



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 12, 2026 – 08:03 AM UTC

PDB ID : 6XQE / pdb_00006xqe
Title : Crystal structure of the *Thermus thermophilus* 70S ribosome in complex with sarecycline, UAA-mRNA, and deacylated P-site tRNA at 3.00Å resolution
Authors : Batool, Z.; Lomakin, I.B.; Bunick, C.G.; Polikanov, Y.S.
Deposited on : 2020-07-09
Resolution : 3.00 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

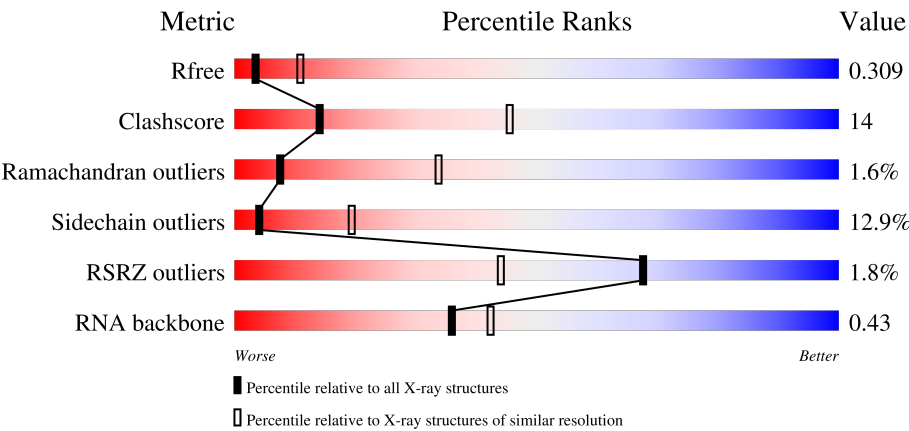
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.00 Å.

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



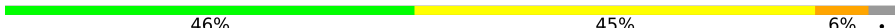
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R _{free}	180053	2672 (3.00-3.00)
Clashscore	190562	2977 (3.00-3.00)
Ramachandran outliers	187476	2877 (3.00-3.00)
Sidechain outliers	187428	2880 (3.00-3.00)
RSRZ outliers	180081	2671 (3.00-3.00)
RNA backbone	3983	1109 (3.20-2.80)

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	
2	1B	121	
2	2B	121	

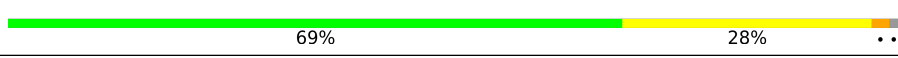
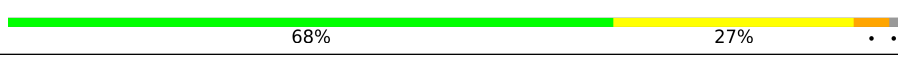
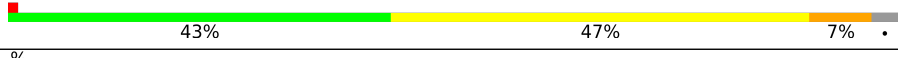
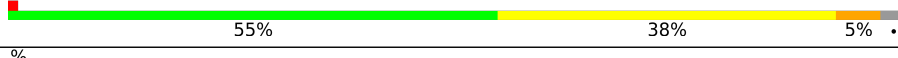
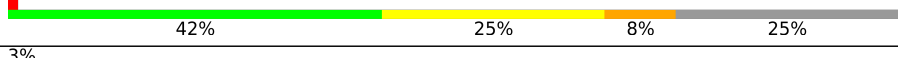
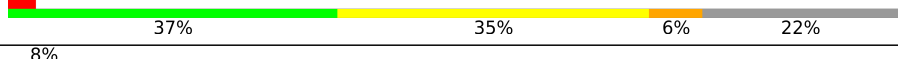
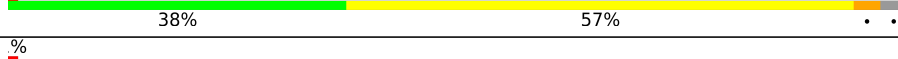
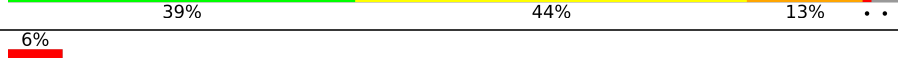
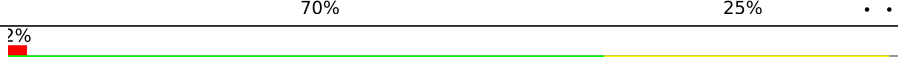
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Mol	Chain	Length	Quality of chain
3	1D	276	
3	2D	276	
4	1E	206	
4	2E	206	
5	1F	210	
5	2F	210	
6	1G	182	
6	2G	182	
7	1H	180	
7	2H	180	
8	1I	148	
8	2I	148	
9	1N	140	
9	2N	140	
10	1O	122	
10	2O	122	
11	1P	150	
11	2P	150	
12	1Q	141	
12	2Q	141	
13	1R	118	
13	2R	118	
14	1S	112	
14	2S	112	
15	1T	146	

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Mol	Chain	Length	Quality of chain
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	
27	15	60	
27	25	60	

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Mol	Chain	Length	Quality of chain
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	
39	2h	138	
40	1i	128	

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Mol	Chain	Length	Quality of chain
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	
52	1u	27	
52	2u	27	

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Mol	Chain	Length	Quality of chain
53	1v	24	
53	2v	24	
54	1x	77	
54	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
55	MG	1A	3793	-	-	-	X
59	SF4	1d	302	-	-	X	-
59	SF4	2d	303	-	-	X	-

2 Entry composition

There are 60 unique types of molecules in this entry. The entry contains 292071 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	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			
22	20	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			

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

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

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

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

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

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

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

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

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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	122	Total	C	N	O	S	0	0	0
			951	587	197	165	2			
44	2m	121	Total	C	N	O	S	0	0	0
			943	581	196	164	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 mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1v	10	Total	C	N	O	P	0	0	0
			217	98	44	65	10			
53	2v	6	Total	C	N	O	P	0	0	0
			113	49	22	36	6			

- Molecule 54 is a RNA chain called P-site tRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	1x	76	Total	C	N	O	P	S	0	0
			1625	725	294	529	76	1		
54	2x	76	Total	C	N	O	P	S	0	0
			1625	725	294	529	76	1		

- Molecule 55 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
55	1A	1040	Total	Mg	0	0
			1040	1040		
55	1B	36	Total	Mg	0	0
			36	36		
55	1D	10	Total	Mg	0	0
			10	10		
55	1E	14	Total	Mg	0	0
			14	14		
55	1F	13	Total	Mg	0	0
			13	13		
55	1G	4	Total	Mg	0	0
			4	4		
55	1H	2	Total	Mg	0	0
			2	2		
55	1I	1	Total	Mg	0	0
			1	1		
55	1N	5	Total	Mg	0	0
			5	5		
55	1O	5	Total	Mg	0	0
			5	5		
55	1P	6	Total	Mg	0	0
			6	6		
55	1Q	5	Total	Mg	0	0
			5	5		
55	1R	7	Total	Mg	0	0
			7	7		
55	1S	3	Total	Mg	0	0
			3	3		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
55	1T	2	Total 2	Mg 2	0	0
55	1U	8	Total 8	Mg 8	0	0
55	1V	4	Total 4	Mg 4	0	0
55	1W	9	Total 9	Mg 9	0	0
55	1X	4	Total 4	Mg 4	0	0
55	1Y	2	Total 2	Mg 2	0	0
55	1Z	3	Total 3	Mg 3	0	0
55	10	7	Total 7	Mg 7	0	0
55	11	3	Total 3	Mg 3	0	0
55	12	2	Total 2	Mg 2	0	0
55	13	5	Total 5	Mg 5	0	0
55	14	1	Total 1	Mg 1	0	0
55	15	4	Total 4	Mg 4	0	0
55	16	3	Total 3	Mg 3	0	0
55	17	7	Total 7	Mg 7	0	0
55	18	6	Total 6	Mg 6	0	0
55	19	2	Total 2	Mg 2	0	0
55	1a	212	Total 212	Mg 212	0	0
55	1b	1	Total 1	Mg 1	0	0
55	1d	1	Total 1	Mg 1	0	0
55	1e	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
55	1f	2	Total 2	Mg 2	0	0
55	1l	3	Total 3	Mg 3	0	0
55	1n	3	Total 3	Mg 3	0	0
55	1t	1	Total 1	Mg 1	0	0
55	1v	5	Total 5	Mg 5	0	0
55	1x	13	Total 13	Mg 13	0	0
55	2A	850	Total 850	Mg 850	0	0
55	2B	20	Total 20	Mg 20	0	0
55	2D	8	Total 8	Mg 8	0	0
55	2E	5	Total 5	Mg 5	0	0
55	2F	6	Total 6	Mg 6	0	0
55	2G	1	Total 1	Mg 1	0	0
55	2O	1	Total 1	Mg 1	0	0
55	2P	4	Total 4	Mg 4	0	0
55	2Q	4	Total 4	Mg 4	0	0
55	2R	1	Total 1	Mg 1	0	0
55	2T	4	Total 4	Mg 4	0	0
55	2U	2	Total 2	Mg 2	0	0
55	2V	1	Total 1	Mg 1	0	0
55	2W	1	Total 1	Mg 1	0	0
55	2X	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
55	2Y	2	Total 2	Mg 2	0	0
55	2Z	2	Total 2	Mg 2	0	0
55	21	6	Total 6	Mg 6	0	0
55	23	3	Total 3	Mg 3	0	0
55	25	4	Total 4	Mg 4	0	0
55	26	1	Total 1	Mg 1	0	0
55	27	2	Total 2	Mg 2	0	0
55	28	3	Total 3	Mg 3	0	0
55	2a	216	Total 216	Mg 216	0	0
55	2d	2	Total 2	Mg 2	0	0
55	2e	2	Total 2	Mg 2	0	0
55	2f	2	Total 2	Mg 2	0	0
55	2g	1	Total 1	Mg 1	0	0
55	2i	1	Total 1	Mg 1	0	0
55	2j	2	Total 2	Mg 2	0	0
55	2k	1	Total 1	Mg 1	0	0
55	2l	2	Total 2	Mg 2	0	0
55	2n	1	Total 1	Mg 1	0	0
55	2q	2	Total 2	Mg 2	0	0
55	2r	1	Total 1	Mg 1	0	0
55	2t	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
55	2x	7	Total	Mg	0	0
			7	7		

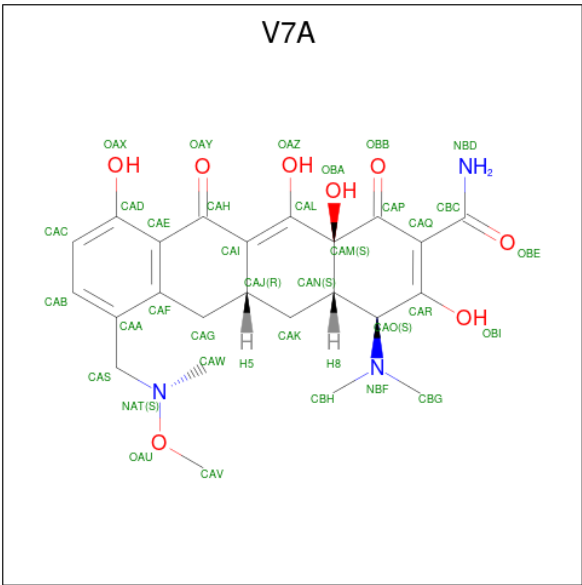
- Molecule 56 is POTASSIUM ION (CCD ID: K) (formula: K).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	1A	1	Total	K	0	0
			1	1		
56	2A	1	Total	K	0	0
			1	1		

- Molecule 57 is ZINC ION (CCD ID: ZN) (formula: Zn).

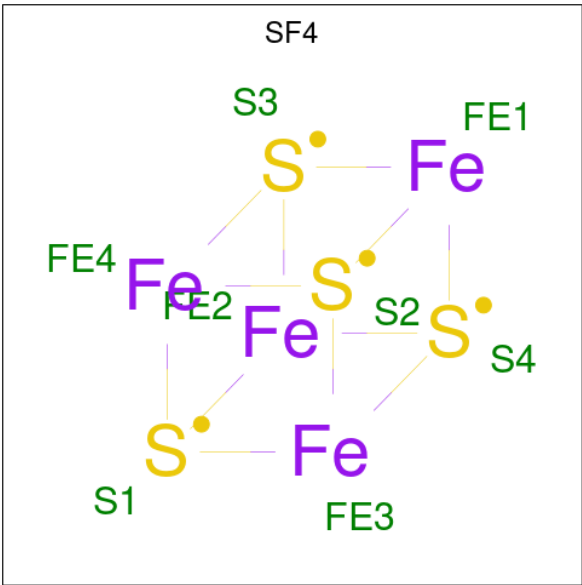
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	1Y	1	Total	Zn	0	0
			1	1		
57	14	1	Total	Zn	0	0
			1	1		
57	15	1	Total	Zn	0	0
			1	1		
57	16	1	Total	Zn	0	0
			1	1		
57	19	1	Total	Zn	0	0
			1	1		
57	1n	1	Total	Zn	0	0
			1	1		
57	2Y	1	Total	Zn	0	0
			1	1		
57	24	1	Total	Zn	0	0
			1	1		
57	25	1	Total	Zn	0	0
			1	1		
57	26	1	Total	Zn	0	0
			1	1		
57	29	1	Total	Zn	0	0
			1	1		
57	2n	1	Total	Zn	0	0
			1	1		

- Molecule 58 is Sarecycline (CCD ID: V7A) (formula: C₂₄H₂₉N₃O₈).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
58	1a	1	Total	C	N	O	0	0
			35	24	3	8		
58	2a	1	Total	C	N	O	0	0
			35	24	3	8		

- Molecule 59 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe₄S₄).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
59	1d	1	Total	Fe	S	0	0
			8	4	4		
59	2d	1	Total	Fe	S	0	0
			8	4	4		

- Molecule 60 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	1A	1402	Total 1402	O 1402	0	0
60	1B	54	Total 54	O 54	0	0
60	1D	21	Total 21	O 21	0	0
60	1E	18	Total 18	O 18	0	0
60	1F	9	Total 9	O 9	0	0
60	1G	4	Total 4	O 4	0	0
60	1H	1	Total 1	O 1	0	0
60	1I	1	Total 1	O 1	0	0
60	1N	5	Total 5	O 5	0	0
60	1O	8	Total 8	O 8	0	0
60	1P	18	Total 18	O 18	0	0
60	1Q	7	Total 7	O 7	0	0
60	1R	9	Total 9	O 9	0	0
60	1S	4	Total 4	O 4	0	0
60	1T	4	Total 4	O 4	0	0
60	1U	14	Total 14	O 14	0	0
60	1V	10	Total 10	O 10	0	0
60	1W	8	Total 8	O 8	0	0
60	1X	4	Total 4	O 4	0	0
60	1Y	4	Total 4	O 4	0	0
60	1Z	1	Total 1	O 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	10	11	Total 11	O 11	0	0
60	11	8	Total 8	O 8	0	0
60	12	3	Total 3	O 3	0	0
60	13	3	Total 3	O 3	0	0
60	14	1	Total 1	O 1	0	0
60	15	6	Total 6	O 6	0	0
60	16	4	Total 4	O 4	0	0
60	17	10	Total 10	O 10	0	0
60	18	8	Total 8	O 8	0	0
60	1a	211	Total 211	O 211	0	0
60	1b	1	Total 1	O 1	0	0
60	1d	2	Total 2	O 2	0	0
60	1e	1	Total 1	O 1	0	0
60	1i	1	Total 1	O 1	0	0
60	1l	4	Total 4	O 4	0	0
60	1m	1	Total 1	O 1	0	0
60	1q	2	Total 2	O 2	0	0
60	1u	2	Total 2	O 2	0	0
60	1v	3	Total 3	O 3	0	0
60	1x	11	Total 11	O 11	0	0
60	2A	680	Total 680	O 680	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	2B	24	Total 24	O 24	0	0
60	2D	12	Total 12	O 12	0	0
60	2E	13	Total 13	O 13	0	0
60	2F	10	Total 10	O 10	0	0
60	2I	1	Total 1	O 1	0	0
60	2O	2	Total 2	O 2	0	0
60	2P	4	Total 4	O 4	0	0
60	2Q	2	Total 2	O 2	0	0
60	2R	3	Total 3	O 3	0	0
60	2T	4	Total 4	O 4	0	0
60	2U	1	Total 1	O 1	0	0
60	2W	2	Total 2	O 2	0	0
60	2X	2	Total 2	O 2	0	0
60	2Y	1	Total 1	O 1	0	0
60	2Z	3	Total 3	O 3	0	0
60	21	10	Total 10	O 10	0	0
60	23	1	Total 1	O 1	0	0
60	27	1	Total 1	O 1	0	0
60	28	2	Total 2	O 2	0	0
60	29	1	Total 1	O 1	0	0
60	2a	173	Total 173	O 173	0	0

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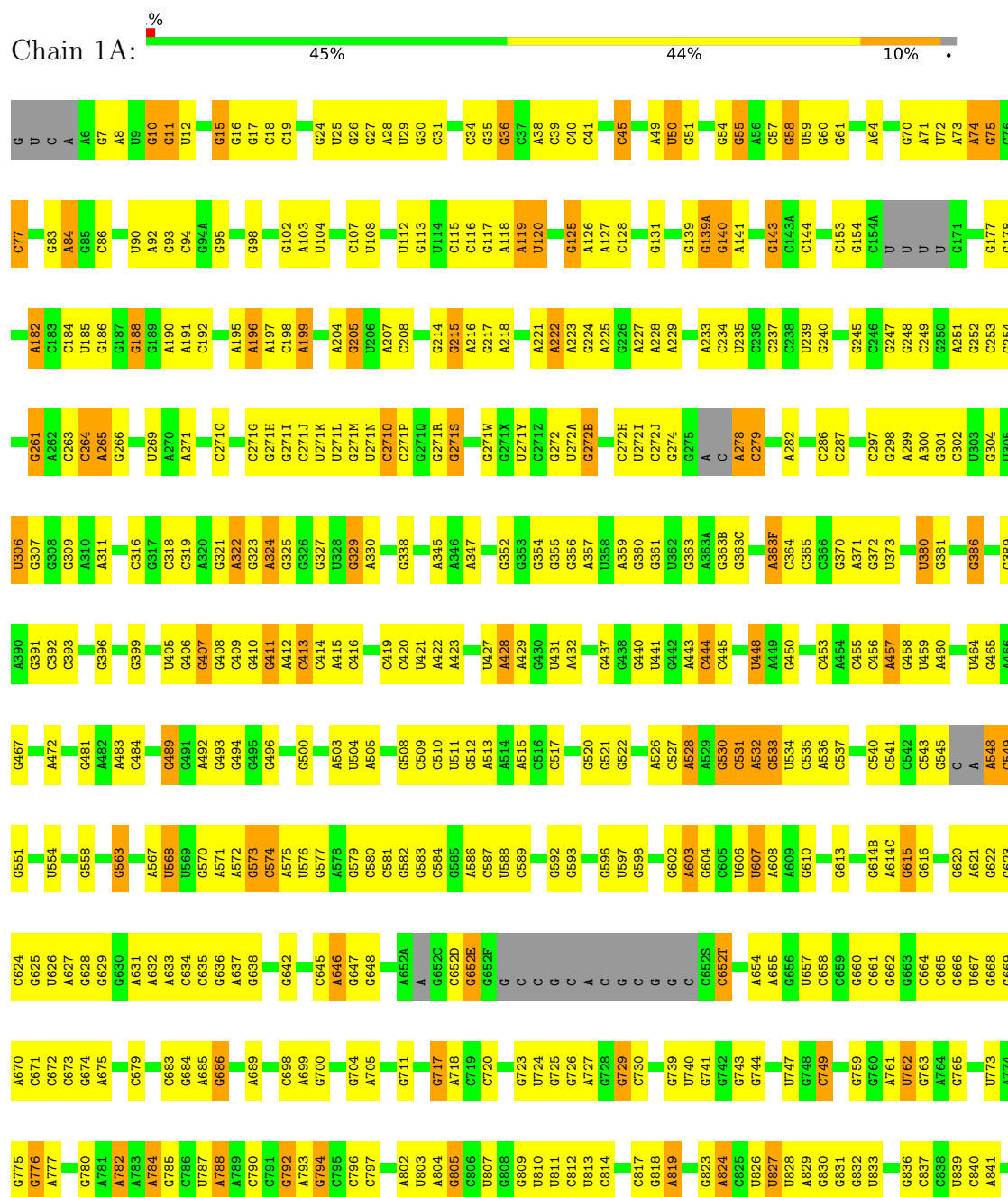
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	2e	2	Total 2	O 2	0	0
60	2g	1	Total 1	O 1	0	0
60	2i	1	Total 1	O 1	0	0
60	2j	4	Total 4	O 4	0	0
60	2l	3	Total 3	O 3	0	0
60	2n	1	Total 1	O 1	0	0
60	2t	3	Total 3	O 3	0	0
60	2v	1	Total 1	O 1	0	0
60	2x	5	Total 5	O 5	0	0

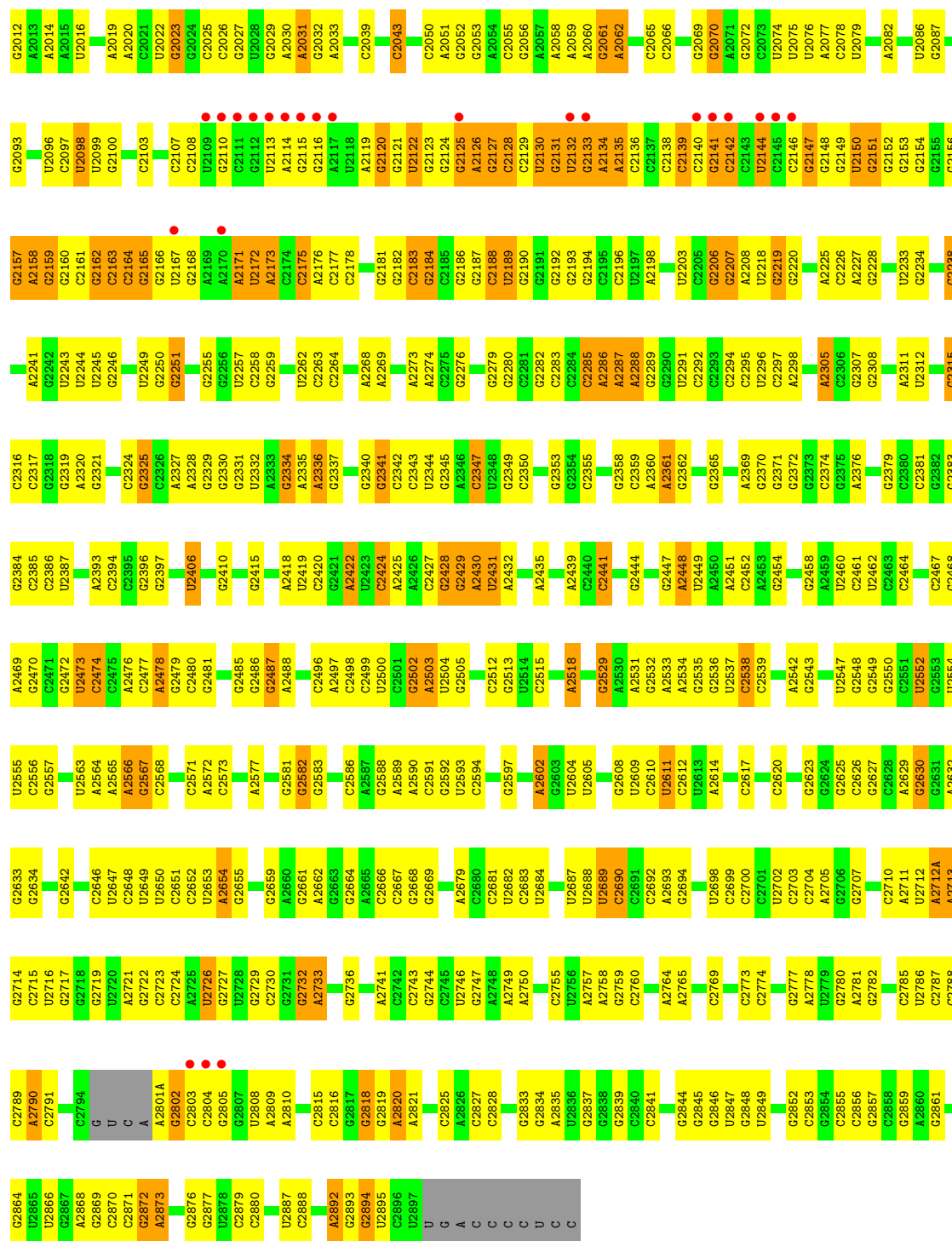
3 Residue-property plots

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

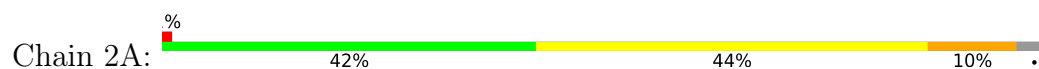
• Molecule 1: 23S Ribosomal RNA



G1929	G1842	U1766	C1557	G1484	U1396	G1309	A1237	C1153	A1077	G1011	G928	G848
G1930	C1843	C1767	A1588	G1485	G1400	G1310	G1238	G1154	U1078	U1012	G932	A849
U1931	C1844	U1768	G1667	A1486	G1401	G1311	G1239	A1155	C1079	C1013	G852	G852
G1932	G1845	G1769	C1565	G1487	C1402	U1312	G1240	A1156	U1082	G1016	G938	C857
G1933	G1846	G1770	A1567	A1490	C1405	U1313	G1241	C1157	U1085	A1020	G942	U858
G1934	C1847	A1773	G1568	C1493	U1406	U1316	G1248	C1158	A1086	A1021	U943	C859
G1935	A1847	C1773	A1569	U1497	C1407	A1317	U1249	U1159	G1087	G1022	U944	U860
A1936	G1848	U1778	A1572	G1500	A1412	C1318	G1250	G1164	U1088	U1023	A945	A861
A1937	G1849	U1779	U1578	G1501	G1413	G1319	C1251	U1165	G1089	G1024	G946	G862
A1938	A1850	U1780	A1579	C1504	G1416	C1320	A1252	C1166	U1090	G1025	G947	A863
U1939	U1851	G1781	A1580	C1505	C1417	A1321	A1254	U1167	G1091	U1026		
U1940	G1858	C1782	G1581	U1506	G1418	G1406	U1255	G1168	C1092	A1027	C955	U868
C1941	A1859	A1783	G1582	C1507	A1419	U1406	U1256	G1170	G1093	A1028	G956	G869
C1942	G1860	A1784	C1584	A1508	A1420	U1406	G1257	G1171	U1094	A1029	A957	A870
U1943	G1861	U1785	A1585	C1509	G1421	G1332	C1258	G1173	A1095	G1030	U958	U871
U1944	G1862	G1786	A1586	C1509	G1424	A1336	G1260	A1174	A1096	U1033	A960	A872
G1945	G1863	A1787	A1587	C1509	G1425	A1337	C1261	U1175	U1101	G1036	C961	G873
U1951	G1864	C1788	C1588	A1509B	G1426	G1338	A1262	A1177	C1102	A1103	U963	G880
A1952	C1865	A1789	C1588	G1510	G1428	A1342	U1263	C1178	A1104	A1045	U964	G881
A1953	C1866	U1790	C1588	C1511	G1429	A1343	G1264	C1179	U1105	C1040	G965	G882
G1954	A1876	G1791	G1595	U1512	G1430	G1344	G1266	U1180	G1107	G1042	G967	G884
U1955	A1877	G1792	G1596	U1514	U1431	G1344	U1267	G1183	U1108	C1043	C885	C885
C1956	G1878	C1793	A1603	U1515	G1431	U1352	A1269	C1185	A1110	A1046	C970	G886
C1958	C1879	C1795	C1604	U1518	G1439	U1352	A1270	G1186	A1111	A1046	G972	A887
C1962	C1882	U1796	G1700	U1519	G1440	G1355	G1271	C1187	G1112	G1047	A973	G889
U1963	G1883	U1797	C1701	G1520	G1441	G1442	A1272	U1188	U1113	A1048	C974	A890
G1964	A1884	U1798	A1608	U1523	G1442	G1442	U1273	A1189	G1114	G1049	C975	G892
C1965	A1885	G1799	A1609	G1524	G1445	A1445	A1274	C1201	A1050	G1051	A983	C893
A1966	U1706	C1800	A1610	G1525	C1445A	G1361	A1275	G1202	C1052	C1053	A984	C894
C1967	C1889	G1801	A1614	G1526	G1448	G1364	A1276	G1203	A1054	A1054	G987	A896
G1968	A1890	C1802	G1615	U1527	A1449	A1365	G1279	G1209	G1055	G1055	A988	C897
A1969	G1891	A1803	A1616	A1528	G1450	C1370	G1281	A1210	G1056	G1056	A989	C898
U1970	C1892	C1712	G1617	A1528	G1450A	G1371	G1281	U1211	A1057	A1057	A990	C904
A1971	G1899	U1720	A1618	A1528	G1451	U1372	A1286	G1212	U1330	G1058	C991	U905
C1972	A1900	G1721	G1626	A1528	C1451	A1373	A1287	A1213	G1131	G1059	C992	U906
G1973	C1903	G1721	A1741	A1528	A1453	G1374	U1288	A1214	A1132	U1060	G993	G906
C1974	C1904	G1721	G1742	A1528	G1455	C1375	C1289	G1215	U1133	U	C994	U907
A1981	C1905	G1742	C1636	A1532	G1456	C1376	G1290	A1220	C1135	G1062	C995	A910
G1985	G1906	C1743	U1639	C	G1466	A1377	C1291	G1223	G1136	C1064	A996	A911
C1989	G1907	C1745A	A1641	U	G1467	A1378	U1292	G1224	G1139	U1065	G997	A911
U1991	U1911	G1746	G1745A	A	C1468	G1380	C1293	A1226	G1140	U1066	A1000	C914
U1992	A1912	G1747	G1747	C	A1471	A1384	C1297	G1226	U1141	A1067	A1001	C915
U1993	A1913	G1747A	G1648	G1541	A1472	G1385	C1298	A1226	G1068	G1068	G1002	A918
C1994	G1914	G1748	G1649	U1542	A1477	C1386	G1299	G1229	A1069	A1070	G1003	A918
U1995	U1915	A1749	G1650	A1542	A1477	C1387	U1300	G1229	A142A	A1070	C1004	A918
C1996	A1916	A1749	G1651	A1545	A1477	C1387	A1301	G1230	G1071	G1071	C1005	U922
G1997	U1917	G1756	G1651	A1545	A1477	C1388	C1304	G1231	G1072	C1006	C1006	C923
G1998	A1918	U1757	A1655	C1546	A1477	C1388	C1305	G1232	A1073	C1007	C1007	C924
A1999	A1919	G1758	C1656	C1547	A1472	C1388	C1305	G1235	G1074	C1008	A1009	C925
U2001	C1920	A1759	C1657	C1548	A1477	C1388	C1305	G1235	C1075	C1008	A1009	A926
G2002	G1921	A1760	C1658	C1549	A1477	C1388	C1305	G1235	C1075	C1008	A1009	A926
G2009	G1922	U1835	C1659	C1550	A1477	C1388	C1305	G1235	C1075	C1008	A1009	A926
G2010	U1923	C1836	C1660	C1551	A1477	C1388	C1305	G1235	C1075	C1008	A1009	A926
U2011	C1924	C1837	G1764	A1554	A1477	C1388	C1305	G1235	C1075	C1008	A1009	A926
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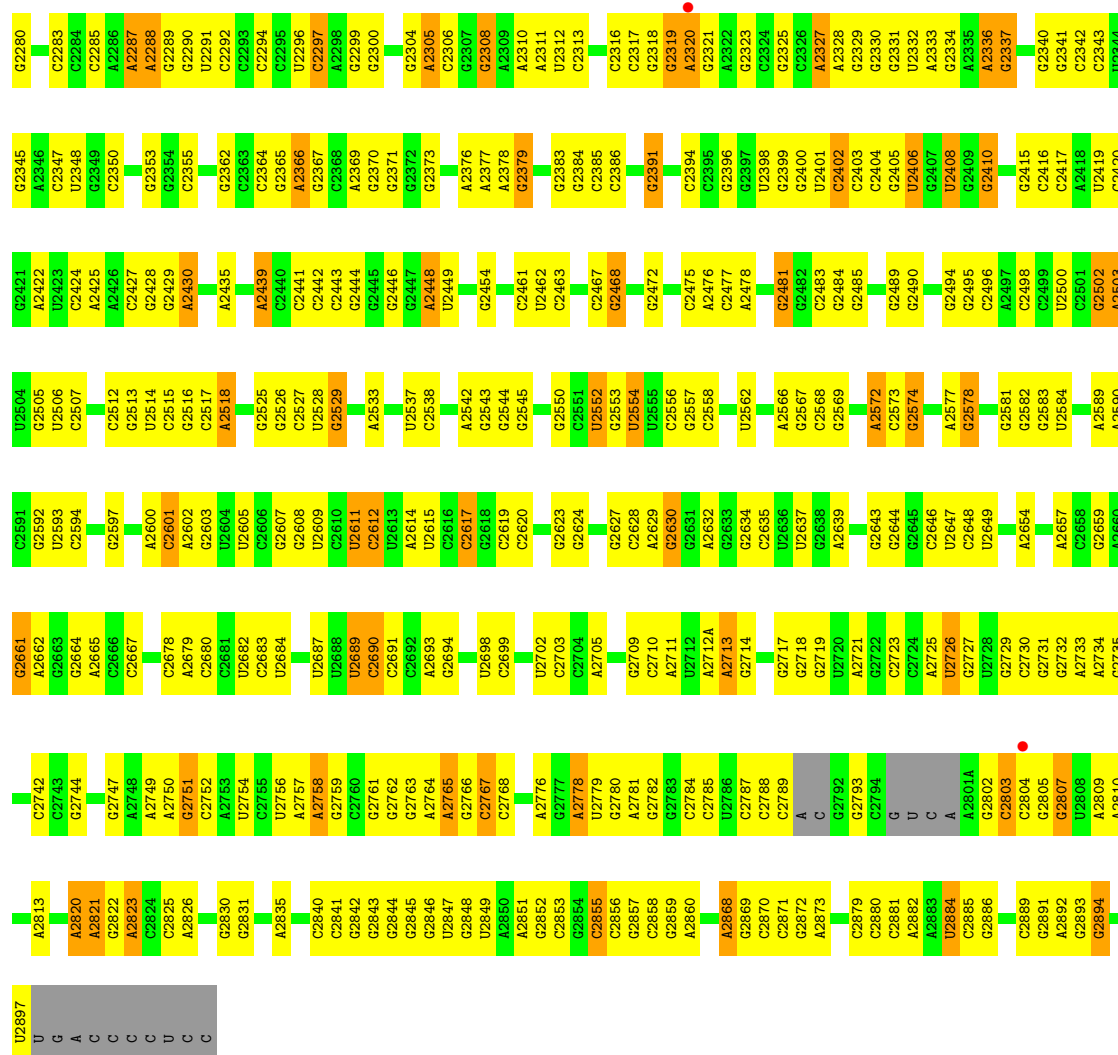


• Molecule 1: 23S Ribosomal RNA



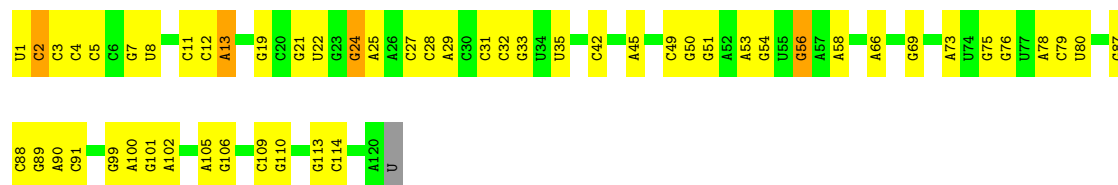


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G2127	C2128	G2129	U2130	G2131	U2132	G2133	A2134	G2135	C2136	G2137	C2138	G2139	G2140	G2141	G2142	G2143	U2144	C2145	G2146	G2147	G2148	G2149	U2150	G2151	G2152	G2153	G2154	G2155	G2156	G2157	A2158	G2159	C2160	G2161	G2162	G2163	C2164	G2165	G2166	U2167	G2168	C2169	A2170	G2171	G2172	G2173	C2174	G2175	A2176	G2177	G2178	G2179	U2180	G2181	G2182	G2183	G2184	G2185	G2186	G2187	G2188	G2189	G2190	G2191	G2192	G2193	G2194	G2195	G2196	G2197	G2198	G2199	G2200	G2201	G2202	G2203	G2204	G2205	G2206	G2207	G2208	G2209	G2210	G2211	G2212	G2213	G2214	G2215	G2216	G2217	G2218	G2219	G2220	G2221	G2222	G2223	G2224	G2225	G2226	G2227	G2228	G2229	G2230	G2231	G2232	G2233	G2234	G2235	G2236	G2237	G2238	G2239	G2240	G2241	G2242	G2243	G2244	G2245	G2246	G2247	G2248	G2249	G2250	G2251	G2252	G2253	G2254	G2255	G2256	G2257	G2258	G2259	G2260	G2261	G2262	G2263	G2264	G2265	G2266	G2267	G2268	G2269	G2270	G2271	G2272	G2273	G2274	G2275	G2276	G2277	G2278	G2279	G2280	G2281	G2282	G2283	G2284	G2285	G2286	G2287	G2288	G2289	G2290	G2291	G2292	G2293	G2294	G2295	G2296	G2297	G2298	G2299	G2300	G2301	G2302	G2303	G2304	G2305	G2306	G2307	G2308	G2309	G2310	G2311	G2312	G2313	G2314	G2315	G2316	G2317	G2318	G2319	G2320	G2321	G2322	G2323	G2324	G2325	G2326	G2327	G2328	G2329	G2330	G2331	G2332	G2333	G2334	G2335	G2336	G2337	G2338	G2339	G2340	G2341	G2342	G2343	G2344	G2345	G2346	G2347	G2348	G2349	G2350	G2351	G2352	G2353	G2354	G2355	G2356	G2357	G2358	G2359	G2360	G2361	G2362	G2363	G2364	G2365	G2366	G2367	G2368	G2369	G2370	G2371	G2372	G2373	G2374	G2375	G2376	G2377	G2378	G2379	G2380	G2381	G2382	G2383	G2384	G2385	G2386	G2387	G2388	G2389	G2390	G2391	G2392	G2393	G2394	G2395	G2396	G2397	G2398	G2399	G2400	G2401	G2402	G2403	G2404	G2405	G2406	G2407	G2408	G2409	G2410	G2411	G2412	G2413	G2414	G2415	G2416	G2417	G2418	G2419	G2420	G2421	G2422	G2423	G2424	G2425	G2426	G2427	G2428	G2429	G2430	G2431	G2432	G2433	G2434	G2435	G2436	G2437	G2438	G2439	G2440	G2441	G2442	G2443	G2444	G2445	G2446	G2447	G2448	G2449	G2450	G2451	G2452	G2453	G2454	G2455	G2456	G2457	G2458	G2459	G2460	G2461	G2462	G2463	G2464	G2465	G2466	G2467	G2468	G2469	G2470	G2471	G2472	G2473	G2474	G2475	G2476	G2477	G2478	G2479	G2480	G2481	G2482	G2483	G2484	G2485	G2486	G2487	G2488	G2489	G2490	G2491	G2492	G2493	G2494	G2495	G2496	G2497	G2498	G2499	G2500	G2501	G2502	G2503	G2504	G2505	G2506	G2507	G2508	G2509	G2510	G2511	G2512	G2513	G2514	G2515	G2516	G2517	G2518	G2519	G2520	G2521	G2522	G2523	G2524	G2525	G2526	G2527	G2528	G2529	G2530	G2531	G2532	G2533	G2534	G2535	G2536	G2537	G2538	G2539	G2540	G2541	G2542	G2543	G2544	G2545	G2546	G2547	G2548	G2549	G2550	G2551	G2552	G2553	G2554	G2555	G2556	G2557	G2558	G2559	G2560	G2561	G2562	G2563	G2564	G2565	G2566	G2567	G2568	G2569	G2570	G2571	G2572	G2573	G2574	G2575	G2576	G2577	G2578	G2579	G2580	G2581	G2582	G2583	G2584	G2585	G2586	G2587	G2588	G2589	G2590	G2591	G2592	G2593	G2594	G2595	G2596	G2597	G2598	G2599	G2600	G2601	G2602	G2603	G2604	G2605	G2606	G2607	G2608	G2609	G2610	G2611	G2612	G2613	G2614	G2615	G2616	G2617	G2618	G2619	G2620	G2621	G2622	G2623	G2624	G2625	G2626	G2627	G2628	G2629	G2630	G2631	G2632	G2633	G2634	G2635	G2636	G2637	G2638	G2639	G2640	G2641	G2642	G2643	G2644	G2645	G2646	G2647	G2648	G2649	G2650	G2651	G2652	G2653	G2654	G2655	G2656	G2657	G2658	G2659	G2660	G2661	G2662	G2663	G2664	G2665	G2666	G2667	G2668	G2669	G2670	G2671	G2672	G2673	G2674	G2675	G2676	G2677	G2678	G2679	G2680	G2681	G2682	G2683	G2684	G2685	G2686	G2687	G2688	G2689	G2690	G2691	G2692	G2693	G2694	G2695	G2696	G2697	G2698	G2699	G2700	G2701	G2702	G2703	G2704	G2705	G2706	G2707	G2708	G2709	G2710	G2711	G2712	G2713	G2714	G2715	G2716	G2717	G2718	G2719	G2720	G2721	G2722	G2723	G2724	G2725	G2726	G2727	G2728	G2729	G2730	G2731	G2732	G2733	G2734	G2735	G2736	G2737	G2738	G2739	G2740	G2741	G2742	G2743	G2744	G2745	G2746	G2747	G2748	G2749	G2750	G2751	G2752	G2753	G2754	G2755	G2756	G2757	G2758	G2759	G2760	G2761	G2762	G2763	G2764	G2765	G2766	G2767	G2768	G2769	G2770	G2771	G2772	G2773	G2774	G2775	G2776	G2777	G2778	G2779	G2780	G2781	G2782	G2783	G2784	G2785	G2786	G2787	G2788	G2789	G2790	G2791	G2792	G2793	G2794	G2795	G2796	G2797	G2798	G2799	G2800	G2801	G2802	G2803	G2804	G2805	G2806	G2807	G2808	G2809	G2810	G2811	G2812	G2813	G2814	G2815	G2816	G2817	G2818	G2819	G2820	G2821	G2822	G2823	G2824	G2825	G2826	G2827	G2828	G2829	G2830	G2831	G2832	G2833	G2834	G2835	G2836	G2837	G2838	G2839	G2840	G2841	G2842	G2843	G2844	G2845	G2846	G2847	G2848	G2849	G2850	G2851	G2852	G2853	G2854	G2855	G2856	G2857	G2858	G2859	G2860	G2861	G2862	G2863	G2864	G2865	G2866	G2867	G2868	G2869	G2870	G2871	G2872	G2873	G2874	G2875	G2876	G2877	G2878	G2879	G2880	G2881	G2882	G2883	G2884	G2885	G2886	G2887	G2888	G2889	G2890	G2891	G2892	G2893	G2894	G2895	G2896	G2897	G2898	G2899	G2900	G2901	G2902	G2903	G2904	G2905	G2906	G2907	G2908	G2909	G2910	G2911	G2912	G2913	G2914	G2915	G2916	G2917	G2918	G2919	G2920	G2921	G2922	G2923	G2924	G2925	G2926	G2927	G2928	G2929	G2930	G2931	G2932	G2933	G2934	G2935	G2936	G2937	G2938	G2939	G2940	G2941	G2942	G2943	G2944	G2945	G2946	G2947	G2948	G2949	G2950	G2951	G2952	G2953	G2954	G2955	G2956	G2957	G2958	G2959	G2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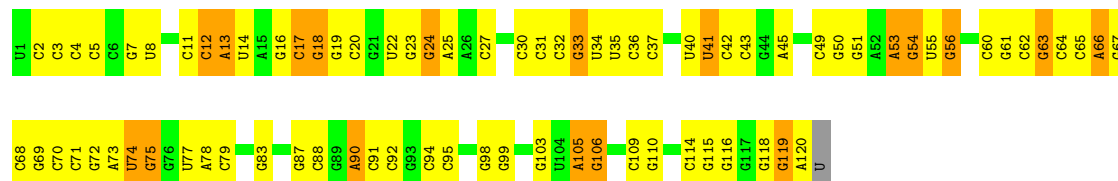
- Molecule 2: 5S Ribosomal RNA

Chain 1B: 55% 41% .



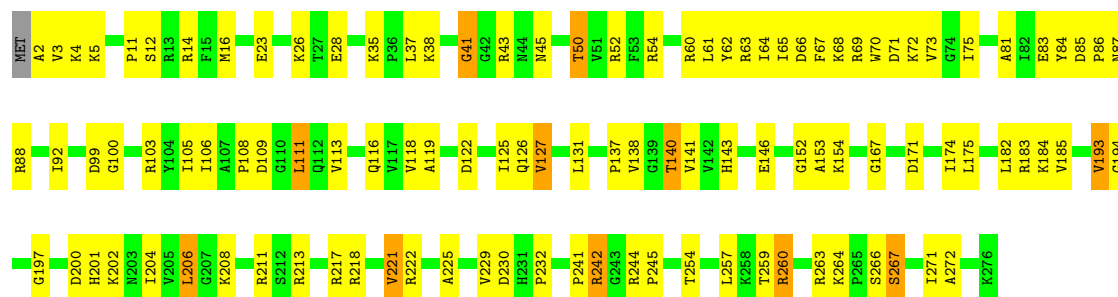
- Molecule 2: 5S Ribosomal RNA

Chain 2B: 33% 51% 15%



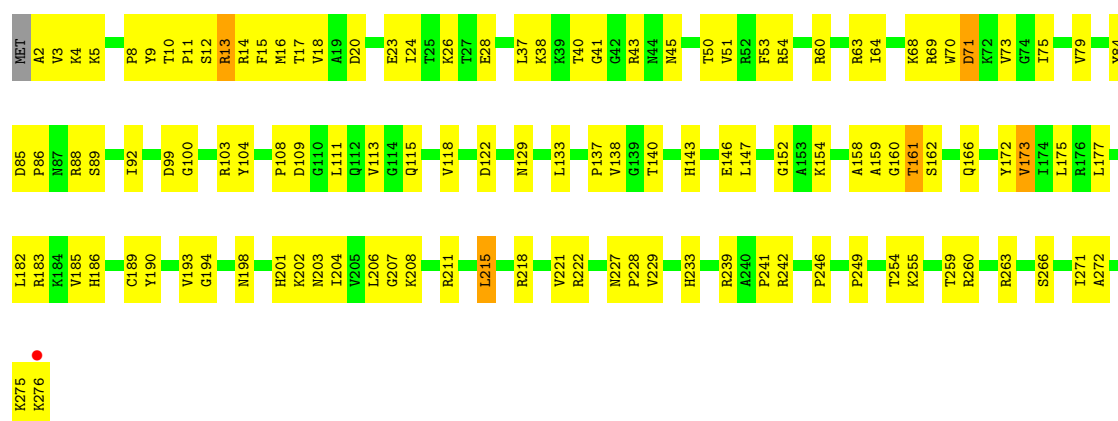
- Molecule 3: 50S ribosomal protein L2

Chain 1D:  60% 36%



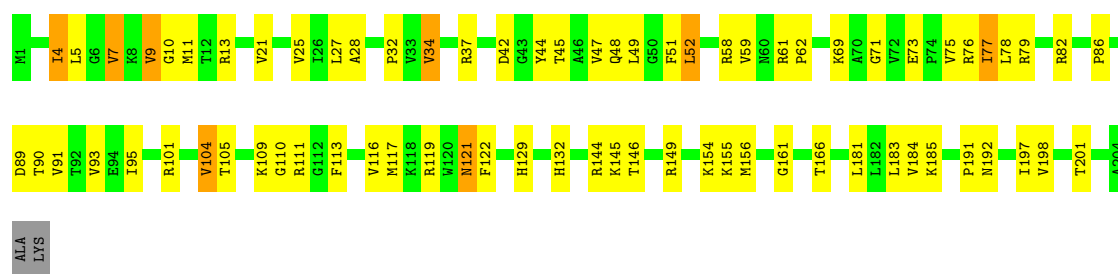
- Molecule 3: 50S ribosomal protein L2

Chain 2D:  57% 41%



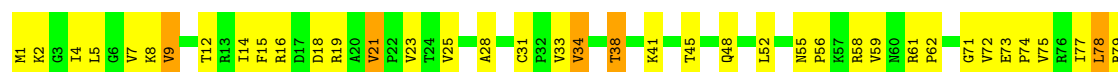
- Molecule 4: 50S ribosomal protein L3

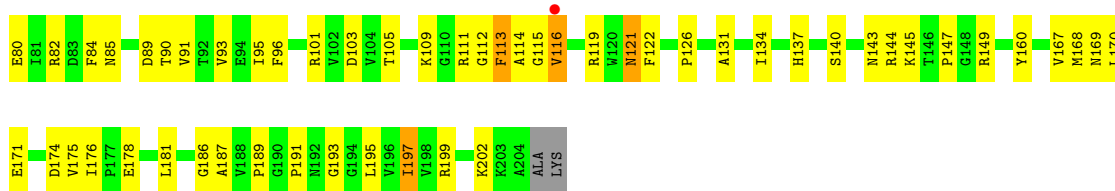
Chain 1E:  64% 32%



- Molecule 4: 50S ribosomal protein L3

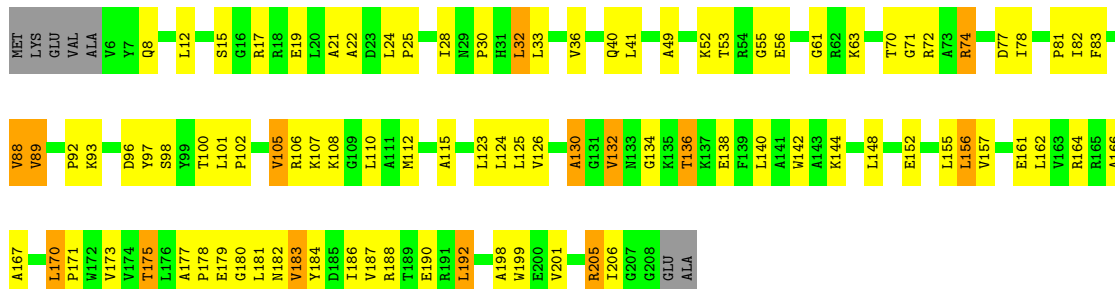
Chain 2E:  54% 40%





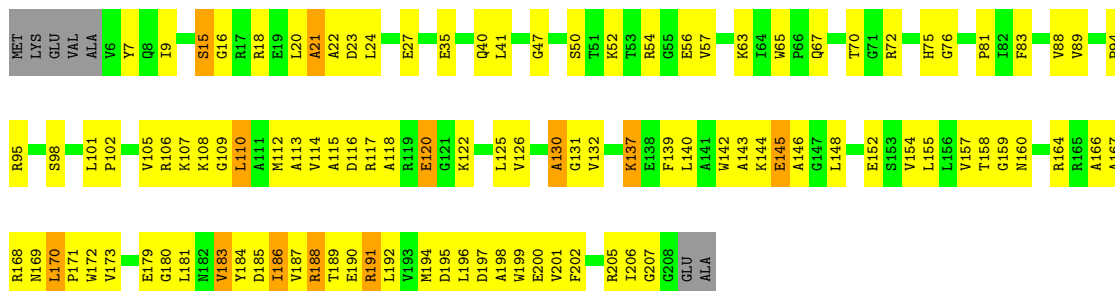
• Molecule 5: 50S ribosomal protein L4

Chain 1F: 52% 38% 7%



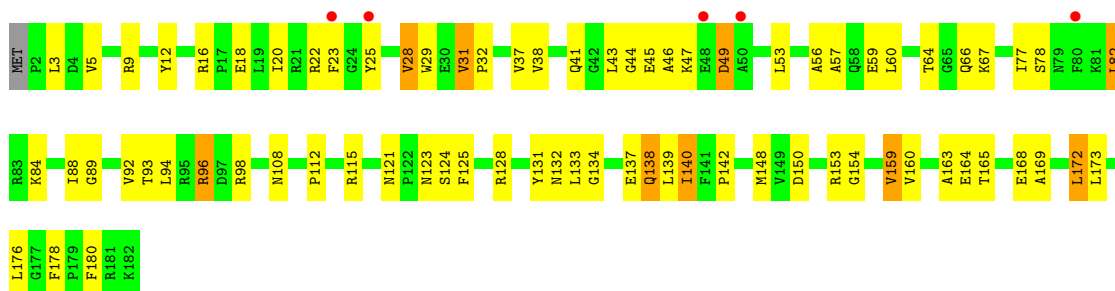
• Molecule 5: 50S ribosomal protein L4

Chain 2F: 46% 45% 6%



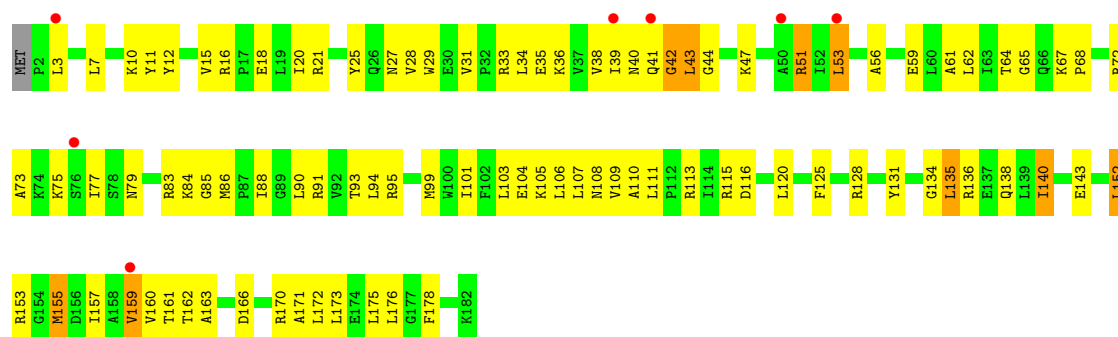
• Molecule 6: 50S ribosomal protein L5

Chain 1G: 3% 58% 36% 5%

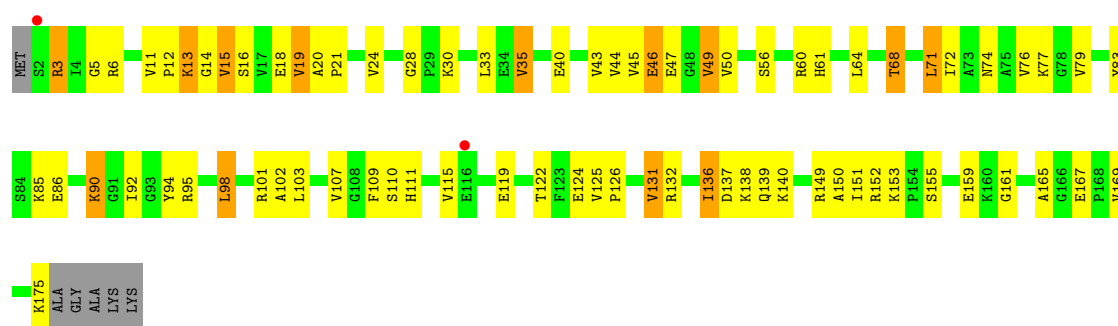


• Molecule 6: 50S ribosomal protein L5

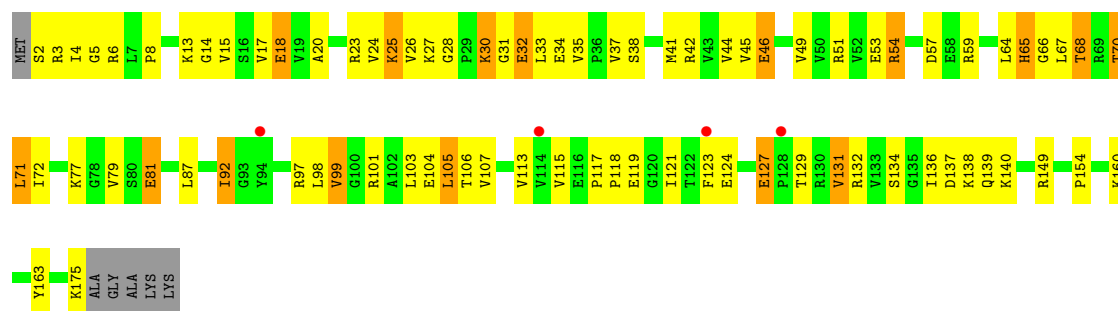
Chain 2G: 4% 48% 46% 5%



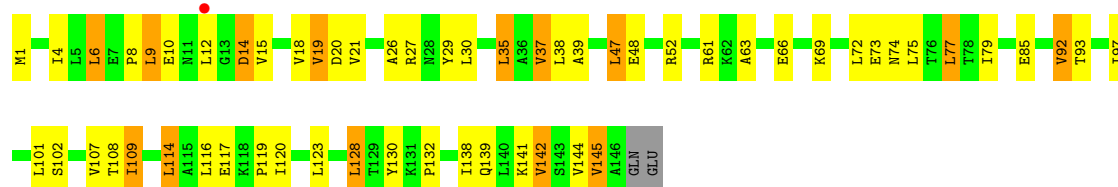
• Molecule 7: 50S ribosomal protein L6



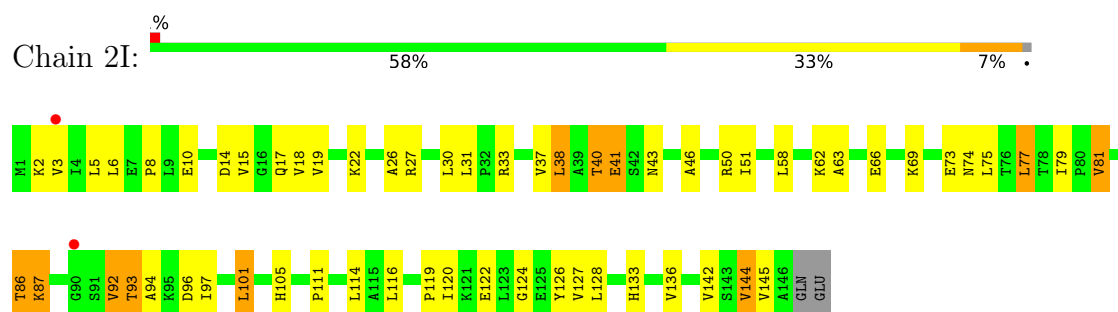
• Molecule 7: 50S ribosomal protein L6



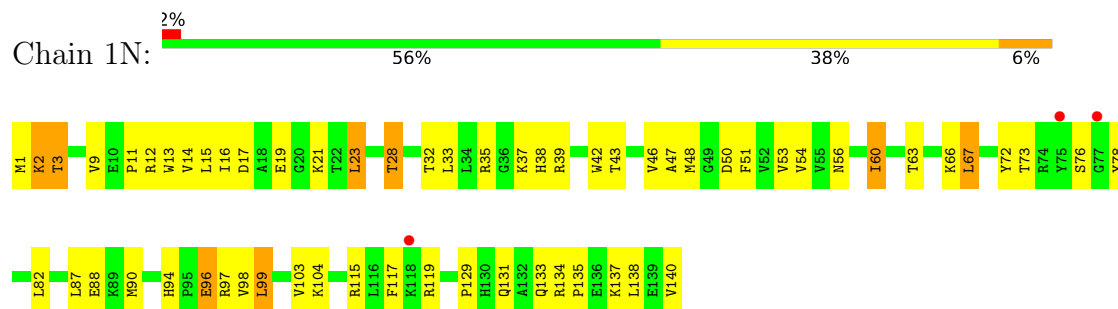
• Molecule 8: 50S ribosomal protein L9



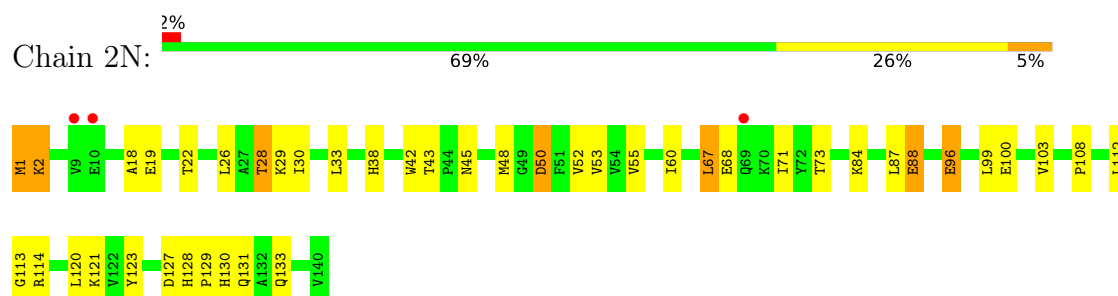
• Molecule 8: 50S ribosomal protein L9



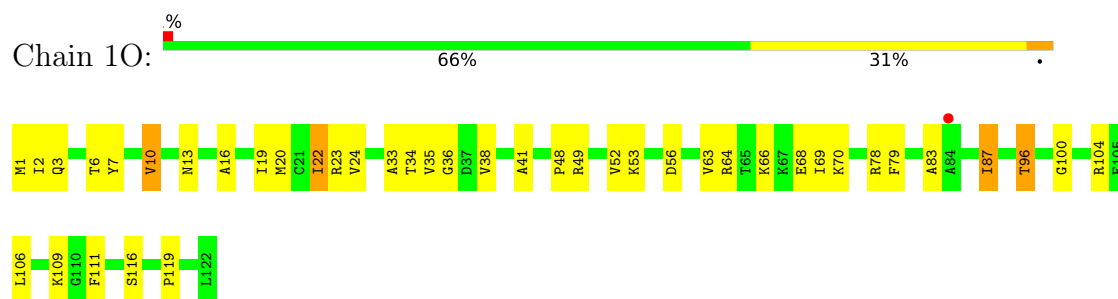
- Molecule 9: 50S ribosomal protein L13



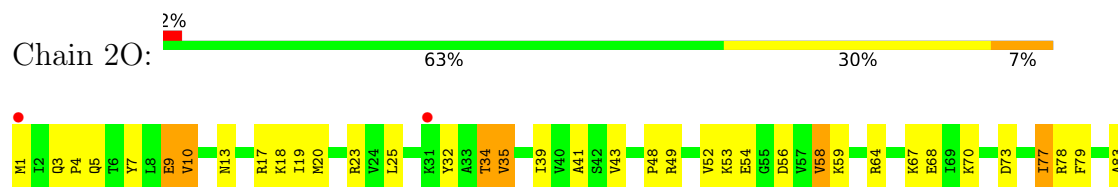
- Molecule 9: 50S ribosomal protein L13



- Molecule 10: 50S ribosomal protein L14



- Molecule 10: 50S ribosomal protein L14





- Molecule 11: 50S ribosomal protein L15



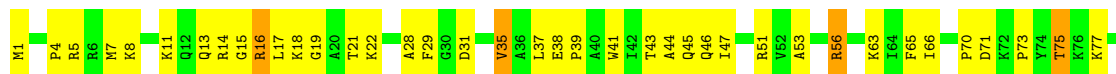
- Molecule 11: 50S ribosomal protein L15



- Molecule 12: 50S ribosomal protein L16

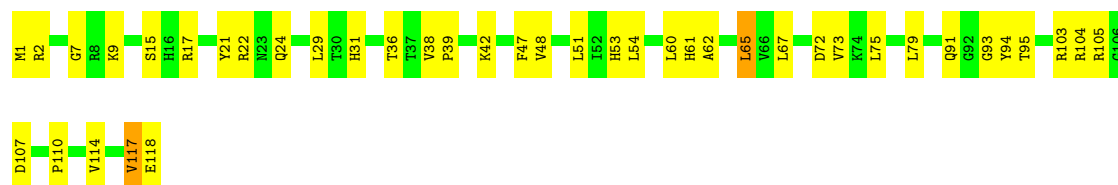


- Molecule 12: 50S ribosomal protein L16

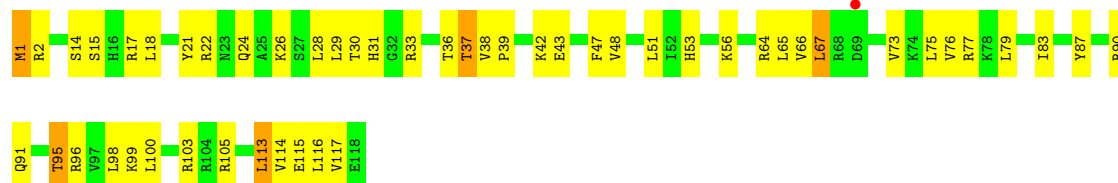


- Molecule 13: 50S ribosomal protein L17

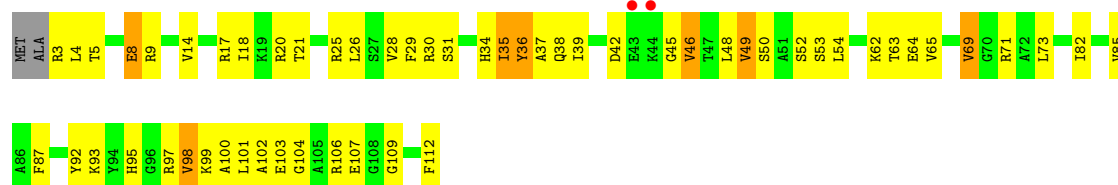




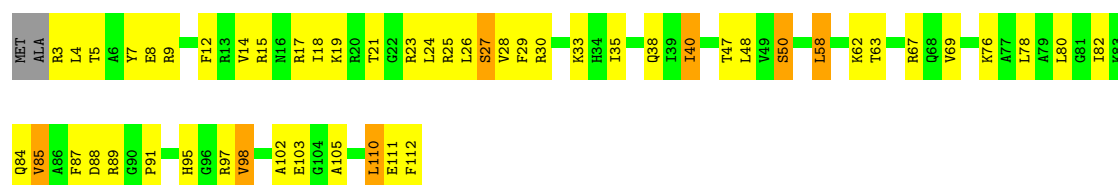
- Molecule 13: 50S ribosomal protein L17



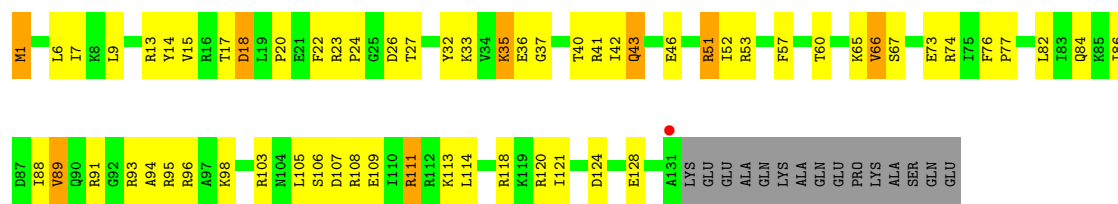
- Molecule 14: 50S ribosomal protein L18



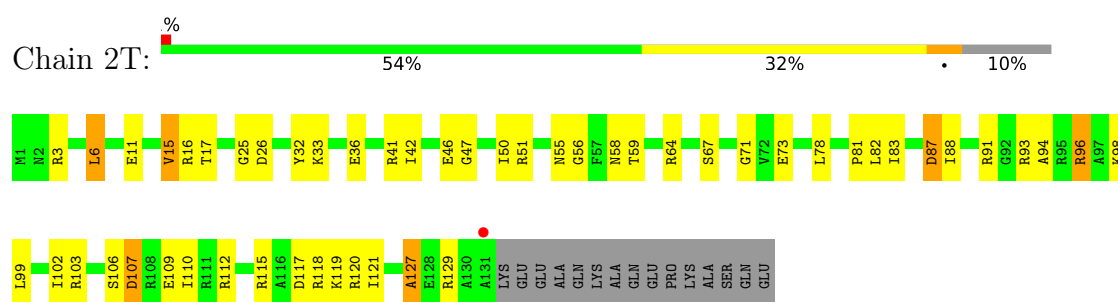
- Molecule 14: 50S ribosomal protein L18



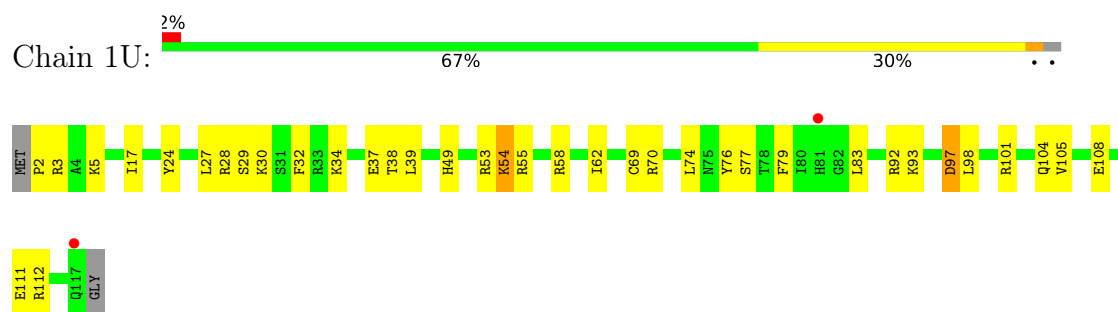
- Molecule 15: 50S ribosomal protein L19



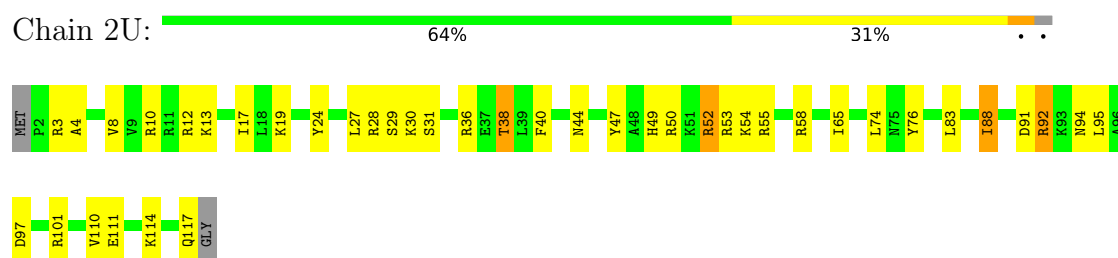
- Molecule 15: 50S ribosomal protein L19



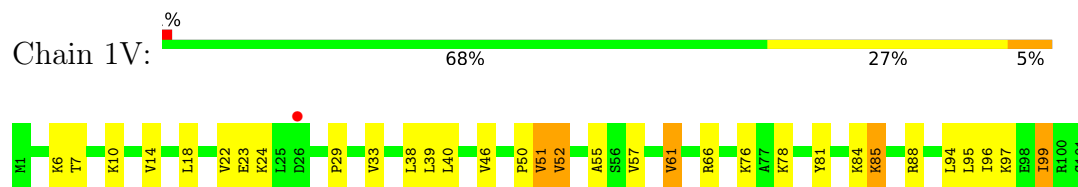
• Molecule 16: 50S ribosomal protein L20



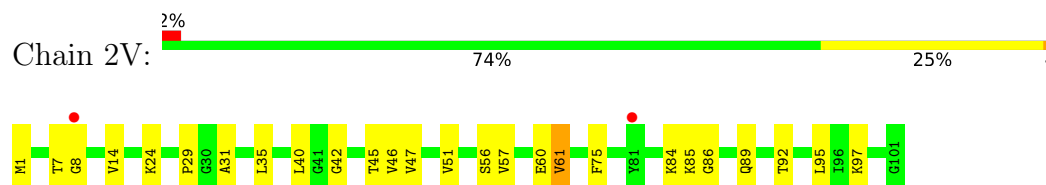
• Molecule 16: 50S ribosomal protein L20



• Molecule 17: 50S ribosomal protein L21



• Molecule 17: 50S ribosomal protein L21



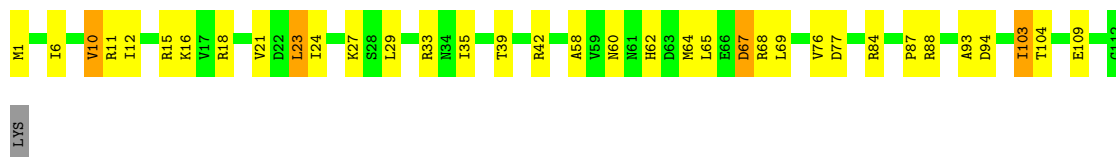
• Molecule 18: 50S ribosomal protein L22





- Molecule 18: 50S ribosomal protein L22

Chain 2W: 68% 27% . .



- Molecule 19: 50S ribosomal protein L23

Chain 1X: 71% 25% . .



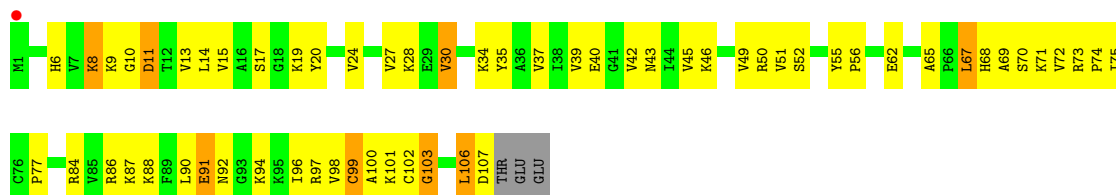
- Molecule 19: 50S ribosomal protein L23

Chain 2X: 67% 31% . .



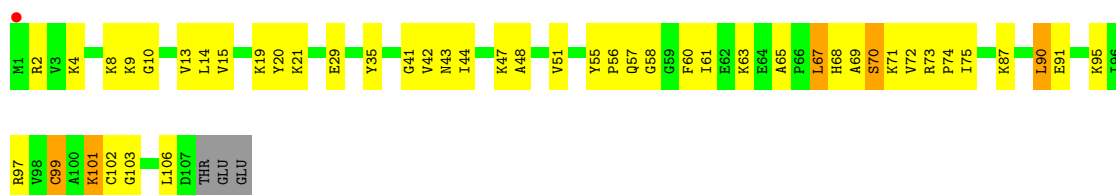
- Molecule 20: 50S ribosomal protein L24

Chain 1Y: 43% 47% 7% .

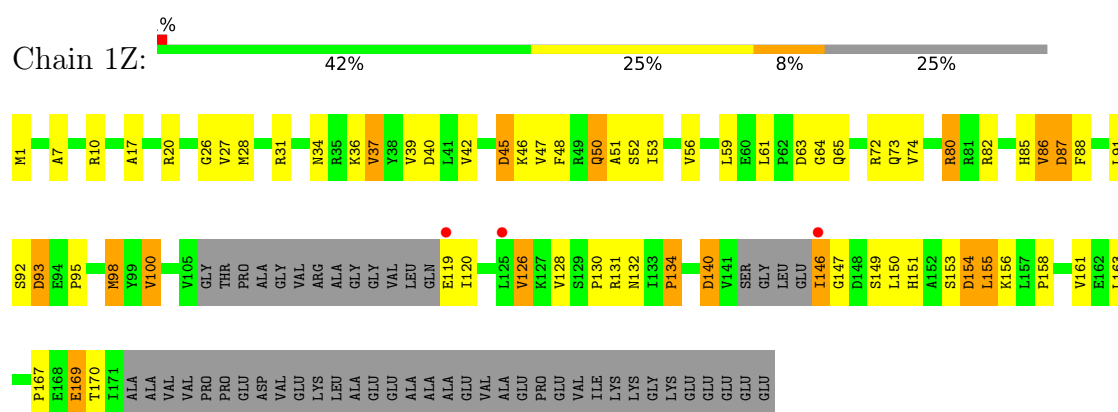


- Molecule 20: 50S ribosomal protein L24

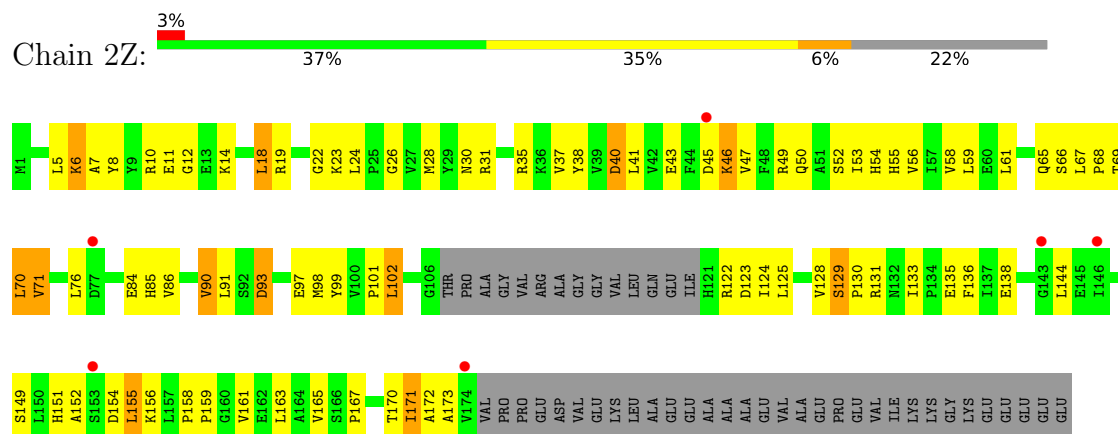
Chain 2Y: 55% 38% 5% .



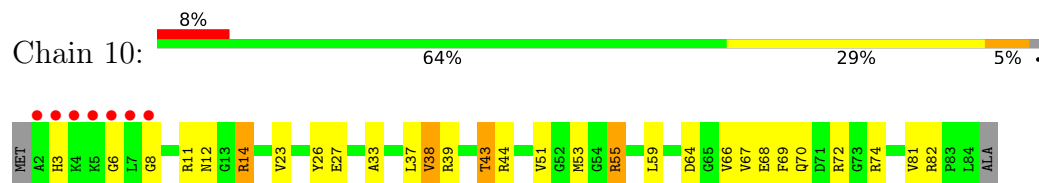
- Molecule 21: 50S ribosomal protein L25



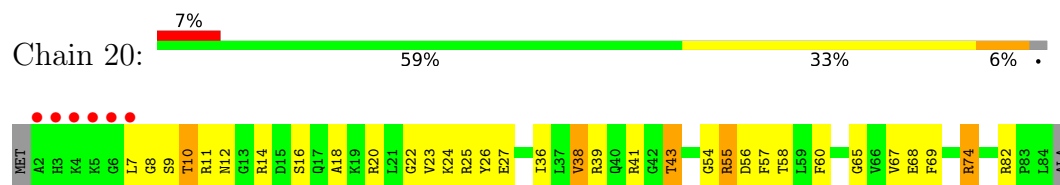
- Molecule 21: 50S ribosomal protein L25



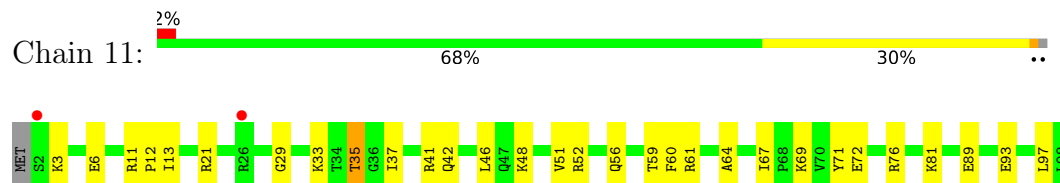
- Molecule 22: 50S ribosomal protein L27



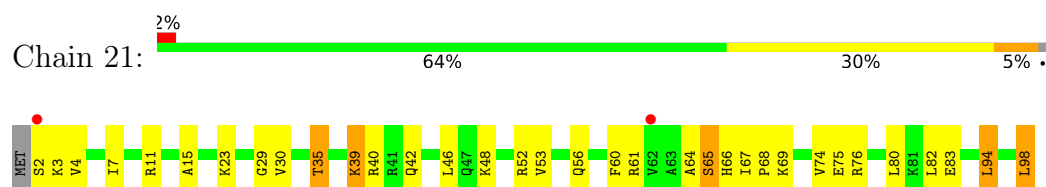
- Molecule 22: 50S ribosomal protein L27



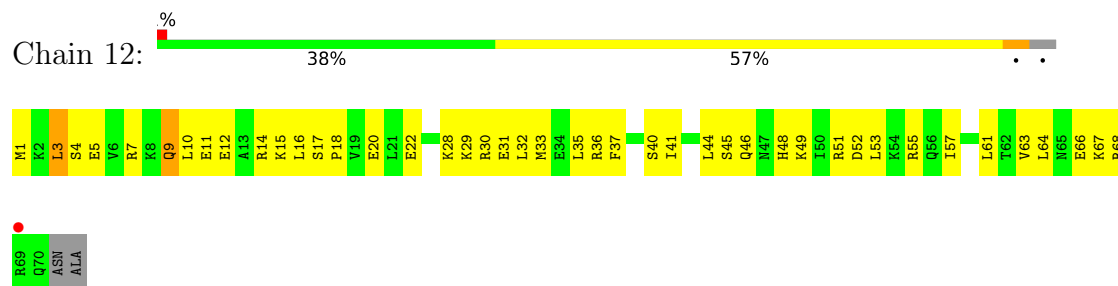
- Molecule 23: 50S ribosomal protein L28



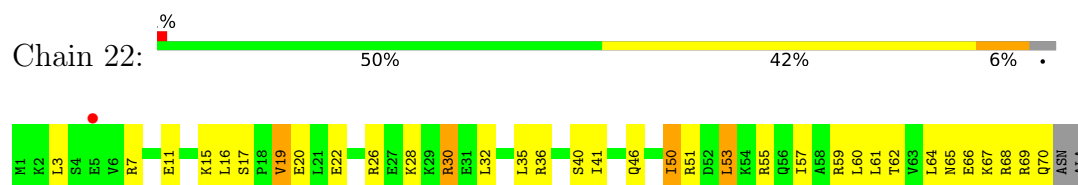
- Molecule 23: 50S ribosomal protein L28



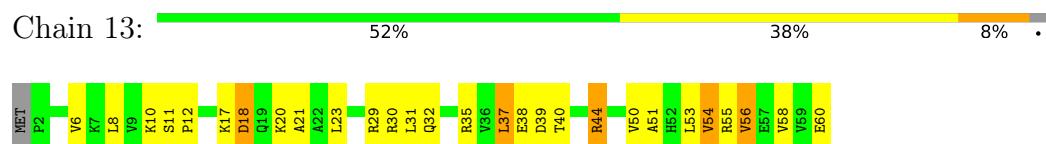
- Molecule 24: 50S ribosomal protein L29



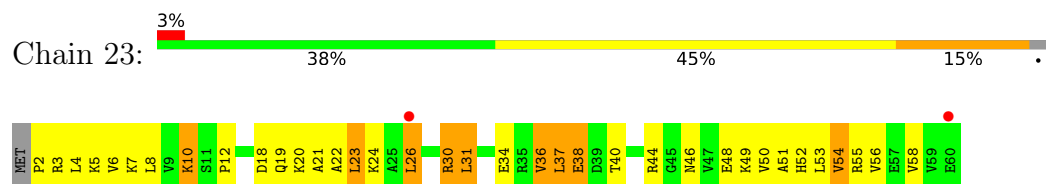
- Molecule 24: 50S ribosomal protein L29



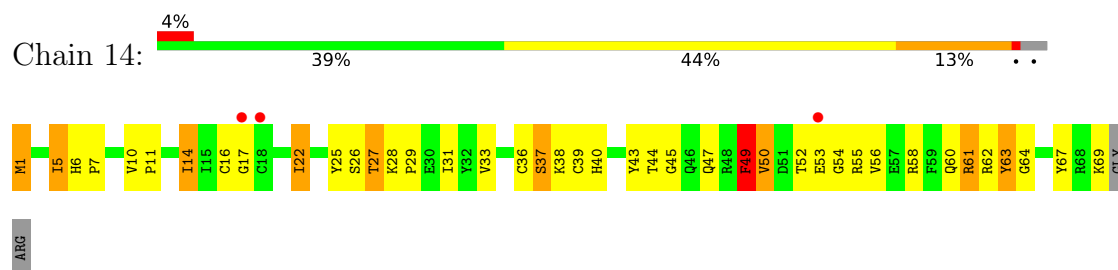
- Molecule 25: 50S ribosomal protein L30



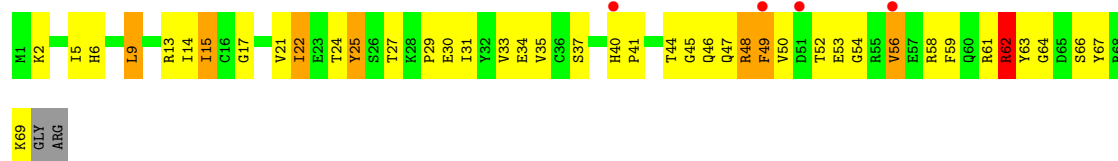
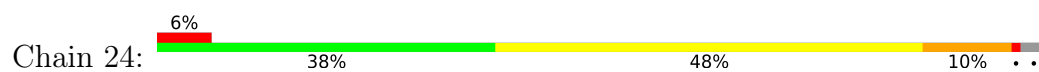
- Molecule 25: 50S ribosomal protein L30



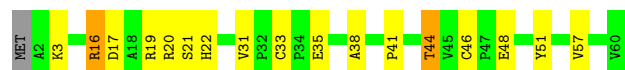
- Molecule 26: 50S ribosomal protein L31



- Molecule 26: 50S ribosomal protein L31



- Molecule 27: 50S ribosomal protein L32



- Molecule 27: 50S ribosomal protein L32



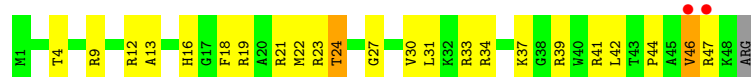
- Molecule 28: 50S ribosomal protein L33



- Molecule 28: 50S ribosomal protein L33

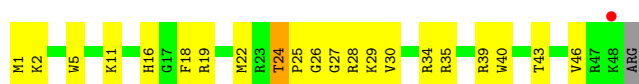


- Molecule 29: 50S ribosomal protein L34



- Molecule 29: 50S ribosomal protein L34

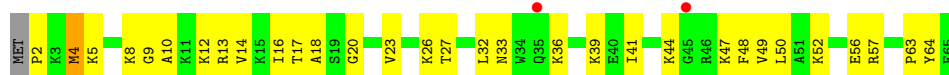




- Molecule 30: 50S ribosomal protein L35



- Molecule 30: 50S ribosomal protein L35



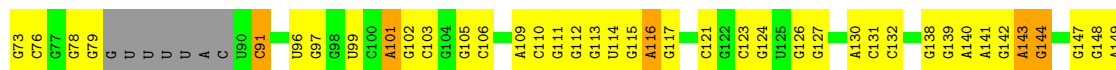
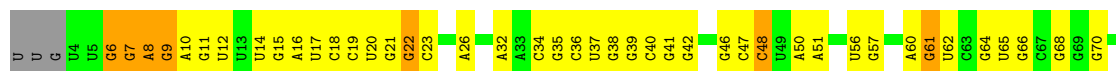
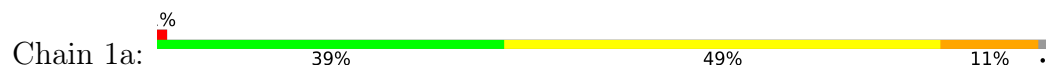
- Molecule 31: 50S ribosomal protein L36



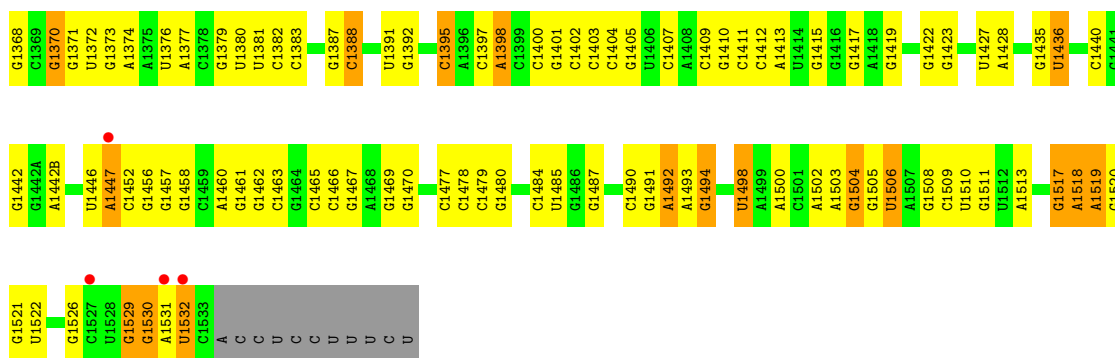
- Molecule 31: 50S ribosomal protein L36



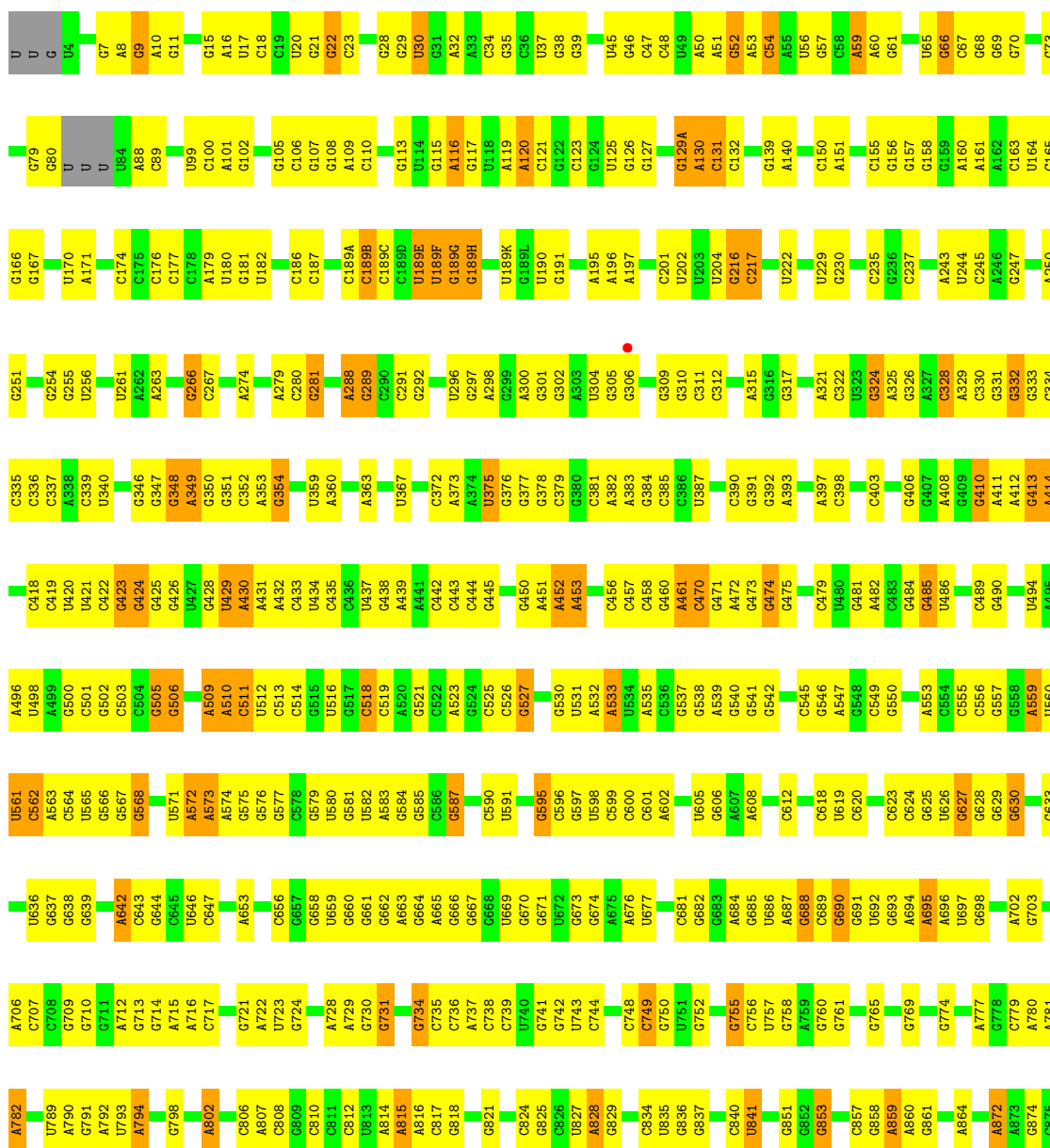
- Molecule 32: 16S Ribosomal RNA

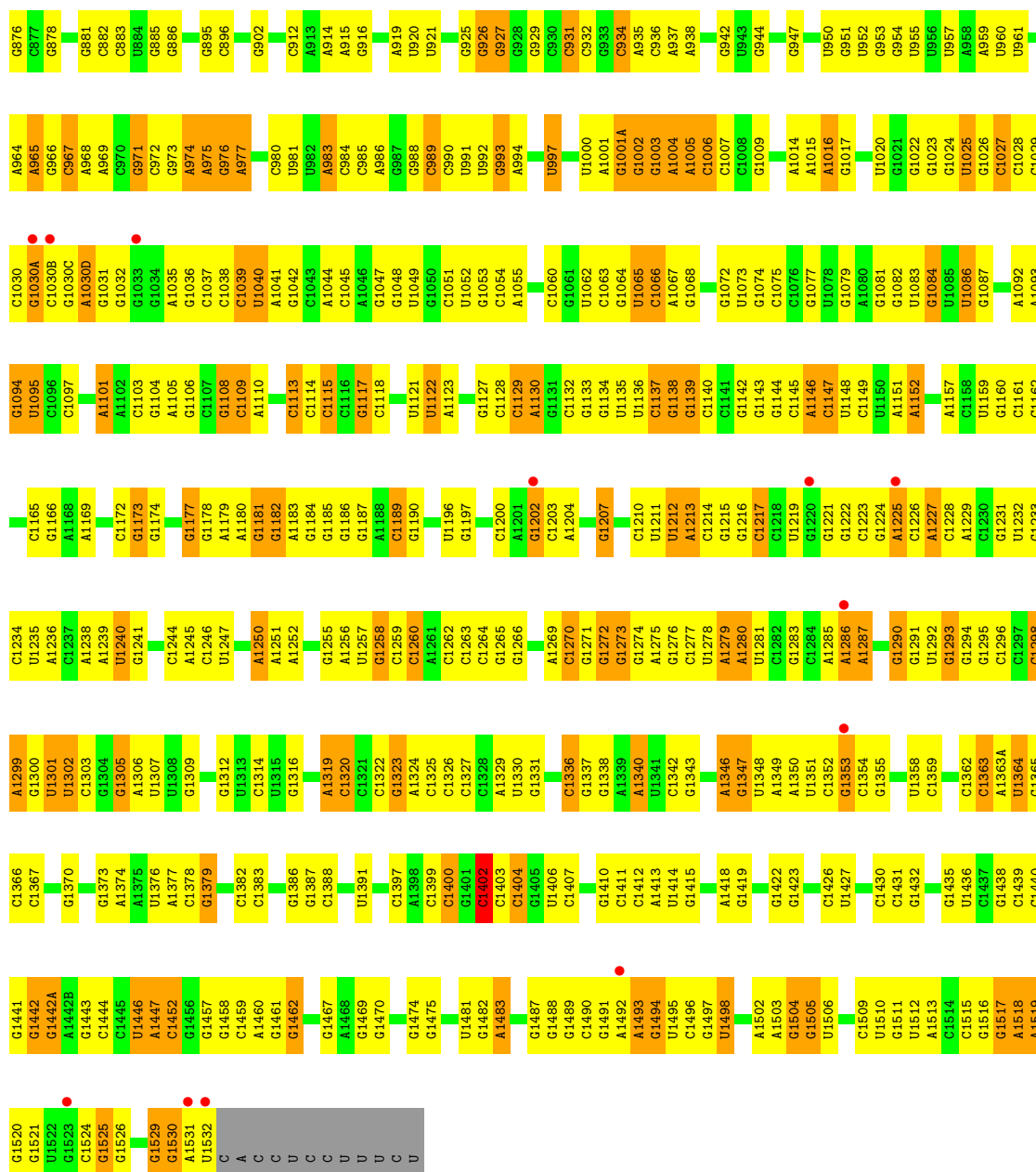


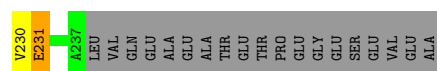




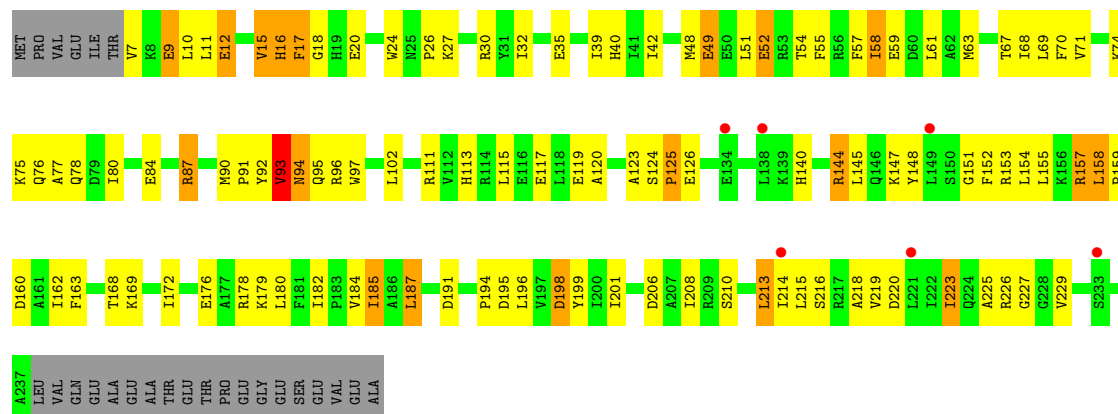
• Molecule 32: 16S Ribosomal RNA



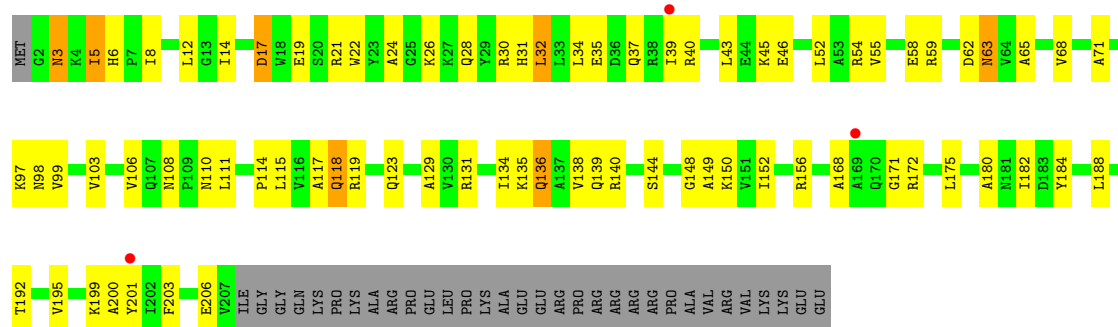




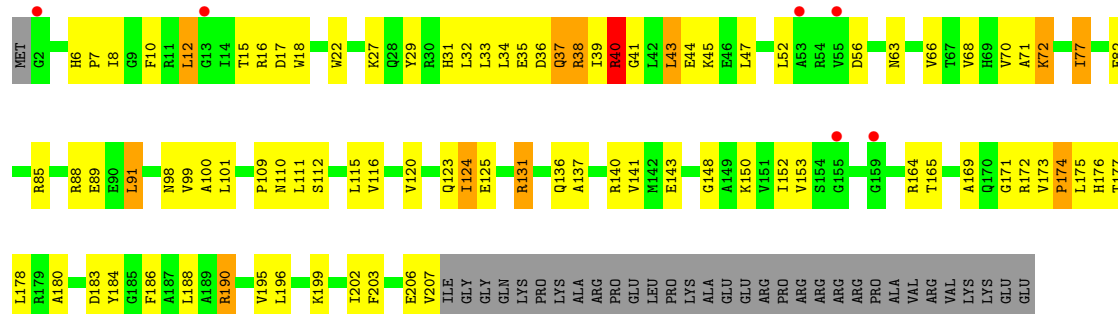
• Molecule 33: 30S ribosomal protein S2



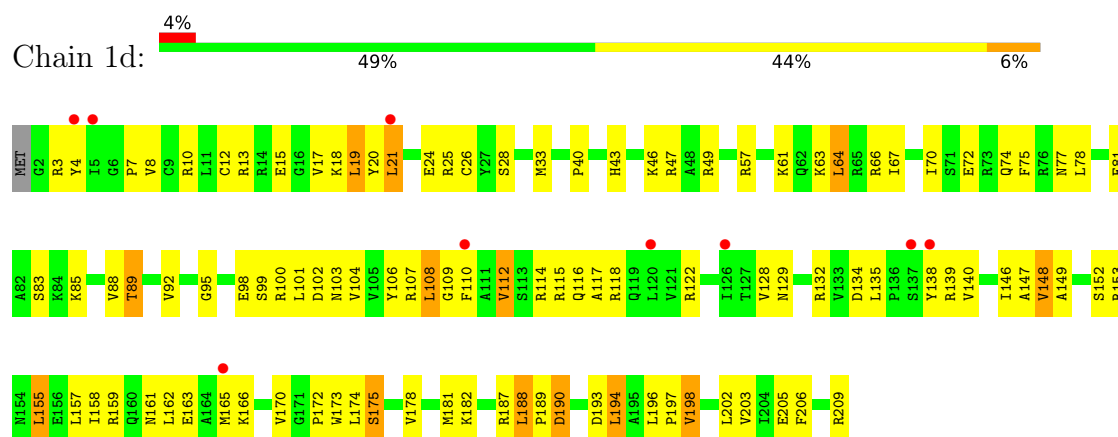
• Molecule 34: 30S ribosomal protein S3



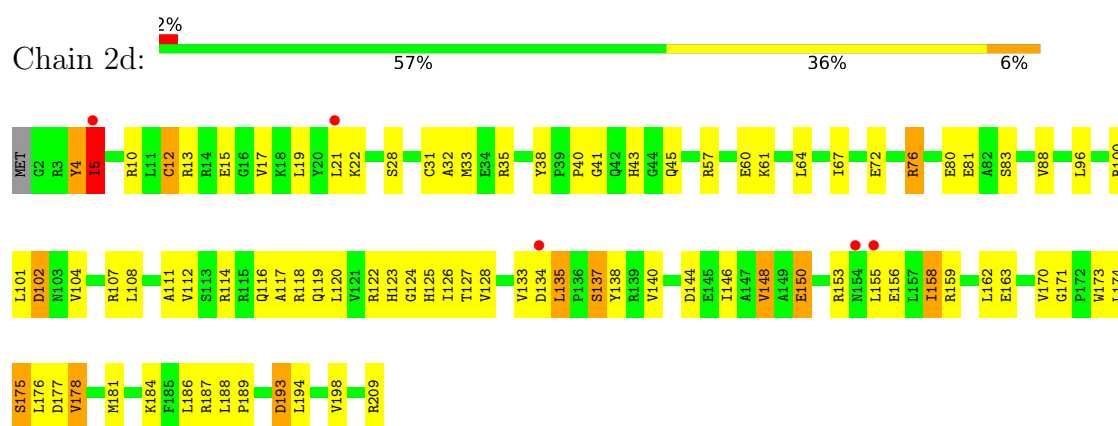
• Molecule 34: 30S ribosomal protein S3



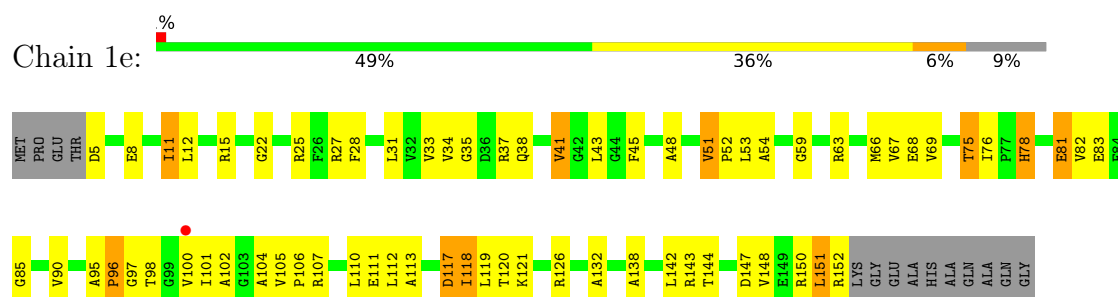
• Molecule 35: 30S ribosomal protein S4



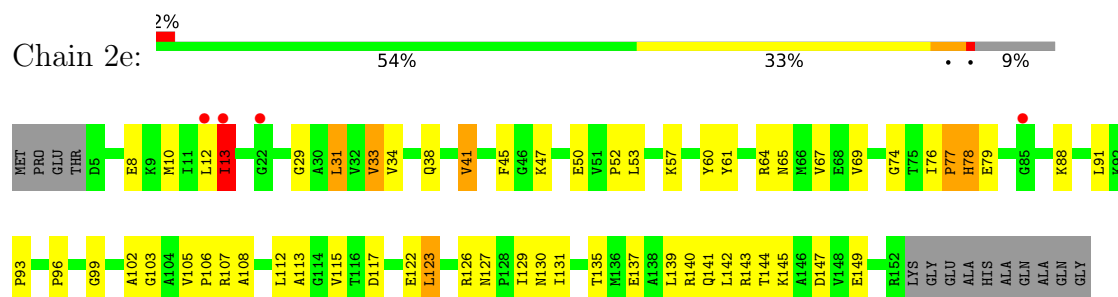
• Molecule 35: 30S ribosomal protein S4



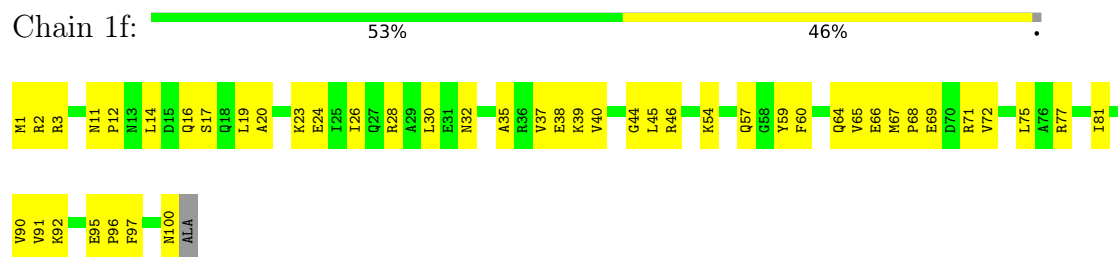
• Molecule 36: 30S ribosomal protein S5



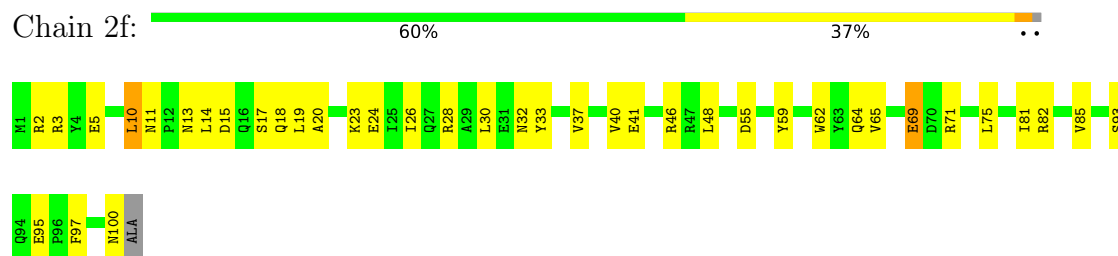
• Molecule 36: 30S ribosomal protein S5



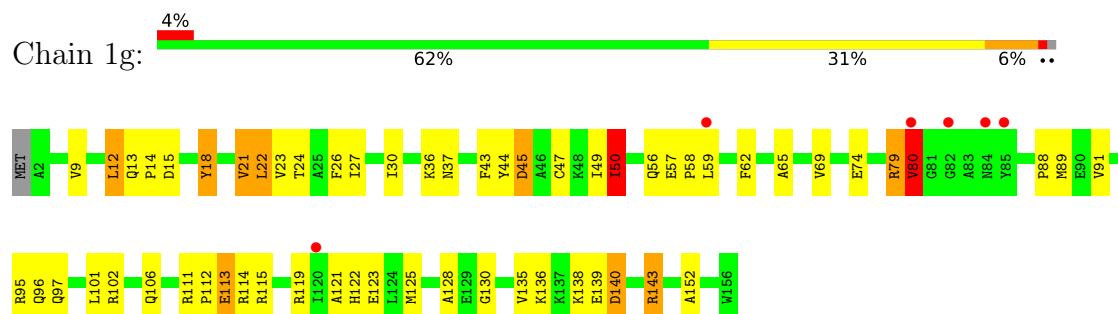
• Molecule 37: 30S ribosomal protein S6



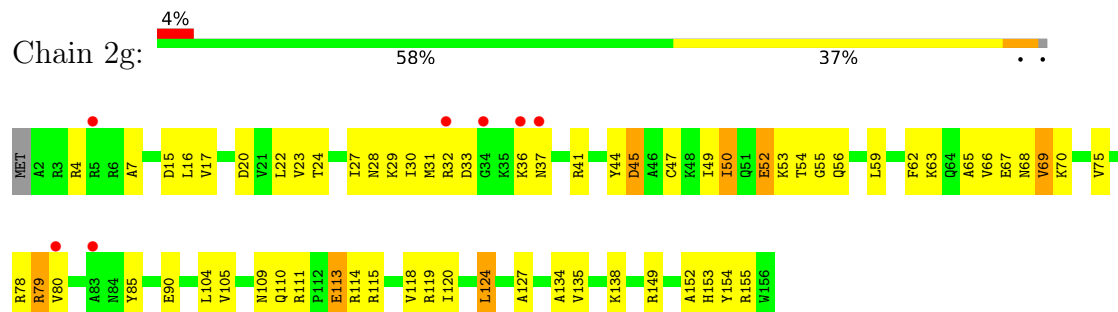
• Molecule 37: 30S ribosomal protein S6



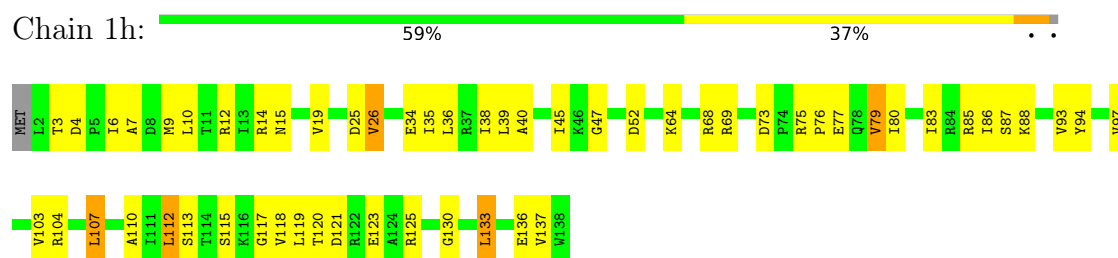
• Molecule 38: 30S ribosomal protein S7



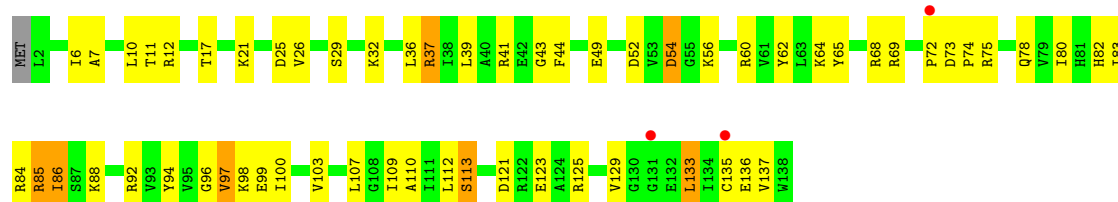
• Molecule 38: 30S ribosomal protein S7



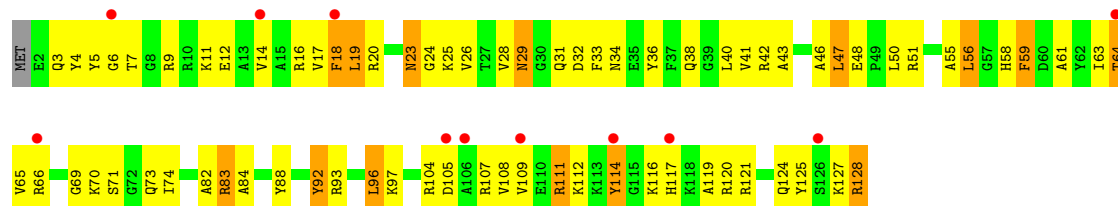
• Molecule 39: 30S ribosomal protein S8



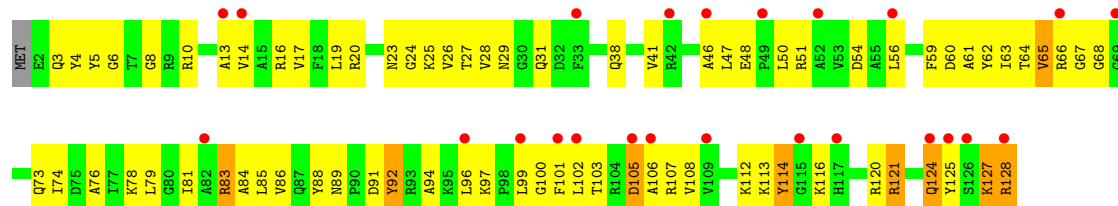
- Molecule 39: 30S ribosomal protein S8



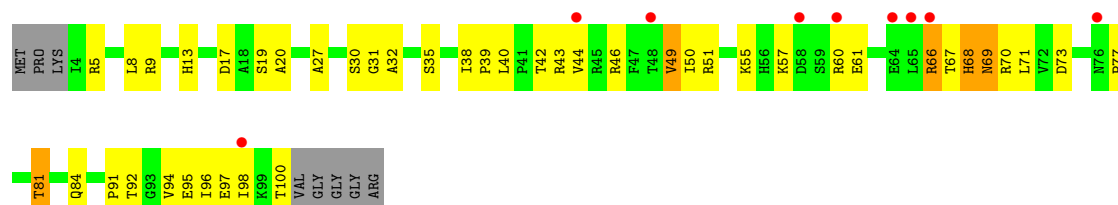
- Molecule 40: 30S ribosomal protein S9



- Molecule 40: 30S ribosomal protein S9

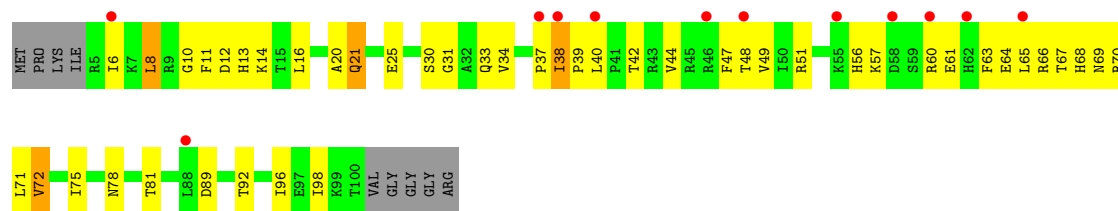


- Molecule 41: 30S ribosomal protein S10

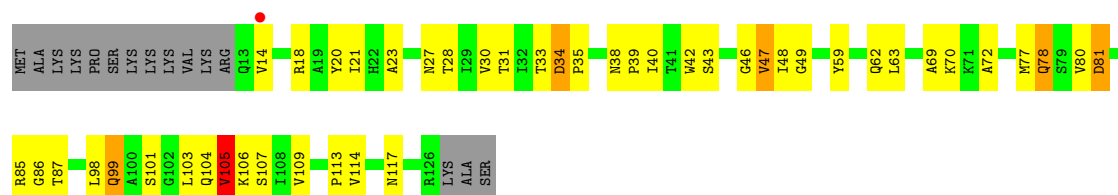


- Molecule 41: 30S ribosomal protein S10

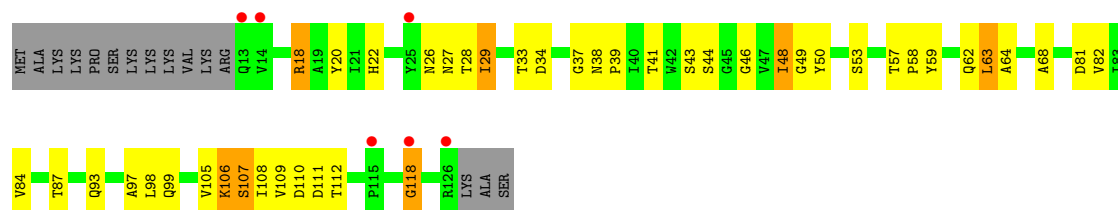




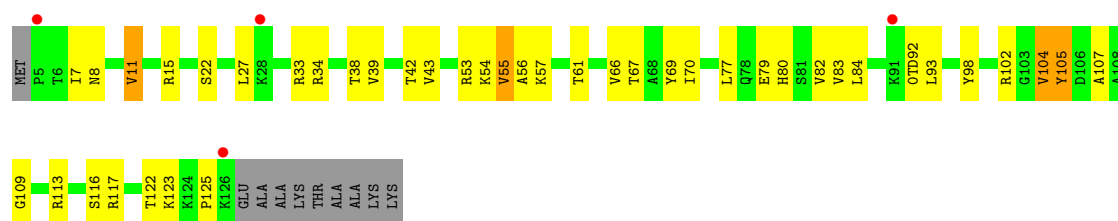
• Molecule 42: 30S ribosomal protein S11



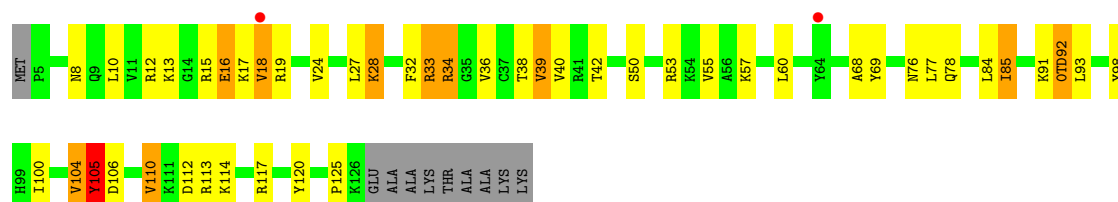
• Molecule 42: 30S ribosomal protein S11



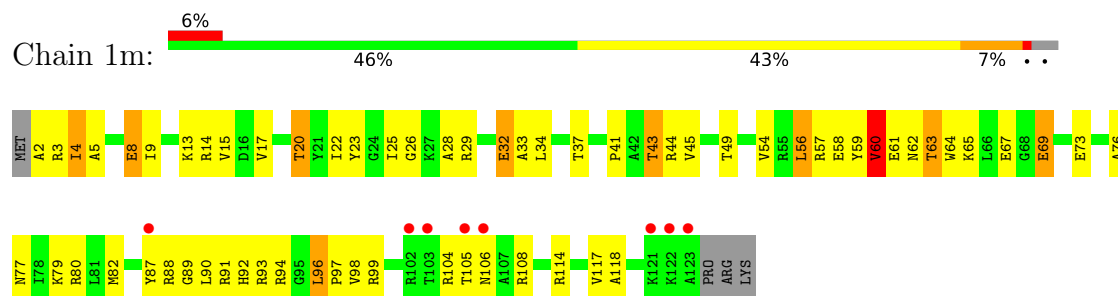
• Molecule 43: 30S ribosomal protein S12



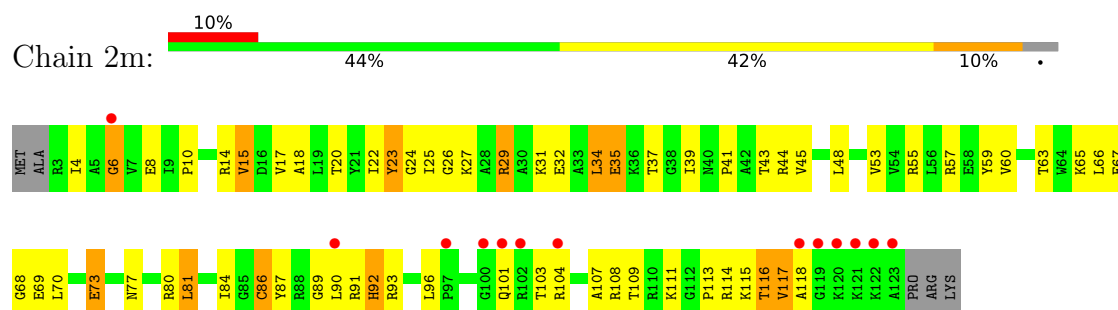
• Molecule 43: 30S ribosomal protein S12



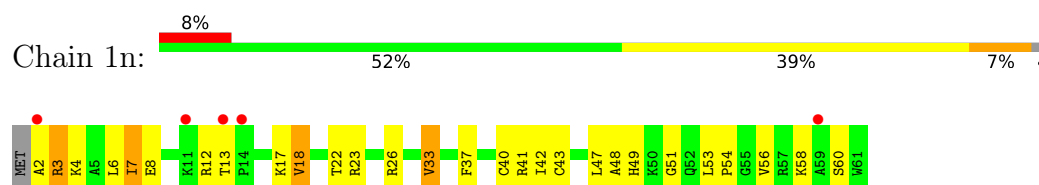
- Molecule 44: 30S ribosomal protein S13



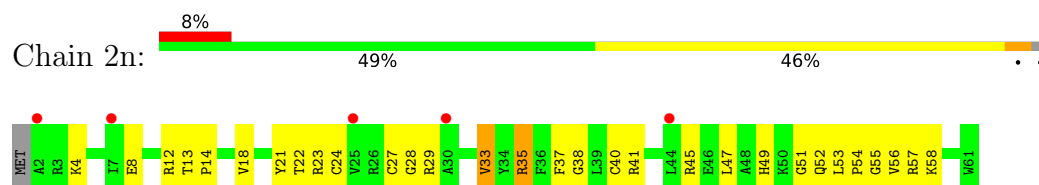
- Molecule 44: 30S ribosomal protein S13



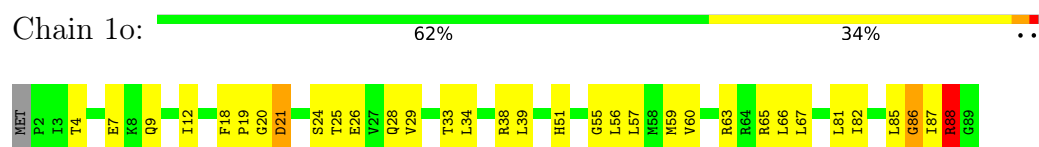
- Molecule 45: 30S ribosomal protein S14 type Z



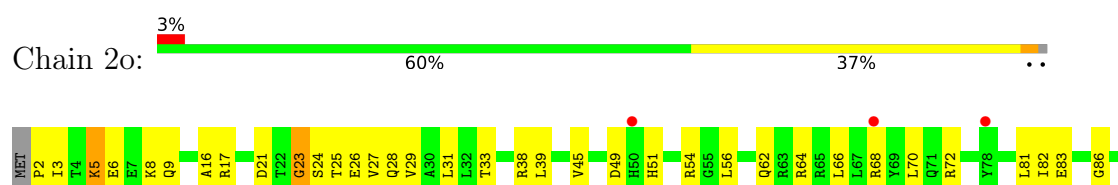
- Molecule 45: 30S ribosomal protein S14 type Z



- Molecule 46: 30S ribosomal protein S15



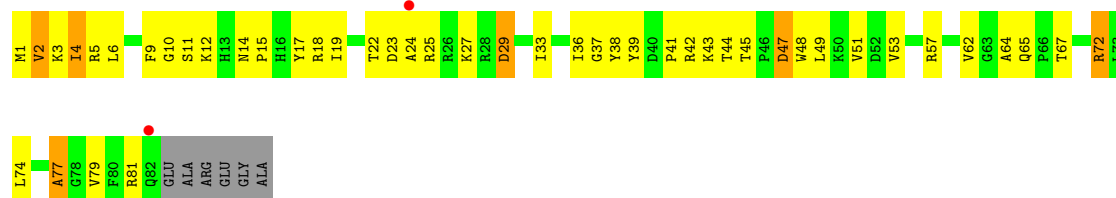
- Molecule 46: 30S ribosomal protein S15



659

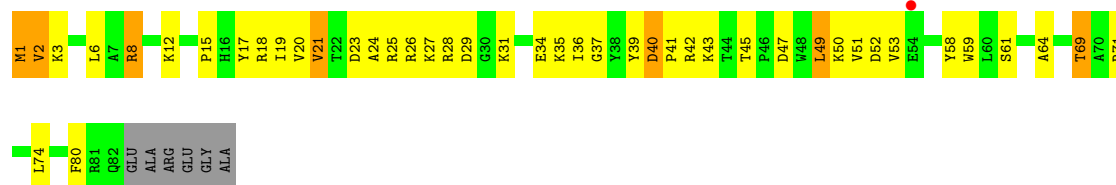
- Molecule 47: 30S ribosomal protein S16

Chain 1p: 



- Molecule 47: 30S ribosomal protein S16

Chain 2p: 



- Molecule 48: 30S ribosomal protein S17

Chain 1q: 



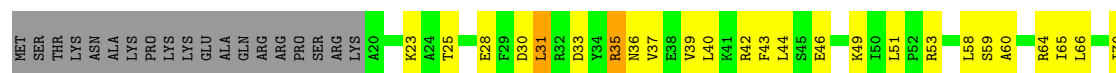
- Molecule 48: 30S ribosomal protein S17

Chain 2q: 



- Molecule 49: 30S ribosomal protein S18

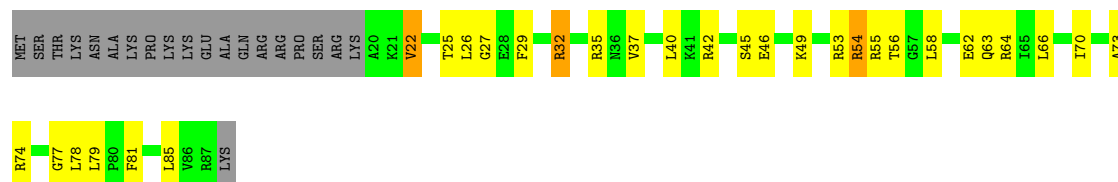
Chain 1r: 





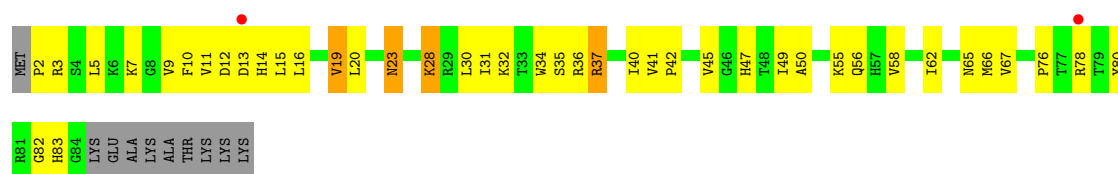
- Molecule 49: 30S ribosomal protein S18

Chain 2r: 43% 31% 23%



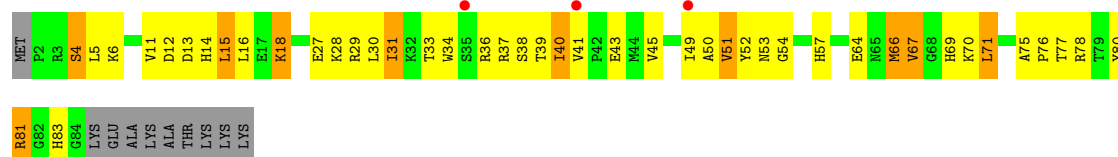
- Molecule 50: 30S ribosomal protein S19

Chain 1s: 2% 44% 41% 11%



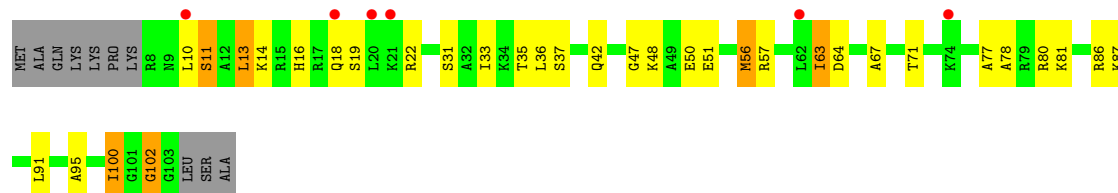
- Molecule 50: 30S ribosomal protein S19

Chain 2s: 3% 41% 38% 11% 11%



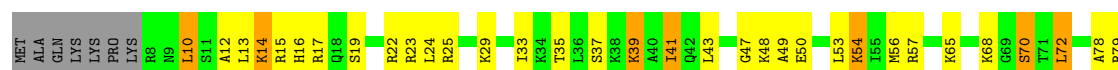
- Molecule 51: 30S ribosomal protein S20

Chain 1t: 6% 58% 26% 6% 9%



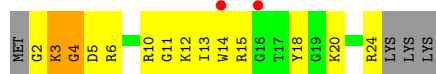
- Molecule 51: 30S ribosomal protein S20

Chain 2t: 54% 29% 8% 9%

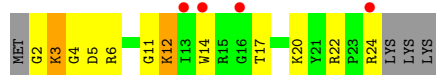




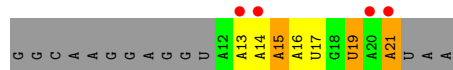
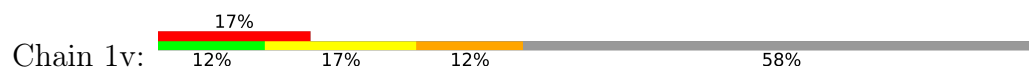
- Molecule 52: 30S ribosomal protein Thx



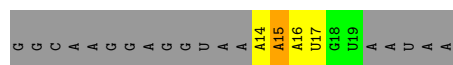
- Molecule 52: 30S ribosomal protein Thx



- Molecule 53: mRNA



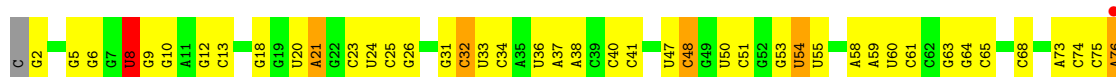
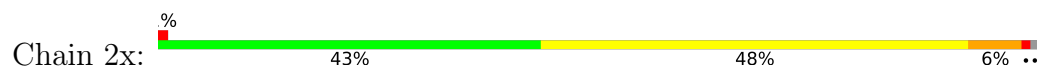
- Molecule 53: mRNA



- Molecule 54: P-site tRNA



- Molecule 54: P-site tRNA



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	209.13Å 448.15Å 621.94Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	86.77 – 3.00 86.77 – 3.00	Depositor EDS
% Data completeness (in resolution range)	99.0 (86.77-3.00) 98.9 (86.77-3.00)	Depositor EDS
R_{merge}	0.30	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.21 (at 3.01Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.246 , 0.311 0.246 , 0.309	Depositor DCC
R_{free} test set	57107 reflections (4.96%)	wwPDB-VP
Wilson B-factor (Å ²)	58.0	Xtriage
Anisotropy	0.166	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.26 , 46.8	EDS
L-test for twinning ²	$\langle L \rangle = 0.36$, $\langle L^2 \rangle = 0.19$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.89	EDS
Total number of atoms	292071	wwPDB-VP
Average B, all atoms (Å ²)	54.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.60% 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: MA6, 2MG, 2MA, M2G, 5MC, K, 4OC, V7A, OMG, MG, UR3, 2MU, SF4, 7MG, 0TD, 5MU, ZN, 4SU, PSU

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	0.26	0/69009	0.44	0/107712
1	2A	0.23	0/67293	0.42	1/105034 (0.0%)
2	1B	0.22	0/2882	0.42	0/4494
2	2B	0.20	0/2879	0.39	0/4487
3	1D	0.27	0/2186	0.53	1/2944 (0.0%)
3	2D	0.23	0/2186	0.50	1/2944 (0.0%)
4	1E	0.24	0/1592	0.48	0/2149
4	2E	0.22	0/1592	0.44	0/2149
5	1F	0.28	0/1619	0.49	0/2193
5	2F	0.22	0/1615	0.48	2/2188 (0.1%)
6	1G	0.21	0/1448	0.48	0/1957
6	2G	0.19	0/1453	0.43	0/1963
7	1H	0.22	0/1356	0.43	0/1834
7	2H	0.20	0/1356	0.39	0/1834
8	1I	0.20	0/1112	0.43	0/1514
8	2I	0.19	0/1079	0.43	0/1475
9	1N	0.23	0/1144	0.46	0/1543
9	2N	0.20	0/1144	0.44	0/1543
10	1O	0.25	0/943	0.47	0/1269
10	2O	0.23	0/943	0.46	0/1269
11	1P	0.24	0/1152	0.54	0/1533
11	2P	0.22	0/1152	0.49	0/1533
12	1Q	0.25	0/1143	0.49	0/1527
12	2Q	0.22	0/1143	0.45	0/1527
13	1R	0.25	0/982	0.50	0/1312
13	2R	0.22	0/982	0.46	0/1312
14	1S	0.24	0/883	0.49	0/1176
14	2S	0.21	0/880	0.43	0/1172
15	1T	0.23	0/1105	0.49	0/1477
15	2T	0.22	0/1097	0.46	0/1468
16	1U	0.25	0/977	0.44	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	2U	0.21	0/977	0.40	0/1301
17	1V	0.23	0/782	0.44	0/1049
17	2V	0.19	0/782	0.41	0/1049
18	1W	0.25	0/897	0.45	0/1205
18	2W	0.22	0/897	0.41	0/1205
19	1X	0.26	0/764	0.49	0/1025
19	2X	0.22	0/764	0.45	0/1025
20	1Y	0.24	0/819	0.44	0/1095
20	2Y	0.21	0/819	0.45	0/1095
21	1Z	0.22	0/1267	0.45	0/1717
21	2Z	0.23	0/1299	0.49	0/1763
22	10	0.25	0/662	0.54	0/881
22	20	0.23	0/662	0.46	0/881
23	11	0.25	0/762	0.47	0/1014
23	21	0.23	0/762	0.47	0/1014
24	12	0.27	0/590	0.49	0/781
24	22	0.21	0/590	0.41	0/781
25	13	0.25	0/474	0.49	0/635
25	23	0.20	0/469	0.40	0/630
26	14	0.24	0/565	0.49	0/761
26	24	0.23	0/545	0.57	0/737
27	15	0.23	0/469	0.45	0/635
27	25	0.23	0/469	0.45	0/635
28	16	0.28	0/460	0.52	0/613
28	26	0.24	0/456	0.46	0/608
29	17	0.30	0/426	0.50	0/561
29	27	0.26	0/426	0.51	0/561
30	18	0.28	0/525	0.48	0/691
30	28	0.24	0/525	0.45	0/691
31	19	0.23	0/310	0.44	0/407
31	29	0.22	0/310	0.46	0/407
32	1a	0.21	0/35795	0.40	0/55864
32	2a	0.20	0/35886	0.40	0/56005
33	1b	0.21	0/1881	0.48	0/2542
33	2b	0.22	0/1860	0.53	1/2518 (0.0%)
34	1c	0.21	0/1572	0.42	0/2126
34	2c	0.23	0/1566	0.48	0/2119
35	1d	0.22	0/1685	0.47	0/2262
35	2d	0.20	0/1704	0.47	0/2284
36	1e	0.22	0/1145	0.48	0/1543
36	2e	0.23	0/1149	0.48	0/1548
37	1f	0.22	0/823	0.43	0/1115
37	2f	0.21	0/829	0.41	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	1g	0.22	0/1250	0.48	1/1679 (0.1%)
38	2g	0.21	0/1254	0.47	0/1683
39	1h	0.19	0/1108	0.43	0/1494
39	2h	0.18	0/1108	0.41	0/1494
40	1i	0.21	0/1002	0.50	0/1346
40	2i	0.21	0/997	0.46	0/1343
41	1j	0.21	0/722	0.44	0/982
41	2j	0.24	0/727	0.49	0/988
42	1k	0.19	0/844	0.41	0/1145
42	2k	0.19	0/848	0.40	0/1149
43	1l	0.21	0/937	0.47	0/1260
43	2l	0.22	0/937	0.49	0/1260
44	1m	0.21	0/961	0.49	0/1290
44	2m	0.24	0/953	0.49	0/1279
45	1n	0.22	0/501	0.42	0/664
45	2n	0.20	0/501	0.49	1/664 (0.2%)
46	1o	0.19	0/739	0.43	0/985
46	2o	0.19	0/739	0.40	0/985
47	1p	0.23	0/697	0.48	0/939
47	2p	0.19	0/693	0.44	0/935
48	1q	0.20	0/836	0.45	0/1117
48	2q	0.19	0/836	0.44	0/1117
49	1r	0.20	0/560	0.41	0/746
49	2r	0.19	0/560	0.37	0/746
50	1s	0.21	0/667	0.45	0/900
50	2s	0.23	0/661	0.56	0/893
51	1t	0.21	0/730	0.49	0/965
51	2t	0.22	0/729	0.51	0/965
52	1u	0.22	0/203	0.51	0/266
52	2u	0.21	0/203	0.47	0/266
53	1v	0.25	0/244	0.41	0/378
53	2v	0.28	0/126	0.45	0/195
54	1x	0.26	0/1725	0.41	0/2689
54	2x	0.25	0/1725	0.41	0/2689
All	All	0.23	0/310069	0.43	8/463831 (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
20	1Y	0	1

There are no bond length outliers.

