



Full wwPDB X-ray Structure Validation Report ⓘ

Aug 21, 2025 – 06:39 PM EDT

PDB ID : 9D0I / pdb_00009d0i
Title : Crystal structure of the wild-type *Thermus thermophilus* 70S ribosome in complex with Se-cresomycin, mRNA, deacylated A-site tRNA^{phe}, aminoacylated P-site fMet-tRNA^{met}, and deacylated E-site tRNA^{phe} at 2.45Å resolution
Authors : Aleksandrova, E.V.; Wu, K.J.Y.; Robinson, P.J.; Benedetto, A.E.; Yu, M.; Tresco, B.I.C.; See, D.N.Y.; Jiang, T.; Ramkissoon, A.; Dunand, C.F.; Svetlov, M.S.; Lee, J.; Myers, A.G.; Polikanov, Y.S.
Deposited on : 2024-08-07
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 Phenix2.0rc1
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0rc1
EDS	:	3.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.006 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)

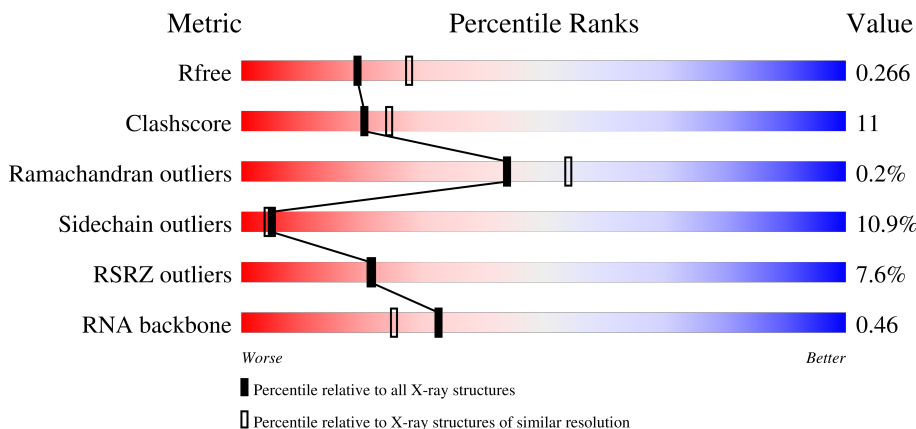
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

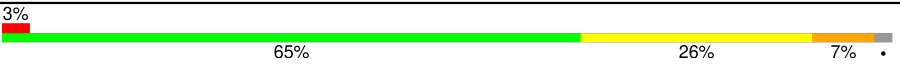
The reported resolution of this entry is 2.45 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	1096 (2.46-2.46)
Clashscore	180529	1178 (2.46-2.46)
Ramachandran outliers	177936	1170 (2.46-2.46)
Sidechain outliers	177891	1170 (2.46-2.46)
RSRZ outliers	164620	1096 (2.46-2.46)
RNA backbone	3690	1040 (2.76-2.16)

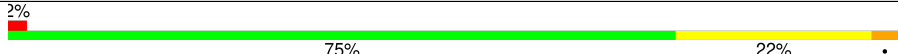
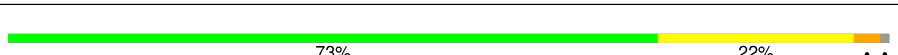
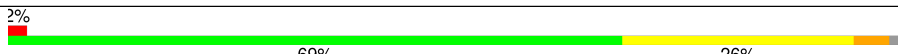
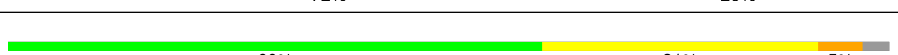
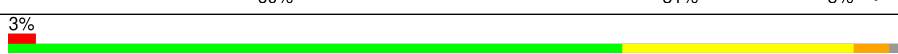
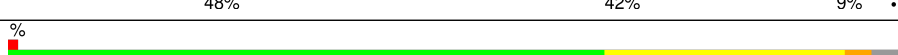
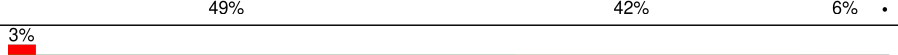
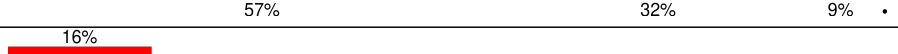
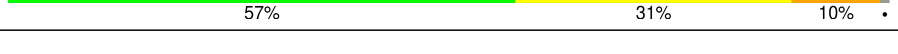
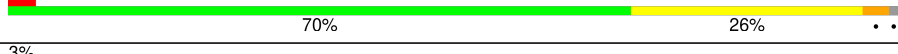
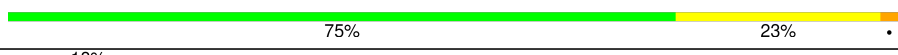
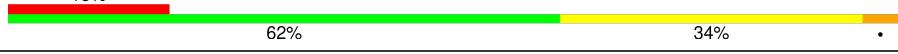
The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively.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

Mol	Chain	Length	Quality of chain
1	1A	2915	
1	2A	2915	

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Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
 Validation Pipeline (wwPDB-VP) : 2.45.1

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Mol	Chain	Length	Quality of chain
2	1B	121	
2	2B	121	
3	1D	276	
3	2D	276	
4	1E	206	
4	2E	206	
5	1F	210	
5	2F	210	
6	1G	182	
6	2G	182	
7	1H	180	
7	2H	180	
8	1I	148	
8	2I	148	
9	1N	140	
9	2N	140	
10	1O	122	
10	2O	122	
11	1P	150	
11	2P	150	
12	1Q	141	
12	2Q	141	
13	1R	118	
13	2R	118	
14	1S	112	

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Mol	Chain	Length	Quality of chain
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	
26	24	71	

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Mol	Chain	Length	Quality of chain
27	15	60	
27	25	60	
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	

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

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

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
56	MG	1a	1641	-	-	-	X
56	MG	1a	1711	-	-	-	X
56	MG	1a	1713	-	-	-	X
56	MG	1n	101	-	-	-	X
56	MG	2A	3446	-	-	-	X
56	MG	2a	3008	-	-	-	X
56	MG	2a	3111	-	-	-	X

2 Entry composition

There are 61 unique types of molecules in this entry. The entry contains 300078 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			

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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	77	Total	C	N	O	S	0	0	0
			608	375	129	103	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			

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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			

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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 MF-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 and E-site Deacylated tRNAphe.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	71	Total	C	N	O	P	S	0	0	0
			1530	685	274	498	71	2			
54	1y	74	Total	C	N	O	P	S	0	0	0
			1585	707	285	518	74	1			
54	2w	69	Total	C	N	O	P	S	0	0	0
			1482	662	267	482	69	2			
54	2y	73	Total	C	N	O	P	S	0	0	0
			1565	698	283	510	73	1			

- Molecule 55 is a RNA chain called P-site Aminoacylated fMet-tRNAmet.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
55	1x	76	Total	C	N	O	P	S	0	0	0
			1635	731	296	530	76	2			
55	2x	76	Total	C	N	O	P	S	0	0	0
			1635	731	296	530	76	2			

- Molecule 56 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	1A	1103	Total	Mg	0	0
			1103	1103		
56	1B	37	Total	Mg	0	0
			37	37		
56	1D	12	Total	Mg	0	0
			12	12		
56	1E	17	Total	Mg	0	0
			17	17		
56	1F	13	Total	Mg	0	0
			13	13		
56	1G	5	Total	Mg	0	0
			5	5		
56	1I	1	Total	Mg	0	0
			1	1		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	1N	5	Total 5	Mg 5	0	0
56	1O	6	Total 6	Mg 6	0	0
56	1P	6	Total 6	Mg 6	0	0
56	1Q	6	Total 6	Mg 6	0	0
56	1R	4	Total 4	Mg 4	0	0
56	1S	3	Total 3	Mg 3	0	0
56	1T	2	Total 2	Mg 2	0	0
56	1U	12	Total 12	Mg 12	0	0
56	1V	7	Total 7	Mg 7	0	0
56	1W	7	Total 7	Mg 7	0	0
56	1X	7	Total 7	Mg 7	0	0
56	1Y	3	Total 3	Mg 3	0	0
56	1Z	3	Total 3	Mg 3	0	0
56	10	8	Total 8	Mg 8	0	0
56	11	5	Total 5	Mg 5	0	0
56	12	2	Total 2	Mg 2	0	0
56	13	4	Total 4	Mg 4	0	0
56	15	7	Total 7	Mg 7	0	0
56	16	2	Total 2	Mg 2	0	0
56	17	4	Total 4	Mg 4	0	0
56	18	7	Total 7	Mg 7	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	19	1	Total 1	Mg 1	0	0
56	1a	215	Total 215	Mg 215	0	0
56	1b	1	Total 1	Mg 1	0	0
56	1d	1	Total 1	Mg 1	0	0
56	1e	2	Total 2	Mg 2	0	0
56	1f	2	Total 2	Mg 2	0	0
56	1l	2	Total 2	Mg 2	0	0
56	1m	1	Total 1	Mg 1	0	0
56	1n	2	Total 2	Mg 2	0	0
56	1s	1	Total 1	Mg 1	0	0
56	1t	1	Total 1	Mg 1	0	0
56	1v	1	Total 1	Mg 1	0	0
56	1w	8	Total 8	Mg 8	0	0
56	1x	14	Total 14	Mg 14	0	0
56	1y	1	Total 1	Mg 1	0	0
56	2A	885	Total 885	Mg 885	0	0
56	2B	20	Total 20	Mg 20	0	0
56	2D	7	Total 7	Mg 7	0	0
56	2E	10	Total 10	Mg 10	0	0
56	2F	5	Total 5	Mg 5	0	0
56	2G	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	2N	1	Total 1	Mg 1	0	0
56	2O	1	Total 1	Mg 1	0	0
56	2P	2	Total 2	Mg 2	0	0
56	2Q	4	Total 4	Mg 4	0	0
56	2R	2	Total 2	Mg 2	0	0
56	2T	3	Total 3	Mg 3	0	0
56	2U	1	Total 1	Mg 1	0	0
56	2V	2	Total 2	Mg 2	0	0
56	2W	1	Total 1	Mg 1	0	0
56	2X	1	Total 1	Mg 1	0	0
56	2Y	1	Total 1	Mg 1	0	0
56	2Z	1	Total 1	Mg 1	0	0
56	20	4	Total 4	Mg 4	0	0
56	21	2	Total 2	Mg 2	0	0
56	23	1	Total 1	Mg 1	0	0
56	25	4	Total 4	Mg 4	0	0
56	26	1	Total 1	Mg 1	0	0
56	27	2	Total 2	Mg 2	0	0
56	28	3	Total 3	Mg 3	0	0
56	29	1	Total 1	Mg 1	0	0
56	2a	241	Total 241	Mg 241	0	0

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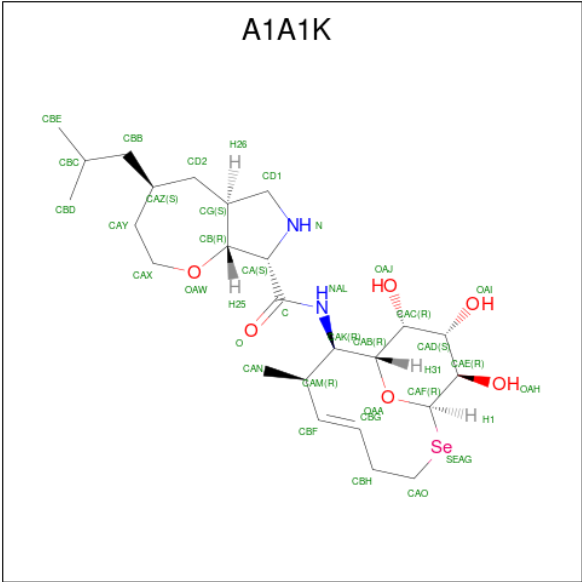
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	2d	2	Total 2	Mg 2	0	0
56	2e	1	Total 1	Mg 1	0	0
56	2f	1	Total 1	Mg 1	0	0
56	2g	1	Total 1	Mg 1	0	0
56	2j	1	Total 1	Mg 1	0	0
56	2l	4	Total 4	Mg 4	0	0
56	2p	1	Total 1	Mg 1	0	0
56	2q	2	Total 2	Mg 2	0	0
56	2r	2	Total 2	Mg 2	0	0
56	2t	1	Total 1	Mg 1	0	0
56	2v	2	Total 2	Mg 2	0	0
56	2w	7	Total 7	Mg 7	0	0
56	2x	5	Total 5	Mg 5	0	0
56	2y	7	Total 7	Mg 7	0	0

- Molecule 57 is POTASSIUM ION (CCD ID: K) (formula: K).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	1A	1	Total 1	K 1	0	0
57	2x	1	Total 1	K 1	0	0

- Molecule 58 is (4S,5aS,8S,8aR)-4-(2-methylpropyl)-N-[(1R,5Z,7R,8R,9R,10R,11S,12R)-10,11,12-trihydroxy-7-methyl-13-oxa-2-selenabicyclo[7.3.1]tridec-5-en-8-yl]octahydro-2H-oxepino[2,3-c]pyrrole-8-carboxamide (non-preferred name) (CCD ID: A1A1K) (formula: C₂₅H₄₂N₂O₆Se).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
58	1A	1	Total	C	N	O	Se	0	0
			34	25	2	6	1		
58	2A	1	Total	C	N	O	Se	0	0
			34	25	2	6	1		

- Molecule 59 is ZINC ION (CCD ID: ZN) (formula: Zn).

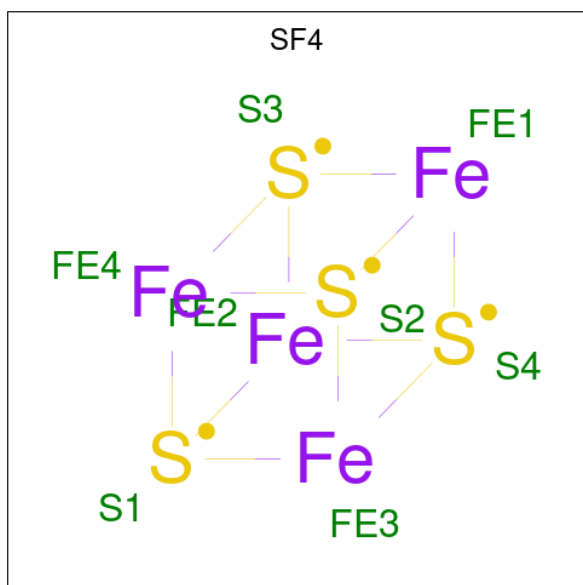
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	1Y	1	Total	Zn	0	0
			1	1		
59	14	1	Total	Zn	0	0
			1	1		
59	15	1	Total	Zn	0	0
			1	1		
59	16	1	Total	Zn	0	0
			1	1		
59	19	1	Total	Zn	0	0
			1	1		
59	1n	1	Total	Zn	0	0
			1	1		
59	2Y	1	Total	Zn	0	0
			1	1		
59	24	1	Total	Zn	0	0
			1	1		
59	25	1	Total	Zn	0	0
			1	1		
59	26	1	Total	Zn	0	0
			1	1		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	29	1	Total	Zn	0	0
			1	1		
59	2n	1	Total	Zn	0	0
			1	1		

- Molecule 60 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
60	1d	1	Total	Fe	S	0	0
			8	4	4		
60	2d	1	Total	Fe	S	0	0
			8	4	4		

- Molecule 61 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	1A	2018	Total	O	0	0
			2018	2018		
61	1B	62	Total	O	0	0
			62	62		
61	1D	26	Total	O	0	0
			26	26		
61	1E	27	Total	O	0	0
			27	27		
61	1F	17	Total	O	0	0
			17	17		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	1G	3	Total	O	0	0
			3	3		
61	1H	2	Total	O	0	0
			2	2		
61	1I	1	Total	O	0	0
			1	1		
61	1N	6	Total	O	0	0
			6	6		
61	1O	7	Total	O	0	0
			7	7		
61	1P	23	Total	O	0	0
			23	23		
61	1Q	7	Total	O	0	0
			7	7		
61	1R	13	Total	O	0	0
			13	13		
61	1S	5	Total	O	0	0
			5	5		
61	1T	8	Total	O	0	0
			8	8		
61	1U	15	Total	O	0	0
			15	15		
61	1V	7	Total	O	0	0
			7	7		
61	1W	8	Total	O	0	0
			8	8		
61	1X	5	Total	O	0	0
			5	5		
61	1Y	2	Total	O	0	0
			2	2		
61	1Z	1	Total	O	0	0
			1	1		
61	10	12	Total	O	0	0
			12	12		
61	11	12	Total	O	0	0
			12	12		
61	12	4	Total	O	0	0
			4	4		
61	13	4	Total	O	0	0
			4	4		
61	15	5	Total	O	0	0
			5	5		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	16	3	Total 3	O 3	0	0
61	17	7	Total 7	O 7	0	0
61	18	11	Total 11	O 11	0	0
61	1a	378	Total 378	O 378	0	0
61	1b	1	Total 1	O 1	0	0
61	1e	1	Total 1	O 1	0	0
61	1f	1	Total 1	O 1	0	0
61	1i	1	Total 1	O 1	0	0
61	1l	8	Total 8	O 8	0	0
61	1o	1	Total 1	O 1	0	0
61	1p	1	Total 1	O 1	0	0
61	1q	2	Total 2	O 2	0	0
61	1u	1	Total 1	O 1	0	0
61	1v	4	Total 4	O 4	0	0
61	1w	10	Total 10	O 10	0	0
61	1x	16	Total 16	O 16	0	0
61	1y	2	Total 2	O 2	0	0
61	2A	1160	Total 1160	O 1160	0	0
61	2B	23	Total 23	O 23	0	0
61	2D	22	Total 22	O 22	0	0
61	2E	12	Total 12	O 12	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	2F	13	Total 13	O 13	0	0
61	2I	3	Total 3	O 3	0	0
61	2O	3	Total 3	O 3	0	0
61	2P	15	Total 15	O 15	0	0
61	2Q	1	Total 1	O 1	0	0
61	2R	4	Total 4	O 4	0	0
61	2T	5	Total 5	O 5	0	0
61	2U	4	Total 4	O 4	0	0
61	2W	3	Total 3	O 3	0	0
61	2X	2	Total 2	O 2	0	0
61	2Z	1	Total 1	O 1	0	0
61	20	6	Total 6	O 6	0	0
61	21	13	Total 13	O 13	0	0
61	23	1	Total 1	O 1	0	0
61	25	1	Total 1	O 1	0	0
61	26	1	Total 1	O 1	0	0
61	27	5	Total 5	O 5	0	0
61	28	3	Total 3	O 3	0	0
61	29	1	Total 1	O 1	0	0
61	2a	264	Total 264	O 264	0	0
61	2d	2	Total 2	O 2	0	0

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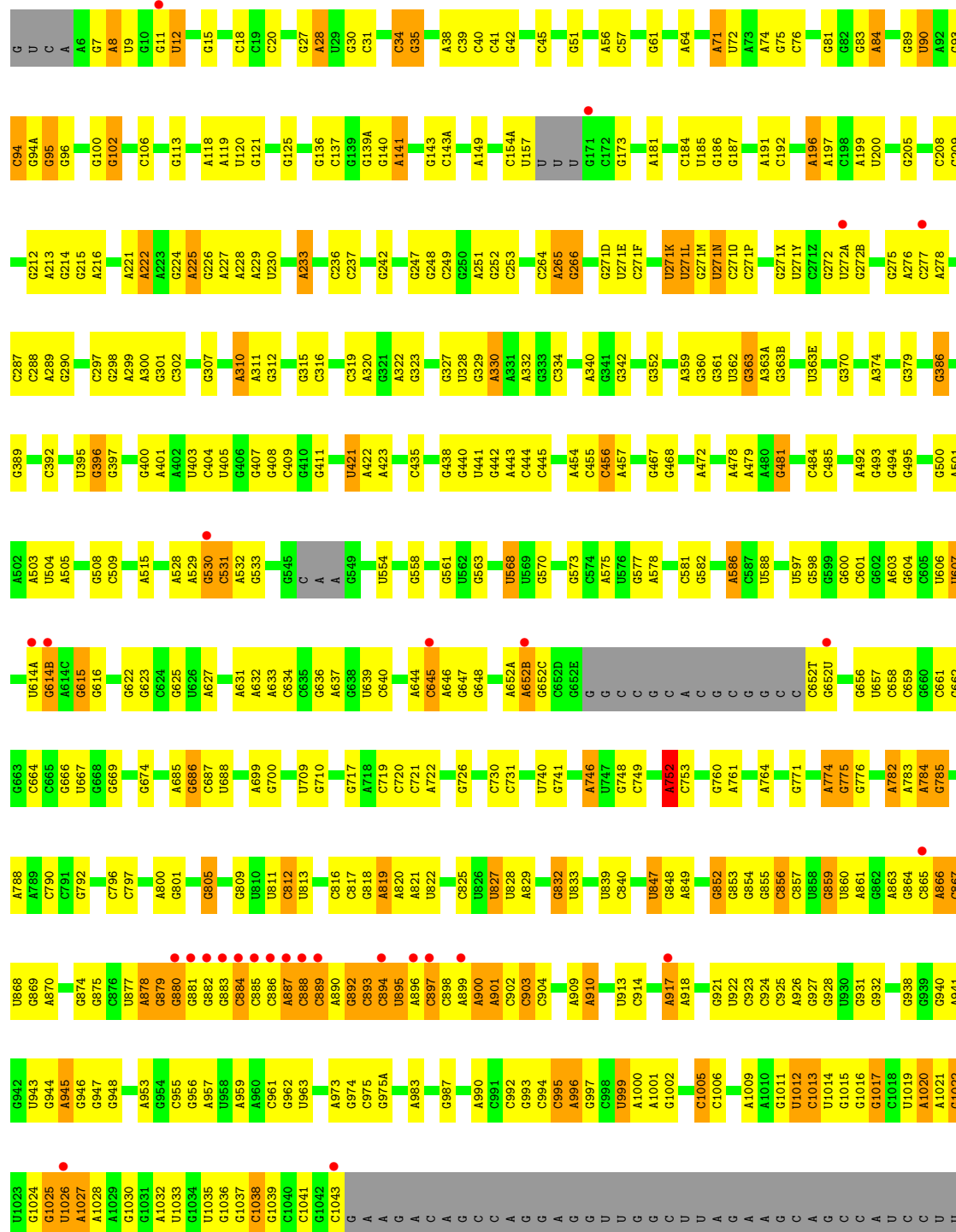
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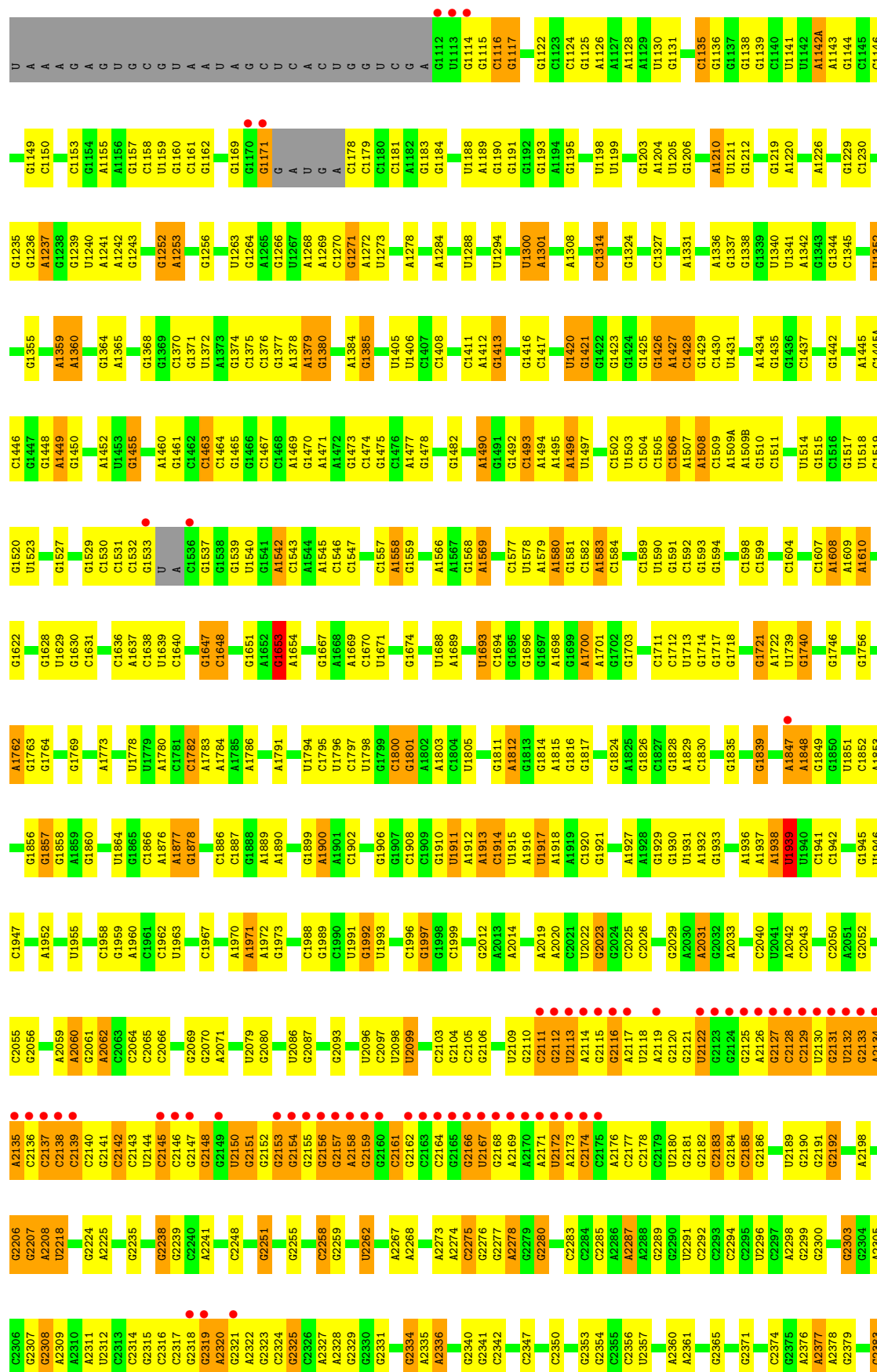
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	2e	2	Total	O	0	0
			2	2		
61	2j	3	Total	O	0	0
			3	3		
61	2l	6	Total	O	0	0
			6	6		
61	2p	1	Total	O	0	0
			1	1		
61	2q	1	Total	O	0	0
			1	1		
61	2r	1	Total	O	0	0
			1	1		
61	2t	3	Total	O	0	0
			3	3		
61	2v	2	Total	O	0	0
			2	2		
61	2w	1	Total	O	0	0
			1	1		
61	2x	7	Total	O	0	0
			7	7		
61	2y	6	Total	O	0	0
			6	6		

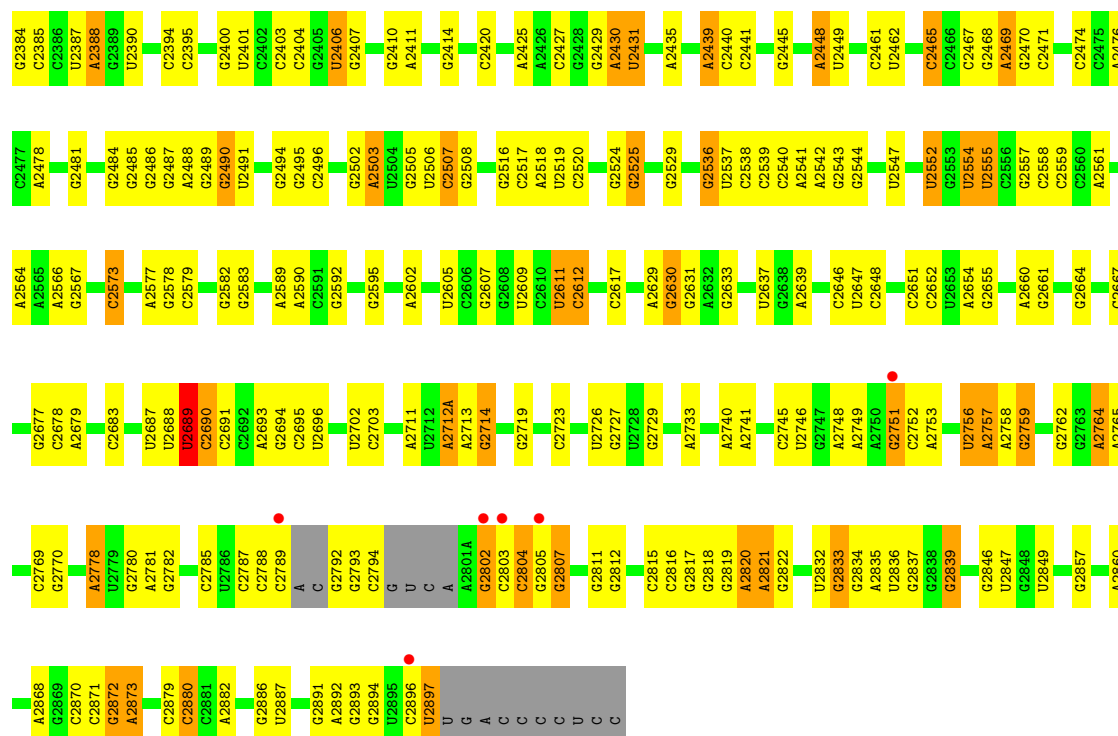
U1276	C2591	A2439	C2326	A2198	A2134	G2052	A1928	G1799	G1674	A1542	C1442	G1442	C1293	U1141
G2732	G2592	C2441	A2327	A2198	A2135	C2055	G1930	C1800	G1678	A1545	G1442	C1297	C1142	U1424
A2733	G2603	A2448	G2330	G2206	C2137	G2056	G1930	A1802	G1678	A1545	A1445	C1445A	U1300	A1143
A2734	G2603	A2448	G2330	G2207	C2138	A2059	A1938	A1803	C1683	C1556	A1448	C1557	A1300	G1444
G2735	U2605	G2454	G2334	A2208	C2140	A2060	U1939	A1811	C1684	C1557	A1448	A1558	A1301	A1155
A2740	U2605	G2454	G2334	U2218	C2141	G2061	U1939	A1811	U1688	A1566	G1450	G1302	A1302	A1155
A2741	U2611	U2605	G2334	G2222	C2142	A2062	C1942	G1814	U1693	A1566	G1450	C1315	C1161	C1161
U2746	U2611	U2605	G2334	A2225	C2144	C2065	U1965	G1815	U1693	A1569	A1452	C1315	C1161	C1161
A2749	C2612	U2611	G2337	G2228	C2146	C2066	U1956	G1816	G1696	A1569	A1452	C1315	C1161	C1161
A2750	C2612	U2611	G2337	U2233	G2147	G2069	U1956	G1817	G1697	A1578	A1453	G1328	G1165	U1165
A2751	C2612	U2611	G2337	G2234	G2148	G2069	C1958	U1818	A1698	A1579	G1455	U1329	C1166	C1166
U2756	U2617	C2467	G2352	G2238	G2151	G2072	U1962	A1829	A1700	G1581	G1461	G1332	G1170	G1170
A2757	U2617	C2467	G2352	G2239	G2152	G2080	U1963	C1837	G1702	A1586	G1465	A1342	G1173	G1173
U2766	U2617	C2467	G2352	G2239	G2152	G2080	U1963	C1837	G1702	A1586	G1465	A1342	G1173	G1173
A2765	A2629	A2476	A2360	G2239	G2152	G2080	U1963	C1837	G1702	A1586	G1465	A1342	G1173	G1173
G2766	A2629	A2476	A2360	U2243	G2153	G2088	U1966	G1839	G1703	A1587	G1466	U1352	G1175	U1175
	A2629	A2476	A2360	U2244	G2154	U2089	C1967	G1839	G1703	A1587	G1466	U1352	G1175	U1175
	G2631	A2478	A2361	U2244	G2155	U2089	C1967	G1839	G1703	A1587	G1466	U1352	G1175	U1175
	G2631	A2478	A2361	U2244	G2155	U2089	C1967	G1839	G1703	A1587	G1466	U1352	G1175	U1175
	G2631	A2478	A2361	U2244	G2155	U2089	C1967	G1839	G1703	A1587	G1466	U1352	G1175	U1175
	G2631	A2478	A2361	U2244	G2155	U2089	C1967	G1839	G1703	A1587	G1466	U1352	G1175	U1175
	G2631	A2478	A2361	U2244	G2155	U2089	C1967	G1839	G1703	A1587	G1466	U1352	G1175	U1175
	G2631	A2478	A2361	U2244	G2155	U2089	C1967	G1839	G1703	A1587	G1466	U1352	G1175	U1175
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	G2631	A2478	A2361	U2244	G2155	U2089	C1967	G1839	G1703	A1587	G1466	U1352	G1175	U1175
	G2631	A2478	A2361	U2244	G2155	U2089	C1967	G1839	G1703	A1587	G1466	U1352	G1175	U1175
	G2631	A2478	A2361	U2244	G2155	U2089	C1967	G1839	G1703	A1587	G1466	U1352	G1175	U1175
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	G263													



• Molecule 1: 23S Ribosomal RNA

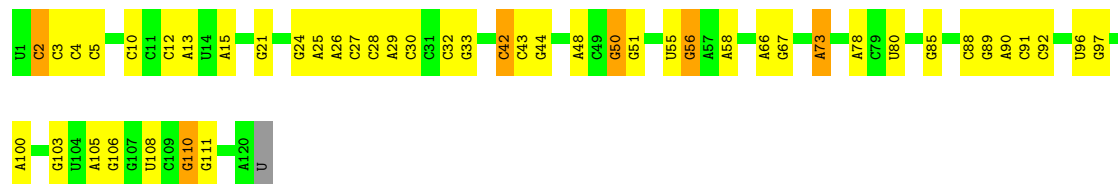






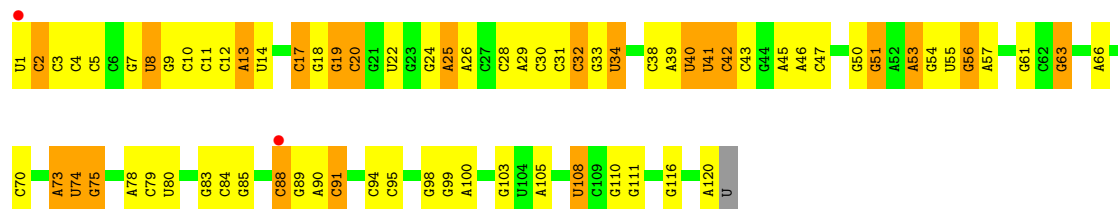
• Molecule 2: 5S Ribosomal RNA

Chain 1B: 60% 34% 5% •



• Molecule 2: 5S Ribosomal RNA

Chain 2B: 39% 42% 18% •



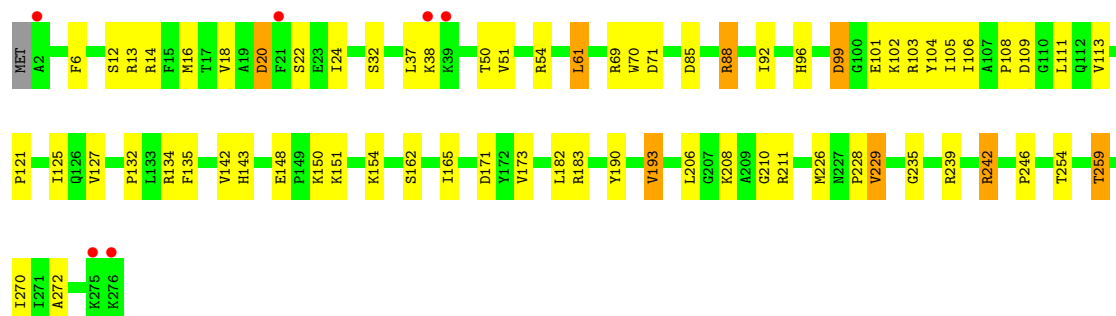
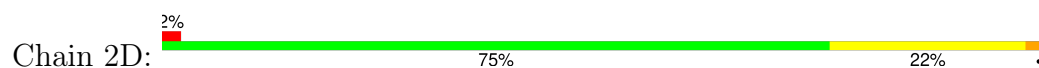
• Molecule 3: 50S ribosomal protein L2

Chain 1D: 78% 20% •

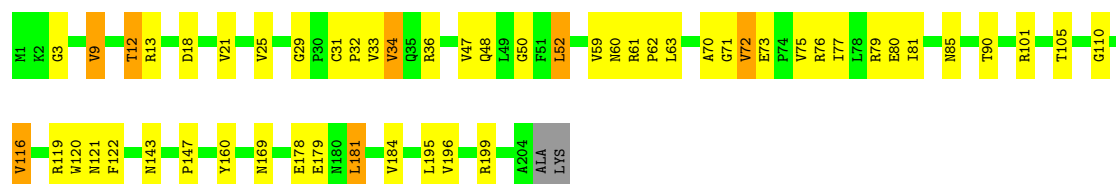
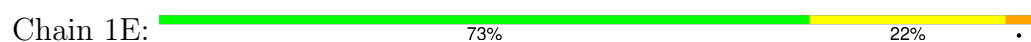




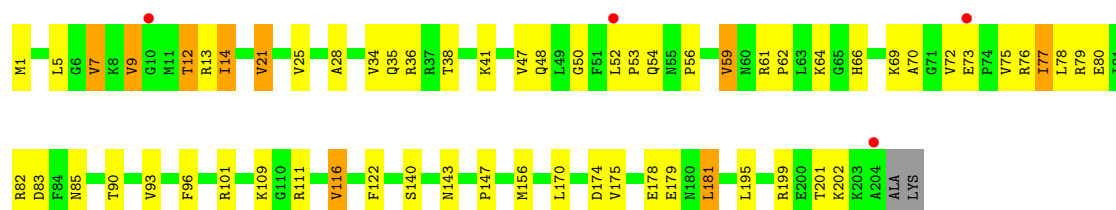
• Molecule 3: 50S ribosomal protein L2



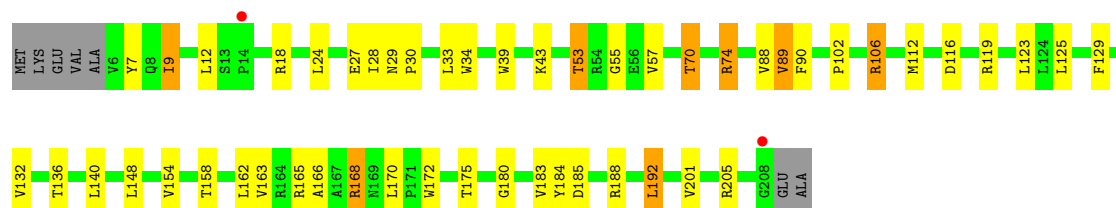
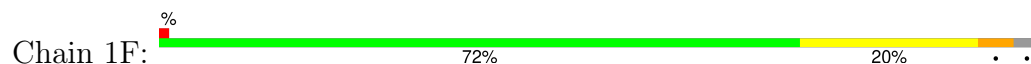
• Molecule 4: 50S ribosomal protein L3



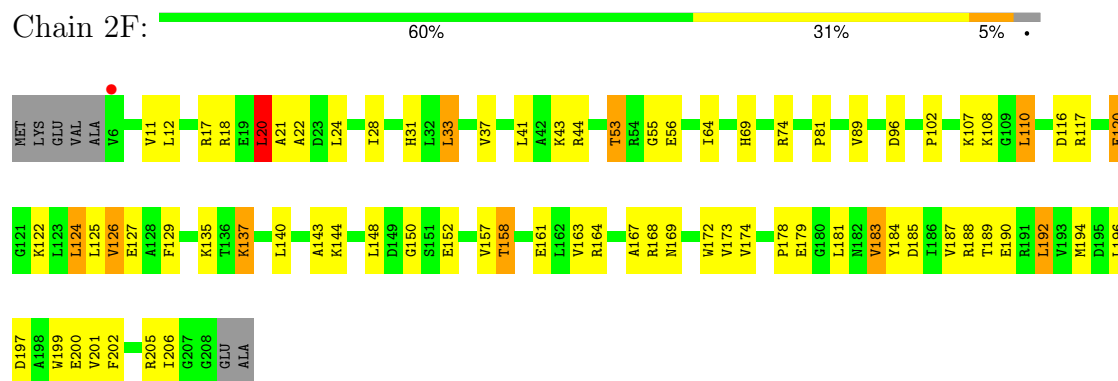
• Molecule 4: 50S ribosomal protein L3



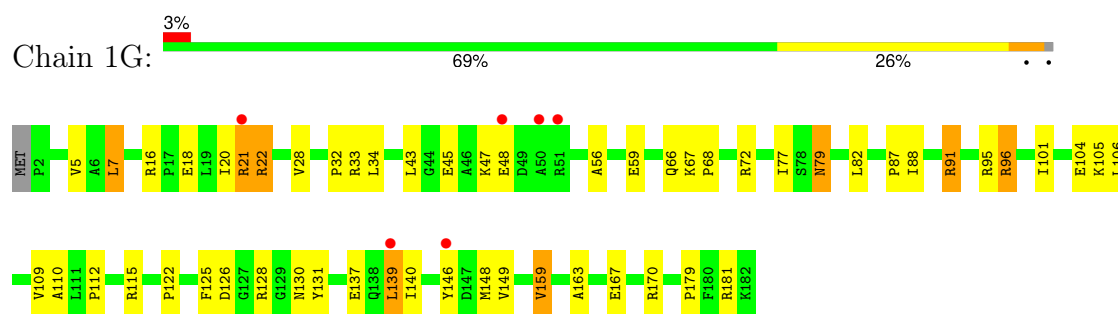
• Molecule 5: 50S ribosomal protein L4



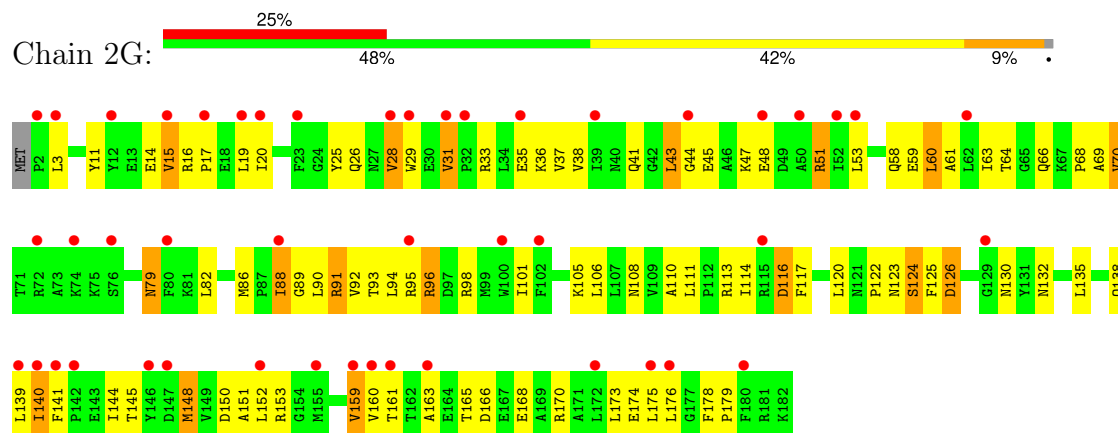
- Molecule 5: 50S ribosomal protein L4



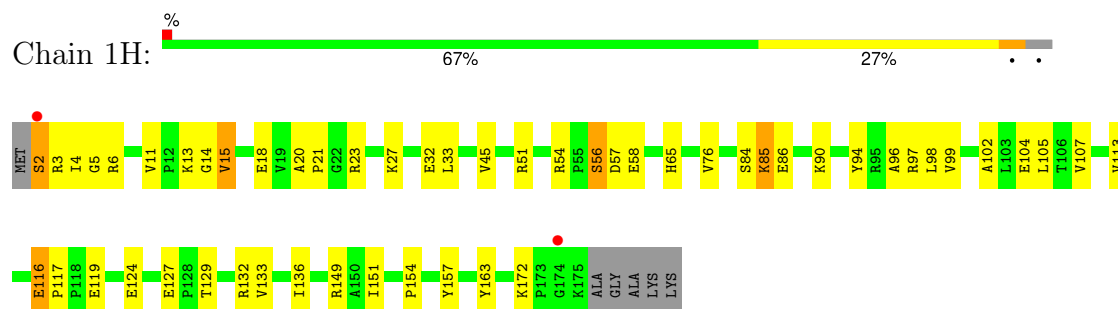
- Molecule 6: 50S ribosomal protein L5



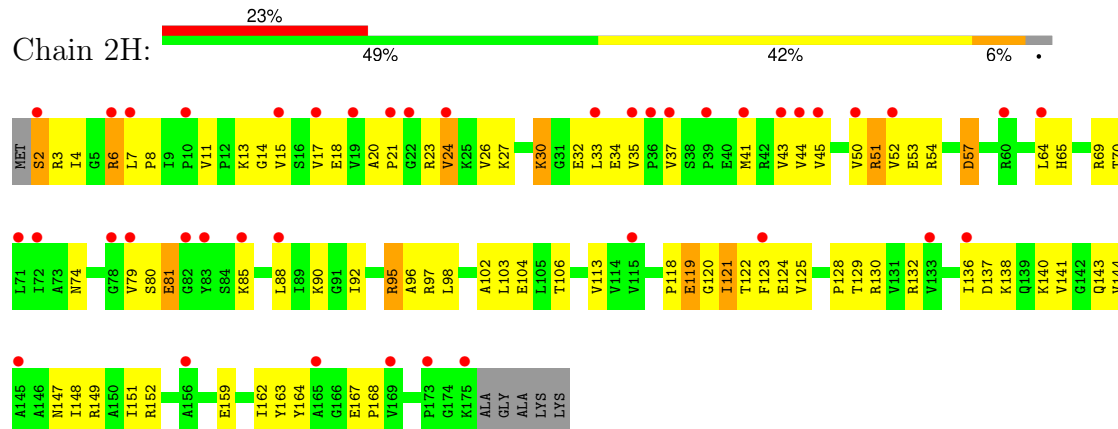
- Molecule 6: 50S ribosomal protein L5



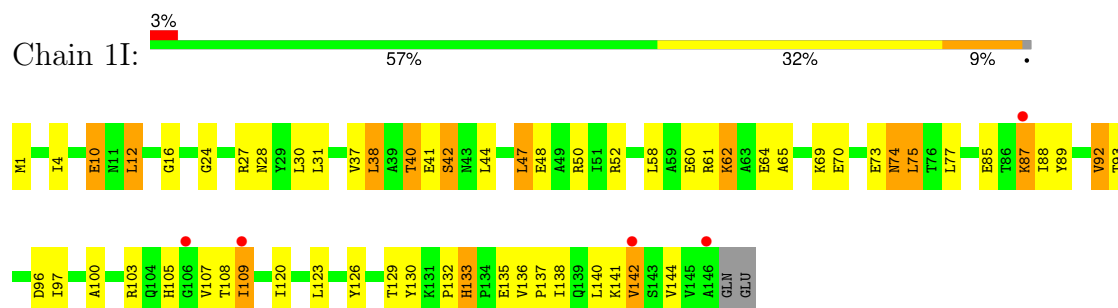
- Molecule 7: 50S ribosomal protein L6



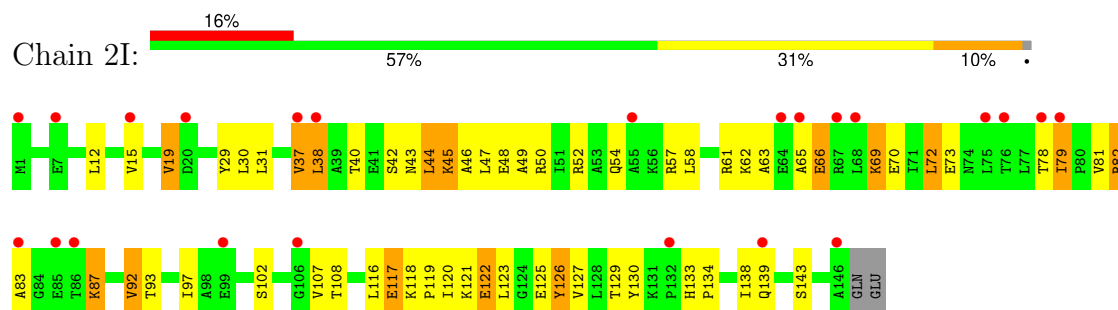
- Molecule 7: 50S ribosomal protein L6



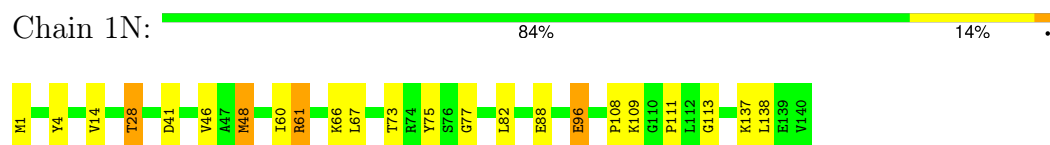
- Molecule 8: 50S ribosomal protein L9



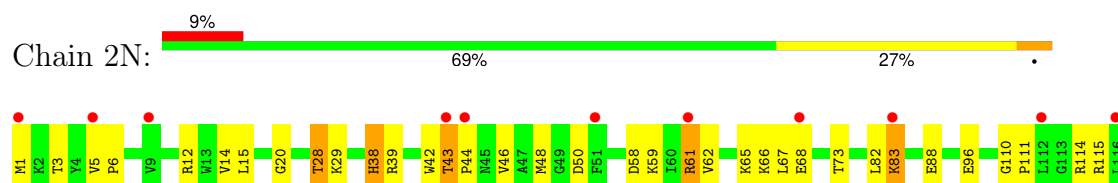
- Molecule 8: 50S ribosomal protein L9



- Molecule 9: 50S ribosomal protein L13



- Molecule 9: 50S ribosomal protein L13





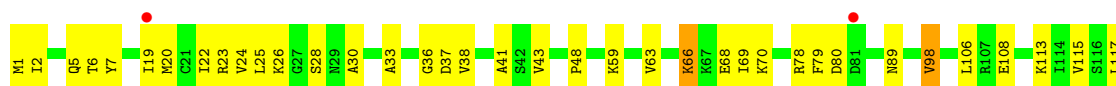
- Molecule 10: 50S ribosomal protein L14

Chain 10: 81% 18% .



- Molecule 10: 50S ribosomal protein L14

Chain 20: 2% 68% 30% .



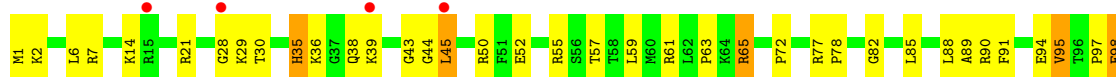
- Molecule 11: 50S ribosomal protein L15

Chain 1P: 3% 70% 26% ..



- Molecule 11: 50S ribosomal protein L15

Chain 2P: 3% 63% 33% ..

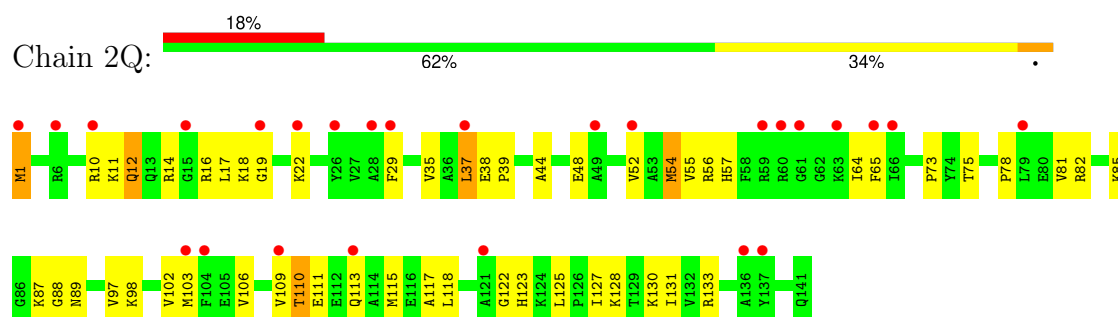


- Molecule 12: 50S ribosomal protein L16

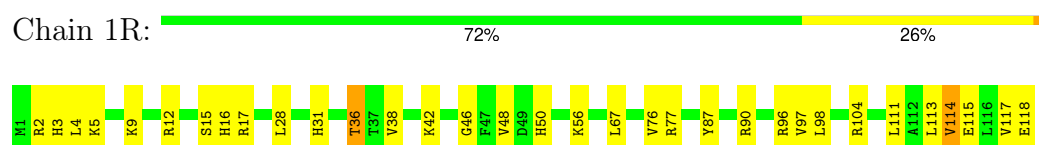
Chain 1Q: 75% 23% .



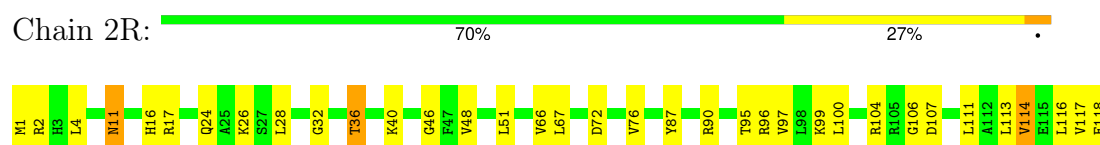
- Molecule 12: 50S ribosomal protein L16



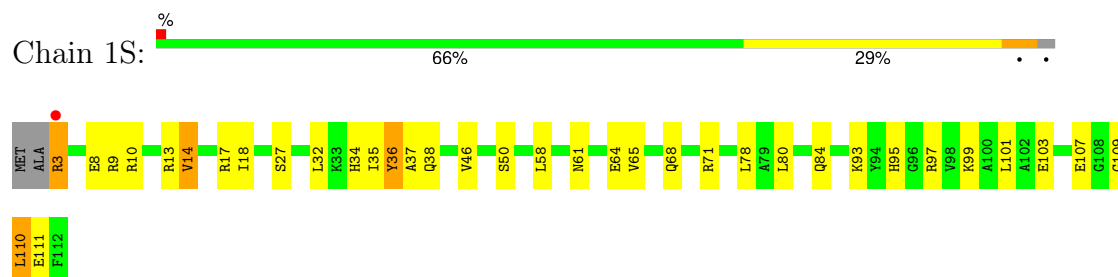
- Molecule 13: 50S ribosomal protein L17



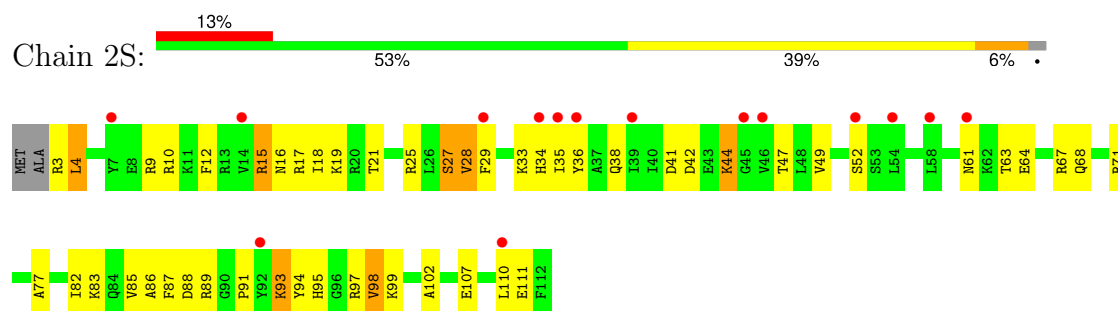
- Molecule 13: 50S ribosomal protein L17



- Molecule 14: 50S ribosomal protein L18

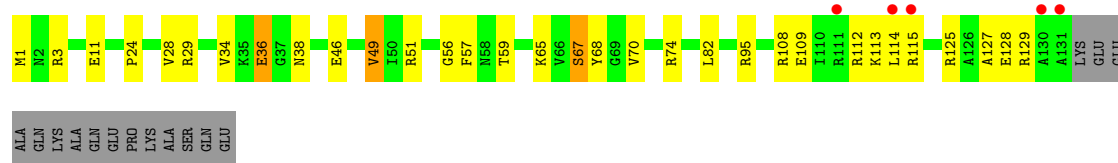


- Molecule 14: 50S ribosomal protein L18

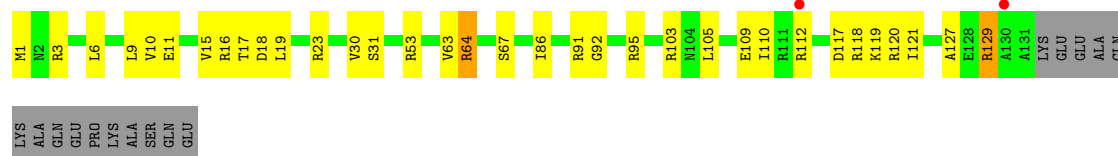


- Molecule 15: 50S ribosomal protein L19

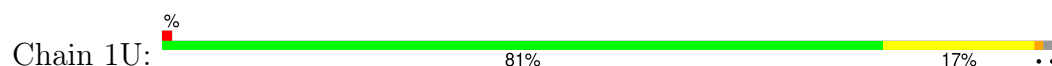




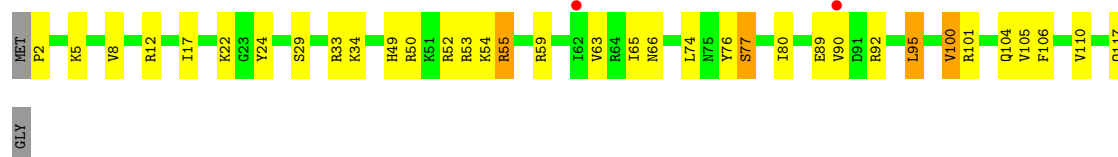
- Molecule 15: 50S ribosomal protein L19



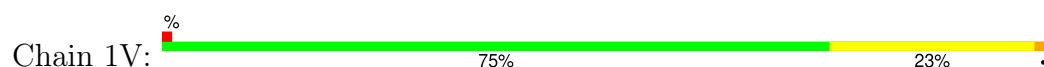
- Molecule 16: 50S ribosomal protein L20



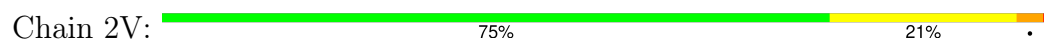
- Molecule 16: 50S ribosomal protein L20



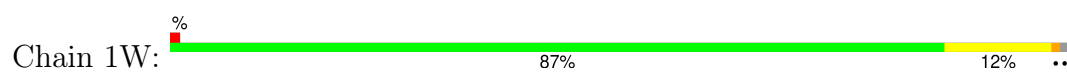
- Molecule 17: 50S ribosomal protein L21



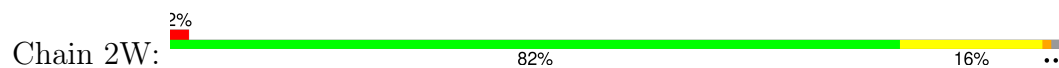
- Molecule 17: 50S ribosomal protein L21



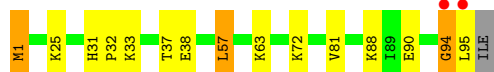
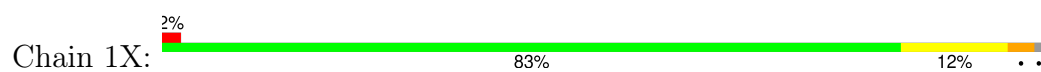
- Molecule 18: 50S ribosomal protein L22



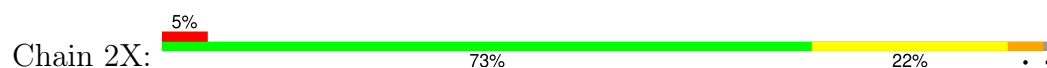
- Molecule 18: 50S ribosomal protein L22



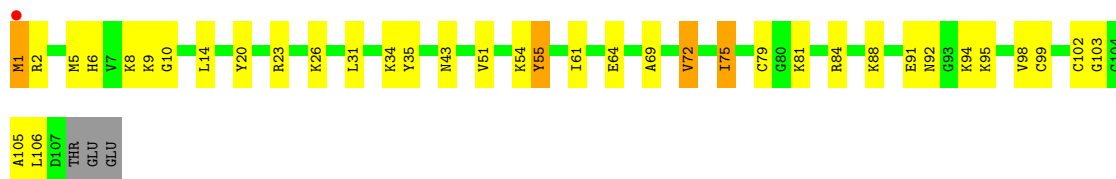
- Molecule 19: 50S ribosomal protein L23



- Molecule 19: 50S ribosomal protein L23



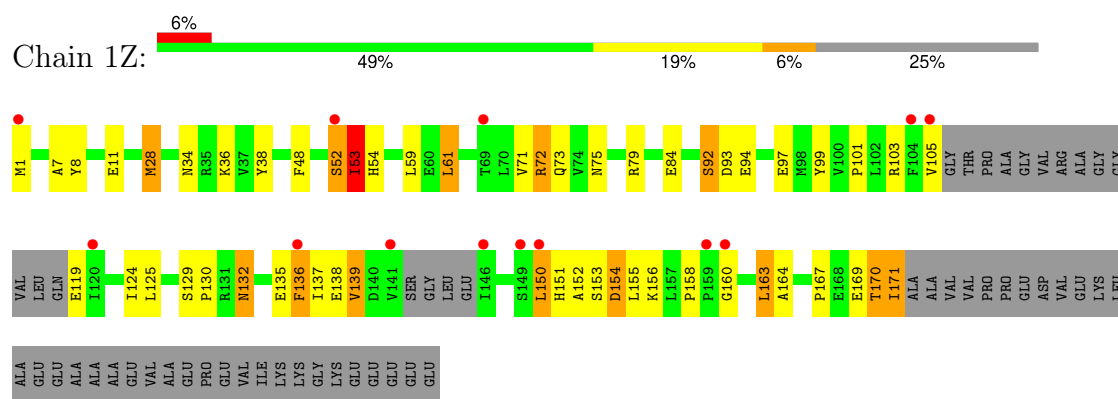
- Molecule 20: 50S ribosomal protein L24



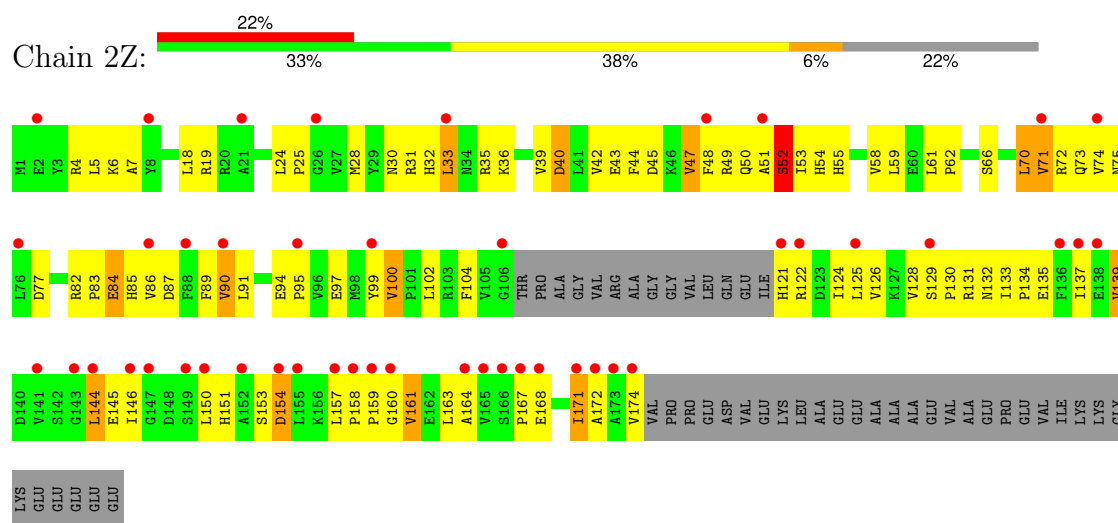
- Molecule 20: 50S ribosomal protein L24



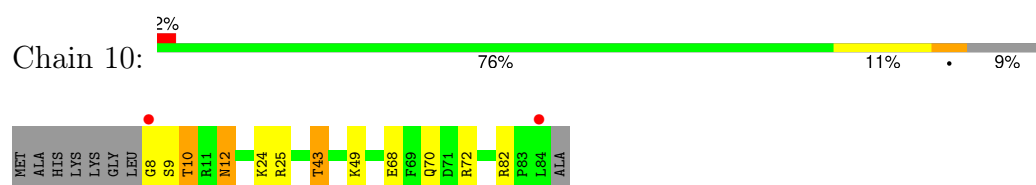
- Molecule 21: 50S ribosomal protein L25



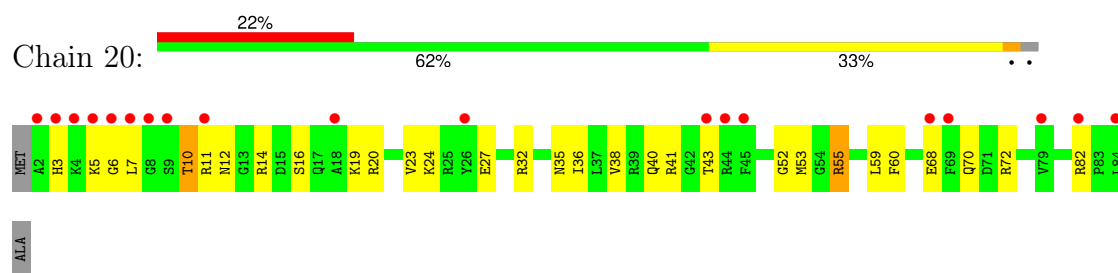
• Molecule 21: 50S ribosomal protein L25



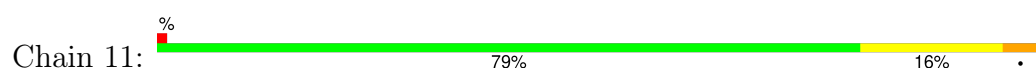
• Molecule 22: 50S ribosomal protein L27



• Molecule 22: 50S ribosomal protein L27

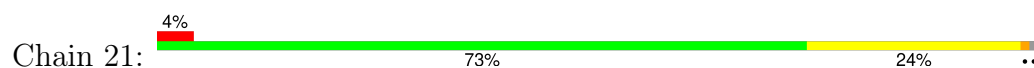


• Molecule 23: 50S ribosomal protein L28





- Molecule 23: 50S ribosomal protein L28



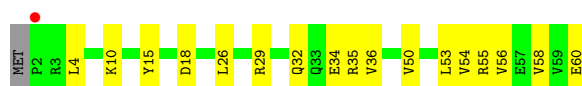
- Molecule 24: 50S ribosomal protein L29



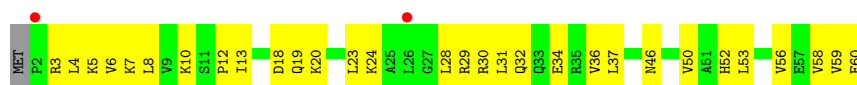
- Molecule 24: 50S ribosomal protein L29



- Molecule 25: 50S ribosomal protein L30



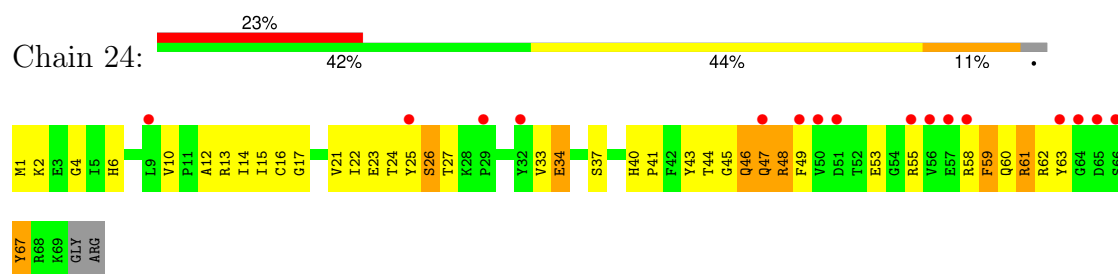
- Molecule 25: 50S ribosomal protein L30



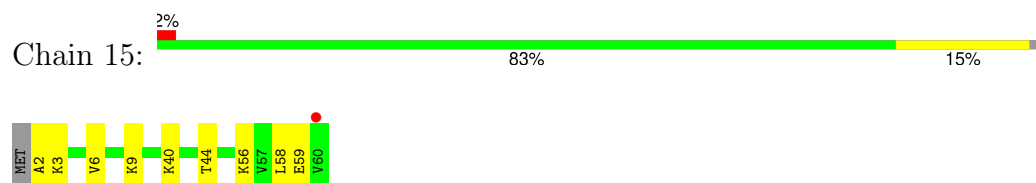
- Molecule 26: 50S ribosomal protein L31



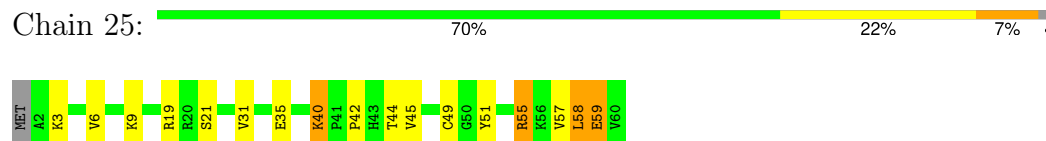
- Molecule 26: 50S ribosomal protein L31



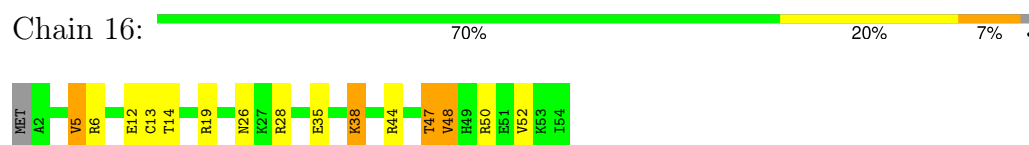
- Molecule 27: 50S ribosomal protein L32



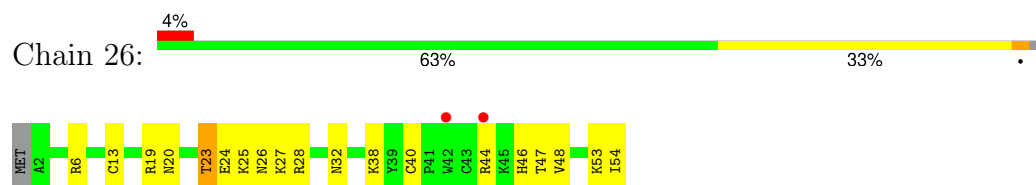
- Molecule 27: 50S ribosomal protein L32



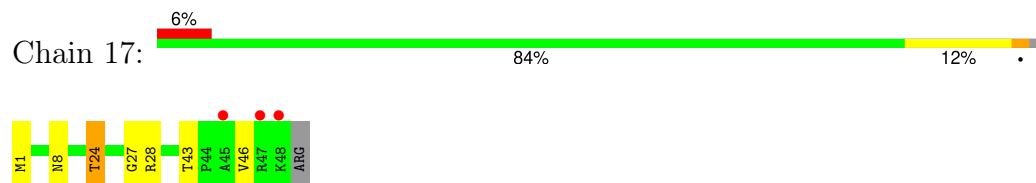
- Molecule 28: 50S ribosomal protein L33



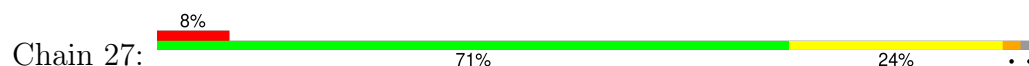
- Molecule 28: 50S ribosomal protein L33



- Molecule 29: 50S ribosomal protein L34



- Molecule 29: 50S ribosomal protein L34





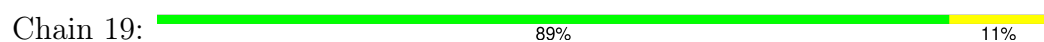
- Molecule 30: 50S ribosomal protein L35



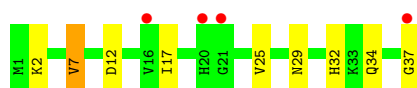
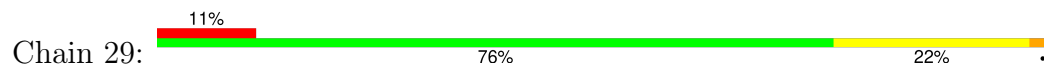
- Molecule 30: 50S ribosomal protein L35



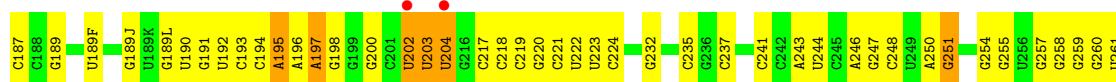
- Molecule 31: 50S ribosomal protein L36

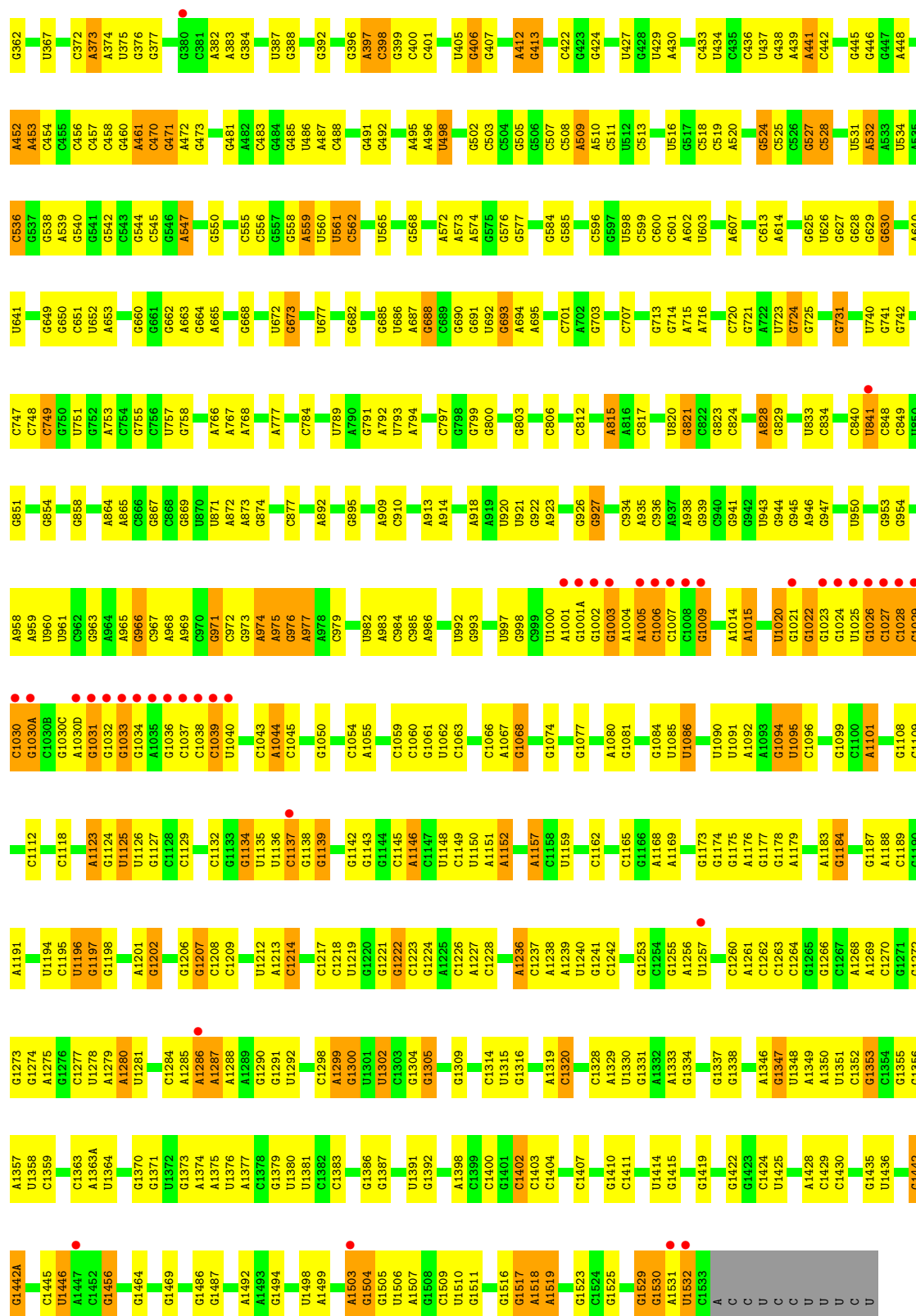


- Molecule 31: 50S ribosomal protein L36

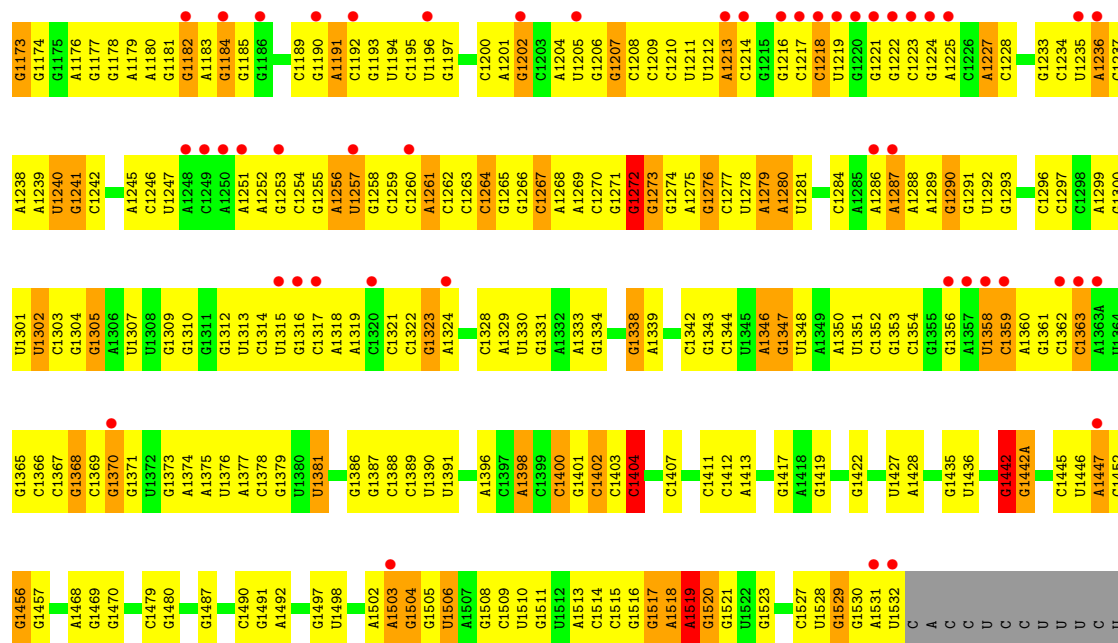


- Molecule 32: 16S Ribosomal RNA

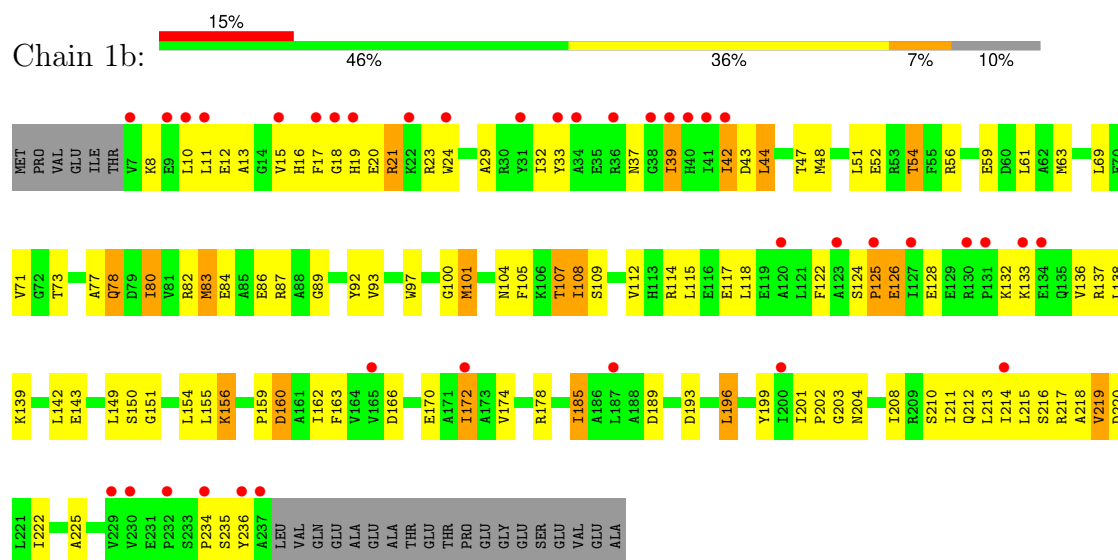




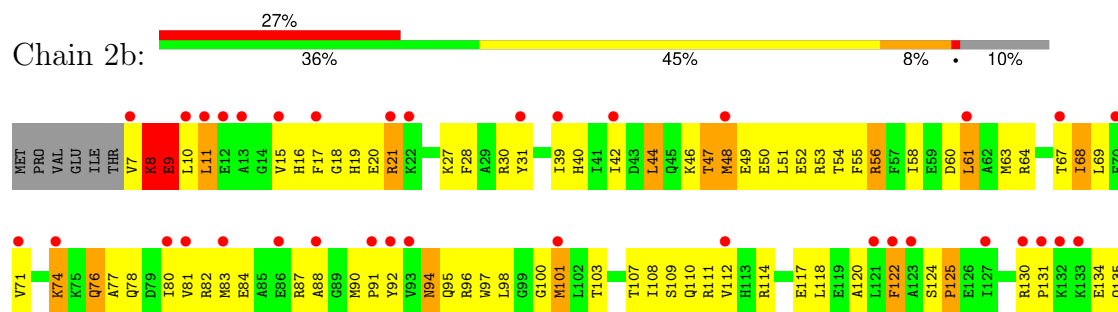
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A1111	G1050	C995	C934	U841	C736	C651	G557	G481	C398	G297	C177	U	U	U	U	U	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16	U17	U18	U19	U20	U21	U22	U23	U24	U25	U26	U27	U28	U29	U30	U31	U32	U33	U34	U35	U36	U37	U38	U39	U40	U41	U42	U43	U44	U45	U46	U47	U48	U49	U50	U51	U52	U53	U54	U55	U56	U57	U58	U59	U60	U61	U62	U63	U64	U65	U66	U67	U68	U69	U70	U71	U72	U73	U74	U75	U76	U77	U78	U79	U80	U81	U82	U83	U84	U85	U86	U87	U88	U89	U90	U91	U92	U93	U94	U95	U96	U97	U98	U99	U100	U101	U102	U103	U104	U105	U106	U107	U108	U109	U110	U111	U112	U113	U114	U115	U116	U117	U118	U119	U120	U121	U122	U123	U124	U125	U126	U127	U128	U129	U130	U131	U132	U133	U134	U135	U136	U137	U138	U139	U140	U141	U142	U143	U144	U145	U146	U147	U148	U149	U150	U151	U152	U153	U154	U155	U156	U157	U158	U159	U160	U161	U162	U163	U164	U165	U166	U167	U168	U169	U170	U171	U172	U173	U174	U175	U176	U177	U178	U179	U180	U181	U182	U183	U184	U185	U186	U187	U188	U189	U190	U191	U192	U193	U194	U195	U196	U197	U198	U199	U200	U201	U202	U203	U204	U205	U206	U207	U208	U209	U210	U211	U212	U213	U214	U215	U216	U217	U218	U219	U220	U221	U222	U223	U224	U225	U226	U227	U228	U229	U230	U231	U232	U233	U234	U235	U236	U237	U238	U239	U240	U241	U242	U243	U244	U245	U246	U247	U248	U249	U250	U251	U252	U253	U254	U255	U256	U257	U258	U259	U260	U261	U262	U263	U264	U265	U266	U267	U268	U269	U270	U271	U272	U273	U274	U275	U276	U277	U278	U279	U280	U281	U282	U283	U284	U285	U286	U287	U288	U289	U290	U291	U292	U293	U294	U295	U296	U297	U298	U299	U300	U301	U302	U303	U304	U305	U306	U307	U308	U309	U310	U311	U312	U313	U314	U315	U316	U317	U318	U319	U320	U321	U322	U323	U324	U325	U326	U327	U328	U329	U330	U331	U332	U333	U334	U335	U336	U337	U338	U339	U340	U341	U342	U343	U344	U345	U346	U347	U348	U349	U350	U351	U352	U353	U354	U355	U356	U357	U358	U359	U360	U361	U362	U363	U364	U365	U366	U367	U368	U369	U370	U371	U372	U373	U374	U375	U376	U377	U378	U379	U380	U381	U382	U383	U384	U385	U386	U387	U388	U389	U390	U391	U392	U393	U394	U395	U396	U397	U398	U399	U400	U401	U402	U403	U404	U405	U406	U407	U408	U409	U410	U411	U412	U413	U414	U415	U416	U417	U418	U419	U420	U421	U422	U423	U424	U425	U426	U427	U428	U429	U430	U431	U432	U433	U434	U435	U436	U437	U438	U439	U440	U441	U442	U443	U444	U445	U446	U447	U448	U449	U450	U451	U452	U453	U454	U455	U456	U457	U458	U459	U460	U461	U462	U463	U464	U465	U466	U467	U468	U469	U470	U471	U472	U473	U474	U475	U476	U477	U478	U479	U480	U481	U482	U483	U484	U485	U486	U487	U488	U489	U490	U491	U492	U493	U494	U495	U496	U497	U498	U499	U500	U501	U502	U503	U504	U505	U506	U507	U508	U509	U510	U511	U512	U513	U514	U515	U516	U517	U518	U519	U520	U521	U522	U523	U524	U525	U526	U527	U528	U529	U530	U531	U532	U533	U534	U535	U536	U537	U538	U539	U540	U541	U542	U543	U544	U545	U546	U547	U548	U549	U550	U551	U552	U553	U554	U555	U556	U557	U558	U559	U560	U561	U562	U563	U564	U565	U566	U567	U568	U569	U570	U571	U572	U573	U574	U575	U576	U577	U578	U579	U580	U581	U582	U583	U584	U585	U586	U587	U588	U589	U590	U591	U592	U593	U594	U595	U596	U597	U598	U599	U600	U601	U602	U603	U604	U605	U606	U607	U608	U609	U610	U611	U612	U613	U614	U615	U616	U617	U618	U619	U620	U621	U622	U623	U624	U625	U626	U627	U628	U629	U630	U631	U632	U633	U634	U635	U636	U637	U638	U639	U640	U641	U642	U643	U644	U645	U646	U647	U648	U649	U650	U651	U652	U653	U654	U655	U656	U657	U658	U659	U660	U661	U662	U663	U664	U665	U666	U667	U668	U669	U670	U671	U672	U673	U674	U675	U676	U677	U678	U679	U680	U681	U682	U683	U684	U685	U686	U687	U688	U689	U690	U691	U692	U693	U694	U695	U696	U697	U698	U699	U700	U701	U702	U703	U704	U705	U706	U707	U708	U709	U710	U711	U712	U713	U714	U715	U716	U717	U718	U719	U720	U721	U722	U723	U724	U725	U726	U727	U728	U729	U730	U731	U732	U733	U734	U735	U736	U737	U738	U739	U740	U741	U742	U743	U744	U745	U746	U747	U748	U749	U750	U751	U752	U753	U754	U755	U756	U757	U758	U759	U760	U761	U762	U763	U764	U765	U766	U767	U768	U769	U770	U771	U772	U773	U774	U775	U776	U777	U778	U779	U780	U781	U782	U783	U784	U785	U786	U787	U788	U789	U790	U791	U792	U793	U794	U795	U796	U797	U798	U799	U800	U801	U802	U803	U804	U805	U806	U807	U808	U809	U810	U811	U812	U813	U814	U815	U816	U817	U818	U819	U820	U821	U822	U823	U824	U825	U826	U827	U828	U829	U830	U831	U832	U833	U834	U835	U836	U837	U838	U839	U840	U841	U842	U843	U844	U845	U846	U847	U848	U849	U850	U851	U852	U853	U854	U855	U856	U857	U858	U859	U860	U861	U862	U863	U864	U865	U866	U867	U868	U869	U870	U871	U872	U873	U874	U875	U876	U877	U878	U879	U880	U881	U882	U883	U884	U885	U886	U887	U888	U889	U890	U891	U892	U893	U894	U895	U896	U897	U898	U899	U900	U901	U902	U903	U904	U905	U906	U907	U908	U909	U910	U911	U912	U913	U914	U915	U916	U917	U918	U919	U920	U921	U922	U923	U924	U925	U926	U927	U928	U929	U930	U931	U932	U933	U934	U935	U936	U937	U938	U939	U940	U941	U942	U943	U944	U945	U946	U947	U948	U949	U950	U951	U952	U953	U954	U955	U956	U957	U958	U959	U960	U961	U962	U963	U964	U965	U966	U967	U968	U969	U970	U971	U972	U973	U974	U975	U976	U977	U978	U979	U980	U981	U982	U983	U984	U985	U986	U987	U988	U989	U990	U991	U992	U993	U994	U995	U996	U997	U998	U999	U1000	U1001	U1002	U1003	U1004	U1005	U1006	U1007	U1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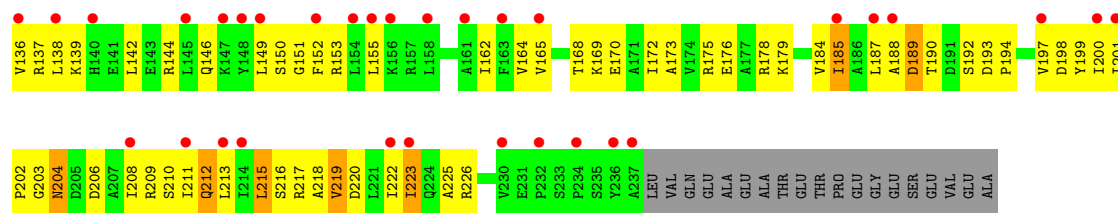


• Molecule 33: 30S ribosomal protein S2

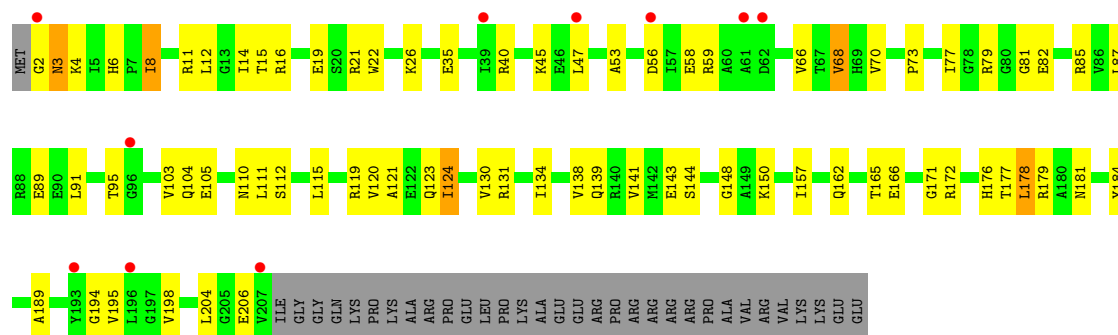


• Molecule 33: 30S ribosomal protein S2

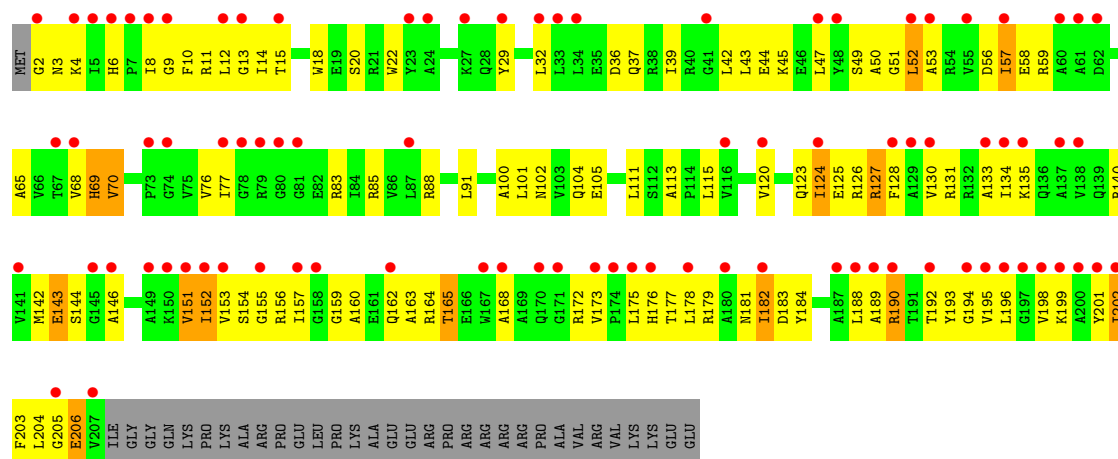




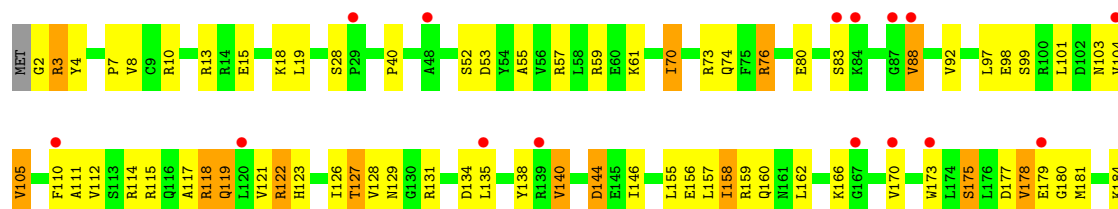
• Molecule 34: 30S ribosomal protein S3



• Molecule 34: 30S ribosomal protein S3

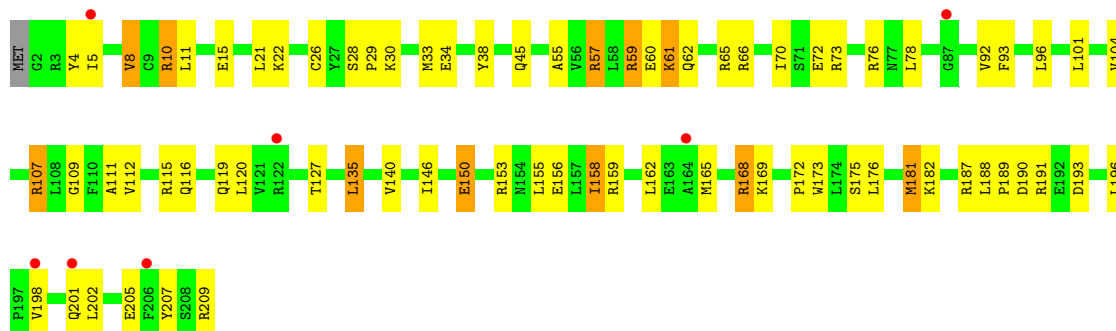


• Molecule 35: 30S ribosomal protein S4

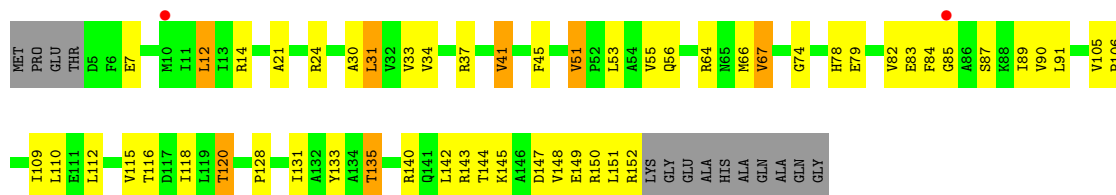




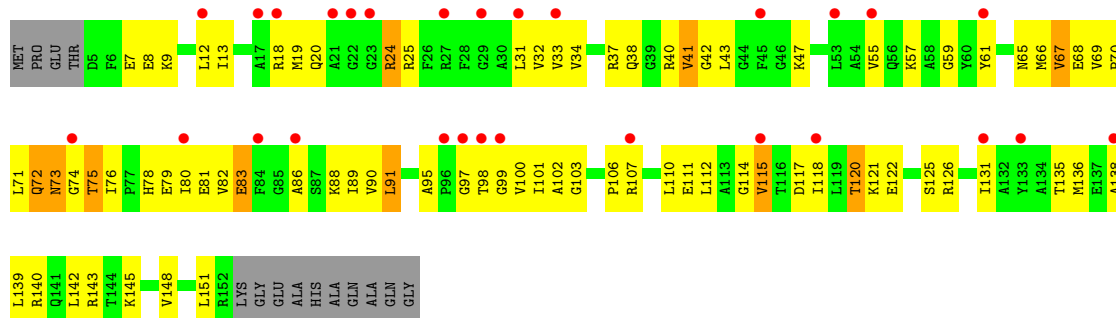
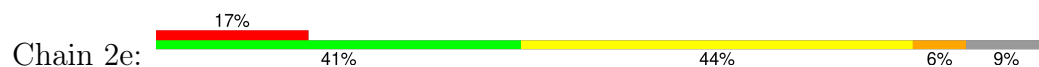
- Molecule 35: 30S ribosomal protein S4



- Molecule 36: 30S ribosomal protein S5



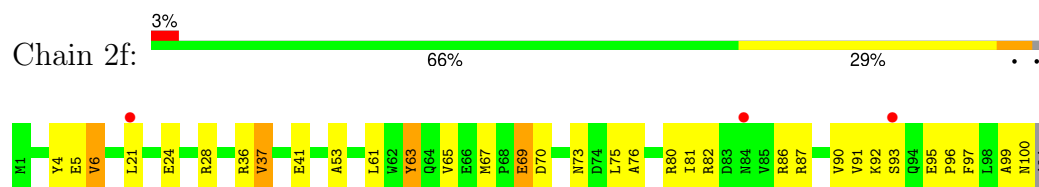
- Molecule 36: 30S ribosomal protein S5



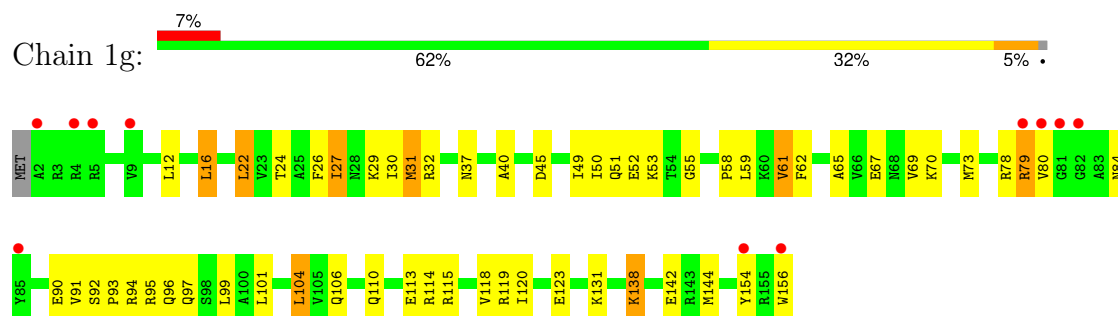
- Molecule 37: 30S ribosomal protein S6



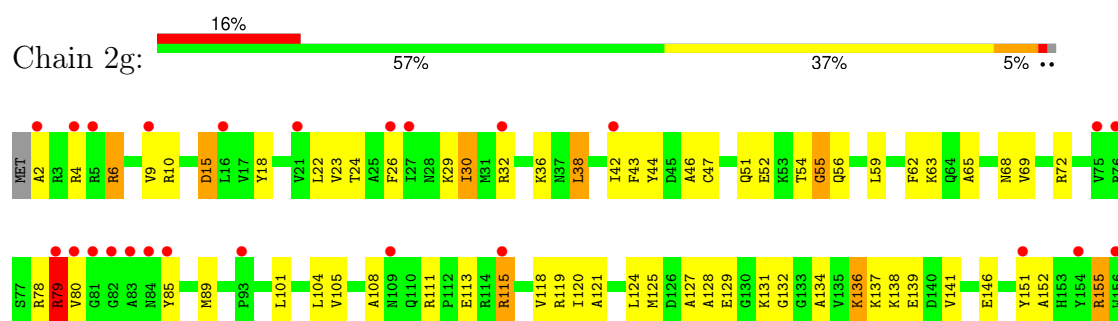
- Molecule 37: 30S ribosomal protein S6



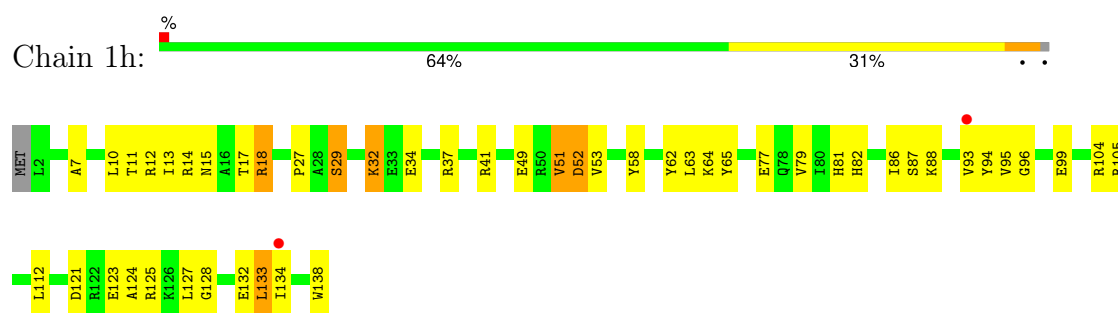
- Molecule 38: 30S ribosomal protein S7



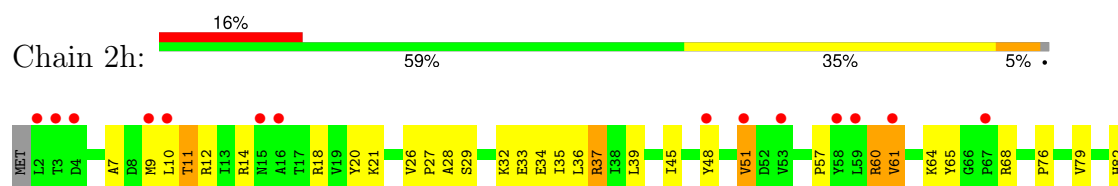
- Molecule 38: 30S ribosomal protein S7



- Molecule 39: 30S ribosomal protein S8

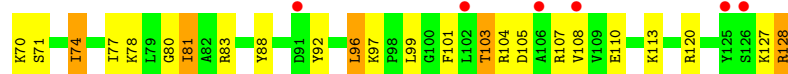


- Molecule 39: 30S ribosomal protein S8

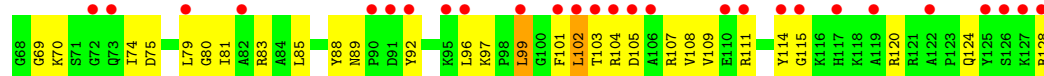
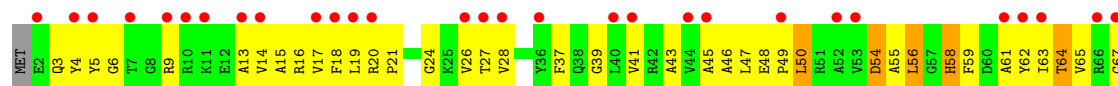
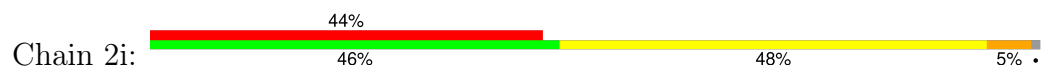




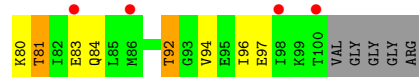
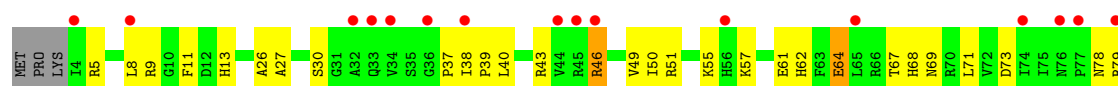
• Molecule 40: 30S ribosomal protein S9



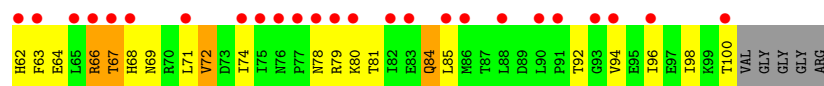
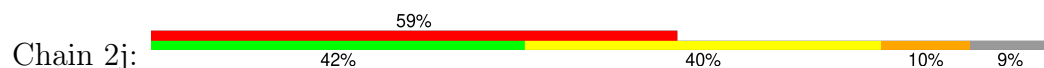
• Molecule 40: 30S ribosomal protein S9



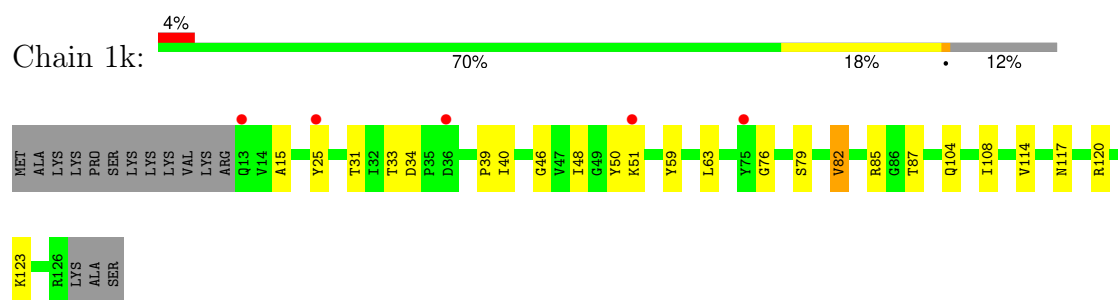
• Molecule 41: 30S ribosomal protein S10



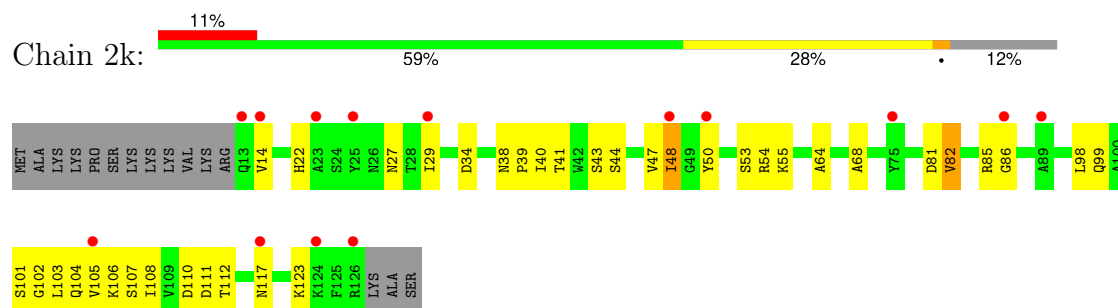
• Molecule 41: 30S ribosomal protein S10



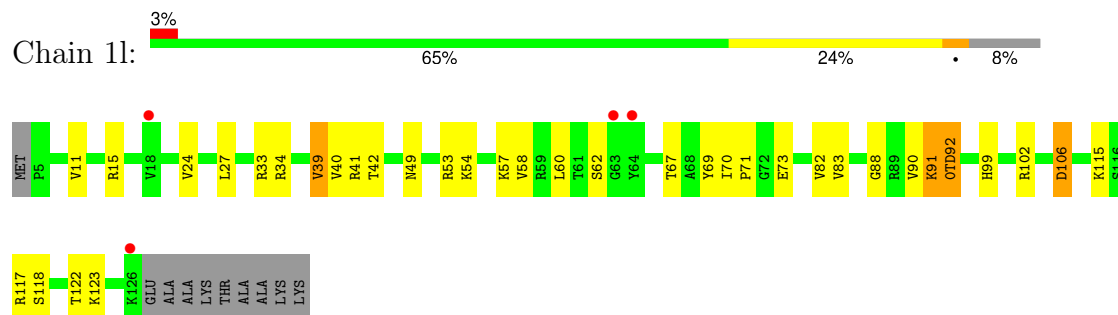
• Molecule 42: 30S ribosomal protein S11



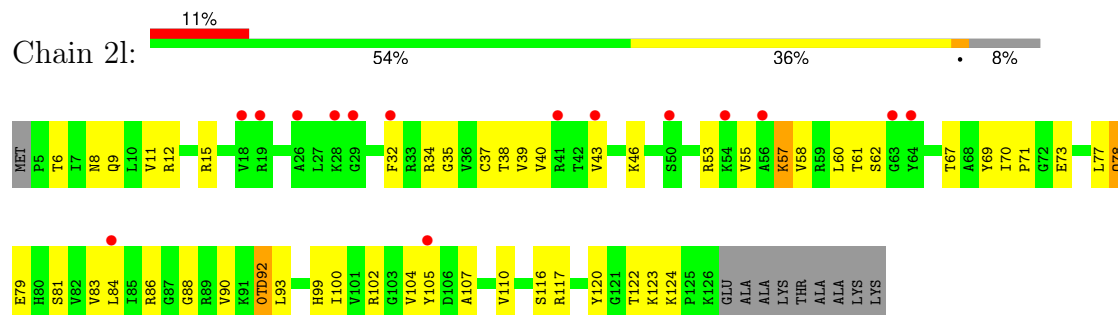
• Molecule 42: 30S ribosomal protein S11



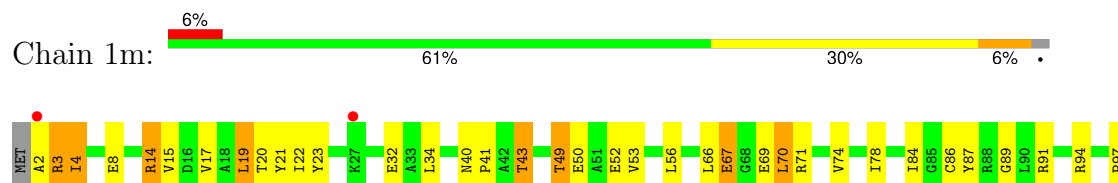
• Molecule 43: 30S ribosomal protein S12



• Molecule 43: 30S ribosomal protein S12

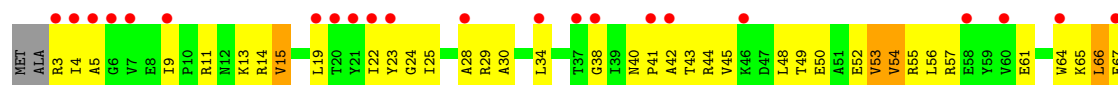
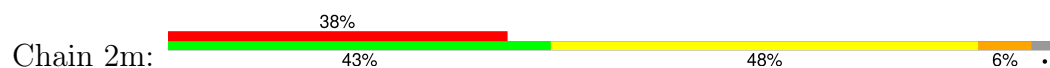


• Molecule 44: 30S ribosomal protein S13





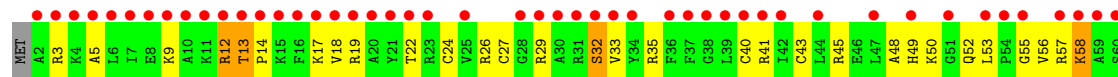
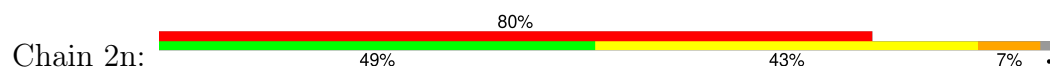
- Molecule 44: 30S ribosomal protein S13



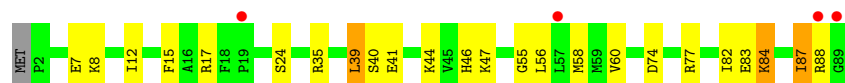
- Molecule 45: 30S ribosomal protein S14 type Z



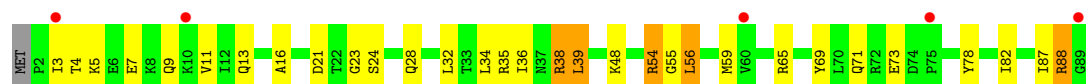
- Molecule 45: 30S ribosomal protein S14 type Z



- Molecule 46: 30S ribosomal protein S15

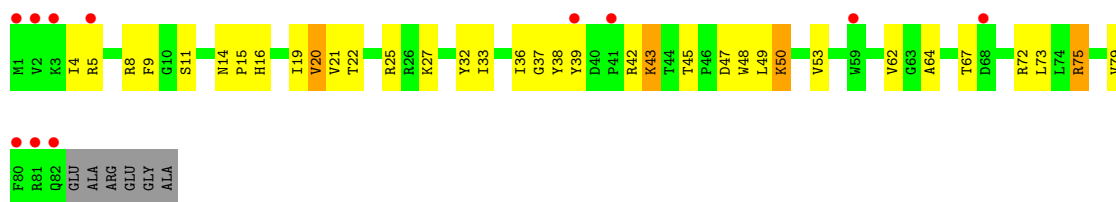


- Molecule 46: 30S ribosomal protein S15

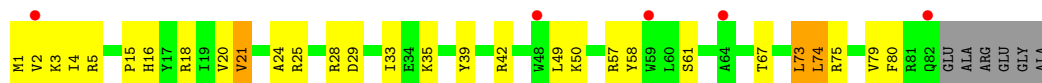


- Molecule 47: 30S ribosomal protein S16

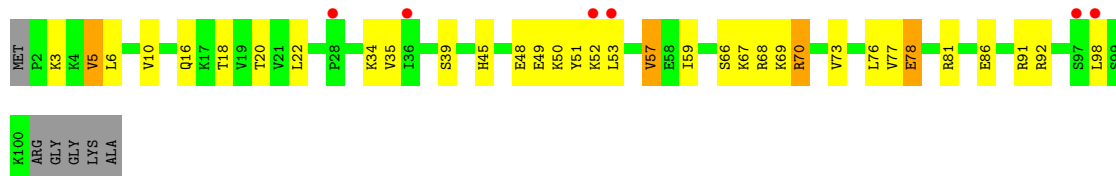




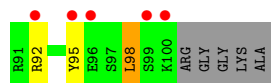
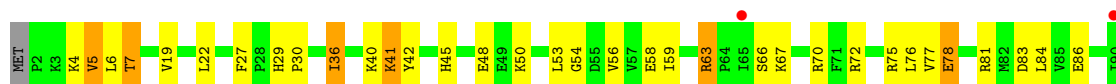
- Molecule 47: 30S ribosomal protein S16



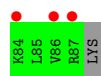
- Molecule 48: 30S ribosomal protein S17



- Molecule 48: 30S ribosomal protein S17

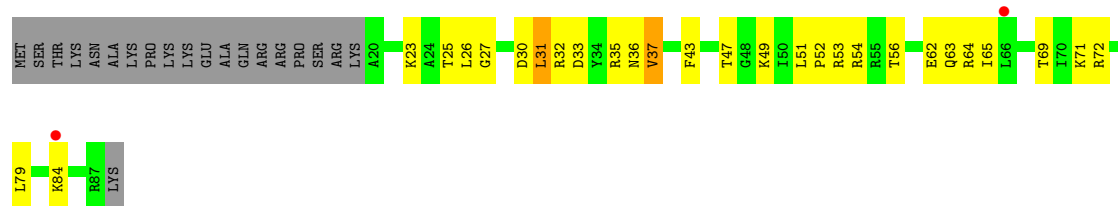


- Molecule 49: 30S ribosomal protein S18

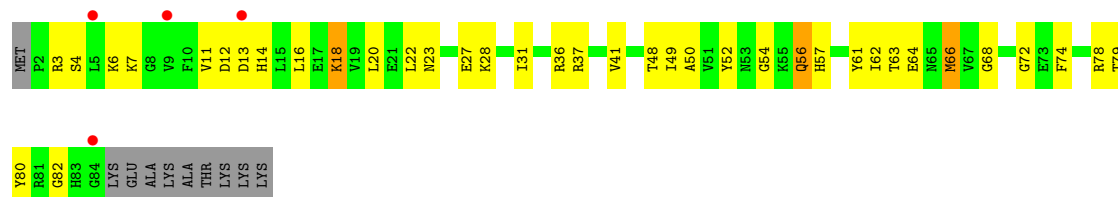


- Molecule 49: 30S ribosomal protein S18

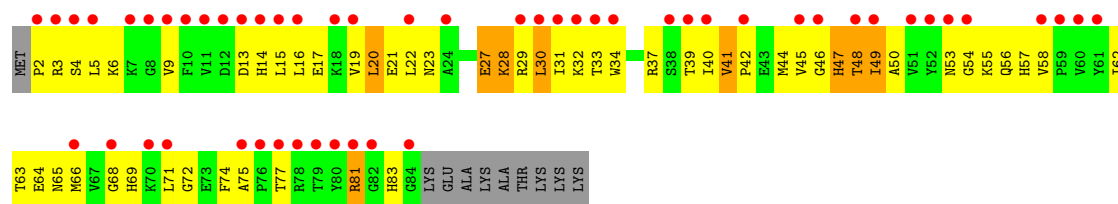




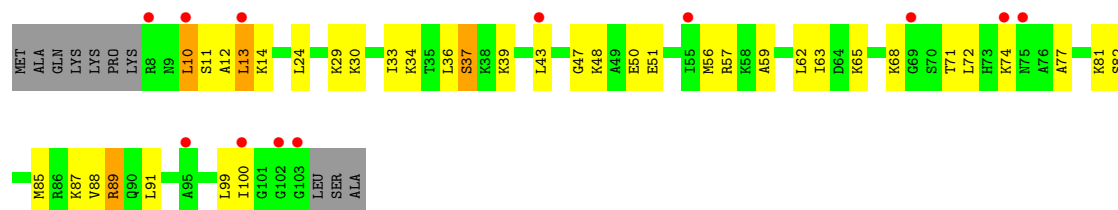
• Molecule 50: 30S ribosomal protein S19



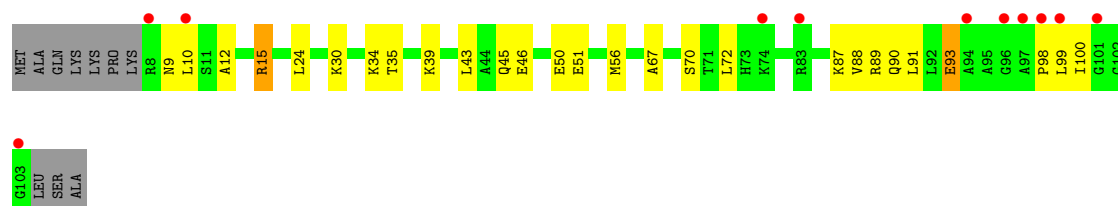
• Molecule 50: 30S ribosomal protein S19



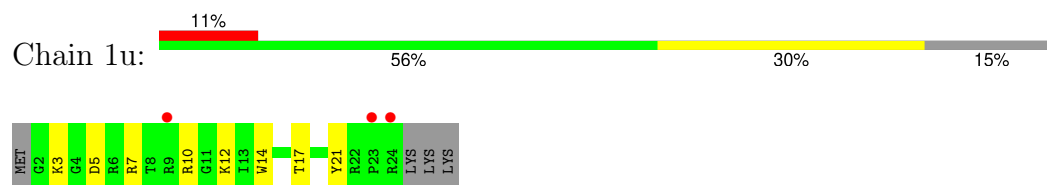
• Molecule 51: 30S ribosomal protein S20



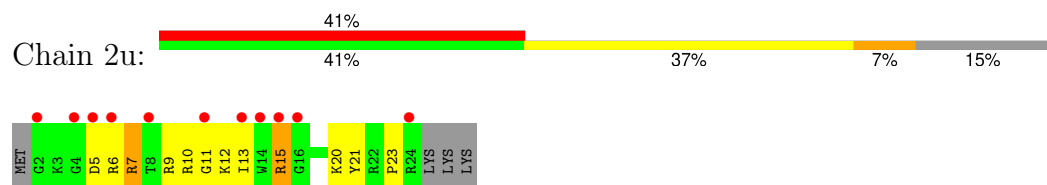
• Molecule 51: 30S ribosomal protein S20



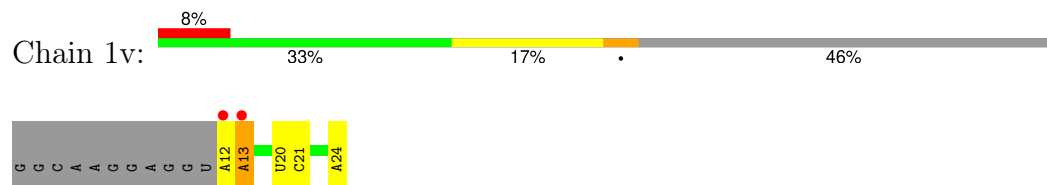
- Molecule 52: 30S ribosomal protein Thx



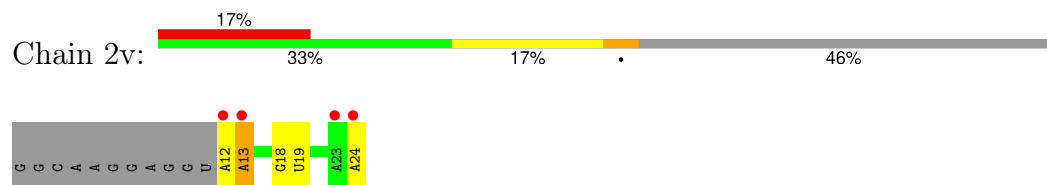
- Molecule 52: 30S ribosomal protein Thx



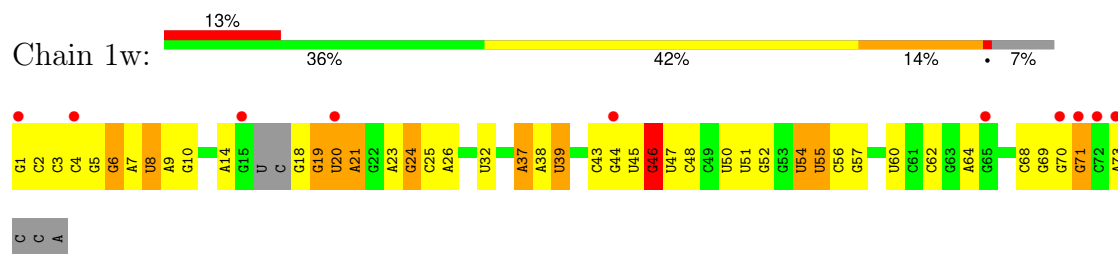
- Molecule 53: MF-mRNA



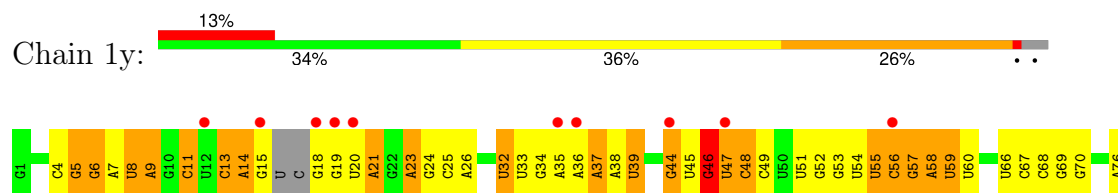
- Molecule 53: MF-mRNA



- Molecule 54: A-site and E-site Deacylated tRNAphe

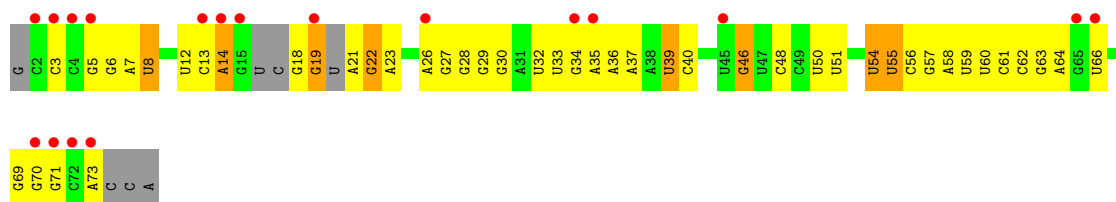


- Molecule 54: A-site and E-site Deacylated tRNAphe



- Molecule 54: A-site and E-site Deacylated tRNAphe

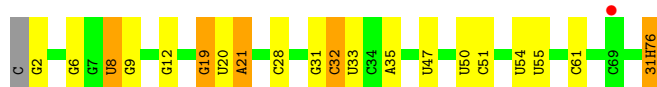
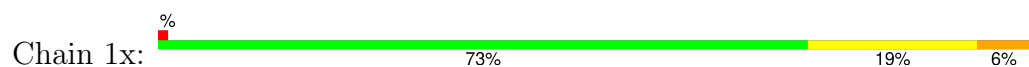




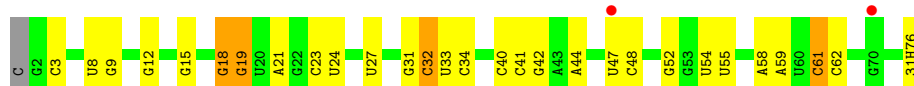
- Molecule 54: A-site and E-site Deacylated tRNA^{phe}



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



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



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	209.79Å 449.98Å 627.07Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	123.69 – 2.45 123.69 – 2.45	Depositor EDS
% Data completeness (in resolution range)	99.7 (123.69-2.45) 99.7 (123.69-2.45)	Depositor EDS
R_{merge}	0.17	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.24 (at 2.45Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.217 , 0.265 0.219 , 0.266	Depositor DCC
R_{free} test set	107260 reflections (5.01%)	wwPDB-VP
Wilson B-factor (Å ²)	56.0	Xtriage
Anisotropy	0.177	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.31 , 53.1	EDS
L-test for twinning ²	$\langle L \rangle = 0.42$, $\langle L^2 \rangle = 0.25$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.94	EDS
Total number of atoms	300078	wwPDB-VP
Average B, all atoms (Å ²)	63.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.56% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: MG, PSU, K, OMU, 5MC, 4SU, M2G, 4OC, 2MA, SF4, MIA, 31H, 5MU, A1A1K, OMC, UR3, ZN, OMG, 0TD, MA6, G7M, 2MG

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	0.56	0/69011	0.74	15/107720 (0.0%)
1	2A	0.41	0/67295	0.62	6/105042 (0.0%)
2	1B	0.45	0/2882	0.70	0/4494
2	2B	0.40	0/2879	0.59	0/4487
3	1D	0.53	0/2186	0.73	0/2944
3	2D	0.42	0/2186	0.67	0/2944
4	1E	0.53	0/1592	0.75	0/2149
4	2E	0.38	0/1592	0.64	0/2149
5	1F	0.54	0/1619	0.79	2/2193 (0.1%)
5	2F	0.39	0/1615	0.64	0/2188
6	1G	0.41	0/1448	0.62	0/1957
6	2G	0.38	0/1453	0.59	0/1963
7	1H	0.41	0/1356	0.60	0/1834
7	2H	0.37	0/1356	0.51	0/1834
8	1I	0.38	0/1112	0.63	0/1514
8	2I	0.37	0/1079	0.63	0/1475
9	1N	0.52	0/1144	0.72	0/1543
9	2N	0.37	0/1144	0.59	0/1543
10	1O	0.51	0/943	0.70	0/1269
10	2O	0.40	0/943	0.59	0/1269
11	1P	0.56	0/1152	0.80	0/1533
11	2P	0.40	0/1152	0.64	0/1533
12	1Q	0.57	0/1143	0.73	0/1527
12	2Q	0.38	0/1143	0.60	0/1527
13	1R	0.58	0/982	0.77	1/1312 (0.1%)
13	2R	0.39	0/982	0.61	0/1312
14	1S	0.44	0/883	0.71	0/1176
14	2S	0.42	0/880	0.63	0/1172
15	1T	0.48	0/1105	0.69	0/1477
15	2T	0.38	0/1097	0.62	0/1468
16	1U	0.58	0/977	0.78	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	0.54	0/782	0.74	0/1049
17	2V	0.34	0/782	0.58	0/1049
18	1W	0.58	0/897	0.72	0/1205
18	2W	0.42	0/897	0.60	0/1205
19	1X	0.53	0/764	0.78	2/1025 (0.2%)
19	2X	0.38	0/764	0.67	2/1025 (0.2%)
20	1Y	0.44	0/819	0.75	0/1095
20	2Y	0.38	0/819	0.62	0/1095
21	1Z	0.44	0/1267	0.68	1/1717 (0.1%)
21	2Z	0.40	0/1299	0.61	0/1763
22	10	0.58	0/616	0.83	2/821 (0.2%)
22	20	0.42	0/662	0.60	0/881
23	11	0.49	0/762	0.70	0/1014
23	21	0.44	0/762	0.67	0/1014
24	12	0.50	0/590	0.62	0/781
24	22	0.34	0/590	0.52	0/781
25	13	0.56	0/474	0.68	0/635
25	23	0.35	0/469	0.62	0/630
26	14	0.45	0/565	0.82	0/761
26	24	0.44	0/545	0.64	0/737
27	15	0.59	0/469	0.77	0/635
27	25	0.42	0/469	0.54	0/635
28	16	0.54	0/460	0.72	0/613
28	26	0.40	0/456	0.59	0/608
29	17	0.63	0/426	0.82	0/561
29	27	0.50	0/426	0.69	0/561
30	18	0.53	0/525	0.73	0/691
30	28	0.38	0/525	0.60	0/691
31	19	0.55	0/310	0.72	0/407
31	29	0.34	0/310	0.62	0/407
32	1a	0.38	1/35795 (0.0%)	0.59	1/55864 (0.0%)
32	2a	0.38	0/35886	0.57	3/56005 (0.0%)
33	1b	0.39	0/1881	0.68	0/2542
33	2b	0.44	0/1860	0.68	2/2518 (0.1%)
34	1c	0.36	0/1572	0.57	0/2126
34	2c	0.43	0/1566	0.63	0/2119
35	1d	0.33	0/1685	0.60	0/2262
35	2d	0.36	0/1704	0.58	0/2284
36	1e	0.35	0/1145	0.57	0/1543
36	2e	0.41	0/1149	0.61	0/1548
37	1f	0.36	0/823	0.54	0/1115
37	2f	0.36	0/829	0.53	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	1g	0.33	0/1250	0.53	0/1679
38	2g	0.35	0/1254	0.52	0/1683
39	1h	0.33	0/1108	0.56	0/1494
39	2h	0.33	0/1108	0.59	0/1494
40	1i	0.33	0/1002	0.62	0/1346
40	2i	0.40	0/997	0.63	0/1343
41	1j	0.38	0/722	0.56	0/982
41	2j	0.44	0/727	0.62	0/988
42	1k	0.37	0/844	0.60	0/1145
42	2k	0.34	0/848	0.51	0/1149
43	1l	0.41	0/937	0.66	0/1260
43	2l	0.36	0/937	0.62	2/1260 (0.2%)
44	1m	0.38	0/969	0.61	0/1302
44	2m	0.41	0/961	0.60	0/1291
45	1n	0.34	0/501	0.64	0/664
45	2n	0.45	0/501	0.66	0/664
46	1o	0.39	0/739	0.55	0/985
46	2o	0.34	0/739	0.54	0/985
47	1p	0.36	0/697	0.64	0/939
47	2p	0.37	0/693	0.63	0/935
48	1q	0.39	0/836	0.60	0/1117
48	2q	0.36	0/836	0.55	0/1117
49	1r	0.38	0/560	0.61	0/746
49	2r	0.34	0/560	0.58	0/746
50	1s	0.36	0/667	0.65	0/900
50	2s	0.47	0/661	0.80	2/893 (0.2%)
51	1t	0.35	0/730	0.62	0/965
51	2t	0.38	0/729	0.60	0/965
52	1u	0.32	0/203	0.57	0/266
52	2u	0.40	0/203	0.58	0/266
53	1v	0.41	0/310	0.52	0/480
53	2v	0.43	0/310	0.54	0/480
54	1w	0.51	2/1537 (0.1%)	0.55	0/2390
54	1y	0.46	2/1606 (0.1%)	0.56	0/2497
54	2w	0.55	2/1487 (0.1%)	0.59	0/2311
54	2y	0.47	2/1583 (0.1%)	0.53	0/2459
55	1x	0.46	1/1700 (0.1%)	0.64	0/2650
55	2x	0.40	1/1700 (0.1%)	0.58	0/2650
All	All	0.45	11/316456 (0.0%)	0.65	41/473777 (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
4	1E	0	1
4	2E	0	1
5	2F	0	1
6	1G	0	1
6	2G	0	1
11	1P	0	3
11	2P	0	3
21	1Z	0	1
21	2Z	0	1
23	11	0	1
26	14	0	1
33	1b	0	1
33	2b	0	2
38	2g	0	1
44	1m	0	1
44	2m	0	1
All	All	0	21

All (11) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2y	46	G7M	O3'-P	5.94	1.62	1.56
54	1y	8	4SU	O3'-P	5.68	1.61	1.56
54	1w	46	G7M	O3'-P	5.47	1.61	1.56
54	1y	46	G7M	O3'-P	5.39	1.61	1.56
54	1w	8	4SU	O3'-P	5.35	1.61	1.56
55	2x	8	4SU	O3'-P	5.29	1.61	1.56
54	2y	8	4SU	O3'-P	5.24	1.61	1.56
54	2w	46	G7M	O3'-P	5.20	1.61	1.56
54	2w	8	4SU	O3'-P	5.14	1.61	1.56
55	1x	8	4SU	O3'-P	5.08	1.61	1.56
32	1a	1498	UR3	O3'-P	5.00	1.61	1.56

All (41) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	1992	G	C2'-C3'-O3'	11.11	126.17	109.50
1	1A	2689	U	P-O3'-C3'	8.45	132.87	120.20
1	1A	2689	U	C2'-C3'-O3'	8.23	121.85	109.50
1	2A	1992	G	C2'-C3'-O3'	8.13	121.70	109.50
22	10	12	ASN	CA-C-N	-7.59	106.54	121.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	10	12	ASN	C-N-CA	-7.59	106.54	121.41
1	1A	1992	G	P-O3'-C3'	7.23	131.04	120.20
5	1F	89	VAL	CA-C-N	-6.80	111.09	123.34
5	1F	89	VAL	C-N-CA	-6.80	111.09	123.34
1	2A	2689	U	P-O3'-C3'	6.39	129.78	120.20
19	2X	94	GLY	CA-C-N	6.05	132.60	121.70
19	2X	94	GLY	C-N-CA	6.05	132.60	121.70
33	2b	9	GLU	CA-C-N	5.91	132.83	121.54
33	2b	9	GLU	C-N-CA	5.91	132.83	121.54
1	1A	443	A	O3'-P-O5'	-5.90	95.15	104.00
1	1A	512	G	O4'-C1'-N9	5.79	116.88	108.20
32	1a	266	G	C2'-C3'-O3'	5.75	118.13	109.50
32	2a	1272	G	N1-C2-N2	-5.73	99.01	116.20
21	1Z	53	ILE	N-CA-C	5.71	121.23	109.34
1	1A	548	A	P-O3'-C3'	5.70	128.75	120.20
1	2A	752	A	C4'-C3'-O3'	5.69	117.94	109.40
1	1A	996	A	O5'-P-OP1	-5.65	91.06	108.00
50	2s	28	LYS	CA-C-N	5.56	131.70	121.70
50	2s	28	LYS	C-N-CA	5.56	131.70	121.70
1	1A	226	G	O4'-C1'-N9	5.49	116.44	108.20
1	1A	575	A	OP1-P-O3'	-5.43	91.71	108.00
1	2A	752	A	C2'-C3'-O3'	5.38	117.58	109.50
1	1A	428	A	C5'-C4'-C3'	-5.37	107.95	116.00
19	1X	94	GLY	CA-C-N	5.26	131.18	121.70
19	1X	94	GLY	C-N-CA	5.26	131.18	121.70
1	2A	2689	U	C2'-C3'-O3'	5.15	117.22	109.50
32	2a	1442	G	P-O3'-C3'	5.14	125.87	119.70
32	2a	1272	G	N3-C2-N2	5.13	135.28	119.90
1	1A	2629	A	C2'-C3'-O3'	5.12	117.18	109.50
43	2l	104	VAL	CA-C-N	5.12	131.32	121.54
43	2l	104	VAL	C-N-CA	5.12	131.32	121.54
13	1R	104	ARG	CB-CG-CD	-5.12	99.53	111.30
1	1A	2629	A	P-O3'-C3'	5.11	127.86	120.20
1	1A	195	A	P-O3'-C3'	5.05	127.78	120.20
1	1A	2689	U	C4'-C3'-O3'	5.03	116.94	109.40
1	2A	1653	G	C2'-C3'-O3'	5.02	117.03	109.50

There are no chirality outliers.

