:15:33:CYS:HB2	27:15:40:LYS:HD3	1.98	0.45
32:1a:109:A:H2'	32:1a:326:G:N2	2.32	0.45
32:1a:228:A:H2'	32:1a:229:U:O4'	2.17	0.45
32:1a:520:A:N1	32:1a:536:C:H1'	2.32	0.45
32:1a:1364:U:C6	52:1u:14:TRP:HH2	2.34	0.45
33:1b:124:SER:HA	33:1b:125:PRO:HA	1.67	0.45
34:1c:60:ALA:HB3	34:1c:63:ASN:OD1	2.17	0.45
34:1c:63:ASN:OD1	34:1c:63:ASN:N	2.50	0.45
34:1c:123:GLN:OE1	34:1c:133:ALA:HB1	2.17	0.45
36:1e:47:LYS:O	36:1e:57:LYS:HD2	2.17	0.45
1:2A:758:C:O2	1:2A:1981:A:H2	1.99	0.45
1:2A:910:A:H2	1:2A:2264:C:O2	2.00	0.45
1:2A:1288:U:O4	13:2R:106:GLY:HA3	2.17	0.45
1:2A:1445(A):C:N4	1:2A:1466:G:H1	2.15	0.45
1:2A:2612:C:P	62:2A:4043:HOH:O	2.75	0.45
6:2G:31:VAL:HG22	6:2G:32:PRO:HD2	1.99	0.45
11:2P:79:ARG:HD2	11:2P:110:TYR:CE1	2.51	0.45
14:2S:18:ILE:HA	14:2S:18:ILE:HD13	1.75	0.45
29:27:1:MET:HB3	29:27:1:MET:HE2	1.63	0.45
32:2a:502:G:H2'	32:2a:503:C:O4'	2.17	0.45
32:2a:1086:U:H2'	32:2a:1087:G:O4'	2.17	0.45
32:2a:1118:C:H42	32:2a:1155:G:H1	1.65	0.45
32:2a:1245:A:C6	32:2a:1246:C:C4	3.05	0.45
32:2a:1281:U:O2'	32:2a:1282:C:H5'	2.18	0.45
32:2a:1505:G:H4'	32:2a:1506:U:H5''	1.98	0.45
35:2d:62:GLN:O	35:2d:66:ARG:HD2	2.17	0.45
38:2g:15:ASP:OD1	38:2g:20:ASP:N	2.46	0.45
38:2g:78:ARG:HG3	38:2g:156:TRP:CE3	2.52	0.45
42:2k:48:ILE:O	42:2k:50:TYR:N	2.50	0.45
43:2l:24:VAL:HB	43:2l:27:LEU:HG	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:2r:51:LEU:HD11	49:2r:55:ARG:HH21	1.82	0.45
1:1A:271:A:N3	1:1A:365:C:O2'	2.49	0.44
1:1A:770:G:N3	1:1A:1354:A:H2	2.14	0.44
1:1A:1142(A):A:C8	1:1A:1144:G:C8	3.04	0.44
1:1A:2698:U:H2'	1:1A:2699:C:C6	2.52	0.44
2:1B:114:C:O2'	14:1S:46:VAL:HG13	2.18	0.44
3:1D:182:LEU:HB2	3:1D:272:ALA:HB3	1.98	0.44
7:1H:92:ILE:HD12	7:1H:92:ILE:HA	1.84	0.44
9:1N:60:ILE:HG13	9:1N:61:ARG:N	2.32	0.44
11:1P:14:LYS:HG2	11:1P:15:ARG:O	2.18	0.44
21:1Z:139:VAL:HG12	21:1Z:140:ASP:H	1.82	0.44
32:1a:21:G:H2'	32:1a:22:G:C8	2.52	0.44
32:1a:105:G:C6	32:1a:106:C:C4	3.05	0.44
32:1a:441:A:H3'	32:1a:442:C:C6	2.51	0.44
32:1a:730:G:C5	32:1a:731:G:H1'	2.52	0.44
32:1a:834:C:C2	32:1a:853:G:C2	3.05	0.44
32:1a:1004:A:H5'	32:1a:1024:G:H1	1.82	0.44
33:1b:230:VAL:HG22	33:1b:231:GLU:H	1.82	0.44
34:1c:71:ALA:O	34:1c:73:PRO:HD3	2.16	0.44
34:1c:201:TYR:C	34:1c:202:ILE:HG12	2.42	0.44
36:1e:51:VAL:O	36:1e:55:VAL:HG23	2.17	0.44
36:1e:143:ARG:HE	39:1h:77:GLU:CD	2.25	0.44
40:1i:111:ARG:HD2	45:1n:61:TRP:OXT	2.17	0.44
48:1q:15:MET:HE1	48:1q:43:LEU:HD22	1.99	0.44
50:1s:51:VAL:O	50:1s:58:VAL:N	2.46	0.44
55:1x:44:A:H2'	55:1x:45:G:O4'	2.17	0.44
56:1y:59:U:H2'	56:1y:60:U:H6	1.81	0.44
1:2A:272(B):G:H2'	1:2A:272(C):G:H8	1.83	0.44
1:2A:289:A:H2'	1:2A:290:G:O4'	2.17	0.44
1:2A:869:G:O3'	12:2Q:6:ARG:NH2	2.50	0.44
1:2A:1450(A):C:N4	1:2A:1451:C:H41	2.15	0.44
1:2A:1496:A:H5'	1:2A:1497:U:OP1	2.17	0.44
1:2A:2769:C:H2'	1:2A:2770:G:O4'	2.17	0.44
3:2D:245:PRO:HB2	3:2D:253:GLN:HG2	1.98	0.44
11:2P:114:ILE:HB	11:2P:130:PHE:CD1	2.52	0.44
19:2X:44:GLU:HG2	19:2X:49:VAL:O	2.17	0.44
23:21:62:VAL:CG1	23:21:67:ILE:HG12	2.46	0.44
32:2a:966:M2G:H2'	32:2a:967:5MC:C6	2.52	0.44
32:2a:1009:G:C2'	32:2a:1010:G:H5'	2.47	0.44
32:2a:1123:A:H1'	41:2j:37:PRO:O	2.16	0.44
32:2a:1277:C:H2'	32:2a:1279:A:C8	2.52	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1312:G:N2	32:2a:1326:C:C2	2.85	0.44
32:2a:1333:A:H2'	32:2a:1334:G:O4'	2.17	0.44
33:2b:16:HIS:CG	33:2b:17:PHE:N	2.85	0.44
35:2d:150:GLU:N	35:2d:150:GLU:CD	2.75	0.44
36:2e:90:VAL:O	36:2e:91:LEU:HD13	2.17	0.44
39:2h:7:ALA:HB2	39:2h:85:ARG:HD3	1.99	0.44
1:1A:30:G:C5	1:1A:31:C:C4	3.04	0.44
1:1A:192:C:N4	1:1A:203:C:O2'	2.50	0.44
1:1A:244:A:C2	1:1A:255:A:C4	3.05	0.44
1:1A:476:G:H2'	1:1A:478:A:OP2	2.17	0.44
1:1A:1113:U:H2'	1:1A:1114:G:H8	1.81	0.44
1:1A:1860:G:H2'	1:1A:1861:G:O4'	2.18	0.44
1:1A:2369:A:H2'	1:1A:2370:G:H8	1.82	0.44
1:1A:2649:U:H2'	1:1A:2650:U:C6	2.51	0.44
2:1B:7:G:H5'	14:1S:29:PHE:CE2	2.52	0.44
4:1E:31:CYS:HB2	4:1E:91:VAL:HB	2.00	0.44
4:1E:179:GLU:HB2	4:1E:181:LEU:HD22	1.99	0.44
5:1F:179:GLU:HA	5:1F:205:ARG:NH2	2.31	0.44
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.76	0.44
8:1I:62:LYS:HG2	8:1I:133:HIS:CE1	2.53	0.44
13:1R:70:LEU:HD23	13:1R:70:LEU:HA	1.70	0.44
15:1T:93:ARG:HB2	15:1T:117:ASP:OD2	2.17	0.44
29:17:23:ARG:NH1	62:17:202:HOH:O	2.50	0.44
32:1a:4:U:O4	39:1h:105:ARG:HD3	2.18	0.44
32:1a:69:G:H2'	32:1a:70:G:C8	2.51	0.44
32:1a:237:C:H5''	48:1q:25:ARG:CZ	2.48	0.44
32:1a:983:A:H2	32:1a:984:C:C6	2.35	0.44
33:1b:59:GLU:HG3	33:1b:221:LEU:HD11	1.98	0.44
36:1e:80:ILE:HG13	36:1e:81:GLU:N	2.31	0.44
36:1e:107:ARG:HG2	36:1e:111:GLU:HG3	1.98	0.44
48:1q:45:HIS:HA	48:1q:69:LYS:HZ2	1.82	0.44
1:2A:196:A:O2'	1:2A:805:G:O6	2.29	0.44
1:2A:322:A:OP1	5:2F:169:ASN:HB2	2.18	0.44
1:2A:510:C:H2'	1:2A:511:U:O4'	2.17	0.44
1:2A:643:A:C2	1:2A:644:A:C4	3.06	0.44
1:2A:1438:U:H2'	1:2A:1439:A:H8	1.81	0.44
1:2A:1913:A:N7	32:2a:1494:G:H4'	2.32	0.44
1:2A:2079:U:O3'	23:21:35:THR:OG1	2.31	0.44
1:2A:2312:U:H5'	6:2G:88:ILE:HD11	1.99	0.44
1:2A:2347:C:O2'	28:26:21:TYR:OH	2.15	0.44
8:2I:93:THR:O	8:2I:97:ILE:HG13	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:21:76:ARG:H	23:21:76:ARG:HG2	1.61	0.44
28:26:19:ARG:NH1	28:26:52:VAL:HG11	2.32	0.44
32:2a:56:U:H2'	32:2a:57:G:C8	2.52	0.44
32:2a:66:G:H8	32:2a:66:G:OP1	2.00	0.44
32:2a:687:A:H4'	32:2a:688:G:O5'	2.17	0.44
32:2a:721:G:H4'	32:2a:722:A:O5'	2.18	0.44
32:2a:1274:G:H8	32:2a:1274:G:O5'	2.00	0.44
32:2a:1389:C:H2'	32:2a:1390:U:C6	2.51	0.44
33:2b:20:GLU:HB2	33:2b:190:THR:OG1	2.17	0.44
33:2b:180:LEU:HB2	33:2b:182:ILE:HG13	1.99	0.44
34:2c:41:GLY:O	34:2c:45:LYS:NZ	2.46	0.44
42:2k:78:GLN:O	42:2k:104:GLN:N	2.47	0.44
1:1A:607:U:C5	1:1A:620:G:C5	3.06	0.44
1:1A:704:G:O2'	1:1A:726:G:N1	2.44	0.44
1:1A:893:C:C4	1:1A:894:C:N4	2.85	0.44
1:1A:1261:C:H1'	62:1A:4287:HOH:O	2.16	0.44
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.49	0.44
1:1A:2118:U:O4	1:1A:2149:G:H1'	2.17	0.44
1:1A:2203:U:O2'	1:1A:2205:C:H5'	2.17	0.44
1:1A:2378:A:H2'	14:1S:21:THR:HG21	1.99	0.44
1:1A:2705:A:O2'	1:1A:2852:G:OP1	2.22	0.44
2:1B:29:A:H2'	2:1B:30:C:C6	2.53	0.44
6:1G:109:VAL:HG21	6:1G:142:PRO:HG3	1.99	0.44
12:1Q:42:ILE:O	12:1Q:95:ALA:N	2.34	0.44
17:1V:43:GLU:H	17:1V:43:GLU:CD	2.23	0.44
19:1X:35:THR:HG22	19:1X:37:THR:N	2.33	0.44
30:18:26:LYS:HD2	30:18:48:PHE:CD2	2.52	0.44
32:1a:277:C:H5''	48:1q:68:ARG:NH2	2.32	0.44
32:1a:342:C:H42	32:1a:347:G:H1	1.64	0.44
32:1a:416:G:C5	32:1a:417:C:C4	3.04	0.44
32:1a:434:U:H2'	32:1a:435:C:C6	2.52	0.44
32:1a:584:G:H2'	32:1a:585:G:C8	2.53	0.44
32:1a:714:G:H2'	32:1a:715:A:C8	2.52	0.44
51:1t:53:LEU:O	51:1t:57:ARG:HG3	2.17	0.44
1:2A:57:C:H2'	1:2A:58:G:O4'	2.17	0.44
1:2A:527:C:C4	1:2A:2779:U:H2'	2.52	0.44
1:2A:1140:C:P	9:2N:66:LYS:HZ3	2.40	0.44
1:2A:1154:G:OP1	16:2U:58:ARG:HG2	2.18	0.44
1:2A:1502:C:H2'	1:2A:1503:U:C6	2.52	0.44
1:2A:2031:A:C6	1:2A:2498:C:H1'	2.52	0.44
1:2A:2083:G:C6	1:2A:2084:C:C4	3.06	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2100:G:C6	1:2A:2190:G:C6	3.05	0.44
1:2A:2516:G:C6	1:2A:2517:C:C4	3.06	0.44
1:2A:2750:A:O2'	1:2A:2752:C:N4	2.49	0.44
1:2A:2854:G:H2'	1:2A:2855:C:C6	2.53	0.44
2:2B:31:C:N4	14:2S:32:LEU:HD22	2.31	0.44
4:2E:119:ARG:HG2	4:2E:120:TRP:CE2	2.52	0.44
13:2R:78:LYS:HE2	13:2R:83:ILE:HD11	1.99	0.44
18:2W:77:ASP:HB2	18:2W:102:HIS:HB2	1.99	0.44
26:24:50:VAL:HG21	44:2m:64:TRP:CA	2.48	0.44
31:29:3:VAL:HA	31:29:35:ARG:O	2.17	0.44
32:2a:427:U:H1'	32:2a:541:G:OP1	2.17	0.44
32:2a:577:G:C8	32:2a:816:A:C6	3.06	0.44
32:2a:806:C:H2'	32:2a:807:A:C8	2.52	0.44
32:2a:1129:C:H4'	32:2a:1146:A:N1	2.33	0.44
32:2a:1133:G:H2'	32:2a:1134:G:C8	2.52	0.44
32:2a:1230:C:H5'	55:2x:30:G:H5''	2.00	0.44
32:2a:1429:C:H2'	32:2a:1430:C:C6	2.53	0.44
32:2a:1468:A:H2'	32:2a:1469:G:O4'	2.17	0.44
33:2b:31:TYR:CD2	33:2b:202:PRO:HB3	2.52	0.44
34:2c:71:ALA:HA	34:2c:106:VAL:HB	2.00	0.44
38:2g:62:PHE:O	38:2g:64:GLN:N	2.47	0.44
38:2g:148:ASN:HB3	38:2g:151:TYR:CD2	2.52	0.44
41:2j:44:VAL:HG13	41:2j:66:ARG:HB3	1.99	0.44
44:2m:49:THR:OG1	44:2m:52:GLU:HG3	2.17	0.44
45:2n:29:ARG:NH1	45:2n:42:ILE:HD11	2.32	0.44
48:2q:56:VAL:O	48:2q:77:VAL:HG23	2.17	0.44
52:2u:2:GLY:O	52:2u:4:GLY:N	2.51	0.44
1:1A:1447:G:O6	62:1A:4286:HOH:O	2.19	0.44
1:1A:1773:A:H2'	1:1A:1774:C:O4'	2.17	0.44
1:1A:1936:A:OP1	1:1A:1937:A:H5'	2.18	0.44
1:1A:2577:A:OP2	27:15:3:LYS:NZ	2.46	0.44
1:1A:2591:C:H2'	1:1A:2592:G:C8	2.52	0.44
1:1A:2626:C:H2'	1:1A:2627:G:O4'	2.18	0.44
2:1B:75:G:H22	21:1Z:73:GLN:HE21	1.65	0.44
3:1D:8:PRO:HB3	3:1D:14:ARG:HG2	1.99	0.44
7:1H:3:ARG:HG2	7:1H:6:ARG:HB2	1.99	0.44
32:1a:998:G:H1	32:1a:1043:C:H42	1.64	0.44
32:1a:1124:G:H1	32:1a:1149:C:H42	1.65	0.44
32:1a:1192:C:H2'	32:1a:1193:G:O4'	2.17	0.44
33:1b:137:ARG:CZ	33:1b:137:ARG:HB2	2.48	0.44
37:1f:12:PRO:HB3	37:1f:58:GLY:HA2	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:1k:51:LYS:HA	42:1k:51:LYS:HD3	1.48	0.44
1:2A:69:C:O2	1:2A:73:A:O2'	2.34	0.44
1:2A:1152:C:H2'	1:2A:1153:C:C6	2.51	0.44
1:2A:2442:C:H2'	1:2A:2443:C:C6	2.52	0.44
1:2A:2574:G:H2'	1:2A:2575:C:H6	1.81	0.44
18:2W:10:VAL:O	18:2W:12:ILE:N	2.46	0.44
20:2Y:74:PRO:O	20:2Y:82:PRO:HA	2.18	0.44
20:2Y:79:CYS:SG	20:2Y:81:LYS:HB2	2.57	0.44
26:24:50:VAL:HG13	44:2m:65:LYS:HB3	2.00	0.44
32:2a:391:G:OP1	47:2p:28:ARG:NH2	2.50	0.44
32:2a:404:U:P	35:2d:118:ARG:HH21	2.41	0.44
32:2a:908:A:H2'	32:2a:909:A:C8	2.53	0.44
32:2a:1055:A:H62	32:2a:1200:C:N4	2.14	0.44
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.52	0.44
32:2a:1168:A:H5''	32:2a:1169:A:OP2	2.17	0.44
32:2a:1306:A:H2'	32:2a:1307:U:O4'	2.18	0.44
32:2a:1310:G:H2'	32:2a:1311:G:O4'	2.17	0.44
32:2a:1348:U:H2'	32:2a:1349:A:H8	1.82	0.44
33:2b:48:MET:HG3	33:2b:49:GLU:N	2.32	0.44
34:2c:101:LEU:HD13	34:2c:102:ASN:N	2.33	0.44
38:2g:27:ILE:HA	38:2g:30:ILE:HD12	1.99	0.44
38:2g:50:ILE:HD12	38:2g:61:VAL:HB	2.00	0.44
38:2g:70:LYS:O	38:2g:138:LYS:HD2	2.17	0.44
41:2j:70:ARG:HD3	41:2j:70:ARG:HA	1.81	0.44
41:2j:74:ILE:HD12	41:2j:74:ILE:HA	1.78	0.44
45:2n:33:VAL:HA	45:2n:40:CYS:HA	1.98	0.44
56:2y:9:A:HO2'	56:2y:11:C:H41	1.55	0.44
1:1A:466:A:N3	1:1A:683:C:H1'	2.32	0.44
1:1A:993:G:C6	1:1A:994:C:N4	2.85	0.44
1:1A:1007:C:O2'	62:1A:4303:HOH:O	2.21	0.44
1:1A:1615:C:C5	1:1A:1617:C:C4	3.06	0.44
1:1A:2275:C:O2	12:1Q:85:LYS:HE3	2.18	0.44
1:1A:2580:U:P	1:1A:2581:G:H22	2.41	0.44
11:1P:95:VAL:CG2	11:1P:125:VAL:HG12	2.47	0.44
18:1W:23:LEU:HD21	27:15:25:LEU:HB2	1.98	0.44
18:1W:29:LEU:O	18:1W:33:ARG:HG3	2.17	0.44
30:18:26:LYS:HG2	30:18:46:ARG:O	2.17	0.44
32:1a:57:G:C5	32:1a:58:C:C4	3.04	0.44
32:1a:408:A:H2'	32:1a:409:G:O4'	2.18	0.44
32:1a:673:G:H5''	37:1f:87:ARG:NH1	2.33	0.44
32:1a:958:A:N6	32:1a:1221:G:O2'	2.46	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:116:GLU:HA	33:1b:119:GLU:HB2	1.99	0.44
48:1q:60:ILE:HG22	48:1q:74:LEU:HB2	1.99	0.44
56:1y:1:G:H2'	56:1y:2:C:C6	2.51	0.44
1:2A:142:A:N1	1:2A:1595:G:O2'	2.41	0.44
1:2A:224:G:C2	1:2A:225:A:C4	3.06	0.44
1:2A:574:C:N3	4:2E:145:LYS:NZ	2.57	0.44
1:2A:594:U:H2'	1:2A:595:C:H6	1.81	0.44
1:2A:649:G:H2'	1:2A:650:C:C6	2.53	0.44
1:2A:1560:G:C4	1:2A:1561:G:C8	3.06	0.44
1:2A:2364:C:H2'	1:2A:2365:G:O4'	2.17	0.44
7:2H:124:GLU:O	7:2H:126:PRO:HD3	2.17	0.44
11:2P:63:PRO:HG2	30:28:25:MET:HB2	1.98	0.44
31:29:22:ARG:CD	31:29:35:ARG:HD2	2.47	0.44
32:2a:972:C:O2'	41:2j:55:LYS:O	2.35	0.44
32:2a:1051:C:C4	32:2a:1052:U:C4	3.05	0.44
35:2d:120:LEU:O	35:2d:125:HIS:HB2	2.18	0.44
46:2o:10:LYS:O	46:2o:13:GLN:HB2	2.18	0.44
1:1A:608:A:H2'	1:1A:609:A:O4'	2.18	0.44
1:1A:699:A:H2'	1:1A:700:G:O4'	2.17	0.44
1:1A:1085:A:H3'	1:1A:1086:A:C2	2.52	0.44
1:1A:2291:U:H2'	1:1A:2292:C:C6	2.52	0.44
1:1A:2627:G:O2'	1:1A:2781:A:N1	2.45	0.44
7:1H:124:GLU:O	7:1H:126:PRO:HD3	2.18	0.44
8:1I:109:ILE:HG13	8:1I:130:TYR:CZ	2.52	0.44
8:1I:130:TYR:N	8:1I:138:ILE:O	2.45	0.44
11:1P:27:HIS:HB2	62:1P:313:HOH:O	2.18	0.44
11:1P:100:LEU:O	11:1P:103:ALA:HB3	2.18	0.44
20:1Y:7:VAL:HG21	20:1Y:72:VAL:CG1	2.47	0.44
21:1Z:155:LEU:HD12	21:1Z:156:LYS:H	1.82	0.44
21:1Z:166:SER:C	21:1Z:168:GLU:N	2.76	0.44
29:17:33:ARG:HH11	29:17:33:ARG:HD2	1.60	0.44
30:18:62:LEU:HB3	30:18:65:GLU:CG	2.48	0.44
32:1a:17:U:H2'	32:1a:18:C:C6	2.52	0.44
32:1a:461:A:O2'	32:1a:470:C:H5'	2.18	0.44
32:1a:522:C:H41	43:1l:53:ARG:NH1	2.15	0.44
32:1a:629:G:H2'	32:1a:630:G:O4'	2.17	0.44
32:1a:1228:C:P	44:1m:108:ARG:HH22	2.39	0.44
32:1a:1401:G:C2	32:1a:1402:4OC:H1'	2.53	0.44
42:1k:17:GLY:O	42:1k:80:VAL:HA	2.17	0.44
51:1t:100:ILE:H	51:1t:100:ILE:HG12	1.62	0.44
1:2A:619:G:N7	5:2F:103:LYS:NZ	2.64	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1586:A:H2'	1:2A:1587:A:O4'	2.17	0.44
1:2A:1847:A:H3'	1:2A:1848:A:H5'	2.00	0.44
1:2A:1848:A:C4	1:2A:1849:G:C8	3.06	0.44
1:2A:2464:C:H2'	1:2A:2465:C:O4'	2.17	0.44
2:2B:7:G:H5'	14:2S:29:PHE:CZ	2.53	0.44
3:2D:38:LYS:HA	3:2D:38:LYS:HD2	1.81	0.44
4:2E:18:ASP:OD2	15:2T:82:LEU:HG	2.18	0.44
6:2G:114:ILE:HD12	6:2G:117:PHE:CD1	2.52	0.44
12:2Q:33:GLY:HA2	12:2Q:105:GLU:HA	1.98	0.44
14:2S:79:ALA:C	14:2S:81:GLY:H	2.26	0.44
18:2W:70:TYR:O	18:2W:107:LEU:HA	2.17	0.44
32:2a:757:U:H2'	32:2a:758:G:O4'	2.17	0.44
32:2a:859:A:H2'	32:2a:860:A:O4'	2.17	0.44
32:2a:921:U:H2'	32:2a:922:G:O4'	2.18	0.44
32:2a:1126:U:H3	41:2j:40:LEU:HD11	1.82	0.44
32:2a:1309:G:C6	32:2a:1329:A:C6	3.06	0.44
33:2b:178:ARG:HH22	39:2h:68:ARG:HH12	1.66	0.44
34:2c:12:LEU:HD13	34:2c:18:TRP:CZ2	2.52	0.44
34:2c:190:ARG:O	34:2c:190:ARG:NE	2.45	0.44
35:2d:21:LEU:C	35:2d:22:LYS:HG2	2.43	0.44
39:2h:17:THR:HB	39:2h:78:GLN:OE1	2.17	0.44
40:2i:64:THR:HG21	40:2i:66:ARG:HH11	1.82	0.44
46:2o:33:THR:HG23	46:2o:63:ARG:NH1	2.33	0.44
47:2p:43:LYS:HE2	47:2p:43:LYS:HB2	1.77	0.44
1:1A:1005:C:O2	1:1A:1143:A:C6	2.71	0.44
1:1A:1496:A:N7	62:1A:4422:HOH:O	2.36	0.44
1:1A:1827:C:C2'	1:1A:1828:G:H5'	2.47	0.44
1:1A:2557:G:H2'	1:1A:2558:C:C6	2.52	0.44
2:1B:103:G:H21	21:1Z:73:GLN:NE2	2.03	0.44
3:1D:76:PRO:O	3:1D:98:VAL:HG22	2.18	0.44
6:1G:72:ARG:NH1	6:1G:85:GLY:O	2.51	0.44
12:1Q:6:ARG:C	12:1Q:7:MET:HG2	2.43	0.44
19:1X:35:THR:O	19:1X:39:ILE:HD12	2.18	0.44
24:12:53:LEU:HD23	24:12:53:LEU:HA	1.83	0.44
32:1a:371:G:H1	32:1a:390:C:N4	2.16	0.44
32:1a:555:C:H2'	32:1a:556:C:C6	2.52	0.44
32:1a:674:G:H2'	32:1a:675:A:C8	2.53	0.44
32:1a:678:U:H2'	32:1a:679:C:C6	2.53	0.44
33:1b:140:HIS:O	33:1b:144:ARG:HG3	2.17	0.44
1:2A:360:G:H2'	1:2A:361:G:O4'	2.17	0.44
1:2A:643:A:C8	28:26:44:ARG:NH1	2.85	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1317:A:H61	1:2A:1335:U:H3	1.64	0.44
1:2A:1992:G:H4'	1:2A:1993:U:C5	2.53	0.44
3:2D:84:TYR:HE2	3:2D:86:PRO:HB3	1.83	0.44
5:2F:11:VAL:HG13	5:2F:125:LEU:HB2	2.00	0.44
6:2G:7:LEU:HD13	6:2G:104:GLU:HA	1.99	0.44
6:2G:30:GLU:O	6:2G:30:GLU:HG2	2.18	0.44
11:2P:90:ARG:HG3	11:2P:91:PHE:CD2	2.52	0.44
12:2Q:57:HIS:O	12:2Q:59:ARG:N	2.51	0.44
21:2Z:3:TYR:HB2	21:2Z:56:VAL:O	2.18	0.44
25:23:16:PRO:HB2	25:23:18:ASP:OD1	2.17	0.44
32:2a:651:C:N4	32:2a:753:A:OP2	2.50	0.44
32:2a:736:C:H5''	49:2r:72:ARG:NH2	2.31	0.44
32:2a:753:A:H4'	32:2a:754:C:O5'	2.17	0.44
32:2a:790:A:C6	32:2a:791:G:C6	3.05	0.44
32:2a:936:C:H2'	32:2a:937:A:O4'	2.18	0.44
32:2a:949:A:H1'	32:2a:1364:U:O2	2.18	0.44
32:2a:1067:A:H2'	32:2a:1093:A:H4'	2.00	0.44
32:2a:1290:G:C4	32:2a:1291:G:C8	3.06	0.44
41:2j:65:LEU:HD12	45:2n:55:GLY:O	2.17	0.44
44:2m:67:GLU:HB3	44:2m:68:GLY:H	1.51	0.44
49:2r:47:THR:OG1	49:2r:49:LYS:HG3	2.18	0.44
56:2y:63:G:H2'	56:2y:64:A:C8	2.53	0.44
1:1A:53:A:H2'	1:1A:54:G:O4'	2.17	0.44
1:1A:271(E):U:H2'	1:1A:271(F):C:C6	2.53	0.44
1:1A:975(A):G:C5	1:1A:976:C:C5	3.06	0.44
1:1A:2114:A:H2'	1:1A:2115:G:O4'	2.18	0.44
9:1N:133:GLN:OE1	9:1N:133:GLN:N	2.51	0.44
10:1O:16:ALA:HB2	10:1O:52:VAL:HG21	1.99	0.44
11:1P:6:LEU:HA	11:1P:6:LEU:HD23	1.67	0.44
11:1P:50:ARG:HG3	30:18:61:LEU:HD21	2.00	0.44
16:1U:27:LEU:HB3	16:1U:31:SER:HB3	2.00	0.44
19:1X:94:GLY:H	19:1X:95:LEU:C	2.25	0.44
20:1Y:30:VAL:O	20:1Y:32:PRO:HD3	2.18	0.44
21:1Z:48:PHE:CE1	21:1Z:52:SER:HA	2.53	0.44
21:1Z:155:LEU:HB3	21:1Z:157:LEU:HG	1.99	0.44
22:10:72:ARG:HE	22:10:72:ARG:HB3	1.69	0.44
23:11:52:ARG:HE	23:11:52:ARG:HB2	1.35	0.44
32:1a:273:A:H1'	48:1q:16:GLN:HE21	1.83	0.44
32:1a:1026:G:OP2	32:1a:1027:C:N4	2.50	0.44
32:1a:1133:G:N2	32:1a:1141:C:N3	2.60	0.44
35:1d:63:LYS:HB2	35:1d:63:LYS:HE3	1.84	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:72:GLU:OE2	35:1d:207:TYR:OH	2.32	0.44
36:1e:27:ARG:HH11	36:1e:27:ARG:HB2	1.83	0.44
43:1l:11:VAL:HG13	48:1q:29:HIS:HD2	1.82	0.44
49:1r:74:ARG:HB3	49:1r:81:PHE:CZ	2.53	0.44
54:1w:5:G:H1	54:1w:68:C:H42	1.66	0.44
56:1y:19:G:C2	56:1y:56:C:N3	2.84	0.44
1:2A:995:C:N4	9:2N:2:LYS:HD2	2.33	0.44
1:2A:1164:G:H1	1:2A:1185:C:H42	1.65	0.44
1:2A:1788:C:H2'	1:2A:1789:A:H8	1.82	0.44
1:2A:2287:A:N7	1:2A:2289:G:C8	2.86	0.44
1:2A:2315:G:H2'	1:2A:2316:C:C6	2.52	0.44
1:2A:2467:C:H5'	12:2Q:123:HIS:CE1	2.53	0.44
1:2A:2529:G:H5''	1:2A:2530:A:H5''	2.00	0.44
1:2A:2807:G:C2	1:2A:2893:G:O6	2.71	0.44
4:2E:97:LYS:O	4:2E:100:GLU:HG3	2.18	0.44
8:2I:14:ASP:OD1	8:2I:15:VAL:N	2.50	0.44
8:2I:14:ASP:OD1	8:2I:15:VAL:HG12	2.18	0.44
9:2N:72:TYR:OH	9:2N:98:VAL:HG13	2.18	0.44
16:2U:58:ARG:HA	16:2U:61:TRP:CE3	2.53	0.44
28:26:21:TYR:CE2	28:26:38:LYS:HE3	2.52	0.44
32:2a:520:A:N1	32:2a:536:C:H1'	2.33	0.44
32:2a:620:C:C2	35:2d:135:LEU:HG	2.53	0.44
32:2a:620:C:H2'	32:2a:621:A:O4'	2.17	0.44
32:2a:690:G:C6	32:2a:691:G:C6	3.05	0.44
32:2a:1239:A:H4'	32:2a:1240:U:H5''	1.99	0.44
32:2a:1278:U:H4'	32:2a:1279:A:O5'	2.17	0.44
33:2b:28:PHE:CD1	33:2b:194:PRO:HG3	2.51	0.44
33:2b:189:ASP:HB2	33:2b:190:THR:H	1.57	0.44
33:2b:236:TYR:CD1	33:2b:237:ALA:N	2.86	0.44
41:2j:61:GLU:OE1	45:2n:45:ARG:NE	2.50	0.44
56:2y:8:4SU:H6	56:2y:8:4SU:O5'	2.18	0.44
1:1A:239:U:H2'	1:1A:240:G:C8	2.53	0.44
1:1A:686:G:O5'	29:17:11:LYS:NZ	2.50	0.44
1:1A:1315:C:C2	1:1A:1338:G:N2	2.86	0.44
1:1A:1429:G:H2'	1:1A:1430:C:H6	1.82	0.44
1:1A:2031:A:C6	1:1A:2498:C:H1'	2.52	0.44
1:1A:2563:U:H4'	10:1O:28:SER:HA	2.00	0.44
1:1A:2703:C:C2	1:1A:2704:C:C5	3.06	0.44
2:1B:66:A:N6	2:1B:108:U:H2'	2.32	0.44
3:1D:5:LYS:HG2	3:1D:17:THR:HG22	2.00	0.44
8:1I:35:LEU:HD23	8:1I:35:LEU:HA	1.73	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:1R:2:ARG:HA	13:1R:5:LYS:HE3	2.00	0.44
32:1a:104:G:C2	32:1a:105:G:C8	3.06	0.44
33:1b:138:LEU:H	33:1b:138:LEU:HG	1.53	0.44
34:1c:55:VAL:HG22	34:1c:68:VAL:HG22	1.99	0.44
34:1c:67:THR:HG23	34:1c:102:ASN:HB2	2.00	0.44
35:1d:172:PRO:C	35:1d:174:LEU:H	2.26	0.44
37:1f:33:TYR:OH	37:1f:78:GLU:HG3	2.18	0.44
42:1k:22:HIS:CD2	42:1k:29:ILE:HD12	2.53	0.44
45:1n:21:TYR:HE1	45:1n:23:ARG:HE	1.65	0.44
48:1q:66:SER:O	48:1q:70:ARG:NH1	2.51	0.44
55:1x:67:C:O2'	55:1x:68:C:H5'	2.18	0.44
1:2A:65:C:O2'	1:2A:456:C:N3	2.51	0.44
1:2A:584:C:H2'	1:2A:585:G:O4'	2.17	0.44
1:2A:631:A:H2'	1:2A:632:A:O4'	2.18	0.44
1:2A:1581:G:H2'	1:2A:1582:C:O4'	2.18	0.44
1:2A:1587:A:C6	1:2A:1588:C:C4	3.06	0.44
1:2A:1710:C:H2'	1:2A:1711:C:C6	2.53	0.44
1:2A:2457:U:C4	1:2A:2458:G:C6	3.05	0.44
1:2A:2630:G:H2'	1:2A:2631:G:C8	2.53	0.44
1:2A:2788:C:P	4:2E:61:ARG:HH21	2.41	0.44
1:2A:2813:A:C6	1:2A:2814:C:C4	3.05	0.44
2:2B:73:A:H3'	2:2B:74:U:H6	1.83	0.44
2:2B:87:G:N2	2:2B:90:A:OP2	2.47	0.44
3:2D:133:LEU:HA	3:2D:136:ILE:HD12	2.00	0.44
5:2F:37:VAL:O	5:2F:41:LEU:HG	2.18	0.44
15:2T:53:ARG:HG3	15:2T:53:ARG:O	2.18	0.44
21:2Z:22:GLY:O	21:2Z:41:LEU:HB2	2.17	0.44
25:23:5:LYS:HD2	25:23:34:GLU:HG2	1.99	0.44
32:2a:72:C:H2'	32:2a:73:G:O4'	2.18	0.44
32:2a:195:A:C6	32:2a:196:A:N1	2.86	0.44
32:2a:570:G:C4	32:2a:571:U:C5	3.06	0.44
32:2a:1058:G:H2'	32:2a:1059:C:C6	2.53	0.44
32:2a:1508:G:H2'	32:2a:1509:C:O4'	2.18	0.44
33:2b:95:GLN:HB3	33:2b:96:ARG:H	1.67	0.44
56:2y:66:U:H2'	56:2y:67:C:O4'	2.17	0.44
1:1A:910:A:N1	1:1A:2277:G:H1'	2.33	0.43
1:1A:1177:A:H2'	1:1A:1177:A:OP1	2.17	0.43
1:1A:1485:G:C4	1:1A:1486:A:C8	3.05	0.43
1:1A:2165:G:H2'	1:1A:2166:G:C4	2.52	0.43
1:1A:2472:G:C5	1:1A:2475:C:C4	3.06	0.43
1:1A:2791:C:C5	1:1A:2893:G:C4	3.06	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:1D:97:TYR:O	3:1D:100:GLY:N	2.51	0.43
4:1E:56:PRO:C	4:1E:58:ARG:N	2.76	0.43
5:1F:195:ASP:HB3	5:1F:198:ALA:H	1.83	0.43
6:1G:117:PHE:HZ	6:1G:179:PRO:HG2	1.83	0.43
9:1N:19:GLU:O	9:1N:21:LYS:N	2.51	0.43
10:1O:41:ALA:O	10:1O:57:VAL:HA	2.18	0.43
15:1T:19:LEU:HD23	15:1T:19:LEU:HA	1.69	0.43
32:1a:189(A):C:H2'	32:1a:189(B):C:C6	2.53	0.43
32:1a:342:C:H2'	32:1a:343:U:O4'	2.17	0.43
32:1a:987:G:N2	32:1a:1219:U:O2	2.50	0.43
32:1a:1371:G:O3'	40:1i:69:GLY:HA3	2.18	0.43
32:1a:1388:C:H2'	32:1a:1389:C:C6	2.53	0.43
33:1b:119:GLU:HG3	33:1b:153:ARG:HH12	1.83	0.43
35:1d:13:ARG:NH2	35:1d:40:PRO:HA	2.33	0.43
43:1l:70:ILE:HD13	43:1l:77:LEU:HD12	1.99	0.43
56:1y:6:G:C6	56:1y:7:A:C6	3.06	0.43
1:2A:751:A:OP1	62:2A:3999:HOH:O	2.21	0.43
1:2A:936:C:H2'	1:2A:937:U:C6	2.52	0.43
1:2A:1227:G:C2	1:2A:1228:G:C4	3.05	0.43
1:2A:1389:G:N2	1:2A:1399:C:C2	2.86	0.43
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.32	0.43
1:2A:2305:A:H8	6:2G:156:ASP:OD1	2.01	0.43
1:2A:2406:U:C2	11:2P:75:ILE:HG12	2.53	0.43
1:2A:2647:U:H2'	1:2A:2648:C:C6	2.52	0.43
1:2A:2733:A:N1	4:2E:203:LYS:HA	2.32	0.43
8:2I:1:MET:HE3	8:2I:1:MET:HB2	1.88	0.43
13:2R:38:VAL:HB	13:2R:39:PRO:HD3	2.00	0.43
20:2Y:90:LEU:HD12	20:2Y:94:LYS:O	2.18	0.43
21:2Z:29:TYR:HA	21:2Z:33:LEU:O	2.18	0.43
27:25:56:LYS:HD2	27:25:58:LEU:O	2.18	0.43
32:2a:532:A:N1	32:2a:1055:A:H1'	2.33	0.43
32:2a:854:G:C6	32:2a:855:G:N7	2.86	0.43
32:2a:951:G:N7	44:2m:102:ARG:NH2	2.66	0.43
32:2a:1144:G:O2'	32:2a:1145:C:H5'	2.17	0.43
32:2a:1235:U:H2'	32:2a:1236:A:O4'	2.18	0.43
34:2c:39:ILE:HG22	34:2c:43:LEU:HD21	1.99	0.43
35:2d:162:LEU:CD1	35:2d:181:MET:HB3	2.48	0.43
38:2g:13:GLN:NE2	38:2g:14:PRO:HD2	2.33	0.43
42:2k:48:ILE:HG21	42:2k:63:LEU:HB3	2.00	0.43
48:2q:88:TYR:CD2	48:2q:89:LEU:HD23	2.52	0.43
49:2r:56:THR:HG21	49:2r:63:GLN:HE22	1.83	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:10:LEU:HD12	51:2t:11:SER:H	1.83	0.43
1:1A:705:A:C2	1:1A:706:A:C4	3.06	0.43
1:1A:1364:G:OP1	23:11:2:SER:HA	2.19	0.43
1:1A:1434:A:H2'	1:1A:1435:G:H8	1.80	0.43
1:1A:2065:C:H4'	1:1A:2251:OMG:HM22	2.00	0.43
1:1A:2467:C:O2	12:1Q:124:LYS:NZ	2.50	0.43
1:1A:2489:G:C6	1:1A:2490:G:N1	2.86	0.43
1:1A:2583:G:N2	1:1A:2584:U:H1'	2.32	0.43
11:1P:96:THR:OG1	11:1P:98:GLU:HG3	2.18	0.43
12:1Q:136:ALA:HB1	21:1Z:52:SER:HB3	2.01	0.43
13:1R:94:TYR:C	13:1R:117:VAL:HG23	2.43	0.43
14:1S:76:LYS:O	14:1S:79:ALA:HB3	2.18	0.43
32:1a:168:G:O2'	32:1a:169:C:H5'	2.18	0.43
32:1a:189(I):G:H2'	32:1a:189(J):G:O4'	2.17	0.43
32:1a:200:G:H1	32:1a:217:C:N4	2.10	0.43
32:1a:910:C:O5'	32:1a:910:C:H6	2.01	0.43
32:1a:1106:G:O2'	32:1a:1107:C:H5'	2.18	0.43
33:1b:154:LEU:O	33:1b:156:LYS:N	2.51	0.43
36:1e:127:ASN:OD1	36:1e:128:PRO:HD2	2.18	0.43
37:1f:36:ARG:O	37:1f:66:GLU:N	2.51	0.43
40:1i:111:ARG:HE	40:1i:111:ARG:HB2	1.65	0.43
49:1r:60:ALA:O	49:1r:64:ARG:HG3	2.18	0.43
1:2A:140:G:N2	1:2A:1596:A:H4'	2.33	0.43
1:2A:282:A:C5	1:2A:359:A:C2	3.06	0.43
1:2A:484:C:H2'	1:2A:485:C:C6	2.53	0.43
1:2A:851:U:O2	1:2A:927:G:C2	2.71	0.43
1:2A:947:G:H2'	1:2A:948:G:C8	2.53	0.43
1:2A:1022:G:C5	1:2A:1140:C:C4	3.06	0.43
1:2A:1164:G:H2'	1:2A:1165:U:C6	2.53	0.43
1:2A:1860:G:H8	1:2A:1860:G:OP2	2.00	0.43
1:2A:1999:C:H5''	1:2A:2723:C:O2'	2.18	0.43
1:2A:2136:C:N4	1:2A:2155:G:N1	2.60	0.43
1:2A:2387:U:H4'	22:20:41:ARG:NH2	2.33	0.43
1:2A:2579:C:O5'	1:2A:2579:C:H6	2.01	0.43
1:2A:2602:A:N6	55:2x:76:31H:H2'	2.32	0.43
4:2E:29:GLY:H	4:2E:180:ASN:HB3	1.83	0.43
5:2F:6:VAL:C	5:2F:7:TYR:HD2	2.26	0.43
6:2G:77:ILE:HG22	6:2G:80:PHE:H	1.83	0.43
17:2V:24:LYS:HB3	17:2V:24:LYS:HE2	1.57	0.43
21:2Z:138:GLU:HB2	21:2Z:156:LYS:HD3	2.01	0.43
23:21:94:LEU:O	23:21:97:LEU:HB2	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:22:66:GLU:HG2	24:22:69:ARG:HH22	1.83	0.43
26:24:50:VAL:HG21	44:2m:64:TRP:C	2.43	0.43
32:2a:396:G:C2	32:2a:398:C:C4	3.06	0.43
32:2a:981:U:H2'	32:2a:982:U:C5	2.53	0.43
32:2a:1221:G:C6	32:2a:1222:G:C5	3.06	0.43
32:2a:1237:C:H2'	32:2a:1336:C:C5	2.53	0.43
32:2a:1266:G:H8	32:2a:1266:G:O5'	2.00	0.43
32:2a:1316:G:N2	32:2a:1318:A:H3'	2.32	0.43
32:2a:1339:A:C5	32:2a:1340:A:H1'	2.53	0.43
32:2a:1529:G:H4'	32:2a:1530:G:OP2	2.18	0.43
33:2b:223:ILE:HA	33:2b:226:ARG:HD3	1.99	0.43
35:2d:175:SER:HB3	35:2d:184:LYS:CB	2.49	0.43
40:2i:32:ASP:OD1	40:2i:33:PHE:N	2.50	0.43
40:2i:40:LEU:O	40:2i:42:ARG:N	2.51	0.43
41:2j:28:ARG:O	41:2j:32:ALA:HB2	2.17	0.43
41:2j:38:ILE:HG12	41:2j:71:LEU:HB3	2.00	0.43
50:2s:20:LEU:HA	50:2s:23:ASN:ND2	2.33	0.43
1:1A:280:C:O5'	1:1A:280:C:H6	2.01	0.43
1:1A:580:C:O2'	1:1A:581:C:H5'	2.18	0.43
1:1A:729:G:OP1	3:1D:12:SER:HB2	2.19	0.43
1:1A:2243:U:OP1	62:1A:4308:HOH:O	2.21	0.43
1:1A:2377:A:H2'	1:1A:2378:A:C8	2.52	0.43
1:1A:2721:A:N3	62:1A:4419:HOH:O	2.36	0.43
2:1B:66:A:H61	2:1B:109:C:H5''	1.84	0.43
5:1F:161:GLU:O	5:1F:165:ARG:N	2.42	0.43
6:1G:55:LYS:O	6:1G:59:GLU:HG2	2.18	0.43
6:1G:117:PHE:CZ	6:1G:179:PRO:HG2	2.53	0.43
13:1R:36:THR:HG22	13:1R:37:THR:N	2.31	0.43
32:1a:946:A:O2'	32:1a:1333:A:N3	2.33	0.43
32:1a:1227:A:OP2	44:1m:96:LEU:HD21	2.18	0.43
32:1a:1503:A:H2	53:1v:13:A:N7	2.16	0.43
32:1a:1518:MA6:H93	32:1a:1519:MA6:C9	2.49	0.43
33:1b:96:ARG:HG2	33:1b:98:LEU:HD23	2.01	0.43
35:1d:61:LYS:HD2	35:1d:207:TYR:OH	2.18	0.43
37:1f:44:GLY:HA2	37:1f:59:TYR:CE2	2.54	0.43
50:1s:27:GLU:HB2	50:1s:28:LYS:CA	2.48	0.43
1:2A:250:G:H2'	1:2A:251:A:C8	2.53	0.43
1:2A:873:G:N2	1:2A:905:U:C2	2.87	0.43
1:2A:1139:G:H5'	9:2N:102:ALA:CB	2.45	0.43
1:2A:1582:C:H2'	1:2A:1583:A:H8	1.83	0.43
1:2A:2116:G:N1	1:2A:2162:G:OP1	2.51	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2218:U:H1'	23:21:52:ARG:NH1	2.29	0.43
1:2A:2807:G:C2	1:2A:2808:U:H1'	2.54	0.43
2:2B:61:G:H2'	2:2B:62:C:C6	2.53	0.43
20:2Y:38:ILE:HG21	20:2Y:64:GLU:HB3	1.99	0.43
21:2Z:9:TYR:OH	21:2Z:63:ASP:OD2	2.36	0.43
21:2Z:145:GLU:N	21:2Z:148:ASP:HB2	2.33	0.43
22:20:51:VAL:HG21	22:20:80:HIS:HA	2.00	0.43
32:2a:101:A:C2'	32:2a:102:G:H5'	2.47	0.43
32:2a:631:G:H2'	32:2a:632:A:C8	2.52	0.43
32:2a:935:A:H61	38:2g:3:ARG:HG3	1.83	0.43
32:2a:973:G:OP1	41:2j:57:LYS:NZ	2.50	0.43
32:2a:1118:C:H1'	32:2a:1179:A:C4	2.53	0.43
32:2a:1259:C:C4	32:2a:1260:C:H1'	2.53	0.43
32:2a:1329:A:P	44:2m:28:ALA:HB3	2.58	0.43
34:2c:38:ARG:HE	34:2c:38:ARG:HB2	1.50	0.43
50:2s:15:LEU:HD12	50:2s:15:LEU:HA	1.84	0.43
54:2w:56:C:H2'	54:2w:57:G:O4'	2.17	0.43
1:1A:681:G:H2'	1:1A:682:G:O4'	2.19	0.43
1:1A:763:G:OP1	62:1A:4307:HOH:O	2.21	0.43
1:1A:813:U:H2'	1:1A:814:C:C6	2.53	0.43
1:1A:871:U:OP1	12:1Q:5:ARG:HG3	2.18	0.43
1:1A:1062:G:H8	1:1A:1070:A:H4'	1.83	0.43
1:1A:1359:A:C2	1:1A:1372:U:O4	2.70	0.43
1:1A:1416:G:O2'	1:1A:1417:C:OP2	2.33	0.43
1:1A:2051:A:H5'	1:1A:2578:G:O4'	2.18	0.43
1:1A:2110:G:C2	1:1A:2120:G:H1'	2.53	0.43
1:1A:2188:C:H2'	1:1A:2189:U:O4'	2.18	0.43
8:1I:10:GLU:H	8:1I:10:GLU:HG3	1.42	0.43
10:1O:97:ARG:HD3	32:1a:339:C:OP2	2.18	0.43
11:1P:94:GLU:HA	11:1P:124:LYS:O	2.19	0.43
15:1T:111:ARG:HH21	32:1a:1463:C:P	2.41	0.43
17:1V:65:GLY:HA3	17:1V:91:TYR:CZ	2.53	0.43
28:16:44:ARG:HG2	28:16:44:ARG:NH1	2.29	0.43
32:1a:839:U:OP2	32:1a:840:C:N4	2.33	0.43
33:1b:207:ALA:O	33:1b:211:ILE:HD12	2.18	0.43
36:1e:12:LEU:HD12	36:1e:128:PRO:HB2	2.01	0.43
37:1f:74:ASP:O	37:1f:78:GLU:HB2	2.18	0.43
43:1l:53:ARG:HD2	43:1l:93:LEU:HD11	2.00	0.43
44:1m:20:THR:C	44:1m:22:ILE:H	2.26	0.43
48:1q:13:ASP:HA	48:1q:19:VAL:HG12	2.00	0.43
1:2A:322:A:OP1	5:2F:168:ARG:HD2	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:666:G:H2'	1:2A:667:U:C6	2.53	0.43
1:2A:1316:U:H2'	1:2A:1317:A:H8	1.83	0.43
1:2A:2022:U:O2'	1:2A:2617:C:H5'	2.19	0.43
2:2B:66:A:N6	2:2B:109:C:O5'	2.52	0.43
5:2F:150:GLY:HA2	5:2F:172:TRP:CD2	2.53	0.43
7:2H:122:THR:HB	7:2H:134:SER:HB2	1.99	0.43
9:2N:48:MET:H	9:2N:48:MET:HG3	1.74	0.43
16:2U:113:ALA:O	16:2U:117:GLN:HG2	2.18	0.43
20:2Y:73:ARG:HE	20:2Y:73:ARG:HB3	1.61	0.43
21:2Z:30:ASN:OD1	21:2Z:33:LEU:HG	2.19	0.43
30:28:6:THR:CG2	30:28:63:PRO:HD2	2.49	0.43
32:2a:45:U:O2'	32:2a:46:G:H5'	2.18	0.43
32:2a:66:G:C6	32:2a:67:C:C5	3.07	0.43
32:2a:721:G:H8	32:2a:721:G:OP1	2.01	0.43
32:2a:971:G:OP1	32:2a:971:G:H3'	2.17	0.43
32:2a:1063:C:N4	32:2a:1064:G:C2	2.87	0.43
32:2a:1414:U:H2'	32:2a:1415:G:H8	1.83	0.43
46:2o:64:ARG:HD3	46:2o:68:ARG:HH21	1.82	0.43
1:1A:36:G:N3	1:1A:450:G:O2'	2.51	0.43
1:1A:249:C:HO2'	11:1P:64:LYS:HZ3	1.54	0.43
1:1A:566:U:H5''	11:1P:29:LYS:HE3	1.99	0.43
1:1A:722:A:H2'	1:1A:723:G:O4'	2.18	0.43
1:1A:747:U:O2	1:1A:2014:A:H1'	2.19	0.43
1:1A:1528(A):A:H8	1:1A:1528(A):A:O5'	2.02	0.43
1:1A:2732:G:H3'	1:1A:2733:A:O4'	2.19	0.43
2:1B:94:C:H2'	2:1B:95:C:C6	2.54	0.43
6:1G:114:ILE:HB	6:1G:117:PHE:HB2	2.00	0.43
11:1P:94:GLU:HG3	11:1P:124:LYS:HG2	2.00	0.43
16:1U:9:VAL:O	16:1U:13:LYS:HG3	2.18	0.43
31:19:15:LYS:HD3	31:19:26:ILE:HD11	2.00	0.43
44:1m:70:LEU:O	44:1m:74:VAL:HG23	2.18	0.43
49:1r:53:ARG:C	49:1r:55:ARG:N	2.77	0.43
56:1y:53:G:N2	56:1y:61:C:N3	2.58	0.43
1:2A:480:A:O2'	20:2Y:46:LYS:O	2.30	0.43
1:2A:664:C:H4'	1:2A:941:A:OP1	2.18	0.43
1:2A:1042:G:H3'	1:2A:1043:C:H6	1.83	0.43
1:2A:1420:U:H3'	1:2A:1420:U:H6	1.83	0.43
1:2A:1754:C:H5''	15:2T:113:LYS:HE2	2.01	0.43
1:2A:2444:G:C6	1:2A:2445:G:C5	3.07	0.43
1:2A:2576:G:O2'	1:2A:2579:C:OP2	2.26	0.43
1:2A:2817:G:H21	1:2A:2836:U:C1'	2.32	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:106:G:H5'	21:2Z:31:ARG:HB3	2.01	0.43
3:2D:70:TRP:HB3	3:2D:190:TYR:CZ	2.54	0.43
8:2I:55:ALA:O	8:2I:58:LEU:HB3	2.18	0.43
10:2O:98:VAL:HG22	10:2O:117:LEU:O	2.19	0.43
12:2Q:36:ALA:C	12:2Q:37:LEU:HD23	2.44	0.43
32:2a:731:G:OP1	32:2a:766:A:H1'	2.19	0.43
32:2a:998:G:C6	32:2a:999:C:C4	3.06	0.43
32:2a:1203:C:P	45:2n:3:ARG:HH11	2.38	0.43
32:2a:1309:G:H5''	44:2m:78:ILE:HG12	2.00	0.43
32:2a:1386:G:C2	32:2a:1387:G:C8	3.06	0.43
33:2b:120:ALA:O	33:2b:122:PHE:N	2.51	0.43
34:2c:134:ILE:HG23	34:2c:151:VAL:HB	2.01	0.43
36:2e:72:GLN:HE21	36:2e:72:GLN:H	1.65	0.43
42:2k:104:GLN:O	42:2k:106:LYS:HG3	2.18	0.43
43:2l:55:VAL:HG13	43:2l:69:TYR:HA	2.00	0.43
44:2m:105:THR:HB	44:2m:106:ASN:CG	2.44	0.43
46:2o:3:ILE:HG23	46:2o:38:ARG:HE	1.83	0.43
46:2o:25:THR:O	46:2o:29:VAL:HG23	2.19	0.43
46:2o:26:GLU:HG3	46:2o:81:LEU:HD22	1.99	0.43
54:2w:6:G:H8	54:2w:6:G:OP2	2.00	0.43
55:2x:22:G:N1	55:2x:23:C:C4	2.87	0.43
1:1A:192:C:C2'	1:1A:193:U:H5'	2.49	0.43
1:1A:806:C:OP1	11:1P:37:GLY:HA2	2.18	0.43
1:1A:878:A:N6	1:1A:900:A:C8	2.87	0.43
1:1A:959:A:C6	1:1A:960:A:N1	2.87	0.43
1:1A:963:U:H2'	1:1A:964:C:C6	2.53	0.43
1:1A:1051:G:H4'	1:1A:2752:C:H4'	2.00	0.43
1:1A:2005:A:H5''	62:1A:4587:HOH:O	2.18	0.43
3:1D:70:TRP:CE2	3:1D:150:LYS:HD2	2.54	0.43
5:1F:64:ILE:HG21	5:1F:78:ILE:HG23	1.99	0.43
20:1Y:76:CYS:SG	20:1Y:78:ALA:HB3	2.58	0.43
24:12:33:MET:HE2	24:12:33:MET:HB3	1.79	0.43
32:1a:194:C:C2'	32:1a:195:A:H5''	2.46	0.43
32:1a:259:G:C6	32:1a:260:G:C4	3.06	0.43
32:1a:679:C:H2'	32:1a:680:C:C6	2.53	0.43
32:1a:814:A:N7	32:1a:816:A:C4	2.86	0.43
32:1a:1163:C:H2'	32:1a:1164:G:H8	1.83	0.43
32:1a:1174:G:O2'	32:1a:1175:G:H5'	2.19	0.43
32:1a:1316:G:N1	32:1a:1319:A:OP2	2.51	0.43
32:1a:1366:C:H2'	32:1a:1367:C:H6	1.84	0.43
34:1c:7:PRO:HG2	34:1c:184:TYR:CD1	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:65:ARG:HE	35:1d:65:ARG:HB3	1.57	0.43
38:1g:20:ASP:HB3	38:1g:23:VAL:HG23	2.01	0.43
43:1l:40:VAL:HG11	43:1l:77:LEU:O	2.19	0.43
44:1m:11:ARG:O	44:1m:12:ASN:HB2	2.18	0.43
54:1w:37:MIA:H8	54:1w:37:MIA:O5'	2.17	0.43
54:1w:67:C:H2'	54:1w:68:C:O4'	2.19	0.43
56:1y:38:A:H2'	56:1y:39:PSU:O4'	2.18	0.43
1:2A:27:G:H22	1:2A:512:G:H1'	1.84	0.43
1:2A:727:A:O2'	1:2A:728:G:H5'	2.19	0.43
1:2A:859:G:O4'	1:2A:2268:A:H1'	2.19	0.43
1:2A:882:G:O6	1:2A:893:C:H5	2.02	0.43
1:2A:896:A:H4'	1:2A:897:C:OP1	2.19	0.43
1:2A:1016:G:C6	1:2A:1017:G:C5	3.06	0.43
1:2A:1021:A:H3'	1:2A:1021:A:C8	2.53	0.43
1:2A:1994:C:O5'	1:2A:1994:C:H6	2.01	0.43
1:2A:2121:G:H1	1:2A:2177:C:H42	1.66	0.43
1:2A:2263:C:H2'	1:2A:2264:C:O4'	2.19	0.43
1:2A:2418:A:C5	1:2A:2419:U:C4	3.07	0.43
1:2A:2710:C:H2'	1:2A:2711:A:C8	2.52	0.43
1:2A:2776:A:H4'	1:2A:2777:G:H5''	2.01	0.43
1:2A:2880:C:O3'	13:2R:90:ARG:NH1	2.51	0.43
2:2B:75:G:O2'	21:2Z:10:ARG:NH2	2.51	0.43
6:2G:138:GLN:OE1	6:2G:138:GLN:N	2.51	0.43
7:2H:7:LEU:HD23	7:2H:69:ARG:HH21	1.84	0.43
11:2P:133:SER:O	11:2P:137:LYS:HG3	2.18	0.43
12:2Q:24:GLY:HA2	12:2Q:67:ARG:NH2	2.34	0.43
12:2Q:57:HIS:C	12:2Q:59:ARG:N	2.77	0.43
15:2T:127:ALA:C	15:2T:129:ARG:N	2.73	0.43
20:2Y:5:MET:HB2	20:2Y:5:MET:HE2	1.72	0.43
22:20:27:GLU:HG3	22:20:68:GLU:HA	2.01	0.43
28:26:18:ARG:HD3	28:26:42:TRP:NE1	2.33	0.43
29:27:16:HIS:O	29:27:43:THR:HG23	2.18	0.43
29:27:24:THR:CG2	29:27:27:GLY:H	2.17	0.43
32:2a:390:C:H2'	32:2a:391:G:C8	2.53	0.43
32:2a:819:A:H5'	32:2a:820:U:H5	1.83	0.43
32:2a:1012:U:H2'	32:2a:1013:G:C8	2.54	0.43
36:2e:33:VAL:HG13	36:2e:112:LEU:HD12	2.00	0.43
38:2g:147:ALA:CB	56:2y:41:C:H5'	2.49	0.43
39:2h:2:LEU:HD12	39:2h:3:THR:H	1.82	0.43
39:2h:103:VAL:HB	39:2h:108:GLY:C	2.44	0.43
43:2l:70:ILE:HG12	43:2l:100:ILE:HD12	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:2q:45:HIS:NE2	48:2q:47:PRO:HG3	2.34	0.43
56:2y:14:A:N3	56:2y:14:A:H2'	2.34	0.43
1:1A:675:A:C4	1:1A:804:A:C2	3.07	0.43
1:1A:686:G:H21	1:1A:788:A:H61	1.65	0.43
1:1A:1555:G:C2'	1:1A:1556:C:H5'	2.49	0.43
1:1A:1788:C:C2'	1:1A:1789:A:H5'	2.49	0.43
2:1B:78:A:C2	2:1B:100:A:C4	3.06	0.43
12:1Q:17:LEU:HA	12:1Q:17:LEU:HD23	1.70	0.43
15:1T:13:ARG:HE	15:1T:13:ARG:HB3	1.46	0.43
24:12:61:LEU:HA	24:12:61:LEU:HD23	1.50	0.43
32:1a:189(B):C:H2'	32:1a:189(C):C:C6	2.54	0.43
32:1a:690:G:H2'	32:1a:691:G:O4'	2.19	0.43
32:1a:814:A:H2'	32:1a:816:A:C5'	2.49	0.43
32:1a:828:A:OP1	32:1a:828:A:H4'	2.19	0.43
32:1a:1239:A:H62	32:1a:1299:A:N6	2.17	0.43
34:1c:20:SER:OG	34:1c:40:ARG:NH2	2.51	0.43
38:1g:78:ARG:NE	38:1g:79:ARG:HH11	2.16	0.43
1:2A:348:G:H2'	1:2A:349:G:O4'	2.18	0.43
1:2A:974:G:H5''	1:2A:1186:G:H21	1.84	0.43
1:2A:1115:G:H2'	1:2A:1116:C:O4'	2.19	0.43
1:2A:1754:C:N3	1:2A:2716:U:O2'	2.52	0.43
1:2A:1808:U:H5''	62:2A:4392:HOH:O	2.18	0.43
1:2A:2109:U:C5'	1:2A:2149:G:H21	2.32	0.43
1:2A:2517:C:H42	1:2A:2567:G:H1	1.65	0.43
1:2A:2768:C:H2'	1:2A:2769:C:O4'	2.18	0.43
1:2A:2840:C:H5''	13:2R:53:HIS:ND1	2.33	0.43
1:2A:2842:G:N7	62:2A:4101:HOH:O	2.37	0.43
1:2A:2865:U:OP2	1:2A:2866:U:O2'	2.29	0.43
1:2A:2869:G:H2'	1:2A:2870:C:O4'	2.17	0.43
5:2F:161:GLU:H	5:2F:161:GLU:HG3	1.57	0.43
6:2G:170:ARG:O	6:2G:174:GLU:HB2	2.18	0.43
10:2O:25:LEU:HD11	10:2O:40:VAL:HG23	2.00	0.43
11:2P:55:ARG:HA	62:2P:302:HOH:O	2.17	0.43
15:2T:82:LEU:H	15:2T:82:LEU:HD12	1.83	0.43
26:24:50:VAL:HG11	44:2m:64:TRP:O	2.19	0.43
32:2a:79:G:O2'	32:2a:80:G:H5'	2.19	0.43
32:2a:189(K):U:C2	32:2a:189(L):G:N7	2.87	0.43
32:2a:502:G:C2	32:2a:503:C:C2	3.07	0.43
32:2a:512:U:H2'	32:2a:513:C:C6	2.54	0.43
32:2a:564:C:C4	32:2a:565:U:C4	3.06	0.43
32:2a:687:A:C8	32:2a:701:C:C4	3.06	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:839:U:H3'	32:2a:840:C:H6	1.84	0.43
33:2b:111:ARG:NH1	33:2b:114:ARG:HB2	2.34	0.43
35:2d:59:ARG:NE	35:2d:59:ARG:HA	2.34	0.43
37:2f:31:GLU:HG2	37:2f:32:ASN:N	2.33	0.43
38:2g:153:HIS:HA	38:2g:155:ARG:NH1	2.34	0.43
45:2n:3:ARG:HG3	45:2n:4:LYS:N	2.33	0.43
51:2t:34:LYS:O	51:2t:35:THR:C	2.62	0.43
51:2t:58:LYS:HD2	51:2t:58:LYS:HA	1.73	0.43
56:2y:58:A:N3	56:2y:60:U:C2	2.86	0.43
1:1A:182:A:N3	1:1A:433:C:O2'	2.42	0.43
1:1A:363(D):G:H2'	1:1A:363(D):G:N3	2.34	0.43
1:1A:931:G:O2'	25:13:24:LYS:NZ	2.51	0.43
1:1A:1759:A:H2'	1:1A:1760:A:C8	2.53	0.43
1:1A:1814:G:H4'	3:1D:51:VAL:HG21	2.01	0.43
1:1A:2391:G:O6	1:1A:2425:A:H8	2.00	0.43
6:1G:31:VAL:HA	6:1G:32:PRO:HD3	1.83	0.43
8:1I:72:LEU:HA	8:1I:72:LEU:HD23	1.77	0.43
15:1T:11:GLU:OE2	15:1T:57:PHE:HB3	2.19	0.43
19:1X:23:GLU:OE1	19:1X:25:LYS:HE2	2.18	0.43
23:11:53:VAL:HG22	23:11:74:VAL:HG13	2.00	0.43
28:16:23:THR:OG1	28:16:24:GLU:N	2.50	0.43
32:1a:78:G:H8	32:1a:78:G:OP2	2.01	0.43
32:1a:160:A:H1'	32:1a:344:A:C4	2.53	0.43
32:1a:410:G:OP1	35:1d:30:LYS:NZ	2.37	0.43
32:1a:1055:A:H2'	34:1c:156:ARG:HD2	2.00	0.43
32:1a:1080:A:H5''	32:1a:1081:G:OP2	2.18	0.43
50:1s:41:VAL:O	50:1s:42:PRO:C	2.61	0.43
56:1y:54:5MU:C2	56:1y:58:A:N7	2.85	0.43
1:2A:438:G:H2'	1:2A:440:G:H8	1.82	0.43
1:2A:479:A:H4'	1:2A:480:A:OP1	2.17	0.43
1:2A:839:U:H1'	1:2A:1191:G:H1'	2.01	0.43
1:2A:1252:G:C2	1:2A:1253:A:C2	3.06	0.43
1:2A:1252:G:N3	16:2U:33:ARG:HG2	2.34	0.43
1:2A:1569:A:H2'	1:2A:1570:A:O4'	2.17	0.43
1:2A:1614:A:C6	18:2W:87:PRO:HB3	2.53	0.43
1:2A:2059:A:O2'	5:2F:69:HIS:HD2	2.02	0.43
1:2A:2061:G:C2	1:2A:2063:C:C4	3.06	0.43
1:2A:2100:G:O2'	1:2A:2101:G:H5'	2.18	0.43
1:2A:2802:G:N3	1:2A:2803:C:H1'	2.33	0.43
5:2F:117:ARG:O	5:2F:122:LYS:HB2	2.19	0.43
6:2G:179:PRO:HG3	26:24:43:TYR:OH	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:56:LYS:C	8:2I:58:LEU:N	2.76	0.43
10:2O:66:LYS:N	10:2O:82:ASN:OD1	2.39	0.43
11:2P:46:LYS:HB3	11:2P:46:LYS:HE3	1.78	0.43
32:2a:120:A:C6	32:2a:122:G:C2	3.07	0.43
32:2a:736:C:H2'	32:2a:737:A:C8	2.54	0.43
32:2a:892:A:O2'	32:2a:1415:G:H4'	2.18	0.43
32:2a:925:G:C2	32:2a:927:G:C8	3.06	0.43
32:2a:1389:C:H2'	32:2a:1390:U:H6	1.83	0.43
33:2b:71:VAL:HG13	33:2b:93:VAL:HG23	2.00	0.43
33:2b:105:PHE:C	33:2b:107:THR:H	2.27	0.43
35:2d:153:ARG:CZ	35:2d:181:MET:HG3	2.49	0.43
38:2g:62:PHE:HA	38:2g:124:LEU:CD2	2.48	0.43
43:2l:82:VAL:HG23	43:2l:106:ASP:OD2	2.18	0.43
50:2s:61:TYR:HE2	50:2s:63:THR:HG22	1.84	0.43
56:2y:10:G:N2	56:2y:26:A:H1'	2.34	0.43
1:1A:271(M):G:O2'	1:1A:271(N):U:H5''	2.19	0.43
1:1A:293:U:H5''	1:1A:294:A:OP2	2.19	0.43
1:1A:374:A:C2	1:1A:401:A:C4	3.07	0.43
1:1A:635:C:H2'	1:1A:636:G:O4'	2.19	0.43
1:1A:992:C:H4'	17:1V:85:LYS:HD3	2.01	0.43
1:1A:1313:U:H5''	62:1A:4388:HOH:O	2.18	0.43
1:1A:1580:A:OP2	1:1A:1580:A:H8	2.01	0.43
1:1A:1790:C:H2'	1:1A:1791:A:C5	2.54	0.43
1:1A:1945:G:H2'	1:1A:1946:U:C6	2.54	0.43
2:1B:105:A:H2'	2:1B:106:G:O4'	2.18	0.43
14:1S:78:LEU:HD11	14:1S:108:GLY:O	2.19	0.43
16:1U:13:LYS:HE3	16:1U:13:LYS:HB3	1.72	0.43
21:1Z:103:ARG:O	21:1Z:138:GLU:HA	2.19	0.43
32:1a:17:U:H1'	32:1a:1080:A:N3	2.33	0.43
32:1a:418:C:H2'	32:1a:419:C:C6	2.54	0.43
32:1a:710:G:C6	32:1a:711:G:C5	3.07	0.43
32:1a:849:C:O5'	32:1a:849:C:H6	2.01	0.43
33:1b:128:GLU:C	33:1b:130:ARG:H	2.23	0.43
36:1e:7:GLU:O	36:1e:34:VAL:HA	2.19	0.43
38:1g:78:ARG:HG2	38:1g:79:ARG:HG3	2.00	0.43
39:1h:127:LEU:HD23	39:1h:127:LEU:HA	1.76	0.43
48:1q:86:GLU:O	48:1q:90:ILE:HG12	2.18	0.43
56:1y:40:C:H2'	56:1y:41:C:H6	1.84	0.43
1:2A:8:A:H2'	1:2A:9:U:C6	2.50	0.43
1:2A:383:U:C2	1:2A:385:C:C4	3.07	0.43
1:2A:501:A:C6	1:2A:502:A:C6	3.07	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1421:G:C2	1:2A:1422:G:C8	3.07	0.43
1:2A:1489:U:O2'	1:2A:1490:A:H8	2.02	0.43
1:2A:2395:C:O2'	23:21:30:VAL:O	2.37	0.43
2:2B:32:C:C2	2:2B:33:G:C8	3.07	0.43
6:2G:125:PHE:HB3	6:2G:166:ASP:OD1	2.18	0.43
6:2G:126:ASP:OD2	6:2G:130:ASN:ND2	2.30	0.43
14:2S:52:SER:O	14:2S:56:LEU:HD12	2.19	0.43
16:2U:46:ALA:O	16:2U:50:ARG:HG3	2.19	0.43
20:2Y:92:ASN:OD1	20:2Y:94:LYS:HG2	2.19	0.43
21:2Z:56:VAL:O	21:2Z:57:ILE:HD13	2.19	0.43
32:2a:168:G:N2	32:2a:169:C:N3	2.67	0.43
32:2a:397:A:H3'	32:2a:397:A:N3	2.33	0.43
32:2a:410:G:H21	32:2a:432:A:H62	1.65	0.43
32:2a:500:G:N2	32:2a:546:G:H1'	2.34	0.43
32:2a:684:A:O2'	42:2k:39:PRO:O	2.34	0.43
32:2a:971:G:H1'	32:2a:1365:G:O2'	2.19	0.43
32:2a:1000:U:C2	32:2a:1042:G:N2	2.87	0.43
32:2a:1346:A:N6	38:2g:10:ARG:HH12	2.16	0.43
32:2a:1382:C:H2'	32:2a:1383:C:C6	2.53	0.43
37:2f:62:TRP:CH2	37:2f:64:GLN:HB2	2.54	0.43
42:2k:65:ALA:HB3	42:2k:97:ALA:HB3	1.99	0.43
42:2k:122:LYS:HB3	42:2k:122:LYS:HE2	1.78	0.43
46:2o:42:HIS:CE1	46:2o:46:HIS:CD2	3.07	0.43
1:1A:458:G:O2'	1:1A:469:G:O6	2.26	0.43
1:1A:614(A):U:H4'	1:1A:614(B):G:H5''	2.01	0.43
1:1A:1688:U:O2	1:1A:1700:A:H5'	2.18	0.43
1:1A:1774:C:O5'	1:1A:1774:C:H6	2.02	0.43
1:1A:2347:C:H2'	1:1A:2348:U:H6	1.84	0.43
3:1D:140:THR:HG22	3:1D:141:VAL:O	2.19	0.43
4:1E:1:MET:C	4:1E:1:MET:SD	3.02	0.43
6:1G:18:GLU:OE1	6:1G:21:ARG:HD3	2.19	0.43
32:1a:667:G:H4'	46:1o:51:HIS:ND1	2.33	0.43
33:1b:107:THR:O	33:1b:110:GLN:HB2	2.17	0.43
34:1c:131:ARG:NH2	36:1e:50:GLU:OE2	2.51	0.43
34:1c:193:TYR:CE1	34:1c:196:LEU:HD21	2.52	0.43
38:1g:78:ARG:NH1	38:1g:156:TRP:HE3	2.16	0.43
39:1h:97:VAL:HA	39:1h:100:ILE:HG13	2.01	0.43
44:1m:33:ALA:HA	44:1m:59:TYR:CE2	2.54	0.43
47:1p:35:LYS:HG2	47:1p:37:GLY:H	1.84	0.43
54:1w:8:4SU:O5'	54:1w:8:4SU:H6	2.19	0.43
1:2A:884:C:H3'	1:2A:885:C:C6	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1042:G:C8	1:2A:1114:G:N2	2.87	0.43
1:2A:1218:C:N4	1:2A:1231:G:H1	2.16	0.43
1:2A:1865:G:C2	1:2A:1878:G:C6	3.07	0.43
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.54	0.43
1:2A:2568:C:H2'	1:2A:2569:G:O4'	2.19	0.43
3:2D:121:PRO:HB3	3:2D:135:PHE:CD2	2.53	0.43
5:2F:24:LEU:HD11	5:2F:202:PHE:HE2	1.84	0.43
6:2G:59:GLU:HB2	6:2G:144:ILE:HD13	2.01	0.43
11:2P:80:TYR:CD1	11:2P:111:ARG:HB3	2.54	0.43
21:2Z:125:LEU:HB3	21:2Z:165:VAL:HG13	1.99	0.43
32:2a:1298:C:H4'	32:2a:1299:A:C4	2.54	0.43
33:2b:47:THR:C	33:2b:51:LEU:HD12	2.44	0.43
34:2c:186:PHE:HA	34:2c:198:VAL:O	2.19	0.43
38:2g:78:ARG:HH21	38:2g:79:ARG:NH1	2.10	0.43
39:2h:64:LYS:HD2	39:2h:79:VAL:HG21	2.01	0.43
42:2k:16:SER:C	42:2k:77:MET:HE1	2.43	0.43
50:2s:28:LYS:HB3	50:2s:29:ARG:CB	2.49	0.43
1:1A:675:A:OP1	5:1F:63:LYS:NZ	2.40	0.42
1:1A:1240:U:OP1	62:1A:4311:HOH:O	2.21	0.42
1:1A:1311:G:N2	1:1A:1603:A:H62	2.17	0.42
1:1A:1364:G:N7	23:11:3:LYS:HD2	2.34	0.42
1:1A:1673:U:OP1	62:1A:4277:HOH:O	2.21	0.42
2:1B:90:A:C5	2:1B:91:C:H1'	2.54	0.42
5:1F:170:LEU:HD12	5:1F:173:VAL:HG21	2.00	0.42
15:1T:22:PHE:HA	15:1T:91:ARG:HH12	1.84	0.42
19:1X:27:THR:HG23	19:1X:80:ILE:HG12	1.99	0.42
19:1X:47:PHE:O	19:1X:49:VAL:HG13	2.18	0.42
30:18:8:LYS:HB3	30:18:12:LYS:HE3	2.01	0.42
32:1a:737:A:OP1	37:1f:92:LYS:N	2.42	0.42
32:1a:925:G:H5''	32:1a:926:G:OP1	2.18	0.42
33:1b:95:GLN:HG3	33:1b:147:LYS:O	2.19	0.42
33:1b:223:ILE:H	33:1b:223:ILE:HG12	1.51	0.42
36:1e:41:VAL:O	36:1e:67:VAL:HG12	2.19	0.42
36:1e:147:ASP:HA	36:1e:150:ARG:HH21	1.83	0.42
37:1f:57:GLN:HE21	37:1f:57:GLN:HB3	1.62	0.42
48:1q:87:LYS:HD2	48:1q:87:LYS:HA	1.63	0.42
50:1s:42:PRO:C	50:1s:44:MET:H	2.27	0.42
56:1y:68:C:C2	56:1y:69:G:C8	3.07	0.42
1:2A:27:G:C2	1:2A:512:G:N3	2.87	0.42
1:2A:1170:G:C6	1:2A:1171:G:C6	3.07	0.42
1:2A:1258:C:H5'	62:2A:4373:HOH:O	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1368:G:OP1	29:27:28:ARG:NH2	2.47	0.42
1:2A:1576:U:H2'	1:2A:1577:C:H6	1.84	0.42
1:2A:2251:OMG:HM23	1:2A:2251:OMG:H1'	1.72	0.42
1:2A:2428:G:H5''	1:2A:2429:G:OP1	2.19	0.42
4:2E:36:ARG:NH1	4:2E:85:ASN:OD1	2.52	0.42
5:2F:51:THR:HG21	5:2F:91:GLY:HA3	2.01	0.42
5:2F:106:ARG:H	5:2F:106:ARG:HG2	1.59	0.42
8:2I:98:ALA:C	8:2I:100:ALA:H	2.26	0.42
12:2Q:57:HIS:CE1	12:2Q:116:GLU:HG3	2.54	0.42
15:2T:59:THR:HG23	15:2T:78:LEU:HB3	2.00	0.42
15:2T:92:GLY:C	15:2T:117:ASP:HB2	2.44	0.42
17:2V:21:ARG:HG2	17:2V:93:GLU:HG3	2.01	0.42
19:2X:65:ARG:HB3	19:2X:70:LEU:HD23	2.01	0.42
20:2Y:55:TYR:N	20:2Y:56:PRO:HD3	2.33	0.42
23:21:52:ARG:HA	23:21:56:GLN:O	2.19	0.42
32:2a:1196:U:C5	53:2v:24:A:C4	3.07	0.42
32:2a:1227:A:O2'	44:2m:115:LYS:HE2	2.19	0.42
32:2a:1353:G:H2'	32:2a:1354:C:C6	2.54	0.42
36:2e:61:TYR:O	36:2e:64:ARG:HG2	2.18	0.42
40:2i:58:HIS:CD2	40:2i:58:HIS:N	2.87	0.42
50:2s:69:HIS:HB3	50:2s:73:GLU:OE1	2.19	0.42
1:1A:184:C:H2'	1:1A:185:U:H6	1.80	0.42
1:1A:210:C:OP2	29:17:29:LYS:NZ	2.52	0.42
1:1A:401:A:C6	1:1A:402:A:C6	3.07	0.42
1:1A:443:A:C5	5:1F:45:ARG:HD2	2.54	0.42
1:1A:652(U):G:H2'	1:1A:652(V):C:C6	2.54	0.42
1:1A:1083:U:H3	1:1A:1085:A:H5''	1.84	0.42
1:1A:1265:A:H3'	27:15:19:ARG:HH21	1.84	0.42
1:1A:1388:G:H2'	1:1A:1389:G:C8	2.53	0.42
1:1A:1510:G:H2'	1:1A:1511:C:O4'	2.20	0.42
1:1A:1588:C:H2'	1:1A:1589:C:C6	2.54	0.42
1:1A:1877:A:H5''	1:1A:1878:G:OP2	2.19	0.42
3:1D:232:PRO:HB3	3:1D:244:ARG:CZ	2.48	0.42
5:1F:123:LEU:HD13	5:1F:192:LEU:HD13	1.99	0.42
6:1G:79:ASN:C	6:1G:81:LYS:H	2.27	0.42
10:1O:9:GLU:OE2	10:1O:18:LYS:HE3	2.18	0.42
19:1X:72:LYS:NZ	19:1X:75:ASP:OD2	2.52	0.42
21:1Z:1:MET:HA	21:1Z:2:GLU:HA	1.62	0.42
28:16:13:CYS:O	28:16:17:LYS:HA	2.19	0.42
31:19:12:ASP:OD1	31:19:12:ASP:C	2.62	0.42
31:19:16:VAL:HG22	31:19:25:VAL:HG22	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:76:C:H2'	32:1a:77:G:H8	1.83	0.42
32:1a:182:U:C4	32:1a:183:G:H1'	2.54	0.42
32:1a:343:U:C2	32:1a:347:G:N1	2.87	0.42
32:1a:352:C:H4'	32:1a:354:G:OP1	2.18	0.42
32:1a:452:A:H4'	47:1p:72:ARG:CZ	2.49	0.42
32:1a:452:A:H4'	47:1p:72:ARG:NH1	2.34	0.42
32:1a:1095:U:H2'	32:1a:1096:C:C6	2.53	0.42
32:1a:1124:G:H1	32:1a:1149:C:N4	2.17	0.42
32:1a:1240:U:OP2	38:1g:116:ALA:N	2.40	0.42
32:1a:1363:C:H5'	32:1a:1363(A):A:O5'	2.19	0.42
32:1a:1530:G:H2'	32:1a:1531:A:N7	2.33	0.42
34:1c:106:VAL:HG23	34:1c:106:VAL:O	2.19	0.42
35:1d:62:GLN:OE1	35:1d:62:GLN:HA	2.19	0.42
36:1e:33:VAL:HG22	36:1e:112:LEU:HD12	2.00	0.42
37:1f:29:ALA:O	37:1f:33:TYR:HD2	2.02	0.42
47:1p:53:VAL:HG13	47:1p:79:VAL:HA	2.00	0.42
51:1t:12:ALA:O	51:1t:15:ARG:HB2	2.19	0.42
1:2A:762:U:H5'	1:2A:763:G:C2	2.54	0.42
1:2A:848:G:N3	1:2A:933:A:H1'	2.34	0.42
1:2A:1331:A:H2'	1:2A:1333:C:C5	2.54	0.42
1:2A:1339:G:N1	1:2A:1340:U:O4	2.51	0.42
1:2A:1392:A:C6	1:2A:1393:A:C6	3.07	0.42
1:2A:1799:G:N7	3:2D:179:SER:OG	2.44	0.42
1:2A:1954:G:O2'	1:2A:1956:U:O4	2.33	0.42
1:2A:2109:U:H5''	1:2A:2149:G:H21	1.84	0.42
1:2A:2334:G:H4'	1:2A:2335:A:OP2	2.18	0.42
2:2B:48:A:H2'	2:2B:49:C:C6	2.54	0.42
7:2H:61:HIS:O	7:2H:65:HIS:HB2	2.19	0.42
8:2I:128:LEU:HD23	8:2I:128:LEU:HA	1.80	0.42
11:2P:60:MET:HE1	30:28:7:HIS:HE1	1.84	0.42
11:2P:107:LYS:O	11:2P:110:TYR:HB2	2.19	0.42
15:2T:26:ASP:HA	15:2T:92:GLY:H	1.84	0.42
15:2T:64:ARG:HD2	15:2T:73:GLU:OE2	2.19	0.42
25:23:10:LYS:HB3	25:23:53:LEU:HA	2.01	0.42
28:26:2:ALA:O	28:26:3:SER:HB3	2.19	0.42
28:26:2:ALA:HB1	28:26:6:ARG:O	2.18	0.42
28:26:16:CYS:HB2	28:26:18:ARG:NH1	2.34	0.42
32:2a:631:G:H2'	32:2a:632:A:H8	1.84	0.42
32:2a:1101:A:H4'	32:2a:1102:A:O5'	2.20	0.42
32:2a:1124:G:O2'	32:2a:1145:C:C4	2.73	0.42
32:2a:1252:A:H2'	32:2a:1253:G:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:2f:7:ASN:C	37:2f:8:ILE:HG12	2.43	0.42
38:2g:20:ASP:HB3	38:2g:23:VAL:HB	2.01	0.42
47:2p:17:TYR:HE2	47:2p:41:PRO:HG3	1.84	0.42
1:1A:205:G:O6	23:11:39:LYS:NZ	2.37	0.42
1:1A:271(H):G:H2'	1:1A:271(I):G:H8	1.82	0.42
1:1A:608:A:C4	1:1A:621:A:C6	3.07	0.42
1:1A:640:C:H2'	1:1A:641:C:C6	2.54	0.42
1:1A:779:U:OP1	3:1D:49:ILE:HG13	2.20	0.42
1:1A:825:C:H4'	1:1A:2428:G:C5	2.54	0.42
1:1A:1076:C:O2'	1:1A:1077:A:N7	2.50	0.42
1:1A:1105:U:O2'	1:1A:1106:G:H5'	2.19	0.42
1:1A:2203:U:O4'	3:1D:151:LYS:HE2	2.20	0.42
1:1A:2206:G:H5''	1:1A:2207:G:N7	2.34	0.42
2:1B:44:G:OP1	6:1G:98:ARG:NH2	2.49	0.42
3:1D:231:HIS:HD2	3:1D:249:PRO:HG3	1.84	0.42
4:1E:33:VAL:HG13	4:1E:89:ASP:C	2.43	0.42
5:1F:123:LEU:HD21	5:1F:199:TRP:HZ3	1.84	0.42
21:1Z:96:VAL:N	21:1Z:128:VAL:O	2.46	0.42
21:1Z:103:ARG:O	21:1Z:139:VAL:N	2.53	0.42
23:11:50:ARG:HG2	23:11:59:THR:HG22	2.01	0.42
32:1a:859:A:H2'	32:1a:860:A:H8	1.83	0.42
32:1a:1099:G:H2'	32:1a:1100:C:O4'	2.18	0.42
32:1a:1338:G:H2'	32:1a:1339:A:C8	2.54	0.42
32:1a:1399:C:C2	32:1a:1502:A:N6	2.87	0.42
33:1b:78:GLN:HA	33:1b:78:GLN:HE21	1.84	0.42
36:1e:151:LEU:HD11	39:1h:77:GLU:HG2	2.02	0.42
38:1g:57:GLU:CD	38:1g:58:PRO:HD2	2.43	0.42
38:1g:113:GLU:CG	38:1g:119:ARG:HG2	2.49	0.42
54:1w:23:A:H4'	54:1w:23:A:OP1	2.19	0.42
55:1x:9:G:N2	55:1x:45:G:H3'	2.34	0.42
56:1y:8:4SU:C2	56:1y:15:G:O6	2.68	0.42
56:1y:36:A:H2'	56:1y:37:MIA:C4'	2.49	0.42
56:1y:56:C:H2'	56:1y:57:G:O4'	2.19	0.42
1:2A:1212:G:H1'	1:2A:1237:A:N6	2.35	0.42
1:2A:1287:A:OP1	13:2R:105:ARG:HB3	2.19	0.42
1:2A:2141:G:C6	1:2A:2151:G:C5	3.07	0.42
2:2B:14:U:H4'	2:2B:15:A:OP2	2.19	0.42
2:2B:75:G:N3	21:2Z:85:HIS:CE1	2.87	0.42
3:2D:255:LYS:HD3	3:2D:255:LYS:HA	1.90	0.42
7:2H:76:VAL:HG13	7:2H:77:LYS:N	2.34	0.42
9:2N:66:LYS:O	9:2N:67:LEU:C	2.62	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2P:77:ARG:HB2	11:2P:78:PRO:HD2	2.01	0.42
21:2Z:7:ALA:C	21:2Z:8:TYR:CD2	2.97	0.42
26:24:47:GLN:O	26:24:48:ARG:C	2.62	0.42
32:2a:300:A:H1'	32:2a:565:U:O2	2.19	0.42
32:2a:403:C:O2'	32:2a:404:U:H5'	2.20	0.42
32:2a:505:G:N7	62:2a:1935:HOH:O	2.37	0.42
32:2a:860:A:H2'	32:2a:861:G:O4'	2.19	0.42
32:2a:1442:G:H2'	32:2a:1442(B):A:N7	2.34	0.42
34:2c:22:TRP:CZ2	45:2n:54:PRO:HG2	2.54	0.42
36:2e:40:ARG:HB3	36:2e:66:MET:HG3	2.01	0.42
39:2h:66:GLY:O	39:2h:76:PRO:HB3	2.19	0.42
41:2j:30:SER:OG	41:2j:81:THR:HG23	2.19	0.42
44:2m:87:TYR:N	50:2s:73:GLU:O	2.52	0.42
50:2s:13:ASP:HA	50:2s:16:LEU:HB3	2.00	0.42
56:2y:69:G:H3'	56:2y:70:G:H5''	2.01	0.42
1:1A:118:A:OP1	29:17:22:MET:HE2	2.19	0.42
1:1A:271(R):G:OP1	23:11:76:ARG:HD2	2.19	0.42
1:1A:487:C:O2	18:1W:53:SER:OG	2.34	0.42
1:1A:576:U:H2'	1:1A:577:G:C8	2.54	0.42
1:1A:774:A:N3	1:1A:774:A:H2'	2.34	0.42
1:1A:1079:C:C4	1:1A:1088:A:N3	2.88	0.42
1:1A:1151:G:H2'	1:1A:1152:C:O4'	2.20	0.42
1:1A:1527:G:H2'	1:1A:1542:A:N1	2.34	0.42
1:1A:1540:U:C2'	1:1A:1541:G:H5'	2.49	0.42
1:1A:1594:G:H2'	1:1A:1595:G:O4'	2.20	0.42
1:1A:2441:C:OP1	1:1A:2441:C:H4'	2.20	0.42
1:1A:2648:C:O2'	1:1A:2649:U:H5'	2.18	0.42
1:1A:2661:G:H2'	1:1A:2662:A:C8	2.54	0.42
2:1B:66:A:H61	2:1B:109:C:C5'	2.32	0.42
10:1O:63:VAL:HG11	10:1O:85:VAL:HG23	2.01	0.42
32:1a:376:G:OP2	47:1p:67:THR:HG21	2.20	0.42
32:1a:492:G:C6	32:1a:493:G:C4	3.07	0.42
32:1a:631:G:H2'	32:1a:632:A:C8	2.54	0.42
32:1a:837:G:C6	32:1a:838:G:C5	3.07	0.42
47:1p:22:THR:HB	47:1p:32:TYR:HB3	2.00	0.42
50:1s:36:ARG:NH2	50:1s:72:GLY:O	2.53	0.42
51:1t:36:LEU:HA	51:1t:39:LYS:HB3	2.02	0.42
56:1y:69:G:H2'	56:1y:69:G:N3	2.34	0.42
1:2A:271(M):G:O2'	1:2A:271(N):U:O5'	2.28	0.42
1:2A:297:C:OP1	20:2Y:95:LYS:NZ	2.50	0.42
1:2A:705:A:H2'	1:2A:706:A:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:717:G:H2'	1:2A:718:A:O4'	2.20	0.42
1:2A:1744:C:H2'	1:2A:1745:C:H6	1.84	0.42
1:2A:2114:A:H2'	1:2A:2114:A:N3	2.34	0.42
1:2A:2717:G:C6	1:2A:2718:G:C5	3.08	0.42
1:2A:2793:G:C2	1:2A:2794:C:N3	2.88	0.42
2:2B:56:G:H5'	6:2G:27:ASN:HD22	1.83	0.42
4:2E:72:VAL:HG12	4:2E:73:GLU:N	2.35	0.42
6:2G:148:MET:HE3	6:2G:148:MET:HB3	1.90	0.42
10:2O:66:LYS:HD2	10:2O:80:ASP:O	2.19	0.42
13:2R:117:VAL:HG12	13:2R:118:GLU:H	1.82	0.42
14:2S:87:PHE:CZ	14:2S:102:ALA:HB2	2.54	0.42
15:2T:56:GLY:O	15:2T:59:THR:HG22	2.20	0.42
18:2W:90:ARG:HE	18:2W:90:ARG:HB3	1.67	0.42
20:2Y:2:ARG:NH1	20:2Y:4:LYS:HA	2.33	0.42
21:2Z:30:ASN:HA	21:2Z:89:PHE:CE1	2.54	0.42
32:2a:22:G:H5''	32:2a:561:U:H3	1.85	0.42
32:2a:386:C:H2'	32:2a:387:U:O4'	2.19	0.42
32:2a:519:C:OP2	43:2l:50:SER:OG	2.33	0.42
32:2a:579:G:H2'	32:2a:580:U:C6	2.54	0.42
32:2a:982:U:H6	32:2a:982:U:OP1	2.03	0.42
32:2a:1051:C:H2'	32:2a:1052:U:C6	2.54	0.42
32:2a:1216:G:N1	32:2a:1217:C:C4	2.87	0.42
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.54	0.42
33:2b:36:ARG:C	33:2b:38:GLY:H	2.26	0.42
39:2h:86:ILE:O	39:2h:88:LYS:HG3	2.20	0.42
41:2j:83:GLU:C	41:2j:85:LEU:N	2.78	0.42
44:2m:98:VAL:C	44:2m:100:GLY:H	2.26	0.42
50:2s:22:LEU:O	50:2s:27:GLU:N	2.52	0.42
50:2s:30:LEU:HD21	50:2s:50:ALA:HB2	2.01	0.42
1:1A:413:C:H6	1:1A:413:C:O5'	2.02	0.42
1:1A:443:A:H1'	1:1A:1201:C:O4'	2.18	0.42
1:1A:1161:C:O2'	17:1V:8:GLY:HA2	2.18	0.42
1:1A:1319:G:O2'	1:1A:1320:C:H5'	2.18	0.42
1:1A:1432:C:H2'	1:1A:1433:U:O4'	2.19	0.42
1:1A:1959:G:N3	32:1a:1483:A:H2	2.16	0.42
2:1B:43:C:H2'	2:1B:44:G:H5''	2.01	0.42
4:1E:16:ARG:NH2	4:1E:171:GLU:OE2	2.47	0.42
4:1E:105:THR:OG1	4:1E:166:THR:HG23	2.18	0.42
6:1G:68:PRO:HB3	6:1G:92:VAL:HB	2.01	0.42
8:1I:5:LEU:O	8:1I:15:VAL:HA	2.20	0.42
18:1W:62:HIS:O	18:1W:64:MET:HG3	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1Z:70:LEU:HD12	21:1Z:91:LEU:HD21	2.00	0.42
25:13:3:ARG:HG2	25:13:38:GLU:HA	2.01	0.42
26:14:9:LEU:HD23	26:14:9:LEU:HA	1.63	0.42
28:16:6:ARG:NH1	28:16:26:ASN:HB2	2.34	0.42
32:1a:299:G:C6	32:1a:300:A:C6	3.07	0.42
32:1a:344:A:O5'	32:1a:345:C:H5	2.02	0.42
32:1a:690:G:C6	32:1a:691:G:C6	3.07	0.42
33:1b:13:ALA:HB2	33:1b:44:LEU:HD22	2.01	0.42
34:1c:19:GLU:O	34:1c:56:ASP:HA	2.20	0.42
36:1e:40:ARG:HD2	36:1e:40:ARG:HA	1.86	0.42
38:1g:78:ARG:HE	38:1g:79:ARG:NH1	2.17	0.42
43:1l:42:THR:HA	43:1l:53:ARG:O	2.20	0.42
54:1w:55:PSU:H6	54:1w:55:PSU:O5'	2.03	0.42
56:1y:5:G:C6	56:1y:6:G:N7	2.88	0.42
56:1y:49:C:H42	56:1y:65:G:H1	1.66	0.42
1:2A:26:G:C6	1:2A:27:G:N1	2.88	0.42
1:2A:99:U:H4'	1:2A:100:G:H5''	2.01	0.42
1:2A:195:A:H2'	1:2A:198:C:N4	2.33	0.42
1:2A:579:G:H2'	1:2A:580:C:C6	2.55	0.42
1:2A:1277:G:O2'	13:2R:24:GLN:HG2	2.19	0.42
1:2A:1838:C:H4'	1:2A:1839:G:C8	2.55	0.42
1:2A:2121:G:O6	1:2A:2176:A:N6	2.52	0.42
1:2A:2335:A:C8	1:2A:2337:G:C5	3.07	0.42
1:2A:2470:G:O2'	1:2A:2471:C:H5'	2.20	0.42
1:2A:2678:C:H2'	1:2A:2679:A:O4'	2.19	0.42
1:2A:2896:C:H2'	1:2A:2897:U:C5	2.54	0.42
8:2I:38:LEU:H	8:2I:38:LEU:HD12	1.84	0.42
10:2O:48:PRO:HB2	10:2O:49:ARG:NH1	2.34	0.42
30:28:29:LYS:NZ	30:28:41:ILE:O	2.51	0.42
32:2a:117:G:OP2	62:2a:1902:HOH:O	2.21	0.42
32:2a:174:C:H2'	32:2a:175:C:C6	2.54	0.42
32:2a:581:G:N2	32:2a:759:A:OP2	2.46	0.42
32:2a:617:G:C6	32:2a:618:C:C5	3.07	0.42
32:2a:939:G:H5'	38:2g:102:ARG:NH2	2.34	0.42
32:2a:1084:G:C5	32:2a:1085:U:C4	3.07	0.42
36:2e:74:GLY:CA	36:2e:116:THR:HG22	2.49	0.42
56:2y:26:A:C6	56:2y:27:G:C5	3.08	0.42
1:1A:1164:G:H2'	1:1A:1165:U:H6	1.83	0.42
1:1A:1190:G:H2'	1:1A:1191:G:C8	2.54	0.42
1:1A:1321:A:H2'	1:1A:1322:A:O4'	2.19	0.42
1:1A:1364:G:C8	23:11:3:LYS:HD2	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1900:A:N1	1:1A:1970:A:C6	2.88	0.42
1:1A:2552:OMU:O5'	1:1A:2552:OMU:H6	2.19	0.42
7:1H:42:ARG:HG2	7:1H:44:VAL:HG13	2.01	0.42
11:1P:86:LYS:C	11:1P:88:LEU:H	2.26	0.42
12:1Q:85:LYS:N	12:1Q:85:LYS:HD2	2.33	0.42
15:1T:31:SER:OG	15:1T:85:LYS:NZ	2.31	0.42
15:1T:126:ALA:O	15:1T:129:ARG:HB2	2.20	0.42
15:1T:128:GLU:C	15:1T:130:ALA:H	2.28	0.42
18:1W:18:ARG:O	18:1W:19:LEU:C	2.63	0.42
20:1Y:73:ARG:HE	20:1Y:73:ARG:HB3	1.35	0.42
32:1a:120:A:H2'	32:1a:121:C:H4'	2.02	0.42
32:1a:258:G:H2'	32:1a:259:G:C8	2.54	0.42
32:1a:406:G:H1	32:1a:436:C:N4	2.17	0.42
32:1a:432:A:C8	32:1a:433:C:C5	3.07	0.42
32:1a:434:U:H2'	32:1a:435:C:O4'	2.20	0.42
32:1a:439:A:OP2	32:1a:493:G:N1	2.47	0.42
32:1a:828:A:H2'	32:1a:829:G:O4'	2.19	0.42
32:1a:959:A:C2	32:1a:1222:G:O4'	2.72	0.42