All (8) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	1D	41	GLY	N-CA-C	-6.09	107.26	115.36
5	2F	21	ALA	CA-C-N	5.71	131.98	121.70
5	2F	21	ALA	C-N-CA	5.71	131.98	121.70
33	2b	87	ARG	N-CA-C	-5.41	106.75	113.19
38	1g	50	ILE	N-CA-C	-5.39	107.22	112.29
3	2D	215	LEU	N-CA-C	-5.35	106.83	113.19
1	2A	1992	G	C2'-C3'-O3'	5.29	117.44	109.50
45	2n	38	GLY	N-CA-C	-5.17	108.58	115.40

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
20	1Y	52	SER	Peptide

5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	1A	61852	0	31184	1170	0
1	2A	60322	0	30423	1110	0
2	1B	2577	0	1305	47	0
2	2B	2575	0	1303	57	0
3	1D	2136	0	2218	88	0
3	2D	2136	0	2218	86	0
4	1E	1559	0	1618	53	0
4	2E	1559	0	1618	58	0
5	1F	1584	0	1624	65	0
5	2F	1580	0	1619	75	0
6	1G	1423	0	1436	55	0
6	2G	1428	0	1438	73	0
7	1H	1330	0	1407	37	0
7	2H	1330	0	1407	47	0
8	1I	1097	0	1140	39	0
8	2I	1064	0	1082	37	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
9	1N	1117	0	1184	35	0
9	2N	1117	0	1184	26	0
10	1O	933	0	995	31	0
10	2O	933	0	996	36	0
11	1P	1135	0	1212	44	0
11	2P	1135	0	1212	55	0
12	1Q	1122	0	1179	33	0
12	2Q	1122	0	1179	46	0
13	1R	968	0	1031	22	0
13	2R	968	0	1033	37	0
14	1S	873	0	926	40	0
14	2S	870	0	923	43	0
15	1T	1091	0	1151	38	0
15	2T	1083	0	1136	40	0
16	1U	959	0	1019	29	0
16	2U	959	0	1019	33	0
17	1V	771	0	829	17	0
17	2V	771	0	830	15	0
18	1W	886	0	940	24	0
18	2W	886	0	940	23	0
19	1X	750	0	814	18	0
19	2X	750	0	814	18	0
20	1Y	806	0	881	38	0
20	2Y	806	0	881	32	0
21	1Z	1240	0	1240	45	0
21	2Z	1271	0	1273	56	0
22	10	653	0	674	22	0
22	20	653	0	674	28	0
23	11	755	0	826	21	0
23	21	755	0	826	20	0
24	12	588	0	643	31	0
24	22	588	0	643	24	0
25	13	469	0	518	15	0
25	23	464	0	514	24	0
26	14	552	0	533	30	0
26	24	532	0	503	31	0
27	15	455	0	465	9	0
27	25	455	0	465	18	0
28	16	453	0	472	16	0
28	26	449	0	469	16	0
29	17	418	0	467	17	0
29	27	418	0	467	14	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
30	18	517	0	582	27	0
30	28	517	0	582	22	0
31	19	307	0	335	10	0
31	29	307	0	335	11	0
32	1a	32246	0	16295	716	0
32	2a	32327	0	16339	717	0
33	1b	1846	0	1867	80	0
33	2b	1825	0	1828	84	0
34	1c	1548	0	1535	46	0
34	2c	1542	0	1517	69	0
35	1d	1655	0	1672	75	0
35	2d	1674	0	1714	60	0
36	1e	1129	0	1185	52	0
36	2e	1133	0	1191	37	0
37	1f	810	0	804	32	0
37	2f	816	0	808	21	0
38	1g	1231	0	1238	37	0
38	2g	1235	0	1249	52	0
39	1h	1088	0	1126	35	0
39	2h	1088	0	1126	45	0
40	1i	983	0	986	63	0
40	2i	978	0	966	60	0
41	1j	709	0	650	42	0
41	2j	714	0	672	36	0
42	1k	829	0	825	30	0
42	2k	833	0	836	34	0
43	1l	932	0	981	31	0
43	2l	932	0	981	36	0
44	1m	951	0	995	51	0
44	2m	943	0	981	52	0
45	1n	492	0	529	27	0
45	2n	492	0	529	26	0
46	1o	728	0	760	18	0
46	2o	728	0	760	24	0
47	1p	681	0	697	30	0
47	2p	677	0	686	30	0
48	1q	823	0	891	28	0
48	2q	823	0	891	22	0
49	1r	555	0	618	22	0
49	2r	555	0	618	24	0
50	1s	652	0	662	31	0
50	2s	646	0	644	40	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
51	1t	728	0	798	23	0
51	2t	727	0	796	31	0
52	1u	199	0	208	13	0
52	2u	199	0	208	11	0
53	1v	217	0	109	7	0
53	2v	113	0	54	5	0
54	1x	1625	0	829	18	0
54	2x	1625	0	828	27	0
55	10	7	0	0	0	0
55	11	3	0	0	0	0
55	12	2	0	0	0	0
55	13	5	0	0	0	0
55	14	1	0	0	0	0
55	15	4	0	0	0	0
55	16	3	0	0	0	0
55	17	7	0	0	0	0
55	18	6	0	0	0	0
55	19	2	0	0	0	0
55	1A	1040	0	0	1	0
55	1B	36	0	0	0	0
55	1D	10	0	0	0	0
55	1E	14	0	0	0	0
55	1F	13	0	0	0	0
55	1G	4	0	0	0	0
55	1H	2	0	0	0	0
55	1I	1	0	0	0	0
55	1N	5	0	0	0	0
55	1O	5	0	0	0	0
55	1P	6	0	0	0	0
55	1Q	5	0	0	0	0
55	1R	7	0	0	0	0
55	1S	3	0	0	0	0
55	1T	2	0	0	0	0
55	1U	8	0	0	0	0
55	1V	4	0	0	0	0
55	1W	9	0	0	0	0
55	1X	4	0	0	0	0
55	1Y	2	0	0	0	0
55	1Z	3	0	0	0	0
55	1a	212	0	0	0	0
55	1b	1	0	0	0	0
55	1d	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
55	1e	1	0	0	0	0
55	1f	2	0	0	0	0
55	1l	3	0	0	0	0
55	1n	3	0	0	0	0
55	1t	1	0	0	0	0
55	1v	5	0	0	0	0
55	1x	13	0	0	0	0
55	2l	6	0	0	0	0
55	23	3	0	0	0	0
55	25	4	0	0	0	0
55	26	1	0	0	0	0
55	27	2	0	0	0	0
55	28	3	0	0	0	0
55	2A	850	0	0	0	0
55	2B	20	0	0	0	0
55	2D	8	0	0	0	0
55	2E	5	0	0	0	0
55	2F	6	0	0	0	0
55	2G	1	0	0	0	0
55	2O	1	0	0	0	0
55	2P	4	0	0	0	0
55	2Q	4	0	0	0	0
55	2R	1	0	0	0	0
55	2T	4	0	0	0	0
55	2U	2	0	0	0	0
55	2V	1	0	0	0	0
55	2W	1	0	0	0	0
55	2X	1	0	0	0	0
55	2Y	2	0	0	0	0
55	2Z	2	0	0	0	0
55	2a	216	0	0	0	0
55	2d	2	0	0	0	0
55	2e	2	0	0	0	0
55	2f	2	0	0	0	0
55	2g	1	0	0	0	0
55	2i	1	0	0	0	0
55	2j	2	0	0	0	0
55	2k	1	0	0	0	0
55	2l	2	0	0	0	0
55	2n	1	0	0	0	0
55	2q	2	0	0	0	0
55	2r	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
55	2t	1	0	0	0	0
55	2x	7	0	0	0	0
56	1A	1	0	0	0	0
56	2A	1	0	0	0	0
57	14	1	0	0	0	0
57	15	1	0	0	0	0
57	16	1	0	0	0	0
57	19	1	0	0	0	0
57	1Y	1	0	0	0	0
57	1n	1	0	0	0	0
57	24	1	0	0	0	0
57	25	1	0	0	0	0
57	26	1	0	0	0	0
57	29	1	0	0	0	0
57	2Y	1	0	0	0	0
57	2n	1	0	0	0	0
58	1a	35	0	0	3	0
58	2a	35	0	0	3	0
59	1d	8	0	0	3	0
59	2d	8	0	0	3	0
60	10	11	0	0	0	0
60	11	8	0	0	0	0
60	12	3	0	0	0	0
60	13	3	0	0	0	0
60	14	1	0	0	0	0
60	15	6	0	0	0	0
60	16	4	0	0	0	0
60	17	10	0	0	2	0
60	18	8	0	0	2	0
60	1A	1402	0	0	154	0
60	1B	54	0	0	5	0
60	1D	21	0	0	3	0
60	1E	18	0	0	2	0
60	1F	9	0	0	0	0
60	1G	4	0	0	0	0
60	1H	1	0	0	0	0
60	1I	1	0	0	0	0
60	1N	5	0	0	0	0
60	1O	8	0	0	1	0
60	1P	18	0	0	1	0
60	1Q	7	0	0	1	0
60	1R	9	0	0	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
60	1S	4	0	0	1	0
60	1T	4	0	0	0	0
60	1U	14	0	0	0	0
60	1V	10	0	0	0	0
60	1W	8	0	0	0	0
60	1X	4	0	0	0	0
60	1Y	4	0	0	1	0
60	1Z	1	0	0	0	0
60	1a	211	0	0	14	0
60	1b	1	0	0	0	0
60	1d	2	0	0	0	0
60	1e	1	0	0	0	0
60	1i	1	0	0	0	0
60	1l	4	0	0	0	0
60	1m	1	0	0	0	0
60	1q	2	0	0	0	0
60	1u	2	0	0	1	0
60	1v	3	0	0	0	0
60	1x	11	0	0	0	0
60	21	10	0	0	0	0
60	23	1	0	0	0	0
60	27	1	0	0	0	0
60	28	2	0	0	0	0
60	29	1	0	0	0	0
60	2A	680	0	0	70	0
60	2B	24	0	0	1	0
60	2D	12	0	0	4	0
60	2E	13	0	0	2	0
60	2F	10	0	0	1	0
60	2I	1	0	0	0	0
60	2O	2	0	0	0	0
60	2P	4	0	0	0	0
60	2Q	2	0	0	0	0
60	2R	3	0	0	0	0
60	2T	4	0	0	0	0
60	2U	1	0	0	0	0
60	2W	2	0	0	0	0
60	2X	2	0	0	0	0
60	2Y	1	0	0	0	0
60	2Z	3	0	0	0	0
60	2a	173	0	0	19	0
60	2e	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
60	2g	1	0	0	0	0
60	2i	1	0	0	0	0
60	2j	4	0	0	1	0
60	2l	3	0	0	0	0
60	2n	1	0	0	0	0
60	2t	3	0	0	0	0
60	2v	1	0	0	1	0
60	2x	5	0	0	2	0
All	All	292071	0	193336	6489	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 14.