All (21) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
23	11	3	LYS	Peptide

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Mol	Chain	Res	Type	Group
26	14	61	ARG	Peptide
4	1E	70	ALA	Peptide
6	1G	95	ARG	Peptide
11	1P	28	GLY	Peptide
11	1P	35	HIS	Peptide
11	1P	43	GLY	Peptide
21	1Z	136	PHE	Peptide
33	1b	126	GLU	Peptide
44	1m	105	THR	Peptide
4	2E	70	ALA	Peptide
5	2F	20	LEU	Peptide
6	2G	95	ARG	Peptide
11	2P	28	GLY	Peptide
11	2P	35	HIS	Peptide
11	2P	43	GLY	Peptide
21	2Z	52	SER	Peptide
33	2b	122	PHE	Peptide
33	2b	8	LYS	Peptide
38	2g	79	ARG	Peptide
44	2m	66	LEU	Peptide

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	1A	61852	0	31195	633	0
1	2A	60322	0	30428	886	0
2	1B	2577	0	1305	31	0
2	2B	2575	0	1303	68	0
3	1D	2136	0	2218	38	0
3	2D	2136	0	2218	46	0
4	1E	1559	0	1618	36	0
4	2E	1559	0	1618	45	0
5	1F	1584	0	1625	31	0
5	2F	1580	0	1619	51	0
6	1G	1423	0	1436	34	0
6	2G	1428	0	1438	79	0
7	1H	1330	0	1407	29	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
7	2H	1330	0	1407	50	0
8	1I	1097	0	1140	41	0
8	2I	1064	0	1082	41	0
9	1N	1117	0	1184	14	0
9	2N	1117	0	1184	28	0
10	1O	933	0	996	17	0
10	2O	933	0	996	27	0
11	1P	1135	0	1212	36	0
11	2P	1135	0	1212	49	0
12	1Q	1122	0	1179	25	0
12	2Q	1122	0	1179	37	0
13	1R	968	0	1033	22	0
13	2R	968	0	1033	28	0
14	1S	873	0	927	25	0
14	2S	870	0	923	46	0
15	1T	1091	0	1151	22	0
15	2T	1083	0	1136	24	0
16	1U	959	0	1019	13	0
16	2U	959	0	1019	23	0
17	1V	771	0	830	17	0
17	2V	771	0	830	17	0
18	1W	886	0	940	9	0
18	2W	886	0	940	10	0
19	1X	750	0	814	14	0
19	2X	750	0	814	15	0
20	1Y	806	0	881	22	0
20	2Y	806	0	881	22	0
21	1Z	1240	0	1240	46	0
21	2Z	1271	0	1273	75	0
22	10	608	0	622	11	0
22	20	653	0	674	29	0
23	11	755	0	826	18	0
23	21	755	0	826	19	0
24	12	588	0	643	15	0
24	22	588	0	643	12	0
25	13	469	0	518	8	0
25	23	464	0	514	26	0
26	14	552	0	533	32	0
26	24	532	0	503	37	0
27	15	455	0	465	5	0
27	25	455	0	465	11	0
28	16	453	0	473	8	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
28	26	449	0	469	11	0
29	17	418	0	467	5	0
29	27	418	0	467	9	0
30	18	517	0	582	12	0
30	28	517	0	582	16	0
31	19	307	0	335	1	0
31	29	307	0	335	6	0
32	1a	32246	0	16294	514	0
32	2a	32327	0	16338	742	0
33	1b	1846	0	1867	93	0
33	2b	1825	0	1828	124	0
34	1c	1548	0	1535	45	0
34	2c	1542	0	1517	84	0
35	1d	1655	0	1672	60	0
35	2d	1674	0	1714	60	0
36	1e	1129	0	1185	33	0
36	2e	1133	0	1191	64	0
37	1f	810	0	804	16	0
37	2f	816	0	808	29	0
38	1g	1231	0	1238	36	0
38	2g	1235	0	1249	51	0
39	1h	1088	0	1126	31	0
39	2h	1088	0	1126	39	0
40	1i	983	0	986	48	0
40	2i	978	0	966	61	0
41	1j	709	0	650	35	0
41	2j	714	0	672	47	0
42	1k	829	0	825	13	0
42	2k	833	0	836	25	0
43	1l	932	0	981	20	0
43	2l	932	0	981	31	0
44	1m	958	0	1002	30	0
44	2m	950	0	988	69	0
45	1n	492	0	529	22	0
45	2n	492	0	529	30	0
46	1o	728	0	760	17	0
46	2o	728	0	760	24	0
47	1p	681	0	697	32	0
47	2p	677	0	686	22	0
48	1q	823	0	891	22	0
48	2q	823	0	891	24	0
49	1r	555	0	618	16	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
49	2r	555	0	618	24	0
50	1s	652	0	662	26	0
50	2s	646	0	644	50	0
51	1t	728	0	798	30	0
51	2t	727	0	796	18	0
52	1u	199	0	208	6	0
52	2u	199	0	208	10	0
53	1v	277	0	140	4	0
53	2v	277	0	140	9	0
54	1w	1530	0	785	28	0
54	1y	1585	0	803	29	0
54	2w	1482	0	754	25	0
54	2y	1565	0	794	42	0
55	1x	1635	0	838	11	0
55	2x	1635	0	839	17	0
56	10	8	0	0	0	0
56	11	5	0	0	0	0
56	12	2	0	0	0	0
56	13	4	0	0	0	0
56	15	7	0	0	0	0
56	16	2	0	0	0	0
56	17	4	0	0	0	0
56	18	7	0	0	0	0
56	19	1	0	0	0	0
56	1A	1103	0	0	0	0
56	1B	37	0	0	0	0
56	1D	12	0	0	0	0
56	1E	17	0	0	0	0
56	1F	13	0	0	0	0
56	1G	5	0	0	0	0
56	1I	1	0	0	0	0
56	1N	5	0	0	0	0
56	1O	6	0	0	0	0
56	1P	6	0	0	0	0
56	1Q	6	0	0	0	0
56	1R	4	0	0	0	0
56	1S	3	0	0	0	0
56	1T	2	0	0	0	0
56	1U	12	0	0	0	0
56	1V	7	0	0	0	0
56	1W	7	0	0	0	0
56	1X	7	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	1Y	3	0	0	0	0
56	1Z	3	0	0	0	0
56	1a	215	0	0	0	0
56	1b	1	0	0	0	0
56	1d	1	0	0	0	0
56	1e	2	0	0	0	0
56	1f	2	0	0	0	0
56	1l	2	0	0	0	0
56	1m	1	0	0	0	0
56	1n	2	0	0	0	0
56	1s	1	0	0	0	0
56	1t	1	0	0	0	0
56	1v	1	0	0	0	0
56	1w	8	0	0	0	0
56	1x	14	0	0	0	0
56	1y	1	0	0	0	0
56	20	4	0	0	0	0
56	21	2	0	0	0	0
56	23	1	0	0	0	0
56	25	4	0	0	0	0
56	26	1	0	0	0	0
56	27	2	0	0	0	0
56	28	3	0	0	0	0
56	29	1	0	0	0	0
56	2A	885	0	0	0	0
56	2B	20	0	0	0	0
56	2D	7	0	0	0	0
56	2E	10	0	0	0	0
56	2F	5	0	0	0	0
56	2G	1	0	0	0	0
56	2N	1	0	0	0	0
56	2O	1	0	0	0	0
56	2P	2	0	0	0	0
56	2Q	4	0	0	0	0
56	2R	2	0	0	0	0
56	2T	3	0	0	0	0
56	2U	1	0	0	0	0
56	2V	2	0	0	0	0
56	2W	1	0	0	0	0
56	2X	1	0	0	0	0
56	2Y	1	0	0	0	0
56	2Z	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	2a	241	0	0	0	0
56	2d	2	0	0	0	0
56	2e	1	0	0	0	0
56	2f	1	0	0	0	0
56	2g	1	0	0	0	0
56	2j	1	0	0	0	0
56	2l	4	0	0	0	0
56	2p	1	0	0	0	0
56	2q	2	0	0	0	0
56	2r	2	0	0	0	0
56	2t	1	0	0	0	0
56	2v	2	0	0	0	0
56	2w	7	0	0	0	0
56	2x	5	0	0	0	0
56	2y	7	0	0	0	0
57	1A	1	0	0	0	0
57	2x	1	0	0	0	0
58	1A	34	0	0	1	0
58	2A	34	0	0	1	0
59	14	1	0	0	0	0
59	15	1	0	0	0	0
59	16	1	0	0	0	0
59	19	1	0	0	0	0
59	1Y	1	0	0	0	0
59	1n	1	0	0	0	0
59	24	1	0	0	0	0
59	25	1	0	0	0	0
59	26	1	0	0	0	0
59	29	1	0	0	0	0
59	2Y	1	0	0	0	0
59	2n	1	0	0	0	0
60	1d	8	0	0	1	0
60	2d	8	0	0	1	0
61	10	12	0	0	2	0
61	11	12	0	0	0	0
61	12	4	0	0	1	0
61	13	4	0	0	0	0
61	15	5	0	0	0	0
61	16	3	0	0	0	0
61	17	7	0	0	0	0
61	18	11	0	0	1	0
61	1A	2018	0	0	79	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	1B	62	0	0	2	0
61	1D	26	0	0	0	0
61	1E	27	0	0	2	0
61	1F	17	0	0	0	0
61	1G	3	0	0	1	0
61	1H	2	0	0	0	0
61	1I	1	0	0	0	0
61	1N	6	0	0	1	0
61	1O	7	0	0	1	0
61	1P	23	0	0	1	0
61	1Q	7	0	0	0	0
61	1R	13	0	0	5	0
61	1S	5	0	0	0	0
61	1T	8	0	0	0	0
61	1U	15	0	0	0	0
61	1V	7	0	0	1	0
61	1W	8	0	0	2	0
61	1X	5	0	0	0	0
61	1Y	2	0	0	1	0
61	1Z	1	0	0	0	0
61	1a	378	0	0	29	0
61	1b	1	0	0	0	0
61	1e	1	0	0	0	0
61	1f	1	0	0	0	0
61	1i	1	0	0	0	0
61	1l	8	0	0	1	0
61	1o	1	0	0	0	0
61	1p	1	0	0	0	0
61	1q	2	0	0	0	0
61	1u	1	0	0	1	0
61	1v	4	0	0	0	0
61	1w	10	0	0	1	0
61	1x	16	0	0	0	0
61	1y	2	0	0	0	0
61	20	6	0	0	0	0
61	21	13	0	0	0	0
61	23	1	0	0	1	0
61	25	1	0	0	0	0
61	26	1	0	0	1	0
61	27	5	0	0	0	0
61	28	3	0	0	0	0
61	29	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	2A	1160	0	0	82	0
61	2B	23	0	0	0	0
61	2D	22	0	0	0	0
61	2E	12	0	0	0	0
61	2F	13	0	0	1	0
61	2I	3	0	0	1	0
61	2O	3	0	0	0	0
61	2P	15	0	0	2	0
61	2Q	1	0	0	0	0
61	2R	4	0	0	0	0
61	2T	5	0	0	0	0
61	2U	4	0	0	0	0
61	2W	3	0	0	0	0
61	2X	2	0	0	0	0
61	2Z	1	0	0	0	0
61	2a	264	0	0	26	0
61	2d	2	0	0	0	0
61	2e	2	0	0	0	0
61	2j	3	0	0	2	0
61	2l	6	0	0	1	0
61	2p	1	0	0	0	0
61	2q	1	0	0	0	0
61	2r	1	0	0	0	0
61	2t	3	0	0	0	0
61	2v	2	0	0	0	0
61	2w	1	0	0	0	0
61	2x	7	0	0	0	0
61	2y	6	0	0	0	0
All	All	300078	0	196592	5320	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 11.