32:1a:966:M2G:HM13	32:1a:967:5MC:H1'	2.01	0.42
32:1a:1285:A:H4'	32:1a:1286:A:O5'	2.20	0.42
33:1b:114:ARG:NE	33:1b:141:GLU:OE2	2.53	0.42
35:1d:139:ARG:HE	35:1d:139:ARG:HB2	1.62	0.42
36:1e:99:GLY:O	36:1e:117:ASP:HA	2.18	0.42
44:1m:2:ALA:HB1	44:1m:6:GLY:O	2.19	0.42
44:1m:101:GLN:H	44:1m:101:GLN:CD	2.27	0.42
48:1q:53:LEU:HD23	48:1q:82:MET:HE1	2.01	0.42
1:2A:108:U:C2	1:2A:109:G:C8	3.08	0.42
1:2A:443:A:C5	5:2F:45:ARG:HD2	2.55	0.42
1:2A:483:A:H1'	20:2Y:59:GLY:O	2.20	0.42
1:2A:503:A:H4'	1:2A:504:U:H5'	2.02	0.42
1:2A:764:A:H5''	3:2D:210:GLY:CA	2.49	0.42
1:2A:775:G:H1'	62:2A:4406:HOH:O	2.18	0.42
1:2A:1037:G:H2'	1:2A:1038:C:O4'	2.20	0.42
1:2A:1592:C:C2	1:2A:1593:G:C8	3.07	0.42
1:2A:1668:A:H4'	1:2A:1669:A:O5'	2.20	0.42
1:2A:1720:U:H2'	1:2A:1721:G:O4'	2.19	0.42
1:2A:1945:G:H2'	1:2A:1946:U:C6	2.55	0.42
1:2A:2042:A:OP1	62:2A:4001:HOH:O	2.22	0.42
1:2A:2485:G:O3'	12:2Q:126:PRO:HB3	2.19	0.42
3:2D:72:LYS:HB3	3:2D:75:ILE:HB	2.01	0.42
4:2E:54:GLN:HE22	4:2E:76:ARG:NH1	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:2H:56:SER:HB3	7:2H:61:HIS:CE1	2.54	0.42
11:2P:38:GLN:O	11:2P:39:LYS:HB3	2.18	0.42
14:2S:30:ARG:HG2	14:2S:30:ARG:HH11	1.85	0.42
28:26:10:LEU:HG	28:26:54:ILE:HG13	2.01	0.42
32:2a:106:C:H2'	32:2a:107:G:H8	1.83	0.42
32:2a:806:C:O2'	32:2a:807:A:H5'	2.20	0.42
32:2a:1106:G:H2'	32:2a:1107:C:C6	2.55	0.42
32:2a:1120:G:C6	32:2a:1121:U:C4	3.08	0.42
32:2a:1263:C:O2	32:2a:1273:G:C2	2.73	0.42
34:2c:142:MET:HG3	34:2c:170:GLN:HB3	2.01	0.42
35:2d:193:ASP:OD1	35:2d:193:ASP:N	2.44	0.42
42:2k:44:SER:OG	42:2k:47:VAL:HG23	2.18	0.42
46:2o:84:LYS:O	46:2o:84:LYS:HD3	2.20	0.42
51:2t:9:ASN:O	51:2t:10:LEU:HB2	2.20	0.42
56:2y:55:PSU:H5''	56:2y:56:C:OP2	2.20	0.42
1:1A:17:G:H2'	1:1A:18:C:H6	1.85	0.42
1:1A:49:A:C8	1:1A:51:G:C2	3.08	0.42
1:1A:272(J):C:H2'	1:1A:274:G:H8	1.85	0.42
1:1A:818:G:C2'	1:1A:819:A:H5''	2.50	0.42
1:1A:824:A:H1'	1:1A:2358:G:N7	2.35	0.42
1:1A:897:C:H2'	1:1A:898:C:C6	2.55	0.42
1:1A:910:A:H2'	1:1A:911:A:C8	2.54	0.42
1:1A:1046:A:HO2'	1:1A:1047:G:P	2.41	0.42
1:1A:1614:A:N1	18:1W:87:PRO:HB3	2.34	0.42
1:1A:2069:G:P	62:1A:4261:HOH:O	2.77	0.42
1:1A:2096:U:H2'	1:1A:2097:C:C6	2.55	0.42
1:1A:2119:A:C4	1:1A:2171:A:C2	3.08	0.42
1:1A:2219:G:O2'	1:1A:2220:G:H5'	2.20	0.42
1:1A:2312:U:OP1	6:1G:73:ALA:HA	2.19	0.42
4:1E:60:ASN:O	4:1E:64:LYS:HG3	2.19	0.42
6:1G:114:ILE:O	6:1G:115:ARG:C	2.62	0.42
8:1I:2:LYS:HA	8:1I:19:VAL:O	2.19	0.42
9:1N:128:HIS:O	9:1N:131:GLN:NE2	2.53	0.42
10:1O:7:TYR:CD2	10:1O:20:MET:HG3	2.55	0.42
11:1P:43:GLY:HA3	62:1P:303:HOH:O	2.19	0.42
16:1U:48:ALA:O	16:1U:51:LYS:HB2	2.20	0.42
16:1U:58:ARG:HA	16:1U:61:TRP:CE3	2.54	0.42
23:11:3:LYS:HB2	23:11:61:ARG:HH12	1.83	0.42
23:11:72:GLU:OE2	23:11:76:ARG:NH2	2.53	0.42
24:12:35:LEU:HD23	24:12:35:LEU:HA	1.76	0.42
25:13:8:LEU:HD12	25:13:53:LEU:O	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:13:39:ASP:CG	25:13:44:ARG:HH12	2.28	0.42
28:16:12:GLU:OE1	28:16:52:VAL:HG11	2.20	0.42
32:1a:164:U:H2'	32:1a:165:C:C6	2.54	0.42
32:1a:875:C:C4	32:1a:876:G:N7	2.88	0.42
32:1a:1239:A:H62	32:1a:1299:A:H62	1.68	0.42
32:1a:1360:A:OP2	45:1n:35:ARG:NH2	2.47	0.42
33:1b:75:LYS:C	33:1b:77:ALA:H	2.28	0.42
38:1g:13:GLN:HE21	38:1g:13:GLN:HB2	1.67	0.42
38:1g:91:VAL:HG12	38:1g:95:ARG:HB3	2.02	0.42
40:1i:86:VAL:C	40:1i:88:TYR:H	2.27	0.42
41:1j:67:THR:O	41:1j:67:THR:OG1	2.32	0.42
43:1l:7:ILE:HD13	43:1l:7:ILE:HA	1.85	0.42
44:1m:86:CYS:HB2	50:1s:73:GLU:HB3	2.01	0.42
1:2A:55:G:O2'	1:2A:127:A:N1	2.48	0.42
1:2A:359:A:H8	1:2A:359:A:O5'	2.02	0.42
1:2A:649:G:H2'	1:2A:650:C:H6	1.84	0.42
1:2A:1257:C:H4'	5:2F:83:PHE:CD1	2.55	0.42
1:2A:1327:C:O2'	1:2A:1328:G:H5'	2.20	0.42
1:2A:1766:U:O2'	1:2A:1767:C:H5'	2.20	0.42
1:2A:1865:G:C2	1:2A:1878:G:C5	3.08	0.42
1:2A:2119:A:N7	1:2A:2170:A:C6	2.88	0.42
2:2B:61:G:C6	2:2B:62:C:C4	3.07	0.42
5:2F:176:LEU:HD23	5:2F:176:LEU:HA	1.73	0.42
6:2G:108:ASN:HB3	26:24:22:ILE:HD13	2.02	0.42
7:2H:98:LEU:HD11	7:2H:125:VAL:H	1.85	0.42
7:2H:107:VAL:HG23	7:2H:109:PHE:CE2	2.54	0.42
14:2S:44:LYS:O	14:2S:46:VAL:HG23	2.20	0.42
14:2S:87:PHE:HB2	14:2S:112:PHE:CE1	2.54	0.42
21:2Z:15:PRO:O	21:2Z:19:ARG:HG3	2.20	0.42
25:23:5:LYS:HD3	25:23:36:VAL:CG2	2.50	0.42
32:2a:26:A:N6	32:2a:558:G:H1'	2.35	0.42
32:2a:129(A):G:C6	32:2a:189(E):U:H4'	2.54	0.42
32:2a:176:C:O2'	32:2a:177:C:H5'	2.20	0.42
32:2a:831:U:OP2	33:2b:22:LYS:NZ	2.42	0.42
32:2a:1080:A:C8	32:2a:1081:G:H1'	2.55	0.42
32:2a:1139:G:N2	32:2a:1142:G:O6	2.44	0.42
33:2b:134:GLU:HA	33:2b:137:ARG:HB2	2.02	0.42
43:2l:71:PRO:O	43:2l:102:ARG:NH1	2.44	0.42
46:2o:74:ASP:OD2	46:2o:77:ARG:HD3	2.20	0.42
51:2t:71:THR:O	51:2t:72:LEU:HD12	2.19	0.42
56:2y:64:A:C2'	56:2y:65:G:H5'	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:45:C:H2'	1:1A:47:C:C6	2.54	0.42
1:1A:97:C:O3'	24:12:2:LYS:HA	2.19	0.42
1:1A:1053:C:H42	1:1A:1106:G:H1	1.68	0.42
1:1A:1283:G:N2	1:1A:1286:A:OP2	2.50	0.42
1:1A:1837:C:OP1	32:1a:784:C:H4'	2.20	0.42
1:1A:2147:G:H3'	1:1A:2147:G:N3	2.35	0.42
4:1E:108:SER:O	4:1E:162:ALA:HA	2.20	0.42
5:1F:157:VAL:HB	5:1F:194:MET:HG2	2.00	0.42
6:1G:3:LEU:HD22	26:14:25:TYR:CE1	2.55	0.42
15:1T:29:ARG:HA	15:1T:46:GLU:HA	2.01	0.42
32:1a:562:C:C5	43:1l:18:VAL:HG12	2.55	0.42
32:1a:923:A:H2'	32:1a:924:C:O4'	2.19	0.42
32:1a:1062:U:H2'	32:1a:1063:C:C6	2.55	0.42
32:1a:1440:C:H2'	32:1a:1441:G:O4'	2.19	0.42
37:1f:12:PRO:HG3	37:1f:57:GLN:O	2.19	0.42
41:1j:81:THR:HA	41:1j:84:GLN:HB3	2.01	0.42
42:1k:14:VAL:HG11	42:1k:35:PRO:HD2	2.01	0.42
1:2A:271(U):G:H2'	1:2A:271(V):G:H8	1.85	0.42
1:2A:887:A:H4'	1:2A:888:C:C6	2.55	0.42
1:2A:948:G:H21	1:2A:985:C:P	2.43	0.42
1:2A:1478:G:H2'	1:2A:1479:G:C8	2.54	0.42
1:2A:1565:C:OP1	3:2D:4:LYS:NZ	2.53	0.42
1:2A:2835:A:N6	1:2A:2879:C:OP2	2.47	0.42
7:2H:20:ALA:HB3	7:2H:23:ARG:HB2	2.01	0.42
8:2I:56:LYS:C	8:2I:58:LEU:H	2.27	0.42
8:2I:62:LYS:O	8:2I:65:ALA:HB3	2.20	0.42
13:2R:57:ARG:HH21	13:2R:62:ALA:HB2	1.84	0.42
26:24:58:ARG:NH2	50:2s:69:HIS:CE1	2.88	0.42
29:27:13:ALA:O	29:27:17:GLY:HA3	2.19	0.42
30:28:32:LEU:HA	30:28:32:LEU:HD23	1.71	0.42
32:2a:7:G:O2'	36:2e:120:THR:O	2.36	0.42
32:2a:256:U:H3	32:2a:270:A:H61	1.67	0.42
32:2a:1002:G:N1	32:2a:1003:G:C8	2.86	0.42
32:2a:1103:C:H2'	32:2a:1104:G:O4'	2.20	0.42
32:2a:1111:A:H8	32:2a:1111:A:O5'	2.03	0.42
32:2a:1290:G:OP1	38:2g:35:LYS:NZ	2.51	0.42
32:2a:1298:C:C4	38:2g:114:ARG:HD3	2.55	0.42
32:2a:1348:U:H4'	40:2i:120:ARG:HD2	2.02	0.42
33:2b:55:PHE:CE1	33:2b:218:ALA:HA	2.54	0.42
33:2b:144:ARG:HA	33:2b:144:ARG:HD2	1.91	0.42
33:2b:185:ILE:CG2	33:2b:199:TYR:HB2	2.50	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:2s:81:ARG:HE	50:2s:81:ARG:HB3	1.41	0.42
1:1A:438:G:H2'	1:1A:440:G:C8	2.54	0.42
1:1A:880:G:H2'	1:1A:881:G:C8	2.54	0.42
1:1A:1043:C:C4	1:1A:1044:G:N7	2.88	0.42
1:1A:1419:A:C8	1:1A:1421:G:C6	3.08	0.42
1:1A:1568:G:O5'	3:1D:61:LEU:HD13	2.20	0.42
1:1A:1647:G:H3'	1:1A:1647:G:OP2	2.19	0.42
1:1A:1985:G:O2'	1:1A:1986:A:H5'	2.20	0.42
1:1A:2098:U:H3	1:1A:2191:G:H1	1.66	0.42
1:1A:2100:G:N1	1:1A:2189:U:N3	2.33	0.42
1:1A:2128:C:N4	1:1A:2160:G:H1	2.18	0.42
1:1A:2168:G:C2	1:1A:2171:A:N7	2.87	0.42
1:1A:2404:C:C2'	1:1A:2405:G:H5'	2.50	0.42
1:1A:2773:C:H2'	1:1A:2774:C:C6	2.54	0.42
1:1A:2892:A:C2'	1:1A:2893:G:H5'	2.50	0.42
62:1A:4245:HOH:O	16:1U:13:LYS:HD3	2.20	0.42
62:1A:5227:HOH:O	5:1F:74:ARG:HD2	2.20	0.42
3:1D:148:GLU:HB2	3:1D:151:LYS:HG3	2.02	0.42
16:1U:47:TYR:HA	16:1U:50:ARG:NH2	2.35	0.42
19:1X:94:GLY:HA3	19:1X:95:LEU:HG	2.02	0.42
20:1Y:35:TYR:CE2	20:1Y:69:ALA:HB3	2.55	0.42
22:10:43:THR:O	22:10:43:THR:CG2	2.67	0.42
32:1a:189(L):G:H2'	32:1a:190:U:H6	1.84	0.42
32:1a:247:G:O6	32:1a:278:G:C6	2.73	0.42
32:1a:280:C:C2	48:1q:38:ARG:HD2	2.55	0.42
32:1a:354:G:N2	32:1a:355:C:C2	2.88	0.42
32:1a:979:C:H2'	32:1a:980:C:H5'	2.01	0.42
32:1a:1255:G:N7	41:1j:43:ARG:NH2	2.67	0.42
32:1a:1366:C:H2'	32:1a:1367:C:C6	2.54	0.42
32:1a:1371:G:OP2	40:1i:11:LYS:HG2	2.19	0.42
33:1b:25:ASN:O	33:1b:26:PRO:C	2.62	0.42
34:1c:22:TRP:CZ2	45:1n:54:PRO:HG2	2.55	0.42
40:1i:95:LYS:O	40:1i:99:LEU:HD13	2.20	0.42
41:1j:23:ILE:HA	41:1j:23:ILE:HD13	1.79	0.42
47:1p:70:ALA:O	47:1p:74:LEU:HD13	2.20	0.42
51:1t:24:LEU:HD22	51:1t:24:LEU:HA	1.84	0.42
51:1t:43:LEU:HD12	51:1t:55:ILE:HG13	2.02	0.42
1:2A:112:U:H5'	24:22:65:ASN:ND2	2.34	0.42
1:2A:204:A:H8	1:2A:204:A:OP1	2.03	0.42
1:2A:271(W):G:O6	1:2A:271(X):G:N1	2.53	0.42
1:2A:783:A:O2'	1:2A:785:G:OP1	2.21	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1449:A:H5'	1:2A:1450:G:OP2	2.20	0.42
1:2A:1656:C:H2'	1:2A:1657:C:C6	2.53	0.42
1:2A:2292:C:H5''	1:2A:2378:A:H61	1.84	0.42
1:2A:2509:G:C6	1:2A:2510:C:C4	3.07	0.42
1:2A:2600:A:H2'	1:2A:2601:C:C6	2.55	0.42
5:2F:117:ARG:HA	5:2F:117:ARG:HD3	1.86	0.42
8:2I:61:ARG:HB2	8:2I:61:ARG:NH1	2.35	0.42
10:2O:92:GLU:O	10:2O:93:PRO:C	2.63	0.42
12:2Q:4:PRO:HD3	12:2Q:70:PRO:O	2.20	0.42
12:2Q:41:TRP:HB3	12:2Q:94:VAL:HB	2.02	0.42
15:2T:45:PHE:CZ	15:2T:74:ARG:HB2	2.55	0.42
26:24:14:ILE:HA	26:24:31:ILE:O	2.20	0.42
30:28:4:MET:HE3	30:28:63:PRO:HG3	2.02	0.42
32:2a:613:C:H2'	32:2a:614:A:H8	1.85	0.42
32:2a:1183:A:O2'	32:2a:1184:G:OP1	2.30	0.42
32:2a:1288:A:N3	32:2a:1352:C:O2'	2.40	0.42
33:2b:179:LYS:HE3	33:2b:179:LYS:HB2	1.93	0.42
36:2e:88:LYS:HB3	36:2e:123:LEU:HB2	2.01	0.42
43:2l:7:ILE:HD13	43:2l:7:ILE:HA	1.92	0.42
45:2n:6:LEU:HA	45:2n:9:LYS:HB3	2.01	0.42
55:2x:29:G:C6	55:2x:42:G:C6	3.07	0.42
56:2y:2:C:H2'	56:2y:3:C:C6	2.55	0.42
1:1A:593:G:C1'	30:18:4:MET:HE2	2.50	0.42
1:1A:723:G:H2'	1:1A:724:U:O4'	2.19	0.42
1:1A:1027:A:C6	1:1A:1126:A:C4	3.08	0.42
1:1A:1054:A:N6	1:1A:1055:G:C6	2.88	0.42
1:1A:1114:G:H2'	1:1A:1115:G:O4'	2.20	0.42
1:1A:1175:U:H4'	1:1A:1176:G:OP1	2.18	0.42
1:1A:1441:G:H4'	1:1A:1628:G:OP1	2.20	0.42
1:1A:1567:A:O4'	1:1A:1568:G:C2	2.73	0.42
1:1A:1999:C:H4'	1:1A:2723:C:O2	2.20	0.42
1:1A:2147:G:H2'	1:1A:2148:G:O4'	2.20	0.42
1:1A:2263:C:H2'	1:1A:2264:C:O4'	2.20	0.42
1:1A:2335:A:C8	1:1A:2337:G:C5	3.08	0.42
1:1A:2646:C:O5'	1:1A:2646:C:H6	2.03	0.42
1:1A:2684:U:C4	1:1A:2685:G:N7	2.88	0.42
11:1P:89:ALA:HA	11:1P:121:LYS:CD	2.49	0.42
11:1P:107:LYS:O	11:1P:110:TYR:HB2	2.20	0.42
14:1S:49:VAL:HG22	14:1S:73:LEU:HD12	2.02	0.42
23:11:50:ARG:HG2	23:11:59:THR:CG2	2.50	0.42
28:16:20:ASN:HB2	28:16:21:TYR:CD2	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:146:G:C2	32:1a:147:G:C4	3.08	0.42
32:1a:520:A:O2'	43:1l:73:GLU:OE2	2.22	0.42
32:1a:892:A:O2'	32:1a:1415:G:H4'	2.20	0.42
32:1a:1053:G:N7	32:1a:1199:U:H3'	2.34	0.42
35:1d:101:LEU:HD12	35:1d:101:LEU:O	2.19	0.42
37:1f:9:VAL:HA	37:1f:59:TYR:O	2.19	0.42
40:1i:100:GLY:O	40:1i:103:THR:HG23	2.19	0.42
40:1i:121:ARG:NH2	40:1i:122:ALA:O	2.52	0.42
44:1m:14:ARG:CZ	44:1m:42:ALA:HA	2.50	0.42
48:1q:9:VAL:O	48:1q:22:LEU:N	2.35	0.42
51:1t:36:LEU:HD12	51:1t:62:LEU:CD1	2.49	0.42
55:1x:50:U:H2'	55:1x:51:C:C6	2.55	0.42
1:2A:692:C:H2'	1:2A:693:C:C6	2.54	0.42
1:2A:778:G:C5	1:2A:779:U:C4	3.08	0.42
1:2A:805:G:O5'	11:2P:41:ARG:HG3	2.20	0.42
1:2A:935:C:H2'	1:2A:936:C:C6	2.55	0.42
1:2A:1225:G:H4'	17:2V:84:LYS:HG2	2.02	0.42
1:2A:1559:G:OP2	62:2A:4000:HOH:O	2.21	0.42
1:2A:1661:G:C4	1:2A:2000:G:N2	2.88	0.42
1:2A:2377:A:H2'	1:2A:2378:A:C8	2.55	0.42
1:2A:2392:A:N3	11:2P:61:ARG:HG2	2.35	0.42
1:2A:2740:A:C6	1:2A:2764:A:C8	3.08	0.42
1:2A:2785:C:H1'	4:2E:66:HIS:CE1	2.55	0.42
1:2A:2839:G:H5'	13:2R:46:GLY:HA2	2.02	0.42
2:2B:65:C:O2'	2:2B:66:A:H5'	2.19	0.42
4:2E:56:PRO:C	4:2E:58:ARG:H	2.28	0.42
5:2F:185:ASP:OD1	5:2F:188:ARG:NH1	2.52	0.42
8:2I:16:GLY:O	8:2I:47:LEU:HD21	2.20	0.42
11:2P:80:TYR:HA	11:2P:111:ARG:O	2.20	0.42
21:2Z:129:SER:OG	21:2Z:130:PRO:HD2	2.20	0.42
24:22:60:LEU:HD23	24:22:60:LEU:HA	1.93	0.42
32:2a:90:U:H2'	32:2a:91:C:H6	1.84	0.42
32:2a:119:A:H5'	32:2a:120:A:N3	2.34	0.42
32:2a:671:G:H2'	32:2a:672:U:O4'	2.20	0.42
32:2a:774:G:C2	32:2a:806:C:C2	3.08	0.42
32:2a:1125:U:O2'	32:2a:1126:U:H2'	2.20	0.42
32:2a:1246:C:H2'	32:2a:1247:U:O4'	2.20	0.42
32:2a:1456:G:H1	51:2t:51:GLU:CD	2.25	0.42
34:2c:9:GLY:HA3	45:2n:49:HIS:HA	2.01	0.42
35:2d:155:LEU:HA	35:2d:155:LEU:HD23	1.74	0.42
36:2e:57:LYS:HE3	36:2e:57:LYS:HB2	1.82	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:107:ALA:O	38:2g:111:ARG:HG3	2.19	0.42
41:2j:63:PHE:HD1	45:2n:58:LYS:HA	1.85	0.42
48:2q:67:LYS:O	48:2q:68:ARG:HG3	2.20	0.42
49:2r:70:ILE:O	49:2r:74:ARG:HG3	2.19	0.42
1:1A:64:A:O3'	19:1X:71:GLY:HA3	2.19	0.41
1:1A:603:A:H4'	1:1A:604:G:H5'	2.02	0.41
1:1A:702:G:C2	1:1A:731:C:C2	3.08	0.41
1:1A:1208:C:C4	1:1A:1209:G:N7	2.87	0.41
1:1A:1674:G:H1'	1:1A:1676:A:N6	2.34	0.41
1:1A:1903:G:C2'	1:1A:1904:G:H5'	2.50	0.41
1:1A:2317:C:H2'	1:1A:2318:G:O4'	2.19	0.41
1:1A:2629:A:H1'	1:1A:2630:G:H5''	2.02	0.41
2:1B:91:C:OP1	12:1Q:16:ARG:HG3	2.20	0.41
4:1E:143:ASN:HD22	4:1E:147:PRO:CD	2.33	0.41
8:1I:54:GLN:O	8:1I:55:ALA:C	2.62	0.41
32:1a:339:C:H2'	32:1a:340:U:H6	1.84	0.41
32:1a:396:G:C2	32:1a:398:C:C4	3.07	0.41
32:1a:762:C:H2'	32:1a:763:G:C8	2.55	0.41
35:1d:93:PHE:O	35:1d:97:LEU:N	2.48	0.41
1:2A:1313:U:H2'	1:2A:1610:A:C2	2.55	0.41
1:2A:1364:G:OP1	23:21:2:SER:N	2.53	0.41
1:2A:1461:G:H2'	1:2A:1462:C:C6	2.51	0.41
1:2A:1666:G:N2	1:2A:1995:U:C2	2.87	0.41
1:2A:2012:G:H4'	18:2W:96:ILE:CD1	2.50	0.41
1:2A:2131:G:H1	1:2A:2158:A:N6	2.18	0.41
1:2A:2138:C:N4	1:2A:2153:G:H1	2.15	0.41
2:2B:43:C:O4'	6:2G:66:GLN:NE2	2.52	0.41
5:2F:36:VAL:O	5:2F:40:GLN:HG3	2.20	0.41
6:2G:3:LEU:HD22	26:24:25:TYR:CE1	2.54	0.41
6:2G:45:GLU:H	6:2G:45:GLU:HG2	1.45	0.41
12:2Q:103:MET:HE2	12:2Q:103:MET:HB3	1.89	0.41
32:2a:189(K):U:N3	32:2a:189(L):G:N7	2.68	0.41
32:2a:865:A:H5'	32:2a:1078:U:C4	2.55	0.41
32:2a:1324:A:H2'	32:2a:1325:C:H6	1.85	0.41
32:2a:1353:G:H2'	32:2a:1354:C:H6	1.85	0.41
34:2c:31:HIS:HA	34:2c:34:LEU:HB2	2.01	0.41
35:2d:105:VAL:HG13	35:2d:110:PHE:HB2	2.02	0.41
36:2e:52:PRO:O	36:2e:56:GLN:HG3	2.20	0.41
39:2h:30:ARG:O	39:2h:34:GLU:HG2	2.20	0.41
44:2m:11:ARG:O	44:2m:12:ASN:HB2	2.19	0.41
54:2w:47:U:H5'	54:2w:48:C:H5''	2.01	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:2y:55:PSU:C6	56:2y:57:G:OP2	2.73	0.41
1:1A:222:A:OP1	62:1A:4302:HOH:O	2.21	0.41
1:1A:271(E):U:C2	1:1A:271(F):C:C5	3.08	0.41
1:1A:553:G:H2'	1:1A:554:U:O4'	2.21	0.41
1:1A:707:G:H2'	1:1A:708:C:C6	2.55	0.41
1:1A:1162:G:O2'	1:1A:1163:G:H5'	2.20	0.41
1:1A:1165:U:H2'	1:1A:1166:C:O4'	2.19	0.41
1:1A:1445:A:H5''	1:1A:1445(A):C:H5	1.85	0.41
1:1A:1787:A:H2'	1:1A:1788:C:H6	1.85	0.41
1:1A:2202:C:H2'	1:1A:2203:U:O4'	2.20	0.41
1:1A:2827:C:H2'	1:1A:2828:C:C6	2.56	0.41
5:1F:24:LEU:O	5:1F:25:PRO:C	2.62	0.41
5:1F:161:GLU:O	5:1F:165:ARG:HB2	2.20	0.41
11:1P:1:MET:HE3	11:1P:1:MET:HB2	1.79	0.41
11:1P:121:LYS:HB2	11:1P:123:LEU:HD13	2.02	0.41
13:1R:24:GLN:NE2	13:1R:44:LEU:HG	2.35	0.41
21:1Z:126:VAL:HG13	21:1Z:162:GLU:H	1.85	0.41
26:14:34:GLU:HB2	44:1m:57:ARG:CZ	2.50	0.41
32:1a:115:G:H4'	32:1a:116:A:O5'	2.20	0.41
32:1a:222:U:O2'	32:1a:223:U:H5'	2.20	0.41
32:1a:715:A:H2'	32:1a:716:A:C8	2.56	0.41
32:1a:1210:C:C2'	32:1a:1211:U:H5'	2.50	0.41
33:1b:113:HIS:ND1	33:1b:113:HIS:N	2.68	0.41
33:1b:119:GLU:CD	33:1b:153:ARG:HH22	2.28	0.41
33:1b:218:ALA:O	33:1b:222:ILE:HG13	2.19	0.41
36:1e:99:GLY:N	36:1e:117:ASP:OD1	2.45	0.41
38:1g:94:ARG:O	38:1g:97:GLN:HB3	2.20	0.41
47:1p:45:THR:O	47:1p:46:PRO:C	2.63	0.41
1:2A:192:C:O2'	1:2A:802:A:N3	2.46	0.41
1:2A:662:G:OP1	11:2P:16:ARG:NE	2.48	0.41
1:2A:728:G:H5''	3:2D:13:ARG:HH21	1.85	0.41
1:2A:1280:G:N2	1:2A:1291:C:C2	2.88	0.41
1:2A:1288:U:C2	1:2A:1327:C:O2	2.73	0.41
1:2A:1572:A:H5'	62:2A:4295:HOH:O	2.19	0.41
1:2A:1660:C:C2	1:2A:2001:A:C2	3.07	0.41
1:2A:1866:C:H2'	1:2A:1876:A:O4'	2.19	0.41
1:2A:2096:U:H3	1:2A:2193:G:H1	1.68	0.41
1:2A:2207:G:H2'	1:2A:2208:A:C2	2.55	0.41
1:2A:2307:G:H8	1:2A:2307:G:P	2.42	0.41
1:2A:2356:C:H4'	22:20:20:ARG:HD3	2.02	0.41
4:2E:47:VAL:HG11	4:2E:86:PRO:CD	2.50	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:119:ARG:HG2	5:2F:119:ARG:HH11	1.85	0.41
16:2U:49:HIS:HA	16:2U:52:ARG:HB2	2.02	0.41
16:2U:115:ALA:C	16:2U:117:GLN:N	2.78	0.41
26:24:45:GLY:C	26:24:47:GLN:N	2.77	0.41
32:2a:272:C:H2'	32:2a:273:A:H8	1.85	0.41
32:2a:428:G:C2	32:2a:430:A:N6	2.88	0.41
32:2a:890:G:N2	32:2a:906:G:H2'	2.35	0.41
32:2a:1000:U:O2	32:2a:1042:G:N2	2.53	0.41
32:2a:1349:A:C4	32:2a:1350:A:C8	3.07	0.41
33:2b:100:GLY:HA3	33:2b:104:ASN:HB3	2.02	0.41
41:2j:23:ILE:HD13	41:2j:23:ILE:HA	1.84	0.41
48:2q:11:VAL:HG22	48:2q:20:THR:O	2.20	0.41
51:2t:89:ARG:O	51:2t:92:LEU:N	2.52	0.41
53:2v:23:A:H4'	53:2v:24:A:C5'	2.31	0.41
1:1A:295:G:C5	1:1A:344:G:C2	3.08	0.41
1:1A:526:A:C2	1:1A:2625:G:N3	2.88	0.41
1:1A:578:A:H5'	1:1A:1254:A:OP1	2.20	0.41
1:1A:1057:A:N7	1:1A:1086:A:H2'	2.35	0.41
1:1A:1439:A:OP1	62:1A:4313:HOH:O	2.22	0.41
1:1A:1477:A:C2	1:1A:1515:G:C2	3.08	0.41
1:1A:1599:C:P	19:1X:36:LYS:HG3	2.60	0.41
1:1A:2495:G:O2'	12:1Q:83:MET:HE3	2.19	0.41
1:1A:2586:C:O2	59:1A:4101:A1C9N:OCT	2.37	0.41
1:1A:2639:A:H2'	1:1A:2640:G:O4'	2.21	0.41
1:1A:2727:G:O3'	10:1O:70:LYS:HD3	2.20	0.41
8:1I:116:LEU:HD12	8:1I:128:LEU:CD1	2.50	0.41
11:1P:71:VAL:HA	11:1P:72:PRO:HA	1.85	0.41
12:1Q:78:PRO:HD3	55:1x:1:C:C4	2.56	0.41
26:14:44:THR:OG1	26:14:47:GLN:HB2	2.19	0.41
32:1a:42:G:C6	32:1a:43:C:C4	3.08	0.41
32:1a:677:U:H3	32:1a:713:G:H22	1.67	0.41
32:1a:965:A:H4'	32:1a:966:M2G:O5'	2.19	0.41
32:1a:1381:U:C4	32:1a:1382:C:C4	3.08	0.41
35:1d:107:ARG:NH2	35:1d:194:LEU:HD11	2.34	0.41
35:1d:126:ILE:HD13	35:1d:126:ILE:HA	1.88	0.41
36:1e:71:LEU:HD21	36:1e:115:VAL:HA	2.02	0.41
37:1f:37:VAL:HG22	37:1f:65:VAL:HG12	2.02	0.41
56:1y:46:G7M:H8	56:1y:46:G7M:H2'	1.88	0.41
1:2A:234:C:H2'	1:2A:235:U:H6	1.85	0.41
1:2A:241:A:N1	1:2A:255:A:H5''	2.34	0.41
1:2A:614(A):U:O5'	1:2A:614(A):U:H6	2.04	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:614(B):G:H2'	5:2F:44:ARG:HH11	1.85	0.41
1:2A:849:A:N6	1:2A:928:G:O2'	2.51	0.41
1:2A:948:G:C2	1:2A:970:C:O2	2.73	0.41
1:2A:974:G:C6	1:2A:1186:G:C6	3.08	0.41
1:2A:1131:G:C2	1:2A:1132:A:C4	3.08	0.41
1:2A:2100:G:C4	1:2A:2190:G:C2	3.08	0.41
1:2A:2171:A:H1'	1:2A:2172:U:C6	2.55	0.41
1:2A:2299:G:C4	1:2A:2300:G:C8	3.08	0.41
2:2B:94:C:H2'	2:2B:95:C:C6	2.54	0.41
6:2G:15:VAL:HG22	6:2G:175:LEU:HB3	2.02	0.41
7:2H:3:ARG:NE	7:2H:3:ARG:HA	2.35	0.41
7:2H:28:GLY:N	7:2H:31:GLY:O	2.53	0.41
7:2H:103:LEU:O	7:2H:115:VAL:HG23	2.20	0.41
7:2H:159:GLU:OE1	7:2H:169:VAL:HG11	2.20	0.41
10:2O:68:GLU:CD	10:2O:68:GLU:H	2.28	0.41
18:2W:12:ILE:HD12	18:2W:42:ARG:HG2	2.02	0.41
20:2Y:37:VAL:N	20:2Y:67:LEU:O	2.43	0.41
32:2a:362:G:N1	32:2a:365:U:OP2	2.53	0.41
32:2a:363:A:C6	32:2a:364:A:C6	3.08	0.41
32:2a:825:G:H2'	32:2a:826:C:H6	1.85	0.41
32:2a:939:G:H1	32:2a:1344:C:H42	1.66	0.41
32:2a:1053:G:N7	32:2a:1200:C:H5''	2.35	0.41
32:2a:1063:C:H3'	32:2a:1064:G:H2'	2.01	0.41
32:2a:1120:G:H2'	32:2a:1121:U:H6	1.84	0.41
32:2a:1342:C:H4'	40:2i:125:TYR:O	2.20	0.41
35:2d:60:GLU:OE1	35:2d:199:ASN:HB3	2.20	0.41
35:2d:101:LEU:HA	35:2d:104:VAL:CG2	2.49	0.41
44:2m:19:LEU:HD21	44:2m:56:LEU:HD21	2.02	0.41
50:2s:23:ASN:C	50:2s:25:LYS:N	2.79	0.41
1:1A:957:A:N1	1:1A:2458:G:H4'	2.36	0.41
1:1A:1085:A:H3'	1:1A:1086:A:H2	1.85	0.41
1:1A:1719:G:C6	1:1A:1720:U:C4	3.09	0.41
1:1A:2140:C:H2'	1:1A:2141:G:H8	1.85	0.41
1:1A:2478:A:OP1	31:19:31:LYS:NZ	2.49	0.41
1:1A:2503:2MA:O2'	1:1A:2505:G:OP2	2.33	0.41
4:1E:28:ALA:HB3	4:1E:93:VAL:CG1	2.49	0.41
4:1E:34:VAL:O	4:1E:70:ALA:HB2	2.20	0.41
13:1R:28:LEU:HD13	13:1R:34:ILE:HG12	2.01	0.41
27:15:49:CYS:SG	27:15:51:TYR:HB2	2.60	0.41
32:1a:515:G:C2	32:1a:537:G:C2	3.09	0.41
32:1a:738:C:H2'	32:1a:739:C:C6	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:762:C:H2'	32:1a:763:G:H8	1.86	0.41
32:1a:964:A:O2'	41:1j:55:LYS:HD2	2.21	0.41
32:1a:969:A:H2'	32:1a:970:C:O4'	2.20	0.41
32:1a:999:C:H42	32:1a:1042:G:H1	1.68	0.41
32:1a:1299:A:N3	32:1a:1299:A:H2'	2.35	0.41
33:1b:119:GLU:O	33:1b:123:ALA:HB2	2.19	0.41
39:1h:20:TYR:HA	39:1h:65:TYR:CZ	2.56	0.41
42:1k:20:TYR:CZ	42:1k:83:ILE:HD12	2.56	0.41
49:1r:61:LYS:O	49:1r:65:ILE:HG13	2.21	0.41
50:1s:11:VAL:HG11	50:1s:16:LEU:HB2	2.02	0.41
1:2A:48:G:C6	1:2A:178:G:O6	2.74	0.41
1:2A:214:G:H1'	1:2A:216:A:O2'	2.20	0.41
1:2A:968:G:H2'	1:2A:969:U:C6	2.56	0.41
1:2A:2018:G:H2'	1:2A:2019:A:O4'	2.20	0.41
1:2A:2650:U:H2'	1:2A:2651:C:C6	2.55	0.41
6:2G:49:ASP:C	6:2G:51:ARG:N	2.78	0.41
6:2G:100:TRP:O	6:2G:104:GLU:HB3	2.19	0.41
14:2S:56:LEU:O	14:2S:58:LEU:N	2.53	0.41
16:2U:74:LEU:HD11	16:2U:110:VAL:HG13	2.02	0.41
21:2Z:48:PHE:CD1	21:2Z:52:SER:HA	2.55	0.41
29:27:16:HIS:CB	29:27:44:PRO:HG2	2.50	0.41
30:28:62:LEU:HB3	30:28:65:GLU:CG	2.50	0.41
32:2a:179:A:H2'	32:2a:180:U:C6	2.54	0.41
32:2a:228:A:H4'	47:2p:62:VAL:HG21	2.03	0.41
32:2a:247:G:O6	32:2a:278:G:C6	2.74	0.41
32:2a:397:A:N6	32:2a:548:G:C5	2.88	0.41
32:2a:596:C:H2'	32:2a:597:G:H8	1.85	0.41
32:2a:1002:G:C2	32:2a:1003:G:H8	2.39	0.41
35:2d:108:LEU:HD22	35:2d:176:LEU:HD22	2.01	0.41
36:2e:144:THR:HB	36:2e:146:ALA:H	1.86	0.41
38:2g:151:TYR:CZ	42:2k:54:ARG:HD3	2.55	0.41
54:2w:68:C:H2'	54:2w:69:G:H8	1.85	0.41
55:2x:17:C:H2'	55:2x:17(A):U:C5	2.56	0.41
1:1A:15:G:O2'	1:1A:16:G:H5'	2.20	0.41
1:1A:304:G:C6	1:1A:305:U:C4	3.09	0.41
1:1A:459:U:H5''	29:17:40:TRP:CG	2.55	0.41
1:1A:480:A:O2'	20:1Y:46:LYS:O	2.32	0.41
1:1A:897:C:C2	1:1A:898:C:N4	2.88	0.41
1:1A:1365:A:O2'	23:11:11:ARG:NH1	2.54	0.41
1:1A:1466:G:H5''	1:1A:1467:C:OP1	2.20	0.41
1:1A:2072:G:N2	62:1A:4599:HOH:O	2.52	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2133:G:C2	1:1A:2157:G:N3	2.89	0.41
6:1G:140:ILE:HG22	6:1G:141:PHE:CD2	2.56	0.41
10:1O:67:LYS:NZ	10:1O:68:GLU:OE2	2.48	0.41
21:1Z:104:PHE:N	21:1Z:104:PHE:CD2	2.89	0.41
26:14:50:VAL:HG21	44:1m:64:TRP:C	2.46	0.41
32:1a:539:A:H2'	32:1a:540:G:C8	2.55	0.41
32:1a:693:G:H2'	32:1a:694:A:H8	1.85	0.41
32:1a:922:G:C6	32:1a:923:A:C6	3.08	0.41
32:1a:1357:A:H8	32:1a:1357:A:O5'	2.03	0.41
33:1b:54:THR:HG21	33:1b:201:ILE:HG12	2.02	0.41
35:1d:3:ARG:O	35:1d:5:ILE:HG23	2.19	0.41
35:1d:128:VAL:HG11	35:1d:138:TYR:CE2	2.56	0.41
38:1g:26:PHE:CE2	38:1g:30:ILE:HD11	2.55	0.41
44:1m:70:LEU:HD23	44:1m:70:LEU:HA	1.90	0.41
50:1s:10:PHE:HE2	50:1s:37:ARG:HG3	1.86	0.41
1:2A:208:C:H2'	1:2A:209:C:C6	2.56	0.41
1:2A:278:A:H2'	1:2A:278:A:N3	2.35	0.41
1:2A:357:A:H2'	1:2A:358:U:C6	2.55	0.41
1:2A:710:G:C2	1:2A:722:A:C2	3.08	0.41
1:2A:893:C:H5'	1:2A:894:C:C5	2.56	0.41
1:2A:1608:A:H1'	1:2A:1610:A:OP2	2.20	0.41
1:2A:1693:U:H1'	3:2D:14:ARG:NH2	2.35	0.41
1:2A:1714:G:H1	1:2A:1745(A):C:N4	2.10	0.41
1:2A:1788:C:C2	1:2A:1789:A:C8	3.08	0.41
1:2A:2130:U:H3'	1:2A:2130:U:H6	1.85	0.41
1:2A:2263:C:N4	22:20:15:ASP:OD1	2.52	0.41
2:2B:69:G:C2	2:2B:70:C:C2	3.08	0.41
6:2G:29:TRP:C	6:2G:31:VAL:N	2.78	0.41
9:2N:25:ARG:O	9:2N:28:THR:HG23	2.20	0.41
10:2O:111:PHE:O	10:2O:115:VAL:HG23	2.20	0.41
17:2V:79:VAL:O	17:2V:79:VAL:HG13	2.20	0.41
22:20:72:ARG:HH21	22:20:75:LEU:HD13	1.85	0.41
31:29:22:ARG:HD2	31:29:35:ARG:HD2	2.02	0.41
32:2a:257:G:H2'	32:2a:258:G:O4'	2.21	0.41
32:2a:275:G:C2	32:2a:276:G:C8	3.08	0.41
32:2a:1128:C:H1'	32:2a:1147:C:N4	2.23	0.41
32:2a:1325:C:H2'	32:2a:1326:C:H6	1.85	0.41
32:2a:1375:A:H2'	32:2a:1376:U:C6	2.54	0.41
32:2a:1431:C:H2'	32:2a:1432:G:O4'	2.21	0.41
33:2b:155:LEU:HD21	33:2b:159:PRO:HG3	2.01	0.41
35:2d:177:ASP:OD1	35:2d:180:GLY:N	2.42	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:79:ARG:H	38:2g:79:ARG:HG3	1.80	0.41
39:2h:37:ARG:NH1	39:2h:38:ILE:HG12	2.35	0.41
43:2l:36:VAL:O	43:2l:58:VAL:HG13	2.20	0.41
47:2p:39:TYR:CG	47:2p:73:LEU:HD21	2.55	0.41
51:2t:9:ASN:OD1	51:2t:9:ASN:N	2.53	0.41
51:2t:25:ARG:CZ	51:2t:25:ARG:HB2	2.49	0.41
1:1A:446:G:OP1	16:1U:3:ARG:NH1	2.46	0.41
1:1A:614(C):A:C4	5:1F:180:GLY:HA2	2.55	0.41
1:1A:686:G:OP2	1:1A:686:G:H4'	2.20	0.41
1:1A:999:U:O2'	1:1A:1000:A:H5'	2.20	0.41
1:1A:1090:U:H2'	1:1A:1091:G:O4'	2.21	0.41
1:1A:1279:G:O2'	62:1A:4309:HOH:O	2.21	0.41
1:1A:1292:U:H2'	1:1A:1293:C:C6	2.55	0.41
1:1A:1341:U:OP2	1:1A:1394:U:O2'	2.34	0.41
1:1A:2321:G:N3	1:1A:2321:G:H2'	2.35	0.41
1:1A:2352:A:C4	1:1A:2366:A:C2	3.09	0.41
1:1A:2459:A:C5	1:1A:2460:U:C4	3.09	0.41
1:1A:2511:U:O2'	4:1E:138:PRO:O	2.35	0.41
1:1A:2553:G:H2'	1:1A:2554:U:O4'	2.20	0.41
3:1D:93:ALA:N	3:1D:105:ILE:O	2.46	0.41
8:1I:38:LEU:HG	8:1I:40:THR:HG22	2.02	0.41
8:1I:122:GLU:O	8:1I:126:TYR:OH	2.35	0.41
9:1N:96:GLU:H	9:1N:96:GLU:CD	2.15	0.41
23:11:94:LEU:HD23	23:11:94:LEU:HA	1.72	0.41
32:1a:114:U:H1'	32:1a:353:A:H1'	2.02	0.41
32:1a:628:G:H2'	32:1a:629:G:C8	2.56	0.41
32:1a:736:C:H5''	49:1r:72:ARG:HH21	1.84	0.41
32:1a:983:A:H3'	32:1a:983:A:N3	2.35	0.41
32:1a:1030(A):G:H5'	32:1a:1030(B):C:OP2	2.20	0.41
32:1a:1073:U:OP1	36:1e:57:LYS:HE2	2.20	0.41
32:1a:1176:A:H2'	32:1a:1177:G:C8	2.56	0.41
33:1b:12:GLU:HB2	33:1b:213:LEU:HD23	2.02	0.41
33:1b:80:ILE:CD1	33:1b:212:GLN:HA	2.50	0.41
42:1k:80:VAL:O	42:1k:106:LYS:N	2.46	0.41
44:1m:5:ALA:HA	44:1m:61:GLU:OE2	2.21	0.41
50:1s:70:LYS:HA	50:1s:70:LYS:HD3	1.82	0.41
54:1w:24:G:C5	54:1w:25:C:C5	3.09	0.41
54:1w:50:U:H2'	54:1w:51:U:C6	2.56	0.41
1:2A:35:G:H2'	1:2A:36:G:O4'	2.20	0.41
1:2A:649:G:C5	1:2A:650:C:C5	3.09	0.41
1:2A:775:G:C5	1:2A:794:G:C8	3.08	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:826:U:H5''	1:2A:2428:G:O3'	2.20	0.41
1:2A:842:G:N1	1:2A:936:C:O2	2.52	0.41
1:2A:1141:U:H6	9:2N:63:THR:OG1	2.04	0.41
1:2A:2323:G:H1	1:2A:2332:U:H3	1.67	0.41
1:2A:2687:U:H2'	1:2A:2688:U:O4'	2.20	0.41
2:2B:37:C:N4	2:2B:38:C:N3	2.68	0.41
2:2B:50:G:OP2	14:2S:97:ARG:HD2	2.21	0.41
8:2I:3:VAL:HG12	8:2I:38:LEU:HA	2.02	0.41
11:2P:96:THR:O	11:2P:99:LEU:HB3	2.21	0.41
11:2P:126:VAL:HA	11:2P:146:VAL:HB	2.03	0.41
20:2Y:5:MET:HE1	20:2Y:32:PRO:HA	2.03	0.41
20:2Y:40:GLU:O	20:2Y:42:VAL:HG23	2.20	0.41
21:2Z:8:TYR:CD2	21:2Z:8:TYR:N	2.89	0.41
25:23:5:LYS:HD3	25:23:36:VAL:HG23	2.01	0.41
32:2a:51:A:C6	32:2a:353:A:C2	3.08	0.41
32:2a:90:U:H2'	32:2a:91:C:C6	2.56	0.41
32:2a:122:G:O3'	32:2a:312:C:H4'	2.21	0.41
32:2a:446:G:H2'	32:2a:447:G:O4'	2.21	0.41
32:2a:569:C:H1'	32:2a:574:A:C4	2.55	0.41
32:2a:767:A:H2'	32:2a:768:A:O4'	2.20	0.41
32:2a:960:U:O2'	32:2a:1223:C:H5'	2.21	0.41
32:2a:1175:G:H8	32:2a:1175:G:O5'	2.04	0.41
32:2a:1250:A:H61	32:2a:1354:C:C1'	2.33	0.41
32:2a:1346:A:C8	32:2a:1348:U:C2	3.08	0.41
32:2a:1524:C:H2'	32:2a:1525:G:C8	2.56	0.41
32:2a:1530:G:N1	32:2a:1531:A:C5	2.88	0.41
33:2b:74:LYS:HB3	33:2b:75:LYS:H	1.52	0.41
34:2c:58:GLU:HB2	34:2c:65:ALA:HB3	2.01	0.41
35:2d:149:ALA:O	35:2d:150:GLU:C	2.64	0.41
37:2f:14:LEU:HD21	37:2f:84:ASN:CG	2.45	0.41
38:2g:73:MET:O	38:2g:141:VAL:HG12	2.20	0.41
39:2h:116:LYS:HB2	39:2h:119:LEU:HD11	2.03	0.41
41:2j:9:ARG:O	41:2j:16:LEU:HD21	2.20	0.41
43:2l:10:LEU:O	43:2l:14:GLY:N	2.52	0.41
43:2l:24:VAL:N	43:2l:25:PRO:HD3	2.35	0.41
49:2r:24:ALA:C	49:2r:26:LEU:H	2.27	0.41
55:2x:40:C:H2'	55:2x:41:C:C6	2.56	0.41
1:1A:198:C:H5'	1:1A:2244:U:OP1	2.21	0.41
1:1A:271(D):G:H2'	1:1A:271(E):U:C6	2.56	0.41
1:1A:483:A:O2'	20:1Y:49:VAL:O	2.30	0.41
1:1A:628:G:C6	1:1A:636:G:C2	3.09	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1190:G:OP1	11:1P:32:THR:HA	2.20	0.41
1:1A:1264:G:O5'	1:1A:1264:G:H8	2.03	0.41
1:1A:1338:G:O6	19:1X:62:LYS:HE2	2.20	0.41
1:1A:1754:C:H5''	15:1T:113:LYS:HE3	2.01	0.41
1:1A:2837:G:C6	1:1A:2838:G:N7	2.89	0.41
1:1A:2848:G:H3'	15:1T:95:ARG:O	2.19	0.41
4:1E:49:LEU:HD22	4:1E:81:ILE:HG13	2.01	0.41
4:1E:176:ILE:HB	4:1E:181:LEU:HB2	2.01	0.41
7:1H:152:ARG:H	7:1H:162:ILE:HD12	1.86	0.41
9:1N:62:VAL:HG13	9:1N:66:LYS:HB2	2.02	0.41
10:1O:4:PRO:O	10:1O:5:GLN:HB2	2.21	0.41
14:1S:74:ALA:O	14:1S:78:LEU:HD12	2.21	0.41
20:1Y:46:LYS:HD3	20:1Y:60:PHE:CG	2.56	0.41
21:1Z:26:GLY:HA2	21:1Z:85:HIS:NE2	2.35	0.41
32:1a:159:G:H2'	32:1a:161:A:OP2	2.20	0.41
32:1a:771:G:C5	32:1a:772:U:C5	3.08	0.41
32:1a:924:C:O2'	32:1a:1502:A:N1	2.46	0.41
32:1a:1151:A:O2'	32:1a:1152:A:H8	2.03	0.41
32:1a:1531:A:C8	32:1a:1531:A:O5'	2.74	0.41
36:1e:41:VAL:HG23	36:1e:67:VAL:HG13	2.02	0.41
39:1h:34:GLU:OE1	39:1h:37:ARG:NH1	2.54	0.41
43:1l:50:SER:O	43:1l:51:ALA:HB2	2.20	0.41
1:2A:263:C:H2'	1:2A:264:C:O4'	2.20	0.41
1:2A:271(L):U:H5'	8:2I:50:ARG:HH11	1.86	0.41
1:2A:302:C:OP1	20:2Y:101:LYS:NZ	2.53	0.41
1:2A:449:A:C2'	1:2A:450:G:H5'	2.51	0.41
1:2A:638:G:H2'	1:2A:639:U:C6	2.55	0.41
1:2A:1286:A:C6	1:2A:1289:C:C2	3.08	0.41
1:2A:1530:C:H6	1:2A:1530:C:H2'	1.59	0.41
1:2A:2556:C:H2'	1:2A:2557:G:O4'	2.21	0.41
1:2A:2685:G:P	15:2T:51:ARG:HH12	2.43	0.41
1:2A:2697:G:H2'	1:2A:2698:U:O4'	2.20	0.41
1:2A:2896:C:H2'	1:2A:2897:U:H6	1.83	0.41
5:2F:20:LEU:HD13	5:2F:125:LEU:HD13	2.01	0.41
12:2Q:75:THR:HG21	12:2Q:87:LYS:HZ1	1.82	0.41
14:2S:66:ALA:O	14:2S:69:VAL:HG12	2.20	0.41
32:2a:448:A:C4	32:2a:487:A:C2	3.09	0.41
32:2a:540:G:H2'	32:2a:541:G:O4'	2.21	0.41
32:2a:608:A:H2'	32:2a:609:A:O4'	2.21	0.41
32:2a:636:U:H2'	32:2a:637:G:H8	1.83	0.41
32:2a:1033:G:H2'	32:2a:1034:G:O4'	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1092:A:C6	32:2a:1093:A:C6	3.08	0.41
32:2a:1152:A:P	41:2j:70:ARG:HH22	2.44	0.41
32:2a:1250:A:H4'	40:2i:68:GLY:H	1.86	0.41
32:2a:1273:G:C6	32:2a:1274:G:C4	3.09	0.41
32:2a:1290:G:H2'	32:2a:1291:G:H8	1.86	0.41
32:2a:1394:A:N6	32:2a:1501:C:H5'	2.36	0.41
33:2b:176:GLU:O	33:2b:180:LEU:HG	2.20	0.41
34:2c:109:PRO:C	34:2c:111:LEU:H	2.28	0.41
35:2d:112:VAL:HG23	35:2d:116:GLN:NE2	2.35	0.41
41:2j:83:GLU:C	41:2j:85:LEU:H	2.28	0.41
47:2p:39:TYR:HA	47:2p:48:TRP:O	2.21	0.41
47:2p:40:ASP:HB3	47:2p:48:TRP:HB2	2.03	0.41
49:2r:84:LYS:HE2	49:2r:84:LYS:HB2	1.88	0.41
51:2t:44:ALA:HB3	51:2t:91:LEU:HD12	2.03	0.41
54:2w:34:G:H2'	54:2w:35:A:C8	2.56	0.41
56:2y:44:G:C6	56:2y:45:U:O2	2.73	0.41
1:1A:829:A:N7	1:1A:2248:C:H5'	2.35	0.41
1:1A:862:G:H2'	1:1A:863:A:O4'	2.21	0.41
1:1A:995:C:O2	9:1N:3:THR:OG1	2.39	0.41
1:1A:1085:A:H2'	1:1A:1086:A:N3	2.36	0.41
1:1A:1235:G:C6	1:1A:1236:G:N1	2.89	0.41
1:1A:1341:U:O2	19:1X:80:ILE:HD12	2.20	0.41
1:1A:1394:U:C4	1:1A:1395:A:C6	3.09	0.41
1:1A:1493:C:N3	1:1A:2206:G:C2	2.89	0.41
1:1A:2163:C:OP1	1:1A:2165:G:N2	2.54	0.41
1:1A:2227:A:N6	1:1A:2228:G:C6	2.89	0.41
1:1A:2584:U:H2'	1:1A:2585:U:C6	2.56	0.41
4:1E:46:ALA:CB	4:1E:82:ARG:HA	2.50	0.41
5:1F:117:ARG:NH2	5:1F:187:VAL:HA	2.36	0.41
5:1F:126:VAL:HG21	5:1F:129:PHE:CZ	2.55	0.41
6:1G:91:ARG:HE	6:1G:91:ARG:HB3	1.68	0.41
8:1I:77:LEU:HB3	8:1I:142:VAL:HG12	2.02	0.41
9:1N:138:LEU:HD23	9:1N:139:GLU:N	2.35	0.41
10:1O:49:ARG:NH1	32:1a:1422:G:O3'	2.52	0.41
13:1R:103:ARG:HD3	13:1R:108:GLY:O	2.21	0.41
32:1a:254:G:N2	48:1q:16:GLN:HE22	2.19	0.41
32:1a:271:C:H2'	32:1a:272:C:C6	2.54	0.41
32:1a:500:G:H2'	32:1a:501:C:C6	2.56	0.41
32:1a:901:A:C5	32:1a:902:G:H1'	2.56	0.41
32:1a:1152:A:H5'	41:1j:13:HIS:ND1	2.36	0.41
32:1a:1378:C:C5	32:1a:1379:G:C8	3.09	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:1h:9:MET:SD	39:1h:32:LYS:HB3	2.61	0.41
45:1n:21:TYR:HE1	45:1n:23:ARG:NE	2.18	0.41
51:1t:9:ASN:O	51:1t:10:LEU:HB2	2.20	0.41
54:1w:2:C:OP2	54:1w:2:C:H6	2.04	0.41
54:1w:15:G:N2	54:1w:21:A:H1'	2.36	0.41
1:2A:92:A:C4	1:2A:93:G:C8	3.09	0.41
1:2A:247:G:H4'	1:2A:386:G:C6	2.55	0.41
1:2A:483:A:H3'	1:2A:484:C:C6	2.56	0.41
1:2A:623:G:H2'	1:2A:624:C:C6	2.56	0.41
1:2A:699:A:H2'	1:2A:700:G:O4'	2.20	0.41
1:2A:817:C:O2'	1:2A:839:U:H5''	2.20	0.41
1:2A:894:C:O2'	1:2A:895:U:H5''	2.20	0.41
1:2A:1359:A:H2'	1:2A:1360:A:H5'	2.03	0.41
1:2A:1368:G:C2	1:2A:1369:G:C8	3.09	0.41
1:2A:1651:G:H2'	1:2A:1652:A:O4'	2.21	0.41
1:2A:2287:A:H61	1:2A:2344:U:H3	1.68	0.41
2:2B:90:A:N7	2:2B:91:C:H1'	2.36	0.41
6:2G:18:GLU:HG2	6:2G:21:ARG:HH22	1.86	0.41
6:2G:179:PRO:HG3	26:24:43:TYR:CE2	2.56	0.41
10:2O:60:ALA:HB1	10:2O:84:ALA:HB1	2.01	0.41
10:2O:98:VAL:CG2	10:2O:118:ALA:HA	2.51	0.41
13:2R:98:LEU:H	13:2R:113:LEU:HD12	1.84	0.41
17:2V:53:GLU:HB3	17:2V:54:GLY:H	1.68	0.41
22:20:39:ARG:NH1	22:20:56:ASP:OD2	2.54	0.41
32:2a:229:U:H5''	47:2p:33:ILE:HD13	2.02	0.41
32:2a:599:C:H2'	32:2a:600:C:H6	1.85	0.41
32:2a:669:U:H2'	32:2a:670:G:O4'	2.21	0.41
32:2a:718:G:OP2	32:2a:720:C:N4	2.53	0.41
32:2a:1070:U:O2'	32:2a:1071:C:H5'	2.20	0.41
32:2a:1226:C:N4	44:2m:104:ARG:HG3	2.36	0.41
32:2a:1258:G:H2'	32:2a:1259:C:C6	2.56	0.41
32:2a:1326:C:H2'	32:2a:1327:C:H6	1.86	0.41
33:2b:73:THR:HG22	33:2b:94:ASN:C	2.46	0.41
35:2d:175:SER:HB3	35:2d:184:LYS:HB3	2.02	0.41
36:2e:131:ILE:HD13	36:2e:131:ILE:HA	1.84	0.41
49:2r:39:VAL:O	49:2r:42:ARG:HG3	2.21	0.41
51:2t:13:LEU:HA	51:2t:13:LEU:HD23	1.87	0.41
55:2x:4:G:H2'	55:2x:5:G:C8	2.54	0.41
55:2x:25:C:O5'	55:2x:25:C:H6	2.04	0.41
1:1A:48:G:C2	1:1A:178:G:C6	3.09	0.41
1:1A:68:G:H2'	1:1A:69:C:O4'	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:123:G:H2'	1:1A:124:G:C8	2.55	0.41
1:1A:492:A:H8	1:1A:492:A:O5'	2.03	0.41
1:1A:557:U:H2'	1:1A:558:G:H8	1.86	0.41
1:1A:795:C:H2'	1:1A:796:C:C6	2.55	0.41
1:1A:814:C:H4'	1:1A:1224:C:O2	2.21	0.41
1:1A:901:A:H2'	1:1A:902:C:O4'	2.21	0.41
1:1A:952:G:C6	1:1A:953:A:N7	2.89	0.41
1:1A:1022:G:C5	1:1A:1140:C:C4	3.09	0.41
1:1A:1056:G:O6	1:1A:1101:U:H5''	2.20	0.41
1:1A:1062:G:H22	1:1A:1077:A:N6	2.18	0.41
1:1A:1599:C:OP1	19:1X:36:LYS:HG3	2.21	0.41
1:1A:1773:A:C5	1:1A:1829:A:H1'	2.56	0.41
1:1A:2130:U:O5'	1:1A:2130:U:H6	2.04	0.41
1:1A:2271:G:O5'	1:1A:2271:G:H8	2.03	0.41
1:1A:2629:A:O2'	1:1A:2630:G:OP2	2.37	0.41
1:1A:2630:G:O4'	1:1A:2894:G:H1'	2.21	0.41
2:1B:94:C:H2'	2:1B:95:C:H6	1.86	0.41
6:1G:64:THR:HB	6:1G:94:LEU:HD21	2.02	0.41
7:1H:12:PRO:HD2	7:1H:15:VAL:HG13	2.03	0.41
8:1I:40:THR:OG1	8:1I:42:SER:N	2.54	0.41
11:1P:49:ARG:HE	11:1P:49:ARG:HB2	1.56	0.41
11:1P:101:VAL:HG23	11:1P:106:LEU:O	2.21	0.41
12:1Q:58:PHE:HB3	12:1Q:61:GLY:O	2.21	0.41
13:1R:72:ASP:O	13:1R:76:VAL:HG23	2.21	0.41
14:1S:27:SER:O	14:1S:37:ALA:HA	2.19	0.41
26:14:13:ARG:NH1	26:14:23:GLU:HG2	2.35	0.41
32:1a:33:A:H2'	32:1a:34:C:C6	2.55	0.41
32:1a:160:A:H3'	32:1a:161:A:H8	1.85	0.41
32:1a:162:A:H8	32:1a:162:A:P	2.44	0.41
32:1a:189:G:C4	32:1a:189(L):G:N2	2.89	0.41
32:1a:446:G:C2'	32:1a:447:G:H5'	2.51	0.41
32:1a:474:G:H5'	32:1a:475:G:OP2	2.21	0.41
32:1a:487:A:H2'	32:1a:488:C:O4'	2.21	0.41
32:1a:521:G:H4'	43:1L:73:GLU:HG2	2.03	0.41
32:1a:688:G:H5'	42:1k:46:GLY:C	2.45	0.41
32:1a:697:U:H2'	32:1a:698:G:H5'	2.03	0.41
32:1a:741:G:H2'	32:1a:742:G:O4'	2.20	0.41
32:1a:787:A:H8	32:1a:787:A:H5''	1.86	0.41
32:1a:927:G:C6	32:1a:928:G:C5	3.09	0.41
32:1a:1005:A:OP2	32:1a:1006:C:N4	2.54	0.41
32:1a:1172:C:H2'	32:1a:1173:G:C8	2.51	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1181:G:O2'	32:1a:1182:G:N7	2.54	0.41
32:1a:1368:G:OP2	40:1i:112:LYS:NZ	2.52	0.41
33:1b:19:HIS:CE1	33:1b:206:ASP:HB2	2.56	0.41
33:1b:30:ARG:HH21	33:1b:194:PRO:HB2	1.86	0.41
34:1c:77:ILE:H	34:1c:77:ILE:HG12	1.38	0.41
34:1c:110:ASN:O	34:1c:141:VAL:HG22	2.20	0.41
36:1e:135:THR:O	36:1e:139:LEU:HG	2.21	0.41
37:1f:39:LYS:HB2	37:1f:64:GLN:CG	2.50	0.41
38:1g:72:ARG:HD3	38:1g:142:GLU:OE2	2.21	0.41
38:1g:136:LYS:O	38:1g:140:ASP:HB2	2.21	0.41
38:1g:138:LYS:HE2	38:1g:142:GLU:OE2	2.21	0.41
41:1j:31:GLY:HA3	41:1j:32:ALA:HA	1.84	0.41
44:1m:11:ARG:HH11	44:1m:11:ARG:CB	2.34	0.41
44:1m:15:VAL:HG11	44:1m:48:LEU:HD21	2.03	0.41
54:1w:58:A:C6	54:1w:61:C:C2	3.09	0.41
56:1y:7:A:O2'	56:1y:49:C:OP2	2.34	0.41
1:2A:80:G:H1	1:2A:106:C:H42	1.68	0.41
1:2A:233:A:H2'	1:2A:234:C:O4'	2.21	0.41
1:2A:312:G:H5'	1:2A:331:A:O2'	2.21	0.41
1:2A:569:U:C4	1:2A:570:G:C6	3.09	0.41
1:2A:884:C:H3'	1:2A:885:C:H6	1.86	0.41
1:2A:1152:C:H5''	16:2U:80:ILE:CG2	2.51	0.41
1:2A:1399:C:O2'	1:2A:1400:G:H5'	2.20	0.41
1:2A:1509(A):A:C5	1:2A:1509(B):A:C8	3.09	0.41
1:2A:1707:G:C5	1:2A:1756:G:C6	3.09	0.41
1:2A:1788:C:H2'	1:2A:1789:A:O4'	2.21	0.41
1:2A:1904:G:OP1	62:2A:4002:HOH:O	2.22	0.41
1:2A:2101:G:C2	1:2A:2102:U:C2	3.09	0.41
1:2A:2164:C:C5	1:2A:2165:G:H1'	2.56	0.41
1:2A:2253:G:O6	22:20:4:LYS:NZ	2.54	0.41
1:2A:2331:G:C6	1:2A:2332:U:C4	3.09	0.41
1:2A:2450:A:OP1	1:2A:2497:A:O2'	2.38	0.41
1:2A:2457:U:O4	1:2A:2458:G:C6	2.74	0.41
1:2A:2468:G:C8	1:2A:2476:A:C2	3.09	0.41
1:2A:2782:G:OP2	62:2A:3998:HOH:O	2.21	0.41
1:2A:2802:G:C6	1:2A:2803:C:C2	3.09	0.41
2:2B:39:A:O2'	2:2B:40:U:H5'	2.21	0.41
6:2G:7:LEU:HB2	6:2G:104:GLU:HB2	2.03	0.41
6:2G:129:GLY:O	6:2G:161:THR:HB	2.21	0.41
6:2G:161:THR:HG22	6:2G:163:ALA:N	2.25	0.41
7:2H:22:GLY:O	7:2H:23:ARG:HG3	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2P:63:PRO:HD3	30:28:27:THR:HG22	2.03	0.41
11:2P:138:LEU:HG	11:2P:143:GLY:HA3	2.03	0.41
15:2T:121:ILE:O	15:2T:122:ASP:C	2.63	0.41
16:2U:24:TYR:CD2	16:2U:38:THR:HG21	2.56	0.41
16:2U:39:LEU:HA	16:2U:39:LEU:HD23	1.78	0.41
17:2V:15:GLU:N	17:2V:18:LEU:HD22	2.36	0.41
17:2V:21:ARG:HD3	17:2V:91:TYR:CE1	2.55	0.41
17:2V:35:LEU:HD13	17:2V:57:VAL:HG12	2.02	0.41
18:2W:21:VAL:HG21	18:2W:76:VAL:CG2	2.50	0.41
20:2Y:17:SER:OG	20:2Y:71:LYS:HG2	2.21	0.41
21:2Z:156:LYS:HE3	21:2Z:156:LYS:HB3	1.46	0.41
25:23:7:LYS:HG2	25:23:9:VAL:CG1	2.50	0.41
26:24:61:ARG:HE	50:2s:42:PRO:CD	2.34	0.41
32:2a:64:G:H4'	32:2a:65:U:H3'	2.02	0.41
32:2a:233:C:H2'	32:2a:234:C:H6	1.86	0.41
32:2a:324:G:N2	32:2a:326:G:H3'	2.36	0.41
32:2a:621:A:C6	32:2a:622:A:C6	3.09	0.41
32:2a:713:G:H2'	32:2a:714:G:C8	2.56	0.41
32:2a:715:A:H2'	32:2a:716:A:C8	2.55	0.41
32:2a:933:G:H1	32:2a:1384:C:N4	2.16	0.41
32:2a:1227:A:O3'	44:2m:115:LYS:NZ	2.38	0.41
32:2a:1263:C:O2	32:2a:1273:G:N1	2.54	0.41
32:2a:1367:C:H2'	32:2a:1368:G:O4'	2.21	0.41
32:2a:1412:C:H2'	32:2a:1413:A:C8	2.56	0.41
32:2a:1458:G:H2'	32:2a:1459:C:C6	2.56	0.41
33:2b:91:PRO:HG2	33:2b:155:LEU:HD12	2.03	0.41
33:2b:118:LEU:O	33:2b:122:PHE:HB3	2.21	0.41
34:2c:39:ILE:HD11	34:2c:59:ARG:HH22	1.86	0.41
34:2c:91:LEU:HD21	34:2c:101:LEU:HD23	2.02	0.41
35:2d:36:ARG:C	35:2d:38:TYR:H	2.29	0.41
35:2d:58:LEU:HD22	35:2d:59:ARG:HH21	1.85	0.41
35:2d:64:LEU:HD23	35:2d:75:PHE:HZ	1.86	0.41
35:2d:201:GLN:O	35:2d:204:ILE:HB	2.20	0.41
36:2e:103:GLY:O	36:2e:106:PRO:HD2	2.21	0.41
39:2h:36:LEU:O	39:2h:39:LEU:HB3	2.21	0.41
39:2h:40:ALA:C	39:2h:42:GLU:N	2.79	0.41
40:2i:47:LEU:H	40:2i:47:LEU:HG	1.41	0.41
41:2j:32:ALA:CB	41:2j:33:GLN:HA	2.49	0.41
48:2q:57:VAL:HG12	48:2q:76:LEU:HA	2.03	0.41
49:2r:51:LEU:HD23	49:2r:51:LEU:HA	1.97	0.41
54:2w:10:G:H2'	54:2w:11:C:C6	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:36:A:H2'	54:2w:37:MIA:H8	2.02	0.41
1:1A:443:A:N7	5:1F:45:ARG:HG2	2.36	0.41
1:1A:1297:C:OP1	1:1A:2710:C:H4'	2.21	0.41
1:1A:1810:A:H2'	1:1A:1811:G:O4'	2.20	0.41
1:1A:2017:U:OP2	62:1A:4312:HOH:O	2.22	0.41
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.21	0.41
1:1A:2123:G:C2	1:1A:2176:A:C2	3.09	0.41
1:1A:2232:U:P	23:11:40:ARG:HH12	2.44	0.41
1:1A:2537:U:H2'	1:1A:2538:C:C6	2.56	0.41
1:1A:2812:G:H2'	1:1A:2813:A:C8	2.56	0.41
3:1D:69:ARG:HD2	3:1D:105:ILE:HG21	2.02	0.41
4:1E:5:LEU:N	4:1E:5:LEU:HD23	2.36	0.41
8:1I:57:ARG:CZ	8:1I:57:ARG:HB3	2.51	0.41
8:1I:73:GLU:HG2	8:1I:139:GLN:O	2.21	0.41
12:1Q:97:VAL:HG21	12:1Q:103:MET:HE3	2.03	0.41
14:1S:83:LYS:HB3	14:1S:111:GLU:HG3	2.03	0.41
14:1S:89:ARG:HD2	14:1S:92:TYR:O	2.21	0.41
17:1V:24:LYS:HB3	17:1V:24:LYS:HE3	1.63	0.41
19:1X:72:LYS:HZ2	19:1X:75:ASP:CG	2.29	0.41
21:1Z:7:ALA:HB3	21:1Z:61:LEU:HD13	2.02	0.41
21:1Z:99:TYR:CZ	21:1Z:125:LEU:HD13	2.55	0.41
25:13:8:LEU:HG	25:13:31:LEU:CD2	2.51	0.41
32:1a:235:C:C5'	48:1q:70:ARG:HG3	2.50	0.41
32:1a:433:C:H2'	32:1a:434:U:C6	2.55	0.41
32:1a:559:A:OP1	36:1e:126:ARG:NH2	2.50	0.41
34:1c:110:ASN:HD22	34:1c:140:ARG:HB3	1.86	0.41
35:1d:61:LYS:NZ	35:1d:72:GLU:OE1	2.48	0.41
36:1e:34:VAL:HG12	36:1e:62:ALA:HB1	2.03	0.41
39:1h:10:LEU:HD22	39:1h:83:ILE:HD11	2.02	0.41
40:1i:23:ASN:HB2	40:1i:25:LYS:HD2	2.02	0.41
43:1l:47:LYS:HA	43:1l:48:PRO:HA	1.80	0.41
48:1q:10:VAL:HA	48:1q:20:THR:O	2.20	0.41
54:1w:23:A:C4	54:1w:24:G:C8	3.08	0.41
1:2A:83:G:H1	1:2A:102:G:HO2'	1.69	0.41
1:2A:551:G:O2'	1:2A:1220:A:N3	2.43	0.41
1:2A:861:A:C2	1:2A:917:A:C4	3.09	0.41
1:2A:1149:G:H2'	1:2A:1150:C:H6	1.85	0.41
1:2A:1557:C:H2'	1:2A:1558:A:C2	2.56	0.41
1:2A:2119:A:N6	1:2A:2170:A:N7	2.69	0.41
1:2A:2496:C:OP2	12:2Q:82:ARG:HD3	2.21	0.41
1:2A:2690:C:N4	1:2A:2713:A:H1'	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2865:U:C4	1:2A:2866:U:C4	3.09	0.41
8:2I:77:LEU:HB3	8:2I:142:VAL:HG13	2.02	0.41
8:2I:87:LYS:HB3	8:2I:87:LYS:HE3	1.61	0.41
9:2N:53:VAL:HA	9:2N:121:LYS:O	2.21	0.41
10:2O:2:ILE:HD12	10:2O:6:THR:HG21	2.03	0.41
13:2R:63:ARG:HB2	13:2R:80:PHE:CE2	2.56	0.41
13:2R:103:ARG:HD3	13:2R:108:GLY:O	2.20	0.41
20:2Y:61:ILE:O	20:2Y:61:ILE:HG13	2.20	0.41
22:20:52:GLY:O	22:20:59:LEU:HA	2.20	0.41
31:29:27:CYS:SG	31:29:28:GLU:N	2.93	0.41
32:2a:152:A:C6	32:2a:170:U:O2	2.74	0.41
32:2a:348:G:C2'	32:2a:349:A:H5'	2.51	0.41
32:2a:542:G:OP1	35:2d:10:ARG:NH2	2.52	0.41
32:2a:735:C:H2'	32:2a:736:C:H6	1.86	0.41
32:2a:1015:A:C6	32:2a:1016:A:C6	3.09	0.41
32:2a:1240:U:H3'	32:2a:1241:G:H5'	2.01	0.41
32:2a:1411:C:O2'	32:2a:1412:C:H5'	2.21	0.41
32:2a:1507:A:H2'	32:2a:1508:G:O4'	2.21	0.41
32:2a:1515:C:O2'	32:2a:1516:G:H5'	2.21	0.41
34:2c:120:VAL:HG13	34:2c:133:ALA:CB	2.50	0.41
35:2d:134:ASP:O	35:2d:136:PRO:HD3	2.20	0.41
36:2e:44:GLY:HA3	36:2e:62:ALA:HB2	2.03	0.41
44:2m:44:ARG:HB2	44:2m:47:ASP:OD2	2.21	0.41
46:2o:39:LEU:HD23	46:2o:39:LEU:HA	1.67	0.41
47:2p:7:ALA:O	47:2p:17:TYR:HA	2.21	0.41
1:1A:94(A):G:H2'	1:1A:95:G:O4'	2.20	0.40
1:1A:881:G:C2	1:1A:897:C:O2	2.73	0.40
1:1A:1333:C:H2'	1:1A:1334:G:H8	1.86	0.40
1:1A:1485:G:N1	1:1A:1486:A:C5	2.89	0.40
1:1A:2035:G:H8	62:1A:5224:HOH:O	2.03	0.40
1:1A:2219:G:C2	1:1A:2220:G:C8	3.08	0.40
2:1B:25:A:OP2	62:1B:303:HOH:O	2.22	0.40
2:1B:51:G:C2'	2:1B:52:A:H5'	2.51	0.40
6:1G:75:LYS:HA	6:1G:84:LYS:HD2	2.03	0.40
6:1G:106:LEU:HD12	6:1G:110:ALA:HB3	2.02	0.40
7:1H:12:PRO:O	7:1H:14:GLY:HA2	2.21	0.40
7:1H:24:VAL:HG13	7:1H:37:VAL:HG21	2.03	0.40
8:1I:130:TYR:HD2	8:1I:138:ILE:HD12	1.85	0.40
32:1a:134:A:H61	47:1p:25:ARG:NH1	2.18	0.40
32:1a:571:U:O2'	32:1a:918:A:OP1	2.26	0.40
32:1a:1248:A:C4	32:1a:1290:G:N2	2.89	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1315:U:HO2'	32:1a:1360:A:HO2'	1.62	0.40
33:1b:121:LEU:HA	33:1b:126:GLU:HB2	2.04	0.40
35:1d:97:LEU:HA	35:1d:97:LEU:HD23	1.72	0.40
36:1e:33:VAL:HB	36:1e:43:LEU:HD13	2.02	0.40
40:1i:115:GLY:O	40:1i:116:LYS:HD3	2.21	0.40
42:1k:59:TYR:CZ	42:1k:63:LEU:HD21	2.56	0.40
1:2A:473:G:O2'	1:2A:474:G:H5'	2.21	0.40
1:2A:520:G:H2'	1:2A:521:G:C8	2.56	0.40
1:2A:652(U):G:H2'	1:2A:652(V):C:O4'	2.21	0.40
1:2A:860:U:C4	1:2A:916:G:N2	2.89	0.40
1:2A:1380:G:C8	1:2A:1380:G:O5'	2.74	0.40
1:2A:1453:U:H5	13:2R:73:VAL:HG13	1.86	0.40
1:2A:1857:G:C5	1:2A:1858:G:C6	3.09	0.40
1:2A:2353:G:O2'	22:20:34:GLY:HA3	2.21	0.40
9:2N:38:HIS:CE1	9:2N:39:ARG:HG3	2.56	0.40
11:2P:91:PHE:O	11:2P:123:LEU:HD21	2.21	0.40
12:2Q:1:MET:CG	12:2Q:44:ALA:HB1	2.51	0.40
18:2W:4:LYS:HG2	18:2W:5:ALA:N	2.36	0.40
21:2Z:95:PRO:HA	21:2Z:128:VAL:O	2.20	0.40
21:2Z:121:HIS:HB2	21:2Z:171:ILE:O	2.21	0.40
32:2a:70:G:C6	32:2a:71:C:C4	3.09	0.40
32:2a:192:U:O4'	51:2t:102:GLY:HA2	2.21	0.40
32:2a:605:U:H2'	32:2a:606:G:O4'	2.21	0.40
32:2a:830:G:C6	32:2a:831:U:N3	2.89	0.40
32:2a:864:A:O2'	32:2a:1078:U:O4	2.26	0.40
32:2a:883:C:C2'	32:2a:884:U:H5'	2.51	0.40
32:2a:1074:G:C6	32:2a:1075:C:C4	3.09	0.40
32:2a:1194:U:H4'	36:2e:22:GLY:O	2.20	0.40
32:2a:1201:A:H4'	32:2a:1202:G:O5'	2.21	0.40
35:2d:93:PHE:CZ	35:2d:97:LEU:HD11	2.57	0.40
37:2f:83:ASP:C	37:2f:85:VAL:H	2.28	0.40
39:2h:90:GLY:O	48:2q:34:LYS:HG3	2.21	0.40
47:2p:28:ARG:NH1	47:2p:29:ASP:CG	2.79	0.40
48:2q:9:VAL:O	48:2q:11:VAL:HG13	2.21	0.40
48:2q:95:TYR:O	48:2q:98:LEU:N	2.45	0.40
56:2y:18:G:O3'	56:2y:60:U:H5	2.04	0.40
1:1A:649:G:H2'	1:1A:650:C:H6	1.86	0.40
1:1A:897:C:H2'	1:1A:898:C:C5	2.56	0.40
1:1A:1058:G:OP1	1:1A:1058:G:H4'	2.21	0.40
1:1A:2135:A:H2'	1:1A:2135:A:N3	2.37	0.40
2:1B:87:G:N2	2:1B:89:G:H3'	2.35	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1B:87:G:N2	2:1B:90:A:OP2	2.47	0.40
4:1E:47:VAL:HG22	4:1E:84:PHE:HB3	2.02	0.40
4:1E:72:VAL:HG12	4:1E:73:GLU:O	2.21	0.40
6:1G:20:ILE:O	6:1G:24:GLY:N	2.53	0.40
8:1I:103:ARG:HG2	8:1I:104:GLN:N	2.35	0.40
11:1P:121:LYS:HB3	11:1P:121:LYS:HE2	1.68	0.40
12:1Q:56:ARG:HD2	54:1w:52:G:O3'	2.22	0.40
32:1a:218:C:O2'	32:1a:219:C:H5'	2.22	0.40
32:1a:1122:U:C4	32:1a:1123:A:N7	2.89	0.40
32:1a:1139:G:N2	32:1a:1143:G:C6	2.89	0.40
32:1a:1360:A:H8	32:1a:1360:A:OP1	2.05	0.40
32:1a:1399:C:C4	32:1a:1401:G:C2	3.10	0.40
36:1e:31:LEU:HD23	36:1e:31:LEU:HA	1.91	0.40
39:1h:110:ALA:HB3	39:1h:121:ASP:HB3	2.02	0.40
40:1i:16:ARG:O	40:1i:64:THR:N	2.48	0.40
40:1i:25:LYS:HD2	40:1i:25:LYS:H	1.86	0.40
41:1j:45:ARG:HG2	41:1j:47:PHE:CZ	2.56	0.40
47:1p:67:THR:H	47:1p:70:ALA:HB3	1.86	0.40
47:1p:75:ARG:HA	47:1p:80:PHE:HD2	1.86	0.40
1:2A:861:A:H2'	1:2A:862:G:O4'	2.21	0.40
1:2A:1412:A:H5''	1:2A:1413:G:OP2	2.21	0.40
1:2A:1461:G:O2'	1:2A:1462:C:H5'	2.21	0.40
1:2A:2545:G:O2'	1:2A:2565:A:N1	2.49	0.40
3:2D:224:ALA:HA	3:2D:233:HIS:O	2.21	0.40
3:2D:232:PRO:HG2	3:2D:248:SER:O	2.21	0.40
6:2G:11:TYR:OH	6:2G:16:ARG:HD3	2.20	0.40
6:2G:15:VAL:O	6:2G:19:LEU:HD12	2.22	0.40
6:2G:41:GLN:O	6:2G:43:LEU:HD22	2.22	0.40
9:2N:4:TYR:O	16:2U:64:ARG:NH2	2.51	0.40
10:2O:87:ILE:C	10:2O:94:ARG:HG3	2.47	0.40
11:2P:44:GLY:O	11:2P:45:LEU:HB2	2.21	0.40
12:2Q:46:GLN:NE2	12:2Q:126:PRO:HG3	2.36	0.40
24:22:24:LEU:HD12	24:22:24:LEU:HA	1.87	0.40
28:26:15:GLU:HG3	28:26:47:THR:HG23	2.04	0.40
32:2a:181:G:H4'	32:2a:182:U:H5'	2.03	0.40
32:2a:187:C:O2	51:2t:103:GLY:HA2	2.22	0.40
32:2a:557:G:H2'	32:2a:558:G:O4'	2.22	0.40
32:2a:615:C:H2'	32:2a:616:G:O4'	2.21	0.40
32:2a:1110:A:H8	32:2a:1110:A:O5'	2.03	0.40
32:2a:1133:G:H2'	32:2a:1134:G:H8	1.85	0.40
32:2a:1256:A:N1	32:2a:1278:U:H1'	2.36	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1458:G:H2'	32:2a:1459:C:H6	1.85	0.40
33:2b:7:VAL:HA	33:2b:9:GLU:OE1	2.22	0.40
34:2c:19:GLU:HB3	34:2c:40:ARG:NH2	2.37	0.40
34:2c:178:LEU:C	34:2c:180:ALA:N	2.72	0.40
35:2d:153:ARG:CG	35:2d:181:MET:HE2	2.51	0.40
48:2q:95:TYR:C	48:2q:97:SER:N	2.79	0.40
56:2y:24:G:C6	56:2y:25:C:C4	3.09	0.40
1:1A:515:A:H1'	1:1A:581:C:H1'	2.04	0.40
1:1A:686:G:H1	29:17:16:HIS:CD2	2.40	0.40
1:1A:1139:G:O2'	1:1A:1143:A:N1	2.50	0.40
1:1A:1913:A:N7	32:1a:1494:G:H4'	2.36	0.40
1:1A:2118:U:H5	1:1A:2148:G:N3	2.19	0.40
1:1A:2459:A:C4	1:1A:2460:U:C6	3.09	0.40
1:1A:2853:C:O2'	1:1A:2854:G:H5'	2.20	0.40
2:1B:95:C:H2'	2:1B:96:U:C6	2.56	0.40
5:1F:139:PHE:HB2	5:1F:166:ALA:HB1	2.04	0.40
11:1P:97:PRO:HD3	11:1P:126:VAL:O	2.21	0.40
16:1U:29:SER:C	16:1U:30:LYS:HD3	2.45	0.40
17:1V:14:VAL:HB	17:1V:96:ILE:HG13	2.02	0.40
17:1V:62:LEU:N	17:1V:93:GLU:O	2.51	0.40
17:1V:71:LEU:HA	17:1V:71:LEU:HD23	1.70	0.40
24:12:58:ALA:O	24:12:62:THR:OG1	2.37	0.40
32:1a:149:A:C2	32:1a:150:C:C2	3.09	0.40
32:1a:429:U:OP2	35:1d:36:ARG:NH2	2.52	0.40
32:1a:638:G:C2	32:1a:639:G:C8	3.09	0.40
32:1a:735:C:H2'	32:1a:736:C:H6	1.86	0.40
32:1a:932:C:O3'	38:1g:4:ARG:NH2	2.55	0.40
32:1a:1087:G:N2	32:1a:1099:G:H1'	2.36	0.40
32:1a:1144:G:O2'	32:1a:1145:C:H5'	2.21	0.40
33:1b:113:HIS:O	33:1b:117:GLU:N	2.53	0.40
41:1j:47:PHE:N	41:1j:63:PHE:O	2.54	0.40
42:1k:82:VAL:CG2	42:1k:105:VAL:HG13	2.52	0.40
47:1p:1:MET:SD	47:1p:65:GLN:HG3	2.62	0.40
1:2A:415:A:H2'	1:2A:416:C:O4'	2.21	0.40
1:2A:840:C:H2'	1:2A:841:A:H8	1.85	0.40
1:2A:853:G:O6	1:2A:925:C:N4	2.53	0.40
1:2A:1133:U:O4	1:2A:2026:C:H1'	2.21	0.40
1:2A:1146:C:C4	1:2A:1147:C:C5	3.09	0.40
1:2A:1360:A:N6	1:2A:1371:G:O2'	2.52	0.40
1:2A:1416:G:O2'	1:2A:1417:C:OP2	2.33	0.40
1:2A:1639:U:H4'	1:2A:2699:C:O2'	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2043:C:H2'	1:2A:2044:C:H6	1.86	0.40
1:2A:2172:U:H4'	1:2A:2173:A:OP2	2.21	0.40
1:2A:2348:U:H5'	28:26:21:TYR:CE1	2.57	0.40
1:2A:2847:U:C5	1:2A:2848:G:C5	3.09	0.40
1:2A:2881:C:H2'	1:2A:2882:A:O4'	2.22	0.40
5:2F:181:LEU:HD11	5:2F:186:ILE:HD11	2.03	0.40
6:2G:67:LYS:HD3	26:24:5:ILE:O	2.21	0.40
7:2H:8:PRO:HG3	7:2H:51:ARG:HG3	2.03	0.40
15:2T:30:VAL:HG22	15:2T:86:ILE:HG12	2.03	0.40
17:2V:15:GLU:O	17:2V:18:LEU:HB2	2.22	0.40
19:2X:5:TYR:CE1	24:22:30:ARG:HD2	2.55	0.40
21:2Z:103:ARG:O	21:2Z:139:VAL:N	2.50	0.40
21:2Z:125:LEU:HD12	21:2Z:126:VAL:H	1.87	0.40
22:20:51:VAL:HG21	22:20:79:VAL:O	2.21	0.40
23:21:4:VAL:HG21	23:21:11:ARG:NH2	2.35	0.40
32:2a:106:C:H2'	32:2a:107:G:C8	2.56	0.40
32:2a:882:C:O2'	32:2a:883:C:H5'	2.21	0.40
32:2a:1150:U:H2'	32:2a:1151:A:H5'	2.04	0.40
34:2c:175:LEU:HG	34:2c:182:ILE:CD1	2.51	0.40
39:2h:92:ARG:HA	39:2h:92:ARG:HD3	1.75	0.40
40:2i:48:GLU:O	40:2i:49:PRO:C	2.63	0.40
40:2i:89:ASN:O	40:2i:92:TYR:HB2	2.21	0.40
41:2j:59:SER:O	41:2j:60:ARG:HD3	2.21	0.40
47:2p:50:LYS:O	47:2p:51:VAL:HG23	2.22	0.40
50:2s:36:ARG:HD2	50:2s:52:TYR:O	2.21	0.40
55:2x:19:G:C4	55:2x:57:A:C2	3.09	0.40
56:2y:7:A:H61	56:2y:66:U:H3	1.69	0.40
1:1A:1116:C:H2'	1:1A:1117:G:H5'	2.04	0.40
1:1A:1173:G:H5''	62:1A:5668:HOH:O	2.22	0.40
1:1A:1886:C:H6	1:1A:1886:C:O5'	2.04	0.40
6:1G:43:LEU:C	6:1G:45:GLU:N	2.75	0.40
13:1R:118:GLU:N	13:1R:118:GLU:OE1	2.55	0.40
15:1T:108:ARG:HG3	15:1T:109:GLU:N	2.36	0.40
16:1U:91:ASP:O	16:1U:95:LEU:HD13	2.21	0.40
22:10:41:ARG:HA	62:10:203:HOH:O	2.22	0.40
32:1a:111:G:O5'	32:1a:111:G:H8	2.04	0.40
32:1a:424:G:H2'	32:1a:425:G:H8	1.87	0.40
32:1a:877:C:H5''	39:1h:88:LYS:HD3	2.02	0.40
33:1b:21:ARG:HB3	33:1b:39:ILE:HD12	2.04	0.40
33:1b:97:TRP:CH2	33:1b:173:ALA:HA	2.56	0.40
34:1c:12:LEU:HD23	34:1c:12:LEU:HA	1.73	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:35:GLU:O	34:1c:39:ILE:HG13	2.20	0.40
34:1c:101:LEU:HD12	34:1c:102:ASN:O	2.21	0.40
35:1d:113:SER:O	35:1d:116:GLN:N	2.53	0.40
39:1h:124:ALA:O	39:1h:128:GLY:N	2.55	0.40
44:1m:3:ARG:HG3	44:1m:4:ILE:N	2.32	0.40
56:1y:34:G:OP1	56:1y:34:G:H8	2.04	0.40
56:1y:43:C:H2'	56:1y:44:G:O4'	2.21	0.40
1:2A:394:A:N6	1:2A:395:U:O4	2.55	0.40
1:2A:691:C:O2'	3:2D:41:GLY:HA3	2.22	0.40
1:2A:848:G:C2	1:2A:933:A:H1'	2.57	0.40
1:2A:1266:G:O5'	18:2W:15:ARG:NH2	2.54	0.40
1:2A:1517:G:C6	1:2A:1518:U:N3	2.90	0.40
1:2A:2224:G:H4'	1:2A:2226:C:C2	2.57	0.40
1:2A:2318:G:H21	14:2S:3:ARG:NE	2.15	0.40
1:2A:2400:G:H2'	1:2A:2401:U:H6	1.86	0.40
62:2A:4283:HOH:O	3:2D:31:LYS:HE2	2.20	0.40
2:2B:8:U:O3'	14:2S:15:ARG:NH1	2.54	0.40
4:2E:14:ILE:HB	15:2T:14:TYR:CZ	2.57	0.40
7:2H:125:VAL:HG13	7:2H:131:VAL:HG22	2.03	0.40
7:2H:143:GLN:NE2	7:2H:147:ASN:OD1	2.54	0.40
16:2U:95:LEU:HD12	16:2U:95:LEU:HA	1.90	0.40
24:22:35:LEU:HD11	24:22:49:LYS:HB3	2.02	0.40
26:24:61:ARG:HE	50:2s:42:PRO:HD3	1.86	0.40
32:2a:262:A:C6	32:2a:263:A:C6	3.09	0.40
32:2a:499:A:C4'	32:2a:500:G:H5'	2.49	0.40
32:2a:646:U:H2'	32:2a:647:C:C6	2.56	0.40
32:2a:790:A:OP1	55:2x:38:A:O2'	2.39	0.40
32:2a:960:U:O2	32:2a:960:U:H2'	2.20	0.40
32:2a:1002:G:C6	32:2a:1003:G:H8	2.39	0.40
32:2a:1253:G:C6	32:2a:1254:C:C4	3.09	0.40
32:2a:1403:C:H1'	32:2a:1500:A:N1	2.36	0.40
33:2b:219:VAL:HA	33:2b:222:ILE:HD11	2.03	0.40
39:2h:85:ARG:HH12	39:2h:134:ILE:HD12	1.86	0.40
39:2h:127:LEU:HD23	39:2h:127:LEU:HA	1.71	0.40
40:2i:117:HIS:CE1	40:2i:123:PRO:HB3	2.57	0.40
42:2k:43:SER:HA	42:2k:47:VAL:HG21	2.02	0.40
42:2k:70:LYS:HA	42:2k:73:MET:HE2	2.03	0.40
46:2o:31:LEU:HA	46:2o:31:LEU:HD23	1.84	0.40
48:2q:81:ARG:HD2	48:2q:81:ARG:HA	1.82	0.40
54:2w:54:5MU:H2'	54:2w:55:PSU:O4'	2.20	0.40
56:2y:18:G:H4'	56:2y:60:U:C5	2.57	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:40:C:H2'	1:1A:41:C:C6	2.56	0.40
1:1A:65:C:H5'	19:1X:71:GLY:HA3	2.04	0.40
1:1A:252:G:OP1	11:1P:50:ARG:NH1	2.49	0.40
1:1A:876:C:N3	1:1A:901:A:N6	2.69	0.40
1:1A:883:G:HO2'	1:1A:884:C:H5	1.68	0.40
1:1A:1429:G:H1'	1:1A:1568:G:H1'	2.04	0.40
1:1A:1570:A:H2'	1:1A:1571:A:C8	2.57	0.40
1:1A:1754:C:N3	1:1A:2716:U:O2'	2.47	0.40
1:1A:2119:A:C4	1:1A:2170:A:C2	3.09	0.40
1:1A:2172:U:H3'	1:1A:2173:A:H5'	2.02	0.40
1:1A:2207:G:H2'	1:1A:2208:A:C2	2.56	0.40
1:1A:2233:U:H2'	1:1A:2234:G:C8	2.57	0.40
2:1B:12:C:O2'	22:10:74:ARG:HG2	2.22	0.40
4:1E:49:LEU:HA	4:1E:49:LEU:HD12	1.64	0.40
12:1Q:118:LEU:HA	12:1Q:118:LEU:HD23	1.87	0.40
13:1R:96:ARG:NH2	13:1R:117:VAL:HG13	2.37	0.40
18:1W:34:ASN:ND2	27:15:39:MET:HG3	2.37	0.40
22:10:75:LEU:HA	22:10:75:LEU:HD23	1.87	0.40
24:12:3:LEU:HD23	24:12:3:LEU:HA	1.95	0.40
32:1a:90:U:O2	32:1a:90:U:H2'	2.22	0.40
32:1a:502:G:H2'	32:1a:503:C:O4'	2.21	0.40
32:1a:580:U:H2'	32:1a:581:G:O4'	2.21	0.40
32:1a:625:G:H2'	32:1a:626:U:C6	2.56	0.40
32:1a:768:A:OP1	32:1a:804:U:H4'	2.21	0.40
32:1a:1026:G:H5''	32:1a:1027:C:N4	2.37	0.40
32:1a:1052:U:O2'	32:1a:1055:A:OP2	2.29	0.40
34:1c:138:VAL:HG23	34:1c:151:VAL:HG23	2.03	0.40
41:1j:76:ASN:HA	41:1j:77:PRO:HD3	1.89	0.40
42:1k:73:MET:HG2	42:1k:103:LEU:HD21	2.03	0.40
44:1m:44:ARG:HB2	44:1m:47:ASP:OD2	2.22	0.40
46:1o:4:THR:OG1	46:1o:7:GLU:HG3	2.21	0.40
1:2A:38:A:H2'	1:2A:39:C:C6	2.57	0.40
1:2A:182:A:H2'	1:2A:183:C:O4'	2.21	0.40
1:2A:231:C:O2'	1:2A:232:G:H5'	2.21	0.40
1:2A:298:G:H5''	1:2A:299:A:OP1	2.21	0.40
1:2A:361:G:O2'	1:2A:362:U:H5'	2.22	0.40
1:2A:602:G:O2'	1:2A:655:A:N6	2.55	0.40
1:2A:643:A:O2'	1:2A:644:A:H5'	2.22	0.40
1:2A:1581:G:C6	1:2A:1582:C:C4	3.09	0.40
1:2A:1833:U:O2'	1:2A:1969:A:N1	2.40	0.40
1:2A:1991:U:H2'	1:2A:1992:G:H5''	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2165:G:H22	1:2A:2172:U:H5	1.69	0.40
1:2A:2380:C:H6	1:2A:2380:C:O5'	2.04	0.40
1:2A:2465:C:O2	1:2A:2486:G:C2	2.74	0.40
1:2A:2651:C:H2'	1:2A:2652:C:C6	2.56	0.40
6:2G:151:ALA:HB3	6:2G:153:ARG:NH1	2.36	0.40
9:2N:138:LEU:HD23	9:2N:138:LEU:HA	1.83	0.40
10:2O:12:ASP:OD1	10:2O:12:ASP:C	2.64	0.40
14:2S:83:LYS:HE3	14:2S:83:LYS:HB2	1.96	0.40
17:2V:37:VAL:HG11	17:2V:40:LEU:HG	2.04	0.40
19:2X:32:PRO:O	19:2X:77:LYS:NZ	2.48	0.40
24:22:35:LEU:HA	24:22:35:LEU:HD23	1.85	0.40
32:2a:20:U:H2'	32:2a:21:G:O4'	2.22	0.40
32:2a:145:G:C5	32:2a:146:G:C8	3.09	0.40
32:2a:189(I):G:H2'	32:2a:189(J):G:O4'	2.20	0.40
32:2a:513:C:H2'	32:2a:514:C:C6	2.56	0.40
32:2a:985:C:H2'	32:2a:986:A:C8	2.57	0.40
32:2a:1093:A:N3	32:2a:1095:U:H5'	2.37	0.40
32:2a:1371:G:O3'	40:2i:69:GLY:HA3	2.21	0.40
33:2b:140:HIS:O	33:2b:144:ARG:HB2	2.22	0.40
33:2b:179:LYS:O	33:2b:180:LEU:HD23	2.22	0.40
34:2c:120:VAL:HG11	34:2c:134:ILE:CD1	2.49	0.40
42:2k:103:LEU:HD23	42:2k:103:LEU:HA	1.71	0.40
43:2l:117:ARG:NH2	43:2l:124:LYS:HB2	2.37	0.40
44:2m:10:PRO:HB2	44:2m:13:LYS:HB3	2.03	0.40
46:2o:82:ILE:O	46:2o:86:GLY:N	2.38	0.40
52:2u:6:ARG:H	52:2u:6:ARG:HG2	1.58	0.40
54:2w:29:G:C2	54:2w:42:C:C2	3.09	0.40
56:2y:60:U:O5'	56:2y:61:C:H5	2.05	0.40