All (6489) 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	1.24	1.32
32:1a:1002:G:H3'	32:1a:1003:G:H4'	1.37	1.06
1:2A:2101:G:H1	1:2A:2188:C:N4	1.55	1.04
1:1A:1082:U:O4	1:1A:1086:A:N1	1.89	1.04
1:1A:2128:C:N4	1:1A:2160:G:H1	1.60	0.99
1:1A:279:C:H42	1:1A:361:G:H1	1.10	0.96
1:1A:2123:G:H1	1:1A:2175:C:H42	0.97	0.96
1:2A:2101:G:H1	1:2A:2188:C:H42	0.96	0.95
1:2A:2137:C:H42	1:2A:2154:G:H1	0.97	0.95
32:2a:1004:A:H5''	32:2a:1024:G:H22	1.32	0.95
1:1A:1039:G:H1	1:1A:1116:C:H42	1.13	0.94
1:1A:2108:C:H42	1:1A:2181:G:H1	0.97	0.94
32:2a:1051:C:H42	32:2a:1207:2MG:HN1	1.14	0.93
32:2a:1002:G:H1	32:2a:1038:C:N4	1.65	0.93
1:2A:2137:C:N4	1:2A:2154:G:H1	1.66	0.93
1:1A:1603:A:OP1	60:1A:4109:HOH:O	1.87	0.92
1:1A:1082:U:N3	1:1A:1086:A:N6	2.07	0.92
33:1b:16:HIS:HB2	33:1b:204:ASN:HB3	1.54	0.90
1:1A:2123:G:H1	1:1A:2175:C:N4	1.67	0.90
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.04	0.90
1:1A:2108:C:N4	1:1A:2181:G:H1	1.69	0.90
32:2a:1002:G:H1	32:2a:1038:C:H42	0.89	0.89
1:1A:907:U:O2'	12:1Q:101:ARG:NH2	2.04	0.88
1:1A:780:G:OP1	3:1D:218:ARG:NH2	2.06	0.88
1:2A:1309:G:HO2'	1:2A:1611:C:HO2'	1.20	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:40:LEU:HB3	41:2j:69:ASN:HB2	1.53	0.87
1:1A:459:U:H2'	1:1A:460:A:H8	1.40	0.87
1:1A:2415:G:H4'	11:1P:67:MET:H	1.39	0.86
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.10	0.86
1:1A:2130:U:H2'	1:1A:2158:A:H61	1.39	0.86
32:2a:1114:C:H42	32:2a:1186:G:H1	1.20	0.86
32:1a:559:A:H4'	32:1a:560:U:H3'	1.57	0.85
1:2A:1604:C:OP1	60:2A:3907:HOH:O	1.91	0.85
23:21:2:SER:HB3	23:21:46:LEU:HD12	1.57	0.85
32:2a:975:A:H4'	32:2a:976:G:H5''	1.59	0.85
1:1A:818:G:OP2	60:1A:4110:HOH:O	1.95	0.84
1:1A:465:G:N2	1:1A:683:C:O2	2.10	0.84
1:1A:2128:C:H42	1:1A:2160:G:H1	0.86	0.84
1:1A:1153:C:OP1	16:1U:92:ARG:NH2	2.08	0.84
1:1A:2096:U:H3	1:1A:2193:G:H1	0.84	0.84
1:1A:2499:C:OP2	60:1A:4111:HOH:O	1.95	0.83
32:1a:1314:C:N4	50:1s:2:PRO:O	2.10	0.83
1:1A:1968:G:OP1	60:1A:4114:HOH:O	1.97	0.83
21:2Z:99:TYR:HB3	21:2Z:123:ASP:HB2	1.61	0.83
1:1A:271(W):G:O6	60:1A:4112:HOH:O	1.96	0.83
1:1A:2141:G:O6	1:1A:2150:U:O2	1.97	0.82
1:2A:1648:C:OP1	60:2A:3908:HOH:O	1.97	0.82
1:2A:2001:A:H2'	1:2A:2002:G:C8	2.14	0.82
34:1c:40:ARG:HA	34:1c:43:LEU:HB2	1.62	0.82
1:1A:2588:G:OP1	60:1A:4115:HOH:O	1.97	0.82
1:1A:990:A:OP2	60:1A:4113:HOH:O	1.96	0.82
32:1a:511:C:OP2	35:1d:49:ARG:NH1	2.12	0.82
36:1e:37:ARG:HH12	36:1e:111:GLU:HB3	1.43	0.82
2:2B:7:G:H21	14:2S:38:GLN:HE22	1.27	0.82
32:2a:201:C:H42	32:2a:216:G:H1	1.28	0.82
32:1a:70:G:H1	32:1a:99:U:H3	1.28	0.82
1:1A:2427:C:OP1	60:1A:4116:HOH:O	1.98	0.81
1:2A:2379:G:O2'	14:2S:17:ARG:NH1	2.12	0.81
8:1I:1:MET:N	8:1I:21:VAL:O	2.14	0.81
1:2A:956:G:H5''	12:2Q:77:LYS:HD2	1.63	0.81
1:2A:2096:U:H3	1:2A:2193:G:H1	1.29	0.81
2:2B:87:G:N2	2:2B:90:A:OP2	2.12	0.81
1:2A:2104:G:H1	1:2A:2185:C:H42	1.25	0.81
1:2A:485:C:H42	1:2A:495:G:H1	1.28	0.81
1:1A:873:G:N2	1:1A:904:C:O2	2.10	0.81
9:1N:47:ALA:HB3	9:1N:115:ARG:HH21	1.43	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1075:C:H5''	33:2b:179:LYS:HE3	1.63	0.81
1:2A:144:C:H4'	19:2X:2:LYS:HG3	1.61	0.81
12:2Q:110:THR:HG23	12:2Q:113:GLN:HB2	1.62	0.80
32:1a:189(A):C:N4	32:1a:189(J):G:O6	2.13	0.80
2:2B:31:C:O2	2:2B:53:A:N6	2.12	0.80
1:2A:2198:A:OP1	8:2I:33:ARG:NH2	2.15	0.80
32:1a:324:G:N7	60:1a:3307:HOH:O	2.14	0.80
32:1a:1260:C:O2	32:1a:1275:A:N6	2.14	0.80
1:2A:2138:C:H42	1:2A:2153:G:H1	1.29	0.80
24:12:12:GLU:HA	24:12:15:LYS:HE2	1.64	0.80
12:2Q:17:LEU:HD21	12:2Q:41:TRP:HE1	1.47	0.80
33:2b:63:MET:HG2	33:2b:225:ALA:HB1	1.64	0.80
40:2i:127:LYS:NZ	54:2x:33:U:OP2	2.13	0.80
2:1B:7:G:H1	2:1B:114:C:H42	1.30	0.80
1:1A:443:A:N6	5:1F:41:LEU:O	2.13	0.80
1:1A:1053:C:H42	1:1A:1106:G:H1	1.28	0.80
32:1a:78:G:N1	32:1a:91:C:N4	2.30	0.80
1:2A:2857:G:N2	1:2A:2860:A:OP2	2.15	0.80
9:2N:26:LEU:HG	9:2N:30:ILE:HD11	1.64	0.80
1:2A:1153:C:OP1	16:2U:92:ARG:NH2	2.15	0.80
1:2A:2137:C:N3	1:2A:2154:G:N2	2.27	0.80
32:2a:664:G:H22	32:2a:741:G:H1	1.28	0.80
1:1A:1828:G:OP2	60:1A:4117:HOH:O	2.00	0.79
32:2a:1252:A:H61	32:2a:1285:A:H61	1.29	0.79
32:2a:1272:G:N2	32:2a:1273:G:N7	2.31	0.79
1:1A:675:A:OP2	60:1A:4119:HOH:O	2.01	0.79
32:1a:1162:C:H42	32:1a:1174:G:H1	1.27	0.79
2:2B:36:C:N4	2:2B:49:C:O2	2.15	0.79
5:1F:8:GLN:HE22	5:1F:21:ALA:HA	1.46	0.79
25:13:10:LYS:HB3	25:13:53:LEU:HA	1.64	0.79
40:1i:105:ASP:HB2	40:1i:107:ARG:HE	1.48	0.79
2:2B:20:C:N4	2:2B:63:G:O6	2.15	0.79
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.16	0.79
1:2A:2562:U:H1'	10:2O:23:ARG:HE	1.48	0.79
1:1A:2114:A:H61	1:1A:2119:A:H62	1.30	0.79
1:2A:2114:A:N6	1:2A:2119:A:N7	2.31	0.78
11:1P:63:PRO:HB2	30:18:30:ARG:HH21	1.48	0.78
13:1R:7:GLY:O	60:1R:301:HOH:O	2.01	0.78
32:1a:1493:A:O2'	53:1v:19:U:O2'	2.00	0.78
13:2R:33:ARG:NH1	13:2R:115:GLU:OE1	2.16	0.78
3:1D:16:MET:HE2	3:1D:211:ARG:HD2	1.66	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1800:C:OP2	3:2D:183:ARG:NH2	2.16	0.78
32:2a:557:G:OP1	60:2a:1901:HOH:O	2.00	0.78
12:2Q:111:GLU:OE2	12:2Q:133:ARG:NH2	2.16	0.78
1:1A:792:G:O6	60:1A:4118:HOH:O	2.00	0.78
1:1A:1266:G:O6	18:1W:13:SER:OG	2.02	0.78
2:1B:87:G:N2	2:1B:90:A:OP2	2.16	0.78
1:1A:652(E):G:H1	1:1A:652(T):C:H42	1.32	0.78
32:1a:1030:C:H42	32:1a:1031:G:H1	1.31	0.78
27:25:16:ARG:NH1	27:25:17:ASP:OD1	2.16	0.78
1:1A:832:G:OP1	60:1A:4121:HOH:O	2.01	0.78
32:2a:1305:G:OP1	52:2u:2:GLY:N	2.17	0.78
2:1B:31:C:O2	2:1B:53:A:N6	2.17	0.77
51:2t:50:GLU:HG3	51:2t:100:ILE:HD11	1.66	0.77
1:1A:1676:A:OP2	60:1A:4120:HOH:O	2.01	0.77
8:1I:4:ILE:HD13	8:1I:47:LEU:HG	1.66	0.77
32:2a:931:C:H42	32:2a:1386:G:H1	1.30	0.77
50:2s:41:VAL:HG12	50:2s:43:GLU:H	1.49	0.77
1:2A:1920:4OC:HM22	1:2A:1921:G:H5'	1.66	0.77
1:2A:2845:G:H2'	1:2A:2846:G:H8	1.50	0.77
32:2a:1296:C:OP1	44:2m:44:ARG:NH2	2.18	0.77
32:1a:952:U:H2'	32:1a:953:G:H8	1.50	0.77
42:1k:99:GLN:HG3	42:1k:105:VAL:HG21	1.67	0.77
1:2A:1603:A:OP1	60:2A:3909:HOH:O	2.03	0.77
20:1Y:102:CYS:SG	20:1Y:103:GLY:N	2.55	0.77
34:1c:12:LEU:HD11	45:1n:51:GLY:HA2	1.67	0.77
32:2a:1329:A:H5''	44:2m:26:GLY:H	1.50	0.76
1:1A:1249:U:OP1	60:1A:4124:HOH:O	2.03	0.76
32:1a:1493:A:HO2'	53:1v:19:U:HO2'	1.30	0.76
32:2a:1000:U:H2'	32:2a:1001:A:H8	1.49	0.76
4:1E:47:VAL:HG11	4:1E:86:PRO:HD2	1.68	0.76
1:1A:2789:C:O2	1:1A:2894:G:N2	2.18	0.76
30:18:6:THR:HG22	30:18:63:PRO:HD2	1.67	0.76
33:1b:84:GLU:OE1	33:1b:87:ARG:NH1	2.19	0.76
1:2A:995:C:OP2	16:2U:54:LYS:NZ	2.18	0.76
1:2A:2682:U:OP2	60:2A:3910:HOH:O	2.02	0.76
32:1a:127:G:H1	32:1a:234:C:H42	1.34	0.76
32:1a:1145:C:H4'	32:1a:1146:A:H5'	1.66	0.76
35:1d:106:TYR:HE2	35:1d:107:ARG:HH11	1.32	0.76
1:2A:2101:G:N2	1:2A:2188:C:N3	2.30	0.76
4:2E:28:ALA:HB3	4:2E:93:VAL:HG12	1.68	0.76
1:1A:31:C:OP1	60:1A:4125:HOH:O	2.03	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:325:A:OP2	51:2t:70:SER:OG	2.03	0.76
12:1Q:35:VAL:HG13	12:1Q:130:LYS:HB3	1.66	0.76
32:1a:1047:G:H5''	45:1n:4:LYS:HD2	1.68	0.76
1:2A:1604:C:OP2	60:2A:3909:HOH:O	2.02	0.76
7:2H:137:ASP:HB3	7:2H:140:LYS:HB2	1.67	0.76
36:2e:8:GLU:HG2	36:2e:34:VAL:HG23	1.68	0.76
1:1A:1082:U:H3	1:1A:1086:A:H61	0.78	0.76
1:1A:399:G:OP2	60:1A:4122:HOH:O	2.02	0.75
1:1A:1056:G:N1	1:1A:1102:C:OP2	2.11	0.75
3:2D:275:LYS:HD2	3:2D:276:LYS:HB2	1.66	0.75
32:2a:160:A:H61	32:2a:347:G:H1'	1.51	0.75
32:1a:68:G:H1	32:1a:101:A:H61	1.34	0.75
32:1a:78:G:N2	32:1a:91:C:N3	2.34	0.75
32:1a:766:A:N6	32:1a:813:U:O2	2.18	0.75
33:1b:136:VAL:HA	33:1b:139:LYS:HB3	1.67	0.75
1:2A:324:A:N6	1:2A:338:G:O2'	2.19	0.75
1:1A:517:C:OP1	27:15:16:ARG:NH2	2.19	0.75
1:1A:2123:G:H2'	1:1A:2124:G:H8	1.52	0.75
11:1P:52:GLU:OE1	11:1P:55:ARG:NH1	2.19	0.75
1:2A:1359:A:H61	1:2A:1372:U:H3	1.35	0.75
1:2A:2721:A:OP1	60:2A:3910:HOH:O	2.04	0.75
1:2A:2807:G:N1	1:2A:2893:G:O6	2.20	0.75
32:2a:445:G:O6	32:2a:489:C:N4	2.17	0.75
1:1A:2206:G:H3'	1:1A:2207:G:C8	2.21	0.75
6:1G:163:ALA:HB1	6:1G:168:GLU:HB2	1.68	0.75
32:1a:152:A:N6	32:1a:170:U:O2	2.19	0.75
32:1a:718:G:H5'	42:1k:117:ASN:HB2	1.68	0.75
1:2A:2693:A:H2'	1:2A:2694:G:H8	1.52	0.75
15:2T:55:ASN:H	15:2T:59:THR:HB	1.51	0.75
38:2g:105:VAL:O	38:2g:109:ASN:ND2	2.18	0.75
1:1A:2131:G:H5''	1:1A:2132:U:H3'	1.68	0.75
1:1A:1062:G:H22	1:1A:1077:A:H61	1.34	0.75
41:1j:40:LEU:HB2	41:1j:69:ASN:HB2	1.68	0.75
1:2A:780:G:OP1	3:2D:218:ARG:NH2	2.19	0.75
35:2d:150:GLU:HA	35:2d:153:ARG:HG3	1.67	0.75
1:1A:862:G:OP2	60:1A:4127:HOH:O	2.04	0.75
21:1Z:150:LEU:HD21	21:1Z:154:ASP:HB2	1.69	0.75
32:1a:664:G:H22	32:1a:741:G:H1	1.33	0.74
1:1A:2128:C:N3	1:1A:2160:G:N2	2.34	0.74
1:1A:2503:2MA:OP1	60:1A:4129:HOH:O	2.05	0.74
1:1A:2602:A:OP1	60:1A:4134:HOH:O	2.06	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:1q:18:THR:OG1	48:1q:69:LYS:NZ	2.19	0.74
1:1A:338:G:OP2	60:1A:4123:HOH:O	2.03	0.74
32:1a:835:U:OP1	49:1r:64:ARG:NH2	2.21	0.74
1:2A:1676:A:OP2	60:2A:3911:HOH:O	2.04	0.74
39:2h:12:ARG:HD2	39:2h:26:VAL:HG12	1.69	0.74
51:2t:57:ARG:HH22	51:2t:100:ILE:HD12	1.53	0.74
1:1A:2428:G:OP1	60:1A:4116:HOH:O	2.04	0.74
1:1A:2856:C:N4	1:1A:2861:G:O6	2.19	0.74
5:2F:114:VAL:HG21	5:2F:202:PHE:CZ	2.23	0.74
32:2a:450:G:H4'	47:2p:41:PRO:HB2	1.70	0.74
1:1A:1332:G:OP1	60:1A:4130:HOH:O	2.05	0.74
1:1A:1456:G:OP2	60:1A:4135:HOH:O	2.06	0.74
3:1D:260:ARG:HH22	3:1D:266:SER:HB2	1.53	0.74
20:1Y:28:LYS:HD3	20:1Y:40:GLU:HG2	1.69	0.74
1:2A:1593:G:H2'	1:2A:1594:G:H8	1.53	0.74
2:2B:14:U:OP2	2:2B:70:C:O2'	2.06	0.74
11:2P:95:VAL:HG23	11:2P:100:LEU:HD11	1.70	0.74
19:2X:8:ILE:O	24:22:36:ARG:NH2	2.20	0.74
1:1A:465:G:OP1	60:1A:4128:HOH:O	2.05	0.74
1:2A:2305:A:H1'	6:2G:136:ARG:HG2	1.70	0.74
32:2a:1262:C:H2'	32:2a:1263:C:H5'	1.70	0.74
1:1A:675:A:OP1	5:1F:63:LYS:NZ	2.21	0.73
1:1A:826:U:OP1	60:1A:4116:HOH:O	2.04	0.73
6:1G:12:TYR:HA	6:1G:16:ARG:HG3	1.69	0.73
14:1S:3:ARG:NH2	60:1S:301:HOH:O	2.21	0.73
1:1A:942:G:O2'	1:1A:1189:A:N3	2.21	0.73
13:2R:33:ARG:NH2	27:25:57:VAL:O	2.21	0.73
1:1A:861:A:N3	2:1B:79:C:O2'	2.21	0.73
1:1A:1604:C:OP2	60:1A:4109:HOH:O	2.05	0.73
1:1A:2218:U:O2	23:11:52:ARG:NH1	2.21	0.73
43:1l:77:LEU:HD21	43:1l:107:ALA:HB2	1.68	0.73
1:1A:2432:A:OP2	60:1A:4132:HOH:O	2.05	0.73
6:1G:142:PRO:HB2	26:14:31:ILE:HG21	1.71	0.73
45:1n:33:VAL:HA	45:1n:40:CYS:HA	1.68	0.73
1:2A:981:A:OP1	60:2A:3912:HOH:O	2.04	0.73
34:2c:34:LEU:HD11	34:2c:38:ARG:HH21	1.52	0.73
3:1D:242:ARG:O	60:1D:403:HOH:O	2.06	0.73
32:1a:1159:U:O4'	32:1a:1182:G:N2	2.21	0.73
1:2A:1938:A:OP2	60:2A:3913:HOH:O	2.05	0.73
1:2A:2126:A:N6	1:2A:2162:G:O2'	2.20	0.73
32:2a:1149:C:O2'	32:2a:1280:A:N1	2.21	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2243:U:OP1	60:1A:4131:HOH:O	2.05	0.73
32:1a:875:C:H1'	39:1h:15:ASN:HD21	1.54	0.73
33:1b:155:LEU:HD11	33:1b:159:PRO:HG3	1.68	0.73
34:1c:131:ARG:HE	34:1c:135:LYS:HE3	1.54	0.73
1:2A:787:U:H5''	1:2A:788:A:H5'	1.69	0.73
21:2Z:45:ASP:OD1	21:2Z:49:ARG:NH1	2.21	0.73
1:1A:1237:A:OP1	60:1A:4133:HOH:O	2.06	0.73
21:1Z:46:LYS:O	21:1Z:50:GLN:NE2	2.21	0.73
1:2A:453:C:OP1	60:2A:3914:HOH:O	2.06	0.73
1:2A:2415:G:H4'	11:2P:67:MET:H	1.52	0.73
1:1A:1053:C:N4	1:1A:1106:G:H1	1.86	0.73
1:1A:1859:A:N6	1:1A:1883:G:O2'	2.22	0.73
32:1a:964:A:O2'	41:1j:55:LYS:NZ	2.22	0.73
33:1b:17:PHE:HB3	33:1b:44:LEU:HD21	1.68	0.73
36:1e:43:LEU:HD21	36:1e:132:ALA:HB1	1.71	0.73
1:2A:2305:A:H5''	6:2G:134:GLY:HA3	1.69	0.73
1:2A:2572:A:H5''	1:2A:2574:G:H4'	1.70	0.73
1:1A:2258:C:OP1	60:1A:4139:HOH:O	2.06	0.73
32:1a:376:G:H5''	47:1p:5:ARG:HB3	1.69	0.73
32:1a:501:C:OP1	43:1l:117:ARG:NH2	2.22	0.73
1:2A:2689:U:OP2	1:2A:2719:G:N2	2.20	0.73
18:2W:12:ILE:HD12	18:2W:42:ARG:HH11	1.53	0.73
32:2a:1106:G:H5''	34:2c:172:ARG:HG2	1.70	0.73
32:2a:1404:5MC:O2	32:2a:1519:MA6:O2'	2.06	0.73
32:1a:266:G:H5''	32:1a:268:C:H41	1.54	0.72
1:2A:613:G:O2'	1:2A:614(C):A:N1	2.21	0.72
1:2A:615:G:OP1	5:2F:40:GLN:NE2	2.20	0.72
39:2h:49:GLU:OE2	39:2h:62:TYR:OH	2.05	0.72
54:1x:10:G:N2	54:1x:26:G:H1'	2.04	0.72
1:1A:309:G:N3	1:1A:329:G:O2'	2.21	0.72
32:2a:330:C:O2	60:2a:1902:HOH:O	2.07	0.72
34:2c:70:VAL:HG12	34:2c:72:LYS:H	1.54	0.72
1:1A:624:C:OP1	60:1A:4136:HOH:O	2.06	0.72
1:1A:1187:G:OP2	60:1A:4138:HOH:O	2.06	0.72
1:2A:529:A:H62	1:2A:2041:U:H3	1.35	0.72
32:2a:538:G:H5''	43:2l:114:LYS:HB2	1.69	0.72
44:2m:23:TYR:HB3	44:2m:67:GLU:HA	1.70	0.72
1:1A:2406:U:OP1	60:1A:4143:HOH:O	2.08	0.72
1:2A:1593:G:H2'	1:2A:1594:G:C8	2.24	0.72
1:1A:370:G:OP2	60:1A:4140:HOH:O	2.08	0.72
1:1A:2219:G:H2'	1:1A:2220:G:H8	1.53	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2682:U:OP2	60:1A:4144:HOH:O	2.08	0.72
1:2A:2227:A:OP1	3:2D:263:ARG:NH1	2.23	0.72
22:20:11:ARG:O	22:20:14:ARG:NH2	2.23	0.72
32:2a:765:G:H1	32:2a:812:C:HO2'	1.37	0.72
1:1A:422:A:OP2	60:1A:4140:HOH:O	2.07	0.72
32:1a:1070:U:O5'	36:1e:25:ARG:NH1	2.23	0.72
1:2A:2131:G:H1	1:2A:2158:A:H62	1.35	0.72
5:2F:195:ASP:OD1	5:2F:196:LEU:N	2.23	0.72
32:2a:560:U:OP2	60:2a:1903:HOH:O	2.08	0.72
32:2a:692:U:OP2	42:2k:26:ASN:ND2	2.22	0.72
1:1A:530:G:O6	60:1A:4137:HOH:O	2.06	0.72
1:1A:1069:A:H1'	1:1A:1096:A:H4'	1.72	0.72
1:1A:2790:A:H5'	1:1A:2893:G:H21	1.55	0.72
1:2A:196:A:O2'	1:2A:805:G:O6	2.06	0.72
32:2a:1129:C:O2'	32:2a:1130:A:N7	2.22	0.72
32:1a:1164:G:H1	32:1a:1172:C:H42	1.35	0.72
1:2A:2684:U:O2'	10:2O:68:GLU:OE2	2.07	0.72
1:1A:2316:C:O2'	6:1G:128:ARG:NH2	2.23	0.71
1:1A:2679:A:O2'	60:1A:4126:HOH:O	2.03	0.71
32:1a:689:C:OP1	42:1k:27:ASN:ND2	2.22	0.71
5:2F:130:ALA:H	5:2F:142:TRP:CD1	2.08	0.71
1:1A:918:A:N3	2:1B:80:U:O2'	2.23	0.71
6:1G:121:ASN:O	6:1G:131:TYR:OH	2.08	0.71
29:17:21:ARG:NH1	60:17:201:HOH:O	2.22	0.71
30:18:42:ARG:NH1	60:18:202:HOH:O	2.23	0.71
1:2A:733:G:OP2	60:2A:3915:HOH:O	2.07	0.71
1:2A:686:G:O5'	29:27:11:LYS:NZ	2.23	0.71
1:2A:1993:U:OP2	60:2A:3916:HOH:O	2.08	0.71
1:1A:833:U:O2	11:1P:55:ARG:NH2	2.20	0.71
35:1d:98:GLU:O	35:1d:103:ASN:ND2	2.24	0.71
1:2A:861:A:N3	2:2B:79:C:O2'	2.23	0.71
40:2i:50:LEU:HD13	40:2i:56:LEU:HA	1.72	0.71
21:1Z:140:ASP:N	21:1Z:140:ASP:OD1	2.22	0.71
1:2A:2171:A:N3	1:2A:2172:U:N3	2.37	0.71
39:2h:41:ARG:NH2	39:2h:123:GLU:OE2	2.20	0.71
50:2s:30:LEU:HD11	50:2s:50:ALA:HB2	1.71	0.71
1:1A:18:C:O2'	1:1A:554:U:OP1	2.09	0.71
1:1A:459:U:OP2	29:17:39:ARG:NH1	2.23	0.71
28:16:26:ASN:HB3	28:16:29:ASN:HB2	1.73	0.71
32:1a:1318:A:OP1	50:1s:7:LYS:NZ	2.22	0.71
35:1d:57:ARG:HE	35:1d:202:LEU:HD22	1.55	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:22:22:GLU:OE2	24:22:68:ARG:NH2	2.23	0.71
32:2a:596:C:O2	32:2a:644:G:N2	2.19	0.71
32:2a:1051:C:N4	32:2a:1207:2MG:HN1	1.85	0.71
32:2a:1114:C:N4	32:2a:1186:G:H1	1.89	0.71
1:1A:1243:G:O3'	11:1P:7:ARG:NH2	2.24	0.71
1:1A:2467:C:H4'	12:1Q:123:HIS:CD2	2.26	0.71
1:1A:2589:A:OP1	60:1A:4142:HOH:O	2.08	0.71
32:2a:315:A:OP1	60:2a:1904:HOH:O	2.08	0.71
32:2a:1002:G:N2	32:2a:1038:C:N3	2.38	0.71
7:1H:137:ASP:HB3	7:1H:140:LYS:HB2	1.73	0.71
32:1a:363:A:OP2	43:1l:34:ARG:NH1	2.22	0.71
32:1a:1027:C:C2	32:1a:1034:G:N2	2.53	0.71
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.25	0.71
1:2A:22:C:N4	1:2A:518:G:O6	2.20	0.71
11:2P:48:PRO:O	30:28:57:ARG:NH2	2.21	0.71
38:2g:69:VAL:HG22	38:2g:135:VAL:HG22	1.73	0.71
1:1A:793:A:O2'	60:1A:4151:HOH:O	2.09	0.71
1:1A:2334:G:O6	22:10:74:ARG:NH1	2.24	0.71
8:2I:3:VAL:HG12	8:2I:38:LEU:HA	1.73	0.71
1:1A:245:G:O6	30:18:8:LYS:NZ	2.22	0.71
1:1A:1468:C:OP1	60:1A:4147:HOH:O	2.08	0.71
32:1a:1166:G:N2	32:1a:1170:A:OP2	2.24	0.71
47:1p:47:ASP:OD1	47:1p:47:ASP:N	2.23	0.71
4:2E:55:ASN:HD22	4:2E:58:ARG:HE	1.39	0.71
5:2F:114:VAL:HG21	5:2F:202:PHE:HZ	1.56	0.71
32:1a:1305:G:H22	32:1a:1331:G:H1'	1.55	0.70
45:1n:6:LEU:HB3	45:1n:23:ARG:NH2	2.06	0.70
1:2A:2336:A:N6	22:20:43:THR:OG1	2.24	0.70
1:2A:2820:A:OP2	1:2A:2821:A:N6	2.18	0.70
32:2a:69:G:H2'	32:2a:70:G:H8	1.56	0.70
32:2a:568:G:O2'	32:2a:574:A:N1	2.22	0.70
6:2G:101:ILE:HG22	6:2G:105:LYS:HE2	1.71	0.70
14:2S:50:SER:O	14:2S:76:LYS:NZ	2.24	0.70
32:2a:1222:G:OP2	32:2a:1322:C:N4	2.24	0.70
34:2c:63:ASN:HB3	34:2c:98:ASN:HD22	1.54	0.70
1:1A:1918:A:N6	60:1A:4247:HOH:O	2.24	0.70
11:1P:35:HIS:O	60:1P:302:HOH:O	2.08	0.70
32:1a:946:A:H2'	32:1a:947:G:C8	2.26	0.70
1:2A:1487:G:H1	1:2A:1502:C:H42	1.39	0.70
32:1a:631:G:H2'	32:1a:632:A:H8	1.56	0.70
33:1b:198:ASP:OD1	33:1b:198:ASP:N	2.24	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:15:GLU:OE2	35:1d:66:ARG:NH1	2.24	0.70
48:1q:66:SER:O	48:1q:70:ARG:NH1	2.24	0.70
1:2A:859:G:N2	1:2A:917:A:OP2	2.24	0.70
11:2P:52:GLU:OE1	11:2P:55:ARG:NH1	2.24	0.70
1:1A:531:C:OP2	60:1A:4149:HOH:O	2.09	0.70
1:1A:762:U:OP1	60:1A:4153:HOH:O	2.10	0.70
1:1A:787:U:OP1	60:1A:4146:HOH:O	2.08	0.70
32:1a:1061:G:H1	32:1a:1195:C:H42	1.40	0.70
1:2A:2552:2MU:OP2	60:2A:3920:HOH:O	2.10	0.70
32:2a:716:A:H1'	42:2k:118:GLY:HA2	1.74	0.70
32:2a:1226:C:N4	44:2m:104:ARG:HE	1.89	0.70
41:2j:64:GLU:OE2	41:2j:66:ARG:NH1	2.23	0.70
32:1a:191:G:N2	51:1t:102:GLY:O	2.23	0.70
32:1a:518:C:O2'	32:1a:1492:A:N6	2.24	0.70
24:22:65:ASN:OD1	24:22:69:ARG:NH1	2.24	0.70
32:1a:1055:A:N7	32:1a:1200:C:N4	2.39	0.70
32:2a:953:G:H5'	32:2a:965:A:H61	1.55	0.70
1:2A:249:C:O2	30:28:12:LYS:NZ	2.24	0.70
1:2A:2123:G:H2'	1:2A:2124:G:H8	1.56	0.70
32:2a:673:G:H2'	32:2a:674:G:C8	2.26	0.70
35:1d:67:ILE:HD13	35:1d:196:LEU:HD23	1.72	0.70
1:2A:742:G:H1	1:2A:755:C:H42	1.40	0.70
1:2A:582:G:OP2	60:2A:3917:HOH:O	2.08	0.70
1:2A:2099:U:H3	1:2A:2190:G:H1	1.40	0.70
19:2X:94:GLY:HA3	19:2X:95:LEU:HB3	1.74	0.70
32:2a:126:G:N2	32:2a:235:C:O2	2.19	0.70
1:1A:2123:G:N2	1:1A:2175:C:N3	2.34	0.69
1:2A:210:C:OP2	29:27:29:LYS:NZ	2.24	0.69
23:21:15:ALA:HB3	23:21:40:ARG:HG3	1.74	0.69
34:2c:120:VAL:HG11	34:2c:137:ALA:HB2	1.73	0.69
40:2i:13:ALA:HB1	40:2i:73:GLN:HG3	1.74	0.69
40:2i:105:ASP:OD1	40:2i:105:ASP:N	2.20	0.69
1:1A:198:C:OP2	60:1A:4156:HOH:O	2.10	0.69
1:1A:672:C:OP1	60:1A:4148:HOH:O	2.09	0.69
1:1A:784:A:OP2	60:1A:4152:HOH:O	2.09	0.69
1:2A:761:A:OP1	60:2A:3921:HOH:O	2.10	0.69
1:2A:882:G:H1	1:2A:894:C:H42	1.38	0.69
1:1A:26:G:H1'	1:1A:515:A:H61	1.57	0.69
1:1A:946:G:OP1	60:1A:4150:HOH:O	2.09	0.69
52:1u:2:GLY:O	52:1u:4:GLY:N	2.24	0.69
1:2A:2150:U:H2'	1:2A:2151:G:C8	2.28	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2108:C:N3	1:1A:2181:G:N2	2.37	0.69
25:13:39:ASP:OD1	25:13:44:ARG:NH1	2.25	0.69
29:17:33:ARG:NH2	60:17:202:HOH:O	2.24	0.69
38:1g:91:VAL:HB	38:1g:96:GLN:HE21	1.57	0.69
1:2A:1865:G:N2	1:2A:1877:A:OP2	2.24	0.69
7:2H:64:LEU:O	7:2H:68:THR:OG1	2.09	0.69
8:2I:133:HIS:HB3	8:2I:136:VAL:HB	1.72	0.69
30:28:32:LEU:O	30:28:36:LYS:NZ	2.22	0.69
32:2a:815:A:N7	32:2a:1509:C:O2'	2.23	0.69
1:1A:2711:A:OP1	60:1A:4157:HOH:O	2.10	0.69
7:1H:150:ALA:HA	7:1H:153:LYS:HG3	1.73	0.69
1:2A:30:G:O2'	1:2A:1214:A:N3	2.24	0.69
1:2A:120:U:OP2	60:2A:3919:HOH:O	2.09	0.69
32:2a:1295:G:H21	32:2a:1302:U:H3	1.39	0.69
34:2c:37:GLN:NE2	45:2n:52:GLN:OE1	2.26	0.69
32:1a:183:G:O6	32:1a:194:C:N4	2.20	0.69
1:2A:2143:C:H42	1:2A:2148:G:H1	1.38	0.69
43:2l:32:PHE:HB3	43:2l:84:LEU:HD11	1.74	0.69
1:1A:144:C:H4'	19:1X:2:LYS:HG3	1.75	0.69
1:2A:1455:G:OP2	60:2A:3918:HOH:O	2.08	0.69
1:2A:2851:A:O2'	13:2R:64:ARG:NH2	2.25	0.69
1:1A:279:C:N4	1:1A:361:G:H1	1.88	0.69
1:1A:1009:A:OP2	9:1N:37:LYS:NZ	2.21	0.69
1:1A:1271:G:OP2	60:1A:4155:HOH:O	2.10	0.69
1:1A:1783:A:OP2	60:1A:4162:HOH:O	2.11	0.69
1:1A:2502:G:H5''	1:1A:2503:2MA:H5''	1.74	0.69
32:1a:1312:G:H5'	50:1s:5:LEU:HD21	1.75	0.69
32:1a:1500:A:OP2	60:1a:3303:HOH:O	2.10	0.69
48:1q:67:LYS:O	48:1q:68:ARG:HB2	1.92	0.69
1:2A:307:G:H21	1:2A:330:A:H62	1.40	0.69
1:2A:1784:A:OP1	60:2A:3924:HOH:O	2.11	0.69
1:2A:2116:G:N2	1:2A:2162:G:OP1	2.26	0.69
7:2H:27:LYS:HA	7:2H:32:GLU:HA	1.74	0.69
19:2X:40:LYS:HG3	19:2X:51:VAL:HB	1.75	0.69
32:2a:363:A:OP2	43:2l:34:ARG:NH1	2.25	0.69
32:2a:669:U:H2'	32:2a:670:G:C8	2.27	0.69
32:2a:1030(A):G:N2	32:2a:1030(D):A:OP2	2.25	0.69
1:1A:1054:A:H61	1:1A:1105:U:H3	1.41	0.69
36:1e:104:ALA:HA	36:1e:107:ARG:HB3	1.75	0.69
1:2A:2845:G:H2'	1:2A:2846:G:C8	2.28	0.69
32:2a:881:G:OP1	43:2l:12:ARG:NH2	2.25	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2n:33:VAL:HA	45:2n:40:CYS:HA	1.73	0.69
51:2t:43:LEU:O	51:2t:47:GLY:N	2.26	0.69
4:1E:119:ARG:NH1	4:1E:156:MET:O	2.26	0.69
32:1a:130:A:N3	32:1a:263:A:O2'	2.24	0.69
1:2A:245:G:O6	30:28:8:LYS:NZ	2.24	0.69
1:2A:1296:G:OP1	1:2A:2709:G:O2'	2.09	0.69
1:1A:467:G:OP1	29:17:33:ARG:NH1	2.25	0.68
41:1j:30:SER:HG	41:1j:81:THR:HG1	1.28	0.68
1:2A:1218:C:H42	1:2A:1231:G:H1	1.40	0.68
32:2a:572:A:OP1	60:2a:1905:HOH:O	2.10	0.68
1:1A:510:C:OP1	60:1A:4160:HOH:O	2.11	0.68
7:1H:3:ARG:NH2	7:1H:5:GLY:H	1.91	0.68
16:1U:105:VAL:HG11	17:1V:39:LEU:HD21	1.75	0.68
1:2A:84:A:H5'	20:2Y:8:LYS:HG2	1.74	0.68
1:2A:1853:A:N3	1:2A:2233:U:O2'	2.24	0.68
35:2d:57:ARG:HH22	36:2e:107:ARG:HD3	1.58	0.68
1:1A:1669:A:OP2	60:1A:4154:HOH:O	2.10	0.68
32:1a:521:G:OP2	43:1l:54:LYS:NZ	2.25	0.68
1:2A:1919:A:N1	32:2a:1495:U:O2'	2.24	0.68
41:2j:6:ILE:HB	41:2j:72:VAL:HG23	1.75	0.68
41:2j:38:ILE:HG13	41:2j:71:LEU:HB3	1.74	0.68
3:1D:26:LYS:NZ	3:1D:28:GLU:O	2.27	0.68
32:1a:946:A:H2'	32:1a:947:G:H8	1.58	0.68
36:1e:102:ALA:O	36:1e:107:ARG:NH2	2.26	0.68
44:1m:17:VAL:O	44:1m:20:THR:OG1	2.11	0.68
1:2A:1619:G:O6	60:2A:3922:HOH:O	2.10	0.68
1:2A:2035:G:OP1	60:2A:3927:HOH:O	2.12	0.68
1:1A:947:G:OP2	60:1A:4166:HOH:O	2.12	0.68
1:1A:1039:G:N2	1:1A:1116:C:N3	2.34	0.68
2:1B:50:G:OP1	14:1S:63:THR:OG1	2.11	0.68
10:1O:49:ARG:NH1	32:1a:1422:G:O3'	2.24	0.68
1:2A:1581:G:H2'	1:2A:1582:C:O4'	1.94	0.68
1:2A:2404:C:O3'	11:2P:77:ARG:NH2	2.26	0.68
49:2r:45:SER:HB3	49:2r:49:LYS:HB2	1.74	0.68
1:1A:885:C:H2'	1:1A:890:A:H61	1.58	0.68
32:2a:1314:C:OP2	50:2s:4:SER:OG	2.11	0.68
52:2u:17:THR:O	52:2u:22:ARG:NH1	2.26	0.68
1:1A:1485:G:H1	1:1A:1504:C:H42	1.42	0.68
14:1S:26:LEU:HD23	14:1S:87:PHE:HD1	1.59	0.68
14:1S:37:ALA:HB2	14:1S:101:LEU:HD21	1.75	0.68
1:2A:1607:C:N4	1:2A:1622:G:OP2	2.26	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1827:C:O2'	1:2A:1970:A:N3	2.24	0.68
1:1A:817:C:OP2	60:1A:4159:HOH:O	2.11	0.68
1:1A:2233:U:H2'	1:1A:2234:G:C8	2.29	0.68
32:1a:1346:A:OP1	40:1i:120:ARG:NH1	2.27	0.68
1:2A:1636:C:H2'	1:2A:1637:A:C8	2.29	0.68
1:2A:2502:G:OP2	60:2A:3923:HOH:O	2.11	0.68
32:2a:1162:C:H42	32:2a:1174:G:H1	1.42	0.68
41:2j:98:ILE:O	60:2j:302:HOH:O	2.10	0.68
9:1N:15:LEU:HD22	9:1N:137:LYS:HD2	1.75	0.68
11:1P:124:LYS:HE2	11:1P:146:VAL:HG21	1.76	0.68
40:2i:4:TYR:HB2	40:2i:19:LEU:HB2	1.74	0.68
49:2r:53:ARG:HG2	49:2r:63:GLN:HE21	1.57	0.68
1:1A:686:G:OP2	60:1A:4168:HOH:O	2.12	0.68
3:1D:118:VAL:HG22	3:1D:119:ALA:H	1.57	0.68
33:1b:69:LEU:HB3	33:1b:162:ILE:HG22	1.74	0.68
1:2A:2787:C:H1'	4:2E:62:PRO:HG3	1.75	0.68
32:2a:574:A:OP2	60:2a:1906:HOH:O	2.12	0.68
48:2q:43:LEU:HD13	48:2q:68:ARG:HH21	1.58	0.68
1:1A:1508:A:O2'	1:1A:1509:C:OP1	2.12	0.67
1:1A:1568:G:P	3:1D:63:ARG:HH12	2.18	0.67
1:1A:2327:A:H2'	1:1A:2328:A:C8	2.29	0.67
32:1a:903:G:OP1	60:1a:3304:HOH:O	2.11	0.67
44:1m:76:ALA:HA	44:1m:79:LYS:HE2	1.76	0.67
1:2A:2680:C:H5'	4:2E:189:PRO:HA	1.76	0.67
35:2d:4:TYR:O	35:2d:5:ILE:HB	1.94	0.67
2:1B:58:A:OP2	60:1B:301:HOH:O	2.12	0.67
39:1h:86:ILE:HG13	39:1h:133:LEU:HD22	1.76	0.67
49:1r:74:ARG:HE	49:1r:81:PHE:HA	1.59	0.67
1:2A:2206:G:H3'	1:2A:2207:G:H8	1.57	0.67
3:2D:108:PRO:HD2	3:2D:111:LEU:HD22	1.75	0.67
27:25:41:PRO:O	27:25:44:THR:OG1	2.11	0.67
32:2a:1030(B):C:H41	32:2a:1030(C):G:H21	1.41	0.67
40:2i:28:VAL:HG22	40:2i:63:ILE:HB	1.75	0.67
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.27	0.67
1:1A:776:G:N2	1:1A:2241:A:OP1	2.28	0.67
5:1F:17:ARG:NH2	5:1F:19:GLU:OE2	2.26	0.67
37:1f:20:ALA:O	37:1f:24:GLU:N	2.24	0.67
1:2A:184:C:O2'	1:2A:217:G:N3	2.26	0.67
1:2A:2292:C:OP1	14:2S:17:ARG:NH2	2.26	0.67
15:2T:50:ILE:HG22	15:2T:102:ILE:HD11	1.76	0.67
19:2X:53:LYS:HB3	19:2X:82:GLN:HB3	1.77	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:21:4:VAL:HG22	23:21:11:ARG:HG3	1.75	0.67
32:2a:583:A:N6	32:2a:758:G:O2'	2.27	0.67
32:2a:1250:A:H2	32:2a:1353:G:H21	1.43	0.67
34:2c:71:ALA:HB2	34:2c:115:LEU:HD21	1.77	0.67
11:1P:126:VAL:HG22	11:1P:146:VAL:HB	1.77	0.67
34:1c:138:VAL:HG13	34:1c:149:ALA:HB3	1.75	0.67
32:2a:659:U:OP2	46:2o:8:LYS:NZ	2.26	0.67
1:1A:563:G:OP2	60:1A:4163:HOH:O	2.11	0.67
1:1A:1176:G:H1'	1:1A:1177:A:H5''	1.75	0.67
1:1A:2126:A:N6	1:1A:2162:G:O2'	2.27	0.67
26:14:16:CYS:SG	26:14:17:GLY:N	2.68	0.67
6:2G:56:ALA:HA	6:2G:59:GLU:HG2	1.77	0.67
7:2H:66:GLY:O	7:2H:70:THR:OG1	2.12	0.67
49:2r:74:ARG:HE	49:2r:81:PHE:HA	1.60	0.67
1:1A:593:G:H4'	30:18:4:MET:HE2	1.77	0.67
1:1A:1301:A:OP1	60:1A:4170:HOH:O	2.12	0.67
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.30	0.67
32:1a:952:U:H2'	32:1a:953:G:C8	2.30	0.67
32:2a:976:G:H5'	32:2a:1358:U:O2'	1.95	0.67
1:1A:453:C:O2	1:1A:457:A:O2'	2.12	0.67
1:2A:1664:A:OP1	60:2A:3926:HOH:O	2.12	0.67
4:2E:103:ASP:OD2	4:2E:202:LYS:NZ	2.28	0.67
14:2S:27:SER:HA	14:2S:88:ASP:HB3	1.76	0.67
43:2l:55:VAL:HG12	43:2l:69:TYR:HA	1.77	0.67
1:1A:803:U:OP1	60:1A:4175:HOH:O	2.13	0.67
1:1A:1047:G:H2'	1:1A:1110:G:H1	1.58	0.67
1:1A:1062:G:C8	1:1A:1070:A:H4'	2.30	0.67
1:1A:1706:U:OP1	60:1A:4178:HOH:O	2.13	0.67
32:1a:376:G:H2'	32:1a:377:G:C8	2.30	0.67
32:1a:452:A:O2'	32:1a:453:A:OP2	2.13	0.67
33:1b:84:GLU:HB3	33:1b:219:VAL:HG21	1.77	0.67
1:2A:2448:A:OP1	60:2A:3925:HOH:O	2.11	0.67
14:2S:30:ARG:HD2	14:2S:97:ARG:HD3	1.76	0.67
1:1A:450:G:O6	60:1A:4165:HOH:O	2.11	0.67
21:1Z:7:ALA:HB2	21:1Z:59:LEU:HD22	1.75	0.67
1:2A:671:C:N4	11:2P:40:SER:O	2.27	0.67
6:2G:59:GLU:OE2	6:2G:153:ARG:NH2	2.26	0.67
20:2Y:2:ARG:HH12	20:2Y:4:LYS:HD3	1.59	0.67
40:2i:50:LEU:HD12	40:2i:51:ARG:HG3	1.76	0.67
34:1c:108:ASN:ND2	34:1c:144:SER:OG	2.28	0.67
32:2a:573:A:OP2	60:2a:1906:HOH:O	2.13	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:1E:32:PRO:HA	4:1E:90:THR:HA	1.75	0.66
32:1a:794:A:OP2	60:1a:3306:HOH:O	2.12	0.66
1:2A:2690:C:OP1	13:2R:17:ARG:NH2	2.28	0.66
1:1A:1541:G:OP2	60:1A:4176:HOH:O	2.13	0.66
1:1A:2611:U:OP1	60:1A:4167:HOH:O	2.12	0.66
32:1a:1025:U:O2	32:1a:1036:G:O6	2.13	0.66
1:2A:2355:C:H4'	22:20:24:LYS:HG3	1.78	0.66
1:2A:2589:A:OP1	60:2A:3930:HOH:O	2.13	0.66
1:1A:304:G:O6	60:1A:4164:HOH:O	2.11	0.66
41:1j:38:ILE:HG13	41:1j:71:LEU:HB3	1.76	0.66
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.31	0.66
4:2E:176:ILE:HB	4:2E:181:LEU:HB2	1.77	0.66
5:2F:185:ASP:HA	5:2F:188:ARG:HD2	1.77	0.66
8:2I:93:THR:H	8:2I:96:ASP:HB2	1.60	0.66
32:2a:501:C:H2'	32:2a:502:G:C8	2.30	0.66
37:2f:33:TYR:HA	37:2f:71:ARG:HH11	1.60	0.66
43:2l:38:THR:OG1	43:2l:57:LYS:O	2.13	0.66
1:1A:1325:G:OP1	1:1A:1647:G:O2'	2.08	0.66
5:1F:177:ALA:O	5:1F:180:GLY:N	2.28	0.66
32:1a:117:G:N7	60:1a:3320:HOH:O	2.28	0.66
32:1a:1518:MA6:N6	32:1a:1519:MA6:H103	2.11	0.66
1:2A:1316:U:H2'	1:2A:1317:A:H8	1.59	0.66
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.11	0.66
32:2a:1086:U:H2'	32:2a:1087:G:H8	1.58	0.66
36:2e:122:GLU:O	36:2e:126:ARG:NH1	2.29	0.66
1:1A:615:G:OP1	5:1F:40:GLN:NE2	2.28	0.66
1:1A:2452:C:OP1	60:1A:4174:HOH:O	2.13	0.66
32:1a:186:C:H5'	51:1t:78:ALA:HB1	1.75	0.66
30:28:33:ASN:OD1	30:28:36:LYS:NZ	2.26	0.66
1:1A:740:U:OP2	60:1A:4169:HOH:O	2.12	0.66
1:1A:880:G:H22	1:1A:898:C:H42	1.43	0.66
1:1A:2864:G:N7	60:1A:4260:HOH:O	2.26	0.66
3:1D:108:PRO:HG2	3:1D:111:LEU:HD13	1.77	0.66
1:2A:1196:C:HO2'	1:2A:1227:G:HO2'	1.36	0.66
21:2Z:19:ARG:NH1	21:2Z:84:GLU:O	2.28	0.66
1:1A:264:C:O2'	1:1A:428:A:N1	2.29	0.66
1:1A:1769:G:O2'	1:1A:1958:C:OP1	2.14	0.66
5:1F:22:ALA:HB1	5:1F:24:LEU:HD13	1.76	0.66
32:1a:707:C:OP1	42:1k:85:ARG:NH1	2.29	0.66
1:2A:1788:C:OP1	60:2A:3929:HOH:O	2.13	0.66
42:2k:18:ARG:HA	42:2k:81:ASP:H	1.61	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:453:C:OP1	60:1A:4165:HOH:O	2.12	0.66
1:1A:459:U:H2'	1:1A:460:A:C8	2.26	0.66
1:1A:1955:U:OP2	60:1A:4181:HOH:O	2.14	0.66
1:1A:2163:C:OP1	1:1A:2165:G:N2	2.18	0.66
32:1a:11:G:O2'	32:1a:506:G:N2	2.28	0.66
32:1a:1097:C:O2'	32:1a:1169:A:N3	2.26	0.66
34:1c:17:ASP:O	34:1c:54:ARG:NH2	2.29	0.66
1:2A:84:A:N1	1:2A:98:G:O2'	2.26	0.66
32:2a:45:U:H2'	32:2a:46:G:C8	2.31	0.66
42:2k:58:PRO:HB3	42:2k:93:GLN:HE21	1.61	0.66
1:2A:731:C:OP2	60:2A:3921:HOH:O	2.13	0.66
1:2A:2150:U:H2'	1:2A:2151:G:H8	1.60	0.66
1:2A:2637:U:H5''	4:2E:82:ARG:HH12	1.60	0.66
6:2G:101:ILE:HD13	26:24:25:TYR:HB2	1.77	0.66
11:2P:8:PRO:HB2	11:2P:12:ALA:HB3	1.77	0.66
12:2Q:11:LYS:NZ	12:2Q:88:GLY:O	2.24	0.66
32:2a:322:C:H4'	51:2t:23:ARG:HD2	1.77	0.66
32:2a:597:G:OP2	60:2a:1907:HOH:O	2.13	0.66
34:2c:180:ALA:HA	34:2c:206:GLU:HB3	1.77	0.66
48:2q:45:HIS:HB3	48:2q:72:ARG:HG2	1.77	0.66
1:1A:224:G:OP2	1:1A:408:G:N2	2.27	0.66
40:1i:32:ASP:OD1	40:1i:33:PHE:N	2.26	0.66
1:2A:517:C:OP2	27:25:13:LYS:NZ	2.29	0.66
1:2A:1660:C:H2'	1:2A:1661:G:H8	1.61	0.66
1:2A:2011:U:OP2	18:2W:16:LYS:NZ	2.27	0.66
3:2D:41:GLY:O	3:2D:43:ARG:NH1	2.29	0.66
50:2s:53:ASN:HD22	50:2s:77:THR:HA	1.61	0.66
1:1A:631:A:OP1	11:1P:65:ARG:NH1	2.29	0.65
1:1A:1778:U:OP1	60:1A:4177:HOH:O	2.13	0.65
32:1a:1302:U:OP1	44:1m:13:LYS:NZ	2.25	0.65
44:1m:58:GLU:O	44:1m:62:ASN:ND2	2.25	0.65
4:2E:59:VAL:HG21	4:2E:74:PRO:HB3	1.79	0.65
32:2a:1118:C:H1'	32:2a:1179:A:C4	2.31	0.65
40:2i:67:GLY:O	40:2i:73:GLN:NE2	2.28	0.65
1:1A:188:G:H1	1:1A:208:C:H42	1.43	0.65
1:1A:2316:C:H2'	1:1A:2317:C:H6	1.61	0.65
1:1A:2393:A:H5''	11:1P:63:PRO:HB3	1.77	0.65
32:1a:42:G:H1	32:1a:400:C:H42	1.44	0.65
32:1a:603:U:H2'	32:1a:604:G:H8	1.61	0.65
32:1a:1126:U:H3	41:1j:40:LEU:HD21	1.60	0.65
58:1a:3213:V7A:NBD	58:1a:3213:V7A:OBB	2.25	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:17:U:H2'	32:2a:18:C:C6	2.31	0.65
32:2a:1259:C:N4	32:2a:1260:C:O2	2.29	0.65
40:2i:6:GLY:HA3	40:2i:83:ARG:HB3	1.79	0.65
1:1A:428:A:OP1	60:1A:4183:HOH:O	2.14	0.65
1:1A:1010:A:OP2	60:1A:4184:HOH:O	2.14	0.65
1:1A:2245:U:H5''	1:1A:2246:G:H5'	1.79	0.65
1:1A:2820:A:OP1	13:1R:2:ARG:NH2	2.29	0.65
32:1a:975:A:H4'	32:1a:976:G:H5''	1.78	0.65
1:2A:1156:A:OP2	60:2A:3940:HOH:O	2.15	0.65
1:2A:2120:G:O6	1:2A:2178:C:N3	2.30	0.65
20:2Y:102:CYS:SG	20:2Y:103:GLY:N	2.65	0.65
32:2a:376:G:H1	32:2a:387:U:H3	1.41	0.65
48:2q:67:LYS:HA	48:2q:70:ARG:HH12	1.60	0.65
1:1A:197:A:OP1	60:1A:4156:HOH:O	2.12	0.65
1:1A:872:A:OP2	12:1Q:5:ARG:NH2	2.29	0.65
1:1A:2564:A:C2	1:1A:2647:U:H4'	2.32	0.65
1:2A:1817:G:OP1	3:2D:88:ARG:NH2	2.30	0.65
1:1A:1186:G:OP2	60:1A:4113:HOH:O	2.14	0.65
1:2A:2430:A:OP1	60:2A:3936:HOH:O	2.14	0.65
33:2b:9:GLU:O	33:2b:11:LEU:N	2.30	0.65
21:1Z:95:PRO:HA	21:1Z:130:PRO:HD3	1.79	0.65
35:1d:81:GLU:OE1	35:1d:139:ARG:NH2	2.28	0.65
1:1A:807:U:OP2	11:1P:41:ARG:NH2	2.30	0.65
1:1A:1314:C:OP1	60:1A:4190:HOH:O	2.15	0.65
1:1A:2448:A:OP2	60:1A:4180:HOH:O	2.13	0.65
32:1a:1356:G:H2'	32:1a:1357:A:H8	1.59	0.65
1:2A:484:C:H42	1:2A:496:G:H1	1.45	0.65
1:2A:527:C:N4	1:2A:2779:U:OP2	2.30	0.65
1:2A:1507:A:O2'	1:2A:1508:A:O4'	2.14	0.65
20:2Y:15:VAL:HG21	20:2Y:42:VAL:HG11	1.78	0.65
41:2j:49:VAL:HG13	45:2n:41:ARG:HB2	1.78	0.65
52:2u:2:GLY:O	52:2u:4:GLY:N	2.29	0.65
1:1A:7:G:H2'	1:1A:8:A:O4'	1.96	0.65
1:1A:2736:G:N7	60:1A:4276:HOH:O	2.29	0.65
35:1d:109:GLY:HA3	35:1d:165:MET:HG3	1.79	0.65
37:1f:39:LYS:HB2	37:1f:64:GLN:HB3	1.78	0.65
1:2A:1827:C:OP2	3:2D:222:ARG:NH1	2.29	0.65
1:2A:2042:A:OP1	60:2A:3933:HOH:O	2.14	0.65
1:2A:2238:G:N7	60:2A:3981:HOH:O	2.29	0.65
32:2a:938:A:N3	32:2a:1376:U:O2'	2.26	0.65
1:1A:805:G:N2	1:1A:829:A:OP1	2.29	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1311:G:OP2	29:17:47:ARG:NH2	2.30	0.65
1:2A:908:C:O2'	12:2Q:71:ASP:OD2	2.15	0.65
1:2A:1639:U:H2'	1:2A:1640:C:H5''	1.77	0.65
6:2G:44:GLY:HA2	6:2G:88:ILE:HB	1.78	0.65
32:2a:1190:G:H5'	34:2c:176:HIS:CE1	2.32	0.65
1:1A:1093:G:H3'	1:1A:1094:U:H5''	1.79	0.64
1:1A:2746:U:OP2	60:1A:4189:HOH:O	2.15	0.64
19:1X:50:LYS:N	19:1X:87:GLN:OE1	2.26	0.64
20:1Y:88:LYS:HB3	20:1Y:96:ILE:HG13	1.79	0.64
32:1a:1250:A:H2	32:1a:1353:G:H21	1.44	0.64
34:1c:172:ARG:NH2	34:1c:206:GLU:OE2	2.30	0.64
1:2A:2637:U:OP1	4:2E:82:ARG:NH1	2.31	0.64
12:2Q:31:ASP:OD1	12:2Q:134:ARG:NH1	2.29	0.64
1:1A:465:G:O6	60:1A:4161:HOH:O	2.11	0.64
6:1G:43:LEU:O	6:1G:45:GLU:N	2.30	0.64
10:1O:68:GLU:OE1	10:1O:78:ARG:NH1	2.30	0.64
43:1l:53:ARG:HB3	43:1l:69:TYR:HE1	1.62	0.64
1:2A:900:A:O2'	1:2A:901:A:OP1	2.14	0.64
1:1A:836:G:N7	60:1A:4199:HOH:O	2.29	0.64
1:1A:966:G:OP1	60:1A:4191:HOH:O	2.15	0.64
32:1a:1035:A:H2'	32:1a:1036:G:H21	1.62	0.64
1:2A:743:G:H1	1:2A:754:C:H42	1.45	0.64
1:2A:1445(A):C:H42	1:2A:1466:G:H1	1.46	0.64
6:2G:171:ALA:O	6:2G:175:LEU:N	2.24	0.64
18:2W:88:ARG:NH1	18:2W:94:ASP:OD2	2.30	0.64
32:2a:451:A:OP1	32:2a:481:G:N2	2.28	0.64
40:2i:23:ASN:HD21	40:2i:25:LYS:HG2	1.62	0.64
1:1A:987:G:OP2	60:1A:4182:HOH:O	2.14	0.64
32:1a:1417:G:O6	60:1a:3305:HOH:O	2.12	0.64
1:2A:398:G:H2'	1:2A:399:G:H8	1.62	0.64
1:2A:1206:G:H1	1:2A:1240:U:H3	1.44	0.64
1:2A:1448:G:O2'	1:2A:1528(A):A:N1	2.30	0.64
21:2Z:28:MET:HE1	21:2Z:61:LEU:HD21	1.80	0.64
44:2m:89:GLY:O	44:2m:93:ARG:N	2.20	0.64
1:1A:1183:G:O2'	25:13:29:ARG:NH1	2.29	0.64
1:2A:1779:U:OP2	1:2A:1784:A:N6	2.22	0.64
1:2A:2454:G:O6	60:2A:3928:HOH:O	2.12	0.64
16:2U:97:ASP:OD1	16:2U:101:ARG:NH1	2.23	0.64
32:2a:1178:G:N2	32:2a:1181:G:OP2	2.17	0.64
49:2r:73:ALA:HB1	49:2r:78:LEU:HB2	1.80	0.64
1:1A:2079:U:O3'	23:11:35:THR:OG1	2.15	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:1E:32:PRO:HB3	4:1E:90:THR:HG22	1.79	0.64
32:1a:1427:U:H2'	32:1a:1428:A:H8	1.62	0.64
35:1d:132:ARG:NH1	35:1d:134:ASP:OD1	2.30	0.64
1:2A:1973:G:OP1	60:2A:3941:HOH:O	2.15	0.64
32:2a:1270:C:H2'	32:2a:1271:G:C8	2.33	0.64
1:1A:2030:A:OP1	60:1A:4188:HOH:O	2.15	0.64
32:1a:1033:G:H2'	32:1a:1034:G:H8	1.62	0.64
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.32	0.64
1:2A:1499:C:H2'	1:2A:1500:G:H8	1.62	0.64
2:2B:43:C:O2	6:2G:95:ARG:NH2	2.25	0.64
6:2G:106:LEU:HA	6:2G:110:ALA:HB3	1.80	0.64
32:2a:667:G:O2'	46:2o:49:ASP:OD1	2.11	0.64
22:10:27:GLU:HB2	22:10:69:PHE:HD1	1.63	0.64
32:1a:42:G:O2'	32:1a:622:A:N1	2.27	0.64
44:1m:65:LYS:HB2	44:1m:69:GLU:HG3	1.80	0.64
44:1m:65:LYS:NZ	44:1m:73:GLU:OE1	2.25	0.64
58:2a:1817:V7A:NBD	58:2a:1817:V7A:OBB	2.29	0.64
1:1A:586:A:H5'	5:1F:89:VAL:HG21	1.80	0.64
1:1A:1203:G:O6	60:1A:4172:HOH:O	2.13	0.64
32:1a:6:G:H2'	36:1e:119:LEU:HD21	1.80	0.64
32:1a:78:G:C6	32:1a:91:C:N4	2.66	0.64
32:1a:885:G:H1	32:1a:912:C:H42	1.46	0.64
1:2A:1237:A:OP1	60:2A:3938:HOH:O	2.14	0.64
12:2Q:38:GLU:OE2	12:2Q:128:LYS:N	2.30	0.64
12:2Q:51:ARG:HG3	12:2Q:66:ILE:HD11	1.78	0.64
32:2a:656:C:O2'	46:2o:28:GLN:NE2	2.31	0.64
37:1f:35:ALA:HA	37:1f:67:MET:HB3	1.80	0.64
1:2A:1849:G:H2'	1:2A:1850:G:H8	1.62	0.64
5:2F:122:LYS:HD2	5:2F:191:ARG:HG2	1.79	0.64
32:1a:316:G:OP2	32:1a:351:G:O2'	2.16	0.63
32:1a:648:A:H2'	32:1a:649:G:C8	2.34	0.63
32:1a:1409:C:H2'	32:1a:1410:G:C8	2.32	0.63
33:1b:185:ILE:HG22	33:1b:199:TYR:HB2	1.80	0.63
48:1q:62:SER:OG	48:1q:72:ARG:NE	2.31	0.63
1:2A:557:U:O2'	9:2N:45:ASN:O	2.16	0.63
1:2A:2503:2MA:OP1	60:2A:3942:HOH:O	2.15	0.63
10:2O:9:GLU:OE2	10:2O:18:LYS:NZ	2.24	0.63
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.62	0.63
32:2a:1402:4OC:HM22	32:2a:1403:C:H5'	1.80	0.63
1:1A:2334:G:H5'	14:1S:9:ARG:HG2	1.79	0.63
33:1b:18:GLY:H	33:1b:204:ASN:HB2	1.63	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1689:A:OP2	1:2A:1698:A:N6	2.30	0.63
6:2G:83:ARG:N	6:2G:86:MET:SD	2.71	0.63
1:1A:2305:A:H5''	6:1G:134:GLY:HA3	1.79	0.63
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.32	0.63
11:1P:96:THR:HG22	11:1P:126:VAL:HB	1.80	0.63
32:1a:1249:C:O2'	40:1i:73:GLN:NE2	2.31	0.63
40:1i:17:VAL:HA	40:1i:63:ILE:HG12	1.81	0.63
1:2A:2135:A:N6	1:2A:2154:G:O6	2.32	0.63
32:2a:1232:U:OP1	40:2i:124:GLN:NE2	2.31	0.63
1:1A:1266:G:O2'	1:1A:2012:G:O6	2.12	0.63
35:1d:70:ILE:HD11	35:1d:75:PHE:HD1	1.64	0.63
44:1m:34:LEU:HD13	44:1m:41:PRO:HA	1.80	0.63
1:2A:576:U:OP1	60:2A:3942:HOH:O	2.15	0.63
1:2A:2355:C:O2	22:20:39:ARG:NH2	2.32	0.63
33:2b:158:LEU:HD12	33:2b:158:LEU:H	1.63	0.63
34:2c:47:LEU:HB3	34:2c:52:LEU:HB2	1.80	0.63
54:2x:50:U:H3	54:2x:64:G:H1	1.46	0.63
1:1A:602:G:O2'	1:1A:655:A:N6	2.31	0.63
1:1A:613:G:N2	1:1A:614(C):A:O2'	2.31	0.63
1:1A:1054:A:N6	1:1A:1105:U:H3	1.96	0.63
1:1A:2331:G:H5'	22:10:44:ARG:HG3	1.80	0.63
15:1T:91:ARG:HB2	15:1T:121:ILE:HG13	1.81	0.63
36:1e:8:GLU:HG3	36:1e:34:VAL:HG22	1.80	0.63
52:1u:5:ASP:OD2	60:1u:101:HOH:O	2.14	0.63
1:2A:95:G:H4'	24:22:46:GLN:HA	1.78	0.63
1:2A:2693:A:H2'	1:2A:2694:G:C8	2.31	0.63
3:2D:89:SER:O	3:2D:198:ASN:ND2	2.32	0.63
48:2q:45:HIS:HA	48:2q:69:LYS:HZ1	1.63	0.63
50:2s:50:ALA:HB1	50:2s:57:HIS:HB3	1.80	0.63
1:1A:1997:G:N7	60:1A:4288:HOH:O	2.30	0.63
38:1g:89:MET:HE2	38:1g:89:MET:HA	1.79	0.63
1:2A:1266:G:O2'	1:2A:2012:G:O6	2.11	0.63
1:2A:2138:C:N4	1:2A:2153:G:H1	1.97	0.63
5:2F:98:SER:O	60:2F:401:HOH:O	2.15	0.63
19:2X:8:ILE:HD11	19:2X:43:VAL:HG22	1.80	0.63
23:21:23:LYS:HB2	23:21:29:GLY:HA3	1.80	0.63
32:2a:1432:G:O6	60:2a:1909:HOH:O	2.14	0.63
1:1A:38:A:H2'	1:1A:39:C:C6	2.34	0.63
4:1E:181:LEU:HD21	15:1T:6:LEU:HD23	1.81	0.63
5:1F:155:LEU:HD23	5:1F:186:ILE:HD13	1.81	0.63
32:1a:377:G:H1	32:1a:386:C:H42	1.46	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:688:G:H5'	42:1k:46:GLY:C	2.24	0.63
33:1b:16:HIS:HB3	33:1b:210:SER:HB2	1.81	0.63
1:2A:256:A:H2'	1:2A:257:A:C8	2.34	0.63
1:2A:2365:G:N7	30:28:39:LYS:NZ	2.46	0.63
6:2G:113:ARG:HB3	6:2G:140:ILE:HG13	1.81	0.63
7:2H:28:GLY:N	7:2H:31:GLY:O	2.31	0.63
40:2i:16:ARG:HB2	40:2i:64:THR:HG22	1.80	0.63
1:1A:511:U:OP2	60:1A:4160:HOH:O	2.16	0.63
1:1A:1103:A:H3'	1:1A:1104:C:H6	1.64	0.63
1:1A:1173:G:N2	1:1A:1177:A:OP1	2.30	0.63
32:1a:1187:G:N3	45:1n:60:SER:OG	2.32	0.63
35:1d:12:CYS:HB2	59:1d:302:SF4:S2	2.38	0.63
6:2G:161:THR:HG22	6:2G:163:ALA:H	1.63	0.63
21:2Z:156:LYS:HE3	21:2Z:158:PRO:HD3	1.80	0.63
31:29:14:CYS:HB3	31:29:27:CYS:HB2	1.80	0.63
32:2a:1147:C:O2	40:2i:16:ARG:NH1	2.32	0.63
1:1A:299:A:N1	1:1A:322:A:O2'	2.25	0.63
1:1A:1680:U:O2'	1:1A:1763:G:N7	2.30	0.63
3:1D:75:ILE:HG21	3:1D:99:ASP:HB2	1.81	0.63
20:1Y:67:LEU:HD22	20:1Y:71:LYS:HD3	1.80	0.63
21:1Z:91:LEU:HD23	21:1Z:130:PRO:HB3	1.80	0.63
51:1t:16:HIS:O	51:1t:19:SER:OG	2.16	0.63
1:1A:444:C:H4'	5:1F:49:ALA:HB2	1.81	0.62
21:1Z:100:VAL:HG11	21:1Z:134:PRO:HG2	1.81	0.62
32:2a:324:G:OP1	51:2t:22:ARG:NE	2.29	0.62
32:2a:714:G:H2'	32:2a:715:A:C8	2.34	0.62
32:1a:936:C:O2	32:1a:1382:C:N4	2.31	0.62
43:1l:27:LEU:O	43:1l:33:ARG:NH2	2.33	0.62
1:2A:2104:G:H1	1:2A:2185:C:N4	1.95	0.62
6:2G:152:LEU:HD23	6:2G:152:LEU:H	1.64	0.62
32:2a:107:G:H2'	32:2a:108:G:O4'	1.99	0.62
1:1A:1939:5MU:OP1	1:1A:2604:U:O2'	2.16	0.62
1:1A:2447:G:OP2	60:1A:4192:HOH:O	2.15	0.62
5:1F:96:ASP:OD1	5:1F:97:TYR:N	2.33	0.62
29:17:12:ARG:NH2	29:17:44:PRO:HB3	2.13	0.62
32:1a:765:G:N1	32:1a:812:C:O2'	2.30	0.62
33:1b:16:HIS:HD2	33:1b:204:ASN:H	1.46	0.62
34:1c:150:LYS:HD3	34:1c:152:ILE:HD11	1.81	0.62
38:1g:50:ILE:HD13	38:1g:125:MET:HG2	1.80	0.62
1:2A:2299:G:N1	1:2A:2318:G:N7	2.47	0.62
1:2A:2852:G:H5'	13:2R:64:ARG:HH22	1.63	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2331:G:O2'	1:1A:2336:A:N1	2.24	0.62
12:1Q:68:ILE:HD13	12:1Q:103:MET:HG2	1.80	0.62
32:1a:877:C:H5''	39:1h:88:LYS:HD3	1.82	0.62
37:1f:3:ARG:NE	37:1f:38:GLU:OE1	2.32	0.62
1:2A:517:C:OP1	27:25:16:ARG:NH2	2.32	0.62
1:2A:1814:G:H4'	3:2D:51:VAL:HG21	1.81	0.62
3:2D:175:LEU:HD12	3:2D:185:VAL:HG21	1.80	0.62
13:2R:87:TYR:OH	13:2R:117:VAL:O	2.15	0.62
14:2S:26:LEU:HD12	14:2S:85:VAL:HG11	1.81	0.62
38:2g:52:GLU:HG2	38:2g:53:LYS:H	1.64	0.62
41:2j:61:GLU:OE2	45:2n:58:LYS:NZ	2.31	0.62
1:1A:740:U:H2'	1:1A:741:G:C8	2.35	0.62
1:1A:2477:C:H2'	31:19:2:LYS:HE2	1.80	0.62
1:1A:2787:C:H1'	4:1E:62:PRO:HG3	1.81	0.62
32:1a:1236:A:H2'	32:1a:1237:C:C6	2.33	0.62
33:1b:78:GLN:O	33:1b:94:ASN:ND2	2.32	0.62
41:1j:13:HIS:HB3	41:1j:68:HIS:CE1	2.33	0.62
41:1j:50:ILE:HA	41:1j:60:ARG:HD3	1.82	0.62
20:1Y:15:VAL:HG21	20:1Y:42:VAL:HG11	1.81	0.62
27:15:41:PRO:O	27:15:44:THR:OG1	2.18	0.62
38:1g:122:HIS:HA	38:1g:125:MET:HE2	1.79	0.62
1:2A:2849:U:H4'	1:2A:2868:A:C2	2.35	0.62
12:2Q:39:PRO:HB3	12:2Q:99:PRO:HD3	1.81	0.62
32:2a:861:G:HO2'	32:2a:874:G:HO2'	1.41	0.62
32:2a:955:U:O4	32:2a:1225:A:N1	2.33	0.62
32:2a:1029:C:H42	32:2a:1032:G:H1	1.47	0.62
46:2o:5:LYS:H	46:2o:5:LYS:HD2	1.64	0.62
1:1A:185:U:H2'	1:1A:186:G:H8	1.64	0.62
1:1A:2712(A):A:OP1	60:1A:4157:HOH:O	2.16	0.62
42:1k:98:LEU:O	42:1k:101:SER:OG	2.14	0.62
32:2a:420:U:O2'	32:2a:423:G:O6	2.17	0.62
32:2a:667:G:H4'	46:2o:51:HIS:CG	2.35	0.62
32:2a:1128:C:H1'	32:2a:1147:C:H42	1.64	0.62
1:1A:24:G:O2'	18:1W:78:GLU:O	2.16	0.62
1:1A:1268:A:H2'	1:1A:1269:A:O4'	2.00	0.62
10:1O:23:ARG:NH1	60:1O:301:HOH:O	2.32	0.62
21:1Z:10:ARG:HG3	21:1Z:36:LYS:HB3	1.81	0.62
32:1a:902:G:H2'	32:1a:903:G:H8	1.63	0.62
40:1i:128:ARG:NH2	54:1x:33:U:OP2	2.32	0.62
1:2A:848:G:H2'	1:2A:849:A:C8	2.34	0.62
1:2A:1668:A:H5''	10:2O:5:GLN:HE21	1.64	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:130:ALA:O	5:2F:132:VAL:N	2.32	0.62
12:2Q:17:LEU:HA	12:2Q:98:LYS:HE2	1.81	0.62
32:2a:309:G:H2'	32:2a:310:G:H8	1.65	0.62
32:2a:642:A:N3	39:2h:113:SER:OG	2.33	0.62
32:2a:1270:C:OP2	52:2u:24:ARG:NH2	2.32	0.62
1:1A:572:A:OP2	17:1V:78:LYS:NZ	2.33	0.62
1:1A:989:G:OP1	1:1A:1157:G:O2'	2.18	0.62
2:1B:25:A:OP2	60:1B:303:HOH:O	2.16	0.62
3:1D:26:LYS:HB3	3:1D:83:GLU:HG2	1.82	0.62
3:1D:125:ILE:HB	37:1f:81:ILE:HD11	1.82	0.62
8:1I:48:GLU:O	8:1I:52:ARG:NH2	2.32	0.62
28:16:25:LYS:HD2	28:16:30:THR:HB	1.82	0.62
32:1a:938:A:H4'	38:1g:95:ARG:HH22	1.63	0.62
32:1a:1427:U:H2'	32:1a:1428:A:C8	2.34	0.62
35:1d:173:TRP:CD1	35:1d:173:TRP:H	2.17	0.62
1:2A:1689:A:H62	1:2A:1698:A:H2	1.45	0.62
1:2A:1864:U:OP1	1:2A:2410:G:O2'	2.17	0.62
1:2A:2079:U:O3'	23:21:35:THR:OG1	2.16	0.62
31:29:2:LYS:NZ	31:29:31:LYS:O	2.29	0.62
41:2j:47:PHE:HB2	41:2j:63:PHE:HB2	1.82	0.62
1:1A:29:U:H2'	1:1A:30:G:C8	2.34	0.62
1:1A:207:A:H2'	1:1A:208:C:O4'	1.99	0.62
1:1A:1085:A:O2'	1:1A:1104:C:O2'	2.17	0.62
5:1F:167:ALA:HB1	5:1F:173:VAL:HG11	1.82	0.62
32:1a:1181:G:O2'	32:1a:1182:G:N7	2.32	0.62
32:1a:1409:C:H2'	32:1a:1410:G:H8	1.63	0.62
36:1e:81:GLU:HB3	36:1e:90:VAL:HG22	1.82	0.62
40:1i:7:THR:O	40:1i:83:ARG:NH1	2.32	0.62
9:2N:53:VAL:HG22	9:2N:121:LYS:HB2	1.82	0.62
33:2b:140:HIS:O	33:2b:144:ARG:N	2.31	0.62
39:2h:21:LYS:O	39:2h:65:TYR:OH	2.17	0.62
1:1A:49:A:H4'	1:1A:50:U:H5''	1.80	0.61
1:1A:120:U:OP2	60:1A:4196:HOH:O	2.16	0.61
7:1H:3:ARG:HH22	7:1H:5:GLY:H	1.48	0.61
32:1a:674:G:H2'	32:1a:675:A:H8	1.64	0.61
32:1a:1401:G:N7	60:1a:3323:HOH:O	2.31	0.61
1:2A:240:G:O6	60:2A:3932:HOH:O	2.13	0.61
1:2A:256:A:H2'	1:2A:257:A:H8	1.64	0.61
32:2a:1517:G:H3'	32:2a:1518:MA6:H8	1.82	0.61
1:1A:86:C:H4'	1:1A:104:U:H1'	1.82	0.61
1:1A:880:G:H2'	1:1A:881:G:C8	2.35	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2625:G:O6	60:1A:4158:HOH:O	2.10	0.61
1:1A:2815:C:H2'	1:1A:2816:C:H6	1.65	0.61
32:1a:161:A:N1	32:1a:347:G:O2'	2.32	0.61
32:1a:1162:C:N4	32:1a:1174:G:H1	1.97	0.61
45:1n:4:LYS:HA	45:1n:7:ILE:HB	1.82	0.61
1:2A:1266:G:O5'	18:2W:15:ARG:NH2	2.33	0.61
32:2a:230:G:O2'	47:2p:25:ARG:NH2	2.33	0.61
35:2d:33:MET:HB2	59:2d:303:SF4:S2	2.40	0.61
38:2g:22:LEU:HG	38:2g:62:PHE:CE2	2.35	0.61
1:1A:624:C:O2'	1:1A:657:U:OP1	2.16	0.61
1:1A:1062:G:H5''	1:1A:1070:A:O2'	2.01	0.61
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.64	0.61
1:1A:2478:A:O2'	1:1A:2536:G:N2	2.32	0.61
1:2A:574:C:N3	4:2E:145:LYS:NZ	2.43	0.61
3:2D:85:ASP:OD2	3:2D:88:ARG:NH1	2.34	0.61
1:1A:1223:G:N2	1:1A:1226:A:OP2	2.34	0.61
3:1D:213:ARG:HD2	3:1D:217:ARG:O	1.99	0.61
32:1a:161:A:H2'	32:1a:162:A:H8	1.65	0.61
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.36	0.61
34:1c:117:ALA:HB2	34:1c:200:ALA:HB2	1.81	0.61
38:1g:102:ARG:HG2	38:1g:106:GLN:HE21	1.65	0.61
40:1i:47:LEU:HB3	40:1i:50:LEU:HD21	1.80	0.61
41:1j:27:ALA:HA	41:1j:81:THR:HG21	1.81	0.61
1:2A:1446:C:H42	1:2A:1465:G:H1	1.48	0.61
8:2I:77:LEU:HD12	8:2I:101:LEU:HG	1.82	0.61
50:2s:49:ILE:HD11	50:2s:71:LEU:HD21	1.82	0.61
1:1A:819:A:OP2	1:1A:1187:G:N2	2.27	0.61
16:1U:29:SER:OG	16:1U:30:LYS:NZ	2.24	0.61
18:1W:20:VAL:HA	18:1W:23:LEU:HD12	1.83	0.61
22:10:27:GLU:HG3	22:10:68:GLU:HA	1.81	0.61
32:1a:715:A:H2'	32:1a:716:A:C8	2.36	0.61
36:1e:148:VAL:HG21	39:1h:107:LEU:HG	1.82	0.61
39:1h:64:LYS:HB3	39:1h:79:VAL:HG21	1.81	0.61
1:2A:2010:G:O6	60:2A:3937:HOH:O	2.14	0.61
1:2A:2137:C:N4	1:2A:2154:G:N1	2.38	0.61
4:2E:119:ARG:HG3	4:2E:160:TYR:HB2	1.83	0.61
17:2V:1:MET:HG2	17:2V:42:GLY:HA3	1.81	0.61
32:2a:155:C:H2'	32:2a:156:G:H8	1.63	0.61
32:2a:348:G:H2'	32:2a:349:A:H8	1.65	0.61
1:1A:530:G:N1	1:1A:2023:G:OP1	2.25	0.61
3:1D:2:ALA:N	3:1D:200:ASP:OD2	2.34	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:562:C:H1'	43:1l:15:ARG:HB3	1.81	0.61
32:1a:719:C:H1'	49:1r:49:LYS:HG2	1.81	0.61
1:2A:70:G:O2'	1:2A:113:G:O2'	2.11	0.61
1:2A:1316:U:H2'	1:2A:1317:A:C8	2.36	0.61
1:2A:2323:G:O6	60:2A:3931:HOH:O	2.13	0.61
32:2a:539:A:H2'	32:2a:540:G:C8	2.36	0.61
46:2o:24:SER:O	46:2o:27:VAL:N	2.34	0.61
47:2p:40:ASP:OD1	47:2p:43:LYS:N	2.34	0.61
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.35	0.61
6:1G:53:LEU:O	6:1G:57:ALA:N	2.34	0.61
15:1T:60:THR:HG22	15:1T:77:PRO:HA	1.82	0.61
1:2A:195:A:N6	1:2A:198:C:OP2	2.34	0.61
32:2a:9:G:H2'	32:2a:10:A:H8	1.66	0.61
32:2a:1097:C:O2'	32:2a:1169:A:N3	2.30	0.61
40:2i:114:TYR:HD1	40:2i:114:TYR:H	1.49	0.61
44:2m:32:GLU:HA	44:2m:35:GLU:HB2	1.82	0.61
20:1Y:99:CYS:HB2	20:1Y:106:LEU:HD21	1.83	0.61
32:1a:1286:A:H2'	32:1a:1287:A:H4'	1.83	0.61
37:1f:38:GLU:HB2	37:1f:64:GLN:HG3	1.81	0.61
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.36	0.61
1:2A:2406:U:C2	11:2P:72:PRO:HG2	2.35	0.61
32:2a:1271:G:C2	32:2a:1272:G:N7	2.68	0.61
35:2d:76:ARG:NE	35:2d:80:GLU:OE2	2.34	0.61
46:2o:2:PRO:O	46:2o:38:ARG:NH2	2.32	0.61
1:1A:391:G:O2'	1:1A:410:G:OP1	2.16	0.61
1:1A:686:G:N2	1:1A:788:A:H61	1.97	0.61
1:1A:837:C:N4	60:1A:4199:HOH:O	2.16	0.61
1:1A:1480:G:H1	1:1A:1511:C:H42	1.49	0.61
12:1Q:103:MET:HE1	12:1Q:125:LEU:HD13	1.82	0.61
1:2A:1556:C:H2'	1:2A:1557:C:H6	1.66	0.61
1:2A:1889:A:H2'	1:2A:1890:A:C8	2.34	0.61
5:2F:155:LEU:HD23	5:2F:192:LEU:HD13	1.82	0.61
12:2Q:39:PRO:HD3	12:2Q:99:PRO:HG3	1.83	0.61
32:2a:1326:C:OP1	52:2u:17:THR:OG1	2.18	0.61
37:2f:62:TRP:CH2	37:2f:64:GLN:HB2	2.36	0.61
20:1Y:30:VAL:HG13	20:1Y:37:VAL:HG12	1.83	0.61
32:1a:711:G:OP1	37:1f:54:LYS:NZ	2.34	0.61
33:1b:68:ILE:HG12	33:1b:161:ALA:HB3	1.81	0.61
33:1b:85:ALA:O	33:1b:90:MET:N	2.31	0.61
44:1m:82:MET:HE2	44:1m:92:HIS:HB3	1.81	0.61
1:2A:942:G:OP2	11:2P:39:LYS:NZ	2.26	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1837:C:O2'	1:2A:1927:A:N3	2.27	0.61
1:2A:1980:G:O2'	1:2A:1982:C:OP2	2.18	0.61
1:2A:2319:G:H22	14:2S:3:ARG:HD2	1.66	0.61
1:2A:2659:G:N2	1:2A:2662:A:OP2	2.34	0.61
5:2F:188:ARG:HA	11:2P:3:LEU:HD11	1.83	0.61
25:23:7:LYS:HB2	25:23:34:GLU:HG3	1.83	0.61
32:2a:1467:G:O6	60:2a:1908:HOH:O	2.14	0.61
44:2m:107:ALA:HB3	44:2m:111:LYS:HE3	1.82	0.61
1:1A:11:G:H2'	1:1A:12:U:H5'	1.83	0.60
1:1A:1292:U:H2'	1:1A:1293:C:C6	2.35	0.60
1:1A:1325:G:OP1	60:1A:4195:HOH:O	2.16	0.60
1:1A:1668:A:N1	1:1A:1675:C:N4	2.49	0.60
1:1A:1918:A:O2'	1:1A:1920:4OC:N4	2.33	0.60
7:1H:103:LEU:HB3	7:1H:115:VAL:HB	1.82	0.60
8:1I:69:LYS:HA	8:1I:138:ILE:HG23	1.83	0.60
1:2A:577:G:O2'	1:2A:1254:A:OP1	2.18	0.60
1:2A:1183:G:H5''	25:23:30:ARG:HH22	1.66	0.60
2:2B:90:A:C5	2:2B:91:C:H1'	2.36	0.60
32:2a:310:G:H5'	47:2p:31:LYS:HB2	1.83	0.60
1:2A:675:A:N3	1:2A:2443:C:O2'	2.32	0.60
1:2A:752:A:H3'	29:27:1:MET:HE1	1.83	0.60
33:2b:157:ARG:NH2	33:2b:160:ASP:OD1	2.33	0.60
34:2c:180:ALA:HB1	34:2c:203:PHE:HE1	1.65	0.60
32:1a:189(F):U:O2	48:1q:63:ARG:NH1	2.34	0.60
32:1a:524:G:H2'	32:1a:525:C:C6	2.36	0.60
32:1a:679:C:H2'	32:1a:680:C:C6	2.36	0.60
32:1a:1327:C:OP2	52:1u:12:LYS:NZ	2.35	0.60
1:2A:271(Z):C:H1'	1:2A:272(C):G:H1'	1.82	0.60
1:2A:857:C:H4'	22:20:23:VAL:HG21	1.83	0.60
21:2Z:67:LEU:HD12	21:2Z:68:PRO:HD2	1.83	0.60
33:2b:32:ILE:HG21	33:2b:40:HIS:HD2	1.66	0.60
1:1A:139(A):G:O6	60:1A:4186:HOH:O	2.14	0.60
1:1A:592:G:O6	60:1A:4187:HOH:O	2.14	0.60
5:1F:132:VAL:HA	5:1F:138:GLU:HB3	1.83	0.60
15:1T:18:ASP:OD1	15:1T:18:ASP:N	2.32	0.60
19:1X:11:PRO:HA	19:1X:28:PHE:HA	1.84	0.60
32:1a:864:A:H2'	32:1a:865:A:C8	2.36	0.60
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.15	0.60
1:2A:2537:U:H2'	1:2A:2538:C:C6	2.37	0.60
1:2A:2562:U:H4'	10:2O:25:LEU:HD21	1.83	0.60
24:22:35:LEU:HB3	24:22:50:ILE:HD13	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:2m:113:PRO:O	44:2m:115:LYS:NZ	2.34	0.60
1:1A:1062:G:H1'	1:1A:1088:A:C8	2.36	0.60
29:17:18:PHE:CE2	29:17:22:MET:HG3	2.36	0.60
40:1i:84:ALA:O	40:1i:88:TYR:N	2.29	0.60
44:1m:13:LYS:HA	44:1m:44:ARG:HH11	1.67	0.60
1:2A:1359:A:N6	1:2A:1372:U:H3	1.97	0.60
23:21:7:ILE:HG23	23:21:98:LEU:HD11	1.82	0.60
32:2a:1252:A:H61	32:2a:1285:A:N6	1.99	0.60
21:1Z:80:ARG:HG2	21:1Z:82:ARG:HD3	1.82	0.60
32:1a:973:G:H3'	32:1a:974:A:H5''	1.83	0.60
33:1b:208:ILE:HA	33:1b:211:ILE:HD11	1.82	0.60
39:1h:120:THR:H	39:1h:123:GLU:HB2	1.66	0.60
40:1i:29:ASN:HD21	40:1i:65:VAL:H	1.49	0.60
1:2A:845:G:OP2	1:2A:845:G:N2	2.33	0.60
11:2P:124:LYS:HE3	11:2P:146:VAL:HG21	1.83	0.60
33:2b:223:ILE:HA	33:2b:226:ARG:HG2	1.82	0.60
39:2h:86:ILE:HG13	39:2h:133:LEU:HD22	1.84	0.60
41:2j:30:SER:O	41:2j:81:THR:OG1	2.19	0.60
1:1A:763:G:OP1	60:1A:4197:HOH:O	2.16	0.60
1:2A:657:U:H2'	1:2A:658:C:C6	2.36	0.60
1:2A:910:A:C5	12:2Q:13:GLN:HG3	2.37	0.60
1:2A:987:G:O2'	1:2A:1000:A:N3	2.29	0.60
32:2a:1263:C:N4	32:2a:1271:G:O6	2.34	0.60
35:2d:12:CYS:CB	59:2d:303:SF4:S2	2.89	0.60
36:2e:88:LYS:HD3	36:2e:123:LEU:HD12	1.82	0.60
1:1A:1426:G:O2'	1:1A:1572:A:N6	2.33	0.60
1:1A:1864:U:H2'	1:1A:1865:G:C8	2.36	0.60
1:1A:2249:U:O4	60:1A:4179:HOH:O	2.13	0.60
32:1a:674:G:H2'	32:1a:675:A:C8	2.37	0.60
32:1a:1037:C:H2'	32:1a:1038:C:C6	2.36	0.60
1:2A:271(H):G:H2'	1:2A:271(I):G:H8	1.67	0.60
1:2A:1019:U:H3	1:2A:1142(A):A:H62	1.50	0.60
1:2A:1525:G:H2'	1:2A:1526:G:C8	2.36	0.60
1:2A:2518:A:OP2	60:2A:3943:HOH:O	2.15	0.60
48:2q:66:SER:HB2	48:2q:69:LYS:HB2	1.84	0.60
1:1A:1062:G:H22	1:1A:1077:A:N6	1.97	0.60
1:1A:1798:U:H5'	3:1D:259:THR:HG23	1.83	0.60
1:1A:2134:A:O2'	1:1A:2135:A:OP1	2.15	0.60
1:1A:2529:G:O6	31:19:31:LYS:NZ	2.35	0.60
28:16:33:LYS:HD2	28:16:51:GLU:HG2	1.84	0.60
32:1a:1031:G:H2'	32:1a:1032:G:C8	2.37	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1063:C:H3'	32:1a:1064:G:H2'	1.84	0.60
36:1e:98:THR:HB	36:1e:117:ASP:HB3	1.84	0.60
14:2S:18:ILE:O	14:2S:21:THR:OG1	2.19	0.60
32:2a:458:C:O2	32:2a:473:G:N2	2.31	0.60
1:1A:1065:U:N3	1:1A:1070:A:OP1	2.34	0.60
5:1F:32:LEU:HD21	5:1F:105:VAL:HG22	1.84	0.60
32:1a:1320:C:H2'	32:1a:1321:C:O4'	2.02	0.60
47:1p:5:ARG:NH1	47:1p:23:ASP:O	2.35	0.60
1:2A:574:C:N4	1:2A:2034:U:OP1	2.35	0.60
10:2O:48:PRO:HB3	32:2a:1422:G:H5''	1.84	0.60
10:2O:49:ARG:NH1	32:2a:1422:G:O3'	2.31	0.60
32:2a:376:G:H2'	32:2a:377:G:C8	2.37	0.60
32:2a:1000:U:H2'	32:2a:1001:A:C8	2.34	0.60
36:2e:135:THR:O	36:2e:139:LEU:HG	2.02	0.60
37:2f:3:ARG:HB3	37:2f:93:SER:HB2	1.84	0.60
1:1A:431:U:H2'	1:1A:432:A:H8	1.67	0.59
1:1A:2125:G:N1	1:1A:2172:U:OP1	2.33	0.59
1:1A:2158:A:O2'	1:1A:2159:G:OP2	2.17	0.59
32:1a:255:G:O3'	48:1q:17:LYS:NZ	2.35	0.59
32:1a:324:G:N2	32:1a:327:A:OP2	2.33	0.59
32:1a:343:U:O2'	32:1a:346:G:O6	2.20	0.59
32:1a:1289:A:P	52:1u:10:ARG:HH22	2.25	0.59
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.83	0.59
1:2A:1021:A:H62	1:2A:1141:U:H3	1.49	0.59
11:2P:78:PRO:HB2	11:2P:111:ARG:HD2	1.82	0.59
50:2s:12:ASP:OD2	50:2s:37:ARG:NH1	2.34	0.59
1:1A:938:G:OP2	30:18:52:LYS:NZ	2.34	0.59
1:1A:1568:G:H5'	3:1D:60:ARG:HA	1.85	0.59
8:1I:132:PRO:HG3	8:1I:138:ILE:HD11	1.82	0.59
1:2A:514:A:N3	1:2A:581:C:O2'	2.34	0.59
1:2A:1487:G:H1	1:2A:1502:C:N4	1.99	0.59
1:2A:2127:G:O2'	1:2A:2173:A:N3	2.36	0.59
12:2Q:81:VAL:HB	22:20:7:LEU:HD22	1.85	0.59
32:2a:56:U:H2'	32:2a:57:G:C8	2.38	0.59
32:2a:1502:A:H5'	32:2a:1504:G:N7	2.16	0.59
35:2d:104:VAL:HG11	35:2d:140:VAL:HG21	1.84	0.59
44:2m:91:ARG:HA	44:2m:96:LEU:HB2	1.83	0.59
1:1A:642:G:OP1	60:1A:4194:HOH:O	2.16	0.59
1:1A:2286:A:H4'	1:1A:2287:A:O4'	2.03	0.59
2:1B:106:G:O6	60:1B:302:HOH:O	2.16	0.59
32:1a:987:G:H1	32:1a:1218:C:H42	1.50	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:398:G:H2'	1:2A:399:G:C8	2.37	0.59
1:2A:2401:U:OP1	28:26:18:ARG:NH2	2.35	0.59
6:2G:64:THR:HB	6:2G:94:LEU:HD21	1.83	0.59
32:2a:429:U:H1'	32:2a:430:A:H5''	1.84	0.59
38:2g:15:ASP:OD1	38:2g:20:ASP:N	2.29	0.59
41:2j:47:PHE:N	41:2j:63:PHE:O	2.35	0.59
1:1A:970:C:O2	1:1A:984:A:O2'	2.19	0.59
1:1A:1173:G:O2'	1:1A:1174:A:O4'	2.20	0.59
32:1a:401:C:H2'	32:1a:402:G:H8	1.67	0.59
34:1c:119:ARG:O	34:1c:123:GLN:N	2.30	0.59
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.37	0.59
1:2A:1449:A:C2	1:2A:1529:G:H1'	2.37	0.59
32:2a:438:G:O2'	32:2a:494:U:O4	2.19	0.59
38:2g:111:ARG:NH1	38:2g:113:GLU:OE2	2.36	0.59
47:2p:39:TYR:HB2	47:2p:49:LEU:HD13	1.84	0.59
1:1A:251:A:C5	1:1A:252:G:H1'	2.38	0.59
1:1A:1264:G:OP1	27:15:19:ARG:NH2	2.35	0.59
1:1A:2123:G:H2'	1:1A:2124:G:C8	2.36	0.59
6:1G:37:VAL:HG22	6:1G:159:VAL:HB	1.84	0.59
8:1I:29:TYR:HD2	8:1I:30:LEU:HD23	1.67	0.59
22:10:27:GLU:HB2	22:10:69:PHE:CD1	2.37	0.59
25:13:12:PRO:HB2	25:13:20:LYS:HG2	1.83	0.59
38:1g:140:ASP:HA	38:1g:143:ARG:HH21	1.67	0.59
1:2A:1983:C:OP1	60:2A:3944:HOH:O	2.16	0.59
1:2A:2391:G:O2'	1:2A:2424:C:N4	2.31	0.59
26:24:62:ARG:NH1	26:24:62:ARG:HA	2.18	0.59
32:2a:760:G:H3'	32:2a:761:G:H8	1.68	0.59
32:2a:806:C:H2'	32:2a:807:A:C8	2.38	0.59
34:2c:110:ASN:HD21	34:2c:140:ARG:HB3	1.66	0.59
1:1A:796:C:H2'	1:1A:797:C:C6	2.37	0.59
1:1A:848:G:H2'	1:1A:849:A:C8	2.37	0.59
1:1A:1827:C:H5'	1:1A:1971:A:H4'	1.85	0.59
32:1a:738:C:H2'	32:1a:739:C:H6	1.67	0.59
1:2A:301:G:O2'	1:2A:335:C:OP1	2.19	0.59
5:2F:143:ALA:HB1	5:2F:148:LEU:HB2	1.85	0.59
7:2H:17:VAL:HG13	7:2H:26:VAL:HG22	1.84	0.59
32:2a:984:C:H2'	32:2a:985:C:C6	2.37	0.59
32:2a:993:G:O2'	32:2a:994:A:N7	2.36	0.59
32:2a:1307:U:OP1	44:2m:101:GLN:NE2	2.36	0.59
44:2m:108:ARG:HD2	44:2m:114:ARG:HG2	1.84	0.59
49:2r:53:ARG:HA	49:2r:56:THR:HG1	1.67	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:2u:12:LYS:HB3	52:2u:22:ARG:HD3	1.83	0.59
1:1A:1671:U:O4	60:1A:4173:HOH:O	2.13	0.59
24:12:1:MET:HE2	24:12:5:GLU:HB3	1.85	0.59
36:1e:142:LEU:O	36:1e:143:ARG:NH1	2.35	0.59
1:2A:2578:G:OP1	1:2A:2614:A:N6	2.36	0.59
5:2F:154:VAL:HB	5:2F:173:VAL:HG22	1.84	0.59
6:2G:108:ASN:ND2	26:24:37:SER:OG	2.33	0.59
12:2Q:37:LEU:HD21	12:2Q:130:LYS:HB2	1.84	0.59
15:2T:106:SER:OG	15:2T:109:GLU:OE1	2.21	0.59
32:2a:988:G:H2'	32:2a:989:C:O4'	2.03	0.59
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.38	0.59
35:2d:187:ARG:NH1	35:2d:193:ASP:OD2	2.31	0.59
39:2h:7:ALA:HB2	39:2h:85:ARG:HG3	1.84	0.59
39:2h:103:VAL:HG21	39:2h:110:ALA:HB2	1.85	0.59
1:1A:776:G:N7	1:1A:793:A:O2'	2.36	0.59
1:1A:2100:G:H1	1:1A:2189:U:H3	1.51	0.59
1:1A:2362:G:OP1	30:18:44:LYS:NZ	2.30	0.59
32:1a:532:A:N1	34:1c:156:ARG:NH1	2.42	0.59
1:2A:2299:G:H2'	1:2A:2300:G:C8	2.37	0.59
4:2E:174:ASP:OD1	4:2E:175:VAL:N	2.35	0.59
13:2R:37:THR:HB	13:2R:39:PRO:HD2	1.83	0.59
39:2h:44:PHE:HD1	39:2h:80:ILE:HG12	1.66	0.59
1:1A:1316:U:H2'	1:1A:1317:A:C8	2.38	0.59
1:1A:1670:C:O2	4:1E:129:HIS:NE2	2.34	0.59
12:1Q:34:LEU:HB2	12:1Q:118:LEU:HD22	1.84	0.59
32:1a:111:G:H5''	47:1p:27:LYS:HB3	1.85	0.59
1:2A:1514:U:H2'	1:2A:1515:G:H8	1.68	0.59
4:2E:38:THR:HG1	4:2E:41:LYS:H	1.49	0.59
32:2a:976:G:N2	32:2a:1363:C:OP2	2.36	0.59
32:2a:1109:C:H2'	32:2a:1110:A:O4'	2.03	0.59
34:2c:40:ARG:HA	34:2c:43:LEU:HB3	1.85	0.59
1:1A:192:C:O2'	1:1A:802:A:N3	2.31	0.59
1:1A:1075:C:H2'	1:1A:1076:C:H2'	1.84	0.59
32:1a:401:C:H2'	32:1a:402:G:C8	2.38	0.59
38:1g:50:ILE:HG23	38:1g:58:PRO:HB3	1.85	0.59
47:1p:74:LEU:HD23	47:1p:79:VAL:HG11	1.85	0.59
1:2A:8:A:H2'	1:2A:9:U:H6	1.67	0.59
33:2b:76:GLN:NE2	33:2b:206:ASP:O	2.32	0.59
34:2c:6:HIS:CD2	34:2c:8:ILE:H	2.21	0.59
39:2h:10:LEU:HD13	39:2h:83:ILE:HG12	1.84	0.59
1:1A:489:G:O6	18:1W:49:LYS:NZ	2.35	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:636:G:O2'	1:1A:638:G:O2'	2.16	0.58
2:1B:12:C:O2'	2:1B:13:A:OP2	2.19	0.58
32:1a:166:G:H2'	32:1a:167:G:H8	1.68	0.58
32:1a:546:G:O2'	32:1a:548:G:O2'	2.18	0.58
40:1i:26:VAL:HB	40:1i:33:PHE:HB2	1.85	0.58
40:1i:42:ARG:NH1	40:1i:71:SER:OG	2.36	0.58
42:1k:85:ARG:HD3	42:1k:113:PRO:HD3	1.84	0.58
1:2A:568:U:H5'	1:2A:945:A:N1	2.18	0.58
1:2A:2131:G:H4'	1:2A:2132:U:H3'	1.85	0.58
1:2A:2189:U:H2'	1:2A:2190:G:C8	2.38	0.58
1:2A:2705:A:O2'	1:2A:2852:G:OP1	2.16	0.58
32:2a:853:G:N7	60:2a:1920:HOH:O	2.32	0.58
32:2a:931:C:N4	32:2a:1386:G:H1	1.98	0.58
50:2s:18:LYS:HB2	50:2s:31:ILE:HD13	1.85	0.58
32:1a:116:A:H61	32:1a:313:A:H1'	1.67	0.58
32:1a:153:C:N4	32:1a:169:C:H42	2.00	0.58
41:1j:42:THR:HG21	41:1j:66:ARG:HD2	1.84	0.58
1:2A:259:G:O2'	1:2A:621:A:O2'	2.19	0.58
1:2A:631:A:N3	1:2A:2415:G:O2'	2.32	0.58
1:2A:800:A:H8	1:2A:800:A:OP1	1.86	0.58
1:1A:579:G:O2'	1:1A:2019:A:OP1	2.19	0.58
1:1A:1770:G:OP1	60:1A:4198:HOH:O	2.16	0.58
20:1Y:43:ASN:HB3	20:1Y:65:ALA:HB3	1.83	0.58
32:1a:1517:G:N7	32:1a:1518:MA6:H103	2.18	0.58
3:2D:228:PRO:O	60:2D:401:HOH:O	2.17	0.58
4:2E:38:THR:OG1	4:2E:41:LYS:N	2.31	0.58
31:29:10:ILE:HD12	31:29:32:HIS:HA	1.85	0.58
32:2a:1320:C:H5'	50:2s:70:LYS:HG3	1.84	0.58
34:2c:36:ASP:HA	34:2c:39:ILE:HD12	1.85	0.58
40:2i:112:LYS:NZ	40:2i:113:LYS:O	2.36	0.58
2:1B:89:G:OP1	60:1B:304:HOH:O	2.17	0.58
20:1Y:35:TYR:CE2	20:1Y:69:ALA:HB3	2.38	0.58
21:1Z:93:ASP:HA	21:1Z:131:ARG:HH12	1.68	0.58
24:12:16:LEU:HD22	24:12:20:GLU:HB3	1.86	0.58
32:1a:233:C:H2'	32:1a:234:C:H6	1.67	0.58
44:1m:94:ARG:HB2	44:1m:96:LEU:HD12	1.85	0.58
1:2A:882:G:H1	1:2A:894:C:N4	2.01	0.58
1:2A:1594:G:H2'	1:2A:1595:G:C8	2.38	0.58
1:2A:1702:G:H2'	1:2A:1703:G:O4'	2.04	0.58
7:2H:30:LYS:HB2	7:2H:79:VAL:HA	1.84	0.58
32:2a:130:A:N3	32:2a:263:A:O2'	2.35	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:176:C:OP1	51:2t:29:LYS:NZ	2.27	0.58
32:2a:1151:A:O2'	32:2a:1152:A:O5'	2.22	0.58
1:1A:143:G:H1'	19:1X:37:THR:HG21	1.86	0.58
1:1A:1016:G:N7	60:1A:4307:HOH:O	2.32	0.58
1:1A:2590:A:O2'	60:1A:4145:HOH:O	2.08	0.58
32:1a:8:A:H5'	36:1e:101:ILE:HG22	1.85	0.58
32:1a:36:C:OP1	43:1l:123:LYS:NZ	2.35	0.58
32:1a:714:G:H2'	32:1a:715:A:C8	2.39	0.58
35:1d:64:LEU:HD22	35:1d:198:VAL:HG21	1.86	0.58
11:2P:81:GLN:HB2	11:2P:110:TYR:HD1	1.69	0.58
32:2a:56:U:H2'	32:2a:57:G:H8	1.68	0.58
32:2a:433:C:H2'	32:2a:434:U:C6	2.38	0.58
32:2a:1203:C:H2'	32:2a:1204:A:H8	1.69	0.58
1:1A:184:C:O2'	1:1A:217:G:N3	2.29	0.58
1:1A:1174:A:H4'	1:1A:1175:U:OP1	2.04	0.58
1:1A:1658:C:H42	1:1A:2002:G:H1	1.49	0.58
1:1A:2746:U:OP1	7:1H:85:LYS:NZ	2.36	0.58
7:1H:124:GLU:HB2	7:1H:132:ARG:HB3	1.84	0.58
32:1a:309:G:H2'	32:1a:310:G:H8	1.69	0.58
32:1a:631:G:H2'	32:1a:632:A:C8	2.37	0.58
36:1e:144:THR:HG23	36:1e:147:ASP:H	1.68	0.58
39:1h:87:SER:HB2	39:1h:93:VAL:HB	1.86	0.58
28:26:25:LYS:NZ	28:26:30:THR:O	2.32	0.58
1:1A:567:A:OP2	11:1P:29:LYS:NZ	2.36	0.58
1:1A:989:G:OP2	25:13:11:SER:OG	2.20	0.58
1:1A:1466:G:H2'	1:1A:1547:C:N4	2.19	0.58
1:1A:1514:U:H2'	1:1A:1515:G:C8	2.38	0.58
1:1A:1825:A:H2'	1:1A:1826:G:H8	1.68	0.58
1:1A:2659:G:O6	60:1A:4171:HOH:O	2.12	0.58
1:1A:2690:C:OP1	13:1R:17:ARG:NH2	2.37	0.58
3:1D:260:ARG:NH2	3:1D:266:SER:HB2	2.19	0.58
33:1b:131:PRO:O	33:1b:135:GLN:N	2.36	0.58
37:1f:1:MET:HE3	37:1f:66:GLU:HG2	1.85	0.58
41:1j:9:ARG:HD3	41:1j:69:ASN:HD22	1.68	0.58
44:1m:87:TYR:O	44:1m:91:ARG:HG2	2.03	0.58
1:2A:607:U:OP1	5:2F:102:PRO:HA	2.04	0.58
1:2A:1579:A:H2'	1:2A:1580:A:C8	2.39	0.58
3:2D:206:LEU:O	3:2D:211:ARG:HD3	2.03	0.58
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.86	0.58
5:2F:102:PRO:HB2	5:2F:105:VAL:HG23	1.84	0.58
1:1A:301:G:OP2	20:1Y:84:ARG:NH2	2.37	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:448:U:OP2	60:1A:4200:HOH:O	2.17	0.58
1:1A:1355:G:OP1	3:1D:38:LYS:NZ	2.30	0.58
1:1A:1788:C:OP1	3:1D:222:ARG:NH2	2.31	0.58
1:1A:2747:G:OP1	7:1H:138:LYS:NZ	2.36	0.58
4:1E:76:ARG:HB3	4:1E:77:ILE:HD12	1.85	0.58
32:1a:96:U:H2'	32:1a:97:G:C8	2.39	0.58
32:1a:201:C:H42	32:1a:216:G:H1	1.50	0.58
32:1a:560:U:OP2	60:1a:3309:HOH:O	2.17	0.58
32:1a:656:C:O2'	46:1o:28:GLN:NE2	2.37	0.58
32:1a:831:U:H2'	32:1a:832:C:C6	2.38	0.58
3:2D:89:SER:HB2	3:2D:201:HIS:CD2	2.39	0.58
3:2D:177:LEU:HD11	3:2D:183:ARG:HD2	1.86	0.58
21:2Z:5:LEU:HB2	21:2Z:47:VAL:HG21	1.86	0.58
32:2a:1347:G:C8	40:2i:107:ARG:HB3	2.39	0.58
37:2f:13:ASN:ND2	37:2f:55:ASP:OD2	2.36	0.58
37:2f:41:GLU:OE1	49:2r:35:ARG:NH1	2.18	0.58
1:1A:607:U:OP1	5:1F:102:PRO:HA	2.04	0.58
1:1A:1255:U:O5'	1:1A:1256:G:H5''	2.02	0.58
1:1A:2292:C:P	14:1S:17:ARG:HH21	2.26	0.58
6:1G:38:VAL:HG22	6:1G:93:THR:HA	1.86	0.58
32:1a:1002:G:N1	32:1a:1004:A:H1'	2.19	0.58
33:1b:200:ILE:HG22	33:1b:202:PRO:HD3	1.86	0.58
1:2A:144:C:H5'	19:2X:2:LYS:HE2	1.84	0.58
1:2A:509:C:OP1	60:2A:3947:HOH:O	2.17	0.58
1:2A:1525:G:H2'	1:2A:1526:G:H8	1.67	0.58
1:2A:2627:G:O2'	1:2A:2781:A:N1	2.35	0.58
7:2H:98:LEU:HD21	7:2H:123:PHE:HB2	1.85	0.58
8:2I:2:LYS:HG2	8:2I:18:VAL:HG12	1.86	0.58
32:2a:117:G:OP2	60:2a:1911:HOH:O	2.17	0.58
32:2a:1373:G:H5''	38:2g:36:LYS:HD2	1.85	0.58
36:2e:50:GLU:HB2	36:2e:53:LEU:HD13	1.86	0.58
42:2k:62:GLN:HB2	42:2k:93:GLN:HG3	1.86	0.58
1:1A:1721:G:H3'	1:1A:1722:A:H5''	1.86	0.58
1:1A:2839:G:N2	13:1R:91:GLN:O	2.33	0.58
32:1a:1353:G:H2'	32:1a:1354:C:H6	1.69	0.58
32:1a:1412:C:H2'	32:1a:1413:A:C8	2.38	0.58
41:1j:9:ARG:HB2	41:1j:95:GLU:HB3	1.86	0.58
1:2A:729:G:C6	3:2D:208:LYS:HB2	2.39	0.58
1:2A:1184:G:OP1	25:23:30:ARG:NE	2.37	0.58
1:2A:2130:U:O2	1:2A:2134:A:O2'	2.22	0.58
1:2A:2747:G:OP1	7:2H:138:LYS:NZ	2.33	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:2H:105:LEU:HB2	7:2H:113:VAL:HB	1.86	0.58
32:2a:127:G:HO2'	48:2q:2:PRO:N	2.01	0.58
32:2a:533:A:O2'	32:2a:535:A:OP2	2.17	0.58
32:2a:643:C:H2'	32:2a:644:G:H8	1.68	0.58
48:2q:59:ILE:HG22	48:2q:73:VAL:HA	1.86	0.58
1:1A:994:C:H3'	16:1U:54:LYS:HE3	1.86	0.57
1:1A:2070:G:OP1	60:1A:4201:HOH:O	2.17	0.57
18:1W:21:VAL:HG21	18:1W:76:VAL:HG23	1.85	0.57
1:2A:2417:C:P	11:2P:65:ARG:HH21	2.27	0.57
7:2H:97:ARG:NH2	7:2H:104:GLU:OE1	2.36	0.57
20:2Y:14:LEU:HB2	20:2Y:75:ILE:HD11	1.86	0.57
35:2d:102:ASP:HB2	35:2d:118:ARG:HG2	1.84	0.57
1:1A:1685:C:H42	1:1A:1703:G:H1	1.51	0.57
2:1B:11:C:OP1	22:10:72:ARG:NH1	2.37	0.57
3:1D:71:ASP:HB3	3:1D:103:ARG:HH12	1.68	0.57
6:1G:56:ALA:HB2	6:1G:153:ARG:HE	1.70	0.57
32:1a:364:A:H2'	32:1a:365:U:O2	2.04	0.57
32:1a:737:A:H5''	37:1f:92:LYS:HG3	1.86	0.57
42:1k:105:VAL:O	42:1k:107:SER:N	2.37	0.57
1:2A:330:A:H2	1:2A:1210:A:H2'	1.68	0.57
1:2A:1203:G:H2'	1:2A:1204:A:C2	2.38	0.57
32:2a:1104:G:H4'	33:2b:111:ARG:HH21	1.68	0.57
34:2c:66:VAL:HG12	34:2c:68:VAL:HG23	1.86	0.57
2:1B:11:C:H3'	2:1B:12:C:C6	2.40	0.57
3:1D:71:ASP:CG	3:1D:103:ARG:HH22	2.12	0.57
26:14:55:ARG:H	26:14:56:VAL:HA	1.69	0.57
33:1b:16:HIS:CG	33:1b:17:PHE:N	2.72	0.57
35:1d:3:ARG:HD3	35:1d:118:ARG:HD2	1.86	0.57
1:2A:1658:C:OP1	60:2E:401:HOH:O	2.16	0.57
1:2A:1894:C:H2'	1:2A:1895:C:H6	1.69	0.57
1:2A:2304:G:H22	1:2A:2312:U:H3	1.52	0.57
3:2D:4:LYS:HB3	3:2D:18:VAL:HG23	1.85	0.57
4:2E:126:PRO:HG2	4:2E:131:ALA:HB2	1.86	0.57
6:2G:115:ARG:NH2	44:2m:6:GLY:O	2.37	0.57
32:2a:1291:G:H5'	38:2g:37:ASN:HD21	1.69	0.57
32:2a:1497:G:H2'	32:2a:1498:UR3:H6	1.85	0.57
1:1A:1843:C:H5''	3:1D:257:LEU:HD13	1.86	0.57
24:12:22:GLU:OE2	24:12:68:ARG:NH2	2.38	0.57
30:18:9:GLY:O	30:18:13:ARG:NH1	2.35	0.57
32:1a:1467:G:O6	60:1a:3308:HOH:O	2.16	0.57
50:1s:20:LEU:HA	50:1s:23:ASN:HD21	1.69	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1003:G:O2'	1:2A:1010:A:N1	2.35	0.57
1:2A:1355:G:O6	60:2A:3946:HOH:O	2.16	0.57
1:2A:1434:A:H61	1:2A:1558:A:H62	1.52	0.57
1:2A:2334:G:H5'	14:2S:9:ARG:HG2	1.86	0.57
5:2F:63:LYS:NZ	5:2F:75:HIS:O	2.36	0.57
21:2Z:53:ILE:HG22	21:2Z:71:VAL:HB	1.87	0.57
32:2a:67:C:H2'	32:2a:68:G:C8	2.39	0.57
32:2a:189(A):C:H2'	32:2a:189(B):C:C6	2.39	0.57
32:2a:1030(A):G:C2	32:2a:1030(C):G:H5''	2.39	0.57
32:2a:1137:C:H5''	32:2a:1138:G:OP1	2.04	0.57
1:1A:2206:G:H5''	1:1A:2207:G:N7	2.18	0.57
1:1A:2567:G:H2'	1:1A:2568:C:C6	2.39	0.57
26:14:7:PRO:HB2	26:14:27:THR:HG21	1.87	0.57
32:1a:542:G:OP1	35:1d:10:ARG:NH2	2.29	0.57
33:1b:55:PHE:HA	33:1b:58:ILE:HB	1.86	0.57
1:2A:1395:A:OP1	60:2A:3909:HOH:O	2.17	0.57
41:2j:57:LYS:HE3	41:2j:60:ARG:NH2	2.20	0.57
43:2l:28:LYS:HB3	43:2l:33:ARG:HH21	1.69	0.57
1:1A:534:U:O2'	16:1U:49:HIS:ND1	2.30	0.57
1:1A:885:C:H2'	1:1A:890:A:N6	2.18	0.57
1:1A:911:A:H2'	12:1Q:9:TYR:OH	2.03	0.57
9:1N:21:LYS:NZ	9:1N:140:VAL:OXT	2.32	0.57
14:1S:39:ILE:HB	14:1S:49:VAL:HG13	1.87	0.57
24:12:63:VAL:HA	24:12:66:GLU:HB3	1.86	0.57
26:14:16:CYS:HB2	26:14:36:CYS:HB3	1.86	0.57
44:1m:89:GLY:O	44:1m:93:ARG:N	2.38	0.57
1:2A:332:A:O2'	1:2A:334:C:OP2	2.18	0.57
1:2A:1384:A:N3	1:2A:1405:U:H1'	2.18	0.57
4:2E:14:ILE:HG13	4:2E:21:VAL:HG13	1.85	0.57
32:2a:662:G:H2'	32:2a:663:A:H8	1.68	0.57
32:2a:750:G:N2	46:2o:28:GLN:OE1	2.38	0.57
32:2a:1518:MA6:N6	32:2a:1519:MA6:H103	2.20	0.57
37:2f:23:LYS:HA	37:2f:26:ILE:HD12	1.85	0.57
1:1A:297:C:OP1	20:1Y:87:LYS:NZ	2.31	0.57
1:1A:994:C:O2'	1:1A:996:A:OP1	2.19	0.57
1:1A:1020:A:N1	1:1A:1141:U:O2'	2.36	0.57
1:1A:1042:G:H1	1:1A:1113:U:H3	1.53	0.57
1:1A:1814:G:H5''	3:1D:54:ARG:HH21	1.69	0.57
1:1A:2292:C:OP1	14:1S:17:ARG:NH2	2.38	0.57
4:1E:110:GLY:HA2	4:1E:161:GLY:HA3	1.87	0.57
32:1a:380:G:H2'	32:1a:381:C:H5''	1.85	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:10:G:H2'	1:2A:11:G:C8	2.40	0.57
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.39	0.57
10:2O:78:ARG:NE	15:2T:73:GLU:OE1	2.29	0.57
32:2a:45:U:H2'	32:2a:46:G:H8	1.70	0.57
39:2h:25:ASP:OD2	39:2h:60:ARG:NH2	2.38	0.57
1:1A:540:C:H2'	1:1A:541:C:H6	1.69	0.57
2:1B:66:A:H61	2:1B:109:C:H5''	1.69	0.57
8:1I:109:ILE:HG13	8:1I:130:TYR:CZ	2.38	0.57
32:1a:575:G:H1	32:1a:880:C:H42	1.53	0.57
32:1a:1133:G:H1	32:1a:1141:C:H42	1.51	0.57
32:1a:1164:G:H1	32:1a:1172:C:N4	2.02	0.57
32:1a:1277:C:O2'	32:1a:1279:A:H1'	2.04	0.57
51:1t:64:ASP:OD2	51:1t:81:LYS:NZ	2.31	0.57
1:2A:302:C:OP2	20:2Y:73:ARG:NH1	2.28	0.57
1:2A:709:U:H2'	1:2A:710:G:C8	2.40	0.57
1:2A:1383:C:N3	60:2A:3997:HOH:O	2.33	0.57
1:2A:2415:G:H4'	11:2P:67:MET:N	2.19	0.57
1:2A:2643:G:H2'	1:2A:2644:G:O4'	2.04	0.57
11:2P:3:LEU:H	11:2P:3:LEU:HD12	1.68	0.57
11:2P:85:LEU:HA	11:2P:88:LEU:HD12	1.86	0.57
32:2a:501:C:H2'	32:2a:502:G:H8	1.69	0.57
32:2a:1312:G:H5'	50:2s:5:LEU:HD12	1.87	0.57
33:2b:195:ASP:O	39:2h:68:ARG:NH2	2.38	0.57
6:1G:64:THR:HB	6:1G:94:LEU:HD11	1.87	0.57
7:1H:74:ASN:ND2	7:1H:83:TYR:OH	2.33	0.57
1:2A:1561:G:H2'	1:2A:1562:A:C8	2.39	0.57
1:2A:2243:U:H2'	1:2A:2244:U:C6	2.40	0.57
32:2a:1226:C:H4'	50:2s:80:TYR:OH	2.05	0.57
23:11:12:PRO:HB2	23:11:41:ARG:HH21	1.70	0.57
32:1a:1458:G:OP1	51:1t:35:THR:OG1	2.22	0.57
35:1d:89:THR:H	36:1e:97:GLY:HA3	1.70	0.57
1:2A:851:U:OP1	25:23:49:LYS:NZ	2.38	0.57
1:2A:1466:G:H2'	1:2A:1547:C:N4	2.19	0.57
1:2A:2630:G:N2	1:2A:2788:C:N3	2.53	0.57
1:2A:2784:C:H2'	1:2A:2785:C:H6	1.69	0.57
5:2F:122:LYS:NZ	5:2F:152:GLU:OE2	2.34	0.57
11:2P:138:LEU:HG	11:2P:143:GLY:HA3	1.86	0.57
26:24:53:GLU:HG2	26:24:54:GLY:H	1.70	0.57
32:2a:512:U:H3	32:2a:539:A:H61	1.53	0.57
32:2a:619:U:N3	35:2d:134:ASP:OD1	2.38	0.57
32:2a:662:G:O2'	32:2a:836:G:OP1	2.23	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1030(A):G:H21	32:2a:1030(C):G:H3'	1.70	0.57
39:2h:54:ASP:OD1	39:2h:54:ASP:N	2.37	0.57
51:2t:57:ARG:HH12	51:2t:100:ILE:HB	1.69	0.57
1:1A:884:C:N4	1:1A:893:C:N3	2.51	0.56
1:1A:1203:G:O2'	1:1A:1242:A:N6	2.33	0.56
1:1A:1933:G:H1	1:1A:1967:C:H42	1.52	0.56
1:1A:2258:C:N4	60:1A:4346:HOH:O	2.37	0.56
32:1a:1143:G:H2'	32:1a:1144:G:C8	2.40	0.56
32:1a:1211:U:H5''	32:1a:1213:A:H5'	1.87	0.56
1:2A:534:U:OP1	16:2U:24:TYR:OH	2.15	0.56
1:2A:1180:C:H2'	1:2A:1181:C:H6	1.69	0.56
1:2A:1668:A:OP1	10:2O:5:GLN:NE2	2.38	0.56
2:2B:37:C:O2	14:2S:95:HIS:NE2	2.38	0.56
32:2a:666:G:O6	60:2a:1910:HOH:O	2.15	0.56
32:2a:757:U:H2'	32:2a:758:G:O4'	2.05	0.56
32:2a:1105:A:H2'	32:2a:1106:G:C8	2.40	0.56
39:2h:73:ASP:OD1	39:2h:75:ARG:NH1	2.38	0.56
39:2h:86:ILE:HG12	39:2h:135:CYS:HA	1.87	0.56
1:1A:956:G:H2'	1:1A:957:A:H2'	1.85	0.56
1:1A:958:U:O2	2:1B:90:A:O2'	2.17	0.56
1:1A:1231:G:H2'	1:1A:1232:G:C8	2.40	0.56
1:1A:2441:C:OP2	1:1A:2586:C:O2'	2.23	0.56
1:1A:2837:G:N7	60:1A:4308:HOH:O	2.32	0.56
4:1E:149:ARG:NH1	60:1E:403:HOH:O	2.37	0.56
7:1H:28:GLY:HA3	7:1H:79:VAL:HB	1.86	0.56
12:1Q:50:ALA:HB1	12:1Q:121:ALA:HB1	1.87	0.56
12:1Q:110:THR:HG23	12:1Q:113:GLN:HG3	1.88	0.56
21:1Z:153:SER:HA	21:1Z:167:PRO:HB3	1.87	0.56
30:18:26:LYS:HG2	30:18:46:ARG:O	2.05	0.56
32:1a:376:G:H1	32:1a:387:U:H3	1.51	0.56
32:1a:1131:G:OP1	40:1i:20:ARG:NH2	2.35	0.56
32:1a:1143:G:H2'	32:1a:1144:G:H8	1.70	0.56
39:1h:103:VAL:HG21	39:1h:110:ALA:HB2	1.87	0.56
40:1i:16:ARG:HB2	40:1i:64:THR:HG22	1.87	0.56
5:2F:110:LEU:HD21	5:2F:181:LEU:HD23	1.88	0.56
23:21:80:LEU:HB3	23:21:82:LEU:HG	1.87	0.56
32:2a:176:C:H2'	32:2a:177:C:H6	1.69	0.56
32:2a:1030(B):C:N4	32:2a:1030(C):G:H21	2.03	0.56
32:2a:1272:G:N2	32:2a:1273:G:C8	2.73	0.56
1:1A:414:C:H4'	1:1A:1879:C:O2	2.04	0.56
1:1A:414:C:H2'	1:1A:415:A:C8	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:729:G:O5'	3:1D:208:LYS:NZ	2.32	0.56
6:1G:32:PRO:HB3	6:1G:163:ALA:HB2	1.87	0.56
6:1G:66:GLN:OE1	6:1G:98:ARG:NH1	2.37	0.56
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.85	0.56
11:1P:95:VAL:HG23	11:1P:100:LEU:HD11	1.87	0.56
15:1T:22:PHE:HB3	15:1T:88:ILE:HD11	1.88	0.56
28:16:6:ARG:NH1	28:16:26:ASN:HB2	2.20	0.56
32:1a:7:G:H8	36:1e:119:LEU:HD23	1.70	0.56
32:1a:264:U:O2'	48:1q:64:PRO:O	2.23	0.56
32:1a:439:A:OP2	32:1a:493:G:N1	2.38	0.56
35:1d:12:CYS:SG	35:1d:19:LEU:N	2.78	0.56
39:1h:14:ARG:HH21	39:1h:83:ILE:HG23	1.69	0.56
40:1i:29:ASN:HD21	40:1i:65:VAL:N	2.03	0.56
40:1i:128:ARG:NH1	54:1x:35:A:OP2	2.38	0.56
1:2A:687:C:H5''	29:27:2:LYS:HE2	1.87	0.56
1:2A:827:U:O2'	1:2A:2068:U:C2	2.57	0.56
1:2A:1913:A:H62	32:2a:1493:A:H2'	1.69	0.56
1:2A:1923:U:O2'	54:2x:12:G:H1'	2.05	0.56
3:2D:16:MET:HG3	3:2D:207:GLY:HA3	1.87	0.56
3:2D:26:LYS:NZ	3:2D:28:GLU:O	2.37	0.56
7:2H:54:ARG:NE	7:2H:57:ASP:OD1	2.38	0.56
14:2S:7:TYR:CZ	14:2S:91:PRO:HG3	2.41	0.56
32:2a:563:A:H2'	32:2a:567:G:C8	2.40	0.56
32:2a:1270:C:H2'	32:2a:1271:G:H8	1.69	0.56
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.06	0.56
43:2l:110:VAL:HB	43:2l:113:ARG:HB2	1.85	0.56
1:1A:632:A:H2'	1:1A:633:A:C8	2.40	0.56
1:1A:2076:U:OP2	1:1A:2238:G:N2	2.31	0.56
1:1A:2227:A:OP2	60:1A:4202:HOH:O	2.18	0.56
22:10:12:ASN:HA	22:10:14:ARG:NH2	2.21	0.56
37:1f:37:VAL:HA	37:1f:65:VAL:HG12	1.87	0.56
38:1g:121:ALA:O	38:1g:125:MET:HG3	2.05	0.56
1:2A:1756:G:H4'	1:2A:1758:G:O4'	2.06	0.56
34:2c:150:LYS:HB2	34:2c:173:VAL:HG21	1.87	0.56
1:1A:2887:U:H2'	1:1A:2888:C:C6	2.41	0.56
14:1S:34:HIS:HB2	14:1S:36:TYR:HE2	1.69	0.56
33:1b:189:ASP:HB3	33:1b:204:ASN:HA	1.88	0.56
33:1b:223:ILE:HA	33:1b:226:ARG:HG2	1.88	0.56
36:1e:5:ASP:OD1	36:1e:5:ASP:N	2.38	0.56
1:2A:2758:A:OP2	60:2A:3948:HOH:O	2.17	0.56
2:2B:103:G:O6	60:2B:301:HOH:O	2.16	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1002:G:H4'	32:2a:1002:G:OP1	2.05	0.56
39:2h:121:ASP:OD1	39:2h:121:ASP:N	2.39	0.56
52:2u:3:LYS:HB3	52:2u:14:TRP:CD1	2.41	0.56
1:1A:1565:C:OP1	3:1D:4:LYS:NZ	2.38	0.56
1:1A:1833:U:O2'	1:1A:1969:A:N1	2.33	0.56
1:1A:2110:G:C2	1:1A:2120:G:H1'	2.41	0.56
1:1A:2418:A:H2'	1:1A:2419:U:C6	2.41	0.56
15:1T:74:ARG:HG2	15:1T:76:PHE:CE2	2.40	0.56
47:1p:4:ILE:N	47:1p:65:GLN:O	2.30	0.56
1:2A:1561:G:H2'	1:2A:1562:A:H8	1.70	0.56
1:2A:1941:C:C5	1:2A:1942:5MC:HM52	2.40	0.56
1:2A:2294:C:P	14:2S:89:ARG:HH22	2.29	0.56
1:2A:2472:G:H2'	1:2A:2475:C:H42	1.69	0.56
23:21:80:LEU:HD23	23:21:82:LEU:HD21	1.87	0.56
32:2a:348:G:H2'	32:2a:349:A:C8	2.40	0.56
32:2a:1273:G:H3'	32:2a:1274:G:H8	1.70	0.56
35:2d:108:LEU:HD11	35:2d:174:LEU:HD22	1.86	0.56
37:2f:33:TYR:HB2	37:2f:75:LEU:HD12	1.87	0.56
39:2h:29:SER:HB3	39:2h:32:LYS:HG3	1.86	0.56
5:1F:25:PRO:HD2	5:1F:115:ALA:HB2	1.88	0.56
32:1a:542:G:H5''	35:1d:40:PRO:O	2.05	0.56
32:1a:850:U:H2'	32:1a:851:G:H8	1.71	0.56
32:1a:1329:A:H5''	44:1m:26:GLY:H	1.70	0.56
1:2A:244:A:H4'	11:2P:74:GLU:HB2	1.88	0.56
1:2A:598:G:N2	5:2F:35:GLU:OE2	2.36	0.56
1:2A:997:G:OP2	16:2U:58:ARG:NH1	2.38	0.56
1:2A:1814:G:OP1	3:2D:40:THR:OG1	2.22	0.56
20:2Y:13:VAL:HG12	20:2Y:74:PRO:HA	1.88	0.56
29:27:24:THR:HG23	29:27:27:GLY:H	1.70	0.56
35:2d:101:LEU:HA	35:2d:104:VAL:HG12	1.88	0.56
1:1A:685:A:OP1	1:1A:686:G:N2	2.39	0.56
32:1a:969:A:H4'	41:1j:55:LYS:NZ	2.20	0.56
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.38	0.56
46:1o:26:GLU:HG3	46:1o:81:LEU:HD22	1.87	0.56
37:2f:28:ARG:O	37:2f:32:ASN:ND2	2.38	0.56
38:2g:70:LYS:O	38:2g:138:LYS:NZ	2.35	0.56
1:1A:787:U:H5''	1:1A:788:A:H5'	1.87	0.56
1:1A:1064:C:N3	1:1A:1074:G:O6	2.39	0.56
3:2D:143:HIS:ND1	3:2D:194:GLY:O	2.39	0.56
15:2T:47:GLY:HA3	15:2T:64:ARG:O	2.06	0.56
32:2a:600:C:OP1	39:2h:97:VAL:N	2.36	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1290:G:O3'	38:2g:37:ASN:ND2	2.39	0.56
35:2d:123:HIS:O	35:2d:125:HIS:N	2.39	0.56
1:1A:247:G:H4'	1:1A:386:G:C6	2.40	0.56
1:1A:2470:G:OP1	12:1Q:56:ARG:NH2	2.39	0.56
3:1D:264:LYS:O	3:1D:267:SER:OG	2.24	0.56
17:1V:46:VAL:HG12	17:1V:52:VAL:HG11	1.88	0.56
32:1a:393:A:OP2	47:1p:12:LYS:NZ	2.30	0.56
1:2A:83:G:H1	1:2A:102:G:HO2'	1.54	0.56
1:2A:422:A:H2'	1:2A:423:A:C8	2.41	0.56
1:2A:776:G:N7	1:2A:793:A:O2'	2.39	0.56
42:2k:27:ASN:OD1	42:2k:28:THR:N	2.38	0.56
50:2s:38:SER:HB2	50:2s:71:LEU:HD13	1.87	0.56
1:1A:1851:U:H3	1:1A:1891:G:H1	1.54	0.55
1:1A:2626:C:H42	1:1A:2777:G:H1	1.54	0.55
1:1A:2853:C:H42	1:1A:2864:G:H1	1.54	0.55
10:1O:36:GLY:HA3	10:1O:109:LYS:HG3	1.88	0.55
19:1X:54:VAL:HG22	19:1X:81:VAL:HG12	1.87	0.55
24:12:1:MET:N	24:12:52:ASP:OD1	2.27	0.55
32:1a:731:G:H2'	32:1a:732:C:H6	1.71	0.55
1:2A:55:G:H1	1:2A:115:C:H42	1.54	0.55
1:2A:1584:C:O2'	1:2A:1586:A:O5'	2.19	0.55
7:2H:154:PRO:HB3	7:2H:163:TYR:CZ	2.41	0.55
32:2a:70:G:H1	32:2a:99:U:H3	1.54	0.55
32:2a:1060:C:H4'	41:2j:51:ARG:HB3	1.86	0.55
40:2i:4:TYR:HB3	40:2i:84:ALA:HB1	1.88	0.55
1:1A:271(O):C:H2'	1:1A:271(P):C:C6	2.40	0.55
1:1A:1311:G:H21	1:1A:1603:A:H62	1.53	0.55
1:1A:1417:C:H2'	1:1A:1418:G:O4'	2.07	0.55
6:1G:43:LEU:C	6:1G:45:GLU:H	2.14	0.55
8:1I:72:LEU:HD21	8:1I:107:VAL:HG11	1.87	0.55
32:1a:35:G:OP1	43:1l:104:VAL:HG11	2.06	0.55
32:1a:117:G:OP2	60:1a:3310:HOH:O	2.17	0.55
32:1a:199:G:H1	32:1a:218:C:H42	1.54	0.55
32:1a:828:A:H2'	32:1a:829:G:O4'	2.06	0.55
32:1a:1002:G:N2	32:1a:1004:A:O2'	2.40	0.55
37:1f:96:PRO:HB3	49:1r:30:ASP:OD2	2.06	0.55
15:2T:64:ARG:HD2	15:2T:73:GLU:HG3	1.87	0.55
32:2a:575:G:O4'	32:2a:881:G:N2	2.39	0.55
33:2b:155:LEU:HD21	33:2b:159:PRO:HG3	1.88	0.55
35:2d:100:ARG:HH22	35:2d:118:ARG:HH11	1.54	0.55
36:2e:33:VAL:HG22	36:2e:112:LEU:HD12	1.86	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1912:A:O2'	32:1a:1494:G:O2'	2.22	0.55
2:1B:76:G:N7	60:1B:309:HOH:O	2.32	0.55
8:1I:26:ALA:HA	8:1I:30:LEU:HB2	1.88	0.55
11:1P:95:VAL:HG13	11:1P:125:VAL:HA	1.89	0.55
32:1a:994:A:N7	32:1a:1216:G:H4'	2.20	0.55
40:1i:55:ALA:HA	40:1i:58:HIS:HD2	1.71	0.55
54:1x:33:U:O2'	54:1x:35:A:N7	2.26	0.55
1:2A:81:G:H1	1:2A:105:C:H42	1.54	0.55
32:2a:157:G:N2	32:2a:164:U:O2	2.35	0.55
32:2a:1181:G:H4'	32:2a:1182:G:OP1	2.05	0.55
32:2a:1294:G:H2'	32:2a:1295:G:C8	2.41	0.55
36:2e:145:LYS:O	36:2e:149:GLU:N	2.37	0.55
54:2x:5:G:H1	54:2x:68:C:H42	1.54	0.55
1:1A:29:U:H2'	1:1A:30:G:H8	1.72	0.55
1:1A:1525:G:H2'	1:1A:1526:G:H8	1.72	0.55
1:1A:1541:G:OP2	1:1A:1542:A:O2'	2.22	0.55
1:1A:1614:A:C2	18:1W:93:ALA:HB2	2.41	0.55
22:10:12:ASN:ND2	22:10:12:ASN:O	2.39	0.55
31:19:27:CYS:SG	31:19:28:GLU:N	2.79	0.55
32:1a:17:U:H2'	32:1a:18:C:C6	2.40	0.55
32:1a:102:G:O2'	32:1a:151:A:N3	2.29	0.55
32:1a:452:A:H62	32:1a:480:U:H3	1.54	0.55
36:1e:78:HIS:HD2	39:1h:104:ARG:HG3	1.71	0.55
45:1n:22:THR:HG23	45:1n:33:VAL:HG13	1.87	0.55
1:2A:1882:C:H2'	1:2A:1883:G:O4'	2.07	0.55
1:2A:2094:G:P	8:2I:22:LYS:HD2	2.46	0.55
1:2A:2597:G:O6	60:2A:3935:HOH:O	2.14	0.55
12:2Q:44:ALA:HB2	12:2Q:70:PRO:HG3	1.88	0.55
32:2a:769:G:H4'	32:2a:1513:A:H4'	1.88	0.55
32:2a:929:G:H1	32:2a:1388:C:H42	1.54	0.55
33:2b:12:GLU:HB3	33:2b:213:LEU:HD22	1.88	0.55
38:2g:114:ARG:HB2	38:2g:115:ARG:NH2	2.20	0.55
1:1A:2001:A:OP1	13:1R:9:LYS:NZ	2.23	0.55
24:12:61:LEU:HD23	24:12:64:LEU:HD23	1.88	0.55
32:1a:96:U:H2'	32:1a:97:G:H8	1.72	0.55
35:1d:148:VAL:HB	35:1d:181:MET:HB3	1.88	0.55
41:1j:35:SER:HB2	41:1j:73:ASP:HB2	1.88	0.55
1:2A:942:G:O2'	1:2A:1189:A:N3	2.38	0.55
1:2A:1662:C:O2'	1:2A:2687:U:OP1	2.20	0.55
1:2A:2316:C:O2'	6:2G:128:ARG:NH2	2.40	0.55
1:2A:2577:A:H2'	1:2A:2614:A:N6	2.22	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:2O:64:ARG:HB2	10:2O:79:PHE:CG	2.41	0.55
28:26:18:ARG:HD3	28:26:42:TRP:CD1	2.41	0.55
32:2a:34:C:H2'	32:2a:35:G:C8	2.41	0.55
34:2c:12:LEU:HD11	45:2n:51:GLY:HA2	1.87	0.55
37:2f:10:LEU:HD11	37:2f:85:VAL:HG22	1.88	0.55
1:1A:271(R):G:H2'	1:1A:271(S):G:H5''	1.87	0.55
1:1A:568:U:OP1	1:1A:945:A:N6	2.31	0.55
1:1A:782:A:H5''	60:1A:4419:HOH:O	2.06	0.55
1:1A:2107:C:H2'	1:1A:2108:C:C6	2.42	0.55
5:1F:24:LEU:HD23	5:1F:115:ALA:HA	1.88	0.55
14:1S:31:SER:O	14:1S:97:ARG:NH2	2.33	0.55
21:1Z:153:SER:OG	21:1Z:167:PRO:O	2.23	0.55
32:1a:1062:U:H2'	32:1a:1063:C:C6	2.41	0.55
1:2A:2823:A:OP1	4:2E:113:PHE:HB2	2.06	0.55
5:2F:171:PRO:HD2	5:2F:172:TRP:HD1	1.72	0.55
28:26:14:THR:OG1	28:26:48:VAL:O	2.24	0.55
32:2a:1029:C:N4	32:2a:1032:G:H1	2.05	0.55
36:2e:50:GLU:HB3	36:2e:52:PRO:HD2	1.89	0.55
49:2r:40:LEU:HD13	49:2r:79:LEU:HD11	1.89	0.55
25:13:8:LEU:O	25:13:32:GLN:N	2.39	0.55
26:14:55:ARG:N	26:14:56:VAL:HA	2.19	0.55
32:1a:1101:A:N6	33:1b:176:GLU:OE2	2.39	0.55
36:1e:33:VAL:HG13	36:1e:112:LEU:HD12	1.89	0.55
44:1m:3:ARG:HG3	44:1m:4:ILE:HG22	1.89	0.55
1:2A:192:C:N4	1:2A:203:C:O2'	2.40	0.55
1:2A:307:G:N1	1:2A:310:A:OP2	2.40	0.55
1:2A:821:A:O2'	1:2A:946:G:OP2	2.22	0.55
3:2D:71:ASP:OD2	3:2D:103:ARG:NH2	2.36	0.55
6:2G:11:TYR:HA	6:2G:15:VAL:HB	1.88	0.55
1:1A:1062:G:N2	1:1A:1077:A:H61	2.03	0.55
4:1E:52:LEU:O	4:1E:76:ARG:N	2.31	0.55
1:2A:856:C:H2'	1:2A:857:C:C6	2.42	0.55
2:2B:54:G:H21	6:2G:29:TRP:HE1	1.55	0.55
7:2H:24:VAL:HG12	7:2H:26:VAL:HG23	1.89	0.55
21:2Z:130:PRO:O	21:2Z:133:ILE:HG13	2.06	0.55
32:2a:190:U:H2'	32:2a:191:G:O4'	2.07	0.55
32:2a:1309:G:O3'	44:2m:77:ASN:ND2	2.40	0.55
33:2b:59:GLU:O	33:2b:63:MET:HG3	2.07	0.55
34:2c:22:TRP:CE2	45:2n:54:PRO:HG2	2.41	0.55
1:1A:567:A:OP1	60:1A:4203:HOH:O	2.18	0.55
7:1H:101:ARG:NH1	7:1H:122:THR:HG22	2.21	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1120:G:H2'	32:1a:1121:U:C6	2.41	0.55
1:2A:985:C:H2'	1:2A:986:C:H6	1.72	0.55
1:2A:1388:G:H2'	1:2A:1389:G:H8	1.72	0.55
1:2A:2166:G:H3'	1:2A:2167:U:H5''	1.88	0.55
1:2A:2462:U:H2'	1:2A:2463:C:C6	2.42	0.55
32:2a:519:C:OP2	43:2l:50:SER:OG	2.25	0.55
32:2a:986:A:N3	50:2s:52:TYR:OH	2.38	0.55
32:2a:1295:G:O3'	44:2m:14:ARG:NH1	2.39	0.55
1:1A:805:G:OP1	60:1A:4206:HOH:O	2.18	0.55
1:1A:971:C:H2'	1:1A:972:G:O4'	2.07	0.55
1:1A:1104:C:H2'	1:1A:1105:U:C6	2.42	0.55
1:1A:1361:G:H1	1:1A:1370:C:H42	1.55	0.55
1:1A:2097:C:H2'	1:1A:2098:U:O4'	2.06	0.55
12:1Q:34:LEU:HD11	12:1Q:129:THR:HB	1.89	0.55
32:1a:187:C:H5''	51:1t:86:ARG:HG3	1.89	0.55
32:1a:254:G:H2'	32:1a:255:G:H8	1.72	0.55
32:1a:1147:C:O2	40:1i:16:ARG:NH1	2.39	0.55
44:1m:65:LYS:HB2	44:1m:69:GLU:CG	2.37	0.55
44:1m:90:LEU:HD22	44:1m:93:ARG:HD2	1.89	0.55
1:2A:500:G:N2	1:2A:502:A:H3'	2.22	0.55
1:2A:631:A:OP1	11:2P:65:ARG:NH1	2.39	0.55
1:2A:1223:G:N2	1:2A:1226:A:OP2	2.31	0.55
1:2A:2299:G:H2'	1:2A:2300:G:H8	1.71	0.55
32:2a:126:G:OP1	32:2a:633:G:N2	2.40	0.55
32:2a:545:C:O2'	32:2a:549:C:OP1	2.22	0.55
33:2b:58:ILE:HD13	33:2b:61:LEU:HB3	1.88	0.55
34:2c:6:HIS:ND1	45:2n:49:HIS:HB3	2.21	0.55
35:2d:13:ARG:NE	35:2d:38:TYR:O	2.29	0.55
41:2j:8:LEU:HG	41:2j:70:ARG:HB2	1.87	0.55
1:1A:19:C:H42	1:1A:521:G:H1	1.54	0.54
1:1A:570:G:H2'	1:1A:2030:A:C5	2.42	0.54
1:1A:994:C:O2	17:1V:10:LYS:NZ	2.39	0.54
1:1A:1105:U:H2'	1:1A:1106:G:C8	2.41	0.54
2:1B:2:C:H2'	2:1B:3:C:C6	2.42	0.54
5:1F:107:LYS:HB2	5:1F:206:ILE:HG22	1.89	0.54
32:1a:110:C:O2'	47:1p:25:ARG:O	2.21	0.54
35:1d:112:VAL:HG23	35:1d:116:GLN:HE22	1.71	0.54
36:1e:59:GLY:O	36:1e:63:ARG:HG3	2.07	0.54
1:2A:185:U:H2'	1:2A:186:G:H8	1.72	0.54
1:2A:1530:C:O2'	1:2A:1531:C:O5'	2.19	0.54
1:2A:2319:G:N2	14:2S:3:ARG:HD2	2.21	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2734:A:H2'	1:2A:2735:G:O4'	2.07	0.54
3:2D:24:ILE:HD13	3:2D:84:TYR:HB2	1.89	0.54
8:2I:86:THR:HG22	8:2I:87:LYS:HG3	1.89	0.54
9:2N:103:VAL:HG11	9:2N:120:LEU:HD22	1.89	0.54
32:2a:562:C:H1'	43:2I:15:ARG:HB3	1.89	0.54
32:2a:1239:A:H62	32:2a:1299:A:N6	2.04	0.54
1:1A:177:G:H3'	1:1A:178:G:H8	1.73	0.54
1:1A:880:G:H2'	1:1A:881:G:H8	1.72	0.54
18:1W:29:LEU:HD22	18:1W:69:LEU:HD12	1.90	0.54
20:1Y:17:SER:OG	20:1Y:71:LYS:NZ	2.38	0.54
32:1a:113:G:O2'	32:1a:354:G:H5'	2.08	0.54
1:2A:807:U:C2	1:2A:808:G:C8	2.95	0.54
2:2B:60:C:H2'	2:2B:61:G:C8	2.43	0.54
6:2G:67:LYS:HD3	26:24:5:ILE:HD12	1.87	0.54
32:2a:410:G:H21	32:2a:432:A:H62	1.54	0.54
32:2a:474:G:H2'	32:2a:475:G:C8	2.43	0.54
32:2a:1490:C:H2'	32:2a:1491:G:O4'	2.07	0.54
43:2I:18:VAL:HG12	43:2I:19:ARG:H	1.73	0.54
1:1A:222:A:H5''	1:1A:421:U:OP1	2.07	0.54
1:1A:667:U:O2	30:18:2:PRO:HD2	2.07	0.54
1:1A:1490:A:O2'	3:1D:99:ASP:OD1	2.26	0.54
1:1A:1882:C:H2'	1:1A:1883:G:O4'	2.06	0.54
1:1A:2196:C:OP2	60:1A:4204:HOH:O	2.18	0.54
32:1a:1122:U:C4	32:1a:1123:A:N7	2.74	0.54
34:1c:22:TRP:CH2	45:1n:54:PRO:HG2	2.42	0.54
3:2D:118:VAL:N	3:2D:129:ASN:OD1	2.40	0.54
18:2W:10:VAL:HG11	18:2W:103:ILE:HD11	1.90	0.54
21:2Z:54:HIS:HB3	21:2Z:101:PRO:HG3	1.89	0.54
32:2a:1228:C:H2'	32:2a:1229:A:H8	1.72	0.54
1:1A:858:U:O2	1:1A:2268:A:H2'	2.08	0.54
1:1A:2206:G:H3'	1:1A:2207:G:H8	1.68	0.54
10:1O:63:VAL:HA	10:1O:106:LEU:HD11	1.88	0.54
35:1d:61:LYS:HD3	35:1d:206:PHE:CE2	2.42	0.54
1:2A:2143:C:N4	1:2A:2148:G:H1	2.04	0.54
4:2E:55:ASN:HD22	4:2E:58:ARG:NE	2.05	0.54
4:2E:134:ILE:HA	4:2E:137:HIS:CD2	2.42	0.54
26:24:53:GLU:HG3	26:24:56:VAL:HG12	1.90	0.54
32:2a:418:C:H2'	32:2a:419:C:C6	2.41	0.54
32:2a:689:C:H2'	32:2a:690:G:O4'	2.07	0.54
32:2a:1145:C:H4'	32:2a:1146:A:H5'	1.88	0.54
32:2a:1298:C:OP2	38:2g:114:ARG:NH2	2.39	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:48:MET:HG3	33:2b:49:GLU:H	1.72	0.54
43:2l:39:VAL:HG23	43:2l:57:LYS:HB3	1.89	0.54
46:2o:39:LEU:HB3	46:2o:56:LEU:HD13	1.89	0.54
1:1A:153:C:H2'	1:1A:154:G:C8	2.42	0.54
1:1A:272(J):C:H2'	1:1A:274:G:H8	1.73	0.54
1:1A:1662:C:O2'	1:1A:2687:U:OP1	2.25	0.54
1:1A:2228:G:P	3:1D:263:ARG:HH12	2.29	0.54
3:1D:85:ASP:OD2	3:1D:88:ARG:NH1	2.40	0.54
12:1Q:26:TYR:O	12:1Q:67:ARG:NH1	2.36	0.54
20:1Y:13:VAL:HG12	20:1Y:74:PRO:HA	1.90	0.54
32:1a:667:G:H4'	46:1o:51:HIS:CE1	2.43	0.54
32:1a:1021:G:O2'	32:1a:1022:G:O5'	2.26	0.54
1:2A:1388:G:H4'	1:2A:1525:G:O2'	2.08	0.54
8:2I:63:ALA:HA	8:2I:66:GLU:HB3	1.88	0.54
18:2W:67:ASP:OD1	18:2W:67:ASP:N	2.41	0.54
21:2Z:102:LEU:HB2	21:2Z:122:ARG:O	2.06	0.54
32:2a:119:A:H4'	32:2a:120:A:C8	2.42	0.54
32:2a:164:U:H2'	32:2a:165:C:C6	2.42	0.54
32:2a:741:G:H2'	32:2a:742:G:O4'	2.08	0.54
41:2j:8:LEU:HD12	41:2j:16:LEU:HD22	1.90	0.54
48:2q:67:LYS:O	48:2q:68:ARG:HB2	2.07	0.54
54:2x:8:4SU:O5'	54:2x:8:4SU:H6	2.06	0.54
1:1A:253:C:OP2	30:18:5:LYS:NZ	2.35	0.54
1:1A:1069:A:H2'	1:1A:1073:A:N7	2.22	0.54
1:1A:1379:A:H4'	1:1A:1380:G:OP2	2.08	0.54
1:1A:2353:G:N7	60:1A:4289:HOH:O	2.33	0.54
1:1A:2487:G:H2'	1:1A:2488:A:C8	2.43	0.54
6:1G:67:LYS:HD2	26:14:5:ILE:HD12	1.90	0.54
14:1S:30:ARG:HG3	14:1S:35:ILE:HD12	1.90	0.54
15:1T:35:LYS:HG2	15:1T:40:THR:HG22	1.90	0.54
32:1a:658:G:H2'	32:1a:659:U:C6	2.43	0.54
32:1a:726:C:H2'	32:1a:727:G:H8	1.72	0.54
34:1c:8:ILE:HD11	34:1c:184:TYR:HB3	1.90	0.54
1:2A:1379:A:H4'	1:2A:1380:G:OP2	2.07	0.54
1:2A:2001:A:H2'	1:2A:2002:G:H8	1.72	0.54
1:2A:2544:G:H2'	1:2A:2545:G:C8	2.43	0.54
1:2A:2729:G:H4'	4:2E:186:GLY:HA2	1.90	0.54
2:2B:64:C:H2'	2:2B:65:C:C6	2.43	0.54
4:2E:5:LEU:HD23	4:2E:197:ILE:HG23	1.88	0.54
16:2U:74:LEU:HD23	16:2U:74:LEU:H	1.73	0.54
32:2a:975:A:N1	41:2j:48:THR:HB	2.22	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:2c:63:ASN:HA	34:2c:98:ASN:H	1.73	0.54
34:2c:88:ARG:HA	34:2c:91:LEU:HB3	1.89	0.54
44:2m:91:ARG:HD2	44:2m:96:LEU:HB3	1.90	0.54
1:1A:2009:G:OP1	18:1W:41:LYS:NZ	2.24	0.54
23:11:64:ALA:HA	23:11:67:ILE:HG13	1.89	0.54
32:1a:737:A:H2'	32:1a:738:C:C6	2.43	0.54
32:1a:864:A:H2	32:1a:918:A:H1'	1.71	0.54
32:1a:1187:G:H2'	32:1a:1188:A:C8	2.42	0.54
32:1a:1233:G:H2'	32:1a:1234:C:C6	2.42	0.54
36:1e:48:ALA:HB3	36:1e:54:ALA:HB2	1.90	0.54
1:2A:536:A:H2'	1:2A:537:C:C6	2.41	0.54
1:2A:586:A:N1	1:2A:809:G:O2'	2.29	0.54
1:2A:899:A:C2'	1:2A:900:A:H5''	2.37	0.54
1:2A:2287:A:C8	1:2A:2289:G:C8	2.96	0.54
1:2A:2319:G:H4'	1:2A:2320:A:OP1	2.07	0.54
1:2A:2533:A:OP1	1:2A:2665:A:O2'	2.26	0.54
13:2R:79:LEU:HA	13:2R:83:ILE:HD12	1.90	0.54
15:2T:73:GLU:OE2	15:2T:103:ARG:NE	2.35	0.54
25:23:19:GLN:O	25:23:23:LEU:HD22	2.08	0.54
32:2a:8:A:N6	35:2d:209:ARG:HB2	2.22	0.54
32:2a:1219:U:O2'	50:2s:34:TRP:HB3	2.06	0.54
33:2b:70:PHE:HD1	33:2b:163:PHE:HB3	1.72	0.54
35:2d:15:GLU:O	35:2d:17:VAL:HG23	2.08	0.54
38:2g:79:ARG:HE	38:2g:79:ARG:H	1.56	0.54
47:2p:15:PRO:HD2	47:2p:42:ARG:HD2	1.90	0.54
1:1A:278:A:H2'	1:1A:279:C:C5	2.42	0.54
1:1A:464:U:H2'	1:1A:465:G:O4'	2.07	0.54
1:1A:1001:A:H2'	1:1A:1002:G:O4'	2.07	0.54
1:1A:1263:U:H2'	1:1A:1264:G:C8	2.43	0.54
1:1A:1815:A:P	3:1D:54:ARG:HH22	2.31	0.54
1:1A:2818:G:OP2	13:1R:42:LYS:NZ	2.41	0.54
9:1N:9:VAL:HG21	9:1N:39:ARG:NH2	2.23	0.54
18:1W:45:TYR:OH	18:1W:49:LYS:NZ	2.25	0.54
23:11:35:THR:OG1	23:11:35:THR:O	2.24	0.54
32:1a:718:G:H22	49:1r:82:THR:HB	1.72	0.54
32:1a:1241:G:H2'	32:1a:1242:C:C6	2.42	0.54
35:1d:18:LYS:HE2	35:1d:33:MET:HB3	1.90	0.54
35:1d:101:LEU:HB2	35:1d:138:TYR:HB3	1.89	0.54
36:1e:151:LEU:HD21	39:1h:77:GLU:HG2	1.88	0.54
1:2A:626:U:O4	11:2P:81:GLN:NE2	2.41	0.54
1:2A:864:G:H1'	1:2A:914:C:N4	2.22	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1204:A:H2	1:2A:1241:A:H62	1.56	0.54
4:2E:56:PRO:HB3	4:2E:74:PRO:HG2	1.90	0.54
13:2R:56:LYS:NZ	13:2R:90:ARG:O	2.41	0.54
15:2T:26:ASP:OD2	15:2T:91:ARG:NH1	2.41	0.54
26:24:50:VAL:HG13	44:2m:65:LYS:HG3	1.89	0.54
32:2a:109:A:C6	32:2a:326:G:C6	2.96	0.54
1:1A:705:A:C2	1:1A:727:A:H1'	2.43	0.54
2:1B:7:G:H5'	14:1S:29:PHE:CE2	2.43	0.54
24:12:17:SER:N	24:12:20:GLU:OE1	2.37	0.54
26:14:40:HIS:HB3	26:14:43:TYR:HD2	1.72	0.54
32:1a:598:U:H4'	39:1h:94:TYR:CG	2.43	0.54
32:1a:646:U:H2'	32:1a:647:C:C6	2.42	0.54
32:1a:972:C:O2'	41:1j:55:LYS:O	2.26	0.54
48:1q:59:ILE:HG22	48:1q:73:VAL:HA	1.88	0.54
52:1u:5:ASP:O	52:1u:11:GLY:HA3	2.08	0.54
1:2A:324:A:H2'	1:2A:325:G:O4'	2.07	0.54
1:2A:1776:G:OP2	60:2A:3949:HOH:O	2.18	0.54
1:2A:2125:G:N2	1:2A:2173:A:OP2	2.41	0.54
1:2A:2224:G:H4'	1:2A:2226:C:C2	2.43	0.54
6:2G:35:GLU:HB3	6:2G:160:VAL:HB	1.89	0.54
8:2I:97:ILE:HD12	8:2I:114:LEU:HD21	1.90	0.54
32:2a:393:A:OP2	47:2p:12:LYS:NZ	2.36	0.54
32:2a:553:A:H5''	43:2l:24:VAL:HG21	1.89	0.54
35:2d:64:LEU:HA	35:2d:67:ILE:HD12	1.90	0.54
36:2e:76:ILE:O	36:2e:93:PRO:HB3	2.07	0.54
1:1A:1547:C:H2'	1:1A:1548:C:C6	2.43	0.54
1:1A:1790:C:H5''	1:1A:1791:A:OP1	2.08	0.54
1:1A:1794:U:H2'	1:1A:1795:C:H6	1.73	0.54
15:1T:118:ARG:HA	15:1T:121:ILE:HB	1.90	0.54
19:1X:43:VAL:HG13	19:1X:47:PHE:HD2	1.71	0.54
32:1a:673:G:H2'	32:1a:674:G:C8	2.43	0.54
39:1h:6:ILE:O	39:1h:10:LEU:HG	2.07	0.54
40:1i:6:GLY:HA3	40:1i:83:ARG:HB3	1.90	0.54
49:1r:30:ASP:OD2	49:1r:33:ASP:HB2	2.08	0.54
2:2B:50:G:OP1	14:2S:63:THR:OG1	2.20	0.54
11:2P:37:GLY:O	11:2P:40:SER:OG	2.23	0.54
18:2W:65:LEU:HB2	18:2W:68:ARG:HD2	1.90	0.54
21:2Z:70:LEU:HB2	21:2Z:91:LEU:HD11	1.90	0.54
44:2m:87:TYR:C	44:2m:89:GLY:H	2.16	0.54
54:2x:10:G:N2	54:2x:26:G:H1'	2.23	0.54
4:1E:49:LEU:HD21	4:1E:91:VAL:HG21	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:1Q:39:PRO:HA	12:1Q:97:VAL:O	2.09	0.53
32:1a:857:C:H2'	32:1a:858:G:O4'	2.08	0.53
33:1b:158:LEU:HD21	33:1b:180:LEU:HD22	1.90	0.53
1:2A:1494:A:H2'	1:2A:1495:A:O4'	2.08	0.53
5:2F:24:LEU:HD23	5:2F:115:ALA:HA	1.89	0.53
7:2H:97:ARG:HH12	7:2H:99:VAL:HG13	1.72	0.53
32:2a:997:U:H3	32:2a:1044:A:N6	2.06	0.53
32:2a:1000:U:O2	32:2a:1042:G:N2	2.41	0.53
32:2a:1348:U:H2'	32:2a:1349:A:H8	1.74	0.53
38:2g:149:ARG:NE	42:2k:59:TYR:OH	2.41	0.53
46:2o:5:LYS:O	46:2o:9:GLN:HG2	2.08	0.53
46:2o:26:GLU:HG3	46:2o:81:LEU:HD22	1.90	0.53
1:1A:1239:G:OP1	60:1A:4125:HOH:O	2.18	0.53
1:1A:1248:G:C5	16:1U:3:ARG:HB2	2.43	0.53
1:1A:1665:A:H1'	10:1O:1:MET:HB2	1.89	0.53
1:1A:1850:G:H1	1:1A:1892:C:H42	1.55	0.53
4:1E:34:VAL:HG13	4:1E:48:GLN:HE21	1.73	0.53
8:1I:116:LEU:HD11	8:1I:120:ILE:HG13	1.90	0.53
24:12:18:PRO:O	24:12:22:GLU:HG3	2.08	0.53
32:1a:201:C:N4	32:1a:216:G:H1	2.06	0.53
32:1a:414:A:H2'	32:1a:415:A:C8	2.43	0.53
32:1a:1136:U:H5''	32:1a:1137:C:C5	2.43	0.53
32:1a:1221:G:OP1	32:1a:1320:C:N4	2.39	0.53
32:1a:1347:G:H22	32:1a:1374:A:P	2.31	0.53
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	1.90	0.53
1:2A:912:C:OP1	12:2Q:8:LYS:NZ	2.40	0.53
1:2A:2718:G:O2'	1:2A:2847:U:OP1	2.25	0.53
1:2A:2751:G:H5'	7:2H:2:SER:HA	1.90	0.53
28:26:10:LEU:HB2	28:26:52:VAL:HG13	1.90	0.53
38:2g:153:HIS:HA	38:2g:155:ARG:NH1	2.23	0.53
44:2m:37:THR:O	44:2m:55:ARG:NH1	2.39	0.53
32:1a:453:A:H4'	47:1p:72:ARG:HB2	1.90	0.53
36:1e:100:VAL:HG22	36:1e:118:ILE:HG22	1.89	0.53
1:2A:251:A:C5	1:2A:252:G:H1'	2.43	0.53
1:2A:541:C:H2'	1:2A:542:C:C6	2.43	0.53
1:2A:2027:G:H2'	1:2A:2028:U:O4'	2.07	0.53
1:2A:2419:U:H2'	1:2A:2420:C:C6	2.43	0.53
2:2B:17:C:H2'	2:2B:18:G:O4'	2.09	0.53
7:2H:103:LEU:HB3	7:2H:115:VAL:HB	1.89	0.53
8:2I:92:VAL:HG13	8:2I:120:ILE:HB	1.90	0.53
25:23:44:ARG:NH2	25:23:48:GLU:OE2	2.40	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1259:C:O2'	32:2a:1283:G:N2	2.37	0.53
33:2b:16:HIS:O	33:2b:18:GLY:N	2.42	0.53
39:2h:83:ILE:HG13	39:2h:137:VAL:HG22	1.89	0.53
44:2m:14:ARG:HB2	44:2m:17:VAL:HG22	1.90	0.53
1:1A:265:A:N1	1:1A:427:U:O2'	2.35	0.53
1:1A:608:A:OP1	5:1F:100:THR:OG1	2.24	0.53
1:1A:860:U:H2'	1:1A:861:A:H8	1.73	0.53
1:1A:1226:A:OP1	17:1V:84:LYS:NZ	2.24	0.53
1:1A:1660:C:H2'	1:1A:1661:G:H8	1.73	0.53
3:1D:65:ILE:HG22	3:1D:66:ASP:H	1.72	0.53
8:1I:102:SER:HA	8:1I:107:VAL:H	1.74	0.53
11:1P:29:LYS:HG3	11:1P:30:THR:H	1.73	0.53
20:1Y:6:HIS:H	20:1Y:6:HIS:CD2	2.26	0.53
32:1a:64:G:H4'	32:1a:65:U:H5''	1.91	0.53
32:1a:662:G:H1	32:1a:743:U:H3	1.55	0.53
1:2A:652(A):A:H2'	1:2A:652(A):A:N3	2.22	0.53
1:2A:1665:A:H1'	10:2O:1:MET:HB2	1.89	0.53
1:2A:2744:G:H1'	1:2A:2761:G:N2	2.24	0.53
3:2D:68:LYS:HB3	3:2D:70:TRP:CE2	2.43	0.53
15:2T:119:LYS:HB2	32:2a:1442(A):G:N2	2.23	0.53
21:2Z:149:SER:HB2	21:2Z:173:ALA:HB2	1.90	0.53
33:2b:30:ARG:HH21	33:2b:194:PRO:HB2	1.73	0.53
44:2m:89:GLY:HA2	44:2m:92:HIS:HB2	1.91	0.53
1:1A:412:A:H3'	1:1A:413:C:C6	2.43	0.53
1:1A:2340:G:H2'	1:1A:2341:G:H8	1.73	0.53
1:1A:2552:2MU:OP2	60:1A:4208:HOH:O	2.18	0.53
1:1A:2743:C:OP2	1:1A:2755:C:N4	2.42	0.53
7:1H:94:TYR:OH	7:1H:152:ARG:NH1	2.42	0.53
8:1I:14:ASP:OD1	8:1I:15:VAL:N	2.41	0.53
32:1a:233:C:H2'	32:1a:234:C:C6	2.44	0.53
32:1a:870:U:H4'	32:1a:871:U:H5''	1.91	0.53
32:1a:880:C:OP1	43:1I:8:ASN:ND2	2.40	0.53
2:2B:53:A:H2'	2:2B:54:G:O4'	2.09	0.53
32:2a:605:U:H2'	32:2a:606:G:C8	2.43	0.53
32:2a:1348:U:H4'	40:2i:120:ARG:HD2	1.90	0.53
34:2c:47:LEU:HB2	34:2c:52:LEU:HD22	1.90	0.53
45:2n:24:CYS:HB3	45:2n:29:ARG:H	1.73	0.53
50:2s:36:ARG:HG2	50:2s:51:VAL:HG12	1.91	0.53
1:1A:1036:G:H1	1:1A:1119:C:H42	1.54	0.53
1:1A:1525:G:H2'	1:1A:1526:G:C8	2.44	0.53
1:1A:1790:C:H2'	1:1A:1791:A:C5	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2107:C:H2'	1:1A:2108:C:H6	1.74	0.53
1:1A:2711:A:H5''	1:1A:2712:U:H5''	1.90	0.53
6:1G:18:GLU:HG3	6:1G:22:ARG:HD2	1.90	0.53
32:1a:278:G:OP2	48:1q:92:ARG:NH2	2.42	0.53
35:1d:196:LEU:O	35:1d:198:VAL:N	2.42	0.53
38:1g:91:VAL:HG12	38:1g:95:ARG:HB3	1.91	0.53
1:2A:89:G:H3'	1:2A:90:U:H5''	1.91	0.53
1:2A:575:A:H4'	1:2A:2500:U:H4'	1.91	0.53
1:2A:861:A:N6	1:2A:916:G:O2'	2.42	0.53
2:2B:18:G:H1	2:2B:65:C:H42	1.56	0.53
4:2E:143:ASN:HB2	4:2E:147:PRO:HD2	1.90	0.53
9:2N:128:HIS:O	9:2N:131:GLN:NE2	2.41	0.53
15:2T:41:ARG:NH1	32:2a:346:G:OP1	2.41	0.53
32:2a:730:G:C5	32:2a:731:G:H1'	2.44	0.53
32:2a:977:A:O2'	32:2a:981:U:N3	2.40	0.53
32:2a:1223:C:H5''	32:2a:1224:G:H5''	1.91	0.53
1:1A:573:G:O2'	1:1A:574:C:H3'	2.09	0.53
1:1A:880:G:H22	1:1A:898:C:N4	2.05	0.53
1:1A:1169:G:H1	1:1A:1180:C:H42	1.55	0.53
1:1A:2430:A:N3	1:1A:2430:A:H2'	2.23	0.53
3:1D:232:PRO:HB3	3:1D:244:ARG:NH2	2.24	0.53
13:1R:72:ASP:HB3	13:1R:75:LEU:HB3	1.90	0.53
32:1a:21:G:H2'	32:1a:22:G:C8	2.44	0.53
32:1a:22:G:H4'	32:1a:885:G:C8	2.44	0.53
32:1a:269:C:H2'	32:1a:270:A:C8	2.43	0.53
48:1q:67:LYS:HA	48:1q:70:ARG:HH12	1.74	0.53
1:2A:302:C:H42	1:2A:315:G:H1	1.56	0.53
1:2A:335:C:H4'	20:2Y:73:ARG:HD2	1.90	0.53
1:2A:1764:G:C6	1:2A:1989:G:C2	2.97	0.53
1:2A:2109:U:H3	1:2A:2180:U:H3	1.57	0.53
1:2A:2494:G:H2'	1:2A:2495:G:H8	1.74	0.53
1:2A:2657:A:H62	1:2A:2664:G:H21	1.55	0.53
2:2B:13:A:N1	2:2B:69:G:O2'	2.31	0.53
2:2B:74:U:H2'	2:2B:75:G:O4'	2.09	0.53
1:1A:363(F):A:H1'	1:1A:364:C:H5	1.74	0.53
1:1A:520:G:H2'	1:1A:521:G:C8	2.44	0.53
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.09	0.53
2:1B:91:C:OP1	12:1Q:16:ARG:NH1	2.42	0.53
10:1O:7:TYR:CE2	10:1O:20:MET:HE3	2.44	0.53
15:1T:65:LYS:HG2	15:1T:66:VAL:H	1.74	0.53
21:1Z:28:MET:HB2	21:1Z:37:VAL:HG11	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:40:C:H2'	32:1a:41:G:C8	2.44	0.53
32:1a:222:U:H2'	32:1a:223:U:C6	2.43	0.53
32:1a:666:G:OP2	32:1a:725:G:N2	2.40	0.53
32:1a:709:G:H2'	32:1a:710:G:H8	1.73	0.53
43:1l:39:VAL:HB	43:1l:57:LYS:HB2	1.91	0.53
1:2A:663:G:OP1	11:2P:17:LYS:N	2.33	0.53
1:2A:1557:C:OP2	1:2A:1558:A:O2'	2.16	0.53
1:2A:1669:A:H5''	1:2A:2550:G:OP1	2.07	0.53
1:2A:2101:G:N1	1:2A:2188:C:N4	2.35	0.53
15:2T:127:ALA:C	15:2T:129:ARG:H	2.17	0.53
32:2a:279:A:C5	48:2q:98:LEU:HD23	2.43	0.53
33:2b:55:PHE:HZ	33:2b:218:ALA:HA	1.74	0.53
33:2b:198:ASP:N	33:2b:198:ASP:OD1	2.41	0.53
35:2d:176:LEU:HD23	35:2d:178:VAL:HG22	1.89	0.53
40:2i:47:LEU:HB3	40:2i:50:LEU:HD21	1.90	0.53
40:2i:99:LEU:HB3	40:2i:101:PHE:CE2	2.43	0.53
43:2l:114:LYS:HE2	43:2l:125:PRO:HG2	1.90	0.53
50:2s:51:VAL:HB	50:2s:75:ALA:HB2	1.91	0.53
1:1A:419:C:H2'	1:1A:420:C:O4'	2.09	0.53
1:1A:458:G:C8	29:17:37:LYS:HG2	2.44	0.53
1:1A:997:G:OP2	16:1U:58:ARG:NH1	2.40	0.53
1:1A:1279:G:H4'	13:1R:31:HIS:CD2	2.44	0.53
1:1A:1786:A:H1'	1:1A:1938:A:N6	2.24	0.53
6:1G:94:LEU:HD22	6:1G:98:ARG:HB2	1.90	0.53
9:1N:23:LEU:HA	9:1N:60:ILE:HD11	1.90	0.53
14:1S:69:VAL:HG13	14:1S:101:LEU:HD13	1.91	0.53
16:1U:69:CYS:HB3	16:1U:74:LEU:HD12	1.91	0.53
17:1V:57:VAL:HG22	17:1V:99:ILE:HG23	1.91	0.53
29:17:13:ALA:HB2	29:17:46:VAL:HG11	1.89	0.53
33:1b:103:THR:HA	33:1b:180:LEU:HD21	1.90	0.53
1:2A:125:G:H5''	29:27:19:ARG:HD3	1.91	0.53
1:2A:212:G:H2'	1:2A:213:A:O4'	2.09	0.53
1:2A:635:C:O2'	1:2A:639:U:OP1	2.25	0.53
1:2A:1264:G:OP1	27:25:19:ARG:NH2	2.42	0.53
1:2A:2657:A:O2'	7:2H:160:LYS:NZ	2.38	0.53
3:2D:146:GLU:HB2	3:2D:189:CYS:HB3	1.90	0.53
9:2N:30:ILE:HG23	9:2N:52:VAL:HG11	1.90	0.53
32:2a:688:G:H5'	42:2k:46:GLY:C	2.33	0.53
33:2b:178:ARG:NH1	33:2b:196:LEU:HA	2.22	0.53
1:1A:1041:C:H42	1:1A:1114:G:H1	1.57	0.53
1:1A:1259:G:H2'	1:1A:1260:G:H8	1.74	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1304:C:H2'	1:1A:1305:C:C6	2.43	0.53
1:1A:1359:A:H2'	1:1A:1360:A:H5'	1.89	0.53
7:1H:64:LEU:O	7:1H:68:THR:OG1	2.27	0.53
26:14:50:VAL:HG11	44:1m:65:LYS:N	2.24	0.53
32:1a:1025:U:O2	32:1a:1036:G:C6	2.62	0.53
32:1a:1073:U:O2	33:1b:104:ASN:ND2	2.42	0.53
32:1a:1309:G:OP2	44:1m:99:ARG:NH2	2.41	0.53
33:1b:178:ARG:NH1	33:1b:196:LEU:O	2.39	0.53
51:1t:47:GLY:HA2	51:1t:48:LYS:C	2.34	0.53
1:2A:1594:G:H2'	1:2A:1595:G:H8	1.73	0.53
1:2A:2646:C:OP2	1:2A:2732:G:O2'	2.23	0.53
2:2B:77:U:OP1	21:2Z:19:ARG:NH2	2.42	0.53
32:2a:587:G:OP1	39:2h:92:ARG:NH2	2.42	0.53
32:2a:627:G:H2'	32:2a:628:G:C8	2.44	0.53
32:2a:662:G:H2'	32:2a:663:A:C8	2.44	0.53
32:2a:676:A:H2	32:2a:714:G:H22	1.56	0.53
43:2l:53:ARG:HD2	43:2l:93:LEU:HD11	1.90	0.53
44:2m:53:VAL:HG12	44:2m:57:ARG:HH21	1.73	0.53
47:2p:8:ARG:H	47:2p:28:ARG:HD2	1.73	0.53
9:1N:13:TRP:HB3	9:1N:135:PRO:HB3	1.89	0.52
10:1O:24:VAL:HG12	10:1O:33:ALA:HB2	1.91	0.52
32:1a:520:A:N1	32:1a:536:C:H1'	2.24	0.52
33:1b:136:VAL:O	33:1b:140:HIS:N	2.40	0.52
40:1i:23:ASN:ND2	40:1i:25:LYS:HG2	2.24	0.52
1:2A:1637:A:H4'	1:2A:2711:A:O2'	2.08	0.52
1:2A:2398:U:H2'	1:2A:2399:G:C8	2.44	0.52
1:2A:2557:G:H2'	1:2A:2558:C:C6	2.44	0.52
21:2Z:28:MET:O	21:2Z:35:ARG:N	2.37	0.52
32:2a:433:C:H2'	32:2a:434:U:H6	1.75	0.52
32:2a:580:U:H2'	32:2a:581:G:O4'	2.09	0.52
32:2a:806:C:H2'	32:2a:807:A:H8	1.73	0.52
36:2e:126:ARG:HA	36:2e:131:ILE:HD11	1.91	0.52
43:2l:27:LEU:HD21	43:2l:85:ILE:HD11	1.90	0.52
1:1A:127:A:H5''	1:1A:128:C:C6	2.43	0.52
1:1A:960:A:C8	1:1A:962:G:C8	2.97	0.52
1:1A:2062:A:OP1	60:1A:4211:HOH:O	2.19	0.52
1:1A:2156:G:H5''	1:1A:2157:G:OP2	2.09	0.52
1:1A:2630:G:N3	1:1A:2892:A:O2'	2.42	0.52
1:1A:2788:C:OP1	4:1E:61:ARG:NH2	2.42	0.52
6:1G:59:GLU:OE2	6:1G:153:ARG:NH2	2.40	0.52
32:1a:1033:G:H2'	32:1a:1034:G:C8	2.41	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:32:LEU:HD22	34:1c:59:ARG:NH1	2.24	0.52
51:1t:33:ILE:O	51:1t:37:SER:OG	2.21	0.52
1:2A:459:U:H2'	1:2A:460:A:H8	1.74	0.52
1:2A:886:C:H2'	1:2A:887:A:H1'	1.90	0.52
1:2A:893:C:H2'	1:2A:894:C:C5	2.43	0.52
1:2A:997:G:OP1	16:2U:92:ARG:HD2	2.09	0.52
1:2A:2291:U:H2'	1:2A:2292:C:C6	2.44	0.52
1:2A:2317:C:N4	1:2A:2318:G:O6	2.42	0.52
14:2S:38:GLN:NE2	14:2S:47:THR:OG1	2.35	0.52
23:21:40:ARG:NH1	23:21:42:GLN:HE21	2.07	0.52
26:24:15:ILE:HG23	26:24:21:VAL:HG22	1.90	0.52
32:2a:157:G:H2'	32:2a:158:G:C8	2.45	0.52
32:2a:297:G:N2	32:2a:300:A:OP2	2.42	0.52
32:2a:375:U:OP1	47:2p:69:THR:HG21	2.10	0.52
32:2a:1004:A:C5'	32:2a:1024:G:H22	2.14	0.52
54:2x:53:G:H3'	54:2x:54:5MU:H73	1.90	0.52
1:1A:1371:G:H2'	1:1A:1372:U:H5	1.73	0.52
1:1A:2319:G:H22	14:1S:3:ARG:HD3	1.75	0.52
3:1D:222:ARG:HH21	3:1D:225:ALA:HB2	1.75	0.52
10:1O:16:ALA:HB2	10:1O:52:VAL:HG21	1.90	0.52
11:1P:95:VAL:HA	11:1P:99:LEU:HD12	1.91	0.52
32:1a:9:G:OP2	36:1e:121:LYS:NZ	2.24	0.52
32:1a:1025:U:C2	32:1a:1036:G:O6	2.62	0.52
42:1k:48:ILE:HD12	42:1k:63:LEU:HB2	1.91	0.52
46:1o:18:PHE:O	46:1o:20:GLY:N	2.43	0.52
47:1p:74:LEU:HA	47:1p:77:ALA:HB3	1.92	0.52
1:2A:743:G:H1	1:2A:754:C:N4	2.06	0.52
1:2A:1721:G:H8	1:2A:1741:A:H62	1.55	0.52
32:2a:123:C:OP1	32:2a:311:C:O2'	2.23	0.52
32:2a:600:C:H5'	39:2h:129:VAL:HA	1.91	0.52
1:1A:302:C:OP1	20:1Y:101:LYS:NZ	2.43	0.52
1:1A:576:U:OP1	60:1A:4129:HOH:O	2.19	0.52
3:1D:37:LEU:HD13	3:1D:62:TYR:HB2	1.90	0.52
6:1G:137:GLU:HB2	6:1G:140:ILE:HD12	1.90	0.52
10:1O:38:VAL:HG13	10:1O:87:ILE:HD11	1.92	0.52
12:1Q:16:ARG:HG3	12:1Q:18:LYS:HG3	1.90	0.52
25:13:35:ARG:HB3	25:13:37:LEU:HD21	1.92	0.52
32:1a:738:C:H2'	32:1a:739:C:C6	2.44	0.52
32:1a:1194:U:H2'	32:1a:1195:C:C6	2.44	0.52
49:1r:53:ARG:HH21	49:1r:59:SER:HA	1.74	0.52
1:2A:2260:C:H42	1:2A:2280:G:H1	1.58	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2781:A:H5''	1:2A:2782:G:H5'	1.91	0.52
60:2A:4287:HOH:O	12:2Q:14:ARG:HD3	2.08	0.52
5:2F:183:VAL:O	5:2F:187:VAL:HG23	2.10	0.52
16:2U:83:LEU:HD22	16:2U:88:ILE:HD12	1.91	0.52
34:2c:112:SER:HB3	34:2c:115:LEU:HD22	1.91	0.52
36:2e:127:ASN:HB3	36:2e:130:ASN:HD22	1.73	0.52
40:2i:48:GLU:HB3	40:2i:101:PHE:HE1	1.74	0.52
43:2l:27:LEU:O	43:2l:33:ARG:NE	2.39	0.52
1:1A:196:A:O5'	11:1P:46:LYS:NZ	2.41	0.52
1:1A:1865:G:N2	1:1A:1876:A:H3'	2.24	0.52
1:1A:2176:A:H2'	1:1A:2177:C:C6	2.44	0.52
8:1I:116:LEU:HD13	8:1I:128:LEU:HD11	1.92	0.52
17:1V:52:VAL:HG23	17:1V:55:ALA:HB3	1.91	0.52
32:1a:337:C:H2'	32:1a:338:A:C8	2.45	0.52
32:1a:942:G:H21	40:1i:124:GLN:NE2	2.08	0.52
1:2A:729:G:O2'	1:2A:763:G:H4'	2.08	0.52
1:2A:996:A:H4'	16:2U:91:ASP:OD2	2.09	0.52
1:2A:2544:G:H2'	1:2A:2545:G:H8	1.73	0.52
3:2D:159:ALA:O	3:2D:161:THR:N	2.43	0.52
32:2a:166:G:H2'	32:2a:167:G:C8	2.44	0.52
32:2a:196:A:N3	32:2a:222:U:H1'	2.25	0.52
32:2a:424:G:H2'	32:2a:425:G:H8	1.74	0.52
32:2a:728:A:H2'	32:2a:729:A:C8	2.44	0.52
32:2a:750:G:N2	46:2o:23:GLY:O	2.24	0.52
32:2a:857:C:H2'	32:2a:858:G:O4'	2.10	0.52
32:2a:1216:G:H2'	32:2a:1217:C:C6	2.44	0.52
1:1A:2121:G:H1	1:1A:2177:C:H42	1.58	0.52
3:1D:108:PRO:HB3	3:1D:143:HIS:HE1	1.72	0.52
34:1c:62:ASP:HA	34:1c:97:LYS:HG2	1.91	0.52
34:1c:134:ILE:HG22	34:1c:168:ALA:HB3	1.90	0.52
36:1e:11:ILE:HB	36:1e:31:LEU:HD23	1.91	0.52
1:2A:207:A:H2'	1:2A:208:C:O4'	2.10	0.52
1:2A:285:C:H42	1:2A:356:G:H1	1.57	0.52
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.25	0.52
1:2A:1937:A:H1'	1:2A:1939:5MU:H71	1.90	0.52
5:2F:20:LEU:HG	5:2F:21:ALA:H	1.74	0.52
1:1A:2193:G:H2'	1:1A:2194:G:C8	2.45	0.52
11:1P:59:LEU:HD11	30:18:10:ALA:HA	1.92	0.52
12:1Q:32:TYR:CE1	12:1Q:133:ARG:HB2	2.45	0.52
20:1Y:10:GLY:HA2	20:1Y:27:VAL:HB	1.91	0.52
32:1a:161:A:H2'	32:1a:162:A:C8	2.42	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:288:A:H2'	32:1a:289:G:H4'	1.90	0.52
32:1a:669:U:H2'	32:1a:670:G:H8	1.74	0.52
32:1a:763:G:H2'	32:1a:764:C:C6	2.44	0.52
33:1b:55:PHE:HE1	33:1b:218:ALA:HA	1.75	0.52
1:2A:956:G:OP2	12:2Q:14:ARG:NH1	2.43	0.52
1:2A:2095:C:H2'	1:2A:2096:U:O4'	2.09	0.52
1:2A:2320:A:N3	1:2A:2320:A:H2'	2.25	0.52
1:2A:2386:C:H4'	22:20:56:ASP:HA	1.92	0.52
7:2H:18:GLU:HG2	7:2H:25:LYS:HB3	1.91	0.52
19:2X:4:ALA:HB1	19:2X:42:ALA:HA	1.92	0.52
32:2a:332:G:H2'	32:2a:333:G:H8	1.75	0.52
42:2k:82:VAL:HB	42:2k:108:ILE:HG12	1.90	0.52
42:2k:87:THR:O	42:2k:87:THR:OG1	2.28	0.52
51:2t:65:LYS:HA	51:2t:68:LYS:HE3	1.91	0.52
1:1A:77:C:O2'	24:12:14:ARG:NH2	2.43	0.52
6:1G:29:TRP:CD1	6:1G:29:TRP:H	2.28	0.52
32:1a:153:C:H42	32:1a:168:G:H22	1.58	0.52
32:1a:726:C:H2'	32:1a:727:G:C8	2.45	0.52
32:1a:1187:G:H2'	32:1a:1188:A:H8	1.75	0.52
32:1a:1287:A:H2	32:1a:1353:G:H1'	1.75	0.52
35:1d:12:CYS:CB	59:1d:302:SF4:S2	2.96	0.52
37:1f:28:ARG:O	37:1f:32:ASN:ND2	2.42	0.52
47:1p:9:PHE:HE2	47:1p:18:ARG:HD2	1.74	0.52
50:1s:12:ASP:O	50:1s:14:HIS:N	2.35	0.52
1:2A:825:C:H42	1:2A:832:G:H1	1.57	0.52
1:2A:2074:U:H2'	1:2A:2075:U:C6	2.45	0.52
1:2A:2529:G:O6	31:29:31:LYS:NZ	2.42	0.52
21:2Z:23:LYS:HD2	21:2Z:40:ASP:HB2	1.91	0.52
32:2a:384:G:H2'	32:2a:385:C:H6	1.75	0.52
32:2a:935:A:H2'	32:2a:936:C:C6	2.44	0.52
32:2a:1039:C:H2'	32:2a:1040:U:O4'	2.10	0.52
32:2a:1228:C:H2'	32:2a:1229:A:C8	2.44	0.52
41:2j:12:ASP:OD1	41:2j:14:LYS:N	2.42	0.52
1:1A:586:A:N1	1:1A:809:G:O2'	2.41	0.52
1:1A:674:G:O2'	5:1F:74:ARG:HD3	2.10	0.52
1:1A:2340:G:H2'	1:1A:2341:G:C8	2.45	0.52
2:1B:7:G:H1	2:1B:114:C:N4	2.04	0.52
3:1D:244:ARG:HB2	3:1D:245:PRO:HD2	1.91	0.52
14:1S:20:ARG:NH2	22:10:51:VAL:O	2.40	0.52
21:1Z:26:GLY:HA3	21:1Z:86:VAL:HG23	1.92	0.52
23:11:69:LYS:O	23:11:72:GLU:HB3	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:580:U:H2'	32:1a:581:G:O4'	2.10	0.52
32:1a:1061:G:H1	32:1a:1195:C:N4	2.07	0.52
46:1o:56:LEU:O	46:1o:60:VAL:HG23	2.10	0.52
1:2A:2557:G:H2'	1:2A:2558:C:H6	1.75	0.52
5:2F:157:VAL:HB	5:2F:194:MET:HG3	1.91	0.52
12:2Q:4:PRO:HD3	12:2Q:70:PRO:O	2.08	0.52
20:2Y:20:TYR:CE2	20:2Y:43:ASN:HA	2.45	0.52
32:2a:559:A:H4'	32:2a:560:U:H3'	1.90	0.52
32:2a:920:U:H2'	32:2a:921:U:C6	2.44	0.52
32:2a:1048:G:O4'	32:2a:1215:G:H4'	2.10	0.52
35:2d:114:ARG:HA	35:2d:117:ALA:HB3	1.91	0.52
43:2l:76:ASN:ND2	43:2l:106:ASP:O	2.42	0.52
50:2s:77:THR:HG23	50:2s:78:ARG:HG3	1.92	0.52
8:1I:1:MET:H2	8:1I:21:VAL:H	1.57	0.52
32:1a:221:C:H2'	32:1a:222:U:H6	1.75	0.52
32:1a:376:G:H2'	32:1a:377:G:H8	1.72	0.52
32:1a:648:A:H2'	32:1a:649:G:H8	1.74	0.52
33:1b:178:ARG:HH12	39:1h:68:ARG:HH22	1.59	0.52
37:1f:69:GLU:H	37:1f:69:GLU:CD	2.18	0.52
39:1h:36:LEU:HD23	39:1h:39:LEU:HD12	1.92	0.52
42:1k:21:ILE:HG12	42:1k:30:VAL:HG22	1.90	0.52
52:1u:6:ARG:HE	52:1u:15:ARG:CZ	2.23	0.52
1:2A:184:C:H1'	1:2A:217:G:H1'	1.92	0.52
1:2A:1689:A:N7	1:2A:1697:G:N2	2.58	0.52
1:2A:2516:G:H1	1:2A:2568:C:H42	1.56	0.52
36:2e:144:THR:H	36:2e:147:ASP:HB2	1.75	0.52
43:2l:16:GLU:HG2	43:2l:17:LYS:O	2.10	0.52
47:2p:19:ILE:HD11	47:2p:39:TYR:HB3	1.91	0.52
1:1A:1042:G:N2	1:1A:1113:U:O2	2.28	0.51
1:1A:1858:G:N2	1:1A:1883:G:H2'	2.24	0.51
1:1A:2418:A:C2	1:1A:2419:U:C2	2.98	0.51
4:1E:191:PRO:HD2	60:1E:408:HOH:O	2.09	0.51
32:1a:438:G:H22	32:1a:494:U:H3'	1.75	0.51
32:1a:667:G:OP1	32:1a:732:C:O2'	2.25	0.51
32:1a:1222:G:H5''	50:1s:78:ARG:NH2	2.25	0.51
32:1a:1306:A:H1'	32:1a:1332:A:C2	2.45	0.51
36:1e:31:LEU:HB2	36:1e:45:PHE:HE1	1.75	0.51
40:1i:127:LYS:NZ	54:1x:34:C:OP2	2.39	0.51
1:2A:531:C:OP1	1:2A:561:G:N1	2.40	0.51
1:2A:829:A:N7	1:2A:2248:C:H5'	2.25	0.51
5:2F:109:GLY:O	5:2F:113:ALA:N	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2P:94:GLU:HG3	11:2P:96:THR:HG23	1.91	0.51
20:2Y:56:PRO:O	20:2Y:58:GLY:N	2.38	0.51
32:2a:706:A:H5''	42:2k:22:HIS:ND1	2.26	0.51
32:2a:1263:C:H1'	32:2a:1273:G:C2	2.45	0.51
38:2g:153:HIS:CE1	42:2k:58:PRO:HD2	2.45	0.51
1:1A:197:A:N6	1:1A:2430:A:O2'	2.44	0.51
1:1A:1053:C:N3	1:1A:1106:G:N2	2.49	0.51
1:1A:1778:U:H2'	1:1A:1784:A:N6	2.25	0.51
1:1A:2219:G:H2'	1:1A:2220:G:C8	2.41	0.51
7:1H:35:VAL:HG13	7:1H:71:LEU:HD23	1.92	0.51
19:1X:25:LYS:HA	19:1X:81:VAL:O	2.10	0.51
20:1Y:92:ASN:HB3	20:1Y:94:LYS:H	1.75	0.51
32:1a:73:G:C6	32:1a:76:C:C4	2.98	0.51
32:1a:148:G:H2'	32:1a:149:A:H8	1.75	0.51
32:1a:255:G:H1'	48:1q:16:GLN:OE1	2.10	0.51
32:1a:593:G:H2'	32:1a:594:G:O4'	2.11	0.51
32:1a:922:G:C6	32:1a:923:A:C6	2.99	0.51
37:1f:96:PRO:HB3	49:1r:30:ASP:CG	2.35	0.51
1:2A:271(H):G:H2'	1:2A:271(I):G:C8	2.46	0.51
1:2A:970:C:O2	1:2A:984:A:O2'	2.21	0.51
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	1.92	0.51
8:2I:38:LEU:H	8:2I:38:LEU:HD12	1.75	0.51
10:2O:100:GLY:O	10:2O:119:PRO:HD2	2.10	0.51
21:2Z:43:GLU:HA	21:2Z:46:LYS:HB2	1.90	0.51
21:2Z:159:PRO:HA	21:2Z:161:VAL:H	1.75	0.51
32:2a:9:G:H2'	32:2a:10:A:C8	2.44	0.51
32:2a:10:A:OP2	36:2e:126:ARG:HD2	2.11	0.51
35:2d:148:VAL:HG12	35:2d:153:ARG:HG2	1.92	0.51
1:1A:298:G:OP2	60:1A:4213:HOH:O	2.19	0.51
1:1A:2061:G:H5''	1:1A:2503:2MA:C2	2.40	0.51
1:1A:2074:U:H2'	1:1A:2075:U:C6	2.46	0.51
8:1I:123:LEU:HD12	8:1I:144:VAL:HG23	1.92	0.51
9:1N:19:GLU:HB2	9:1N:56:ASN:HD22	1.75	0.51
21:1Z:63:ASP:O	21:1Z:65:GLN:N	2.43	0.51
25:13:18:ASP:OD1	25:13:18:ASP:N	2.42	0.51
32:1a:61:G:H2'	32:1a:62:U:O4'	2.10	0.51
32:1a:559:A:OP1	36:1e:126:ARG:NH2	2.43	0.51
32:1a:763:G:H2'	32:1a:764:C:H6	1.73	0.51
34:1c:37:GLN:HE22	45:1n:47:LEU:HD13	1.76	0.51
34:1c:52:LEU:HD21	34:1c:55:VAL:HG23	1.92	0.51
40:1i:43:ALA:HA	40:1i:74:ILE:HD13	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:879:G:H3'	1:2A:880:G:O4'	2.10	0.51
1:2A:1470:G:O2'	1:2A:1520:G:O6	2.20	0.51
1:2A:2163:C:H3'	1:2A:2164:C:O4'	2.10	0.51
16:2U:27:LEU:O	16:2U:31:SER:N	2.42	0.51
32:2a:425:G:O3'	35:2d:45:GLN:NE2	2.43	0.51
32:2a:659:U:H2'	32:2a:660:G:O4'	2.10	0.51
32:2a:1003:G:O6	32:2a:1035:A:H2'	2.10	0.51
32:2a:1203:C:H2'	32:2a:1204:A:C8	2.45	0.51
32:2a:1306:A:OP1	52:2u:6:ARG:NH2	2.42	0.51
48:2q:43:LEU:HD22	48:2q:68:ARG:HE	1.75	0.51
1:1A:27:G:N2	1:1A:512:G:H1'	2.25	0.51
3:1D:126:GLN:HE21	3:1D:127:VAL:HG22	1.75	0.51
32:1a:34:C:H2'	32:1a:35:G:C8	2.45	0.51
32:1a:969:A:H4'	41:1j:55:LYS:HZ3	1.74	0.51
35:1d:102:ASP:N	35:1d:102:ASP:OD1	2.42	0.51
42:1k:80:VAL:HG13	42:1k:103:LEU:HD22	1.93	0.51
47:1p:57:ARG:NH2	47:1p:79:VAL:O	2.31	0.51
1:2A:422:A:OP2	60:2A:3950:HOH:O	2.19	0.51
1:2A:479:A:H4'	1:2A:480:A:H5'	1.92	0.51
1:2A:1280:G:H1	1:2A:1290:C:H42	1.58	0.51
1:2A:2164:C:C5	1:2A:2165:G:H1'	2.45	0.51
1:2A:2592:G:OP1	60:2A:3952:HOH:O	2.19	0.51
2:2B:16:G:H2'	2:2B:17:C:C6	2.45	0.51
6:2G:7:LEU:HB2	6:2G:104:GLU:HG3	1.91	0.51
6:2G:44:GLY:N	6:2G:88:ILE:O	2.42	0.51
22:20:25:ARG:HB3	22:20:67:VAL:HG21	1.92	0.51
32:2a:376:G:H2'	32:2a:377:G:H8	1.75	0.51
32:2a:513:C:H2'	32:2a:514:C:C6	2.46	0.51
32:2a:734:G:H2'	32:2a:735:C:H6	1.75	0.51
32:2a:975:A:H4'	32:2a:976:G:C5'	2.38	0.51
32:2a:1004:A:N1	32:2a:1037:C:C2	2.79	0.51
32:2a:1512:U:H2'	32:2a:1513:A:C8	2.46	0.51
34:2c:82:GLU:HA	34:2c:85:ARG:NH1	2.26	0.51
38:2g:65:ALA:O	38:2g:69:VAL:HG23	2.10	0.51
38:2g:153:HIS:HE1	42:2k:57:THR:HB	1.75	0.51
43:2l:10:LEU:HB3	48:2q:32:TYR:CE2	2.46	0.51
52:2u:2:GLY:O	52:2u:5:ASP:N	2.34	0.51
1:1A:759:G:N2	60:1A:4317:HOH:O	2.44	0.51
1:1A:956:G:OP2	12:1Q:14:ARG:NH1	2.44	0.51
1:1A:2001:A:H2'	1:1A:2002:G:C8	2.45	0.51
1:1A:2193:G:H2'	1:1A:2194:G:H8	1.76	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2393:A:H2'	1:1A:2394:C:H6	1.75	0.51
1:1A:2422:A:N7	30:18:31:HIS:HE1	2.08	0.51
1:1A:2633:G:H2'	1:1A:2634:G:O4'	2.10	0.51
2:1B:42:C:OP1	6:1G:67:LYS:NZ	2.36	0.51
8:1I:77:LEU:HB3	8:1I:142:VAL:HG13	1.93	0.51
10:1O:7:TYR:HE2	10:1O:20:MET:HE3	1.76	0.51
24:12:31:GLU:HB3	24:12:53:LEU:HD11	1.92	0.51
28:16:14:THR:HG23	28:16:15:GLU:HG3	1.93	0.51
32:1a:56:U:H2'	32:1a:57:G:H8	1.76	0.51
32:1a:664:G:H4'	32:1a:725:G:O2'	2.10	0.51
32:1a:755:G:OP2	46:1o:65:ARG:HD2	2.11	0.51
40:1i:108:VAL:HG22	40:1i:109:VAL:H	1.75	0.51
48:1q:10:VAL:HA	48:1q:20:THR:O	2.10	0.51
1:2A:237:C:O2	1:2A:609:A:O2'	2.28	0.51
1:2A:797:C:H2'	1:2A:798:G:O4'	2.10	0.51
1:2A:1965:C:H3'	1:2A:1966:A:H2'	1.92	0.51
6:2G:62:LEU:O	6:2G:65:GLY:N	2.39	0.51
7:2H:24:VAL:O	7:2H:34:GLU:HA	2.10	0.51
32:2a:474:G:H2'	32:2a:475:G:H8	1.75	0.51
32:2a:1104:G:H4'	33:2b:111:ARG:HE	1.75	0.51
32:2a:1358:U:OP1	45:2n:35:ARG:HG3	2.10	0.51
44:2m:116:THR:HG22	44:2m:117:VAL:H	1.75	0.51
49:2r:22:VAL:HG12	49:2r:26:LEU:HD23	1.93	0.51
1:1A:455:C:N3	1:1A:472:A:H2'	2.25	0.51
1:1A:862:G:OP2	60:1A:4207:HOH:O	2.18	0.51
1:1A:1371:G:H2'	1:1A:1372:U:C5	2.45	0.51
2:1B:13:A:N1	2:1B:69:G:O2'	2.41	0.51
14:1S:93:LYS:HG2	14:1S:95:HIS:HB2	1.91	0.51
15:1T:105:LEU:HB3	15:1T:109:GLU:HB3	1.93	0.51
32:1a:1324:A:H4'	32:1a:1362:C:H4'	1.92	0.51
38:1g:57:GLU:OE1	38:1g:59:LEU:HB3	2.11	0.51
1:2A:272(B):G:H2'	1:2A:272(C):G:C8	2.45	0.51
1:2A:628:G:H5''	30:28:18:ALA:HB2	1.92	0.51
1:2A:958:U:OP2	12:2Q:14:ARG:NH2	2.32	0.51
1:2A:981:A:N1	1:2A:2027:G:O2'	2.43	0.51
1:2A:1482:G:H2'	1:2A:1484:G:H8	1.75	0.51
2:2B:98:G:H3'	2:2B:99:G:H8	1.76	0.51
7:2H:38:SER:HB3	7:2H:41:MET:HG2	1.93	0.51
8:2I:81:VAL:HG23	8:2I:145:VAL:O	2.11	0.51
21:2Z:7:ALA:HB3	21:2Z:61:LEU:HD12	1.93	0.51
32:2a:601:C:H2'	32:2a:602:A:C8	2.45	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:971:G:P	32:2a:1231:G:H21	2.34	0.51
32:2a:1524:C:N4	32:2a:1525:G:O6	2.44	0.51
38:2g:69:VAL:HG13	38:2g:135:VAL:HA	1.92	0.51
40:2i:99:LEU:HB3	40:2i:101:PHE:HE2	1.76	0.51
41:2j:21:GLN:HA	41:2j:21:GLN:HE21	1.74	0.51
1:1A:1424:G:H2'	1:1A:1425:G:O4'	2.10	0.51
1:1A:1550:C:OP1	1:1A:1720:U:O2'	2.28	0.51
35:1d:15:GLU:HB3	35:1d:63:LYS:HE2	1.93	0.51
36:1e:15:ARG:HG3	36:1e:28:PHE:CZ	2.46	0.51
42:1k:31:THR:HG22	42:1k:42:TRP:HB2	1.93	0.51
43:1l:102:ARG:NH2	43:1l:109:GLY:O	2.43	0.51
1:2A:62:C:H42	1:2A:93:G:H1	1.59	0.51
1:2A:541:C:H2'	1:2A:542:C:H6	1.76	0.51
1:2A:2124:G:O6	1:2A:2174:C:N3	2.43	0.51
15:2T:117:ASP:O	15:2T:121:ILE:HG13	2.11	0.51
32:2a:685:G:C2	32:2a:686:U:C4	2.98	0.51
32:2a:790:A:OP1	54:2x:38:A:O2'	2.29	0.51
32:2a:1002:G:C6	32:2a:1003:G:H8	2.28	0.51
32:2a:1117:G:H5'	32:2a:1118:C:OP2	2.11	0.51
33:2b:124:SER:HB3	33:2b:125:PRO:HD3	1.93	0.51
33:2b:201:ILE:HG21	33:2b:214:ILE:HG21	1.91	0.51
42:2k:34:ASP:OD1	42:2k:38:ASN:N	2.44	0.51
1:1A:411:G:H3'	60:1A:4911:HOH:O	2.11	0.51
1:1A:996:A:OP2	16:1U:93:LYS:NZ	2.37	0.51
1:1A:1030:G:OP2	12:1Q:128:LYS:NZ	2.41	0.51
1:1A:1797:C:H4'	3:1D:257:LEU:O	2.11	0.51
2:1B:11:C:H3'	2:1B:12:C:H6	1.76	0.51
32:1a:264:U:H2'	32:1a:265:G:O4'	2.11	0.51
32:1a:1129:C:O2	32:1a:1130:A:N6	2.21	0.51
32:1a:1148:U:O2'	40:1i:14:VAL:HG21	2.10	0.51
32:1a:1323:G:H2'	32:1a:1324:A:C8	2.46	0.51
33:1b:163:PHE:HZ	33:1b:201:ILE:HD12	1.76	0.51
37:1f:97:PHE:O	49:1r:31:LEU:N	2.26	0.51
38:1g:139:GLU:O	38:1g:143:ARG:N	2.42	0.51
40:1i:24:GLY:HA2	40:1i:59:PHE:O	2.10	0.51
1:2A:459:U:H5''	29:27:40:TRP:CD2	2.46	0.51
1:2A:581:C:H2'	1:2A:582:G:C8	2.46	0.51
1:2A:1468:C:H2'	1:2A:1469:A:C8	2.45	0.51
1:2A:1786:A:H1'	1:2A:1938:A:N6	2.25	0.51
1:2A:2223:G:OP1	3:2D:172:TYR:OH	2.19	0.51
32:2a:59:A:H3'	32:2a:331:G:H22	1.74	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:155:C:H2'	32:2a:156:G:C8	2.45	0.51
32:2a:512:U:H2'	32:2a:513:C:C6	2.45	0.51
32:2a:1122:U:H2'	32:2a:1123:A:C8	2.46	0.51
34:2c:29:TYR:HE2	34:2c:33:LEU:HD22	1.76	0.51
35:2d:155:LEU:HB3	35:2d:158:ILE:HD12	1.93	0.51
35:2d:193:ASP:N	35:2d:193:ASP:OD1	2.44	0.51
40:2i:26:VAL:HG22	40:2i:61:ALA:HB3	1.93	0.51
1:1A:511:U:H4'	1:1A:1235:G:H4'	1.93	0.51
1:1A:885:C:OP1	1:1A:885:C:H4'	2.11	0.51
1:1A:1567:A:OP2	3:1D:84:TYR:OH	2.24	0.51
1:1A:2122:U:H2'	1:1A:2123:G:O4'	2.10	0.51
1:1A:2203:U:H3	1:1A:2220:G:H1	1.59	0.51
1:1A:2597:G:OP1	60:1A:4212:HOH:O	2.19	0.51
1:1A:2732:G:H3'	1:1A:2733:A:O4'	2.11	0.51
9:1N:42:TRP:HA	9:1N:48:MET:SD	2.51	0.51
32:1a:422:C:H5'	32:1a:423:G:C5	2.46	0.51
32:1a:769:G:H4'	32:1a:1513:A:H4'	1.93	0.51
32:1a:1004:A:H2'	32:1a:1005:A:H5'	1.92	0.51
49:1r:58:LEU:HD12	49:1r:66:LEU:HD22	1.93	0.51
54:1x:55:PSU:N3	54:1x:58:A:OP2	2.36	0.51
1:2A:415:A:H61	1:2A:2408:U:H3	1.58	0.51
1:2A:643:A:N1	1:2A:2369:A:O2'	2.44	0.51
1:2A:833:U:H1'	11:2P:55:ARG:HH21	1.76	0.51
4:2E:9:VAL:HB	15:2T:3:ARG:HG2	1.92	0.51
4:2E:103:ASP:N	4:2E:199:ARG:O	2.41	0.51
5:2F:137:LYS:H	5:2F:137:LYS:HZ3	1.59	0.51
6:2G:33:ARG:HE	6:2G:162:THR:HG21	1.75	0.51
6:2G:38:VAL:HG22	6:2G:93:THR:HG23	1.92	0.51
7:2H:103:LEU:HB2	7:2H:123:PHE:CD2	2.45	0.51
20:2Y:97:ARG:NH1	20:2Y:106:LEU:O	2.44	0.51
32:2a:743:U:H2'	32:2a:744:C:C6	2.46	0.51
32:2a:1202:G:O4'	45:2n:29:ARG:NH1	2.43	0.51
34:2c:120:VAL:O	34:2c:124:ILE:HG23	2.11	0.51
35:2d:119:GLN:HG2	35:2d:123:HIS:CD2	2.46	0.51
1:1A:45:C:OP2	1:1A:215:G:H2'	2.10	0.51
1:1A:1448:G:O2'	1:1A:1528(A):A:N1	2.39	0.51
3:1D:83:GLU:HB2	3:1D:92:ILE:HG13	1.91	0.51
10:1O:100:GLY:O	10:1O:119:PRO:HD2	2.11	0.51
16:1U:17:ILE:HG13	16:1U:32:PHE:HE1	1.76	0.51
24:12:14:ARG:HG2	24:12:63:VAL:HG11	1.93	0.51
32:1a:432:A:H3'	32:1a:433:C:H6	1.76	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:534:U:O5'	32:1a:534:U:H6	1.94	0.51
33:1b:8:LYS:H	33:1b:8:LYS:HD3	1.76	0.51
41:1j:68:HIS:H	41:1j:68:HIS:CD2	2.27	0.51
50:1s:55:LYS:HG3	50:1s:56:GLN:HG3	1.93	0.51
54:1x:10:G:H22	54:1x:26:G:H1'	1.75	0.51
54:1x:25:C:H2'	54:1x:26:G:O4'	2.10	0.51
1:2A:82:G:N2	1:2A:103:A:OP2	2.44	0.51
1:2A:271(E):U:H2'	1:2A:271(F):C:C6	2.46	0.51
1:2A:298:G:OP2	60:2A:3953:HOH:O	2.19	0.51
1:2A:338:G:H2'	1:2A:339:U:H6	1.75	0.51
1:2A:741:G:OP1	60:2A:3954:HOH:O	2.19	0.51
1:2A:2116:G:N7	1:2A:2166:G:N2	2.45	0.51
1:2A:2377:A:H2'	1:2A:2378:A:C8	2.46	0.51
1:2A:2710:C:OP1	13:2R:15:SER:OG	2.25	0.51
12:2Q:53:ALA:HB1	12:2Q:120:ILE:HG22	1.93	0.51
32:2a:189(A):C:H2'	32:2a:189(B):C:H6	1.74	0.51
32:2a:555:C:H2'	32:2a:556:C:C6	2.46	0.51
32:2a:976:G:N7	32:2a:1359:C:H1'	2.26	0.51
1:1A:1045:A:OP1	1:1A:1045:A:H4'	2.11	0.50
1:1A:1248:G:P	5:1F:92:PRO:HG3	2.51	0.50
1:1A:2287:A:O2'	1:1A:2288:A:H3'	2.11	0.50
1:1A:2347:C:OP1	28:16:38:LYS:NZ	2.36	0.50
17:1V:66:ARG:HB3	17:1V:88:ARG:HB3	1.94	0.50
21:1Z:63:ASP:OD1	21:1Z:63:ASP:N	2.43	0.50
28:16:13:CYS:SG	28:16:47:THR:HG21	2.51	0.50
32:1a:658:G:H2'	32:1a:659:U:H6	1.76	0.50
32:1a:1319:A:H61	32:1a:1361:G:H1'	1.75	0.50
32:1a:1373:G:H5''	38:1g:36:LYS:HD2	1.93	0.50
48:1q:17:LYS:HD3	48:1q:47:PRO:HA	1.93	0.50
1:2A:55:G:O2'	1:2A:127:A:N1	2.39	0.50
1:2A:947:G:H1	1:2A:970:C:H42	1.58	0.50
1:2A:1291:C:H2'	1:2A:1292:U:C6	2.46	0.50
1:2A:1686:C:H2'	1:2A:1687:G:O4'	2.12	0.50
2:2B:68:C:H2'	2:2B:69:G:H8	1.76	0.50
7:2H:51:ARG:NH1	7:2H:53:GLU:OE2	2.40	0.50
32:2a:1093:A:N3	32:2a:1095:U:H5'	2.26	0.50
32:2a:1142:G:H2'	32:2a:1143:G:O4'	2.10	0.50
40:2i:29:ASN:OD1	40:2i:65:VAL:N	2.44	0.50
42:2k:29:ILE:HG23	42:2k:44:SER:HB3	1.93	0.50
1:1A:674:G:OP2	60:1A:4214:HOH:O	2.20	0.50
1:1A:944:G:N7	60:1A:4227:HOH:O	2.35	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1472:A:N6	1:1A:1519:G:H1'	2.27	0.50
7:1H:12:PRO:O	7:1H:15:VAL:HG13	2.10	0.50
20:1Y:34:LYS:NZ	60:1Y:301:HOH:O	2.45	0.50
32:1a:474:G:H5'	32:1a:475:G:OP2	2.11	0.50
32:1a:669:U:H2'	32:1a:670:G:C8	2.46	0.50
32:1a:986:A:H2'	32:1a:987:G:O4'	2.11	0.50
32:1a:1004:A:H5''	32:1a:1024:G:H22	1.76	0.50
35:1d:173:TRP:CE3	35:1d:174:LEU:HG	2.47	0.50
39:1h:110:ALA:HB3	39:1h:121:ASP:HB3	1.92	0.50
48:1q:13:ASP:HA	48:1q:19:VAL:HG12	1.93	0.50
1:2A:458:G:O2'	29:27:39:ARG:HD3	2.10	0.50
1:2A:1342:A:OP2	60:2A:3951:HOH:O	2.19	0.50
1:2A:2138:C:N3	1:2A:2153:G:N2	2.54	0.50
1:2A:2416:C:O3'	11:2P:65:ARG:NH2	2.45	0.50
8:2I:62:LYS:HE2	8:2I:133:HIS:NE2	2.26	0.50
12:2Q:43:THR:N	12:2Q:46:GLN:OE1	2.42	0.50
20:2Y:14:LEU:CB	20:2Y:75:ILE:HD11	2.41	0.50
27:25:16:ARG:HG3	27:25:17:ASP:N	2.26	0.50
32:2a:598:U:H2'	32:2a:599:C:H6	1.75	0.50
32:2a:1234:C:H1'	32:2a:1364:U:O2	2.11	0.50
32:2a:1326:C:P	52:2u:17:THR:HG1	2.34	0.50
33:2b:120:ALA:O	33:2b:125:PRO:HD2	2.11	0.50
42:2k:62:GLN:HG3	42:2k:97:ALA:HB2	1.93	0.50
54:2x:76:A:OP1	60:2x:201:HOH:O	2.19	0.50
1:1A:272:G:N7	1:1A:421:U:H2'	2.27	0.50
1:1A:593:G:H1	1:1A:664:C:H42	1.58	0.50
1:1A:1173:G:N1	1:1A:1176:G:OP2	2.44	0.50
6:1G:43:LEU:HD22	6:1G:153:ARG:HD2	1.93	0.50
21:1Z:47:VAL:O	21:1Z:50:GLN:NE2	2.44	0.50
32:1a:7:G:O2'	36:1e:120:THR:O	2.29	0.50
47:1p:49:LEU:HD21	47:1p:51:VAL:HG23	1.93	0.50
1:2A:857:C:N4	1:2A:858:U:O4	2.44	0.50
1:2A:1999:C:H4'	1:2A:2723:C:O2	2.12	0.50
10:2O:73:ASP:OD2	15:2T:32:TYR:OH	2.13	0.50
24:22:64:LEU:O	24:22:68:ARG:HG3	2.10	0.50
32:2a:331:G:N7	60:2a:1922:HOH:O	2.34	0.50
32:2a:1005:A:H3'	32:2a:1006:C:C6	2.47	0.50
32:2a:1066:C:H2'	32:2a:1067:A:C8	2.46	0.50
32:2a:1316:G:H22	32:2a:1319:A:H5''	1.75	0.50
32:2a:1342:C:H2'	32:2a:1343:G:H8	1.76	0.50
1:1A:723:G:H2'	1:1A:724:U:O4'	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1864:U:H2'	1:1A:1865:G:H8	1.76	0.50
1:1A:2133:G:H22	1:1A:2157:G:H1'	1.77	0.50
1:1A:2172:U:H3'	1:1A:2173:A:H5'	1.93	0.50
3:1D:137:PRO:O	3:1D:140:THR:OG1	2.30	0.50
5:1F:183:VAL:O	5:1F:187:VAL:HG23	2.12	0.50
8:1I:93:THR:HG22	8:1I:119:PRO:HB3	1.93	0.50
8:1I:114:LEU:HD22	8:1I:130:TYR:HD1	1.76	0.50
11:1P:37:GLY:O	11:1P:40:SER:N	2.44	0.50
24:12:46:GLN:O	24:12:49:LYS:HG3	2.10	0.50
32:1a:864:A:OP2	36:1e:85:GLY:HA2	2.11	0.50
32:1a:1015:A:H2'	32:1a:1016:A:C8	2.46	0.50
32:1a:1303:C:OP2	60:1a:3311:HOH:O	2.19	0.50
32:1a:1529:G:H4'	32:1a:1530:G:OP2	2.11	0.50
39:1h:83:ILE:HA	39:1h:136:GLU:O	2.11	0.50
1:2A:900:A:H2'	1:2A:901:A:H8	1.77	0.50
1:2A:1158:C:H2'	1:2A:1159:U:H6	1.77	0.50
3:2D:158:ALA:O	3:2D:161:THR:OG1	2.29	0.50
20:2Y:90:LEU:HD23	20:2Y:91:GLU:H	1.76	0.50
32:2a:1438:G:H2'	32:2a:1439:C:H6	1.75	0.50
51:2t:16:HIS:O	51:2t:19:SER:OG	2.25	0.50
1:1A:271:A:N3	1:1A:365:C:O2'	2.43	0.50
1:1A:1820:U:O2	3:1D:202:LYS:N	2.45	0.50
1:1A:2153:G:H2'	1:1A:2154:G:C8	2.47	0.50
1:1A:2642:G:H5'	9:1N:78:TYR:CD2	2.47	0.50
1:1A:2698:U:H2'	1:1A:2699:C:C6	2.47	0.50
9:1N:51:PHE:HE2	9:1N:119:ARG:HH21	1.59	0.50
32:1a:324:G:P	51:1t:22:ARG:HE	2.35	0.50
32:1a:715:A:H2'	32:1a:716:A:H8	1.76	0.50
32:1a:1304:G:N2	32:1a:1332:A:N7	2.59	0.50
32:1a:1346:A:N1	32:1a:1374:A:H5''	2.25	0.50
37:1f:12:PRO:HA	37:1f:45:LEU:HD11	1.93	0.50
47:1p:74:LEU:HG	47:1p:79:VAL:HG21	1.94	0.50
1:2A:856:C:O2'	1:2A:857:C:OP1	2.28	0.50
1:2A:1514:U:H2'	1:2A:1515:G:C8	2.46	0.50
1:2A:2461:C:H2'	1:2A:2462:U:C6	2.46	0.50
1:2A:2659:G:N2	1:2A:2661:G:H5''	2.26	0.50
2:2B:40:U:O2'	2:2B:41:U:H5'	2.10	0.50
13:2R:96:ARG:HH22	13:2R:117:VAL:HG13	1.76	0.50
15:2T:91:ARG:HB2	15:2T:121:ILE:HG12	1.94	0.50
18:2W:58:ALA:HB1	18:2W:64:MET:HB2	1.92	0.50
21:2Z:30:ASN:HD22	21:2Z:90:VAL:HB	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:629:G:H2'	32:2a:630:G:O4'	2.11	0.50
32:2a:1292:U:H5'	40:2i:38:GLN:HE21	1.76	0.50
34:2c:85:ARG:O	34:2c:89:GLU:N	2.40	0.50
40:2i:3:GLN:NE2	40:2i:20:ARG:HH21	2.09	0.50
9:1N:13:TRP:CE2	9:1N:133:GLN:HG2	2.47	0.50
32:1a:1030(B):C:H2'	32:1a:1030(C):G:H5'	1.93	0.50
32:1a:1130:A:H4'	40:1i:3:GLN:HE22	1.76	0.50
33:1b:61:LEU:HA	33:1b:64:ARG:HG2	1.94	0.50
36:1e:105:VAL:HB	36:1e:106:PRO:HD3	1.92	0.50
38:1g:111:ARG:HD2	38:1g:123:GLU:HB2	1.93	0.50
1:2A:265:A:H1'	1:2A:266:G:O4'	2.12	0.50
1:2A:559:G:H2'	1:2A:560:C:O4'	2.12	0.50
5:2F:171:PRO:HD2	5:2F:172:TRP:CD1	2.47	0.50
6:2G:73:ALA:HB3	6:2G:85:GLY:H	1.76	0.50
13:2R:21:TYR:HB3	13:2R:47:PHE:CD2	2.46	0.50
22:20:9:SER:OG	22:20:10:THR:N	2.44	0.50
24:22:16:LEU:HB3	24:22:20:GLU:HB3	1.92	0.50
33:2b:24:TRP:CE2	33:2b:26:PRO:HG3	2.46	0.50
41:2j:11:PHE:HE1	41:2j:67:THR:HG22	1.77	0.50
48:2q:75:ARG:HH22	48:2q:77:VAL:HG13	1.75	0.50
50:2s:28:LYS:HB3	50:2s:29:ARG:HA	1.93	0.50
1:1A:185:U:H2'	1:1A:186:G:C8	2.46	0.50
1:1A:987:G:O2'	1:1A:1000:A:N3	2.40	0.50
1:1A:2147:G:H3'	1:1A:2147:G:N3	2.27	0.50
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.45	0.50
7:1H:20:ALA:HB1	7:1H:21:PRO:HD2	1.93	0.50
7:1H:77:LYS:HD3	7:1H:83:TYR:CZ	2.46	0.50
7:1H:109:PHE:C	7:1H:111:HIS:H	2.20	0.50
12:1Q:138:ASP:OD1	12:1Q:138:ASP:N	2.43	0.50
21:1Z:48:PHE:HA	21:1Z:51:ALA:HB3	1.93	0.50
22:10:23:VAL:HA	22:10:38:VAL:HG22	1.93	0.50
32:1a:140:A:H2'	32:1a:141:A:C8	2.47	0.50
32:1a:964:A:HO2'	41:1j:55:LYS:HZ2	1.54	0.50
32:1a:1458:G:H5''	51:1t:31:SER:HB2	1.92	0.50
32:1a:1498:UR3:O2'	53:1v:17:U:OP1	2.24	0.50
33:1b:15:VAL:HG12	33:1b:209:ARG:HG2	1.93	0.50
33:1b:86:GLU:HG3	33:1b:92:TYR:HE2	1.76	0.50
43:1l:84:LEU:HB2	43:1l:105:TYR:CE2	2.47	0.50
54:1x:22:G:N7	54:1x:46:G:N2	2.55	0.50
3:2D:246:PRO:C	3:2D:254:THR:HG22	2.37	0.50
10:2O:104:ARG:HA	10:2O:121:VAL:HG12	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:2V:14:VAL:HG21	17:2V:57:VAL:HG21	1.93	0.50
32:2a:157:G:H2'	32:2a:158:G:H8	1.77	0.50
32:2a:176:C:H2'	32:2a:177:C:C6	2.47	0.50
32:2a:605:U:H2'	32:2a:606:G:H8	1.76	0.50
33:2b:32:ILE:HG21	33:2b:40:HIS:CD2	2.45	0.50
39:2h:6:ILE:HD12	39:2h:85:ARG:NH2	2.27	0.50
41:2j:51:ARG:HG2	45:2n:45:ARG:NH2	2.26	0.50
42:2k:81:ASP:OD1	42:2k:106:LYS:HG3	2.12	0.50
51:2t:100:ILE:HG22	51:2t:101:GLY:H	1.76	0.50
53:2v:14:A:P	53:2v:14:A:H3'	2.52	0.50
1:1A:117:G:C6	1:1A:119:A:C6	3.00	0.50
1:1A:1388:G:H2'	1:1A:1389:G:C8	2.47	0.50
1:1A:1973:G:H2'	1:1A:1974:C:C6	2.47	0.50
1:1A:2103:C:H42	1:1A:2186:G:H1	1.60	0.50
1:1A:2134:A:H2'	1:1A:2159:G:O2'	2.11	0.50
1:1A:2759:G:N2	7:1H:139:GLN:OE1	2.41	0.50
15:1T:35:LYS:HZ1	15:1T:36:GLU:C	2.20	0.50
26:14:28:LYS:HG2	26:14:29:PRO:HD2	1.94	0.50
32:1a:461:A:O2'	32:1a:471:G:N7	2.40	0.50
33:1b:80:ILE:HG23	33:1b:215:LEU:HD22	1.94	0.50
36:1e:67:VAL:HG22	36:1e:68:GLU:H	1.76	0.50
47:1p:29:ASP:OD1	47:1p:29:ASP:N	2.44	0.50
1:2A:570:G:H2'	1:2A:2030:A:C5	2.47	0.50
1:2A:588:U:H2'	1:2A:589:C:C6	2.47	0.50
1:2A:699:A:H2'	1:2A:700:G:O4'	2.12	0.50
1:2A:1180:C:H2'	1:2A:1181:C:C6	2.47	0.50
16:2U:44:ASN:ND2	17:2V:75:PHE:O	2.41	0.50
24:22:19:VAL:HA	24:22:22:GLU:HB2	1.94	0.50
32:2a:37:U:H2'	32:2a:38:G:H8	1.77	0.50
32:2a:189(G):G:H8	32:2a:189(G):G:OP1	1.95	0.50
32:2a:309:G:H2'	32:2a:310:G:C8	2.47	0.50
32:2a:1277:C:O2'	32:2a:1279:A:H8	1.95	0.50
32:2a:1510:U:H2'	32:2a:1511:G:C8	2.46	0.50
38:2g:111:ARG:HB2	38:2g:119:ARG:HD2	1.93	0.50
1:1A:318:C:H2'	1:1A:319:C:H6	1.77	0.50
1:1A:823:G:H2'	1:1A:824:A:C8	2.46	0.50
1:1A:1186:G:H2'	1:1A:1187:G:O4'	2.12	0.50
1:1A:1311:G:N2	1:1A:1603:A:H62	2.09	0.50
1:1A:1336:A:H2'	1:1A:1337:G:C8	2.47	0.50
1:1A:1669:A:H5''	1:1A:2550:G:OP1	2.12	0.50
1:1A:2394:C:H1'	60:1A:4261:HOH:O	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2849:U:H4'	1:1A:2868:A:C2	2.47	0.50
4:1E:7:VAL:HG13	4:1E:27:LEU:HB3	1.91	0.50
9:1N:131:GLN:O	9:1N:134:ARG:HG3	2.11	0.50
13:1R:62:ALA:HA	13:1R:65:LEU:HD22	1.94	0.50
26:14:50:VAL:HG11	44:1m:64:TRP:C	2.37	0.50
31:19:16:VAL:HG22	31:19:25:VAL:HG22	1.94	0.50
32:1a:8:A:C6	35:1d:209:ARG:HB2	2.47	0.50
32:1a:390:C:H2'	32:1a:391:G:C8	2.46	0.50
32:1a:1273:G:H3'	32:1a:1274:G:H8	1.77	0.50
32:1a:1462:G:H2'	32:1a:1463:C:C6	2.47	0.50
42:1k:14:VAL:HG21	42:1k:35:PRO:HD3	1.94	0.50
43:1l:11:VAL:HG13	48:1q:29:HIS:CD2	2.46	0.50
49:1r:44:LEU:HD11	49:1r:79:LEU:HB3	1.93	0.50
1:2A:1657:C:H2'	1:2A:1658:C:C6	2.47	0.50
1:2A:1660:C:H2'	1:2A:1661:G:C8	2.43	0.50
1:2A:1794:U:H2'	1:2A:1795:C:C6	2.47	0.50
1:2A:2028:U:H2'	1:2A:2029:G:O4'	2.11	0.50
6:2G:107:LEU:HD23	6:2G:111:LEU:HD12	1.94	0.50
10:2O:34:THR:OG1	10:2O:35:VAL:N	2.45	0.50
32:2a:505:G:H2'	32:2a:506:G:H8	1.75	0.50
32:2a:715:A:H2'	32:2a:716:A:C8	2.46	0.50
32:2a:1165:C:H2'	32:2a:1166:G:O4'	2.12	0.50
32:2a:1265:G:H2'	32:2a:1266:G:O4'	2.12	0.50
32:2a:1286:A:C8	32:2a:1287:A:H4'	2.46	0.50
1:1A:354:G:H2'	1:1A:355:G:H8	1.77	0.49
1:1A:535:C:O3'	16:1U:53:ARG:NH1	2.45	0.49
1:1A:862:G:H2'	1:1A:863:A:O4'	2.12	0.49
1:1A:1045:A:H5'	1:1A:1046:A:H5'	1.94	0.49
1:1A:1791:A:H3'	1:1A:1792:G:H8	1.76	0.49
1:1A:2294:C:H2'	1:1A:2295:C:H6	1.75	0.49
6:1G:115:ARG:NH1	6:1G:137:GLU:OE1	2.44	0.49
15:1T:109:GLU:O	15:1T:113:LYS:HG2	2.11	0.49
18:1W:3:ALA:HB3	18:1W:107:LEU:HB2	1.93	0.49
26:14:14:ILE:HG12	26:14:31:ILE:HB	1.93	0.49
32:1a:56:U:H2'	32:1a:57:G:C8	2.45	0.49
32:1a:260:G:OP1	51:1t:80:ARG:NH2	2.36	0.49
32:1a:403:C:H4'	35:1d:122:ARG:NH1	2.27	0.49
32:1a:624:C:O3'	47:1p:10:GLY:HA2	2.12	0.49
32:1a:660:G:H2'	32:1a:661:G:O4'	2.12	0.49
32:1a:1070:U:H2'	32:1a:1071:C:C6	2.47	0.49
32:1a:1129:C:OP1	40:1i:66:ARG:NH1	2.45	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:147:ALA:HA	35:1d:182:LYS:HA	1.94	0.49
36:1e:144:THR:O	36:1e:148:VAL:HG23	2.12	0.49
50:1s:20:LEU:HA	50:1s:23:ASN:ND2	2.27	0.49
1:2A:313:C:H2'	1:2A:314:A:H8	1.77	0.49
1:2A:1028:A:N6	1:2A:1125:G:H2'	2.26	0.49
1:2A:1818:U:O2'	3:2D:154:LYS:O	2.24	0.49
1:2A:2343:C:O2'	1:2A:2373:G:O2'	2.30	0.49
4:2E:15:PHE:CD2	15:2T:81:PRO:HD3	2.47	0.49
5:2F:15:SER:HB2	5:2F:18:ARG:HD2	1.94	0.49
11:2P:95:VAL:HG13	11:2P:125:VAL:HA	1.93	0.49
16:2U:8:VAL:HB	16:2U:12:ARG:HE	1.76	0.49
28:26:29:ASN:OD1	28:26:29:ASN:N	2.45	0.49
32:2a:983:A:H1'	32:2a:1049:U:O2	2.11	0.49
32:2a:1144:G:H21	32:2a:1146:A:H62	1.60	0.49
32:2a:1400:5MC:N4	54:2x:34:C:H1'	2.27	0.49
32:2a:1493:A:H5''	32:2a:1494:G:OP2	2.12	0.49
44:2m:66:LEU:O	44:2m:70:LEU:HB3	2.12	0.49
1:1A:57:C:H2'	1:1A:58:G:O4'	2.12	0.49
1:1A:1260:G:C6	1:1A:1261:C:C4	3.00	0.49
1:1A:1860:G:N2	1:1A:1883:G:H1'	2.27	0.49
1:1A:2011:U:H2'	1:1A:2012:G:O4'	2.13	0.49
1:1A:2257:U:H2'	1:1A:2258:C:C6	2.47	0.49
2:1B:24:G:N7	2:1B:56:G:H2'	2.27	0.49
4:1E:28:ALA:HB3	4:1E:93:VAL:HG12	1.93	0.49
6:1G:121:ASN:OD1	6:1G:123:ASN:N	2.45	0.49
7:1H:152:ARG:HG3	7:1H:161:GLY:HA2	1.94	0.49
16:1U:28:ARG:NH1	16:1U:38:THR:OG1	2.41	0.49
29:17:24:THR:HG23	29:17:27:GLY:H	1.77	0.49
32:1a:377:G:H1	32:1a:386:C:N4	2.10	0.49
32:1a:444:C:H2'	32:1a:445:G:H8	1.77	0.49
32:1a:598:U:H2'	32:1a:599:C:H6	1.77	0.49
32:1a:1030(D):A:H62	32:1a:1031:G:H21	1.58	0.49
32:1a:1330:U:O4	32:1a:1331:G:N1	2.45	0.49
48:1q:64:PRO:HA	48:1q:70:ARG:HD2	1.94	0.49
1:2A:370:G:OP2	60:2A:3950:HOH:O	2.18	0.49
1:2A:1910:G:H22	1:2A:1920:4OC:C2	2.25	0.49
1:2A:2590:A:H5''	3:2D:239:ARG:HG3	1.94	0.49
5:2F:126:VAL:O	5:2F:196:LEU:HG	2.13	0.49
6:2G:41:GLN:O	6:2G:43:LEU:N	2.45	0.49
8:2I:40:THR:OG1	8:2I:41:GLU:N	2.45	0.49
10:2O:4:PRO:O	10:2O:5:GLN:HB2	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:2T:107:ASP:HA	15:2T:110:ILE:HD12	1.94	0.49
21:2Z:11:GLU:HG3	21:2Z:12:GLY:H	1.77	0.49
32:2a:807:A:H2'	32:2a:808:C:C6	2.47	0.49
32:2a:1279:A:O2'	32:2a:1281:U:OP2	2.27	0.49
45:2n:22:THR:HG23	45:2n:33:VAL:HG13	1.94	0.49
46:2o:16:ALA:HB1	46:2o:21:ASP:HB3	1.94	0.49
50:2s:80:TYR:O	50:2s:81:ARG:HG2	2.12	0.49
5:1F:125:LEU:HD21	5:1F:199:TRP:CD2	2.47	0.49
23:11:89:GLU:O	23:11:93:GLU:HG2	2.11	0.49
32:1a:667:G:H4'	46:1o:51:HIS:ND1	2.28	0.49
32:1a:676:A:H2'	32:1a:677:U:C6	2.47	0.49
1:2A:852:G:N2	1:2A:926:A:H1'	2.27	0.49
1:2A:2270:G:H2'	1:2A:2271:G:O4'	2.11	0.49
1:2A:2287:A:O2'	1:2A:2288:A:H5''	2.13	0.49
3:2D:71:ASP:HB3	3:2D:103:ARG:HH12	1.76	0.49
15:2T:93:ARG:N	15:2T:115:ARG:O	2.41	0.49
32:2a:179:A:H2'	32:2a:180:U:C6	2.47	0.49
32:2a:500:G:C6	32:2a:546:G:C2	3.00	0.49
32:2a:1004:A:N6	32:2a:1037:C:H1'	2.26	0.49
32:2a:1014:A:H1'	50:2s:34:TRP:HB2	1.94	0.49
32:2a:1052:U:O4	32:2a:1200:C:O2'	2.18	0.49
32:2a:1053:G:H4'	32:2a:1054:C:H3'	1.94	0.49
32:2a:1053:G:N7	32:2a:1200:C:H5''	2.28	0.49
32:2a:1330:U:H2'	32:2a:1331:G:H5'	1.92	0.49
33:2b:119:GLU:CD	33:2b:153:ARG:HH12	2.19	0.49
34:2c:136:GLN:HB3	34:2c:140:ARG:NH1	2.27	0.49
38:2g:41:ARG:O	38:2g:45:ASP:N	2.39	0.49
40:2i:23:ASN:N	40:2i:60:ASP:OD1	2.41	0.49
41:2j:57:LYS:O	41:2j:60:ARG:NE	2.40	0.49
1:1A:184:C:H1'	1:1A:217:G:H1'	1.93	0.49
1:1A:1795:C:H2'	1:1A:1796:U:O4'	2.11	0.49
1:1A:1912:A:H62	1:1A:1917:PSU:HN3	1.60	0.49
1:1A:1998:G:OP1	60:1A:4209:HOH:O	2.19	0.49
1:1A:2172:U:H3'	1:1A:2173:A:C5'	2.40	0.49
22:10:33:ALA:N	22:10:64:ASP:OD1	2.43	0.49
32:1a:153:C:N4	32:1a:168:G:H1	2.11	0.49
32:1a:193:C:H2'	32:1a:194:C:C6	2.46	0.49
32:1a:745:C:H2'	32:1a:746:A:C8	2.48	0.49
32:1a:1248:A:N3	40:1i:70:LYS:HE2	2.27	0.49
32:1a:1368:G:OP1	40:1i:111:ARG:NH2	2.45	0.49
1:2A:1434:A:H61	1:2A:1558:A:N6	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:52:LYS:HA	5:2F:56:GLU:OE1	2.12	0.49
24:22:61:LEU:HD23	24:22:64:LEU:HD23	1.94	0.49
32:2a:390:C:H4'	47:2p:28:ARG:NH2	2.26	0.49
32:2a:408:A:H5''	35:2d:112:VAL:HG21	1.93	0.49
32:2a:789:U:O2'	32:2a:791:G:N7	2.42	0.49
32:2a:1226:C:H42	44:2m:104:ARG:HE	1.59	0.49
32:2a:1350:A:OP1	40:2i:121:ARG:NE	2.45	0.49
32:2a:1387:G:H2'	32:2a:1388:C:C6	2.48	0.49
1:1A:2371:G:H21	28:16:46:HIS:HE1	1.61	0.49
1:1A:2741:A:OP1	31:19:22:ARG:NH2	2.45	0.49
2:1B:49:C:H2'	2:1B:50:G:C8	2.47	0.49
8:1I:1:MET:O	8:1I:20:ASP:HA	2.13	0.49
32:1a:193:C:O2'	32:1a:194:C:H5'	2.12	0.49
32:1a:693:G:H2'	32:1a:694:A:C8	2.47	0.49
34:1c:199:LYS:HB3	34:1c:201:TYR:HE2	1.78	0.49
38:1g:113:GLU:HG2	38:1g:119:ARG:HG2	1.93	0.49
40:1i:112:LYS:NZ	40:1i:116:LYS:O	2.43	0.49
43:1l:102:ARG:HH21	43:1l:109:GLY:C	2.20	0.49
54:1x:14:A:H61	54:1x:21:A:H2	1.56	0.49
1:2A:242:G:H5''	30:28:64:TYR:CE2	2.48	0.49
1:2A:302:C:H2'	1:2A:303:U:H6	1.77	0.49
1:2A:329:G:H1	20:2Y:19:LYS:HG3	1.77	0.49
1:2A:587:C:OP2	11:2P:21:ARG:NH2	2.45	0.49
1:2A:1469:A:H2'	1:2A:1470:G:O4'	2.12	0.49
1:2A:1803:A:O2'	3:2D:259:THR:HG21	2.13	0.49
1:2A:2615:U:C2	27:25:7:PRO:HA	2.48	0.49
21:2Z:55:HIS:CE1	21:2Z:135:GLU:HB2	2.47	0.49
24:22:67:LYS:O	24:22:70:GLN:HG2	2.12	0.49
32:2a:1258:G:H2'	32:2a:1259:C:C6	2.48	0.49
32:2a:1259:C:C4	32:2a:1260:C:H1'	2.48	0.49
36:2e:12:LEU:HB3	36:2e:31:LEU:HB2	1.93	0.49
41:2j:61:GLU:OE1	45:2n:49:HIS:NE2	2.38	0.49
1:1A:699:A:H2'	1:1A:700:G:O4'	2.12	0.49
1:1A:813:U:H2'	1:1A:814:C:C6	2.48	0.49
1:1A:1012:U:O4	9:1N:28:THR:HG21	2.12	0.49
1:1A:1028:A:N3	1:1A:2486:G:O2'	2.40	0.49
1:1A:1825:A:H2'	1:1A:1826:G:C8	2.45	0.49
6:1G:53:LEU:H	6:1G:53:LEU:HD12	1.77	0.49
17:1V:50:PRO:HG2	17:1V:51:VAL:HG22	1.94	0.49
19:1X:40:LYS:HG3	19:1X:51:VAL:HB	1.93	0.49
32:1a:22:G:C6	32:1a:23:C:C4	3.00	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:993:G:H1	32:1a:1045:C:H42	1.61	0.49
32:1a:1126:U:O2	32:1a:1280:A:H2'	2.12	0.49
32:1a:1347:G:HO2'	32:1a:1373:G:H1	1.60	0.49
37:1f:97:PHE:HB3	49:1r:31:LEU:HB2	1.93	0.49
39:1h:4:ASP:OD2	39:1h:7:ALA:N	2.34	0.49
40:1i:5:TYR:HB2	40:1i:18:PHE:HE1	1.77	0.49
43:1l:55:VAL:HG12	43:1l:69:TYR:HA	1.94	0.49
1:2A:322:A:OP2	5:2F:169:ASN:HB2	2.13	0.49
1:2A:539:G:H2'	1:2A:540:C:C6	2.47	0.49
1:2A:1022:G:H22	1:2A:1142(A):A:H2	1.57	0.49
2:2B:118:G:C2	2:2B:119:G:H1'	2.46	0.49
3:2D:9:TYR:CE1	3:2D:13:ARG:HG3	2.47	0.49
6:2G:125:PHE:HB3	6:2G:166:ASP:CG	2.38	0.49
7:2H:8:PRO:HB3	7:2H:51:ARG:HG2	1.95	0.49
10:2O:49:ARG:NH2	32:2a:1423:G:OP1	2.35	0.49
14:2S:26:LEU:HD22	14:2S:87:PHE:CE1	2.48	0.49
32:2a:1024:G:C2'	32:2a:1025:U:H5''	2.43	0.49
32:2a:1151:A:H5''	41:2j:42:THR:H	1.77	0.49
32:2a:1224:G:H1	32:2a:1363:C:H42	1.59	0.49
32:2a:1336:C:H4'	32:2a:1337:G:O4'	2.12	0.49
32:2a:1447:A:H5''	32:2a:1452:C:OP2	2.12	0.49
35:2d:170:VAL:HG13	35:2d:171:GLY:O	2.13	0.49
38:2g:68:ASN:ND2	38:2g:127:ALA:O	2.30	0.49
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.94	0.49
1:1A:70:G:H5''	1:1A:112:U:O2	2.12	0.49
1:1A:1304:C:H2'	1:1A:1305:C:H6	1.78	0.49
1:1A:1466:G:H2'	1:1A:1547:C:H41	1.76	0.49
1:1A:1485:G:H1	1:1A:1504:C:N4	2.07	0.49
1:1A:2355:C:O2	22:10:39:ARG:NH2	2.46	0.49
1:1A:2359:C:H2'	1:1A:2360:A:C8	2.48	0.49
3:1D:183:ARG:NH1	3:1D:184:LYS:O	2.45	0.49
11:1P:121:LYS:HB2	11:1P:123:LEU:HD12	1.95	0.49
15:1T:32:TYR:CE1	15:1T:82:LEU:HB2	2.48	0.49
24:12:29:LYS:HG2	24:12:57:ILE:HD13	1.94	0.49
32:1a:578:C:H1'	32:1a:729:A:H1'	1.93	0.49
32:1a:767:A:H2'	32:1a:768:A:O4'	2.13	0.49
32:1a:1280:A:H5'	41:1j:40:LEU:HD22	1.94	0.49
35:1d:7:PRO:HB2	35:1d:10:ARG:HG2	1.94	0.49
36:1e:147:ASP:HA	36:1e:150:ARG:NH2	2.27	0.49
1:2A:242:G:H5''	30:28:64:TYR:CZ	2.47	0.49
1:2A:1328:G:H2'	1:2A:1330:C:C5	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1814:G:H2'	1:2A:1815:A:C8	2.47	0.49
1:2A:2399:G:H2'	1:2A:2400:G:O4'	2.12	0.49
3:2D:159:ALA:O	3:2D:161:THR:OG1	2.25	0.49
16:2U:47:TYR:HA	16:2U:50:ARG:NH2	2.28	0.49
18:2W:23:LEU:O	18:2W:27:LYS:HE3	2.11	0.49
32:2a:304:U:H2'	32:2a:305:G:C8	2.47	0.49
32:2a:674:G:N2	32:2a:717:C:O2	2.45	0.49
32:2a:814:A:H2'	32:2a:816:A:H5''	1.94	0.49
32:2a:1024:G:H2'	32:2a:1025:U:H5''	1.94	0.49
32:2a:1179:A:H2'	32:2a:1180:A:C8	2.48	0.49
32:2a:1244:C:H2'	32:2a:1245:A:C8	2.48	0.49
32:2a:1326:C:H2'	32:2a:1327:C:C6	2.47	0.49
35:2d:101:LEU:N	35:2d:138:TYR:O	2.45	0.49
38:2g:69:VAL:HA	38:2g:138:LYS:HD2	1.95	0.49
42:2k:33:THR:HA	42:2k:39:PRO:HA	1.95	0.49
42:2k:48:ILE:HG21	42:2k:63:LEU:HD22	1.95	0.49
1:1A:628:G:H2'	1:1A:629:G:C8	2.47	0.49
1:1A:857:C:H4'	22:10:23:VAL:HG21	1.94	0.49
1:1A:1965:C:H3'	1:1A:1966:A:H2'	1.93	0.49
8:1I:19:VAL:HG12	8:1I:20:ASP:H	1.78	0.49
10:1O:64:ARG:HB2	10:1O:79:PHE:CD2	2.47	0.49
11:1P:88:LEU:HD21	11:1P:95:VAL:HG21	1.94	0.49
32:1a:319:G:H2'	32:1a:320:C:O4'	2.13	0.49
32:1a:1133:G:H1	32:1a:1141:C:N4	2.11	0.49
35:1d:13:ARG:HB2	35:1d:40:PRO:HD3	1.95	0.49
39:1h:12:ARG:NH1	39:1h:25:ASP:O	2.45	0.49
1:2A:579:G:H2'	1:2A:580:C:C6	2.48	0.49
1:2A:1397:U:OP2	1:2A:1398:C:N4	2.40	0.49
1:2A:1470:G:N2	1:2A:1520:G:OP2	2.40	0.49
1:2A:2725:A:H1'	1:2A:2726:U:H2'	1.93	0.49
7:2H:35:VAL:HG11	7:2H:71:LEU:HB3	1.94	0.49
44:2m:80:ARG:O	44:2m:84:ILE:N	2.40	0.49
1:1A:992:C:H2'	1:1A:993:G:H8	1.78	0.49
1:1A:1388:G:H2'	1:1A:1389:G:H8	1.78	0.49
1:1A:2086:U:H2'	1:1A:2087:G:H8	1.78	0.49
1:1A:2712:U:O2'	1:1A:2713:A:H5'	2.12	0.49
2:1B:27:C:H5''	14:1S:54:LEU:HD11	1.93	0.49
6:1G:16:ARG:HH21	6:1G:31:VAL:CG2	2.26	0.49
20:1Y:51:VAL:HA	20:1Y:55:TYR:O	2.13	0.49
25:13:17:LYS:O	25:13:21:ALA:N	2.43	0.49
31:19:17:ILE:HG13	31:19:24:TYR:HB2	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:201:C:H42	32:1a:216:G:N2	2.10	0.49
32:1a:394:G:H2'	32:1a:395:C:C6	2.47	0.49
32:1a:1090:U:H3	32:1a:1095:U:H3	1.60	0.49
32:1a:1349:A:H1'	32:1a:1374:A:N6	2.26	0.49
1:2A:1183:G:H5''	25:23:30:ARG:NH2	2.28	0.49
1:2A:1263:U:C4	1:2A:1264:G:C6	3.01	0.49
1:2A:2010:G:H5''	18:2W:42:ARG:HB2	1.94	0.49
1:2A:2483:C:N3	12:2Q:124:LYS:NZ	2.60	0.49
15:2T:87:ASP:OD1	15:2T:87:ASP:N	2.46	0.49
20:2Y:2:ARG:NH1	20:2Y:4:LYS:HD3	2.25	0.49
26:24:61:ARG:O	26:24:62:ARG:HB2	2.13	0.49
32:2a:734:G:H2'	32:2a:735:C:C6	2.47	0.49
37:2f:97:PHE:HB2	49:2r:32:ARG:HG3	1.94	0.49
45:2n:12:ARG:HD2	45:2n:13:THR:O	2.13	0.49
1:1A:324:A:H2'	1:1A:325:G:O4'	2.13	0.49
1:1A:743:G:H2'	1:1A:744:G:O4'	2.13	0.49
1:1A:880:G:H8	1:1A:880:G:OP2	1.96	0.49
1:1A:1076:C:O3'	1:1A:1077:A:H8	1.96	0.49
3:1D:50:THR:O	3:1D:50:THR:OG1	2.31	0.49
6:1G:16:ARG:NH2	6:1G:28:VAL:O	2.46	0.49
15:1T:24:PRO:HD3	15:1T:52:ILE:HD12	1.95	0.49
26:14:40:HIS:HB3	26:14:43:TYR:CD2	2.47	0.49
29:17:30:VAL:HG22	29:17:33:ARG:HH22	1.78	0.49
38:1g:47:CYS:HA	38:1g:50:ILE:HG22	1.95	0.49
40:1i:26:VAL:HG13	40:1i:61:ALA:HB3	1.94	0.49
40:1i:33:PHE:HZ	40:1i:46:ALA:HB3	1.77	0.49
44:1m:29:ARG:HE	44:1m:64:TRP:CD1	2.31	0.49
1:2A:259:G:HO2'	1:2A:621:A:HO2'	1.50	0.49
1:2A:864:G:H21	1:2A:866:A:H61	1.61	0.49
4:2E:111:ARG:HA	13:2R:1:MET:SD	2.53	0.49
18:2W:21:VAL:HA	18:2W:24:ILE:HG12	1.94	0.49
29:27:26:GLY:O	29:27:30:VAL:HG23	2.13	0.49
32:2a:598:U:H4'	39:2h:94:TYR:CD2	2.47	0.49
32:2a:664:G:OP1	49:2r:64:ARG:NE	2.38	0.49
33:2b:16:HIS:C	33:2b:18:GLY:H	2.21	0.49
34:2c:148:GLY:HA2	34:2c:171:GLY:HA3	1.94	0.49
35:2d:88:VAL:HG22	36:2e:96:PRO:HB2	1.95	0.49
52:2u:5:ASP:O	52:2u:11:GLY:HA3	2.13	0.49
1:1A:1557:C:H5''	1:1A:1558:A:OP2	2.12	0.48
1:1A:2285:C:OP2	28:16:6:ARG:NH1	2.45	0.48
1:1A:2681:C:OP2	4:1E:109:LYS:NZ	2.38	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:1E:52:LEU:HB2	4:1E:76:ARG:HB2	1.95	0.48
11:1P:89:ALA:HA	11:1P:121:LYS:HD3	1.95	0.48
14:1S:102:ALA:HB1	14:1S:112:PHE:HZ	1.78	0.48
30:18:62:LEU:HB3	30:18:65:GLU:CG	2.43	0.48
32:1a:559:A:N3	32:1a:559:A:H5'	2.27	0.48
32:1a:721:G:H4'	32:1a:722:A:O4'	2.13	0.48
32:1a:1149:C:H2'	32:1a:1150:U:C6	2.48	0.48
50:1s:58:VAL:HG21	50:1s:76:PRO:HD2	1.93	0.48
1:2A:784:A:N6	1:2A:2072:G:O2'	2.46	0.48
1:2A:1364:G:C8	23:21:3:LYS:HD2	2.48	0.48
1:2A:1878:G:H2'	1:2A:1879:C:C6	2.48	0.48
1:2A:2648:C:H2'	1:2A:2649:U:C6	2.48	0.48
2:2B:33:G:N2	2:2B:35:U:O4	2.41	0.48
4:2E:181:LEU:HD11	15:2T:6:LEU:HD12	1.95	0.48
7:2H:101:ARG:NH2	7:2H:117:PRO:HG2	2.28	0.48
21:2Z:10:ARG:NH2	21:2Z:26:GLY:O	2.28	0.48
26:24:53:GLU:HG2	26:24:54:GLY:N	2.28	0.48
41:2j:65:LEU:HD12	45:2n:55:GLY:O	2.13	0.48
46:2o:39:LEU:HD23	46:2o:56:LEU:HB2	1.95	0.48
50:2s:64:GLU:CD	50:2s:64:GLU:H	2.21	0.48
54:2x:59:A:H2'	54:2x:60:U:H5'	1.95	0.48
1:1A:964:C:O2'	1:1A:2273:A:N3	2.38	0.48
1:1A:1094:U:H2'	1:1A:1095:A:C8	2.47	0.48
4:1E:5:LEU:HD12	4:1E:51:PHE:HB2	1.94	0.48
4:1E:104:VAL:HG13	4:1E:198:VAL:HG22	1.95	0.48
10:1O:13:ASN:ND2	10:1O:96:THR:OG1	2.46	0.48
14:1S:35:ILE:HG12	14:1S:101:LEU:HD22	1.95	0.48
15:1T:46:GLU:O	15:1T:65:LYS:HG3	2.13	0.48
35:1d:112:VAL:HG23	35:1d:116:GLN:NE2	2.29	0.48
37:1f:67:MET:HB2	37:1f:68:PRO:HD2	1.95	0.48
50:1s:12:ASP:C	50:1s:14:HIS:H	2.20	0.48
1:2A:1005:C:O2'	9:2N:28:THR:OG1	2.12	0.48
1:2A:1239:G:H2'	1:2A:1240:U:O4'	2.12	0.48
1:2A:2330:G:H2'	1:2A:2331:G:O4'	2.13	0.48
1:2A:2754:U:O2'	1:2A:2756:U:OP2	2.27	0.48
1:2A:2843:G:H2'	1:2A:2844:G:H8	1.78	0.48
6:2G:10:LYS:NZ	6:2G:175:LEU:O	2.44	0.48
21:2Z:52:SER:OG	21:2Z:53:ILE:N	2.43	0.48
32:2a:736:C:H2'	32:2a:737:A:C8	2.49	0.48
34:2c:8:ILE:HG23	34:2c:16:ARG:HE	1.78	0.48
34:2c:34:LEU:HD11	34:2c:38:ARG:NH2	2.24	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:2c:183:ASP:OD1	34:2c:184:TYR:N	2.46	0.48
39:2h:82:HIS:CE1	39:2h:84:ARG:HG2	2.48	0.48
1:1A:2801(A):A:H1'	1:1A:2895:U:H1'	1.95	0.48
2:1B:32:C:H2'	2:1B:33:G:O4'	2.13	0.48
14:1S:48:LEU:HD22	14:1S:82:ILE:HD11	1.95	0.48
15:1T:107:ASP:O	15:1T:111:ARG:HG3	2.13	0.48
20:1Y:68:HIS:HB3	20:1Y:71:LYS:HG3	1.95	0.48
32:1a:192:U:H2'	32:1a:193:C:C6	2.47	0.48
32:1a:512:U:O4'	35:1d:43:HIS:HE1	1.96	0.48
32:1a:816:A:OP2	32:1a:1526:G:O2'	2.29	0.48
32:1a:1462:G:H2'	32:1a:1463:C:H6	1.77	0.48
2:2B:75:G:H21	21:2Z:85:HIS:CE1	2.31	0.48
3:2D:5:LYS:HE3	60:2D:405:HOH:O	2.12	0.48
6:2G:41:GLN:O	6:2G:43:LEU:HG	2.13	0.48
7:2H:13:LYS:HA	7:2H:14:GLY:HA2	1.55	0.48
12:2Q:38:GLU:HG3	12:2Q:127:ILE:HG22	1.94	0.48
24:22:32:LEU:HD13	24:22:53:LEU:HB3	1.96	0.48
32:2a:572:A:H8	32:2a:573:A:N7	2.11	0.48
32:2a:582:U:OP2	32:2a:758:G:N1	2.46	0.48
32:2a:598:U:H4'	39:2h:94:TYR:CG	2.49	0.48
32:2a:638:G:H2'	32:2a:639:G:C8	2.49	0.48
32:2a:1235:U:O2'	32:2a:1305:G:O5'	2.31	0.48
32:2a:1239:A:H4'	32:2a:1240:U:H5'	1.94	0.48
33:2b:77:ALA:HA	33:2b:80:ILE:HG22	1.96	0.48
47:2p:23:ASP:OD1	47:2p:24:ALA:N	2.46	0.48
1:1A:93:G:H2'	1:1A:94:C:H6	1.78	0.48
1:1A:107:C:H2'	1:1A:108:U:H6	1.78	0.48
1:1A:704:G:O2'	1:1A:726:G:N2	2.42	0.48
1:1A:848:G:O6	1:1A:928:G:H2'	2.13	0.48
1:1A:1011:G:OP1	16:1U:77:SER:OG	2.21	0.48
1:1A:1178:C:H2'	1:1A:1179:C:C6	2.47	0.48
1:1A:1636:C:O2'	1:1A:1760:A:N3	2.35	0.48
3:1D:67:PHE:HB3	3:1D:153:ALA:H	1.78	0.48
3:1D:182:LEU:HB2	3:1D:272:ALA:HB3	1.94	0.48
5:1F:136:THR:HG23	5:1F:166:ALA:O	2.13	0.48
17:1V:14:VAL:HB	17:1V:96:ILE:HG13	1.95	0.48
32:1a:599:C:O2'	39:1h:130:GLY:N	2.46	0.48
32:1a:983:A:H1'	32:1a:1049:U:O2	2.13	0.48
32:1a:1003:G:C4	32:1a:1004:A:H2	2.32	0.48
37:1f:46:ARG:HH22	49:1r:37:VAL:HG11	1.78	0.48
50:1s:28:LYS:HD2	50:1s:47:HIS:HA	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:293:U:O2	1:2A:348:G:N2	2.47	0.48
1:2A:751:A:C6	1:2A:789:A:C5	3.02	0.48
1:2A:887:A:H4'	1:2A:888:C:C5	2.48	0.48
1:2A:991:C:H42	1:2A:1163:G:H1	1.62	0.48
1:2A:1425:G:H2'	1:2A:1426:G:C8	2.48	0.48
1:2A:1826:G:H2'	1:2A:1827:C:O4'	2.13	0.48
1:2A:2398:U:H2'	1:2A:2399:G:H8	1.77	0.48
32:2a:452:A:O2'	32:2a:453:A:H8	1.96	0.48
32:2a:560:U:OP1	60:2a:1912:HOH:O	2.20	0.48
32:2a:643:C:H2'	32:2a:644:G:C8	2.49	0.48
32:2a:859:A:O2'	33:2b:27:LYS:NZ	2.45	0.48
32:2a:1250:A:H61	32:2a:1354:C:H4'	1.78	0.48
36:2e:99:GLY:N	36:2e:117:ASP:OD1	2.41	0.48
43:2l:110:VAL:HG23	43:2l:120:TYR:HB3	1.94	0.48
47:2p:23:ASP:OD2	47:2p:25:ARG:NH1	2.46	0.48
53:2v:16:A:H2'	53:2v:17:U:C6	2.49	0.48
1:1A:1231:G:H2'	1:1A:1232:G:H8	1.78	0.48
1:1A:2376:A:N3	14:1S:106:ARG:NH2	2.62	0.48
5:1F:130:ALA:H	5:1F:142:TRP:CD1	2.31	0.48
6:1G:67:LYS:H	26:14:6:HIS:CE1	2.30	0.48
8:1I:75:LEU:O	8:1I:141:LYS:HE3	2.14	0.48
19:1X:8:ILE:O	24:12:36:ARG:NH2	2.46	0.48
32:1a:186:C:H2'	32:1a:187:C:C6	2.49	0.48
32:1a:509:A:N3	32:1a:543:C:O2'	2.30	0.48
32:1a:1030:C:N4	32:1a:1031:G:H1	2.06	0.48
32:1a:1220:G:O3'	50:1s:36:ARG:HD3	2.13	0.48
32:1a:1324:A:C4'	32:1a:1362:C:H4'	2.43	0.48
1:2A:536:A:H2'	1:2A:537:C:H6	1.77	0.48
1:2A:1418:G:OP1	1:2A:1588:C:O2'	2.31	0.48
1:2A:1507:A:O2'	1:2A:1508:A:O5'	2.32	0.48
1:2A:1614:A:C2	18:2W:93:ALA:HB2	2.48	0.48
1:2A:2119:A:N6	1:2A:2171:A:C6	2.82	0.48
6:2G:18:GLU:OE2	6:2G:21:ARG:NH2	2.47	0.48
14:2S:5:THR:OG1	14:2S:8:GLU:HG3	2.13	0.48
20:2Y:68:HIS:CE1	20:2Y:70:SER:HB3	2.48	0.48
32:2a:131:C:H2'	32:2a:132:C:C6	2.49	0.48
32:2a:623:C:H2'	32:2a:624:C:O4'	2.13	0.48
33:2b:179:LYS:HA	39:2h:72:PRO:HG3	1.96	0.48
42:2k:18:ARG:HE	42:2k:37:GLY:HA2	1.78	0.48
51:2t:39:LYS:HE2	51:2t:39:LYS:HB2	1.76	0.48
1:1A:125:G:H5'	29:17:19:ARG:HD3	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:239:U:H2'	1:1A:240:G:O4'	2.13	0.48
1:1A:580:C:H2'	1:1A:581:C:C6	2.47	0.48
1:1A:1406:U:H2'	1:1A:1407:C:C6	2.49	0.48
1:1A:1550:C:H4'	1:1A:1743:C:O2	2.13	0.48
1:1A:2096:U:O2	1:1A:2193:G:N2	2.29	0.48
1:1A:2503:2MA:OP2	60:1A:4216:HOH:O	2.20	0.48
2:1B:8:U:O3'	14:1S:25:ARG:NH2	2.30	0.48
3:1D:221:VAL:O	60:1D:404:HOH:O	2.20	0.48
7:1H:101:ARG:HH12	7:1H:122:THR:HG22	1.77	0.48
12:1Q:38:GLU:HG3	12:1Q:127:ILE:HB	1.95	0.48
21:1Z:52:SER:OG	21:1Z:53:ILE:N	2.47	0.48
32:1a:373:A:H2'	32:1a:374:A:H8	1.77	0.48
32:1a:737:A:O5'	37:1f:92:LYS:NZ	2.41	0.48
32:1a:1082:G:H2'	32:1a:1083:U:O4'	2.13	0.48
32:1a:1502:A:H5'	32:1a:1504:G:N7	2.28	0.48
35:1d:43:HIS:HA	35:1d:46:LYS:HD3	1.94	0.48
1:2A:93:G:H2'	1:2A:94:C:C6	2.49	0.48
1:2A:538:G:H2'	1:2A:539:G:H8	1.78	0.48
1:2A:601:C:O2'	1:2A:605:C:H5''	2.13	0.48
1:2A:1248:G:C5	16:2U:3:ARG:HB2	2.49	0.48
1:2A:1259:G:H2'	1:2A:1260:G:C8	2.47	0.48
1:2A:2318:G:H21	14:2S:3:ARG:NE	2.11	0.48
1:2A:2478:A:H5'	31:29:31:LYS:HE2	1.95	0.48
2:2B:7:G:N2	14:2S:38:GLN:HE22	2.04	0.48
5:2F:101:LEU:HD12	5:2F:102:PRO:HD2	1.94	0.48
9:2N:42:TRP:HA	9:2N:48:MET:SD	2.53	0.48
15:2T:26:ASP:OD1	15:2T:120:ARG:NH2	2.46	0.48
15:2T:96:ARG:HB3	15:2T:99:LEU:HD23	1.95	0.48
23:21:53:VAL:HG21	23:21:94:LEU:HD11	1.95	0.48
24:22:32:LEU:HA	24:22:53:LEU:HD13	1.95	0.48
32:2a:254:G:H2'	32:2a:255:G:H8	1.79	0.48
32:2a:1041:A:C6	32:2a:1042:G:C6	3.01	0.48
32:2a:1065:U:OP2	32:2a:1190:G:N2	2.46	0.48
32:2a:1130:A:H5''	40:2i:62:TYR:HE2	1.79	0.48
33:2b:162:ILE:HD11	33:2b:184:VAL:HG22	1.94	0.48
1:1A:264:C:O2'	1:1A:265:A:H2'	2.14	0.48
1:1A:484:C:OP1	20:1Y:51:VAL:HG22	2.13	0.48
1:1A:508:G:N2	18:1W:80:PRO:HG2	2.28	0.48
1:1A:717:G:H2'	1:1A:718:A:O4'	2.13	0.48
1:1A:729:G:O4'	3:1D:208:LYS:NZ	2.45	0.48
1:1A:2165:G:N2	1:1A:2171:A:O2'	2.47	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:10:66:VAL:O	22:10:81:VAL:HA	2.14	0.48
32:1a:1122:U:O4	32:1a:1123:A:N6	2.47	0.48
33:1b:19:HIS:CD2	33:1b:20:GLU:HG3	2.48	0.48
36:1e:11:ILE:HD13	36:1e:31:LEU:HG	1.95	0.48
36:1e:35:GLY:HA3	36:1e:112:LEU:HB3	1.96	0.48
1:2A:975(A):G:H1'	1:2A:990:A:C2	2.49	0.48
1:2A:1181:C:H2'	1:2A:1182:A:C8	2.49	0.48
1:2A:1190:G:O2'	1:2A:1191:G:H5'	2.13	0.48
1:2A:2442:C:H2'	1:2A:2443:C:H6	1.79	0.48
1:2A:2512:C:H1'	4:2E:140:SER:O	2.13	0.48
32:2a:261:U:OP2	51:2t:79:ARG:NH2	2.46	0.48
32:2a:728:A:H2'	32:2a:729:A:H8	1.78	0.48
32:2a:1147:C:O3'	40:2i:5:TYR:OH	2.30	0.48
32:2a:1228:C:H4'	44:2m:116:THR:HA	1.96	0.48
34:2c:63:ASN:HB2	34:2c:98:ASN:HB2	1.94	0.48
50:2s:53:ASN:ND2	50:2s:76:PRO:O	2.47	0.48
54:2x:8:4SU:O2	54:2x:21:A:H2	1.96	0.48
1:1A:119:A:H4'	1:1A:120:U:OP1	2.14	0.48
1:1A:323:G:C8	5:1F:171:PRO:HG3	2.49	0.48
1:1A:484:C:H42	1:1A:496:G:H1	1.62	0.48
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.44	0.48
1:1A:1844:C:H2'	1:1A:1845:G:C8	2.48	0.48
1:1A:2712:U:OP1	1:1A:2714:G:H4'	2.12	0.48
4:1E:101:ARG:HB2	4:1E:201:THR:HG21	1.94	0.48
5:1F:101:LEU:HB3	5:1F:106:ARG:HD3	1.96	0.48
17:1V:29:PRO:HA	17:1V:61:VAL:HG22	1.95	0.48
23:11:13:ILE:HG12	23:11:42:GLN:HB2	1.96	0.48
32:1a:1029:C:N4	32:1a:1031:G:O6	2.46	0.48
33:1b:115:LEU:HA	33:1b:145:LEU:HD13	1.94	0.48
1:2A:2250:G:O2'	1:2A:2496:C:OP1	2.32	0.48
9:2N:71:ILE:HG21	9:2N:84:LYS:HB3	1.96	0.48
17:2V:60:GLU:HB2	17:2V:97:LYS:HE2	1.96	0.48
18:2W:68:ARG:HB2	18:2W:109:GLU:HG2	1.96	0.48
24:22:7:ARG:O	24:22:11:GLU:HG3	2.13	0.48
30:28:9:GLY:O	30:28:13:ARG:HD2	2.14	0.48
32:2a:691:G:H2'	32:2a:692:U:C6	2.48	0.48
32:2a:1004:A:N3	32:2a:1038:C:C2	2.82	0.48
32:2a:1014:A:H4'	50:2s:14:HIS:NE2	2.28	0.48
32:2a:1233:G:O2'	32:2a:1365:G:OP1	2.32	0.48
32:2a:1252:A:N6	32:2a:1285:A:H61	2.04	0.48
33:2b:84:GLU:HB3	33:2b:219:VAL:HG11	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:93:G:H2'	1:1A:94:C:C6	2.49	0.48
1:1A:579:G:H2'	1:1A:580:C:C6	2.48	0.48
1:1A:711:G:H1	1:1A:720:C:H42	1.61	0.48
1:1A:2019:A:H5''	16:1U:27:LEU:HD12	1.96	0.48
1:1A:2722:G:H2'	1:1A:2723:C:C6	2.49	0.48
32:1a:271:C:H2'	32:1a:272:C:H6	1.79	0.48
32:1a:409:G:OP1	35:1d:24:GLU:HB2	2.14	0.48
32:1a:461:A:O2'	32:1a:470:C:H5'	2.14	0.48
32:1a:1064:G:H4'	32:1a:1065:U:OP1	2.14	0.48
1:2A:49:A:H5''	1:2A:51:G:O4'	2.14	0.48
1:2A:534:U:O5'	1:2A:534:U:H6	1.96	0.48
1:2A:993:G:OP1	16:2U:50:ARG:NH2	2.47	0.48
1:2A:1426:G:O2'	1:2A:1572:A:N6	2.45	0.48
60:2A:4300:HOH:O	18:2W:18:ARG:HD3	2.14	0.48
10:2O:58:VAL:HG23	10:2O:59:LYS:O	2.14	0.48
10:2O:64:ARG:HG2	10:2O:83:ALA:HB3	1.96	0.48
32:2a:160:A:N6	32:2a:347:G:H1'	2.24	0.48
36:2e:13:ILE:HA	36:2e:29:GLY:O	2.14	0.48
1:1A:840:C:H2'	1:1A:841:A:C8	2.49	0.48
1:1A:1184:G:OP1	25:13:30:ARG:NH1	2.47	0.48
1:1A:1291:C:H2'	1:1A:1292:U:C6	2.49	0.48
1:1A:1500:G:O2'	3:1D:100:GLY:O	2.28	0.48
1:1A:2790:A:H5'	1:1A:2893:G:N2	2.27	0.48
4:1E:4:ILE:HD13	4:1E:28:ALA:HB1	1.96	0.48
10:1O:2:ILE:HD12	10:1O:6:THR:HG21	1.95	0.48
13:1R:22:ARG:HA	13:1R:47:PHE:HE2	1.79	0.48
15:1T:42:ILE:HG21	15:1T:84:GLN:OE1	2.14	0.48
16:1U:17:ILE:HG23	16:1U:39:LEU:HD12	1.96	0.48
25:13:6:VAL:HG22	25:13:56:VAL:HG13	1.94	0.48
32:1a:577:G:H1'	32:1a:816:A:C4	2.49	0.48
32:1a:1289:A:OP1	52:1u:10:ARG:NH2	2.46	0.48
34:1c:175:LEU:HD21	34:1c:201:TYR:HD1	1.78	0.48
39:1h:69:ARG:HG2	39:1h:76:PRO:HA	1.96	0.48
1:2A:27:G:N2	1:2A:512:G:H1'	2.29	0.48
1:2A:290:G:H2'	1:2A:291:C:O4'	2.13	0.48
1:2A:1032:A:H2	1:2A:1122:G:H22	1.61	0.48
1:2A:1500:G:O2'	3:2D:100:GLY:O	2.31	0.48
1:2A:2260:C:N4	1:2A:2280:G:H1	2.12	0.48
6:2G:53:LEU:HD22	6:2G:53:LEU:HA	1.75	0.48
6:2G:109:VAL:HG13	26:24:33:VAL:HG11	1.94	0.48
18:2W:29:LEU:HD22	18:2W:69:LEU:HD12	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:23:7:LYS:HB3	25:23:55:ARG:HB3	1.96	0.48
28:26:16:CYS:HB2	28:26:18:ARG:NH1	2.29	0.48
32:2a:882:C:O2'	32:2a:883:C:H5'	2.14	0.48
32:2a:1144:G:N2	32:2a:1146:A:H62	2.11	0.48
40:2i:113:LYS:HB2	40:2i:116:LYS:HD3	1.95	0.48
42:2k:48:ILE:HG21	42:2k:63:LEU:HD13	1.96	0.48
1:1A:125:G:H4'	1:1A:126:A:OP2	2.13	0.47
1:1A:674:G:H1'	5:1F:74:ARG:HH11	1.79	0.47
1:1A:1040:C:H2'	1:1A:1041:C:O4'	2.14	0.47
1:1A:1518:U:H2'	1:1A:1519:G:O4'	2.14	0.47
1:1A:2369:A:H2'	1:1A:2370:G:H8	1.78	0.47
1:1A:2386:C:H2'	1:1A:2387:U:O4'	2.13	0.47
1:1A:2537:U:H2'	1:1A:2538:C:C6	2.48	0.47
1:1A:2555:U:C5	1:1A:2556:C:C2	3.02	0.47
1:1A:2788:C:P	4:1E:61:ARG:HH21	2.36	0.47
17:1V:76:LYS:HD2	17:1V:81:TYR:CD2	2.49	0.47
32:1a:269:C:H2'	32:1a:270:A:H8	1.79	0.47
32:1a:511:C:P	35:1d:49:ARG:HH12	2.35	0.47
32:1a:731:G:H2'	32:1a:732:C:C6	2.49	0.47
32:1a:1051:C:H42	32:1a:1207:2MG:HN1	1.62	0.47
32:1a:1063:C:OP2	32:1a:1064:G:O2'	2.29	0.47
32:1a:1266:G:N2	32:1a:1269:A:OP2	2.44	0.47
34:1c:63:ASN:N	34:1c:63:ASN:OD1	2.47	0.47
40:1i:28:VAL:HA	40:1i:63:ILE:O	2.14	0.47
40:1i:65:VAL:HG11	40:1i:73:GLN:HB3	1.95	0.47
1:2A:143:G:H2'	1:2A:143(A):C:C6	2.48	0.47
1:2A:460:A:H62	1:2A:469:G:H21	1.62	0.47
1:2A:652(T):C:H2'	1:2A:652(U):G:C8	2.49	0.47
1:2A:848:G:H2'	1:2A:849:A:H8	1.79	0.47
1:2A:919:G:N2	1:2A:2269:A:OP2	2.47	0.47
1:2A:1339:G:N2	1:2A:1603:A:H1'	2.28	0.47
1:2A:1344:G:O2'	1:2A:1385:G:H2'	2.14	0.47
1:2A:2196:C:OP2	60:2A:3956:HOH:O	2.20	0.47
1:2A:2852:G:H2'	1:2A:2853:C:O4'	2.14	0.47
7:2H:124:GLU:HB2	7:2H:132:ARG:HB3	1.95	0.47
7:2H:127:GLU:C	7:2H:129:THR:H	2.22	0.47
10:2O:49:ARG:HH12	32:2a:1423:G:P	2.37	0.47
13:2R:99:LYS:NZ	27:25:43:HIS:HB3	2.29	0.47
16:2U:50:ARG:O	16:2U:54:LYS:HD2	2.13	0.47
19:2X:26:TYR:OH	19:2X:88:LYS:HA	2.14	0.47
38:2g:104:LEU:HD12	38:2g:134:ALA:HB1	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:10:LEU:HG	51:2t:12:ALA:H	1.78	0.47
1:1A:253:C:H2'	1:1A:254:G:O4'	2.14	0.47
1:1A:445:C:OP1	16:1U:2:PRO:HA	2.14	0.47
1:1A:531:C:H4'	1:1A:532:A:H5''	1.94	0.47
1:1A:660:G:C6	1:1A:661:C:C4	3.01	0.47
1:1A:2650:U:H2'	1:1A:2651:C:C6	2.50	0.47
1:1A:2715:C:H2'	1:1A:2716:U:H6	1.79	0.47
3:1D:11:PRO:O	3:1D:14:ARG:HG3	2.14	0.47
5:1F:78:ILE:HA	5:1F:83:PHE:CD2	2.49	0.47
21:1Z:50:GLN:NE2	21:1Z:50:GLN:H	2.13	0.47
27:15:16:ARG:HG3	27:15:17:ASP:N	2.28	0.47
32:1a:103:C:O2'	32:1a:172:A:N1	2.44	0.47
32:1a:971:G:N2	32:1a:1363(A):A:OP2	2.30	0.47
32:1a:1457:G:H4'	51:1t:36:LEU:HD11	1.95	0.47
32:1a:1492:A:C2	53:1v:21:A:H5''	2.49	0.47
1:2A:581:C:H2'	1:2A:582:G:H8	1.79	0.47
1:2A:604:G:OP2	11:2P:90:ARG:NH2	2.46	0.47
1:2A:858:U:O2	1:2A:2268:A:H2'	2.14	0.47
1:2A:1495:A:H2'	1:2A:1496:A:C8	2.49	0.47
1:2A:1990:C:H2'	1:2A:1991:U:C6	2.49	0.47
3:2D:92:ILE:HD12	3:2D:104:TYR:CE1	2.48	0.47
13:2R:38:VAL:HG12	13:2R:42:LYS:HE3	1.96	0.47
18:2W:35:ILE:O	18:2W:39:THR:OG1	2.25	0.47
26:24:53:GLU:OE1	26:24:53:GLU:N	2.42	0.47
32:2a:1228:C:OP1	44:2m:115:LYS:NZ	2.39	0.47
32:2a:1469:G:H2'	32:2a:1470:G:C8	2.49	0.47
46:2o:29:VAL:O	46:2o:33:THR:OG1	2.28	0.47
1:1A:54:G:H2'	1:1A:55:G:O4'	2.13	0.47
1:1A:747:U:O2	1:1A:2014:A:H1'	2.15	0.47
1:1A:2096:U:O4	1:1A:2193:G:O6	2.32	0.47
1:1A:2393:A:H2'	1:1A:2394:C:C6	2.49	0.47
1:1A:2397:G:N2	1:1A:2420:C:H1'	2.29	0.47
1:1A:2869:G:H2'	1:1A:2870:C:O4'	2.13	0.47
5:1F:52:LYS:O	5:1F:88:VAL:HG13	2.14	0.47
6:1G:66:GLN:HE21	6:1G:92:VAL:HG23	1.80	0.47
7:1H:40:GLU:OE2	7:1H:60:ARG:NH2	2.47	0.47
14:1S:106:ARG:O	14:1S:109:GLY:N	2.39	0.47
20:1Y:86:ARG:HG3	20:1Y:100:ALA:HB2	1.95	0.47
21:1Z:63:ASP:C	21:1Z:65:GLN:H	2.22	0.47
27:15:35:GLU:HG2	27:15:51:TYR:CD2	2.49	0.47
32:1a:626:U:H2'	32:1a:627:G:H8	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:979:C:N3	45:1n:18:VAL:HB	2.29	0.47
32:1a:1126:U:O2'	32:1a:1127:G:H8	1.97	0.47
38:1g:23:VAL:HG13	38:1g:43:PHE:CZ	2.49	0.47
41:1j:61:GLU:OE2	45:1n:58:LYS:NZ	2.38	0.47
43:1l:53:ARG:HB2	43:1l:93:LEU:HD11	1.96	0.47
49:1r:35:ARG:O	49:1r:37:VAL:N	2.47	0.47
1:2A:13:A:N1	1:2A:525:U:H2'	2.30	0.47
1:2A:299:A:N3	1:2A:319:C:O2'	2.39	0.47
1:2A:486:C:H2'	1:2A:487:C:C6	2.49	0.47
1:2A:638:G:C6	1:2A:639:U:C4	3.03	0.47
1:2A:1959:G:H1'	32:2a:1418:A:N3	2.29	0.47
1:2A:2077:A:H2'	1:2A:2078:C:H6	1.80	0.47
1:2A:2593:U:H2'	1:2A:2594:C:H6	1.79	0.47
1:2A:2762:G:H2'	1:2A:2763:G:O4'	2.13	0.47
9:2N:38:HIS:NE2	9:2N:50:ASP:OD2	2.40	0.47
22:20:56:ASP:CG	22:20:58:THR:HG1	2.22	0.47
32:2a:237:C:H5''	48:2q:25:ARG:CZ	2.45	0.47
32:2a:625:G:H2'	32:2a:626:U:C6	2.49	0.47
32:2a:636:U:H2'	32:2a:637:G:C8	2.50	0.47
32:2a:952:U:C5	44:2m:104:ARG:HD3	2.49	0.47
32:2a:1330:U:H4'	44:2m:23:TYR:CE1	2.49	0.47
37:2f:11:ASN:HB3	37:2f:14:LEU:HG	1.96	0.47
37:2f:20:ALA:HA	37:2f:23:LYS:HD3	1.95	0.47
47:2p:36:ILE:O	47:2p:51:VAL:HA	2.15	0.47
1:1A:35:G:H2'	1:1A:36:G:O4'	2.14	0.47
1:1A:140:G:N2	1:1A:1596:A:H4'	2.30	0.47
1:1A:271(H):G:H5'	23:11:81:LYS:HE2	1.95	0.47
1:1A:1862:G:H2'	1:1A:1863:G:C8	2.49	0.47
1:1A:1995:U:H1'	10:1O:3:GLN:HE22	1.79	0.47
8:1I:37:VAL:HG12	8:1I:38:LEU:HD23	1.97	0.47
32:1a:110:C:H2'	32:1a:111:G:O4'	2.15	0.47
32:1a:201:C:H42	32:1a:216:G:H22	1.62	0.47
32:1a:294:U:OP1	32:1a:610:G:O2'	2.26	0.47
32:1a:574:A:HO2'	32:1a:882:C:HO2'	1.58	0.47
32:1a:789:U:O2'	32:1a:791:G:N7	2.28	0.47
33:1b:163:PHE:HA	33:1b:185:ILE:O	2.13	0.47
35:1d:106:TYR:CD2	35:1d:107:ARG:HD3	2.49	0.47
38:1g:26:PHE:CE2	38:1g:30:ILE:HD11	2.50	0.47
1:2A:1461:G:H2'	1:2A:1462:C:H6	1.77	0.47
1:2A:2259:G:H1'	1:2A:2427:C:H2'	1.97	0.47
4:2E:8:LYS:O	4:2E:193:GLY:N	2.39	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:2E:77:ILE:HG21	4:2E:195:LEU:HD11	1.96	0.47
9:2N:1:MET:SD	16:2U:94:ASN:ND2	2.88	0.47
32:2a:560:U:H4'	32:2a:561:U:O5'	2.15	0.47
32:2a:937:A:H1'	32:2a:1379:G:N2	2.30	0.47
32:2a:1079:G:H5''	36:2e:45:PHE:CE2	2.49	0.47
34:2c:131:ARG:HH21	36:2e:50:GLU:HG3	1.80	0.47
39:2h:44:PHE:CD1	39:2h:80:ILE:HG12	2.46	0.47
44:2m:34:LEU:HD23	44:2m:39:ILE:HB	1.96	0.47
44:2m:59:TYR:O	44:2m:63:THR:OG1	2.25	0.47
1:1A:26:G:C6	1:1A:27:G:N1	2.83	0.47
1:1A:995:C:N3	9:1N:3:THR:N	2.54	0.47
1:1A:1069:A:H2'	1:1A:1073:A:C8	2.49	0.47
1:1A:1173:G:H22	1:1A:1177:A:P	2.38	0.47
1:1A:1445:A:H5'	1:1A:1445(A):C:C5	2.50	0.47
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.47	0.47
1:1A:2086:U:H2'	1:1A:2087:G:C8	2.49	0.47
1:1A:2120:G:O6	1:1A:2178:C:N3	2.48	0.47
1:1A:2349:G:OP2	30:18:42:ARG:NE	2.37	0.47
60:1A:4390:HOH:O	4:1E:132:HIS:HE1	1.95	0.47
11:1P:63:PRO:HB2	30:18:30:ARG:NH2	2.21	0.47
15:1T:93:ARG:NH2	15:1T:95:ARG:HD3	2.29	0.47
20:1Y:88:LYS:HB2	20:1Y:98:VAL:HG21	1.97	0.47
21:1Z:158:PRO:O	21:1Z:161:VAL:HG12	2.14	0.47
28:16:14:THR:HG21	28:16:48:VAL:HG13	1.96	0.47
32:1a:441:A:H5''	32:1a:442:C:C5	2.50	0.47
34:1c:71:ALA:HA	34:1c:106:VAL:HB	1.96	0.47
34:1c:114:PRO:O	34:1c:118:GLN:NE2	2.48	0.47
35:1d:64:LEU:HD13	35:1d:67:ILE:HD12	1.95	0.47
39:1h:73:ASP:OD1	39:1h:75:ARG:HG3	2.13	0.47
44:1m:3:ARG:NH2	44:1m:9:ILE:O	2.41	0.47
1:2A:812:C:O2'	1:2A:1226:A:O2'	2.23	0.47
1:2A:1227:G:OP1	16:2U:13:LYS:HG2	2.15	0.47
1:2A:2262:U:H2'	1:2A:2263:C:H6	1.79	0.47
3:2D:70:TRP:HB3	3:2D:190:TYR:CE2	2.50	0.47
3:2D:89:SER:OG	3:2D:159:ALA:N	2.47	0.47
10:2O:88:ASN:OD1	10:2O:92:GLU:HB2	2.15	0.47
15:2T:109:GLU:HG2	15:2T:112:ARG:NH2	2.29	0.47
32:2a:1346:A:OP1	40:2i:120:ARG:NH1	2.47	0.47
32:2a:1377:A:H4'	32:2a:1378:C:H5	1.80	0.47
32:2a:1458:G:OP1	51:2t:35:THR:OG1	2.33	0.47
33:2b:54:THR:HG23	33:2b:199:TYR:HB3	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:100:ARG:HH22	35:2d:118:ARG:NH1	2.12	0.47
42:2k:43:SER:HB3	42:2k:68:ALA:HB2	1.95	0.47
49:2r:53:ARG:HG2	49:2r:63:GLN:NE2	2.27	0.47
49:2r:66:LEU:O	49:2r:70:ILE:HG13	2.14	0.47
50:2s:81:ARG:HE	50:2s:81:ARG:HB3	1.38	0.47
1:1A:192:C:OP1	60:1A:4131:HOH:O	2.20	0.47
1:1A:359:A:H2'	1:1A:360:G:O4'	2.14	0.47
1:1A:483:A:O2'	20:1Y:49:VAL:O	2.29	0.47
1:1A:494:G:O2'	18:1W:5:ALA:HA	2.15	0.47
1:1A:536:A:H2'	1:1A:537:C:C6	2.50	0.47
1:1A:1509(A):A:H3'	1:1A:1509(B):A:H8	1.79	0.47
1:1A:2243:U:H2'	1:1A:2244:U:C6	2.49	0.47
3:1D:35:LYS:HE3	3:1D:64:ILE:HD11	1.96	0.47
13:1R:29:LEU:HD22	13:1R:79:LEU:HD13	1.97	0.47
19:1X:29:TRP:CZ3	19:1X:78:LYS:HB3	2.49	0.47
32:1a:143:A:H5''	32:1a:144:G:H5'	1.96	0.47
32:1a:353:A:H5'	32:1a:353:A:H8	1.79	0.47
32:1a:384:G:H2'	32:1a:385:C:C6	2.49	0.47
32:1a:1103:C:H2'	32:1a:1104:G:O4'	2.15	0.47
32:1a:1288:A:O3'	52:1u:10:ARG:NH2	2.48	0.47
48:1q:82:MET:HA	48:1q:85:VAL:HB	1.95	0.47
1:2A:67:U:H2'	1:2A:68:G:O4'	2.15	0.47
1:2A:497:A:H2'	1:2A:498:G:O4'	2.15	0.47
1:2A:1165:U:H2'	1:2A:1166:C:C6	2.49	0.47
1:2A:1298:C:H5''	1:2A:1299:G:OP2	2.14	0.47
1:2A:1496:A:OP2	1:2A:1496:A:H8	1.98	0.47
1:2A:1560:G:H2'	1:2A:1561:G:H8	1.80	0.47
1:2A:2757:A:N1	7:2H:67:LEU:HD22	2.30	0.47
1:2A:2881:C:O2'	13:2R:96:ARG:HA	2.15	0.47
2:2B:11:C:H3'	2:2B:12:C:C6	2.50	0.47
5:2F:108:LYS:O	5:2F:112:MET:N	2.36	0.47
5:2F:139:PHE:HB2	5:2F:166:ALA:HB1	1.96	0.47
16:2U:49:HIS:HA	16:2U:52:ARG:HB2	1.96	0.47
27:25:51:TYR:CE2	27:25:56:LYS:HD3	2.50	0.47
32:2a:129(A):G:N2	32:2a:189(H):G:N7	2.63	0.47
1:1A:218:A:OP2	60:1A:4215:HOH:O	2.20	0.47
1:1A:321:G:H5'	5:1F:134:GLY:O	2.15	0.47
1:1A:1051:G:H2'	1:1A:1052:C:O4'	2.14	0.47
1:1A:1214:A:H2'	1:1A:1215:G:O4'	2.14	0.47
1:1A:1394:U:C4	1:1A:1395:A:C6	3.02	0.47
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1514:U:H2'	1:1A:1515:G:H8	1.78	0.47
1:1A:1794:U:H2'	1:1A:1795:C:C6	2.48	0.47
1:1A:1884:A:H2'	1:1A:1885:A:O4'	2.14	0.47
1:1A:2311:A:N1	6:1G:47:LYS:HE3	2.30	0.47
1:1A:2773:C:H2'	1:1A:2774:C:H6	1.79	0.47
1:1A:2803:C:H2'	1:1A:2804:C:C6	2.50	0.47
8:1I:6:LEU:HD21	8:1I:37:VAL:HG23	1.97	0.47
11:1P:29:LYS:HG3	11:1P:30:THR:N	2.29	0.47
16:1U:79:PHE:CE2	16:1U:83:LEU:HD11	2.50	0.47
17:1V:22:VAL:HG23	17:1V:23:GLU:O	2.15	0.47
21:1Z:28:MET:O	21:1Z:34:ASN:HA	2.14	0.47
23:11:72:GLU:O	23:11:76:ARG:HG3	2.15	0.47
26:14:26:SER:OG	26:14:27:THR:N	2.46	0.47
26:14:49:PHE:HB3	26:14:50:VAL:H	1.62	0.47
28:16:10:LEU:HG	28:16:54:ILE:HD12	1.95	0.47
32:1a:16:A:N3	32:1a:1080:A:O2'	2.42	0.47
32:1a:112:G:H5'	32:1a:389:A:O2'	2.15	0.47
32:1a:195:A:H2'	32:1a:196:A:C4	2.50	0.47
32:1a:407:G:OP1	35:1d:115:ARG:NH2	2.48	0.47
32:1a:517:G:H22	32:1a:533:A:P	2.37	0.47
32:1a:687:A:N3	32:1a:688:G:H1'	2.29	0.47
32:1a:930:C:H42	32:1a:1387:G:H1	1.63	0.47
32:1a:1101:A:H4'	32:1a:1102:A:O5'	2.13	0.47
32:1a:1190:G:OP1	34:1c:5:ILE:N	2.41	0.47
32:1a:1291:G:OP1	38:1g:37:ASN:ND2	2.47	0.47
32:1a:1490:C:H2'	32:1a:1491:G:O4'	2.13	0.47
35:1d:108:LEU:HB3	35:1d:110:PHE:CE2	2.49	0.47
38:1g:91:VAL:HG13	38:1g:95:ARG:HD3	1.96	0.47
39:1h:112:LEU:HB3	39:1h:133:LEU:HA	1.95	0.47
47:1p:39:TYR:HB2	47:1p:49:LEU:HD12	1.96	0.47
49:1r:40:LEU:O	49:1r:42:ARG:N	2.48	0.47
1:2A:213:A:N6	1:2A:214:G:C6	2.83	0.47
1:2A:590:A:H2'	1:2A:591:C:C6	2.50	0.47
1:2A:829:A:H4'	60:2A:4181:HOH:O	2.14	0.47
1:2A:854:G:H2'	1:2A:855:G:C8	2.50	0.47
1:2A:1225:G:H4'	17:2V:84:LYS:HG2	1.96	0.47
1:2A:1432:C:H42	1:2A:1561:G:H1	1.62	0.47
1:2A:1668:A:H5''	10:2O:5:GLN:NE2	2.30	0.47
1:2A:1879:C:H2'	1:2A:1880:C:O4'	2.14	0.47
1:2A:1930:G:N2	1:2A:1968:G:H2'	2.30	0.47
1:2A:1991:U:H2'	1:2A:1992:G:H5''	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2000:G:H2'	1:2A:2001:A:H5'	1.96	0.47
1:2A:2274:A:H5''	1:2A:2275:C:OP2	2.14	0.47
1:2A:2275:C:O2	12:2Q:85:LYS:NZ	2.44	0.47
1:2A:2514:U:H2'	1:2A:2515:C:C6	2.50	0.47
1:2A:2528:U:O2'	1:2A:2529:G:H8	1.98	0.47
1:2A:2556:C:H2'	1:2A:2557:G:O4'	2.13	0.47
1:2A:2612:C:OP1	60:2A:3955:HOH:O	2.20	0.47
2:2B:66:A:H61	2:2B:109:C:H5''	1.79	0.47
6:2G:56:ALA:HB2	6:2G:153:ARG:NH2	2.29	0.47
10:2O:53:LYS:HG2	10:2O:56:ASP:OD2	2.15	0.47
13:2R:67:LEU:HD12	13:2R:76:VAL:HG21	1.96	0.47
21:2Z:138:GLU:HG2	21:2Z:156:LYS:NZ	2.29	0.47
21:2Z:171:ILE:H	21:2Z:171:ILE:HG13	1.44	0.47
32:2a:15:G:C4	32:2a:16:A:C8	3.02	0.47
32:2a:28:G:O2'	32:2a:296:U:OP1	2.29	0.47
32:2a:123:C:OP1	32:2a:312:C:H5'	2.15	0.47
32:2a:129(A):G:H4'	32:2a:130:A:H5''	1.97	0.47
32:2a:166:G:H2'	32:2a:167:G:H8	1.79	0.47
32:2a:328:C:H4'	32:2a:329:A:H5'	1.97	0.47
32:2a:413:G:N2	32:2a:428:G:H1'	2.30	0.47
32:2a:518:C:O2'	32:2a:530:G:N2	2.47	0.47
32:2a:950:U:H2'	32:2a:951:G:H8	1.79	0.47
32:2a:1103:C:OP1	33:2b:96:ARG:NH1	2.45	0.47
32:2a:1129:C:OP1	40:2i:16:ARG:NH1	2.45	0.47
32:2a:1269:A:H2	32:2a:1312:G:N3	2.13	0.47
34:2c:186:PHE:HZ	34:2c:188:LEU:HD13	1.79	0.47
36:2e:74:GLY:O	36:2e:115:VAL:HA	2.14	0.47
42:2k:48:ILE:HD11	42:2k:64:ALA:HA	1.97	0.47
1:1A:278:A:H4'	1:1A:279:C:OP1	2.13	0.47
1:1A:415:A:H2'	1:1A:416:C:C6	2.50	0.47
1:1A:817:C:O2'	1:1A:839:U:OP1	2.29	0.47
1:1A:955:C:OP1	12:1Q:87:LYS:HE2	2.14	0.47
1:1A:1838:C:C5	1:1A:1899:G:C2	3.03	0.47
1:1A:2533:A:H2'	1:1A:2534:A:O4'	2.15	0.47
1:1A:2773:C:OP1	4:1E:166:THR:OG1	2.32	0.47
2:1B:28:C:H2'	2:1B:29:A:O4'	2.14	0.47
32:1a:456:C:H42	32:1a:475:G:H1	1.63	0.47
32:1a:508:C:P	35:1d:209:ARG:HH22	2.38	0.47
32:1a:1067:A:H8	32:1a:1067:A:O5'	1.98	0.47
45:1n:6:LEU:HB3	45:1n:23:ARG:HH22	1.74	0.47
1:2A:873:G:O3'	12:2Q:63:LYS:NZ	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1773:A:C5	1:2A:1829:A:H1'	2.50	0.47
1:2A:2378:A:H4'	14:2S:23:ARG:NH1	2.30	0.47
4:2E:109:LYS:HD3	4:2E:191:PRO:HB3	1.95	0.47
6:2G:107:LEU:HD11	6:2G:178:PHE:CE1	2.50	0.47
7:2H:77:LYS:HG3	7:2H:81:GLU:HG3	1.97	0.47
13:2R:51:LEU:HD13	13:2R:66:VAL:HG13	1.97	0.47
13:2R:98:LEU:HB2	13:2R:113:LEU:HD21	1.96	0.47
21:2Z:22:GLY:O	21:2Z:41:LEU:HB3	2.14	0.47
21:2Z:58:VAL:HA	21:2Z:68:PRO:HA	1.97	0.47
25:23:12:PRO:HB2	25:23:20:LYS:HD3	1.96	0.47
32:2a:69:G:H2'	32:2a:70:G:C8	2.43	0.47
32:2a:1189:C:H2'	34:2c:176:HIS:CE1	2.49	0.47
32:2a:1224:G:N2	32:2a:1363:C:N3	2.63	0.47
34:2c:39:ILE:C	34:2c:41:GLY:H	2.23	0.47
34:2c:98:ASN:O	34:2c:100:ALA:N	2.48	0.47
38:2g:20:ASP:HB3	38:2g:23:VAL:HG23	1.96	0.47
53:2v:15:A:OP2	60:2v:101:HOH:O	2.19	0.47
1:1A:997:G:C2	1:1A:1159:U:C2	3.02	0.47
1:1A:1951:U:H2'	1:1A:1953:A:OP2	2.15	0.47
1:1A:2342:C:H2'	1:1A:2343:C:O4'	2.15	0.47
2:1B:75:G:O2'	21:1Z:85:HIS:NE2	2.48	0.47
4:1E:9:VAL:HG22	4:1E:25:VAL:HB	1.95	0.47
32:1a:177:C:H2'	32:1a:178:C:H6	1.80	0.47
36:1e:51:VAL:HB	36:1e:52:PRO:HD3	1.97	0.47
38:1g:65:ALA:HA	38:1g:128:ALA:HA	1.96	0.47
51:1t:13:LEU:HD12	51:1t:14:LYS:N	2.30	0.47
1:2A:330:A:H2	1:2A:1210:A:HO2'	1.63	0.47
1:2A:523:C:H5''	1:2A:540:C:O2'	2.14	0.47
1:2A:2583:G:H2'	1:2A:2584:U:O4'	2.15	0.47
1:2A:2682:U:O2'	15:2T:58:ASN:ND2	2.46	0.47
1:2A:2847:U:O4	1:2A:2848:G:N1	2.48	0.47
3:2D:68:LYS:HD2	3:2D:70:TRP:CZ2	2.49	0.47
7:2H:3:ARG:NH2	7:2H:5:GLY:H	2.13	0.47
8:2I:14:ASP:N	8:2I:17:GLN:OE1	2.47	0.47
8:2I:38:LEU:HB2	8:2I:40:THR:HG22	1.97	0.47
19:2X:30:VAL:HG11	19:2X:79:ALA:HB3	1.97	0.47
20:2Y:41:GLY:C	20:2Y:44:ILE:HD11	2.40	0.47
29:27:18:PHE:O	29:27:22:MET:HG2	2.14	0.47
32:2a:186:C:H5'	51:2t:78:ALA:HB1	1.97	0.47
32:2a:738:C:H2'	32:2a:739:C:C6	2.50	0.47
32:2a:1280:A:O2'	32:2a:1281:U:H5'	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1431:C:H2'	32:2a:1432:G:O4'	2.15	0.47
35:2d:32:ALA:HA	35:2d:35:ARG:HD3	1.97	0.47
35:2d:114:ARG:O	35:2d:118:ARG:N	2.43	0.47
35:2d:177:ASP:O	35:2d:181:MET:N	2.47	0.47
39:2h:83:ILE:HA	39:2h:136:GLU:O	2.15	0.47
46:2o:2:PRO:C	46:2o:38:ARG:HH21	2.19	0.47
1:1A:966:G:H2'	1:1A:967:C:C6	2.50	0.47
1:1A:1103:A:H3'	1:1A:1104:C:C6	2.48	0.47
1:1A:2679:A:C2	1:1A:2729:G:C2	3.03	0.47
14:1S:34:HIS:HB2	14:1S:36:TYR:CE2	2.49	0.47
32:1a:46:G:H1	32:1a:395:C:H42	1.63	0.47
32:1a:356:A:N3	32:1a:368:U:O2'	2.38	0.47
32:1a:439:A:C5	32:1a:441:A:H1'	2.49	0.47
32:1a:505:G:N7	60:1a:3328:HOH:O	2.36	0.47
40:1i:55:ALA:HA	40:1i:58:HIS:CD2	2.48	0.47
41:1j:44:VAL:HG11	41:1j:46:ARG:NH1	2.30	0.47
42:1k:77:MET:C	42:1k:78:GLN:HG2	2.40	0.47
48:1q:18:THR:HG23	48:1q:69:LYS:HD2	1.97	0.47
1:2A:592:G:H1	1:2A:665:C:H42	1.62	0.47
1:2A:1499:C:H2'	1:2A:1500:G:C8	2.46	0.47
1:2A:1608:A:H1'	1:2A:1610:A:OP2	2.15	0.47
1:2A:1948:G:H21	32:2a:1418:A:H2	1.63	0.47
1:2A:2045:C:O2'	27:25:18:ALA:O	2.32	0.47
1:2A:2105:C:N4	1:2A:2106:G:O6	2.48	0.47
1:2A:2767:C:H2'	1:2A:2768:C:C6	2.50	0.47
5:2F:122:LYS:HA	5:2F:191:ARG:HH11	1.80	0.47
5:2F:137:LYS:H	5:2F:137:LYS:NZ	2.13	0.47
6:2G:11:TYR:CZ	6:2G:16:ARG:HD3	2.49	0.47
8:2I:87:LYS:HD2	8:2I:87:LYS:O	2.15	0.47
11:2P:63:PRO:HD3	30:28:27:THR:HG22	1.97	0.47
32:2a:1113:C:H2'	32:2a:1114:C:H6	1.80	0.47
32:2a:1162:C:N4	32:2a:1174:G:H1	2.10	0.47
35:2d:175:SER:OG	35:2d:184:LYS:HB2	2.15	0.47
39:2h:36:LEU:HD23	39:2h:39:LEU:HD12	1.97	0.47
39:2h:37:ARG:O	39:2h:41:ARG:N	2.25	0.47
43:2l:8:ASN:O	43:2l:12:ARG:HG3	2.15	0.47
46:2o:64:ARG:HH11	46:2o:68:ARG:HH21	1.63	0.47
48:2q:56:VAL:HB	48:2q:78:GLU:HB3	1.97	0.47
1:1A:30:G:H2'	1:1A:31:C:C6	2.50	0.46
1:1A:74:A:H5'	1:1A:75:G:O4'	2.15	0.46
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1614:A:C6	18:1W:87:PRO:HB3	2.50	0.46
1:1A:1808:U:H2'	1:1A:1809:A:O4'	2.15	0.46
1:1A:1906:G:OP2	1:1A:1929:G:O2'	2.33	0.46
1:1A:2050:C:H2'	1:1A:2051:A:C8	2.50	0.46
1:1A:2292:C:OP1	1:1A:2379:G:N2	2.41	0.46
1:1A:2749:A:H3'	1:1A:2750:A:H2'	1.96	0.46
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.60	0.46
22:10:8:GLY:HA2	54:1x:2:G:H4'	1.97	0.46
30:18:23:VAL:HG12	30:18:47:LYS:HB3	1.96	0.46
32:1a:778:G:H2'	32:1a:779:C:O4'	2.15	0.46
32:1a:976:G:H5'	32:1a:1358:U:O2'	2.15	0.46
32:1a:1140:C:H2'	32:1a:1141:C:C6	2.50	0.46
32:1a:1226:C:C4	44:1m:104:ARG:HG3	2.50	0.46
32:1a:1310:G:H2'	32:1a:1311:G:O4'	2.15	0.46
33:1b:166:ASP:HB3	33:1b:169:LYS:HB3	1.97	0.46
38:1g:45:ASP:O	38:1g:49:ILE:HG13	2.16	0.46
39:1h:40:ALA:HB2	39:1h:47:GLY:HA2	1.96	0.46
43:1l:33:ARG:HD2	43:1l:61:THR:OG1	2.15	0.46
44:1m:57:ARG:O	44:1m:60:VAL:HG23	2.16	0.46
1:2A:322:A:H5'	1:2A:340:A:H1'	1.96	0.46
1:2A:500:G:N1	1:2A:503:A:OP2	2.44	0.46
1:2A:593:G:H4'	30:28:63:PRO:HB3	1.97	0.46
1:2A:635:C:H2'	1:2A:636:G:O4'	2.15	0.46
1:2A:890:A:H2'	1:2A:892:G:C8	2.51	0.46
1:2A:1221(A):C:H42	1:2A:1228:G:H1	1.63	0.46
1:2A:1683:C:H2'	1:2A:1684:C:C6	2.49	0.46
1:2A:1805:U:O2	3:2D:50:THR:HB	2.14	0.46
1:2A:2022:U:OP2	27:25:15:ARG:NH2	2.48	0.46
1:2A:2299:G:C2	1:2A:2300:G:C5	3.03	0.46
1:2A:2362:G:OP1	30:28:44:LYS:NZ	2.41	0.46
5:2F:130:ALA:C	5:2F:132:VAL:H	2.23	0.46
7:2H:24:VAL:HG21	7:2H:72:ILE:HD11	1.96	0.46
12:2Q:139:GLU:HG2	21:2Z:122:ARG:HG3	1.97	0.46
23:21:52:ARG:HD3	23:21:56:GLN:O	2.15	0.46
25:23:8:LEU:HG	25:23:31:LEU:HD22	1.97	0.46
32:2a:658:G:H5''	46:2o:8:LYS:HE2	1.97	0.46
32:2a:1190:G:H5'	34:2c:176:HIS:NE2	2.29	0.46
33:2b:61:LEU:HD23	33:2b:68:ILE:HD11	1.98	0.46
42:2k:110:ASP:HB3	49:2r:85:LEU:HB3	1.96	0.46
1:1A:190:A:P	1:1A:205:G:H22	2.38	0.46
1:1A:957:A:N1	1:1A:2458:G:H4'	2.30	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1878:G:H2'	1:1A:1879:C:C6	2.51	0.46
7:1H:175:LYS:HB2	7:1H:175:LYS:HE3	1.60	0.46
11:1P:111:ARG:HG2	11:1P:128:HIS:CD2	2.49	0.46
32:1a:1216:G:OP1	45:1n:2:ALA:HA	2.15	0.46
32:1a:1376:U:H2'	32:1a:1377:A:C8	2.50	0.46
1:2A:1190:G:OP1	11:2P:30:THR:OG1	2.32	0.46
1:2A:1440:G:H2'	1:2A:1441:G:O4'	2.15	0.46
1:2A:1667:G:O2'	1:2A:1991:U:O4	2.27	0.46
1:2A:1810:A:H2'	1:2A:1811:G:O4'	2.14	0.46
3:2D:85:ASP:HB2	3:2D:92:ILE:HG12	1.97	0.46
5:2F:117:ARG:HG3	5:2F:186:ILE:HG23	1.97	0.46
6:2G:111:LEU:HD21	6:2G:120:LEU:HD21	1.96	0.46
13:2R:28:LEU:HD23	13:2R:48:VAL:HG21	1.96	0.46
21:2Z:93:ASP:OD2	21:2Z:93:ASP:N	2.46	0.46
21:2Z:128:VAL:HG22	21:2Z:129:SER:H	1.80	0.46
26:24:45:GLY:C	26:24:47:GLN:H	2.23	0.46
28:26:5:VAL:HA	28:26:27:LYS:HE2	1.97	0.46
32:2a:292:G:H21	32:2a:608:A:H61	1.63	0.46
32:2a:502:G:H2'	32:2a:503:C:O4'	2.16	0.46
44:2m:81:LEU:HA	44:2m:84:ILE:HG12	1.96	0.46
47:2p:18:ARG:HD3	47:2p:35:LYS:HD2	1.97	0.46
50:2s:40:ILE:HB	50:2s:67:VAL:O	2.15	0.46
1:1A:589:C:H42	1:1A:668:G:H1	1.64	0.46
1:1A:636:G:OP1	11:1P:132:LYS:HG3	2.16	0.46
1:1A:1028:A:N6	1:1A:1125:G:H2'	2.30	0.46
1:1A:2513:G:O2'	4:1E:154:LYS:NZ	2.49	0.46
18:1W:12:ILE:HD13	18:1W:17:VAL:HG13	1.98	0.46
32:1a:201:C:N4	32:1a:216:G:H22	2.14	0.46
32:1a:1014:A:H1'	50:1s:34:TRP:HB2	1.97	0.46
32:1a:1379:G:H2'	32:1a:1380:U:C6	2.50	0.46
33:1b:176:GLU:O	33:1b:180:LEU:HD12	2.15	0.46
41:1j:67:THR:O	41:1j:67:THR:OG1	2.32	0.46
42:1k:18:ARG:NH2	42:1k:35:PRO:O	2.48	0.46
1:2A:68:G:H2'	1:2A:69:C:O4'	2.16	0.46
1:2A:489:G:H2'	1:2A:491:G:O4'	2.15	0.46
1:2A:852:G:H2'	1:2A:853:G:C8	2.51	0.46
1:2A:1164:G:H2'	1:2A:1165:U:C6	2.50	0.46
1:2A:1580:A:H3'	1:2A:1581:G:H8	1.81	0.46
1:2A:2123:G:O6	1:2A:2174:C:N4	2.48	0.46
1:2A:2484:G:C2	1:2A:2485:G:C8	3.04	0.46
5:2F:144:LYS:C	5:2F:146:ALA:H	2.23	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:158:THR:O	5:2F:164:ARG:NH1	2.49	0.46
6:2G:40:ASN:OD1	6:2G:42:GLY:N	2.48	0.46
11:2P:81:GLN:HB2	11:2P:110:TYR:CD1	2.50	0.46
21:2Z:102:LEU:HD13	21:2Z:124:ILE:HD13	1.98	0.46
32:2a:663:A:H61	32:2a:742:G:H1	1.64	0.46
32:2a:927:G:N2	32:2a:1391:U:H1'	2.30	0.46
32:2a:1002:G:N3	32:2a:1003:G:H1'	2.30	0.46
33:2b:18:GLY:HA3	33:2b:42:ILE:H	1.80	0.46
36:2e:77:PRO:O	36:2e:93:PRO:HG3	2.15	0.46
44:2m:117:VAL:HG22	44:2m:118:ALA:H	1.79	0.46
45:2n:47:LEU:HB3	45:2n:53:LEU:HG	1.97	0.46
1:1A:30:G:H2'	1:1A:31:C:H6	1.80	0.46
1:1A:576:U:O5'	1:1A:576:U:H6	1.98	0.46
1:1A:1337:G:H2'	1:1A:1338:G:O4'	2.15	0.46
1:1A:1971:A:C4	3:1D:241:PRO:HD3	2.50	0.46
1:1A:2130:U:H2'	1:1A:2158:A:N6	2.18	0.46
1:1A:2259:G:C2	1:1A:2282:G:C6	3.03	0.46
1:1A:2512:C:H4'	4:1E:122:PHE:CE2	2.50	0.46
2:1B:78:A:C2	2:1B:100:A:C4	3.03	0.46
3:1D:206:LEU:O	3:1D:211:ARG:HD3	2.15	0.46
8:1I:9:LEU:HB3	8:1I:12:LEU:HB2	1.98	0.46
9:1N:129:PRO:O	9:1N:131:GLN:N	2.41	0.46
32:1a:1052:U:O4	32:1a:1200:C:O2'	2.32	0.46
36:1e:12:LEU:H	36:1e:31:LEU:HB3	1.79	0.46
36:1e:37:ARG:NH1	36:1e:111:GLU:HB3	2.22	0.46
36:1e:144:THR:HG22	36:1e:147:ASP:OD2	2.15	0.46
42:1k:34:ASP:HB3	42:1k:40:ILE:HD11	1.97	0.46
45:1n:3:ARG:O	45:1n:7:ILE:N	2.46	0.46
47:1p:53:VAL:HG13	47:1p:79:VAL:HG13	1.97	0.46
1:2A:60:G:C6	1:2A:74:A:N6	2.84	0.46
1:2A:234:C:H2'	1:2A:235:U:C6	2.51	0.46
1:2A:528:A:H8	9:2N:114:ARG:CZ	2.28	0.46
1:2A:1355:G:OP1	3:2D:38:LYS:NZ	2.43	0.46
1:2A:1605:C:H2'	1:2A:1606:G:O4'	2.14	0.46
1:2A:2467:C:OP1	31:29:6:SER:OG	2.30	0.46
1:2A:2759:G:OP2	60:2A:3948:HOH:O	2.21	0.46
3:2D:166:GLN:HG3	3:2D:182:LEU:HD11	1.98	0.46
5:2F:54:ARG:HD2	5:2F:81:PRO:HD3	1.96	0.46
13:2R:36:THR:HG22	13:2R:37:THR:H	1.81	0.46
26:24:40:HIS:O	26:24:44:THR:HG22	2.15	0.46
28:26:16:CYS:HB2	28:26:18:ARG:HH11	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:157:G:H1	32:2a:164:U:H3	1.62	0.46
32:2a:315:A:H5''	32:2a:317:G:OP2	2.16	0.46
32:2a:827:U:H3	32:2a:872:A:H61	1.64	0.46
36:2e:105:VAL:HB	36:2e:106:PRO:HD3	1.97	0.46
36:2e:108:ALA:O	36:2e:112:LEU:HG	2.15	0.46
46:2o:25:THR:HG21	46:2o:70:LEU:HB2	1.97	0.46
48:2q:67:LYS:HA	48:2q:70:ARG:NH1	2.29	0.46
1:1A:576:U:H2'	1:1A:577:G:C8	2.51	0.46
1:1A:1056:G:H1'	1:1A:1103:A:H61	1.80	0.46
1:1A:1214:A:N6	1:1A:1235:G:O2'	2.42	0.46
1:1A:2134:A:N7	1:1A:2156:G:O2'	2.44	0.46
1:1A:2646:C:OP2	1:1A:2732:G:O2'	2.31	0.46
1:1A:2721:A:H1'	1:1A:2873:A:O2'	2.15	0.46
6:1G:108:ASN:O	6:1G:112:PRO:HG2	2.16	0.46
9:1N:73:THR:HG23	9:1N:82:LEU:HD11	1.97	0.46
16:1U:34:LYS:NZ	16:1U:37:GLU:OE1	2.46	0.46
21:1Z:45:ASP:O	21:1Z:48:PHE:N	2.49	0.46
32:1a:123:C:OP1	32:1a:311:C:O2'	2.32	0.46
32:1a:240:C:H2'	32:1a:241:C:C6	2.50	0.46
32:1a:707:C:H4'	42:1k:20:TYR:CG	2.49	0.46
32:1a:1003:G:N3	32:1a:1004:A:H2	2.13	0.46
35:1d:106:TYR:CE2	35:1d:107:ARG:HD3	2.50	0.46
1:2A:637:A:H5''	11:2P:117:GLU:CG	2.45	0.46
1:2A:724:U:H2'	1:2A:725:G:O4'	2.15	0.46
1:2A:2279:G:C2	1:2A:2280:G:H1'	2.51	0.46
1:2A:2855:C:H2'	1:2A:2856:C:C6	2.50	0.46
1:2A:2889:C:H2'	1:2A:2891:G:O4'	2.15	0.46
5:2F:63:LYS:HA	5:2F:76:GLY:O	2.15	0.46
5:2F:130:ALA:H	5:2F:142:TRP:HD1	1.59	0.46
6:2G:173:LEU:HB3	6:2G:178:PHE:CG	2.50	0.46
8:2I:26:ALA:HB1	8:2I:31:LEU:HD13	1.98	0.46
13:2R:36:THR:HG22	13:2R:37:THR:N	2.31	0.46
24:22:17:SER:H	24:22:20:GLU:HB2	1.80	0.46
26:24:47:GLN:C	26:24:49:PHE:H	2.23	0.46
26:24:62:ARG:HB3	26:24:63:TYR:CE1	2.50	0.46
32:2a:302:G:O5'	32:2a:302:G:H8	1.98	0.46
32:2a:986:A:H1'	50:2s:54:GLY:O	2.14	0.46
33:2b:126:GLU:CD	33:2b:126:GLU:H	2.24	0.46
1:1A:27:G:C2	1:1A:512:G:N3	2.84	0.46
1:1A:98:G:H5'	24:12:3:LEU:HD23	1.98	0.46
1:1A:1144:G:C6	1:1A:1145:C:N4	2.84	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1213:A:N3	1:1A:1238:G:O2'	2.43	0.46
1:1A:1933:G:H1	1:1A:1967:C:N4	2.14	0.46
1:1A:2142:C:N3	1:1A:2149:G:O6	2.49	0.46
1:1A:2461:C:H2'	1:1A:2462:U:H6	1.81	0.46
1:1A:2827:C:H2'	1:1A:2828:C:C6	2.51	0.46
5:1F:74:ARG:H	5:1F:74:ARG:HG3	1.48	0.46
6:1G:23:PHE:CZ	6:1G:168:GLU:HA	2.50	0.46
6:1G:41:GLN:NE2	6:1G:154:GLY:O	2.40	0.46
13:1R:117:VAL:HG12	13:1R:118:GLU:H	1.81	0.46
21:1Z:98:MET:HE2	21:1Z:100:VAL:HG22	1.98	0.46
22:10:53:MET:HG3	22:10:59:LEU:HD23	1.98	0.46
24:12:28:LYS:HB3	24:12:53:LEU:HD22	1.98	0.46
24:12:63:VAL:O	24:12:67:LYS:N	2.44	0.46
32:1a:294:U:O4	32:1a:295:C:N4	2.48	0.46
32:1a:626:U:H2'	32:1a:627:G:C8	2.51	0.46
32:1a:692:U:H2'	32:1a:694:A:OP2	2.15	0.46
32:1a:1030(D):A:H62	32:1a:1031:G:N2	2.12	0.46
32:1a:1531:A:H8	32:1a:1531:A:O5'	1.98	0.46
33:1b:38:GLY:O	33:1b:39:ILE:HG13	2.16	0.46
46:1o:55:GLY:O	46:1o:59:MET:HG3	2.15	0.46
46:1o:82:ILE:O	46:1o:86:GLY:N	2.48	0.46
47:1p:6:LEU:HB3	47:1p:17:TYR:CD1	2.51	0.46
50:1s:80:TYR:CZ	50:1s:82:GLY:HA2	2.51	0.46
1:2A:806:C:O2	1:2A:2444:G:O2'	2.34	0.46
1:2A:1257:C:H4'	5:2F:83:PHE:CD1	2.51	0.46
1:2A:1278:A:OP1	13:2R:36:THR:HG23	2.15	0.46
1:2A:1364:G:P	23:2I:3:LYS:HG3	2.55	0.46
1:2A:1704:G:H5''	32:2a:1430:C:H5'	1.97	0.46
1:2A:2623:G:H2'	1:2A:2624:G:H8	1.80	0.46
3:2D:15:PHE:HA	60:2D:405:HOH:O	2.16	0.46
4:2E:121:ASN:N	4:2E:121:ASN:OD1	2.48	0.46
32:2a:382:A:H2'	32:2a:383:A:C8	2.50	0.46
43:2I:42:THR:HA	43:2I:53:ARG:O	2.16	0.46
1:1A:1002:G:C2	1:1A:1003:G:H1'	2.50	0.46
1:1A:1407:C:H42	1:1A:1595:G:H1	1.63	0.46
1:1A:1688:U:O2	1:1A:1700:A:H5'	2.15	0.46
1:1A:2704:C:H3'	1:1A:2705:A:H8	1.80	0.46
1:1A:2705:A:O2'	1:1A:2852:G:OP1	2.27	0.46
1:1A:2721:A:OP1	60:1A:4144:HOH:O	2.21	0.46
5:1F:161:GLU:HG2	5:1F:164:ARG:NH2	2.31	0.46
8:1I:4:ILE:HG13	8:1I:39:ALA:HB2	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:30:THR:O	11:1P:33:ARG:HB2	2.16	0.46
14:1S:95:HIS:C	14:1S:99:LYS:HB2	2.41	0.46
25:13:51:ALA:HA	25:13:54:VAL:HG12	1.98	0.46
29:17:31:LEU:HD22	29:17:42:LEU:HB3	1.98	0.46
32:1a:1465:C:H2'	32:1a:1466:C:O4'	2.16	0.46
35:1d:74:GLN:O	35:1d:78:LEU:HB2	2.16	0.46
40:1i:4:TYR:CE2	40:1i:88:TYR:HD1	2.34	0.46
41:1j:17:ASP:HA	41:1j:20:ALA:HB3	1.96	0.46
43:1l:82:VAL:HG12	43:1l:105:TYR:HB3	1.98	0.46
1:2A:889:C:O2'	1:2A:890:A:O4'	2.25	0.46
1:2A:1005:C:H1'	1:2A:1012:U:C4	2.50	0.46
1:2A:2262:U:H2'	1:2A:2263:C:C6	2.51	0.46
1:2A:2593:U:H2'	1:2A:2594:C:C6	2.51	0.46
5:2F:9:ILE:HD12	5:2F:22:ALA:HB3	1.96	0.46
18:2W:6:ILE:HG12	18:2W:104:THR:HG23	1.98	0.46
32:2a:266:G:H2'	32:2a:266:G:N3	2.30	0.46
32:2a:523:A:H61	43:2l:92:0TD:CG	2.28	0.46
32:2a:688:G:H2'	32:2a:689:C:H6	1.81	0.46
32:2a:690:G:C6	32:2a:691:G:C6	3.04	0.46
32:2a:1251:A:H2'	32:2a:1252:A:C8	2.50	0.46
34:2c:35:GLU:O	34:2c:39:ILE:HG13	2.16	0.46
35:2d:57:ARG:NH2	36:2e:107:ARG:HD3	2.27	0.46
51:2t:91:LEU:HD23	51:2t:91:LEU:HA	1.80	0.46
1:1A:827:U:O2	1:1A:2246:G:H4'	2.16	0.46
1:1A:1141:U:H4'	1:1A:1142(A):A:O4'	2.16	0.46
1:1A:1308:A:H2'	1:1A:1309:G:O4'	2.16	0.46
1:1A:1658:C:N4	1:1A:1659:U:O4	2.49	0.46
1:1A:2131:G:N2	1:1A:2133:G:N3	2.63	0.46
1:1A:2263:C:H2'	1:1A:2264:C:H6	1.81	0.46
5:1F:156:LEU:O	5:1F:175:THR:HA	2.16	0.46
7:1H:46:GLU:HG3	7:1H:49:VAL:HG12	1.97	0.46
14:1S:65:VAL:O	14:1S:69:VAL:HG12	2.16	0.46
14:1S:71:ARG:NH1	14:1S:107:GLU:OE2	2.47	0.46
32:1a:272:C:H2'	32:1a:273:A:C8	2.51	0.46
32:1a:457:C:H2'	32:1a:458:C:C6	2.51	0.46
32:1a:1017:G:H2'	32:1a:1018:C:O4'	2.16	0.46
33:1b:45:GLN:O	33:1b:49:GLU:HG3	2.16	0.46
33:1b:61:LEU:HD21	33:1b:160:ASP:HB2	1.98	0.46
49:1r:73:ALA:HB1	49:1r:78:LEU:HB2	1.97	0.46
54:1x:64:G:H2'	54:1x:65:C:C6	2.51	0.46
1:2A:61:G:OP1	24:22:51:ARG:NH2	2.49	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:616:G:H5'	5:2F:205:ARG:HD3	1.96	0.46
1:2A:687:C:H2'	1:2A:688:U:H6	1.81	0.46
1:2A:1258:C:H5'	60:2A:4327:HOH:O	2.14	0.46
1:2A:1803:A:H4'	3:2D:259:THR:HG23	1.98	0.46
1:2A:1913:A:H4'	1:2A:1914:C:C5'	2.45	0.46
1:2A:2163:C:C5	1:2A:2164:C:H1'	2.50	0.46
1:2A:2552:2MU:H2'	1:2A:2554:U:OP2	2.15	0.46
2:2B:7:G:H4'	14:2S:29:PHE:CG	2.50	0.46
2:2B:19:G:H2'	2:2B:20:C:O4'	2.15	0.46
2:2B:32:C:C2	2:2B:51:G:N2	2.84	0.46
12:2Q:35:VAL:HB	12:2Q:102:VAL:HG22	1.98	0.46
14:2S:3:ARG:NH1	14:2S:4:LEU:H	2.14	0.46
30:28:4:MET:H	30:28:4:MET:HG2	1.33	0.46
32:2a:537:G:H5''	43:2l:113:ARG:NH1	2.31	0.46
32:2a:722:A:C8	32:2a:724:G:H1'	2.50	0.46
32:2a:973:G:H3'	32:2a:974:A:H5''	1.97	0.46
32:2a:1148:U:O2'	40:2i:66:ARG:HD2	2.16	0.46
32:2a:1271:G:N2	32:2a:1272:G:N7	2.63	0.46
32:2a:1347:G:N2	32:2a:1374:A:OP2	2.42	0.46
34:2c:18:TRP:CZ2	45:2n:57:ARG:HB3	2.51	0.46
35:2d:111:ALA:HA	35:2d:116:GLN:HE21	1.81	0.46
39:2h:32:LYS:O	39:2h:36:LEU:HG	2.15	0.46
51:2t:47:GLY:HA2	51:2t:48:LYS:C	2.41	0.46
1:1A:922:U:H1'	22:10:26:TYR:CD2	2.51	0.46
1:1A:1133:U:O4	1:1A:2026:C:H1'	2.16	0.46
1:1A:1257:C:H4'	5:1F:83:PHE:CE1	2.51	0.46
1:1A:1445:A:H4'	1:1A:1445(A):C:OP2	2.14	0.46
1:1A:1486:A:H2'	1:1A:1487:G:C8	2.50	0.46
1:1A:1963:U:H4'	1:1A:1964:G:OP1	2.16	0.46
1:1A:2342:C:O2	1:1A:2374:C:H4'	2.16	0.46
3:1D:109:ASP:HB2	3:1D:197:GLY:HA2	1.98	0.46
3:1D:152:GLY:O	3:1D:154:LYS:HG2	2.15	0.46
14:1S:87:PHE:HZ	14:1S:98:VAL:HG12	1.81	0.46
21:1Z:146:ILE:HA	21:1Z:147:GLY:HA2	1.67	0.46
26:14:63:TYR:N	26:14:64:GLY:HA2	2.31	0.46
32:1a:114:U:H1'	32:1a:353:A:H1'	1.97	0.46
32:1a:460:G:N2	32:1a:471:G:N7	2.64	0.46
32:1a:939:G:C6	32:1a:940:C:N4	2.84	0.46
32:1a:1002:G:C2	32:1a:1004:A:H1'	2.50	0.46
33:1b:42:ILE:H	33:1b:42:ILE:HG13	1.58	0.46
34:1c:175:LEU:HD21	34:1c:201:TYR:CD1	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:118:ILE:HG12	36:1e:119:LEU:H	1.80	0.46
44:1m:73:GLU:O	44:1m:77:ASN:ND2	2.46	0.46
46:1o:33:THR:HG21	46:1o:85:LEU:HD22	1.98	0.46
1:2A:195:A:H2'	1:2A:198:C:N4	2.31	0.46
1:2A:884:C:H3'	1:2A:885:C:H6	1.81	0.46
1:2A:1757:U:O2	1:2A:1761:C:N4	2.49	0.46
1:2A:2370:G:H2'	1:2A:2371:G:C8	2.51	0.46
1:2A:2542:A:H4'	1:2A:2543:G:C8	2.50	0.46
1:2A:2543:G:H5'	1:2A:2767:C:OP1	2.15	0.46
2:2B:22:U:H3	2:2B:61:G:H1	1.64	0.46
3:2D:146:GLU:HG2	3:2D:152:GLY:C	2.41	0.46
5:2F:143:ALA:HA	5:2F:148:LEU:HD12	1.98	0.46
24:22:11:GLU:O	24:22:15:LYS:HG3	2.16	0.46
31:29:22:ARG:HD2	31:29:35:ARG:HD2	1.98	0.46
32:2a:180:U:H2'	32:2a:181:G:H5'	1.98	0.46
32:2a:325:A:H2'	32:2a:326:G:O4'	2.16	0.46
32:2a:627:G:H2'	32:2a:628:G:H8	1.81	0.46
32:2a:684:A:N6	60:2a:1931:HOH:O	2.48	0.46
32:2a:1133:G:H2'	32:2a:1134:G:C8	2.51	0.46
34:2c:109:PRO:C	34:2c:111:LEU:H	2.24	0.46
35:2d:162:LEU:HD13	35:2d:181:MET:HB2	1.97	0.46
1:1A:1668:A:C8	1:1A:1674:G:C6	3.04	0.46
2:1B:4:C:H2'	2:1B:5:C:O4'	2.16	0.46
2:1B:45:A:OP2	6:1G:96:ARG:NH2	2.49	0.46
4:1E:10:GLY:HA2	4:1E:192:ASN:OD1	2.15	0.46
15:1T:73:GLU:OE2	15:1T:103:ARG:NE	2.49	0.46
31:19:2:LYS:HD3	31:19:4:ARG:HE	1.80	0.46
32:1a:260:G:H2'	32:1a:261:U:C6	2.50	0.46
32:1a:618:C:H3'	32:1a:620:C:OP2	2.16	0.46
32:1a:1027:C:C4	32:1a:1034:G:N1	2.84	0.46
32:1a:1521:G:H2'	32:1a:1522:U:C6	2.50	0.46
35:1d:88:VAL:O	35:1d:92:VAL:HG22	2.16	0.46
40:1i:38:GLN:C	40:1i:40:LEU:H	2.24	0.46
43:1l:7:ILE:O	43:1l:11:VAL:HG23	2.16	0.46
43:1l:66:VAL:HG11	43:1l:98:TYR:HE2	1.80	0.46
1:2A:379:G:O2'	1:2A:2232:U:OP1	2.30	0.46
1:2A:1161:C:H4'	17:2V:8:GLY:HA2	1.98	0.46
1:2A:1532:C:H42	1:2A:1537:G:H1	1.63	0.46
1:2A:2405:G:H5'	11:2P:75:ILE:HD13	1.98	0.46
3:2D:246:PRO:HG2	3:2D:255:LYS:HG3	1.98	0.46
17:2V:31:ALA:O	17:2V:61:VAL:HG12	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:152:ALA:HA	21:2Z:155:LEU:HD21	1.97	0.46
32:2a:300:A:H2'	32:2a:301:G:O4'	2.16	0.46
32:2a:824:C:H2'	32:2a:825:G:C8	2.51	0.46
32:2a:885:G:H1	32:2a:912:C:H42	1.64	0.46
32:2a:926:G:N2	53:2v:16:A:OP1	2.37	0.46
32:2a:1003:G:C5	32:2a:1004:A:C2	3.04	0.46
32:2a:1026:G:N2	32:2a:1027:C:O4'	2.49	0.46
32:2a:1221:G:O3'	50:2s:77:THR:OG1	2.28	0.46
32:2a:1227:A:C8	50:2s:83:HIS:HB3	2.51	0.46
33:2b:76:GLN:CD	33:2b:76:GLN:H	2.23	0.46
38:2g:23:VAL:O	38:2g:27:ILE:HG12	2.16	0.46
44:2m:25:ILE:HG12	44:2m:29:ARG:HB3	1.98	0.46
46:2o:6:GLU:CD	46:2o:6:GLU:H	2.24	0.46
47:2p:6:LEU:HD23	47:2p:17:TYR:CG	2.51	0.46
1:1A:606:U:H4'	1:1A:658:C:H4'	1.98	0.45
1:1A:671:C:OP1	11:1P:43:GLY:N	2.38	0.45
1:1A:1142(A):A:O2'	1:1A:1143:A:H3'	2.17	0.45
1:1A:1252:G:C2	1:1A:1253:A:C2	3.04	0.45
1:1A:1324:G:OP2	60:1A:4218:HOH:O	2.21	0.45
1:1A:2065:C:H2'	1:1A:2066:C:C6	2.51	0.45
1:1A:2144:U:H3	1:1A:2147:G:H22	1.63	0.45
1:1A:2593:U:C4	1:1A:2594:C:N4	2.84	0.45
10:1O:48:PRO:CB	32:1a:1422:G:H5''	2.46	0.45
24:12:35:LEU:HD12	24:12:53:LEU:HD12	1.98	0.45
32:1a:1187:G:H4'	40:1i:111:ARG:HH11	1.82	0.45
32:1a:1395:C:H5''	32:1a:1402:4OC:O2'	2.16	0.45
32:1a:1405:G:O2'	32:1a:1518:MA6:O2'	2.30	0.45
33:1b:71:VAL:O	33:1b:165:VAL:HG23	2.15	0.45
33:1b:115:LEU:O	33:1b:119:GLU:HG2	2.15	0.45
46:1o:24:SER:OG	46:1o:25:THR:N	2.49	0.45
51:1t:48:LYS:HD2	51:1t:51:GLU:OE1	2.15	0.45
1:2A:196:A:O5'	11:2P:46:LYS:NZ	2.49	0.45
1:2A:485:C:N4	1:2A:495:G:H1	2.04	0.45
1:2A:872:A:H2'	1:2A:873:G:C8	2.52	0.45
1:2A:921:G:C5	1:2A:922:U:C4	3.04	0.45
1:2A:1152:C:H2'	1:2A:1153:C:C6	2.50	0.45
1:2A:1249:U:H5'	16:2U:4:ALA:HB3	1.98	0.45
1:2A:2274:A:C5	1:2A:2276:G:C8	3.04	0.45
1:2A:2472:G:H2'	1:2A:2475:C:N4	2.32	0.45
1:2A:2472:G:H1'	1:2A:2478:A:H61	1.80	0.45
1:2A:2847:U:OP1	15:2T:98:LYS:HE2	2.15	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:54:HIS:NE2	21:2Z:123:ASP:HB3	2.31	0.45
32:2a:336:C:H2'	32:2a:337:C:C6	2.51	0.45
32:2a:381:C:H2'	32:2a:382:A:O4'	2.15	0.45
32:2a:560:U:H5'	32:2a:566:G:N2	2.31	0.45
32:2a:1172:C:H2'	32:2a:1173:G:C8	2.51	0.45
32:2a:1271:G:N1	32:2a:1272:G:O6	2.49	0.45
32:2a:1414:U:H2'	32:2a:1415:G:H8	1.81	0.45
33:2b:12:GLU:O	33:2b:15:VAL:HG22	2.16	0.45
33:2b:180:LEU:HD12	33:2b:182:ILE:HD11	1.97	0.45
35:2d:187:ARG:HG3	35:2d:188:LEU:O	2.15	0.45
54:2x:21:A:C5	54:2x:48:C:C4	3.05	0.45
1:1A:500:G:N2	1:1A:503:A:O5'	2.39	0.45
1:1A:963:U:H1'	1:1A:2250:G:O6	2.16	0.45
1:1A:997:G:OP1	16:1U:92:ARG:HD3	2.16	0.45
1:1A:1259:G:H2'	1:1A:1260:G:C8	2.51	0.45
1:1A:1903:G:C2	1:1A:1904:G:C8	3.05	0.45
1:1A:2396:G:H4'	23:11:29:GLY:O	2.16	0.45
1:1A:2620:C:H1'	4:1E:156:MET:HB2	1.99	0.45
1:1A:2683:C:O2	10:1O:70:LYS:NZ	2.36	0.45
1:1A:2712:U:H1'	1:1A:2712(A):A:C8	2.51	0.45
1:1A:2841:C:H42	1:1A:2876:G:H1	1.64	0.45
4:1E:109:LYS:HE3	4:1E:191:PRO:HA	1.98	0.45
6:1G:163:ALA:HB3	6:1G:169:ALA:HB2	1.98	0.45
8:1I:77:LEU:HD23	8:1I:77:LEU:HA	1.79	0.45
9:1N:67:LEU:O	9:1N:88:GLU:HG3	2.15	0.45
22:10:70:GLN:HG2	22:10:72:ARG:HG3	1.99	0.45
32:1a:109:A:C8	32:1a:326:G:H2'	2.51	0.45
32:1a:195:A:O2'	32:1a:222:U:O2'	2.29	0.45
32:1a:636:U:H2'	32:1a:637:G:C8	2.51	0.45
40:1i:28:VAL:HG22	40:1i:63:ILE:HB	1.98	0.45
50:1s:15:LEU:O	50:1s:19:VAL:HG23	2.16	0.45
1:2A:830:G:H5''	60:2A:4181:HOH:O	2.16	0.45
1:2A:1147:C:H2'	1:2A:1148:A:C8	2.52	0.45
1:2A:2813:A:O5'	1:2A:2813:A:H8	1.99	0.45
5:2F:41:LEU:HD21	5:2F:184:TYR:CE1	2.50	0.45
8:2I:5:LEU:HD11	8:2I:19:VAL:HG22	1.98	0.45
14:2S:67:ARG:HH22	14:2S:103:GLU:HB2	1.80	0.45
21:2Z:11:GLU:CG	21:2Z:12:GLY:H	2.29	0.45
32:2a:288:A:H2'	32:2a:289:G:H4'	1.98	0.45
37:2f:19:LEU:HD11	37:2f:59:TYR:CE1	2.51	0.45
38:2g:27:ILE:O	38:2g:30:ILE:N	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:54:THR:O	38:2g:56:GLN:N	2.50	0.45
41:2j:11:PHE:CE1	41:2j:67:THR:HG22	2.51	0.45
1:1A:483:A:H5''	20:1Y:50:ARG:HG2	1.98	0.45
1:1A:1639:U:O2'	1:1A:1640:C:H5'	2.16	0.45
1:1A:1782:C:O2	1:1A:2608:G:O2'	2.33	0.45
1:1A:1907:G:N1	1:1A:1924:C:N3	2.64	0.45
1:1A:2683:C:H4'	4:1E:13:ARG:CZ	2.46	0.45
3:1D:45:ASN:OD1	3:1D:45:ASN:N	2.47	0.45
3:1D:66:ASP:HB3	3:1D:105:ILE:HG22	1.96	0.45
11:1P:2:LYS:HZ2	11:1P:4:SER:H	1.62	0.45
12:1Q:18:LYS:O	12:1Q:98:LYS:NZ	2.42	0.45
30:18:7:HIS:CD2	30:18:61:LEU:HD13	2.52	0.45
32:1a:299:G:H2'	32:1a:300:A:C8	2.51	0.45
32:1a:300:A:H2'	32:1a:301:G:O4'	2.15	0.45
32:1a:318:G:H2'	32:1a:319:G:C8	2.52	0.45
34:1c:148:GLY:HA2	34:1c:171:GLY:HA3	1.97	0.45
35:1d:153:ARG:HA	35:1d:181:MET:HE1	1.97	0.45
37:1f:44:GLY:HA2	37:1f:59:TYR:CE2	2.51	0.45
44:1m:2:ALA:HA	44:1m:8:GLU:HB2	1.99	0.45
52:1u:3:LYS:HB3	52:1u:14:TRP:CG	2.51	0.45
1:2A:1324:G:C4	1:2A:1328:G:O6	2.69	0.45
1:2A:1364:G:OP2	23:21:61:ARG:NH2	2.44	0.45
1:2A:2331:G:O2'	22:20:43:THR:OG1	2.35	0.45
1:2A:2448:A:N6	60:2A:4006:HOH:O	2.49	0.45
7:2H:6:ARG:CZ	7:2H:6:ARG:HB3	2.45	0.45
11:2P:46:LYS:HB3	11:2P:46:LYS:HE2	1.59	0.45
12:2Q:43:THR:C	12:2Q:45:GLN:H	2.23	0.45
14:2S:26:LEU:HD22	14:2S:87:PHE:HE1	1.82	0.45
30:28:52:LYS:O	30:28:56:GLU:HG3	2.16	0.45
32:2a:1015:A:H2'	32:2a:1016:A:H8	1.80	0.45
32:2a:1367:C:H5'	41:2j:60:ARG:HH12	1.81	0.45
32:2a:1461:G:H2'	32:2a:1462:G:H8	1.81	0.45
33:2b:178:ARG:HH11	33:2b:196:LEU:HA	1.81	0.45
34:2c:39:ILE:O	34:2c:43:LEU:HB2	2.16	0.45
37:2f:48:LEU:HD23	49:2r:77:GLY:HA3	1.98	0.45
51:2t:25:ARG:O	51:2t:29:LYS:HG3	2.17	0.45
1:1A:1549:C:H2'	1:1A:1550:C:H6	1.82	0.45
1:1A:1614:A:N1	18:1W:93:ALA:HB2	2.32	0.45
1:1A:1848:A:H1'	32:1a:702:A:H5'	1.98	0.45
1:1A:2167:U:O2	1:1A:2167:U:H2'	2.17	0.45
1:1A:2291:U:O2'	1:1A:2374:C:O2	2.29	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2485:G:H5''	12:1Q:46:GLN:HE21	1.81	0.45
2:1B:101:G:H2'	2:1B:102:A:O4'	2.17	0.45
8:1I:101:LEU:HG	8:1I:107:VAL:HB	1.98	0.45
14:1S:36:TYR:N	14:1S:36:TYR:CD2	2.85	0.45
16:1U:98:LEU:HD23	16:1U:98:LEU:HA	1.87	0.45
25:13:35:ARG:HH21	25:13:37:LEU:HD22	1.81	0.45
27:15:33:CYS:N	27:15:38:ALA:O	2.32	0.45
32:1a:266:G:H2'	32:1a:266:G:N3	2.31	0.45
32:1a:676:A:H2'	32:1a:677:U:H6	1.81	0.45
32:1a:977:A:H1'	32:1a:982:U:O4	2.17	0.45
32:1a:1122:U:N3	32:1a:1123:A:N7	2.64	0.45
32:1a:1262:C:H2'	32:1a:1263:C:C6	2.52	0.45
34:1c:136:GLN:HA	34:1c:139:GLN:HB3	1.99	0.45
47:1p:3:LYS:HG3	47:1p:24:ALA:HB2	1.98	0.45
47:1p:48:TRP:CD1	47:1p:48:TRP:H	2.34	0.45
1:2A:185:U:H2'	1:2A:186:G:C8	2.50	0.45
1:2A:684:G:O2'	1:2A:788:A:N7	2.48	0.45
1:2A:857:C:H1'	22:20:26:TYR:HE1	1.80	0.45
1:2A:870:A:C2	1:2A:908:C:C2	3.04	0.45
1:2A:1414:G:N2	1:2A:1589:C:O2	2.49	0.45
1:2A:1450:G:H2'	1:2A:1450(A):C:C6	2.51	0.45
1:2A:1528:A:H2'	1:2A:1528(A):A:C8	2.52	0.45
2:2B:42:C:C4	2:2B:43:C:C4	3.05	0.45
3:2D:260:ARG:HH22	3:2D:266:SER:HB2	1.81	0.45
7:2H:103:LEU:HG	7:2H:105:LEU:HD23	1.98	0.45
13:2R:79:LEU:O	13:2R:83:ILE:HB	2.17	0.45
19:2X:31:HIS:CD2	19:2X:33:LYS:HB2	2.52	0.45
27:25:11:THR:HG23	27:25:15:ARG:HB3	1.97	0.45
29:27:34:ARG:CZ	29:27:39:ARG:HG3	2.47	0.45
32:2a:934:C:O2	32:2a:937:A:N6	2.50	0.45
32:2a:1004:A:N6	32:2a:1037:C:O2	2.33	0.45
32:2a:1129:C:H2'	32:2a:1139:G:N7	2.31	0.45
33:2b:16:HIS:CG	33:2b:17:PHE:N	2.84	0.45
44:2m:20:THR:HG21	44:2m:27:LYS:HD2	1.98	0.45
46:2o:82:ILE:O	46:2o:86:GLY:N	2.50	0.45
54:2x:25:C:H2'	54:2x:26:G:O4'	2.15	0.45
1:1A:282:A:N3	1:1A:282:A:H2'	2.31	0.45
1:1A:414:C:H2'	1:1A:415:A:H8	1.81	0.45
1:1A:527:C:H4'	1:1A:528:A:O5'	2.17	0.45
1:1A:904:C:H2'	1:1A:905:U:C6	2.51	0.45
1:1A:1394:U:H4'	1:1A:1603:A:H4'	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1748:G:H2'	1:1A:1749:A:H8	1.79	0.45
1:1A:1889:A:N1	1:1A:2234:G:H1'	2.31	0.45
7:1H:33:LEU:HD11	7:1H:136:ILE:HG13	1.98	0.45
7:1H:149:ARG:NH1	7:1H:167:GLU:OE2	2.49	0.45
12:1Q:32:TYR:CD1	12:1Q:133:ARG:HB2	2.51	0.45
16:1U:97:ASP:OD1	16:1U:101:ARG:NH1	2.48	0.45
19:1X:53:LYS:HB3	19:1X:82:GLN:HB3	1.97	0.45
21:1Z:128:VAL:HG22	21:1Z:132:ASN:HB2	1.97	0.45
32:1a:15:G:H2'	32:1a:16:A:C8	2.52	0.45
32:1a:831:U:H2'	32:1a:832:C:H6	1.81	0.45
32:1a:1053:G:N7	32:1a:1200:C:H5''	2.31	0.45
40:1i:46:ALA:HB2	40:1i:74:ILE:HG23	1.97	0.45
40:1i:93:ARG:HG2	40:1i:97:LYS:HB2	1.98	0.45
1:2A:414:C:O4'	1:2A:1863:G:N2	2.50	0.45
1:2A:2109:U:H2'	1:2A:2110:G:H5'	1.99	0.45
1:2A:2183:C:H2'	1:2A:2184:G:C8	2.51	0.45
1:2A:2858:C:H2'	1:2A:2859:G:O4'	2.16	0.45
6:2G:39:ILE:O	6:2G:91:ARG:HG2	2.16	0.45
8:2I:122:GLU:O	8:2I:126:TYR:OH	2.28	0.45
11:2P:45:LEU:HD23	11:2P:45:LEU:HA	1.63	0.45
15:2T:59:THR:HG23	15:2T:78:LEU:HB3	1.98	0.45
21:2Z:55:HIS:HE1	21:2Z:135:GLU:HB2	1.80	0.45
32:2a:562:C:H4'	32:2a:563:A:O5'	2.16	0.45
32:2a:625:G:H2'	32:2a:626:U:H6	1.81	0.45
32:2a:944:G:N1	32:2a:1338:G:OP2	2.50	0.45
32:2a:1228:C:O3'	44:2m:116:THR:HG23	2.15	0.45
32:2a:1250:A:H4'	40:2i:68:GLY:H	1.81	0.45
36:2e:41:VAL:O	36:2e:67:VAL:HG22	2.16	0.45
47:2p:21:VAL:HG21	47:2p:59:TRP:CD2	2.51	0.45
1:1A:673:C:H5''	5:1F:81:PRO:HD2	1.98	0.45
1:1A:740:U:H2'	1:1A:741:G:H8	1.80	0.45
1:1A:1477:A:C2	1:1A:1515:G:C2	3.05	0.45
1:1A:1542:A:O2'	60:1A:4176:HOH:O	2.21	0.45
1:1A:1668:A:N6	1:1A:1676:A:N1	2.53	0.45
1:1A:2542:A:H4'	1:1A:2543:G:C8	2.51	0.45
1:1A:2715:C:H2'	1:1A:2716:U:C6	2.52	0.45
2:1B:49:C:OP2	14:1S:30:ARG:NH1	2.50	0.45
6:1G:163:ALA:O	6:1G:165:THR:N	2.49	0.45
21:1Z:27:VAL:HG22	21:1Z:28:MET:H	1.81	0.45
30:18:21:LYS:HD3	30:18:49:VAL:HG21	1.99	0.45
32:1a:250:A:H4'	32:1a:251:G:O5'	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:303:A:H2'	32:1a:304:U:O4'	2.16	0.45
32:1a:609:A:H2'	32:1a:610:G:O4'	2.16	0.45
32:1a:1353:G:H2'	32:1a:1354:C:C6	2.49	0.45
1:2A:25:U:H2'	1:2A:26:G:O4'	2.16	0.45
1:2A:275:G:H2'	1:2A:276:A:O4'	2.17	0.45
1:2A:658:C:H2'	1:2A:659:C:C6	2.52	0.45
1:2A:1652:A:H3'	1:2A:1653:G:C8	2.52	0.45
1:2A:1695:G:H1'	3:2D:8:PRO:O	2.16	0.45
1:2A:2731:G:C6	1:2A:2732:G:C6	3.04	0.45
6:2G:12:TYR:CD1	6:2G:16:ARG:HG3	2.52	0.45
21:2Z:99:TYR:HA	21:2Z:125:LEU:HA	1.98	0.45
22:20:65:GLY:HA3	22:20:82:ARG:O	2.16	0.45
26:24:24:THR:C	26:24:25:TYR:HD2	2.23	0.45
32:2a:390:C:H2'	32:2a:391:G:C8	2.50	0.45
32:2a:511:C:H1'	35:2d:43:HIS:CE1	2.52	0.45
32:2a:882:C:OP2	43:2l:13:LYS:NZ	2.50	0.45
33:2b:87:ARG:NH2	33:2b:220:ASP:OD2	2.50	0.45
41:2j:47:PHE:CZ	45:2n:37:PHE:HE2	2.35	0.45
42:2k:106:LYS:HG3	42:2k:107:SER:H	1.82	0.45
1:1A:2077:A:H2'	1:1A:2078:C:H6	1.82	0.45
1:1A:2496:C:N4	60:1A:4430:HOH:O	2.49	0.45
1:1A:2515:C:N4	60:1A:4428:HOH:O	2.49	0.45
5:1F:123:LEU:HD12	5:1F:192:LEU:O	2.17	0.45
10:1O:109:LYS:HB3	10:1O:111:PHE:HE2	1.81	0.45
32:1a:875:C:C4	32:1a:876:G:N7	2.85	0.45
41:1j:51:ARG:NE	41:1j:60:ARG:O	2.47	0.45
44:1m:25:ILE:HG23	44:1m:29:ARG:HB3	1.98	0.45
1:2A:271(G):C:H2'	1:2A:271(H):G:H8	1.81	0.45
1:2A:272(E):G:C2	1:2A:364:C:C2	3.05	0.45
1:2A:513:A:H2	1:2A:582:G:H4'	1.82	0.45
1:2A:990:A:C6	1:2A:1186:G:H1'	2.52	0.45
1:2A:1720:U:H2'	1:2A:1721:G:O4'	2.17	0.45
1:2A:2086:U:H2'	1:2A:2087:G:C8	2.52	0.45
1:2A:2776:A:C6	1:2A:2778:A:C6	3.04	0.45
4:2E:4:ILE:HD12	4:2E:91:VAL:HG12	1.98	0.45
5:2F:196:LEU:O	5:2F:200:GLU:N	2.50	0.45
11:2P:88:LEU:HA	11:2P:91:PHE:HD2	1.80	0.45
11:2P:88:LEU:HA	11:2P:91:PHE:CD2	2.52	0.45
20:2Y:9:LYS:HA	20:2Y:10:GLY:HA2	1.49	0.45
21:2Z:18:LEU:HD21	21:2Z:38:TYR:HB2	1.98	0.45
32:2a:980:C:H3'	32:2a:981:U:C6	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:29:LYS:O	51:2t:33:ILE:HG13	2.17	0.45
1:1A:184:C:H2'	1:1A:185:U:C6	2.51	0.45
1:1A:674:G:H1'	5:1F:74:ARG:NH1	2.31	0.45
1:1A:1144:G:C6	1:1A:1145:C:C4	3.05	0.45
1:1A:1510:G:H2'	1:1A:1511:C:H6	1.81	0.45
1:1A:1860:G:H22	1:1A:1883:G:H1'	1.82	0.45
1:1A:2023:G:H5'	1:1A:2617:C:H4'	1.98	0.45
1:1A:2324:C:H5''	1:1A:2325:G:H5''	1.99	0.45
1:1A:2726:U:O2'	1:1A:2727:G:H8	1.99	0.45
6:1G:125:PHE:HE1	6:1G:173:LEU:HD12	1.81	0.45
10:1O:34:THR:OG1	10:1O:35:VAL:N	2.50	0.45
10:1O:104:ARG:NH2	15:1T:43:GLN:OE1	2.47	0.45
15:1T:106:SER:H	15:1T:109:GLU:HB2	1.82	0.45
16:1U:104:GLN:HG2	16:1U:105:VAL:N	2.31	0.45
32:1a:7:G:C8	36:1e:119:LEU:HD23	2.51	0.45
32:1a:78:G:C2	32:1a:91:C:N3	2.85	0.45
32:1a:397:A:H5'	32:1a:398:C:OP1	2.16	0.45
32:1a:848:C:H2'	32:1a:849:C:H6	1.82	0.45
32:1a:974:A:OP2	45:1n:41:ARG:NH2	2.50	0.45
32:1a:1070:U:H2'	32:1a:1071:C:H6	1.82	0.45
32:1a:1237:C:O2	32:1a:1334:G:O2'	2.28	0.45
32:1a:1410:G:H2'	32:1a:1411:C:C6	2.52	0.45
58:1a:3213:V7A:OAY	58:1a:3213:V7A:OAZ	2.33	0.45
44:1m:13:LYS:HA	44:1m:44:ARG:NH1	2.30	0.45
50:1s:10:PHE:CE2	50:1s:37:ARG:HD2	2.52	0.45
1:2A:480:A:O5'	20:2Y:47:LYS:HD3	2.16	0.45
1:2A:817:C:H3'	1:2A:818:G:H8	1.82	0.45
1:2A:852:G:H2'	1:2A:853:G:H8	1.81	0.45
1:2A:947:G:H1	1:2A:970:C:N4	2.14	0.45
1:2A:1042:G:C5	1:2A:1043:C:H5	2.35	0.45
1:2A:1385:G:H1'	1:2A:1386:C:C6	2.51	0.45
1:2A:2601:C:H2'	1:2A:2603:G:C8	2.52	0.45
1:2A:2841:C:H2'	1:2A:2842:G:C8	2.52	0.45
4:2E:169:ASN:ND2	60:2E:406:HOH:O	2.50	0.45
6:2G:166:ASP:O	6:2G:170:ARG:N	2.50	0.45
17:2V:95:LEU:HD22	17:2V:97:LYS:HD3	1.98	0.45
19:2X:5:TYR:CE1	24:22:30:ARG:HG3	2.52	0.45
32:2a:489:C:H2'	32:2a:490:G:H8	1.81	0.45
32:2a:1067:A:H8	32:2a:1067:A:O5'	2.00	0.45
33:2b:70:PHE:CD1	33:2b:163:PHE:HB3	2.51	0.45
35:2d:155:LEU:HD13	35:2d:158:ILE:HD11	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:2f:95:GLU:OE1	37:2f:95:GLU:N	2.50	0.45
40:2i:8:GLY:HA3	40:2i:79:LEU:HB3	1.99	0.45
43:2l:33:ARG:HB3	43:2l:60:LEU:HD22	1.98	0.45
1:1A:40:C:H2'	1:1A:41:C:C6	2.52	0.45
1:1A:581:C:H2'	1:1A:582:G:C8	2.51	0.45
1:1A:773:U:OP1	60:1A:4221:HOH:O	2.21	0.45
1:1A:1069:A:H4'	1:1A:1070:A:H5''	1.98	0.45
1:1A:2031:A:O2'	1:1A:2454:G:N2	2.48	0.45
1:1A:2315:G:H5''	1:1A:2316:C:OP2	2.17	0.45
5:1F:36:VAL:O	5:1F:40:GLN:HG3	2.17	0.45
5:1F:93:LYS:HA	5:1F:93:LYS:HD3	1.73	0.45
8:1I:72:LEU:HD12	8:1I:138:ILE:HG21	1.98	0.45
8:1I:77:LEU:HD13	8:1I:79:ILE:HD11	1.98	0.45
13:1R:94:TYR:C	13:1R:117:VAL:HG23	2.41	0.45
24:12:48:HIS:CE1	24:12:49:LYS:HG2	2.52	0.45
32:1a:258:G:H2'	32:1a:259:G:H8	1.81	0.45
32:1a:284:G:H2'	32:1a:285:G:C8	2.52	0.45
32:1a:814:A:N7	32:1a:816:A:C4	2.85	0.45
32:1a:1493:A:H5''	32:1a:1494:G:OP2	2.16	0.45
36:1e:118:ILE:HG12	36:1e:119:LEU:N	2.32	0.45
38:1g:97:GLN:O	38:1g:101:LEU:HG	2.17	0.45
1:2A:123:G:H2'	1:2A:124:G:O4'	2.17	0.45
1:2A:1445(A):C:N4	1:2A:1466:G:H1	2.12	0.45
1:2A:1614:A:N1	18:2W:87:PRO:HA	2.31	0.45
1:2A:1958:C:H2'	1:2A:1959:G:H8	1.82	0.45
1:2A:2544:G:H1'	1:2A:2646:C:H4'	1.98	0.45
1:2A:2893:G:H5''	1:2A:2894:G:O4'	2.17	0.45
4:2E:31:CYS:HB2	4:2E:91:VAL:HB	1.99	0.45
8:2I:79:ILE:O	8:2I:145:VAL:HG22	2.17	0.45
12:2Q:85:LYS:HG3	22:20:7:LEU:HB3	1.98	0.45
14:2S:15:ARG:O	14:2S:19:LYS:HG2	2.17	0.45
32:2a:11:G:H1	32:2a:23:C:H42	1.63	0.45
32:2a:1003:G:H22	32:2a:1027:C:N4	2.15	0.45
32:2a:1246:C:H2'	32:2a:1247:U:O4'	2.17	0.45
32:2a:1342:C:O2'	40:2i:124:GLN:HA	2.17	0.45
32:2a:1382:C:H2'	32:2a:1383:C:C6	2.52	0.45
32:2a:1495:U:H2'	32:2a:1496:C:C6	2.52	0.45
33:2b:63:MET:CG	33:2b:225:ALA:HB1	2.41	0.45
33:2b:92:TYR:N	33:2b:151:GLY:O	2.47	0.45
34:2c:120:VAL:HA	34:2c:123:GLN:HB2	1.98	0.45
47:2p:2:VAL:HG13	47:2p:64:ALA:HA	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:14:LYS:HB2	51:2t:17:ARG:NH2	2.32	0.45
1:1A:223:A:N1	1:1A:407:G:O2'	2.42	0.45
1:1A:582:G:H2'	1:1A:583:G:C8	2.51	0.45
1:1A:1567:A:H3'	3:1D:86:PRO:HG3	1.99	0.45
1:1A:2026:C:H2'	1:1A:2027:G:O4'	2.17	0.45
1:1A:2165:G:H1	1:1A:2171:A:H2'	1.82	0.45
1:1A:2535:G:H2'	1:1A:2536:G:H8	1.81	0.45
1:1A:2563:U:H1'	1:1A:2566:A:N6	2.32	0.45
2:1B:49:C:H2'	2:1B:50:G:H8	1.82	0.45
18:1W:37:ARG:NH1	18:1W:38:TYR:OH	2.50	0.45
32:1a:198:G:C6	32:1a:220:G:C2	3.05	0.45
33:1b:74:LYS:O	33:1b:78:GLN:NE2	2.47	0.45
35:1d:138:TYR:HD2	35:1d:139:ARG:N	2.15	0.45
41:1j:51:ARG:H	41:1j:60:ARG:HA	1.82	0.45
50:1s:62:ILE:HA	50:1s:66:MET:SD	2.57	0.45
1:2A:362:U:O2'	1:2A:363:G:H5'	2.17	0.45
1:2A:829:A:N7	1:2A:2247:A:O2'	2.43	0.45
1:2A:882:G:H2'	1:2A:883:G:C8	2.52	0.45
1:2A:1388:G:H2'	1:2A:1389:G:C8	2.50	0.45
1:2A:1913:A:N6	32:2a:1493:A:H2'	2.32	0.45
1:2A:2721:A:H1'	1:2A:2873:A:O2'	2.17	0.45
1:2A:2830:G:H2'	1:2A:2831:G:C8	2.52	0.45
2:2B:19:G:N2	2:2B:65:C:N3	2.65	0.45
5:2F:118:ALA:O	5:2F:120:GLU:N	2.44	0.45
7:2H:25:LYS:HD2	7:2H:27:LYS:HE2	1.99	0.45
8:2I:8:PRO:HD3	8:2I:15:VAL:HB	1.99	0.45
11:2P:29:LYS:HG3	11:2P:30:THR:H	1.82	0.45
32:2a:65:U:H4'	32:2a:66:G:C5'	2.47	0.45
32:2a:348:G:O2'	32:2a:349:A:H5'	2.17	0.45
32:2a:858:G:H8	32:2a:858:G:OP2	2.00	0.45
32:2a:895:G:H2'	32:2a:896:C:C6	2.52	0.45
32:2a:1015:A:H2'	32:2a:1016:A:C8	2.52	0.45
32:2a:1132:C:H2'	32:2a:1133:G:C8	2.51	0.45
32:2a:1305:G:N2	32:2a:1331:G:H1'	2.32	0.45
32:2a:1374:A:O2'	38:2g:28:ASN:HB3	2.17	0.45
32:2a:1494:G:OP2	32:2a:1494:G:H8	1.99	0.45
33:2b:51:LEU:HA	33:2b:51:LEU:HD23	1.77	0.45
33:2b:55:PHE:CZ	33:2b:218:ALA:HA	2.52	0.45
35:2d:5:ILE:HD12	35:2d:5:ILE:HA	1.83	0.45
39:2h:82:HIS:NE2	39:2h:84:ARG:HG2	2.32	0.45
1:1A:19:C:N4	1:1A:521:G:H1	2.14	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1430:C:H2'	1:1A:1431:U:C6	2.52	0.44
8:1I:93:THR:O	8:1I:97:ILE:HG12	2.17	0.44
14:1S:8:GLU:H	14:1S:8:GLU:HG2	1.58	0.44
14:1S:26:LEU:HD12	14:1S:38:GLN:O	2.16	0.44
32:1a:141:A:H2'	32:1a:142:G:C8	2.52	0.44
32:1a:756:C:H2'	32:1a:757:U:O4'	2.17	0.44
32:1a:929:G:H2'	32:1a:930:C:H6	1.81	0.44
32:1a:1030:C:N3	32:1a:1031:G:N2	2.65	0.44
37:1f:11:ASN:HD22	37:1f:14:LEU:HG	1.82	0.44
1:2A:78:A:H2'	1:2A:79:G:C8	2.52	0.44
1:2A:211:A:H2'	1:2A:212:G:O4'	2.17	0.44
1:2A:323:G:H1'	1:2A:1205:U:O2	2.18	0.44
1:2A:492:A:H2'	1:2A:493:G:O4'	2.17	0.44
1:2A:1999:C:O2	1:2A:2687:U:O2'	2.30	0.44
1:2A:2822:G:O5'	1:2A:2822:G:H8	1.99	0.44
4:2E:147:PRO:HB2	4:2E:149:ARG:HG2	1.98	0.44
5:2F:47:GLY:O	5:2F:94:PRO:HA	2.17	0.44
5:2F:65:TRP:CH2	5:2F:72:ARG:HD3	2.52	0.44
6:2G:20:ILE:HA	6:2G:25:TYR:HD2	1.82	0.44
9:2N:53:VAL:HG21	9:2N:130:HIS:HD2	1.82	0.44
10:2O:13:ASN:OD1	10:2O:13:ASN:N	2.46	0.44
14:2S:58:LEU:H	14:2S:58:LEU:HG	1.45	0.44
14:2S:78:LEU:HD23	14:2S:78:LEU:HA	1.76	0.44
15:2T:16:ARG:NH1	15:2T:83:ILE:HB	2.32	0.44
15:2T:51:ARG:HB2	15:2T:98:LYS:HD2	1.98	0.44
22:20:24:LYS:HD3	22:20:24:LYS:HA	1.80	0.44
32:2a:60:A:H4'	32:2a:61:G:O5'	2.17	0.44
32:2a:160:A:H2'	32:2a:161:A:C8	2.52	0.44
32:2a:598:U:O4	60:2a:1907:HOH:O	2.19	0.44
32:2a:1047:G:H1	32:2a:1210:C:H42	1.65	0.44
32:2a:1051:C:N3	32:2a:1207:2MG:N2	2.56	0.44
33:2b:12:GLU:H	33:2b:12:GLU:HG3	1.61	0.44
33:2b:180:LEU:HB2	33:2b:182:ILE:HG13	1.99	0.44
34:2c:112:SER:O	34:2c:116:VAL:HG23	2.17	0.44
40:2i:26:VAL:HG13	40:2i:61:ALA:HB3	1.99	0.44
43:2l:27:LEU:HD23	43:2l:27:LEU:HA	1.84	0.44
44:2m:84:ILE:HG13	44:2m:86:CYS:H	1.81	0.44
47:2p:26:ARG:HG3	47:2p:27:LYS:N	2.31	0.44
1:1A:489:G:N7	18:1W:49:LYS:NZ	2.57	0.44
1:1A:1526:G:C6	1:1A:1527:G:C2	3.05	0.44
1:1A:1798:U:H5'	3:1D:259:THR:CG2	2.47	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1996:C:H4'	1:1A:1997:G:OP1	2.16	0.44
1:1A:2126:A:N7	1:1A:2163:C:H1'	2.32	0.44
1:1A:2187:G:H2'	1:1A:2188:C:O4'	2.16	0.44
5:1F:8:GLN:NE2	5:1F:21:ALA:HA	2.24	0.44
7:1H:72:ILE:O	7:1H:76:VAL:HG23	2.17	0.44
7:1H:98:LEU:HD23	7:1H:102:ALA:O	2.16	0.44
32:1a:140:A:H2'	32:1a:141:A:H8	1.81	0.44
32:1a:433:C:H2'	32:1a:434:U:C6	2.52	0.44
32:1a:554:C:H2'	32:1a:555:C:C6	2.52	0.44
32:1a:987:G:H2'	32:1a:988:G:H8	1.82	0.44
33:1b:115:LEU:HD13	33:1b:145:LEU:HB2	1.99	0.44
35:1d:25:ARG:O	35:1d:28:SER:HB3	2.16	0.44
35:1d:190:ASP:H	35:1d:193:ASP:CG	2.25	0.44
42:1k:43:SER:HA	42:1k:47:VAL:HG21	1.98	0.44
50:1s:32:LYS:HA	50:1s:50:ALA:HB3	1.98	0.44
53:1v:14:A:H2'	53:1v:14:A:N3	2.30	0.44
1:2A:410:G:H1	1:2A:417:C:H42	1.64	0.44
1:2A:486:C:H2'	1:2A:487:C:C5	2.52	0.44
1:2A:576:U:H2'	1:2A:577:G:C8	2.52	0.44
1:2A:686:G:H1	29:27:16:HIS:CD2	2.35	0.44
1:2A:887:A:H4'	1:2A:888:C:H5	1.82	0.44
1:2A:2809:A:H2'	1:2A:2810:A:C8	2.52	0.44
1:2A:2840:C:H4'	13:2R:53:HIS:CE1	2.52	0.44
2:2B:105:A:C5	2:2B:106:G:H1'	2.51	0.44
5:2F:159:GLY:HA2	5:2F:164:ARG:NH1	2.33	0.44
12:2Q:15:GLY:O	12:2Q:16:ARG:HB2	2.17	0.44
32:2a:669:U:H2'	32:2a:670:G:H8	1.81	0.44
32:2a:695:A:OP2	42:2k:53:SER:N	2.49	0.44
32:2a:1014:A:H4'	50:2s:14:HIS:CE1	2.52	0.44
32:2a:1060:C:O2	41:2j:56:HIS:HE1	2.00	0.44
32:2a:1134:G:C2	32:2a:1135:U:H1'	2.52	0.44
32:2a:1373:G:C5'	38:2g:36:LYS:HB2	2.47	0.44
32:2a:1459:C:H2'	32:2a:1460:A:C8	2.52	0.44
32:2a:1515:C:O2	32:2a:1521:G:N2	2.51	0.44
34:2c:7:PRO:HG3	34:2c:175:LEU:HD23	1.99	0.44
34:2c:41:GLY:O	34:2c:45:LYS:NZ	2.49	0.44
43:2l:53:ARG:NH1	43:2l:92:0TD:OD1	2.46	0.44
45:2n:23:ARG:HG3	45:2n:28:GLY:HA2	1.99	0.44
54:2x:75:C:OP1	60:2x:201:HOH:O	2.21	0.44
1:1A:198:C:O2'	1:1A:199:A:H5'	2.18	0.44
1:1A:272(A):U:HO2'	1:1A:272(B):G:P	2.34	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:625:G:H2'	1:1A:626:U:H6	1.83	0.44
1:1A:646:A:H2'	1:1A:647:G:C8	2.52	0.44
1:1A:1299:G:H5'	1:1A:1301:A:O4'	2.17	0.44
1:1A:1930:G:O2'	1:1A:1968:G:O6	2.30	0.44
1:1A:2153:G:H2'	1:1A:2154:G:H8	1.82	0.44
1:1A:2274:A:O2'	1:1A:2276:G:OP1	2.35	0.44
1:1A:2342:C:O2'	1:1A:2374:C:OP1	2.35	0.44
1:1A:2406:U:H2'	1:1A:2406:U:OP2	2.16	0.44
1:1A:2502:G:H5''	1:1A:2503:2MA:C5'	2.45	0.44
3:1D:63:ARG:HG2	3:1D:92:ILE:CD1	2.47	0.44
6:1G:56:ALA:O	6:1G:60:LEU:HB2	2.17	0.44
12:1Q:75:THR:HB	60:1Q:302:HOH:O	2.17	0.44
13:1R:53:HIS:HB2	13:1R:94:TYR:HE2	1.83	0.44
15:1T:41:ARG:NH2	15:1T:43:GLN:HB2	2.33	0.44
32:1a:15:G:H2'	32:1a:16:A:H8	1.83	0.44
32:1a:642:A:N3	39:1h:113:SER:OG	2.50	0.44
32:1a:888:G:H1'	32:1a:909:A:H61	1.81	0.44
32:1a:999:C:H2'	32:1a:1000:U:O4'	2.17	0.44
32:1a:1479:C:H2'	32:1a:1480:G:O4'	2.18	0.44
32:1a:1518:MA6:O5'	32:1a:1518:MA6:H8	2.18	0.44
33:1b:74:LYS:NZ	33:1b:206:ASP:OD1	2.44	0.44
38:1g:69:VAL:O	38:1g:138:LYS:HG3	2.16	0.44
44:1m:20:THR:C	44:1m:22:ILE:H	2.26	0.44
1:2A:65:C:H5'	19:2X:71:GLY:HA3	1.99	0.44
1:2A:747:U:O2	1:2A:2014:A:H1'	2.17	0.44
1:2A:1292:U:H2'	1:2A:1293:C:C6	2.52	0.44
1:2A:2002:G:H8	1:2A:2002:G:O5'	2.01	0.44
1:2A:2341:G:H2'	1:2A:2342:C:O4'	2.17	0.44
8:2I:40:THR:HG23	8:2I:43:ASN:OD1	2.17	0.44
9:2N:96:GLU:CD	9:2N:96:GLU:H	2.23	0.44
29:27:25:PRO:HA	29:27:28:ARG:HG3	1.98	0.44
32:2a:139:G:H2'	32:2a:140:A:C8	2.52	0.44
32:2a:590:C:H2'	32:2a:591:U:H6	1.81	0.44
32:2a:756:C:C4	32:2a:757:U:C4	3.06	0.44
32:2a:781:A:C5	32:2a:802:A:C2	3.05	0.44
32:2a:861:G:O2'	32:2a:874:G:O2'	2.17	0.44
32:2a:1115:C:H42	32:2a:1185:G:H1	1.65	0.44
32:2a:1264:C:N4	32:2a:1265:G:O6	2.51	0.44
32:2a:1292:U:H2'	32:2a:1293:G:O4'	2.17	0.44
32:2a:1340:A:O2'	54:2x:31:G:O3'	2.36	0.44
33:2b:115:LEU:HD13	33:2b:145:LEU:HB2	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:2h:43:GLY:O	39:2h:64:LYS:NZ	2.47	0.44
47:2p:1:MET:HB3	47:2p:1:MET:HE2	1.62	0.44
1:1A:182:A:H8	1:1A:182:A:OP2	2.00	0.44
1:1A:1186:G:O5'	1:1A:1186:G:H8	2.00	0.44
3:1D:127:VAL:HG12	3:1D:194:GLY:HA3	2.00	0.44
5:1F:110:LEU:HA	5:1F:183:VAL:HG12	2.00	0.44
9:1N:99:LEU:O	9:1N:103:VAL:HG23	2.17	0.44
21:1Z:155:LEU:HA	21:1Z:155:LEU:HD13	1.74	0.44
26:14:1:MET:HG2	26:14:6:HIS:CD2	2.52	0.44
32:1a:198:G:C4	32:1a:199:G:C8	3.05	0.44
33:1b:59:GLU:HB2	33:1b:221:LEU:HD21	2.00	0.44
34:1c:136:GLN:HB2	34:1c:140:ARG:NH1	2.32	0.44
35:1d:99:SER:O	35:1d:140:VAL:HG22	2.17	0.44
36:1e:12:LEU:HB3	36:1e:31:LEU:HB3	1.99	0.44
36:1e:82:VAL:HG21	36:1e:138:ALA:HA	2.00	0.44
41:1j:9:ARG:HD3	41:1j:69:ASN:ND2	2.31	0.44
41:1j:49:VAL:HG23	45:1n:41:ARG:HB2	1.98	0.44
47:1p:43:LYS:HG2	47:1p:48:TRP:CE2	2.53	0.44
1:2A:320:A:H4'	1:2A:322:A:C8	2.53	0.44
1:2A:530:G:C5	1:2A:2022:U:H5''	2.52	0.44
1:2A:1449:A:N6	1:2A:1450:G:C4	2.86	0.44
1:2A:1537:G:H2'	1:2A:1538:G:H8	1.82	0.44
1:2A:1817:G:C6	1:2A:1818:U:C4	3.06	0.44
1:2A:2011:U:H2'	1:2A:2012:G:O4'	2.16	0.44
3:2D:3:VAL:CG1	3:2D:17:THR:HB	2.48	0.44
3:2D:11:PRO:O	3:2D:14:ARG:HG3	2.17	0.44
4:2E:33:VAL:HG22	4:2E:89:ASP:O	2.17	0.44
6:2G:11:TYR:O	6:2G:16:ARG:N	2.49	0.44
9:2N:108:PRO:O	9:2N:113:GLY:HA3	2.17	0.44
12:2Q:130:LYS:HE2	12:2Q:130:LYS:HB3	1.72	0.44
18:2W:29:LEU:HG	18:2W:33:ARG:HD2	1.99	0.44
32:2a:1001:A:H2'	32:2a:1001(A):G:C8	2.52	0.44
32:2a:1172:C:H2'	32:2a:1173:G:H8	1.83	0.44
35:2d:13:ARG:NH2	35:2d:40:PRO:HA	2.32	0.44
1:1A:17:G:H1'	60:1A:4586:HOH:O	2.17	0.44
1:1A:1062:G:H8	1:1A:1070:A:H4'	1.77	0.44
1:1A:1113:U:H2'	1:1A:1114:G:C8	2.53	0.44
1:1A:1167:U:H2'	1:1A:1168:G:C8	2.52	0.44
1:1A:1657:C:H2'	1:1A:1658:C:C6	2.52	0.44
1:1A:2472:G:H5''	1:1A:2473:U:H5''	1.98	0.44
1:1A:2556:C:H2'	1:1A:2557:G:O4'	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2689:U:H4'	1:1A:2690:C:O5'	2.18	0.44
1:1A:2815:C:H2'	1:1A:2816:C:C6	2.50	0.44
4:1E:49:LEU:N	4:1E:79:ARG:O	2.38	0.44
21:1Z:155:LEU:HD12	21:1Z:156:LYS:H	1.83	0.44
26:14:50:VAL:HB	44:1m:63:THR:O	2.18	0.44
32:1a:9:G:H2'	32:1a:10:A:H8	1.81	0.44
32:1a:441:A:H5''	32:1a:442:C:H5	1.82	0.44
33:1b:219:VAL:HA	33:1b:222:ILE:HD12	1.98	0.44
34:1c:35:GLU:O	34:1c:39:ILE:N	2.42	0.44
35:1d:21:LEU:H	35:1d:21:LEU:HG	1.58	0.44
39:1h:79:VAL:HG12	39:1h:80:ILE:HG13	1.98	0.44
43:1l:105:TYR:C	43:1l:107:ALA:H	2.25	0.44
1:2A:8:A:H2'	1:2A:9:U:C6	2.48	0.44
1:2A:105:C:H2'	1:2A:106:C:H6	1.83	0.44
1:2A:383:U:H2'	1:2A:385:C:H5	1.82	0.44
1:2A:632:A:OP1	60:2A:3958:HOH:O	2.21	0.44
1:2A:774:A:H2'	1:2A:774:A:N3	2.32	0.44
1:2A:899:A:O2'	1:2A:900:A:H5''	2.17	0.44
1:2A:1437:C:H5'	1:2A:1438:U:OP2	2.17	0.44
1:2A:2319:G:H22	14:2S:3:ARG:HH11	1.65	0.44
1:2A:2659:G:O2'	1:2A:2661:G:N7	2.50	0.44
4:2E:115:GLY:O	4:2E:119:ARG:HB2	2.17	0.44
9:2N:30:ILE:HD13	9:2N:99:LEU:HD11	1.99	0.44
15:2T:36:GLU:CD	15:2T:41:ARG:HE	2.24	0.44
20:2Y:9:LYS:HD2	20:2Y:29:GLU:HA	1.99	0.44
21:2Z:53:ILE:HA	21:2Z:71:VAL:HG23	1.99	0.44
21:2Z:151:HIS:ND1	21:2Z:170:THR:HA	2.33	0.44
24:22:53:LEU:O	24:22:57:ILE:HG13	2.18	0.44
32:2a:677:U:H3	32:2a:713:G:H22	1.64	0.44
32:2a:1121:U:C2'	32:2a:1122:U:H5'	2.47	0.44
50:2s:11:VAL:O	50:2s:13:ASP:N	2.51	0.44
1:1A:879:G:H22	1:1A:899:A:H1'	1.82	0.44
1:1A:1050:A:H2'	1:1A:1051:G:O4'	2.18	0.44
1:1A:1919:A:O2'	32:1a:1517:G:N3	2.38	0.44
1:1A:2330:G:H2'	1:1A:2331:G:O4'	2.17	0.44
9:1N:82:LEU:HA	9:1N:82:LEU:HD12	1.77	0.44
11:1P:114:ILE:HG22	11:1P:134:ALA:HB1	1.99	0.44
15:1T:23:ARG:N	15:1T:26:ASP:OD2	2.48	0.44
21:1Z:150:LEU:HD21	21:1Z:154:ASP:CB	2.46	0.44
26:14:61:ARG:NH2	50:1s:41:VAL:HG13	2.31	0.44
26:14:69:LYS:HB3	26:14:69:LYS:HE3	1.81	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:130:A:OP2	48:1q:63:ARG:HD3	2.17	0.44
32:1a:417:C:H42	32:1a:426:G:H1	1.65	0.44
32:1a:503:C:OP2	43:1l:116:SER:OG	2.24	0.44
32:1a:533:A:O2'	32:1a:534:U:H5''	2.18	0.44
32:1a:1262:C:H2'	32:1a:1263:C:H6	1.80	0.44
32:1a:1309:G:H1	32:1a:1328:C:H42	1.65	0.44
32:1a:1372:U:H2'	32:1a:1373:G:O4'	2.17	0.44
32:1a:1530:G:H2'	32:1a:1531:A:C8	2.53	0.44
33:1b:82:ARG:NH1	33:1b:92:TYR:OH	2.51	0.44
34:1c:58:GLU:HB2	34:1c:65:ALA:HB3	1.99	0.44
35:1d:104:VAL:HG21	35:1d:140:VAL:HG21	2.00	0.44
42:1k:23:ALA:HB3	42:1k:86:GLY:HA3	1.98	0.44
44:1m:28:ALA:O	44:1m:32:GLU:HB2	2.17	0.44
46:1o:39:LEU:HD23	46:1o:56:LEU:HB2	1.99	0.44
48:1q:24:GLU:HG2	48:1q:25:ARG:N	2.33	0.44
50:1s:40:ILE:HB	50:1s:67:VAL:O	2.17	0.44
1:2A:271(U):G:H2'	1:2A:271(V):G:H8	1.82	0.44
1:2A:887:A:O2'	1:2A:888:C:H3'	2.18	0.44
1:2A:1265:A:H61	1:2A:2013:A:H5''	1.81	0.44
1:2A:1446:C:H2'	1:2A:1447:G:H8	1.83	0.44
1:2A:2001:A:H5''	1:2A:2689:U:H2'	1.99	0.44
1:2A:2290:G:C2	1:2A:2343:C:O2	2.71	0.44
1:2A:2868:A:H2'	1:2A:2869:G:C8	2.52	0.44
3:2D:84:TYR:HE2	3:2D:86:PRO:HB3	1.82	0.44
5:2F:112:MET:HB2	5:2F:112:MET:HE3	1.72	0.44
10:2O:19:ILE:HG22	10:2O:43:VAL:HG22	2.00	0.44
14:2S:110:LEU:HD12	14:2S:110:LEU:HA	1.87	0.44
16:2U:36:ARG:HG2	16:2U:40:PHE:CZ	2.53	0.44
22:20:12:ASN:HA	22:20:14:ARG:NH2	2.32	0.44
32:2a:254:G:H2'	32:2a:255:G:C8	2.52	0.44
32:2a:642:A:H2'	32:2a:643:C:C6	2.53	0.44
32:2a:707:C:H4'	42:2k:20:TYR:CD2	2.53	0.44
33:2b:48:MET:HG3	33:2b:49:GLU:N	2.33	0.44
35:2d:155:LEU:HD23	35:2d:156:GLU:N	2.33	0.44
38:2g:59:LEU:O	38:2g:63:LYS:HG3	2.17	0.44
44:2m:15:VAL:HG13	44:2m:45:VAL:HG22	1.99	0.44
47:2p:1:MET:HE3	47:2p:3:LYS:HD3	2.00	0.44
49:2r:73:ALA:HB3	49:2r:79:LEU:HD12	1.99	0.44
1:1A:26:G:O3'	1:1A:1260:G:H4'	2.18	0.44
1:1A:574:C:N3	4:1E:145:LYS:NZ	2.47	0.44
1:1A:642:G:N2	1:1A:646:A:H62	2.15	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:906:G:O3'	12:1Q:67:ARG:NH2	2.50	0.44
1:1A:1710:C:H2'	1:1A:1711:C:H6	1.82	0.44
1:1A:2072:G:N2	60:1A:4442:HOH:O	2.51	0.44
1:1A:2316:C:H2'	1:1A:2317:C:C6	2.47	0.44
1:1A:2642:G:OP1	9:1N:76:SER:OG	2.18	0.44
12:1Q:60:ARG:HD3	12:1Q:60:ARG:HA	1.54	0.44
17:1V:61:VAL:HA	17:1V:94:LEU:HD23	2.00	0.44
32:1a:66:G:H5''	32:1a:199:G:O2'	2.18	0.44
32:1a:371:G:H1	32:1a:390:C:H42	1.64	0.44
32:1a:1234:C:H2'	32:1a:1235:U:C6	2.52	0.44
34:1c:28:GLN:O	34:1c:32:LEU:HG	2.17	0.44
35:1d:20:TYR:HA	35:1d:26:CYS:SG	2.58	0.44
40:1i:5:TYR:HB2	40:1i:18:PHE:CE1	2.52	0.44
40:1i:96:LEU:HD23	40:1i:96:LEU:HA	1.90	0.44
44:1m:88:ARG:HG2	44:1m:98:VAL:HG13	1.98	0.44
44:1m:96:LEU:HD23	44:1m:97:PRO:HD2	1.99	0.44
51:1t:87:LYS:O	51:1t:91:LEU:HG	2.18	0.44
1:2A:884:C:H3'	1:2A:885:C:C6	2.53	0.44
1:2A:988:A:OP1	25:23:10:LYS:HG2	2.17	0.44
1:2A:1341:U:O4	19:2X:16:LYS:NZ	2.39	0.44
1:2A:1436:G:H2'	1:2A:1437:C:O4'	2.17	0.44
1:2A:1782:C:O2	1:2A:2608:G:O2'	2.24	0.44
1:2A:1916:A:O5'	1:2A:1916:A:H8	2.00	0.44
1:2A:1996:C:H4'	1:2A:1997:G:OP1	2.18	0.44
1:2A:2154:G:N7	1:2A:2156:G:N2	2.66	0.44
1:2A:2348:U:H5'	28:26:21:TYR:CE1	2.52	0.44
1:2A:2553:G:H8	1:2A:2553:G:OP1	2.01	0.44
2:2B:32:C:H2'	2:2B:33:G:O4'	2.18	0.44
6:2G:61:ALA:HB2	6:2G:68:PRO:HD3	2.00	0.44
6:2G:172:LEU:O	6:2G:176:LEU:HG	2.18	0.44
7:2H:87:LEU:HB2	7:2H:131:VAL:HB	2.00	0.44
12:2Q:125:LEU:HD12	12:2Q:129:THR:HG21	2.00	0.44
13:2R:99:LYS:HZ3	27:25:43:HIS:HB3	1.83	0.44
14:2S:23:ARG:HG2	14:2S:24:LEU:H	1.83	0.44
15:2T:64:ARG:HH21	15:2T:71:GLY:HA3	1.81	0.44
17:2V:40:LEU:HB2	17:2V:46:VAL:HB	2.00	0.44
32:2a:229:U:H2'	32:2a:230:G:O4'	2.18	0.44
32:2a:243:A:H4'	32:2a:244:U:H5''	1.98	0.44
32:2a:828:A:H2'	32:2a:829:G:O4'	2.18	0.44
32:2a:878:G:OP1	39:2h:88:LYS:HB3	2.17	0.44
32:2a:957:U:O2	32:2a:959:A:H8	2.01	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1047:G:H5''	45:2n:4:LYS:HD2	1.99	0.44
32:2a:1426:C:H2'	32:2a:1427:U:C6	2.53	0.44
35:2d:61:LYS:NZ	35:2d:72:GLU:OE1	2.50	0.44
1:1A:247:G:H4'	1:1A:386:G:C5	2.52	0.44
1:1A:526:A:O2'	1:1A:2043:C:O2	2.30	0.44
1:1A:1342:A:O2'	1:1A:1344:G:OP2	2.31	0.44
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.53	0.44
1:1A:1510:G:H2'	1:1A:1511:C:C6	2.52	0.44
1:1A:1640:C:H2'	1:1A:1641:A:O4'	2.17	0.44
1:1A:2572:A:N7	4:1E:145:LYS:HB2	2.33	0.44
5:1F:130:ALA:O	5:1F:132:VAL:N	2.46	0.44
9:1N:63:THR:OG1	9:1N:66:LYS:NZ	2.51	0.44
26:14:56:VAL:O	26:14:60:GLN:HB2	2.18	0.44
32:1a:113:G:H2'	32:1a:114:U:O4'	2.17	0.44
32:1a:1072:G:O6	32:1a:1102:A:N6	2.51	0.44
33:1b:18:GLY:N	33:1b:204:ASN:HB2	2.32	0.44
33:1b:212:GLN:O	33:1b:216:SER:OG	2.10	0.44
36:1e:95:ALA:HB1	36:1e:96:PRO:HD2	2.00	0.44
40:1i:127:LYS:O	40:1i:128:ARG:HG2	2.18	0.44
1:2A:224:G:O6	1:2A:419:C:O2'	2.29	0.44
1:2A:918:A:C6	1:2A:919:G:H1'	2.53	0.44
1:2A:937:U:H2'	1:2A:938:G:O4'	2.17	0.44
1:2A:1468:C:C2	1:2A:1525:G:C2	3.06	0.44
2:2B:55:U:O2'	6:2G:27:ASN:ND2	2.41	0.44
5:2F:199:TRP:HA	5:2F:202:PHE:HB3	2.00	0.44
8:2I:3:VAL:O	8:2I:18:VAL:HA	2.18	0.44
15:2T:25:GLY:HA3	15:2T:94:ALA:HB2	2.00	0.44
31:29:11:CYS:HB3	31:29:32:HIS:HE1	1.83	0.44
32:2a:472:A:H4'	47:2p:80:PHE:O	2.18	0.44
32:2a:559:A:H5''	32:2a:560:U:H3'	1.99	0.44
32:2a:1226:C:OP2	44:2m:91:ARG:NH1	2.51	0.44
32:2a:1410:G:N2	32:2a:1491:G:H1'	2.33	0.44
38:2g:153:HIS:CE1	42:2k:57:THR:HB	2.52	0.44
39:2h:100:ILE:HD11	39:2h:129:VAL:O	2.17	0.44
1:1A:15:G:C4	1:1A:16:G:C8	3.06	0.44
1:1A:278:A:H2'	1:1A:279:C:C6	2.52	0.44
1:1A:392:C:H5''	1:1A:409:C:H5''	1.99	0.44
1:1A:910:A:N3	1:1A:2264:C:O2'	2.45	0.44
1:1A:1090:U:C2	1:1A:1102:C:H1'	2.53	0.44
1:1A:1156:A:OP1	16:1U:55:ARG:HD3	2.17	0.44
1:1A:1374:G:H2'	1:1A:1375:C:C6	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1452:A:OP2	60:1A:4219:HOH:O	2.21	0.44
1:1A:1528:A:H2'	1:1A:1528(A):A:C8	2.52	0.44
1:1A:1766:U:H2'	1:1A:1767:C:H6	1.83	0.44
1:1A:2161:C:O2'	1:1A:2162:G:H8	2.01	0.44
1:1A:2498:C:O2'	1:1A:2499:C:H5'	2.18	0.44
1:1A:2699:C:H2'	1:1A:2700:C:O4'	2.18	0.44
4:1E:27:LEU:HD23	15:1T:1:MET:HE2	2.00	0.44
4:1E:27:LEU:HD22	15:1T:6:LEU:HD21	1.99	0.44
26:14:11:PRO:HG3	26:14:25:TYR:CE1	2.53	0.44
32:1a:188:C:O5'	32:1a:188:C:H6	2.01	0.44
32:1a:262:A:H2'	32:1a:263:A:C8	2.52	0.44
32:1a:607:A:H2'	32:1a:608:A:O4'	2.18	0.44
32:1a:610:G:OP1	60:1a:3313:HOH:O	2.21	0.44
32:1a:848:C:H2'	32:1a:849:C:C6	2.53	0.44
32:1a:982:U:H5''	45:1n:6:LEU:HD21	1.99	0.44
34:1c:108:ASN:HB3	34:1c:111:LEU:HB2	1.99	0.44
39:1h:117:GLY:O	39:1h:119:LEU:HG	2.18	0.44
40:1i:5:TYR:C	40:1i:84:ALA:HB2	2.43	0.44
40:1i:41:VAL:C	40:1i:43:ALA:H	2.26	0.44
44:1m:56:LEU:O	44:1m:60:VAL:HG22	2.17	0.44
1:2A:822:U:C4	1:2A:836:G:N2	2.86	0.44
1:2A:2222:G:H5''	3:2D:186:HIS:NE2	2.33	0.44
1:2A:2317:C:N4	1:2A:2318:G:C6	2.86	0.44
1:2A:2516:G:O2'	1:2A:2517:C:H5'	2.18	0.44
17:2V:24:LYS:HA	17:2V:92:THR:OG1	2.17	0.44
21:2Z:97:GLU:HB3	21:2Z:125:LEU:HD11	1.99	0.44
21:2Z:171:ILE:HD12	21:2Z:172:ALA:H	1.83	0.44
32:2a:359:U:H2'	32:2a:360:A:C8	2.53	0.44
32:2a:392:G:H2'	32:2a:393:A:C8	2.53	0.44
32:2a:638:G:H2'	32:2a:639:G:H8	1.83	0.44
32:2a:1083:U:H5''	32:2a:1084:G:OP2	2.18	0.44
32:2a:1481:U:H2'	32:2a:1482:G:C8	2.52	0.44
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.98	0.44
33:2b:94:ASN:HB3	33:2b:95:GLN:NE2	2.33	0.44
38:2g:44:TYR:HA	38:2g:47:CYS:HB2	2.00	0.44
38:2g:47:CYS:HA	38:2g:50:ILE:HD11	2.00	0.44
38:2g:114:ARG:HB2	38:2g:115:ARG:HH22	1.83	0.44
1:1A:300:A:H1'	1:1A:319:C:H1'	2.00	0.43
1:1A:327:G:N2	20:1Y:70:SER:OG	2.51	0.43
1:1A:571:A:H5'	1:1A:2030:A:N7	2.33	0.43
1:1A:1377:G:H8	1:1A:1377:G:O5'	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1569:A:O5'	3:1D:61:LEU:HD11	2.18	0.43
1:1A:2355:C:H42	1:1A:2362:G:H1	1.64	0.43
1:1A:2649:U:H2'	1:1A:2650:U:C6	2.53	0.43
1:1A:2790:A:H2'	1:1A:2790:A:N3	2.32	0.43
3:1D:23:GLU:HG3	60:1D:420:HOH:O	2.17	0.43
23:11:6:GLU:CD	23:11:61:ARG:H	2.26	0.43
32:1a:37:U:H2'	32:1a:38:G:H8	1.83	0.43
32:1a:160:A:H2'	32:1a:161:A:O4'	2.18	0.43
32:1a:189(C):C:H2'	32:1a:189(D):C:O4'	2.18	0.43
32:1a:318:G:H2'	32:1a:319:G:H8	1.83	0.43
32:1a:427:U:OP1	35:1d:13:ARG:NH1	2.50	0.43
32:1a:432:A:H3'	32:1a:433:C:C6	2.52	0.43
32:1a:540:G:H2'	32:1a:541:G:C8	2.53	0.43
32:1a:812:C:OP1	32:1a:903:G:H1'	2.17	0.43
33:1b:127:ILE:HD11	33:1b:130:ARG:HG3	2.00	0.43
35:1d:128:VAL:HG12	35:1d:129:ASN:HD22	1.83	0.43
40:1i:11:LYS:H	40:1i:104:ARG:HH21	1.65	0.43
41:1j:69:ASN:O	41:1j:70:ARG:NH1	2.40	0.43
44:1m:118:ALA:HB2	54:1x:28:C:H4'	1.99	0.43
48:1q:29:HIS:HB3	48:1q:33:GLY:N	2.33	0.43
50:1s:12:ASP:OD2	50:1s:35:SER:OG	2.29	0.43
1:2A:675:A:C8	1:2A:804:A:C6	3.05	0.43
1:2A:783:A:O2'	1:2A:785:G:OP1	2.16	0.43
1:2A:1178:C:O2	1:2A:1178:C:H2'	2.17	0.43
1:2A:1332:G:C8	1:2A:1610:A:C8	3.06	0.43
3:2D:12:SER:HB3	3:2D:208:LYS:HB3	2.00	0.43
3:2D:202:LYS:C	3:2D:204:ILE:H	2.26	0.43
6:2G:113:ARG:O	6:2G:140:ILE:HD11	2.18	0.43
12:2Q:73:PRO:HB3	12:2Q:93:TYR:CE1	2.52	0.43
18:2W:1:MET:HE3	18:2W:62:HIS:CD2	2.52	0.43
32:2a:108:G:N2	51:2t:12:ALA:HB1	2.33	0.43
32:2a:113:G:H1'	32:2a:354:G:H5'	1.99	0.43
32:2a:255:G:C6	32:2a:256:U:C4	3.05	0.43
32:2a:414:A:N6	32:2a:431:A:N3	2.66	0.43
33:2b:69:LEU:HD13	33:2b:155:LEU:HD22	2.00	0.43
34:2c:125:GLU:H	34:2c:125:GLU:HG2	1.67	0.43
40:2i:88:TYR:HD2	40:2i:89:ASN:HB2	1.83	0.43
41:2j:8:LEU:HD11	41:2j:20:ALA:HB2	1.99	0.43
43:2l:110:VAL:CG2	43:2l:120:TYR:HB3	2.48	0.43
49:2r:45:SER:OG	49:2r:46:GLU:N	2.51	0.43
49:2r:45:SER:N	49:2r:49:LYS:O	2.40	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:72:LEU:HD23	51:2t:72:LEU:HA	1.74	0.43
1:1A:70:G:O2'	1:1A:113:G:O2'	2.21	0.43
1:1A:373:U:O2	1:1A:423:A:H2	2.01	0.43
1:1A:613:G:O2'	1:1A:614(C):A:N1	2.39	0.43
1:1A:1639:U:H4'	1:1A:2699:C:H4'	2.00	0.43
1:1A:1820:U:O2	3:1D:201:HIS:HB3	2.18	0.43
1:1A:1922:G:H2'	1:1A:1923:U:O4'	2.18	0.43
1:1A:1981:A:OP1	60:1A:4223:HOH:O	2.21	0.43
8:1I:73:GLU:HG2	8:1I:139:GLN:O	2.17	0.43
12:1Q:4:PRO:HD3	12:1Q:70:PRO:O	2.18	0.43
13:1R:48:VAL:O	13:1R:51:LEU:N	2.51	0.43
17:1V:40:LEU:HD12	17:1V:46:VAL:HB	1.98	0.43
23:11:48:LYS:HA	23:11:60:PHE:O	2.18	0.43
32:1a:189:G:C6	32:1a:189(A):C:C4	3.05	0.43
32:1a:837:G:H1	32:1a:849:C:H42	1.65	0.43
32:1a:1274:G:N2	32:1a:1275:A:N7	2.66	0.43
34:1c:55:VAL:HG22	34:1c:68:VAL:HG22	2.00	0.43
41:1j:55:LYS:HB2	41:1j:55:LYS:HE3	1.73	0.43
43:1l:11:VAL:HG13	48:1q:29:HIS:HD2	1.83	0.43
43:1l:38:THR:OG1	43:1l:39:VAL:N	2.48	0.43
47:1p:19:ILE:N	47:1p:37:GLY:O	2.50	0.43
1:2A:52:A:N1	1:2A:178:G:O2'	2.44	0.43
1:2A:302:C:H2'	1:2A:303:U:C6	2.53	0.43
1:2A:313:C:H2'	1:2A:314:A:C8	2.53	0.43
1:2A:742:G:H1	1:2A:755:C:N4	2.13	0.43
1:2A:910:A:C6	1:2A:911:A:C6	3.06	0.43
1:2A:1413:G:H2'	1:2A:1414:G:C8	2.54	0.43
1:2A:1518:U:H2'	1:2A:1519:G:O4'	2.18	0.43
1:2A:1688:U:H2'	1:2A:1698:A:N6	2.33	0.43
1:2A:2030:A:H4'	1:2A:2031:A:C8	2.53	0.43
1:2A:2136:C:N4	1:2A:2155:G:H1	2.15	0.43
1:2A:2305:A:H2'	1:2A:2306:C:O4'	2.18	0.43
1:2A:2646:C:H2'	1:2A:2647:U:O4'	2.17	0.43
7:2H:20:ALA:HB3	7:2H:23:ARG:HB2	1.99	0.43
14:2S:80:LEU:HB3	14:2S:82:ILE:HD13	2.00	0.43
25:23:3:ARG:HH21	25:23:36:VAL:HG11	1.83	0.43
28:26:5:VAL:O	28:26:27:LYS:HG2	2.18	0.43
32:2a:52:G:H1	32:2a:359:U:H3	1.66	0.43
32:2a:456:C:H42	32:2a:475:G:H1	1.66	0.43
32:2a:472:A:H5''	47:2p:80:PHE:HB3	2.00	0.43
32:2a:642:A:C5	32:2a:643:C:C4	3.05	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:728:A:OP1	46:2o:54:ARG:NH1	2.50	0.43
32:2a:748:C:H1'	32:2a:749:C:OP2	2.18	0.43
32:2a:953:G:H5'	32:2a:965:A:N6	2.27	0.43
32:2a:1366:C:H2'	32:2a:1367:C:C6	2.53	0.43
36:2e:129:ILE:HD12	36:2e:129:ILE:H	1.82	0.43
38:2g:66:VAL:O	38:2g:70:LYS:HG3	2.18	0.43
39:2h:17:THR:HB	39:2h:78:GLN:OE1	2.18	0.43
44:2m:44:ARG:O	44:2m:48:LEU:HG	2.17	0.43
50:2s:13:ASP:HA	50:2s:16:LEU:HB3	2.00	0.43
51:2t:57:ARG:NH2	51:2t:100:ILE:HD12	2.27	0.43
1:1A:90:U:H1'	1:1A:92:A:C8	2.53	0.43
1:1A:668:G:H2'	1:1A:670:A:H62	1.83	0.43
1:1A:1012:U:P	16:1U:70:ARG:HH22	2.41	0.43
1:1A:1441:G:H2'	1:1A:1442:G:H8	1.83	0.43
1:1A:1608:A:H1'	1:1A:1610:A:OP2	2.18	0.43
1:1A:1655:A:H1'	4:1E:113:PHE:CD2	2.53	0.43
1:1A:1862:G:H2'	1:1A:1863:G:H8	1.83	0.43
1:1A:2500:U:O2'	1:1A:2504:U:OP1	2.33	0.43
1:1A:2539:C:H5'	31:19:3:VAL:HG21	1.99	0.43
1:1A:2892:A:C6	1:1A:2893:G:C6	3.07	0.43
2:1B:21:G:H2'	2:1B:22:U:C6	2.54	0.43
6:1G:115:ARG:HH22	44:1m:2:ALA:HB2	1.82	0.43
14:1S:18:ILE:O	14:1S:21:THR:OG1	2.35	0.43
20:1Y:9:LYS:HA	20:1Y:10:GLY:HA2	1.64	0.43
20:1Y:73:ARG:HE	20:1Y:73:ARG:HB3	1.66	0.43
32:1a:295:C:H2'	32:1a:296:U:O4'	2.18	0.43
32:1a:537:G:H5''	43:1l:113:ARG:NH1	2.32	0.43
32:1a:1292:U:H2'	32:1a:1293:G:O4'	2.18	0.43
32:1a:1318:A:H5''	50:1s:3:ARG:NH1	2.33	0.43
33:1b:107:THR:O	33:1b:110:GLN:HB3	2.18	0.43
38:1g:69:VAL:O	38:1g:69:VAL:HG12	2.18	0.43
40:1i:31:GLN:HE21	40:1i:36:TYR:HB2	1.83	0.43
41:1j:8:LEU:HB2	41:1j:70:ARG:HB2	2.00	0.43
47:1p:41:PRO:O	47:1p:43:LYS:NZ	2.47	0.43
50:1s:31:ILE:HD13	50:1s:49:ILE:HG12	2.00	0.43
51:1t:63:ILE:HG21	51:1t:81:LYS:HG3	1.99	0.43
1:2A:301:G:H2'	1:2A:334:C:H2'	2.00	0.43
1:2A:310:A:H1'	1:2A:311:A:H2'	1.99	0.43
1:2A:463:G:N2	1:2A:465:G:H3'	2.33	0.43
1:2A:506:G:O3'	1:2A:507:A:H8	2.01	0.43
1:2A:816:C:H2'	1:2A:817:C:C6	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1999:C:H5''	1:2A:2723:C:O2'	2.18	0.43
1:2A:2185:C:H2'	1:2A:2186:G:O4'	2.18	0.43
2:2B:3:C:H2'	2:2B:4:C:C6	2.53	0.43
5:2F:181:LEU:HD11	5:2F:186:ILE:HD11	2.00	0.43
8:2I:101:LEU:HD23	8:2I:101:LEU:HA	1.79	0.43
10:2O:64:ARG:HD3	10:2O:79:PHE:CD1	2.53	0.43
20:2Y:48:ALA:HA	20:2Y:60:PHE:HA	1.99	0.43
25:23:6:VAL:HG13	25:23:54:VAL:HG13	1.98	0.43
25:23:46:ASN:O	25:23:49:LYS:N	2.49	0.43
32:2a:170:U:H2'	32:2a:171:A:H8	1.83	0.43
32:2a:533:A:OP1	60:2a:1913:HOH:O	2.21	0.43
32:2a:735:C:H2'	32:2a:736:C:C6	2.53	0.43
32:2a:859:A:H2'	32:2a:860:A:O4'	2.18	0.43
32:2a:1414:U:H2'	32:2a:1415:G:C8	2.54	0.43
33:2b:70:PHE:HE2	33:2b:90:MET:HB2	1.83	0.43
34:2c:10:PHE:CE2	34:2c:178:LEU:HG	2.53	0.43
38:2g:120:ILE:O	38:2g:124:LEU:HB2	2.19	0.43
40:2i:94:ALA:C	40:2i:96:LEU:H	2.25	0.43
1:1A:28:A:C2	1:1A:513:A:C8	3.07	0.43
1:1A:380:U:H2'	1:1A:381:G:C8	2.52	0.43
1:1A:1412:A:H2'	1:1A:1413:G:C8	2.54	0.43
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.53	0.43
1:1A:2134:A:C4	1:1A:2158:A:H2	2.36	0.43
1:1A:2183:C:O2'	1:1A:2184:G:OP1	2.30	0.43
1:1A:2531:A:H2'	1:1A:2532:G:C8	2.53	0.43
2:1B:114:C:H1'	14:1S:46:VAL:HA	2.00	0.43
5:1F:33:LEU:HB2	11:1P:6:LEU:HD21	2.01	0.43
5:1F:178:PRO:HG2	5:1F:179:GLU:OE2	2.18	0.43
9:1N:72:TYR:OH	9:1N:98:VAL:HG13	2.19	0.43
10:1O:48:PRO:HB3	32:1a:1422:G:H5''	2.00	0.43
12:1Q:133:ARG:HG3	12:1Q:134:ARG:N	2.32	0.43
14:1S:36:TYR:N	14:1S:36:TYR:HD2	2.16	0.43
32:1a:554:C:H2'	32:1a:555:C:H6	1.84	0.43
32:1a:1370:G:C2	32:1a:1371:G:C8	3.06	0.43
33:1b:47:THR:HG22	33:1b:51:LEU:HD11	2.00	0.43
34:1c:17:ASP:HB3	34:1c:21:ARG:HH21	1.83	0.43
38:1g:18:TYR:CD2	38:1g:59:LEU:HD13	2.53	0.43
45:1n:48:ALA:HB2	45:1n:53:LEU:HD12	2.00	0.43
1:2A:61:G:H5'	24:22:50:ILE:HG21	2.00	0.43
1:2A:195:A:H5''	1:2A:196:A:O5'	2.18	0.43
1:2A:479:A:N3	1:2A:481:G:H5''	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:551:G:H2'	1:2A:552:G:C8	2.53	0.43
1:2A:1430:C:H2'	1:2A:1431:U:C6	2.54	0.43
1:2A:1449:A:H2	1:2A:1529:G:H1'	1.81	0.43
1:2A:1653:G:O3'	13:2R:2:ARG:HB2	2.18	0.43
1:2A:1680:U:N3	1:2A:1764:G:OP2	2.42	0.43
1:2A:1683:C:O2'	60:2A:3960:HOH:O	2.21	0.43
1:2A:2134:A:H2'	1:2A:2134:A:N3	2.33	0.43
2:2B:11:C:H3'	2:2B:12:C:H6	1.83	0.43
3:2D:137:PRO:O	3:2D:140:THR:OG1	2.37	0.43
3:2D:215:LEU:HD23	3:2D:215:LEU:HA	1.88	0.43
4:2E:16:ARG:O	4:2E:19:ARG:HB3	2.18	0.43
6:2G:20:ILE:HG23	6:2G:25:TYR:HB2	1.99	0.43
7:2H:54:ARG:HG2	7:2H:65:HIS:CE1	2.52	0.43
9:2N:29:LYS:O	9:2N:33:LEU:HG	2.18	0.43
13:2R:30:THR:HG22	13:2R:31:HIS:CD2	2.53	0.43
19:2X:39:ILE:O	19:2X:43:VAL:HG23	2.18	0.43
21:2Z:151:HIS:HD1	21:2Z:170:THR:HA	1.83	0.43
26:24:17:GLY:HA3	44:2m:57:ARG:NH1	2.33	0.43
26:24:64:GLY:C	26:24:66:SER:H	2.26	0.43
32:2a:571:U:O4	32:2a:864:A:N6	2.51	0.43
32:2a:684:A:O2'	42:2k:39:PRO:O	2.36	0.43
32:2a:932:C:O3'	38:2g:4:ARG:NH2	2.50	0.43
32:2a:1314:C:OP1	50:2s:6:LYS:HE3	2.17	0.43
32:2a:1387:G:H2'	32:2a:1388:C:H6	1.82	0.43
42:2k:48:ILE:O	42:2k:50:TYR:N	2.51	0.43
42:2k:99:GLN:HG3	42:2k:105:VAL:HG21	1.99	0.43
1:1A:749:C:C4	1:1A:1618:A:C2	3.06	0.43
1:1A:794:G:OP2	60:1A:4151:HOH:O	2.21	0.43
1:1A:879:G:N2	1:1A:899:A:H1'	2.33	0.43
1:1A:1001:A:C8	1:1A:1002:G:C8	3.07	0.43
1:1A:1301:A:H2	1:1A:1626:G:N3	2.16	0.43
1:1A:1802:A:H2'	1:1A:1803:A:C8	2.53	0.43
1:1A:2065:C:H2'	1:1A:2066:C:H6	1.84	0.43
1:1A:2125:G:H22	1:1A:2172:U:P	2.42	0.43
1:1A:2498:C:H3'	60:1A:4111:HOH:O	2.18	0.43
1:1A:2577:A:H2'	1:1A:2614:A:N6	2.33	0.43
1:1A:2652:C:H2'	1:1A:2653:U:O4'	2.19	0.43
5:1F:28:ILE:O	5:1F:30:PRO:HD3	2.17	0.43
5:1F:144:LYS:HE3	5:1F:144:LYS:HB2	1.80	0.43
5:1F:184:TYR:CE2	5:1F:188:ARG:HD2	2.52	0.43
7:1H:19:VAL:HG13	7:1H:24:VAL:HG22	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:1N:16:ILE:O	9:1N:54:VAL:HA	2.19	0.43
10:1O:13:ASN:OD1	10:1O:13:ASN:N	2.45	0.43
20:1Y:97:ARG:HH11	20:1Y:107:ASP:C	2.26	0.43
32:1a:78:G:N1	32:1a:91:C:C4	2.85	0.43
32:1a:1263:C:H2'	32:1a:1264:C:C6	2.54	0.43
32:1a:1484:C:H2'	32:1a:1485:U:H6	1.84	0.43
33:1b:109:SER:O	33:1b:112:VAL:HG22	2.19	0.43
36:1e:53:LEU:H	36:1e:53:LEU:HD12	1.83	0.43
39:1h:83:ILE:HG13	39:1h:137:VAL:HG22	1.99	0.43
43:1l:79:GLU:HG2	43:1l:80:HIS:CE1	2.53	0.43
1:2A:455:C:N3	1:2A:473:G:H5'	2.34	0.43
1:2A:531:C:C5	1:2A:2035:G:C2	3.06	0.43
1:2A:885:C:H3'	1:2A:886:C:H5''	1.99	0.43
1:2A:993:G:N3	17:2V:89:GLN:NE2	2.56	0.43
1:2A:1029:A:H8	1:2A:1029:A:O5'	2.02	0.43
1:2A:1614:A:P	1:2A:1614:A:H8	2.41	0.43
1:2A:1710:C:H2'	1:2A:1711:C:C6	2.53	0.43
1:2A:1913:A:N6	32:2a:1493:A:C8	2.87	0.43
1:2A:2308:G:H3'	1:2A:2310:A:OP2	2.18	0.43
1:2A:2765:A:OP2	60:2A:3957:HOH:O	2.21	0.43
3:2D:133:LEU:HB3	3:2D:173:VAL:HG11	2.01	0.43
4:2E:2:LYS:HA	4:2E:84:PHE:CD1	2.54	0.43
16:2U:74:LEU:HD21	16:2U:110:VAL:HG13	2.00	0.43
22:20:8:GLY:HA2	54:2x:2:G:H5'	2.00	0.43
26:24:34:GLU:HG3	26:24:35:VAL:HG12	2.01	0.43
32:2a:967:5MC:H2'	32:2a:968:A:C8	2.54	0.43
32:2a:1064:G:H4'	32:2a:1066:C:H5'	2.01	0.43
32:2a:1323:G:H2'	32:2a:1324:A:C8	2.53	0.43
33:2b:80:ILE:HD12	33:2b:208:ILE:HG23	2.00	0.43
33:2b:191:ASP:OD1	33:2b:191:ASP:N	2.50	0.43
36:2e:31:LEU:HD23	36:2e:31:LEU:HA	1.84	0.43
38:2g:16:LEU:HD13	40:2i:41:VAL:HG12	2.00	0.43
1:1A:521:G:H2'	1:1A:522:G:C8	2.54	0.43
1:1A:839:U:H2'	1:1A:840:C:C6	2.53	0.43
1:1A:868:U:N3	1:1A:869:G:N7	2.67	0.43
1:1A:2126:A:H4'	1:1A:2127:G:OP1	2.18	0.43
1:1A:2565:A:H5''	1:1A:2566:A:OP2	2.19	0.43
3:1D:71:ASP:CB	3:1D:103:ARG:HH12	2.31	0.43
6:1G:138:GLN:NE2	6:1G:153:ARG:H	2.16	0.43
10:1O:22:ILE:HG12	10:1O:41:ALA:HA	2.01	0.43
10:1O:53:LYS:HG2	10:1O:56:ASP:CG	2.43	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1Z:72:ARG:HA	21:1Z:72:ARG:HD3	1.75	0.43
24:12:7:ARG:O	24:12:11:GLU:HG3	2.17	0.43
25:13:50:VAL:HB	25:13:53:LEU:HD12	2.00	0.43
26:14:61:ARG:HH21	50:1s:41:VAL:HG13	1.82	0.43
32:1a:284:G:H2'	32:1a:285:G:H8	1.83	0.43
32:1a:370:C:H2'	32:1a:371:G:O4'	2.19	0.43
32:1a:474:G:H3'	32:1a:475:G:H8	1.83	0.43
32:1a:502:G:H2'	32:1a:503:C:O4'	2.19	0.43
32:1a:709:G:H2'	32:1a:710:G:C8	2.54	0.43
32:1a:1226:C:O2	50:1s:83:HIS:NE2	2.51	0.43
32:1a:1231:G:H2'	32:1a:1232:U:O4'	2.19	0.43
32:1a:1402:4OC:CM2	32:1a:1403:C:H5'	2.47	0.43
33:1b:174:VAL:O	33:1b:178:ARG:HG3	2.18	0.43
35:1d:64:LEU:HA	35:1d:67:ILE:HD12	2.00	0.43
37:1f:16:GLN:O	37:1f:19:LEU:HB3	2.17	0.43
44:1m:3:ARG:NE	44:1m:8:GLU:HG3	2.34	0.43
44:1m:59:TYR:O	44:1m:63:THR:OG1	2.21	0.43
47:1p:14:ASN:N	47:1p:15:PRO:HD3	2.34	0.43
52:1u:6:ARG:HE	52:1u:15:ARG:NH2	2.15	0.43
52:1u:15:ARG:H	52:1u:15:ARG:HG2	1.65	0.43
1:2A:190:A:N3	1:2A:679:C:O2'	2.51	0.43
1:2A:271(R):G:C2	1:2A:271(S):G:C8	3.07	0.43
1:2A:391:G:O2'	1:2A:410:G:OP1	2.35	0.43
1:2A:517:C:H2'	1:2A:518:G:O4'	2.18	0.43
1:2A:562:U:O2'	1:2A:572:A:O4'	2.37	0.43
1:2A:686:G:N2	1:2A:788:A:H61	2.16	0.43
1:2A:826:U:H5''	1:2A:2428:G:O3'	2.18	0.43
1:2A:1139:G:O2'	1:2A:1143:A:N1	2.48	0.43
1:2A:1568:G:P	3:2D:63:ARG:HH12	2.41	0.43
1:2A:2803:C:H5''	1:2A:2804:C:OP2	2.19	0.43
2:2B:27:C:OP1	14:2S:33:LYS:NZ	2.43	0.43
3:2D:246:PRO:O	3:2D:254:THR:HG22	2.18	0.43
4:2E:34:VAL:HG21	4:2E:78:LEU:HD21	1.99	0.43
12:2Q:19:GLY:O	12:2Q:99:PRO:HD2	2.17	0.43
18:2W:35:ILE:HG23	27:25:28:PRO:HD2	2.00	0.43
22:20:23:VAL:HG22	22:20:38:VAL:HG22	2.00	0.43
32:2a:814:A:N7	32:2a:816:A:C4	2.86	0.43
32:2a:1084:G:H5''	32:2a:1086:U:C4	2.53	0.43
39:2h:36:LEU:HA	39:2h:39:LEU:HB2	2.01	0.43
39:2h:97:VAL:HG13	39:2h:98:LYS:HG3	2.00	0.43
40:2i:127:LYS:H	40:2i:127:LYS:HG3	1.59	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:59:U:O2'	1:1A:73:A:H2'	2.19	0.43
1:1A:83:G:N2	1:1A:103:A:OP2	2.49	0.43
1:1A:570:G:H2'	1:1A:2030:A:C6	2.53	0.43
1:1A:1020:A:H4'	1:1A:1021:A:O5'	2.18	0.43
1:1A:1149:G:H2'	1:1A:1150:C:C6	2.54	0.43
1:1A:1361:G:H1	1:1A:1370:C:N4	2.15	0.43
1:1A:1364:G:OP2	23:11:3:LYS:HD2	2.19	0.43
1:1A:2257:U:O2'	1:1A:2258:C:H5'	2.19	0.43
2:1B:2:C:H2'	2:1B:3:C:H6	1.84	0.43
3:1D:26:LYS:HB2	3:1D:81:ALA:HB1	1.99	0.43
3:1D:118:VAL:HG22	3:1D:119:ALA:N	2.30	0.43
5:1F:108:LYS:HG2	5:1F:112:MET:HE3	2.00	0.43
6:1G:165:THR:OG1	6:1G:168:GLU:HG3	2.18	0.43
9:1N:11:PRO:HG3	9:1N:119:ARG:HH22	1.83	0.43
9:1N:96:GLU:H	9:1N:96:GLU:CD	2.26	0.43
12:1Q:32:TYR:OH	12:1Q:111:GLU:OE2	2.35	0.43
13:1R:104:ARG:HD2	13:1R:107:ASP:OD1	2.18	0.43
15:1T:20:PRO:HG2	15:1T:86:ILE:HG22	2.01	0.43
22:10:11:ARG:O	22:10:14:ARG:NH2	2.43	0.43
32:1a:60:A:N7	32:1a:110:C:N4	2.61	0.43
32:1a:109:A:H2'	32:1a:326:G:N2	2.34	0.43
32:1a:447:G:O6	32:1a:485:G:O2'	2.34	0.43
32:1a:1505:G:OP2	60:1a:3303:HOH:O	2.21	0.43
33:1b:15:VAL:HB	33:1b:209:ARG:HB3	2.00	0.43
33:1b:16:HIS:CD2	33:1b:204:ASN:H	2.32	0.43
33:1b:59:GLU:HG2	33:1b:63:MET:HE2	2.01	0.43
33:1b:163:PHE:HA	33:1b:185:ILE:HG12	1.99	0.43
33:1b:185:ILE:O	33:1b:185:ILE:HG12	2.19	0.43
42:1k:81:ASP:HB3	42:1k:107:SER:HB3	2.00	0.43
44:1m:54:VAL:HG12	44:1m:57:ARG:NH1	2.33	0.43
48:1q:28:PRO:HA	48:1q:34:LYS:O	2.19	0.43
1:2A:84:A:H5'	20:2Y:8:LYS:HE3	2.00	0.43
1:2A:784:A:O4'	3:2D:227:ASN:ND2	2.51	0.43
1:2A:1288:U:C2	1:2A:1327:C:O2	2.72	0.43
1:2A:1815:A:C6	1:2A:1817:G:C6	3.06	0.43
1:2A:2402:C:H1'	1:2A:2403:C:H5	1.83	0.43
2:2B:22:U:H2'	2:2B:23:G:C8	2.54	0.43
3:2D:16:MET:HG2	3:2D:211:ARG:HH11	1.83	0.43
8:2I:27:ARG:HH12	23:21:68:PRO:HB3	1.83	0.43
14:2S:28:VAL:HG11	14:2S:98:VAL:HG13	1.99	0.43
32:2a:50:A:H1'	32:2a:52:G:C8	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:542:G:OP1	35:2d:10:ARG:NH1	2.48	0.43
32:2a:565:U:OP2	32:2a:566:G:O2'	2.32	0.43
32:2a:1083:U:C5	32:2a:1084:G:C6	3.06	0.43
32:2a:1469:G:H2'	32:2a:1470:G:H8	1.83	0.43
33:2b:172:ILE:O	33:2b:176:GLU:HG2	2.19	0.43
34:2c:77:ILE:H	34:2c:77:ILE:HG12	1.49	0.43
47:2p:49:LEU:HD12	47:2p:50:LYS:H	1.84	0.43
51:2t:49:ALA:O	51:2t:53:LEU:HB2	2.19	0.43
54:2x:23:C:H2'	54:2x:24:U:C6	2.54	0.43
1:1A:457:A:H4'	1:1A:458:G:OP1	2.19	0.43
1:1A:629:G:H1	1:1A:634:C:H42	1.66	0.43
1:1A:848:G:H2'	1:1A:849:A:H8	1.81	0.43
1:1A:924:C:H2'	1:1A:925:C:C6	2.54	0.43
1:1A:1229:G:N7	60:1A:4339:HOH:O	2.36	0.43
1:1A:1448:G:H5''	1:1A:1542:A:OP1	2.19	0.43
1:1A:1671:U:O5'	1:1A:1671:U:H6	2.00	0.43
1:1A:1832:C:N4	1:1A:1833:U:C4	2.86	0.43
7:1H:86:GLU:HB2	7:1H:165:ALA:HB2	2.00	0.43
7:1H:90:LYS:HD2	7:1H:159:GLU:HG2	2.00	0.43
18:1W:85:VAL:HG22	18:1W:95:ILE:HD13	2.01	0.43
20:1Y:55:TYR:N	20:1Y:56:PRO:HD3	2.34	0.43
29:17:9:ARG:NH1	29:17:47:ARG:HD3	2.34	0.43
31:19:25:VAL:HB	31:19:34:GLN:HB2	2.01	0.43
32:1a:452:A:HO2'	32:1a:453:A:P	2.40	0.43
32:1a:936:C:H42	32:1a:1379:G:H1	1.67	0.43
32:1a:1132:C:H2'	32:1a:1133:G:O4'	2.19	0.43
32:1a:1348:U:H5''	40:1i:119:ALA:HB3	2.01	0.43
36:1e:142:LEU:HD23	36:1e:142:LEU:HA	1.87	0.43
39:1h:34:GLU:O	39:1h:38:ILE:HG12	2.18	0.43
40:1i:114:TYR:HE1	41:1j:60:ARG:H	1.64	0.43
44:1m:82:MET:HG3	44:1m:93:ARG:HG3	2.00	0.43
1:2A:300:A:O2'	1:2A:318:C:O2	2.34	0.43
1:2A:615:G:H2'	1:2A:616:G:C8	2.54	0.43
1:2A:822:U:H2'	1:2A:823:G:H8	1.83	0.43
1:2A:1282:U:H2'	1:2A:1283:G:O4'	2.19	0.43
1:2A:1408:C:O2	1:2A:1595:G:N2	2.52	0.43
1:2A:1910:G:H2'	1:2A:1911:PSU:C6	2.53	0.43
1:2A:2364:C:H2'	1:2A:2365:G:O4'	2.19	0.43
1:2A:2648:C:H2'	1:2A:2649:U:H6	1.83	0.43
1:2A:2713:A:OP1	13:2R:14:SER:OG	2.35	0.43
2:2B:92:C:OP1	12:2Q:19:GLY:HA2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2D:69:ARG:HE	3:2D:69:ARG:HB3	1.71	0.43
19:2X:57:LEU:HD11	19:2X:78:LYS:HE2	2.00	0.43
28:26:15:GLU:HB2	28:26:47:THR:HG21	2.01	0.43
32:2a:437:U:H5''	35:2d:155:LEU:HD11	2.00	0.43
32:2a:590:C:H2'	32:2a:591:U:C6	2.54	0.43
32:2a:779:C:H2'	32:2a:780:A:O4'	2.18	0.43
32:2a:975:A:H5'	32:2a:975:A:H8	1.84	0.43
32:2a:1273:G:H3'	32:2a:1274:G:C8	2.50	0.43
33:2b:169:LYS:HA	33:2b:169:LYS:HD2	1.88	0.43
40:2i:128:ARG:NE	54:2x:32:5MC:OP2	2.47	0.43
45:2n:27:CYS:SG	45:2n:29:ARG:HG3	2.58	0.43
1:1A:443:A:H1'	1:1A:1201:C:O4'	2.18	0.43
1:1A:568:U:P	11:1P:36:LYS:HE3	2.58	0.43
1:1A:1082:U:C4	1:1A:1086:A:N1	2.77	0.43
1:1A:1365:A:O2'	23:11:11:ARG:NH1	2.52	0.43
1:1A:2547:U:H2'	1:1A:2548:G:C8	2.54	0.43
1:1A:2717:G:O2'	15:1T:96:ARG:HD3	2.19	0.43
3:1D:175:LEU:HD12	3:1D:185:VAL:HG21	2.01	0.43
26:14:44:THR:OG1	26:14:47:GLN:HB2	2.18	0.43
32:1a:112:G:H4'	32:1a:389:A:H4'	2.00	0.43
32:1a:236:G:H5''	48:1q:42:TYR:OH	2.18	0.43
32:1a:578:C:C1'	32:1a:729:A:H1'	2.48	0.43
32:1a:699:C:H2'	32:1a:700:G:H8	1.83	0.43
32:1a:806:C:O5'	32:1a:806:C:H6	2.02	0.43
32:1a:1117:G:O3'	40:1i:104:ARG:NH1	2.52	0.43
32:1a:1492:A:N3	53:1v:21:A:H5''	2.34	0.43
34:1c:97:LYS:O	34:1c:99:VAL:N	2.52	0.43
35:1d:85:LYS:HE3	35:1d:85:LYS:HB3	1.83	0.43
37:1f:30:LEU:HD23	37:1f:75:LEU:HD21	2.01	0.43
38:1g:26:PHE:O	38:1g:30:ILE:HG13	2.19	0.43
38:1g:44:TYR:HA	38:1g:47:CYS:SG	2.58	0.43
39:1h:38:ILE:HG13	39:1h:118:VAL:HG12	2.01	0.43
47:1p:2:VAL:O	47:1p:64:ALA:HA	2.18	0.43
1:2A:240:G:O5'	1:2A:240:G:H8	2.01	0.43
1:2A:676:A:H1'	1:2A:2443:C:H1'	2.00	0.43
1:2A:1257:C:O5'	1:2A:1257:C:H6	2.02	0.43
1:2A:1824:G:O3'	3:2D:249:PRO:HD3	2.19	0.43
1:2A:2072:G:C6	1:2A:2073:C:C4	3.07	0.43
7:2H:104:GLU:HA	7:2H:113:VAL:O	2.19	0.43
10:2O:25:LEU:HA	10:2O:25:LEU:HD23	1.73	0.43
14:2S:14:VAL:O	14:2S:18:ILE:HG12	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:2U:52:ARG:NH1	16:2U:55:ARG:HH21	2.16	0.43
32:2a:125:U:H2'	32:2a:126:G:C8	2.53	0.43
32:2a:243:A:N6	32:2a:281:G:H1'	2.33	0.43
32:2a:984:C:H2'	32:2a:985:C:H6	1.81	0.43
33:2b:97:TRP:CZ2	33:2b:102:LEU:HG	2.53	0.43
34:2c:150:LYS:HG3	34:2c:169:ALA:HB2	2.01	0.43
35:2d:173:TRP:CD1	35:2d:189:PRO:HG3	2.53	0.43
39:2h:56:LYS:HA	39:2h:56:LYS:HD3	1.85	0.43
41:2j:10:GLY:H	41:2j:16:LEU:HD11	1.84	0.43
44:2m:14:ARG:HG3	44:2m:44:ARG:NH1	2.33	0.43
1:1A:271(G):C:O2'	23:11:81:LYS:HE3	2.19	0.43
1:1A:297:C:H5''	20:1Y:87:LYS:HG3	2.01	0.43
1:1A:862:G:H4'	2:1B:79:C:H5'	2.00	0.43
1:1A:1002:G:N2	1:1A:1003:G:H1'	2.34	0.43
1:1A:2332:U:H5'	1:1A:2336:A:N6	2.33	0.43
1:1A:2355:C:H1'	22:10:39:ARG:HH21	1.83	0.43
1:1A:2581:G:N1	1:1A:2610:C:O2'	2.48	0.43
1:1A:2661:G:H2'	1:1A:2662:A:C8	2.54	0.43
2:1B:31:C:H4'	6:1G:29:TRP:CH2	2.54	0.43
6:1G:43:LEU:HD12	6:1G:89:GLY:HA2	2.01	0.43
6:1G:77:ILE:H	6:1G:82:LEU:HB3	1.84	0.43
6:1G:138:GLN:HE22	6:1G:153:ARG:H	1.66	0.43
11:1P:46:LYS:HE2	11:1P:46:LYS:HB3	1.72	0.43
24:12:51:ARG:O	24:12:55:ARG:HG2	2.18	0.43
32:1a:153:C:N4	32:1a:168:G:H22	2.16	0.43
32:1a:967:5MC:H4'	40:1i:125:TYR:HE1	1.84	0.43
32:1a:1027:C:N1	32:1a:1034:G:N2	2.66	0.43
33:1b:52:GLU:HG2	33:1b:56:ARG:HH22	1.84	0.43
35:1d:173:TRP:CD2	35:1d:189:PRO:HG3	2.54	0.43
36:1e:75:THR:HG23	36:1e:76:ILE:O	2.19	0.43
50:1s:3:ARG:NH2	50:1s:7:LYS:HE2	2.34	0.43
50:1s:50:ALA:HA	50:1s:58:VAL:O	2.18	0.43
1:2A:253:C:OP2	30:28:5:LYS:NZ	2.46	0.43
1:2A:288:C:H2'	1:2A:289:A:H8	1.84	0.43
1:2A:1022:G:C6	1:2A:1140:C:C4	3.07	0.43
1:2A:1710:C:H2'	1:2A:1711:C:H6	1.84	0.43
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.53	0.43
1:2A:1971:A:C4	3:2D:241:PRO:HD3	2.53	0.43
1:2A:2176:A:H2'	1:2A:2177:C:C6	2.54	0.43
1:2A:2749:A:N3	7:2H:59:ARG:NH2	2.61	0.43
1:2A:2870:C:H2'	1:2A:2871:C:O4'	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:33:G:C6	2:2B:34:U:C4	3.06	0.43
6:2G:120:LEU:HB3	6:2G:131:TYR:OH	2.19	0.43
17:2V:35:LEU:HB2	17:2V:57:VAL:HB	2.00	0.43
22:20:18:ALA:HB3	22:20:20:ARG:NH1	2.34	0.43
32:2a:937:A:OP2	60:2a:1914:HOH:O	2.21	0.43
32:2a:1151:A:O2'	32:2a:1152:A:H8	2.01	0.43
32:2a:1226:C:H2'	44:2m:103:THR:HB	2.01	0.43
32:2a:1244:C:H2'	32:2a:1245:A:H8	1.84	0.43
32:2a:1498:UR3:O2'	53:2v:17:U:OP1	2.29	0.43
33:2b:187:LEU:HB2	33:2b:201:ILE:HB	2.01	0.43
1:1A:1251:C:H5''	60:1A:4425:HOH:O	2.19	0.42
1:1A:1324:G:N2	1:1A:1331:A:C4	2.87	0.42
1:1A:2183:C:HO2'	1:1A:2184:G:P	2.40	0.42
1:1A:2777:G:OP2	1:1A:2781:A:O2'	2.29	0.42
2:1B:51:G:N7	14:1S:62:LYS:NZ	2.59	0.42
8:1I:61:ARG:HD3	8:1I:61:ARG:HA	1.82	0.42
10:1O:70:LYS:HE2	10:1O:70:LYS:HB3	1.74	0.42
13:1R:93:GLY:C	13:1R:95:THR:H	2.27	0.42
19:1X:92:LEU:O	19:1X:94:GLY:N	2.51	0.42
25:13:8:LEU:HG	25:13:31:LEU:HD23	2.00	0.42
30:18:7:HIS:CB	30:18:61:LEU:HB3	2.49	0.42
32:1a:9:G:C6	32:1a:26:A:N6	2.87	0.42
32:1a:221:C:H2'	32:1a:222:U:C6	2.54	0.42
32:1a:511:C:O2'	32:1a:534:U:H1'	2.18	0.42
32:1a:748:C:H6	32:1a:748:C:H2'	1.66	0.42
32:1a:1043:C:H2'	32:1a:1044:A:O4'	2.19	0.42
35:1d:202:LEU:O	35:1d:206:PHE:N	2.45	0.42
42:1k:59:TYR:O	42:1k:62:GLN:HB3	2.19	0.42
1:2A:338:G:H2'	1:2A:339:U:C6	2.54	0.42
1:2A:563:G:H22	1:2A:578:A:H2	1.65	0.42
1:2A:575:A:OP2	1:2A:2055:C:N4	2.25	0.42
1:2A:1308:A:C2	1:2A:1309:G:H1'	2.54	0.42
1:2A:1313:U:H2'	1:2A:1313:U:O2	2.17	0.42
1:2A:1551:C:H2'	1:2A:1552:G:O4'	2.19	0.42
1:2A:1557:C:H2'	1:2A:1558:A:C2	2.54	0.42
1:2A:1945:G:H1	1:2A:1961:C:H42	1.66	0.42
1:2A:1961:C:O2	60:2A:3959:HOH:O	2.21	0.42
1:2A:2120:G:N1	1:2A:2178:C:O2	2.35	0.42
5:2F:122:LYS:O	5:2F:191:ARG:HD3	2.19	0.42
6:2G:72:ARG:HD3	6:2G:85:GLY:O	2.19	0.42
17:2V:1:MET:HE1	17:2V:40:LEU:HB3	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:26:11:LEU:HD23	28:26:11:LEU:HA	1.79	0.42
28:26:36:LEU:HA	28:26:36:LEU:HD23	1.81	0.42
32:2a:186:C:H2'	32:2a:187:C:H6	1.84	0.42
32:2a:502:G:H4'	32:2a:550:G:H4'	2.00	0.42
32:2a:1093:A:C4	32:2a:1095:U:H5'	2.54	0.42
34:2c:8:ILE:HG23	34:2c:16:ARG:HG3	2.01	0.42
35:2d:128:VAL:HG13	35:2d:144:ASP:HB3	2.00	0.42
37:2f:24:GLU:O	37:2f:28:ARG:N	2.32	0.42
46:2o:39:LEU:HD12	46:2o:39:LEU:HA	1.73	0.42
1:1A:191:A:N1	60:1A:4336:HOH:O	2.36	0.42
1:1A:263:C:O2'	1:1A:429:A:N3	2.46	0.42
1:1A:526:A:OP1	60:1A:4224:HOH:O	2.21	0.42
1:1A:1085:A:C6	1:1A:1086:A:C8	3.07	0.42
1:1A:1479:G:N2	1:1A:1513:C:H1'	2.35	0.42
1:1A:1509(A):A:H3'	1:1A:1509(B):A:C8	2.54	0.42
1:1A:1712:C:H42	1:1A:1747:G:H1	1.66	0.42
1:1A:1784:A:H4'	1:1A:1785:A:O5'	2.19	0.42
1:1A:2335:A:C8	1:1A:2337:G:C5	3.07	0.42
1:1A:2582:G:C2	1:1A:2583:G:C8	3.07	0.42
3:1D:68:LYS:C	3:1D:70:TRP:H	2.25	0.42
7:1H:44:VAL:O	7:1H:50:VAL:HG13	2.18	0.42
20:1Y:46:LYS:HB2	20:1Y:46:LYS:HE3	1.91	0.42
32:1a:141:A:H2'	32:1a:142:G:H8	1.84	0.42
32:1a:164:U:H2'	32:1a:165:C:C6	2.53	0.42
32:1a:441:A:H2'	32:1a:441:A:N3	2.34	0.42
32:1a:591:U:H2'	32:1a:592:G:H8	1.84	0.42
32:1a:687:A:H4'	32:1a:688:G:O5'	2.19	0.42
32:1a:1048:G:OP1	45:1n:4:LYS:HB2	2.19	0.42
32:1a:1168:A:P	32:1a:1168:A:H8	2.42	0.42
32:1a:1207:2MG:C6	32:1a:1208:C:C4	3.08	0.42
32:1a:1379:G:H2'	32:1a:1380:U:H6	1.84	0.42
45:1n:26:ARG:HD3	45:1n:43:CYS:SG	2.58	0.42
48:1q:90:ILE:HA	48:1q:93:GLN:HB3	2.00	0.42
1:2A:567:A:OP2	11:2P:29:LYS:NZ	2.52	0.42
1:2A:583:G:OP2	16:2U:10:ARG:HD2	2.18	0.42
1:2A:861:A:H2'	1:2A:862:G:O4'	2.19	0.42
1:2A:2206:G:H8	1:2A:2207:G:N7	2.17	0.42
1:2A:2607:G:H2'	1:2A:2608:G:C8	2.54	0.42
2:2B:78:A:H2'	2:2B:79:C:O4'	2.19	0.42
3:2D:70:TRP:NE1	3:2D:146:GLU:OE2	2.46	0.42
10:2O:39:ILE:HD12	10:2O:41:ALA:HB2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:23:38:GLU:H	25:23:38:GLU:HG2	1.54	0.42
26:24:48:ARG:HD2	26:24:48:ARG:HA	1.56	0.42
32:2a:693:G:H2'	32:2a:694:A:O4'	2.19	0.42
32:2a:1358:U:H2'	32:2a:1359:C:O4'	2.19	0.42
32:2a:1443:G:H2'	32:2a:1444:C:C6	2.54	0.42
33:2b:58:ILE:HD13	33:2b:58:ILE:HA	1.84	0.42
33:2b:215:LEU:O	33:2b:219:VAL:N	2.25	0.42
34:2c:125:GLU:HB3	34:2c:190:ARG:O	2.20	0.42
40:2i:73:GLN:HA	40:2i:76:ALA:HB3	1.99	0.42
47:2p:28:ARG:HG2	47:2p:29:ASP:OD1	2.20	0.42
49:2r:54:ARG:HE	49:2r:55:ARG:HG2	1.84	0.42
1:1A:521:G:H2'	1:1A:522:G:H8	1.85	0.42
1:1A:635:C:H2'	1:1A:636:G:O4'	2.19	0.42
1:1A:657:U:H2'	1:1A:658:C:C6	2.55	0.42
1:1A:870:A:H2'	1:1A:871:U:O4'	2.19	0.42
1:1A:1288:U:H4'	1:1A:1289:C:OP2	2.19	0.42
1:1A:1509:C:H6	1:1A:1509:C:H2'	1.60	0.42
1:1A:1658:C:N4	1:1A:2002:G:H1	2.16	0.42
1:1A:1665:A:OP1	10:1O:66:LYS:HE2	2.19	0.42
1:1A:2430:A:O2'	1:1A:2431:U:H5'	2.19	0.42
2:1B:113:G:H21	14:1S:45:GLY:C	2.27	0.42
4:1E:121:ASN:OD1	4:1E:121:ASN:N	2.52	0.42
10:1O:68:GLU:HB3	10:1O:78:ARG:HB2	2.01	0.42
28:16:34:LEU:H	28:16:51:GLU:HB3	1.83	0.42
32:1a:132:C:H5'	32:1a:262:A:H1'	2.01	0.42
32:1a:724:G:H2'	32:1a:725:G:H8	1.83	0.42
32:1a:909:A:H2'	32:1a:910:C:O4'	2.18	0.42
32:1a:1484:C:H2'	32:1a:1485:U:C6	2.54	0.42
33:1b:187:LEU:HA	33:1b:201:ILE:O	2.19	0.42
34:1c:22:TRP:CG	34:1c:59:ARG:HB2	2.54	0.42
37:1f:11:ASN:HB3	37:1f:14:LEU:HG	2.00	0.42
42:1k:27:ASN:OD1	42:1k:28:THR:N	2.51	0.42
42:1k:38:ASN:HA	42:1k:39:PRO:HD3	1.93	0.42
49:1r:51:LEU:HD23	49:1r:51:LEU:HA	1.77	0.42
50:1s:42:PRO:HA	50:1s:45:VAL:HG23	2.00	0.42
1:2A:190:A:OP2	23:21:39:LYS:HE3	2.20	0.42
1:2A:558:G:OP1	9:2N:112:LEU:N	2.45	0.42
1:2A:695:G:C2	1:2A:768:G:C5	3.07	0.42
1:2A:1319:G:C6	1:2A:1320:C:N4	2.87	0.42
1:2A:1371:G:H2'	1:2A:1372:U:H5	1.84	0.42
1:2A:1531:C:H42	1:2A:1538:G:H1	1.66	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2095:C:H42	1:2A:2194:G:H1	1.67	0.42
1:2A:2512:C:H2'	1:2A:2513:G:O4'	2.18	0.42
1:2A:2788:C:P	4:2E:61:ARG:HH21	2.42	0.42
1:2A:2843:G:H2'	1:2A:2844:G:C8	2.54	0.42
2:2B:83:G:N1	2:2B:94:C:N3	2.57	0.42
2:2B:106:G:OP1	21:2Z:31:ARG:HG2	2.19	0.42
6:2G:15:VAL:HG13	6:2G:175:LEU:HD12	2.00	0.42
10:2O:10:VAL:HG13	10:2O:17:ARG:O	2.20	0.42
20:2Y:68:HIS:HB3	20:2Y:71:LYS:HD3	2.01	0.42
32:2a:333:G:O2'	32:2a:334:C:H5'	2.18	0.42
32:2a:335:C:H2'	32:2a:336:C:C6	2.54	0.42
32:2a:579:G:C6	32:2a:580:U:C4	3.07	0.42
32:2a:620:C:C2	35:2d:135:LEU:HG	2.55	0.42
32:2a:988:G:C6	32:2a:989:C:C2	3.07	0.42
32:2a:1324:A:O4'	32:2a:1362:C:H4'	2.20	0.42
51:2t:12:ALA:HA	51:2t:15:ARG:HB2	2.01	0.42
1:1A:370:G:H4'	1:1A:371:A:OP2	2.20	0.42
1:1A:833:U:O3'	30:18:57:ARG:NH1	2.52	0.42
1:1A:1471:A:OP2	1:1A:1519:G:N2	2.48	0.42
1:1A:2079:U:OP1	23:11:21:ARG:NH1	2.39	0.42
1:1A:2451:A:H3'	55:1A:3137:MG:MG	1.42	0.42
4:1E:34:VAL:HG11	4:1E:78:LEU:HD11	2.01	0.42
13:1R:54:LEU:HD23	13:1R:54:LEU:HA	1.81	0.42
15:1T:51:ARG:HB2	15:1T:98:LYS:HD2	2.01	0.42
16:1U:5:LYS:HB2	16:1U:5:LYS:HE3	1.83	0.42
21:1Z:88:PHE:HD1	21:1Z:88:PHE:HA	1.78	0.42
22:10:55:ARG:CZ	22:10:55:ARG:HB2	2.49	0.42
32:1a:182:U:C4	32:1a:183:G:H1'	2.55	0.42
32:1a:197:A:H4'	32:1a:198:G:O5'	2.19	0.42
32:1a:328:C:H4'	32:1a:329:A:H5'	2.01	0.42
32:1a:654:G:C2	32:1a:753:A:C4	3.07	0.42
32:1a:772:U:H2'	32:1a:773:G:O4'	2.19	0.42
32:1a:1089:G:C2	32:1a:1097:C:C2	3.07	0.42
32:1a:1132:C:O5'	32:1a:1132:C:H6	2.02	0.42
42:1k:69:ALA:HA	42:1k:72:ALA:HB3	2.01	0.42
1:2A:89:G:C6	1:2A:90:U:C4	3.07	0.42
1:2A:530:G:N1	1:2A:2022:U:OP1	2.52	0.42
1:2A:637:A:H5''	11:2P:117:GLU:HG3	2.01	0.42
1:2A:723:G:H2'	1:2A:724:U:H6	1.84	0.42
1:2A:1280:G:H1	1:2A:1290:C:N4	2.17	0.42
1:2A:1906:G:H1	1:2A:1924:C:H42	1.67	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:2E:95:ILE:HG13	4:2E:96:PHE:N	2.34	0.42
8:2I:37:VAL:HG22	8:2I:38:LEU:HD12	2.00	0.42
8:2I:124:GLY:H	8:2I:144:VAL:HG23	1.84	0.42
22:20:22:GLY:H	22:20:39:ARG:HB2	1.83	0.42
25:23:19:GLN:OE1	25:23:52:HIS:NE2	2.51	0.42
26:24:62:ARG:HA	26:24:62:ARG:CZ	2.49	0.42
32:2a:339:C:H2'	32:2a:340:U:H6	1.85	0.42
32:2a:505:G:H2'	32:2a:506:G:C8	2.54	0.42
32:2a:526:C:C4	32:2a:527:7MG:H1'	2.54	0.42
32:2a:582:U:C2	32:2a:760:G:C6	3.08	0.42
32:2a:706:A:H5''	42:2k:22:HIS:CE1	2.54	0.42
32:2a:1298:C:H4'	32:2a:1299:A:C8	2.55	0.42
32:2a:1496:C:H2'	32:2a:1497:G:C8	2.54	0.42
32:2a:1516:G:N1	32:2a:1519:MA6:OP2	2.50	0.42
34:2c:44:GLU:OE2	34:2c:52:LEU:HD23	2.20	0.42
34:2c:71:ALA:HB1	34:2c:109:PRO:HB3	2.01	0.42
36:2e:60:TYR:C	36:2e:60:TYR:CD1	2.97	0.42
36:2e:78:HIS:HE1	36:2e:142:LEU:HD23	1.85	0.42
38:2g:28:ASN:HA	38:2g:31:MET:HE2	2.02	0.42
40:2i:48:GLU:HG2	40:2i:101:PHE:CZ	2.54	0.42
49:2r:58:LEU:HD22	49:2r:62:GLU:HB3	2.01	0.42
51:2t:54:LYS:NZ	51:2t:54:LYS:HB3	2.34	0.42
1:1A:29:U:O5'	1:1A:29:U:H6	2.02	0.42
1:1A:1058:G:H2'	1:1A:1058:G:N3	2.34	0.42
1:1A:1063:G:H2'	1:1A:1064:C:C6	2.54	0.42
1:1A:1092:C:H2'	1:1A:1093:G:O4'	2.19	0.42
1:1A:1386:C:H2'	1:1A:1387:C:C6	2.54	0.42
1:1A:2053:G:OP1	4:1E:144:ARG:HG3	2.18	0.42
1:1A:2164:C:C5	1:1A:2165:G:H1'	2.54	0.42
1:1A:2577:A:O4'	27:15:3:LYS:HB2	2.18	0.42
6:1G:25:TYR:CZ	6:1G:32:PRO:HD3	2.54	0.42
8:1I:27:ARG:HG2	23:11:71:TYR:CZ	2.54	0.42
11:1P:71:VAL:HA	11:1P:73:GLY:N	2.35	0.42
17:1V:6:LYS:HB2	17:1V:38:LEU:HD11	2.02	0.42
21:1Z:61:LEU:HB2	21:1Z:65:GLN:HB2	2.01	0.42
26:14:37:SER:O	26:14:39:CYS:N	2.51	0.42
32:1a:9:G:H2'	32:1a:10:A:C8	2.54	0.42
32:1a:427:U:O2'	32:1a:541:G:OP1	2.26	0.42
32:1a:1382:C:H2'	32:1a:1383:C:H6	1.85	0.42
32:1a:1530:G:H4'	32:1a:1530:G:OP1	2.18	0.42
58:1a:3213:V7A:OBE	58:1a:3213:V7A:OBI	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:22:TRP:CD1	34:1c:59:ARG:HB2	2.55	0.42
35:1d:149:ALA:HB3	35:1d:152:SER:HB2	2.02	0.42
37:1f:100:ASN:ND2	49:1r:23:LYS:HE2	2.35	0.42
48:1q:60:ILE:HG22	48:1q:74:LEU:HB2	2.01	0.42
51:1t:67:ALA:HB2	51:1t:77:ALA:HB2	2.00	0.42
1:2A:18:C:H2'	1:2A:19:C:C6	2.55	0.42
1:2A:1453:U:OP1	13:2R:77:ARG:NH1	2.49	0.42
1:2A:1682:G:H1'	1:2A:1762:A:C5	2.54	0.42
3:2D:10:THR:OG1	3:2D:13:ARG:HG2	2.20	0.42
4:2E:56:PRO:C	4:2E:58:ARG:H	2.27	0.42
6:2G:33:ARG:NE	6:2G:162:THR:HG21	2.34	0.42
6:2G:64:THR:HB	6:2G:94:LEU:HD11	2.02	0.42
6:2G:116:ASP:OD2	44:2m:68:GLY:HA3	2.20	0.42
10:2O:7:TYR:HE2	10:2O:20:MET:HE3	1.84	0.42
16:2U:52:ARG:CZ	16:2U:55:ARG:HH21	2.32	0.42
20:2Y:90:LEU:HD23	20:2Y:91:GLU:N	2.35	0.42
22:20:36:ILE:HD13	22:20:60:PHE:HB3	2.00	0.42
32:2a:834:C:H2'	32:2a:835:U:H6	1.85	0.42
32:2a:1121:U:O2'	32:2a:1122:U:H5'	2.20	0.42
32:2a:1354:C:H2'	32:2a:1355:G:C8	2.54	0.42
32:2a:1446:U:H3	32:2a:1452:C:H1'	1.84	0.42
33:2b:113:HIS:O	33:2b:117:GLU:HB2	2.19	0.42
34:2c:18:TRP:HZ2	45:2n:57:ARG:HB3	1.83	0.42
38:2g:78:ARG:HG2	38:2g:79:ARG:H	1.84	0.42
40:2i:81:ILE:O	40:2i:85:LEU:HD13	2.20	0.42
44:2m:17:VAL:O	44:2m:20:THR:OG1	2.31	0.42
48:2q:9:VAL:O	48:2q:21:VAL:HA	2.19	0.42
54:2x:36:U:H2'	54:2x:37:A:O4'	2.19	0.42
1:1A:153:C:H2'	1:1A:154:G:H8	1.83	0.42
1:1A:431:U:H2'	1:1A:432:A:C8	2.52	0.42
1:1A:548:A:O2'	1:1A:549:G:OP1	2.28	0.42
1:1A:684:G:OP1	29:17:16:HIS:ND1	2.46	0.42
1:1A:761:A:O5'	1:1A:761:A:H8	2.02	0.42
1:1A:943:U:O4	60:1A:4227:HOH:O	2.22	0.42
1:1A:1063:G:N2	1:1A:1076:C:O2'	2.46	0.42
1:1A:1396:U:H6	1:1A:1396:U:H2'	1.65	0.42
1:1A:1501:C:O4'	3:1D:100:GLY:HA2	2.20	0.42
1:1A:1826:G:H4'	3:1D:242:ARG:CZ	2.50	0.42
1:1A:1971:A:C5	3:1D:241:PRO:HD3	2.54	0.42
1:1A:2361:A:OP1	30:18:27:THR:OG1	2.28	0.42
3:1D:65:ILE:HG22	3:1D:66:ASP:N	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:1F:152:GLU:HB3	5:1F:190:GLU:HB3	2.01	0.42
9:1N:32:THR:HG23	9:1N:37:LYS:HB2	2.01	0.42
23:11:52:ARG:HD3	23:11:56:GLN:C	2.44	0.42
28:16:39:TYR:HA	28:16:46:HIS:HA	2.02	0.42
32:1a:603:U:H2'	32:1a:604:G:C8	2.47	0.42
32:1a:1055:A:N3	32:1a:1055:A:H2'	2.34	0.42
32:1a:1254:C:N4	41:1j:43:ARG:HH22	2.18	0.42
32:1a:1460:A:H3'	32:1a:1461:G:H8	1.84	0.42
33:1b:77:ALA:HB2	33:1b:211:ILE:HD12	2.01	0.42
35:1d:172:PRO:HD2	35:1d:173:TRP:CD1	2.55	0.42
38:1g:88:PRO:HD2	38:1g:152:ALA:HA	2.00	0.42
41:1j:31:GLY:HA2	41:1j:32:ALA:HA	1.62	0.42
44:1m:4:ILE:HA	44:1m:5:ALA:HA	1.74	0.42
44:1m:14:ARG:HG3	44:1m:44:ARG:CZ	2.50	0.42
44:1m:15:VAL:N	44:1m:43:THR:O	2.51	0.42
1:2A:55:G:H2'	1:2A:56:A:H8	1.84	0.42
1:2A:614(C):A:C4	5:2F:180:GLY:HA2	2.54	0.42
1:2A:984:A:H5''	1:2A:985:C:H5	1.85	0.42
1:2A:1155:A:P	16:2U:55:ARG:HD2	2.60	0.42
1:2A:1410:G:H2'	1:2A:1411:C:C6	2.54	0.42
1:2A:1565:C:O3'	1:2A:1566:A:H8	2.02	0.42
1:2A:1833:U:O2'	1:2A:1969:A:N1	2.34	0.42
1:2A:2003:G:H8	1:2A:2003:G:O5'	2.02	0.42
1:2A:2601:C:H2'	1:2A:2603:G:H8	1.83	0.42
1:2A:2639:A:C2	1:2A:2778:A:C8	3.08	0.42
5:2F:195:ASP:OD1	5:2F:197:ASP:N	2.52	0.42
6:2G:155:MET:HE2	6:2G:155:MET:HB3	1.98	0.42
7:2H:35:VAL:HG13	7:2H:71:LEU:HD22	2.00	0.42
25:23:5:LYS:HE2	25:23:5:LYS:HB3	1.89	0.42
32:2a:216:G:H2'	32:2a:217:C:C6	2.55	0.42
32:2a:1074:G:O2'	32:2a:1101:A:N1	2.50	0.42
32:2a:1092:A:H5''	38:2g:4:ARG:NH1	2.33	0.42
32:2a:1212:U:H5''	32:2a:1213:A:OP1	2.20	0.42
32:2a:1441:G:H4'	32:2a:1442:G:C4	2.55	0.42
33:2b:24:TRP:CD1	33:2b:24:TRP:H	2.38	0.42
33:2b:93:VAL:HG13	33:2b:152:PHE:HB2	2.01	0.42
34:2c:153:VAL:HG22	34:2c:196:LEU:HD12	2.02	0.42
36:2e:61:TYR:O	36:2e:64:ARG:HB2	2.19	0.42
40:2i:116:LYS:HB3	40:2i:121:ARG:O	2.20	0.42
45:2n:23:ARG:NE	45:2n:28:GLY:O	2.53	0.42
1:1A:412:A:H3'	1:1A:413:C:H6	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:852:G:H8	1:1A:852:G:O5'	2.03	0.42
1:1A:1131:G:C8	1:1A:2025:C:H4'	2.54	0.42
1:1A:1131:G:H21	9:1N:73:THR:CG2	2.32	0.42
1:1A:2473:U:O2'	1:1A:2474:C:OP1	2.36	0.42
1:1A:2518:A:OP2	60:1A:4217:HOH:O	2.21	0.42
2:1B:32:C:C2	2:1B:51:G:N2	2.87	0.42
4:1E:37:ARG:HG3	4:1E:44:TYR:OH	2.20	0.42
9:1N:12:ARG:HB3	9:1N:50:ASP:OD1	2.19	0.42
14:1S:99:LYS:HG2	14:1S:103:GLU:OE2	2.19	0.42
15:1T:14:TYR:HB2	15:1T:57:PHE:CE1	2.54	0.42
27:15:20:ARG:O	27:15:22:HIS:N	2.53	0.42
32:1a:158:G:N2	32:1a:163:C:O2	2.53	0.42
32:1a:243:A:C2	32:1a:246:A:C8	3.08	0.42
32:1a:707:C:H4'	42:1k:20:TYR:CD2	2.55	0.42
32:1a:1235:U:O2'	32:1a:1305:G:OP1	2.33	0.42
33:1b:131:PRO:HB2	33:1b:134:GLU:H	1.84	0.42
51:1t:56:MET:O	51:1t:56:MET:HG3	2.20	0.42
53:1v:15:A:OP2	53:1v:15:A:H8	2.03	0.42
1:2A:271(Q):G:H2'	1:2A:271(R):G:H8	1.85	0.42
1:2A:602:G:O2'	1:2A:655:A:N6	2.53	0.42
1:2A:738:G:C2	1:2A:759:G:C5	3.07	0.42
4:2E:61:ARG:HB2	4:2E:62:PRO:HD3	2.01	0.42
6:2G:83:ARG:O	6:2G:85:GLY:N	2.53	0.42
7:2H:121:ILE:HD11	7:2H:140:LYS:HD3	2.01	0.42
14:2S:67:ARG:HH22	14:2S:103:GLU:CB	2.32	0.42
16:2U:28:ARG:HH11	16:2U:38:THR:HG23	1.85	0.42
21:2Z:98:MET:HE2	21:2Z:98:MET:HB2	1.93	0.42
24:22:60:LEU:HD23	24:22:60:LEU:HA	1.86	0.42
32:2a:1082:G:H2'	32:2a:1083:U:O4'	2.19	0.42
33:2b:54:THR:O	33:2b:57:PHE:HB3	2.19	0.42
33:2b:185:ILE:CG2	33:2b:199:TYR:HB2	2.50	0.42
34:2c:22:TRP:CE3	34:2c:32:LEU:HD23	2.55	0.42
34:2c:174:PRO:HB2	34:2c:177:THR:HB	2.02	0.42
35:2d:22:LYS:HG3	59:2d:303:SF4:S4	2.60	0.42
35:2d:194:LEU:HD23	35:2d:194:LEU:HA	1.87	0.42
36:2e:141:GLN:HA	36:2e:143:ARG:HH12	1.83	0.42
37:2f:37:VAL:HA	37:2f:65:VAL:HG12	2.02	0.42
38:2g:28:ASN:O	38:2g:31:MET:HB3	2.20	0.42
38:2g:152:ALA:O	38:2g:155:ARG:HD3	2.18	0.42
43:2l:105:TYR:HD1	43:2l:105:TYR:HA	1.48	0.42
54:2x:40:C:H2'	54:2x:41:C:H6	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:25:U:H2'	1:1A:26:G:O4'	2.19	0.42
1:1A:363(B):G:H2'	1:1A:363(C):G:H8	1.84	0.42
1:1A:685:A:C2	1:1A:689:A:C6	3.08	0.42
1:1A:1047:G:H2'	1:1A:1109:C:N4	2.34	0.42
1:1A:1287:A:OP1	13:1R:105:ARG:HB3	2.20	0.42
1:1A:1401:G:H2'	1:1A:1402:C:C6	2.55	0.42
1:1A:1684:C:H2'	1:1A:1685:C:C6	2.55	0.42
1:1A:2432:A:C6	23:11:33:LYS:HB3	2.54	0.42
1:1A:2653:U:H3'	1:1A:2654:A:C8	2.55	0.42
1:1A:2857:G:N2	1:1A:2859:G:H3'	2.35	0.42
3:1D:5:LYS:HE2	3:1D:5:LYS:HB3	1.92	0.42
3:1D:37:LEU:HD12	3:1D:37:LEU:HA	1.63	0.42
6:1G:178:PHE:HB3	6:1G:180:PHE:CE2	2.55	0.42
9:1N:104:LYS:HE2	9:1N:117:PHE:CE2	2.54	0.42
12:1Q:57:HIS:HD2	12:1Q:117:ALA:HB2	1.85	0.42
15:1T:26:ASP:OD1	15:1T:120:ARG:NH2	2.53	0.42
16:1U:108:GLU:HG3	16:1U:112:ARG:HE	1.85	0.42
19:1X:94:GLY:CA	19:1X:95:LEU:HB2	2.50	0.42
21:1Z:50:GLN:H	21:1Z:50:GLN:HE21	1.68	0.42
24:12:53:LEU:HD23	24:12:53:LEU:HA	1.73	0.42
32:1a:153:C:H42	32:1a:168:G:H1	1.67	0.42
32:1a:408:A:H2'	32:1a:409:G:O4'	2.19	0.42
32:1a:652:U:O4	32:1a:752:G:O2'	2.27	0.42
32:1a:1030(A):G:H2'	32:1a:1030(B):C:H5''	2.02	0.42
32:1a:1201:A:H1'	32:1a:1202:G:OP2	2.19	0.42
35:1d:114:ARG:O	35:1d:117:ALA:N	2.52	0.42
38:1g:79:ARG:O	38:1g:80:VAL:C	2.63	0.42
46:1o:9:GLN:HA	46:1o:12:ILE:HB	2.02	0.42
46:1o:25:THR:O	46:1o:29:VAL:HG23	2.20	0.42
54:1x:14:A:N6	54:1x:21:A:H2	2.18	0.42
1:2A:214:G:HO2'	1:2A:215:G:P	2.42	0.42
1:2A:269:U:C4	1:2A:271(Y):U:C2	3.08	0.42
1:2A:675:A:H4'	5:2F:67:GLN:OE1	2.20	0.42
1:2A:839:U:H2'	1:2A:840:C:H6	1.85	0.42
1:2A:1149:G:N2	1:2A:1150:C:N3	2.67	0.42
1:2A:2066:C:OP1	60:2A:3963:HOH:O	2.22	0.42
9:2N:18:ALA:HB1	9:2N:60:ILE:HD13	2.01	0.42
9:2N:96:GLU:O	9:2N:100:GLU:HB2	2.19	0.42
14:2S:87:PHE:CE2	14:2S:102:ALA:HB2	2.54	0.42
14:2S:105:ALA:O	14:2S:110:LEU:HB2	2.20	0.42
21:2Z:149:SER:OG	21:2Z:172:ALA:O	2.29	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:20:27:GLU:HB2	22:20:69:PHE:HD1	1.84	0.42
23:21:48:LYS:HA	23:21:60:PHE:O	2.19	0.42
25:23:2:PRO:HB2	25:23:3:ARG:H	1.63	0.42
26:24:15:ILE:HD13	26:24:21:VAL:HG13	2.02	0.42
31:29:24:TYR:CE1	31:29:35:ARG:HD3	2.55	0.42
32:2a:108:G:H21	51:2t:12:ALA:HB1	1.85	0.42
32:2a:473:G:O2'	32:2a:474:G:H5'	2.19	0.42
32:2a:525:C:OP1	43:2l:91:LYS:HB2	2.19	0.42
32:2a:886:G:H4'	32:2a:915:A:H1'	2.02	0.42
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.55	0.42
32:2a:1346:A:N1	32:2a:1374:A:H5''	2.35	0.42
37:2f:2:ARG:HG3	37:2f:69:GLU:HG2	2.01	0.42
51:2t:57:ARG:NH1	51:2t:101:GLY:O	2.52	0.42
1:1A:107:C:H2'	1:1A:108:U:C6	2.55	0.42
1:1A:889:C:O2'	1:1A:890:A:O4'	2.37	0.42
1:1A:1093:G:H3'	1:1A:1094:U:C5'	2.48	0.42
1:1A:1837:C:C5	1:1A:1899:G:N2	2.87	0.42
1:1A:1916:A:C6	1:1A:1917:PSU:C2	3.07	0.42
1:1A:2025:C:H2'	1:1A:2026:C:C6	2.55	0.42
1:1A:2336:A:N6	22:10:43:THR:OG1	2.44	0.42
5:1F:12:LEU:HB3	5:1F:124:LEU:HD11	2.01	0.42
6:1G:78:SER:OG	54:1x:19:G:N2	2.51	0.42
11:1P:49:ARG:NH1	30:18:61:LEU:HD23	2.35	0.42
19:1X:72:LYS:NZ	19:1X:75:ASP:OD1	2.36	0.42
24:12:33:MET:O	24:12:37:PHE:HD1	2.02	0.42
26:14:49:PHE:CZ	44:1m:61:GLU:HB3	2.55	0.42
32:1a:160:A:H1'	32:1a:344:A:N7	2.35	0.42
32:1a:902:G:O2'	32:1a:903:G:H5'	2.20	0.42
32:1a:972:C:OP2	41:1j:57:LYS:NZ	2.31	0.42
35:1d:182:LYS:HE3	35:1d:182:LYS:HB2	1.93	0.42
36:1e:41:VAL:HG22	36:1e:113:ALA:HA	2.01	0.42
38:1g:97:GLN:HG2	38:1g:101:LEU:HD11	2.02	0.42
40:1i:48:GLU:HA	40:1i:51:ARG:HD2	2.01	0.42
54:1x:8:4SU:O5'	54:1x:8:4SU:H6	2.19	0.42
1:2A:315:G:H2'	1:2A:316:C:C6	2.54	0.42
1:2A:652(U):G:OP2	1:2A:652(U):G:H8	2.03	0.42
1:2A:2090:G:C2	1:2A:2230:G:C5	3.08	0.42
1:2A:2332:U:O5'	1:2A:2332:U:H6	2.02	0.42
1:2A:2600:A:C6	1:2A:2601:C:N4	2.88	0.42
1:2A:2750:A:O2'	1:2A:2752:C:N4	2.44	0.42
2:2B:50:G:OP2	14:2S:62:LYS:HB2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:95:C:OP1	21:2Z:14:LYS:NZ	2.45	0.42
5:2F:126:VAL:HG22	5:2F:195:ASP:HA	2.01	0.42
11:2P:59:LEU:HD11	30:28:10:ALA:HB2	2.01	0.42
13:2R:29:LEU:HB2	13:2R:75:LEU:HD11	2.00	0.42
20:2Y:35:TYR:CE2	20:2Y:69:ALA:HB3	2.55	0.42
20:2Y:44:ILE:HA	20:2Y:63:LYS:O	2.20	0.42
25:23:4:LEU:N	25:23:37:LEU:O	2.51	0.42
32:2a:1245:A:H2'	32:2a:1246:C:O4'	2.19	0.42
32:2a:1412:C:H2'	32:2a:1413:A:C8	2.55	0.42
32:2a:1438:G:H2'	32:2a:1439:C:C6	2.53	0.42
36:2e:41:VAL:HG21	36:2e:113:ALA:HB2	2.02	0.42
39:2h:7:ALA:HA	39:2h:10:LEU:HB2	2.02	0.42
47:2p:51:VAL:O	47:2p:53:VAL:HG13	2.20	0.42
47:2p:58:TYR:O	47:2p:61:SER:N	2.53	0.42
1:1A:1106:G:C6	1:1A:1107:G:C5	3.07	0.42
1:1A:1224:C:O2'	17:1V:85:LYS:HA	2.20	0.42
1:1A:1317:A:H2'	1:1A:1318:C:C6	2.55	0.42
1:1A:2345:G:O2'	1:1A:2381:C:O2'	2.30	0.42
4:1E:10:GLY:HA3	15:1T:7:ILE:HD11	2.02	0.42
4:1E:109:LYS:O	4:1E:111:ARG:NH1	2.52	0.42
5:1F:61:GLY:HA2	5:1F:77:ASP:HB3	2.01	0.42
5:1F:181:LEU:HD12	5:1F:181:LEU:HA	1.75	0.42
7:1H:3:ARG:HG3	7:1H:6:ARG:HE	1.85	0.42
10:1O:64:ARG:HG2	10:1O:83:ALA:HB3	2.01	0.42
15:1T:33:LYS:HB3	15:1T:33:LYS:HE3	1.84	0.42
27:15:20:ARG:C	27:15:22:HIS:H	2.28	0.42
28:16:18:ARG:HD2	28:16:42:TRP:CD1	2.54	0.42
32:1a:14:U:N3	32:1a:17:U:OP2	2.47	0.42
32:1a:174:C:H2'	32:1a:175:C:C6	2.55	0.42
32:1a:192:U:H4'	51:1t:57:ARG:HD2	2.02	0.42
32:1a:450:G:H4'	47:1p:42:ARG:HG3	2.01	0.42
32:1a:591:U:H2'	32:1a:592:G:C8	2.55	0.42
32:1a:1215:G:H8	32:1a:1215:G:O5'	2.02	0.42
32:1a:1252:A:H2'	32:1a:1253:G:O4'	2.19	0.42
35:1d:26:CYS:CB	59:1d:302:SF4:S1	3.08	0.42
35:1d:57:ARG:NH2	35:1d:205:GLU:OE2	2.53	0.42
41:1j:39:PRO:HA	41:1j:70:ARG:HD3	2.02	0.42
43:1l:56:ALA:HB2	43:1l:70:ILE:HD11	2.00	0.42
44:1m:91:ARG:HB2	44:1m:98:VAL:HG22	2.02	0.42
48:1q:50:LYS:HG3	48:1q:51:TYR:CE2	2.54	0.42
51:1t:14:LYS:O	51:1t:18:GLN:HG3	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:319:C:N4	1:2A:320:A:C6	2.88	0.42
1:2A:321:G:O2'	1:2A:340:A:N3	2.47	0.42
1:2A:652(B):A:O2'	1:2A:652(C):G:H4'	2.20	0.42
1:2A:873:G:H1'	12:2Q:29:PHE:HE1	1.85	0.42
1:2A:2141:G:N2	1:2A:2151:G:H1'	2.34	0.42
1:2A:2305:A:H1'	6:2G:136:ARG:HA	2.01	0.42
1:2A:2370:G:C6	1:2A:2371:G:C6	3.08	0.42
4:2E:18:ASP:HB3	15:2T:82:LEU:HD11	2.01	0.42
8:2I:26:ALA:HA	8:2I:30:LEU:HB2	2.01	0.42
12:2Q:56:ARG:HE	12:2Q:56:ARG:HB3	1.48	0.42
12:2Q:66:ILE:HG12	12:2Q:104:PHE:CD1	2.55	0.42
13:2R:22:ARG:O	13:2R:26:LYS:HG3	2.20	0.42
14:2S:111:GLU:O	14:2S:112:PHE:HB3	2.20	0.42
19:2X:61:GLY:N	19:2X:75:ASP:OD1	2.47	0.42
25:23:48:GLU:HA	25:23:51:ALA:HB2	2.01	0.42
26:24:2:LYS:H	26:24:6:HIS:CD2	2.37	0.42
30:28:17:THR:O	30:28:20:GLY:N	2.52	0.42
30:28:23:VAL:CG1	30:28:47:LYS:HD3	2.49	0.42
32:2a:1005:A:H5''	32:2a:1006:C:C5	2.54	0.42
32:2a:1263:C:N3	32:2a:1272:G:O6	2.52	0.42
32:2a:1403:C:H6	32:2a:1403:C:O5'	2.03	0.42
36:2e:137:GLU:HA	36:2e:140:ARG:HG2	2.01	0.42
38:2g:152:ALA:C	38:2g:154:TYR:H	2.27	0.42
40:2i:24:GLY:HA2	40:2i:59:PHE:O	2.20	0.42
41:2j:12:ASP:OD1	41:2j:13:HIS:N	2.53	0.42
50:2s:66:MET:HA	50:2s:69:HIS:CE1	2.55	0.42
1:1A:237:C:N3	1:1A:261:G:C2	2.88	0.41
1:1A:622:G:H2'	1:1A:623:G:H8	1.84	0.41
1:1A:636:G:C2	11:1P:115:LEU:HD11	2.55	0.41
1:1A:1066:U:N3	1:1A:1069:A:OP2	2.51	0.41
1:1A:1584:C:H6	1:1A:1584:C:H2'	1.57	0.41
1:1A:1742:G:H2'	1:1A:1743:C:C6	2.55	0.41
1:1A:1990:C:H2'	1:1A:1991:U:O4'	2.20	0.41
1:1A:2721:A:H2'	1:1A:2722:G:O4'	2.20	0.41
2:1B:99:G:O5'	2:1B:99:G:H8	2.03	0.41
11:1P:84:ASN:HA	11:1P:115:LEU:O	2.20	0.41
14:1S:28:VAL:HG11	14:1S:98:VAL:HG13	2.02	0.41
19:1X:11:PRO:HD3	24:12:37:PHE:CE2	2.55	0.41
32:1a:115:G:H1	32:1a:312:C:H42	1.68	0.41
32:1a:177:C:O2'	32:1a:178:C:H5'	2.20	0.41
32:1a:659:U:H2'	32:1a:660:G:O4'	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:929:G:H1	32:1a:1388:C:H42	1.68	0.41
32:1a:964:A:H5''	32:1a:1199:U:OP1	2.20	0.41
32:1a:1118:C:P	40:1i:104:ARG:HH11	2.42	0.41
32:1a:1133:G:H2'	32:1a:1134:G:C8	2.54	0.41
32:1a:1234:C:H2'	32:1a:1235:U:H6	1.85	0.41
32:1a:1508:G:H2'	32:1a:1509:C:C6	2.55	0.41
33:1b:73:THR:HA	33:1b:94:ASN:O	2.20	0.41
34:1c:35:GLU:HB3	34:1c:59:ARG:NH2	2.35	0.41
39:1h:9:MET:SD	39:1h:26:VAL:HG21	2.59	0.41
46:1o:63:ARG:O	46:1o:67:LEU:HG	2.20	0.41
1:2A:262:A:H2'	1:2A:263:C:O4'	2.20	0.41
1:2A:754:C:O2'	1:2A:1272:A:N1	2.44	0.41
1:2A:996:A:H2'	1:2A:997:G:H8	1.85	0.41
1:2A:1130:U:O2	1:2A:2025:C:H5''	2.20	0.41
1:2A:1892:C:H2'	1:2A:1893:C:C6	2.55	0.41
1:2A:1991:U:C2'	1:2A:1992:G:H5''	2.50	0.41
1:2A:2364:C:OP1	22:20:55:ARG:NH1	2.53	0.41
1:2A:2366:A:H3'	1:2A:2367:G:H8	1.84	0.41
6:2G:51:ARG:H	6:2G:51:ARG:HG3	1.53	0.41
6:2G:135:LEU:HD21	6:2G:157:ILE:HD12	2.00	0.41
13:2R:18:LEU:HD21	13:2R:22:ARG:NH2	2.35	0.41
25:23:22:ALA:O	25:23:26:LEU:HG	2.20	0.41
32:2a:20:U:H2'	32:2a:21:G:O4'	2.20	0.41
32:2a:460:G:H2'	32:2a:461:A:H2'	2.02	0.41
32:2a:706:A:H5''	42:2k:22:HIS:HD1	1.84	0.41
32:2a:841:U:H6	32:2a:841:U:P	2.42	0.41
32:2a:1291:G:H4'	40:2i:38:GLN:O	2.19	0.41
58:2a:1817:V7A:OBE	58:2a:1817:V7A:OBI	2.33	0.41
41:2j:68:HIS:CD2	41:2j:68:HIS:H	2.37	0.41
44:2m:10:PRO:HD2	44:2m:18:ALA:HB1	2.02	0.41
44:2m:34:LEU:HD13	44:2m:41:PRO:HB3	2.02	0.41
49:2r:26:LEU:HD21	49:2r:42:ARG:HD2	2.02	0.41
1:1A:603:A:H3'	11:1P:90:ARG:HH22	1.85	0.41
1:1A:616:G:H5'	5:1F:205:ARG:NH1	2.35	0.41
1:1A:1297:C:OP1	1:1A:2710:C:H4'	2.20	0.41
1:1A:2168:G:N1	1:1A:2171:A:C8	2.88	0.41
1:1A:2571:C:O2'	4:1E:146:THR:O	2.24	0.41
4:1E:104:VAL:HA	4:1E:197:ILE:O	2.20	0.41
8:1I:8:PRO:HA	8:1I:14:ASP:HA	2.02	0.41
8:1I:109:ILE:HD12	8:1I:109:ILE:HA	1.61	0.41
9:1N:90:MET:HE1	9:1N:97:ARG:HH11	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1O:49:ARG:HH12	32:1a:1423:G:P	2.43	0.41
15:1T:94:ALA:C	15:1T:96:ARG:H	2.28	0.41
20:1Y:20:TYR:CE2	20:1Y:43:ASN:HA	2.56	0.41
26:14:54:GLY:HA2	26:14:55:ARG:HA	1.82	0.41
32:1a:193:C:H2'	32:1a:194:C:H6	1.85	0.41
32:1a:432:A:H2'	32:1a:433:C:O4'	2.20	0.41
32:1a:1055:A:H5''	32:1a:1056:U:OP2	2.19	0.41
32:1a:1120:G:H2'	32:1a:1121:U:H6	1.84	0.41
34:1c:148:GLY:HA3	34:1c:172:ARG:O	2.19	0.41
44:1m:33:ALA:O	44:1m:37:THR:OG1	2.25	0.41
44:1m:33:ALA:HB2	44:1m:64:TRP:HH2	1.85	0.41
51:1t:11:SER:O	51:1t:11:SER:OG	2.35	0.41
52:1u:10:ARG:HE	52:1u:13:ILE:HD12	1.84	0.41
1:2A:204:A:O3'	1:2A:205:G:H4'	2.19	0.41
1:2A:464:U:H2'	1:2A:465:G:O4'	2.20	0.41
1:2A:605:C:H2'	1:2A:606:U:O4'	2.20	0.41
1:2A:867:C:C4	1:2A:868:U:C4	3.08	0.41
1:2A:1012:U:O4	9:2N:28:THR:HG21	2.19	0.41
1:2A:1128:A:O4'	1:2A:2516:G:O2'	2.38	0.41
1:2A:2689:U:H4'	1:2A:2690:C:O5'	2.21	0.41
11:2P:29:LYS:HG3	11:2P:30:THR:N	2.35	0.41
13:2R:24:GLN:OE1	13:2R:36:THR:HG21	2.20	0.41
26:24:14:ILE:O	26:24:22:ILE:HD12	2.19	0.41
32:2a:755:G:C6	32:2a:756:C:C4	3.07	0.41
32:2a:779:C:N4	32:2a:780:A:C6	2.88	0.41
32:2a:1177:G:H2'	32:2a:1178:G:O4'	2.19	0.41
32:2a:1443:G:H2'	32:2a:1444:C:H6	1.85	0.41
33:2b:74:LYS:HB3	33:2b:75:LYS:H	1.69	0.41
34:2c:116:VAL:HG21	34:2c:202:ILE:HD11	2.02	0.41
34:2c:180:ALA:HB1	34:2c:203:PHE:CE1	2.49	0.41
41:2j:33:GLN:HG3	41:2j:34:VAL:H	1.85	0.41
43:2l:77:LEU:HD23	43:2l:77:LEU:HA	1.89	0.41
45:2n:58:LYS:HE3	45:2n:58:LYS:HB3	1.78	0.41
49:2r:27:GLY:O	49:2r:29:PHE:HD2	2.03	0.41
1:1A:10:G:N2	1:1A:2802:G:OP1	2.53	0.41
1:1A:662:G:H5'	11:1P:14:LYS:O	2.20	0.41
1:1A:906:G:H2'	1:1A:907:U:O4'	2.20	0.41
1:1A:1935:G:H1'	1:1A:1964:G:N2	2.35	0.41
1:1A:2262:U:H2'	1:1A:2263:C:C6	2.55	0.41
1:1A:2496:C:N4	1:1A:2497:A:N1	2.68	0.41
1:1A:2684:U:OP1	15:1T:53:ARG:HD3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2700:C:H6	1:1A:2700:C:O5'	2.03	0.41
5:1F:53:THR:C	5:1F:55:GLY:H	2.28	0.41
18:1W:28:SER:OG	18:1W:31:GLU:HB2	2.20	0.41
20:1Y:14:LEU:HB2	20:1Y:75:ILE:HD11	2.01	0.41
20:1Y:77:PRO:HD2	20:1Y:106:LEU:HD23	2.02	0.41
32:1a:48:C:H5''	32:1a:365:U:O4	2.20	0.41
32:1a:471:G:H2'	32:1a:472:A:H8	1.85	0.41
32:1a:558:G:C6	32:1a:559:A:C6	3.08	0.41
32:1a:1004:A:H5''	32:1a:1025:U:C5	2.55	0.41
32:1a:1254:C:H41	41:1j:43:ARG:HH12	1.68	0.41
32:1a:1260:C:H4'	32:1a:1284:C:H5'	2.01	0.41
35:1d:173:TRP:HZ2	35:1d:194:LEU:HD22	1.86	0.41
41:1j:49:VAL:CG2	45:1n:41:ARG:HB2	2.50	0.41
52:1u:18:TYR:CD1	52:1u:24:ARG:HB3	2.55	0.41
1:2A:23:G:H2'	1:2A:24:G:H8	1.86	0.41
1:2A:24:G:O2'	18:2W:77:ASP:HB3	2.20	0.41
1:2A:85:G:C5	1:2A:98:G:C2	3.08	0.41
1:2A:637:A:P	11:2P:133:SER:HG	2.43	0.41
1:2A:770:G:OP2	60:2A:3961:HOH:O	2.22	0.41
1:2A:1322:A:C5	1:2A:1323:U:C5	3.08	0.41
1:2A:1964:G:H4'	1:2A:1965:C:OP2	2.20	0.41
1:2A:2285:C:OP2	28:26:26:ASN:ND2	2.42	0.41
1:2A:2353:G:H1	1:2A:2364:C:H42	1.66	0.41
1:2A:2619:C:H2'	1:2A:2620:C:H6	1.86	0.41
1:2A:2627:G:H2'	1:2A:2628:C:C6	2.54	0.41
1:2A:2788:C:OP1	4:2E:61:ARG:NH2	2.53	0.41
4:2E:101:ARG:NH1	4:2E:171:GLU:HB2	2.35	0.41
11:2P:83:VAL:HG11	11:2P:100:LEU:HD23	2.03	0.41
21:2Z:54:HIS:CD2	21:2Z:101:PRO:HG3	2.54	0.41
26:24:30:GLU:C	26:24:31:ILE:HG13	2.45	0.41
31:29:25:VAL:HB	31:29:34:GLN:HB2	2.01	0.41
32:2a:434:U:H2'	32:2a:435:C:C6	2.54	0.41
32:2a:595:G:H1'	32:2a:596:C:H5	1.86	0.41
32:2a:964:A:N6	32:2a:965:A:H62	2.18	0.41
32:2a:975:A:N6	32:2a:1367:C:O4'	2.53	0.41
32:2a:1030(A):G:N2	32:2a:1030(C):G:H3'	2.35	0.41
32:2a:1094:G:O2'	32:2a:1108:G:N1	2.53	0.41
32:2a:1113:C:OP2	32:2a:1113:C:H6	2.03	0.41
32:2a:1226:C:H4'	50:2s:80:TYR:CZ	2.55	0.41
33:2b:94:ASN:HD22	33:2b:94:ASN:HA	1.60	0.41
37:2f:95:GLU:O	49:2r:32:ARG:HD2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:59:LEU:HG	38:2g:63:LYS:HE2	2.02	0.41
38:2g:115:ARG:HG3	38:2g:118:VAL:H	1.84	0.41
40:2i:100:GLY:O	40:2i:103:THR:HG22	2.21	0.41
40:2i:106:ALA:O	40:2i:108:VAL:HG23	2.20	0.41
45:2n:21:TYR:HE1	45:2n:23:ARG:HD3	1.85	0.41
47:2p:37:GLY:HA2	47:2p:50:LYS:O	2.21	0.41
1:1A:484:C:N4	1:1A:496:G:H1	2.19	0.41
1:1A:533:G:H5'	16:1U:24:TYR:CE1	2.56	0.41
1:1A:1164:G:H2'	1:1A:1165:U:C6	2.56	0.41
1:1A:1658:C:C4	1:1A:1659:U:C4	3.08	0.41
1:1A:1721:G:H1'	1:1A:1741:A:N6	2.35	0.41
1:1A:1806:C:C2	1:1A:1807:G:C8	3.08	0.41
1:1A:2188:C:H2'	1:1A:2189:U:O4'	2.20	0.41
1:1A:2315:G:C6	1:1A:2316:C:N4	2.88	0.41
1:1A:2781:A:H5''	1:1A:2782:G:H5'	2.01	0.41
3:1D:69:ARG:HE	3:1D:69:ARG:HB3	1.71	0.41
5:1F:70:THR:C	5:1F:72:ARG:H	2.28	0.41
6:1G:108:ASN:HD22	26:14:22:ILE:HD13	1.84	0.41
7:1H:11:VAL:HG21	7:1H:50:VAL:HG23	2.01	0.41
13:1R:61:HIS:O	13:1R:65:LEU:HD13	2.19	0.41
21:1Z:92:SER:O	21:1Z:130:PRO:HG2	2.20	0.41
30:18:7:HIS:HB3	30:18:61:LEU:HB3	2.02	0.41
31:19:10:ILE:HD12	31:19:32:HIS:CD2	2.56	0.41
32:1a:159:G:O2'	32:1a:161:A:N7	2.42	0.41
32:1a:277:C:H2'	32:1a:278:G:C8	2.56	0.41
32:1a:437:U:H4'	35:1d:155:LEU:HD11	2.02	0.41
32:1a:541:G:H2'	32:1a:542:G:H8	1.85	0.41
32:1a:545:C:H5'	35:1d:72:GLU:CB	2.50	0.41
32:1a:728:A:H2'	32:1a:729:A:C8	2.55	0.41
38:1g:14:PRO:HG3	38:1g:21:VAL:HG12	2.03	0.41
40:1i:9:ARG:O	40:1i:104:ARG:HG3	2.21	0.41
1:2A:93:G:H2'	1:2A:94:C:H6	1.85	0.41
1:2A:205:G:H5''	60:2A:4145:HOH:O	2.20	0.41
1:2A:342:G:H2'	1:2A:343:C:C6	2.55	0.41
1:2A:667:U:O2	30:28:2:PRO:HD2	2.20	0.41
1:2A:928:G:O5'	1:2A:928:G:H8	2.04	0.41
1:2A:952:G:C6	1:2A:966:G:C6	3.08	0.41
1:2A:995:C:N4	9:2N:2:LYS:HD3	2.35	0.41
1:2A:1153:C:H5'	16:2U:76:TYR:HE2	1.85	0.41
1:2A:1331:A:H2'	1:2A:1333:C:C5	2.56	0.41
1:2A:1754:C:H2'	1:2A:1755:A:C8	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2029:G:C2	1:2A:2033:A:N7	2.88	0.41
1:2A:2727:G:O2'	10:2O:70:LYS:NZ	2.42	0.41
2:2B:43:C:H1'	6:2G:93:THR:O	2.20	0.41
3:2D:73:VAL:O	3:2D:75:ILE:HD12	2.20	0.41
4:2E:5:LEU:HD21	4:2E:79:ARG:HB2	2.01	0.41
6:2G:61:ALA:O	6:2G:65:GLY:N	2.54	0.41
8:2I:116:LEU:HD21	8:2I:119:PRO:HA	2.02	0.41
11:2P:1:MET:HE2	11:2P:1:MET:HB2	1.99	0.41
11:2P:82:GLY:HA2	11:2P:113:LYS:O	2.19	0.41
14:2S:35:ILE:HB	14:2S:97:ARG:NH2	2.35	0.41
16:2U:29:SER:OG	16:2U:30:LYS:HE2	2.20	0.41
22:20:54:GLY:O	22:20:57:PHE:N	2.51	0.41
30:28:50:LEU:HD23	30:28:50:LEU:HA	1.60	0.41
32:2a:280:C:N4	48:2q:39:SER:OG	2.48	0.41
32:2a:460:G:O6	32:2a:470:C:H4'	2.20	0.41
32:2a:1072:G:H2'	32:2a:1073:U:O4'	2.21	0.41
34:2c:137:ALA:O	34:2c:141:VAL:HG23	2.20	0.41
34:2c:152:ILE:HD11	34:2c:199:LYS:NZ	2.35	0.41
36:2e:103:GLY:O	36:2e:106:PRO:HD2	2.20	0.41
44:2m:31:LYS:O	44:2m:35:GLU:N	2.53	0.41
50:2s:28:LYS:HB3	50:2s:29:ARG:CA	2.51	0.41
1:1A:36:G:N3	1:1A:450:G:O2'	2.53	0.41
1:1A:190:A:N3	1:1A:679:C:O2'	2.50	0.41
1:1A:234:C:H2'	1:1A:235:U:H6	1.86	0.41
1:1A:265:A:N6	1:1A:428:A:H1'	2.35	0.41
1:1A:356:G:H2'	1:1A:357:A:H8	1.86	0.41
1:1A:440:G:H2'	1:1A:441:U:C6	2.56	0.41
1:1A:946:G:OP2	60:1A:4220:HOH:O	2.21	0.41
1:1A:1291:C:H2'	1:1A:1292:U:H6	1.86	0.41
1:1A:1394:U:O4	1:1A:1395:A:N6	2.54	0.41
1:1A:1549:C:H2'	1:1A:1550:C:C6	2.55	0.41
1:1A:1567:A:H2'	3:1D:84:TYR:CE2	2.55	0.41
1:1A:1835:G:H1'	1:1A:1931:U:C2	2.56	0.41
1:1A:2782:G:N2	60:1A:4470:HOH:O	2.54	0.41
4:1E:117:MET:HE2	4:1E:117:MET:HB3	1.90	0.41
5:1F:102:PRO:O	5:1F:106:ARG:HG3	2.20	0.41
15:1T:27:THR:C	15:1T:89:VAL:HG22	2.46	0.41
15:1T:96:ARG:NH1	15:1T:96:ARG:HB2	2.36	0.41
21:1Z:73:GLN:HB3	21:1Z:87:ASP:HB2	2.02	0.41
24:12:33:MET:SD	24:12:37:PHE:HE1	2.43	0.41
32:1a:46:G:H2'	32:1a:366:C:C5	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:109:A:N7	32:1a:326:G:H2'	2.36	0.41
32:1a:429:U:H1'	32:1a:430:A:H5''	2.02	0.41
32:1a:473:G:H2'	32:1a:474:G:C8	2.55	0.41
32:1a:1014:A:H3'	32:1a:1015:A:C8	2.56	0.41
32:1a:1129:C:O2'	32:1a:1139:G:N7	2.49	0.41
32:1a:1182:G:H4'	32:1a:1183:A:H5''	2.01	0.41
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.55	0.41
33:1b:118:LEU:HD23	33:1b:118:LEU:HA	1.91	0.41
35:1d:174:LEU:HB3	35:1d:175:SER:H	1.70	0.41
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	2.01	0.41
38:1g:136:LYS:O	38:1g:140:ASP:HB2	2.20	0.41
40:1i:69:GLY:O	40:1i:73:GLN:HG3	2.21	0.41
1:2A:197:A:N6	1:2A:2430:A:H2'	2.35	0.41
1:2A:251:A:C4	1:2A:252:G:H1'	2.55	0.41
1:2A:963:U:H1'	1:2A:2250:G:O6	2.19	0.41
1:2A:1155:A:OP1	16:2U:55:ARG:HD2	2.20	0.41
1:2A:1558:A:H4'	1:2A:1559:G:O5'	2.21	0.41
1:2A:1668:A:N6	1:2A:1676:A:H61	2.18	0.41
1:2A:1742:G:C5	1:2A:1743:C:C4	3.08	0.41
1:2A:1800:C:P	3:2D:183:ARG:HH21	2.44	0.41
1:2A:2137:C:C2	1:2A:2154:G:N2	2.82	0.41
1:2A:2439:A:H8	1:2A:2439:A:H5'	1.85	0.41
1:2A:2742:C:H42	1:2A:2762:G:H1	1.69	0.41
1:2A:2881:C:H2'	1:2A:2882:A:O4'	2.20	0.41
4:2E:1:MET:HE3	4:2E:199:ARG:HD2	2.02	0.41
5:2F:116:ASP:O	5:2F:120:GLU:HG2	2.20	0.41
6:2G:79:ASN:OD1	6:2G:79:ASN:N	2.53	0.41
7:2H:149:ARG:NH2	7:2H:154:PRO:HD2	2.36	0.41
10:2O:53:LYS:HG2	10:2O:56:ASP:CG	2.45	0.41
10:2O:77:ILE:HA	15:2T:73:GLU:O	2.21	0.41
11:2P:86:LYS:HG2	11:2P:117:GLU:O	2.20	0.41
18:2W:84:ARG:HD3	18:2W:84:ARG:HA	1.80	0.41
32:2a:29:G:C2'	32:2a:30:U:H5'	2.50	0.41
32:2a:109:A:H5'	32:2a:110:C:H5	1.85	0.41
32:2a:378:G:H2'	32:2a:379:C:C6	2.56	0.41
32:2a:485:G:O2'	32:2a:486:U:OP2	2.38	0.41
32:2a:540:G:H2'	32:2a:541:G:O4'	2.20	0.41
32:2a:792:A:H1'	32:2a:794:A:N7	2.36	0.41
32:2a:815:A:O2'	32:2a:1526:G:N2	2.47	0.41
32:2a:1129:C:H5''	32:2a:1130:A:OP1	2.21	0.41
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:2a:1817:V7A:OAY	58:2a:1817:V7A:OAX	2.36	0.41
33:2b:16:HIS:HB2	33:2b:210:SER:HB2	2.03	0.41
33:2b:215:LEU:HD23	33:2b:215:LEU:HA	1.85	0.41
34:2c:29:TYR:CE2	34:2c:33:LEU:HD22	2.56	0.41
1:1A:608:A:C4	1:1A:621:A:C6	3.09	0.41
1:1A:1445:A:H5'	1:1A:1445(A):C:H5	1.85	0.41
1:1A:1953:A:N1	1:1A:2549:G:O2'	2.46	0.41
1:1A:2250:G:HO2'	1:1A:2496:C:P	2.43	0.41
1:1A:2693:A:H2'	1:1A:2694:G:H8	1.85	0.41
5:1F:182:ASN:O	5:1F:186:ILE:HG12	2.20	0.41
8:1I:29:TYR:CE2	8:1I:35:LEU:HD11	2.55	0.41
19:1X:41:ASN:OD1	19:1X:41:ASN:N	2.53	0.41
20:1Y:11:ASP:O	20:1Y:27:VAL:HG23	2.21	0.41
29:17:30:VAL:O	29:17:34:ARG:HG3	2.21	0.41
30:18:21:LYS:HA	60:18:206:HOH:O	2.21	0.41
32:1a:420:U:N3	32:1a:422:C:N3	2.69	0.41
32:1a:517:G:N3	32:1a:531:U:H5'	2.36	0.41
32:1a:750:G:O2'	46:1o:21:ASP:OD1	2.39	0.41
32:1a:1008:C:N3	32:1a:1021:G:O6	2.53	0.41
32:1a:1030(D):A:H2'	32:1a:1031:G:H4'	2.00	0.41
32:1a:1202:G:C2	45:1n:42:ILE:HG21	2.56	0.41
32:1a:1239:A:H62	32:1a:1299:A:N6	2.18	0.41
32:1a:1279:A:H5''	32:1a:1280:A:OP1	2.20	0.41
32:1a:1287:A:C6	32:1a:1288:A:C6	3.08	0.41
34:1c:6:HIS:HB3	45:1n:49:HIS:ND1	2.35	0.41
37:1f:60:PHE:HE2	49:1r:78:LEU:HD21	1.85	0.41
42:1k:18:ARG:HB2	42:1k:33:THR:OG1	2.21	0.41
42:1k:59:TYR:CZ	42:1k:63:LEU:HD11	2.56	0.41
42:1k:78:GLN:O	42:1k:104:GLN:N	2.46	0.41
42:1k:99:GLN:HA	42:1k:105:VAL:HG21	2.03	0.41
47:1p:17:TYR:O	47:1p:39:TYR:N	2.53	0.41
47:1p:43:LYS:HG2	47:1p:48:TRP:NE1	2.36	0.41
48:1q:45:HIS:O	48:1q:73:VAL:HG23	2.20	0.41
50:1s:11:VAL:C	50:1s:13:ASP:H	2.29	0.41
51:1t:57:ARG:HH12	51:1t:100:ILE:HD11	1.85	0.41
1:2A:383:U:C2	1:2A:385:C:C4	3.08	0.41
1:2A:690:G:N2	1:2A:773:U:O2	2.53	0.41
1:2A:1412:A:H2'	1:2A:1413:G:C8	2.55	0.41
1:2A:1423:G:H1	1:2A:1575:C:H42	1.67	0.41
1:2A:1599:C:H2'	1:2A:1600:C:C6	2.55	0.41
1:2A:1789:A:H2'	1:2A:1790:C:O4'	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1892:C:H2'	1:2A:1893:C:H6	1.85	0.41
1:2A:2166:G:H5'	1:2A:2167:U:OP2	2.20	0.41
1:2A:2168:G:H8	1:2A:2170:A:C8	2.39	0.41
1:2A:2313:C:H4'	6:2G:91:ARG:HG3	2.02	0.41
1:2A:2468:G:N2	1:2A:2481:G:H1'	2.35	0.41
1:2A:2698:U:H2'	1:2A:2699:C:C6	2.56	0.41
1:2A:2717:G:C6	1:2A:2718:G:C5	3.08	0.41
5:2F:20:LEU:HD22	5:2F:125:LEU:CD1	2.50	0.41
5:2F:23:ASP:C	5:2F:24:LEU:HD12	2.45	0.41
5:2F:107:LYS:HG3	5:2F:206:ILE:HA	2.02	0.41
5:2F:179:GLU:HA	5:2F:205:ARG:HH22	1.86	0.41
6:2G:105:LYS:NZ	6:2G:143:GLU:OE2	2.51	0.41
10:2O:70:LYS:HB3	10:2O:70:LYS:HE2	1.76	0.41
11:2P:29:LYS:HG3	11:2P:30:THR:HG23	2.02	0.41
12:2Q:21:THR:HA	12:2Q:98:LYS:HB2	2.01	0.41
13:2R:95:THR:HG23	13:2R:116:LEU:HD23	2.02	0.41
15:2T:42:ILE:HD13	15:2T:42:ILE:HA	1.94	0.41
15:2T:118:ARG:HA	15:2T:121:ILE:HD12	2.02	0.41
21:2Z:6:LYS:H	21:2Z:6:LYS:HG2	1.40	0.41
32:2a:53:A:C6	32:2a:54:C:C4	3.08	0.41
32:2a:115:G:H4'	32:2a:116:A:O5'	2.19	0.41
32:2a:1104:G:H4'	33:2b:111:ARG:NH2	2.35	0.41
32:2a:1342:C:H2'	32:2a:1343:G:C8	2.55	0.41
32:2a:1489:G:H2'	32:2a:1490:C:C6	2.56	0.41
33:2b:49:GLU:HA	33:2b:52:GLU:HB3	2.02	0.41
42:2k:48:ILE:H	42:2k:48:ILE:HG12	1.69	0.41
43:2l:68:ALA:HA	43:2l:98:TYR:O	2.19	0.41
44:2m:45:VAL:HA	44:2m:48:LEU:HD12	2.02	0.41
54:2x:5:G:H1	54:2x:68:C:N4	2.19	0.41
1:1A:882:G:H1	1:1A:894:C:N4	2.19	0.41
1:1A:1580:A:OP2	1:1A:1580:A:H8	2.02	0.41
1:1A:2131:G:C2	1:1A:2133:G:C2	3.09	0.41
1:1A:2151:G:C2	1:1A:2152:G:C5	3.09	0.41
1:1A:2655:G:O2'	1:1A:2664:G:O6	2.31	0.41
1:1A:2667:C:H2'	1:1A:2668:G:O4'	2.20	0.41
1:1A:2786:U:O2'	4:1E:62:PRO:O	2.34	0.41
6:1G:46:ALA:HA	6:1G:49:ASP:HB2	2.02	0.41
16:1U:62:ILE:HG23	16:1U:76:TYR:CE1	2.56	0.41
18:1W:17:VAL:O	18:1W:21:VAL:HG23	2.21	0.41
32:1a:519:C:H2'	32:1a:520:A:H8	1.86	0.41
32:1a:1030:C:C4	32:1a:1030(A):G:H1'	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1532:U:O5'	32:1a:1532:U:H6	2.03	0.41
33:1b:54:THR:HG22	33:1b:199:TYR:HB3	2.03	0.41
34:1c:24:ALA:HB2	34:1c:32:LEU:HD12	2.02	0.41
34:1c:32:LEU:HD22	34:1c:59:ARG:HH11	1.85	0.41
34:1c:180:ALA:HB1	34:1c:203:PHE:CE1	2.56	0.41
35:1d:95:GLY:HA3	35:1d:188:LEU:HD13	2.02	0.41
35:1d:159:ARG:O	35:1d:163:GLU:HG3	2.21	0.41
36:1e:37:ARG:O	36:1e:38:GLN:HG3	2.21	0.41
41:1j:39:PRO:HB3	41:1j:70:ARG:CZ	2.51	0.41
49:1r:40:LEU:O	49:1r:43:PHE:N	2.48	0.41
1:2A:15:G:O2'	27:25:18:ALA:HA	2.21	0.41
1:2A:729:G:C4	3:2D:208:LYS:HD2	2.55	0.41
1:2A:807:U:OP2	11:2P:41:ARG:NH2	2.53	0.41
1:2A:1224:C:HO2'	17:2V:86:GLY:H	1.64	0.41
1:2A:1277:G:O2'	13:2R:24:GLN:HG2	2.20	0.41
1:2A:1490:A:O2'	3:2D:99:ASP:OD1	2.36	0.41
1:2A:1927:A:H2'	1:2A:1928:A:C8	2.55	0.41
1:2A:1937:A:O2'	1:2A:1939:5MU:OP2	2.23	0.41
1:2A:2037:G:H2'	1:2A:2038:G:C8	2.56	0.41
1:2A:2126:A:H4'	1:2A:2127:G:OP1	2.19	0.41
1:2A:2489:G:C6	1:2A:2490:G:N1	2.89	0.41
1:2A:2825:C:H2'	1:2A:2826:A:O4'	2.20	0.41
2:2B:31:C:H4'	6:2G:29:TRP:CZ2	2.55	0.41
5:2F:7:TYR:CD2	5:2F:24:LEU:HB2	2.55	0.41
7:2H:127:GLU:C	7:2H:129:THR:N	2.79	0.41
9:2N:67:LEU:O	9:2N:88:GLU:HG2	2.21	0.41
9:2N:123:TYR:CE2	9:2N:129:PRO:HD2	2.55	0.41
11:2P:47:ASP:HA	11:2P:48:PRO:HD2	1.98	0.41
12:2Q:75:THR:HG21	12:2Q:87:LYS:HG2	2.01	0.41
13:2R:38:VAL:O	13:2R:42:LYS:HG3	2.21	0.41
20:2Y:43:ASN:HB2	20:2Y:67:LEU:HD21	2.03	0.41
21:2Z:5:LEU:O	21:2Z:59:LEU:HA	2.20	0.41
32:2a:291:C:H2'	32:2a:292:G:H8	1.85	0.41
32:2a:425:G:H4'	35:2d:45:GLN:HE22	1.86	0.41
32:2a:585:G:OP1	48:2q:37:LYS:HE2	2.21	0.41
32:2a:1144:G:C6	32:2a:1145:C:N4	2.88	0.41
32:2a:1240:U:OP2	38:2g:115:ARG:HA	2.21	0.41
32:2a:1262:C:H2'	32:2a:1263:C:C5'	2.45	0.41
32:2a:1452:C:H4'	32:2a:1457:G:C8	2.56	0.41
33:2b:91:PRO:HG2	33:2b:155:LEU:HD13	2.02	0.41
33:2b:216:SER:C	33:2b:218:ALA:N	2.79	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:86:VAL:HG22	40:2i:92:TYR:HB3	2.02	0.41
50:2s:11:VAL:HG12	50:2s:15:LEU:HB3	2.03	0.41
51:2t:37:SER:O	51:2t:41:ILE:HB	2.21	0.41
54:2x:51:C:H42	54:2x:63:G:H1	1.68	0.41
1:1A:108:U:H4'	1:1A:347:A:H2	1.85	0.41
1:1A:272:G:O2'	1:1A:421:U:OP2	2.38	0.41
1:1A:286:C:H2'	1:1A:287:C:C6	2.56	0.41
1:1A:995:C:N4	9:1N:2:LYS:HD3	2.36	0.41
1:1A:1068:G:H2'	1:1A:1096:A:H1'	2.03	0.41
1:1A:1614:A:H8	1:1A:1614:A:P	2.43	0.41
1:1A:2255:G:O2'	54:1x:3:C:H5'	2.20	0.41
1:1A:2358:G:C5	1:1A:2359:C:C5	3.09	0.41
1:1A:2424:C:O2	1:1A:2429:G:O2'	2.35	0.41
1:1A:2623:G:H4'	1:1A:2825:C:O2	2.21	0.41
1:1A:2846:G:N2	1:1A:2871:C:H1'	2.36	0.41
1:1A:2849:U:O2	1:1A:2868:A:C8	2.74	0.41
5:1F:53:THR:O	5:1F:55:GLY:N	2.53	0.41
5:1F:148:LEU:HD23	5:1F:148:LEU:HA	1.71	0.41
8:1I:114:LEU:HD12	8:1I:128:LEU:HD12	2.02	0.41
11:1P:23:PRO:O	11:1P:24:GLY:C	2.64	0.41
12:1Q:122:GLY:HA2	12:1Q:125:LEU:HD12	2.02	0.41
23:11:97:LEU:HD23	23:11:97:LEU:HA	1.92	0.41
28:16:6:ARG:HH12	28:16:26:ASN:HB2	1.83	0.41
32:1a:12:U:H4'	32:1a:526:C:O2'	2.20	0.41
32:1a:821:G:H8	32:1a:821:G:OP2	2.04	0.41
32:1a:974:A:P	45:1n:41:ARG:HH21	2.44	0.41
32:1a:1217:C:H2'	32:1a:1218:C:O4'	2.21	0.41
32:1a:1271:G:H5'	32:1a:1314:C:H5'	2.02	0.41
37:1f:68:PRO:HG2	37:1f:71:ARG:HD2	2.03	0.41
40:1i:82:ALA:O	40:1i:84:ALA:N	2.54	0.41
44:1m:15:VAL:HG13	44:1m:43:THR:O	2.21	0.41
45:1n:37:PHE:HE1	45:1n:53:LEU:HD22	1.85	0.41
1:2A:839:U:H2'	1:2A:840:C:C6	2.55	0.41
1:2A:900:A:HO2'	1:2A:901:A:P	2.41	0.41
1:2A:1197:G:C2	1:2A:1250:G:C6	3.09	0.41
1:2A:1291:C:H2'	1:2A:1292:U:H6	1.85	0.41
1:2A:1689:A:H4'	32:2a:1475:G:H4'	2.03	0.41
1:2A:1815:A:P	3:2D:54:ARG:HH22	2.43	0.41
1:2A:1900:A:N1	1:2A:1970:A:C6	2.89	0.41
1:2A:1972:A:H2'	1:2A:1973:G:C8	2.55	0.41
1:2A:2045:C:O2	27:25:22:HIS:NE2	2.47	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2053:G:C2	1:2A:2617:C:C2	3.09	0.41
1:2A:2106:G:H2'	1:2A:2107:C:O4'	2.21	0.41
1:2A:2472:G:N1	1:2A:2477:C:OP1	2.38	0.41
1:2A:2562:U:H1'	10:2O:23:ARG:NE	2.27	0.41
1:2A:2822:G:H2'	1:2A:2823:A:H5''	2.03	0.41
3:2D:79:VAL:HB	3:2D:115:GLN:H	1.86	0.41
5:2F:164:ARG:H	5:2F:164:ARG:HG2	1.70	0.41
5:2F:167:ALA:HA	5:2F:170:LEU:HD23	2.03	0.41
8:2I:46:ALA:O	8:2I:50:ARG:HB2	2.20	0.41
15:2T:11:GLU:O	15:2T:15:VAL:HG23	2.21	0.41
19:2X:9:LEU:HA	24:22:36:ARG:HH21	1.86	0.41
21:2Z:131:ARG:H	21:2Z:131:ARG:HG3	1.68	0.41
23:21:52:ARG:HA	23:21:56:GLN:O	2.21	0.41
26:24:53:GLU:H	26:24:53:GLU:CD	2.28	0.41
26:24:58:ARG:HB3	50:2s:64:GLU:O	2.21	0.41
30:28:26:LYS:HD3	30:28:48:PHE:HB3	2.02	0.41
31:29:18:ARG:HG3	31:29:22:ARG:O	2.21	0.41
32:2a:7:G:H5'	32:2a:298:A:O4'	2.21	0.41
32:2a:106:C:O2'	32:2a:379:C:OP1	2.37	0.41
32:2a:403:C:H4'	35:2d:122:ARG:CZ	2.50	0.41
32:2a:782:A:O3'	32:2a:1515:C:H4'	2.21	0.41
32:2a:991:U:C5	32:2a:1212:U:H1'	2.56	0.41
32:2a:1003:G:H22	32:2a:1027:C:H42	1.69	0.41
32:2a:1151:A:N3	41:2j:39:PRO:HG3	2.35	0.41
32:2a:1186:G:H2'	32:2a:1187:G:O4'	2.21	0.41
32:2a:1404:5MC:OP2	32:2a:1404:5MC:HM51	2.21	0.41
34:2c:31:HIS:O	34:2c:35:GLU:HB2	2.20	0.41
36:2e:41:VAL:H	36:2e:67:VAL:HG22	1.85	0.41
36:2e:102:ALA:HB1	36:2e:106:PRO:HB2	2.02	0.41
38:2g:16:LEU:HD22	40:2i:41:VAL:O	2.20	0.41
47:2p:34:GLU:HG2	47:2p:35:LYS:H	1.86	0.41
48:2q:84:LEU:H	48:2q:84:LEU:HG	1.60	0.41
54:2x:73:A:H5''	54:2x:74:C:O4'	2.21	0.41
1:1A:354:G:H2'	1:1A:355:G:C8	2.55	0.41
1:1A:448:U:O4	1:1A:583:G:H1'	2.21	0.41
1:1A:558:G:H5''	60:1A:4473:HOH:O	2.20	0.41
1:1A:881:G:N2	1:1A:882:G:H1'	2.35	0.41
1:1A:995:C:OP2	16:1U:54:LYS:NZ	2.53	0.41
1:1A:1309:G:OP1	29:17:9:ARG:HG3	2.20	0.41
1:1A:1439:A:H2'	1:1A:1440:G:O4'	2.21	0.41
1:1A:1567:A:H2'	3:1D:84:TYR:HE2	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1650:G:H2'	1:1A:1651:G:O4'	2.21	0.41
1:1A:1675:C:H2'	1:1A:1676:A:O4'	2.20	0.41
1:1A:2065:C:H4'	1:1A:2251:OMG:HM22	2.03	0.41
1:1A:2138:C:H2'	1:1A:2139:C:H5'	2.02	0.41
1:1A:2147:G:C6	1:1A:2148:G:H1'	2.56	0.41
1:1A:2287:A:H61	1:1A:2344:U:H3	1.69	0.41
1:1A:2369:A:H2'	1:1A:2370:G:C8	2.56	0.41
1:1A:2418:A:H2'	1:1A:2419:U:H6	1.83	0.41
1:1A:2460:U:C4	1:1A:2461:C:C4	3.09	0.41
1:1A:2478:A:H3'	1:1A:2479:G:H8	1.85	0.41
1:1A:2687:U:H2'	1:1A:2688:U:O4'	2.20	0.41
1:1A:2785:C:H2'	1:1A:2786:U:O4'	2.21	0.41
1:1A:2819:G:H5''	60:1A:5067:HOH:O	2.21	0.41
2:1B:53:A:H2'	2:1B:54:G:O4'	2.20	0.41
3:1D:41:GLY:O	3:1D:43:ARG:NH1	2.54	0.41
4:1E:11:MET:HE2	4:1E:11:MET:HB3	1.97	0.41
5:1F:170:LEU:HD13	5:1F:170:LEU:HA	1.85	0.41
6:1G:172:LEU:O	6:1G:176:LEU:HD12	2.21	0.41
7:1H:125:VAL:HG22	7:1H:131:VAL:HG13	2.03	0.41
8:1I:63:ALA:HA	8:1I:66:GLU:HB2	2.02	0.41
9:1N:11:PRO:HG3	9:1N:119:ARG:NH2	2.35	0.41
9:1N:94:HIS:O	9:1N:97:ARG:HB2	2.20	0.41
13:1R:21:TYR:HB3	13:1R:47:PHE:CD2	2.56	0.41
13:1R:38:VAL:HG23	13:1R:110:PRO:O	2.20	0.41
18:1W:18:ARG:HG2	18:1W:76:VAL:HB	2.01	0.41
21:1Z:128:VAL:HG23	21:1Z:161:VAL:HA	2.03	0.41
24:12:5:GLU:O	24:12:9:GLN:HB2	2.21	0.41
24:12:12:GLU:O	24:12:15:LYS:HG2	2.21	0.41
32:1a:223:U:H2'	32:1a:224:C:H6	1.85	0.41
32:1a:241:C:H2'	32:1a:242:C:H6	1.86	0.41
32:1a:272:C:H2'	32:1a:273:A:H8	1.86	0.41
32:1a:403:C:H4'	35:1d:122:ARG:CZ	2.51	0.41
32:1a:422:C:H5'	32:1a:423:G:C6	2.56	0.41
32:1a:475:G:N3	32:1a:475:G:H2'	2.36	0.41
32:1a:630:G:H2'	32:1a:631:G:C8	2.56	0.41
32:1a:664:G:H4'	32:1a:725:G:HO2'	1.84	0.41
32:1a:795:C:H4'	32:1a:1506:U:N3	2.36	0.41
32:1a:841:U:O2	32:1a:841:U:H2'	2.21	0.41
32:1a:947:G:H2'	32:1a:948:C:O4'	2.21	0.41
32:1a:987:G:H1	32:1a:1218:C:N4	2.15	0.41
32:1a:1037:C:H2'	32:1a:1038:C:H6	1.83	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1195:C:H5''	32:1a:1196:U:OP2	2.21	0.41
32:1a:1240:U:H3	38:1g:30:ILE:HG22	1.86	0.41
32:1a:1329:A:H5''	44:1m:26:GLY:N	2.35	0.41
33:1b:215:LEU:O	33:1b:219:VAL:HG23	2.21	0.41
37:1f:23:LYS:HA	37:1f:26:ILE:HD12	2.02	0.41
38:1g:12:LEU:HD13	38:1g:21:VAL:HB	2.02	0.41
38:1g:22:LEU:HG	38:1g:62:PHE:HE2	1.85	0.41
39:1h:10:LEU:HD12	39:1h:85:ARG:HG2	2.03	0.41
40:1i:19:LEU:HD11	40:1i:84:ALA:HB3	2.01	0.41
45:1n:37:PHE:CE1	45:1n:53:LEU:HD22	2.55	0.41
46:1o:87:ILE:O	46:1o:88:ARG:C	2.63	0.41
47:1p:22:THR:OG1	47:1p:23:ASP:N	2.40	0.41
49:1r:66:LEU:O	49:1r:70:ILE:HG13	2.21	0.41
54:1x:58:A:H4'	54:1x:59:A:OP1	2.21	0.41
1:2A:189:G:H2'	1:2A:205:G:N2	2.36	0.41
1:2A:319:C:H2'	1:2A:320:A:O4'	2.20	0.41
1:2A:323:G:C8	5:2F:171:PRO:HG3	2.56	0.41
1:2A:372:G:H3'	23:21:66:HIS:CE1	2.55	0.41
1:2A:409:C:H2'	1:2A:410:G:C8	2.56	0.41
1:2A:571:A:C8	1:2A:2030:A:N6	2.89	0.41
1:2A:616:G:N2	1:2A:618:C:O2	2.54	0.41
1:2A:725:G:H8	1:2A:725:G:O5'	2.04	0.41
1:2A:825:C:N4	1:2A:832:G:H1	2.19	0.41
1:2A:1243:G:O2'	11:2P:7:ARG:NH2	2.53	0.41
1:2A:1283:G:O2'	1:2A:1285:G:N7	2.48	0.41
1:2A:1306:C:H1'	1:2A:1623:G:N2	2.35	0.41
1:2A:1364:G:N2	1:2A:1367:A:OP2	2.44	0.41
1:2A:1368:G:C2	1:2A:1369:G:C8	3.07	0.41
1:2A:1394:U:C4	1:2A:1395:A:C6	3.09	0.41
1:2A:1511:C:H2'	1:2A:1512:U:H6	1.85	0.41
1:2A:1560:G:H2'	1:2A:1561:G:C8	2.55	0.41
1:2A:1612:C:O3'	29:27:5:TRP:HB3	2.21	0.41
1:2A:1665:A:C4'	10:2O:67:LYS:HB2	2.51	0.41
1:2A:2206:G:H5''	1:2A:2207:G:N7	2.36	0.41
1:2A:2337:G:N3	1:2A:2337:G:H2'	2.36	0.41
1:2A:2366:A:H3'	1:2A:2367:G:C8	2.56	0.41
1:2A:2427:C:H5''	1:2A:2428:G:OP1	2.21	0.41
1:2A:2526:G:C6	1:2A:2527:C:C4	3.09	0.41
1:2A:2611:U:N3	27:25:3:LYS:HG2	2.36	0.41
1:2A:2784:C:H2'	1:2A:2785:C:C6	2.54	0.41
1:2A:2841:C:H2'	1:2A:2842:G:H8	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:24:G:H4'	2:2B:25:A:N7	2.36	0.41
3:2D:182:LEU:HB3	3:2D:271:ILE:HB	2.02	0.41
3:2D:182:LEU:HB2	3:2D:272:ALA:HB3	2.03	0.41
4:2E:9:VAL:HG13	4:2E:25:VAL:O	2.20	0.41
5:2F:117:ARG:NH2	5:2F:189:THR:O	2.52	0.41
6:2G:65:GLY:HA3	26:24:9:LEU:HD13	2.03	0.41
6:2G:131:TYR:O	6:2G:159:VAL:HG13	2.20	0.41
7:2H:33:LEU:HD21	7:2H:136:ILE:HG13	2.02	0.41
7:2H:35:VAL:CG1	7:2H:71:LEU:HB3	2.51	0.41
8:2I:14:ASP:OD1	8:2I:15:VAL:N	2.48	0.41
8:2I:69:LYS:HE3	8:2I:73:GLU:OE1	2.21	0.41
8:2I:93:THR:HB	8:2I:94:ALA:H	1.78	0.41
12:2Q:16:ARG:HG3	12:2Q:18:LYS:HG3	2.03	0.41
12:2Q:63:LYS:HD3	12:2Q:65:PHE:CZ	2.56	0.41
16:2U:30:LYS:HD3	16:2U:30:LYS:HA	1.78	0.41
16:2U:111:GLU:HA	16:2U:114:LYS:HD3	2.03	0.41
20:2Y:43:ASN:CG	20:2Y:65:ALA:HB3	2.46	0.41
20:2Y:43:ASN:ND2	20:2Y:65:ALA:HB3	2.36	0.41
21:2Z:6:LYS:HD2	21:2Z:8:TYR:OH	2.21	0.41
21:2Z:28:MET:N	21:2Z:35:ARG:O	2.42	0.41
25:23:6:VAL:HG13	25:23:54:VAL:CG1	2.51	0.41
25:23:21:ALA:O	25:23:24:LYS:N	2.54	0.41
26:24:58:ARG:HH21	50:2s:69:HIS:CE1	2.38	0.41
32:2a:35:G:OP1	43:2l:104:VAL:HG11	2.20	0.41
32:2a:443:C:H2'	32:2a:444:C:H6	1.85	0.41
32:2a:925:G:H1'	32:2a:1502:A:C4	2.55	0.41
32:2a:1004:A:H1'	32:2a:1038:C:O2	2.21	0.41
32:2a:1222:G:H2'	32:2a:1223:C:O4'	2.21	0.41
32:2a:1273:G:C8	32:2a:1274:G:C8	3.09	0.41
32:2a:1410:G:H2'	32:2a:1411:C:C6	2.55	0.41
32:2a:1487:G:C2	32:2a:1488:G:C8	3.08	0.41
32:2a:1495:U:H2'	32:2a:1496:C:H6	1.86	0.41
33:2b:51:LEU:HD23	33:2b:54:THR:HB	2.02	0.41
33:2b:147:LYS:HD2	33:2b:148:TYR:CZ	2.56	0.41
33:2b:178:ARG:HH12	39:2h:74:PRO:HG3	1.85	0.41
35:2d:159:ARG:O	35:2d:163:GLU:HB2	2.20	0.41
38:2g:113:GLU:HB2	38:2g:119:ARG:HG2	2.02	0.41
38:2g:115:ARG:O	38:2g:119:ARG:HG3	2.21	0.41
40:2i:79:LEU:O	40:2i:83:ARG:HB2	2.21	0.41
41:2j:37:PRO:HA	41:2j:72:VAL:HG13	2.03	0.41
44:2m:70:LEU:HD12	44:2m:73:GLU:HG2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2n:37:PHE:CE1	45:2n:53:LEU:HD13	2.56	0.41
1:1A:11:G:C2'	1:1A:12:U:H5'	2.48	0.41
1:1A:227:A:H61	1:1A:410:G:H21	1.69	0.41
1:1A:271(I):G:N7	1:1A:271(J):C:N4	2.69	0.41
1:1A:580:C:H2'	1:1A:581:C:H6	1.86	0.41
1:1A:598:G:O2'	11:1P:9:ASN:HB2	2.21	0.41
1:1A:1095:A:N7	1:1A:1096:A:C8	2.89	0.41
1:1A:1814:G:H3'	1:1A:1815:A:H2'	2.02	0.41
1:1A:2296:U:H4'	1:1A:2297:C:OP1	2.21	0.41
1:1A:2647:U:H2'	1:1A:2648:C:C6	2.56	0.41
1:1A:2834:G:H4'	4:1E:58:ARG:HH21	1.85	0.41
3:1D:62:TYR:HA	3:1D:87:ASN:OD1	2.21	0.41
5:1F:96:ASP:OD1	5:1F:98:SER:N	2.34	0.41
14:1S:100:ALA:O	14:1S:104:GLY:N	2.46	0.41
18:1W:85:VAL:O	18:1W:87:PRO:HD3	2.21	0.41
32:1a:19:C:H2'	32:1a:20:U:O4'	2.20	0.41
32:1a:106:C:O2'	32:1a:379:C:H5''	2.21	0.41
32:1a:865:A:H2'	32:1a:866:C:O4'	2.21	0.41
32:1a:1257:U:O4	45:1n:17:LYS:NZ	2.54	0.41
40:1i:111:ARG:HE	40:1i:111:ARG:HB2	1.62	0.41
1:2A:707:G:H2'	1:2A:708:C:O4'	2.21	0.41
1:2A:762:U:H4'	1:2A:763:G:O5'	2.20	0.41
1:2A:784:A:H5'	1:2A:785:G:OP1	2.20	0.41
1:2A:1030:G:OP2	12:2Q:128:LYS:NZ	2.42	0.41
1:2A:1352:U:OP2	60:2A:3962:HOH:O	2.22	0.41
1:2A:1466:G:N3	1:2A:1547:C:N4	2.69	0.41
1:2A:2131:G:C8	1:2A:2133:G:N2	2.89	0.41
2:2B:55:U:H2'	2:2B:56:G:O4'	2.21	0.41
5:2F:192:LEU:HD21	5:2F:194:MET:HE2	2.03	0.41
6:2G:138:GLN:HB3	6:2G:153:ARG:O	2.21	0.41
20:2Y:99:CYS:SG	20:2Y:101:LYS:HB2	2.61	0.41
32:2a:298:A:H8	32:2a:298:A:OP1	2.03	0.41
32:2a:403:C:OP1	35:2d:137:SER:OG	2.39	0.41
32:2a:501:C:OP1	43:2l:117:ARG:NH2	2.54	0.41
32:2a:542:G:H5'	35:2d:41:GLY:CA	2.51	0.41
32:2a:814:A:H5'	32:2a:1511:G:H4'	2.02	0.41
32:2a:1127:G:H5'	32:2a:1280:A:O2'	2.21	0.41
32:2a:1272:G:C2	32:2a:1273:G:C8	3.09	0.41
34:2c:188:LEU:HD12	34:2c:188:LEU:HA	1.87	0.41
37:2f:100:ASN:HB2	49:2r:27:GLY:O	2.20	0.41
38:2g:29:LYS:HA	38:2g:29:LYS:HD2	1.80	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:114:TYR:HD2	41:2j:60:ARG:HG2	1.86	0.41
47:2p:23:ASP:CG	47:2p:25:ARG:HG3	2.46	0.41
49:2r:70:ILE:HG22	49:2r:74:ARG:NH1	2.35	0.41
1:1A:27:G:H22	1:1A:512:G:H1'	1.86	0.40
1:1A:492:A:H2'	1:1A:493:G:O4'	2.21	0.40
1:1A:581:C:H2'	1:1A:582:G:H8	1.85	0.40
1:1A:587:C:OP2	11:1P:21:ARG:NH2	2.54	0.40
1:1A:588:U:H2'	1:1A:589:C:C6	2.57	0.40
1:1A:596:G:H2'	1:1A:597:U:O4'	2.22	0.40
1:1A:729:G:C6	3:1D:208:LYS:HB2	2.55	0.40
1:1A:739:G:OP1	60:1A:4229:HOH:O	2.22	0.40
1:1A:1047:G:H2'	1:1A:1109:C:H42	1.85	0.40
1:1A:1478:G:N2	1:1A:1514:U:C2	2.90	0.40
1:1A:2591:C:H2'	1:1A:2592:G:C8	2.56	0.40
1:1A:2786:U:OP1	4:1E:69:LYS:NZ	2.42	0.40
1:1A:2844:G:H2'	1:1A:2845:G:O4'	2.21	0.40
3:1D:127:VAL:HA	3:1D:193:VAL:HG22	2.03	0.40
3:1D:167:GLY:N	3:1D:174:ILE:HB	2.36	0.40
6:1G:56:ALA:HB2	6:1G:153:ARG:NE	2.34	0.40
21:1Z:17:ALA:HA	21:1Z:20:ARG:NH1	2.36	0.40
21:1Z:59:LEU:HD23	21:1Z:59:LEU:HA	1.90	0.40
21:1Z:126:VAL:HG23	21:1Z:163:LEU:HA	2.02	0.40
28:16:18:ARG:HD2	28:16:42:TRP:CG	2.57	0.40
32:1a:126:G:C2	32:1a:236:G:C6	3.09	0.40
32:1a:768:A:H2'	32:1a:769:G:O4'	2.21	0.40
32:1a:834:C:OP1	49:1r:60:ALA:HB2	2.21	0.40
32:1a:1251:A:H4'	40:1i:12:GLU:OE1	2.21	0.40
33:1b:52:GLU:HG2	33:1b:56:ARG:NH2	2.36	0.40
33:1b:132:LYS:O	33:1b:136:VAL:HG23	2.21	0.40
34:1c:58:GLU:HB3	41:1j:92:THR:HG21	2.02	0.40
36:1e:96:PRO:O	36:1e:98:THR:N	2.54	0.40
41:1j:84:GLN:O	41:1j:84:GLN:HG2	2.20	0.40
42:1k:105:VAL:C	42:1k:107:SER:H	2.28	0.40
43:1l:66:VAL:HG21	43:1l:98:TYR:CD2	2.56	0.40
1:2A:539:G:C2	1:2A:540:C:C2	3.09	0.40
1:2A:579:G:C2	1:2A:580:C:C2	3.09	0.40
1:2A:1831:G:C2	1:2A:1975:G:N3	2.89	0.40
1:2A:1995:U:H3'	1:2A:1996:C:H2'	2.02	0.40
1:2A:2680:C:H1'	4:2E:187:ALA:HB1	2.02	0.40
1:2A:2729:G:H2'	1:2A:2730:C:C6	2.56	0.40
2:2B:62:C:H2'	2:2B:63:G:C8	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:70:C:H2'	2:2B:71:C:C6	2.55	0.40
6:2G:140:ILE:HD12	6:2G:140:ILE:HA	1.86	0.40
9:2N:133:GLN:OE1	9:2N:133:GLN:N	2.54	0.40
14:2S:25:ARG:HD3	14:2S:40:ILE:HG13	2.02	0.40
32:2a:955:U:H3	32:2a:1225:A:H2	1.61	0.40
32:2a:1483:A:H8	32:2a:1483:A:OP2	2.03	0.40
34:2c:120:VAL:HG12	34:2c:123:GLN:HE21	1.86	0.40
39:2h:96:GLY:H	39:2h:99:GLU:CD	2.29	0.40
39:2h:100:ILE:HD12	39:2h:125:ARG:HG3	2.03	0.40
40:2i:127:LYS:HB2	40:2i:127:LYS:HE3	1.89	0.40
1:1A:543:C:H1'	1:1A:551:G:N2	2.36	0.40
1:1A:1005:C:H1'	1:1A:1012:U:C4	2.56	0.40
1:1A:1045:A:C8	1:1A:1047:G:N2	2.89	0.40
1:1A:1209:G:N2	1:1A:1210:A:N1	2.69	0.40
1:1A:1257:C:H4'	5:1F:83:PHE:CD1	2.57	0.40
1:1A:1429:G:H2'	1:1A:1430:C:H6	1.85	0.40
1:1A:2058:A:C6	1:1A:2059:A:N6	2.90	0.40
1:1A:2298:A:C6	1:1A:2321:G:C6	3.09	0.40
20:1Y:91:GLU:H	20:1Y:91:GLU:HG2	1.55	0.40
24:12:33:MET:HE2	24:12:33:MET:HB3	1.89	0.40
30:18:23:VAL:HA	30:18:48:PHE:O	2.22	0.40
32:1a:341:C:H2'	32:1a:342:C:C6	2.57	0.40
32:1a:362:G:N2	32:1a:365:U:OP2	2.54	0.40
32:1a:739:C:P	37:1f:2:ARG:HH22	2.44	0.40
33:1b:101:MET:C	33:1b:102:LEU:HD12	2.46	0.40
33:1b:172:ILE:H	33:1b:172:ILE:HG13	1.46	0.40
35:1d:116:GLN:HE22	35:1d:161:ASN:ND2	2.19	0.40
39:1h:121:ASP:HB2	39:1h:125:ARG:NH2	2.36	0.40
1:2A:271(Q):G:H2'	1:2A:271(R):G:C8	2.56	0.40
1:2A:1414:G:H1	1:2A:1588:C:H42	1.68	0.40
1:2A:2101:G:C5	1:2A:2102:U:C4	3.09	0.40
1:2A:2296:U:H4'	1:2A:2297:C:OP1	2.21	0.40
1:2A:2331:G:H4'	22:20:43:THR:H	1.85	0.40
3:2D:2:ALA:O	3:2D:20:ASP:HB3	2.22	0.40
3:2D:53:PHE:C	3:2D:218:ARG:HB2	2.46	0.40
3:2D:166:GLN:NE2	32:2a:712:A:H5''	2.35	0.40
15:2T:50:ILE:CG2	15:2T:102:ILE:HD11	2.48	0.40
15:2T:118:ARG:O	15:2T:118:ARG:HD3	2.21	0.40
20:2Y:68:HIS:ND1	20:2Y:70:SER:HB3	2.36	0.40
32:2a:22:G:H5''	32:2a:561:U:H3	1.86	0.40
32:2a:926:G:C6	32:2a:1505:G:C6	3.10	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1122:U:H2'	32:2a:1123:A:H8	1.83	0.40
32:2a:1529:G:H4'	32:2a:1530:G:OP2	2.20	0.40
34:2c:164:ARG:HG2	34:2c:165:THR:H	1.85	0.40
35:2d:155:LEU:HD23	35:2d:156:GLU:H	1.87	0.40
39:2h:69:ARG:HD3	39:2h:75:ARG:O	2.21	0.40
40:2i:78:LYS:HE2	40:2i:78:LYS:HB3	1.91	0.40
41:2j:8:LEU:HB3	41:2j:96:ILE:HG12	2.03	0.40
51:2t:53:LEU:O	51:2t:57:ARG:HG3	2.22	0.40
54:2x:64:G:H2'	54:2x:65:C:C6	2.56	0.40
1:1A:16:G:H2'	1:1A:17:G:H8	1.87	0.40
1:1A:84:A:OP2	20:1Y:8:LYS:NZ	2.45	0.40
1:1A:115:C:H2'	1:1A:116:C:O4'	2.21	0.40
1:1A:573:G:HO2'	1:1A:574:C:H3'	1.86	0.40
1:1A:665:C:H2'	1:1A:666:G:H8	1.87	0.40
1:1A:880:G:N1	1:1A:881:G:O6	2.54	0.40
1:1A:1053:C:C2	1:1A:1054:A:H1'	2.56	0.40
1:1A:1230:C:H2'	1:1A:1231:G:C8	2.55	0.40
1:1A:2627:G:O2'	1:1A:2781:A:N1	2.42	0.40
1:1A:2648:C:H2'	1:1A:2649:U:H6	1.87	0.40
5:1F:178:PRO:HB3	5:1F:198:ALA:HB1	2.03	0.40
6:1G:16:ARG:O	6:1G:20:ILE:HG13	2.21	0.40
10:1O:10:VAL:HG11	10:1O:16:ALA:CB	2.51	0.40
21:1Z:151:HIS:HB3	21:1Z:169:GLU:O	2.22	0.40
32:1a:35:G:H2'	32:1a:36:C:C6	2.56	0.40
32:1a:386:C:H2'	32:1a:387:U:O4'	2.21	0.40
32:1a:922:G:N3	32:1a:1398:A:H2	2.19	0.40
32:1a:931:C:H2'	32:1a:932:C:O4'	2.21	0.40
32:1a:1014:A:N3	32:1a:1219:U:O2'	2.47	0.40
32:1a:1139:G:H4'	32:1a:1140:C:H5'	2.02	0.40
32:1a:1387:G:H2'	32:1a:1388:C:C6	2.57	0.40
32:1a:1447:A:H5''	32:1a:1452:C:OP2	2.22	0.40
32:1a:1477:C:H2'	32:1a:1478:C:C6	2.57	0.40
32:1a:1517:G:O6	32:1a:1518:MA6:H92	2.21	0.40
33:1b:134:GLU:O	33:1b:138:LEU:HG	2.21	0.40
35:1d:173:TRP:HB2	35:1d:187:ARG:O	2.21	0.40
37:1f:44:GLY:HA2	37:1f:59:TYR:CZ	2.56	0.40
41:1j:49:VAL:O	41:1j:60:ARG:HB3	2.21	0.40
43:1l:33:ARG:HA	43:1l:33:ARG:HD3	1.91	0.40
44:1m:80:ARG:HD2	50:1s:65:ASN:HB2	2.04	0.40
46:1o:7:GLU:OE1	46:1o:38:ARG:NH2	2.53	0.40
1:2A:52:A:H2'	1:2A:53:A:C8	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:455:C:N3	1:2A:472:A:H2'	2.37	0.40
1:2A:634:C:H2'	1:2A:635:C:C6	2.56	0.40
1:2A:638:G:C2	1:2A:639:U:C2	3.09	0.40
1:2A:728:G:C2	1:2A:730:C:C2	3.09	0.40
1:2A:967:C:H2'	1:2A:968:G:O4'	2.22	0.40
1:2A:1232:G:H2'	1:2A:1233:C:O4'	2.21	0.40
1:2A:1301:A:O2'	1:2A:1302:A:H3'	2.21	0.40
1:2A:1453:U:O2'	1:2A:1455:G:N7	2.51	0.40
1:2A:1706:U:O2'	1:2A:1757:U:OP2	2.28	0.40
1:2A:1740:G:H2'	1:2A:1740:G:N3	2.37	0.40
1:2A:1924:C:H4'	54:2x:13:C:O2'	2.21	0.40
4:2E:112:GLY:O	4:2E:114:ALA:N	2.54	0.40
9:2N:26:LEU:O	9:2N:30:ILE:HG13	2.21	0.40
11:2P:95:VAL:HG23	11:2P:100:LEU:CD1	2.47	0.40
20:2Y:87:LYS:HD2	20:2Y:95:LYS:HD2	2.03	0.40
22:20:74:ARG:HE	22:20:74:ARG:HB3	1.61	0.40
24:22:11:GLU:HG3	24:22:11:GLU:H	1.72	0.40
32:2a:189(F):U:O2	48:2q:63:ARG:NH1	2.54	0.40
32:2a:709:G:H2'	32:2a:710:G:H8	1.86	0.40
32:2a:735:C:H2'	32:2a:736:C:H6	1.85	0.40
32:2a:1350:A:H2'	32:2a:1351:U:O4'	2.21	0.40
35:2d:107:ARG:HH21	35:2d:173:TRP:HH2	1.69	0.40
35:2d:123:HIS:C	35:2d:125:HIS:H	2.29	0.40
44:2m:80:ARG:HH21	50:2s:69:HIS:CE1	2.39	0.40
1:1A:306:U:H2'	1:1A:307:G:O4'	2.21	0.40
1:1A:589:C:N4	1:1A:668:G:H1	2.18	0.40
1:1A:804:A:H2	1:1A:2444:G:H4'	1.87	0.40
1:1A:956:G:N2	1:1A:960:A:OP2	2.51	0.40
1:1A:1007:C:H5''	9:1N:35:ARG:HH11	1.87	0.40
1:1A:1166:C:H42	1:1A:1183:G:H1	1.68	0.40
1:1A:1660:C:H2'	1:1A:1661:G:C8	2.55	0.40
1:1A:1683:C:H2'	1:1A:1684:C:C6	2.56	0.40
1:1A:1721:G:H1'	1:1A:1741:A:H61	1.87	0.40
1:1A:1756:G:H1'	1:1A:1758:G:C2	2.56	0.40
1:1A:1850:G:C6	1:1A:1851:U:C4	3.10	0.40
1:1A:2593:U:H2'	1:1A:2594:C:C6	2.57	0.40
1:1A:2692:C:H1'	1:1A:2847:U:H1'	2.03	0.40
1:1A:2719:G:N2	1:1A:2872:G:H1	2.20	0.40
1:1A:2809:A:C6	1:1A:2810:A:C6	3.10	0.40
3:1D:52:ARG:O	3:1D:54:ARG:HG2	2.21	0.40
3:1D:146:GLU:HG2	3:1D:152:GLY:C	2.47	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:1G:138:GLN:HE22	6:1G:153:ARG:N	2.20	0.40
11:1P:86:LYS:HB3	11:1P:118:GLY:HA3	2.04	0.40
15:1T:108:ARG:HG3	15:1T:109:GLU:N	2.36	0.40
21:1Z:128:VAL:HB	21:1Z:161:VAL:HG23	2.04	0.40
32:1a:600:C:OP1	39:1h:97:VAL:HG12	2.21	0.40
32:1a:792:A:H1'	32:1a:794:A:N7	2.36	0.40
32:1a:1245:A:H2'	32:1a:1246:C:C6	2.56	0.40
33:1b:167:PRO:O	33:1b:171:ALA:N	2.55	0.40
33:1b:223:ILE:H	33:1b:223:ILE:HG12	1.52	0.40
34:1c:111:LEU:HD23	34:1c:111:LEU:HA	1.89	0.40
38:1g:44:TYR:O	38:1g:47:CYS:HB2	2.21	0.40
39:1h:39:LEU:HB3	39:1h:45:ILE:HG12	2.03	0.40
41:1j:42:THR:HG23	41:1j:68:HIS:N	2.36	0.40
43:1l:102:ARG:O	43:1l:104:VAL:N	2.54	0.40
44:1m:108:ARG:CZ	44:1m:114:ARG:HG2	2.51	0.40
51:1t:47:GLY:HA2	51:1t:48:LYS:O	2.21	0.40
1:2A:48:G:C2	1:2A:178:G:C6	3.10	0.40
1:2A:309:G:N3	1:2A:329:G:O2'	2.49	0.40
1:2A:590:A:P	5:2F:95:ARG:HH21	2.44	0.40
1:2A:823:G:O2'	1:2A:824:A:H5'	2.21	0.40
1:2A:1203:G:H2'	1:2A:1204:A:H2	1.82	0.40
1:2A:1567:A:OP2	3:2D:84:TYR:OH	2.35	0.40
1:2A:1846:G:H5''	1:2A:1847:A:OP2	2.21	0.40
1:2A:2262:U:H5	22:20:16:SER:HB3	1.86	0.40
1:2A:2884:U:H2'	1:2A:2885:C:O4'	2.22	0.40
4:2E:181:LEU:HD23	4:2E:181:LEU:HA	1.87	0.40
8:2I:26:ALA:O	8:2I:31:LEU:HB2	2.22	0.40
8:2I:75:LEU:HD13	8:2I:105:HIS:CE1	2.55	0.40
12:2Q:37:LEU:HD12	12:2Q:128:LYS:HB3	2.04	0.40
17:2V:29:PRO:HA	17:2V:61:VAL:HG13	2.04	0.40
23:21:7:ILE:HG21	23:21:69:LYS:HB3	2.02	0.40
24:22:51:ARG:O	24:22:55:ARG:HG2	2.22	0.40
24:22:65:ASN:O	24:22:69:ARG:NH1	2.55	0.40
26:24:41:PRO:O	26:24:46:GLN:HA	2.22	0.40
28:26:9:LEU:HD22	28:26:25:LYS:HG2	2.03	0.40
32:2a:99:U:H2'	32:2a:100:C:C6	2.57	0.40
32:2a:105:G:C5	32:2a:106:C:C4	3.09	0.40
32:2a:129(A):G:C6	32:2a:189(E):U:H4'	2.56	0.40
32:2a:509:A:O2'	32:2a:510:A:OP1	2.32	0.40
32:2a:646:U:H2'	32:2a:647:C:C6	2.55	0.40
32:2a:774:G:C2	32:2a:806:C:C2	3.09	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:967:5MC:H4'	40:2i:125:TYR:HE1	1.86	0.40
32:2a:1271:G:C6	32:2a:1272:G:O6	2.74	0.40
39:2h:7:ALA:O	39:2h:11:THR:N	2.51	0.40
46:2o:62:GLN:HG3	46:2o:66:LEU:HD13	2.03	0.40
50:2s:27:GLU:HB2	50:2s:28:LYS:HA	2.04	0.40
54:2x:18:G:C2	54:2x:58:A:C5	3.09	0.40
1:1A:540:C:H2'	1:1A:541:C:C6	2.53	0.40
1:1A:724:U:H2'	1:1A:725:G:O4'	2.22	0.40
1:1A:1062:G:H2'	1:1A:1063:G:C8	2.57	0.40
1:1A:1256:G:H1'	5:1F:82:ILE:HD11	2.03	0.40
1:1A:1400:G:H2'	1:1A:1401:G:C8	2.57	0.40
1:1A:1525:G:C2	1:1A:1526:G:C4	3.10	0.40
1:1A:1639:U:OP2	60:1A:4226:HOH:O	2.22	0.40
1:1A:2512:C:H4'	4:1E:122:PHE:CZ	2.57	0.40
1:1A:2666:C:H5''	1:1A:2667:C:OP2	2.22	0.40
1:1A:2747:G:O6	1:1A:2755:C:H5''	2.21	0.40
3:1D:68:LYS:HD2	3:1D:70:TRP:CZ2	2.56	0.40
3:1D:175:LEU:HA	3:1D:175:LEU:HD23	1.80	0.40
7:1H:56:SER:HG	7:1H:61:HIS:CG	2.36	0.40
15:1T:108:ARG:HA	15:1T:111:ARG:CZ	2.51	0.40
18:1W:68:ARG:NH1	18:1W:111:HIS:HA	2.36	0.40
19:1X:9:LEU:HA	24:12:36:ARG:HH21	1.87	0.40
19:1X:11:PRO:HD3	24:12:37:PHE:CD2	2.56	0.40
26:14:37:SER:C	26:14:39:CYS:H	2.29	0.40
30:18:34:TRP:CG	30:18:35:GLN:N	2.90	0.40
32:1a:323:U:H2'	32:1a:324:G:O4'	2.21	0.40
32:1a:533:A:O2'	32:1a:535:A:OP2	2.28	0.40
32:1a:574:A:N3	32:1a:883:C:H1'	2.36	0.40
32:1a:666:G:N1	32:1a:741:G:C5	2.89	0.40
32:1a:913:A:H4'	32:1a:914:A:O5'	2.20	0.40
32:1a:987:G:H2'	32:1a:988:G:C8	2.56	0.40
32:1a:1090:U:H2'	32:1a:1091:U:H6	1.86	0.40
32:1a:1212:U:H4'	32:1a:1213:A:H8	1.87	0.40
32:1a:1317:C:O2	50:1s:37:ARG:NH1	2.54	0.40
32:1a:1469:G:H2'	32:1a:1470:G:C8	2.56	0.40
37:1f:30:LEU:O	37:1f:35:ALA:HB3	2.20	0.40
41:1j:5:ARG:HG3	41:1j:71:LEU:HD11	2.03	0.40
44:1m:88:ARG:O	44:1m:92:HIS:ND1	2.24	0.40
1:2A:27:G:O2'	1:2A:512:G:N2	2.54	0.40
1:2A:636:G:C6	11:2P:115:LEU:HD11	2.57	0.40
1:2A:690:G:N2	60:2D:402:HOH:O	2.18	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:849:A:N3	25:23:21:ALA:HB1	2.37	0.40
1:2A:1002:G:O5'	1:2A:1002:G:H8	2.04	0.40
1:2A:1040:C:H4'	21:2Z:46:LYS:NZ	2.37	0.40
1:2A:1206:G:C6	1:2A:1207:C:N4	2.90	0.40
1:2A:1213:A:H2'	1:2A:1214:A:C8	2.57	0.40
1:2A:1339:G:H21	1:2A:1603:A:H1'	1.87	0.40
1:2A:1766:U:C2	1:2A:1987:G:N2	2.89	0.40
1:2A:1779:U:O4	1:2A:1785:A:C6	2.74	0.40
1:2A:2120:G:C6	1:2A:2178:C:N3	2.90	0.40
1:2A:2240:C:H2'	1:2A:2241:A:H8	1.86	0.40
1:2A:2365:G:H4'	22:20:60:PHE:CZ	2.57	0.40
1:2A:2635:C:O2'	4:2E:80:GLU:OE2	2.38	0.40
3:2D:13:ARG:HD3	3:2D:13:ARG:HA	1.52	0.40
3:2D:60:ARG:HE	3:2D:86:PRO:HB2	1.86	0.40
3:2D:233:HIS:NE2	3:2D:246:PRO:HA	2.37	0.40
4:2E:48:GLN:HA	4:2E:80:GLU:HA	2.04	0.40
5:2F:198:ALA:HA	5:2F:201:VAL:HG22	2.04	0.40
15:2T:56:GLY:O	15:2T:59:THR:HG22	2.20	0.40
15:2T:109:GLU:HG2	15:2T:112:ARG:CZ	2.51	0.40
21:2Z:28:MET:HB2	21:2Z:37:VAL:HG11	2.04	0.40
32:2a:489:C:H2'	32:2a:490:G:C8	2.56	0.40
32:2a:696:A:H2'	32:2a:697:U:C6	2.55	0.40
32:2a:1349:A:H5''	40:2i:121:ARG:HB2	2.04	0.40
33:2b:51:LEU:HD21	33:2b:201:ILE:HG12	2.02	0.40
37:2f:15:ASP:CG	37:2f:17:SER:H	2.29	0.40
44:2m:22:ILE:O	44:2m:24:GLY:N	2.53	0.40
48:2q:41:LYS:NZ	48:2q:92:ARG:HH21	2.19	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%)	249 (91%)	24 (9%)	0	100	100
3	2D	273/276 (99%)	245 (90%)	26 (10%)	2 (1%)	18	53
4	1E	202/206 (98%)	181 (90%)	19 (9%)	2 (1%)	12	45
4	2E	202/206 (98%)	179 (89%)	19 (9%)	4 (2%)	6	28
5	1F	201/210 (96%)	177 (88%)	21 (10%)	3 (2%)	8	35
5	2F	201/210 (96%)	175 (87%)	19 (10%)	7 (4%)	3	16
6	1G	179/182 (98%)	156 (87%)	19 (11%)	4 (2%)	5	26
6	2G	179/182 (98%)	153 (86%)	24 (13%)	2 (1%)	11	43
7	1H	172/180 (96%)	155 (90%)	12 (7%)	5 (3%)	3	20
7	2H	172/180 (96%)	150 (87%)	18 (10%)	4 (2%)	5	25
8	1I	144/148 (97%)	125 (87%)	18 (12%)	1 (1%)	18	53
8	2I	144/148 (97%)	124 (86%)	18 (12%)	2 (1%)	9	36
9	1N	138/140 (99%)	126 (91%)	11 (8%)	1 (1%)	18	53
9	2N	138/140 (99%)	126 (91%)	10 (7%)	2 (1%)	9	36
10	1O	120/122 (98%)	105 (88%)	15 (12%)	0	100	100
10	2O	120/122 (98%)	106 (88%)	13 (11%)	1 (1%)	16	50
11	1P	147/150 (98%)	122 (83%)	20 (14%)	5 (3%)	3	17
11	2P	147/150 (98%)	128 (87%)	17 (12%)	2 (1%)	9	36
12	1Q	139/141 (99%)	123 (88%)	15 (11%)	1 (1%)	18	53
12	2Q	139/141 (99%)	125 (90%)	10 (7%)	4 (3%)	3	20
13	1R	116/118 (98%)	100 (86%)	14 (12%)	2 (2%)	7	32
13	2R	116/118 (98%)	105 (90%)	11 (10%)	0	100	100
14	1S	108/112 (96%)	94 (87%)	14 (13%)	0	100	100
14	2S	108/112 (96%)	100 (93%)	7 (6%)	1 (1%)	14	48
15	1T	129/146 (88%)	109 (84%)	18 (14%)	2 (2%)	7	34
15	2T	129/146 (88%)	114 (88%)	14 (11%)	1 (1%)	16	50
16	1U	114/118 (97%)	111 (97%)	3 (3%)	0	100	100
16	2U	114/118 (97%)	107 (94%)	7 (6%)	0	100	100
17	1V	99/101 (98%)	84 (85%)	14 (14%)	1 (1%)	12	45
17	2V	99/101 (98%)	95 (96%)	4 (4%)	0	100	100
18	1W	110/113 (97%)	107 (97%)	2 (2%)	1 (1%)	14	48
18	2W	110/113 (97%)	101 (92%)	8 (7%)	1 (1%)	14	48