All (5320) 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	1.30	1.28
1:1A:1054:A:N6	1:1A:1105:U:H3	1.52	1.06
1:1A:2499:C:OP1	61:1A:4203:HOH:O	1.75	1.04
1:2A:2714:G:OP2	61:2A:3901:HOH:O	1.78	1.02
1:1A:1082:U:O4	1:1A:1086:A:N1	1.93	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:22:U:H3	2:2B:61:G:H1	1.09	0.98
1:2A:1204:A:H2	1:2A:1241:A:H62	1.11	0.98
32:2a:1151:A:HO2'	32:2a:1152:A:H8	1.11	0.97
1:2A:2807:G:N1	1:2A:2893:G:O6	1.98	0.97
1:1A:1055:G:H1	1:1A:1104:C:H42	1.11	0.96
1:2A:2711:A:OP2	61:2A:3901:HOH:O	1.83	0.96
33:1b:33:TYR:HB2	33:1b:43:ASP:HB2	1.45	0.95
29:17:24:THR:HG22	29:17:27:GLY:H	1.32	0.95
1:2A:2138:C:H42	1:2A:2153:G:H1	0.98	0.94
1:1A:1058:G:H1	1:1A:1080:C:N4	1.64	0.94
1:2A:783:A:OP2	61:2A:3902:HOH:O	1.86	0.93
1:1A:1058:G:H1	1:1A:1080:C:H42	0.94	0.93
2:2B:7:G:H21	14:2S:38:GLN:HE22	1.04	0.92
1:2A:2137:C:H42	1:2A:2154:G:H1	1.18	0.91
1:1A:1669:A:OP2	61:1A:4204:HOH:O	1.88	0.91
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.06	0.91
1:1A:1798:U:H5'	3:1D:259:THR:HG22	1.53	0.91
1:2A:2138:C:N4	1:2A:2153:G:H1	1.67	0.90
32:2a:1310:G:H5'	44:2m:77:ASN:HD21	1.37	0.89
54:2w:18:G:O2'	54:2w:57:G:N2	2.05	0.89
47:2p:15:PRO:HD2	47:2p:42:ARG:HD2	1.53	0.89
1:2A:2379:G:O2'	14:2S:17:ARG:NH1	2.05	0.89
32:2a:922:G:H4'	36:2e:20:GLN:HA	1.55	0.88
33:2b:16:HIS:HB3	33:2b:210:SER:HB2	1.55	0.88
1:1A:2427:C:OP1	61:1A:4205:HOH:O	1.90	0.88
32:1a:1314:C:OP2	50:1s:4:SER:OG	1.90	0.88
54:2y:18:G:H22	54:2y:55:PSU:HN3	1.15	0.88
1:1A:301:G:OP2	20:1Y:84:ARG:NH2	2.07	0.88
1:1A:2099:U:H3	1:1A:2190:G:H1	1.16	0.87
1:2A:948:G:OP1	61:2A:3903:HOH:O	1.91	0.87
8:2I:66:GLU:HA	8:2I:69:LYS:HB3	1.54	0.87
1:2A:2110:G:OP1	1:2A:2118:U:N3	2.05	0.87
33:2b:219:VAL:HA	33:2b:222:ILE:HG12	1.56	0.87
32:2a:1228:C:OP1	44:2m:115:LYS:NZ	2.07	0.87
1:1A:1058:G:N2	1:1A:1080:C:N3	2.22	0.87
32:2a:1286:A:H8	32:2a:1287:A:H4'	1.41	0.86
1:1A:1253:A:OP1	61:1A:4206:HOH:O	1.93	0.86
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.09	0.86
26:14:58:ARG:HE	50:1s:68:GLY:HA3	1.40	0.86
32:1a:812:C:N3	61:1a:1907:HOH:O	2.07	0.86
1:2A:1798:U:H5'	3:2D:259:THR:HG22	1.58	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2712(A):A:OP2	61:2A:3901:HOH:O	1.93	0.86
1:1A:1054:A:N6	1:1A:1105:U:N3	2.17	0.86
36:2e:122:GLU:O	36:2e:126:ARG:NH1	2.08	0.86
54:1w:26:A:H61	54:1w:44:G:H1	1.22	0.86
32:2a:953:G:H5'	32:2a:965:A:H61	1.41	0.86
8:1I:77:LEU:HB3	8:1I:142:VAL:HG12	1.58	0.86
1:1A:2100:G:H1	1:1A:2189:U:H3	1.19	0.85
32:1a:165:C:H2'	32:1a:166:G:H8	1.38	0.85
1:1A:1065:U:O2	1:1A:1073:A:N6	2.09	0.85
1:2A:2143:C:H42	1:2A:2148:G:H1	1.23	0.85
14:2S:67:ARG:HG2	14:2S:71:ARG:HD2	1.58	0.85
11:1P:91:PHE:O	11:1P:121:LYS:NZ	2.08	0.85
32:1a:1025:U:O2	32:1a:1036:G:O6	1.95	0.85
39:1h:34:GLU:OE1	39:1h:37:ARG:NH1	2.09	0.85
32:1a:1002:G:H3'	32:1a:1003:G:H4'	1.56	0.84
1:2A:2430:A:OP2	61:2A:3904:HOH:O	1.93	0.84
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.57	0.84
23:11:50:ARG:HG2	23:11:59:THR:HG22	1.57	0.84
32:2a:8:A:H5'	36:2e:101:ILE:HG22	1.58	0.84
1:2A:1938:A:OP2	61:2A:3905:HOH:O	1.95	0.84
32:1a:1030:C:N4	32:1a:1030(A):G:N3	2.26	0.84
32:1a:1505:G:OP2	61:1a:1903:HOH:O	1.94	0.84
32:2a:1025:U:H3	32:2a:1036:G:H1	1.25	0.84
1:2A:962:G:OP1	61:2A:3903:HOH:O	1.95	0.84
32:2a:1347:G:H22	32:2a:1373:G:H2'	1.43	0.84
52:1u:5:ASP:OD1	61:1u:101:HOH:O	1.96	0.84
19:1X:31:HIS:HD2	19:1X:33:LYS:H	1.21	0.84
40:2i:3:GLN:HE21	40:2i:20:ARG:HE	1.24	0.83
1:1A:11:G:H2'	1:1A:12:U:H5''	1.60	0.83
1:2A:2759:G:OP2	61:2A:3906:HOH:O	1.96	0.83
1:1A:884:C:H42	1:1A:892:G:H1	1.24	0.83
1:1A:1865:G:OP1	61:1A:4207:HOH:O	1.94	0.83
1:2A:2206:G:H3'	1:2A:2207:G:H8	1.44	0.83
40:2i:16:ARG:HB2	40:2i:64:THR:HG22	1.61	0.83
10:1O:48:PRO:HB3	32:1a:1422:G:H5''	1.59	0.82
1:2A:854:G:O6	61:2A:3908:HOH:O	1.97	0.82
13:2R:97:VAL:HG22	13:2R:114:VAL:HG13	1.61	0.82
15:1T:65:LYS:HE2	15:1T:67:SER:HB2	1.60	0.82
20:1Y:34:LYS:NZ	61:1Y:301:HOH:O	2.12	0.82
1:1A:631:A:OP1	11:1P:65:ARG:NH1	2.11	0.82
32:2a:944:G:OP1	61:2a:3302:HOH:O	1.97	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1417:G:O6	61:2a:3303:HOH:O	1.98	0.82
32:2a:1119:C:OP2	40:2i:9:ARG:NH2	2.12	0.82
48:1q:18:THR:OG1	48:1q:69:LYS:NZ	2.13	0.82
23:21:50:ARG:HG2	23:21:59:THR:HG22	1.58	0.82
32:1a:1086:U:H3	32:1a:1099:G:H22	1.25	0.82
32:1a:405:U:O4	35:1d:2:GLY:N	2.12	0.81
32:1a:1381:U:H1'	38:1g:79:ARG:HG2	1.61	0.81
1:1A:1494:A:OP1	61:1A:4208:HOH:O	1.97	0.81
32:1a:1027:C:C2	32:1a:1034:G:N2	2.48	0.81
33:1b:18:GLY:HA3	33:1b:42:ILE:HG13	1.60	0.81
32:2a:148:G:H2'	32:2a:149:A:H8	1.46	0.81
1:2A:1025:G:O2'	61:2A:3907:HOH:O	1.97	0.81
36:2e:43:LEU:HD22	36:2e:136:MET:HG3	1.63	0.81
32:2a:1347:G:N2	32:2a:1373:G:H2'	1.96	0.81
1:2A:1647:G:OP1	61:2A:3909:HOH:O	1.98	0.81
32:2a:1329:A:OP2	52:2u:7:ARG:NH1	2.13	0.81
1:1A:2206:G:H3'	1:1A:2207:G:C8	2.17	0.80
1:1A:2306:C:O2	61:1A:4209:HOH:O	1.98	0.80
32:1a:693:G:OP2	61:1a:1905:HOH:O	2.00	0.80
32:1a:892:A:OP2	61:1a:1904:HOH:O	1.99	0.80
1:1A:826:U:OP1	61:1A:4205:HOH:O	2.00	0.80
6:1G:66:GLN:HG3	26:14:1:MET:HE1	1.64	0.80
32:1a:544:G:OP1	35:1d:59:ARG:NH2	2.12	0.80
1:1A:1970:A:OP1	61:1A:4210:HOH:O	1.99	0.80
36:1e:89:ILE:HG12	36:1e:135:THR:HG23	1.64	0.80
5:1F:116:ASP:OD1	5:1F:119:ARG:NH2	2.16	0.79
33:1b:20:GLU:HG2	33:1b:23:ARG:HH11	1.46	0.79
1:1A:1055:G:H1	1:1A:1104:C:N4	1.79	0.79
39:1h:121:ASP:OD2	39:1h:125:ARG:NH2	2.14	0.79
7:2H:113:VAL:HG11	7:2H:151:ILE:HD13	1.65	0.79
32:2a:656:C:O2'	46:2o:28:GLN:OE1	2.00	0.79
33:1b:12:GLU:HB2	33:1b:213:LEU:HD21	1.63	0.79
1:1A:1670:C:OP2	61:1A:4204:HOH:O	2.01	0.79
1:2A:2308:G:O6	1:2A:2311:A:N6	2.13	0.79
15:2T:30:VAL:HG22	15:2T:86:ILE:HG12	1.65	0.79
1:2A:500:G:H22	1:2A:503:A:H5'	1.48	0.79
11:2P:39:LYS:HB2	11:2P:45:LEU:HD13	1.65	0.79
32:2a:1255:G:OP1	41:2j:45:ARG:NH2	2.15	0.79
11:1P:90:ARG:HG2	11:1P:90:ARG:HH11	1.48	0.79
1:1A:1039:G:H1	1:1A:1116:C:H42	1.29	0.78
32:1a:877:C:OP1	39:1h:88:LYS:NZ	2.15	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:1n:12:ARG:HB3	45:1n:12:ARG:HH11	1.48	0.78
32:2a:1055:A:N7	32:2a:1200:C:N4	2.32	0.78
42:2k:85:ARG:HA	42:2k:112:THR:HG22	1.65	0.78
32:2a:975:A:H4'	32:2a:976:G:H5''	1.62	0.78
1:1A:993:G:OP1	16:1U:50:ARG:NH2	2.16	0.78
1:2A:570:G:O6	61:2A:3910:HOH:O	2.01	0.78
21:2Z:53:ILE:HA	21:2Z:71:VAL:HG23	1.65	0.78
32:2a:596:C:OP2	61:2a:3304:HOH:O	2.00	0.78
41:2j:49:VAL:HG23	45:2n:41:ARG:HB2	1.62	0.78
1:1A:739:G:OP1	61:1A:4212:HOH:O	2.01	0.78
8:2I:38:LEU:H	8:2I:38:LEU:HD12	1.48	0.78
32:2a:1375:A:H4'	38:2g:29:LYS:HE2	1.66	0.78
1:2A:880:G:N2	1:2A:898:C:O2	2.17	0.78
1:2A:1830:C:OP2	61:2A:3911:HOH:O	2.02	0.78
33:2b:52:GLU:HG2	33:2b:56:ARG:HH12	1.49	0.78
34:2c:44:GLU:HA	34:2c:52:LEU:HD23	1.64	0.78
34:2c:162:GLN:NE2	53:2v:24:A:O2'	2.17	0.78
8:2I:40:THR:O	8:2I:44:LEU:HB2	1.84	0.78
32:2a:1518:MA6:H93	32:2a:1519:MA6:H92	1.65	0.78
29:27:24:THR:HG22	29:27:27:GLY:H	1.49	0.78
32:2a:1108:G:O6	61:2a:3305:HOH:O	2.01	0.78
35:1d:166:LYS:NZ	35:1d:179:GLU:OE2	2.17	0.78
1:2A:1124:C:OP1	61:2A:3912:HOH:O	2.02	0.78
32:2a:1286:A:C8	32:2a:1287:A:H4'	2.17	0.78
48:2q:45:HIS:HB3	48:2q:72:ARG:HG2	1.65	0.78
1:2A:2379:G:HO2'	14:2S:17:ARG:HH12	1.31	0.77
2:2B:7:G:N2	14:2S:38:GLN:HE22	1.82	0.77
32:2a:1134:G:C2	32:2a:1135:U:H1'	2.19	0.77
48:2q:95:TYR:HA	48:2q:98:LEU:HD22	1.65	0.77
32:2a:1145:C:H4'	32:2a:1146:A:H5'	1.65	0.77
1:2A:955:C:OP1	12:2Q:87:LYS:NZ	2.17	0.77
33:2b:16:HIS:HB2	33:2b:204:ASN:HB3	1.67	0.77
39:2h:64:LYS:HG2	39:2h:79:VAL:HG21	1.65	0.77
41:2j:61:GLU:OE2	45:2n:58:LYS:NZ	2.17	0.77
51:1t:10:LEU:HB3	51:1t:12:ALA:H	1.48	0.77
1:1A:2243:U:OP1	61:1A:4213:HOH:O	2.01	0.77
1:2A:1420:U:O2'	1:2A:1421:G:OP1	2.02	0.77
32:2a:434:U:H2'	32:2a:435:C:H6	1.49	0.77
38:2g:68:ASN:HD22	38:2g:128:ALA:HA	1.50	0.77
1:2A:2589:A:OP1	61:2A:3902:HOH:O	2.02	0.77
32:2a:866:C:O2'	32:2a:919:A:OP1	2.03	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2P:35:HIS:O	61:2P:301:HOH:O	2.02	0.77
1:2A:878:A:H61	1:2A:899:A:H1'	1.50	0.77
1:2A:2131:G:OP2	1:2A:2131:G:N2	2.17	0.77
32:1a:79:G:O6	32:1a:90:U:O2	2.03	0.77
1:2A:883:G:N1	1:2A:894:C:O2	2.15	0.77
33:2b:91:PRO:HG2	33:2b:155:LEU:HD13	1.66	0.77
32:2a:673:G:H2'	32:2a:674:G:C8	2.19	0.76
4:1E:119:ARG:HD2	4:1E:160:TYR:HB2	1.67	0.76
18:1W:92:ARG:NH1	61:1W:301:HOH:O	2.15	0.76
1:2A:297:C:OP2	61:2A:3914:HOH:O	2.03	0.76
2:2B:75:G:H22	21:2Z:73:GLN:HE21	1.31	0.76
32:1a:1030(A):G:O2'	32:1a:1031:G:N2	2.15	0.76
1:2A:2131:G:H4'	1:2A:2132:U:H3'	1.67	0.76
32:2a:771:G:N7	61:2a:3317:HOH:O	2.17	0.76
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.65	0.76
47:2p:18:ARG:HD3	47:2p:35:LYS:HD2	1.65	0.76
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.20	0.76
1:2A:2151:G:H2'	1:2A:2152:G:H8	1.49	0.76
1:1A:2448:A:OP1	61:1A:4203:HOH:O	2.03	0.76
50:1s:50:ALA:HB1	50:1s:57:HIS:HB3	1.68	0.76
1:2A:1030:G:OP2	12:2Q:128:LYS:NZ	2.18	0.76
1:2A:1689:A:H62	1:2A:1698:A:H2	1.32	0.76
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.19	0.76
32:2a:1274:G:N2	32:2a:1275:A:N7	2.32	0.76
1:2A:2206:G:H5''	1:2A:2207:G:N7	2.01	0.76
8:2I:37:VAL:HG12	8:2I:38:LEU:HD12	1.68	0.76
44:1m:3:ARG:HG2	44:1m:8:GLU:HA	1.67	0.76
1:2A:921:G:O6	61:2A:3915:HOH:O	2.04	0.76
2:2B:7:G:H21	14:2S:38:GLN:NE2	1.82	0.76
43:2l:32:PHE:HB3	43:2l:84:LEU:HD11	1.68	0.76
1:2A:106:C:H1'	20:2Y:1:MET:HE2	1.68	0.75
8:2I:57:ARG:HA	8:2I:61:ARG:HH21	1.49	0.75
32:2a:1149:C:O2'	32:2a:1280:A:N1	2.19	0.75
1:2A:963:U:OP2	61:2A:3903:HOH:O	2.04	0.75
32:2a:1118:C:OP1	40:2i:104:ARG:NH1	2.20	0.75
45:2n:26:ARG:HD3	45:2n:43:CYS:HB3	1.68	0.75
1:2A:370:G:N7	61:2A:3945:HOH:O	2.19	0.75
32:2a:1166:G:N2	32:2a:1170:A:OP2	2.20	0.75
1:2A:775:G:O3'	61:2A:3913:HOH:O	2.03	0.75
1:2A:1449:A:O2'	1:2A:1529:G:N2	2.15	0.75
32:2a:437:U:H5'	35:2d:155:LEU:HD21	1.67	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2y:34:G:H2'	54:2y:35:A:H8	1.51	0.75
1:1A:2552:OMU:OP2	61:1A:4215:HOH:O	2.04	0.75
32:1a:975:A:H4'	32:1a:976:G:H5''	1.67	0.75
1:1A:2140:C:N3	1:1A:2151:G:O6	2.20	0.75
41:1j:5:ARG:NH2	41:1j:73:ASP:OD2	2.19	0.75
1:1A:1602:U:O4	61:1A:4214:HOH:O	2.03	0.75
1:1A:1025:G:O2'	61:1A:4211:HOH:O	2.00	0.74
32:1a:664:G:H22	32:1a:741:G:H1	1.32	0.74
1:2A:1294:U:O2'	13:2R:26:LYS:NZ	2.19	0.74
32:2a:396:G:O2'	32:2a:398:C:OP1	2.03	0.74
39:2h:51:VAL:HG11	39:2h:60:ARG:HH12	1.50	0.74
8:1I:40:THR:O	8:1I:44:LEU:HB2	1.86	0.74
32:1a:1530:G:OP1	61:1a:1906:HOH:O	2.04	0.74
32:2a:9:G:H2'	32:2a:10:A:C8	2.22	0.74
38:2g:113:GLU:HG2	38:2g:119:ARG:HG2	1.69	0.74
43:2l:117:ARG:HB3	43:2l:122:THR:HB	1.68	0.74
44:2m:80:ARG:HH22	50:2s:69:HIS:HE1	1.34	0.74
2:1B:21:G:N7	61:1B:3702:HOH:O	2.19	0.74
18:1W:4:LYS:HD3	18:1W:6:ILE:HD11	1.67	0.74
33:1b:42:ILE:HD12	33:1b:203:GLY:HA2	1.68	0.74
3:2D:148:GLU:HB2	3:2D:151:LYS:HD2	1.68	0.74
1:1A:279:C:H42	1:1A:361:G:H1	1.36	0.74
32:1a:1348:U:H4'	40:1i:120:ARG:HD2	1.70	0.74
1:2A:2042:A:OP1	61:2A:3918:HOH:O	2.05	0.74
1:1A:1506:C:H2'	1:1A:1507:A:H8	1.51	0.74
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.23	0.74
48:1q:57:VAL:HG12	48:1q:76:LEU:HA	1.70	0.74
1:2A:1021:A:H62	1:2A:1141:U:H3	1.34	0.74
8:2I:72:LEU:HD11	8:2I:107:VAL:HG11	1.70	0.74
34:2c:179:ARG:NH1	34:2c:206:GLU:OE1	2.20	0.74
1:2A:1015:G:H2'	1:2A:1016:G:H8	1.50	0.74
10:2O:48:PRO:HB3	32:2a:1422:G:H5''	1.68	0.74
11:2P:126:VAL:HG12	11:2P:148:LEU:HD22	1.67	0.74
32:2a:1147:C:O2	40:2i:16:ARG:NH1	2.21	0.74
33:2b:98:LEU:HB2	33:2b:101:MET:HE3	1.70	0.74
32:2a:662:G:H2'	32:2a:663:A:C8	2.23	0.74
1:1A:1069:A:H1'	1:1A:1096:A:H4'	1.70	0.74
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	1.68	0.74
1:2A:2677:G:N3	61:2A:3952:HOH:O	2.21	0.74
10:2O:115:VAL:HG13	10:2O:121:VAL:HG21	1.69	0.74
1:1A:1332:G:OP1	61:1A:4216:HOH:O	2.05	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2579:C:OP1	61:2A:3917:HOH:O	2.05	0.74
1:2A:1604:C:OP1	61:2A:3919:HOH:O	2.06	0.73
1:1A:387:U:O4	61:1A:4217:HOH:O	2.05	0.73
1:1A:2337:G:OP1	61:1A:4221:HOH:O	2.06	0.73
26:14:56:VAL:HB	26:14:60:GLN:HG3	1.70	0.73
1:2A:852:G:H2'	1:2A:853:G:H8	1.53	0.73
32:2a:662:G:O2'	32:2a:836:G:OP1	2.05	0.73
44:2m:45:VAL:HA	44:2m:48:LEU:HD12	1.68	0.73
1:1A:1014:U:OP2	61:1A:4218:HOH:O	2.06	0.73
61:1A:4209:HOH:O	6:1G:45:GLU:OE2	2.05	0.73
12:1Q:37:LEU:HD21	12:1Q:130:LYS:HE2	1.71	0.73
40:1i:128:ARG:NH2	55:1x:33:U:OP2	2.22	0.73
18:2W:4:LYS:HD3	18:2W:6:ILE:HD11	1.69	0.73
1:1A:1053:C:H42	1:1A:1106:G:H1	1.35	0.73
1:1A:2125:G:N1	1:1A:2172:U:OP1	2.20	0.73
1:1A:2136:C:N3	1:1A:2155:G:N2	2.36	0.73
1:2A:1253:A:OP1	61:2A:3920:HOH:O	2.06	0.73
46:2o:87:ILE:HG22	46:2o:88:ARG:H	1.54	0.73
1:1A:847:U:OP2	61:1A:4220:HOH:O	2.06	0.73
1:2A:2788:C:OP1	4:2E:61:ARG:NH2	2.21	0.73
36:2e:100:VAL:O	36:2e:107:ARG:NH1	2.17	0.73
1:1A:2447:G:OP2	61:1A:4219:HOH:O	2.06	0.73
21:1Z:52:SER:O	21:1Z:54:HIS:N	2.17	0.73
7:2H:18:GLU:OE2	7:2H:27:LYS:NZ	2.21	0.73
44:2m:84:ILE:HG22	50:2s:74:PHE:HE1	1.53	0.73
1:2A:2143:C:N4	1:2A:2148:G:H1	1.87	0.73
1:1A:2136:C:N4	1:1A:2155:G:N1	2.36	0.73
46:1o:82:ILE:HD12	46:1o:88:ARG:HG3	1.70	0.73
5:2F:116:ASP:OD2	11:2P:1:MET:N	2.22	0.73
28:16:13:CYS:SG	28:16:47:THR:HG21	2.29	0.72
32:1a:78:G:O6	32:1a:92:C:N4	2.21	0.72
6:1G:21:ARG:O	6:1G:21:ARG:NH1	2.22	0.72
32:1a:1021:G:O2'	32:1a:1022:G:O5'	2.07	0.72
34:2c:52:LEU:HD12	34:2c:53:ALA:H	1.55	0.72
35:2d:150:GLU:H	35:2d:150:GLU:CD	1.93	0.72
1:1A:123:G:OP2	61:1A:4222:HOH:O	2.07	0.72
1:1A:1087:G:H2'	1:1A:1089:G:C8	2.25	0.72
40:1i:21:PRO:HA	40:1i:59:PHE:HA	1.71	0.72
32:1a:1337:G:N7	61:1a:1925:HOH:O	2.22	0.72
32:2a:157:G:H1	32:2a:164:U:H3	1.35	0.72
1:2A:568:U:O4	61:2A:3916:HOH:O	2.04	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2137:C:N4	1:2A:2154:G:H1	1.88	0.72
7:2H:33:LEU:HD21	7:2H:136:ILE:HG13	1.72	0.72
32:2a:984:C:H2'	32:2a:985:C:H6	1.53	0.72
33:2b:92:TYR:N	33:2b:151:GLY:O	2.21	0.72
15:1T:24:PRO:HA	15:1T:49:VAL:HG22	1.72	0.72
5:2F:53:THR:HG23	5:2F:55:GLY:H	1.54	0.72
32:2a:473:G:H2'	32:2a:474:G:H8	1.54	0.72
1:2A:1607:C:N4	1:2A:1622:G:OP2	2.21	0.72
32:2a:1090:U:N3	32:2a:1095:U:O4	2.19	0.72
36:2e:8:GLU:HB3	36:2e:34:VAL:HG12	1.71	0.72
54:2y:18:G:N2	54:2y:55:PSU:HN3	1.88	0.72
36:1e:41:VAL:HG23	36:1e:67:VAL:HG13	1.72	0.72
37:2f:100:ASN:HD21	49:2r:23:LYS:HE3	1.54	0.72
33:1b:24:TRP:HZ3	33:1b:29:ALA:HB2	1.54	0.72
2:2B:14:U:OP2	2:2B:70:C:O2'	2.06	0.71
32:1a:1077:G:N2	32:1a:1080:A:OP2	2.22	0.71
32:1a:1198:G:OP1	61:1a:1908:HOH:O	2.07	0.71
32:2a:9:G:H2'	32:2a:10:A:H8	1.53	0.71
49:2r:52:PRO:HB2	49:2r:54:ARG:HG2	1.70	0.71
1:1A:630:G:OP1	30:18:47:LYS:NZ	2.22	0.71
1:1A:2629:A:O2'	1:1A:2630:G:OP2	2.07	0.71
32:1a:973:G:OP1	41:1j:57:LYS:NZ	2.21	0.71
41:2j:47:PHE:N	41:2j:63:PHE:O	2.22	0.71
2:1B:58:A:OP2	61:1B:3701:HOH:O	2.08	0.71
32:1a:79:G:O6	32:1a:90:U:C2	2.43	0.71
1:2A:822:U:OP2	61:2A:3924:HOH:O	2.08	0.71
1:2A:2314:C:H2'	1:2A:2315:G:H8	1.55	0.71
11:2P:99:LEU:HD12	11:2P:102:ARG:HH21	1.55	0.71
36:2e:57:LYS:HG2	36:2e:61:TYR:HE2	1.54	0.71
2:1B:103:G:H21	21:1Z:73:GLN:HE22	1.38	0.71
32:1a:36:C:OP1	43:1l:123:LYS:NZ	2.22	0.71
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.24	0.71
1:2A:1670:C:OP1	61:2A:3922:HOH:O	2.08	0.71
1:2A:2431:U:OP1	61:2A:3921:HOH:O	2.08	0.71
40:1i:42:ARG:NH1	40:1i:71:SER:OG	2.23	0.71
14:2S:38:GLN:NE2	14:2S:47:THR:OG1	2.23	0.71
32:2a:148:G:H2'	32:2a:149:A:C8	2.26	0.71
1:1A:1647:G:OP1	61:1A:4224:HOH:O	2.08	0.71
1:1A:887:A:H2	1:1A:889:C:H3'	1.54	0.71
50:2s:17:GLU:HA	50:2s:20:LEU:HG	1.73	0.71
1:1A:2350:C:OP2	61:1A:4223:HOH:O	2.07	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:324:G:N7	61:1a:1927:HOH:O	2.24	0.70
33:2b:58:ILE:HA	33:2b:61:LEU:HB3	1.71	0.70
1:2A:2135:A:N1	1:2A:2156:G:O2'	2.23	0.70
41:2j:38:ILE:HG13	41:2j:71:LEU:HB3	1.72	0.70
1:1A:1041:C:H42	1:1A:1114:G:H1	1.39	0.70
1:1A:1271:G:OP2	61:1A:4224:HOH:O	2.09	0.70
1:2A:2218:U:O2	23:21:52:ARG:NH1	2.23	0.70
1:2A:2318:G:H21	14:2S:3:ARG:HD3	1.57	0.70
14:2S:33:LYS:HB3	14:2S:34:HIS:CD2	2.26	0.70
32:2a:1125:U:H6	32:2a:1126:U:HO2'	1.39	0.70
42:2k:22:HIS:HB3	42:2k:29:ILE:HB	1.73	0.70
12:1Q:10:ARG:HH11	12:1Q:11:LYS:HE2	1.57	0.70
54:1y:8:4SU:H4'	54:1y:48:C:H4'	1.72	0.70
43:2l:86:ARG:NH1	61:2l:301:HOH:O	2.24	0.70
32:2a:53:A:OP2	61:2a:3306:HOH:O	2.09	0.70
50:2s:49:ILE:HG22	50:2s:62:ILE:HD11	1.74	0.70
5:1F:185:ASP:HA	5:1F:188:ARG:HD3	1.72	0.70
4:1E:105:THR:OG1	4:1E:199:ARG:NH2	2.25	0.70
32:1a:1355:G:OP1	61:1a:1909:HOH:O	2.08	0.70
1:2A:938:G:OP2	30:28:52:LYS:NZ	2.24	0.70
1:2A:1973:G:OP1	61:2A:3923:HOH:O	2.08	0.70
32:2a:664:G:H22	32:2a:741:G:H1	1.39	0.70
32:2a:1330:U:H4'	44:2m:23:TYR:CZ	2.27	0.70
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.72	0.70
34:2c:58:GLU:HB3	41:2j:92:THR:HG21	1.72	0.70
54:2y:34:G:H2'	54:2y:35:A:C8	2.27	0.70
32:1a:184:G:H2'	32:1a:185:A:H8	1.56	0.70
1:1A:1779:U:OP2	61:1A:4226:HOH:O	2.10	0.70
20:2Y:28:LYS:NZ	20:2Y:40:GLU:OE2	2.24	0.70
21:2Z:47:VAL:O	21:2Z:50:GLN:NE2	2.24	0.70
32:2a:976:G:H5'	32:2a:1358:U:O2'	1.91	0.70
48:2q:81:ARG:HB3	48:2q:84:LEU:HD12	1.73	0.70
32:1a:574:A:OP2	61:1a:1911:HOH:O	2.10	0.70
34:1c:19:GLU:O	34:1c:40:ARG:NH2	2.25	0.70
2:2B:20:C:N4	2:2B:63:G:O6	2.19	0.70
33:1b:87:ARG:NH2	33:1b:220:ASP:OD1	2.23	0.69
1:2A:1011:G:OP2	16:2U:66:ASN:ND2	2.25	0.69
6:2G:69:ALA:HB3	6:2G:91:ARG:HH21	1.55	0.69
32:2a:1216:G:H5''	45:2n:5:ALA:HB2	1.73	0.69
54:2y:18:G:N2	54:2y:55:PSU:N3	2.34	0.69
1:2A:9:U:OP1	9:2N:115:ARG:NH2	2.25	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:752:A:H3'	29:27:1:MET:HE1	1.72	0.69
1:1A:1359:A:H2'	1:1A:1360:A:H5'	1.73	0.69
21:1Z:11:GLU:O	21:1Z:36:LYS:NZ	2.25	0.69
1:2A:2785:C:OP1	4:2E:41:LYS:NZ	2.21	0.69
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.27	0.69
34:2c:182:ILE:HG22	34:2c:203:PHE:HA	1.73	0.69
32:2a:266:G:H5''	32:2a:268:C:H41	1.58	0.69
32:1a:276:G:O3'	48:1q:68:ARG:NH1	2.24	0.69
54:1w:9:A:O2'	54:1w:10:G:N7	2.25	0.69
54:1w:26:A:N6	54:1w:44:G:H1	1.89	0.69
1:2A:1271:G:OP2	61:2A:3909:HOH:O	2.09	0.69
14:2S:33:LYS:HB3	14:2S:34:HIS:HD2	1.57	0.69
1:1A:1062:G:H1	1:1A:1077:A:H61	1.38	0.69
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.24	0.69
1:1A:1811:G:N7	61:1A:4257:HOH:O	2.25	0.69
32:1a:660:G:N7	61:1a:1930:HOH:O	2.26	0.69
9:2N:67:LEU:HB3	9:2N:88:GLU:HG3	1.75	0.69
32:2a:408:A:N7	61:2a:3325:HOH:O	2.24	0.69
1:2A:1434:A:H61	1:2A:1558:A:H62	1.40	0.69
1:2A:1493:C:N4	1:2A:2206:G:O2'	2.26	0.69
1:2A:2118:U:OP1	1:2A:2148:G:H4'	1.93	0.69
1:2A:2143:C:N3	1:2A:2148:G:N2	2.37	0.69
32:2a:504:C:OP1	61:2a:3307:HOH:O	2.09	0.69
1:1A:2821:A:OP2	61:1R:301:HOH:O	2.10	0.69
32:1a:79:G:C6	32:1a:90:U:O2	2.45	0.69
1:2A:1851:U:OP1	61:2A:3925:HOH:O	2.09	0.69
1:1A:1418:G:OP2	61:1A:4225:HOH:O	2.10	0.69
19:1X:31:HIS:CD2	19:1X:33:LYS:H	2.07	0.69
35:1d:119:GLN:HG2	35:1d:123:HIS:CD2	2.28	0.69
1:2A:2142:C:N4	1:2A:2148:G:O6	2.26	0.69
5:2F:137:LYS:HA	5:2F:140:LEU:HD12	1.74	0.69
4:1E:29:GLY:HA3	61:1E:402:HOH:O	1.93	0.68
32:1a:869:G:OP2	61:1a:1910:HOH:O	2.09	0.68
1:2A:1568:G:N7	61:2A:3965:HOH:O	2.25	0.68
32:2a:770:C:OP1	61:2a:3310:HOH:O	2.11	0.68
1:1A:2154:G:C2	1:1A:2155:G:H1'	2.28	0.68
1:2A:1183:G:H5''	25:23:30:ARG:NH2	2.09	0.68
1:2A:2524:G:N7	61:2A:3970:HOH:O	2.26	0.68
32:2a:662:G:H2'	32:2a:663:A:H8	1.55	0.68
4:2E:14:ILE:HG13	4:2E:21:VAL:HG13	1.75	0.68
21:2Z:121:HIS:N	21:2Z:171:ILE:O	2.27	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1817:G:OP1	3:2D:88:ARG:NH2	2.26	0.68
32:1a:1196:U:H3	34:1c:162:GLN:HE22	1.40	0.68
1:2A:332:A:O2'	1:2A:334:C:OP2	2.11	0.68
1:2A:1812:A:OP2	61:2A:3926:HOH:O	2.11	0.68
1:2A:2238:G:H5''	61:2A:4102:HOH:O	1.93	0.68
1:1A:2331:G:O2'	1:1A:2336:A:N1	2.23	0.68
9:1N:67:LEU:O	9:1N:88:GLU:HG3	1.94	0.68
21:1Z:105:VAL:N	21:1Z:139:VAL:O	2.25	0.68
21:2Z:39:VAL:HG21	21:2Z:44:PHE:HD1	1.58	0.68
32:2a:1271:G:N2	32:2a:1272:G:N7	2.42	0.68
1:1A:1452:A:OP2	61:1A:4232:HOH:O	2.12	0.68
36:1e:142:LEU:O	36:1e:143:ARG:NH1	2.23	0.68
1:2A:1022:G:H22	1:2A:1142(A):A:H2	1.41	0.68
5:2F:185:ASP:HA	5:2F:188:ARG:HD3	1.75	0.68
16:2U:49:HIS:HA	16:2U:52:ARG:HB2	1.74	0.68
24:22:38:GLN:NE2	24:22:43:GLN:O	2.26	0.68
1:2A:2448:A:OP1	61:2A:3910:HOH:O	2.12	0.68
33:2b:48:MET:HA	33:2b:51:LEU:HB2	1.75	0.68
1:1A:762:U:OP1	61:1A:4227:HOH:O	2.10	0.68
26:24:44:THR:O	26:24:46:GLN:N	2.25	0.68
51:2t:50:GLU:O	51:2t:100:ILE:HD11	1.94	0.68
1:1A:2790:A:H3'	1:1A:2790:A:N3	2.09	0.68
21:1Z:151:HIS:HA	21:1Z:171:ILE:HG23	1.76	0.68
42:1k:34:ASP:HB3	42:1k:40:ILE:HD11	1.76	0.68
1:2A:2839:G:H5'	13:2R:46:GLY:HA2	1.74	0.68
32:2a:1030(A):G:N2	32:2a:1030(D):A:OP2	2.26	0.68
1:1A:2409:G:H1'	61:1A:4332:HOH:O	1.94	0.67
27:15:40:LYS:NZ	27:15:44:THR:O	2.27	0.67
54:1y:56:C:H2'	54:1y:57:G:O4'	1.94	0.67
19:2X:8:ILE:O	24:22:36:ARG:NH2	2.26	0.67
32:2a:1352:C:H2'	32:2a:1353:G:C8	2.29	0.67
40:2i:9:ARG:HG2	40:2i:14:VAL:HG12	1.77	0.67
1:1A:2428:G:OP1	61:1A:4205:HOH:O	2.12	0.67
11:1P:29:LYS:HG3	11:1P:30:THR:H	1.58	0.67
40:1i:110:GLU:OE2	40:1i:113:LYS:NZ	2.25	0.67
32:2a:117:G:OP2	61:2a:3309:HOH:O	2.11	0.67
1:1A:2136:C:N3	1:1A:2155:G:C2	2.62	0.67
1:1A:2550:G:OP1	61:1A:4204:HOH:O	2.11	0.67
7:1H:86:GLU:OE2	7:1H:132:ARG:NH2	2.26	0.67
1:2A:1648:C:OP1	61:2A:3909:HOH:O	2.12	0.67
22:10:9:SER:O	61:10:201:HOH:O	2.12	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1019:U:H2'	1:2A:1020:A:H8	1.60	0.67
32:2a:434:U:H2'	32:2a:435:C:C6	2.28	0.67
32:2a:533:A:OP1	61:2a:3308:HOH:O	2.10	0.67
1:1A:731:C:OP1	61:1A:4231:HOH:O	2.12	0.67
1:1A:1082:U:N3	1:1A:1086:A:N6	2.08	0.67
8:1I:38:LEU:HD23	8:1I:38:LEU:H	1.59	0.67
32:1a:486:U:H2'	32:1a:487:A:H8	1.59	0.67
15:2T:118:ARG:HG2	32:2a:1442(A):G:C8	2.30	0.67
9:1N:46:VAL:HG23	9:1N:48:MET:HG2	1.77	0.67
32:1a:148:G:H2'	32:1a:149:A:H8	1.60	0.67
6:2G:38:VAL:HA	6:2G:93:THR:HA	1.75	0.67
32:2a:1508:G:O6	32:2a:1527:C:N4	2.17	0.67
40:2i:4:TYR:O	40:2i:19:LEU:N	2.28	0.67
44:2m:13:LYS:HA	44:2m:44:ARG:HH11	1.59	0.67
1:1A:2602:A:OP1	61:1A:4229:HOH:O	2.12	0.67
32:1a:1029:C:H41	32:1a:1030(A):G:H21	1.41	0.67
32:2a:1316:G:H22	32:2a:1319:A:H5'	1.59	0.67
35:2d:15:GLU:OE2	35:2d:66:ARG:NH1	2.28	0.67
1:1A:880:G:H2'	1:1A:881:G:H8	1.59	0.67
13:1R:97:VAL:HG22	13:1R:114:VAL:HG13	1.77	0.67
1:2A:625:G:O6	11:2P:107:LYS:NZ	2.27	0.67
1:2A:888:C:OP1	44:2m:93:ARG:NH1	2.28	0.67
12:2Q:35:VAL:HG22	12:2Q:102:VAL:HG22	1.77	0.67
43:2l:69:TYR:HE2	43:2l:71:PRO:HA	1.59	0.67
1:1A:1077:A:H2'	1:1A:1078:U:H4'	1.77	0.67
1:1A:2168:G:N1	1:1A:2171:A:N7	2.43	0.67
46:1o:87:ILE:HG22	46:1o:88:ARG:H	1.59	0.67
26:24:16:CYS:SG	26:24:17:GLY:N	2.68	0.67
32:2a:1053:G:H4'	32:2a:1054:C:H3'	1.75	0.67
49:2r:32:ARG:HA	49:2r:69:THR:HG21	1.75	0.67
32:1a:542:G:OP1	35:1d:10:ARG:NH2	2.28	0.67
34:1c:179:ARG:HD2	34:1c:206:GLU:HB3	1.77	0.67
49:1r:52:PRO:HB2	49:1r:54:ARG:HG2	1.76	0.67
1:2A:2314:C:H5'	6:2G:38:VAL:HG21	1.75	0.67
1:2A:2879:C:OP2	61:2A:3927:HOH:O	2.12	0.67
12:2Q:111:GLU:O	12:2Q:115:MET:HG2	1.95	0.67
32:2a:64:G:H4'	32:2a:65:U:H3'	1.77	0.67
32:2a:222:U:H2'	32:2a:223:U:C6	2.29	0.67
32:2a:903:G:OP1	61:2a:3311:HOH:O	2.12	0.67
1:1A:1045:A:OP1	1:1A:1045:A:H4'	1.93	0.66
54:1y:13:C:H2'	54:1y:14:A:H5''	1.75	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:821:A:N1	61:2A:3980:HOH:O	2.28	0.66
11:2P:95:VAL:HG12	11:2P:100:LEU:HD21	1.78	0.66
32:2a:742:G:OP2	46:2o:35:ARG:NH2	2.29	0.66
34:2c:100:ALA:O	34:2c:102:ASN:ND2	2.28	0.66
35:2d:153:ARG:HG2	35:2d:181:MET:HE2	1.76	0.66
34:1c:35:GLU:CD	34:1c:59:ARG:HH22	2.03	0.66
1:2A:973:A:OP2	61:2A:3916:HOH:O	2.12	0.66
26:24:46:GLN:C	26:24:48:ARG:H	2.03	0.66
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.60	0.66
32:1a:1125:U:H4'	41:1j:5:ARG:HH22	1.61	0.66
1:2A:1803:A:O2'	3:2D:259:THR:HG21	1.95	0.66
32:2a:1315:U:O2'	32:2a:1360:A:N3	2.23	0.66
1:1A:363(A):A:H2'	1:1A:363(B):G:C8	2.30	0.66
35:1d:98:GLU:HG3	35:1d:189:PRO:HG2	1.77	0.66
1:2A:81:G:N7	61:2A:3976:HOH:O	2.28	0.66
1:2A:2022:U:O2'	1:2A:2617:C:H5'	1.95	0.66
1:1A:272(G):C:H42	1:1A:363(C):G:H1	1.43	0.66
1:1A:2277:G:OP2	22:10:10:THR:HG21	1.94	0.66
1:2A:2817:G:OP1	13:2R:99:LYS:NZ	2.27	0.66
32:2a:1376:U:H2'	32:2a:1377:A:H8	1.61	0.66
1:1A:1048:A:N1	1:1A:1112:G:O2'	2.25	0.66
1:1A:1580:A:OP2	1:1A:1580:A:H8	1.79	0.66
1:1A:2126:A:N3	1:1A:2127:G:H1'	2.10	0.66
13:1R:50:HIS:ND1	61:1R:302:HOH:O	2.29	0.66
32:1a:1036:G:H5''	32:1a:1037:C:C5	2.30	0.66
32:2a:48:C:OP1	61:2a:3312:HOH:O	2.13	0.66
32:2a:1119:C:H2'	32:2a:1120:G:H8	1.60	0.66
32:2a:1190:G:H5'	34:2c:176:HIS:HE1	1.60	0.66
33:2b:9:GLU:O	33:2b:11:LEU:N	2.29	0.66
38:2g:69:VAL:HG21	38:2g:104:LEU:HD21	1.78	0.66
15:1T:112:ARG:HG3	15:1T:115:ARG:NH2	2.11	0.66
21:1Z:153:SER:HA	21:1Z:167:PRO:HB3	1.77	0.66
1:2A:113:G:OP1	61:2A:3930:HOH:O	2.14	0.66
1:2A:2342:C:O2'	1:2A:2374:C:OP1	2.13	0.66
35:2d:72:GLU:OE2	35:2d:207:TYR:OH	2.13	0.66
48:2q:7:THR:HG23	48:2q:58:GLU:HG3	1.78	0.66
4:1E:110:GLY:O	61:1R:301:HOH:O	2.13	0.66
32:1a:682:G:O6	61:1a:1912:HOH:O	2.11	0.66
1:2A:667:U:O2	30:28:2:PRO:HD2	1.96	0.66
32:2a:750:G:N3	46:2o:23:GLY:HA3	2.10	0.66
39:2h:51:VAL:HG11	39:2h:60:ARG:NH1	2.11	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:2h:51:VAL:HG21	39:2h:60:ARG:HB2	1.78	0.66
5:1F:53:THR:CG2	5:1F:55:GLY:H	2.08	0.66
32:1a:864:A:OP1	61:1a:1915:HOH:O	2.14	0.66
32:1a:953:G:H5'	32:1a:965:A:H61	1.61	0.66
1:2A:900:A:H2'	1:2A:901:A:H8	1.61	0.66
1:2A:994:C:OP2	16:2U:54:LYS:NZ	2.28	0.66
1:2A:2751:G:H5'	7:2H:2:SER:HA	1.77	0.66
33:2b:118:LEU:HD12	33:2b:122:PHE:HB2	1.78	0.66
17:1V:55:ALA:HA	17:1V:101:GLY:HA2	1.78	0.65
44:1m:67:GLU:HG3	44:1m:71:ARG:NH2	2.11	0.65
1:2A:1352:U:OP2	61:2A:3929:HOH:O	2.14	0.65
1:2A:2138:C:N3	1:2A:2153:G:N2	2.39	0.65
32:2a:1012:U:H2'	32:2a:1013:G:C8	2.31	0.65
1:1A:9:U:H3	1:1A:2629:A:H2	1.44	0.65
1:2A:271(K):U:H4'	1:2A:271(L):U:OP1	1.95	0.65
6:2G:15:VAL:HB	6:2G:175:LEU:HB3	1.78	0.65
32:2a:1051:C:H2'	32:2a:1052:U:H6	1.61	0.65
32:2a:1373:G:H5''	38:2g:36:LYS:HE3	1.78	0.65
35:1d:175:SER:HB3	35:1d:186:LEU:HD21	1.79	0.65
40:1i:20:ARG:O	40:1i:60:ASP:N	2.23	0.65
32:2a:21:G:O2'	32:2a:914:A:N6	2.28	0.65
36:2e:102:ALA:HB1	36:2e:106:PRO:HG2	1.77	0.65
1:1A:1800:C:OP1	3:1D:260:ARG:NH2	2.29	0.65
32:1a:865:A:H2	32:1a:918:A:H4'	1.61	0.65
25:23:13:ILE:O	61:23:201:HOH:O	2.15	0.65
33:2b:188:ALA:HB1	33:2b:192:SER:HB2	1.78	0.65
1:1A:918:A:N3	2:1B:80:U:O2'	2.30	0.65
1:1A:2228:G:OP1	3:1D:261:LYS:NZ	2.29	0.65
32:2a:1030(A):G:N2	32:2a:1030(C):G:H3'	2.12	0.65
32:2a:1239:A:H62	32:2a:1299:A:N6	1.94	0.65
45:2n:9:LYS:HG2	45:2n:12:ARG:HH12	1.61	0.65
7:1H:20:ALA:HB1	7:1H:21:PRO:HD2	1.78	0.65
32:1a:1353:G:OP1	52:1u:10:ARG:NH1	2.30	0.65
50:1s:27:GLU:HB2	50:1s:28:LYS:HA	1.78	0.65
1:2A:500:G:N1	1:2A:503:A:OP2	2.29	0.65
21:2Z:104:PHE:HA	21:2Z:139:VAL:HG23	1.79	0.65
32:2a:1002:G:C2	32:2a:1003:G:H1'	2.31	0.65
3:1D:2:ALA:N	3:1D:200:ASP:OD2	2.30	0.65
1:2A:1801:G:OP2	3:2D:154:LYS:NZ	2.26	0.65
14:2S:35:ILE:HG13	14:2S:97:ARG:HH21	1.61	0.65
26:24:60:GLN:O	26:24:62:ARG:NH1	2.30	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:297:G:N2	32:2a:300:A:OP2	2.30	0.65
32:2a:441:A:H3'	32:2a:442:C:C6	2.31	0.65
32:1a:1302:U:OP2	44:1m:21:TYR:OH	2.12	0.65
32:1a:1356:G:H2'	32:1a:1357:A:H8	1.61	0.65
1:2A:2782:G:OP2	61:2A:3928:HOH:O	2.14	0.65
4:2E:1:MET:HE3	4:2E:199:ARG:HD2	1.78	0.65
32:2a:1029:C:C4	32:2a:1032:G:N1	2.65	0.65
32:2a:1194:U:H2'	32:2a:1195:C:H6	1.60	0.65
41:1j:27:ALA:HA	41:1j:81:THR:HG21	1.78	0.65
41:1j:38:ILE:HD11	41:1j:71:LEU:HD23	1.77	0.65
50:1s:22:LEU:HB3	50:1s:27:GLU:HB3	1.79	0.65
54:1y:26:A:H61	54:1y:44:G:H1	1.45	0.65
36:1e:78:HIS:HD2	39:1h:104:ARG:HD2	1.61	0.65
1:2A:271(E):U:H2'	1:2A:271(F):C:C6	2.32	0.65
31:29:29:ASN:HD22	31:29:32:HIS:CE1	2.15	0.65
33:2b:178:ARG:HH22	39:2h:68:ARG:HH22	1.45	0.65
1:2A:2125:G:N1	1:2A:2172:U:OP1	2.29	0.64
1:2A:2611:U:H6	1:2A:2611:U:H5'	1.62	0.64
5:2F:168:ARG:NH2	61:2F:401:HOH:O	2.29	0.64
36:2e:42:GLY:HA2	36:2e:65:ASN:O	1.98	0.64
33:1b:118:LEU:HB3	33:1b:142:LEU:HD12	1.79	0.64
1:2A:1024:G:OP2	61:2A:3907:HOH:O	2.15	0.64
1:2A:1959:G:N7	61:2A:3982:HOH:O	2.29	0.64
26:24:53:GLU:HG2	26:24:55:ARG:H	1.62	0.64
32:2a:17:U:H2'	32:2a:18:C:C6	2.32	0.64
40:2i:97:LYS:HA	40:2i:102:LEU:HG	1.79	0.64
1:1A:1047:G:H2'	1:1A:1110:G:H22	1.61	0.64
32:1a:405:U:OP2	35:1d:3:ARG:NH1	2.30	0.64
5:2F:18:ARG:NH1	5:2F:127:GLU:OE2	2.30	0.64
32:2a:565:U:OP2	32:2a:566:G:O2'	2.14	0.64
32:2a:1051:C:H2'	32:2a:1052:U:C6	2.32	0.64
1:1A:438:G:OP2	61:1A:4233:HOH:O	2.14	0.64
1:1A:2163:C:OP1	1:1A:2165:G:N2	2.31	0.64
33:1b:178:ARG:NH1	33:1b:196:LEU:O	2.30	0.64
1:2A:1278:A:OP1	13:2R:36:THR:HG23	1.98	0.64
1:2A:2748:A:H5'	7:2H:4:ILE:HD12	1.80	0.64
34:2c:91:LEU:HD11	34:2c:101:LEU:HD12	1.78	0.64
44:2m:13:LYS:HA	44:2m:44:ARG:NH1	2.12	0.64
49:2r:31:LEU:HD23	49:2r:31:LEU:H	1.62	0.64
1:1A:882:G:H4'	54:1w:19:G:O6	1.97	0.64
32:1a:184:G:H2'	32:1a:185:A:C8	2.33	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:277:C:P	48:1q:68:ARG:HH12	2.20	0.64
35:1d:7:PRO:HB2	35:1d:10:ARG:HD2	1.78	0.64
2:2B:46:A:H2'	2:2B:47:C:C6	2.33	0.64
2:2B:54:G:H21	6:2G:29:TRP:HE1	1.44	0.64
34:2c:123:GLN:HA	34:2c:126:ARG:HD2	1.79	0.64
50:2s:28:LYS:HB3	50:2s:29:ARG:HA	1.80	0.64
34:1c:87:LEU:O	34:1c:91:LEU:HB2	1.98	0.64
1:2A:827:U:OP1	61:2A:3904:HOH:O	2.15	0.64
1:2A:1188:U:H4'	17:2V:79:VAL:HG22	1.80	0.64
32:2a:982:U:O2	32:2a:1222:G:N1	2.21	0.64
1:1A:952:G:OP1	12:1Q:16:ARG:NH2	2.31	0.64
33:1b:54:THR:HG23	33:1b:199:TYR:HB3	1.79	0.64
33:1b:122:PHE:HE2	33:1b:139:LYS:HB2	1.62	0.64
1:2A:1478:G:O2'	1:2A:1558:A:N1	2.30	0.64
2:2B:3:C:H2'	2:2B:4:C:C6	2.33	0.64
32:2a:954:G:H2'	32:2a:955:U:C6	2.33	0.64
34:2c:47:LEU:HG	34:2c:50:ALA:HB3	1.80	0.64
40:2i:4:TYR:HB2	40:2i:19:LEU:HB2	1.77	0.64
1:2A:2292:C:OP1	14:2S:17:ARG:NH2	2.30	0.64
3:2D:125:ILE:HB	37:2f:81:ILE:HD11	1.78	0.64
21:2Z:28:MET:HE1	21:2Z:61:LEU:HD21	1.80	0.64
32:2a:548:G:OP1	61:2a:3314:HOH:O	2.15	0.64
32:2a:1387:G:H2'	32:2a:1388:C:H6	1.62	0.64
33:2b:16:HIS:CG	33:2b:17:PHE:N	2.66	0.64
34:2c:6:HIS:HB3	45:2n:49:HIS:ND1	2.12	0.64
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.31	0.64
1:1A:2124:G:H1	1:1A:2174:C:H42	1.44	0.64
1:2A:987:G:O2'	1:2A:1000:A:N3	2.29	0.64
1:2A:2105:C:H2'	1:2A:2106:G:H8	1.63	0.64
1:2A:2478:A:OP2	31:29:2:LYS:NZ	2.31	0.64
32:2a:176:C:H2'	32:2a:177:C:H6	1.62	0.64
34:2c:20:SER:OG	34:2c:36:ASP:OD2	2.14	0.64
44:2m:3:ARG:HB3	44:2m:9:ILE:H	1.62	0.64
1:1A:2791:C:H2'	1:1A:2792:G:H8	1.63	0.64
8:1I:31:LEU:HD21	8:1I:38:LEU:HD22	1.80	0.64
34:1c:22:TRP:CZ2	45:1n:54:PRO:HG2	2.33	0.64
32:2a:187:C:O2'	51:2t:89:ARG:NH2	2.31	0.64
32:2a:572:A:OP1	61:2a:3313:HOH:O	2.15	0.64
4:2E:5:LEU:HD11	4:2E:79:ARG:HB2	1.80	0.63
8:2I:29:TYR:HD2	8:2I:30:LEU:HD23	1.62	0.63
31:29:25:VAL:HB	31:29:34:GLN:HB2	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:951:G:N7	44:2m:102:ARG:NH2	2.45	0.63
40:2i:17:VAL:HG11	40:2i:81:ILE:HG13	1.79	0.63
1:1A:1187:G:H5'	17:1V:81:TYR:CE1	2.32	0.63
21:1Z:132:ASN:OD1	21:1Z:132:ASN:N	2.31	0.63
40:1i:26:VAL:HG13	40:1i:61:ALA:HB3	1.80	0.63
54:1w:5:G:H2'	54:1w:6:G:H8	1.63	0.63
11:2P:63:PRO:HG2	30:28:25:MET:HB2	1.79	0.63
33:2b:97:TRP:HE1	33:2b:172:ILE:HG22	1.62	0.63
34:2c:88:ARG:HA	34:2c:91:LEU:HG	1.81	0.63
21:1Z:92:SER:O	21:1Z:130:PRO:HG2	1.97	0.63
32:1a:1125:U:H4'	41:1j:5:ARG:NH2	2.13	0.63
32:2a:864:A:H5'	36:2e:86:ALA:HB2	1.80	0.63
1:1A:1058:G:N1	1:1A:1080:C:N4	2.27	0.63
33:1b:77:ALA:HB2	33:1b:211:ILE:HD13	1.80	0.63
1:2A:307:G:N1	1:2A:310:A:OP2	2.30	0.63
1:2A:1800:C:OP2	3:2D:183:ARG:NH2	2.31	0.63
32:2a:1151:A:O2'	32:2a:1152:A:H8	1.79	0.63
32:2a:1271:G:C2	32:2a:1272:G:N7	2.66	0.63
40:2i:28:VAL:HG13	40:2i:63:ILE:HB	1.81	0.63
1:1A:84:A:H5'	20:1Y:8:LYS:HG2	1.81	0.63
39:1h:7:ALA:HA	39:1h:10:LEU:HD12	1.80	0.63
54:1w:18:G:O2'	54:1w:57:G:N2	2.24	0.63
1:2A:2394:C:N3	54:2y:76:A:O2'	2.29	0.63
5:2F:184:TYR:CE2	5:2F:188:ARG:HD2	2.33	0.63
4:1E:77:ILE:HD13	4:1E:195:LEU:HD13	1.80	0.63
4:1E:116:VAL:HG13	4:1E:122:PHE:HB2	1.81	0.63
11:1P:29:LYS:HG3	11:1P:30:THR:N	2.13	0.63
2:2B:75:G:N2	21:2Z:87:ASP:OD1	2.30	0.63
32:2a:727:G:OP1	32:2a:742:G:N2	2.27	0.63
32:2a:1401:G:OP1	53:2v:18:G:O2'	2.17	0.63
34:2c:32:LEU:HD23	34:2c:59:ARG:HD3	1.81	0.63
47:2p:15:PRO:O	47:2p:16:HIS:ND1	2.31	0.63
48:2q:40:LYS:HD3	48:2q:42:TYR:CZ	2.34	0.63
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.32	0.63
32:1a:625:G:H2'	32:1a:626:U:H6	1.64	0.63
32:1a:1499:A:OP2	61:1a:1903:HOH:O	2.15	0.63
1:2A:1569:A:H5'	3:2D:61:LEU:HD11	1.79	0.63
1:2A:1582:C:H2'	1:2A:1583:A:H8	1.64	0.63
17:2V:40:LEU:HB2	17:2V:46:VAL:HB	1.80	0.63
32:2a:278:G:OP2	48:2q:41:LYS:NZ	2.23	0.63
32:2a:1291:G:H4'	40:2i:39:GLY:HA3	1.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:2c:9:GLY:N	45:2n:49:HIS:O	2.32	0.63
1:1A:278:A:H2'	1:1A:279:C:C6	2.34	0.63
1:1A:878:A:N6	1:1A:899:A:O2'	2.31	0.63
35:1d:15:GLU:OE2	35:1d:59:ARG:NH1	2.32	0.63
43:1l:88:GLY:O	43:1l:99:HIS:HD2	1.82	0.63
1:2A:1264:G:OP1	27:25:19:ARG:NH2	2.23	0.63
9:2N:15:LEU:HD23	9:2N:137:LYS:HG2	1.81	0.63
32:2a:1268:A:H2'	32:2a:1269:A:C8	2.34	0.63
33:1b:44:LEU:HA	33:1b:47:THR:OG1	1.98	0.62
36:1e:33:VAL:HG21	36:1e:109:ILE:HA	1.80	0.62
14:2S:35:ILE:HD11	14:2S:97:ARG:HE	1.64	0.62
32:2a:815:A:N7	32:2a:1509:C:O2'	2.30	0.62
32:1a:165:C:H2'	32:1a:166:G:C8	2.27	0.62
32:1a:1239:A:H62	32:1a:1299:A:N6	1.97	0.62
33:1b:154:LEU:HD12	33:1b:154:LEU:H	1.64	0.62
36:1e:78:HIS:CD2	39:1h:104:ARG:HD2	2.33	0.62
39:1h:41:ARG:NH2	39:1h:123:GLU:OE2	2.32	0.62
51:1t:57:ARG:HH22	51:1t:100:ILE:HD12	1.64	0.62
13:2R:32:GLY:HA2	13:2R:116:LEU:HD12	1.81	0.62
32:2a:646:U:H2'	32:2a:647:C:C6	2.33	0.62
32:2a:1457:G:OP1	51:2t:39:LYS:NZ	2.27	0.62
33:2b:97:TRP:CH2	33:2b:101:MET:HB2	2.33	0.62
33:2b:149:LEU:HD22	33:2b:152:PHE:CD2	2.34	0.62
40:2i:3:GLN:HE21	40:2i:20:ARG:NE	1.95	0.62
44:2m:94:ARG:NH2	50:2s:81:ARG:HA	2.13	0.62
1:1A:226:G:H21	1:1A:228:A:H62	1.46	0.62
32:1a:1028:C:H2'	32:1a:1029:C:O4'	1.99	0.62
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	1.80	0.62
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.79	0.62
1:2A:1153:C:OP1	16:2U:92:ARG:NH2	2.33	0.62
32:2a:966:M2G:HM22	55:2x:34:C:H5'	1.82	0.62
44:2m:92:HIS:HA	44:2m:110:ARG:NH2	2.13	0.62
1:1A:898:C:N4	1:1A:899:A:H62	1.96	0.62
1:1A:1176:G:N2	1:1A:1178:C:OP2	2.28	0.62
1:1A:1607:C:O2	61:1A:4230:HOH:O	2.12	0.62
15:1T:127:ALA:C	15:1T:129:ARG:H	2.08	0.62
33:1b:52:GLU:OE2	33:1b:56:ARG:NH2	2.32	0.62
1:2A:2099:U:H3	1:2A:2190:G:H1	1.46	0.62
11:2P:114:ILE:HG13	11:2P:125:VAL:HG11	1.79	0.62
12:2Q:111:GLU:OE2	12:2Q:133:ARG:NH2	2.33	0.62
33:2b:218:ALA:O	33:2b:222:ILE:HG23	1.99	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:28:VAL:HG22	40:2i:63:ILE:HD12	1.81	0.62
1:1A:2140:C:O2	1:1A:2151:G:N1	2.32	0.62
51:1t:33:ILE:O	51:1t:37:SER:OG	2.14	0.62
1:2A:631:A:OP1	11:2P:65:ARG:NH1	2.28	0.62
1:2A:805:G:OP1	61:2A:3933:HOH:O	2.16	0.62
1:2A:1693:U:O2'	3:2D:14:ARG:NH2	2.32	0.62
42:2k:34:ASP:HB3	42:2k:40:ILE:HD11	1.80	0.62
32:1a:1033:G:H2'	32:1a:1034:G:H8	1.65	0.62
36:1e:78:HIS:HE1	36:1e:143:ARG:H	1.47	0.62
1:2A:242:G:C8	30:28:5:LYS:HG2	2.34	0.62
48:2q:67:LYS:HA	48:2q:70:ARG:HH12	1.63	0.62
38:1g:27:ILE:HD11	38:1g:40:ALA:HA	1.81	0.62
1:2A:2320:A:H1'	1:2A:2321:G:C2	2.35	0.62
7:2H:3:ARG:HG2	7:2H:6:ARG:HB2	1.82	0.62
22:20:10:THR:HG22	22:20:12:ASN:HB2	1.81	0.62
54:2y:26:A:N1	54:2y:44:G:C6	2.68	0.62
23:11:4:VAL:N	23:11:46:LEU:HD11	2.15	0.62
3:2D:20:ASP:OD1	3:2D:20:ASP:N	2.27	0.62
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	1.80	0.62
33:2b:178:ARG:HH22	39:2h:68:ARG:HH12	1.47	0.62
40:2i:85:LEU:HB3	40:2i:92:TYR:HD2	1.65	0.62
16:1U:97:ASP:OD1	16:1U:101:ARG:NH1	2.32	0.62
32:1a:560:U:O2'	32:1a:561:U:OP2	2.16	0.62
1:2A:652(T):C:H2'	1:2A:652(U):G:C8	2.35	0.62
1:2A:854:G:H2'	1:2A:855:G:H8	1.65	0.62
12:1Q:32:TYR:OH	12:1Q:111:GLU:OE2	2.17	0.62
32:1a:412:A:H4'	32:1a:413:G:H5'	1.82	0.62
33:1b:84:GLU:O	33:1b:219:VAL:HG21	1.99	0.62
34:1c:6:HIS:HD2	34:1c:8:ILE:H	1.45	0.62
32:2a:56:U:H2'	32:2a:57:G:C8	2.35	0.62
32:2a:1387:G:H2'	32:2a:1388:C:C6	2.34	0.62
40:2i:21:PRO:HA	40:2i:59:PHE:HA	1.80	0.62
42:2k:86:GLY:H	42:2k:112:THR:HG22	1.64	0.62
50:2s:53:ASN:HD21	50:2s:56:GLN:HB2	1.64	0.62
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.14	0.61
1:2A:900:A:O2'	1:2A:901:A:OP1	2.18	0.61
1:2A:1582:C:H2'	1:2A:1583:A:C8	2.35	0.61
19:2X:88:LYS:NZ	19:2X:90:GLU:OE1	2.33	0.61
32:2a:328:C:H4'	32:2a:329:A:H5'	1.81	0.61
32:2a:1122:U:N3	32:2a:1123:A:N7	2.48	0.61
44:2m:25:ILE:HG13	44:2m:66:LEU:HD21	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1023:U:OP2	61:1A:4211:HOH:O	2.16	0.61
1:1A:1096:A:N6	1:1A:1097:U:O2	2.32	0.61
1:1A:1991:U:H2'	1:1A:1992:G:H5''	1.82	0.61
2:1B:73:A:N1	21:1Z:34:ASN:ND2	2.47	0.61
41:1j:9:ARG:NH2	41:1j:97:GLU:OE2	2.33	0.61
1:2A:397:G:N7	61:2A:3990:HOH:O	2.31	0.61
1:2A:993:G:OP1	16:2U:50:ARG:NH2	2.33	0.61
2:2B:24:G:H4'	2:2B:25:A:C8	2.34	0.61
6:2G:106:LEU:HA	6:2G:110:ALA:HB3	1.82	0.61
6:1G:79:ASN:OD1	6:1G:79:ASN:N	2.31	0.61
32:1a:1152:A:OP1	41:1j:68:HIS:ND1	2.33	0.61
3:2D:108:PRO:HG2	3:2D:111:LEU:HB2	1.83	0.61
32:2a:194:C:H2'	32:2a:195:A:H5''	1.82	0.61
32:2a:1119:C:H2'	32:2a:1120:G:C8	2.35	0.61
35:2d:59:ARG:NH1	35:2d:59:ARG:HA	2.15	0.61
40:2i:18:PHE:HD2	40:2i:62:TYR:HD2	1.48	0.61
1:1A:271(K):U:O2	8:1I:50:ARG:NE	2.33	0.61
1:1A:1342:A:OP2	61:1A:4214:HOH:O	2.16	0.61
32:1a:456:C:H2'	32:1a:457:C:H6	1.63	0.61
4:2E:50:GLY:HA3	4:2E:75:VAL:HG21	1.83	0.61
32:2a:909:A:N3	32:2a:1413:A:O2'	2.27	0.61
43:2l:71:PRO:O	43:2l:102:ARG:NH1	2.31	0.61
45:2n:48:ALA:HB2	45:2n:53:LEU:HD12	1.83	0.61
54:2w:39:PSU:H2'	54:2w:40:C:H6	1.63	0.61
55:2x:40:C:H2'	55:2x:41:C:H6	1.66	0.61
7:1H:113:VAL:HG11	7:1H:151:ILE:HD13	1.82	0.61
24:12:41:ILE:HG13	24:12:43:GLN:HG3	1.82	0.61
1:2A:287:C:H2'	1:2A:288:C:H6	1.65	0.61
1:2A:2592:G:OP1	61:2A:3931:HOH:O	2.15	0.61
8:2I:48:GLU:HG3	8:2I:52:ARG:HH12	1.64	0.61
22:20:32:ARG:H	22:20:35:ASN:ND2	1.99	0.61
32:2a:671:G:H2'	32:2a:672:U:O4'	2.00	0.61
32:2a:735:C:H2'	32:2a:736:C:H6	1.63	0.61
33:2b:15:VAL:HG12	33:2b:209:ARG:HB3	1.81	0.61
33:2b:88:ALA:HB1	33:2b:222:ILE:HD11	1.83	0.61
35:2d:196:LEU:O	35:2d:198:VAL:N	2.31	0.61
38:2g:115:ARG:HH11	38:2g:118:VAL:HG21	1.65	0.61
32:2a:1412:C:H2'	32:2a:1413:A:C8	2.35	0.61
38:2g:80:VAL:HB	38:2g:85:TYR:HE2	1.65	0.61
50:2s:53:ASN:OD1	50:2s:55:LYS:N	2.21	0.61
1:1A:2336:A:H61	22:10:43:THR:CG2	2.13	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2787:C:H1'	4:1E:62:PRO:HG3	1.83	0.61
28:16:6:ARG:NH1	28:16:26:ASN:HB2	2.16	0.61
47:2p:58:TYR:O	47:2p:61:SER:OG	2.11	0.61
51:1t:36:LEU:HD12	51:1t:62:LEU:HD12	1.83	0.61
2:2B:31:C:H4'	6:2G:29:TRP:CZ2	2.34	0.61
23:21:64:ALA:HA	23:21:67:ILE:HG13	1.82	0.61
1:1A:1798:U:H5'	3:1D:259:THR:CG2	2.29	0.61
1:1A:2849:U:OP2	15:1T:95:ARG:NH1	2.33	0.61
1:2A:882:G:H1	1:2A:894:C:H42	1.49	0.61
1:2A:925:C:H2'	1:2A:926:A:H8	1.63	0.61
1:2A:2166:G:O6	1:2A:2171:A:N6	2.34	0.61
32:2a:1292:U:H2'	32:2a:1293:G:H8	1.66	0.61
33:2b:178:ARG:NH2	39:2h:68:ARG:HH22	1.99	0.61
32:1a:60:A:H4'	32:1a:61:G:H5'	1.82	0.61
32:1a:486:U:H2'	32:1a:487:A:C8	2.36	0.61
40:1i:48:GLU:HA	40:1i:51:ARG:HD3	1.83	0.61
54:1y:8:4SU:O2'	54:1y:21:A:N1	2.33	0.61
1:2A:2320:A:H1'	1:2A:2321:G:N2	2.16	0.61
32:2a:737:A:H2'	32:2a:738:C:H6	1.66	0.61
1:1A:1371:G:O6	61:1A:4234:HOH:O	2.16	0.60
32:1a:376:G:H4'	47:1p:5:ARG:HH21	1.66	0.60
32:1a:1218:C:H2'	32:1a:1219:U:C6	2.36	0.60
1:2A:1242:A:N1	11:2P:2:LYS:NZ	2.49	0.60
6:2G:47:LYS:HG3	6:2G:48:GLU:H	1.65	0.60
11:2P:89:ALA:HA	11:2P:121:LYS:HD3	1.81	0.60
1:1A:2121:G:H1	1:1A:2177:C:H42	1.46	0.60
1:1A:2366:A:OP1	61:1A:4236:HOH:O	2.16	0.60
17:1V:38:LEU:HD23	17:1V:50:PRO:O	2.00	0.60
21:1Z:151:HIS:HB3	21:1Z:169:GLU:O	2.01	0.60
1:2A:34:C:O2'	1:2A:35:G:OP1	2.15	0.60
1:2A:1711:C:H2'	1:2A:1712:C:H6	1.64	0.60
23:21:82:LEU:HA	23:21:85:LEU:HD13	1.83	0.60
27:25:40:LYS:NZ	27:25:44:THR:O	2.33	0.60
32:2a:1060:C:C5	34:2c:2:GLY:HA3	2.36	0.60
54:2y:26:A:N1	54:2y:44:G:O6	2.34	0.60
9:1N:96:GLU:H	9:1N:96:GLU:CD	2.09	0.60
11:1P:98:GLU:O	11:1P:101:VAL:HG12	2.01	0.60
40:1i:128:ARG:NH1	55:1x:35:A:OP2	2.34	0.60
1:2A:2138:C:H2'	1:2A:2139:C:O4'	2.02	0.60
27:25:49:CYS:SG	27:25:51:TYR:HB2	2.42	0.60
32:2a:588:G:OP2	61:2a:3315:HOH:O	2.17	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1144:G:H21	32:2a:1146:A:H62	1.49	0.60
34:2c:131:ARG:HE	34:2c:135:LYS:HZ1	1.48	0.60
1:1A:363:G:H2'	1:1A:363(A):A:H8	1.66	0.60
40:1i:53:VAL:O	40:1i:55:ALA:N	2.35	0.60
1:2A:307:G:H21	1:2A:330:A:H62	1.48	0.60
1:2A:832:G:H5'	11:2P:45:LEU:HD11	1.83	0.60
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.36	0.60
4:2E:79:ARG:HG2	4:2E:79:ARG:HH11	1.66	0.60
27:25:57:VAL:HG12	27:25:58:LEU:HD13	1.84	0.60
1:1A:1971:A:OP1	61:1A:4210:HOH:O	2.16	0.60
6:1G:77:ILE:HD12	6:1G:82:LEU:HD23	1.83	0.60
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.16	0.60
37:1f:37:VAL:HA	37:1f:65:VAL:HG12	1.83	0.60
1:2A:2079:U:O3'	23:21:35:THR:OG1	2.18	0.60
32:2a:523:A:H61	43:2l:92:0TD:CG	2.14	0.60
38:2g:72:ARG:HH22	38:2g:138:LYS:NZ	1.99	0.60
1:1A:1506:C:H2'	1:1A:1507:A:C8	2.35	0.60
1:1A:2788:C:OP1	4:1E:61:ARG:NH2	2.35	0.60
4:1E:34:VAL:HG22	4:1E:48:GLN:HE21	1.65	0.60
41:1j:40:LEU:HB2	41:1j:69:ASN:HB2	1.84	0.60
36:2e:68:GLU:HG2	36:2e:70:PRO:HD3	1.83	0.60
36:2e:140:ARG:O	36:2e:143:ARG:NH1	2.31	0.60
5:1F:9:ILE:HG12	5:1F:123:LEU:HD23	1.83	0.60
6:1G:126:ASP:HB3	6:1G:128:ARG:H	1.66	0.60
35:1d:173:TRP:CD1	35:1d:173:TRP:H	2.19	0.60
1:2A:2151:G:H2'	1:2A:2152:G:C8	2.35	0.60
2:2B:43:C:O4'	6:2G:66:GLN:NE2	2.35	0.60
22:20:68:GLU:HB2	22:20:82:ARG:HH21	1.67	0.60
33:2b:109:SER:HA	33:2b:112:VAL:HG23	1.83	0.60
1:1A:2611:U:H5'	1:1A:2611:U:H6	1.67	0.60
1:1A:2791:C:H2'	1:1A:2792:G:C8	2.36	0.60
32:1a:757:U:H2'	32:1a:758:G:O4'	2.01	0.60
32:1a:1033:G:C4	32:1a:1034:G:C8	2.90	0.60
37:1f:89:MET:HE1	49:1r:72:ARG:HB3	1.83	0.60
46:1o:41:GLU:OE2	46:1o:44:LYS:NZ	2.32	0.60
1:2A:801:G:O6	5:2F:53:THR:OG1	2.19	0.60
1:2A:1651:G:OP1	13:2R:40:LYS:NZ	2.35	0.60
5:2F:143:ALA:HB1	5:2F:148:LEU:HB2	1.83	0.60
8:2I:48:GLU:HG3	8:2I:52:ARG:NH1	2.17	0.60
32:2a:1002:G:C6	32:2a:1003:G:H8	2.20	0.60
33:2b:92:TYR:CE2	33:2b:151:GLY:HA3	2.36	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:528:A:O2'	1:1A:529:A:H5'	2.00	0.60
1:1A:752:A:H3'	29:17:1:MET:HE1	1.84	0.60
1:1A:1045:A:OP1	1:1A:1046:A:H3'	2.02	0.60
32:1a:17:U:H2'	32:1a:18:C:C6	2.37	0.60
32:1a:966:M2G:HM11	40:1i:127:LYS:HE2	1.83	0.60
32:1a:1030(D):A:H2'	32:1a:1031:G:H4'	1.82	0.60
1:2A:892:G:H3'	1:2A:893:C:H5''	1.83	0.60
19:2X:94:GLY:H	19:2X:95:LEU:HB2	1.66	0.60
25:23:6:VAL:HG13	25:23:56:VAL:HG22	1.82	0.60
32:2a:401:C:OP2	35:2d:73:ARG:NH2	2.35	0.60
32:2a:913:A:OP1	43:2l:46:LYS:NZ	2.35	0.60
32:2a:1272:G:N2	32:2a:1273:G:C8	2.69	0.60
1:1A:2661:G:H2'	1:1A:2662:A:C8	2.36	0.60
34:1c:139:GLN:O	34:1c:143:GLU:HG3	2.02	0.60
38:1g:27:ILE:HA	38:1g:30:ILE:HD12	1.83	0.60
1:2A:2837:G:N7	61:2A:3994:HOH:O	2.32	0.60
32:2a:1004:A:N6	32:2a:1037:C:H1'	2.17	0.60
32:1a:56:U:H2'	32:1a:57:G:C8	2.36	0.59
33:1b:21:ARG:H	33:1b:39:ILE:HG13	1.67	0.59
1:2A:2079:U:OP1	23:21:21:ARG:NH2	2.31	0.59
1:2A:2131:G:C8	1:2A:2133:G:C2	2.90	0.59
32:2a:428:G:OP2	35:2d:10:ARG:NH1	2.35	0.59
47:2p:21:VAL:HG23	47:2p:33:ILE:HB	1.82	0.59
50:2s:19:VAL:O	50:2s:23:ASN:ND2	2.35	0.59
1:1A:1047:G:H2'	1:1A:1110:G:N2	2.16	0.59
1:1A:2517:C:OP1	61:1A:4237:HOH:O	2.17	0.59
1:1A:2746:U:OP1	7:1H:85:LYS:NZ	2.35	0.59
32:1a:382:A:H2'	32:1a:383:A:H8	1.67	0.59
42:1k:15:ALA:HA	42:1k:76:GLY:O	2.02	0.59
50:1s:48:THR:HG22	50:1s:61:TYR:HD1	1.66	0.59
1:2A:881:G:C2	1:2A:882:G:H1'	2.36	0.59
1:2A:1653:G:O6	13:2R:11:ASN:ND2	2.35	0.59
2:2B:11:C:H3'	2:2B:12:C:C6	2.37	0.59
7:2H:6:ARG:HH11	7:2H:6:ARG:HG3	1.67	0.59
32:2a:1316:G:H5''	45:2n:17:LYS:HE2	1.84	0.59
33:2b:74:LYS:NZ	33:2b:206:ASP:OD1	2.35	0.59
50:2s:13:ASP:HA	50:2s:16:LEU:HB2	1.83	0.59
50:2s:32:LYS:HD2	50:2s:34:TRP:HZ3	1.67	0.59
1:1A:668:G:OP2	61:1A:4235:HOH:O	2.16	0.59
32:1a:545:C:OP1	35:1d:61:LYS:NZ	2.35	0.59
32:1a:662:G:H2'	32:1a:663:A:C8	2.37	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:131:ARG:HH11	34:1c:166:GLU:HG3	1.67	0.59
41:1j:64:GLU:HG2	45:1n:59:ALA:HB2	1.84	0.59
7:2H:11:VAL:HG21	7:2H:50:VAL:HG23	1.84	0.59
32:2a:1020:U:H2'	32:2a:1021:G:C8	2.37	0.59
32:2a:1072:G:H2'	32:2a:1073:U:C6	2.38	0.59
40:2i:128:ARG:NH2	55:2x:33:U:OP2	2.31	0.59
1:1A:570:G:O6	61:1A:4203:HOH:O	2.15	0.59
3:1D:39:LYS:NZ	3:1D:57:GLY:O	2.35	0.59
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.37	0.59
26:24:34:GLU:CB	44:2m:57:ARG:HH21	2.15	0.59
32:2a:737:A:H1'	37:2f:73:ASN:HD21	1.67	0.59
32:2a:922:G:N3	32:2a:1398:A:H2	2.00	0.59
32:2a:1004:A:C8	32:2a:1005:A:H4'	2.37	0.59
32:2a:1261:A:H5'	32:2a:1284:C:OP1	2.02	0.59
37:2f:6:VAL:HG13	37:2f:90:VAL:HG22	1.83	0.59
40:2i:85:LEU:HB3	40:2i:92:TYR:CD2	2.37	0.59
43:2l:70:ILE:HD13	43:2l:77:LEU:HD12	1.84	0.59
1:1A:2771:C:H2'	1:1A:2772:C:C6	2.38	0.59
11:1P:39:LYS:HB2	11:1P:45:LEU:HD13	1.84	0.59
34:1c:6:HIS:CD2	34:1c:8:ILE:H	2.21	0.59
1:2A:1495:A:H2'	1:2A:1496:A:C8	2.37	0.59
7:2H:41:MET:HE3	7:2H:64:LEU:HB2	1.84	0.59
33:2b:54:THR:HG23	33:2b:199:TYR:HB3	1.83	0.59
35:2d:165:MET:HE2	35:2d:168:ARG:CZ	2.33	0.59
35:2d:173:TRP:CD2	35:2d:189:PRO:HB3	2.38	0.59
37:2f:95:GLU:O	49:2r:32:ARG:NH1	2.35	0.59
40:2i:28:VAL:HA	40:2i:63:ILE:O	2.03	0.59
1:1A:484:C:OP1	20:1Y:51:VAL:HG22	2.02	0.59
5:1F:53:THR:HG22	5:1F:55:GLY:H	1.67	0.59
32:1a:1108:G:O6	61:1a:1914:HOH:O	2.14	0.59
33:1b:100:GLY:O	33:1b:104:ASN:N	2.25	0.59
36:1e:51:VAL:O	36:1e:55:VAL:HG23	2.02	0.59
15:2T:117:ASP:OD2	15:2T:120:ARG:NE	2.31	0.59
21:2Z:53:ILE:HG22	21:2Z:71:VAL:O	2.02	0.59
32:2a:1126:U:H3	41:2j:40:LEU:HD11	1.65	0.59
1:1A:1053:C:N4	1:1A:1106:G:H1	2.00	0.59
32:1a:1309:G:OP2	44:1m:99:ARG:NH2	2.36	0.59
34:1c:11:ARG:NH2	34:1c:177:THR:O	2.32	0.59
40:1i:55:ALA:HA	40:1i:58:HIS:CD2	2.38	0.59
42:1k:104:GLN:O	42:1k:104:GLN:HG3	2.03	0.59
45:1n:9:LYS:HG2	45:1n:12:ARG:NH1	2.18	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:2E:56:PRO:HA	4:2E:59:VAL:HG23	1.83	0.59
32:2a:1002:G:N3	32:2a:1003:G:H1'	2.18	0.59
33:2b:185:ILE:HB	33:2b:199:TYR:HB2	1.85	0.59
34:2c:20:SER:HB3	34:2c:22:TRP:HE1	1.68	0.59
8:1I:48:GLU:HB3	8:1I:52:ARG:NH1	2.18	0.59
21:1Z:75:ASN:O	21:1Z:84:GLU:HG2	2.03	0.59
21:1Z:132:ASN:HD22	21:1Z:160:GLY:HA3	1.68	0.59
32:1a:1237:C:O2'	32:1a:1300:G:N2	2.31	0.59
32:1a:1531:A:H8	32:1a:1531:A:O5'	1.85	0.59
4:2E:178:GLU:OE1	4:2E:178:GLU:N	2.28	0.59
32:2a:67:C:H2'	32:2a:68:G:C8	2.37	0.59
44:2m:23:TYR:HB3	44:2m:67:GLU:HA	1.85	0.59
32:1a:69:G:H2'	32:1a:70:G:C8	2.38	0.59
36:1e:144:THR:H	36:1e:147:ASP:HB2	1.66	0.59
1:2A:30:G:H2'	1:2A:31:C:C6	2.38	0.59
1:2A:1025:G:C4	1:2A:1135:C:H1'	2.38	0.59
34:2c:36:ASP:HA	34:2c:39:ILE:HD12	1.85	0.59
39:2h:34:GLU:OE1	39:2h:37:ARG:NH1	2.36	0.59
44:2m:24:GLY:HA3	44:2m:66:LEU:HD23	1.84	0.59
33:1b:82:ARG:HD2	33:1b:92:TYR:OH	2.02	0.59
34:1c:130:VAL:HG21	34:1c:157:ILE:HG23	1.83	0.59
39:1h:112:LEU:HA	39:1h:134:ILE:HG12	1.84	0.59
1:2A:994:C:H3'	16:2U:54:LYS:HE3	1.84	0.59
1:2A:2110:G:H3'	1:2A:2111:C:H5'	1.83	0.59
6:2G:44:GLY:N	6:2G:88:ILE:O	2.29	0.59
22:20:11:ARG:O	22:20:14:ARG:NH2	2.36	0.59
32:2a:664:G:N2	32:2a:741:G:H1	2.01	0.59
32:2a:1016:A:HO2'	32:2a:1217:C:HO2'	1.47	0.59
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.03	0.59
33:2b:87:ARG:NH2	33:2b:220:ASP:OD1	2.29	0.59
36:2e:139:LEU:HA	36:2e:142:LEU:HD12	1.84	0.59
37:2f:69:GLU:CD	37:2f:69:GLU:H	2.10	0.59
41:2j:15:THR:HB	41:2j:94:VAL:HG22	1.84	0.59
47:2p:28:ARG:HG2	47:2p:29:ASP:OD1	2.02	0.59
50:2s:41:VAL:HG23	50:2s:42:PRO:HD2	1.85	0.59
1:1A:1105:U:H2'	1:1A:1106:G:C8	2.38	0.58
1:1A:2312:U:H5'	6:1G:88:ILE:HD11	1.85	0.58
7:1H:33:LEU:HD21	7:1H:136:ILE:HG13	1.84	0.58
32:1a:1183:A:O2'	32:1a:1184:G:OP1	2.20	0.58
1:2A:1671:U:OP2	61:2A:3922:HOH:O	2.17	0.58
21:2Z:157:LEU:HD21	21:2Z:163:LEU:HB2	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:21:23:LYS:HB3	23:21:29:GLY:HA3	1.85	0.58
32:2a:377:G:OP1	47:2p:3:LYS:HE2	2.03	0.58
32:2a:1026:G:O6	32:2a:1036:G:N2	2.36	0.58
32:2a:1318:A:O2'	50:2s:37:ARG:HB2	2.03	0.58
33:2b:16:HIS:HB2	33:2b:204:ASN:HD22	1.67	0.58
38:2g:23:VAL:HG13	38:2g:43:PHE:CE2	2.38	0.58
38:2g:115:ARG:HG2	38:2g:118:VAL:HG23	1.83	0.58
46:2o:5:LYS:O	46:2o:9:GLN:HG2	2.02	0.58
1:1A:588:U:H2'	1:1A:589:C:C6	2.38	0.58
1:1A:1058:G:N2	1:1A:1081:U:O2	2.36	0.58
1:1A:1095:A:H62	1:1A:1097:U:H3	1.51	0.58
22:10:8:GLY:HA2	55:1x:2:G:H5'	1.84	0.58
32:1a:110:C:O2'	47:1p:25:ARG:O	2.20	0.58
32:1a:1224:G:OP1	61:1a:1916:HOH:O	2.16	0.58
32:1a:1305:G:H22	32:1a:1331:G:H1'	1.67	0.58
39:1h:81:HIS:N	39:1h:138:TRP:O	2.35	0.58
1:2A:1203:G:O6	61:2A:3932:HOH:O	2.16	0.58
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.38	0.58
1:2A:2317:C:N4	1:2A:2318:G:O6	2.35	0.58
1:2A:2467:C:H4'	12:2Q:123:HIS:CD2	2.38	0.58
6:2G:43:LEU:HD12	6:2G:45:GLU:HG3	1.83	0.58
32:2a:553:A:H2'	32:2a:554:C:C6	2.37	0.58
32:2a:1182:G:H4'	32:2a:1183:A:H5''	1.85	0.58
32:2a:1206:G:O2'	34:2c:193:TYR:HA	2.03	0.58
32:2a:1427:U:H2'	32:2a:1428:A:C8	2.38	0.58
6:1G:126:ASP:HB2	6:1G:130:ASN:H	1.68	0.58
12:1Q:16:ARG:HG3	12:1Q:17:LEU:H	1.68	0.58
32:1a:1329:A:N7	52:1u:7:ARG:NH2	2.50	0.58
46:1o:56:LEU:O	46:1o:60:VAL:HG23	2.03	0.58
1:2A:20:C:OP1	16:2U:22:LYS:NZ	2.26	0.58
1:2A:2819:G:N7	61:2A:3998:HOH:O	2.32	0.58
6:2G:63:ILE:HD12	6:2G:141:PHE:HB2	1.85	0.58
27:25:45:VAL:HG11	27:25:58:LEU:HD22	1.85	0.58
32:2a:1264:C:N4	32:2a:1265:G:O6	2.36	0.58
39:2h:7:ALA:HA	39:2h:10:LEU:HD12	1.84	0.58
40:2i:58:HIS:H	40:2i:58:HIS:CD2	2.19	0.58
50:2s:22:LEU:HD22	50:2s:31:ILE:HD11	1.85	0.58
1:1A:2080:G:OP1	23:11:35:THR:HG21	2.04	0.58
33:1b:174:VAL:O	33:1b:178:ARG:HG2	2.03	0.58
28:26:23:THR:OG1	28:26:24:GLU:N	2.33	0.58
32:2a:984:C:H2'	32:2a:985:C:C6	2.38	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1251:A:N1	32:2a:1354:C:O2'	2.33	0.58
40:2i:50:LEU:HD13	40:2i:56:LEU:HA	1.85	0.58
45:2n:57:ARG:HG2	45:2n:58:LYS:H	1.68	0.58
1:1A:1588:C:H2'	1:1A:1589:C:H6	1.68	0.58
26:14:55:ARG:H	26:14:56:VAL:HA	1.69	0.58
32:1a:67:C:H2'	32:1a:68:G:C8	2.38	0.58
1:2A:2262:U:OP2	22:20:16:SER:OG	2.13	0.58
11:2P:38:GLN:O	11:2P:39:LYS:HB3	2.04	0.58
32:2a:1085:U:H3'	32:2a:1086:U:C6	2.39	0.58
32:2a:1092:A:H5''	38:2g:4:ARG:NH1	2.19	0.58
32:2a:1194:U:H2'	32:2a:1195:C:C6	2.38	0.58
1:1A:1816:G:O6	3:1D:35:LYS:NZ	2.31	0.58
1:1A:2101:G:H2'	1:1A:2102:U:C6	2.38	0.58
1:2A:83:G:H1	1:2A:102:G:HO2'	1.50	0.58
26:24:46:GLN:HE21	26:24:48:ARG:HH11	1.51	0.58
35:2d:22:LYS:HB2	35:2d:26:CYS:SG	2.44	0.58
11:1P:126:VAL:HG12	11:1P:148:LEU:HD22	1.84	0.58
40:1i:3:GLN:HE21	40:1i:20:ARG:NH2	2.00	0.58
1:2A:89:G:H3'	1:2A:90:U:H5''	1.85	0.58
1:2A:666:G:H1'	30:28:4:MET:HE3	1.86	0.58
1:2A:2019:A:N7	27:25:9:LYS:HE2	2.18	0.58
7:2H:121:ILE:HD12	7:2H:144:VAL:HG21	1.85	0.58
14:2S:71:ARG:NH1	14:2S:107:GLU:OE1	2.36	0.58
18:2W:1:MET:HE2	18:2W:62:HIS:HB3	1.85	0.58
32:2a:1227:A:OP2	44:2m:111:LYS:HD3	2.03	0.58
34:2c:53:ALA:HB2	34:2c:115:LEU:HD11	1.85	0.58
44:2m:80:ARG:O	44:2m:84:ILE:HG12	2.03	0.58
50:2s:28:LYS:HB3	50:2s:29:ARG:CA	2.33	0.58
54:2y:62:C:H2'	54:2y:63:G:H8	1.68	0.58
3:1D:37:LEU:HD13	3:1D:87:ASN:ND2	2.18	0.58
32:1a:456:C:H2'	32:1a:457:C:C6	2.38	0.58
1:2A:1169:G:N2	1:2A:1181:C:N3	2.51	0.58
32:2a:834:C:H2'	32:2a:835:U:H6	1.69	0.58
33:2b:162:ILE:HD11	33:2b:184:VAL:HG22	1.84	0.58
40:2i:99:LEU:HB3	40:2i:101:PHE:CD2	2.38	0.58
1:1A:882:G:H1	1:1A:894:C:H42	1.52	0.58
21:1Z:132:ASN:ND2	21:1Z:160:GLY:HA3	2.18	0.58
26:14:63:TYR:HD1	26:14:63:TYR:H	1.50	0.58
32:1a:262:A:H2'	32:1a:263:A:C8	2.38	0.58
32:1a:672:U:O2'	32:1a:673:G:O5'	2.20	0.58
32:1a:742:G:OP2	46:1o:35:ARG:NH2	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1442:G:O2'	32:1a:1442(A):G:H5'	2.03	0.58
33:1b:235:SER:O	33:1b:235:SER:OG	2.20	0.58
6:2G:79:ASN:OD1	6:2G:79:ASN:N	2.37	0.58
20:2Y:44:ILE:HA	20:2Y:63:LYS:O	2.03	0.58
32:2a:441:A:H3'	32:2a:442:C:H6	1.69	0.58
36:2e:78:HIS:CD2	36:2e:142:LEU:HD23	2.39	0.58
1:1A:1518:U:H2'	1:1A:1519:G:O4'	2.04	0.58
1:1A:2111:C:N4	1:1A:2144:U:O2'	2.37	0.58
1:1A:2591:C:H2'	1:1A:2592:G:C8	2.39	0.58
6:1G:125:PHE:O	61:1G:301:HOH:O	2.17	0.58
16:1U:104:GLN:NE2	16:1U:105:VAL:HG23	2.19	0.58
21:1Z:53:ILE:HG22	21:1Z:71:VAL:HG12	1.85	0.58
32:1a:452:A:H4'	47:1p:72:ARG:CZ	2.34	0.58
33:1b:69:LEU:HB3	33:1b:162:ILE:HG22	1.86	0.58
4:2E:9:VAL:HG22	4:2E:25:VAL:HB	1.86	0.58
4:2E:179:GLU:HG3	15:2T:9:LEU:HD21	1.85	0.58
32:2a:1310:G:H5'	44:2m:77:ASN:ND2	2.12	0.58
33:2b:31:TYR:HE2	33:2b:200:ILE:HG21	1.68	0.58
12:1Q:51:ARG:HD3	12:1Q:66:ILE:HD11	1.86	0.57
32:1a:250:A:H4'	32:1a:251:G:O5'	2.03	0.57
47:1p:20:VAL:HG21	47:1p:32:TYR:CD2	2.38	0.57
1:2A:2144:U:O2'	1:2A:2147:G:O6	2.10	0.57
25:23:7:LYS:HG3	25:23:34:GLU:HG3	1.86	0.57
1:1A:1359:A:N6	1:1A:1372:U:H3	2.02	0.57
2:1B:66:A:H61	2:1B:108:U:H2'	1.69	0.57
26:14:63:TYR:HD1	26:14:63:TYR:N	2.02	0.57
33:1b:20:GLU:HG2	33:1b:23:ARG:NH1	2.19	0.57
1:2A:400:G:N7	61:2A:4000:HOH:O	2.32	0.57
1:2A:1847:A:H3'	1:2A:1848:A:H5'	1.86	0.57
1:2A:2324:C:H5''	1:2A:2325:G:H5'	1.86	0.57
1:2A:2552:OMU:H2'	1:2A:2554:U:OP2	2.04	0.57
6:2G:179:PRO:HG3	26:24:43:TYR:OH	2.03	0.57
8:2I:92:VAL:HG13	8:2I:120:ILE:HB	1.86	0.57
32:2a:10:A:OP2	36:2e:126:ARG:HD2	2.05	0.57
33:2b:27:LYS:HB2	33:2b:194:PRO:HD2	1.85	0.57
55:2x:23:C:H2'	55:2x:24:U:C6	2.39	0.57
26:14:63:TYR:N	26:14:63:TYR:CD1	2.71	0.57
35:1d:187:ARG:NH1	35:1d:188:LEU:O	2.37	0.57
1:2A:2637:U:H5''	4:2E:82:ARG:NH1	2.19	0.57
6:2G:125:PHE:HB3	6:2G:166:ASP:CG	2.29	0.57
11:2P:91:PHE:O	11:2P:121:LYS:NZ	2.35	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:878:A:H61	1:1A:899:A:C2'	2.17	0.57
1:1A:2870:C:H2'	1:1A:2871:C:O4'	2.04	0.57
6:1G:179:PRO:HG3	26:14:43:TYR:OH	2.05	0.57
30:18:42:ARG:HD2	61:18:202:HOH:O	2.04	0.57
34:1c:8:ILE:HD12	34:1c:16:ARG:HG3	1.85	0.57
51:1t:10:LEU:HD12	51:1t:11:SER:H	1.70	0.57
1:2A:764:A:H5''	3:2D:210:GLY:HA2	1.85	0.57
1:2A:1557:C:OP2	1:2A:1558:A:O2'	2.20	0.57
8:2I:73:GLU:HA	61:2I:201:HOH:O	2.04	0.57
11:2P:85:LEU:HA	11:2P:88:LEU:HD12	1.86	0.57
32:2a:544:G:OP1	35:2d:62:GLN:NE2	2.35	0.57
32:2a:673:G:H5''	37:2f:87:ARG:NH1	2.19	0.57
32:2a:921:U:O2	36:2e:19:MET:HB2	2.03	0.57
1:1A:1641:A:H2'	1:1A:1642:G:O4'	2.03	0.57
1:1A:2503:2MA:H8	58:1A:4105:A1A1K:O	2.05	0.57
10:1O:20:MET:HE3	10:1O:44:LYS:HE3	1.86	0.57
32:1a:520:A:O2'	43:1l:73:GLU:OE2	2.15	0.57
1:2A:796:C:H2'	1:2A:797:C:C6	2.39	0.57
1:2A:2356:C:OP1	22:20:24:LYS:NZ	2.35	0.57
21:2Z:77:ASP:N	21:2Z:82:ARG:O	2.37	0.57
32:2a:1125:U:OP1	41:2j:35:SER:OG	2.23	0.57
37:2f:24:GLU:O	37:2f:28:ARG:N	2.32	0.57
1:1A:1054:A:N1	1:1A:1105:U:O2	2.37	0.57
1:1A:2140:C:N3	1:1A:2151:G:C6	2.73	0.57
32:1a:1086:U:H3	32:1a:1099:G:N2	2.00	0.57
32:1a:1346:A:N1	32:1a:1374:A:H5''	2.19	0.57
52:1u:3:LYS:HB3	52:1u:14:TRP:CD1	2.40	0.57
1:2A:422:A:OP2	61:2A:3934:HOH:O	2.17	0.57
1:2A:652(A):A:H3'	1:2A:652(B):A:H5''	1.84	0.57
1:2A:1125:G:H5'	31:29:37:GLY:HA2	1.86	0.57
1:2A:1340:U:OP1	19:2X:16:LYS:NZ	2.33	0.57
3:2D:132:PRO:HD3	3:2D:190:TYR:CZ	2.40	0.57
9:2N:38:HIS:CE1	9:2N:39:ARG:HG3	2.39	0.57
32:2a:1442:G:H2'	32:2a:1442:G:N3	2.19	0.57
43:2l:88:GLY:O	43:2l:99:HIS:HD2	1.87	0.57
1:1A:1076:C:O2'	1:1A:1077:A:N7	2.37	0.57
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.40	0.57
1:1A:2313:C:H4'	6:1G:91:ARG:HG3	1.87	0.57
32:1a:271:C:H2'	32:1a:272:C:H6	1.70	0.57
50:1s:49:ILE:HG13	50:1s:62:ILE:HD11	1.86	0.57
1:2A:646:A:H2'	1:2A:647:G:O4'	2.03	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:23:5:LYS:NZ	25:23:34:GLU:OE2	2.35	0.57
28:26:6:ARG:NH1	28:26:26:ASN:HB2	2.20	0.57
32:2a:1112:C:N3	34:2c:178:LEU:HD12	2.20	0.57
44:2m:78:ILE:HG23	44:2m:92:HIS:CE1	2.40	0.57
1:1A:1721:G:H1'	1:1A:1741:A:H61	1.70	0.57
10:1O:104:ARG:NE	15:1T:36:GLU:OE2	2.27	0.57
32:1a:186:C:H2'	32:1a:187:C:C6	2.40	0.57
1:2A:2064:C:H2'	1:2A:2065:C:C6	2.40	0.57
7:2H:54:ARG:NH2	7:2H:57:ASP:OD2	2.37	0.57
26:24:13:ARG:HH11	26:24:13:ARG:HB2	1.70	0.57
32:2a:447:G:O6	32:2a:485:G:O2'	2.20	0.57
32:2a:769:G:H4'	32:2a:1513:A:H4'	1.86	0.57
32:2a:951:G:N3	32:2a:970:C:O2'	2.31	0.57
33:2b:15:VAL:HG21	33:2b:213:LEU:HD13	1.86	0.57
32:1a:1279:A:H4'	32:1a:1281:U:H5	1.69	0.57
39:1h:11:THR:HG22	39:1h:15:ASN:HD21	1.70	0.57
45:1n:12:ARG:HH11	45:1n:12:ARG:CB	2.18	0.57
1:2A:1591:G:H2'	1:2A:1592:C:H6	1.70	0.57
6:2G:11:TYR:HA	6:2G:15:VAL:HG22	1.87	0.57
32:2a:1317:C:N4	45:2n:19:ARG:HH21	2.02	0.57
32:2a:1360:A:OP2	45:2n:35:ARG:NH2	2.38	0.57
33:2b:76:GLN:HB2	33:2b:208:ILE:HD11	1.87	0.57
41:2j:78:ASN:O	41:2j:80:LYS:N	2.37	0.57
1:1A:271(R):G:O6	61:1A:4228:HOH:O	2.12	0.57
1:1A:1183:G:O2'	25:13:29:ARG:NH1	2.37	0.57
1:1A:2155:G:H2'	1:1A:2155:G:N3	2.19	0.57
1:2A:11:G:C2'	1:2A:12:U:H5'	2.35	0.57
1:2A:34:C:H2'	1:2A:35:G:H5'	1.85	0.57
1:2A:1452:A:OP2	61:2A:3936:HOH:O	2.18	0.57
1:2A:2832:U:OP2	61:2A:3935:HOH:O	2.17	0.57
6:2G:123:ASN:O	6:2G:125:PHE:N	2.37	0.57
11:2P:29:LYS:HG3	11:2P:30:THR:N	2.20	0.57
34:2c:125:GLU:O	34:2c:190:ARG:NH2	2.38	0.57
39:2h:20:TYR:CE1	39:2h:76:PRO:HG2	2.40	0.57
1:1A:2804:C:H2'	1:1A:2805:G:O4'	2.05	0.56
35:1d:156:GLU:O	35:1d:160:GLN:HG3	2.05	0.56
36:1e:148:VAL:O	36:1e:152:ARG:HG3	2.04	0.56
47:1p:19:ILE:N	47:1p:37:GLY:O	2.37	0.56
54:1w:71:G:H2'	54:1w:71:G:N3	2.20	0.56
1:2A:2299:G:N1	1:2A:2318:G:N7	2.53	0.56
32:2a:203:U:H2'	32:2a:203:U:OP2	2.04	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:65:ARG:NH1	35:2d:70:ILE:O	2.37	0.56
49:2r:53:ARG:HA	49:2r:56:THR:OG1	2.05	0.56
20:1Y:6:HIS:H	20:1Y:6:HIS:CD2	2.22	0.56
32:1a:148:G:H2'	32:1a:149:A:C8	2.40	0.56
32:1a:532:A:N6	32:1a:1206:G:O2'	2.38	0.56
32:1a:1009:G:O6	32:1a:1020:U:O2	2.23	0.56
41:1j:8:LEU:HD22	41:1j:96:ILE:HG22	1.87	0.56
24:22:29:LYS:HG2	24:22:57:ILE:HD13	1.85	0.56
32:2a:685:G:C2	32:2a:686:U:C4	2.93	0.56
32:2a:1101:A:C8	33:2b:172:ILE:HD13	2.40	0.56
32:2a:1122:U:C2	32:2a:1123:A:C8	2.93	0.56
34:2c:125:GLU:HB2	34:2c:190:ARG:HH21	1.69	0.56
35:2d:104:VAL:HG21	35:2d:140:VAL:HG21	1.86	0.56
1:1A:84:A:H5''	20:1Y:8:LYS:HE3	1.88	0.56
1:1A:671:C:N4	61:1A:4322:HOH:O	2.38	0.56
1:1A:2361:A:OP1	30:18:27:THR:OG1	2.12	0.56
4:1E:9:VAL:HG22	4:1E:25:VAL:HB	1.87	0.56
32:1a:271:C:H2'	32:1a:272:C:C6	2.40	0.56
32:1a:1095:U:P	32:1a:1108:G:H1	2.28	0.56
32:1a:1414:U:H3	32:1a:1486:G:H1	1.52	0.56
40:1i:43:ALA:HA	40:1i:74:ILE:HD13	1.86	0.56
47:1p:47:ASP:OD1	47:1p:47:ASP:N	2.37	0.56
48:1q:45:HIS:O	48:1q:73:VAL:HG23	2.05	0.56
49:1r:32:ARG:HA	49:1r:69:THR:HG21	1.87	0.56
1:2A:247:G:H4'	1:2A:386:G:C5	2.40	0.56
1:2A:403:U:H4'	1:2A:404:C:H5'	1.87	0.56
1:2A:586:A:N1	1:2A:809:G:O2'	2.29	0.56
1:2A:2258:C:O2'	1:2A:2427:C:OP2	2.23	0.56
2:2B:17:C:H2'	2:2B:18:G:O4'	2.06	0.56
8:2I:43:ASN:HA	8:2I:46:ALA:HB3	1.88	0.56
10:2O:7:TYR:HE2	10:2O:20:MET:HE3	1.69	0.56
14:2S:94:TYR:CE2	14:2S:99:LYS:HG3	2.40	0.56
19:2X:1:MET:HE1	24:22:26:ARG:HH21	1.69	0.56
23:21:83:GLU:OE2	23:21:83:GLU:N	2.32	0.56
32:2a:473:G:H2'	32:2a:474:G:C8	2.38	0.56
42:2k:99:GLN:HG2	42:2k:105:VAL:HG21	1.86	0.56
50:2s:64:GLU:OE2	50:2s:65:ASN:ND2	2.38	0.56
54:2w:22:G:H2'	54:2w:23:A:H8	1.70	0.56
54:2y:55:PSU:HN1	54:2y:57:G:H5'	1.69	0.56
32:1a:625:G:H2'	32:1a:626:U:C6	2.39	0.56
39:1h:49:GLU:HG2	39:1h:62:TYR:HE2	1.70	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:287:C:H2'	1:2A:288:C:C6	2.41	0.56
1:2A:884:C:H3'	1:2A:885:C:C6	2.40	0.56
1:2A:1364:G:P	23:21:3:LYS:HG3	2.46	0.56
1:2A:1379:A:H4'	1:2A:1380:G:OP2	2.05	0.56
4:2E:36:ARG:NH1	4:2E:85:ASN:OD1	2.39	0.56
5:2F:33:LEU:HB3	11:2P:6:LEU:HD21	1.86	0.56
19:2X:53:LYS:HB3	19:2X:82:GLN:HB3	1.87	0.56
26:24:46:GLN:O	26:24:48:ARG:N	2.38	0.56
32:2a:390:C:O3'	47:2p:28:ARG:NH2	2.39	0.56
32:2a:448:A:P	32:2a:485:G:H22	2.28	0.56
32:2a:1049:U:C5	32:2a:1201:A:H5'	2.40	0.56
32:2a:1084:G:H5'	32:2a:1102:A:OP2	2.05	0.56
48:2q:27:PHE:CE1	48:2q:36:ILE:HD11	2.41	0.56
50:2s:64:GLU:CD	50:2s:64:GLU:H	2.13	0.56
1:1A:1174:A:H4'	1:1A:1175:U:OP1	2.04	0.56
1:1A:2101:G:H1	1:1A:2188:C:H42	1.54	0.56
38:1g:58:PRO:O	38:1g:61:VAL:N	2.38	0.56
44:1m:50:GLU:HA	44:1m:53:VAL:HG22	1.86	0.56
47:1p:43:LYS:HA	47:1p:48:TRP:CD1	2.41	0.56
50:1s:11:VAL:HG11	50:1s:16:LEU:HB2	1.87	0.56
1:2A:889:C:O2'	1:2A:890:A:OP2	2.20	0.56
1:2A:1783:A:O2'	1:2A:2607:G:O2'	2.23	0.56
1:2A:2857:G:N2	1:2A:2860:A:OP2	2.38	0.56
15:2T:18:ASP:OD1	15:2T:18:ASP:N	2.31	0.56
21:2Z:44:PHE:O	21:2Z:48:PHE:N	2.36	0.56
23:21:3:LYS:O	23:21:12:PRO:HD3	2.06	0.56
25:23:52:HIS:CD2	25:23:53:LEU:HG	2.40	0.56
32:2a:1190:G:H5'	34:2c:176:HIS:CE1	2.39	0.56
32:2a:1221:G:O3'	50:2s:77:THR:OG1	2.23	0.56
34:2c:134:ILE:HG23	34:2c:151:VAL:HG13	1.86	0.56
38:2g:113:GLU:CG	38:2g:119:ARG:HG2	2.35	0.56
54:2y:67:C:H2'	54:2y:68:C:C6	2.41	0.56
6:1G:179:PRO:HB2	26:14:42:PHE:HE2	1.71	0.56
32:1a:161:A:N1	32:1a:347:G:O2'	2.39	0.56
32:1a:1059:C:O3'	45:1n:45:ARG:NH2	2.38	0.56
51:1t:43:LEU:O	51:1t:47:GLY:N	2.25	0.56
54:1y:9:A:H8	54:1y:11:C:H41	1.53	0.56
1:2A:863:A:H2'	1:2A:864:G:C8	2.41	0.56
1:2A:1886:C:H2'	1:2A:1887:C:H6	1.70	0.56
1:1A:226:G:N2	1:1A:228:A:H62	2.03	0.56
1:1A:1864:U:OP1	1:1A:2410:G:O2'	2.23	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2126:A:H4'	1:1A:2127:G:OP1	2.04	0.56
33:1b:155:LEU:HD21	33:1b:159:PRO:HD3	1.88	0.56
1:2A:1243:G:O2'	11:2P:7:ARG:NH2	2.38	0.56
1:2A:2065:C:H2'	1:2A:2066:C:C6	2.41	0.56
1:2A:2319:G:H22	14:2S:3:ARG:HD2	1.70	0.56
1:2A:2357:U:OP1	22:20:20:ARG:NE	2.31	0.56
32:2a:1240:U:N3	38:2g:30:ILE:O	2.33	0.56
33:2b:80:ILE:HD13	33:2b:211:ILE:HG22	1.87	0.56
33:2b:217:ARG:HA	33:2b:220:ASP:HB2	1.88	0.56
38:2g:22:LEU:HG	38:2g:62:PHE:HE2	1.70	0.56
39:2h:33:GLU:O	39:2h:36:LEU:N	2.38	0.56
55:2x:61:C:H2'	55:2x:62:C:H6	1.70	0.56
1:1A:602:G:O2'	1:1A:655:A:N6	2.39	0.56
1:1A:2771:C:H2'	1:1A:2772:C:H6	1.70	0.56
11:1P:38:GLN:HG2	11:1P:45:LEU:H	1.70	0.56
33:1b:185:ILE:HG22	33:1b:199:TYR:HB2	1.87	0.56
44:1m:23:TYR:HB3	44:1m:67:GLU:HA	1.88	0.56
48:1q:78:GLU:HG2	48:1q:81:ARG:HG2	1.87	0.56
1:2A:236:C:H2'	1:2A:237:C:C6	2.41	0.56
1:2A:1769:G:O2'	1:2A:1958:C:OP1	2.22	0.56
26:24:58:ARG:HD2	50:2s:68:GLY:H	1.71	0.56
32:2a:719:C:H42	49:2r:71:LYS:HE2	1.69	0.56
1:1A:2334:G:H5'	14:1S:9:ARG:HG2	1.87	0.56
20:1Y:102:CYS:SG	20:1Y:103:GLY:N	2.78	0.56
26:14:55:ARG:N	26:14:56:VAL:HA	2.20	0.56
32:1a:690:G:C6	32:1a:691:G:C6	2.94	0.56
33:1b:12:GLU:O	33:1b:15:VAL:HG22	2.06	0.56
1:2A:839:U:H2'	1:2A:840:C:C6	2.41	0.56
1:2A:2595:G:N7	61:2A:4001:HOH:O	2.32	0.56
13:2R:72:ASP:O	13:2R:76:VAL:HG23	2.06	0.56
32:2a:372:C:O2	61:2a:3316:HOH:O	2.17	0.56
32:2a:458:C:H2'	32:2a:460:G:O4'	2.06	0.56
32:2a:612:C:O2	32:2a:629:G:N2	2.39	0.56
32:2a:1004:A:C6	32:2a:1037:C:H1'	2.40	0.56
32:2a:1328:C:O2'	44:2m:29:ARG:NE	2.38	0.56
34:2c:188:LEU:HG	34:2c:189:ALA:H	1.71	0.56
40:2i:37:PHE:HB3	40:2i:43:ALA:HB2	1.88	0.56
42:2k:98:LEU:O	42:2k:101:SER:OG	2.22	0.56
54:2w:29:G:H2'	54:2w:30:G:H8	1.71	0.56
1:1A:2233:U:H2'	1:1A:2234:G:C8	2.41	0.56
32:1a:1202:G:H1'	45:1n:29:ARG:HD2	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1011:G:OP1	16:2U:77:SER:OG	2.21	0.56
1:2A:1219:G:H1	1:2A:1230:C:H42	1.53	0.56
1:2A:2065:C:H2'	1:2A:2066:C:H6	1.71	0.56
1:2A:2135:A:C8	1:2A:2136:C:H5	2.24	0.56
1:2A:2494:G:OP1	22:20:3:HIS:N	2.38	0.56
11:2P:29:LYS:HG3	11:2P:30:THR:H	1.69	0.56
21:2Z:72:ARG:HH22	21:2Z:97:GLU:HB2	1.71	0.56
21:2Z:150:LEU:H	21:2Z:171:ILE:HD11	1.70	0.56
37:2f:61:LEU:HB3	37:2f:63:TYR:HE2	1.71	0.56
46:2o:16:ALA:HB1	46:2o:21:ASP:HB3	1.88	0.56
47:2p:28:ARG:NH1	47:2p:29:ASP:OD1	2.39	0.56
1:1A:880:G:H2'	1:1A:881:G:C8	2.42	0.55
32:1a:1032:G:H2'	32:1a:1033:G:O4'	2.06	0.55
38:1g:91:VAL:HB	38:1g:96:GLN:HE21	1.70	0.55
1:2A:1502:C:H2'	1:2A:1503:U:H6	1.71	0.55
1:2A:2577:A:H5''	1:2A:2578:G:H5'	1.88	0.55
1:2A:2781:A:H5''	1:2A:2782:G:H5'	1.88	0.55
1:2A:2896:C:H2'	1:2A:2897:U:C6	2.42	0.55
2:2B:43:C:H5''	26:24:1:MET:HG2	1.88	0.55
6:2G:64:THR:HB	6:2G:94:LEU:HD21	1.87	0.55
11:2P:50:ARG:HD3	30:28:7:HIS:CD2	2.40	0.55
33:2b:16:HIS:HB3	33:2b:210:SER:CB	2.32	0.55
40:2i:6:GLY:HA3	40:2i:80:GLY:O	2.06	0.55
54:2y:67:C:H2'	54:2y:68:C:H6	1.71	0.55
1:1A:305:U:H2'	1:1A:306:U:C6	2.41	0.55
1:1A:1062:G:O5'	1:1A:1070:A:O2'	2.23	0.55
1:1A:1155:A:OP1	16:1U:55:ARG:HD2	2.06	0.55
1:1A:1607:C:H4'	1:1A:1608:A:O5'	2.06	0.55
8:1I:38:LEU:H	8:1I:38:LEU:CD2	2.19	0.55
54:1y:67:C:H2'	54:1y:68:C:C6	2.40	0.55
1:2A:2439:A:H5'	1:2A:2439:A:C8	2.41	0.55
2:2B:75:G:H22	21:2Z:73:GLN:NE2	2.01	0.55
5:2F:167:ALA:HB1	5:2F:173:VAL:HG11	1.89	0.55
9:2N:123:TYR:OH	9:2N:130:HIS:NE2	2.35	0.55
17:2V:62:LEU:HD12	17:2V:93:GLU:HG2	1.88	0.55
34:2c:6:HIS:ND1	45:2n:49:HIS:HB3	2.21	0.55
39:2h:11:THR:HG23	39:2h:14:ARG:NH1	2.22	0.55
51:2t:56:MET:HG3	51:2t:88:VAL:HG21	1.88	0.55
54:2y:42:C:H2'	54:2y:43:C:H6	1.69	0.55
1:1A:1075:C:C2'	1:1A:1076:C:H5'	2.36	0.55
1:1A:1176:G:H1'	1:1A:1177:A:H5''	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1800:C:OP2	3:1D:183:ARG:NH2	2.39	0.55
1:1A:1843:C:H5'	3:1D:253:GLN:OE1	2.05	0.55
1:1A:2751:G:C5	7:1H:2:SER:N	2.74	0.55
33:1b:185:ILE:HG22	33:1b:199:TYR:HD2	1.71	0.55
40:1i:3:GLN:HE21	40:1i:20:ARG:CZ	2.20	0.55
40:1i:55:ALA:HA	40:1i:58:HIS:HD2	1.72	0.55
1:2A:1889:A:H2'	1:2A:1890:A:C8	2.41	0.55
1:2A:2136:C:N4	1:2A:2155:G:H1	2.05	0.55
1:2A:2651:C:H2'	1:2A:2652:C:H6	1.71	0.55
1:2A:2683:C:OP1	15:2T:53:ARG:NH2	2.37	0.55
4:2E:35:GLN:OE1	4:2E:66:HIS:HE1	1.89	0.55
14:2S:27:SER:HA	14:2S:88:ASP:HB3	1.87	0.55
32:2a:130:A:O2'	32:2a:131:C:O5'	2.23	0.55
32:2a:737:A:H2'	32:2a:738:C:C6	2.41	0.55
32:2a:1190:G:O2'	34:2c:3:ASN:HB2	2.06	0.55
32:2a:1502:A:C8	32:2a:1505:G:N2	2.73	0.55
47:2p:74:LEU:O	47:2p:79:VAL:HG23	2.06	0.55
1:1A:548:A:H1'	1:1A:549:G:OP1	2.07	0.55
7:1H:56:SER:OG	7:1H:57:ASP:N	2.38	0.55
24:12:55:ARG:NH2	61:12:202:HOH:O	2.38	0.55
32:1a:452:A:H4'	47:1p:72:ARG:NH1	2.21	0.55
32:1a:1112:C:H1'	34:1c:179:ARG:NH1	2.21	0.55
1:2A:93:G:H2'	1:2A:94:C:C6	2.42	0.55
1:2A:2849:U:OP2	15:2T:95:ARG:NH1	2.40	0.55
10:2O:80:ASP:OD2	15:2T:64:ARG:NH2	2.40	0.55
16:2U:89:GLU:H	17:2V:38:LEU:HD21	1.71	0.55
32:2a:1263:C:N3	32:2a:1272:G:O6	2.39	0.55
40:2i:92:TYR:HB3	40:2i:96:LEU:HD12	1.87	0.55
54:2y:65:G:H2'	54:2y:66:U:C6	2.41	0.55
1:1A:1300:U:H4'	1:1A:1301:A:H5''	1.89	0.55
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.41	0.55
15:1T:1:MET:HE2	15:1T:3:ARG:HG3	1.87	0.55
32:1a:976:G:H5'	32:1a:1358:U:O2'	2.06	0.55
46:1o:17:ARG:HH11	46:1o:17:ARG:HG3	1.72	0.55
1:2A:639:U:H2'	1:2A:640:C:C6	2.42	0.55
1:2A:893:C:H2'	1:2A:894:C:C5	2.42	0.55
1:2A:2127:G:C6	1:2A:2161:C:N4	2.74	0.55
1:2A:2137:C:N3	1:2A:2154:G:N2	2.50	0.55
10:2O:36:GLY:HA2	10:2O:106:LEU:HD23	1.88	0.55
14:2S:28:VAL:HG11	14:2S:98:VAL:HG13	1.88	0.55
32:2a:1328:C:O2'	44:2m:29:ARG:NH2	2.38	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1176:G:H21	1:1A:1178:C:P	2.28	0.55
11:1P:38:GLN:O	11:1P:39:LYS:HB3	2.07	0.55
32:1a:339:C:H2'	32:1a:340:U:C6	2.42	0.55
34:1c:104:GLN:HG2	34:1c:105:GLU:H	1.71	0.55
1:2A:2695:C:H2'	1:2A:2696:U:C6	2.42	0.55
3:2D:127:VAL:HA	3:2D:193:VAL:HG12	1.88	0.55
6:2G:61:ALA:HA	6:2G:66:GLN:O	2.06	0.55
32:2a:1445:C:O2'	32:2a:1447:A:N6	2.39	0.55
32:2a:1508:G:N1	32:2a:1527:C:N3	2.41	0.55
34:2c:32:LEU:O	34:2c:36:ASP:HB2	2.05	0.55
48:2q:4:LYS:HE2	48:2q:6:LEU:HD21	1.88	0.55
54:2w:29:G:H2'	54:2w:30:G:C8	2.41	0.55
2:1B:88:C:H2'	2:1B:89:G:O4'	2.07	0.55
18:1W:2:GLU:OE2	18:1W:72:LYS:NZ	2.30	0.55
32:1a:45:U:H2'	32:1a:46:G:C8	2.41	0.55
34:1c:91:LEU:O	34:1c:95:THR:N	2.32	0.55
1:2A:2136:C:O2'	1:2A:2137:C:O5'	2.25	0.55
32:2a:1366:C:H2'	32:2a:1367:C:C6	2.41	0.55
37:2f:97:PHE:HE2	49:2r:62:GLU:HG2	1.72	0.55
1:1A:1508:A:O2'	1:1A:1509:C:H5''	2.06	0.55
4:1E:34:VAL:HG22	4:1E:48:GLN:NE2	2.22	0.55
32:1a:345:C:H5'	32:1a:346:G:C4	2.42	0.55
38:1g:51:GLN:O	38:1g:55:GLY:HA2	2.07	0.55
1:2A:558:G:OP1	9:2N:111:PRO:HD2	2.07	0.55
1:2A:2318:G:H21	14:2S:3:ARG:CD	2.19	0.55
6:2G:59:GLU:O	6:2G:63:ILE:HG12	2.06	0.55
40:2i:99:LEU:HB3	40:2i:101:PHE:CE2	2.42	0.55
41:2j:42:THR:HB	41:2j:68:HIS:HA	1.88	0.55
5:1F:123:LEU:HD13	5:1F:192:LEU:HD13	1.89	0.55
24:12:16:LEU:HB3	24:12:20:GLU:HB2	1.89	0.55
32:1a:159:G:O2'	32:1a:161:A:N7	2.33	0.55
33:1b:37:ASN:C	33:1b:39:ILE:H	2.15	0.55
43:1l:82:VAL:O	43:1l:106:ASP:HB2	2.06	0.55
50:1s:27:GLU:OE1	50:1s:27:GLU:N	2.35	0.55
1:2A:956:G:H2'	1:2A:957:A:H2'	1.88	0.55
7:2H:8:PRO:HB3	7:2H:51:ARG:HB3	1.87	0.55
32:2a:748:C:H4'	32:2a:749:C:O5'	2.07	0.55
32:2a:1273:G:H3'	32:2a:1274:G:H8	1.71	0.55
33:2b:31:TYR:CE2	33:2b:200:ILE:HG21	2.42	0.55
39:2h:21:LYS:O	39:2h:65:TYR:OH	2.16	0.55
41:2j:44:VAL:HG13	41:2j:66:ARG:HB3	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:2s:49:ILE:HG12	50:2s:50:ALA:N	2.20	0.55
1:1A:839:U:H2'	1:1A:840:C:C6	2.41	0.55
8:1I:109:ILE:HG23	8:1I:130:TYR:CZ	2.41	0.55
1:2A:322:A:H5'	1:2A:340:A:H1'	1.89	0.55
1:2A:2273:A:H2'	1:2A:2274:A:C8	2.42	0.55
1:2A:2319:G:N2	14:2S:3:ARG:HD2	2.21	0.55
7:2H:7:LEU:HD23	7:2H:69:ARG:NH2	2.21	0.55
32:2a:20:U:H2'	32:2a:21:G:O4'	2.07	0.55
32:2a:21:G:H2'	32:2a:22:G:C8	2.42	0.55
32:2a:1442:G:O2'	32:2a:1442(A):G:H5'	2.06	0.55
35:2d:60:GLU:HG3	35:2d:202:LEU:HD12	1.88	0.55
35:2d:61:LYS:NZ	35:2d:72:GLU:OE1	2.40	0.55
54:2w:28:G:H2'	54:2w:29:G:O4'	2.07	0.55
1:1A:2685:G:H5'	10:1O:68:GLU:OE2	2.07	0.54
1:1A:2756:U:H1'	1:1A:2757:A:H5''	1.89	0.54
9:2N:20:GLY:HA2	9:2N:61:ARG:HE	1.72	0.54
20:2Y:60:PHE:O	20:2Y:61:ILE:HD13	2.07	0.54
25:23:7:LYS:NZ	25:23:32:GLN:O	2.38	0.54
32:2a:1118:C:H1'	32:2a:1179:A:C4	2.42	0.54
38:2g:59:LEU:O	38:2g:63:LYS:HB2	2.06	0.54
1:1A:1045:A:H1'	1:1A:1047:G:N3	2.23	0.54
1:1A:1087:G:H2'	1:1A:1089:G:H8	1.72	0.54
1:1A:1786:A:H1'	1:1A:1938:A:N6	2.21	0.54
1:1A:2136:C:N4	1:1A:2155:G:H1	2.06	0.54
2:1B:92:C:OP1	21:1Z:79:ARG:NH1	2.40	0.54
18:1W:92:ARG:NH2	61:1W:302:HOH:O	2.38	0.54
32:1a:179:A:H2'	32:1a:180:U:C6	2.41	0.54
32:1a:300:A:H1'	32:1a:565:U:O2	2.07	0.54
39:1h:124:ALA:O	39:1h:128:GLY:N	2.40	0.54
1:2A:236:C:H2'	1:2A:237:C:H6	1.72	0.54
1:2A:2136:C:N3	1:2A:2155:G:N2	2.54	0.54
1:2A:2611:U:C4	27:25:3:LYS:HG2	2.42	0.54
4:2E:7:VAL:HG11	15:2T:1:MET:HE1	1.88	0.54
8:2I:12:LEU:HD22	8:2I:19:VAL:HG21	1.89	0.54
12:2Q:54:MET:HB2	12:2Q:64:ILE:HD13	1.89	0.54
32:2a:728:A:H2'	32:2a:729:A:C8	2.42	0.54
32:2a:1095:U:H2'	32:2a:1096:C:C6	2.41	0.54
33:2b:78:GLN:HE22	33:2b:95:GLN:HE22	1.55	0.54
35:2d:111:ALA:HB2	35:2d:120:LEU:HD12	1.89	0.54
1:1A:1039:G:H1	1:1A:1116:C:N4	2.04	0.54
4:1E:9:VAL:HB	15:1T:3:ARG:HG2	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:1Y:6:HIS:HE1	20:1Y:72:VAL:O	1.90	0.54
21:1Z:152:ALA:HB1	21:1Z:163:LEU:HD11	1.88	0.54
31:19:17:ILE:HD13	31:19:26:ILE:HD13	1.90	0.54
32:1a:865:A:C2	32:1a:918:A:H4'	2.41	0.54
32:1a:972:C:OP2	41:1j:57:LYS:NZ	2.32	0.54
32:2a:12:U:H4'	32:2a:526:C:O2'	2.06	0.54
32:2a:553:A:H2'	32:2a:554:C:H6	1.72	0.54
42:2k:43:SER:HA	42:2k:47:VAL:HG21	1.88	0.54
42:2k:54:ARG:NH1	54:2y:39:PSU:O2'	2.39	0.54
1:1A:1359:A:N1	1:1A:1372:U:C4	2.75	0.54
1:1A:2612:C:OP2	27:15:2:ALA:N	2.40	0.54
32:1a:176:C:H2'	32:1a:177:C:C6	2.42	0.54
32:1a:1179:A:H4'	40:1i:103:THR:HA	1.89	0.54
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.42	0.54
35:1d:173:TRP:CD2	35:1d:189:PRO:HG3	2.43	0.54
54:1y:48:C:C2	54:1y:59:U:H1'	2.41	0.54
1:2A:1591:G:H2'	1:2A:1592:C:C6	2.43	0.54
1:2A:1711:C:H2'	1:2A:1712:C:C6	2.42	0.54
1:2A:2059:A:O2'	5:2F:69:HIS:HD2	1.89	0.54
6:2G:35:GLU:HB3	6:2G:160:VAL:HG23	1.90	0.54
31:29:7:VAL:HG12	31:29:34:GLN:HB3	1.88	0.54
32:2a:1517:G:N7	32:2a:1518:MA6:H103	2.22	0.54
33:2b:60:ASP:O	33:2b:64:ARG:HG2	2.07	0.54
44:2m:57:ARG:O	44:2m:61:GLU:HB2	2.08	0.54
50:2s:28:LYS:NZ	50:2s:46:GLY:O	2.41	0.54
4:1E:3:GLY:HA3	4:1E:81:ILE:HD12	1.88	0.54
21:1Z:136:PHE:O	21:1Z:137:ILE:HG13	2.07	0.54
32:1a:57:G:H2'	32:1a:58:C:C6	2.43	0.54
32:1a:1068:G:H8	32:1a:1068:G:OP2	1.90	0.54
41:1j:11:PHE:HE1	41:1j:67:THR:HG22	1.72	0.54
1:2A:1116:C:H2'	1:2A:1117:G:C8	2.43	0.54
1:2A:2340:G:H2'	1:2A:2341:G:H8	1.72	0.54
12:2Q:57:HIS:HD2	12:2Q:117:ALA:HB2	1.73	0.54
32:2a:202:U:H3'	32:2a:203:U:C5	2.43	0.54
32:2a:1218:C:H2'	32:2a:1219:U:C6	2.43	0.54
33:2b:16:HIS:CB	33:2b:204:ASN:HB3	2.37	0.54
35:2d:187:ARG:NH1	35:2d:190:ASP:OD1	2.41	0.54
44:2m:40:ASN:OD1	44:2m:41:PRO:HD2	2.07	0.54
50:2s:53:ASN:OD1	50:2s:54:GLY:N	2.40	0.54
54:2w:22:G:H2'	54:2w:23:A:C8	2.42	0.54
32:1a:974:A:H8	32:1a:974:A:OP1	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1039:C:H2'	32:1a:1040:U:C6	2.43	0.54
32:1a:1239:A:H62	32:1a:1299:A:H62	1.54	0.54
1:2A:894:C:O2'	1:2A:895:U:H5''	2.08	0.54
1:2A:931:G:O2'	25:23:24:LYS:HD3	2.07	0.54
3:2D:108:PRO:HB3	3:2D:143:HIS:HE1	1.72	0.54
32:2a:1017:G:H8	32:2a:1017:G:OP2	1.90	0.54
55:2x:15:G:H2'	55:2x:59:A:N1	2.21	0.54
54:2y:40:C:H2'	54:2y:41:C:H6	1.72	0.54
1:1A:2142:C:N3	1:1A:2149:G:O6	2.41	0.54
10:1O:73:ASP:HB2	15:1T:82:LEU:HD13	1.89	0.54
21:1Z:156:LYS:HG2	21:1Z:158:PRO:HD3	1.90	0.54
32:1a:382:A:H2'	32:1a:383:A:C8	2.42	0.54
32:1a:1149:C:H2'	32:1a:1150:U:C6	2.42	0.54
36:1e:131:ILE:O	36:1e:135:THR:OG1	2.26	0.54
54:1w:56:C:H2'	54:1w:57:G:O4'	2.08	0.54
54:1y:51:U:H2'	54:1y:52:G:C8	2.42	0.54
1:2A:995:C:O2	9:2N:3:THR:OG1	2.20	0.54
1:2A:1783:A:HO2'	1:2A:2607:G:HO2'	1.56	0.54
21:2Z:144:LEU:HD23	21:2Z:174:VAL:HG22	1.89	0.54
32:2a:402:G:N7	61:2a:3330:HOH:O	2.32	0.54
32:2a:989:C:HO2'	32:2a:1016:A:H2	1.56	0.54
32:2a:1521:G:N3	61:2a:3331:HOH:O	2.33	0.54
33:2b:21:ARG:HA	33:2b:39:ILE:HA	1.90	0.54
55:2x:23:C:H2'	55:2x:24:U:H6	1.73	0.54
54:2y:9:A:H5'	54:2y:46:G7M:N3	2.23	0.54
1:1A:1012:U:C5	9:1N:28:THR:HG21	2.43	0.54
1:1A:1119:C:N4	61:1A:4330:HOH:O	2.41	0.54
1:1A:2615:U:H2'	1:1A:2616:C:H6	1.73	0.54
6:1G:167:GLU:OE1	6:1G:167:GLU:N	2.39	0.54
32:1a:235:C:H5''	48:1q:70:ARG:HG3	1.89	0.54
32:1a:472:A:OP1	47:1p:75:ARG:NH2	2.39	0.54
1:2A:1364:G:OP2	23:21:3:LYS:HG3	2.06	0.54
1:2A:2870:C:H2'	1:2A:2871:C:O4'	2.08	0.54
15:2T:6:LEU:O	15:2T:10:VAL:HG23	2.07	0.54
32:2a:953:G:H5'	32:2a:965:A:N6	2.17	0.54
39:2h:36:LEU:HD22	39:2h:61:VAL:HG11	1.89	0.54
1:1A:1762:A:H2'	61:1A:5974:HOH:O	2.06	0.54
1:1A:2135:A:O2'	1:1A:2136:C:O5'	2.23	0.54
12:1Q:18:LYS:O	12:1Q:98:LYS:NZ	2.37	0.54
33:1b:21:ARG:HA	33:1b:39:ILE:HA	1.89	0.54
34:1c:124:ILE:HG22	34:1c:130:VAL:HG22	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:1k:79:SER:HA	42:1k:104:GLN:HB3	1.88	0.54
1:2A:1155:A:H5''	16:2U:55:ARG:NE	2.22	0.54
1:2A:1496:A:N3	1:2A:1577:C:O2'	2.33	0.54
6:2G:114:ILE:HB	6:2G:117:PHE:HD1	1.73	0.54
26:24:44:THR:C	26:24:46:GLN:H	2.14	0.54
32:2a:562:C:H1'	43:2l:15:ARG:HB3	1.90	0.54
32:2a:920:U:H2'	32:2a:921:U:H6	1.73	0.54
32:2a:1150:U:H4'	41:2j:41:PRO:HG3	1.90	0.54
33:2b:84:GLU:HB3	33:2b:219:VAL:HG11	1.89	0.54
52:2u:5:ASP:O	52:2u:11:GLY:HA3	2.08	0.54
1:1A:1584:C:O2'	1:1A:1586:A:H5'	2.08	0.54
1:1A:2794:C:H42	1:1A:2802:G:H22	1.54	0.54
2:1B:103:G:N2	21:1Z:73:GLN:HE22	2.03	0.54
4:1E:178:GLU:OE1	4:1E:178:GLU:N	2.36	0.54
32:1a:193:C:H2'	32:1a:194:C:C6	2.43	0.54
33:1b:82:ARG:NH1	33:1b:92:TYR:OH	2.39	0.54
39:1h:51:VAL:HG12	39:1h:52:ASP:H	1.72	0.54
44:1m:3:ARG:HG3	44:1m:4:ILE:N	2.23	0.54
1:2A:2811:G:N2	1:2A:2891:G:H1'	2.23	0.54
2:2B:2:C:H2'	2:2B:3:C:C6	2.43	0.54
2:2B:11:C:OP2	2:2B:12:C:N4	2.33	0.54
12:2Q:75:THR:HG21	12:2Q:87:LYS:HE3	1.90	0.54
21:2Z:146:ILE:HG12	21:2Z:174:VAL:HG23	1.90	0.54
26:24:46:GLN:HG2	26:24:48:ARG:H	1.72	0.54
32:2a:1233:G:H2'	32:2a:1234:C:C6	2.43	0.54
32:2a:1388:C:H2'	32:2a:1389:C:C6	2.43	0.54
35:2d:112:VAL:HG22	35:2d:116:GLN:NE2	2.23	0.54
49:2r:33:ASP:OD2	49:2r:36:ASN:HB2	2.08	0.54
32:1a:202:U:H3'	32:1a:203:U:C5	2.43	0.53
46:1o:84:LYS:C	46:1o:84:LYS:HD3	2.33	0.53
1:2A:1019:U:H3	1:2A:1142(A):A:H62	1.56	0.53
1:2A:1378:A:O2'	1:2A:1380:G:N7	2.36	0.53
2:2B:57:A:N3	6:2G:29:TRP:HB3	2.23	0.53
6:2G:37:VAL:HG22	6:2G:159:VAL:HB	1.89	0.53
6:2G:116:ASP:OD2	44:2m:68:GLY:HA3	2.08	0.53
17:2V:60:GLU:HB2	17:2V:97:LYS:HE2	1.90	0.53
32:2a:173:U:H5''	32:2a:197:A:O4'	2.07	0.53
32:2a:1026:G:H5'	32:2a:1027:C:O5'	2.08	0.53
32:2a:1305:G:N2	32:2a:1331:G:H1'	2.23	0.53
32:2a:1318:A:OP1	50:2s:3:ARG:NH2	2.30	0.53
33:2b:175:ARG:HH12	33:2b:179:LYS:HD2	1.71	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2y:9:A:H4'	54:2y:46:G7M:H5'	1.89	0.53
1:1A:1094:U:H1'	1:1A:1097:U:C4	2.43	0.53
5:1F:29:ASN:H	5:1F:112:MET:HE3	1.73	0.53
32:1a:176:C:H2'	32:1a:177:C:H6	1.73	0.53
32:1a:258:G:H2'	32:1a:259:G:H8	1.72	0.53
1:2A:879:G:H3'	1:2A:880:G:C8	2.43	0.53
1:2A:1853:A:N1	1:2A:2087:G:H1'	2.23	0.53
4:2E:52:LEU:O	4:2E:76:ARG:N	2.38	0.53
10:2O:2:ILE:HB	10:2O:33:ALA:HB3	1.90	0.53
41:2j:74:ILE:HG22	61:2j:302:HOH:O	2.08	0.53
1:1A:2114:A:H2	1:1A:2168:G:H1'	1.73	0.53
20:1Y:92:ASN:ND2	20:1Y:94:LYS:HG3	2.24	0.53
54:1w:5:G:H2'	54:1w:6:G:C8	2.42	0.53
1:2A:1009:A:O4'	16:2U:59:ARG:HD2	2.09	0.53
1:2A:2105:C:H2'	1:2A:2106:G:C8	2.41	0.53
1:2A:2176:A:H2'	1:2A:2177:C:C6	2.44	0.53
2:2B:75:G:H1	21:2Z:73:GLN:NE2	2.06	0.53
34:2c:113:ALA:HB2	34:2c:202:ILE:HG13	1.90	0.53
35:2d:8:VAL:HG22	35:2d:21:LEU:HD13	1.89	0.53
38:2g:152:ALA:O	38:2g:155:ARG:HD3	2.08	0.53
1:1A:1229:G:N7	61:1A:4294:HOH:O	2.34	0.53
1:1A:1814:G:H4'	3:1D:51:VAL:HG21	1.90	0.53
1:1A:2515:C:O2'	1:1A:2516:G:H5'	2.08	0.53
24:12:1:MET:HE3	24:12:5:GLU:HB3	1.89	0.53
32:1a:262:A:C6	32:1a:263:A:C6	2.96	0.53
32:1a:339:C:H2'	32:1a:340:U:H6	1.73	0.53
32:1a:1370:G:C2	32:1a:1371:G:C8	2.96	0.53
49:1r:40:LEU:HD13	49:1r:79:LEU:HD11	1.90	0.53
1:2A:2383:G:O2'	1:2A:2384:G:H5'	2.09	0.53
1:2A:2805:G:H2'	1:2A:2807:G:H8	1.68	0.53
2:2B:11:C:H3'	2:2B:12:C:H6	1.73	0.53
15:2T:105:LEU:HB2	15:2T:110:ILE:HG13	1.91	0.53
21:2Z:75:ASN:O	21:2Z:84:GLU:HG3	2.09	0.53
26:24:34:GLU:HB2	44:2m:57:ARG:HH21	1.73	0.53
32:2a:653:A:H5''	32:2a:653:A:N3	2.24	0.53
32:2a:1080:A:H5''	32:2a:1081:G:OP2	2.08	0.53
32:2a:1081:G:H5'	36:2e:18:ARG:HB3	1.90	0.53
32:2a:1161:C:H2'	32:2a:1162:C:H6	1.74	0.53
32:2a:1299:A:H2'	32:2a:1299:A:N3	2.23	0.53
35:2d:112:VAL:H	35:2d:116:GLN:NE2	2.05	0.53
40:2i:3:GLN:NE2	40:2i:20:ARG:HE	2.02	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2y:18:G:O6	54:2y:56:C:N4	2.41	0.53
1:1A:198:C:H5'	1:1A:2244:U:OP1	2.08	0.53
1:1A:1090:U:C2	1:1A:1102:C:H1'	2.44	0.53
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.43	0.53
8:1I:75:LEU:O	8:1I:141:LYS:NZ	2.34	0.53
32:1a:376:G:OP2	47:1p:67:THR:HG21	2.09	0.53
32:1a:1002:G:H3'	32:1a:1003:G:C4'	2.35	0.53
32:1a:1036:G:H5''	32:1a:1037:C:H5	1.72	0.53
54:1y:26:A:N6	54:1y:44:G:H1	2.05	0.53
1:2A:890:A:H2'	1:2A:892:G:H8	1.73	0.53
1:2A:1589:C:H2'	1:2A:1590:U:C6	2.44	0.53
1:2A:2769:C:H2'	1:2A:2770:G:O4'	2.08	0.53
10:2O:68:GLU:OE1	10:2O:78:ARG:NH1	2.38	0.53
15:2T:127:ALA:C	15:2T:129:ARG:H	2.16	0.53
21:2Z:45:ASP:OD1	21:2Z:49:ARG:NE	2.42	0.53
30:28:32:LEU:O	30:28:36:LYS:HE3	2.08	0.53
32:2a:406:G:H21	35:2d:119:GLN:HE22	1.56	0.53
32:2a:1343:G:H2'	32:2a:1344:C:C6	2.44	0.53
32:2a:1346:A:N1	32:2a:1374:A:H5''	2.24	0.53
32:2a:1356:G:N2	32:2a:1367:C:C2	2.76	0.53
1:1A:184:C:H2'	1:1A:185:U:C6	2.43	0.53
1:1A:2206:G:H3'	1:1A:2207:G:N7	2.24	0.53
8:1I:75:LEU:HD22	8:1I:105:HIS:CD2	2.44	0.53
47:1p:49:LEU:HD13	47:1p:50:LYS:N	2.24	0.53
1:2A:1266:G:O5'	18:2W:15:ARG:NH2	2.40	0.53
7:2H:96:ALA:N	7:2H:128:PRO:O	2.42	0.53
21:2Z:31:ARG:NH1	21:2Z:94:GLU:HG2	2.22	0.53
32:2a:936:C:H2'	32:2a:937:A:O4'	2.09	0.53
32:2a:1257:U:O4	45:2n:17:LYS:NZ	2.42	0.53
33:2b:55:PHE:HD1	33:2b:58:ILE:HD11	1.74	0.53
36:2e:41:VAL:HG12	36:2e:69:VAL:HG21	1.90	0.53
37:2f:91:VAL:HG11	49:2r:72:ARG:NH1	2.23	0.53
44:2m:34:LEU:O	44:2m:38:GLY:N	2.42	0.53
1:1A:616:G:OP2	5:1F:106:ARG:NH2	2.39	0.53
1:1A:1173:G:H22	1:1A:1177:A:P	2.32	0.53
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.44	0.53
1:1A:2134:A:N3	1:1A:2159:G:O2'	2.39	0.53
1:1A:2136:C:C2	1:1A:2155:G:N2	2.76	0.53
9:1N:4:TYR:CD2	16:1U:100:VAL:HG11	2.44	0.53
23:11:19:GLN:HB2	23:11:35:THR:HG22	1.91	0.53
32:1a:202:U:H3'	32:1a:203:U:C6	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1525:G:P	42:1k:120:ARG:HH22	2.31	0.53
46:1o:84:LYS:HD3	46:1o:84:LYS:O	2.09	0.53
1:2A:921:G:C6	1:2A:922:U:C4	2.96	0.53
1:2A:2758:A:C2	1:2A:2759:G:H1'	2.43	0.53
7:2H:90:LYS:HD2	7:2H:159:GLU:HG2	1.91	0.53
11:2P:99:LEU:HD12	11:2P:102:ARG:NH2	2.23	0.53
32:2a:255:G:C6	32:2a:256:U:C4	2.97	0.53
32:2a:1132:C:H2'	32:2a:1133:G:C8	2.43	0.53
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.08	0.53
6:1G:122:PRO:HB3	6:1G:170:ARG:HH12	1.73	0.53
10:1O:63:VAL:HG12	10:1O:106:LEU:HD11	1.91	0.53
1:2A:597:U:H2'	1:2A:598:G:C8	2.44	0.53
1:2A:2833:G:H4'	1:2A:2834:G:OP2	2.08	0.53
17:2V:29:PRO:HA	17:2V:61:VAL:HG22	1.91	0.53
32:2a:1519:MA6:H102	32:2a:1520:G:O2'	2.09	0.53
34:2c:29:TYR:HE1	41:2j:11:PHE:HE2	1.55	0.53
44:2m:52:GLU:HG2	44:2m:55:ARG:NH2	2.24	0.53
1:1A:2129:C:H1'	1:1A:2160:G:H22	1.73	0.53
22:10:10:THR:HG22	22:10:12:ASN:H	1.73	0.53
22:10:24:LYS:O	22:10:25:ARG:NH1	2.39	0.53
30:18:28:GLY:O	30:18:36:LYS:NZ	2.42	0.53
32:1a:224:C:OP1	51:1t:74:LYS:NZ	2.41	0.53
1:2A:903:C:H2'	1:2A:904:C:C6	2.44	0.53
1:2A:1946:U:H2'	1:2A:1947:C:C6	2.44	0.53
1:2A:2356:C:O3'	22:20:20:ARG:HD3	2.09	0.53
11:2P:55:ARG:HA	61:2P:302:HOH:O	2.08	0.53
22:20:70:GLN:NE2	22:20:72:ARG:HD2	2.24	0.53
32:2a:1273:G:H3'	32:2a:1274:G:C8	2.43	0.53
40:2i:70:LYS:O	40:2i:74:ILE:HG13	2.09	0.53
1:1A:922:U:H2'	1:1A:923:C:C6	2.44	0.53
1:1A:1803:A:H4'	3:1D:259:THR:HG23	1.91	0.53
8:1I:62:LYS:HA	8:1I:133:HIS:HE1	1.73	0.53
8:1I:109:ILE:HD12	8:1I:130:TYR:CE2	2.44	0.53
12:1Q:16:ARG:HG2	12:1Q:18:LYS:HG3	1.91	0.53
32:1a:407:G:OP1	35:1d:115:ARG:NH2	2.42	0.53
32:1a:1025:U:O2	32:1a:1036:G:C6	2.61	0.53
32:1a:1095:U:OP1	32:1a:1108:G:N2	2.39	0.53
33:1b:8:LYS:O	33:1b:217:ARG:NH2	2.42	0.53
44:1m:3:ARG:HG3	44:1m:4:ILE:H	1.74	0.53
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.24	0.53
1:2A:2803:C:H2'	1:2A:2804:C:C6	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:43:LEU:C	6:2G:45:GLU:H	2.15	0.53
21:2Z:4:ARG:NH2	21:2Z:66:SER:OG	2.42	0.53
21:2Z:40:ASP:OD2	21:2Z:43:GLU:N	2.18	0.53
32:2a:1109:C:H2'	32:2a:1110:A:O4'	2.09	0.53
33:2b:134:GLU:O	33:2b:138:LEU:HG	2.09	0.53
38:2g:15:ASP:OD2	38:2g:44:TYR:OH	2.19	0.53
40:2i:15:ALA:HB2	40:2i:65:VAL:HG23	1.91	0.53
1:1A:818:G:O6	61:1A:4238:HOH:O	2.18	0.52
1:1A:1006:C:C2	1:1A:1138:G:N2	2.77	0.52
32:1a:1530:G:H2'	32:1a:1531:A:C8	2.43	0.52
35:1d:114:ARG:HA	35:1d:117:ALA:HB3	1.90	0.52
1:2A:1159:U:O2'	1:2A:1160:G:H5'	2.09	0.52
1:2A:1545:A:H2'	1:2A:1546:C:O4'	2.09	0.52
1:2A:2207:G:H3'	1:2A:2208:A:H5''	1.91	0.52
21:2Z:31:ARG:HB2	21:2Z:32:HIS:CD2	2.45	0.52
28:26:44:ARG:HG2	28:26:44:ARG:HH11	1.73	0.52
32:2a:1305:G:H22	32:2a:1331:G:H1'	1.73	0.52
37:2f:76:ALA:O	37:2f:80:ARG:HG3	2.09	0.52
44:2m:73:GLU:O	44:2m:77:ASN:HB2	2.08	0.52
54:2y:55:PSU:HN1	54:2y:57:G:C5'	2.22	0.52
1:1A:1278:A:OP1	13:1R:36:THR:HG23	2.09	0.52
20:1Y:14:LEU:HB2	20:1Y:75:ILE:HD11	1.92	0.52
36:1e:84:PHE:CE2	36:1e:133:TYR:HD2	2.26	0.52
1:2A:829:A:N7	1:2A:2248:C:H5'	2.23	0.52
1:2A:1022:G:N7	9:2N:66:LYS:HE2	2.24	0.52
1:2A:1506:C:H2'	1:2A:1507:A:H5'	1.91	0.52
1:2A:2224:G:OP2	61:2A:3941:HOH:O	2.19	0.52
1:2A:2802:G:H2'	1:2A:2803:C:O4'	2.08	0.52
2:2B:39:A:O2'	2:2B:40:U:H5'	2.09	0.52
18:2W:64:MET:HE2	18:2W:109:GLU:HG3	1.90	0.52
32:2a:1104:G:H4'	33:2b:111:ARG:NH2	2.23	0.52
32:2a:1427:U:H2'	32:2a:1428:A:H8	1.73	0.52
35:2d:92:VAL:O	35:2d:96:LEU:HG	2.10	0.52
36:2e:12:LEU:HB3	36:2e:31:LEU:HB2	1.89	0.52
41:2j:52:GLY:O	45:2n:41:ARG:NH1	2.35	0.52
43:2l:6:THR:HG23	43:2l:9:GLN:OE1	2.10	0.52
21:1Z:54:HIS:HB3	21:1Z:101:PRO:HD3	1.91	0.52
32:1a:547:A:OP2	35:1d:2:GLY:HA2	2.09	0.52
34:1c:79:ARG:O	34:1c:82:GLU:HG2	2.09	0.52
49:1r:58:LEU:HD22	49:1r:62:GLU:HB3	1.91	0.52
1:2A:322:A:OP2	5:2F:169:ASN:HB2	2.08	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:31:C:H4'	6:2G:29:TRP:HZ2	1.75	0.52
5:2F:21:ALA:CB	5:2F:22:ALA:HA	2.38	0.52
7:2H:119:GLU:HG2	7:2H:120:GLY:N	2.22	0.52
32:2a:620:C:C2	35:2d:135:LEU:HG	2.44	0.52
32:2a:1053:G:N7	32:2a:1200:C:H5'	2.25	0.52
42:2k:86:GLY:H	42:2k:112:THR:CG2	2.23	0.52
44:2m:79:LYS:HG2	44:2m:83:ASP:OD2	2.09	0.52
48:2q:41:LYS:HZ2	48:2q:92:ARG:HH21	1.56	0.52
54:2y:62:C:H2'	54:2y:63:G:C8	2.45	0.52
1:1A:2635:C:O2'	4:1E:80:GLU:OE2	2.21	0.52
11:1P:138:LEU:HD23	11:1P:145:PRO:HB3	1.90	0.52
32:1a:222:U:H2'	32:1a:223:U:C6	2.45	0.52
32:1a:341:C:H2'	32:1a:342:C:C6	2.44	0.52
35:1d:52:SER:H	35:1d:55:ALA:HB3	1.74	0.52
40:1i:92:TYR:O	40:1i:96:LEU:HB2	2.10	0.52
41:1j:11:PHE:CE1	41:1j:67:THR:HG22	2.45	0.52
51:1t:71:THR:O	51:1t:72:LEU:HD23	2.09	0.52
1:2A:1449:A:HO2'	1:2A:1529:G:H21	1.52	0.52
1:2A:2191:G:H2'	1:2A:2192:G:O4'	2.09	0.52
12:2Q:109:VAL:HG21	12:2Q:113:GLN:NE2	2.24	0.52
33:2b:124:SER:HB3	33:2b:125:PRO:HD3	1.92	0.52
1:1A:1069:A:O4'	1:1A:1096:A:O2'	2.27	0.52
1:1A:1399:C:OP1	19:1X:25:LYS:NZ	2.42	0.52
14:1S:84:GLN:HA	14:1S:111:GLU:HB2	1.90	0.52
32:1a:332:G:OP2	51:1t:10:LEU:HD23	2.09	0.52
47:1p:22:THR:HA	47:1p:33:ILE:HD12	1.90	0.52
1:2A:892:G:H3'	1:2A:893:C:C5'	2.40	0.52
1:2A:1514:U:H2'	1:2A:1515:G:H8	1.75	0.52
1:2A:1518:U:H2'	1:2A:1519:G:O4'	2.10	0.52
1:2A:2315:G:H2'	1:2A:2316:C:H6	1.74	0.52
1:2A:2320:A:N3	1:2A:2320:A:H2'	2.24	0.52
1:2A:2400:G:H2'	1:2A:2401:U:H6	1.74	0.52
2:2B:19:G:H2'	2:2B:20:C:O4'	2.10	0.52
32:2a:1005:A:H5''	32:2a:1006:C:C5	2.44	0.52
32:2a:1379:G:O6	38:2g:2:ALA:HB3	2.08	0.52
32:2a:1469:G:H2'	32:2a:1470:G:C8	2.44	0.52
34:2c:123:GLN:O	34:2c:128:PHE:HB2	2.09	0.52
41:2j:40:LEU:HB2	41:2j:69:ASN:HB3	1.92	0.52
43:2l:57:LYS:HG2	43:2l:67:THR:HG22	1.92	0.52
1:1A:1721:G:H1'	1:1A:1741:A:N6	2.25	0.52
1:1A:2023:G:H5'	1:1A:2617:C:H4'	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:121:LYS:HB3	11:1P:123:LEU:HD13	1.92	0.52
11:1P:126:VAL:HG12	11:1P:148:LEU:CD2	2.39	0.52
19:1X:94:GLY:H	19:1X:95:LEU:HB2	1.74	0.52
32:1a:189:G:C6	32:1a:189(L):G:N1	2.78	0.52
32:1a:1062:U:H2'	32:1a:1063:C:C6	2.45	0.52
32:1a:1223:C:P	50:1s:78:ARG:HH21	2.31	0.52
33:1b:112:VAL:HG12	33:1b:149:LEU:HD13	1.90	0.52
35:1d:196:LEU:HD12	35:1d:196:LEU:H	1.74	0.52
6:2G:82:LEU:HA	6:2G:86:MET:SD	2.50	0.52
21:2Z:150:LEU:C	21:2Z:171:ILE:HG12	2.35	0.52
22:20:6:GLY:O	22:20:7:LEU:HD23	2.10	0.52
32:2a:79:G:H1	32:2a:90:U:H3	1.58	0.52
32:2a:114:U:O2'	32:2a:115:G:H5'	2.10	0.52
32:2a:707:C:H2'	32:2a:708:C:C6	2.44	0.52
32:2a:1064:G:O6	32:2a:1191:A:N6	2.42	0.52
34:2c:39:ILE:HG22	34:2c:43:LEU:HD11	1.92	0.52
36:2e:83:GLU:HA	36:2e:88:LYS:HA	1.91	0.52
1:1A:2646:C:H2'	1:1A:2647:U:O4'	2.09	0.52
21:1Z:72:ARG:NH2	21:1Z:97:GLU:O	2.43	0.52
28:16:26:ASN:HD21	28:16:28:ARG:NH2	2.08	0.52
32:1a:1145:C:H4'	32:1a:1146:A:H5'	1.91	0.52
40:1i:77:ILE:O	40:1i:81:ILE:HG22	2.09	0.52
51:1t:63:ILE:HD12	51:1t:81:LYS:HG2	1.92	0.52
1:2A:811:U:H2'	11:2P:21:ARG:HA	1.92	0.52
8:2I:29:TYR:CD2	8:2I:30:LEU:HD23	2.44	0.52
11:2P:97:PRO:HD3	11:2P:126:VAL:O	2.10	0.52
15:2T:92:GLY:O	15:2T:120:ARG:NH2	2.43	0.52
32:2a:947:G:O3'	44:2m:109:THR:OG1	2.27	0.52
1:1A:1803:A:O2'	3:1D:259:THR:HG21	2.10	0.52
6:1G:72:ARG:NH1	6:1G:87:PRO:HG3	2.25	0.52
32:1a:458:C:H2'	32:1a:460:G:O4'	2.08	0.52
32:1a:1080:A:H5'	36:1e:14:ARG:HH21	1.73	0.52
32:1a:1191:A:H5''	34:1c:4:LYS:NZ	2.25	0.52
36:1e:147:ASP:OD1	36:1e:150:ARG:NH2	2.42	0.52
1:2A:709:U:H2'	1:2A:710:G:C8	2.44	0.52
1:2A:898:C:H2'	1:2A:899:A:H5'	1.90	0.52
1:2A:1507:A:O2'	1:2A:1508:A:O4'	2.25	0.52
1:2A:1778:U:H2'	1:2A:1784:A:N6	2.25	0.52
1:2A:2275:C:H6	1:2A:2275:C:H5'	1.75	0.52
14:2S:15:ARG:HB3	14:2S:19:LYS:NZ	2.25	0.52
32:2a:70:G:H2'	32:2a:71:C:C6	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:986:A:H1'	50:2s:55:LYS:HA	1.91	0.52
32:2a:1033:G:H2'	32:2a:1034:G:H8	1.75	0.52
32:2a:1070:U:OP1	36:2e:18:ARG:NH2	2.43	0.52
32:2a:1518:MA6:H93	32:2a:1519:MA6:C9	2.39	0.52
40:2i:9:ARG:CG	40:2i:14:VAL:HG12	2.40	0.52
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.74	0.52
1:1A:1693:U:O2'	3:1D:14:ARG:NH2	2.42	0.52
1:1A:2171:A:HO2'	1:1A:2172:U:H6	1.58	0.52
1:1A:2319:G:N1	14:1S:3:ARG:HA	2.25	0.52
2:1B:42:C:OP2	26:14:2:LYS:NZ	2.39	0.52
7:1H:84:SER:OG	7:1H:132:ARG:NH1	2.42	0.52
10:1O:36:GLY:O	61:1O:301:HOH:O	2.19	0.52
44:1m:70:LEU:O	44:1m:74:VAL:HG23	2.10	0.52
45:1n:23:ARG:NH1	45:1n:30:ALA:HB2	2.24	0.52
1:2A:1374:G:H2'	1:2A:1375:C:C6	2.45	0.52
1:2A:1514:U:H2'	1:2A:1515:G:C8	2.45	0.52
6:2G:11:TYR:HB2	6:2G:176:LEU:HD21	1.91	0.52
14:2S:3:ARG:NH1	14:2S:4:LEU:H	2.07	0.52
14:2S:85:VAL:HG12	14:2S:86:ALA:H	1.75	0.52
19:2X:28:PHE:CE1	19:2X:92:LEU:HD11	2.44	0.52
21:2Z:25:PRO:HD2	21:2Z:84:GLU:O	2.09	0.52
1:1A:1173:G:N1	1:1A:1176:G:OP2	2.43	0.52
6:1G:67:LYS:HE3	6:1G:68:PRO:O	2.10	0.52
33:1b:16:HIS:HB2	33:1b:204:ASN:CB	2.40	0.52
49:1r:43:PHE:C	49:1r:51:LEU:HD12	2.35	0.52
1:2A:1264:G:H2'	1:2A:2014:A:N6	2.24	0.52
12:2Q:118:LEU:HD12	12:2Q:131:ILE:HG23	1.92	0.52
26:24:15:ILE:HD12	26:24:21:VAL:HG22	1.92	0.52
32:2a:501:C:OP1	43:2l:124:LYS:HD2	2.09	0.52
32:2a:920:U:H2'	32:2a:921:U:C6	2.44	0.52
32:2a:1118:C:H1'	32:2a:1179:A:C5	2.45	0.52
34:2c:134:ILE:HG22	34:2c:168:ALA:HB3	1.92	0.52
2:1B:28:C:OP1	14:1S:36:TYR:OH	2.24	0.51
8:1I:100:ALA:HA	8:1I:103:ARG:HH11	1.75	0.51
15:2T:91:ARG:HB2	15:2T:121:ILE:HG13	1.91	0.51
32:2a:155:C:H2'	32:2a:156:G:O4'	2.10	0.51
32:2a:932:C:H2'	32:2a:933:G:H8	1.75	0.51
32:2a:1016:A:N6	32:2a:1017:G:C2	2.78	0.51
32:2a:1144:G:N2	32:2a:1146:A:H62	2.07	0.51
33:2b:76:GLN:OE1	33:2b:206:ASP:HA	2.10	0.51
36:2e:75:THR:HA	36:2e:115:VAL:HG12	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:2h:29:SER:OG	39:2h:32:LYS:HD3	2.10	0.51
39:2h:35:ILE:O	39:2h:39:LEU:HD12	2.10	0.51
1:1A:1359:A:H61	1:1A:1372:U:H3	1.57	0.51
1:1A:2155:G:H5''	1:1A:2156:G:C8	2.44	0.51
5:1F:172:TRP:CD1	5:1F:172:TRP:H	2.27	0.51
24:12:10:LEU:O	24:12:14:ARG:HG3	2.10	0.51
32:1a:1288:A:N3	32:1a:1352:C:O2'	2.38	0.51
32:1a:1518:MA6:H93	32:1a:1519:MA6:H92	1.93	0.51
47:1p:19:ILE:HG22	47:1p:36:ILE:HG13	1.91	0.51
51:1t:56:MET:HE3	51:1t:85:MET:HG2	1.92	0.51
1:2A:265:A:C8	1:2A:266:G:H1'	2.45	0.51
1:2A:271(O):C:H2'	1:2A:271(P):C:C6	2.46	0.51
1:2A:479:A:N3	1:2A:481:G:H5''	2.24	0.51
1:2A:1579:A:H2'	1:2A:1580:A:C8	2.45	0.51
1:2A:2287:A:C8	1:2A:2289:G:C8	2.98	0.51
1:2A:2630:G:H2'	1:2A:2631:G:C8	2.45	0.51
32:2a:779:C:H2'	32:2a:780:A:O4'	2.11	0.51
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.45	0.51
44:2m:65:LYS:HE3	44:2m:70:LEU:HD23	1.92	0.51
44:2m:84:ILE:HG22	50:2s:74:PHE:CE1	2.41	0.51
54:2w:12:U:H3'	54:2w:13:C:H5''	1.91	0.51
1:1A:879:G:H8	1:1A:879:G:O5'	1.93	0.51
1:1A:1243:G:O2'	11:1P:7:ARG:NH2	2.44	0.51
1:1A:1453:U:O2'	1:1A:1455:G:N7	2.43	0.51
1:1A:2121:G:H2'	1:1A:2122:U:C6	2.46	0.51
1:1A:2194:G:H2'	1:1A:2195:C:O4'	2.10	0.51
5:1F:129:PHE:CD2	5:1F:163:VAL:HG21	2.45	0.51
13:1R:98:LEU:HB2	13:1R:113:LEU:HD11	1.91	0.51
32:1a:1118:C:H1'	32:1a:1179:A:C4	2.46	0.51
36:1e:85:GLY:O	36:1e:87:SER:N	2.44	0.51
1:2A:839:U:H2'	1:2A:840:C:H6	1.75	0.51
1:2A:1455:G:OP2	61:2A:3946:HOH:O	2.19	0.51
1:2A:2651:C:H2'	1:2A:2652:C:C6	2.45	0.51
9:2N:110:GLY:O	9:2N:114:ARG:HG3	2.10	0.51
32:2a:15:G:H2'	32:2a:16:A:C8	2.46	0.51
32:2a:1388:C:H2'	32:2a:1389:C:H6	1.76	0.51
34:2c:8:ILE:C	34:2c:10:PHE:H	2.18	0.51
38:2g:38:LEU:O	38:2g:42:ILE:HG13	2.10	0.51
38:2g:54:THR:O	38:2g:56:GLN:N	2.40	0.51
44:2m:70:LEU:O	44:2m:73:GLU:N	2.42	0.51
54:2w:33:U:N3	54:2w:36:A:OP2	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:58:A:H4'	54:2w:59:U:OP1	2.09	0.51
1:1A:1055:G:N2	1:1A:1104:C:N3	2.48	0.51
1:1A:2218:U:O4'	23:11:52:ARG:NH2	2.44	0.51
8:1I:65:ALA:HB1	8:1I:136:VAL:HG11	1.93	0.51
28:16:14:THR:HG21	28:16:48:VAL:HG13	1.92	0.51
32:1a:4:U:O4	39:1h:105:ARG:HD3	2.10	0.51
32:1a:159:G:N2	32:1a:162:A:OP2	2.43	0.51
32:1a:685:G:O2'	32:1a:686:U:H5'	2.10	0.51
36:1e:78:HIS:CE1	36:1e:143:ARG:H	2.27	0.51
36:1e:106:PRO:O	36:1e:110:LEU:HG	2.10	0.51
48:1q:66:SER:O	48:1q:70:ARG:NH1	2.44	0.51
1:2A:784:A:C6	3:2D:229:VAL:HG11	2.45	0.51
1:2A:880:G:C2	1:2A:881:G:C8	2.98	0.51
1:2A:2136:C:N4	1:2A:2155:G:N1	2.58	0.51
1:2A:2143:C:H2'	1:2A:2144:U:O4'	2.11	0.51
11:2P:82:GLY:HA3	11:2P:115:LEU:HD11	1.91	0.51
32:2a:202:U:H3'	32:2a:203:U:C6	2.45	0.51
49:2r:65:ILE:O	49:2r:69:THR:HG23	2.10	0.51
51:2t:67:ALA:HA	51:2t:72:LEU:O	2.10	0.51
54:2y:14:A:O2'	54:2y:15:G:OP1	2.22	0.51
32:1a:165:C:O2'	32:1a:166:G:H5'	2.11	0.51
32:1a:946:A:H2'	32:1a:947:G:C8	2.46	0.51
39:1h:29:SER:OG	39:1h:32:LYS:HD3	2.10	0.51
1:2A:847:U:H5'	1:2A:848:G:OP2	2.11	0.51
1:2A:2161:C:H2'	1:2A:2162:G:O4'	2.10	0.51
5:2F:164:ARG:O	5:2F:168:ARG:HG3	2.11	0.51
6:2G:124:SER:O	6:2G:124:SER:OG	2.28	0.51
20:2Y:8:LYS:HD3	20:2Y:97:ARG:NH1	2.25	0.51
21:2Z:73:GLN:O	21:2Z:87:ASP:N	2.41	0.51
21:2Z:154:ASP:N	21:2Z:154:ASP:OD1	2.44	0.51
32:2a:56:U:H2'	32:2a:57:G:H8	1.75	0.51
32:2a:142:G:H2'	32:2a:143:A:C8	2.45	0.51
32:2a:598:U:H4'	39:2h:94:TYR:CG	2.46	0.51
32:2a:997:U:H3	32:2a:1044:A:H61	1.56	0.51
32:2a:1032:G:H2'	32:2a:1033:G:C8	2.45	0.51
33:2b:17:PHE:HA	33:2b:44:LEU:HD11	1.92	0.51
33:2b:178:ARG:HH22	39:2h:68:ARG:NH2	2.09	0.51
34:2c:151:VAL:HG23	34:2c:199:LYS:O	2.11	0.51
52:2u:15:ARG:HG2	52:2u:15:ARG:HH11	1.76	0.51
1:1A:106:C:H1'	20:1Y:1:MET:HE2	1.91	0.51
1:1A:1512:U:O2'	1:1A:1513:C:H5'	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2567:G:H2'	1:1A:2568:C:C6	2.46	0.51
1:1A:2803:C:H2'	1:1A:2804:C:C6	2.45	0.51
1:1A:2853:C:H2'	1:1A:2854:G:C8	2.46	0.51
2:1B:92:C:H5''	21:1Z:79:ARG:NH1	2.26	0.51
2:1B:103:G:H21	21:1Z:73:GLN:NE2	2.05	0.51
15:1T:108:ARG:HG3	15:1T:109:GLU:N	2.26	0.51
23:11:64:ALA:HA	23:11:67:ILE:HG13	1.93	0.51
33:1b:48:MET:HA	33:1b:51:LEU:HD12	1.93	0.51
37:1f:8:ILE:HB	37:1f:61:LEU:HB2	1.92	0.51
39:1h:86:ILE:HD12	39:1h:133:LEU:HD22	1.92	0.51
41:1j:46:ARG:HB2	41:1j:46:ARG:HH11	1.75	0.51
1:2A:359:A:H2'	1:2A:360:G:O4'	2.09	0.51
7:2H:144:VAL:O	7:2H:148:ILE:HG13	2.10	0.51
32:2a:109:A:C6	32:2a:326:G:C6	2.99	0.51
32:2a:554:C:O2'	61:2a:3318:HOH:O	2.19	0.51
32:2a:1071:C:H2'	32:2a:1072:G:H8	1.76	0.51
32:2a:1314:C:N4	50:2s:2:PRO:O	2.39	0.51
34:2c:69:HIS:HA	34:2c:104:GLN:HB3	1.93	0.51
35:2d:57:ARG:NH1	35:2d:205:GLU:HB3	2.26	0.51
35:2d:112:VAL:HG22	35:2d:116:GLN:HE22	1.75	0.51
44:2m:101:GLN:OE1	44:2m:101:GLN:N	2.44	0.51
1:1A:1069:A:H4'	1:1A:1070:A:H5''	1.93	0.51
32:1a:69:G:H2'	32:1a:70:G:H8	1.76	0.51
32:1a:920:U:H2'	32:1a:921:U:C6	2.46	0.51
32:1a:1025:U:C2	32:1a:1036:G:O6	2.64	0.51
32:1a:1109:C:OP2	34:1c:176:HIS:ND1	2.44	0.51
45:1n:48:ALA:HB2	45:1n:53:LEU:HD12	1.92	0.51
1:2A:71:A:N7	19:2X:31:HIS:HE1	2.09	0.51
1:2A:407:G:H2'	1:2A:408:G:C8	2.46	0.51
1:2A:1851:U:H2'	1:2A:1852:C:O4'	2.11	0.51
1:2A:2315:G:H2'	1:2A:2316:C:C6	2.45	0.51
1:2A:2547:U:O2	10:2O:23:ARG:NH2	2.44	0.51
2:2B:3:C:H2'	2:2B:4:C:H6	1.74	0.51
6:2G:3:LEU:HD22	26:24:25:TYR:CE1	2.45	0.51
13:2R:100:LEU:HD21	13:2R:113:LEU:HD23	1.91	0.51
32:2a:862:C:H1'	32:2a:874:G:H5''	1.92	0.51
32:2a:1227:A:C8	50:2s:83:HIS:HB3	2.46	0.51
32:2a:1237:C:HO2'	32:2a:1300:G:H1	1.56	0.51
39:2h:116:LYS:HD3	39:2h:127:LEU:HD22	1.91	0.51
43:2l:35:GLY:HA3	43:2l:60:LEU:HD23	1.93	0.51
1:1A:171:G:O2'	1:1A:172:C:H5'	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1062:G:P	1:1A:1070:A:H1'	2.51	0.51
1:1A:2406:U:H2'	1:1A:2406:U:OP2	2.11	0.51
3:1D:146:GLU:HG2	3:1D:152:GLY:C	2.36	0.51
6:1G:131:TYR:HB3	6:1G:159:VAL:HG13	1.93	0.51
32:1a:815:A:N7	32:1a:1509:C:O2'	2.43	0.51
55:1x:8:4SU:O5'	55:1x:8:4SU:H6	2.11	0.51
54:1y:36:A:H2'	54:1y:37:MIA:O4'	2.11	0.51
1:2A:328:U:H4'	20:2Y:68:HIS:CD2	2.46	0.51
1:2A:1005:C:H2'	1:2A:1006:C:C6	2.46	0.51
4:2E:12:THR:HG22	4:2E:13:ARG:H	1.74	0.51
5:2F:53:THR:HG23	5:2F:55:GLY:N	2.25	0.51
32:2a:834:C:H2'	32:2a:835:U:C6	2.46	0.51
32:2a:1077:G:N2	32:2a:1080:A:OP2	2.40	0.51
32:2a:1206:G:C6	32:2a:1207:2MG:C5	2.99	0.51
54:2w:34:G:H2'	54:2w:35:A:C8	2.46	0.51
1:1A:1379:A:H4'	1:1A:1380:G:OP2	2.11	0.51
1:1A:1673:U:OP1	61:1A:4215:HOH:O	2.19	0.51
1:1A:1799:G:O2'	3:1D:181:GLU:OE2	2.24	0.51
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.11	0.51
1:1A:2168:G:N1	1:1A:2171:A:C8	2.79	0.51
1:1A:2291:U:H2'	1:1A:2292:C:C6	2.46	0.51
4:1E:179:GLU:HB2	4:1E:181:LEU:HD22	1.93	0.51
32:1a:1136:U:H5''	32:1a:1137:C:C2	2.46	0.51
1:2A:2131:G:N7	1:2A:2133:G:N2	2.59	0.51
1:2A:2749:A:OP1	7:2H:3:ARG:NH1	2.44	0.51
32:2a:719:C:O2'	49:2r:49:LYS:HB3	2.10	0.51
32:2a:1121:U:O2'	32:2a:1122:U:H5'	2.11	0.51
32:2a:1277:C:HO2'	32:2a:1279:A:H8	1.55	0.51
47:2p:42:ARG:HG2	47:2p:42:ARG:HH11	1.76	0.51
1:1A:2336:A:H61	22:10:43:THR:HG21	1.76	0.51
1:1A:2701:C:H2'	1:1A:2702:U:H2'	1.93	0.51
9:1N:73:THR:HB	9:1N:82:LEU:HD11	1.93	0.51
33:1b:139:LYS:O	33:1b:143:GLU:HG3	2.11	0.51
34:1c:59:ARG:O	41:1j:92:THR:HG22	2.11	0.51
40:1i:17:VAL:HA	40:1i:63:ILE:HG23	1.92	0.51
1:2A:1226:A:OP1	17:2V:84:LYS:HE2	2.11	0.51
1:2A:2128:C:H2'	1:2A:2129:C:O4'	2.11	0.51
1:2A:2537:U:H2'	1:2A:2538:C:C6	2.45	0.51
7:2H:3:ARG:NH2	7:2H:65:HIS:HB3	2.26	0.51
32:2a:130:A:H5'	48:2q:63:ARG:HE	1.75	0.51
32:2a:1272:G:N2	32:2a:1273:G:C5	2.79	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:18:GLY:HA2	33:2b:42:ILE:HG13	1.92	0.51
33:2b:92:TYR:CZ	33:2b:151:GLY:HA3	2.46	0.51
39:2h:12:ARG:NH1	39:2h:27:PRO:HD3	2.26	0.51
40:2i:17:VAL:HG21	40:2i:80:GLY:C	2.36	0.51
44:2m:5:ALA:HB3	44:2m:22:ILE:HD13	1.93	0.51
1:1A:247:G:H4'	1:1A:386:G:C5	2.46	0.50
1:1A:558:G:OP1	9:1N:111:PRO:HD2	2.10	0.50
1:1A:1364:G:OP2	23:11:3:LYS:HG3	2.11	0.50
1:1A:1593:G:H2'	1:1A:1594:G:C8	2.47	0.50
2:1B:33:G:C2	2:1B:50:G:C2	2.98	0.50
3:1D:18:VAL:HG12	3:1D:211:ARG:NH2	2.26	0.50
7:1H:98:LEU:HD23	7:1H:102:ALA:O	2.11	0.50
21:1Z:138:GLU:H	21:1Z:156:LYS:NZ	2.09	0.50
32:1a:677:U:H3	32:1a:713:G:H22	1.58	0.50
32:1a:864:A:H2'	32:1a:865:A:C8	2.45	0.50
32:1a:1273:G:C2	32:1a:1274:G:H1'	2.46	0.50
33:1b:163:PHE:HA	33:1b:185:ILE:HG12	1.93	0.50
54:1y:23:A:H2'	54:1y:24:G:C8	2.45	0.50
1:2A:1359:A:C2	1:2A:1372:U:O4	2.64	0.50
1:2A:1374:G:H2'	1:2A:1375:C:H6	1.76	0.50
1:2A:1376:C:O2'	1:2A:1377:G:H5'	2.11	0.50
10:2O:2:ILE:HD12	10:2O:6:THR:HG21	1.92	0.50
32:2a:818:G:O2'	32:2a:819:A:H5'	2.12	0.50
32:2a:1208:C:H2'	32:2a:1209:C:H6	1.75	0.50
32:2a:1266:G:N2	32:2a:1268:A:H3'	2.26	0.50
32:2a:1321:C:H4'	44:2m:87:TYR:CE2	2.46	0.50
38:2g:46:ALA:HB1	38:2g:121:ALA:HB2	1.92	0.50
51:2t:43:LEU:HD13	51:2t:51:GLU:HG2	1.92	0.50
1:1A:1918:A:N6	61:1A:4371:HOH:O	2.43	0.50
1:1A:2352:A:N6	1:1A:2365:G:O2'	2.44	0.50
5:1F:148:LEU:HD22	5:1F:154:VAL:HG21	1.93	0.50
26:14:16:CYS:HA	26:14:33:VAL:O	2.10	0.50
32:1a:79:G:N2	32:1a:90:U:O2'	2.44	0.50
32:1a:1221:G:OP1	32:1a:1320:C:N4	2.40	0.50
55:1x:8:4SU:O2	55:1x:21:A:H2	1.94	0.50
54:1y:48:C:OP2	54:1y:48:C:H6	1.94	0.50
1:2A:749:C:OP2	61:2A:3948:HOH:O	2.19	0.50
1:2A:1815:A:P	3:2D:54:ARG:HH22	2.34	0.50
6:2G:16:ARG:O	6:2G:20:ILE:HG13	2.11	0.50
7:2H:17:VAL:HG11	7:2H:50:VAL:HG21	1.93	0.50
7:2H:24:VAL:O	7:2H:34:GLU:HA	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:128:VAL:HG22	21:2Z:129:SER:O	2.12	0.50
21:2Z:151:HIS:HB3	21:2Z:168:GLU:HA	1.92	0.50
32:2a:542:G:OP1	35:2d:10:ARG:NH2	2.35	0.50
39:2h:14:ARG:O	39:2h:18:ARG:HG3	2.12	0.50
1:1A:1268:A:C2	1:1A:2013:A:C4	3.00	0.50
1:1A:1364:G:P	23:11:3:LYS:HG3	2.52	0.50
1:1A:2059:A:OP2	61:1A:4240:HOH:O	2.19	0.50
1:1A:2106:G:H1	1:1A:2183:C:H42	1.59	0.50
8:1I:38:LEU:HD23	8:1I:38:LEU:N	2.25	0.50
18:1W:1:MET:HE3	18:1W:2:GLU:H	1.75	0.50
32:1a:438:G:N1	32:1a:495:A:OP2	2.42	0.50
32:1a:692:U:O2'	32:1a:694:A:N7	2.35	0.50
32:1a:963:G:H5'	61:1a:2108:HOH:O	2.11	0.50
32:1a:1031:G:H2'	32:1a:1032:G:C8	2.46	0.50
38:1g:78:ARG:NH1	38:1g:154:TYR:O	2.45	0.50
7:2H:124:GLU:OE2	7:2H:132:ARG:HD2	2.12	0.50
32:2a:814:A:H2'	32:2a:816:A:H5'	1.93	0.50
32:2a:1155:G:H2'	32:2a:1156:G:C8	2.47	0.50
1:1A:2319:G:H22	14:1S:3:ARG:HD3	1.77	0.50
4:1E:195:LEU:HG	4:1E:196:VAL:N	2.27	0.50
7:1H:116:GLU:HG3	7:1H:117:PRO:HD2	1.93	0.50
8:1I:93:THR:O	8:1I:97:ILE:HG13	2.11	0.50
29:17:24:THR:O	29:17:28:ARG:HG3	2.11	0.50
30:18:62:LEU:HB3	30:18:65:GLU:HG2	1.92	0.50
1:2A:607:U:OP1	5:2F:102:PRO:HA	2.12	0.50
1:2A:2294:C:OP2	14:2S:89:ARG:NH2	2.28	0.50
1:2A:2469:A:O3'	12:2Q:56:ARG:NH1	2.45	0.50
6:2G:41:GLN:O	6:2G:43:LEU:N	2.45	0.50
30:28:26:LYS:HB2	30:28:44:LYS:O	2.11	0.50
32:2a:659:U:H2'	32:2a:660:G:H8	1.76	0.50
32:2a:1125:U:H6	32:2a:1126:U:O2'	1.94	0.50
32:2a:1176:A:H2'	32:2a:1177:G:C8	2.47	0.50
36:2e:57:LYS:HG2	36:2e:61:TYR:CE2	2.43	0.50
46:2o:87:ILE:HG22	46:2o:88:ARG:N	2.24	0.50
1:1A:894:C:H2'	1:1A:895:U:O4'	2.12	0.50
1:1A:1688:U:O2	1:1A:1700:A:H5'	2.10	0.50
4:1E:121:ASN:ND2	61:1E:404:HOH:O	2.45	0.50
7:1H:154:PRO:HB3	7:1H:163:TYR:CZ	2.46	0.50
32:1a:171:A:H2'	32:1a:172:A:C8	2.46	0.50
32:1a:193:C:H2'	32:1a:194:C:H6	1.76	0.50
32:1a:1206:G:O4'	34:1c:194:GLY:HA2	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1456:G:O3'	51:1t:39:LYS:NZ	2.37	0.50
54:1w:4:C:H2'	54:1w:5:G:C8	2.46	0.50
54:1y:51:U:H2'	54:1y:52:G:H8	1.76	0.50
1:2A:2390:U:P	30:28:35:GLN:HE22	2.35	0.50
2:2B:24:G:N7	2:2B:56:G:H2'	2.26	0.50
2:2B:55:U:H1'	6:2G:29:TRP:CD1	2.47	0.50
12:2Q:10:ARG:HH11	12:2Q:11:LYS:HE2	1.77	0.50
20:2Y:40:GLU:O	20:2Y:42:VAL:HG23	2.12	0.50
25:23:8:LEU:HD23	25:23:30:ARG:O	2.12	0.50
32:2a:1317:C:N3	50:2s:37:ARG:NH2	2.58	0.50
32:2a:1513:A:H2'	32:2a:1514:C:C6	2.47	0.50
1:1A:1060:U:H3	1:1A:1088:A:H8	1.58	0.50
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.47	0.50
3:1D:147:LEU:HD13	3:1D:155:LEU:HD21	1.93	0.50
16:1U:81:HIS:CE1	16:1U:85:LYS:HD2	2.46	0.50
32:1a:789:U:O2'	32:1a:791:G:N7	2.41	0.50
32:1a:971:G:N1	32:1a:1363(A):A:OP2	2.42	0.50
46:1o:15:PHE:CZ	46:1o:84:LYS:HD2	2.47	0.50
1:2A:271(L):U:H5''	8:2I:50:ARG:HH11	1.77	0.50
1:2A:748:G:C8	18:2W:89:ALA:HB1	2.46	0.50
2:2B:46:A:H2'	2:2B:47:C:H6	1.76	0.50
8:2I:79:ILE:N	8:2I:143:SER:O	2.29	0.50
32:2a:524:G:H2'	32:2a:525:C:C6	2.47	0.50
33:2b:120:ALA:O	33:2b:125:PRO:HD2	2.12	0.50
1:1A:143:G:H1'	19:1X:37:THR:HG21	1.94	0.50
1:1A:1999:C:H4'	1:1A:2723:C:O2	2.10	0.50
1:1A:2615:U:H2'	1:1A:2616:C:C6	2.46	0.50
6:1G:16:ARG:O	6:1G:20:ILE:HG13	2.12	0.50
32:1a:116:A:OP1	61:1a:1921:HOH:O	2.20	0.50
32:1a:151:A:N6	32:1a:171:A:C6	2.80	0.50
32:1a:200:G:H1	32:1a:217:C:H42	1.58	0.50
32:1a:584:G:H5'	48:1q:91:ARG:NH2	2.27	0.50
40:1i:17:VAL:HG21	40:1i:81:ILE:HB	1.92	0.50
44:1m:19:LEU:HD21	44:1m:56:LEU:HD21	1.92	0.50
54:1w:1:G:OP3	61:1w:201:HOH:O	2.19	0.50
54:1w:51:U:H2'	54:1w:52:G:C8	2.47	0.50
1:2A:30:G:H2'	1:2A:31:C:H6	1.76	0.50
1:2A:84:A:H5''	20:2Y:8:LYS:NZ	2.26	0.50
1:2A:1411:C:H2'	1:2A:1412:A:H8	1.76	0.50
1:2A:2558:C:H2'	1:2A:2559:C:O4'	2.12	0.50
1:2A:2872:G:O2'	1:2A:2873:A:H5'	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:53:A:H8	2:2B:53:A:O5'	1.95	0.50
20:2Y:6:HIS:H	20:2Y:6:HIS:CD2	2.30	0.50
22:20:52:GLY:O	22:20:59:LEU:HA	2.12	0.50
25:23:8:LEU:HB2	25:23:28:LEU:HD22	1.94	0.50
32:2a:707:C:H2'	32:2a:708:C:H6	1.77	0.50
32:2a:1057:G:H2'	32:2a:1058:G:O4'	2.12	0.50
32:2a:1101:A:H8	33:2b:172:ILE:HD13	1.77	0.50
38:2g:68:ASN:ND2	38:2g:128:ALA:HA	2.21	0.50
38:2g:108:ALA:HA	38:2g:111:ARG:HD2	1.93	0.50
1:1A:1778:U:H2'	1:1A:1784:A:N6	2.26	0.50
1:1A:2143:C:H2'	1:1A:2144:U:O4'	2.12	0.50
1:1A:2683:C:O2	10:1O:70:LYS:NZ	2.36	0.50
32:1a:352:C:O2'	32:1a:354:G:OP1	2.28	0.50
32:1a:1027:C:C4	32:1a:1034:G:N1	2.80	0.50
32:1a:1347:G:H5''	40:1i:107:ARG:HB3	1.93	0.50
39:1h:87:SER:HB2	39:1h:93:VAL:HB	1.94	0.50
51:1t:57:ARG:HH12	51:1t:100:ILE:HD12	1.75	0.50
1:2A:315:G:H2'	1:2A:316:C:C6	2.47	0.50
1:2A:848:G:H2'	1:2A:849:A:C8	2.46	0.50
2:2B:11:C:O5'	2:2B:12:C:H5	1.95	0.50
6:2G:68:PRO:HB2	6:2G:90:LEU:HB3	1.93	0.50
17:2V:16:PRO:HD3	17:2V:99:ILE:HD11	1.94	0.50
28:26:13:CYS:SG	28:26:47:THR:HG21	2.51	0.50
32:2a:176:C:H2'	32:2a:177:C:C6	2.44	0.50
32:2a:547:A:OP1	61:2a:3319:HOH:O	2.19	0.50
32:2a:828:A:N6	32:2a:858:G:O2'	2.41	0.50
32:2a:1381:U:H1'	38:2g:79:ARG:HD3	1.94	0.50
35:2d:176:LEU:HD12	35:2d:182:LYS:O	2.11	0.50
36:2e:72:GLN:C	36:2e:73:ASN:HD22	2.19	0.50
38:2g:44:TYR:O	38:2g:47:CYS:HB2	2.12	0.50
1:1A:1851:U:H2'	1:1A:1852:C:O4'	2.12	0.50
12:1Q:17:LEU:HD21	12:1Q:96:VAL:HG13	1.94	0.50
23:11:8:SER:HB3	23:11:66:HIS:CD2	2.47	0.50
32:1a:651:C:O2'	32:1a:652:U:H5'	2.12	0.50
34:1c:162:GLN:NE2	53:1v:24:A:O3'	2.44	0.50
35:1d:184:LYS:O	35:1d:186:LEU:HD22	2.12	0.50
1:2A:96:G:H4'	24:22:48:HIS:CD2	2.47	0.50
1:2A:1012:U:C5	9:2N:28:THR:HG21	2.47	0.50
1:2A:1171:G:H8	1:2A:1171:G:O5'	1.95	0.50
1:2A:1300:U:H4'	1:2A:1301:A:H5''	1.94	0.50
1:2A:2052:G:H4'	4:2E:143:ASN:O	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2484:G:C2	1:2A:2485:G:C8	3.00	0.50
32:2a:70:G:H2'	32:2a:71:C:H6	1.76	0.50
32:2a:201:C:H5'	32:2a:202:U:OP2	2.12	0.50
32:2a:551:U:H2'	32:2a:552:U:C6	2.46	0.50
32:2a:952:U:H2'	32:2a:953:G:C8	2.47	0.50
33:2b:27:LYS:O	33:2b:194:PRO:HG2	2.12	0.50
38:2g:51:GLN:O	38:2g:55:GLY:HA2	2.12	0.50
1:1A:154(A):C:O5'	1:1A:154(A):C:H6	1.95	0.49
1:1A:639:U:H2'	1:1A:640:C:C6	2.47	0.49
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.47	0.49
5:1F:53:THR:HG23	5:1F:55:GLY:H	1.76	0.49
13:1R:56:LYS:NZ	13:1R:90:ARG:O	2.45	0.49
14:1S:10:ARG:O	14:1S:14:VAL:HG13	2.12	0.49
32:1a:452:A:O2'	32:1a:453:A:OP2	2.29	0.49
44:1m:40:ASN:O	44:1m:43:THR:OG1	2.30	0.49
1:2A:35:G:H1'	1:2A:454:A:C4	2.47	0.49
1:2A:212:G:H2'	1:2A:213:A:O4'	2.12	0.49
1:2A:1803:A:H4'	3:2D:259:THR:HG23	1.93	0.49
1:2A:2112:G:C2	1:2A:2113:U:H1'	2.47	0.49
1:2A:2820:A:OP2	13:2R:2:ARG:NH2	2.45	0.49
14:2S:19:LYS:C	14:2S:21:THR:H	2.20	0.49
32:2a:449:C:O2	47:2p:42:ARG:NH1	2.45	0.49
32:2a:528:C:H5'	32:2a:529:G:OP2	2.12	0.49
41:2j:25:GLU:OE2	41:2j:29:ARG:NE	2.44	0.49
42:2k:85:ARG:HG2	42:2k:111:ASP:O	2.12	0.49
1:1A:34:C:H5''	1:1A:35:G:OP2	2.12	0.49
1:1A:2181:G:O2'	1:1A:2182:G:OP1	2.28	0.49
3:1D:96:HIS:CD2	3:1D:102:LYS:HD3	2.47	0.49
4:1E:52:LEU:O	4:1E:76:ARG:N	2.45	0.49
7:1H:97:ARG:NE	7:1H:104:GLU:OE1	2.44	0.49
32:1a:7:G:H5'	32:1a:298:A:O4'	2.10	0.49
32:1a:78:G:C6	32:1a:91:C:N4	2.80	0.49
32:1a:945:G:OP1	61:1a:1920:HOH:O	2.19	0.49
32:1a:1298:C:C5	38:1g:114:ARG:HD3	2.48	0.49
32:1a:1347:G:O2'	32:1a:1373:G:O6	2.27	0.49
33:1b:109:SER:O	33:1b:112:VAL:HG22	2.10	0.49
54:1y:4:C:H2'	54:1y:5:G:O4'	2.13	0.49
32:2a:988:G:C1'	32:2a:1014:A:H61	2.23	0.49
32:2a:1330:U:H4'	44:2m:23:TYR:CE1	2.47	0.49
36:2e:102:ALA:HB2	36:2e:120:THR:HG21	1.95	0.49
37:2f:100:ASN:HB2	49:2r:27:GLY:O	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:2x:58:A:H4'	55:2x:59:A:OP1	2.12	0.49
1:1A:1094:U:H1'	1:1A:1097:U:C5	2.48	0.49
1:1A:1113:U:H2'	1:1A:1114:G:H8	1.77	0.49
30:18:32:LEU:O	30:18:36:LYS:HE3	2.13	0.49
32:1a:1175:G:H2'	32:1a:1176:A:C8	2.47	0.49
1:2A:441:U:H2'	1:2A:442:G:C8	2.47	0.49
1:2A:764:A:H5''	3:2D:210:GLY:CA	2.41	0.49
1:2A:2184:G:H2'	1:2A:2185:C:C6	2.47	0.49
2:2B:98:G:H3'	2:2B:99:G:H8	1.77	0.49
10:2O:98:VAL:HG13	10:2O:117:LEU:HB3	1.94	0.49
19:2X:12:VAL:HG22	19:2X:29:TRP:CE2	2.46	0.49
32:2a:1356:G:N2	32:2a:1367:C:O2	2.45	0.49
34:2c:183:ASP:O	34:2c:201:TYR:HA	2.12	0.49
35:2d:172:PRO:HB2	35:2d:187:ARG:NH2	2.27	0.49
46:2o:7:GLU:OE1	46:2o:38:ARG:NH2	2.37	0.49
46:2o:32:LEU:O	46:2o:36:ILE:HG13	2.11	0.49
1:1A:2649:U:H2'	1:1A:2650:U:C6	2.46	0.49
8:1I:77:LEU:HD21	8:1I:100:ALA:HB3	1.93	0.49
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.47	0.49
33:1b:84:GLU:OE1	33:1b:216:SER:HA	2.11	0.49
42:1k:48:ILE:CD1	42:1k:63:LEU:HB2	2.42	0.49
50:1s:63:THR:HG23	50:1s:66:MET:HE3	1.93	0.49
54:1y:38:A:H2'	54:1y:39:PSU:O4'	2.13	0.49
1:2A:379:G:N2	23:21:42:GLN:OE1	2.35	0.49
1:2A:1171:G:H22	1:2A:1178:C:N4	2.10	0.49
1:2A:1355:G:O6	61:2A:3943:HOH:O	2.19	0.49
1:2A:2819:G:H2'	1:2A:2821:A:N7	2.27	0.49
32:2a:543:C:O2'	32:2a:544:G:H5'	2.12	0.49
32:2a:558:G:OP1	61:2a:3320:HOH:O	2.19	0.49
32:2a:1085:U:H3'	32:2a:1086:U:H6	1.76	0.49
33:2b:16:HIS:HB2	33:2b:204:ASN:ND2	2.27	0.49
35:2d:172:PRO:HD2	35:2d:173:TRP:CZ3	2.48	0.49
39:2h:119:LEU:HB3	39:2h:123:GLU:HB2	1.93	0.49
3:1D:145:VAL:HG12	3:1D:146:GLU:O	2.13	0.49
6:1G:18:GLU:OE2	6:1G:22:ARG:HD2	2.13	0.49
11:1P:2:LYS:HG2	11:1P:3:LEU:N	2.28	0.49
12:1Q:84:GLY:O	12:1Q:85:LYS:HB2	2.12	0.49
32:1a:1330:U:H2'	32:1a:1331:G:H5'	1.95	0.49
34:1c:148:GLY:HA3	34:1c:172:ARG:H	1.76	0.49
37:1f:2:ARG:HD2	37:1f:69:GLU:HB3	1.95	0.49
1:2A:445:C:OP1	16:2U:2:PRO:HA	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:644:A:H4'	1:2A:645:C:C4	2.47	0.49
1:2A:1000:A:C4	1:2A:1155:A:C6	3.00	0.49
1:2A:1006:C:C2	1:2A:1138:G:N2	2.81	0.49
1:2A:2611:U:H3'	1:2A:2611:U:OP2	2.12	0.49
11:2P:90:ARG:HD2	11:2P:91:PHE:CZ	2.47	0.49
32:2a:859:A:H2'	32:2a:860:A:O4'	2.13	0.49
32:2a:1068:G:N7	32:2a:1094:G:C8	2.81	0.49
32:2a:1161:C:H2'	32:2a:1162:C:C6	2.47	0.49
33:2b:40:HIS:HB3	33:2b:190:THR:HG21	1.95	0.49
33:2b:178:ARG:HH22	39:2h:68:ARG:NH1	2.10	0.49
33:2b:219:VAL:CA	33:2b:222:ILE:HG12	2.38	0.49
38:2g:111:ARG:NH1	38:2g:113:GLU:OE2	2.45	0.49
1:1A:2124:G:H1	1:1A:2174:C:N4	2.07	0.49
11:1P:35:HIS:O	61:1P:301:HOH:O	2.19	0.49
32:1a:134:A:H61	47:1p:25:ARG:NH1	2.11	0.49
32:1a:975:A:H5'	32:1a:975:A:H8	1.78	0.49
33:1b:163:PHE:CD1	33:1b:185:ILE:HG13	2.48	0.49
42:1k:33:THR:HA	42:1k:39:PRO:HA	1.94	0.49
49:1r:25:THR:O	49:1r:26:LEU:HG	2.12	0.49
50:1s:80:TYR:CZ	50:1s:82:GLY:HA2	2.48	0.49
1:2A:600:G:O3'	5:2F:108:LYS:HE3	2.13	0.49
4:2E:9:VAL:HB	15:2T:3:ARG:HG2	1.94	0.49
6:2G:173:LEU:O	6:2G:178:PHE:N	2.46	0.49
32:2a:994:A:O2'	32:2a:995:C:H5'	2.11	0.49
32:2a:1411:C:H2'	32:2a:1412:C:H6	1.78	0.49
33:2b:98:LEU:O	33:2b:101:MET:HG3	2.13	0.49
34:2c:56:ASP:O	34:2c:57:ILE:HD12	2.13	0.49
40:2i:108:VAL:HG22	40:2i:109:VAL:H	1.78	0.49
1:1A:444:C:H5''	61:1A:4740:HOH:O	2.13	0.49
3:1D:26:LYS:HE2	3:1D:28:GLU:O	2.11	0.49
4:1E:50:GLY:HA3	4:1E:75:VAL:HG21	1.95	0.49
33:1b:133:LYS:HZ2	33:1b:137:ARG:HE	1.61	0.49
35:1d:101:LEU:HB2	35:1d:138:TYR:HB3	1.94	0.49
36:1e:41:VAL:O	36:1e:66:MET:HA	2.12	0.49
36:1e:145:LYS:O	36:1e:149:GLU:HG2	2.12	0.49
44:1m:23:TYR:CE2	44:1m:71:ARG:HG3	2.48	0.49
1:2A:818:G:OP2	61:2A:3942:HOH:O	2.19	0.49
1:2A:1184:G:H5'	25:23:29:ARG:NH1	2.28	0.49
1:2A:2023:G:H5'	1:2A:2617:C:H4'	1.94	0.49
7:2H:95:ARG:HD3	7:2H:106:THR:HB	1.95	0.49
8:2I:65:ALA:O	8:2I:69:LYS:N	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:22:29:LYS:HE2	24:22:57:ILE:HG21	1.93	0.49
25:23:59:VAL:HG12	25:23:60:GLU:N	2.27	0.49
28:26:53:LYS:NZ	61:26:201:HOH:O	2.45	0.49
32:2a:269:C:H2'	32:2a:270:A:C8	2.47	0.49
32:2a:344:A:OP2	32:2a:345:C:N4	2.37	0.49
40:2i:79:LEU:HG	40:2i:83:ARG:HD2	1.94	0.49
43:2l:40:VAL:HG21	43:2l:78:GLN:HA	1.95	0.49
44:2m:82:MET:HE3	44:2m:93:ARG:HB3	1.94	0.49
1:1A:264:C:O2'	1:1A:265:A:H2'	2.12	0.49
1:1A:655:A:H8	1:1A:656:G:C1'	2.25	0.49
1:1A:1292:U:H2'	1:1A:1293:C:C6	2.48	0.49
1:1A:2307:G:H4'	1:1A:2308:G:O5'	2.12	0.49
32:1a:441:A:H8	32:1a:441:A:OP2	1.96	0.49
32:1a:977:A:H1'	32:1a:982:U:O4	2.13	0.49
1:2A:652(T):C:H2'	1:2A:652(U):G:H8	1.75	0.49
1:2A:2331:G:O2'	1:2A:2336:A:N1	2.42	0.49
6:2G:122:PRO:O	6:2G:125:PHE:HD2	1.95	0.49
9:2N:42:TRP:HA	9:2N:48:MET:SD	2.53	0.49
19:2X:26:TYR:CE2	19:2X:89:ILE:HG13	2.48	0.49
32:2a:410:G:OP1	35:2d:30:LYS:NZ	2.32	0.49
32:2a:948:C:OP2	44:2m:106:ASN:HB2	2.13	0.49
32:2a:1517:G:H2'	32:2a:1518:MA6:H8	1.95	0.49
33:2b:107:THR:O	33:2b:110:GLN:HB3	2.12	0.49
34:2c:120:VAL:HG13	34:2c:133:ALA:HB1	1.94	0.49
40:2i:105:ASP:HB2	40:2i:107:ARG:HG3	1.95	0.49
44:2m:29:ARG:HD3	44:2m:64:TRP:CE2	2.48	0.49
50:2s:33:THR:HG22	50:2s:50:ALA:O	2.11	0.49
1:1A:249:C:O2	30:18:12:LYS:NZ	2.35	0.49
1:1A:363:G:H2'	1:1A:363(A):A:C8	2.46	0.49
1:1A:861:A:C2	1:1A:917:A:C4	3.01	0.49
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.47	0.49
1:1A:2483:C:N3	12:1Q:124:LYS:NZ	2.58	0.49
32:1a:130:A:O2'	32:1a:131:C:O5'	2.25	0.49
32:1a:527:G7M:HN72	43:1l:92:0TD:H3	1.94	0.49
32:1a:943:U:H2'	32:1a:944:G:H5'	1.93	0.49
32:1a:1175:G:H2'	32:1a:1176:A:H8	1.78	0.49
33:1b:16:HIS:CG	33:1b:17:PHE:N	2.81	0.49
37:1f:33:TYR:CD2	37:1f:75:LEU:HD23	2.47	0.49
41:1j:38:ILE:HG12	41:1j:71:LEU:O	2.13	0.49
51:1t:65:LYS:O	51:1t:68:LYS:HB3	2.13	0.49
1:2A:2285:C:OP2	28:26:6:ARG:NH1	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:2E:53:PRO:HA	4:2E:75:VAL:HA	1.94	0.49
5:2F:110:LEU:HD21	5:2F:181:LEU:HD23	1.94	0.49
6:2G:44:GLY:HA2	6:2G:88:ILE:HG22	1.94	0.49
10:2O:22:ILE:HG23	10:2O:41:ALA:HA	1.95	0.49
13:2R:104:ARG:HD2	13:2R:107:ASP:OD1	2.13	0.49
20:2Y:12:THR:OG1	20:2Y:26:LYS:HD3	2.12	0.49
26:24:46:GLN:C	26:24:48:ARG:N	2.66	0.49
32:2a:129(A):G:C6	32:2a:189(E):U:H4'	2.48	0.49
32:2a:279:A:OP2	48:2q:95:TYR:OH	2.19	0.49
32:2a:376:G:H5''	47:2p:5:ARG:HB2	1.95	0.49
32:2a:1004:A:N3	32:2a:1038:C:C2	2.81	0.49
32:2a:1055:A:H62	32:2a:1200:C:N4	2.11	0.49
32:2a:1273:G:H5'	32:2a:1274:G:OP2	2.13	0.49
34:2c:111:LEU:CD2	34:2c:146:ALA:HB2	2.43	0.49
34:2c:125:GLU:HB2	34:2c:190:ARG:HE	1.77	0.49
42:2k:48:ILE:HD11	42:2k:64:ALA:HA	1.95	0.49
43:2l:34:ARG:O	43:2l:61:THR:HG23	2.13	0.49
44:2m:3:ARG:NH2	44:2m:11:ARG:HG3	2.28	0.49
45:2n:32:SER:O	45:2n:40:CYS:HA	2.13	0.49
54:2w:58:A:H1'	54:2w:60:U:OP2	2.12	0.49
1:1A:583:G:OP2	16:1U:10:ARG:HD2	2.13	0.49
1:1A:721:C:H2'	1:1A:722:A:C8	2.48	0.49
1:1A:1371:G:H2'	1:1A:1372:U:H5	1.78	0.49
1:1A:2131:G:H5''	1:1A:2132:U:H3'	1.95	0.49
1:1A:2160:G:C6	1:1A:2161:C:N4	2.81	0.49
2:1B:32:C:C2	2:1B:51:G:N2	2.81	0.49
49:1r:37:VAL:CG2	49:1r:78:LEU:HB3	2.43	0.49
51:1t:29:LYS:O	51:1t:33:ILE:HG13	2.12	0.49
1:2A:271(O):C:H4'	8:2I:49:ALA:HB1	1.93	0.49
1:2A:1035:U:O4	61:2A:3947:HOH:O	2.19	0.49
1:2A:1203:G:OP2	1:2A:1204:A:O2'	2.26	0.49
1:2A:1294:U:HO2'	13:2R:26:LYS:HZ2	1.51	0.49
1:2A:2849:U:H4'	1:2A:2868:A:C2	2.48	0.49
4:2E:79:ARG:HG2	4:2E:79:ARG:NH1	2.27	0.49
5:2F:20:LEU:HA	5:2F:20:LEU:HD23	1.66	0.49
6:2G:20:ILE:HA	6:2G:25:TYR:HD2	1.77	0.49
33:2b:63:MET:HG3	33:2b:225:ALA:HB1	1.95	0.49
33:2b:185:ILE:CB	33:2b:199:TYR:HB2	2.42	0.49
42:2k:110:ASP:OD2	42:2k:112:THR:HG23	2.12	0.49
54:2y:23:A:H2'	54:2y:24:G:O4'	2.13	0.49
1:1A:2801(A):A:N3	1:1A:2895:U:H1'	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:1F:34:TRP:HA	11:1P:6:LEU:HD13	1.94	0.48
32:1a:161:A:H2'	32:1a:162:A:C8	2.47	0.48
32:1a:664:G:P	49:1r:64:ARG:HH21	2.37	0.48
43:1l:71:PRO:O	43:1l:102:ARG:NH1	2.41	0.48
1:2A:1015:G:H2'	1:2A:1016:G:C8	2.38	0.48
1:2A:1149:G:H2'	1:2A:1150:C:C6	2.48	0.48
1:2A:1713:U:H2'	1:2A:1714:G:H8	1.78	0.48
1:2A:2298:A:N6	1:2A:2318:G:C8	2.81	0.48
1:2A:2590:A:N3	61:2A:4008:HOH:O	2.35	0.48
29:27:24:THR:O	29:27:28:ARG:HG3	2.13	0.48
32:2a:977:A:H2	32:2a:1224:G:C6	2.31	0.48
32:2a:1251:A:H2'	32:2a:1252:A:C8	2.48	0.48
32:2a:1255:G:O3'	32:2a:1258:G:H1'	2.13	0.48
33:2b:222:ILE:HG13	33:2b:223:ILE:N	2.28	0.48
37:2f:97:PHE:CD2	49:2r:65:ILE:HD12	2.48	0.48
1:1A:284:U:H2'	1:1A:285:C:C6	2.48	0.48
1:1A:1783:A:H5'	1:1A:2608:G:H4'	1.95	0.48
35:1d:117:ALA:O	35:1d:121:VAL:HG23	2.13	0.48
2:2B:74:U:H3'	2:2B:75:G:H5''	1.95	0.48
14:2S:83:LYS:HB2	14:2S:111:GLU:OE1	2.13	0.48
17:2V:1:MET:HE2	17:2V:43:GLU:H	1.78	0.48
32:2a:536:C:O5'	32:2a:536:C:H6	1.97	0.48
33:2b:192:SER:O	33:2b:194:PRO:HD3	2.13	0.48
34:2c:51:GLY:O	34:2c:70:VAL:HG12	2.13	0.48
37:2f:5:GLU:N	37:2f:91:VAL:O	2.41	0.48
1:1A:654:A:OP2	61:1A:4241:HOH:O	2.20	0.48
1:1A:709:U:H2'	1:1A:710:G:C8	2.47	0.48
1:1A:1121:C:N4	61:1A:4251:HOH:O	2.46	0.48
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.46	0.48
26:14:63:TYR:N	26:14:64:GLY:HA2	2.28	0.48
32:1a:1095:U:H2'	32:1a:1096:C:C6	2.49	0.48
32:1a:1277:C:O2'	32:1a:1279:A:H1'	2.13	0.48
54:1y:67:C:H2'	54:1y:68:C:H6	1.78	0.48
1:2A:1429:G:H2'	1:2A:1430:C:C6	2.47	0.48
1:2A:2060:A:N3	61:2A:4010:HOH:O	2.35	0.48
1:2A:2180:U:H2'	1:2A:2181:G:O4'	2.12	0.48
3:2D:182:LEU:HB2	3:2D:272:ALA:HB3	1.94	0.48
12:2Q:38:GLU:HB2	12:2Q:127:ILE:HG22	1.94	0.48
32:2a:932:C:H2'	32:2a:933:G:C8	2.47	0.48
32:2a:986:A:H2'	32:2a:987:G:O4'	2.13	0.48
33:2b:82:ARG:HB2	33:2b:92:TYR:CZ	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2n:12:ARG:HB3	45:2n:12:ARG:HH11	1.77	0.48
50:2s:32:LYS:HA	50:2s:50:ALA:HB3	1.95	0.48
52:2u:20:LYS:O	52:2u:23:PRO:HD3	2.13	0.48
1:1A:2151:G:C6	1:1A:2152:G:C6	3.01	0.48
1:1A:2417:C:OP1	11:1P:65:ARG:NH2	2.45	0.48
22:10:10:THR:HA	61:10:209:HOH:O	2.13	0.48
32:1a:1263:C:H2'	32:1a:1264:C:C6	2.48	0.48
35:1d:128:VAL:O	35:1d:131:ARG:N	2.47	0.48
37:1f:21:LEU:O	37:1f:25:ILE:HG13	2.13	0.48
1:2A:531:C:OP1	1:2A:561:G:N1	2.38	0.48
1:2A:1184:G:H5'	25:23:29:ARG:HH11	1.78	0.48
1:2A:2525:G:N2	1:2A:2539:C:C2	2.81	0.48
21:2Z:19:ARG:NH1	21:2Z:84:GLU:O	2.47	0.48
21:2Z:157:LEU:HB3	21:2Z:161:VAL:HG13	1.93	0.48
32:2a:429:U:H1'	32:2a:430:A:H5''	1.94	0.48
32:2a:586:C:O2'	32:2a:878:G:H4'	2.13	0.48
32:2a:833:U:H2'	32:2a:834:C:C6	2.48	0.48
32:2a:943:U:H1'	40:2i:124:GLN:HE22	1.79	0.48
32:2a:1180:A:H5'	40:2i:103:THR:HG23	1.96	0.48
33:2b:78:GLN:NE2	33:2b:95:GLN:HE22	2.11	0.48
33:2b:223:ILE:HA	33:2b:226:ARG:HG2	1.96	0.48
36:2e:90:VAL:HG12	36:2e:121:LYS:O	2.13	0.48
42:2k:48:ILE:O	42:2k:50:TYR:N	2.37	0.48
18:1W:65:LEU:HD12	18:1W:68:ARG:NH1	2.28	0.48
32:1a:958:A:C6	32:1a:959:A:N1	2.82	0.48
1:2A:196:A:N3	1:2A:196:A:H2'	2.29	0.48
1:2A:994:C:O2'	1:2A:996:A:OP1	2.29	0.48
1:2A:1359:A:C2	1:2A:1360:A:C8	3.01	0.48
1:2A:2127:G:N1	1:2A:2161:C:C4	2.81	0.48
1:2A:2319:G:N2	14:2S:3:ARG:HA	2.29	0.48
2:2B:75:G:N3	21:2Z:85:HIS:CE1	2.82	0.48
5:2F:120:GLU:OE2	5:2F:122:LYS:HG3	2.13	0.48
6:2G:108:ASN:O	26:24:37:SER:N	2.46	0.48
6:2G:170:ARG:NH1	6:2G:174:GLU:OE2	2.47	0.48
8:2I:38:LEU:HB2	8:2I:40:THR:HG23	1.95	0.48
12:2Q:48:GLU:O	12:2Q:52:VAL:HG23	2.13	0.48
32:2a:1016:A:N6	32:2a:1017:G:N3	2.62	0.48
41:2j:8:LEU:HD23	41:2j:8:LEU:H	1.78	0.48
50:2s:63:THR:HG22	50:2s:66:MET:HG2	1.95	0.48
1:1A:784:A:O4'	3:1D:227:ASN:ND2	2.47	0.48
1:1A:1027:A:C2	1:1A:2488:A:H5'	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:60:GLU:OE2	8:1I:64:GLU:HB2	2.13	0.48
13:1R:2:ARG:HD2	61:1R:309:HOH:O	2.13	0.48
32:1a:112:G:OP1	47:1p:27:LYS:HD3	2.14	0.48
32:1a:848:C:H2'	32:1a:849:C:C6	2.48	0.48
32:1a:1504:G:OP1	32:1a:1507:A:H4'	2.13	0.48
33:1b:48:MET:HG2	33:1b:51:LEU:HD12	1.96	0.48
35:1d:144:ASP:N	35:1d:144:ASP:OD1	2.47	0.48
35:1d:194:LEU:HD13	35:1d:195:ALA:H	1.79	0.48
40:1i:56:LEU:HG	40:1i:57:GLY:N	2.28	0.48
44:1m:20:THR:C	44:1m:22:ILE:H	2.21	0.48
44:1m:67:GLU:HG3	44:1m:71:ARG:HH22	1.78	0.48
51:1t:10:LEU:HB3	51:1t:12:ALA:N	2.22	0.48
1:2A:658:C:H2'	1:2A:659:C:C6	2.48	0.48
1:2A:1037:G:H2'	1:2A:1038:C:O4'	2.14	0.48
1:2A:1507:A:O2'	1:2A:1508:A:O5'	2.31	0.48
1:2A:2637:U:OP1	4:2E:82:ARG:NH1	2.46	0.48
21:2Z:7:ALA:O	21:2Z:62:PRO:HD3	2.13	0.48
32:2a:335:C:H2'	32:2a:336:C:C6	2.49	0.48
32:2a:1403:C:C2	32:2a:1404:5MC:HM52	2.49	0.48
35:2d:107:ARG:HH11	35:2d:173:TRP:HZ2	1.62	0.48
35:2d:155:LEU:HD23	35:2d:156:GLU:H	1.79	0.48
38:2g:22:LEU:HG	38:2g:62:PHE:CE2	2.48	0.48
10:1O:24:VAL:HG13	10:1O:33:ALA:HB2	1.95	0.48
26:14:16:CYS:SG	26:14:17:GLY:N	2.85	0.48
32:1a:453:A:C6	32:1a:454:C:C4	3.01	0.48
32:1a:923:A:H5''	36:1e:21:ALA:HB2	1.96	0.48
33:1b:29:ALA:HA	33:1b:32:ILE:HG13	1.94	0.48
50:1s:52:TYR:HA	50:1s:56:GLN:O	2.12	0.48
1:2A:636:G:OP1	11:2P:132:LYS:NZ	2.44	0.48
1:2A:817:C:C2	1:2A:818:G:C8	3.01	0.48
7:2H:3:ARG:NH1	7:2H:4:ILE:H	2.10	0.48
11:2P:82:GLY:HA2	11:2P:113:LYS:O	2.13	0.48
16:2U:76:TYR:CZ	16:2U:80:ILE:HG13	2.48	0.48
21:2Z:100:VAL:HG21	21:2Z:134:PRO:HG2	1.95	0.48
21:2Z:129:SER:OG	21:2Z:130:PRO:HD2	2.14	0.48
32:2a:719:C:N4	49:2r:71:LYS:HE2	2.28	0.48
32:2a:946:A:H2'	32:2a:947:G:C8	2.49	0.48
33:2b:169:LYS:O	33:2b:169:LYS:HD3	2.13	0.48
38:2g:18:TYR:CG	38:2g:59:LEU:HD13	2.49	0.48
1:1A:185:U:H2'	1:1A:186:G:H8	1.79	0.48
1:1A:1075:C:H2'	1:1A:1076:C:H5'	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1359:A:C2	1:1A:1372:U:O4	2.67	0.48
1:1A:2136:C:N4	1:1A:2155:G:C6	2.80	0.48
1:1A:2206:G:H5''	1:1A:2207:G:C5	2.48	0.48
3:1D:169:GLU:OE2	3:1D:184:LYS:NZ	2.31	0.48
14:1S:14:VAL:O	14:1S:18:ILE:HG12	2.14	0.48
32:1a:1350:A:C2	32:1a:1351:U:C2	3.02	0.48
32:1a:1386:G:H2'	32:1a:1387:G:H8	1.78	0.48
34:1c:124:ILE:CG2	34:1c:130:VAL:HG22	2.44	0.48
35:1d:18:LYS:HG2	60:1d:302:SF4:S1	2.53	0.48
41:1j:61:GLU:OE1	45:1n:45:ARG:HD2	2.14	0.48
43:1l:57:LYS:HG3	43:1l:67:THR:HG22	1.96	0.48
1:2A:1193:G:OP1	11:2P:14:LYS:NZ	2.32	0.48
1:2A:2096:U:H2'	1:2A:2097:C:C6	2.49	0.48
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.49	0.48
2:2B:73:A:C4	2:2B:105:A:C2	3.01	0.48
6:2G:101:ILE:HD13	26:24:25:TYR:HB2	1.95	0.48
21:2Z:53:ILE:HG13	21:2Z:54:HIS:N	2.28	0.48
21:2Z:73:GLN:HB3	21:2Z:87:ASP:CG	2.38	0.48
21:2Z:145:GLU:HG3	21:2Z:146:ILE:N	2.29	0.48
22:20:10:THR:CG2	22:20:12:ASN:HB2	2.44	0.48
32:2a:8:A:N6	35:2d:209:ARG:HB2	2.28	0.48
32:2a:834:C:C2	32:2a:853:G:C2	3.01	0.48
32:2a:1102:A:O3'	33:2b:96:ARG:NH2	2.46	0.48
39:2h:7:ALA:O	39:2h:11:THR:OG1	2.31	0.48
1:1A:898:C:H41	1:1A:899:A:H62	1.62	0.48
1:1A:1005:C:H5''	61:1A:4287:HOH:O	2.13	0.48
1:1A:1164:G:H2'	1:1A:1165:U:C6	2.49	0.48
1:1A:1427:A:H4'	1:1A:1428:C:O4'	2.14	0.48
14:1S:93:LYS:HG2	14:1S:95:HIS:HB2	1.94	0.48
32:1a:1005:A:H5''	32:1a:1006:C:C5	2.48	0.48
51:1t:99:LEU:HA	51:1t:100:ILE:O	2.14	0.48
1:2A:27:G:O2'	1:2A:28:A:OP2	2.30	0.48
1:2A:854:G:H2'	1:2A:855:G:C8	2.48	0.48
1:2A:1027:A:C6	1:2A:1126:A:C4	3.01	0.48
1:2A:1028:A:N6	1:2A:1125:G:H2'	2.29	0.48
1:2A:2278:A:OP2	22:20:12:ASN:ND2	2.47	0.48
1:2A:2461:C:H2'	1:2A:2462:U:C6	2.49	0.48
11:2P:98:GLU:O	11:2P:101:VAL:HG12	2.14	0.48
14:2S:68:GLN:HA	14:2S:71:ARG:HD3	1.95	0.48
32:2a:1261:A:H5''	32:2a:1262:C:OP2	2.14	0.48
32:2a:1367:C:O2'	41:2j:62:HIS:HE1	1.97	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:33:VAL:HG13	36:2e:112:LEU:HD22	1.94	0.48
46:2o:69:TYR:CE1	46:2o:73:GLU:HG3	2.49	0.48
1:1A:1021:A:H3'	1:1A:1021:A:N3	2.28	0.48
4:1E:18:ASP:HB3	15:1T:82:LEU:HD21	1.95	0.48
8:1I:47:LEU:HD23	8:1I:47:LEU:HA	1.72	0.48
17:1V:98:GLU:CD	17:1V:100:ARG:HH11	2.22	0.48
32:1a:232:G:H1'	32:1a:262:A:N1	2.29	0.48
32:1a:872:A:C8	32:1a:874:G:C8	3.02	0.48
32:1a:1037:C:H2'	32:1a:1038:C:C6	2.49	0.48
6:2G:126:ASP:HB2	6:2G:130:ASN:O	2.14	0.48
8:2I:93:THR:HG22	8:2I:119:PRO:HB3	1.95	0.48
27:25:31:VAL:HG22	27:25:42:PRO:HD3	1.96	0.48
32:2a:189(D):C:H2'	32:2a:189(E):U:O4'	2.13	0.48
32:2a:1033:G:H2'	32:2a:1034:G:C8	2.48	0.48
