Full wwPDB X-ray Structure Validation Report ⓘ

Aug 6, 2026 – 12:08 AM EDT

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-tRNAphe, aminoacylated P-site fMet-tRNAmet, and deacylated E-site tRNAphe at 2.45A 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:

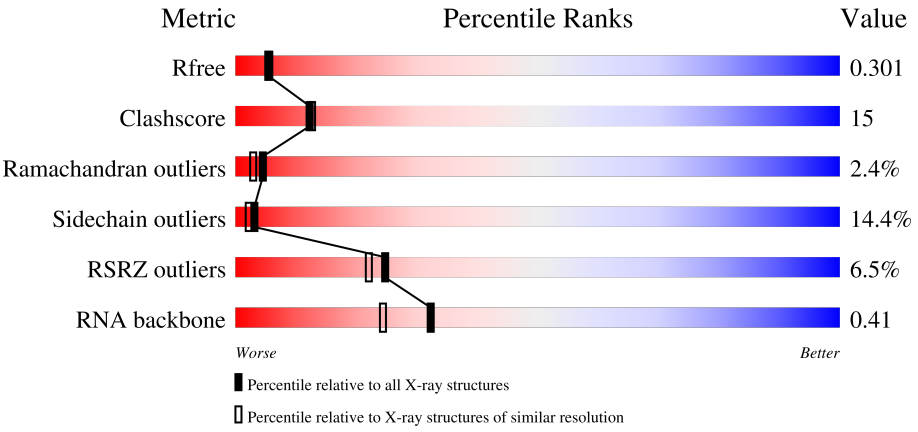
MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.015 (Gargrove)

1 Overall quality at a glance (i)

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 <=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	4% 49% 40% 10% •

Continued on next page...

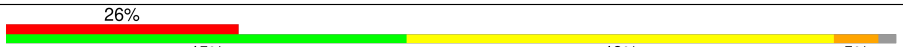
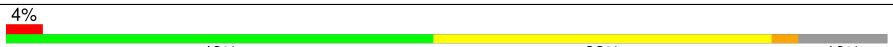
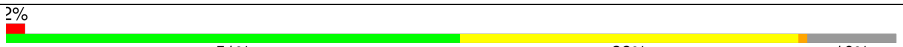
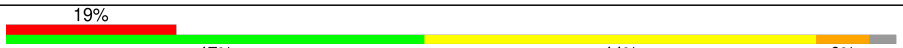
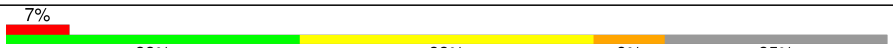
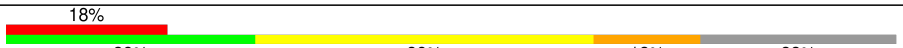
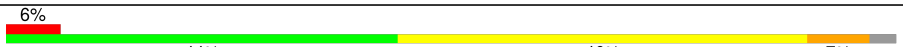
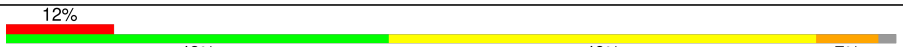
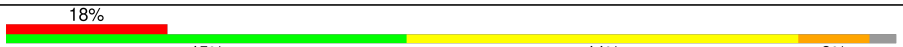
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.50

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	2A	2915	3% 41% 44% 11%
2	1B	121	50% 42% 7%
2	2B	121	6% 26% 56% 17%
3	1D	276	68% 29%
3	2D	276	2% 62% 32% 6%
4	1E	206	59% 33% 7%
4	2E	206	4% 55% 40%
5	1F	210	% 56% 34% 7%
5	2F	210	5% 47% 42% 7%
6	1G	182	% 52% 40% 7%
6	2G	182	30% 40% 49% 9%
7	1H	180	3% 64% 29%
7	2H	180	14% 46% 40% 11%
8	1I	148	4% 46% 41% 11%
8	2I	148	23% 42% 44% 12%
9	1N	140	% 61% 34% 6%
9	2N	140	9% 52% 36% 11%
10	1O	122	61% 34%
10	2O	122	2% 54% 39% 7%
11	1P	150	5% 55% 37% 7%
11	2P	150	6% 52% 41% 5%
12	1Q	141	% 65% 30% 6%
12	2Q	141	6% 46% 47% 7%
13	1R	118	56% 41%
13	2R	118	% 50% 46%

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	32% 42% 39% 14%
27	15	60	2% 75% 22%
27	25	60	5% 82% 13%
28	16	54	57% 35% 6%
28	26	54	9% 48% 43% 7%
29	17	49	2% 57% 37%
29	27	49	4% 59% 35%
30	18	65	2% 63% 29% 6%
30	28	65	9% 55% 37% 6%
31	19	37	3% 57% 43%
31	29	37	16% 49% 41% 11%
32	1a	1521	2% 43% 46% 10%
32	2a	1521	3% 35% 49% 15%
33	1b	256	11% 34% 41% 13% 10%
33	2b	256	27% 34% 46% 10% 10%
34	1c	239	5% 47% 33% 5% 14%
34	2c	239	19% 41% 38% 6% 14%
35	1d	209	2% 56% 36% 7%
35	2d	209	10% 39% 53% 8%
36	1e	162	3% 44% 37% 10% 9%
36	2e	162	7% 38% 44% 9% 9%
37	1f	101	41% 53% 5%
37	2f	101	3% 45% 46% 9%
38	1g	156	12% 54% 35% 10%
38	2g	156	17% 40% 49% 10%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
39	1h	138	2% 57% 41%
39	2h	138	9% 46% 46% 7%
40	1i	128	9% 54% 41% 5%
40	2i	128	41% 48% 41% 9%
41	1j	105	12% 53% 32% 7% 8%
41	2j	105	34% 37% 42% 12% 9%
42	1k	129	5% 59% 26% 12%
42	2k	129	7% 40% 39% 9% 12%
43	1l	132	3% 60% 30% 8%
43	2l	132	5% 53% 34% 5% 8%
44	1m	126	8% 53% 39% 6%
44	2m	126	29% 34% 47% 15%
45	1n	61	3% 62% 33%
45	2n	61	46% 39% 52% 7%
46	1o	89	3% 55% 36% 8%
46	2o	89	3% 54% 39% 6%
47	1p	88	8% 52% 38% 7%
47	2p	88	8% 44% 45% 7%
48	1q	105	3% 50% 38% 7% 6%
48	2q	105	9% 48% 40% 6% 6%
49	1r	88	% 34% 39% 23%
49	2r	88	6% 28% 45% 23%
50	1s	93	3% 42% 41% 6% 11%
50	2s	93	30% 35% 41% 11% 11%
51	1t	106	11% 45% 38% 6% 9%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
51	2t	106	7% 50% 33% 8% 9%
52	1u	27	7% 59% 26% 15%
52	2u	27	56% 44% 33% 7% 15%
53	1v	24	12% 50% 46%
53	2v	24	21% 25% 25% 46%
54	1w	76	16% 26% 45% 22%
54	2w	76	13% 22% 47% 24% 5%
55	1x	77	% 57% 32% 10%
55	2x	77	% 55% 34% 12%
56	1y	76	9% 9% 54% 29% 5%
56	2y	76	14% 22% 45% 26%

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 (i)

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-tRNAphe.

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-tRNAmet.

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 tRNAphe.

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

Continued on next page...

Continued from previous page...

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

Continued on next page...

Continued from previous page...

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

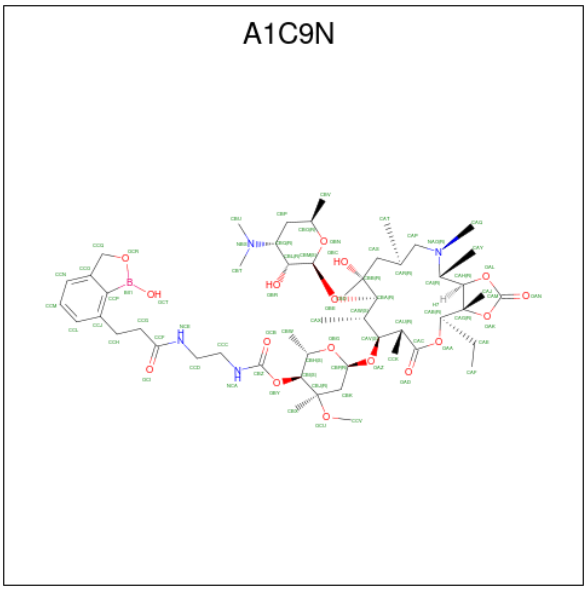
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1A	1	Total K 1 1	0	0

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: $C_{52}H_{85}BN_4O_{17}$) (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).

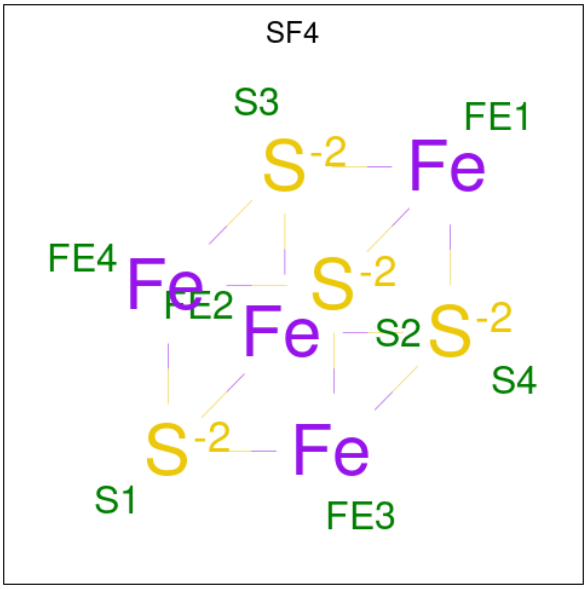
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1Y	1	Total Zn 1 1	0	0
60	14	1	Total Zn 1 1	0	0
60	15	1	Total Zn 1 1	0	0
60	16	1	Total Zn 1 1	0	0
60	19	1	Total Zn 1 1	0	0
60	1n	1	Total Zn 1 1	0	0

Continued on next page...

Continued from previous page...

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

- 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 8 4 4	0	0
61	2d	1	Total Fe S 8 4 4	0	0

- Molecule 62 is water.

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

Continued on next page...

Continued from previous page...

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

Continued on next page...

Continued from previous page...

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

Continued on next page...

Continued from previous page...

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

Continued on next page...

Continued from previous page...

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

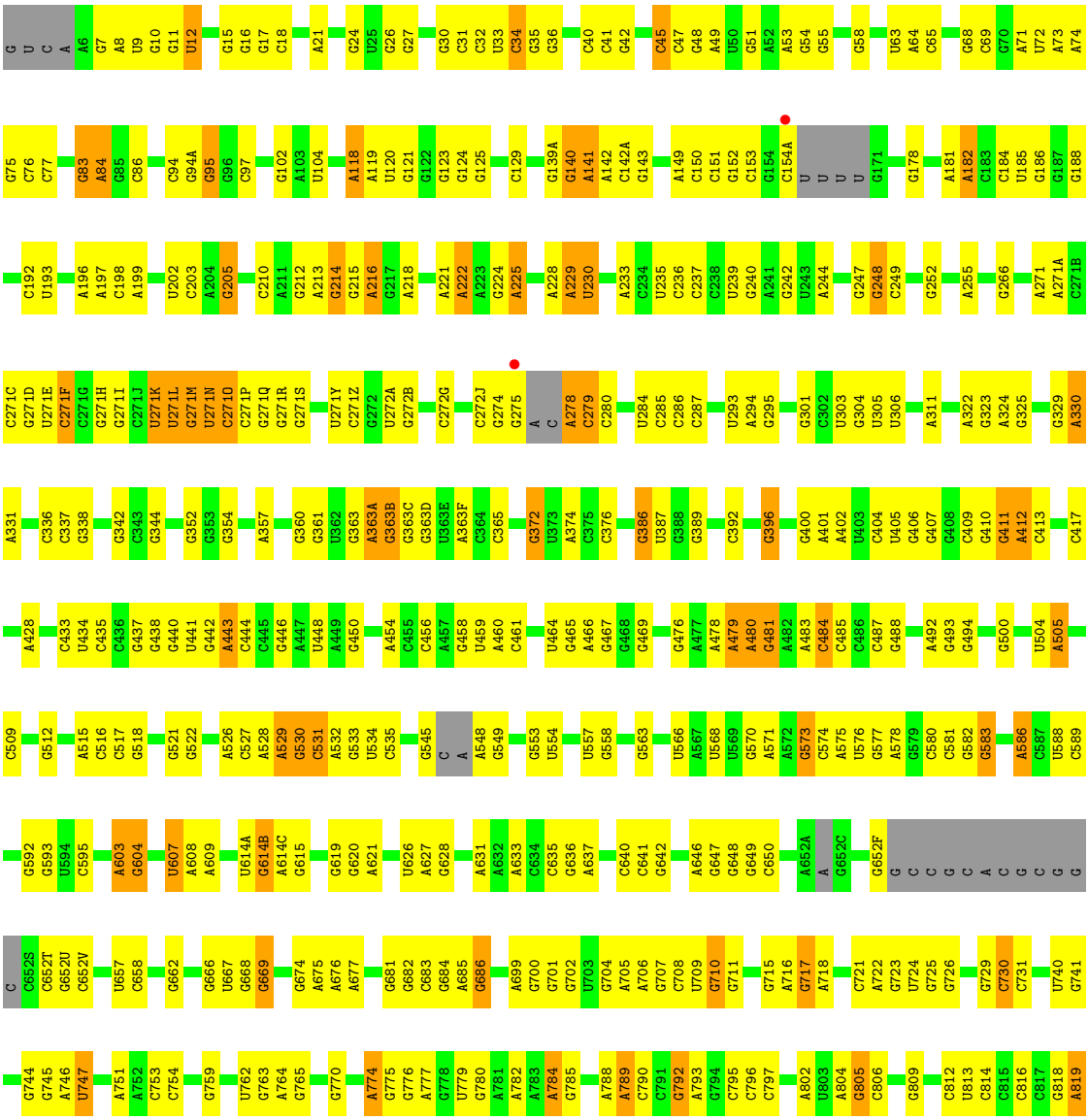
3 Residue-property plots (i)

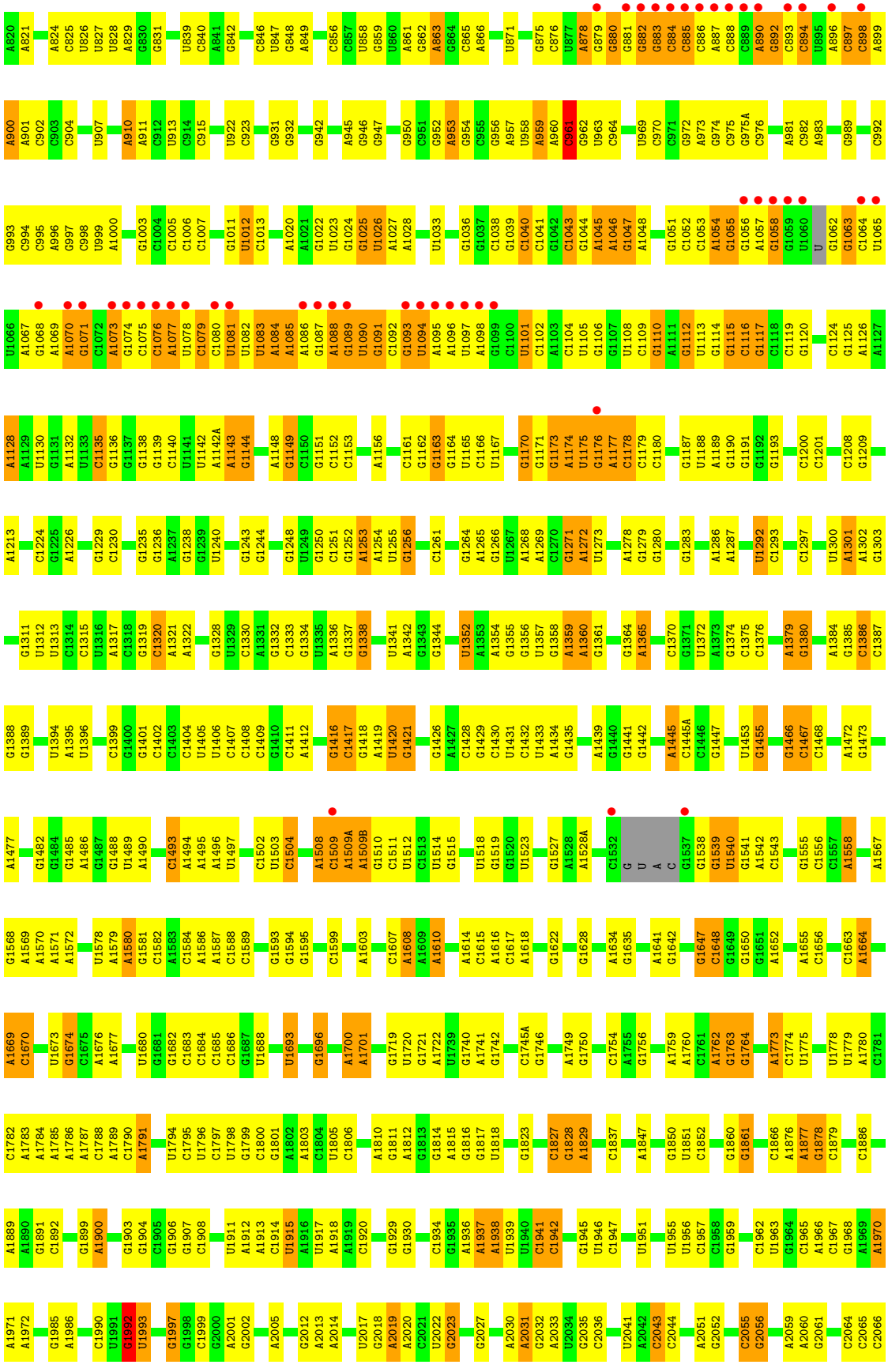
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. 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.

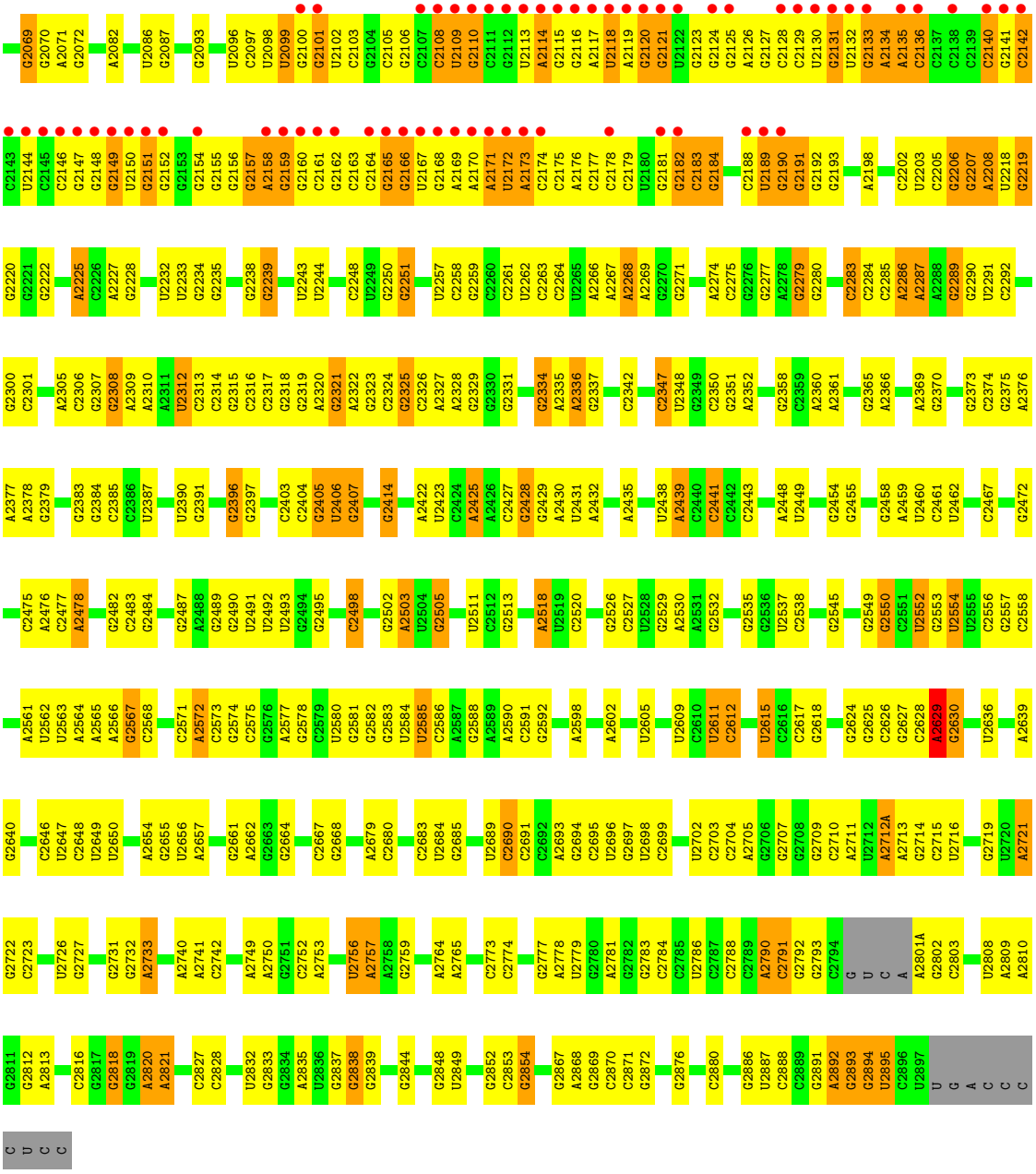
- Molecule 1: 23S Ribosomal RNA

Chain 1A:





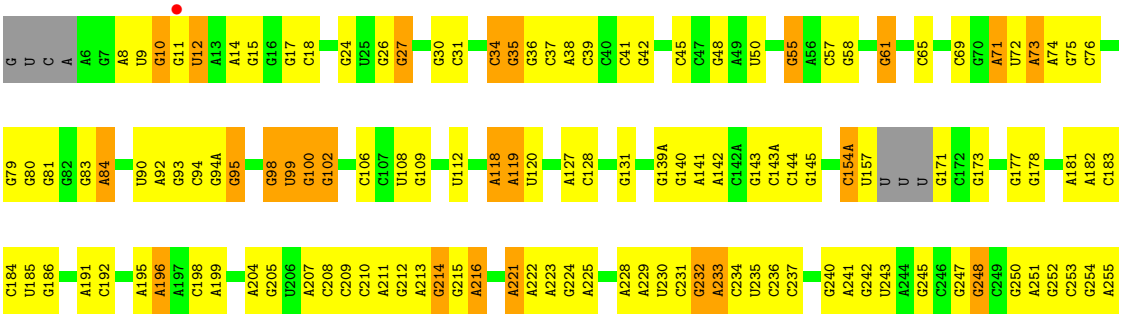


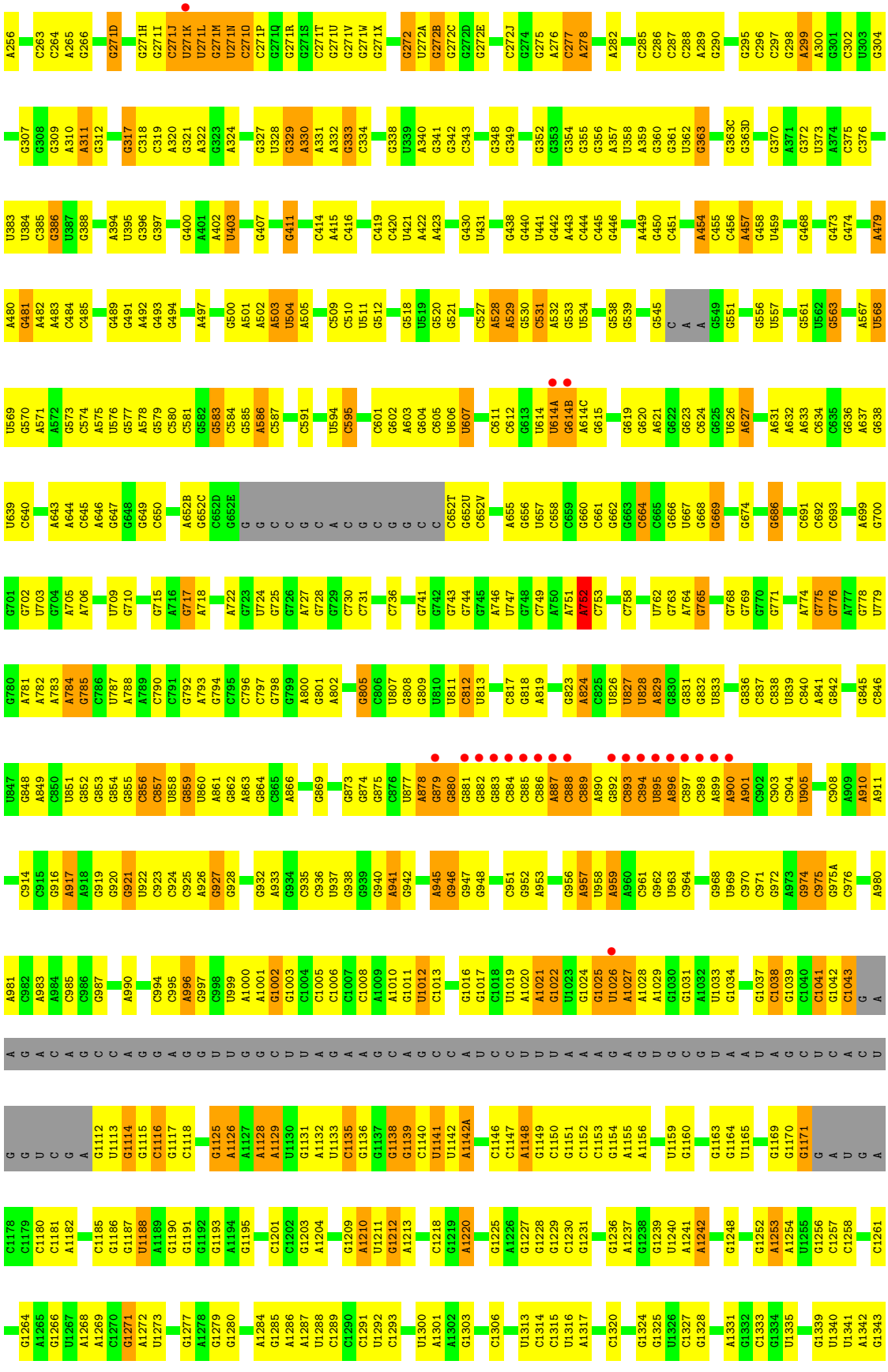


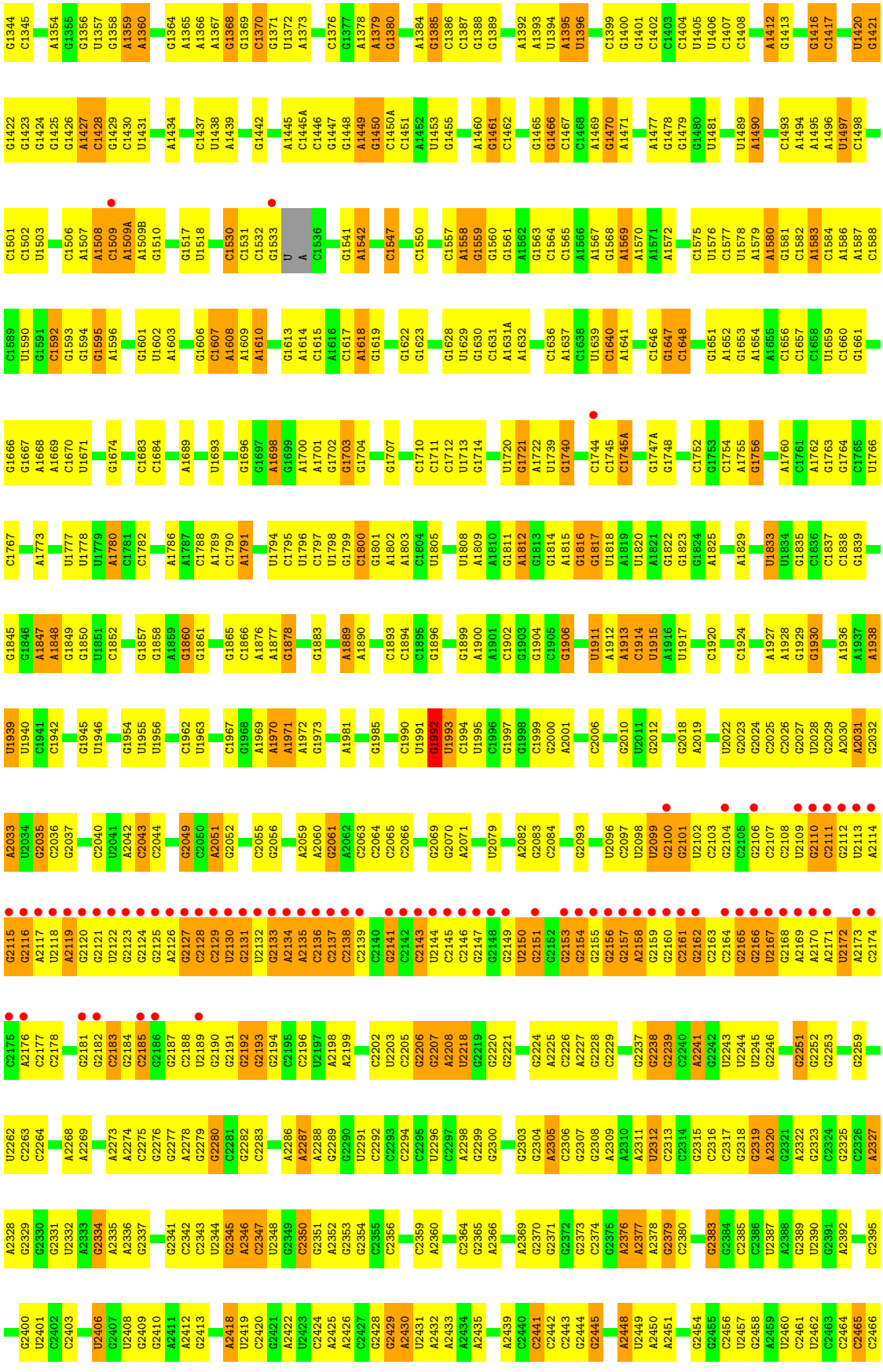
• Molecule 1: 23S Ribosomal RNA

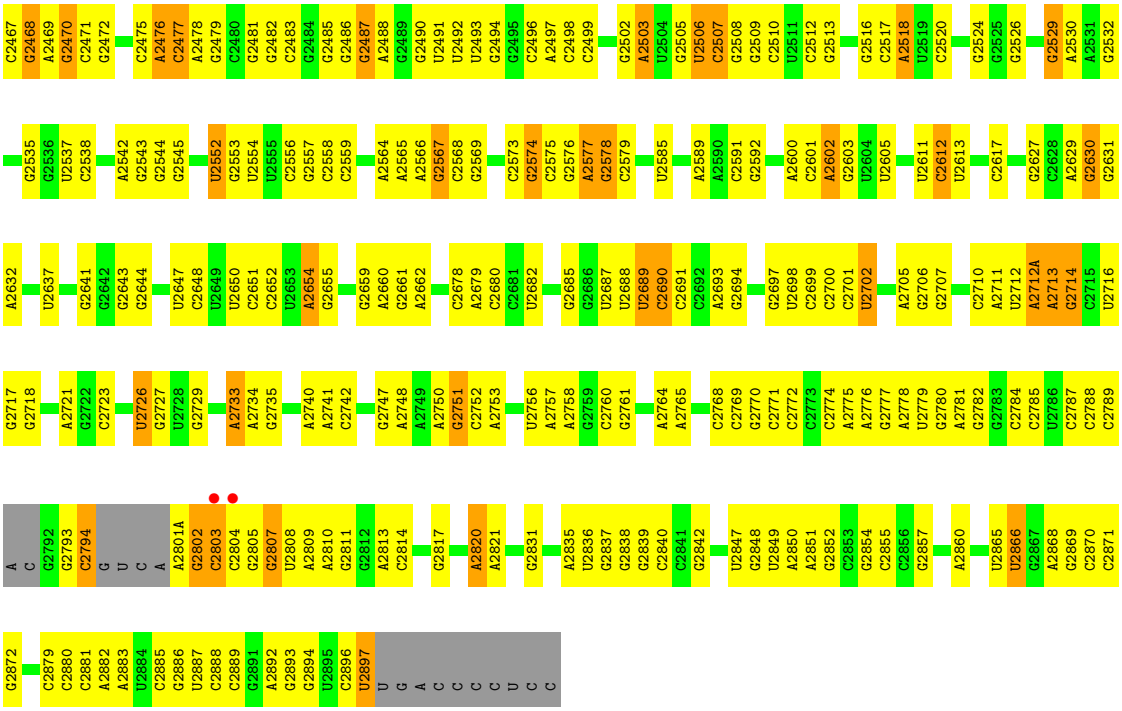
Chain 2A:







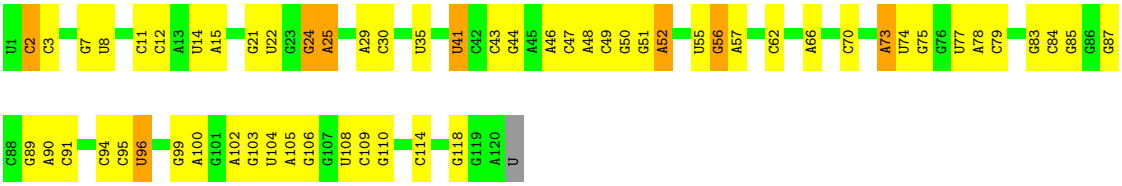




• Molecule 2: 5S Ribosomal RNA

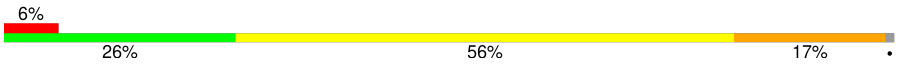
Chain 1B:

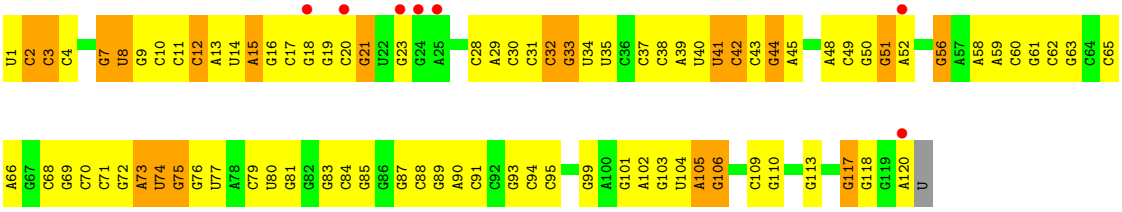




• Molecule 2: 5S Ribosomal RNA

Chain 2B:





• Molecule 3: 50S ribosomal protein L2

Chain 1D:



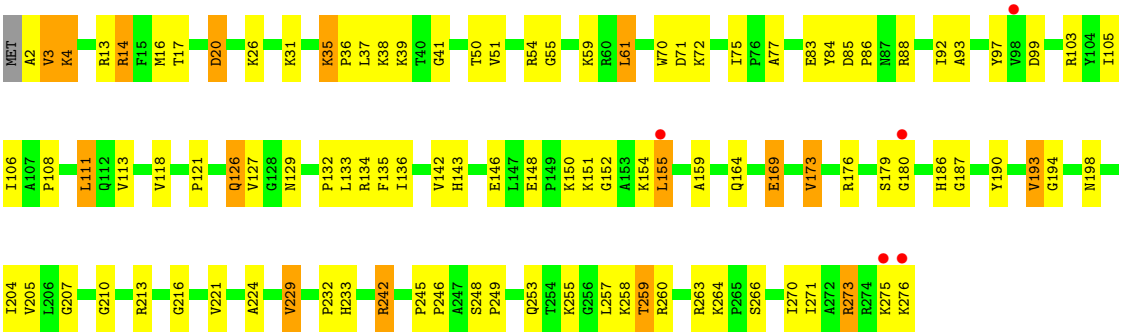




• Molecule 3: 50S ribosomal protein L2

Chain 2D:

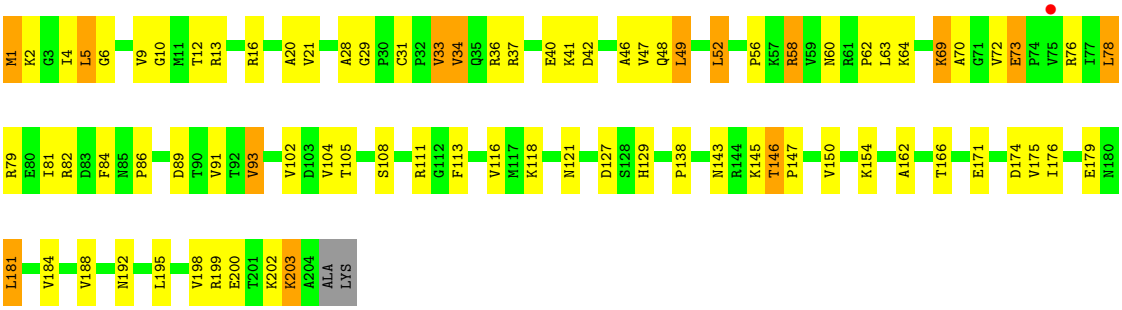




• Molecule 4: 50S ribosomal protein L3

Chain 1E:

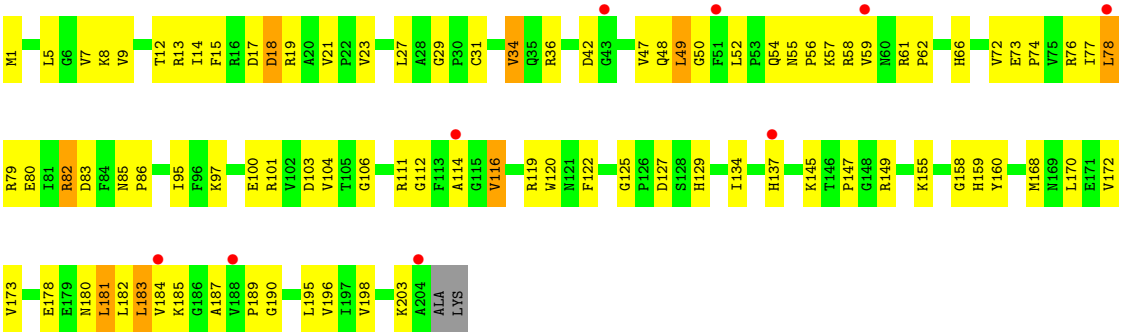




• Molecule 4: 50S ribosomal protein L3

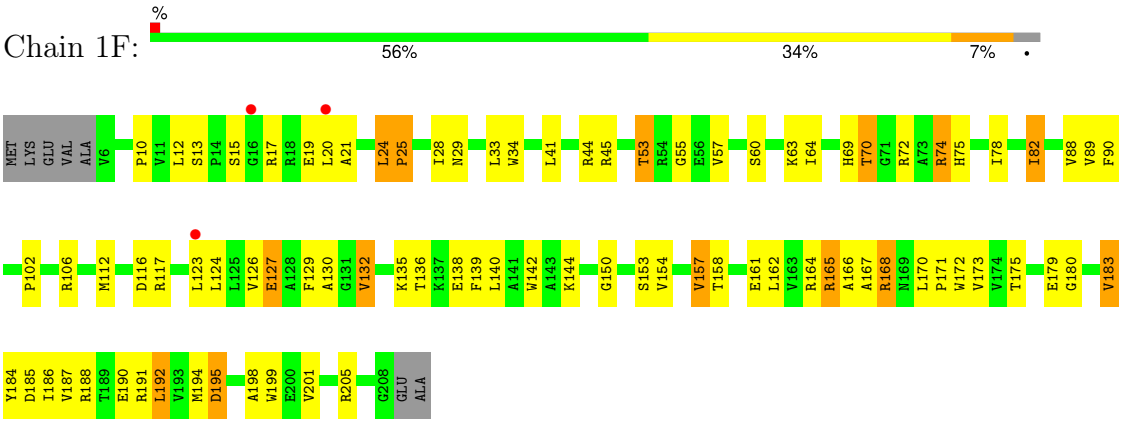
Chain 2E:





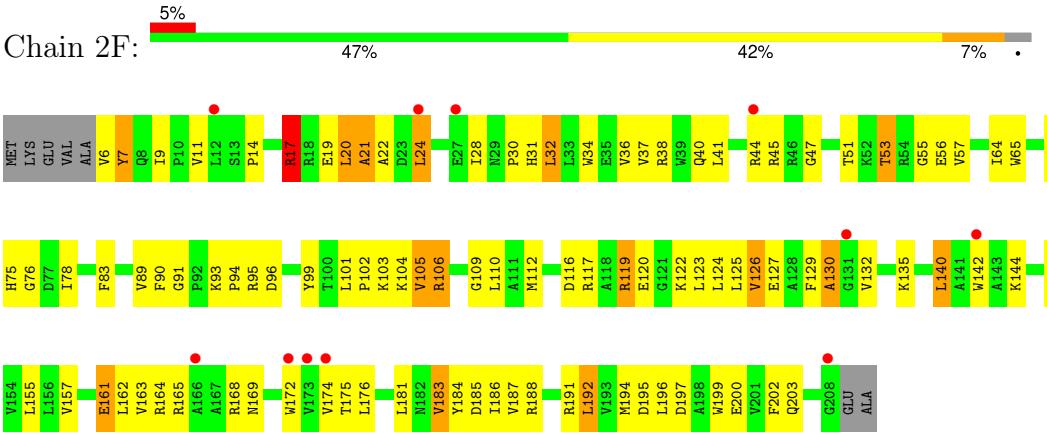
• Molecule 5: 50S ribosomal protein L4

Chain 1F:



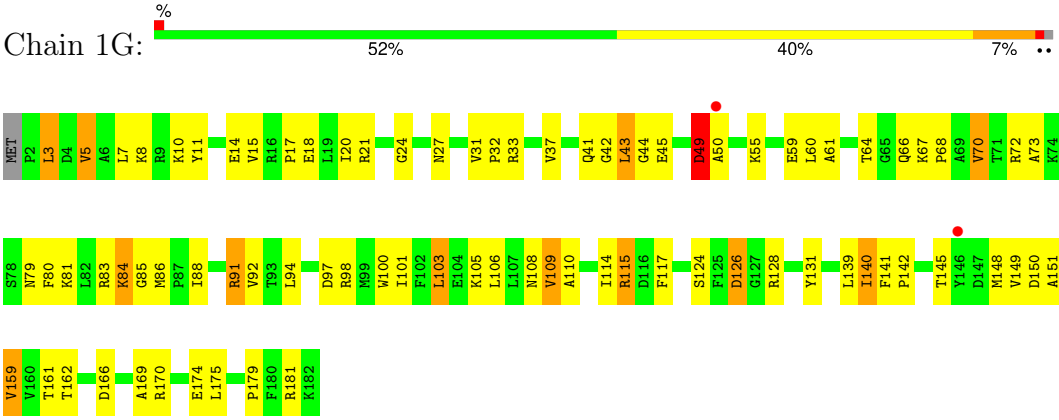
• Molecule 5: 50S ribosomal protein L4

Chain 2F:



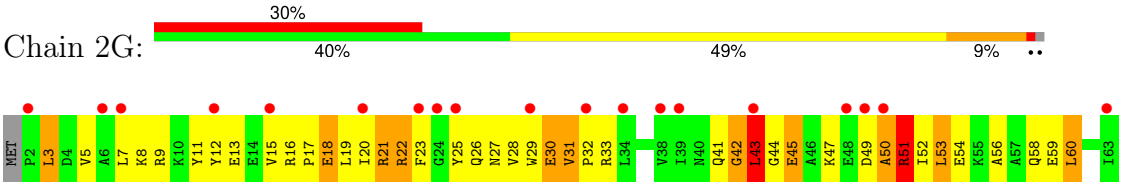
• Molecule 6: 50S ribosomal protein L5

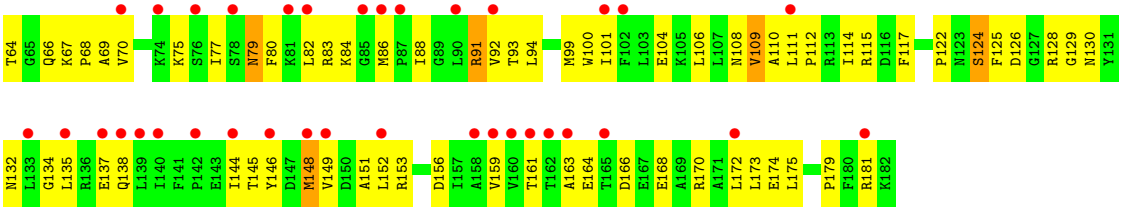
Chain 1G:



• Molecule 6: 50S ribosomal protein L5

Chain 2G:

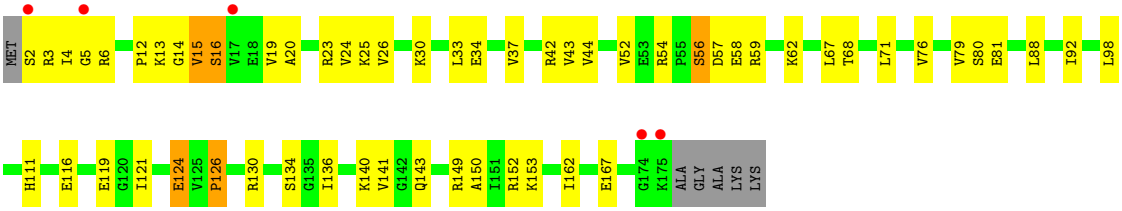




• Molecule 7: 50S ribosomal protein L6

Chain 1H:

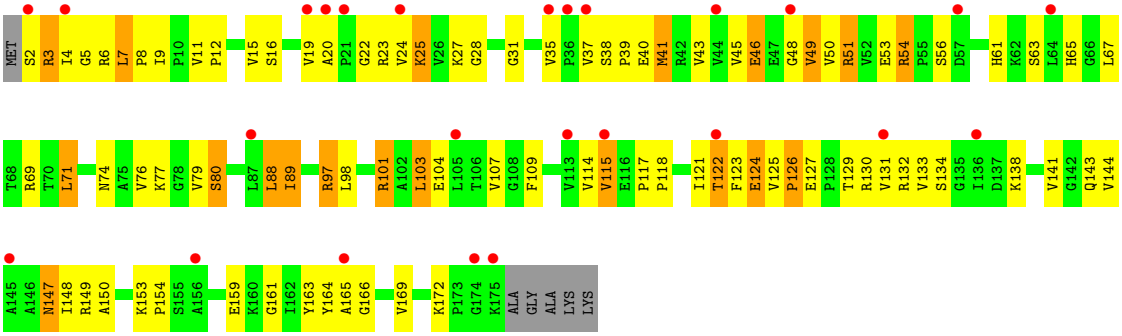




• Molecule 7: 50S ribosomal protein L6

Chain 2H:

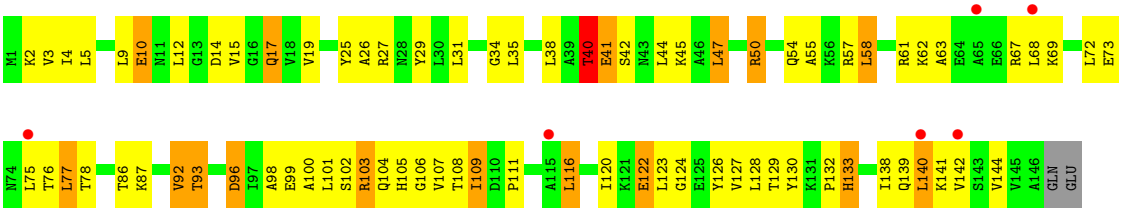




• Molecule 8: 50S ribosomal protein L9

Chain 1I:

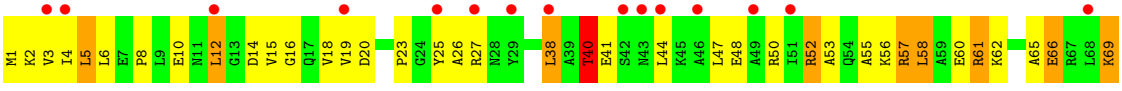


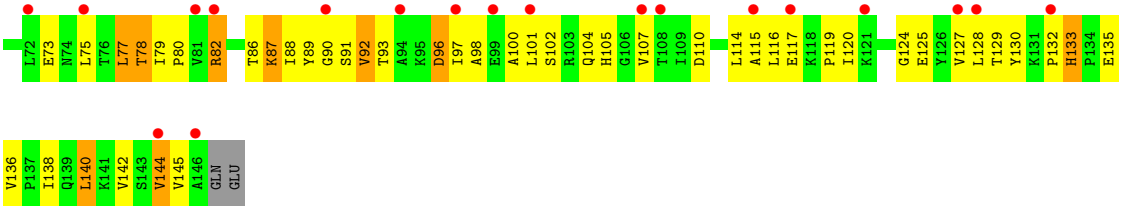


• Molecule 8: 50S ribosomal protein L9

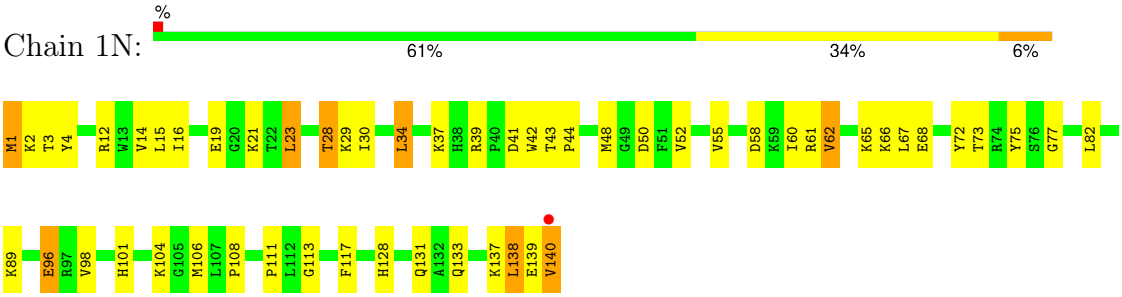
Chain 2I:



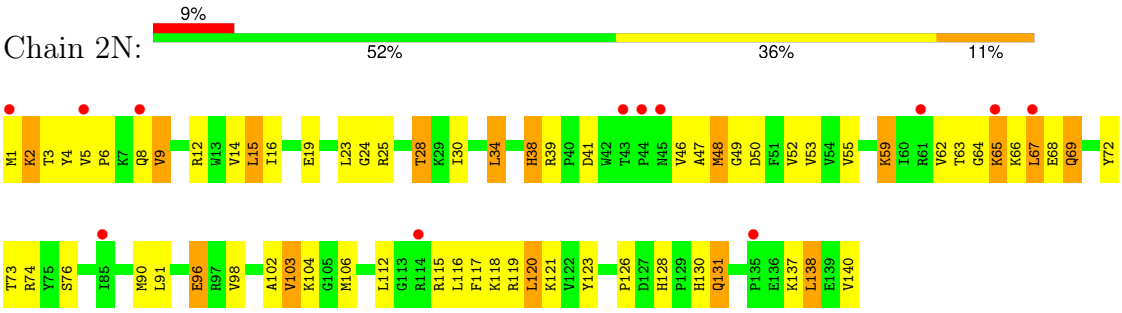




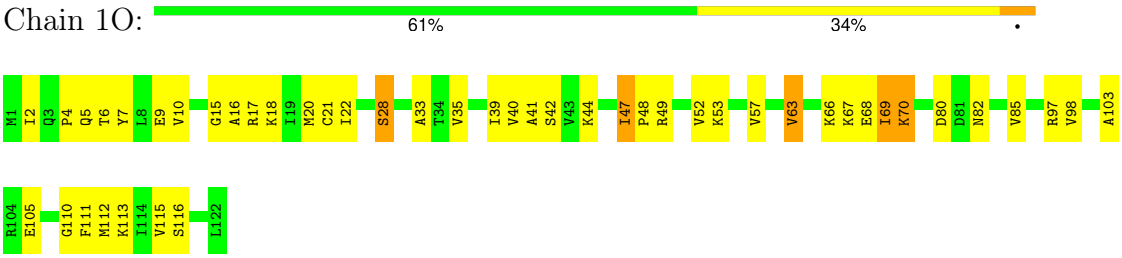
• Molecule 9: 50S ribosomal protein L13



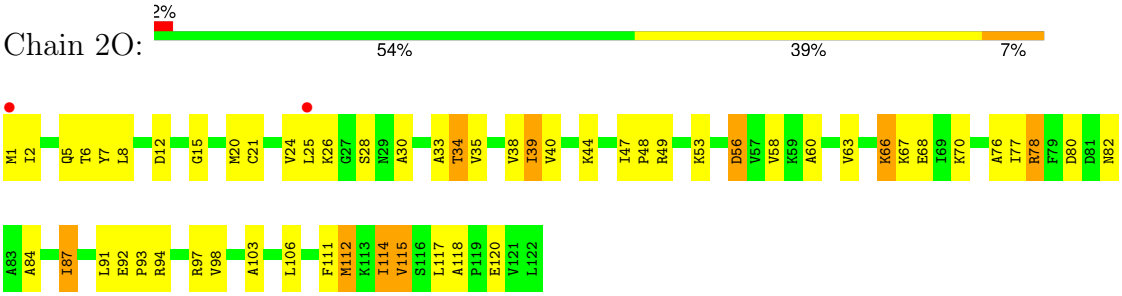
• Molecule 9: 50S ribosomal protein L13



• Molecule 10: 50S ribosomal protein L14

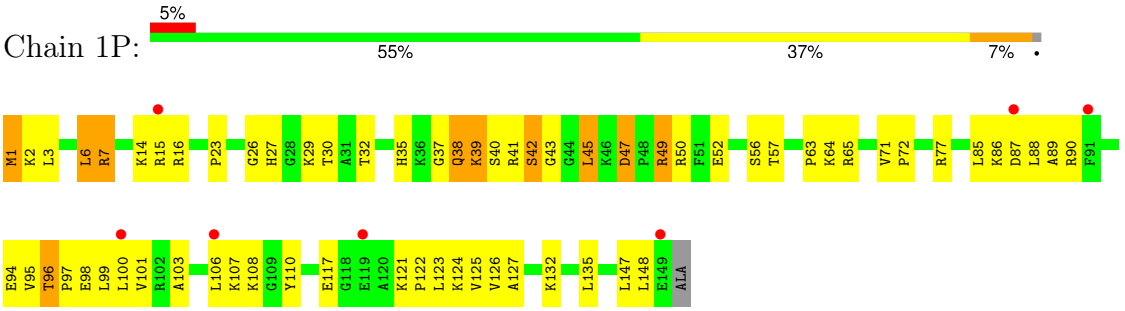


• Molecule 10: 50S ribosomal protein L14



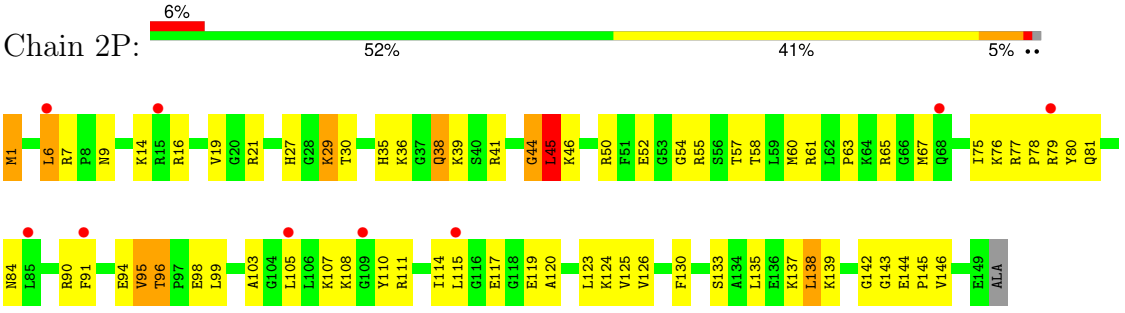
• Molecule 11: 50S ribosomal protein L15

Chain 1P:



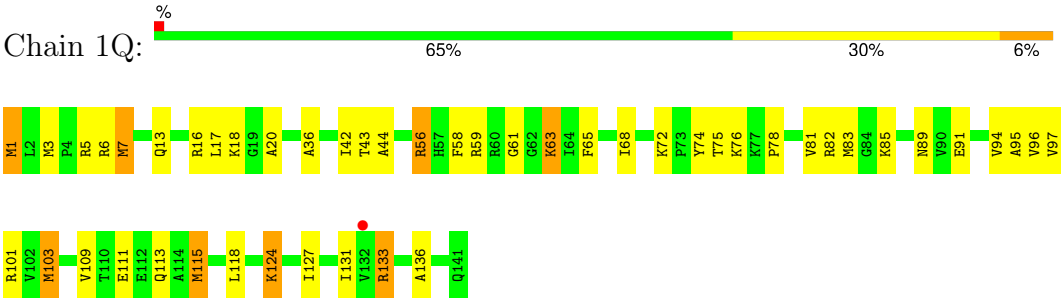
• Molecule 11: 50S ribosomal protein L15

Chain 2P:



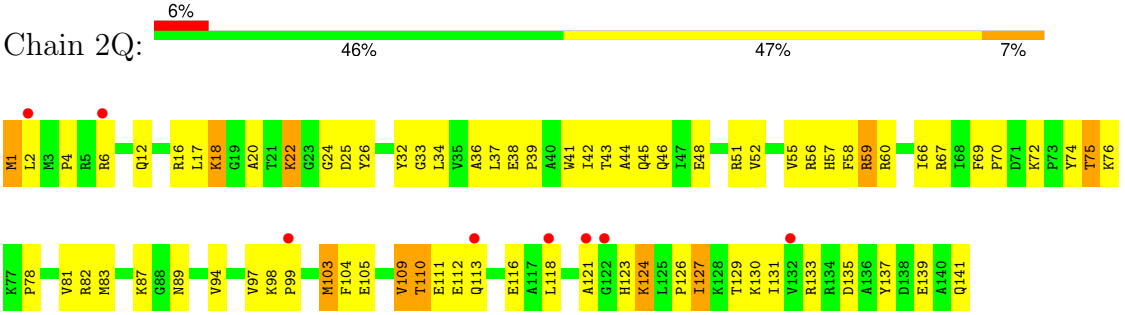
• Molecule 12: 50S ribosomal protein L16

Chain 1Q:



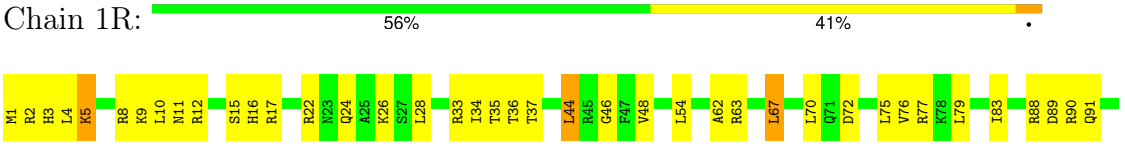
• Molecule 12: 50S ribosomal protein L16

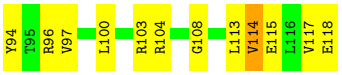
Chain 2Q:



• Molecule 13: 50S ribosomal protein L17

Chain 1R:

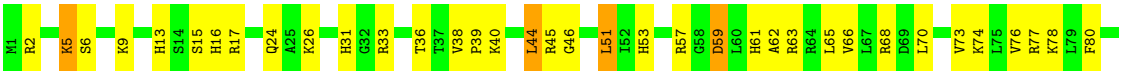


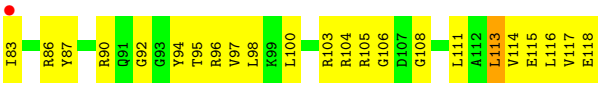


• Molecule 13: 50S ribosomal protein L17

Chain 2R:



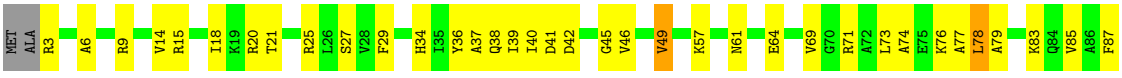


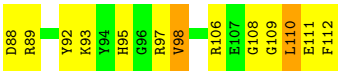


• Molecule 14: 50S ribosomal protein L18

Chain 1S:



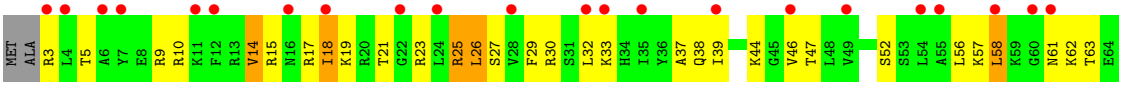


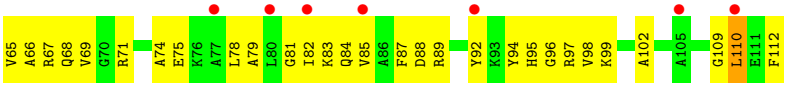


• Molecule 14: 50S ribosomal protein L18

Chain 2S:



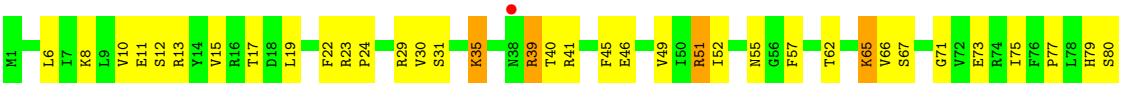


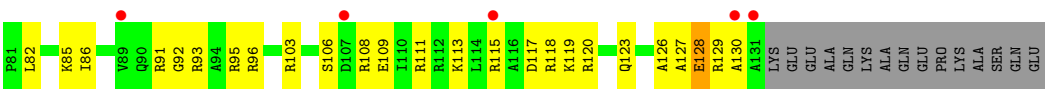


• Molecule 15: 50S ribosomal protein L19

Chain 1T:



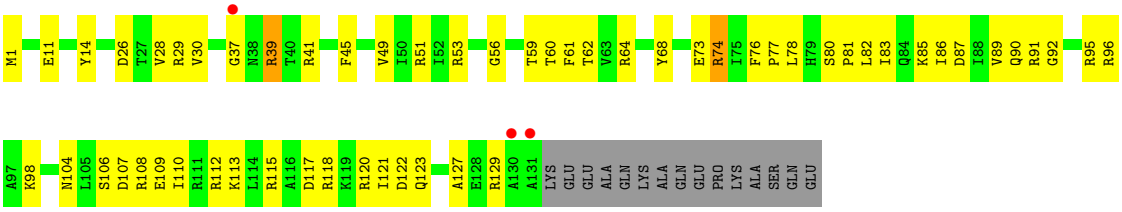




• Molecule 15: 50S ribosomal protein L19

Chain 2T:

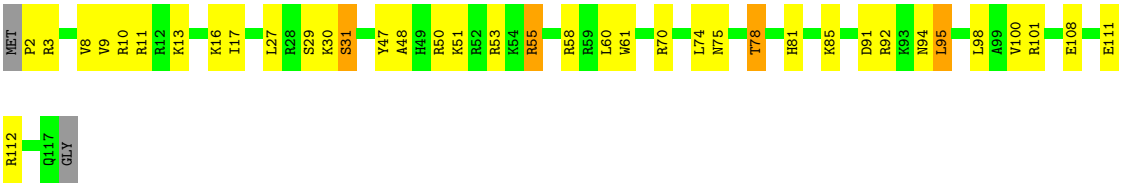




• Molecule 16: 50S ribosomal protein L20

Chain 1U:

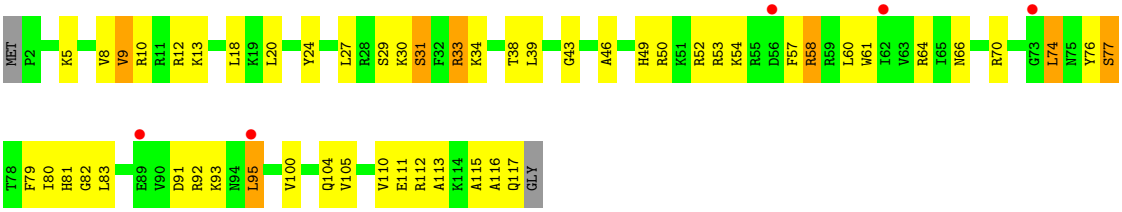




• Molecule 16: 50S ribosomal protein L20

Chain 2U:





• Molecule 17: 50S ribosomal protein L21

Chain 1V:





• Molecule 17: 50S ribosomal protein L21

Chain 2V:

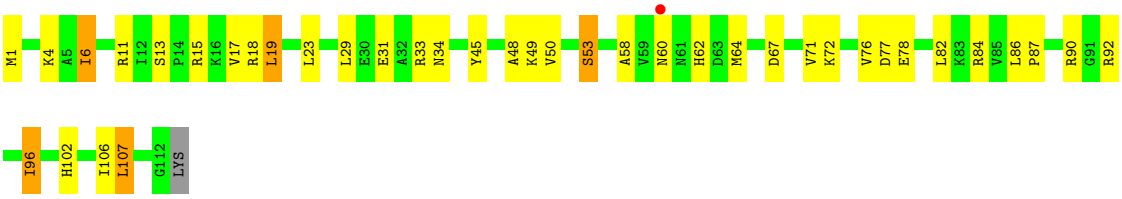




• Molecule 18: 50S ribosomal protein L22

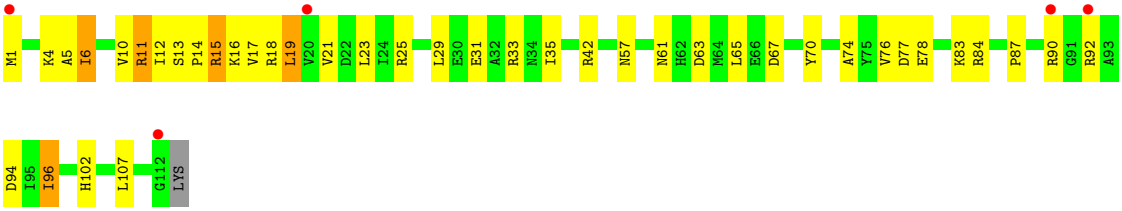
Chain 1W:





• Molecule 18: 50S ribosomal protein L22





• Molecule 19: 50S ribosomal protein L23





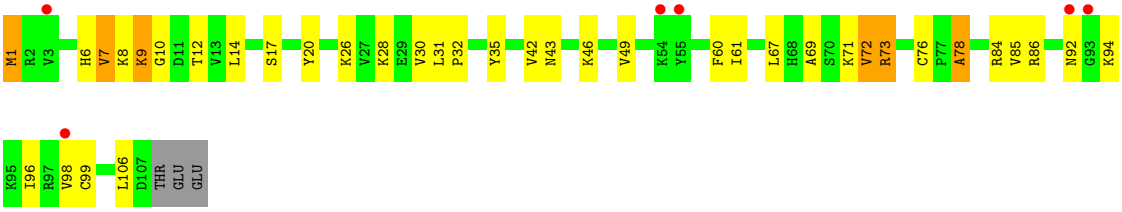
• Molecule 19: 50S ribosomal protein L23





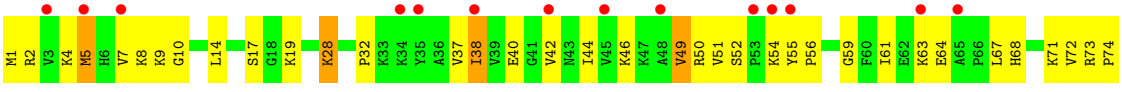
• Molecule 20: 50S ribosomal protein L24

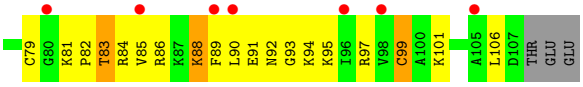




• Molecule 20: 50S ribosomal protein L24

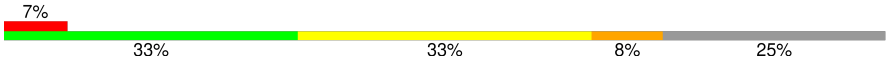


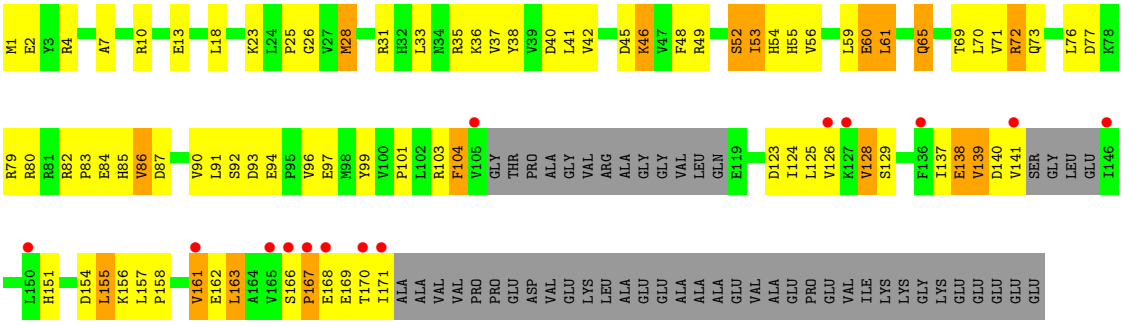




• Molecule 21: 50S ribosomal protein L25

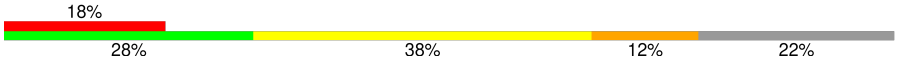
Chain 1Z:

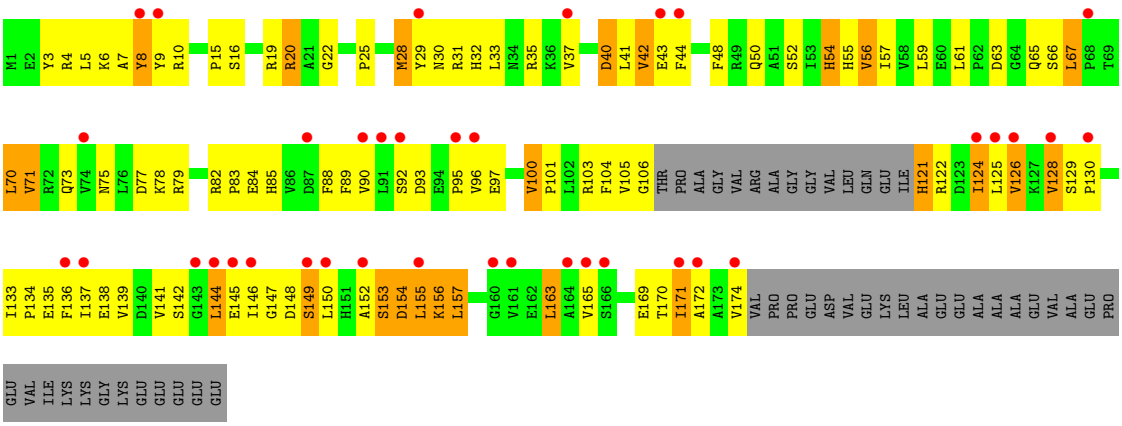




• Molecule 21: 50S ribosomal protein L25

Chain 2Z:





• Molecule 22: 50S ribosomal protein L27

Chain 10:

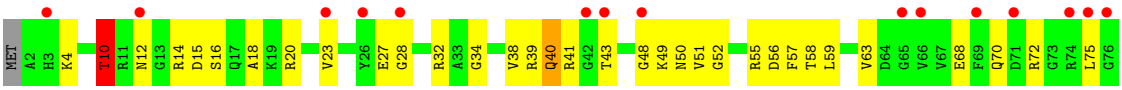


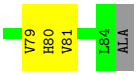


• Molecule 22: 50S ribosomal protein L27

Chain 20:



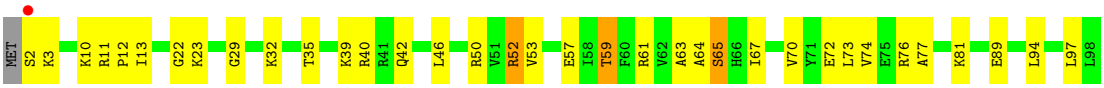




• Molecule 23: 50S ribosomal protein L28

Chain 11:

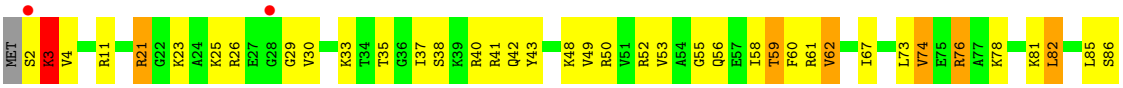




• Molecule 23: 50S ribosomal protein L28

Chain 21:



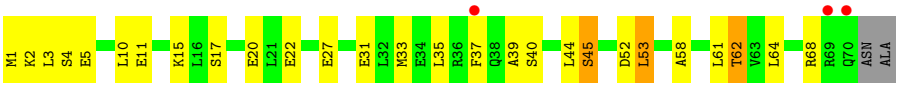




• Molecule 24: 50S ribosomal protein L29

Chain 12:

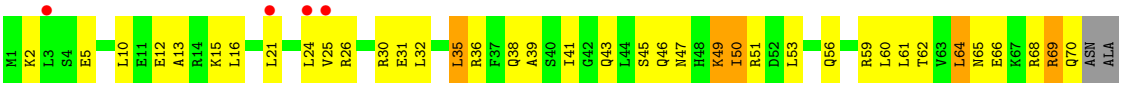




• Molecule 24: 50S ribosomal protein L29

Chain 22:





• Molecule 25: 50S ribosomal protein L30

Chain 13:

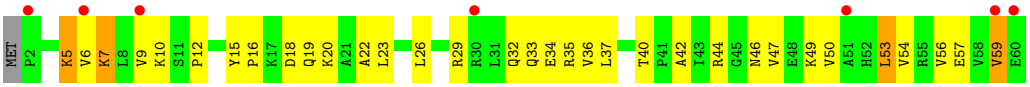




• Molecule 25: 50S ribosomal protein L30

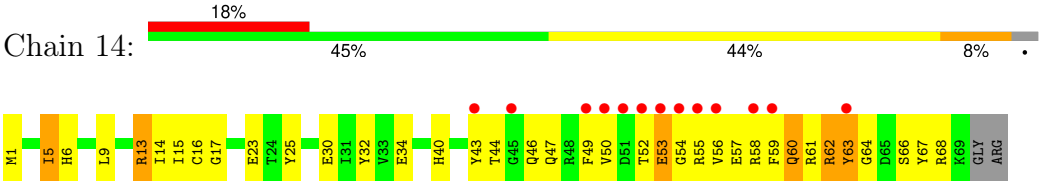
Chain 23:





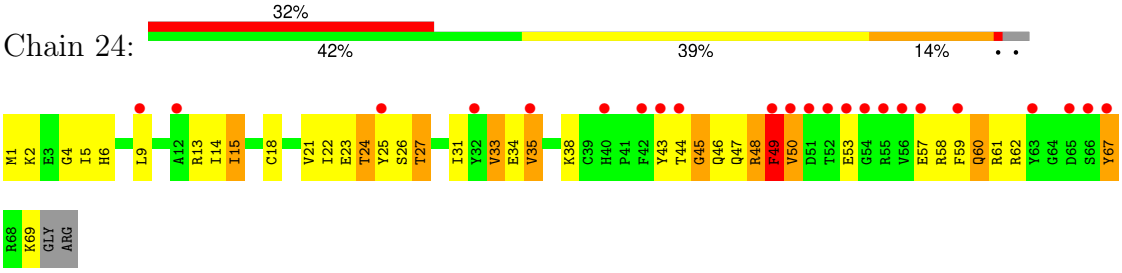
• Molecule 26: 50S ribosomal protein L31

Chain 14:



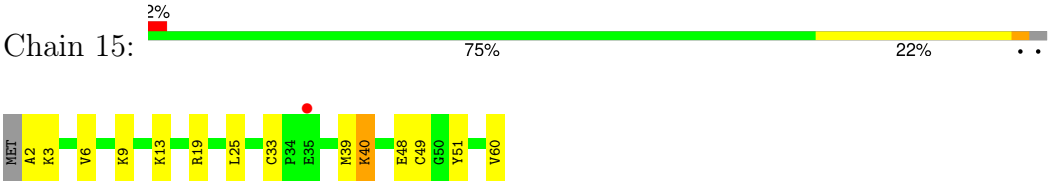
• Molecule 26: 50S ribosomal protein L31

Chain 24:



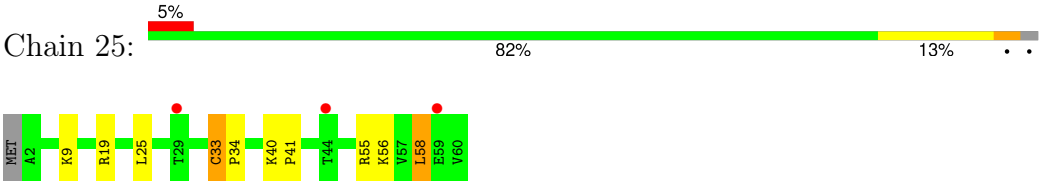
• Molecule 27: 50S ribosomal protein L32

Chain 15:



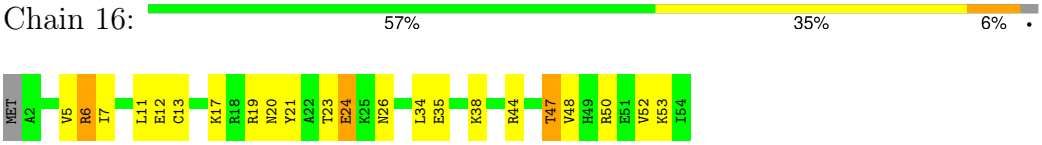
• Molecule 27: 50S ribosomal protein L32

Chain 25:



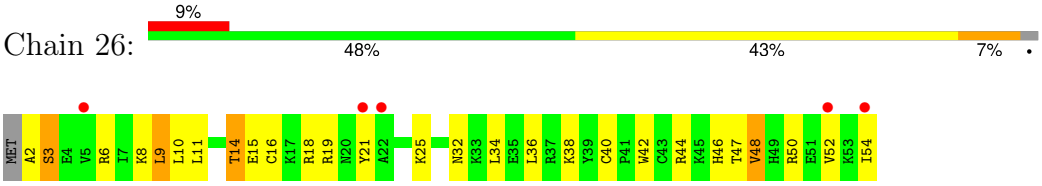
• Molecule 28: 50S ribosomal protein L33

Chain 16:



• Molecule 28: 50S ribosomal protein L33

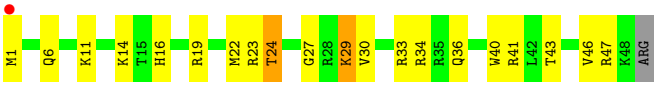
Chain 26:



• Molecule 29: 50S ribosomal protein L34

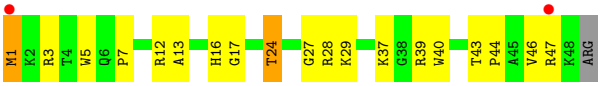
Chain 17:





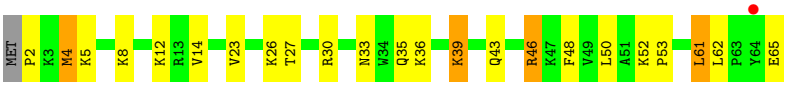
• Molecule 29: 50S ribosomal protein L34





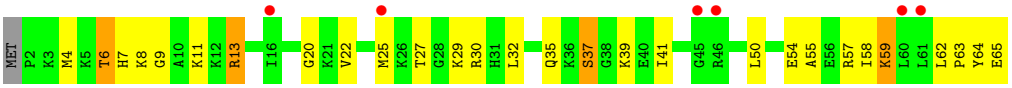
• Molecule 30: 50S ribosomal protein L35





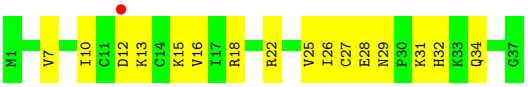
• Molecule 30: 50S ribosomal protein L35





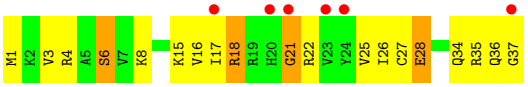
• Molecule 31: 50S ribosomal protein L36



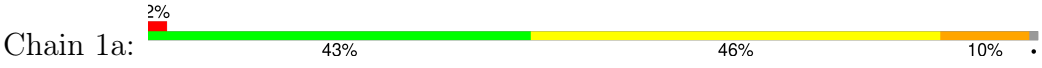


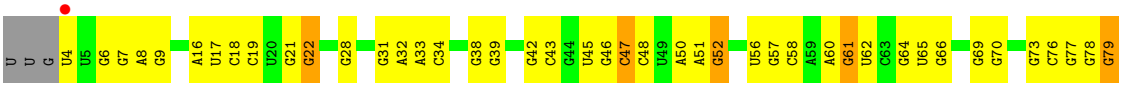
• Molecule 31: 50S ribosomal protein L36