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
19	1X	93/96 (97%)	85 (91%)	8 (9%)	0	100	100
19	2X	93/96 (97%)	80 (86%)	12 (13%)	1 (1%)	11	43
20	1Y	105/110 (96%)	92 (88%)	12 (11%)	1 (1%)	12	45
20	2Y	105/110 (96%)	93 (89%)	8 (8%)	4 (4%)	2	15
21	1Z	148/206 (72%)	120 (81%)	23 (16%)	5 (3%)	3	17
21	2Z	156/206 (76%)	118 (76%)	35 (22%)	3 (2%)	6	30
22	10	81/85 (95%)	74 (91%)	6 (7%)	1 (1%)	10	40
22	20	81/85 (95%)	74 (91%)	7 (9%)	0	100	100
23	11	95/98 (97%)	88 (93%)	7 (7%)	0	100	100
23	21	95/98 (97%)	85 (90%)	7 (7%)	3 (3%)	3	18
24	12	68/72 (94%)	61 (90%)	7 (10%)	0	100	100
24	22	68/72 (94%)	66 (97%)	2 (3%)	0	100	100
25	13	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
25	23	57/60 (95%)	52 (91%)	5 (9%)	0	100	100
26	14	67/71 (94%)	50 (75%)	12 (18%)	5 (8%)	1	4
26	24	67/71 (94%)	50 (75%)	14 (21%)	3 (4%)	2	12
27	15	57/60 (95%)	51 (90%)	5 (9%)	1 (2%)	6	31
27	25	57/60 (95%)	52 (91%)	5 (9%)	0	100	100
28	16	51/54 (94%)	46 (90%)	5 (10%)	0	100	100
28	26	51/54 (94%)	43 (84%)	8 (16%)	0	100	100
29	17	46/49 (94%)	45 (98%)	1 (2%)	0	100	100
29	27	46/49 (94%)	43 (94%)	3 (6%)	0	100	100
30	18	62/65 (95%)	59 (95%)	3 (5%)	0	100	100
30	28	62/65 (95%)	57 (92%)	5 (8%)	0	100	100
31	19	35/37 (95%)	32 (91%)	3 (9%)	0	100	100
31	29	35/37 (95%)	30 (86%)	5 (14%)	0	100	100
33	1b	229/256 (90%)	186 (81%)	36 (16%)	7 (3%)	3	19
33	2b	229/256 (90%)	193 (84%)	28 (12%)	8 (4%)	3	16
34	1c	204/239 (85%)	179 (88%)	22 (11%)	3 (2%)	8	35
34	2c	204/239 (85%)	171 (84%)	29 (14%)	4 (2%)	6	28
35	1d	206/209 (99%)	173 (84%)	31 (15%)	2 (1%)	12	45