32:2a:1094:G:O2'	32:2a:1108:G:N2	2.47	0.48
34:2c:20:SER:HB3	34:2c:22:TRP:NE1	2.28	0.48
37:2f:96:PRO:HB3	49:2r:30:ASP:CG	2.38	0.48
40:2i:49:PRO:HG3	40:2i:101:PHE:HD1	1.78	0.48
45:2n:24:CYS:HB2	45:2n:40:CYS:HB3	1.96	0.48
1:1A:253:C:OP2	30:18:5:LYS:NZ	2.29	0.47
1:1A:674:G:O2'	5:1F:74:ARG:HD3	2.14	0.47
1:1A:1354:A:H2'	1:1A:1355:G:O4'	2.14	0.47
1:1A:1899:G:N3	1:1A:1899:G:H2'	2.28	0.47
1:1A:2334:G:H4'	1:1A:2335:A:OP2	2.14	0.47
11:1P:50:ARG:HD3	30:18:7:HIS:CD2	2.49	0.47
11:1P:82:GLY:HA2	11:1P:113:LYS:O	2.13	0.47
18:1W:7:ALA:HB2	18:1W:50:VAL:HG22	1.96	0.47
23:11:3:LYS:O	23:11:12:PRO:HD3	2.14	0.47
26:14:43:TYR:C	26:14:45:GLY:H	2.22	0.47
33:1b:21:ARG:HG3	33:1b:21:ARG:O	2.13	0.47
39:1h:14:ARG:O	39:1h:18:ARG:HG3	2.14	0.47
43:1l:34:ARG:NH1	61:1l:301:HOH:O	2.44	0.47
1:2A:568:U:H5'	1:2A:945:A:N1	2.29	0.47
1:2A:999:U:O2'	1:2A:1000:A:H5'	2.14	0.47
1:2A:2723:C:OP2	4:2E:109:LYS:NZ	2.47	0.47
12:2Q:109:VAL:HG22	12:2Q:110:THR:H	1.79	0.47
14:2S:12:PHE:O	14:2S:16:ASN:ND2	2.47	0.47
14:2S:64:GLU:O	14:2S:68:GLN:HG2	2.14	0.47
32:2a:109:A:H2'	32:2a:326:G:N2	2.29	0.47
32:2a:254:G:OP1	48:2q:66:SER:OG	2.32	0.47
32:2a:542:G:P	35:2d:10:ARG:HH22	2.37	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1107:C:C4	32:2a:1108:G:C8	3.02	0.47
32:2a:1225:A:OP1	44:2m:103:THR:N	2.44	0.47
46:2o:9:GLN:O	46:2o:13:GLN:HG3	2.14	0.47
1:1A:361:G:C6	1:1A:362:U:O4	2.68	0.47
1:1A:886:C:N3	1:1A:887:A:C8	2.82	0.47
1:1A:897:C:H4'	54:1w:55:PSU:O3'	2.14	0.47
1:1A:1041:C:N4	1:1A:1114:G:H1	2.11	0.47
1:1A:1702:G:N7	61:1A:4300:HOH:O	2.35	0.47
1:1A:1939:5MU:OP1	1:1A:2604:U:O2'	2.33	0.47
1:1A:2714:G:OP2	61:1A:4239:HOH:O	2.19	0.47
2:1B:43:C:H5''	26:14:1:MET:CE	2.44	0.47
10:1O:26:LYS:HE2	10:1O:37:ASP:OD2	2.14	0.47
12:1Q:12:GLN:NE2	12:1Q:72:LYS:HG3	2.29	0.47
32:1a:185:A:O2'	32:1a:186:C:H5'	2.14	0.47
32:1a:560:U:H5	61:1a:1993:HOH:O	1.97	0.47
32:1a:1149:C:H2'	32:1a:1150:U:H6	1.77	0.47
38:1g:78:ARG:O	38:1g:84:ASN:HA	2.14	0.47
1:2A:869:G:C2	1:2A:909:A:C2	3.02	0.47
61:2A:4280:HOH:O	11:2P:44:GLY:HA2	2.13	0.47
2:2B:83:G:H1	2:2B:94:C:H42	1.62	0.47
2:2B:94:C:H2'	2:2B:95:C:C6	2.49	0.47
3:2D:108:PRO:HD2	3:2D:111:LEU:HD22	1.96	0.47
10:2O:7:TYR:HE2	10:2O:20:MET:CE	2.27	0.47
10:2O:48:PRO:CB	32:2a:1422:G:H5''	2.40	0.47
32:2a:114:U:C2'	32:2a:115:G:H5'	2.44	0.47
32:2a:828:A:H5''	32:2a:859:A:C2	2.50	0.47
32:2a:1176:A:H2'	32:2a:1177:G:O4'	2.14	0.47
35:2d:140:VAL:HG11	35:2d:146:ILE:HD11	1.96	0.47
55:2x:27:U:O2	55:2x:44:A:H2	1.97	0.47
1:1A:1079:C:H2'	1:1A:1080:C:O4'	2.14	0.47
1:1A:1155:A:P	16:1U:55:ARG:HD2	2.54	0.47
1:1A:2051:A:H5'	1:1A:2578:G:O4'	2.13	0.47
9:1N:109:LYS:HE2	61:1N:302:HOH:O	2.14	0.47
32:1a:1126:U:O2	32:1a:1280:A:H2'	2.14	0.47
38:1g:78:ARG:HG3	38:1g:156:TRP:HZ3	1.79	0.47
40:1i:6:GLY:O	40:1i:17:VAL:HG12	2.15	0.47
1:2A:1021:A:H3'	1:2A:1021:A:C8	2.49	0.47
5:2F:137:LYS:H	5:2F:137:LYS:HG2	1.36	0.47
17:2V:98:GLU:OE1	17:2V:100:ARG:NH1	2.47	0.47
21:2Z:130:PRO:O	21:2Z:133:ILE:HG13	2.13	0.47
26:24:41:PRO:HB3	26:24:49:PHE:CD1	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1086:U:H3	32:2a:1099:G:H22	1.61	0.47
32:2a:1129:C:H1'	32:2a:1146:A:H61	1.79	0.47
32:2a:1289:A:H2'	32:2a:1290:G:H5'	1.96	0.47
33:2b:100:GLY:HA2	33:2b:103:THR:OG1	2.14	0.47
33:2b:185:ILE:HG22	33:2b:199:TYR:HD2	1.79	0.47
34:2c:124:ILE:HG21	34:2c:130:VAL:HG13	1.96	0.47
37:2f:99:ALA:HB1	49:2r:23:LYS:NZ	2.29	0.47
39:2h:124:ALA:O	39:2h:128:GLY:N	2.46	0.47
41:2j:5:ARG:N	61:2j:302:HOH:O	2.46	0.47
41:2j:45:ARG:HG2	41:2j:47:PHE:CZ	2.49	0.47
41:2j:78:ASN:O	41:2j:81:THR:N	2.46	0.47
1:1A:278:A:OP2	1:1A:278:A:H8	1.97	0.47
1:1A:662:G:H5'	11:1P:14:LYS:O	2.14	0.47
1:1A:1165:U:H2'	1:1A:1166:C:C6	2.49	0.47
1:1A:1395:A:OP1	61:1A:4242:HOH:O	2.20	0.47
1:1A:2141:G:C6	1:1A:2142:C:C2	3.03	0.47
4:1E:101:ARG:HD2	4:1E:169:ASN:OD1	2.14	0.47
32:1a:502:G:H2'	32:1a:503:C:O4'	2.14	0.47
32:1a:1015:A:N3	32:1a:1218:C:O2'	2.42	0.47
32:1a:1036:G:H3'	32:1a:1037:C:C6	2.50	0.47
32:1a:1349:A:C2	32:1a:1374:A:C4	3.03	0.47
38:1g:78:ARG:HG2	38:1g:79:ARG:HG3	1.94	0.47
54:1y:68:C:C2	54:1y:69:G:C8	3.03	0.47
1:2A:455:C:H3'	1:2A:456:C:H5''	1.96	0.47
1:2A:656:G:H2'	1:2A:657:U:O4'	2.14	0.47
1:2A:774:A:H2'	1:2A:774:A:N3	2.29	0.47
1:2A:2655:G:O2'	1:2A:2664:G:O6	2.28	0.47
2:2B:66:A:N6	2:2B:108:U:H3'	2.30	0.47
16:2U:106:PHE:O	16:2U:110:VAL:HG23	2.14	0.47
21:2Z:128:VAL:HG21	21:2Z:132:ASN:O	2.14	0.47
32:2a:15:G:H2'	32:2a:16:A:H8	1.79	0.47
32:2a:607:A:H2'	32:2a:608:A:O4'	2.14	0.47
32:2a:693:G:H2'	32:2a:694:A:C8	2.49	0.47
32:2a:979:C:H2'	32:2a:980:C:O4'	2.14	0.47
38:2g:89:MET:SD	38:2g:155:ARG:HB2	2.54	0.47
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.97	0.47
44:2m:80:ARG:O	44:2m:84:ILE:N	2.46	0.47
1:1A:484:C:H2'	1:1A:485:C:C6	2.50	0.47
1:1A:700:G:O2'	1:1A:1632:A:N3	2.45	0.47
1:1A:882:G:H4'	54:1w:19:G:C6	2.48	0.47
1:1A:996:A:H4'	16:1U:91:ASP:OD2	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2801(A):A:H1'	1:1A:2895:U:H1'	1.97	0.47
14:1S:99:LYS:O	14:1S:103:GLU:HG3	2.14	0.47
1:2A:11:G:O5'	1:2A:11:G:H8	1.97	0.47
1:2A:30:G:C5	1:2A:31:C:C4	3.03	0.47
1:2A:41:C:H2'	1:2A:42:G:H8	1.78	0.47
1:2A:94(A):G:H2'	1:2A:95:G:O4'	2.15	0.47
1:2A:1021:A:H3'	1:2A:1021:A:H8	1.78	0.47
1:2A:1219:G:H1	1:2A:1230:C:N4	2.13	0.47
1:2A:1371:G:H2'	1:2A:1372:U:H5	1.79	0.47
1:2A:1504:C:H2'	1:2A:1505:C:H6	1.80	0.47
1:2A:2561:A:H4'	10:2O:22:ILE:HD11	1.97	0.47
13:2R:87:TYR:OH	13:2R:117:VAL:O	2.28	0.47
20:2Y:29:GLU:HB3	20:2Y:38:ILE:HD12	1.96	0.47
32:2a:1128:C:O2'	32:2a:1129:C:OP1	2.30	0.47
1:1A:904:C:O2'	21:1Z:169:GLU:OE2	2.32	0.47
1:1A:1113:U:H2'	1:1A:1114:G:C8	2.49	0.47
1:1A:2096:U:H3	1:1A:2193:G:H1	1.63	0.47
5:1F:184:TYR:CE2	5:1F:188:ARG:HD2	2.49	0.47
13:1R:96:ARG:HG2	13:1R:115:GLU:HG2	1.97	0.47
17:1V:82:ARG:NH1	61:1V:301:HOH:O	2.19	0.47
29:17:8:ASN:OD1	29:17:8:ASN:C	2.57	0.47
32:1a:584:G:H5'	48:1q:91:ARG:HH22	1.80	0.47
32:1a:751:U:H4'	46:1o:24:SER:HB3	1.95	0.47
38:1g:67:GLU:HA	38:1g:70:LYS:HD2	1.97	0.47
40:1i:17:VAL:HG11	40:1i:81:ILE:N	2.30	0.47
1:2A:222:A:H3'	1:2A:421:U:H5'	1.95	0.47
3:2D:12:SER:HB3	3:2D:208:LYS:HB3	1.96	0.47
5:2F:20:LEU:HD12	5:2F:125:LEU:HD13	1.97	0.47
6:2G:144:ILE:HG23	6:2G:148:MET:HE2	1.97	0.47
6:2G:148:MET:HB2	6:2G:148:MET:HE3	1.62	0.47
7:2H:26:VAL:O	7:2H:32:GLU:HA	2.14	0.47
26:24:59:PHE:HE2	50:2s:64:GLU:HB2	1.79	0.47
32:2a:598:U:O4	61:2a:3304:HOH:O	2.11	0.47
32:2a:828:A:H2'	32:2a:829:G:O4'	2.14	0.47
32:2a:840:C:H4'	32:2a:841:U:OP1	2.13	0.47
32:2a:977:A:O3'	32:2a:980:C:N4	2.48	0.47
32:2a:1049:U:H1'	32:2a:1201:A:N7	2.29	0.47
32:2a:1069:C:O2'	32:2a:1192:C:O2	2.30	0.47
32:2a:1087:G:N2	32:2a:1099:G:H1'	2.30	0.47
32:2a:1151:A:H5''	41:2j:42:THR:HG23	1.97	0.47
32:2a:1292:U:H2'	32:2a:1293:G:C8	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1359:C:O2'	32:2a:1361:G:N7	2.47	0.47
33:2b:219:VAL:O	33:2b:223:ILE:HG12	2.15	0.47
48:2q:48:GLU:OE1	48:2q:50:LYS:HE3	2.15	0.47
51:2t:10:LEU:HD23	51:2t:12:ALA:HB2	1.95	0.47
55:2x:18:G:O2'	55:2x:19:G:H5'	2.14	0.47
54:2y:61:C:H2'	54:2y:62:C:C6	2.49	0.47
1:1A:55:G:O2'	1:1A:127:A:N1	2.35	0.47
1:1A:864:G:O2'	1:1A:865:C:H5'	2.15	0.47
1:1A:1448:G:H4'	1:1A:1542:A:OP1	2.15	0.47
1:1A:2222:G:OP2	61:1A:4244:HOH:O	2.20	0.47
1:1A:2315:G:H2'	1:1A:2316:C:C6	2.50	0.47
1:1A:2464:C:H1'	61:1A:5536:HOH:O	2.15	0.47
23:11:11:ARG:HG3	23:11:12:PRO:HD2	1.96	0.47
32:1a:362:G:OP2	61:1a:1923:HOH:O	2.20	0.47
32:1a:848:C:H2'	32:1a:849:C:H6	1.79	0.47
32:1a:976:G:OP2	32:1a:1358:U:O2'	2.32	0.47
32:1a:1060:C:P	45:1n:45:ARG:HH22	2.37	0.47
32:1a:1255:G:N7	41:1j:43:ARG:NH2	2.62	0.47
33:1b:83:MET:HG3	33:1b:234:PRO:HG3	1.95	0.47
33:1b:93:VAL:HG11	33:1b:97:TRP:CD1	2.50	0.47
33:1b:178:ARG:HE	33:1b:178:ARG:HB3	1.58	0.47
40:1i:49:PRO:HG2	40:1i:81:ILE:HG23	1.95	0.47
43:1l:33:ARG:HB3	43:1l:60:LEU:HD22	1.97	0.47
46:1o:8:LYS:O	46:1o:12:ILE:HG13	2.15	0.47
1:2A:275:G:H2'	1:2A:276:A:O4'	2.15	0.47
1:2A:860:U:C2	1:2A:2268:A:C8	3.02	0.47
1:2A:861:A:N3	2:2B:79:C:O2'	2.48	0.47
1:2A:922:U:H2'	1:2A:923:C:C6	2.50	0.47
1:2A:1239:G:H2'	1:2A:1240:U:O4'	2.15	0.47
1:2A:1469:A:H2'	1:2A:1470:G:O4'	2.14	0.47
1:2A:1913:A:H4'	1:2A:1914:C:C5'	2.44	0.47
1:2A:2125:G:H1'	1:2A:2173:A:H61	1.80	0.47
1:2A:2134:A:H2'	1:2A:2134:A:N3	2.29	0.47
1:2A:2387:U:H1'	22:20:41:ARG:HE	1.80	0.47
1:2A:2646:C:H2'	1:2A:2647:U:O4'	2.14	0.47
4:2E:9:VAL:HG13	4:2E:25:VAL:O	2.14	0.47
4:2E:143:ASN:HB2	4:2E:147:PRO:HD2	1.97	0.47
5:2F:125:LEU:HB3	5:2F:196:LEU:HD21	1.96	0.47
5:2F:197:ASP:O	5:2F:200:GLU:HB3	2.15	0.47
7:2H:3:ARG:HH21	7:2H:65:HIS:HB3	1.79	0.47
12:2Q:110:THR:HB	12:2Q:113:GLN:H	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:23:46:ASN:O	25:23:50:VAL:HG22	2.14	0.47
30:28:55:ALA:O	30:28:59:LYS:HG3	2.14	0.47
32:2a:417:C:H2'	32:2a:418:C:H6	1.80	0.47
32:2a:587:G:N2	32:2a:754:C:OP2	2.43	0.47
32:2a:973:G:N3	41:2j:54:PHE:HE1	2.12	0.47
32:2a:1070:U:H2'	32:2a:1071:C:H6	1.79	0.47
32:2a:1135:U:H2'	32:2a:1137:C:N3	2.30	0.47
32:2a:1191:A:H5''	32:2a:1192:C:OP2	2.15	0.47
33:2b:184:VAL:O	33:2b:198:ASP:N	2.44	0.47
34:2c:47:LEU:HD11	34:2c:76:VAL:HA	1.97	0.47
34:2c:85:ARG:HB3	34:2c:85:ARG:CZ	2.45	0.47
36:2e:24:ARG:NH1	53:2v:24:A:OP2	2.48	0.47
37:2f:53:ALA:HB3	37:2f:86:ARG:CZ	2.44	0.47
37:2f:76:ALA:HB1	37:2f:80:ARG:HH22	1.80	0.47
39:2h:28:ALA:CB	39:2h:57:PRO:HB2	2.45	0.47
1:1A:185:U:H2'	1:1A:186:G:C8	2.50	0.47
1:1A:375:C:H2'	1:1A:376:C:C6	2.50	0.47
1:1A:1028:A:N6	1:1A:1125:G:H2'	2.29	0.47
13:1R:31:HIS:HD2	61:1R:313:HOH:O	1.97	0.47
28:16:35:GLU:OE2	28:16:50:ARG:NH1	2.45	0.47
32:1a:241:C:C2	32:1a:286:G:C2	3.03	0.47
32:1a:1315:U:H2'	32:1a:1316:G:O4'	2.15	0.47
32:1a:1503:A:C2	53:1v:12:A:H2	2.32	0.47
34:1c:120:VAL:O	34:1c:124:ILE:HG12	2.14	0.47
44:1m:14:ARG:NH2	44:1m:41:PRO:O	2.48	0.47
48:1q:10:VAL:HA	48:1q:20:THR:O	2.15	0.47
51:1t:30:LYS:O	51:1t:34:LYS:HG3	2.15	0.47
1:2A:581:C:H2'	1:2A:582:G:C8	2.50	0.47
1:2A:816:C:H2'	1:2A:817:C:H6	1.80	0.47
3:2D:121:PRO:HB3	3:2D:135:PHE:CE2	2.49	0.47
8:2I:38:LEU:HB2	8:2I:40:THR:CG2	2.45	0.47
32:2a:1287:A:N6	32:2a:1371:G:O4'	2.42	0.47
32:2a:1381:U:O2'	38:2g:79:ARG:HD3	2.14	0.47
38:2g:65:ALA:HB1	38:2g:127:ALA:HB3	1.95	0.47
42:2k:44:SER:OG	42:2k:47:VAL:HG23	2.14	0.47
42:2k:82:VAL:HB	42:2k:108:ILE:HD13	1.96	0.47
44:2m:43:THR:OG1	44:2m:48:LEU:HD21	2.15	0.47
51:2t:72:LEU:HD12	51:2t:72:LEU:HA	1.78	0.47
54:2y:8:4SU:H6	54:2y:8:4SU:O5'	2.14	0.47
24:12:7:ARG:O	24:12:11:GLU:HG3	2.15	0.47
32:1a:203:U:OP2	32:1a:203:U:H6	1.98	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:278:G:OP2	48:1q:92:ARG:NH2	2.47	0.47
32:1a:373:A:O2'	32:1a:374:A:H5'	2.14	0.47
32:1a:649:G:H2'	32:1a:650:G:H8	1.80	0.47
32:1a:731:G:H5'	32:1a:766:A:H4'	1.97	0.47
54:1y:66:U:C4	54:1y:67:C:C4	3.03	0.47
1:2A:1359:A:N1	1:2A:1372:U:C4	2.82	0.47
1:2A:2080:G:N2	1:2A:2241:A:C4	2.83	0.47
2:2B:103:G:H21	21:2Z:73:GLN:NE2	2.13	0.47
5:2F:150:GLY:HA2	5:2F:172:TRP:CD2	2.49	0.47
21:2Z:72:ARG:NH1	21:2Z:97:GLU:O	2.32	0.47
32:2a:1064:G:C6	32:2a:1191:A:N6	2.79	0.47
32:2a:1272:G:N2	32:2a:1273:G:N7	2.61	0.47
33:2b:80:ILE:HD11	33:2b:212:GLN:HE21	1.80	0.47
1:1A:2461:C:H2'	1:1A:2462:U:C6	2.50	0.47
7:1H:154:PRO:HB3	7:1H:163:TYR:CE1	2.50	0.47
8:1I:126:TYR:HB2	8:1I:142:VAL:HG23	1.96	0.47
14:1S:61:ASN:O	14:1S:65:VAL:HG23	2.14	0.47
24:12:24:LEU:O	24:12:28:LYS:HG3	2.15	0.47
32:1a:626:U:N3	32:1a:627:G:N7	2.62	0.47
32:1a:1004:A:H5''	32:1a:1025:U:C5	2.50	0.47
32:1a:1162:C:O5'	32:1a:1162:C:H6	1.97	0.47
38:1g:115:ARG:HB2	38:1g:118:VAL:HG23	1.98	0.47
40:1i:28:VAL:HG22	40:1i:63:ILE:HB	1.96	0.47
41:1j:30:SER:HB3	41:1j:81:THR:HG23	1.97	0.47
41:1j:50:ILE:HB	45:1n:41:ARG:HD2	1.96	0.47
43:1l:53:ARG:HB3	43:1l:69:TYR:HE1	1.80	0.47
50:1s:20:LEU:HA	50:1s:23:ASN:HD22	1.80	0.47
51:1t:87:LYS:O	51:1t:91:LEU:HG	2.15	0.47
1:2A:864:G:N2	1:2A:913:U:C2	2.83	0.47
1:2A:892:G:N2	1:2A:894:C:OP2	2.47	0.47
1:2A:2815:C:H2'	1:2A:2816:C:C6	2.50	0.47
3:2D:70:TRP:CE2	3:2D:150:LYS:HD3	2.50	0.47
9:2N:96:GLU:CD	9:2N:96:GLU:H	2.23	0.47
32:2a:587:G:N1	32:2a:754:C:OP2	2.47	0.47
32:2a:1013:G:O2'	32:2a:1015:A:N7	2.35	0.47
32:2a:1371:G:O3'	40:2i:69:GLY:HA3	2.15	0.47
33:2b:81:VAL:HB	33:2b:94:ASN:HD21	1.80	0.47
35:2d:109:GLY:HA3	35:2d:165:MET:HE3	1.97	0.47
36:2e:78:HIS:HD2	36:2e:142:LEU:HD23	1.79	0.47
38:2g:38:LEU:O	38:2g:38:LEU:HD12	2.14	0.47
43:2l:38:THR:O	43:2l:79:GLU:HG3	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2y:48:C:H2'	54:2y:59:U:H1'	1.98	0.47
1:1A:548:A:H61	17:1V:19:LYS:H	1.64	0.46
1:1A:897:C:C4	1:1A:898:C:N4	2.82	0.46
1:1A:1161:C:O2'	17:1V:8:GLY:HA2	2.15	0.46
1:1A:1328:G:O2'	1:1A:1329:U:H2'	2.16	0.46
12:1Q:7:MET:HE3	12:1Q:7:MET:HB3	1.66	0.46
13:1R:38:VAL:HG12	13:1R:42:LYS:HE3	1.97	0.46
26:14:61:ARG:NH2	50:1s:41:VAL:HG12	2.30	0.46
32:1a:507:C:OP2	32:1a:508:C:O2'	2.25	0.46
32:1a:1054:C:C4	32:1a:1196:U:H5	2.33	0.46
32:1a:1066:C:O2'	32:1a:1067:A:H5'	2.15	0.46
32:1a:1221:G:C2'	32:1a:1222:G:H5'	2.45	0.46
33:1b:15:VAL:HG21	33:1b:213:LEU:HD23	1.97	0.46
33:1b:61:LEU:HD11	33:1b:160:ASP:HB2	1.96	0.46
42:1k:48:ILE:HD13	42:1k:63:LEU:HB2	1.96	0.46
45:1n:15:LYS:HB3	45:1n:16:PHE:CD2	2.50	0.46
47:1p:49:LEU:O	47:1p:50:LYS:HE2	2.15	0.46
1:2A:856:C:N4	61:2A:3915:HOH:O	2.47	0.46
1:2A:1932:A:H2'	1:2A:1933:G:O4'	2.14	0.46
2:2B:33:G:C2	2:2B:50:G:C2	3.03	0.46
6:2G:36:LYS:HG2	6:2G:160:VAL:HG22	1.97	0.46
8:2I:117:GLU:OE1	8:2I:118:LYS:N	2.35	0.46
17:2V:62:LEU:HD11	17:2V:95:LEU:HB2	1.97	0.46
32:2a:37:U:O2'	32:2a:500:G:H4'	2.15	0.46
32:2a:316:G:OP2	32:2a:351:G:O2'	2.31	0.46
32:2a:559:A:OP1	36:2e:126:ARG:NH2	2.48	0.46
32:2a:742:G:P	46:2o:35:ARG:HH22	2.37	0.46
32:2a:922:G:C6	32:2a:923:A:C6	3.02	0.46
43:2l:117:ARG:NE	43:2l:123:LYS:O	2.42	0.46
46:2o:55:GLY:O	46:2o:59:MET:HG3	2.15	0.46
1:1A:1080:C:H5'	1:1A:1081:U:OP2	2.16	0.46
1:1A:1591:G:C6	1:1A:1592:C:C4	3.04	0.46
1:1A:2611:U:C4	27:15:3:LYS:HG2	2.50	0.46
34:1c:148:GLY:HA2	34:1c:171:GLY:HA3	1.96	0.46
53:1v:20:U:H2'	53:1v:21:C:C6	2.50	0.46
1:2A:855:G:H2'	1:2A:856:C:C6	2.49	0.46
1:2A:1013:C:H2'	1:2A:1014:U:H6	1.79	0.46
1:2A:1796:U:H2'	1:2A:1797:C:H6	1.77	0.46
1:2A:1902:C:H5'	3:2D:246:PRO:HD3	1.97	0.46
1:2A:2062:A:OP1	61:2A:3949:HOH:O	2.21	0.46
3:2D:108:PRO:HB3	3:2D:143:HIS:CE1	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:129:PHE:CD2	5:2F:163:VAL:HG21	2.50	0.46
10:2O:68:GLU:HB3	10:2O:78:ARG:HB2	1.97	0.46
13:2R:11:ASN:HD22	13:2R:11:ASN:N	2.13	0.46
15:2T:16:ARG:HB3	15:2T:18:ASP:OD1	2.16	0.46
32:2a:19:C:H5''	36:2e:86:ALA:HB1	1.97	0.46
32:2a:814:A:N7	32:2a:816:A:C4	2.83	0.46
32:2a:1006:C:H2'	32:2a:1007:C:C6	2.50	0.46
32:2a:1217:C:O2'	32:2a:1218:C:H5'	2.16	0.46
32:2a:1240:U:OP2	38:2g:115:ARG:HA	2.14	0.46
32:2a:1353:G:OP1	52:2u:10:ARG:NH1	2.48	0.46
32:2a:1479:C:H2'	32:2a:1480:G:H8	1.80	0.46
32:2a:1528:U:O3'	32:2a:1529:G:H3'	2.15	0.46
33:2b:211:ILE:O	33:2b:215:LEU:HB2	2.14	0.46
34:2c:42:LEU:O	34:2c:43:LEU:HD23	2.15	0.46
2:1B:24:G:N7	2:1B:56:G:H2'	2.30	0.46
2:1B:43:C:H5''	26:14:1:MET:HE2	1.96	0.46
8:1I:10:GLU:H	8:1I:10:GLU:HG3	1.52	0.46
8:1I:69:LYS:HE2	8:1I:73:GLU:OE2	2.14	0.46
17:1V:20:LEU:HD12	17:1V:20:LEU:HA	1.66	0.46
19:1X:1:MET:HE1	24:12:26:ARG:HH21	1.80	0.46
32:1a:92:C:H2'	32:1a:93:G:C8	2.50	0.46
32:1a:1003:G:C4	32:1a:1004:A:H2	2.33	0.46
32:1a:1176:A:H2'	32:1a:1177:G:C8	2.51	0.46
32:1a:1391:U:O2'	32:1a:1532:U:OP1	2.23	0.46
35:1d:101:LEU:O	35:1d:104:VAL:HG12	2.15	0.46
43:1l:24:VAL:HG21	43:1l:27:LEU:HD12	1.96	0.46
49:1r:66:LEU:O	49:1r:69:THR:OG1	2.22	0.46
54:1w:51:U:H2'	54:1w:52:G:H8	1.79	0.46
1:2A:40:C:H2'	1:2A:41:C:C6	2.51	0.46
1:2A:407:G:H2'	1:2A:408:G:H8	1.81	0.46
1:2A:2461:C:H2'	1:2A:2462:U:H6	1.81	0.46
1:2A:2503:2MA:H8	58:2A:3886:A1A1K:O	2.15	0.46
7:2H:143:GLN:NE2	7:2H:147:ASN:OD1	2.48	0.46
12:2Q:81:VAL:HG12	22:20:5:LYS:HD3	1.97	0.46
13:2R:16:HIS:O	13:2R:16:HIS:HD2	1.98	0.46
32:2a:539:A:H2'	32:2a:540:G:C8	2.51	0.46
32:2a:649:G:H2'	32:2a:650:G:O4'	2.14	0.46
32:2a:999:C:C4	32:2a:1000:U:C4	3.02	0.46
32:2a:1054:C:C5	54:2w:34:G:H1'	2.50	0.46
32:2a:1375:A:C6	32:2a:1376:U:C4	3.03	0.46
32:2a:1400:5MC:H5'	53:2v:18:G:C6	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:6:ILE:HD13	41:2j:98:ILE:HG12	1.97	0.46
41:2j:30:SER:OG	41:2j:84:GLN:OE1	2.29	0.46
43:2l:69:TYR:CE2	43:2l:71:PRO:HA	2.45	0.46
1:1A:443:A:H1'	1:1A:1201:C:O4'	2.15	0.46
1:1A:1405:U:H2'	1:1A:1406:U:H6	1.79	0.46
61:1A:4949:HOH:O	5:1F:70:THR:HG23	2.15	0.46
8:1I:37:VAL:HG13	8:1I:38:LEU:HD23	1.97	0.46
32:1a:748:C:O5'	32:1a:748:C:H6	1.98	0.46
32:1a:1118:C:OP1	40:1i:9:ARG:NH1	2.47	0.46
33:1b:80:ILE:HD12	33:1b:212:GLN:HA	1.97	0.46
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.48	0.46
34:1c:82:GLU:OE2	34:1c:85:ARG:NH1	2.48	0.46
38:1g:78:ARG:HG3	38:1g:156:TRP:CZ3	2.50	0.46
1:2A:719:C:H2'	1:2A:720:C:C6	2.51	0.46
1:2A:2303:G:O2'	6:2G:132:ASN:ND2	2.43	0.46
1:2A:2371:G:O2'	28:26:46:HIS:ND1	2.40	0.46
6:2G:38:VAL:HG12	6:2G:93:THR:HB	1.97	0.46
6:2G:51:ARG:H	6:2G:51:ARG:HD2	1.80	0.46
24:22:65:ASN:OD1	24:22:69:ARG:NH1	2.47	0.46
32:2a:976:G:C8	32:2a:1358:U:C2	3.03	0.46
32:2a:993:G:N3	32:2a:993:G:H2'	2.30	0.46
32:2a:1072:G:C6	32:2a:1073:U:C4	3.04	0.46
32:2a:1253:G:H2'	32:2a:1254:C:C6	2.51	0.46
33:2b:47:THR:O	33:2b:51:LEU:N	2.48	0.46
39:2h:28:ALA:HB3	39:2h:57:PRO:HB2	1.96	0.46
48:2q:56:VAL:O	48:2q:77:VAL:HB	2.15	0.46
50:2s:39:THR:HG22	50:2s:40:ILE:O	2.16	0.46
1:1A:1173:G:N2	1:1A:1177:A:OP2	2.41	0.46
4:1E:36:ARG:NH1	4:1E:85:ASN:OD1	2.49	0.46
5:1F:7:TYR:CD2	5:1F:24:LEU:HB2	2.51	0.46
7:1H:6:ARG:HH22	7:1H:54:ARG:NH2	2.13	0.46
13:1R:2:ARG:HG2	13:1R:5:LYS:HB2	1.98	0.46
14:1S:27:SER:O	14:1S:37:ALA:HA	2.16	0.46
26:14:58:ARG:O	26:14:61:ARG:HB3	2.16	0.46
32:1a:1044:A:C5	32:1a:1045:C:H1'	2.50	0.46
34:1c:121:ALA:HB1	34:1c:189:ALA:HB2	1.97	0.46
35:1d:114:ARG:O	35:1d:118:ARG:N	2.47	0.46
40:1i:18:PHE:HB2	40:1i:62:TYR:O	2.16	0.46
54:1y:55:PSU:O5'	54:1y:55:PSU:H6	1.99	0.46
1:2A:125:G:H1'	29:27:48:LYS:HD3	1.96	0.46
1:2A:900:A:C4	1:2A:901:A:C8	3.03	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2331:G:O2'	22:20:43:THR:HG22	2.16	0.46
1:2A:2400:G:H2'	1:2A:2401:U:C6	2.51	0.46
6:2G:150:ASP:OD1	6:2G:150:ASP:N	2.40	0.46
8:2I:122:GLU:O	8:2I:126:TYR:OH	2.34	0.46
21:2Z:102:LEU:HB2	21:2Z:104:PHE:CE2	2.50	0.46
32:2a:45:U:H2'	32:2a:46:G:C8	2.49	0.46
32:2a:340:U:H2'	32:2a:341:C:C6	2.51	0.46
32:2a:757:U:OP1	32:2a:822:C:O2'	2.29	0.46
32:2a:1076:C:OP1	33:2b:179:LYS:NZ	2.49	0.46
32:2a:1239:A:H62	32:2a:1299:A:H62	1.61	0.46
35:2d:155:LEU:HD23	35:2d:156:GLU:N	2.31	0.46
35:2d:201:GLN:HE21	36:2e:99:GLY:HA2	1.80	0.46
46:2o:11:VAL:HG21	46:2o:34:LEU:HD22	1.96	0.46
1:1A:452:G:C4	1:1A:458:G:C6	3.04	0.46
1:1A:1697:G:OP2	1:1A:1698:A:O2'	2.32	0.46
1:1A:1810:A:H2'	1:1A:1811:G:O4'	2.15	0.46
1:1A:2121:G:H1	1:1A:2177:C:N4	2.12	0.46
1:1A:2422:A:O4'	54:1y:76:A:N6	2.48	0.46
2:1B:2:C:H2'	2:1B:3:C:C6	2.50	0.46
5:1F:28:ILE:O	5:1F:30:PRO:HD3	2.16	0.46
8:1I:24:GLY:O	8:1I:28:ASN:HB2	2.16	0.46
24:12:23:LYS:O	24:12:27:GLU:HG3	2.16	0.46
28:16:5:VAL:HG11	28:16:28:ARG:HH21	1.80	0.46
32:1a:935:A:O2'	32:1a:1383:C:N3	2.49	0.46
41:1j:40:LEU:HD12	41:1j:69:ASN:HB3	1.98	0.46
1:2A:271(K):U:C2	8:2I:50:ARG:HD3	2.51	0.46
1:2A:2156:G:H2'	1:2A:2157:G:C6	2.50	0.46
1:2A:2334:G:H5'	14:2S:9:ARG:HG2	1.97	0.46
1:2A:2360:A:H2'	1:2A:2361:A:O4'	2.16	0.46
1:2A:2365:G:OP1	22:20:55:ARG:N	2.44	0.46
1:2A:2740:A:C6	1:2A:2764:A:C8	3.03	0.46
1:2A:2880:C:O3'	13:2R:90:ARG:NH1	2.48	0.46
5:2F:53:THR:HG22	5:2F:56:GLU:HG3	1.98	0.46
6:2G:33:ARG:O	6:2G:161:THR:HG23	2.16	0.46
6:2G:43:LEU:C	6:2G:45:GLU:N	2.73	0.46
7:2H:97:ARG:NE	7:2H:104:GLU:OE1	2.48	0.46
32:2a:867:G:OP2	32:2a:867:G:H8	1.98	0.46
32:2a:1263:C:C4	32:2a:1272:G:O6	2.68	0.46
50:2s:17:GLU:HA	50:2s:20:LEU:CG	2.44	0.46
1:1A:2336:A:H61	22:10:43:THR:HG22	1.80	0.46
2:1B:66:A:N6	2:1B:108:U:H2'	2.29	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:38:GLN:O	11:1P:39:LYS:CB	2.64	0.46
14:1S:110:LEU:HD12	14:1S:110:LEU:HA	1.81	0.46
15:1T:56:GLY:O	15:1T:59:THR:HG22	2.16	0.46
32:1a:841:U:OP2	32:1a:841:U:H6	1.97	0.46
32:1a:1398:A:O2'	61:1a:1922:HOH:O	2.20	0.46
34:1c:73:PRO:O	34:1c:77:ILE:HG12	2.15	0.46
38:1g:97:GLN:O	38:1g:101:LEU:HG	2.16	0.46
43:1l:39:VAL:HG11	43:1l:41:ARG:HH11	1.81	0.46
48:1q:22:LEU:HD11	48:1q:39:SER:HB2	1.98	0.46
50:1s:18:LYS:O	50:1s:22:LEU:HG	2.15	0.46
1:2A:141:A:C8	1:2A:1408:C:O2'	2.68	0.46
1:2A:2171:A:H1'	1:2A:2172:U:C6	2.51	0.46
1:2A:2183:C:H2'	1:2A:2184:G:H8	1.81	0.46
4:2E:181:LEU:HD12	4:2E:181:LEU:HA	1.70	0.46
8:2I:45:LYS:O	8:2I:49:ALA:N	2.40	0.46
8:2I:133:HIS:CD2	8:2I:134:PRO:HD2	2.50	0.46
14:2S:10:ARG:HG2	14:2S:91:PRO:HA	1.97	0.46
32:2a:270:A:H2'	32:2a:271:C:C6	2.50	0.46
32:2a:416:G:C5	32:2a:417:C:C4	3.03	0.46
32:2a:417:C:H2'	32:2a:418:C:C6	2.51	0.46
32:2a:600:C:O2'	32:2a:601:C:H5'	2.16	0.46
32:2a:967:5MC:H2'	32:2a:968:A:C8	2.51	0.46
32:2a:1235:U:O2'	32:2a:1305:G:O5'	2.34	0.46
32:2a:1309:G:OP1	44:2m:88:ARG:NH2	2.47	0.46
36:2e:43:LEU:HB2	36:2e:136:MET:SD	2.56	0.46
54:2y:30:G:H2'	54:2y:31:A:H8	1.80	0.46
1:1A:2280:G:O2'	1:1A:2388:A:N1	2.40	0.46
1:1A:2319:G:H1	14:1S:3:ARG:HA	1.81	0.46
6:1G:126:ASP:HB2	6:1G:130:ASN:O	2.15	0.46
32:1a:129:U:H5'	48:1q:3:LYS:NZ	2.31	0.46
35:1d:158:ILE:HD12	35:1d:159:ARG:N	2.31	0.46
38:1g:144:MET:HE2	38:1g:144:MET:HB3	1.72	0.46
39:1h:64:LYS:HG2	39:1h:79:VAL:HG21	1.97	0.46
40:1i:70:LYS:O	40:1i:74:ILE:HG13	2.16	0.46
44:1m:121:LYS:HE3	55:1x:28:C:OP1	2.15	0.46
9:2N:38:HIS:ND1	9:2N:39:ARG:HG3	2.31	0.46
10:2O:59:LYS:NZ	10:2O:89:ASN:OD1	2.49	0.46
21:2Z:4:ARG:HG2	21:2Z:58:VAL:HB	1.98	0.46
21:2Z:33:LEU:HD21	21:2Z:90:VAL:HG21	1.96	0.46
32:2a:141:A:H1'	32:2a:182:U:O2	2.16	0.46
32:2a:358:U:H2'	32:2a:359:U:C6	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:991:U:O2'	32:2a:1212:U:N3	2.46	0.46
32:2a:1057:G:C4	32:2a:1204:A:C2	3.03	0.46
32:2a:1135:U:H3'	32:2a:1137:C:N4	2.31	0.46
32:2a:1404:5MC:O2	32:2a:1519:MA6:O2'	2.30	0.46
32:2a:1503:A:C2	53:2v:13:A:C5	3.03	0.46
35:2d:59:ARG:HA	35:2d:59:ARG:HH11	1.80	0.46
37:2f:4:TYR:CE1	37:2f:92:LYS:HG3	2.51	0.46
37:2f:67:MET:HE1	37:2f:75:LEU:HD22	1.96	0.46
41:2j:8:LEU:HB3	41:2j:96:ILE:HD13	1.98	0.46
51:2t:9:ASN:O	51:2t:10:LEU:HB2	2.15	0.46
1:1A:1022:G:N7	9:1N:66:LYS:HE2	2.31	0.46
1:1A:1866:C:H2'	1:1A:1876:A:O4'	2.14	0.46
1:1A:2352:A:C4	1:1A:2366:A:C2	3.04	0.46
7:1H:157:TYR:CE1	7:1H:172:LYS:HG3	2.51	0.46
11:1P:39:LYS:HG3	11:1P:45:LEU:HD22	1.97	0.46
14:1S:35:ILE:HD13	14:1S:101:LEU:HD12	1.98	0.46
15:1T:127:ALA:C	15:1T:129:ARG:N	2.70	0.46
32:1a:175:C:H2'	32:1a:176:C:C6	2.51	0.46
32:1a:748:C:H4'	32:1a:749:C:O5'	2.16	0.46
32:1a:1074:G:O2'	32:1a:1101:A:N1	2.32	0.46
32:1a:1263:C:H2'	32:1a:1264:C:H6	1.81	0.46
44:1m:122:LYS:HG3	44:1m:123:ALA:H	1.80	0.46
50:1s:27:GLU:HG2	50:1s:28:LYS:HG2	1.98	0.46
54:1w:18:G:N2	54:1w:57:G:H2'	2.30	0.46
1:2A:374:A:C2	1:2A:401:A:C4	3.04	0.46
1:2A:800:A:H8	1:2A:800:A:OP1	1.99	0.46
1:2A:867:C:C5	1:2A:868:U:H5	2.34	0.46
1:2A:1027:A:N6	1:2A:1126:A:C4	2.84	0.46
1:2A:2274:A:C5	1:2A:2276:G:C8	3.04	0.46
1:2A:2377:A:H2'	1:2A:2378:A:C8	2.50	0.46
2:2B:42:C:C4	2:2B:43:C:C4	3.04	0.46
6:2G:60:LEU:O	6:2G:60:LEU:HD23	2.16	0.46
21:2Z:5:LEU:O	21:2Z:59:LEU:HA	2.16	0.46
21:2Z:102:LEU:HG	21:2Z:122:ARG:O	2.16	0.46
22:20:23:VAL:HG22	22:20:38:VAL:HG22	1.98	0.46
32:2a:1265:G:C4	32:2a:1271:G:N2	2.84	0.46
32:2a:1350:A:C2	32:2a:1351:U:C2	3.04	0.46
40:2i:3:GLN:NE2	40:2i:20:ARG:HH21	2.13	0.46
41:2j:11:PHE:CE1	41:2j:67:THR:HG22	2.51	0.46
44:2m:13:LYS:O	44:2m:45:VAL:HG23	2.16	0.46
54:2w:54:5MU:H2'	54:2w:55:PSU:O4'	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:278:A:O2'	1:1A:279:C:OP1	2.26	0.46
8:1I:135:GLU:C	8:1I:137:PRO:HD3	2.41	0.46
17:1V:50:PRO:HG2	17:1V:51:VAL:HG23	1.97	0.46
32:1a:1424:C:H2'	32:1a:1425:U:O4'	2.16	0.46
35:1d:146:ILE:H	35:1d:146:ILE:HD12	1.81	0.46
35:1d:190:ASP:O	35:1d:193:ASP:HB2	2.16	0.46
37:1f:8:ILE:HD11	37:1f:79:LEU:HD13	1.97	0.46
39:1h:95:VAL:HB	39:1h:99:GLU:HB2	1.98	0.46
41:1j:62:HIS:HB3	45:1n:59:ALA:HB3	1.97	0.46
42:1k:82:VAL:HG12	42:1k:108:ILE:HG23	1.98	0.46
1:2A:782:A:C2	3:2D:226:MET:HG2	2.51	0.46
1:2A:1027:A:C2	1:2A:2488:A:H5'	2.50	0.46
1:2A:1266:G:O2'	1:2A:2012:G:O6	2.32	0.46
1:2A:1952:A:C2	10:2O:22:ILE:HD12	2.51	0.46
5:2F:11:VAL:HG22	5:2F:125:LEU:HB2	1.98	0.46
8:2I:62:LYS:HG3	8:2I:63:ALA:N	2.31	0.46
32:2a:222:U:H2'	32:2a:223:U:H6	1.75	0.46
32:2a:432:A:H3'	32:2a:433:C:H6	1.79	0.46
32:2a:1184:G:H2'	32:2a:1185:G:H8	1.81	0.46
32:2a:1201:A:H4'	32:2a:1202:G:O5'	2.16	0.46
33:2b:149:LEU:HD22	33:2b:152:PHE:HD2	1.81	0.46
34:2c:13:GLY:N	34:2c:18:TRP:HZ3	2.14	0.46
43:2l:83:VAL:HG13	43:2l:100:ILE:HG23	1.98	0.46
1:1A:185:U:H4'	1:1A:218:A:H4'	1.98	0.45
1:1A:911:A:H2'	12:1Q:9:TYR:OH	2.16	0.45
1:1A:2319:G:H22	14:1S:3:ARG:CD	2.29	0.45
7:1H:96:ALA:HB2	7:1H:105:LEU:HD23	1.97	0.45
19:1X:88:LYS:HE3	19:1X:88:LYS:HB3	1.65	0.45
32:1a:44:G:O6	61:1a:1919:HOH:O	2.19	0.45
32:1a:299:G:O6	61:1a:1913:HOH:O	2.12	0.45
32:1a:343:U:O2'	32:1a:344:A:H2'	2.15	0.45
32:1a:1014:A:H4'	50:1s:14:HIS:NE2	2.31	0.45
33:1b:156:LYS:HA	33:1b:156:LYS:HD2	1.72	0.45
33:1b:196:LEU:HD12	33:1b:196:LEU:HA	1.83	0.45
54:1y:58:A:O2'	54:1y:60:U:OP2	2.25	0.45
1:2A:455:C:N3	1:2A:472:A:H2'	2.31	0.45
1:2A:1178:C:H2'	1:2A:1179:C:C6	2.51	0.45
1:2A:1877:A:OP2	1:2A:1877:A:H8	1.98	0.45
1:2A:2815:C:H2'	1:2A:2816:C:H6	1.80	0.45
4:2E:50:GLY:HA2	4:2E:77:ILE:O	2.16	0.45
9:2N:58:ASP:OD1	9:2N:58:ASP:N	2.47	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:2Q:97:VAL:HG11	12:2Q:103:MET:HE3	1.97	0.45
16:2U:24:TYR:HB2	16:2U:29:SER:HB3	1.99	0.45
31:29:12:ASP:OD1	31:29:12:ASP:N	2.47	0.45
32:2a:652:U:O2'	32:2a:653:A:O5'	2.34	0.45
32:2a:680:C:C2	32:2a:711:G:N2	2.84	0.45
32:2a:975:A:N1	41:2j:48:THR:HB	2.31	0.45
32:2a:1057:G:H5''	34:2c:154:SER:OG	2.16	0.45
32:2a:1070:U:H2'	32:2a:1071:C:C6	2.51	0.45
34:2c:173:VAL:O	34:2c:175:LEU:HD12	2.16	0.45
36:2e:81:GLU:HG2	36:2e:90:VAL:HG23	1.98	0.45
44:2m:14:ARG:HG2	44:2m:42:ALA:HA	1.98	0.45
1:1A:69:C:O2	1:1A:73:A:O2'	2.32	0.45
1:1A:579:G:H2'	1:1A:580:C:C6	2.52	0.45
1:1A:817:C:H4'	1:1A:932:G:C5	2.51	0.45
1:1A:2156:G:H2'	1:1A:2157:G:C2	2.50	0.45
1:1A:2408:U:H2'	1:1A:2409:G:C8	2.51	0.45
1:1A:2469:A:O3'	12:1Q:56:ARG:NH1	2.49	0.45
32:1a:160:A:H2'	32:1a:161:A:O4'	2.16	0.45
32:1a:258:G:H2'	32:1a:259:G:C8	2.50	0.45
32:1a:405:U:O2'	32:1a:498:U:H5'	2.16	0.45
32:1a:472:A:P	47:1p:75:ARG:HH22	2.39	0.45
32:1a:1375:A:C6	32:1a:1376:U:N3	2.84	0.45
32:1a:1529:G:H4'	32:1a:1530:G:OP2	2.17	0.45
33:1b:101:MET:HG3	33:1b:108:ILE:HD12	1.97	0.45
34:1c:119:ARG:O	34:1c:123:GLN:HG3	2.15	0.45
36:1e:83:GLU:HA	36:1e:87:SER:O	2.16	0.45
41:1j:38:ILE:HD11	41:1j:71:LEU:HB3	1.98	0.45
41:1j:81:THR:HA	41:1j:84:GLN:HB3	1.97	0.45
54:1w:18:G:H4'	54:1w:60:U:C5	2.51	0.45
1:2A:271(D):G:H2'	1:2A:271(E):U:C6	2.50	0.45
1:2A:300:A:N3	1:2A:319:C:H1'	2.31	0.45
1:2A:863:A:H2'	1:2A:864:G:H8	1.80	0.45
1:2A:1630:G:H2'	1:2A:1631:C:C6	2.51	0.45
1:2A:1916:A:H2'	1:2A:1917:PSU:O4'	2.17	0.45
1:2A:2273:A:O2'	1:2A:2274:A:H5'	2.15	0.45
11:2P:45:LEU:HD12	11:2P:45:LEU:HA	1.62	0.45
12:2Q:85:LYS:HE2	22:20:7:LEU:HD12	1.99	0.45
20:2Y:9:LYS:HA	20:2Y:10:GLY:HA2	1.57	0.45
25:23:10:LYS:HB3	25:23:53:LEU:HA	1.99	0.45
26:24:67:TYR:HD2	50:2s:9:VAL:HB	1.81	0.45
32:2a:391:G:C6	32:2a:392:G:C5	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:953:G:C5	32:2a:954:G:C8	3.04	0.45
32:2a:1056:U:O5'	34:2c:163:ALA:HB2	2.16	0.45
1:1A:324:A:H2'	1:1A:325:G:O4'	2.17	0.45
1:1A:2467:C:H4'	12:1Q:123:HIS:CD2	2.51	0.45
11:1P:19:VAL:HG12	11:1P:27:HIS:HB3	1.97	0.45
21:1Z:137:ILE:HG23	21:1Z:156:LYS:HE2	1.97	0.45
32:1a:438:G:H4'	35:1d:123:HIS:ND1	2.31	0.45
32:1a:1173:G:C4	32:1a:1174:G:C8	3.04	0.45
33:1b:19:HIS:HA	33:1b:39:ILE:HG23	1.98	0.45
36:1e:151:LEU:HD11	39:1h:77:GLU:HG2	1.99	0.45
37:1f:79:LEU:O	37:1f:85:VAL:HG11	2.16	0.45
47:1p:53:VAL:HG13	47:1p:79:VAL:HG13	1.98	0.45
49:1r:73:ALA:HB3	49:1r:79:LEU:HD12	1.98	0.45
54:1y:32:PSU:N3	54:1y:33:U:H5	2.15	0.45
1:2A:38:A:H2'	1:2A:39:C:C6	2.51	0.45
1:2A:84:A:OP2	20:2Y:8:LYS:NZ	2.36	0.45
1:2A:289:A:H2'	1:2A:290:G:O4'	2.16	0.45
1:2A:1001:A:H2'	1:2A:1002:G:O4'	2.16	0.45
1:2A:1021:A:N6	1:2A:1141:U:H3	2.10	0.45
1:2A:1237:A:OP1	61:2A:3951:HOH:O	2.21	0.45
1:2A:1886:C:H2'	1:2A:1887:C:C6	2.50	0.45
1:2A:2104:G:C2	1:2A:2186:G:C2	3.04	0.45
1:2A:2524:G:O6	61:2A:3938:HOH:O	2.18	0.45
5:2F:24:LEU:HD11	5:2F:199:TRP:HH2	1.80	0.45
8:2I:69:LYS:HA	8:2I:138:ILE:HD13	1.98	0.45
8:2I:87:LYS:HE2	8:2I:87:LYS:HB2	1.73	0.45
10:2O:26:LYS:HE2	10:2O:37:ASP:OD2	2.15	0.45
11:2P:101:VAL:HG21	11:2P:108:LYS:HG3	1.98	0.45
26:24:24:THR:OG1	26:24:25:TYR:N	2.49	0.45
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.52	0.45
32:2a:1264:C:H42	32:2a:1271:G:H1	1.63	0.45
33:2b:16:HIS:CG	33:2b:17:PHE:H	2.34	0.45
33:2b:187:LEU:HA	33:2b:201:ILE:O	2.17	0.45
36:2e:7:GLU:OE1	36:2e:37:ARG:NH2	2.47	0.45
41:2j:44:VAL:HG22	41:2j:66:ARG:HB3	1.98	0.45
48:2q:29:HIS:CD2	48:2q:30:PRO:HD2	2.51	0.45
52:2u:12:LYS:HE2	52:2u:21:TYR:HB2	1.98	0.45
1:1A:1030:G:OP2	12:1Q:128:LYS:NZ	2.49	0.45
1:1A:1603:A:OP1	61:1A:4242:HOH:O	2.21	0.45
1:1A:2327:A:H2'	1:1A:2328:A:C8	2.51	0.45
1:1A:2712:U:H2'	1:1A:2714:G:H5''	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:1N:60:ILE:HG13	9:1N:61:ARG:H	1.81	0.45
13:1R:118:GLU:H	13:1R:118:GLU:CD	2.24	0.45
32:1a:310:G:OP2	47:1p:27:LYS:HE2	2.17	0.45
32:1a:707:C:OP1	42:1k:85:ARG:NH1	2.49	0.45
32:1a:920:U:H2'	32:1a:921:U:H6	1.81	0.45
32:1a:1129:C:O2'	32:1a:1139:G:N7	2.44	0.45
33:1b:33:TYR:CB	33:1b:43:ASP:HB2	2.32	0.45
33:1b:214:ILE:O	33:1b:218:ALA:HB2	2.16	0.45
35:1d:70:ILE:HD11	35:1d:74:GLN:HB3	1.99	0.45
38:1g:93:PRO:HA	38:1g:96:GLN:HG3	1.98	0.45
51:1t:13:LEU:HD12	51:1t:14:LYS:N	2.31	0.45
1:2A:1477:A:H2'	1:2A:1478:G:O4'	2.16	0.45
1:2A:2309:A:H8	1:2A:2309:A:O5'	1.99	0.45
1:2A:2746:U:O3'	7:2H:138:LYS:HD3	2.16	0.45
32:2a:598:U:H2'	32:2a:599:C:H6	1.81	0.45
32:2a:983:A:H3'	32:2a:983:A:N3	2.30	0.45
32:2a:1054:C:C4	54:2w:34:G:H1'	2.51	0.45
32:2a:1065:U:H3	32:2a:1109:C:C5'	2.29	0.45
32:2a:1258:G:O2'	32:2a:1259:C:H5'	2.16	0.45
32:2a:1288:A:N1	32:2a:1371:G:H1'	2.30	0.45
33:2b:8:LYS:HG2	33:2b:9:GLU:H	1.80	0.45
36:2e:71:LEU:HD22	36:2e:115:VAL:HG13	1.99	0.45
36:2e:95:ALA:O	36:2e:97:GLY:N	2.50	0.45
1:1A:84:A:OP2	20:1Y:8:LYS:NZ	2.36	0.45
1:1A:272(J):C:H2'	1:1A:274:G:H8	1.81	0.45
1:1A:414:C:H2'	1:1A:415:A:C8	2.52	0.45
1:1A:548:A:N6	17:1V:19:LYS:H	2.13	0.45
1:1A:2794:C:N4	1:1A:2802:G:H22	2.14	0.45
10:1O:108:GLU:H	10:1O:108:GLU:HG3	1.55	0.45
17:1V:76:LYS:HB2	17:1V:81:TYR:HB3	1.98	0.45
17:1V:81:TYR:C	17:1V:82:ARG:HD2	2.41	0.45
32:1a:243:A:C2	32:1a:246:A:C8	3.05	0.45
32:1a:481:G:O2'	32:1a:483:C:N4	2.48	0.45
32:1a:909:A:H2'	32:1a:910:C:O4'	2.16	0.45
33:1b:10:LEU:HA	33:1b:48:MET:HE1	1.98	0.45
33:1b:16:HIS:CD2	33:1b:17:PHE:N	2.85	0.45
33:1b:59:GLU:HG3	33:1b:225:ALA:HB2	1.98	0.45
38:1g:106:GLN:O	38:1g:110:GLN:HG2	2.17	0.45
43:1l:42:THR:HA	43:1l:53:ARG:O	2.17	0.45
48:1q:50:LYS:HD2	48:1q:51:TYR:CE2	2.52	0.45
1:2A:622:G:H2'	1:2A:623:G:H8	1.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1178:C:H2'	1:2A:1179:C:H6	1.82	0.45
1:2A:2103:C:H2'	1:2A:2104:G:C8	2.51	0.45
1:2A:2340:G:H2'	1:2A:2341:G:C8	2.50	0.45
1:2A:2678:C:H2'	1:2A:2679:A:O4'	2.17	0.45
1:2A:2687:U:H2'	1:2A:2688:U:O4'	2.16	0.45
5:2F:202:PHE:O	5:2F:206:ILE:HG12	2.17	0.45
7:2H:51:ARG:NH2	7:2H:53:GLU:OE2	2.45	0.45
21:2Z:52:SER:CB	21:2Z:54:HIS:H	2.30	0.45
29:27:9:ARG:CZ	29:27:47:ARG:HG3	2.47	0.45
32:2a:102:G:C5	32:2a:103:C:C5	3.05	0.45
32:2a:445:G:H2'	32:2a:446:G:C8	2.52	0.45
32:2a:730:G:C5	32:2a:731:G:H1'	2.52	0.45
32:2a:757:U:H2'	32:2a:758:G:O4'	2.16	0.45
32:2a:1469:G:H2'	32:2a:1470:G:H8	1.82	0.45
34:2c:111:LEU:HD11	34:2c:144:SER:O	2.16	0.45
38:2g:26:PHE:CZ	38:2g:30:ILE:HD11	2.51	0.45
1:1A:361:G:N1	1:1A:362:U:O4	2.49	0.45
1:1A:910:A:N1	1:1A:2277:G:H1'	2.32	0.45
1:1A:1268:A:H2'	1:1A:1269:A:O4'	2.15	0.45
1:1A:1297:C:OP1	1:1A:2710:C:H4'	2.16	0.45
1:1A:1315:C:OP2	61:1A:4216:HOH:O	2.21	0.45
1:1A:1588:C:H2'	1:1A:1589:C:C6	2.47	0.45
1:1A:1858:G:OP2	1:1A:1858:G:H8	1.99	0.45
10:1O:1:MET:HE3	10:1O:32:TYR:CE2	2.51	0.45
32:1a:194:C:C2'	32:1a:195:A:H5''	2.47	0.45
32:1a:626:U:C2	32:1a:627:G:C8	3.05	0.45
32:1a:922:G:H2'	32:1a:923:A:C8	2.51	0.45
32:1a:1207:2MG:C6	32:1a:1208:C:C4	3.05	0.45
32:1a:1429:C:H2'	32:1a:1430:C:C6	2.51	0.45
33:1b:13:ALA:HB2	33:1b:44:LEU:HD13	1.98	0.45
1:2A:200:U:O2	1:2A:386:G:N2	2.49	0.45
1:2A:674:G:H1'	5:2F:74:ARG:HD3	1.98	0.45
1:2A:812:C:H2'	1:2A:813:U:H6	1.82	0.45
1:2A:910:A:N1	1:2A:2277:G:H1'	2.31	0.45
1:2A:918:A:N3	2:2B:80:U:O2'	2.41	0.45
1:2A:1005:C:C2	1:2A:1143:A:C6	3.05	0.45
1:2A:2127:G:C2	1:2A:2161:C:N3	2.84	0.45
1:2A:2507:C:H5''	1:2A:2573:C:N4	2.32	0.45
2:2B:43:C:OP1	26:24:6:HIS:NE2	2.49	0.45
9:2N:15:LEU:N	9:2N:136:GLU:O	2.43	0.45
21:2Z:45:ASP:O	21:2Z:49:ARG:HG3	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:21:67:ILE:N	23:21:68:PRO:HD2	2.32	0.45
25:23:18:ASP:OD1	25:23:19:GLN:N	2.50	0.45
28:26:38:LYS:HB3	28:26:38:LYS:HE3	1.65	0.45
32:2a:34:C:H2'	32:2a:35:G:H8	1.80	0.45
33:2b:187:LEU:HD23	33:2b:188:ALA:N	2.32	0.45
35:2d:172:PRO:HB2	35:2d:187:ARG:HH21	1.81	0.45
38:2g:26:PHE:O	38:2g:30:ILE:HD12	2.17	0.45
39:2h:82:HIS:CD2	39:2h:82:HIS:C	2.95	0.45
40:2i:13:ALA:HA	40:2i:67:GLY:O	2.17	0.45
51:2t:43:LEU:CD1	51:2t:51:GLU:HG2	2.47	0.45
1:1A:2156:G:H2'	1:1A:2157:G:C6	2.51	0.45
1:1A:2439:A:H5'	1:1A:2439:A:C8	2.52	0.45
1:1A:2581:G:N3	1:1A:2581:G:H2'	2.31	0.45
7:1H:3:ARG:NH1	7:1H:5:GLY:H	2.14	0.45
10:1O:76:ALA:O	15:1T:74:ARG:NH1	2.50	0.45
32:1a:309:G:O2'	32:1a:607:A:N1	2.50	0.45
32:1a:1003:G:H2'	32:1a:1004:A:N3	2.31	0.45
32:1a:1189:C:OP1	41:1j:51:ARG:NH2	2.36	0.45
32:1a:1428:A:H2'	32:1a:1429:C:O4'	2.17	0.45
33:1b:185:ILE:HG22	33:1b:199:TYR:CD2	2.52	0.45
39:1h:12:ARG:NH1	39:1h:27:PRO:HD3	2.32	0.45
54:1w:18:G:H4'	54:1w:60:U:C6	2.52	0.45
54:1w:37:MIA:H2'	54:1w:38:A:O4'	2.17	0.45
1:2A:438:G:H2'	1:2A:440:G:C8	2.52	0.45
1:2A:699:A:H2'	1:2A:700:G:O4'	2.16	0.45
1:2A:1423:G:OP1	1:2A:1492:G:O2'	2.32	0.45
1:2A:1740:G:H2'	1:2A:1740:G:N3	2.30	0.45
1:2A:2171:A:N3	1:2A:2172:U:N3	2.65	0.45
3:2D:96:HIS:CD2	3:2D:102:LYS:HG2	2.52	0.45
4:2E:28:ALA:HB3	4:2E:93:VAL:HG12	1.97	0.45
23:21:3:LYS:HB2	23:21:61:ARG:HH22	1.82	0.45
32:2a:587:G:OP1	39:2h:89:PRO:HB3	2.17	0.45
32:2a:868:C:H2'	32:2a:869:G:O4'	2.16	0.45
36:2e:82:VAL:HB	36:2e:138:ALA:HB2	1.98	0.45
1:1A:121:G:H4'	1:1A:149:A:H5'	1.98	0.45
1:1A:749:C:H4'	1:1A:1271:G:N3	2.32	0.45
1:1A:1047:G:O2'	1:1A:1048:A:H8	1.99	0.45
1:1A:2734:A:H2'	1:1A:2735:G:O4'	2.17	0.45
7:1H:11:VAL:HG13	7:1H:15:VAL:HG22	1.97	0.45
8:1I:27:ARG:HD3	23:11:71:TYR:CE2	2.52	0.45
9:1N:75:TYR:CE2	9:1N:77:GLY:HA2	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1O:104:ARG:CZ	15:1T:34:VAL:HG11	2.47	0.45
11:1P:45:LEU:HA	11:1P:45:LEU:HD12	1.65	0.45
19:1X:1:MET:HE3	19:1X:1:MET:HB2	1.94	0.45
20:1Y:9:LYS:HA	20:1Y:10:GLY:HA2	1.70	0.45
21:1Z:8:TYR:HB2	21:1Z:38:TYR:CE2	2.52	0.45
26:14:59:PHE:O	26:14:62:ARG:HD3	2.17	0.45
32:1a:392:G:OP1	47:1p:8:ARG:NH2	2.50	0.45
32:1a:812:C:O2	61:1a:1918:HOH:O	2.18	0.45
32:1a:938:A:C6	32:1a:939:G:C5	3.05	0.45
32:1a:1157:A:H61	32:1a:1178:G:H21	1.65	0.45
39:1h:13:ILE:O	39:1h:17:THR:HG23	2.17	0.45
1:2A:832:G:C5'	11:2P:45:LEU:HD11	2.46	0.45
1:2A:861:A:C2	1:2A:917:A:C4	3.04	0.45
1:2A:1593:G:H2'	1:2A:1594:G:C8	2.52	0.45
1:2A:2356:C:H2'	1:2A:2357:U:O4'	2.16	0.45
5:2F:117:ARG:O	5:2F:120:GLU:HG3	2.17	0.45
15:2T:19:LEU:HD22	15:2T:86:ILE:HD12	1.99	0.45
21:2Z:99:TYR:HA	21:2Z:124:ILE:O	2.17	0.45
23:21:2:SER:HB3	23:21:46:LEU:HD12	1.99	0.45
28:26:25:LYS:HE3	28:26:27:LYS:HA	1.98	0.45
32:2a:1269:A:N1	32:2a:1312:G:O2'	2.30	0.45
34:2c:47:LEU:HD22	34:2c:68:VAL:HG11	1.99	0.45
36:2e:32:VAL:HG11	36:2e:59:GLY:HA2	1.98	0.45
44:2m:19:LEU:HD21	44:2m:56:LEU:HD21	1.99	0.45
44:2m:28:ALA:C	44:2m:30:ALA:H	2.24	0.45
47:2p:49:LEU:HD12	47:2p:50:LYS:N	2.32	0.45
51:2t:90:GLN:O	51:2t:93:GLU:HG3	2.16	0.45
54:2w:39:PSU:H2'	54:2w:40:C:C6	2.46	0.45
1:1A:284:U:H2'	1:1A:285:C:H6	1.80	0.45
1:1A:857:C:N4	1:1A:858:U:O4	2.50	0.45
1:1A:2732:G:H3'	1:1A:2733:A:O4'	2.16	0.45
2:1B:44:G:C2	2:1B:48:A:C2	3.05	0.45
3:1D:34:VAL:HG12	3:1D:63:ARG:HG3	1.97	0.45
4:1E:143:ASN:HD22	4:1E:147:PRO:CD	2.30	0.45
30:18:33:ASN:HA	30:18:36:LYS:HE3	1.99	0.45
32:1a:177:C:O2'	32:1a:178:C:H5'	2.17	0.45
32:1a:640:A:C5	32:1a:641:U:C4	3.04	0.45
32:1a:1001(A):G:H2'	32:1a:1002:G:O4'	2.17	0.45
32:1a:1026:G:C8	32:1a:1027:C:O2	2.69	0.45
33:1b:78:GLN:HA	33:1b:78:GLN:HE21	1.82	0.45
38:1g:90:GLU:CD	38:1g:90:GLU:H	2.25	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:1s:36:ARG:HB3	50:1s:72:GLY:HA3	1.99	0.45
54:1y:46:G7M:H3'	54:1y:47:U:H5''	1.99	0.45
1:2A:186:G:H2'	1:2A:187:G:H8	1.82	0.45
1:2A:302:C:OP2	20:2Y:73:ARG:NH1	2.48	0.45
1:2A:530:G:O4'	1:2A:530:G:N3	2.50	0.45
1:2A:1032:A:H2	1:2A:1122:G:H22	1.65	0.45
1:2A:1131:G:O6	1:2A:2040:C:H1'	2.16	0.45
1:2A:1158:C:H4'	25:23:32:GLN:HB2	1.99	0.45
1:2A:2207:G:H2'	1:2A:2208:A:C2	2.52	0.45
1:2A:2404:C:N4	1:2A:2414:G:C6	2.84	0.45
1:2A:2745:C:H2'	1:2A:2746:U:O4'	2.17	0.45
1:2A:2839:G:H5'	13:2R:46:GLY:CA	2.43	0.45
6:2G:111:LEU:HD21	6:2G:120:LEU:HD11	1.99	0.45
20:2Y:3:VAL:HB	20:2Y:32:PRO:HB3	1.98	0.45
32:2a:863:U:H2'	32:2a:865:A:OP2	2.16	0.45
32:2a:1003:G:H2'	32:2a:1004:A:O4'	2.16	0.45
32:2a:1132:C:H2'	32:2a:1133:G:H8	1.82	0.45
32:2a:1323:G:H4'	32:2a:1363:C:N3	2.31	0.45
33:2b:19:HIS:HB2	33:2b:204:ASN:HB2	1.99	0.45
33:2b:27:LYS:HD3	33:2b:193:ASP:OD1	2.17	0.45
36:2e:67:VAL:O	36:2e:69:VAL:HG23	2.17	0.45
36:2e:76:ILE:HD12	36:2e:78:HIS:O	2.17	0.45
43:2l:77:LEU:HD21	43:2l:107:ALA:HB2	1.99	0.45
44:2m:15:VAL:O	44:2m:19:LEU:HG	2.17	0.45
44:2m:72:ALA:O	44:2m:75:ALA:HB3	2.17	0.45
44:2m:84:ILE:HG22	44:2m:84:ILE:O	2.17	0.45
45:2n:45:ARG:O	45:2n:49:HIS:HD2	1.99	0.45
54:2w:8:4SU:S4	54:2w:13:C:O2'	2.69	0.45
54:2y:64:A:H2'	54:2y:65:G:H5'	1.99	0.45
1:1A:1429:G:O2'	1:1A:1430:C:H5'	2.17	0.45
1:1A:2273:A:H2'	1:1A:2274:A:C8	2.52	0.45
1:1A:2871:C:N3	61:1A:4303:HOH:O	2.36	0.45
5:1F:89:VAL:HG12	5:1F:90:PHE:CD2	2.52	0.45
6:1G:7:LEU:HD12	6:1G:104:GLU:N	2.31	0.45
6:1G:179:PRO:HB2	26:14:42:PHE:CE2	2.52	0.45
20:1Y:35:TYR:CE2	20:1Y:69:ALA:HB3	2.52	0.45
32:1a:292:G:N7	32:1a:293:G:H1'	2.32	0.45
32:1a:396:G:O2'	32:1a:398:C:OP1	2.26	0.45
32:1a:399:G:H2'	32:1a:400:C:C6	2.52	0.45
32:1a:448:A:C4	32:1a:487:A:C2	3.04	0.45
32:1a:668:G:O2'	46:1o:46:HIS:HB3	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:828:A:H2'	32:1a:829:G:O4'	2.17	0.45
32:1a:973:G:H3'	32:1a:974:A:H5''	1.99	0.45
32:1a:1228:C:OP1	44:1m:115:LYS:NZ	2.42	0.45
32:1a:1239:A:C4	32:1a:1298:C:N4	2.85	0.45
38:1g:69:VAL:O	38:1g:69:VAL:HG12	2.17	0.45
51:1t:77:ALA:O	51:1t:81:LYS:HG3	2.17	0.45
1:2A:271(N):U:OP1	1:2A:271(N):U:H2'	2.16	0.45
1:2A:363:G:H2'	1:2A:363(A):A:H8	1.81	0.45
1:2A:614(B):G:H2'	5:2F:44:ARG:HH11	1.81	0.45
1:2A:674:G:O2'	5:2F:74:ARG:HD3	2.17	0.45
1:2A:927:G:H2'	1:2A:928:G:O4'	2.16	0.45
1:2A:2508:G:O3'	1:2A:2555:U:H5'	2.17	0.45
4:2E:54:GLN:NE2	4:2E:76:ARG:HG2	2.32	0.45
16:2U:104:GLN:NE2	16:2U:105:VAL:HG23	2.32	0.45
25:23:4:LEU:HD22	25:23:56:VAL:HG11	1.98	0.45
28:26:40:CYS:O	28:26:44:ARG:N	2.47	0.45
32:2a:1267:C:H5''	32:2a:1268:A:OP2	2.17	0.45
33:2b:28:PHE:CD1	33:2b:194:PRO:HG3	2.52	0.45
33:2b:55:PHE:CD1	33:2b:58:ILE:HD11	2.52	0.45
35:2d:158:ILE:HG22	35:2d:162:LEU:CD1	2.47	0.45
51:2t:87:LYS:O	51:2t:91:LEU:HG	2.17	0.45
1:1A:281:G:O2'	1:1A:359:A:N6	2.44	0.44
1:1A:606:U:H4'	1:1A:658:C:H4'	1.99	0.44
1:1A:642:G:N2	1:1A:645:C:OP2	2.44	0.44
1:1A:1500:G:H2'	1:1A:1501:C:H6	1.82	0.44
1:1A:1509(A):A:H3'	1:1A:1509(B):A:H8	1.82	0.44
9:1N:41:ASP:O	9:1N:48:MET:HE1	2.17	0.44
32:1a:1268:A:H2'	32:1a:1269:A:C8	2.51	0.44
33:1b:172:ILE:H	33:1b:172:ILE:HG13	1.46	0.44
33:1b:201:ILE:HG21	33:1b:214:ILE:HG21	1.99	0.44
35:1d:122:ARG:HD3	35:1d:134:ASP:O	2.17	0.44
1:2A:93:G:H2'	1:2A:94:C:H6	1.82	0.44
1:2A:191:A:H2'	1:2A:192:C:C6	2.52	0.44
1:2A:224:G:C2	1:2A:225:A:C4	3.04	0.44
1:2A:1038:C:H42	1:2A:1117:G:H1	1.63	0.44
1:2A:1229:G:C2	1:2A:1230:C:C2	3.05	0.44
1:2A:1490:A:O2'	3:2D:99:ASP:OD1	2.34	0.44
1:2A:1805:U:O2	3:2D:50:THR:HB	2.17	0.44
1:2A:2846:G:H2'	1:2A:2847:U:O4'	2.17	0.44
2:2B:2:C:H2'	2:2B:3:C:H6	1.82	0.44
2:2B:13:A:O2'	2:2B:14:U:H3'	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2D:92:ILE:HD12	3:2D:104:TYR:CD1	2.51	0.44
7:2H:118:PRO:HD2	7:2H:121:ILE:HB	1.98	0.44
9:2N:28:THR:HG22	9:2N:29:LYS:N	2.32	0.44
16:2U:100:VAL:HG12	16:2U:101:ARG:HG3	1.97	0.44
21:2Z:131:ARG:H	21:2Z:131:ARG:HD2	1.81	0.44
26:24:14:ILE:HB	26:24:22:ILE:HD13	1.99	0.44
32:2a:134:A:H61	47:2p:25:ARG:NH1	2.14	0.44
32:2a:198:G:C4	32:2a:199:G:C8	3.06	0.44
32:2a:728:A:N7	46:2o:54:ARG:HD3	2.32	0.44
32:2a:755:G:OP2	46:2o:65:ARG:HD2	2.17	0.44
32:2a:980:C:H3'	32:2a:981:U:C6	2.53	0.44
32:2a:1266:G:H22	32:2a:1268:A:H3'	1.82	0.44
32:2a:1305:G:C2	32:2a:1331:G:N3	2.85	0.44
32:2a:1390:U:H2'	32:2a:1391:U:C6	2.52	0.44
32:2a:1411:C:H2'	32:2a:1412:C:C6	2.53	0.44
36:2e:148:VAL:HG21	39:2h:107:LEU:HD23	1.99	0.44
38:2g:120:ILE:O	38:2g:124:LEU:HB2	2.17	0.44
42:2k:27:ASN:ND2	42:2k:55:LYS:HE3	2.32	0.44
54:2y:40:C:H2'	54:2y:41:C:C6	2.51	0.44
1:1A:1628:G:H2'	1:1A:1629:U:C6	2.53	0.44
1:1A:2359:C:H2'	1:1A:2360:A:O4'	2.18	0.44
2:1B:55:U:H2'	2:1B:56:G:O4'	2.17	0.44
22:10:68:GLU:OE1	22:10:82:ARG:HD3	2.18	0.44
23:11:50:ARG:HG2	23:11:59:THR:CG2	2.39	0.44
26:14:35:VAL:HG22	26:14:36:CYS:N	2.32	0.44
32:1a:341:C:H2'	32:1a:342:C:H6	1.83	0.44
32:1a:983:A:H5'	32:1a:984:C:OP2	2.17	0.44
32:1a:1523:G:OP1	42:1k:123:LYS:NZ	2.35	0.44
33:1b:219:VAL:HA	33:1b:222:ILE:HG13	1.99	0.44
1:2A:322:A:C5	1:2A:340:A:C2	3.05	0.44
1:2A:492:A:H2'	1:2A:493:G:O4'	2.18	0.44
1:2A:719:C:H2'	1:2A:720:C:H6	1.82	0.44
1:2A:1448:G:H4'	1:2A:1542:A:OP1	2.17	0.44
1:2A:1786:A:C4	1:2A:1938:A:C6	3.05	0.44
1:2A:1910:G:H2'	1:2A:1911:PSU:H6	1.80	0.44
1:2A:2695:C:H2'	1:2A:2696:U:H6	1.82	0.44
11:2P:77:ARG:HB2	11:2P:78:PRO:HD2	1.98	0.44
26:24:48:ARG:HD2	26:24:48:ARG:HA	1.55	0.44
32:2a:664:G:OP1	49:2r:64:ARG:NE	2.33	0.44
32:2a:1071:C:C2	32:2a:1072:G:C8	3.05	0.44
32:2a:1183:A:O2'	32:2a:1185:G:OP2	2.36	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1346:A:N6	38:2g:10:ARG:HH12	2.16	0.44
34:2c:39:ILE:O	34:2c:43:LEU:HG	2.17	0.44
34:2c:159:GLY:HA2	34:2c:193:TYR:CZ	2.52	0.44
37:2f:36:ARG:CZ	37:2f:36:ARG:HB3	2.47	0.44
52:2u:15:ARG:HG2	52:2u:15:ARG:NH1	2.30	0.44
1:1A:9:U:N3	1:1A:2629:A:H2	2.11	0.44
1:1A:1013:C:OP2	61:1A:4218:HOH:O	2.21	0.44
1:1A:1092:C:C2'	1:1A:1093:G:H5'	2.47	0.44
1:1A:1170:G:H8	1:1A:1170:G:H5''	1.83	0.44
1:1A:1178:C:H2'	1:1A:1179:C:H6	1.83	0.44
1:1A:1274:A:N3	1:1A:1297:C:H1'	2.33	0.44
6:1G:106:LEU:HA	6:1G:110:ALA:HB3	1.98	0.44
8:1I:30:LEU:HD23	8:1I:30:LEU:HA	1.76	0.44
9:1N:61:ARG:HD3	9:1N:61:ARG:HA	1.76	0.44
13:1R:9:LYS:O	13:1R:17:ARG:HD3	2.18	0.44
23:11:23:LYS:HB3	23:11:29:GLY:HA3	1.98	0.44
24:12:3:LEU:HA	24:12:3:LEU:HD23	1.67	0.44
26:14:40:HIS:O	26:14:43:TYR:N	2.47	0.44
32:1a:472:A:H2'	32:1a:473:G:O4'	2.18	0.44
32:1a:1027:C:N1	32:1a:1034:G:N2	2.65	0.44
32:1a:1092:A:N3	32:1a:1183:A:N6	2.66	0.44
32:1a:1503:A:N3	53:1v:13:A:N6	2.65	0.44
33:1b:170:GLU:O	33:1b:174:VAL:HG23	2.17	0.44
38:1g:26:PHE:CE2	38:1g:30:ILE:HD11	2.52	0.44
1:2A:272:G:H4'	1:2A:272(A):U:C5'	2.47	0.44
1:2A:330:A:H2	1:2A:1210:A:H2'	1.82	0.44
1:2A:855:G:O2'	22:20:27:GLU:OE2	2.34	0.44
1:2A:866:A:C6	1:2A:914:C:C5	3.05	0.44
1:2A:1344:G:O2'	1:2A:1385:G:H2'	2.17	0.44
1:2A:1598:C:H2'	1:2A:1599:C:H6	1.82	0.44
1:2A:1996:C:H4'	1:2A:1997:G:OP1	2.17	0.44
1:2A:2150:U:N3	1:2A:2151:G:N7	2.65	0.44
4:2E:101:ARG:HA	4:2E:170:LEU:O	2.17	0.44
6:2G:138:GLN:HB3	6:2G:153:ARG:O	2.16	0.44
7:2H:123:PHE:O	7:2H:124:GLU:HG3	2.18	0.44
9:2N:43:THR:HG22	9:2N:44:PRO:HD2	1.99	0.44
12:2Q:37:LEU:HD21	12:2Q:130:LYS:HE2	1.99	0.44
12:2Q:113:GLN:HE21	12:2Q:113:GLN:HB3	1.61	0.44
20:2Y:15:VAL:O	20:2Y:21:LYS:HA	2.18	0.44
23:21:52:ARG:HD3	23:21:56:GLN:O	2.17	0.44
26:24:2:LYS:O	26:24:4:GLY:N	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:24:22:ILE:O	26:24:24:THR:HG22	2.17	0.44
32:2a:108:G:C6	51:2t:15:ARG:HG2	2.52	0.44
32:2a:1381:U:O2	32:2a:1381:U:H2'	2.16	0.44
36:2e:76:ILE:HB	36:2e:142:LEU:HD22	1.99	0.44
40:2i:54:ASP:O	40:2i:56:LEU:HD12	2.17	0.44
40:2i:79:LEU:HD22	40:2i:104:ARG:HB2	1.99	0.44
45:2n:57:ARG:CG	45:2n:58:LYS:H	2.31	0.44
50:2s:53:ASN:ND2	50:2s:56:GLN:HB2	2.31	0.44
1:1A:1178:C:H2'	1:1A:1179:C:C6	2.52	0.44
1:1A:1510:G:H2'	1:1A:1511:C:C6	2.52	0.44
1:1A:1678:G:H5''	1:1A:1678:G:N3	2.33	0.44
1:1A:2811:G:N2	1:1A:2891:G:H1'	2.32	0.44
12:1Q:17:LEU:HD23	12:1Q:17:LEU:HA	1.74	0.44
19:1X:88:LYS:NZ	19:1X:90:GLU:OE1	2.46	0.44
26:14:68:ARG:HD3	26:14:69:LYS:N	2.32	0.44
32:1a:663:A:O3'	49:1r:64:ARG:NH2	2.47	0.44
32:1a:892:A:O2'	32:1a:1415:G:H4'	2.18	0.44
32:1a:1085:U:C2	32:1a:1094:G:O6	2.71	0.44
32:1a:1134:G:N3	32:1a:1134:G:H2'	2.32	0.44
35:1d:53:ASP:O	35:1d:57:ARG:HG3	2.18	0.44
35:1d:105:VAL:HG13	35:1d:110:PHE:HB2	1.98	0.44
36:1e:105:VAL:HG21	36:1e:128:PRO:HB3	1.98	0.44
37:1f:97:PHE:O	49:1r:31:LEU:HD23	2.16	0.44
45:1n:2:ALA:O	45:1n:6:LEU:HD12	2.18	0.44
1:2A:221:A:O4'	1:2A:233:A:H1'	2.17	0.44
1:2A:320:A:H4'	1:2A:322:A:N7	2.33	0.44
1:2A:467:G:OP1	29:27:33:ARG:HD2	2.18	0.44
1:2A:1342:A:O2'	1:2A:1344:G:OP2	2.26	0.44
1:2A:1412:A:H2'	1:2A:1413:G:C8	2.52	0.44
1:2A:1427:A:H4'	1:2A:1428:C:O5'	2.16	0.44
1:2A:2496:C:OP2	12:2Q:82:ARG:HD3	2.17	0.44
1:2A:2820:A:P	13:2R:2:ARG:HH22	2.40	0.44
5:2F:12:LEU:HG	5:2F:124:LEU:HD11	2.00	0.44
7:2H:6:ARG:HH22	7:2H:54:ARG:HH22	1.65	0.44
14:2S:3:ARG:HD2	14:2S:3:ARG:HA	1.80	0.44
19:2X:31:HIS:CD2	19:2X:33:LYS:H	2.35	0.44
21:2Z:55:HIS:HE1	21:2Z:135:GLU:HB2	1.82	0.44
21:2Z:70:LEU:HA	21:2Z:70:LEU:HD12	1.65	0.44
32:2a:93:G:O2'	32:2a:96:U:H5'	2.17	0.44
32:2a:300:A:H1'	32:2a:565:U:O2	2.18	0.44
32:2a:1023:G:C4	32:2a:1024:G:C8	3.05	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1040:U:C2	32:2a:1041:A:C8	3.05	0.44
35:2d:155:LEU:O	35:2d:159:ARG:HG3	2.18	0.44
38:2g:125:MET:O	38:2g:129:GLU:HG3	2.17	0.44
40:2i:102:LEU:HD13	40:2i:103:THR:OG1	2.17	0.44
42:2k:104:GLN:HG2	42:2k:106:LYS:HG2	2.00	0.44
48:2q:29:HIS:CG	48:2q:30:PRO:HD2	2.53	0.44
54:2w:19:G:N2	54:2w:57:G:H1'	2.32	0.44
1:1A:748:G:C8	18:1W:89:ALA:HB1	2.51	0.44
1:1A:1709:U:H2'	1:1A:1710:C:C6	2.53	0.44
1:1A:2019:A:N7	27:15:9:LYS:HE2	2.33	0.44
61:1A:4265:HOH:O	16:1U:13:LYS:HG2	2.18	0.44
32:1a:437:U:H5''	35:1d:155:LEU:HD21	1.99	0.44
32:1a:1050:G:H2'	32:1a:1050:G:N3	2.32	0.44
32:1a:1095:U:OP2	61:1a:1914:HOH:O	2.20	0.44
32:1a:1445:C:H2'	32:1a:1446:U:O4'	2.16	0.44
34:1c:53:ALA:HB2	34:1c:115:LEU:HD21	1.99	0.44
37:1f:19:LEU:HD11	37:1f:59:TYR:CZ	2.53	0.44
45:1n:58:LYS:HE3	45:1n:58:LYS:HB3	1.85	0.44
54:1y:6:G:O6	54:1y:7:A:N6	2.51	0.44
54:1y:9:A:H8	54:1y:11:C:N4	2.14	0.44
1:2A:76:C:O3'	24:22:59:ARG:HG3	2.17	0.44
1:2A:900:A:C2'	1:2A:901:A:H8	2.29	0.44
1:2A:940:G:N3	1:2A:1191:G:H4'	2.33	0.44
1:2A:1016:G:C2	1:2A:1017:G:C8	3.05	0.44
1:2A:2130:U:H2'	1:2A:2158:A:H61	1.82	0.44
1:2A:2133:G:HO2'	1:2A:2157:G:N2	2.15	0.44
9:2N:38:HIS:NE2	9:2N:50:ASP:OD2	2.48	0.44
26:24:13:ARG:HA	26:24:22:ILE:O	2.18	0.44
32:2a:540:G:C4	32:2a:541:G:C8	3.06	0.44
32:2a:952:U:H2'	32:2a:953:G:H8	1.81	0.44
32:2a:1064:G:OP1	32:2a:1386:G:H4'	2.18	0.44
32:2a:1092:A:H5''	38:2g:4:ARG:HH12	1.83	0.44
33:2b:77:ALA:HB2	33:2b:211:ILE:HD13	1.98	0.44
36:2e:71:LEU:C	36:2e:72:GLN:HE21	2.26	0.44
40:2i:24:GLY:HA2	40:2i:59:PHE:O	2.18	0.44
51:2t:30:LYS:O	51:2t:34:LYS:HG3	2.17	0.44
1:1A:518:G:H2'	1:1A:519:U:C6	2.53	0.44
1:1A:570:G:H2'	1:1A:2030:A:N7	2.33	0.44
1:1A:717:G:H2'	1:1A:718:A:O4'	2.17	0.44
1:1A:882:G:H1	1:1A:894:C:N4	2.15	0.44
1:1A:1064:C:H1'	1:1A:1076:C:H5	1.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1359:A:N1	1:1A:1372:U:O4	2.51	0.44
1:1A:1669:A:H5''	1:1A:2550:G:OP1	2.17	0.44
1:1A:2429:G:OP1	61:1A:4205:HOH:O	2.20	0.44
1:1A:2788:C:P	4:1E:61:ARG:HH21	2.41	0.44
1:1A:2839:G:H5'	13:1R:46:GLY:HA2	1.99	0.44
8:1I:16:GLY:O	8:1I:47:LEU:HD11	2.18	0.44
10:1O:120:GLU:HB2	15:1T:68:TYR:CE2	2.52	0.44
11:1P:91:PHE:CD1	11:1P:99:LEU:HD21	2.52	0.44
13:1R:28:LEU:HD23	13:1R:48:VAL:HG21	1.98	0.44
17:1V:43:GLU:OE1	17:1V:43:GLU:N	2.46	0.44
25:13:26:LEU:O	25:13:35:ARG:NE	2.46	0.44
28:16:38:LYS:HE3	28:16:38:LYS:HB3	1.45	0.44
32:1a:172:A:N6	32:1a:174:C:O2	2.51	0.44
32:1a:461:A:C6	32:1a:471:G:C2	3.06	0.44
32:1a:509:A:C8	32:1a:509:A:H3'	2.53	0.44
32:1a:629:G:H2'	32:1a:630:G:O4'	2.18	0.44
32:1a:867:G:O2'	32:1a:873:A:N1	2.37	0.44
32:1a:986:A:H1'	50:1s:54:GLY:O	2.18	0.44
33:1b:21:ARG:N	33:1b:39:ILE:HG13	2.31	0.44
51:1t:10:LEU:HA	51:1t:10:LEU:HD13	1.71	0.44
54:1w:24:G:H5'	54:1w:25:C:OP2	2.18	0.44
1:2A:631:A:H2'	1:2A:632:A:O4'	2.17	0.44
1:2A:686:G:N2	1:2A:788:A:H61	2.15	0.44
1:2A:783:A:O2'	1:2A:785:G:OP1	2.28	0.44
1:2A:820:A:N3	1:2A:943:U:H4'	2.33	0.44
1:2A:869:G:C4	1:2A:870:A:C8	3.05	0.44
1:2A:996:A:C2	1:2A:997:G:C8	3.06	0.44
1:2A:1115:G:H2'	1:2A:1116:C:O4'	2.18	0.44
1:2A:1188:U:C4'	17:2V:79:VAL:HG22	2.46	0.44
1:2A:1688:U:O2	1:2A:1700:A:H5'	2.16	0.44
1:2A:1864:U:OP1	1:2A:2410:G:O2'	2.30	0.44
1:2A:2469:A:H5''	1:2A:2470:G:OP2	2.17	0.44
5:2F:33:LEU:HD13	5:2F:33:LEU:HA	1.77	0.44
5:2F:108:LYS:HE2	5:2F:108:LYS:HB2	1.86	0.44
6:2G:11:TYR:O	6:2G:16:ARG:HG2	2.18	0.44
11:2P:52:GLU:OE1	11:2P:55:ARG:NE	2.44	0.44
32:2a:341:C:O5'	32:2a:341:C:H6	2.01	0.44
32:2a:841:U:C4	32:2a:848:C:H1'	2.53	0.44
32:2a:1115:C:O2'	32:2a:1116:C:H5'	2.17	0.44
32:2a:1277:C:HO2'	32:2a:1279:A:H1'	1.82	0.44
32:2a:1368:G:OP1	40:2i:111:ARG:NH2	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1479:C:C2	32:2a:1480:G:C8	3.06	0.44
32:2a:1510:U:H2'	32:2a:1511:G:C8	2.52	0.44
36:2e:71:LEU:HD13	36:2e:114:GLY:O	2.16	0.44
41:2j:32:ALA:HB1	41:2j:33:GLN:HA	2.00	0.44
44:2m:25:ILE:HG13	44:2m:66:LEU:CD2	2.48	0.44
46:2o:48:LYS:HA	46:2o:48:LYS:HD3	1.61	0.44
54:2y:52:G:H5'	54:2y:53:G:OP2	2.18	0.44
1:1A:1108:U:H2'	1:1A:1109:C:O4'	2.18	0.44
1:1A:1698:A:C8	1:1A:1700:A:O4'	2.71	0.44
1:1A:2150:U:H2'	1:1A:2151:G:C8	2.53	0.44
4:1E:181:LEU:HD12	4:1E:181:LEU:HA	1.73	0.44
14:1S:34:HIS:O	14:1S:97:ARG:NH2	2.51	0.44
32:1a:109:A:C6	32:1a:326:G:C6	3.06	0.44
32:1a:197:A:C5	32:1a:221:C:H4'	2.53	0.44
32:1a:430:A:OP2	35:1d:8:VAL:HG12	2.18	0.44
32:1a:1148:U:H2'	32:1a:1149:C:O4'	2.18	0.44
32:1a:1187:G:H2'	32:1a:1188:A:C8	2.53	0.44
33:1b:193:ASP:OD2	33:1b:196:LEU:HD22	2.17	0.44
34:1c:15:THR:HG21	34:1c:181:ASN:HA	2.00	0.44
41:1j:26:ALA:HB1	41:1j:84:GLN:OE1	2.18	0.44
47:1p:15:PRO:HD2	47:1p:42:ARG:NE	2.33	0.44
55:1x:19:G:H4'	55:1x:20:U:OP2	2.16	0.44
1:2A:852:G:C5	1:2A:853:G:N7	2.86	0.44
1:2A:900:A:H2'	1:2A:901:A:C8	2.45	0.44
1:2A:2133:G:O2'	1:2A:2157:G:N2	2.51	0.44
1:2A:2291:U:H2'	1:2A:2292:C:C6	2.53	0.44
1:2A:2882:A:H5'	13:2R:96:ARG:HB2	1.99	0.44
32:2a:7:G:H5'	32:2a:298:A:O4'	2.17	0.44
32:2a:34:C:H2'	32:2a:35:G:C8	2.53	0.44
32:2a:725:G:O2'	32:2a:726:C:H5'	2.18	0.44
32:2a:890:G:O2'	32:2a:906:G:O6	2.25	0.44
32:2a:1039:C:N4	32:2a:1040:U:C2	2.86	0.44
32:2a:1261:A:H3'	32:2a:1262:C:C6	2.52	0.44
32:2a:1307:U:O5'	32:2a:1307:U:H6	2.00	0.44
32:2a:1365:G:C5	32:2a:1366:C:C5	3.05	0.44
32:2a:1515:C:H2'	32:2a:1516:G:H8	1.83	0.44
33:2b:50:GLU:HB3	33:2b:200:ILE:O	2.18	0.44
33:2b:142:LEU:HD21	33:2b:146:GLN:NE2	2.33	0.44
34:2c:181:ASN:HB3	34:2c:205:GLY:O	2.17	0.44
35:2d:28:SER:HB2	35:2d:29:PRO:HD2	1.99	0.44
36:2e:103:GLY:O	36:2e:106:PRO:HD2	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:6:ARG:H	38:2g:6:ARG:HG3	1.53	0.44
38:2g:131:LYS:HB3	38:2g:131:LYS:HE2	1.76	0.44
44:2m:40:ASN:HB3	44:2m:43:THR:HG23	2.00	0.44
44:2m:92:HIS:HA	44:2m:110:ARG:HH21	1.78	0.44
46:2o:21:ASP:OD2	46:2o:24:SER:OG	2.32	0.44
51:2t:10:LEU:HG	51:2t:12:ALA:H	1.83	0.44
1:1A:321:G:N3	5:1F:165:ARG:HD2	2.33	0.44
1:1A:582:G:H2'	1:1A:583:G:C8	2.53	0.44
1:1A:2032:G:OP2	1:1A:2454:G:O2'	2.30	0.44
1:1A:2630:G:H2'	1:1A:2631:G:C8	2.53	0.44
1:1A:2855:C:H2'	1:1A:2856:C:H6	1.83	0.44
7:1H:3:ARG:NH2	7:1H:65:HIS:HB3	2.33	0.44
15:1T:29:ARG:HG3	15:1T:46:GLU:HB2	2.00	0.44
15:1T:108:ARG:NH2	15:1T:112:ARG:HD3	2.32	0.44
26:14:18:CYS:SG	26:14:20:ASN:HB2	2.57	0.44
32:1a:741:G:H2'	32:1a:742:G:O4'	2.18	0.44
32:1a:941:G:O2'	32:1a:1350:A:H4'	2.18	0.44
32:1a:1142:G:H2'	32:1a:1143:G:O4'	2.18	0.44
32:1a:1209:C:O2'	32:1a:1214:C:N4	2.46	0.44
33:1b:54:THR:HG23	33:1b:199:TYR:CB	2.46	0.44
37:1f:62:TRP:CD1	49:1r:35:ARG:HE	2.36	0.44
38:1g:31:MET:HE3	38:1g:31:MET:HB3	1.88	0.44
1:2A:879:G:H3'	1:2A:880:G:H8	1.83	0.44
1:2A:902:C:H2'	1:2A:903:C:C6	2.53	0.44
1:2A:1858:G:O6	61:2A:3944:HOH:O	2.19	0.44
1:2A:2410:G:C4	1:2A:2411:A:C8	3.06	0.44
2:2B:51:G:OP2	14:2S:61:ASN:HA	2.18	0.44
3:2D:6:PHE:HE2	3:2D:18:VAL:HG13	1.83	0.44
6:2G:89:GLY:O	6:2G:90:LEU:HD23	2.16	0.44
15:2T:6:LEU:O	15:2T:9:LEU:HB3	2.17	0.44
18:2W:71:VAL:HA	18:2W:107:LEU:HD23	1.98	0.44
32:2a:407:G:H5''	35:2d:115:ARG:HB3	2.00	0.44
32:2a:629:G:H2'	32:2a:630:G:O4'	2.18	0.44
32:2a:1206:G:C4	32:2a:1207:2MG:C8	3.06	0.44
32:2a:1314:C:OP1	50:2s:6:LYS:NZ	2.34	0.44
32:2a:1350:A:C6	32:2a:1351:U:C4	3.06	0.44
32:2a:1468:A:H2'	32:2a:1469:G:O4'	2.18	0.44
32:2a:1490:C:C2	32:2a:1491:G:C8	3.06	0.44
33:2b:170:GLU:HB3	33:2b:173:ALA:HB3	2.00	0.44
36:2e:34:VAL:O	36:2e:42:GLY:N	2.46	0.44
37:2f:37:VAL:HA	37:2f:65:VAL:HG12	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:89:MET:HE3	38:2g:89:MET:HB3	1.89	0.44
40:2i:4:TYR:CE1	40:2i:88:TYR:HA	2.53	0.44
45:2n:12:ARG:HH11	45:2n:12:ARG:CG	2.30	0.44
50:2s:30:LEU:HD23	50:2s:31:ILE:N	2.33	0.44
1:1A:2820:A:C5	13:1R:4:LEU:HD11	2.53	0.44
1:1A:2839:G:N2	1:1A:2880:C:C2	2.86	0.44
61:1A:4678:HOH:O	3:1D:14:ARG:HD2	2.18	0.44
5:1F:136:THR:HA	5:1F:166:ALA:O	2.18	0.44
15:1T:127:ALA:O	15:1T:129:ARG:N	2.51	0.44
17:1V:1:MET:HE2	17:1V:43:GLU:H	1.83	0.44
26:14:47:GLN:NE2	26:14:49:PHE:HE1	2.15	0.44
32:1a:1004:A:H5''	32:1a:1025:U:H5	1.81	0.44
33:1b:19:HIS:HA	33:1b:39:ILE:CG2	2.47	0.44
48:1q:76:LEU:HD12	48:1q:77:VAL:H	1.83	0.44
50:1s:31:ILE:O	50:1s:50:ALA:N	2.48	0.44
1:2A:468:G:N7	29:27:39:ARG:NH2	2.64	0.44
1:2A:879:G:C6	1:2A:880:G:C2	3.06	0.44
1:2A:1464:C:C2	1:2A:1465:G:C8	3.06	0.44
1:2A:1693:U:H4'	1:2A:1694:C:OP2	2.18	0.44
1:2A:2251:OMG:HM23	1:2A:2251:OMG:H1'	1.78	0.44
1:2A:2689:U:P	1:2A:2719:G:H22	2.41	0.44
4:2E:143:ASN:HD22	4:2E:147:PRO:HD3	1.83	0.44
7:2H:13:LYS:HA	7:2H:14:GLY:HA2	1.51	0.44
32:2a:1060:C:H2'	32:2a:1061:G:H8	1.82	0.44
32:2a:1318:A:H5''	50:2s:3:ARG:NH2	2.33	0.44
33:2b:46:LYS:HA	33:2b:49:GLU:HB3	2.00	0.44
47:2p:5:ARG:HH21	47:2p:28:ARG:HA	1.83	0.44
1:1A:412:A:H8	1:1A:412:A:O5'	2.01	0.43
1:1A:536:A:H2'	1:1A:537:C:C6	2.52	0.43
1:1A:1035:U:H2'	1:1A:1036:G:C8	2.53	0.43
1:1A:1178:C:O5'	1:1A:1178:C:H6	2.01	0.43
1:1A:1858:G:N2	1:1A:1883:G:H2'	2.33	0.43
5:1F:170:LEU:HD13	5:1F:172:TRP:CZ2	2.53	0.43
6:1G:56:ALA:HA	6:1G:59:GLU:HG2	2.00	0.43
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.69	0.43
21:1Z:52:SER:C	21:1Z:54:HIS:H	2.16	0.43
32:1a:69:G:C2	32:1a:70:G:C5	3.06	0.43
32:1a:79:G:N2	32:1a:90:U:HO2'	2.16	0.43
32:1a:854:G:H3'	32:1a:871:U:O4	2.18	0.43
32:1a:1014:A:H4'	50:1s:14:HIS:CE1	2.52	0.43
32:1a:1518:MA6:O5'	32:1a:1518:MA6:H8	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:16:HIS:HB2	33:1b:204:ASN:HB2	2.00	0.43
37:1f:42:GLU:OE2	37:1f:59:TYR:OH	2.26	0.43
1:2A:657:U:H2'	1:2A:658:C:C6	2.53	0.43
1:2A:864:G:C6	1:2A:865:C:N4	2.86	0.43
1:2A:1856:G:C2'	1:2A:1857:G:H5'	2.47	0.43
1:2A:2820:A:C5	13:2R:4:LEU:HD11	2.51	0.43
3:2D:71:ASP:HB2	3:2D:103:ARG:HH12	1.83	0.43
5:2F:184:TYR:O	5:2F:188:ARG:HG3	2.18	0.43
12:2Q:17:LEU:HD13	12:2Q:39:PRO:HB2	1.99	0.43
14:2S:41:ASP:OD1	14:2S:44:LYS:HB2	2.18	0.43
20:2Y:86:ARG:HB2	20:2Y:98:VAL:HG23	2.00	0.43
24:22:9:GLN:HE22	24:22:56:GLN:HG2	1.83	0.43
32:2a:659:U:C2	32:2a:660:G:C8	3.05	0.43
32:2a:1060:C:H4'	41:2j:51:ARG:HB3	2.00	0.43
32:2a:1192:C:OP2	34:2c:4:LYS:NZ	2.51	0.43
32:2a:1221:G:H4'	50:2s:53:ASN:O	2.18	0.43
33:2b:95:GLN:NE2	33:2b:95:GLN:HA	2.31	0.43
34:2c:42:LEU:HA	34:2c:45:LYS:NZ	2.33	0.43
50:2s:27:GLU:H	50:2s:27:GLU:HG2	1.49	0.43
52:2u:9:ARG:O	52:2u:13:ILE:HG13	2.18	0.43
54:2w:26:A:H2'	54:2w:27:G:O4'	2.18	0.43
1:1A:647:G:H2'	1:1A:648:G:O4'	2.17	0.43
1:1A:2439:A:N6	55:1x:76:31H:OP1	2.51	0.43
1:1A:2779:U:H5'	1:1A:2781:A:O4'	2.18	0.43
4:1E:12:THR:HG22	4:1E:13:ARG:H	1.82	0.43
26:14:54:GLY:N	26:14:55:ARG:HA	2.33	0.43
28:16:12:GLU:OE1	28:16:52:VAL:HG11	2.19	0.43
32:1a:1060:C:C5	34:1c:2:GLY:HA3	2.53	0.43
33:1b:16:HIS:HB2	33:1b:204:ASN:HB3	1.99	0.43
33:1b:105:PHE:C	33:1b:107:THR:H	2.26	0.43
34:1c:79:ARG:C	34:1c:81:GLY:H	2.26	0.43
35:1d:188:LEU:O	35:1d:188:LEU:HD12	2.18	0.43
47:1p:14:ASN:N	47:1p:15:PRO:HD3	2.33	0.43
1:2A:71:A:H3'	1:2A:71:A:OP2	2.18	0.43
1:2A:301:G:OP2	20:2Y:84:ARG:NH2	2.51	0.43
1:2A:2111:C:N4	1:2A:2144:U:O2'	2.42	0.43
1:2A:2787:C:H1'	4:2E:62:PRO:HG3	1.99	0.43
8:2I:87:LYS:O	8:2I:87:LYS:HG3	2.18	0.43
8:2I:129:THR:HA	8:2I:138:ILE:O	2.18	0.43
10:2O:98:VAL:HG22	10:2O:118:ALA:HA	1.98	0.43
21:2Z:91:LEU:HD22	21:2Z:91:LEU:H	1.82	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:95:PRO:HA	21:2Z:129:SER:HA	1.99	0.43
32:2a:88:A:H5''	32:2a:89:C:C6	2.53	0.43
32:2a:158:G:H2'	32:2a:159:G:O4'	2.18	0.43
32:2a:1061:G:H5''	41:2j:59:SER:HB3	2.00	0.43
34:2c:18:TRP:NE1	45:2n:53:LEU:O	2.52	0.43
34:2c:193:TYR:HE1	34:2c:196:LEU:HD11	1.83	0.43
36:2e:89:ILE:HG12	36:2e:135:THR:HG22	2.00	0.43
39:2h:96:GLY:H	39:2h:99:GLU:CD	2.25	0.43
1:1A:620:G:H2'	1:1A:620:G:N3	2.33	0.43
1:1A:819:A:C4	1:1A:1189:A:C2	3.06	0.43
1:1A:1721:G:H8	1:1A:1721:G:O5'	2.01	0.43
5:1F:184:TYR:O	5:1F:188:ARG:HG3	2.18	0.43
8:1I:12:LEU:HD23	8:1I:12:LEU:HA	1.66	0.43
17:1V:2:PHE:CE2	17:1V:41:GLY:HA3	2.53	0.43
25:13:18:ASP:OD1	25:13:18:ASP:N	2.51	0.43
32:1a:119:A:H4'	32:1a:120:A:C8	2.53	0.43
32:1a:453:A:C5	32:1a:454:C:C4	3.06	0.43
32:1a:1004:A:H61	32:1a:1037:C:H42	1.66	0.43
33:1b:24:TRP:CZ3	33:1b:29:ALA:HB2	2.42	0.43
34:1c:22:TRP:CE2	45:1n:54:PRO:HG2	2.52	0.43
39:1h:11:THR:HG22	39:1h:15:ASN:ND2	2.31	0.43
47:1p:4:ILE:HG13	47:1p:64:ALA:HB1	1.99	0.43
1:2A:395:U:O2'	1:2A:396:G:N7	2.40	0.43
1:2A:515:A:H1'	1:2A:581:C:H1'	2.00	0.43
1:2A:1336:A:H2'	1:2A:1337:G:C8	2.53	0.43
1:2A:1473:G:C6	1:2A:1474:C:C4	3.05	0.43
1:2A:2171:A:C4	1:2A:2172:U:C4	3.06	0.43
1:2A:2406:U:C2	11:2P:72:PRO:HG2	2.53	0.43
9:2N:131:GLN:H	9:2N:131:GLN:HG2	1.62	0.43
25:23:24:LYS:HE3	25:23:24:LYS:HB2	1.68	0.43
25:23:59:VAL:HG12	25:23:60:GLU:H	1.82	0.43
32:2a:107:G:H2'	32:2a:108:G:O4'	2.18	0.43
32:2a:678:U:H2'	32:2a:679:C:C6	2.53	0.43
32:2a:1212:U:H5''	32:2a:1213:A:O5'	2.18	0.43
33:2b:131:PRO:O	33:2b:135:GLN:HG3	2.18	0.43
43:2l:69:TYR:CD1	43:2l:90:VAL:HG21	2.53	0.43
1:1A:321:G:O4'	5:1F:165:ARG:HG2	2.18	0.43
1:1A:657:U:H2'	1:1A:658:C:C6	2.53	0.43
1:1A:1044:G:H5'	1:1A:1045:A:OP2	2.18	0.43
19:1X:31:HIS:CD2	19:1X:32:PRO:HD2	2.53	0.43
21:1Z:28:MET:O	21:1Z:34:ASN:HA	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:293:G:C6	32:1a:294:U:C4	3.06	0.43
32:1a:299:G:C6	32:1a:300:A:C6	3.05	0.43
32:1a:600:C:H2'	32:1a:601:C:C6	2.54	0.43
32:1a:601:C:H2'	32:1a:602:A:C8	2.53	0.43
32:1a:688:G:H5'	42:1k:46:GLY:C	2.43	0.43
32:1a:1162:C:N3	32:1a:1175:G:C2	2.87	0.43
51:1t:99:LEU:HA	51:1t:100:ILE:C	2.44	0.43
54:1w:44:G:O5'	54:1w:44:G:H8	2.02	0.43
1:2A:478:A:N1	1:2A:500:G:H4'	2.33	0.43
1:2A:924:C:H2'	1:2A:925:C:C6	2.53	0.43
1:2A:1589:C:H2'	1:2A:1590:U:H6	1.82	0.43
1:2A:1912:A:C8	1:2A:1918:A:C2	3.07	0.43
1:2A:2125:G:H1'	1:2A:2173:A:N6	2.33	0.43
2:2B:25:A:H2'	2:2B:26:A:C8	2.53	0.43
4:2E:59:VAL:O	4:2E:64:LYS:HE3	2.18	0.43
7:2H:80:SER:OG	7:2H:81:GLU:N	2.50	0.43
14:2S:77:ALA:HB1	14:2S:82:ILE:HB	2.01	0.43
21:2Z:30:ASN:HB2	21:2Z:89:PHE:HE1	1.84	0.43
22:20:38:VAL:HG12	22:20:40:GLN:HG2	2.01	0.43
25:23:12:PRO:HB2	25:23:20:LYS:HG2	2.00	0.43
26:24:13:ARG:HD3	26:24:23:GLU:HG2	2.00	0.43
26:24:61:ARG:HD2	26:24:61:ARG:HA	1.74	0.43
32:2a:102:G:H21	32:2a:151:A:H2	1.67	0.43
32:2a:259:G:H2'	32:2a:260:G:O4'	2.18	0.43
32:2a:445:G:H2'	32:2a:446:G:H8	1.83	0.43
32:2a:627:G:H2'	32:2a:628:G:H8	1.83	0.43
32:2a:853:G:C2	32:2a:854:G:C8	3.07	0.43
32:2a:1037:C:H2'	32:2a:1038:C:C6	2.53	0.43
32:2a:1141:C:C2	32:2a:1142:G:C8	3.06	0.43
32:2a:1157:A:C8	32:2a:1181:G:C6	3.06	0.43
32:2a:1168:A:C6	32:2a:1169:A:C6	3.06	0.43
32:2a:1264:C:C4	32:2a:1272:G:O6	2.71	0.43
32:2a:1505:G:H4'	32:2a:1506:U:H5''	2.01	0.43
35:2d:78:LEU:HB3	35:2d:93:PHE:HE1	1.83	0.43
1:1A:1094:U:H2'	1:1A:1095:A:H8	1.83	0.43
1:1A:1957:C:H2'	1:1A:1958:C:C6	2.54	0.43
1:1A:2187:G:C6	1:1A:2188:C:C4	3.06	0.43
1:1A:2887:U:H2'	1:1A:2888:C:C6	2.52	0.43
5:1F:106:ARG:H	5:1F:106:ARG:HG2	1.34	0.43
6:1G:146:TYR:O	6:1G:149:VAL:HG12	2.18	0.43
7:1H:3:ARG:HH11	7:1H:4:ILE:H	1.66	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:101:VAL:HG23	11:1P:106:LEU:O	2.18	0.43
32:1a:406:G:H21	35:1d:119:GLN:HE22	1.65	0.43
32:1a:927:G:OP2	32:1a:927:G:H4'	2.18	0.43
32:1a:1410:G:H2'	32:1a:1411:C:C6	2.53	0.43
41:1j:78:ASN:O	41:1j:80:LYS:N	2.51	0.43
44:1m:108:ARG:HD3	44:1m:108:ARG:HA	1.80	0.43
49:1r:37:VAL:HG23	49:1r:78:LEU:HB3	2.00	0.43
1:2A:184:C:H2'	1:2A:185:U:C6	2.54	0.43
1:2A:887:A:H4'	1:2A:888:C:C5	2.53	0.43
1:2A:1445(A):C:H2'	1:2A:1446:C:C6	2.54	0.43
1:2A:1477:A:C2	1:2A:1515:G:C2	3.06	0.43
1:2A:2025:C:H2'	1:2A:2026:C:C6	2.54	0.43
1:2A:2127:G:N1	1:2A:2161:C:N4	2.66	0.43
1:2A:2307:G:H8	1:2A:2307:G:OP1	2.01	0.43
1:2A:2792:G:C6	1:2A:2805:G:C6	3.06	0.43
1:2A:2818:G:OP1	1:2A:2837:G:O2'	2.26	0.43
3:2D:85:ASP:OD2	3:2D:88:ARG:HD2	2.19	0.43
5:2F:152:GLU:HG2	5:2F:190:GLU:OE2	2.18	0.43
6:2G:111:LEU:HA	6:2G:114:ILE:HD12	2.00	0.43
27:25:59:GLU:O	27:25:59:GLU:HG3	2.19	0.43
32:2a:544:G:OP1	35:2d:59:ARG:NH2	2.52	0.43
32:2a:582:U:C2	32:2a:760:G:C6	3.07	0.43
32:2a:1059:C:O3'	45:2n:45:ARG:NH2	2.51	0.43
32:2a:1216:G:H5''	45:2n:5:ALA:CB	2.44	0.43
32:2a:1245:A:H2'	32:2a:1246:C:C6	2.53	0.43
32:2a:1275:A:H2'	32:2a:1276:G:O4'	2.18	0.43
32:2a:1319:A:H61	32:2a:1361:G:H21	1.66	0.43
38:2g:151:TYR:CZ	42:2k:54:ARG:HD3	2.53	0.43
46:2o:71:GLN:HB2	46:2o:78:TYR:CD1	2.53	0.43
48:2q:78:GLU:HG2	48:2q:81:ARG:HG2	2.00	0.43
1:1A:1054:A:N6	1:1A:1105:U:C4	2.87	0.43
3:1D:130:ALA:C	3:1D:131:LEU:HD12	2.43	0.43
5:1F:102:PRO:O	5:1F:106:ARG:HG2	2.18	0.43
16:1U:76:TYR:CZ	16:1U:80:ILE:HG13	2.53	0.43
21:1Z:48:PHE:CE1	21:1Z:71:VAL:HG11	2.53	0.43
32:1a:715:A:H2'	32:1a:716:A:C8	2.54	0.43
32:1a:829:G:C6	32:1a:858:G:N2	2.87	0.43
32:1a:1410:G:H2'	32:1a:1411:C:H6	1.83	0.43
34:1c:47:LEU:HD13	34:1c:68:VAL:HG11	2.01	0.43
35:1d:13:ARG:NH2	35:1d:40:PRO:HA	2.33	0.43
44:1m:34:LEU:HD13	44:1m:41:PRO:HA	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:1n:24:CYS:SG	45:1n:40:CYS:N	2.85	0.43
1:2A:72:U:OP2	24:22:29:LYS:NZ	2.45	0.43
1:2A:1580:A:H3'	1:2A:1581:G:H8	1.83	0.43
1:2A:1946:U:C2	1:2A:1947:C:C5	3.07	0.43
1:2A:2127:G:N2	1:2A:2161:C:C2	2.86	0.43
1:2A:2156:G:H2'	1:2A:2157:G:C5	2.53	0.43
1:2A:2299:G:C2	1:2A:2300:G:C8	3.07	0.43
2:2B:90:A:C5	2:2B:91:C:H1'	2.53	0.43
9:2N:73:THR:HA	9:2N:83:LYS:O	2.18	0.43
10:2O:19:ILE:HG22	10:2O:43:VAL:HA	2.01	0.43
32:2a:448:A:OP2	32:2a:485:G:N2	2.35	0.43
32:2a:841:U:H6	32:2a:841:U:P	2.41	0.43
32:2a:1279:A:O2'	32:2a:1281:U:OP2	2.28	0.43
32:2a:1291:G:C6	32:2a:1292:U:C4	3.07	0.43
34:2c:29:TYR:HE1	41:2j:11:PHE:CE2	2.34	0.43
34:2c:164:ARG:HG2	34:2c:165:THR:H	1.84	0.43
34:2c:184:TYR:CD1	34:2c:201:TYR:CE1	3.06	0.43
38:2g:115:ARG:HH11	38:2g:118:VAL:CG2	2.31	0.43
41:2j:46:ARG:HA	41:2j:64:GLU:HA	2.00	0.43
44:2m:84:ILE:C	44:2m:86:CYS:H	2.26	0.43
47:2p:42:ARG:HG2	47:2p:42:ARG:NH1	2.33	0.43
51:2t:24:LEU:HD23	51:2t:24:LEU:HA	1.78	0.43
55:2x:31:G:C8	55:2x:32:5MC:HM53	2.53	0.43
1:1A:1020:A:N1	1:1A:1141:U:O2'	2.49	0.43
1:1A:1069:A:H2'	1:1A:1073:A:C8	2.54	0.43
12:1Q:31:ASP:OD1	12:1Q:134:ARG:NH1	2.47	0.43
32:1a:767:A:H2'	32:1a:768:A:O4'	2.19	0.43
32:1a:1134:G:C6	32:1a:1135:U:C2	3.07	0.43
32:1a:1284:C:H3'	32:1a:1285:A:C8	2.53	0.43
38:1g:52:GLU:H	38:1g:52:GLU:HG3	1.61	0.43
38:1g:138:LYS:HE2	38:1g:142:GLU:CD	2.44	0.43
39:1h:94:TYR:CE1	39:1h:132:GLU:HB2	2.53	0.43
40:1i:47:LEU:C	40:1i:49:PRO:HD2	2.44	0.43
44:1m:49:THR:HG23	44:1m:52:GLU:OE1	2.19	0.43
55:1x:31:G:C8	55:1x:32:5MC:HM53	2.54	0.43
1:2A:271(P):C:O3'	8:2I:42:SER:OG	2.31	0.43
1:2A:945:A:C4	1:2A:2448:A:C2	3.06	0.43
1:2A:1430:C:H2'	1:2A:1431:U:C6	2.53	0.43
1:2A:1946:U:H2'	1:2A:1947:C:H6	1.83	0.43
1:2A:2298:A:C2	1:2A:2299:G:H1'	2.54	0.43
1:2A:2470:G:O2'	1:2A:2471:C:H5'	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2679:A:C2	1:2A:2729:G:C2	3.07	0.43
1:2A:2690:C:OP1	13:2R:17:ARG:NH2	2.52	0.43
6:2G:96:ARG:H	6:2G:96:ARG:HG3	1.51	0.43
7:2H:121:ILE:HD11	7:2H:140:LYS:HB3	2.00	0.43
10:2O:26:LYS:O	10:2O:30:ALA:HB2	2.18	0.43
12:2Q:55:VAL:HG23	12:2Q:64:ILE:HD12	2.00	0.43
32:2a:131:C:H2'	32:2a:132:C:C6	2.54	0.43
32:2a:933:G:N2	32:2a:935:A:O4'	2.52	0.43
32:2a:1146:A:H2'	32:2a:1147:C:O4'	2.18	0.43
32:2a:1313:U:P	50:2s:5:LEU:HD12	2.59	0.43
32:2a:1313:U:H2'	32:2a:1314:C:H6	1.83	0.43
34:2c:18:TRP:NE1	45:2n:55:GLY:H	2.15	0.43
39:2h:9:MET:SD	39:2h:32:LYS:HG2	2.59	0.43
55:2x:27:U:O2	55:2x:44:A:C2	2.71	0.43
1:1A:191:A:H2'	1:1A:192:C:C6	2.53	0.43
1:1A:288:C:H2'	1:1A:289:A:H8	1.83	0.43
1:1A:1385:G:O2'	1:1A:1396:U:O2	2.27	0.43
1:1A:2206:G:OP2	1:1A:2206:G:H4'	2.18	0.43
1:1A:2667:C:H2'	1:1A:2668:G:O4'	2.19	0.43
3:1D:71:ASP:HB3	3:1D:103:ARG:HH12	1.84	0.43
12:1Q:39:PRO:HA	12:1Q:97:VAL:O	2.19	0.43
30:18:11:LYS:HG3	30:18:11:LYS:O	2.18	0.43
32:1a:35:G:O2'	43:1l:118:SER:O	2.26	0.43
32:1a:336:C:O2'	32:1a:337:C:H5'	2.18	0.43
32:1a:433:C:H2'	32:1a:434:U:H6	1.84	0.43
35:1d:88:VAL:O	35:1d:92:VAL:HG23	2.18	0.43
54:1w:20:U:OP2	54:1w:20:U:H4'	2.16	0.43
1:2A:1038:C:N4	1:2A:1117:G:H1	2.16	0.43
1:2A:2353:G:H5''	22:20:32:ARG:HH11	1.84	0.43
2:2B:47:C:O2'	14:2S:93:LYS:HD2	2.19	0.43
4:2E:69:LYS:O	4:2E:69:LYS:HG2	2.18	0.43
4:2E:82:ARG:HG3	4:2E:83:ASP:N	2.33	0.43
4:2E:96:PHE:O	4:2E:175:VAL:HG21	2.19	0.43
9:2N:5:VAL:HA	9:2N:6:PRO:HD3	1.92	0.43
11:2P:94:GLU:HG3	11:2P:124:LYS:HD3	2.01	0.43
21:2Z:102:LEU:HD13	21:2Z:139:VAL:HG11	2.01	0.43
32:2a:473:G:C2	32:2a:474:G:C5	3.07	0.43
32:2a:854:G:C2	32:2a:855:G:C8	3.06	0.43
32:2a:882:C:O2'	32:2a:883:C:H5'	2.19	0.43
38:2g:69:VAL:HG11	38:2g:134:ALA:HB1	1.99	0.43
44:2m:13:LYS:O	44:2m:45:VAL:N	2.47	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2n:27:CYS:SG	45:2n:29:ARG:HB2	2.58	0.43
1:1A:662:G:H5''	11:1P:16:ARG:HG3	2.00	0.43
1:1A:878:A:C6	1:1A:900:A:C5	3.07	0.43
1:1A:1142(A):A:C4	1:1A:1144:G:N7	2.86	0.43
1:1A:1800:C:OP1	3:1D:264:LYS:NZ	2.36	0.43
1:1A:2243:U:H2'	1:1A:2244:U:C6	2.54	0.43
1:1A:2845:G:O2'	1:1A:2846:G:H5'	2.19	0.43
10:1O:48:PRO:CB	32:1a:1422:G:H5''	2.41	0.43
11:1P:1:MET:HE3	11:1P:1:MET:HB2	1.66	0.43
19:1X:1:MET:HE1	24:12:26:ARG:NH2	2.34	0.43
26:14:28:LYS:HA	26:14:29:PRO:HD3	1.90	0.43
32:1a:260:G:H2'	32:1a:261:U:C6	2.53	0.43
32:1a:598:U:H2'	32:1a:599:C:C6	2.54	0.43
32:1a:1004:A:N6	32:1a:1037:C:H42	2.16	0.43
32:1a:1330:U:C2'	32:1a:1331:G:H5'	2.48	0.43
33:1b:132:LYS:O	33:1b:136:VAL:HG13	2.19	0.43
35:1d:103:ASN:OD1	35:1d:114:ARG:NE	2.38	0.43
35:1d:118:ARG:O	35:1d:121:VAL:N	2.52	0.43
35:1d:173:TRP:HE1	35:1d:193:ASP:HB3	1.84	0.43
1:2A:251:A:C5	1:2A:252:G:H1'	2.53	0.43
1:2A:606:U:H4'	1:2A:658:C:H4'	2.00	0.43
1:2A:855:G:C6	1:2A:856:C:C4	3.07	0.43
1:2A:1288:U:O4	13:2R:106:GLY:HA3	2.19	0.43
1:2A:1848:A:C4	1:2A:1849:G:C8	3.07	0.43
1:2A:2116:G:N1	1:2A:2162:G:OP1	2.51	0.43
1:2A:2125:G:H21	1:2A:2174:C:N4	2.17	0.43
2:2B:43:C:C4	2:2B:45:A:N6	2.87	0.43
3:2D:101:GLU:OE2	3:2D:103:ARG:NE	2.49	0.43
6:2G:63:ILE:HD12	6:2G:141:PHE:CB	2.47	0.43
6:2G:114:ILE:HA	6:2G:140:ILE:HD11	2.00	0.43
11:2P:6:LEU:HD23	11:2P:6:LEU:HA	1.81	0.43
18:2W:1:MET:HE2	18:2W:62:HIS:CG	2.54	0.43
20:2Y:43:ASN:ND2	20:2Y:65:ALA:O	2.51	0.43
32:2a:980:C:H3'	32:2a:981:U:H6	1.84	0.43
32:2a:1020:U:H2'	32:2a:1021:G:H8	1.83	0.43
32:2a:1153:C:C4	32:2a:1154:G:N7	2.87	0.43
32:2a:1362:C:H2'	32:2a:1363:C:H5''	2.01	0.43
33:2b:114:ARG:HA	33:2b:117:GLU:CB	2.48	0.43
33:2b:185:ILE:CG2	33:2b:199:TYR:HB2	2.48	0.43
35:2d:156:GLU:CD	35:2d:159:ARG:HH21	2.27	0.43
35:2d:173:TRP:CG	35:2d:189:PRO:HB3	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:135:THR:O	36:2e:138:ALA:N	2.52	0.43
42:2k:102:GLY:C	42:2k:103:LEU:HD12	2.44	0.43
44:2m:84:ILE:O	44:2m:86:CYS:N	2.52	0.43
45:2n:57:ARG:HG2	45:2n:58:LYS:N	2.32	0.43
1:1A:865:C:H4'	1:1A:866:A:N7	2.34	0.43
1:1A:910:A:C5	12:1Q:13:GLN:HG3	2.54	0.43
1:1A:1062:G:H1	1:1A:1077:A:N6	2.11	0.43
1:1A:1500:G:H2'	1:1A:1501:C:C6	2.53	0.43
1:1A:1814:G:C4'	3:1D:51:VAL:HG21	2.49	0.43
6:1G:47:LYS:HG3	6:1G:48:GLU:H	1.84	0.43
13:1R:12:ARG:HB3	13:1R:16:HIS:HB3	2.01	0.43
20:1Y:54:LYS:O	20:1Y:55:TYR:CD2	2.72	0.43
21:1Z:125:LEU:HD23	21:1Z:164:ALA:O	2.19	0.43
32:1a:254:G:OP1	48:1q:67:LYS:O	2.36	0.43
32:1a:627:G:O2'	32:1a:628:G:H5'	2.18	0.43
32:1a:872:A:C4	32:1a:874:G:N7	2.87	0.43
32:1a:1152:A:H5'	41:1j:13:HIS:ND1	2.34	0.43
32:1a:1429:C:H2'	32:1a:1430:C:H6	1.83	0.43
42:1k:50:TYR:HH	42:1k:59:TYR:HD2	1.67	0.43
47:1p:9:PHE:N	47:1p:16:HIS:O	2.52	0.43
1:2A:746:A:H2'	1:2A:2612:C:H5''	2.01	0.43
1:2A:947:G:H2'	1:2A:948:G:C8	2.53	0.43
1:2A:1314:C:H6	1:2A:1314:C:H5'	1.84	0.43
1:2A:2540:C:H2'	1:2A:2541:A:O4'	2.19	0.43
6:2G:151:ALA:HB3	6:2G:153:ARG:NH1	2.34	0.43
7:2H:137:ASP:HB3	7:2H:140:LYS:HB2	2.01	0.43
12:2Q:12:GLN:NE2	12:2Q:73:PRO:HD2	2.34	0.43
12:2Q:29:PHE:HB3	12:2Q:65:PHE:CE1	2.54	0.43
16:2U:59:ARG:O	16:2U:63:VAL:HG23	2.19	0.43
17:2V:81:TYR:C	17:2V:82:ARG:HD2	2.43	0.43
18:2W:92:ARG:HG2	18:2W:93:ALA:N	2.34	0.43
32:2a:256:U:H2'	32:2a:257:G:C8	2.54	0.43
32:2a:621:A:OP2	61:2a:3321:HOH:O	2.21	0.43
32:2a:659:U:H2'	32:2a:660:G:C8	2.53	0.43
32:2a:735:C:H2'	32:2a:736:C:C6	2.47	0.43
32:2a:767:A:H2'	32:2a:768:A:O4'	2.19	0.43
32:2a:957:U:H2'	32:2a:958:A:H5''	2.01	0.43
32:2a:964:A:N3	32:2a:969:A:O2'	2.40	0.43
40:2i:45:ALA:O	40:2i:48:GLU:HB2	2.19	0.43
41:2j:6:ILE:HB	41:2j:72:VAL:HB	2.00	0.43
46:2o:4:THR:OG1	46:2o:7:GLU:HG3	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2y:57:G:N3	54:2y:57:G:H2'	2.33	0.43
1:1A:1465:G:O2'	1:1A:1545:A:N1	2.48	0.42
1:1A:1712:C:H2'	1:1A:1713:U:O4'	2.19	0.42
1:1A:2379:G:O2'	14:1S:17:ARG:NH2	2.52	0.42
1:1A:2512:C:H2'	1:1A:2513:G:O4'	2.19	0.42
7:1H:56:SER:OG	7:1H:58:GLU:HG2	2.19	0.42
8:1I:132:PRO:HD2	8:1I:136:VAL:O	2.19	0.42
11:1P:90:ARG:HG2	11:1P:90:ARG:NH1	2.24	0.42
12:1Q:1:MET:HE2	12:1Q:1:MET:HB2	1.88	0.42
15:1T:113:LYS:O	15:1T:114:LEU:HD23	2.19	0.42
20:1Y:98:VAL:HG12	20:1Y:105:ALA:HA	2.01	0.42
32:1a:1005:A:H5''	32:1a:1006:C:H5	1.83	0.42
32:1a:1187:G:H2'	32:1a:1188:A:H8	1.84	0.42
34:1c:178:LEU:HD12	34:1c:178:LEU:HA	1.67	0.42
48:1q:50:LYS:HD2	48:1q:51:TYR:CZ	2.54	0.42
50:1s:11:VAL:HG12	50:1s:13:ASP:H	1.84	0.42
54:1y:18:G:C2	54:1y:58:A:C5	3.07	0.42
1:2A:615:G:O2'	5:2F:205:ARG:NH2	2.52	0.42
1:2A:760:G:H2'	1:2A:761:A:O4'	2.18	0.42
1:2A:1019:U:H2'	1:2A:1020:A:C8	2.47	0.42
1:2A:1171:G:H22	1:2A:1178:C:H42	1.67	0.42
1:2A:1270:C:H5''	1:2A:1271:G:O5'	2.19	0.42
1:2A:1794:U:H2'	1:2A:1795:C:C6	2.55	0.42
1:2A:2303:G:O2'	6:2G:132:ASN:HB2	2.19	0.42
2:2B:74:U:C3'	2:2B:75:G:H5''	2.49	0.42
3:2D:134:ARG:HG3	3:2D:135:PHE:CD1	2.54	0.42
8:2I:120:ILE:HD13	8:2I:120:ILE:HA	1.83	0.42
11:2P:114:ILE:HG13	11:2P:125:VAL:CG1	2.47	0.42
12:2Q:11:LYS:NZ	12:2Q:88:GLY:O	2.50	0.42
13:2R:51:LEU:HD22	13:2R:66:VAL:HG13	2.01	0.42
14:2S:34:HIS:C	14:2S:35:ILE:HG13	2.44	0.42
16:2U:90:VAL:O	16:2U:95:LEU:HD13	2.18	0.42
21:2Z:31:ARG:HD2	21:2Z:94:GLU:OE2	2.19	0.42
32:2a:1292:U:C2	32:2a:1293:G:C8	3.07	0.42
35:2d:101:LEU:O	35:2d:104:VAL:HG22	2.19	0.42
36:2e:69:VAL:HG12	36:2e:71:LEU:HD21	2.01	0.42
36:2e:80:ILE:HG22	36:2e:91:LEU:HB2	2.00	0.42
38:2g:132:GLY:O	38:2g:136:LYS:HG2	2.19	0.42
39:2h:33:GLU:HG2	39:2h:48:TYR:CE1	2.54	0.42
47:2p:75:ARG:HB2	47:2p:80:PHE:CE2	2.54	0.42
54:2y:49:C:N3	54:2y:65:G:N2	2.57	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:228:A:H8	1:1A:229:A:H5'	1.85	0.42
1:1A:251:A:C5	1:1A:252:G:H1'	2.54	0.42
1:1A:919:G:N2	1:1A:2269:A:OP2	2.51	0.42
1:1A:1092:C:H2'	1:1A:1093:G:H5'	2.01	0.42
1:1A:1817:G:C6	1:1A:1818:U:C4	3.07	0.42
1:1A:2149:G:C6	1:1A:2150:U:C2	3.07	0.42
1:1A:2855:C:H2'	1:1A:2856:C:C6	2.53	0.42
5:1F:34:TRP:CH2	11:1P:8:PRO:HB3	2.54	0.42
21:1Z:150:LEU:O	21:1Z:171:ILE:HG12	2.19	0.42
32:1a:257:G:C6	32:1a:258:G:C5	3.07	0.42
32:1a:461:A:O2'	32:1a:470:C:H5'	2.19	0.42
32:1a:692:U:H5'	32:1a:797:C:H5'	2.00	0.42
32:1a:1333:A:H2'	32:1a:1334:G:O4'	2.19	0.42
33:1b:166:ASP:O	33:1b:170:GLU:N	2.52	0.42
35:1d:126:ILE:HG22	35:1d:127:THR:N	2.33	0.42
36:1e:30:ALA:O	36:1e:45:PHE:HD1	2.02	0.42
37:1f:97:PHE:HB3	49:1r:32:ARG:HG3	2.01	0.42
40:1i:105:ASP:HB2	40:1i:107:ARG:HG3	2.00	0.42
44:1m:91:ARG:NE	44:1m:97:PRO:O	2.47	0.42
48:1q:66:SER:OG	48:1q:69:LYS:HB2	2.20	0.42
54:1w:19:G:H4'	54:1w:20:U:OP1	2.19	0.42
1:2A:740:U:H2'	1:2A:741:G:C8	2.54	0.42
1:2A:1475:G:C2	1:2A:1517:G:C2	3.08	0.42
1:2A:2150:U:H2'	1:2A:2151:G:H8	1.83	0.42
1:2A:2274:A:C6	1:2A:2276:G:C8	3.07	0.42
1:2A:2318:G:H21	14:2S:3:ARG:NE	2.17	0.42
6:2G:59:GLU:HB2	6:2G:144:ILE:HD11	2.01	0.42
10:2O:25:LEU:HB2	10:2O:38:VAL:O	2.19	0.42
16:2U:8:VAL:O	16:2U:12:ARG:HG3	2.20	0.42
32:2a:80:G:N2	32:2a:90:U:H1'	2.34	0.42
32:2a:1166:G:C2	32:2a:1171:G:C6	3.07	0.42
32:2a:1207:2MG:C6	32:2a:1208:C:C4	3.07	0.42
32:2a:1247:U:H1'	32:2a:1291:G:N2	2.33	0.42
32:2a:1261:A:H3'	32:2a:1262:C:H6	1.84	0.42
33:2b:112:VAL:HG22	33:2b:149:LEU:HD13	2.01	0.42
34:2c:11:ARG:NH2	34:2c:177:THR:O	2.52	0.42
36:2e:131:ILE:O	36:2e:135:THR:HG23	2.19	0.42
44:2m:50:GLU:O	44:2m:54:VAL:HG22	2.19	0.42
47:2p:39:TYR:CD2	47:2p:73:LEU:HD21	2.53	0.42
49:2r:56:THR:OG1	49:2r:63:GLN:NE2	2.52	0.42
54:2y:18:G:N2	54:2y:58:A:C4	2.87	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:884:C:C5	1:1A:885:C:H1'	2.54	0.42
3:1D:68:LYS:C	3:1D:70:TRP:H	2.28	0.42
8:1I:48:GLU:OE1	8:1I:52:ARG:NH1	2.53	0.42
8:1I:105:HIS:O	8:1I:107:VAL:HG23	2.19	0.42
11:1P:90:ARG:HD2	11:1P:91:PHE:CZ	2.54	0.42
14:1S:58:LEU:HD23	14:1S:58:LEU:HA	1.83	0.42
32:1a:90:U:H5''	32:1a:91:C:OP1	2.19	0.42
32:1a:740:U:O2'	32:1a:741:G:H5'	2.19	0.42
32:1a:953:G:H2'	32:1a:954:G:O4'	2.19	0.42
32:1a:1319:A:OP1	50:1s:3:ARG:HD2	2.18	0.42
32:1a:1328:C:OP1	52:1u:21:TYR:OH	2.34	0.42
36:1e:7:GLU:O	36:1e:34:VAL:HA	2.19	0.42
38:1g:16:LEU:HD23	40:1i:42:ARG:HA	2.01	0.42
38:1g:95:ARG:O	38:1g:99:LEU:HG	2.19	0.42
44:1m:66:LEU:O	44:1m:70:LEU:N	2.47	0.42
46:1o:39:LEU:HD13	46:1o:56:LEU:HB2	2.02	0.42
46:1o:74:ASP:HB3	46:1o:77:ARG:HB2	2.01	0.42
1:2A:139(A):G:O2'	1:2A:140:G:H5'	2.19	0.42
1:2A:598:G:O2'	5:2F:31:HIS:NE2	2.43	0.42
1:2A:955:C:OP2	12:2Q:14:ARG:HG3	2.18	0.42
1:2A:1910:G:C6	1:2A:1921:G:C6	3.08	0.42
1:2A:2420:C:H5'	28:26:54:ILE:HD11	2.01	0.42
19:2X:94:GLY:N	19:2X:95:LEU:HB2	2.33	0.42
21:2Z:125:LEU:HD23	21:2Z:164:ALA:HB3	2.01	0.42
25:23:7:LYS:CG	25:23:34:GLU:HG3	2.48	0.42
26:24:45:GLY:C	26:24:47:GLN:H	2.25	0.42
32:2a:406:G:C8	32:2a:495:A:C2	3.07	0.42
32:2a:718:G:H5'	42:2k:117:ASN:CG	2.45	0.42
32:2a:1105:A:N3	32:2a:1106:G:C8	2.87	0.42
32:2a:1173:G:H2'	32:2a:1174:G:H8	1.84	0.42
32:2a:1236:A:O2'	32:2a:1304:G:H4'	2.19	0.42
32:2a:1256:A:H61	32:2a:1278:U:C2'	2.33	0.42
32:2a:1273:G:N7	32:2a:1274:G:C5	2.87	0.42
32:2a:1502:A:H5'	32:2a:1504:G:N7	2.34	0.42
33:2b:197:VAL:HG23	33:2b:200:ILE:HG13	2.01	0.42
40:2i:26:VAL:HG22	40:2i:61:ALA:HB3	2.00	0.42
42:2k:81:ASP:OD1	42:2k:106:LYS:HB2	2.19	0.42
43:2l:53:ARG:HD2	43:2l:93:LEU:HD11	2.01	0.42
1:1A:271(Q):G:OP1	8:1I:42:SER:HB2	2.18	0.42
1:1A:271(V):G:O6	61:1A:4243:HOH:O	2.20	0.42
1:1A:1358:G:N2	1:1A:1372:U:C5	2.87	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2629:A:HO2'	1:1A:2630:G:P	2.37	0.42
3:1D:9:TYR:CE1	3:1D:13:ARG:HG3	2.55	0.42
4:1E:119:ARG:HG2	4:1E:120:TRP:CD1	2.55	0.42
6:1G:126:ASP:OD2	6:1G:130:ASN:ND2	2.35	0.42
20:1Y:5:MET:HB2	20:1Y:5:MET:HE2	1.70	0.42
20:1Y:20:TYR:CE2	20:1Y:43:ASN:HA	2.54	0.42
29:17:24:THR:CG2	29:17:27:GLY:H	2.16	0.42
32:1a:1001(A):G:C2	32:1a:1002:G:H1'	2.54	0.42
37:1f:86:ARG:O	37:1f:87:ARG:HG2	2.20	0.42
44:1m:86:CYS:O	44:1m:89:GLY:N	2.52	0.42
51:1t:89:ARG:H	51:1t:89:ARG:HG2	1.56	0.42
1:2A:18:C:O2'	1:2A:554:U:OP1	2.35	0.42
1:2A:136:G:O2'	1:2A:137:C:H5'	2.20	0.42
1:2A:141:A:H8	1:2A:1408:C:HO2'	1.58	0.42
1:2A:253:C:O2'	61:2A:3955:HOH:O	2.21	0.42
1:2A:600:G:H2'	1:2A:601:C:C6	2.53	0.42
1:2A:1527:G:H2'	1:2A:1542:A:N1	2.34	0.42
1:2A:2114:A:N6	1:2A:2115:G:H21	2.18	0.42
1:2A:2135:A:N7	1:2A:2136:C:H5	2.17	0.42
3:2D:206:LEU:HD22	3:2D:211:ARG:HG2	2.01	0.42
7:2H:164:TYR:O	7:2H:167:GLU:HB2	2.19	0.42
12:2Q:54:MET:HB2	12:2Q:64:ILE:CD1	2.48	0.42
21:2Z:55:HIS:CE1	21:2Z:135:GLU:HB2	2.54	0.42
25:23:4:LEU:O	25:23:36:VAL:HA	2.20	0.42
32:2a:451:A:C6	32:2a:481:G:C5	3.07	0.42
32:2a:620:C:H2'	32:2a:621:A:O4'	2.19	0.42
32:2a:972:C:O2'	41:2j:55:LYS:O	2.30	0.42
32:2a:1052:U:N3	32:2a:1200:C:N3	2.67	0.42
32:2a:1252:A:H2'	32:2a:1253:G:O4'	2.19	0.42
35:2d:11:LEU:O	35:2d:15:GLU:HG2	2.20	0.42
37:2f:100:ASN:ND2	49:2r:23:LYS:HE3	2.29	0.42
41:2j:23:ILE:HD13	41:2j:23:ILE:HA	1.76	0.42
42:2k:39:PRO:O	42:2k:40:ILE:HD13	2.19	0.42
43:2l:70:ILE:HG12	43:2l:100:ILE:HD12	2.02	0.42
48:2q:58:GLU:OE2	48:2q:75:ARG:NH2	2.52	0.42
55:2x:23:C:C2	55:2x:24:U:C5	3.07	0.42
1:1A:363(A):A:C2	1:1A:363(B):G:C5	3.07	0.42
1:1A:796:C:H2'	1:1A:797:C:C6	2.53	0.42
2:1B:26:A:H2'	2:1B:27:C:O4'	2.20	0.42
2:1B:96:U:H2'	2:1B:97:G:C8	2.54	0.42
21:1Z:7:ALA:HB2	21:1Z:59:LEU:HD22	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1Z:54:HIS:HD2	21:1Z:99:TYR:O	2.03	0.42
32:1a:219:C:H2'	32:1a:220:G:O4'	2.20	0.42
32:1a:1298:C:H4'	32:1a:1299:A:C4	2.55	0.42
33:1b:21:ARG:CA	33:1b:39:ILE:HA	2.48	0.42
33:1b:24:TRP:CD1	33:1b:24:TRP:H	2.38	0.42
34:1c:134:ILE:O	34:1c:138:VAL:HG23	2.18	0.42
35:1d:76:ARG:O	35:1d:80:GLU:HG2	2.20	0.42
36:1e:90:VAL:O	36:1e:120:THR:HA	2.18	0.42
37:1f:67:MET:HB2	37:1f:68:PRO:HD2	2.01	0.42
40:1i:8:GLY:O	40:1i:15:ALA:N	2.53	0.42
40:1i:46:ALA:HA	40:1i:78:LYS:HB2	2.00	0.42
51:1t:47:GLY:N	51:1t:48:LYS:HB2	2.34	0.42
51:1t:56:MET:SD	51:1t:88:VAL:HG21	2.59	0.42
1:2A:121:G:H4'	1:2A:149:A:H5'	2.01	0.42
1:2A:1157:G:C2	1:2A:1158:C:C2	3.07	0.42
1:2A:1463:C:H2'	1:2A:1464:C:C6	2.54	0.42
1:2A:2070:G:H2'	1:2A:2071:A:O4'	2.18	0.42
1:2A:2536:G:C5	1:2A:2537:U:C5	3.07	0.42
2:2B:41:U:H5	6:2G:70:VAL:H	1.66	0.42
12:2Q:19:GLY:O	12:2Q:98:LYS:HE3	2.19	0.42
20:2Y:46:LYS:HD3	20:2Y:60:PHE:CD1	2.55	0.42
22:20:53:MET:HG3	22:20:59:LEU:CD2	2.50	0.42
32:2a:61:G:C5	32:2a:107:G:C2	3.07	0.42
32:2a:302:G:N3	32:2a:556:C:H4'	2.34	0.42
32:2a:422:C:H5'	32:2a:423:G:C5	2.54	0.42
32:2a:422:C:O4'	32:2a:423:G:N1	2.53	0.42
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.29	0.42
32:2a:685:G:N2	32:2a:686:U:C4	2.87	0.42
32:2a:1103:C:H2'	32:2a:1104:G:O4'	2.20	0.42
32:2a:1112:C:N4	34:2c:178:LEU:HD12	2.35	0.42
32:2a:1222:G:C6	32:2a:1223:C:C4	3.08	0.42
32:2a:1330:U:O4	32:2a:1331:G:C6	2.73	0.42
33:2b:15:VAL:CG2	33:2b:213:LEU:HD13	2.49	0.42
34:2c:37:GLN:NE2	45:2n:52:GLN:OE1	2.36	0.42
43:2l:8:ASN:O	43:2l:12:ARG:HG3	2.19	0.42
47:2p:15:PRO:C	47:2p:16:HIS:HD1	2.27	0.42
48:2q:22:LEU:HD13	48:2q:41:LYS:HG2	2.01	0.42
54:2y:49:C:H42	54:2y:65:G:H1	1.66	0.42
1:1A:831:G:H8	1:1A:831:G:O5'	2.01	0.42
1:1A:1063:G:C5	1:1A:1064:C:N4	2.87	0.42
1:1A:1094:U:H2'	1:1A:1095:A:C8	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:1E:119:ARG:HG2	4:1E:120:TRP:NE1	2.35	0.42
32:1a:144:G:C2	32:1a:179:A:N3	2.88	0.42
32:1a:558:G:H5''	32:1a:559:A:OP2	2.20	0.42
32:1a:1241:G:H2'	32:1a:1242:C:C6	2.54	0.42
32:1a:1291:G:C6	32:1a:1292:U:C4	3.07	0.42
35:1d:99:SER:HB3	35:1d:140:VAL:O	2.20	0.42
36:1e:85:GLY:C	36:1e:87:SER:H	2.28	0.42
37:1f:39:LYS:HE3	37:1f:39:LYS:HB3	1.81	0.42
43:1l:117:ARG:HB3	43:1l:122:THR:HB	2.02	0.42
44:1m:66:LEU:O	44:1m:69:GLU:N	2.52	0.42
1:2A:95:G:N2	1:2A:96:G:H1'	2.35	0.42
1:2A:721:C:H2'	1:2A:722:A:C8	2.55	0.42
1:2A:1263:U:C4	1:2A:1264:G:C6	3.07	0.42
1:2A:1908:C:O2	55:2x:12:G:H4'	2.20	0.42
1:2A:2129:C:N3	1:2A:2159:G:N2	2.68	0.42
1:2A:2727:G:O2'	10:2O:70:LYS:NZ	2.51	0.42
2:2B:7:G:H5'	14:2S:29:PHE:CE2	2.54	0.42
3:2D:69:ARG:HD2	3:2D:105:ILE:HG21	2.01	0.42
4:2E:48:GLN:HA	4:2E:80:GLU:HA	2.01	0.42
4:2E:174:ASP:OD1	4:2E:175:VAL:N	2.51	0.42
5:2F:192:LEU:HD13	5:2F:194:MET:HE2	2.02	0.42
7:2H:11:VAL:CG2	7:2H:50:VAL:HG23	2.48	0.42
7:2H:90:LYS:HE3	7:2H:163:TYR:CD2	2.54	0.42
12:2Q:122:GLY:HA2	12:2Q:125:LEU:HD12	2.00	0.42
14:2S:87:PHE:CE1	14:2S:102:ALA:HB2	2.53	0.42
21:2Z:44:PHE:CE1	21:2Z:86:VAL:HG21	2.54	0.42
32:2a:69:G:C2	32:2a:70:G:N7	2.88	0.42
32:2a:570:G:H1'	32:2a:820:U:C4	2.54	0.42
32:2a:948:C:H2'	32:2a:949:A:H8	1.84	0.42
32:2a:1014:A:H4'	50:2s:14:HIS:CE1	2.55	0.42
32:2a:1338:G:C6	32:2a:1339:A:C6	3.08	0.42
33:2b:21:ARG:CB	33:2b:39:ILE:HG13	2.49	0.42
33:2b:187:LEU:HD21	33:2b:203:GLY:C	2.44	0.42
34:2c:194:GLY:O	34:2c:196:LEU:HD12	2.19	0.42
40:2i:28:VAL:HG22	40:2i:63:ILE:HB	2.00	0.42
41:2j:42:THR:CB	41:2j:68:HIS:HA	2.49	0.42
42:2k:48:ILE:H	42:2k:48:ILE:HD12	1.83	0.42
1:1A:601:C:O2'	1:1A:605:C:H5''	2.19	0.42
1:1A:1837:C:OP1	32:1a:784:C:H4'	2.19	0.42
1:1A:1986:A:O2'	1:1A:1987:G:H5'	2.19	0.42
1:1A:2118:U:O4	1:1A:2149:G:H1'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:1D:35:LYS:HB2	3:1D:36:PRO:HD2	2.01	0.42
6:1G:137:GLU:CD	6:1G:139:LEU:HD11	2.45	0.42
8:1I:87:LYS:HE3	8:1I:87:LYS:O	2.19	0.42
21:1Z:150:LEU:HD12	21:1Z:154:ASP:OD1	2.18	0.42
27:15:56:LYS:HE3	27:15:58:LEU:O	2.18	0.42
32:1a:160:A:H1'	32:1a:344:A:C5	2.54	0.42
32:1a:204:U:P	32:1a:204:U:H3'	2.60	0.42
32:1a:713:G:H2'	32:1a:714:G:C8	2.55	0.42
33:1b:105:PHE:C	33:1b:107:THR:N	2.78	0.42
35:1d:138:TYR:HE2	35:1d:140:VAL:HA	1.85	0.42
41:1j:80:LYS:O	41:1j:84:GLN:HB2	2.19	0.42
1:2A:731:C:H5''	61:2A:4329:HOH:O	2.18	0.42
1:2A:1035:U:H2'	1:2A:1036:G:C8	2.54	0.42
1:2A:1204:A:N1	1:2A:1241:A:N7	2.67	0.42
1:2A:1364:G:C8	23:21:3:LYS:HD2	2.54	0.42
1:2A:1814:G:H4'	3:2D:51:VAL:HG21	2.01	0.42
1:2A:2141:G:H2'	1:2A:2142:C:O4'	2.18	0.42
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.55	0.42
2:2B:42:C:O2	6:2G:92:VAL:HA	2.20	0.42
2:2B:78:A:C2	2:2B:100:A:C4	3.08	0.42
3:2D:16:MET:HE3	3:2D:16:MET:HB2	1.86	0.42
11:2P:59:LEU:HD11	30:28:10:ALA:HA	2.02	0.42
24:22:4:SER:HA	24:22:7:ARG:NH1	2.33	0.42
25:23:3:ARG:HE	25:23:36:VAL:CG1	2.32	0.42
27:25:55:ARG:HG3	27:25:55:ARG:NH1	2.35	0.42
32:2a:298:A:H2'	32:2a:299:G:O4'	2.20	0.42
32:2a:406:G:H21	35:2d:119:GLN:NE2	2.16	0.42
32:2a:406:G:N2	32:2a:437:U:O2	2.53	0.42
32:2a:504:C:H6	32:2a:504:C:O5'	2.03	0.42
32:2a:646:U:H2'	32:2a:647:C:H6	1.83	0.42
32:2a:841:U:C5	32:2a:848:C:H1'	2.55	0.42
32:2a:977:A:C2	32:2a:1224:G:C5	3.07	0.42
32:2a:989:C:H1'	32:2a:1016:A:H2	1.85	0.42
32:2a:1005:A:H1'	32:2a:1025:U:N3	2.35	0.42
32:2a:1095:U:H2'	32:2a:1096:C:H6	1.85	0.42
32:2a:1112:C:C4	34:2c:178:LEU:HD12	2.54	0.42
32:2a:1353:G:C2	32:2a:1370:G:C2	3.08	0.42
32:2a:1396:A:O4'	32:2a:1398:A:H1'	2.20	0.42
32:2a:1457:G:H5''	51:2t:35:THR:HG21	2.02	0.42
39:2h:100:ILE:HD11	39:2h:129:VAL:O	2.20	0.42
42:2k:43:SER:HB3	42:2k:68:ALA:HB2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:2v:12:A:N3	53:2v:12:A:H2'	2.34	0.42
1:1A:94:C:H2'	1:1A:94(A):G:O4'	2.20	0.42
1:1A:655:A:H8	1:1A:656:G:O4'	2.03	0.42
1:1A:1059:G:OP2	1:1A:1060:U:H3'	2.18	0.42
1:1A:1865:G:H5''	61:1A:4207:HOH:O	2.18	0.42
1:1A:1876:A:H2'	1:1A:1877:A:C8	2.55	0.42
1:1A:2072:G:N2	61:1A:4490:HOH:O	2.52	0.42
1:1A:2130:U:H2'	1:1A:2158:A:N1	2.35	0.42
32:1a:189:G:C4	32:1a:189(L):G:N2	2.87	0.42
32:1a:217:C:H2'	32:1a:218:C:C6	2.54	0.42
32:1a:538:G:OP2	43:1l:115:LYS:HD2	2.19	0.42
32:1a:1136:U:O5'	32:1a:1136:U:H6	2.03	0.42
32:1a:1151:A:O4'	41:1j:39:PRO:HB2	2.20	0.42
32:1a:1240:U:OP1	38:1g:119:ARG:NH2	2.50	0.42
33:1b:12:GLU:HB2	33:1b:213:LEU:CD2	2.44	0.42
33:1b:19:HIS:CE1	33:1b:189:ASP:OD2	2.73	0.42
38:1g:73:MET:HE3	38:1g:73:MET:HB3	1.80	0.42
40:1i:14:VAL:HG22	40:1i:66:ARG:O	2.19	0.42
47:1p:72:ARG:HG3	47:1p:73:LEU:HD23	2.01	0.42
1:2A:1190:G:O2'	1:2A:1191:G:H5'	2.20	0.42
1:2A:1782:C:H1'	1:2A:2609:U:H5''	2.02	0.42
1:2A:2206:G:H3'	1:2A:2207:G:N7	2.34	0.42
2:2B:83:G:H1	2:2B:94:C:N4	2.17	0.42
4:2E:48:GLN:HE21	4:2E:78:LEU:HD12	1.85	0.42
7:2H:30:LYS:HG2	7:2H:79:VAL:O	2.20	0.42
7:2H:98:LEU:HD23	7:2H:102:ALA:O	2.20	0.42
7:2H:167:GLU:HA	7:2H:168:PRO:HD3	1.89	0.42
8:2I:83:ALA:HB2	8:2I:123:LEU:HD21	2.02	0.42
8:2I:130:TYR:HB3	8:2I:138:ILE:HB	2.02	0.42
9:2N:20:GLY:N	9:2N:59:LYS:O	2.45	0.42
10:2O:113:LYS:HA	10:2O:113:LYS:HD2	1.61	0.42
11:2P:39:LYS:HB2	11:2P:45:LEU:HD22	2.00	0.42
12:2Q:1:MET:HB3	12:2Q:44:ALA:HB1	2.02	0.42
13:2R:100:LEU:HA	13:2R:100:LEU:HD23	1.74	0.42
22:20:19:LYS:HA	22:20:19:LYS:HD3	1.88	0.42
30:28:60:LEU:HD23	30:28:60:LEU:HA	1.88	0.42
32:2a:50:A:H4'	32:2a:52:G:OP1	2.19	0.42
32:2a:833:U:C2	32:2a:834:C:C5	3.08	0.42
32:2a:1014:A:H1'	50:2s:34:TRP:HB2	2.02	0.42
32:2a:1123:A:H1'	41:2j:37:PRO:O	2.20	0.42
32:2a:1133:G:H2'	32:2a:1134:G:H8	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1319:A:N6	32:2a:1361:G:H21	2.17	0.42
33:2b:88:ALA:CB	33:2b:222:ILE:HD11	2.48	0.42
33:2b:185:ILE:HG22	33:2b:199:TYR:CD2	2.55	0.42
33:2b:185:ILE:HG22	33:2b:199:TYR:HB2	2.01	0.42
45:2n:17:LYS:HB2	45:2n:17:LYS:HE3	1.91	0.42
1:1A:1047:G:H5''	1:1A:1047:G:H8	1.84	0.42
1:1A:1524:G:H2'	1:1A:1525:G:O4'	2.20	0.42
1:1A:2180:U:H2'	1:1A:2181:G:O4'	2.19	0.42
2:1B:29:A:C2	2:1B:30:C:C2	3.07	0.42
4:1E:79:ARG:HA	4:1E:79:ARG:HD3	1.70	0.42
6:1G:34:LEU:HD23	6:1G:34:LEU:HA	1.76	0.42
6:1G:66:GLN:HG3	26:14:1:MET:CE	2.43	0.42
32:1a:255:G:H1'	48:1q:16:GLN:OE1	2.20	0.42
32:1a:524:G:H2'	32:1a:525:C:C6	2.55	0.42
32:1a:1061:G:C4	32:1a:1197:G:N2	2.88	0.42
32:1a:1118:C:P	40:1i:104:ARG:HH11	2.43	0.42
47:1p:72:ARG:O	47:1p:75:ARG:HB3	2.20	0.42
1:2A:9:U:N3	1:2A:2629:A:C2	2.88	0.42
1:2A:392:C:H5''	1:2A:409:C:H5''	2.02	0.42
1:2A:687:C:H2'	1:2A:688:U:O4'	2.20	0.42
1:2A:819:A:C4	1:2A:1189:A:C2	3.08	0.42
1:2A:820:A:C2	1:2A:943:U:H4'	2.54	0.42
1:2A:884:C:H3'	1:2A:885:C:H6	1.81	0.42
1:2A:1017:G:O6	1:2A:1146:C:N4	2.52	0.42
1:2A:1183:G:H5''	25:23:30:ARG:HH21	1.83	0.42
1:2A:1324:G:C2	1:2A:1331:A:C2	3.08	0.42
1:2A:1520:G:H3'	1:2A:1523:U:H6	1.84	0.42
9:2N:15:LEU:HB2	9:2N:135:PRO:HB2	2.01	0.42
32:2a:189(A):C:O2'	32:2a:189(B):C:H5'	2.19	0.42
32:2a:416:G:H2'	32:2a:417:C:C6	2.54	0.42
32:2a:499:A:H4'	32:2a:500:G:OP1	2.19	0.42
32:2a:1263:C:O2	32:2a:1273:G:C2	2.72	0.42
44:2m:49:THR:OG1	44:2m:52:GLU:HG3	2.20	0.42
44:2m:50:GLU:O	44:2m:53:VAL:HG22	2.20	0.42
46:2o:87:ILE:CG2	46:2o:88:ARG:H	2.28	0.42
1:1A:614(C):A:C4	5:1F:180:GLY:HA2	2.55	0.42
1:1A:994:C:OP1	16:1U:53:ARG:NH2	2.53	0.42
1:1A:2404:C:O3'	11:1P:77:ARG:NH2	2.53	0.42
2:1B:4:C:H2'	2:1B:5:C:O4'	2.20	0.42
3:1D:205:VAL:O	3:1D:206:LEU:C	2.63	0.42
4:1E:116:VAL:HG13	4:1E:122:PHE:CB	2.49	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:1H:90:LYS:HE3	7:1H:163:TYR:CD2	2.54	0.42
14:1S:68:GLN:NE2	14:1S:71:ARG:HE	2.18	0.42
25:13:50:VAL:HB	25:13:53:LEU:HD12	2.02	0.42
32:1a:714:G:H2'	32:1a:715:A:C8	2.54	0.42
32:1a:720:C:H2'	32:1a:721:G:C8	2.55	0.42
32:1a:1359:C:O5'	32:1a:1359:C:H6	2.02	0.42
33:1b:47:THR:HA	33:1b:202:PRO:HG2	2.01	0.42
35:1d:111:ALA:HB3	35:1d:117:ALA:HB2	2.01	0.42
40:1i:33:PHE:HD2	40:1i:34:ASN:ND2	2.18	0.42
44:1m:123:ALA:HB2	54:1w:39:PSU:H1'	2.01	0.42
46:1o:55:GLY:HA2	46:1o:58:MET:HE3	2.02	0.42
1:2A:226:G:O2'	1:2A:227:A:N7	2.52	0.42
1:2A:1533:G:C2	1:2A:1537:G:C6	3.07	0.42
1:2A:1667:G:O2'	1:2A:1991:U:O4	2.30	0.42
1:2A:2050:C:H1'	4:2E:156:MET:HE2	2.02	0.42
1:2A:2365:G:H4'	22:20:60:PHE:CZ	2.55	0.42
4:2E:111:ARG:HA	13:2R:1:MET:SD	2.60	0.42
8:2I:69:LYS:HE3	8:2I:73:GLU:OE1	2.20	0.42
26:24:12:ALA:CB	26:24:26:SER:HB3	2.50	0.42
32:2a:359:U:H2'	32:2a:360:A:C8	2.54	0.42
32:2a:934:C:O2'	32:2a:1344:C:OP2	2.32	0.42
32:2a:1084:G:OP1	32:2a:1086:U:C2	2.73	0.42
32:2a:1122:U:C4	32:2a:1123:A:N7	2.88	0.42
32:2a:1208:C:H2'	32:2a:1209:C:C6	2.53	0.42
33:2b:27:LYS:C	33:2b:194:PRO:HG2	2.44	0.42
33:2b:88:ALA:HB2	33:2b:219:VAL:CG2	2.50	0.42
33:2b:212:GLN:O	33:2b:216:SER:N	2.42	0.42
35:2d:33:MET:HB2	60:2d:303:SF4:S2	2.60	0.42
35:2d:191:ARG:HD2	35:2d:191:ARG:HA	1.73	0.42
39:2h:110:ALA:HB3	39:2h:121:ASP:HB3	2.01	0.42
1:1A:1174:A:H1'	1:1A:1175:U:O5'	2.20	0.41
1:1A:1359:A:N3	1:1A:1359:A:H5'	2.35	0.41
1:1A:1477:A:C2	1:1A:1515:G:C2	3.08	0.41
1:1A:2251:OMG:HM23	1:1A:2251:OMG:H1'	1.89	0.41
1:1A:2874:C:OP1	61:1A:4247:HOH:O	2.22	0.41
5:1F:125:LEU:HD23	5:1F:125:LEU:HA	1.90	0.41
10:1O:16:ALA:HB2	10:1O:52:VAL:HG21	2.02	0.41
12:1Q:20:ALA:HB2	21:1Z:79:ARG:HG3	2.02	0.41
14:1S:71:ARG:HH11	14:1S:107:GLU:CD	2.28	0.41
21:1Z:124:ILE:HD11	21:1Z:152:ALA:HB2	2.02	0.41
32:1a:243:A:H4'	32:1a:244:U:H5''	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:376:G:O3'	47:1p:5:ARG:NE	2.53	0.41
32:1a:584:G:H2'	32:1a:585:G:C8	2.55	0.41
32:1a:613:C:H2'	32:1a:614:A:C8	2.55	0.41
32:1a:1316:G:N1	32:1a:1319:A:OP2	2.49	0.41
46:1o:87:ILE:O	46:1o:88:ARG:HB2	2.20	0.41
1:2A:208:C:H2'	1:2A:209:C:C6	2.55	0.41
1:2A:867:C:C4	1:2A:868:U:C5	3.08	0.41
1:2A:1412:A:C2	1:2A:1413:G:C4	3.08	0.41
1:2A:1717:G:C4	1:2A:1718:G:C8	3.08	0.41
1:2A:1721:G:H2'	1:2A:1740:G:O6	2.19	0.41
1:2A:2110:G:H3'	1:2A:2111:C:C5'	2.50	0.41
1:2A:2181:G:C6	1:2A:2182:G:N7	2.88	0.41
2:2B:9:G:OP1	14:2S:25:ARG:NH2	2.53	0.41
2:2B:38:C:C1'	14:2S:95:HIS:HE2	2.33	0.41
15:2T:23:ARG:HD3	15:2T:120:ARG:NH1	2.35	0.41
32:2a:189(L):G:H2'	32:2a:190:U:H6	1.84	0.41
32:2a:994:A:N7	32:2a:1216:G:H4'	2.35	0.41
32:2a:1103:C:C2	32:2a:1104:G:C8	3.08	0.41
32:2a:1176:A:C4	32:2a:1177:G:C8	3.08	0.41
32:2a:1241:G:H2'	32:2a:1242:C:C6	2.55	0.41
32:2a:1333:A:H2'	32:2a:1334:G:O4'	2.20	0.41
33:2b:52:GLU:O	33:2b:56:ARG:HB3	2.19	0.41
34:2c:12:LEU:HB3	34:2c:18:TRP:CH2	2.56	0.41
36:2e:24:ARG:O	36:2e:25:ARG:HG3	2.20	0.41
36:2e:74:GLY:O	36:2e:115:VAL:HA	2.20	0.41
37:2f:70:ASP:OD1	37:2f:70:ASP:N	2.53	0.41
37:2f:86:ARG:O	37:2f:87:ARG:HG2	2.19	0.41
38:2g:137:LYS:O	38:2g:141:VAL:HG23	2.20	0.41
39:2h:11:THR:HG23	39:2h:14:ARG:HH12	1.83	0.41
44:2m:84:ILE:C	44:2m:86:CYS:N	2.78	0.41
50:2s:72:GLY:HA2	50:2s:75:ALA:HB3	2.01	0.41
1:1A:139(A):G:O2'	1:1A:140:G:H5'	2.20	0.41
1:1A:452:G:C2	1:1A:458:G:C5	3.09	0.41
1:1A:534:U:H2'	1:1A:535:C:C6	2.55	0.41
1:1A:593:G:C6	1:1A:594:U:C4	3.08	0.41
1:1A:883:G:H21	1:1A:893:C:H42	1.68	0.41
1:1A:1171:G:C5	1:1A:1173:G:C8	3.08	0.41
1:1A:1275:A:N3	1:1A:1276:A:H1'	2.35	0.41
1:1A:2052:G:H4'	4:1E:143:ASN:O	2.21	0.41
1:1A:2740:A:H2'	1:1A:2741:A:C8	2.55	0.41
1:1A:2749:A:OP1	7:1H:3:ARG:NH1	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1B:110:G:H2'	2:1B:111:G:H8	1.86	0.41
14:1S:3:ARG:HA	14:1S:3:ARG:HD3	1.56	0.41
14:1S:80:LEU:HD23	14:1S:80:LEU:HA	1.81	0.41
21:1Z:137:ILE:HA	21:1Z:156:LYS:HZ1	1.85	0.41
26:14:14:ILE:HA	26:14:31:ILE:O	2.19	0.41
32:1a:179:A:H2'	32:1a:180:U:H6	1.86	0.41
32:1a:539:A:H2'	32:1a:540:G:C8	2.54	0.41
32:1a:724:G:C2	32:1a:725:G:C8	3.08	0.41
32:1a:1037:C:H2'	32:1a:1038:C:H6	1.85	0.41
32:1a:1084:G:C5	32:1a:1085:U:C4	3.08	0.41
32:1a:1217:C:OP1	45:1n:9:LYS:HE3	2.19	0.41
35:1d:4:TYR:OH	35:1d:7:PRO:O	2.37	0.41
40:1i:28:VAL:HA	40:1i:63:ILE:O	2.20	0.41
1:2A:7:G:H2'	1:2A:8:A:O4'	2.20	0.41
1:2A:495:G:N3	18:2W:61:ASN:ND2	2.68	0.41
1:2A:644:A:H4'	1:2A:645:C:N4	2.35	0.41
1:2A:992:C:OP1	17:2V:74:LYS:NZ	2.46	0.41
1:2A:1628:G:H2'	1:2A:1629:U:C6	2.55	0.41
1:2A:2086:U:H2'	1:2A:2087:G:C8	2.55	0.41
1:2A:2114:A:H62	1:2A:2115:G:H21	1.66	0.41
1:2A:2470:G:C2	1:2A:2471:C:C6	3.08	0.41
1:2A:2543:G:H2'	1:2A:2544:G:C8	2.55	0.41
2:2B:88:C:H2'	2:2B:89:G:O4'	2.20	0.41
5:2F:37:VAL:O	5:2F:41:LEU:HG	2.19	0.41
8:2I:50:ARG:O	8:2I:54:GLN:HB2	2.20	0.41
11:2P:1:MET:HB2	11:2P:1:MET:HE3	1.77	0.41
12:2Q:75:THR:HA	12:2Q:89:ASN:O	2.20	0.41
15:2T:11:GLU:O	15:2T:15:VAL:HG23	2.20	0.41
15:2T:64:ARG:NH1	15:2T:103:ARG:HA	2.35	0.41
21:2Z:82:ARG:HA	21:2Z:83:PRO:HD3	1.91	0.41
32:2a:137:C:H2'	32:2a:138:G:H8	1.85	0.41
32:2a:160:A:H1'	32:2a:344:A:C5	2.55	0.41
32:2a:545:C:O2'	32:2a:549:C:OP1	2.32	0.41
32:2a:1090:U:H2'	32:2a:1091:U:C6	2.55	0.41
32:2a:1305:G:O2'	32:2a:1331:G:N2	2.53	0.41
32:2a:1321:C:OP2	32:2a:1322:C:O2'	2.36	0.41
33:2b:30:ARG:HG3	33:2b:31:TYR:CD1	2.55	0.41
34:2c:83:ARG:C	34:2c:85:ARG:N	2.78	0.41
39:2h:135:CYS:SG	39:2h:136:GLU:N	2.91	0.41
41:2j:33:GLN:HE21	41:2j:33:GLN:HB2	1.63	0.41
43:2l:43:VAL:HG23	43:2l:55:VAL:HG21	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:2m:56:LEU:HD12	44:2m:56:LEU:HA	1.94	0.41
50:2s:47:HIS:O	50:2s:48:THR:HG23	2.20	0.41
54:2y:18:G:N1	54:2y:55:PSU:C4	2.87	0.41
1:1A:2190:G:H2'	1:1A:2191:G:O4'	2.21	0.41
8:1I:70:GLU:O	8:1I:74:ASN:HB2	2.21	0.41
12:1Q:10:ARG:NH1	12:1Q:90:VAL:H	2.19	0.41
20:1Y:20:TYR:HB3	20:1Y:23:ARG:HG3	2.02	0.41
24:12:53:LEU:HD23	24:12:53:LEU:HA	1.80	0.41
25:13:4:LEU:O	25:13:36:VAL:HA	2.19	0.41
32:1a:820:U:H4'	32:1a:821:G:OP2	2.20	0.41
32:1a:1286:A:H2'	32:1a:1287:A:H4'	2.03	0.41
32:1a:1516:G:H2'	32:1a:1518:MA6:OP2	2.20	0.41
38:1g:22:LEU:HG	38:1g:62:PHE:HE2	1.85	0.41
51:1t:62:LEU:HD23	51:1t:62:LEU:HA	1.66	0.41
55:1x:50:U:H2'	55:1x:51:C:C6	2.55	0.41
1:2A:878:A:N1	1:2A:879:G:C8	2.88	0.41
1:2A:975(A):G:C2	1:2A:990:A:C8	3.08	0.41
1:2A:1364:G:N7	23:21:3:LYS:HD2	2.35	0.41
1:2A:1778:U:OP1	61:2A:3954:HOH:O	2.21	0.41
1:2A:2280:G:O2'	1:2A:2388:A:N1	2.44	0.41
1:2A:2465:C:O2	1:2A:2486:G:C2	2.73	0.41
1:2A:2468:G:C2	1:2A:2481:G:N3	2.88	0.41
1:2A:2660:A:C6	1:2A:2661:G:C6	3.09	0.41
1:2A:2821:A:H2'	1:2A:2822:G:C8	2.56	0.41
4:2E:101:ARG:HB2	4:2E:201:THR:HG21	2.02	0.41
5:2F:158:THR:O	5:2F:164:ARG:HD3	2.20	0.41
6:2G:28:VAL:O	6:2G:31:VAL:N	2.36	0.41
6:2G:126:ASP:OD2	6:2G:130:ASN:ND2	2.53	0.41
7:2H:20:ALA:HB1	7:2H:21:PRO:HD2	2.02	0.41
13:2R:28:LEU:HD23	13:2R:48:VAL:HG21	2.02	0.41
21:2Z:126:VAL:HB	21:2Z:161:VAL:HG23	2.01	0.41
24:22:21:LEU:O	24:22:25:VAL:HG23	2.20	0.41
29:27:26:GLY:O	29:27:30:VAL:HG23	2.21	0.41
32:2a:6:G:N2	36:2e:98:THR:HG23	2.35	0.41
32:2a:501:C:H2'	32:2a:502:G:C8	2.55	0.41
32:2a:667:G:N2	32:2a:740:U:H1'	2.36	0.41
32:2a:833:U:H2'	32:2a:834:C:H6	1.83	0.41
32:2a:1078:U:H2'	32:2a:1079:G:C8	2.55	0.41
32:2a:1097:C:O4'	32:2a:1170:A:O2'	2.35	0.41
34:2c:155:GLY:O	34:2c:157:ILE:N	2.49	0.41
37:2f:41:GLU:OE1	49:2r:35:ARG:NH2	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:3:GLN:HE21	40:2i:20:ARG:HH21	1.68	0.41
52:2u:9:ARG:NE	52:2u:13:ILE:HD11	2.36	0.41
54:2y:11:C:H2'	54:2y:12:U:H6	1.86	0.41
54:2y:28:G:C2	54:2y:29:G:C8	3.07	0.41
1:1A:118:A:C8	1:1A:119:A:C8	3.08	0.41
1:1A:322:A:H5'	1:1A:340:A:H1'	2.01	0.41
1:1A:1095:A:H2'	1:1A:1096:A:H5''	2.02	0.41
1:1A:1184:G:H5'	25:13:29:ARG:NH1	2.36	0.41
1:1A:1396:U:H6	1:1A:1396:U:H2'	1.73	0.41
1:1A:2238:G:N3	1:1A:2238:G:H2'	2.34	0.41
17:1V:29:PRO:HA	17:1V:61:VAL:HG22	2.02	0.41
21:1Z:7:ALA:HB3	21:1Z:61:LEU:HD12	2.02	0.41
21:1Z:93:ASP:OD1	21:1Z:94:GLU:N	2.53	0.41
23:11:13:ILE:HD11	23:11:42:GLN:OE1	2.19	0.41
26:14:59:PHE:CD2	50:1s:64:GLU:HB3	2.55	0.41
32:1a:519:C:H2'	32:1a:520:A:C8	2.54	0.41
32:1a:562:C:H1'	43:1l:15:ARG:HB3	2.02	0.41
32:1a:975:A:H4'	32:1a:976:G:C5'	2.46	0.41
32:1a:1187:G:N3	45:1n:60:SER:OG	2.52	0.41
32:1a:1261:A:H3'	32:1a:1262:C:C6	2.55	0.41
33:1b:86:GLU:C	33:1b:89:GLY:H	2.28	0.41
36:1e:89:ILE:HG21	36:1e:135:THR:HA	2.02	0.41
1:2A:859:G:N2	1:2A:917:A:OP2	2.52	0.41
1:2A:883:G:C2	1:2A:894:C:O2	2.73	0.41
1:2A:897:C:H5'	54:2w:56:C:OP1	2.20	0.41
1:2A:1178:C:C2	1:2A:1179:C:C5	3.08	0.41
1:2A:1669:A:C8	10:2O:5:GLN:HG3	2.56	0.41
1:2A:1945:G:C6	1:2A:1946:U:C4	3.08	0.41
1:2A:2582:G:C2	1:2A:2583:G:C8	3.08	0.41
1:2A:2637:U:H5''	4:2E:82:ARG:HH12	1.84	0.41
3:2D:228:PRO:HD3	3:2D:235:GLY:CA	2.51	0.41
5:2F:178:PRO:HG2	5:2F:179:GLU:OE2	2.20	0.41
32:2a:64:G:C4'	32:2a:65:U:H3'	2.48	0.41
32:2a:358:U:H2'	32:2a:359:U:H6	1.82	0.41
32:2a:521:G:H4'	43:2l:73:GLU:HG2	2.02	0.41
32:2a:1030:C:N4	32:2a:1030(A):G:C5	2.89	0.41
32:2a:1348:U:H4'	40:2i:120:ARG:HD2	2.01	0.41
33:2b:61:LEU:HD11	33:2b:68:ILE:HG13	2.02	0.41
34:2c:127:ARG:HH22	34:2c:192:THR:CG2	2.32	0.41
34:2c:181:ASN:O	34:2c:204:LEU:HB2	2.21	0.41
36:2e:110:LEU:O	36:2e:115:VAL:HG23	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:33:GLN:O	41:2j:74:ILE:HD12	2.21	0.41
43:2l:37:CYS:HB2	43:2l:81:SER:H	1.84	0.41
43:2l:92:0TD:O	43:2l:93:LEU:HD23	2.20	0.41
50:2s:17:GLU:HG2	50:2s:21:GLU:HG3	2.02	0.41
53:2v:19:U:O5'	53:2v:19:U:H6	2.03	0.41
1:1A:864:G:H2'	1:1A:865:C:C6	2.55	0.41
1:1A:1076:C:H4'	1:1A:1077:A:OP1	2.20	0.41
6:1G:32:PRO:HB3	6:1G:163:ALA:HB2	2.01	0.41
8:1I:58:LEU:O	8:1I:61:ARG:N	2.53	0.41
8:1I:92:VAL:HG11	8:1I:144:VAL:HG11	2.02	0.41
21:1Z:1:MET:N	21:1Z:135:GLU:OE2	2.53	0.41
21:1Z:151:HIS:ND1	21:1Z:170:THR:HA	2.35	0.41
26:14:53:GLU:H	26:14:53:GLU:HG3	1.47	0.41
32:1a:401:C:P	35:1d:73:ARG:HH21	2.44	0.41
32:1a:445:G:H2'	32:1a:446:G:O4'	2.20	0.41
32:1a:747:C:H3'	32:1a:748:C:C5	2.56	0.41
32:1a:1266:G:N2	32:1a:1270:C:N3	2.69	0.41
33:1b:114:ARG:NH1	33:1b:117:GLU:OE1	2.51	0.41
36:1e:7:GLU:OE2	36:1e:37:ARG:NH2	2.53	0.41
38:1g:49:ILE:HG22	38:1g:53:LYS:HD2	2.03	0.41
39:1h:81:HIS:HB2	39:1h:138:TRP:CD1	2.55	0.41
40:1i:4:TYR:CD1	40:1i:88:TYR:HB2	2.55	0.41
54:1w:21:A:C5	54:1w:46:G7M:C6	3.03	0.41
54:1w:54:5MU:O5'	54:1w:54:5MU:H6	2.03	0.41
1:2A:56:A:H2'	1:2A:57:C:O4'	2.20	0.41
1:2A:64:A:O3'	19:2X:71:GLY:HA3	2.20	0.41
1:2A:84:A:H5''	20:2Y:8:LYS:HZ2	1.86	0.41
1:2A:639:U:H2'	1:2A:640:C:H6	1.84	0.41
1:2A:661:C:H2'	1:2A:662:G:C8	2.55	0.41
1:2A:878:A:N6	1:2A:899:A:H1'	2.28	0.41
1:2A:925:C:H2'	1:2A:926:A:C8	2.51	0.41
1:2A:1341:U:O2	19:2X:80:ILE:HD13	2.20	0.41
1:2A:1866:C:H2'	1:2A:1876:A:O4'	2.20	0.41
1:2A:1913:A:H4'	1:2A:1914:C:H5''	2.02	0.41
1:2A:2111:C:N3	1:2A:2145:C:O2'	2.48	0.41
1:2A:2494:G:C6	1:2A:2495:G:C5	3.08	0.41
1:2A:2633:G:H5''	1:2A:2812:G:H5'	2.03	0.41
1:2A:2886:G:H2'	1:2A:2887:U:H6	1.85	0.41
2:2B:33:G:C2'	2:2B:34:U:H5'	2.51	0.41
6:2G:124:SER:OG	6:2G:132:ASN:O	2.38	0.41
9:2N:46:VAL:HG23	9:2N:48:MET:HE3	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:2X:24:GLY:O	19:2X:83:VAL:HG22	2.20	0.41
27:25:35:GLU:HG2	27:25:51:TYR:CG	2.55	0.41
30:28:34:TRP:CG	30:28:35:GLN:N	2.89	0.41
32:2a:7:G:O2'	36:2e:120:THR:O	2.36	0.41
32:2a:942:G:C2	32:2a:1342:C:C2	3.09	0.41
32:2a:1178:G:H2'	32:2a:1180:A:OP2	2.21	0.41
36:2e:99:GLY:O	36:2e:117:ASP:HA	2.21	0.41
38:2g:101:LEU:O	38:2g:105:VAL:HG23	2.21	0.41
41:2j:25:GLU:O	41:2j:29:ARG:HG2	2.20	0.41
41:2j:49:VAL:CG1	41:2j:61:GLU:HB3	2.51	0.41
43:2l:110:VAL:HG23	43:2l:120:TYR:HB3	2.02	0.41
44:2m:97:PRO:HA	44:2m:110:ARG:HD3	2.01	0.41
48:2q:54:GLY:O	48:2q:81:ARG:N	2.41	0.41
49:2r:35:ARG:O	49:2r:37:VAL:N	2.53	0.41
53:2v:12:A:H5''	53:2v:13:A:OP1	2.20	0.41
1:1A:271(M):G:O2'	1:1A:271(N):U:H5''	2.21	0.41
1:1A:620:G:N3	1:1A:620:G:H5'	2.35	0.41
1:1A:876:C:H2'	1:1A:877:U:O4'	2.20	0.41
1:1A:947:G:H2'	1:1A:948:G:C8	2.56	0.41
1:1A:1540:U:C2'	1:1A:1541:G:H5'	2.50	0.41
1:1A:1878:G:H2'	1:1A:1879:C:C6	2.55	0.41
1:1A:2040:C:H2'	1:1A:2041:U:O4'	2.21	0.41
1:1A:2088:G:C6	1:1A:2089:U:C4	3.09	0.41
1:1A:2147:G:H3'	1:1A:2147:G:N3	2.35	0.41
1:1A:2808:U:O2'	1:1A:2809:A:H5'	2.21	0.41
3:1D:108:PRO:HD2	3:1D:111:LEU:HD22	2.01	0.41
6:1G:109:VAL:C	6:1G:112:PRO:HD2	2.45	0.41
7:1H:94:TYR:CE1	7:1H:107:VAL:C	2.99	0.41
14:1S:78:LEU:HD21	14:1S:109:GLY:O	2.21	0.41
17:1V:71:LEU:HD23	17:1V:71:LEU:HA	1.90	0.41
32:1a:487:A:H2'	32:1a:488:C:O4'	2.21	0.41
32:1a:922:G:C6	32:1a:923:A:C6	3.08	0.41
36:1e:12:LEU:HB3	36:1e:31:LEU:HB2	2.03	0.41
39:1h:53:VAL:HB	39:1h:58:TYR:CD2	2.56	0.41
39:1h:96:GLY:H	39:1h:99:GLU:CD	2.28	0.41
45:1n:15:LYS:HB3	45:1n:16:PHE:CE2	2.56	0.41
1:2A:41:C:H2'	1:2A:42:G:C8	2.55	0.41
1:2A:1494:A:C6	1:2A:1495:A:C6	3.09	0.41
1:2A:2019:A:O4'	16:2U:34:LYS:HE2	2.21	0.41
1:2A:2314:C:C5'	6:2G:38:VAL:HG21	2.45	0.41
3:2D:13:ARG:HA	3:2D:13:ARG:HD3	1.82	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:91:ARG:HD2	6:2G:93:THR:HG23	2.02	0.41
6:2G:113:ARG:NH2	6:2G:139:LEU:O	2.54	0.41
7:2H:98:LEU:HG	7:2H:125:VAL:HG23	2.03	0.41
32:2a:200:G:H2'	32:2a:201:C:O4'	2.21	0.41
32:2a:683:G:H2'	32:2a:684:A:O4'	2.20	0.41
32:2a:684:A:C6	32:2a:685:G:C6	3.09	0.41
32:2a:1157:A:H5'	32:2a:1158:C:C6	2.55	0.41
36:2e:135:THR:O	36:2e:136:MET:C	2.64	0.41
50:2s:33:THR:H	50:2s:57:HIS:CE1	2.38	0.41
54:2y:18:G:H1'	54:2y:57:G:O6	2.20	0.41
1:1A:2531:A:H5'	7:1H:157:TYR:CE1	2.56	0.41
1:1A:2881:C:H2'	1:1A:2882:A:O4'	2.21	0.41
15:1T:11:GLU:HG2	15:1T:57:PHE:CD2	2.55	0.41
19:1X:57:LEU:N	19:1X:57:LEU:HD23	2.35	0.41
21:1Z:92:SER:OG	21:1Z:93:ASP:N	2.52	0.41
32:1a:221:C:H2'	32:1a:222:U:H6	1.85	0.41
32:1a:376:G:P	47:1p:67:THR:HG21	2.61	0.41
32:1a:520:A:N1	32:1a:536:C:H1'	2.36	0.41
32:1a:555:C:H2'	32:1a:556:C:C6	2.55	0.41
32:1a:823:G:H2'	32:1a:824:C:O4'	2.20	0.41
32:1a:1006:C:H2'	32:1a:1007:C:C6	2.56	0.41
32:1a:1090:U:H2'	32:1a:1091:U:H6	1.86	0.41
32:1a:1226:C:O2'	44:1m:103:THR:O	2.33	0.41
32:1a:1486:G:O6	61:1a:1917:HOH:O	2.17	0.41
33:1b:8:LYS:HE2	33:1b:8:LYS:HB2	1.93	0.41
43:1l:54:LYS:HD2	43:1l:54:LYS:N	2.36	0.41
43:1l:90:VAL:O	43:1l:92:0TD:N	2.53	0.41
44:1m:84:ILE:HD12	50:1s:74:PHE:CZ	2.55	0.41
47:1p:48:TRP:CE3	47:1p:49:LEU:HB2	2.56	0.41
1:2A:423:A:OP1	61:2A:3956:HOH:O	2.22	0.41
1:2A:647:G:H2'	1:2A:648:G:O4'	2.21	0.41
1:2A:1252:G:N3	16:2U:33:ARG:HG2	2.35	0.41
1:2A:1999:C:H5''	1:2A:2723:C:O2'	2.21	0.41
1:2A:2059:A:C8	1:2A:2503:2MA:HM22	2.55	0.41
1:2A:2255:G:O2'	55:2x:3:C:H5'	2.20	0.41
2:2B:32:C:H2'	2:2B:33:G:O4'	2.20	0.41
5:2F:53:THR:HG22	5:2F:56:GLU:CG	2.50	0.41
6:2G:101:ILE:HG22	6:2G:105:LYS:HE2	2.02	0.41
7:2H:149:ARG:HA	7:2H:162:ILE:HG21	2.03	0.41
20:2Y:8:LYS:HE3	20:2Y:8:LYS:HB3	1.65	0.41
21:2Z:144:LEU:HG	21:2Z:145:GLU:H	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:451:A:C5	32:2a:481:G:C6	3.09	0.41
32:2a:982:U:H6	32:2a:982:U:OP1	2.03	0.41
32:2a:983:A:H2	32:2a:984:C:C6	2.38	0.41
32:2a:1297:C:OP1	44:2m:44:ARG:NH1	2.53	0.41
32:2a:1367:C:H5''	40:2i:114:TYR:HA	2.03	0.41
34:2c:162:GLN:OE1	34:2c:162:GLN:HA	2.21	0.41
35:2d:4:TYR:O	35:2d:115:ARG:NH1	2.45	0.41
38:2g:32:ARG:HB3	38:2g:32:ARG:CZ	2.50	0.41
40:2i:17:VAL:HG21	40:2i:81:ILE:N	2.35	0.41
46:2o:82:ILE:HD12	46:2o:88:ARG:HG3	2.02	0.41
51:2t:98:PRO:O	51:2t:99:LEU:HB2	2.21	0.41
54:2w:60:U:O2	54:2w:60:U:H2'	2.20	0.41
54:2y:24:G:C6	54:2y:25:C:C4	3.08	0.41
1:1A:143:G:H1'	19:1X:37:THR:CG2	2.50	0.41
1:1A:1431:U:H2'	1:1A:1432:C:C6	2.55	0.41
1:1A:1540:U:O2'	1:1A:1541:G:H5'	2.20	0.41
1:1A:1556:C:H2'	1:1A:1557:C:C6	2.56	0.41
1:1A:2156:G:OP2	1:1A:2156:G:H8	2.04	0.41
1:1A:2816:C:O2'	1:1A:2817:G:H5'	2.21	0.41
2:1B:110:G:H2'	2:1B:111:G:C8	2.56	0.41
4:1E:33:VAL:HG13	4:1E:47:VAL:HG23	2.03	0.41
7:1H:3:ARG:HG3	7:1H:4:ILE:N	2.36	0.41
8:1I:93:THR:OG1	8:1I:96:ASP:N	2.36	0.41
13:1R:67:LEU:HG	13:1R:76:VAL:HG21	2.03	0.41
13:1R:87:TYR:OH	13:1R:117:VAL:O	2.28	0.41
32:1a:118:U:H3'	32:1a:288:A:H61	1.85	0.41
32:1a:190:U:C5	32:1a:191:G:N7	2.88	0.41
32:1a:198:G:C6	32:1a:220:G:C2	3.09	0.41
32:1a:528:C:H41	43:1l:49:ASN:CG	2.28	0.41
32:1a:972:C:O2'	41:1j:55:LYS:O	2.35	0.41
32:1a:975:A:O2'	45:1n:32:SER:OG	2.21	0.41
32:1a:1136:U:H5''	32:1a:1137:C:C4	2.56	0.41
32:1a:1194:U:H2'	32:1a:1195:C:C6	2.55	0.41
32:1a:1236:A:H4'	32:1a:1304:G:H4'	2.01	0.41
33:1b:63:MET:HE3	33:1b:63:MET:HB2	1.88	0.41
38:1g:29:LYS:HD2	38:1g:29:LYS:HA	1.82	0.41
38:1g:65:ALA:O	38:1g:69:VAL:HG23	2.21	0.41
40:1i:99:LEU:HB3	40:1i:101:PHE:CE1	2.56	0.41
52:1u:12:LYS:HB3	52:1u:17:THR:O	2.21	0.41
1:2A:597:U:H2'	1:2A:598:G:H8	1.84	0.41
1:2A:866:A:N6	1:2A:914:C:C5	2.89	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1012:U:H5	9:2N:28:THR:HG21	1.86	0.41
1:2A:1160:G:C6	1:2A:1161:C:N3	2.89	0.41
1:2A:1425:G:C6	1:2A:1426:G:C6	3.08	0.41
1:2A:1510:G:O5'	1:2A:1510:G:H8	2.04	0.41
1:2A:1608:A:H1'	1:2A:1610:A:OP2	2.20	0.41
1:2A:1877:A:H5'	1:2A:1878:G:OP2	2.21	0.41
1:2A:1899:G:O2'	1:2A:1900:A:OP2	2.31	0.41
1:2A:2516:G:C6	1:2A:2517:C:C4	3.09	0.41
1:2A:2752:C:H2'	1:2A:2753:A:O4'	2.21	0.41
5:2F:81:PRO:HB3	5:2F:89:VAL:HG23	2.03	0.41
6:2G:179:PRO:HG3	26:24:43:TYR:CZ	2.55	0.41
7:2H:7:LEU:HD23	7:2H:69:ARG:CZ	2.51	0.41
10:2O:24:VAL:HG13	10:2O:33:ALA:HB2	2.03	0.41
11:2P:121:LYS:HB3	11:2P:121:LYS:HE2	1.85	0.41
12:2Q:16:ARG:HG3	12:2Q:17:LEU:H	1.86	0.41
21:2Z:52:SER:HB3	21:2Z:54:HIS:H	1.86	0.41
21:2Z:131:ARG:H	21:2Z:131:ARG:CD	2.34	0.41
22:20:6:GLY:C	22:20:7:LEU:HD23	2.45	0.41
30:28:33:ASN:HA	30:28:36:LYS:HD2	2.02	0.41
32:2a:1002:G:N2	32:2a:1039:C:N4	2.69	0.41
32:2a:1052:U:O4	32:2a:1200:C:O2'	2.35	0.41
32:2a:1097:C:C2	32:2a:1098:C:C6	3.08	0.41
32:2a:1151:A:O4'	41:2j:39:PRO:HB2	2.20	0.41
36:2e:80:ILE:HG21	36:2e:138:ALA:HB1	2.03	0.41
40:2i:55:ALA:HA	40:2i:58:HIS:CD2	2.55	0.41
48:2q:41:LYS:NZ	48:2q:92:ARG:HH21	2.17	0.41
49:2r:43:PHE:O	49:2r:51:LEU:HD12	2.21	0.41
54:2w:8:4SU:S4	54:2w:14:A:N7	2.94	0.41
1:1A:12:U:O2	1:1A:12:U:H2'	2.20	0.41
1:1A:1047:G:O2'	1:1A:1048:A:O5'	2.37	0.41
1:1A:1665:A:H2'	1:1A:1666:G:O4'	2.21	0.41
1:1A:1773:A:H2'	1:1A:1774:C:O4'	2.21	0.41
1:1A:2820:A:P	13:1R:2:ARG:HH22	2.43	0.41
3:1D:206:LEU:O	3:1D:211:ARG:HD3	2.21	0.41
4:1E:60:ASN:OD1	4:1E:63:LEU:HG	2.21	0.41
5:1F:165:ARG:HA	5:1F:168:ARG:HD2	2.03	0.41
7:1H:84:SER:HA	7:1H:133:VAL:O	2.21	0.41
8:1I:88:ILE:HG22	8:1I:89:TYR:N	2.36	0.41
11:1P:94:GLU:OE1	11:1P:124:LYS:HD3	2.20	0.41
11:1P:100:LEU:HD12	11:1P:112:LEU:HD22	2.03	0.41
24:12:2:LYS:O	24:12:6:VAL:HG23	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:163:C:H2'	32:1a:164:U:C6	2.56	0.41
32:1a:192:U:H2'	32:1a:193:C:C6	2.56	0.41
32:1a:195:A:C5	32:1a:196:A:N1	2.89	0.41
32:1a:397:A:H3'	32:1a:397:A:N3	2.35	0.41
32:1a:433:C:H2'	32:1a:434:U:C6	2.56	0.41
32:1a:491:G:H2'	32:1a:492:G:O4'	2.20	0.41
32:1a:601:C:H2'	32:1a:602:A:H8	1.86	0.41
32:1a:602:A:C6	32:1a:603:U:C4	3.09	0.41
32:1a:977:A:O2'	32:1a:979:C:OP2	2.39	0.41
32:1a:985:C:H2'	32:1a:986:A:C8	2.56	0.41
32:1a:1435:G:H2'	32:1a:1436:U:H6	1.81	0.41
33:1b:16:HIS:HB3	33:1b:210:SER:HB2	2.03	0.41
33:1b:125:PRO:HD2	33:1b:126:GLU:H	1.86	0.41
33:1b:150:SER:OG	33:1b:151:GLY:N	2.53	0.41
34:1c:12:LEU:HD23	34:1c:12:LEU:HA	1.87	0.41
35:1d:97:LEU:HD23	35:1d:97:LEU:HA	1.94	0.41
35:1d:175:SER:HB3	35:1d:186:LEU:CD2	2.47	0.41
36:1e:74:GLY:O	36:1e:115:VAL:HA	2.21	0.41
38:1g:45:ASP:O	38:1g:49:ILE:HG13	2.20	0.41
38:1g:104:LEU:HD13	38:1g:104:LEU:HA	1.92	0.41
39:1h:14:ARG:HD3	39:1h:18:ARG:NH2	2.36	0.41
40:1i:11:LYS:O	40:1i:12:GLU:HB2	2.21	0.41
40:1i:17:VAL:HG11	40:1i:80:GLY:C	2.46	0.41
40:1i:29:ASN:OD1	40:1i:64:THR:HA	2.20	0.41
41:1j:49:VAL:HG12	41:1j:61:GLU:O	2.21	0.41
47:1p:5:ARG:HD3	47:1p:22:THR:CG2	2.50	0.41
47:1p:38:TYR:CZ	47:1p:50:LYS:HB2	2.56	0.41
48:1q:48:GLU:O	48:1q:49:GLU:C	2.64	0.41
54:1y:24:G:H2'	54:1y:25:C:O4'	2.21	0.41
1:2A:881:G:N2	1:2A:882:G:H1'	2.35	0.41
1:2A:1161:C:H2'	1:2A:1162:G:C8	2.55	0.41
1:2A:1235:G:C2	1:2A:1236:G:N2	2.89	0.41
1:2A:1288:U:C2	1:2A:1327:C:O2	2.74	0.41
1:2A:1721:G:C2	1:2A:1739:U:OP2	2.74	0.41
1:2A:2029:G:H2'	1:2A:2031:A:OP1	2.20	0.41
1:2A:2097:C:H2'	1:2A:2098:U:O4'	2.20	0.41
1:2A:2106:G:C6	1:2A:2184:G:C6	3.09	0.41
1:2A:2150:U:C2'	1:2A:2151:G:H5'	2.51	0.41
1:2A:2319:G:H22	14:2S:3:ARG:HH11	1.68	0.41
1:2A:2365:G:P	22:20:55:ARG:HG2	2.61	0.41
1:2A:2519:U:C4	1:2A:2542:A:C5	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2564:A:OP1	1:2A:2648:C:H4'	2.21	0.41
1:2A:2756:U:H1'	1:2A:2757:A:H5''	2.02	0.41
4:2E:1:MET:HB3	4:2E:83:ASP:O	2.21	0.41
6:2G:161:THR:HG22	6:2G:163:ALA:H	1.84	0.41
8:2I:69:LYS:HG3	8:2I:70:GLU:N	2.36	0.41
8:2I:93:THR:O	8:2I:97:ILE:HG13	2.21	0.41
11:2P:63:PRO:HD3	30:28:27:THR:HG22	2.03	0.41
13:2R:118:GLU:CD	13:2R:118:GLU:H	2.29	0.41
21:2Z:24:LEU:HD12	21:2Z:25:PRO:CD	2.51	0.41
21:2Z:153:SER:HB3	21:2Z:167:PRO:HA	2.03	0.41
32:2a:281:G:O3'	32:2a:282:A:H8	2.04	0.41
32:2a:288:A:H2'	32:2a:289:G:H4'	2.02	0.41
32:2a:321:A:O2'	32:2a:322:C:H5'	2.21	0.41
32:2a:423:G:N3	32:2a:423:G:H3'	2.36	0.41
32:2a:512:U:H2'	32:2a:513:C:C6	2.55	0.41
32:2a:857:C:H2'	32:2a:858:G:O4'	2.20	0.41
32:2a:918:A:H2'	32:2a:919:A:O4'	2.21	0.41
32:2a:1041:A:H2'	32:2a:1042:G:O4'	2.20	0.41
32:2a:1122:U:H2'	32:2a:1123:A:H8	1.86	0.41
32:2a:1456:G:OP1	32:2a:1456:G:H8	2.04	0.41
32:2a:1503:A:H2	53:2v:13:A:C5	2.39	0.41
33:2b:47:THR:HG23	33:2b:202:PRO:HG2	2.02	0.41
33:2b:165:VAL:HG23	33:2b:187:LEU:HB3	2.02	0.41
34:2c:152:ILE:HD11	34:2c:199:LYS:NZ	2.36	0.41
36:2e:79:GLU:OE1	36:2e:79:GLU:N	2.53	0.41
37:2f:61:LEU:HD13	37:2f:63:TYR:OH	2.21	0.41
37:2f:82:ARG:HE	37:2f:82:ARG:HB3	1.40	0.41
38:2g:18:TYR:CD1	38:2g:59:LEU:HD13	2.56	0.41
40:2i:99:LEU:HD13	40:2i:99:LEU:HA	1.87	0.41
42:2k:38:ASN:HD22	42:2k:38:ASN:N	2.19	0.41
44:2m:29:ARG:HB3	44:2m:64:TRP:CZ3	2.56	0.41
45:2n:52:GLN:O	45:2n:53:LEU:HD23	2.21	0.41
49:2r:37:VAL:HG22	49:2r:79:LEU:HD23	2.03	0.41
54:2w:21:A:O2'	54:2w:22:G:OP1	2.38	0.41
1:1A:279:C:N4	1:1A:361:G:H1	2.10	0.41
1:1A:593:G:N2	1:1A:665:C:C2	2.89	0.41
1:1A:862:G:H2'	1:1A:863:A:O4'	2.21	0.41
1:1A:1094:U:N3	1:1A:1097:U:OP2	2.53	0.41
1:1A:1919:A:O2'	32:1a:1517:G:N3	2.48	0.41
1:1A:2065:C:H2'	1:1A:2066:C:C6	2.56	0.41
1:1A:2124:G:H2'	1:1A:2125:G:O4'	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2134:A:O2'	1:1A:2135:A:OP1	2.36	0.41
1:1A:2136:C:C4	1:1A:2155:G:N1	2.89	0.41
6:1G:96:ARG:H	6:1G:96:ARG:HG3	1.47	0.41
13:1R:16:HIS:HD2	13:1R:16:HIS:O	2.04	0.41
14:1S:32:LEU:HD23	14:1S:32:LEU:HA	1.78	0.41
20:1Y:79:CYS:SG	20:1Y:81:LYS:HG3	2.61	0.41
21:1Z:153:SER:CA	21:1Z:167:PRO:HB3	2.49	0.41
23:11:23:LYS:HD2	23:11:29:GLY:CA	2.51	0.41
24:12:31:GLU:HG2	24:12:53:LEU:HD11	2.03	0.41
25:13:32:GLN:HA	25:13:32:GLN:NE2	2.35	0.41
34:1c:111:LEU:HD21	34:1c:144:SER:O	2.21	0.41
1:2A:143:G:H2'	1:2A:143(A):C:C6	2.56	0.41
1:2A:484:C:H2'	1:2A:485:C:C6	2.56	0.41
1:2A:839:U:H1'	1:2A:1191:G:H1'	2.03	0.41
1:2A:1379:A:H8	1:2A:1379:A:O5'	2.04	0.41
1:2A:1826:G:H4'	3:2D:242:ARG:CZ	2.51	0.41
1:2A:2066:C:H5''	61:2A:4398:HOH:O	2.21	0.41
1:2A:2489:G:O2'	1:2A:2490:G:H5'	2.21	0.41
5:2F:183:VAL:O	5:2F:187:VAL:HG23	2.20	0.41
6:2G:111:LEU:CD2	6:2G:120:LEU:HD11	2.51	0.41
7:2H:70:THR:HG22	7:2H:74:ASN:HD21	1.86	0.41
11:2P:94:GLU:HG2	11:2P:95:VAL:N	2.36	0.41
23:21:94:LEU:HA	23:21:97:LEU:HD12	2.03	0.41
25:23:3:ARG:HE	25:23:36:VAL:HG11	1.85	0.41
26:24:40:HIS:CD2	26:24:41:PRO:HD2	2.56	0.41
32:2a:403:C:O2'	32:2a:404:U:H5'	2.21	0.41
32:2a:544:G:C6	32:2a:545:C:C4	3.09	0.41
32:2a:1133:G:C4	32:2a:1134:G:C8	3.09	0.41
32:2a:1251:A:O2'	32:2a:1369:C:O2'	2.36	0.41
32:2a:1343:G:C6	32:2a:1344:C:C4	3.08	0.41
33:2b:20:GLU:HG3	33:2b:189:ASP:HB2	2.02	0.41
34:2c:156:ARG:NE	34:2c:160:ALA:O	2.51	0.41
43:2l:84:LEU:HB2	43:2l:105:TYR:CE2	2.56	0.41
54:2w:50:U:H2'	54:2w:51:U:C6	2.56	0.41
54:2y:74:C:H2'	54:2y:75:C:C6	2.56	0.41
1:1A:654:A:H2	1:1A:655:A:C2	2.39	0.40
1:1A:1063:G:C6	1:1A:1064:C:N4	2.89	0.40
1:1A:1173:G:H2'	1:1A:1173:G:OP2	2.21	0.40
1:1A:1636:C:H2'	1:1A:1637:A:C8	2.56	0.40
1:1A:2591:C:H2'	1:1A:2592:G:H8	1.84	0.40
1:1A:2646:C:OP2	1:1A:2732:G:O2'	2.29	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2848:G:H3'	15:1T:95:ARG:O	2.22	0.40
2:1B:78:A:C2	2:1B:100:A:C4	3.08	0.40
2:1B:90:A:N7	2:1B:91:C:H1'	2.37	0.40
4:1E:32:PRO:HB2	4:1E:72:VAL:HG11	2.04	0.40
5:1F:39:TRP:O	5:1F:43:LYS:HD3	2.21	0.40
9:1N:108:PRO:O	9:1N:113:GLY:HA3	2.21	0.40
20:1Y:88:LYS:O	20:1Y:95:LYS:HA	2.20	0.40
23:11:52:ARG:HD3	23:11:55:GLY:C	2.46	0.40
32:1a:701:C:O2	32:1a:703:G:N1	2.55	0.40
32:1a:1084:G:C6	32:1a:1085:U:O4	2.75	0.40
32:1a:1292:U:H5'	40:1i:38:GLN:OE1	2.21	0.40
33:1b:112:VAL:O	33:1b:115:LEU:HB3	2.21	0.40
40:1i:5:TYR:HB2	40:1i:18:PHE:CE1	2.57	0.40
44:1m:87:TYR:O	44:1m:91:ARG:HG2	2.21	0.40
1:2A:271(K):U:O2	8:2I:50:ARG:HD3	2.21	0.40
1:2A:645:C:H5''	1:2A:646:A:OP2	2.21	0.40
1:2A:869:G:C6	1:2A:870:A:N7	2.89	0.40
2:2B:1:U:O2'	2:2B:2:C:O5'	2.34	0.40
2:2B:7:G:H2'	2:2B:8:U:O4'	2.21	0.40
2:2B:10:C:O2'	2:2B:11:C:H5'	2.20	0.40
2:2B:29:A:H2'	2:2B:30:C:C6	2.56	0.40
7:2H:35:VAL:O	7:2H:37:VAL:HG23	2.22	0.40
10:2O:66:LYS:HG2	10:2O:79:PHE:O	2.20	0.40
15:2T:119:LYS:HB2	32:2a:1442(A):G:N2	2.36	0.40
17:2V:2:PHE:CZ	17:2V:41:GLY:HA3	2.56	0.40
17:2V:2:PHE:CE2	17:2V:41:GLY:HA3	2.56	0.40
18:2W:5:ALA:C	18:2W:6:ILE:HG13	2.46	0.40
29:27:1:MET:HE2	29:27:1:MET:HB3	1.94	0.40
32:2a:1016:A:O2'	32:2a:1217:C:O2'	2.22	0.40
32:2a:1060:C:H5	34:2c:2:GLY:HA3	1.83	0.40
32:2a:1296:C:H5''	44:2m:44:ARG:NH2	2.36	0.40
33:2b:74:LYS:O	33:2b:78:GLN:HG2	2.20	0.40
33:2b:103:THR:HG23	33:2b:176:GLU:HB3	2.03	0.40
33:2b:139:LYS:HE3	33:2b:139:LYS:HB3	1.86	0.40
34:2c:65:ALA:HA	34:2c:100:ALA:HB3	2.03	0.40
36:2e:70:PRO:O	36:2e:71:LEU:HD23	2.21	0.40
36:2e:139:LEU:HA	36:2e:139:LEU:HD23	1.86	0.40
39:2h:20:TYR:CD1	39:2h:65:TYR:CD1	3.10	0.40
41:2j:81:THR:O	41:2j:84:GLN:N	2.42	0.40
54:2w:63:G:C6	54:2w:64:A:C6	3.09	0.40
1:1A:187:G:OP2	61:1A:4245:HOH:O	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:466:A:N3	1:1A:683:C:H1'	2.36	0.40
1:1A:715:G:C2	46:1o:56:LEU:HD21	2.56	0.40
1:1A:1794:U:H2'	1:1A:1795:C:C6	2.55	0.40
32:1a:189:G:C6	32:1a:189(L):G:C6	3.10	0.40
32:1a:1004:A:H5'	32:1a:1024:G:H1	1.86	0.40
32:1a:1134:G:H5'	32:1a:1135:U:OP2	2.20	0.40
32:1a:1376:U:H2'	32:1a:1377:A:C8	2.56	0.40
32:1a:1379:G:C4	32:1a:1380:U:C5	3.09	0.40
33:1b:18:GLY:CA	33:1b:42:ILE:HG13	2.42	0.40
34:1c:124:ILE:HG12	34:1c:124:ILE:H	1.68	0.40
35:1d:128:VAL:HG12	35:1d:129:ASN:ND2	2.37	0.40
35:1d:158:ILE:H	35:1d:158:ILE:HG13	1.50	0.40
41:1j:81:THR:C	41:1j:83:GLU:N	2.78	0.40
47:1p:39:TYR:HB2	47:1p:49:LEU:CD2	2.51	0.40
1:2A:272:G:H4'	1:2A:272(A):U:H5''	2.03	0.40
1:2A:577:G:C6	1:2A:578:A:C6	3.10	0.40
1:2A:1026:U:OP1	61:2A:3907:HOH:O	2.22	0.40
1:2A:1198:U:H2'	1:2A:1199:U:C6	2.57	0.40
1:2A:1509(B):A:H2'	1:2A:1510:G:C8	2.56	0.40
1:2A:1636:C:H2'	1:2A:1637:A:C8	2.57	0.40
1:2A:1839:G:N7	1:2A:1927:A:H1'	2.36	0.40
2:2B:28:C:C4	2:2B:29:A:N7	2.89	0.40
6:2G:14:GLU:C	6:2G:17:PRO:HD2	2.46	0.40
6:2G:41:GLN:NE2	6:2G:153:ARG:HB3	2.36	0.40
6:2G:110:ALA:HA	6:2G:140:ILE:O	2.21	0.40
11:2P:57:THR:O	11:2P:61:ARG:HG3	2.22	0.40
11:2P:135:LEU:HD23	11:2P:135:LEU:HA	1.86	0.40
14:2S:25:ARG:HD3	14:2S:42:ASP:OD2	2.21	0.40
21:2Z:158:PRO:HA	21:2Z:159:PRO:HD3	1.90	0.40
32:2a:17:U:O2'	32:2a:1079:G:N3	2.52	0.40
32:2a:25:C:H5'	32:2a:524:G:H1'	2.03	0.40
32:2a:328:C:H4'	32:2a:329:A:C5'	2.51	0.40
32:2a:509:A:H5''	35:2d:55:ALA:HB2	2.04	0.40
32:2a:583:A:H2'	32:2a:584:G:O4'	2.21	0.40
32:2a:683:G:C4	32:2a:684:A:C8	3.10	0.40
32:2a:1073:U:H2'	32:2a:1074:G:H8	1.87	0.40
32:2a:1142:G:H2'	32:2a:1143:G:O4'	2.21	0.40
32:2a:1170:A:H5''	32:2a:1171:G:OP2	2.21	0.40
32:2a:1178:G:O2'	32:2a:1180:A:N7	2.44	0.40
32:2a:1277:C:O2'	32:2a:1279:A:H8	2.03	0.40
33:2b:48:MET:HA	33:2b:51:LEU:HD12	2.02	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:2c:140:ARG:O	34:2c:143:GLU:N	2.50	0.40
39:2h:122:ARG:HG3	39:2h:125:ARG:HH21	1.86	0.40
46:2o:87:ILE:O	46:2o:88:ARG:HB2	2.21	0.40
48:2q:5:VAL:HA	48:2q:59:ILE:O	2.21	0.40
50:2s:40:ILE:HG23	50:2s:44:MET:SD	2.61	0.40
55:2x:41:C:C2	55:2x:42:G:C8	3.09	0.40
54:2y:66:U:H2'	54:2y:67:C:O4'	2.21	0.40
1:1A:1453:U:OP1	13:1R:77:ARG:NH1	2.43	0.40
1:1A:2127:G:C6	1:1A:2162:G:C6	3.10	0.40
1:1A:2321:G:N3	1:1A:2321:G:H2'	2.35	0.40
1:1A:2721:A:H5''	61:1A:4269:HOH:O	2.20	0.40
1:1A:2723:C:OP1	13:1R:3:HIS:ND1	2.54	0.40
3:1D:77:ALA:HB2	3:1D:97:TYR:CD1	2.57	0.40
7:1H:27:LYS:HG2	7:1H:32:GLU:HB3	2.02	0.40
16:1U:76:TYR:CE2	16:1U:80:ILE:HG13	2.57	0.40
22:10:70:GLN:HE21	22:10:72:ARG:HG2	1.86	0.40
32:1a:195:A:H1'	32:1a:222:U:O2'	2.21	0.40
32:1a:1123:A:O2'	41:1j:37:PRO:O	2.38	0.40
33:1b:133:LYS:HE3	33:1b:133:LYS:HB3	1.86	0.40
33:1b:155:LEU:HD11	33:1b:159:PRO:HG3	2.02	0.40
35:1d:178:VAL:C	35:1d:180:GLY:H	2.28	0.40
39:1h:17:THR:HG22	39:1h:63:LEU:HD13	2.02	0.40
44:1m:2:ALA:N	44:1m:8:GLU:OE1	2.54	0.40
51:1t:50:GLU:HG3	51:1t:100:ILE:HG23	2.03	0.40
51:1t:59:ALA:O	51:1t:63:ILE:HG13	2.22	0.40
54:1w:26:A:N1	54:1w:44:G:N2	2.63	0.40
54:1y:7:A:C6	54:1y:49:C:C4	3.09	0.40
1:2A:298:G:H5''	1:2A:299:A:OP1	2.22	0.40
1:2A:323:G:O2'	1:2A:1205:U:N3	2.44	0.40
1:2A:1539:G:H2'	1:2A:1540:U:O4'	2.21	0.40
1:2A:1815:A:OP2	3:2D:54:ARG:NH2	2.48	0.40
1:2A:1856:G:H2'	1:2A:1857:G:H5'	2.03	0.40
1:2A:2166:G:H5'	1:2A:2167:U:OP2	2.20	0.40
1:2A:2169:A:H1'	54:2y:56:C:C6	2.56	0.40
1:2A:2693:A:H2'	1:2A:2694:G:C8	2.57	0.40
21:2Z:97:GLU:HB3	21:2Z:125:LEU:HD11	2.04	0.40
21:2Z:159:PRO:HA	21:2Z:160:GLY:HA2	1.78	0.40
21:2Z:171:ILE:HG13	21:2Z:172:ALA:H	1.86	0.40
32:2a:320:C:O2'	32:2a:1435:G:H1'	2.21	0.40
32:2a:615:C:H2'	32:2a:616:G:O4'	2.21	0.40
32:2a:693:G:C6	32:2a:694:A:C6	3.09	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:818:G:N2	32:2a:873:A:OP1	2.50	0.40
32:2a:895:G:N7	61:2a:3337:HOH:O	2.37	0.40
32:2a:1121:U:C2'	32:2a:1122:U:H5'	2.51	0.40
32:2a:1206:G:C5	32:2a:1207:2MG:N7	2.89	0.40
33:2b:53:ARG:HA	33:2b:56:ARG:HH11	1.86	0.40
33:2b:149:LEU:HA	33:2b:152:PHE:HB3	2.04	0.40
40:2i:5:TYR:CD1	40:2i:18:PHE:CE1	3.09	0.40
40:2i:49:PRO:HG3	40:2i:101:PHE:CD1	2.54	0.40
40:2i:108:VAL:HG22	40:2i:109:VAL:N	2.36	0.40
1:1A:75:G:H4'	24:12:55:ARG:NH1	2.37	0.40
1:1A:228:A:C8	1:1A:229:A:H5'	2.57	0.40
1:1A:1908:C:O2	55:1x:12:G:H4'	2.21	0.40
8:1I:130:TYR:O	8:1I:138:ILE:N	2.54	0.40
11:1P:81:GLN:NE2	11:1P:105:LEU:O	2.54	0.40
19:1X:63:LYS:HZ3	19:1X:63:LYS:HG3	1.58	0.40
20:1Y:26:LYS:HA	20:1Y:26:LYS:HD3	1.82	0.40
21:1Z:103:ARG:O	21:1Z:138:GLU:HA	2.21	0.40
23:11:52:ARG:HE	23:11:52:ARG:HB2	1.66	0.40
30:18:62:LEU:HB3	30:18:65:GLU:CG	2.52	0.40
32:1a:187:C:H5'	51:1t:82:SER:HA	2.04	0.40
32:1a:799:G:C2'	32:1a:800:G:H5'	2.52	0.40
32:1a:833:U:H2'	32:1a:834:C:H6	1.87	0.40
32:1a:1055:A:C5	32:1a:1206:G:C2	3.10	0.40
32:1a:1090:U:H2'	32:1a:1091:U:C6	2.57	0.40
32:1a:1168:A:H2'	32:1a:1169:A:C8	2.56	0.40
34:1c:181:ASN:ND2	34:1c:204:LEU:HB2	2.37	0.40
38:1g:104:LEU:HD12	38:1g:123:GLU:HG3	2.03	0.40
48:1q:5:VAL:O	48:1q:6:LEU:HD23	2.22	0.40
1:2A:11:G:H2'	1:2A:12:U:H5'	2.03	0.40
1:2A:271(X):G:C2	1:2A:271(Y):U:O4	2.74	0.40
1:2A:361:G:O2'	1:2A:362:U:H5'	2.22	0.40
1:2A:1000:A:C5	1:2A:1155:A:C5	3.09	0.40
1:2A:1169:G:N2	1:2A:1181:C:C4	2.90	0.40
1:2A:1268:A:H2'	1:2A:1269:A:O4'	2.21	0.40
1:2A:1510:G:H2'	1:2A:1511:C:C6	2.56	0.40
1:2A:1638:C:H2'	1:2A:1639:U:O4'	2.21	0.40
1:2A:1647:G:H3'	1:2A:1647:G:P	2.61	0.40
1:2A:1762:A:N1	61:2A:4020:HOH:O	2.37	0.40
1:2A:1824:G:N3	3:2D:254:THR:OG1	2.54	0.40
1:2A:1937:A:H1'	1:2A:1939:5MU:H71	2.02	0.40
1:2A:1988:C:H2'	1:2A:1989:G:O4'	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2314:C:H2'	1:2A:2315:G:C8	2.43	0.40
1:2A:2322:A:H2'	1:2A:2323:G:O4'	2.20	0.40
1:2A:2365:G:O6	30:28:39:LYS:HE3	2.21	0.40
1:2A:2525:G:C2	1:2A:2539:C:C2	3.09	0.40
7:2H:27:LYS:HG2	7:2H:32:GLU:HB3	2.03	0.40
8:2I:81:VAL:HG12	8:2I:82:ARG:N	2.36	0.40
12:2Q:78:PRO:HG2	12:2Q:81:VAL:HG11	2.02	0.40
21:2Z:150:LEU:O	21:2Z:171:ILE:HG12	2.22	0.40
22:20:70:GLN:HE21	22:20:72:ARG:HD2	1.86	0.40
26:24:46:GLN:NE2	26:24:48:ARG:HD3	2.36	0.40
32:2a:432:A:C8	32:2a:433:C:C5	3.09	0.40
32:2a:546:G:OP1	35:2d:73:ARG:HG2	2.21	0.40
32:2a:741:G:H2'	32:2a:742:G:O4'	2.22	0.40
32:2a:938:A:C5	32:2a:939:G:C8	3.09	0.40
32:2a:1061:G:C5	32:2a:1062:U:C5	3.10	0.40
32:2a:1129:C:H2'	32:2a:1139:G:N7	2.36	0.40
32:2a:1183:A:OP2	61:2a:3322:HOH:O	2.22	0.40
32:2a:1328:C:OP1	52:2u:21:TYR:OH	2.33	0.40
32:2a:1360:A:H8	32:2a:1360:A:OP1	2.03	0.40
35:2d:196:LEU:HA	35:2d:196:LEU:HD23	1.63	0.40
47:2p:1:MET:O	47:2p:24:ALA:N	2.48	0.40
47:2p:75:ARG:HB2	47:2p:80:PHE:HE2	1.86	0.40
55:2x:40:C:O2'	55:2x:41:C:H5'	2.20	0.40
1:1A:614:U:H5'	1:1A:614(C):A:N6	2.36	0.40
1:1A:747:U:O2	1:1A:2014:A:H1'	2.22	0.40
1:1A:886:C:H3'	1:1A:887:A:C5'	2.51	0.40
1:1A:1072:C:H5''	1:1A:1073:A:OP1	2.21	0.40
1:1A:1445:A:H4'	1:1A:1445(A):C:OP2	2.22	0.40
1:1A:1683:C:H2'	1:1A:1684:C:C6	2.57	0.40
4:1E:31:CYS:HA	4:1E:32:PRO:HD2	1.93	0.40
6:1G:101:ILE:HG22	6:1G:105:LYS:HE2	2.04	0.40
12:1Q:6:ARG:C	12:1Q:7:MET:HG2	2.44	0.40
14:1S:61:ASN:HB3	14:1S:64:GLU:HB2	2.03	0.40
25:13:10:LYS:NZ	25:13:15:TYR:OH	2.52	0.40
32:1a:198:G:C6	32:1a:220:G:N3	2.90	0.40
32:1a:317:G:C6	32:1a:318:G:C5	3.09	0.40
32:1a:374:A:C6	32:1a:375:U:C4	3.09	0.40
32:1a:377:G:C2	32:1a:387:U:O2	2.74	0.40
32:1a:803:G:OP1	61:1a:1924:HOH:O	2.22	0.40
32:1a:1020:U:O2	32:1a:1020:U:H2'	2.22	0.40
34:1c:110:ASN:O	34:1c:141:VAL:HG22	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:76:ARG:NE	35:1d:80:GLU:OE2	2.47	0.40
35:1d:173:TRP:HB3	35:1d:187:ARG:HG3	2.04	0.40
36:1e:33:VAL:HG13	36:1e:112:LEU:HD22	2.03	0.40
38:1g:37:ASN:OD1	40:1i:41:VAL:HG12	2.21	0.40
39:1h:65:TYR:HA	39:1h:79:VAL:HG23	2.02	0.40
54:1w:43:C:H2'	54:1w:44:G:C8	2.57	0.40
1:2A:1839:G:C8	1:2A:1927:A:H1'	2.57	0.40
1:2A:1971:A:H2	3:2D:239:ARG:O	2.04	0.40
1:2A:2121:G:H1	1:2A:2177:C:H42	1.68	0.40
1:2A:2121:G:H2'	1:2A:2122:U:O4'	2.21	0.40
1:2A:2639:A:C2	1:2A:2778:A:C8	3.09	0.40
5:2F:126:VAL:O	5:2F:196:LEU:HG	2.21	0.40
9:2N:12:ARG:NH2	9:2N:50:ASP:OD2	2.52	0.40
9:2N:73:THR:HB	9:2N:82:LEU:HD11	2.04	0.40
12:2Q:18:LYS:HE2	12:2Q:18:LYS:HB2	1.97	0.40
15:2T:105:LEU:CB	15:2T:110:ILE:HG13	2.50	0.40
15:2T:109:GLU:HG2	15:2T:112:ARG:NH2	2.37	0.40
21:2Z:36:LYS:HB2	21:2Z:36:LYS:HE3	1.90	0.40
32:2a:195:A:N3	32:2a:222:U:O2'	2.52	0.40
32:2a:1205:U:H1'	34:2c:195:VAL:HG12	2.03	0.40
32:2a:1313:U:H2'	32:2a:1314:C:C6	2.57	0.40
32:2a:1367:C:OP1	40:2i:115:GLY:N	2.54	0.40
33:2b:76:GLN:HE21	33:2b:76:GLN:HB3	1.63	0.40
36:2e:40:ARG:NH1	36:2e:68:GLU:HA	2.36	0.40
46:2o:39:LEU:HB3	46:2o:56:LEU:HD12	2.04	0.40
50:2s:28:LYS:HD3	50:2s:28:LYS:HA	1.73	0.40