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:357:G:O2'	8:2I:89:TYR:O[2_655]	2.19	0.01

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 X-ray entries followed by that with respect to entries of similar resolution.

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	
3	1D	273/276 (99%)	253 (93%)	20 (7%)	0	100	100
3	2D	273/276 (99%)	243 (89%)	27 (10%)	3 (1%)	11	12
4	1E	202/206 (98%)	181 (90%)	19 (9%)	2 (1%)	12	14
4	2E	202/206 (98%)	178 (88%)	18 (9%)	6 (3%)	3	2
5	1F	201/210 (96%)	192 (96%)	7 (4%)	2 (1%)	12	14
5	2F	201/210 (96%)	184 (92%)	13 (6%)	4 (2%)	6	4
6	1G	179/182 (98%)	151 (84%)	24 (13%)	4 (2%)	5	3
6	2G	179/182 (98%)	148 (83%)	25 (14%)	6 (3%)	3	1
7	1H	172/180 (96%)	163 (95%)	8 (5%)	1 (1%)	21	27
7	2H	172/180 (96%)	147 (86%)	23 (13%)	2 (1%)	10	11
8	1I	144/148 (97%)	112 (78%)	28 (19%)	4 (3%)	4	2
8	2I	144/148 (97%)	110 (76%)	27 (19%)	7 (5%)	1	0
9	1N	138/140 (99%)	125 (91%)	10 (7%)	3 (2%)	5	3
9	2N	138/140 (99%)	123 (89%)	12 (9%)	3 (2%)	5	3
10	1O	120/122 (98%)	112 (93%)	8 (7%)	0	100	100
10	2O	120/122 (98%)	106 (88%)	13 (11%)	1 (1%)	16	20
11	1P	147/150 (98%)	123 (84%)	18 (12%)	6 (4%)	2	1
11	2P	147/150 (98%)	121 (82%)	20 (14%)	6 (4%)	2	1
12	1Q	139/141 (99%)	125 (90%)	12 (9%)	2 (1%)	9	8
12	2Q	139/141 (99%)	120 (86%)	17 (12%)	2 (1%)	9	8
13	1R	116/118 (98%)	106 (91%)	10 (9%)	0	100	100
13	2R	116/118 (98%)	107 (92%)	8 (7%)	1 (1%)	14	17
14	1S	108/112 (96%)	98 (91%)	9 (8%)	1 (1%)	14	17
14	2S	108/112 (96%)	90 (83%)	12 (11%)	6 (6%)	1	0
15	1T	129/146 (88%)	117 (91%)	10 (8%)	2 (2%)	7	7

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
15	2T	129/146 (88%)	116 (90%)	12 (9%)	1 (1%)	16	20
16	1U	114/118 (97%)	112 (98%)	2 (2%)	0	100	100
16	2U	114/118 (97%)	105 (92%)	8 (7%)	1 (1%)	14	17
17	1V	99/101 (98%)	90 (91%)	6 (6%)	3 (3%)	3	2
17	2V	99/101 (98%)	91 (92%)	5 (5%)	3 (3%)	3	2
18	1W	110/113 (97%)	107 (97%)	3 (3%)	0	100	100
18	2W	110/113 (97%)	103 (94%)	6 (6%)	1 (1%)	14	17
19	1X	93/96 (97%)	86 (92%)	5 (5%)	2 (2%)	5	3
19	2X	93/96 (97%)	82 (88%)	10 (11%)	1 (1%)	11	12
20	1Y	105/110 (96%)	98 (93%)	6 (6%)	1 (1%)	12	14
20	2Y	105/110 (96%)	97 (92%)	7 (7%)	1 (1%)	12	14
21	1Z	148/206 (72%)	125 (84%)	18 (12%)	5 (3%)	3	1
21	2Z	156/206 (76%)	122 (78%)	27 (17%)	7 (4%)	2	0
22	10	81/85 (95%)	78 (96%)	3 (4%)	0	100	100
22	20	81/85 (95%)	72 (89%)	7 (9%)	2 (2%)	4	3
23	11	95/98 (97%)	86 (90%)	8 (8%)	1 (1%)	11	12
23	21	95/98 (97%)	86 (90%)	8 (8%)	1 (1%)	11	12
24	12	68/72 (94%)	64 (94%)	4 (6%)	0	100	100
24	22	68/72 (94%)	60 (88%)	8 (12%)	0	100	100
25	13	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
25	23	57/60 (95%)	49 (86%)	6 (10%)	2 (4%)	3	1
26	14	67/71 (94%)	48 (72%)	15 (22%)	4 (6%)	1	0
26	24	67/71 (94%)	48 (72%)	12 (18%)	7 (10%)	0	0
27	15	57/60 (95%)	54 (95%)	3 (5%)	0	100	100
27	25	57/60 (95%)	49 (86%)	8 (14%)	0	100	100
28	16	51/54 (94%)	47 (92%)	4 (8%)	0	100	100
28	26	51/54 (94%)	45 (88%)	5 (10%)	1 (2%)	6	4
29	17	46/49 (94%)	43 (94%)	3 (6%)	0	100	100
29	27	46/49 (94%)	44 (96%)	2 (4%)	0	100	100
30	18	62/65 (95%)	60 (97%)	1 (2%)	1 (2%)	7	7
30	28	62/65 (95%)	57 (92%)	5 (8%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
31	19	35/37 (95%)	33 (94%)	2 (6%)	0	100	100
31	29	35/37 (95%)	32 (91%)	2 (6%)	1 (3%)	3	2
33	1b	229/256 (90%)	174 (76%)	36 (16%)	19 (8%)	0	0
33	2b	229/256 (90%)	166 (72%)	45 (20%)	18 (8%)	1	0
34	1c	204/239 (85%)	180 (88%)	23 (11%)	1 (0%)	24	32
34	2c	204/239 (85%)	167 (82%)	31 (15%)	6 (3%)	3	2
35	1d	206/209 (99%)	178 (86%)	24 (12%)	4 (2%)	6	5
35	2d	206/209 (99%)	174 (84%)	25 (12%)	7 (3%)	3	1
36	1e	146/162 (90%)	132 (90%)	12 (8%)	2 (1%)	9	8
36	2e	146/162 (90%)	114 (78%)	24 (16%)	8 (6%)	1	0
37	1f	98/101 (97%)	93 (95%)	5 (5%)	0	100	100
37	2f	98/101 (97%)	87 (89%)	9 (9%)	2 (2%)	6	4
38	1g	153/156 (98%)	128 (84%)	21 (14%)	4 (3%)	4	2
38	2g	153/156 (98%)	127 (83%)	17 (11%)	9 (6%)	1	0
39	1h	135/138 (98%)	126 (93%)	9 (7%)	0	100	100
39	2h	135/138 (98%)	109 (81%)	24 (18%)	2 (2%)	8	7
40	1i	125/128 (98%)	100 (80%)	24 (19%)	1 (1%)	16	20
40	2i	125/128 (98%)	100 (80%)	23 (18%)	2 (2%)	7	7
41	1j	95/105 (90%)	77 (81%)	14 (15%)	4 (4%)	2	0
41	2j	94/105 (90%)	78 (83%)	7 (7%)	9 (10%)	0	0
42	1k	112/129 (87%)	99 (88%)	9 (8%)	4 (4%)	2	1
42	2k	112/129 (87%)	93 (83%)	12 (11%)	7 (6%)	1	0
43	1l	119/132 (90%)	104 (87%)	15 (13%)	0	100	100
43	2l	119/132 (90%)	111 (93%)	6 (5%)	2 (2%)	7	6
44	1m	121/126 (96%)	106 (88%)	15 (12%)	0	100	100
44	2m	120/126 (95%)	90 (75%)	26 (22%)	4 (3%)	3	1
45	1n	58/61 (95%)	53 (91%)	5 (9%)	0	100	100
45	2n	58/61 (95%)	53 (91%)	4 (7%)	1 (2%)	7	6
46	1o	86/89 (97%)	74 (86%)	7 (8%)	5 (6%)	1	0
46	2o	86/89 (97%)	77 (90%)	8 (9%)	1 (1%)	10	11
47	1p	80/88 (91%)	68 (85%)	12 (15%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
47	2p	80/88 (91%)	67 (84%)	12 (15%)	1 (1%)	9	9
48	1q	97/105 (92%)	84 (87%)	12 (12%)	1 (1%)	12	14
48	2q	97/105 (92%)	79 (81%)	14 (14%)	4 (4%)	2	1
49	1r	66/88 (75%)	55 (83%)	7 (11%)	4 (6%)	1	0
49	2r	66/88 (75%)	58 (88%)	7 (11%)	1 (2%)	8	7
50	1s	81/93 (87%)	68 (84%)	10 (12%)	3 (4%)	2	1
50	2s	81/93 (87%)	62 (76%)	14 (17%)	5 (6%)	1	0
51	1t	94/106 (89%)	79 (84%)	9 (10%)	6 (6%)	1	0
51	2t	94/106 (89%)	73 (78%)	16 (17%)	5 (5%)	1	0
52	1u	21/27 (78%)	18 (86%)	2 (10%)	1 (5%)	2	0
52	2u	21/27 (78%)	16 (76%)	3 (14%)	2 (10%)	0	0
All	All	11370/12128 (94%)	9876 (87%)	1219 (11%)	275 (2%)	4	3

All (275) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
8	1I	107	VAL
11	1P	38	GLN
11	1P	39	LYS
20	1Y	78	ALA
21	1Z	53	ILE
21	1Z	93	ASP
26	14	46	GLN
26	14	62	ARG
33	1b	17	PHE
33	1b	20	GLU
33	1b	21	ARG
33	1b	22	LYS
35	1d	88	VAL
35	1d	173	TRP
41	1j	30	SER
41	1j	79	ARG
46	1o	88	ARG
51	1t	100	ILE
3	2D	273	ARG
5	2F	130	ALA
5	2F	149	ASP
6	2G	43	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	2G	50	ALA
6	2G	51	ARG
7	2H	126	PRO
7	2H	165	ALA
8	2I	10	GLU
8	2I	135	GLU
11	2P	29	LYS
14	2S	57	LYS
17	2V	53	GLU
17	2V	79	VAL
21	2Z	128	VAL
21	2Z	142	SER
21	2Z	146	ILE
21	2Z	154	ASP
26	24	48	ARG
33	2b	16	HIS
33	2b	17	PHE
33	2b	74	LYS
33	2b	121	LEU
33	2b	195	ASP
33	2b	224	GLN
33	2b	231	GLU
36	2e	11	ILE
40	2i	56	LEU
40	2i	121	ARG
41	2j	55	LYS
42	2k	104	GLN
42	2k	117	ASN
44	2m	95	GLY
44	2m	106	ASN
48	2q	96	GLU
50	2s	27	GLU
50	2s	40	ILE
50	2s	81	ARG
51	2t	10	LEU
51	2t	99	LEU
6	1G	49	ASP
7	1H	126	PRO
8	1I	116	LEU
11	1P	87	ASP
15	1T	106	SER
17	1V	43	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	1V	100	ARG
19	1X	94	GLY
21	1Z	52	SER
21	1Z	60	GLU
33	1b	34	ALA
33	1b	129	GLU
36	1e	85	GLY
41	1j	55	LYS
42	1k	49	GLY
42	1k	77	MET
46	1o	19	PRO
48	1q	68	ARG
49	1r	54	ARG
50	1s	68	GLY
51	1t	96	GLY
4	2E	18	ASP
4	2E	129	HIS
5	2F	17	ARG
6	2G	42	GLY
6	2G	181	ARG
8	2I	115	ALA
9	2N	8	GLN
11	2P	38	GLN
11	2P	44	GLY
12	2Q	22	LYS
12	2Q	58	PHE
14	2S	84	GLN
14	2S	96	GLY
17	2V	100	ARG
18	2W	11	ARG
20	2Y	51	VAL
21	2Z	93	ASP
23	21	3	LYS
26	24	4	GLY
26	24	45	GLY
33	2b	106	LYS
34	2c	13	GLY
36	2e	69	VAL
36	2e	140	ARG
37	2f	42	GLU
38	2g	63	LYS
38	2g	80	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	2g	152	ALA
38	2g	153	HIS
41	2j	77	PRO
41	2j	89	ASP
42	2k	49	GLY
44	2m	29	ARG
45	2n	25	VAL
46	2o	87	ILE
47	2p	62	VAL
48	2q	68	ARG
51	2t	47	GLY
52	2u	3	LYS
4	1E	203	LYS
5	1F	130	ALA
6	1G	84	LYS
6	1G	181	ARG
9	1N	28	THR
15	1T	55	ASN
26	14	53	GLU
30	18	61	LEU
33	1b	16	HIS
33	1b	77	ALA
33	1b	82	ARG
33	1b	155	LEU
34	1c	66	VAL
49	1r	84	LYS
51	1t	68	LYS
52	1u	23	PRO
8	2I	40	THR
10	2O	5	GLN
11	2P	119	GLU
14	2S	85	VAL
26	24	18	CYS
28	26	3	SER
33	2b	24	TRP
33	2b	43	ASP
33	2b	78	GLN
33	2b	125	PRO
34	2c	43	LEU
34	2c	54	ARG
35	2d	3	ARG
35	2d	177	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	2e	37	ARG
36	2e	108	ALA
38	2g	54	THR
38	2g	55	GLY
39	2h	22	GLU
41	2j	31	GLY
42	2k	54	ARG
42	2k	105	VAL
48	2q	12	SER
48	2q	67	LYS
49	2r	55	ARG
50	2s	7	LYS
4	1E	52	LEU
9	1N	2	LYS
17	1V	53	GLU
23	1I	10	LYS
33	1b	231	GLU
38	1g	80	VAL
40	1i	52	ALA
41	1j	77	PRO
46	1o	23	GLY
46	1o	87	ILE
50	1s	47	HIS
51	1t	46	GLU
4	2E	52	LEU
6	2G	47	LYS
9	2N	2	LYS
11	2P	45	LEU
13	2R	45	ARG
16	2U	116	ALA
22	20	10	THR
26	24	38	LYS
33	2b	21	ARG
33	2b	123	ALA
34	2c	156	ARG
34	2c	179	ARG
36	2e	68	GLU
36	2e	96	PRO
37	2f	84	ASN
38	2g	84	ASN
38	2g	130	GLY
41	2j	35	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	2j	78	ASN
41	2j	84	GLN
43	2l	105	TYR
50	2s	24	ALA
51	2t	89	ARG
8	1I	40	THR
14	1S	6	ALA
19	1X	2	LYS
33	1b	13	ALA
33	1b	19	HIS
33	1b	78	GLN
35	1d	86	LYS
35	1d	172	PRO
38	1g	148	ASN
51	1t	74	LYS
3	2D	134	ARG
3	2D	169	GLU
4	2E	155	LYS
5	2F	119	ARG
8	2I	26	ALA
11	2P	36	LYS
14	2S	94	TYR
21	2Z	144	LEU
25	23	44	ARG
26	24	49	PHE
33	2b	20	GLU
33	2b	105	PHE
33	2b	225	ALA
35	2d	73	ARG
35	2d	185	PHE
42	2k	91	ARG
43	2l	91	LYS
44	2m	18	ALA
52	2u	23	PRO
8	1I	34	GLY
9	1N	111	PRO
11	1P	122	PRO
33	1b	76	GLN
33	1b	83	MET
33	1b	124	SER
36	1e	69	VAL
38	1g	10	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	1k	95	ILE
46	1o	86	GLY
50	1s	67	VAL
51	1t	10	LEU
4	2E	57	LYS
8	2I	80	PRO
15	2T	37	GLY
19	2X	2	LYS
21	2Z	157	LEU
26	24	60	GLN
34	2c	39	ILE
35	2d	172	PRO
41	2j	37	PRO
12	1Q	3	MET
21	1Z	167	PRO
26	14	54	GLY
33	1b	208	ILE
42	1k	105	VAL
35	2d	167	GLY
51	2t	100	ILE
5	1F	25	PRO
33	1b	26	PRO
38	1g	55	GLY
9	2N	126	PRO
33	2b	227	GLY
6	1G	44	GLY
11	1P	23	PRO
11	1P	47	ASP
12	1Q	96	VAL
49	1r	27	GLY
49	1r	75	ILE
8	2I	8	PRO
22	20	28	GLY
25	23	59	VAL
35	2d	5	ILE
38	2g	17	VAL
14	2S	109	GLY
36	2e	85	GLY
4	2E	172	VAL
31	29	21	GLY
39	2h	51	VAL
41	2j	91	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	2k	118	GLY

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 X-ray entries followed by that with respect to entries of similar resolution.

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	
3	1D	215/218 (99%)	196 (91%)	19 (9%)	9	10
3	2D	215/218 (99%)	194 (90%)	21 (10%)	7	7
4	1E	164/166 (99%)	142 (87%)	22 (13%)	4	3
4	2E	164/166 (99%)	146 (89%)	18 (11%)	6	5
5	1F	160/166 (96%)	134 (84%)	26 (16%)	2	1
5	2F	159/166 (96%)	137 (86%)	22 (14%)	3	3
6	1G	143/156 (92%)	124 (87%)	19 (13%)	4	3
6	2G	143/156 (92%)	117 (82%)	26 (18%)	2	1
7	1H	144/148 (97%)	126 (88%)	18 (12%)	4	4
7	2H	144/148 (97%)	115 (80%)	29 (20%)	1	0
8	1I	113/124 (91%)	84 (74%)	29 (26%)	0	0
8	2I	105/124 (85%)	74 (70%)	31 (30%)	0	0
9	1N	118/119 (99%)	103 (87%)	15 (13%)	4	4
9	2N	118/119 (99%)	92 (78%)	26 (22%)	1	0
10	1O	100/100 (100%)	88 (88%)	12 (12%)	5	4
10	2O	100/100 (100%)	87 (87%)	13 (13%)	4	3
11	1P	115/116 (99%)	105 (91%)	10 (9%)	9	11
11	2P	115/116 (99%)	103 (90%)	12 (10%)	7	6
12	1Q	111/111 (100%)	100 (90%)	11 (10%)	7	7
12	2Q	111/111 (100%)	96 (86%)	15 (14%)	4	3
13	1R	101/101 (100%)	91 (90%)	10 (10%)	7	7
13	2R	101/101 (100%)	90 (89%)	11 (11%)	6	5
14	1S	86/88 (98%)	72 (84%)	14 (16%)	2	1

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
14	2S	85/88 (97%)	74 (87%)	11 (13%)	4	3
15	1T	115/127 (91%)	100 (87%)	15 (13%)	4	3
15	2T	113/127 (89%)	102 (90%)	11 (10%)	8	8
16	1U	93/94 (99%)	84 (90%)	9 (10%)	8	8
16	2U	93/94 (99%)	81 (87%)	12 (13%)	4	3
17	1V	80/82 (98%)	69 (86%)	11 (14%)	3	3
17	2V	80/82 (98%)	65 (81%)	15 (19%)	1	0
18	1W	90/92 (98%)	77 (86%)	13 (14%)	3	2
18	2W	90/92 (98%)	79 (88%)	11 (12%)	5	4
19	1X	77/78 (99%)	71 (92%)	6 (8%)	11	14
19	2X	77/78 (99%)	71 (92%)	6 (8%)	11	14
20	1Y	85/91 (93%)	72 (85%)	13 (15%)	3	2
20	2Y	85/91 (93%)	69 (81%)	16 (19%)	1	0
21	1Z	135/179 (75%)	111 (82%)	24 (18%)	2	1
21	2Z	137/179 (76%)	105 (77%)	32 (23%)	1	0
22	10	65/67 (97%)	61 (94%)	4 (6%)	16	23
22	20	65/67 (97%)	61 (94%)	4 (6%)	16	23
23	11	80/83 (96%)	74 (92%)	6 (8%)	12	16
23	21	80/83 (96%)	64 (80%)	16 (20%)	1	0
24	12	65/67 (97%)	59 (91%)	6 (9%)	8	9
24	22	65/67 (97%)	58 (89%)	7 (11%)	6	6
25	13	51/52 (98%)	44 (86%)	7 (14%)	3	3
25	23	50/52 (96%)	43 (86%)	7 (14%)	3	3
26	14	59/63 (94%)	48 (81%)	11 (19%)	1	1
26	24	53/63 (84%)	42 (79%)	11 (21%)	1	0
27	15	50/52 (96%)	48 (96%)	2 (4%)	28	41
27	25	50/52 (96%)	47 (94%)	3 (6%)	17	26
28	16	51/52 (98%)	43 (84%)	8 (16%)	2	1
28	26	50/52 (96%)	44 (88%)	6 (12%)	5	4
29	17	41/42 (98%)	34 (83%)	7 (17%)	2	1
29	27	41/42 (98%)	38 (93%)	3 (7%)	13	17

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
30	18	54/55 (98%)	48 (89%)	6 (11%)	6	5
30	28	54/55 (98%)	48 (89%)	6 (11%)	6	5
31	19	34/34 (100%)	33 (97%)	1 (3%)	37	52
31	29	34/34 (100%)	28 (82%)	6 (18%)	2	1
33	1b	192/220 (87%)	156 (81%)	36 (19%)	1	0
33	2b	187/220 (85%)	152 (81%)	35 (19%)	1	0
34	1c	142/188 (76%)	123 (87%)	19 (13%)	4	3
34	2c	140/188 (74%)	115 (82%)	25 (18%)	2	1
35	1d	169/181 (93%)	143 (85%)	26 (15%)	2	2
35	2d	173/181 (96%)	139 (80%)	34 (20%)	1	0
36	1e	113/123 (92%)	95 (84%)	18 (16%)	2	1
36	2e	114/123 (93%)	92 (81%)	22 (19%)	1	0
37	1f	84/90 (93%)	72 (86%)	12 (14%)	3	2
37	2f	85/90 (94%)	66 (78%)	19 (22%)	1	0
38	1g	119/127 (94%)	98 (82%)	21 (18%)	2	1
38	2g	120/127 (94%)	100 (83%)	20 (17%)	2	1
39	1h	114/119 (96%)	102 (90%)	12 (10%)	6	6
39	2h	114/119 (96%)	99 (87%)	15 (13%)	4	3
40	1i	90/99 (91%)	78 (87%)	12 (13%)	4	3
40	2i	89/99 (90%)	73 (82%)	16 (18%)	2	1
41	1j	66/92 (72%)	56 (85%)	10 (15%)	3	2
41	2j	69/92 (75%)	54 (78%)	15 (22%)	1	0
42	1k	82/99 (83%)	72 (88%)	10 (12%)	5	4
42	2k	83/99 (84%)	62 (75%)	21 (25%)	0	0
43	1l	96/108 (89%)	89 (93%)	7 (7%)	13	17
43	2l	96/108 (89%)	81 (84%)	15 (16%)	2	1
44	1m	93/101 (92%)	80 (86%)	13 (14%)	3	3
44	2m	92/101 (91%)	68 (74%)	24 (26%)	0	0
45	1n	49/50 (98%)	41 (84%)	8 (16%)	2	1
45	2n	49/50 (98%)	45 (92%)	4 (8%)	10	13
46	1o	78/80 (98%)	68 (87%)	10 (13%)	4	3

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
46	2o	78/80 (98%)	69 (88%)	9 (12%)	5	5
47	1p	69/74 (93%)	59 (86%)	10 (14%)	3	2
47	2p	68/74 (92%)	59 (87%)	9 (13%)	4	3
48	1q	94/97 (97%)	85 (90%)	9 (10%)	8	8
48	2q	94/97 (97%)	82 (87%)	12 (13%)	4	3
49	1r	59/77 (77%)	53 (90%)	6 (10%)	7	6
49	2r	59/77 (77%)	54 (92%)	5 (8%)	10	11
50	1s	69/80 (86%)	60 (87%)	9 (13%)	4	3
50	2s	67/80 (84%)	56 (84%)	11 (16%)	2	1
51	1t	70/82 (85%)	60 (86%)	10 (14%)	3	2
51	2t	70/82 (85%)	60 (86%)	10 (14%)	3	2
52	1u	18/22 (82%)	17 (94%)	1 (6%)	19	27
52	2u	18/22 (82%)	17 (94%)	1 (6%)	19	27
All	All	9303/10064 (92%)	7961 (86%)	1342 (14%)	3	2

All (1342) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	22	SER
3	1D	27	THR
3	1D	37	LEU
3	1D	75	ILE
3	1D	88	ARG
3	1D	106	ILE
3	1D	136	ILE
3	1D	142	VAL
3	1D	147	LEU
3	1D	155	LEU
3	1D	157	ARG
3	1D	162	SER
3	1D	173	VAL
3	1D	221	VAL
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	276	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	1E	1	MET
4	1E	5	LEU
4	1E	9	VAL
4	1E	21	VAL
4	1E	33	VAL
4	1E	34	VAL
4	1E	36	ARG
4	1E	41	LYS
4	1E	49	LEU
4	1E	58	ARG
4	1E	69	LYS
4	1E	73	GLU
4	1E	78	LEU
4	1E	93	VAL
4	1E	102	VAL
4	1E	116	VAL
4	1E	127	ASP
4	1E	146	THR
4	1E	181	LEU
4	1E	184	VAL
4	1E	188	VAL
4	1E	202	LYS
5	1F	15	SER
5	1F	19	GLU
5	1F	24	LEU
5	1F	28	ILE
5	1F	33	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	60	SER
5	1F	70	THR
5	1F	74	ARG
5	1F	82	ILE
5	1F	88	VAL
5	1F	106	ARG
5	1F	127	GLU
5	1F	132	VAL
5	1F	144	LYS
5	1F	157	VAL
5	1F	158	THR
5	1F	162	LEU
5	1F	165	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	1F	168	ARG
5	1F	175	THR
5	1F	183	VAL
5	1F	192	LEU
5	1F	195	ASP
5	1F	201	VAL
6	1G	3	LEU
6	1G	5	VAL
6	1G	7	LEU
6	1G	43	LEU
6	1G	49	ASP
6	1G	60	LEU
6	1G	70	VAL
6	1G	91	ARG
6	1G	103	LEU
6	1G	108	ASN
6	1G	109	VAL
6	1G	115	ARG
6	1G	126	ASP
6	1G	139	LEU
6	1G	140	ILE
6	1G	149	VAL
6	1G	150	ASP
6	1G	159	VAL
6	1G	161	THR
7	1H	2	SER
7	1H	15	VAL
7	1H	16	SER
7	1H	19	VAL
7	1H	43	VAL
7	1H	52	VAL
7	1H	56	SER
7	1H	58	GLU
7	1H	76	VAL
7	1H	80	SER
7	1H	81	GLU
7	1H	98	LEU
7	1H	116	GLU
7	1H	119	GLU
7	1H	124	GLU
7	1H	134	SER
7	1H	141	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	1H	143	GLN
8	1I	3	VAL
8	1I	9	LEU
8	1I	10	GLU
8	1I	12	LEU
8	1I	17	GLN
8	1I	27	ARG
8	1I	40	THR
8	1I	41	GLU
8	1I	45	LYS
8	1I	47	LEU
8	1I	50	ARG
8	1I	58	LEU
8	1I	68	LEU
8	1I	77	LEU
8	1I	86	THR
8	1I	87	LYS
8	1I	92	VAL
8	1I	93	THR
8	1I	96	ASP
8	1I	99	GLU
8	1I	102	SER
8	1I	103	ARG
8	1I	108	THR
8	1I	109	ILE
8	1I	122	GLU
8	1I	123	LEU
8	1I	127	VAL
8	1I	133	HIS
8	1I	140	LEU
9	1N	1	MET
9	1N	14	VAL
9	1N	23	LEU
9	1N	34	LEU
9	1N	43	THR
9	1N	48	MET
9	1N	55	VAL
9	1N	62	VAL
9	1N	65	LYS
9	1N	67	LEU
9	1N	68	GLU
9	1N	89	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	1N	96	GLU
9	1N	138	LEU
9	1N	140	VAL
10	1O	21	CYS
10	1O	28	SER
10	1O	39	ILE
10	1O	42	SER
10	1O	47	ILE
10	1O	53	LYS
10	1O	63	VAL
10	1O	69	ILE
10	1O	70	LYS
10	1O	98	VAL
10	1O	113	LYS
10	1O	116	SER
11	1P	1	MET
11	1P	6	LEU
11	1P	7	ARG
11	1P	42	SER
11	1P	45	LEU
11	1P	49	ARG
11	1P	56	SER
11	1P	96	THR
11	1P	135	LEU
11	1P	147	LEU
12	1Q	1	MET
12	1Q	7	MET
12	1Q	56	ARG
12	1Q	59	ARG
12	1Q	63	LYS
12	1Q	72	LYS
12	1Q	75	THR
12	1Q	103	MET
12	1Q	115	MET
12	1Q	124	LYS
12	1Q	133	ARG
13	1R	5	LYS
13	1R	8	ARG
13	1R	15	SER
13	1R	35	THR
13	1R	44	LEU
13	1R	67	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	1R	75	LEU
13	1R	91	GLN
13	1R	100	LEU
13	1R	114	VAL
14	1S	14	VAL
14	1S	15	ARG
14	1S	18	ILE
14	1S	36	TYR
14	1S	38	GLN
14	1S	49	VAL
14	1S	57	LYS
14	1S	69	VAL
14	1S	71	ARG
14	1S	78	LEU
14	1S	85	VAL
14	1S	88	ASP
14	1S	98	VAL
14	1S	110	LEU
15	1T	10	VAL
15	1T	12	SER
15	1T	17	THR
15	1T	23	ARG
15	1T	35	LYS
15	1T	39	ARG
15	1T	49	VAL
15	1T	51	ARG
15	1T	65	LYS
15	1T	66	VAL
15	1T	67	SER
15	1T	75	ILE
15	1T	82	LEU
15	1T	96	ARG
15	1T	128	GLU
16	1U	17	ILE
16	1U	31	SER
16	1U	55	ARG
16	1U	60	LEU
16	1U	74	LEU
16	1U	78	THR
16	1U	95	LEU
16	1U	101	ARG
16	1U	108	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	1V	7	THR
17	1V	20	LEU
17	1V	28	GLU
17	1V	32	THR
17	1V	56	SER
17	1V	61	VAL
17	1V	78	LYS
17	1V	79	VAL
17	1V	82	ARG
17	1V	85	LYS
17	1V	100	ARG
18	1W	6	ILE
18	1W	11	ARG
18	1W	19	LEU
18	1W	50	VAL
18	1W	53	SER
18	1W	60	ASN
18	1W	67	ASP
18	1W	72	LYS
18	1W	90	ARG
18	1W	92	ARG
18	1W	96	ILE
18	1W	106	ILE
18	1W	107	LEU
19	1X	23	GLU
19	1X	35	THR
19	1X	54	VAL
19	1X	60	ARG
19	1X	72	LYS
19	1X	81	VAL
20	1Y	1	MET
20	1Y	7	VAL
20	1Y	9	LYS
20	1Y	14	LEU
20	1Y	17	SER
20	1Y	28	LYS
20	1Y	31	LEU
20	1Y	61	ILE
20	1Y	71	LYS
20	1Y	72	VAL
20	1Y	73	ARG
20	1Y	85	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	1Y	96	ILE
21	1Z	28	MET
21	1Z	33	LEU
21	1Z	36	LYS
21	1Z	40	ASP
21	1Z	42	VAL
21	1Z	46	LYS
21	1Z	53	ILE
21	1Z	56	VAL
21	1Z	61	LEU
21	1Z	65	GLN
21	1Z	72	ARG
21	1Z	84	GLU
21	1Z	86	VAL
21	1Z	104	PHE
21	1Z	124	ILE
21	1Z	128	VAL
21	1Z	129	SER
21	1Z	138	GLU
21	1Z	139	VAL
21	1Z	154	ASP
21	1Z	155	LEU
21	1Z	161	VAL
21	1Z	163	LEU
21	1Z	171	ILE
22	10	14	ARG
22	10	43	THR
22	10	49	LYS
22	10	55	ARG
23	11	46	LEU
23	11	52	ARG
23	11	59	THR
23	11	65	SER
23	11	81	LYS
23	11	89	GLU
24	12	4	SER
24	12	27	GLU
24	12	40	SER
24	12	45	SER
24	12	53	LEU
24	12	62	THR
25	13	23	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	13	24	LYS
25	13	31	LEU
25	13	34	GLU
25	13	37	LEU
25	13	54	VAL
25	13	56	VAL
26	14	5	ILE
26	14	13	ARG
26	14	14	ILE
26	14	30	GLU
26	14	49	PHE
26	14	52	THR
26	14	53	GLU
26	14	60	GLN
26	14	63	TYR
26	14	66	SER
26	14	68	ARG
27	15	6	VAL
27	15	40	LYS
28	16	5	VAL
28	16	6	ARG
28	16	7	ILE
28	16	19	ARG
28	16	24	GLU
28	16	34	LEU
28	16	47	THR
28	16	48	VAL
29	17	1	MET
29	17	14	LYS
29	17	24	THR
29	17	29	LYS
29	17	41	ARG
29	17	43	THR
29	17	46	VAL
30	18	4	MET
30	18	14	VAL
30	18	23	VAL
30	18	39	LYS
30	18	46	ARG
30	18	50	LEU
31	19	18	ARG
33	1b	12	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	1b	21	ARG
33	1b	35	GLU
33	1b	41	ILE
33	1b	44	LEU
33	1b	48	MET
33	1b	51	LEU
33	1b	54	THR
33	1b	60	ASP
33	1b	63	MET
33	1b	78	GLN
33	1b	79	ASP
33	1b	80	ILE
33	1b	81	VAL
33	1b	83	MET
33	1b	93	VAL
33	1b	97	TRP
33	1b	102	LEU
33	1b	107	THR
33	1b	108	ILE
33	1b	112	VAL
33	1b	113	HIS
33	1b	119	GLU
33	1b	121	LEU
33	1b	127	ILE
33	1b	146	GLN
33	1b	157	ARG
33	1b	164	VAL
33	1b	169	LYS
33	1b	170	GLU
33	1b	196	LEU
33	1b	208	ILE
33	1b	212	GLN
33	1b	217	ARG
33	1b	223	ILE
33	1b	229	VAL
34	1c	3	ASN
34	1c	49	SER
34	1c	63	ASN
34	1c	66	VAL
34	1c	70	VAL
34	1c	77	ILE
34	1c	82	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	1c	98	ASN
34	1c	104	GLN
34	1c	115	LEU
34	1c	127	ARG
34	1c	138	VAL
34	1c	166	GLU
34	1c	175	LEU
34	1c	178	LEU
34	1c	182	ILE
34	1c	196	LEU
34	1c	201	TYR
34	1c	202	ILE
35	1d	3	ARG
35	1d	5	ILE
35	1d	17	VAL
35	1d	24	GLU
35	1d	28	SER
35	1d	58	LEU
35	1d	66	ARG
35	1d	70	ILE
35	1d	77	ASN
35	1d	83	SER
35	1d	85	LYS
35	1d	86	LYS
35	1d	89	THR
35	1d	108	LEU
35	1d	112	VAL
35	1d	115	ARG
35	1d	122	ARG
35	1d	135	LEU
35	1d	140	VAL
35	1d	152	SER
35	1d	157	LEU
35	1d	178	VAL
35	1d	184	LYS
35	1d	188	LEU
35	1d	193	ASP
35	1d	194	LEU
36	1e	10	MET
36	1e	12	LEU
36	1e	19	MET
36	1e	31	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1e	33	VAL
36	1e	38	GLN
36	1e	41	VAL
36	1e	53	LEU
36	1e	63	ARG
36	1e	64	ARG
36	1e	79	GLU
36	1e	80	ILE
36	1e	91	LEU
36	1e	119	LEU
36	1e	125	SER
36	1e	126	ARG
36	1e	149	GLU
36	1e	150	ARG
37	1f	19	LEU
37	1f	21	LEU
37	1f	22	GLU
37	1f	39	LYS
37	1f	40	VAL
37	1f	55	ASP
37	1f	66	GLU
37	1f	70	ASP
37	1f	72	VAL
37	1f	75	LEU
37	1f	78	GLU
37	1f	100	ASN
38	1g	6	ARG
38	1g	12	LEU
38	1g	13	GLN
38	1g	21	VAL
38	1g	32	ARG
38	1g	50	ILE
38	1g	57	GLU
38	1g	59	LEU
38	1g	61	VAL
38	1g	66	VAL
38	1g	79	ARG
38	1g	85	TYR
38	1g	86	GLN
38	1g	90	GLU
38	1g	91	VAL
38	1g	104	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	1g	113	GLU
38	1g	114	ARG
38	1g	115	ARG
38	1g	120	ILE
38	1g	155	ARG
39	1h	19	VAL
39	1h	21	LYS
39	1h	23	SER
39	1h	39	LEU
39	1h	45	ILE
39	1h	48	TYR
39	1h	50	ARG
39	1h	99	GLU
39	1h	112	LEU
39	1h	115	SER
39	1h	122	ARG
39	1h	133	LEU
40	1i	14	VAL
40	1i	17	VAL
40	1i	27	THR
40	1i	38	GLN
40	1i	64	THR
40	1i	66	ARG
40	1i	81	ILE
40	1i	92	TYR
40	1i	96	LEU
40	1i	103	THR
40	1i	108	VAL
40	1i	128	ARG
41	1j	21	GLN
41	1j	44	VAL
41	1j	46	ARG
41	1j	49	VAL
41	1j	67	THR
41	1j	81	THR
41	1j	92	THR
41	1j	97	GLU
41	1j	98	ILE
41	1j	100	THR
42	1k	25	TYR
42	1k	31	THR
42	1k	40	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	1k	41	THR
42	1k	51	LYS
42	1k	73	MET
42	1k	84	VAL
42	1k	87	THR
42	1k	107	SER
42	1k	117	ASN
43	1l	18	VAL
43	1l	36	VAL
43	1l	54	LYS
43	1l	57	LYS
43	1l	62	SER
43	1l	83	VAL
43	1l	96	VAL
44	1m	3	ARG
44	1m	4	ILE
44	1m	17	VAL
44	1m	19	LEU
44	1m	32	GLU
44	1m	49	THR
44	1m	54	VAL
44	1m	60	VAL
44	1m	64	TRP
44	1m	70	LEU
44	1m	96	LEU
44	1m	99	ARG
44	1m	122	LYS
45	1n	6	LEU
45	1n	7	ILE
45	1n	9	LYS
45	1n	18	VAL
45	1n	25	VAL
45	1n	33	VAL
45	1n	35	ARG
45	1n	60	SER
46	1o	5	LYS
46	1o	7	GLU
46	1o	19	PRO
46	1o	21	ASP
46	1o	24	SER
46	1o	27	VAL
46	1o	39	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	1o	84	LYS
46	1o	87	ILE
46	1o	88	ARG
47	1p	4	ILE
47	1p	20	VAL
47	1p	21	VAL
47	1p	27	LYS
47	1p	29	ASP
47	1p	45	THR
47	1p	50	LYS
47	1p	57	ARG
47	1p	60	LEU
47	1p	62	VAL
48	1q	14	LYS
48	1q	26	GLN
48	1q	36	ILE
48	1q	52	LYS
48	1q	53	LEU
48	1q	60	ILE
48	1q	73	VAL
48	1q	74	LEU
48	1q	83	ASP
49	1r	31	LEU
49	1r	37	VAL
49	1r	49	LYS
49	1r	54	ARG
49	1r	68	LYS
49	1r	84	LYS
50	1s	5	LEU
50	1s	6	LYS
50	1s	28	LYS
50	1s	32	LYS
50	1s	37	ARG
50	1s	51	VAL
50	1s	62	ILE
50	1s	63	THR
50	1s	71	LEU
51	1t	9	ASN
51	1t	10	LEU
51	1t	13	LEU
51	1t	19	SER
51	1t	24	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	1t	55	ILE
51	1t	61	SER
51	1t	71	THR
51	1t	72	LEU
51	1t	100	ILE
52	1u	13	ILE
3	2D	3	VAL
3	2D	4	LYS
3	2D	14	ARG
3	2D	20	ASP
3	2D	35	LYS
3	2D	37	LEU
3	2D	61	LEU
3	2D	111	LEU
3	2D	113	VAL
3	2D	126	GLN
3	2D	142	VAL
3	2D	155	LEU
3	2D	169	GLU
3	2D	173	VAL
3	2D	193	VAL
3	2D	204	ILE
3	2D	221	VAL
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	271	ILE
4	2E	7	VAL
4	2E	9	VAL
4	2E	17	ASP
4	2E	19	ARG
4	2E	21	VAL
4	2E	23	VAL
4	2E	34	VAL
4	2E	49	LEU
4	2E	78	LEU
4	2E	82	ARG
4	2E	95	ILE
4	2E	116	VAL
4	2E	134	ILE
4	2E	181	LEU
4	2E	182	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	2E	183	LEU
4	2E	184	VAL
4	2E	196	VAL
5	2F	7	TYR
5	2F	17	ARG
5	2F	20	LEU
5	2F	24	LEU
5	2F	32	LEU
5	2F	53	THR
5	2F	57	VAL
5	2F	96	ASP
5	2F	105	VAL
5	2F	106	ARG
5	2F	126	VAL
5	2F	135	LYS
5	2F	140	LEU
5	2F	144	LYS
5	2F	153	SER
5	2F	161	GLU
5	2F	162	LEU
5	2F	165	ARG
5	2F	175	THR
5	2F	183	VAL
5	2F	192	LEU
5	2F	203	GLN
6	2G	3	LEU
6	2G	18	GLU
6	2G	21	ARG
6	2G	22	ARG
6	2G	26	GLN
6	2G	28	VAL
6	2G	30	GLU
6	2G	31	VAL
6	2G	43	LEU
6	2G	45	GLU
6	2G	51	ARG
6	2G	53	LEU
6	2G	60	LEU
6	2G	79	ASN
6	2G	91	ARG
6	2G	99	MET
6	2G	109	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	2G	111	LEU
6	2G	124	SER
6	2G	145	THR
6	2G	148	MET
6	2G	149	VAL
6	2G	159	VAL
6	2G	164	GLU
6	2G	168	GLU
6	2G	173	LEU
7	2H	3	ARG
7	2H	7	LEU
7	2H	16	SER
7	2H	25	LYS
7	2H	40	GLU
7	2H	41	MET
7	2H	43	VAL
7	2H	45	VAL
7	2H	46	GLU
7	2H	49	VAL
7	2H	51	ARG
7	2H	54	ARG
7	2H	67	LEU
7	2H	71	LEU
7	2H	80	SER
7	2H	88	LEU
7	2H	89	ILE
7	2H	97	ARG
7	2H	101	ARG
7	2H	103	LEU
7	2H	114	VAL
7	2H	115	VAL
7	2H	122	THR
7	2H	124	GLU
7	2H	127	GLU
7	2H	130	ARG
7	2H	133	VAL
7	2H	147	ASN
7	2H	172	LYS
8	2I	5	LEU
8	2I	6	LEU
8	2I	12	LEU
8	2I	25	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	2I	38	LEU
8	2I	40	THR
8	2I	52	ARG
8	2I	57	ARG
8	2I	58	LEU
8	2I	61	ARG
8	2I	66	GLU
8	2I	69	LYS
8	2I	73	GLU
8	2I	77	LEU
8	2I	78	THR
8	2I	79	ILE
8	2I	82	ARG
8	2I	86	THR
8	2I	87	LYS
8	2I	91	SER
8	2I	92	VAL
8	2I	96	ASP
8	2I	107	VAL
8	2I	117	GLU
8	2I	125	GLU
8	2I	127	VAL
8	2I	129	THR
8	2I	133	HIS
8	2I	140	LEU
8	2I	144	VAL
8	2I	145	VAL
9	2N	1	MET
9	2N	5	VAL
9	2N	9	VAL
9	2N	14	VAL
9	2N	15	LEU
9	2N	23	LEU
9	2N	28	THR
9	2N	34	LEU
9	2N	38	HIS
9	2N	48	MET
9	2N	55	VAL
9	2N	59	LYS
9	2N	62	VAL
9	2N	65	LYS
9	2N	67	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	2N	68	GLU
9	2N	69	GLN
9	2N	73	THR
9	2N	91	LEU
9	2N	96	GLU
9	2N	103	VAL
9	2N	115	ARG
9	2N	120	LEU
9	2N	131	GLN
9	2N	137	LYS
9	2N	138	LEU
10	2O	1	MET
10	2O	28	SER
10	2O	34	THR
10	2O	39	ILE
10	2O	56	ASP
10	2O	58	VAL
10	2O	66	LYS
10	2O	78	ARG
10	2O	87	ILE
10	2O	91	LEU
10	2O	112	MET
10	2O	114	ILE
10	2O	115	VAL
11	2P	1	MET
11	2P	6	LEU
11	2P	7	ARG
11	2P	45	LEU
11	2P	58	THR
11	2P	67	MET
11	2P	76	LYS
11	2P	95	VAL
11	2P	96	THR
11	2P	98	GLU
11	2P	135	LEU
11	2P	138	LEU
12	2Q	1	MET
12	2Q	18	LYS
12	2Q	42	ILE
12	2Q	55	VAL
12	2Q	56	ARG
12	2Q	59	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	2Q	60	ARG
12	2Q	75	THR
12	2Q	103	MET
12	2Q	109	VAL
12	2Q	110	THR
12	2Q	112	GLU
12	2Q	124	LYS
12	2Q	127	ILE
12	2Q	135	ASP
13	2R	5	LYS
13	2R	6	SER
13	2R	15	SER
13	2R	44	LEU
13	2R	51	LEU
13	2R	59	ASP
13	2R	97	VAL
13	2R	100	LEU
13	2R	104	ARG
13	2R	111	LEU
13	2R	113	LEU
14	2S	5	THR
14	2S	14	VAL
14	2S	18	ILE
14	2S	23	ARG
14	2S	25	ARG
14	2S	26	LEU
14	2S	58	LEU
14	2S	75	GLU
14	2S	78	LEU
14	2S	82	ILE
14	2S	110	LEU
15	2T	28	VAL
15	2T	39	ARG
15	2T	74	ARG
15	2T	80	SER
15	2T	83	ILE
15	2T	89	VAL
15	2T	96	ARG
15	2T	104	ASN
15	2T	107	ASP
15	2T	110	ILE
15	2T	115	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
16	2U	5	LYS
16	2U	9	VAL
16	2U	18	LEU
16	2U	20	LEU
16	2U	31	SER
16	2U	33	ARG
16	2U	58	ARG
16	2U	60	LEU
16	2U	74	LEU
16	2U	77	SER
16	2U	95	LEU
16	2U	111	GLU
17	2V	7	THR
17	2V	18	LEU
17	2V	28	GLU
17	2V	33	VAL
17	2V	38	LEU
17	2V	51	VAL
17	2V	52	VAL
17	2V	53	GLU
17	2V	56	SER
17	2V	61	VAL
17	2V	66	ARG
17	2V	79	VAL
17	2V	85	LYS
17	2V	98	GLU
17	2V	99	ILE
18	2W	1	MET
18	2W	6	ILE
18	2W	11	ARG
18	2W	15	ARG
18	2W	19	LEU
18	2W	63	ASP
18	2W	65	LEU
18	2W	67	ASP
18	2W	92	ARG
18	2W	94	ASP
18	2W	96	ILE
19	2X	49	VAL
19	2X	60	ARG
19	2X	70	LEU
19	2X	78	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	2X	81	VAL
19	2X	82	GLN
20	2Y	1	MET
20	2Y	5	MET
20	2Y	7	VAL
20	2Y	14	LEU
20	2Y	19	LYS
20	2Y	28	LYS
20	2Y	38	ILE
20	2Y	49	VAL
20	2Y	72	VAL
20	2Y	83	THR
20	2Y	85	VAL
20	2Y	88	LYS
20	2Y	91	GLU
20	2Y	97	ARG
20	2Y	99	CYS
20	2Y	106	LEU
21	2Z	5	LEU
21	2Z	8	TYR
21	2Z	20	ARG
21	2Z	28	MET
21	2Z	37	VAL
21	2Z	40	ASP
21	2Z	42	VAL
21	2Z	54	HIS
21	2Z	56	VAL
21	2Z	61	LEU
21	2Z	67	LEU
21	2Z	70	LEU
21	2Z	71	VAL
21	2Z	77	ASP
21	2Z	82	ARG
21	2Z	92	SER
21	2Z	96	VAL
21	2Z	100	VAL
21	2Z	121	HIS
21	2Z	124	ILE
21	2Z	126	VAL
21	2Z	133	ILE
21	2Z	136	PHE
21	2Z	137	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	2Z	149	SER
21	2Z	153	SER
21	2Z	155	LEU
21	2Z	156	LYS
21	2Z	163	LEU
21	2Z	170	THR
21	2Z	171	ILE
21	2Z	174	VAL
22	20	10	THR
22	20	14	ARG
22	20	40	GLN
22	20	49	LYS
23	21	3	LYS
23	21	21	ARG
23	21	26	ARG
23	21	37	ILE
23	21	38	SER
23	21	49	VAL
23	21	58	ILE
23	21	59	THR
23	21	62	VAL
23	21	74	VAL
23	21	76	ARG
23	21	78	LYS
23	21	81	LYS
23	21	82	LEU
23	21	93	GLU
23	21	98	LEU
24	22	35	LEU
24	22	46	GLN
24	22	49	LYS
24	22	50	ILE
24	22	62	THR
24	22	64	LEU
24	22	69	ARG
25	23	5	LYS
25	23	7	LYS
25	23	23	LEU
25	23	47	VAL
25	23	53	LEU
25	23	54	VAL
25	23	59	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	24	15	ILE
26	24	24	THR
26	24	27	THR
26	24	33	VAL
26	24	34	GLU
26	24	35	VAL
26	24	49	PHE
26	24	50	VAL
26	24	59	PHE
26	24	67	TYR
26	24	69	LYS
27	25	33	CYS
27	25	55	ARG
27	25	58	LEU
28	26	8	LYS
28	26	9	LEU
28	26	14	THR
28	26	32	ASN
28	26	34	LEU
28	26	48	VAL
29	27	1	MET
29	27	24	THR
29	27	46	VAL
30	28	6	THR
30	28	13	ARG
30	28	37	SER
30	28	50	LEU
30	28	58	ILE
30	28	59	LYS
31	29	1	MET
31	29	4	ARG
31	29	6	SER
31	29	17	ILE
31	29	18	ARG
31	29	28	GLU
33	2b	8	LYS
33	2b	9	GLU
33	2b	16	HIS
33	2b	44	LEU
33	2b	53	ARG
33	2b	58	ILE
33	2b	63	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	2b	67	THR
33	2b	79	ASP
33	2b	95	GLN
33	2b	101	MET
33	2b	107	THR
33	2b	108	ILE
33	2b	110	GLN
33	2b	111	ARG
33	2b	112	VAL
33	2b	115	LEU
33	2b	127	ILE
33	2b	130	ARG
33	2b	141	GLU
33	2b	142	LEU
33	2b	149	LEU
33	2b	153	ARG
33	2b	155	LEU
33	2b	158	LEU
33	2b	164	VAL
33	2b	185	ILE
33	2b	189	ASP
33	2b	195	ASP
33	2b	214	ILE
33	2b	215	LEU
33	2b	223	ILE
33	2b	229	VAL
33	2b	230	VAL
33	2b	236	TYR
34	2c	5	ILE
34	2c	11	ARG
34	2c	15	THR
34	2c	34	LEU
34	2c	43	LEU
34	2c	46	GLU
34	2c	49	SER
34	2c	55	VAL
34	2c	56	ASP
34	2c	72	LYS
34	2c	82	GLU
34	2c	89	GLU
34	2c	91	LEU
34	2c	103	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	2c	104	GLN
34	2c	105	GLU
34	2c	126	ARG
34	2c	150	LYS
34	2c	151	VAL
34	2c	152	ILE
34	2c	165	THR
34	2c	188	LEU
34	2c	190	ARG
34	2c	195	VAL
34	2c	206	GLU
35	2d	17	VAL
35	2d	18	LYS
35	2d	19	LEU
35	2d	28	SER
35	2d	42	GLN
35	2d	47	ARG
35	2d	49	ARG
35	2d	50	ARG
35	2d	52	SER
35	2d	53	ASP
35	2d	73	ARG
35	2d	74	GLN
35	2d	78	LEU
35	2d	81	GLU
35	2d	83	SER
35	2d	86	LYS
35	2d	91	SER
35	2d	112	VAL
35	2d	115	ARG
35	2d	127	THR
35	2d	134	ASP
35	2d	135	LEU
35	2d	150	GLU
35	2d	156	GLU
35	2d	158	ILE
35	2d	160	GLN
35	2d	168	ARG
35	2d	181	MET
35	2d	182	LYS
35	2d	188	LEU
35	2d	190	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	2d	193	ASP
35	2d	200	GLU
35	2d	202	LEU
36	2e	5	ASP
36	2e	11	ILE
36	2e	12	LEU
36	2e	13	ILE
36	2e	18	ARG
36	2e	20	GLN
36	2e	31	LEU
36	2e	32	VAL
36	2e	41	VAL
36	2e	51	VAL
36	2e	53	LEU
36	2e	55	VAL
36	2e	64	ARG
36	2e	69	VAL
36	2e	71	LEU
36	2e	72	GLN
36	2e	98	THR
36	2e	115	VAL
36	2e	119	LEU
36	2e	126	ARG
36	2e	144	THR
36	2e	147	ASP
37	2f	8	ILE
37	2f	19	LEU
37	2f	21	LEU
37	2f	37	VAL
37	2f	40	VAL
37	2f	43	LEU
37	2f	45	LEU
37	2f	61	LEU
37	2f	66	GLU
37	2f	69	GLU
37	2f	70	ASP
37	2f	80	ARG
37	2f	83	ASP
37	2f	85	VAL
37	2f	89	MET
37	2f	92	LYS
37	2f	93	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	2f	94	GLN
37	2f	98	LEU
38	2g	4	ARG
38	2g	6	ARG
38	2g	9	VAL
38	2g	15	ASP
38	2g	21	VAL
38	2g	24	THR
38	2g	31	MET
38	2g	59	LEU
38	2g	67	GLU
38	2g	73	MET
38	2g	75	VAL
38	2g	79	ARG
38	2g	85	TYR
38	2g	97	GLN
38	2g	105	VAL
38	2g	113	GLU
38	2g	124	LEU
38	2g	139	GLU
38	2g	144	MET
38	2g	155	ARG
39	2h	3	THR
39	2h	10	LEU
39	2h	26	VAL
39	2h	34	GLU
39	2h	37	ARG
39	2h	51	VAL
39	2h	52	ASP
39	2h	65	TYR
39	2h	77	GLU
39	2h	86	ILE
39	2h	91	ARG
39	2h	112	LEU
39	2h	116	LYS
39	2h	129	VAL
39	2h	137	VAL
40	2i	14	VAL
40	2i	26	VAL
40	2i	27	THR
40	2i	40	LEU
40	2i	47	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	2i	63	ILE
40	2i	64	THR
40	2i	65	VAL
40	2i	66	ARG
40	2i	89	ASN
40	2i	92	TYR
40	2i	102	LEU
40	2i	103	THR
40	2i	108	VAL
40	2i	109	VAL
40	2i	113	LYS
41	2j	6	ILE
41	2j	8	LEU
41	2j	9	ARG
41	2j	19	SER
41	2j	29	ARG
41	2j	34	VAL
41	2j	38	ILE
41	2j	65	LEU
41	2j	67	THR
41	2j	72	VAL
41	2j	81	THR
41	2j	85	LEU
41	2j	89	ASP
41	2j	97	GLU
41	2j	98	ILE
42	2k	14	VAL
42	2k	18	ARG
42	2k	21	ILE
42	2k	30	VAL
42	2k	40	ILE
42	2k	41	THR
42	2k	48	ILE
42	2k	51	LYS
42	2k	53	SER
42	2k	80	VAL
42	2k	84	VAL
42	2k	85	ARG
42	2k	87	THR
42	2k	98	LEU
42	2k	99	GLN
42	2k	101	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	2k	105	VAL
42	2k	108	ILE
42	2k	109	VAL
42	2k	114	VAL
42	2k	117	ASN
43	2l	8	ASN
43	2l	13	LYS
43	2l	18	VAL
43	2l	24	VAL
43	2l	33	ARG
43	2l	34	ARG
43	2l	43	VAL
43	2l	55	VAL
43	2l	61	THR
43	2l	78	GLN
43	2l	82	VAL
43	2l	83	VAL
43	2l	85	ILE
43	2l	97	ARG
43	2l	122	THR
44	2m	4	ILE
44	2m	11	ARG
44	2m	19	LEU
44	2m	22	ILE
44	2m	32	GLU
44	2m	34	LEU
44	2m	53	VAL
44	2m	54	VAL
44	2m	55	ARG
44	2m	66	LEU
44	2m	67	GLU
44	2m	74	VAL
44	2m	80	ARG
44	2m	81	LEU
44	2m	82	MET
44	2m	90	LEU
44	2m	93	ARG
44	2m	99	ARG
44	2m	102	ARG
44	2m	103	THR
44	2m	105	THR
44	2m	106	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	2m	108	ARG
44	2m	116	THR
45	2n	3	ARG
45	2n	9	LYS
45	2n	18	VAL
45	2n	33	VAL
46	2o	3	ILE
46	2o	4	THR
46	2o	22	THR
46	2o	39	LEU
46	2o	54	ARG
46	2o	60	VAL
46	2o	84	LYS
46	2o	87	ILE
46	2o	88	ARG
47	2p	9	PHE
47	2p	11	SER
47	2p	20	VAL
47	2p	38	TYR
47	2p	42	ARG
47	2p	60	LEU
47	2p	61	SER
47	2p	67	THR
47	2p	72	ARG
48	2q	7	THR
48	2q	9	VAL
48	2q	14	LYS
48	2q	21	VAL
48	2q	24	GLU
48	2q	43	LEU
48	2q	58	GLU
48	2q	60	ILE
48	2q	65	ILE
48	2q	67	LYS
48	2q	77	VAL
48	2q	79	SER
49	2r	37	VAL
49	2r	68	LYS
49	2r	76	LEU
49	2r	84	LYS
49	2r	86	VAL
50	2s	15	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	2s	27	GLU
50	2s	28	LYS
50	2s	37	ARG
50	2s	41	VAL
50	2s	43	GLU
50	2s	49	ILE
50	2s	51	VAL
50	2s	57	HIS
50	2s	77	THR
50	2s	81	ARG
51	2t	15	ARG
51	2t	17	ARG
51	2t	23	ARG
51	2t	35	THR
51	2t	36	LEU
51	2t	37	SER
51	2t	46	GLU
51	2t	70	SER
51	2t	72	LEU
51	2t	75	ASN
52	2u	6	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (165) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	116	GLN
3	1D	126	GLN
3	1D	164	GLN
4	1E	48	GLN
4	1E	121	ASN
4	1E	180	ASN
4	1E	192	ASN
5	1F	69	HIS
5	1F	133	ASN
6	1G	41	GLN
6	1G	108	ASN
8	1I	105	HIS
8	1I	133	HIS
9	1N	8	GLN
10	1O	5	GLN
10	1O	90	GLN
11	1P	27	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	1Q	12	GLN
12	1Q	113	GLN
13	1R	31	HIS
13	1R	71	GLN
13	1R	91	GLN
15	1T	90	GLN
16	1U	81	HIS
16	1U	94	ASN
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
21	1Z	32	HIS
21	1Z	34	ASN
21	1Z	65	GLN
21	1Z	73	GLN
22	10	35	ASN
23	11	56	GLN
24	12	9	GLN
25	13	32	GLN
28	16	20	ASN
33	1b	16	HIS
33	1b	78	GLN
33	1b	212	GLN
34	1c	6	HIS
34	1c	69	HIS
34	1c	136	GLN
34	1c	139	GLN
34	1c	170	GLN
35	1d	77	ASN
35	1d	116	GLN
35	1d	119	GLN
35	1d	123	HIS
35	1d	125	HIS
36	1e	56	GLN
36	1e	78	HIS
36	1e	141	GLN
37	1f	57	GLN
37	1f	64	GLN
37	1f	73	ASN
37	1f	100	ASN
38	1g	13	GLN
38	1g	28	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	1g	51	GLN
38	1g	148	ASN
40	1i	3	GLN
40	1i	124	GLN
41	1j	21	GLN
41	1j	68	HIS
42	1k	22	HIS
42	1k	104	GLN
42	1k	117	ASN
43	1l	80	HIS
43	1l	99	HIS
44	1m	77	ASN
44	1m	92	HIS
46	1o	9	GLN
46	1o	71	GLN
47	1p	13	HIS
47	1p	76	GLN
48	1q	16	GLN
49	1r	63	GLN
50	1s	47	HIS
50	1s	83	HIS
51	1t	26	ASN
51	1t	42	GLN
3	2D	87	ASN
3	2D	126	GLN
5	2F	69	HIS
5	2F	75	HIS
6	2G	26	GLN
8	2I	105	HIS
8	2I	133	HIS
9	2N	8	GLN
9	2N	131	GLN
11	2P	27	HIS
11	2P	84	ASN
12	2Q	12	GLN
12	2Q	13	GLN
13	2R	13	HIS
13	2R	31	HIS
13	2R	71	GLN
14	2S	38	GLN
14	2S	68	GLN
15	2T	43	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	2T	58	ASN
15	2T	84	GLN
16	2U	71	GLN
19	2X	31	HIS
20	2Y	6	HIS
20	2Y	68	HIS
21	2Z	32	HIS
21	2Z	55	HIS
21	2Z	151	HIS
22	20	3	HIS
22	20	12	ASN
22	20	17	GLN
22	20	40	GLN
22	20	70	GLN
23	21	56	GLN
24	22	46	GLN
24	22	47	ASN
24	22	56	GLN
25	23	32	GLN
26	24	46	GLN
28	26	20	ASN
33	2b	40	HIS
33	2b	94	ASN
33	2b	135	GLN
33	2b	224	GLN
34	2c	6	HIS
34	2c	98	ASN
34	2c	170	GLN
34	2c	176	HIS
34	2c	181	ASN
35	2d	42	GLN
35	2d	45	GLN
35	2d	77	ASN
35	2d	116	GLN
35	2d	119	GLN
35	2d	123	HIS
36	2e	20	GLN
36	2e	72	GLN
37	2f	7	ASN
37	2f	73	ASN
38	2g	13	GLN
38	2g	28	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	2i	3	GLN
40	2i	31	GLN
40	2i	58	HIS
40	2i	89	ASN
40	2i	117	HIS
41	2j	21	GLN
42	2k	93	GLN
42	2k	104	GLN
42	2k	116	HIS
44	2m	77	ASN
45	2n	49	HIS
46	2o	9	GLN
46	2o	62	GLN
48	2q	26	GLN
48	2q	94	ASN
50	2s	23	ASN
50	2s	47	HIS
50	2s	69	HIS
50	2s	83	HIS
51	2t	16	HIS
51	2t	75	ASN
51	2t	90	GLN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	532 (18%)	36 (1%)
1	2A	2791/2915 (95%)	550 (19%)	26 (0%)
2	1B	119/121 (98%)	14 (11%)	0
2	2B	118/121 (97%)	35 (29%)	0
32	1a	1497/1521 (98%)	293 (19%)	0
32	2a	1501/1521 (98%)	359 (23%)	0
53	1v	12/24 (50%)	1 (8%)	0
53	2v	12/24 (50%)	3 (25%)	0
54	1w	71/76 (93%)	25 (35%)	0
54	2w	69/76 (90%)	27 (39%)	0
55	1x	75/77 (97%)	12 (16%)	0
55	2x	75/77 (97%)	13 (17%)	0
56	1y	72/76 (94%)	35 (48%)	0
56	2y	70/76 (92%)	28 (40%)	0
All	All	9346/9620 (97%)	1927 (20%)	62 (0%)