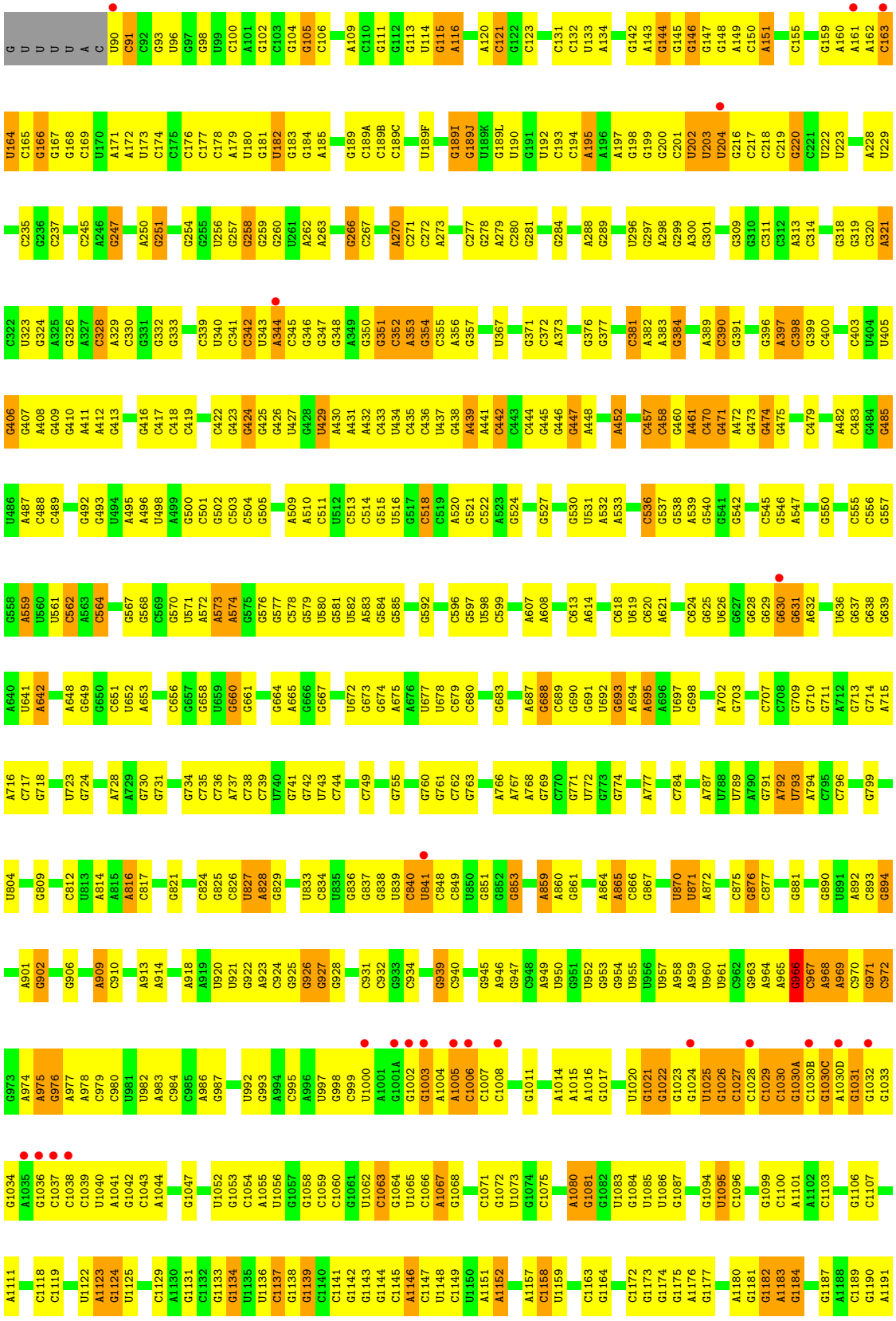


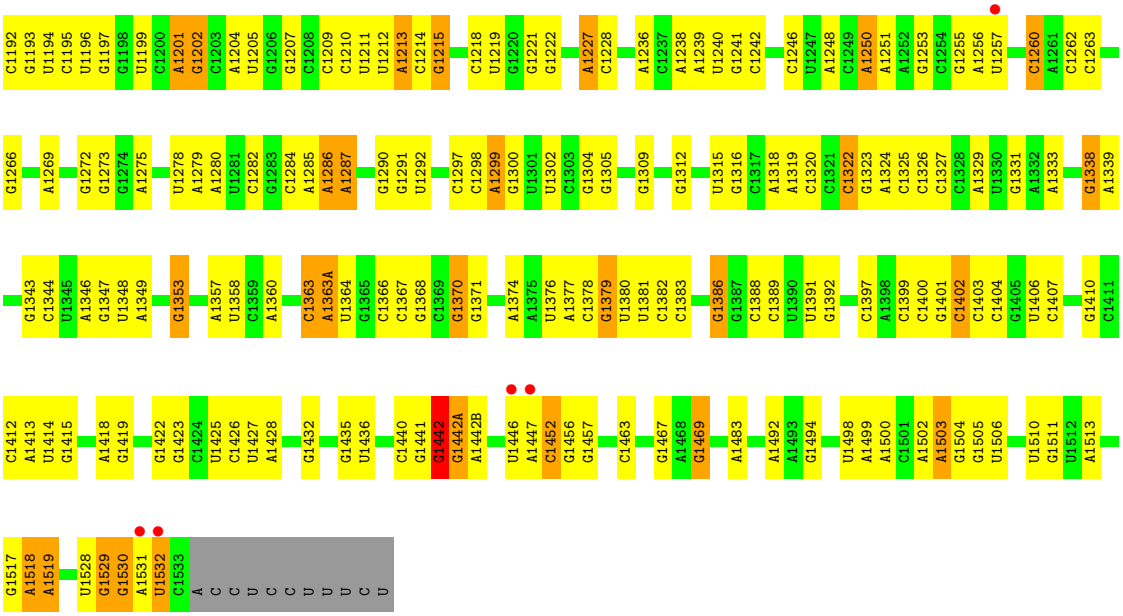


• Molecule 32: 16S Ribosomal RNA





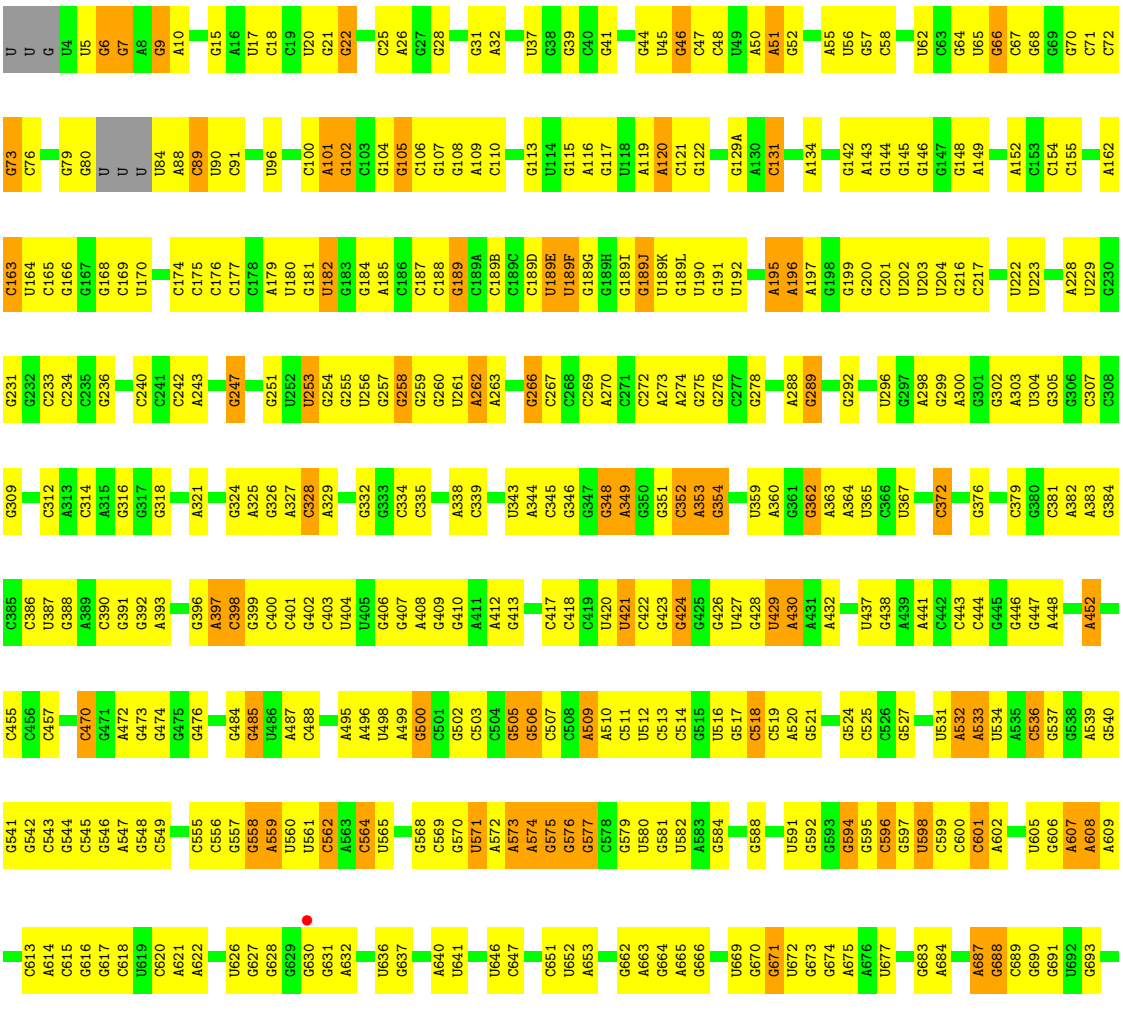

G U U U U A C
U90 C91 C92 G93 U96 G97 G98 U99 C100 A101 G102 C103 G104 G105 C106
A109 C110 G111 G112 G113 U114 G115 A116
A120 C121 G122 C123
C131 C132 U133 A134
G142 A143 G144 G145 G146 G147 G148 A149 C150 A151
C155
G159 A160 A161 A162 C163
U164 C165 G166 G167 G168 C169 U170 A171 A172 U173 C174 C175 C176 C177 C178 A179 U180 G181 U182 G183 G184 A185
G189 C189A C189B C189C U189F G189I G189J U189K G189L A190 C191 U192 C193 C194 A195 A196 A197 G198 G199 G200 C201 U202 U203 U204 G216 C217 C218 C219 G220 C221 U222 U223 A228 U229
C235 C236 C237 C245 A246 G247 A250 G251 G254 G255 U256 G257 G258 C259 G260 U261 A262 A263 C266 C267 A270 C271 C272 A273 C277 G278 A279 C280 C281 G284 A288 G289 U296 G297 A298 G299 A300 G301 G309 G310 C311 C312 A313 C314 G318 G319 C320 A321
C322 U323 G324 A325 G326 A327 G328 A329 C330 G331 G332 G333 C339 U340 C341 C342 U343 A344 C345 G346 G347 G348 A349 G350 G351 C352 A353 G354 C355 A356 G357 U367 G371 C372 A373 G376 G377 C381 A382 A383 G384 A389 C390 G391 G396 A397 C398 G399 C400 C403 U404 U405
G406 G407 A408 G409 G410 A411 A412 G413 G416 C417 C418 C419 C422 G423 G424 G425 G426 U427 G428 U429 A430 A431 A432 C433 U434 C435 C436 U437 G438 A439 A441 C442 C443 C444 G445 G446 G447 A448 A452 C457 C458 G460 A461 C470 G471 A472 G473 G474 G475 C479 A482 C483 G484 G485
U486 A487 C488 C489 G492 G493 U494 A495 A496 U498 A499 G500 C501 G502 C503 C504 G505 A509 A510 C511 U512 C513 C514 G515 U516 G517 C518 C519 A520 G521 C522 A523 G524 G527 G530 U531 A532 A533 C536 G537 G538 A539 G540 G541 G542 C545 G546 A547 G550 C555 C556 G557
G558 A559 U560 U561 C562 A563 C564 G567 G568 C569 G570 U571 A572 A573 A574 G575 G576 G577 C578 G579 U580 G581 U582 A583 G584 G585 G592 C596 G597 U598 C599 A607 A608 C613 A614 C618 U619 C620 A621 C624 G625 U626 G627 G628 G629 G630 G631 A632 U636 G637 G638 G639
A640 U641 A642 A648 G649 G650 C651 U652 A653 C656 G657 G658 U659 G660 G661 G664 A665 G666 G667 U672 G673 G674 A675 A676 U677 U678 C679 C680 G683 A687 G688 C689 G690 G691 U692 G693 A694 A695 A696 U697 G698 A702 G703 C707 C708 G709 G710 G711 A712 G713 G714 A715
A716 C717 G718 U723 G724 A728 A729 G730 G731 G734 C735 C736 A737 C738 C739 U740 G741 G742 U743 C744 C749 G755 G760 G761 C762 G763 A766 A767 A768 G769 C770 G771 U772 G773 G774 A777 C784 A787 U788 U789 A790 G791 A792 U793 A794 C795 C796 G799
U804 G809 C812 U813 A814 A815 A816 C817 G821 C824 G825 C826 U827 A828 G829 U833 C834 U835 G836 G837 G838 U839 C840 U841 C848 C849 U850 G851 G852 G853 A859 A860 G861 A864 A865 C866 G867 U870 U871 A872 C875 G876 C877 G881 G890 U891 A892 C893 G894
A901 G902 G906 A909 C910 A913 A914 A918 A919 U920 U921 G922 A923 C924 G925 G926 G927 G928 C931 C932 G933 C934 G939 C940 G945 A946 G947 C948 A949 U950 G951 U952 G953 G954 U955 U956 U957 A958 A959 U960 U961 C962 G963 A964 A965 G966 C967 A968 A969 C970 G971 C972
G973 A974 A975 G976 A977 A978 C979 C980 U981 U982 A983 C984 C985 A986 G987 U992 G993 A994 C995 A996 U997 G998 C999 U1000 A1001 G1001A G1002 G1003 A1004 A1005 C1006 C1007 C1008 G1011 A1014 A1015 A1016 G1017 U1020 G1021 G1022 G1023 G1024 U1025 G1026 C1027 C1028 C1029 C1030 G1030A C1030B G1030C A1030D G1031 G1032 G1033
G1034 A1035 G1036 C1037 C1038 C1039 U1040 A1041 G1042 C1043 A1044 G1047 U1052 G1053 C1054 A1055 U1056 G1057 G1058 C1059 C1060 C1061 U1062 C1063 C1064 U1065 C1066 A1067 G1068 C1071 G1072 U1073 C1074 C1075 A1080 G1081 G1082 U1083 G1084 U1085 U1086 G1087 G1094 U1095 C1096 G1099 C1100 A1101 A1102 C1103 G1106 C1107
A1111 C1118 C1119 U1122 A1123 G1124 U1125 C1129 A1130 G1131 C1132 G1133 G1134 U1135 U1136 C1137 G1138 G1139 C1140 C1141 G1142 G1143 G1144 C1145 A1146 C1147 U1148 C1149 U1150 A1151 A1152 A1157 C1158 U1159 C1163 G1164 C1172 G1173 G1174 G1175 A1176 G1177 A1180 G1181 G1182 A1183 G1184 G1187 A1188 C1189 G1190 A1191

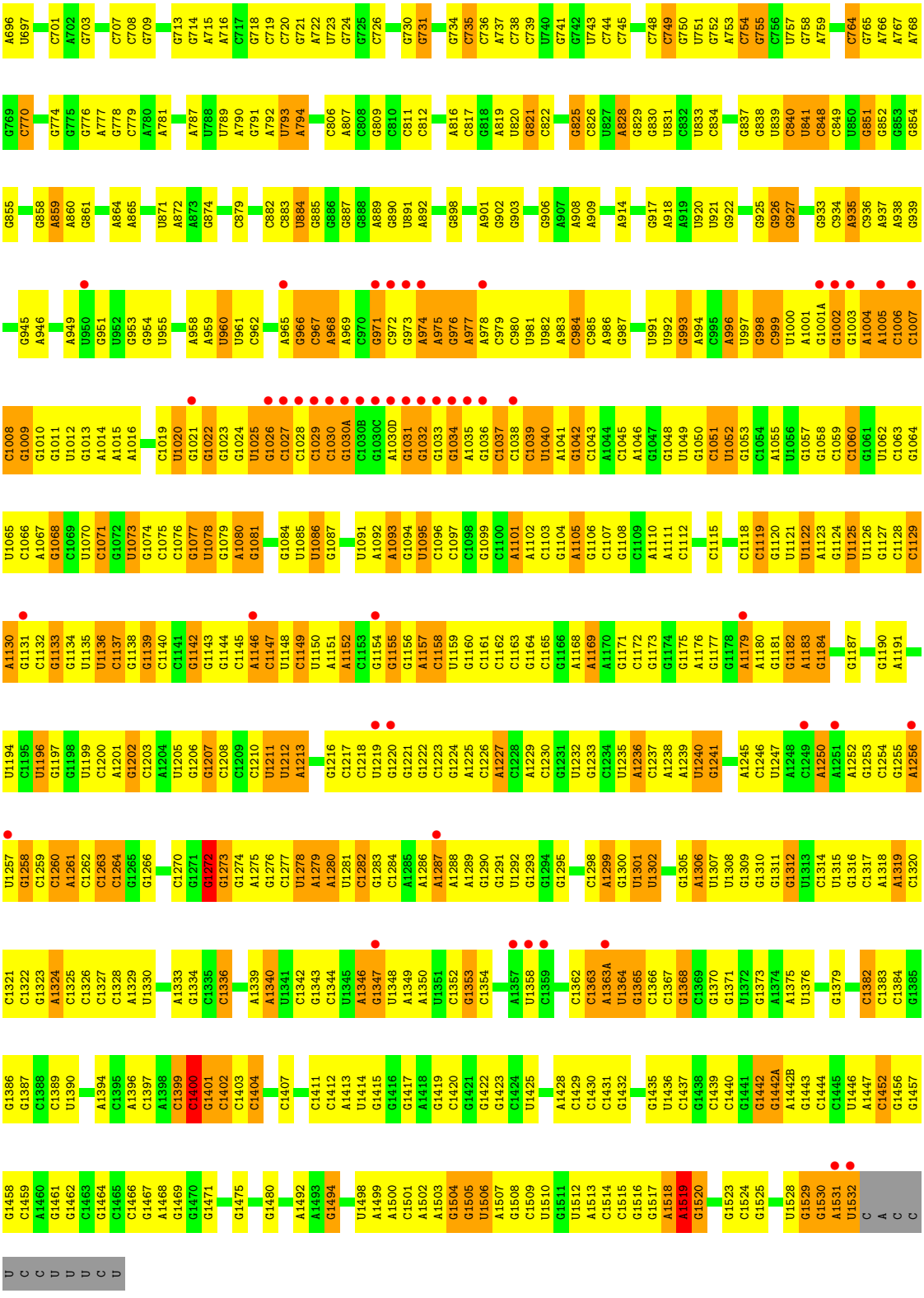


• Molecule 32: 16S Ribosomal RNA

Chain 2a:

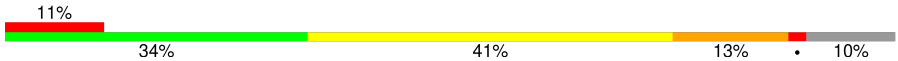


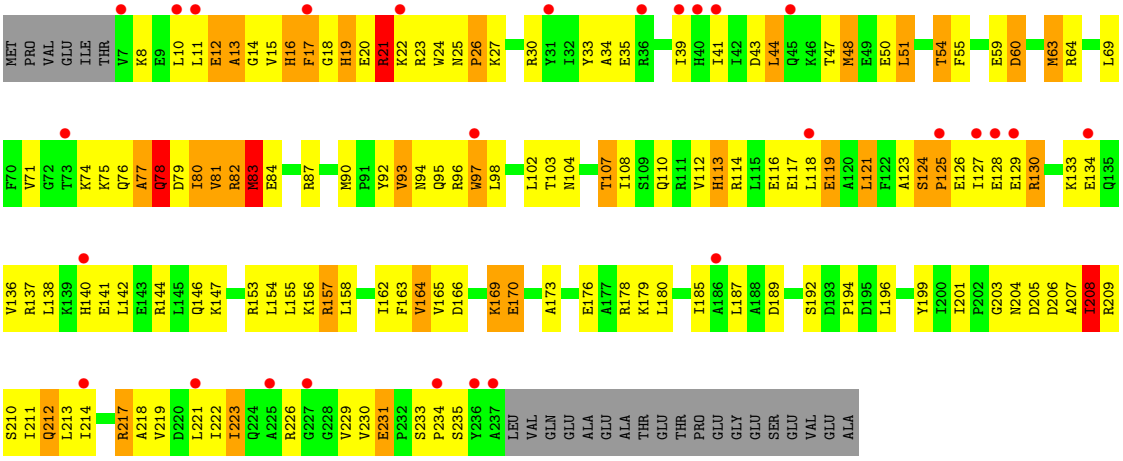




• Molecule 33: 30S ribosomal protein S2

Chain 1b:

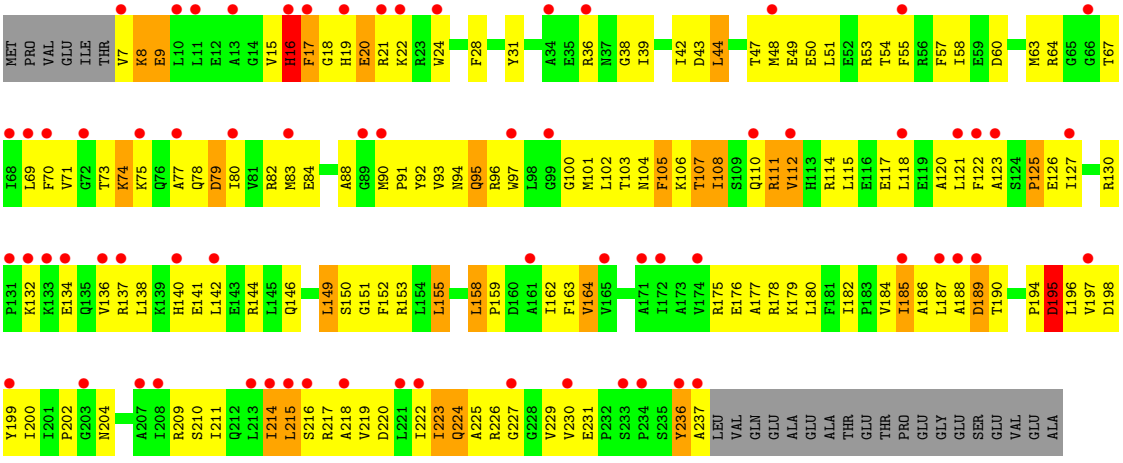




• Molecule 33: 30S ribosomal protein S2

Chain 2b:

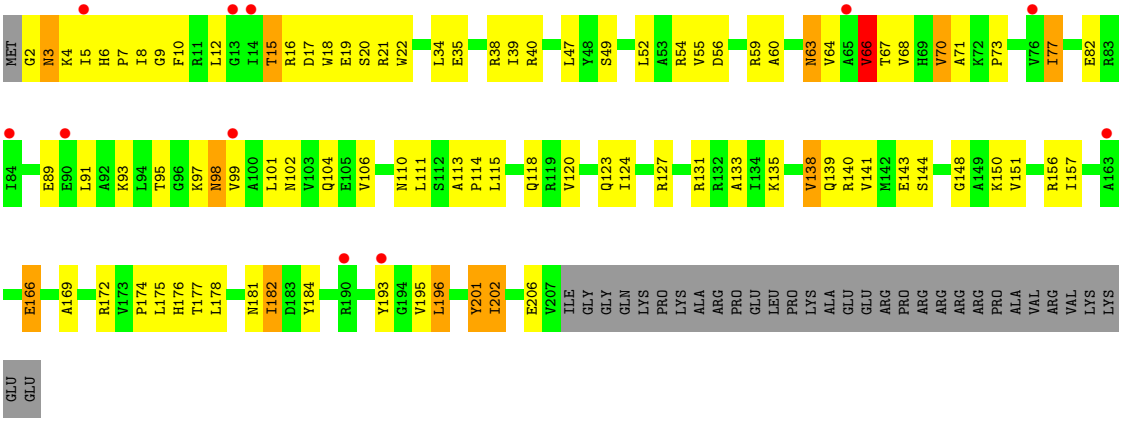




• Molecule 34: 30S ribosomal protein S3

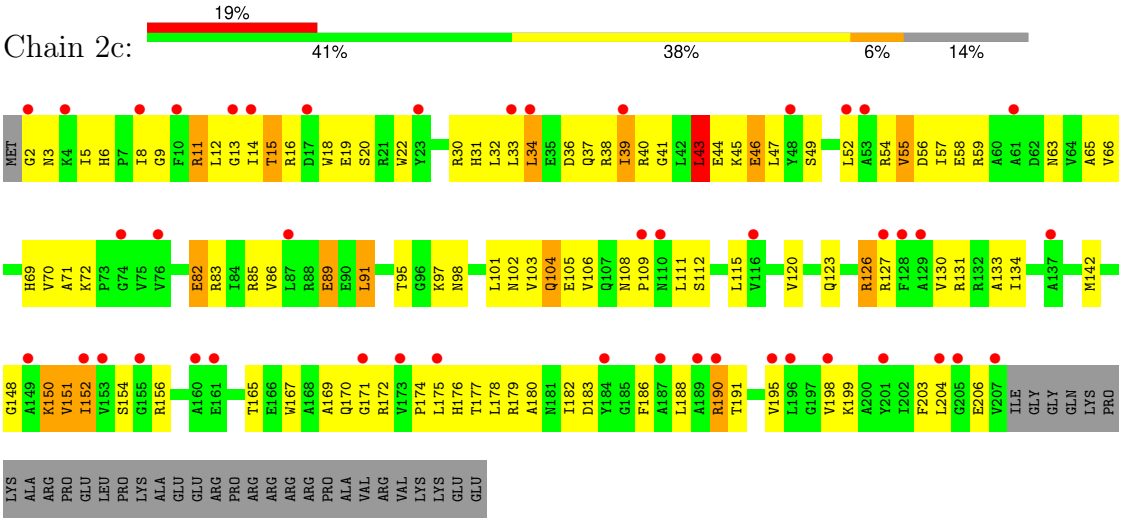
Chain 1c:





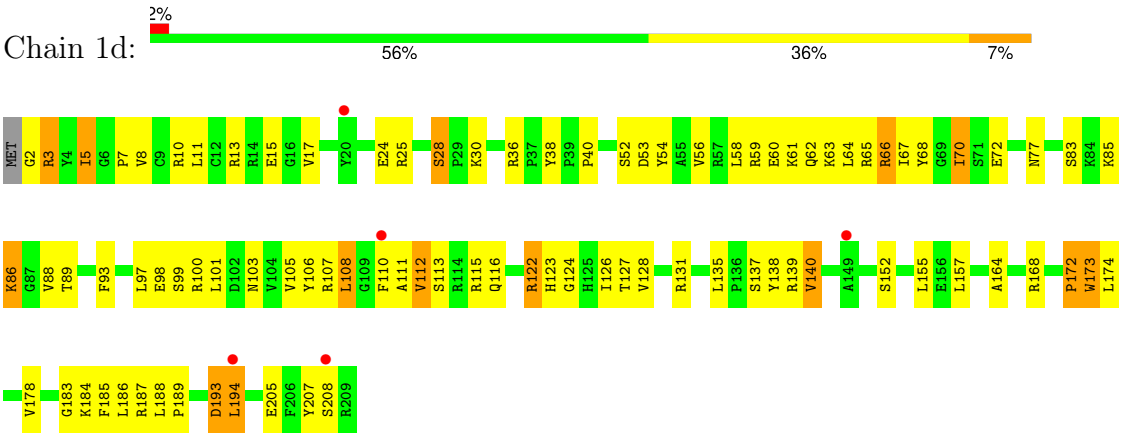
• Molecule 34: 30S ribosomal protein S3

Chain 2c:



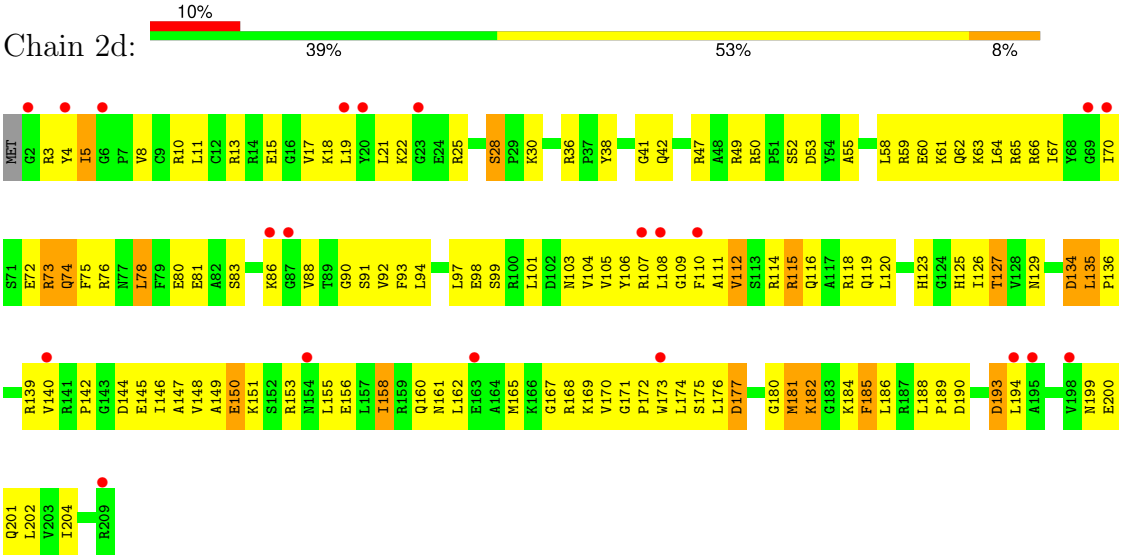
• Molecule 35: 30S ribosomal protein S4

Chain 1d:



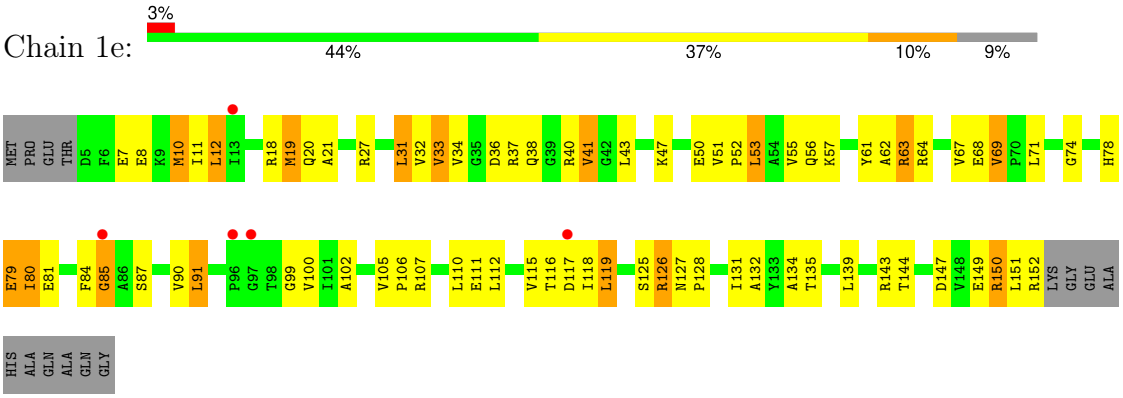
• Molecule 35: 30S ribosomal protein S4

Chain 2d:



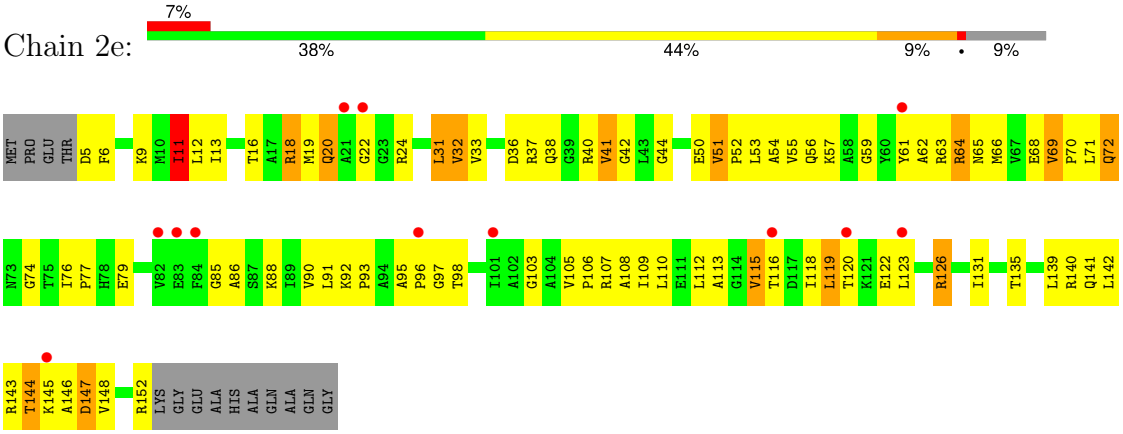
• Molecule 36: 30S ribosomal protein S5

Chain 1e:



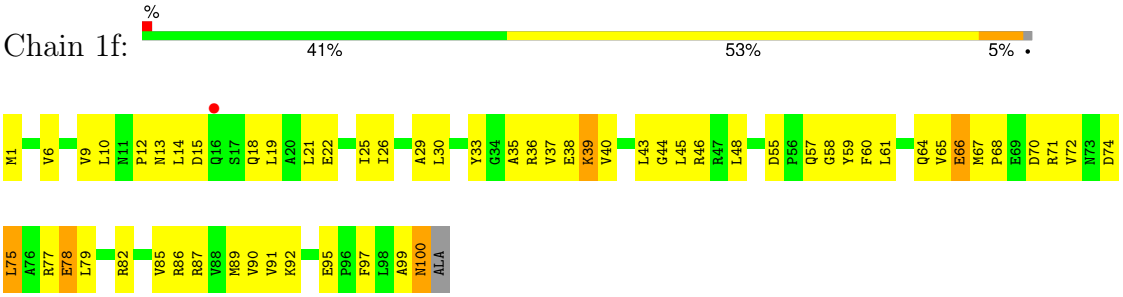
• Molecule 36: 30S ribosomal protein S5

Chain 2e:



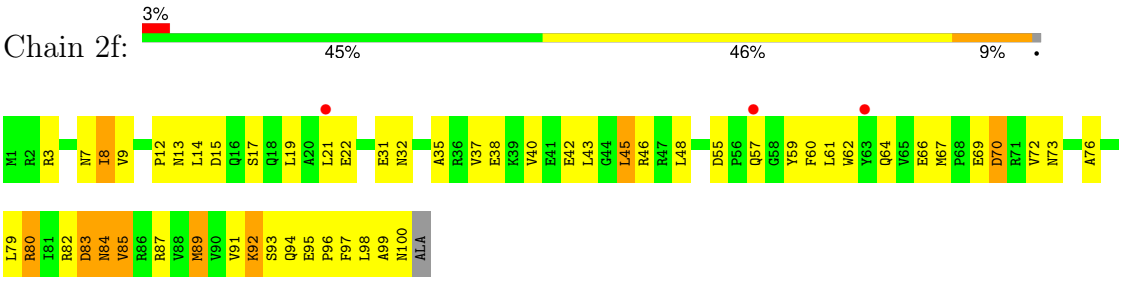
• Molecule 37: 30S ribosomal protein S6

Chain 1f:



• Molecule 37: 30S ribosomal protein S6

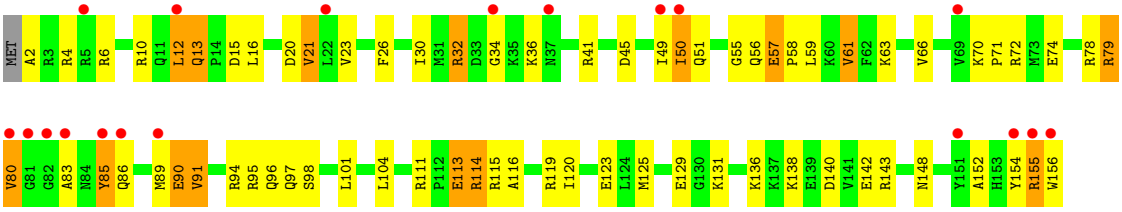
Chain 2f:



• Molecule 38: 30S ribosomal protein S7

Chain 1g:

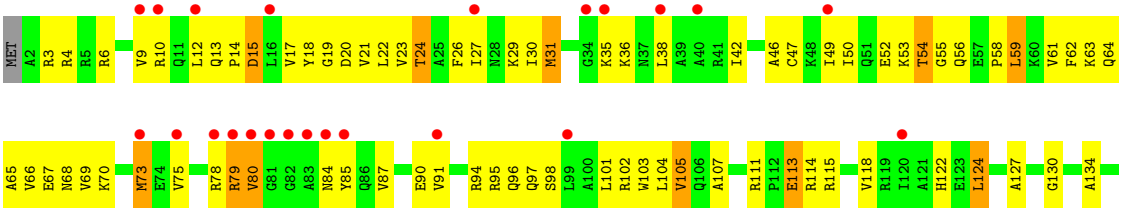


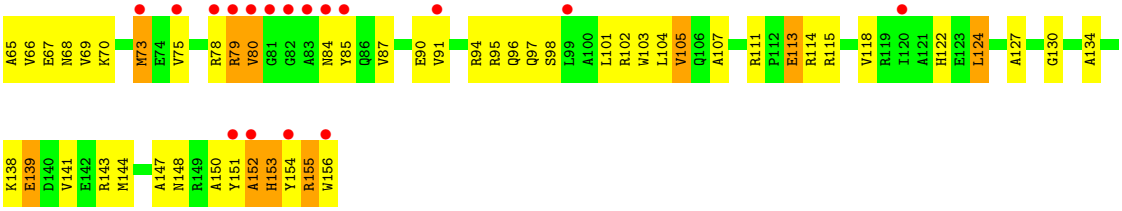


• Molecule 38: 30S ribosomal protein S7

Chain 2g:



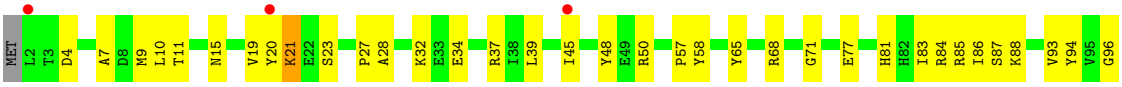




• Molecule 39: 30S ribosomal protein S8

Chain 1h:



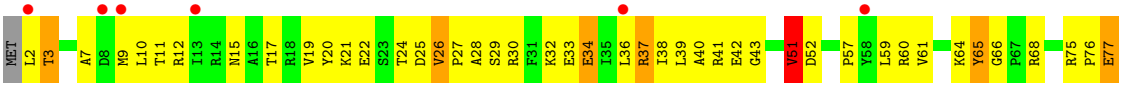


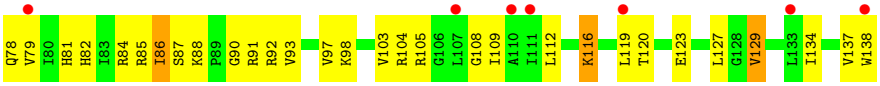


• Molecule 39: 30S ribosomal protein S8

Chain 2h:



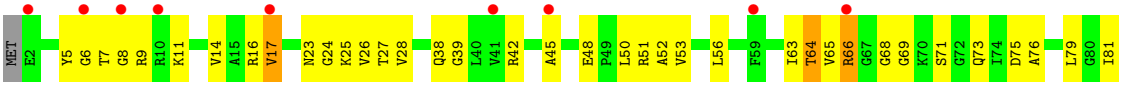




• Molecule 40: 30S ribosomal protein S9

Chain 1i:



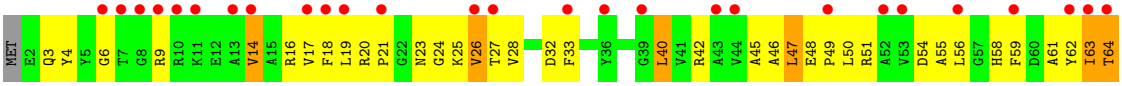


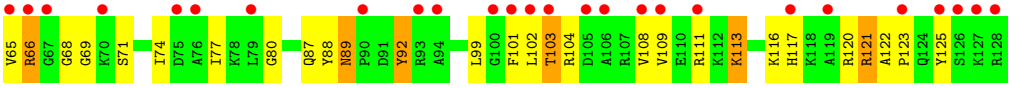


• Molecule 40: 30S ribosomal protein S9

Chain 2i:



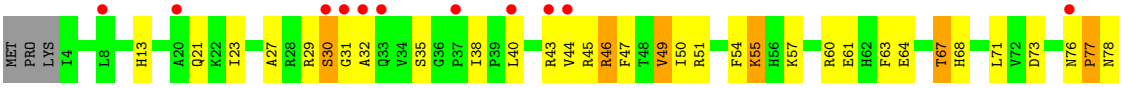


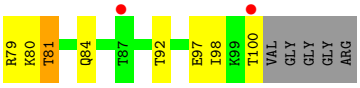


• Molecule 41: 30S ribosomal protein S10

Chain 1j:



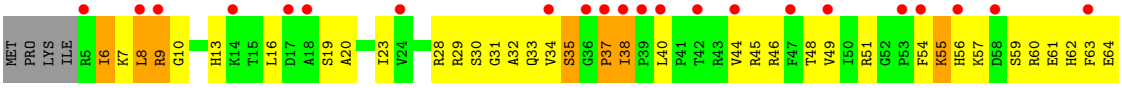


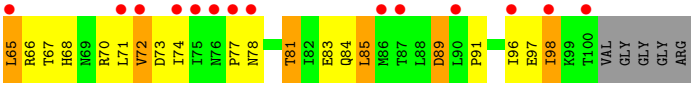


• Molecule 41: 30S ribosomal protein S10

Chain 2j:



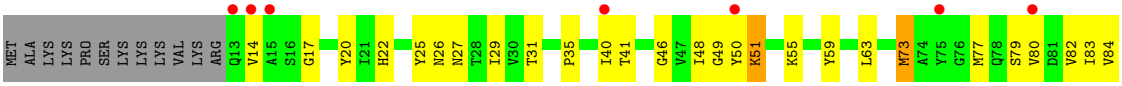




• Molecule 42: 30S ribosomal protein S11

Chain 1k:



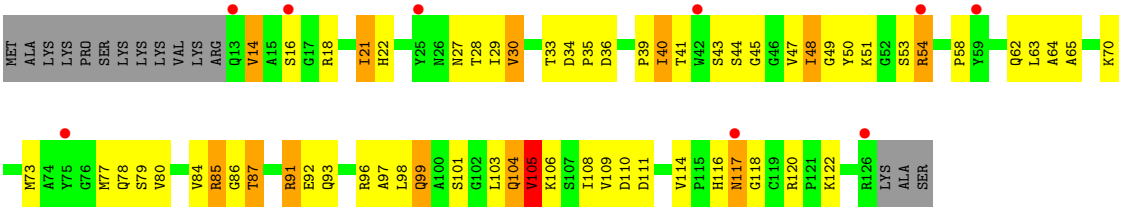




• Molecule 42: 30S ribosomal protein S11

Chain 2k:

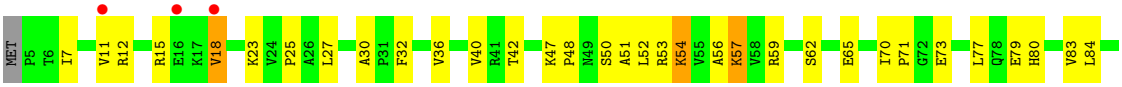


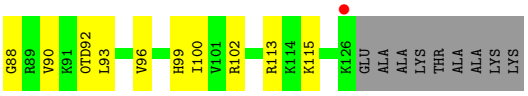


• Molecule 43: 30S ribosomal protein S12

Chain 1l:



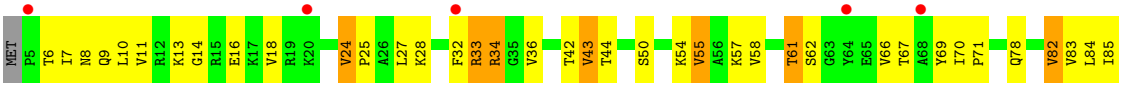


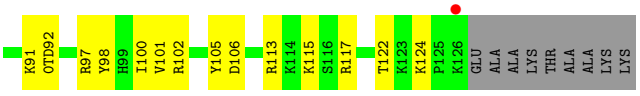


• Molecule 43: 30S ribosomal protein S12

Chain 2l:

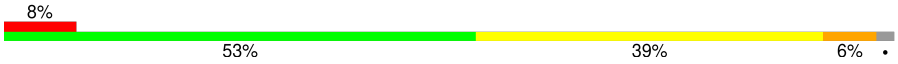


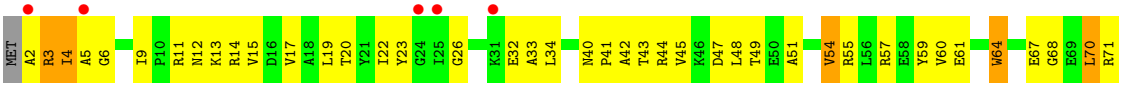


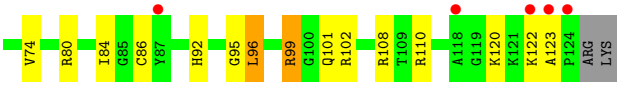


• Molecule 44: 30S ribosomal protein S13

Chain 1m:



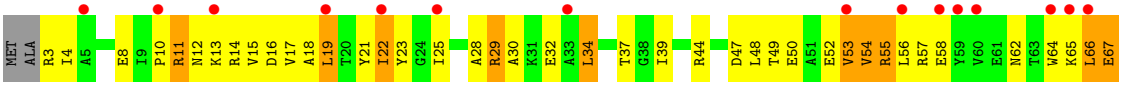


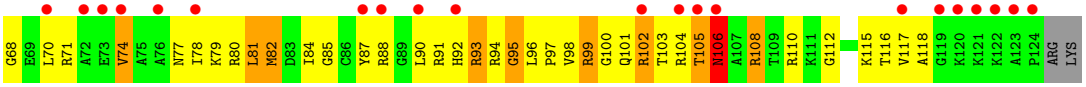


• Molecule 44: 30S ribosomal protein S13

Chain 2m:

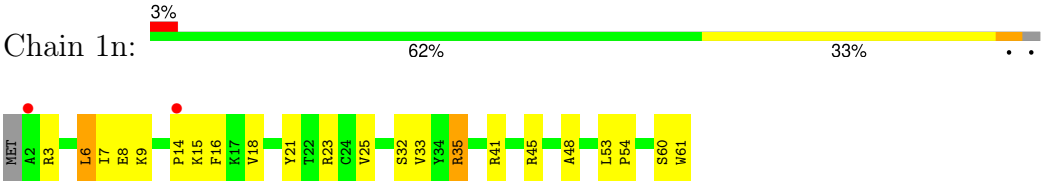






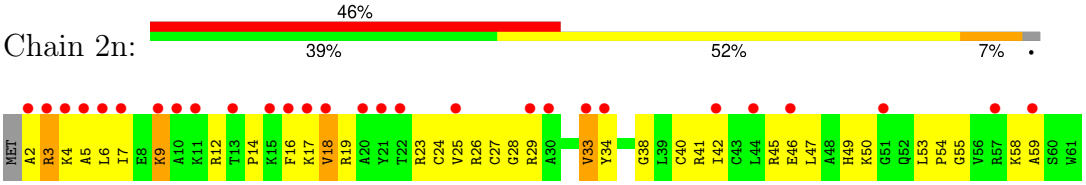
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 1n:



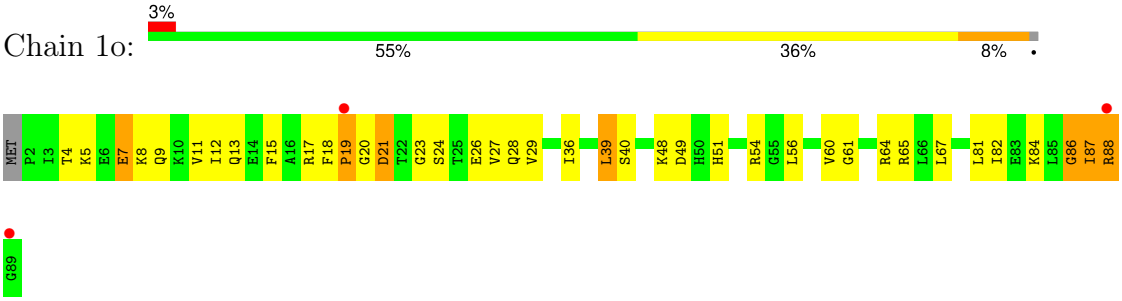
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 2n:



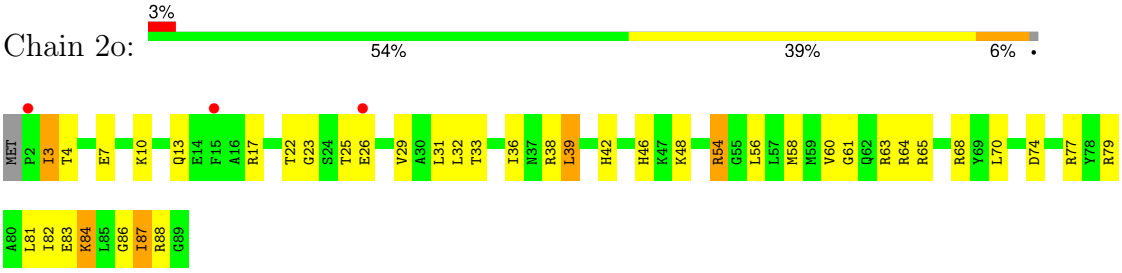
• Molecule 46: 30S ribosomal protein S15