There are no symmetry-related clashes.

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%)	260 (95%)	13 (5%)	0	100	100
3	2D	273/276 (99%)	258 (94%)	15 (6%)	0	100	100
4	1E	202/206 (98%)	193 (96%)	7 (4%)	2 (1%)	13	14
4	2E	202/206 (98%)	190 (94%)	12 (6%)	0	100	100
5	1F	201/210 (96%)	194 (96%)	7 (4%)	0	100	100
5	2F	201/210 (96%)	184 (92%)	17 (8%)	0	100	100
6	1G	179/182 (98%)	165 (92%)	13 (7%)	1 (1%)	22	28
6	2G	179/182 (98%)	154 (86%)	24 (13%)	1 (1%)	22	28
7	1H	172/180 (96%)	163 (95%)	9 (5%)	0	100	100
7	2H	172/180 (96%)	160 (93%)	12 (7%)	0	100	100
8	1I	144/148 (97%)	123 (85%)	21 (15%)	0	100	100
8	2I	144/148 (97%)	123 (85%)	21 (15%)	0	100	100
9	1N	138/140 (99%)	129 (94%)	9 (6%)	0	100	100
9	2N	138/140 (99%)	129 (94%)	9 (6%)	0	100	100
10	1O	120/122 (98%)	113 (94%)	7 (6%)	0	100	100
10	2O	120/122 (98%)	110 (92%)	10 (8%)	0	100	100
11	1P	147/150 (98%)	133 (90%)	13 (9%)	1 (1%)	19	24
11	2P	147/150 (98%)	130 (88%)	16 (11%)	1 (1%)	19	24
12	1Q	139/141 (99%)	132 (95%)	7 (5%)	0	100	100
12	2Q	139/141 (99%)	125 (90%)	14 (10%)	0	100	100
13	1R	116/118 (98%)	112 (97%)	4 (3%)	0	100	100
13	2R	116/118 (98%)	111 (96%)	5 (4%)	0	100	100
14	1S	108/112 (96%)	104 (96%)	4 (4%)	0	100	100
14	2S	108/112 (96%)	91 (84%)	17 (16%)	0	100	100
15	1T	129/146 (88%)	120 (93%)	9 (7%)	0	100	100
15	2T	129/146 (88%)	125 (97%)	4 (3%)	0	100	100
16	1U	114/118 (97%)	114 (100%)	0	0	100	100
16	2U	114/118 (97%)	109 (96%)	5 (4%)	0	100	100
17	1V	99/101 (98%)	97 (98%)	2 (2%)	0	100	100
17	2V	99/101 (98%)	89 (90%)	9 (9%)	1 (1%)	13	14
18	1W	110/113 (97%)	110 (100%)	0	0	100	100
18	2W	110/113 (97%)	107 (97%)	3 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
19	1X	93/96 (97%)	89 (96%)	4 (4%)	0	100	100
19	2X	93/96 (97%)	88 (95%)	5 (5%)	0	100	100
20	1Y	105/110 (96%)	99 (94%)	6 (6%)	0	100	100
20	2Y	105/110 (96%)	97 (92%)	7 (7%)	1 (1%)	13	14
21	1Z	148/206 (72%)	129 (87%)	17 (12%)	2 (1%)	9	9
21	2Z	156/206 (76%)	128 (82%)	26 (17%)	2 (1%)	10	10
22	10	75/85 (88%)	72 (96%)	3 (4%)	0	100	100
22	20	81/85 (95%)	75 (93%)	6 (7%)	0	100	100
23	11	95/98 (97%)	91 (96%)	4 (4%)	0	100	100
23	21	95/98 (97%)	93 (98%)	2 (2%)	0	100	100
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100	100
24	22	68/72 (94%)	67 (98%)	1 (2%)	0	100	100
25	13	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
25	23	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
26	14	67/71 (94%)	47 (70%)	20 (30%)	0	100	100
26	24	67/71 (94%)	47 (70%)	19 (28%)	1 (2%)	8	8
27	15	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
27	25	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
28	16	51/54 (94%)	50 (98%)	1 (2%)	0	100	100
28	26	51/54 (94%)	48 (94%)	3 (6%)	0	100	100
29	17	46/49 (94%)	46 (100%)	0	0	100	100
29	27	46/49 (94%)	45 (98%)	1 (2%)	0	100	100
30	18	62/65 (95%)	62 (100%)	0	0	100	100
30	28	62/65 (95%)	59 (95%)	3 (5%)	0	100	100
31	19	35/37 (95%)	35 (100%)	0	0	100	100
31	29	35/37 (95%)	33 (94%)	2 (6%)	0	100	100
33	1b	229/256 (90%)	186 (81%)	41 (18%)	2 (1%)	14	18
33	2b	229/256 (90%)	181 (79%)	44 (19%)	4 (2%)	7	6
34	1c	204/239 (85%)	188 (92%)	16 (8%)	0	100	100
34	2c	204/239 (85%)	160 (78%)	44 (22%)	0	100	100
35	1d	206/209 (99%)	188 (91%)	18 (9%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
35	2d	206/209 (99%)	190 (92%)	16 (8%)	0	100	100
36	1e	146/162 (90%)	133 (91%)	13 (9%)	0	100	100
36	2e	146/162 (90%)	124 (85%)	22 (15%)	0	100	100
37	1f	98/101 (97%)	94 (96%)	4 (4%)	0	100	100
37	2f	98/101 (97%)	93 (95%)	5 (5%)	0	100	100
38	1g	153/156 (98%)	144 (94%)	9 (6%)	0	100	100
38	2g	153/156 (98%)	135 (88%)	17 (11%)	1 (1%)	19	24
39	1h	135/138 (98%)	125 (93%)	10 (7%)	0	100	100
39	2h	135/138 (98%)	119 (88%)	16 (12%)	0	100	100
40	1i	125/128 (98%)	104 (83%)	21 (17%)	0	100	100
40	2i	125/128 (98%)	103 (82%)	22 (18%)	0	100	100
41	1j	95/105 (90%)	78 (82%)	16 (17%)	1 (1%)	12	13
41	2j	94/105 (90%)	78 (83%)	15 (16%)	1 (1%)	12	13
42	1k	112/129 (87%)	101 (90%)	11 (10%)	0	100	100
42	2k	112/129 (87%)	102 (91%)	10 (9%)	0	100	100
43	1l	119/132 (90%)	111 (93%)	6 (5%)	2 (2%)	7	6
43	2l	119/132 (90%)	108 (91%)	11 (9%)	0	100	100
44	1m	121/126 (96%)	103 (85%)	18 (15%)	0	100	100
44	2m	120/126 (95%)	99 (82%)	21 (18%)	0	100	100
45	1n	58/61 (95%)	50 (86%)	7 (12%)	1 (2%)	7	6
45	2n	58/61 (95%)	47 (81%)	9 (16%)	2 (3%)	3	1
46	1o	86/89 (97%)	80 (93%)	6 (7%)	0	100	100
46	2o	86/89 (97%)	80 (93%)	6 (7%)	0	100	100
47	1p	80/88 (91%)	71 (89%)	9 (11%)	0	100	100
47	2p	80/88 (91%)	74 (92%)	6 (8%)	0	100	100
48	1q	97/105 (92%)	87 (90%)	10 (10%)	0	100	100
48	2q	97/105 (92%)	91 (94%)	6 (6%)	0	100	100
49	1r	66/88 (75%)	57 (86%)	9 (14%)	0	100	100
49	2r	66/88 (75%)	60 (91%)	6 (9%)	0	100	100
50	1s	81/93 (87%)	70 (86%)	11 (14%)	0	100	100
50	2s	81/93 (87%)	64 (79%)	17 (21%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
51	1t	94/106 (89%)	81 (86%)	13 (14%)	0	100	100
51	2t	94/106 (89%)	82 (87%)	12 (13%)	0	100	100
52	1u	21/27 (78%)	17 (81%)	4 (19%)	0	100	100
52	2u	21/27 (78%)	18 (86%)	3 (14%)	0	100	100
All	All	11364/12128 (94%)	10319 (91%)	1018 (9%)	27 (0%)	44	54

All (27) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
11	1P	36	LYS
21	1Z	53	ILE
21	2Z	52	SER
33	2b	10	LEU
6	1G	96	ARG
41	1j	79	ARG
43	1l	91	LYS
45	1n	14	PRO
11	2P	36	LYS
21	2Z	51	ALA
26	24	47	GLN
41	2j	79	ARG
45	2n	14	PRO
33	2b	21	ARG
33	1b	125	PRO
6	2G	96	ARG
33	2b	9	GLU
21	1Z	52	SER
4	1E	52	LEU
43	1l	106	ASP
33	2b	74	LYS
4	1E	71	GLY
33	1b	124	SER
38	2g	55	GLY
45	2n	13	THR
17	2V	79	VAL
20	2Y	55	TYR

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	1D	215/218 (99%)	198 (92%)	17 (8%)	10	11
3	2D	215/218 (99%)	193 (90%)	22 (10%)	6	5
4	1E	164/166 (99%)	153 (93%)	11 (7%)	13	17
4	2E	164/166 (99%)	146 (89%)	18 (11%)	5	4
5	1F	160/166 (96%)	139 (87%)	21 (13%)	3	2
5	2F	159/166 (96%)	135 (85%)	24 (15%)	2	1
6	1G	143/156 (92%)	128 (90%)	15 (10%)	5	5
6	2G	143/156 (92%)	117 (82%)	26 (18%)	1	0
7	1H	144/148 (97%)	128 (89%)	16 (11%)	5	4
7	2H	144/148 (97%)	119 (83%)	25 (17%)	1	0
8	1I	113/124 (91%)	91 (80%)	22 (20%)	1	0
8	2I	105/124 (85%)	78 (74%)	27 (26%)	0	0
9	1N	118/119 (99%)	110 (93%)	8 (7%)	13	16
9	2N	118/119 (99%)	104 (88%)	14 (12%)	4	3
10	1O	100/100 (100%)	97 (97%)	3 (3%)	36	51
10	2O	100/100 (100%)	93 (93%)	7 (7%)	12	15
11	1P	115/116 (99%)	109 (95%)	6 (5%)	19	27
11	2P	115/116 (99%)	108 (94%)	7 (6%)	15	21
12	1Q	111/111 (100%)	105 (95%)	6 (5%)	18	26
12	2Q	111/111 (100%)	104 (94%)	7 (6%)	15	20
13	1R	101/101 (100%)	97 (96%)	4 (4%)	27	39
13	2R	101/101 (100%)	94 (93%)	7 (7%)	13	16
14	1S	86/88 (98%)	77 (90%)	9 (10%)	5	5
14	2S	85/88 (97%)	72 (85%)	13 (15%)	2	1
15	1T	115/127 (91%)	106 (92%)	9 (8%)	10	12
15	2T	113/127 (89%)	107 (95%)	6 (5%)	19	27

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
16	1U	93/94 (99%)	86 (92%)	7 (8%)	11	13
16	2U	93/94 (99%)	84 (90%)	9 (10%)	6	6
17	1V	80/82 (98%)	73 (91%)	7 (9%)	8	8
17	2V	80/82 (98%)	74 (92%)	6 (8%)	11	13
18	1W	90/92 (98%)	87 (97%)	3 (3%)	33	47
18	2W	90/92 (98%)	84 (93%)	6 (7%)	13	17
19	1X	77/78 (99%)	72 (94%)	5 (6%)	14	18
19	2X	77/78 (99%)	70 (91%)	7 (9%)	7	7
20	1Y	85/91 (93%)	74 (87%)	11 (13%)	3	2
20	2Y	85/91 (93%)	72 (85%)	13 (15%)	2	1
21	1Z	135/179 (75%)	121 (90%)	14 (10%)	5	5
21	2Z	137/179 (76%)	118 (86%)	19 (14%)	3	2
22	10	61/67 (91%)	58 (95%)	3 (5%)	21	30
22	20	65/67 (97%)	62 (95%)	3 (5%)	23	33
23	11	80/83 (96%)	77 (96%)	3 (4%)	28	41
23	21	80/83 (96%)	76 (95%)	4 (5%)	20	29
24	12	65/67 (97%)	63 (97%)	2 (3%)	35	50
24	22	65/67 (97%)	58 (89%)	7 (11%)	5	4
25	13	51/52 (98%)	45 (88%)	6 (12%)	4	3
25	23	50/52 (96%)	46 (92%)	4 (8%)	10	11
26	14	59/63 (94%)	52 (88%)	7 (12%)	4	3
26	24	53/63 (84%)	42 (79%)	11 (21%)	1	0
27	15	50/52 (96%)	48 (96%)	2 (4%)	27	39
27	25	50/52 (96%)	44 (88%)	6 (12%)	4	3
28	16	51/52 (98%)	45 (88%)	6 (12%)	4	3
28	26	50/52 (96%)	44 (88%)	6 (12%)	4	3
29	17	41/42 (98%)	38 (93%)	3 (7%)	11	14
29	27	41/42 (98%)	38 (93%)	3 (7%)	11	14
30	18	54/55 (98%)	51 (94%)	3 (6%)	17	24
30	28	54/55 (98%)	50 (93%)	4 (7%)	11	13
31	19	34/34 (100%)	32 (94%)	2 (6%)	16	23

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
31	29	34/34 (100%)	32 (94%)	2 (6%)	16	23
33	1b	192/220 (87%)	167 (87%)	25 (13%)	3	2
33	2b	187/220 (85%)	153 (82%)	34 (18%)	1	0
34	1c	142/188 (76%)	121 (85%)	21 (15%)	2	1
34	2c	140/188 (74%)	117 (84%)	23 (16%)	2	1
35	1d	169/181 (93%)	139 (82%)	30 (18%)	1	0
35	2d	173/181 (96%)	153 (88%)	20 (12%)	4	3
36	1e	113/123 (92%)	97 (86%)	16 (14%)	2	2
36	2e	114/123 (93%)	93 (82%)	21 (18%)	1	0
37	1f	84/90 (93%)	74 (88%)	10 (12%)	4	3
37	2f	85/90 (94%)	79 (93%)	6 (7%)	12	15
38	1g	119/127 (94%)	100 (84%)	19 (16%)	2	1
38	2g	120/127 (94%)	106 (88%)	14 (12%)	4	3
39	1h	114/119 (96%)	106 (93%)	8 (7%)	12	15
39	2h	114/119 (96%)	101 (89%)	13 (11%)	4	4
40	1i	90/99 (91%)	79 (88%)	11 (12%)	4	3
40	2i	89/99 (90%)	77 (86%)	12 (14%)	3	2
41	1j	66/92 (72%)	61 (92%)	5 (8%)	11	13
41	2j	69/92 (75%)	56 (81%)	13 (19%)	1	0
42	1k	82/99 (83%)	75 (92%)	7 (8%)	8	9
42	2k	83/99 (84%)	76 (92%)	7 (8%)	9	9
43	1l	96/108 (89%)	88 (92%)	8 (8%)	9	10
43	2l	96/108 (89%)	89 (93%)	7 (7%)	11	14
44	1m	93/101 (92%)	78 (84%)	15 (16%)	2	1
44	2m	92/101 (91%)	81 (88%)	11 (12%)	4	3
45	1n	49/50 (98%)	42 (86%)	7 (14%)	2	2
45	2n	49/50 (98%)	39 (80%)	10 (20%)	1	0
46	1o	78/80 (98%)	71 (91%)	7 (9%)	8	8
46	2o	78/80 (98%)	72 (92%)	6 (8%)	10	12
47	1p	69/74 (93%)	61 (88%)	8 (12%)	4	3
47	2p	68/74 (92%)	60 (88%)	8 (12%)	4	3

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
48	1q	94/97 (97%)	83 (88%)	11 (12%)	4	3
48	2q	94/97 (97%)	82 (87%)	12 (13%)	3	2
49	1r	59/77 (77%)	52 (88%)	7 (12%)	4	3
49	2r	59/77 (77%)	53 (90%)	6 (10%)	6	5
50	1s	69/80 (86%)	61 (88%)	8 (12%)	4	3
50	2s	67/80 (84%)	54 (81%)	13 (19%)	1	0
51	1t	70/82 (85%)	64 (91%)	6 (9%)	8	9
51	2t	70/82 (85%)	65 (93%)	5 (7%)	12	15
52	1u	18/22 (82%)	18 (100%)	0	100	100
52	2u	18/22 (82%)	15 (83%)	3 (17%)	2	1
All	All	9299/10064 (92%)	8282 (89%)	1017 (11%)	5	4

All (1017) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	32	SER
3	1D	37	LEU
3	1D	38	LYS
3	1D	61	LEU
3	1D	88	ARG
3	1D	99	ASP
3	1D	106	ILE
3	1D	122	ASP
3	1D	142	VAL
3	1D	173	VAL
3	1D	183	ARG
3	1D	211	ARG
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	273	ARG
4	1E	9	VAL
4	1E	12	THR
4	1E	21	VAL
4	1E	34	VAL
4	1E	59	VAL
4	1E	72	VAL

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Mol	Chain	Res	Type
4	1E	73	GLU
4	1E	90	THR
4	1E	116	VAL
4	1E	181	LEU
4	1E	184	VAL
5	1F	9	ILE
5	1F	12	LEU
5	1F	18	ARG
5	1F	27	GLU
5	1F	33	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	70	THR
5	1F	74	ARG
5	1F	88	VAL
5	1F	106	ARG
5	1F	132	VAL
5	1F	140	LEU
5	1F	158	THR
5	1F	162	LEU
5	1F	168	ARG
5	1F	175	THR
5	1F	183	VAL
5	1F	192	LEU
5	1F	201	VAL
5	1F	205	ARG
6	1G	5	VAL
6	1G	7	LEU
6	1G	21	ARG
6	1G	22	ARG
6	1G	28	VAL
6	1G	33	ARG
6	1G	43	LEU
6	1G	79	ASN
6	1G	91	ARG
6	1G	115	ARG
6	1G	139	LEU
6	1G	140	ILE
6	1G	148	MET
6	1G	159	VAL
6	1G	181	ARG
7	1H	2	SER

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Mol	Chain	Res	Type
7	1H	15	VAL
7	1H	18	GLU
7	1H	23	ARG
7	1H	45	VAL
7	1H	51	ARG
7	1H	56	SER
7	1H	76	VAL
7	1H	85	LYS
7	1H	99	VAL
7	1H	116	GLU
7	1H	119	GLU
7	1H	124	GLU
7	1H	127	GLU
7	1H	129	THR
7	1H	149	ARG
8	1I	1	MET
8	1I	4	ILE
8	1I	10	GLU
8	1I	12	LEU
8	1I	38	LEU
8	1I	40	THR
8	1I	41	GLU
8	1I	42	SER
8	1I	47	LEU
8	1I	62	LYS
8	1I	74	ASN
8	1I	75	LEU
8	1I	85	GLU
8	1I	87	LYS
8	1I	92	VAL
8	1I	108	THR
8	1I	109	ILE
8	1I	123	LEU
8	1I	129	THR
8	1I	133	HIS
8	1I	140	LEU
8	1I	142	VAL
9	1N	1	MET
9	1N	14	VAL
9	1N	28	THR
9	1N	48	MET
9	1N	61	ARG

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Mol	Chain	Res	Type
9	1N	96	GLU
9	1N	137	LYS
9	1N	138	LEU
10	1O	28	SER
10	1O	98	VAL
10	1O	108	GLU
11	1P	45	LEU
11	1P	75	ILE
11	1P	90	ARG
11	1P	126	VAL
11	1P	133	SER
11	1P	148	LEU
12	1Q	7	MET
12	1Q	8	LYS
12	1Q	16	ARG
12	1Q	56	ARG
12	1Q	109	VAL
12	1Q	133	ARG
13	1R	15	SER
13	1R	36	THR
13	1R	111	LEU
13	1R	114	VAL
14	1S	3	ARG
14	1S	8	GLU
14	1S	13	ARG
14	1S	14	VAL
14	1S	36	TYR
14	1S	38	GLN
14	1S	46	VAL
14	1S	50	SER
14	1S	110	LEU
15	1T	28	VAL
15	1T	36	GLU
15	1T	38	ASN
15	1T	49	VAL
15	1T	51	ARG
15	1T	67	SER
15	1T	70	VAL
15	1T	125	ARG
15	1T	128	GLU
16	1U	8	VAL
16	1U	9	VAL

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Mol	Chain	Res	Type
16	1U	17	ILE
16	1U	31	SER
16	1U	74	LEU
16	1U	95	LEU
16	1U	100	VAL
17	1V	10	LYS
17	1V	32	THR
17	1V	56	SER
17	1V	61	VAL
17	1V	79	VAL
17	1V	85	LYS
17	1V	100	ARG
18	1W	11	ARG
18	1W	15	ARG
18	1W	17	VAL
19	1X	1	MET
19	1X	38	GLU
19	1X	57	LEU
19	1X	72	LYS
19	1X	81	VAL
20	1Y	1	MET
20	1Y	2	ARG
20	1Y	31	LEU
20	1Y	55	TYR
20	1Y	61	ILE
20	1Y	64	GLU
20	1Y	72	VAL
20	1Y	75	ILE
20	1Y	91	GLU
20	1Y	99	CYS
20	1Y	106	LEU
21	1Z	28	MET
21	1Z	61	LEU
21	1Z	72	ARG
21	1Z	92	SER
21	1Z	119	GLU
21	1Z	129	SER
21	1Z	132	ASN
21	1Z	139	VAL
21	1Z	150	LEU
21	1Z	154	ASP
21	1Z	155	LEU

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Mol	Chain	Res	Type
21	1Z	163	LEU
21	1Z	170	THR
21	1Z	171	ILE
22	10	10	THR
22	10	43	THR
22	10	49	LYS
23	11	35	THR
23	11	46	LEU
23	11	52	ARG
24	12	1	MET
24	12	19	VAL
25	13	34	GLU
25	13	54	VAL
25	13	55	ARG
25	13	56	VAL
25	13	58	VAL
25	13	60	GLU
26	14	5	ILE
26	14	15	ILE
26	14	49	PHE
26	14	53	GLU
26	14	62	ARG
26	14	63	TYR
26	14	69	LYS
27	15	6	VAL
27	15	59	GLU
28	16	5	VAL
28	16	19	ARG
28	16	38	LYS
28	16	44	ARG
28	16	47	THR
28	16	48	VAL
29	17	24	THR
29	17	43	THR
29	17	46	VAL
30	18	14	VAL
30	18	23	VAL
30	18	58	ILE
31	19	4	ARG
31	19	28	GLU
33	1b	11	LEU
33	1b	21	ARG

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Mol	Chain	Res	Type
33	1b	39	ILE
33	1b	42	ILE
33	1b	44	LEU
33	1b	54	THR
33	1b	71	VAL
33	1b	73	THR
33	1b	78	GLN
33	1b	80	ILE
33	1b	83	MET
33	1b	101	MET
33	1b	107	THR
33	1b	108	ILE
33	1b	128	GLU
33	1b	138	LEU
33	1b	156	LYS
33	1b	160	ASP
33	1b	172	ILE
33	1b	185	ILE
33	1b	196	LEU
33	1b	208	ILE
33	1b	215	LEU
33	1b	219	VAL
33	1b	236	TYR
34	1c	3	ASN
34	1c	8	ILE
34	1c	14	ILE
34	1c	21	ARG
34	1c	26	LYS
34	1c	45	LYS
34	1c	56	ASP
34	1c	58	GLU
34	1c	66	VAL
34	1c	68	VAL
34	1c	70	VAL
34	1c	89	GLU
34	1c	103	VAL
34	1c	112	SER
34	1c	124	ILE
34	1c	150	LYS
34	1c	165	THR
34	1c	178	LEU
34	1c	184	TYR

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Mol	Chain	Res	Type
34	1c	195	VAL
34	1c	198	VAL
35	1d	3	ARG
35	1d	19	LEU
35	1d	28	SER
35	1d	70	ILE
35	1d	76	ARG
35	1d	83	SER
35	1d	88	VAL
35	1d	105	VAL
35	1d	112	VAL
35	1d	118	ARG
35	1d	119	GLN
35	1d	122	ARG
35	1d	127	THR
35	1d	135	LEU
35	1d	140	VAL
35	1d	144	ASP
35	1d	157	LEU
35	1d	158	ILE
35	1d	162	LEU
35	1d	170	VAL
35	1d	175	SER
35	1d	177	ASP
35	1d	178	VAL
35	1d	181	MET
35	1d	186	LEU
35	1d	194	LEU
35	1d	196	LEU
35	1d	200	GLU
35	1d	201	GLN
35	1d	202	LEU
36	1e	12	LEU
36	1e	24	ARG
36	1e	31	LEU
36	1e	41	VAL
36	1e	51	VAL
36	1e	53	LEU
36	1e	56	GLN
36	1e	64	ARG
36	1e	67	VAL
36	1e	79	GLU

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Mol	Chain	Res	Type
36	1e	82	VAL
36	1e	91	LEU
36	1e	116	THR
36	1e	120	THR
36	1e	135	THR
36	1e	140	ARG
37	1f	40	VAL
37	1f	43	LEU
37	1f	54	LYS
37	1f	55	ASP
37	1f	64	GLN
37	1f	72	VAL
37	1f	75	LEU
37	1f	81	ILE
37	1f	89	MET
37	1f	92	LYS
38	1g	12	LEU
38	1g	16	LEU
38	1g	22	LEU
38	1g	24	THR
38	1g	27	ILE
38	1g	31	MET
38	1g	32	ARG
38	1g	50	ILE
38	1g	59	LEU
38	1g	61	VAL
38	1g	79	ARG
38	1g	80	VAL
38	1g	92	SER
38	1g	94	ARG
38	1g	104	LEU
38	1g	113	GLU
38	1g	120	ILE
38	1g	131	LYS
38	1g	138	LYS
39	1h	18	ARG
39	1h	29	SER
39	1h	32	LYS
39	1h	51	VAL
39	1h	52	ASP
39	1h	82	HIS
39	1h	127	LEU

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Mol	Chain	Res	Type
39	1h	133	LEU
40	1i	7	THR
40	1i	25	LYS
40	1i	56	LEU
40	1i	74	ILE
40	1i	81	ILE
40	1i	83	ARG
40	1i	96	LEU
40	1i	97	LYS
40	1i	103	THR
40	1i	108	VAL
40	1i	128	ARG
41	1j	46	ARG
41	1j	64	GLU
41	1j	81	THR
41	1j	92	THR
41	1j	94	VAL
42	1k	25	TYR
42	1k	31	THR
42	1k	51	LYS
42	1k	82	VAL
42	1k	87	THR
42	1k	114	VAL
42	1k	117	ASN
43	1l	11	VAL
43	1l	39	VAL
43	1l	40	VAL
43	1l	58	VAL
43	1l	62	SER
43	1l	70	ILE
43	1l	83	VAL
43	1l	91	LYS
44	1m	3	ARG
44	1m	4	ILE
44	1m	14	ARG
44	1m	15	VAL
44	1m	17	VAL
44	1m	19	LEU
44	1m	32	GLU
44	1m	43	THR
44	1m	49	THR
44	1m	67	GLU

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Mol	Chain	Res	Type
44	1m	70	LEU
44	1m	78	ILE
44	1m	94	ARG
44	1m	102	ARG
44	1m	106	ASN
45	1n	3	ARG
45	1n	12	ARG
45	1n	13	THR
45	1n	18	VAL
45	1n	32	SER
45	1n	33	VAL
45	1n	41	ARG
46	1o	7	GLU
46	1o	39	LEU
46	1o	40	SER
46	1o	47	LYS
46	1o	83	GLU
46	1o	84	LYS
46	1o	87	ILE
47	1p	11	SER
47	1p	20	VAL
47	1p	21	VAL
47	1p	43	LYS
47	1p	45	THR
47	1p	50	LYS
47	1p	62	VAL
47	1p	75	ARG
48	1q	5	VAL
48	1q	34	LYS
48	1q	35	VAL
48	1q	52	LYS
48	1q	53	LEU
48	1q	57	VAL
48	1q	59	ILE
48	1q	70	ARG
48	1q	78	GLU
48	1q	86	GLU
48	1q	98	LEU
49	1r	26	LEU
49	1r	28	GLU
49	1r	35	ARG
49	1r	37	VAL

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Mol	Chain	Res	Type
49	1r	42	ARG
49	1r	61	LYS
49	1r	63	GLN
50	1s	6	LYS
50	1s	7	LYS
50	1s	12	ASP
50	1s	18	LYS
50	1s	37	ARG
50	1s	56	GLN
50	1s	66	MET
50	1s	79	THR
51	1t	10	LEU
51	1t	13	LEU
51	1t	24	LEU
51	1t	37	SER
51	1t	51	GLU
51	1t	89	ARG
3	2D	20	ASP
3	2D	22	SER
3	2D	24	ILE
3	2D	32	SER
3	2D	37	LEU
3	2D	38	LYS
3	2D	61	LEU
3	2D	88	ARG
3	2D	99	ASP
3	2D	106	ILE
3	2D	109	ASP
3	2D	113	VAL
3	2D	142	VAL
3	2D	162	SER
3	2D	165	ILE
3	2D	171	ASP
3	2D	173	VAL
3	2D	193	VAL
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	270	ILE
4	2E	7	VAL
4	2E	9	VAL
4	2E	12	THR

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Mol	Chain	Res	Type
4	2E	14	ILE
4	2E	21	VAL
4	2E	34	VAL
4	2E	38	THR
4	2E	47	VAL
4	2E	59	VAL
4	2E	72	VAL
4	2E	73	GLU
4	2E	77	ILE
4	2E	90	THR
4	2E	116	VAL
4	2E	140	SER
4	2E	181	LEU
4	2E	195	LEU
4	2E	202	LYS
5	2F	17	ARG
5	2F	20	LEU
5	2F	28	ILE
5	2F	33	LEU
5	2F	43	LYS
5	2F	53	THR
5	2F	64	ILE
5	2F	96	ASP
5	2F	107	LYS
5	2F	110	LEU
5	2F	120	GLU
5	2F	124	LEU
5	2F	126	VAL
5	2F	135	LYS
5	2F	137	LYS
5	2F	144	LYS
5	2F	157	VAL
5	2F	158	THR
5	2F	161	GLU
5	2F	174	VAL
5	2F	183	VAL
5	2F	189	THR
5	2F	192	LEU
5	2F	201	VAL
6	2G	15	VAL
6	2G	19	LEU
6	2G	26	GLN

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Mol	Chain	Res	Type
6	2G	28	VAL
6	2G	31	VAL
6	2G	43	LEU
6	2G	51	ARG
6	2G	53	LEU
6	2G	58	GLN
6	2G	60	LEU
6	2G	70	VAL
6	2G	79	ASN
6	2G	88	ILE
6	2G	91	ARG
6	2G	98	ARG
6	2G	116	ASP
6	2G	124	SER
6	2G	126	ASP
6	2G	135	LEU
6	2G	140	ILE
6	2G	145	THR
6	2G	148	MET
6	2G	152	LEU
6	2G	159	VAL
6	2G	165	THR
6	2G	168	GLU
7	2H	2	SER
7	2H	6	ARG
7	2H	15	VAL
7	2H	23	ARG
7	2H	24	VAL
7	2H	30	LYS
7	2H	43	VAL
7	2H	44	VAL
7	2H	45	VAL
7	2H	51	ARG
7	2H	52	VAL
7	2H	57	ASP
7	2H	81	GLU
7	2H	85	LYS
7	2H	88	LEU
7	2H	92	ILE
7	2H	95	ARG
7	2H	103	LEU
7	2H	119	GLU

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Mol	Chain	Res	Type
7	2H	121	ILE
7	2H	122	THR
7	2H	129	THR
7	2H	130	ARG
7	2H	141	VAL
7	2H	152	ARG
8	2I	15	VAL
8	2I	19	VAL
8	2I	31	LEU
8	2I	37	VAL
8	2I	38	LEU
8	2I	44	LEU
8	2I	45	LYS
8	2I	47	LEU
8	2I	58	LEU
8	2I	66	GLU
8	2I	69	LYS
8	2I	72	LEU
8	2I	78	THR
8	2I	79	ILE
8	2I	82	ARG
8	2I	87	LYS
8	2I	92	VAL
8	2I	102	SER
8	2I	108	THR
8	2I	116	LEU
8	2I	117	GLU
8	2I	121	LYS
8	2I	122	GLU
8	2I	125	GLU
8	2I	126	TYR
8	2I	127	VAL
8	2I	139	GLN
9	2N	1	MET
9	2N	14	VAL
9	2N	28	THR
9	2N	38	HIS
9	2N	43	THR
9	2N	61	ARG
9	2N	62	VAL
9	2N	65	LYS
9	2N	68	GLU

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Mol	Chain	Res	Type
9	2N	83	LYS
9	2N	120	LEU
9	2N	121	LYS
9	2N	131	GLN
9	2N	138	LEU
10	2O	1	MET
10	2O	28	SER
10	2O	63	VAL
10	2O	66	LYS
10	2O	69	ILE
10	2O	98	VAL
10	2O	108	GLU
11	2P	45	LEU
11	2P	65	ARG
11	2P	95	VAL
11	2P	98	GLU
11	2P	123	LEU
11	2P	133	SER
11	2P	135	LEU
12	2Q	1	MET
12	2Q	12	GLN
12	2Q	22	LYS
12	2Q	37	LEU
12	2Q	54	MET
12	2Q	106	VAL
12	2Q	110	THR
13	2R	11	ASN
13	2R	24	GLN
13	2R	36	THR
13	2R	67	LEU
13	2R	95	THR
13	2R	111	LEU
13	2R	114	VAL
14	2S	4	LEU
14	2S	15	ARG
14	2S	18	ILE
14	2S	27	SER
14	2S	28	VAL
14	2S	36	TYR
14	2S	44	LYS
14	2S	49	VAL
14	2S	52	SER

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Mol	Chain	Res	Type
14	2S	63	THR
14	2S	93	LYS
14	2S	98	VAL
14	2S	110	LEU
15	2T	17	THR
15	2T	31	SER
15	2T	63	VAL
15	2T	64	ARG
15	2T	67	SER
15	2T	129	ARG
16	2U	5	LYS
16	2U	17	ILE
16	2U	55	ARG
16	2U	65	ILE
16	2U	74	LEU
16	2U	77	SER
16	2U	95	LEU
16	2U	100	VAL
16	2U	117	GLN
17	2V	1	MET
17	2V	38	LEU
17	2V	57	VAL
17	2V	61	VAL
17	2V	79	VAL
17	2V	85	LYS
18	2W	11	ARG
18	2W	15	ARG
18	2W	17	VAL
18	2W	35	ILE
18	2W	60	ASN
18	2W	90	ARG
19	2X	37	THR
19	2X	38	GLU
19	2X	49	VAL
19	2X	81	VAL
19	2X	83	VAL
19	2X	88	LYS
19	2X	92	LEU
20	2Y	5	MET
20	2Y	7	VAL
20	2Y	11	ASP
20	2Y	14	LEU

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Mol	Chain	Res	Type
20	2Y	21	LYS
20	2Y	30	VAL
20	2Y	40	GLU
20	2Y	47	LYS
20	2Y	66	PRO
20	2Y	72	VAL
20	2Y	87	LYS
20	2Y	88	LYS
20	2Y	99	CYS
21	2Z	6	LYS
21	2Z	18	LEU
21	2Z	33	LEU
21	2Z	35	ARG
21	2Z	40	ASP
21	2Z	42	VAL
21	2Z	47	VAL
21	2Z	70	LEU
21	2Z	71	VAL
21	2Z	74	VAL
21	2Z	84	GLU
21	2Z	90	VAL
21	2Z	100	VAL
21	2Z	137	ILE
21	2Z	139	VAL
21	2Z	144	LEU
21	2Z	154	ASP
21	2Z	161	VAL
21	2Z	171	ILE
22	20	10	THR
22	20	36	ILE
22	20	55	ARG
23	21	40	ARG
23	21	78	LYS
23	21	82	LEU
23	21	90	ILE
24	22	19	VAL
24	22	30	ARG
24	22	44	LEU
24	22	53	LEU
24	22	59	ARG
24	22	63	VAL
24	22	70	GLN

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Mol	Chain	Res	Type
25	23	23	LEU
25	23	31	LEU
25	23	37	LEU
25	23	58	VAL
26	24	10	VAL
26	24	26	SER
26	24	27	THR
26	24	33	VAL
26	24	34	GLU
26	24	46	GLN
26	24	48	ARG
26	24	59	PHE
26	24	61	ARG
26	24	63	TYR
26	24	67	TYR
27	25	6	VAL
27	25	21	SER
27	25	40	LYS
27	25	55	ARG
27	25	58	LEU
27	25	59	GLU
28	26	19	ARG
28	26	20	ASN
28	26	23	THR
28	26	28	ARG
28	26	32	ASN
28	26	48	VAL
29	27	24	THR
29	27	41	ARG
29	27	43	THR
30	28	14	VAL
30	28	23	VAL
30	28	29	LYS
30	28	37	SER
31	29	7	VAL
31	29	17	ILE
33	2b	7	VAL
33	2b	8	LYS
33	2b	9	GLU
33	2b	11	LEU
33	2b	44	LEU
33	2b	47	THR

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Mol	Chain	Res	Type
33	2b	48	MET
33	2b	56	ARG
33	2b	61	LEU
33	2b	67	THR
33	2b	68	ILE
33	2b	71	VAL
33	2b	76	GLN
33	2b	83	MET
33	2b	90	MET
33	2b	94	ASN
33	2b	101	MET
33	2b	108	ILE
33	2b	125	PRO
33	2b	130	ARG
33	2b	136	VAL
33	2b	137	ARG
33	2b	144	ARG
33	2b	150	SER
33	2b	153	ARG
33	2b	164	VAL
33	2b	168	THR
33	2b	185	ILE
33	2b	189	ASP
33	2b	204	ASN
33	2b	212	GLN
33	2b	215	LEU
33	2b	219	VAL
33	2b	223	ILE
34	2c	14	ILE
34	2c	15	THR
34	2c	49	SER
34	2c	52	LEU
34	2c	57	ILE
34	2c	69	HIS
34	2c	70	VAL
34	2c	77	ILE
34	2c	105	GLU
34	2c	124	ILE
34	2c	127	ARG
34	2c	142	MET
34	2c	143	GLU
34	2c	151	VAL

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Mol	Chain	Res	Type
34	2c	152	ILE
34	2c	153	VAL
34	2c	165	THR
34	2c	172	ARG
34	2c	182	ILE
34	2c	190	ARG
34	2c	198	VAL
34	2c	202	ILE
34	2c	206	GLU
35	2d	5	ILE
35	2d	8	VAL
35	2d	10	ARG
35	2d	34	GLU
35	2d	45	GLN
35	2d	57	ARG
35	2d	59	ARG
35	2d	61	LYS
35	2d	76	ARG
35	2d	107	ARG
35	2d	127	THR
35	2d	135	LEU
35	2d	150	GLU
35	2d	158	ILE
35	2d	168	ARG
35	2d	169	LYS
35	2d	175	SER
35	2d	181	MET
35	2d	188	LEU
35	2d	193	ASP
36	2e	9	LYS
36	2e	13	ILE
36	2e	24	ARG
36	2e	38	GLN
36	2e	41	VAL
36	2e	47	LYS
36	2e	55	VAL
36	2e	66	MET
36	2e	67	VAL
36	2e	72	GLN
36	2e	73	ASN
36	2e	75	THR
36	2e	83	GLU

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Mol	Chain	Res	Type
36	2e	91	LEU
36	2e	111	GLU
36	2e	115	VAL
36	2e	118	ILE
36	2e	120	THR
36	2e	125	SER
36	2e	145	LYS
36	2e	151	LEU
37	2f	6	VAL
37	2f	21	LEU
37	2f	37	VAL
37	2f	63	TYR
37	2f	69	GLU
37	2f	93	SER
38	2g	6	ARG
38	2g	9	VAL
38	2g	15	ASP
38	2g	24	THR
38	2g	30	ILE
38	2g	38	LEU
38	2g	52	GLU
38	2g	78	ARG
38	2g	79	ARG
38	2g	115	ARG
38	2g	136	LYS
38	2g	139	GLU
38	2g	146	GLU
38	2g	155	ARG
39	2h	11	THR
39	2h	26	VAL
39	2h	37	ARG
39	2h	45	ILE
39	2h	51	VAL
39	2h	60	ARG
39	2h	61	VAL
39	2h	84	ARG
39	2h	112	LEU
39	2h	127	LEU
39	2h	134	ILE
39	2h	135	CYS
39	2h	137	VAL
40	2i	27	THR

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Mol	Chain	Res	Type
40	2i	41	VAL
40	2i	47	LEU
40	2i	50	LEU
40	2i	54	ASP
40	2i	56	LEU
40	2i	58	HIS
40	2i	64	THR
40	2i	75	ASP
40	2i	89	ASN
40	2i	99	LEU
40	2i	102	LEU
41	2j	8	LEU
41	2j	21	GLN
41	2j	23	ILE
41	2j	25	GLU
41	2j	33	GLN
41	2j	38	ILE
41	2j	61	GLU
41	2j	66	ARG
41	2j	67	THR
41	2j	72	VAL
41	2j	84	GLN
41	2j	85	LEU
41	2j	100	THR
42	2k	14	VAL
42	2k	41	THR
42	2k	48	ILE
42	2k	53	SER
42	2k	82	VAL
42	2k	107	SER
42	2k	123	LYS
43	2l	11	VAL
43	2l	39	VAL
43	2l	57	LYS
43	2l	58	VAL
43	2l	62	SER
43	2l	78	GLN
43	2l	116	SER
44	2m	4	ILE
44	2m	15	VAL
44	2m	53	VAL
44	2m	54	VAL

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Mol	Chain	Res	Type
44	2m	70	LEU
44	2m	81	LEU
44	2m	86	CYS
44	2m	103	THR
44	2m	106	ASN
44	2m	108	ARG
44	2m	117	VAL
45	2n	3	ARG
45	2n	12	ARG
45	2n	13	THR
45	2n	18	VAL
45	2n	22	THR
45	2n	32	SER
45	2n	33	VAL
45	2n	50	LYS
45	2n	56	VAL
45	2n	58	LYS
46	2o	3	ILE
46	2o	38	ARG
46	2o	39	LEU
46	2o	54	ARG
46	2o	56	LEU
46	2o	88	ARG
47	2p	2	VAL
47	2p	4	ILE
47	2p	20	VAL
47	2p	21	VAL
47	2p	57	ARG
47	2p	67	THR
47	2p	73	LEU
47	2p	74	LEU
48	2q	5	VAL
48	2q	7	THR
48	2q	19	VAL
48	2q	36	ILE
48	2q	41	LYS
48	2q	53	LEU
48	2q	63	ARG
48	2q	76	LEU
48	2q	78	GLU
48	2q	83	ASP
48	2q	86	GLU

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Mol	Chain	Res	Type
48	2q	98	LEU
49	2r	25	THR
49	2r	26	LEU
49	2r	31	LEU
49	2r	37	VAL
49	2r	47	THR
49	2r	84	LYS
50	2s	4	SER
50	2s	15	LEU
50	2s	20	LEU
50	2s	27	GLU
50	2s	30	LEU
50	2s	41	VAL
50	2s	45	VAL
50	2s	47	HIS
50	2s	48	THR
50	2s	49	ILE
50	2s	58	VAL
50	2s	71	LEU
50	2s	81	ARG
51	2t	15	ARG
51	2t	45	GLN
51	2t	46	GLU
51	2t	70	SER
51	2t	93	GLU
52	2u	6	ARG
52	2u	7	ARG
52	2u	15	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (149) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	87	ASN
3	1D	126	GLN
4	1E	48	GLN
4	1E	143	ASN
5	1F	8	GLN
5	1F	133	ASN
5	1F	203	GLN
6	1G	26	GLN
6	1G	40	ASN
8	1I	133	HIS

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Mol	Chain	Res	Type
9	1N	8	GLN
9	1N	94	HIS
9	1N	131	GLN
12	1Q	12	GLN
12	1Q	123	HIS
13	1R	71	GLN
13	1R	91	GLN
14	1S	68	GLN
15	1T	58	ASN
15	1T	84	GLN
15	1T	90	GLN
16	1U	81	HIS
16	1U	94	ASN
16	1U	117	GLN
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
20	1Y	92	ASN
21	1Z	54	HIS
21	1Z	73	GLN
21	1Z	151	HIS
25	13	32	GLN
26	14	47	GLN
28	16	20	ASN
33	1b	78	GLN
33	1b	140	HIS
34	1c	6	HIS
34	1c	37	GLN
34	1c	108	ASN
34	1c	118	GLN
34	1c	162	GLN
34	1c	170	GLN
34	1c	181	ASN
35	1d	116	GLN
36	1e	38	GLN
36	1e	78	HIS
37	1f	57	GLN
37	1f	73	ASN
37	1f	100	ASN
38	1g	13	GLN
38	1g	28	ASN
38	1g	68	ASN

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Mol	Chain	Res	Type
38	1g	96	GLN
38	1g	110	GLN
40	1i	3	GLN
40	1i	31	GLN
40	1i	34	ASN
40	1i	58	HIS
40	1i	124	GLN
43	1l	99	HIS
44	1m	12	ASN
44	1m	77	ASN
46	1o	46	HIS
46	1o	50	HIS
46	1o	62	GLN
49	1r	63	GLN
50	1s	23	ASN
50	1s	57	HIS
50	1s	83	HIS
51	1t	90	GLN
3	2D	87	ASN
4	2E	48	GLN
4	2E	121	ASN
4	2E	169	ASN
5	2F	69	HIS
5	2F	75	HIS
5	2F	160	ASN
6	2G	40	ASN
7	2H	74	ASN
7	2H	111	HIS
7	2H	143	GLN
8	2I	133	HIS
9	2N	8	GLN
9	2N	131	GLN
10	2O	5	GLN
12	2Q	12	GLN
12	2Q	113	GLN
13	2R	11	ASN
13	2R	61	HIS
14	2S	38	GLN
14	2S	68	GLN
14	2S	84	GLN
16	2U	72	HIS
16	2U	94	ASN

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Mol	Chain	Res	Type
16	2U	117	GLN
19	2X	31	HIS
20	2Y	6	HIS
21	2Z	30	ASN
21	2Z	32	HIS
21	2Z	55	HIS
21	2Z	73	GLN
21	2Z	121	HIS
24	22	9	GLN
26	24	20	ASN
26	24	46	GLN
28	26	20	ASN
30	28	35	GLN
31	29	29	ASN
33	2b	40	HIS
33	2b	45	GLN
33	2b	95	GLN
33	2b	135	GLN
33	2b	146	GLN
33	2b	212	GLN
34	2c	102	ASN
34	2c	162	GLN
35	2d	42	GLN
35	2d	77	ASN
35	2d	116	GLN
35	2d	123	HIS
35	2d	125	HIS
35	2d	201	GLN
36	2e	72	GLN
36	2e	73	ASN
36	2e	141	GLN
37	2f	73	ASN
37	2f	100	ASN
38	2g	28	ASN
38	2g	37	ASN
38	2g	68	ASN
40	2i	3	GLN
40	2i	31	GLN
40	2i	58	HIS
40	2i	73	GLN
40	2i	117	HIS
41	2j	33	GLN

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Mol	Chain	Res	Type
42	2k	22	HIS
42	2k	38	ASN
42	2k	117	ASN
43	2l	99	HIS
44	2m	77	ASN
46	2o	62	GLN
46	2o	71	GLN
49	2r	63	GLN
50	2s	57	HIS
50	2s	65	ASN
50	2s	69	HIS
51	2t	75	ASN
51	2t	90	GLN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	439 (15%)	40 (1%)
1	2A	2791/2915 (95%)	499 (17%)	39 (1%)
2	1B	119/121 (98%)	14 (11%)	0
2	2B	118/121 (97%)	29 (24%)	0
32	1a	1497/1521 (98%)	239 (15%)	0
32	2a	1501/1521 (98%)	313 (20%)	0
53	1v	12/24 (50%)	1 (8%)	0
53	2v	12/24 (50%)	1 (8%)	0
54	1w	69/76 (90%)	23 (33%)	0
54	1y	72/76 (94%)	24 (33%)	0
54	2w	66/76 (86%)	16 (24%)	0
54	2y	70/76 (92%)	20 (28%)	0
55	1x	74/77 (96%)	6 (8%)	0
55	2x	74/77 (96%)	8 (10%)	0
All	All	9339/9620 (97%)	1632 (17%)	79 (0%)

All (1632) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	13	A
1	1A	34	C
1	1A	36	G
1	1A	45	C

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Mol	Chain	Res	Type
1	1A	63	U
1	1A	71	A
1	1A	74	A
1	1A	75	G
1	1A	84	A
1	1A	95	G
1	1A	119	A
1	1A	120	U
1	1A	154(A)	C
1	1A	181	A
1	1A	196	A
1	1A	197	A
1	1A	205	G
1	1A	215	G
1	1A	216	A
1	1A	221	A
1	1A	222	A
1	1A	228	A
1	1A	229	A
1	1A	233	A
1	1A	248	G
1	1A	271(A)	A
1	1A	271(C)	C
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(O)	C
1	1A	271(S)	G
1	1A	272(B)	G
1	1A	272(I)	U
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	357	A
1	1A	363	G
1	1A	363(B)	G
1	1A	380	U
1	1A	386	G
1	1A	396	G

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Mol	Chain	Res	Type
1	1A	411	G
1	1A	412	A
1	1A	428	A
1	1A	444	C
1	1A	448	U
1	1A	451	C
1	1A	454	A
1	1A	456	C
1	1A	457	A
1	1A	481	G
1	1A	504	U
1	1A	505	A
1	1A	509	C
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	586	A
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(D)	C
1	1A	652(E)	G
1	1A	652(F)	G
1	1A	652(T)	C
1	1A	669	G
1	1A	670	A
1	1A	685	A
1	1A	686	G
1	1A	717	G
1	1A	730	C