All (1927) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	10	G
1	1A	12	U
1	1A	21	A
1	1A	32	C
1	1A	33	U
1	1A	34	C
1	1A	45	C
1	1A	55	G
1	1A	63	U
1	1A	71	A
1	1A	72	U
1	1A	74	A
1	1A	75	G
1	1A	83	G
1	1A	84	A
1	1A	94	C
1	1A	95	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	125	G
1	1A	140	G
1	1A	141	A
1	1A	182	A
1	1A	188	G
1	1A	196	A
1	1A	197	A
1	1A	199	A
1	1A	205	G
1	1A	214	G
1	1A	215	G
1	1A	216	A
1	1A	221	A
1	1A	222	A
1	1A	225	A
1	1A	228	A
1	1A	229	A
1	1A	230	U
1	1A	233	A
1	1A	248	G
1	1A	266	G
1	1A	271(A)	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	271(C)	C
1	1A	271(F)	C
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(O)	C
1	1A	271(S)	G
1	1A	271(Y)	U
1	1A	272(A)	U
1	1A	272(B)	G
1	1A	275	G
1	1A	279	C
1	1A	311	A
1	1A	329	G
1	1A	330	A
1	1A	352	G
1	1A	354	G
1	1A	357	A
1	1A	363	G
1	1A	363(A)	A
1	1A	363(B)	G
1	1A	363(F)	A
1	1A	372	G
1	1A	386	G
1	1A	389	G
1	1A	396	G
1	1A	404	C
1	1A	405	U
1	1A	407	G
1	1A	411	G
1	1A	412	A
1	1A	428	A
1	1A	437	G
1	1A	444	C
1	1A	448	U
1	1A	454	A
1	1A	456	C
1	1A	480	A
1	1A	481	G
1	1A	484	C
1	1A	504	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	505	A
1	1A	509	C
1	1A	521	G
1	1A	522	G
1	1A	529	A
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	575	A
1	1A	583	G
1	1A	586	A
1	1A	592	G
1	1A	595	C
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	619	G
1	1A	627	A
1	1A	637	A
1	1A	646	A
1	1A	648	G
1	1A	652(F)	G
1	1A	652(T)	C
1	1A	669	G
1	1A	686	G
1	1A	701	G
1	1A	710	G
1	1A	711	G
1	1A	717	G
1	1A	730	C
1	1A	746	A
1	1A	747	U
1	1A	762	U
1	1A	764	A
1	1A	765	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	774	A
1	1A	775	G
1	1A	776	G
1	1A	777	A
1	1A	782	A
1	1A	784	A
1	1A	785	G
1	1A	789	A
1	1A	790	C
1	1A	792	G
1	1A	805	G
1	1A	812	C
1	1A	819	A
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	861	A
1	1A	863	A
1	1A	878	A
1	1A	879	G
1	1A	880	G
1	1A	882	G
1	1A	883	G
1	1A	884	C
1	1A	885	C
1	1A	886	C
1	1A	887	A
1	1A	888	C
1	1A	890	A
1	1A	892	G
1	1A	894	C
1	1A	896	A
1	1A	897	C
1	1A	898	C
1	1A	900	A
1	1A	910	A
1	1A	913	U
1	1A	915	C
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	950	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	953	A
1	1A	959	A
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	989	G
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1025	G
1	1A	1026	U
1	1A	1033	U
1	1A	1038	C
1	1A	1040	C
1	1A	1043	C
1	1A	1045	A
1	1A	1046	A
1	1A	1047	G
1	1A	1054	A
1	1A	1055	G
1	1A	1058	G
1	1A	1063	G
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1074	G
1	1A	1075	C
1	1A	1076	C
1	1A	1077	A
1	1A	1078	U
1	1A	1079	C
1	1A	1081	U
1	1A	1083	U
1	1A	1084	A
1	1A	1085	A
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1091	G
1	1A	1093	G
1	1A	1094	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1098	A
1	1A	1101	U
1	1A	1102	C
1	1A	1110	G
1	1A	1112	G
1	1A	1115	G
1	1A	1116	C
1	1A	1117	G
1	1A	1128	A
1	1A	1130	U
1	1A	1132	A
1	1A	1135	C
1	1A	1136	G
1	1A	1143	A
1	1A	1144	G
1	1A	1149	G
1	1A	1163	G
1	1A	1170	G
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1244	G
1	1A	1248	G
1	1A	1250	G
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U
1	1A	1292	U
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1317	A
1	1A	1320	C
1	1A	1338	G
1	1A	1352	U
1	1A	1359	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1360	A
1	1A	1365	A
1	1A	1370	C
1	1A	1379	A
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G
1	1A	1386	C
1	1A	1396	U
1	1A	1404	C
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1445	A
1	1A	1455	G
1	1A	1466	G
1	1A	1467	C
1	1A	1468	C
1	1A	1482	G
1	1A	1493	C
1	1A	1494	A
1	1A	1497	U
1	1A	1504	C
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1509(B)	A
1	1A	1523	U
1	1A	1539	G
1	1A	1540	U
1	1A	1543	C
1	1A	1558	A
1	1A	1569	A
1	1A	1578	U
1	1A	1580	A
1	1A	1581	G
1	1A	1582	C
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1610	A
1	1A	1618	A
1	1A	1634	A
1	1A	1647	G
1	1A	1648	C
1	1A	1664	A
1	1A	1669	A
1	1A	1670	C
1	1A	1674	G
1	1A	1682	G
1	1A	1693	U
1	1A	1696	G
1	1A	1700	A
1	1A	1701	A
1	1A	1722	A
1	1A	1745(A)	C
1	1A	1746	G
1	1A	1749	A
1	1A	1750	G
1	1A	1756	G
1	1A	1762	A
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1806	C
1	1A	1816	G
1	1A	1827	C
1	1A	1828	G
1	1A	1829	A
1	1A	1847	A
1	1A	1861	G
1	1A	1877	A
1	1A	1878	G
1	1A	1889	A
1	1A	1900	A
1	1A	1906	G
1	1A	1912	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1929	G
1	1A	1930	G
1	1A	1934	C
1	1A	1937	A
1	1A	1938	A
1	1A	1941	C
1	1A	1947	C
1	1A	1955	U
1	1A	1963	U
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1990	C
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2033	A
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2069	G
1	1A	2082	A
1	1A	2099	U
1	1A	2101	G
1	1A	2102	U
1	1A	2103	C
1	1A	2108	C
1	1A	2109	U
1	1A	2110	G
1	1A	2113	U
1	1A	2114	A
1	1A	2116	G
1	1A	2117	A
1	1A	2118	U
1	1A	2120	G
1	1A	2121	G
1	1A	2126	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2127	G
1	1A	2129	C
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2136	C
1	1A	2140	C
1	1A	2142	C
1	1A	2144	U
1	1A	2146	C
1	1A	2149	G
1	1A	2150	U
1	1A	2151	G
1	1A	2154	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2161	C
1	1A	2162	G
1	1A	2165	G
1	1A	2166	G
1	1A	2167	U
1	1A	2171	A
1	1A	2172	U
1	1A	2173	A
1	1A	2174	C
1	1A	2181	G
1	1A	2182	G
1	1A	2184	G
1	1A	2189	U
1	1A	2190	G
1	1A	2191	G
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2218	U
1	1A	2219	G
1	1A	2225	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2235	G
1	1A	2238	G
1	1A	2239	G
1	1A	2259	G
1	1A	2267	A
1	1A	2268	A
1	1A	2269	A
1	1A	2279	G
1	1A	2280	G
1	1A	2283	C
1	1A	2287	A
1	1A	2289	G
1	1A	2290	G
1	1A	2305	A
1	1A	2308	G
1	1A	2312	U
1	1A	2320	A
1	1A	2321	G
1	1A	2325	G
1	1A	2326	C
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2361	A
1	1A	2376	A
1	1A	2379	G
1	1A	2383	G
1	1A	2385	C
1	1A	2396	G
1	1A	2405	G
1	1A	2406	U
1	1A	2407	G
1	1A	2414	G
1	1A	2422	A
1	1A	2423	U
1	1A	2425	A
1	1A	2428	G
1	1A	2429	G
1	1A	2430	A
1	1A	2432	A
1	1A	2435	A
1	1A	2439	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2441	C
1	1A	2448	A
1	1A	2449	U
1	1A	2476	A
1	1A	2477	C
1	1A	2478	A
1	1A	2491	U
1	1A	2498	C
1	1A	2502	G
1	1A	2505	G
1	1A	2518	A
1	1A	2520	C
1	1A	2529	G
1	1A	2530	A
1	1A	2535	G
1	1A	2549	G
1	1A	2550	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2572	A
1	1A	2573	C
1	1A	2574	G
1	1A	2582	G
1	1A	2585	U
1	1A	2602	A
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2615	U
1	1A	2629	A
1	1A	2630	G
1	1A	2654	A
1	1A	2689	U
1	1A	2690	C
1	1A	2691	C
1	1A	2702	U
1	1A	2707	G
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2721	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2726	U
1	1A	2733	A
1	1A	2757	A
1	1A	2764	A
1	1A	2765	A
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2792	G
1	1A	2793	G
1	1A	2802	G
1	1A	2803	C
1	1A	2808	U
1	1A	2816	C
1	1A	2818	G
1	1A	2820	A
1	1A	2821	A
1	1A	2833	G
1	1A	2835	A
1	1A	2838	G
1	1A	2854	G
1	1A	2872	G
1	1A	2876	G
1	1A	2880	C
1	1A	2892	A
1	1A	2893	G
1	1A	2894	G
1	1A	2895	U
2	1B	2	C
2	1B	15	A
2	1B	24	G
2	1B	25	A
2	1B	35	U
2	1B	41	U
2	1B	50	G
2	1B	52	A
2	1B	56	G
2	1B	57	A
2	1B	73	A
2	1B	85	G
2	1B	96	U
2	1B	110	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	9	G
32	1a	22	G
32	1a	32	A
32	1a	39	G
32	1a	47	C
32	1a	48	C
32	1a	51	A
32	1a	52	G
32	1a	61	G
32	1a	65	U
32	1a	66	G
32	1a	73	G
32	1a	79	G
32	1a	91	C
32	1a	98	G
32	1a	105	G
32	1a	115	G
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	142	G
32	1a	143	A
32	1a	144	G
32	1a	146	G
32	1a	151	A
32	1a	155	C
32	1a	163	C
32	1a	164	U
32	1a	166	G
32	1a	167	G
32	1a	173	U
32	1a	174	C
32	1a	182	U
32	1a	189(I)	G
32	1a	189(J)	G
32	1a	195	A
32	1a	197	A
32	1a	199	G
32	1a	201	C
32	1a	202	U
32	1a	203	U
32	1a	204	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	216	G
32	1a	220	G
32	1a	247	G
32	1a	251	G
32	1a	258	G
32	1a	266	G
32	1a	267	C
32	1a	270	A
32	1a	289	G
32	1a	301	G
32	1a	318	G
32	1a	321	A
32	1a	328	C
32	1a	329	A
32	1a	332	G
32	1a	341	C
32	1a	342	C
32	1a	344	A
32	1a	348	G
32	1a	351	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	356	A
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	381	C
32	1a	384	G
32	1a	390	C
32	1a	397	A
32	1a	398	C
32	1a	406	G
32	1a	412	A
32	1a	413	G
32	1a	422	C
32	1a	423	G
32	1a	424	G
32	1a	429	U
32	1a	439	A
32	1a	442	C
32	1a	447	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	452	A
32	1a	457	C
32	1a	458	C
32	1a	461	A
32	1a	470	C
32	1a	471	G
32	1a	474	G
32	1a	479	C
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	505	G
32	1a	510	A
32	1a	511	C
32	1a	518	C
32	1a	524	G
32	1a	531	U
32	1a	532	A
32	1a	533	A
32	1a	536	C
32	1a	547	A
32	1a	550	G
32	1a	559	A
32	1a	561	U
32	1a	562	C
32	1a	564	C
32	1a	568	G
32	1a	572	A
32	1a	573	A
32	1a	574	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	630	G
32	1a	631	G
32	1a	641	U
32	1a	642	A
32	1a	649	G
32	1a	653	A
32	1a	660	G
32	1a	665	A
32	1a	672	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	687	A
32	1a	688	G
32	1a	693	G
32	1a	695	A
32	1a	702	A
32	1a	703	G
32	1a	709	G
32	1a	718	G
32	1a	723	U
32	1a	724	G
32	1a	734	G
32	1a	749	C
32	1a	755	G
32	1a	766	A
32	1a	774	G
32	1a	777	A
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	796	C
32	1a	799	G
32	1a	812	C
32	1a	816	A
32	1a	817	C
32	1a	821	G
32	1a	827	U
32	1a	828	A
32	1a	836	G
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	853	G
32	1a	859	A
32	1a	861	G
32	1a	865	A
32	1a	870	U
32	1a	871	U
32	1a	872	A
32	1a	876	G
32	1a	894	G
32	1a	902	G
32	1a	909	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	913	A
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	931	C
32	1a	934	C
32	1a	939	G
32	1a	960	U
32	1a	961	U
32	1a	966	M2G
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	972	C
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	992	U
32	1a	993	G
32	1a	997	U
32	1a	1000	U
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1008	C
32	1a	1011	G
32	1a	1020	U
32	1a	1021	G
32	1a	1022	G
32	1a	1023	G
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(C)	G
32	1a	1031	G
32	1a	1039	C
32	1a	1044	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	1056	U
32	1a	1063	C
32	1a	1065	U
32	1a	1068	G
32	1a	1080	A
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1123	A
32	1a	1124	G
32	1a	1125	U
32	1a	1129	C
32	1a	1131	G
32	1a	1134	G
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
32	1a	1146	A
32	1a	1152	A
32	1a	1158	C
32	1a	1159	U
32	1a	1182	G
32	1a	1183	A
32	1a	1184	G
32	1a	1187	G
32	1a	1196	U
32	1a	1197	G
32	1a	1201	A
32	1a	1202	G
32	1a	1204	A
32	1a	1213	A
32	1a	1215	G
32	1a	1227	A
32	1a	1236	A
32	1a	1238	A
32	1a	1250	A
32	1a	1253	G
32	1a	1256	A
32	1a	1257	U
32	1a	1260	C
32	1a	1275	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	1278	U
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1297	C
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1312	G
32	1a	1320	C
32	1a	1322	C
32	1a	1338	G
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1363(A)	A
32	1a	1370	G
32	1a	1379	G
32	1a	1383	C
32	1a	1386	G
32	1a	1397	C
32	1a	1406	U
32	1a	1410	G
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1442(B)	A
32	1a	1446	U
32	1a	1447	A
32	1a	1452	C
32	1a	1467	G
32	1a	1469	G
32	1a	1492	A
32	1a	1503	A
32	1a	1504	G
32	1a	1506	U
32	1a	1517	G
32	1a	1529	G
32	1a	1530	G
32	1a	1532	U
53	1v	13	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	1w	2	C
54	1w	3	C
54	1w	6	G
54	1w	7	A
54	1w	8	4SU
54	1w	9	A
54	1w	14	A
54	1w	19	G
54	1w	20	U
54	1w	21	A
54	1w	23	A
54	1w	24	G
54	1w	25	C
54	1w	27	G
54	1w	36	A
54	1w	39	PSU
54	1w	45	U
54	1w	46	G7M
54	1w	47	U
54	1w	48	C
54	1w	50	U
54	1w	60	U
54	1w	72	C
54	1w	73	A
54	1w	74	C
55	1x	2	G
55	1x	9	G
55	1x	14	A
55	1x	18	G
55	1x	19	G
55	1x	21	A
55	1x	31	G
55	1x	47	U
55	1x	48	C
55	1x	49	G
55	1x	61	C
55	1x	63	G
56	1y	5	G
56	1y	8	4SU
56	1y	9	A
56	1y	12	U
56	1y	13	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
56	1y	14	A
56	1y	15	G
56	1y	19	G
56	1y	20	U
56	1y	21	A
56	1y	22	G
56	1y	28	G
56	1y	29	G
56	1y	30	G
56	1y	35	A
56	1y	37	MIA
56	1y	40	C
56	1y	44	G
56	1y	45	U
56	1y	46	G7M
56	1y	47	U
56	1y	48	C
56	1y	49	C
56	1y	52	G
56	1y	54	5MU
56	1y	57	G
56	1y	58	A
56	1y	59	U
56	1y	61	C
56	1y	65	G
56	1y	67	C
56	1y	68	C
56	1y	69	G
56	1y	70	G
56	1y	71	G
1	2A	10	G
1	2A	12	U
1	2A	14	A
1	2A	15	G
1	2A	27	G
1	2A	34	C
1	2A	35	G
1	2A	45	C
1	2A	50	U
1	2A	55	G
1	2A	61	G
1	2A	71	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	73	A
1	2A	74	A
1	2A	75	G
1	2A	79	G
1	2A	84	A
1	2A	90	U
1	2A	94	C
1	2A	95	G
1	2A	98	G
1	2A	99	U
1	2A	100	G
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	131	G
1	2A	143(A)	C
1	2A	154(A)	C
1	2A	157	U
1	2A	173	G
1	2A	181	A
1	2A	196	A
1	2A	205	G
1	2A	214	G
1	2A	215	G
1	2A	216	A
1	2A	221	A
1	2A	222	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	232	G
1	2A	233	A
1	2A	248	G
1	2A	256	A
1	2A	266	G
1	2A	271(D)	G
1	2A	271(J)	C
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	271(O)	C
1	2A	272	G
1	2A	272(B)	G
1	2A	272(E)	G
1	2A	272(J)	C
1	2A	277	C
1	2A	278	A
1	2A	288	C
1	2A	299	A
1	2A	311	A
1	2A	317	G
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	333	G
1	2A	342	G
1	2A	343	C
1	2A	352	G
1	2A	363	G
1	2A	363(C)	G
1	2A	363(D)	G
1	2A	386	G
1	2A	396	G
1	2A	403	U
1	2A	411	G
1	2A	421	U
1	2A	444	C
1	2A	454	A
1	2A	455	C
1	2A	457	A
1	2A	479	A
1	2A	481	G
1	2A	494	G
1	2A	503	A
1	2A	504	U
1	2A	505	A
1	2A	509	C
1	2A	529	A
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	545	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	563	G
1	2A	568	U
1	2A	573	G
1	2A	575	A
1	2A	583	G
1	2A	586	A
1	2A	591	C
1	2A	595	C
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614	U
1	2A	614(A)	U
1	2A	614(B)	G
1	2A	614(C)	A
1	2A	615	G
1	2A	627	A
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	664	C
1	2A	669	G
1	2A	686	G
1	2A	715	G
1	2A	717	G
1	2A	730	C
1	2A	741	G
1	2A	747	U
1	2A	752	A
1	2A	753	C
1	2A	765	G
1	2A	771	G
1	2A	774	A
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	790	C
1	2A	792	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	805	G
1	2A	812	C
1	2A	819	A
1	2A	824	A
1	2A	827	U
1	2A	828	U
1	2A	829	A
1	2A	838	C
1	2A	846	C
1	2A	857	C
1	2A	859	G
1	2A	866	A
1	2A	874	G
1	2A	875	G
1	2A	877	U
1	2A	878	A
1	2A	879	G
1	2A	880	G
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	893	C
1	2A	894	C
1	2A	895	U
1	2A	896	A
1	2A	900	A
1	2A	901	A
1	2A	905	U
1	2A	910	A
1	2A	914	C
1	2A	917	A
1	2A	921	G
1	2A	927	G
1	2A	932	G
1	2A	938	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	951	C
1	2A	952	G
1	2A	953	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	957	A
1	2A	959	A
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	996	A
1	2A	999	U
1	2A	1002	G
1	2A	1005	C
1	2A	1008	C
1	2A	1012	U
1	2A	1013	C
1	2A	1021	A
1	2A	1022	G
1	2A	1025	G
1	2A	1026	U
1	2A	1027	A
1	2A	1033	U
1	2A	1038	C
1	2A	1039	G
1	2A	1041	C
1	2A	1043	C
1	2A	1114	G
1	2A	1116	C
1	2A	1118	C
1	2A	1125	G
1	2A	1126	A
1	2A	1128	A
1	2A	1129	A
1	2A	1135	C
1	2A	1136	G
1	2A	1138	G
1	2A	1139	G
1	2A	1141	U
1	2A	1142(A)	A
1	2A	1148	A
1	2A	1155	A
1	2A	1171	G
1	2A	1188	U
1	2A	1195	G
1	2A	1210	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	1211	U
1	2A	1212	G
1	2A	1220	A
1	2A	1236	G
1	2A	1242	A
1	2A	1248	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1314	C
1	2A	1320	C
1	2A	1343	G
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1370	C
1	2A	1373	A
1	2A	1378	A
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1395	A
1	2A	1396	U
1	2A	1412	A
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1427	A
1	2A	1428	C
1	2A	1437	C
1	2A	1445	A
1	2A	1447	G
1	2A	1449	A
1	2A	1450	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	1460	A
1	2A	1461	G
1	2A	1466	G
1	2A	1467	C
1	2A	1470	G
1	2A	1471	A
1	2A	1490	A
1	2A	1493	C
1	2A	1494	A
1	2A	1497	U
1	2A	1506	C
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1531	C
1	2A	1532	C
1	2A	1533	G
1	2A	1542	A
1	2A	1547	C
1	2A	1558	A
1	2A	1559	G
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1583	A
1	2A	1584	C
1	2A	1592	C
1	2A	1595	G
1	2A	1607	C
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1618	A
1	2A	1631(A)	A
1	2A	1640	C
1	2A	1646	C
1	2A	1647	G
1	2A	1648	C
1	2A	1653	G
1	2A	1654	A
1	2A	1674	G
1	2A	1696	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	1698	A
1	2A	1700	A
1	2A	1701	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1739	U
1	2A	1740	G
1	2A	1745(A)	C
1	2A	1752	C
1	2A	1756	G
1	2A	1760	A
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1812	A
1	2A	1816	G
1	2A	1817	G
1	2A	1820	U
1	2A	1829	A
1	2A	1833	U
1	2A	1835	G
1	2A	1847	A
1	2A	1848	A
1	2A	1860	G
1	2A	1861	G
1	2A	1877	A
1	2A	1878	G
1	2A	1889	A
1	2A	1896	G
1	2A	1900	A
1	2A	1906	G
1	2A	1911	PSU
1	2A	1913	A
1	2A	1914	C
1	2A	1929	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	1930	G
1	2A	1936	A
1	2A	1938	A
1	2A	1939	5MU
1	2A	1940	U
1	2A	1955	U
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1985	G
1	2A	1993	U
1	2A	1997	G
1	2A	2023	G
1	2A	2031	A
1	2A	2033	A
1	2A	2035	G
1	2A	2036	C
1	2A	2043	C
1	2A	2049	G
1	2A	2051	A
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2069	G
1	2A	2093	G
1	2A	2099	U
1	2A	2100	G
1	2A	2101	G
1	2A	2110	G
1	2A	2111	C
1	2A	2112	G
1	2A	2113	U
1	2A	2115	G
1	2A	2116	G
1	2A	2119	A
1	2A	2120	G
1	2A	2122	U
1	2A	2125	G
1	2A	2126	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2127	G
1	2A	2128	C
1	2A	2129	C
1	2A	2130	U
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2136	C
1	2A	2137	C
1	2A	2138	C
1	2A	2139	C
1	2A	2141	G
1	2A	2143	C
1	2A	2145	C
1	2A	2146	C
1	2A	2150	U
1	2A	2151	G
1	2A	2153	G
1	2A	2154	G
1	2A	2156	G
1	2A	2157	G
1	2A	2158	A
1	2A	2161	C
1	2A	2162	G
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2168	G
1	2A	2169	A
1	2A	2172	U
1	2A	2174	C
1	2A	2178	C
1	2A	2181	G
1	2A	2182	G
1	2A	2183	C
1	2A	2185	C
1	2A	2188	C
1	2A	2189	U
1	2A	2192	G
1	2A	2193	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2225	A
1	2A	2238	G
1	2A	2239	G
1	2A	2241	A
1	2A	2275	C
1	2A	2277	G
1	2A	2278	A
1	2A	2279	G
1	2A	2280	G
1	2A	2283	C
1	2A	2287	A
1	2A	2288	A
1	2A	2305	A
1	2A	2308	G
1	2A	2309	A
1	2A	2311	A
1	2A	2312	U
1	2A	2319	G
1	2A	2320	A
1	2A	2322	A
1	2A	2325	G
1	2A	2327	A
1	2A	2334	G
1	2A	2336	A
1	2A	2345	G
1	2A	2346	A
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2376	A
1	2A	2377	A
1	2A	2379	G
1	2A	2383	G
1	2A	2385	C
1	2A	2403	C
1	2A	2406	U
1	2A	2410	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2418	A
1	2A	2422	A
1	2A	2425	A
1	2A	2426	A
1	2A	2429	G
1	2A	2430	A
1	2A	2435	A
1	2A	2439	A
1	2A	2441	C
1	2A	2445	G
1	2A	2448	A
1	2A	2460	U
1	2A	2465	C
1	2A	2468	G
1	2A	2469	A
1	2A	2470	G
1	2A	2476	A
1	2A	2477	C
1	2A	2487	G
1	2A	2490	G
1	2A	2491	U
1	2A	2494	G
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2507	C
1	2A	2518	A
1	2A	2520	C
1	2A	2529	G
1	2A	2532	G
1	2A	2535	G
1	2A	2553	G
1	2A	2554	U
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2574	G
1	2A	2577	A
1	2A	2578	G
1	2A	2585	U
1	2A	2602	A
1	2A	2611	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2612	C
1	2A	2629	A
1	2A	2630	G
1	2A	2654	A
1	2A	2689	U
1	2A	2690	C
1	2A	2691	C
1	2A	2702	U
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2747	G
1	2A	2751	G
1	2A	2757	A
1	2A	2758	A
1	2A	2760	C
1	2A	2761	G
1	2A	2765	A
1	2A	2778	A
1	2A	2789	C
1	2A	2794	C
1	2A	2802	G
1	2A	2803	C
1	2A	2804	C
1	2A	2807	G
1	2A	2820	A
1	2A	2821	A
1	2A	2866	U
1	2A	2872	G
1	2A	2892	A
1	2A	2894	G
1	2A	2897	U
2	2B	2	C
2	2B	3	C
2	2B	7	G
2	2B	8	U
2	2B	10	C
2	2B	12	C
2	2B	15	A
2	2B	21	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	2B	23	G
2	2B	32	C
2	2B	33	G
2	2B	35	U
2	2B	41	U
2	2B	42	C
2	2B	44	G
2	2B	45	A
2	2B	51	G
2	2B	56	G
2	2B	58	A
2	2B	59	A
2	2B	63	G
2	2B	68	C
2	2B	71	C
2	2B	73	A
2	2B	74	U
2	2B	75	G
2	2B	83	G
2	2B	84	C
2	2B	85	G
2	2B	105	A
2	2B	106	G
2	2B	110	G
2	2B	113	G
2	2B	117	G
2	2B	120	A
32	2a	5	U
32	2a	6	G
32	2a	7	G
32	2a	9	G
32	2a	22	G
32	2a	31	G
32	2a	32	A
32	2a	39	G
32	2a	41	G
32	2a	46	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	52	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	66	G
32	2a	73	G
32	2a	88	A
32	2a	89	C
32	2a	100	C
32	2a	101	A
32	2a	102	G
32	2a	105	G
32	2a	116	A
32	2a	120	A
32	2a	121	C
32	2a	131	C
32	2a	142	G
32	2a	143	A
32	2a	144	G
32	2a	163	C
32	2a	182	U
32	2a	189	G
32	2a	189(E)	U
32	2a	189(F)	U
32	2a	189(G)	G
32	2a	189(J)	G
32	2a	195	A
32	2a	196	A
32	2a	197	A
32	2a	201	C
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	231	G
32	2a	240	C
32	2a	247	G
32	2a	251	G
32	2a	253	U
32	2a	258	G
32	2a	262	A
32	2a	266	G
32	2a	267	C
32	2a	269	C
32	2a	289	G
32	2a	316	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	318	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	344	A
32	2a	348	G
32	2a	349	A
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	362	G
32	2a	367	U
32	2a	372	C
32	2a	383	A
32	2a	384	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	421	U
32	2a	423	G
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	441	A
32	2a	452	A
32	2a	455	C
32	2a	457	C
32	2a	470	C
32	2a	476	G
32	2a	484	G
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	500	G
32	2a	505	G
32	2a	506	G
32	2a	509	A
32	2a	510	A
32	2a	511	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	517	G
32	2a	518	C
32	2a	521	G
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	534	U
32	2a	536	C
32	2a	543	C
32	2a	547	A
32	2a	558	G
32	2a	559	A
32	2a	560	U
32	2a	562	C
32	2a	564	C
32	2a	571	U
32	2a	572	A
32	2a	573	A
32	2a	574	A
32	2a	575	G
32	2a	576	G
32	2a	577	G
32	2a	594	G
32	2a	596	C
32	2a	598	U
32	2a	601	C
32	2a	607	A
32	2a	608	A
32	2a	630	G
32	2a	653	A
32	2a	665	A
32	2a	671	G
32	2a	687	A
32	2a	688	G
32	2a	693	G
32	2a	723	U
32	2a	724	G
32	2a	731	G
32	2a	735	C
32	2a	749	C
32	2a	754	C
32	2a	755	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	764	C
32	2a	770	C
32	2a	777	A
32	2a	787	A
32	2a	793	U
32	2a	794	A
32	2a	812	C
32	2a	817	C
32	2a	821	G
32	2a	825	G
32	2a	828	A
32	2a	840	C
32	2a	841	U
32	2a	848	C
32	2a	851	G
32	2a	859	A
32	2a	871	U
32	2a	872	A
32	2a	874	G
32	2a	884	U
32	2a	885	G
32	2a	887	G
32	2a	891	U
32	2a	902	G
32	2a	914	A
32	2a	917	G
32	2a	926	G
32	2a	927	G
32	2a	934	C
32	2a	935	A
32	2a	958	A
32	2a	960	U
32	2a	961	U
32	2a	962	C
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	978	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	983	A
32	2a	984	C
32	2a	987	G
32	2a	991	U
32	2a	992	U
32	2a	993	G
32	2a	996	A
32	2a	997	U
32	2a	998	G
32	2a	999	C
32	2a	1001	A
32	2a	1002	G
32	2a	1004	A
32	2a	1005	A
32	2a	1006	C
32	2a	1007	C
32	2a	1008	C
32	2a	1009	G
32	2a	1011	G
32	2a	1019	C
32	2a	1020	U
32	2a	1022	G
32	2a	1023	G
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1028	C
32	2a	1029	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1031	G
32	2a	1032	G
32	2a	1034	G
32	2a	1035	A
32	2a	1037	C
32	2a	1039	C
32	2a	1040	U
32	2a	1042	G
32	2a	1046	A
32	2a	1048	G
32	2a	1050	G
32	2a	1051	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	1052	U
32	2a	1060	C
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1071	C
32	2a	1073	U
32	2a	1077	G
32	2a	1078	U
32	2a	1080	A
32	2a	1081	G
32	2a	1086	U
32	2a	1091	U
32	2a	1093	A
32	2a	1094	G
32	2a	1095	U
32	2a	1097	C
32	2a	1101	A
32	2a	1105	A
32	2a	1115	C
32	2a	1119	C
32	2a	1122	U
32	2a	1125	U
32	2a	1129	C
32	2a	1130	A
32	2a	1133	G
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1140	C
32	2a	1142	G
32	2a	1146	A
32	2a	1147	C
32	2a	1149	C
32	2a	1152	A
32	2a	1155	G
32	2a	1157	A
32	2a	1158	C
32	2a	1159	U
32	2a	1160	G
32	2a	1169	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	1171	G
32	2a	1173	G
32	2a	1179	A
32	2a	1181	G
32	2a	1182	G
32	2a	1183	A
32	2a	1184	G
32	2a	1196	U
32	2a	1197	G
32	2a	1199	U
32	2a	1202	G
32	2a	1211	U
32	2a	1212	U
32	2a	1213	A
32	2a	1220	G
32	2a	1225	A
32	2a	1227	A
32	2a	1236	A
32	2a	1238	A
32	2a	1240	U
32	2a	1241	G
32	2a	1250	A
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1260	C
32	2a	1261	A
32	2a	1264	C
32	2a	1270	C
32	2a	1272	G
32	2a	1273	G
32	2a	1275	A
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A
32	2a	1282	C
32	2a	1283	G
32	2a	1287	A
32	2a	1289	A
32	2a	1299	A
32	2a	1301	U
32	2a	1302	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	1305	G
32	2a	1306	A
32	2a	1312	G
32	2a	1319	A
32	2a	1320	C
32	2a	1323	G
32	2a	1324	A
32	2a	1336	C
32	2a	1340	A
32	2a	1346	A
32	2a	1347	G
32	2a	1353	G
32	2a	1363	C
32	2a	1363(A)	A
32	2a	1364	U
32	2a	1365	G
32	2a	1368	G
32	2a	1370	G
32	2a	1379	G
32	2a	1382	C
32	2a	1399	C
32	2a	1400	5MC
32	2a	1401	G
32	2a	1404	5MC
32	2a	1419	G
32	2a	1437	C
32	2a	1440	C
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1446	U
32	2a	1447	A
32	2a	1452	C
32	2a	1457	G
32	2a	1461	G
32	2a	1464	G
32	2a	1492	A
32	2a	1494	G
32	2a	1499	A
32	2a	1503	A
32	2a	1504	G
32	2a	1505	G
32	2a	1506	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	1517	G
32	2a	1519	MA6
32	2a	1520	G
32	2a	1528	U
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	13	A
53	2v	14	A
53	2v	15	A
54	2w	3	C
54	2w	4	C
54	2w	5	G
54	2w	6	G
54	2w	7	A
54	2w	8	4SU
54	2w	9	A
54	2w	13	C
54	2w	14	A
54	2w	19	G
54	2w	21	A
54	2w	27	G
54	2w	34	G
54	2w	46	G7M
54	2w	48	C
54	2w	51	U
54	2w	61	C
54	2w	62	C
54	2w	65	G
54	2w	67	C
54	2w	68	C
54	2w	69	G
54	2w	70	G
54	2w	71	G
54	2w	72	C
54	2w	73	A
54	2w	74	C
55	2x	2	G
55	2x	5	G
55	2x	9	G
55	2x	16	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
55	2x	19	G
55	2x	21	A
55	2x	22	G
55	2x	25	C
55	2x	41	C
55	2x	47	U
55	2x	64	G
55	2x	68	C
55	2x	69	C
56	2y	3	C
56	2y	4	C
56	2y	12	U
56	2y	14	A
56	2y	15	G
56	2y	19	G
56	2y	27	G
56	2y	32	PSU
56	2y	33	U
56	2y	34	G
56	2y	37	MIA
56	2y	42	C
56	2y	43	C
56	2y	45	U
56	2y	46	G7M
56	2y	47	U
56	2y	49	C
56	2y	52	G
56	2y	53	G
56	2y	55	PSU
56	2y	56	C
56	2y	58	A
56	2y	59	U
56	2y	61	C
56	2y	65	G
56	2y	68	C
56	2y	69	G
56	2y	70	G

All (62) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	196	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	479	A
1	1A	548	A
1	1A	627	A
1	1A	685	A
1	1A	746	A
1	1A	764	A
1	1A	774	A
1	1A	974	G
1	1A	1046	A
1	1A	1067	A
1	1A	1078	U
1	1A	1174	A
1	1A	1176	G
1	1A	1337	G
1	1A	1420	U
1	1A	1442	G
1	1A	1508	A
1	1A	1663	C
1	1A	1762	A
1	1A	1992	G
1	1A	1997	G
1	1A	2019	A
1	1A	2134	A
1	1A	2181	G
1	1A	2183	C
1	1A	2286	A
1	1A	2406	U
1	1A	2439	A
1	1A	2448	A
1	1A	2629	A
1	1A	2689	U
1	1A	2756	U
1	2A	196	A
1	2A	214	G
1	2A	228	A
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	528	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	746	A
1	2A	752	A
1	2A	774	A
1	2A	856	C
1	2A	893	C
1	2A	1026	U
1	2A	1210	A
1	2A	1379	A
1	2A	1420	U
1	2A	1442	G
1	2A	1493	C
1	2A	1530	C
1	2A	1653	G
1	2A	1913	A
1	2A	1992	G
1	2A	2119	A
1	2A	2126	A
1	2A	2689	U
1	2A	2756	U

5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

88 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. 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 $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z > 2$	Counts	RMSZ	# $ Z > 2$
56	4SU	2y	8	56	18,21,22	1.74	4 (22%)	25,30,33	2.62	6 (24%)
55	5MU	2x	54	55	19,22,23	1.48	5 (26%)	27,32,35	2.44	8 (29%)
32	4OC	2a	1402	32	20,23,24	0.76	1 (5%)	25,32,35	1.39	5 (20%)
54	5MU	1w	54	54	19,22,23	1.31	4 (21%)	27,32,35	2.29	6 (22%)
55	31H	2x	76	57,58,55	31,34,35	1.34	4 (12%)	35,47,50	2.02	11 (31%)
56	PSU	2y	39	56	18,21,22	1.35	2 (11%)	21,30,33	2.09	4 (19%)
32	UR3	2a	1498	32	19,22,23	1.28	1 (5%)	26,32,35	1.82	5 (19%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
32	5MC	2a	1407	32	19,22,23	1.85	3 (15%)	26,32,35	1.20	3 (11%)
32	5MC	2a	1400	32	19,22,23	1.42	2 (10%)	26,32,35	1.05	1 (3%)
1	5MC	1A	1942	57,1	19,22,23	1.69	3 (15%)	26,32,35	1.40	3 (11%)
54	PSU	1w	39	54	18,21,22	1.18	2 (11%)	21,30,33	2.67	6 (28%)
1	PSU	2A	1911	1	18,21,22	1.40	2 (11%)	21,30,33	2.52	5 (23%)
56	PSU	2y	32	56	18,21,22	1.40	3 (16%)	21,30,33	1.99	4 (19%)
1	5MU	2A	1915	57,1	19,22,23	1.47	6 (31%)	27,32,35	2.20	8 (29%)
1	2MA	1A	2503	57,1	22,25,26	1.28	4 (18%)	32,37,40	2.66	11 (34%)
54	MIA	2w	37	54	24,27,32	2.10	4 (16%)	32,39,47	2.45	11 (34%)
43	0TD	2l	92	43	8,9,10	5.25	2 (25%)	6,11,13	4.63	1 (16%)
55	5MC	1x	32	55	19,22,23	1.37	3 (15%)	26,32,35	1.38	2 (7%)
32	UR3	1a	1498	32	19,22,23	1.27	2 (10%)	26,32,35	2.27	6 (23%)
32	M2G	2a	966	32	24,27,28	1.36	4 (16%)	33,40,43	1.85	6 (18%)
32	4OC	1a	1402	32	20,23,24	0.84	1 (5%)	25,32,35	1.06	1 (4%)
1	PSU	1A	1911	1	18,21,22	1.54	3 (16%)	21,30,33	2.28	4 (19%)
32	MA6	2a	1519	32	23,26,27	0.43	0	33,38,41	2.15	10 (30%)
1	5MU	1A	1939	1	19,22,23	1.53	5 (26%)	27,32,35	2.75	8 (29%)
1	PSU	2A	2605	1	18,21,22	1.44	3 (16%)	21,30,33	2.00	4 (19%)
1	OMU	2A	2552	57,1	19,22,23	1.11	3 (15%)	25,31,34	1.83	5 (20%)
32	MA6	2a	1518	32	23,26,27	0.39	0	33,38,41	2.06	9 (27%)
1	PSU	2A	1917	1	18,21,22	1.50	3 (16%)	21,30,33	2.26	5 (23%)
56	4SU	1y	8	56	18,21,22	1.62	3 (16%)	25,30,33	2.30	5 (20%)
32	PSU	2a	516	32	18,21,22	1.38	2 (11%)	21,30,33	2.06	6 (28%)
55	5MU	1x	54	57,55	19,22,23	1.36	3 (15%)	27,32,35	1.75	6 (22%)
55	PSU	2x	55	55	18,21,22	1.36	2 (11%)	21,30,33	1.91	4 (19%)
32	5MC	1a	967	32	19,22,23	1.83	3 (15%)	26,32,35	1.27	3 (11%)
1	PSU	1A	2605	57,1	18,21,22	1.44	3 (16%)	21,30,33	2.06	4 (19%)
54	F3N	2w	76	54,1	33,36,37	1.46	5 (15%)	41,51,54	1.83	9 (21%)
1	OMC	2A	1920	1	19,22,23	0.73	0	25,31,34	0.97	1 (4%)
56	PSU	1y	32	56	18,21,22	1.42	2 (11%)	21,30,33	2.03	4 (19%)
32	5MC	2a	1404	32	19,22,23	1.81	3 (15%)	26,32,35	1.20	4 (15%)
1	5MC	2A	1942	1	19,22,23	1.77	2 (10%)	26,32,35	1.46	4 (15%)
1	5MU	2A	1939	57,1	19,22,23	1.64	5 (26%)	27,32,35	2.78	8 (29%)
56	PSU	1y	55	56	18,21,22	1.35	2 (11%)	21,30,33	1.99	4 (19%)
1	OMG	2A	2251	57,1,55	23,26,27	1.26	4 (17%)	32,38,41	1.97	7 (21%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
54	PSU	2w	39	54	18,21,22	1.40	2 (11%)	21,30,33	1.69	4 (19%)
32	G7M	1a	527	32	23,26,27	1.66	3 (13%)	34,39,42	1.74	4 (11%)
55	5MC	2x	32	55	19,22,23	1.36	2 (10%)	26,32,35	1.38	4 (15%)
1	5MC	1A	1962	57,1	19,22,23	1.81	3 (15%)	26,32,35	1.52	6 (23%)
1	5MC	2A	1962	57,1	19,22,23	1.74	3 (15%)	26,32,35	1.33	3 (11%)
54	4SU	1w	8	54	18,21,22	1.90	4 (22%)	25,30,33	2.66	7 (28%)
32	MA6	1a	1518	32	23,26,27	0.43	0	33,38,41	1.94	9 (27%)
54	F3N	1w	76	54,1	33,36,37	1.69	4 (12%)	41,51,54	1.62	8 (19%)
54	G7M	2w	46	54	23,26,27	1.56	4 (17%)	34,39,42	1.88	5 (14%)
32	G7M	2a	527	32	23,26,27	1.41	5 (21%)	34,39,42	1.61	4 (11%)
43	0TD	1l	92	43	8,9,10	3.95	1 (12%)	6,11,13	9.18	3 (50%)
54	5MU	2w	54	54	19,22,23	1.50	6 (31%)	27,32,35	1.89	7 (25%)
1	2MA	2A	2503	57,1	22,25,26	1.54	6 (27%)	32,37,40	2.34	7 (21%)
55	4SU	1x	8	55	18,21,22	2.34	6 (33%)	25,30,33	1.97	6 (24%)
55	PSU	1x	55	55	18,21,22	1.41	2 (11%)	21,30,33	2.00	3 (14%)
32	PSU	1a	516	32,57	18,21,22	1.38	2 (11%)	21,30,33	2.07	5 (23%)
56	PSU	1y	39	56	18,21,22	1.46	3 (16%)	21,30,33	2.06	3 (14%)
32	MA6	1a	1519	32	23,26,27	0.45	0	33,38,41	1.95	8 (24%)
32	2MG	2a	1207	32,57	23,26,27	1.28	3 (13%)	33,38,41	2.09	9 (27%)
54	PSU	2w	55	54	18,21,22	1.42	3 (16%)	21,30,33	2.07	6 (28%)
56	MIA	1y	37	56	21,24,32	1.68	3 (14%)	30,35,47	2.16	6 (20%)
32	5MC	1a	1404	32	19,22,23	1.60	3 (15%)	26,32,35	1.48	3 (11%)
1	PSU	1A	1917	1	18,21,22	1.33	2 (11%)	21,30,33	2.15	6 (28%)
54	4SU	2w	8	54	18,21,22	1.82	5 (27%)	25,30,33	2.51	5 (20%)
1	OMU	1A	2552	57,1	19,22,23	1.30	4 (21%)	25,31,34	1.94	6 (24%)
56	PSU	2y	55	56	18,21,22	1.36	1 (5%)	21,30,33	2.01	5 (23%)
32	5MC	1a	1407	32	19,22,23	1.91	3 (15%)	26,32,35	1.21	4 (15%)
32	2MG	1a	1207	32	23,26,27	1.33	3 (13%)	33,38,41	2.42	10 (30%)
56	MIA	2y	37	56	21,24,32	1.72	3 (14%)	30,35,47	1.87	9 (30%)
56	5MU	1y	54	56	19,22,23	1.57	4 (21%)	27,32,35	1.97	6 (22%)
54	PSU	1w	32	57,54	18,21,22	1.27	1 (5%)	21,30,33	1.61	4 (19%)
32	5MC	2a	967	32	19,22,23	1.67	3 (15%)	26,32,35	1.10	3 (11%)
54	PSU	1w	55	54	18,21,22	1.55	3 (16%)	21,30,33	2.39	5 (23%)
54	PSU	2w	32	54	18,21,22	1.44	2 (11%)	21,30,33	1.82	4 (19%)
56	G7M	2y	46	56	23,26,27	1.66	5 (21%)	34,39,42	1.92	4 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
1	5MU	1A	1915	1	19,22,23	1.41	4 (21%)	27,32,35	2.42	6 (22%)
54	MIA	1w	37	54	28,31,32	2.28	6 (21%)	38,44,47	2.72	10 (26%)
32	5MC	1a	1400	32	19,22,23	1.39	2 (10%)	26,32,35	1.37	3 (11%)
56	G7M	1y	46	56	23,26,27	1.71	6 (26%)	34,39,42	2.20	9 (26%)
56	5MU	2y	54	56	19,22,23	1.49	4 (21%)	27,32,35	1.57	5 (18%)
1	OMG	1A	2251	57,1,55	23,26,27	1.28	3 (13%)	32,38,41	2.10	6 (18%)
55	31H	1x	76	57,55	31,34,35	1.19	3 (9%)	35,47,50	2.41	14 (40%)
54	G7M	1w	46	54	23,26,27	1.57	3 (13%)	34,39,42	1.79	4 (11%)
32	M2G	1a	966	32	24,27,28	1.32	4 (16%)	33,40,43	2.03	7 (21%)
55	4SU	2x	8	55	18,21,22	2.22	6 (33%)	25,30,33	1.52	6 (24%)
1	OMC	1A	1920	1	19,22,23	0.81	0	25,31,34	1.18	2 (8%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	4SU	2y	8	56	-	0/7/25/26	0/2/2/2
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
32	4OC	2a	1402	32	-	0/9/29/30	0/2/2/2
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
55	31H	2x	76	57,58,55	-	5/22/40/41	0/3/3/3
56	PSU	2y	39	56	-	0/7/25/26	0/2/2/2
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	2/7/25/26	0/2/2/2
1	5MC	1A	1942	57,1	-	0/7/25/26	0/2/2/2
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	2/7/25/26	0/2/2/2
56	PSU	2y	32	56	-	2/7/25/26	0/2/2/2
1	5MU	2A	1915	57,1	-	0/7/25/26	0/2/2/2
1	2MA	1A	2503	57,1	-	1/7/25/26	0/3/3/3
54	MIA	2w	37	54	-	2/11/29/34	0/3/3/3
43	0TD	2l	92	43	-	3/7/12/14	-
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/11/29/30	0/3/3/3
32	4OC	1a	1402	32	-	0/9/29/30	0/2/2/2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	3/11/29/30	0/3/3/3
1	5MU	1A	1939	1	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
1	OMU	2A	2552	57,1	-	0/9/27/28	0/2/2/2
32	MA6	2a	1518	32	-	0/11/29/30	0/3/3/3
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
56	4SU	1y	8	56	-	3/7/25/26	0/2/2/2
32	PSU	2a	516	32	-	2/7/25/26	0/2/2/2
55	5MU	1x	54	57,55	-	0/7/25/26	0/2/2/2
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
1	PSU	1A	2605	57,1	-	0/7/25/26	0/2/2/2
54	F3N	2w	76	54,1	-	1/19/37/38	0/4/4/4
1	OMC	2A	1920	1	-	1/9/27/28	0/2/2/2
56	PSU	1y	32	56	-	0/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	2/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
1	5MU	2A	1939	57,1	-	0/7/25/26	0/2/2/2
56	PSU	1y	55	56	-	2/7/25/26	0/2/2/2
1	OMG	2A	2251	57,1,55	-	0/9/27/28	0/3/3/3
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
32	G7M	1a	527	32	-	2/7/25/26	0/3/3/3
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	57,1	-	0/7/25/26	0/2/2/2
1	5MC	2A	1962	57,1	-	0/7/25/26	0/2/2/2
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/11/29/30	0/3/3/3
54	F3N	1w	76	54,1	-	0/19/37/38	0/4/4/4
54	G7M	2w	46	54	-	0/7/25/26	0/3/3/3
32	G7M	2a	527	32	-	3/7/25/26	0/3/3/3
43	0TD	1l	92	43	-	3/7/12/14	-
54	5MU	2w	54	54	-	1/7/25/26	0/2/2/2
1	2MA	2A	2503	57,1	-	1/7/25/26	0/3/3/3
55	4SU	1x	8	55	-	1/7/25/26	0/2/2/2
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	32,57	-	0/7/25/26	0/2/2/2
56	PSU	1y	39	56	-	0/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	2/11/29/30	0/3/3/3
32	2MG	2a	1207	32,57	-	2/9/27/28	0/3/3/3

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
56	MIA	1y	37	56	-	2/7/25/34	0/3/3/3
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
54	4SU	2w	8	54	-	0/7/25/26	0/2/2/2
1	OMU	1A	2552	57,1	-	0/9/27/28	0/2/2/2
56	PSU	2y	55	56	-	3/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	0/9/27/28	0/3/3/3
56	MIA	2y	37	56	-	3/7/25/34	0/3/3/3
56	5MU	1y	54	56	-	2/7/25/26	0/2/2/2
54	PSU	1w	32	57,54	-	0/7/25/26	0/2/2/2
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
54	PSU	1w	55	54	-	2/7/25/26	0/2/2/2
54	PSU	2w	32	54	-	0/7/25/26	0/2/2/2
56	G7M	2y	46	56	-	4/7/25/26	0/3/3/3
1	5MU	1A	1915	1	-	0/7/25/26	0/2/2/2
54	MIA	1w	37	54	-	2/15/33/34	0/3/3/3
32	5MC	1a	1400	32	-	0/7/25/26	0/2/2/2
56	G7M	1y	46	56	-	2/7/25/26	0/3/3/3
56	5MU	2y	54	56	-	0/7/25/26	0/2/2/2
1	OMG	1A	2251	57,1,55	-	0/9/27/28	0/3/3/3
55	31H	1x	76	57,55	-	4/22/40/41	0/3/3/3
54	G7M	1w	46	54	-	0/7/25/26	0/3/3/3
32	M2G	1a	966	32	-	0/11/29/30	0/3/3/3
55	4SU	2x	8	55	-	0/7/25/26	0/2/2/2
1	OMC	1A	1920	1	-	1/9/27/28	0/2/2/2

All (266) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-11.57	1.70	1.82
43	1l	92	0TD	CB-SB	-10.64	1.71	1.82
43	2l	92	0TD	CB-CA	8.77	1.57	1.54
32	1a	1407	5MC	C5-C4	7.52	1.49	1.44
32	1a	967	5MC	C5-C4	7.04	1.49	1.44
32	2a	1407	5MC	C5-C4	7.03	1.49	1.44
54	2w	37	MIA	C2-S10	-7.00	1.69	1.75
32	2a	1404	5MC	C5-C4	6.87	1.49	1.44
54	1w	37	MIA	C13-C14	6.82	1.52	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1942	5MC	C5-C4	6.48	1.49	1.44
1	2A	1942	5MC	C5-C4	6.40	1.49	1.44
1	1A	1962	5MC	C5-C4	6.40	1.49	1.44
54	1w	76	F3N	CB-CG	-6.16	1.36	1.51
54	1w	37	MIA	C2-S10	-6.13	1.70	1.75
1	2A	1962	5MC	C5-C4	6.09	1.48	1.44
32	2a	967	5MC	C5-C4	5.87	1.48	1.44
56	2y	37	MIA	C5-C4	5.66	1.49	1.39
55	1x	8	4SU	C4-N3	-5.62	1.31	1.37
56	1y	37	MIA	C5-C4	5.44	1.48	1.39
32	1a	527	G7M	C5-N7	-5.37	1.33	1.39
32	1a	1404	5MC	C5-C4	5.29	1.48	1.44
55	2x	8	4SU	C4-N3	-5.10	1.32	1.37
32	2a	1400	5MC	C5-C4	5.07	1.48	1.44
1	1A	1911	PSU	C6-C5	5.06	1.40	1.35
54	1w	8	4SU	C4-S4	-5.00	1.59	1.68
55	2x	8	4SU	C4-S4	-4.99	1.59	1.68
54	1w	37	MIA	C5-C4	4.94	1.47	1.39
56	2y	8	4SU	C4-S4	-4.88	1.60	1.68
54	2w	37	MIA	C5-C4	4.86	1.47	1.39
55	1x	8	4SU	C2-N3	-4.86	1.29	1.38
54	2w	76	F3N	CB-CG	-4.85	1.39	1.51
54	2w	8	4SU	C4-S4	-4.84	1.60	1.68
54	1w	55	PSU	C6-C5	4.71	1.40	1.35
54	1w	76	F3N	C5-C4	-4.69	1.30	1.39
56	1y	46	G7M	C5-N7	-4.58	1.33	1.39
54	2w	46	G7M	C5-N7	-4.53	1.34	1.39
56	1y	39	PSU	C6-C5	4.46	1.40	1.35
56	1y	32	PSU	C6-C5	4.44	1.40	1.35
55	2x	76	31H	C5-N7	-4.41	1.31	1.39
56	1y	8	4SU	C4-S4	-4.39	1.60	1.68
54	2w	32	PSU	C6-C5	4.32	1.40	1.35
1	2A	2503	2MA	C5-C4	4.30	1.46	1.39
54	1w	46	G7M	C5-N7	-4.28	1.34	1.39
55	1x	32	5MC	C5-C4	4.21	1.47	1.44
56	2y	46	G7M	C5-C4	4.21	1.48	1.38
32	1a	1400	5MC	C5-C4	4.19	1.47	1.44
32	2a	516	PSU	C6-C5	4.16	1.39	1.35
55	2x	32	5MC	C5-C4	4.13	1.47	1.44
32	1a	1498	UR3	C2-N1	4.05	1.44	1.38
56	1y	55	PSU	C6-C5	4.05	1.39	1.35
54	2w	39	PSU	C6-C5	4.01	1.39	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2w	55	PSU	C6-C5	4.01	1.39	1.35
55	2x	55	PSU	C6-C5	3.97	1.39	1.35
56	2y	32	PSU	C6-C5	3.96	1.39	1.35
56	2y	39	PSU	C6-C5	3.96	1.39	1.35
54	1w	46	G7M	C5-C4	3.88	1.48	1.38
56	2y	55	PSU	C6-C5	3.85	1.39	1.35
55	1x	8	4SU	C4-S4	-3.85	1.61	1.68
1	1A	2605	PSU	C6-C5	3.83	1.39	1.35
55	1x	55	PSU	C6-C5	3.81	1.39	1.35
56	1y	46	G7M	C5-C4	3.78	1.47	1.38
32	2a	527	G7M	C5-N7	-3.77	1.34	1.39
32	2a	1498	UR3	C2-N1	3.76	1.43	1.38
56	2y	46	G7M	C5-N7	-3.75	1.34	1.39
32	1a	516	PSU	C6-C5	3.73	1.39	1.35
1	1A	1917	PSU	C6-C5	3.69	1.39	1.35
54	2w	76	F3N	C5-C4	-3.65	1.32	1.39
1	1A	1962	5MC	C6-C5	3.63	1.40	1.34
32	2a	1207	2MG	C5-C4	3.58	1.48	1.38
55	2x	8	4SU	C5-C4	-3.56	1.38	1.42
54	2w	76	F3N	C5-N7	-3.53	1.32	1.39
54	1w	76	F3N	C5-N7	-3.52	1.32	1.39
32	1a	527	G7M	C5-C4	3.50	1.47	1.38
32	2a	966	M2G	C5-C4	3.47	1.48	1.38
55	1x	8	4SU	C5-C4	-3.47	1.38	1.42
1	2A	2605	PSU	C6-C5	3.46	1.39	1.35
32	1a	1404	5MC	C6-C5	3.43	1.40	1.34
56	1y	54	5MU	C6-C5	3.42	1.40	1.34
1	1A	1939	5MU	C4-C5	3.40	1.50	1.44
1	2A	1939	5MU	C4-N3	-3.39	1.32	1.38
55	1x	76	31H	C5-C4	-3.32	1.33	1.39
54	1w	8	4SU	C5-C4	-3.30	1.38	1.42
55	1x	76	31H	C5-N7	-3.29	1.33	1.39
54	2w	46	G7M	C5-C4	3.23	1.46	1.38
55	2x	32	5MC	C6-C5	3.22	1.39	1.34
1	2A	1911	PSU	C6-C5	3.20	1.38	1.35
1	2A	1917	PSU	C6-C5	3.20	1.38	1.35
55	1x	76	31H	C5-C6	-3.20	1.32	1.41
54	2w	8	4SU	C4-N3	-3.18	1.34	1.37
32	2a	527	G7M	C5-C4	3.17	1.46	1.38
1	1A	1915	5MU	C6-C5	3.17	1.39	1.34
55	1x	32	5MC	C6-C5	3.14	1.39	1.34
56	1y	8	4SU	C2-N1	3.12	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	2y	54	5MU	C6-C5	3.11	1.39	1.34
1	2A	1939	5MU	C4-C5	3.11	1.49	1.44
54	1w	37	MIA	C5-C6	3.11	1.49	1.41
54	2w	54	5MU	C4-C5	3.10	1.49	1.44
1	2A	1939	5MU	C2-N3	-3.10	1.32	1.38
55	2x	76	31H	C5-C4	-3.08	1.33	1.39
56	2y	37	MIA	C5-C6	3.08	1.49	1.41
1	1A	2605	PSU	C2-N1	-3.06	1.32	1.36
54	1w	8	4SU	C2-N1	3.05	1.43	1.38
55	1x	54	5MU	C4-N3	-3.04	1.33	1.38
56	1y	37	MIA	C5-C6	3.04	1.49	1.41
54	1w	32	PSU	C6-C5	3.04	1.38	1.35
1	2A	1917	PSU	C4-N3	-3.03	1.33	1.38
1	1A	2503	2MA	C5-C4	3.03	1.44	1.39
54	2w	37	MIA	C5-C6	3.02	1.49	1.41
1	2A	1939	5MU	C6-N1	-3.02	1.32	1.38
1	2A	1915	5MU	C2-N1	3.02	1.43	1.38
32	1a	966	M2G	C2-N2	3.00	1.40	1.35
56	2y	8	4SU	C5-C4	-2.98	1.38	1.42
55	2x	8	4SU	C2-N3	-2.97	1.32	1.38
1	2A	1942	5MC	C6-C5	2.96	1.39	1.34
32	2a	967	5MC	C6-C5	2.94	1.39	1.34
55	2x	54	5MU	C4-C5	2.94	1.49	1.44
32	1a	966	M2G	C5-C4	2.92	1.46	1.38
54	1w	39	PSU	C6-C5	2.91	1.38	1.35
1	1A	2251	OMG	C5-C4	2.91	1.46	1.38
54	2w	8	4SU	C2-N1	2.90	1.43	1.38
1	2A	1962	5MC	C6-N1	-2.90	1.33	1.38
1	2A	1915	5MU	C6-C5	2.87	1.39	1.34
1	2A	2605	PSU	C2-N3	-2.87	1.32	1.37
32	1a	1207	2MG	C6-N1	-2.86	1.33	1.38
1	2A	2251	OMG	C6-N1	-2.85	1.33	1.38
32	2a	966	M2G	C2-N2	2.85	1.40	1.35
55	2x	54	5MU	C6-C5	2.84	1.39	1.34
1	1A	2552	OMU	C4-N3	-2.84	1.33	1.38
55	1x	54	5MU	C6-C5	2.84	1.39	1.34
1	1A	1915	5MU	C4-N3	-2.82	1.33	1.38
32	1a	1207	2MG	C5-C4	2.82	1.46	1.38
32	1a	1400	5MC	C6-C5	2.81	1.39	1.34
1	1A	1939	5MU	C6-N1	-2.81	1.33	1.38
56	1y	54	5MU	C4-C5	2.79	1.49	1.44
1	2A	1939	5MU	C6-C5	2.78	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	966	M2G	C6-N1	-2.77	1.33	1.38
56	1y	54	5MU	C2-N1	2.77	1.42	1.38
54	1w	8	4SU	C4-N3	-2.77	1.34	1.37
1	2A	2503	2MA	C5-N7	-2.74	1.34	1.39
56	2y	54	5MU	C4-C5	2.71	1.49	1.44
1	2A	1915	5MU	C4-N3	-2.71	1.33	1.38
1	1A	1939	5MU	C2-N3	-2.70	1.33	1.38
1	2A	2251	OMG	C5-C4	2.69	1.46	1.38
54	2w	54	5MU	C6-C5	2.69	1.39	1.34
56	2y	8	4SU	C2-N1	2.69	1.42	1.38
54	1w	54	5MU	C4-N3	-2.69	1.33	1.38
56	1y	54	5MU	C4-N3	-2.68	1.33	1.38
56	1y	37	MIA	C8-N7	2.67	1.36	1.31
1	2A	2251	OMG	C5-N7	-2.66	1.33	1.39
54	2w	54	5MU	C4-N3	-2.65	1.33	1.38
56	2y	37	MIA	C8-N7	2.63	1.36	1.31
56	2y	54	5MU	C2-N1	2.62	1.42	1.38
1	1A	1915	5MU	C2-N1	2.61	1.42	1.38
54	1w	76	F3N	C2'-C3'	-2.59	1.49	1.53
56	1y	46	G7M	C2-N3	2.59	1.39	1.33
1	1A	2503	2MA	C5-C6	2.57	1.48	1.41
32	1a	967	5MC	C6-N1	-2.56	1.33	1.38
54	2w	55	PSU	C4-N3	-2.54	1.34	1.38
1	1A	2552	OMU	C2-N3	-2.54	1.33	1.38
1	2A	1962	5MC	C6-C5	2.53	1.38	1.34
1	2A	2503	2MA	C5-C6	2.52	1.48	1.41
55	2x	8	4SU	C2-N1	2.52	1.42	1.38
56	2y	46	G7M	C6-N1	-2.52	1.34	1.38
1	1A	1939	5MU	C6-C5	2.51	1.38	1.34
55	2x	76	31H	C3'-N3'	2.50	1.49	1.45
54	2w	39	PSU	C4-N3	-2.50	1.34	1.38
1	1A	1939	5MU	C4-N3	-2.49	1.34	1.38
55	2x	54	5MU	C4-N3	-2.49	1.34	1.38
32	1a	967	5MC	C6-C5	2.48	1.38	1.34
54	2w	46	G7M	C6-N1	-2.48	1.34	1.38
1	1A	1942	5MC	C6-N1	-2.46	1.33	1.38
1	1A	2251	OMG	C6-N1	-2.46	1.34	1.38
1	2A	2552	OMU	C4-N3	-2.46	1.34	1.38
32	2a	527	G7M	C5-C6	2.44	1.50	1.43
54	1w	37	MIA	C8-N7	2.44	1.36	1.31
1	1A	2605	PSU	C4-N3	-2.44	1.34	1.38
1	2A	1917	PSU	C2-N3	-2.43	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	2251	OMG	C5-N7	-2.43	1.34	1.39
1	2A	1911	PSU	C4-N3	-2.43	1.34	1.38
32	2a	966	M2G	C5-N7	-2.43	1.34	1.39
56	1y	46	G7M	C6-N1	-2.43	1.34	1.38
55	2x	54	5MU	C2-N1	2.42	1.42	1.38
32	2a	1404	5MC	C6-N1	-2.41	1.33	1.38
1	2A	2251	OMG	C4-N9	-2.40	1.31	1.38
55	1x	8	4SU	O2-C2	2.40	1.27	1.23
32	2a	1400	5MC	C6-C5	2.39	1.38	1.34
32	2a	967	5MC	C6-N1	-2.38	1.34	1.38
56	1y	55	PSU	C4-N3	-2.37	1.34	1.38
1	1A	1911	PSU	C4-N3	-2.35	1.34	1.38
32	1a	527	G7M	C6-N1	-2.34	1.34	1.38
56	2y	54	5MU	C4-N3	-2.34	1.34	1.38
32	1a	1407	5MC	C6-C5	2.33	1.38	1.34
54	1w	54	5MU	C6-C5	2.32	1.38	1.34
54	2w	32	PSU	C4-N3	-2.32	1.34	1.38
32	2a	516	PSU	C4-N3	-2.32	1.34	1.38
55	1x	54	5MU	C2-N3	-2.31	1.33	1.38
1	2A	2605	PSU	C4-N3	-2.31	1.34	1.38
54	1w	55	PSU	C2-N1	-2.30	1.33	1.36
55	2x	76	31H	C5-C6	-2.30	1.34	1.41
56	2y	39	PSU	C4-C5	2.30	1.50	1.44
55	2x	54	5MU	C6-N1	-2.30	1.34	1.38
32	1a	1404	5MC	C6-N1	-2.29	1.34	1.38
54	2w	8	4SU	C5-C4	-2.29	1.39	1.42
54	1w	46	G7M	C6-N1	-2.29	1.34	1.38
1	1A	1911	PSU	C4-C5	2.29	1.50	1.44
32	1a	1207	2MG	C4-N9	-2.28	1.32	1.38
32	1a	1407	5MC	C6-N1	-2.27	1.34	1.38
55	2x	55	PSU	C4-N3	-2.26	1.34	1.38
54	1w	54	5MU	C6-N1	-2.26	1.34	1.38
54	2w	8	4SU	C2-N3	-2.26	1.34	1.38
54	2w	54	5MU	C6-N1	-2.24	1.34	1.38
1	1A	2552	OMU	C6-C5	2.24	1.40	1.35
54	2w	37	MIA	C5-N7	-2.24	1.35	1.39
1	1A	2552	OMU	C5-C4	-2.24	1.38	1.43
1	2A	2503	2MA	C4-N9	-2.23	1.33	1.37
32	2a	1407	5MC	C6-C5	2.23	1.38	1.34
54	2w	55	PSU	C2-N3	-2.23	1.33	1.37
32	2a	1404	5MC	C6-C5	2.22	1.38	1.34
54	1w	37	MIA	C4-N9	-2.22	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1962	5MC	C6-N1	-2.21	1.34	1.38
56	1y	46	G7M	C4-N3	2.21	1.39	1.34
32	1a	516	PSU	C2-N1	-2.20	1.33	1.36
54	1w	54	5MU	C2-N3	-2.20	1.34	1.38
1	1A	1917	PSU	C4-N3	-2.20	1.34	1.38
1	1A	1942	5MC	C6-C5	2.18	1.38	1.34
32	2a	1402	4OC	C6-C5	2.17	1.40	1.35
54	2w	54	5MU	C2-N3	-2.17	1.34	1.38
1	2A	1915	5MU	C6-N1	-2.16	1.34	1.38
56	1y	46	G7M	C2-N2	2.16	1.39	1.34
56	1y	32	PSU	C4-N3	-2.15	1.34	1.38
56	2y	46	G7M	C5-C6	2.15	1.49	1.43
54	2w	76	F3N	C2'-C3'	-2.15	1.50	1.53
1	1A	1915	5MU	C2-N3	-2.15	1.34	1.38
54	2w	76	F3N	C5-C6	-2.15	1.35	1.41
54	1w	55	PSU	C4-N3	-2.13	1.34	1.38
56	2y	46	G7M	C2-N3	2.13	1.38	1.33
55	1x	55	PSU	C4-N3	-2.13	1.34	1.38
32	2a	966	M2G	C2-N3	2.12	1.37	1.32
1	2A	2503	2MA	C8-N7	2.12	1.35	1.31
56	1y	39	PSU	C4-N3	-2.12	1.34	1.38
1	2A	2552	OMU	C6-C5	2.11	1.40	1.35
1	2A	1915	5MU	C2-N3	-2.11	1.34	1.38
32	2a	527	G7M	C4-N9	-2.11	1.32	1.38
1	2A	2503	2MA	C8-N9	-2.11	1.34	1.37
55	1x	8	4SU	C6-C5	2.10	1.40	1.35
1	2A	1915	5MU	C4-C5	2.10	1.48	1.44
32	2a	1207	2MG	C6-N1	-2.10	1.34	1.38
32	2a	1207	2MG	C4-N9	-2.09	1.32	1.38
1	2A	2552	OMU	C2-N3	-2.08	1.34	1.38
56	1y	8	4SU	C5-C4	-2.08	1.40	1.42
1	1A	2503	2MA	C5-N7	-2.07	1.35	1.39
32	1a	1498	UR3	C6-C5	2.07	1.39	1.35
32	2a	527	G7M	C6-N1	-2.06	1.35	1.38
54	1w	39	PSU	C4-N3	-2.06	1.35	1.38
32	1a	1402	4OC	C6-C5	2.06	1.39	1.35
54	2w	54	5MU	C2-N1	2.05	1.41	1.38
56	1y	39	PSU	C4-C5	2.05	1.50	1.44
54	2w	46	G7M	C5-C6	2.05	1.48	1.43
1	1A	2503	2MA	C8-N9	-2.04	1.34	1.37
55	2x	8	4SU	O2-C2	2.03	1.26	1.23
32	1a	966	M2G	C5-N7	-2.02	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1x	32	5MC	C6-N1	-2.02	1.34	1.38
56	2y	8	4SU	C4-N3	-2.01	1.35	1.37
32	2a	1407	5MC	C6-N1	-2.01	1.34	1.38
56	2y	32	PSU	C4-C5	2.01	1.49	1.44
56	2y	32	PSU	C4-N3	-2.00	1.35	1.38

All (490) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	1l	92	0TD	CSB-SB-CB	21.91	141.76	102.36
43	2l	92	0TD	CSB-SB-CB	-11.05	82.51	102.36
54	1w	37	MIA	C12-C13-C14	-9.37	110.19	127.01
54	2w	37	MIA	C5-C4-N3	-8.33	118.40	127.18
54	1w	39	PSU	N1-C2-N3	8.04	123.66	115.17
1	2A	2503	2MA	C5-C4-N3	-7.76	119.01	127.18
54	2w	8	4SU	C4-N3-C2	-7.56	120.07	127.31
1	2A	1911	PSU	N1-C2-N3	7.43	123.01	115.17
32	1a	1498	UR3	C4-N3-C2	-7.29	118.71	124.58
32	1a	1207	2MG	C2-N3-C4	7.28	121.11	112.00
56	1y	46	G7M	N9-C4-N3	7.22	140.40	125.95
1	2A	1917	PSU	N1-C2-N3	7.18	122.74	115.17
1	1A	1911	PSU	N1-C2-N3	7.11	122.67	115.17
54	1w	37	MIA	C5-C4-N3	-7.08	119.72	127.18
1	2A	1939	5MU	C4-N3-C2	-7.03	118.12	127.34
1	1A	1939	5MU	C4-N3-C2	-6.95	118.23	127.34
56	2y	8	4SU	C4-N3-C2	-6.92	120.68	127.31
1	1A	2503	2MA	C5-C4-N3	-6.91	119.90	127.18
1	2A	2503	2MA	N3-C4-N9	6.85	135.69	126.99
56	1y	8	4SU	C4-N3-C2	-6.73	120.86	127.31
1	2A	1939	5MU	N3-C2-N1	6.64	123.53	114.89
54	2w	37	MIA	N3-C4-N9	6.64	135.41	126.99
1	1A	2503	2MA	N3-C4-N9	6.62	135.40	126.99
54	1w	8	4SU	C4-N3-C2	-6.60	120.99	127.31
56	1y	37	MIA	C5-C4-N3	-6.56	117.68	126.72
54	2w	8	4SU	C5-C4-N3	6.48	120.78	114.75
56	1y	39	PSU	N1-C2-N3	6.48	122.01	115.17
56	2y	8	4SU	C5-C4-S4	-6.46	116.93	124.31
54	1w	8	4SU	C5-C4-S4	-6.44	116.95	124.31
1	1A	1939	5MU	N3-C2-N1	6.34	123.15	114.89
54	1w	39	PSU	C4-N3-C2	-6.34	117.64	126.37
1	1A	1915	5MU	C5-C4-N3	6.31	120.81	115.32
56	1y	32	PSU	N1-C2-N3	6.31	121.82	115.17

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	2251	OMG	C5-C4-N3	-6.30	118.36	128.39
54	1w	55	PSU	N1-C2-N3	6.27	121.78	115.17
54	2w	46	G7M	N9-C4-N3	6.25	138.44	125.95
32	1a	966	M2G	C5-C4-N3	-6.24	118.45	128.39
56	2y	46	G7M	N9-C4-N3	6.22	138.39	125.95
55	2x	54	5MU	C4-N3-C2	-6.21	119.20	127.34
56	1y	55	PSU	N1-C2-N3	6.21	121.71	115.17
32	2a	966	M2G	C5-C4-N3	-6.18	118.55	128.39
54	2w	76	F3N	N1-C2-N3	-6.16	119.25	128.58
1	2A	1939	5MU	C5-C6-N1	-6.13	116.65	123.31
54	1w	8	4SU	C5-C4-N3	6.13	120.46	114.75
54	2w	55	PSU	N1-C2-N3	6.11	121.62	115.17
54	1w	46	G7M	N9-C4-N3	6.09	138.13	125.95
55	2x	54	5MU	N3-C2-N1	6.05	122.76	114.89
56	2y	55	PSU	N1-C2-N3	6.04	121.54	115.17
32	2a	516	PSU	N1-C2-N3	6.00	121.49	115.17
55	1x	55	PSU	N1-C2-N3	6.00	121.49	115.17
56	2y	39	PSU	N1-C2-N3	5.99	121.49	115.17
32	2a	1498	UR3	C4-N3-C2	-5.96	119.78	124.58
56	1y	46	G7M	C5-C4-N3	-5.89	117.02	128.15
56	2y	46	G7M	C5-C4-N3	-5.87	117.06	128.15
54	2w	46	G7M	C5-C4-N3	-5.86	117.07	128.15
56	2y	32	PSU	N1-C2-N3	5.86	121.35	115.17
1	2A	1915	5MU	N3-C2-N1	5.79	122.43	114.89
56	2y	8	4SU	C5-C4-N3	5.74	120.09	114.75
32	1a	516	PSU	N1-C2-N3	5.71	121.19	115.17
1	1A	1915	5MU	C4-N3-C2	-5.71	119.86	127.34
32	1a	527	G7M	N9-C4-N3	5.70	137.34	125.95
1	1A	2251	OMG	C2-N3-C4	5.69	122.10	112.30
32	1a	1207	2MG	C5-C4-N3	-5.63	119.42	128.39
1	1A	1917	PSU	N1-C2-N3	5.63	121.11	115.17
55	2x	76	31H	N1-C2-N3	-5.59	120.13	128.58
55	1x	8	4SU	O2-C2-N1	5.56	130.04	122.80
1	1A	1915	5MU	O4-C4-C5	-5.54	118.58	124.92
54	2w	32	PSU	N1-C2-N3	5.54	121.01	115.17
55	1x	76	31H	C5-C4-N3	-5.53	119.10	126.72
54	1w	46	G7M	C5-C4-N3	-5.49	117.78	128.15
54	1w	76	F3N	N1-C2-N3	-5.49	120.28	128.58
55	1x	76	31H	N1-C2-N3	-5.48	120.29	128.58
55	2x	55	PSU	N1-C2-N3	5.47	120.94	115.17
54	1w	54	5MU	C4-N3-C2	-5.47	120.17	127.34
1	2A	2251	OMG	C5-C4-N3	-5.46	119.69	128.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	2605	PSU	N1-C2-N3	5.44	120.91	115.17
1	1A	1939	5MU	C5-C4-N3	5.44	120.05	115.32
1	2A	2605	PSU	N1-C2-N3	5.43	120.90	115.17
32	2a	1207	2MG	C2-N3-C4	5.41	118.77	112.00
1	2A	1939	5MU	C5-C4-N3	5.41	120.02	115.32
1	1A	2552	OMU	N3-C2-N1	5.37	121.88	114.89
1	1A	1915	5MU	N3-C2-N1	5.37	121.88	114.89
1	1A	2503	2MA	C4-N9-C8	5.36	111.37	105.74
56	1y	46	G7M	C2-N3-C4	5.34	121.49	112.30
1	2A	1911	PSU	O2-C2-N1	-5.32	117.30	122.79
54	1w	54	5MU	O4-C4-C5	-5.30	118.86	124.92
32	1a	527	G7M	C5-C4-N3	-5.28	118.17	128.15
56	2y	46	G7M	C2-N3-C4	5.27	121.38	112.30
56	1y	8	4SU	C5-C4-N3	5.23	119.62	114.75
54	1w	54	5MU	N3-C2-N1	5.23	121.70	114.89
56	2y	37	MIA	C5-C4-N3	-5.23	119.52	126.72
56	1y	54	5MU	N3-C2-N1	5.22	121.68	114.89
54	2w	76	F3N	C5-C4-N3	-5.16	119.61	126.72
54	1w	55	PSU	O2-C2-N1	-5.13	117.50	122.79
54	2w	46	G7M	C2-N3-C4	5.12	121.11	112.30
1	2A	1915	5MU	C4-N3-C2	-5.08	120.68	127.34
56	1y	37	MIA	N3-C4-N9	5.03	135.72	127.17
32	1a	516	PSU	O2-C2-N1	-5.03	117.60	122.79
1	1A	2605	PSU	O2-C2-N1	-5.01	117.62	122.79
54	1w	54	5MU	C5-C4-N3	5.00	119.67	115.32
1	1A	1917	PSU	C4-N3-C2	-4.99	119.50	126.37
54	2w	8	4SU	N3-C2-N1	4.95	121.34	114.89
55	1x	76	31H	O4'-C1'-N9	4.94	117.57	108.09
32	2a	966	M2G	N9-C4-N3	4.93	135.81	125.95
32	1a	966	M2G	N9-C4-N3	4.90	135.76	125.95
1	2A	2552	OMU	N3-C2-N1	4.90	121.27	114.89
1	1A	1939	5MU	C5-C6-N1	-4.88	118.01	123.31
32	2a	1519	MA6	C5-C4-N3	-4.88	120.00	126.72
1	2A	1911	PSU	C4-N3-C2	-4.84	119.70	126.37
54	2w	39	PSU	N1-C2-N3	4.84	120.27	115.17
56	2y	39	PSU	C4-N3-C2	-4.83	119.72	126.37
32	2a	1519	MA6	C4-C5-N7	-4.83	105.06	110.58
32	1a	1404	5MC	C5-C6-N1	-4.82	118.08	123.31
54	1w	55	PSU	C6-C5-C4	-4.82	114.92	118.17
32	2a	1207	2MG	C5-C4-N3	-4.81	120.74	128.39
32	2a	1518	MA6	N1-C2-N3	-4.80	121.32	128.58
54	1w	37	MIA	N3-C4-N9	4.79	133.07	126.99