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
35	2d	206/209 (99%)	185 (90%)	17 (8%)	4 (2%)	6	30
36	1e	146/162 (90%)	127 (87%)	15 (10%)	4 (3%)	4	22
36	2e	146/162 (90%)	129 (88%)	14 (10%)	3 (2%)	5	27
37	1f	98/101 (97%)	91 (93%)	7 (7%)	0	100	100
37	2f	98/101 (97%)	89 (91%)	9 (9%)	0	100	100
38	1g	153/156 (98%)	133 (87%)	17 (11%)	3 (2%)	6	28
38	2g	153/156 (98%)	132 (86%)	18 (12%)	3 (2%)	6	28
39	1h	135/138 (98%)	125 (93%)	10 (7%)	0	100	100
39	2h	135/138 (98%)	124 (92%)	10 (7%)	1 (1%)	18	53
40	1i	125/128 (98%)	102 (82%)	20 (16%)	3 (2%)	4	24
40	2i	125/128 (98%)	106 (85%)	15 (12%)	4 (3%)	3	18
41	1j	95/105 (90%)	78 (82%)	15 (16%)	2 (2%)	5	27
41	2j	94/105 (90%)	75 (80%)	16 (17%)	3 (3%)	3	18
42	1k	112/129 (87%)	90 (80%)	19 (17%)	3 (3%)	4	22
42	2k	112/129 (87%)	95 (85%)	13 (12%)	4 (4%)	2	16
43	1l	119/132 (90%)	103 (87%)	14 (12%)	2 (2%)	7	32
43	2l	119/132 (90%)	99 (83%)	19 (16%)	1 (1%)	16	50
44	1m	120/126 (95%)	96 (80%)	19 (16%)	5 (4%)	2	13
44	2m	119/126 (94%)	99 (83%)	17 (14%)	3 (2%)	4	23
45	1n	58/61 (95%)	52 (90%)	6 (10%)	0	100	100
45	2n	58/61 (95%)	55 (95%)	2 (3%)	1 (2%)	7	32
46	1o	86/89 (97%)	77 (90%)	6 (7%)	3 (4%)	3	16
46	2o	86/89 (97%)	77 (90%)	8 (9%)	1 (1%)	10	40
47	1p	80/88 (91%)	71 (89%)	7 (9%)	2 (2%)	4	23
47	2p	80/88 (91%)	64 (80%)	15 (19%)	1 (1%)	9	38
48	1q	97/105 (92%)	84 (87%)	12 (12%)	1 (1%)	12	45
48	2q	97/105 (92%)	88 (91%)	8 (8%)	1 (1%)	12	45
49	1r	66/88 (75%)	60 (91%)	5 (8%)	1 (2%)	8	35
49	2r	66/88 (75%)	64 (97%)	2 (3%)	0	100	100
50	1s	81/93 (87%)	65 (80%)	15 (18%)	1 (1%)	10	40
50	2s	81/93 (87%)	60 (74%)	21 (26%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
51	1t	94/106 (89%)	78 (83%)	13 (14%)	3 (3%)	3	18
51	2t	94/106 (89%)	84 (89%)	8 (8%)	2 (2%)	5	27
52	1u	21/27 (78%)	13 (62%)	6 (29%)	2 (10%)	0	2
52	2u	21/27 (78%)	16 (76%)	4 (19%)	1 (5%)	2	11
All	All	11368/12128 (94%)	9944 (88%)	1244 (11%)	180 (2%)	7	34