Chain 1o:



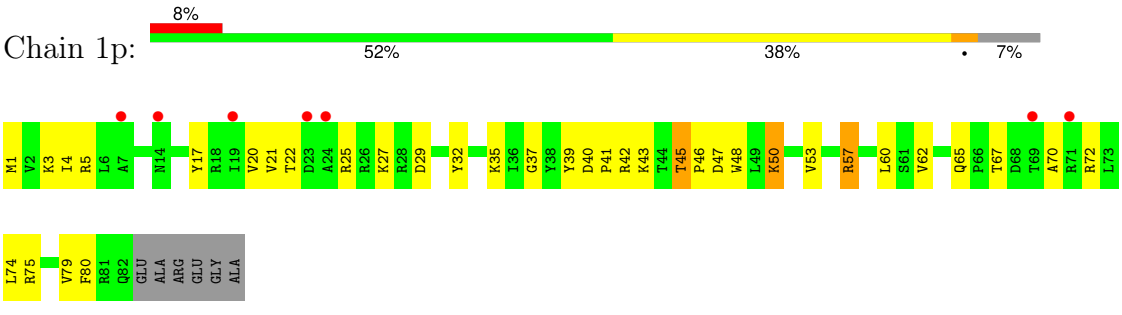
• Molecule 46: 30S ribosomal protein S15

Chain 2o:



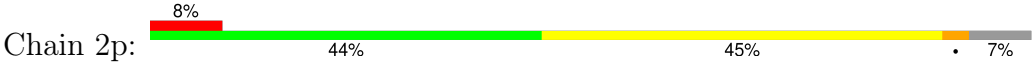
• Molecule 47: 30S ribosomal protein S16

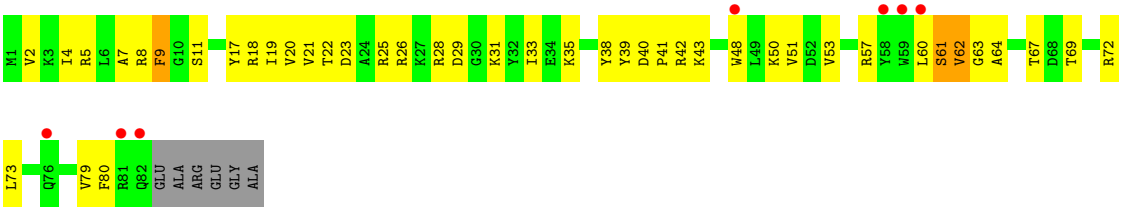
Chain 1p:



• Molecule 47: 30S ribosomal protein S16

Chain 2p:

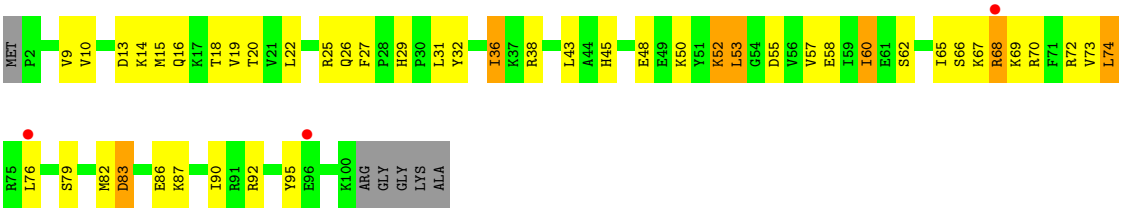




• Molecule 48: 30S ribosomal protein S17

Chain 1q:

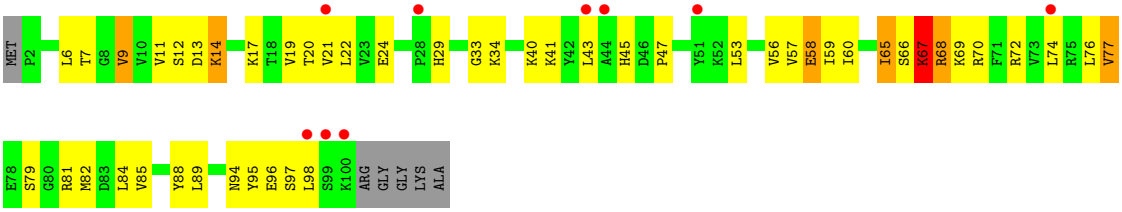




• Molecule 48: 30S ribosomal protein S17

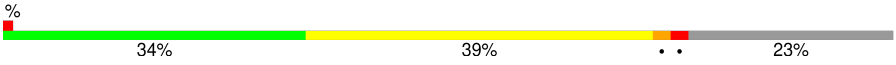
Chain 2q:

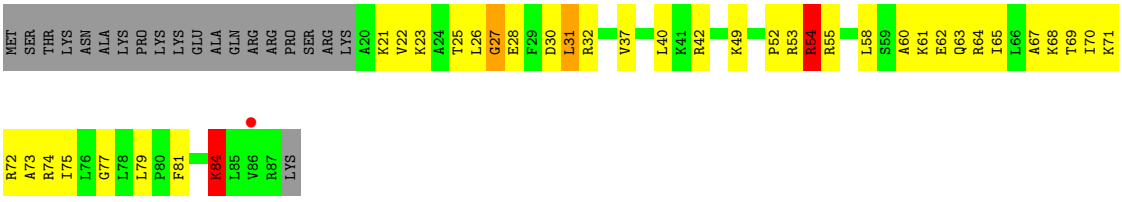




• Molecule 49: 30S ribosomal protein S18

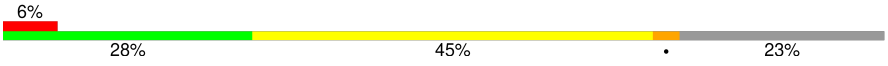
Chain 1r:

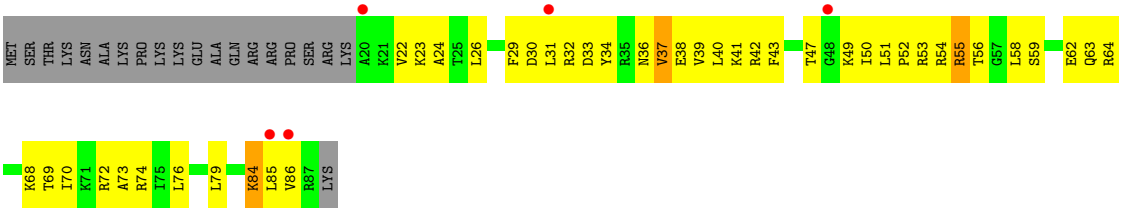




• Molecule 49: 30S ribosomal protein S18

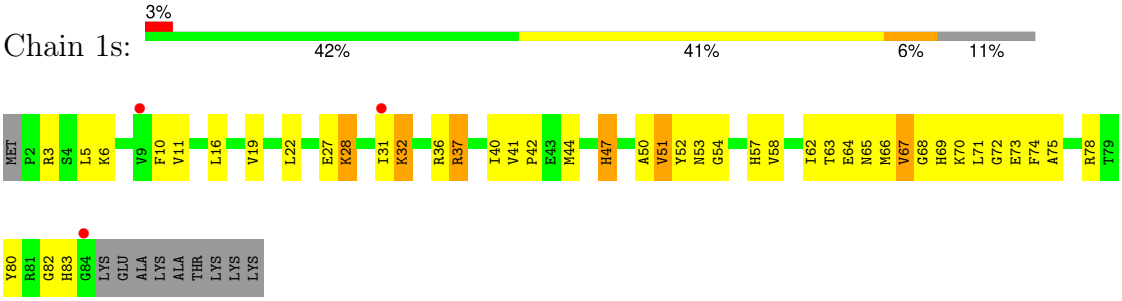
Chain 2r:





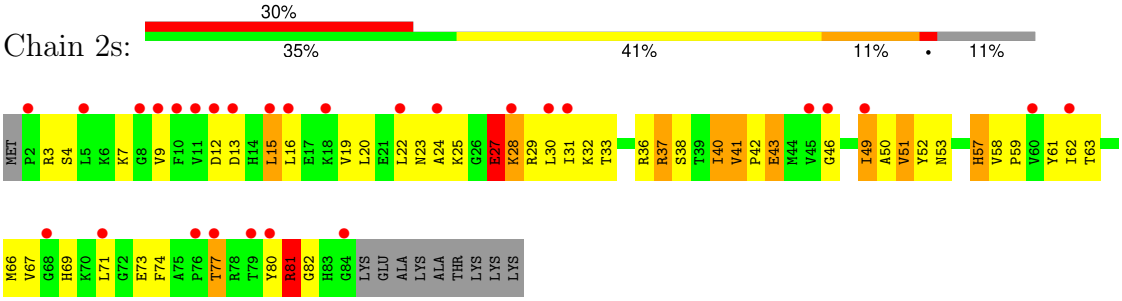
• Molecule 50: 30S ribosomal protein S19

Chain 1s:



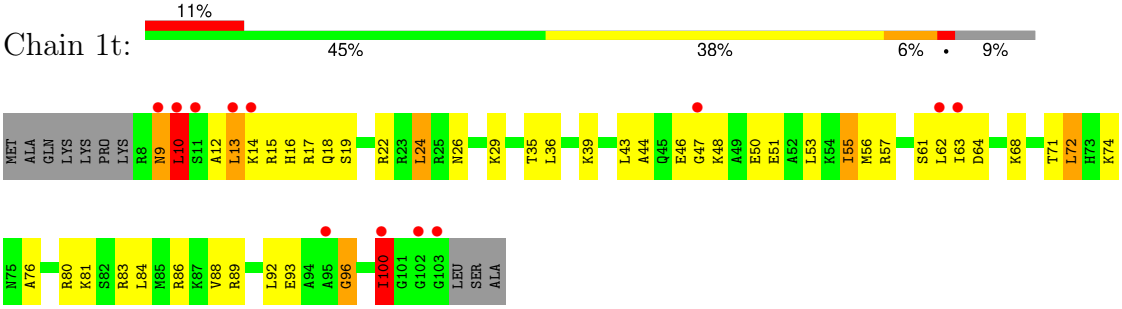
• Molecule 50: 30S ribosomal protein S19

Chain 2s:



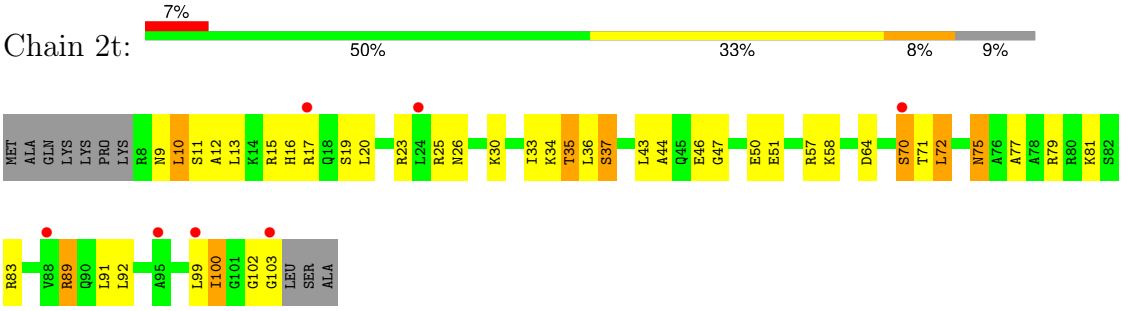
• Molecule 51: 30S ribosomal protein S20

Chain 1t:



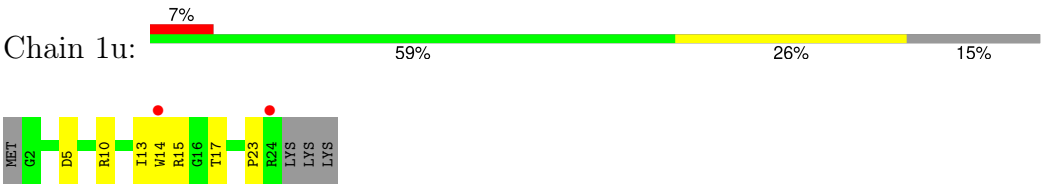
• Molecule 51: 30S ribosomal protein S20

Chain 2t:



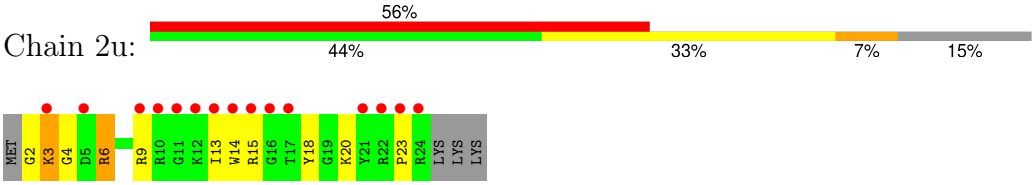
• Molecule 52: 30S ribosomal protein Thx

Chain 1u:



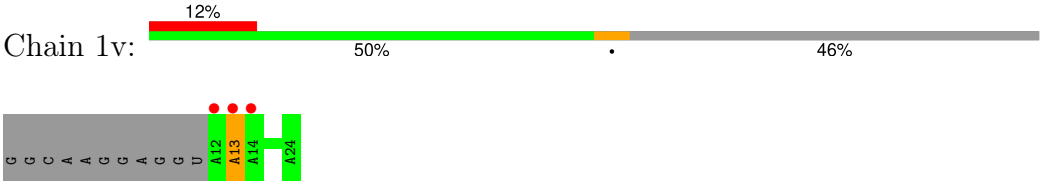
• Molecule 52: 30S ribosomal protein Thx

Chain 2u:



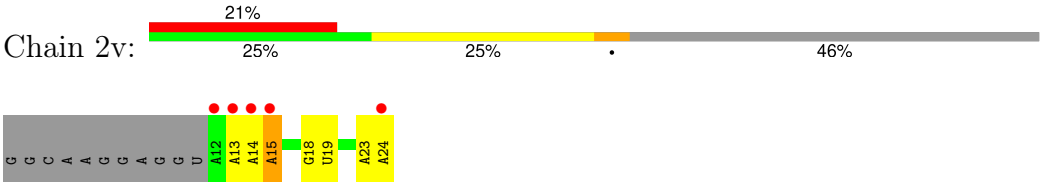
• Molecule 53: MET-PHE-mRNA

Chain 1v:



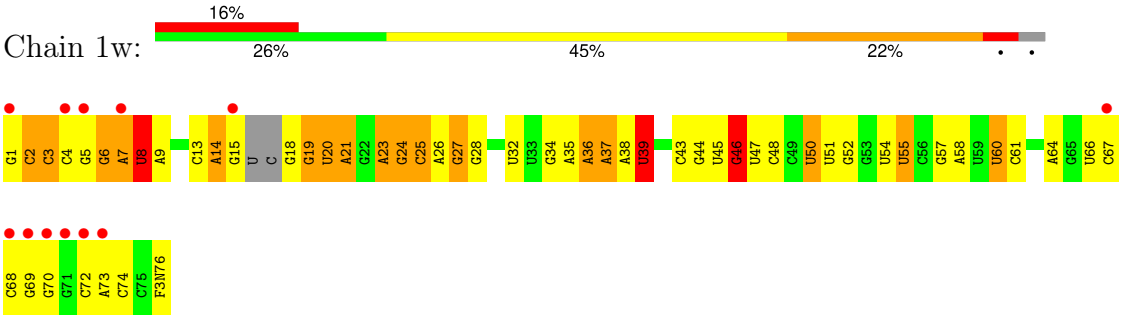
• Molecule 53: MET-PHE-mRNA

Chain 2v:



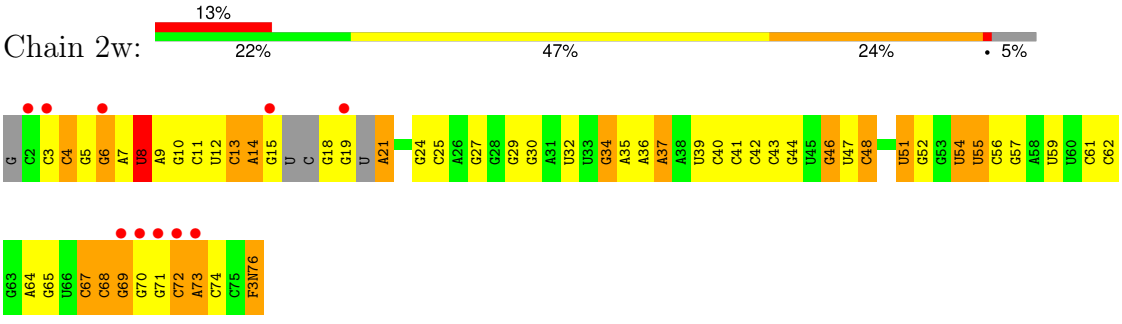
• Molecule 54: A-site Aminoacylated Phe-tRNAphe

Chain 1w:



• Molecule 54: A-site Aminoacylated Phe-tRNAphe

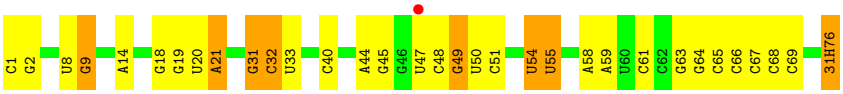
Chain 2w:



• Molecule 55: P-site Aminoacylated fMet-tRNAmet

Chain 1x:

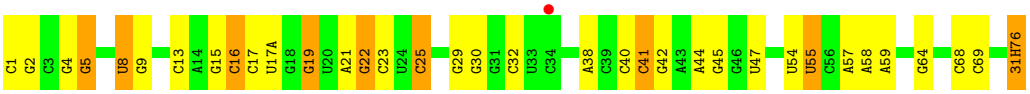




• Molecule 55: P-site Aminoacylated fMet-tRNAmet

Chain 2x:

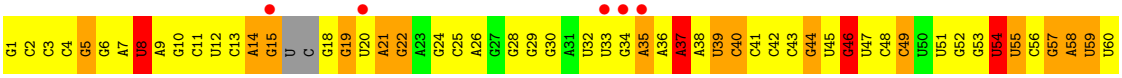


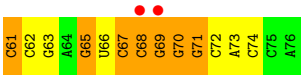


• Molecule 56: E-site Deacylated tRNAphe

Chain 1y:



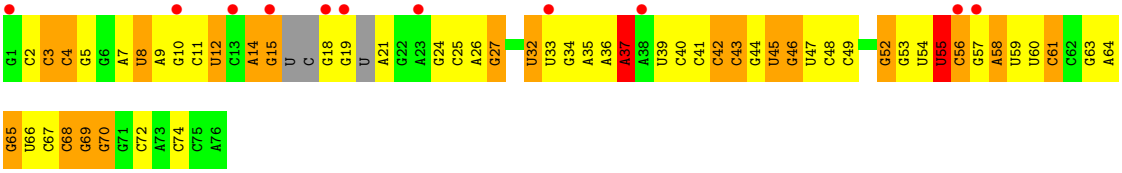




• Molecule 56: E-site Deacylated tRNAphe

Chain 2y:





4 Data and refinement statistics (i)

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
$< I/\sigma(I) >$ [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]	$< \|L\| > = 0.34$, $< L^2 > = 0.16$	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.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ 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: UR3, 0TD, 4SU, ZN, OMC, F3N, 2MG, SF4, 4OC, A1C9N, MIA, M2G, OMG, MG, G7M, 31H, 5MC, 2MA, 5MU, MA6, PSU, K, OMU

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(^{o})	Ideal(^{o})
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(^{o})	Ideal(^{o})
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 (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	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:H4'	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
43:1l:113:ARG:NE	43:1l: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 (i)

5.3.1 Protein backbone (i)

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	11	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 (i)

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 (i)