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	1x	54	5MU	N3-C2-N1	4.78	121.12	114.89
32	1a	1519	MA6	N1-C2-N3	-4.78	121.34	128.58
1	1A	2552	OMU	C4-N3-C2	-4.77	120.69	126.61
1	2A	1917	PSU	C4-N3-C2	-4.73	119.86	126.37
32	2a	527	G7M	C5-C4-N3	-4.68	119.31	128.15
56	1y	54	5MU	C4-N3-C2	-4.66	121.23	127.34
1	2A	2251	OMG	C2-N3-C4	4.65	120.31	112.30
55	2x	54	5MU	C5-C4-N3	4.63	119.35	115.32
32	2a	527	G7M	N9-C4-N3	4.63	135.21	125.95
54	1w	8	4SU	C1'-N1-C2	4.61	125.87	117.59
54	1w	37	MIA	C15-C14-C13	-4.60	108.84	122.66
54	1w	37	MIA	C6-C5-N7	4.59	137.43	132.43
54	1w	46	G7M	C2-N3-C4	4.55	120.14	112.30
32	1a	966	M2G	C2-N3-C4	4.55	120.92	112.51
32	2a	1519	MA6	C5-N7-C8	4.50	110.53	103.45
56	1y	8	4SU	C5-C4-S4	-4.48	119.19	124.31
1	1A	1911	PSU	C4-N3-C2	-4.47	120.21	126.37
32	1a	1498	UR3	O2-C2-N3	-4.47	115.15	121.33
32	2a	527	G7M	C2-N3-C4	4.46	119.98	112.30
32	1a	1207	2MG	C6-C5-N7	4.45	138.39	130.29
54	1w	32	PSU	N1-C2-N3	4.43	119.84	115.17
1	2A	2552	OMU	C4-N3-C2	-4.41	121.13	126.61
1	2A	2605	PSU	C6-C5-C4	-4.41	115.20	118.17
1	1A	2503	2MA	N9-C8-N7	-4.37	107.74	113.94
32	2a	1518	MA6	C5-C4-N3	-4.35	120.72	126.72
32	1a	1518	MA6	C5-C4-N3	-4.35	120.73	126.72
55	1x	8	4SU	C4-N3-C2	4.32	131.45	127.31
56	1y	32	PSU	C4-N3-C2	-4.32	120.43	126.37
56	2y	55	PSU	O2-C2-N1	-4.30	118.35	122.79
56	1y	39	PSU	O2-C2-N1	-4.29	118.37	122.79
54	2w	54	5MU	N3-C2-N1	4.28	120.46	114.89
1	1A	2251	OMG	N9-C4-N3	4.27	134.49	125.95
32	1a	967	5MC	C5-C6-N1	-4.27	118.68	123.31
32	2a	966	M2G	C2-N3-C4	4.25	120.37	112.51
32	2a	1207	2MG	C6-C5-N7	4.24	138.01	130.29
32	1a	1518	MA6	N1-C2-N3	-4.23	122.17	128.58
55	2x	55	PSU	C4-N3-C2	-4.22	120.56	126.37
32	1a	1498	UR3	C6-N1-C2	-4.22	118.35	121.80
54	2w	54	5MU	C4-N3-C2	-4.20	121.83	127.34
1	2A	2552	OMU	O2-C2-N1	-4.17	117.36	122.80
32	1a	527	G7M	C2-N3-C4	4.15	119.45	112.30
56	1y	37	MIA	C2-N3-C4	4.14	121.94	111.83

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	1x	32	5MC	C5-C6-N1	-4.12	118.83	123.31
32	2a	516	PSU	C4-N3-C2	-4.12	120.69	126.37
55	1x	8	4SU	C6-C5-C4	-4.12	116.39	119.95
32	1a	1519	MA6	C2-N1-C6	4.10	121.85	111.83
55	2x	76	31H	C5-C4-N3	-4.09	121.09	126.72
55	2x	54	5MU	C5-C6-N1	-4.09	118.87	123.31
56	2y	37	MIA	N3-C4-N9	4.08	134.10	127.17
1	1A	1939	5MU	O2-C2-N1	-4.07	117.50	122.80
1	1A	1911	PSU	O2-C2-N1	-4.06	118.60	122.79
1	1A	2503	2MA	C5-N7-C8	4.05	109.81	103.45
32	1a	1207	2MG	N1-C2-N2	4.05	120.69	116.56
54	2w	55	PSU	C4-N3-C2	-4.03	120.82	126.37
56	1y	55	PSU	C4-N3-C2	-4.02	120.83	126.37
55	1x	76	31H	CA-N-CN	-4.02	116.64	122.82
32	1a	1498	UR3	C1'-N1-C2	3.99	123.56	117.04
56	1y	8	4SU	N3-C2-N1	3.98	120.07	114.89
32	2a	1518	MA6	C5-N7-C8	3.97	109.69	103.45
1	1A	1942	5MC	C5-C6-N1	-3.96	119.01	123.31
55	1x	55	PSU	O2-C2-N1	-3.95	118.71	122.79
32	2a	1518	MA6	C4-C5-N7	-3.93	106.09	110.58
1	2A	2251	OMG	C6-C5-N7	3.92	137.42	130.29
1	2A	1915	5MU	O4-C4-C5	-3.90	120.45	124.92
43	1l	92	0TD	OD2-CG-CB	3.90	121.57	113.15
56	2y	32	PSU	C4-N3-C2	-3.90	121.00	126.37
1	1A	2503	2MA	C2-N1-C6	3.89	124.09	118.10
56	2y	8	4SU	N3-C2-N1	3.89	119.96	114.89
1	2A	2503	2MA	N6-C6-N1	3.87	122.25	117.03
1	2A	1939	5MU	O2-C2-N1	-3.87	117.76	122.80
1	1A	1939	5MU	O4-C4-C5	-3.87	120.50	124.92
32	2a	1518	MA6	C2-N1-C6	3.86	121.26	111.83
54	1w	76	F3N	C5-C4-N3	-3.86	121.40	126.72
56	1y	37	MIA	N3-C2-N1	-3.86	122.74	128.58
55	1x	55	PSU	C4-N3-C2	-3.85	121.07	126.37
32	1a	1518	MA6	C2-N1-C6	3.82	121.15	111.83
1	1A	1962	5MC	C5-C4-N3	-3.77	117.89	121.75
32	1a	1207	2MG	N9-C4-N3	3.77	133.50	125.95
32	2a	1207	2MG	N2-C2-N3	-3.76	115.72	120.51
56	2y	54	5MU	N3-C2-N1	3.75	119.77	114.89
32	2a	1519	MA6	N9-C8-N7	-3.74	108.62	113.94
1	2A	2605	PSU	C4-N3-C2	-3.73	121.23	126.37
55	2x	54	5MU	O2-C2-N1	-3.73	117.95	122.80
55	1x	54	5MU	C4-N3-C2	-3.70	122.49	127.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	2251	OMG	C6-C5-N7	3.69	137.00	130.29
55	1x	32	5MC	C5-C4-N3	-3.68	117.98	121.75
1	2A	2251	OMG	N9-C4-N3	3.68	133.31	125.95
1	2A	1915	5MU	C5-C4-N3	3.68	118.52	115.32
1	1A	2605	PSU	C6-C5-C4	-3.67	115.69	118.17
1	1A	2503	2MA	C4-C5-N7	-3.66	106.40	110.58
1	2A	1962	5MC	C5-C6-N1	-3.66	119.34	123.31
32	1a	1400	5MC	O2-C2-N3	-3.65	116.58	122.33
54	2w	32	PSU	C4-N3-C2	-3.65	121.34	126.37
56	2y	8	4SU	C1'-N1-C2	3.65	124.14	117.59
32	2a	1498	UR3	C1'-N1-C2	3.63	122.98	117.04
1	2A	1942	5MC	C5-C6-N1	-3.62	119.38	123.31
1	2A	1942	5MC	O2-C2-N3	-3.61	116.63	122.33
32	1a	1518	MA6	C5-N7-C8	3.60	109.11	103.45
54	2w	54	5MU	C5-C4-N3	3.59	118.45	115.32
54	2w	76	F3N	C2-N3-C4	3.59	120.60	111.83
56	1y	37	MIA	C4-C5-N7	-3.58	106.48	110.58
55	2x	54	5MU	O4-C4-C5	-3.58	120.82	124.92
54	1w	37	MIA	C4-C5-N7	-3.58	106.49	110.58
32	1a	1519	MA6	C5-C4-N3	-3.56	121.81	126.72
56	1y	54	5MU	C5-C4-N3	3.56	118.41	115.32
55	1x	76	31H	C5-C4-N9	3.55	109.69	105.81
1	1A	1939	5MU	C5M-C5-C4	3.55	122.58	118.78
1	1A	2552	OMU	C5-C4-N3	3.55	119.77	114.80
32	2a	1519	MA6	N1-C2-N3	-3.54	123.22	128.58
32	1a	516	PSU	C4-N3-C2	-3.54	121.50	126.37
54	2w	54	5MU	C5M-C5-C4	3.54	122.56	118.78
32	2a	1518	MA6	N9-C8-N7	-3.52	108.95	113.94
54	1w	37	MIA	C2-N3-C4	3.52	121.50	112.29
56	2y	37	MIA	C4-C5-N7	-3.52	106.56	110.58
54	2w	8	4SU	C5-C4-S4	-3.51	120.30	124.31
1	2A	2503	2MA	C4-N9-C8	3.50	109.42	105.74
56	2y	32	PSU	O2-C2-N1	-3.49	119.19	122.79
32	1a	1498	UR3	C5-C4-N3	3.48	119.62	115.04
32	1a	1518	MA6	C4-C5-N7	-3.47	106.61	110.58
32	1a	1519	MA6	C4-C5-N7	-3.47	106.61	110.58
1	1A	1920	OMC	O2-C2-N3	-3.45	116.88	122.33
1	1A	1962	5MC	O2-C2-N3	-3.45	116.89	122.33
32	2a	1207	2MG	C4-C5-N7	-3.44	105.21	110.67
55	2x	76	31H	N9-C8-N7	-3.44	109.05	113.94
56	1y	54	5MU	C5-C6-N1	-3.44	119.58	123.31
54	2w	37	MIA	C2-N3-C4	3.44	121.30	112.29

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	1a	1519	MA6	C5-N7-C8	3.43	108.84	103.45
32	2a	1402	4OC	O2-C2-N3	-3.43	116.93	122.33
54	2w	37	MIA	C4-C5-N7	-3.43	106.66	110.58
55	1x	76	31H	N9-C8-N7	-3.43	109.07	113.94
55	2x	76	31H	O2'-C2'-C3'	3.42	119.54	111.16
32	2a	1518	MA6	C2-N3-C4	3.42	120.18	111.83
32	1a	1207	2MG	C4-C5-N7	-3.41	105.26	110.67
54	2w	54	5MU	C5-C6-N1	-3.40	119.62	123.31
54	2w	76	F3N	N9-C8-N7	-3.39	109.12	113.94
56	1y	39	PSU	C4-N3-C2	-3.39	121.70	126.37
1	2A	1917	PSU	O2-C2-N1	-3.39	119.30	122.79
55	2x	32	5MC	C5-C6-N1	-3.37	119.65	123.31
54	1w	8	4SU	N3-C2-N1	3.37	119.28	114.89
55	2x	8	4SU	C5-C4-N3	3.37	117.88	114.75
56	1y	54	5MU	O4-C4-C5	-3.37	121.06	124.92
54	2w	39	PSU	C4-N3-C2	-3.35	121.76	126.37
55	1x	76	31H	C2-N3-C4	3.32	119.95	111.83
56	2y	39	PSU	O2-C2-N1	-3.32	119.37	122.79
56	2y	37	MIA	C2-N3-C4	3.31	119.93	111.83
56	2y	55	PSU	C4-N3-C2	-3.30	121.82	126.37
56	2y	54	5MU	C4-N3-C2	-3.29	123.03	127.34
32	2a	1519	MA6	C2-N1-C6	3.26	119.80	111.83
56	1y	8	4SU	C1'-N1-C2	3.26	123.45	117.59
1	1A	1942	5MC	CM5-C5-C6	-3.26	118.44	122.85
32	1a	1407	5MC	C5-C6-N1	-3.25	119.78	123.31
32	2a	1407	5MC	C5-C4-N3	-3.25	118.42	121.75
56	1y	55	PSU	O2-C2-N1	-3.25	119.44	122.79
32	1a	1518	MA6	N9-C8-N7	-3.25	109.33	113.94
54	1w	39	PSU	O2-C2-N1	-3.22	119.47	122.79
32	2a	1407	5MC	C5-C6-N1	-3.22	119.82	123.31
32	2a	1207	2MG	N1-C2-N2	3.22	119.84	116.56
55	2x	8	4SU	C1'-N1-C2	3.22	123.37	117.59
1	1A	2251	OMG	C4-C5-N7	-3.20	105.60	110.67
55	2x	76	31H	C4'-O4'-C1'	-3.20	102.41	109.47
32	1a	1404	5MC	C5-C4-N3	-3.20	118.48	121.75
56	2y	37	MIA	N3-C2-N1	-3.19	123.75	128.58
54	1w	55	PSU	C4-N3-C2	-3.16	122.01	126.37
55	1x	54	5MU	C5-C4-N3	3.16	118.07	115.32
55	2x	76	31H	C2-N3-C4	3.16	119.55	111.83
32	2a	1402	4OC	C6-C5-C4	3.15	120.79	117.00
32	2a	1519	MA6	C2-N3-C4	3.14	119.49	111.83
1	1A	1942	5MC	C5-C4-N3	-3.13	118.55	121.75

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	1404	5MC	C5-C6-N1	-3.13	119.91	123.31
55	2x	32	5MC	C5-C4-N3	-3.13	118.55	121.75
1	1A	1962	5MC	CM5-C5-C6	-3.12	118.62	122.85
54	1w	39	PSU	C5-C6-N1	-3.12	117.81	122.14
56	2y	54	5MU	O4-C4-C5	-3.12	121.35	124.92
55	1x	76	31H	C6-C5-C4	3.09	121.40	117.18
54	2w	37	MIA	C12-N6-C6	-3.09	119.98	122.85
54	1w	37	MIA	C2-N1-C6	3.09	123.40	117.54
55	1x	76	31H	C5-N7-C8	3.07	108.28	103.45
54	1w	37	MIA	N3-C2-N1	-3.07	121.40	127.00
56	2y	54	5MU	C5-C4-N3	3.06	117.99	115.32
32	2a	967	5MC	C5-C6-N1	-3.06	119.99	123.31
1	2A	1915	5MU	C5-C6-N1	-3.06	119.99	123.31
1	2A	1911	PSU	C5-C6-N1	-3.06	117.89	122.14
1	1A	2605	PSU	C4-N3-C2	-3.06	122.16	126.37
55	2x	76	31H	C5-N7-C8	3.06	108.25	103.45
32	1a	1518	MA6	C2-N3-C4	3.04	119.27	111.83
55	2x	32	5MC	O2-C2-N3	-3.04	117.53	122.33
54	1w	54	5MU	C5-C6-N1	-3.04	120.02	123.31
32	1a	1519	MA6	C2-N3-C4	3.03	119.24	111.83
1	1A	1915	5MU	C5-C6-N1	-3.03	120.02	123.31
1	2A	1942	5MC	C5-C4-N3	-3.02	118.66	121.75
55	1x	54	5MU	O4-C4-C5	-3.02	121.47	124.92
1	1A	1939	5MU	C5M-C5-C6	-3.00	118.79	122.85
32	1a	1407	5MC	C5-C4-N3	-2.99	118.69	121.75
32	1a	966	M2G	C6-C5-N7	2.99	135.74	130.29
1	2A	1939	5MU	O4-C4-C5	-2.99	121.49	124.92
32	2a	1519	MA6	C4-C5-C6	2.98	118.99	115.91
56	1y	32	PSU	O2-C2-N1	-2.97	119.72	122.79
32	1a	1400	5MC	C5-C4-N3	-2.97	118.71	121.75
54	1w	37	MIA	C16-C14-C13	-2.96	113.77	122.66
32	1a	1519	MA6	N9-C8-N7	-2.96	109.74	113.94
1	2A	1917	PSU	C5-C6-N1	-2.94	118.06	122.14
1	2A	1962	5MC	C1'-N1-C6	-2.94	116.31	121.15
32	2a	1498	UR3	C6-N1-C2	-2.94	119.40	121.80
32	2a	1400	5MC	C5-C4-N3	-2.93	118.75	121.75
54	1w	32	PSU	C4-N3-C2	-2.93	122.33	126.37
54	2w	37	MIA	C6-C5-N7	2.93	135.62	132.43
1	2A	2552	OMU	C5-C4-N3	2.90	118.86	114.80
56	1y	54	5MU	O2-C2-N1	-2.86	119.07	122.80
54	1w	76	F3N	N9-C8-N7	-2.86	109.88	113.94
56	1y	46	G7M	O6-C6-C5	-2.85	121.66	128.01

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	1498	UR3	C5-C4-N3	2.84	118.78	115.04
54	1w	55	PSU	C6-N1-C2	-2.84	120.06	122.69
54	1w	76	F3N	C2-N3-C4	2.83	118.74	111.83
1	1A	2503	2MA	CM2-C2-N3	2.83	121.36	117.13
54	1w	8	4SU	C1'-N1-C6	-2.81	114.77	120.78
32	2a	1207	2MG	N9-C4-N3	2.81	131.57	125.95
54	1w	39	PSU	O2-C2-N3	-2.80	116.88	121.86
55	1x	8	4SU	O2-C2-N3	-2.79	116.34	121.49
32	1a	966	M2G	CM2-N2-C2	-2.78	114.92	120.61
54	1w	54	5MU	O2-C2-N1	-2.78	119.18	122.80
55	1x	76	31H	C4-C5-N7	-2.77	107.41	110.58
32	1a	1518	MA6	C4-C5-C6	2.77	118.77	115.91
54	2w	76	F3N	C6-C5-C4	2.76	120.95	117.18
32	1a	1518	MA6	N3-C4-N9	2.75	131.85	127.17
1	2A	2503	2MA	C4-C5-N7	-2.75	107.44	110.58
1	1A	1917	PSU	C5-C6-N1	-2.74	118.34	122.14
56	2y	32	PSU	C6-C5-C4	-2.74	116.33	118.17
1	1A	2503	2MA	N6-C6-N1	2.74	120.72	117.03
56	1y	37	MIA	C5-N7-C8	2.72	107.73	103.45
54	2w	54	5MU	C5M-C5-C6	-2.72	119.17	122.85
55	2x	8	4SU	C6-N1-C2	-2.71	117.70	121.00
1	2A	2251	OMG	C4-C5-N7	-2.71	106.38	110.67
54	2w	39	PSU	C6-C5-C4	-2.71	116.35	118.17
54	2w	76	F3N	N3-C4-N9	2.70	131.76	127.17
1	2A	2605	PSU	O2-C2-N3	-2.69	117.08	121.86
32	2a	516	PSU	O2-C2-N1	-2.69	120.01	122.79
32	1a	967	5MC	CM5-C5-C6	-2.67	119.23	122.85
56	2y	54	5MU	C5-C6-N1	-2.67	120.41	123.31
56	2y	8	4SU	S4-C4-N3	2.66	122.99	120.20
32	1a	1207	2MG	N2-C2-N3	-2.65	117.13	120.51
32	2a	1404	5MC	CM5-C5-C6	-2.65	119.27	122.85
1	1A	1917	PSU	O2-C2-N1	-2.64	120.06	122.79
55	1x	76	31H	OCN-CN-N	-2.64	118.50	125.32
55	2x	8	4SU	O2-C2-N1	2.63	126.22	122.80
54	1w	76	F3N	C5-C4-N9	2.63	108.67	105.81
54	1w	32	PSU	O2-C2-N1	-2.62	120.08	122.79
54	2w	32	PSU	O2-C2-N3	-2.62	117.21	121.86
32	2a	516	PSU	C5-C6-N1	-2.62	118.50	122.14
1	1A	2552	OMU	C6-N1-C2	-2.61	117.82	121.00
32	2a	966	M2G	O6-C6-C5	-2.61	119.64	126.53
1	2A	1962	5MC	C5-C4-N3	-2.60	119.09	121.75
32	2a	1207	2MG	CM2-N2-C2	-2.59	118.07	123.65

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	2x	8	4SU	O2-C2-N3	-2.59	116.71	121.49
1	2A	1939	5MU	C5M-C5-C6	-2.59	119.35	122.85
1	2A	2251	OMG	CM2-O2'-C2'	-2.58	107.84	114.47
54	2w	76	F3N	C5-C4-N9	2.57	108.62	105.81
32	2a	1518	MA6	N3-C4-N9	2.57	131.54	127.17
55	1x	54	5MU	C5-C6-N1	-2.56	120.53	123.31
54	1w	32	PSU	C6-C5-C4	-2.55	116.45	118.17
32	2a	967	5MC	C5-C4-N3	-2.55	119.14	121.75
55	2x	55	PSU	O2-C2-N1	-2.55	120.16	122.79
1	1A	2552	OMU	O4-C4-C5	-2.55	120.77	125.16
32	2a	1519	MA6	N3-C4-N9	2.54	131.49	127.17
55	1x	54	5MU	O2-C2-N1	-2.53	119.51	122.80
54	2w	76	F3N	C5-N7-C8	2.51	107.40	103.45
32	1a	1400	5MC	O2-C2-N1	2.51	123.82	118.90
32	1a	1207	2MG	C8-N7-C5	2.50	108.72	104.26
54	2w	37	MIA	C5-N7-C8	2.48	107.35	103.45
55	1x	76	31H	C4'-O4'-C1'	-2.47	104.01	109.47
32	2a	1519	MA6	C5-C4-N9	2.47	108.50	105.81
1	1A	1920	OMC	C1'-N1-C2	2.46	123.88	118.44
32	2a	1498	UR3	O2-C2-N3	-2.46	117.93	121.33
32	2a	516	PSU	O4-C4-C5	-2.46	117.89	124.01
1	1A	2251	OMG	C8-N7-C5	2.46	108.64	104.26
32	1a	966	M2G	C4-C5-N7	-2.46	106.78	110.67
1	2A	1939	5MU	C5M-C5-C4	2.43	121.37	118.78
54	2w	37	MIA	C2-N1-C6	2.43	122.14	117.54
32	2a	1404	5MC	C5-C4-N3	-2.42	119.28	121.75
32	1a	527	G7M	O6-C6-C5	-2.42	122.62	128.01
1	1A	2503	2MA	C6-C5-N7	2.42	136.75	132.09
43	1l	92	0TD	OD1-CG-CB	-2.41	117.39	122.44
1	2A	1915	5MU	O2-C2-N3	-2.41	117.05	121.49
55	2x	32	5MC	N1-C2-N3	2.40	122.96	118.80
32	2a	967	5MC	O2-C2-N3	-2.38	118.57	122.33
56	1y	32	PSU	C5-C6-N1	-2.38	118.84	122.14
55	2x	76	31H	OCN-CN-N	-2.38	119.18	125.32
32	2a	966	M2G	C6-C5-N7	2.38	134.61	130.29
55	1x	8	4SU	S4-C4-N3	-2.37	117.73	120.20
56	2y	37	MIA	C4-N9-C8	2.36	108.22	105.74
54	2w	76	F3N	C3'-N3'-C	-2.35	119.62	123.20
55	1x	76	31H	N3-C4-N9	2.35	131.17	127.17
32	2a	516	PSU	O4'-C1'-C2'	2.35	108.40	105.15
1	2A	1911	PSU	O4'-C1'-C2'	2.34	108.39	105.15
55	2x	76	31H	N3-C4-N9	2.33	131.13	127.17

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	1917	PSU	O4-C4-C5	-2.32	118.24	124.01
1	1A	2503	2MA	N3-C2-N1	-2.32	121.67	125.77
32	1a	1498	UR3	C3U-N3-C4	2.32	121.09	117.87
1	2A	1920	OMC	O2-C2-N3	-2.32	118.68	122.33
54	2w	46	G7M	C5-C6-N1	2.30	116.60	111.84
55	2x	54	5MU	C5M-C5-C6	-2.30	119.73	122.85
54	1w	76	F3N	C6-C5-C4	2.30	120.32	117.18
1	2A	1915	5MU	C6-N1-C2	-2.30	119.02	121.30
56	2y	37	MIA	C5-N7-C8	2.29	107.05	103.45
54	2w	37	MIA	N3-C2-N1	-2.29	122.83	127.00
55	2x	55	PSU	C5-C6-N1	-2.28	118.97	122.14
55	1x	8	4SU	C1'-N1-C2	2.28	121.69	117.59
54	1w	8	4SU	S4-C4-N3	2.28	122.59	120.20
1	1A	1911	PSU	C6-C5-C4	-2.28	116.64	118.17
32	1a	1207	2MG	CM2-N2-C2	-2.28	118.76	123.65
54	1w	76	F3N	CA-C-N3'	-2.27	113.14	116.21
32	1a	1404	5MC	N1-C2-N3	2.27	122.74	118.80
54	2w	55	PSU	O2-C2-N1	-2.26	120.45	122.79
32	2a	1402	4OC	C5-C4-N3	-2.26	119.06	122.60
1	1A	2552	OMU	O2-C2-N1	-2.26	119.85	122.80
56	1y	46	G7M	C5-C6-N1	2.26	116.51	111.84
56	2y	39	PSU	C5-C6-N1	-2.25	119.02	122.14
32	2a	1407	5MC	CM5-C5-C6	-2.25	119.81	122.85
55	2x	8	4SU	C6-C5-C4	-2.25	118.01	119.95
1	1A	1962	5MC	C5-C4-N4	2.24	124.55	121.39
1	2A	2503	2MA	C5-N7-C8	2.23	106.96	103.45
56	2y	37	MIA	C6-C5-N7	2.23	136.39	132.09
54	2w	55	PSU	O2-C2-N3	-2.21	117.93	121.86
32	1a	1519	MA6	C9-N6-C6	-2.20	114.92	120.52
1	2A	1917	PSU	O2-C2-N3	-2.20	117.96	121.86
32	2a	527	G7M	C5-C6-N1	2.19	116.37	111.84
56	1y	46	G7M	C8-N7-C5	-2.19	105.04	107.78
32	1a	1207	2MG	N9-C8-N7	-2.19	109.34	113.40
54	2w	37	MIA	C11-S10-C2	-2.19	100.61	102.25
56	1y	55	PSU	C5-C6-N1	-2.18	119.11	122.14
54	2w	37	MIA	C4-N9-C8	2.18	108.02	105.74
32	1a	967	5MC	C5-C4-N3	-2.18	119.53	121.75
56	1y	46	G7M	N2-C2-N3	2.17	123.91	119.67
1	2A	2503	2MA	N9-C8-N7	-2.16	110.87	113.94
54	2w	32	PSU	C6-C5-C4	-2.14	116.73	118.17
56	2y	55	PSU	C6-N1-C2	-2.13	120.71	122.69
1	2A	1915	5MU	C1'-N1-C2	2.13	121.42	117.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2w	54	5MU	O4-C4-C5	-2.13	122.48	124.92
55	2x	76	31H	CA-N-CN	-2.13	119.55	122.82
55	2x	76	31H	O4'-C1'-C2'	-2.13	102.07	106.62
54	2w	8	4SU	C6-N1-C2	-2.12	118.41	121.00
1	2A	2251	OMG	C5-C6-N1	2.12	118.64	113.25
1	1A	1915	5MU	O2-C2-N1	-2.11	120.05	122.80
1	2A	2552	OMU	O4-C4-C5	-2.10	121.54	125.16
54	1w	39	PSU	O4-C4-C5	-2.10	118.79	124.01
56	2y	46	G7M	C8-N7-C5	-2.10	105.16	107.78
32	2a	966	M2G	C4-C5-N7	-2.10	107.34	110.67
54	1w	46	G7M	O6-C6-C5	-2.09	123.34	128.01
55	2x	54	5MU	C5M-C5-C4	2.09	121.02	118.78
54	2w	46	G7M	O6-C6-C5	-2.09	123.34	128.01
32	2a	1207	2MG	C8-N7-C5	2.09	107.98	104.26
1	2A	1942	5MC	N1-C2-N3	2.08	122.42	118.80
32	2a	1402	4OC	CM4-N4-C4	-2.08	118.39	122.45
56	2y	37	MIA	C2-N1-C6	2.08	122.15	118.73
32	1a	1407	5MC	N1-C2-N3	2.08	122.41	118.80
54	2w	39	PSU	O2-C2-N3	-2.07	118.18	121.86
32	1a	516	PSU	O4'-C1'-C2'	2.07	108.02	105.15
32	1a	516	PSU	O4-C4-C5	-2.07	118.86	124.01
1	1A	1962	5MC	N1-C2-N3	2.07	122.39	118.80
1	1A	1962	5MC	C5-C6-N1	-2.07	121.07	123.31
54	1w	76	F3N	C5-N7-C8	2.07	106.70	103.45
54	2w	55	PSU	C6-C5-C4	-2.06	116.78	118.17
1	1A	1917	PSU	C6-C5-C4	-2.06	116.78	118.17
32	2a	1402	4OC	N1-C2-N3	2.06	122.38	118.80
56	1y	46	G7M	C6-C5-N7	-2.05	129.60	132.17
32	1a	1402	4OC	C6-C5-C4	2.05	119.47	117.00
32	1a	966	M2G	O6-C6-C5	-2.04	121.15	126.53
55	1x	76	31H	O2'-C2'-C3'	2.03	116.13	111.16
54	2w	55	PSU	C5-C6-N1	-2.03	119.33	122.14
32	1a	1407	5MC	CM5-C5-C6	-2.02	120.11	122.85
56	1y	46	G7M	C4-C5-N7	2.02	110.97	107.67
56	2y	55	PSU	C6-C5-C4	-2.02	116.81	118.17
32	2a	1518	MA6	C4-C5-C6	2.01	117.98	115.91
32	2a	1404	5MC	O2-C2-N3	-2.00	119.17	122.33

There are no chirality outliers.

All (71) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
54	1w	37	MIA	C12-C13-C14-C16
56	1y	46	G7M	C4'-C5'-O5'-P
32	2a	1207	2MG	N1-C2-N2-CM2
32	2a	1207	2MG	N3-C2-N2-CM2
32	2a	1519	MA6	O4'-C4'-C5'-O5'
43	2l	92	0TD	CA-CB-SB-CSB
55	2x	76	31H	C3'-C4'-C5'-O5'
55	2x	76	31H	O4'-C4'-C5'-O5'
56	2y	32	PSU	O4'-C4'-C5'-O5'
55	1x	76	31H	C3'-C4'-C5'-O5'
32	1a	1519	MA6	O4'-C4'-C5'-O5'
56	1y	8	4SU	O4'-C4'-C5'-O5'
56	1y	37	MIA	C3'-C4'-C5'-O5'
56	1y	54	5MU	O4'-C4'-C5'-O5'
55	1x	76	31H	O4'-C4'-C5'-O5'
56	1y	8	4SU	C3'-C4'-C5'-O5'
56	1y	37	MIA	O4'-C4'-C5'-O5'
1	2A	1911	PSU	O4'-C4'-C5'-O5'
32	2a	1400	5MC	C3'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
56	2y	32	PSU	C3'-C4'-C5'-O5'
55	2x	76	31H	N-CA-CB-CG
56	2y	46	G7M	O4'-C1'-N9-C4
55	1x	76	31H	CA-CB-CG-SD
55	2x	76	31H	CB-CG-SD-CE
32	2a	1519	MA6	C3'-C4'-C5'-O5'
56	2y	37	MIA	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
56	1y	54	5MU	C3'-C4'-C5'-O5'
32	2a	1400	5MC	O4'-C4'-C5'-O5'
56	2y	46	G7M	O4'-C4'-C5'-O5'
56	2y	55	PSU	C3'-C4'-C5'-O5'
56	2y	46	G7M	C3'-C4'-C5'-O5'
55	1x	76	31H	C4'-C5'-O5'-P
1	2A	1911	PSU	C3'-C4'-C5'-O5'
56	2y	37	MIA	O4'-C4'-C5'-O5'
56	2y	46	G7M	O4'-C1'-N9-C8
32	2a	527	G7M	O4'-C4'-C5'-O5'
32	2a	1404	5MC	C3'-C4'-C5'-O5'
43	1l	92	0TD	CG-CB-SB-CSB
32	1a	527	G7M	C3'-C4'-C5'-O5'
54	2w	54	5MU	O4'-C4'-C5'-O5'
43	2l	92	0TD	SB-CB-CG-OD1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
32	2a	1519	MA6	C4'-C5'-O5'-P
54	1w	55	PSU	O4'-C1'-C5-C4
56	1y	55	PSU	O4'-C1'-C5-C4
32	2a	516	PSU	O4'-C1'-C5-C4
56	2y	55	PSU	O4'-C1'-C5-C4
55	2x	76	31H	C4'-C5'-O5'-P
54	1w	37	MIA	N6-C12-C13-C14
32	2a	1404	5MC	O4'-C4'-C5'-O5'
32	1a	527	G7M	C4'-C5'-O5'-P
54	2w	37	MIA	N1-C2-S10-C11
54	2w	37	MIA	N3-C2-S10-C11
56	1y	55	PSU	C4'-C5'-O5'-P
43	1l	92	0TD	CA-CB-SB-CSB
43	1l	92	0TD	SB-CB-CG-OD2
54	1w	55	PSU	O4'-C1'-C5-C6
32	2a	516	PSU	O4'-C1'-C5-C6
32	2a	527	G7M	C4'-C5'-O5'-P
56	2y	55	PSU	O4'-C4'-C5'-O5'
56	1y	46	G7M	C3'-C4'-C5'-O5'
56	1y	8	4SU	C4'-C5'-O5'-P
43	2l	92	0TD	CG-CB-SB-CSB
55	1x	8	4SU	O4'-C4'-C5'-O5'
54	2w	76	F3N	O4'-C4'-C5'-O5'
1	1A	2503	2MA	C4'-C5'-O5'-P
56	2y	37	MIA	C4'-C5'-O5'-P
1	1A	1920	OMC	C2'-C1'-N1-C2
1	2A	1920	OMC	C2'-C1'-N1-C2
1	2A	2503	2MA	O4'-C4'-C5'-O5'

There are no ring outliers.

47 monomers are involved in 75 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
56	2y	8	4SU	3	0
32	2a	1402	4OC	2	0
55	2x	76	31H	3	0
32	2a	1400	5MC	4	0
1	1A	1942	5MC	1	0
54	1w	39	PSU	2	0
1	2A	1915	5MU	1	0
1	1A	2503	2MA	1	0
54	2w	37	MIA	2	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
55	1x	32	5MC	1	0
32	2a	966	M2G	2	0
32	1a	1402	4OC	2	0
32	2a	1519	MA6	3	0
1	2A	2552	OMU	1	0
32	2a	1518	MA6	1	0
56	1y	8	4SU	2	0
55	1x	54	5MU	1	0
55	2x	55	PSU	2	0
32	1a	967	5MC	2	0
54	2w	76	F3N	2	0
56	1y	55	PSU	1	0
1	2A	2251	OMG	1	0
54	1w	8	4SU	1	0
32	1a	1518	MA6	2	0
54	2w	54	5MU	3	0
1	2A	2503	2MA	1	0
55	1x	55	PSU	1	0
56	1y	39	PSU	1	0
32	1a	1519	MA6	2	0
32	2a	1207	2MG	2	0
54	2w	55	PSU	1	0
56	1y	37	MIA	3	0
54	2w	8	4SU	2	0
1	1A	2552	OMU	2	0
56	2y	55	PSU	5	0
56	2y	37	MIA	1	0
56	1y	54	5MU	2	0
32	2a	967	5MC	4	0
54	1w	55	PSU	1	0
1	1A	1915	5MU	1	0
54	1w	37	MIA	1	0
56	1y	46	G7M	1	0
1	1A	2251	OMG	1	0
55	1x	76	31H	1	0
54	1w	46	G7M	1	0
32	1a	966	M2G	2	0
55	2x	8	4SU	1	0

5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6 Ligand geometry

Of 2812 ligands modelled in this entry, 2808 are monoatomic - leaving 4 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. 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 $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z > 2$	Counts	RMSZ	# $ Z > 2$
59	A1C9N	2A	3885	-	77,79,79	1.97	11 (14%)	107,118,118	2.17	28 (26%)
61	SF4	2d	303	35	0,12,12	-	-	-		
59	A1C9N	1A	4101	-	77,79,79	3.00	12 (15%)	107,118,118	2.38	29 (27%)
61	SF4	1d	302	35	0,12,12	-	-	-		

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
59	A1C9N	2A	3885	-	-	14/82/141/141	1/6/6/6
61	SF4	2d	303	35	-	-	0/6/5/5
59	A1C9N	1A	4101	-	-	14/82/141/141	1/6/6/6
61	SF4	1d	302	35	-	-	0/6/5/5

All (23) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	1A	4101	A1C9N	B01-OCR	19.21	1.63	1.39
59	1A	4101	A1C9N	B01-OCT	12.44	1.54	1.35
59	2A	3885	A1C9N	B01-OCT	-8.76	1.22	1.35
59	2A	3885	A1C9N	CCQ-CCO	-6.37	1.41	1.50
59	1A	4101	A1C9N	CAU-CAC	-5.50	1.39	1.51
59	1A	4101	A1C9N	CCQ-CCO	-5.15	1.43	1.50
59	2A	3885	A1C9N	CAU-CAC	-5.12	1.40	1.51
59	2A	3885	A1C9N	CCH-CCJ	-4.99	1.42	1.51
59	2A	3885	A1C9N	CCJ-CCP	-4.98	1.35	1.41
59	1A	4101	A1C9N	CCH-CCJ	-4.16	1.43	1.51
59	2A	3885	A1C9N	OCR-CCQ	-3.70	1.41	1.44

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	2A	3885	A1C9N	OAK-CAG	-3.32	1.42	1.47
59	1A	4101	A1C9N	CCJ-CCP	-3.13	1.37	1.41
59	2A	3885	A1C9N	B01-OCR	3.08	1.43	1.39
59	2A	3885	A1C9N	CCN-CCO	-2.94	1.34	1.39
59	1A	4101	A1C9N	CCN-CCO	-2.89	1.35	1.39
59	2A	3885	A1C9N	OAK-CAM	2.82	1.38	1.34
59	1A	4101	A1C9N	CCG-CCF	2.63	1.56	1.51
59	1A	4101	A1C9N	OAK-CAG	-2.45	1.43	1.47
59	1A	4101	A1C9N	OCR-CCQ	-2.39	1.42	1.44
59	2A	3885	A1C9N	OAA-CAC	2.19	1.39	1.34
59	1A	4101	A1C9N	OAL-CAM	2.16	1.40	1.34
59	1A	4101	A1C9N	OAK-CAM	2.07	1.37	1.34

All (57) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	1A	4101	A1C9N	B01-OCR-CCQ	-16.14	97.70	110.48
59	2A	3885	A1C9N	B01-OCR-CCQ	-12.64	100.47	110.48
59	1A	4101	A1C9N	OBY-CBZ-NCA	5.88	120.59	111.01
59	2A	3885	A1C9N	OBY-CBZ-NCA	5.40	119.81	111.01
59	2A	3885	A1C9N	CAE-CAB-CAG	-5.36	107.83	115.23
59	1A	4101	A1C9N	OCR-CCQ-CCO	4.62	108.10	105.79
59	2A	3885	A1C9N	OAL-CAH-CAI	4.20	115.51	109.10
59	1A	4101	A1C9N	CBB-CBA-CAW	-4.10	107.94	113.89
59	1A	4101	A1C9N	OCB-CBZ-NCA	-3.98	118.94	124.93
59	2A	3885	A1C9N	CAB-OAA-CAC	3.86	124.93	118.20
59	1A	4101	A1C9N	OCU-CBJ-CBK	-3.70	107.25	112.95
59	2A	3885	A1C9N	CCQ-CCO-CCP	-3.65	108.64	110.53
59	1A	4101	A1C9N	B01-CCP-CCO	3.57	107.17	105.19
59	1A	4101	A1C9N	CAE-CAB-CAG	-3.52	110.37	115.23
59	2A	3885	A1C9N	CBT-NBS-CBQ	-3.50	103.06	113.15
59	2A	3885	A1C9N	OAZ-CAV-CAW	-3.48	104.14	108.23
59	2A	3885	A1C9N	CAX-CAW-CAV	-3.45	105.32	111.40
59	1A	4101	A1C9N	OAL-CAH-CAI	3.44	114.35	109.10
59	2A	3885	A1C9N	CAF-CAE-CAB	-3.38	104.94	113.11
59	2A	3885	A1C9N	OBY-CBZ-OCB	-3.26	119.75	124.55
59	2A	3885	A1C9N	OCR-CCQ-CCO	-3.25	104.16	105.79
59	2A	3885	A1C9N	OAK-CAG-CAB	3.10	112.49	105.63
59	1A	4101	A1C9N	CAB-OAA-CAC	3.02	123.47	118.20
59	2A	3885	A1C9N	OBC-CBB-CBA	2.99	113.12	107.60
59	2A	3885	A1C9N	OCB-CBZ-NCA	-2.98	120.44	124.93
59	1A	4101	A1C9N	OAK-CAG-CAJ	2.97	112.03	106.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	2A	3885	A1C9N	CAH-OAL-CAM	-2.88	104.60	109.45
59	1A	4101	A1C9N	OBN-CBO-CBP	2.82	113.37	109.34
59	2A	3885	A1C9N	CBB-CBA-CAW	-2.80	109.82	113.89
59	1A	4101	A1C9N	OBY-CBZ-OCB	-2.79	120.45	124.55
59	2A	3885	A1C9N	OAA-CAB-CAG	2.73	111.64	105.48
59	1A	4101	A1C9N	OAA-CAB-CAG	2.71	111.59	105.48
59	1A	4101	A1C9N	CCV-OCU-CBJ	-2.67	112.08	117.51
59	2A	3885	A1C9N	B01-CCP-CCO	2.66	106.67	105.19
59	2A	3885	A1C9N	CBV-CBO-CBP	-2.57	109.38	113.27
59	1A	4101	A1C9N	CBV-CBO-CBP	-2.52	109.46	113.27
59	2A	3885	A1C9N	OAZ-CBF-CBK	2.51	113.20	108.99
59	1A	4101	A1C9N	OAA-CAB-CAE	-2.50	102.72	107.36
59	1A	4101	A1C9N	CBM-OBN-CBO	-2.48	109.09	112.91
59	2A	3885	A1C9N	CCH-CCG-CCF	-2.46	107.29	112.83
59	1A	4101	A1C9N	CAF-CAE-CAB	-2.45	107.19	113.11
59	2A	3885	A1C9N	CAV-CAU-CAC	2.40	114.79	109.93
59	2A	3885	A1C9N	CAQ-NAO-CAP	2.39	113.83	110.26
59	2A	3885	A1C9N	OCU-CBJ-CBK	-2.32	109.38	112.95
59	1A	4101	A1C9N	CBP-CBQ-CBL	-2.30	106.72	110.02
59	1A	4101	A1C9N	OAZ-CBF-OBG	2.24	117.19	109.97
59	1A	4101	A1C9N	OAZ-CAV-CAW	2.20	110.82	108.23
59	1A	4101	A1C9N	CCQ-CCO-CCP	2.19	111.65	110.53
59	1A	4101	A1C9N	CBX-CBJ-CBK	-2.18	106.84	110.64
59	2A	3885	A1C9N	CBO-CBP-CBQ	-2.17	106.76	110.46
59	1A	4101	A1C9N	CBW-CBH-CBI	-2.17	109.23	113.55
59	1A	4101	A1C9N	CBJ-CBK-CBF	-2.16	111.34	114.99
59	2A	3885	A1C9N	OBR-CBL-CBQ	2.14	113.78	109.87
59	1A	4101	A1C9N	CCD-NCE-CCF	-2.12	118.87	122.82
59	2A	3885	A1C9N	CAH-CAI-NAO	-2.10	108.25	109.92
59	1A	4101	A1C9N	CAP-NAO-CAI	-2.06	108.64	112.06
59	1A	4101	A1C9N	CAH-CAI-NAO	2.01	111.51	109.92

There are no chirality outliers.

All (28) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
59	1A	4101	A1C9N	CBI-CBJ-OCU-CCV
59	1A	4101	A1C9N	CBK-CBJ-OCU-CCV
59	1A	4101	A1C9N	CBX-CBJ-OCU-CCV
59	1A	4101	A1C9N	CBP-CBQ-NBS-CBU
59	2A	3885	A1C9N	CBI-CBJ-OCU-CCV
59	2A	3885	A1C9N	CBP-CBQ-NBS-CBT

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
59	2A	3885	A1C9N	OCB-CBZ-OBY-CBI
59	2A	3885	A1C9N	NCA-CBZ-OBY-CBI
59	2A	3885	A1C9N	CBP-CBQ-NBS-CBU
59	1A	4101	A1C9N	CBL-CBQ-NBS-CBU
59	2A	3885	A1C9N	NCA-CCC-CCD-NCE
59	1A	4101	A1C9N	CBP-CBQ-NBS-CBT
59	1A	4101	A1C9N	CBL-CBQ-NBS-CBT
59	2A	3885	A1C9N	CBL-CBQ-NBS-CBT
59	2A	3885	A1C9N	CCF-CCG-CCH-CCJ
59	2A	3885	A1C9N	CCD-CCC-NCA-CBZ
59	2A	3885	A1C9N	CCG-CCH-CCJ-CCL
59	2A	3885	A1C9N	CCG-CCH-CCJ-CCP
59	1A	4101	A1C9N	CCG-CCH-CCJ-CCL
59	1A	4101	A1C9N	CCF-CCG-CCH-CCJ
59	1A	4101	A1C9N	CCG-CCH-CCJ-CCP
59	1A	4101	A1C9N	CAR-CAS-CBB-CBD
59	1A	4101	A1C9N	NCA-CCC-CCD-NCE
59	2A	3885	A1C9N	NCE-CCF-CCG-CCH
59	2A	3885	A1C9N	OCI-CCF-CCG-CCH
59	1A	4101	A1C9N	OCB-CBZ-OBY-CBI
59	2A	3885	A1C9N	CBK-CBJ-OCU-CCV
59	1A	4101	A1C9N	NCA-CBZ-OBY-CBI

All (2) ring outliers are listed below:

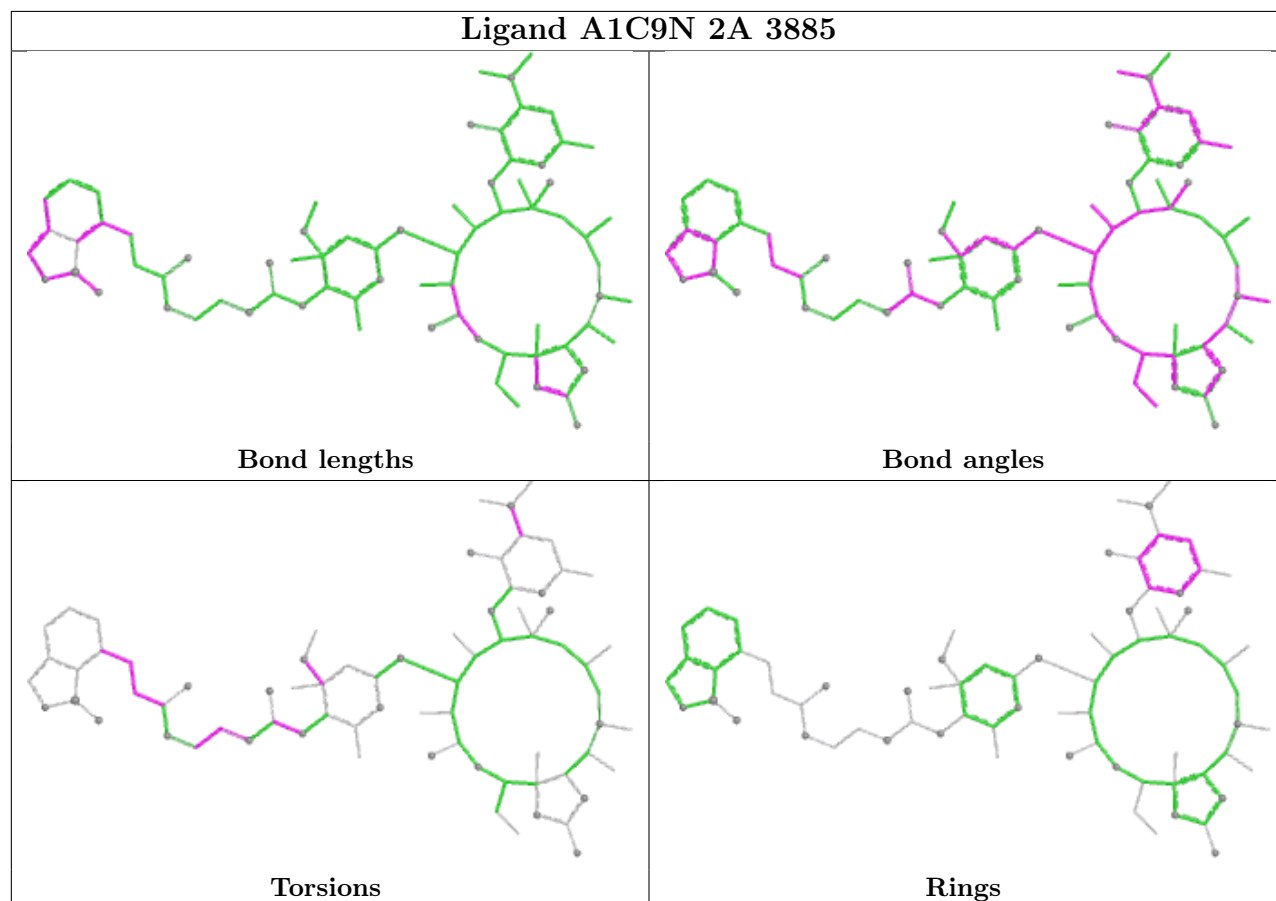
Mol	Chain	Res	Type	Atoms
59	2A	3885	A1C9N	CBL-CBM-CBO-CBP-CBQ-OBN
59	1A	4101	A1C9N	CBL-CBM-CBO-CBP-CBQ-OBN

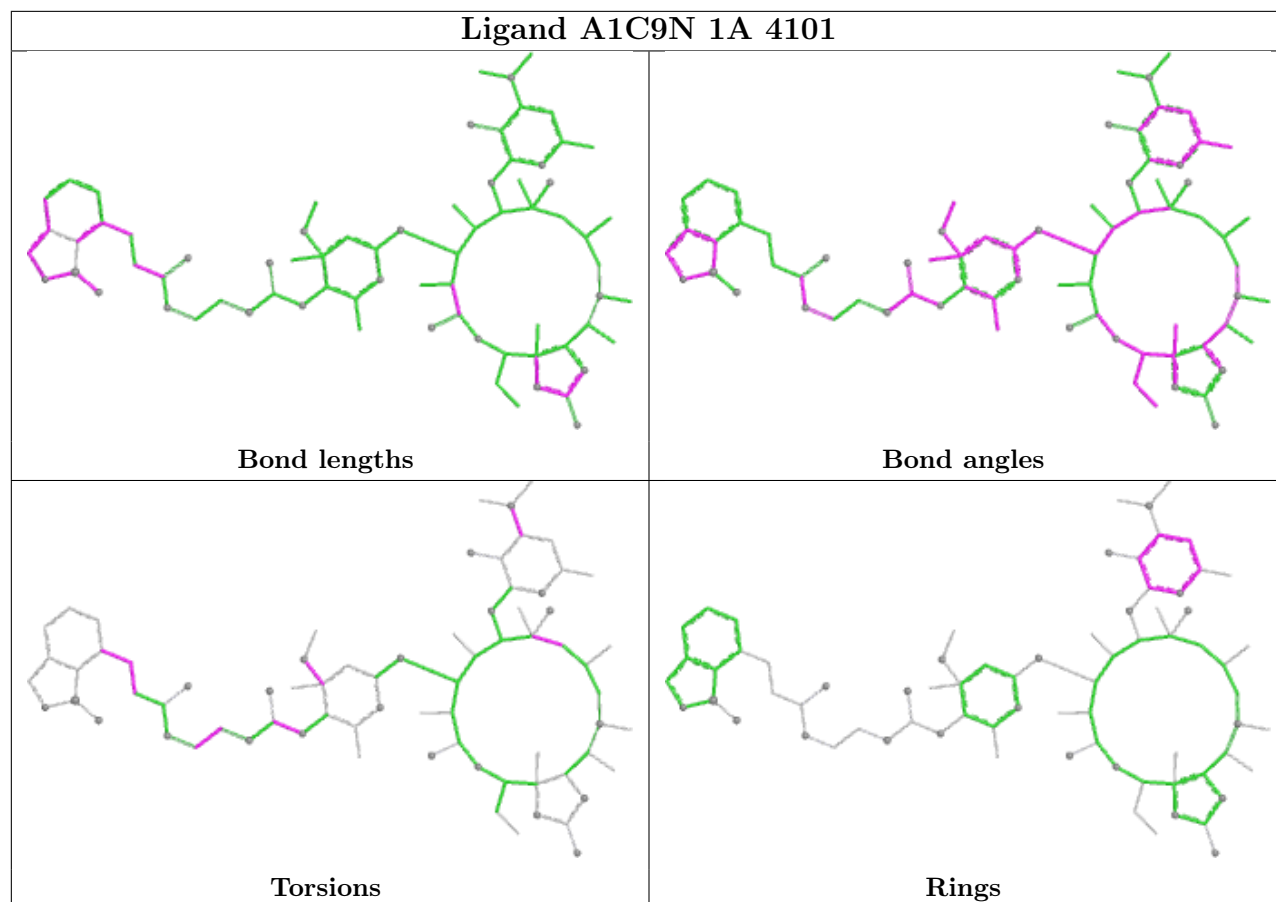
1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
59	1A	4101	A1C9N	1	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and

any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.





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 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ > 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q < 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	1A	2860/2915 (98%)	-0.40	115 (4%) 42 41	14, 32, 79, 89	0
1	2A	2789/2915 (95%)	0.14	99 (3%) 47 47	28, 51, 76, 89	0
2	1B	120/121 (99%)	-0.41	0 100 100	25, 41, 53, 76	0
2	2B	120/121 (99%)	0.82	7 (5%) 29 26	52, 65, 73, 75	0
3	1D	275/276 (99%)	-0.00	1 (0%) 88 89	16, 32, 46, 60	0
3	2D	275/276 (99%)	0.46	5 (1%) 67 69	24, 45, 54, 69	0
4	1E	204/206 (99%)	0.19	1 (0%) 87 88	15, 38, 52, 60	0
4	2E	204/206 (99%)	0.66	9 (4%) 39 38	29, 51, 61, 66	0
5	1F	203/210 (96%)	0.21	3 (1%) 72 74	14, 41, 61, 71	0
5	2F	203/210 (96%)	0.90	11 (5%) 31 29	28, 58, 66, 71	0
6	1G	181/182 (99%)	0.67	2 (1%) 78 79	34, 50, 62, 75	0
6	2G	181/182 (99%)	1.66	54 (29%) 1 1	56, 65, 71, 75	0
7	1H	174/180 (96%)	0.60	5 (2%) 53 55	32, 49, 57, 60	0
7	2H	174/180 (96%)	1.32	25 (14%) 6 4	57, 68, 74, 78	0
8	1I	146/148 (98%)	0.82	6 (4%) 41 41	37, 59, 68, 71	0
8	2I	146/148 (98%)	1.47	34 (23%) 2 1	51, 64, 71, 75	0
9	1N	140/140 (100%)	0.12	1 (0%) 84 86	24, 36, 52, 65	0
9	2N	140/140 (100%)	1.06	12 (8%) 16 14	37, 56, 64, 68	0
10	1O	122/122 (100%)	0.10	0 100 100	24, 36, 50, 56	0
10	2O	122/122 (100%)	0.53	2 (1%) 70 73	33, 49, 58, 64	0
11	1P	149/150 (99%)	0.45	7 (4%) 36 35	15, 43, 61, 67	0
11	2P	149/150 (99%)	0.91	9 (6%) 27 24	35, 56, 69, 76	0
12	1Q	141/141 (100%)	0.10	1 (0%) 84 86	22, 35, 47, 58	0
12	2Q	141/141 (100%)	1.02	8 (5%) 29 26	37, 56, 63, 69	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	1R	118/118 (100%)	0.01	0 100 100	19, 31, 42, 48	0
13	2R	118/118 (100%)	0.56	1 (0%) 82 83	32, 44, 56, 64	0
14	1S	110/112 (98%)	0.30	0 100 100	31, 42, 52, 55	0
14	2S	110/112 (98%)	1.49	29 (26%) 1 1	51, 60, 67, 70	0
15	1T	131/146 (89%)	0.44	6 (4%) 37 36	25, 42, 62, 72	0
15	2T	131/146 (89%)	0.65	3 (2%) 61 63	41, 51, 63, 72	0
16	1U	116/118 (98%)	-0.07	0 100 100	20, 30, 42, 48	0
16	2U	116/118 (98%)	0.81	5 (4%) 40 39	38, 56, 64, 72	0
17	1V	101/101 (100%)	-0.01	1 (0%) 79 80	17, 37, 51, 55	0
17	2V	101/101 (100%)	0.87	1 (0%) 79 80	40, 61, 66, 69	0
18	1W	112/113 (99%)	0.12	1 (0%) 81 82	21, 31, 46, 63	0
18	2W	112/113 (99%)	0.77	5 (4%) 38 37	35, 45, 59, 81	0
19	1X	95/96 (98%)	-0.01	2 (2%) 63 65	19, 32, 53, 69	0
19	2X	95/96 (98%)	0.68	1 (1%) 78 79	39, 51, 61, 67	0
20	1Y	107/110 (97%)	0.52	6 (5%) 30 27	32, 43, 58, 67	0
20	2Y	107/110 (97%)	1.39	21 (19%) 3 2	52, 61, 67, 72	0
21	1Z	154/206 (74%)	0.90	14 (9%) 15 12	34, 54, 67, 75	0
21	2Z	160/206 (77%)	1.51	37 (23%) 2 1	54, 66, 73, 76	0
22	10	83/85 (97%)	0.03	0 100 100	21, 31, 41, 56	0
22	20	83/85 (97%)	1.33	15 (18%) 3 3	38, 53, 60, 62	0
23	11	97/98 (98%)	0.30	1 (1%) 79 80	21, 40, 59, 64	0
23	21	97/98 (98%)	0.68	3 (3%) 51 52	35, 49, 61, 67	0
24	12	70/72 (97%)	0.30	3 (4%) 40 39	28, 43, 52, 68	0
24	22	70/72 (97%)	0.97	4 (5%) 29 26	50, 57, 64, 70	0
25	13	59/60 (98%)	0.09	1 (1%) 69 71	20, 33, 50, 57	0
25	23	59/60 (98%)	1.23	7 (11%) 9 7	46, 57, 69, 72	0
26	14	69/71 (97%)	1.14	13 (18%) 3 2	39, 59, 74, 79	0
26	24	69/71 (97%)	1.77	23 (33%) 1 1	61, 70, 77, 79	0
27	15	59/60 (98%)	-0.03	1 (1%) 69 71	17, 30, 43, 48	0
27	25	59/60 (98%)	0.61	3 (5%) 33 31	28, 45, 57, 62	0
28	16	53/54 (98%)	0.12	0 100 100	26, 36, 46, 52	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	26	53/54 (98%)	0.94	5 (9%) 14 11	43, 53, 60, 64	0
29	17	48/49 (97%)	-0.19	1 (2%) 63 65	15, 24, 39, 49	0
29	27	48/49 (97%)	0.36	2 (4%) 40 40	26, 39, 50, 63	0
30	18	64/65 (98%)	-0.01	1 (1%) 70 73	22, 29, 37, 40	0
30	28	64/65 (98%)	0.78	6 (9%) 14 11	37, 48, 54, 57	0
31	19	37/37 (100%)	0.20	1 (2%) 56 57	29, 36, 49, 55	0
31	29	37/37 (100%)	1.40	6 (16%) 4 3	54, 59, 66, 70	0
32	1a	1488/1521 (97%)	0.13	29 (1%) 66 67	29, 53, 76, 88	0
32	2a	1491/1521 (98%)	0.53	48 (3%) 50 51	39, 62, 78, 90	0
33	1b	231/256 (90%)	1.11	28 (12%) 8 7	49, 62, 72, 78	0
33	2b	231/256 (90%)	1.59	69 (29%) 1 1	59, 70, 75, 78	0
34	1c	206/239 (86%)	0.81	11 (5%) 32 30	45, 56, 67, 74	0
34	2c	206/239 (86%)	1.50	45 (21%) 2 2	55, 67, 73, 77	0
35	1d	208/209 (99%)	0.72	5 (2%) 59 62	44, 54, 61, 66	0
35	2d	208/209 (99%)	1.13	21 (10%) 12 10	43, 55, 63, 72	0
36	1e	148/162 (91%)	0.63	5 (3%) 48 48	40, 52, 61, 72	0
36	2e	148/162 (91%)	1.09	12 (8%) 18 16	52, 62, 67, 74	0
37	1f	100/101 (99%)	0.50	1 (1%) 79 80	37, 49, 60, 67	0
37	2f	100/101 (99%)	0.74	3 (3%) 52 53	49, 58, 65, 70	0
38	1g	155/156 (99%)	1.04	19 (12%) 8 7	46, 56, 67, 73	0
38	2g	155/156 (99%)	1.22	27 (17%) 4 3	58, 66, 73, 81	0
39	1h	137/138 (99%)	0.69	3 (2%) 62 64	46, 54, 61, 65	0
39	2h	137/138 (99%)	1.17	13 (9%) 14 11	55, 63, 69, 71	0
40	1i	127/128 (99%)	1.13	12 (9%) 14 11	40, 58, 68, 72	0
40	2i	127/128 (99%)	1.96	53 (41%) 0 0	58, 68, 72, 75	0
41	1j	97/105 (92%)	1.18	13 (13%) 7 6	43, 61, 70, 74	0
41	2j	96/105 (91%)	1.82	36 (37%) 1 0	57, 68, 73, 77	0
42	1k	114/129 (88%)	0.78	7 (6%) 27 24	35, 53, 62, 66	0
42	2k	114/129 (88%)	1.03	9 (7%) 18 16	47, 61, 68, 70	0
43	1l	121/132 (91%)	0.40	4 (3%) 49 50	36, 44, 53, 63	0
43	2l	121/132 (91%)	0.84	6 (4%) 34 32	43, 54, 61, 67	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	1m	123/126 (97%)	1.01	10 (8%) 18 16	41, 56, 64, 69	0
44	2m	122/126 (96%)	1.77	36 (29%) 1 1	60, 67, 72, 74	0
45	1n	60/61 (98%)	0.77	2 (3%) 49 50	43, 51, 60, 60	0
45	2n	60/61 (98%)	2.09	28 (46%) 0 0	61, 66, 71, 73	0
46	1o	88/89 (98%)	0.81	3 (3%) 48 48	38, 51, 61, 63	0
46	2o	88/89 (98%)	0.98	3 (3%) 48 48	50, 58, 65, 70	0
47	1p	82/88 (93%)	1.17	7 (8%) 16 14	47, 56, 61, 64	0
47	2p	82/88 (93%)	0.92	7 (8%) 16 14	46, 54, 60, 65	0
48	1q	99/105 (94%)	0.99	3 (3%) 52 53	41, 54, 62, 67	0
48	2q	99/105 (94%)	1.04	9 (9%) 15 12	52, 60, 66, 70	0
49	1r	68/88 (77%)	0.49	1 (1%) 72 74	43, 51, 60, 65	0
49	2r	68/88 (77%)	0.88	5 (7%) 20 18	53, 61, 66, 70	0
50	1s	83/93 (89%)	0.81	3 (3%) 46 46	46, 56, 64, 69	0
50	2s	83/93 (89%)	1.71	28 (33%) 1 1	60, 68, 73, 77	0
51	1t	96/106 (90%)	1.08	12 (12%) 8 6	51, 57, 66, 71	0
51	2t	96/106 (90%)	0.98	7 (7%) 21 18	48, 56, 67, 69	0
52	1u	23/27 (85%)	1.26	2 (8%) 16 14	51, 54, 58, 62	0
52	2u	23/27 (85%)	2.55	15 (65%) 0 0	61, 68, 72, 73	0
53	1v	13/24 (54%)	0.57	3 (23%) 2 1	37, 43, 77, 83	0
53	2v	13/24 (54%)	1.47	5 (38%) 1 0	53, 62, 80, 84	0
54	1w	66/76 (86%)	0.97	12 (18%) 3 3	23, 69, 79, 83	0
54	2w	64/76 (84%)	1.16	10 (15%) 5 3	40, 77, 82, 87	0
55	1x	72/77 (93%)	0.22	1 (1%) 73 75	19, 52, 67, 77	0
55	2x	72/77 (93%)	0.58	1 (1%) 73 75	34, 63, 71, 78	0
56	1y	67/76 (88%)	1.28	7 (10%) 11 9	48, 80, 84, 86	0
56	2y	66/76 (86%)	1.53	11 (16%) 4 3	59, 82, 85, 87	0
All	All	20873/21748 (95%)	0.49	1356 (6%) 25 22	14, 53, 73, 90	0