All (180) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	1F	130	ALA
7	1H	92	ILE
11	1P	45	LEU
33	1b	17	PHE
33	1b	33	TYR
36	1e	96	PRO
44	1m	67	GLU
44	1m	106	ASN
46	1o	88	ARG
52	1u	3	LYS
6	2G	84	LYS
12	2Q	16	ARG
33	2b	10	LEU
33	2b	17	PHE
35	2d	4	TYR
35	2d	5	ILE
40	2i	54	ASP
42	2k	112	THR
43	2l	105	TYR
51	2t	10	LEU
52	2u	3	LYS
6	1G	44	GLY
6	1G	49	ASP
6	1G	164	GLU
7	1H	126	PRO
11	1P	24	GLY
11	1P	28	GLY
12	1Q	16	ARG
21	1Z	45	ASP
21	1Z	64	GLY
26	14	38	LYS
26	14	49	PHE

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Mol	Chain	Res	Type
26	14	61	ARG
26	14	62	ARG
34	1c	129	ALA
40	1i	83	ARG
42	1k	106	LYS
43	1l	105	TYR
47	1p	81	ARG
48	1q	68	ARG
49	1r	36	ASN
3	2D	160	GLY
4	2E	113	PHE
5	2F	16	GLY
5	2F	130	ALA
5	2F	131	GLY
6	2G	42	GLY
7	2H	46	GLU
7	2H	92	ILE
11	2P	45	LEU
14	2S	84	GLN
26	24	49	PHE
33	2b	9	GLU
35	2d	124	GLY
35	2d	186	LEU
38	2g	55	GLY
41	2j	75	ILE
48	2q	68	ARG
4	1E	71	GLY
7	1H	46	GLU
11	1P	67	MET
13	1R	103	ARG
20	1Y	103	GLY
21	1Z	120	ILE
27	15	21	SER
33	1b	20	GLU
33	1b	129	GLU
34	1c	98	ASN
36	1e	22	GLY
40	1i	29	ASN
41	1j	91	PRO
44	1m	105	THR
47	1p	77	ALA
51	1t	100	ILE

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Mol	Chain	Res	Type
5	2F	120	GLU
5	2F	145	GLU
8	2I	10	GLU
9	2N	19	GLU
10	2O	54	GLU
18	2W	60	ASN
20	2Y	21	LYS
20	2Y	57	GLN
21	2Z	66	SER
33	2b	125	PRO
34	2c	27	LYS
38	2g	80	VAL
39	2h	86	ILE
41	2j	78	ASN
42	2k	106	LYS
44	2m	23	TYR
46	2o	23	GLY
4	1E	52	LEU
9	1N	2	LYS
15	1T	128	GLU
17	1V	97	LYS
38	1g	130	GLY
41	1j	77	PRO
44	1m	8	GLU
51	1t	102	GLY
52	1u	4	GLY
4	2E	52	LEU
4	2E	144	ARG
5	2F	168	ARG
7	2H	65	HIS
9	2N	2	LYS
12	2Q	28	ALA
15	2T	127	ALA
19	2X	93	GLU
21	2Z	65	GLN
33	2b	123	ALA
34	2c	40	ARG
34	2c	99	VAL
34	2c	174	PRO
36	2e	69	VAL
36	2e	77	PRO
38	2g	7	ALA

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Mol	Chain	Res	Type
42	2k	49	GLY
45	2n	14	PRO
47	2p	52	ASP
51	2t	102	GLY
6	1G	84	LYS
7	1H	151	ILE
11	1P	23	PRO
18	1W	80	PRO
35	1d	4	TYR
35	1d	197	PRO
42	1k	49	GLY
51	1t	95	ALA
7	2H	118	PRO
11	2P	44	GLY
12	2Q	22	LYS
23	2I	64	ALA
23	2I	65	SER
26	24	62	ARG
33	2b	20	GLU
40	2i	10	ARG
40	2i	91	ASP
44	2m	6	GLY
7	1H	110	SER
40	1i	92	TYR
42	1k	105	VAL
43	1l	125	PRO
3	2D	203	ASN
4	2E	71	GLY
20	2Y	101	LYS
33	2b	227	GLY
41	2j	31	GLY
44	2m	117	VAL
15	1T	37	GLY
34	1c	14	ILE
38	1g	80	VAL
46	1o	19	PRO
46	1o	86	GLY
8	2I	111	PRO
40	2i	97	LYS
42	2k	118	GLY
5	1F	89	VAL
21	1Z	134	PRO

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Mol	Chain	Res	Type
22	10	6	GLY
33	1b	231	GLU
38	1g	112	PRO
44	1m	60	VAL
50	1s	19	VAL
5	2F	207	GLY
12	2Q	47	ILE
8	1I	145	VAL
21	1Z	39	VAL
36	1e	51	VAL
20	2Y	55	TYR
26	24	29	PRO
5	1F	71	GLY
13	1R	39	PRO
26	14	45	GLY
33	1b	124	SER
21	2Z	167	PRO
33	2b	93	VAL
36	1e	69	VAL
23	21	30	VAL
36	2e	13	ILE
33	1b	125	PRO

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%)	188 (87%)	27 (13%)	4	20
3	2D	215/218 (99%)	197 (92%)	18 (8%)	10	37
4	1E	164/166 (99%)	142 (87%)	22 (13%)	4	18
4	2E	164/166 (99%)	142 (87%)	22 (13%)	4	18
5	1F	160/166 (96%)	141 (88%)	19 (12%)	5	22
5	2F	159/166 (96%)	140 (88%)	19 (12%)	5	22
6	1G	143/156 (92%)	124 (87%)	19 (13%)	4	18

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
6	2G	143/156 (92%)	124 (87%)	19 (13%)	4	18
7	1H	144/148 (97%)	121 (84%)	23 (16%)	2	12
7	2H	144/148 (97%)	116 (81%)	28 (19%)	1	8
8	1I	113/124 (91%)	93 (82%)	20 (18%)	2	10
8	2I	105/124 (85%)	87 (83%)	18 (17%)	2	11
9	1N	118/119 (99%)	101 (86%)	17 (14%)	3	15
9	2N	118/119 (99%)	105 (89%)	13 (11%)	6	25
10	1O	100/100 (100%)	93 (93%)	7 (7%)	14	44
10	2O	100/100 (100%)	87 (87%)	13 (13%)	4	19
11	1P	115/116 (99%)	102 (89%)	13 (11%)	5	24
11	2P	115/116 (99%)	102 (89%)	13 (11%)	5	24
12	1Q	111/111 (100%)	97 (87%)	14 (13%)	4	20
12	2Q	111/111 (100%)	102 (92%)	9 (8%)	11	38
13	1R	101/101 (100%)	91 (90%)	10 (10%)	7	30
13	2R	101/101 (100%)	88 (87%)	13 (13%)	4	19
14	1S	86/88 (98%)	68 (79%)	18 (21%)	1	7
14	2S	85/88 (97%)	75 (88%)	10 (12%)	5	22
15	1T	115/127 (91%)	100 (87%)	15 (13%)	4	19
15	2T	113/127 (89%)	103 (91%)	10 (9%)	9	35
16	1U	93/94 (99%)	90 (97%)	3 (3%)	34	67
16	2U	93/94 (99%)	84 (90%)	9 (10%)	8	30
17	1V	80/82 (98%)	70 (88%)	10 (12%)	4	20
17	2V	80/82 (98%)	73 (91%)	7 (9%)	9	35
18	1W	90/92 (98%)	84 (93%)	6 (7%)	15	46
18	2W	90/92 (98%)	84 (93%)	6 (7%)	15	46
19	1X	77/78 (99%)	72 (94%)	5 (6%)	15	47
19	2X	77/78 (99%)	72 (94%)	5 (6%)	15	47
20	1Y	85/91 (93%)	71 (84%)	14 (16%)	2	12
20	2Y	85/91 (93%)	78 (92%)	7 (8%)	10	37
21	1Z	135/179 (75%)	112 (83%)	23 (17%)	2	11
21	2Z	137/179 (76%)	114 (83%)	23 (17%)	2	11

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
22	10	65/67 (97%)	57 (88%)	8 (12%)	4	21
22	20	65/67 (97%)	58 (89%)	7 (11%)	6	26
23	11	80/83 (96%)	75 (94%)	5 (6%)	16	48
23	21	80/83 (96%)	70 (88%)	10 (12%)	4	20
24	12	65/67 (97%)	55 (85%)	10 (15%)	2	13
24	22	65/67 (97%)	53 (82%)	12 (18%)	1	9
25	13	51/52 (98%)	40 (78%)	11 (22%)	1	6
25	23	50/52 (96%)	35 (70%)	15 (30%)	0	1
26	14	59/63 (94%)	44 (75%)	15 (25%)	0	3
26	24	53/63 (84%)	40 (76%)	13 (24%)	1	4
27	15	50/52 (96%)	44 (88%)	6 (12%)	5	22
27	25	50/52 (96%)	48 (96%)	2 (4%)	28	62
28	16	51/52 (98%)	46 (90%)	5 (10%)	7	30
28	26	50/52 (96%)	36 (72%)	14 (28%)	0	2
29	17	41/42 (98%)	36 (88%)	5 (12%)	5	21
29	27	41/42 (98%)	37 (90%)	4 (10%)	7	30
30	18	54/55 (98%)	52 (96%)	2 (4%)	30	64
30	28	54/55 (98%)	49 (91%)	5 (9%)	8	32
31	19	34/34 (100%)	31 (91%)	3 (9%)	9	35
31	29	34/34 (100%)	32 (94%)	2 (6%)	18	50
33	1b	192/220 (87%)	157 (82%)	35 (18%)	2	9
33	2b	187/220 (85%)	162 (87%)	25 (13%)	4	18
34	1c	142/188 (76%)	121 (85%)	21 (15%)	3	15
34	2c	140/188 (74%)	122 (87%)	18 (13%)	4	19
35	1d	169/181 (93%)	141 (83%)	28 (17%)	2	12
35	2d	173/181 (96%)	147 (85%)	26 (15%)	3	14
36	1e	113/123 (92%)	101 (89%)	12 (11%)	6	27
36	2e	114/123 (93%)	101 (89%)	13 (11%)	5	24
37	1f	84/90 (93%)	76 (90%)	8 (10%)	8	31
37	2f	85/90 (94%)	76 (89%)	9 (11%)	6	27
38	1g	119/127 (94%)	98 (82%)	21 (18%)	2	10

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
38	2g	120/127 (94%)	103 (86%)	17 (14%)	3	16
39	1h	114/119 (96%)	104 (91%)	10 (9%)	9	35
39	2h	114/119 (96%)	104 (91%)	10 (9%)	9	35
40	1i	90/99 (91%)	75 (83%)	15 (17%)	2	12
40	2i	89/99 (90%)	75 (84%)	14 (16%)	2	13
41	1j	66/92 (72%)	55 (83%)	11 (17%)	2	12
41	2j	69/92 (75%)	61 (88%)	8 (12%)	5	23
42	1k	82/99 (83%)	72 (88%)	10 (12%)	5	21
42	2k	83/99 (84%)	73 (88%)	10 (12%)	5	22
43	1l	96/108 (89%)	87 (91%)	9 (9%)	8	32
43	2l	96/108 (89%)	81 (84%)	15 (16%)	2	13
44	1m	92/101 (91%)	79 (86%)	13 (14%)	3	16
44	2m	91/101 (90%)	75 (82%)	16 (18%)	2	10
45	1n	49/50 (98%)	41 (84%)	8 (16%)	2	12
45	2n	49/50 (98%)	44 (90%)	5 (10%)	7	29
46	1o	78/80 (98%)	72 (92%)	6 (8%)	12	40
46	2o	78/80 (98%)	71 (91%)	7 (9%)	9	34
47	1p	69/74 (93%)	55 (80%)	14 (20%)	1	7
47	2p	68/74 (92%)	56 (82%)	12 (18%)	2	10
48	1q	94/97 (97%)	87 (93%)	7 (7%)	13	42
48	2q	94/97 (97%)	88 (94%)	6 (6%)	16	48
49	1r	59/77 (77%)	50 (85%)	9 (15%)	3	14
49	2r	59/77 (77%)	54 (92%)	5 (8%)	10	36
50	1s	69/80 (86%)	63 (91%)	6 (9%)	9	35
50	2s	67/80 (84%)	54 (81%)	13 (19%)	1	8
51	1t	70/82 (85%)	62 (89%)	8 (11%)	5	24
51	2t	70/82 (85%)	58 (83%)	12 (17%)	2	11
52	1u	18/22 (82%)	17 (94%)	1 (6%)	19	52
52	2u	18/22 (82%)	16 (89%)	2 (11%)	6	25
All	All	9301/10064 (92%)	8105 (87%)	1196 (13%)	4	19

All (1196) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	12	SER
3	1D	50	THR
3	1D	72	LYS
3	1D	73	VAL
3	1D	106	ILE
3	1D	111	LEU
3	1D	113	VAL
3	1D	116	GLN
3	1D	122	ASP
3	1D	127	VAL
3	1D	131	LEU
3	1D	138	VAL
3	1D	140	THR
3	1D	141	VAL
3	1D	171	ASP
3	1D	193	VAL
3	1D	204	ILE
3	1D	206	LEU
3	1D	221	VAL
3	1D	229	VAL
3	1D	230	ASP
3	1D	242	ARG
3	1D	254	THR
3	1D	260	ARG
3	1D	267	SER
3	1D	271	ILE
4	1E	4	ILE
4	1E	7	VAL
4	1E	9	VAL
4	1E	21	VAL
4	1E	34	VAL
4	1E	42	ASP
4	1E	45	THR
4	1E	59	VAL
4	1E	73	GLU
4	1E	75	VAL
4	1E	77	ILE
4	1E	82	ARG
4	1E	89	ASP
4	1E	95	ILE
4	1E	104	VAL
4	1E	105	THR

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Mol	Chain	Res	Type
4	1E	116	VAL
4	1E	121	ASN
4	1E	155	LYS
4	1E	183	LEU
4	1E	184	VAL
4	1E	185	LYS
5	1F	15	SER
5	1F	32	LEU
5	1F	56	GLU
5	1F	74	ARG
5	1F	88	VAL
5	1F	105	VAL
5	1F	126	VAL
5	1F	132	VAL
5	1F	136	THR
5	1F	140	LEU
5	1F	156	LEU
5	1F	157	VAL
5	1F	162	LEU
5	1F	170	LEU
5	1F	175	THR
5	1F	183	VAL
5	1F	192	LEU
5	1F	201	VAL
5	1F	205	ARG
6	1G	3	LEU
6	1G	5	VAL
6	1G	9	ARG
6	1G	28	VAL
6	1G	31	VAL
6	1G	82	LEU
6	1G	88	ILE
6	1G	96	ARG
6	1G	124	SER
6	1G	132	ASN
6	1G	133	LEU
6	1G	138	GLN
6	1G	139	LEU
6	1G	140	ILE
6	1G	148	MET
6	1G	150	ASP
6	1G	159	VAL

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Mol	Chain	Res	Type
6	1G	160	VAL
6	1G	172	LEU
7	1H	3	ARG
7	1H	13	LYS
7	1H	15	VAL
7	1H	16	SER
7	1H	18	GLU
7	1H	19	VAL
7	1H	30	LYS
7	1H	35	VAL
7	1H	43	VAL
7	1H	45	VAL
7	1H	47	GLU
7	1H	49	VAL
7	1H	68	THR
7	1H	71	LEU
7	1H	90	LYS
7	1H	95	ARG
7	1H	98	LEU
7	1H	107	VAL
7	1H	119	GLU
7	1H	131	VAL
7	1H	136	ILE
7	1H	155	SER
7	1H	169	VAL
8	1I	6	LEU
8	1I	9	LEU
8	1I	10	GLU
8	1I	14	ASP
8	1I	18	VAL
8	1I	19	VAL
8	1I	35	LEU
8	1I	37	VAL
8	1I	47	LEU
8	1I	74	ASN
8	1I	77	LEU
8	1I	85	GLU
8	1I	92	VAL
8	1I	108	THR
8	1I	109	ILE
8	1I	114	LEU
8	1I	117	GLU

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Mol	Chain	Res	Type
8	1I	128	LEU
8	1I	142	VAL
8	1I	145	VAL
9	1N	1	MET
9	1N	3	THR
9	1N	14	VAL
9	1N	17	ASP
9	1N	23	LEU
9	1N	28	THR
9	1N	33	LEU
9	1N	38	HIS
9	1N	43	THR
9	1N	46	VAL
9	1N	53	VAL
9	1N	60	ILE
9	1N	67	LEU
9	1N	87	LEU
9	1N	96	GLU
9	1N	99	LEU
9	1N	138	LEU
10	1O	10	VAL
10	1O	19	ILE
10	1O	22	ILE
10	1O	69	ILE
10	1O	87	ILE
10	1O	96	THR
10	1O	116	SER
11	1P	3	LEU
11	1P	7	ARG
11	1P	21	ARG
11	1P	45	LEU
11	1P	56	SER
11	1P	57	THR
11	1P	75	ILE
11	1P	83	VAL
11	1P	95	VAL
11	1P	117	GLU
11	1P	123	LEU
11	1P	125	VAL
11	1P	148	LEU
12	1Q	2	LEU
12	1Q	6	ARG

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Mol	Chain	Res	Type
12	1Q	35	VAL
12	1Q	43	THR
12	1Q	56	ARG
12	1Q	60	ARG
12	1Q	75	THR
12	1Q	89	ASN
12	1Q	103	MET
12	1Q	110	THR
12	1Q	127	ILE
12	1Q	133	ARG
12	1Q	138	ASP
12	1Q	141	GLN
13	1R	1	MET
13	1R	15	SER
13	1R	24	GLN
13	1R	36	THR
13	1R	60	LEU
13	1R	65	LEU
13	1R	67	LEU
13	1R	73	VAL
13	1R	114	VAL
13	1R	117	VAL
14	1S	4	LEU
14	1S	5	THR
14	1S	8	GLU
14	1S	14	VAL
14	1S	35	ILE
14	1S	36	TYR
14	1S	42	ASP
14	1S	46	VAL
14	1S	49	VAL
14	1S	50	SER
14	1S	52	SER
14	1S	53	SER
14	1S	64	GLU
14	1S	69	VAL
14	1S	73	LEU
14	1S	85	VAL
14	1S	92	TYR
14	1S	98	VAL
15	1T	1	MET
15	1T	9	LEU

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Mol	Chain	Res	Type
15	1T	13	ARG
15	1T	15	VAL
15	1T	17	THR
15	1T	18	ASP
15	1T	35	LYS
15	1T	43	GLN
15	1T	51	ARG
15	1T	66	VAL
15	1T	67	SER
15	1T	89	VAL
15	1T	111	ARG
15	1T	114	LEU
15	1T	124	ASP
16	1U	54	LYS
16	1U	97	ASP
16	1U	111	GLU
17	1V	7	THR
17	1V	18	LEU
17	1V	24	LYS
17	1V	33	VAL
17	1V	51	VAL
17	1V	52	VAL
17	1V	61	VAL
17	1V	85	LYS
17	1V	95	LEU
17	1V	99	ILE
18	1W	4	LYS
18	1W	10	VAL
18	1W	11	ARG
18	1W	17	VAL
18	1W	67	ASP
18	1W	92	ARG
19	1X	14	SER
19	1X	41	ASN
19	1X	52	VAL
19	1X	81	VAL
19	1X	92	LEU
20	1Y	8	LYS
20	1Y	11	ASP
20	1Y	19	LYS
20	1Y	24	VAL
20	1Y	30	VAL

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Mol	Chain	Res	Type
20	1Y	39	VAL
20	1Y	45	VAL
20	1Y	62	GLU
20	1Y	67	LEU
20	1Y	72	VAL
20	1Y	90	LEU
20	1Y	91	GLU
20	1Y	99	CYS
20	1Y	106	LEU
21	1Z	1	MET
21	1Z	31	ARG
21	1Z	37	VAL
21	1Z	40	ASP
21	1Z	42	VAL
21	1Z	50	GLN
21	1Z	56	VAL
21	1Z	74	VAL
21	1Z	80	ARG
21	1Z	86	VAL
21	1Z	87	ASP
21	1Z	93	ASP
21	1Z	98	MET
21	1Z	100	VAL
21	1Z	119	GLU
21	1Z	126	VAL
21	1Z	140	ASP
21	1Z	146	ILE
21	1Z	149	SER
21	1Z	154	ASP
21	1Z	155	LEU
21	1Z	169	GLU
21	1Z	170	THR
22	10	3	HIS
22	10	14	ARG
22	10	37	LEU
22	10	38	VAL
22	10	43	THR
22	10	55	ARG
22	10	67	VAL
22	10	82	ARG
23	11	35	THR
23	11	37	ILE

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Mol	Chain	Res	Type
23	11	46	LEU
23	11	51	VAL
23	11	59	THR
24	12	3	LEU
24	12	4	SER
24	12	9	GLN
24	12	10	LEU
24	12	30	ARG
24	12	32	LEU
24	12	40	SER
24	12	41	ILE
24	12	44	LEU
24	12	45	SER
25	13	18	ASP
25	13	23	LEU
25	13	37	LEU
25	13	38	GLU
25	13	40	THR
25	13	44	ARG
25	13	54	VAL
25	13	55	ARG
25	13	56	VAL
25	13	58	VAL
25	13	60	GLU
26	14	1	MET
26	14	5	ILE
26	14	10	VAL
26	14	14	ILE
26	14	22	ILE
26	14	27	THR
26	14	33	VAL
26	14	37	SER
26	14	49	PHE
26	14	50	VAL
26	14	52	THR
26	14	53	GLU
26	14	58	ARG
26	14	63	TYR
26	14	67	TYR
27	15	16	ARG
27	15	31	VAL
27	15	44	THR

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Mol	Chain	Res	Type
27	15	46	CYS
27	15	48	GLU
27	15	57	VAL
28	16	6	ARG
28	16	19	ARG
28	16	47	THR
28	16	48	VAL
28	16	51	GLU
29	17	4	THR
29	17	23	ARG
29	17	24	THR
29	17	41	ARG
29	17	46	VAL
30	18	14	VAL
30	18	29	LYS
31	19	3	VAL
31	19	4	ARG
31	19	28	GLU
33	1b	7	VAL
33	1b	8	LYS
33	1b	12	GLU
33	1b	21	ARG
33	1b	39	ILE
33	1b	42	ILE
33	1b	54	THR
33	1b	64	ARG
33	1b	71	VAL
33	1b	76	GLN
33	1b	80	ILE
33	1b	81	VAL
33	1b	93	VAL
33	1b	98	LEU
33	1b	107	THR
33	1b	111	ARG
33	1b	112	VAL
33	1b	127	ILE
33	1b	142	LEU
33	1b	155	LEU
33	1b	156	LYS
33	1b	158	LEU
33	1b	160	ASP
33	1b	162	ILE

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Mol	Chain	Res	Type
33	1b	164	VAL
33	1b	168	THR
33	1b	172	ILE
33	1b	179	LYS
33	1b	180	LEU
33	1b	185	ILE
33	1b	198	ASP
33	1b	211	ILE
33	1b	223	ILE
33	1b	230	VAL
33	1b	231	GLU
34	1c	3	ASN
34	1c	5	ILE
34	1c	17	ASP
34	1c	19	GLU
34	1c	26	LYS
34	1c	30	ARG
34	1c	31	HIS
34	1c	32	LEU
34	1c	34	LEU
34	1c	45	LYS
34	1c	46	GLU
34	1c	63	ASN
34	1c	103	VAL
34	1c	110	ASN
34	1c	115	LEU
34	1c	118	GLN
34	1c	136	GLN
34	1c	182	ILE
34	1c	188	LEU
34	1c	192	THR
34	1c	195	VAL
35	1d	8	VAL
35	1d	17	VAL
35	1d	19	LEU
35	1d	21	LEU
35	1d	47	ARG
35	1d	64	LEU
35	1d	77	ASN
35	1d	83	SER
35	1d	89	THR
35	1d	100	ARG

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Mol	Chain	Res	Type
35	1d	108	LEU
35	1d	112	VAL
35	1d	135	LEU
35	1d	146	ILE
35	1d	148	VAL
35	1d	155	LEU
35	1d	157	LEU
35	1d	158	ILE
35	1d	162	LEU
35	1d	166	LYS
35	1d	170	VAL
35	1d	175	SER
35	1d	178	VAL
35	1d	188	LEU
35	1d	190	ASP
35	1d	194	LEU
35	1d	198	VAL
35	1d	203	VAL
36	1e	11	ILE
36	1e	27	ARG
36	1e	41	VAL
36	1e	66	MET
36	1e	75	THR
36	1e	78	HIS
36	1e	81	GLU
36	1e	83	GLU
36	1e	117	ASP
36	1e	118	ILE
36	1e	151	LEU
36	1e	152	ARG
37	1f	17	SER
37	1f	40	VAL
37	1f	57	GLN
37	1f	72	VAL
37	1f	77	ARG
37	1f	90	VAL
37	1f	91	VAL
37	1f	95	GLU
38	1g	9	VAL
38	1g	12	LEU
38	1g	13	GLN
38	1g	15	ASP

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Mol	Chain	Res	Type
38	1g	18	TYR
38	1g	21	VAL
38	1g	22	LEU
38	1g	24	THR
38	1g	27	ILE
38	1g	45	ASP
38	1g	50	ILE
38	1g	56	GLN
38	1g	74	GLU
38	1g	79	ARG
38	1g	80	VAL
38	1g	113	GLU
38	1g	114	ARG
38	1g	115	ARG
38	1g	135	VAL
38	1g	140	ASP
38	1g	143	ARG
39	1h	3	THR
39	1h	19	VAL
39	1h	26	VAL
39	1h	35	ILE
39	1h	52	ASP
39	1h	79	VAL
39	1h	107	LEU
39	1h	112	LEU
39	1h	115	SER
39	1h	133	LEU
40	1i	18	PHE
40	1i	19	LEU
40	1i	23	ASN
40	1i	34	ASN
40	1i	47	LEU
40	1i	56	LEU
40	1i	59	PHE
40	1i	64	THR
40	1i	92	TYR
40	1i	96	LEU
40	1i	111	ARG
40	1i	114	TYR
40	1i	117	HIS
40	1i	121	ARG
40	1i	128	ARG

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Mol	Chain	Res	Type
41	1j	19	SER
41	1j	49	VAL
41	1j	66	ARG
41	1j	68	HIS
41	1j	69	ASN
41	1j	81	THR
41	1j	94	VAL
41	1j	96	ILE
41	1j	97	GLU
41	1j	98	ILE
41	1j	100	THR
42	1k	34	ASP
42	1k	47	VAL
42	1k	70	LYS
42	1k	78	GLN
42	1k	81	ASP
42	1k	87	THR
42	1k	99	GLN
42	1k	105	VAL
42	1k	109	VAL
42	1k	114	VAL
43	1l	11	VAL
43	1l	22	SER
43	1l	42	THR
43	1l	43	VAL
43	1l	55	VAL
43	1l	67	THR
43	1l	83	VAL
43	1l	104	VAL
43	1l	122	THR
44	1m	4	ILE
44	1m	20	THR
44	1m	23	TYR
44	1m	32	GLU
44	1m	43	THR
44	1m	45	VAL
44	1m	49	THR
44	1m	56	LEU
44	1m	60	VAL
44	1m	63	THR
44	1m	69	GLU
44	1m	96	LEU

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Mol	Chain	Res	Type
44	1m	117	VAL
45	1n	3	ARG
45	1n	7	ILE
45	1n	8	GLU
45	1n	12	ARG
45	1n	13	THR
45	1n	18	VAL
45	1n	33	VAL
45	1n	56	VAL
46	1o	4	THR
46	1o	21	ASP
46	1o	34	LEU
46	1o	57	LEU
46	1o	66	LEU
46	1o	88	ARG
47	1p	1	MET
47	1p	2	VAL
47	1p	4	ILE
47	1p	11	SER
47	1p	29	ASP
47	1p	33	ILE
47	1p	36	ILE
47	1p	38	TYR
47	1p	44	THR
47	1p	45	THR
47	1p	47	ASP
47	1p	62	VAL
47	1p	67	THR
47	1p	72	ARG
48	1q	9	VAL
48	1q	19	VAL
48	1q	35	VAL
48	1q	60	ILE
48	1q	74	LEU
48	1q	87	LYS
48	1q	96	GLU
49	1r	25	THR
49	1r	28	GLU
49	1r	31	LEU
49	1r	35	ARG
49	1r	39	VAL
49	1r	46	GLU

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Mol	Chain	Res	Type
49	1r	65	ILE
49	1r	75	ILE
49	1r	85	LEU
50	1s	9	VAL
50	1s	16	LEU
50	1s	23	ASN
50	1s	28	LYS
50	1s	30	LEU
50	1s	37	ARG
51	1t	10	LEU
51	1t	11	SER
51	1t	13	LEU
51	1t	42	GLN
51	1t	50	GLU
51	1t	56	MET
51	1t	63	ILE
51	1t	71	THR
52	1u	20	LYS
3	2D	13	ARG
3	2D	23	GLU
3	2D	37	LEU
3	2D	45	ASN
3	2D	64	ILE
3	2D	71	ASP
3	2D	109	ASP
3	2D	113	VAL
3	2D	122	ASP
3	2D	138	VAL
3	2D	147	LEU
3	2D	161	THR
3	2D	162	SER
3	2D	173	VAL
3	2D	193	VAL
3	2D	221	VAL
3	2D	229	VAL
3	2D	242	ARG
4	2E	7	VAL
4	2E	9	VAL
4	2E	12	THR
4	2E	21	VAL
4	2E	23	VAL
4	2E	34	VAL

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Mol	Chain	Res	Type
4	2E	38	THR
4	2E	45	THR
4	2E	72	VAL
4	2E	73	GLU
4	2E	75	VAL
4	2E	78	LEU
4	2E	85	ASN
4	2E	90	THR
4	2E	105	THR
4	2E	116	VAL
4	2E	121	ASN
4	2E	167	VAL
4	2E	168	MET
4	2E	170	LEU
4	2E	178	GLU
4	2E	197	ILE
5	2F	15	SER
5	2F	27	GLU
5	2F	50	SER
5	2F	57	VAL
5	2F	70	THR
5	2F	88	VAL
5	2F	89	VAL
5	2F	106	ARG
5	2F	110	LEU
5	2F	137	LYS
5	2F	140	LEU
5	2F	145	GLU
5	2F	160	ASN
5	2F	170	LEU
5	2F	183	VAL
5	2F	186	ILE
5	2F	188	ARG
5	2F	190	GLU
5	2F	191	ARG
6	2G	3	LEU
6	2G	28	VAL
6	2G	31	VAL
6	2G	34	LEU
6	2G	36	LYS
6	2G	43	LEU
6	2G	47	LYS

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Mol	Chain	Res	Type
6	2G	51	ARG
6	2G	53	LEU
6	2G	75	LYS
6	2G	77	ILE
6	2G	90	LEU
6	2G	99	MET
6	2G	103	LEU
6	2G	135	LEU
6	2G	140	ILE
6	2G	152	LEU
6	2G	155	MET
6	2G	159	VAL
7	2H	4	ILE
7	2H	15	VAL
7	2H	18	GLU
7	2H	25	LYS
7	2H	30	LYS
7	2H	32	GLU
7	2H	37	VAL
7	2H	42	ARG
7	2H	44	VAL
7	2H	45	VAL
7	2H	46	GLU
7	2H	49	VAL
7	2H	54	ARG
7	2H	68	THR
7	2H	70	THR
7	2H	71	LEU
7	2H	81	GLU
7	2H	92	ILE
7	2H	99	VAL
7	2H	105	LEU
7	2H	106	THR
7	2H	107	VAL
7	2H	119	GLU
7	2H	127	GLU
7	2H	131	VAL
7	2H	134	SER
7	2H	139	GLN
7	2H	175	LYS
8	2I	6	LEU
8	2I	38	LEU

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Mol	Chain	Res	Type
8	2I	40	THR
8	2I	41	GLU
8	2I	51	ILE
8	2I	58	LEU
8	2I	74	ASN
8	2I	77	LEU
8	2I	81	VAL
8	2I	86	THR
8	2I	87	LYS
8	2I	92	VAL
8	2I	93	THR
8	2I	101	LEU
8	2I	127	VAL
8	2I	128	LEU
8	2I	142	VAL
8	2I	144	VAL
9	2N	1	MET
9	2N	22	THR
9	2N	28	THR
9	2N	43	THR
9	2N	50	ASP
9	2N	55	VAL
9	2N	67	LEU
9	2N	68	GLU
9	2N	73	THR
9	2N	87	LEU
9	2N	88	GLU
9	2N	96	GLU
9	2N	127	ASP
10	2O	3	GLN
10	2O	9	GLU
10	2O	10	VAL
10	2O	32	TYR
10	2O	34	THR
10	2O	35	VAL
10	2O	52	VAL
10	2O	58	VAL
10	2O	77	ILE
10	2O	85	VAL
10	2O	86	ILE
10	2O	88	ASN
10	2O	121	VAL

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Mol	Chain	Res	Type
11	2P	3	LEU
11	2P	19	VAL
11	2P	32	THR
11	2P	40	SER
11	2P	56	SER
11	2P	58	THR
11	2P	67	MET
11	2P	71	VAL
11	2P	90	ARG
11	2P	95	VAL
11	2P	117	GLU
11	2P	123	LEU
11	2P	148	LEU
12	2Q	1	MET
12	2Q	5	ARG
12	2Q	7	MET
12	2Q	35	VAL
12	2Q	56	ARG
12	2Q	75	THR
12	2Q	110	THR
12	2Q	131	ILE
12	2Q	141	GLN
13	2R	1	MET
13	2R	37	THR
13	2R	43	GLU
13	2R	65	LEU
13	2R	67	LEU
13	2R	73	VAL
13	2R	91	GLN
13	2R	95	THR
13	2R	100	LEU
13	2R	103	ARG
13	2R	105	ARG
13	2R	113	LEU
13	2R	114	VAL
14	2S	12	PHE
14	2S	27	SER
14	2S	40	ILE
14	2S	48	LEU
14	2S	50	SER
14	2S	58	LEU
14	2S	69	VAL

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Mol	Chain	Res	Type
14	2S	85	VAL
14	2S	98	VAL
14	2S	110	LEU
15	2T	6	LEU
15	2T	15	VAL
15	2T	17	THR
15	2T	33	LYS
15	2T	46	GLU
15	2T	67	SER
15	2T	87	ASP
15	2T	88	ILE
15	2T	96	ARG
15	2T	107	ASP
16	2U	17	ILE
16	2U	19	LYS
16	2U	38	THR
16	2U	52	ARG
16	2U	65	ILE
16	2U	88	ILE
16	2U	92	ARG
16	2U	95	LEU
16	2U	117	GLN
17	2V	7	THR
17	2V	45	THR
17	2V	47	VAL
17	2V	51	VAL
17	2V	56	SER
17	2V	61	VAL
17	2V	85	LYS
18	2W	10	VAL
18	2W	11	ARG
18	2W	23	LEU
18	2W	67	ASP
18	2W	76	VAL
18	2W	103	ILE
19	2X	54	VAL
19	2X	66	LEU
19	2X	81	VAL
19	2X	82	GLN
19	2X	83	VAL
20	2Y	51	VAL
20	2Y	61	ILE

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Mol	Chain	Res	Type
20	2Y	67	LEU
20	2Y	70	SER
20	2Y	72	VAL
20	2Y	90	LEU
20	2Y	99	CYS
21	2Z	6	LYS
21	2Z	18	LEU
21	2Z	24	LEU
21	2Z	40	ASP
21	2Z	46	LYS
21	2Z	50	GLN
21	2Z	56	VAL
21	2Z	69	THR
21	2Z	70	LEU
21	2Z	71	VAL
21	2Z	76	LEU
21	2Z	86	VAL
21	2Z	90	VAL
21	2Z	93	ASP
21	2Z	102	LEU
21	2Z	129	SER
21	2Z	136	PHE
21	2Z	144	LEU
21	2Z	154	ASP
21	2Z	155	LEU
21	2Z	163	LEU
21	2Z	165	VAL
21	2Z	171	ILE
22	20	10	THR
22	20	38	VAL
22	20	41	ARG
22	20	43	THR
22	20	55	ARG
22	20	68	GLU
22	20	74	ARG
23	21	35	THR
23	21	39	LYS
23	21	65	SER
23	21	67	ILE
23	21	74	VAL
23	21	75	GLU
23	21	76	ARG

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Mol	Chain	Res	Type
23	21	83	GLU
23	21	94	LEU
23	21	98	LEU
24	22	3	LEU
24	22	19	VAL
24	22	26	ARG
24	22	28	LYS
24	22	30	ARG
24	22	40	SER
24	22	41	ILE
24	22	50	ILE
24	22	53	LEU
24	22	59	ARG
24	22	62	THR
24	22	66	GLU
25	23	10	LYS
25	23	18	ASP
25	23	23	LEU
25	23	26	LEU
25	23	30	ARG
25	23	31	LEU
25	23	36	VAL
25	23	37	LEU
25	23	38	GLU
25	23	40	THR
25	23	50	VAL
25	23	53	LEU
25	23	54	VAL
25	23	56	VAL
25	23	58	VAL
26	24	9	LEU
26	24	13	ARG
26	24	15	ILE
26	24	22	ILE
26	24	25	TYR
26	24	27	THR
26	24	48	ARG
26	24	52	THR
26	24	56	VAL
26	24	59	PHE
26	24	62	ARG
26	24	67	TYR

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Mol	Chain	Res	Type
26	24	69	LYS
27	25	6	VAL
27	25	48	GLU
28	26	6	ARG
28	26	14	THR
28	26	15	GLU
28	26	19	ARG
28	26	20	ASN
28	26	29	ASN
28	26	34	LEU
28	26	35	GLU
28	26	40	CYS
28	26	45	LYS
28	26	47	THR
28	26	48	VAL
28	26	52	VAL
28	26	54	ILE
29	27	24	THR
29	27	35	ARG
29	27	43	THR
29	27	46	VAL
30	28	4	MET
30	28	14	VAL
30	28	16	ILE
30	28	41	ILE
30	28	49	VAL
31	29	14	CYS
31	29	28	GLU
33	2b	7	VAL
33	2b	12	GLU
33	2b	15	VAL
33	2b	16	HIS
33	2b	35	GLU
33	2b	39	ILE
33	2b	49	GLU
33	2b	52	GLU
33	2b	58	ILE
33	2b	67	THR
33	2b	71	VAL
33	2b	78	GLN
33	2b	93	VAL
33	2b	94	ASN

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Mol	Chain	Res	Type
33	2b	144	ARG
33	2b	154	LEU
33	2b	157	ARG
33	2b	158	LEU
33	2b	168	THR
33	2b	185	ILE
33	2b	187	LEU
33	2b	198	ASP
33	2b	213	LEU
33	2b	223	ILE
33	2b	229	VAL
34	2c	12	LEU
34	2c	15	THR
34	2c	17	ASP
34	2c	37	GLN
34	2c	38	ARG
34	2c	40	ARG
34	2c	43	LEU
34	2c	56	ASP
34	2c	72	LYS
34	2c	77	ILE
34	2c	91	LEU
34	2c	101	LEU
34	2c	124	ILE
34	2c	131	ARG
34	2c	143	GLU
34	2c	190	ARG
34	2c	195	VAL
34	2c	207	VAL
35	2d	5	ILE
35	2d	12	CYS
35	2d	19	LEU
35	2d	21	LEU
35	2d	28	SER
35	2d	31	CYS
35	2d	60	GLU
35	2d	76	ARG
35	2d	81	GLU
35	2d	83	SER
35	2d	96	LEU
35	2d	102	ASP
35	2d	120	LEU

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Mol	Chain	Res	Type
35	2d	126	ILE
35	2d	127	THR
35	2d	133	VAL
35	2d	135	LEU
35	2d	137	SER
35	2d	146	ILE
35	2d	148	VAL
35	2d	150	GLU
35	2d	158	ILE
35	2d	175	SER
35	2d	178	VAL
35	2d	193	ASP
35	2d	198	VAL
36	2e	10	MET
36	2e	13	ILE
36	2e	31	LEU
36	2e	33	VAL
36	2e	38	GLN
36	2e	41	VAL
36	2e	47	LYS
36	2e	57	LYS
36	2e	65	ASN
36	2e	78	HIS
36	2e	79	GLU
36	2e	91	LEU
36	2e	123	LEU
37	2f	5	GLU
37	2f	10	LEU
37	2f	18	GLN
37	2f	30	LEU
37	2f	40	VAL
37	2f	46	ARG
37	2f	69	GLU
37	2f	81	ILE
37	2f	82	ARG
38	2g	17	VAL
38	2g	24	THR
38	2g	32	ARG
38	2g	33	ASP
38	2g	45	ASP
38	2g	49	ILE
38	2g	50	ILE

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Mol	Chain	Res	Type
38	2g	52	GLU
38	2g	67	GLU
38	2g	69	VAL
38	2g	75	VAL
38	2g	79	ARG
38	2g	85	TYR
38	2g	90	GLU
38	2g	110	GLN
38	2g	113	GLU
38	2g	124	LEU
39	2h	37	ARG
39	2h	52	ASP
39	2h	54	ASP
39	2h	85	ARG
39	2h	97	VAL
39	2h	107	LEU
39	2h	109	ILE
39	2h	112	LEU
39	2h	113	SER
39	2h	133	LEU
40	2i	14	VAL
40	2i	17	VAL
40	2i	27	THR
40	2i	31	GLN
40	2i	65	VAL
40	2i	83	ARG
40	2i	92	TYR
40	2i	102	LEU
40	2i	105	ASP
40	2i	114	TYR
40	2i	121	ARG
40	2i	124	GLN
40	2i	127	LYS
40	2i	128	ARG
41	2j	8	LEU
41	2j	21	GLN
41	2j	25	GLU
41	2j	38	ILE
41	2j	44	VAL
41	2j	72	VAL
41	2j	89	ASP
41	2j	92	THR

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Mol	Chain	Res	Type
42	2k	18	ARG
42	2k	29	ILE
42	2k	41	THR
42	2k	48	ILE
42	2k	63	LEU
42	2k	84	VAL
42	2k	98	LEU
42	2k	107	SER
42	2k	109	VAL
42	2k	111	ASP
43	2l	16	GLU
43	2l	18	VAL
43	2l	28	LYS
43	2l	33	ARG
43	2l	34	ARG
43	2l	36	VAL
43	2l	39	VAL
43	2l	40	VAL
43	2l	78	GLN
43	2l	85	ILE
43	2l	100	ILE
43	2l	104	VAL
43	2l	105	TYR
43	2l	110	VAL
43	2l	112	ASP
44	2m	4	ILE
44	2m	8	GLU
44	2m	15	VAL
44	2m	29	ARG
44	2m	34	LEU
44	2m	35	GLU
44	2m	43	THR
44	2m	60	VAL
44	2m	69	GLU
44	2m	73	GLU
44	2m	81	LEU
44	2m	86	CYS
44	2m	90	LEU
44	2m	92	HIS
44	2m	109	THR
44	2m	116	THR
45	2n	8	GLU

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Mol	Chain	Res	Type
45	2n	18	VAL
45	2n	33	VAL
45	2n	35	ARG
45	2n	56	VAL
46	2o	3	ILE
46	2o	5	LYS
46	2o	17	ARG
46	2o	31	LEU
46	2o	45	VAL
46	2o	72	ARG
46	2o	83	GLU
47	2p	1	MET
47	2p	2	VAL
47	2p	8	ARG
47	2p	20	VAL
47	2p	21	VAL
47	2p	40	ASP
47	2p	45	THR
47	2p	47	ASP
47	2p	49	LEU
47	2p	69	THR
47	2p	71	ARG
47	2p	74	LEU
48	2q	11	VAL
48	2q	14	LYS
48	2q	24	GLU
48	2q	35	VAL
48	2q	73	VAL
48	2q	84	LEU
49	2r	22	VAL
49	2r	25	THR
49	2r	32	ARG
49	2r	37	VAL
49	2r	54	ARG
50	2s	4	SER
50	2s	15	LEU
50	2s	18	LYS
50	2s	31	ILE
50	2s	33	THR
50	2s	39	THR
50	2s	40	ILE
50	2s	45	VAL

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Mol	Chain	Res	Type
50	2s	51	VAL
50	2s	66	MET
50	2s	67	VAL
50	2s	71	LEU
50	2s	81	ARG
51	2t	13	LEU
51	2t	14	LYS
51	2t	24	LEU
51	2t	39	LYS
51	2t	41	ILE
51	2t	54	LYS
51	2t	56	MET
51	2t	70	SER
51	2t	72	LEU
51	2t	86	ARG
51	2t	99	LEU
51	2t	100	ILE
52	2u	12	LYS
52	2u	20	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (157) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	116	GLN
3	1D	126	GLN
3	1D	164	GLN
3	1D	166	GLN
4	1E	48	GLN
4	1E	132	HIS
5	1F	8	GLN
5	1F	69	HIS
6	1G	79	ASN
6	1G	123	ASN
7	1H	111	HIS
9	1N	56	ASN
9	1N	133	GLN
10	1O	3	GLN
10	1O	5	GLN
10	1O	89	ASN
12	1Q	45	GLN
12	1Q	89	ASN
13	1R	13	HIS

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Mol	Chain	Res	Type
13	1R	61	HIS
13	1R	71	GLN
13	1R	91	GLN
15	1T	58	ASN
20	1Y	6	HIS
21	1Z	50	GLN
22	10	17	GLN
22	10	35	ASN
23	11	19	GLN
24	12	48	HIS
24	12	70	GLN
27	15	4	HIS
28	16	20	ASN
33	1b	16	HIS
33	1b	19	HIS
33	1b	78	GLN
33	1b	146	GLN
33	1b	212	GLN
34	1c	37	GLN
34	1c	108	ASN
34	1c	118	GLN
34	1c	123	GLN
34	1c	162	GLN
34	1c	170	GLN
35	1d	45	GLN
35	1d	77	ASN
35	1d	116	GLN
35	1d	129	ASN
35	1d	160	GLN
35	1d	161	ASN
37	1f	7	ASN
37	1f	18	GLN
37	1f	100	ASN
38	1g	28	ASN
38	1g	51	GLN
38	1g	96	GLN
38	1g	106	GLN
38	1g	148	ASN
39	1h	15	ASN
40	1i	3	GLN
40	1i	23	ASN
40	1i	29	ASN

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Mol	Chain	Res	Type
40	1i	31	GLN
40	1i	58	HIS
40	1i	73	GLN
40	1i	124	GLN
41	1j	56	HIS
41	1j	68	HIS
41	1j	69	ASN
42	1k	117	ASN
43	1l	8	ASN
46	1o	28	GLN
46	1o	50	HIS
47	1p	13	HIS
49	1r	63	GLN
50	1s	47	HIS
50	1s	57	HIS
51	1t	90	GLN
3	2D	201	HIS
4	2E	55	ASN
4	2E	132	HIS
4	2E	169	ASN
4	2E	192	ASN
5	2F	29	ASN
5	2F	69	HIS
5	2F	75	HIS
5	2F	203	GLN
6	2G	108	ASN
7	2H	61	HIS
7	2H	111	HIS
7	2H	139	GLN
8	2I	139	GLN
9	2N	94	HIS
10	2O	5	GLN
11	2P	70	GLN
13	2R	31	HIS
13	2R	50	HIS
13	2R	91	GLN
14	2S	38	GLN
15	2T	58	ASN
16	2U	81	HIS
16	2U	94	ASN
16	2U	117	GLN
18	2W	60	ASN

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Mol	Chain	Res	Type
18	2W	62	HIS
19	2X	31	HIS
19	2X	82	GLN
21	2Z	34	ASN
21	2Z	50	GLN
21	2Z	73	GLN
21	2Z	75	ASN
23	21	42	GLN
26	24	40	HIS
28	26	20	ASN
29	27	6	GLN
30	28	35	GLN
33	2b	40	HIS
33	2b	94	ASN
33	2b	95	GLN
33	2b	110	GLN
34	2c	37	GLN
34	2c	69	HIS
34	2c	98	ASN
34	2c	110	ASN
34	2c	118	GLN
34	2c	123	GLN
34	2c	162	GLN
35	2d	42	GLN
35	2d	62	GLN
35	2d	74	GLN
35	2d	77	ASN
35	2d	116	GLN
35	2d	123	HIS
35	2d	160	GLN
36	2e	130	ASN
38	2g	37	ASN
38	2g	86	GLN
38	2g	153	HIS
40	2i	3	GLN
40	2i	23	ASN
40	2i	38	GLN
40	2i	89	ASN
40	2i	124	GLN
41	2j	13	HIS
41	2j	21	GLN
41	2j	68	HIS

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Mol	Chain	Res	Type
42	2k	93	GLN
42	2k	104	GLN
43	2l	78	GLN
44	2m	77	ASN
45	2n	52	GLN
46	2o	28	GLN
49	2r	63	GLN
50	2s	23	ASN
50	2s	53	ASN
50	2s	69	HIS
51	2t	16	HIS
51	2t	75	ASN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	554 (19%)	21 (0%)
1	2A	2791/2915 (95%)	578 (20%)	21 (0%)
2	1B	120/121 (99%)	9 (7%)	1 (0%)
2	2B	118/121 (97%)	32 (27%)	0
32	1a	1497/1521 (98%)	304 (20%)	0
32	2a	1501/1521 (98%)	337 (22%)	0
53	1v	9/24 (37%)	5 (55%)	0
53	2v	4/24 (16%)	1 (25%)	0
54	1x	75/77 (97%)	9 (12%)	0
54	2x	75/77 (97%)	9 (12%)	0
All	All	9054/9316 (97%)	1838 (20%)	43 (0%)

All (1838) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	10	G
1	1A	11	G
1	1A	15	G
1	1A	34	C
1	1A	36	G
1	1A	45	C
1	1A	50	U
1	1A	51	G
1	1A	55	G
1	1A	58	G

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Mol	Chain	Res	Type
1	1A	60	G
1	1A	61	G
1	1A	64	A
1	1A	71	A
1	1A	72	U
1	1A	74	A
1	1A	75	G
1	1A	77	C
1	1A	84	A
1	1A	95	G
1	1A	102	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	125	G
1	1A	131	G
1	1A	139	G
1	1A	139(A)	G
1	1A	140	G
1	1A	141	A
1	1A	143	G
1	1A	182	A
1	1A	188	G
1	1A	196	A
1	1A	199	A
1	1A	204	A
1	1A	205	G
1	1A	214	G
1	1A	215	G
1	1A	216	A
1	1A	221	A
1	1A	222	A
1	1A	225	A
1	1A	228	A
1	1A	229	A
1	1A	233	A
1	1A	248	G
1	1A	249	C
1	1A	261	G
1	1A	264	C
1	1A	265	A
1	1A	269	U

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Mol	Chain	Res	Type
1	1A	271(C)	C
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(O)	C
1	1A	271(S)	G
1	1A	271(Y)	U
1	1A	272(B)	G
1	1A	272(H)	C
1	1A	272(I)	U
1	1A	279	C
1	1A	306	U
1	1A	311	A
1	1A	316	C
1	1A	322	A
1	1A	324	A
1	1A	329	G
1	1A	330	A
1	1A	345	A
1	1A	352	G
1	1A	363	G
1	1A	363(F)	A
1	1A	372	G
1	1A	380	U
1	1A	386	G
1	1A	389	G
1	1A	393	C
1	1A	396	G
1	1A	405	U
1	1A	406	G
1	1A	407	G
1	1A	411	G
1	1A	413	C
1	1A	428	A
1	1A	437	G
1	1A	444	C
1	1A	448	U
1	1A	456	C
1	1A	457	A
1	1A	481	G
1	1A	489	G

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Mol	Chain	Res	Type
1	1A	504	U
1	1A	505	A
1	1A	509	C
1	1A	528	A
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	568	U
1	1A	573	G
1	1A	574	C
1	1A	575	A
1	1A	584	C
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	610	G
1	1A	614(B)	G
1	1A	615	G
1	1A	620	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	648	G
1	1A	652(D)	C
1	1A	652(E)	G
1	1A	652(T)	C
1	1A	654	A
1	1A	669	G
1	1A	686	G
1	1A	698	C
1	1A	717	G
1	1A	729	G
1	1A	730	C
1	1A	749	C
1	1A	762	U
1	1A	765	G
1	1A	775	G

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Mol	Chain	Res	Type
1	1A	776	G
1	1A	777	A
1	1A	782	A
1	1A	784	A
1	1A	785	G
1	1A	788	A
1	1A	790	C
1	1A	792	G
1	1A	794	G
1	1A	805	G
1	1A	810	U
1	1A	811	U
1	1A	812	C
1	1A	819	A
1	1A	824	A
1	1A	827	U
1	1A	828	U
1	1A	830	G
1	1A	831	G
1	1A	859	G
1	1A	880	G
1	1A	884	C
1	1A	885	C
1	1A	886	C
1	1A	887	A
1	1A	888	C
1	1A	889	C
1	1A	890	A
1	1A	895	U
1	1A	896	A
1	1A	897	C
1	1A	905	U
1	1A	907	U
1	1A	910	A
1	1A	914	C
1	1A	915	C
1	1A	926	A
1	1A	932	G
1	1A	944	G
1	1A	945	A
1	1A	946	G
1	1A	959	A

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Mol	Chain	Res	Type
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	989	G
1	1A	993	G
1	1A	995	C
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1021	A
1	1A	1022	G
1	1A	1023	U
1	1A	1024	G
1	1A	1025	G
1	1A	1026	U
1	1A	1033	U
1	1A	1041	C
1	1A	1044	G
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	1060	U
1	1A	1064	C
1	1A	1065	U
1	1A	1068	G
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1075	C
1	1A	1076	C
1	1A	1078	U
1	1A	1079	C
1	1A	1085	A
1	1A	1088	A
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	1101	U
1	1A	1103	A
1	1A	1104	C
1	1A	1107	G
1	1A	1109	C
1	1A	1111	A
1	1A	1112	G
1	1A	1115	G
1	1A	1129	A
1	1A	1130	U
1	1A	1131	G
1	1A	1132	A
1	1A	1135	C
1	1A	1136	G
1	1A	1138	G
1	1A	1139	G
1	1A	1142	U
1	1A	1155	A
1	1A	1156	A
1	1A	1157	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	1187	G
1	1A	1210	A
1	1A	1212	G
1	1A	1220	A
1	1A	1232	G
1	1A	1248	G
1	1A	1252	G
1	1A	1253	A
1	1A	1256	G
1	1A	1262	A
1	1A	1268	A
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U

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Mol	Chain	Res	Type
1	1A	1274	A
1	1A	1276	A
1	1A	1281	G
1	1A	1286	A
1	1A	1300	U
1	1A	1301	A
1	1A	1313	U
1	1A	1320	C
1	1A	1321	A
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1370	C
1	1A	1371	G
1	1A	1378	A
1	1A	1384	A
1	1A	1385	G
1	1A	1386	C
1	1A	1396	U
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1439	A
1	1A	1441	G
1	1A	1445	A
1	1A	1450	G
1	1A	1450(A)	C
1	1A	1453	U
1	1A	1455	G
1	1A	1467	C
1	1A	1482	G
1	1A	1493	C
1	1A	1497	U
1	1A	1506	C
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1509(B)	A
1	1A	1523	U
1	1A	1545	A

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Mol	Chain	Res	Type
1	1A	1551	C
1	1A	1554	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	1607	C
1	1A	1608	A
1	1A	1609	A
1	1A	1610	A
1	1A	1616	A
1	1A	1647	G
1	1A	1648	C
1	1A	1667	G
1	1A	1674	G
1	1A	1681	G
1	1A	1696	G
1	1A	1697	G
1	1A	1700	A
1	1A	1701	A
1	1A	1722	A
1	1A	1745(A)	C
1	1A	1746	G
1	1A	1756	G
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1791	A
1	1A	1800	C
1	1A	1802	A
1	1A	1816	G
1	1A	1829	A
1	1A	1842	G
1	1A	1847	A
1	1A	1858	G
1	1A	1878	G
1	1A	1889	A

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Mol	Chain	Res	Type
1	1A	1900	A
1	1A	1905	C
1	1A	1906	G
1	1A	1914	C
1	1A	1916	A
1	1A	1919	A
1	1A	1929	G
1	1A	1930	G
1	1A	1931	U
1	1A	1936	A
1	1A	1938	A
1	1A	1941	C
1	1A	1944	U
1	1A	1945	G
1	1A	1955	U
1	1A	1962	5MC
1	1A	1963	U
1	1A	1964	G
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1985	G
1	1A	1993	U
1	1A	1997	G
1	1A	2016	U
1	1A	2020	A
1	1A	2023	G
1	1A	2029	G
1	1A	2031	A
1	1A	2032	G
1	1A	2033	A
1	1A	2039	C
1	1A	2043	C
1	1A	2052	G
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	2070	G

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Mol	Chain	Res	Type
1	1A	2082	A
1	1A	2093	G
1	1A	2098	U
1	1A	2099	U
1	1A	2113	U
1	1A	2115	G
1	1A	2116	G
1	1A	2120	G
1	1A	2122	U
1	1A	2125	G
1	1A	2126	A
1	1A	2127	G
1	1A	2128	C
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	2139	C
1	1A	2140	C
1	1A	2141	G
1	1A	2142	C
1	1A	2144	U
1	1A	2146	C
1	1A	2147	G
1	1A	2150	U
1	1A	2151	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2162	G
1	1A	2163	C
1	1A	2164	C
1	1A	2165	G
1	1A	2166	G
1	1A	2171	A
1	1A	2172	U
1	1A	2173	A
1	1A	2175	C

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Mol	Chain	Res	Type
1	1A	2182	G
1	1A	2184	G
1	1A	2188	C
1	1A	2189	U
1	1A	2190	G
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2219	G
1	1A	2225	A
1	1A	2226	C
1	1A	2238	G
1	1A	2269	A
1	1A	2279	G
1	1A	2280	G
1	1A	2283	C
1	1A	2285	C
1	1A	2286	A
1	1A	2287	A
1	1A	2288	A
1	1A	2289	G
1	1A	2305	A
1	1A	2307	G
1	1A	2308	G
1	1A	2312	U
1	1A	2315	G
1	1A	2320	A
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2341	G
1	1A	2347	C
1	1A	2350	C
1	1A	2361	A
1	1A	2365	G
1	1A	2372	G
1	1A	2383	G
1	1A	2384	G
1	1A	2385	C
1	1A	2406	U

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Mol	Chain	Res	Type
1	1A	2410	G
1	1A	2422	A
1	1A	2424	C
1	1A	2425	A
1	1A	2428	G
1	1A	2429	G
1	1A	2430	A
1	1A	2431	U
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2448	A
1	1A	2449	U
1	1A	2464	C
1	1A	2468	G
1	1A	2469	A
1	1A	2474	C
1	1A	2476	A
1	1A	2478	A
1	1A	2480	C
1	1A	2481	G
1	1A	2487	G
1	1A	2502	G
1	1A	2505	G
1	1A	2518	A
1	1A	2529	G
1	1A	2538	C
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2582	G
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	2632	A
1	1A	2654	A
1	1A	2669	G
1	1A	2689	U

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Mol	Chain	Res	Type
1	1A	2690	C
1	1A	2702	U
1	1A	2703	C
1	1A	2707	G
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2724	C
1	1A	2726	U
1	1A	2730	C
1	1A	2732	G
1	1A	2733	A
1	1A	2744	G
1	1A	2757	A
1	1A	2758	A
1	1A	2760	C
1	1A	2764	A
1	1A	2765	A
1	1A	2769	C
1	1A	2778	A
1	1A	2780	G
1	1A	2790	A
1	1A	2791	C
1	1A	2802	G
1	1A	2805	G
1	1A	2808	U
1	1A	2818	G
1	1A	2820	A
1	1A	2821	A
1	1A	2833	G
1	1A	2835	A
1	1A	2848	G
1	1A	2855	C
1	1A	2866	U
1	1A	2872	G
1	1A	2873	A
1	1A	2877	G
1	1A	2879	C
1	1A	2880	C
1	1A	2892	A
1	1A	2894	G
2	1B	2	C
2	1B	13	A

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Mol	Chain	Res	Type
2	1B	19	G
2	1B	24	G
2	1B	35	U
2	1B	56	G
2	1B	73	A
2	1B	88	C
2	1B	110	G
32	1a	6	G
32	1a	7	G
32	1a	8	A
32	1a	9	G
32	1a	22	G
32	1a	32	A
32	1a	39	G
32	1a	47	C
32	1a	48	C
32	1a	50	A
32	1a	51	A
32	1a	61	G
32	1a	79	G
32	1a	91	C
32	1a	101	A
32	1a	105	G
32	1a	116	A
32	1a	121	C
32	1a	124	G
32	1a	131	C
32	1a	138	G
32	1a	139	G
32	1a	143	A
32	1a	144	G
32	1a	147	G
32	1a	156	G
32	1a	157	G
32	1a	163	C
32	1a	169	C
32	1a	174	C
32	1a	183	G
32	1a	189(E)	U
32	1a	189(H)	G
32	1a	189(J)	G
32	1a	190	U

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Mol	Chain	Res	Type
32	1a	191	G
32	1a	192	U
32	1a	193	C
32	1a	194	C
32	1a	195	A
32	1a	197	A
32	1a	203	U
32	1a	204	U
32	1a	216	G
32	1a	245	C
32	1a	247	G
32	1a	251	G
32	1a	256	U
32	1a	266	G
32	1a	267	C
32	1a	269	C
32	1a	281	G
32	1a	289	G
32	1a	306	G
32	1a	320	C
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	344	A
32	1a	348	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	356	A
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	381	C
32	1a	388	G
32	1a	397	A
32	1a	398	C
32	1a	406	G
32	1a	411	A
32	1a	412	A
32	1a	413	G
32	1a	414	A
32	1a	422	C

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Mol	Chain	Res	Type
32	1a	423	G
32	1a	424	G
32	1a	428	G
32	1a	429	U
32	1a	430	A
32	1a	437	U
32	1a	438	G
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	475	G
32	1a	477	A
32	1a	484	G
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	518	C
32	1a	519	C
32	1a	521	G
32	1a	531	U
32	1a	532	A
32	1a	547	A
32	1a	559	A
32	1a	560	U
32	1a	561	U
32	1a	562	C
32	1a	568	G
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	607	A
32	1a	630	G
32	1a	653	A
32	1a	665	A

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Mol	Chain	Res	Type
32	1a	666	G
32	1a	671	G
32	1a	687	A
32	1a	688	G
32	1a	721	G
32	1a	731	G
32	1a	743	U
32	1a	748	C
32	1a	749	C
32	1a	754	C
32	1a	755	G
32	1a	759	A
32	1a	774	G
32	1a	777	A
32	1a	782	A
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	796	C
32	1a	816	A
32	1a	817	C
32	1a	821	G
32	1a	828	A
32	1a	832	C
32	1a	836	G
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	859	A
32	1a	870	U
32	1a	872	A
32	1a	873	A
32	1a	876	G
32	1a	891	U
32	1a	902	G
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	929	G
32	1a	933	G
32	1a	934	C
32	1a	935	A

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Mol	Chain	Res	Type
32	1a	936	C
32	1a	942	G
32	1a	955	U
32	1a	959	A
32	1a	960	U
32	1a	961	U
32	1a	967	5MC
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	978	A
32	1a	982	U
32	1a	992	U
32	1a	993	G
32	1a	994	A
32	1a	995	C
32	1a	997	U
32	1a	1000	U
32	1a	1001	A
32	1a	1002	G
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1008	C
32	1a	1013	G
32	1a	1020	U
32	1a	1021	G
32	1a	1022	G
32	1a	1023	G
32	1a	1024	G
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C
32	1a	1030(A)	G
32	1a	1030(C)	G
32	1a	1031	G

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Mol	Chain	Res	Type
32	1a	1032	G
32	1a	1033	G
32	1a	1034	G
32	1a	1036	G
32	1a	1041	A
32	1a	1043	C
32	1a	1044	A
32	1a	1045	C
32	1a	1053	G
32	1a	1054	C
32	1a	1055	A
32	1a	1065	U
32	1a	1066	C
32	1a	1068	G
32	1a	1081	G
32	1a	1084	G
32	1a	1085	U
32	1a	1092	A
32	1a	1094	G
32	1a	1095	U
32	1a	1096	C
32	1a	1101	A
32	1a	1121	U
32	1a	1124	G
32	1a	1125	U
32	1a	1134	G
32	1a	1135	U
32	1a	1136	U
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
32	1a	1146	A
32	1a	1149	C
32	1a	1152	A
32	1a	1159	U
32	1a	1184	G
32	1a	1186	G
32	1a	1196	U
32	1a	1197	G
32	1a	1199	U
32	1a	1202	G
32	1a	1204	A

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Mol	Chain	Res	Type
32	1a	1213	A
32	1a	1224	G
32	1a	1225	A
32	1a	1227	A
32	1a	1236	A
32	1a	1238	A
32	1a	1239	A
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1270	C
32	1a	1274	G
32	1a	1275	A
32	1a	1276	G
32	1a	1278	U
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1294	G
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1305	G
32	1a	1312	G
32	1a	1320	C
32	1a	1322	C
32	1a	1323	G
32	1a	1338	G
32	1a	1347	G
32	1a	1353	G
32	1a	1355	G
32	1a	1363	C
32	1a	1365	G
32	1a	1370	G
32	1a	1381	U
32	1a	1388	C
32	1a	1395	C
32	1a	1397	C
32	1a	1398	A
32	1a	1415	G
32	1a	1419	G
32	1a	1436	U

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Mol	Chain	Res	Type
32	1a	1440	C
32	1a	1442	G
32	1a	1442(B)	A
32	1a	1446	U
32	1a	1447	A
32	1a	1456	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	1520	G
32	1a	1529	G
32	1a	1530	G
32	1a	1532	U
53	1v	13	A
53	1v	15	A
53	1v	16	A
53	1v	19	U
53	1v	21	A
54	1x	6	G
54	1x	7	G
54	1x	9	G
54	1x	18	G
54	1x	21	A
54	1x	47	U
54	1x	48	C
54	1x	61	C
54	1x	76	A
1	2A	14	A
1	2A	15	G
1	2A	23	G
1	2A	34	C
1	2A	35	G
1	2A	36	G
1	2A	45	C
1	2A	59	U
1	2A	64	A
1	2A	71	A
1	2A	74	A

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Mol	Chain	Res	Type
1	2A	75	G
1	2A	81	G
1	2A	84	A
1	2A	90	U
1	2A	102	G
1	2A	118	A
1	2A	120	U
1	2A	121	G
1	2A	125	G
1	2A	131	G
1	2A	136	G
1	2A	154(A)	C
1	2A	157	U
1	2A	174	C
1	2A	181	A
1	2A	191	A
1	2A	196	A
1	2A	199	A
1	2A	200	U
1	2A	201	C
1	2A	205	G
1	2A	216	A
1	2A	222	A
1	2A	223	A
1	2A	225	A
1	2A	228	A
1	2A	229	A
1	2A	232	G
1	2A	233	A
1	2A	248	G
1	2A	266	G
1	2A	267	C
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	271(V)	G
1	2A	271(Y)	U
1	2A	272	G
1	2A	272(B)	G
1	2A	277	C
1	2A	278	A

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Mol	Chain	Res	Type
1	2A	283	A
1	2A	284	U
1	2A	285	C
1	2A	294	A
1	2A	311	A
1	2A	324	A
1	2A	329	G
1	2A	330	A
1	2A	346	A
1	2A	352	G
1	2A	362	U
1	2A	363	G
1	2A	363(D)	G
1	2A	363(E)	U
1	2A	366	C
1	2A	372	G
1	2A	380	U
1	2A	386	G
1	2A	405	U
1	2A	411	G
1	2A	421	U
1	2A	425	G
1	2A	426	C
1	2A	429	A
1	2A	444	C
1	2A	446	G
1	2A	455	C
1	2A	457	A
1	2A	481	G
1	2A	482	A
1	2A	494	G
1	2A	498	G
1	2A	499	U
1	2A	504	U
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	510	C
1	2A	527	C
1	2A	528	A
1	2A	529	A
1	2A	531	C

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Mol	Chain	Res	Type
1	2A	532	A
1	2A	533	G
1	2A	551	G
1	2A	556	G
1	2A	562	U
1	2A	563	G
1	2A	568	U
1	2A	573	G
1	2A	574	C
1	2A	575	A
1	2A	578	A
1	2A	588	U
1	2A	595	C
1	2A	599	G
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(A)	U
1	2A	614(B)	G
1	2A	614(C)	A
1	2A	615	G
1	2A	616	G
1	2A	627	A
1	2A	630	G
1	2A	631	A
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	652(U)	G
1	2A	669	G
1	2A	673	C
1	2A	686	G
1	2A	698	C
1	2A	712	G
1	2A	715	G
1	2A	717	G
1	2A	721	C
1	2A	730	C
1	2A	748	G
1	2A	753	C

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Mol	Chain	Res	Type
1	2A	771	G
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	788	A
1	2A	789	A
1	2A	792	G
1	2A	795	C
1	2A	805	G
1	2A	809	G
1	2A	812	C
1	2A	819	A
1	2A	824	A
1	2A	826	U
1	2A	827	U
1	2A	832	G
1	2A	843	G
1	2A	857	C
1	2A	859	G
1	2A	865	C
1	2A	866	A
1	2A	869	G
1	2A	874	G
1	2A	877	U
1	2A	878	A
1	2A	879	G
1	2A	880	G
1	2A	884	C
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	892	G
1	2A	893	C
1	2A	894	C
1	2A	896	A
1	2A	897	C
1	2A	898	C
1	2A	900	A
1	2A	901	A
1	2A	910	A

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Mol	Chain	Res	Type
1	2A	917	A
1	2A	925	C
1	2A	932	G
1	2A	933	A
1	2A	934	G
1	2A	938	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	959	A
1	2A	961	C
1	2A	965	C
1	2A	968	G
1	2A	972	G
1	2A	974	G
1	2A	975	C
1	2A	980	A
1	2A	981	A
1	2A	983	A
1	2A	996	A
1	2A	1006	C
1	2A	1012	U
1	2A	1013	C
1	2A	1015	G
1	2A	1020	A
1	2A	1022	G
1	2A	1023	U
1	2A	1025	G
1	2A	1026	U
1	2A	1027	A
1	2A	1033	U
1	2A	1038	C
1	2A	1039	G
1	2A	1041	C
1	2A	1042	G
1	2A	1043	C
1	2A	1114	G
1	2A	1116	C
1	2A	1117	G
1	2A	1121	C
1	2A	1126	A

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Mol	Chain	Res	Type
1	2A	1129	A
1	2A	1130	U
1	2A	1132	A
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1142(A)	A
1	2A	1144	G
1	2A	1151	G
1	2A	1155	A
1	2A	1164	G
1	2A	1170	G
1	2A	1171	G
1	2A	1192	G
1	2A	1204	A
1	2A	1205	U
1	2A	1206	G
1	2A	1210	A
1	2A	1211	U
1	2A	1221	C
1	2A	1227	G
1	2A	1232	G
1	2A	1237	A
1	2A	1241	A
1	2A	1247	A
1	2A	1248	G
1	2A	1249	U
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1274	A
1	2A	1275	A
1	2A	1298	C
1	2A	1300	U
1	2A	1301	A
1	2A	1309	G
1	2A	1314	C
1	2A	1319	G
1	2A	1321	A
1	2A	1332	G

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Mol	Chain	Res	Type
1	2A	1341	U
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	1379	A
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1406	U
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1427	A
1	2A	1428	C
1	2A	1429	G
1	2A	1437	C
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1460	A
1	2A	1461	G
1	2A	1467	C
1	2A	1471	A
1	2A	1475	G
1	2A	1479	G
1	2A	1482	G
1	2A	1486	A
1	2A	1490	A
1	2A	1493	C
1	2A	1495	A
1	2A	1496	A
1	2A	1497	U
1	2A	1503	U
1	2A	1508	A
1	2A	1509(A)	A
1	2A	1531	C
1	2A	1532	C

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Mol	Chain	Res	Type
1	2A	1538	G
1	2A	1541	G
1	2A	1543	C
1	2A	1544	A
1	2A	1545	A
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	1584	C
1	2A	1586	A
1	2A	1588	C
1	2A	1593	G
1	2A	1608	A
1	2A	1609	A
1	2A	1616	A
1	2A	1622	G
1	2A	1638	C
1	2A	1639	U
1	2A	1640	C
1	2A	1648	C
1	2A	1653	G
1	2A	1654	A
1	2A	1661	G
1	2A	1663	C
1	2A	1664	A
1	2A	1670	C
1	2A	1674	G
1	2A	1675	C
1	2A	1676	A
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	1750	G
1	2A	1756	G

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Mol	Chain	Res	Type
1	2A	1757	U
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1776	G
1	2A	1780	A
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1816	G
1	2A	1833	U
1	2A	1835	G
1	2A	1847	A
1	2A	1848	A
1	2A	1861	G
1	2A	1864	U
1	2A	1866	C
1	2A	1878	G
1	2A	1890	A
1	2A	1899	G
1	2A	1900	A
1	2A	1906	G
1	2A	1910	G
1	2A	1914	C
1	2A	1915	5MU
1	2A	1927	A
1	2A	1929	G
1	2A	1930	G
1	2A	1936	A
1	2A	1938	A
1	2A	1941	C
1	2A	1943	U
1	2A	1944	U
1	2A	1955	U
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1993	U
1	2A	1997	G

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Mol	Chain	Res	Type
1	2A	2001	A
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	2032	G
1	2A	2033	A
1	2A	2043	C
1	2A	2052	G
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2062	A
1	2A	2063	C
1	2A	2068	U
1	2A	2069	G
1	2A	2101	G
1	2A	2104	G
1	2A	2107	C
1	2A	2109	U
1	2A	2110	G
1	2A	2111	C
1	2A	2112	G
1	2A	2113	U
1	2A	2115	G
1	2A	2116	G
1	2A	2118	U
1	2A	2119	A
1	2A	2120	G
1	2A	2122	U
1	2A	2123	G
1	2A	2126	A
1	2A	2127	G
1	2A	2129	C
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2137	C
1	2A	2138	C
1	2A	2140	C
1	2A	2142	C

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Mol	Chain	Res	Type
1	2A	2146	C
1	2A	2148	G
1	2A	2155	G
1	2A	2156	G
1	2A	2160	G
1	2A	2161	C
1	2A	2162	G
1	2A	2163	C
1	2A	2164	C
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2172	U
1	2A	2181	G
1	2A	2182	G
1	2A	2184	G
1	2A	2185	C
1	2A	2188	C
1	2A	2189	U
1	2A	2192	G
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2225	A
1	2A	2226	C
1	2A	2238	G
1	2A	2239	G
1	2A	2274	A
1	2A	2275	C
1	2A	2279	G
1	2A	2283	C
1	2A	2287	A
1	2A	2288	A
1	2A	2297	C
1	2A	2305	A
1	2A	2308	G
1	2A	2311	A
1	2A	2319	G
1	2A	2320	A
1	2A	2321	G
1	2A	2325	G

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Mol	Chain	Res	Type
1	2A	2327	A
1	2A	2333	A
1	2A	2336	A
1	2A	2337	G
1	2A	2340	G
1	2A	2345	G
1	2A	2347	C
1	2A	2350	C
1	2A	2366	A
1	2A	2376	A
1	2A	2379	G
1	2A	2383	G
1	2A	2384	G
1	2A	2385	C
1	2A	2391	G
1	2A	2394	C
1	2A	2396	G
1	2A	2402	C
1	2A	2406	U
1	2A	2408	U
1	2A	2410	G
1	2A	2422	A
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2435	A
1	2A	2439	A
1	2A	2441	C
1	2A	2446	G
1	2A	2448	A
1	2A	2449	U
1	2A	2468	G
1	2A	2476	A
1	2A	2481	G
1	2A	2498	C
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2507	C
1	2A	2518	A
1	2A	2525	G
1	2A	2529	G

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Mol	Chain	Res	Type
1	2A	2554	U
1	2A	2566	A
1	2A	2567	G
1	2A	2569	G
1	2A	2572	A
1	2A	2573	C
1	2A	2574	G
1	2A	2578	G
1	2A	2581	G
1	2A	2582	G
1	2A	2601	C
1	2A	2602	A
1	2A	2609	U
1	2A	2611	U
1	2A	2612	C
1	2A	2617	C
1	2A	2629	A
1	2A	2630	G
1	2A	2632	A
1	2A	2634	G
1	2A	2654	A
1	2A	2661	G
1	2A	2667	C
1	2A	2678	C
1	2A	2679	A
1	2A	2683	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	2751	G
1	2A	2758	A
1	2A	2764	A
1	2A	2765	A
1	2A	2766	G
1	2A	2767	C

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Mol	Chain	Res	Type
1	2A	2778	A
1	2A	2780	G
1	2A	2789	C
1	2A	2793	G
1	2A	2802	G
1	2A	2803	C
1	2A	2807	G
1	2A	2820	A
1	2A	2821	A
1	2A	2823	A
1	2A	2835	A
1	2A	2855	C
1	2A	2868	A
1	2A	2872	G
1	2A	2879	C
1	2A	2880	C
1	2A	2884	U
1	2A	2886	G
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	12	C
2	2B	13	A
2	2B	17	C
2	2B	18	G
2	2B	24	G
2	2B	30	C
2	2B	33	G
2	2B	41	U
2	2B	45	A
2	2B	53	A
2	2B	54	G
2	2B	56	G
2	2B	63	G
2	2B	66	A
2	2B	67	G
2	2B	72	G
2	2B	73	A
2	2B	74	U

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Mol	Chain	Res	Type
2	2B	75	G
2	2B	88	C
2	2B	90	A
2	2B	105	A
2	2B	106	G
2	2B	110	G
2	2B	114	C
2	2B	115	G
2	2B	116	G
2	2B	119	G
2	2B	120	A
32	2a	9	G
32	2a	22	G
32	2a	30	U
32	2a	32	A
32	2a	39	G
32	2a	47	C
32	2a	48	C
32	2a	51	A
32	2a	52	G
32	2a	54	C
32	2a	59	A
32	2a	66	G
32	2a	73	G
32	2a	79	G
32	2a	80	G
32	2a	88	A
32	2a	89	C
32	2a	101	A
32	2a	102	G
32	2a	116	A
32	2a	120	A
32	2a	121	C
32	2a	129(A)	G
32	2a	130	A
32	2a	131	C
32	2a	150	C
32	2a	151	A
32	2a	163	C
32	2a	174	C
32	2a	182	U
32	2a	189(B)	C

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Mol	Chain	Res	Type
32	2a	189(C)	C
32	2a	189(E)	U
32	2a	189(F)	U
32	2a	189(G)	G
32	2a	189(H)	G
32	2a	189(K)	U
32	2a	195	A
32	2a	197	A
32	2a	202	U
32	2a	204	U
32	2a	216	G
32	2a	217	C
32	2a	245	C
32	2a	247	G
32	2a	250	A
32	2a	251	G
32	2a	266	G
32	2a	267	C
32	2a	274	A
32	2a	281	G
32	2a	288	A
32	2a	289	G
32	2a	306	G
32	2a	321	A
32	2a	324	G
32	2a	328	C
32	2a	332	G
32	2a	348	G
32	2a	349	A
32	2a	350	G
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	375	U
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	410	G

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Mol	Chain	Res	Type
32	2a	411	A
32	2a	412	A
32	2a	413	G
32	2a	414	A
32	2a	421	U
32	2a	422	C
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	453	A
32	2a	457	C
32	2a	461	A
32	2a	470	C
32	2a	471	G
32	2a	474	G
32	2a	479	C
32	2a	482	A
32	2a	484	G
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	505	G
32	2a	506	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	518	C
32	2a	521	G
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	559	A
32	2a	561	U
32	2a	562	C
32	2a	564	C
32	2a	568	G
32	2a	572	A

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Mol	Chain	Res	Type
32	2a	573	A
32	2a	576	G
32	2a	577	G
32	2a	584	G
32	2a	587	G
32	2a	595	G
32	2a	612	C
32	2a	618	C
32	2a	627	G
32	2a	630	G
32	2a	642	A
32	2a	653	A
32	2a	661	G
32	2a	665	A
32	2a	671	G
32	2a	681	C
32	2a	682	G
32	2a	687	A
32	2a	688	G
32	2a	690	G
32	2a	695	A
32	2a	698	G
32	2a	702	A
32	2a	703	G
32	2a	721	G
32	2a	723	U
32	2a	731	G
32	2a	734	G
32	2a	749	C
32	2a	752	G
32	2a	755	G
32	2a	777	A
32	2a	782	A
32	2a	793	U
32	2a	794	A
32	2a	798	G
32	2a	802	A
32	2a	810	C
32	2a	815	A
32	2a	817	C
32	2a	818	G
32	2a	821	G

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Mol	Chain	Res	Type
32	2a	828	A
32	2a	837	G
32	2a	840	C
32	2a	841	U
32	2a	851	G
32	2a	853	G
32	2a	859	A
32	2a	872	A
32	2a	876	G
32	2a	902	G
32	2a	914	A
32	2a	916	G
32	2a	919	A
32	2a	926	G
32	2a	927	G
32	2a	931	C
32	2a	934	C
32	2a	942	G
32	2a	947	G
32	2a	954	G
32	2a	960	U
32	2a	961	U
32	2a	965	A
32	2a	969	A
32	2a	971	G
32	2a	972	C
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	983	A
32	2a	989	C
32	2a	990	C
32	2a	992	U
32	2a	993	G
32	2a	997	U
32	2a	1001(A)	G
32	2a	1002	G
32	2a	1003	G
32	2a	1004	A
32	2a	1005	A
32	2a	1006	C

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Mol	Chain	Res	Type
32	2a	1007	C
32	2a	1009	G
32	2a	1016	A
32	2a	1017	G
32	2a	1020	U
32	2a	1022	G
32	2a	1023	G
32	2a	1025	U
32	2a	1027	C
32	2a	1028	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1030(D)	A
32	2a	1031	G
32	2a	1036	G
32	2a	1039	C
32	2a	1040	U
32	2a	1045	C
32	2a	1055	A
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1077	G
32	2a	1081	G
32	2a	1084	G
32	2a	1086	U
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1108	G
32	2a	1109	C
32	2a	1113	C
32	2a	1115	C
32	2a	1117	G
32	2a	1122	U
32	2a	1129	C
32	2a	1130	A
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1140	C

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Mol	Chain	Res	Type
32	2a	1146	A
32	2a	1147	C
32	2a	1152	A
32	2a	1157	A
32	2a	1159	U
32	2a	1160	G
32	2a	1161	C
32	2a	1173	G
32	2a	1177	G
32	2a	1181	G
32	2a	1182	G
32	2a	1183	A
32	2a	1184	G
32	2a	1189	C
32	2a	1196	U
32	2a	1197	G
32	2a	1202	G
32	2a	1211	U
32	2a	1212	U
32	2a	1213	A
32	2a	1214	C
32	2a	1217	C
32	2a	1225	A
32	2a	1227	A
32	2a	1236	A
32	2a	1238	A
32	2a	1240	U
32	2a	1241	G
32	2a	1250	A
32	2a	1255	G
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1260	C
32	2a	1270	C
32	2a	1272	G
32	2a	1273	G
32	2a	1275	A
32	2a	1276	G
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A

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Mol	Chain	Res	Type
32	2a	1286	A
32	2a	1287	A
32	2a	1290	G
32	2a	1293	G
32	2a	1298	C
32	2a	1299	A
32	2a	1300	G
32	2a	1301	U
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1319	A
32	2a	1320	C
32	2a	1323	G
32	2a	1325	C
32	2a	1336	C
32	2a	1340	A
32	2a	1346	A
32	2a	1347	G
32	2a	1352	C
32	2a	1353	G
32	2a	1363	C
32	2a	1363(A)	A
32	2a	1364	U
32	2a	1370	G
32	2a	1379	G
32	2a	1397	C
32	2a	1399	C
32	2a	1402	4OC
32	2a	1406	U
32	2a	1419	G
32	2a	1440	C
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1446	U
32	2a	1447	A
32	2a	1452	C
32	2a	1462	G
32	2a	1474	G
32	2a	1483	A
32	2a	1492	A
32	2a	1493	A

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Mol	Chain	Res	Type
32	2a	1494	G
32	2a	1503	A
32	2a	1504	G
32	2a	1505	G
32	2a	1506	U
32	2a	1517	G
32	2a	1520	G
32	2a	1525	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	15	A
54	2x	6	G
54	2x	8	4SU
54	2x	9	G
54	2x	20	U
54	2x	21	A
54	2x	47	U
54	2x	48	C
54	2x	61	C
54	2x	76	A

All (43) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	195	A
1	1A	266	G
1	1A	278	A
1	1A	548	A
1	1A	1047	G
1	1A	1065	U
1	1A	1067	A
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1275	A
1	1A	1508	A
1	1A	1944	U
1	1A	1992	G
1	1A	2134	A
1	1A	2158	A

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Mol	Chain	Res	Type
1	1A	2183	C
1	1A	2288	A
1	1A	2430	A
1	1A	2473	U
1	1A	2689	U
2	1B	1	U
1	2A	195	A
1	2A	228	A
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	528	A
1	2A	669	G
1	2A	752	A
1	2A	784	A
1	2A	856	C
1	2A	900	A
1	2A	1026	U
1	2A	1210	A
1	2A	1240	U
1	2A	1379	A
1	2A	1530	C
1	2A	1653	G
1	2A	1913	A
1	2A	1992	G
1	2A	2022	U
1	2A	2689	U

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

56 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	$\# Z > 2$
32	5MC	2a	967	32	19,22,23	1.68	3 (15%)	26,32,35	1.23	4 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
32	2MG	2a	1207	55,32	23,26,27	1.24	4 (17%)	33,38,41	2.11	7 (21%)
32	PSU	1a	516	55,32	18,21,22	1.39	2 (11%)	21,30,33	1.97	4 (19%)
54	PSU	1x	55	54	18,21,22	1.41	2 (11%)	21,30,33	1.95	4 (19%)
32	7MG	1a	527	55,32	23,26,27	1.33	3 (13%)	27,39,42	2.59	7 (25%)
54	5MU	2x	54	54	19,22,23	1.40	5 (26%)	27,32,35	2.15	6 (22%)
1	2MA	1A	2503	1,55	22,25,26	1.42	5 (22%)	32,37,40	2.31	10 (31%)
32	M2G	1a	966	55,32	24,27,28	1.35	4 (16%)	33,40,43	1.98	5 (15%)
1	OMG	2A	2251	1,55,54	23,26,27	1.29	3 (13%)	32,38,41	1.90	6 (18%)
32	MA6	2a	1518	32	23,26,27	1.54	5 (21%)	33,38,41	2.33	13 (39%)
43	0TD	2l	92	43	8,9,10	4.72	2 (25%)	6,11,13	6.44	3 (50%)
32	MA6	2a	1519	32	23,26,27	1.58	4 (17%)	33,38,41	2.37	13 (39%)
32	5MC	2a	1407	32	19,22,23	1.68	3 (15%)	26,32,35	1.27	4 (15%)
1	PSU	1A	2605	1	18,21,22	1.39	2 (11%)	21,30,33	2.13	3 (14%)
1	5MC	1A	1962	1	19,22,23	1.58	3 (15%)	26,32,35	1.10	2 (7%)
1	PSU	2A	1911	1	18,21,22	1.34	2 (11%)	21,30,33	1.96	3 (14%)
1	5MU	2A	1915	1,55	19,22,23	1.54	6 (31%)	27,32,35	2.11	7 (25%)
32	7MG	2a	527	55,32	23,26,27	1.37	4 (17%)	27,39,42	2.53	8 (29%)
32	UR3	2a	1498	32	19,22,23	1.07	1 (5%)	26,32,35	1.65	4 (15%)
54	4SU	2x	8	54	18,21,22	2.12	6 (33%)	25,30,33	1.67	6 (24%)
1	5MU	1A	1939	1	19,22,23	1.39	5 (26%)	27,32,35	2.18	6 (22%)
54	PSU	2x	55	54	18,21,22	1.35	2 (11%)	21,30,33	2.02	4 (19%)
1	4OC	1A	1920	1	19,22,24	0.82	0	25,31,35	1.09	3 (12%)
1	PSU	1A	1911	1	18,21,22	1.38	2 (11%)	21,30,33	2.00	3 (14%)
32	5MC	1a	1400	32	19,22,23	1.70	3 (15%)	26,32,35	1.22	3 (11%)
32	MA6	1a	1519	32	23,26,27	1.57	5 (21%)	33,38,41	2.26	12 (36%)
1	5MC	2A	1962	1,55	19,22,23	1.66	3 (15%)	26,32,35	1.38	6 (23%)
32	5MC	1a	967	32	19,22,23	1.46	3 (15%)	26,32,35	1.14	3 (11%)
1	PSU	1A	1917	1	18,21,22	1.36	3 (16%)	21,30,33	2.14	4 (19%)
32	UR3	1a	1498	32	19,22,23	1.00	1 (5%)	26,32,35	1.84	3 (11%)
1	5MC	1A	1942	1	19,22,23	1.46	3 (15%)	26,32,35	1.16	3 (11%)
1	5MC	2A	1942	1,55	19,22,23	1.78	3 (15%)	26,32,35	1.29	2 (7%)
1	5MU	2A	1939	1	19,22,23	1.55	6 (31%)	27,32,35	2.27	7 (25%)
1	4OC	2A	1920	1	19,22,24	0.80	0	25,31,35	1.08	1 (4%)
1	2MA	2A	2503	1,55	22,25,26	1.51	4 (18%)	32,37,40	2.24	8 (25%)
1	2MU	2A	2552	1,55	19,22,24	1.30	2 (10%)	25,31,36	1.91	6 (24%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
1	PSU	2A	2605	1	18,21,22	1.36	2 (11%)	21,30,33	2.04	4 (19%)
54	4SU	1x	8	54	18,21,22	2.19	5 (27%)	25,30,33	1.49	4 (16%)
1	PSU	2A	1917	1	18,21,22	1.39	2 (11%)	21,30,33	2.08	4 (19%)
54	5MC	2x	32	54	19,22,23	1.75	3 (15%)	26,32,35	1.24	3 (11%)
32	5MC	2a	1400	54,32	19,22,23	1.90	3 (15%)	26,32,35	1.36	4 (15%)
32	5MC	2a	1404	32	19,22,23	1.60	3 (15%)	26,32,35	1.22	3 (11%)
1	2MU	1A	2552	1,55	19,22,24	1.27	3 (15%)	25,31,36	1.96	5 (20%)
32	4OC	1a	1402	32	20,23,24	0.79	0	25,32,35	0.90	0
1	5MU	1A	1915	1	19,22,23	1.40	5 (26%)	27,32,35	2.20	7 (25%)
1	OMG	1A	2251	1,55,54	23,26,27	1.30	3 (13%)	32,38,41	2.18	7 (21%)
54	5MU	1x	54	54	19,22,23	1.40	6 (31%)	27,32,35	1.68	5 (18%)
32	2MG	1a	1207	32	23,26,27	1.26	4 (17%)	33,38,41	2.22	6 (18%)
32	MA6	1a	1518	32	23,26,27	1.44	5 (21%)	33,38,41	2.34	13 (39%)
32	5MC	1a	1404	32	19,22,23	1.74	3 (15%)	26,32,35	1.11	3 (11%)
32	PSU	2a	516	32	18,21,22	1.40	2 (11%)	21,30,33	1.90	4 (19%)
32	5MC	1a	1407	32	19,22,23	1.54	3 (15%)	26,32,35	1.16	3 (11%)
43	0TD	1l	92	43	8,9,10	4.33	1 (12%)	6,11,13	2.26	3 (50%)
32	4OC	2a	1402	32	20,23,24	0.79	0	25,32,35	1.05	2 (8%)
32	M2G	2a	966	55,32	24,27,28	1.32	3 (12%)	33,40,43	1.92	5 (15%)
54	5MC	1x	32	54	19,22,23	1.60	3 (15%)	26,32,35	1.26	3 (11%)

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
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	55,32	-	1/9/27/28	0/3/3/3
32	PSU	1a	516	55,32	-	0/7/25/26	0/2/2/2
54	PSU	1x	55	54	-	0/7/25/26	0/2/2/2
32	7MG	1a	527	55,32	-	2/7/37/38	0/3/3/3
54	5MU	2x	54	54	-	0/7/25/26	0/2/2/2
1	2MA	1A	2503	1,55	-	2/7/25/26	0/3/3/3
32	M2G	1a	966	55,32	-	1/11/29/30	0/3/3/3
1	OMG	2A	2251	1,55,54	-	0/9/27/28	0/3/3/3
32	MA6	2a	1518	32	-	3/11/29/30	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
43	0TD	2l	92	43	-	1/7/12/14	-
32	MA6	2a	1519	32	-	4/11/29/30	0/3/3/3
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
1	PSU	1A	2605	1	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	1	-	0/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	1/7/25/26	0/2/2/2
1	5MU	2A	1915	1,55	-	1/7/25/26	0/2/2/2
32	7MG	2a	527	55,32	-	2/7/37/38	0/3/3/3
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
54	4SU	2x	8	54	-	0/7/25/26	0/2/2/2
1	5MU	1A	1939	1	-	0/7/25/26	0/2/2/2
54	PSU	2x	55	54	-	0/7/25/26	0/2/2/2
1	4OC	1A	1920	1	-	2/9/27/30	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	2/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	3/11/29/30	0/3/3/3
1	5MC	2A	1962	1,55	-	0/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	2/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1,55	-	0/7/25/26	0/2/2/2
1	5MU	2A	1939	1	-	0/7/25/26	0/2/2/2
1	4OC	2A	1920	1	-	1/9/27/30	0/2/2/2
1	2MA	2A	2503	1,55	-	2/7/25/26	0/3/3/3
1	2MU	2A	2552	1,55	-	2/9/27/28	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
54	4SU	1x	8	54	-	0/7/25/26	0/2/2/2
1	PSU	2A	1917	1	-	1/7/25/26	0/2/2/2
54	5MC	2x	32	54	-	0/7/25/26	0/2/2/2
32	5MC	2a	1400	54,32	-	0/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	0/7/25/26	0/2/2/2
1	2MU	1A	2552	1,55	-	0/9/27/28	0/2/2/2
32	4OC	1a	1402	32	-	2/9/29/30	0/2/2/2
1	5MU	1A	1915	1	-	0/7/25/26	0/2/2/2
1	OMG	1A	2251	1,55,54	-	0/9/27/28	0/3/3/3
54	5MU	1x	54	54	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	2/9/27/28	0/3/3/3
32	MA6	1a	1518	32	-	3/11/29/30	0/3/3/3
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	2/7/12/14	-
32	4OC	2a	1402	32	-	2/9/29/30	0/2/2/2
32	M2G	2a	966	55,32	-	0/11/29/30	0/3/3/3
54	5MC	1x	32	54	-	0/7/25/26	0/2/2/2