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	$\#\|Z\| > 2$
1	5MC	1A	1942	1,57	19,22,23	1.69	3 (15%)	26,32,35	1.40	3 (11%)
54	PSU	2w	32	54	18,21,22	1.44	2 (11%)	21,30,33	1.82	4 (19%)
54	PSU	2w	55	54	18,21,22	1.42	3 (16%)	21,30,33	2.07	6 (28%)
56	5MU	1y	54	56	19,22,23	1.57	4 (21%)	27,32,35	1.97	6 (22%)
32	5MC	2a	1404	32	19,22,23	1.81	3 (15%)	26,32,35	1.20	4 (15%)
54	5MU	1w	54	54	19,22,23	1.31	4 (21%)	27,32,35	2.29	6 (22%)
54	G7M	2w	46	54	23,26,27	1.56	4 (17%)	34,39,42	1.88	5 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
1	OMG	1A	2251	1,57,55	23,26,27	1.28	3 (13%)	32,38,41	2.10	6 (18%)
56	G7M	1y	46	56	23,26,27	1.71	6 (26%)	34,39,42	2.20	9 (26%)
55	PSU	1x	55	55	18,21,22	1.41	2 (11%)	21,30,33	2.00	3 (14%)
55	31H	2x	76	57,58,55	31,34,35	1.34	4 (12%)	35,47,50	2.02	11 (31%)
54	G7M	1w	46	54	23,26,27	1.57	3 (13%)	34,39,42	1.79	4 (11%)
54	4SU	1w	8	54	18,21,22	1.90	4 (22%)	25,30,33	2.66	7 (28%)
43	0TD	2l	92	43	8,9,10	5.25	2 (25%)	6,11,13	4.63	1 (16%)
56	PSU	1y	32	56	18,21,22	1.42	2 (11%)	21,30,33	2.03	4 (19%)
54	PSU	2w	39	54	18,21,22	1.40	2 (11%)	21,30,33	1.69	4 (19%)
32	G7M	2a	527	32	23,26,27	1.41	5 (21%)	34,39,42	1.61	4 (11%)
56	PSU	2y	32	56	18,21,22	1.40	3 (16%)	21,30,33	1.99	4 (19%)
54	PSU	1w	39	54	18,21,22	1.18	2 (11%)	21,30,33	2.67	6 (28%)
32	5MC	1a	1404	32	19,22,23	1.60	3 (15%)	26,32,35	1.48	3 (11%)
56	MIA	2y	37	56	21,24,32	1.72	3 (14%)	30,35,47	1.87	9 (30%)
55	5MU	1x	54	57,55	19,22,23	1.36	3 (15%)	27,32,35	1.75	6 (22%)
1	5MU	1A	1939	1	19,22,23	1.53	5 (26%)	27,32,35	2.75	8 (29%)
1	PSU	2A	1911	1	18,21,22	1.40	2 (11%)	21,30,33	2.52	5 (23%)
56	PSU	2y	55	56	18,21,22	1.36	1 (5%)	21,30,33	2.01	5 (23%)
32	M2G	1a	966	32	24,27,28	1.32	4 (16%)	33,40,43	2.03	7 (21%)
1	5MC	1A	1962	1,57	19,22,23	1.81	3 (15%)	26,32,35	1.52	6 (23%)
56	4SU	2y	8	56	18,21,22	1.74	4 (22%)	25,30,33	2.62	6 (24%)
32	UR3	2a	1498	32	19,22,23	1.28	1 (5%)	26,32,35	1.82	5 (19%)
1	OMC	1A	1920	1	19,22,23	0.81	0	25,31,34	1.18	2 (8%)
1	OMC	2A	1920	1	19,22,23	0.73	0	25,31,34	0.97	1 (4%)
32	PSU	2a	516	32	18,21,22	1.38	2 (11%)	21,30,33	2.06	6 (28%)
1	OMU	1A	2552	1,57	19,22,23	1.30	4 (21%)	25,31,34	1.94	6 (24%)
32	MA6	1a	1518	32	23,26,27	0.43	0	33,38,41	1.94	9 (27%)
32	5MC	1a	967	32	19,22,23	1.83	3 (15%)	26,32,35	1.27	3 (11%)
1	5MU	2A	1939	1,57	19,22,23	1.64	5 (26%)	27,32,35	2.78	8 (29%)
1	5MC	2A	1942	1	19,22,23	1.77	2 (10%)	26,32,35	1.46	4 (15%)
1	OMG	2A	2251	1,57,55	23,26,27	1.26	4 (17%)	32,38,41	1.97	7 (21%)
32	5MC	2a	1407	32	19,22,23	1.85	3 (15%)	26,32,35	1.20	3 (11%)
55	4SU	1x	8	55	18,21,22	2.34	6 (33%)	25,30,33	1.97	6 (24%)
32	MA6	1a	1519	32	23,26,27	0.45	0	33,38,41	1.95	8 (24%)
55	4SU	2x	8	55	18,21,22	2.22	6 (33%)	25,30,33	1.52	6 (24%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
54	MIA	1w	37	54	28,31,32	2.28	6 (21%)	38,44,47	2.72	10 (26%)
54	5MU	2w	54	54	19,22,23	1.50	6 (31%)	27,32,35	1.89	7 (25%)
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%)
1	PSU	1A	1917	1	18,21,22	1.33	2 (11%)	21,30,33	2.15	6 (28%)
32	G7M	1a	527	32	23,26,27	1.66	3 (13%)	34,39,42	1.74	4 (11%)
32	2MG	1a	1207	32	23,26,27	1.33	3 (13%)	33,38,41	2.42	10 (30%)
32	PSU	1a	516	32,57	18,21,22	1.38	2 (11%)	21,30,33	2.07	5 (23%)
56	G7M	2y	46	56	23,26,27	1.66	5 (21%)	34,39,42	1.92	4 (11%)
1	5MU	1A	1915	1	19,22,23	1.41	4 (21%)	27,32,35	2.42	6 (22%)
55	PSU	2x	55	55	18,21,22	1.36	2 (11%)	21,30,33	1.91	4 (19%)
54	4SU	2w	8	54	18,21,22	1.82	5 (27%)	25,30,33	2.51	5 (20%)
55	5MU	2x	54	55	19,22,23	1.48	5 (26%)	27,32,35	2.44	8 (29%)
56	PSU	2y	39	56	18,21,22	1.35	2 (11%)	21,30,33	2.09	4 (19%)
32	2MG	2a	1207	32,57	23,26,27	1.28	3 (13%)	33,38,41	2.09	9 (27%)
1	2MA	2A	2503	1,57	22,25,26	1.54	6 (27%)	32,37,40	2.34	7 (21%)
55	31H	1x	76	57,55	31,34,35	1.19	3 (9%)	35,47,50	2.41	14 (40%)
55	5MC	2x	32	40,55	19,22,23	1.36	2 (10%)	26,32,35	1.38	4 (15%)
32	5MC	2a	1400	32	19,22,23	1.42	2 (10%)	26,32,35	1.05	1 (3%)
56	4SU	1y	8	56	18,21,22	1.62	3 (16%)	25,30,33	2.30	5 (20%)
32	UR3	1a	1498	32	19,22,23	1.27	2 (10%)	26,32,35	2.27	6 (23%)
55	5MC	1x	32	55	19,22,23	1.37	3 (15%)	26,32,35	1.38	2 (7%)
32	MA6	2a	1519	32	23,26,27	0.43	0	33,38,41	2.15	10 (30%)
1	5MU	2A	1915	1,57	19,22,23	1.47	6 (31%)	27,32,35	2.20	8 (29%)
32	M2G	2a	966	32	24,27,28	1.36	4 (16%)	33,40,43	1.85	6 (18%)
32	4OC	2a	1402	32	20,23,24	0.76	1 (5%)	25,32,35	1.39	5 (20%)
54	F3N	1w	76	1,54	33,36,37	1.69	4 (12%)	41,51,54	1.62	8 (19%)
1	OMU	2A	2552	1,57	19,22,23	1.11	3 (15%)	25,31,34	1.83	5 (20%)
1	PSU	2A	2605	1	18,21,22	1.44	3 (16%)	21,30,33	2.00	4 (19%)
56	5MU	2y	54	56	19,22,23	1.49	4 (21%)	27,32,35	1.57	5 (18%)
32	5MC	1a	1407	32	19,22,23	1.91	3 (15%)	26,32,35	1.21	4 (15%)
32	MA6	2a	1518	32	23,26,27	0.39	0	33,38,41	2.06	9 (27%)
54	MIA	2w	37	54	24,27,32	2.10	4 (16%)	32,39,47	2.45	11 (34%)
54	PSU	1w	32	57,54	18,21,22	1.27	1 (5%)	21,30,33	1.61	4 (19%)
1	2MA	1A	2503	1,57	22,25,26	1.28	4 (18%)	32,37,40	2.66	11 (34%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	5MC	1a	1400	32	19,22,23	1.39	2 (10%)	26,32,35	1.37	3 (11%)
56	MIA	1y	37	56	21,24,32	1.68	3 (14%)	30,35,47	2.16	6 (20%)
1	PSU	1A	1911	1	18,21,22	1.54	3 (16%)	21,30,33	2.28	4 (19%)
32	4OC	1a	1402	32	20,23,24	0.84	1 (5%)	25,32,35	1.06	1 (4%)
56	PSU	1y	55	56	18,21,22	1.35	2 (11%)	21,30,33	1.99	4 (19%)
1	5MC	2A	1962	1,57	19,22,23	1.74	3 (15%)	26,32,35	1.33	3 (11%)
54	F3N	2w	76	1,54	33,36,37	1.46	5 (15%)	41,51,54	1.83	9 (21%)
1	PSU	2A	1917	1	18,21,22	1.50	3 (16%)	21,30,33	2.26	5 (23%)
43	0TD	1l	92	43	8,9,10	3.95	1 (12%)	6,11,13	9.18	3 (50%)
1	PSU	1A	2605	1,57	18,21,22	1.44	3 (16%)	21,30,33	2.06	4 (19%)
56	PSU	1y	39	56	18,21,22	1.46	3 (16%)	21,30,33	2.06	3 (14%)

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
1	5MC	1A	1942	1,57	-	0/7/25/26	0/2/2/2
54	PSU	2w	32	54	-	0/7/25/26	0/2/2/2
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
56	5MU	1y	54	56	-	2/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	2/7/25/26	0/2/2/2
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
54	G7M	2w	46	54	-	0/7/25/26	0/3/3/3
1	OMG	1A	2251	1,57,55	-	0/9/27/28	0/3/3/3
56	G7M	1y	46	56	-	2/7/25/26	0/3/3/3
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2
55	31H	2x	76	57,58,55	-	5/22/40/41	0/3/3/3
54	G7M	1w	46	54	-	0/7/25/26	0/3/3/3
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	3/7/12/14	-
56	PSU	1y	32	56	-	0/7/25/26	0/2/2/2
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
32	G7M	2a	527	32	-	3/7/25/26	0/3/3/3
56	PSU	2y	32	56	-	2/7/25/26	0/2/2/2
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	MIA	2y	37	56	-	3/7/25/34	0/3/3/3
55	5MU	1x	54	57,55	-	0/7/25/26	0/2/2/2
1	5MU	1A	1939	1	-	0/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	2/7/25/26	0/2/2/2
56	PSU	2y	55	56	-	3/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/11/29/30	0/3/3/3
1	5MC	1A	1962	1,57	-	0/7/25/26	0/2/2/2
56	4SU	2y	8	56	-	0/7/25/26	0/2/2/2
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
1	OMC	1A	1920	1	-	1/9/27/28	0/2/2/2
1	OMC	2A	1920	1	-	1/9/27/28	0/2/2/2
32	PSU	2a	516	32	-	2/7/25/26	0/2/2/2
1	OMU	1A	2552	1,57	-	0/9/27/28	0/2/2/2
32	MA6	1a	1518	32	-	0/11/29/30	0/3/3/3
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
1	5MU	2A	1939	1,57	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
1	OMG	2A	2251	1,57,55	-	0/9/27/28	0/3/3/3
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
55	4SU	1x	8	55	-	1/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	2/11/29/30	0/3/3/3
55	4SU	2x	8	55	-	0/7/25/26	0/2/2/2
54	MIA	1w	37	54	-	2/15/33/34	0/3/3/3
54	5MU	2w	54	54	-	1/7/25/26	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
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
32	G7M	1a	527	32	-	2/7/25/26	0/3/3/3
32	2MG	1a	1207	32	-	0/9/27/28	0/3/3/3
32	PSU	1a	516	32,57	-	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
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
54	4SU	2w	8	54	-	0/7/25/26	0/2/2/2
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
56	PSU	2y	39	56	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	32,57	-	2/9/27/28	0/3/3/3
1	2MA	2A	2503	1,57	-	1/7/25/26	0/3/3/3
55	31H	1x	76	57,55	-	4/22/40/41	0/3/3/3
55	5MC	2x	32	40,55	-	0/7/25/26	0/2/2/2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	5MC	2a	1400	32	-	2/7/25/26	0/2/2/2
56	4SU	1y	8	56	-	3/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	3/11/29/30	0/3/3/3
1	5MU	2A	1915	1,57	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/11/29/30	0/3/3/3
32	4OC	2a	1402	32	-	0/9/29/30	0/2/2/2
54	F3N	1w	76	1,54	-	0/19/37/38	0/4/4/4
1	OMU	2A	2552	1,57	-	0/9/27/28	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
56	5MU	2y	54	56	-	0/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
32	MA6	2a	1518	32	-	0/11/29/30	0/3/3/3
54	MIA	2w	37	54	-	2/11/29/34	0/3/3/3
54	PSU	1w	32	57,54	-	0/7/25/26	0/2/2/2
1	2MA	1A	2503	1,57	-	1/7/25/26	0/3/3/3
32	5MC	1a	1400	32	-	0/7/25/26	0/2/2/2
56	MIA	1y	37	56	-	2/7/25/34	0/3/3/3
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
32	4OC	1a	1402	32	-	0/9/29/30	0/2/2/2
56	PSU	1y	55	56	-	2/7/25/26	0/2/2/2
1	5MC	2A	1962	1,57	-	0/7/25/26	0/2/2/2
54	F3N	2w	76	1,54	-	1/19/37/38	0/4/4/4
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	3/7/12/14	-
1	PSU	1A	2605	1,57	-	0/7/25/26	0/2/2/2
56	PSU	1y	39	56	-	0/7/25/26	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(^{o})	Ideal(^{o})
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(^{o})	Ideal(^{o})
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(^{o})	Ideal(^{o})
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(^{o})	Ideal(^{o})
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(^{o})	Ideal(^{o})
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(^{o})	Ideal(^{o})
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(^{o})	Ideal(^{o})
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(^{o})	Ideal(^{o})
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(^{o})	Ideal(^{o})
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(^{o})	Ideal(^{o})
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(^{o})	Ideal(^{o})
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(^{o})	Ideal(^{o})
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
1	1A	1942	5MC	1	0
54	2w	55	PSU	1	0
56	1y	54	5MU	2	0
1	1A	2251	OMG	1	0
56	1y	46	G7M	1	0
55	1x	55	PSU	1	0
55	2x	76	31H	3	0
54	1w	46	G7M	1	0
54	1w	8	4SU	1	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
54	1w	39	PSU	2	0
56	2y	37	MIA	1	0
55	1x	54	5MU	1	0
56	2y	55	PSU	5	0
32	1a	966	M2G	2	0
56	2y	8	4SU	3	0
1	1A	2552	OMU	2	0
32	1a	1518	MA6	2	0
32	1a	967	5MC	2	0
1	2A	2251	OMG	1	0
32	1a	1519	MA6	2	0
55	2x	8	4SU	1	0
54	1w	37	MIA	1	0
54	2w	54	5MU	3	0
32	2a	967	5MC	4	0
54	1w	55	PSU	1	0
1	1A	1915	5MU	1	0
55	2x	55	PSU	2	0
54	2w	8	4SU	2	0
32	2a	1207	2MG	2	0
1	2A	2503	2MA	1	0
55	1x	76	31H	1	0
32	2a	1400	5MC	4	0
56	1y	8	4SU	2	0
55	1x	32	5MC	1	0
32	2a	1519	MA6	3	0
1	2A	1915	5MU	1	0
32	2a	966	M2G	2	0
32	2a	1402	4OC	2	0
1	2A	2552	OMU	1	0
32	2a	1518	MA6	1	0
54	2w	37	MIA	2	0
1	1A	2503	2MA	1	0
56	1y	37	MIA	3	0
32	1a	1402	4OC	2	0
56	1y	55	PSU	1	0
54	2w	76	F3N	2	0
56	1y	39	PSU	1	0

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

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	$\#\|Z\| > 2$
61	SF4	1d	302	35	0,12,12	-	-	-		
59	A1C9N	1A	4101	-	77,79,79	3.00	12 (15%)	107,118,118	2.38	29 (27%)
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	-	-	-		

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
61	SF4	1d	302	35	-	-	0/6/5/5
59	A1C9N	1A	4101	-	-	14/82/141/141	1/6/6/6
59	A1C9N	2A	3885	-	-	14/82/141/141	1/6/6/6
61	SF4	2d	303	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(^{o})	Ideal(^{o})
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(^{o})	Ideal(^{o})
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

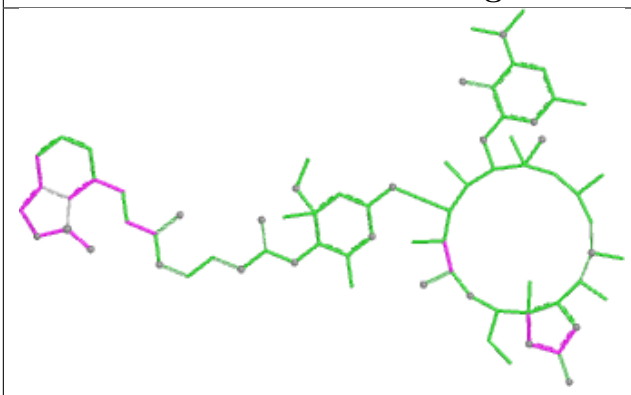
1 monomer is involved in 1 short contact:

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

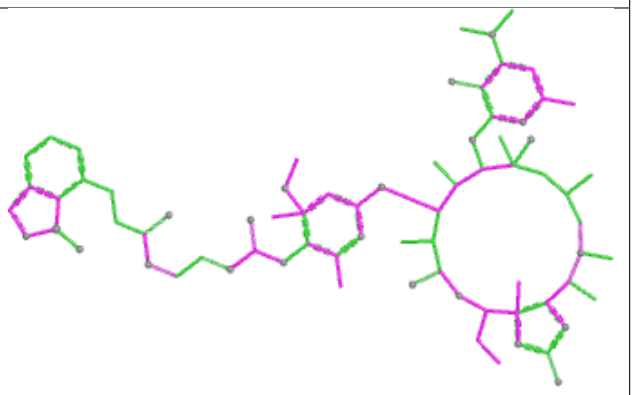
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 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.

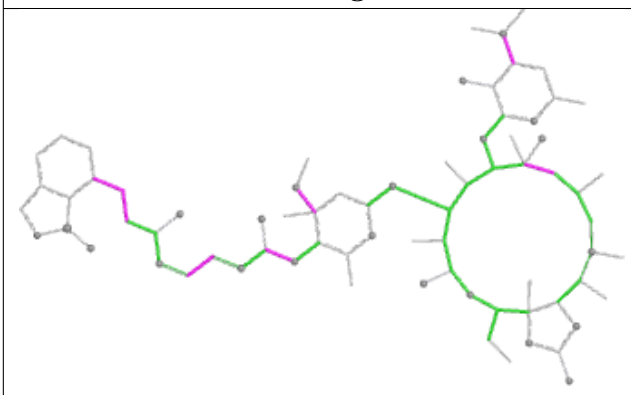
Ligand A1C9N 1A 4101



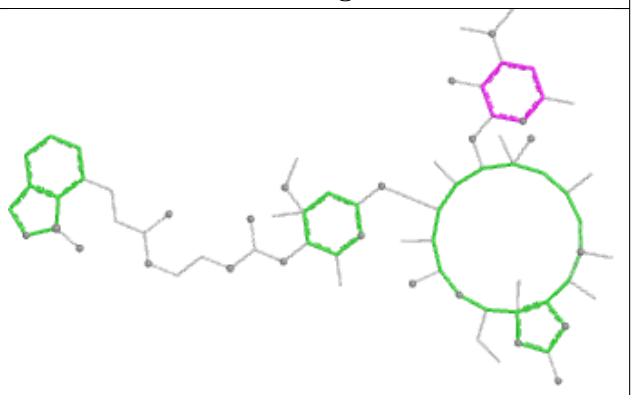
Bond lengths



Bond angles

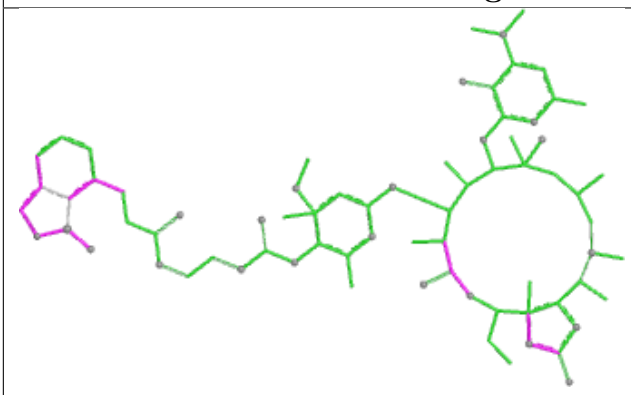


Torsions

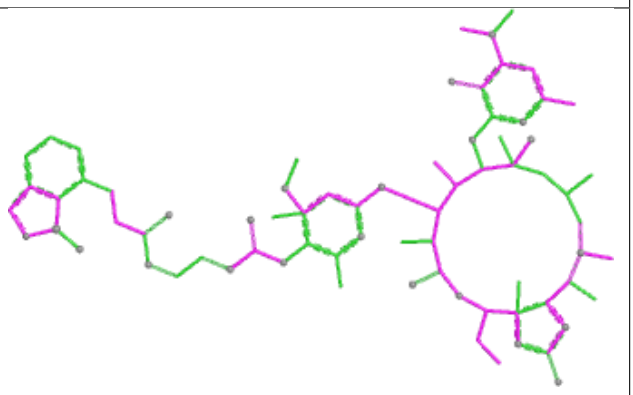


Rings

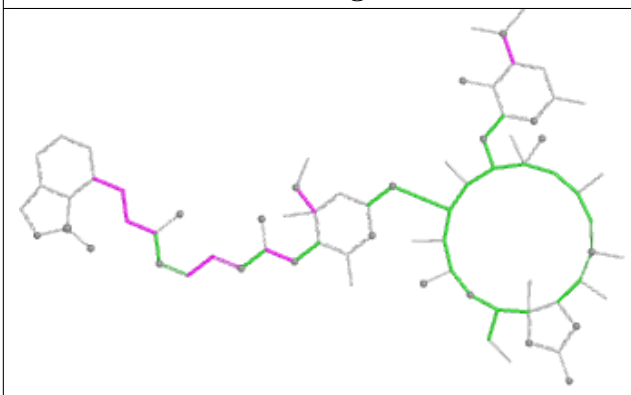
Ligand A1C9N 2A 3885



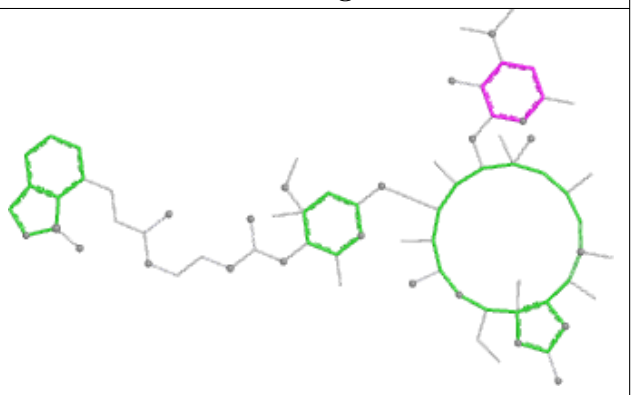
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

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	21	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	21	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 (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(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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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	11	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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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	21	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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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(Å^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 (i)

There are no such residues in this entry.