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Mol	Chain	Res	Type
1	1A	746	A
1	1A	747	U
1	1A	764	A
1	1A	765	G
1	1A	774	A
1	1A	775	G
1	1A	776	G
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	836	G
1	1A	855	G
1	1A	859	G
1	1A	866	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	894	C
1	1A	895	U
1	1A	896	A
1	1A	897	C
1	1A	898	C
1	1A	900	A
1	1A	910	A
1	1A	932	G
1	1A	945	A
1	1A	946	G

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Mol	Chain	Res	Type
1	1A	959	A
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1026	U
1	1A	1033	U
1	1A	1038	C
1	1A	1041	C
1	1A	1044	G
1	1A	1045	A
1	1A	1046	A
1	1A	1047	G
1	1A	1048	A
1	1A	1054	A
1	1A	1055	G
1	1A	1058	G
1	1A	1063	G
1	1A	1068	G
1	1A	1069	A
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	1078	U
1	1A	1079	C
1	1A	1081	U
1	1A	1082	U
1	1A	1083	U
1	1A	1087	G
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1091	G
1	1A	1093	G
1	1A	1094	U

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Mol	Chain	Res	Type
1	1A	1096	A
1	1A	1098	A
1	1A	1101	U
1	1A	1110	G
1	1A	1111	A
1	1A	1112	G
1	1A	1115	G
1	1A	1116	C
1	1A	1120	G
1	1A	1129	A
1	1A	1130	U
1	1A	1135	C
1	1A	1136	G
1	1A	1137	G
1	1A	1142(A)	A
1	1A	1143	A
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	1229	G
1	1A	1248	G
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1289	C
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G
1	1A	1396	U

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Mol	Chain	Res	Type
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	1450	G
1	1A	1461	G
1	1A	1467	C
1	1A	1473	G
1	1A	1482	G
1	1A	1493	C
1	1A	1494	A
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1518	U
1	1A	1540	U
1	1A	1542	A
1	1A	1558	A
1	1A	1566	A
1	1A	1569	A
1	1A	1578	U
1	1A	1580	A
1	1A	1581	G
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1610	A
1	1A	1640	C
1	1A	1648	C
1	1A	1654	A
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
1	1A	1722	A
1	1A	1739	U
1	1A	1746	G
1	1A	1756	G
1	1A	1763	G

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Mol	Chain	Res	Type
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	1816	G
1	1A	1817	G
1	1A	1829	A
1	1A	1839	G
1	1A	1847	A
1	1A	1858	G
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	1919	A
1	1A	1927	A
1	1A	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	1965	C
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1984	G
1	1A	1992	G
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2032	G
1	1A	2033	A
1	1A	2039	C

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Mol	Chain	Res	Type
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2062	A
1	1A	2069	G
1	1A	2093	G
1	1A	2098	U
1	1A	2101	G
1	1A	2102	U
1	1A	2108	C
1	1A	2110	G
1	1A	2112	G
1	1A	2113	U
1	1A	2114	A
1	1A	2116	G
1	1A	2118	U
1	1A	2121	G
1	1A	2122	U
1	1A	2126	A
1	1A	2127	G
1	1A	2129	C
1	1A	2130	U
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	2143	C
1	1A	2144	U
1	1A	2146	C
1	1A	2150	U
1	1A	2151	G
1	1A	2156	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2161	C

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Mol	Chain	Res	Type
1	1A	2165	G
1	1A	2166	G
1	1A	2168	G
1	1A	2171	A
1	1A	2172	U
1	1A	2173	A
1	1A	2174	C
1	1A	2177	C
1	1A	2178	C
1	1A	2181	G
1	1A	2182	G
1	1A	2183	C
1	1A	2184	G
1	1A	2189	U
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2268	A
1	1A	2269	A
1	1A	2280	G
1	1A	2283	C
1	1A	2286	A
1	1A	2287	A
1	1A	2305	A
1	1A	2308	G
1	1A	2320	A
1	1A	2321	G
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2350	C
1	1A	2361	A
1	1A	2372	G
1	1A	2379	G
1	1A	2383	G
1	1A	2385	C

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Mol	Chain	Res	Type
1	1A	2400	G
1	1A	2406	U
1	1A	2407	G
1	1A	2422	A
1	1A	2423	U
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2431	U
1	1A	2435	A
1	1A	2439	A
1	1A	2440	C
1	1A	2441	C
1	1A	2448	A
1	1A	2476	A
1	1A	2478	A
1	1A	2502	G
1	1A	2505	G
1	1A	2518	A
1	1A	2529	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2602	A
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2654	A
1	1A	2689	U
1	1A	2690	C
1	1A	2703	C
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2757	A
1	1A	2765	A
1	1A	2766	G

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Mol	Chain	Res	Type
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2793	G
1	1A	2794	C
1	1A	2802	G
1	1A	2803	C
1	1A	2820	A
1	1A	2821	A
1	1A	2835	A
1	1A	2839	G
1	1A	2872	G
1	1A	2892	A
1	1A	2894	G
2	1B	2	C
2	1B	10	C
2	1B	12	C
2	1B	13	A
2	1B	15	A
2	1B	25	A
2	1B	42	C
2	1B	50	G
2	1B	56	G
2	1B	67	G
2	1B	73	A
2	1B	85	G
2	1B	106	G
2	1B	110	G
32	1a	7	G
32	1a	9	G
32	1a	22	G
32	1a	31	G
32	1a	32	A
32	1a	33	A
32	1a	39	G
32	1a	48	C
32	1a	51	A
32	1a	52	G
32	1a	61	G
32	1a	77	G
32	1a	79	G
32	1a	91	C

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Mol	Chain	Res	Type
32	1a	98	G
32	1a	100	C
32	1a	115	G
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	144	G
32	1a	147	G
32	1a	162	A
32	1a	163	C
32	1a	165	C
32	1a	166	G
32	1a	174	C
32	1a	180	U
32	1a	182	U
32	1a	189(F)	U
32	1a	189(J)	G
32	1a	195	A
32	1a	197	A
32	1a	202	U
32	1a	203	U
32	1a	204	U
32	1a	237	C
32	1a	247	G
32	1a	248	C
32	1a	251	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	345	C
32	1a	348	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	384	G
32	1a	388	G

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Mol	Chain	Res	Type
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	424	G
32	1a	427	U
32	1a	429	U
32	1a	436	C
32	1a	439	A
32	1a	441	A
32	1a	442	C
32	1a	452	A
32	1a	453	A
32	1a	461	A
32	1a	470	C
32	1a	471	G
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	505	G
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	513	C
32	1a	518	C
32	1a	524	G
32	1a	528	C
32	1a	531	U
32	1a	532	A
32	1a	534	U
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	568	G
32	1a	572	A
32	1a	573	A
32	1a	576	G

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Mol	Chain	Res	Type
32	1a	577	G
32	1a	596	C
32	1a	630	G
32	1a	653	A
32	1a	665	A
32	1a	673	G
32	1a	687	A
32	1a	688	G
32	1a	693	G
32	1a	695	A
32	1a	723	U
32	1a	724	G
32	1a	731	G
32	1a	749	C
32	1a	753	A
32	1a	755	G
32	1a	777	A
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	806	C
32	1a	815	A
32	1a	817	C
32	1a	821	G
32	1a	828	A
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	895	G
32	1a	913	A
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	936	C
32	1a	950	U
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	974	A

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Mol	Chain	Res	Type
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	998	G
32	1a	1000	U
32	1a	1001	A
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1009	G
32	1a	1015	A
32	1a	1020	U
32	1a	1022	G
32	1a	1023	G
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	1033	G
32	1a	1039	C
32	1a	1043	C
32	1a	1044	A
32	1a	1068	G
32	1a	1081	G
32	1a	1086	U
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	1127	G
32	1a	1132	C
32	1a	1134	G
32	1a	1137	C

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Mol	Chain	Res	Type
32	1a	1138	G
32	1a	1139	G
32	1a	1146	A
32	1a	1152	A
32	1a	1157	A
32	1a	1159	U
32	1a	1165	C
32	1a	1184	G
32	1a	1196	U
32	1a	1197	G
32	1a	1201	A
32	1a	1202	G
32	1a	1212	U
32	1a	1213	A
32	1a	1214	C
32	1a	1222	G
32	1a	1227	A
32	1a	1236	A
32	1a	1238	A
32	1a	1253	G
32	1a	1256	A
32	1a	1257	U
32	1a	1260	C
32	1a	1272	G
32	1a	1275	A
32	1a	1278	U
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1290	G
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1305	G
32	1a	1320	C
32	1a	1338	G
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1364	U
32	1a	1419	G
32	1a	1442	G

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Mol	Chain	Res	Type
32	1a	1442(A)	G
32	1a	1446	U
32	1a	1456	G
32	1a	1464	G
32	1a	1469	G
32	1a	1487	G
32	1a	1492	A
32	1a	1494	G
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
54	1w	2	C
54	1w	3	C
54	1w	6	G
54	1w	7	A
54	1w	8	4SU
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	45	U
54	1w	46	G7M
54	1w	47	U
54	1w	48	C
54	1w	50	U
54	1w	62	C
54	1w	64	A
54	1w	68	C
54	1w	69	G
54	1w	70	G
54	1w	71	G
54	1w	73	A
55	1x	6	G
55	1x	9	G
55	1x	19	G

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Mol	Chain	Res	Type
55	1x	21	A
55	1x	47	U
55	1x	61	C
54	1y	5	G
54	1y	6	G
54	1y	9	A
54	1y	11	C
54	1y	13	C
54	1y	14	A
54	1y	15	G
54	1y	19	G
54	1y	20	U
54	1y	21	A
54	1y	23	A
54	1y	34	G
54	1y	35	A
54	1y	44	G
54	1y	45	U
54	1y	46	G7M
54	1y	47	U
54	1y	48	C
54	1y	53	G
54	1y	56	C
54	1y	57	G
54	1y	58	A
54	1y	59	U
54	1y	70	G
1	2A	8	A
1	2A	12	U
1	2A	15	G
1	2A	28	A
1	2A	34	C
1	2A	35	G
1	2A	45	C
1	2A	51	G
1	2A	61	G
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	84	A
1	2A	90	U
1	2A	94	C

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Mol	Chain	Res	Type
1	2A	95	G
1	2A	100	G
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	141	A
1	2A	154(A)	C
1	2A	157	U
1	2A	173	G
1	2A	181	A
1	2A	196	A
1	2A	197	A
1	2A	199	A
1	2A	205	G
1	2A	214	G
1	2A	215	G
1	2A	216	A
1	2A	222	A
1	2A	225	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	233	A
1	2A	248	G
1	2A	264	C
1	2A	265	A
1	2A	266	G
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	272(B)	G
1	2A	277	C
1	2A	278	A
1	2A	310	A
1	2A	311	A
1	2A	312	G
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	342	G

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Mol	Chain	Res	Type
1	2A	352	G
1	2A	363	G
1	2A	363(B)	G
1	2A	363(E)	U
1	2A	386	G
1	2A	389	G
1	2A	396	G
1	2A	405	U
1	2A	411	G
1	2A	421	U
1	2A	435	C
1	2A	443	A
1	2A	444	C
1	2A	456	C
1	2A	457	A
1	2A	481	G
1	2A	494	G
1	2A	501	A
1	2A	504	U
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	529	A
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	563	G
1	2A	568	U
1	2A	573	G
1	2A	575	A
1	2A	586	A
1	2A	588	U
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(A)	U
1	2A	614(B)	G
1	2A	615	G
1	2A	616	G
1	2A	627	A
1	2A	633	A

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Mol	Chain	Res	Type
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	717	G
1	2A	726	G
1	2A	730	C
1	2A	752	A
1	2A	753	C
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
1	2A	805	G
1	2A	812	C
1	2A	819	A
1	2A	825	C
1	2A	827	U
1	2A	828	U
1	2A	832	G
1	2A	833	U
1	2A	847	U
1	2A	852	G
1	2A	857	C
1	2A	859	G
1	2A	866	A
1	2A	867	C
1	2A	874	G
1	2A	875	G
1	2A	877	U
1	2A	878	A
1	2A	879	G
1	2A	880	G

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Mol	Chain	Res	Type
1	2A	884	C
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	892	G
1	2A	893	C
1	2A	894	C
1	2A	895	U
1	2A	896	A
1	2A	897	C
1	2A	900	A
1	2A	901	A
1	2A	903	C
1	2A	910	A
1	2A	917	A
1	2A	932	G
1	2A	941	A
1	2A	944	G
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	959	A
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	995	C
1	2A	996	A
1	2A	999	U
1	2A	1005	C
1	2A	1012	U
1	2A	1013	C
1	2A	1017	G
1	2A	1020	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

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Mol	Chain	Res	Type
1	2A	1041	C
1	2A	1043	C
1	2A	1114	G
1	2A	1116	C
1	2A	1117	G
1	2A	1128	A
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1142(A)	A
1	2A	1144	G
1	2A	1171	G
1	2A	1195	G
1	2A	1206	G
1	2A	1210	A
1	2A	1211	U
1	2A	1212	G
1	2A	1220	A
1	2A	1237	A
1	2A	1252	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1284	A
1	2A	1300	U
1	2A	1301	A
1	2A	1308	A
1	2A	1314	C
1	2A	1338	G
1	2A	1345	C
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1370	C
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G

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Mol	Chain	Res	Type
1	2A	1413	G
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1426	G
1	2A	1427	A
1	2A	1428	C
1	2A	1435	G
1	2A	1437	C
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1455	G
1	2A	1460	A
1	2A	1461	G
1	2A	1463	C
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1490	A
1	2A	1493	C
1	2A	1496	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	1542	A
1	2A	1543	C
1	2A	1547	C
1	2A	1558	A
1	2A	1559	G
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1583	A
1	2A	1584	C
1	2A	1608	A

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Mol	Chain	Res	Type
1	2A	1609	A
1	2A	1610	A
1	2A	1640	C
1	2A	1647	G
1	2A	1648	C
1	2A	1654	A
1	2A	1674	G
1	2A	1693	U
1	2A	1696	G
1	2A	1700	A
1	2A	1701	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1740	G
1	2A	1746	G
1	2A	1756	G
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	1811	G
1	2A	1812	A
1	2A	1816	G
1	2A	1828	G
1	2A	1829	A
1	2A	1835	G
1	2A	1839	G
1	2A	1847	A
1	2A	1848	A
1	2A	1857	G
1	2A	1860	G
1	2A	1877	A
1	2A	1878	G
1	2A	1900	A
1	2A	1906	G
1	2A	1914	C

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Mol	Chain	Res	Type
1	2A	1929	G
1	2A	1930	G
1	2A	1931	U
1	2A	1936	A
1	2A	1938	A
1	2A	1939	5MU
1	2A	1941	C
1	2A	1955	U
1	2A	1960	A
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1992	G
1	2A	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2062	A
1	2A	2069	G
1	2A	2093	G
1	2A	2099	U
1	2A	2109	U
1	2A	2111	C
1	2A	2112	G
1	2A	2113	U
1	2A	2116	G
1	2A	2117	A
1	2A	2120	G
1	2A	2122	U
1	2A	2126	A
1	2A	2127	G
1	2A	2128	C
1	2A	2129	C

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Mol	Chain	Res	Type
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2137	C
1	2A	2138	C
1	2A	2139	C
1	2A	2140	C
1	2A	2142	C
1	2A	2145	C
1	2A	2146	C
1	2A	2148	G
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	2159	G
1	2A	2161	C
1	2A	2164	C
1	2A	2166	G
1	2A	2167	U
1	2A	2168	G
1	2A	2172	U
1	2A	2174	C
1	2A	2178	C
1	2A	2183	C
1	2A	2185	C
1	2A	2189	U
1	2A	2192	G
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	2235	G
1	2A	2238	G
1	2A	2239	G

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Mol	Chain	Res	Type
1	2A	2258	C
1	2A	2259	G
1	2A	2262	U
1	2A	2267	A
1	2A	2275	C
1	2A	2278	A
1	2A	2280	G
1	2A	2283	C
1	2A	2287	A
1	2A	2303	G
1	2A	2305	A
1	2A	2308	G
1	2A	2312	U
1	2A	2319	G
1	2A	2320	A
1	2A	2325	G
1	2A	2334	G
1	2A	2335	A
1	2A	2336	A
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2376	A
1	2A	2377	A
1	2A	2383	G
1	2A	2385	C
1	2A	2388	A
1	2A	2395	C
1	2A	2403	C
1	2A	2406	U
1	2A	2407	G
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2431	U
1	2A	2435	A
1	2A	2439	A
1	2A	2440	C
1	2A	2441	C
1	2A	2445	G
1	2A	2448	A
1	2A	2449	U

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Mol	Chain	Res	Type
1	2A	2465	C
1	2A	2469	A
1	2A	2474	C
1	2A	2476	A
1	2A	2487	G
1	2A	2490	G
1	2A	2491	U
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	2525	G
1	2A	2529	G
1	2A	2536	G
1	2A	2554	U
1	2A	2555	U
1	2A	2557	G
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2602	A
1	2A	2611	U
1	2A	2612	C
1	2A	2630	G
1	2A	2654	A
1	2A	2667	C
1	2A	2689	U
1	2A	2690	C
1	2A	2691	C
1	2A	2702	U
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2741	A
1	2A	2751	G
1	2A	2757	A
1	2A	2759	G

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Mol	Chain	Res	Type
1	2A	2762	G
1	2A	2764	A
1	2A	2765	A
1	2A	2778	A
1	2A	2780	G
1	2A	2789	C
1	2A	2793	G
1	2A	2794	C
1	2A	2802	G
1	2A	2804	C
1	2A	2807	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2839	G
1	2A	2872	G
1	2A	2873	A
1	2A	2880	C
1	2A	2892	A
1	2A	2894	G
1	2A	2897	U
2	2B	2	C
2	2B	5	C
2	2B	8	U
2	2B	13	A
2	2B	17	C
2	2B	19	G
2	2B	20	C
2	2B	25	A
2	2B	32	C
2	2B	34	U
2	2B	40	U
2	2B	41	U
2	2B	42	C
2	2B	51	G
2	2B	53	A
2	2B	56	G
2	2B	63	G
2	2B	73	A
2	2B	74	U
2	2B	75	G

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Mol	Chain	Res	Type
2	2B	84	C
2	2B	85	G
2	2B	88	C
2	2B	91	C
2	2B	108	U
2	2B	110	G
2	2B	111	G
2	2B	116	G
2	2B	120	A
32	2a	9	G
32	2a	22	G
32	2a	32	A
32	2a	39	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	52	G
32	2a	66	G
32	2a	73	G
32	2a	80	G
32	2a	88	A
32	2a	89	C
32	2a	101	A
32	2a	112	G
32	2a	115	G
32	2a	116	A
32	2a	121	C
32	2a	131	C
32	2a	142	G
32	2a	144	G
32	2a	159	G
32	2a	163	C
32	2a	182	U
32	2a	195	A
32	2a	197	A
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	217	C
32	2a	247	G

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Mol	Chain	Res	Type
32	2a	251	G
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	269	C
32	2a	281	G
32	2a	289	G
32	2a	301	G
32	2a	318	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	339	C
32	2a	349	A
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	367	U
32	2a	372	C
32	2a	373	A
32	2a	384	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	411	A
32	2a	412	A
32	2a	413	G
32	2a	415	A
32	2a	421	U
32	2a	423	G
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	470	C
32	2a	471	G
32	2a	485	G
32	2a	496	A
32	2a	498	U

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Mol	Chain	Res	Type
32	2a	499	A
32	2a	505	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	517	G
32	2a	518	C
32	2a	521	G
32	2a	527	G7M
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	559	A
32	2a	560	U
32	2a	561	U
32	2a	564	C
32	2a	572	A
32	2a	573	A
32	2a	574	A
32	2a	576	G
32	2a	577	G
32	2a	581	G
32	2a	595	G
32	2a	596	C
32	2a	597	G
32	2a	607	A
32	2a	613	C
32	2a	614	A
32	2a	619	U
32	2a	630	G
32	2a	653	A
32	2a	657	G
32	2a	665	A
32	2a	666	G
32	2a	673	G
32	2a	687	A
32	2a	688	G
32	2a	693	G
32	2a	695	A
32	2a	705	U
32	2a	720	C

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Mol	Chain	Res	Type
32	2a	721	G
32	2a	723	U
32	2a	731	G
32	2a	749	C
32	2a	755	G
32	2a	777	A
32	2a	792	A
32	2a	793	U
32	2a	794	A
32	2a	805	C
32	2a	807	A
32	2a	816	A
32	2a	817	C
32	2a	821	G
32	2a	828	A
32	2a	833	U
32	2a	834	C
32	2a	840	C
32	2a	841	U
32	2a	853	G
32	2a	855	G
32	2a	859	A
32	2a	870	U
32	2a	874	G
32	2a	885	G
32	2a	902	G
32	2a	914	A
32	2a	916	G
32	2a	926	G
32	2a	927	G
32	2a	934	C
32	2a	935	A
32	2a	942	G
32	2a	958	A
32	2a	960	U
32	2a	961	U
32	2a	963	G
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	974	A
32	2a	975	A

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Mol	Chain	Res	Type
32	2a	976	G
32	2a	977	A
32	2a	978	A
32	2a	984	C
32	2a	989	C
32	2a	992	U
32	2a	993	G
32	2a	995	C
32	2a	997	U
32	2a	998	G
32	2a	999	C
32	2a	1001	A
32	2a	1003	G
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G
32	2a	1011	G
32	2a	1016	A
32	2a	1017	G
32	2a	1020	U
32	2a	1021	G
32	2a	1022	G
32	2a	1023	G
32	2a	1024	G
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1029	C
32	2a	1030(A)	G
32	2a	1031	G
32	2a	1032	G
32	2a	1033	G
32	2a	1035	A
32	2a	1036	G
32	2a	1037	C
32	2a	1039	C
32	2a	1040	U
32	2a	1043	C
32	2a	1044	A
32	2a	1046	A
32	2a	1050	G
32	2a	1053	G

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Mol	Chain	Res	Type
32	2a	1064	G
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1077	G
32	2a	1078	U
32	2a	1079	G
32	2a	1080	A
32	2a	1081	G
32	2a	1085	U
32	2a	1086	U
32	2a	1087	G
32	2a	1089	G
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1105	A
32	2a	1109	C
32	2a	1115	C
32	2a	1116	C
32	2a	1122	U
32	2a	1125	U
32	2a	1129	C
32	2a	1130	A
32	2a	1132	C
32	2a	1133	G
32	2a	1135	U
32	2a	1136	U
32	2a	1137	C
32	2a	1139	G
32	2a	1140	C
32	2a	1141	C
32	2a	1146	A
32	2a	1152	A
32	2a	1157	A
32	2a	1158	C
32	2a	1159	U
32	2a	1160	G
32	2a	1171	G
32	2a	1172	C
32	2a	1173	G
32	2a	1182	G

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Mol	Chain	Res	Type
32	2a	1184	G
32	2a	1189	C
32	2a	1191	A
32	2a	1193	G
32	2a	1196	U
32	2a	1197	G
32	2a	1202	G
32	2a	1210	C
32	2a	1211	U
32	2a	1213	A
32	2a	1214	C
32	2a	1218	C
32	2a	1227	A
32	2a	1236	A
32	2a	1238	A
32	2a	1240	U
32	2a	1241	G
32	2a	1256	A
32	2a	1257	U
32	2a	1260	C
32	2a	1261	A
32	2a	1264	C
32	2a	1267	C
32	2a	1270	C
32	2a	1272	G
32	2a	1273	G
32	2a	1276	G
32	2a	1279	A
32	2a	1280	A
32	2a	1287	A
32	2a	1290	G
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1323	G
32	2a	1324	A
32	2a	1338	G
32	2a	1346	A
32	2a	1347	G
32	2a	1358	U
32	2a	1359	C
32	2a	1363	C

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Mol	Chain	Res	Type
32	2a	1368	G
32	2a	1370	G
32	2a	1378	C
32	2a	1381	U
32	2a	1398	A
32	2a	1402	4OC
32	2a	1404	5MC
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1446	U
32	2a	1447	A
32	2a	1452	C
32	2a	1456	G
32	2a	1487	G
32	2a	1492	A
32	2a	1497	G
32	2a	1503	A
32	2a	1504	G
32	2a	1506	U
32	2a	1517	G
32	2a	1519	MA6
32	2a	1520	G
32	2a	1523	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	13	A
54	2w	3	C
54	2w	5	G
54	2w	6	G
54	2w	7	A
54	2w	14	A
54	2w	19	G
54	2w	22	G
54	2w	46	G7M
54	2w	48	C
54	2w	61	C
54	2w	62	C
54	2w	66	U
54	2w	69	G

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Mol	Chain	Res	Type
54	2w	70	G
54	2w	71	G
54	2w	73	A
55	2x	9	G
55	2x	18	G
55	2x	19	G
55	2x	21	A
55	2x	47	U
55	2x	48	C
55	2x	52	G
55	2x	61	C
54	2y	15	G
54	2y	19	G
54	2y	24	G
54	2y	27	G
54	2y	40	C
54	2y	45	U
54	2y	48	C
54	2y	49	C
54	2y	52	G
54	2y	53	G
54	2y	54	5MU
54	2y	55	PSU
54	2y	56	C
54	2y	57	G
54	2y	58	A
54	2y	59	U
54	2y	65	G
54	2y	69	G
54	2y	70	G
54	2y	73	A

All (79) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	196	A
1	1A	199	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	548	A
1	1A	669	G

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Mol	Chain	Res	Type
1	1A	685	A
1	1A	746	A
1	1A	764	A
1	1A	774	A
1	1A	827	U
1	1A	974	G
1	1A	1047	G
1	1A	1067	A
1	1A	1128	A
1	1A	1142(A)	A
1	1A	1174	A
1	1A	1176	G
1	1A	1379	A
1	1A	1420	U
1	1A	1442	G
1	1A	1508	A
1	1A	1608	A
1	1A	1762	A
1	1A	1992	G
1	1A	2126	A
1	1A	2134	A
1	1A	2181	G
1	1A	2183	C
1	1A	2238	G
1	1A	2250	G
1	1A	2406	U
1	1A	2422	A
1	1A	2430	A
1	1A	2439	A
1	1A	2611	U
1	1A	2629	A
1	1A	2689	U
1	1A	2756	U
1	2A	34	C
1	2A	196	A
1	2A	199	A
1	2A	228	A
1	2A	249	C
1	2A	266	G
1	2A	271(K)	U
1	2A	271(M)	G
1	2A	277	C

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Mol	Chain	Res	Type
1	2A	310	A
1	2A	528	A
1	2A	685	A
1	2A	746	A
1	2A	752	A
1	2A	774	A
1	2A	805	G
1	2A	827	U
1	2A	856	C
1	2A	900	A
1	2A	974	G
1	2A	1026	U
1	2A	1210	A
1	2A	1379	A
1	2A	1420	U
1	2A	1442	G
1	2A	1530	C
1	2A	1608	A
1	2A	1653	G
1	2A	1913	A
1	2A	1939	5MU
1	2A	1992	G
1	2A	2119	A
1	2A	2126	A
1	2A	2335	A
1	2A	2406	U
1	2A	2439	A
1	2A	2448	A
1	2A	2689	U
1	2A	2756	U

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

86 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
54	4SU	1w	8	54	18,21,22	1.70	5 (27%)	25,30,33	1.95	5 (20%)
54	PSU	1w	32	54	18,21,22	1.34	2 (11%)	21,30,33	1.89	3 (14%)
43	0TD	1l	92	43	8,9,10	4.23	3 (37%)	6,11,13	6.30	2 (33%)
54	G7M	1y	46	54	20,26,27	1.32	1 (5%)	16,39,42	0.69	0
1	2MA	1A	2503	56,1	18,25,26	0.73	0	20,37,40	1.80	1 (5%)
1	5MU	1A	1939	56,1	19,22,23	1.49	4 (21%)	27,32,35	2.62	6 (22%)
55	PSU	1x	55	55	18,21,22	1.31	1 (5%)	21,30,33	1.87	4 (19%)
32	MA6	2a	1518	32	19,26,27	1.02	2 (10%)	18,38,41	2.09	4 (22%)
1	PSU	2A	1911	1	18,21,22	1.35	2 (11%)	21,30,33	1.91	4 (19%)
1	OMU	2A	2552	56,1	19,22,23	1.18	3 (15%)	25,31,34	1.66	5 (20%)
1	5MC	1A	1942	1	19,22,23	1.43	3 (15%)	26,32,35	1.31	4 (15%)
54	PSU	2y	55	54	18,21,22	1.38	2 (11%)	21,30,33	2.03	5 (23%)
32	UR3	1a	1498	32	19,22,23	1.16	2 (10%)	26,32,35	1.76	5 (19%)
54	MIA	2y	37	54	17,24,32	1.03	1 (5%)	16,35,47	1.32	2 (12%)
54	MIA	1y	37	54	17,24,32	1.03	1 (5%)	16,35,47	1.37	2 (12%)
54	PSU	1y	55	54	18,21,22	1.44	1 (5%)	21,30,33	2.08	4 (19%)
32	4OC	2a	1402	32,56	20,23,24	0.80	1 (5%)	25,32,35	1.06	2 (8%)
54	PSU	2y	39	54	18,21,22	1.30	2 (11%)	21,30,33	1.84	4 (19%)
32	G7M	2a	527	32,56	20,26,27	1.36	2 (10%)	16,39,42	0.66	0
32	5MC	2a	1407	32	19,22,23	1.43	3 (15%)	26,32,35	1.36	3 (11%)
32	5MC	1a	1404	32	19,22,23	1.84	3 (15%)	26,32,35	1.32	4 (15%)
54	PSU	1w	55	54	18,21,22	1.45	2 (11%)	21,30,33	1.99	4 (19%)
1	PSU	2A	1917	1	18,21,22	1.35	2 (11%)	21,30,33	1.96	3 (14%)
32	MA6	1a	1519	32	19,26,27	1.06	1 (5%)	18,38,41	1.75	3 (16%)
32	4OC	1a	1402	32	20,23,24	0.84	1 (5%)	25,32,35	1.10	2 (8%)
1	PSU	2A	2605	1	18,21,22	1.27	3 (16%)	21,30,33	2.21	5 (23%)
54	PSU	1w	39	54	18,21,22	1.28	2 (11%)	21,30,33	2.23	4 (19%)
54	G7M	2w	46	54	20,26,27	1.29	1 (5%)	16,39,42	1.04	2 (12%)
1	OMC	1A	1920	1	19,22,23	0.82	0	25,31,34	0.92	0
32	PSU	2a	516	32	18,21,22	1.30	1 (5%)	21,30,33	1.88	4 (19%)
32	5MC	1a	1400	32	19,22,23	1.50	3 (15%)	26,32,35	1.36	4 (15%)
54	PSU	1y	32	54	18,21,22	1.37	3 (16%)	21,30,33	1.81	3 (14%)
54	PSU	2y	32	54	18,21,22	1.40	1 (5%)	21,30,33	1.98	3 (14%)
32	M2G	2a	966	32	20,27,28	1.28	3 (15%)	19,40,43	1.22	2 (10%)
54	PSU	2w	39	54	18,21,22	1.37	2 (11%)	21,30,33	2.03	4 (19%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
55	5MU	2x	54	55	19,22,23	1.45	5 (26%)	27,32,35	2.25	7 (25%)
1	5MU	2A	1939	56,1	19,22,23	1.52	4 (21%)	27,32,35	2.57	6 (22%)
54	G7M	1w	46	54	20,26,27	1.33	1 (5%)	16,39,42	0.76	1 (6%)
1	PSU	1A	2605	56,1	18,21,22	1.66	3 (16%)	21,30,33	2.24	5 (23%)
32	MA6	1a	1518	32	19,26,27	0.97	1 (5%)	18,38,41	1.93	4 (22%)
1	PSU	1A	1917	1	18,21,22	1.38	3 (16%)	21,30,33	2.14	4 (19%)
32	UR3	2a	1498	32,56	19,22,23	1.05	2 (10%)	26,32,35	1.96	3 (11%)
1	OMC	2A	1920	1	19,22,23	0.72	0	25,31,34	0.88	1 (4%)
43	0TD	2l	92	43	8,9,10	4.69	1 (12%)	6,11,13	4.41	2 (33%)
54	4SU	2y	8	54	18,21,22	1.64	5 (27%)	25,30,33	2.35	6 (24%)
32	PSU	1a	516	32,56	18,21,22	1.42	3 (16%)	21,30,33	1.85	6 (28%)
1	5MC	2A	1962	56,1	19,22,23	1.72	3 (15%)	26,32,35	1.25	4 (15%)
54	5MU	2w	54	54	19,22,23	1.27	3 (15%)	27,32,35	1.76	6 (22%)
54	5MU	1w	54	54	19,22,23	1.32	4 (21%)	27,32,35	2.26	6 (22%)
55	5MU	1x	54	56,55	19,22,23	1.44	5 (26%)	27,32,35	2.27	6 (22%)
32	5MC	1a	1407	32	19,22,23	1.50	2 (10%)	26,32,35	1.25	3 (11%)
54	4SU	2w	8	54	18,21,22	1.52	3 (16%)	25,30,33	2.24	5 (20%)
54	MIA	2w	37	54	19,27,32	1.85	3 (15%)	18,39,47	1.67	5 (27%)
32	5MC	2a	1404	32	19,22,23	1.79	3 (15%)	26,32,35	1.36	4 (15%)
32	M2G	1a	966	32	20,27,28	1.36	3 (15%)	19,40,43	1.10	2 (10%)
54	5MU	2y	54	54	19,22,23	1.59	5 (26%)	27,32,35	2.09	9 (33%)
1	OMG	1A	2251	56,1,55	19,26,27	1.06	1 (5%)	21,38,41	0.98	1 (4%)
55	31H	1x	76	56,55	27,34,35	1.13	2 (7%)	22,47,50	2.89	5 (22%)
1	5MU	2A	1915	1	19,22,23	1.48	3 (15%)	27,32,35	2.05	5 (18%)
54	PSU	2w	55	56,54	18,21,22	1.51	3 (16%)	21,30,33	1.99	4 (19%)
32	5MC	2a	967	32	19,22,23	1.68	2 (10%)	26,32,35	1.21	2 (7%)
54	5MU	1y	54	54	19,22,23	1.55	5 (26%)	27,32,35	1.80	7 (25%)
54	G7M	2y	46	54	20,26,27	1.39	2 (10%)	16,39,42	0.78	1 (6%)
32	5MC	2a	1400	32	19,22,23	1.72	3 (15%)	26,32,35	1.36	3 (11%)
54	4SU	1y	8	54	18,21,22	1.60	4 (22%)	25,30,33	1.68	5 (20%)
32	5MC	1a	967	32	19,22,23	1.85	2 (10%)	26,32,35	1.13	2 (7%)
32	G7M	1a	527	32,56	20,26,27	1.27	2 (10%)	16,39,42	0.55	0
54	PSU	1y	39	54	18,21,22	1.44	2 (11%)	21,30,33	1.87	4 (19%)
55	5MC	2x	32	55	19,22,23	1.63	2 (10%)	26,32,35	1.43	4 (15%)
55	4SU	1x	8	55	18,21,22	2.26	5 (27%)	25,30,33	2.40	8 (32%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
55	PSU	2x	55	55	18,21,22	1.43	2 (11%)	21,30,33	2.15	5 (23%)
1	5MC	1A	1962	56,1	19,22,23	1.53	2 (10%)	26,32,35	1.28	4 (15%)
32	MA6	2a	1519	32	19,26,27	1.00	2 (10%)	18,38,41	2.08	3 (16%)
1	2MA	2A	2503	56,1	18,25,26	0.82	0	20,37,40	1.66	3 (15%)
1	OMG	2A	2251	56,1,55	19,26,27	0.95	1 (5%)	21,38,41	1.19	3 (14%)
55	4SU	2x	8	55	18,21,22	2.03	5 (27%)	25,30,33	1.60	8 (32%)
32	2MG	2a	1207	32	18,26,27	0.99	2 (11%)	16,38,41	1.24	1 (6%)
1	5MU	1A	1915	1	19,22,23	1.47	4 (21%)	27,32,35	2.12	8 (29%)
55	31H	2x	76	56,55	27,34,35	1.25	3 (11%)	22,47,50	2.53	5 (22%)
54	MIA	1w	37	54	24,31,32	2.01	4 (16%)	22,44,47	2.69	7 (31%)
32	2MG	1a	1207	32	18,26,27	0.92	1 (5%)	16,38,41	1.72	4 (25%)
55	5MC	1x	32	55	19,22,23	1.54	3 (15%)	26,32,35	1.48	3 (11%)
1	5MC	2A	1942	1	19,22,23	1.55	3 (15%)	26,32,35	1.21	3 (11%)
1	OMU	1A	2552	56,1	19,22,23	1.11	2 (10%)	25,31,34	2.29	5 (20%)
1	PSU	1A	1911	1	18,21,22	1.44	3 (16%)	21,30,33	1.99	3 (14%)
54	PSU	2w	32	54	18,21,22	1.38	3 (16%)	21,30,33	1.98	4 (19%)

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
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
54	PSU	1w	32	54	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	5/7/12/14	-
54	G7M	1y	46	54	-	1/3/25/26	0/3/3/3
1	2MA	1A	2503	56,1	-	0/3/25/26	0/3/3/3
1	5MU	1A	1939	56,1	-	0/7/25/26	0/2/2/2
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2
32	MA6	2a	1518	32	-	0/7/29/30	0/3/3/3
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
1	OMU	2A	2552	56,1	-	0/9/27/28	0/2/2/2
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
54	PSU	2y	55	54	-	6/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
54	MIA	2y	37	54	-	0/3/25/34	0/3/3/3
54	MIA	1y	37	54	-	0/3/25/34	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	PSU	1y	55	54	-	2/7/25/26	0/2/2/2
32	4OC	2a	1402	32,56	-	3/9/29/30	0/2/2/2
54	PSU	2y	39	54	-	0/7/25/26	0/2/2/2
32	G7M	2a	527	32,56	-	3/3/25/26	0/3/3/3
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
54	PSU	1w	55	54	-	0/7/25/26	0/2/2/2
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	3/7/29/30	0/3/3/3
32	4OC	1a	1402	32	-	0/9/29/30	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
54	G7M	2w	46	54	-	3/3/25/26	0/3/3/3
1	OMC	1A	1920	1	-	1/9/27/28	0/2/2/2
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	1/7/25/26	0/2/2/2
54	PSU	1y	32	54	-	0/7/25/26	0/2/2/2
54	PSU	2y	32	54	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/7/29/30	0/3/3/3
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
1	5MU	2A	1939	56,1	-	1/7/25/26	0/2/2/2
54	G7M	1w	46	54	-	1/3/25/26	0/3/3/3
1	PSU	1A	2605	56,1	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
32	UR3	2a	1498	32,56	-	0/7/25/26	0/2/2/2
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
43	0TD	2l	92	43	-	2/7/12/14	-
54	4SU	2y	8	54	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	32,56	-	0/7/25/26	0/2/2/2
1	5MC	2A	1962	56,1	-	0/7/25/26	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
55	5MU	1x	54	56,55	-	0/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
54	4SU	2w	8	54	-	0/7/25/26	0/2/2/2
54	MIA	2w	37	54	-	2/7/29/34	0/3/3/3
32	5MC	2a	1404	32	-	2/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/7/29/30	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	5MU	2y	54	54	-	3/7/25/26	0/2/2/2
1	OMG	1A	2251	56,1,55	-	0/5/27/28	0/3/3/3
55	31H	1x	76	56,55	-	4/18/40/41	0/3/3/3
1	5MU	2A	1915	1	-	1/7/25/26	0/2/2/2
54	PSU	2w	55	56,54	-	0/7/25/26	0/2/2/2
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
54	5MU	1y	54	54	-	1/7/25/26	0/2/2/2
54	G7M	2y	46	54	-	0/3/25/26	0/3/3/3
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
54	4SU	1y	8	54	-	0/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
32	G7M	1a	527	32,56	-	2/3/25/26	0/3/3/3
54	PSU	1y	39	54	-	0/7/25/26	0/2/2/2
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	56,1	-	0/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	2/7/29/30	0/3/3/3
1	2MA	2A	2503	56,1	-	1/3/25/26	0/3/3/3
1	OMG	2A	2251	56,1,55	-	0/5/27/28	0/3/3/3
55	4SU	2x	8	55	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	2/5/27/28	0/3/3/3
1	5MU	1A	1915	1	-	1/7/25/26	0/2/2/2
55	31H	2x	76	56,55	-	4/18/40/41	0/3/3/3
54	MIA	1w	37	54	-	3/11/33/34	0/3/3/3
32	2MG	1a	1207	32	-	2/5/27/28	0/3/3/3
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
1	OMU	1A	2552	56,1	-	0/9/27/28	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
54	PSU	2w	32	54	-	0/7/25/26	0/2/2/2

All (209) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-12.90	1.69	1.82
43	1l	92	0TD	CB-SB	-10.73	1.71	1.82
32	1a	967	5MC	C5-C4	6.86	1.49	1.44
32	1a	1404	5MC	C5-C4	6.81	1.49	1.44
54	1w	37	MIA	C13-C14	6.77	1.52	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1404	5MC	C5-C4	6.39	1.49	1.44
32	2a	967	5MC	C5-C4	6.24	1.48	1.44
32	2a	1400	5MC	C5-C4	6.20	1.48	1.44
1	2A	1962	5MC	C5-C4	6.17	1.48	1.44
54	2w	37	MIA	C2-S10	-5.67	1.71	1.75
55	1x	8	4SU	C4-N3	-5.59	1.31	1.37
55	2x	32	5MC	C5-C4	5.41	1.48	1.44
1	2A	1942	5MC	C5-C4	5.28	1.48	1.44
32	1a	1407	5MC	C5-C4	5.28	1.48	1.44
55	2x	8	4SU	C4-N3	-5.16	1.32	1.37
1	1A	1962	5MC	C5-C4	5.02	1.47	1.44
55	1x	8	4SU	C2-N3	-5.02	1.29	1.38
55	1x	32	5MC	C5-C4	4.97	1.47	1.44
54	2w	55	PSU	C6-C5	4.94	1.40	1.35
32	1a	1400	5MC	C5-C4	4.84	1.47	1.44
54	1w	8	4SU	C4-S4	-4.81	1.60	1.68
54	1w	37	MIA	C2-S10	-4.76	1.71	1.75
54	2y	8	4SU	C4-S4	-4.67	1.60	1.68
1	1A	1942	5MC	C5-C4	4.62	1.47	1.44
54	1y	55	PSU	C6-C5	4.60	1.40	1.35
32	2a	1407	5MC	C5-C4	4.59	1.47	1.44
54	2y	32	PSU	C6-C5	4.59	1.40	1.35
54	1w	55	PSU	C6-C5	4.55	1.40	1.35
54	1y	39	PSU	C6-C5	4.49	1.40	1.35
54	2w	39	PSU	C6-C5	4.38	1.40	1.35
54	1y	32	PSU	C6-C5	4.30	1.40	1.35
54	1y	46	G7M	C5-C4	4.24	1.47	1.39
55	2x	55	PSU	C6-C5	4.21	1.39	1.35
55	2x	8	4SU	C2-N3	-4.21	1.30	1.38
54	2y	54	5MU	C2-N1	4.19	1.45	1.38
54	2y	46	G7M	C5-C4	4.11	1.47	1.39
54	1w	46	G7M	C5-C4	4.07	1.47	1.39
54	2w	8	4SU	C4-S4	-4.06	1.61	1.68
32	1a	516	PSU	C6-C5	4.05	1.39	1.35
1	2A	1917	PSU	C6-C5	3.98	1.39	1.35
32	2a	527	G7M	C5-C4	3.84	1.46	1.39
54	2w	46	G7M	C5-C4	3.83	1.46	1.39
32	1a	527	G7M	C5-C4	3.83	1.46	1.39
1	1A	1917	PSU	C6-C5	3.82	1.39	1.35
54	2w	32	PSU	C6-C5	3.82	1.39	1.35
54	1y	8	4SU	C4-S4	-3.82	1.62	1.68
32	1a	966	M2G	C2-N3	3.81	1.36	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	516	PSU	C6-C5	3.75	1.39	1.35
32	2a	966	M2G	C2-N3	3.71	1.35	1.30
54	1w	32	PSU	C6-C5	3.68	1.39	1.35
55	1x	8	4SU	C4-S4	-3.68	1.62	1.68
54	2y	55	PSU	C6-C5	3.66	1.39	1.35
54	2y	39	PSU	C6-C5	3.61	1.39	1.35
1	2A	1939	5MU	C6-C5	3.58	1.40	1.34
55	1x	76	31H	C3'-N3'	3.55	1.51	1.45
32	2a	1404	5MC	C6-C5	3.54	1.40	1.34
55	2x	8	4SU	C4-S4	-3.52	1.62	1.68
1	2A	1911	PSU	C6-C5	3.51	1.39	1.35
54	2w	37	MIA	C6-C5	3.47	1.50	1.44
1	1A	2605	PSU	C4-N3	-3.43	1.32	1.38
55	1x	55	PSU	C6-C5	3.40	1.39	1.35
54	1w	39	PSU	C6-C5	3.38	1.39	1.35
55	2x	76	31H	C3'-N3'	3.33	1.51	1.45
55	2x	32	5MC	C6-C5	3.31	1.40	1.34
1	1A	1911	PSU	C6-C5	3.30	1.38	1.35
1	1A	1939	5MU	C2-N3	-3.29	1.32	1.38
1	2A	2605	PSU	C6-C5	3.23	1.38	1.35
1	1A	2605	PSU	C2-N1	-3.18	1.32	1.36
32	1a	967	5MC	C6-C5	3.18	1.39	1.34
55	1x	32	5MC	C6-C5	3.18	1.39	1.34
1	1A	1939	5MU	C6-C5	3.16	1.39	1.34
1	1A	2251	OMG	C6-N1	-3.16	1.33	1.37
1	1A	1962	5MC	C6-N1	-3.15	1.32	1.38
55	1x	8	4SU	C5-C4	-3.15	1.38	1.42
54	2w	37	MIA	C2-N3	3.11	1.38	1.34
1	1A	1939	5MU	C6-N1	-3.10	1.32	1.38
1	1A	1915	5MU	C2-N1	3.07	1.43	1.38
1	2A	1915	5MU	C2-N1	3.06	1.43	1.38
54	1y	8	4SU	C4-N3	-3.05	1.34	1.37
1	1A	2605	PSU	C2-N3	-3.03	1.32	1.37
54	1w	37	MIA	C6-C5	3.01	1.49	1.44
1	1A	1942	5MC	C6-C5	2.98	1.39	1.34
1	2A	1915	5MU	C6-C5	2.97	1.39	1.34
1	2A	1939	5MU	C4-N3	-2.97	1.33	1.38
1	2A	1939	5MU	C2-N3	-2.96	1.32	1.38
54	2y	54	5MU	C6-C5	2.95	1.39	1.34
43	1l	92	0TD	CB-CA	2.94	1.55	1.54
55	1x	54	5MU	C4-N3	-2.94	1.33	1.38
1	1A	1911	PSU	C4-N3	-2.92	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1915	5MU	C6-C5	2.92	1.39	1.34
54	1y	54	5MU	C6-C5	2.92	1.39	1.34
55	1x	54	5MU	C6-C5	2.90	1.39	1.34
43	1l	92	0TD	CB-CG	2.89	1.56	1.52
1	2A	1942	5MC	C6-C5	2.89	1.39	1.34
1	2A	1915	5MU	C4-C5	2.88	1.49	1.44
55	2x	54	5MU	C2-N1	2.86	1.42	1.38
54	1y	54	5MU	C4-C5	2.84	1.49	1.44
54	2y	37	MIA	C2-N3	2.83	1.36	1.32
54	1y	37	MIA	C2-N3	2.82	1.36	1.32
32	1a	966	M2G	C6-N1	-2.81	1.33	1.37
55	2x	54	5MU	C6-C5	2.80	1.39	1.34
32	2a	1407	5MC	C6-C5	2.78	1.39	1.34
55	2x	76	31H	C6-C5	-2.77	1.33	1.43
32	1a	1400	5MC	C6-C5	2.76	1.39	1.34
54	2w	8	4SU	C2-N1	2.75	1.42	1.38
54	1y	54	5MU	C2-N1	2.75	1.42	1.38
54	2y	8	4SU	C2-N1	2.73	1.42	1.38
54	1w	54	5MU	C2-N1	2.73	1.42	1.38
32	1a	1498	UR3	C2-N1	2.70	1.42	1.38
54	1w	37	MIA	C2-N3	2.70	1.38	1.34
54	1w	54	5MU	C6-C5	2.68	1.39	1.34
54	1w	8	4SU	C2-N1	2.68	1.42	1.38
55	1x	76	31H	C6-C5	-2.61	1.33	1.43
55	2x	76	31H	C5-N7	-2.61	1.30	1.39
1	1A	1915	5MU	C4-N3	-2.61	1.34	1.38
32	2a	527	G7M	C6-N1	-2.60	1.33	1.37
32	1a	1407	5MC	C6-C5	2.60	1.38	1.34
32	2a	1400	5MC	C6-C5	2.59	1.38	1.34
55	2x	54	5MU	C4-N3	-2.57	1.34	1.38
32	1a	966	M2G	C2-N2	2.57	1.39	1.35
32	2a	967	5MC	C6-C5	2.56	1.38	1.34
54	2y	54	5MU	C4-C5	2.54	1.49	1.44
32	2a	1498	UR3	C2-N1	2.52	1.42	1.38
54	1y	54	5MU	C4-N3	-2.51	1.34	1.38
1	2A	1962	5MC	C6-C5	2.51	1.38	1.34
1	1A	1942	5MC	C6-N1	-2.50	1.33	1.38
54	1y	8	4SU	C6-C5	2.48	1.40	1.35
55	2x	55	PSU	C4-N3	-2.47	1.34	1.38
32	1a	1519	MA6	C6-C5	-2.47	1.41	1.44
1	2A	1962	5MC	C6-N1	-2.47	1.33	1.38
32	1a	1404	5MC	C6-C5	2.46	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1w	55	PSU	C4-N3	-2.44	1.34	1.38
1	1A	2552	OMU	C2-N3	-2.43	1.33	1.38
54	2w	54	5MU	C6-C5	2.43	1.38	1.34
32	1a	516	PSU	C4-N3	-2.43	1.34	1.38
1	1A	1915	5MU	C4-C5	2.42	1.48	1.44
32	1a	527	G7M	C6-N1	-2.41	1.34	1.37
32	2a	1407	5MC	C6-N1	-2.39	1.33	1.38
55	2x	8	4SU	C6-C5	2.37	1.40	1.35
54	1y	39	PSU	C4-N3	-2.37	1.34	1.38
32	1a	1404	5MC	C6-N1	-2.37	1.34	1.38
32	1a	1498	UR3	C5-C4	-2.37	1.38	1.43
1	2A	2251	OMG	C6-N1	-2.36	1.34	1.37
1	2A	1911	PSU	C4-N3	-2.36	1.34	1.38
55	1x	32	5MC	C6-N1	-2.36	1.34	1.38
1	2A	1942	5MC	C6-N1	-2.35	1.34	1.38
1	1A	1939	5MU	C4-N3	-2.35	1.34	1.38
55	2x	8	4SU	C5-C4	-2.35	1.39	1.42
32	1a	1400	5MC	C6-N1	-2.35	1.34	1.38
32	2a	1518	MA6	C6-C5	-2.34	1.41	1.44
55	1x	54	5MU	C2-N1	2.33	1.42	1.38
54	2y	39	PSU	C4-N3	-2.33	1.34	1.38
54	1w	39	PSU	C4-N3	-2.33	1.34	1.38
54	2y	55	PSU	C4-N3	-2.31	1.34	1.38
32	2a	966	M2G	C2-N2	2.30	1.39	1.35
55	2x	54	5MU	C4-C5	2.30	1.48	1.44
32	2a	1519	MA6	C6-C5	-2.28	1.41	1.44
54	2w	32	PSU	C4-N3	-2.28	1.34	1.38
1	1A	1917	PSU	C4-N3	-2.27	1.34	1.38
1	2A	2605	PSU	C4-N3	-2.26	1.34	1.38
54	2w	32	PSU	C4-C5	2.26	1.50	1.44
54	2y	54	5MU	O2-C2	2.25	1.27	1.23
54	1w	32	PSU	C4-N3	-2.25	1.34	1.38
1	2A	1917	PSU	C4-N3	-2.25	1.34	1.38
32	1a	1518	MA6	C6-C5	-2.25	1.41	1.44
1	1A	1911	PSU	O4'-C1'	-2.24	1.40	1.43
55	1x	8	4SU	C6-C5	2.24	1.40	1.35
1	1A	2552	OMU	C5-C4	-2.23	1.38	1.43
54	1w	8	4SU	C6-C5	2.23	1.40	1.35
54	2w	55	PSU	C4-N3	-2.22	1.34	1.38
55	1x	54	5MU	C4-C5	2.21	1.48	1.44
32	2a	1498	UR3	C6-C5	2.21	1.40	1.35
54	2w	54	5MU	C4-N3	-2.21	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	2552	OMU	C6-C5	2.20	1.40	1.35
54	1y	54	5MU	C6-N1	-2.20	1.34	1.38
1	2A	2552	OMU	C2-N3	-2.19	1.34	1.38
54	1w	8	4SU	C5-C4	-2.18	1.39	1.42
32	2a	1404	5MC	C6-N1	-2.16	1.34	1.38
54	1w	8	4SU	C4-N3	-2.14	1.35	1.37
1	1A	1917	PSU	C2-N3	-2.14	1.33	1.37
54	2y	8	4SU	C5-C4	-2.14	1.39	1.42
32	1a	516	PSU	C2-N3	-2.13	1.34	1.37
1	2A	1939	5MU	C4-C5	2.13	1.48	1.44
32	2a	1400	5MC	C6-N1	-2.12	1.34	1.38
55	1x	54	5MU	C6-N1	-2.12	1.34	1.38
32	2a	1207	2MG	C6-N1	-2.12	1.34	1.37
1	2A	2552	OMU	C4-N3	-2.10	1.35	1.38
54	2w	54	5MU	C2-N3	-2.08	1.34	1.38
55	2x	54	5MU	C6-N1	-2.08	1.34	1.38
54	2y	46	G7M	C2-N3	2.07	1.38	1.33
32	1a	1207	2MG	C6-N1	-2.06	1.34	1.37
32	2a	966	M2G	C6-N1	-2.05	1.34	1.37
54	1y	32	PSU	C4-N3	-2.05	1.35	1.38
54	1y	8	4SU	C2-N1	2.05	1.41	1.38
54	2w	55	PSU	C4-C5	2.05	1.50	1.44
54	2y	8	4SU	C6-C5	2.05	1.39	1.35
32	2a	1519	MA6	C6-N1	2.04	1.35	1.32
54	2y	54	5MU	C4-N3	-2.04	1.35	1.38
32	2a	1518	MA6	C6-N1	2.04	1.35	1.32
32	1a	1402	4OC	C6-N1	-2.04	1.33	1.38
54	2y	8	4SU	C4-N3	-2.04	1.35	1.37
54	2w	8	4SU	C4-N3	-2.04	1.35	1.37
32	2a	1207	2MG	C5-C4	2.03	1.48	1.43
54	1w	54	5MU	C4-N3	-2.03	1.35	1.38
54	1y	32	PSU	C4-C5	2.02	1.49	1.44
54	2w	39	PSU	C4-C5	2.02	1.49	1.44
1	2A	2605	PSU	C2-N3	-2.02	1.34	1.37
54	1w	54	5MU	C4-C5	2.02	1.48	1.44
32	2a	1402	4OC	C6-C5	2.00	1.39	1.35

All (327) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	1l	92	0TD	CSB-SB-CB	-15.08	75.26	102.36
43	2l	92	0TD	CSB-SB-CB	-10.39	83.69	102.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	1w	37	MIA	C12-C13-C14	-9.66	109.68	127.01
55	1x	76	31H	O4'-C1'-N9	-8.53	97.44	108.75
32	2a	1498	UR3	C4-N3-C2	-7.94	118.19	124.58
1	1A	2605	PSU	N1-C2-N3	7.29	122.86	115.17
55	2x	76	31H	C4'-O4'-C1'	-7.02	103.50	109.92
55	2x	55	PSU	N1-C2-N3	6.95	122.50	115.17
54	2w	8	4SU	C4-N3-C2	-6.80	120.80	127.31
1	2A	1939	5MU	C5-C4-N3	6.71	121.16	115.32
54	2y	8	4SU	C4-N3-C2	-6.70	120.89	127.31
54	1w	39	PSU	N1-C2-N3	6.60	122.14	115.17
54	1y	55	PSU	N1-C2-N3	6.55	122.08	115.17
1	1A	1939	5MU	C4-N3-C2	-6.44	118.89	127.34
55	1x	76	31H	N3-C2-N1	-6.41	119.97	128.67
1	2A	1939	5MU	C4-N3-C2	-6.32	119.06	127.34
1	1A	1917	PSU	N1-C2-N3	6.28	121.79	115.17
1	1A	1911	PSU	N1-C2-N3	6.27	121.78	115.17
55	1x	8	4SU	O2-C2-N1	6.22	130.90	122.80
54	2y	32	PSU	N1-C2-N3	6.22	121.73	115.17
32	1a	1498	UR3	C4-N3-C2	-6.21	119.58	124.58
1	2A	1917	PSU	N1-C2-N3	6.21	121.72	115.17
55	2x	76	31H	O4'-C1'-N9	-6.17	100.56	108.75
1	1A	2503	2MA	C2-N3-C4	6.17	120.44	115.46
1	2A	2605	PSU	N1-C2-N3	6.15	121.65	115.17
54	2w	32	PSU	N1-C2-N3	6.13	121.63	115.17
1	1A	1939	5MU	C5-C4-N3	6.01	120.55	115.32
54	1w	55	PSU	N1-C2-N3	6.00	121.50	115.17
55	2x	76	31H	N3-C2-N1	-5.99	120.55	128.67
1	1A	2552	OMU	O2-C2-N1	-5.96	115.04	122.80
54	1w	54	5MU	O4-C4-C5	-5.94	118.12	124.92
54	1w	32	PSU	N1-C2-N3	5.94	121.44	115.17
32	2a	1519	MA6	N3-C2-N1	-5.89	120.68	128.67
32	2a	1518	MA6	N3-C2-N1	-5.85	120.74	128.67
54	2w	55	PSU	N1-C2-N3	5.83	121.32	115.17
1	2A	1939	5MU	N3-C2-N1	5.82	122.47	114.89
54	2y	55	PSU	N1-C2-N3	5.81	121.30	115.17
54	2w	39	PSU	N1-C2-N3	5.77	121.26	115.17
55	2x	54	5MU	N3-C2-N1	5.68	122.28	114.89
54	1y	39	PSU	N1-C2-N3	5.62	121.09	115.17
54	2y	39	PSU	N1-C2-N3	5.62	121.09	115.17
32	2a	516	PSU	N1-C2-N3	5.58	121.05	115.17
54	2y	8	4SU	C5-C4-N3	5.57	119.93	114.75
1	1A	1939	5MU	O4-C4-C5	-5.56	118.56	124.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	1x	54	5MU	C4-N3-C2	-5.56	120.06	127.34
55	1x	55	PSU	N1-C2-N3	5.53	121.00	115.17
55	2x	54	5MU	C4-N3-C2	-5.49	120.14	127.34
1	1A	1939	5MU	C5-C6-N1	-5.46	117.38	123.31
55	1x	54	5MU	N3-C2-N1	5.45	121.99	114.89
1	1A	2552	OMU	C4-N3-C2	-5.42	119.88	126.61
54	1w	8	4SU	C5-C4-N3	5.36	119.74	114.75
1	2A	1911	PSU	N1-C2-N3	5.33	120.79	115.17
32	1a	516	PSU	N1-C2-N3	5.31	120.77	115.17
54	1w	8	4SU	C4-N3-C2	-5.31	122.22	127.31
1	1A	1939	5MU	N3-C2-N1	5.31	121.80	114.89
55	1x	8	4SU	C4-N3-C2	5.28	132.38	127.31
54	1w	54	5MU	C4-N3-C2	-5.28	120.41	127.34
1	1A	1915	5MU	N3-C2-N1	5.28	121.76	114.89
54	1w	54	5MU	N3-C2-N1	5.24	121.71	114.89
55	1x	76	31H	C4'-O4'-C1'	-5.21	105.15	109.92
1	2A	2503	2MA	C2-N3-C4	5.17	119.64	115.46
54	2w	8	4SU	C5-C4-N3	5.12	119.52	114.75
54	1y	32	PSU	N1-C2-N3	5.11	120.56	115.17
32	2a	1518	MA6	C2-N1-C6	5.09	121.83	116.84
32	1a	1518	MA6	N3-C2-N1	-4.99	121.90	128.67
32	2a	1519	MA6	C2-N1-C6	4.95	121.70	116.84
1	2A	2605	PSU	C4-N3-C2	-4.94	119.57	126.37
1	1A	1915	5MU	C4-N3-C2	-4.91	120.90	127.34
1	2A	1915	5MU	C4-N3-C2	-4.88	120.94	127.34
1	2A	1939	5MU	C5-C6-N1	-4.88	118.02	123.31
32	1a	1519	MA6	N3-C2-N1	-4.84	122.11	128.67
54	2y	54	5MU	C5-C4-N3	4.82	119.51	115.32
54	1y	8	4SU	C4-N3-C2	-4.79	122.72	127.31
1	2A	1915	5MU	C5-C4-N3	4.72	119.43	115.32
54	1w	39	PSU	O2-C2-N1	-4.71	117.94	122.79
1	1A	2552	OMU	N3-C2-N1	4.70	121.01	114.89
55	1x	76	31H	CA-N-CN	-4.66	115.65	122.82
54	1w	54	5MU	C5-C4-N3	4.63	119.35	115.32
55	1x	32	5MC	C5-C6-N1	-4.58	118.33	123.31
54	2y	55	PSU	O2-C2-N1	-4.58	118.06	122.79
1	2A	1915	5MU	O4-C4-C5	-4.58	119.68	124.92
54	2w	39	PSU	C4-N3-C2	-4.58	120.07	126.37
54	2w	37	MIA	C12-N6-C6	-4.55	118.63	122.85
1	2A	1939	5MU	O4-C4-C5	-4.54	119.72	124.92
54	2y	8	4SU	C5-C4-S4	-4.54	119.12	124.31
55	1x	8	4SU	C6-C5-C4	-4.52	116.04	119.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	1x	54	5MU	C5-C4-N3	4.50	119.23	115.32
54	2w	8	4SU	N3-C2-N1	4.50	120.75	114.89
1	1A	1917	PSU	C4-N3-C2	-4.44	120.25	126.37
55	1x	54	5MU	C5-C6-N1	-4.44	118.50	123.31
54	2y	8	4SU	N3-C2-N1	4.42	120.64	114.89
1	1A	2605	PSU	C4-N3-C2	-4.40	120.31	126.37
55	2x	54	5MU	C5-C4-N3	4.40	119.14	115.32
54	1w	39	PSU	C4-N3-C2	-4.37	120.34	126.37
32	1a	1518	MA6	C2-N1-C6	4.35	121.11	116.84
55	2x	55	PSU	C4-N3-C2	-4.34	120.40	126.37
54	2y	54	5MU	C4-N3-C2	-4.31	121.69	127.34
54	1y	8	4SU	N3-C2-N1	4.31	120.50	114.89
54	2y	54	5MU	O4-C4-C5	-4.29	120.01	124.92
54	1y	55	PSU	O2-C2-N1	-4.26	118.39	122.79
32	2a	1404	5MC	C5-C6-N1	-4.25	118.70	123.31
54	2w	54	5MU	O4-C4-C5	-4.23	120.07	124.92
1	2A	1915	5MU	N3-C2-N1	4.22	120.39	114.89
1	1A	1915	5MU	C5-C4-N3	4.19	118.97	115.32
55	2x	54	5MU	O4-C4-C5	-4.17	120.14	124.92
1	1A	1915	5MU	O4-C4-C5	-4.14	120.18	124.92
1	1A	1911	PSU	O2-C2-N1	-4.14	118.52	122.79
54	1w	37	MIA	C15-C14-C13	-4.13	110.28	122.66
1	1A	2552	OMU	O4-C4-C5	-4.11	118.08	125.16
55	1x	54	5MU	O4-C4-C5	-4.05	120.29	124.92
32	1a	1407	5MC	C5-C6-N1	-4.03	118.94	123.31
1	1A	1917	PSU	O2-C2-N1	-3.97	118.69	122.79
54	1y	54	5MU	C4-N3-C2	-3.96	122.15	127.34
1	1A	1942	5MC	C5-C6-N1	-3.95	119.03	123.31
32	1a	1519	MA6	C2-N1-C6	3.94	120.70	116.84
32	2a	967	5MC	C5-C6-N1	-3.92	119.06	123.31
54	2w	32	PSU	C4-N3-C2	-3.92	120.97	126.37
54	2w	32	PSU	O2-C2-N1	-3.88	118.78	122.79
54	2y	37	MIA	N3-C2-N1	-3.87	123.42	128.67
54	1w	37	MIA	C16-C14-C13	-3.86	111.06	122.66
54	2w	54	5MU	C5-C4-N3	3.86	118.68	115.32
54	1y	37	MIA	N3-C2-N1	-3.86	123.44	128.67
1	2A	2552	OMU	N3-C2-N1	3.86	119.91	114.89
32	1a	1404	5MC	C5-C4-N3	-3.85	117.81	121.75
32	1a	516	PSU	C4-N3-C2	-3.82	121.11	126.37
54	1y	54	5MU	N3-C2-N1	3.82	119.86	114.89
55	2x	32	5MC	C5-C6-N1	-3.81	119.17	123.31
1	2A	1911	PSU	C4-N3-C2	-3.80	121.14	126.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	2552	OMU	C4-N3-C2	-3.76	121.94	126.61
32	2a	516	PSU	C4-N3-C2	-3.75	121.20	126.37
54	2w	8	4SU	C5-C4-S4	-3.75	120.02	124.31
1	2A	1917	PSU	C4-N3-C2	-3.75	121.21	126.37
54	2y	39	PSU	C4-N3-C2	-3.73	121.23	126.37
32	2a	516	PSU	O2-C2-N1	-3.72	118.95	122.79
54	2y	54	5MU	N3-C2-N1	3.71	119.72	114.89
54	1y	54	5MU	C5-C4-N3	3.71	118.55	115.32
55	2x	8	4SU	O2-C2-N1	3.69	127.60	122.80
54	2y	55	PSU	C4-N3-C2	-3.69	121.29	126.37
1	1A	2552	OMU	C5-C4-N3	3.68	119.96	114.80
54	2y	32	PSU	C4-N3-C2	-3.68	121.30	126.37
32	1a	1400	5MC	C5-C6-N1	-3.68	119.32	123.31
55	1x	55	PSU	C4-N3-C2	-3.66	121.33	126.37
54	1w	55	PSU	C4-N3-C2	-3.65	121.34	126.37
32	2a	1407	5MC	C5-C4-N3	-3.64	118.02	121.75
54	2w	55	PSU	O2-C2-N1	-3.64	119.04	122.79
32	2a	1400	5MC	C5-C6-N1	-3.61	119.39	123.31
54	1y	32	PSU	C4-N3-C2	-3.59	121.43	126.37
55	1x	8	4SU	O2-C2-N3	-3.59	114.88	121.49
54	1w	32	PSU	C4-N3-C2	-3.58	121.44	126.37
1	2A	1917	PSU	O2-C2-N1	-3.56	119.12	122.79
54	2y	32	PSU	O2-C2-N1	-3.56	119.12	122.79
54	2w	55	PSU	C4-N3-C2	-3.55	121.48	126.37
1	2A	1911	PSU	C6-C5-C4	-3.55	115.78	118.17
32	1a	1207	2MG	N2-C2-N3	-3.54	116.00	120.51
54	1y	39	PSU	C4-N3-C2	-3.54	121.50	126.37
32	1a	967	5MC	C5-C6-N1	-3.52	119.49	123.31
32	1a	1207	2MG	C8-N7-C5	3.49	108.50	102.55
54	1w	32	PSU	O2-C2-N1	-3.49	119.19	122.79
32	2a	1498	UR3	C5-C4-N3	3.49	119.63	115.04
1	2A	1942	5MC	C5-C6-N1	-3.48	119.54	123.31
1	2A	2552	OMU	O2-C2-N1	-3.47	118.28	122.80
54	1w	8	4SU	C5-C4-S4	-3.47	120.34	124.31
55	1x	32	5MC	C5-C4-N3	-3.47	118.20	121.75
1	1A	1942	5MC	C5-C4-N3	-3.46	118.21	121.75
1	1A	1911	PSU	C4-N3-C2	-3.46	121.61	126.37
54	1y	55	PSU	C4-N3-C2	-3.46	121.61	126.37
54	1y	8	4SU	C5-C4-N3	3.41	117.92	114.75
55	1x	8	4SU	S4-C4-N3	-3.41	116.64	120.20
1	2A	1962	5MC	C5-C4-N3	-3.41	118.26	121.75
54	1y	54	5MU	C5-C6-N1	-3.38	119.64	123.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	1a	1518	MA6	C4-C5-N7	-3.37	105.77	109.34
1	1A	1962	5MC	C5-C4-N3	-3.37	118.30	121.75
32	2a	1407	5MC	C5-C6-N1	-3.37	119.66	123.31
54	1w	8	4SU	N3-C2-N1	3.34	119.23	114.89
32	1a	1207	2MG	N1-C2-N2	3.34	119.97	116.56
1	2A	1915	5MU	C5-C6-N1	-3.31	119.72	123.31
54	1w	37	MIA	C2-N1-C6	3.30	123.28	117.42
1	2A	1942	5MC	C5-C4-N3	-3.29	118.38	121.75
55	2x	54	5MU	C5-C6-N1	-3.28	119.75	123.31
54	2w	54	5MU	N3-C2-N1	3.27	119.15	114.89
54	2w	54	5MU	C4-N3-C2	-3.27	123.06	127.34
1	1A	2251	OMG	C8-N7-C5	3.26	108.11	102.55
54	2y	54	5MU	C1'-N1-C2	3.25	123.43	117.59
32	1a	1404	5MC	C5-C6-N1	-3.25	119.79	123.31
55	1x	54	5MU	O2-C2-N1	-3.22	118.60	122.80
32	2a	1519	MA6	C4-C5-N7	-3.22	105.93	109.34
1	2A	2552	OMU	C5-C4-N3	3.20	119.29	114.80
55	1x	76	31H	OCN-CN-N	-3.20	117.06	125.32
1	2A	2605	PSU	O2-C2-N1	-3.19	119.50	122.79
54	1y	32	PSU	O2-C2-N1	-3.18	119.51	122.79
32	2a	1207	2MG	C8-N7-C5	3.15	107.92	102.55
55	1x	55	PSU	O2-C2-N1	-3.14	119.55	122.79
54	2y	54	5MU	C1'-N1-C6	-3.13	115.99	121.15
32	1a	1402	4OC	C6-C5-C4	3.13	120.77	117.00
55	1x	8	4SU	C5-C4-S4	3.11	127.86	124.31
54	1y	39	PSU	C6-C5-C4	-3.09	116.09	118.17
32	2a	1407	5MC	O2-C2-N3	-3.09	117.46	122.33
55	1x	8	4SU	C1'-N1-C2	3.08	123.13	117.59
1	1A	2605	PSU	O2-C2-N1	-3.08	119.61	122.79
55	2x	32	5MC	O2-C2-N3	-3.08	117.47	122.33
54	2y	39	PSU	O2-C2-N1	-3.08	119.61	122.79
32	2a	1400	5MC	O2-C2-N3	-3.06	117.50	122.33
32	2a	966	M2G	C8-N7-C5	3.06	107.76	102.55
32	1a	1498	UR3	C6-N1-C2	-3.06	119.30	121.80
1	2A	1962	5MC	C5-C6-N1	-3.04	120.02	123.31
32	2a	1404	5MC	O2-C2-N3	-2.99	117.61	122.33
54	1y	54	5MU	O4-C4-C5	-2.99	121.50	124.92
54	1w	37	MIA	N3-C2-N1	-2.98	121.57	127.03
54	2w	54	5MU	C5M-C5-C4	2.98	121.97	118.78
32	1a	1498	UR3	C1'-N1-C2	2.97	121.90	117.04
32	1a	966	M2G	C8-N7-C5	2.96	107.58	102.55
32	1a	1400	5MC	C5-C4-N3	-2.95	118.73	121.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	2x	8	4SU	S4-C4-N3	-2.95	117.12	120.20
32	1a	1407	5MC	C5-C4-N3	-2.94	118.74	121.75
54	2w	39	PSU	C6-C5-C4	-2.94	116.19	118.17
1	2A	2503	2MA	O4'-C1'-N9	-2.93	104.87	108.75
54	1w	55	PSU	O2-C2-N1	-2.91	119.79	122.79
1	2A	2605	PSU	C5-C6-N1	-2.91	118.11	122.14
32	2a	1402	4OC	CM4-N4-C4	-2.90	116.79	122.45
32	1a	1498	UR3	C5-C4-N3	2.88	118.83	115.04
32	1a	1519	MA6	C4-C5-N7	-2.82	106.35	109.34
1	2A	1911	PSU	O2-C2-N1	-2.82	119.88	122.79
55	2x	8	4SU	O2-C2-N3	-2.82	116.29	121.49
54	2w	55	PSU	C6-C5-C4	-2.79	116.29	118.17
54	1y	37	MIA	C4-C5-N7	-2.78	106.40	109.34
55	2x	8	4SU	C6-C5-C4	-2.77	117.55	119.95
55	2x	55	PSU	O2-C2-N3	-2.76	116.95	121.86
1	2A	2251	OMG	C8-N7-C5	2.74	107.21	102.55
32	2a	1518	MA6	C4-C5-N7	-2.74	106.45	109.34
1	1A	1939	5MU	O2-C2-N1	-2.72	119.26	122.80
54	2y	8	4SU	O2-C2-N1	-2.72	119.26	122.80
1	1A	1962	5MC	C1'-N1-C6	-2.71	116.68	121.15
1	1A	1962	5MC	CM5-C5-C6	-2.71	119.18	122.85
54	2w	37	MIA	C1'-N9-C4	2.70	131.38	126.64
32	1a	967	5MC	C5-C4-N3	-2.69	119.00	121.75
32	1a	1404	5MC	CM5-C5-C6	-2.65	119.26	122.85
54	2y	55	PSU	C6-C5-C4	-2.65	116.39	118.17
54	2y	54	5MU	C5-C6-N1	-2.64	120.45	123.31
54	1w	54	5MU	C5-C6-N1	-2.62	120.46	123.31
55	2x	32	5MC	C5-C4-N3	-2.60	119.09	121.75
1	1A	1915	5MU	O2-C2-N1	-2.59	119.42	122.80
55	1x	8	4SU	C6-N1-C2	-2.58	117.85	121.00
32	2a	1404	5MC	C5-C4-N3	-2.58	119.11	121.75
54	2y	54	5MU	O2-C2-N3	-2.55	116.78	121.49
1	2A	2251	OMG	C5-C6-N1	2.53	118.90	114.07
54	1w	54	5MU	O2-C2-N1	-2.51	119.53	122.80
55	2x	55	PSU	C5-C6-N1	-2.51	118.66	122.14
1	1A	2605	PSU	C5-C6-N1	-2.50	118.67	122.14
1	2A	1939	5MU	O2-C2-N1	-2.50	119.54	122.80
43	1l	92	0TD	OD2-CG-CB	2.50	118.54	113.15
32	2a	1402	4OC	C6-C5-C4	2.49	120.00	117.00
54	1w	39	PSU	C5-C6-N1	-2.48	118.70	122.14
54	2w	46	G7M	N2-C2-N1	2.47	121.98	116.76
32	1a	1407	5MC	CM5-C5-C6	-2.47	119.51	122.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	1a	1400	5MC	O2-C2-N3	-2.44	118.48	122.33
32	1a	1207	2MG	CM2-N2-C2	-2.44	118.41	123.65
1	1A	2605	PSU	O2-C2-N3	-2.44	117.53	121.86
55	2x	8	4SU	C1'-N1-C2	2.43	121.95	117.59
1	2A	2605	PSU	O4-C4-C5	-2.43	117.98	124.01
54	2w	37	MIA	C2-N1-C6	2.42	121.73	117.42
1	1A	1915	5MU	C5-C6-N1	-2.42	120.68	123.31
54	1y	54	5MU	C5M-C5-C4	2.41	121.35	118.78
55	2x	76	31H	OCN-CN-N	-2.40	119.11	125.32
1	2A	2251	OMG	O6-C6-C5	-2.39	119.58	124.32
54	1w	37	MIA	C4-C5-N7	-2.39	106.81	109.34
55	1x	32	5MC	N4-C4-N3	2.39	122.83	118.51
54	2w	46	G7M	N2-C2-N3	-2.38	115.03	119.67
32	1a	1518	MA6	C1'-N9-C4	-2.37	122.47	126.64
32	2a	1400	5MC	C5-C4-N3	-2.36	119.34	121.75
1	1A	1917	PSU	C5-C6-N1	-2.35	118.88	122.14
32	1a	1498	UR3	C3U-N3-C2	2.33	121.39	117.33
54	2w	37	MIA	C4-C5-N7	-2.31	106.89	109.34
32	2a	1498	UR3	C3U-N3-C4	2.31	121.07	117.87
54	2y	37	MIA	C4-C5-N7	-2.31	106.90	109.34
54	2y	8	4SU	C6-N1-C2	-2.30	118.20	121.00
55	2x	8	4SU	C4-N3-C2	2.29	129.51	127.31
54	2w	39	PSU	O2-C2-N1	-2.29	120.43	122.79
1	2A	1962	5MC	CM5-C5-C6	-2.28	119.77	122.85
1	2A	1920	OMC	C2'-C1'-N1	-2.27	109.94	114.24
32	2a	1404	5MC	N1-C2-N3	2.26	122.72	118.80
32	1a	516	PSU	C5-C6-N1	-2.25	119.02	122.14
32	1a	516	PSU	C6-C5-C4	-2.25	116.66	118.17
54	1y	55	PSU	C6-N1-C2	-2.24	120.61	122.69
32	1a	1404	5MC	O2-C2-N3	-2.24	118.80	122.33
32	1a	1400	5MC	N4-C4-N3	2.22	122.53	118.51
1	1A	1915	5MU	C5M-C5-C4	2.20	121.13	118.78
54	2w	8	4SU	O2-C2-N1	-2.20	119.93	122.80
32	2a	967	5MC	C5-C4-N3	-2.20	119.50	121.75
32	2a	516	PSU	O4'-C1'-C2'	2.19	108.18	105.15
1	2A	1942	5MC	N4-C4-N3	2.19	122.47	118.51
55	2x	8	4SU	C5-C4-S4	2.18	126.80	124.31
55	2x	55	PSU	O2-C2-N1	-2.18	120.54	122.79
1	1A	1915	5MU	C6-N1-C2	-2.16	119.15	121.30
1	1A	1962	5MC	C5-C6-N1	-2.16	120.97	123.31
1	2A	2552	OMU	O4-C4-C5	-2.15	121.45	125.16
32	1a	966	M2G	C5-C6-N1	2.15	118.17	114.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	1518	MA6	C10-N6-C6	2.15	125.33	119.40
54	2y	55	PSU	O4'-C1'-C2'	2.15	108.12	105.15
43	2l	92	0TD	OD2-CG-CB	2.14	117.78	113.15
54	1y	8	4SU	O2-C2-N1	-2.13	120.03	122.80
32	1a	516	PSU	O4'-C1'-C2'	2.12	108.09	105.15
55	2x	54	5MU	O2-C2-N3	-2.12	117.58	121.49
54	2y	54	5MU	C5M-C5-C4	2.12	121.04	118.78
1	2A	2503	2MA	C2-N1-C6	2.12	121.36	118.10
54	1w	46	G7M	O6-C6-N1	2.12	123.13	120.62
32	2a	966	M2G	CM2-N2-CM1	2.11	122.60	115.87
54	1y	39	PSU	O2-C2-N3	-2.11	118.12	121.86
1	1A	1942	5MC	CM5-C5-C6	-2.10	120.01	122.85
55	2x	76	31H	CA-N-CN	-2.09	119.61	122.82
54	2y	39	PSU	C5-C6-N1	-2.08	119.25	122.14
54	2w	37	MIA	N3-C2-N1	-2.08	123.23	127.03
54	1w	37	MIA	S10-C2-N3	2.07	123.32	116.14
54	1y	54	5MU	C1'-N1-C6	-2.07	117.74	121.15
54	1w	55	PSU	C6-C5-C4	-2.06	116.78	118.17
32	1a	516	PSU	O2-C2-N3	-2.06	118.21	121.86
55	2x	54	5MU	O2-C2-N1	-2.04	120.14	122.80
55	2x	8	4SU	C6-N1-C2	-2.04	118.51	121.00
32	1a	1402	4OC	O2-C2-N3	-2.04	119.11	122.33
54	2w	54	5MU	C1'-N1-C2	2.03	121.24	117.59
1	2A	1962	5MC	N4-C4-N3	2.03	122.18	118.51
55	1x	55	PSU	O4-C4-C5	-2.02	118.98	124.01
54	2w	32	PSU	O4'-C1'-C2'	2.02	107.95	105.15
54	1y	8	4SU	C6-N1-C2	-2.02	118.54	121.00
54	1w	8	4SU	C1'-N1-C2	2.01	121.20	117.59
55	2x	32	5MC	C1'-N1-C6	-2.01	117.84	121.15
1	1A	1942	5MC	N1-C2-N3	2.00	122.28	118.80
54	2y	46	G7M	O4'-C1'-N9	-2.00	106.09	108.75

There are no chirality outliers.

All (62) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
32	1a	1207	2MG	N1-C2-N2-CM2
32	1a	1207	2MG	N3-C2-N2-CM2
32	1a	1519	MA6	O4'-C4'-C5'-O5'
43	1l	92	0TD	O-C-CA-CB
43	1l	92	0TD	CA-CB-SB-CSB
43	1l	92	0TD	CG-CB-SB-CSB

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Mol	Chain	Res	Type	Atoms
54	1w	37	MIA	N1-C2-S10-C11
54	1w	37	MIA	N3-C2-S10-C11
54	1w	37	MIA	C12-C13-C14-C16
55	1x	76	31H	CB-CA-N-CN
54	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	1402	4OC	O4'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
54	2y	54	5MU	C3'-C4'-C5'-O5'
54	2y	54	5MU	O4'-C4'-C5'-O5'
54	2y	55	PSU	C2'-C1'-C5-C4
54	2y	55	PSU	C2'-C1'-C5-C6
54	2y	55	PSU	O4'-C1'-C5-C6
55	1x	76	31H	C3'-C4'-C5'-O5'
55	2x	76	31H	C3'-C4'-C5'-O5'
55	1x	76	31H	O4'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
55	2x	76	31H	O4'-C4'-C5'-O5'
54	2y	55	PSU	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	1402	4OC	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
55	1x	76	31H	C4'-C5'-O5'-P
32	1a	527	G7M	C3'-C4'-C5'-O5'
55	2x	76	31H	C4'-C5'-O5'-P
32	2a	527	G7M	O4'-C4'-C5'-O5'
54	2y	55	PSU	O4'-C4'-C5'-O5'
54	1y	54	5MU	O4'-C4'-C5'-O5'
1	2A	1915	5MU	O4'-C4'-C5'-O5'
1	1A	1915	5MU	O4'-C4'-C5'-O5'
32	2a	1404	5MC	C3'-C4'-C5'-O5'
54	2w	46	G7M	C3'-C4'-C5'-O5'
32	2a	1404	5MC	O4'-C4'-C5'-O5'
54	2w	46	G7M	O4'-C4'-C5'-O5'
43	1l	92	0TD	SB-CB-CG-OD1
43	2l	92	0TD	SB-CB-CG-OD1
54	1w	46	G7M	C4'-C5'-O5'-P
54	1y	55	PSU	O4'-C1'-C5-C4
54	2y	55	PSU	O4'-C1'-C5-C4
55	2x	76	31H	CB-CG-SD-CE
32	1a	1519	MA6	C4'-C5'-O5'-P

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Mol	Chain	Res	Type	Atoms
32	1a	527	G7M	O4'-C4'-C5'-O5'
54	2w	46	G7M	C4'-C5'-O5'-P
54	2w	37	MIA	N3-C2-S10-C11
32	1a	1400	5MC	O4'-C4'-C5'-O5'
43	1l	92	0TD	SB-CB-CG-OD2
54	2w	37	MIA	N1-C2-S10-C11
32	2a	527	G7M	C4'-C5'-O5'-P
1	2A	1939	5MU	O4'-C4'-C5'-O5'
54	1y	55	PSU	O4'-C1'-C5-C6
1	2A	2503	2MA	O4'-C4'-C5'-O5'
43	2l	92	0TD	CG-CB-SB-CSB
1	1A	1920	OMC	C2'-C1'-N1-C2
32	2a	1402	4OC	C2'-C1'-N1-C2
54	2y	54	5MU	C2'-C1'-N1-C2

There are no ring outliers.

48 monomers are involved in 67 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
43	1l	92	0TD	2	0
54	1y	46	G7M	1	0
1	1A	2503	2MA	1	0
1	1A	1939	5MU	1	0
32	2a	1518	MA6	4	0
1	2A	1911	PSU	1	0
1	2A	2552	OMU	1	0
54	2y	55	PSU	6	0
54	1y	37	MIA	1	0
54	1y	55	PSU	1	0
54	2y	39	PSU	1	0
54	1w	55	PSU	1	0
1	2A	1917	PSU	1	0
32	1a	1519	MA6	1	0
32	1a	1402	4OC	1	0
54	1w	39	PSU	1	0
54	1y	32	PSU	1	0
32	2a	966	M2G	1	0
54	2w	39	PSU	2	0
1	2A	1939	5MU	1	0
54	1w	46	G7M	1	0
32	1a	1518	MA6	3	0
43	2l	92	0TD	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
54	2y	8	4SU	1	0
54	2w	54	5MU	1	0
54	1w	54	5MU	1	0
54	2w	8	4SU	2	0
32	2a	1404	5MC	2	0
32	1a	966	M2G	1	0
1	1A	2251	OMG	1	0
55	1x	76	31H	1	0
54	2w	55	PSU	1	0
32	2a	967	5MC	1	0
54	2y	46	G7M	2	0
32	2a	1400	5MC	1	0
54	1y	8	4SU	2	0
32	1a	527	G7M	1	0
54	1y	39	PSU	1	0
55	2x	32	5MC	1	0
55	1x	8	4SU	2	0
32	2a	1519	MA6	4	0
1	2A	2503	2MA	2	0
1	2A	2251	OMG	1	0
32	2a	1207	2MG	4	0
54	1w	37	MIA	1	0
32	1a	1207	2MG	1	0
55	1x	32	5MC	1	0
1	1A	2552	OMU	1	0

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 2813 ligands modelled in this entry, 2809 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
58	A1A1K	1A	4105	56	31,37,37	1.76	7 (22%)	28,53,53	1.11	3 (10%)
60	SF4	1d	302	35	0,12,12	-	-	-		
60	SF4	2d	303	35	0,12,12	-	-	-		
58	A1A1K	2A	3886	-	31,37,37	1.45	4 (12%)	28,53,53	0.93	1 (3%)

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
58	A1A1K	1A	4105	56	-	2/26/71/71	0/3/4/4
60	SF4	1d	302	35	-	-	0/6/5/5
60	SF4	2d	303	35	-	-	0/6/5/5
58	A1A1K	2A	3886	-	-	3/26/71/71	0/3/4/4

All (11) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	1A	4105	A1A1K	CAM-CBF	-5.10	1.39	1.51
58	2A	3886	A1A1K	CAM-CBF	-4.82	1.39	1.51
58	2A	3886	A1A1K	OAW-CB	3.04	1.45	1.42
58	1A	4105	A1A1K	CAB-CAK	3.01	1.57	1.53
58	1A	4105	A1A1K	OAW-CB	2.77	1.45	1.42
58	1A	4105	A1A1K	CBB-CAZ	2.60	1.57	1.53
58	1A	4105	A1A1K	CD2-CG	2.43	1.58	1.53
58	2A	3886	A1A1K	CD2-CAZ	-2.35	1.51	1.53
58	2A	3886	A1A1K	OAW-CAX	2.26	1.46	1.43
58	1A	4105	A1A1K	CAC-CAB	-2.13	1.46	1.52
58	1A	4105	A1A1K	CAK-NAL	2.05	1.49	1.45

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	1A	4105	A1A1K	CBC-CBB-CAZ	-3.13	110.61	116.68
58	2A	3886	A1A1K	CD2-CAZ-CAY	-2.31	110.33	113.78
58	1A	4105	A1A1K	CD2-CAZ-CAY	-2.31	110.34	113.78
58	1A	4105	A1A1K	CB-CA-C	2.14	114.68	110.46

There are no chirality outliers.

All (5) torsion outliers are listed below:

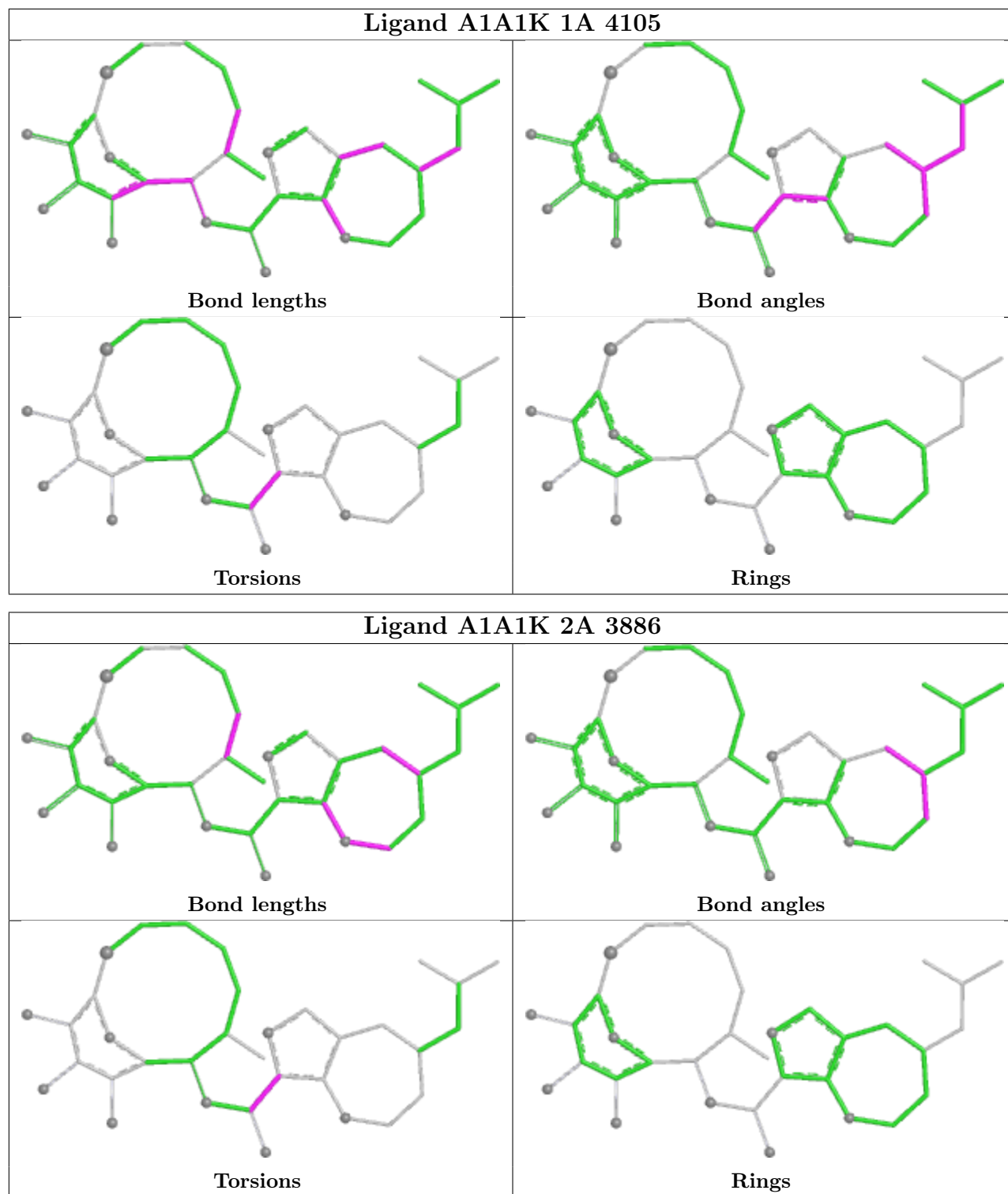
Mol	Chain	Res	Type	Atoms
58	2A	3886	A1A1K	O-C-CA-CB
58	2A	3886	A1A1K	NAL-C-CA-CB
58	1A	4105	A1A1K	O-C-CA-CB
58	1A	4105	A1A1K	NAL-C-CA-CB
58	2A	3886	A1A1K	O-C-CA-N

There are no ring outliers.

4 monomers are involved in 4 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
58	1A	4105	A1A1K	1	0
60	1d	302	SF4	1	0
60	2d	303	SF4	1	0
58	2A	3886	A1A1K	1	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.



5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

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%)	-0.60	92 (3%)	50	53	24, 41, 91, 106	0
1	2A	2789/2915 (95%)	-0.04	97 (3%)	47	49	37, 62, 92, 103	0
2	1B	120/121 (99%)	-0.41	0	100	100	34, 54, 67, 86	0
2	2B	120/121 (99%)	0.73	2 (1%)	69	70	65, 82, 87, 97	0
3	1D	275/276 (99%)	-0.22	3 (1%)	77	79	25, 42, 55, 79	0
3	2D	275/276 (99%)	0.28	6 (2%)	62	65	38, 55, 67, 82	0
4	1E	204/206 (99%)	-0.25	0	100	100	23, 43, 62, 79	0
4	2E	204/206 (99%)	0.45	4 (1%)	64	67	41, 63, 75, 87	0
5	1F	203/210 (96%)	-0.09	2 (0%)	79	80	22, 46, 72, 84	0
5	2F	203/210 (96%)	0.45	1 (0%)	87	88	40, 71, 81, 85	0
6	1G	181/182 (99%)	0.43	6 (3%)	49	51	45, 62, 73, 85	0
6	2G	181/182 (99%)	1.45	46 (25%)	2	2	72, 81, 86, 92	0
7	1H	174/180 (96%)	0.26	2 (1%)	77	79	41, 58, 69, 76	0
7	2H	174/180 (96%)	1.36	41 (23%)	2	2	72, 83, 90, 95	0
8	1I	146/148 (98%)	0.73	5 (3%)	48	50	48, 74, 80, 85	0
8	2I	146/148 (98%)	1.25	23 (15%)	6	5	59, 78, 86, 94	0
9	1N	140/140 (100%)	-0.17	0	100	100	32, 43, 62, 74	0
9	2N	140/140 (100%)	0.92	13 (9%)	16	16	51, 68, 80, 87	0
10	1O	122/122 (100%)	0.05	0	100	100	35, 45, 61, 67	0
10	2O	122/122 (100%)	0.47	2 (1%)	70	72	52, 63, 74, 76	0
11	1P	149/150 (99%)	0.10	4 (2%)	56	59	26, 49, 69, 75	0
11	2P	149/150 (99%)	0.67	5 (3%)	48	50	45, 71, 83, 91	0
12	1Q	141/141 (100%)	-0.15	0	100	100	33, 46, 62, 74	0
12	2Q	141/141 (100%)	1.24	26 (18%)	4	4	57, 70, 80, 87	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	1R	118/118 (100%)	-0.36	0 100 100	30, 38, 50, 58	0
13	2R	118/118 (100%)	0.09	0 100 100	45, 55, 66, 73	0
14	1S	110/112 (98%)	0.11	1 (0%) 81 81	43, 54, 64, 70	0
14	2S	110/112 (98%)	1.22	15 (13%) 8 7	67, 76, 83, 87	0
15	1T	131/146 (89%)	0.05	5 (3%) 44 46	37, 48, 69, 75	0
15	2T	131/146 (89%)	0.64	2 (1%) 71 73	56, 65, 76, 79	0
16	1U	116/118 (98%)	-0.49	1 (0%) 81 81	25, 35, 51, 66	0
16	2U	116/118 (98%)	0.53	2 (1%) 69 70	51, 65, 79, 84	0
17	1V	101/101 (100%)	-0.35	1 (0%) 79 80	26, 43, 59, 71	0
17	2V	101/101 (100%)	0.65	0 100 100	47, 74, 80, 86	0
18	1W	112/113 (99%)	-0.33	1 (0%) 81 81	26, 36, 55, 78	0
18	2W	112/113 (99%)	0.33	2 (1%) 67 69	43, 56, 70, 91	0
19	1X	95/96 (98%)	-0.10	2 (2%) 63 65	31, 42, 63, 81	0
19	2X	95/96 (98%)	0.69	5 (5%) 33 33	49, 63, 78, 87	0
20	1Y	107/110 (97%)	0.31	1 (0%) 81 81	41, 53, 70, 80	0
20	2Y	107/110 (97%)	1.17	13 (12%) 10 10	60, 75, 84, 90	0
21	1Z	154/206 (74%)	0.78	13 (8%) 18 18	46, 66, 84, 88	0
21	2Z	160/206 (77%)	1.69	46 (28%) 1 1	73, 83, 91, 94	0
22	10	77/85 (90%)	0.07	2 (2%) 57 60	31, 42, 57, 66	0
22	20	83/85 (97%)	1.42	19 (22%) 2 2	54, 69, 77, 90	0
23	11	97/98 (98%)	0.15	1 (1%) 79 80	34, 48, 71, 75	0
23	21	97/98 (98%)	0.57	4 (4%) 42 43	45, 59, 77, 83	0
24	12	70/72 (97%)	0.01	1 (1%) 73 75	39, 52, 64, 74	0
24	22	70/72 (97%)	0.82	6 (8%) 18 17	61, 74, 81, 83	0
25	13	59/60 (98%)	-0.27	1 (1%) 69 70	29, 40, 62, 74	0
25	23	59/60 (98%)	0.65	2 (3%) 48 50	58, 68, 77, 86	0
26	14	69/71 (97%)	0.68	3 (4%) 40 41	56, 74, 86, 88	0
26	24	69/71 (97%)	1.48	16 (23%) 2 2	80, 86, 90, 93	0
27	15	59/60 (98%)	-0.30	1 (1%) 69 70	26, 36, 52, 64	0
27	25	59/60 (98%)	0.18	0 100 100	40, 55, 69, 79	0
28	16	53/54 (98%)	-0.16	0 100 100	36, 45, 59, 69	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	26	53/54 (98%)	0.65	2 (3%) 44 46	54, 65, 73, 74	0
29	17	48/49 (97%)	-0.31	3 (6%) 27 28	25, 32, 60, 67	0
29	27	48/49 (97%)	0.19	4 (8%) 19 18	36, 45, 65, 74	0
30	18	64/65 (98%)	-0.27	0 100 100	31, 39, 46, 58	0
30	28	64/65 (98%)	0.68	0 100 100	51, 61, 66, 70	0
31	19	37/37 (100%)	-0.07	0 100 100	35, 44, 61, 64	0
31	29	37/37 (100%)	1.11	4 (10%) 12 12	62, 71, 79, 83	0
32	1a	1488/1521 (97%)	0.20	47 (3%) 50 53	40, 71, 92, 106	0
32	2a	1491/1521 (98%)	0.72	158 (10%) 13 13	53, 79, 95, 106	0
33	1b	231/256 (90%)	1.06	38 (16%) 5 5	70, 79, 88, 94	0
33	2b	231/256 (90%)	1.63	68 (29%) 1 1	76, 85, 89, 91	0
34	1c	206/239 (86%)	0.89	10 (4%) 36 36	66, 76, 83, 85	0
34	2c	206/239 (86%)	1.87	87 (42%) 1 0	73, 85, 89, 94	0
35	1d	208/209 (99%)	1.01	18 (8%) 17 17	59, 74, 82, 89	0
35	2d	208/209 (99%)	0.74	7 (3%) 48 50	62, 72, 78, 83	0
36	1e	148/162 (91%)	0.63	2 (1%) 73 75	58, 68, 77, 81	0
36	2e	148/162 (91%)	1.30	28 (18%) 4 4	68, 79, 85, 87	0
37	1f	100/101 (99%)	0.56	1 (1%) 79 80	60, 70, 77, 80	0
37	2f	100/101 (99%)	0.71	3 (3%) 52 55	65, 74, 80, 84	0
38	1g	155/156 (99%)	0.61	11 (7%) 23 24	64, 73, 83, 85	0
38	2g	155/156 (99%)	1.16	25 (16%) 5 5	71, 80, 86, 90	0
39	1h	137/138 (99%)	0.55	2 (1%) 71 73	56, 70, 76, 82	0
39	2h	137/138 (99%)	1.26	22 (16%) 5 5	72, 79, 84, 87	0
40	1i	127/128 (99%)	1.20	19 (14%) 6 6	62, 79, 83, 86	0
40	2i	127/128 (99%)	1.95	56 (44%) 1 0	72, 84, 89, 90	0
41	1j	97/105 (92%)	1.38	20 (20%) 3 3	65, 80, 87, 89	0
41	2j	96/105 (91%)	2.32	62 (64%) 0 0	78, 86, 91, 92	0
42	1k	114/129 (88%)	0.70	5 (4%) 39 40	51, 69, 78, 80	0
42	2k	114/129 (88%)	1.00	14 (12%) 9 9	60, 76, 82, 84	0
43	1l	121/132 (91%)	0.49	4 (3%) 49 51	52, 63, 71, 77	0
43	2l	121/132 (91%)	1.04	15 (12%) 9 9	63, 73, 80, 84	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	1m	123/126 (97%)	0.84	8 (6%) 26 26	61, 72, 80, 88	0
44	2m	122/126 (96%)	2.02	48 (39%) 1 0	76, 83, 88, 91	0
45	1n	60/61 (98%)	1.19	4 (6%) 25 26	67, 72, 78, 80	0
45	2n	60/61 (98%)	3.10	49 (81%) 0 0	80, 86, 89, 91	0
46	1o	88/89 (98%)	0.62	4 (4%) 39 39	55, 68, 77, 82	0
46	2o	88/89 (98%)	0.91	5 (5%) 30 31	65, 76, 82, 86	0
47	1p	82/88 (93%)	1.13	11 (13%) 8 7	62, 74, 79, 84	0
47	2p	82/88 (93%)	1.00	5 (6%) 28 28	62, 71, 78, 82	0
48	1q	99/105 (94%)	0.94	6 (6%) 28 28	58, 69, 77, 80	0
48	2q	99/105 (94%)	0.81	7 (7%) 23 24	64, 76, 83, 88	0
49	1r	68/88 (77%)	0.62	5 (7%) 22 23	62, 70, 77, 79	0
49	2r	68/88 (77%)	0.74	2 (2%) 54 56	65, 74, 80, 84	0
50	1s	83/93 (89%)	0.71	4 (4%) 36 37	66, 75, 83, 86	0
50	2s	83/93 (89%)	2.28	53 (63%) 0 0	79, 86, 91, 95	0
51	1t	96/106 (90%)	1.08	12 (12%) 9 9	63, 73, 81, 83	0
51	2t	96/106 (90%)	0.91	11 (11%) 11 10	64, 72, 81, 84	0
52	1u	23/27 (85%)	1.29	3 (13%) 9 8	67, 70, 75, 76	0
52	2u	23/27 (85%)	2.07	11 (47%) 0 0	78, 82, 86, 87	0
53	1v	13/24 (54%)	0.79	2 (15%) 6 6	50, 72, 84, 93	0
53	2v	13/24 (54%)	1.80	4 (30%) 1 1	75, 86, 93, 100	0
54	1w	64/76 (84%)	1.31	10 (15%) 6 6	73, 92, 100, 105	0
54	1y	67/76 (88%)	1.04	10 (14%) 7 6	43, 91, 98, 100	0
54	2w	62/76 (81%)	1.67	18 (29%) 1 1	86, 97, 102, 105	0
54	2y	66/76 (86%)	1.15	7 (10%) 13 13	60, 96, 99, 103	0
55	1x	71/77 (92%)	0.20	1 (1%) 73 75	32, 64, 84, 91	0
55	2x	71/77 (92%)	0.56	2 (2%) 55 57	53, 82, 89, 99	0
All	All	20861/21748 (95%)	0.39	1583 (7%) 21 21	22, 68, 89, 106	0

All (1583) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
44	2m	123	ALA	10.0
44	2m	124	PRO	9.7

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Mol	Chain	Res	Type	RSRZ
44	1m	124	PRO	7.6
45	2n	2	ALA	7.2
44	2m	102	ARG	7.1
21	1Z	141	VAL	6.6
44	1m	123	ALA	6.6
45	1n	2	ALA	6.4
44	1m	122	LYS	6.3
44	1m	2	ALA	6.3
44	1m	121	LYS	6.1
45	2n	25	VAL	6.1
33	2b	237	ALA	6.0
32	2a	1033	G	5.8
44	2m	122	LYS	5.5
45	2n	34	TYR	5.5
45	2n	39	LEU	5.4
23	2l	2	SER	5.3
21	1Z	146	ILE	5.3
41	2j	65	LEU	5.3
1	2A	2125	G	5.2
21	2Z	173	ALA	5.1
45	2n	14	PRO	5.1
33	2b	236	TYR	5.0
54	1w	73	A	4.9
1	2A	2155	G	4.8
21	2Z	146	ILE	4.8
21	2Z	141	VAL	4.8
44	2m	6	GLY	4.7
50	2s	2	PRO	4.7
45	2n	13	THR	4.6
50	2s	13	ASP	4.6
45	2n	37	PHE	4.5
51	1t	103	GLY	4.5
40	2i	126	SER	4.5
32	2a	1036	G	4.5
41	2j	32	ALA	4.5
38	1g	80	VAL	4.5
35	1d	167	GLY	4.5
52	1u	24	ARG	4.5
45	2n	16	PHE	4.5
41	2j	10	GLY	4.5
32	2a	1034	G	4.5
41	2j	47	PHE	4.4

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Mol	Chain	Res	Type	RSRZ
50	1s	84	GLY	4.4
32	2a	1116	C	4.4
44	2m	121	LYS	4.4
40	2i	102	LEU	4.4
45	2n	33	VAL	4.4
1	1A	1081	U	4.4
19	2X	92	LEU	4.3
1	1A	1096	A	4.3
32	2a	1002	G	4.3
38	2g	81	GLY	4.3
54	2w	73	A	4.3
32	2a	1219	U	4.3
34	2c	8	ILE	4.3
21	2Z	174	VAL	4.3
33	2b	71	VAL	4.3
21	2Z	172	ALA	4.3
1	1A	1094	U	4.2
40	2i	14	VAL	4.2
5	1F	208	GLY	4.2
22	20	7	LEU	4.2
26	24	49	PHE	4.2
38	2g	80	VAL	4.2
45	2n	21	TYR	4.2
32	1a	1027	C	4.2
33	2b	161	ALA	4.2
1	2A	2174	C	4.2
32	2a	1030(B)	C	4.2
32	2a	1224	G	4.1
32	2a	1149	C	4.1
40	2i	11	LYS	4.1
41	2j	49	VAL	4.1
45	2n	7	ILE	4.1
22	20	5	LYS	4.1
22	20	2	ALA	4.1
29	27	45	ALA	4.1
34	2c	158	GLY	4.0
12	2Q	22	LYS	4.0
34	2c	124	ILE	4.0
32	2a	1030	C	4.0
41	2j	63	PHE	4.0
36	2e	22	GLY	4.0
32	2a	1035	A	4.0

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Mol	Chain	Res	Type	RSRZ
7	1H	2	SER	4.0
11	2P	15	ARG	4.0
40	2i	36	TYR	4.0
32	1a	1532	U	4.0
1	1A	1087	G	4.0
32	2a	1001(A)	G	4.0
1	2A	1536	C	4.0
1	2A	2154	G	3.9
34	2c	171	GLY	3.9
50	2s	79	THR	3.9
45	2n	18	VAL	3.9
50	2s	14	HIS	3.9
52	2u	14	TRP	3.9
1	1A	2159	G	3.9
41	1j	4	ILE	3.9
26	24	56	VAL	3.9
38	2g	5	ARG	3.9
52	2u	2	GLY	3.9
21	2Z	164	ALA	3.9
34	2c	189	ALA	3.9
6	2G	74	LYS	3.9
44	2m	104	ARG	3.9
33	2b	152	PHE	3.8
1	2A	2146	C	3.8
45	2n	30	ALA	3.8
45	2n	3	ARG	3.8
45	2n	15	LYS	3.8
1	1A	1058	G	3.8
1	1A	2115	G	3.8
26	24	51	ASP	3.8
32	2a	1030(A)	G	3.8
1	1A	1078	U	3.8
32	2a	1150	U	3.8
3	1D	276	LYS	3.8
45	2n	6	LEU	3.8
34	2c	2	GLY	3.8
40	1i	106	ALA	3.8
32	1a	1035	A	3.8
1	2A	2138	C	3.8
32	1a	1001(A)	G	3.8
32	2a	1038	C	3.8
54	2w	4	C	3.8

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Mol	Chain	Res	Type	RSRZ
7	2H	2	SER	3.8
21	1Z	150	LEU	3.8
40	1i	2	GLU	3.8
29	17	48	LYS	3.8
1	2A	883	G	3.8
32	2a	1220	G	3.8
45	2n	61	TRP	3.7
21	2Z	150	LEU	3.7
4	2E	204	ALA	3.7
45	2n	38	GLY	3.7
40	2i	105	ASP	3.7
50	2s	12	ASP	3.7
1	2A	2126	A	3.7
1	1A	1064	C	3.7
32	1a	1025	U	3.7
12	2Q	104	PHE	3.7
54	2w	71	G	3.7
50	2s	9	VAL	3.7
12	2Q	15	GLY	3.7
48	2q	96	GLU	3.7
45	2n	4	LYS	3.7
1	2A	2134	A	3.7
1	2A	2173	A	3.7
40	2i	99	LEU	3.7
50	2s	52	TYR	3.7
21	2Z	147	GLY	3.7
32	1a	1003	G	3.7
40	2i	10	ARG	3.7
50	2s	71	LEU	3.7
34	2c	128	PHE	3.7
32	2a	965	A	3.7
1	1A	885	C	3.7
32	2a	1114	C	3.7
38	1g	85	TYR	3.7
38	2g	154	TYR	3.7
44	2m	100	GLY	3.7
54	2w	3	C	3.7
1	1A	1056	G	3.7
1	2A	2133	G	3.7
34	2c	182	ILE	3.7
40	2i	9	ARG	3.6
45	2n	59	ALA	3.6

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Mol	Chain	Res	Type	RSRZ
32	1a	1036	G	3.6
40	2i	96	LEU	3.6
41	2j	37	PRO	3.6
7	2H	19	VAL	3.6
34	1c	2	GLY	3.6
47	1p	82	GLN	3.6
1	2A	2128	C	3.6
19	1X	95	LEU	3.6
34	2c	188	LEU	3.6
54	2w	15	G	3.6
41	2j	91	PRO	3.6
50	2s	80	TYR	3.6
1	2A	652(B)	A	3.6
3	2D	38	LYS	3.6
29	27	48	LYS	3.6
16	2U	90	VAL	3.6
6	2G	48	GLU	3.5
50	2s	4	SER	3.5
38	1g	81	GLY	3.5
52	2u	11	GLY	3.5
45	2n	22	THR	3.5
47	2p	82	GLN	3.5
54	1w	1	G	3.5
21	2Z	144	LEU	3.5
1	1A	1057	A	3.5
32	1a	1531	A	3.5
32	2a	974	A	3.5
45	2n	31	ARG	3.5
18	2W	112	GLY	3.5
41	2j	36	GLY	3.5
52	2u	16	GLY	3.5
33	2b	165	VAL	3.5
45	2n	20	ALA	3.5
32	2a	973	G	3.5
32	2a	1202	G	3.5
12	2Q	60	ARG	3.5
52	2u	15	ARG	3.5
53	2v	12	A	3.5
40	2i	67	GLY	3.5
40	2i	41	VAL	3.5
1	1A	1100	C	3.5
34	2c	157	ILE	3.5

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Mol	Chain	Res	Type	RSRZ
21	2Z	121	HIS	3.5
33	2b	11	LEU	3.5
45	2n	36	PHE	3.4
6	2G	28	VAL	3.4
43	1l	18	VAL	3.4
22	20	3	HIS	3.4
33	1b	11	LEU	3.4
26	24	32	TYR	3.4
20	2Y	89	PHE	3.4
41	2j	34	VAL	3.4
32	1a	1026	G	3.4
32	2a	976	G	3.4
32	2a	1117	G	3.4
45	2n	40	CYS	3.4
45	2n	53	LEU	3.4
1	1A	1095	A	3.4
33	2b	122	PHE	3.4
38	2g	84	ASN	3.4
6	2G	159	VAL	3.4
21	2Z	149	SER	3.4
15	1T	131	ALA	3.4
33	1b	237	ALA	3.4
48	1q	98	LEU	3.4
54	1w	71	G	3.4
21	2Z	95	PRO	3.4
45	2n	17	LYS	3.4
1	1A	1065	U	3.4
1	1A	2113	U	3.4
32	1a	1257	U	3.4
32	2a	1040	U	3.4
21	2Z	171	ILE	3.4
41	2j	74	ILE	3.4
50	2s	51	VAL	3.4
33	2b	123	ALA	3.3
34	2c	149	ALA	3.3
45	2n	10	ALA	3.3
8	2I	75	LEU	3.3
22	20	84	LEU	3.3
26	24	65	ASP	3.3
32	2a	993	G	3.3
1	1A	2119	A	3.3
1	2A	2169	A	3.3

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Mol	Chain	Res	Type	RSRZ
32	1a	1447	A	3.3
32	2a	1004	A	3.3
31	29	21	GLY	3.3
41	2j	78	ASN	3.3
32	2a	1039	C	3.3
49	1r	86	VAL	3.3
15	1T	130	ALA	3.3
23	1l	2	SER	3.3
44	2m	5	ALA	3.3
41	2j	71	LEU	3.3
33	1b	22	LYS	3.3
50	2s	32	LYS	3.3
1	1A	2112	G	3.3
1	1A	2117	A	3.3
1	2A	896	A	3.3
23	2l	28	GLY	3.3
34	2c	145	GLY	3.3
41	2j	44	VAL	3.3
14	2S	58	LEU	3.3
41	2j	88	LEU	3.3
44	2m	72	ALA	3.3
50	2s	38	SER	3.3
31	29	37	GLY	3.3
45	2n	55	GLY	3.3
6	2G	20	ILE	3.3
29	27	47	ARG	3.3
41	2j	38	ILE	3.3
1	2A	2116	G	3.3
32	2a	630	G	3.3
41	2j	40	LEU	3.3
53	2v	24	A	3.3
41	2j	27	ALA	3.3
50	2s	76	PRO	3.3
40	2i	91	ASP	3.3
12	2Q	66	ILE	3.2
34	2c	195	VAL	3.2
21	1Z	1	MET	3.2
1	2A	882	G	3.2
41	1j	77	PRO	3.2
32	2a	962	C	3.2
32	2a	1115	C	3.2
34	2c	190	ARG	3.2

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Mol	Chain	Res	Type	RSRZ
40	1i	66	ARG	3.2
42	2k	126	ARG	3.2
6	2G	146	TYR	3.2
20	2Y	55	TYR	3.2
33	2b	80	ILE	3.2
34	2c	5	ILE	3.2
44	1m	120	LYS	3.2
44	2m	22	ILE	3.2
8	2I	68	LEU	3.2
26	14	56	VAL	3.2
26	24	9	LEU	3.2
33	1b	7	VAL	3.2
33	2b	187	LEU	3.2
33	2b	67	THR	3.2
34	2c	137	ALA	3.2
41	2j	41	PRO	3.2
39	2h	4	ASP	3.2
45	2n	29	ARG	3.2
3	2D	275	LYS	3.2
36	2e	23	GLY	3.2
41	2j	31	GLY	3.2
19	2X	95	LEU	3.2
33	1b	10	LEU	3.2
9	2N	5	VAL	3.2
34	2c	207	VAL	3.2
35	1d	104	VAL	3.2
50	2s	61	TYR	3.2
6	1G	48	GLU	3.2
44	2m	67	GLU	3.2
1	1A	2114	A	3.2
32	2a	1003	G	3.2
33	2b	163	PHE	3.2
42	2k	124	LYS	3.2
1	2A	2136	C	3.2
1	2A	2803	C	3.2
22	20	6	GLY	3.2
34	1c	47	LEU	3.2
34	2c	52	LEU	3.2
50	2s	11	VAL	3.2
44	2m	87	TYR	3.2
32	2a	1030(D)	A	3.2
32	2a	1357	A	3.2

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Mol	Chain	Res	Type	RSRZ
32	2a	1503	A	3.2
53	1v	13	A	3.2
41	2j	93	GLY	3.1
7	2H	136	ILE	3.1
33	2b	200	ILE	3.1
35	1d	120	LEU	3.1
1	1A	1059	G	3.1
1	2A	614(B)	G	3.1
1	2A	2127	G	3.1
1	2A	2802	G	3.1
32	1a	1023	G	3.1
32	2a	979	C	3.1
32	2a	980	C	3.1
32	2a	1018	C	3.1
32	2a	1223	C	3.1
33	1b	229	VAL	3.1
33	1b	230	VAL	3.1
34	2c	116	VAL	3.1
50	2s	53	ASN	3.1
7	2H	39	PRO	3.1
33	2b	234	PRO	3.1
38	1g	79	ARG	3.1
40	2i	66	ARG	3.1
1	2A	2113	U	3.1
20	2Y	5	MET	3.1
44	2m	68	GLY	3.1
50	2s	68	GLY	3.1
44	2m	19	LEU	3.1
1	1A	888	C	3.1
1	1A	2145	C	3.1
1	2A	2156	G	3.1
32	2a	1019	C	3.1
40	2i	114	TYR	3.1
32	1a	204	U	3.1
33	2b	230	VAL	3.1
44	2m	98	VAL	3.1
40	2i	82	ALA	3.1
41	2j	14	LYS	3.1
1	2A	885	C	3.1
32	2a	1037	C	3.1
1	2A	652(U)	G	3.1
1	2A	2112	G	3.1

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Mol	Chain	Res	Type	RSRZ
1	2A	2157	G	3.1
54	2w	5	G	3.1
34	2c	9	GLY	3.1
34	2c	78	GLY	3.1
39	2h	2	LEU	3.1
50	2s	15	LEU	3.1
32	2a	1196	U	3.1
50	1s	13	ASP	3.1
34	2c	151	VAL	3.1
44	2m	60	VAL	3.1
8	2I	86	THR	3.1
9	2N	83	LYS	3.1
23	2I	81	LYS	3.1
32	2a	977	A	3.1
34	2c	4	LYS	3.1
34	2c	192	THR	3.1
41	2j	59	SER	3.1
32	2a	1032	G	3.0
12	2Q	65	PHE	3.0
33	1b	38	GLY	3.0
34	2c	187	ALA	3.0
32	2a	1016	A	3.0
44	2m	23	TYR	3.0
1	1A	1080	C	3.0
14	2S	45	GLY	3.0
50	2s	8	GLY	3.0
50	2s	10	PHE	3.0
52	1u	23	PRO	3.0
6	2G	160	VAL	3.0
50	1s	9	VAL	3.0
33	2b	21	ARG	3.0
1	1A	2158	A	3.0
22	20	9	SER	3.0
32	1a	1001	A	3.0
32	1a	1286	A	3.0
32	2a	1001	A	3.0
21	2Z	155	LEU	3.0
34	2c	152	ILE	3.0
34	2c	167	TRP	3.0
38	2g	82	GLY	3.0
1	2A	2139	C	3.0
32	2a	999	C	3.0

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Mol	Chain	Res	Type	RSRZ
32	2a	1320	C	3.0
54	2w	72	C	3.0
1	2A	2166	G	3.0
32	1a	1034	G	3.0
32	2a	1356	G	3.0
44	2m	42	ALA	3.0
54	2w	34	G	3.0
22	20	43	THR	3.0
45	2n	44	LEU	3.0
32	1a	1503	A	3.0
32	2a	978	A	3.0
45	2n	12	ARG	3.0
47	2p	2	VAL	3.0
34	2c	180	ALA	3.0
32	2a	1053	G	3.0
34	2c	175	LEU	2.9
42	1k	25	TYR	2.9
44	2m	90	LEU	2.9
45	2n	47	LEU	2.9
22	10	8	GLY	2.9
33	1b	214	ILE	2.9
33	2b	185	ILE	2.9
8	2I	85	GLU	2.9
21	2Z	168	GLU	2.9
38	2g	79	ARG	2.9
41	2j	5	ARG	2.9
52	2u	24	ARG	2.9
7	2H	17	VAL	2.9
34	1c	207	VAL	2.9
9	2N	1	MET	2.9
20	2Y	1	MET	2.9
51	1t	95	ALA	2.9
1	1A	2146	C	2.9
1	2A	2111	C	2.9
32	2a	1532	U	2.9
40	2i	79	LEU	2.9
1	2A	2147	G	2.9
43	1l	64	TYR	2.9
54	1w	65	G	2.9
48	2q	65	ILE	2.9
50	2s	40	ILE	2.9
21	2Z	159	PRO	2.9

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Mol	Chain	Res	Type	RSRZ
33	1b	125	PRO	2.9
1	2A	899	A	2.9
7	2H	35	VAL	2.9
7	2H	133	VAL	2.9
44	2m	7	VAL	2.9
36	2e	17	ALA	2.9
9	2N	112	LEU	2.9
49	2r	66	LEU	2.9
22	20	69	PHE	2.9
26	24	29	PRO	2.9
33	1b	131	PRO	2.9
47	1p	5	ARG	2.9
32	2a	1190	G	2.9
7	2H	41	MET	2.9
33	2b	112	VAL	2.9
40	2i	28	VAL	2.9
38	2g	2	ALA	2.9
33	2b	121	LEU	2.9
50	2s	5	LEU	2.9
6	2G	52	ILE	2.9
32	2a	1260	C	2.9
33	2b	214	ILE	2.9
44	2m	78	ILE	2.9
9	2N	44	PRO	2.9
25	23	2	PRO	2.9
26	14	63	TYR	2.9
46	2o	75	PRO	2.9
33	2b	83	MET	2.9
41	2j	68	HIS	2.9
34	2c	198	VAL	2.9
1	2A	2115	G	2.9
32	2a	1131	G	2.9
32	2a	1222	G	2.9
22	20	4	LYS	2.9
1	2A	2170	A	2.8
32	2a	983	A	2.8
32	2a	994	A	2.8
33	2b	201	ILE	2.8
6	2G	129	GLY	2.8
18	1W	112	GLY	2.8
32	2a	982	U	2.8
51	2t	103	GLY	2.8

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Mol	Chain	Res	Type	RSRZ
34	2c	73	PRO	2.8
54	1y	20	U	2.8
1	1A	2138	C	2.8
1	2A	2137	C	2.8
41	2j	62	HIS	2.8
42	2k	25	TYR	2.8
36	2e	33	VAL	2.8
3	1D	275	LYS	2.8
6	2G	50	ALA	2.8
9	2N	43	THR	2.8
6	2G	3	LEU	2.8
32	1a	1024	G	2.8
32	1a	1030(A)	G	2.8
34	2c	12	LEU	2.8
1	1A	1088	A	2.8
32	2a	1250	A	2.8
14	2S	35	ILE	2.8
33	1b	39	ILE	2.8
33	2b	91	PRO	2.8
34	2c	6	HIS	2.8
35	1d	110	PHE	2.8
33	1b	9	GLU	2.8
1	1A	34	C	2.8
43	2l	43	VAL	2.8
6	2G	53	LEU	2.8
34	2c	15	THR	2.8
40	1i	102	LEU	2.8
50	2s	33	THR	2.8
50	2s	77	THR	2.8
51	1t	13	LEU	2.8
1	1A	1068	G	2.8
1	1A	2190	G	2.8
39	2h	67	PRO	2.8
41	2j	77	PRO	2.8
1	1A	1069	A	2.8
32	1a	1030(D)	A	2.8
32	2a	1225	A	2.8
33	1b	17	PHE	2.8
40	2i	18	PHE	2.8
1	1A	1097	U	2.8
41	2j	7	LYS	2.8
33	2b	93	VAL	2.8

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Mol	Chain	Res	Type	RSRZ
33	2b	136	VAL	2.8
32	1a	1038	C	2.8
44	2m	28	ALA	2.8
50	2s	24	ALA	2.8
54	1w	72	C	2.8
41	2j	90	LEU	2.8
41	2j	42	THR	2.8
38	2g	32	ARG	2.8
40	2i	128	ARG	2.8
33	2b	208	ILE	2.8
34	2c	7	PRO	2.8
34	2c	176	HIS	2.8
41	2j	54	PHE	2.8
1	1A	1063	G	2.8
12	2Q	63	LYS	2.8
21	1Z	149	SER	2.8
32	2a	1110	A	2.8
45	2n	58	LYS	2.8
53	1v	12	A	2.8
53	2v	13	A	2.8
1	1A	1066	U	2.8
43	2l	18	VAL	2.8
40	2i	119	ALA	2.8
33	2b	154	LEU	2.7
34	2c	87	LEU	2.7
1	2A	2145	C	2.7
32	2a	1054	C	2.7
35	2d	122	ARG	2.7
41	2j	76	ASN	2.7
33	1b	200	ILE	2.7
44	2m	4	ILE	2.7
7	2H	36	PRO	2.7
21	1Z	159	PRO	2.7
34	2c	174	PRO	2.7
34	2c	74	GLY	2.7
21	2Z	88	PHE	2.7
1	2A	2123	G	2.7
32	1a	1002	G	2.7
32	2a	1031	G	2.7
1	2A	2167	U	2.7
7	2H	43	VAL	2.7
27	15	60	VAL	2.7

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Mol	Chain	Res	Type	RSRZ
32	2a	1531	A	2.7
40	2i	5	TYR	2.7
54	2w	70	G	2.7
54	2y	19	G	2.7
54	2y	36	A	2.7
55	2x	47	U	2.7
34	2c	24	ALA	2.7
34	2c	168	ALA	2.7
34	2c	196	LEU	2.7
36	2e	138	ALA	2.7
12	2Q	6	ARG	2.7
38	2g	76	ARG	2.7
49	1r	87	ARG	2.7
41	1j	100	THR	2.7
42	2k	117	ASN	2.7
1	1A	1092	C	2.7
32	1a	1008	C	2.7
32	2a	1362	C	2.7
34	1c	39	ILE	2.7
35	2d	5	ILE	2.7
41	1j	74	ILE	2.7
54	2w	2	C	2.7
46	1o	19	PRO	2.7
21	2Z	106	GLY	2.7
41	2j	83	GLU	2.7
35	2d	206	PHE	2.7
42	2k	13	GLN	2.7
21	2Z	166	SER	2.7
34	2c	23	TYR	2.7
34	2c	68	VAL	2.7
1	1A	2170	A	2.7
6	2G	163	ALA	2.7
9	2N	61	ARG	2.7
29	17	45	ALA	2.7
32	1a	1005	A	2.7
1	1A	1176	G	2.7
1	2A	1533	G	2.7
32	1a	1033	G	2.7
20	2Y	44	ILE	2.7
33	2b	39	ILE	2.7
21	2Z	129	SER	2.7
33	1b	15	VAL	2.7

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Mol	Chain	Res	Type	RSRZ
39	2h	53	VAL	2.7
38	1g	5	ARG	2.7
6	1G	50	ALA	2.7
20	1Y	1	MET	2.7
24	22	1	MET	2.7
34	2c	129	ALA	2.7
41	1j	86	MET	2.7
32	2a	1257	U	2.7
1	1A	1077	A	2.7
32	2a	1044	A	2.7
7	2H	21	PRO	2.7
20	2Y	61	ILE	2.7
43	2l	28	LYS	2.7
45	2n	9	LYS	2.7
54	1w	70	G	2.7
12	2Q	61	GLY	2.7
34	2c	13	GLY	2.7
32	2a	1249	C	2.7
32	2a	1359	C	2.7
40	2i	17	VAL	2.6
35	1d	195	ALA	2.6
35	2d	164	ALA	2.6
47	2p	64	ALA	2.6
50	2s	75	ALA	2.6
33	2b	148	TYR	2.6
41	2j	55	LYS	2.6
51	1t	74	LYS	2.6
52	2u	5	ASP	2.6
8	2I	76	THR	2.6
32	2a	997	U	2.6
32	2a	1020	U	2.6
44	2m	103	THR	2.6
14	2S	61	ASN	2.6
50	2s	31	ILE	2.6
33	2b	12	GLU	2.6
35	1d	179	GLU	2.6
33	1b	18	GLY	2.6
38	1g	82	GLY	2.6
46	1o	89	GLY	2.6
44	2m	101	GLN	2.6
1	1A	1093	G	2.6
21	2Z	136	PHE	2.6