All (173) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-12.79	1.69	1.82
43	1l	92	0TD	CB-SB	-11.86	1.70	1.82
32	2a	1400	5MC	C5-C4	7.01	1.49	1.44
1	2A	1942	5MC	C5-C4	6.48	1.49	1.44
32	1a	1404	5MC	C5-C4	6.45	1.49	1.44
54	2x	32	5MC	C5-C4	6.37	1.48	1.44
32	1a	1400	5MC	C5-C4	6.20	1.48	1.44
32	2a	967	5MC	C5-C4	6.17	1.48	1.44
32	2a	1407	5MC	C5-C4	6.08	1.48	1.44
1	2A	1962	5MC	C5-C4	5.92	1.48	1.44
32	2a	1404	5MC	C5-C4	5.69	1.48	1.44
1	1A	1962	5MC	C5-C4	5.65	1.48	1.44
54	1x	32	5MC	C5-C4	5.62	1.48	1.44
32	1a	1407	5MC	C5-C4	5.36	1.48	1.44
32	1a	967	5MC	C5-C4	5.09	1.48	1.44
54	1x	8	4SU	C4-N3	-5.05	1.32	1.37
1	1A	1942	5MC	C5-C4	4.96	1.47	1.44
32	2a	1519	MA6	C5-C4	4.84	1.47	1.39
54	2x	8	4SU	C4-S4	-4.78	1.60	1.68
54	2x	8	4SU	C4-N3	-4.75	1.32	1.37
32	1a	1519	MA6	C5-C4	4.74	1.47	1.39
32	2a	1518	MA6	C5-C4	4.66	1.47	1.39
1	2A	2503	2MA	C5-C4	4.66	1.47	1.39
54	1x	8	4SU	C4-S4	-4.62	1.60	1.68
32	1a	1518	MA6	C5-C4	4.44	1.47	1.39
54	1x	55	PSU	C6-C5	4.06	1.39	1.35
1	1A	2503	2MA	C5-C4	4.01	1.46	1.39
54	1x	8	4SU	C2-N3	-3.90	1.31	1.38
32	2a	527	7MG	C4-N9	-3.78	1.33	1.37
32	1a	516	PSU	C6-C5	3.78	1.39	1.35
32	2a	516	PSU	C6-C5	3.70	1.39	1.35
1	2A	1917	PSU	C6-C5	3.51	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1911	PSU	C6-C5	3.46	1.39	1.35
54	1x	8	4SU	C5-C4	-3.45	1.38	1.42
1	2A	2605	PSU	C6-C5	3.43	1.39	1.35
54	2x	55	PSU	C6-C5	3.35	1.39	1.35
1	1A	2605	PSU	C6-C5	3.35	1.39	1.35
32	1a	966	M2G	C5-C4	3.33	1.47	1.38
32	1a	527	7MG	C4-N9	-3.32	1.33	1.37
1	1A	2251	OMG	C5-C4	3.31	1.47	1.38
32	2a	966	M2G	C5-C4	3.26	1.47	1.38
1	2A	1911	PSU	C6-C5	3.23	1.38	1.35
32	2a	1207	2MG	C5-C4	3.21	1.47	1.38
32	2a	1519	MA6	C5-C6	3.20	1.49	1.41
32	1a	527	7MG	C5-C4	3.19	1.47	1.37
1	2A	1939	5MU	C4-N3	-3.19	1.32	1.38
54	2x	8	4SU	C2-N3	-3.19	1.32	1.38
32	2a	527	7MG	C5-C4	3.17	1.47	1.37
1	2A	2251	OMG	C5-C4	3.16	1.47	1.38
32	2a	1518	MA6	C5-C6	3.15	1.49	1.41
32	2a	1400	5MC	C6-C5	3.12	1.39	1.34
54	2x	8	4SU	C5-C4	-3.12	1.38	1.42
32	1a	1207	2MG	C5-C4	3.10	1.47	1.38
1	2A	2251	OMG	C6-N1	-3.04	1.33	1.38
1	1A	2251	OMG	C6-N1	-3.03	1.33	1.38
1	2A	1915	5MU	C6-C5	3.01	1.39	1.34
1	2A	2552	2MU	C4-N3	-2.99	1.33	1.38
32	1a	1519	MA6	C5-C6	2.97	1.49	1.41
1	2A	1942	5MC	C6-C5	2.96	1.39	1.34
32	2a	966	M2G	C2-N2	2.96	1.40	1.35
54	2x	32	5MC	C6-C5	2.95	1.39	1.34
1	2A	1915	5MU	C4-C5	2.92	1.49	1.44
32	1a	1400	5MC	C6-C5	2.91	1.39	1.34
1	2A	1939	5MU	C6-C5	2.86	1.39	1.34
32	2a	1404	5MC	C6-C5	2.85	1.39	1.34
1	2A	1915	5MU	C4-N3	-2.85	1.33	1.38
1	1A	1917	PSU	C6-C5	2.83	1.38	1.35
54	1x	54	5MU	C4-N3	-2.81	1.33	1.38
54	1x	32	5MC	C6-C5	2.81	1.39	1.34
32	1a	966	M2G	C6-N1	-2.80	1.33	1.38
54	2x	54	5MU	C6-C5	2.80	1.39	1.34
32	1a	1407	5MC	C6-C5	2.78	1.39	1.34
32	1a	966	M2G	C2-N2	2.77	1.40	1.35
1	1A	1939	5MU	C4-N3	-2.75	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1917	PSU	C4-N3	-2.73	1.33	1.38
54	1x	54	5MU	C6-C5	2.71	1.39	1.34
1	1A	2552	2MU	C4-N3	-2.69	1.34	1.38
1	2A	1917	PSU	C4-N3	-2.69	1.33	1.38
1	2A	2251	OMG	C5-N7	-2.68	1.33	1.39
1	1A	1915	5MU	C6-C5	2.68	1.39	1.34
1	1A	1939	5MU	C6-C5	2.67	1.39	1.34
32	1a	1404	5MC	C6-C5	2.67	1.39	1.34
1	2A	1911	PSU	C4-N3	-2.67	1.33	1.38
1	1A	1915	5MU	C4-N3	-2.63	1.33	1.38
54	2x	55	PSU	C4-N3	-2.61	1.34	1.38
32	2a	1407	5MC	C6-C5	2.61	1.38	1.34
1	1A	2605	PSU	C4-N3	-2.60	1.34	1.38
1	2A	2503	2MA	C5-C6	2.60	1.48	1.41
1	2A	1939	5MU	C2-N3	-2.59	1.33	1.38
32	2a	967	5MC	C6-C5	2.59	1.38	1.34
1	2A	1962	5MC	C6-C5	2.58	1.38	1.34
1	1A	1915	5MU	C2-N1	2.57	1.42	1.38
32	1a	1518	MA6	C5-C6	2.57	1.48	1.41
1	1A	2503	2MA	C5-C6	2.57	1.48	1.41
32	1a	1207	2MG	C6-N1	-2.56	1.34	1.38
1	2A	1939	5MU	C6-N1	-2.54	1.33	1.38
1	1A	1962	5MC	C6-C5	2.54	1.38	1.34
54	2x	54	5MU	C4-N3	-2.52	1.34	1.38
1	1A	1942	5MC	C6-C5	2.52	1.38	1.34
1	1A	1911	PSU	C4-N3	-2.52	1.34	1.38
32	2a	1498	UR3	C2-N1	2.50	1.42	1.38
1	2A	2605	PSU	C4-N3	-2.49	1.34	1.38
1	2A	1915	5MU	C2-N1	2.49	1.42	1.38
1	2A	2503	2MA	C8-N7	2.48	1.36	1.31
1	2A	1939	5MU	C4-C5	2.45	1.48	1.44
32	2a	966	M2G	C6-N1	-2.44	1.34	1.38
1	1A	1942	5MC	C6-N1	-2.44	1.33	1.38
54	2x	54	5MU	C4-C5	2.43	1.48	1.44
1	1A	2552	2MU	C5-C4	2.42	1.49	1.43
32	1a	967	5MC	C6-C5	2.41	1.38	1.34
1	1A	1939	5MU	C2-N3	-2.41	1.33	1.38
1	1A	2503	2MA	C4-N9	-2.41	1.32	1.37
1	1A	2503	2MA	C8-N7	2.41	1.36	1.31
32	1a	1519	MA6	C8-N7	2.40	1.36	1.31
32	2a	1207	2MG	C6-N1	-2.39	1.34	1.38
1	2A	1942	5MC	C6-N1	-2.39	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1519	MA6	C8-N7	2.37	1.36	1.31
54	2x	8	4SU	C2-N1	2.35	1.42	1.38
32	1a	1498	UR3	C2-N1	2.34	1.41	1.38
1	2A	1962	5MC	C6-N1	-2.34	1.34	1.38
1	1A	1939	5MU	C6-N1	-2.32	1.34	1.38
54	1x	55	PSU	C4-N3	-2.32	1.34	1.38
32	2a	516	PSU	C4-N3	-2.31	1.34	1.38
1	1A	1962	5MC	C6-N1	-2.30	1.34	1.38
32	2a	1400	5MC	C6-N1	-2.30	1.34	1.38
32	2a	1518	MA6	C8-N7	2.29	1.36	1.31
1	1A	2251	OMG	C5-N7	-2.29	1.34	1.39
43	2l	92	0TD	CB-CA	-2.28	1.54	1.54
54	2x	54	5MU	C2-N1	2.27	1.42	1.38
32	1a	1407	5MC	C6-N1	-2.27	1.34	1.38
32	1a	516	PSU	C4-N3	-2.26	1.34	1.38
1	2A	2503	2MA	C5-N7	-2.26	1.35	1.39
32	1a	1207	2MG	C2-N3	2.26	1.36	1.32
1	1A	1915	5MU	C4-C5	2.26	1.48	1.44
1	1A	1939	5MU	C4-C5	2.25	1.48	1.44
1	2A	2552	2MU	C5-C4	2.25	1.48	1.43
54	1x	32	5MC	C6-N1	-2.21	1.34	1.38
32	1a	1519	MA6	C4-N9	-2.21	1.33	1.37
54	1x	8	4SU	O2-C2	2.21	1.27	1.23
54	2x	32	5MC	C6-N1	-2.20	1.34	1.38
54	1x	54	5MU	C2-N3	-2.20	1.34	1.38
32	1a	967	5MC	C6-N1	-2.19	1.34	1.38
32	2a	1407	5MC	C6-N1	-2.19	1.34	1.38
32	1a	1518	MA6	C4-N9	-2.18	1.33	1.37
32	1a	527	7MG	C6-N1	-2.17	1.34	1.38
32	1a	966	M2G	C5-N7	-2.17	1.34	1.39
32	1a	1518	MA6	C5-N7	-2.16	1.35	1.39
32	1a	1519	MA6	C5-N7	-2.16	1.35	1.39
54	2x	54	5MU	C6-N1	-2.15	1.34	1.38
1	2A	1915	5MU	C6-N1	-2.14	1.34	1.38
1	1A	2503	2MA	C5-N7	-2.14	1.35	1.39
1	2A	1939	5MU	C2-N1	2.14	1.41	1.38
32	1a	1518	MA6	C8-N7	2.13	1.35	1.31
32	2a	1207	2MG	C5-N7	-2.13	1.34	1.39
32	2a	967	5MC	C6-N1	-2.13	1.34	1.38
32	2a	1207	2MG	C4-N9	-2.13	1.32	1.38
1	1A	2552	2MU	C2-N1	2.13	1.41	1.38
32	2a	1519	MA6	C5-N7	-2.11	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2x	8	4SU	O2-C2	2.11	1.26	1.23
32	2a	1404	5MC	C6-N1	-2.11	1.34	1.38
32	2a	1518	MA6	C5-N7	-2.11	1.35	1.39
32	1a	1400	5MC	C6-N1	-2.10	1.34	1.38
1	2A	1915	5MU	C2-N3	-2.10	1.34	1.38
32	2a	527	7MG	C8-N9	2.09	1.47	1.45
54	1x	54	5MU	C2-N1	2.09	1.41	1.38
1	1A	1915	5MU	C6-N1	-2.08	1.34	1.38
54	1x	54	5MU	C4-C5	2.07	1.48	1.44
54	1x	54	5MU	C6-N1	-2.05	1.34	1.38
32	1a	1404	5MC	C6-N1	-2.04	1.34	1.38
32	1a	1207	2MG	C5-N7	-2.02	1.35	1.39
32	2a	1518	MA6	C4-N9	-2.01	1.33	1.37
1	1A	1917	PSU	C2-N3	-2.00	1.34	1.37
32	2a	527	7MG	C6-N1	-2.00	1.35	1.38

All (281) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	2l	92	0TD	CSB-SB-CB	-15.22	75.00	102.36
32	1a	527	7MG	N9-C4-N3	8.73	138.25	125.46
32	2a	527	7MG	N9-C4-N3	8.13	137.37	125.46
1	2A	2503	2MA	C5-C4-N3	-7.94	118.82	127.18
1	1A	2503	2MA	C5-C4-N3	-7.36	119.43	127.18
1	1A	2251	OMG	C5-C4-N3	-7.32	116.74	128.39
32	1a	1498	UR3	C4-N3-C2	-7.31	118.70	124.58
32	1a	1207	2MG	C2-N3-C4	7.23	121.04	112.00
32	1a	966	M2G	C5-C4-N3	-6.84	117.50	128.39
1	1A	1917	PSU	N1-C2-N3	6.56	122.09	115.17
1	2A	1917	PSU	N1-C2-N3	6.54	122.07	115.17
1	1A	2605	PSU	N1-C2-N3	6.52	122.05	115.17
54	2x	55	PSU	N1-C2-N3	6.40	121.92	115.17
32	2a	1207	2MG	C2-N3-C4	6.38	119.98	112.00
32	2a	966	M2G	C5-C4-N3	-6.35	118.28	128.39
32	1a	1207	2MG	C5-C4-N3	-6.30	118.37	128.39
1	2A	2251	OMG	C5-C4-N3	-6.28	118.39	128.39
32	2a	1498	UR3	C4-N3-C2	-6.22	119.57	124.58
1	2A	2605	PSU	N1-C2-N3	6.17	121.68	115.17
54	1x	55	PSU	N1-C2-N3	6.14	121.65	115.17
1	1A	1911	PSU	N1-C2-N3	6.09	121.60	115.17
32	2a	527	7MG	N9-C8-N7	-5.99	94.89	103.37
1	2A	1911	PSU	N1-C2-N3	5.90	121.39	115.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	2552	2MU	N3-C2-N1	5.88	122.55	114.89
32	1a	516	PSU	N1-C2-N3	5.88	121.37	115.17
1	2A	2503	2MA	N3-C4-N9	5.83	134.39	126.99
32	2a	516	PSU	N1-C2-N3	5.83	121.32	115.17
1	2A	1939	5MU	C4-N3-C2	-5.76	119.79	127.34
32	2a	1519	MA6	C5-C4-N3	-5.72	118.84	126.72
1	2A	1939	5MU	N3-C2-N1	5.72	122.33	114.89
1	1A	2503	2MA	N3-C4-N9	5.71	134.24	126.99
1	2A	1915	5MU	N3-C2-N1	5.61	122.20	114.89
1	1A	2251	OMG	N9-C4-N3	5.60	137.15	125.95
32	2a	1207	2MG	C5-C4-N3	-5.51	119.62	128.39
54	2x	54	5MU	N3-C2-N1	5.42	121.94	114.89
32	1a	1519	MA6	C5-C4-N3	-5.42	119.26	126.72
32	1a	527	7MG	N9-C8-N7	-5.35	95.79	103.37
32	1a	527	7MG	C5-C4-N3	-5.35	118.09	128.13
1	1A	1915	5MU	C4-N3-C2	-5.34	120.34	127.34
1	1A	1939	5MU	C4-N3-C2	-5.32	120.37	127.34
54	2x	54	5MU	C4-N3-C2	-5.31	120.38	127.34
1	1A	1915	5MU	N3-C2-N1	5.23	121.69	114.89
32	2a	1518	MA6	C5-C4-N3	-5.21	119.55	126.72
32	1a	1518	MA6	C5-C4-N3	-5.16	119.61	126.72
1	2A	1915	5MU	C4-N3-C2	-5.16	120.58	127.34
1	2A	2552	2MU	N3-C2-N1	5.16	121.60	114.89
1	1A	2251	OMG	C2-N3-C4	5.14	121.16	112.30
1	1A	1939	5MU	N3-C2-N1	5.07	121.49	114.89
32	1a	966	M2G	N9-C4-N3	5.03	136.00	125.95
1	2A	2251	OMG	N9-C4-N3	4.99	135.93	125.95
1	2A	1939	5MU	C5-C6-N1	-4.94	117.94	123.31
1	2A	2552	2MU	C4-N3-C2	-4.89	120.54	126.61
32	2a	966	M2G	N9-C4-N3	4.86	135.67	125.95
1	1A	2552	2MU	C4-N3-C2	-4.86	120.58	126.61
1	1A	1915	5MU	C5-C4-N3	4.77	119.47	115.32
1	1A	1939	5MU	C5-C4-N3	4.76	119.46	115.32
32	1a	1207	2MG	N9-C4-N3	4.72	135.39	125.95
32	2a	966	M2G	C2-N3-C4	4.69	121.19	112.51
32	1a	1518	MA6	C9-N6-C6	-4.67	108.64	120.52
1	2A	2251	OMG	C2-N3-C4	4.60	120.23	112.30
32	1a	966	M2G	C2-N3-C4	4.59	121.01	112.51
1	2A	1939	5MU	C5-C4-N3	4.58	119.30	115.32
32	2a	1518	MA6	C2-N1-C6	4.54	122.92	111.83
32	2a	1518	MA6	C4-C5-N7	-4.52	105.41	110.58
32	2a	1518	MA6	C9-N6-C6	-4.50	109.06	120.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	527	7MG	C5-C4-N3	-4.49	119.70	128.13
32	1a	1518	MA6	C2-N1-C6	4.48	122.77	111.83
1	2A	1942	5MC	C5-C6-N1	-4.47	118.46	123.31
32	1a	527	7MG	C2-N3-C4	4.44	119.95	112.30
1	1A	1917	PSU	C4-N3-C2	-4.43	120.26	126.37
32	2a	1519	MA6	C4-C5-N7	-4.37	105.59	110.58
1	1A	1915	5MU	O4-C4-C5	-4.34	119.95	124.92
32	1a	1519	MA6	C4-C5-N7	-4.32	105.64	110.58
32	1a	1519	MA6	C2-N1-C6	4.29	122.30	111.83
32	2a	1519	MA6	C2-N1-C6	4.28	122.28	111.83
1	1A	2605	PSU	C4-N3-C2	-4.27	120.49	126.37
54	1x	54	5MU	N3-C2-N1	4.27	120.45	114.89
32	2a	1519	MA6	N3-C4-N9	4.26	134.41	127.17
1	2A	1917	PSU	C4-N3-C2	-4.23	120.54	126.37
54	2x	54	5MU	C5-C4-N3	4.19	118.97	115.32
32	2a	1519	MA6	C9-N6-C6	-4.18	109.89	120.52
32	1a	1518	MA6	C4-C5-N7	-4.16	105.82	110.58
54	2x	55	PSU	C4-N3-C2	-4.12	120.69	126.37
1	1A	1939	5MU	O4-C4-C5	-4.05	120.29	124.92
1	2A	1911	PSU	C4-N3-C2	-4.05	120.80	126.37
54	2x	8	4SU	C1'-N1-C2	4.04	124.84	117.59
1	1A	2605	PSU	O2-C2-N1	-3.98	118.68	122.79
32	2a	527	7MG	C2-N3-C4	3.98	119.15	112.30
1	1A	1911	PSU	C4-N3-C2	-3.97	120.91	126.37
1	2A	2605	PSU	C4-N3-C2	-3.96	120.91	126.37
32	1a	1518	MA6	N3-C4-N9	3.96	133.90	127.17
1	1A	1939	5MU	C5-C6-N1	-3.89	119.08	123.31
32	1a	1519	MA6	N3-C4-N9	3.89	133.78	127.17
1	2A	1915	5MU	C5-C4-N3	3.88	118.70	115.32
32	1a	516	PSU	O2-C2-N1	-3.86	118.81	122.79
54	2x	8	4SU	C5-C4-N3	3.85	118.33	114.75
54	2x	54	5MU	O4-C4-C5	-3.80	120.57	124.92
1	2A	1915	5MU	C5-C6-N1	-3.79	119.19	123.31
32	2a	1400	5MC	C5-C6-N1	-3.78	119.21	123.31
1	1A	1911	PSU	O2-C2-N1	-3.75	118.92	122.79
32	2a	1519	MA6	C2-N3-C4	3.74	120.98	111.83
32	1a	1519	MA6	C9-N6-C6	-3.74	111.00	120.52
32	1a	1498	UR3	C5-C4-N3	3.73	119.95	115.04
32	2a	1207	2MG	C6-C5-N7	3.72	137.05	130.29
54	1x	55	PSU	C4-N3-C2	-3.71	121.26	126.37
1	1A	1962	5MC	C5-C6-N1	-3.71	119.28	123.31
1	2A	2503	2MA	C4-C5-N7	-3.70	106.35	110.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	1518	MA6	N3-C4-N9	3.69	133.44	127.17
32	1a	516	PSU	C4-N3-C2	-3.67	121.31	126.37
54	1x	8	4SU	C6-C5-C4	-3.67	116.77	119.95
32	2a	516	PSU	C4-N3-C2	-3.65	121.34	126.37
1	2A	1911	PSU	O2-C2-N1	-3.65	119.03	122.79
32	2a	1518	MA6	C2-N3-C4	3.65	120.74	111.83
43	1l	92	0TD	CSB-SB-CB	3.59	108.83	102.36
1	1A	1942	5MC	C5-C6-N1	-3.58	119.42	123.31
32	2a	1518	MA6	N1-C2-N3	-3.56	123.19	128.58
54	1x	54	5MU	C4-N3-C2	-3.56	122.68	127.34
1	1A	1917	PSU	O2-C2-N1	-3.54	119.14	122.79
1	2A	2605	PSU	O2-C2-N1	-3.53	119.15	122.79
1	2A	1917	PSU	O2-C2-N1	-3.50	119.18	122.79
32	1a	1518	MA6	N1-C2-N3	-3.49	123.29	128.58
32	1a	1518	MA6	C2-N3-C4	3.49	120.36	111.83
32	1a	1519	MA6	C2-N3-C4	3.48	120.33	111.83
54	2x	32	5MC	C5-C6-N1	-3.48	119.54	123.31
54	1x	8	4SU	C5-C4-N3	3.47	117.98	114.75
1	1A	2503	2MA	C4-N9-C8	3.47	109.38	105.74
1	1A	2503	2MA	C4-C5-N7	-3.47	106.62	110.58
32	2a	516	PSU	O2-C2-N1	-3.44	119.24	122.79
32	1a	1407	5MC	C5-C4-N3	-3.44	118.23	121.75
54	1x	8	4SU	O2-C2-N1	3.41	127.23	122.80
32	2a	1207	2MG	N9-C4-N3	3.40	132.75	125.95
54	2x	54	5MU	C5-C6-N1	-3.36	119.67	123.31
54	1x	32	5MC	C5-C6-N1	-3.34	119.69	123.31
32	2a	1519	MA6	N1-C2-N3	-3.31	123.57	128.58
32	1a	1207	2MG	C6-C5-N7	3.29	136.27	130.29
32	1a	1518	MA6	C4-N9-C8	3.28	109.18	105.74
32	1a	1400	5MC	C5-C4-N3	-3.27	118.40	121.75
54	1x	54	5MU	O4-C4-C5	-3.22	121.23	124.92
43	2l	92	0TD	OD2-CG-CB	3.22	120.10	113.15
32	2a	1207	2MG	N2-C2-N3	-3.19	116.44	120.51
43	1l	92	0TD	OD2-CG-CB	3.19	120.04	113.15
54	2x	55	PSU	O2-C2-N1	-3.18	119.50	122.79
54	2x	32	5MC	C5-C4-N3	-3.18	118.49	121.75
1	1A	1915	5MU	C5-C6-N1	-3.17	119.87	123.31
1	1A	2503	2MA	N6-C6-N1	3.17	121.31	117.03
54	1x	55	PSU	O2-C2-N1	-3.14	119.55	122.79
32	2a	1518	MA6	C5-N7-C8	3.14	108.38	103.45
32	2a	966	M2G	C6-C5-N7	3.14	136.00	130.29
1	1A	2552	2MU	O2-C2-N1	-3.13	118.72	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	1519	MA6	C5-N7-C8	3.11	108.34	103.45
32	1a	1519	MA6	N1-C2-N3	-3.08	123.91	128.58
32	2a	1404	5MC	C5-C4-N3	-3.07	118.61	121.75
1	2A	2503	2MA	N6-C6-N1	3.07	121.16	117.03
32	1a	1404	5MC	C5-C6-N1	-3.05	120.00	123.31
32	2a	1400	5MC	C5-C4-N3	-3.05	118.62	121.75
32	1a	1518	MA6	C5-N7-C8	3.05	108.24	103.45
32	2a	1207	2MG	C4-C5-N7	-3.04	105.85	110.67
32	2a	1498	UR3	C5-C4-N3	3.04	119.04	115.04
54	1x	32	5MC	C5-C4-N3	-3.02	118.66	121.75
54	1x	32	5MC	O2-C2-N3	-3.02	117.56	122.33
32	2a	1407	5MC	C5-C4-N3	-3.02	118.66	121.75
32	2a	1207	2MG	N1-C2-N2	3.00	119.62	116.56
1	2A	2552	2MU	C5-C4-N3	3.00	119.00	114.80
32	1a	966	M2G	C6-C5-N7	2.99	135.72	130.29
1	1A	1939	5MU	O2-C2-N1	-2.97	118.93	122.80
1	2A	1962	5MC	C5-C4-N3	-2.96	118.72	121.75
32	2a	1519	MA6	C10-N6-C6	-2.95	113.00	120.52
54	1x	54	5MU	C5-C4-N3	2.95	117.89	115.32
32	2a	1404	5MC	C5-C6-N1	-2.93	120.13	123.31
32	1a	1519	MA6	C5-N7-C8	2.93	108.05	103.45
54	2x	8	4SU	O2-C2-N1	2.91	126.58	122.80
32	1a	967	5MC	C5-C6-N1	-2.89	120.17	123.31
32	2a	967	5MC	C5-C6-N1	-2.88	120.18	123.31
1	2A	1939	5MU	O4-C4-C5	-2.84	121.67	124.92
54	2x	54	5MU	O2-C2-N1	-2.82	119.12	122.80
32	2a	1518	MA6	C6-C5-N7	2.82	137.93	133.43
1	2A	1962	5MC	C5-C6-N1	-2.81	120.27	123.31
1	1A	1917	PSU	C5-C6-N1	-2.79	118.27	122.14
32	1a	1519	MA6	C4-N9-C8	2.79	108.66	105.74
32	1a	966	M2G	C4-C5-N7	-2.78	106.26	110.67
1	2A	1962	5MC	C1'-N1-C6	-2.77	116.59	121.15
32	2a	1518	MA6	C4-N9-C8	2.76	108.64	105.74
32	2a	1407	5MC	C5-C6-N1	-2.76	120.32	123.31
32	1a	1518	MA6	C10-N6-C9	-2.75	107.33	116.18
32	1a	1404	5MC	C5-C4-N3	-2.75	118.93	121.75
32	2a	1519	MA6	C4-N9-C8	2.75	108.62	105.74
1	1A	2503	2MA	C2-N1-C6	2.75	122.33	118.10
1	1A	2503	2MA	C6-C5-N7	2.73	137.35	132.09
1	2A	1915	5MU	O4-C4-C5	-2.72	121.80	124.92
32	1a	1407	5MC	C5-C6-N1	-2.71	120.37	123.31
1	2A	2552	2MU	O2-C2-N1	-2.70	119.28	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	1920	4OC	O2-C2-N3	-2.70	118.07	122.33
1	2A	1920	4OC	O2-C2-N3	-2.70	118.08	122.33
32	2a	1407	5MC	O2-C2-N3	-2.70	118.08	122.33
1	1A	2552	2MU	O4-C4-C5	-2.69	120.52	125.16
32	1a	1400	5MC	C5-C6-N1	-2.69	120.40	123.31
32	2a	527	7MG	C5-C4-N9	-2.68	102.90	106.33
1	2A	2503	2MA	C2-N1-C6	2.68	122.22	118.10
54	1x	54	5MU	C5-C6-N1	-2.66	120.43	123.31
1	2A	1962	5MC	O2-C2-N3	-2.65	118.15	122.33
54	2x	8	4SU	O2-C2-N3	-2.64	116.61	121.49
1	1A	2503	2MA	N9-C8-N7	-2.63	110.20	113.94
1	1A	2251	OMG	C4-C5-N7	-2.63	106.51	110.67
1	2A	2552	2MU	C2'-C1'-N1	-2.62	109.26	114.24
1	2A	1915	5MU	O2-C2-N1	-2.62	119.39	122.80
32	1a	1207	2MG	C4-C5-N7	-2.62	106.53	110.67
32	1a	1518	MA6	C10-N6-C6	-2.61	113.89	120.52
32	2a	1404	5MC	O2-C2-N3	-2.60	118.23	122.33
32	1a	1518	MA6	N9-C8-N7	-2.59	110.27	113.94
1	1A	1915	5MU	O2-C2-N1	-2.59	119.43	122.80
1	2A	1942	5MC	C5-C4-N3	-2.58	119.11	121.75
1	2A	2503	2MA	C5-N7-C8	2.58	107.50	103.45
32	2a	1518	MA6	C10-N6-C6	-2.57	113.98	120.52
1	1A	2503	2MA	C5-N7-C8	2.55	107.47	103.45
32	1a	1519	MA6	C10-N6-C6	-2.55	114.04	120.52
32	2a	966	M2G	C4-C5-N7	-2.55	106.63	110.67
1	1A	1942	5MC	C5-C4-N3	-2.54	119.15	121.75
54	2x	32	5MC	O2-C2-N3	-2.54	118.33	122.33
54	2x	8	4SU	C6-C5-C4	-2.54	117.75	119.95
32	1a	527	7MG	C5-C6-N1	2.52	115.38	110.94
1	1A	2251	OMG	C6-C5-N7	2.52	134.88	130.29
1	1A	2552	2MU	C5-C4-N3	2.50	118.29	114.80
32	1a	1518	MA6	C6-C5-N7	2.49	137.41	133.43
32	2a	1400	5MC	CM5-C5-C6	-2.47	119.50	122.85
32	1a	967	5MC	C5-C4-N3	-2.47	119.22	121.75
32	2a	967	5MC	C5-C4-N3	-2.47	119.22	121.75
32	2a	527	7MG	C5-C6-N1	2.47	115.28	110.94
32	2a	967	5MC	C1'-N1-C6	-2.46	117.09	121.15
32	2a	1519	MA6	C6-C5-N7	2.42	137.30	133.43
32	1a	967	5MC	O2-C2-N3	-2.41	118.53	122.33
32	2a	1402	4OC	C6-C5-C4	2.39	119.88	117.00
32	2a	1518	MA6	N9-C8-N7	-2.39	110.55	113.94
54	2x	55	PSU	C5-C6-N1	-2.37	118.85	122.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	2503	2MA	C4-N9-C8	2.37	108.22	105.74
32	1a	1519	MA6	C6-C5-N7	2.36	137.19	133.43
32	2a	967	5MC	O2-C2-N3	-2.35	118.62	122.33
1	2A	2605	PSU	C6-C5-C4	-2.35	116.59	118.17
1	2A	2251	OMG	C6-C5-N7	2.35	134.56	130.29
32	1a	516	PSU	O4'-C1'-C2'	2.34	108.39	105.15
32	1a	1519	MA6	N9-C8-N7	-2.30	110.67	113.94
54	1x	8	4SU	C1'-N1-C2	2.30	121.73	117.59
32	2a	1519	MA6	N9-C8-N7	-2.30	110.67	113.94
1	2A	2552	2MU	O4-C4-C5	-2.29	121.22	125.16
1	1A	1920	4OC	C1'-N1-C2	2.28	123.47	118.44
32	2a	1518	MA6	C10-N6-C9	-2.25	108.94	116.18
1	2A	2503	2MA	C6-C5-N7	2.24	136.41	132.09
32	1a	527	7MG	O6-C6-C5	-2.22	122.17	127.62
1	2A	1939	5MU	O2-C2-N1	-2.21	119.92	122.80
1	1A	2251	OMG	C1'-N9-C8	-2.20	120.47	126.73
32	2a	1498	UR3	C1'-N1-C2	2.20	120.64	117.04
32	2a	527	7MG	O6-C6-C5	-2.19	122.24	127.62
1	2A	1917	PSU	C5-C6-N1	-2.18	119.12	122.14
1	1A	2503	2MA	N3-C2-N1	-2.17	121.94	125.77
1	1A	2251	OMG	C2-N1-C6	-2.15	121.21	125.11
32	1a	1400	5MC	O2-C2-N3	-2.14	118.96	122.33
32	2a	1400	5MC	O2-C2-N3	-2.13	118.97	122.33
32	2a	527	7MG	C6-C5-C4	-2.13	118.65	122.40
32	1a	1498	UR3	C3U-N3-C4	2.13	120.82	117.87
1	2A	2251	OMG	C4-C5-N7	-2.11	107.32	110.67
54	1x	55	PSU	C5-C6-N1	-2.11	119.21	122.14
43	1l	92	0TD	OD1-CG-CB	-2.11	118.02	122.44
1	2A	2251	OMG	O6-C6-C5	-2.11	120.97	126.53
1	1A	1942	5MC	O2-C2-N3	-2.10	119.02	122.33
1	1A	1962	5MC	C5-C4-N3	-2.10	119.60	121.75
32	1a	527	7MG	C5-C4-N9	-2.10	103.65	106.33
1	2A	1962	5MC	C1'-N1-C2	2.08	123.04	118.44
32	1a	1207	2MG	C2-N1-C6	-2.08	122.04	124.55
1	2A	1915	5MU	C5M-C5-C6	-2.08	120.04	122.85
32	2a	1402	4OC	C5-C4-N3	-2.07	119.35	122.60
32	2a	1519	MA6	N1-C6-N6	2.07	119.38	116.86
54	2x	8	4SU	C1'-N1-C6	-2.07	116.36	120.78
1	1A	1915	5MU	C5M-C5-C4	2.05	120.97	118.78
1	1A	1920	4OC	O2-C2-N1	2.05	122.92	118.90
1	2A	1962	5MC	CM5-C5-C6	-2.05	120.08	122.85
32	1a	1404	5MC	CM5-C5-C6	-2.04	120.08	122.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	1a	1407	5MC	O2-C2-N3	-2.04	119.12	122.33
32	2a	1498	UR3	C3U-N3-C4	2.03	120.69	117.87
32	2a	516	PSU	C6-C5-C4	-2.03	116.80	118.17
1	2A	1939	5MU	O2-C2-N3	-2.03	117.75	121.49
32	2a	1407	5MC	CM5-C5-C6	-2.02	120.11	122.85
43	2l	92	0TD	OD1-CG-CB	-2.02	118.21	122.44

There are no chirality outliers.

All (44) 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	1518	MA6	C5-C6-N6-C9
43	1l	92	0TD	CA-CB-SB-CSB
32	2a	1402	4OC	O4'-C4'-C5'-O5'
32	2a	1518	MA6	C5-C6-N6-C9
32	1a	1519	MA6	O4'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
32	1a	967	5MC	O4'-C4'-C5'-O5'
32	1a	1402	4OC	O4'-C4'-C5'-O5'
1	2A	2552	2MU	O4'-C4'-C5'-O5'
32	2a	527	7MG	C3'-C4'-C5'-O5'
32	1a	1518	MA6	N1-C6-N6-C9
32	2a	1518	MA6	N1-C6-N6-C9
32	2a	1402	4OC	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	527	7MG	O4'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C5-C6-N6-C10
32	2a	1519	MA6	C5-C6-N6-C10
32	1a	527	7MG	C3'-C4'-C5'-O5'
32	1a	1402	4OC	C3'-C4'-C5'-O5'
1	2A	1915	5MU	O4'-C4'-C5'-O5'
32	1a	1400	5MC	O4'-C4'-C5'-O5'
43	1l	92	0TD	CG-CB-SB-CSB
1	2A	1911	PSU	O4'-C4'-C5'-O5'
1	2A	1917	PSU	O4'-C4'-C5'-O5'
32	1a	967	5MC	C3'-C4'-C5'-O5'
32	1a	1518	MA6	C5-C6-N6-C10
1	1A	2503	2MA	C4'-C5'-O5'-P
32	1a	966	M2G	C4'-C5'-O5'-P

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Mol	Chain	Res	Type	Atoms
32	1a	527	7MG	O4'-C4'-C5'-O5'
1	1A	2503	2MA	O4'-C4'-C5'-O5'
32	2a	1519	MA6	C4'-C5'-O5'-P
32	1a	1400	5MC	C3'-C4'-C5'-O5'
32	2a	1207	2MG	O4'-C4'-C5'-O5'
1	1A	1920	4OC	C2'-C1'-N1-C6
32	2a	1518	MA6	C5-C6-N6-C10
1	2A	2503	2MA	O4'-C4'-C5'-O5'
1	1A	1920	4OC	C2'-C1'-N1-C2
43	2l	92	0TD	CG-CB-SB-CSB
1	2A	2503	2MA	O4'-C1'-N9-C8
1	2A	1920	4OC	C2'-C1'-N1-C2
1	2A	2552	2MU	C3'-C4'-C5'-O5'

There are no ring outliers.

33 monomers are involved in 55 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
32	2a	967	5MC	2	0
32	2a	1207	2MG	3	0
54	1x	55	PSU	1	0
54	2x	54	5MU	1	0
1	1A	2503	2MA	5	0
32	2a	1518	MA6	2	0
43	2l	92	0TD	2	0
32	2a	1519	MA6	3	0
1	2A	1911	PSU	1	0
32	2a	527	7MG	1	0
32	2a	1498	UR3	2	0
54	2x	8	4SU	2	0
1	1A	1939	5MU	1	0
1	1A	1920	4OC	1	0
32	1a	1519	MA6	1	0
32	1a	967	5MC	1	0
1	1A	1917	PSU	2	0
32	1a	1498	UR3	1	0
1	2A	1942	5MC	1	0
1	2A	1939	5MU	2	0
1	2A	1920	4OC	2	0
1	2A	2503	2MA	1	0
1	2A	2552	2MU	2	0
54	1x	8	4SU	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
54	2x	32	5MC	1	0
32	2a	1400	5MC	1	0
32	2a	1404	5MC	2	0
1	1A	2552	2MU	1	0
32	1a	1402	4OC	3	0
1	1A	2251	OMG	1	0
32	1a	1207	2MG	2	0
32	1a	1518	MA6	5	0
32	2a	1402	4OC	1	0

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 2656 ligands modelled in this entry, 2652 are monoatomic - leaving 4 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
59	SF4	1d	302	35	0,12,12	-	-	-		
58	V7A	2a	1817	55	37,38,38	4.07	12 (32%)	43,60,60	1.74	9 (20%)
59	SF4	2d	303	35	0,12,12	-	-	-		
58	V7A	1a	3213	55	37,38,38	4.04	12 (32%)	43,60,60	1.70	9 (20%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
59	SF4	1d	302	35	-	-	0/6/5/5
58	V7A	2a	1817	55	-	3/13/72/72	0/4/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
59	SF4	2d	303	35	-	-	0/6/5/5
58	V7A	1a	3213	55	-	4/13/72/72	0/4/4/4

All (24) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	2a	1817	V7A	CAM-CAL	-13.28	1.40	1.52
58	1a	3213	V7A	CAM-CAL	-12.63	1.41	1.52
58	1a	3213	V7A	CAM-CAP	-11.56	1.39	1.55
58	2a	1817	V7A	CAM-CAP	-11.01	1.40	1.55
58	1a	3213	V7A	CAJ-CAI	-11.00	1.40	1.51
58	2a	1817	V7A	CAJ-CAI	-10.35	1.40	1.51
58	2a	1817	V7A	CAG-CAF	-7.79	1.39	1.51
58	1a	3213	V7A	CAG-CAF	-7.53	1.40	1.51
58	2a	1817	V7A	CAS-CAA	-6.70	1.39	1.51
58	1a	3213	V7A	CAS-CAA	-6.20	1.40	1.51
58	2a	1817	V7A	CAO-CAR	-5.82	1.40	1.51
58	1a	3213	V7A	CAO-CAR	-5.37	1.41	1.51
58	2a	1817	V7A	CAQ-CBC	-3.80	1.39	1.47
58	1a	3213	V7A	CAQ-CBC	-3.62	1.40	1.47
58	2a	1817	V7A	CAI-CAL	3.44	1.40	1.36
58	1a	3213	V7A	CAI-CAL	3.23	1.40	1.36
58	1a	3213	V7A	CAI-CAH	-3.19	1.39	1.46
58	2a	1817	V7A	CAI-CAH	-3.12	1.39	1.46
58	2a	1817	V7A	CAE-CAH	-2.87	1.39	1.46
58	1a	3213	V7A	CAQ-CAP	-2.80	1.38	1.46
58	1a	3213	V7A	CAE-CAH	-2.76	1.39	1.46
58	2a	1817	V7A	CAQ-CAP	-2.37	1.39	1.46
58	2a	1817	V7A	CAK-CAN	-2.36	1.49	1.53
58	1a	3213	V7A	CAK-CAN	-2.01	1.50	1.53

All (18) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	2a	1817	V7A	CAJ-CAK-CAN	-4.75	102.28	110.38
58	1a	3213	V7A	OBI-CAR-CAQ	-4.02	116.20	122.93
58	2a	1817	V7A	CBG-NBF-CAO	-3.79	105.47	114.10
58	1a	3213	V7A	CBG-NBF-CAO	-3.77	105.53	114.10
58	1a	3213	V7A	CAJ-CAK-CAN	-3.71	104.06	110.38
58	2a	1817	V7A	OBI-CAR-CAQ	-3.60	116.90	122.93
58	1a	3213	V7A	OAZ-CAL-CAI	-3.54	116.65	123.52
58	1a	3213	V7A	CAM-CAP-CAQ	3.29	120.97	115.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	1a	3213	V7A	OAZ-CAL-CAM	3.06	117.80	113.37
58	2a	1817	V7A	OAZ-CAL-CAI	-2.98	117.74	123.52
58	2a	1817	V7A	OAZ-CAL-CAM	2.85	117.50	113.37
58	2a	1817	V7A	CAM-CAP-CAQ	2.70	120.05	115.75
58	2a	1817	V7A	OAX-CAD-CAE	-2.61	116.32	121.14
58	1a	3213	V7A	OAX-CAD-CAE	-2.52	116.47	121.14
58	2a	1817	V7A	CAF-CAG-CAJ	-2.41	109.93	113.12
58	1a	3213	V7A	CAM-CAL-CAI	2.39	125.49	123.06
58	1a	3213	V7A	OBB-CAP-CAQ	-2.16	118.66	123.23
58	2a	1817	V7A	CAP-CAM-CAL	2.11	112.36	109.88

There are no chirality outliers.

All (7) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
58	1a	3213	V7A	CAN-CAO-NBF-CBH
58	1a	3213	V7A	CAW-NAT-OAU-CAV
58	2a	1817	V7A	CAN-CAO-NBF-CBH
58	2a	1817	V7A	CAW-NAT-OAU-CAV
58	1a	3213	V7A	CAA-CAS-NAT-CAW
58	1a	3213	V7A	CAF-CAA-CAS-NAT
58	2a	1817	V7A	CAF-CAA-CAS-NAT

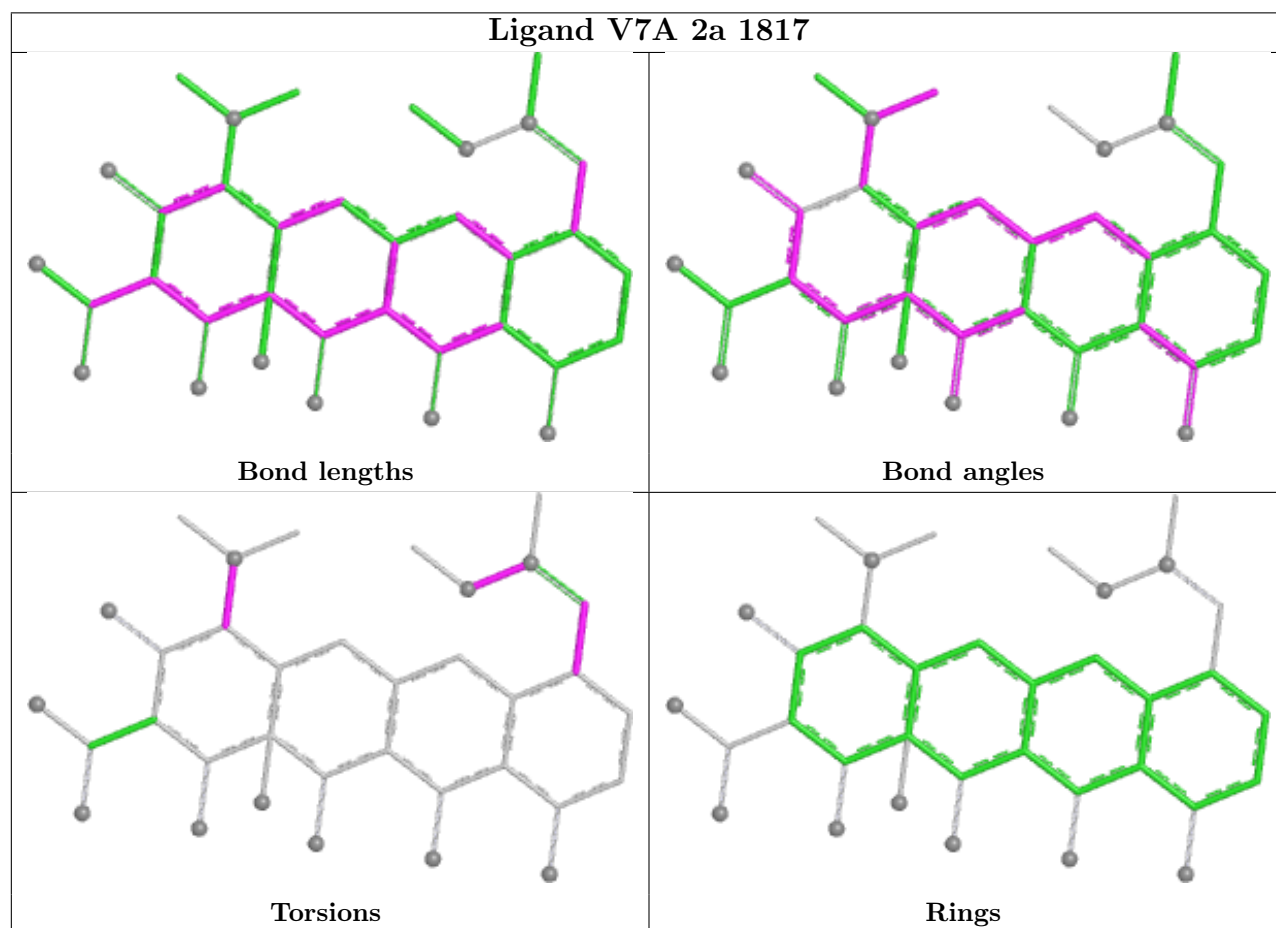
There are no ring outliers.

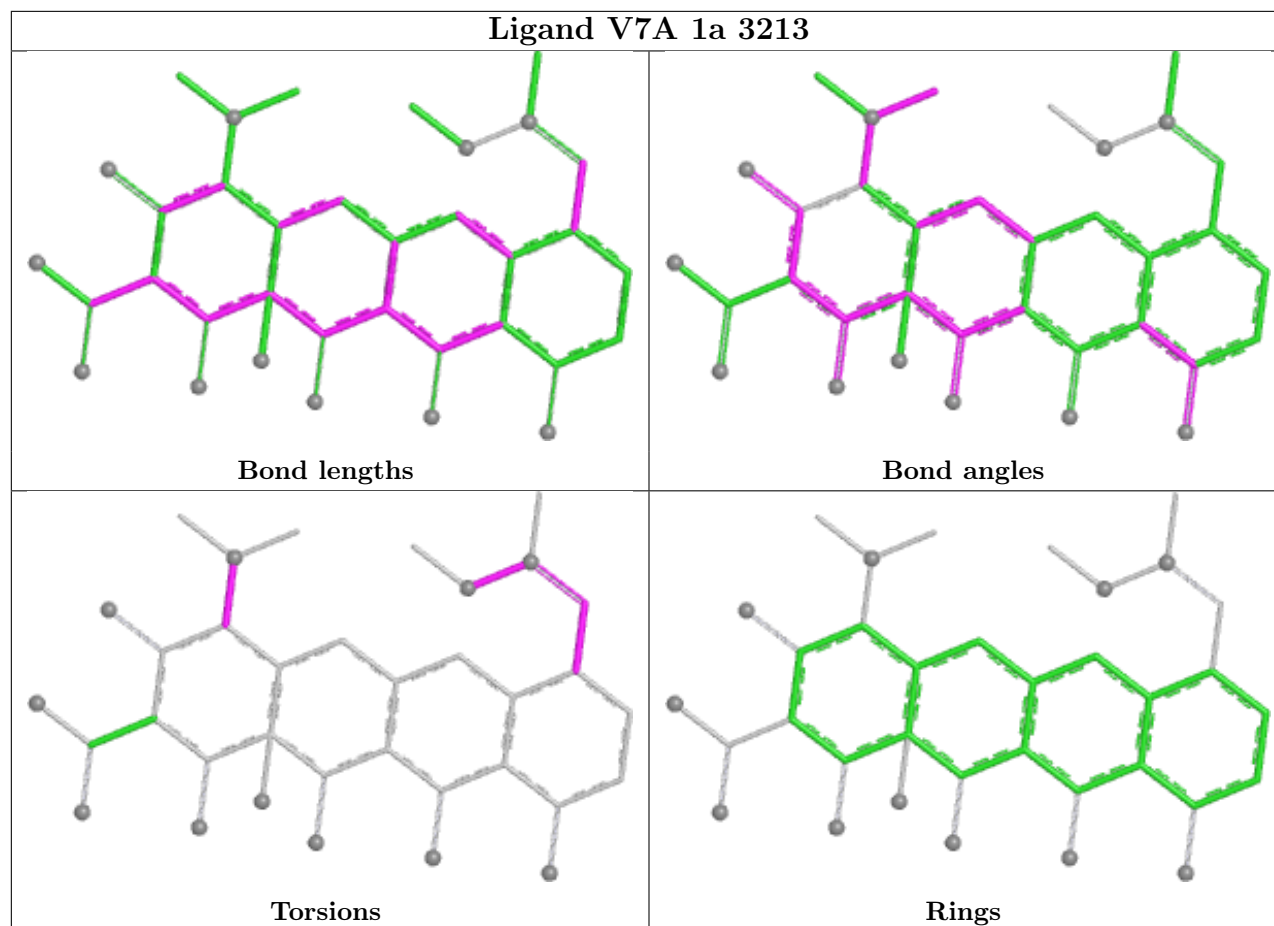
4 monomers are involved in 12 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
59	1d	302	SF4	3	0
58	2a	1817	V7A	3	0
59	2d	303	SF4	3	0
58	1a	3213	V7A	3	0

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

The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.





5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	1A	2860/2915 (98%)	-0.40	31 (1%) 78 57	11, 36, 96, 112	0
1	2A	2789/2915 (95%)	-0.19	37 (1%) 75 53	21, 49, 90, 116	0
2	1B	120/121 (99%)	-0.40	0 100 100	27, 51, 64, 85	0
2	2B	120/121 (99%)	0.11	0 100 100	49, 68, 83, 95	0
3	1D	275/276 (99%)	-0.21	0 100 100	14, 31, 47, 61	0
3	2D	275/276 (99%)	-0.01	1 (0%) 88 76	22, 42, 58, 84	0
4	1E	204/206 (99%)	-0.03	0 100 100	18, 43, 63, 78	0
4	2E	204/206 (99%)	0.05	1 (0%) 87 72	24, 50, 66, 77	0
5	1F	203/210 (96%)	-0.07	0 100 100	16, 40, 64, 82	0
5	2F	203/210 (96%)	0.15	0 100 100	27, 57, 73, 79	0
6	1G	181/182 (99%)	0.36	5 (2%) 55 32	37, 53, 70, 83	0
6	2G	181/182 (99%)	0.74	7 (3%) 43 24	53, 68, 82, 88	0
7	1H	174/180 (96%)	0.12	2 (1%) 78 57	33, 51, 64, 71	0
7	2H	174/180 (96%)	0.56	4 (2%) 61 38	50, 75, 84, 88	0
8	1I	146/148 (98%)	0.18	1 (0%) 84 66	40, 64, 75, 81	0
8	2I	146/148 (98%)	0.27	2 (1%) 73 51	42, 68, 80, 87	0
9	1N	140/140 (100%)	0.06	3 (2%) 63 40	22, 42, 60, 68	0
9	2N	140/140 (100%)	0.32	3 (2%) 63 40	35, 58, 75, 82	0
10	1O	122/122 (100%)	-0.15	1 (0%) 82 64	23, 37, 55, 65	0
10	2O	122/122 (100%)	0.00	2 (1%) 70 47	30, 44, 60, 71	0
11	1P	149/150 (99%)	0.18	3 (2%) 65 41	17, 43, 65, 72	0
11	2P	149/150 (99%)	0.37	2 (1%) 75 53	30, 59, 74, 85	0
12	1Q	141/141 (100%)	0.10	2 (1%) 73 51	25, 41, 53, 61	0
12	2Q	141/141 (100%)	0.35	1 (0%) 84 66	38, 52, 65, 70	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	1R	118/118 (100%)	0.09	0 100 100	22, 39, 53, 62	0
13	2R	118/118 (100%)	0.18	1 (0%) 82 64	31, 44, 57, 67	0
14	1S	110/112 (98%)	0.06	2 (1%) 67 44	33, 45, 57, 65	0
14	2S	110/112 (98%)	0.28	0 100 100	48, 60, 71, 79	0
15	1T	131/146 (89%)	0.01	1 (0%) 82 64	27, 48, 67, 79	0
15	2T	131/146 (89%)	0.02	1 (0%) 82 64	36, 49, 67, 79	0
16	1U	116/118 (98%)	0.05	2 (1%) 69 45	22, 37, 56, 63	0
16	2U	116/118 (98%)	0.21	0 100 100	37, 54, 66, 82	0
17	1V	101/101 (100%)	-0.08	1 (0%) 79 59	22, 48, 61, 69	0
17	2V	101/101 (100%)	0.26	2 (1%) 65 41	39, 63, 73, 80	0
18	1W	112/113 (99%)	-0.18	0 100 100	22, 37, 56, 88	0
18	2W	112/113 (99%)	0.03	0 100 100	29, 44, 60, 78	0
19	1X	95/96 (98%)	-0.14	0 100 100	21, 34, 50, 73	0
19	2X	95/96 (98%)	0.16	1 (1%) 78 57	34, 50, 65, 74	0
20	1Y	107/110 (97%)	0.05	1 (0%) 81 61	31, 47, 64, 71	0
20	2Y	107/110 (97%)	0.47	1 (0%) 81 61	49, 64, 77, 84	0
21	1Z	154/206 (74%)	0.25	3 (1%) 66 43	38, 56, 70, 85	0
21	2Z	160/206 (77%)	0.61	6 (3%) 44 24	50, 66, 85, 96	0
22	10	83/85 (97%)	0.24	7 (8%) 17 9	26, 34, 68, 92	0
22	20	83/85 (97%)	0.64	6 (7%) 21 11	37, 51, 73, 87	0
23	11	97/98 (98%)	0.40	2 (2%) 63 40	17, 39, 63, 67	0
23	21	97/98 (98%)	0.23	2 (2%) 63 40	27, 50, 67, 75	0
24	12	70/72 (97%)	0.02	1 (1%) 73 51	26, 41, 56, 62	0
24	22	70/72 (97%)	0.27	1 (1%) 73 51	43, 59, 71, 77	0
25	13	59/60 (98%)	-0.23	0 100 100	27, 39, 59, 63	0
25	23	59/60 (98%)	0.42	2 (3%) 48 27	47, 56, 72, 75	0
26	14	69/71 (97%)	0.54	3 (4%) 40 21	53, 74, 87, 101	0
26	24	69/71 (97%)	0.79	4 (5%) 29 15	61, 82, 95, 102	0
27	15	59/60 (98%)	0.07	0 100 100	23, 44, 75, 81	0
27	25	59/60 (98%)	0.34	1 (1%) 69 45	28, 48, 77, 89	0
28	16	53/54 (98%)	-0.21	1 (1%) 66 43	30, 39, 51, 56	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	26	53/54 (98%)	-0.02	0 100 100	40, 48, 59, 61	0
29	17	48/49 (97%)	-0.08	2 (4%) 40 22	16, 24, 49, 53	0
29	27	48/49 (97%)	0.09	1 (2%) 63 40	26, 33, 51, 67	0
30	18	64/65 (98%)	-0.08	1 (1%) 70 47	23, 30, 39, 58	0
30	28	64/65 (98%)	0.45	2 (3%) 51 30	35, 45, 56, 73	0
31	19	37/37 (100%)	0.05	0 100 100	31, 44, 54, 65	0
31	29	37/37 (100%)	0.48	2 (5%) 31 16	46, 61, 74, 76	0
32	1a	1488/1521 (97%)	0.04	11 (0%) 84 66	27, 65, 93, 112	0
32	2a	1491/1521 (98%)	0.08	13 (0%) 81 61	43, 69, 93, 110	0
33	1b	231/256 (90%)	0.37	3 (1%) 75 53	55, 73, 86, 101	0
33	2b	231/256 (90%)	0.55	6 (2%) 57 34	61, 79, 86, 93	0
34	1c	206/239 (86%)	0.37	3 (1%) 72 49	51, 66, 79, 90	0
34	2c	206/239 (86%)	0.53	6 (2%) 53 31	60, 76, 84, 91	0
35	1d	208/209 (99%)	0.50	9 (4%) 40 21	49, 67, 79, 85	0
35	2d	208/209 (99%)	0.52	5 (2%) 59 36	51, 66, 75, 82	0
36	1e	148/162 (91%)	0.14	1 (0%) 84 66	43, 57, 68, 71	0
36	2e	148/162 (91%)	0.39	4 (2%) 56 33	47, 67, 77, 81	0
37	1f	100/101 (99%)	0.02	0 100 100	42, 61, 71, 75	0
37	2f	100/101 (99%)	0.04	0 100 100	53, 66, 74, 80	0
38	1g	155/156 (99%)	0.32	6 (3%) 43 24	53, 66, 83, 104	0
38	2g	155/156 (99%)	0.37	7 (4%) 38 20	63, 73, 83, 91	0
39	1h	137/138 (99%)	0.07	0 100 100	50, 61, 71, 74	0
39	2h	137/138 (99%)	0.40	3 (2%) 62 39	54, 69, 77, 84	0
40	1i	127/128 (99%)	0.80	11 (8%) 16 8	54, 69, 80, 85	0
40	2i	127/128 (99%)	1.20	24 (18%) 3 2	66, 80, 88, 94	0
41	1j	97/105 (92%)	0.80	9 (9%) 14 7	53, 68, 81, 85	0
41	2j	96/105 (91%)	1.08	12 (12%) 8 5	60, 77, 87, 97	0
42	1k	114/129 (88%)	0.26	1 (0%) 81 61	37, 60, 75, 79	0
42	2k	114/129 (88%)	0.19	6 (5%) 32 16	51, 65, 74, 81	0
43	1l	121/132 (91%)	0.18	4 (3%) 49 28	42, 52, 64, 73	0
43	2l	121/132 (91%)	0.27	2 (1%) 69 45	45, 58, 68, 78	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	1m	122/126 (96%)	0.73	8 (6%) 24 12	55, 70, 78, 84	0
44	2m	121/126 (96%)	0.97	13 (10%) 11 6	62, 75, 85, 92	0
45	1n	60/61 (98%)	0.85	5 (8%) 17 9	57, 66, 75, 79	0
45	2n	60/61 (98%)	0.94	5 (8%) 17 9	66, 75, 83, 88	0
46	1o	88/89 (98%)	0.40	0 100 100	43, 58, 70, 82	0
46	2o	88/89 (98%)	0.48	3 (3%) 48 27	55, 66, 75, 80	0
47	1p	82/88 (93%)	0.87	2 (2%) 59 36	50, 68, 80, 86	0
47	2p	82/88 (93%)	0.66	1 (1%) 76 55	51, 64, 71, 81	0
48	1q	99/105 (94%)	0.65	2 (2%) 65 41	47, 61, 71, 74	0
48	2q	99/105 (94%)	0.25	0 100 100	50, 62, 72, 75	0
49	1r	68/88 (77%)	0.17	0 100 100	44, 62, 72, 83	0
49	2r	68/88 (77%)	-0.01	0 100 100	51, 67, 76, 80	0
50	1s	83/93 (89%)	0.47	2 (2%) 59 36	59, 70, 80, 91	0
50	2s	83/93 (89%)	0.68	3 (3%) 46 26	67, 77, 86, 90	0
51	1t	96/106 (90%)	0.52	6 (6%) 26 13	53, 67, 78, 81	0
51	2t	96/106 (90%)	0.36	1 (1%) 79 59	45, 62, 75, 83	0
52	1u	23/27 (85%)	1.03	2 (8%) 16 8	58, 65, 72, 79	0
52	2u	23/27 (85%)	1.05	4 (17%) 4 3	65, 71, 78, 79	0
53	1v	10/24 (41%)	1.18	4 (40%) 1 1	46, 82, 94, 95	0
53	2v	6/24 (25%)	0.34	0 100 100	56, 66, 85, 85	0
54	1x	72/77 (93%)	-0.21	0 100 100	34, 52, 70, 87	0
54	2x	72/77 (93%)	0.07	1 (1%) 73 51	44, 68, 80, 93	0
All	All	20598/21444 (96%)	0.09	376 (1%) 67 44	11, 57, 84, 116	0

All (376) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	2A	2147	G	7.0
1	2A	2146	C	6.9
40	1i	126	SER	5.9
22	10	6	GLY	5.5
32	2a	1532	U	5.4
1	2A	2145	C	5.4
1	2A	2143	C	5.3

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Mol	Chain	Res	Type	RSRZ
44	2m	120	LYS	5.1
1	2A	2111	C	5.0
1	1A	2145	C	4.8
36	2e	22	GLY	4.7
22	20	3	HIS	4.7
44	1m	123	ALA	4.7
22	10	7	LEU	4.6
51	1t	18	GLN	4.6
22	20	5	LYS	4.5
1	2A	2118	U	4.4
1	2A	2133	G	4.4
44	2m	90	LEU	4.3
44	2m	122	LYS	4.2
1	1A	2804	C	4.1
40	2i	14	VAL	4.1
1	2A	2144	U	4.1
44	2m	6	GLY	4.0
35	1d	110	PHE	4.0
7	2H	128	PRO	4.0
1	2A	2117	A	4.0
22	10	5	LYS	3.9
1	1A	2132	U	3.9
1	2A	2109	U	3.9
6	1G	25	TYR	3.8
23	11	26	ARG	3.8
11	1P	70	GLN	3.8
41	2j	62	HIS	3.8
22	20	4	LYS	3.8
26	24	56	VAL	3.8
40	2i	124	GLN	3.7
32	1a	1257	U	3.7
1	2A	2110	G	3.7
1	1A	2803	C	3.7
36	2e	13	ILE	3.7
1	1A	1093	G	3.6
26	14	17	GLY	3.6
3	2D	276	LYS	3.6
40	2i	96	LEU	3.6
1	1A	1095	A	3.5
47	1p	82	GLN	3.5
22	20	6	GLY	3.5
40	1i	6	GLY	3.5

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Mol	Chain	Res	Type	RSRZ
44	2m	121	LYS	3.5
11	2P	68	GLN	3.5
44	1m	87	TYR	3.5
33	2b	214	ILE	3.4
44	2m	104	ARG	3.4
1	1A	2141	G	3.4
7	2H	123	PHE	3.4
40	1i	109	VAL	3.4
40	2i	106	ALA	3.4
32	2a	1202	G	3.4
6	2G	53	LEU	3.4
45	2n	2	ALA	3.4
40	2i	105	ASP	3.3
1	2A	2115	G	3.3
12	1Q	33	GLY	3.3
41	2j	37	PRO	3.3
10	2O	1	MET	3.3
22	20	2	ALA	3.3
44	2m	123	ALA	3.3
45	1n	2	ALA	3.3
22	10	4	LYS	3.2
26	24	49	PHE	3.2
40	1i	105	ASP	3.2
32	1a	1531	A	3.2
1	2A	1171	G	3.1
1	2A	2182	G	3.1
22	10	2	ALA	3.1
6	1G	48	GLU	3.1
41	2j	46	ARG	3.1
22	10	3	HIS	3.1
40	2i	102	LEU	3.1
1	1A	2170	A	3.1
26	24	51	ASP	3.1
1	2A	2148	G	3.0
22	20	7	LEU	3.0
9	1N	77	GLY	3.0
40	2i	109	VAL	3.0
1	2A	2120	G	3.0
35	2d	155	LEU	3.0
45	2n	30	ALA	3.0
1	1A	2144	U	3.0
40	2i	49	PRO	3.0

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Mol	Chain	Res	Type	RSRZ
35	2d	5	ILE	3.0
35	1d	120	LEU	2.9
43	1l	28	LYS	2.9
22	10	8	GLY	2.9
32	2a	1030(B)	C	2.9
45	2n	7	ILE	2.9
1	1A	2110	G	2.9
51	1t	20	LEU	2.9
43	1l	91	LYS	2.9
1	1A	2142	C	2.9
33	1b	12	GLU	2.9
38	1g	82	GLY	2.9
41	1j	44	VAL	2.9
1	1A	2146	C	2.9
12	2Q	104	PHE	2.9
44	1m	122	LYS	2.9
41	2j	58	ASP	2.9
34	2c	159	GLY	2.9
32	1a	1447	A	2.9
35	1d	138	TYR	2.9
32	2a	1220	G	2.9
20	2Y	1	MET	2.8
9	2N	69	GLN	2.8
33	1b	7	VAL	2.8
21	2Z	146	ILE	2.8
17	2V	81	TYR	2.8
6	2G	76	SER	2.8
42	2k	115	PRO	2.8
48	1q	35	VAL	2.8
16	1U	117	GLN	2.8
24	12	69	ARG	2.8
44	1m	105	THR	2.8
1	1A	1094	U	2.8
32	2a	1033	G	2.8
52	2u	14	TRP	2.7
38	1g	85	TYR	2.7
40	1i	114	TYR	2.7
54	2x	76	A	2.7
34	1c	201	TYR	2.7
1	1A	2114	A	2.7
32	1a	414	A	2.7
29	27	48	LYS	2.7

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Mol	Chain	Res	Type	RSRZ
44	2m	119	GLY	2.7
8	1I	12	LEU	2.7
40	2i	126	SER	2.7
1	1A	2109	U	2.7
6	1G	23	PHE	2.6
7	2H	94	TYR	2.6
1	1A	2112	G	2.6
1	1A	2133	G	2.6
1	2A	2149	G	2.6
6	2G	39	ILE	2.6
44	1m	102	ARG	2.6
53	1v	21	A	2.6
1	2A	1719	G	2.6
1	1A	1096	A	2.6
19	2X	33	LYS	2.6
43	1l	126	LYS	2.6
1	2A	2174	C	2.6
34	2c	155	GLY	2.6
45	1n	11	LYS	2.6
52	1u	14	TRP	2.6
1	2A	2112	G	2.6
1	2A	2128	C	2.6
32	1a	1367	C	2.6
40	2i	33	PHE	2.5
52	1u	16	GLY	2.5
1	1A	2805	G	2.5
1	1A	1092	C	2.5
32	1a	1030(B)	C	2.5
40	2i	117	HIS	2.5
41	2j	60	ARG	2.5
44	1m	121	LYS	2.5
14	1S	43	GLU	2.5
34	1c	39	ILE	2.5
1	1A	2116	G	2.5
24	22	5	GLU	2.5
41	2j	40	LEU	2.5
1	2A	2170	A	2.5
42	2k	14	VAL	2.5
17	1V	26	ASP	2.4
38	2g	36	LYS	2.4
40	2i	42	ARG	2.4
41	1j	58	ASP	2.4

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Mol	Chain	Res	Type	RSRZ
1	1A	1532	C	2.4
1	1A	2111	C	2.4
32	2a	1523	G	2.4
42	2k	25	TYR	2.4
38	2g	80	VAL	2.4
31	29	15	LYS	2.4
51	1t	21	LYS	2.4
51	1t	10	LEU	2.4
44	1m	106	ASN	2.4
40	2i	115	GLY	2.4
1	1A	2115	G	2.4
21	1Z	146	ILE	2.4
32	1a	1532	U	2.4
10	2O	31	LYS	2.4
38	2g	5	ARG	2.4
44	2m	102	ARG	2.4
21	2Z	153	SER	2.4
23	21	62	VAL	2.4
11	2P	66	GLY	2.4
21	2Z	143	GLY	2.4
52	2u	16	GLY	2.4
32	2a	1286	A	2.4
32	2a	1531	A	2.4
41	1j	66	ARG	2.4
1	1A	2140	C	2.4
33	2b	149	LEU	2.4
35	1d	21	LEU	2.4
38	2g	37	ASN	2.4
39	2h	131	GLY	2.4
41	1j	76	ASN	2.4
1	2A	1026	U	2.4
4	2E	116	VAL	2.4
44	2m	97	PRO	2.4
30	28	45	GLY	2.3
36	2e	85	GLY	2.3
32	1a	532	A	2.3
53	1v	13	A	2.3
53	1v	20	A	2.3
26	14	18	CYS	2.3
1	2A	2142	C	2.3
40	1i	18	PHE	2.3
7	1H	2	SER	2.3

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Mol	Chain	Res	Type	RSRZ
8	2I	90	GLY	2.3
34	2c	13	GLY	2.3
41	2j	6	ILE	2.3
46	2o	50	HIS	2.3
6	2G	3	LEU	2.3
13	2R	69	ASP	2.3
26	14	53	GLU	2.3
47	2p	54	GLU	2.3
42	1k	14	VAL	2.3
35	1d	126	ILE	2.3
6	1G	50	ALA	2.3
35	1d	137	SER	2.3
35	2d	154	ASN	2.3
12	1Q	133	ARG	2.3
1	1A	2113	U	2.3
41	1j	98	ILE	2.3
34	2c	53	ALA	2.3
23	11	2	SER	2.3
38	1g	80	VAL	2.3
40	1i	14	VAL	2.3
1	1A	2125	G	2.2
34	1c	169	ALA	2.2
44	2m	118	ALA	2.2
1	2A	2119	A	2.2
41	2j	88	LEU	2.2
53	1v	14	A	2.2
50	1s	78	ARG	2.2
8	2I	3	VAL	2.2
21	2Z	174	VAL	2.2
21	1Z	119	GLU	2.2
48	1q	28	PRO	2.2
32	2a	1353	G	2.2
45	1n	13	THR	2.2
1	2A	2132	U	2.2
46	2o	78	TYR	2.2
7	2H	114	VAL	2.2
6	2G	41	GLN	2.2
1	2A	2804	C	2.2
35	1d	165	MET	2.2
40	2i	52	ALA	2.2
40	2i	69	GLY	2.2
52	2u	24	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
6	2G	159	VAL	2.2
30	28	35	GLN	2.2
38	1g	120	ILE	2.2
7	1H	116	GLU	2.2
32	1a	1030(A)	G	2.2
32	2a	1030(A)	G	2.2
38	1g	84	ASN	2.2
32	2a	1492	A	2.2
33	1b	11	LEU	2.2
41	2j	65	LEU	2.2
45	1n	59	ALA	2.2
1	1A	1079	C	2.2
35	1d	4	TYR	2.2
42	2k	13	GLN	2.2
40	2i	56	LEU	2.2
41	1j	64	GLU	2.2
27	25	28	PRO	2.2
39	2h	72	PRO	2.2
40	2i	66	ARG	2.2
51	2t	80	ARG	2.2
50	1s	13	ASP	2.2
1	1A	2117	A	2.2
1	2A	2062	A	2.2
1	2A	2101	G	2.2
1	2A	2181	G	2.2
1	2A	2103	C	2.1
33	2b	138	LEU	2.1
45	2n	44	LEU	2.1
41	2j	55	LYS	2.1
38	2g	83	ALA	2.1
40	2i	46	ALA	2.1
40	2i	82	ALA	2.1
50	2s	35	SER	2.1
38	2g	32	ARG	2.1
45	1n	14	PRO	2.1
1	2A	2167	U	2.1
50	2s	41	VAL	2.1
40	1i	64	THR	2.1
41	2j	48	THR	2.1
9	1N	75	TYR	2.1
43	2l	64	TYR	2.1
6	2G	50	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
40	1i	66	ARG	2.1
46	2o	68	ARG	2.1
32	1a	1527	C	2.1
21	2Z	45	ASP	2.1
21	2Z	77	ASP	2.1
36	1e	100	VAL	2.1
45	2n	25	VAL	2.1
25	23	26	LEU	2.1
10	1O	84	ALA	2.1
32	2a	1225	A	2.1
34	2c	2	GLY	2.1
23	21	2	SER	2.1
40	2i	101	PHE	2.1
32	2a	306	G	2.1
14	1S	44	LYS	2.1
51	1t	74	LYS	2.1
35	1d	5	ILE	2.1
36	2e	12	LEU	2.1
38	1g	59	LEU	2.1
40	2i	99	LEU	2.1
52	2u	13	ILE	2.1
41	1j	60	ARG	2.1
15	1T	131	ALA	2.1
15	2T	131	ALA	2.1
44	2m	101	GLN	2.1
31	29	37	GLY	2.1
6	1G	80	PHE	2.1
30	18	56	GLU	2.1
43	1l	5	PRO	2.1
43	2l	18	VAL	2.1
1	2A	2114	A	2.1
9	1N	118	LYS	2.1
11	1P	50	ARG	2.1
28	16	54	ILE	2.1
33	2b	221	LEU	2.1
41	2j	38	ILE	2.1
50	2s	49	ILE	2.1
16	1U	81	HIS	2.1
26	24	40	HIS	2.1
29	17	47	ARG	2.1
40	1i	117	HIS	2.1
20	1Y	1	MET	2.1

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Mol	Chain	Res	Type	RSRZ
1	1A	888	C	2.1
1	2A	2159	G	2.1
47	1p	24	ALA	2.1
44	2m	100	GLY	2.1
9	2N	10	GLU	2.1
1	1A	2167	U	2.0
29	17	46	VAL	2.0
34	2c	55	VAL	2.0
35	2d	21	LEU	2.0
1	2A	229	A	2.0
35	2d	134	ASP	2.0
40	2i	125	TYR	2.0
39	2h	135	CYS	2.0
11	1P	51	PHE	2.0
42	2k	118	GLY	2.0
25	23	60	GLU	2.0
33	2b	134	GLU	2.0
1	2A	2165	G	2.0
32	1a	1001(A)	G	2.0
42	2k	126	ARG	2.0
33	2b	233	SER	2.0
40	1i	106	ALA	2.0
40	2i	13	ALA	2.0
41	1j	48	THR	2.0
44	1m	103	THR	2.0
17	2V	8	GLY	2.0
38	2g	34	GLY	2.0
1	2A	2320	A	2.0
9	2N	9	VAL	2.0
40	2i	128	ARG	2.0
21	1Z	125	LEU	2.0
41	1j	65	LEU	2.0
51	1t	62	LEU	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($\text{\AA}^2$)	Q<0.9
54	5MU	2x	54	21/22	0.81	0.10	70,76,87,97	0
1	5MU	2A	1915	21/22	0.83	0.12	55,72,85,88	0
54	PSU	1x	55	20/21	0.87	0.10	49,59,66,70	0
54	PSU	2x	55	20/21	0.87	0.09	64,72,80,82	0
32	2MG	2a	1207	24/25	0.88	0.09	69,74,78,93	0
32	5MC	2a	1400	21/22	0.88	0.15	60,73,79,95	0
54	4SU	2x	8	20/21	0.88	0.10	63,68,73,78	0
32	PSU	1a	516	20/21	0.88	0.10	53,70,76,77	0
32	PSU	2a	516	20/21	0.88	0.09	61,69,73,76	0
32	7MG	2a	527	24/25	0.89	0.11	47,63,71,72	0
32	2MG	1a	1207	24/25	0.89	0.10	63,68,73,79	0
1	PSU	1A	1917	20/21	0.89	0.10	48,59,63,65	0
54	5MC	2x	32	21/22	0.90	0.12	57,63,70,71	0
32	5MC	2a	967	21/22	0.90	0.13	65,71,77,81	0
1	5MU	1A	1915	21/22	0.90	0.08	53,60,70,73	0
1	PSU	2A	1911	20/21	0.91	0.08	51,55,79,79	0
43	0TD	2l	92	10/11	0.91	0.13	55,59,62,66	0
32	M2G	2a	966	25/26	0.91	0.15	65,73,80,82	0
32	4OC	2a	1402	22/23	0.92	0.10	54,61,66,69	0
54	5MU	1x	54	21/22	0.92	0.08	45,63,65,67	0
1	5MC	2A	1942	21/22	0.92	0.09	36,49,55,57	0
54	5MC	1x	32	21/22	0.93	0.11	37,52,60,64	0
1	4OC	2A	1920	21/23	0.93	0.10	44,56,61,64	0
54	4SU	1x	8	20/21	0.93	0.09	44,55,61,70	0
32	MA6	1a	1519	24/25	0.94	0.10	29,36,41,42	0
1	PSU	2A	1917	20/21	0.94	0.07	45,56,60,60	0
32	5MC	1a	967	21/22	0.94	0.11	47,57,63,65	0
1	5MU	2A	1939	21/22	0.94	0.10	30,37,45,48	0
1	PSU	1A	1911	20/21	0.94	0.08	40,51,56,57	0
1	5MC	2A	1962	21/22	0.94	0.10	31,40,49,54	0
32	5MC	1a	1400	21/22	0.94	0.10	43,50,56,59	0
32	4OC	1a	1402	22/23	0.94	0.10	35,46,53,58	0
32	5MC	1a	1404	21/22	0.94	0.09	29,38,43,47	0
32	5MC	1a	1407	21/22	0.95	0.09	32,42,49,52	0
32	5MC	2a	1404	21/22	0.95	0.08	47,58,62,62	0
32	5MC	2a	1407	21/22	0.95	0.08	41,52,56,58	0
32	UR3	2a	1498	21/22	0.95	0.10	31,51,56,64	0
32	MA6	2a	1518	24/25	0.95	0.10	44,53,61,64	0
32	MA6	2a	1519	24/25	0.95	0.13	46,53,56,65	0
32	MA6	1a	1518	24/25	0.95	0.11	27,35,38,40	0
32	M2G	1a	966	25/26	0.95	0.09	45,52,57,60	0
43	0TD	1l	92	10/11	0.95	0.08	43,49,50,55	0
1	4OC	1A	1920	21/23	0.95	0.10	27,44,55,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
1	PSU	2A	2605	20/21	0.95	0.10	23,31,35,36	0
1	5MU	1A	1939	21/22	0.96	0.09	19,25,29,32	0
1	OMG	2A	2251	24/25	0.96	0.07	27,33,36,37	0
1	2MA	2A	2503	23/24	0.96	0.08	20,26,36,41	0
32	UR3	1a	1498	21/22	0.96	0.08	23,37,42,47	0
32	7MG	1a	527	24/25	0.96	0.08	34,39,51,55	0
1	5MC	1A	1942	21/22	0.96	0.08	22,36,41,46	0
1	5MC	1A	1962	21/22	0.96	0.09	25,37,42,46	0
1	2MU	1A	2552	21/23	0.97	0.08	26,37,41,43	0
1	2MU	2A	2552	21/23	0.97	0.07	25,33,39,42	0
1	PSU	1A	2605	20/21	0.97	0.08	19,24,28,28	0
1	OMG	1A	2251	24/25	0.97	0.08	18,23,30,34	0
1	2MA	1A	2503	23/24	0.98	0.08	12,19,25,31	0