All (1356) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
44	2m	123	ALA	7.4
1	2A	882	G	6.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	2146	C	6.3
1	2A	883	G	6.1
44	2m	124	PRO	5.8
1	2A	884	C	5.7
40	2i	123	PRO	5.7
1	1A	2117	A	5.5
1	2A	2112	G	5.5
18	2W	112	GLY	5.4
1	1A	2115	G	5.3
1	1A	2114	A	5.3
1	2A	2143	C	5.2
1	2A	885	C	5.1
52	2u	13	ILE	5.1
1	2A	2145	C	5.0
1	2A	2113	U	5.0
1	1A	2112	G	4.9
1	1A	2145	C	4.9
45	2n	2	ALA	4.9
26	24	51	ASP	4.9
21	1Z	141	VAL	4.9
33	2b	165	VAL	4.8
1	1A	2111	C	4.8
1	2A	881	G	4.7
35	2d	69	GLY	4.7
26	24	56	VAL	4.6
40	2i	127	LYS	4.6
38	2g	85	TYR	4.6
1	1A	1096	A	4.5
6	2G	43	LEU	4.5
54	2w	72	C	4.5
23	11	2	SER	4.5
1	2A	2147	G	4.5
26	14	56	VAL	4.4
51	1t	103	GLY	4.4
6	2G	29	TRP	4.4
52	2u	14	TRP	4.4
1	1A	2147	G	4.4
40	2i	26	VAL	4.3
1	2A	2127	G	4.3
8	2I	72	LEU	4.3
54	2w	71	G	4.3
1	1A	1057	A	4.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	2S	7	TYR	4.2
15	2T	131	ALA	4.2
54	1w	70	G	4.2
1	2A	2118	U	4.2
40	2i	102	LEU	4.2
1	1A	885	C	4.2
1	2A	2119	A	4.2
1	1A	2113	U	4.2
1	1A	2141	G	4.2
35	2d	4	TYR	4.1
1	1A	2119	A	4.1
52	2u	11	GLY	4.1
6	2G	20	ILE	4.1
1	2A	2144	U	4.1
52	2u	24	ARG	4.1
1	1A	888	C	4.1
26	14	52	THR	4.1
33	1b	127	ILE	4.0
1	1A	2142	C	4.0
44	2m	121	LYS	4.0
1	2A	2111	C	4.0
34	2c	184	TYR	4.0
34	1c	65	ALA	4.0
1	1A	2174	C	4.0
26	24	66	SER	4.0
33	2b	24	TRP	4.0
14	2S	32	LEU	4.0
22	20	74	ARG	4.0
25	23	2	PRO	3.9
1	1A	886	C	3.9
6	1G	146	TYR	3.9
21	2Z	172	ALA	3.9
33	2b	34	ALA	3.9
40	2i	27	THR	3.9
1	1A	2161	C	3.9
44	2m	87	TYR	3.9
26	24	59	PHE	3.9
14	2S	61	ASN	3.9
1	1A	883	G	3.8
1	2A	2110	G	3.8
54	1w	72	C	3.8
1	2A	2114	A	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
38	1g	151	TYR	3.8
1	2A	2159	G	3.8
3	2D	275	LYS	3.8
32	1a	1036	G	3.8
32	2a	1036	G	3.8
52	2u	17	THR	3.8
44	1m	122	LYS	3.8
50	2s	84	GLY	3.8
1	2A	2174	C	3.8
35	2d	108	LEU	3.8
45	2n	3	ARG	3.8
5	2F	166	ALA	3.8
33	1b	17	PHE	3.8
1	1A	1095	A	3.8
32	1a	1531	A	3.8
49	2r	48	GLY	3.8
39	2h	58	TYR	3.8
21	2Z	146	ILE	3.7
1	1A	884	C	3.7
32	2a	1257	U	3.7
9	2N	45	ASN	3.7
1	1A	882	G	3.7
1	2A	2133	G	3.7
33	2b	237	ALA	3.7
50	2s	80	TYR	3.7
1	2A	2173	A	3.7
33	1b	237	ALA	3.7
23	2l	28	GLY	3.7
1	2A	2158	A	3.6
1	2A	886	C	3.6
44	1m	24	GLY	3.6
44	1m	124	PRO	3.6
50	2s	2	PRO	3.6
1	2A	2115	G	3.6
1	2A	2131	G	3.6
1	2A	2117	A	3.6
53	1v	13	A	3.6
41	1j	76	ASN	3.6
1	1A	2109	U	3.6
32	2a	1532	U	3.6
38	2g	154	TYR	3.6
1	2A	2169	A	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	2m	19	LEU	3.6
34	2c	17	ASP	3.6
33	2b	203	GLY	3.6
1	1A	1078	U	3.5
35	2d	20	TYR	3.5
34	2c	13	GLY	3.5
52	2u	16	GLY	3.5
45	2n	7	ILE	3.5
1	1A	1075	C	3.5
1	2A	2129	C	3.5
48	2q	100	LYS	3.5
1	2A	2109	U	3.5
45	2n	25	VAL	3.5
15	1T	130	ALA	3.5
48	2q	74	LEU	3.5
45	2n	42	ILE	3.5
1	1A	2169	A	3.5
1	2A	2166	G	3.5
3	2D	276	LYS	3.5
32	2a	1030(B)	C	3.5
46	1o	88	ARG	3.5
38	1g	80	VAL	3.5
48	2q	44	ALA	3.5
1	1A	1059	G	3.5
54	1w	71	G	3.5
40	2i	109	VAL	3.5
1	2A	894	C	3.5
38	2g	80	VAL	3.4
8	2I	38	LEU	3.4
44	2m	90	LEU	3.4
34	2c	155	GLY	3.4
44	2m	5	ALA	3.4
22	20	71	ASP	3.4
32	2a	1031	G	3.4
43	2l	126	LYS	3.4
38	2g	82	GLY	3.4
1	1A	2164	C	3.4
32	1a	1257	U	3.4
24	12	70	GLN	3.4
34	2c	204	LEU	3.4
8	2I	4	ILE	3.4
51	1t	95	ALA	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	2189	U	3.4
38	1g	156	TRP	3.4
1	2A	896	A	3.4
42	1k	14	VAL	3.4
41	2j	77	PRO	3.4
44	2m	33	ALA	3.4
45	2n	29	ARG	3.4
23	2l	2	SER	3.4
1	1A	2121	G	3.3
26	24	49	PHE	3.3
32	2a	1033	G	3.3
1	1A	898	C	3.3
32	2a	1027	C	3.3
14	2S	58	LEU	3.3
21	1Z	165	VAL	3.3
44	2m	66	LEU	3.3
52	2u	23	PRO	3.3
53	2v	13	A	3.3
12	2Q	121	ALA	3.3
41	1j	20	ALA	3.3
44	1m	2	ALA	3.3
1	1A	1060	U	3.3
1	1A	2131	G	3.3
6	2G	81	LYS	3.3
6	2G	87	PRO	3.3
40	2i	14	VAL	3.3
11	2P	109	GLY	3.3
7	2H	156	ALA	3.3
6	2G	86	MET	3.3
1	1A	2159	G	3.3
1	2A	2155	G	3.3
1	2A	2128	C	3.3
26	14	55	ARG	3.3
8	2I	107	VAL	3.3
51	2t	103	GLY	3.3
33	2b	216	SER	3.3
40	2i	101	PHE	3.3
40	2i	75	ASP	3.3
6	2G	159	VAL	3.3
20	2Y	80	GLY	3.3
35	2d	2	GLY	3.3
38	2g	156	TRP	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	1a	1447	A	3.2
26	24	65	ASP	3.2
33	2b	236	TYR	3.2
21	1Z	168	GLU	3.2
45	2n	46	GLU	3.2
7	2H	131	VAL	3.2
20	2Y	42	VAL	3.2
50	2s	45	VAL	3.2
39	2h	111	ILE	3.2
1	2A	2149	G	3.2
21	2Z	149	SER	3.2
33	1b	236	TYR	3.2
45	2n	6	LEU	3.2
45	2n	34	TYR	3.2
20	1Y	54	LYS	3.2
35	2d	140	VAL	3.2
33	2b	172	ILE	3.2
8	2I	146	ALA	3.2
45	1n	2	ALA	3.2
1	1A	2143	C	3.2
1	1A	1068	G	3.2
1	1A	1087	G	3.2
1	2A	2116	G	3.2
1	2A	2168	G	3.2
42	1k	13	GLN	3.2
41	2j	58	ASP	3.2
1	2A	2126	A	3.2
48	1q	96	GLU	3.2
40	2i	62	TYR	3.2
9	1N	140	VAL	3.2
34	2c	205	GLY	3.2
41	1j	31	GLY	3.2
6	2G	39	ILE	3.2
6	2G	140	ILE	3.2
21	1Z	171	ILE	3.2
40	2i	126	SER	3.2
1	2A	2120	G	3.2
1	2A	2160	G	3.2
54	2w	70	G	3.2
33	2b	187	LEU	3.2
47	1p	14	ASN	3.2
50	2s	16	LEU	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	2s	28	LYS	3.2
1	2A	887	A	3.2
1	1A	1097	U	3.2
40	2i	7	THR	3.2
40	2i	103	THR	3.2
6	1G	50	ALA	3.1
15	2T	130	ALA	3.1
45	2n	10	ALA	3.1
32	1a	163	C	3.1
41	2j	8	LEU	3.1
1	1A	1058	G	3.1
32	2a	1032	G	3.1
26	24	55	ARG	3.1
40	2i	128	ARG	3.1
44	1m	123	ALA	3.1
7	2H	175	LYS	3.1
33	2b	122	PHE	3.1
6	2G	139	LEU	3.1
7	2H	35	VAL	3.1
44	2m	105	THR	3.1
1	1A	2189	U	3.1
26	24	42	PHE	3.1
7	2H	2	SER	3.1
33	2b	118	LEU	3.1
1	1A	2140	C	3.1
33	2b	99	GLY	3.1
21	2Z	90	VAL	3.1
21	2Z	165	VAL	3.1
35	2d	107	ARG	3.1
8	2I	97	ILE	3.1
6	2G	138	GLN	3.1
37	1f	16	GLN	3.1
1	1A	1093	G	3.1
1	1A	2149	G	3.1
1	1A	2166	G	3.1
1	2A	2154	G	3.1
4	2E	204	ALA	3.1
8	2I	49	ALA	3.1
6	2G	90	LEU	3.1
40	2i	9	ARG	3.1
40	2i	66	ARG	3.1
34	2c	173	VAL	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	2i	17	VAL	3.1
32	2a	1007	C	3.1
45	2n	4	LYS	3.0
1	1A	896	A	3.0
1	1A	2150	U	3.0
1	2A	2130	U	3.0
1	1A	2116	G	3.0
1	1A	2133	G	3.0
1	1A	2160	G	3.0
41	2j	65	LEU	3.0
50	2s	15	LEU	3.0
51	2t	70	SER	3.0
18	2W	92	ARG	3.0
31	29	37	GLY	3.0
33	2b	136	VAL	3.0
41	2j	24	VAL	3.0
6	2G	161	THR	3.0
1	1A	2167	U	3.0
1	1A	2170	A	3.0
1	1A	2173	A	3.0
1	2A	1026	U	3.0
33	1b	125	PRO	3.0
26	24	9	LEU	3.0
35	2d	19	LEU	3.0
38	1g	12	LEU	3.0
56	2y	18	G	3.0
36	1e	85	GLY	3.0
21	2Z	137	ILE	3.0
39	2h	79	VAL	3.0
44	2m	60	VAL	3.0
26	24	52	THR	3.0
40	2i	106	ALA	3.0
1	2A	1509	C	3.0
1	2A	2137	C	3.0
41	2j	40	LEU	3.0
56	1y	35	A	3.0
1	2A	2165	G	3.0
34	2c	152	ILE	3.0
41	2j	34	VAL	3.0
34	2c	53	ALA	3.0
40	2i	36	TYR	3.0
1	1A	2129	C	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
8	2I	12	LEU	3.0
38	2g	16	LEU	3.0
40	2i	79	LEU	3.0
54	1w	67	C	3.0
33	2b	133	LYS	3.0
14	2S	12	PHE	3.0
32	2a	1357	A	3.0
31	29	21	GLY	3.0
33	2b	214	ILE	2.9
34	2c	195	VAL	2.9
1	1A	2125	G	2.9
32	1a	1001(A)	G	2.9
32	1a	1003	G	2.9
38	2g	152	ALA	2.9
44	2m	72	ALA	2.9
45	2n	5	ALA	2.9
6	2G	142	PRO	2.9
34	2c	175	LEU	2.9
1	2A	2142	C	2.9
50	2s	10	PHE	2.9
1	1A	2132	U	2.9
33	2b	227	GLY	2.9
35	2d	154	ASN	2.9
54	2w	73	A	2.9
24	22	25	VAL	2.9
26	24	35	VAL	2.9
26	24	57	GLU	2.9
33	2b	112	VAL	2.9
45	2n	30	ALA	2.9
1	2A	2148	G	2.9
32	2a	1030(A)	G	2.9
45	2n	57	ARG	2.9
44	2m	120	LYS	2.9
21	2Z	155	LEU	2.9
22	20	26	TYR	2.9
26	24	63	TYR	2.9
40	1i	105	ASP	2.9
1	2A	2138	C	2.9
42	2k	117	ASN	2.9
1	1A	1077	A	2.9
1	2A	2170	A	2.9
54	1w	73	A	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	1j	44	VAL	2.9
42	2k	126	ARG	2.9
44	2m	102	ARG	2.9
47	1p	69	THR	2.9
38	2g	40	ALA	2.9
1	1A	2182	G	2.9
35	2d	23	GLY	2.9
40	2i	39	GLY	2.9
1	2A	2132	U	2.9
32	1a	204	U	2.9
1	1A	1064	C	2.9
1	1A	1073	A	2.9
33	2b	7	VAL	2.9
38	2g	10	ARG	2.9
34	2c	137	ALA	2.9
39	2h	2	LEU	2.9
37	2f	63	TYR	2.9
44	1m	87	TYR	2.9
54	1w	69	G	2.9
20	2Y	54	LYS	2.8
41	2j	98	ILE	2.8
44	2m	78	ILE	2.8
32	1a	1030(B)	C	2.8
32	1a	1038	C	2.8
54	2w	2	C	2.8
8	2I	94	ALA	2.8
32	2a	1005	A	2.8
33	2b	234	PRO	2.8
44	1m	5	ALA	2.8
34	2c	87	LEU	2.8
35	2d	194	LEU	2.8
34	2c	48	TYR	2.8
22	20	42	GLY	2.8
40	2i	10	ARG	2.8
7	2H	136	ILE	2.8
16	2U	62	ILE	2.8
33	1b	40	HIS	2.8
20	2Y	98	VAL	2.8
21	2Z	37	VAL	2.8
33	2b	230	VAL	2.8
33	2b	131	PRO	2.8
1	1A	2146	C	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	2175	C	2.8
33	1b	225	ALA	2.8
6	2G	34	LEU	2.8
7	2H	87	LEU	2.8
50	2s	13	ASP	2.8
26	14	58	ARG	2.8
35	2d	110	PHE	2.8
41	2j	47	PHE	2.8
5	2F	208	GLY	2.8
33	2b	72	GLY	2.8
38	1g	154	TYR	2.8
25	23	6	VAL	2.8
1	1A	2165	G	2.8
1	2A	2156	G	2.8
15	1T	131	ALA	2.8
21	2Z	150	LEU	2.8
33	2b	121	LEU	2.8
34	2c	129	ALA	2.8
40	2i	43	ALA	2.8
50	2s	22	LEU	2.8
1	1A	2108	C	2.8
1	2A	898	C	2.8
9	2N	8	GLN	2.8
6	2G	181	ARG	2.8
26	14	49	PHE	2.8
38	2g	81	GLY	2.8
33	2b	185	ILE	2.8
44	2m	106	ASN	2.8
7	2H	44	VAL	2.8
9	2N	5	VAL	2.8
21	2Z	126	VAL	2.8
6	2G	163	ALA	2.8
8	2I	46	ALA	2.8
8	2I	75	LEU	2.8
22	20	75	LEU	2.8
33	1b	186	ALA	2.8
41	2j	42	THR	2.8
1	1A	1089	G	2.8
1	2A	2123	G	2.8
1	2A	2182	G	2.8
32	1a	630	G	2.8
15	1T	115	ARG	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	2c	171	GLY	2.7
36	1e	97	GLY	2.7
21	1Z	146	ILE	2.7
40	2i	63	ILE	2.7
41	2j	74	ILE	2.7
36	2e	96	PRO	2.7
48	2q	99	SER	2.7
4	1E	75	VAL	2.7
7	2H	115	VAL	2.7
21	1Z	105	VAL	2.7
25	23	59	VAL	2.7
44	2m	117	VAL	2.7
45	2n	33	VAL	2.7
8	2I	44	LEU	2.7
8	2I	68	LEU	2.7
21	1Z	170	THR	2.7
39	2h	119	LEU	2.7
44	2m	56	LEU	2.7
21	2Z	152	ALA	2.7
25	23	51	ALA	2.7
34	2c	189	ALA	2.7
1	1A	2130	U	2.7
1	1A	2172	U	2.7
7	1H	175	LYS	2.7
8	2I	99	GLU	2.7
33	2b	36	ARG	2.7
1	1A	2162	G	2.7
1	1A	1076	C	2.7
1	1A	1509	C	2.7
1	1A	2128	C	2.7
1	2A	2164	C	2.7
26	24	40	HIS	2.7
41	2j	56	HIS	2.7
41	2j	36	GLY	2.7
8	2I	127	VAL	2.7
21	2Z	128	VAL	2.7
39	1h	20	TYR	2.7
34	2c	196	LEU	2.7
44	2m	70	LEU	2.7
33	2b	218	ALA	2.7
40	1i	45	ALA	2.7
43	2l	20	LYS	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
45	2n	20	ALA	2.7
1	1A	2148	G	2.7
1	2A	2162	G	2.7
7	1H	5	GLY	2.7
22	20	65	GLY	2.7
32	2a	630	G	2.7
26	14	59	PHE	2.7
32	2a	1249	C	2.7
33	2b	70	PHE	2.7
50	2s	8	GLY	2.7
7	2H	4	ILE	2.7
32	1a	1008	C	2.7
44	2m	25	ILE	2.7
50	2s	76	PRO	2.7
26	24	50	VAL	2.7
6	2G	133	LEU	2.7
8	2I	128	LEU	2.7
14	2S	92	TYR	2.7
21	1Z	127	LYS	2.7
21	2Z	29	TYR	2.7
30	18	64	TYR	2.7
36	2e	123	LEU	2.7
39	2h	138	TRP	2.7
43	2l	64	TYR	2.7
6	2G	162	THR	2.7
33	2b	137	ARG	2.7
44	2m	88	ARG	2.7
47	1p	24	ALA	2.7
52	2u	9	ARG	2.7
42	2k	13	GLN	2.7
32	2a	1358	U	2.7
7	2H	174	GLY	2.7
26	14	45	GLY	2.7
40	2i	33	PHE	2.7
33	1b	234	PRO	2.7
32	1a	1002	G	2.7
32	2a	1001(A)	G	2.7
32	2a	1030	C	2.7
44	2m	122	LYS	2.7
55	2x	34	C	2.7
5	1F	20	LEU	2.7
6	2G	82	LEU	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	2Z	174	VAL	2.7
29	27	47	ARG	2.7
40	2i	56	LEU	2.7
40	2i	108	VAL	2.7
50	1s	9	VAL	2.7
11	1P	149	GLU	2.7
25	23	60	GLU	2.7
26	24	44	THR	2.7
44	2m	64	TRP	2.7
1	1A	2118	U	2.7
34	1c	13	GLY	2.6
8	2I	121	LYS	2.6
21	1Z	167	PRO	2.6
33	1b	39	ILE	2.6
36	2e	145	LYS	2.6
45	2n	15	LYS	2.6
45	2n	16	PHE	2.6
12	2Q	6	ARG	2.6
8	1I	142	VAL	2.6
14	2S	54	LEU	2.6
20	2Y	3	VAL	2.6
21	2Z	96	VAL	2.6
44	2m	53	VAL	2.6
48	2q	98	LEU	2.6
1	1A	1056	G	2.6
1	1A	2100	G	2.6
1	1A	2136	C	2.6
1	1A	2154	G	2.6
1	2A	888	C	2.6
1	2A	1744	C	2.6
1	2A	2100	G	2.6
32	1a	1037	C	2.6
44	2m	73	GLU	2.6
54	2w	15	G	2.6
45	2n	13	THR	2.6
4	2E	137	HIS	2.6
34	2c	4	LYS	2.6
38	1g	82	GLY	2.6
20	2Y	53	PRO	2.6
39	2h	13	ILE	2.6
40	2i	49	PRO	2.6
50	2s	62	ILE	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	2G	172	LEU	2.6
14	2S	80	LEU	2.6
20	1Y	92	ASN	2.6
21	2Z	144	LEU	2.6
37	2f	21	LEU	2.6
38	2g	38	LEU	2.6
51	1t	10	LEU	2.6
25	13	58	VAL	2.6
40	2i	65	VAL	2.6
53	1v	12	A	2.6
33	2b	77	ALA	2.6
40	2i	76	ALA	2.6
54	2w	3	C	2.6
1	1A	1537	G	2.6
1	2A	2125	G	2.6
32	2a	1021	G	2.6
33	1b	31	TYR	2.6
5	2F	172	TRP	2.6
45	2n	51	GLY	2.6
21	2Z	130	PRO	2.6
8	2I	51	ILE	2.6
25	23	30	ARG	2.6
55	1x	47	U	2.6
33	2b	17	PHE	2.6
26	14	50	VAL	2.6
34	2c	116	VAL	2.6
40	2i	64	THR	2.6
32	2a	1030(C)	G	2.6
9	2N	61	ARG	2.6
21	2Z	68	PRO	2.6
22	20	48	GLY	2.6
24	12	69	ARG	2.6
46	1o	89	GLY	2.6
6	2G	144	ILE	2.6
34	1c	14	ILE	2.6
4	2E	78	LEU	2.6
6	2G	149	VAL	2.6
8	2I	81	VAL	2.6
19	2X	83	VAL	2.6
47	2p	76	GLN	2.6
6	2G	6	ALA	2.6
6	2G	158	ALA	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	2j	18	ALA	2.6
51	1t	11	SER	2.6
41	2j	100	THR	2.6
44	2m	65	LYS	2.6
1	1A	2158	A	2.6
1	2A	899	A	2.6
32	2a	1030(D)	A	2.6
11	2P	79	ARG	2.5
40	1i	66	ARG	2.5
41	2j	9	ARG	2.5
19	1X	94	GLY	2.5
1	1A	1176	G	2.5
1	2A	879	G	2.5
14	2S	82	ILE	2.5
21	1Z	136	PHE	2.5
33	2b	55	PHE	2.5
1	2A	2167	U	2.5
6	2G	135	LEU	2.5
39	1h	2	LEU	2.5
41	2j	90	LEU	2.5
8	2I	43	ASN	2.5
17	2V	5	VAL	2.5
22	20	12	ASN	2.5
31	29	23	VAL	2.5
51	2t	88	VAL	2.5
33	2b	233	SER	2.5
40	2i	13	ALA	2.5
26	24	32	TYR	2.5
40	2i	125	TYR	2.5
44	2m	59	TYR	2.5
26	14	51	ASP	2.5
40	2i	67	GLY	2.5
50	2s	46	GLY	2.5
33	2b	80	ILE	2.5
38	2g	120	ILE	2.5
50	2s	49	ILE	2.5
52	1u	14	TRP	2.5
1	1A	881	G	2.5
21	2Z	91	LEU	2.5
21	2Z	136	PHE	2.5
24	22	21	LEU	2.5
32	2a	1154	G	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	2b	221	LEU	2.5
34	2c	128	PHE	2.5
32	2a	973	G	2.5
56	1y	34	G	2.5
56	2y	57	G	2.5
28	26	5	VAL	2.5
33	2b	140	HIS	2.5
38	2g	9	VAL	2.5
45	2n	18	VAL	2.5
48	1q	68	ARG	2.5
9	2N	1	MET	2.5
29	27	1	MET	2.5
26	24	67	TYR	2.5
6	2G	85	GLY	2.5
21	2Z	43	GLU	2.5
39	1h	45	ILE	2.5
1	2A	897	C	2.5
1	2A	2139	C	2.5
32	1a	1028	C	2.5
19	1X	95	LEU	2.5
40	2i	59	PHE	2.5
41	2j	63	PHE	2.5
45	2n	44	LEU	2.5
1	1A	2110	G	2.5
1	1A	2151	G	2.5
32	1a	1032	G	2.5
56	2y	1	G	2.5
8	2I	115	ALA	2.5
44	2m	76	ALA	2.5
6	2G	148	MET	2.5
40	2i	90	PRO	2.5
34	2c	2	GLY	2.5
6	2G	101	ILE	2.5
34	2c	39	ILE	2.5
40	2i	105	ASP	2.5
1	1A	1098	A	2.5
32	1a	1005	A	2.5
32	2a	1035	A	2.5
53	2v	14	A	2.5
56	2y	38	A	2.5
5	2F	24	LEU	2.5
14	2S	11	LYS	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	2c	33	LEU	2.5
41	2j	14	LYS	2.5
38	1g	86	GLN	2.5
20	2Y	7	VAL	2.5
34	1c	76	VAL	2.5
50	2s	11	VAL	2.5
1	1A	1094	U	2.5
18	2W	90	ARG	2.5
38	1g	155	ARG	2.5
52	2u	22	ARG	2.5
20	2Y	48	ALA	2.5
33	2b	13	ALA	2.5
41	1j	32	ALA	2.5
47	1p	7	ALA	2.5
27	25	44	THR	2.5
1	1A	1074	G	2.5
2	2B	23	G	2.5
32	2a	1034	G	2.5
7	2H	21	PRO	2.4
44	2m	10	PRO	2.4
6	2G	24	GLY	2.4
14	2S	60	GLY	2.4
26	14	54	GLY	2.4
34	1c	90	GLU	2.4
44	2m	58	GLU	2.4
44	2m	119	GLY	2.4
51	1t	47	GLY	2.4
33	2b	127	ILE	2.4
34	2c	8	ILE	2.4
42	1k	75	TYR	2.4
44	1m	31	LYS	2.4
45	2n	21	TYR	2.4
47	1p	19	ILE	2.4
11	2P	115	LEU	2.4
39	2h	107	LEU	2.4
41	1j	40	LEU	2.4
2	2B	120	A	2.4
11	1P	91	PHE	2.4
53	2v	24	A	2.4
11	1P	15	ARG	2.4
6	2G	38	VAL	2.4
8	2I	19	VAL	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	2i	44	VAL	2.4
41	2j	76	ASN	2.4
1	1A	2144	U	2.4
6	2G	50	ALA	2.4
40	2i	94	ALA	2.4
49	2r	20	ALA	2.4
42	2k	16	SER	2.4
1	1A	2181	G	2.4
7	2H	48	GLY	2.4
35	2d	6	GLY	2.4
38	1g	81	GLY	2.4
40	2i	8	GLY	2.4
6	2G	49	ASP	2.4
8	1I	140	LEU	2.4
21	2Z	9	TYR	2.4
34	2c	23	TYR	2.4
37	2f	57	GLN	2.4
38	1g	85	TYR	2.4
38	2g	99	LEU	2.4
41	1j	8	LEU	2.4
6	2G	70	VAL	2.4
22	20	66	VAL	2.4
33	2b	197	VAL	2.4
38	2g	84	ASN	2.4
41	2j	78	ASN	2.4
1	1A	894	C	2.4
14	2S	77	ALA	2.4
33	2b	188	ALA	2.4
36	2e	21	ALA	2.4
54	1w	68	C	2.4
56	2y	13	C	2.4
1	1A	2122	U	2.4
1	2A	271(K)	U	2.4
9	2N	43	THR	2.4
22	20	43	THR	2.4
33	1b	73	THR	2.4
6	2G	76	SER	2.4
33	2b	89	GLY	2.4
50	2s	68	GLY	2.4
51	1t	63	ILE	2.4
1	2A	614(B)	G	2.4
1	2A	2106	G	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	2a	1026	G	2.4
22	20	69	PHE	2.4
15	1T	89	VAL	2.4
20	2Y	45	VAL	2.4
43	1l	18	VAL	2.4
32	2a	1256	A	2.4
42	1k	15	ALA	2.4
51	2t	95	ALA	2.4
6	2G	165	THR	2.4
1	1A	2188	C	2.4
21	2Z	95	PRO	2.4
33	1b	134	GLU	2.4
35	2d	163	GLU	2.4
40	2i	70	LYS	2.4
32	1a	1006	C	2.4
32	2a	1359	C	2.4
41	2j	37	PRO	2.4
32	1a	1446	U	2.4
21	2Z	124	ILE	2.4
36	1e	13	ILE	2.4
41	2j	75	ILE	2.4
3	2D	155	LEU	2.4
30	28	60	LEU	2.4
1	2A	2151	G	2.4
20	2Y	5	MET	2.4
21	2Z	44	PHE	2.4
26	14	63	TYR	2.4
32	2a	1131	G	2.4
33	2b	199	TYR	2.4
36	2e	61	TYR	2.4
33	2b	90	MET	2.4
54	1w	5	G	2.4
56	1y	69	G	2.4
8	2I	144	VAL	2.4
34	2c	207	VAL	2.4
14	2S	6	ALA	2.4
38	1g	83	ALA	2.4
21	2Z	145	GLU	2.4
26	24	53	GLU	2.4
9	2N	44	PRO	2.3
41	1j	87	THR	2.3
47	2p	48	TRP	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	889	C	2.3
1	2A	2804	C	2.3
7	1H	174	GLY	2.3
33	2b	66	GLY	2.3
36	2e	22	GLY	2.3
56	2y	56	C	2.3
9	2N	114	ARG	2.3
20	2Y	38	ILE	2.3
20	2Y	90	LEU	2.3
34	1c	84	ILE	2.3
33	2b	16	HIS	2.3
39	2h	133	LEU	2.3
51	1t	13	LEU	2.3
8	2I	25	TYR	2.3
20	2Y	55	TYR	2.3
34	1c	193	TYR	2.3
36	2e	84	PHE	2.3
40	1i	59	PHE	2.3
42	2k	25	TYR	2.3
14	2S	46	VAL	2.3
34	2c	76	VAL	2.3
35	2d	86	LYS	2.3
1	1A	2120	G	2.3
32	1a	1024	G	2.3
32	2a	1220	G	2.3
6	2G	48	GLU	2.3
8	2I	117	GLU	2.3
43	1l	16	GLU	2.3
41	2j	39	PRO	2.3
41	1j	100	THR	2.3
50	2s	77	THR	2.3
1	1A	887	A	2.3
1	2A	2176	A	2.3
32	1a	1030(D)	A	2.3
6	2G	78	SER	2.3
8	2I	82	ARG	2.3
21	2Z	143	GLY	2.3
33	1b	36	ARG	2.3
1	1A	1081	U	2.3
12	2Q	113	GLN	2.3
56	2y	33	U	2.3
47	1p	23	ASP	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	2s	12	ASP	2.3
44	2m	13	LYS	2.3
5	2F	173	VAL	2.3
5	2F	174	VAL	2.3
6	2G	146	TYR	2.3
20	1Y	3	VAL	2.3
28	26	52	VAL	2.3
44	2m	74	VAL	2.3
6	2G	137	GLU	2.3
8	2I	132	PRO	2.3
41	2j	53	PRO	2.3
1	1A	2168	G	2.3
1	2A	2181	G	2.3
32	2a	971	G	2.3
36	2e	120	THR	2.3
51	2t	17	ARG	2.3
52	2u	15	ARG	2.3
56	2y	15	G	2.3
1	2A	2134	A	2.3
1	2A	2171	A	2.3
2	2B	25	A	2.3
33	1b	97	TRP	2.3
53	2v	12	A	2.3
22	20	3	HIS	2.3
21	2Z	125	LEU	2.3
33	2b	215	LEU	2.3
38	1g	22	LEU	2.3
39	2h	36	LEU	2.3
42	1k	40	ILE	2.3
50	2s	71	LEU	2.3
51	2t	99	LEU	2.3
32	1a	1000	U	2.3
56	1y	20	U	2.3
41	2j	86	MET	2.3
1	1A	154(A)	C	2.3
1	1A	1080	C	2.3
1	2A	2803	C	2.3
3	1D	276	LYS	2.3
9	2N	65	LYS	2.3
32	2a	1028	C	2.3
45	2n	11	LYS	2.3
24	12	37	PHE	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	2E	184	VAL	2.3
7	2H	19	VAL	2.3
14	2S	85	VAL	2.3
33	1b	7	VAL	2.3
34	2c	161	GLU	2.3
40	2i	53	VAL	2.3
46	2o	26	GLU	2.3
4	2E	114	ALA	2.3
12	2Q	99	PRO	2.3
14	2S	16	ASN	2.3
15	1T	38	ASN	2.3
28	26	22	ALA	2.3
33	2b	123	ALA	2.3
40	2i	93	ARG	2.3
41	1j	43	ARG	2.3
11	2P	68	GLN	2.3
14	2S	22	GLY	2.3
30	28	45	GLY	2.3
40	2i	117	HIS	2.3
51	1t	102	GLY	2.3
1	1A	1099	G	2.3
1	2A	2153	G	2.3
33	2b	213	LEU	2.3
32	2a	1287	A	2.3
32	2a	1531	A	2.3
33	2b	68	ILE	2.3
42	2k	42	TRP	2.3
48	2q	43	LEU	2.3
1	1A	1086	A	2.3
1	2A	2135	A	2.3
32	1a	1035	A	2.3
32	2a	965	A	2.3
53	1v	14	A	2.3
43	1l	126	LYS	2.3
1	1A	893	C	2.3
6	2G	102	PHE	2.3
40	2i	18	PHE	2.3
49	1r	86	VAL	2.3
7	2H	36	PRO	2.3
20	2Y	35	TYR	2.3
33	2b	171	ALA	2.2
42	1k	50	TYR	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
45	2n	59	ALA	2.2
4	2E	43	GLY	2.2
5	2F	131	GLY	2.2
16	2U	73	GLY	2.2
34	2c	74	GLY	2.2
35	2d	87	GLY	2.2
38	1g	34	GLY	2.2
50	1s	84	GLY	2.2
6	2G	7	LEU	2.2
20	2Y	34	LYS	2.2
21	1Z	166	SER	2.2
24	22	3	LEU	2.2
30	28	16	ILE	2.2
33	2b	142	LEU	2.2
33	2b	222	ILE	2.2
34	2c	14	ILE	2.2
35	2d	70	ILE	2.2
1	1A	2171	A	2.2
1	1A	2152	G	2.2
1	2A	2141	G	2.2
1	2A	2157	G	2.2
2	2B	18	G	2.2
32	1a	4	U	2.2
5	2F	27	GLU	2.2
46	2o	15	PHE	2.2
1	1A	2138	C	2.2
3	2D	98	VAL	2.2
6	2G	92	VAL	2.2
6	2G	160	VAL	2.2
22	20	23	VAL	2.2
25	23	9	VAL	2.2
32	2a	1029	C	2.2
41	2j	49	VAL	2.2
14	2S	55	ALA	2.2
8	2I	29	TYR	2.2
41	1j	33	GLN	2.2
5	1F	16	GLY	2.2
20	2Y	63	LYS	2.2
50	2s	18	LYS	2.2
5	2F	12	LEU	2.2
8	2I	101	LEU	2.2
30	28	61	LEU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	2b	69	LEU	2.2
49	2r	31	LEU	2.2
50	2s	5	LEU	2.2
7	1H	2	SER	2.2
28	26	54	ILE	2.2
35	1d	208	SER	2.2
38	1g	49	ILE	2.2
44	1m	25	ILE	2.2
1	1A	890	A	2.2
11	1P	119	GLU	2.2
32	2a	950	U	2.2
1	2A	1533	G	2.2
42	2k	54	ARG	2.2
54	1w	15	G	2.2
56	2y	10	G	2.2
41	2j	54	PHE	2.2
12	1Q	132	VAL	2.2
21	2Z	74	VAL	2.2
34	1c	99	VAL	2.2
43	1l	11	VAL	2.2
50	2s	9	VAL	2.2
8	1I	65	ALA	2.2
20	2Y	105	ALA	2.2
34	2c	61	ALA	2.2
44	1m	118	ALA	2.2
56	1y	68	C	2.2
6	2G	12	TYR	2.2
33	2b	19	HIS	2.2
42	2k	75	TYR	2.2
45	2n	17	LYS	2.2
51	1t	14	LYS	2.2
7	2H	122	THR	2.2
8	2I	90	GLY	2.2
14	2S	110	LEU	2.2
20	1Y	93	GLY	2.2
38	1g	89	MET	2.2
33	2b	10	LEU	2.2
34	2c	52	LEU	2.2
38	2g	34	GLY	2.2
40	2i	100	GLY	2.2
51	2t	24	LEU	2.2
31	29	17	ILE	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
38	2g	27	ILE	2.2
39	2h	8	ASP	2.2
41	2j	17	ASP	2.2
14	2S	3	ARG	2.2
38	2g	79	ARG	2.2
40	2i	111	ARG	2.2
41	2j	5	ARG	2.2
52	2u	10	ARG	2.2
32	1a	90	U	2.2
32	1a	161	A	2.2
32	2a	1251	A	2.2
7	2H	24	VAL	2.2
7	2H	37	VAL	2.2
21	1Z	161	VAL	2.2
33	2b	174	VAL	2.2
34	2c	153	VAL	2.2
1	1A	2101	G	2.2
1	1A	2190	G	2.2
6	2G	74	LYS	2.2
32	2a	1002	G	2.2
33	2b	132	LYS	2.2
54	2w	69	G	2.2
26	24	12	ALA	2.2
33	2b	161	ALA	2.2
30	28	25	MET	2.2
33	2b	48	MET	2.2
33	2b	83	MET	2.2
33	2b	110	GLN	2.2
39	2h	9	MET	2.2
47	2p	82	GLN	2.2
8	2I	108	THR	2.2
6	2G	152	LEU	2.2
8	1I	68	LEU	2.2
11	1P	100	LEU	2.2
11	2P	6	LEU	2.2
16	2U	95	LEU	2.2
21	1Z	150	LEU	2.2
40	1i	8	GLY	2.2
49	2r	85	LEU	2.2
33	1b	214	ILE	2.2
21	2Z	92	SER	2.2
26	14	53	GLU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
27	15	35	GLU	2.2
8	2I	27	ARG	2.2
11	2P	15	ARG	2.2
30	28	46	ARG	2.2
46	1o	19	PRO	2.2
1	1A	2135	A	2.1
1	2A	895	U	2.2
1	2A	2122	U	2.2
2	2B	52	A	2.1
17	1V	72	VAL	2.1
32	1a	841	U	2.2
8	1I	115	ALA	2.1
18	1W	60	ASN	2.1
33	1b	45	GLN	2.1
38	2g	83	ALA	2.1
40	2i	52	ALA	2.1
40	2i	119	ALA	2.1
43	2l	68	ALA	2.1
3	2D	180	GLY	2.1
5	1F	123	LEU	2.1
6	2G	111	LEU	2.1
8	1I	75	LEU	2.1
12	2Q	122	GLY	2.1
33	1b	10	LEU	2.1
35	1d	194	LEU	2.1
36	2e	116	THR	2.1
50	2s	30	LEU	2.1
56	1y	15	G	2.1
6	2G	63	ILE	2.1
26	14	43	TYR	2.1
36	2e	101	ILE	2.1
50	1s	31	ILE	2.1
1	1A	1532	C	2.1
1	2A	2136	C	2.1
1	2A	2161	C	2.1
1	2A	2185	C	2.1
5	2F	44	ARG	2.1
33	1b	129	GLU	2.1
34	1c	190	ARG	2.1
34	2c	190	ARG	2.1
35	2d	209	ARG	2.1
40	1i	10	ARG	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	1j	30	SER	2.1
47	2p	81	ARG	2.1
31	19	12	ASP	2.1
6	2G	32	PRO	2.1
14	2S	33	LYS	2.1
40	2i	21	PRO	2.1
45	2n	9	LYS	2.1
5	2F	142	TRP	2.1
6	2G	23	PHE	2.1
14	2S	49	VAL	2.1
38	2g	75	VAL	2.1
38	2g	91	VAL	2.1
1	1A	1088	A	2.1
1	2A	900	A	2.1
7	2H	145	ALA	2.1
32	2a	1146	A	2.1
33	2b	207	ALA	2.1
54	1w	7	A	2.1
56	2y	23	A	2.1
34	2c	110	ASN	2.1
10	2O	25	LEU	2.1
12	2Q	2	LEU	2.1
14	2S	4	LEU	2.1
40	1i	6	GLY	2.1
21	2Z	171	ILE	2.1
50	2s	31	ILE	2.1
26	24	25	TYR	2.1
31	29	24	TYR	2.1
33	2b	21	ARG	2.1
34	2c	127	ARG	2.1
34	2c	201	TYR	2.1
1	1A	275	G	2.1
1	2A	2104	G	2.1
1	2A	2121	G	2.1
40	1i	2	GLU	2.1
56	2y	19	G	2.1
1	1A	2178	C	2.1
2	2B	20	C	2.1
11	1P	87	ASP	2.1
15	1T	107	ASP	2.1
32	2a	972	C	2.1
52	2u	5	ASP	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	1b	22	LYS	2.1
40	2i	11	LYS	2.1
41	1j	37	PRO	2.1
48	2q	28	PRO	2.1
11	2P	91	PHE	2.1
29	17	1	MET	2.1
34	2c	10	PHE	2.1
35	1d	110	PHE	2.1
43	2l	32	PHE	2.1
4	2E	59	VAL	2.1
42	1k	80	VAL	2.1
50	2s	60	VAL	2.1
1	1A	1065	U	2.1
7	2H	20	ALA	2.1
20	2Y	65	ALA	2.1
34	2c	187	ALA	2.1
47	2p	59	TRP	2.1
50	2s	24	ALA	2.1
56	1y	33	U	2.1
7	2H	64	LEU	2.1
21	2Z	160	GLY	2.1
22	20	28	GLY	2.1
22	20	76	GLY	2.1
24	22	24	LEU	2.1
32	2a	1363(A)	A	2.1
53	2v	15	A	2.1
45	2n	22	THR	2.1
38	2g	78	ARG	2.1
52	1u	24	ARG	2.1
14	2S	18	ILE	2.1
14	2S	39	ILE	2.1
33	2b	134	GLU	2.1
38	1g	50	ILE	2.1
41	2j	96	ILE	2.1
26	24	43	TYR	2.1
28	26	21	TYR	2.1
52	2u	21	TYR	2.1
7	2H	57	ASP	2.1
8	2I	42	SER	2.1
21	2Z	87	ASP	2.1
38	2g	35	LYS	2.1
40	1i	91	ASP	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	2u	3	LYS	2.1
1	2A	11	G	2.1
1	2A	892	G	2.1
2	2B	24	G	2.1
32	2a	1347	G	2.1
54	2w	6	G	2.1
32	2a	1038	C	2.1
36	1e	96	PRO	2.1
43	2l	5	PRO	2.1
45	1n	14	PRO	2.1
10	2O	1	MET	2.1
38	2g	73	MET	2.1
12	2Q	132	VAL	2.1
14	2S	28	VAL	2.1
20	2Y	85	VAL	2.1
36	2e	82	VAL	2.1
48	2q	21	VAL	2.1
14	2S	105	ALA	2.1
34	1c	163	ALA	2.1
34	2c	160	ALA	2.1
35	2d	195	ALA	2.1
11	1P	106	LEU	2.1
11	2P	85	LEU	2.1
12	2Q	118	LEU	2.1
14	2S	24	LEU	2.1
32	2a	1219	U	2.1
33	1b	118	LEU	2.1
34	2c	34	LEU	2.1
38	1g	37	ASN	2.1
47	1p	71	ARG	2.1
48	1q	76	LEU	2.1
51	1t	62	LEU	2.1
26	24	54	GLY	2.1
40	2i	6	GLY	2.1
33	1b	128	GLU	2.1
41	2j	87	THR	2.1
1	1A	1070	A	2.1
13	2R	83	ILE	2.1
14	2S	35	ILE	2.1
32	2a	974	A	2.1
32	2a	978	A	2.1
38	2g	49	ILE	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	2j	38	ILE	2.1
44	2m	22	ILE	2.1
6	2G	25	TYR	2.1
16	2U	56	ASP	2.1
20	1Y	55	TYR	2.1
21	2Z	8	TYR	2.1
35	1d	20	TYR	2.1
47	2p	58	TYR	2.1
34	2c	109	PRO	2.1
1	1A	2124	G	2.0
1	2A	893	C	2.1
1	2A	2124	G	2.0
1	2A	2186	G	2.0
32	2a	1003	G	2.0
54	1w	4	C	2.1
6	2G	15	VAL	2.0
7	1H	17	VAL	2.0
20	2Y	89	PHE	2.0
34	2c	198	VAL	2.0
35	2d	198	VAL	2.0
41	2j	44	VAL	2.0
38	1g	5	ARG	2.0
39	2h	110	ALA	2.0
44	2m	104	ARG	2.0
7	2H	105	LEU	2.0
11	2P	105	LEU	2.0
33	1b	11	LEU	2.0
33	1b	221	LEU	2.0
38	2g	12	LEU	2.0
40	2i	19	LEU	2.0
41	2j	71	LEU	2.0
47	2p	60	LEU	2.0
51	1t	9	ASN	2.0
15	2T	37	GLY	2.0
16	2U	89	GLU	2.0
36	2e	83	GLU	2.0
9	2N	85	ILE	2.0
27	25	29	THR	2.0
32	1a	1532	U	2.0
50	2s	79	THR	2.0
51	1t	100	ILE	2.0
32	1a	344	A	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	1e	117	ASP	2.0
9	2N	135	PRO	2.0
38	2g	151	TYR	2.0
46	2o	2	PRO	2.0
48	2q	51	TYR	2.0
21	2Z	166	SER	2.0
1	1A	2107	C	2.0
4	2E	51	PHE	2.0
4	2E	188	VAL	2.0
7	2H	113	VAL	2.0
8	2I	3	VAL	2.0
18	2W	20	VAL	2.0
20	1Y	98	VAL	2.0
21	1Z	126	VAL	2.0
21	2Z	161	VAL	2.0
38	1g	69	VAL	2.0
40	1i	17	VAL	2.0
40	1i	41	VAL	2.0
41	2j	72	VAL	2.0
49	2r	86	VAL	2.0
1	1A	879	G	2.0
1	1A	1071	G	2.0
7	2H	165	ALA	2.0
9	2N	67	LEU	2.0
21	2Z	164	ALA	2.0
33	2b	11	LEU	2.0
34	2c	149	ALA	2.0
35	1d	149	ALA	2.0
54	1w	1	G	2.0
54	2w	19	G	2.0
23	21	98	LEU	2.0
27	25	59	GLU	2.0
40	1i	99	LEU	2.0
33	1b	227	GLY	2.0
33	2b	22	LYS	2.0
33	2b	75	LYS	2.0
52	2u	12	LYS	2.0
20	2Y	96	ILE	2.0
33	1b	41	ILE	2.0
33	2b	208	ILE	2.0
34	1c	5	ILE	2.0
1	2A	614(A)	U	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	2b	97	TRP	2.0
35	2d	173	TRP	2.0
6	2G	2	PRO	2.0
32	2a	1179	A	2.0
18	2W	1	MET	2.0
33	2b	189	ASP	2.0
31	29	20	HIS	2.0
33	1b	140	HIS	2.0
42	2k	59	TYR	2.0
44	2m	92	HIS	2.0

6.2 Non-standard residues in protein, DNA, RNA chains

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q<0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	G7M	2y	46	24/25	0.49	0.16	67,84,89,96	0
56	PSU	2y	55	20/21	0.59	0.16	75,82,88,102	0
56	G7M	1y	46	24/25	0.60	0.15	76,84,88,94	0
56	4SU	2y	8	20/21	0.65	0.14	73,83,93,99	0
56	5MU	2y	54	21/22	0.67	0.14	66,79,92,103	0
54	G7M	2w	46	24/25	0.68	0.14	69,76,88,94	0
56	MIA	2y	37	22/30	0.69	0.16	68,75,94,99	0
56	4SU	1y	8	20/21	0.70	0.13	79,84,92,103	0
56	MIA	1y	37	22/30	0.71	0.15	63,72,80,94	0
56	PSU	1y	32	20/21	0.71	0.16	70,76,94,100	0
56	5MU	1y	54	21/22	0.73	0.13	66,78,83,96	0
56	PSU	2y	39	20/21	0.74	0.18	72,79,86,94	0
56	PSU	1y	55	20/21	0.75	0.13	71,78,93,93	0
54	G7M	1w	46	24/25	0.75	0.14	57,67,87,98	0
56	PSU	2y	32	20/21	0.77	0.15	62,78,87,90	0
56	PSU	1y	39	20/21	0.81	0.14	68,74,78,79	0
54	4SU	2w	8	20/21	0.82	0.12	68,73,87,88	0
32	2MG	2a	1207	24/25	0.86	0.13	61,66,74,75	0
55	4SU	2x	8	20/21	0.87	0.11	58,62,73,75	0
55	5MU	2x	54	21/22	0.88	0.12	58,67,72,77	0
54	5MU	2w	54	21/22	0.88	0.10	57,66,69,72	0
54	PSU	2w	55	20/21	0.88	0.10	63,69,75,77	0
54	PSU	2w	32	20/21	0.88	0.13	59,64,73,73	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
55	PSU	2x	55	20/21	0.89	0.12	58,63,73,79	0
54	PSU	2w	39	20/21	0.89	0.12	56,65,68,70	0
55	5MC	2x	32	21/22	0.89	0.16	52,57,65,66	0
32	PSU	2a	516	20/21	0.89	0.12	54,60,64,66	0
43	0TD	2l	92	10/11	0.90	0.14	46,53,58,65	0
1	PSU	2A	1917	20/21	0.90	0.11	42,52,59,63	0
54	PSU	1w	55	20/21	0.91	0.10	55,61,67,68	0
55	4SU	1x	8	20/21	0.91	0.12	47,55,62,63	0
54	PSU	1w	32	20/21	0.91	0.12	47,51,58,61	0
1	OMC	2A	1920	21/22	0.92	0.10	46,52,56,57	0
32	5MC	2a	1407	21/22	0.92	0.12	46,52,55,61	0
55	5MU	1x	54	21/22	0.92	0.11	46,54,59,61	0
32	G7M	2a	527	24/25	0.92	0.11	48,56,62,67	0
32	5MC	2a	967	21/22	0.92	0.14	54,61,64,70	0
32	M2G	2a	966	25/26	0.93	0.14	56,62,69,72	0
1	5MU	1A	1915	21/22	0.93	0.11	38,42,50,58	0
55	PSU	1x	55	20/21	0.93	0.09	45,51,59,63	0
32	5MC	2a	1400	21/22	0.93	0.14	46,57,64,70	0
32	5MC	2a	1404	21/22	0.93	0.12	41,53,57,60	0
1	5MC	2A	1942	21/22	0.93	0.11	42,53,59,64	0
54	4SU	1w	8	20/21	0.93	0.11	56,67,72,74	0
1	PSU	2A	1911	20/21	0.93	0.11	44,56,64,66	0
54	5MU	1w	54	21/22	0.94	0.09	45,50,58,66	0
1	5MU	2A	1915	21/22	0.94	0.09	47,56,60,62	0
32	4OC	2a	1402	22/23	0.94	0.11	48,56,58,62	0
32	2MG	1a	1207	24/25	0.94	0.10	43,51,55,65	0
54	MIA	2w	37	25/30	0.94	0.10	50,60,63,65	0
32	MA6	2a	1518	24/25	0.95	0.10	48,54,60,65	0
32	MA6	2a	1519	24/25	0.95	0.12	42,53,57,60	0
1	OMU	2A	2552	21/22	0.95	0.09	34,40,43,47	0
1	OMC	1A	1920	21/22	0.95	0.08	29,37,39,41	0
32	PSU	1a	516	20/21	0.95	0.09	32,47,51,51	0
1	PSU	1A	1911	20/21	0.95	0.08	36,40,47,51	0
43	0TD	1l	92	10/11	0.95	0.09	36,42,45,47	0
54	PSU	1w	39	20/21	0.96	0.08	39,48,51,52	0
32	5MC	1a	1400	21/22	0.96	0.10	28,38,45,49	0
32	4OC	1a	1402	22/23	0.96	0.09	32,38,41,46	0
32	5MC	1a	1404	21/22	0.96	0.08	28,32,37,40	0
32	MA6	1a	1518	24/25	0.96	0.10	32,38,42,42	0
55	5MC	1x	32	21/22	0.96	0.08	35,39,44,49	0
32	MA6	1a	1519	24/25	0.96	0.09	30,37,41,42	0
32	M2G	1a	966	25/26	0.96	0.08	34,41,47,48	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
55	31H	2x	76	32/33	0.96	0.09	26,34,39,49	0
32	UR3	2a	1498	21/22	0.96	0.11	42,51,56,57	0
32	5MC	1a	967	21/22	0.96	0.09	31,41,48,50	0
1	5MC	2A	1962	21/22	0.96	0.10	28,42,48,53	0
1	OMG	2A	2251	24/25	0.96	0.09	29,34,40,42	0
1	5MC	1A	1942	21/22	0.96	0.08	33,38,41,51	0
1	PSU	2A	2605	20/21	0.96	0.08	25,36,39,41	0
54	MIA	1w	37	29/30	0.96	0.09	38,46,53,54	0
32	G7M	1a	527	24/25	0.97	0.07	30,35,44,47	0
1	2MA	2A	2503	23/24	0.97	0.07	25,31,39,39	0
32	5MC	1a	1407	21/22	0.97	0.07	26,31,34,40	0
54	F3N	2w	76	33/34	0.97	0.09	27,33,37,42	0
1	OMG	1A	2251	24/25	0.97	0.07	16,21,28,30	0
1	PSU	1A	1917	20/21	0.97	0.08	26,36,45,46	0
55	31H	1x	76	32/33	0.97	0.08	16,21,26,30	10
54	F3N	1w	76	33/34	0.97	0.07	15,19,23,28	0
1	5MC	1A	1962	21/22	0.98	0.07	22,26,38,41	0
1	5MU	1A	1939	21/22	0.98	0.07	20,24,26,27	0
1	5MU	2A	1939	21/22	0.98	0.06	24,33,39,43	0
1	2MA	1A	2503	23/24	0.98	0.06	11,18,23,23	0
1	OMU	1A	2552	21/22	0.98	0.07	20,25,30,33	0
32	UR3	1a	1498	21/22	0.98	0.06	22,32,35,39	0
1	PSU	1A	2605	20/21	0.98	0.07	17,22,27,29	0