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Mol	Chain	Res	Type	RSRZ
32	2a	1316	G	2.6
38	1g	4	ARG	2.6
38	2g	4	ARG	2.6
1	1A	2111	C	2.6
1	1A	2164	C	2.6
22	10	84	LEU	2.6
32	1a	1029	C	2.6
36	1e	10	MET	2.6
45	2n	32	SER	2.6
33	2b	7	VAL	2.6
8	1I	146	ALA	2.6
21	2Z	21	ALA	2.6
40	1i	15	ALA	2.6
42	2k	89	ALA	2.6
19	2X	69	TYR	2.6
39	2h	94	TYR	2.6
40	2i	62	TYR	2.6
8	2I	20	ASP	2.6
21	2Z	137	ILE	2.6
21	2Z	158	PRO	2.6
34	2c	62	ASP	2.6
38	2g	93	PRO	2.6
26	24	64	GLY	2.6
34	2c	80	GLY	2.6
32	2a	1248	A	2.6
50	2s	34	TRP	2.6
6	1G	51	ARG	2.6
51	1t	8	ARG	2.6
1	1A	2152	G	2.6
1	2A	2165	G	2.6
41	1j	8	LEU	2.6
9	2N	9	VAL	2.6
21	1Z	105	VAL	2.6
26	24	50	VAL	2.6
34	2c	200	ALA	2.6
40	2i	13	ALA	2.6
41	2j	26	ALA	2.6
51	2t	97	ALA	2.6
6	2G	12	TYR	2.6
33	2b	127	ILE	2.6
39	2h	86	ILE	2.6
40	2i	7	THR	2.6

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Mol	Chain	Res	Type	RSRZ
1	1A	1060	U	2.6
36	1e	85	GLY	2.6
6	2G	102	PHE	2.6
29	17	47	ARG	2.6
41	2j	79	ARG	2.6
1	1A	1086	A	2.6
32	2a	949	A	2.6
25	23	26	LEU	2.6
38	2g	16	LEU	2.6
40	2i	19	LEU	2.6
49	1r	78	LEU	2.6
26	24	66	SER	2.6
34	2c	55	VAL	2.6
1	1A	1091	G	2.6
7	2H	145	ALA	2.6
32	2a	953	G	2.6
32	2a	1184	G	2.6
40	1i	13	ALA	2.6
1	1A	2794	C	2.6
1	2A	1043	C	2.6
7	2H	83	TYR	2.6
32	1a	1028	C	2.6
32	2a	1119	C	2.6
34	2c	201	TYR	2.6
38	2g	151	TYR	2.6
40	2i	2	GLU	2.6
42	1k	36	ASP	2.6
21	2Z	143	GLY	2.6
34	2c	41	GLY	2.6
34	2c	155	GLY	2.6
51	2t	96	GLY	2.6
2	2B	1	U	2.6
38	2g	26	PHE	2.6
43	2l	32	PHE	2.6
33	2b	149	LEU	2.5
34	2c	178	LEU	2.5
46	1o	57	LEU	2.5
51	1t	10	LEU	2.5
1	1A	548	A	2.5
7	2H	52	VAL	2.5
39	1h	93	VAL	2.5
41	1j	32	ALA	2.5

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Mol	Chain	Res	Type	RSRZ
1	1A	1071	G	2.5
1	2A	2319	G	2.5
6	2G	161	THR	2.5
14	2S	92	TYR	2.5
32	2a	1042	G	2.5
41	2j	58	ASP	2.5
41	2j	100	THR	2.5
43	2l	105	TYR	2.5
54	2y	18	G	2.5
54	2y	57	G	2.5
7	1H	174	GLY	2.5
22	20	8	GLY	2.5
34	2c	194	GLY	2.5
50	2s	54	GLY	2.5
54	1w	4	C	2.5
6	2G	141	PHE	2.5
11	1P	15	ARG	2.5
12	2Q	10	ARG	2.5
14	2S	29	PHE	2.5
52	2u	6	ARG	2.5
1	1A	1026	U	2.5
1	1A	2150	U	2.5
33	2b	147	LYS	2.5
1	1A	1098	A	2.5
32	2a	975	A	2.5
32	2a	1251	A	2.5
32	2a	1286	A	2.5
38	2g	83	ALA	2.5
44	1m	118	ALA	2.5
33	2b	223	ILE	2.5
41	2j	96	ILE	2.5
41	1j	33	GLN	2.5
19	1X	94	GLY	2.5
36	2e	99	GLY	2.5
39	2h	58	TYR	2.5
40	2i	72	GLY	2.5
51	1t	102	GLY	2.5
12	2Q	59	ARG	2.5
1	1A	1099	G	2.5
1	1A	2151	G	2.5
32	1a	1031	G	2.5
1	2A	886	C	2.5

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Mol	Chain	Res	Type	RSRZ
1	2A	888	C	2.5
1	2A	2175	C	2.5
1	2A	2896	C	2.5
32	1a	1037	C	2.5
32	2a	1006	C	2.5
50	2s	18	LYS	2.5
7	2H	64	LEU	2.5
50	2s	30	LEU	2.5
32	2a	1148	U	2.5
6	2G	15	VAL	2.5
14	2S	46	VAL	2.5
31	29	16	VAL	2.5
39	2h	61	VAL	2.5
41	2j	94	VAL	2.5
44	2m	64	TRP	2.5
6	2G	142	PRO	2.5
40	1i	126	SER	2.5
21	2Z	2	GLU	2.5
1	1A	899	A	2.5
1	1A	1070	A	2.5
32	2a	1363(A)	A	2.5
12	2Q	103	MET	2.5
21	2Z	160	GLY	2.5
34	1c	62	ASP	2.5
34	2c	29	TYR	2.5
38	2g	85	TYR	2.5
26	14	59	PHE	2.5
1	1A	1089	G	2.5
1	2A	2129	C	2.5
32	2a	1182	G	2.5
1	2A	2130	U	2.5
21	2Z	152	ALA	2.5
21	2Z	167	PRO	2.5
34	2c	60	ALA	2.5
42	2k	23	ALA	2.5
44	2m	118	ALA	2.5
34	2c	77	ILE	2.5
39	2h	134	ILE	2.5
41	2j	75	ILE	2.5
33	2b	48	MET	2.5
34	2c	79	ARG	2.5
47	1p	1	MET	2.5

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Mol	Chain	Res	Type	RSRZ
50	2s	29	ARG	2.5
1	1A	1103	A	2.5
1	2A	2119	A	2.5
7	2H	22	GLY	2.5
36	2e	29	GLY	2.5
41	2j	17	ASP	2.5
33	1b	33	TYR	2.5
40	2i	92	TYR	2.5
6	2G	23	PHE	2.5
7	2H	71	LEU	2.4
44	2m	34	LEU	2.4
51	2t	10	LEU	2.4
33	1b	40	HIS	2.4
40	2i	117	HIS	2.4
1	2A	1026	U	2.4
7	2H	79	VAL	2.4
12	2Q	109	VAL	2.4
32	1a	63	C	2.4
1	2A	2153	G	2.4
1	2A	2160	G	2.4
1	2A	2318	G	2.4
32	2a	981	U	2.4
32	2a	1358	U	2.4
6	2G	17	PRO	2.4
54	1y	15	G	2.4
54	2y	15	G	2.4
34	2c	53	ALA	2.4
34	2c	146	ALA	2.4
40	2i	45	ALA	2.4
8	2I	79	ILE	2.4
33	1b	41	ILE	2.4
38	2g	156	TRP	2.4
45	2n	8	GLU	2.4
7	2H	60	ARG	2.4
42	1k	51	LYS	2.4
21	1Z	69	THR	2.4
41	2j	48	THR	2.4
52	2u	4	GLY	2.4
20	2Y	107	ASP	2.4
1	2A	2117	A	2.4
6	1G	139	LEU	2.4
21	2Z	157	LEU	2.4

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Mol	Chain	Res	Type	RSRZ
36	2e	31	LEU	2.4
36	2e	133	TYR	2.4
40	1i	56	LEU	2.4
42	2k	75	TYR	2.4
14	2S	14	VAL	2.4
34	2c	138	VAL	2.4
34	2c	141	VAL	2.4
8	2I	99	GLU	2.4
12	2Q	121	ALA	2.4
33	2b	86	GLU	2.4
1	1A	1052	C	2.4
1	1A	1079	C	2.4
1	2A	884	C	2.4
32	2a	1218	C	2.4
33	2b	133	LYS	2.4
33	2b	156	LYS	2.4
34	2c	134	ILE	2.4
34	2c	170	GLN	2.4
38	2g	42	ILE	2.4
41	2j	50	ILE	2.4
26	24	55	ARG	2.4
41	1j	46	ARG	2.4
41	2j	9	ARG	2.4
41	2j	66	ARG	2.4
50	2s	78	ARG	2.4
1	1A	2160	G	2.4
1	2A	2168	G	2.4
32	1a	380	G	2.4
32	2a	998	G	2.4
32	2a	1048	G	2.4
6	2G	44	GLY	2.4
8	2I	106	GLY	2.4
19	2X	94	GLY	2.4
34	2c	205	GLY	2.4
51	2t	101	GLY	2.4
50	2s	22	LEU	2.4
33	2b	31	TYR	2.4
41	2j	13	HIS	2.4
42	2k	50	TYR	2.4
32	1a	149	A	2.4
6	2G	2	PRO	2.4
7	2H	15	VAL	2.4

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Mol	Chain	Res	Type	RSRZ
21	2Z	165	VAL	2.4
33	2b	81	VAL	2.4
12	2Q	28	ALA	2.4
24	22	11	GLU	2.4
15	1T	115	ARG	2.4
36	2e	21	ALA	2.4
40	2i	122	ALA	2.4
43	2l	56	ALA	2.4
33	1b	127	ILE	2.4
50	2s	82	GLY	2.4
1	1A	879	G	2.4
1	1A	2141	G	2.4
1	2A	2124	G	2.4
32	2a	963	G	2.4
54	1y	18	G	2.4
7	2H	123	PHE	2.4
31	29	20	HIS	2.4
33	2b	17	PHE	2.4
1	2A	2135	A	2.4
45	2n	54	PRO	2.4
51	2t	74	LYS	2.4
54	1y	35	A	2.4
54	2y	21	A	2.4
21	2Z	71	VAL	2.4
21	2Z	74	VAL	2.4
35	1d	170	VAL	2.4
22	20	44	ARG	2.4
41	1j	83	GLU	2.4
44	2m	88	ARG	2.4
45	2n	41	ARG	2.4
36	2e	118	ILE	2.4
40	2i	61	ALA	2.4
41	2j	82	ILE	2.4
45	2n	42	ILE	2.4
32	2a	1126	U	2.4
32	2a	1205	U	2.4
54	2w	66	U	2.4
8	1I	106	GLY	2.4
11	2P	28	GLY	2.4
40	1i	67	GLY	2.4
45	2n	28	GLY	2.4
1	1A	1075	C	2.3

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Mol	Chain	Res	Type	RSRZ
1	2A	645	C	2.3
1	2A	2164	C	2.3
33	2b	158	LEU	2.3
34	2c	33	LEU	2.3
35	1d	135	LEU	2.3
39	2h	59	LEU	2.3
41	2j	85	LEU	2.3
44	2m	70	LEU	2.3
50	2s	16	LEU	2.3
51	2t	99	LEU	2.3
12	2Q	29	PHE	2.3
21	1Z	104	PHE	2.3
40	2i	101	PHE	2.3
45	2n	49	HIS	2.3
44	2m	106	ASN	2.3
1	2A	2131	G	2.3
32	2a	1058	G	2.3
21	2Z	99	TYR	2.3
33	1b	31	TYR	2.3
39	2h	48	TYR	2.3
44	2m	21	TYR	2.3
47	1p	39	TYR	2.3
20	2Y	94	LYS	2.3
35	1d	29	PRO	2.3
4	2E	73	GLU	2.3
6	2G	35	GLU	2.3
22	20	68	GLU	2.3
33	2b	15	VAL	2.3
40	2i	53	VAL	2.3
40	2i	111	ARG	2.3
46	2o	60	VAL	2.3
50	2s	19	VAL	2.3
50	2s	45	VAL	2.3
52	1u	9	ARG	2.3
1	2A	2114	A	2.3
6	2G	39	ILE	2.3
8	2I	55	ALA	2.3
8	2I	146	ALA	2.3
24	22	9	GLN	2.3
36	2e	86	ALA	2.3
40	2i	52	ALA	2.3
43	2l	26	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
54	1y	36	A	2.3
54	2w	26	A	2.3
11	1P	116	GLY	2.3
43	2l	63	GLY	2.3
40	1i	64	THR	2.3
50	2s	48	THR	2.3
6	2G	19	LEU	2.3
33	2b	155	LEU	2.3
50	1s	5	LEU	2.3
36	2e	84	PHE	2.3
1	1A	2136	C	2.3
1	2A	277	C	2.3
32	2a	990	C	2.3
32	2a	995	C	2.3
32	2a	1066	C	2.3
7	2H	175	LYS	2.3
44	1m	27	LYS	2.3
6	2G	32	PRO	2.3
7	2H	10	PRO	2.3
33	1b	236	TYR	2.3
38	1g	154	TYR	2.3
8	2I	67	ARG	2.3
41	1j	45	ARG	2.3
50	2s	3	ARG	2.3
1	1A	880	G	2.3
22	20	79	VAL	2.3
33	1b	134	GLU	2.3
40	2i	44	VAL	2.3
40	2i	73	GLN	2.3
8	2I	83	ALA	2.3
44	2m	75	ALA	2.3
52	2u	13	ILE	2.3
1	1A	2135	A	2.3
1	2A	1847	A	2.3
32	2a	1015	A	2.3
6	2G	76	SER	2.3
17	1V	101	GLY	2.3
21	2Z	76	LEU	2.3
35	1d	194	LEU	2.3
44	2m	96	LEU	2.3
48	1q	53	LEU	2.3
32	2a	991	U	2.3

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Mol	Chain	Res	Type	RSRZ
3	2D	21	PHE	2.3
41	2j	80	LYS	2.3
46	2o	10	LYS	2.3
7	2H	6	ARG	2.3
26	24	58	ARG	2.3
40	2i	20	ARG	2.3
47	1p	81	ARG	2.3
50	2s	81	ARG	2.3
51	2t	8	ARG	2.3
40	1i	12	GLU	2.3
40	2i	110	GLU	2.3
43	2l	64	TYR	2.3
8	1I	142	VAL	2.3
33	1b	165	VAL	2.3
34	2c	120	VAL	2.3
38	2g	9	VAL	2.3
42	2k	14	VAL	2.3
44	2m	117	VAL	2.3
6	2G	88	ILE	2.3
38	2g	27	ILE	2.3
40	2i	63	ILE	2.3
41	1j	38	ILE	2.3
33	1b	123	ALA	2.3
33	2b	88	ALA	2.3
34	1c	61	ALA	2.3
1	2A	2805	G	2.3
32	1a	1009	G	2.3
32	1a	1021	G	2.3
32	2a	1216	G	2.3
32	2a	1253	G	2.3
54	2w	65	G	2.3
6	2G	172	LEU	2.3
33	1b	19	HIS	2.3
33	2b	145	LEU	2.3
33	2b	213	LEU	2.3
34	2c	32	LEU	2.3
41	1j	36	GLY	2.3
43	2l	50	SER	2.3
32	2a	1447	A	2.3
1	1A	2189	U	2.3
1	2A	272(A)	U	2.3
1	2A	1113	U	2.3

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Mol	Chain	Res	Type	RSRZ
32	1a	65	U	2.3
32	1a	1040	U	2.3
54	1w	20	U	2.3
6	2G	147	ASP	2.3
40	1i	91	ASP	2.3
50	2s	66	MET	2.3
14	1S	3	ARG	2.3
45	2n	19	ARG	2.3
11	2P	149	GLU	2.3
14	2S	7	TYR	2.3
26	24	63	TYR	2.3
1	1A	2137	C	2.3
1	2A	2163	C	2.3
2	2B	88	C	2.3
33	2b	42	ILE	2.3
40	1i	14	VAL	2.3
50	2s	49	ILE	2.3
51	1t	100	ILE	2.3
15	2T	130	ALA	2.3
21	2Z	51	ALA	2.3
7	2H	78	GLY	2.2
20	2Y	90	LEU	2.2
37	2f	21	LEU	2.2
40	1i	19	LEU	2.2
46	2o	89	GLY	2.2
1	2A	11	G	2.2
1	2A	1171	G	2.2
1	2A	2321	G	2.2
8	2I	78	THR	2.2
32	2a	1023	G	2.2
32	2a	1370	G	2.2
33	1b	133	LYS	2.2
35	1d	83	SER	2.2
52	2u	8	THR	2.2
1	1A	2790	A	2.2
8	2I	1	MET	2.2
12	2Q	1	MET	2.2
47	1p	80	PHE	2.2
32	2a	969	A	2.2
53	2v	23	A	2.2
1	2A	2172	U	2.2
15	1T	111	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
24	12	69	ARG	2.2
32	2a	1000	U	2.2
32	2a	1315	U	2.2
36	2e	18	ARG	2.2
38	1g	156	TRP	2.2
45	2n	57	ARG	2.2
47	2p	59	TRP	2.2
20	2Y	53	PRO	2.2
41	2j	53	PRO	2.2
8	2I	64	GLU	2.2
8	2I	139	GLN	2.2
35	2d	201	GLN	2.2
6	1G	146	TYR	2.2
8	2I	15	VAL	2.2
12	2Q	137	TYR	2.2
21	1Z	120	ILE	2.2
21	2Z	86	VAL	2.2
34	2c	153	VAL	2.2
36	2e	61	TYR	2.2
48	2q	95	TYR	2.2
33	1b	34	ALA	2.2
1	2A	865	C	2.2
1	2A	889	C	2.2
1	2A	894	C	2.2
32	2a	1028	C	2.2
32	2a	1029	C	2.2
32	2a	1363	C	2.2
33	2b	140	HIS	2.2
7	2H	33	LEU	2.2
12	2Q	37	LEU	2.2
23	2I	46	LEU	2.2
34	1c	196	LEU	2.2
34	2c	34	LEU	2.2
24	22	8	LYS	2.2
43	1l	63	GLY	2.2
47	1p	3	LYS	2.2
49	2r	84	LYS	2.2
40	1i	27	THR	2.2
33	2b	101	MET	2.2
39	2h	9	MET	2.2
6	2G	95	ARG	2.2
33	1b	130	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
1	1A	2793	G	2.2
1	2A	171	G	2.2
1	2A	2149	G	2.2
1	2A	2159	G	2.2
32	2a	951	G	2.2
32	2a	1009	G	2.2
32	2a	1017	G	2.2
32	2a	1024	G	2.2
32	2a	1030(C)	G	2.2
32	2a	1061	G	2.2
32	2a	1064	G	2.2
32	2a	1094	G	2.2
54	1w	15	G	2.2
54	2w	19	G	2.2
1	2A	2158	A	2.2
25	13	2	PRO	2.2
32	2a	1092	A	2.2
33	1b	234	PRO	2.2
33	2b	131	PRO	2.2
51	2t	98	PRO	2.2
9	2N	140	VAL	2.2
33	2b	222	ILE	2.2
38	2g	75	VAL	2.2
41	1j	34	VAL	2.2
3	2D	2	ALA	2.2
12	2Q	49	ALA	2.2
14	2S	36	TYR	2.2
26	24	25	TYR	2.2
33	2b	92	TYR	2.2
34	2c	48	TYR	2.2
40	2i	125	TYR	2.2
3	1D	38	LYS	2.2
33	2b	138	LEU	2.2
34	2c	27	LYS	2.2
40	2i	95	LYS	2.2
36	2e	74	GLY	2.2
32	2a	1045	C	2.2
40	2i	103	THR	2.2
41	2j	19	SER	2.2
6	2G	80	PHE	2.2
6	2G	115	ARG	2.2
18	2W	92	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
22	20	82	ARG	2.2
10	2O	81	ASP	2.2
16	1U	117	GLN	2.2
34	2c	162	GLN	2.2
44	2m	58	GLU	2.2
32	1a	1032	G	2.2
32	2a	950	U	2.2
1	1A	1073	A	2.2
1	2A	917	A	2.2
32	2a	996	A	2.2
32	2a	1014	A	2.2
32	2a	1026	G	2.2
32	2a	1151	A	2.2
32	2a	1236	A	2.2
55	2x	70	G	2.2
5	2F	6	VAL	2.2
7	2H	45	VAL	2.2
8	1I	109	ILE	2.2
33	2b	211	ILE	2.2
36	2e	115	VAL	2.2
41	1j	98	ILE	2.2
51	1t	55	ILE	2.2
9	2N	118	LYS	2.2
22	20	26	TYR	2.2
34	2c	199	LYS	2.2
38	1g	2	ALA	2.2
40	2i	4	TYR	2.2
40	2i	106	ALA	2.2
45	1n	4	LYS	2.2
6	2G	152	LEU	2.2
6	2G	175	LEU	2.2
39	2h	10	LEU	2.2
43	2l	84	LEU	2.2
19	2X	67	GLY	2.2
34	1c	96	GLY	2.2
40	2i	115	GLY	2.2
6	1G	21	ARG	2.2
40	2i	104	ARG	2.2
41	2j	43	ARG	2.2
43	2l	19	ARG	2.2
45	1n	3	ARG	2.2
1	1A	886	C	2.2

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Mol	Chain	Res	Type	RSRZ
21	2Z	48	PHE	2.2
45	2n	60	SER	2.2
32	2a	1027	C	2.2
32	2a	1060	C	2.2
32	2a	1317	C	2.2
33	2b	232	PRO	2.2
40	2i	90	PRO	2.2
26	24	47	GLN	2.2
35	1d	192	GLU	2.2
47	2p	48	TRP	2.2
1	2A	614(A)	U	2.2
1	2A	2132	U	2.2
32	2a	961	U	2.2
32	2a	1062	U	2.2
33	1b	42	ILE	2.2
34	2c	202	ILE	2.2
8	2I	37	VAL	2.2
33	2b	197	VAL	2.2
38	2g	21	VAL	2.2
40	2i	26	VAL	2.2
1	1A	2110	G	2.2
32	2a	1127	G	2.2
32	2a	1130	A	2.2
32	2a	1287	A	2.2
32	2a	1324	A	2.2
41	2j	20	ALA	2.2
4	2E	52	LEU	2.1
9	2N	116	LEU	2.1
14	2S	110	LEU	2.1
15	1T	114	LEU	2.1
51	1t	43	LEU	2.1
4	2E	10	GLY	2.1
7	2H	82	GLY	2.1
21	2Z	26	GLY	2.1
35	2d	87	GLY	2.1
43	2l	29	GLY	2.1
50	2s	46	GLY	2.1
22	20	11	ARG	2.1
38	2g	115	ARG	2.1
41	2j	60	ARG	2.1
51	2t	83	ARG	2.1
36	2e	98	THR	2.1

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Mol	Chain	Res	Type	RSRZ
8	2I	132	PRO	2.1
47	1p	41	PRO	2.1
50	2s	59	PRO	2.1
1	1A	889	C	2.1
32	2a	1007	C	2.1
32	2a	1113	C	2.1
55	1x	69	C	2.1
41	1j	76	ASN	2.1
10	2O	19	ILE	2.1
14	2S	39	ILE	2.1
36	2e	80	ILE	2.1
40	2i	127	LYS	2.1
43	1l	126	LYS	2.1
48	1q	52	LYS	2.1
6	2G	31	VAL	2.1
28	26	42	TRP	2.1
39	2h	93	VAL	2.1
42	2k	105	VAL	2.1
6	2G	62	LEU	2.1
6	2G	176	LEU	2.1
7	2H	165	ALA	2.1
8	2I	65	ALA	2.1
11	1P	105	LEU	2.1
12	2Q	136	ALA	2.1
32	1a	202	U	2.1
32	2a	1052	U	2.1
14	2S	54	LEU	2.1
21	2Z	33	LEU	2.1
21	2Z	125	LEU	2.1
33	2b	10	LEU	2.1
36	2e	12	LEU	2.1
40	2i	40	LEU	2.1
41	2j	8	LEU	2.1
45	2n	5	ALA	2.1
41	2j	86	MET	2.1
1	1A	1054	A	2.1
12	2Q	26	TYR	2.1
21	2Z	8	TYR	2.1
32	2a	964	A	2.1
32	2a	1123	A	2.1
35	1d	87	GLY	2.1
42	2k	86	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
54	2w	14	A	2.1
35	1d	139	ARG	2.1
36	2e	27	ARG	2.1
44	2m	3	ARG	2.1
1	2A	2162	G	2.1
32	2a	971	G	2.1
50	2s	39	THR	2.1
9	2N	51	PHE	2.1
5	1F	14	PRO	2.1
21	1Z	52	SER	2.1
40	2i	49	PRO	2.1
48	1q	28	PRO	2.1
9	2N	68	GLU	2.1
41	2j	61	GLU	2.1
34	1c	56	ASP	2.1
35	1d	84	LYS	2.1
44	2m	46	LYS	2.1
1	1A	652(S)	C	2.1
16	2U	62	ILE	2.1
32	1a	1006	C	2.1
41	2j	23	ILE	2.1
45	1n	7	ILE	2.1
46	2o	3	ILE	2.1
7	2H	37	VAL	2.1
7	2H	44	VAL	2.1
7	2H	50	VAL	2.1
7	2H	169	VAL	2.1
34	2c	173	VAL	2.1
35	1d	88	VAL	2.1
36	2e	55	VAL	2.1
39	2h	51	VAL	2.1
40	1i	108	VAL	2.1
41	1j	44	VAL	2.1
6	2G	155	MET	2.1
7	2H	156	ALA	2.1
8	2I	38	LEU	2.1
34	2c	133	ALA	2.1
39	2h	16	ALA	2.1
1	1A	12	U	2.1
1	1A	614(A)	U	2.1
28	26	44	ARG	2.1
12	2Q	19	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
51	1t	69	GLY	2.1
40	1i	125	TYR	2.1
1	2A	2171	A	2.1
32	1a	344	A	2.1
32	2a	1213	A	2.1
39	2h	3	THR	2.1
21	1Z	136	PHE	2.1
44	2m	41	PRO	2.1
1	1A	2165	G	2.1
1	1A	2166	G	2.1
1	2A	1114	G	2.1
1	2A	2751	G	2.1
32	2a	987	G	2.1
32	2a	1021	G	2.1
8	2I	7	GLU	2.1
26	24	57	GLU	2.1
33	2b	132	LYS	2.1
34	2c	150	LYS	2.1
33	1b	172	ILE	2.1
6	2G	139	LEU	2.1
12	2Q	52	VAL	2.1
21	2Z	90	VAL	2.1
47	1p	2	VAL	2.1
1	1A	154(A)	C	2.1
1	1A	1509	C	2.1
1	2A	897	C	2.1
32	2a	824	C	2.1
32	2a	1112	C	2.1
32	2a	1192	C	2.1
32	2a	1214	C	2.1
48	2q	92	ARG	2.1
49	1r	20	ALA	2.1
54	1y	56	C	2.1
21	2Z	122	ARG	2.1
36	2e	107	ARG	2.1
41	1j	79	ARG	2.1
43	2l	41	ARG	2.1
1	1A	2109	U	2.1
1	1A	2897	U	2.1
11	1P	44	GLY	2.1
32	1a	841	U	2.1
34	2c	81	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
36	2e	97	GLY	2.1
44	2m	38	GLY	2.1
54	1y	12	U	2.1
54	1y	47	U	2.1
42	1k	75	TYR	2.1
7	2H	173	PRO	2.1
36	2e	45	PHE	2.1
36	2e	96	PRO	2.1
41	2j	67	THR	2.1
44	2m	37	THR	2.1
1	2A	887	A	2.1
8	1I	87	LYS	2.1
11	2P	39	LYS	2.1
20	2Y	54	LYS	2.1
21	2Z	138	GLU	2.1
32	2a	946	A	2.1
33	2b	22	LYS	2.1
44	2m	120	LYS	2.1
45	2n	11	LYS	2.1
48	2q	100	LYS	2.1
49	1r	84	LYS	2.1
54	2w	35	A	2.1
37	2f	93	SER	2.1
48	1q	97	SER	2.1
1	1A	2162	G	2.1
1	2A	530	G	2.1
1	2A	1170	G	2.1
32	2a	1089	G	2.1
54	2y	44	G	2.1
21	2Z	154	ASP	2.1
34	2c	57	ILE	2.1
41	2j	6	ILE	2.1
42	2k	29	ILE	2.1
7	2H	7	LEU	2.0
11	2P	45	LEU	2.0
20	2Y	106	LEU	2.0
33	1b	187	LEU	2.0
33	2b	61	LEU	2.0
34	2c	47	LEU	2.0
35	2d	198	VAL	2.0
36	2e	53	LEU	2.0
38	1g	9	VAL	2.0

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Mol	Chain	Res	Type	RSRZ
39	2h	133	LEU	2.0
50	2s	58	VAL	2.0
6	2G	72	ARG	2.0
44	2m	71	ARG	2.0
45	2n	23	ARG	2.0
22	20	18	ALA	2.0
44	2m	76	ALA	2.0
6	2G	29	TRP	2.0
6	2G	100	TRP	2.0
1	1A	2140	C	2.0
1	2A	2789	C	2.0
20	2Y	104	GLY	2.0
45	2n	51	GLY	2.0
47	1p	59	TRP	2.0
32	1a	1007	C	2.0
32	1a	1030	C	2.0
32	1a	1039	C	2.0
32	2a	972	C	2.0
54	2w	13	C	2.0
1	1A	2167	U	2.0
32	2a	1049	U	2.0
34	1c	193	TYR	2.0
3	2D	39	LYS	2.0
39	2h	89	PRO	2.0
43	2l	54	LYS	2.0
44	2m	20	THR	2.0
50	2s	42	PRO	2.0
50	2s	70	LYS	2.0
14	2S	52	SER	2.0
1	1A	2173	A	2.0
41	1j	56	HIS	2.0
7	2H	72	ILE	2.0
39	2h	111	ILE	2.0
42	2k	48	ILE	2.0
48	1q	36	ILE	2.0
48	2q	90	ILE	2.0
37	2f	84	ASN	2.0
38	2g	109	ASN	2.0
39	2h	15	ASN	2.0
47	1p	68	ASP	2.0
51	1t	75	ASN	2.0
7	2H	88	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
12	2Q	79	LEU	2.0
34	2c	130	VAL	2.0
37	1f	46	ARG	2.0
39	2h	84	ARG	2.0
41	1j	65	LEU	2.0
44	2m	81	LEU	2.0
7	2H	24	VAL	2.0
7	2H	115	VAL	2.0
24	22	63	VAL	2.0
29	27	46	VAL	2.0
46	1o	88	ARG	2.0
50	2s	60	VAL	2.0
1	1A	171	G	2.0
1	1A	2207	G	2.0
1	2A	880	G	2.0
1	2A	881	G	2.0
1	2A	1112	G	2.0
32	1a	346	G	2.0
32	2a	1010	G	2.0
32	2a	1186	G	2.0
32	2a	1221	G	2.0
54	1w	44	G	2.0
54	1y	19	G	2.0
54	1y	44	G	2.0
33	1b	120	ALA	2.0
33	2b	13	ALA	2.0
33	2b	188	ALA	2.0
34	2c	61	ALA	2.0
35	1d	48	ALA	2.0
51	2t	94	ALA	2.0
21	1Z	160	GLY	2.0
34	2c	197	GLY	2.0
50	2s	84	GLY	2.0
33	1b	24	TRP	2.0
35	1d	173	TRP	2.0
3	2D	276	LYS	2.0
7	2H	85	LYS	2.0
33	2b	74	LYS	2.0
34	2c	135	LYS	2.0
50	2s	7	LYS	2.0
1	1A	1076	C	2.0
32	1a	174	C	2.0

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Mol	Chain	Res	Type	RSRZ
32	1a	1137	C	2.0
33	1b	232	PRO	2.0
1	2A	2122	U	2.0
32	2a	1159	U	2.0
32	2a	1217	C	2.0
40	1i	21	PRO	2.0
32	2a	1235	U	2.0
33	2b	70	PHE	2.0
34	2c	67	THR	2.0
40	1i	4	TYR	2.0
40	2i	27	THR	2.0
54	2w	45	U	2.0
6	2G	180	PHE	2.0
12	2Q	113	GLN	2.0
22	20	45	PHE	2.0
42	1k	13	GLN	2.0
14	2S	34	HIS	2.0
41	2j	35	SER	2.0
48	2q	99	SER	2.0
6	2G	140	ILE	2.0
36	2e	131	ILE	2.0
39	1h	134	ILE	2.0
44	2m	9	ILE	2.0
15	2T	112	ARG	2.0
24	22	7	ARG	2.0
33	1b	36	ARG	2.0
33	2b	130	ARG	2.0

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
54	PSU	2y	55	20/21	0.51	0.17	93,99,111,111	0
54	G7M	2w	46	24/25	0.53	0.14	79,96,103,111	0
54	G7M	1w	46	24/25	0.53	0.16	77,91,102,115	0
54	G7M	1y	46	24/25	0.57	0.17	88,96,103,115	0
54	G7M	2y	46	24/25	0.62	0.17	92,94,99,121	0
54	5MU	2y	54	21/22	0.64	0.16	90,98,103,120	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
54	4SU	2y	8	20/21	0.68	0.15	93,97,104,110	0
54	PSU	2w	55	20/21	0.69	0.15	86,94,99,102	0
54	PSU	2y	32	20/21	0.70	0.14	82,91,98,105	0
54	5MU	2w	54	21/22	0.72	0.14	78,87,93,95	0
54	PSU	1y	55	20/21	0.72	0.14	89,95,102,107	0
54	MIA	2y	37	22/30	0.72	0.14	81,93,103,114	0
54	4SU	1y	8	20/21	0.73	0.14	90,96,99,108	0
54	5MU	1y	54	21/22	0.73	0.14	85,90,96,110	0
54	4SU	2w	8	20/21	0.75	0.12	90,97,105,113	0
54	4SU	1w	8	20/21	0.77	0.12	86,92,103,105	0
54	PSU	1w	55	20/21	0.81	0.11	82,90,97,97	0
54	PSU	1y	39	20/21	0.82	0.11	84,86,98,98	0
32	2MG	2a	1207	24/25	0.82	0.14	85,90,95,106	0
54	PSU	1y	32	20/21	0.83	0.13	83,88,93,93	0
54	PSU	2y	39	20/21	0.84	0.11	83,87,98,104	0
54	MIA	1y	37	22/30	0.84	0.12	82,86,92,101	0
55	4SU	2x	8	20/21	0.85	0.12	81,86,90,90	0
55	PSU	2x	55	20/21	0.86	0.11	75,81,86,87	0
54	PSU	2w	32	20/21	0.86	0.14	81,90,95,102	0
54	MIA	2w	37	25/30	0.86	0.16	77,88,93,107	0
54	MIA	1w	37	29/30	0.86	0.17	64,73,76,98	0
54	PSU	2w	39	20/21	0.87	0.11	83,90,94,95	0
32	PSU	2a	516	20/21	0.88	0.12	76,82,87,88	0
1	5MU	2A	1915	21/22	0.88	0.11	76,80,84,88	0
54	PSU	1w	32	20/21	0.89	0.13	73,78,84,85	0
32	G7M	2a	527	24/25	0.89	0.13	65,73,80,84	0
32	M2G	2a	966	25/26	0.89	0.18	67,74,87,91	0
55	5MC	2x	32	21/22	0.89	0.14	72,78,82,82	0
55	5MU	2x	54	21/22	0.90	0.11	74,83,88,91	0
32	5MC	2a	1404	21/22	0.90	0.13	59,65,70,73	0
1	PSU	2A	1911	20/21	0.90	0.10	67,70,76,79	0
1	PSU	2A	1917	20/21	0.91	0.09	66,74,79,81	0
54	5MU	1w	54	21/22	0.91	0.09	70,81,85,87	0
32	4OC	2a	1402	22/23	0.92	0.13	58,70,74,80	0
55	PSU	1x	55	20/21	0.92	0.10	60,68,74,78	0
43	0TD	2l	92	10/11	0.92	0.11	69,74,79,90	0
1	OMC	2A	1920	21/22	0.92	0.12	61,70,74,76	0
32	5MC	2a	967	21/22	0.92	0.14	72,77,85,88	0
54	PSU	1w	39	20/21	0.92	0.11	73,78,86,88	0
32	5MC	2a	1400	21/22	0.92	0.15	69,75,80,88	0
32	MA6	2a	1518	24/25	0.93	0.13	53,74,78,81	0
43	0TD	1l	92	10/11	0.93	0.10	57,60,65,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
32	2MG	1a	1207	24/25	0.93	0.10	71,75,78,81	0
32	UR3	2a	1498	21/22	0.93	0.13	63,65,70,73	0
32	PSU	1a	516	20/21	0.94	0.09	64,70,73,74	0
1	5MU	1A	1915	21/22	0.94	0.10	57,62,68,70	0
32	5MC	2a	1407	21/22	0.94	0.12	59,64,72,77	0
55	5MU	1x	54	21/22	0.94	0.10	66,72,76,80	0
32	5MC	1a	967	21/22	0.95	0.10	58,63,68,69	0
1	5MC	2A	1942	21/22	0.95	0.10	58,64,67,68	0
1	5MC	2A	1962	21/22	0.95	0.10	44,57,65,67	0
32	G7M	1a	527	24/25	0.95	0.09	51,54,59,60	0
32	MA6	2a	1519	24/25	0.95	0.13	58,71,75,77	0
55	5MC	1x	32	21/22	0.95	0.12	54,61,66,75	0
1	5MC	1A	1942	21/22	0.96	0.08	37,43,49,55	0
55	4SU	1x	8	20/21	0.96	0.08	58,66,71,71	0
32	5MC	1a	1400	21/22	0.96	0.11	51,57,60,63	0
32	MA6	1a	1519	24/25	0.96	0.11	45,50,56,62	0
32	M2G	1a	966	25/26	0.96	0.11	56,62,68,69	0
1	PSU	1A	1917	20/21	0.96	0.07	52,57,61,63	0
55	31H	2x	76	32/33	0.96	0.10	44,49,61,62	0
1	OMU	2A	2552	21/22	0.97	0.08	42,50,56,61	0
32	5MC	1a	1407	21/22	0.97	0.09	42,45,50,51	0
32	MA6	1a	1518	24/25	0.97	0.09	39,49,54,54	0
1	OMC	1A	1920	21/22	0.97	0.07	41,49,53,56	0
1	PSU	1A	1911	20/21	0.97	0.08	43,53,57,59	0
1	PSU	1A	2605	20/21	0.97	0.06	25,30,34,37	0
1	5MU	2A	1939	21/22	0.97	0.08	38,45,50,52	0
32	4OC	1a	1402	22/23	0.97	0.10	46,50,59,59	0
32	5MC	1a	1404	21/22	0.97	0.09	44,50,53,55	0
1	OMG	2A	2251	24/25	0.97	0.08	45,48,54,61	0
1	2MA	2A	2503	23/24	0.97	0.09	39,42,46,47	0
55	31H	1x	76	32/33	0.98	0.07	25,31,37,44	10
1	5MU	1A	1939	21/22	0.98	0.05	27,33,37,39	0
1	PSU	2A	2605	20/21	0.98	0.06	36,43,48,50	0
1	5MC	1A	1962	21/22	0.98	0.07	35,42,47,53	0
1	OMU	1A	2552	21/22	0.98	0.06	29,34,38,41	0
32	UR3	1a	1498	21/22	0.99	0.07	43,48,51,52	0
1	2MA	1A	2503	23/24	0.99	0.05	21,26,29,31	0
1	OMG	1A	2251	24/25	0.99	0.04	28,31,34,37	0