6.3 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3246	1/1	0.48	0.32	74,74,74,74	0
57	MG	2a	1818	1/1	0.48	0.20	78,78,78,78	0
57	MG	2a	1788	1/1	0.55	0.25	69,69,69,69	0
57	MG	2A	3506	1/1	0.56	0.33	82,82,82,82	0
57	MG	2A	3562	1/1	0.56	0.20	64,64,64,64	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	1A	4008	1/1	0.60	0.13	77,77,77,77	0
57	MG	2A	3884	1/1	0.62	0.24	75,75,75,75	0
57	MG	2a	1618	1/1	0.62	0.24	70,70,70,70	0
57	MG	2A	3730	1/1	0.63	0.18	74,74,74,74	0
57	MG	1A	3292	1/1	0.64	0.32	59,59,59,59	0
57	MG	1A	3467	1/1	0.66	0.27	71,71,71,71	0
57	MG	1a	1613	1/1	0.67	0.23	71,71,71,71	0
57	MG	1A	3948	1/1	0.67	0.13	57,57,57,57	0
57	MG	1A	3516	1/1	0.67	0.28	66,66,66,66	0
57	MG	2a	1624	1/1	0.68	0.34	76,76,76,76	0
57	MG	2a	1711	1/1	0.68	0.34	73,73,73,73	0
57	MG	2A	3289	1/1	0.68	0.19	73,73,73,73	0
57	MG	2A	3004	1/1	0.68	0.27	66,66,66,66	0
57	MG	2a	1822	1/1	0.68	0.20	60,60,60,60	0
57	MG	2A	3607	1/1	0.69	0.18	59,59,59,59	0
57	MG	1A	3978	1/1	0.69	0.22	79,79,79,79	0
57	MG	2A	3761	1/1	0.69	0.25	60,60,60,60	0
57	MG	2a	1629	1/1	0.69	0.21	60,60,60,60	0
57	MG	1B	233	1/1	0.70	0.19	71,71,71,71	0
57	MG	2A	3670	1/1	0.70	0.18	66,66,66,66	0
57	MG	2A	3059	1/1	0.71	0.29	69,69,69,69	0
57	MG	2A	3103	1/1	0.71	0.27	62,62,62,62	0
57	MG	2A	3554	1/1	0.71	0.25	53,53,53,53	0
57	MG	2A	3807	1/1	0.71	0.18	68,68,68,68	0
57	MG	2A	3196	1/1	0.71	0.22	71,71,71,71	0
57	MG	1w	102	1/1	0.71	0.13	73,73,73,73	0
57	MG	2B	202	1/1	0.72	0.23	76,76,76,76	0
57	MG	10	106	1/1	0.72	0.17	46,46,46,46	0
57	MG	1A	4073	1/1	0.72	0.17	57,57,57,57	0
57	MG	2A	3596	1/1	0.72	0.21	76,76,76,76	0
57	MG	2B	212	1/1	0.73	0.32	81,81,81,81	0
57	MG	1A	3884	1/1	0.73	0.15	64,64,64,64	0
57	MG	2A	3501	1/1	0.73	0.14	71,71,71,71	0
57	MG	1A	3887	1/1	0.73	0.21	42,42,42,42	0
57	MG	1A	3858	1/1	0.73	0.16	64,64,64,64	0
57	MG	1A	4094	1/1	0.73	0.18	77,77,77,77	0
57	MG	1x	101	1/1	0.73	0.24	65,65,65,65	0
57	MG	2a	1821	1/1	0.73	0.19	53,53,53,53	0
57	MG	2A	3599	1/1	0.73	0.14	59,59,59,59	0
57	MG	2y	106	1/1	0.73	0.17	73,73,73,73	0
57	MG	1A	3269	1/1	0.74	0.22	65,65,65,65	0
57	MG	1A	3944	1/1	0.74	0.18	40,40,40,40	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	29	101	1/1	0.74	0.52	71,71,71,71	0
57	MG	2A	3868	1/1	0.74	0.19	69,69,69,69	0
57	MG	1A	3612	1/1	0.74	0.14	57,57,57,57	0
57	MG	2w	103	1/1	0.74	0.18	62,62,62,62	0
57	MG	2B	201	1/1	0.74	0.22	62,62,62,62	0
57	MG	2A	3344	1/1	0.75	0.16	72,72,72,72	0
57	MG	2a	1771	1/1	0.75	0.15	72,72,72,72	0
57	MG	1A	3955	1/1	0.75	0.17	59,59,59,59	0
57	MG	2a	1798	1/1	0.75	0.17	54,54,54,54	0
57	MG	1A	3838	1/1	0.75	0.22	65,65,65,65	0
57	MG	2A	3243	1/1	0.75	0.19	68,68,68,68	0
57	MG	1a	1676	1/1	0.75	0.31	73,73,73,73	0
57	MG	1a	1743	1/1	0.75	0.20	61,61,61,61	0
57	MG	2A	3322	1/1	0.75	0.23	74,74,74,74	0
57	MG	1A	3675	1/1	0.76	0.11	48,48,48,48	0
57	MG	2A	3192	1/1	0.76	0.18	69,69,69,69	0
57	MG	2A	3414	1/1	0.76	0.13	72,72,72,72	0
57	MG	2A	3262	1/1	0.76	0.34	61,61,61,61	0
57	MG	2A	3606	1/1	0.76	0.12	65,65,65,65	0
57	MG	2j	202	1/1	0.76	0.14	62,62,62,62	0
57	MG	1A	3874	1/1	0.76	0.18	26,26,26,26	0
57	MG	2w	105	1/1	0.76	0.19	77,77,77,77	0
57	MG	2A	3539	1/1	0.76	0.19	54,54,54,54	0
57	MG	1A	3544	1/1	0.77	0.20	67,67,67,67	0
57	MG	1A	4017	1/1	0.77	0.11	38,38,38,38	0
57	MG	2A	3614	1/1	0.77	0.14	55,55,55,55	0
57	MG	1A	4025	1/1	0.77	0.12	59,59,59,59	0
57	MG	2a	1641	1/1	0.77	0.20	64,64,64,64	0
57	MG	2A	3106	1/1	0.77	0.20	73,73,73,73	0
57	MG	1A	3651	1/1	0.77	0.10	35,35,35,35	0
57	MG	2T	203	1/1	0.77	0.21	64,64,64,64	0
57	MG	2A	3348	1/1	0.78	0.16	62,62,62,62	0
57	MG	2a	1644	1/1	0.78	0.33	69,69,69,69	0
57	MG	2A	3370	1/1	0.78	0.28	73,73,73,73	0
57	MG	1A	3805	1/1	0.78	0.14	53,53,53,53	0
57	MG	1w	105	1/1	0.78	0.13	73,73,73,73	0
57	MG	2A	3283	1/1	0.78	0.24	63,63,63,63	0
57	MG	1A	3986	1/1	0.78	0.29	77,77,77,77	0
57	MG	1A	3551	1/1	0.78	0.13	61,61,61,61	0
57	MG	2A	3747	1/1	0.78	0.18	57,57,57,57	0
57	MG	2a	1610	1/1	0.78	0.18	69,69,69,69	0
57	MG	2p	101	1/1	0.78	0.17	53,53,53,53	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3695	1/1	0.78	0.10	30,30,30,30	0
57	MG	2A	3768	1/1	0.78	0.13	56,56,56,56	0
57	MG	2A	3779	1/1	0.78	0.23	60,60,60,60	0
57	MG	2A	3461	1/1	0.79	0.22	64,64,64,64	0
57	MG	1A	4057	1/1	0.79	0.13	47,47,47,47	0
57	MG	2a	1695	1/1	0.79	0.25	66,66,66,66	0
57	MG	1A	4021	1/1	0.79	0.14	63,63,63,63	0
57	MG	2A	3102	1/1	0.79	0.29	66,66,66,66	0
57	MG	2A	3687	1/1	0.79	0.15	62,62,62,62	0
57	MG	2B	211	1/1	0.79	0.20	64,64,64,64	0
57	MG	2A	3713	1/1	0.79	0.12	58,58,58,58	0
57	MG	1A	3646	1/1	0.79	0.14	54,54,54,54	0
57	MG	1A	4097	1/1	0.79	0.17	65,65,65,65	0
57	MG	2A	3750	1/1	0.79	0.15	64,64,64,64	0
57	MG	2A	3568	1/1	0.79	0.17	50,50,50,50	0
57	MG	2A	3110	1/1	0.79	0.13	65,65,65,65	0
57	MG	2A	3446	1/1	0.79	0.20	54,54,54,54	0
57	MG	2x	104	1/1	0.79	0.20	60,60,60,60	0
57	MG	2a	1630	1/1	0.79	0.33	67,67,67,67	0
57	MG	2a	1620	1/1	0.80	0.19	61,61,61,61	0
57	MG	1A	3428	1/1	0.80	0.20	66,66,66,66	0
57	MG	1A	3965	1/1	0.80	0.09	18,18,18,18	0
57	MG	1a	1804	1/1	0.80	0.12	39,39,39,39	0
57	MG	2A	3410	1/1	0.80	0.17	71,71,71,71	0
57	MG	2A	3412	1/1	0.80	0.12	61,61,61,61	0
57	MG	2A	3809	1/1	0.80	0.16	61,61,61,61	0
57	MG	2A	3820	1/1	0.80	0.14	58,58,58,58	0
57	MG	2a	1743	1/1	0.80	0.27	68,68,68,68	0
57	MG	1A	4048	1/1	0.80	0.11	24,24,24,24	0
57	MG	1A	4009	1/1	0.80	0.15	57,57,57,57	0
57	MG	2A	3663	1/1	0.80	0.16	76,76,76,76	0
57	MG	2A	3272	1/1	0.80	0.13	76,76,76,76	0
57	MG	1A	3418	1/1	0.80	0.21	65,65,65,65	0
57	MG	2A	3689	1/1	0.80	0.14	65,65,65,65	0
57	MG	2B	216	1/1	0.80	0.15	69,69,69,69	0
57	MG	2B	220	1/1	0.80	0.25	58,58,58,58	0
57	MG	2v	101	1/1	0.80	0.17	74,74,74,74	0
57	MG	2A	3115	1/1	0.80	0.24	55,55,55,55	0
57	MG	2A	3718	1/1	0.80	0.15	59,59,59,59	0
57	MG	2A	3116	1/1	0.80	0.22	57,57,57,57	0
57	MG	2A	3326	1/1	0.80	0.21	59,59,59,59	0
57	MG	1v	101	1/1	0.81	0.16	59,59,59,59	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1a	1623	1/1	0.81	0.27	58,58,58,58	0
57	MG	2A	3349	1/1	0.81	0.18	68,68,68,68	0
57	MG	2a	1748	1/1	0.81	0.14	73,73,73,73	0
57	MG	2A	3255	1/1	0.81	0.09	69,69,69,69	0
57	MG	2A	3748	1/1	0.81	0.17	59,59,59,59	0
57	MG	2G	201	1/1	0.81	0.25	56,56,56,56	0
57	MG	2a	1803	1/1	0.81	0.26	65,65,65,65	0
57	MG	2A	3380	1/1	0.81	0.23	72,72,72,72	0
57	MG	1a	1642	1/1	0.81	0.16	64,64,64,64	0
57	MG	1U	210	1/1	0.81	0.22	43,43,43,43	0
57	MG	1A	3725	1/1	0.81	0.15	49,49,49,49	0
57	MG	2A	3430	1/1	0.81	0.32	60,60,60,60	0
57	MG	2A	3187	1/1	0.81	0.14	68,68,68,68	0
57	MG	2A	3304	1/1	0.81	0.14	74,74,74,74	0
57	MG	2w	104	1/1	0.81	0.14	81,81,81,81	0
57	MG	1A	3956	1/1	0.81	0.13	66,66,66,66	0
57	MG	1a	1810	1/1	0.81	0.18	63,63,63,63	0
57	MG	2A	3695	1/1	0.81	0.17	57,57,57,57	0
57	MG	2A	3275	1/1	0.82	0.22	64,64,64,64	0
57	MG	2A	3276	1/1	0.82	0.19	74,74,74,74	0
57	MG	1a	1789	1/1	0.82	0.22	69,69,69,69	0
57	MG	1A	3964	1/1	0.82	0.08	46,46,46,46	0
57	MG	2A	3301	1/1	0.82	0.20	58,58,58,58	0
57	MG	1A	3722	1/1	0.82	0.11	52,52,52,52	0
57	MG	1e	201	1/1	0.82	0.11	65,65,65,65	0
57	MG	2a	1726	1/1	0.82	0.16	58,58,58,58	0
57	MG	2A	3111	1/1	0.82	0.19	60,60,60,60	0
57	MG	2a	1744	1/1	0.82	0.14	78,78,78,78	0
57	MG	1m	3002	1/1	0.82	0.20	57,57,57,57	0
57	MG	2A	3879	1/1	0.82	0.19	57,57,57,57	0
57	MG	1B	209	1/1	0.82	0.12	60,60,60,60	0
57	MG	1A	3233	1/1	0.82	0.15	59,59,59,59	0
57	MG	2A	3354	1/1	0.82	0.16	70,70,70,70	0
57	MG	1H	201	1/1	0.82	0.12	63,63,63,63	0
57	MG	1a	1697	1/1	0.82	0.28	59,59,59,59	0
57	MG	2A	3213	1/1	0.82	0.14	56,56,56,56	0
57	MG	1A	4091	1/1	0.82	0.09	71,71,71,71	0
57	MG	2E	306	1/1	0.82	0.20	49,49,49,49	0
57	MG	2A	3705	1/1	0.82	0.23	60,60,60,60	0
57	MG	2A	3709	1/1	0.82	0.09	71,71,71,71	0
57	MG	2A	3008	1/1	0.82	0.21	59,59,59,59	0
57	MG	2A	3031	1/1	0.82	0.22	67,67,67,67	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1a	1753	1/1	0.82	0.18	58,58,58,58	0
57	MG	2A	3101	1/1	0.82	0.20	66,66,66,66	0
57	MG	1A	4029	1/1	0.83	0.11	52,52,52,52	0
57	MG	10	107	1/1	0.83	0.16	60,60,60,60	0
57	MG	1A	3664	1/1	0.83	0.09	27,27,27,27	0
57	MG	1A	3775	1/1	0.83	0.07	12,12,12,12	0
57	MG	1A	4071	1/1	0.83	0.09	40,40,40,40	0
57	MG	1A	3980	1/1	0.83	0.10	58,58,58,58	0
57	MG	2A	3488	1/1	0.83	0.16	61,61,61,61	0
57	MG	2A	3090	1/1	0.83	0.16	50,50,50,50	0
57	MG	2a	1656	1/1	0.83	0.23	72,72,72,72	0
57	MG	1A	3623	1/1	0.83	0.12	57,57,57,57	0
57	MG	1A	3996	1/1	0.83	0.11	54,54,54,54	0
57	MG	2A	3292	1/1	0.83	0.14	77,77,77,77	0
57	MG	1a	1749	1/1	0.83	0.16	54,54,54,54	0
57	MG	1A	3312	1/1	0.83	0.11	52,52,52,52	0
57	MG	2A	3587	1/1	0.83	0.17	55,55,55,55	0
57	MG	2A	3854	1/1	0.83	0.28	63,63,63,63	0
57	MG	1a	1768	1/1	0.83	0.08	48,48,48,48	0
57	MG	1A	3952	1/1	0.83	0.12	57,57,57,57	0
57	MG	1B	228	1/1	0.83	0.10	68,68,68,68	0
57	MG	2a	1809	1/1	0.83	0.16	64,64,64,64	0
57	MG	1B	229	1/1	0.83	0.20	60,60,60,60	0
57	MG	1A	3713	1/1	0.83	0.13	50,50,50,50	0
57	MG	2A	3654	1/1	0.83	0.18	60,60,60,60	0
57	MG	2A	3658	1/1	0.83	0.18	54,54,54,54	0
57	MG	1A	3866	1/1	0.83	0.21	32,32,32,32	0
57	MG	2A	3363	1/1	0.83	0.17	61,61,61,61	0
57	MG	2w	101	1/1	0.83	0.23	59,59,59,59	0
57	MG	2A	3366	1/1	0.83	0.13	50,50,50,50	0
57	MG	1A	3250	1/1	0.83	0.18	60,60,60,60	0
57	MG	1Z	3702	1/1	0.83	0.11	63,63,63,63	0
57	MG	2A	3701	1/1	0.83	0.12	63,63,63,63	0
57	MG	2a	1601	1/1	0.83	0.17	59,59,59,59	0
57	MG	2A	3558	1/1	0.84	0.12	48,48,48,48	0
57	MG	2A	3759	1/1	0.84	0.17	54,54,54,54	0
57	MG	2A	3068	1/1	0.84	0.16	62,62,62,62	0
57	MG	2A	3072	1/1	0.84	0.12	57,57,57,57	0
57	MG	2A	3219	1/1	0.84	0.14	60,60,60,60	0
57	MG	1S	203	1/1	0.84	0.13	61,61,61,61	0
57	MG	2a	1665	1/1	0.84	0.13	57,57,57,57	0
57	MG	1A	3511	1/1	0.84	0.14	65,65,65,65	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3730	1/1	0.84	0.17	64,64,64,64	0
57	MG	10	102	1/1	0.84	0.36	63,63,63,63	0
57	MG	2A	3611	1/1	0.84	0.17	51,51,51,51	0
57	MG	2A	3266	1/1	0.84	0.18	52,52,52,52	0
57	MG	2A	3882	1/1	0.84	0.16	65,65,65,65	0
57	MG	2A	3372	1/1	0.84	0.11	67,67,67,67	0
57	MG	2A	3376	1/1	0.84	0.12	64,64,64,64	0
57	MG	1A	3738	1/1	0.84	0.12	52,52,52,52	0
57	MG	2A	3387	1/1	0.84	0.13	60,60,60,60	0
57	MG	1A	3060	1/1	0.84	0.13	58,58,58,58	0
57	MG	1x	102	1/1	0.84	0.15	62,62,62,62	0
57	MG	2B	217	1/1	0.84	0.14	54,54,54,54	0
57	MG	1a	1785	1/1	0.84	0.15	53,53,53,53	0
57	MG	2a	1829	1/1	0.84	0.12	57,57,57,57	0
57	MG	1A	3979	1/1	0.84	0.09	30,30,30,30	0
57	MG	2l	203	1/1	0.84	0.14	62,62,62,62	0
57	MG	2A	3291	1/1	0.84	0.20	67,67,67,67	0
57	MG	2A	3171	1/1	0.84	0.17	62,62,62,62	0
57	MG	2V	202	1/1	0.84	0.15	59,59,59,59	0
57	MG	2A	3295	1/1	0.84	0.31	65,65,65,65	0
57	MG	2A	3176	1/1	0.84	0.11	49,49,49,49	0
57	MG	1A	3679	1/1	0.84	0.09	19,19,19,19	0
57	MG	2A	3316	1/1	0.84	0.26	58,58,58,58	0
57	MG	2y	104	1/1	0.84	0.09	71,71,71,71	0
57	MG	1A	4024	1/1	0.84	0.20	50,50,50,50	0
57	MG	1l	104	1/1	0.85	0.11	50,50,50,50	0
57	MG	2A	3320	1/1	0.85	0.15	55,55,55,55	0
57	MG	2E	301	1/1	0.85	0.11	58,58,58,58	0
57	MG	2A	3122	1/1	0.85	0.14	58,58,58,58	0
57	MG	1w	103	1/1	0.85	0.09	55,55,55,55	0
57	MG	1A	3487	1/1	0.85	0.13	62,62,62,62	0
57	MG	2A	3178	1/1	0.85	0.17	61,61,61,61	0
57	MG	27	101	1/1	0.85	0.26	58,58,58,58	0
57	MG	2A	3184	1/1	0.85	0.21	56,56,56,56	0
57	MG	1w	106	1/1	0.85	0.10	42,42,42,42	0
57	MG	2A	3684	1/1	0.85	0.10	62,62,62,62	0
57	MG	1A	3596	1/1	0.85	0.16	60,60,60,60	0
57	MG	1A	3492	1/1	0.85	0.18	50,50,50,50	0
57	MG	2A	3206	1/1	0.85	0.18	62,62,62,62	0
57	MG	2A	3211	1/1	0.85	0.10	64,64,64,64	0
57	MG	1x	112	1/1	0.85	0.11	54,54,54,54	0
57	MG	2A	3707	1/1	0.85	0.12	57,57,57,57	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1a	1649	1/1	0.85	0.12	57,57,57,57	0
57	MG	2A	3382	1/1	0.85	0.16	47,47,47,47	0
57	MG	1A	3752	1/1	0.85	0.23	57,57,57,57	0
57	MG	2A	3399	1/1	0.85	0.14	64,64,64,64	0
57	MG	2A	3406	1/1	0.85	0.16	65,65,65,65	0
57	MG	2a	1714	1/1	0.85	0.17	62,62,62,62	0
57	MG	1A	3204	1/1	0.85	0.14	62,62,62,62	0
57	MG	1A	4001	1/1	0.85	0.08	24,24,24,24	0
57	MG	1A	3947	1/1	0.85	0.10	23,23,23,23	0
57	MG	1A	3122	1/1	0.85	0.13	35,35,35,35	0
57	MG	2a	1756	1/1	0.85	0.15	64,64,64,64	0
57	MG	2A	3075	1/1	0.85	0.13	63,63,63,63	0
57	MG	2A	3776	1/1	0.85	0.11	65,65,65,65	0
57	MG	1A	3718	1/1	0.85	0.09	58,58,58,58	0
57	MG	2A	3094	1/1	0.85	0.18	38,38,38,38	0
57	MG	1A	3844	1/1	0.85	0.12	42,42,42,42	0
57	MG	2a	1812	1/1	0.85	0.13	70,70,70,70	0
57	MG	2A	3285	1/1	0.85	0.13	53,53,53,53	0
57	MG	2A	3839	1/1	0.85	0.09	28,28,28,28	0
57	MG	2A	3847	1/1	0.85	0.19	70,70,70,70	0
57	MG	1A	3352	1/1	0.85	0.12	45,45,45,45	0
57	MG	2a	1833	1/1	0.85	0.14	62,62,62,62	0
57	MG	1A	3958	1/1	0.85	0.13	54,54,54,54	0
57	MG	1A	3864	1/1	0.85	0.22	31,31,31,31	0
57	MG	2A	3294	1/1	0.85	0.11	55,55,55,55	0
57	MG	2A	3564	1/1	0.85	0.13	47,47,47,47	0
57	MG	1A	4047	1/1	0.85	0.14	31,31,31,31	0
57	MG	2A	3583	1/1	0.85	0.14	44,44,44,44	0
57	MG	2B	209	1/1	0.85	0.23	56,56,56,56	0
57	MG	1A	3865	1/1	0.85	0.12	50,50,50,50	0
57	MG	1A	3966	1/1	0.85	0.18	48,48,48,48	0
57	MG	2B	215	1/1	0.85	0.10	47,47,47,47	0
57	MG	2A	3310	1/1	0.85	0.25	64,64,64,64	0
57	MG	2a	1639	1/1	0.86	0.15	65,65,65,65	0
57	MG	1O	205	1/1	0.86	0.18	56,56,56,56	0
57	MG	1a	1731	1/1	0.86	0.10	39,39,39,39	0
57	MG	2A	3273	1/1	0.86	0.14	65,65,65,65	0
57	MG	2A	3851	1/1	0.86	0.12	59,59,59,59	0
57	MG	2A	3853	1/1	0.86	0.11	32,32,32,32	0
57	MG	2a	1706	1/1	0.86	0.11	53,53,53,53	0
57	MG	1A	3193	1/1	0.86	0.11	47,47,47,47	0
57	MG	1A	3962	1/1	0.86	0.10	42,42,42,42	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2a	1717	1/1	0.86	0.17	70,70,70,70	0
57	MG	2a	1720	1/1	0.86	0.22	66,66,66,66	0
57	MG	1x	111	1/1	0.86	0.13	55,55,55,55	0
57	MG	2a	1731	1/1	0.86	0.16	64,64,64,64	0
57	MG	1A	3721	1/1	0.86	0.15	43,43,43,43	0
57	MG	2A	3409	1/1	0.86	0.16	64,64,64,64	0
57	MG	2A	3682	1/1	0.86	0.13	50,50,50,50	0
57	MG	2A	3003	1/1	0.86	0.13	47,47,47,47	0
57	MG	2A	3175	1/1	0.86	0.18	57,57,57,57	0
57	MG	1a	1760	1/1	0.86	0.11	60,60,60,60	0
57	MG	1A	3510	1/1	0.86	0.10	55,55,55,55	0
57	MG	2B	213	1/1	0.86	0.21	58,58,58,58	0
57	MG	2a	1804	1/1	0.86	0.17	64,64,64,64	0
57	MG	1A	3843	1/1	0.86	0.14	56,56,56,56	0
57	MG	1A	4095	1/1	0.86	0.10	37,37,37,37	0
57	MG	2A	3189	1/1	0.86	0.19	68,68,68,68	0
57	MG	1a	1798	1/1	0.86	0.15	81,81,81,81	0
57	MG	2A	3502	1/1	0.86	0.09	61,61,61,61	0
57	MG	2a	1823	1/1	0.86	0.19	59,59,59,59	0
57	MG	2a	1826	1/1	0.86	0.14	62,62,62,62	0
57	MG	2A	3195	1/1	0.86	0.24	53,53,53,53	0
57	MG	1A	3469	1/1	0.86	0.12	55,55,55,55	0
57	MG	2A	3204	1/1	0.86	0.13	45,45,45,45	0
57	MG	2A	3555	1/1	0.86	0.11	42,42,42,42	0
57	MG	15	109	1/1	0.86	0.11	45,45,45,45	0
57	MG	1A	3712	1/1	0.86	0.13	34,34,34,34	0
57	MG	2A	3091	1/1	0.86	0.14	66,66,66,66	0
57	MG	1A	3737	1/1	0.86	0.15	65,65,65,65	0
57	MG	2A	3097	1/1	0.86	0.15	58,58,58,58	0
57	MG	1A	4036	1/1	0.86	0.11	45,45,45,45	0
57	MG	2A	3791	1/1	0.86	0.10	49,49,49,49	0
57	MG	1A	3210	1/1	0.86	0.12	64,64,64,64	0
57	MG	1A	3716	1/1	0.86	0.15	45,45,45,45	0
57	MG	2A	3440	1/1	0.87	0.19	53,53,53,53	0
57	MG	1a	1755	1/1	0.87	0.09	47,47,47,47	0
57	MG	2A	3449	1/1	0.87	0.17	49,49,49,49	0
57	MG	2A	3735	1/1	0.87	0.14	51,51,51,51	0
57	MG	2A	3740	1/1	0.87	0.11	50,50,50,50	0
57	MG	1A	3382	1/1	0.87	0.09	61,61,61,61	0
57	MG	2a	1638	1/1	0.87	0.30	54,54,54,54	0
57	MG	2A	3299	1/1	0.87	0.16	56,56,56,56	0
57	MG	1A	3038	1/1	0.87	0.14	56,56,56,56	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1a	1774	1/1	0.87	0.11	70,70,70,70	0
57	MG	2a	1649	1/1	0.87	0.24	61,61,61,61	0
57	MG	2a	1653	1/1	0.87	0.22	57,57,57,57	0
57	MG	1A	3989	1/1	0.87	0.09	30,30,30,30	0
57	MG	2A	3762	1/1	0.87	0.17	37,37,37,37	0
57	MG	2A	3514	1/1	0.87	0.13	56,56,56,56	0
57	MG	2a	1701	1/1	0.87	0.14	51,51,51,51	0
57	MG	2A	3198	1/1	0.87	0.23	55,55,55,55	0
57	MG	2a	1708	1/1	0.87	0.16	54,54,54,54	0
57	MG	2A	3083	1/1	0.87	0.10	37,37,37,37	0
57	MG	1A	3535	1/1	0.87	0.25	53,53,53,53	0
57	MG	2A	3323	1/1	0.87	0.19	52,52,52,52	0
57	MG	1A	3341	1/1	0.87	0.14	53,53,53,53	0
57	MG	2A	3814	1/1	0.87	0.12	49,49,49,49	0
57	MG	2a	1727	1/1	0.87	0.18	66,66,66,66	0
57	MG	1A	3860	1/1	0.87	0.09	21,21,21,21	0
57	MG	2A	3838	1/1	0.87	0.12	68,68,68,68	0
57	MG	2A	3565	1/1	0.87	0.18	42,42,42,42	0
57	MG	1A	3545	1/1	0.87	0.19	50,50,50,50	0
57	MG	2A	3222	1/1	0.87	0.16	57,57,57,57	0
57	MG	2a	1766	1/1	0.87	0.14	54,54,54,54	0
57	MG	2A	3224	1/1	0.87	0.10	50,50,50,50	0
57	MG	2A	3357	1/1	0.87	0.12	62,62,62,62	0
57	MG	17	105	1/1	0.87	0.30	48,48,48,48	0
57	MG	1A	3493	1/1	0.87	0.11	51,51,51,51	0
57	MG	2A	3367	1/1	0.87	0.25	62,62,62,62	0
57	MG	1A	3561	1/1	0.87	0.14	55,55,55,55	0
57	MG	2A	3612	1/1	0.87	0.13	63,63,63,63	0
57	MG	1a	1628	1/1	0.87	0.25	60,60,60,60	0
57	MG	2B	207	1/1	0.87	0.11	62,62,62,62	0
57	MG	2A	3623	1/1	0.87	0.13	42,42,42,42	0
57	MG	1a	1634	1/1	0.87	0.09	46,46,46,46	0
57	MG	1B	214	1/1	0.87	0.10	44,44,44,44	0
57	MG	1B	225	1/1	0.87	0.11	49,49,49,49	0
57	MG	2A	3274	1/1	0.87	0.12	61,61,61,61	0
57	MG	2a	1834	1/1	0.87	0.21	63,63,63,63	0
57	MG	2e	201	1/1	0.87	0.10	59,59,59,59	0
57	MG	2A	3677	1/1	0.87	0.18	56,56,56,56	0
57	MG	2l	202	1/1	0.87	0.14	53,53,53,53	0
57	MG	2A	3391	1/1	0.87	0.15	63,63,63,63	0
57	MG	2A	3397	1/1	0.87	0.14	58,58,58,58	0
57	MG	1A	3562	1/1	0.87	0.12	52,52,52,52	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3710	1/1	0.87	0.11	21,21,21,21	0
57	MG	1A	3972	1/1	0.87	0.12	62,62,62,62	0
57	MG	1a	1739	1/1	0.87	0.16	64,64,64,64	0
57	MG	1A	3591	1/1	0.87	0.29	45,45,45,45	0
57	MG	2w	109	1/1	0.87	0.20	65,65,65,65	0
57	MG	1A	4038	1/1	0.87	0.08	26,26,26,26	0
57	MG	1A	3265	1/1	0.87	0.10	40,40,40,40	0
57	MG	2A	3710	1/1	0.87	0.11	60,60,60,60	0
57	MG	2A	3359	1/1	0.88	0.10	50,50,50,50	0
57	MG	2A	3778	1/1	0.88	0.10	56,56,56,56	0
57	MG	1A	3649	1/1	0.88	0.12	47,47,47,47	0
57	MG	2A	3098	1/1	0.88	0.17	61,61,61,61	0
57	MG	2A	3799	1/1	0.88	0.16	58,58,58,58	0
57	MG	1A	3470	1/1	0.88	0.10	41,41,41,41	0
57	MG	1A	3405	1/1	0.88	0.16	50,50,50,50	0
57	MG	2A	3811	1/1	0.88	0.08	43,43,43,43	0
57	MG	1A	3277	1/1	0.88	0.07	48,48,48,48	0
57	MG	1A	3821	1/1	0.88	0.12	49,49,49,49	0
57	MG	18	102	1/1	0.88	0.15	50,50,50,50	0
57	MG	1B	203	1/1	0.88	0.19	55,55,55,55	0
57	MG	1A	3064	1/1	0.88	0.11	50,50,50,50	0
57	MG	1A	3891	1/1	0.88	0.12	35,35,35,35	0
57	MG	2a	1719	1/1	0.88	0.15	65,65,65,65	0
57	MG	1B	217	1/1	0.88	0.09	40,40,40,40	0
57	MG	2a	1721	1/1	0.88	0.18	54,54,54,54	0
57	MG	2A	3137	1/1	0.88	0.11	47,47,47,47	0
57	MG	2A	3401	1/1	0.88	0.19	65,65,65,65	0
57	MG	1B	223	1/1	0.88	0.13	59,59,59,59	0
57	MG	2a	1741	1/1	0.88	0.10	44,44,44,44	0
57	MG	1a	1643	1/1	0.88	0.18	53,53,53,53	0
57	MG	2A	3679	1/1	0.88	0.18	51,51,51,51	0
57	MG	1A	3897	1/1	0.88	0.07	23,23,23,23	0
57	MG	1a	1658	1/1	0.88	0.20	45,45,45,45	0
57	MG	2a	1758	1/1	0.88	0.08	49,49,49,49	0
57	MG	2a	1761	1/1	0.88	0.09	54,54,54,54	0
57	MG	2B	203	1/1	0.88	0.18	61,61,61,61	0
57	MG	1a	1663	1/1	0.88	0.18	61,61,61,61	0
57	MG	2a	1785	1/1	0.88	0.16	54,54,54,54	0
57	MG	2B	208	1/1	0.88	0.11	51,51,51,51	0
57	MG	1A	3196	1/1	0.88	0.25	33,33,33,33	0
57	MG	2B	210	1/1	0.88	0.16	67,67,67,67	0
57	MG	1A	3727	1/1	0.88	0.16	49,49,49,49	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	2A	3698	1/1	0.88	0.08	34,34,34,34	0
57	MG	1a	1711	1/1	0.88	0.17	56,56,56,56	0
57	MG	1a	1724	1/1	0.88	0.14	62,62,62,62	0
57	MG	2A	3311	1/1	0.88	0.24	63,63,63,63	0
57	MG	2A	3464	1/1	0.88	0.20	49,49,49,49	0
57	MG	1A	4039	1/1	0.88	0.08	38,38,38,38	0
57	MG	2D	307	1/1	0.88	0.21	53,53,53,53	0
57	MG	1D	312	1/1	0.88	0.16	39,39,39,39	0
57	MG	1A	4040	1/1	0.88	0.11	28,28,28,28	0
57	MG	2A	3729	1/1	0.88	0.08	39,39,39,39	0
57	MG	1A	3855	1/1	0.88	0.23	56,56,56,56	0
57	MG	1A	3644	1/1	0.88	0.09	19,19,19,19	0
57	MG	2A	3736	1/1	0.88	0.12	69,69,69,69	0
57	MG	2A	3522	1/1	0.88	0.17	50,50,50,50	0
57	MG	2A	3338	1/1	0.88	0.19	55,55,55,55	0
57	MG	2a	1609	1/1	0.88	0.15	62,62,62,62	0
57	MG	1A	3395	1/1	0.88	0.13	56,56,56,56	0
57	MG	1Y	202	1/1	0.88	0.09	53,53,53,53	0
57	MG	1A	4068	1/1	0.88	0.10	38,38,38,38	0
57	MG	2a	1623	1/1	0.88	0.26	58,58,58,58	0
57	MG	1A	4000	1/1	0.88	0.12	41,41,41,41	0
57	MG	2A	3355	1/1	0.88	0.09	37,37,37,37	0
57	MG	2A	3767	1/1	0.88	0.11	56,56,56,56	0
57	MG	2A	3228	1/1	0.88	0.15	53,53,53,53	0
57	MG	1A	3434	1/1	0.89	0.17	51,51,51,51	0
57	MG	2A	3622	1/1	0.89	0.12	40,40,40,40	0
57	MG	1a	1772	1/1	0.89	0.09	47,47,47,47	0
57	MG	2A	3639	1/1	0.89	0.08	44,44,44,44	0
57	MG	1Z	3700	1/1	0.89	0.11	50,50,50,50	0
57	MG	2A	3656	1/1	0.89	0.26	61,61,61,61	0
57	MG	2R	202	1/1	0.89	0.18	45,45,45,45	0
57	MG	2R	203	1/1	0.89	0.12	43,43,43,43	0
57	MG	1A	3436	1/1	0.89	0.10	53,53,53,53	0
57	MG	2A	3351	1/1	0.89	0.08	73,73,73,73	0
57	MG	23	101	1/1	0.89	0.13	58,58,58,58	0
57	MG	1A	3236	1/1	0.89	0.13	52,52,52,52	0
57	MG	2A	3675	1/1	0.89	0.18	52,52,52,52	0
57	MG	1A	3653	1/1	0.89	0.10	59,59,59,59	0
57	MG	2A	3356	1/1	0.89	0.21	40,40,40,40	0
57	MG	1A	4060	1/1	0.89	0.10	45,45,45,45	0
57	MG	1a	1809	1/1	0.89	0.14	61,61,61,61	0
57	MG	2A	3360	1/1	0.89	0.11	60,60,60,60	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3191	1/1	0.89	0.07	50,50,50,50	0
57	MG	1A	3468	1/1	0.89	0.12	54,54,54,54	0
57	MG	2A	3194	1/1	0.89	0.15	58,58,58,58	0
57	MG	1A	3173	1/1	0.89	0.09	34,34,34,34	0
57	MG	1A	3026	1/1	0.89	0.09	49,49,49,49	0
57	MG	1A	4081	1/1	0.89	0.09	29,29,29,29	0
57	MG	2a	1640	1/1	0.89	0.23	63,63,63,63	0
57	MG	2A	3377	1/1	0.89	0.13	67,67,67,67	0
57	MG	1A	3990	1/1	0.89	0.10	33,33,33,33	0
57	MG	2a	1648	1/1	0.89	0.10	50,50,50,50	0
57	MG	1A	3795	1/1	0.89	0.11	67,67,67,67	0
57	MG	1A	3917	1/1	0.89	0.24	38,38,38,38	0
57	MG	2a	1655	1/1	0.89	0.14	63,63,63,63	0
57	MG	2A	3723	1/1	0.89	0.08	42,42,42,42	0
57	MG	2A	3724	1/1	0.89	0.10	56,56,56,56	0
57	MG	2a	1675	1/1	0.89	0.28	54,54,54,54	0
57	MG	2a	1679	1/1	0.89	0.14	56,56,56,56	0
57	MG	1A	3933	1/1	0.89	0.08	31,31,31,31	0
57	MG	2a	1699	1/1	0.89	0.11	65,65,65,65	0
57	MG	2a	1700	1/1	0.89	0.18	56,56,56,56	0
57	MG	2A	3217	1/1	0.89	0.11	51,51,51,51	0
57	MG	1A	3479	1/1	0.89	0.17	38,38,38,38	0
57	MG	1B	208	1/1	0.89	0.09	58,58,58,58	0
57	MG	2a	1710	1/1	0.89	0.11	55,55,55,55	0
57	MG	1A	3814	1/1	0.89	0.41	50,50,50,50	0
57	MG	1a	1651	1/1	0.89	0.16	50,50,50,50	0
57	MG	2A	3241	1/1	0.89	0.23	52,52,52,52	0
57	MG	2A	3749	1/1	0.89	0.09	66,66,66,66	0
57	MG	1A	4016	1/1	0.89	0.08	33,33,33,33	0
57	MG	2A	3752	1/1	0.89	0.14	44,44,44,44	0
57	MG	1a	1659	1/1	0.89	0.11	48,48,48,48	0
57	MG	2A	3417	1/1	0.89	0.10	64,64,64,64	0
57	MG	2A	3418	1/1	0.89	0.18	66,66,66,66	0
57	MG	2A	3764	1/1	0.89	0.09	48,48,48,48	0
57	MG	2A	3428	1/1	0.89	0.14	39,39,39,39	0
57	MG	2A	3253	1/1	0.89	0.22	63,63,63,63	0
57	MG	2A	3005	1/1	0.89	0.11	52,52,52,52	0
57	MG	1A	3323	1/1	0.89	0.11	50,50,50,50	0
57	MG	2A	3028	1/1	0.89	0.31	43,43,43,43	0
57	MG	2a	1760	1/1	0.89	0.10	68,68,68,68	0
57	MG	1A	3408	1/1	0.89	0.10	54,54,54,54	0
57	MG	2A	3035	1/1	0.89	0.11	53,53,53,53	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3053	1/1	0.89	0.18	55,55,55,55	0
57	MG	1a	1677	1/1	0.89	0.13	53,53,53,53	0
57	MG	1a	1679	1/1	0.89	0.20	45,45,45,45	0
57	MG	2A	3279	1/1	0.89	0.11	53,53,53,53	0
57	MG	2a	1799	1/1	0.89	0.09	55,55,55,55	0
57	MG	1a	1681	1/1	0.89	0.11	58,58,58,58	0
57	MG	2A	3823	1/1	0.89	0.09	57,57,57,57	0
57	MG	2a	1806	1/1	0.89	0.09	58,58,58,58	0
57	MG	2A	3826	1/1	0.89	0.10	49,49,49,49	0
57	MG	2A	3515	1/1	0.89	0.15	54,54,54,54	0
57	MG	2A	3520	1/1	0.89	0.13	38,38,38,38	0
57	MG	2a	1819	1/1	0.89	0.10	52,52,52,52	0
57	MG	1A	3604	1/1	0.89	0.13	44,44,44,44	0
57	MG	2A	3536	1/1	0.89	0.09	40,40,40,40	0
57	MG	1a	1702	1/1	0.89	0.17	55,55,55,55	0
57	MG	2A	3550	1/1	0.89	0.10	44,44,44,44	0
57	MG	1a	1708	1/1	0.89	0.12	50,50,50,50	0
57	MG	2a	1831	1/1	0.89	0.11	61,61,61,61	0
57	MG	1A	3413	1/1	0.89	0.10	47,47,47,47	0
57	MG	1a	1718	1/1	0.89	0.20	45,45,45,45	0
57	MG	2d	302	1/1	0.89	0.09	65,65,65,65	0
57	MG	1a	1720	1/1	0.89	0.11	64,64,64,64	0
57	MG	1A	4028	1/1	0.89	0.10	61,61,61,61	0
57	MG	1A	3613	1/1	0.89	0.09	26,26,26,26	0
57	MG	1a	1738	1/1	0.89	0.07	36,36,36,36	0
57	MG	2l	204	1/1	0.89	0.08	55,55,55,55	0
57	MG	2B	204	1/1	0.89	0.13	65,65,65,65	0
57	MG	1A	4033	1/1	0.89	0.11	44,44,44,44	0
57	MG	1A	4035	1/1	0.89	0.08	41,41,41,41	0
57	MG	2w	102	1/1	0.89	0.20	73,73,73,73	0
57	MG	2A	3588	1/1	0.89	0.11	60,60,60,60	0
57	MG	1A	3340	1/1	0.89	0.20	46,46,46,46	0
57	MG	1Q	205	1/1	0.89	0.09	36,36,36,36	0
57	MG	1A	3859	1/1	0.89	0.09	55,55,55,55	0
57	MG	2x	102	1/1	0.89	0.17	57,57,57,57	0
57	MG	1A	3235	1/1	0.89	0.09	31,31,31,31	0
57	MG	2y	101	1/1	0.89	0.13	71,71,71,71	0
57	MG	1a	1761	1/1	0.89	0.11	47,47,47,47	0
57	MG	2y	105	1/1	0.89	0.23	65,65,65,65	0
57	MG	2A	3337	1/1	0.89	0.13	52,52,52,52	0
57	MG	1A	3481	1/1	0.90	0.09	43,43,43,43	0
57	MG	1a	1725	1/1	0.90	0.10	39,39,39,39	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3231	1/1	0.90	0.21	42,42,42,42	0
57	MG	2a	1616	1/1	0.90	0.16	51,51,51,51	0
57	MG	1A	3848	1/1	0.90	0.08	47,47,47,47	0
57	MG	2A	3057	1/1	0.90	0.12	47,47,47,47	0
57	MG	1A	3853	1/1	0.90	0.08	40,40,40,40	0
57	MG	2A	3715	1/1	0.90	0.10	61,61,61,61	0
57	MG	2a	1625	1/1	0.90	0.29	66,66,66,66	0
57	MG	2A	3717	1/1	0.90	0.09	55,55,55,55	0
57	MG	2A	3250	1/1	0.90	0.12	51,51,51,51	0
57	MG	2a	1635	1/1	0.90	0.19	51,51,51,51	0
57	MG	2A	3411	1/1	0.90	0.20	60,60,60,60	0
57	MG	2A	3067	1/1	0.90	0.08	40,40,40,40	0
57	MG	2A	3254	1/1	0.90	0.10	52,52,52,52	0
57	MG	1A	3317	1/1	0.90	0.17	43,43,43,43	0
57	MG	2A	3256	1/1	0.90	0.15	58,58,58,58	0
57	MG	2A	3426	1/1	0.90	0.15	47,47,47,47	0
57	MG	1a	1741	1/1	0.90	0.07	42,42,42,42	0
57	MG	2A	3745	1/1	0.90	0.12	47,47,47,47	0
57	MG	2A	3074	1/1	0.90	0.14	55,55,55,55	0
57	MG	2A	3436	1/1	0.90	0.28	55,55,55,55	0
57	MG	1A	3281	1/1	0.90	0.11	47,47,47,47	0
57	MG	2a	1670	1/1	0.90	0.15	69,69,69,69	0
57	MG	2A	3080	1/1	0.90	0.09	53,53,53,53	0
57	MG	1a	1745	1/1	0.90	0.12	54,54,54,54	0
57	MG	2a	1684	1/1	0.90	0.19	50,50,50,50	0
57	MG	2a	1688	1/1	0.90	0.09	63,63,63,63	0
57	MG	2A	3086	1/1	0.90	0.17	43,43,43,43	0
57	MG	2a	1698	1/1	0.90	0.14	49,49,49,49	0
57	MG	2A	3462	1/1	0.90	0.14	42,42,42,42	0
57	MG	1A	3655	1/1	0.90	0.10	30,30,30,30	0
57	MG	2A	3486	1/1	0.90	0.18	49,49,49,49	0
57	MG	2A	3277	1/1	0.90	0.12	56,56,56,56	0
57	MG	2A	3497	1/1	0.90	0.10	59,59,59,59	0
57	MG	2A	3278	1/1	0.90	0.17	45,45,45,45	0
57	MG	1A	3389	1/1	0.90	0.10	52,52,52,52	0
57	MG	13	105	1/1	0.90	0.12	46,46,46,46	0
57	MG	1a	1758	1/1	0.90	0.15	43,43,43,43	0
57	MG	2A	3792	1/1	0.90	0.10	35,35,35,35	0
57	MG	1A	3731	1/1	0.90	0.08	40,40,40,40	0
57	MG	2A	3802	1/1	0.90	0.09	56,56,56,56	0
57	MG	1A	3667	1/1	0.90	0.12	53,53,53,53	0
57	MG	1A	4088	1/1	0.90	0.16	50,50,50,50	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3810	1/1	0.90	0.11	63,63,63,63	0
57	MG	1a	1769	1/1	0.90	0.08	69,69,69,69	0
57	MG	18	103	1/1	0.90	0.20	50,50,50,50	0
57	MG	2A	3815	1/1	0.90	0.10	50,50,50,50	0
57	MG	2a	1745	1/1	0.90	0.09	45,45,45,45	0
57	MG	1A	3668	1/1	0.90	0.07	31,31,31,31	0
57	MG	1a	1780	1/1	0.90	0.11	36,36,36,36	0
57	MG	1A	3873	1/1	0.90	0.10	42,42,42,42	0
57	MG	2A	3837	1/1	0.90	0.12	74,74,74,74	0
57	MG	2A	3305	1/1	0.90	0.13	53,53,53,53	0
57	MG	1A	3744	1/1	0.90	0.10	45,45,45,45	0
57	MG	2A	3118	1/1	0.90	0.13	50,50,50,50	0
57	MG	2a	1775	1/1	0.90	0.13	62,62,62,62	0
57	MG	1A	3335	1/1	0.90	0.17	36,36,36,36	0
57	MG	2A	3318	1/1	0.90	0.08	44,44,44,44	0
57	MG	2a	1789	1/1	0.90	0.09	53,53,53,53	0
57	MG	1a	1637	1/1	0.90	0.26	66,66,66,66	0
57	MG	2A	3153	1/1	0.90	0.24	55,55,55,55	0
57	MG	2A	3869	1/1	0.90	0.09	50,50,50,50	0
57	MG	2A	3870	1/1	0.90	0.12	46,46,46,46	0
57	MG	2A	3162	1/1	0.90	0.14	53,53,53,53	0
57	MG	2A	3590	1/1	0.90	0.08	44,44,44,44	0
57	MG	1A	4098	1/1	0.90	0.12	54,54,54,54	0
57	MG	1A	3761	1/1	0.90	0.13	34,34,34,34	0
57	MG	1a	1812	1/1	0.90	0.14	60,60,60,60	0
57	MG	1A	3888	1/1	0.90	0.09	13,13,13,13	0
57	MG	2A	3610	1/1	0.90	0.13	53,53,53,53	0
57	MG	2B	205	1/1	0.90	0.13	45,45,45,45	0
57	MG	1A	3769	1/1	0.90	0.10	37,37,37,37	0
57	MG	1t	201	1/1	0.90	0.19	56,56,56,56	0
57	MG	1A	4012	1/1	0.90	0.07	27,27,27,27	0
57	MG	2A	3619	1/1	0.90	0.10	65,65,65,65	0
57	MG	1A	3895	1/1	0.90	0.11	18,18,18,18	0
57	MG	1A	3770	1/1	0.90	0.08	22,22,22,22	0
57	MG	1a	1670	1/1	0.90	0.16	49,49,49,49	0
57	MG	2B	214	1/1	0.90	0.18	55,55,55,55	0
57	MG	1A	3337	1/1	0.90	0.24	47,47,47,47	0
57	MG	1A	3338	1/1	0.90	0.08	39,39,39,39	0
57	MG	1A	3532	1/1	0.90	0.09	45,45,45,45	0
57	MG	2A	3202	1/1	0.90	0.11	46,46,46,46	0
57	MG	2q	202	1/1	0.90	0.16	61,61,61,61	0
57	MG	1A	3946	1/1	0.90	0.08	21,21,21,21	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2v	103	1/1	0.90	0.23	56,56,56,56	0
57	MG	1A	3272	1/1	0.90	0.11	36,36,36,36	0
57	MG	2A	3209	1/1	0.90	0.11	44,44,44,44	0
57	MG	2F	306	1/1	0.90	0.16	53,53,53,53	0
57	MG	2A	3371	1/1	0.90	0.18	61,61,61,61	0
57	MG	1A	3476	1/1	0.90	0.13	39,39,39,39	0
57	MG	1A	3822	1/1	0.90	0.23	29,29,29,29	0
57	MG	1A	3830	1/1	0.90	0.11	40,40,40,40	0
57	MG	1A	3100	1/1	0.90	0.12	60,60,60,60	0
57	MG	2A	3220	1/1	0.90	0.14	56,56,56,56	0
57	MG	25	103	1/1	0.90	0.22	47,47,47,47	0
57	MG	2A	3696	1/1	0.90	0.11	54,54,54,54	0
57	MG	1A	3647	1/1	0.90	0.09	52,52,52,52	0
59	A1C9N	2A	3885	74/74	0.90	0.15	27,48,58,59	0
57	MG	1A	3232	1/1	0.91	0.14	48,48,48,48	0
57	MG	1A	3366	1/1	0.91	0.11	28,28,28,28	0
57	MG	1E	314	1/1	0.91	0.06	34,34,34,34	0
57	MG	2D	303	1/1	0.91	0.21	57,57,57,57	0
57	MG	1A	4007	1/1	0.91	0.07	40,40,40,40	0
57	MG	1A	3615	1/1	0.91	0.09	30,30,30,30	0
57	MG	2E	302	1/1	0.91	0.09	41,41,41,41	0
57	MG	2A	3334	1/1	0.91	0.16	56,56,56,56	0
57	MG	2F	302	1/1	0.91	0.08	39,39,39,39	0
57	MG	1A	3170	1/1	0.91	0.12	56,56,56,56	0
57	MG	2A	3139	1/1	0.91	0.10	44,44,44,44	0
57	MG	2A	3340	1/1	0.91	0.09	43,43,43,43	0
57	MG	2A	3146	1/1	0.91	0.14	55,55,55,55	0
57	MG	2T	202	1/1	0.91	0.15	59,59,59,59	0
57	MG	2A	3345	1/1	0.91	0.11	64,64,64,64	0
57	MG	1R	202	1/1	0.91	0.18	56,56,56,56	0
57	MG	2Z	301	1/1	0.91	0.13	57,57,57,57	0
57	MG	2I	101	1/1	0.91	0.17	33,33,33,33	0
57	MG	2A	3632	1/1	0.91	0.14	61,61,61,61	0
57	MG	1a	1767	1/1	0.91	0.09	54,54,54,54	0
57	MG	2A	3644	1/1	0.91	0.08	40,40,40,40	0
57	MG	28	102	1/1	0.91	0.12	41,41,41,41	0
57	MG	2A	3653	1/1	0.91	0.08	41,41,41,41	0
57	MG	2A	3350	1/1	0.91	0.11	61,61,61,61	0
57	MG	2a	1603	1/1	0.91	0.11	57,57,57,57	0
57	MG	2a	1606	1/1	0.91	0.14	52,52,52,52	0
57	MG	2a	1607	1/1	0.91	0.26	54,54,54,54	0
57	MG	1A	3875	1/1	0.91	0.10	27,27,27,27	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3353	1/1	0.91	0.10	45,45,45,45	0
57	MG	1A	4015	1/1	0.91	0.09	28,28,28,28	0
57	MG	2A	3668	1/1	0.91	0.14	54,54,54,54	0
57	MG	1A	3878	1/1	0.91	0.24	27,27,27,27	0
57	MG	1A	3733	1/1	0.91	0.09	37,37,37,37	0
57	MG	1A	3885	1/1	0.91	0.08	29,29,29,29	0
57	MG	2A	3358	1/1	0.91	0.23	55,55,55,55	0
57	MG	2a	1626	1/1	0.91	0.10	46,46,46,46	0
57	MG	1a	1783	1/1	0.91	0.11	52,52,52,52	0
57	MG	1A	3641	1/1	0.91	0.14	53,53,53,53	0
57	MG	2a	1632	1/1	0.91	0.07	73,73,73,73	0
57	MG	2A	3685	1/1	0.91	0.10	51,51,51,51	0
57	MG	2A	3362	1/1	0.91	0.10	49,49,49,49	0
57	MG	1A	3098	1/1	0.91	0.08	50,50,50,50	0
57	MG	1a	1791	1/1	0.91	0.08	41,41,41,41	0
57	MG	1a	1792	1/1	0.91	0.08	68,68,68,68	0
57	MG	2a	1642	1/1	0.91	0.31	69,69,69,69	0
57	MG	1A	3186	1/1	0.91	0.06	28,28,28,28	0
57	MG	2A	3700	1/1	0.91	0.19	46,46,46,46	0
57	MG	1A	3751	1/1	0.91	0.08	46,46,46,46	0
57	MG	1A	3896	1/1	0.91	0.07	12,12,12,12	0
57	MG	1A	3047	1/1	0.91	0.06	12,12,12,12	0
57	MG	1A	3910	1/1	0.91	0.17	18,18,18,18	0
57	MG	2a	1659	1/1	0.91	0.14	63,63,63,63	0
57	MG	2A	3378	1/1	0.91	0.15	56,56,56,56	0
57	MG	2a	1666	1/1	0.91	0.08	49,49,49,49	0
57	MG	2A	3711	1/1	0.91	0.07	39,39,39,39	0
57	MG	2a	1673	1/1	0.91	0.13	58,58,58,58	0
57	MG	1A	3914	1/1	0.91	0.08	32,32,32,32	0
57	MG	2a	1678	1/1	0.91	0.31	66,66,66,66	0
57	MG	1l	201	1/1	0.91	0.10	55,55,55,55	0
57	MG	1A	3407	1/1	0.91	0.15	53,53,53,53	0
57	MG	18	105	1/1	0.91	0.20	54,54,54,54	0
57	MG	1a	1608	1/1	0.91	0.15	48,48,48,48	0
57	MG	1A	3923	1/1	0.91	0.13	50,50,50,50	0
57	MG	2A	3400	1/1	0.91	0.20	55,55,55,55	0
57	MG	1A	3929	1/1	0.91	0.10	41,41,41,41	0
57	MG	2A	3731	1/1	0.91	0.10	34,34,34,34	0
57	MG	1A	3494	1/1	0.91	0.10	43,43,43,43	0
57	MG	1A	4050	1/1	0.91	0.07	41,41,41,41	0
57	MG	1a	1636	1/1	0.91	0.17	50,50,50,50	0
57	MG	1A	4055	1/1	0.91	0.17	62,62,62,62	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1a	1640	1/1	0.91	0.15	46,46,46,46	0
57	MG	2a	1715	1/1	0.91	0.19	56,56,56,56	0
57	MG	2A	3413	1/1	0.91	0.09	58,58,58,58	0
57	MG	1A	3322	1/1	0.91	0.08	34,34,34,34	0
57	MG	1A	4058	1/1	0.91	0.09	54,54,54,54	0
57	MG	1A	3409	1/1	0.91	0.10	39,39,39,39	0
57	MG	2A	3753	1/1	0.91	0.11	62,62,62,62	0
57	MG	1A	3784	1/1	0.91	0.09	32,32,32,32	0
57	MG	2A	3760	1/1	0.91	0.11	32,32,32,32	0
57	MG	2a	1733	1/1	0.91	0.14	48,48,48,48	0
57	MG	1A	3785	1/1	0.91	0.10	41,41,41,41	0
57	MG	2A	3017	1/1	0.91	0.10	45,45,45,45	0
57	MG	2A	3763	1/1	0.91	0.11	39,39,39,39	0
57	MG	1A	3659	1/1	0.91	0.09	33,33,33,33	0
57	MG	2A	3765	1/1	0.91	0.10	49,49,49,49	0
57	MG	2a	1753	1/1	0.91	0.08	55,55,55,55	0
57	MG	2A	3438	1/1	0.91	0.26	56,56,56,56	0
57	MG	2a	1757	1/1	0.91	0.07	72,72,72,72	0
57	MG	2A	3257	1/1	0.91	0.16	55,55,55,55	0
57	MG	2a	1759	1/1	0.91	0.11	63,63,63,63	0
57	MG	2A	3441	1/1	0.91	0.11	53,53,53,53	0
57	MG	2A	3777	1/1	0.91	0.09	52,52,52,52	0
57	MG	2A	3261	1/1	0.91	0.10	47,47,47,47	0
57	MG	2A	3447	1/1	0.91	0.21	54,54,54,54	0
57	MG	2a	1773	1/1	0.91	0.08	64,64,64,64	0
57	MG	1a	1660	1/1	0.91	0.11	59,59,59,59	0
57	MG	2a	1777	1/1	0.91	0.18	47,47,47,47	0
57	MG	2a	1778	1/1	0.91	0.14	48,48,48,48	0
57	MG	2A	3450	1/1	0.91	0.19	56,56,56,56	0
57	MG	2a	1787	1/1	0.91	0.09	65,65,65,65	0
57	MG	2A	3795	1/1	0.91	0.20	58,58,58,58	0
57	MG	2A	3452	1/1	0.91	0.08	46,46,46,46	0
57	MG	2A	3457	1/1	0.91	0.15	46,46,46,46	0
57	MG	1A	3258	1/1	0.91	0.12	54,54,54,54	0
57	MG	2A	3271	1/1	0.91	0.31	61,61,61,61	0
57	MG	1a	1665	1/1	0.91	0.13	54,54,54,54	0
57	MG	2A	3465	1/1	0.91	0.10	39,39,39,39	0
57	MG	2A	3470	1/1	0.91	0.17	62,62,62,62	0
57	MG	1A	3327	1/1	0.91	0.12	49,49,49,49	0
57	MG	1A	3330	1/1	0.91	0.08	39,39,39,39	0
57	MG	1A	4093	1/1	0.91	0.16	59,59,59,59	0
57	MG	1A	3264	1/1	0.91	0.17	59,59,59,59	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3827	1/1	0.91	0.09	41,41,41,41	0
57	MG	1A	3073	1/1	0.91	0.22	66,66,66,66	0
57	MG	2A	3503	1/1	0.91	0.07	18,18,18,18	0
57	MG	2A	3505	1/1	0.91	0.12	38,38,38,38	0
57	MG	2a	1830	1/1	0.91	0.17	50,50,50,50	0
57	MG	1a	1689	1/1	0.91	0.13	69,69,69,69	0
57	MG	2A	3508	1/1	0.91	0.10	55,55,55,55	0
57	MG	2A	3512	1/1	0.91	0.07	47,47,47,47	0
57	MG	2d	301	1/1	0.91	0.20	54,54,54,54	0
57	MG	2A	3513	1/1	0.91	0.10	64,64,64,64	0
57	MG	2A	3856	1/1	0.91	0.09	40,40,40,40	0
57	MG	2A	3864	1/1	0.91	0.10	51,51,51,51	0
57	MG	1A	3686	1/1	0.91	0.12	46,46,46,46	0
57	MG	2A	3281	1/1	0.91	0.11	54,54,54,54	0
57	MG	2A	3517	1/1	0.91	0.18	55,55,55,55	0
57	MG	2A	3518	1/1	0.91	0.10	56,56,56,56	0
57	MG	2A	3078	1/1	0.91	0.09	39,39,39,39	0
57	MG	1A	3450	1/1	0.91	0.07	47,47,47,47	0
57	MG	1a	1707	1/1	0.91	0.10	61,61,61,61	0
57	MG	2A	3290	1/1	0.91	0.12	65,65,65,65	0
57	MG	1A	3457	1/1	0.91	0.25	34,34,34,34	0
57	MG	1A	3466	1/1	0.91	0.14	49,49,49,49	0
57	MG	1A	3570	1/1	0.91	0.13	54,54,54,54	0
57	MG	1B	210	1/1	0.91	0.10	45,45,45,45	0
57	MG	2w	107	1/1	0.91	0.12	55,55,55,55	0
57	MG	1A	3131	1/1	0.91	0.19	47,47,47,47	0
57	MG	1A	3271	1/1	0.91	0.07	25,25,25,25	0
57	MG	2x	103	1/1	0.91	0.13	64,64,64,64	0
57	MG	1A	3598	1/1	0.91	0.31	60,60,60,60	0
57	MG	1B	224	1/1	0.91	0.09	45,45,45,45	0
57	MG	2A	3577	1/1	0.91	0.07	33,33,33,33	0
57	MG	1A	3158	1/1	0.91	0.12	32,32,32,32	0
57	MG	1A	3723	1/1	0.91	0.07	36,36,36,36	0
57	MG	1A	3997	1/1	0.91	0.11	54,54,54,54	0
57	MG	1A	3460	1/1	0.92	0.06	34,34,34,34	0
57	MG	1A	3572	1/1	0.92	0.08	42,42,42,42	0
57	MG	1A	3870	1/1	0.92	0.12	34,34,34,34	0
57	MG	1a	1799	1/1	0.92	0.10	52,52,52,52	0
57	MG	1A	3872	1/1	0.92	0.23	40,40,40,40	0
57	MG	1A	3359	1/1	0.92	0.15	46,46,46,46	0
57	MG	1A	3057	1/1	0.92	0.11	48,48,48,48	0
57	MG	2A	3527	1/1	0.92	0.11	45,45,45,45	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3529	1/1	0.92	0.14	45,45,45,45	0
57	MG	1A	3058	1/1	0.92	0.09	29,29,29,29	0
57	MG	1a	1813	1/1	0.92	0.07	56,56,56,56	0
57	MG	2A	3547	1/1	0.92	0.10	49,49,49,49	0
57	MG	1b	301	1/1	0.92	0.17	56,56,56,56	0
57	MG	1A	3385	1/1	0.92	0.10	47,47,47,47	0
57	MG	2A	3269	1/1	0.92	0.15	47,47,47,47	0
57	MG	1A	3605	1/1	0.92	0.11	47,47,47,47	0
57	MG	2E	304	1/1	0.92	0.11	35,35,35,35	0
57	MG	15	103	1/1	0.92	0.19	29,29,29,29	0
57	MG	2F	301	1/1	0.92	0.31	40,40,40,40	0
57	MG	1n	102	1/1	0.92	0.14	38,38,38,38	0
57	MG	15	106	1/1	0.92	0.19	35,35,35,35	0
57	MG	1A	4026	1/1	0.92	0.08	37,37,37,37	0
57	MG	2P	202	1/1	0.92	0.17	47,47,47,47	0
57	MG	2P	203	1/1	0.92	0.07	52,52,52,52	0
57	MG	2A	3575	1/1	0.92	0.07	29,29,29,29	0
57	MG	1A	3729	1/1	0.92	0.09	37,37,37,37	0
57	MG	2A	3581	1/1	0.92	0.16	64,64,64,64	0
57	MG	2A	3582	1/1	0.92	0.10	33,33,33,33	0
57	MG	1A	3326	1/1	0.92	0.11	25,25,25,25	0
57	MG	1A	3391	1/1	0.92	0.24	39,39,39,39	0
57	MG	20	101	1/1	0.92	0.10	48,48,48,48	0
57	MG	1A	3392	1/1	0.92	0.11	53,53,53,53	0
57	MG	2A	3589	1/1	0.92	0.12	27,27,27,27	0
57	MG	1a	1604	1/1	0.92	0.16	53,53,53,53	0
57	MG	1a	1606	1/1	0.92	0.12	57,57,57,57	0
57	MG	28	101	1/1	0.92	0.10	54,54,54,54	0
57	MG	1x	108	1/1	0.92	0.23	58,58,58,58	0
57	MG	2A	3287	1/1	0.92	0.14	60,60,60,60	0
57	MG	1A	3892	1/1	0.92	0.07	29,29,29,29	0
57	MG	2A	3609	1/1	0.92	0.17	51,51,51,51	0
57	MG	1A	3197	1/1	0.92	0.19	39,39,39,39	0
57	MG	1y	101	1/1	0.92	0.08	58,58,58,58	0
57	MG	2a	1608	1/1	0.92	0.20	58,58,58,58	0
57	MG	1a	1614	1/1	0.92	0.07	57,57,57,57	0
57	MG	2A	3293	1/1	0.92	0.14	54,54,54,54	0
57	MG	2a	1611	1/1	0.92	0.14	45,45,45,45	0
57	MG	1a	1615	1/1	0.92	0.14	54,54,54,54	0
57	MG	2A	3621	1/1	0.92	0.07	25,25,25,25	0
57	MG	1A	3484	1/1	0.92	0.14	45,45,45,45	0
57	MG	2A	3297	1/1	0.92	0.18	53,53,53,53	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3625	1/1	0.92	0.07	47,47,47,47	0
57	MG	1A	3328	1/1	0.92	0.13	39,39,39,39	0
57	MG	2A	3300	1/1	0.92	0.11	54,54,54,54	0
57	MG	1A	4042	1/1	0.92	0.08	25,25,25,25	0
57	MG	2A	3652	1/1	0.92	0.07	43,43,43,43	0
57	MG	2A	3303	1/1	0.92	0.10	63,63,63,63	0
57	MG	1a	1635	1/1	0.92	0.11	26,26,26,26	0
57	MG	2a	1636	1/1	0.92	0.22	52,52,52,52	0
57	MG	2A	3029	1/1	0.92	0.15	61,61,61,61	0
57	MG	2A	3307	1/1	0.92	0.16	49,49,49,49	0
57	MG	2A	3308	1/1	0.92	0.18	43,43,43,43	0
57	MG	2A	3667	1/1	0.92	0.17	50,50,50,50	0
57	MG	2A	3030	1/1	0.92	0.14	43,43,43,43	0
57	MG	1A	4043	1/1	0.92	0.14	40,40,40,40	0
57	MG	2A	3672	1/1	0.92	0.11	46,46,46,46	0
57	MG	2A	3674	1/1	0.92	0.09	40,40,40,40	0
57	MG	2a	1650	1/1	0.92	0.13	61,61,61,61	0
57	MG	2a	1652	1/1	0.92	0.12	42,42,42,42	0
57	MG	1A	4044	1/1	0.92	0.10	50,50,50,50	0
57	MG	2A	3043	1/1	0.92	0.25	45,45,45,45	0
57	MG	2A	3319	1/1	0.92	0.17	62,62,62,62	0
57	MG	2a	1658	1/1	0.92	0.08	48,48,48,48	0
57	MG	2A	3046	1/1	0.92	0.24	58,58,58,58	0
57	MG	2a	1663	1/1	0.92	0.16	57,57,57,57	0
57	MG	2A	3048	1/1	0.92	0.09	41,41,41,41	0
57	MG	2A	3052	1/1	0.92	0.07	42,42,42,42	0
57	MG	2A	3686	1/1	0.92	0.17	58,58,58,58	0
57	MG	1A	3906	1/1	0.92	0.08	53,53,53,53	0
57	MG	2A	3055	1/1	0.92	0.12	47,47,47,47	0
57	MG	1A	3909	1/1	0.92	0.13	24,24,24,24	0
57	MG	1A	3750	1/1	0.92	0.13	56,56,56,56	0
57	MG	1a	1645	1/1	0.92	0.10	47,47,47,47	0
57	MG	2A	3699	1/1	0.92	0.09	52,52,52,52	0
57	MG	2a	1691	1/1	0.92	0.27	56,56,56,56	0
57	MG	1a	1646	1/1	0.92	0.18	49,49,49,49	0
57	MG	1A	3248	1/1	0.92	0.18	51,51,51,51	0
57	MG	1A	3332	1/1	0.92	0.07	37,37,37,37	0
57	MG	1A	3757	1/1	0.92	0.17	43,43,43,43	0
57	MG	1A	3928	1/1	0.92	0.09	53,53,53,53	0
57	MG	2a	1702	1/1	0.92	0.14	47,47,47,47	0
57	MG	1A	3129	1/1	0.92	0.09	34,34,34,34	0
57	MG	1A	3495	1/1	0.92	0.11	39,39,39,39	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3940	1/1	0.92	0.07	45,45,45,45	0
57	MG	1a	1668	1/1	0.92	0.12	49,49,49,49	0
57	MG	2a	1712	1/1	0.92	0.17	56,56,56,56	0
57	MG	2a	1713	1/1	0.92	0.11	48,48,48,48	0
57	MG	1a	1669	1/1	0.92	0.22	44,44,44,44	0
57	MG	1A	3410	1/1	0.92	0.07	34,34,34,34	0
57	MG	1A	3183	1/1	0.92	0.11	37,37,37,37	0
57	MG	1A	3658	1/1	0.92	0.05	18,18,18,18	0
57	MG	1A	3415	1/1	0.92	0.30	59,59,59,59	0
57	MG	1A	3662	1/1	0.92	0.07	37,37,37,37	0
57	MG	1a	1683	1/1	0.92	0.20	57,57,57,57	0
57	MG	2A	3105	1/1	0.92	0.10	52,52,52,52	0
57	MG	1a	1684	1/1	0.92	0.08	43,43,43,43	0
57	MG	1A	3804	1/1	0.92	0.09	33,33,33,33	0
57	MG	2a	1737	1/1	0.92	0.13	55,55,55,55	0
57	MG	2a	1740	1/1	0.92	0.08	51,51,51,51	0
57	MG	1a	1692	1/1	0.92	0.24	43,43,43,43	0
57	MG	2A	3112	1/1	0.92	0.11	44,44,44,44	0
57	MG	2A	3374	1/1	0.92	0.16	33,33,33,33	0
57	MG	2A	3114	1/1	0.92	0.18	56,56,56,56	0
57	MG	1A	3525	1/1	0.92	0.14	55,55,55,55	0
57	MG	1A	3416	1/1	0.92	0.09	39,39,39,39	0
57	MG	2a	1754	1/1	0.92	0.13	52,52,52,52	0
57	MG	1A	3818	1/1	0.92	0.09	51,51,51,51	0
57	MG	1A	3534	1/1	0.92	0.10	33,33,33,33	0
57	MG	2A	3129	1/1	0.92	0.11	66,66,66,66	0
57	MG	1A	3670	1/1	0.92	0.15	33,33,33,33	0
57	MG	1A	3296	1/1	0.92	0.17	50,50,50,50	0
57	MG	2A	3143	1/1	0.92	0.19	41,41,41,41	0
57	MG	1a	1719	1/1	0.92	0.31	54,54,54,54	0
57	MG	2a	1770	1/1	0.92	0.10	64,64,64,64	0
57	MG	2A	3147	1/1	0.92	0.21	59,59,59,59	0
57	MG	1B	213	1/1	0.92	0.20	63,63,63,63	0
57	MG	2A	3159	1/1	0.92	0.27	51,51,51,51	0
57	MG	2A	3771	1/1	0.92	0.16	57,57,57,57	0
57	MG	2A	3775	1/1	0.92	0.15	48,48,48,48	0
57	MG	2a	1783	1/1	0.92	0.15	56,56,56,56	0
57	MG	1A	3970	1/1	0.92	0.07	24,24,24,24	0
57	MG	2A	3164	1/1	0.92	0.14	53,53,53,53	0
57	MG	1B	215	1/1	0.92	0.08	45,45,45,45	0
57	MG	1A	3540	1/1	0.92	0.15	30,30,30,30	0
57	MG	2a	1791	1/1	0.92	0.11	66,66,66,66	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2a	1796	1/1	0.92	0.08	43,43,43,43	0
57	MG	1a	1736	1/1	0.92	0.16	51,51,51,51	0
57	MG	2A	3177	1/1	0.92	0.10	44,44,44,44	0
57	MG	2a	1802	1/1	0.92	0.07	42,42,42,42	0
57	MG	2A	3793	1/1	0.92	0.10	58,58,58,58	0
57	MG	1a	1737	1/1	0.92	0.10	45,45,45,45	0
57	MG	1B	218	1/1	0.92	0.14	53,53,53,53	0
57	MG	2a	1808	1/1	0.92	0.11	50,50,50,50	0
57	MG	2A	3801	1/1	0.92	0.09	52,52,52,52	0
57	MG	2a	1810	1/1	0.92	0.15	51,51,51,51	0
57	MG	1A	3681	1/1	0.92	0.10	16,16,16,16	0
57	MG	2a	1816	1/1	0.92	0.12	60,60,60,60	0
57	MG	2A	3804	1/1	0.92	0.09	36,36,36,36	0
57	MG	2A	3806	1/1	0.92	0.10	46,46,46,46	0
57	MG	1A	3339	1/1	0.92	0.08	40,40,40,40	0
57	MG	2A	3432	1/1	0.92	0.13	56,56,56,56	0
57	MG	1A	3298	1/1	0.92	0.08	38,38,38,38	0
57	MG	1A	3981	1/1	0.92	0.08	73,73,73,73	0
57	MG	1A	3851	1/1	0.92	0.10	43,43,43,43	0
57	MG	1a	1752	1/1	0.92	0.08	41,41,41,41	0
57	MG	1A	3987	1/1	0.92	0.09	44,44,44,44	0
57	MG	2A	3197	1/1	0.92	0.13	55,55,55,55	0
57	MG	2A	3448	1/1	0.92	0.13	38,38,38,38	0
57	MG	1D	306	1/1	0.92	0.10	36,36,36,36	0
57	MG	2A	3828	1/1	0.92	0.08	33,33,33,33	0
57	MG	2A	3835	1/1	0.92	0.10	43,43,43,43	0
57	MG	2i	201	1/1	0.92	0.17	66,66,66,66	0
57	MG	1A	3852	1/1	0.92	0.12	42,42,42,42	0
57	MG	2l	201	1/1	0.92	0.08	59,59,59,59	0
57	MG	1E	310	1/1	0.92	0.08	24,24,24,24	0
57	MG	2A	3453	1/1	0.92	0.09	44,44,44,44	0
57	MG	2A	3455	1/1	0.92	0.10	49,49,49,49	0
57	MG	1E	313	1/1	0.92	0.10	39,39,39,39	0
57	MG	2A	3208	1/1	0.92	0.08	53,53,53,53	0
57	MG	1a	1765	1/1	0.92	0.14	53,53,53,53	0
57	MG	1A	3702	1/1	0.92	0.11	28,28,28,28	0
57	MG	2A	3857	1/1	0.92	0.08	39,39,39,39	0
57	MG	1A	3706	1/1	0.92	0.10	17,17,17,17	0
57	MG	2A	3867	1/1	0.92	0.16	45,45,45,45	0
57	MG	2A	3214	1/1	0.92	0.18	45,45,45,45	0
57	MG	2A	3215	1/1	0.92	0.09	47,47,47,47	0
57	MG	1A	3708	1/1	0.92	0.15	49,49,49,49	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3871	1/1	0.92	0.10	50,50,50,50	0
57	MG	1Q	204	1/1	0.92	0.08	58,58,58,58	0
57	MG	1A	3220	1/1	0.92	0.08	39,39,39,39	0
57	MG	1a	1775	1/1	0.92	0.11	44,44,44,44	0
57	MG	1A	3345	1/1	0.92	0.13	50,50,50,50	0
57	MG	2y	103	1/1	0.92	0.12	59,59,59,59	0
57	MG	1A	3027	1/1	0.92	0.13	57,57,57,57	0
57	MG	1T	203	1/1	0.92	0.13	43,43,43,43	0
57	MG	2A	3237	1/1	0.92	0.10	50,50,50,50	0
57	MG	1U	203	1/1	0.92	0.09	47,47,47,47	0
57	MG	2A	3042	1/1	0.93	0.16	39,39,39,39	0
57	MG	1A	3300	1/1	0.93	0.17	49,49,49,49	0
57	MG	2A	3044	1/1	0.93	0.13	57,57,57,57	0
57	MG	1A	3453	1/1	0.93	0.10	44,44,44,44	0
57	MG	1A	3346	1/1	0.93	0.11	33,33,33,33	0
57	MG	1A	3302	1/1	0.93	0.17	34,34,34,34	0
57	MG	1A	3357	1/1	0.93	0.14	54,54,54,54	0
57	MG	2N	201	1/1	0.93	0.06	45,45,45,45	0
57	MG	1A	3924	1/1	0.93	0.08	41,41,41,41	0
57	MG	1A	3925	1/1	0.93	0.06	39,39,39,39	0
57	MG	2A	3604	1/1	0.93	0.10	50,50,50,50	0
57	MG	2A	3058	1/1	0.93	0.17	46,46,46,46	0
57	MG	1A	4096	1/1	0.93	0.14	54,54,54,54	0
57	MG	1a	1678	1/1	0.93	0.08	41,41,41,41	0
57	MG	1A	3739	1/1	0.93	0.09	35,35,35,35	0
57	MG	2W	201	1/1	0.93	0.14	57,57,57,57	0
57	MG	2W	203	1/1	0.93	0.09	35,35,35,35	0
57	MG	2A	3069	1/1	0.93	0.12	53,53,53,53	0
57	MG	1A	3610	1/1	0.93	0.07	35,35,35,35	0
57	MG	2A	3073	1/1	0.93	0.11	43,43,43,43	0
57	MG	2A	3617	1/1	0.93	0.08	57,57,57,57	0
57	MG	25	101	1/1	0.93	0.15	49,49,49,49	0
57	MG	1A	3930	1/1	0.93	0.09	28,28,28,28	0
57	MG	1A	3358	1/1	0.93	0.08	53,53,53,53	0
57	MG	1a	1686	1/1	0.93	0.09	47,47,47,47	0
57	MG	1A	3310	1/1	0.93	0.22	39,39,39,39	0
57	MG	2A	3082	1/1	0.93	0.09	40,40,40,40	0
57	MG	2A	3627	1/1	0.93	0.13	51,51,51,51	0
57	MG	1A	3311	1/1	0.93	0.09	45,45,45,45	0
57	MG	2a	1605	1/1	0.93	0.24	56,56,56,56	0
57	MG	2A	3636	1/1	0.93	0.07	25,25,25,25	0
57	MG	2A	3638	1/1	0.93	0.09	37,37,37,37	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3321	1/1	0.93	0.13	46,46,46,46	0
57	MG	2A	3642	1/1	0.93	0.10	39,39,39,39	0
57	MG	1A	3619	1/1	0.93	0.08	21,21,21,21	0
57	MG	2A	3650	1/1	0.93	0.13	38,38,38,38	0
57	MG	1a	1698	1/1	0.93	0.09	40,40,40,40	0
57	MG	2a	1617	1/1	0.93	0.06	41,41,41,41	0
57	MG	1a	1699	1/1	0.93	0.20	49,49,49,49	0
57	MG	2A	3092	1/1	0.93	0.11	47,47,47,47	0
57	MG	2A	3655	1/1	0.93	0.07	42,42,42,42	0
57	MG	1a	1701	1/1	0.93	0.23	54,54,54,54	0
57	MG	1A	3759	1/1	0.93	0.06	31,31,31,31	0
57	MG	1A	3053	1/1	0.93	0.14	41,41,41,41	0
57	MG	1A	3949	1/1	0.93	0.15	51,51,51,51	0
57	MG	1a	1709	1/1	0.93	0.11	54,54,54,54	0
57	MG	2A	3669	1/1	0.93	0.10	55,55,55,55	0
57	MG	2a	1633	1/1	0.93	0.15	49,49,49,49	0
57	MG	1A	3764	1/1	0.93	0.11	33,33,33,33	0
57	MG	2A	3671	1/1	0.93	0.10	48,48,48,48	0
57	MG	2a	1637	1/1	0.93	0.14	50,50,50,50	0
57	MG	1a	1713	1/1	0.93	0.17	53,53,53,53	0
57	MG	1a	1715	1/1	0.93	0.18	48,48,48,48	0
57	MG	1A	3767	1/1	0.93	0.08	19,19,19,19	0
57	MG	1A	3062	1/1	0.93	0.27	51,51,51,51	0
57	MG	1A	3109	1/1	0.93	0.06	29,29,29,29	0
57	MG	1A	3390	1/1	0.93	0.25	31,31,31,31	0
57	MG	1A	3207	1/1	0.93	0.09	45,45,45,45	0
57	MG	1B	230	1/1	0.93	0.07	50,50,50,50	0
57	MG	1A	3485	1/1	0.93	0.09	43,43,43,43	0
57	MG	2a	1651	1/1	0.93	0.12	47,47,47,47	0
57	MG	1A	3325	1/1	0.93	0.11	38,38,38,38	0
57	MG	2A	3128	1/1	0.93	0.10	37,37,37,37	0
57	MG	1A	3797	1/1	0.93	0.11	51,51,51,51	0
57	MG	1E	302	1/1	0.93	0.09	45,45,45,45	0
57	MG	1A	3802	1/1	0.93	0.08	13,13,13,13	0
57	MG	1A	3115	1/1	0.93	0.16	36,36,36,36	0
57	MG	2a	1660	1/1	0.93	0.12	51,51,51,51	0
57	MG	2A	3368	1/1	0.93	0.17	45,45,45,45	0
57	MG	2a	1664	1/1	0.93	0.08	48,48,48,48	0
57	MG	1A	3399	1/1	0.93	0.11	44,44,44,44	0
57	MG	2A	3703	1/1	0.93	0.10	76,76,76,76	0
57	MG	1a	1748	1/1	0.93	0.07	51,51,51,51	0
57	MG	2a	1672	1/1	0.93	0.09	44,44,44,44	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3401	1/1	0.93	0.08	40,40,40,40	0
57	MG	2A	3155	1/1	0.93	0.11	49,49,49,49	0
57	MG	1N	205	1/1	0.93	0.08	49,49,49,49	0
57	MG	1A	3219	1/1	0.93	0.08	42,42,42,42	0
57	MG	2a	1681	1/1	0.93	0.08	55,55,55,55	0
57	MG	1a	1754	1/1	0.93	0.10	57,57,57,57	0
57	MG	2A	3165	1/1	0.93	0.06	63,63,63,63	0
57	MG	2A	3381	1/1	0.93	0.07	56,56,56,56	0
57	MG	2a	1693	1/1	0.93	0.12	46,46,46,46	0
57	MG	2a	1694	1/1	0.93	0.15	33,33,33,33	0
57	MG	2A	3170	1/1	0.93	0.14	48,48,48,48	0
57	MG	2a	1696	1/1	0.93	0.14	51,51,51,51	0
57	MG	2A	3385	1/1	0.93	0.17	56,56,56,56	0
57	MG	1A	3496	1/1	0.93	0.21	36,36,36,36	0
57	MG	2A	3388	1/1	0.93	0.12	44,44,44,44	0
57	MG	1A	3500	1/1	0.93	0.09	53,53,53,53	0
57	MG	1Q	206	1/1	0.93	0.15	40,40,40,40	0
57	MG	2a	1703	1/1	0.93	0.17	58,58,58,58	0
57	MG	1A	3118	1/1	0.93	0.12	38,38,38,38	0
57	MG	1A	3184	1/1	0.93	0.12	46,46,46,46	0
57	MG	2a	1709	1/1	0.93	0.11	61,61,61,61	0
57	MG	2A	3181	1/1	0.93	0.19	47,47,47,47	0
57	MG	2A	3744	1/1	0.93	0.06	36,36,36,36	0
57	MG	2A	3402	1/1	0.93	0.10	45,45,45,45	0
57	MG	2A	3403	1/1	0.93	0.11	41,41,41,41	0
57	MG	2A	3182	1/1	0.93	0.22	54,54,54,54	0
57	MG	2A	3408	1/1	0.93	0.08	58,58,58,58	0
57	MG	1T	202	1/1	0.93	0.08	57,57,57,57	0
57	MG	2a	1718	1/1	0.93	0.09	56,56,56,56	0
57	MG	1A	3991	1/1	0.93	0.05	23,23,23,23	0
57	MG	1A	3993	1/1	0.93	0.06	26,26,26,26	0
57	MG	2A	3757	1/1	0.93	0.08	35,35,35,35	0
57	MG	1A	3994	1/1	0.93	0.10	42,42,42,42	0
57	MG	1A	3006	1/1	0.93	0.07	27,27,27,27	0
57	MG	2a	1728	1/1	0.93	0.15	43,43,43,43	0
57	MG	1A	3673	1/1	0.93	0.10	23,23,23,23	0
57	MG	1A	3845	1/1	0.93	0.06	26,26,26,26	0
57	MG	2a	1735	1/1	0.93	0.15	42,42,42,42	0
57	MG	2a	1736	1/1	0.93	0.10	54,54,54,54	0
57	MG	1Z	3703	1/1	0.93	0.07	32,32,32,32	0
57	MG	2a	1738	1/1	0.93	0.18	50,50,50,50	0
57	MG	2A	3423	1/1	0.93	0.19	43,43,43,43	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3523	1/1	0.93	0.08	62,62,62,62	0
57	MG	10	105	1/1	0.93	0.13	62,62,62,62	0
57	MG	1a	1790	1/1	0.93	0.06	47,47,47,47	0
57	MG	2A	3769	1/1	0.93	0.11	64,64,64,64	0
57	MG	1A	3850	1/1	0.93	0.13	46,46,46,46	0
57	MG	1A	3524	1/1	0.93	0.18	53,53,53,53	0
57	MG	1A	3334	1/1	0.93	0.10	43,43,43,43	0
57	MG	1A	3189	1/1	0.93	0.08	39,39,39,39	0
57	MG	2A	3210	1/1	0.93	0.06	37,37,37,37	0
57	MG	2A	3442	1/1	0.93	0.35	60,60,60,60	0
57	MG	2A	3782	1/1	0.93	0.09	46,46,46,46	0
57	MG	2A	3443	1/1	0.93	0.15	48,48,48,48	0
57	MG	2A	3444	1/1	0.93	0.14	58,58,58,58	0
57	MG	1a	1802	1/1	0.93	0.10	52,52,52,52	0
57	MG	2a	1769	1/1	0.93	0.12	40,40,40,40	0
57	MG	1a	1803	1/1	0.93	0.08	67,67,67,67	0
57	MG	2A	3797	1/1	0.93	0.13	47,47,47,47	0
57	MG	1A	3688	1/1	0.93	0.07	32,32,32,32	0
57	MG	1A	3690	1/1	0.93	0.08	43,43,43,43	0
57	MG	1A	3694	1/1	0.93	0.08	24,24,24,24	0
57	MG	1A	3533	1/1	0.93	0.11	39,39,39,39	0
57	MG	17	107	1/1	0.93	0.11	39,39,39,39	0
57	MG	2A	3221	1/1	0.93	0.13	41,41,41,41	0
57	MG	2A	3808	1/1	0.93	0.08	48,48,48,48	0
57	MG	1A	3863	1/1	0.93	0.10	44,44,44,44	0
57	MG	2A	3223	1/1	0.93	0.21	49,49,49,49	0
57	MG	1d	301	1/1	0.93	0.16	50,50,50,50	0
57	MG	2a	1794	1/1	0.93	0.14	55,55,55,55	0
57	MG	1A	3701	1/1	0.93	0.10	26,26,26,26	0
57	MG	2A	3230	1/1	0.93	0.17	40,40,40,40	0
57	MG	2A	3816	1/1	0.93	0.11	55,55,55,55	0
57	MG	2a	1801	1/1	0.93	0.21	56,56,56,56	0
57	MG	2A	3466	1/1	0.93	0.06	44,44,44,44	0
57	MG	1A	3288	1/1	0.93	0.11	54,54,54,54	0
57	MG	2A	3471	1/1	0.93	0.08	46,46,46,46	0
57	MG	2A	3475	1/1	0.93	0.10	62,62,62,62	0
57	MG	2A	3483	1/1	0.93	0.14	53,53,53,53	0
57	MG	2A	3232	1/1	0.93	0.10	40,40,40,40	0
57	MG	2A	3233	1/1	0.93	0.24	52,52,52,52	0
57	MG	2A	3495	1/1	0.93	0.09	59,59,59,59	0
57	MG	2a	1813	1/1	0.93	0.11	54,54,54,54	0
57	MG	1A	3016	1/1	0.93	0.09	50,50,50,50	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3842	1/1	0.93	0.08	54,54,54,54	0
57	MG	2A	3240	1/1	0.93	0.10	32,32,32,32	0
57	MG	2a	1820	1/1	0.93	0.12	56,56,56,56	0
57	MG	1A	3417	1/1	0.93	0.12	36,36,36,36	0
57	MG	2A	3852	1/1	0.93	0.08	60,60,60,60	0
57	MG	1A	3295	1/1	0.93	0.10	42,42,42,42	0
57	MG	2a	1825	1/1	0.93	0.12	42,42,42,42	0
57	MG	1a	1611	1/1	0.93	0.11	51,51,51,51	0
57	MG	2A	3248	1/1	0.93	0.15	51,51,51,51	0
57	MG	1A	3421	1/1	0.93	0.10	33,33,33,33	0
57	MG	1A	3550	1/1	0.93	0.11	51,51,51,51	0
57	MG	2a	1832	1/1	0.93	0.15	41,41,41,41	0
57	MG	1A	3715	1/1	0.93	0.10	65,65,65,65	0
57	MG	1a	1621	1/1	0.93	0.15	49,49,49,49	0
57	MG	1A	3876	1/1	0.93	0.06	25,25,25,25	0
57	MG	2A	3516	1/1	0.93	0.11	33,33,33,33	0
57	MG	1A	3427	1/1	0.93	0.07	52,52,52,52	0
57	MG	2A	3872	1/1	0.93	0.15	56,56,56,56	0
57	MG	2j	201	1/1	0.93	0.07	52,52,52,52	0
57	MG	2A	3875	1/1	0.93	0.22	52,52,52,52	0
57	MG	1x	104	1/1	0.93	0.12	48,48,48,48	0
57	MG	2A	3881	1/1	0.93	0.09	51,51,51,51	0
57	MG	1a	1629	1/1	0.93	0.15	44,44,44,44	0
57	MG	1A	3560	1/1	0.93	0.10	26,26,26,26	0
57	MG	1A	3719	1/1	0.93	0.05	10,10,10,10	0
57	MG	2q	201	1/1	0.93	0.19	59,59,59,59	0
57	MG	1A	3886	1/1	0.93	0.07	31,31,31,31	0
57	MG	2r	102	1/1	0.93	0.14	61,61,61,61	0
57	MG	1A	4045	1/1	0.93	0.07	42,42,42,42	0
57	MG	1A	3720	1/1	0.93	0.14	57,57,57,57	0
57	MG	2A	3541	1/1	0.93	0.07	40,40,40,40	0
57	MG	1A	3241	1/1	0.93	0.07	30,30,30,30	0
57	MG	1A	3245	1/1	0.93	0.13	39,39,39,39	0
57	MG	1A	3565	1/1	0.93	0.12	45,45,45,45	0
57	MG	2A	3023	1/1	0.93	0.17	63,63,63,63	0
57	MG	2w	106	1/1	0.93	0.09	50,50,50,50	0
57	MG	1A	3566	1/1	0.93	0.07	40,40,40,40	0
57	MG	1A	3726	1/1	0.93	0.07	23,23,23,23	0
57	MG	2A	3563	1/1	0.93	0.11	40,40,40,40	0
57	MG	1A	3344	1/1	0.93	0.07	35,35,35,35	0
57	MG	1A	3900	1/1	0.93	0.20	58,58,58,58	0
57	MG	2A	3566	1/1	0.93	0.07	42,42,42,42	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3284	1/1	0.93	0.16	45,45,45,45	0
57	MG	2A	3572	1/1	0.93	0.12	50,50,50,50	0
57	MG	1A	3439	1/1	0.93	0.26	49,49,49,49	0
57	MG	2A	3037	1/1	0.93	0.08	37,37,37,37	0
59	A1C9N	1A	4101	74/74	0.93	0.12	13,37,50,51	0
57	MG	2A	3579	1/1	0.93	0.09	54,54,54,54	0
57	MG	2A	3238	1/1	0.94	0.08	58,58,58,58	0
57	MG	1A	3580	1/1	0.94	0.10	54,54,54,54	0
57	MG	1A	3458	1/1	0.94	0.11	46,46,46,46	0
57	MG	2A	3242	1/1	0.94	0.09	50,50,50,50	0
57	MG	1A	3305	1/1	0.94	0.12	36,36,36,36	0
57	MG	2A	3525	1/1	0.94	0.07	53,53,53,53	0
57	MG	1A	4030	1/1	0.94	0.07	33,33,33,33	0
57	MG	2A	3528	1/1	0.94	0.08	48,48,48,48	0
57	MG	2A	3247	1/1	0.94	0.09	52,52,52,52	0
57	MG	1m	3001	1/1	0.94	0.08	36,36,36,36	0
57	MG	17	106	1/1	0.94	0.07	35,35,35,35	0
57	MG	2A	3251	1/1	0.94	0.10	53,53,53,53	0
57	MG	2A	3544	1/1	0.94	0.07	32,32,32,32	0
57	MG	2A	3546	1/1	0.94	0.16	41,41,41,41	0
57	MG	1n	101	1/1	0.94	0.17	40,40,40,40	0
57	MG	1A	3728	1/1	0.94	0.13	42,42,42,42	0
57	MG	2A	3552	1/1	0.94	0.07	32,32,32,32	0
57	MG	2F	304	1/1	0.94	0.17	39,39,39,39	0
57	MG	1A	3375	1/1	0.94	0.08	43,43,43,43	0
57	MG	1A	3377	1/1	0.94	0.14	39,39,39,39	0
57	MG	18	104	1/1	0.94	0.11	49,49,49,49	0
57	MG	1A	3234	1/1	0.94	0.09	40,40,40,40	0
57	MG	1A	3028	1/1	0.94	0.10	42,42,42,42	0
57	MG	2Q	201	1/1	0.94	0.15	52,52,52,52	0
57	MG	2Q	202	1/1	0.94	0.12	52,52,52,52	0
57	MG	1A	3178	1/1	0.94	0.05	23,23,23,23	0
57	MG	1w	107	1/1	0.94	0.06	56,56,56,56	0
57	MG	1a	1607	1/1	0.94	0.07	35,35,35,35	0
57	MG	1A	3893	1/1	0.94	0.09	41,41,41,41	0
57	MG	2A	3571	1/1	0.94	0.06	37,37,37,37	0
57	MG	1a	1609	1/1	0.94	0.07	44,44,44,44	0
57	MG	2W	202	1/1	0.94	0.08	40,40,40,40	0
57	MG	1x	106	1/1	0.94	0.23	51,51,51,51	0
57	MG	2X	101	1/1	0.94	0.07	60,60,60,60	0
57	MG	1A	3180	1/1	0.94	0.06	34,34,34,34	0
57	MG	1A	3112	1/1	0.94	0.13	27,27,27,27	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	20	102	1/1	0.94	0.18	50,50,50,50	0
57	MG	1A	3740	1/1	0.94	0.08	55,55,55,55	0
57	MG	1x	114	1/1	0.94	0.10	36,36,36,36	0
57	MG	1A	3743	1/1	0.94	0.07	39,39,39,39	0
57	MG	2A	3280	1/1	0.94	0.11	37,37,37,37	0
57	MG	2A	3002	1/1	0.94	0.22	44,44,44,44	0
57	MG	27	102	1/1	0.94	0.08	37,37,37,37	0
57	MG	1a	1619	1/1	0.94	0.08	37,37,37,37	0
57	MG	1A	3903	1/1	0.94	0.09	31,31,31,31	0
57	MG	1A	3618	1/1	0.94	0.05	20,20,20,20	0
57	MG	2A	3006	1/1	0.94	0.20	45,45,45,45	0
57	MG	1A	3054	1/1	0.94	0.10	24,24,24,24	0
57	MG	2a	1604	1/1	0.94	0.13	54,54,54,54	0
57	MG	2A	3605	1/1	0.94	0.08	40,40,40,40	0
57	MG	1A	3324	1/1	0.94	0.15	43,43,43,43	0
57	MG	2A	3018	1/1	0.94	0.18	48,48,48,48	0
57	MG	2A	3022	1/1	0.94	0.16	41,41,41,41	0
57	MG	1a	1631	1/1	0.94	0.14	39,39,39,39	0
57	MG	1a	1633	1/1	0.94	0.24	55,55,55,55	0
57	MG	1A	3912	1/1	0.94	0.07	36,36,36,36	0
57	MG	2a	1614	1/1	0.94	0.09	52,52,52,52	0
57	MG	1A	4059	1/1	0.94	0.09	35,35,35,35	0
57	MG	1A	3637	1/1	0.94	0.14	43,43,43,43	0
57	MG	2A	3032	1/1	0.94	0.07	47,47,47,47	0
57	MG	1A	4065	1/1	0.94	0.05	34,34,34,34	0
57	MG	2a	1621	1/1	0.94	0.10	54,54,54,54	0
57	MG	2A	3302	1/1	0.94	0.13	50,50,50,50	0
57	MG	1A	4066	1/1	0.94	0.10	51,51,51,51	0
57	MG	1A	3397	1/1	0.94	0.06	27,27,27,27	0
57	MG	1A	3920	1/1	0.94	0.05	24,24,24,24	0
57	MG	2a	1628	1/1	0.94	0.22	52,52,52,52	0
57	MG	2A	3629	1/1	0.94	0.07	45,45,45,45	0
57	MG	1A	3643	1/1	0.94	0.06	34,34,34,34	0
57	MG	2A	3633	1/1	0.94	0.17	48,48,48,48	0
57	MG	1A	4078	1/1	0.94	0.07	30,30,30,30	0
57	MG	1A	4080	1/1	0.94	0.08	44,44,44,44	0
57	MG	1a	1650	1/1	0.94	0.12	56,56,56,56	0
57	MG	1A	3185	1/1	0.94	0.10	56,56,56,56	0
57	MG	1a	1655	1/1	0.94	0.07	42,42,42,42	0
57	MG	2A	3648	1/1	0.94	0.13	44,44,44,44	0
57	MG	1a	1656	1/1	0.94	0.12	42,42,42,42	0
57	MG	1A	3488	1/1	0.94	0.10	36,36,36,36	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3007	1/1	0.94	0.07	32,32,32,32	0
57	MG	1A	4092	1/1	0.94	0.10	44,44,44,44	0
57	MG	2a	1645	1/1	0.94	0.09	44,44,44,44	0
57	MG	2a	1647	1/1	0.94	0.11	52,52,52,52	0
57	MG	1A	3402	1/1	0.94	0.12	31,31,31,31	0
57	MG	2A	3325	1/1	0.94	0.12	52,52,52,52	0
57	MG	1A	3263	1/1	0.94	0.18	63,63,63,63	0
57	MG	2A	3660	1/1	0.94	0.15	53,53,53,53	0
57	MG	2A	3332	1/1	0.94	0.10	57,57,57,57	0
57	MG	2A	3665	1/1	0.94	0.06	49,49,49,49	0
57	MG	2A	3333	1/1	0.94	0.34	54,54,54,54	0
57	MG	1A	3771	1/1	0.94	0.07	26,26,26,26	0
57	MG	2A	3336	1/1	0.94	0.13	56,56,56,56	0
57	MG	1A	3406	1/1	0.94	0.25	28,28,28,28	0
57	MG	1A	3187	1/1	0.94	0.10	28,28,28,28	0
57	MG	2A	3339	1/1	0.94	0.09	57,57,57,57	0
57	MG	2A	3673	1/1	0.94	0.07	27,27,27,27	0
57	MG	1a	1671	1/1	0.94	0.08	52,52,52,52	0
57	MG	2A	3341	1/1	0.94	0.08	48,48,48,48	0
57	MG	2a	1669	1/1	0.94	0.07	47,47,47,47	0
57	MG	1a	1674	1/1	0.94	0.06	44,44,44,44	0
57	MG	1a	1675	1/1	0.94	0.07	37,37,37,37	0
57	MG	2A	3680	1/1	0.94	0.14	41,41,41,41	0
57	MG	2A	3346	1/1	0.94	0.15	46,46,46,46	0
57	MG	1A	3081	1/1	0.94	0.20	28,28,28,28	0
57	MG	1A	3793	1/1	0.94	0.07	42,42,42,42	0
57	MG	1A	3503	1/1	0.94	0.07	52,52,52,52	0
57	MG	1A	3796	1/1	0.94	0.12	43,43,43,43	0
57	MG	1A	3088	1/1	0.94	0.07	33,33,33,33	0
57	MG	2a	1689	1/1	0.94	0.10	48,48,48,48	0
57	MG	2a	1690	1/1	0.94	0.08	49,49,49,49	0
57	MG	1B	212	1/1	0.94	0.05	44,44,44,44	0
57	MG	1A	3333	1/1	0.94	0.13	44,44,44,44	0
57	MG	2A	3697	1/1	0.94	0.09	46,46,46,46	0
57	MG	1A	3195	1/1	0.94	0.09	25,25,25,25	0
57	MG	1a	1688	1/1	0.94	0.10	46,46,46,46	0
57	MG	1A	3093	1/1	0.94	0.06	44,44,44,44	0
57	MG	1A	3961	1/1	0.94	0.10	40,40,40,40	0
57	MG	1A	3275	1/1	0.94	0.08	39,39,39,39	0
57	MG	1A	3145	1/1	0.94	0.08	36,36,36,36	0
57	MG	1A	3674	1/1	0.94	0.06	32,32,32,32	0
57	MG	2A	3107	1/1	0.94	0.13	42,42,42,42	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2a	1704	1/1	0.94	0.11	49,49,49,49	0
57	MG	2a	1705	1/1	0.94	0.12	51,51,51,51	0
57	MG	1A	3528	1/1	0.94	0.28	52,52,52,52	0
57	MG	2a	1707	1/1	0.94	0.13	53,53,53,53	0
57	MG	1A	3149	1/1	0.94	0.17	30,30,30,30	0
57	MG	2A	3369	1/1	0.94	0.10	57,57,57,57	0
57	MG	1a	1705	1/1	0.94	0.12	47,47,47,47	0
57	MG	1A	3832	1/1	0.94	0.06	31,31,31,31	0
57	MG	1A	3835	1/1	0.94	0.10	37,37,37,37	0
57	MG	2A	3373	1/1	0.94	0.07	48,48,48,48	0
57	MG	1B	231	1/1	0.94	0.19	42,42,42,42	0
57	MG	1B	232	1/1	0.94	0.07	43,43,43,43	0
57	MG	1A	3836	1/1	0.94	0.12	50,50,50,50	0
57	MG	2A	3127	1/1	0.94	0.09	53,53,53,53	0
57	MG	2A	3734	1/1	0.94	0.06	23,23,23,23	0
57	MG	2A	3379	1/1	0.94	0.20	48,48,48,48	0
57	MG	1D	303	1/1	0.94	0.10	34,34,34,34	0
57	MG	2a	1724	1/1	0.94	0.10	41,41,41,41	0
57	MG	2A	3738	1/1	0.94	0.09	60,60,60,60	0
57	MG	1a	1716	1/1	0.94	0.16	41,41,41,41	0
57	MG	2A	3743	1/1	0.94	0.07	42,42,42,42	0
57	MG	2A	3132	1/1	0.94	0.12	51,51,51,51	0
57	MG	2A	3134	1/1	0.94	0.08	47,47,47,47	0
57	MG	2A	3386	1/1	0.94	0.10	50,50,50,50	0
57	MG	1A	3419	1/1	0.94	0.07	44,44,44,44	0
57	MG	1A	3151	1/1	0.94	0.07	20,20,20,20	0
57	MG	1A	3984	1/1	0.94	0.08	54,54,54,54	0
57	MG	2A	3751	1/1	0.94	0.09	51,51,51,51	0
57	MG	2A	3393	1/1	0.94	0.10	47,47,47,47	0
57	MG	2a	1742	1/1	0.94	0.20	60,60,60,60	0
57	MG	1E	303	1/1	0.94	0.10	41,41,41,41	0
57	MG	1E	307	1/1	0.94	0.08	40,40,40,40	0
57	MG	2A	3148	1/1	0.94	0.21	49,49,49,49	0
57	MG	2A	3151	1/1	0.94	0.07	57,57,57,57	0
57	MG	2a	1752	1/1	0.94	0.07	55,55,55,55	0
57	MG	1E	308	1/1	0.94	0.10	35,35,35,35	0
57	MG	1A	3985	1/1	0.94	0.08	67,67,67,67	0
57	MG	1A	3687	1/1	0.94	0.05	15,15,15,15	0
57	MG	2A	3161	1/1	0.94	0.08	40,40,40,40	0
57	MG	1A	3290	1/1	0.94	0.11	46,46,46,46	0
57	MG	1F	311	1/1	0.94	0.07	34,34,34,34	0
57	MG	1F	312	1/1	0.94	0.10	38,38,38,38	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3169	1/1	0.94	0.10	42,42,42,42	0
57	MG	2A	3770	1/1	0.94	0.11	48,48,48,48	0
57	MG	1G	203	1/1	0.94	0.07	60,60,60,60	0
57	MG	2A	3774	1/1	0.94	0.11	34,34,34,34	0
57	MG	1A	3153	1/1	0.94	0.10	34,34,34,34	0
57	MG	1a	1747	1/1	0.94	0.07	48,48,48,48	0
57	MG	1N	202	1/1	0.94	0.07	42,42,42,42	0
57	MG	2A	3419	1/1	0.94	0.12	43,43,43,43	0
57	MG	2A	3421	1/1	0.94	0.20	41,41,41,41	0
57	MG	1N	204	1/1	0.94	0.23	43,43,43,43	0
57	MG	2A	3790	1/1	0.94	0.10	49,49,49,49	0
57	MG	1a	1751	1/1	0.94	0.07	38,38,38,38	0
57	MG	1A	3542	1/1	0.94	0.08	36,36,36,36	0
57	MG	1A	3429	1/1	0.94	0.06	27,27,27,27	0
57	MG	2a	1790	1/1	0.94	0.07	41,41,41,41	0
57	MG	1P	203	1/1	0.94	0.21	32,32,32,32	0
57	MG	2A	3796	1/1	0.94	0.07	47,47,47,47	0
57	MG	2A	3433	1/1	0.94	0.14	42,42,42,42	0
57	MG	2A	3798	1/1	0.94	0.10	59,59,59,59	0
57	MG	2A	3434	1/1	0.94	0.26	52,52,52,52	0
57	MG	2a	1800	1/1	0.94	0.15	53,53,53,53	0
57	MG	2A	3800	1/1	0.94	0.10	52,52,52,52	0
57	MG	1Q	201	1/1	0.94	0.22	32,32,32,32	0
57	MG	2A	3437	1/1	0.94	0.09	48,48,48,48	0
57	MG	2A	3803	1/1	0.94	0.11	44,44,44,44	0
57	MG	2a	1805	1/1	0.94	0.15	51,51,51,51	0
57	MG	2A	3188	1/1	0.94	0.08	46,46,46,46	0
57	MG	2a	1807	1/1	0.94	0.24	52,52,52,52	0
57	MG	2A	3439	1/1	0.94	0.24	51,51,51,51	0
57	MG	1A	3431	1/1	0.94	0.09	37,37,37,37	0
57	MG	1a	1759	1/1	0.94	0.13	47,47,47,47	0
57	MG	1A	3548	1/1	0.94	0.10	49,49,49,49	0
57	MG	1A	3995	1/1	0.94	0.47	35,35,35,35	0
57	MG	2a	1814	1/1	0.94	0.10	56,56,56,56	0
57	MG	1a	1763	1/1	0.94	0.10	50,50,50,50	0
57	MG	1A	3294	1/1	0.94	0.07	31,31,31,31	0
57	MG	1A	3435	1/1	0.94	0.12	38,38,38,38	0
57	MG	1T	201	1/1	0.94	0.15	42,42,42,42	0
57	MG	2A	3819	1/1	0.94	0.06	57,57,57,57	0
57	MG	2A	3199	1/1	0.94	0.09	42,42,42,42	0
57	MG	2A	3201	1/1	0.94	0.08	43,43,43,43	0
57	MG	2A	3451	1/1	0.94	0.07	40,40,40,40	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3999	1/1	0.94	0.08	42,42,42,42	0
57	MG	2a	1828	1/1	0.94	0.09	49,49,49,49	0
57	MG	2A	3203	1/1	0.94	0.06	42,42,42,42	0
57	MG	2A	3830	1/1	0.94	0.06	35,35,35,35	0
57	MG	2A	3831	1/1	0.94	0.09	34,34,34,34	0
57	MG	1A	3552	1/1	0.94	0.10	31,31,31,31	0
57	MG	1A	3217	1/1	0.94	0.17	36,36,36,36	0
57	MG	2A	3207	1/1	0.94	0.08	44,44,44,44	0
57	MG	1A	3042	1/1	0.94	0.14	23,23,23,23	0
57	MG	1a	1779	1/1	0.94	0.10	57,57,57,57	0
57	MG	2A	3843	1/1	0.94	0.08	39,39,39,39	0
57	MG	1W	206	1/1	0.94	0.14	41,41,41,41	0
57	MG	2A	3848	1/1	0.94	0.09	58,58,58,58	0
57	MG	1X	107	1/1	0.94	0.06	44,44,44,44	0
57	MG	2A	3467	1/1	0.94	0.17	45,45,45,45	0
57	MG	2A	3468	1/1	0.94	0.09	54,54,54,54	0
57	MG	1Y	201	1/1	0.94	0.06	40,40,40,40	0
57	MG	2A	3855	1/1	0.94	0.08	54,54,54,54	0
57	MG	2m	201	1/1	0.94	0.08	60,60,60,60	0
57	MG	1A	3448	1/1	0.94	0.10	49,49,49,49	0
57	MG	1A	3563	1/1	0.94	0.11	35,35,35,35	0
57	MG	2A	3860	1/1	0.94	0.16	46,46,46,46	0
57	MG	2r	101	1/1	0.94	0.13	54,54,54,54	0
57	MG	2A	3482	1/1	0.94	0.08	58,58,58,58	0
57	MG	2t	201	1/1	0.94	0.11	35,35,35,35	0
57	MG	1A	3159	1/1	0.94	0.06	47,47,47,47	0
57	MG	2A	3484	1/1	0.94	0.09	53,53,53,53	0
57	MG	1A	4013	1/1	0.94	0.08	27,27,27,27	0
57	MG	1A	3869	1/1	0.94	0.05	39,39,39,39	0
57	MG	2A	3490	1/1	0.94	0.13	52,52,52,52	0
57	MG	2A	3494	1/1	0.94	0.09	29,29,29,29	0
57	MG	1A	3168	1/1	0.94	0.10	24,24,24,24	0
57	MG	1A	3454	1/1	0.94	0.11	49,49,49,49	0
57	MG	2A	3880	1/1	0.94	0.09	51,51,51,51	0
57	MG	1A	3025	1/1	0.94	0.09	34,34,34,34	0
57	MG	10	108	1/1	0.94	0.07	48,48,48,48	0
57	MG	2A	3225	1/1	0.94	0.22	54,54,54,54	0
57	MG	1a	1807	1/1	0.94	0.07	36,36,36,36	0
57	MG	2x	105	1/1	0.94	0.16	39,39,39,39	0
57	MG	1a	1808	1/1	0.94	0.12	56,56,56,56	0
57	MG	2A	3507	1/1	0.94	0.08	63,63,63,63	0
57	MG	1A	3576	1/1	0.94	0.15	35,35,35,35	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	12	101	1/1	0.94	0.07	38,38,38,38	0
57	MG	13	103	1/1	0.94	0.10	40,40,40,40	0
57	MG	2A	3236	1/1	0.94	0.07	46,46,46,46	0
57	MG	1A	3577	1/1	0.94	0.17	36,36,36,36	0
57	MG	1A	3932	1/1	0.95	0.07	44,44,44,44	0
57	MG	1a	1722	1/1	0.95	0.14	41,41,41,41	0
57	MG	1D	308	1/1	0.95	0.12	29,29,29,29	0
57	MG	1A	3070	1/1	0.95	0.07	26,26,26,26	0
57	MG	2A	3186	1/1	0.95	0.09	39,39,39,39	0
57	MG	2A	3474	1/1	0.95	0.08	47,47,47,47	0
57	MG	1a	1727	1/1	0.95	0.07	55,55,55,55	0
57	MG	2A	3476	1/1	0.95	0.09	32,32,32,32	0
57	MG	2A	3874	1/1	0.95	0.12	48,48,48,48	0
57	MG	2A	3479	1/1	0.95	0.11	35,35,35,35	0
57	MG	2A	3876	1/1	0.95	0.14	44,44,44,44	0
57	MG	2A	3877	1/1	0.95	0.08	59,59,59,59	0
57	MG	2A	3480	1/1	0.95	0.14	46,46,46,46	0
57	MG	2A	3481	1/1	0.95	0.11	30,30,30,30	0
57	MG	1a	1728	1/1	0.95	0.12	44,44,44,44	0
57	MG	1A	3579	1/1	0.95	0.09	39,39,39,39	0
57	MG	1a	1733	1/1	0.95	0.07	31,31,31,31	0
57	MG	1a	1734	1/1	0.95	0.06	30,30,30,30	0
57	MG	1a	1735	1/1	0.95	0.07	43,43,43,43	0
57	MG	1A	3941	1/1	0.95	0.10	46,46,46,46	0
57	MG	2A	3492	1/1	0.95	0.19	50,50,50,50	0
57	MG	1A	3742	1/1	0.95	0.07	54,54,54,54	0
57	MG	2B	206	1/1	0.95	0.17	54,54,54,54	0
57	MG	1A	3182	1/1	0.95	0.05	28,28,28,28	0
57	MG	2A	3496	1/1	0.95	0.10	42,42,42,42	0
57	MG	1A	3583	1/1	0.95	0.04	22,22,22,22	0
57	MG	2A	3499	1/1	0.95	0.05	49,49,49,49	0
57	MG	1E	312	1/1	0.95	0.06	51,51,51,51	0
57	MG	1a	1742	1/1	0.95	0.08	35,35,35,35	0
57	MG	1A	3749	1/1	0.95	0.06	9,9,9,9	0
57	MG	1A	3584	1/1	0.95	0.06	32,32,32,32	0
57	MG	1F	305	1/1	0.95	0.04	39,39,39,39	0
57	MG	1F	310	1/1	0.95	0.19	29,29,29,29	0
57	MG	1A	3587	1/1	0.95	0.05	39,39,39,39	0
57	MG	2B	218	1/1	0.95	0.09	60,60,60,60	0
57	MG	2B	219	1/1	0.95	0.16	55,55,55,55	0
57	MG	2A	3510	1/1	0.95	0.16	52,52,52,52	0
57	MG	1A	3954	1/1	0.95	0.06	45,45,45,45	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2D	305	1/1	0.95	0.05	20,20,20,20	0
57	MG	1G	202	1/1	0.95	0.15	48,48,48,48	0
57	MG	1A	3462	1/1	0.95	0.07	44,44,44,44	0
57	MG	1G	204	1/1	0.95	0.07	47,47,47,47	0
57	MG	1A	3593	1/1	0.95	0.05	23,23,23,23	0
57	MG	1A	3957	1/1	0.95	0.12	47,47,47,47	0
57	MG	2E	307	1/1	0.95	0.07	48,48,48,48	0
57	MG	1A	3465	1/1	0.95	0.10	41,41,41,41	0
57	MG	2A	3519	1/1	0.95	0.08	25,25,25,25	0
57	MG	2F	303	1/1	0.95	0.12	56,56,56,56	0
57	MG	1A	3959	1/1	0.95	0.13	37,37,37,37	0
57	MG	2A	3521	1/1	0.95	0.07	17,17,17,17	0
57	MG	1N	206	1/1	0.95	0.22	28,28,28,28	0
57	MG	2A	3523	1/1	0.95	0.06	39,39,39,39	0
57	MG	1a	1762	1/1	0.95	0.16	49,49,49,49	0
57	MG	1A	3597	1/1	0.95	0.24	39,39,39,39	0
57	MG	1A	3762	1/1	0.95	0.05	38,38,38,38	0
57	MG	1A	3301	1/1	0.95	0.08	34,34,34,34	0
57	MG	2A	3532	1/1	0.95	0.06	44,44,44,44	0
57	MG	1A	3120	1/1	0.95	0.14	33,33,33,33	0
57	MG	2T	201	1/1	0.95	0.09	47,47,47,47	0
57	MG	1A	3383	1/1	0.95	0.10	44,44,44,44	0
57	MG	2A	3227	1/1	0.95	0.13	41,41,41,41	0
57	MG	1A	3002	1/1	0.95	0.06	38,38,38,38	0
57	MG	2A	3545	1/1	0.95	0.07	36,36,36,36	0
57	MG	1A	3971	1/1	0.95	0.07	30,30,30,30	0
57	MG	1A	3388	1/1	0.95	0.12	15,15,15,15	0
57	MG	1a	1776	1/1	0.95	0.09	43,43,43,43	0
57	MG	1A	3772	1/1	0.95	0.07	18,18,18,18	0
57	MG	1A	3773	1/1	0.95	0.09	25,25,25,25	0
57	MG	1A	3471	1/1	0.95	0.06	43,43,43,43	0
57	MG	1A	3780	1/1	0.95	0.06	52,52,52,52	0
57	MG	1U	209	1/1	0.95	0.14	40,40,40,40	0
57	MG	1A	3473	1/1	0.95	0.10	39,39,39,39	0
57	MG	1V	204	1/1	0.95	0.20	36,36,36,36	0
57	MG	25	104	1/1	0.95	0.11	45,45,45,45	0
57	MG	1V	208	1/1	0.95	0.11	44,44,44,44	0
57	MG	2A	3244	1/1	0.95	0.09	58,58,58,58	0
57	MG	1W	204	1/1	0.95	0.09	44,44,44,44	0
57	MG	1A	3306	1/1	0.95	0.13	32,32,32,32	0
57	MG	1X	101	1/1	0.95	0.12	48,48,48,48	0
57	MG	1X	102	1/1	0.95	0.13	27,27,27,27	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2a	1602	1/1	0.95	0.12	60,60,60,60	0
57	MG	1A	3788	1/1	0.95	0.06	43,43,43,43	0
57	MG	2A	3252	1/1	0.95	0.10	59,59,59,59	0
57	MG	1a	1806	1/1	0.95	0.08	58,58,58,58	0
57	MG	1A	3478	1/1	0.95	0.11	25,25,25,25	0
57	MG	1A	3622	1/1	0.95	0.08	23,23,23,23	0
57	MG	2A	3586	1/1	0.95	0.09	39,39,39,39	0
57	MG	1A	3307	1/1	0.95	0.09	27,27,27,27	0
57	MG	1Z	3701	1/1	0.95	0.05	31,31,31,31	0
57	MG	1A	3624	1/1	0.95	0.05	20,20,20,20	0
57	MG	2a	1612	1/1	0.95	0.07	52,52,52,52	0
57	MG	2a	1613	1/1	0.95	0.13	51,51,51,51	0
57	MG	1A	3800	1/1	0.95	0.06	16,16,16,16	0
57	MG	2A	3592	1/1	0.95	0.09	48,48,48,48	0
57	MG	2A	3265	1/1	0.95	0.12	38,38,38,38	0
57	MG	2A	3598	1/1	0.95	0.07	38,38,38,38	0
57	MG	1A	3629	1/1	0.95	0.09	35,35,35,35	0
57	MG	1A	3803	1/1	0.95	0.06	35,35,35,35	0
57	MG	1A	3633	1/1	0.95	0.05	29,29,29,29	0
57	MG	1e	202	1/1	0.95	0.22	48,48,48,48	0
57	MG	1A	3238	1/1	0.95	0.18	19,19,19,19	0
57	MG	1A	3998	1/1	0.95	0.07	40,40,40,40	0
57	MG	1A	3808	1/1	0.95	0.06	22,22,22,22	0
57	MG	1A	3640	1/1	0.95	0.10	55,55,55,55	0
57	MG	1A	3815	1/1	0.95	0.08	26,26,26,26	0
57	MG	2a	1631	1/1	0.95	0.21	51,51,51,51	0
57	MG	2A	3613	1/1	0.95	0.13	52,52,52,52	0
57	MG	1n	103	1/1	0.95	0.18	44,44,44,44	0
57	MG	2a	1634	1/1	0.95	0.08	59,59,59,59	0
57	MG	1A	3074	1/1	0.95	0.08	27,27,27,27	0
57	MG	14	101	1/1	0.95	0.10	46,46,46,46	0
57	MG	2A	3620	1/1	0.95	0.05	26,26,26,26	0
57	MG	1A	3819	1/1	0.95	0.09	39,39,39,39	0
57	MG	1A	3393	1/1	0.95	0.07	52,52,52,52	0
57	MG	1w	104	1/1	0.95	0.20	64,64,64,64	0
57	MG	1A	3394	1/1	0.95	0.12	53,53,53,53	0
57	MG	2A	3626	1/1	0.95	0.14	53,53,53,53	0
57	MG	16	101	1/1	0.95	0.06	39,39,39,39	0
57	MG	17	103	1/1	0.95	0.10	29,29,29,29	0
57	MG	17	104	1/1	0.95	0.12	42,42,42,42	0
57	MG	1A	3243	1/1	0.95	0.21	27,27,27,27	0
57	MG	2A	3635	1/1	0.95	0.15	44,44,44,44	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3313	1/1	0.95	0.06	30,30,30,30	0
57	MG	1x	105	1/1	0.95	0.12	45,45,45,45	0
57	MG	1A	3833	1/1	0.95	0.11	42,42,42,42	0
57	MG	1x	107	1/1	0.95	0.06	42,42,42,42	0
57	MG	2a	1654	1/1	0.95	0.10	44,44,44,44	0
57	MG	1A	3079	1/1	0.95	0.08	44,44,44,44	0
57	MG	2A	3646	1/1	0.95	0.09	35,35,35,35	0
57	MG	2a	1657	1/1	0.95	0.12	56,56,56,56	0
57	MG	2A	3647	1/1	0.95	0.08	28,28,28,28	0
57	MG	1A	3321	1/1	0.95	0.13	25,25,25,25	0
57	MG	2A	3649	1/1	0.95	0.09	39,39,39,39	0
57	MG	1A	3837	1/1	0.95	0.12	33,33,33,33	0
57	MG	1A	3246	1/1	0.95	0.11	50,50,50,50	0
57	MG	1a	1601	1/1	0.95	0.06	42,42,42,42	0
57	MG	2A	3001	1/1	0.95	0.19	41,41,41,41	0
57	MG	2a	1667	1/1	0.95	0.18	55,55,55,55	0
57	MG	1A	3840	1/1	0.95	0.06	27,27,27,27	0
57	MG	1A	3842	1/1	0.95	0.06	39,39,39,39	0
57	MG	1A	3247	1/1	0.95	0.23	49,49,49,49	0
57	MG	2A	3659	1/1	0.95	0.14	54,54,54,54	0
57	MG	1A	3656	1/1	0.95	0.06	27,27,27,27	0
57	MG	2A	3661	1/1	0.95	0.15	40,40,40,40	0
57	MG	2A	3662	1/1	0.95	0.07	56,56,56,56	0
57	MG	2A	3309	1/1	0.95	0.07	45,45,45,45	0
57	MG	2a	1683	1/1	0.95	0.07	44,44,44,44	0
57	MG	1A	3052	1/1	0.95	0.06	40,40,40,40	0
57	MG	2a	1686	1/1	0.95	0.17	47,47,47,47	0
57	MG	2A	3666	1/1	0.95	0.07	53,53,53,53	0
57	MG	1a	1610	1/1	0.95	0.15	42,42,42,42	0
57	MG	2A	3312	1/1	0.95	0.07	64,64,64,64	0
57	MG	2A	3314	1/1	0.95	0.09	53,53,53,53	0
57	MG	2a	1692	1/1	0.95	0.16	46,46,46,46	0
57	MG	2A	3016	1/1	0.95	0.13	54,54,54,54	0
57	MG	1A	3501	1/1	0.95	0.06	36,36,36,36	0
57	MG	1a	1612	1/1	0.95	0.12	29,29,29,29	0
57	MG	1A	3661	1/1	0.95	0.06	31,31,31,31	0
57	MG	1A	3188	1/1	0.95	0.16	25,25,25,25	0
57	MG	2A	3025	1/1	0.95	0.08	39,39,39,39	0
57	MG	1A	3504	1/1	0.95	0.07	27,27,27,27	0
57	MG	1A	3506	1/1	0.95	0.11	29,29,29,29	0
57	MG	1A	3257	1/1	0.95	0.13	45,45,45,45	0
57	MG	2A	3330	1/1	0.95	0.08	49,49,49,49	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3856	1/1	0.95	0.07	13,13,13,13	0
57	MG	1a	1624	1/1	0.95	0.09	47,47,47,47	0
57	MG	1a	1625	1/1	0.95	0.06	40,40,40,40	0
57	MG	2A	3335	1/1	0.95	0.09	43,43,43,43	0
57	MG	2A	3688	1/1	0.95	0.07	46,46,46,46	0
57	MG	1a	1626	1/1	0.95	0.19	42,42,42,42	0
57	MG	2A	3691	1/1	0.95	0.14	42,42,42,42	0
57	MG	2A	3692	1/1	0.95	0.11	55,55,55,55	0
57	MG	2A	3693	1/1	0.95	0.12	42,42,42,42	0
57	MG	2A	3040	1/1	0.95	0.21	50,50,50,50	0
57	MG	2A	3041	1/1	0.95	0.10	48,48,48,48	0
57	MG	1a	1627	1/1	0.95	0.14	48,48,48,48	0
57	MG	1A	3085	1/1	0.95	0.17	35,35,35,35	0
57	MG	1A	3191	1/1	0.95	0.12	25,25,25,25	0
57	MG	2A	3045	1/1	0.95	0.10	44,44,44,44	0
57	MG	1A	4046	1/1	0.95	0.06	40,40,40,40	0
57	MG	2A	3047	1/1	0.95	0.07	56,56,56,56	0
57	MG	2a	1722	1/1	0.95	0.19	54,54,54,54	0
57	MG	2A	3704	1/1	0.95	0.05	48,48,48,48	0
57	MG	2a	1725	1/1	0.95	0.06	39,39,39,39	0
57	MG	1a	1632	1/1	0.95	0.23	50,50,50,50	0
57	MG	2A	3049	1/1	0.95	0.07	55,55,55,55	0
57	MG	2A	3708	1/1	0.95	0.06	47,47,47,47	0
57	MG	2A	3050	1/1	0.95	0.16	31,31,31,31	0
57	MG	2a	1732	1/1	0.95	0.16	36,36,36,36	0
57	MG	2A	3051	1/1	0.95	0.20	49,49,49,49	0
57	MG	2a	1734	1/1	0.95	0.18	41,41,41,41	0
57	MG	2A	3352	1/1	0.95	0.12	48,48,48,48	0
57	MG	2A	3712	1/1	0.95	0.10	61,61,61,61	0
57	MG	1A	3017	1/1	0.95	0.13	41,41,41,41	0
57	MG	1A	3862	1/1	0.95	0.08	33,33,33,33	0
57	MG	2a	1739	1/1	0.95	0.27	53,53,53,53	0
57	MG	1A	3414	1/1	0.95	0.05	26,26,26,26	0
57	MG	1A	4054	1/1	0.95	0.11	38,38,38,38	0
57	MG	2A	3722	1/1	0.95	0.06	38,38,38,38	0
57	MG	1A	3194	1/1	0.95	0.12	21,21,21,21	0
57	MG	1a	1639	1/1	0.95	0.13	47,47,47,47	0
57	MG	2A	3726	1/1	0.95	0.07	51,51,51,51	0
57	MG	2a	1747	1/1	0.95	0.07	50,50,50,50	0
57	MG	2A	3727	1/1	0.95	0.07	48,48,48,48	0
57	MG	2a	1749	1/1	0.95	0.17	72,72,72,72	0
57	MG	2A	3061	1/1	0.95	0.11	45,45,45,45	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3526	1/1	0.95	0.05	36,36,36,36	0
57	MG	2A	3361	1/1	0.95	0.14	53,53,53,53	0
57	MG	1A	3683	1/1	0.95	0.08	52,52,52,52	0
57	MG	1A	3527	1/1	0.95	0.07	40,40,40,40	0
57	MG	2A	3364	1/1	0.95	0.07	56,56,56,56	0
57	MG	2A	3071	1/1	0.95	0.09	48,48,48,48	0
57	MG	1A	3092	1/1	0.95	0.18	42,42,42,42	0
57	MG	2A	3741	1/1	0.95	0.12	50,50,50,50	0
57	MG	2A	3742	1/1	0.95	0.09	47,47,47,47	0
57	MG	1A	3157	1/1	0.95	0.50	22,22,22,22	0
57	MG	1a	1647	1/1	0.95	0.13	36,36,36,36	0
57	MG	1A	3018	1/1	0.95	0.11	22,22,22,22	0
57	MG	2a	1772	1/1	0.95	0.12	58,58,58,58	0
57	MG	1A	3693	1/1	0.95	0.07	33,33,33,33	0
57	MG	1A	3336	1/1	0.95	0.05	38,38,38,38	0
57	MG	1A	3274	1/1	0.95	0.10	29,29,29,29	0
57	MG	1A	3538	1/1	0.95	0.10	38,38,38,38	0
57	MG	2a	1782	1/1	0.95	0.21	48,48,48,48	0
57	MG	2A	3084	1/1	0.95	0.06	35,35,35,35	0
57	MG	2a	1784	1/1	0.95	0.08	56,56,56,56	0
57	MG	1A	3881	1/1	0.95	0.15	35,35,35,35	0
57	MG	2a	1786	1/1	0.95	0.09	45,45,45,45	0
57	MG	2A	3089	1/1	0.95	0.14	45,45,45,45	0
57	MG	2A	3755	1/1	0.95	0.10	50,50,50,50	0
57	MG	1A	3882	1/1	0.95	0.08	22,22,22,22	0
57	MG	1A	4086	1/1	0.95	0.07	36,36,36,36	0
57	MG	1A	4087	1/1	0.95	0.11	48,48,48,48	0
57	MG	2a	1792	1/1	0.95	0.18	55,55,55,55	0
57	MG	1a	1664	1/1	0.95	0.04	38,38,38,38	0
57	MG	2A	3384	1/1	0.95	0.10	35,35,35,35	0
57	MG	2a	1797	1/1	0.95	0.08	46,46,46,46	0
57	MG	2A	3095	1/1	0.95	0.10	35,35,35,35	0
57	MG	1A	3539	1/1	0.95	0.27	54,54,54,54	0
57	MG	1a	1666	1/1	0.95	0.13	42,42,42,42	0
57	MG	2A	3766	1/1	0.95	0.10	66,66,66,66	0
57	MG	2A	3100	1/1	0.95	0.12	36,36,36,36	0
57	MG	1A	3705	1/1	0.95	0.07	25,25,25,25	0
57	MG	2A	3392	1/1	0.95	0.09	48,48,48,48	0
57	MG	1A	3426	1/1	0.95	0.11	40,40,40,40	0
57	MG	2A	3395	1/1	0.95	0.19	52,52,52,52	0
57	MG	2A	3773	1/1	0.95	0.10	45,45,45,45	0
57	MG	2A	3396	1/1	0.95	0.14	42,42,42,42	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3541	1/1	0.95	0.04	18,18,18,18	0
57	MG	1A	3019	1/1	0.95	0.13	32,32,32,32	0
57	MG	2a	1811	1/1	0.95	0.16	50,50,50,50	0
57	MG	1a	1673	1/1	0.95	0.06	43,43,43,43	0
57	MG	1A	3276	1/1	0.95	0.21	38,38,38,38	0
57	MG	1A	3164	1/1	0.95	0.07	40,40,40,40	0
57	MG	1A	3714	1/1	0.95	0.09	33,33,33,33	0
57	MG	2A	3789	1/1	0.95	0.08	42,42,42,42	0
57	MG	2A	3404	1/1	0.95	0.12	38,38,38,38	0
57	MG	1A	3547	1/1	0.95	0.05	36,36,36,36	0
57	MG	2A	3407	1/1	0.95	0.12	60,60,60,60	0
57	MG	2A	3113	1/1	0.95	0.17	48,48,48,48	0
57	MG	1A	3209	1/1	0.95	0.09	33,33,33,33	0
57	MG	1B	205	1/1	0.95	0.13	48,48,48,48	0
57	MG	1a	1680	1/1	0.95	0.16	34,34,34,34	0
57	MG	2a	1827	1/1	0.95	0.20	42,42,42,42	0
57	MG	1B	206	1/1	0.95	0.07	36,36,36,36	0
57	MG	1a	1682	1/1	0.95	0.13	43,43,43,43	0
57	MG	1A	3342	1/1	0.95	0.27	31,31,31,31	0
57	MG	2A	3415	1/1	0.95	0.09	46,46,46,46	0
57	MG	1A	3032	1/1	0.95	0.22	25,25,25,25	0
57	MG	1a	1685	1/1	0.95	0.14	50,50,50,50	0
57	MG	2A	3131	1/1	0.95	0.22	50,50,50,50	0
57	MG	1A	3901	1/1	0.95	0.07	32,32,32,32	0
57	MG	2A	3422	1/1	0.95	0.14	33,33,33,33	0
57	MG	1A	3169	1/1	0.95	0.12	31,31,31,31	0
57	MG	2A	3135	1/1	0.95	0.06	33,33,33,33	0
57	MG	2A	3136	1/1	0.95	0.17	41,41,41,41	0
57	MG	1A	3555	1/1	0.95	0.20	34,34,34,34	0
57	MG	2k	201	1/1	0.95	0.13	52,52,52,52	0
57	MG	2A	3813	1/1	0.95	0.06	54,54,54,54	0
57	MG	1a	1690	1/1	0.95	0.09	37,37,37,37	0
57	MG	1a	1691	1/1	0.95	0.19	43,43,43,43	0
57	MG	2A	3145	1/1	0.95	0.11	40,40,40,40	0
57	MG	2A	3818	1/1	0.95	0.13	59,59,59,59	0
57	MG	1A	3556	1/1	0.95	0.07	26,26,26,26	0
57	MG	1a	1696	1/1	0.95	0.20	43,43,43,43	0
57	MG	1A	3559	1/1	0.95	0.08	36,36,36,36	0
57	MG	2A	3824	1/1	0.95	0.09	42,42,42,42	0
57	MG	2A	3825	1/1	0.95	0.09	43,43,43,43	0
57	MG	2A	3149	1/1	0.95	0.18	42,42,42,42	0
57	MG	1A	3437	1/1	0.95	0.08	40,40,40,40	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3020	1/1	0.95	0.09	40,40,40,40	0
57	MG	2A	3829	1/1	0.95	0.09	40,40,40,40	0
57	MG	2A	3154	1/1	0.95	0.10	48,48,48,48	0
57	MG	1A	3441	1/1	0.95	0.12	31,31,31,31	0
57	MG	2A	3834	1/1	0.95	0.06	43,43,43,43	0
57	MG	2A	3156	1/1	0.95	0.10	55,55,55,55	0
57	MG	1A	3350	1/1	0.95	0.18	34,34,34,34	0
57	MG	2A	3160	1/1	0.95	0.06	46,46,46,46	0
57	MG	1A	3922	1/1	0.95	0.10	30,30,30,30	0
57	MG	1B	227	1/1	0.95	0.04	23,23,23,23	0
57	MG	1A	3039	1/1	0.95	0.06	22,22,22,22	0
57	MG	1A	3223	1/1	0.95	0.10	20,20,20,20	0
57	MG	1A	3024	1/1	0.95	0.16	44,44,44,44	0
57	MG	2x	106	1/1	0.95	0.10	48,48,48,48	0
57	MG	1A	3927	1/1	0.95	0.06	27,27,27,27	0
57	MG	2y	102	1/1	0.95	0.08	55,55,55,55	0
57	MG	1A	3456	1/1	0.95	0.09	37,37,37,37	0
57	MG	2A	3172	1/1	0.95	0.07	55,55,55,55	0
57	MG	2A	3174	1/1	0.95	0.09	47,47,47,47	0
57	MG	1A	3574	1/1	0.95	0.09	41,41,41,41	0
57	MG	1D	302	1/1	0.95	0.10	40,40,40,40	0
57	MG	1A	3297	1/1	0.95	0.09	41,41,41,41	0
57	MG	2A	3849	1/1	0.96	0.06	37,37,37,37	0
57	MG	2A	3850	1/1	0.96	0.07	19,19,19,19	0
57	MG	1a	1657	1/1	0.96	0.09	34,34,34,34	0
57	MG	1A	3639	1/1	0.96	0.04	10,10,10,10	0
57	MG	2A	3120	1/1	0.96	0.10	31,31,31,31	0
57	MG	1A	3480	1/1	0.96	0.08	40,40,40,40	0
57	MG	2A	3124	1/1	0.96	0.21	56,56,56,56	0
57	MG	2A	3125	1/1	0.96	0.22	44,44,44,44	0
57	MG	2A	3126	1/1	0.96	0.05	41,41,41,41	0
57	MG	1A	3289	1/1	0.96	0.07	19,19,19,19	0
57	MG	1A	3642	1/1	0.96	0.05	36,36,36,36	0
57	MG	1A	3482	1/1	0.96	0.08	37,37,37,37	0
57	MG	1A	4061	1/1	0.96	0.24	40,40,40,40	0
57	MG	2A	3460	1/1	0.96	0.17	51,51,51,51	0
57	MG	1A	4064	1/1	0.96	0.04	14,14,14,14	0
57	MG	1a	1667	1/1	0.96	0.07	40,40,40,40	0
57	MG	2A	3463	1/1	0.96	0.14	48,48,48,48	0
57	MG	1A	3483	1/1	0.96	0.06	44,44,44,44	0
57	MG	1A	3203	1/1	0.96	0.05	29,29,29,29	0
57	MG	1A	4067	1/1	0.96	0.07	46,46,46,46	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3138	1/1	0.96	0.17	32,32,32,32	0
57	MG	2A	3878	1/1	0.96	0.08	45,45,45,45	0
57	MG	1A	3379	1/1	0.96	0.04	37,37,37,37	0
57	MG	2A	3469	1/1	0.96	0.05	32,32,32,32	0
57	MG	2A	3140	1/1	0.96	0.12	51,51,51,51	0
57	MG	1A	4069	1/1	0.96	0.10	16,16,16,16	0
57	MG	2A	3883	1/1	0.96	0.09	34,34,34,34	0
57	MG	2A	3473	1/1	0.96	0.14	17,17,17,17	0
57	MG	1A	3648	1/1	0.96	0.09	24,24,24,24	0
57	MG	1A	3846	1/1	0.96	0.13	42,42,42,42	0
57	MG	1A	4074	1/1	0.96	0.07	36,36,36,36	0
57	MG	2A	3478	1/1	0.96	0.09	40,40,40,40	0
57	MG	1A	4077	1/1	0.96	0.09	42,42,42,42	0
57	MG	1A	3486	1/1	0.96	0.11	44,44,44,44	0
57	MG	1A	3381	1/1	0.96	0.10	28,28,28,28	0
57	MG	1A	3138	1/1	0.96	0.11	29,29,29,29	0
57	MG	1A	4085	1/1	0.96	0.10	27,27,27,27	0
57	MG	1A	3654	1/1	0.96	0.10	44,44,44,44	0
57	MG	2A	3485	1/1	0.96	0.10	42,42,42,42	0
57	MG	1A	3142	1/1	0.96	0.10	10,10,10,10	0
57	MG	2A	3157	1/1	0.96	0.09	31,31,31,31	0
57	MG	2A	3158	1/1	0.96	0.05	26,26,26,26	0
57	MG	1A	3854	1/1	0.96	0.08	43,43,43,43	0
57	MG	1A	3208	1/1	0.96	0.08	27,27,27,27	0
57	MG	1A	3657	1/1	0.96	0.08	30,30,30,30	0
57	MG	1a	1687	1/1	0.96	0.11	46,46,46,46	0
57	MG	1A	3857	1/1	0.96	0.11	38,38,38,38	0
57	MG	2A	3498	1/1	0.96	0.11	45,45,45,45	0
57	MG	2D	302	1/1	0.96	0.17	39,39,39,39	0
57	MG	1A	3087	1/1	0.96	0.06	37,37,37,37	0
57	MG	2D	304	1/1	0.96	0.14	35,35,35,35	0
57	MG	2A	3500	1/1	0.96	0.13	48,48,48,48	0
57	MG	2D	306	1/1	0.96	0.24	35,35,35,35	0
57	MG	2A	3166	1/1	0.96	0.17	34,34,34,34	0
57	MG	2A	3168	1/1	0.96	0.13	38,38,38,38	0
57	MG	1A	3009	1/1	0.96	0.06	26,26,26,26	0
57	MG	2E	303	1/1	0.96	0.11	45,45,45,45	0
57	MG	1A	3660	1/1	0.96	0.05	30,30,30,30	0
57	MG	2E	305	1/1	0.96	0.06	40,40,40,40	0
57	MG	1A	3211	1/1	0.96	0.08	41,41,41,41	0
57	MG	1a	1695	1/1	0.96	0.22	41,41,41,41	0
57	MG	2A	3173	1/1	0.96	0.06	52,52,52,52	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3497	1/1	0.96	0.08	23,23,23,23	0
57	MG	1B	201	1/1	0.96	0.06	30,30,30,30	0
57	MG	1B	202	1/1	0.96	0.11	42,42,42,42	0
57	MG	1A	3663	1/1	0.96	0.07	35,35,35,35	0
57	MG	1a	1700	1/1	0.96	0.14	42,42,42,42	0
57	MG	1A	3498	1/1	0.96	0.17	36,36,36,36	0
57	MG	2O	201	1/1	0.96	0.06	38,38,38,38	0
57	MG	1A	3666	1/1	0.96	0.05	15,15,15,15	0
57	MG	1a	1703	1/1	0.96	0.17	49,49,49,49	0
57	MG	2A	3185	1/1	0.96	0.12	41,41,41,41	0
57	MG	1a	1704	1/1	0.96	0.09	49,49,49,49	0
57	MG	2Q	203	1/1	0.96	0.10	48,48,48,48	0
57	MG	2R	201	1/1	0.96	0.06	32,32,32,32	0
57	MG	1B	207	1/1	0.96	0.17	37,37,37,37	0
57	MG	1A	3868	1/1	0.96	0.05	37,37,37,37	0
57	MG	1A	3499	1/1	0.96	0.10	30,30,30,30	0
57	MG	2A	3524	1/1	0.96	0.06	42,42,42,42	0
57	MG	2A	3190	1/1	0.96	0.09	46,46,46,46	0
57	MG	2V	201	1/1	0.96	0.16	51,51,51,51	0
57	MG	2A	3526	1/1	0.96	0.09	44,44,44,44	0
57	MG	1A	3216	1/1	0.96	0.06	37,37,37,37	0
57	MG	1B	211	1/1	0.96	0.10	43,43,43,43	0
57	MG	1a	1712	1/1	0.96	0.04	35,35,35,35	0
57	MG	2A	3530	1/1	0.96	0.06	43,43,43,43	0
57	MG	1A	3089	1/1	0.96	0.07	36,36,36,36	0
57	MG	2A	3534	1/1	0.96	0.04	36,36,36,36	0
57	MG	2A	3535	1/1	0.96	0.09	28,28,28,28	0
57	MG	1a	1714	1/1	0.96	0.06	29,29,29,29	0
57	MG	2A	3538	1/1	0.96	0.08	45,45,45,45	0
57	MG	1A	3672	1/1	0.96	0.04	15,15,15,15	0
57	MG	1A	3090	1/1	0.96	0.06	32,32,32,32	0
57	MG	2A	3543	1/1	0.96	0.13	42,42,42,42	0
57	MG	1a	1717	1/1	0.96	0.11	44,44,44,44	0
57	MG	2A	3200	1/1	0.96	0.23	51,51,51,51	0
57	MG	1A	3155	1/1	0.96	0.08	33,33,33,33	0
57	MG	1A	3221	1/1	0.96	0.06	27,27,27,27	0
57	MG	28	104	1/1	0.96	0.09	47,47,47,47	0
57	MG	2A	3548	1/1	0.96	0.12	36,36,36,36	0
57	MG	2A	3549	1/1	0.96	0.07	47,47,47,47	0
57	MG	1A	3877	1/1	0.96	0.15	32,32,32,32	0
57	MG	1A	3396	1/1	0.96	0.17	28,28,28,28	0
57	MG	1a	1723	1/1	0.96	0.18	54,54,54,54	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3222	1/1	0.96	0.06	26,26,26,26	0
57	MG	1A	3398	1/1	0.96	0.13	16,16,16,16	0
57	MG	2A	3559	1/1	0.96	0.05	20,20,20,20	0
57	MG	2A	3561	1/1	0.96	0.14	38,38,38,38	0
57	MG	1a	1726	1/1	0.96	0.20	57,57,57,57	0
57	MG	1A	3518	1/1	0.96	0.14	34,34,34,34	0
57	MG	1A	3522	1/1	0.96	0.08	52,52,52,52	0
57	MG	1A	3309	1/1	0.96	0.10	35,35,35,35	0
57	MG	1A	3400	1/1	0.96	0.05	31,31,31,31	0
57	MG	1A	3091	1/1	0.96	0.09	21,21,21,21	0
57	MG	2a	1615	1/1	0.96	0.06	37,37,37,37	0
57	MG	2A	3216	1/1	0.96	0.11	43,43,43,43	0
57	MG	1A	3225	1/1	0.96	0.18	37,37,37,37	0
57	MG	2A	3573	1/1	0.96	0.05	37,37,37,37	0
57	MG	2a	1619	1/1	0.96	0.14	48,48,48,48	0
57	MG	1A	3404	1/1	0.96	0.10	27,27,27,27	0
57	MG	1B	235	1/1	0.96	0.06	39,39,39,39	0
57	MG	2a	1622	1/1	0.96	0.17	57,57,57,57	0
57	MG	2A	3578	1/1	0.96	0.17	38,38,38,38	0
57	MG	1A	3697	1/1	0.96	0.13	59,59,59,59	0
57	MG	2A	3580	1/1	0.96	0.07	43,43,43,43	0
57	MG	1A	3699	1/1	0.96	0.07	33,33,33,33	0
57	MG	1D	304	1/1	0.96	0.09	30,30,30,30	0
57	MG	1D	305	1/1	0.96	0.04	16,16,16,16	0
57	MG	1A	3227	1/1	0.96	0.17	39,39,39,39	0
57	MG	2A	3226	1/1	0.96	0.31	40,40,40,40	0
57	MG	1A	3228	1/1	0.96	0.10	36,36,36,36	0
57	MG	1a	1746	1/1	0.96	0.04	48,48,48,48	0
57	MG	2A	3229	1/1	0.96	0.17	45,45,45,45	0
57	MG	2A	3591	1/1	0.96	0.12	49,49,49,49	0
57	MG	1D	311	1/1	0.96	0.24	23,23,23,23	0
57	MG	1A	3703	1/1	0.96	0.05	10,10,10,10	0
57	MG	1E	301	1/1	0.96	0.05	21,21,21,21	0
57	MG	1A	3314	1/1	0.96	0.13	33,33,33,33	0
57	MG	2A	3600	1/1	0.96	0.14	43,43,43,43	0
57	MG	2A	3235	1/1	0.96	0.14	55,55,55,55	0
57	MG	1A	3902	1/1	0.96	0.11	29,29,29,29	0
57	MG	2a	1643	1/1	0.96	0.22	54,54,54,54	0
57	MG	1A	3316	1/1	0.96	0.12	33,33,33,33	0
57	MG	1A	3230	1/1	0.96	0.09	20,20,20,20	0
57	MG	1A	3907	1/1	0.96	0.07	32,32,32,32	0
57	MG	1A	3908	1/1	0.96	0.06	29,29,29,29	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3536	1/1	0.96	0.11	36,36,36,36	0
57	MG	1A	3537	1/1	0.96	0.10	35,35,35,35	0
57	MG	1A	3911	1/1	0.96	0.11	41,41,41,41	0
57	MG	2A	3245	1/1	0.96	0.09	47,47,47,47	0
57	MG	1F	308	1/1	0.96	0.12	46,46,46,46	0
57	MG	2A	3618	1/1	0.96	0.12	45,45,45,45	0
57	MG	1A	3319	1/1	0.96	0.06	42,42,42,42	0
57	MG	1A	3411	1/1	0.96	0.06	40,40,40,40	0
57	MG	2A	3249	1/1	0.96	0.07	51,51,51,51	0
57	MG	1a	1766	1/1	0.96	0.07	50,50,50,50	0
57	MG	1A	3915	1/1	0.96	0.07	34,34,34,34	0
57	MG	1G	201	1/1	0.96	0.06	36,36,36,36	0
57	MG	1A	3916	1/1	0.96	0.14	27,27,27,27	0
57	MG	1A	3065	1/1	0.96	0.08	30,30,30,30	0
57	MG	1A	3918	1/1	0.96	0.04	31,31,31,31	0
57	MG	1A	3066	1/1	0.96	0.05	19,19,19,19	0
57	MG	1I	201	1/1	0.96	0.08	49,49,49,49	0
57	MG	2a	1668	1/1	0.96	0.09	57,57,57,57	0
57	MG	2A	3260	1/1	0.96	0.08	39,39,39,39	0
57	MG	1a	1777	1/1	0.96	0.06	49,49,49,49	0
57	MG	2a	1671	1/1	0.96	0.10	45,45,45,45	0
57	MG	1a	1778	1/1	0.96	0.08	36,36,36,36	0
57	MG	1N	201	1/1	0.96	0.12	42,42,42,42	0
57	MG	2a	1674	1/1	0.96	0.05	42,42,42,42	0
57	MG	1A	3094	1/1	0.96	0.12	31,31,31,31	0
57	MG	2a	1676	1/1	0.96	0.10	51,51,51,51	0
57	MG	2A	3643	1/1	0.96	0.05	34,34,34,34	0
57	MG	1A	3004	1/1	0.96	0.06	19,19,19,19	0
57	MG	2a	1680	1/1	0.96	0.10	64,64,64,64	0
57	MG	1a	1784	1/1	0.96	0.06	35,35,35,35	0
57	MG	1A	3099	1/1	0.96	0.07	32,32,32,32	0
57	MG	1A	3546	1/1	0.96	0.11	36,36,36,36	0
57	MG	1O	201	1/1	0.96	0.08	51,51,51,51	0
57	MG	2a	1687	1/1	0.96	0.10	43,43,43,43	0
57	MG	1O	202	1/1	0.96	0.07	48,48,48,48	0
57	MG	1A	3926	1/1	0.96	0.09	34,34,34,34	0
57	MG	1a	1795	1/1	0.96	0.06	56,56,56,56	0
57	MG	1A	3033	1/1	0.96	0.04	29,29,29,29	0
57	MG	1A	3102	1/1	0.96	0.07	16,16,16,16	0
57	MG	1a	1800	1/1	0.96	0.08	56,56,56,56	0
57	MG	1Q	202	1/1	0.96	0.06	30,30,30,30	0
57	MG	1Q	203	1/1	0.96	0.10	43,43,43,43	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3724	1/1	0.96	0.07	40,40,40,40	0
57	MG	1A	3420	1/1	0.96	0.05	29,29,29,29	0
57	MG	2A	3286	1/1	0.96	0.16	34,34,34,34	0
57	MG	1A	3931	1/1	0.96	0.04	31,31,31,31	0
57	MG	1Q	207	1/1	0.96	0.07	47,47,47,47	0
57	MG	1A	3104	1/1	0.96	0.07	24,24,24,24	0
57	MG	1R	203	1/1	0.96	0.09	28,28,28,28	0
57	MG	1R	204	1/1	0.96	0.07	16,16,16,16	0
57	MG	1A	3425	1/1	0.96	0.07	39,39,39,39	0
57	MG	1A	3936	1/1	0.96	0.07	34,34,34,34	0
57	MG	1A	3939	1/1	0.96	0.04	34,34,34,34	0
57	MG	1A	3329	1/1	0.96	0.15	44,44,44,44	0
57	MG	2A	3298	1/1	0.96	0.06	36,36,36,36	0
57	MG	1U	202	1/1	0.96	0.10	33,33,33,33	0
57	MG	1A	3045	1/1	0.96	0.07	17,17,17,17	0
57	MG	2A	3676	1/1	0.96	0.07	53,53,53,53	0
57	MG	1A	3111	1/1	0.96	0.05	31,31,31,31	0
57	MG	1A	3945	1/1	0.96	0.07	43,43,43,43	0
57	MG	1A	3075	1/1	0.96	0.08	27,27,27,27	0
57	MG	2a	1716	1/1	0.96	0.13	39,39,39,39	0
57	MG	2A	3681	1/1	0.96	0.10	44,44,44,44	0
57	MG	1V	205	1/1	0.96	0.07	24,24,24,24	0
57	MG	1A	3114	1/1	0.96	0.15	30,30,30,30	0
57	MG	2A	3306	1/1	0.96	0.06	37,37,37,37	0
57	MG	1V	210	1/1	0.96	0.05	41,41,41,41	0
57	MG	1W	202	1/1	0.96	0.12	46,46,46,46	0
57	MG	1W	203	1/1	0.96	0.05	27,27,27,27	0
57	MG	1A	3433	1/1	0.96	0.07	28,28,28,28	0
57	MG	1A	3076	1/1	0.96	0.22	35,35,35,35	0
57	MG	1W	207	1/1	0.96	0.08	28,28,28,28	0
57	MG	1A	3253	1/1	0.96	0.06	35,35,35,35	0
57	MG	2A	3694	1/1	0.96	0.13	48,48,48,48	0
57	MG	2A	3315	1/1	0.96	0.07	35,35,35,35	0
57	MG	1A	3034	1/1	0.96	0.08	32,32,32,32	0
57	MG	1X	103	1/1	0.96	0.05	25,25,25,25	0
57	MG	1A	3741	1/1	0.96	0.12	41,41,41,41	0
57	MG	1x	103	1/1	0.96	0.14	41,41,41,41	0
57	MG	1A	3119	1/1	0.96	0.05	36,36,36,36	0
57	MG	1A	3261	1/1	0.96	0.07	32,32,32,32	0
57	MG	2A	3702	1/1	0.96	0.08	33,33,33,33	0
57	MG	1Y	203	1/1	0.96	0.15	40,40,40,40	0
57	MG	1A	3440	1/1	0.96	0.14	36,36,36,36	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3746	1/1	0.96	0.08	20,20,20,20	0
57	MG	2A	3706	1/1	0.96	0.10	42,42,42,42	0
57	MG	1A	3748	1/1	0.96	0.10	23,23,23,23	0
57	MG	1A	3080	1/1	0.96	0.14	25,25,25,25	0
57	MG	10	101	1/1	0.96	0.13	36,36,36,36	0
57	MG	1A	3446	1/1	0.96	0.06	27,27,27,27	0
57	MG	10	103	1/1	0.96	0.11	41,41,41,41	0
57	MG	1A	3447	1/1	0.96	0.06	42,42,42,42	0
57	MG	1A	3048	1/1	0.96	0.15	34,34,34,34	0
57	MG	2A	3714	1/1	0.96	0.11	20,20,20,20	0
57	MG	1A	3581	1/1	0.96	0.14	39,39,39,39	0
57	MG	1A	3582	1/1	0.96	0.06	32,32,32,32	0
57	MG	11	101	1/1	0.96	0.17	32,32,32,32	0
57	MG	11	102	1/1	0.96	0.10	34,34,34,34	0
57	MG	2A	3010	1/1	0.96	0.08	45,45,45,45	0
57	MG	2A	3015	1/1	0.96	0.15	37,37,37,37	0
57	MG	2a	1763	1/1	0.96	0.08	51,51,51,51	0
57	MG	2a	1765	1/1	0.96	0.06	49,49,49,49	0
57	MG	11	103	1/1	0.96	0.07	36,36,36,36	0
57	MG	1A	3760	1/1	0.96	0.05	50,50,50,50	0
57	MG	11	105	1/1	0.96	0.06	29,29,29,29	0
57	MG	2A	3019	1/1	0.96	0.07	33,33,33,33	0
57	MG	2A	3021	1/1	0.96	0.09	24,24,24,24	0
57	MG	1A	3976	1/1	0.96	0.10	53,53,53,53	0
57	MG	12	102	1/1	0.96	0.08	26,26,26,26	0
57	MG	1A	3977	1/1	0.96	0.08	58,58,58,58	0
57	MG	1A	3449	1/1	0.96	0.10	31,31,31,31	0
57	MG	2A	3739	1/1	0.96	0.16	44,44,44,44	0
57	MG	1A	3190	1/1	0.96	0.08	32,32,32,32	0
57	MG	1A	3763	1/1	0.96	0.06	14,14,14,14	0
57	MG	1A	3585	1/1	0.96	0.07	40,40,40,40	0
57	MG	15	108	1/1	0.96	0.15	33,33,33,33	0
57	MG	2A	3034	1/1	0.96	0.09	35,35,35,35	0
57	MG	1A	3766	1/1	0.96	0.07	13,13,13,13	0
57	MG	2A	3746	1/1	0.96	0.07	40,40,40,40	0
57	MG	2A	3036	1/1	0.96	0.04	25,25,25,25	0
57	MG	1A	3124	1/1	0.96	0.15	28,28,28,28	0
57	MG	17	101	1/1	0.96	0.07	23,23,23,23	0
57	MG	1A	3083	1/1	0.96	0.09	19,19,19,19	0
57	MG	1A	3592	1/1	0.96	0.08	24,24,24,24	0
57	MG	1A	3130	1/1	0.96	0.07	66,66,66,66	0
57	MG	1A	3594	1/1	0.96	0.14	36,36,36,36	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3754	1/1	0.96	0.12	59,59,59,59	0
57	MG	1A	3347	1/1	0.96	0.22	23,23,23,23	0
57	MG	1A	3992	1/1	0.96	0.03	26,26,26,26	0
57	MG	1A	3051	1/1	0.96	0.07	27,27,27,27	0
57	MG	1A	3777	1/1	0.96	0.04	18,18,18,18	0
57	MG	1A	3459	1/1	0.96	0.25	50,50,50,50	0
57	MG	2A	3375	1/1	0.96	0.09	48,48,48,48	0
57	MG	1A	3781	1/1	0.96	0.06	36,36,36,36	0
57	MG	1A	3782	1/1	0.96	0.06	26,26,26,26	0
57	MG	1a	1605	1/1	0.96	0.11	52,52,52,52	0
57	MG	1A	3783	1/1	0.96	0.04	18,18,18,18	0
57	MG	1A	3351	1/1	0.96	0.06	32,32,32,32	0
57	MG	2A	3056	1/1	0.96	0.06	33,33,33,33	0
57	MG	1A	3135	1/1	0.96	0.13	31,31,31,31	0
57	MG	2A	3383	1/1	0.96	0.21	56,56,56,56	0
57	MG	1A	3786	1/1	0.96	0.12	46,46,46,46	0
57	MG	2a	1815	1/1	0.96	0.04	54,54,54,54	0
57	MG	1A	4003	1/1	0.96	0.09	19,19,19,19	0
57	MG	2a	1817	1/1	0.96	0.07	59,59,59,59	0
57	MG	1A	3607	1/1	0.96	0.06	24,24,24,24	0
57	MG	2A	3062	1/1	0.96	0.05	47,47,47,47	0
57	MG	2A	3063	1/1	0.96	0.17	38,38,38,38	0
57	MG	2A	3389	1/1	0.96	0.16	46,46,46,46	0
57	MG	2A	3066	1/1	0.96	0.07	42,42,42,42	0
57	MG	1A	3789	1/1	0.96	0.10	42,42,42,42	0
57	MG	2a	1824	1/1	0.96	0.15	57,57,57,57	0
57	MG	2A	3780	1/1	0.96	0.09	39,39,39,39	0
57	MG	1A	3790	1/1	0.96	0.05	19,19,19,19	0
57	MG	2A	3394	1/1	0.96	0.08	52,52,52,52	0
57	MG	1A	3608	1/1	0.96	0.07	29,29,29,29	0
57	MG	1A	3794	1/1	0.96	0.04	17,17,17,17	0
57	MG	1a	1616	1/1	0.96	0.05	46,46,46,46	0
57	MG	2A	3398	1/1	0.96	0.08	36,36,36,36	0
57	MG	1A	3463	1/1	0.96	0.12	26,26,26,26	0
57	MG	1A	3611	1/1	0.96	0.06	15,15,15,15	0
57	MG	1A	3353	1/1	0.96	0.05	28,28,28,28	0
57	MG	2A	3076	1/1	0.96	0.21	41,41,41,41	0
57	MG	2A	3077	1/1	0.96	0.05	32,32,32,32	0
57	MG	1A	3137	1/1	0.96	0.32	23,23,23,23	0
57	MG	2g	201	1/1	0.96	0.08	63,63,63,63	0
57	MG	1A	4022	1/1	0.96	0.07	47,47,47,47	0
57	MG	1A	3801	1/1	0.96	0.10	20,20,20,20	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3614	1/1	0.96	0.06	30,30,30,30	0
57	MG	1A	3198	1/1	0.96	0.04	30,30,30,30	0
57	MG	2A	3085	1/1	0.96	0.11	55,55,55,55	0
57	MG	1A	3616	1/1	0.96	0.06	40,40,40,40	0
57	MG	2A	3087	1/1	0.96	0.07	36,36,36,36	0
57	MG	2A	3088	1/1	0.96	0.09	42,42,42,42	0
57	MG	1A	3200	1/1	0.96	0.08	29,29,29,29	0
57	MG	1A	3806	1/1	0.96	0.06	35,35,35,35	0
57	MG	2A	3416	1/1	0.96	0.05	47,47,47,47	0
57	MG	1A	3807	1/1	0.96	0.06	31,31,31,31	0
57	MG	1A	3202	1/1	0.96	0.06	30,30,30,30	0
57	MG	1A	3812	1/1	0.96	0.28	19,19,19,19	0
57	MG	2A	3420	1/1	0.96	0.16	48,48,48,48	0
57	MG	1A	4037	1/1	0.96	0.08	31,31,31,31	0
57	MG	1A	3368	1/1	0.96	0.05	25,25,25,25	0
57	MG	2A	3822	1/1	0.96	0.05	30,30,30,30	0
57	MG	1A	3369	1/1	0.96	0.16	34,34,34,34	0
57	MG	1A	3817	1/1	0.96	0.10	66,66,66,66	0
57	MG	1A	4041	1/1	0.96	0.06	38,38,38,38	0
57	MG	2A	3429	1/1	0.96	0.07	34,34,34,34	0
57	MG	1A	3370	1/1	0.96	0.07	36,36,36,36	0
57	MG	2A	3431	1/1	0.96	0.12	40,40,40,40	0
57	MG	2w	108	1/1	0.96	0.06	58,58,58,58	0
57	MG	1a	1644	1/1	0.96	0.08	55,55,55,55	0
57	MG	1A	3626	1/1	0.96	0.05	16,16,16,16	0
57	MG	1A	3628	1/1	0.96	0.13	34,34,34,34	0
57	MG	2A	3833	1/1	0.96	0.04	31,31,31,31	0
57	MG	2A	3435	1/1	0.96	0.05	31,31,31,31	0
57	MG	1A	3371	1/1	0.96	0.10	42,42,42,42	0
57	MG	2A	3109	1/1	0.96	0.15	31,31,31,31	0
57	MG	1a	1648	1/1	0.96	0.14	39,39,39,39	0
57	MG	1A	3824	1/1	0.96	0.05	28,28,28,28	0
57	MG	2A	3840	1/1	0.96	0.08	35,35,35,35	0
57	MG	1A	3373	1/1	0.96	0.06	42,42,42,42	0
57	MG	1A	3831	1/1	0.96	0.05	22,22,22,22	0
57	MG	1A	3635	1/1	0.96	0.04	26,26,26,26	0
57	MG	1A	3374	1/1	0.96	0.11	32,32,32,32	0
60	ZN	24	501	1/1	0.96	0.09	105,105,105,105	0
60	ZN	2n	501	1/1	0.96	0.06	81,81,81,81	0
57	MG	1v	102	1/1	0.97	0.05	41,41,41,41	0
57	MG	1w	101	1/1	0.97	0.04	40,40,40,40	0
57	MG	1A	4032	1/1	0.97	0.07	21,21,21,21	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3841	1/1	0.97	0.04	40,40,40,40	0
57	MG	1A	3171	1/1	0.97	0.08	8,8,8,8	0
57	MG	1A	3172	1/1	0.97	0.06	38,38,38,38	0
57	MG	2D	301	1/1	0.97	0.07	25,25,25,25	0
57	MG	1A	3113	1/1	0.97	0.10	28,28,28,28	0
57	MG	1A	3176	1/1	0.97	0.22	26,26,26,26	0
57	MG	1A	3671	1/1	0.97	0.06	23,23,23,23	0
57	MG	2A	3553	1/1	0.97	0.05	37,37,37,37	0
57	MG	1A	3847	1/1	0.97	0.04	26,26,26,26	0
57	MG	1A	3077	1/1	0.97	0.18	29,29,29,29	0
57	MG	2D	308	1/1	0.97	0.07	49,49,49,49	0
57	MG	1A	3849	1/1	0.97	0.06	46,46,46,46	0
57	MG	2A	3258	1/1	0.97	0.07	53,53,53,53	0
57	MG	2A	3259	1/1	0.97	0.09	38,38,38,38	0
57	MG	1A	3529	1/1	0.97	0.04	29,29,29,29	0
57	MG	1A	3021	1/1	0.97	0.04	15,15,15,15	0
57	MG	1A	3181	1/1	0.97	0.07	27,27,27,27	0
57	MG	2A	3263	1/1	0.97	0.05	35,35,35,35	0
57	MG	2A	3264	1/1	0.97	0.07	48,48,48,48	0
57	MG	1A	3676	1/1	0.97	0.08	13,13,13,13	0
57	MG	1x	109	1/1	0.97	0.07	13,13,13,13	0
57	MG	2A	3267	1/1	0.97	0.09	59,59,59,59	0
57	MG	2A	3268	1/1	0.97	0.13	44,44,44,44	0
57	MG	1x	110	1/1	0.97	0.11	46,46,46,46	0
57	MG	2A	3576	1/1	0.97	0.04	40,40,40,40	0
57	MG	2A	3270	1/1	0.97	0.08	39,39,39,39	0
57	MG	1A	3677	1/1	0.97	0.04	27,27,27,27	0
57	MG	1A	3117	1/1	0.97	0.05	21,21,21,21	0
57	MG	1x	113	1/1	0.97	0.06	43,43,43,43	0
57	MG	1A	4049	1/1	0.97	0.04	26,26,26,26	0
57	MG	1a	1602	1/1	0.97	0.14	45,45,45,45	0
57	MG	1A	3022	1/1	0.97	0.04	29,29,29,29	0
57	MG	1A	4052	1/1	0.97	0.03	25,25,25,25	0
57	MG	1A	3682	1/1	0.97	0.06	24,24,24,24	0
57	MG	1A	3008	1/1	0.97	0.03	23,23,23,23	0
57	MG	1A	4056	1/1	0.97	0.06	11,11,11,11	0
57	MG	1A	3684	1/1	0.97	0.07	53,53,53,53	0
57	MG	2U	201	1/1	0.97	0.07	48,48,48,48	0
57	MG	1A	3685	1/1	0.97	0.05	28,28,28,28	0
57	MG	1A	3861	1/1	0.97	0.10	24,24,24,24	0
57	MG	2A	3593	1/1	0.97	0.14	36,36,36,36	0
57	MG	2A	3594	1/1	0.97	0.06	39,39,39,39	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3011	1/1	0.97	0.06	36,36,36,36	0
57	MG	2A	3012	1/1	0.97	0.06	30,30,30,30	0
57	MG	2X	102	1/1	0.97	0.07	46,46,46,46	0
57	MG	2A	3013	1/1	0.97	0.06	40,40,40,40	0
57	MG	2A	3288	1/1	0.97	0.12	36,36,36,36	0
57	MG	2A	3603	1/1	0.97	0.11	47,47,47,47	0
57	MG	2A	3014	1/1	0.97	0.06	30,30,30,30	0
57	MG	1A	3037	1/1	0.97	0.14	20,20,20,20	0
57	MG	1A	3422	1/1	0.97	0.07	30,30,30,30	0
57	MG	25	102	1/1	0.97	0.19	41,41,41,41	0
57	MG	1A	4063	1/1	0.97	0.04	27,27,27,27	0
57	MG	2A	3608	1/1	0.97	0.08	26,26,26,26	0
57	MG	25	105	1/1	0.97	0.09	50,50,50,50	0
57	MG	1A	3424	1/1	0.97	0.13	38,38,38,38	0
57	MG	1A	3249	1/1	0.97	0.18	28,28,28,28	0
57	MG	2A	3020	1/1	0.97	0.05	47,47,47,47	0
57	MG	2A	3296	1/1	0.97	0.07	42,42,42,42	0
57	MG	28	103	1/1	0.97	0.06	44,44,44,44	0
57	MG	1a	1617	1/1	0.97	0.08	29,29,29,29	0
57	MG	1A	3121	1/1	0.97	0.13	24,24,24,24	0
57	MG	2A	3616	1/1	0.97	0.11	36,36,36,36	0
57	MG	1A	3252	1/1	0.97	0.04	43,43,43,43	0
57	MG	2A	3024	1/1	0.97	0.10	48,48,48,48	0
57	MG	1A	3543	1/1	0.97	0.09	42,42,42,42	0
57	MG	2A	3026	1/1	0.97	0.17	40,40,40,40	0
57	MG	1A	3055	1/1	0.97	0.08	25,25,25,25	0
57	MG	1A	3698	1/1	0.97	0.06	18,18,18,18	0
57	MG	1A	3254	1/1	0.97	0.04	43,43,43,43	0
57	MG	1A	3255	1/1	0.97	0.06	35,35,35,35	0
57	MG	1A	3056	1/1	0.97	0.05	20,20,20,20	0
57	MG	1A	3126	1/1	0.97	0.15	32,32,32,32	0
57	MG	1A	4079	1/1	0.97	0.05	25,25,25,25	0
57	MG	2A	3630	1/1	0.97	0.04	31,31,31,31	0
57	MG	1A	3704	1/1	0.97	0.07	36,36,36,36	0
57	MG	1A	3549	1/1	0.97	0.06	45,45,45,45	0
57	MG	1A	4082	1/1	0.97	0.04	19,19,19,19	0
57	MG	1A	3879	1/1	0.97	0.11	30,30,30,30	0
57	MG	1A	3880	1/1	0.97	0.14	35,35,35,35	0
57	MG	1A	3259	1/1	0.97	0.05	24,24,24,24	0
57	MG	2A	3640	1/1	0.97	0.06	47,47,47,47	0
57	MG	2A	3641	1/1	0.97	0.04	37,37,37,37	0
57	MG	2A	3317	1/1	0.97	0.06	41,41,41,41	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3001	1/1	0.97	0.07	33,33,33,33	0
57	MG	1A	3883	1/1	0.97	0.14	29,29,29,29	0
57	MG	1a	1641	1/1	0.97	0.05	56,56,56,56	0
57	MG	1A	3343	1/1	0.97	0.04	43,43,43,43	0
57	MG	2a	1627	1/1	0.97	0.09	39,39,39,39	0
57	MG	1A	3711	1/1	0.97	0.07	34,34,34,34	0
57	MG	1A	3554	1/1	0.97	0.14	30,30,30,30	0
57	MG	2A	3324	1/1	0.97	0.07	39,39,39,39	0
57	MG	1A	3438	1/1	0.97	0.18	43,43,43,43	0
57	MG	1A	3010	1/1	0.97	0.04	26,26,26,26	0
57	MG	2A	3327	1/1	0.97	0.05	40,40,40,40	0
57	MG	1A	3192	1/1	0.97	0.19	32,32,32,32	0
57	MG	2A	3331	1/1	0.97	0.06	52,52,52,52	0
57	MG	1A	3040	1/1	0.97	0.06	25,25,25,25	0
57	MG	2A	3054	1/1	0.97	0.11	42,42,42,42	0
57	MG	1A	4100	1/1	0.97	0.13	38,38,38,38	0
57	MG	1A	3442	1/1	0.97	0.17	39,39,39,39	0
57	MG	1A	3894	1/1	0.97	0.08	25,25,25,25	0
57	MG	1a	1654	1/1	0.97	0.15	41,41,41,41	0
57	MG	2A	3664	1/1	0.97	0.14	52,52,52,52	0
57	MG	1A	3445	1/1	0.97	0.06	40,40,40,40	0
57	MG	1B	204	1/1	0.97	0.04	22,22,22,22	0
57	MG	1A	3267	1/1	0.97	0.21	27,27,27,27	0
57	MG	2a	1646	1/1	0.97	0.06	52,52,52,52	0
57	MG	1A	3348	1/1	0.97	0.08	25,25,25,25	0
57	MG	2A	3342	1/1	0.97	0.07	36,36,36,36	0
57	MG	2A	3343	1/1	0.97	0.09	41,41,41,41	0
57	MG	2A	3065	1/1	0.97	0.08	66,66,66,66	0
57	MG	1A	3898	1/1	0.97	0.04	24,24,24,24	0
57	MG	1A	3899	1/1	0.97	0.05	11,11,11,11	0
57	MG	2A	3347	1/1	0.97	0.05	41,41,41,41	0
57	MG	1a	1662	1/1	0.97	0.16	37,37,37,37	0
57	MG	1A	3349	1/1	0.97	0.12	27,27,27,27	0
57	MG	1A	3567	1/1	0.97	0.07	47,47,47,47	0
57	MG	1A	3568	1/1	0.97	0.13	21,21,21,21	0
57	MG	1A	3268	1/1	0.97	0.10	25,25,25,25	0
57	MG	1A	3905	1/1	0.97	0.04	31,31,31,31	0
57	MG	1A	3571	1/1	0.97	0.07	43,43,43,43	0
57	MG	2A	3683	1/1	0.97	0.07	40,40,40,40	0
57	MG	1A	3134	1/1	0.97	0.07	33,33,33,33	0
57	MG	1A	3451	1/1	0.97	0.09	44,44,44,44	0
57	MG	1A	3270	1/1	0.97	0.10	25,25,25,25	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1B	221	1/1	0.97	0.09	36,36,36,36	0
57	MG	2A	3081	1/1	0.97	0.11	52,52,52,52	0
57	MG	1A	3061	1/1	0.97	0.12	33,33,33,33	0
57	MG	2A	3690	1/1	0.97	0.08	32,32,32,32	0
57	MG	1A	3455	1/1	0.97	0.07	37,37,37,37	0
57	MG	1A	3732	1/1	0.97	0.06	41,41,41,41	0
57	MG	1A	3913	1/1	0.97	0.07	41,41,41,41	0
57	MG	1A	3355	1/1	0.97	0.05	42,42,42,42	0
57	MG	2A	3365	1/1	0.97	0.09	36,36,36,36	0
57	MG	1A	3734	1/1	0.97	0.09	41,41,41,41	0
57	MG	2a	1677	1/1	0.97	0.19	45,45,45,45	0
57	MG	1A	3736	1/1	0.97	0.03	9,9,9,9	0
57	MG	1A	3356	1/1	0.97	0.14	27,27,27,27	0
57	MG	1A	3041	1/1	0.97	0.10	17,17,17,17	0
57	MG	1A	3011	1/1	0.97	0.06	31,31,31,31	0
57	MG	2a	1682	1/1	0.97	0.14	51,51,51,51	0
57	MG	1A	3921	1/1	0.97	0.08	20,20,20,20	0
57	MG	2A	3093	1/1	0.97	0.14	35,35,35,35	0
57	MG	1A	3139	1/1	0.97	0.04	14,14,14,14	0
57	MG	1A	3461	1/1	0.97	0.06	26,26,26,26	0
57	MG	1A	3586	1/1	0.97	0.19	37,37,37,37	0
57	MG	1A	3360	1/1	0.97	0.08	31,31,31,31	0
57	MG	2A	3099	1/1	0.97	0.09	41,41,41,41	0
57	MG	1A	3361	1/1	0.97	0.07	36,36,36,36	0
57	MG	1D	307	1/1	0.97	0.05	26,26,26,26	0
57	MG	1A	3745	1/1	0.97	0.05	42,42,42,42	0
57	MG	1A	3464	1/1	0.97	0.15	45,45,45,45	0
57	MG	1a	1693	1/1	0.97	0.07	35,35,35,35	0
57	MG	1a	1694	1/1	0.97	0.18	37,37,37,37	0
57	MG	1A	3364	1/1	0.97	0.12	21,21,21,21	0
57	MG	2A	3108	1/1	0.97	0.10	41,41,41,41	0
57	MG	1A	3365	1/1	0.97	0.09	24,24,24,24	0
57	MG	1A	3595	1/1	0.97	0.09	27,27,27,27	0
57	MG	2A	3719	1/1	0.97	0.06	48,48,48,48	0
57	MG	2A	3721	1/1	0.97	0.05	25,25,25,25	0
57	MG	1A	3140	1/1	0.97	0.09	31,31,31,31	0
57	MG	1E	306	1/1	0.97	0.08	24,24,24,24	0
57	MG	2A	3390	1/1	0.97	0.05	52,52,52,52	0
57	MG	2A	3725	1/1	0.97	0.07	46,46,46,46	0
57	MG	1A	3367	1/1	0.97	0.10	33,33,33,33	0
57	MG	1A	3934	1/1	0.97	0.04	30,30,30,30	0
57	MG	1E	309	1/1	0.97	0.12	40,40,40,40	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3756	1/1	0.97	0.04	38,38,38,38	0
57	MG	2A	3117	1/1	0.97	0.08	38,38,38,38	0
57	MG	2A	3732	1/1	0.97	0.05	35,35,35,35	0
57	MG	2A	3733	1/1	0.97	0.12	37,37,37,37	0
57	MG	1A	3937	1/1	0.97	0.04	51,51,51,51	0
57	MG	2A	3119	1/1	0.97	0.08	49,49,49,49	0
57	MG	1A	3141	1/1	0.97	0.09	26,26,26,26	0
57	MG	2A	3121	1/1	0.97	0.07	35,35,35,35	0
57	MG	1a	1706	1/1	0.97	0.07	39,39,39,39	0
57	MG	1A	3600	1/1	0.97	0.17	45,45,45,45	0
57	MG	1A	3601	1/1	0.97	0.08	40,40,40,40	0
57	MG	1F	306	1/1	0.97	0.10	21,21,21,21	0
57	MG	2a	1723	1/1	0.97	0.10	52,52,52,52	0
57	MG	1a	1710	1/1	0.97	0.05	32,32,32,32	0
57	MG	2A	3405	1/1	0.97	0.05	43,43,43,43	0
57	MG	1A	3602	1/1	0.97	0.09	42,42,42,42	0
57	MG	1F	309	1/1	0.97	0.06	40,40,40,40	0
57	MG	2A	3130	1/1	0.97	0.07	38,38,38,38	0
57	MG	2a	1730	1/1	0.97	0.10	45,45,45,45	0
57	MG	1A	3603	1/1	0.97	0.09	29,29,29,29	0
57	MG	1A	3278	1/1	0.97	0.09	21,21,21,21	0
57	MG	2A	3133	1/1	0.97	0.05	52,52,52,52	0
57	MG	1A	3279	1/1	0.97	0.29	31,31,31,31	0
57	MG	1A	3606	1/1	0.97	0.04	18,18,18,18	0
57	MG	1A	3472	1/1	0.97	0.20	32,32,32,32	0
57	MG	1A	3951	1/1	0.97	0.06	41,41,41,41	0
57	MG	1A	3043	1/1	0.97	0.07	35,35,35,35	0
57	MG	1G	205	1/1	0.97	0.05	34,34,34,34	0
57	MG	2A	3758	1/1	0.97	0.08	49,49,49,49	0
57	MG	1A	3953	1/1	0.97	0.06	56,56,56,56	0
57	MG	2A	3141	1/1	0.97	0.13	34,34,34,34	0
57	MG	2A	3142	1/1	0.97	0.14	51,51,51,51	0
57	MG	1A	3474	1/1	0.97	0.04	27,27,27,27	0
57	MG	2A	3144	1/1	0.97	0.12	29,29,29,29	0
57	MG	2a	1746	1/1	0.97	0.07	59,59,59,59	0
57	MG	1A	3285	1/1	0.97	0.04	34,34,34,34	0
57	MG	2A	3424	1/1	0.97	0.22	40,40,40,40	0
57	MG	2A	3425	1/1	0.97	0.22	48,48,48,48	0
57	MG	2a	1750	1/1	0.97	0.05	59,59,59,59	0
57	MG	2a	1751	1/1	0.97	0.06	52,52,52,52	0
57	MG	1A	3477	1/1	0.97	0.11	39,39,39,39	0
57	MG	2A	3427	1/1	0.97	0.12	48,48,48,48	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1N	203	1/1	0.97	0.11	43,43,43,43	0
57	MG	2a	1755	1/1	0.97	0.05	58,58,58,58	0
57	MG	1A	3286	1/1	0.97	0.07	48,48,48,48	0
57	MG	1A	3144	1/1	0.97	0.06	47,47,47,47	0
57	MG	2A	3772	1/1	0.97	0.04	36,36,36,36	0
57	MG	1a	1730	1/1	0.97	0.07	37,37,37,37	0
57	MG	2A	3152	1/1	0.97	0.05	38,38,38,38	0
57	MG	1A	3205	1/1	0.97	0.05	15,15,15,15	0
57	MG	1A	3378	1/1	0.97	0.04	31,31,31,31	0
57	MG	1A	3097	1/1	0.97	0.09	42,42,42,42	0
57	MG	1O	203	1/1	0.97	0.09	42,42,42,42	0
57	MG	2a	1767	1/1	0.97	0.05	53,53,53,53	0
57	MG	2a	1768	1/1	0.97	0.08	64,64,64,64	0
57	MG	1O	204	1/1	0.97	0.09	45,45,45,45	0
57	MG	1A	3963	1/1	0.97	0.05	21,21,21,21	0
57	MG	2A	3781	1/1	0.97	0.13	35,35,35,35	0
57	MG	1P	202	1/1	0.97	0.15	19,19,19,19	0
57	MG	2A	3785	1/1	0.97	0.05	47,47,47,47	0
57	MG	2A	3787	1/1	0.97	0.07	45,45,45,45	0
57	MG	2a	1776	1/1	0.97	0.07	53,53,53,53	0
57	MG	1A	3146	1/1	0.97	0.33	29,29,29,29	0
57	MG	1A	3620	1/1	0.97	0.09	7,7,7,7	0
57	MG	2a	1779	1/1	0.97	0.10	35,35,35,35	0
57	MG	2a	1781	1/1	0.97	0.09	30,30,30,30	0
57	MG	1A	3621	1/1	0.97	0.06	33,33,33,33	0
57	MG	2A	3163	1/1	0.97	0.10	40,40,40,40	0
57	MG	1A	3967	1/1	0.97	0.06	54,54,54,54	0
57	MG	2A	3794	1/1	0.97	0.06	48,48,48,48	0
57	MG	1A	3969	1/1	0.97	0.08	34,34,34,34	0
57	MG	1A	3044	1/1	0.97	0.04	16,16,16,16	0
57	MG	2A	3167	1/1	0.97	0.25	52,52,52,52	0
57	MG	1A	3067	1/1	0.97	0.11	35,35,35,35	0
57	MG	1A	3152	1/1	0.97	0.14	23,23,23,23	0
57	MG	1A	3212	1/1	0.97	0.08	37,37,37,37	0
57	MG	1a	1750	1/1	0.97	0.08	30,30,30,30	0
57	MG	2a	1793	1/1	0.97	0.19	50,50,50,50	0
57	MG	1A	3213	1/1	0.97	0.18	21,21,21,21	0
57	MG	2a	1795	1/1	0.97	0.12	47,47,47,47	0
57	MG	1A	3490	1/1	0.97	0.13	37,37,37,37	0
57	MG	2A	3456	1/1	0.97	0.13	34,34,34,34	0
57	MG	2A	3805	1/1	0.97	0.05	35,35,35,35	0
57	MG	1S	201	1/1	0.97	0.25	37,37,37,37	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3459	1/1	0.97	0.23	45,45,45,45	0
57	MG	1S	202	1/1	0.97	0.04	37,37,37,37	0
57	MG	1A	3630	1/1	0.97	0.06	19,19,19,19	0
57	MG	1a	1757	1/1	0.97	0.05	41,41,41,41	0
57	MG	1A	3491	1/1	0.97	0.08	45,45,45,45	0
57	MG	2A	3179	1/1	0.97	0.05	37,37,37,37	0
57	MG	2A	3180	1/1	0.97	0.06	36,36,36,36	0
57	MG	1A	3299	1/1	0.97	0.21	23,23,23,23	0
57	MG	1A	3983	1/1	0.97	0.05	48,48,48,48	0
57	MG	2A	3183	1/1	0.97	0.09	56,56,56,56	0
57	MG	1T	204	1/1	0.97	0.06	37,37,37,37	0
57	MG	1A	3636	1/1	0.97	0.04	22,22,22,22	0
57	MG	2A	3821	1/1	0.97	0.06	40,40,40,40	0
57	MG	1A	3799	1/1	0.97	0.04	16,16,16,16	0
57	MG	1U	206	1/1	0.97	0.31	40,40,40,40	0
57	MG	1U	207	1/1	0.97	0.11	23,23,23,23	0
57	MG	1U	208	1/1	0.97	0.23	32,32,32,32	0
57	MG	1A	3215	1/1	0.97	0.07	32,32,32,32	0
57	MG	2A	3477	1/1	0.97	0.08	46,46,46,46	0
57	MG	1A	3638	1/1	0.97	0.05	27,27,27,27	0
57	MG	1a	1770	1/1	0.97	0.04	37,37,37,37	0
57	MG	1a	1771	1/1	0.97	0.05	50,50,50,50	0
57	MG	1A	3988	1/1	0.97	0.11	18,18,18,18	0
57	MG	1A	3012	1/1	0.97	0.03	19,19,19,19	0
57	MG	1V	206	1/1	0.97	0.08	28,28,28,28	0
57	MG	1A	3101	1/1	0.97	0.10	19,19,19,19	0
57	MG	1V	209	1/1	0.97	0.05	27,27,27,27	0
57	MG	1A	3156	1/1	0.97	0.06	28,28,28,28	0
57	MG	2A	3487	1/1	0.97	0.05	17,17,17,17	0
57	MG	1W	201	1/1	0.97	0.09	32,32,32,32	0
57	MG	1A	3071	1/1	0.97	0.11	17,17,17,17	0
57	MG	1a	1781	1/1	0.97	0.06	48,48,48,48	0
57	MG	2A	3845	1/1	0.97	0.05	45,45,45,45	0
57	MG	2A	3493	1/1	0.97	0.05	45,45,45,45	0
57	MG	1A	3046	1/1	0.97	0.05	20,20,20,20	0
57	MG	2A	3205	1/1	0.97	0.23	48,48,48,48	0
57	MG	1A	3308	1/1	0.97	0.07	24,24,24,24	0
57	MG	1A	3107	1/1	0.97	0.12	22,22,22,22	0
57	MG	1a	1786	1/1	0.97	0.05	55,55,55,55	0
57	MG	1a	1787	1/1	0.97	0.06	48,48,48,48	0
57	MG	1A	3810	1/1	0.97	0.04	27,27,27,27	0
57	MG	1A	3161	1/1	0.97	0.07	26,26,26,26	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3212	1/1	0.97	0.06	37,37,37,37	0
57	MG	1A	3162	1/1	0.97	0.05	22,22,22,22	0
57	MG	2A	3504	1/1	0.97	0.17	37,37,37,37	0
57	MG	2A	3861	1/1	0.97	0.05	40,40,40,40	0
57	MG	2A	3862	1/1	0.97	0.06	27,27,27,27	0
57	MG	2A	3863	1/1	0.97	0.05	30,30,30,30	0
57	MG	1A	3226	1/1	0.97	0.09	29,29,29,29	0
57	MG	1X	106	1/1	0.97	0.04	37,37,37,37	0
57	MG	1A	3816	1/1	0.97	0.06	34,34,34,34	0
57	MG	1A	3505	1/1	0.97	0.09	41,41,41,41	0
57	MG	1A	4002	1/1	0.97	0.03	6,6,6,6	0
57	MG	1A	3652	1/1	0.97	0.06	27,27,27,27	0
57	MG	1A	3029	1/1	0.97	0.15	22,22,22,22	0
57	MG	1A	3509	1/1	0.97	0.07	44,44,44,44	0
57	MG	1A	3110	1/1	0.97	0.14	25,25,25,25	0
57	MG	1A	4010	1/1	0.97	0.05	12,12,12,12	0
57	MG	1A	3031	1/1	0.97	0.11	11,11,11,11	0
57	MG	1A	3827	1/1	0.97	0.09	17,17,17,17	0
57	MG	1A	4014	1/1	0.97	0.06	31,31,31,31	0
57	MG	10	104	1/1	0.97	0.05	28,28,28,28	0
57	MG	1A	3829	1/1	0.97	0.07	30,30,30,30	0
57	MG	1A	3515	1/1	0.97	0.16	23,23,23,23	0
57	MG	1A	3231	1/1	0.97	0.07	19,19,19,19	0
57	MG	2x	101	1/1	0.97	0.09	29,29,29,29	0
57	MG	1A	4019	1/1	0.97	0.08	33,33,33,33	0
57	MG	1A	3517	1/1	0.97	0.21	30,30,30,30	0
57	MG	2A	3234	1/1	0.97	0.12	25,25,25,25	0
57	MG	1f	202	1/1	0.97	0.09	43,43,43,43	0
57	MG	1k	201	1/1	0.97	0.08	33,33,33,33	0
57	MG	1A	3318	1/1	0.97	0.08	37,37,37,37	0
57	MG	1A	4023	1/1	0.97	0.10	28,28,28,28	0
57	MG	2A	3239	1/1	0.97	0.08	43,43,43,43	0
57	MG	1A	3834	1/1	0.97	0.05	37,37,37,37	0
57	MG	1A	3520	1/1	0.97	0.05	33,33,33,33	0
57	MG	1A	3521	1/1	0.97	0.12	49,49,49,49	0
58	K	2A	3472	1/1	0.97	0.06	41,41,41,41	0
57	MG	2A	3537	1/1	0.97	0.07	26,26,26,26	0
57	MG	1A	3049	1/1	0.97	0.04	10,10,10,10	0
60	ZN	14	102	1/1	0.97	0.06	58,58,58,58	0
57	MG	1A	3320	1/1	0.97	0.06	24,24,24,24	0
57	MG	1A	3665	1/1	0.97	0.03	20,20,20,20	0
57	MG	1A	3237	1/1	0.98	0.16	24,24,24,24	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3108	1/1	0.98	0.11	22,22,22,22	0
57	MG	1A	3578	1/1	0.98	0.14	33,33,33,33	0
57	MG	1A	3239	1/1	0.98	0.05	25,25,25,25	0
57	MG	1A	3787	1/1	0.98	0.08	13,13,13,13	0
57	MG	1A	3423	1/1	0.98	0.07	35,35,35,35	0
57	MG	2A	3737	1/1	0.98	0.05	51,51,51,51	0
57	MG	1A	3023	1/1	0.98	0.04	9,9,9,9	0
57	MG	1U	201	1/1	0.98	0.15	27,27,27,27	0
57	MG	2A	3489	1/1	0.98	0.14	37,37,37,37	0
57	MG	1A	3242	1/1	0.98	0.07	22,22,22,22	0
57	MG	2A	3491	1/1	0.98	0.03	31,31,31,31	0
57	MG	1A	4051	1/1	0.98	0.05	23,23,23,23	0
57	MG	2A	3060	1/1	0.98	0.05	34,34,34,34	0
57	MG	1U	204	1/1	0.98	0.12	25,25,25,25	0
57	MG	1U	205	1/1	0.98	0.16	24,24,24,24	0
57	MG	1A	3791	1/1	0.98	0.03	33,33,33,33	0
57	MG	1A	3678	1/1	0.98	0.06	14,14,14,14	0
57	MG	1A	3072	1/1	0.98	0.04	9,9,9,9	0
57	MG	1A	3244	1/1	0.98	0.05	32,32,32,32	0
57	MG	1A	3362	1/1	0.98	0.06	37,37,37,37	0
57	MG	2A	3282	1/1	0.98	0.04	33,33,33,33	0
57	MG	1V	201	1/1	0.98	0.16	22,22,22,22	0
57	MG	1V	203	1/1	0.98	0.27	35,35,35,35	0
57	MG	1A	3363	1/1	0.98	0.05	36,36,36,36	0
57	MG	2A	3756	1/1	0.98	0.04	42,42,42,42	0
57	MG	1A	3798	1/1	0.98	0.07	35,35,35,35	0
57	MG	1A	3430	1/1	0.98	0.04	29,29,29,29	0
57	MG	1V	207	1/1	0.98	0.18	23,23,23,23	0
57	MG	1A	3589	1/1	0.98	0.04	30,30,30,30	0
57	MG	1A	3590	1/1	0.98	0.22	38,38,38,38	0
57	MG	2A	3511	1/1	0.98	0.06	45,45,45,45	0
57	MG	1A	3502	1/1	0.98	0.07	51,51,51,51	0
57	MG	1a	1721	1/1	0.98	0.11	26,26,26,26	0
57	MG	1A	3160	1/1	0.98	0.06	22,22,22,22	0
57	MG	1A	3432	1/1	0.98	0.14	27,27,27,27	0
57	MG	1A	3691	1/1	0.98	0.04	29,29,29,29	0
57	MG	1A	3132	1/1	0.98	0.04	16,16,16,16	0
57	MG	2a	1661	1/1	0.98	0.15	54,54,54,54	0
57	MG	2a	1662	1/1	0.98	0.04	32,32,32,32	0
57	MG	1W	205	1/1	0.98	0.09	31,31,31,31	0
57	MG	1A	3199	1/1	0.98	0.08	32,32,32,32	0
57	MG	1A	4070	1/1	0.98	0.11	26,26,26,26	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1a	1729	1/1	0.98	0.06	46,46,46,46	0
57	MG	1W	208	1/1	0.98	0.05	24,24,24,24	0
57	MG	1A	3507	1/1	0.98	0.04	13,13,13,13	0
57	MG	1a	1732	1/1	0.98	0.04	28,28,28,28	0
57	MG	1A	4072	1/1	0.98	0.04	15,15,15,15	0
57	MG	1A	3696	1/1	0.98	0.02	22,22,22,22	0
57	MG	1X	104	1/1	0.98	0.18	45,45,45,45	0
57	MG	1X	105	1/1	0.98	0.09	24,24,24,24	0
57	MG	1A	3811	1/1	0.98	0.02	15,15,15,15	0
57	MG	1A	4076	1/1	0.98	0.04	17,17,17,17	0
57	MG	1A	3508	1/1	0.98	0.07	39,39,39,39	0
57	MG	2A	3783	1/1	0.98	0.10	34,34,34,34	0
57	MG	2A	3784	1/1	0.98	0.05	43,43,43,43	0
57	MG	2A	3533	1/1	0.98	0.03	26,26,26,26	0
57	MG	2A	3786	1/1	0.98	0.04	47,47,47,47	0
57	MG	1a	1740	1/1	0.98	0.06	31,31,31,31	0
57	MG	2A	3788	1/1	0.98	0.09	48,48,48,48	0
57	MG	1A	3813	1/1	0.98	0.05	31,31,31,31	0
57	MG	2A	3313	1/1	0.98	0.14	52,52,52,52	0
57	MG	2a	1685	1/1	0.98	0.24	45,45,45,45	0
57	MG	1A	3133	1/1	0.98	0.13	22,22,22,22	0
57	MG	1A	3201	1/1	0.98	0.07	16,16,16,16	0
57	MG	1a	1744	1/1	0.98	0.07	33,33,33,33	0
57	MG	1A	3938	1/1	0.98	0.07	36,36,36,36	0
57	MG	1A	3700	1/1	0.98	0.04	32,32,32,32	0
57	MG	1A	4083	1/1	0.98	0.09	28,28,28,28	0
57	MG	1A	3163	1/1	0.98	0.28	23,23,23,23	0
57	MG	1A	3512	1/1	0.98	0.14	19,19,19,19	0
57	MG	1A	3942	1/1	0.98	0.04	40,40,40,40	0
57	MG	1A	3943	1/1	0.98	0.03	43,43,43,43	0
57	MG	1A	4089	1/1	0.98	0.04	22,22,22,22	0
57	MG	2a	1697	1/1	0.98	0.09	33,33,33,33	0
57	MG	1A	4090	1/1	0.98	0.06	34,34,34,34	0
57	MG	2A	3551	1/1	0.98	0.08	31,31,31,31	0
57	MG	1A	3513	1/1	0.98	0.04	16,16,16,16	0
57	MG	1A	3820	1/1	0.98	0.06	24,24,24,24	0
57	MG	2A	3328	1/1	0.98	0.07	32,32,32,32	0
57	MG	1A	3082	1/1	0.98	0.07	25,25,25,25	0
57	MG	2A	3556	1/1	0.98	0.05	47,47,47,47	0
57	MG	1A	3165	1/1	0.98	0.03	28,28,28,28	0
57	MG	1A	3823	1/1	0.98	0.04	32,32,32,32	0
57	MG	1A	3372	1/1	0.98	0.15	29,29,29,29	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	2A	3812	1/1	0.98	0.04	41,41,41,41	0
57	MG	1A	3950	1/1	0.98	0.04	38,38,38,38	0
57	MG	1A	3826	1/1	0.98	0.03	28,28,28,28	0
57	MG	2A	3123	1/1	0.98	0.04	37,37,37,37	0
57	MG	1A	4099	1/1	0.98	0.14	40,40,40,40	0
57	MG	2A	3817	1/1	0.98	0.07	36,36,36,36	0
57	MG	13	102	1/1	0.98	0.09	39,39,39,39	0
57	MG	2A	3567	1/1	0.98	0.04	28,28,28,28	0
57	MG	1A	3707	1/1	0.98	0.07	10,10,10,10	0
57	MG	2A	3569	1/1	0.98	0.06	52,52,52,52	0
57	MG	2A	3570	1/1	0.98	0.07	55,55,55,55	0
57	MG	13	104	1/1	0.98	0.04	28,28,28,28	0
57	MG	1A	3828	1/1	0.98	0.11	20,20,20,20	0
57	MG	1A	3315	1/1	0.98	0.03	31,31,31,31	0
57	MG	15	101	1/1	0.98	0.18	24,24,24,24	0
57	MG	1A	3519	1/1	0.98	0.07	38,38,38,38	0
57	MG	15	105	1/1	0.98	0.13	28,28,28,28	0
57	MG	1a	1773	1/1	0.98	0.04	55,55,55,55	0
57	MG	1A	3166	1/1	0.98	0.13	29,29,29,29	0
57	MG	15	107	1/1	0.98	0.08	23,23,23,23	0
57	MG	1A	3444	1/1	0.98	0.10	21,21,21,21	0
57	MG	2a	1729	1/1	0.98	0.12	48,48,48,48	0
57	MG	1A	3206	1/1	0.98	0.05	16,16,16,16	0
57	MG	1A	3376	1/1	0.98	0.08	23,23,23,23	0
57	MG	2A	3584	1/1	0.98	0.04	29,29,29,29	0
57	MG	2A	3585	1/1	0.98	0.09	29,29,29,29	0
57	MG	16	102	1/1	0.98	0.10	24,24,24,24	0
57	MG	1A	3256	1/1	0.98	0.03	16,16,16,16	0
57	MG	2A	3841	1/1	0.98	0.06	33,33,33,33	0
57	MG	17	102	1/1	0.98	0.04	17,17,17,17	0
57	MG	1a	1782	1/1	0.98	0.04	56,56,56,56	0
57	MG	1A	3167	1/1	0.98	0.05	22,22,22,22	0
57	MG	1A	3717	1/1	0.98	0.04	51,51,51,51	0
57	MG	1A	3096	1/1	0.98	0.05	9,9,9,9	0
57	MG	1A	3380	1/1	0.98	0.04	20,20,20,20	0
57	MG	1A	3136	1/1	0.98	0.06	33,33,33,33	0
57	MG	1a	1788	1/1	0.98	0.03	38,38,38,38	0
57	MG	2A	3597	1/1	0.98	0.08	51,51,51,51	0
57	MG	18	101	1/1	0.98	0.10	37,37,37,37	0
57	MG	2A	3150	1/1	0.98	0.04	28,28,28,28	0
57	MG	1A	3452	1/1	0.98	0.07	40,40,40,40	0
57	MG	2A	3602	1/1	0.98	0.04	28,28,28,28	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3968	1/1	0.98	0.05	27,27,27,27	0
57	MG	2A	3858	1/1	0.98	0.06	37,37,37,37	0
57	MG	2A	3859	1/1	0.98	0.09	41,41,41,41	0
57	MG	1B	216	1/1	0.98	0.04	34,34,34,34	0
57	MG	1a	1793	1/1	0.98	0.05	47,47,47,47	0
57	MG	1A	3530	1/1	0.98	0.17	25,25,25,25	0
57	MG	1a	1796	1/1	0.98	0.04	51,51,51,51	0
57	MG	1a	1797	1/1	0.98	0.04	60,60,60,60	0
57	MG	2A	3865	1/1	0.98	0.04	44,44,44,44	0
57	MG	1A	3531	1/1	0.98	0.04	20,20,20,20	0
57	MG	1B	219	1/1	0.98	0.04	35,35,35,35	0
57	MG	1a	1603	1/1	0.98	0.11	42,42,42,42	0
57	MG	2a	1762	1/1	0.98	0.04	41,41,41,41	0
57	MG	1a	1801	1/1	0.98	0.04	49,49,49,49	0
57	MG	1B	220	1/1	0.98	0.05	42,42,42,42	0
57	MG	1A	3063	1/1	0.98	0.06	27,27,27,27	0
57	MG	2A	3873	1/1	0.98	0.07	37,37,37,37	0
57	MG	2A	3615	1/1	0.98	0.08	43,43,43,43	0
57	MG	1B	222	1/1	0.98	0.03	28,28,28,28	0
57	MG	1a	1805	1/1	0.98	0.07	48,48,48,48	0
57	MG	1A	3084	1/1	0.98	0.13	18,18,18,18	0
57	MG	1A	3973	1/1	0.98	0.05	38,38,38,38	0
57	MG	1A	3625	1/1	0.98	0.07	25,25,25,25	0
57	MG	2a	1774	1/1	0.98	0.05	48,48,48,48	0
57	MG	1A	3015	1/1	0.98	0.09	27,27,27,27	0
57	MG	1A	3627	1/1	0.98	0.09	32,32,32,32	0
57	MG	1a	1811	1/1	0.98	0.03	31,31,31,31	0
57	MG	2A	3624	1/1	0.98	0.11	29,29,29,29	0
57	MG	1A	3387	1/1	0.98	0.10	22,22,22,22	0
57	MG	2a	1780	1/1	0.98	0.08	52,52,52,52	0
57	MG	1A	3116	1/1	0.98	0.06	18,18,18,18	0
57	MG	1A	3266	1/1	0.98	0.04	35,35,35,35	0
57	MG	2A	3628	1/1	0.98	0.07	36,36,36,36	0
57	MG	1A	3982	1/1	0.98	0.03	30,30,30,30	0
57	MG	1A	3632	1/1	0.98	0.03	28,28,28,28	0
57	MG	1A	3214	1/1	0.98	0.08	23,23,23,23	0
57	MG	1f	201	1/1	0.98	0.08	38,38,38,38	0
57	MG	2A	3634	1/1	0.98	0.05	22,22,22,22	0
57	MG	1a	1618	1/1	0.98	0.09	41,41,41,41	0
57	MG	1A	3634	1/1	0.98	0.05	11,11,11,11	0
57	MG	2A	3637	1/1	0.98	0.09	40,40,40,40	0
57	MG	1a	1620	1/1	0.98	0.05	41,41,41,41	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1l	202	1/1	0.98	0.07	41,41,41,41	0
57	MG	1A	3735	1/1	0.98	0.03	22,22,22,22	0
57	MG	1A	3174	1/1	0.98	0.11	19,19,19,19	0
57	MG	1A	3175	1/1	0.98	0.07	27,27,27,27	0
57	MG	1A	3035	1/1	0.98	0.09	16,16,16,16	0
57	MG	1A	3331	1/1	0.98	0.09	39,39,39,39	0
57	MG	1A	3218	1/1	0.98	0.08	33,33,33,33	0
57	MG	1D	309	1/1	0.98	0.06	34,34,34,34	0
57	MG	1D	310	1/1	0.98	0.05	29,29,29,29	0
57	MG	1a	1630	1/1	0.98	0.05	41,41,41,41	0
57	MG	1A	3177	1/1	0.98	0.04	18,18,18,18	0
57	MG	2A	3651	1/1	0.98	0.13	44,44,44,44	0
57	MG	2A	3193	1/1	0.98	0.16	43,43,43,43	0
57	MG	1A	3059	1/1	0.98	0.05	26,26,26,26	0
57	MG	1D	313	1/1	0.98	0.07	31,31,31,31	0
57	MG	1A	3143	1/1	0.98	0.07	36,36,36,36	0
57	MG	1A	3003	1/1	0.98	0.04	20,20,20,20	0
57	MG	2A	3657	1/1	0.98	0.06	46,46,46,46	0
57	MG	1A	3103	1/1	0.98	0.05	40,40,40,40	0
57	MG	1w	108	1/1	0.98	0.06	48,48,48,48	0
57	MG	1E	304	1/1	0.98	0.07	27,27,27,27	0
57	MG	1a	1638	1/1	0.98	0.14	37,37,37,37	0
57	MG	1E	305	1/1	0.98	0.11	23,23,23,23	0
57	MG	1A	3867	1/1	0.98	0.03	28,28,28,28	0
57	MG	1A	3645	1/1	0.98	0.10	10,10,10,10	0
57	MG	1A	3747	1/1	0.98	0.07	32,32,32,32	0
57	MG	1A	3224	1/1	0.98	0.09	31,31,31,31	0
57	MG	2F	305	1/1	0.98	0.17	40,40,40,40	0
57	MG	1A	3078	1/1	0.98	0.06	22,22,22,22	0
57	MG	1E	311	1/1	0.98	0.05	24,24,24,24	0
57	MG	1A	3403	1/1	0.98	0.10	34,34,34,34	0
57	MG	1A	3147	1/1	0.98	0.04	26,26,26,26	0
57	MG	1A	4004	1/1	0.98	0.13	14,14,14,14	0
57	MG	1F	301	1/1	0.98	0.04	22,22,22,22	0
57	MG	1F	304	1/1	0.98	0.06	21,21,21,21	0
57	MG	1A	4005	1/1	0.98	0.04	25,25,25,25	0
57	MG	1a	1652	1/1	0.98	0.07	31,31,31,31	0
57	MG	1a	1653	1/1	0.98	0.06	36,36,36,36	0
57	MG	1A	4006	1/1	0.98	0.04	32,32,32,32	0
57	MG	2A	3218	1/1	0.98	0.11	42,42,42,42	0
57	MG	1F	307	1/1	0.98	0.08	25,25,25,25	0
57	MG	1A	3650	1/1	0.98	0.03	19,19,19,19	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3753	1/1	0.98	0.05	25,25,25,25	0
57	MG	2A	3007	1/1	0.98	0.16	41,41,41,41	0
57	MG	1A	3754	1/1	0.98	0.05	33,33,33,33	0
57	MG	2f	201	1/1	0.98	0.07	41,41,41,41	0
57	MG	1A	3755	1/1	0.98	0.06	39,39,39,39	0
57	MG	1A	4011	1/1	0.98	0.03	16,16,16,16	0
57	MG	1a	1661	1/1	0.98	0.03	36,36,36,36	0
57	MG	1A	3282	1/1	0.98	0.12	18,18,18,18	0
57	MG	1A	3475	1/1	0.98	0.05	21,21,21,21	0
57	MG	1A	3284	1/1	0.98	0.15	22,22,22,22	0
57	MG	1A	3557	1/1	0.98	0.31	30,30,30,30	0
57	MG	1A	3558	1/1	0.98	0.08	23,23,23,23	0
57	MG	2A	3445	1/1	0.98	0.08	45,45,45,45	0
57	MG	1A	3148	1/1	0.98	0.05	21,21,21,21	0
57	MG	1A	4018	1/1	0.98	0.04	25,25,25,25	0
57	MG	1A	3105	1/1	0.98	0.06	18,18,18,18	0
57	MG	1A	4020	1/1	0.98	0.05	45,45,45,45	0
57	MG	1A	3229	1/1	0.98	0.05	18,18,18,18	0
57	MG	1a	1672	1/1	0.98	0.04	40,40,40,40	0
57	MG	1A	3150	1/1	0.98	0.16	21,21,21,21	0
57	MG	1A	3123	1/1	0.98	0.11	25,25,25,25	0
57	MG	2v	102	1/1	0.98	0.05	45,45,45,45	0
57	MG	2A	3454	1/1	0.98	0.09	40,40,40,40	0
57	MG	1A	3889	1/1	0.98	0.06	18,18,18,18	0
57	MG	2A	3027	1/1	0.98	0.05	30,30,30,30	0
57	MG	1A	3890	1/1	0.98	0.06	32,32,32,32	0
57	MG	2A	3458	1/1	0.98	0.14	34,34,34,34	0
57	MG	1A	3768	1/1	0.98	0.04	24,24,24,24	0
57	MG	1A	4027	1/1	0.98	0.04	31,31,31,31	0
57	MG	1A	3412	1/1	0.98	0.06	46,46,46,46	0
57	MG	1A	3106	1/1	0.98	0.09	23,23,23,23	0
57	MG	2A	3033	1/1	0.98	0.03	35,35,35,35	0
57	MG	1P	201	1/1	0.98	0.05	23,23,23,23	0
57	MG	1A	3293	1/1	0.98	0.11	25,25,25,25	0
57	MG	1A	4031	1/1	0.98	0.04	48,48,48,48	0
57	MG	1A	3125	1/1	0.98	0.16	24,24,24,24	0
57	MG	2A	3716	1/1	0.98	0.06	35,35,35,35	0
57	MG	2A	3038	1/1	0.98	0.03	32,32,32,32	0
57	MG	2A	3039	1/1	0.98	0.03	27,27,27,27	0
57	MG	1A	3569	1/1	0.98	0.09	18,18,18,18	0
57	MG	2A	3720	1/1	0.98	0.06	37,37,37,37	0
57	MG	1A	3774	1/1	0.98	0.06	25,25,25,25	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3154	1/1	0.98	0.06	25,25,25,25	0
57	MG	1A	3050	1/1	0.98	0.15	28,28,28,28	0
58	K	1A	3564	1/1	0.98	0.03	17,17,17,17	0
57	MG	1A	3778	1/1	0.98	0.04	19,19,19,19	0
57	MG	1A	3127	1/1	0.98	0.13	32,32,32,32	0
57	MG	1R	201	1/1	0.98	0.05	24,24,24,24	0
57	MG	1A	3669	1/1	0.98	0.03	29,29,29,29	0
60	ZN	2Y	501	1/1	0.98	0.05	87,87,87,87	0
57	MG	1A	3354	1/1	0.98	0.12	27,27,27,27	0
57	MG	1A	3904	1/1	0.98	0.04	26,26,26,26	0
57	MG	1A	3689	1/1	0.99	0.05	25,25,25,25	0
57	MG	1A	3251	1/1	0.99	0.05	34,34,34,34	0
57	MG	2A	3678	1/1	0.99	0.04	26,26,26,26	0
57	MG	1A	3588	1/1	0.99	0.09	25,25,25,25	0
57	MG	2A	3866	1/1	0.99	0.12	29,29,29,29	0
57	MG	1A	4062	1/1	0.99	0.04	33,33,33,33	0
57	MG	1A	3692	1/1	0.99	0.02	21,21,21,21	0
57	MG	1A	3386	1/1	0.99	0.10	20,20,20,20	0
57	MG	1A	3240	1/1	0.99	0.04	15,15,15,15	0
57	MG	2A	3509	1/1	0.99	0.03	55,55,55,55	0
57	MG	2A	3595	1/1	0.99	0.05	35,35,35,35	0
57	MG	1A	3283	1/1	0.99	0.05	30,30,30,30	0
57	MG	1A	3960	1/1	0.99	0.03	33,33,33,33	0
57	MG	1A	3303	1/1	0.99	0.07	21,21,21,21	0
57	MG	1a	1756	1/1	0.99	0.03	33,33,33,33	0
57	MG	1B	226	1/1	0.99	0.03	27,27,27,27	0
57	MG	2A	3601	1/1	0.99	0.03	38,38,38,38	0
57	MG	1A	3304	1/1	0.99	0.06	16,16,16,16	0
57	MG	1a	1622	1/1	0.99	0.04	39,39,39,39	0
57	MG	1A	3776	1/1	0.99	0.03	38,38,38,38	0
57	MG	1A	3086	1/1	0.99	0.11	28,28,28,28	0
57	MG	1A	3068	1/1	0.99	0.03	24,24,24,24	0
57	MG	1A	3779	1/1	0.99	0.02	33,33,33,33	0
57	MG	1a	1764	1/1	0.99	0.07	35,35,35,35	0
57	MG	1A	3095	1/1	0.99	0.02	12,12,12,12	0
57	MG	1A	4075	1/1	0.99	0.06	30,30,30,30	0
57	MG	1B	234	1/1	0.99	0.03	38,38,38,38	0
57	MG	1A	3871	1/1	0.99	0.06	10,10,10,10	0
57	MG	1B	236	1/1	0.99	0.03	22,22,22,22	0
57	MG	1D	301	1/1	0.99	0.09	17,17,17,17	0
57	MG	1A	3919	1/1	0.99	0.01	18,18,18,18	0
57	MG	1A	3825	1/1	0.99	0.03	10,10,10,10	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3287	1/1	0.99	0.05	25,25,25,25	0
57	MG	2A	3531	1/1	0.99	0.04	32,32,32,32	0
57	MG	2A	3064	1/1	0.99	0.04	55,55,55,55	0
57	MG	1A	3631	1/1	0.99	0.05	30,30,30,30	0
57	MG	1A	3514	1/1	0.99	0.07	25,25,25,25	0
57	MG	1A	3974	1/1	0.99	0.04	44,44,44,44	0
57	MG	1A	3975	1/1	0.99	0.04	54,54,54,54	0
57	MG	13	101	1/1	0.99	0.06	23,23,23,23	0
57	MG	2A	3070	1/1	0.99	0.07	26,26,26,26	0
57	MG	1A	4084	1/1	0.99	0.04	29,29,29,29	0
57	MG	2A	3540	1/1	0.99	0.03	26,26,26,26	0
57	MG	1A	3599	1/1	0.99	0.10	41,41,41,41	0
57	MG	2A	3542	1/1	0.99	0.12	33,33,33,33	0
57	MG	1A	3489	1/1	0.99	0.14	30,30,30,30	0
57	MG	2A	3631	1/1	0.99	0.04	32,32,32,32	0
57	MG	1A	3128	1/1	0.99	0.08	37,37,37,37	0
57	MG	1A	3069	1/1	0.99	0.06	9,9,9,9	0
57	MG	1A	3443	1/1	0.99	0.07	20,20,20,20	0
57	MG	15	102	1/1	0.99	0.06	23,23,23,23	0
57	MG	1A	3709	1/1	0.99	0.03	21,21,21,21	0
57	MG	2A	3079	1/1	0.99	0.10	21,21,21,21	0
57	MG	2A	3728	1/1	0.99	0.06	40,40,40,40	0
57	MG	15	104	1/1	0.99	0.20	24,24,24,24	0
57	MG	1A	4034	1/1	0.99	0.05	19,19,19,19	0
57	MG	1A	3573	1/1	0.99	0.12	21,21,21,21	0
57	MG	1A	3005	1/1	0.99	0.07	27,27,27,27	0
57	MG	2A	3009	1/1	0.99	0.08	29,29,29,29	0
57	MG	1A	3792	1/1	0.99	0.04	25,25,25,25	0
57	MG	1A	3575	1/1	0.99	0.09	30,30,30,30	0
57	MG	2A	3645	1/1	0.99	0.04	27,27,27,27	0
57	MG	2A	3557	1/1	0.99	0.05	36,36,36,36	0
57	MG	1A	3839	1/1	0.99	0.05	29,29,29,29	0
57	MG	1a	1794	1/1	0.99	0.03	36,36,36,36	0
57	MG	2A	3560	1/1	0.99	0.06	30,30,30,30	0
57	MG	2A	3832	1/1	0.99	0.03	23,23,23,23	0
57	MG	2P	201	1/1	0.99	0.07	52,52,52,52	0
57	MG	1A	3935	1/1	0.99	0.02	4,4,4,4	0
57	MG	1A	3291	1/1	0.99	0.05	37,37,37,37	0
57	MG	1A	3273	1/1	0.99	0.05	39,39,39,39	0
57	MG	2A	3836	1/1	0.99	0.05	32,32,32,32	0
57	MG	1A	3609	1/1	0.99	0.10	15,15,15,15	0
57	MG	2a	1764	1/1	0.99	0.08	54,54,54,54	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	1A	3013	1/1	0.99	0.08	11,11,11,11	0
57	MG	1V	202	1/1	0.99	0.13	18,18,18,18	0
57	MG	1A	3260	1/1	0.99	0.03	29,29,29,29	0
57	MG	2A	3096	1/1	0.99	0.06	30,30,30,30	0
57	MG	1A	3680	1/1	0.99	0.04	15,15,15,15	0
57	MG	2A	3329	1/1	0.99	0.11	26,26,26,26	0
57	MG	2A	3844	1/1	0.99	0.03	25,25,25,25	0
57	MG	1F	302	1/1	0.99	0.04	28,28,28,28	0
57	MG	2A	3846	1/1	0.99	0.04	45,45,45,45	0
57	MG	1F	303	1/1	0.99	0.15	23,23,23,23	0
57	MG	1A	3014	1/1	0.99	0.09	19,19,19,19	0
57	MG	2A	3574	1/1	0.99	0.04	36,36,36,36	0
57	MG	1A	3758	1/1	0.99	0.04	16,16,16,16	0
57	MG	1A	3262	1/1	0.99	0.05	36,36,36,36	0
57	MG	1A	3030	1/1	0.99	0.07	16,16,16,16	0
57	MG	2A	3104	1/1	0.99	0.08	22,22,22,22	0
57	MG	1A	3553	1/1	0.99	0.12	22,22,22,22	0
57	MG	1A	3179	1/1	0.99	0.02	10,10,10,10	0
57	MG	1A	4053	1/1	0.99	0.02	22,22,22,22	0
57	MG	1A	3617	1/1	0.99	0.11	31,31,31,31	0
60	ZN	1Y	204	1/1	0.99	0.03	59,59,59,59	0
57	MG	1A	3280	1/1	0.99	0.16	23,23,23,23	0
60	ZN	15	110	1/1	0.99	0.05	35,35,35,35	0
60	ZN	16	103	1/1	0.99	0.03	34,34,34,34	0
60	ZN	1n	104	1/1	0.99	0.03	48,48,48,48	0
57	MG	1A	3765	1/1	0.99	0.04	28,28,28,28	0
57	MG	1A	3809	1/1	0.99	0.05	17,17,17,17	0
60	ZN	25	106	1/1	0.99	0.04	52,52,52,52	0
60	ZN	26	501	1/1	0.99	0.03	47,47,47,47	0
60	ZN	29	102	1/1	0.99	0.04	59,59,59,59	0
57	MG	1A	3384	1/1	0.99	0.04	34,34,34,34	0
61	SF4	1d	302	8/8	0.99	0.05	43,47,53,61	0
61	SF4	2d	303	8/8	0.99	0.04	42,45,50,53	0
60	ZN	19	501	1/1	1.00	0.03	34,34,34,34	0
57	MG	1A	3036	1/1	1.00	0.07	23,23,23,23	0

6.5 Other polymers

There are no such residues in this entry.