6.3 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

6.4 Ligands ⓘ

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	MG	2y	104	1/1	0.43	0.26	95,95,95,95	0
56	MG	2A	3665	1/1	0.52	0.24	87,87,87,87	0
56	MG	2a	3107	1/1	0.55	0.33	80,80,80,80	0
56	MG	2a	3225	1/1	0.57	0.22	84,84,84,84	0
56	MG	1B	3630	1/1	0.57	0.24	81,81,81,81	0
56	MG	2a	3208	1/1	0.60	0.30	80,80,80,80	0
56	MG	2A	3312	1/1	0.60	0.39	80,80,80,80	0
56	MG	2A	3321	1/1	0.60	0.37	89,89,89,89	0
56	MG	2A	3494	1/1	0.62	0.20	77,77,77,77	0
56	MG	2A	3446	1/1	0.63	0.40	91,91,91,91	0
56	MG	2A	3679	1/1	0.63	0.26	81,81,81,81	0
56	MG	2A	3415	1/1	0.64	0.26	84,84,84,84	0
56	MG	1A	3535	1/1	0.64	0.27	67,67,67,67	0
56	MG	2A	3223	1/1	0.64	0.34	82,82,82,82	0
56	MG	1A	3476	1/1	0.65	0.26	83,83,83,83	0
56	MG	2A	3319	1/1	0.65	0.31	86,86,86,86	0
56	MG	2w	107	1/1	0.66	0.22	84,84,84,84	0
56	MG	2A	3359	1/1	0.66	0.36	83,83,83,83	0
56	MG	20	104	1/1	0.67	0.20	76,76,76,76	0
56	MG	2A	3712	1/1	0.67	0.17	87,87,87,87	0
56	MG	2A	3773	1/1	0.67	0.26	74,74,74,74	0
56	MG	2a	3057	1/1	0.68	0.28	86,86,86,86	0
56	MG	2A	3396	1/1	0.68	0.23	81,81,81,81	0
56	MG	1a	1718	1/1	0.68	0.17	71,71,71,71	0
56	MG	1A	3741	1/1	0.68	0.19	71,71,71,71	0
56	MG	1a	1641	1/1	0.68	0.41	85,85,85,85	0
56	MG	2A	3542	1/1	0.68	0.24	72,72,72,72	0
56	MG	2y	105	1/1	0.68	0.30	99,99,99,99	0
56	MG	2A	3816	1/1	0.69	0.17	70,70,70,70	0
56	MG	2A	3698	1/1	0.69	0.23	65,65,65,65	0
56	MG	1A	4011	1/1	0.69	0.15	76,76,76,76	0
56	MG	1A	3845	1/1	0.69	0.26	74,74,74,74	0
56	MG	2a	3148	1/1	0.69	0.36	84,84,84,84	0
56	MG	2A	3346	1/1	0.70	0.30	90,90,90,90	0
56	MG	2G	201	1/1	0.70	0.27	83,83,83,83	0
56	MG	2A	3708	1/1	0.70	0.26	80,80,80,80	0
56	MG	2j	201	1/1	0.70	0.14	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3258	1/1	0.70	0.26	83,83,83,83	0
56	MG	1A	3100	1/1	0.70	0.15	79,79,79,79	0
56	MG	2a	3111	1/1	0.70	0.41	84,84,84,84	0
56	MG	2A	3269	1/1	0.71	0.13	83,83,83,83	0
56	MG	1A	3797	1/1	0.71	0.22	81,81,81,81	0
56	MG	2A	3352	1/1	0.71	0.17	82,82,82,82	0
56	MG	1A	3898	1/1	0.71	0.22	49,49,49,49	0
56	MG	2a	3212	1/1	0.72	0.21	76,76,76,76	0
56	MG	2a	3068	1/1	0.72	0.17	85,85,85,85	0
56	MG	2A	3758	1/1	0.72	0.19	73,73,73,73	0
56	MG	2q	202	1/1	0.72	0.16	86,86,86,86	0
56	MG	2w	105	1/1	0.72	0.15	91,91,91,91	0
56	MG	2A	3091	1/1	0.72	0.29	88,88,88,88	0
56	MG	1a	1743	1/1	0.72	0.27	83,83,83,83	0
56	MG	2a	3063	1/1	0.72	0.36	84,84,84,84	0
56	MG	2A	3343	1/1	0.73	0.16	82,82,82,82	0
56	MG	2A	3300	1/1	0.73	0.27	68,68,68,68	0
56	MG	2A	3694	1/1	0.73	0.22	76,76,76,76	0
56	MG	2a	3007	1/1	0.73	0.22	77,77,77,77	0
56	MG	2a	3028	1/1	0.73	0.27	85,85,85,85	0
56	MG	2A	3347	1/1	0.73	0.33	88,88,88,88	0
56	MG	2A	3349	1/1	0.73	0.12	92,92,92,92	0
56	MG	2A	3175	1/1	0.73	0.22	77,77,77,77	0
56	MG	2A	3500	1/1	0.73	0.31	86,86,86,86	0
56	MG	2A	3356	1/1	0.73	0.28	78,78,78,78	0
56	MG	2A	3293	1/1	0.74	0.17	79,79,79,79	0
56	MG	1A	3860	1/1	0.74	0.18	77,77,77,77	0
56	MG	2a	3135	1/1	0.74	0.29	91,91,91,91	0
56	MG	1A	3479	1/1	0.74	0.19	78,78,78,78	0
56	MG	1A	3568	1/1	0.74	0.18	71,71,71,71	0
56	MG	1A	4092	1/1	0.74	0.22	86,86,86,86	0
56	MG	2A	3097	1/1	0.74	0.21	80,80,80,80	0
56	MG	1A	4098	1/1	0.74	0.30	78,78,78,78	0
56	MG	2A	3655	1/1	0.74	0.17	75,75,75,75	0
56	MG	2w	102	1/1	0.74	0.17	98,98,98,98	0
56	MG	1A	3707	1/1	0.74	0.21	71,71,71,71	0
56	MG	1U	212	1/1	0.74	0.39	55,55,55,55	0
56	MG	1I	104	1/1	0.74	0.20	84,84,84,84	0
56	MG	2A	3275	1/1	0.74	0.20	78,78,78,78	0
56	MG	2A	3345	1/1	0.75	0.26	84,84,84,84	0
56	MG	1a	1698	1/1	0.75	0.28	79,79,79,79	0
56	MG	2a	3125	1/1	0.75	0.29	85,85,85,85	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	2A	3472	1/1	0.75	0.19	85,85,85,85	0
56	MG	2A	3110	1/1	0.75	0.12	81,81,81,81	0
56	MG	2A	3810	1/1	0.75	0.18	71,71,71,71	0
56	MG	1a	1711	1/1	0.75	0.40	78,78,78,78	0
56	MG	2A	3859	1/1	0.75	0.23	81,81,81,81	0
56	MG	1A	4094	1/1	0.75	0.18	65,65,65,65	0
56	MG	2A	3625	1/1	0.75	0.21	64,64,64,64	0
56	MG	2A	3249	1/1	0.75	0.22	82,82,82,82	0
56	MG	1A	3689	1/1	0.75	0.24	69,69,69,69	0
56	MG	2A	3378	1/1	0.75	0.22	79,79,79,79	0
56	MG	2A	3395	1/1	0.75	0.31	78,78,78,78	0
56	MG	1A	3755	1/1	0.75	0.14	64,64,64,64	0
56	MG	2y	107	1/1	0.75	0.25	96,96,96,96	0
56	MG	1A	3529	1/1	0.76	0.14	80,80,80,80	0
56	MG	2A	3325	1/1	0.76	0.17	71,71,71,71	0
56	MG	2a	3106	1/1	0.76	0.26	80,80,80,80	0
56	MG	2A	3408	1/1	0.76	0.15	78,78,78,78	0
56	MG	2A	3331	1/1	0.76	0.29	77,77,77,77	0
56	MG	2a	3112	1/1	0.76	0.17	93,93,93,93	0
56	MG	1O	206	1/1	0.76	0.32	70,70,70,70	0
56	MG	1a	1739	1/1	0.76	0.20	88,88,88,88	0
56	MG	1A	4041	1/1	0.76	0.10	61,61,61,61	0
56	MG	1a	1791	1/1	0.76	0.11	81,81,81,81	0
56	MG	1a	1812	1/1	0.76	0.21	80,80,80,80	0
56	MG	2B	220	1/1	0.76	0.24	80,80,80,80	0
56	MG	2A	3606	1/1	0.76	0.16	82,82,82,82	0
56	MG	1A	3249	1/1	0.76	0.23	79,79,79,79	0
56	MG	25	104	1/1	0.76	0.24	82,82,82,82	0
56	MG	1A	3815	1/1	0.76	0.25	69,69,69,69	0
56	MG	2a	3008	1/1	0.76	0.47	84,84,84,84	0
56	MG	2A	3101	1/1	0.76	0.31	81,81,81,81	0
56	MG	2a	3042	1/1	0.76	0.23	86,86,86,86	0
56	MG	1A	3999	1/1	0.76	0.15	75,75,75,75	0
56	MG	2a	3197	1/1	0.77	0.26	84,84,84,84	0
56	MG	2A	3115	1/1	0.77	0.25	71,71,71,71	0
56	MG	1w	104	1/1	0.77	0.15	84,84,84,84	0
56	MG	1x	101	1/1	0.77	0.14	69,69,69,69	0
56	MG	2a	3231	1/1	0.77	0.29	79,79,79,79	0
56	MG	2A	3229	1/1	0.77	0.22	65,65,65,65	0
56	MG	1A	4080	1/1	0.77	0.23	66,66,66,66	0
56	MG	1a	1780	1/1	0.77	0.12	77,77,77,77	0
56	MG	2a	3122	1/1	0.77	0.25	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	1A	4035	1/1	0.77	0.21	60,60,60,60	0
56	MG	2a	3053	1/1	0.77	0.17	87,87,87,87	0
56	MG	2a	3142	1/1	0.77	0.27	74,74,74,74	0
56	MG	1A	4099	1/1	0.77	0.17	62,62,62,62	0
56	MG	2a	3082	1/1	0.78	0.30	78,78,78,78	0
56	MG	1a	1713	1/1	0.78	0.52	82,82,82,82	0
56	MG	2A	3031	1/1	0.78	0.17	61,61,61,61	0
56	MG	1D	311	1/1	0.78	0.29	72,72,72,72	0
56	MG	2A	3815	1/1	0.78	0.13	84,84,84,84	0
56	MG	1A	4024	1/1	0.78	0.12	69,69,69,69	0
56	MG	2A	3280	1/1	0.78	0.22	76,76,76,76	0
56	MG	2A	3885	1/1	0.78	0.34	88,88,88,88	0
56	MG	2B	208	1/1	0.78	0.15	76,76,76,76	0
56	MG	2A	3290	1/1	0.78	0.25	86,86,86,86	0
56	MG	1A	3208	1/1	0.78	0.22	81,81,81,81	0
56	MG	2Z	301	1/1	0.78	0.14	86,86,86,86	0
56	MG	1A	4036	1/1	0.78	0.14	53,53,53,53	0
56	MG	1A	3531	1/1	0.78	0.14	69,69,69,69	0
56	MG	2A	3670	1/1	0.78	0.17	64,64,64,64	0
56	MG	1B	3622	1/1	0.78	0.23	63,63,63,63	0
56	MG	2A	3689	1/1	0.78	0.15	65,65,65,65	0
56	MG	2A	3196	1/1	0.78	0.15	81,81,81,81	0
56	MG	1n	101	1/1	0.78	0.46	74,74,74,74	0
56	MG	2a	3055	1/1	0.78	0.19	79,79,79,79	0
56	MG	1A	3263	1/1	0.78	0.15	59,59,59,59	0
56	MG	2A	3417	1/1	0.78	0.19	78,78,78,78	0
56	MG	2A	3728	1/1	0.78	0.18	71,71,71,71	0
56	MG	2A	3094	1/1	0.79	0.26	52,52,52,52	0
56	MG	2a	3177	1/1	0.79	0.18	79,79,79,79	0
56	MG	2a	3196	1/1	0.79	0.27	82,82,82,82	0
56	MG	1A	3293	1/1	0.79	0.17	54,54,54,54	0
56	MG	2A	3358	1/1	0.79	0.21	75,75,75,75	0
56	MG	1a	1722	1/1	0.79	0.18	74,74,74,74	0
56	MG	2a	3217	1/1	0.79	0.35	67,67,67,67	0
56	MG	2A	3360	1/1	0.79	0.17	72,72,72,72	0
56	MG	2A	3375	1/1	0.79	0.17	80,80,80,80	0
56	MG	2A	3506	1/1	0.79	0.19	65,65,65,65	0
56	MG	2A	3103	1/1	0.79	0.23	64,64,64,64	0
56	MG	2v	101	1/1	0.79	0.31	85,85,85,85	0
56	MG	2A	3591	1/1	0.79	0.20	79,79,79,79	0
56	MG	1x	107	1/1	0.79	0.28	77,77,77,77	0
56	MG	2A	3610	1/1	0.79	0.22	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	1A	3693	1/1	0.79	0.15	71,71,71,71	0
56	MG	2a	3041	1/1	0.79	0.38	72,72,72,72	0
56	MG	1A	4044	1/1	0.79	0.17	52,52,52,52	0
56	MG	2a	3084	1/1	0.80	0.30	80,80,80,80	0
56	MG	2A	3116	1/1	0.80	0.38	80,80,80,80	0
56	MG	2A	3322	1/1	0.80	0.25	75,75,75,75	0
56	MG	2a	3109	1/1	0.80	0.20	73,73,73,73	0
56	MG	2A	3126	1/1	0.80	0.11	71,71,71,71	0
56	MG	1A	3753	1/1	0.80	0.28	69,69,69,69	0
56	MG	2A	3338	1/1	0.80	0.35	75,75,75,75	0
56	MG	2a	3124	1/1	0.80	0.41	81,81,81,81	0
56	MG	2A	3873	1/1	0.80	0.20	76,76,76,76	0
56	MG	1A	3344	1/1	0.80	0.28	68,68,68,68	0
56	MG	2A	3203	1/1	0.80	0.29	82,82,82,82	0
56	MG	2B	214	1/1	0.80	0.19	70,70,70,70	0
56	MG	1A	3396	1/1	0.80	0.21	79,79,79,79	0
56	MG	1x	108	1/1	0.80	0.36	82,82,82,82	0
56	MG	2A	3231	1/1	0.80	0.31	68,68,68,68	0
56	MG	2A	3023	1/1	0.80	0.26	82,82,82,82	0
56	MG	1A	3399	1/1	0.80	0.25	81,81,81,81	0
56	MG	2A	3063	1/1	0.80	0.18	62,62,62,62	0
56	MG	1A	3466	1/1	0.80	0.17	70,70,70,70	0
56	MG	1A	3162	1/1	0.80	0.25	70,70,70,70	0
56	MG	1a	1749	1/1	0.80	0.29	74,74,74,74	0
56	MG	2p	101	1/1	0.80	0.27	81,81,81,81	0
56	MG	1A	3477	1/1	0.80	0.25	72,72,72,72	0
56	MG	2a	3044	1/1	0.80	0.33	76,76,76,76	0
56	MG	2v	102	1/1	0.80	0.32	80,80,80,80	0
56	MG	15	106	1/1	0.80	0.26	47,47,47,47	0
56	MG	1A	3343	1/1	0.80	0.17	64,64,64,64	0
56	MG	2A	3315	1/1	0.80	0.22	54,54,54,54	0
56	MG	2A	3410	1/1	0.80	0.14	71,71,71,71	0
56	MG	1A	3528	1/1	0.80	0.16	80,80,80,80	0
56	MG	2A	3767	1/1	0.80	0.16	58,58,58,58	0
56	MG	2A	3263	1/1	0.81	0.26	77,77,77,77	0
56	MG	2a	3009	1/1	0.81	0.32	78,78,78,78	0
56	MG	2a	3011	1/1	0.81	0.38	77,77,77,77	0
56	MG	2a	3141	1/1	0.81	0.30	81,81,81,81	0
56	MG	2A	3083	1/1	0.81	0.22	68,68,68,68	0
56	MG	2a	3036	1/1	0.81	0.38	83,83,83,83	0
56	MG	1A	3557	1/1	0.81	0.12	75,75,75,75	0
56	MG	1A	3883	1/1	0.81	0.24	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3742	1/1	0.81	0.14	59,59,59,59	0
56	MG	2A	3478	1/1	0.81	0.30	73,73,73,73	0
56	MG	2A	3881	1/1	0.81	0.10	64,64,64,64	0
56	MG	1a	1638	1/1	0.81	0.24	71,71,71,71	0
56	MG	2a	3222	1/1	0.81	0.11	78,78,78,78	0
56	MG	1A	3968	1/1	0.81	0.14	69,69,69,69	0
56	MG	2a	3227	1/1	0.81	0.11	79,79,79,79	0
56	MG	2B	211	1/1	0.81	0.25	81,81,81,81	0
56	MG	2g	201	1/1	0.81	0.20	80,80,80,80	0
56	MG	2a	3069	1/1	0.81	0.30	78,78,78,78	0
56	MG	2a	3075	1/1	0.81	0.20	74,74,74,74	0
56	MG	2A	3386	1/1	0.81	0.21	79,79,79,79	0
56	MG	2A	3704	1/1	0.81	0.14	78,78,78,78	0
56	MG	2A	3525	1/1	0.81	0.28	70,70,70,70	0
56	MG	2A	3533	1/1	0.81	0.26	76,76,76,76	0
56	MG	1A	3975	1/1	0.81	0.27	74,74,74,74	0
56	MG	2I	101	1/1	0.81	0.26	89,89,89,89	0
56	MG	1A	3823	1/1	0.81	0.23	62,62,62,62	0
56	MG	1A	3791	1/1	0.81	0.10	82,82,82,82	0
56	MG	2a	3123	1/1	0.81	0.29	77,77,77,77	0
56	MG	2A	3394	1/1	0.82	0.25	77,77,77,77	0
56	MG	1a	1669	1/1	0.82	0.25	72,72,72,72	0
56	MG	1A	3526	1/1	0.82	0.16	66,66,66,66	0
56	MG	2A	3402	1/1	0.82	0.31	66,66,66,66	0
56	MG	1A	3809	1/1	0.82	0.14	55,55,55,55	0
56	MG	2a	3002	1/1	0.82	0.20	73,73,73,73	0
56	MG	1A	3671	1/1	0.82	0.11	46,46,46,46	0
56	MG	1a	1714	1/1	0.82	0.36	78,78,78,78	0
56	MG	2A	3061	1/1	0.82	0.21	63,63,63,63	0
56	MG	2a	3181	1/1	0.82	0.11	84,84,84,84	0
56	MG	2A	3432	1/1	0.82	0.27	74,74,74,74	0
56	MG	1A	3385	1/1	0.82	0.12	77,77,77,77	0
56	MG	2a	3034	1/1	0.82	0.16	87,87,87,87	0
56	MG	2A	3719	1/1	0.82	0.21	72,72,72,72	0
56	MG	1A	4058	1/1	0.82	0.25	69,69,69,69	0
56	MG	2a	3218	1/1	0.82	0.30	75,75,75,75	0
56	MG	2A	3736	1/1	0.82	0.15	62,62,62,62	0
56	MG	1A	3546	1/1	0.82	0.28	67,67,67,67	0
56	MG	2a	3226	1/1	0.82	0.13	79,79,79,79	0
56	MG	2A	3485	1/1	0.82	0.18	75,75,75,75	0
56	MG	1A	4086	1/1	0.82	0.25	59,59,59,59	0
56	MG	2A	3271	1/1	0.82	0.32	88,88,88,88	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3502	1/1	0.82	0.12	64,64,64,64	0
56	MG	1Z	301	1/1	0.82	0.12	72,72,72,72	0
56	MG	1A	4090	1/1	0.82	0.21	69,69,69,69	0
56	MG	1A	3854	1/1	0.82	0.21	73,73,73,73	0
56	MG	2A	3879	1/1	0.82	0.22	68,68,68,68	0
56	MG	1a	1615	1/1	0.82	0.14	73,73,73,73	0
56	MG	2A	3590	1/1	0.82	0.20	72,72,72,72	0
56	MG	2A	3294	1/1	0.82	0.29	73,73,73,73	0
56	MG	1e	201	1/1	0.82	0.16	84,84,84,84	0
56	MG	1A	4093	1/1	0.82	0.18	78,78,78,78	0
56	MG	1A	3501	1/1	0.82	0.14	76,76,76,76	0
56	MG	1A	3936	1/1	0.83	0.13	53,53,53,53	0
56	MG	2A	3268	1/1	0.83	0.23	70,70,70,70	0
56	MG	1A	3966	1/1	0.83	0.11	55,55,55,55	0
56	MG	2A	3828	1/1	0.83	0.14	63,63,63,63	0
56	MG	2a	3088	1/1	0.83	0.22	82,82,82,82	0
56	MG	1a	1764	1/1	0.83	0.16	81,81,81,81	0
56	MG	2A	3870	1/1	0.83	0.17	71,71,71,71	0
56	MG	1A	3594	1/1	0.83	0.15	49,49,49,49	0
56	MG	1A	3596	1/1	0.83	0.25	71,71,71,71	0
56	MG	2A	3374	1/1	0.83	0.27	65,65,65,65	0
56	MG	1A	3308	1/1	0.83	0.28	60,60,60,60	0
56	MG	2A	3376	1/1	0.83	0.17	78,78,78,78	0
56	MG	1a	1639	1/1	0.83	0.19	64,64,64,64	0
56	MG	1A	3398	1/1	0.83	0.24	69,69,69,69	0
56	MG	2B	217	1/1	0.83	0.12	77,77,77,77	0
56	MG	1s	101	1/1	0.83	0.17	77,77,77,77	0
56	MG	2A	3661	1/1	0.83	0.27	71,71,71,71	0
56	MG	2A	3304	1/1	0.83	0.21	88,88,88,88	0
56	MG	1A	3348	1/1	0.83	0.19	64,64,64,64	0
56	MG	2A	3676	1/1	0.83	0.15	67,67,67,67	0
56	MG	1w	107	1/1	0.83	0.15	85,85,85,85	0
56	MG	2A	3181	1/1	0.83	0.22	74,74,74,74	0
56	MG	2a	3203	1/1	0.83	0.13	80,80,80,80	0
56	MG	1A	3488	1/1	0.83	0.16	77,77,77,77	0
56	MG	1A	3433	1/1	0.83	0.31	80,80,80,80	0
56	MG	2A	3702	1/1	0.83	0.12	80,80,80,80	0
56	MG	2A	3211	1/1	0.83	0.17	76,76,76,76	0
56	MG	2a	3012	1/1	0.83	0.26	75,75,75,75	0
56	MG	2a	3015	1/1	0.83	0.38	80,80,80,80	0
56	MG	2a	3020	1/1	0.83	0.26	77,77,77,77	0
56	MG	2a	3023	1/1	0.83	0.24	87,87,87,87	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	2a	3024	1/1	0.83	0.19	74,74,74,74	0
56	MG	1A	3509	1/1	0.83	0.20	78,78,78,78	0
56	MG	2A	3710	1/1	0.83	0.17	75,75,75,75	0
56	MG	1A	3068	1/1	0.83	0.15	52,52,52,52	0
56	MG	2A	3717	1/1	0.83	0.23	67,67,67,67	0
56	MG	2A	3449	1/1	0.83	0.32	70,70,70,70	0
56	MG	2a	3043	1/1	0.83	0.23	77,77,77,77	0
56	MG	1O	201	1/1	0.83	0.14	72,72,72,72	0
56	MG	2A	3475	1/1	0.83	0.26	76,76,76,76	0
56	MG	2A	3742	1/1	0.83	0.20	73,73,73,73	0
56	MG	2y	103	1/1	0.83	0.15	90,90,90,90	0
56	MG	2A	3237	1/1	0.83	0.27	72,72,72,72	0
56	MG	1A	3570	1/1	0.83	0.28	61,61,61,61	0
56	MG	1A	4074	1/1	0.83	0.10	52,52,52,52	0
56	MG	2A	3254	1/1	0.84	0.20	71,71,71,71	0
56	MG	2A	3687	1/1	0.84	0.17	71,71,71,71	0
56	MG	1A	3602	1/1	0.84	0.25	63,63,63,63	0
56	MG	1a	1679	1/1	0.84	0.17	81,81,81,81	0
56	MG	1x	111	1/1	0.84	0.21	74,74,74,74	0
56	MG	1y	101	1/1	0.84	0.11	91,91,91,91	0
56	MG	2a	3048	1/1	0.84	0.29	80,80,80,80	0
56	MG	2A	3008	1/1	0.84	0.24	73,73,73,73	0
56	MG	1a	1683	1/1	0.84	0.19	78,78,78,78	0
56	MG	1A	3603	1/1	0.84	0.28	58,58,58,58	0
56	MG	2A	3406	1/1	0.84	0.17	76,76,76,76	0
56	MG	2A	3407	1/1	0.84	0.13	82,82,82,82	0
56	MG	1a	1710	1/1	0.84	0.16	72,72,72,72	0
56	MG	1A	4006	1/1	0.84	0.20	33,33,33,33	0
56	MG	2A	3412	1/1	0.84	0.24	73,73,73,73	0
56	MG	2A	3740	1/1	0.84	0.14	75,75,75,75	0
56	MG	1A	3299	1/1	0.84	0.34	68,68,68,68	0
56	MG	1A	3545	1/1	0.84	0.29	62,62,62,62	0
56	MG	2A	3761	1/1	0.84	0.16	40,40,40,40	0
56	MG	2A	3426	1/1	0.84	0.23	65,65,65,65	0
56	MG	1B	3631	1/1	0.84	0.11	73,73,73,73	0
56	MG	2A	3306	1/1	0.84	0.44	66,66,66,66	0
56	MG	2a	3118	1/1	0.84	0.16	76,76,76,76	0
56	MG	2A	3811	1/1	0.84	0.13	75,75,75,75	0
56	MG	2A	3813	1/1	0.84	0.14	73,73,73,73	0
56	MG	2A	3310	1/1	0.84	0.22	69,69,69,69	0
56	MG	1A	3353	1/1	0.84	0.20	70,70,70,70	0
56	MG	2a	3129	1/1	0.84	0.24	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3098	1/1	0.84	0.22	75,75,75,75	0
56	MG	1A	3360	1/1	0.84	0.15	71,71,71,71	0
56	MG	2A	3861	1/1	0.84	0.11	56,56,56,56	0
56	MG	1A	3846	1/1	0.84	0.14	55,55,55,55	0
56	MG	1A	3716	1/1	0.84	0.13	46,46,46,46	0
56	MG	2A	3497	1/1	0.84	0.44	81,81,81,81	0
56	MG	2A	3111	1/1	0.84	0.19	71,71,71,71	0
56	MG	2A	3327	1/1	0.84	0.17	71,71,71,71	0
56	MG	2a	3200	1/1	0.84	0.24	82,82,82,82	0
56	MG	1W	207	1/1	0.84	0.22	38,38,38,38	0
56	MG	1A	3730	1/1	0.84	0.13	67,67,67,67	0
56	MG	2a	3209	1/1	0.84	0.21	80,80,80,80	0
56	MG	1Z	302	1/1	0.84	0.14	77,77,77,77	0
56	MG	1a	1800	1/1	0.84	0.14	73,73,73,73	0
56	MG	1A	3732	1/1	0.84	0.24	71,71,71,71	0
56	MG	1A	3473	1/1	0.84	0.15	60,60,60,60	0
56	MG	2A	3601	1/1	0.84	0.22	92,92,92,92	0
56	MG	1f	202	1/1	0.84	0.28	74,74,74,74	0
56	MG	1a	1601	1/1	0.84	0.18	74,74,74,74	0
56	MG	2a	3228	1/1	0.84	0.40	78,78,78,78	0
56	MG	2A	3613	1/1	0.84	0.16	69,69,69,69	0
56	MG	2A	3614	1/1	0.84	0.27	63,63,63,63	0
56	MG	2A	3616	1/1	0.84	0.20	71,71,71,71	0
56	MG	2A	3617	1/1	0.84	0.14	66,66,66,66	0
56	MG	1A	3914	1/1	0.84	0.10	47,47,47,47	0
56	MG	2r	101	1/1	0.84	0.12	77,77,77,77	0
56	MG	1A	3254	1/1	0.84	0.14	69,69,69,69	0
56	MG	1w	106	1/1	0.84	0.10	72,72,72,72	0
56	MG	1A	3231	1/1	0.84	0.16	69,69,69,69	0
56	MG	2a	3016	1/1	0.84	0.21	73,73,73,73	0
56	MG	2A	3364	1/1	0.84	0.60	85,85,85,85	0
56	MG	2y	102	1/1	0.84	0.13	94,94,94,94	0
56	MG	2A	3671	1/1	0.84	0.13	77,77,77,77	0
56	MG	2A	3672	1/1	0.84	0.12	76,76,76,76	0
56	MG	1A	3137	1/1	0.84	0.21	57,57,57,57	0
56	MG	2a	3032	1/1	0.84	0.39	79,79,79,79	0
56	MG	1A	3264	1/1	0.85	0.13	64,64,64,64	0
56	MG	1A	3332	1/1	0.85	0.26	61,61,61,61	0
56	MG	2A	3609	1/1	0.85	0.24	69,69,69,69	0
56	MG	2A	3844	1/1	0.85	0.13	46,46,46,46	0
56	MG	2A	3851	1/1	0.85	0.12	67,67,67,67	0
56	MG	2a	3099	1/1	0.85	0.28	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	1a	1633	1/1	0.85	0.25	81,81,81,81	0
56	MG	2A	3132	1/1	0.85	0.13	60,60,60,60	0
56	MG	2A	3866	1/1	0.85	0.14	68,68,68,68	0
56	MG	1A	3911	1/1	0.85	0.20	46,46,46,46	0
56	MG	2A	3177	1/1	0.85	0.15	66,66,66,66	0
56	MG	2a	3113	1/1	0.85	0.27	77,77,77,77	0
56	MG	2a	3114	1/1	0.85	0.36	83,83,83,83	0
56	MG	1A	3337	1/1	0.85	0.13	63,63,63,63	0
56	MG	2a	3119	1/1	0.85	0.23	72,72,72,72	0
56	MG	2A	3880	1/1	0.85	0.18	60,60,60,60	0
56	MG	2A	3191	1/1	0.85	0.18	72,72,72,72	0
56	MG	2A	3006	1/1	0.85	0.30	65,65,65,65	0
56	MG	1A	3054	1/1	0.85	0.16	51,51,51,51	0
56	MG	2A	3206	1/1	0.85	0.33	74,74,74,74	0
56	MG	2a	3133	1/1	0.85	0.27	75,75,75,75	0
56	MG	2B	213	1/1	0.85	0.23	71,71,71,71	0
56	MG	2a	3136	1/1	0.85	0.29	65,65,65,65	0
56	MG	2A	3207	1/1	0.85	0.14	69,69,69,69	0
56	MG	1S	201	1/1	0.85	0.36	47,47,47,47	0
56	MG	2A	3215	1/1	0.85	0.16	69,69,69,69	0
56	MG	2A	3419	1/1	0.85	0.23	69,69,69,69	0
56	MG	2A	3218	1/1	0.85	0.29	75,75,75,75	0
56	MG	2a	3194	1/1	0.85	0.19	79,79,79,79	0
56	MG	1a	1672	1/1	0.85	0.14	63,63,63,63	0
56	MG	2A	3439	1/1	0.85	0.33	60,60,60,60	0
56	MG	2A	3691	1/1	0.85	0.12	73,73,73,73	0
56	MG	28	103	1/1	0.85	0.30	65,65,65,65	0
56	MG	2A	3339	1/1	0.85	0.27	63,63,63,63	0
56	MG	2A	3342	1/1	0.85	0.14	82,82,82,82	0
56	MG	2A	3456	1/1	0.85	0.23	58,58,58,58	0
56	MG	2a	3216	1/1	0.85	0.21	76,76,76,76	0
56	MG	2A	3458	1/1	0.85	0.28	71,71,71,71	0
56	MG	1A	3092	1/1	0.85	0.20	68,68,68,68	0
56	MG	2A	3709	1/1	0.85	0.12	68,68,68,68	0
56	MG	2a	3223	1/1	0.85	0.19	84,84,84,84	0
56	MG	1a	1802	1/1	0.85	0.10	81,81,81,81	0
56	MG	1a	1682	1/1	0.85	0.29	75,75,75,75	0
56	MG	2A	3716	1/1	0.85	0.19	76,76,76,76	0
56	MG	2A	3483	1/1	0.85	0.21	76,76,76,76	0
56	MG	2A	3238	1/1	0.85	0.14	64,64,64,64	0
56	MG	2A	3727	1/1	0.85	0.19	68,68,68,68	0
56	MG	2A	3348	1/1	0.85	0.15	90,90,90,90	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	2l	204	1/1	0.85	0.17	84,84,84,84	0
56	MG	2A	3734	1/1	0.85	0.15	79,79,79,79	0
56	MG	1A	3850	1/1	0.85	0.10	67,67,67,67	0
56	MG	1a	1694	1/1	0.85	0.26	63,63,63,63	0
56	MG	1Y	201	1/1	0.85	0.25	63,63,63,63	0
56	MG	1A	3542	1/1	0.85	0.28	57,57,57,57	0
56	MG	2w	101	1/1	0.85	0.26	82,82,82,82	0
56	MG	1w	101	1/1	0.85	0.20	70,70,70,70	0
56	MG	2w	104	1/1	0.85	0.14	76,76,76,76	0
56	MG	1B	3611	1/1	0.85	0.16	63,63,63,63	0
56	MG	1A	3474	1/1	0.85	0.12	61,61,61,61	0
56	MG	2A	3807	1/1	0.85	0.09	61,61,61,61	0
56	MG	2A	3547	1/1	0.85	0.16	59,59,59,59	0
56	MG	2a	3062	1/1	0.85	0.39	74,74,74,74	0
56	MG	1B	3629	1/1	0.85	0.15	69,69,69,69	0
56	MG	2A	3113	1/1	0.85	0.12	67,67,67,67	0
56	MG	2A	3751	1/1	0.86	0.18	68,68,68,68	0
56	MG	1a	1671	1/1	0.86	0.11	62,62,62,62	0
56	MG	2a	3058	1/1	0.86	0.20	87,87,87,87	0
56	MG	1w	105	1/1	0.86	0.15	73,73,73,73	0
56	MG	1A	3475	1/1	0.86	0.18	76,76,76,76	0
56	MG	1A	3098	1/1	0.86	0.21	74,74,74,74	0
56	MG	2A	3786	1/1	0.86	0.18	61,61,61,61	0
56	MG	2A	3806	1/1	0.86	0.13	61,61,61,61	0
56	MG	1A	4031	1/1	0.86	0.12	68,68,68,68	0
56	MG	1A	3039	1/1	0.86	0.24	67,67,67,67	0
56	MG	1A	3867	1/1	0.86	0.10	50,50,50,50	0
56	MG	1a	1695	1/1	0.86	0.30	64,64,64,64	0
56	MG	2a	3101	1/1	0.86	0.46	79,79,79,79	0
56	MG	2A	3350	1/1	0.86	0.19	76,76,76,76	0
56	MG	1A	4039	1/1	0.86	0.36	65,65,65,65	0
56	MG	1a	1701	1/1	0.86	0.21	73,73,73,73	0
56	MG	1a	1703	1/1	0.86	0.40	76,76,76,76	0
56	MG	2A	3568	1/1	0.86	0.17	54,54,54,54	0
56	MG	1A	3874	1/1	0.86	0.20	58,58,58,58	0
56	MG	1A	3413	1/1	0.86	0.19	66,66,66,66	0
56	MG	1A	4057	1/1	0.86	0.14	63,63,63,63	0
56	MG	2A	3367	1/1	0.86	0.15	70,70,70,70	0
56	MG	2A	3371	1/1	0.86	0.13	69,69,69,69	0
56	MG	2A	3875	1/1	0.86	0.16	71,71,71,71	0
56	MG	2A	3876	1/1	0.86	0.22	67,67,67,67	0
56	MG	1A	3424	1/1	0.86	0.25	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3064	1/1	0.86	0.18	81,81,81,81	0
56	MG	1A	3907	1/1	0.86	0.10	61,61,61,61	0
56	MG	1A	3807	1/1	0.86	0.09	59,59,59,59	0
56	MG	2B	206	1/1	0.86	0.20	70,70,70,70	0
56	MG	2A	3379	1/1	0.86	0.10	80,80,80,80	0
56	MG	2A	3385	1/1	0.86	0.26	70,70,70,70	0
56	MG	2a	3143	1/1	0.86	0.37	62,62,62,62	0
56	MG	2A	3092	1/1	0.86	0.19	70,70,70,70	0
56	MG	2A	3392	1/1	0.86	0.14	73,73,73,73	0
56	MG	2A	3274	1/1	0.86	0.20	84,84,84,84	0
56	MG	2a	3189	1/1	0.86	0.23	72,72,72,72	0
56	MG	1A	3368	1/1	0.86	0.37	51,51,51,51	0
56	MG	2D	306	1/1	0.86	0.39	59,59,59,59	0
56	MG	2D	307	1/1	0.86	0.16	71,71,71,71	0
56	MG	13	103	1/1	0.86	0.16	59,59,59,59	0
56	MG	2Q	202	1/1	0.86	0.21	65,65,65,65	0
56	MG	1A	3460	1/1	0.86	0.20	64,64,64,64	0
56	MG	2A	3403	1/1	0.86	0.26	73,73,73,73	0
56	MG	2A	3405	1/1	0.86	0.18	67,67,67,67	0
56	MG	2a	3214	1/1	0.86	0.33	63,63,63,63	0
56	MG	1a	1755	1/1	0.86	0.15	81,81,81,81	0
56	MG	26	101	1/1	0.86	0.32	73,73,73,73	0
56	MG	2A	3688	1/1	0.86	0.20	74,74,74,74	0
56	MG	2a	3221	1/1	0.86	0.14	76,76,76,76	0
56	MG	2A	3102	1/1	0.86	0.28	80,80,80,80	0
56	MG	2a	3006	1/1	0.86	0.31	78,78,78,78	0
56	MG	2A	3297	1/1	0.86	0.18	69,69,69,69	0
56	MG	1a	1763	1/1	0.86	0.19	73,73,73,73	0
56	MG	1A	3375	1/1	0.86	0.20	61,61,61,61	0
56	MG	2A	3413	1/1	0.86	0.11	59,59,59,59	0
56	MG	2a	3229	1/1	0.86	0.15	71,71,71,71	0
56	MG	1A	3839	1/1	0.86	0.16	66,66,66,66	0
56	MG	2A	3706	1/1	0.86	0.15	60,60,60,60	0
56	MG	1A	3974	1/1	0.86	0.20	55,55,55,55	0
56	MG	2a	3019	1/1	0.86	0.15	83,83,83,83	0
56	MG	1A	3844	1/1	0.86	0.19	66,66,66,66	0
56	MG	1A	3987	1/1	0.86	0.12	71,71,71,71	0
56	MG	2A	3318	1/1	0.86	0.27	71,71,71,71	0
56	MG	2a	3027	1/1	0.86	0.15	75,75,75,75	0
56	MG	1A	3326	1/1	0.86	0.19	60,60,60,60	0
56	MG	2A	3440	1/1	0.86	0.40	78,78,78,78	0
56	MG	1a	1656	1/1	0.86	0.25	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2a	3035	1/1	0.86	0.13	89,89,89,89	0
56	MG	1a	1658	1/1	0.86	0.20	69,69,69,69	0
56	MG	2w	106	1/1	0.86	0.09	82,82,82,82	0
56	MG	1a	1661	1/1	0.86	0.27	82,82,82,82	0
56	MG	2A	3178	1/1	0.86	0.23	76,76,76,76	0
56	MG	1a	1667	1/1	0.86	0.32	70,70,70,70	0
56	MG	1A	3262	1/1	0.86	0.23	76,76,76,76	0
56	MG	2A	3476	1/1	0.86	0.20	74,74,74,74	0
56	MG	2A	3746	1/1	0.86	0.15	61,61,61,61	0
56	MG	2a	3031	1/1	0.87	0.23	71,71,71,71	0
56	MG	1a	1647	1/1	0.87	0.17	69,69,69,69	0
56	MG	2A	3404	1/1	0.87	0.12	72,72,72,72	0
56	MG	2A	3088	1/1	0.87	0.15	57,57,57,57	0
56	MG	1A	3412	1/1	0.87	0.16	59,59,59,59	0
56	MG	2A	3277	1/1	0.87	0.20	75,75,75,75	0
56	MG	2A	3278	1/1	0.87	0.22	68,68,68,68	0
56	MG	1A	3717	1/1	0.87	0.16	67,67,67,67	0
56	MG	2A	3411	1/1	0.87	0.08	79,79,79,79	0
56	MG	1A	3255	1/1	0.87	0.13	75,75,75,75	0
56	MG	1A	3547	1/1	0.87	0.34	55,55,55,55	0
56	MG	1a	1668	1/1	0.87	0.38	74,74,74,74	0
56	MG	2A	3732	1/1	0.87	0.11	76,76,76,76	0
56	MG	1A	3737	1/1	0.87	0.15	60,60,60,60	0
56	MG	1a	1810	1/1	0.87	0.30	59,59,59,59	0
56	MG	1A	3414	1/1	0.87	0.13	56,56,56,56	0
56	MG	1a	1813	1/1	0.87	0.22	67,67,67,67	0
56	MG	2A	3437	1/1	0.87	0.21	68,68,68,68	0
56	MG	1A	3364	1/1	0.87	0.16	64,64,64,64	0
56	MG	2A	3311	1/1	0.87	0.15	77,77,77,77	0
56	MG	2a	3083	1/1	0.87	0.34	68,68,68,68	0
56	MG	1A	4046	1/1	0.87	0.12	49,49,49,49	0
56	MG	2a	3085	1/1	0.87	0.16	75,75,75,75	0
56	MG	2A	3313	1/1	0.87	0.25	74,74,74,74	0
56	MG	2a	3092	1/1	0.87	0.21	78,78,78,78	0
56	MG	2A	3314	1/1	0.87	0.46	62,62,62,62	0
56	MG	1A	3747	1/1	0.87	0.10	52,52,52,52	0
56	MG	2a	3105	1/1	0.87	0.15	70,70,70,70	0
56	MG	2A	3461	1/1	0.87	0.26	76,76,76,76	0
56	MG	2A	3469	1/1	0.87	0.13	70,70,70,70	0
56	MG	1A	3087	1/1	0.87	0.13	39,39,39,39	0
56	MG	2a	3110	1/1	0.87	0.25	93,93,93,93	0
56	MG	2A	3119	1/1	0.87	0.30	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1t	201	1/1	0.87	0.29	66,66,66,66	0
56	MG	1a	1690	1/1	0.87	0.22	57,57,57,57	0
56	MG	2A	3137	1/1	0.87	0.21	66,66,66,66	0
56	MG	2A	3818	1/1	0.87	0.11	82,82,82,82	0
56	MG	2A	3146	1/1	0.87	0.16	76,76,76,76	0
56	MG	2A	3492	1/1	0.87	0.23	62,62,62,62	0
56	MG	2A	3164	1/1	0.87	0.28	80,80,80,80	0
56	MG	2A	3852	1/1	0.87	0.11	71,71,71,71	0
56	MG	2A	3334	1/1	0.87	0.14	67,67,67,67	0
56	MG	2A	3499	1/1	0.87	0.13	73,73,73,73	0
56	MG	1A	3435	1/1	0.87	0.13	54,54,54,54	0
56	MG	1A	3338	1/1	0.87	0.18	58,58,58,58	0
56	MG	2A	3872	1/1	0.87	0.08	69,69,69,69	0
56	MG	2A	3503	1/1	0.87	0.13	64,64,64,64	0
56	MG	1a	1697	1/1	0.87	0.37	73,73,73,73	0
56	MG	2A	3508	1/1	0.87	0.31	70,70,70,70	0
56	MG	2a	3146	1/1	0.87	0.38	72,72,72,72	0
56	MG	2A	3520	1/1	0.87	0.25	60,60,60,60	0
56	MG	2a	3150	1/1	0.87	0.12	82,82,82,82	0
56	MG	2a	3151	1/1	0.87	0.19	65,65,65,65	0
56	MG	1A	3252	1/1	0.87	0.27	48,48,48,48	0
56	MG	1A	3467	1/1	0.87	0.32	71,71,71,71	0
56	MG	1x	106	1/1	0.87	0.23	67,67,67,67	0
56	MG	2B	201	1/1	0.87	0.23	76,76,76,76	0
56	MG	2A	3545	1/1	0.87	0.26	66,66,66,66	0
56	MG	2A	3201	1/1	0.87	0.15	58,58,58,58	0
56	MG	1A	3647	1/1	0.87	0.18	62,62,62,62	0
56	MG	2A	3585	1/1	0.87	0.13	53,53,53,53	0
56	MG	2a	3205	1/1	0.87	0.17	66,66,66,66	0
56	MG	15	107	1/1	0.87	0.15	65,65,65,65	0
56	MG	1x	110	1/1	0.87	0.19	70,70,70,70	0
56	MG	1A	3651	1/1	0.87	0.12	79,79,79,79	0
56	MG	1x	113	1/1	0.87	0.31	66,66,66,66	0
56	MG	2A	3216	1/1	0.87	0.46	80,80,80,80	0
56	MG	2F	305	1/1	0.87	0.10	76,76,76,76	0
56	MG	2A	3217	1/1	0.87	0.22	81,81,81,81	0
56	MG	1A	3324	1/1	0.87	0.28	63,63,63,63	0
56	MG	2R	201	1/1	0.87	0.21	70,70,70,70	0
56	MG	2V	201	1/1	0.87	0.29	51,51,51,51	0
56	MG	2A	3220	1/1	0.87	0.19	56,56,56,56	0
56	MG	1a	1625	1/1	0.87	0.33	71,71,71,71	0
56	MG	1a	1631	1/1	0.87	0.40	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3829	1/1	0.87	0.16	42,42,42,42	0
56	MG	2A	3630	1/1	0.87	0.18	75,75,75,75	0
56	MG	2A	3233	1/1	0.87	0.17	60,60,60,60	0
56	MG	2a	3238	1/1	0.87	0.14	83,83,83,83	0
56	MG	1A	3180	1/1	0.87	0.29	63,63,63,63	0
56	MG	2a	3003	1/1	0.87	0.14	85,85,85,85	0
56	MG	2A	3377	1/1	0.87	0.17	55,55,55,55	0
56	MG	2A	3036	1/1	0.87	0.29	58,58,58,58	0
56	MG	2A	3044	1/1	0.87	0.11	53,53,53,53	0
56	MG	2A	3382	1/1	0.87	0.25	73,73,73,73	0
56	MG	2A	3252	1/1	0.87	0.37	74,74,74,74	0
56	MG	2A	3052	1/1	0.87	0.11	62,62,62,62	0
56	MG	2a	3014	1/1	0.87	0.31	70,70,70,70	0
56	MG	2A	3387	1/1	0.87	0.25	55,55,55,55	0
56	MG	2A	3054	1/1	0.87	0.21	69,69,69,69	0
56	MG	1A	3539	1/1	0.87	0.17	66,66,66,66	0
56	MG	2A	3266	1/1	0.87	0.11	60,60,60,60	0
56	MG	1A	3328	1/1	0.87	0.12	50,50,50,50	0
56	MG	2x	105	1/1	0.87	0.17	69,69,69,69	0
56	MG	2y	101	1/1	0.87	0.10	77,77,77,77	0
56	MG	2A	3397	1/1	0.87	0.15	69,69,69,69	0
56	MG	2a	3025	1/1	0.87	0.28	72,72,72,72	0
56	MG	2a	3026	1/1	0.87	0.13	82,82,82,82	0
56	MG	2A	3700	1/1	0.87	0.18	74,74,74,74	0
56	MG	1a	1754	1/1	0.87	0.18	81,81,81,81	0
56	MG	2A	3772	1/1	0.88	0.15	74,74,74,74	0
56	MG	2a	3054	1/1	0.88	0.23	86,86,86,86	0
56	MG	1A	3927	1/1	0.88	0.15	70,70,70,70	0
56	MG	2A	3782	1/1	0.88	0.11	79,79,79,79	0
56	MG	1A	3513	1/1	0.88	0.26	68,68,68,68	0
56	MG	2a	3060	1/1	0.88	0.17	78,78,78,78	0
56	MG	1A	3816	1/1	0.88	0.13	41,41,41,41	0
56	MG	2A	3059	1/1	0.88	0.34	77,77,77,77	0
56	MG	2a	3065	1/1	0.88	0.20	75,75,75,75	0
56	MG	2a	3066	1/1	0.88	0.17	87,87,87,87	0
56	MG	2a	3067	1/1	0.88	0.23	69,69,69,69	0
56	MG	1A	3569	1/1	0.88	0.20	63,63,63,63	0
56	MG	1a	1636	1/1	0.88	0.25	79,79,79,79	0
56	MG	1A	4095	1/1	0.88	0.12	72,72,72,72	0
56	MG	1A	3373	1/1	0.88	0.12	57,57,57,57	0
56	MG	1A	3731	1/1	0.88	0.14	52,52,52,52	0
56	MG	2A	3509	1/1	0.88	0.15	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3825	1/1	0.88	0.10	79,79,79,79	0
56	MG	2A	3518	1/1	0.88	0.10	59,59,59,59	0
56	MG	2a	3090	1/1	0.88	0.23	69,69,69,69	0
56	MG	2A	3363	1/1	0.88	0.13	69,69,69,69	0
56	MG	2A	3521	1/1	0.88	0.32	79,79,79,79	0
56	MG	2A	3248	1/1	0.88	0.12	71,71,71,71	0
56	MG	2a	3103	1/1	0.88	0.21	81,81,81,81	0
56	MG	2a	3104	1/1	0.88	0.34	76,76,76,76	0
56	MG	2A	3090	1/1	0.88	0.16	56,56,56,56	0
56	MG	2A	3535	1/1	0.88	0.09	63,63,63,63	0
56	MG	1a	1775	1/1	0.88	0.09	88,88,88,88	0
56	MG	2A	3373	1/1	0.88	0.32	59,59,59,59	0
56	MG	1A	3374	1/1	0.88	0.34	66,66,66,66	0
56	MG	1a	1649	1/1	0.88	0.25	74,74,74,74	0
56	MG	2A	3571	1/1	0.88	0.18	56,56,56,56	0
56	MG	2A	3581	1/1	0.88	0.26	65,65,65,65	0
56	MG	1a	1654	1/1	0.88	0.18	70,70,70,70	0
56	MG	1B	3618	1/1	0.88	0.08	47,47,47,47	0
56	MG	1A	3417	1/1	0.88	0.23	65,65,65,65	0
56	MG	2A	3884	1/1	0.88	0.18	68,68,68,68	0
56	MG	1B	3623	1/1	0.88	0.15	59,59,59,59	0
56	MG	1B	3626	1/1	0.88	0.18	62,62,62,62	0
56	MG	2B	203	1/1	0.88	0.26	81,81,81,81	0
56	MG	2B	204	1/1	0.88	0.20	81,81,81,81	0
56	MG	1A	4004	1/1	0.88	0.11	39,39,39,39	0
56	MG	1A	3187	1/1	0.88	0.12	52,52,52,52	0
56	MG	2B	209	1/1	0.88	0.23	74,74,74,74	0
56	MG	2a	3137	1/1	0.88	0.29	71,71,71,71	0
56	MG	2a	3140	1/1	0.88	0.31	67,67,67,67	0
56	MG	1l	202	1/1	0.88	0.13	73,73,73,73	0
56	MG	2A	3388	1/1	0.88	0.34	68,68,68,68	0
56	MG	1A	3333	1/1	0.88	0.11	52,52,52,52	0
56	MG	1B	3635	1/1	0.88	0.14	72,72,72,72	0
56	MG	2a	3147	1/1	0.88	0.11	63,63,63,63	0
56	MG	2A	3283	1/1	0.88	0.20	75,75,75,75	0
56	MG	2A	3288	1/1	0.88	0.16	66,66,66,66	0
56	MG	2A	3635	1/1	0.88	0.16	67,67,67,67	0
56	MG	2a	3162	1/1	0.88	0.13	83,83,83,83	0
56	MG	2a	3166	1/1	0.88	0.10	78,78,78,78	0
56	MG	2a	3174	1/1	0.88	0.09	86,86,86,86	0
56	MG	2F	301	1/1	0.88	0.10	50,50,50,50	0
56	MG	2a	3180	1/1	0.88	0.10	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1674	1/1	0.88	0.23	82,82,82,82	0
56	MG	2A	3399	1/1	0.88	0.31	68,68,68,68	0
56	MG	1A	3334	1/1	0.88	0.24	69,69,69,69	0
56	MG	2A	3128	1/1	0.88	0.17	59,59,59,59	0
56	MG	2A	3296	1/1	0.88	0.43	78,78,78,78	0
56	MG	2V	202	1/1	0.88	0.11	71,71,71,71	0
56	MG	1A	3855	1/1	0.88	0.16	59,59,59,59	0
56	MG	2A	3673	1/1	0.88	0.18	76,76,76,76	0
56	MG	2a	3206	1/1	0.88	0.15	69,69,69,69	0
56	MG	2a	3207	1/1	0.88	0.16	68,68,68,68	0
56	MG	2A	3133	1/1	0.88	0.08	76,76,76,76	0
56	MG	1A	3482	1/1	0.88	0.17	63,63,63,63	0
56	MG	2a	3211	1/1	0.88	0.16	75,75,75,75	0
56	MG	1a	1686	1/1	0.88	0.27	81,81,81,81	0
56	MG	2A	3157	1/1	0.88	0.30	64,64,64,64	0
56	MG	2A	3159	1/1	0.88	0.20	65,65,65,65	0
56	MG	1A	3865	1/1	0.88	0.12	63,63,63,63	0
56	MG	2a	3005	1/1	0.88	0.33	77,77,77,77	0
56	MG	2a	3219	1/1	0.88	0.19	78,78,78,78	0
56	MG	2A	3168	1/1	0.88	0.23	67,67,67,67	0
56	MG	1a	1691	1/1	0.88	0.29	60,60,60,60	0
56	MG	1A	3657	1/1	0.88	0.11	69,69,69,69	0
56	MG	2A	3317	1/1	0.88	0.12	80,80,80,80	0
56	MG	2A	3421	1/1	0.88	0.22	55,55,55,55	0
56	MG	2A	3425	1/1	0.88	0.23	49,49,49,49	0
56	MG	2a	3013	1/1	0.88	0.25	72,72,72,72	0
56	MG	1A	3871	1/1	0.88	0.21	62,62,62,62	0
56	MG	2A	3431	1/1	0.88	0.16	56,56,56,56	0
56	MG	2a	3235	1/1	0.88	0.27	68,68,68,68	0
56	MG	2a	3236	1/1	0.88	0.21	72,72,72,72	0
56	MG	2a	3237	1/1	0.88	0.32	69,69,69,69	0
56	MG	2A	3180	1/1	0.88	0.18	54,54,54,54	0
56	MG	2a	3017	1/1	0.88	0.30	77,77,77,77	0
56	MG	1A	3760	1/1	0.88	0.16	44,44,44,44	0
56	MG	2l	202	1/1	0.88	0.24	79,79,79,79	0
56	MG	2A	3189	1/1	0.88	0.19	68,68,68,68	0
56	MG	1A	3764	1/1	0.88	0.23	58,58,58,58	0
56	MG	2A	3443	1/1	0.88	0.44	67,67,67,67	0
56	MG	2A	3193	1/1	0.88	0.23	73,73,73,73	0
56	MG	2t	201	1/1	0.88	0.21	62,62,62,62	0
56	MG	2A	3329	1/1	0.88	0.15	67,67,67,67	0
56	MG	2A	3731	1/1	0.88	0.13	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3133	1/1	0.88	0.17	58,58,58,58	0
56	MG	2a	3030	1/1	0.88	0.15	75,75,75,75	0
56	MG	2A	3333	1/1	0.88	0.12	69,69,69,69	0
56	MG	1A	3495	1/1	0.88	0.16	60,60,60,60	0
56	MG	2A	3739	1/1	0.88	0.12	62,62,62,62	0
56	MG	2A	3337	1/1	0.88	0.14	79,79,79,79	0
56	MG	1a	1709	1/1	0.88	0.23	65,65,65,65	0
56	MG	1A	3908	1/1	0.88	0.13	70,70,70,70	0
56	MG	1A	3079	1/1	0.88	0.13	60,60,60,60	0
56	MG	1A	3303	1/1	0.88	0.17	48,48,48,48	0
56	MG	1A	4088	1/1	0.88	0.17	61,61,61,61	0
56	MG	1a	1602	1/1	0.88	0.20	65,65,65,65	0
56	MG	2y	106	1/1	0.88	0.36	79,79,79,79	0
56	MG	2a	3049	1/1	0.88	0.24	72,72,72,72	0
56	MG	2A	3279	1/1	0.89	0.42	75,75,75,75	0
56	MG	2A	3744	1/1	0.89	0.12	76,76,76,76	0
56	MG	1A	3315	1/1	0.89	0.08	51,51,51,51	0
56	MG	2A	3055	1/1	0.89	0.29	73,73,73,73	0
56	MG	2A	3752	1/1	0.89	0.16	59,59,59,59	0
56	MG	2A	3057	1/1	0.89	0.14	72,72,72,72	0
56	MG	1B	3625	1/1	0.89	0.11	60,60,60,60	0
56	MG	2A	3060	1/1	0.89	0.16	63,63,63,63	0
56	MG	1A	3514	1/1	0.89	0.14	62,62,62,62	0
56	MG	2a	3071	1/1	0.89	0.12	76,76,76,76	0
56	MG	2A	3444	1/1	0.89	0.31	68,68,68,68	0
56	MG	2A	3781	1/1	0.89	0.16	72,72,72,72	0
56	MG	1A	3523	1/1	0.89	0.20	54,54,54,54	0
56	MG	1A	3150	1/1	0.89	0.13	51,51,51,51	0
56	MG	2A	3789	1/1	0.89	0.08	79,79,79,79	0
56	MG	2a	3087	1/1	0.89	0.21	65,65,65,65	0
56	MG	2A	3065	1/1	0.89	0.11	78,78,78,78	0
56	MG	2A	3302	1/1	0.89	0.34	76,76,76,76	0
56	MG	2a	3091	1/1	0.89	0.16	72,72,72,72	0
56	MG	1A	3024	1/1	0.89	0.16	58,58,58,58	0
56	MG	2A	3468	1/1	0.89	0.21	70,70,70,70	0
56	MG	1A	3440	1/1	0.89	0.27	59,59,59,59	0
56	MG	2A	3307	1/1	0.89	0.22	70,70,70,70	0
56	MG	1A	3454	1/1	0.89	0.11	60,60,60,60	0
56	MG	1a	1705	1/1	0.89	0.11	57,57,57,57	0
56	MG	2A	3819	1/1	0.89	0.12	62,62,62,62	0
56	MG	1a	1708	1/1	0.89	0.34	74,74,74,74	0
56	MG	1E	317	1/1	0.89	0.07	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	2A	3831	1/1	0.89	0.10	58,58,58,58	0
56	MG	2A	3838	1/1	0.89	0.09	74,74,74,74	0
56	MG	1G	204	1/1	0.89	0.10	60,60,60,60	0
56	MG	2A	3486	1/1	0.89	0.14	64,64,64,64	0
56	MG	2A	3489	1/1	0.89	0.17	77,77,77,77	0
56	MG	2a	3116	1/1	0.89	0.17	71,71,71,71	0
56	MG	1A	3455	1/1	0.89	0.11	60,60,60,60	0
56	MG	1A	3457	1/1	0.89	0.15	71,71,71,71	0
56	MG	1A	3458	1/1	0.89	0.17	55,55,55,55	0
56	MG	1U	203	1/1	0.89	0.15	38,38,38,38	0
56	MG	1A	3251	1/1	0.89	0.08	58,58,58,58	0
56	MG	1a	1723	1/1	0.89	0.31	63,63,63,63	0
56	MG	2A	3324	1/1	0.89	0.35	75,75,75,75	0
56	MG	1a	1736	1/1	0.89	0.10	72,72,72,72	0
56	MG	1A	3330	1/1	0.89	0.13	59,59,59,59	0
56	MG	1A	3083	1/1	0.89	0.23	44,44,44,44	0
56	MG	1Y	202	1/1	0.89	0.12	74,74,74,74	0
56	MG	2a	3139	1/1	0.89	0.31	69,69,69,69	0
56	MG	1a	1753	1/1	0.89	0.08	70,70,70,70	0
56	MG	1A	3787	1/1	0.89	0.11	46,46,46,46	0
56	MG	1A	3026	1/1	0.89	0.18	64,64,64,64	0
56	MG	1a	1759	1/1	0.89	0.30	71,71,71,71	0
56	MG	1a	1760	1/1	0.89	0.13	73,73,73,73	0
56	MG	1A	3559	1/1	0.89	0.17	63,63,63,63	0
56	MG	1A	4012	1/1	0.89	0.15	57,57,57,57	0
56	MG	1a	1766	1/1	0.89	0.13	73,73,73,73	0
56	MG	1A	3300	1/1	0.89	0.19	54,54,54,54	0
56	MG	1a	1776	1/1	0.89	0.11	77,77,77,77	0
56	MG	2a	3165	1/1	0.89	0.10	88,88,88,88	0
56	MG	1a	1779	1/1	0.89	0.10	72,72,72,72	0
56	MG	2a	3171	1/1	0.89	0.10	74,74,74,74	0
56	MG	1A	3027	1/1	0.89	0.17	74,74,74,74	0
56	MG	2B	218	1/1	0.89	0.15	71,71,71,71	0
56	MG	2A	3586	1/1	0.89	0.17	56,56,56,56	0
56	MG	1a	1784	1/1	0.89	0.11	66,66,66,66	0
56	MG	2a	3182	1/1	0.89	0.13	83,83,83,83	0
56	MG	17	104	1/1	0.89	0.14	59,59,59,59	0
56	MG	2A	3599	1/1	0.89	0.15	68,68,68,68	0
56	MG	2A	3354	1/1	0.89	0.24	69,69,69,69	0
56	MG	2A	3602	1/1	0.89	0.10	65,65,65,65	0
56	MG	2a	3199	1/1	0.89	0.28	71,71,71,71	0
56	MG	1A	3259	1/1	0.89	0.20	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3182	1/1	0.89	0.22	67,67,67,67	0
56	MG	2T	201	1/1	0.89	0.13	65,65,65,65	0
56	MG	2A	3184	1/1	0.89	0.28	75,75,75,75	0
56	MG	1A	3576	1/1	0.89	0.15	55,55,55,55	0
56	MG	1A	3820	1/1	0.89	0.10	70,70,70,70	0
56	MG	1A	3587	1/1	0.89	0.12	52,52,52,52	0
56	MG	2A	3195	1/1	0.89	0.29	73,73,73,73	0
56	MG	1A	3408	1/1	0.89	0.22	64,64,64,64	0
56	MG	2A	3198	1/1	0.89	0.11	61,61,61,61	0
56	MG	1b	301	1/1	0.89	0.17	78,78,78,78	0
56	MG	2A	3645	1/1	0.89	0.18	52,52,52,52	0
56	MG	1A	3309	1/1	0.89	0.17	66,66,66,66	0
56	MG	1A	4055	1/1	0.89	0.09	55,55,55,55	0
56	MG	1A	3311	1/1	0.89	0.38	71,71,71,71	0
56	MG	1A	3486	1/1	0.89	0.22	54,54,54,54	0
56	MG	1n	102	1/1	0.89	0.21	68,68,68,68	0
56	MG	2A	3381	1/1	0.89	0.26	65,65,65,65	0
56	MG	1a	1640	1/1	0.89	0.23	74,74,74,74	0
56	MG	1A	4063	1/1	0.89	0.13	59,59,59,59	0
56	MG	1A	3313	1/1	0.89	0.25	63,63,63,63	0
56	MG	2A	3682	1/1	0.89	0.14	63,63,63,63	0
56	MG	1A	3650	1/1	0.89	0.16	61,61,61,61	0
56	MG	2A	3221	1/1	0.89	0.17	63,63,63,63	0
56	MG	1a	1650	1/1	0.89	0.35	76,76,76,76	0
56	MG	1A	3314	1/1	0.89	0.29	63,63,63,63	0
56	MG	1A	3420	1/1	0.89	0.10	49,49,49,49	0
56	MG	1A	3670	1/1	0.89	0.13	64,64,64,64	0
56	MG	1A	3506	1/1	0.89	0.21	50,50,50,50	0
56	MG	2A	3701	1/1	0.89	0.19	62,62,62,62	0
56	MG	1a	1662	1/1	0.89	0.14	67,67,67,67	0
56	MG	2A	3242	1/1	0.89	0.16	53,53,53,53	0
56	MG	1A	3507	1/1	0.89	0.11	67,67,67,67	0
56	MG	1A	3869	1/1	0.89	0.09	58,58,58,58	0
56	MG	1A	3421	1/1	0.89	0.25	72,72,72,72	0
56	MG	1A	3872	1/1	0.89	0.16	74,74,74,74	0
56	MG	2A	3711	1/1	0.89	0.11	85,85,85,85	0
56	MG	1A	3700	1/1	0.89	0.12	73,73,73,73	0
56	MG	2A	3005	1/1	0.89	0.27	67,67,67,67	0
56	MG	2w	103	1/1	0.89	0.24	86,86,86,86	0
56	MG	1B	3602	1/1	0.89	0.25	57,57,57,57	0
56	MG	2A	3267	1/1	0.89	0.37	69,69,69,69	0
56	MG	1A	3875	1/1	0.89	0.10	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1681	1/1	0.89	0.18	79,79,79,79	0
56	MG	2x	102	1/1	0.89	0.20	74,74,74,74	0
56	MG	2a	3045	1/1	0.89	0.28	71,71,71,71	0
56	MG	2A	3028	1/1	0.89	0.37	61,61,61,61	0
56	MG	1A	3510	1/1	0.89	0.11	65,65,65,65	0
56	MG	2a	3051	1/1	0.89	0.17	82,82,82,82	0
56	MG	1B	3621	1/1	0.89	0.09	57,57,57,57	0
56	MG	1a	1685	1/1	0.89	0.16	62,62,62,62	0
56	MG	2A	3422	1/1	0.89	0.18	54,54,54,54	0
56	MG	1A	3890	1/1	0.89	0.13	38,38,38,38	0
57	K	2x	101	1/1	0.89	0.19	83,83,83,83	0
56	MG	2A	3270	1/1	0.90	0.26	67,67,67,67	0
56	MG	1A	3358	1/1	0.90	0.16	58,58,58,58	0
56	MG	2a	3046	1/1	0.90	0.26	71,71,71,71	0
56	MG	1A	3608	1/1	0.90	0.13	56,56,56,56	0
56	MG	1A	4059	1/1	0.90	0.07	19,19,19,19	0
56	MG	2A	3276	1/1	0.90	0.11	68,68,68,68	0
56	MG	1a	1724	1/1	0.90	0.23	66,66,66,66	0
56	MG	2A	3067	1/1	0.90	0.27	64,64,64,64	0
56	MG	2A	3420	1/1	0.90	0.30	57,57,57,57	0
56	MG	1A	3624	1/1	0.90	0.08	13,13,13,13	0
56	MG	1a	1737	1/1	0.90	0.18	63,63,63,63	0
56	MG	2a	3059	1/1	0.90	0.15	88,88,88,88	0
56	MG	2A	3423	1/1	0.90	0.28	66,66,66,66	0
56	MG	2A	3282	1/1	0.90	0.12	63,63,63,63	0
56	MG	18	107	1/1	0.90	0.11	68,68,68,68	0
56	MG	2a	3064	1/1	0.90	0.08	68,68,68,68	0
56	MG	2A	3429	1/1	0.90	0.35	63,63,63,63	0
56	MG	2A	3430	1/1	0.90	0.20	44,44,44,44	0
56	MG	1A	4066	1/1	0.90	0.06	26,26,26,26	0
56	MG	1A	4069	1/1	0.90	0.10	61,61,61,61	0
56	MG	2A	3748	1/1	0.90	0.10	65,65,65,65	0
56	MG	1a	1603	1/1	0.90	0.15	70,70,70,70	0
56	MG	2a	3074	1/1	0.90	0.24	76,76,76,76	0
56	MG	2A	3095	1/1	0.90	0.19	49,49,49,49	0
56	MG	1a	1614	1/1	0.90	0.23	72,72,72,72	0
56	MG	1A	3359	1/1	0.90	0.09	61,61,61,61	0
56	MG	2A	3762	1/1	0.90	0.15	69,69,69,69	0
56	MG	2A	3298	1/1	0.90	0.37	71,71,71,71	0
56	MG	1a	1616	1/1	0.90	0.17	68,68,68,68	0
56	MG	1a	1617	1/1	0.90	0.15	63,63,63,63	0
56	MG	2A	3779	1/1	0.90	0.13	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1624	1/1	0.90	0.09	60,60,60,60	0
56	MG	2A	3457	1/1	0.90	0.28	63,63,63,63	0
56	MG	2a	3097	1/1	0.90	0.27	66,66,66,66	0
56	MG	2a	3098	1/1	0.90	0.19	83,83,83,83	0
56	MG	1A	3156	1/1	0.90	0.11	52,52,52,52	0
56	MG	1a	1628	1/1	0.90	0.27	62,62,62,62	0
56	MG	2A	3462	1/1	0.90	0.26	56,56,56,56	0
56	MG	2A	3464	1/1	0.90	0.21	61,61,61,61	0
56	MG	2A	3808	1/1	0.90	0.11	52,52,52,52	0
56	MG	2A	3308	1/1	0.90	0.13	68,68,68,68	0
56	MG	1a	1769	1/1	0.90	0.10	69,69,69,69	0
56	MG	1a	1630	1/1	0.90	0.32	73,73,73,73	0
56	MG	1A	3244	1/1	0.90	0.23	70,70,70,70	0
56	MG	1A	3011	1/1	0.90	0.14	51,51,51,51	0
56	MG	1A	3799	1/1	0.90	0.13	63,63,63,63	0
56	MG	1A	3061	1/1	0.90	0.11	52,52,52,52	0
56	MG	1A	3269	1/1	0.90	0.13	51,51,51,51	0
56	MG	1A	3916	1/1	0.90	0.12	58,58,58,58	0
56	MG	1A	3923	1/1	0.90	0.11	42,42,42,42	0
56	MG	2A	3140	1/1	0.90	0.09	68,68,68,68	0
56	MG	2A	3493	1/1	0.90	0.16	68,68,68,68	0
56	MG	2A	3850	1/1	0.90	0.13	81,81,81,81	0
56	MG	1A	3289	1/1	0.90	0.18	57,57,57,57	0
56	MG	2A	3323	1/1	0.90	0.16	65,65,65,65	0
56	MG	2A	3854	1/1	0.90	0.10	68,68,68,68	0
56	MG	2a	3131	1/1	0.90	0.16	72,72,72,72	0
56	MG	2a	3132	1/1	0.90	0.19	63,63,63,63	0
56	MG	2A	3858	1/1	0.90	0.15	45,45,45,45	0
56	MG	1a	1811	1/1	0.90	0.34	80,80,80,80	0
56	MG	1A	3930	1/1	0.90	0.10	59,59,59,59	0
56	MG	1A	3932	1/1	0.90	0.09	37,37,37,37	0
56	MG	2A	3167	1/1	0.90	0.31	70,70,70,70	0
56	MG	2A	3330	1/1	0.90	0.10	66,66,66,66	0
56	MG	1a	1815	1/1	0.90	0.09	58,58,58,58	0
56	MG	2A	3172	1/1	0.90	0.18	73,73,73,73	0
56	MG	2A	3511	1/1	0.90	0.13	57,57,57,57	0
56	MG	2a	3144	1/1	0.90	0.14	66,66,66,66	0
56	MG	2A	3878	1/1	0.90	0.10	77,77,77,77	0
56	MG	2A	3513	1/1	0.90	0.12	63,63,63,63	0
56	MG	2A	3516	1/1	0.90	0.10	73,73,73,73	0
56	MG	1A	3493	1/1	0.90	0.17	55,55,55,55	0
56	MG	2A	3335	1/1	0.90	0.19	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	2a	3159	1/1	0.90	0.11	81,81,81,81	0
56	MG	1B	3615	1/1	0.90	0.10	56,56,56,56	0
56	MG	1a	1657	1/1	0.90	0.27	77,77,77,77	0
56	MG	2B	202	1/1	0.90	0.11	66,66,66,66	0
56	MG	2a	3167	1/1	0.90	0.18	70,70,70,70	0
56	MG	1A	3951	1/1	0.90	0.11	61,61,61,61	0
56	MG	1A	3376	1/1	0.90	0.23	63,63,63,63	0
56	MG	1A	3497	1/1	0.90	0.19	63,63,63,63	0
56	MG	1a	1666	1/1	0.90	0.17	68,68,68,68	0
56	MG	1A	3381	1/1	0.90	0.29	66,66,66,66	0
56	MG	1v	101	1/1	0.90	0.26	78,78,78,78	0
56	MG	2a	3188	1/1	0.90	0.15	65,65,65,65	0
56	MG	2B	212	1/1	0.90	0.23	75,75,75,75	0
56	MG	2a	3192	1/1	0.90	0.26	76,76,76,76	0
56	MG	1A	3838	1/1	0.90	0.20	61,61,61,61	0
56	MG	2A	3575	1/1	0.90	0.12	70,70,70,70	0
56	MG	2A	3194	1/1	0.90	0.22	79,79,79,79	0
56	MG	2A	3582	1/1	0.90	0.19	81,81,81,81	0
56	MG	1A	3978	1/1	0.90	0.13	65,65,65,65	0
56	MG	1A	3984	1/1	0.90	0.15	73,73,73,73	0
56	MG	1A	3340	1/1	0.90	0.12	61,61,61,61	0
56	MG	2E	305	1/1	0.90	0.18	69,69,69,69	0
56	MG	1A	3992	1/1	0.90	0.09	40,40,40,40	0
56	MG	2A	3594	1/1	0.90	0.26	68,68,68,68	0
56	MG	1A	3843	1/1	0.90	0.09	53,53,53,53	0
56	MG	2A	3204	1/1	0.90	0.24	63,63,63,63	0
56	MG	1B	3636	1/1	0.90	0.14	62,62,62,62	0
56	MG	2A	3603	1/1	0.90	0.22	62,62,62,62	0
56	MG	2T	202	1/1	0.90	0.19	66,66,66,66	0
56	MG	1A	4000	1/1	0.90	0.11	59,59,59,59	0
56	MG	1E	303	1/1	0.90	0.27	56,56,56,56	0
56	MG	2A	3365	1/1	0.90	0.16	70,70,70,70	0
56	MG	2A	3612	1/1	0.90	0.18	74,74,74,74	0
56	MG	2A	3214	1/1	0.90	0.10	61,61,61,61	0
56	MG	2A	3369	1/1	0.90	0.17	65,65,65,65	0
56	MG	1A	3718	1/1	0.90	0.11	53,53,53,53	0
56	MG	1A	3721	1/1	0.90	0.20	64,64,64,64	0
56	MG	29	101	1/1	0.90	0.23	73,73,73,73	0
56	MG	2A	3624	1/1	0.90	0.11	40,40,40,40	0
56	MG	1A	3393	1/1	0.90	0.11	58,58,58,58	0
56	MG	1A	3149	1/1	0.90	0.12	43,43,43,43	0
56	MG	1A	3852	1/1	0.90	0.18	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3636	1/1	0.90	0.20	60,60,60,60	0
56	MG	1S	203	1/1	0.90	0.12	76,76,76,76	0
56	MG	1T	201	1/1	0.90	0.20	70,70,70,70	0
56	MG	2a	3239	1/1	0.90	0.23	65,65,65,65	0
56	MG	2d	302	1/1	0.90	0.16	70,70,70,70	0
56	MG	2a	3010	1/1	0.90	0.17	68,68,68,68	0
56	MG	2A	3657	1/1	0.90	0.08	64,64,64,64	0
56	MG	2A	3018	1/1	0.90	0.11	57,57,57,57	0
56	MG	2A	3230	1/1	0.90	0.15	59,59,59,59	0
56	MG	1A	3294	1/1	0.90	0.14	58,58,58,58	0
56	MG	1A	3733	1/1	0.90	0.17	70,70,70,70	0
56	MG	2A	3029	1/1	0.90	0.14	71,71,71,71	0
56	MG	1V	202	1/1	0.90	0.25	53,53,53,53	0
56	MG	2a	3018	1/1	0.90	0.21	74,74,74,74	0
56	MG	2A	3674	1/1	0.90	0.11	63,63,63,63	0
56	MG	2A	3241	1/1	0.90	0.14	62,62,62,62	0
56	MG	1A	3856	1/1	0.90	0.10	59,59,59,59	0
56	MG	2A	3393	1/1	0.90	0.24	78,78,78,78	0
56	MG	2A	3039	1/1	0.90	0.23	70,70,70,70	0
56	MG	1A	3195	1/1	0.90	0.28	64,64,64,64	0
56	MG	2A	3045	1/1	0.90	0.21	75,75,75,75	0
56	MG	2A	3051	1/1	0.90	0.18	74,74,74,74	0
56	MG	2A	3257	1/1	0.90	0.14	79,79,79,79	0
56	MG	2x	104	1/1	0.90	0.25	77,77,77,77	0
56	MG	2A	3401	1/1	0.90	0.12	77,77,77,77	0
56	MG	1A	3020	1/1	0.90	0.15	51,51,51,51	0
56	MG	2A	3262	1/1	0.90	0.12	68,68,68,68	0
56	MG	1A	3356	1/1	0.90	0.17	66,66,66,66	0
56	MG	1A	3745	1/1	0.90	0.08	60,60,60,60	0
56	MG	2a	3039	1/1	0.90	0.30	68,68,68,68	0
56	MG	10	107	1/1	0.90	0.15	68,68,68,68	0
56	MG	1A	3525	1/1	0.90	0.19	61,61,61,61	0
56	MG	1a	1715	1/1	0.90	0.10	59,59,59,59	0
56	MG	2a	3033	1/1	0.91	0.11	85,85,85,85	0
56	MG	1a	1696	1/1	0.91	0.38	69,69,69,69	0
56	MG	2A	3695	1/1	0.91	0.22	62,62,62,62	0
56	MG	2A	3696	1/1	0.91	0.20	74,74,74,74	0
56	MG	2a	3037	1/1	0.91	0.23	65,65,65,65	0
56	MG	2A	3697	1/1	0.91	0.20	74,74,74,74	0
56	MG	1O	204	1/1	0.91	0.16	65,65,65,65	0
56	MG	2A	3259	1/1	0.91	0.13	77,77,77,77	0
56	MG	2A	3261	1/1	0.91	0.17	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1O	205	1/1	0.91	0.13	71,71,71,71	0
56	MG	1A	3431	1/1	0.91	0.21	58,58,58,58	0
56	MG	1a	1702	1/1	0.91	0.21	69,69,69,69	0
56	MG	2A	3707	1/1	0.91	0.11	54,54,54,54	0
56	MG	1A	3841	1/1	0.91	0.14	43,43,43,43	0
56	MG	1a	1704	1/1	0.91	0.23	63,63,63,63	0
56	MG	1S	202	1/1	0.91	0.17	60,60,60,60	0
56	MG	1a	1706	1/1	0.91	0.10	66,66,66,66	0
56	MG	1A	4009	1/1	0.91	0.09	74,74,74,74	0
56	MG	1A	3295	1/1	0.91	0.13	70,70,70,70	0
56	MG	1T	202	1/1	0.91	0.14	57,57,57,57	0
56	MG	2A	3718	1/1	0.91	0.38	80,80,80,80	0
56	MG	1A	3366	1/1	0.91	0.10	51,51,51,51	0
56	MG	2a	3061	1/1	0.91	0.13	70,70,70,70	0
56	MG	1A	4018	1/1	0.91	0.07	50,50,50,50	0
56	MG	1A	3518	1/1	0.91	0.13	58,58,58,58	0
56	MG	2A	3730	1/1	0.91	0.13	54,54,54,54	0
56	MG	2A	3089	1/1	0.91	0.14	61,61,61,61	0
56	MG	1A	4027	1/1	0.91	0.14	59,59,59,59	0
56	MG	1A	3686	1/1	0.91	0.15	49,49,49,49	0
56	MG	1A	3296	1/1	0.91	0.12	62,62,62,62	0
56	MG	2A	3284	1/1	0.91	0.10	62,62,62,62	0
56	MG	2A	3433	1/1	0.91	0.41	71,71,71,71	0
56	MG	2A	3286	1/1	0.91	0.12	72,72,72,72	0
56	MG	2A	3438	1/1	0.91	0.24	75,75,75,75	0
56	MG	2a	3080	1/1	0.91	0.33	70,70,70,70	0
56	MG	1A	3045	1/1	0.91	0.07	34,34,34,34	0
56	MG	1A	3194	1/1	0.91	0.25	34,34,34,34	0
56	MG	1A	3302	1/1	0.91	0.17	41,41,41,41	0
56	MG	1A	3711	1/1	0.91	0.15	52,52,52,52	0
56	MG	2a	3086	1/1	0.91	0.12	68,68,68,68	0
56	MG	2A	3754	1/1	0.91	0.10	68,68,68,68	0
56	MG	2A	3295	1/1	0.91	0.10	69,69,69,69	0
56	MG	2A	3447	1/1	0.91	0.17	55,55,55,55	0
56	MG	2A	3448	1/1	0.91	0.26	57,57,57,57	0
56	MG	2A	3765	1/1	0.91	0.11	51,51,51,51	0
56	MG	2a	3096	1/1	0.91	0.19	67,67,67,67	0
56	MG	1A	3859	1/1	0.91	0.18	50,50,50,50	0
56	MG	2A	3770	1/1	0.91	0.13	67,67,67,67	0
56	MG	2A	3451	1/1	0.91	0.17	58,58,58,58	0
56	MG	2A	3455	1/1	0.91	0.17	68,68,68,68	0
56	MG	1a	1740	1/1	0.91	0.14	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	4048	1/1	0.91	0.10	51,51,51,51	0
56	MG	2A	3299	1/1	0.91	0.24	77,77,77,77	0
56	MG	2A	3783	1/1	0.91	0.14	79,79,79,79	0
56	MG	2A	3108	1/1	0.91	0.32	56,56,56,56	0
56	MG	2A	3301	1/1	0.91	0.35	73,73,73,73	0
56	MG	2A	3800	1/1	0.91	0.11	80,80,80,80	0
56	MG	1A	3335	1/1	0.91	0.39	68,68,68,68	0
56	MG	16	101	1/1	0.91	0.15	49,49,49,49	0
56	MG	1A	3258	1/1	0.91	0.09	41,41,41,41	0
56	MG	1A	3465	1/1	0.91	0.13	58,58,58,58	0
56	MG	1A	3141	1/1	0.91	0.11	51,51,51,51	0
56	MG	2A	3812	1/1	0.91	0.13	77,77,77,77	0
56	MG	1A	3725	1/1	0.91	0.09	48,48,48,48	0
56	MG	2a	3121	1/1	0.91	0.18	79,79,79,79	0
56	MG	2A	3477	1/1	0.91	0.10	69,69,69,69	0
56	MG	1A	3388	1/1	0.91	0.23	66,66,66,66	0
56	MG	2A	3127	1/1	0.91	0.08	77,77,77,77	0
56	MG	1a	1604	1/1	0.91	0.14	67,67,67,67	0
56	MG	1A	3543	1/1	0.91	0.17	47,47,47,47	0
56	MG	2a	3130	1/1	0.91	0.16	65,65,65,65	0
56	MG	2A	3487	1/1	0.91	0.27	65,65,65,65	0
56	MG	1A	3469	1/1	0.91	0.15	73,73,73,73	0
56	MG	2A	3834	1/1	0.91	0.14	62,62,62,62	0
56	MG	2A	3134	1/1	0.91	0.12	52,52,52,52	0
56	MG	2A	3843	1/1	0.91	0.15	59,59,59,59	0
56	MG	1a	1772	1/1	0.91	0.11	79,79,79,79	0
56	MG	1A	3876	1/1	0.91	0.16	43,43,43,43	0
56	MG	2A	3142	1/1	0.91	0.28	68,68,68,68	0
56	MG	1A	4081	1/1	0.91	0.09	58,58,58,58	0
56	MG	2A	3148	1/1	0.91	0.30	67,67,67,67	0
56	MG	2A	3149	1/1	0.91	0.20	45,45,45,45	0
56	MG	2A	3154	1/1	0.91	0.14	69,69,69,69	0
56	MG	2a	3145	1/1	0.91	0.19	71,71,71,71	0
56	MG	2A	3860	1/1	0.91	0.07	43,43,43,43	0
56	MG	1a	1622	1/1	0.91	0.35	73,73,73,73	0
56	MG	1A	3339	1/1	0.91	0.12	56,56,56,56	0
56	MG	2a	3149	1/1	0.91	0.12	83,83,83,83	0
56	MG	1A	3395	1/1	0.91	0.33	43,43,43,43	0
56	MG	2A	3871	1/1	0.91	0.15	73,73,73,73	0
56	MG	2a	3156	1/1	0.91	0.07	82,82,82,82	0
56	MG	2a	3158	1/1	0.91	0.09	83,83,83,83	0
56	MG	1a	1785	1/1	0.91	0.13	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1627	1/1	0.91	0.20	65,65,65,65	0
56	MG	1A	3146	1/1	0.91	0.26	46,46,46,46	0
56	MG	1a	1629	1/1	0.91	0.09	61,61,61,61	0
56	MG	1A	3558	1/1	0.91	0.13	71,71,71,71	0
56	MG	1A	3214	1/1	0.91	0.11	62,62,62,62	0
56	MG	1A	3099	1/1	0.91	0.11	44,44,44,44	0
56	MG	2A	3530	1/1	0.91	0.13	61,61,61,61	0
56	MG	2A	3340	1/1	0.91	0.20	63,63,63,63	0
56	MG	1A	3400	1/1	0.91	0.25	39,39,39,39	0
56	MG	1A	3073	1/1	0.91	0.33	65,65,65,65	0
56	MG	2A	3183	1/1	0.91	0.10	56,56,56,56	0
56	MG	2A	3546	1/1	0.91	0.21	60,60,60,60	0
56	MG	1A	3483	1/1	0.91	0.14	53,53,53,53	0
56	MG	2A	3565	1/1	0.91	0.11	75,75,75,75	0
56	MG	2A	3187	1/1	0.91	0.25	67,67,67,67	0
56	MG	1d	301	1/1	0.91	0.36	66,66,66,66	0
56	MG	1B	3601	1/1	0.91	0.16	55,55,55,55	0
56	MG	1A	3410	1/1	0.91	0.15	57,57,57,57	0
56	MG	2a	3202	1/1	0.91	0.22	71,71,71,71	0
56	MG	1a	1644	1/1	0.91	0.15	73,73,73,73	0
56	MG	2a	3204	1/1	0.91	0.18	72,72,72,72	0
56	MG	2A	3584	1/1	0.91	0.17	70,70,70,70	0
56	MG	2B	215	1/1	0.91	0.17	73,73,73,73	0
56	MG	1A	3593	1/1	0.91	0.28	50,50,50,50	0
56	MG	1B	3612	1/1	0.91	0.32	66,66,66,66	0
56	MG	2A	3357	1/1	0.91	0.11	68,68,68,68	0
56	MG	1B	3614	1/1	0.91	0.11	59,59,59,59	0
56	MG	2A	3199	1/1	0.91	0.22	67,67,67,67	0
56	MG	2a	3213	1/1	0.91	0.12	72,72,72,72	0
56	MG	2A	3597	1/1	0.91	0.16	71,71,71,71	0
56	MG	2a	3215	1/1	0.91	0.08	71,71,71,71	0
56	MG	2E	307	1/1	0.91	0.16	74,74,74,74	0
56	MG	2E	308	1/1	0.91	0.13	68,68,68,68	0
56	MG	1A	3411	1/1	0.91	0.18	53,53,53,53	0
56	MG	1A	3106	1/1	0.91	0.39	42,42,42,42	0
56	MG	2a	3220	1/1	0.91	0.20	75,75,75,75	0
56	MG	1A	3601	1/1	0.91	0.20	70,70,70,70	0
56	MG	1A	3954	1/1	0.91	0.07	57,57,57,57	0
56	MG	2A	3366	1/1	0.91	0.18	67,67,67,67	0
56	MG	2a	3224	1/1	0.91	0.11	74,74,74,74	0
56	MG	1A	3956	1/1	0.91	0.09	61,61,61,61	0
56	MG	2A	3210	1/1	0.91	0.14	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3963	1/1	0.91	0.10	55,55,55,55	0
56	MG	2A	3213	1/1	0.91	0.13	69,69,69,69	0
56	MG	1a	1665	1/1	0.91	0.07	74,74,74,74	0
56	MG	1A	3354	1/1	0.91	0.11	61,61,61,61	0
56	MG	1A	3317	1/1	0.91	0.25	59,59,59,59	0
56	MG	1A	3121	1/1	0.91	0.18	53,53,53,53	0
56	MG	1A	3618	1/1	0.91	0.15	46,46,46,46	0
56	MG	27	101	1/1	0.91	0.19	60,60,60,60	0
56	MG	27	102	1/1	0.91	0.12	57,57,57,57	0
56	MG	2a	3240	1/1	0.91	0.14	75,75,75,75	0
56	MG	2A	3626	1/1	0.91	0.10	56,56,56,56	0
56	MG	1A	3062	1/1	0.91	0.25	59,59,59,59	0
56	MG	2A	3631	1/1	0.91	0.15	58,58,58,58	0
56	MG	2A	3632	1/1	0.91	0.20	77,77,77,77	0
56	MG	1A	3980	1/1	0.91	0.13	74,74,74,74	0
56	MG	1A	3821	1/1	0.91	0.18	60,60,60,60	0
56	MG	2A	3642	1/1	0.91	0.10	61,61,61,61	0
56	MG	2A	3384	1/1	0.91	0.39	75,75,75,75	0
56	MG	2r	102	1/1	0.91	0.08	82,82,82,82	0
56	MG	2A	3225	1/1	0.91	0.15	65,65,65,65	0
56	MG	1a	1678	1/1	0.91	0.14	55,55,55,55	0
56	MG	1D	312	1/1	0.91	0.15	38,38,38,38	0
56	MG	2A	3662	1/1	0.91	0.23	71,71,71,71	0
56	MG	2A	3664	1/1	0.91	0.08	70,70,70,70	0
56	MG	1A	3626	1/1	0.91	0.14	40,40,40,40	0
56	MG	2A	3667	1/1	0.91	0.14	64,64,64,64	0
56	MG	2A	3389	1/1	0.91	0.12	71,71,71,71	0
56	MG	2A	3390	1/1	0.91	0.16	65,65,65,65	0
56	MG	1E	311	1/1	0.91	0.11	61,61,61,61	0
56	MG	1E	314	1/1	0.91	0.09	69,69,69,69	0
56	MG	1a	1684	1/1	0.91	0.24	80,80,80,80	0
56	MG	2A	3239	1/1	0.91	0.26	65,65,65,65	0
56	MG	1A	3327	1/1	0.91	0.30	62,62,62,62	0
56	MG	1F	311	1/1	0.91	0.14	49,49,49,49	0
56	MG	2A	3683	1/1	0.91	0.14	63,63,63,63	0
56	MG	1F	313	1/1	0.91	0.14	60,60,60,60	0
56	MG	1A	3834	1/1	0.91	0.13	47,47,47,47	0
56	MG	1N	201	1/1	0.91	0.24	57,57,57,57	0
56	MG	1A	3361	1/1	0.91	0.12	55,55,55,55	0
56	MG	2A	3693	1/1	0.91	0.14	70,70,70,70	0
56	MG	1A	3511	1/1	0.92	0.09	54,54,54,54	0
56	MG	2A	3656	1/1	0.92	0.12	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	10	108	1/1	0.92	0.08	53,53,53,53	0
56	MG	1A	4028	1/1	0.92	0.08	54,54,54,54	0
56	MG	2A	3370	1/1	0.92	0.16	74,74,74,74	0
56	MG	1A	4029	1/1	0.92	0.07	55,55,55,55	0
56	MG	1A	3443	1/1	0.92	0.08	74,74,74,74	0
56	MG	1A	3260	1/1	0.92	0.10	72,72,72,72	0
56	MG	2a	3021	1/1	0.92	0.16	89,89,89,89	0
56	MG	2a	3022	1/1	0.92	0.19	68,68,68,68	0
56	MG	2A	3668	1/1	0.92	0.10	63,63,63,63	0
56	MG	1A	3665	1/1	0.92	0.11	38,38,38,38	0
56	MG	2A	3186	1/1	0.92	0.12	54,54,54,54	0
56	MG	1A	3049	1/1	0.92	0.17	54,54,54,54	0
56	MG	1A	3519	1/1	0.92	0.12	63,63,63,63	0
56	MG	19	101	1/1	0.92	0.19	59,59,59,59	0
56	MG	2a	3029	1/1	0.92	0.14	65,65,65,65	0
56	MG	2A	3192	1/1	0.92	0.19	67,67,67,67	0
56	MG	2A	3677	1/1	0.92	0.09	64,64,64,64	0
56	MG	1A	3521	1/1	0.92	0.27	46,46,46,46	0
56	MG	1A	4045	1/1	0.92	0.07	40,40,40,40	0
56	MG	1a	1799	1/1	0.92	0.08	77,77,77,77	0
56	MG	2A	3684	1/1	0.92	0.14	71,71,71,71	0
56	MG	2A	3686	1/1	0.92	0.10	56,56,56,56	0
56	MG	1A	3391	1/1	0.92	0.26	32,32,32,32	0
56	MG	1A	3342	1/1	0.92	0.23	53,53,53,53	0
56	MG	1a	1607	1/1	0.92	0.32	77,77,77,77	0
56	MG	2A	3690	1/1	0.92	0.16	84,84,84,84	0
56	MG	2A	3200	1/1	0.92	0.18	70,70,70,70	0
56	MG	1A	3101	1/1	0.92	0.09	39,39,39,39	0
56	MG	2A	3202	1/1	0.92	0.39	73,73,73,73	0
56	MG	1A	3703	1/1	0.92	0.09	46,46,46,46	0
56	MG	2a	3047	1/1	0.92	0.14	67,67,67,67	0
56	MG	1A	3461	1/1	0.92	0.09	56,56,56,56	0
56	MG	1A	3163	1/1	0.92	0.19	45,45,45,45	0
56	MG	1A	3713	1/1	0.92	0.11	42,42,42,42	0
56	MG	2A	3699	1/1	0.92	0.12	59,59,59,59	0
56	MG	2A	3208	1/1	0.92	0.15	67,67,67,67	0
56	MG	2A	3209	1/1	0.92	0.09	58,58,58,58	0
56	MG	1a	1623	1/1	0.92	0.25	67,67,67,67	0
56	MG	1A	4064	1/1	0.92	0.15	41,41,41,41	0
56	MG	1A	3868	1/1	0.92	0.13	51,51,51,51	0
56	MG	1A	3715	1/1	0.92	0.10	40,40,40,40	0
56	MG	1A	3267	1/1	0.92	0.19	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3268	1/1	0.92	0.32	56,56,56,56	0
56	MG	1A	3232	1/1	0.92	0.07	53,53,53,53	0
56	MG	1A	4082	1/1	0.92	0.07	29,29,29,29	0
56	MG	1a	1632	1/1	0.92	0.21	65,65,65,65	0
56	MG	1A	3719	1/1	0.92	0.19	63,63,63,63	0
56	MG	1w	103	1/1	0.92	0.10	80,80,80,80	0
56	MG	2A	3224	1/1	0.92	0.32	70,70,70,70	0
56	MG	1A	3541	1/1	0.92	0.19	50,50,50,50	0
56	MG	2A	3725	1/1	0.92	0.11	60,60,60,60	0
56	MG	2A	3726	1/1	0.92	0.12	51,51,51,51	0
56	MG	2A	3228	1/1	0.92	0.29	51,51,51,51	0
56	MG	1A	3404	1/1	0.92	0.11	51,51,51,51	0
56	MG	1A	3884	1/1	0.92	0.16	34,34,34,34	0
56	MG	1A	3886	1/1	0.92	0.09	61,61,61,61	0
56	MG	1A	3728	1/1	0.92	0.10	40,40,40,40	0
56	MG	2A	3234	1/1	0.92	0.19	54,54,54,54	0
56	MG	1x	102	1/1	0.92	0.31	70,70,70,70	0
56	MG	1x	103	1/1	0.92	0.17	57,57,57,57	0
56	MG	1x	104	1/1	0.92	0.23	65,65,65,65	0
56	MG	2A	3240	1/1	0.92	0.07	85,85,85,85	0
56	MG	2A	3743	1/1	0.92	0.11	57,57,57,57	0
56	MG	1a	1643	1/1	0.92	0.16	69,69,69,69	0
56	MG	2a	3093	1/1	0.92	0.19	68,68,68,68	0
56	MG	2a	3095	1/1	0.92	0.16	76,76,76,76	0
56	MG	1A	3891	1/1	0.92	0.07	26,26,26,26	0
56	MG	1A	3892	1/1	0.92	0.11	32,32,32,32	0
56	MG	2A	3750	1/1	0.92	0.14	65,65,65,65	0
56	MG	2A	3434	1/1	0.92	0.35	70,70,70,70	0
56	MG	2a	3100	1/1	0.92	0.27	55,55,55,55	0
56	MG	1A	3893	1/1	0.92	0.09	33,33,33,33	0
56	MG	1A	4103	1/1	0.92	0.31	62,62,62,62	0
56	MG	2A	3757	1/1	0.92	0.10	75,75,75,75	0
56	MG	2A	3253	1/1	0.92	0.29	62,62,62,62	0
56	MG	2A	3759	1/1	0.92	0.12	77,77,77,77	0
56	MG	1A	3894	1/1	0.92	0.09	54,54,54,54	0
56	MG	1A	3323	1/1	0.92	0.12	55,55,55,55	0
56	MG	1B	3609	1/1	0.92	0.10	48,48,48,48	0
56	MG	2A	3766	1/1	0.92	0.20	52,52,52,52	0
56	MG	1A	3901	1/1	0.92	0.12	27,27,27,27	0
56	MG	1A	3544	1/1	0.92	0.23	50,50,50,50	0
56	MG	2A	3014	1/1	0.92	0.08	50,50,50,50	0
56	MG	2A	3016	1/1	0.92	0.10	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3265	1/1	0.92	0.17	68,68,68,68	0
56	MG	2A	3017	1/1	0.92	0.25	59,59,59,59	0
56	MG	1B	3613	1/1	0.92	0.29	75,75,75,75	0
56	MG	1A	3409	1/1	0.92	0.14	52,52,52,52	0
56	MG	2A	3024	1/1	0.92	0.19	65,65,65,65	0
56	MG	2A	3460	1/1	0.92	0.26	70,70,70,70	0
56	MG	2A	3795	1/1	0.92	0.09	80,80,80,80	0
56	MG	2a	3126	1/1	0.92	0.19	70,70,70,70	0
56	MG	1A	3287	1/1	0.92	0.11	49,49,49,49	0
56	MG	1A	3912	1/1	0.92	0.18	31,31,31,31	0
56	MG	2A	3463	1/1	0.92	0.27	61,61,61,61	0
56	MG	1A	3325	1/1	0.92	0.12	59,59,59,59	0
56	MG	2A	3809	1/1	0.92	0.13	57,57,57,57	0
56	MG	1A	3556	1/1	0.92	0.10	63,63,63,63	0
56	MG	2A	3038	1/1	0.92	0.09	34,34,34,34	0
56	MG	1A	3478	1/1	0.92	0.12	62,62,62,62	0
56	MG	2a	3138	1/1	0.92	0.37	75,75,75,75	0
56	MG	2A	3043	1/1	0.92	0.17	80,80,80,80	0
56	MG	1A	3925	1/1	0.92	0.15	68,68,68,68	0
56	MG	1a	1673	1/1	0.92	0.17	60,60,60,60	0
56	MG	1A	3288	1/1	0.92	0.17	56,56,56,56	0
56	MG	1a	1677	1/1	0.92	0.32	61,61,61,61	0
56	MG	2A	3820	1/1	0.92	0.09	58,58,58,58	0
56	MG	1A	3480	1/1	0.92	0.12	51,51,51,51	0
56	MG	1A	3565	1/1	0.92	0.14	44,44,44,44	0
56	MG	1A	3481	1/1	0.92	0.16	65,65,65,65	0
56	MG	2A	3488	1/1	0.92	0.15	64,64,64,64	0
56	MG	1B	3633	1/1	0.92	0.08	46,46,46,46	0
56	MG	2A	3841	1/1	0.92	0.11	52,52,52,52	0
56	MG	1B	3634	1/1	0.92	0.09	68,68,68,68	0
56	MG	2a	3152	1/1	0.92	0.09	84,84,84,84	0
56	MG	1A	3942	1/1	0.92	0.07	35,35,35,35	0
56	MG	2a	3157	1/1	0.92	0.08	72,72,72,72	0
56	MG	1A	3758	1/1	0.92	0.10	53,53,53,53	0
56	MG	1D	305	1/1	0.92	0.10	48,48,48,48	0
56	MG	2a	3160	1/1	0.92	0.13	69,69,69,69	0
56	MG	1a	1688	1/1	0.92	0.09	66,66,66,66	0
56	MG	2a	3163	1/1	0.92	0.06	93,93,93,93	0
56	MG	1A	3167	1/1	0.92	0.20	61,61,61,61	0
56	MG	2A	3068	1/1	0.92	0.19	67,67,67,67	0
56	MG	2A	3069	1/1	0.92	0.11	53,53,53,53	0
56	MG	2A	3074	1/1	0.92	0.11	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3075	1/1	0.92	0.22	78,78,78,78	0
56	MG	1A	3363	1/1	0.92	0.13	62,62,62,62	0
56	MG	1A	3962	1/1	0.92	0.09	57,57,57,57	0
56	MG	1E	308	1/1	0.92	0.26	66,66,66,66	0
56	MG	2A	3514	1/1	0.92	0.16	64,64,64,64	0
56	MG	1A	3765	1/1	0.92	0.12	52,52,52,52	0
56	MG	1A	3775	1/1	0.92	0.10	48,48,48,48	0
56	MG	2A	3519	1/1	0.92	0.14	44,44,44,44	0
56	MG	2a	3193	1/1	0.92	0.15	64,64,64,64	0
56	MG	1A	3485	1/1	0.92	0.21	53,53,53,53	0
56	MG	1a	1699	1/1	0.92	0.26	68,68,68,68	0
56	MG	2A	3523	1/1	0.92	0.14	56,56,56,56	0
56	MG	2a	3198	1/1	0.92	0.13	71,71,71,71	0
56	MG	1A	3970	1/1	0.92	0.10	50,50,50,50	0
56	MG	2A	3883	1/1	0.92	0.13	60,60,60,60	0
56	MG	2A	3096	1/1	0.92	0.10	41,41,41,41	0
56	MG	1A	3973	1/1	0.92	0.09	53,53,53,53	0
56	MG	2A	3316	1/1	0.92	0.21	73,73,73,73	0
56	MG	1A	3247	1/1	0.92	0.29	65,65,65,65	0
56	MG	1A	3170	1/1	0.92	0.10	56,56,56,56	0
56	MG	1N	202	1/1	0.92	0.12	54,54,54,54	0
56	MG	1A	3976	1/1	0.92	0.10	60,60,60,60	0
56	MG	2A	3564	1/1	0.92	0.13	52,52,52,52	0
56	MG	1O	203	1/1	0.92	0.23	64,64,64,64	0
56	MG	2B	210	1/1	0.92	0.15	75,75,75,75	0
56	MG	1A	3490	1/1	0.92	0.12	57,57,57,57	0
56	MG	1A	3006	1/1	0.92	0.16	62,62,62,62	0
56	MG	2A	3573	1/1	0.92	0.10	64,64,64,64	0
56	MG	1A	3598	1/1	0.92	0.22	56,56,56,56	0
56	MG	2A	3326	1/1	0.92	0.12	57,57,57,57	0
56	MG	2B	216	1/1	0.92	0.15	76,76,76,76	0
56	MG	1P	206	1/1	0.92	0.22	46,46,46,46	0
56	MG	1A	3181	1/1	0.92	0.21	61,61,61,61	0
56	MG	2B	219	1/1	0.92	0.23	83,83,83,83	0
56	MG	2A	3118	1/1	0.92	0.15	56,56,56,56	0
56	MG	2D	305	1/1	0.92	0.34	48,48,48,48	0
56	MG	1A	3182	1/1	0.92	0.12	56,56,56,56	0
56	MG	2A	3332	1/1	0.92	0.16	60,60,60,60	0
56	MG	2E	303	1/1	0.92	0.34	69,69,69,69	0
56	MG	2A	3125	1/1	0.92	0.23	67,67,67,67	0
56	MG	1A	3996	1/1	0.92	0.07	37,37,37,37	0
56	MG	2A	3595	1/1	0.92	0.12	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2a	3230	1/1	0.92	0.11	60,60,60,60	0
56	MG	1A	3119	1/1	0.92	0.37	48,48,48,48	0
56	MG	1A	3502	1/1	0.92	0.35	52,52,52,52	0
56	MG	2A	3129	1/1	0.92	0.15	71,71,71,71	0
56	MG	2P	202	1/1	0.92	0.16	63,63,63,63	0
56	MG	2A	3130	1/1	0.92	0.13	57,57,57,57	0
56	MG	2Q	204	1/1	0.92	0.13	58,58,58,58	0
56	MG	1A	3434	1/1	0.92	0.10	69,69,69,69	0
56	MG	2d	301	1/1	0.92	0.34	66,66,66,66	0
56	MG	2R	202	1/1	0.92	0.10	56,56,56,56	0
56	MG	1a	1730	1/1	0.92	0.09	73,73,73,73	0
56	MG	2A	3608	1/1	0.92	0.13	60,60,60,60	0
56	MG	2U	201	1/1	0.92	0.17	62,62,62,62	0
56	MG	1U	204	1/1	0.92	0.11	47,47,47,47	0
56	MG	1A	3825	1/1	0.92	0.07	54,54,54,54	0
56	MG	2X	101	1/1	0.92	0.10	65,65,65,65	0
56	MG	2Y	201	1/1	0.92	0.18	61,61,61,61	0
56	MG	1A	3046	1/1	0.92	0.08	42,42,42,42	0
56	MG	1W	206	1/1	0.92	0.15	33,33,33,33	0
56	MG	1A	4010	1/1	0.92	0.08	81,81,81,81	0
56	MG	2I	102	1/1	0.92	0.36	57,57,57,57	0
56	MG	1a	1745	1/1	0.92	0.12	72,72,72,72	0
56	MG	1a	1748	1/1	0.92	0.09	66,66,66,66	0
56	MG	2A	3619	1/1	0.92	0.12	55,55,55,55	0
56	MG	2A	3620	1/1	0.92	0.12	71,71,71,71	0
56	MG	2A	3152	1/1	0.92	0.11	57,57,57,57	0
56	MG	2A	3153	1/1	0.92	0.27	63,63,63,63	0
56	MG	2a	3001	1/1	0.92	0.10	69,69,69,69	0
56	MG	1X	107	1/1	0.92	0.10	64,64,64,64	0
56	MG	1A	3833	1/1	0.92	0.08	47,47,47,47	0
56	MG	2a	3004	1/1	0.92	0.21	59,59,59,59	0
56	MG	1A	3439	1/1	0.92	0.09	50,50,50,50	0
56	MG	1A	3646	1/1	0.92	0.10	46,46,46,46	0
56	MG	1A	3128	1/1	0.92	0.07	76,76,76,76	0
56	MG	10	103	1/1	0.92	0.15	55,55,55,55	0
56	MG	1a	1761	1/1	0.92	0.17	63,63,63,63	0
56	MG	1a	1762	1/1	0.92	0.08	65,65,65,65	0
56	MG	2A	3651	1/1	0.92	0.17	49,49,49,49	0
57	K	1A	3571	1/1	0.92	0.28	75,75,75,75	0
56	MG	2A	3652	1/1	0.92	0.11	53,53,53,53	0
56	MG	2A	3491	1/1	0.93	0.22	63,63,63,63	0
56	MG	1A	4102	1/1	0.93	0.15	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3619	1/1	0.93	0.09	41,41,41,41	0
56	MG	2A	3774	1/1	0.93	0.15	60,60,60,60	0
56	MG	1a	1782	1/1	0.93	0.10	68,68,68,68	0
56	MG	1A	3620	1/1	0.93	0.10	54,54,54,54	0
56	MG	1A	3122	1/1	0.93	0.18	41,41,41,41	0
56	MG	1a	1626	1/1	0.93	0.15	70,70,70,70	0
56	MG	2A	3501	1/1	0.93	0.27	63,63,63,63	0
56	MG	1B	3607	1/1	0.93	0.14	69,69,69,69	0
56	MG	2A	3794	1/1	0.93	0.09	55,55,55,55	0
56	MG	2A	3144	1/1	0.93	0.16	51,51,51,51	0
56	MG	2A	3796	1/1	0.93	0.11	71,71,71,71	0
56	MG	2A	3504	1/1	0.93	0.12	48,48,48,48	0
56	MG	2A	3803	1/1	0.93	0.15	72,72,72,72	0
56	MG	2A	3145	1/1	0.93	0.20	59,59,59,59	0
56	MG	1B	3608	1/1	0.93	0.26	72,72,72,72	0
56	MG	1A	3808	1/1	0.93	0.08	49,49,49,49	0
56	MG	1a	1806	1/1	0.93	0.09	75,75,75,75	0
56	MG	1A	3298	1/1	0.93	0.24	54,54,54,54	0
56	MG	1A	3627	1/1	0.93	0.12	65,65,65,65	0
56	MG	1A	3960	1/1	0.93	0.10	53,53,53,53	0
56	MG	2A	3517	1/1	0.93	0.10	53,53,53,53	0
56	MG	2A	3155	1/1	0.93	0.10	56,56,56,56	0
56	MG	1A	3633	1/1	0.93	0.13	55,55,55,55	0
56	MG	1A	3817	1/1	0.93	0.07	35,35,35,35	0
56	MG	1A	3029	1/1	0.93	0.15	37,37,37,37	0
56	MG	1A	3129	1/1	0.93	0.11	48,48,48,48	0
56	MG	1A	3025	1/1	0.93	0.15	36,36,36,36	0
56	MG	2A	3169	1/1	0.93	0.13	46,46,46,46	0
56	MG	2A	3336	1/1	0.93	0.08	54,54,54,54	0
56	MG	2A	3832	1/1	0.93	0.11	48,48,48,48	0
56	MG	1A	3972	1/1	0.93	0.10	46,46,46,46	0
56	MG	1B	3624	1/1	0.93	0.15	60,60,60,60	0
56	MG	1A	3824	1/1	0.93	0.35	43,43,43,43	0
56	MG	2A	3842	1/1	0.93	0.10	78,78,78,78	0
56	MG	1A	3135	1/1	0.93	0.25	36,36,36,36	0
56	MG	1B	3627	1/1	0.93	0.08	47,47,47,47	0
56	MG	2A	3548	1/1	0.93	0.25	56,56,56,56	0
56	MG	1A	3826	1/1	0.93	0.07	42,42,42,42	0
56	MG	2A	3344	1/1	0.93	0.29	73,73,73,73	0
56	MG	1A	3257	1/1	0.93	0.09	41,41,41,41	0
56	MG	1A	3832	1/1	0.93	0.07	40,40,40,40	0
56	MG	1A	3202	1/1	0.93	0.07	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3345	1/1	0.93	0.16	53,53,53,53	0
56	MG	2A	3578	1/1	0.93	0.10	40,40,40,40	0
56	MG	2A	3865	1/1	0.93	0.09	40,40,40,40	0
56	MG	2a	3120	1/1	0.93	0.16	72,72,72,72	0
56	MG	1A	3346	1/1	0.93	0.27	37,37,37,37	0
56	MG	1A	3673	1/1	0.93	0.10	34,34,34,34	0
56	MG	1D	302	1/1	0.93	0.17	48,48,48,48	0
56	MG	1A	3840	1/1	0.93	0.10	55,55,55,55	0
56	MG	2A	3355	1/1	0.93	0.10	74,74,74,74	0
56	MG	1A	3998	1/1	0.93	0.08	47,47,47,47	0
56	MG	2a	3128	1/1	0.93	0.16	67,67,67,67	0
56	MG	1A	3205	1/1	0.93	0.23	64,64,64,64	0
56	MG	2A	3593	1/1	0.93	0.11	67,67,67,67	0
56	MG	1A	3351	1/1	0.93	0.24	39,39,39,39	0
56	MG	1x	105	1/1	0.93	0.18	57,57,57,57	0
56	MG	1E	305	1/1	0.93	0.21	38,38,38,38	0
56	MG	2A	3361	1/1	0.93	0.14	72,72,72,72	0
56	MG	1A	4003	1/1	0.93	0.13	53,53,53,53	0
56	MG	1A	3352	1/1	0.93	0.28	67,67,67,67	0
56	MG	1A	3696	1/1	0.93	0.06	37,37,37,37	0
56	MG	1A	3207	1/1	0.93	0.11	61,61,61,61	0
56	MG	1x	112	1/1	0.93	0.11	72,72,72,72	0
56	MG	1F	304	1/1	0.93	0.13	45,45,45,45	0
56	MG	2B	205	1/1	0.93	0.11	58,58,58,58	0
56	MG	2A	3205	1/1	0.93	0.36	72,72,72,72	0
56	MG	1A	3166	1/1	0.93	0.14	46,46,46,46	0
56	MG	2A	3372	1/1	0.93	0.10	63,63,63,63	0
56	MG	2A	3001	1/1	0.93	0.46	69,69,69,69	0
56	MG	2A	3003	1/1	0.93	0.24	66,66,66,66	0
56	MG	2A	3004	1/1	0.93	0.33	63,63,63,63	0
56	MG	2A	3618	1/1	0.93	0.08	65,65,65,65	0
56	MG	1A	3058	1/1	0.93	0.08	44,44,44,44	0
56	MG	1A	3217	1/1	0.93	0.08	49,49,49,49	0
56	MG	2A	3622	1/1	0.93	0.10	74,74,74,74	0
56	MG	2A	3007	1/1	0.93	0.16	57,57,57,57	0
56	MG	1A	3549	1/1	0.93	0.26	58,58,58,58	0
56	MG	2A	3380	1/1	0.93	0.26	71,71,71,71	0
56	MG	1A	3550	1/1	0.93	0.32	52,52,52,52	0
56	MG	1A	4025	1/1	0.93	0.10	58,58,58,58	0
56	MG	1A	3552	1/1	0.93	0.22	65,65,65,65	0
56	MG	1a	1687	1/1	0.93	0.25	69,69,69,69	0
56	MG	2A	3020	1/1	0.93	0.12	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3554	1/1	0.93	0.37	73,73,73,73	0
56	MG	2A	3222	1/1	0.93	0.14	63,63,63,63	0
56	MG	1A	3864	1/1	0.93	0.07	34,34,34,34	0
56	MG	2a	3172	1/1	0.93	0.07	80,80,80,80	0
56	MG	1A	3415	1/1	0.93	0.10	52,52,52,52	0
56	MG	2a	3175	1/1	0.93	0.16	58,58,58,58	0
56	MG	2a	3176	1/1	0.93	0.07	90,90,90,90	0
56	MG	2F	304	1/1	0.93	0.20	59,59,59,59	0
56	MG	1A	3416	1/1	0.93	0.19	45,45,45,45	0
56	MG	2A	3227	1/1	0.93	0.17	74,74,74,74	0
56	MG	1Q	206	1/1	0.93	0.08	42,42,42,42	0
56	MG	2a	3186	1/1	0.93	0.22	61,61,61,61	0
56	MG	1R	201	1/1	0.93	0.10	49,49,49,49	0
56	MG	1A	3720	1/1	0.93	0.08	67,67,67,67	0
56	MG	1A	3319	1/1	0.93	0.24	35,35,35,35	0
56	MG	1A	3218	1/1	0.93	0.13	40,40,40,40	0
56	MG	2A	3400	1/1	0.93	0.11	74,74,74,74	0
56	MG	2a	3195	1/1	0.93	0.14	58,58,58,58	0
56	MG	1A	3224	1/1	0.93	0.12	48,48,48,48	0
56	MG	2A	3235	1/1	0.93	0.23	49,49,49,49	0
56	MG	1A	3422	1/1	0.93	0.15	54,54,54,54	0
56	MG	2A	3046	1/1	0.93	0.12	63,63,63,63	0
56	MG	2A	3048	1/1	0.93	0.17	55,55,55,55	0
56	MG	1A	3168	1/1	0.93	0.10	52,52,52,52	0
56	MG	1A	3426	1/1	0.93	0.12	53,53,53,53	0
56	MG	1A	4053	1/1	0.93	0.08	51,51,51,51	0
56	MG	2A	3409	1/1	0.93	0.17	76,76,76,76	0
56	MG	2A	3245	1/1	0.93	0.20	72,72,72,72	0
56	MG	25	101	1/1	0.93	0.20	55,55,55,55	0
56	MG	1A	3276	1/1	0.93	0.26	42,42,42,42	0
56	MG	1a	1707	1/1	0.93	0.10	65,65,65,65	0
56	MG	1V	206	1/1	0.93	0.13	67,67,67,67	0
56	MG	1V	207	1/1	0.93	0.11	56,56,56,56	0
56	MG	1W	201	1/1	0.93	0.31	62,62,62,62	0
56	MG	2A	3256	1/1	0.93	0.07	66,66,66,66	0
56	MG	1W	202	1/1	0.93	0.13	47,47,47,47	0
56	MG	1A	3734	1/1	0.93	0.13	50,50,50,50	0
56	MG	1A	3579	1/1	0.93	0.23	47,47,47,47	0
56	MG	2A	3260	1/1	0.93	0.19	61,61,61,61	0
56	MG	2A	3424	1/1	0.93	0.33	58,58,58,58	0
56	MG	2A	3066	1/1	0.93	0.23	66,66,66,66	0
56	MG	1A	3582	1/1	0.93	0.10	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3427	1/1	0.93	0.37	59,59,59,59	0
56	MG	1a	1716	1/1	0.93	0.35	58,58,58,58	0
56	MG	1a	1717	1/1	0.93	0.26	54,54,54,54	0
56	MG	1A	3585	1/1	0.93	0.12	68,68,68,68	0
56	MG	1A	3743	1/1	0.93	0.08	63,63,63,63	0
56	MG	2A	3080	1/1	0.93	0.08	57,57,57,57	0
56	MG	2A	3082	1/1	0.93	0.10	60,60,60,60	0
56	MG	1A	3169	1/1	0.93	0.17	44,44,44,44	0
56	MG	2A	3085	1/1	0.93	0.15	64,64,64,64	0
56	MG	2A	3086	1/1	0.93	0.11	52,52,52,52	0
56	MG	2a	3233	1/1	0.93	0.20	74,74,74,74	0
56	MG	1A	4068	1/1	0.93	0.07	41,41,41,41	0
56	MG	2A	3441	1/1	0.93	0.29	68,68,68,68	0
56	MG	1A	3233	1/1	0.93	0.32	55,55,55,55	0
56	MG	1A	4071	1/1	0.93	0.10	51,51,51,51	0
56	MG	1A	3371	1/1	0.93	0.12	54,54,54,54	0
56	MG	1A	4075	1/1	0.93	0.09	27,27,27,27	0
56	MG	11	105	1/1	0.93	0.11	63,63,63,63	0
56	MG	12	101	1/1	0.93	0.09	55,55,55,55	0
56	MG	2A	3450	1/1	0.93	0.14	84,84,84,84	0
56	MG	1A	3048	1/1	0.93	0.06	25,25,25,25	0
56	MG	1A	3331	1/1	0.93	0.14	61,61,61,61	0
56	MG	1A	3245	1/1	0.93	0.11	63,63,63,63	0
56	MG	1A	4083	1/1	0.93	0.11	46,46,46,46	0
56	MG	2q	201	1/1	0.93	0.14	85,85,85,85	0
56	MG	1A	4085	1/1	0.93	0.14	57,57,57,57	0
56	MG	2A	3291	1/1	0.93	0.09	67,67,67,67	0
56	MG	18	105	1/1	0.93	0.11	47,47,47,47	0
56	MG	1A	3763	1/1	0.93	0.17	67,67,67,67	0
56	MG	1A	3448	1/1	0.93	0.12	43,43,43,43	0
56	MG	1A	3453	1/1	0.93	0.15	40,40,40,40	0
56	MG	2A	3465	1/1	0.93	0.12	44,44,44,44	0
56	MG	2A	3466	1/1	0.93	0.12	63,63,63,63	0
56	MG	1A	4091	1/1	0.93	0.13	45,45,45,45	0
56	MG	2A	3114	1/1	0.93	0.19	72,72,72,72	0
56	MG	1A	3246	1/1	0.93	0.19	67,67,67,67	0
56	MG	2A	3474	1/1	0.93	0.25	66,66,66,66	0
56	MG	1A	3778	1/1	0.93	0.07	20,20,20,20	0
56	MG	1A	3616	1/1	0.93	0.09	54,54,54,54	0
56	MG	2x	103	1/1	0.93	0.11	63,63,63,63	0
56	MG	1a	1767	1/1	0.93	0.19	62,62,62,62	0
56	MG	2A	3123	1/1	0.93	0.26	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3082	1/1	0.93	0.19	50,50,50,50	0
56	MG	1a	1770	1/1	0.93	0.09	76,76,76,76	0
56	MG	2a	3052	1/1	0.93	0.18	74,74,74,74	0
56	MG	1A	4096	1/1	0.93	0.08	54,54,54,54	0
56	MG	2A	3309	1/1	0.93	0.19	68,68,68,68	0
56	MG	1A	3929	1/1	0.93	0.11	42,42,42,42	0
56	MG	2a	3056	1/1	0.93	0.26	68,68,68,68	0
56	MG	1A	3795	1/1	0.93	0.06	44,44,44,44	0
56	MG	2A	3769	1/1	0.93	0.21	73,73,73,73	0
56	MG	1A	3588	1/1	0.94	0.08	39,39,39,39	0
56	MG	1A	3241	1/1	0.94	0.17	45,45,45,45	0
56	MG	1A	3931	1/1	0.94	0.09	60,60,60,60	0
56	MG	2A	3669	1/1	0.94	0.17	69,69,69,69	0
56	MG	1A	3050	1/1	0.94	0.14	31,31,31,31	0
56	MG	1A	3935	1/1	0.94	0.07	44,44,44,44	0
56	MG	1A	3595	1/1	0.94	0.10	39,39,39,39	0
56	MG	1A	3767	1/1	0.94	0.09	54,54,54,54	0
56	MG	1a	1659	1/1	0.94	0.11	57,57,57,57	0
56	MG	1a	1660	1/1	0.94	0.25	64,64,64,64	0
56	MG	1A	3492	1/1	0.94	0.12	55,55,55,55	0
56	MG	2A	3398	1/1	0.94	0.14	50,50,50,50	0
56	MG	1A	3052	1/1	0.94	0.09	45,45,45,45	0
56	MG	1a	1663	1/1	0.94	0.21	70,70,70,70	0
56	MG	1A	3783	1/1	0.94	0.09	57,57,57,57	0
56	MG	2A	3685	1/1	0.94	0.21	45,45,45,45	0
56	MG	1A	3957	1/1	0.94	0.10	47,47,47,47	0
56	MG	1A	3600	1/1	0.94	0.32	63,63,63,63	0
56	MG	1A	3961	1/1	0.94	0.13	62,62,62,62	0
56	MG	1A	3126	1/1	0.94	0.13	49,49,49,49	0
56	MG	1a	1670	1/1	0.94	0.21	70,70,70,70	0
56	MG	2A	3226	1/1	0.94	0.12	65,65,65,65	0
56	MG	1A	3419	1/1	0.94	0.09	63,63,63,63	0
56	MG	1A	3053	1/1	0.94	0.06	56,56,56,56	0
56	MG	1A	3605	1/1	0.94	0.07	41,41,41,41	0
56	MG	1A	3803	1/1	0.94	0.11	30,30,30,30	0
56	MG	1A	3035	1/1	0.94	0.06	51,51,51,51	0
56	MG	2A	3232	1/1	0.94	0.11	42,42,42,42	0
56	MG	1A	3609	1/1	0.94	0.10	48,48,48,48	0
56	MG	2A	3033	1/1	0.94	0.17	58,58,58,58	0
56	MG	2A	3035	1/1	0.94	0.08	43,43,43,43	0
56	MG	1A	3312	1/1	0.94	0.32	64,64,64,64	0
56	MG	1A	3810	1/1	0.94	0.06	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3705	1/1	0.94	0.07	68,68,68,68	0
56	MG	1A	3132	1/1	0.94	0.10	40,40,40,40	0
56	MG	2A	3041	1/1	0.94	0.21	61,61,61,61	0
56	MG	2A	3042	1/1	0.94	0.26	62,62,62,62	0
56	MG	1A	3977	1/1	0.94	0.11	57,57,57,57	0
56	MG	2A	3243	1/1	0.94	0.15	69,69,69,69	0
56	MG	1A	3093	1/1	0.94	0.12	58,58,58,58	0
56	MG	2A	3428	1/1	0.94	0.40	65,65,65,65	0
56	MG	2A	3246	1/1	0.94	0.17	66,66,66,66	0
56	MG	1A	3427	1/1	0.94	0.12	61,61,61,61	0
56	MG	1A	3430	1/1	0.94	0.11	59,59,59,59	0
56	MG	2A	3250	1/1	0.94	0.26	64,64,64,64	0
56	MG	2A	3722	1/1	0.94	0.10	38,38,38,38	0
56	MG	2A	3047	1/1	0.94	0.21	61,61,61,61	0
56	MG	1A	3985	1/1	0.94	0.09	70,70,70,70	0
56	MG	2A	3435	1/1	0.94	0.33	68,68,68,68	0
56	MG	1A	3183	1/1	0.94	0.15	73,73,73,73	0
56	MG	2A	3255	1/1	0.94	0.28	73,73,73,73	0
56	MG	1E	316	1/1	0.94	0.14	57,57,57,57	0
56	MG	1A	3989	1/1	0.94	0.11	67,67,67,67	0
56	MG	1a	1693	1/1	0.94	0.35	60,60,60,60	0
56	MG	1F	301	1/1	0.94	0.12	43,43,43,43	0
56	MG	1A	3990	1/1	0.94	0.12	47,47,47,47	0
56	MG	1A	3362	1/1	0.94	0.14	62,62,62,62	0
56	MG	2A	3741	1/1	0.94	0.19	61,61,61,61	0
56	MG	1F	312	1/1	0.94	0.12	61,61,61,61	0
56	MG	2a	3078	1/1	0.94	0.21	65,65,65,65	0
56	MG	2A	3062	1/1	0.94	0.07	54,54,54,54	0
56	MG	2a	3081	1/1	0.94	0.28	75,75,75,75	0
56	MG	2A	3264	1/1	0.94	0.15	65,65,65,65	0
56	MG	2A	3745	1/1	0.94	0.15	65,65,65,65	0
56	MG	1A	3515	1/1	0.94	0.13	35,35,35,35	0
56	MG	1G	201	1/1	0.94	0.09	42,42,42,42	0
56	MG	2A	3749	1/1	0.94	0.08	51,51,51,51	0
56	MG	2A	3453	1/1	0.94	0.23	56,56,56,56	0
56	MG	1G	202	1/1	0.94	0.23	67,67,67,67	0
56	MG	2a	3089	1/1	0.94	0.18	75,75,75,75	0
56	MG	1G	203	1/1	0.94	0.05	75,75,75,75	0
56	MG	1A	3997	1/1	0.94	0.12	65,65,65,65	0
56	MG	2A	3755	1/1	0.94	0.10	63,63,63,63	0
56	MG	1I	201	1/1	0.94	0.10	65,65,65,65	0
56	MG	1A	3637	1/1	0.94	0.07	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3273	1/1	0.94	0.22	75,75,75,75	0
56	MG	2A	3760	1/1	0.94	0.19	70,70,70,70	0
56	MG	1A	3516	1/1	0.94	0.07	56,56,56,56	0
56	MG	1A	3316	1/1	0.94	0.21	62,62,62,62	0
56	MG	2A	3763	1/1	0.94	0.08	60,60,60,60	0
56	MG	1A	3830	1/1	0.94	0.06	32,32,32,32	0
56	MG	2a	3102	1/1	0.94	0.10	69,69,69,69	0
56	MG	1A	3185	1/1	0.94	0.10	58,58,58,58	0
56	MG	1A	4005	1/1	0.94	0.07	20,20,20,20	0
56	MG	1A	3134	1/1	0.94	0.26	34,34,34,34	0
56	MG	1A	3655	1/1	0.94	0.07	35,35,35,35	0
56	MG	1Q	205	1/1	0.94	0.12	50,50,50,50	0
56	MG	1A	3367	1/1	0.94	0.15	59,59,59,59	0
56	MG	1A	3663	1/1	0.94	0.10	57,57,57,57	0
56	MG	1A	3441	1/1	0.94	0.22	55,55,55,55	0
56	MG	2A	3287	1/1	0.94	0.09	52,52,52,52	0
56	MG	1A	4014	1/1	0.94	0.06	30,30,30,30	0
56	MG	1A	3668	1/1	0.94	0.06	28,28,28,28	0
56	MG	1A	4019	1/1	0.94	0.07	47,47,47,47	0
56	MG	1A	3189	1/1	0.94	0.13	35,35,35,35	0
56	MG	1a	1726	1/1	0.94	0.19	71,71,71,71	0
56	MG	1A	3527	1/1	0.94	0.19	44,44,44,44	0
56	MG	1a	1731	1/1	0.94	0.06	48,48,48,48	0
56	MG	2A	3797	1/1	0.94	0.08	41,41,41,41	0
56	MG	2A	3799	1/1	0.94	0.12	75,75,75,75	0
56	MG	1A	3094	1/1	0.94	0.18	43,43,43,43	0
56	MG	1U	205	1/1	0.94	0.29	49,49,49,49	0
56	MG	2A	3105	1/1	0.94	0.14	71,71,71,71	0
56	MG	2a	3127	1/1	0.94	0.26	67,67,67,67	0
56	MG	2A	3106	1/1	0.94	0.22	78,78,78,78	0
56	MG	2A	3495	1/1	0.94	0.10	40,40,40,40	0
56	MG	2A	3496	1/1	0.94	0.06	62,62,62,62	0
56	MG	1A	3004	1/1	0.94	0.06	28,28,28,28	0
56	MG	1A	3848	1/1	0.94	0.19	55,55,55,55	0
56	MG	2A	3303	1/1	0.94	0.13	79,79,79,79	0
56	MG	2a	3134	1/1	0.94	0.22	62,62,62,62	0
56	MG	1A	3196	1/1	0.94	0.07	46,46,46,46	0
56	MG	2A	3814	1/1	0.94	0.10	63,63,63,63	0
56	MG	1a	1744	1/1	0.94	0.15	71,71,71,71	0
56	MG	1A	4032	1/1	0.94	0.08	53,53,53,53	0
56	MG	1a	1747	1/1	0.94	0.09	59,59,59,59	0
56	MG	2A	3505	1/1	0.94	0.20	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3691	1/1	0.94	0.07	43,43,43,43	0
56	MG	2A	3821	1/1	0.94	0.11	65,65,65,65	0
56	MG	2A	3117	1/1	0.94	0.28	62,62,62,62	0
56	MG	2A	3826	1/1	0.94	0.12	49,49,49,49	0
56	MG	1A	3198	1/1	0.94	0.07	43,43,43,43	0
56	MG	1A	3537	1/1	0.94	0.27	41,41,41,41	0
56	MG	1A	4040	1/1	0.94	0.09	53,53,53,53	0
56	MG	2A	3124	1/1	0.94	0.20	67,67,67,67	0
56	MG	2A	3515	1/1	0.94	0.07	57,57,57,57	0
56	MG	1A	3040	1/1	0.94	0.09	38,38,38,38	0
56	MG	1a	1757	1/1	0.94	0.08	56,56,56,56	0
56	MG	1A	3378	1/1	0.94	0.08	50,50,50,50	0
56	MG	2a	3153	1/1	0.94	0.06	64,64,64,64	0
56	MG	2a	3154	1/1	0.94	0.08	96,96,96,96	0
56	MG	1A	3379	1/1	0.94	0.10	38,38,38,38	0
56	MG	2A	3848	1/1	0.94	0.10	57,57,57,57	0
56	MG	1A	3861	1/1	0.94	0.09	69,69,69,69	0
56	MG	2A	3320	1/1	0.94	0.17	76,76,76,76	0
56	MG	2A	3522	1/1	0.94	0.09	44,44,44,44	0
56	MG	1A	3329	1/1	0.94	0.11	47,47,47,47	0
56	MG	2A	3855	1/1	0.94	0.06	27,27,27,27	0
56	MG	2A	3856	1/1	0.94	0.10	73,73,73,73	0
56	MG	2A	3524	1/1	0.94	0.10	28,28,28,28	0
56	MG	1A	4050	1/1	0.94	0.12	34,34,34,34	0
56	MG	2A	3529	1/1	0.94	0.14	53,53,53,53	0
56	MG	10	104	1/1	0.94	0.15	50,50,50,50	0
56	MG	2a	3173	1/1	0.94	0.07	67,67,67,67	0
56	MG	2A	3863	1/1	0.94	0.16	56,56,56,56	0
56	MG	2A	3531	1/1	0.94	0.11	59,59,59,59	0
56	MG	2A	3532	1/1	0.94	0.10	53,53,53,53	0
56	MG	2A	3868	1/1	0.94	0.17	56,56,56,56	0
56	MG	1A	3463	1/1	0.94	0.17	68,68,68,68	0
56	MG	1A	3142	1/1	0.94	0.15	46,46,46,46	0
56	MG	2A	3541	1/1	0.94	0.16	68,68,68,68	0
56	MG	1A	3017	1/1	0.94	0.11	63,63,63,63	0
56	MG	2A	3874	1/1	0.94	0.09	62,62,62,62	0
56	MG	2A	3141	1/1	0.94	0.17	45,45,45,45	0
56	MG	2a	3190	1/1	0.94	0.22	78,78,78,78	0
56	MG	2a	3191	1/1	0.94	0.10	61,61,61,61	0
56	MG	1A	3018	1/1	0.94	0.10	36,36,36,36	0
56	MG	1a	1771	1/1	0.94	0.08	63,63,63,63	0
56	MG	1A	3870	1/1	0.94	0.08	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3553	1/1	0.94	0.08	38,38,38,38	0
56	MG	2A	3557	1/1	0.94	0.09	48,48,48,48	0
56	MG	2A	3558	1/1	0.94	0.13	55,55,55,55	0
56	MG	2A	3561	1/1	0.94	0.09	51,51,51,51	0
56	MG	1A	4060	1/1	0.94	0.11	69,69,69,69	0
56	MG	2A	3147	1/1	0.94	0.17	63,63,63,63	0
56	MG	2a	3201	1/1	0.94	0.11	69,69,69,69	0
56	MG	1A	4061	1/1	0.94	0.16	59,59,59,59	0
56	MG	1A	4062	1/1	0.94	0.12	39,39,39,39	0
56	MG	1A	3468	1/1	0.94	0.14	43,43,43,43	0
56	MG	1A	3272	1/1	0.94	0.11	34,34,34,34	0
56	MG	1A	3873	1/1	0.94	0.06	26,26,26,26	0
56	MG	2A	3580	1/1	0.94	0.08	48,48,48,48	0
56	MG	18	106	1/1	0.94	0.14	52,52,52,52	0
56	MG	2A	3156	1/1	0.94	0.12	71,71,71,71	0
56	MG	2A	3341	1/1	0.94	0.08	53,53,53,53	0
56	MG	1A	4067	1/1	0.94	0.10	54,54,54,54	0
56	MG	2A	3158	1/1	0.94	0.16	45,45,45,45	0
56	MG	1A	3472	1/1	0.94	0.10	47,47,47,47	0
56	MG	2A	3160	1/1	0.94	0.14	66,66,66,66	0
56	MG	2A	3161	1/1	0.94	0.10	62,62,62,62	0
56	MG	1A	3213	1/1	0.94	0.13	56,56,56,56	0
56	MG	2A	3165	1/1	0.94	0.13	63,63,63,63	0
56	MG	2A	3596	1/1	0.94	0.19	64,64,64,64	0
56	MG	1A	3723	1/1	0.94	0.14	63,63,63,63	0
56	MG	2D	303	1/1	0.94	0.17	55,55,55,55	0
56	MG	1A	3877	1/1	0.94	0.10	33,33,33,33	0
56	MG	2A	3600	1/1	0.94	0.10	74,74,74,74	0
56	MG	1A	3001	1/1	0.94	0.13	48,48,48,48	0
56	MG	2E	301	1/1	0.94	0.25	64,64,64,64	0
56	MG	2E	302	1/1	0.94	0.09	57,57,57,57	0
56	MG	2A	3353	1/1	0.94	0.15	63,63,63,63	0
56	MG	1a	1606	1/1	0.94	0.11	61,61,61,61	0
56	MG	2A	3173	1/1	0.94	0.20	75,75,75,75	0
56	MG	2A	3174	1/1	0.94	0.22	68,68,68,68	0
56	MG	1A	3336	1/1	0.94	0.21	58,58,58,58	0
56	MG	2a	3232	1/1	0.94	0.17	73,73,73,73	0
56	MG	2F	302	1/1	0.94	0.12	65,65,65,65	0
56	MG	2A	3176	1/1	0.94	0.21	59,59,59,59	0
56	MG	2A	3611	1/1	0.94	0.07	45,45,45,45	0
56	MG	1a	1613	1/1	0.94	0.07	73,73,73,73	0
56	MG	2N	201	1/1	0.94	0.09	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2P	201	1/1	0.94	0.08	67,67,67,67	0
56	MG	1A	3152	1/1	0.94	0.17	47,47,47,47	0
56	MG	1A	3889	1/1	0.94	0.07	44,44,44,44	0
56	MG	2A	3615	1/1	0.94	0.12	62,62,62,62	0
56	MG	2A	3362	1/1	0.94	0.20	74,74,74,74	0
56	MG	1A	3153	1/1	0.94	0.11	44,44,44,44	0
56	MG	1A	3562	1/1	0.94	0.14	52,52,52,52	0
56	MG	1A	3403	1/1	0.94	0.11	46,46,46,46	0
56	MG	1A	3292	1/1	0.94	0.06	38,38,38,38	0
56	MG	1A	3219	1/1	0.94	0.13	49,49,49,49	0
56	MG	2A	3368	1/1	0.94	0.11	60,60,60,60	0
56	MG	1A	3896	1/1	0.94	0.07	40,40,40,40	0
56	MG	2A	3188	1/1	0.94	0.08	55,55,55,55	0
56	MG	2A	3629	1/1	0.94	0.07	48,48,48,48	0
56	MG	20	102	1/1	0.94	0.08	67,67,67,67	0
56	MG	20	103	1/1	0.94	0.14	69,69,69,69	0
56	MG	1A	3110	1/1	0.94	0.14	37,37,37,37	0
56	MG	1A	3572	1/1	0.94	0.09	59,59,59,59	0
56	MG	1A	3906	1/1	0.94	0.07	30,30,30,30	0
56	MG	1A	3111	1/1	0.94	0.11	40,40,40,40	0
56	MG	1A	3744	1/1	0.94	0.14	52,52,52,52	0
56	MG	2A	3638	1/1	0.94	0.10	60,60,60,60	0
56	MG	2A	3640	1/1	0.94	0.12	69,69,69,69	0
56	MG	1A	3118	1/1	0.94	0.07	43,43,43,43	0
56	MG	1A	3022	1/1	0.94	0.11	45,45,45,45	0
56	MG	1A	4101	1/1	0.94	0.08	57,57,57,57	0
56	MG	1A	3748	1/1	0.94	0.08	59,59,59,59	0
56	MG	2A	3654	1/1	0.94	0.09	50,50,50,50	0
56	MG	1A	3750	1/1	0.94	0.09	35,35,35,35	0
56	MG	1A	3919	1/1	0.94	0.26	40,40,40,40	0
56	MG	1A	3584	1/1	0.94	0.25	38,38,38,38	0
56	MG	2A	3659	1/1	0.94	0.17	49,49,49,49	0
56	MG	1A	3924	1/1	0.94	0.18	42,42,42,42	0
56	MG	1A	3234	1/1	0.94	0.07	64,64,64,64	0
56	MG	2A	3663	1/1	0.94	0.21	58,58,58,58	0
56	MG	1A	3487	1/1	0.94	0.21	47,47,47,47	0
56	MG	1A	3081	1/1	0.95	0.16	43,43,43,43	0
56	MG	1A	3250	1/1	0.95	0.09	46,46,46,46	0
56	MG	2A	3025	1/1	0.95	0.10	66,66,66,66	0
56	MG	2A	3026	1/1	0.95	0.12	53,53,53,53	0
56	MG	1B	3616	1/1	0.95	0.08	60,60,60,60	0
56	MG	1A	3958	1/1	0.95	0.06	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3030	1/1	0.95	0.17	51,51,51,51	0
56	MG	1A	3109	1/1	0.95	0.14	35,35,35,35	0
56	MG	1A	3805	1/1	0.95	0.07	45,45,45,45	0
56	MG	2A	3436	1/1	0.95	0.16	59,59,59,59	0
56	MG	1A	3305	1/1	0.95	0.25	63,63,63,63	0
56	MG	1A	3617	1/1	0.95	0.07	31,31,31,31	0
56	MG	1A	3355	1/1	0.95	0.16	56,56,56,56	0
56	MG	1A	3967	1/1	0.95	0.05	28,28,28,28	0
56	MG	2A	3040	1/1	0.95	0.09	57,57,57,57	0
56	MG	1A	3508	1/1	0.95	0.16	66,66,66,66	0
56	MG	1A	3814	1/1	0.95	0.28	34,34,34,34	0
56	MG	2a	3038	1/1	0.95	0.29	62,62,62,62	0
56	MG	1A	3425	1/1	0.95	0.09	48,48,48,48	0
56	MG	2a	3040	1/1	0.95	0.16	80,80,80,80	0
56	MG	1A	3307	1/1	0.95	0.07	51,51,51,51	0
56	MG	1B	3632	1/1	0.95	0.08	59,59,59,59	0
56	MG	1A	3211	1/1	0.95	0.37	44,44,44,44	0
56	MG	1A	3818	1/1	0.95	0.09	44,44,44,44	0
56	MG	1A	3819	1/1	0.95	0.08	59,59,59,59	0
56	MG	2A	3452	1/1	0.95	0.08	45,45,45,45	0
56	MG	1A	3253	1/1	0.95	0.11	39,39,39,39	0
56	MG	1A	3310	1/1	0.95	0.06	56,56,56,56	0
56	MG	2A	3053	1/1	0.95	0.16	71,71,71,71	0
56	MG	1A	3822	1/1	0.95	0.07	32,32,32,32	0
56	MG	1A	3981	1/1	0.95	0.13	51,51,51,51	0
56	MG	2A	3459	1/1	0.95	0.29	61,61,61,61	0
56	MG	1A	3982	1/1	0.95	0.10	42,42,42,42	0
56	MG	2A	3058	1/1	0.95	0.28	68,68,68,68	0
56	MG	1A	3983	1/1	0.95	0.06	70,70,70,70	0
56	MG	1A	3059	1/1	0.95	0.24	60,60,60,60	0
56	MG	1A	3097	1/1	0.95	0.08	49,49,49,49	0
56	MG	1A	3986	1/1	0.95	0.07	71,71,71,71	0
56	MG	1E	312	1/1	0.95	0.05	24,24,24,24	0
56	MG	2A	3272	1/1	0.95	0.09	57,57,57,57	0
56	MG	1A	3256	1/1	0.95	0.18	41,41,41,41	0
56	MG	2A	3470	1/1	0.95	0.17	57,57,57,57	0
56	MG	1A	3436	1/1	0.95	0.10	49,49,49,49	0
56	MG	1A	3215	1/1	0.95	0.25	43,43,43,43	0
56	MG	2A	3753	1/1	0.95	0.06	80,80,80,80	0
56	MG	1a	1692	1/1	0.95	0.39	72,72,72,72	0
56	MG	1A	3991	1/1	0.95	0.09	29,29,29,29	0
56	MG	1A	3654	1/1	0.95	0.07	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3073	1/1	0.95	0.07	62,62,62,62	0
56	MG	2a	3073	1/1	0.95	0.52	83,83,83,83	0
56	MG	2A	3480	1/1	0.95	0.09	62,62,62,62	0
56	MG	1F	309	1/1	0.95	0.06	45,45,45,45	0
56	MG	2a	3077	1/1	0.95	0.22	66,66,66,66	0
56	MG	2A	3281	1/1	0.95	0.06	62,62,62,62	0
56	MG	1A	3831	1/1	0.95	0.07	41,41,41,41	0
56	MG	2A	3077	1/1	0.95	0.14	54,54,54,54	0
56	MG	2A	3764	1/1	0.95	0.09	44,44,44,44	0
56	MG	2A	3079	1/1	0.95	0.11	37,37,37,37	0
56	MG	1A	3365	1/1	0.95	0.14	54,54,54,54	0
56	MG	1A	3216	1/1	0.95	0.22	48,48,48,48	0
56	MG	1A	3662	1/1	0.95	0.11	53,53,53,53	0
56	MG	2A	3289	1/1	0.95	0.24	62,62,62,62	0
56	MG	2A	3771	1/1	0.95	0.06	62,62,62,62	0
56	MG	2A	3084	1/1	0.95	0.12	53,53,53,53	0
56	MG	1A	3837	1/1	0.95	0.17	66,66,66,66	0
56	MG	2A	3292	1/1	0.95	0.18	73,73,73,73	0
56	MG	2A	3776	1/1	0.95	0.10	58,58,58,58	0
56	MG	1A	3442	1/1	0.95	0.09	57,57,57,57	0
56	MG	2a	3094	1/1	0.95	0.26	72,72,72,72	0
56	MG	1A	3154	1/1	0.95	0.21	42,42,42,42	0
56	MG	1A	3446	1/1	0.95	0.12	63,63,63,63	0
56	MG	1A	3447	1/1	0.95	0.09	47,47,47,47	0
56	MG	2A	3784	1/1	0.95	0.08	57,57,57,57	0
56	MG	2A	3785	1/1	0.95	0.07	47,47,47,47	0
56	MG	1A	3530	1/1	0.95	0.10	74,74,74,74	0
56	MG	2A	3787	1/1	0.95	0.14	68,68,68,68	0
56	MG	1N	204	1/1	0.95	0.34	48,48,48,48	0
56	MG	1N	205	1/1	0.95	0.14	58,58,58,58	0
56	MG	1A	3114	1/1	0.95	0.16	41,41,41,41	0
56	MG	1A	3449	1/1	0.95	0.23	47,47,47,47	0
56	MG	1A	3450	1/1	0.95	0.30	48,48,48,48	0
56	MG	1A	3451	1/1	0.95	0.17	36,36,36,36	0
56	MG	2A	3510	1/1	0.95	0.06	77,77,77,77	0
56	MG	2A	3100	1/1	0.95	0.10	59,59,59,59	0
56	MG	2A	3804	1/1	0.95	0.14	56,56,56,56	0
56	MG	2A	3305	1/1	0.95	0.14	64,64,64,64	0
56	MG	1A	3540	1/1	0.95	0.24	44,44,44,44	0
56	MG	1A	3370	1/1	0.95	0.10	56,56,56,56	0
56	MG	1Q	202	1/1	0.95	0.07	54,54,54,54	0
56	MG	1Q	204	1/1	0.95	0.07	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	1A	4020	1/1	0.95	0.09	50,50,50,50	0
56	MG	1a	1721	1/1	0.95	0.19	49,49,49,49	0
56	MG	1A	4022	1/1	0.95	0.10	49,49,49,49	0
56	MG	1A	4023	1/1	0.95	0.10	57,57,57,57	0
56	MG	1R	203	1/1	0.95	0.19	42,42,42,42	0
56	MG	1A	3261	1/1	0.95	0.13	71,71,71,71	0
56	MG	2A	3817	1/1	0.95	0.06	67,67,67,67	0
56	MG	1a	1727	1/1	0.95	0.13	66,66,66,66	0
56	MG	1A	3702	1/1	0.95	0.09	47,47,47,47	0
56	MG	2A	3526	1/1	0.95	0.13	53,53,53,53	0
56	MG	1A	3372	1/1	0.95	0.11	56,56,56,56	0
56	MG	2A	3823	1/1	0.95	0.12	56,56,56,56	0
56	MG	1a	1733	1/1	0.95	0.12	50,50,50,50	0
56	MG	1a	1735	1/1	0.95	0.12	61,61,61,61	0
56	MG	2A	3121	1/1	0.95	0.12	55,55,55,55	0
56	MG	1A	3704	1/1	0.95	0.06	37,37,37,37	0
56	MG	1A	3320	1/1	0.95	0.09	60,60,60,60	0
56	MG	2A	3537	1/1	0.95	0.09	56,56,56,56	0
56	MG	2A	3540	1/1	0.95	0.07	42,42,42,42	0
56	MG	1A	3321	1/1	0.95	0.16	50,50,50,50	0
56	MG	1A	3862	1/1	0.95	0.04	24,24,24,24	0
56	MG	1A	3322	1/1	0.95	0.12	53,53,53,53	0
56	MG	1U	210	1/1	0.95	0.18	43,43,43,43	0
56	MG	2A	3845	1/1	0.95	0.10	59,59,59,59	0
56	MG	2A	3328	1/1	0.95	0.07	49,49,49,49	0
56	MG	1A	3157	1/1	0.95	0.14	36,36,36,36	0
56	MG	1A	3462	1/1	0.95	0.12	48,48,48,48	0
56	MG	2A	3555	1/1	0.95	0.08	44,44,44,44	0
56	MG	2A	3556	1/1	0.95	0.08	60,60,60,60	0
56	MG	1A	3220	1/1	0.95	0.06	47,47,47,47	0
56	MG	1A	3221	1/1	0.95	0.08	55,55,55,55	0
56	MG	1A	3160	1/1	0.95	0.48	38,38,38,38	0
56	MG	1A	3225	1/1	0.95	0.13	53,53,53,53	0
56	MG	2A	3138	1/1	0.95	0.19	53,53,53,53	0
56	MG	1A	3386	1/1	0.95	0.09	46,46,46,46	0
56	MG	1A	3226	1/1	0.95	0.07	51,51,51,51	0
56	MG	2A	3572	1/1	0.95	0.12	74,74,74,74	0
56	MG	1X	103	1/1	0.95	0.08	43,43,43,43	0
56	MG	2A	3574	1/1	0.95	0.07	46,46,46,46	0
56	MG	2A	3869	1/1	0.95	0.11	59,59,59,59	0
56	MG	2A	3143	1/1	0.95	0.17	50,50,50,50	0
56	MG	1A	3470	1/1	0.95	0.17	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3579	1/1	0.95	0.12	62,62,62,62	0
56	MG	1A	3727	1/1	0.95	0.07	51,51,51,51	0
56	MG	1A	4054	1/1	0.95	0.07	50,50,50,50	0
56	MG	1A	3561	1/1	0.95	0.12	36,36,36,36	0
56	MG	1A	3228	1/1	0.95	0.13	33,33,33,33	0
56	MG	10	101	1/1	0.95	0.26	46,46,46,46	0
56	MG	2A	3151	1/1	0.95	0.13	62,62,62,62	0
56	MG	2A	3589	1/1	0.95	0.12	60,60,60,60	0
56	MG	1A	3879	1/1	0.95	0.14	36,36,36,36	0
56	MG	1A	3273	1/1	0.95	0.06	43,43,43,43	0
56	MG	1A	3188	1/1	0.95	0.22	39,39,39,39	0
56	MG	1A	3885	1/1	0.95	0.11	39,39,39,39	0
56	MG	2A	3351	1/1	0.95	0.14	66,66,66,66	0
56	MG	1A	3278	1/1	0.95	0.18	35,35,35,35	0
56	MG	2a	3184	1/1	0.95	0.07	78,78,78,78	0
56	MG	2a	3185	1/1	0.95	0.10	59,59,59,59	0
56	MG	1A	3888	1/1	0.95	0.08	40,40,40,40	0
56	MG	2a	3187	1/1	0.95	0.11	70,70,70,70	0
56	MG	1A	3279	1/1	0.95	0.36	45,45,45,45	0
56	MG	12	102	1/1	0.95	0.09	43,43,43,43	0
56	MG	1A	3280	1/1	0.95	0.10	36,36,36,36	0
56	MG	1a	1781	1/1	0.95	0.10	50,50,50,50	0
56	MG	13	104	1/1	0.95	0.13	59,59,59,59	0
56	MG	15	101	1/1	0.95	0.27	33,33,33,33	0
56	MG	1A	3740	1/1	0.95	0.07	64,64,64,64	0
56	MG	1A	3573	1/1	0.95	0.11	39,39,39,39	0
56	MG	1A	3284	1/1	0.95	0.06	45,45,45,45	0
56	MG	2A	3170	1/1	0.95	0.10	63,63,63,63	0
56	MG	16	102	1/1	0.95	0.07	60,60,60,60	0
56	MG	17	101	1/1	0.95	0.11	42,42,42,42	0
56	MG	1A	3577	1/1	0.95	0.19	43,43,43,43	0
56	MG	1a	1807	1/1	0.95	0.06	62,62,62,62	0
56	MG	1a	1809	1/1	0.95	0.18	66,66,66,66	0
56	MG	18	101	1/1	0.95	0.14	66,66,66,66	0
56	MG	1A	3578	1/1	0.95	0.19	53,53,53,53	0
56	MG	2A	3179	1/1	0.95	0.12	46,46,46,46	0
56	MG	1A	3286	1/1	0.95	0.07	57,57,57,57	0
56	MG	1A	4076	1/1	0.95	0.08	67,67,67,67	0
56	MG	2A	3623	1/1	0.95	0.07	32,32,32,32	0
56	MG	1A	4077	1/1	0.95	0.08	53,53,53,53	0
56	MG	2a	3210	1/1	0.95	0.19	72,72,72,72	0
56	MG	1A	3899	1/1	0.95	0.06	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3746	1/1	0.95	0.09	56,56,56,56	0
56	MG	2A	3627	1/1	0.95	0.12	43,43,43,43	0
56	MG	2A	3185	1/1	0.95	0.13	51,51,51,51	0
56	MG	2E	310	1/1	0.95	0.14	73,73,73,73	0
56	MG	1A	3902	1/1	0.95	0.11	64,64,64,64	0
56	MG	1A	3161	1/1	0.95	0.15	54,54,54,54	0
56	MG	2F	303	1/1	0.95	0.09	51,51,51,51	0
56	MG	1a	1605	1/1	0.95	0.06	63,63,63,63	0
56	MG	1A	3583	1/1	0.95	0.12	34,34,34,34	0
56	MG	1A	3407	1/1	0.95	0.07	44,44,44,44	0
56	MG	1a	1610	1/1	0.95	0.17	59,59,59,59	0
56	MG	2O	201	1/1	0.95	0.16	67,67,67,67	0
56	MG	2A	3639	1/1	0.95	0.15	50,50,50,50	0
56	MG	1A	4087	1/1	0.95	0.19	61,61,61,61	0
56	MG	1A	3909	1/1	0.95	0.09	50,50,50,50	0
56	MG	2Q	203	1/1	0.95	0.07	60,60,60,60	0
56	MG	1A	4089	1/1	0.95	0.11	44,44,44,44	0
56	MG	1w	102	1/1	0.95	0.12	63,63,63,63	0
56	MG	1A	3028	1/1	0.95	0.18	36,36,36,36	0
56	MG	1A	3086	1/1	0.95	0.20	33,33,33,33	0
56	MG	2A	3391	1/1	0.95	0.19	66,66,66,66	0
56	MG	1a	1620	1/1	0.95	0.08	56,56,56,56	0
56	MG	1A	3164	1/1	0.95	0.21	37,37,37,37	0
56	MG	1A	3590	1/1	0.95	0.13	38,38,38,38	0
56	MG	1A	3762	1/1	0.95	0.06	45,45,45,45	0
56	MG	1A	3591	1/1	0.95	0.13	59,59,59,59	0
56	MG	1A	3242	1/1	0.95	0.17	52,52,52,52	0
56	MG	20	101	1/1	0.95	0.20	68,68,68,68	0
56	MG	2a	3241	1/1	0.95	0.13	73,73,73,73	0
56	MG	1A	4097	1/1	0.95	0.23	57,57,57,57	0
56	MG	1A	3076	1/1	0.95	0.19	52,52,52,52	0
56	MG	2A	3666	1/1	0.95	0.10	52,52,52,52	0
56	MG	1A	3766	1/1	0.95	0.09	22,22,22,22	0
56	MG	1A	3201	1/1	0.95	0.09	34,34,34,34	0
56	MG	2l	203	1/1	0.95	0.08	78,78,78,78	0
56	MG	1A	3489	1/1	0.95	0.14	64,64,64,64	0
56	MG	25	102	1/1	0.95	0.15	55,55,55,55	0
56	MG	25	103	1/1	0.95	0.09	59,59,59,59	0
56	MG	1A	3776	1/1	0.95	0.08	33,33,33,33	0
56	MG	1A	3016	1/1	0.95	0.23	56,56,56,56	0
56	MG	1A	3102	1/1	0.95	0.17	43,43,43,43	0
56	MG	1B	3603	1/1	0.95	0.17	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	1B	3605	1/1	0.95	0.06	47,47,47,47	0
56	MG	2A	3675	1/1	0.95	0.07	43,43,43,43	0
56	MG	1B	3606	1/1	0.95	0.17	50,50,50,50	0
56	MG	2A	3002	1/1	0.95	0.37	68,68,68,68	0
56	MG	2A	3678	1/1	0.95	0.07	56,56,56,56	0
56	MG	1A	3248	1/1	0.95	0.12	42,42,42,42	0
56	MG	2A	3681	1/1	0.95	0.25	75,75,75,75	0
56	MG	1a	1642	1/1	0.95	0.21	71,71,71,71	0
56	MG	1A	3941	1/1	0.95	0.07	43,43,43,43	0
56	MG	1A	3494	1/1	0.95	0.07	54,54,54,54	0
56	MG	2A	3414	1/1	0.95	0.12	67,67,67,67	0
56	MG	1a	1645	1/1	0.95	0.08	55,55,55,55	0
56	MG	1B	3610	1/1	0.95	0.11	54,54,54,54	0
56	MG	2A	3010	1/1	0.95	0.12	58,58,58,58	0
56	MG	2A	3011	1/1	0.95	0.09	61,61,61,61	0
56	MG	1a	1648	1/1	0.95	0.21	64,64,64,64	0
56	MG	1A	3949	1/1	0.95	0.10	31,31,31,31	0
56	MG	2A	3692	1/1	0.95	0.07	51,51,51,51	0
56	MG	1A	3793	1/1	0.95	0.05	35,35,35,35	0
56	MG	1A	3350	1/1	0.95	0.10	43,43,43,43	0
56	MG	1a	1655	1/1	0.95	0.10	59,59,59,59	0
56	MG	2A	3022	1/1	0.95	0.22	48,48,48,48	0
59	ZN	24	501	1/1	0.95	0.09	108,108,108,108	0
56	MG	1D	308	1/1	0.96	0.12	53,53,53,53	0
56	MG	1A	3063	1/1	0.96	0.26	57,57,57,57	0
56	MG	1A	3706	1/1	0.96	0.10	26,26,26,26	0
56	MG	1E	301	1/1	0.96	0.15	42,42,42,42	0
56	MG	2A	3713	1/1	0.96	0.06	68,68,68,68	0
56	MG	2A	3244	1/1	0.96	0.20	59,59,59,59	0
56	MG	1A	3171	1/1	0.96	0.12	42,42,42,42	0
56	MG	1E	304	1/1	0.96	0.26	51,51,51,51	0
56	MG	2A	3247	1/1	0.96	0.14	44,44,44,44	0
56	MG	2A	3454	1/1	0.96	0.24	57,57,57,57	0
56	MG	2A	3723	1/1	0.96	0.08	42,42,42,42	0
56	MG	2A	3724	1/1	0.96	0.06	48,48,48,48	0
56	MG	1a	1664	1/1	0.96	0.14	60,60,60,60	0
56	MG	2A	3037	1/1	0.96	0.10	51,51,51,51	0
56	MG	1A	3709	1/1	0.96	0.05	30,30,30,30	0
56	MG	1E	307	1/1	0.96	0.18	35,35,35,35	0
56	MG	1A	3847	1/1	0.96	0.05	42,42,42,42	0
56	MG	1A	3175	1/1	0.96	0.17	30,30,30,30	0
56	MG	1A	3178	1/1	0.96	0.07	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3270	1/1	0.96	0.11	43,43,43,43	0
56	MG	1A	3853	1/1	0.96	0.08	53,53,53,53	0
56	MG	1A	3423	1/1	0.96	0.10	51,51,51,51	0
56	MG	1A	3564	1/1	0.96	0.18	32,32,32,32	0
56	MG	1A	3271	1/1	0.96	0.13	53,53,53,53	0
56	MG	2A	3467	1/1	0.96	0.20	42,42,42,42	0
56	MG	1a	1675	1/1	0.96	0.10	67,67,67,67	0
56	MG	2A	3050	1/1	0.96	0.11	43,43,43,43	0
56	MG	1F	305	1/1	0.96	0.04	42,42,42,42	0
56	MG	2a	3050	1/1	0.96	0.11	65,65,65,65	0
56	MG	1F	308	1/1	0.96	0.07	53,53,53,53	0
56	MG	1A	3179	1/1	0.96	0.21	42,42,42,42	0
56	MG	1a	1680	1/1	0.96	0.11	78,78,78,78	0
56	MG	1F	310	1/1	0.96	0.10	38,38,38,38	0
56	MG	1A	3227	1/1	0.96	0.15	44,44,44,44	0
56	MG	1A	3065	1/1	0.96	0.29	65,65,65,65	0
56	MG	1A	3002	1/1	0.96	0.20	58,58,58,58	0
56	MG	1A	4015	1/1	0.96	0.05	34,34,34,34	0
56	MG	1A	4016	1/1	0.96	0.06	38,38,38,38	0
56	MG	2A	3756	1/1	0.96	0.14	46,46,46,46	0
56	MG	1A	3863	1/1	0.96	0.07	27,27,27,27	0
56	MG	1A	3724	1/1	0.96	0.13	35,35,35,35	0
56	MG	1a	1689	1/1	0.96	0.19	55,55,55,55	0
56	MG	1A	3009	1/1	0.96	0.05	30,30,30,30	0
56	MG	1A	3866	1/1	0.96	0.17	33,33,33,33	0
56	MG	1A	3726	1/1	0.96	0.17	57,57,57,57	0
56	MG	1N	203	1/1	0.96	0.10	37,37,37,37	0
56	MG	1A	3491	1/1	0.96	0.10	44,44,44,44	0
56	MG	2A	3071	1/1	0.96	0.10	66,66,66,66	0
56	MG	2a	3070	1/1	0.96	0.23	54,54,54,54	0
56	MG	1A	3432	1/1	0.96	0.20	56,56,56,56	0
56	MG	2a	3072	1/1	0.96	0.07	64,64,64,64	0
56	MG	1A	3074	1/1	0.96	0.05	34,34,34,34	0
56	MG	1A	3184	1/1	0.96	0.10	42,42,42,42	0
56	MG	2A	3285	1/1	0.96	0.28	53,53,53,53	0
56	MG	2a	3076	1/1	0.96	0.17	55,55,55,55	0
56	MG	1A	3237	1/1	0.96	0.20	56,56,56,56	0
56	MG	2A	3078	1/1	0.96	0.06	52,52,52,52	0
56	MG	1A	3496	1/1	0.96	0.11	43,43,43,43	0
56	MG	1A	3238	1/1	0.96	0.12	32,32,32,32	0
56	MG	1P	201	1/1	0.96	0.21	35,35,35,35	0
56	MG	2A	3778	1/1	0.96	0.10	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1P	204	1/1	0.96	0.10	37,37,37,37	0
56	MG	2A	3507	1/1	0.96	0.10	68,68,68,68	0
56	MG	1A	4033	1/1	0.96	0.10	40,40,40,40	0
56	MG	1Q	201	1/1	0.96	0.09	35,35,35,35	0
56	MG	1A	3498	1/1	0.96	0.06	54,54,54,54	0
56	MG	2A	3087	1/1	0.96	0.09	57,57,57,57	0
56	MG	1Q	203	1/1	0.96	0.07	65,65,65,65	0
56	MG	1A	3586	1/1	0.96	0.10	44,44,44,44	0
56	MG	2A	3788	1/1	0.96	0.06	65,65,65,65	0
56	MG	1A	3499	1/1	0.96	0.14	58,58,58,58	0
56	MG	2A	3792	1/1	0.96	0.10	58,58,58,58	0
56	MG	2A	3793	1/1	0.96	0.08	59,59,59,59	0
56	MG	1A	3500	1/1	0.96	0.16	61,61,61,61	0
56	MG	1A	3882	1/1	0.96	0.21	36,36,36,36	0
56	MG	1A	4042	1/1	0.96	0.08	57,57,57,57	0
56	MG	1R	204	1/1	0.96	0.10	37,37,37,37	0
56	MG	1A	4043	1/1	0.96	0.16	51,51,51,51	0
56	MG	1A	3437	1/1	0.96	0.15	53,53,53,53	0
56	MG	1A	3239	1/1	0.96	0.13	44,44,44,44	0
56	MG	2A	3099	1/1	0.96	0.10	53,53,53,53	0
56	MG	1A	3592	1/1	0.96	0.09	46,46,46,46	0
56	MG	1a	1720	1/1	0.96	0.14	53,53,53,53	0
56	MG	1A	3505	1/1	0.96	0.10	41,41,41,41	0
56	MG	2A	3528	1/1	0.96	0.11	58,58,58,58	0
56	MG	2a	3108	1/1	0.96	0.17	66,66,66,66	0
56	MG	1A	3139	1/1	0.96	0.06	20,20,20,20	0
56	MG	1A	4052	1/1	0.96	0.04	38,38,38,38	0
56	MG	1A	3380	1/1	0.96	0.08	51,51,51,51	0
56	MG	2A	3107	1/1	0.96	0.08	61,61,61,61	0
56	MG	1a	1725	1/1	0.96	0.13	60,60,60,60	0
56	MG	1U	208	1/1	0.96	0.21	38,38,38,38	0
56	MG	2a	3115	1/1	0.96	0.09	77,77,77,77	0
56	MG	1A	3291	1/1	0.96	0.22	42,42,42,42	0
56	MG	2A	3112	1/1	0.96	0.15	50,50,50,50	0
56	MG	1A	3382	1/1	0.96	0.09	45,45,45,45	0
56	MG	1A	3444	1/1	0.96	0.07	43,43,43,43	0
56	MG	2A	3543	1/1	0.96	0.06	37,37,37,37	0
56	MG	2A	3544	1/1	0.96	0.08	66,66,66,66	0
56	MG	1A	3757	1/1	0.96	0.07	42,42,42,42	0
56	MG	1A	3445	1/1	0.96	0.14	38,38,38,38	0
56	MG	1A	3759	1/1	0.96	0.06	46,46,46,46	0
56	MG	2A	3827	1/1	0.96	0.05	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3897	1/1	0.96	0.07	29,29,29,29	0
56	MG	1A	3512	1/1	0.96	0.08	48,48,48,48	0
56	MG	1A	3051	1/1	0.96	0.11	32,32,32,32	0
56	MG	2A	3122	1/1	0.96	0.07	58,58,58,58	0
56	MG	2A	3836	1/1	0.96	0.07	45,45,45,45	0
56	MG	1X	102	1/1	0.96	0.09	43,43,43,43	0
56	MG	1A	3105	1/1	0.96	0.17	48,48,48,48	0
56	MG	2A	3559	1/1	0.96	0.07	45,45,45,45	0
56	MG	1A	3387	1/1	0.96	0.09	49,49,49,49	0
56	MG	1a	1746	1/1	0.96	0.08	63,63,63,63	0
56	MG	1A	3144	1/1	0.96	0.20	42,42,42,42	0
56	MG	1A	3612	1/1	0.96	0.11	55,55,55,55	0
56	MG	1Y	203	1/1	0.96	0.19	52,52,52,52	0
56	MG	1a	1751	1/1	0.96	0.08	59,59,59,59	0
56	MG	2A	3131	1/1	0.96	0.15	55,55,55,55	0
56	MG	1a	1752	1/1	0.96	0.14	62,62,62,62	0
56	MG	1A	3389	1/1	0.96	0.11	54,54,54,54	0
56	MG	2A	3577	1/1	0.96	0.07	49,49,49,49	0
56	MG	2A	3857	1/1	0.96	0.08	66,66,66,66	0
56	MG	1A	3769	1/1	0.96	0.09	25,25,25,25	0
56	MG	2A	3135	1/1	0.96	0.13	59,59,59,59	0
56	MG	2A	3136	1/1	0.96	0.06	54,54,54,54	0
56	MG	1Z	303	1/1	0.96	0.14	56,56,56,56	0
56	MG	2A	3862	1/1	0.96	0.06	42,42,42,42	0
56	MG	1A	4072	1/1	0.96	0.12	21,21,21,21	0
56	MG	2A	3864	1/1	0.96	0.14	51,51,51,51	0
56	MG	1A	3770	1/1	0.96	0.06	35,35,35,35	0
56	MG	1A	3771	1/1	0.96	0.05	31,31,31,31	0
56	MG	10	105	1/1	0.96	0.29	68,68,68,68	0
56	MG	1A	3774	1/1	0.96	0.10	31,31,31,31	0
56	MG	1A	3078	1/1	0.96	0.08	32,32,32,32	0
56	MG	11	102	1/1	0.96	0.13	49,49,49,49	0
56	MG	1A	4079	1/1	0.96	0.12	62,62,62,62	0
56	MG	1A	3917	1/1	0.96	0.09	39,39,39,39	0
56	MG	1A	3918	1/1	0.96	0.13	34,34,34,34	0
56	MG	1A	3452	1/1	0.96	0.09	65,65,65,65	0
56	MG	2A	3150	1/1	0.96	0.07	48,48,48,48	0
56	MG	1A	3522	1/1	0.96	0.30	45,45,45,45	0
56	MG	2a	3168	1/1	0.96	0.06	58,58,58,58	0
56	MG	2a	3169	1/1	0.96	0.19	64,64,64,64	0
56	MG	1A	3779	1/1	0.96	0.05	64,64,64,64	0
56	MG	1A	3041	1/1	0.96	0.23	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	15	102	1/1	0.96	0.10	42,42,42,42	0
56	MG	15	103	1/1	0.96	0.23	30,30,30,30	0
56	MG	15	104	1/1	0.96	0.07	32,32,32,32	0
56	MG	2A	3607	1/1	0.96	0.15	57,57,57,57	0
56	MG	15	105	1/1	0.96	0.08	50,50,50,50	0
56	MG	2a	3178	1/1	0.96	0.06	74,74,74,74	0
56	MG	2a	3179	1/1	0.96	0.09	75,75,75,75	0
56	MG	1A	3621	1/1	0.96	0.10	51,51,51,51	0
56	MG	1A	3790	1/1	0.96	0.13	32,32,32,32	0
56	MG	1A	3623	1/1	0.96	0.04	42,42,42,42	0
56	MG	1A	3394	1/1	0.96	0.62	48,48,48,48	0
56	MG	2A	3162	1/1	0.96	0.09	64,64,64,64	0
56	MG	2A	3163	1/1	0.96	0.18	54,54,54,54	0
56	MG	1a	1794	1/1	0.96	0.05	82,82,82,82	0
56	MG	1A	3341	1/1	0.96	0.21	41,41,41,41	0
56	MG	2A	3166	1/1	0.96	0.09	44,44,44,44	0
56	MG	1A	3934	1/1	0.96	0.07	48,48,48,48	0
56	MG	1A	3456	1/1	0.96	0.09	45,45,45,45	0
56	MG	1a	1805	1/1	0.96	0.06	56,56,56,56	0
56	MG	2A	3621	1/1	0.96	0.08	72,72,72,72	0
56	MG	18	102	1/1	0.96	0.20	45,45,45,45	0
56	MG	2A	3171	1/1	0.96	0.13	72,72,72,72	0
56	MG	18	104	1/1	0.96	0.14	53,53,53,53	0
56	MG	1A	3798	1/1	0.96	0.13	56,56,56,56	0
56	MG	1A	3629	1/1	0.96	0.07	37,37,37,37	0
56	MG	2D	302	1/1	0.96	0.33	70,70,70,70	0
56	MG	1A	3042	1/1	0.96	0.27	38,38,38,38	0
56	MG	2D	304	1/1	0.96	0.07	40,40,40,40	0
56	MG	1A	3943	1/1	0.96	0.08	66,66,66,66	0
56	MG	1A	3944	1/1	0.96	0.06	37,37,37,37	0
56	MG	1A	3946	1/1	0.96	0.08	55,55,55,55	0
56	MG	1A	3804	1/1	0.96	0.07	23,23,23,23	0
56	MG	1A	3043	1/1	0.96	0.15	46,46,46,46	0
56	MG	1A	3952	1/1	0.96	0.05	63,63,63,63	0
56	MG	2E	304	1/1	0.96	0.21	51,51,51,51	0
56	MG	1e	202	1/1	0.96	0.16	61,61,61,61	0
56	MG	1A	3641	1/1	0.96	0.10	57,57,57,57	0
56	MG	1l	201	1/1	0.96	0.08	76,76,76,76	0
56	MG	2E	309	1/1	0.96	0.11	45,45,45,45	0
56	MG	1A	3112	1/1	0.96	0.07	51,51,51,51	0
56	MG	2A	3643	1/1	0.96	0.16	68,68,68,68	0
56	MG	1m	3001	1/1	0.96	0.07	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3647	1/1	0.96	0.06	50,50,50,50	0
56	MG	2A	3650	1/1	0.96	0.08	52,52,52,52	0
56	MG	1a	1608	1/1	0.96	0.07	58,58,58,58	0
56	MG	1a	1609	1/1	0.96	0.11	50,50,50,50	0
56	MG	2A	3653	1/1	0.96	0.09	48,48,48,48	0
56	MG	1A	3113	1/1	0.96	0.07	46,46,46,46	0
56	MG	1a	1611	1/1	0.96	0.07	33,33,33,33	0
56	MG	1A	3532	1/1	0.96	0.09	64,64,64,64	0
56	MG	2Q	201	1/1	0.96	0.10	61,61,61,61	0
56	MG	1A	3533	1/1	0.96	0.09	54,54,54,54	0
56	MG	1A	3534	1/1	0.96	0.08	50,50,50,50	0
56	MG	1A	3204	1/1	0.96	0.08	36,36,36,36	0
56	MG	1A	3536	1/1	0.96	0.11	44,44,44,44	0
56	MG	1a	1618	1/1	0.96	0.09	53,53,53,53	0
56	MG	1A	3965	1/1	0.96	0.05	38,38,38,38	0
56	MG	1A	3659	1/1	0.96	0.07	44,44,44,44	0
56	MG	2T	203	1/1	0.96	0.20	61,61,61,61	0
56	MG	1w	108	1/1	0.96	0.07	88,88,88,88	0
56	MG	2a	3234	1/1	0.96	0.12	59,59,59,59	0
56	MG	1A	3056	1/1	0.96	0.17	48,48,48,48	0
56	MG	1A	3405	1/1	0.96	0.09	51,51,51,51	0
56	MG	2W	201	1/1	0.96	0.11	45,45,45,45	0
56	MG	1A	3969	1/1	0.96	0.08	56,56,56,56	0
56	MG	1A	3664	1/1	0.96	0.11	53,53,53,53	0
56	MG	1A	3971	1/1	0.96	0.09	27,27,27,27	0
56	MG	1A	3406	1/1	0.96	0.07	48,48,48,48	0
56	MG	1B	3619	1/1	0.96	0.21	58,58,58,58	0
56	MG	1B	3620	1/1	0.96	0.06	37,37,37,37	0
56	MG	2e	201	1/1	0.96	0.06	75,75,75,75	0
56	MG	2f	201	1/1	0.96	0.11	57,57,57,57	0
56	MG	1A	3117	1/1	0.96	0.10	52,52,52,52	0
56	MG	1A	3030	1/1	0.96	0.31	32,32,32,32	0
56	MG	2l	201	1/1	0.96	0.09	70,70,70,70	0
56	MG	2A	3212	1/1	0.96	0.09	63,63,63,63	0
56	MG	23	101	1/1	0.96	0.06	56,56,56,56	0
56	MG	1A	3034	1/1	0.96	0.23	35,35,35,35	0
56	MG	2A	3416	1/1	0.96	0.17	60,60,60,60	0
56	MG	1a	1635	1/1	0.96	0.15	69,69,69,69	0
56	MG	1A	3089	1/1	0.96	0.16	54,54,54,54	0
56	MG	1a	1637	1/1	0.96	0.07	50,50,50,50	0
56	MG	1A	3677	1/1	0.96	0.06	37,37,37,37	0
56	MG	1A	3681	1/1	0.96	0.05	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3219	1/1	0.96	0.07	52,52,52,52	0
56	MG	1A	3979	1/1	0.96	0.08	70,70,70,70	0
56	MG	1B	3628	1/1	0.96	0.05	40,40,40,40	0
56	MG	1A	3471	1/1	0.96	0.10	51,51,51,51	0
56	MG	1A	3090	1/1	0.96	0.07	56,56,56,56	0
56	MG	1A	3060	1/1	0.96	0.07	36,36,36,36	0
56	MG	2A	3009	1/1	0.96	0.06	47,47,47,47	0
56	MG	1A	3127	1/1	0.96	0.09	39,39,39,39	0
56	MG	1A	3836	1/1	0.96	0.15	41,41,41,41	0
56	MG	2A	3012	1/1	0.96	0.06	43,43,43,43	0
56	MG	1A	3047	1/1	0.96	0.07	34,34,34,34	0
56	MG	1A	3698	1/1	0.96	0.07	25,25,25,25	0
56	MG	1A	3551	1/1	0.96	0.21	53,53,53,53	0
56	MG	2x	106	1/1	0.96	0.09	58,58,58,58	0
56	MG	1a	1651	1/1	0.96	0.08	58,58,58,58	0
56	MG	1a	1652	1/1	0.96	0.13	54,54,54,54	0
56	MG	1a	1653	1/1	0.96	0.07	57,57,57,57	0
56	MG	1B	3637	1/1	0.96	0.07	44,44,44,44	0
56	MG	2A	3703	1/1	0.96	0.10	39,39,39,39	0
56	MG	2A	3236	1/1	0.96	0.21	44,44,44,44	0
56	MG	1D	301	1/1	0.96	0.25	41,41,41,41	0
56	MG	2A	3442	1/1	0.96	0.25	60,60,60,60	0
56	MG	1A	3005	1/1	0.96	0.08	43,43,43,43	0
56	MG	1A	3131	1/1	0.96	0.08	53,53,53,53	0
56	MG	1A	3130	1/1	0.97	0.08	46,46,46,46	0
56	MG	1A	3581	1/1	0.97	0.39	41,41,41,41	0
56	MG	1A	3155	1/1	0.97	0.10	45,45,45,45	0
56	MG	1A	3222	1/1	0.97	0.18	42,42,42,42	0
56	MG	1A	3705	1/1	0.97	0.10	30,30,30,30	0
56	MG	1a	1788	1/1	0.97	0.05	65,65,65,65	0
56	MG	1a	1790	1/1	0.97	0.10	72,72,72,72	0
56	MG	2A	3768	1/1	0.97	0.06	59,59,59,59	0
56	MG	2A	3139	1/1	0.97	0.19	46,46,46,46	0
56	MG	1A	3459	1/1	0.97	0.09	49,49,49,49	0
56	MG	1A	3223	1/1	0.97	0.24	54,54,54,54	0
56	MG	1a	1796	1/1	0.97	0.06	71,71,71,71	0
56	MG	1A	3091	1/1	0.97	0.07	29,29,29,29	0
56	MG	1A	3517	1/1	0.97	0.19	50,50,50,50	0
56	MG	2A	3775	1/1	0.97	0.20	68,68,68,68	0
56	MG	1a	1801	1/1	0.97	0.06	68,68,68,68	0
56	MG	2A	3777	1/1	0.97	0.05	44,44,44,44	0
56	MG	1A	3115	1/1	0.97	0.18	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3536	1/1	0.97	0.11	42,42,42,42	0
56	MG	2A	3780	1/1	0.97	0.10	63,63,63,63	0
56	MG	1a	1612	1/1	0.97	0.05	64,64,64,64	0
56	MG	2A	3538	1/1	0.97	0.06	41,41,41,41	0
56	MG	2A	3539	1/1	0.97	0.07	57,57,57,57	0
56	MG	1A	3589	1/1	0.97	0.07	42,42,42,42	0
56	MG	1A	3158	1/1	0.97	0.09	36,36,36,36	0
56	MG	1A	3988	1/1	0.97	0.16	62,62,62,62	0
56	MG	1A	3464	1/1	0.97	0.21	41,41,41,41	0
56	MG	1A	3851	1/1	0.97	0.04	59,59,59,59	0
56	MG	1A	3357	1/1	0.97	0.14	40,40,40,40	0
56	MG	2A	3790	1/1	0.97	0.05	54,54,54,54	0
56	MG	2A	3791	1/1	0.97	0.04	59,59,59,59	0
56	MG	1a	1619	1/1	0.97	0.06	65,65,65,65	0
56	MG	1a	1814	1/1	0.97	0.16	58,58,58,58	0
56	MG	1A	3116	1/1	0.97	0.07	40,40,40,40	0
56	MG	2A	3551	1/1	0.97	0.08	65,65,65,65	0
56	MG	1A	3995	1/1	0.97	0.08	31,31,31,31	0
56	MG	1A	3265	1/1	0.97	0.18	37,37,37,37	0
56	MG	2A	3798	1/1	0.97	0.06	73,73,73,73	0
56	MG	1A	3191	1/1	0.97	0.12	52,52,52,52	0
56	MG	1D	304	1/1	0.97	0.07	24,24,24,24	0
56	MG	1f	201	1/1	0.97	0.14	49,49,49,49	0
56	MG	1A	3722	1/1	0.97	0.04	14,14,14,14	0
56	MG	2A	3805	1/1	0.97	0.10	79,79,79,79	0
56	MG	1A	3857	1/1	0.97	0.08	44,44,44,44	0
56	MG	2A	3562	1/1	0.97	0.11	42,42,42,42	0
56	MG	1D	309	1/1	0.97	0.10	46,46,46,46	0
56	MG	1D	310	1/1	0.97	0.11	29,29,29,29	0
56	MG	2A	3567	1/1	0.97	0.11	43,43,43,43	0
56	MG	1A	3858	1/1	0.97	0.09	28,28,28,28	0
56	MG	1A	4001	1/1	0.97	0.10	57,57,57,57	0
56	MG	1A	4002	1/1	0.97	0.06	62,62,62,62	0
56	MG	1A	3230	1/1	0.97	0.11	48,48,48,48	0
56	MG	1a	1634	1/1	0.97	0.12	37,37,37,37	0
56	MG	1A	3193	1/1	0.97	0.18	38,38,38,38	0
56	MG	1A	3318	1/1	0.97	0.15	40,40,40,40	0
56	MG	1A	3064	1/1	0.97	0.07	34,34,34,34	0
56	MG	1A	3103	1/1	0.97	0.07	33,33,33,33	0
56	MG	1A	3007	1/1	0.97	0.05	39,39,39,39	0
56	MG	1A	3235	1/1	0.97	0.27	39,39,39,39	0
56	MG	1A	3606	1/1	0.97	0.36	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3824	1/1	0.97	0.12	61,61,61,61	0
56	MG	1E	315	1/1	0.97	0.17	46,46,46,46	0
56	MG	1A	3607	1/1	0.97	0.19	35,35,35,35	0
56	MG	1A	3275	1/1	0.97	0.12	53,53,53,53	0
56	MG	2A	3588	1/1	0.97	0.14	47,47,47,47	0
56	MG	1A	3197	1/1	0.97	0.20	39,39,39,39	0
56	MG	1A	3735	1/1	0.97	0.11	58,58,58,58	0
56	MG	2A	3833	1/1	0.97	0.09	46,46,46,46	0
56	MG	1A	3611	1/1	0.97	0.08	39,39,39,39	0
56	MG	2A	3835	1/1	0.97	0.07	58,58,58,58	0
56	MG	1F	306	1/1	0.97	0.10	31,31,31,31	0
56	MG	1A	3120	1/1	0.97	0.22	43,43,43,43	0
56	MG	1A	3614	1/1	0.97	0.06	43,43,43,43	0
56	MG	1x	109	1/1	0.97	0.08	32,32,32,32	0
56	MG	1A	3140	1/1	0.97	0.10	50,50,50,50	0
56	MG	2a	3117	1/1	0.97	0.17	66,66,66,66	0
56	MG	1A	3538	1/1	0.97	0.13	43,43,43,43	0
56	MG	2A	3190	1/1	0.97	0.06	59,59,59,59	0
56	MG	2A	3846	1/1	0.97	0.06	43,43,43,43	0
56	MG	2A	3847	1/1	0.97	0.06	55,55,55,55	0
56	MG	1A	3240	1/1	0.97	0.17	37,37,37,37	0
56	MG	1A	3281	1/1	0.97	0.29	40,40,40,40	0
56	MG	1A	3878	1/1	0.97	0.04	40,40,40,40	0
56	MG	1A	3429	1/1	0.97	0.08	42,42,42,42	0
56	MG	1A	3283	1/1	0.97	0.14	50,50,50,50	0
56	MG	1A	3484	1/1	0.97	0.07	43,43,43,43	0
56	MG	1G	205	1/1	0.97	0.08	64,64,64,64	0
56	MG	1A	3023	1/1	0.97	0.05	20,20,20,20	0
56	MG	1A	4034	1/1	0.97	0.07	46,46,46,46	0
56	MG	1A	3751	1/1	0.97	0.04	51,51,51,51	0
56	MG	1A	3377	1/1	0.97	0.23	42,42,42,42	0
56	MG	1A	3285	1/1	0.97	0.06	46,46,46,46	0
56	MG	1A	3095	1/1	0.97	0.05	38,38,38,38	0
56	MG	1A	3631	1/1	0.97	0.10	44,44,44,44	0
56	MG	1O	202	1/1	0.97	0.15	59,59,59,59	0
56	MG	1A	3632	1/1	0.97	0.08	55,55,55,55	0
56	MG	1A	3548	1/1	0.97	0.06	28,28,28,28	0
56	MG	2A	3867	1/1	0.97	0.07	63,63,63,63	0
56	MG	1A	3635	1/1	0.97	0.09	53,53,53,53	0
56	MG	1A	3636	1/1	0.97	0.05	37,37,37,37	0
56	MG	2A	3019	1/1	0.97	0.07	42,42,42,42	0
56	MG	1A	3895	1/1	0.97	0.08	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1P	203	1/1	0.97	0.12	40,40,40,40	0
56	MG	1A	4047	1/1	0.97	0.04	53,53,53,53	0
56	MG	1a	1676	1/1	0.97	0.11	58,58,58,58	0
56	MG	1P	205	1/1	0.97	0.20	31,31,31,31	0
56	MG	1A	3243	1/1	0.97	0.05	42,42,42,42	0
56	MG	2A	3877	1/1	0.97	0.10	46,46,46,46	0
56	MG	1A	4049	1/1	0.97	0.10	29,29,29,29	0
56	MG	1A	3638	1/1	0.97	0.05	23,23,23,23	0
56	MG	1A	4051	1/1	0.97	0.05	25,25,25,25	0
56	MG	2A	3633	1/1	0.97	0.06	44,44,44,44	0
56	MG	1A	3124	1/1	0.97	0.20	42,42,42,42	0
56	MG	2a	3155	1/1	0.97	0.06	67,67,67,67	0
56	MG	2A	3032	1/1	0.97	0.05	47,47,47,47	0
56	MG	2A	3637	1/1	0.97	0.06	43,43,43,43	0
56	MG	1A	3642	1/1	0.97	0.11	32,32,32,32	0
56	MG	2A	3034	1/1	0.97	0.13	58,58,58,58	0
56	MG	1A	3900	1/1	0.97	0.04	36,36,36,36	0
56	MG	2A	3641	1/1	0.97	0.09	47,47,47,47	0
56	MG	1A	3643	1/1	0.97	0.09	25,25,25,25	0
56	MG	2a	3164	1/1	0.97	0.06	70,70,70,70	0
56	MG	1A	3644	1/1	0.97	0.05	43,43,43,43	0
56	MG	2B	207	1/1	0.97	0.05	67,67,67,67	0
56	MG	1A	3903	1/1	0.97	0.05	39,39,39,39	0
56	MG	2A	3646	1/1	0.97	0.13	60,60,60,60	0
56	MG	1A	3904	1/1	0.97	0.13	36,36,36,36	0
56	MG	2A	3648	1/1	0.97	0.06	45,45,45,45	0
56	MG	2A	3649	1/1	0.97	0.11	49,49,49,49	0
56	MG	2A	3418	1/1	0.97	0.14	43,43,43,43	0
56	MG	1A	3905	1/1	0.97	0.12	49,49,49,49	0
56	MG	1A	3645	1/1	0.97	0.05	51,51,51,51	0
56	MG	1A	3773	1/1	0.97	0.06	30,30,30,30	0
56	MG	1A	3206	1/1	0.97	0.14	34,34,34,34	0
56	MG	1U	202	1/1	0.97	0.28	43,43,43,43	0
56	MG	1A	3384	1/1	0.97	0.14	40,40,40,40	0
56	MG	1A	3553	1/1	0.97	0.07	53,53,53,53	0
56	MG	2D	301	1/1	0.97	0.07	43,43,43,43	0
56	MG	2A	3658	1/1	0.97	0.20	69,69,69,69	0
56	MG	1A	3145	1/1	0.97	0.05	36,36,36,36	0
56	MG	2A	3660	1/1	0.97	0.09	57,57,57,57	0
56	MG	1U	206	1/1	0.97	0.20	37,37,37,37	0
56	MG	2A	3049	1/1	0.97	0.08	32,32,32,32	0
56	MG	1U	207	1/1	0.97	0.24	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3913	1/1	0.97	0.07	61,61,61,61	0
56	MG	1a	1700	1/1	0.97	0.32	69,69,69,69	0
56	MG	1U	209	1/1	0.97	0.20	38,38,38,38	0
56	MG	1A	3652	1/1	0.97	0.12	28,28,28,28	0
56	MG	1A	4070	1/1	0.97	0.07	54,54,54,54	0
56	MG	2E	306	1/1	0.97	0.06	46,46,46,46	0
56	MG	2A	3056	1/1	0.97	0.11	50,50,50,50	0
56	MG	1A	3653	1/1	0.97	0.07	35,35,35,35	0
56	MG	1V	205	1/1	0.97	0.07	42,42,42,42	0
56	MG	1A	3555	1/1	0.97	0.12	52,52,52,52	0
56	MG	1A	3788	1/1	0.97	0.08	56,56,56,56	0
56	MG	2A	3251	1/1	0.97	0.14	69,69,69,69	0
56	MG	1A	3789	1/1	0.97	0.09	66,66,66,66	0
56	MG	1A	3922	1/1	0.97	0.07	25,25,25,25	0
56	MG	1W	204	1/1	0.97	0.07	35,35,35,35	0
56	MG	1A	3125	1/1	0.97	0.23	41,41,41,41	0
56	MG	1A	3656	1/1	0.97	0.05	36,36,36,36	0
56	MG	1A	3792	1/1	0.97	0.08	56,56,56,56	0
56	MG	1A	3174	1/1	0.97	0.15	33,33,33,33	0
56	MG	1X	104	1/1	0.97	0.19	43,43,43,43	0
56	MG	1X	105	1/1	0.97	0.05	50,50,50,50	0
56	MG	1A	3928	1/1	0.97	0.17	45,45,45,45	0
56	MG	2A	3072	1/1	0.97	0.12	53,53,53,53	0
56	MG	1a	1719	1/1	0.97	0.17	51,51,51,51	0
56	MG	1A	3658	1/1	0.97	0.07	50,50,50,50	0
56	MG	1A	4084	1/1	0.97	0.06	35,35,35,35	0
56	MG	2A	3076	1/1	0.97	0.12	48,48,48,48	0
56	MG	1A	3212	1/1	0.97	0.06	48,48,48,48	0
56	MG	1A	3661	1/1	0.97	0.07	45,45,45,45	0
56	MG	1A	3147	1/1	0.97	0.18	32,32,32,32	0
56	MG	1A	3800	1/1	0.97	0.08	53,53,53,53	0
56	MG	2A	3081	1/1	0.97	0.08	52,52,52,52	0
56	MG	1A	3177	1/1	0.97	0.08	25,25,25,25	0
56	MG	10	102	1/1	0.97	0.08	49,49,49,49	0
56	MG	1a	1729	1/1	0.97	0.08	55,55,55,55	0
56	MG	1A	3392	1/1	0.97	0.09	29,29,29,29	0
56	MG	1A	3071	1/1	0.97	0.24	37,37,37,37	0
56	MG	1A	3806	1/1	0.97	0.10	46,46,46,46	0
56	MG	10	106	1/1	0.97	0.07	47,47,47,47	0
56	MG	1A	3666	1/1	0.97	0.04	32,32,32,32	0
56	MG	1A	3667	1/1	0.97	0.04	27,27,27,27	0
56	MG	2A	3471	1/1	0.97	0.30	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1738	1/1	0.97	0.07	63,63,63,63	0
56	MG	11	101	1/1	0.97	0.32	43,43,43,43	0
56	MG	2A	3093	1/1	0.97	0.11	43,43,43,43	0
56	MG	1A	3088	1/1	0.97	0.18	46,46,46,46	0
56	MG	1a	1741	1/1	0.97	0.05	50,50,50,50	0
56	MG	1A	3669	1/1	0.97	0.06	31,31,31,31	0
56	MG	2A	3479	1/1	0.97	0.19	48,48,48,48	0
56	MG	1A	3566	1/1	0.97	0.10	41,41,41,41	0
56	MG	28	102	1/1	0.97	0.12	59,59,59,59	0
56	MG	2A	3714	1/1	0.97	0.10	70,70,70,70	0
56	MG	2A	3715	1/1	0.97	0.06	35,35,35,35	0
56	MG	2A	3481	1/1	0.97	0.12	63,63,63,63	0
56	MG	2A	3482	1/1	0.97	0.09	74,74,74,74	0
56	MG	1A	3567	1/1	0.97	0.08	37,37,37,37	0
56	MG	2A	3484	1/1	0.97	0.18	48,48,48,48	0
56	MG	2A	3720	1/1	0.97	0.08	54,54,54,54	0
56	MG	1A	3151	1/1	0.97	0.08	39,39,39,39	0
56	MG	13	102	1/1	0.97	0.08	41,41,41,41	0
56	MG	1A	3955	1/1	0.97	0.06	80,80,80,80	0
56	MG	1A	3675	1/1	0.97	0.06	23,23,23,23	0
56	MG	1a	1750	1/1	0.97	0.15	48,48,48,48	0
56	MG	2A	3490	1/1	0.97	0.06	47,47,47,47	0
56	MG	1A	3504	1/1	0.97	0.16	33,33,33,33	0
56	MG	1A	3679	1/1	0.97	0.07	25,25,25,25	0
56	MG	1A	3080	1/1	0.97	0.09	41,41,41,41	0
56	MG	1A	3682	1/1	0.97	0.10	24,24,24,24	0
56	MG	2A	3733	1/1	0.97	0.08	48,48,48,48	0
56	MG	2A	3109	1/1	0.97	0.12	49,49,49,49	0
56	MG	1B	3604	1/1	0.97	0.20	59,59,59,59	0
56	MG	2A	3737	1/1	0.97	0.05	59,59,59,59	0
56	MG	1A	3684	1/1	0.97	0.04	28,28,28,28	0
56	MG	1A	3685	1/1	0.97	0.05	35,35,35,35	0
56	MG	1A	3964	1/1	0.97	0.06	44,44,44,44	0
56	MG	1A	3397	1/1	0.97	0.08	58,58,58,58	0
56	MG	1A	3687	1/1	0.97	0.11	53,53,53,53	0
56	MG	17	102	1/1	0.97	0.08	30,30,30,30	0
56	MG	1A	3688	1/1	0.97	0.06	36,36,36,36	0
56	MG	1a	1765	1/1	0.97	0.06	60,60,60,60	0
56	MG	1A	3828	1/1	0.97	0.04	38,38,38,38	0
56	MG	1A	3015	1/1	0.97	0.07	36,36,36,36	0
56	MG	1a	1768	1/1	0.97	0.07	60,60,60,60	0
56	MG	18	103	1/1	0.97	0.09	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3574	1/1	0.97	0.05	27,27,27,27	0
56	MG	1A	3347	1/1	0.97	0.10	39,39,39,39	0
56	MG	2A	3512	1/1	0.97	0.07	70,70,70,70	0
56	MG	1A	3304	1/1	0.97	0.37	62,62,62,62	0
56	MG	1a	1773	1/1	0.97	0.08	68,68,68,68	0
56	MG	1A	3697	1/1	0.97	0.13	31,31,31,31	0
56	MG	1A	3402	1/1	0.97	0.13	33,33,33,33	0
56	MG	1a	1777	1/1	0.97	0.06	70,70,70,70	0
59	ZN	2Y	202	1/1	0.97	0.05	95,95,95,95	0
56	MG	1A	3835	1/1	0.97	0.09	41,41,41,41	0
59	ZN	2n	501	1/1	0.97	0.07	98,98,98,98	0
56	MG	13	101	1/1	0.98	0.06	41,41,41,41	0
56	MG	1A	3209	1/1	0.98	0.11	38,38,38,38	0
56	MG	1A	3780	1/1	0.98	0.05	24,24,24,24	0
56	MG	1A	3210	1/1	0.98	0.11	42,42,42,42	0
56	MG	1A	3887	1/1	0.98	0.04	35,35,35,35	0
56	MG	1A	4008	1/1	0.98	0.03	32,32,32,32	0
56	MG	1A	3784	1/1	0.98	0.04	49,49,49,49	0
56	MG	1A	3786	1/1	0.98	0.03	29,29,29,29	0
56	MG	1A	3390	1/1	0.98	0.34	35,35,35,35	0
56	MG	1a	1728	1/1	0.98	0.13	58,58,58,58	0
56	MG	1A	3173	1/1	0.98	0.34	37,37,37,37	0
56	MG	1A	4013	1/1	0.98	0.06	35,35,35,35	0
56	MG	1A	3008	1/1	0.98	0.11	29,29,29,29	0
56	MG	1a	1732	1/1	0.98	0.04	43,43,43,43	0
56	MG	1A	3692	1/1	0.98	0.04	35,35,35,35	0
56	MG	1a	1734	1/1	0.98	0.09	47,47,47,47	0
56	MG	1A	3613	1/1	0.98	0.08	29,29,29,29	0
56	MG	1D	303	1/1	0.98	0.10	44,44,44,44	0
56	MG	17	103	1/1	0.98	0.10	32,32,32,32	0
56	MG	1A	3694	1/1	0.98	0.03	26,26,26,26	0
56	MG	1A	3096	1/1	0.98	0.13	25,25,25,25	0
56	MG	1D	306	1/1	0.98	0.17	36,36,36,36	0
56	MG	2A	3534	1/1	0.98	0.05	52,52,52,52	0
56	MG	1D	307	1/1	0.98	0.11	39,39,39,39	0
56	MG	1A	3794	1/1	0.98	0.03	41,41,41,41	0
56	MG	1A	4021	1/1	0.98	0.06	39,39,39,39	0
56	MG	1A	3615	1/1	0.98	0.06	31,31,31,31	0
56	MG	1A	3796	1/1	0.98	0.07	24,24,24,24	0
56	MG	1A	3176	1/1	0.98	0.09	33,33,33,33	0
56	MG	1A	3699	1/1	0.98	0.07	32,32,32,32	0
56	MG	1E	302	1/1	0.98	0.23	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	4026	1/1	0.98	0.06	57,57,57,57	0
56	MG	1A	3301	1/1	0.98	0.09	37,37,37,37	0
56	MG	1A	3077	1/1	0.98	0.11	36,36,36,36	0
56	MG	2A	3383	1/1	0.98	0.09	38,38,38,38	0
56	MG	1E	306	1/1	0.98	0.07	36,36,36,36	0
56	MG	1A	3801	1/1	0.98	0.06	29,29,29,29	0
56	MG	2A	3549	1/1	0.98	0.08	45,45,45,45	0
56	MG	2A	3550	1/1	0.98	0.04	48,48,48,48	0
56	MG	1A	4030	1/1	0.98	0.04	47,47,47,47	0
56	MG	1E	309	1/1	0.98	0.05	45,45,45,45	0
56	MG	2A	3554	1/1	0.98	0.03	49,49,49,49	0
56	MG	2A	3738	1/1	0.98	0.05	43,43,43,43	0
56	MG	1a	1758	1/1	0.98	0.07	56,56,56,56	0
56	MG	1E	310	1/1	0.98	0.09	55,55,55,55	0
56	MG	1A	3802	1/1	0.98	0.05	29,29,29,29	0
56	MG	1A	3012	1/1	0.98	0.06	31,31,31,31	0
56	MG	1A	3349	1/1	0.98	0.17	35,35,35,35	0
56	MG	1A	3148	1/1	0.98	0.19	38,38,38,38	0
56	MG	1A	3503	1/1	0.98	0.16	36,36,36,36	0
56	MG	2A	3563	1/1	0.98	0.07	42,42,42,42	0
56	MG	1A	3910	1/1	0.98	0.05	38,38,38,38	0
56	MG	1A	3019	1/1	0.98	0.17	48,48,48,48	0
56	MG	2A	3566	1/1	0.98	0.09	50,50,50,50	0
56	MG	1F	302	1/1	0.98	0.06	33,33,33,33	0
56	MG	1A	3708	1/1	0.98	0.09	39,39,39,39	0
56	MG	2A	3569	1/1	0.98	0.07	55,55,55,55	0
56	MG	2A	3570	1/1	0.98	0.07	38,38,38,38	0
56	MG	1A	3625	1/1	0.98	0.07	33,33,33,33	0
56	MG	1a	1621	1/1	0.98	0.05	49,49,49,49	0
56	MG	1A	3710	1/1	0.98	0.04	14,14,14,14	0
56	MG	1F	307	1/1	0.98	0.12	35,35,35,35	0
56	MG	2a	3161	1/1	0.98	0.04	69,69,69,69	0
56	MG	1A	3811	1/1	0.98	0.05	24,24,24,24	0
56	MG	1a	1774	1/1	0.98	0.04	67,67,67,67	0
56	MG	1A	3812	1/1	0.98	0.04	46,46,46,46	0
56	MG	1A	3401	1/1	0.98	0.05	35,35,35,35	0
56	MG	1A	3712	1/1	0.98	0.04	31,31,31,31	0
56	MG	1A	3560	1/1	0.98	0.21	41,41,41,41	0
56	MG	1A	3714	1/1	0.98	0.05	33,33,33,33	0
56	MG	2A	3583	1/1	0.98	0.10	53,53,53,53	0
56	MG	1A	3628	1/1	0.98	0.10	36,36,36,36	0
56	MG	1A	3306	1/1	0.98	0.04	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3630	1/1	0.98	0.09	27,27,27,27	0
56	MG	2A	3587	1/1	0.98	0.08	47,47,47,47	0
56	MG	1A	3123	1/1	0.98	0.24	42,42,42,42	0
56	MG	1a	1786	1/1	0.98	0.07	49,49,49,49	0
56	MG	1a	1787	1/1	0.98	0.08	77,77,77,77	0
56	MG	1A	3013	1/1	0.98	0.19	28,28,28,28	0
56	MG	2A	3592	1/1	0.98	0.03	33,33,33,33	0
56	MG	1A	3021	1/1	0.98	0.10	24,24,24,24	0
56	MG	28	101	1/1	0.98	0.18	49,49,49,49	0
56	MG	1A	3003	1/1	0.98	0.06	31,31,31,31	0
56	MG	2a	3183	1/1	0.98	0.10	59,59,59,59	0
56	MG	1a	1793	1/1	0.98	0.08	74,74,74,74	0
56	MG	2A	3104	1/1	0.98	0.10	35,35,35,35	0
56	MG	1A	4056	1/1	0.98	0.06	34,34,34,34	0
56	MG	1A	3010	1/1	0.98	0.06	37,37,37,37	0
56	MG	1a	1798	1/1	0.98	0.04	76,76,76,76	0
56	MG	1A	3933	1/1	0.98	0.05	48,48,48,48	0
56	MG	1A	3186	1/1	0.98	0.09	38,38,38,38	0
56	MG	1A	3827	1/1	0.98	0.08	30,30,30,30	0
56	MG	1A	3104	1/1	0.98	0.04	25,25,25,25	0
56	MG	1a	1804	1/1	0.98	0.05	70,70,70,70	0
56	MG	1A	3938	1/1	0.98	0.04	35,35,35,35	0
56	MG	1A	3939	1/1	0.98	0.04	63,63,63,63	0
56	MG	1A	3084	1/1	0.98	0.07	31,31,31,31	0
56	MG	1a	1646	1/1	0.98	0.09	61,61,61,61	0
56	MG	1A	4065	1/1	0.98	0.03	40,40,40,40	0
56	MG	1A	3085	1/1	0.98	0.15	35,35,35,35	0
56	MG	1P	202	1/1	0.98	0.15	32,32,32,32	0
56	MG	2A	3120	1/1	0.98	0.05	39,39,39,39	0
56	MG	1A	3190	1/1	0.98	0.20	40,40,40,40	0
56	MG	1A	3229	1/1	0.98	0.22	35,35,35,35	0
56	MG	1A	3945	1/1	0.98	0.04	53,53,53,53	0
56	MG	1A	3575	1/1	0.98	0.12	35,35,35,35	0
56	MG	1A	3947	1/1	0.98	0.04	48,48,48,48	0
56	MG	2A	3801	1/1	0.98	0.04	42,42,42,42	0
56	MG	2A	3802	1/1	0.98	0.07	58,58,58,58	0
56	MG	1A	3948	1/1	0.98	0.05	28,28,28,28	0
56	MG	1A	3108	1/1	0.98	0.04	43,43,43,43	0
56	MG	1A	3950	1/1	0.98	0.08	63,63,63,63	0
56	MG	2A	3445	1/1	0.98	0.23	62,62,62,62	0
56	MG	1A	3192	1/1	0.98	0.13	34,34,34,34	0
56	MG	1A	3648	1/1	0.98	0.04	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3953	1/1	0.98	0.09	49,49,49,49	0
56	MG	2A	3628	1/1	0.98	0.06	44,44,44,44	0
56	MG	1R	202	1/1	0.98	0.22	41,41,41,41	0
56	MG	1A	3649	1/1	0.98	0.04	20,20,20,20	0
56	MG	1A	3520	1/1	0.98	0.10	30,30,30,30	0
56	MG	1A	3736	1/1	0.98	0.06	46,46,46,46	0
56	MG	1A	3159	1/1	0.98	0.07	35,35,35,35	0
56	MG	2A	3634	1/1	0.98	0.06	46,46,46,46	0
56	MG	1A	3739	1/1	0.98	0.06	27,27,27,27	0
56	MG	1A	3959	1/1	0.98	0.07	52,52,52,52	0
56	MG	1A	3580	1/1	0.98	0.14	46,46,46,46	0
56	MG	1U	201	1/1	0.98	0.06	29,29,29,29	0
56	MG	1A	3274	1/1	0.98	0.16	41,41,41,41	0
56	MG	2A	3822	1/1	0.98	0.04	50,50,50,50	0
56	MG	1A	3418	1/1	0.98	0.09	43,43,43,43	0
56	MG	1A	3524	1/1	0.98	0.16	33,33,33,33	0
56	MG	1A	3066	1/1	0.98	0.07	30,30,30,30	0
56	MG	1A	3369	1/1	0.98	0.18	34,34,34,34	0
56	MG	1A	3849	1/1	0.98	0.06	39,39,39,39	0
56	MG	1A	3067	1/1	0.98	0.07	33,33,33,33	0
56	MG	1A	3277	1/1	0.98	0.09	28,28,28,28	0
56	MG	1A	3660	1/1	0.98	0.05	46,46,46,46	0
56	MG	1A	3749	1/1	0.98	0.09	23,23,23,23	0
56	MG	1V	201	1/1	0.98	0.18	35,35,35,35	0
56	MG	1A	3044	1/1	0.98	0.08	35,35,35,35	0
56	MG	1V	204	1/1	0.98	0.19	56,56,56,56	0
56	MG	1A	3236	1/1	0.98	0.15	33,33,33,33	0
56	MG	2A	3840	1/1	0.98	0.05	57,57,57,57	0
56	MG	1A	3752	1/1	0.98	0.03	23,23,23,23	0
56	MG	1A	4100	1/1	0.98	0.03	35,35,35,35	0
56	MG	1A	3069	1/1	0.98	0.09	24,24,24,24	0
56	MG	1A	3754	1/1	0.98	0.05	57,57,57,57	0
56	MG	1x	114	1/1	0.98	0.05	72,72,72,72	0
56	MG	1W	203	1/1	0.98	0.15	35,35,35,35	0
56	MG	1A	3136	1/1	0.98	0.06	43,43,43,43	0
56	MG	1A	4104	1/1	0.98	0.07	38,38,38,38	0
56	MG	1A	3756	1/1	0.98	0.07	40,40,40,40	0
56	MG	1A	3199	1/1	0.98	0.17	28,28,28,28	0
56	MG	1A	3200	1/1	0.98	0.09	45,45,45,45	0
56	MG	1A	3165	1/1	0.98	0.05	32,32,32,32	0
56	MG	1A	3055	1/1	0.98	0.07	37,37,37,37	0
56	MG	1A	3761	1/1	0.98	0.04	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3203	1/1	0.98	0.08	22,22,22,22	0
56	MG	1A	3597	1/1	0.98	0.33	38,38,38,38	0
56	MG	1A	3072	1/1	0.98	0.09	19,19,19,19	0
56	MG	1A	3672	1/1	0.98	0.08	44,44,44,44	0
56	MG	1A	3599	1/1	0.98	0.14	45,45,45,45	0
56	MG	2A	3015	1/1	0.98	0.07	47,47,47,47	0
56	MG	1A	3674	1/1	0.98	0.06	33,33,33,33	0
56	MG	2a	3079	1/1	0.98	0.10	53,53,53,53	0
56	MG	1A	3032	1/1	0.98	0.10	27,27,27,27	0
56	MG	1A	3290	1/1	0.98	0.05	54,54,54,54	0
56	MG	1A	3033	1/1	0.98	0.29	34,34,34,34	0
56	MG	1A	3772	1/1	0.98	0.04	37,37,37,37	0
56	MG	2A	3498	1/1	0.98	0.06	51,51,51,51	0
56	MG	2A	3680	1/1	0.98	0.05	40,40,40,40	0
56	MG	1B	3617	1/1	0.98	0.09	55,55,55,55	0
56	MG	1A	3993	1/1	0.98	0.10	42,42,42,42	0
56	MG	1A	3680	1/1	0.98	0.05	24,24,24,24	0
56	MG	1A	3075	1/1	0.98	0.07	29,29,29,29	0
56	MG	1A	3604	1/1	0.98	0.15	57,57,57,57	0
56	MG	2A	3027	1/1	0.98	0.04	43,43,43,43	0
56	MG	1A	3438	1/1	0.98	0.14	48,48,48,48	0
56	MG	1I	103	1/1	0.98	0.05	41,41,41,41	0
56	MG	1A	3880	1/1	0.98	0.13	41,41,41,41	0
56	MG	1A	3881	1/1	0.98	0.20	36,36,36,36	0
58	A1A1K	1A	4105	34/34	0.98	0.07	24,30,36,53	0
58	A1A1K	2A	3886	34/34	0.98	0.08	39,46,54,56	0
56	MG	1A	3777	1/1	0.98	0.06	30,30,30,30	0
56	MG	1A	3143	1/1	0.98	0.16	33,33,33,33	0
59	ZN	29	102	1/1	0.98	0.04	79,79,79,79	0
56	MG	2A	3882	1/1	0.98	0.04	52,52,52,52	0
60	SF4	1d	302	8/8	0.98	0.06	67,74,78,79	0
56	MG	2A	3527	1/1	0.99	0.07	46,46,46,46	0
56	MG	1A	4078	1/1	0.99	0.07	41,41,41,41	0
56	MG	2A	3197	1/1	0.99	0.03	54,54,54,54	0
56	MG	1a	1792	1/1	0.99	0.07	49,49,49,49	0
56	MG	1A	3640	1/1	0.99	0.06	27,27,27,27	0
56	MG	2A	3837	1/1	0.99	0.07	46,46,46,46	0
56	MG	2A	3605	1/1	0.99	0.04	44,44,44,44	0
56	MG	2A	3839	1/1	0.99	0.03	56,56,56,56	0
56	MG	1F	303	1/1	0.99	0.11	34,34,34,34	0
56	MG	2A	3070	1/1	0.99	0.07	33,33,33,33	0
56	MG	1A	3057	1/1	0.99	0.09	21,21,21,21	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1797	1/1	0.99	0.04	60,60,60,60	0
56	MG	1A	3070	1/1	0.99	0.09	20,20,20,20	0
56	MG	1A	3622	1/1	0.99	0.04	23,23,23,23	0
56	MG	1A	3842	1/1	0.99	0.03	36,36,36,36	0
56	MG	1A	4038	1/1	0.99	0.02	42,42,42,42	0
56	MG	1A	3994	1/1	0.99	0.06	26,26,26,26	0
56	MG	2A	3849	1/1	0.99	0.05	35,35,35,35	0
56	MG	2A	3473	1/1	0.99	0.13	31,31,31,31	0
56	MG	2A	3013	1/1	0.99	0.05	51,51,51,51	0
56	MG	1a	1803	1/1	0.99	0.03	62,62,62,62	0
56	MG	2A	3853	1/1	0.99	0.07	66,66,66,66	0
56	MG	1A	3138	1/1	0.99	0.09	37,37,37,37	0
56	MG	1a	1742	1/1	0.99	0.07	40,40,40,40	0
56	MG	1A	3690	1/1	0.99	0.08	26,26,26,26	0
56	MG	1A	3915	1/1	0.99	0.09	38,38,38,38	0
56	MG	1a	1808	1/1	0.99	0.04	63,63,63,63	0
56	MG	1A	3266	1/1	0.99	0.08	41,41,41,41	0
56	MG	2A	3021	1/1	0.99	0.07	30,30,30,30	0
56	MG	1U	211	1/1	0.99	0.21	41,41,41,41	0
56	MG	2A	3552	1/1	0.99	0.07	59,59,59,59	0
56	MG	1A	3037	1/1	0.99	0.08	35,35,35,35	0
56	MG	1A	3107	1/1	0.99	0.31	34,34,34,34	0
56	MG	1A	3813	1/1	0.99	0.05	32,32,32,32	0
56	MG	1V	203	1/1	0.99	0.10	33,33,33,33	0
56	MG	1A	3920	1/1	0.99	0.04	30,30,30,30	0
56	MG	1A	3921	1/1	0.99	0.03	32,32,32,32	0
56	MG	1A	3383	1/1	0.99	0.17	28,28,28,28	0
56	MG	2A	3560	1/1	0.99	0.12	44,44,44,44	0
56	MG	1A	3781	1/1	0.99	0.08	32,32,32,32	0
56	MG	1A	3782	1/1	0.99	0.04	46,46,46,46	0
56	MG	1a	1756	1/1	0.99	0.08	61,61,61,61	0
56	MG	1A	4007	1/1	0.99	0.10	24,24,24,24	0
56	MG	1A	3695	1/1	0.99	0.07	30,30,30,30	0
56	MG	1A	3926	1/1	0.99	0.03	37,37,37,37	0
56	MG	1W	205	1/1	0.99	0.06	39,39,39,39	0
56	MG	1A	3610	1/1	0.99	0.06	27,27,27,27	0
56	MG	1A	3785	1/1	0.99	0.04	28,28,28,28	0
56	MG	2A	3644	1/1	0.99	0.09	43,43,43,43	0
56	MG	1X	101	1/1	0.99	0.26	44,44,44,44	0
56	MG	1A	3038	1/1	0.99	0.21	33,33,33,33	0
56	MG	2A	3721	1/1	0.99	0.04	38,38,38,38	0
56	MG	2a	3170	1/1	0.99	0.04	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3014	1/1	0.99	0.15	30,30,30,30	0
56	MG	1A	3563	1/1	0.99	0.13	37,37,37,37	0
56	MG	1A	3428	1/1	0.99	0.19	36,36,36,36	0
56	MG	1a	1712	1/1	0.99	0.11	54,54,54,54	0
56	MG	2A	3576	1/1	0.99	0.06	40,40,40,40	0
56	MG	1X	106	1/1	0.99	0.06	37,37,37,37	0
56	MG	1A	3701	1/1	0.99	0.07	29,29,29,29	0
56	MG	2A	3729	1/1	0.99	0.03	61,61,61,61	0
56	MG	1A	4017	1/1	0.99	0.03	32,32,32,32	0
56	MG	1A	3729	1/1	0.99	0.06	27,27,27,27	0
56	MG	1A	3282	1/1	0.99	0.22	36,36,36,36	0
56	MG	1A	3676	1/1	0.99	0.09	34,34,34,34	0
56	MG	1A	3937	1/1	0.99	0.03	13,13,13,13	0
56	MG	2A	3735	1/1	0.99	0.05	45,45,45,45	0
56	MG	1A	3634	1/1	0.99	0.09	28,28,28,28	0
56	MG	1A	3678	1/1	0.99	0.03	45,45,45,45	0
56	MG	1a	1778	1/1	0.99	0.05	59,59,59,59	0
56	MG	1A	3031	1/1	0.99	0.14	32,32,32,32	0
56	MG	1A	3036	1/1	0.99	0.07	20,20,20,20	0
56	MG	1A	3297	1/1	0.99	0.05	38,38,38,38	0
56	MG	1A	3172	1/1	0.99	0.06	34,34,34,34	0
56	MG	1A	4073	1/1	0.99	0.10	35,35,35,35	0
56	MG	1E	313	1/1	0.99	0.09	30,30,30,30	0
56	MG	1A	3738	1/1	0.99	0.08	33,33,33,33	0
56	MG	1A	3768	1/1	0.99	0.07	39,39,39,39	0
56	MG	2A	3747	1/1	0.99	0.07	53,53,53,53	0
56	MG	1A	3683	1/1	0.99	0.04	33,33,33,33	0
59	ZN	1Y	204	1/1	0.99	0.03	65,65,65,65	0
59	ZN	14	501	1/1	0.99	0.04	87,87,87,87	0
59	ZN	15	108	1/1	0.99	0.05	45,45,45,45	0
59	ZN	16	103	1/1	0.99	0.04	44,44,44,44	0
59	ZN	1n	103	1/1	0.99	0.03	69,69,69,69	0
56	MG	1a	1789	1/1	0.99	0.06	59,59,59,59	0
56	MG	1A	3639	1/1	0.99	0.05	34,34,34,34	0
59	ZN	25	105	1/1	0.99	0.03	53,53,53,53	0
59	ZN	26	102	1/1	0.99	0.04	62,62,62,62	0
56	MG	2A	3829	1/1	0.99	0.15	55,55,55,55	0
56	MG	2A	3830	1/1	0.99	0.06	39,39,39,39	0
56	MG	2A	3598	1/1	0.99	0.08	53,53,53,53	0
60	SF4	2d	303	8/8	0.99	0.04	67,73,82,85	0
56	MG	1A	4037	1/1	1.00	0.03	28,28,28,28	0
56	MG	1A	3940	1/1	1.00	0.05	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	ZN	19	102	1/1	1.00	0.04	44,44,44,44	0
56	MG	1a	1795	1/1	1.00	0.05	55,55,55,55	0
56	MG	2A	3604	1/1	1.00	0.03	43,43,43,43	0
56	MG	1a	1783	1/1	1.00	0.02	73,73,73,73	0

6.5 Other polymers [i](#)

There are no such residues in this entry.