6.3 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1v	102	1/1	0.46	0.35	76,76,76,76	0
55	MG	1a	3172	1/1	0.56	0.22	67,67,67,67	0
55	MG	1B	229	1/1	0.60	0.11	75,75,75,75	0
55	MG	1a	3102	1/1	0.61	0.30	61,61,61,61	0
55	MG	1A	3842	1/1	0.65	0.28	28,28,28,28	0
55	MG	1A	3650	1/1	0.66	0.16	60,60,60,60	0
55	MG	1A	3952	1/1	0.66	0.13	68,68,68,68	0
55	MG	2A	3396	1/1	0.66	0.11	51,51,51,51	0
55	MG	1E	301	1/1	0.68	0.22	57,57,57,57	0
55	MG	2a	1744	1/1	0.68	0.18	72,72,72,72	0
55	MG	2A	3751	1/1	0.69	0.14	50,50,50,50	0
55	MG	1P	205	1/1	0.69	0.14	56,56,56,56	0
55	MG	2A	3115	1/1	0.70	0.18	47,47,47,47	0
55	MG	1B	218	1/1	0.70	0.12	41,41,41,41	0
55	MG	2A	3091	1/1	0.71	0.29	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3793	1/1	0.71	0.53	48,48,48,48	0
55	MG	2A	3200	1/1	0.71	0.20	57,57,57,57	0
55	MG	1B	221	1/1	0.71	0.14	56,56,56,56	0
55	MG	2A	3577	1/1	0.71	0.13	69,69,69,69	0
55	MG	1A	3079	1/1	0.71	0.25	46,46,46,46	0
55	MG	2a	1739	1/1	0.71	0.18	83,83,83,83	0
55	MG	1A	3691	1/1	0.71	0.14	26,26,26,26	0
55	MG	2a	1810	1/1	0.71	0.10	66,66,66,66	0
55	MG	1x	102	1/1	0.72	0.26	80,80,80,80	0
55	MG	2A	3765	1/1	0.73	0.11	54,54,54,54	0
55	MG	2A	3824	1/1	0.73	0.20	53,53,53,53	0
55	MG	2a	1730	1/1	0.73	0.24	59,59,59,59	0
55	MG	1A	3680	1/1	0.73	0.16	37,37,37,37	0
55	MG	2A	3683	1/1	0.73	0.12	47,47,47,47	0
55	MG	2a	1774	1/1	0.73	0.11	29,29,29,29	0
55	MG	1a	3177	1/1	0.73	0.14	69,69,69,69	0
57	ZN	15	105	1/1	0.73	0.21	155,155,155,155	0
55	MG	1Q	205	1/1	0.74	0.18	37,37,37,37	0
55	MG	2A	3298	1/1	0.74	0.14	52,52,52,52	0
55	MG	1a	3051	1/1	0.74	0.32	78,78,78,78	0
55	MG	2A	3514	1/1	0.74	0.12	51,51,51,51	0
55	MG	1A	3749	1/1	0.74	0.27	53,53,53,53	0
55	MG	2A	3722	1/1	0.75	0.13	25,25,25,25	0
55	MG	2A	3676	1/1	0.75	0.16	65,65,65,65	0
55	MG	2B	215	1/1	0.75	0.12	60,60,60,60	0
55	MG	2A	3566	1/1	0.76	0.17	25,25,25,25	0
55	MG	2A	3361	1/1	0.76	0.14	50,50,50,50	0
55	MG	1A	3662	1/1	0.76	0.08	72,72,72,72	0
55	MG	2A	3769	1/1	0.76	0.14	69,69,69,69	0
55	MG	2A	3142	1/1	0.76	0.18	37,37,37,37	0
55	MG	2A	3707	1/1	0.76	0.12	44,44,44,44	0
55	MG	2a	1762	1/1	0.77	0.15	55,55,55,55	0
55	MG	1a	3066	1/1	0.77	0.18	62,62,62,62	0
55	MG	2a	1795	1/1	0.77	0.17	65,65,65,65	0
55	MG	1a	3149	1/1	0.77	0.10	56,56,56,56	0
55	MG	1a	3181	1/1	0.77	0.11	48,48,48,48	0
55	MG	1A	3907	1/1	0.78	0.36	61,61,61,61	0
55	MG	1A	3913	1/1	0.78	0.14	50,50,50,50	0
55	MG	1a	3191	1/1	0.78	0.10	62,62,62,62	0
55	MG	2A	3805	1/1	0.78	0.14	46,46,46,46	0
55	MG	1A	3587	1/1	0.78	0.10	37,37,37,37	0
55	MG	2A	3530	1/1	0.78	0.20	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3957	1/1	0.78	0.19	63,63,63,63	0
55	MG	1A	3962	1/1	0.78	0.17	53,53,53,53	0
55	MG	2A	3594	1/1	0.78	0.19	37,37,37,37	0
55	MG	2A	3616	1/1	0.78	0.14	44,44,44,44	0
55	MG	1A	3722	1/1	0.78	0.18	44,44,44,44	0
55	MG	2A	3141	1/1	0.78	0.10	31,31,31,31	0
55	MG	1A	3825	1/1	0.78	0.17	52,52,52,52	0
55	MG	1A	3740	1/1	0.78	0.15	39,39,39,39	0
55	MG	2a	1721	1/1	0.79	0.17	57,57,57,57	0
55	MG	2a	1725	1/1	0.79	0.11	59,59,59,59	0
55	MG	1E	309	1/1	0.79	0.22	36,36,36,36	0
55	MG	1A	3224	1/1	0.79	0.27	48,48,48,48	0
55	MG	1A	3601	1/1	0.79	0.10	47,47,47,47	0
55	MG	2A	3787	1/1	0.79	0.17	57,57,57,57	0
55	MG	2A	3544	1/1	0.79	0.20	48,48,48,48	0
55	MG	1A	3334	1/1	0.79	0.18	51,51,51,51	0
55	MG	2B	212	1/1	0.79	0.24	60,60,60,60	0
55	MG	1A	3761	1/1	0.79	0.14	51,51,51,51	0
55	MG	2A	3619	1/1	0.80	0.14	42,42,42,42	0
55	MG	2A	3380	1/1	0.80	0.19	49,49,49,49	0
55	MG	2a	1617	1/1	0.80	0.24	46,46,46,46	0
55	MG	2a	1641	1/1	0.80	0.11	51,51,51,51	0
55	MG	2a	1717	1/1	0.80	0.16	68,68,68,68	0
55	MG	1A	3026	1/1	0.80	0.24	52,52,52,52	0
55	MG	2A	3466	1/1	0.80	0.28	45,45,45,45	0
55	MG	1A	3861	1/1	0.80	0.14	28,28,28,28	0
55	MG	2A	3728	1/1	0.80	0.18	57,57,57,57	0
55	MG	1A	3884	1/1	0.80	0.11	68,68,68,68	0
55	MG	2a	1755	1/1	0.80	0.17	44,44,44,44	0
55	MG	1A	3190	1/1	0.80	0.12	41,41,41,41	0
55	MG	1a	3048	1/1	0.80	0.11	64,64,64,64	0
55	MG	1A	3530	1/1	0.80	0.11	42,42,42,42	0
55	MG	1a	3197	1/1	0.80	0.12	61,61,61,61	0
55	MG	2a	1813	1/1	0.80	0.12	63,63,63,63	0
55	MG	1A	3943	1/1	0.80	0.18	41,41,41,41	0
55	MG	2A	3423	1/1	0.81	0.19	31,31,31,31	0
55	MG	1O	203	1/1	0.81	0.17	58,58,58,58	0
55	MG	1A	3965	1/1	0.81	0.12	27,27,27,27	0
55	MG	2A	3054	1/1	0.81	0.13	43,43,43,43	0
55	MG	2A	3681	1/1	0.81	0.11	50,50,50,50	0
55	MG	2A	3817	1/1	0.81	0.17	55,55,55,55	0
55	MG	2a	1746	1/1	0.81	0.19	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3541	1/1	0.81	0.12	39,39,39,39	0
55	MG	1A	3158	1/1	0.81	0.17	58,58,58,58	0
55	MG	2A	3717	1/1	0.81	0.11	28,28,28,28	0
55	MG	1A	3661	1/1	0.81	0.17	45,45,45,45	0
55	MG	2a	1622	1/1	0.81	0.20	63,63,63,63	0
55	MG	2a	1633	1/1	0.81	0.27	51,51,51,51	0
55	MG	1a	3171	1/1	0.81	0.10	59,59,59,59	0
55	MG	2a	1723	1/1	0.82	0.24	65,65,65,65	0
55	MG	2A	3195	1/1	0.82	0.11	42,42,42,42	0
55	MG	1B	203	1/1	0.82	0.11	51,51,51,51	0
55	MG	2A	3272	1/1	0.82	0.23	56,56,56,56	0
55	MG	2a	1741	1/1	0.82	0.12	59,59,59,59	0
55	MG	1a	3179	1/1	0.82	0.15	47,47,47,47	0
55	MG	2A	3058	1/1	0.82	0.24	47,47,47,47	0
55	MG	23	102	1/1	0.82	0.15	52,52,52,52	0
55	MG	1A	3969	1/1	0.82	0.11	45,45,45,45	0
55	MG	1a	3027	1/1	0.82	0.15	45,45,45,45	0
55	MG	2A	3600	1/1	0.82	0.21	37,37,37,37	0
55	MG	2a	1798	1/1	0.82	0.15	53,53,53,53	0
55	MG	2a	1801	1/1	0.82	0.18	47,47,47,47	0
55	MG	2a	1802	1/1	0.82	0.17	58,58,58,58	0
55	MG	1A	4005	1/1	0.82	0.28	47,47,47,47	0
55	MG	1B	226	1/1	0.82	0.08	53,53,53,53	0
55	MG	2A	3663	1/1	0.82	0.13	43,43,43,43	0
55	MG	2A	3835	1/1	0.83	0.20	42,42,42,42	0
55	MG	2A	3197	1/1	0.83	0.16	34,34,34,34	0
55	MG	2A	3428	1/1	0.83	0.11	58,58,58,58	0
55	MG	2A	3724	1/1	0.83	0.12	41,41,41,41	0
55	MG	1A	3094	1/1	0.83	0.18	33,33,33,33	0
55	MG	1a	3047	1/1	0.83	0.28	55,55,55,55	0
55	MG	1A	4012	1/1	0.83	0.33	47,47,47,47	0
55	MG	2a	1790	1/1	0.83	0.19	62,62,62,62	0
55	MG	2A	3312	1/1	0.83	0.13	52,52,52,52	0
55	MG	2a	1702	1/1	0.83	0.31	55,55,55,55	0
55	MG	1A	3853	1/1	0.83	0.11	39,39,39,39	0
55	MG	1A	3508	1/1	0.83	0.14	33,33,33,33	0
55	MG	1a	3072	1/1	0.83	0.24	60,60,60,60	0
55	MG	2A	3818	1/1	0.83	0.15	30,30,30,30	0
55	MG	2A	3714	1/1	0.83	0.10	56,56,56,56	0
55	MG	2B	203	1/1	0.84	0.10	52,52,52,52	0
55	MG	1A	3228	1/1	0.84	0.11	30,30,30,30	0
55	MG	2A	3568	1/1	0.84	0.15	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3268	1/1	0.84	0.09	42,42,42,42	0
55	MG	2a	1604	1/1	0.84	0.16	47,47,47,47	0
55	MG	2a	1608	1/1	0.84	0.14	53,53,53,53	0
55	MG	2A	3178	1/1	0.84	0.34	42,42,42,42	0
55	MG	2A	3193	1/1	0.84	0.09	52,52,52,52	0
55	MG	1A	3199	1/1	0.84	0.11	43,43,43,43	0
55	MG	1a	3173	1/1	0.84	0.14	51,51,51,51	0
55	MG	2a	1648	1/1	0.84	0.13	58,58,58,58	0
55	MG	2a	1660	1/1	0.84	0.14	46,46,46,46	0
55	MG	2a	1691	1/1	0.84	0.30	53,53,53,53	0
55	MG	1A	3217	1/1	0.84	0.10	48,48,48,48	0
55	MG	1A	3887	1/1	0.84	0.14	55,55,55,55	0
55	MG	2A	3286	1/1	0.84	0.14	33,33,33,33	0
55	MG	1A	4033	1/1	0.84	0.10	42,42,42,42	0
55	MG	1a	3032	1/1	0.84	0.17	57,57,57,57	0
55	MG	2A	3319	1/1	0.84	0.12	38,38,38,38	0
55	MG	2A	3328	1/1	0.84	0.17	64,64,64,64	0
55	MG	1A	3750	1/1	0.84	0.15	58,58,58,58	0
55	MG	2A	3377	1/1	0.84	0.12	49,49,49,49	0
55	MG	1A	3015	1/1	0.84	0.18	36,36,36,36	0
55	MG	1A	3762	1/1	0.84	0.12	30,30,30,30	0
55	MG	1x	104	1/1	0.84	0.10	46,46,46,46	0
55	MG	2A	3425	1/1	0.84	0.19	42,42,42,42	0
55	MG	2A	3774	1/1	0.84	0.08	58,58,58,58	0
55	MG	2A	3021	1/1	0.84	0.26	55,55,55,55	0
55	MG	2A	3048	1/1	0.84	0.14	57,57,57,57	0
55	MG	1a	3061	1/1	0.84	0.14	61,61,61,61	0
55	MG	1A	3570	1/1	0.84	0.12	43,43,43,43	0
55	MG	1A	3684	1/1	0.84	0.10	52,52,52,52	0
55	MG	1B	233	1/1	0.84	0.10	42,42,42,42	0
55	MG	2A	3841	1/1	0.84	0.10	53,53,53,53	0
55	MG	1A	3814	1/1	0.85	0.09	25,25,25,25	0
55	MG	2A	3571	1/1	0.85	0.10	29,29,29,29	0
55	MG	2B	213	1/1	0.85	0.21	50,50,50,50	0
55	MG	2A	3576	1/1	0.85	0.14	48,48,48,48	0
55	MG	2B	219	1/1	0.85	0.16	63,63,63,63	0
55	MG	2A	3236	1/1	0.85	0.12	38,38,38,38	0
55	MG	2a	1603	1/1	0.85	0.10	43,43,43,43	0
55	MG	2A	3251	1/1	0.85	0.17	21,21,21,21	0
55	MG	2A	3262	1/1	0.85	0.34	50,50,50,50	0
55	MG	1A	3889	1/1	0.85	0.10	45,45,45,45	0
55	MG	1a	3104	1/1	0.85	0.15	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1x	112	1/1	0.85	0.11	51,51,51,51	0
55	MG	2A	3673	1/1	0.85	0.08	56,56,56,56	0
55	MG	2A	3005	1/1	0.85	0.10	45,45,45,45	0
55	MG	2A	3008	1/1	0.85	0.08	24,24,24,24	0
55	MG	1a	3114	1/1	0.85	0.11	51,51,51,51	0
55	MG	2A	3350	1/1	0.85	0.08	38,38,38,38	0
55	MG	2A	3711	1/1	0.85	0.11	47,47,47,47	0
55	MG	2A	3027	1/1	0.85	0.18	46,46,46,46	0
55	MG	1a	3142	1/1	0.85	0.13	44,44,44,44	0
55	MG	1a	3016	1/1	0.85	0.12	46,46,46,46	0
55	MG	2A	3388	1/1	0.85	0.18	34,34,34,34	0
55	MG	1a	3155	1/1	0.85	0.17	49,49,49,49	0
55	MG	2A	3401	1/1	0.85	0.24	38,38,38,38	0
55	MG	2A	3763	1/1	0.85	0.12	60,60,60,60	0
55	MG	2A	3408	1/1	0.85	0.06	34,34,34,34	0
55	MG	1A	3306	1/1	0.85	0.06	38,38,38,38	0
55	MG	2A	3095	1/1	0.85	0.16	37,37,37,37	0
55	MG	1A	3524	1/1	0.85	0.07	35,35,35,35	0
55	MG	2A	3802	1/1	0.85	0.09	17,17,17,17	0
55	MG	1B	231	1/1	0.85	0.08	39,39,39,39	0
55	MG	1A	3342	1/1	0.85	0.17	46,46,46,46	0
55	MG	1A	4024	1/1	0.85	0.13	35,35,35,35	0
55	MG	1a	3058	1/1	0.85	0.09	48,48,48,48	0
55	MG	1A	3542	1/1	0.85	0.18	51,51,51,51	0
55	MG	1A	3406	1/1	0.85	0.11	31,31,31,31	0
55	MG	2q	202	1/1	0.85	0.16	55,55,55,55	0
55	MG	2A	3850	1/1	0.85	0.14	54,54,54,54	0
55	MG	2T	203	1/1	0.86	0.09	51,51,51,51	0
55	MG	1A	3712	1/1	0.86	0.14	36,36,36,36	0
55	MG	2A	3347	1/1	0.86	0.06	48,48,48,48	0
55	MG	2A	3087	1/1	0.86	0.08	31,31,31,31	0
55	MG	2A	3090	1/1	0.86	0.19	40,40,40,40	0
55	MG	1A	3111	1/1	0.86	0.10	40,40,40,40	0
55	MG	1A	3354	1/1	0.86	0.10	37,37,37,37	0
55	MG	1A	3849	1/1	0.86	0.21	22,22,22,22	0
55	MG	2a	1636	1/1	0.86	0.11	49,49,49,49	0
55	MG	1a	3079	1/1	0.86	0.17	41,41,41,41	0
55	MG	1a	3184	1/1	0.86	0.34	55,55,55,55	0
55	MG	2a	1651	1/1	0.86	0.12	58,58,58,58	0
55	MG	2a	1656	1/1	0.86	0.14	44,44,44,44	0
55	MG	2A	3150	1/1	0.86	0.21	45,45,45,45	0
55	MG	2a	1665	1/1	0.86	0.16	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2a	1687	1/1	0.86	0.12	44,44,44,44	0
55	MG	1a	3080	1/1	0.86	0.20	63,63,63,63	0
55	MG	2A	3187	1/1	0.86	0.22	62,62,62,62	0
55	MG	2a	1707	1/1	0.86	0.11	43,43,43,43	0
55	MG	2a	1712	1/1	0.86	0.14	41,41,41,41	0
55	MG	2a	1714	1/1	0.86	0.24	50,50,50,50	0
55	MG	2A	3759	1/1	0.86	0.16	43,43,43,43	0
55	MG	1a	3088	1/1	0.86	0.26	51,51,51,51	0
55	MG	1A	3543	1/1	0.86	0.15	30,30,30,30	0
55	MG	2a	1724	1/1	0.86	0.23	49,49,49,49	0
55	MG	2A	3504	1/1	0.86	0.07	37,37,37,37	0
55	MG	1A	3295	1/1	0.86	0.07	26,26,26,26	0
55	MG	2A	3777	1/1	0.86	0.14	46,46,46,46	0
55	MG	2a	1740	1/1	0.86	0.11	75,75,75,75	0
55	MG	1a	3108	1/1	0.86	0.17	63,63,63,63	0
55	MG	2A	3531	1/1	0.86	0.17	43,43,43,43	0
55	MG	2A	3234	1/1	0.86	0.13	53,53,53,53	0
55	MG	1x	107	1/1	0.86	0.18	48,48,48,48	0
55	MG	2a	1761	1/1	0.86	0.10	49,49,49,49	0
55	MG	2A	3248	1/1	0.86	0.09	33,33,33,33	0
55	MG	1A	3225	1/1	0.86	0.28	54,54,54,54	0
55	MG	1a	3041	1/1	0.86	0.16	45,45,45,45	0
55	MG	2A	3836	1/1	0.86	0.24	39,39,39,39	0
55	MG	1A	3687	1/1	0.86	0.11	59,59,59,59	0
55	MG	1A	3154	1/1	0.86	0.07	17,17,17,17	0
55	MG	2A	3292	1/1	0.86	0.19	48,48,48,48	0
55	MG	2a	1806	1/1	0.86	0.13	55,55,55,55	0
55	MG	1a	3166	1/1	0.86	0.14	84,84,84,84	0
55	MG	2a	1811	1/1	0.86	0.30	42,42,42,42	0
55	MG	2A	3301	1/1	0.86	0.14	44,44,44,44	0
55	MG	2d	302	1/1	0.86	0.12	47,47,47,47	0
55	MG	1a	3169	1/1	0.86	0.12	55,55,55,55	0
57	ZN	14	102	1/1	0.86	0.17	159,159,159,159	0
55	MG	1A	3898	1/1	0.86	0.17	54,54,54,54	0
55	MG	1B	216	1/1	0.87	0.13	67,67,67,67	0
55	MG	2I	101	1/1	0.87	0.06	37,37,37,37	0
55	MG	2A	3035	1/1	0.87	0.18	30,30,30,30	0
55	MG	2A	3045	1/1	0.87	0.10	45,45,45,45	0
55	MG	1A	3200	1/1	0.87	0.12	37,37,37,37	0
55	MG	2A	3051	1/1	0.87	0.08	42,42,42,42	0
55	MG	1A	3083	1/1	0.87	0.13	42,42,42,42	0
55	MG	2A	3646	1/1	0.87	0.11	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3660	1/1	0.87	0.12	38,38,38,38	0
55	MG	2a	1634	1/1	0.87	0.17	51,51,51,51	0
55	MG	2a	1635	1/1	0.87	0.13	31,31,31,31	0
55	MG	1A	3145	1/1	0.87	0.14	45,45,45,45	0
55	MG	2A	3670	1/1	0.87	0.12	43,43,43,43	0
55	MG	2A	3068	1/1	0.87	0.25	32,32,32,32	0
55	MG	2A	3316	1/1	0.87	0.06	36,36,36,36	0
55	MG	2a	1652	1/1	0.87	0.20	40,40,40,40	0
55	MG	1A	3618	1/1	0.87	0.07	46,46,46,46	0
55	MG	2A	3088	1/1	0.87	0.14	45,45,45,45	0
55	MG	2A	3333	1/1	0.87	0.13	34,34,34,34	0
55	MG	1A	3362	1/1	0.87	0.12	44,44,44,44	0
55	MG	2A	3349	1/1	0.87	0.15	49,49,49,49	0
55	MG	1A	3025	1/1	0.87	0.26	51,51,51,51	0
55	MG	2A	3718	1/1	0.87	0.10	62,62,62,62	0
55	MG	1A	3815	1/1	0.87	0.18	31,31,31,31	0
55	MG	1A	3553	1/1	0.87	0.09	27,27,27,27	0
55	MG	1E	312	1/1	0.87	0.39	54,54,54,54	0
55	MG	1A	4020	1/1	0.87	0.13	35,35,35,35	0
55	MG	1A	4021	1/1	0.87	0.14	42,42,42,42	0
55	MG	2A	3760	1/1	0.87	0.11	50,50,50,50	0
55	MG	2A	3171	1/1	0.87	0.23	35,35,35,35	0
55	MG	1A	3912	1/1	0.87	0.14	39,39,39,39	0
55	MG	2A	3422	1/1	0.87	0.21	52,52,52,52	0
55	MG	2A	3772	1/1	0.87	0.21	31,31,31,31	0
55	MG	13	102	1/1	0.87	0.30	59,59,59,59	0
55	MG	1A	3747	1/1	0.87	0.11	38,38,38,38	0
55	MG	1a	3140	1/1	0.87	0.15	42,42,42,42	0
55	MG	2a	1754	1/1	0.87	0.25	45,45,45,45	0
55	MG	2A	3794	1/1	0.87	0.11	37,37,37,37	0
55	MG	2A	3457	1/1	0.87	0.09	54,54,54,54	0
55	MG	1a	3017	1/1	0.87	0.17	48,48,48,48	0
55	MG	2A	3482	1/1	0.87	0.13	35,35,35,35	0
55	MG	1A	3935	1/1	0.87	0.07	56,56,56,56	0
55	MG	2A	3207	1/1	0.87	0.17	48,48,48,48	0
55	MG	2a	1796	1/1	0.87	0.09	50,50,50,50	0
55	MG	2A	3225	1/1	0.87	0.11	42,42,42,42	0
55	MG	2A	3011	1/1	0.87	0.14	41,41,41,41	0
55	MG	2A	3015	1/1	0.87	0.09	55,55,55,55	0
55	MG	2A	3242	1/1	0.87	0.10	62,62,62,62	0
55	MG	2A	3546	1/1	0.87	0.13	54,54,54,54	0
55	MG	2A	3558	1/1	0.87	0.10	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3244	1/1	0.87	0.07	35,35,35,35	0
55	MG	1B	215	1/1	0.87	0.11	56,56,56,56	0
55	MG	2g	201	1/1	0.87	0.09	65,65,65,65	0
55	MG	2B	216	1/1	0.87	0.10	57,57,57,57	0
55	MG	2A	3249	1/1	0.87	0.07	25,25,25,25	0
55	MG	2Q	202	1/1	0.87	0.12	38,38,38,38	0
57	ZN	25	105	1/1	0.87	0.12	164,164,164,164	0
55	MG	2A	3613	1/1	0.88	0.27	28,28,28,28	0
55	MG	25	104	1/1	0.88	0.13	34,34,34,34	0
55	MG	27	102	1/1	0.88	0.11	36,36,36,36	0
55	MG	1a	3055	1/1	0.88	0.07	46,46,46,46	0
55	MG	1A	3915	1/1	0.88	0.11	53,53,53,53	0
55	MG	2A	3630	1/1	0.88	0.16	32,32,32,32	0
55	MG	1A	3820	1/1	0.88	0.22	14,14,14,14	0
55	MG	1B	230	1/1	0.88	0.14	44,44,44,44	0
55	MG	2a	1626	1/1	0.88	0.11	46,46,46,46	0
55	MG	2A	3122	1/1	0.88	0.11	49,49,49,49	0
55	MG	1a	3202	1/1	0.88	0.11	47,47,47,47	0
55	MG	1b	301	1/1	0.88	0.13	54,54,54,54	0
55	MG	2A	3336	1/1	0.88	0.19	59,59,59,59	0
55	MG	2A	3346	1/1	0.88	0.10	47,47,47,47	0
55	MG	2A	3145	1/1	0.88	0.07	51,51,51,51	0
55	MG	2A	3149	1/1	0.88	0.06	43,43,43,43	0
55	MG	1n	102	1/1	0.88	0.12	55,55,55,55	0
55	MG	2A	3356	1/1	0.88	0.12	36,36,36,36	0
55	MG	2A	3160	1/1	0.88	0.17	58,58,58,58	0
55	MG	2A	3169	1/1	0.88	0.10	40,40,40,40	0
55	MG	1A	3172	1/1	0.88	0.08	22,22,22,22	0
55	MG	2A	3173	1/1	0.88	0.16	31,31,31,31	0
55	MG	2A	3727	1/1	0.88	0.07	40,40,40,40	0
55	MG	2a	1704	1/1	0.88	0.15	47,47,47,47	0
55	MG	1A	3835	1/1	0.88	0.17	24,24,24,24	0
55	MG	1A	3841	1/1	0.88	0.14	41,41,41,41	0
55	MG	2A	3191	1/1	0.88	0.13	50,50,50,50	0
55	MG	1A	3401	1/1	0.88	0.09	37,37,37,37	0
55	MG	1A	3226	1/1	0.88	0.07	46,46,46,46	0
55	MG	1A	3315	1/1	0.88	0.07	21,21,21,21	0
55	MG	1A	3323	1/1	0.88	0.12	30,30,30,30	0
55	MG	2A	3447	1/1	0.88	0.20	39,39,39,39	0
55	MG	1A	3868	1/1	0.88	0.12	29,29,29,29	0
55	MG	2A	3465	1/1	0.88	0.21	50,50,50,50	0
55	MG	2A	3778	1/1	0.88	0.14	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3214	1/1	0.88	0.12	33,33,33,33	0
55	MG	2a	1742	1/1	0.88	0.29	44,44,44,44	0
55	MG	2A	3217	1/1	0.88	0.25	50,50,50,50	0
55	MG	1A	3869	1/1	0.88	0.10	61,61,61,61	0
55	MG	13	103	1/1	0.88	0.14	53,53,53,53	0
55	MG	1A	3528	1/1	0.88	0.19	59,59,59,59	0
55	MG	1A	3760	1/1	0.88	0.14	22,22,22,22	0
55	MG	1a	3165	1/1	0.88	0.14	48,48,48,48	0
55	MG	2a	1769	1/1	0.88	0.18	64,64,64,64	0
55	MG	2A	3832	1/1	0.88	0.20	36,36,36,36	0
55	MG	1A	3287	1/1	0.88	0.14	48,48,48,48	0
55	MG	1A	3532	1/1	0.88	0.13	40,40,40,40	0
55	MG	2A	3549	1/1	0.88	0.11	61,61,61,61	0
55	MG	2A	3847	1/1	0.88	0.14	47,47,47,47	0
55	MG	2A	3849	1/1	0.88	0.17	50,50,50,50	0
55	MG	1A	3905	1/1	0.88	0.10	63,63,63,63	0
55	MG	1A	3290	1/1	0.88	0.12	39,39,39,39	0
55	MG	2A	3267	1/1	0.88	0.12	54,54,54,54	0
55	MG	1A	3293	1/1	0.88	0.10	41,41,41,41	0
55	MG	2A	3275	1/1	0.88	0.14	45,45,45,45	0
55	MG	2d	301	1/1	0.88	0.19	38,38,38,38	0
55	MG	2A	3277	1/1	0.88	0.10	42,42,42,42	0
55	MG	2A	3587	1/1	0.88	0.12	60,60,60,60	0
55	MG	2i	201	1/1	0.88	0.09	70,70,70,70	0
55	MG	2n	101	1/1	0.88	0.16	56,56,56,56	0
55	MG	2F	304	1/1	0.88	0.13	54,54,54,54	0
55	MG	2t	201	1/1	0.88	0.18	36,36,36,36	0
55	MG	1A	3358	1/1	0.88	0.20	35,35,35,35	0
55	MG	1a	3053	1/1	0.88	0.09	38,38,38,38	0
55	MG	2A	3610	1/1	0.88	0.19	41,41,41,41	0
55	MG	2A	3569	1/1	0.89	0.12	35,35,35,35	0
55	MG	1A	3308	1/1	0.89	0.08	45,45,45,45	0
55	MG	1A	3370	1/1	0.89	0.19	35,35,35,35	0
55	MG	2Z	302	1/1	0.89	0.13	26,26,26,26	0
55	MG	1a	3082	1/1	0.89	0.18	28,28,28,28	0
55	MG	1A	3383	1/1	0.89	0.12	27,27,27,27	0
55	MG	2A	3263	1/1	0.89	0.05	33,33,33,33	0
55	MG	1a	3089	1/1	0.89	0.17	49,49,49,49	0
55	MG	1A	3067	1/1	0.89	0.11	21,21,21,21	0
55	MG	2A	3273	1/1	0.89	0.10	24,24,24,24	0
55	MG	1A	3840	1/1	0.89	0.11	28,28,28,28	0
55	MG	1A	3956	1/1	0.89	0.16	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2a	1621	1/1	0.89	0.10	40,40,40,40	0
55	MG	2A	3622	1/1	0.89	0.11	37,37,37,37	0
55	MG	2A	3279	1/1	0.89	0.11	33,33,33,33	0
55	MG	2A	3280	1/1	0.89	0.22	39,39,39,39	0
55	MG	1F	313	1/1	0.89	0.13	49,49,49,49	0
55	MG	1a	3117	1/1	0.89	0.16	46,46,46,46	0
55	MG	1a	3122	1/1	0.89	0.15	42,42,42,42	0
55	MG	1G	202	1/1	0.89	0.11	40,40,40,40	0
55	MG	1A	3166	1/1	0.89	0.09	36,36,36,36	0
55	MG	2A	3680	1/1	0.89	0.08	46,46,46,46	0
55	MG	1a	3144	1/1	0.89	0.09	56,56,56,56	0
55	MG	2a	1654	1/1	0.89	0.14	35,35,35,35	0
55	MG	1a	3148	1/1	0.89	0.21	40,40,40,40	0
55	MG	2A	3686	1/1	0.89	0.16	31,31,31,31	0
55	MG	2a	1662	1/1	0.89	0.16	52,52,52,52	0
55	MG	2A	3688	1/1	0.89	0.08	53,53,53,53	0
55	MG	2a	1670	1/1	0.89	0.16	49,49,49,49	0
55	MG	2a	1673	1/1	0.89	0.06	50,50,50,50	0
55	MG	2A	3697	1/1	0.89	0.10	30,30,30,30	0
55	MG	2A	3700	1/1	0.89	0.21	31,31,31,31	0
55	MG	2a	1699	1/1	0.89	0.10	36,36,36,36	0
55	MG	1A	3583	1/1	0.89	0.09	43,43,43,43	0
55	MG	2A	3708	1/1	0.89	0.13	20,20,20,20	0
55	MG	2a	1705	1/1	0.89	0.07	54,54,54,54	0
55	MG	2A	3709	1/1	0.89	0.09	42,42,42,42	0
55	MG	1Q	203	1/1	0.89	0.09	45,45,45,45	0
55	MG	2A	3111	1/1	0.89	0.10	56,56,56,56	0
55	MG	1a	3162	1/1	0.89	0.11	47,47,47,47	0
55	MG	1A	3746	1/1	0.89	0.15	51,51,51,51	0
55	MG	2A	3135	1/1	0.89	0.16	49,49,49,49	0
55	MG	1R	207	1/1	0.89	0.18	55,55,55,55	0
55	MG	1T	202	1/1	0.89	0.10	46,46,46,46	0
55	MG	1V	204	1/1	0.89	0.05	51,51,51,51	0
55	MG	2a	1736	1/1	0.89	0.17	54,54,54,54	0
55	MG	2A	3363	1/1	0.89	0.08	49,49,49,49	0
55	MG	1A	3411	1/1	0.89	0.16	29,29,29,29	0
55	MG	1A	3992	1/1	0.89	0.08	40,40,40,40	0
55	MG	2A	3158	1/1	0.89	0.10	38,38,38,38	0
55	MG	1a	3003	1/1	0.89	0.08	54,54,54,54	0
55	MG	1A	3996	1/1	0.89	0.14	51,51,51,51	0
55	MG	2A	3770	1/1	0.89	0.10	45,45,45,45	0
55	MG	1a	3180	1/1	0.89	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
55	MG	2a	1756	1/1	0.89	0.13	33,33,33,33	0
55	MG	2a	1757	1/1	0.89	0.18	44,44,44,44	0
55	MG	2a	1759	1/1	0.89	0.15	50,50,50,50	0
55	MG	2A	3411	1/1	0.89	0.16	43,43,43,43	0
55	MG	2A	3172	1/1	0.89	0.10	43,43,43,43	0
55	MG	1A	3436	1/1	0.89	0.17	53,53,53,53	0
55	MG	1A	3865	1/1	0.89	0.11	49,49,49,49	0
55	MG	2a	1776	1/1	0.89	0.16	55,55,55,55	0
55	MG	2a	1787	1/1	0.89	0.12	49,49,49,49	0
55	MG	1A	3605	1/1	0.89	0.13	53,53,53,53	0
55	MG	1A	3751	1/1	0.89	0.13	44,44,44,44	0
55	MG	1a	3198	1/1	0.89	0.10	56,56,56,56	0
55	MG	1A	3881	1/1	0.89	0.10	44,44,44,44	0
55	MG	1a	3206	1/1	0.89	0.09	60,60,60,60	0
55	MG	1A	3455	1/1	0.89	0.12	35,35,35,35	0
55	MG	2A	3205	1/1	0.89	0.09	54,54,54,54	0
55	MG	1A	3035	1/1	0.89	0.12	18,18,18,18	0
55	MG	2A	3528	1/1	0.89	0.11	24,24,24,24	0
55	MG	1A	3250	1/1	0.89	0.11	46,46,46,46	0
55	MG	1A	3895	1/1	0.89	0.09	48,48,48,48	0
55	MG	1x	103	1/1	0.89	0.27	50,50,50,50	0
55	MG	2A	3232	1/1	0.89	0.13	43,43,43,43	0
55	MG	2A	3545	1/1	0.89	0.08	57,57,57,57	0
55	MG	2j	201	1/1	0.89	0.08	64,64,64,64	0
55	MG	2B	210	1/1	0.89	0.09	45,45,45,45	0
55	MG	1A	3770	1/1	0.89	0.10	32,32,32,32	0
55	MG	2A	3235	1/1	0.89	0.11	34,34,34,34	0
55	MG	1A	3301	1/1	0.89	0.19	29,29,29,29	0
55	MG	1A	3805	1/1	0.89	0.16	41,41,41,41	0
55	MG	1A	3104	1/1	0.89	0.36	32,32,32,32	0
58	V7A	2a	1817	35/35	0.89	0.16	61,80,87,88	0
55	MG	1A	3809	1/1	0.90	0.17	32,32,32,32	0
55	MG	2B	211	1/1	0.90	0.15	35,35,35,35	0
55	MG	1B	205	1/1	0.90	0.14	44,44,44,44	0
55	MG	1a	3209	1/1	0.90	0.13	38,38,38,38	0
55	MG	2A	3202	1/1	0.90	0.24	45,45,45,45	0
55	MG	2A	3204	1/1	0.90	0.06	18,18,18,18	0
55	MG	1A	3350	1/1	0.90	0.08	28,28,28,28	0
55	MG	2B	220	1/1	0.90	0.11	50,50,50,50	0
55	MG	1e	201	1/1	0.90	0.19	54,54,54,54	0
55	MG	2P	203	1/1	0.90	0.07	46,46,46,46	0
55	MG	1f	202	1/1	0.90	0.18	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3591	1/1	0.90	0.08	29,29,29,29	0
55	MG	2W	201	1/1	0.90	0.17	45,45,45,45	0
55	MG	2Z	301	1/1	0.90	0.14	68,68,68,68	0
55	MG	1n	103	1/1	0.90	0.19	37,37,37,37	0
55	MG	1a	3050	1/1	0.90	0.08	25,25,25,25	0
55	MG	1B	217	1/1	0.90	0.20	32,32,32,32	0
55	MG	1A	3908	1/1	0.90	0.12	29,29,29,29	0
55	MG	1B	219	1/1	0.90	0.07	40,40,40,40	0
55	MG	1A	3392	1/1	0.90	0.16	31,31,31,31	0
55	MG	1B	224	1/1	0.90	0.10	40,40,40,40	0
55	MG	1A	3822	1/1	0.90	0.15	26,26,26,26	0
55	MG	2a	1609	1/1	0.90	0.22	39,39,39,39	0
55	MG	2a	1610	1/1	0.90	0.19	55,55,55,55	0
55	MG	2a	1614	1/1	0.90	0.30	53,53,53,53	0
55	MG	1A	3914	1/1	0.90	0.11	62,62,62,62	0
55	MG	1a	3073	1/1	0.90	0.14	50,50,50,50	0
55	MG	2A	3254	1/1	0.90	0.08	41,41,41,41	0
55	MG	2a	1624	1/1	0.90	0.24	38,38,38,38	0
55	MG	1A	3736	1/1	0.90	0.11	33,33,33,33	0
55	MG	1A	3296	1/1	0.90	0.19	48,48,48,48	0
55	MG	2A	3614	1/1	0.90	0.18	13,13,13,13	0
55	MG	2A	3023	1/1	0.90	0.24	41,41,41,41	0
55	MG	1A	3744	1/1	0.90	0.22	21,21,21,21	0
55	MG	2a	1637	1/1	0.90	0.24	39,39,39,39	0
55	MG	1a	3085	1/1	0.90	0.17	38,38,38,38	0
55	MG	2a	1643	1/1	0.90	0.16	49,49,49,49	0
55	MG	1A	3612	1/1	0.90	0.09	14,14,14,14	0
55	MG	2A	3634	1/1	0.90	0.16	40,40,40,40	0
55	MG	2A	3639	1/1	0.90	0.17	44,44,44,44	0
55	MG	2A	3276	1/1	0.90	0.09	59,59,59,59	0
55	MG	2A	3649	1/1	0.90	0.20	47,47,47,47	0
55	MG	1A	3615	1/1	0.90	0.16	15,15,15,15	0
55	MG	1a	3090	1/1	0.90	0.12	46,46,46,46	0
55	MG	2A	3669	1/1	0.90	0.09	37,37,37,37	0
55	MG	1A	3165	1/1	0.90	0.20	40,40,40,40	0
55	MG	2A	3282	1/1	0.90	0.06	49,49,49,49	0
55	MG	1F	301	1/1	0.90	0.20	29,29,29,29	0
55	MG	1F	309	1/1	0.90	0.16	45,45,45,45	0
55	MG	2A	3294	1/1	0.90	0.14	33,33,33,33	0
55	MG	2A	3079	1/1	0.90	0.26	50,50,50,50	0
55	MG	1A	3629	1/1	0.90	0.13	16,16,16,16	0
55	MG	2A	3687	1/1	0.90	0.19	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3089	1/1	0.90	0.12	39,39,39,39	0
55	MG	2a	1709	1/1	0.90	0.12	44,44,44,44	0
55	MG	2A	3313	1/1	0.90	0.23	52,52,52,52	0
55	MG	1N	205	1/1	0.90	0.13	22,22,22,22	0
55	MG	2A	3701	1/1	0.90	0.17	48,48,48,48	0
55	MG	2a	1719	1/1	0.90	0.22	43,43,43,43	0
55	MG	1A	3364	1/1	0.90	0.09	43,43,43,43	0
55	MG	2A	3094	1/1	0.90	0.20	49,49,49,49	0
55	MG	1O	205	1/1	0.90	0.09	31,31,31,31	0
55	MG	1P	203	1/1	0.90	0.14	44,44,44,44	0
55	MG	2A	3340	1/1	0.90	0.14	43,43,43,43	0
55	MG	2a	1732	1/1	0.90	0.20	39,39,39,39	0
55	MG	2A	3345	1/1	0.90	0.10	41,41,41,41	0
55	MG	1P	204	1/1	0.90	0.23	19,19,19,19	0
55	MG	1A	3972	1/1	0.90	0.26	37,37,37,37	0
55	MG	2A	3133	1/1	0.90	0.19	33,33,33,33	0
55	MG	1P	206	1/1	0.90	0.19	34,34,34,34	0
55	MG	1A	3167	1/1	0.90	0.18	30,30,30,30	0
55	MG	2A	3736	1/1	0.90	0.08	54,54,54,54	0
55	MG	2A	3740	1/1	0.90	0.09	42,42,42,42	0
55	MG	1A	3995	1/1	0.90	0.12	48,48,48,48	0
55	MG	2A	3758	1/1	0.90	0.23	59,59,59,59	0
55	MG	1A	3663	1/1	0.90	0.10	44,44,44,44	0
55	MG	1A	4003	1/1	0.90	0.13	42,42,42,42	0
55	MG	1A	3875	1/1	0.90	0.07	39,39,39,39	0
55	MG	2A	3151	1/1	0.90	0.07	56,56,56,56	0
55	MG	12	101	1/1	0.90	0.08	34,34,34,34	0
55	MG	1A	3474	1/1	0.90	0.05	23,23,23,23	0
55	MG	1A	4016	1/1	0.90	0.07	54,54,54,54	0
55	MG	2a	1778	1/1	0.90	0.07	61,61,61,61	0
55	MG	2a	1783	1/1	0.90	0.19	56,56,56,56	0
55	MG	2A	3773	1/1	0.90	0.08	36,36,36,36	0
55	MG	13	104	1/1	0.90	0.12	38,38,38,38	0
55	MG	2A	3412	1/1	0.90	0.21	45,45,45,45	0
55	MG	2A	3420	1/1	0.90	0.20	38,38,38,38	0
55	MG	18	103	1/1	0.90	0.30	40,40,40,40	0
55	MG	1A	3776	1/1	0.90	0.06	32,32,32,32	0
55	MG	1A	3787	1/1	0.90	0.09	58,58,58,58	0
55	MG	2A	3183	1/1	0.90	0.16	39,39,39,39	0
55	MG	2A	3442	1/1	0.90	0.09	33,33,33,33	0
55	MG	2A	3185	1/1	0.90	0.07	54,54,54,54	0
55	MG	2A	3819	1/1	0.90	0.12	21,21,21,21	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3452	1/1	0.90	0.18	37,37,37,37	0
55	MG	2A	3456	1/1	0.90	0.18	38,38,38,38	0
55	MG	2A	3834	1/1	0.90	0.15	43,43,43,43	0
55	MG	2A	3186	1/1	0.90	0.19	43,43,43,43	0
55	MG	1A	3492	1/1	0.90	0.10	47,47,47,47	0
55	MG	2A	3837	1/1	0.90	0.24	23,23,23,23	0
55	MG	2A	3838	1/1	0.90	0.14	49,49,49,49	0
55	MG	1a	3021	1/1	0.90	0.15	34,34,34,34	0
55	MG	1A	3499	1/1	0.90	0.11	39,39,39,39	0
55	MG	2A	3483	1/1	0.90	0.16	29,29,29,29	0
55	MG	2A	3497	1/1	0.90	0.12	51,51,51,51	0
58	V7A	1a	3213	35/35	0.90	0.14	47,61,72,74	0
55	MG	2A	3502	1/1	0.90	0.19	56,56,56,56	0
55	MG	2A	3826	1/1	0.91	0.08	35,35,35,35	0
55	MG	1A	3616	1/1	0.91	0.17	12,12,12,12	0
55	MG	2A	3126	1/1	0.91	0.17	46,46,46,46	0
55	MG	1A	3910	1/1	0.91	0.07	35,35,35,35	0
55	MG	1a	3096	1/1	0.91	0.10	42,42,42,42	0
55	MG	1a	3101	1/1	0.91	0.15	45,45,45,45	0
55	MG	1D	303	1/1	0.91	0.07	31,31,31,31	0
55	MG	2A	3839	1/1	0.91	0.08	30,30,30,30	0
55	MG	2A	3840	1/1	0.91	0.09	51,51,51,51	0
55	MG	1A	3501	1/1	0.91	0.26	36,36,36,36	0
55	MG	2A	3843	1/1	0.91	0.23	39,39,39,39	0
55	MG	2A	3440	1/1	0.91	0.08	40,40,40,40	0
55	MG	1A	3623	1/1	0.91	0.13	15,15,15,15	0
55	MG	1a	3110	1/1	0.91	0.10	40,40,40,40	0
55	MG	2B	201	1/1	0.91	0.11	40,40,40,40	0
55	MG	1E	311	1/1	0.91	0.07	48,48,48,48	0
55	MG	2B	204	1/1	0.91	0.20	47,47,47,47	0
55	MG	2A	3453	1/1	0.91	0.14	31,31,31,31	0
55	MG	2A	3155	1/1	0.91	0.09	54,54,54,54	0
55	MG	1A	3322	1/1	0.91	0.04	20,20,20,20	0
55	MG	1a	3120	1/1	0.91	0.14	42,42,42,42	0
55	MG	1a	3121	1/1	0.91	0.28	54,54,54,54	0
55	MG	1A	3634	1/1	0.91	0.10	32,32,32,32	0
55	MG	1A	3923	1/1	0.91	0.12	36,36,36,36	0
55	MG	1A	3803	1/1	0.91	0.25	29,29,29,29	0
55	MG	2E	301	1/1	0.91	0.07	31,31,31,31	0
55	MG	2E	305	1/1	0.91	0.08	27,27,27,27	0
55	MG	2A	3499	1/1	0.91	0.21	45,45,45,45	0
55	MG	1A	3514	1/1	0.91	0.29	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1N	202	1/1	0.91	0.09	41,41,41,41	0
55	MG	1A	3948	1/1	0.91	0.14	43,43,43,43	0
55	MG	2V	201	1/1	0.91	0.14	53,53,53,53	0
55	MG	2A	3526	1/1	0.91	0.13	27,27,27,27	0
55	MG	2X	101	1/1	0.91	0.07	34,34,34,34	0
55	MG	1A	3371	1/1	0.91	0.21	45,45,45,45	0
55	MG	1A	3812	1/1	0.91	0.10	39,39,39,39	0
55	MG	1a	3164	1/1	0.91	0.10	52,52,52,52	0
55	MG	2A	3539	1/1	0.91	0.10	41,41,41,41	0
55	MG	2A	3540	1/1	0.91	0.14	32,32,32,32	0
55	MG	1A	3059	1/1	0.91	0.06	35,35,35,35	0
55	MG	28	103	1/1	0.91	0.10	53,53,53,53	0
55	MG	1A	3961	1/1	0.91	0.15	37,37,37,37	0
55	MG	1A	3330	1/1	0.91	0.10	33,33,33,33	0
55	MG	1A	3184	1/1	0.91	0.14	43,43,43,43	0
55	MG	1A	3683	1/1	0.91	0.09	39,39,39,39	0
55	MG	1A	3971	1/1	0.91	0.13	20,20,20,20	0
55	MG	1A	3160	1/1	0.91	0.24	45,45,45,45	0
55	MG	2a	1615	1/1	0.91	0.22	37,37,37,37	0
55	MG	1A	3983	1/1	0.91	0.18	25,25,25,25	0
55	MG	1V	203	1/1	0.91	0.09	22,22,22,22	0
55	MG	1A	3826	1/1	0.91	0.09	29,29,29,29	0
55	MG	2A	3575	1/1	0.91	0.11	26,26,26,26	0
55	MG	2A	3218	1/1	0.91	0.11	43,43,43,43	0
55	MG	2a	1628	1/1	0.91	0.16	41,41,41,41	0
55	MG	2a	1631	1/1	0.91	0.19	42,42,42,42	0
55	MG	2A	3222	1/1	0.91	0.10	47,47,47,47	0
55	MG	1W	204	1/1	0.91	0.10	43,43,43,43	0
55	MG	1W	205	1/1	0.91	0.17	34,34,34,34	0
55	MG	2A	3595	1/1	0.91	0.07	45,45,45,45	0
55	MG	2A	3598	1/1	0.91	0.15	32,32,32,32	0
55	MG	1W	208	1/1	0.91	0.12	27,27,27,27	0
55	MG	1Y	201	1/1	0.91	0.13	33,33,33,33	0
55	MG	2A	3611	1/1	0.91	0.16	43,43,43,43	0
55	MG	10	101	1/1	0.91	0.05	33,33,33,33	0
55	MG	2A	3240	1/1	0.91	0.10	29,29,29,29	0
55	MG	11	103	1/1	0.91	0.09	47,47,47,47	0
55	MG	2A	3243	1/1	0.91	0.07	51,51,51,51	0
55	MG	1A	3685	1/1	0.91	0.10	26,26,26,26	0
55	MG	2A	3628	1/1	0.91	0.21	31,31,31,31	0
55	MG	1a	3210	1/1	0.91	0.09	34,34,34,34	0
55	MG	2a	1666	1/1	0.91	0.20	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3297	1/1	0.91	0.11	40,40,40,40	0
55	MG	1A	3416	1/1	0.91	0.18	44,44,44,44	0
55	MG	2a	1680	1/1	0.91	0.16	40,40,40,40	0
55	MG	2a	1686	1/1	0.91	0.14	37,37,37,37	0
55	MG	2A	3252	1/1	0.91	0.07	36,36,36,36	0
55	MG	2A	3647	1/1	0.91	0.11	41,41,41,41	0
55	MG	1A	3693	1/1	0.91	0.13	46,46,46,46	0
55	MG	2A	3651	1/1	0.91	0.16	48,48,48,48	0
55	MG	2a	1703	1/1	0.91	0.15	38,38,38,38	0
55	MG	1A	3706	1/1	0.91	0.13	39,39,39,39	0
55	MG	1A	3707	1/1	0.91	0.10	24,24,24,24	0
55	MG	2A	3264	1/1	0.91	0.09	52,52,52,52	0
55	MG	1a	3012	1/1	0.91	0.10	43,43,43,43	0
55	MG	1a	3013	1/1	0.91	0.07	56,56,56,56	0
55	MG	1a	3015	1/1	0.91	0.12	31,31,31,31	0
55	MG	2A	3678	1/1	0.91	0.14	43,43,43,43	0
55	MG	1A	3567	1/1	0.91	0.07	27,27,27,27	0
55	MG	1A	3863	1/1	0.91	0.07	49,49,49,49	0
55	MG	1A	3718	1/1	0.91	0.10	46,46,46,46	0
55	MG	1A	4029	1/1	0.91	0.18	36,36,36,36	0
55	MG	1A	3418	1/1	0.91	0.07	36,36,36,36	0
55	MG	1A	4034	1/1	0.91	0.11	54,54,54,54	0
55	MG	2A	3283	1/1	0.91	0.05	31,31,31,31	0
55	MG	2a	1733	1/1	0.91	0.13	44,44,44,44	0
55	MG	1a	3042	1/1	0.91	0.28	53,53,53,53	0
55	MG	2A	3290	1/1	0.91	0.07	30,30,30,30	0
55	MG	2A	3705	1/1	0.91	0.10	55,55,55,55	0
55	MG	2A	3016	1/1	0.91	0.08	33,33,33,33	0
55	MG	1A	4036	1/1	0.91	0.10	48,48,48,48	0
55	MG	1A	3127	1/1	0.91	0.09	18,18,18,18	0
55	MG	1a	3049	1/1	0.91	0.11	63,63,63,63	0
55	MG	2A	3307	1/1	0.91	0.09	38,38,38,38	0
55	MG	2A	3716	1/1	0.91	0.12	45,45,45,45	0
55	MG	2A	3308	1/1	0.91	0.09	44,44,44,44	0
55	MG	1A	3448	1/1	0.91	0.17	37,37,37,37	0
55	MG	1B	208	1/1	0.91	0.09	43,43,43,43	0
55	MG	2A	3314	1/1	0.91	0.07	39,39,39,39	0
55	MG	2A	3046	1/1	0.91	0.11	56,56,56,56	0
55	MG	1B	211	1/1	0.91	0.10	39,39,39,39	0
55	MG	2A	3734	1/1	0.91	0.07	39,39,39,39	0
55	MG	2a	1775	1/1	0.91	0.07	68,68,68,68	0
55	MG	1A	3876	1/1	0.91	0.10	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3453	1/1	0.91	0.24	24,24,24,24	0
55	MG	2a	1780	1/1	0.91	0.18	62,62,62,62	0
55	MG	1A	3600	1/1	0.91	0.11	33,33,33,33	0
55	MG	2A	3337	1/1	0.91	0.15	35,35,35,35	0
55	MG	2A	3061	1/1	0.91	0.13	50,50,50,50	0
55	MG	2a	1793	1/1	0.91	0.15	57,57,57,57	0
55	MG	1a	3065	1/1	0.91	0.07	51,51,51,51	0
55	MG	2A	3762	1/1	0.91	0.14	67,67,67,67	0
55	MG	1A	3355	1/1	0.91	0.11	37,37,37,37	0
55	MG	2A	3086	1/1	0.91	0.06	48,48,48,48	0
55	MG	1a	3068	1/1	0.91	0.05	30,30,30,30	0
55	MG	1A	3602	1/1	0.91	0.07	28,28,28,28	0
55	MG	1A	3080	1/1	0.91	0.12	41,41,41,41	0
55	MG	1A	3896	1/1	0.91	0.06	28,28,28,28	0
55	MG	1B	225	1/1	0.91	0.14	49,49,49,49	0
55	MG	2a	1815	1/1	0.91	0.08	53,53,53,53	0
55	MG	2A	3373	1/1	0.91	0.06	31,31,31,31	0
55	MG	1A	3610	1/1	0.91	0.10	24,24,24,24	0
55	MG	2A	3105	1/1	0.91	0.10	45,45,45,45	0
55	MG	2A	3793	1/1	0.91	0.14	13,13,13,13	0
55	MG	2A	3381	1/1	0.91	0.14	68,68,68,68	0
55	MG	2A	3110	1/1	0.91	0.05	17,17,17,17	0
55	MG	1A	3048	1/1	0.91	0.08	33,33,33,33	0
55	MG	2A	3814	1/1	0.91	0.09	44,44,44,44	0
55	MG	2x	104	1/1	0.91	0.25	50,50,50,50	0
55	MG	2A	3398	1/1	0.91	0.09	38,38,38,38	0
55	MG	2A	3113	1/1	0.91	0.14	50,50,50,50	0
55	MG	2A	3405	1/1	0.91	0.16	41,41,41,41	0
55	MG	2A	3821	1/1	0.91	0.13	33,33,33,33	0
55	MG	1A	3168	1/1	0.91	0.20	31,31,31,31	0
55	MG	1a	3062	1/1	0.92	0.20	51,51,51,51	0
55	MG	2A	3364	1/1	0.92	0.20	33,33,33,33	0
55	MG	2A	3367	1/1	0.92	0.11	27,27,27,27	0
55	MG	1A	3513	1/1	0.92	0.07	53,53,53,53	0
55	MG	2A	3376	1/1	0.92	0.11	33,33,33,33	0
55	MG	1A	3360	1/1	0.92	0.14	28,28,28,28	0
55	MG	2A	3379	1/1	0.92	0.07	43,43,43,43	0
55	MG	1A	3518	1/1	0.92	0.08	45,45,45,45	0
55	MG	1A	3062	1/1	0.92	0.06	36,36,36,36	0
55	MG	1A	3695	1/1	0.92	0.10	10,10,10,10	0
55	MG	1a	3076	1/1	0.92	0.12	59,59,59,59	0
55	MG	1a	3078	1/1	0.92	0.19	19,19,19,19	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3084	1/1	0.92	0.06	32,32,32,32	0
55	MG	1A	3185	1/1	0.92	0.06	23,23,23,23	0
55	MG	2A	3112	1/1	0.92	0.08	42,42,42,42	0
55	MG	1A	3147	1/1	0.92	0.10	41,41,41,41	0
55	MG	1A	3714	1/1	0.92	0.12	11,11,11,11	0
55	MG	2A	3413	1/1	0.92	0.18	30,30,30,30	0
55	MG	2A	3118	1/1	0.92	0.14	51,51,51,51	0
55	MG	1B	234	1/1	0.92	0.14	48,48,48,48	0
55	MG	1A	3377	1/1	0.92	0.14	38,38,38,38	0
55	MG	2A	3851	1/1	0.92	0.13	47,47,47,47	0
55	MG	1D	309	1/1	0.92	0.14	21,21,21,21	0
55	MG	2A	3134	1/1	0.92	0.11	40,40,40,40	0
55	MG	2A	3431	1/1	0.92	0.12	37,37,37,37	0
55	MG	1a	3091	1/1	0.92	0.09	53,53,53,53	0
55	MG	2A	3137	1/1	0.92	0.10	39,39,39,39	0
55	MG	1A	3381	1/1	0.92	0.10	22,22,22,22	0
55	MG	1a	3100	1/1	0.92	0.09	31,31,31,31	0
55	MG	1E	303	1/1	0.92	0.09	22,22,22,22	0
55	MG	2A	3147	1/1	0.92	0.26	51,51,51,51	0
55	MG	1E	306	1/1	0.92	0.07	33,33,33,33	0
55	MG	2A	3460	1/1	0.92	0.23	32,32,32,32	0
55	MG	1A	3735	1/1	0.92	0.17	37,37,37,37	0
55	MG	1A	3909	1/1	0.92	0.09	80,80,80,80	0
55	MG	2A	3470	1/1	0.92	0.23	21,21,21,21	0
55	MG	2A	3472	1/1	0.92	0.26	15,15,15,15	0
55	MG	2A	3480	1/1	0.92	0.06	38,38,38,38	0
55	MG	1A	3307	1/1	0.92	0.16	39,39,39,39	0
55	MG	2U	201	1/1	0.92	0.23	48,48,48,48	0
55	MG	2A	3157	1/1	0.92	0.07	20,20,20,20	0
55	MG	2A	3487	1/1	0.92	0.12	44,44,44,44	0
55	MG	1E	313	1/1	0.92	0.07	43,43,43,43	0
55	MG	1A	3556	1/1	0.92	0.11	26,26,26,26	0
55	MG	2A	3161	1/1	0.92	0.10	51,51,51,51	0
55	MG	2A	3167	1/1	0.92	0.11	51,51,51,51	0
55	MG	2I	104	1/1	0.92	0.15	27,27,27,27	0
55	MG	2I	106	1/1	0.92	0.17	35,35,35,35	0
55	MG	1A	3232	1/1	0.92	0.04	26,26,26,26	0
55	MG	2A	3519	1/1	0.92	0.07	60,60,60,60	0
55	MG	1A	3311	1/1	0.92	0.11	41,41,41,41	0
55	MG	2A	3527	1/1	0.92	0.08	40,40,40,40	0
55	MG	1A	3580	1/1	0.92	0.11	42,42,42,42	0
55	MG	1a	3133	1/1	0.92	0.17	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3922	1/1	0.92	0.06	68,68,68,68	0
55	MG	2A	3534	1/1	0.92	0.15	21,21,21,21	0
55	MG	2A	3180	1/1	0.92	0.12	38,38,38,38	0
55	MG	2a	1612	1/1	0.92	0.11	39,39,39,39	0
55	MG	2A	3181	1/1	0.92	0.05	10,10,10,10	0
55	MG	1A	3193	1/1	0.92	0.16	15,15,15,15	0
55	MG	2A	3542	1/1	0.92	0.12	29,29,29,29	0
55	MG	1a	3143	1/1	0.92	0.09	34,34,34,34	0
55	MG	1A	3931	1/1	0.92	0.09	20,20,20,20	0
55	MG	1A	3407	1/1	0.92	0.08	37,37,37,37	0
55	MG	2A	3188	1/1	0.92	0.04	30,30,30,30	0
55	MG	1A	3589	1/1	0.92	0.10	25,25,25,25	0
55	MG	1a	3150	1/1	0.92	0.10	41,41,41,41	0
55	MG	2a	1632	1/1	0.92	0.19	51,51,51,51	0
55	MG	1A	3409	1/1	0.92	0.06	50,50,50,50	0
55	MG	1a	3157	1/1	0.92	0.15	34,34,34,34	0
55	MG	1A	3594	1/1	0.92	0.10	25,25,25,25	0
55	MG	1a	3163	1/1	0.92	0.12	42,42,42,42	0
55	MG	2A	3203	1/1	0.92	0.05	44,44,44,44	0
55	MG	1A	3595	1/1	0.92	0.10	24,24,24,24	0
55	MG	1A	3763	1/1	0.92	0.08	37,37,37,37	0
55	MG	2a	1646	1/1	0.92	0.12	58,58,58,58	0
55	MG	1A	3767	1/1	0.92	0.19	40,40,40,40	0
55	MG	1a	3168	1/1	0.92	0.13	50,50,50,50	0
55	MG	1A	3318	1/1	0.92	0.12	27,27,27,27	0
55	MG	2a	1653	1/1	0.92	0.10	42,42,42,42	0
55	MG	1A	3771	1/1	0.92	0.08	44,44,44,44	0
55	MG	1A	3319	1/1	0.92	0.14	16,16,16,16	0
55	MG	2A	3223	1/1	0.92	0.15	51,51,51,51	0
55	MG	1A	3266	1/1	0.92	0.25	52,52,52,52	0
55	MG	2A	3226	1/1	0.92	0.22	32,32,32,32	0
55	MG	2A	3229	1/1	0.92	0.05	22,22,22,22	0
55	MG	2a	1667	1/1	0.92	0.12	40,40,40,40	0
55	MG	1A	3435	1/1	0.92	0.07	54,54,54,54	0
55	MG	1A	3974	1/1	0.92	0.08	30,30,30,30	0
55	MG	2a	1678	1/1	0.92	0.14	40,40,40,40	0
55	MG	1A	3976	1/1	0.92	0.15	26,26,26,26	0
55	MG	2a	1681	1/1	0.92	0.12	54,54,54,54	0
55	MG	2a	1685	1/1	0.92	0.12	51,51,51,51	0
55	MG	1A	3058	1/1	0.92	0.11	39,39,39,39	0
55	MG	1Y	202	1/1	0.92	0.07	44,44,44,44	0
55	MG	1a	3186	1/1	0.92	0.10	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2a	1698	1/1	0.92	0.15	40,40,40,40	0
55	MG	1A	3270	1/1	0.92	0.09	41,41,41,41	0
55	MG	1a	3193	1/1	0.92	0.14	62,62,62,62	0
55	MG	1A	3286	1/1	0.92	0.09	41,41,41,41	0
55	MG	1A	3121	1/1	0.92	0.11	27,27,27,27	0
55	MG	2A	3654	1/1	0.92	0.10	41,41,41,41	0
55	MG	1a	3199	1/1	0.92	0.07	55,55,55,55	0
55	MG	1A	3457	1/1	0.92	0.15	38,38,38,38	0
55	MG	2A	3666	1/1	0.92	0.12	26,26,26,26	0
55	MG	1A	4004	1/1	0.92	0.08	31,31,31,31	0
55	MG	2A	3261	1/1	0.92	0.16	43,43,43,43	0
55	MG	2A	3671	1/1	0.92	0.06	35,35,35,35	0
55	MG	1a	3207	1/1	0.92	0.14	50,50,50,50	0
55	MG	1A	3458	1/1	0.92	0.08	25,25,25,25	0
55	MG	14	101	1/1	0.92	0.11	40,40,40,40	0
55	MG	2A	3265	1/1	0.92	0.14	37,37,37,37	0
55	MG	2a	1726	1/1	0.92	0.28	26,26,26,26	0
55	MG	2a	1728	1/1	0.92	0.15	41,41,41,41	0
55	MG	1a	3212	1/1	0.92	0.15	66,66,66,66	0
55	MG	18	102	1/1	0.92	0.16	26,26,26,26	0
55	MG	1A	3628	1/1	0.92	0.09	22,22,22,22	0
55	MG	19	101	1/1	0.92	0.10	58,58,58,58	0
55	MG	1A	3471	1/1	0.92	0.08	47,47,47,47	0
55	MG	2A	3696	1/1	0.92	0.07	50,50,50,50	0
55	MG	1a	3004	1/1	0.92	0.08	57,57,57,57	0
55	MG	2A	3278	1/1	0.92	0.13	36,36,36,36	0
55	MG	1a	3005	1/1	0.92	0.31	51,51,51,51	0
55	MG	1v	103	1/1	0.92	0.31	55,55,55,55	0
55	MG	2a	1749	1/1	0.92	0.14	53,53,53,53	0
55	MG	2a	1751	1/1	0.92	0.10	34,34,34,34	0
55	MG	1A	3212	1/1	0.92	0.06	10,10,10,10	0
55	MG	1A	3643	1/1	0.92	0.07	35,35,35,35	0
55	MG	1A	3831	1/1	0.92	0.07	26,26,26,26	0
55	MG	2A	3289	1/1	0.92	0.15	49,49,49,49	0
55	MG	1A	3479	1/1	0.92	0.09	48,48,48,48	0
55	MG	1A	4031	1/1	0.92	0.08	21,21,21,21	0
55	MG	1a	3018	1/1	0.92	0.25	42,42,42,42	0
55	MG	1a	3020	1/1	0.92	0.16	34,34,34,34	0
55	MG	2a	1771	1/1	0.92	0.08	39,39,39,39	0
55	MG	2A	3719	1/1	0.92	0.17	47,47,47,47	0
55	MG	2A	3721	1/1	0.92	0.12	40,40,40,40	0
55	MG	1A	3652	1/1	0.92	0.10	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3655	1/1	0.92	0.12	41,41,41,41	0
55	MG	1A	3658	1/1	0.92	0.13	32,32,32,32	0
55	MG	1a	3037	1/1	0.92	0.13	39,39,39,39	0
55	MG	2A	3731	1/1	0.92	0.14	46,46,46,46	0
55	MG	1A	4038	1/1	0.92	0.08	35,35,35,35	0
55	MG	1A	4041	1/1	0.92	0.10	29,29,29,29	0
55	MG	2A	3737	1/1	0.92	0.16	51,51,51,51	0
55	MG	2A	3032	1/1	0.92	0.15	28,28,28,28	0
55	MG	2a	1797	1/1	0.92	0.15	47,47,47,47	0
55	MG	2A	3318	1/1	0.92	0.14	44,44,44,44	0
55	MG	1A	3292	1/1	0.92	0.06	25,25,25,25	0
55	MG	2A	3037	1/1	0.92	0.18	17,17,17,17	0
55	MG	2A	3332	1/1	0.92	0.05	33,33,33,33	0
55	MG	2a	1809	1/1	0.92	0.10	26,26,26,26	0
55	MG	1B	204	1/1	0.92	0.09	25,25,25,25	0
55	MG	1A	3493	1/1	0.92	0.12	37,37,37,37	0
55	MG	2a	1812	1/1	0.92	0.14	54,54,54,54	0
55	MG	1A	3215	1/1	0.92	0.10	44,44,44,44	0
55	MG	2A	3766	1/1	0.92	0.09	37,37,37,37	0
55	MG	2A	3050	1/1	0.92	0.13	31,31,31,31	0
55	MG	1A	3666	1/1	0.92	0.06	23,23,23,23	0
55	MG	2f	202	1/1	0.92	0.14	52,52,52,52	0
55	MG	1A	3169	1/1	0.92	0.09	38,38,38,38	0
55	MG	2A	3055	1/1	0.92	0.09	48,48,48,48	0
55	MG	1a	3054	1/1	0.92	0.10	46,46,46,46	0
55	MG	2k	201	1/1	0.92	0.09	54,54,54,54	0
55	MG	1A	3866	1/1	0.92	0.08	62,62,62,62	0
55	MG	2A	3351	1/1	0.92	0.12	38,38,38,38	0
55	MG	2A	3780	1/1	0.92	0.12	51,51,51,51	0
55	MG	2A	3781	1/1	0.92	0.15	43,43,43,43	0
55	MG	2x	107	1/1	0.92	0.19	47,47,47,47	0
56	K	2A	3433	1/1	0.92	0.07	43,43,43,43	0
55	MG	2A	3785	1/1	0.92	0.15	43,43,43,43	0
55	MG	2A	3355	1/1	0.92	0.17	30,30,30,30	0
57	ZN	24	501	1/1	0.92	0.14	147,147,147,147	0
55	MG	1A	3359	1/1	0.92	0.17	33,33,33,33	0
55	MG	2A	3358	1/1	0.92	0.05	17,17,17,17	0
55	MG	1A	3512	1/1	0.92	0.07	23,23,23,23	0
55	MG	2A	3764	1/1	0.93	0.08	37,37,37,37	0
55	MG	2A	3341	1/1	0.93	0.13	43,43,43,43	0
55	MG	1A	3141	1/1	0.93	0.10	37,37,37,37	0
55	MG	1a	3059	1/1	0.93	0.06	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1a	3060	1/1	0.93	0.12	44,44,44,44	0
55	MG	1A	3521	1/1	0.93	0.13	25,25,25,25	0
55	MG	1A	3070	1/1	0.93	0.06	41,41,41,41	0
55	MG	2A	3074	1/1	0.93	0.10	44,44,44,44	0
55	MG	2A	3077	1/1	0.93	0.11	23,23,23,23	0
55	MG	1a	3064	1/1	0.93	0.17	59,59,59,59	0
55	MG	1A	3171	1/1	0.93	0.08	34,34,34,34	0
55	MG	2A	3359	1/1	0.93	0.19	33,33,33,33	0
55	MG	1A	3298	1/1	0.93	0.05	38,38,38,38	0
55	MG	1A	3873	1/1	0.93	0.07	50,50,50,50	0
55	MG	1A	3090	1/1	0.93	0.13	42,42,42,42	0
55	MG	1A	3538	1/1	0.93	0.16	29,29,29,29	0
55	MG	2A	3795	1/1	0.93	0.11	30,30,30,30	0
55	MG	2A	3371	1/1	0.93	0.10	27,27,27,27	0
55	MG	2A	3372	1/1	0.93	0.13	42,42,42,42	0
55	MG	2A	3806	1/1	0.93	0.15	36,36,36,36	0
55	MG	1A	3878	1/1	0.93	0.08	20,20,20,20	0
55	MG	1B	228	1/1	0.93	0.09	33,33,33,33	0
55	MG	2A	3097	1/1	0.93	0.24	40,40,40,40	0
55	MG	1A	3879	1/1	0.93	0.12	41,41,41,41	0
55	MG	2A	3106	1/1	0.93	0.13	23,23,23,23	0
55	MG	1A	3704	1/1	0.93	0.07	41,41,41,41	0
55	MG	2A	3382	1/1	0.93	0.16	22,22,22,22	0
55	MG	2A	3827	1/1	0.93	0.10	45,45,45,45	0
55	MG	1A	3180	1/1	0.93	0.12	56,56,56,56	0
55	MG	2A	3389	1/1	0.93	0.14	28,28,28,28	0
55	MG	2A	3391	1/1	0.93	0.19	30,30,30,30	0
55	MG	2A	3392	1/1	0.93	0.15	25,25,25,25	0
55	MG	1B	232	1/1	0.93	0.08	59,59,59,59	0
55	MG	1A	3182	1/1	0.93	0.11	42,42,42,42	0
55	MG	1A	3077	1/1	0.93	0.05	24,24,24,24	0
55	MG	2A	3117	1/1	0.93	0.09	33,33,33,33	0
55	MG	1A	3893	1/1	0.93	0.08	35,35,35,35	0
55	MG	2A	3409	1/1	0.93	0.14	28,28,28,28	0
55	MG	2A	3120	1/1	0.93	0.19	30,30,30,30	0
55	MG	1A	3240	1/1	0.93	0.10	31,31,31,31	0
55	MG	1a	3093	1/1	0.93	0.13	53,53,53,53	0
55	MG	2A	3416	1/1	0.93	0.10	33,33,33,33	0
55	MG	2A	3130	1/1	0.93	0.07	28,28,28,28	0
55	MG	2A	3131	1/1	0.93	0.11	49,49,49,49	0
55	MG	1A	3558	1/1	0.93	0.13	21,21,21,21	0
55	MG	2B	205	1/1	0.93	0.14	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3242	1/1	0.93	0.10	28,28,28,28	0
55	MG	1A	3729	1/1	0.93	0.08	29,29,29,29	0
55	MG	1A	3733	1/1	0.93	0.11	17,17,17,17	0
55	MG	2A	3435	1/1	0.93	0.13	24,24,24,24	0
55	MG	2A	3439	1/1	0.93	0.07	15,15,15,15	0
55	MG	1a	3103	1/1	0.93	0.12	44,44,44,44	0
55	MG	2A	3441	1/1	0.93	0.06	31,31,31,31	0
55	MG	1A	3568	1/1	0.93	0.06	31,31,31,31	0
55	MG	2A	3444	1/1	0.93	0.23	36,36,36,36	0
55	MG	1a	3105	1/1	0.93	0.15	35,35,35,35	0
55	MG	2A	3449	1/1	0.93	0.15	32,32,32,32	0
55	MG	1A	3249	1/1	0.93	0.37	49,49,49,49	0
55	MG	2Q	201	1/1	0.93	0.09	53,53,53,53	0
55	MG	1A	3737	1/1	0.93	0.09	33,33,33,33	0
55	MG	2A	3455	1/1	0.93	0.24	32,32,32,32	0
55	MG	1a	3113	1/1	0.93	0.13	41,41,41,41	0
55	MG	1A	3001	1/1	0.93	0.07	26,26,26,26	0
55	MG	1F	304	1/1	0.93	0.22	30,30,30,30	0
55	MG	2A	3461	1/1	0.93	0.28	51,51,51,51	0
55	MG	2A	3156	1/1	0.93	0.25	32,32,32,32	0
55	MG	1F	308	1/1	0.93	0.10	51,51,51,51	0
55	MG	1A	3320	1/1	0.93	0.10	28,28,28,28	0
55	MG	1A	3426	1/1	0.93	0.10	15,15,15,15	0
55	MG	2A	3473	1/1	0.93	0.27	19,19,19,19	0
55	MG	2A	3479	1/1	0.93	0.17	23,23,23,23	0
55	MG	1A	3262	1/1	0.93	0.21	27,27,27,27	0
55	MG	26	101	1/1	0.93	0.20	40,40,40,40	0
55	MG	2A	3166	1/1	0.93	0.05	38,38,38,38	0
55	MG	28	101	1/1	0.93	0.06	31,31,31,31	0
55	MG	1a	3137	1/1	0.93	0.07	34,34,34,34	0
55	MG	2A	3486	1/1	0.93	0.14	29,29,29,29	0
55	MG	1G	204	1/1	0.93	0.08	51,51,51,51	0
55	MG	2a	1607	1/1	0.93	0.07	31,31,31,31	0
55	MG	2A	3489	1/1	0.93	0.15	17,17,17,17	0
55	MG	2A	3493	1/1	0.93	0.07	42,42,42,42	0
55	MG	1H	201	1/1	0.93	0.12	32,32,32,32	0
55	MG	2a	1611	1/1	0.93	0.16	47,47,47,47	0
55	MG	1A	3590	1/1	0.93	0.06	21,21,21,21	0
55	MG	1A	3189	1/1	0.93	0.08	22,22,22,22	0
55	MG	2A	3503	1/1	0.93	0.15	26,26,26,26	0
55	MG	1A	3437	1/1	0.93	0.07	29,29,29,29	0
55	MG	2A	3509	1/1	0.93	0.11	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3511	1/1	0.93	0.18	27,27,27,27	0
55	MG	1A	3933	1/1	0.93	0.06	51,51,51,51	0
55	MG	2A	3516	1/1	0.93	0.14	36,36,36,36	0
55	MG	1A	3023	1/1	0.93	0.05	24,24,24,24	0
55	MG	2a	1630	1/1	0.93	0.14	48,48,48,48	0
55	MG	2A	3520	1/1	0.93	0.08	48,48,48,48	0
55	MG	2A	3522	1/1	0.93	0.15	34,34,34,34	0
55	MG	1a	3153	1/1	0.93	0.06	26,26,26,26	0
55	MG	1a	3154	1/1	0.93	0.07	41,41,41,41	0
55	MG	1A	3451	1/1	0.93	0.18	47,47,47,47	0
55	MG	1a	3156	1/1	0.93	0.13	39,39,39,39	0
55	MG	1A	3331	1/1	0.93	0.05	21,21,21,21	0
55	MG	2a	1638	1/1	0.93	0.10	42,42,42,42	0
55	MG	2a	1640	1/1	0.93	0.06	42,42,42,42	0
55	MG	1A	3191	1/1	0.93	0.07	44,44,44,44	0
55	MG	1A	3764	1/1	0.93	0.09	41,41,41,41	0
55	MG	2A	3194	1/1	0.93	0.10	26,26,26,26	0
55	MG	1A	3274	1/1	0.93	0.09	40,40,40,40	0
55	MG	1A	3281	1/1	0.93	0.05	12,12,12,12	0
55	MG	1A	3459	1/1	0.93	0.14	28,28,28,28	0
55	MG	2A	3201	1/1	0.93	0.25	51,51,51,51	0
55	MG	1A	3464	1/1	0.93	0.12	29,29,29,29	0
55	MG	1A	3968	1/1	0.93	0.07	42,42,42,42	0
55	MG	2a	1659	1/1	0.93	0.18	45,45,45,45	0
55	MG	2A	3552	1/1	0.93	0.20	15,15,15,15	0
55	MG	2A	3554	1/1	0.93	0.14	28,28,28,28	0
55	MG	1A	3777	1/1	0.93	0.07	51,51,51,51	0
55	MG	2A	3559	1/1	0.93	0.11	24,24,24,24	0
55	MG	1A	3778	1/1	0.93	0.14	55,55,55,55	0
55	MG	2a	1669	1/1	0.93	0.09	40,40,40,40	0
55	MG	1A	3467	1/1	0.93	0.19	28,28,28,28	0
55	MG	2A	3209	1/1	0.93	0.07	24,24,24,24	0
55	MG	1a	3174	1/1	0.93	0.13	49,49,49,49	0
55	MG	1a	3175	1/1	0.93	0.08	74,74,74,74	0
55	MG	1A	3790	1/1	0.93	0.06	28,28,28,28	0
55	MG	1A	3351	1/1	0.93	0.09	28,28,28,28	0
55	MG	2A	3578	1/1	0.93	0.11	22,22,22,22	0
55	MG	1A	3794	1/1	0.93	0.06	35,35,35,35	0
55	MG	2A	3589	1/1	0.93	0.08	42,42,42,42	0
55	MG	2a	1695	1/1	0.93	0.14	43,43,43,43	0
55	MG	2A	3590	1/1	0.93	0.26	27,27,27,27	0
55	MG	2A	3591	1/1	0.93	0.09	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3593	1/1	0.93	0.25	50,50,50,50	0
55	MG	10	106	1/1	0.93	0.11	35,35,35,35	0
55	MG	1a	3183	1/1	0.93	0.10	44,44,44,44	0
55	MG	1A	3283	1/1	0.93	0.12	12,12,12,12	0
55	MG	1A	3993	1/1	0.93	0.26	10,10,10,10	0
55	MG	2A	3607	1/1	0.93	0.14	44,44,44,44	0
55	MG	2a	1710	1/1	0.93	0.07	57,57,57,57	0
55	MG	1A	3284	1/1	0.93	0.06	14,14,14,14	0
55	MG	1a	3192	1/1	0.93	0.08	33,33,33,33	0
55	MG	1A	3488	1/1	0.93	0.06	30,30,30,30	0
55	MG	2A	3239	1/1	0.93	0.09	34,34,34,34	0
55	MG	1A	3998	1/1	0.93	0.07	44,44,44,44	0
55	MG	2A	3618	1/1	0.93	0.16	22,22,22,22	0
55	MG	2A	3241	1/1	0.93	0.09	32,32,32,32	0
55	MG	1A	3999	1/1	0.93	0.13	32,32,32,32	0
55	MG	16	103	1/1	0.93	0.10	42,42,42,42	0
55	MG	1A	4001	1/1	0.93	0.12	41,41,41,41	0
55	MG	2A	3631	1/1	0.93	0.19	19,19,19,19	0
55	MG	2A	3246	1/1	0.93	0.09	48,48,48,48	0
55	MG	1a	3203	1/1	0.93	0.07	39,39,39,39	0
55	MG	1A	3356	1/1	0.93	0.05	29,29,29,29	0
55	MG	2a	1737	1/1	0.93	0.20	28,28,28,28	0
55	MG	1A	3639	1/1	0.93	0.09	15,15,15,15	0
55	MG	1A	3641	1/1	0.93	0.24	17,17,17,17	0
55	MG	1A	4006	1/1	0.93	0.11	42,42,42,42	0
55	MG	1A	3357	1/1	0.93	0.27	39,39,39,39	0
55	MG	2A	3658	1/1	0.93	0.10	52,52,52,52	0
55	MG	1a	3009	1/1	0.93	0.08	28,28,28,28	0
55	MG	1a	3010	1/1	0.93	0.16	55,55,55,55	0
55	MG	1A	4014	1/1	0.93	0.09	51,51,51,51	0
55	MG	2a	1752	1/1	0.93	0.29	37,37,37,37	0
55	MG	1A	3644	1/1	0.93	0.16	28,28,28,28	0
55	MG	1A	4018	1/1	0.93	0.07	40,40,40,40	0
55	MG	1A	3824	1/1	0.93	0.07	14,14,14,14	0
55	MG	1A	3496	1/1	0.93	0.15	26,26,26,26	0
55	MG	1A	3498	1/1	0.93	0.09	25,25,25,25	0
55	MG	1A	3830	1/1	0.93	0.07	30,30,30,30	0
55	MG	1A	3162	1/1	0.93	0.08	36,36,36,36	0
55	MG	2a	1764	1/1	0.93	0.10	41,41,41,41	0
55	MG	1x	105	1/1	0.93	0.26	54,54,54,54	0
55	MG	1a	3025	1/1	0.93	0.17	30,30,30,30	0
55	MG	1x	110	1/1	0.93	0.14	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3066	1/1	0.93	0.11	23,23,23,23	0
55	MG	1x	113	1/1	0.93	0.21	50,50,50,50	0
55	MG	2A	3284	1/1	0.93	0.10	33,33,33,33	0
55	MG	1a	3029	1/1	0.93	0.14	30,30,30,30	0
55	MG	2A	3287	1/1	0.93	0.27	46,46,46,46	0
55	MG	1A	3837	1/1	0.93	0.12	51,51,51,51	0
55	MG	1a	3033	1/1	0.93	0.22	40,40,40,40	0
55	MG	2A	3291	1/1	0.93	0.05	39,39,39,39	0
55	MG	1A	3839	1/1	0.93	0.06	36,36,36,36	0
55	MG	1a	3038	1/1	0.93	0.08	54,54,54,54	0
55	MG	2A	3295	1/1	0.93	0.09	31,31,31,31	0
55	MG	1A	4037	1/1	0.93	0.09	33,33,33,33	0
55	MG	2A	3715	1/1	0.93	0.08	46,46,46,46	0
55	MG	2A	3022	1/1	0.93	0.10	27,27,27,27	0
55	MG	2A	3302	1/1	0.93	0.06	40,40,40,40	0
55	MG	2A	3303	1/1	0.93	0.11	44,44,44,44	0
55	MG	2A	3304	1/1	0.93	0.07	39,39,39,39	0
55	MG	1A	3027	1/1	0.93	0.24	28,28,28,28	0
55	MG	2A	3026	1/1	0.93	0.08	27,27,27,27	0
55	MG	2A	3310	1/1	0.93	0.06	28,28,28,28	0
55	MG	2A	3726	1/1	0.93	0.11	52,52,52,52	0
55	MG	1a	3044	1/1	0.93	0.11	56,56,56,56	0
55	MG	2A	3028	1/1	0.93	0.09	35,35,35,35	0
55	MG	2f	201	1/1	0.93	0.05	44,44,44,44	0
55	MG	2A	3730	1/1	0.93	0.14	54,54,54,54	0
55	MG	1A	3206	1/1	0.93	0.11	28,28,28,28	0
55	MG	1B	202	1/1	0.93	0.11	48,48,48,48	0
55	MG	1A	3134	1/1	0.93	0.33	34,34,34,34	0
55	MG	2A	3039	1/1	0.93	0.10	32,32,32,32	0
55	MG	2A	3738	1/1	0.93	0.07	27,27,27,27	0
55	MG	2A	3323	1/1	0.93	0.07	38,38,38,38	0
55	MG	2A	3744	1/1	0.93	0.07	51,51,51,51	0
55	MG	2x	102	1/1	0.93	0.10	41,41,41,41	0
55	MG	2x	103	1/1	0.93	0.13	29,29,29,29	0
55	MG	2A	3745	1/1	0.93	0.20	17,17,17,17	0
55	MG	2x	105	1/1	0.93	0.17	31,31,31,31	0
55	MG	2A	3747	1/1	0.93	0.12	49,49,49,49	0
55	MG	1A	3365	1/1	0.93	0.06	41,41,41,41	0
55	MG	1A	3851	1/1	0.93	0.08	43,43,43,43	0
55	MG	1A	3668	1/1	0.93	0.22	10,10,10,10	0
55	MG	1A	3516	1/1	0.93	0.18	31,31,31,31	0
55	MG	2A	3761	1/1	0.93	0.15	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1B	212	1/1	0.93	0.07	25,25,25,25	0
55	MG	2A	3053	1/1	0.93	0.11	34,34,34,34	0
55	MG	1a	3134	1/1	0.94	0.10	28,28,28,28	0
55	MG	2A	3792	1/1	0.94	0.14	30,30,30,30	0
55	MG	1Q	202	1/1	0.94	0.06	30,30,30,30	0
55	MG	1A	3216	1/1	0.94	0.07	30,30,30,30	0
55	MG	2A	3427	1/1	0.94	0.18	45,45,45,45	0
55	MG	2A	3797	1/1	0.94	0.11	21,21,21,21	0
55	MG	2A	3798	1/1	0.94	0.19	23,23,23,23	0
55	MG	1A	3635	1/1	0.94	0.08	22,22,22,22	0
55	MG	1A	3146	1/1	0.94	0.12	49,49,49,49	0
55	MG	2A	3432	1/1	0.94	0.12	45,45,45,45	0
55	MG	2A	3807	1/1	0.94	0.20	21,21,21,21	0
55	MG	1S	201	1/1	0.94	0.17	47,47,47,47	0
55	MG	2A	3815	1/1	0.94	0.11	44,44,44,44	0
55	MG	2A	3437	1/1	0.94	0.08	37,37,37,37	0
55	MG	1a	3145	1/1	0.94	0.09	23,23,23,23	0
55	MG	1A	3640	1/1	0.94	0.11	47,47,47,47	0
55	MG	2A	3820	1/1	0.94	0.11	33,33,33,33	0
55	MG	1V	202	1/1	0.94	0.18	35,35,35,35	0
55	MG	1A	3497	1/1	0.94	0.12	37,37,37,37	0
55	MG	2A	3443	1/1	0.94	0.20	46,46,46,46	0
55	MG	1a	3152	1/1	0.94	0.08	40,40,40,40	0
55	MG	2A	3831	1/1	0.94	0.09	35,35,35,35	0
55	MG	2A	3446	1/1	0.94	0.12	59,59,59,59	0
55	MG	2A	3833	1/1	0.94	0.22	47,47,47,47	0
55	MG	1A	3979	1/1	0.94	0.10	36,36,36,36	0
55	MG	1A	3980	1/1	0.94	0.07	24,24,24,24	0
55	MG	2A	3168	1/1	0.94	0.18	47,47,47,47	0
55	MG	1A	3982	1/1	0.94	0.07	36,36,36,36	0
55	MG	1A	3811	1/1	0.94	0.11	39,39,39,39	0
55	MG	1A	3988	1/1	0.94	0.09	36,36,36,36	0
55	MG	1A	3223	1/1	0.94	0.08	31,31,31,31	0
55	MG	2A	3459	1/1	0.94	0.16	29,29,29,29	0
55	MG	2A	3174	1/1	0.94	0.07	33,33,33,33	0
55	MG	2A	3846	1/1	0.94	0.09	43,43,43,43	0
55	MG	1A	3173	1/1	0.94	0.06	28,28,28,28	0
55	MG	2A	3464	1/1	0.94	0.12	20,20,20,20	0
55	MG	10	104	1/1	0.94	0.16	46,46,46,46	0
55	MG	10	105	1/1	0.94	0.15	29,29,29,29	0
55	MG	1A	3008	1/1	0.94	0.11	21,21,21,21	0
55	MG	2A	3184	1/1	0.94	0.14	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1a	3167	1/1	0.94	0.13	31,31,31,31	0
55	MG	1A	3506	1/1	0.94	0.09	23,23,23,23	0
55	MG	2B	206	1/1	0.94	0.11	40,40,40,40	0
55	MG	1A	3055	1/1	0.94	0.16	29,29,29,29	0
55	MG	1A	3657	1/1	0.94	0.08	19,19,19,19	0
55	MG	1A	4000	1/1	0.94	0.07	32,32,32,32	0
55	MG	1A	3155	1/1	0.94	0.05	23,23,23,23	0
55	MG	2B	214	1/1	0.94	0.17	49,49,49,49	0
55	MG	1A	3378	1/1	0.94	0.04	29,29,29,29	0
55	MG	16	101	1/1	0.94	0.07	28,28,28,28	0
55	MG	1A	3380	1/1	0.94	0.20	24,24,24,24	0
55	MG	2A	3496	1/1	0.94	0.08	27,27,27,27	0
55	MG	2D	302	1/1	0.94	0.11	28,28,28,28	0
55	MG	17	103	1/1	0.94	0.10	41,41,41,41	0
55	MG	2E	304	1/1	0.94	0.08	30,30,30,30	0
55	MG	1A	3157	1/1	0.94	0.09	29,29,29,29	0
55	MG	1A	3300	1/1	0.94	0.06	27,27,27,27	0
55	MG	2G	201	1/1	0.94	0.05	42,42,42,42	0
55	MG	2P	201	1/1	0.94	0.07	40,40,40,40	0
55	MG	1a	3182	1/1	0.94	0.09	39,39,39,39	0
55	MG	18	104	1/1	0.94	0.05	33,33,33,33	0
55	MG	2A	3506	1/1	0.94	0.12	33,33,33,33	0
55	MG	18	105	1/1	0.94	0.13	35,35,35,35	0
55	MG	1A	3836	1/1	0.94	0.06	45,45,45,45	0
55	MG	19	102	1/1	0.94	0.08	31,31,31,31	0
55	MG	2A	3515	1/1	0.94	0.16	24,24,24,24	0
55	MG	1a	3002	1/1	0.94	0.14	30,30,30,30	0
55	MG	1A	3389	1/1	0.94	0.10	21,21,21,21	0
55	MG	1A	3523	1/1	0.94	0.07	42,42,42,42	0
55	MG	2A	3521	1/1	0.94	0.12	33,33,33,33	0
55	MG	2A	3220	1/1	0.94	0.11	38,38,38,38	0
55	MG	1A	3233	1/1	0.94	0.21	24,24,24,24	0
55	MG	23	101	1/1	0.94	0.13	21,21,21,21	0
55	MG	1a	3007	1/1	0.94	0.08	27,27,27,27	0
55	MG	25	101	1/1	0.94	0.10	38,38,38,38	0
55	MG	25	102	1/1	0.94	0.05	28,28,28,28	0
55	MG	1A	3526	1/1	0.94	0.11	31,31,31,31	0
55	MG	1A	3304	1/1	0.94	0.06	35,35,35,35	0
55	MG	2A	3228	1/1	0.94	0.19	45,45,45,45	0
55	MG	1A	3402	1/1	0.94	0.07	35,35,35,35	0
55	MG	2A	3536	1/1	0.94	0.18	15,15,15,15	0
55	MG	1A	3236	1/1	0.94	0.23	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3233	1/1	0.94	0.06	50,50,50,50	0
55	MG	2a	1606	1/1	0.94	0.21	30,30,30,30	0
55	MG	1a	3014	1/1	0.94	0.08	33,33,33,33	0
55	MG	1A	3692	1/1	0.94	0.07	44,44,44,44	0
55	MG	1A	3856	1/1	0.94	0.14	39,39,39,39	0
55	MG	1A	3535	1/1	0.94	0.10	22,22,22,22	0
55	MG	1A	3110	1/1	0.94	0.13	43,43,43,43	0
55	MG	2A	3547	1/1	0.94	0.10	29,29,29,29	0
55	MG	2a	1613	1/1	0.94	0.20	45,45,45,45	0
55	MG	1f	201	1/1	0.94	0.10	33,33,33,33	0
55	MG	1A	3540	1/1	0.94	0.08	14,14,14,14	0
55	MG	2A	3553	1/1	0.94	0.11	45,45,45,45	0
55	MG	1l	201	1/1	0.94	0.19	24,24,24,24	0
55	MG	2A	3555	1/1	0.94	0.11	32,32,32,32	0
55	MG	1n	101	1/1	0.94	0.06	34,34,34,34	0
55	MG	2a	1625	1/1	0.94	0.11	43,43,43,43	0
55	MG	2A	3245	1/1	0.94	0.06	24,24,24,24	0
55	MG	1A	3017	1/1	0.94	0.09	10,10,10,10	0
55	MG	2A	3247	1/1	0.94	0.08	25,25,25,25	0
55	MG	1a	3023	1/1	0.94	0.15	44,44,44,44	0
55	MG	1t	201	1/1	0.94	0.23	42,42,42,42	0
55	MG	2A	3572	1/1	0.94	0.10	50,50,50,50	0
55	MG	1a	3024	1/1	0.94	0.10	30,30,30,30	0
55	MG	1A	3246	1/1	0.94	0.05	37,37,37,37	0
55	MG	1A	3313	1/1	0.94	0.09	21,21,21,21	0
55	MG	2A	3255	1/1	0.94	0.09	51,51,51,51	0
55	MG	2A	3258	1/1	0.94	0.06	23,23,23,23	0
55	MG	1a	3028	1/1	0.94	0.24	52,52,52,52	0
55	MG	1A	3417	1/1	0.94	0.07	30,30,30,30	0
55	MG	1a	3030	1/1	0.94	0.10	50,50,50,50	0
55	MG	2a	1645	1/1	0.94	0.06	46,46,46,46	0
55	MG	1x	106	1/1	0.94	0.16	39,39,39,39	0
55	MG	2a	1647	1/1	0.94	0.17	60,60,60,60	0
55	MG	1A	3716	1/1	0.94	0.07	20,20,20,20	0
55	MG	2a	1649	1/1	0.94	0.14	62,62,62,62	0
55	MG	2a	1650	1/1	0.94	0.10	49,49,49,49	0
55	MG	1x	109	1/1	0.94	0.05	53,53,53,53	0
55	MG	2A	3596	1/1	0.94	0.08	26,26,26,26	0
55	MG	1A	3113	1/1	0.94	0.07	36,36,36,36	0
55	MG	1x	111	1/1	0.94	0.10	32,32,32,32	0
55	MG	2A	3601	1/1	0.94	0.16	44,44,44,44	0
55	MG	2a	1657	1/1	0.94	0.10	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3604	1/1	0.94	0.13	34,34,34,34	0
55	MG	1a	3034	1/1	0.94	0.11	49,49,49,49	0
55	MG	2a	1661	1/1	0.94	0.08	46,46,46,46	0
55	MG	2A	3608	1/1	0.94	0.10	31,31,31,31	0
55	MG	1A	3719	1/1	0.94	0.12	19,19,19,19	0
55	MG	1A	3425	1/1	0.94	0.13	33,33,33,33	0
55	MG	2A	3007	1/1	0.94	0.14	38,38,38,38	0
55	MG	1A	3019	1/1	0.94	0.06	30,30,30,30	0
55	MG	2A	3010	1/1	0.94	0.11	42,42,42,42	0
55	MG	1A	3251	1/1	0.94	0.15	26,26,26,26	0
55	MG	1a	3043	1/1	0.94	0.16	35,35,35,35	0
55	MG	2a	1679	1/1	0.94	0.19	45,45,45,45	0
55	MG	1A	3885	1/1	0.94	0.10	46,46,46,46	0
55	MG	2A	3285	1/1	0.94	0.07	21,21,21,21	0
55	MG	1A	3252	1/1	0.94	0.06	35,35,35,35	0
55	MG	1A	3582	1/1	0.94	0.09	45,45,45,45	0
55	MG	2A	3288	1/1	0.94	0.07	30,30,30,30	0
55	MG	2A	3638	1/1	0.94	0.14	26,26,26,26	0
55	MG	1A	3257	1/1	0.94	0.14	25,25,25,25	0
55	MG	2A	3643	1/1	0.94	0.10	43,43,43,43	0
55	MG	1A	3585	1/1	0.94	0.10	22,22,22,22	0
55	MG	1B	223	1/1	0.94	0.07	28,28,28,28	0
55	MG	1a	3052	1/1	0.94	0.20	53,53,53,53	0
55	MG	1A	3438	1/1	0.94	0.06	33,33,33,33	0
55	MG	2A	3653	1/1	0.94	0.11	41,41,41,41	0
55	MG	1A	3260	1/1	0.94	0.12	35,35,35,35	0
55	MG	2A	3656	1/1	0.94	0.07	35,35,35,35	0
55	MG	1A	3903	1/1	0.94	0.18	37,37,37,37	0
55	MG	2A	3038	1/1	0.94	0.23	51,51,51,51	0
55	MG	1A	3261	1/1	0.94	0.19	23,23,23,23	0
55	MG	2a	1716	1/1	0.94	0.27	47,47,47,47	0
55	MG	2A	3664	1/1	0.94	0.08	34,34,34,34	0
55	MG	2A	3041	1/1	0.94	0.12	29,29,29,29	0
55	MG	1A	3748	1/1	0.94	0.09	27,27,27,27	0
55	MG	1A	3198	1/1	0.94	0.08	29,29,29,29	0
55	MG	1A	3263	1/1	0.94	0.10	15,15,15,15	0
55	MG	2A	3672	1/1	0.94	0.19	39,39,39,39	0
55	MG	2A	3309	1/1	0.94	0.09	48,48,48,48	0
55	MG	1A	3013	1/1	0.94	0.09	20,20,20,20	0
55	MG	1a	3063	1/1	0.94	0.17	42,42,42,42	0
55	MG	1A	3758	1/1	0.94	0.30	49,49,49,49	0
55	MG	1A	3759	1/1	0.94	0.05	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1B	235	1/1	0.94	0.07	38,38,38,38	0
55	MG	2A	3684	1/1	0.94	0.14	36,36,36,36	0
55	MG	1D	302	1/1	0.94	0.20	30,30,30,30	0
55	MG	2A	3059	1/1	0.94	0.16	32,32,32,32	0
55	MG	1a	3071	1/1	0.94	0.12	37,37,37,37	0
55	MG	2A	3327	1/1	0.94	0.22	43,43,43,43	0
55	MG	2A	3066	1/1	0.94	0.20	46,46,46,46	0
55	MG	2a	1745	1/1	0.94	0.09	53,53,53,53	0
55	MG	2A	3067	1/1	0.94	0.09	27,27,27,27	0
55	MG	1A	3599	1/1	0.94	0.10	27,27,27,27	0
55	MG	2A	3071	1/1	0.94	0.20	45,45,45,45	0
55	MG	1A	3348	1/1	0.94	0.07	28,28,28,28	0
55	MG	2a	1753	1/1	0.94	0.17	33,33,33,33	0
55	MG	2A	3075	1/1	0.94	0.16	30,30,30,30	0
55	MG	2A	3076	1/1	0.94	0.06	30,30,30,30	0
55	MG	2A	3343	1/1	0.94	0.04	25,25,25,25	0
55	MG	1A	3916	1/1	0.94	0.09	21,21,21,21	0
55	MG	2a	1758	1/1	0.94	0.06	46,46,46,46	0
55	MG	1A	3918	1/1	0.94	0.18	19,19,19,19	0
55	MG	2A	3081	1/1	0.94	0.09	54,54,54,54	0
55	MG	1A	3267	1/1	0.94	0.07	37,37,37,37	0
55	MG	1E	308	1/1	0.94	0.10	34,34,34,34	0
55	MG	1A	3133	1/1	0.94	0.04	27,27,27,27	0
55	MG	2A	3720	1/1	0.94	0.12	44,44,44,44	0
55	MG	2a	1773	1/1	0.94	0.11	48,48,48,48	0
55	MG	1A	3927	1/1	0.94	0.12	31,31,31,31	0
55	MG	1A	3928	1/1	0.94	0.09	33,33,33,33	0
55	MG	1A	3202	1/1	0.94	0.09	33,33,33,33	0
55	MG	1A	3932	1/1	0.94	0.05	15,15,15,15	0
55	MG	2A	3096	1/1	0.94	0.12	44,44,44,44	0
55	MG	2A	3362	1/1	0.94	0.05	42,42,42,42	0
55	MG	2a	1784	1/1	0.94	0.17	32,32,32,32	0
55	MG	2a	1785	1/1	0.94	0.08	37,37,37,37	0
55	MG	2A	3729	1/1	0.94	0.14	24,24,24,24	0
55	MG	2a	1789	1/1	0.94	0.18	44,44,44,44	0
55	MG	1A	3040	1/1	0.94	0.12	36,36,36,36	0
55	MG	2A	3102	1/1	0.94	0.21	31,31,31,31	0
55	MG	2A	3732	1/1	0.94	0.07	28,28,28,28	0
55	MG	1A	3208	1/1	0.94	0.15	28,28,28,28	0
55	MG	1a	3094	1/1	0.94	0.10	41,41,41,41	0
55	MG	2A	3108	1/1	0.94	0.07	41,41,41,41	0
55	MG	1A	3937	1/1	0.94	0.10	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3477	1/1	0.94	0.04	25,25,25,25	0
55	MG	2a	1805	1/1	0.94	0.09	50,50,50,50	0
55	MG	1A	3773	1/1	0.94	0.11	21,21,21,21	0
55	MG	2a	1808	1/1	0.94	0.07	56,56,56,56	0
55	MG	1A	3210	1/1	0.94	0.06	25,25,25,25	0
55	MG	2A	3746	1/1	0.94	0.19	31,31,31,31	0
55	MG	1A	3954	1/1	0.94	0.07	38,38,38,38	0
55	MG	2A	3748	1/1	0.94	0.05	44,44,44,44	0
55	MG	2A	3749	1/1	0.94	0.12	35,35,35,35	0
55	MG	2a	1814	1/1	0.94	0.06	46,46,46,46	0
55	MG	1H	202	1/1	0.94	0.07	22,22,22,22	0
55	MG	2A	3756	1/1	0.94	0.07	25,25,25,25	0
55	MG	2A	3757	1/1	0.94	0.14	34,34,34,34	0
55	MG	1A	3480	1/1	0.94	0.09	20,20,20,20	0
55	MG	1N	203	1/1	0.94	0.09	45,45,45,45	0
55	MG	1a	3109	1/1	0.94	0.12	40,40,40,40	0
55	MG	1A	3041	1/1	0.94	0.16	30,30,30,30	0
55	MG	2A	3127	1/1	0.94	0.16	32,32,32,32	0
55	MG	1O	201	1/1	0.94	0.06	40,40,40,40	0
55	MG	2l	201	1/1	0.94	0.10	47,47,47,47	0
55	MG	1A	3782	1/1	0.94	0.10	29,29,29,29	0
55	MG	2A	3132	1/1	0.94	0.12	38,38,38,38	0
55	MG	2r	101	1/1	0.94	0.15	40,40,40,40	0
55	MG	2A	3402	1/1	0.94	0.12	34,34,34,34	0
55	MG	2A	3768	1/1	0.94	0.11	35,35,35,35	0
55	MG	1A	3489	1/1	0.94	0.18	28,28,28,28	0
55	MG	2A	3406	1/1	0.94	0.05	30,30,30,30	0
55	MG	1a	3118	1/1	0.94	0.20	42,42,42,42	0
55	MG	2x	106	1/1	0.94	0.24	60,60,60,60	0
55	MG	1A	3964	1/1	0.94	0.11	40,40,40,40	0
55	MG	1A	3789	1/1	0.94	0.16	24,24,24,24	0
55	MG	1A	3966	1/1	0.94	0.07	28,28,28,28	0
55	MG	1A	3069	1/1	0.94	0.18	29,29,29,29	0
55	MG	2A	3779	1/1	0.94	0.14	34,34,34,34	0
55	MG	2A	3143	1/1	0.94	0.09	44,44,44,44	0
55	MG	2A	3418	1/1	0.94	0.30	46,46,46,46	0
55	MG	2A	3144	1/1	0.94	0.14	44,44,44,44	0
55	MG	2A	3786	1/1	0.95	0.12	37,37,37,37	0
55	MG	2A	3128	1/1	0.95	0.18	36,36,36,36	0
55	MG	1a	3107	1/1	0.95	0.17	36,36,36,36	0
55	MG	1A	3517	1/1	0.95	0.16	34,34,34,34	0
55	MG	1A	3701	1/1	0.95	0.09	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3419	1/1	0.95	0.13	31,31,31,31	0
55	MG	1A	3702	1/1	0.95	0.15	21,21,21,21	0
55	MG	1a	3112	1/1	0.95	0.15	54,54,54,54	0
55	MG	2A	3801	1/1	0.95	0.10	44,44,44,44	0
55	MG	1A	3207	1/1	0.95	0.15	22,22,22,22	0
55	MG	1A	3316	1/1	0.95	0.06	14,14,14,14	0
55	MG	2A	3138	1/1	0.95	0.09	31,31,31,31	0
55	MG	1a	3115	1/1	0.95	0.17	38,38,38,38	0
55	MG	2A	3808	1/1	0.95	0.10	22,22,22,22	0
55	MG	2A	3429	1/1	0.95	0.10	32,32,32,32	0
55	MG	1A	3522	1/1	0.95	0.07	33,33,33,33	0
55	MG	1A	3403	1/1	0.95	0.06	30,30,30,30	0
55	MG	1A	3405	1/1	0.95	0.08	32,32,32,32	0
55	MG	1A	3715	1/1	0.95	0.09	21,21,21,21	0
55	MG	2A	3146	1/1	0.95	0.20	40,40,40,40	0
55	MG	1I	201	1/1	0.95	0.06	52,52,52,52	0
55	MG	2A	3823	1/1	0.95	0.09	26,26,26,26	0
55	MG	2A	3148	1/1	0.95	0.20	31,31,31,31	0
55	MG	2A	3825	1/1	0.95	0.15	31,31,31,31	0
55	MG	1a	3123	1/1	0.95	0.09	27,27,27,27	0
55	MG	1A	3128	1/1	0.95	0.05	23,23,23,23	0
55	MG	2A	3829	1/1	0.95	0.09	33,33,33,33	0
55	MG	1A	3082	1/1	0.95	0.08	36,36,36,36	0
55	MG	2A	3152	1/1	0.95	0.17	50,50,50,50	0
55	MG	1A	3529	1/1	0.95	0.12	38,38,38,38	0
55	MG	1A	3720	1/1	0.95	0.05	56,56,56,56	0
55	MG	1A	3924	1/1	0.95	0.11	47,47,47,47	0
55	MG	1A	3926	1/1	0.95	0.07	34,34,34,34	0
55	MG	1A	3264	1/1	0.95	0.18	42,42,42,42	0
55	MG	1A	3007	1/1	0.95	0.06	27,27,27,27	0
55	MG	2A	3162	1/1	0.95	0.05	37,37,37,37	0
55	MG	2A	3163	1/1	0.95	0.06	33,33,33,33	0
55	MG	2A	3164	1/1	0.95	0.15	36,36,36,36	0
55	MG	2A	3842	1/1	0.95	0.17	42,42,42,42	0
55	MG	1A	3930	1/1	0.95	0.10	17,17,17,17	0
55	MG	2A	3462	1/1	0.95	0.19	15,15,15,15	0
55	MG	2A	3463	1/1	0.95	0.23	16,16,16,16	0
55	MG	2A	3848	1/1	0.95	0.08	31,31,31,31	0
55	MG	1A	3730	1/1	0.95	0.15	37,37,37,37	0
55	MG	1Q	201	1/1	0.95	0.21	26,26,26,26	0
55	MG	1A	3732	1/1	0.95	0.11	18,18,18,18	0
55	MG	2A	3469	1/1	0.95	0.16	21,21,21,21	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3170	1/1	0.95	0.15	47,47,47,47	0
55	MG	1A	3214	1/1	0.95	0.06	23,23,23,23	0
55	MG	1A	3934	1/1	0.95	0.07	49,49,49,49	0
55	MG	2A	3475	1/1	0.95	0.20	17,17,17,17	0
55	MG	2A	3477	1/1	0.95	0.18	16,16,16,16	0
55	MG	1R	204	1/1	0.95	0.06	41,41,41,41	0
55	MG	1A	3324	1/1	0.95	0.08	31,31,31,31	0
55	MG	2A	3175	1/1	0.95	0.07	37,37,37,37	0
55	MG	1A	3136	1/1	0.95	0.10	30,30,30,30	0
55	MG	2A	3484	1/1	0.95	0.11	29,29,29,29	0
55	MG	1a	3158	1/1	0.95	0.13	19,19,19,19	0
55	MG	2B	217	1/1	0.95	0.12	53,53,53,53	0
55	MG	2B	218	1/1	0.95	0.17	37,37,37,37	0
55	MG	1a	3159	1/1	0.95	0.06	34,34,34,34	0
55	MG	1S	203	1/1	0.95	0.09	44,44,44,44	0
55	MG	2D	301	1/1	0.95	0.23	42,42,42,42	0
55	MG	2A	3490	1/1	0.95	0.07	23,23,23,23	0
55	MG	2D	308	1/1	0.95	0.20	22,22,22,22	0
55	MG	1A	3938	1/1	0.95	0.16	18,18,18,18	0
55	MG	1U	202	1/1	0.95	0.12	28,28,28,28	0
55	MG	1A	3941	1/1	0.95	0.07	15,15,15,15	0
55	MG	2F	301	1/1	0.95	0.06	28,28,28,28	0
55	MG	2F	303	1/1	0.95	0.10	30,30,30,30	0
55	MG	1A	3419	1/1	0.95	0.08	49,49,49,49	0
55	MG	2F	306	1/1	0.95	0.12	54,54,54,54	0
55	MG	1A	3138	1/1	0.95	0.39	29,29,29,29	0
55	MG	2A	3189	1/1	0.95	0.13	32,32,32,32	0
55	MG	1A	3951	1/1	0.95	0.12	33,33,33,33	0
55	MG	2P	204	1/1	0.95	0.09	44,44,44,44	0
55	MG	1A	3332	1/1	0.95	0.06	47,47,47,47	0
55	MG	2A	3507	1/1	0.95	0.17	10,10,10,10	0
55	MG	2T	201	1/1	0.95	0.08	36,36,36,36	0
55	MG	1A	3953	1/1	0.95	0.07	46,46,46,46	0
55	MG	1W	209	1/1	0.95	0.10	29,29,29,29	0
55	MG	2A	3513	1/1	0.95	0.04	56,56,56,56	0
55	MG	1X	101	1/1	0.95	0.08	30,30,30,30	0
55	MG	2A	3199	1/1	0.95	0.21	38,38,38,38	0
55	MG	2Y	201	1/1	0.95	0.10	27,27,27,27	0
55	MG	1X	102	1/1	0.95	0.17	34,34,34,34	0
55	MG	1A	3555	1/1	0.95	0.07	34,34,34,34	0
55	MG	1a	3176	1/1	0.95	0.06	71,71,71,71	0
55	MG	1A	3433	1/1	0.95	0.11	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2I	105	1/1	0.95	0.12	49,49,49,49	0
55	MG	1A	3333	1/1	0.95	0.16	30,30,30,30	0
55	MG	2A	3525	1/1	0.95	0.17	29,29,29,29	0
55	MG	1A	3559	1/1	0.95	0.14	42,42,42,42	0
55	MG	2A	3206	1/1	0.95	0.12	42,42,42,42	0
55	MG	1A	3561	1/1	0.95	0.09	52,52,52,52	0
55	MG	2A	3529	1/1	0.95	0.13	28,28,28,28	0
55	MG	1A	3563	1/1	0.95	0.17	19,19,19,19	0
55	MG	1I	102	1/1	0.95	0.06	28,28,28,28	0
55	MG	2A	3215	1/1	0.95	0.07	24,24,24,24	0
55	MG	2A	3535	1/1	0.95	0.20	24,24,24,24	0
55	MG	1A	3752	1/1	0.95	0.19	24,24,24,24	0
55	MG	1A	3755	1/1	0.95	0.09	26,26,26,26	0
55	MG	2a	1605	1/1	0.95	0.15	42,42,42,42	0
55	MG	1a	3187	1/1	0.95	0.08	76,76,76,76	0
55	MG	1A	3967	1/1	0.95	0.09	38,38,38,38	0
55	MG	1A	3139	1/1	0.95	0.05	35,35,35,35	0
55	MG	1A	3336	1/1	0.95	0.11	32,32,32,32	0
55	MG	1a	3195	1/1	0.95	0.12	25,25,25,25	0
55	MG	1A	3339	1/1	0.95	0.17	33,33,33,33	0
55	MG	15	103	1/1	0.95	0.06	23,23,23,23	0
55	MG	2A	3548	1/1	0.95	0.17	22,22,22,22	0
55	MG	2A	3230	1/1	0.95	0.05	42,42,42,42	0
55	MG	2A	3550	1/1	0.95	0.07	10,10,10,10	0
55	MG	2a	1616	1/1	0.95	0.26	52,52,52,52	0
55	MG	2A	3551	1/1	0.95	0.13	32,32,32,32	0
55	MG	2A	3231	1/1	0.95	0.08	55,55,55,55	0
55	MG	1A	3439	1/1	0.95	0.08	26,26,26,26	0
55	MG	2a	1623	1/1	0.95	0.17	48,48,48,48	0
55	MG	1A	3443	1/1	0.95	0.09	39,39,39,39	0
55	MG	1A	3280	1/1	0.95	0.10	19,19,19,19	0
55	MG	17	104	1/1	0.95	0.10	28,28,28,28	0
55	MG	17	106	1/1	0.95	0.06	17,17,17,17	0
55	MG	2a	1629	1/1	0.95	0.12	30,30,30,30	0
55	MG	2A	3562	1/1	0.95	0.17	29,29,29,29	0
55	MG	1A	3449	1/1	0.95	0.16	15,15,15,15	0
55	MG	1A	3343	1/1	0.95	0.12	25,25,25,25	0
55	MG	1A	3588	1/1	0.95	0.07	35,35,35,35	0
55	MG	1A	3452	1/1	0.95	0.12	21,21,21,21	0
55	MG	1d	301	1/1	0.95	0.16	21,21,21,21	0
55	MG	1A	3985	1/1	0.95	0.09	37,37,37,37	0
55	MG	1A	3987	1/1	0.95	0.06	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3772	1/1	0.95	0.14	47,47,47,47	0
55	MG	1A	3991	1/1	0.95	0.14	34,34,34,34	0
55	MG	2A	3580	1/1	0.95	0.16	40,40,40,40	0
55	MG	2a	1642	1/1	0.95	0.09	43,43,43,43	0
55	MG	2A	3585	1/1	0.95	0.08	43,43,43,43	0
55	MG	1A	3179	1/1	0.95	0.08	44,44,44,44	0
55	MG	2A	3588	1/1	0.95	0.10	42,42,42,42	0
55	MG	1A	3775	1/1	0.95	0.06	40,40,40,40	0
55	MG	1a	3006	1/1	0.95	0.06	56,56,56,56	0
55	MG	1A	3030	1/1	0.95	0.09	21,21,21,21	0
55	MG	1A	3593	1/1	0.95	0.07	22,22,22,22	0
55	MG	1A	3181	1/1	0.95	0.14	27,27,27,27	0
55	MG	1A	3780	1/1	0.95	0.07	41,41,41,41	0
55	MG	1A	3285	1/1	0.95	0.13	42,42,42,42	0
55	MG	2A	3597	1/1	0.95	0.13	26,26,26,26	0
55	MG	2a	1655	1/1	0.95	0.10	57,57,57,57	0
55	MG	1A	3786	1/1	0.95	0.10	37,37,37,37	0
55	MG	2A	3599	1/1	0.95	0.13	40,40,40,40	0
55	MG	1A	3033	1/1	0.95	0.10	35,35,35,35	0
55	MG	1A	3460	1/1	0.95	0.08	41,41,41,41	0
55	MG	2A	3603	1/1	0.95	0.09	45,45,45,45	0
55	MG	1A	3461	1/1	0.95	0.15	38,38,38,38	0
55	MG	2a	1663	1/1	0.95	0.12	31,31,31,31	0
55	MG	1A	3463	1/1	0.95	0.05	45,45,45,45	0
55	MG	2A	3268	1/1	0.95	0.06	32,32,32,32	0
55	MG	1a	3019	1/1	0.95	0.07	50,50,50,50	0
55	MG	1A	4009	1/1	0.95	0.10	41,41,41,41	0
55	MG	1A	3603	1/1	0.95	0.07	36,36,36,36	0
55	MG	1A	3227	1/1	0.95	0.09	37,37,37,37	0
55	MG	2a	1674	1/1	0.95	0.10	67,67,67,67	0
55	MG	2a	1676	1/1	0.95	0.10	40,40,40,40	0
55	MG	2A	3615	1/1	0.95	0.08	25,25,25,25	0
55	MG	2A	3002	1/1	0.95	0.07	26,26,26,26	0
55	MG	2A	3004	1/1	0.95	0.10	24,24,24,24	0
55	MG	1A	3466	1/1	0.95	0.22	38,38,38,38	0
55	MG	2a	1684	1/1	0.95	0.08	68,68,68,68	0
55	MG	2A	3620	1/1	0.95	0.05	21,21,21,21	0
55	MG	1A	3611	1/1	0.95	0.09	59,59,59,59	0
55	MG	2A	3625	1/1	0.95	0.10	24,24,24,24	0
55	MG	2a	1689	1/1	0.95	0.23	42,42,42,42	0
55	MG	2a	1690	1/1	0.95	0.22	39,39,39,39	0
55	MG	2A	3281	1/1	0.95	0.12	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2a	1692	1/1	0.95	0.10	46,46,46,46	0
55	MG	2a	1693	1/1	0.95	0.05	57,57,57,57	0
55	MG	2A	3629	1/1	0.95	0.12	39,39,39,39	0
55	MG	1a	3026	1/1	0.95	0.12	27,27,27,27	0
55	MG	2A	3009	1/1	0.95	0.09	27,27,27,27	0
55	MG	2a	1701	1/1	0.95	0.10	48,48,48,48	0
55	MG	1A	3034	1/1	0.95	0.09	22,22,22,22	0
55	MG	1A	3469	1/1	0.95	0.14	25,25,25,25	0
55	MG	2A	3013	1/1	0.95	0.06	36,36,36,36	0
55	MG	1A	3003	1/1	0.95	0.12	28,28,28,28	0
55	MG	1A	3472	1/1	0.95	0.07	30,30,30,30	0
55	MG	2a	1708	1/1	0.95	0.06	69,69,69,69	0
55	MG	2A	3017	1/1	0.95	0.16	24,24,24,24	0
55	MG	1a	3031	1/1	0.95	0.17	29,29,29,29	0
55	MG	2a	1711	1/1	0.95	0.13	49,49,49,49	0
55	MG	1A	4030	1/1	0.95	0.10	20,20,20,20	0
55	MG	1A	3473	1/1	0.95	0.12	27,27,27,27	0
55	MG	2A	3024	1/1	0.95	0.09	25,25,25,25	0
55	MG	2A	3655	1/1	0.95	0.11	26,26,26,26	0
55	MG	2a	1718	1/1	0.95	0.11	38,38,38,38	0
55	MG	1A	3626	1/1	0.95	0.16	14,14,14,14	0
55	MG	1a	3035	1/1	0.95	0.06	52,52,52,52	0
55	MG	2a	1722	1/1	0.95	0.09	26,26,26,26	0
55	MG	1A	3021	1/1	0.95	0.06	21,21,21,21	0
55	MG	2A	3661	1/1	0.95	0.08	41,41,41,41	0
55	MG	2A	3031	1/1	0.95	0.19	46,46,46,46	0
55	MG	1A	3105	1/1	0.95	0.09	19,19,19,19	0
55	MG	2a	1727	1/1	0.95	0.21	44,44,44,44	0
55	MG	1A	3632	1/1	0.95	0.05	27,27,27,27	0
55	MG	2a	1729	1/1	0.95	0.14	48,48,48,48	0
55	MG	1A	3633	1/1	0.95	0.07	26,26,26,26	0
55	MG	1A	4040	1/1	0.95	0.16	33,33,33,33	0
55	MG	1A	3478	1/1	0.95	0.16	27,27,27,27	0
55	MG	2a	1735	1/1	0.95	0.13	33,33,33,33	0
55	MG	1a	3045	1/1	0.95	0.11	30,30,30,30	0
55	MG	1B	201	1/1	0.95	0.05	23,23,23,23	0
55	MG	1A	3832	1/1	0.95	0.09	17,17,17,17	0
55	MG	1A	3156	1/1	0.95	0.10	24,24,24,24	0
55	MG	2A	3315	1/1	0.95	0.08	14,14,14,14	0
55	MG	1A	3192	1/1	0.95	0.11	39,39,39,39	0
55	MG	2a	1743	1/1	0.95	0.06	38,38,38,38	0
55	MG	2A	3682	1/1	0.95	0.13	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3485	1/1	0.95	0.06	39,39,39,39	0
55	MG	1A	3486	1/1	0.95	0.09	38,38,38,38	0
55	MG	2a	1747	1/1	0.95	0.11	29,29,29,29	0
55	MG	2a	1748	1/1	0.95	0.08	61,61,61,61	0
55	MG	2A	3321	1/1	0.95	0.07	37,37,37,37	0
55	MG	2A	3322	1/1	0.95	0.04	33,33,33,33	0
55	MG	1B	209	1/1	0.95	0.12	27,27,27,27	0
55	MG	2A	3689	1/1	0.95	0.08	51,51,51,51	0
55	MG	2A	3690	1/1	0.95	0.08	43,43,43,43	0
55	MG	2A	3694	1/1	0.95	0.05	21,21,21,21	0
55	MG	2A	3324	1/1	0.95	0.07	26,26,26,26	0
55	MG	2A	3326	1/1	0.95	0.04	34,34,34,34	0
55	MG	1A	3642	1/1	0.95	0.13	21,21,21,21	0
55	MG	1A	3245	1/1	0.95	0.15	48,48,48,48	0
55	MG	2a	1760	1/1	0.95	0.15	38,38,38,38	0
55	MG	2A	3330	1/1	0.95	0.09	26,26,26,26	0
55	MG	2A	3331	1/1	0.95	0.08	45,45,45,45	0
55	MG	1A	3011	1/1	0.95	0.14	16,16,16,16	0
55	MG	1A	3846	1/1	0.95	0.09	18,18,18,18	0
55	MG	2a	1770	1/1	0.95	0.08	40,40,40,40	0
55	MG	2A	3710	1/1	0.95	0.09	27,27,27,27	0
55	MG	2A	3064	1/1	0.95	0.06	33,33,33,33	0
55	MG	1A	3072	1/1	0.95	0.13	27,27,27,27	0
55	MG	2A	3338	1/1	0.95	0.12	32,32,32,32	0
55	MG	1A	3373	1/1	0.95	0.05	28,28,28,28	0
55	MG	1A	3852	1/1	0.95	0.07	62,62,62,62	0
55	MG	2A	3342	1/1	0.95	0.04	21,21,21,21	0
55	MG	1B	220	1/1	0.95	0.13	25,25,25,25	0
55	MG	1A	3653	1/1	0.95	0.14	21,21,21,21	0
55	MG	1B	222	1/1	0.95	0.12	22,22,22,22	0
55	MG	1A	3376	1/1	0.95	0.13	24,24,24,24	0
55	MG	2A	3348	1/1	0.95	0.09	32,32,32,32	0
55	MG	1A	3005	1/1	0.95	0.06	20,20,20,20	0
55	MG	2a	1792	1/1	0.95	0.07	72,72,72,72	0
55	MG	1A	3006	1/1	0.95	0.08	25,25,25,25	0
55	MG	2A	3080	1/1	0.95	0.08	26,26,26,26	0
55	MG	2A	3353	1/1	0.95	0.18	36,36,36,36	0
55	MG	1A	3379	1/1	0.95	0.09	27,27,27,27	0
55	MG	2A	3082	1/1	0.95	0.29	44,44,44,44	0
55	MG	2A	3085	1/1	0.95	0.06	27,27,27,27	0
55	MG	1A	3124	1/1	0.95	0.07	27,27,27,27	0
55	MG	2a	1803	1/1	0.95	0.04	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2a	1804	1/1	0.95	0.10	31,31,31,31	0
55	MG	1a	3074	1/1	0.95	0.11	42,42,42,42	0
55	MG	1a	3075	1/1	0.95	0.11	43,43,43,43	0
55	MG	2A	3089	1/1	0.95	0.06	32,32,32,32	0
55	MG	1A	3502	1/1	0.95	0.05	24,24,24,24	0
55	MG	2A	3365	1/1	0.95	0.16	34,34,34,34	0
55	MG	1A	3664	1/1	0.95	0.07	20,20,20,20	0
55	MG	2A	3370	1/1	0.95	0.07	25,25,25,25	0
55	MG	2A	3093	1/1	0.95	0.06	22,22,22,22	0
55	MG	1A	3665	1/1	0.95	0.05	10,10,10,10	0
55	MG	1A	3505	1/1	0.95	0.06	27,27,27,27	0
55	MG	2A	3375	1/1	0.95	0.09	35,35,35,35	0
55	MG	2A	3755	1/1	0.95	0.09	42,42,42,42	0
55	MG	1a	3081	1/1	0.95	0.07	41,41,41,41	0
55	MG	1A	3254	1/1	0.95	0.12	27,27,27,27	0
55	MG	2A	3098	1/1	0.95	0.14	42,42,42,42	0
55	MG	1A	3669	1/1	0.95	0.05	26,26,26,26	0
55	MG	1A	3670	1/1	0.95	0.06	57,57,57,57	0
55	MG	2j	202	1/1	0.95	0.09	49,49,49,49	0
55	MG	1A	3672	1/1	0.95	0.06	32,32,32,32	0
55	MG	2A	3383	1/1	0.95	0.10	37,37,37,37	0
55	MG	1A	3678	1/1	0.95	0.09	16,16,16,16	0
55	MG	2q	201	1/1	0.95	0.16	30,30,30,30	0
55	MG	1D	306	1/1	0.95	0.06	35,35,35,35	0
55	MG	1A	3507	1/1	0.95	0.19	37,37,37,37	0
55	MG	1A	3310	1/1	0.95	0.12	36,36,36,36	0
55	MG	2A	3395	1/1	0.95	0.07	38,38,38,38	0
55	MG	1a	3095	1/1	0.95	0.08	28,28,28,28	0
55	MG	1A	3509	1/1	0.95	0.16	24,24,24,24	0
55	MG	1A	3892	1/1	0.95	0.06	25,25,25,25	0
55	MG	1A	3511	1/1	0.95	0.07	21,21,21,21	0
55	MG	2A	3403	1/1	0.95	0.21	35,35,35,35	0
55	MG	2A	3775	1/1	0.95	0.14	30,30,30,30	0
55	MG	2A	3119	1/1	0.95	0.08	29,29,29,29	0
55	MG	1A	3386	1/1	0.95	0.19	10,10,10,10	0
55	MG	1A	3204	1/1	0.95	0.21	25,25,25,25	0
55	MG	1A	3390	1/1	0.95	0.12	30,30,30,30	0
55	MG	2A	3410	1/1	0.95	0.06	43,43,43,43	0
55	MG	1A	3056	1/1	0.95	0.11	42,42,42,42	0
55	MG	1A	3045	1/1	0.96	0.16	15,15,15,15	0
55	MG	1E	302	1/1	0.96	0.13	32,32,32,32	0
55	MG	2A	3139	1/1	0.96	0.14	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3140	1/1	0.96	0.05	37,37,37,37	0
55	MG	1A	3681	1/1	0.96	0.12	22,22,22,22	0
55	MG	2A	3438	1/1	0.96	0.18	30,30,30,30	0
55	MG	2A	3809	1/1	0.96	0.06	40,40,40,40	0
55	MG	2A	3810	1/1	0.96	0.10	29,29,29,29	0
55	MG	1A	3682	1/1	0.96	0.08	56,56,56,56	0
55	MG	1A	3412	1/1	0.96	0.05	27,27,27,27	0
55	MG	1A	3183	1/1	0.96	0.10	29,29,29,29	0
55	MG	1E	310	1/1	0.96	0.09	20,20,20,20	0
55	MG	1A	3317	1/1	0.96	0.06	24,24,24,24	0
55	MG	1A	3888	1/1	0.96	0.07	58,58,58,58	0
55	MG	1A	3686	1/1	0.96	0.13	39,39,39,39	0
55	MG	1E	314	1/1	0.96	0.07	36,36,36,36	0
55	MG	2A	3448	1/1	0.96	0.12	32,32,32,32	0
55	MG	1a	3116	1/1	0.96	0.27	32,32,32,32	0
55	MG	2A	3450	1/1	0.96	0.08	19,19,19,19	0
55	MG	2A	3451	1/1	0.96	0.17	19,19,19,19	0
55	MG	2A	3828	1/1	0.96	0.08	24,24,24,24	0
55	MG	1A	3890	1/1	0.96	0.06	43,43,43,43	0
55	MG	1F	302	1/1	0.96	0.09	16,16,16,16	0
55	MG	2A	3153	1/1	0.96	0.15	50,50,50,50	0
55	MG	1A	3047	1/1	0.96	0.14	21,21,21,21	0
55	MG	1F	306	1/1	0.96	0.05	11,11,11,11	0
55	MG	1F	307	1/1	0.96	0.09	30,30,30,30	0
55	MG	1A	3688	1/1	0.96	0.08	33,33,33,33	0
55	MG	2A	3159	1/1	0.96	0.08	31,31,31,31	0
55	MG	1a	3126	1/1	0.96	0.12	30,30,30,30	0
55	MG	1a	3129	1/1	0.96	0.13	32,32,32,32	0
55	MG	1a	3132	1/1	0.96	0.15	31,31,31,31	0
55	MG	1A	3248	1/1	0.96	0.13	16,16,16,16	0
55	MG	1F	312	1/1	0.96	0.04	19,19,19,19	0
55	MG	2A	3468	1/1	0.96	0.24	19,19,19,19	0
55	MG	2A	3844	1/1	0.96	0.13	40,40,40,40	0
55	MG	2A	3845	1/1	0.96	0.12	38,38,38,38	0
55	MG	1A	3420	1/1	0.96	0.09	29,29,29,29	0
55	MG	1G	201	1/1	0.96	0.10	30,30,30,30	0
55	MG	2A	3471	1/1	0.96	0.06	43,43,43,43	0
55	MG	1a	3141	1/1	0.96	0.08	45,45,45,45	0
55	MG	1A	3897	1/1	0.96	0.06	42,42,42,42	0
55	MG	2A	3474	1/1	0.96	0.12	10,10,10,10	0
55	MG	1G	203	1/1	0.96	0.07	40,40,40,40	0
55	MG	1A	3421	1/1	0.96	0.17	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3478	1/1	0.96	0.14	15,15,15,15	0
55	MG	1A	3902	1/1	0.96	0.05	25,25,25,25	0
55	MG	1A	3694	1/1	0.96	0.07	35,35,35,35	0
55	MG	2B	207	1/1	0.96	0.33	60,60,60,60	0
55	MG	1A	3536	1/1	0.96	0.17	16,16,16,16	0
55	MG	1A	3423	1/1	0.96	0.06	34,34,34,34	0
55	MG	2A	3176	1/1	0.96	0.06	19,19,19,19	0
55	MG	2A	3177	1/1	0.96	0.07	33,33,33,33	0
55	MG	1A	3539	1/1	0.96	0.15	20,20,20,20	0
55	MG	2A	3488	1/1	0.96	0.17	16,16,16,16	0
55	MG	2A	3179	1/1	0.96	0.10	30,30,30,30	0
55	MG	1A	3703	1/1	0.96	0.17	25,25,25,25	0
55	MG	1A	3143	1/1	0.96	0.07	28,28,28,28	0
55	MG	2A	3494	1/1	0.96	0.10	50,50,50,50	0
55	MG	2A	3495	1/1	0.96	0.04	17,17,17,17	0
55	MG	1A	3541	1/1	0.96	0.14	32,32,32,32	0
55	MG	1A	3144	1/1	0.96	0.11	38,38,38,38	0
55	MG	2D	305	1/1	0.96	0.19	41,41,41,41	0
55	MG	1A	3091	1/1	0.96	0.07	32,32,32,32	0
55	MG	2A	3500	1/1	0.96	0.17	33,33,33,33	0
55	MG	2E	303	1/1	0.96	0.05	28,28,28,28	0
55	MG	1A	3544	1/1	0.96	0.13	40,40,40,40	0
55	MG	1A	3545	1/1	0.96	0.14	22,22,22,22	0
55	MG	1A	3546	1/1	0.96	0.17	35,35,35,35	0
55	MG	1A	3919	1/1	0.96	0.11	33,33,33,33	0
55	MG	1A	3921	1/1	0.96	0.10	54,54,54,54	0
55	MG	1A	3547	1/1	0.96	0.13	24,24,24,24	0
55	MG	1A	3548	1/1	0.96	0.13	23,23,23,23	0
55	MG	1R	203	1/1	0.96	0.19	30,30,30,30	0
55	MG	1A	3434	1/1	0.96	0.07	43,43,43,43	0
55	MG	2A	3198	1/1	0.96	0.17	26,26,26,26	0
55	MG	1R	206	1/1	0.96	0.05	24,24,24,24	0
55	MG	2A	3517	1/1	0.96	0.12	44,44,44,44	0
55	MG	2Q	204	1/1	0.96	0.05	33,33,33,33	0
55	MG	1a	3170	1/1	0.96	0.11	36,36,36,36	0
55	MG	1A	3029	1/1	0.96	0.09	23,23,23,23	0
55	MG	2T	204	1/1	0.96	0.13	39,39,39,39	0
55	MG	1A	3726	1/1	0.96	0.07	18,18,18,18	0
55	MG	1A	3727	1/1	0.96	0.10	39,39,39,39	0
55	MG	2A	3523	1/1	0.96	0.06	27,27,27,27	0
55	MG	2A	3524	1/1	0.96	0.15	23,23,23,23	0
55	MG	1A	3329	1/1	0.96	0.11	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1U	201	1/1	0.96	0.07	24,24,24,24	0
55	MG	1A	3253	1/1	0.96	0.12	21,21,21,21	0
55	MG	1U	206	1/1	0.96	0.08	19,19,19,19	0
55	MG	1a	3178	1/1	0.96	0.08	36,36,36,36	0
55	MG	2A	3210	1/1	0.96	0.09	15,15,15,15	0
55	MG	2A	3212	1/1	0.96	0.11	26,26,26,26	0
55	MG	2A	3532	1/1	0.96	0.06	24,24,24,24	0
55	MG	1U	208	1/1	0.96	0.17	36,36,36,36	0
55	MG	23	103	1/1	0.96	0.20	17,17,17,17	0
55	MG	1V	201	1/1	0.96	0.07	27,27,27,27	0
55	MG	1A	3097	1/1	0.96	0.10	30,30,30,30	0
55	MG	1A	3255	1/1	0.96	0.18	32,32,32,32	0
55	MG	1A	3734	1/1	0.96	0.11	12,12,12,12	0
55	MG	27	101	1/1	0.96	0.13	31,31,31,31	0
55	MG	1W	203	1/1	0.96	0.05	13,13,13,13	0
55	MG	1A	3440	1/1	0.96	0.09	19,19,19,19	0
55	MG	1A	3564	1/1	0.96	0.14	15,15,15,15	0
55	MG	1a	3188	1/1	0.96	0.10	41,41,41,41	0
55	MG	2A	3227	1/1	0.96	0.22	29,29,29,29	0
55	MG	1a	3189	1/1	0.96	0.06	44,44,44,44	0
55	MG	1A	3565	1/1	0.96	0.14	16,16,16,16	0
55	MG	1A	3150	1/1	0.96	0.10	27,27,27,27	0
55	MG	1A	3741	1/1	0.96	0.07	16,16,16,16	0
55	MG	1A	3944	1/1	0.96	0.09	20,20,20,20	0
55	MG	1A	3259	1/1	0.96	0.10	10,10,10,10	0
55	MG	1A	3195	1/1	0.96	0.15	31,31,31,31	0
55	MG	1Z	302	1/1	0.96	0.03	32,32,32,32	0
55	MG	1a	3200	1/1	0.96	0.08	53,53,53,53	0
55	MG	1A	3571	1/1	0.96	0.08	25,25,25,25	0
55	MG	1A	3572	1/1	0.96	0.10	36,36,36,36	0
55	MG	2A	3561	1/1	0.96	0.10	27,27,27,27	0
55	MG	1A	3578	1/1	0.96	0.11	26,26,26,26	0
55	MG	2a	1618	1/1	0.96	0.10	40,40,40,40	0
55	MG	2a	1619	1/1	0.96	0.05	27,27,27,27	0
55	MG	2a	1620	1/1	0.96	0.07	63,63,63,63	0
55	MG	1A	3196	1/1	0.96	0.10	24,24,24,24	0
55	MG	10	107	1/1	0.96	0.05	24,24,24,24	0
55	MG	1A	3581	1/1	0.96	0.06	15,15,15,15	0
55	MG	1a	3211	1/1	0.96	0.08	36,36,36,36	0
55	MG	1A	3959	1/1	0.96	0.16	56,56,56,56	0
55	MG	1A	3340	1/1	0.96	0.06	39,39,39,39	0
55	MG	12	102	1/1	0.96	0.19	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3152	1/1	0.96	0.10	29,29,29,29	0
55	MG	2A	3250	1/1	0.96	0.05	44,44,44,44	0
55	MG	2A	3579	1/1	0.96	0.07	25,25,25,25	0
55	MG	1A	3963	1/1	0.96	0.07	42,42,42,42	0
55	MG	2A	3584	1/1	0.96	0.04	40,40,40,40	0
55	MG	1A	3757	1/1	0.96	0.09	23,23,23,23	0
55	MG	1A	3101	1/1	0.96	0.12	34,34,34,34	0
55	MG	1A	3586	1/1	0.96	0.07	31,31,31,31	0
55	MG	1A	3456	1/1	0.96	0.17	24,24,24,24	0
55	MG	1A	3345	1/1	0.96	0.15	21,21,21,21	0
55	MG	2a	1639	1/1	0.96	0.05	34,34,34,34	0
55	MG	17	101	1/1	0.96	0.08	19,19,19,19	0
55	MG	1A	3103	1/1	0.96	0.15	32,32,32,32	0
55	MG	1A	3349	1/1	0.96	0.09	26,26,26,26	0
55	MG	1v	105	1/1	0.96	0.15	35,35,35,35	0
55	MG	2a	1644	1/1	0.96	0.04	31,31,31,31	0
55	MG	2A	3266	1/1	0.96	0.05	32,32,32,32	0
55	MG	1A	3051	1/1	0.96	0.04	16,16,16,16	0
55	MG	17	107	1/1	0.96	0.11	32,32,32,32	0
55	MG	2A	3270	1/1	0.96	0.19	25,25,25,25	0
55	MG	1A	3973	1/1	0.96	0.07	38,38,38,38	0
55	MG	1A	3765	1/1	0.96	0.20	26,26,26,26	0
55	MG	2A	3602	1/1	0.96	0.08	36,36,36,36	0
55	MG	2A	3274	1/1	0.96	0.09	46,46,46,46	0
55	MG	1A	3052	1/1	0.96	0.09	19,19,19,19	0
55	MG	2A	3605	1/1	0.96	0.18	33,33,33,33	0
55	MG	1A	3768	1/1	0.96	0.14	24,24,24,24	0
55	MG	1x	108	1/1	0.96	0.12	28,28,28,28	0
55	MG	1A	3769	1/1	0.96	0.07	48,48,48,48	0
55	MG	2a	1658	1/1	0.96	0.10	20,20,20,20	0
55	MG	1A	3981	1/1	0.96	0.15	47,47,47,47	0
55	MG	2A	3612	1/1	0.96	0.15	26,26,26,26	0
55	MG	1A	3352	1/1	0.96	0.06	16,16,16,16	0
55	MG	1A	3353	1/1	0.96	0.18	34,34,34,34	0
55	MG	1A	3984	1/1	0.96	0.07	43,43,43,43	0
55	MG	2a	1664	1/1	0.96	0.25	37,37,37,37	0
55	MG	1A	3106	1/1	0.96	0.09	33,33,33,33	0
55	MG	1A	3986	1/1	0.96	0.12	23,23,23,23	0
55	MG	1A	3269	1/1	0.96	0.10	25,25,25,25	0
55	MG	2a	1668	1/1	0.96	0.12	28,28,28,28	0
55	MG	1A	3159	1/1	0.96	0.04	28,28,28,28	0
55	MG	2A	3621	1/1	0.96	0.08	21,21,21,21	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2a	1671	1/1	0.96	0.05	42,42,42,42	0
55	MG	1A	3989	1/1	0.96	0.06	35,35,35,35	0
55	MG	1a	3011	1/1	0.96	0.06	70,70,70,70	0
55	MG	2a	1675	1/1	0.96	0.14	44,44,44,44	0
55	MG	1A	3271	1/1	0.96	0.05	32,32,32,32	0
55	MG	1A	3073	1/1	0.96	0.06	22,22,22,22	0
55	MG	2A	3012	1/1	0.96	0.06	40,40,40,40	0
55	MG	1A	3277	1/1	0.96	0.06	25,25,25,25	0
55	MG	2A	3632	1/1	0.96	0.08	37,37,37,37	0
55	MG	2a	1682	1/1	0.96	0.12	26,26,26,26	0
55	MG	2a	1683	1/1	0.96	0.08	36,36,36,36	0
55	MG	1A	3607	1/1	0.96	0.06	15,15,15,15	0
55	MG	2A	3637	1/1	0.96	0.17	31,31,31,31	0
55	MG	1A	3209	1/1	0.96	0.10	24,24,24,24	0
55	MG	2A	3296	1/1	0.96	0.07	35,35,35,35	0
55	MG	2a	1688	1/1	0.96	0.08	33,33,33,33	0
55	MG	2A	3641	1/1	0.96	0.13	41,41,41,41	0
55	MG	1A	3476	1/1	0.96	0.14	38,38,38,38	0
55	MG	2A	3020	1/1	0.96	0.07	26,26,26,26	0
55	MG	1A	3161	1/1	0.96	0.08	29,29,29,29	0
55	MG	1A	3363	1/1	0.96	0.09	33,33,33,33	0
55	MG	2a	1694	1/1	0.96	0.04	46,46,46,46	0
55	MG	2A	3650	1/1	0.96	0.09	41,41,41,41	0
55	MG	2a	1697	1/1	0.96	0.07	23,23,23,23	0
55	MG	1A	3282	1/1	0.96	0.08	24,24,24,24	0
55	MG	2A	3305	1/1	0.96	0.07	29,29,29,29	0
55	MG	2a	1700	1/1	0.96	0.16	43,43,43,43	0
55	MG	2A	3306	1/1	0.96	0.07	19,19,19,19	0
55	MG	1A	3791	1/1	0.96	0.09	46,46,46,46	0
55	MG	1A	3024	1/1	0.96	0.12	38,38,38,38	0
55	MG	2A	3657	1/1	0.96	0.07	50,50,50,50	0
55	MG	1A	3622	1/1	0.96	0.11	39,39,39,39	0
55	MG	2A	3659	1/1	0.96	0.06	41,41,41,41	0
55	MG	1A	3798	1/1	0.96	0.08	17,17,17,17	0
55	MG	1A	4007	1/1	0.96	0.15	50,50,50,50	0
55	MG	2A	3662	1/1	0.96	0.11	39,39,39,39	0
55	MG	1A	3481	1/1	0.96	0.20	31,31,31,31	0
55	MG	1A	4010	1/1	0.96	0.06	54,54,54,54	0
55	MG	2A	3665	1/1	0.96	0.17	37,37,37,37	0
55	MG	2A	3036	1/1	0.96	0.04	23,23,23,23	0
55	MG	1A	4011	1/1	0.96	0.14	54,54,54,54	0
55	MG	2A	3317	1/1	0.96	0.14	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3804	1/1	0.96	0.17	35,35,35,35	0
55	MG	1A	4013	1/1	0.96	0.06	28,28,28,28	0
55	MG	2A	3040	1/1	0.96	0.08	28,28,28,28	0
55	MG	2A	3675	1/1	0.96	0.11	42,42,42,42	0
55	MG	1A	3624	1/1	0.96	0.13	43,43,43,43	0
55	MG	2A	3677	1/1	0.96	0.10	37,37,37,37	0
55	MG	2A	3042	1/1	0.96	0.06	42,42,42,42	0
55	MG	2A	3679	1/1	0.96	0.07	40,40,40,40	0
55	MG	2A	3043	1/1	0.96	0.13	20,20,20,20	0
55	MG	1A	3806	1/1	0.96	0.05	30,30,30,30	0
55	MG	1A	3808	1/1	0.96	0.14	22,22,22,22	0
55	MG	2a	1731	1/1	0.96	0.11	33,33,33,33	0
55	MG	1A	3483	1/1	0.96	0.29	40,40,40,40	0
55	MG	2A	3329	1/1	0.96	0.07	23,23,23,23	0
55	MG	2a	1734	1/1	0.96	0.08	40,40,40,40	0
55	MG	2A	3685	1/1	0.96	0.13	10,10,10,10	0
55	MG	1a	3036	1/1	0.96	0.06	34,34,34,34	0
55	MG	1A	3810	1/1	0.96	0.07	23,23,23,23	0
55	MG	2A	3052	1/1	0.96	0.07	34,34,34,34	0
55	MG	1A	3366	1/1	0.96	0.08	43,43,43,43	0
55	MG	1a	3039	1/1	0.96	0.14	20,20,20,20	0
55	MG	2A	3692	1/1	0.96	0.10	48,48,48,48	0
55	MG	2A	3693	1/1	0.96	0.19	20,20,20,20	0
55	MG	1A	3368	1/1	0.96	0.14	29,29,29,29	0
55	MG	2A	3057	1/1	0.96	0.11	38,38,38,38	0
55	MG	1A	3487	1/1	0.96	0.08	25,25,25,25	0
55	MG	2A	3698	1/1	0.96	0.06	34,34,34,34	0
55	MG	1A	3163	1/1	0.96	0.14	19,19,19,19	0
55	MG	2A	3060	1/1	0.96	0.28	41,41,41,41	0
55	MG	2A	3703	1/1	0.96	0.08	30,30,30,30	0
55	MG	1A	3816	1/1	0.96	0.13	15,15,15,15	0
55	MG	2A	3706	1/1	0.96	0.15	31,31,31,31	0
55	MG	2A	3344	1/1	0.96	0.06	37,37,37,37	0
55	MG	2A	3063	1/1	0.96	0.10	26,26,26,26	0
55	MG	1A	3818	1/1	0.96	0.17	28,28,28,28	0
55	MG	1A	3164	1/1	0.96	0.12	31,31,31,31	0
55	MG	1A	3821	1/1	0.96	0.08	10,10,10,10	0
55	MG	2A	3712	1/1	0.96	0.15	22,22,22,22	0
55	MG	1A	3491	1/1	0.96	0.05	37,37,37,37	0
55	MG	2A	3070	1/1	0.96	0.10	34,34,34,34	0
55	MG	1A	4039	1/1	0.96	0.21	31,31,31,31	0
55	MG	1A	3636	1/1	0.96	0.05	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2a	1766	1/1	0.96	0.07	39,39,39,39	0
55	MG	2a	1767	1/1	0.96	0.06	52,52,52,52	0
55	MG	1A	3078	1/1	0.96	0.22	23,23,23,23	0
55	MG	1A	3036	1/1	0.96	0.13	30,30,30,30	0
55	MG	1A	3827	1/1	0.96	0.11	22,22,22,22	0
55	MG	2a	1772	1/1	0.96	0.09	28,28,28,28	0
55	MG	1A	3829	1/1	0.96	0.07	28,28,28,28	0
55	MG	2A	3360	1/1	0.96	0.04	38,38,38,38	0
55	MG	1a	3056	1/1	0.96	0.05	37,37,37,37	0
55	MG	2A	3725	1/1	0.96	0.13	25,25,25,25	0
55	MG	1a	3057	1/1	0.96	0.06	31,31,31,31	0
55	MG	1A	3220	1/1	0.96	0.14	34,34,34,34	0
55	MG	2a	1781	1/1	0.96	0.05	53,53,53,53	0
55	MG	2a	1782	1/1	0.96	0.06	40,40,40,40	0
55	MG	1A	3039	1/1	0.96	0.16	38,38,38,38	0
55	MG	1A	3126	1/1	0.96	0.05	48,48,48,48	0
55	MG	1A	3294	1/1	0.96	0.04	10,10,10,10	0
55	MG	2a	1786	1/1	0.96	0.07	39,39,39,39	0
55	MG	1A	3645	1/1	0.96	0.13	30,30,30,30	0
55	MG	1A	3649	1/1	0.96	0.09	31,31,31,31	0
55	MG	2A	3733	1/1	0.96	0.14	15,15,15,15	0
55	MG	1B	213	1/1	0.96	0.04	48,48,48,48	0
55	MG	1B	214	1/1	0.96	0.14	30,30,30,30	0
55	MG	2a	1794	1/1	0.96	0.07	51,51,51,51	0
55	MG	2A	3374	1/1	0.96	0.10	35,35,35,35	0
55	MG	1A	3031	1/1	0.96	0.10	26,26,26,26	0
55	MG	1a	3067	1/1	0.96	0.13	34,34,34,34	0
55	MG	2A	3742	1/1	0.96	0.09	50,50,50,50	0
55	MG	1A	3004	1/1	0.96	0.12	25,25,25,25	0
55	MG	1a	3069	1/1	0.96	0.12	23,23,23,23	0
55	MG	1A	3129	1/1	0.96	0.47	24,24,24,24	0
55	MG	1A	3063	1/1	0.96	0.08	21,21,21,21	0
55	MG	2A	3101	1/1	0.96	0.19	30,30,30,30	0
55	MG	1A	3843	1/1	0.96	0.18	35,35,35,35	0
55	MG	2a	1807	1/1	0.96	0.14	45,45,45,45	0
55	MG	2A	3384	1/1	0.96	0.16	24,24,24,24	0
55	MG	2A	3385	1/1	0.96	0.15	21,21,21,21	0
55	MG	2A	3387	1/1	0.96	0.17	25,25,25,25	0
55	MG	1A	3229	1/1	0.96	0.09	29,29,29,29	0
55	MG	1A	3847	1/1	0.96	0.04	21,21,21,21	0
55	MG	2A	3390	1/1	0.96	0.10	37,37,37,37	0
55	MG	1A	3230	1/1	0.96	0.05	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3109	1/1	0.96	0.08	41,41,41,41	0
55	MG	2a	1816	1/1	0.96	0.11	35,35,35,35	0
55	MG	2A	3393	1/1	0.96	0.09	31,31,31,31	0
55	MG	2A	3394	1/1	0.96	0.13	27,27,27,27	0
55	MG	2e	201	1/1	0.96	0.11	43,43,43,43	0
55	MG	2e	202	1/1	0.96	0.41	47,47,47,47	0
55	MG	1a	3077	1/1	0.96	0.10	46,46,46,46	0
55	MG	1A	3659	1/1	0.96	0.11	31,31,31,31	0
55	MG	1A	3400	1/1	0.96	0.07	27,27,27,27	0
55	MG	1A	3510	1/1	0.96	0.11	21,21,21,21	0
55	MG	1A	3855	1/1	0.96	0.07	36,36,36,36	0
55	MG	1A	3175	1/1	0.96	0.07	26,26,26,26	0
55	MG	1a	3083	1/1	0.96	0.09	40,40,40,40	0
55	MG	1A	3085	1/1	0.96	0.04	14,14,14,14	0
55	MG	2A	3407	1/1	0.96	0.39	50,50,50,50	0
55	MG	1A	3235	1/1	0.96	0.08	20,20,20,20	0
55	MG	2A	3776	1/1	0.96	0.07	57,57,57,57	0
55	MG	1A	3086	1/1	0.96	0.07	37,37,37,37	0
55	MG	2A	3124	1/1	0.96	0.12	29,29,29,29	0
55	MG	2x	101	1/1	0.96	0.09	35,35,35,35	0
55	MG	2A	3125	1/1	0.96	0.20	18,18,18,18	0
55	MG	1A	3237	1/1	0.96	0.06	25,25,25,25	0
55	MG	1A	3867	1/1	0.96	0.09	18,18,18,18	0
55	MG	2A	3783	1/1	0.96	0.13	19,19,19,19	0
55	MG	1A	3239	1/1	0.96	0.08	43,43,43,43	0
55	MG	2A	3129	1/1	0.96	0.15	27,27,27,27	0
56	K	1A	3470	1/1	0.96	0.07	51,51,51,51	0
55	MG	1A	3408	1/1	0.96	0.05	18,18,18,18	0
55	MG	1A	3872	1/1	0.96	0.08	52,52,52,52	0
55	MG	1A	3671	1/1	0.96	0.07	28,28,28,28	0
55	MG	1D	305	1/1	0.96	0.09	20,20,20,20	0
55	MG	1A	3088	1/1	0.96	0.15	28,28,28,28	0
55	MG	1A	3410	1/1	0.96	0.06	34,34,34,34	0
55	MG	2A	3136	1/1	0.96	0.06	39,39,39,39	0
55	MG	1a	3208	1/1	0.97	0.07	41,41,41,41	0
55	MG	1A	3098	1/1	0.97	0.07	32,32,32,32	0
55	MG	1A	3413	1/1	0.97	0.11	21,21,21,21	0
55	MG	2A	3505	1/1	0.97	0.21	18,18,18,18	0
55	MG	1A	3994	1/1	0.97	0.12	10,10,10,10	0
55	MG	2A	3224	1/1	0.97	0.07	34,34,34,34	0
55	MG	2A	3508	1/1	0.97	0.23	15,15,15,15	0
55	MG	1A	3515	1/1	0.97	0.15	10,10,10,10	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3510	1/1	0.97	0.29	32,32,32,32	0
55	MG	17	105	1/1	0.97	0.04	22,22,22,22	0
55	MG	2A	3512	1/1	0.97	0.09	27,27,27,27	0
55	MG	1A	3647	1/1	0.97	0.10	43,43,43,43	0
55	MG	2B	202	1/1	0.97	0.09	40,40,40,40	0
55	MG	1A	3997	1/1	0.97	0.05	37,37,37,37	0
55	MG	1A	3648	1/1	0.97	0.06	34,34,34,34	0
55	MG	1A	3415	1/1	0.97	0.15	26,26,26,26	0
55	MG	1A	3265	1/1	0.97	0.04	19,19,19,19	0
55	MG	1l	203	1/1	0.97	0.03	35,35,35,35	0
55	MG	2B	209	1/1	0.97	0.03	40,40,40,40	0
55	MG	1A	3651	1/1	0.97	0.09	15,15,15,15	0
55	MG	1A	3100	1/1	0.97	0.07	38,38,38,38	0
55	MG	1A	3519	1/1	0.97	0.12	26,26,26,26	0
55	MG	1a	3001	1/1	0.97	0.14	47,47,47,47	0
55	MG	2A	3237	1/1	0.97	0.09	40,40,40,40	0
55	MG	2A	3238	1/1	0.97	0.11	18,18,18,18	0
55	MG	1v	101	1/1	0.97	0.09	36,36,36,36	0
55	MG	1A	3654	1/1	0.97	0.06	43,43,43,43	0
55	MG	1A	3520	1/1	0.97	0.19	11,11,11,11	0
55	MG	1A	3218	1/1	0.97	0.09	22,22,22,22	0
55	MG	1x	101	1/1	0.97	0.22	38,38,38,38	0
55	MG	1A	3219	1/1	0.97	0.07	36,36,36,36	0
55	MG	1A	3142	1/1	0.97	0.06	25,25,25,25	0
55	MG	2D	304	1/1	0.97	0.10	22,22,22,22	0
55	MG	1A	3660	1/1	0.97	0.10	10,10,10,10	0
55	MG	2D	306	1/1	0.97	0.12	28,28,28,28	0
55	MG	1A	3221	1/1	0.97	0.27	30,30,30,30	0
55	MG	1A	3338	1/1	0.97	0.09	55,55,55,55	0
55	MG	2E	302	1/1	0.97	0.12	27,27,27,27	0
55	MG	2A	3537	1/1	0.97	0.09	22,22,22,22	0
55	MG	1A	3222	1/1	0.97	0.07	19,19,19,19	0
55	MG	1A	3272	1/1	0.97	0.07	23,23,23,23	0
55	MG	1A	4017	1/1	0.97	0.05	25,25,25,25	0
55	MG	1A	3427	1/1	0.97	0.04	22,22,22,22	0
55	MG	2A	3543	1/1	0.97	0.08	23,23,23,23	0
55	MG	2A	3253	1/1	0.97	0.16	30,30,30,30	0
55	MG	1A	3531	1/1	0.97	0.20	30,30,30,30	0
55	MG	2O	201	1/1	0.97	0.06	31,31,31,31	0
55	MG	1A	3428	1/1	0.97	0.10	21,21,21,21	0
55	MG	2A	3256	1/1	0.97	0.04	55,55,55,55	0
55	MG	2A	3257	1/1	0.97	0.09	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	4023	1/1	0.97	0.05	40,40,40,40	0
55	MG	2A	3259	1/1	0.97	0.12	40,40,40,40	0
55	MG	2A	3001	1/1	0.97	0.24	29,29,29,29	0
55	MG	1A	3833	1/1	0.97	0.04	28,28,28,28	0
55	MG	2T	202	1/1	0.97	0.12	39,39,39,39	0
55	MG	1A	4025	1/1	0.97	0.06	45,45,45,45	0
55	MG	1A	3533	1/1	0.97	0.08	21,21,21,21	0
55	MG	1A	3534	1/1	0.97	0.09	37,37,37,37	0
55	MG	1a	3022	1/1	0.97	0.11	16,16,16,16	0
55	MG	1A	3431	1/1	0.97	0.04	14,14,14,14	0
55	MG	2A	3560	1/1	0.97	0.08	23,23,23,23	0
55	MG	1A	3341	1/1	0.97	0.07	43,43,43,43	0
55	MG	2A	3269	1/1	0.97	0.05	30,30,30,30	0
55	MG	2A	3565	1/1	0.97	0.15	22,22,22,22	0
55	MG	1A	3673	1/1	0.97	0.17	39,39,39,39	0
55	MG	2A	3567	1/1	0.97	0.07	33,33,33,33	0
55	MG	2A	3271	1/1	0.97	0.05	57,57,57,57	0
55	MG	1A	3675	1/1	0.97	0.04	43,43,43,43	0
55	MG	2A	3570	1/1	0.97	0.09	33,33,33,33	0
55	MG	1A	3676	1/1	0.97	0.06	25,25,25,25	0
55	MG	1A	3677	1/1	0.97	0.07	36,36,36,36	0
55	MG	2A	3574	1/1	0.97	0.09	31,31,31,31	0
55	MG	1A	3273	1/1	0.97	0.08	26,26,26,26	0
55	MG	1A	3176	1/1	0.97	0.16	21,21,21,21	0
55	MG	2A	3019	1/1	0.97	0.06	47,47,47,47	0
55	MG	1A	3344	1/1	0.97	0.09	19,19,19,19	0
55	MG	1A	3275	1/1	0.97	0.06	21,21,21,21	0
55	MG	1A	3347	1/1	0.97	0.05	34,34,34,34	0
55	MG	2A	3583	1/1	0.97	0.09	19,19,19,19	0
55	MG	1A	3276	1/1	0.97	0.07	40,40,40,40	0
55	MG	1A	3854	1/1	0.97	0.05	38,38,38,38	0
55	MG	2A	3586	1/1	0.97	0.11	31,31,31,31	0
55	MG	2A	3025	1/1	0.97	0.15	35,35,35,35	0
55	MG	1A	3044	1/1	0.97	0.07	22,22,22,22	0
55	MG	1B	206	1/1	0.97	0.04	45,45,45,45	0
55	MG	1B	207	1/1	0.97	0.12	42,42,42,42	0
55	MG	2A	3029	1/1	0.97	0.12	21,21,21,21	0
55	MG	2A	3592	1/1	0.97	0.07	31,31,31,31	0
55	MG	1A	3279	1/1	0.97	0.04	16,16,16,16	0
55	MG	1a	3040	1/1	0.97	0.13	34,34,34,34	0
55	MG	2A	3033	1/1	0.97	0.13	22,22,22,22	0
55	MG	2A	3034	1/1	0.97	0.08	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3857	1/1	0.97	0.08	23,23,23,23	0
55	MG	1A	3859	1/1	0.97	0.04	51,51,51,51	0
55	MG	1A	3860	1/1	0.97	0.06	45,45,45,45	0
55	MG	1A	3444	1/1	0.97	0.13	18,18,18,18	0
55	MG	2A	3297	1/1	0.97	0.05	17,17,17,17	0
55	MG	1A	3445	1/1	0.97	0.09	19,19,19,19	0
55	MG	2A	3300	1/1	0.97	0.12	31,31,31,31	0
55	MG	1A	3864	1/1	0.97	0.06	31,31,31,31	0
55	MG	1A	3689	1/1	0.97	0.06	54,54,54,54	0
55	MG	1A	3690	1/1	0.97	0.09	27,27,27,27	0
55	MG	1A	3446	1/1	0.97	0.09	42,42,42,42	0
55	MG	2A	3609	1/1	0.97	0.11	27,27,27,27	0
55	MG	2A	3044	1/1	0.97	0.19	33,33,33,33	0
55	MG	1A	3550	1/1	0.97	0.07	24,24,24,24	0
55	MG	1A	3057	1/1	0.97	0.12	18,18,18,18	0
55	MG	1A	3037	1/1	0.97	0.05	15,15,15,15	0
55	MG	1A	3046	1/1	0.97	0.11	30,30,30,30	0
55	MG	1A	3696	1/1	0.97	0.14	25,25,25,25	0
55	MG	2A	3311	1/1	0.97	0.05	33,33,33,33	0
55	MG	2A	3617	1/1	0.97	0.09	23,23,23,23	0
55	MG	1A	3697	1/1	0.97	0.07	32,32,32,32	0
55	MG	1A	3877	1/1	0.97	0.07	37,37,37,37	0
55	MG	1A	3698	1/1	0.97	0.09	12,12,12,12	0
55	MG	1A	3699	1/1	0.97	0.07	22,22,22,22	0
55	MG	2A	3056	1/1	0.97	0.04	23,23,23,23	0
55	MG	2A	3623	1/1	0.97	0.12	14,14,14,14	0
55	MG	2A	3624	1/1	0.97	0.14	27,27,27,27	0
55	MG	1A	3880	1/1	0.97	0.07	55,55,55,55	0
55	MG	1A	3700	1/1	0.97	0.10	20,20,20,20	0
55	MG	1A	3882	1/1	0.97	0.04	24,24,24,24	0
55	MG	2A	3320	1/1	0.97	0.09	30,30,30,30	0
55	MG	1A	3883	1/1	0.97	0.06	55,55,55,55	0
55	MG	1A	3557	1/1	0.97	0.06	54,54,54,54	0
55	MG	1A	3038	1/1	0.97	0.06	21,21,21,21	0
55	MG	1A	3148	1/1	0.97	0.09	26,26,26,26	0
55	MG	2A	3065	1/1	0.97	0.12	26,26,26,26	0
55	MG	1D	301	1/1	0.97	0.16	22,22,22,22	0
55	MG	1A	3454	1/1	0.97	0.07	21,21,21,21	0
55	MG	1A	3705	1/1	0.97	0.15	36,36,36,36	0
55	MG	2A	3644	1/1	0.97	0.12	52,52,52,52	0
55	MG	2A	3069	1/1	0.97	0.14	28,28,28,28	0
55	MG	1a	3070	1/1	0.97	0.18	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3648	1/1	0.97	0.06	32,32,32,32	0
55	MG	1D	304	1/1	0.97	0.24	30,30,30,30	0
55	MG	1A	3108	1/1	0.97	0.11	33,33,33,33	0
55	MG	2A	3334	1/1	0.97	0.16	30,30,30,30	0
55	MG	2A	3335	1/1	0.97	0.08	25,25,25,25	0
55	MG	1A	3151	1/1	0.97	0.09	25,25,25,25	0
55	MG	1D	307	1/1	0.97	0.18	10,10,10,10	0
55	MG	1A	3710	1/1	0.97	0.10	13,13,13,13	0
55	MG	2A	3339	1/1	0.97	0.06	34,34,34,34	0
55	MG	1A	3894	1/1	0.97	0.05	16,16,16,16	0
55	MG	1A	3014	1/1	0.97	0.15	30,30,30,30	0
55	MG	1A	3064	1/1	0.97	0.05	13,13,13,13	0
55	MG	1A	3291	1/1	0.97	0.07	18,18,18,18	0
55	MG	1A	3361	1/1	0.97	0.07	37,37,37,37	0
55	MG	1A	3900	1/1	0.97	0.07	22,22,22,22	0
55	MG	1A	3049	1/1	0.97	0.22	26,26,26,26	0
55	MG	1A	3117	1/1	0.97	0.08	24,24,24,24	0
55	MG	2a	1677	1/1	0.97	0.09	45,45,45,45	0
55	MG	1A	3904	1/1	0.97	0.05	32,32,32,32	0
55	MG	1a	3086	1/1	0.97	0.05	50,50,50,50	0
55	MG	1a	3087	1/1	0.97	0.09	36,36,36,36	0
55	MG	2A	3092	1/1	0.97	0.20	44,44,44,44	0
55	MG	2A	3352	1/1	0.97	0.05	31,31,31,31	0
55	MG	1A	3575	1/1	0.97	0.08	27,27,27,27	0
55	MG	2A	3354	1/1	0.97	0.05	31,31,31,31	0
55	MG	1A	3721	1/1	0.97	0.14	26,26,26,26	0
55	MG	1A	3577	1/1	0.97	0.11	15,15,15,15	0
55	MG	2A	3357	1/1	0.97	0.04	14,14,14,14	0
55	MG	1A	3238	1/1	0.97	0.06	27,27,27,27	0
55	MG	1a	3092	1/1	0.97	0.10	51,51,51,51	0
55	MG	1A	3194	1/1	0.97	0.05	32,32,32,32	0
55	MG	2A	3099	1/1	0.97	0.12	26,26,26,26	0
55	MG	1A	3911	1/1	0.97	0.13	47,47,47,47	0
55	MG	1A	3050	1/1	0.97	0.07	25,25,25,25	0
55	MG	2A	3103	1/1	0.97	0.13	34,34,34,34	0
55	MG	1A	3367	1/1	0.97	0.04	27,27,27,27	0
55	MG	2a	1696	1/1	0.97	0.04	53,53,53,53	0
55	MG	2A	3366	1/1	0.97	0.13	31,31,31,31	0
55	MG	1a	3098	1/1	0.97	0.03	26,26,26,26	0
55	MG	2A	3368	1/1	0.97	0.11	22,22,22,22	0
55	MG	1A	3122	1/1	0.97	0.05	22,22,22,22	0
55	MG	1A	3369	1/1	0.97	0.07	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3243	1/1	0.97	0.17	26,26,26,26	0
55	MG	1A	3917	1/1	0.97	0.10	16,16,16,16	0
55	MG	2A	3695	1/1	0.97	0.09	44,44,44,44	0
55	MG	1A	3299	1/1	0.97	0.08	34,34,34,34	0
55	MG	2a	1706	1/1	0.97	0.11	30,30,30,30	0
55	MG	1A	3475	1/1	0.97	0.10	27,27,27,27	0
55	MG	2A	3114	1/1	0.97	0.07	30,30,30,30	0
55	MG	1A	3920	1/1	0.97	0.10	15,15,15,15	0
55	MG	2A	3378	1/1	0.97	0.17	44,44,44,44	0
55	MG	2A	3702	1/1	0.97	0.11	31,31,31,31	0
55	MG	1A	3372	1/1	0.97	0.06	22,22,22,22	0
55	MG	2a	1713	1/1	0.97	0.15	31,31,31,31	0
55	MG	2A	3704	1/1	0.97	0.10	26,26,26,26	0
55	MG	2a	1715	1/1	0.97	0.21	36,36,36,36	0
55	MG	1A	3123	1/1	0.97	0.14	10,10,10,10	0
55	MG	1A	3087	1/1	0.97	0.12	30,30,30,30	0
55	MG	1A	3742	1/1	0.97	0.05	22,22,22,22	0
55	MG	1A	3068	1/1	0.97	0.07	34,34,34,34	0
55	MG	2a	1720	1/1	0.97	0.15	23,23,23,23	0
55	MG	2A	3123	1/1	0.97	0.18	16,16,16,16	0
55	MG	1N	204	1/1	0.97	0.05	33,33,33,33	0
55	MG	2A	3386	1/1	0.97	0.16	31,31,31,31	0
55	MG	1A	3201	1/1	0.97	0.06	36,36,36,36	0
55	MG	2A	3713	1/1	0.97	0.06	39,39,39,39	0
55	MG	1A	3002	1/1	0.97	0.08	39,39,39,39	0
55	MG	1A	3596	1/1	0.97	0.04	34,34,34,34	0
55	MG	1O	204	1/1	0.97	0.12	38,38,38,38	0
55	MG	1a	3119	1/1	0.97	0.11	16,16,16,16	0
55	MG	1A	3598	1/1	0.97	0.08	35,35,35,35	0
55	MG	1P	201	1/1	0.97	0.05	15,15,15,15	0
55	MG	1A	3203	1/1	0.97	0.15	14,14,14,14	0
55	MG	1A	3484	1/1	0.97	0.07	24,24,24,24	0
55	MG	1a	3124	1/1	0.97	0.20	34,34,34,34	0
55	MG	2A	3723	1/1	0.97	0.06	36,36,36,36	0
55	MG	2A	3397	1/1	0.97	0.07	21,21,21,21	0
55	MG	1A	3016	1/1	0.97	0.08	28,28,28,28	0
55	MG	2A	3399	1/1	0.97	0.06	32,32,32,32	0
55	MG	1a	3127	1/1	0.97	0.14	21,21,21,21	0
55	MG	1a	3128	1/1	0.97	0.07	30,30,30,30	0
55	MG	1A	3753	1/1	0.97	0.05	28,28,28,28	0
55	MG	1a	3131	1/1	0.97	0.11	42,42,42,42	0
55	MG	1A	3936	1/1	0.97	0.11	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3382	1/1	0.97	0.12	26,26,26,26	0
55	MG	1A	3205	1/1	0.97	0.15	18,18,18,18	0
55	MG	1Q	204	1/1	0.97	0.04	35,35,35,35	0
55	MG	1a	3138	1/1	0.97	0.12	19,19,19,19	0
55	MG	1A	3939	1/1	0.97	0.06	14,14,14,14	0
55	MG	2a	1750	1/1	0.97	0.17	32,32,32,32	0
55	MG	1R	201	1/1	0.97	0.09	40,40,40,40	0
55	MG	1R	202	1/1	0.97	0.11	32,32,32,32	0
55	MG	2A	3741	1/1	0.97	0.08	25,25,25,25	0
55	MG	2A	3414	1/1	0.97	0.05	28,28,28,28	0
55	MG	2A	3743	1/1	0.97	0.06	35,35,35,35	0
55	MG	1A	3604	1/1	0.97	0.07	20,20,20,20	0
55	MG	1A	3312	1/1	0.97	0.08	40,40,40,40	0
55	MG	1A	3606	1/1	0.97	0.04	28,28,28,28	0
55	MG	1a	3147	1/1	0.97	0.04	44,44,44,44	0
55	MG	1A	3071	1/1	0.97	0.19	35,35,35,35	0
55	MG	1A	3608	1/1	0.97	0.14	19,19,19,19	0
55	MG	2A	3750	1/1	0.97	0.12	41,41,41,41	0
55	MG	2A	3424	1/1	0.97	0.04	40,40,40,40	0
55	MG	2A	3752	1/1	0.97	0.08	30,30,30,30	0
55	MG	2A	3753	1/1	0.97	0.07	31,31,31,31	0
55	MG	2a	1768	1/1	0.97	0.17	36,36,36,36	0
55	MG	2A	3154	1/1	0.97	0.07	32,32,32,32	0
55	MG	1S	202	1/1	0.97	0.13	33,33,33,33	0
55	MG	1A	3490	1/1	0.97	0.08	35,35,35,35	0
55	MG	1T	201	1/1	0.97	0.09	13,13,13,13	0
55	MG	2A	3430	1/1	0.97	0.13	29,29,29,29	0
55	MG	1A	3314	1/1	0.97	0.06	29,29,29,29	0
55	MG	1A	3131	1/1	0.97	0.06	21,21,21,21	0
55	MG	2A	3434	1/1	0.97	0.14	15,15,15,15	0
55	MG	1A	3955	1/1	0.97	0.11	39,39,39,39	0
55	MG	2a	1779	1/1	0.97	0.05	19,19,19,19	0
55	MG	2A	3436	1/1	0.97	0.14	33,33,33,33	0
55	MG	1U	203	1/1	0.97	0.07	32,32,32,32	0
55	MG	1A	3766	1/1	0.97	0.04	26,26,26,26	0
55	MG	1U	207	1/1	0.97	0.07	31,31,31,31	0
55	MG	1a	3160	1/1	0.97	0.11	39,39,39,39	0
55	MG	1a	3161	1/1	0.97	0.07	41,41,41,41	0
55	MG	1A	3393	1/1	0.97	0.30	21,21,21,21	0
55	MG	1A	3958	1/1	0.97	0.12	27,27,27,27	0
55	MG	2a	1788	1/1	0.97	0.04	54,54,54,54	0
55	MG	1A	3495	1/1	0.97	0.06	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3617	1/1	0.97	0.11	27,27,27,27	0
55	MG	2a	1791	1/1	0.97	0.06	66,66,66,66	0
55	MG	1A	3394	1/1	0.97	0.05	31,31,31,31	0
55	MG	1W	201	1/1	0.97	0.18	35,35,35,35	0
55	MG	1W	202	1/1	0.97	0.05	20,20,20,20	0
55	MG	1A	3395	1/1	0.97	0.07	13,13,13,13	0
55	MG	1A	3397	1/1	0.97	0.07	16,16,16,16	0
55	MG	1A	3256	1/1	0.97	0.17	25,25,25,25	0
55	MG	1W	206	1/1	0.97	0.08	27,27,27,27	0
55	MG	2a	1799	1/1	0.97	0.11	49,49,49,49	0
55	MG	2a	1800	1/1	0.97	0.12	28,28,28,28	0
55	MG	2A	3784	1/1	0.97	0.09	43,43,43,43	0
55	MG	1A	3774	1/1	0.97	0.06	37,37,37,37	0
55	MG	1A	3053	1/1	0.97	0.07	31,31,31,31	0
55	MG	1A	3258	1/1	0.97	0.05	22,22,22,22	0
55	MG	2A	3788	1/1	0.97	0.08	40,40,40,40	0
55	MG	2A	3789	1/1	0.97	0.12	34,34,34,34	0
55	MG	2A	3790	1/1	0.97	0.06	42,42,42,42	0
55	MG	2A	3458	1/1	0.97	0.09	28,28,28,28	0
55	MG	1A	3503	1/1	0.97	0.06	40,40,40,40	0
55	MG	2A	3182	1/1	0.97	0.05	25,25,25,25	0
55	MG	1X	103	1/1	0.97	0.07	34,34,34,34	0
55	MG	2A	3796	1/1	0.97	0.14	22,22,22,22	0
55	MG	1A	3630	1/1	0.97	0.07	18,18,18,18	0
55	MG	1A	3779	1/1	0.97	0.08	27,27,27,27	0
55	MG	1Z	301	1/1	0.97	0.03	23,23,23,23	0
55	MG	1A	3504	1/1	0.97	0.04	25,25,25,25	0
55	MG	2A	3804	1/1	0.97	0.09	31,31,31,31	0
55	MG	1A	3781	1/1	0.97	0.09	41,41,41,41	0
55	MG	10	102	1/1	0.97	0.06	34,34,34,34	0
55	MG	1A	3095	1/1	0.97	0.14	29,29,29,29	0
55	MG	1a	3185	1/1	0.97	0.04	32,32,32,32	0
55	MG	1A	3096	1/1	0.97	0.05	23,23,23,23	0
55	MG	1A	3321	1/1	0.97	0.05	18,18,18,18	0
55	MG	2A	3813	1/1	0.97	0.11	34,34,34,34	0
55	MG	2A	3196	1/1	0.97	0.06	29,29,29,29	0
55	MG	1A	3137	1/1	0.97	0.07	30,30,30,30	0
55	MG	1A	3637	1/1	0.97	0.17	16,16,16,16	0
55	MG	1A	3638	1/1	0.97	0.12	10,10,10,10	0
55	MG	1A	3792	1/1	0.97	0.05	37,37,37,37	0
55	MG	1A	3170	1/1	0.97	0.12	32,32,32,32	0
55	MG	1A	3043	1/1	0.97	0.07	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1a	3196	1/1	0.97	0.03	34,34,34,34	0
55	MG	1A	3795	1/1	0.97	0.06	27,27,27,27	0
55	MG	1A	3326	1/1	0.97	0.04	26,26,26,26	0
55	MG	13	105	1/1	0.97	0.07	26,26,26,26	0
55	MG	1A	3800	1/1	0.97	0.09	24,24,24,24	0
55	MG	2A	3208	1/1	0.97	0.12	37,37,37,37	0
55	MG	15	101	1/1	0.97	0.12	36,36,36,36	0
55	MG	1A	3990	1/1	0.97	0.05	25,25,25,25	0
55	MG	2A	3491	1/1	0.97	0.19	27,27,27,27	0
55	MG	2A	3492	1/1	0.97	0.03	10,10,10,10	0
55	MG	2A	3211	1/1	0.97	0.11	26,26,26,26	0
55	MG	1a	3204	1/1	0.97	0.16	22,22,22,22	0
55	MG	2A	3213	1/1	0.97	0.05	32,32,32,32	0
55	MG	1a	3205	1/1	0.97	0.07	41,41,41,41	0
55	MG	1A	3328	1/1	0.97	0.05	22,22,22,22	0
55	MG	2A	3216	1/1	0.97	0.04	28,28,28,28	0
55	MG	16	102	1/1	0.97	0.05	18,18,18,18	0
55	MG	1A	3213	1/1	0.98	0.08	35,35,35,35	0
55	MG	1A	3844	1/1	0.98	0.08	23,23,23,23	0
55	MG	2A	3116	1/1	0.98	0.05	38,38,38,38	0
55	MG	1A	3325	1/1	0.98	0.07	41,41,41,41	0
55	MG	1A	3429	1/1	0.98	0.09	23,23,23,23	0
55	MG	1A	3848	1/1	0.98	0.05	22,22,22,22	0
55	MG	1F	303	1/1	0.98	0.07	29,29,29,29	0
55	MG	1A	3738	1/1	0.98	0.04	42,42,42,42	0
55	MG	1a	3190	1/1	0.98	0.08	44,44,44,44	0
55	MG	1F	305	1/1	0.98	0.04	34,34,34,34	0
55	MG	2A	3498	1/1	0.98	0.07	32,32,32,32	0
55	MG	1A	3850	1/1	0.98	0.07	17,17,17,17	0
55	MG	1A	3430	1/1	0.98	0.19	32,32,32,32	0
55	MG	2A	3501	1/1	0.98	0.04	26,26,26,26	0
55	MG	1a	3194	1/1	0.98	0.04	27,27,27,27	0
55	MG	1A	3970	1/1	0.98	0.12	22,22,22,22	0
55	MG	1A	3560	1/1	0.98	0.07	19,19,19,19	0
55	MG	1F	310	1/1	0.98	0.14	25,25,25,25	0
55	MG	1F	311	1/1	0.98	0.07	29,29,29,29	0
55	MG	1A	3102	1/1	0.98	0.05	17,17,17,17	0
55	MG	1A	3562	1/1	0.98	0.09	25,25,25,25	0
55	MG	1a	3201	1/1	0.98	0.03	33,33,33,33	0
55	MG	1A	3074	1/1	0.98	0.19	19,19,19,19	0
55	MG	1A	3975	1/1	0.98	0.03	23,23,23,23	0
55	MG	1A	3374	1/1	0.98	0.04	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3977	1/1	0.98	0.03	23,23,23,23	0
55	MG	1A	3076	1/1	0.98	0.05	42,42,42,42	0
55	MG	1a	3046	1/1	0.98	0.06	33,33,33,33	0
55	MG	1A	3858	1/1	0.98	0.08	41,41,41,41	0
55	MG	1A	3566	1/1	0.98	0.05	18,18,18,18	0
55	MG	2A	3735	1/1	0.98	0.04	22,22,22,22	0
55	MG	1N	201	1/1	0.98	0.05	47,47,47,47	0
55	MG	1A	3130	1/1	0.98	0.14	18,18,18,18	0
55	MG	1A	3288	1/1	0.98	0.05	27,27,27,27	0
55	MG	2A	3739	1/1	0.98	0.10	43,43,43,43	0
55	MG	1A	3862	1/1	0.98	0.04	39,39,39,39	0
55	MG	1A	3569	1/1	0.98	0.08	28,28,28,28	0
55	MG	1A	3289	1/1	0.98	0.03	10,10,10,10	0
55	MG	1O	202	1/1	0.98	0.04	47,47,47,47	0
55	MG	1A	3754	1/1	0.98	0.07	33,33,33,33	0
55	MG	1A	3656	1/1	0.98	0.04	36,36,36,36	0
55	MG	1l	202	1/1	0.98	0.05	18,18,18,18	0
55	MG	1A	3756	1/1	0.98	0.04	23,23,23,23	0
55	MG	1A	3186	1/1	0.98	0.07	34,34,34,34	0
55	MG	1P	202	1/1	0.98	0.12	15,15,15,15	0
55	MG	1A	3187	1/1	0.98	0.16	33,33,33,33	0
55	MG	2A	3533	1/1	0.98	0.06	42,42,42,42	0
55	MG	1A	3870	1/1	0.98	0.05	14,14,14,14	0
55	MG	1A	3871	1/1	0.98	0.09	12,12,12,12	0
55	MG	2A	3754	1/1	0.98	0.06	43,43,43,43	0
55	MG	1A	3574	1/1	0.98	0.07	46,46,46,46	0
55	MG	1A	3441	1/1	0.98	0.11	38,38,38,38	0
55	MG	1v	104	1/1	0.98	0.07	35,35,35,35	0
55	MG	1A	3874	1/1	0.98	0.04	30,30,30,30	0
55	MG	1A	3576	1/1	0.98	0.09	10,10,10,10	0
55	MG	1A	3442	1/1	0.98	0.09	22,22,22,22	0
55	MG	2A	3165	1/1	0.98	0.09	33,33,33,33	0
55	MG	1A	3188	1/1	0.98	0.04	22,22,22,22	0
55	MG	1A	3579	1/1	0.98	0.11	15,15,15,15	0
55	MG	1A	3065	1/1	0.98	0.10	16,16,16,16	0
55	MG	1A	4002	1/1	0.98	0.06	17,17,17,17	0
55	MG	1A	3384	1/1	0.98	0.07	21,21,21,21	0
55	MG	1R	205	1/1	0.98	0.03	30,30,30,30	0
55	MG	1A	3132	1/1	0.98	0.08	35,35,35,35	0
55	MG	1A	3447	1/1	0.98	0.14	33,33,33,33	0
55	MG	1A	3387	1/1	0.98	0.08	24,24,24,24	0
55	MG	1A	3028	1/1	0.98	0.07	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3042	1/1	0.98	0.04	18,18,18,18	0
55	MG	1A	3886	1/1	0.98	0.12	36,36,36,36	0
55	MG	2A	3556	1/1	0.98	0.05	26,26,26,26	0
55	MG	1A	3092	1/1	0.98	0.13	22,22,22,22	0
55	MG	2A	3003	1/1	0.98	0.15	29,29,29,29	0
55	MG	1A	3674	1/1	0.98	0.08	32,32,32,32	0
55	MG	1A	3093	1/1	0.98	0.05	18,18,18,18	0
55	MG	2A	3006	1/1	0.98	0.10	38,38,38,38	0
55	MG	2A	3782	1/1	0.98	0.04	37,37,37,37	0
55	MG	2A	3563	1/1	0.98	0.18	27,27,27,27	0
55	MG	2A	3564	1/1	0.98	0.08	25,25,25,25	0
55	MG	1A	3009	1/1	0.98	0.05	32,32,32,32	0
55	MG	1U	205	1/1	0.98	0.15	27,27,27,27	0
55	MG	1A	3891	1/1	0.98	0.06	42,42,42,42	0
55	MG	1A	3114	1/1	0.98	0.05	10,10,10,10	0
55	MG	1A	3592	1/1	0.98	0.04	27,27,27,27	0
55	MG	2A	3369	1/1	0.98	0.07	19,19,19,19	0
55	MG	1A	4019	1/1	0.98	0.04	41,41,41,41	0
55	MG	1A	3679	1/1	0.98	0.04	23,23,23,23	0
55	MG	2A	3573	1/1	0.98	0.04	23,23,23,23	0
55	MG	2A	3014	1/1	0.98	0.04	21,21,21,21	0
55	MG	2A	3192	1/1	0.98	0.12	25,25,25,25	0
55	MG	1A	3396	1/1	0.98	0.15	22,22,22,22	0
55	MG	1A	3346	1/1	0.98	0.03	15,15,15,15	0
55	MG	2A	3799	1/1	0.98	0.13	29,29,29,29	0
55	MG	1A	3398	1/1	0.98	0.33	29,29,29,29	0
55	MG	2A	3018	1/1	0.98	0.13	10,10,10,10	0
55	MG	1A	3399	1/1	0.98	0.05	17,17,17,17	0
55	MG	2A	3581	1/1	0.98	0.09	33,33,33,33	0
55	MG	2A	3582	1/1	0.98	0.05	33,33,33,33	0
55	MG	1A	4027	1/1	0.98	0.11	11,11,11,11	0
55	MG	1A	4028	1/1	0.98	0.11	17,17,17,17	0
55	MG	1A	3899	1/1	0.98	0.09	22,22,22,22	0
55	MG	1A	3785	1/1	0.98	0.13	14,14,14,14	0
55	MG	2A	3811	1/1	0.98	0.14	10,10,10,10	0
55	MG	2A	3812	1/1	0.98	0.04	28,28,28,28	0
55	MG	1A	3901	1/1	0.98	0.06	28,28,28,28	0
55	MG	1A	4032	1/1	0.98	0.12	39,39,39,39	0
55	MG	1A	3597	1/1	0.98	0.04	34,34,34,34	0
55	MG	1A	3140	1/1	0.98	0.09	33,33,33,33	0
55	MG	1a	3106	1/1	0.98	0.10	10,10,10,10	0
55	MG	1A	4035	1/1	0.98	0.17	15,15,15,15	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1X	104	1/1	0.98	0.05	22,22,22,22	0
55	MG	1A	3788	1/1	0.98	0.08	35,35,35,35	0
55	MG	2A	3822	1/1	0.98	0.03	28,28,28,28	0
55	MG	1A	3302	1/1	0.98	0.05	26,26,26,26	0
55	MG	1a	3111	1/1	0.98	0.10	25,25,25,25	0
55	MG	1A	3462	1/1	0.98	0.12	30,30,30,30	0
55	MG	1A	3525	1/1	0.98	0.16	25,25,25,25	0
55	MG	1Z	303	1/1	0.98	0.04	28,28,28,28	0
55	MG	1A	3303	1/1	0.98	0.07	37,37,37,37	0
55	MG	1A	3527	1/1	0.98	0.10	17,17,17,17	0
55	MG	2A	3830	1/1	0.98	0.14	31,31,31,31	0
55	MG	10	103	1/1	0.98	0.04	25,25,25,25	0
55	MG	1A	3115	1/1	0.98	0.07	20,20,20,20	0
55	MG	2A	3219	1/1	0.98	0.05	24,24,24,24	0
55	MG	2a	1738	1/1	0.98	0.03	59,59,59,59	0
55	MG	1A	3305	1/1	0.98	0.04	23,23,23,23	0
55	MG	2A	3606	1/1	0.98	0.12	34,34,34,34	0
55	MG	2A	3221	1/1	0.98	0.07	33,33,33,33	0
55	MG	2A	3404	1/1	0.98	0.06	12,12,12,12	0
55	MG	1A	3231	1/1	0.98	0.10	22,22,22,22	0
55	MG	1A	3799	1/1	0.98	0.09	51,51,51,51	0
55	MG	11	101	1/1	0.98	0.23	32,32,32,32	0
55	MG	1A	3468	1/1	0.98	0.12	34,34,34,34	0
55	MG	2A	3047	1/1	0.98	0.04	33,33,33,33	0
55	MG	1A	3116	1/1	0.98	0.04	29,29,29,29	0
55	MG	2A	3049	1/1	0.98	0.04	21,21,21,21	0
55	MG	1a	3125	1/1	0.98	0.03	21,21,21,21	0
55	MG	1A	3609	1/1	0.98	0.09	17,17,17,17	0
55	MG	1A	3081	1/1	0.98	0.09	15,15,15,15	0
55	MG	2A	3415	1/1	0.98	0.06	36,36,36,36	0
55	MG	1A	3309	1/1	0.98	0.16	25,25,25,25	0
55	MG	2A	3417	1/1	0.98	0.07	16,16,16,16	0
55	MG	1B	210	1/1	0.98	0.04	30,30,30,30	0
55	MG	1a	3130	1/1	0.98	0.19	38,38,38,38	0
55	MG	1A	3807	1/1	0.98	0.10	31,31,31,31	0
55	MG	2A	3421	1/1	0.98	0.21	22,22,22,22	0
55	MG	2A	3626	1/1	0.98	0.06	21,21,21,21	0
55	MG	2A	3627	1/1	0.98	0.16	23,23,23,23	0
55	MG	1A	3118	1/1	0.98	0.09	24,24,24,24	0
55	MG	1A	3613	1/1	0.98	0.08	19,19,19,19	0
55	MG	2a	1765	1/1	0.98	0.07	42,42,42,42	0
55	MG	1A	3614	1/1	0.98	0.12	14,14,14,14	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1a	3136	1/1	0.98	0.07	32,32,32,32	0
55	MG	2A	3426	1/1	0.98	0.09	55,55,55,55	0
55	MG	1A	3119	1/1	0.98	0.05	34,34,34,34	0
55	MG	2A	3635	1/1	0.98	0.04	31,31,31,31	0
55	MG	2A	3636	1/1	0.98	0.12	28,28,28,28	0
55	MG	2A	3062	1/1	0.98	0.03	17,17,17,17	0
55	MG	15	104	1/1	0.98	0.02	17,17,17,17	0
55	MG	1A	3925	1/1	0.98	0.04	20,20,20,20	0
55	MG	2A	3640	1/1	0.98	0.04	39,39,39,39	0
55	MG	1A	3537	1/1	0.98	0.08	30,30,30,30	0
55	MG	2a	1777	1/1	0.98	0.06	38,38,38,38	0
55	MG	1A	3813	1/1	0.98	0.04	44,44,44,44	0
55	MG	1A	3060	1/1	0.98	0.09	21,21,21,21	0
55	MG	2A	3645	1/1	0.98	0.08	49,49,49,49	0
55	MG	2D	303	1/1	0.98	0.04	40,40,40,40	0
55	MG	17	102	1/1	0.98	0.06	18,18,18,18	0
55	MG	1A	3061	1/1	0.98	0.03	37,37,37,37	0
55	MG	1A	3619	1/1	0.98	0.04	23,23,23,23	0
55	MG	2D	307	1/1	0.98	0.08	25,25,25,25	0
55	MG	1A	3817	1/1	0.98	0.11	40,40,40,40	0
55	MG	2A	3072	1/1	0.98	0.11	26,26,26,26	0
55	MG	2A	3073	1/1	0.98	0.09	30,30,30,30	0
55	MG	2A	3652	1/1	0.98	0.04	31,31,31,31	0
55	MG	1A	3621	1/1	0.98	0.08	36,36,36,36	0
55	MG	1A	3414	1/1	0.98	0.12	26,26,26,26	0
55	MG	1a	3151	1/1	0.98	0.10	28,28,28,28	0
55	MG	2F	302	1/1	0.98	0.07	32,32,32,32	0
55	MG	18	101	1/1	0.98	0.20	27,27,27,27	0
55	MG	2A	3445	1/1	0.98	0.09	32,32,32,32	0
55	MG	2A	3078	1/1	0.98	0.06	41,41,41,41	0
55	MG	1A	3174	1/1	0.98	0.10	23,23,23,23	0
55	MG	1A	3713	1/1	0.98	0.05	40,40,40,40	0
55	MG	2A	3260	1/1	0.98	0.05	23,23,23,23	0
55	MG	1A	3054	1/1	0.98	0.13	21,21,21,21	0
55	MG	1A	3625	1/1	0.98	0.05	20,20,20,20	0
55	MG	2A	3083	1/1	0.98	0.04	27,27,27,27	0
55	MG	1A	3241	1/1	0.98	0.07	34,34,34,34	0
55	MG	2Q	203	1/1	0.98	0.09	49,49,49,49	0
55	MG	2A	3454	1/1	0.98	0.20	28,28,28,28	0
55	MG	2R	201	1/1	0.98	0.08	17,17,17,17	0
55	MG	2A	3667	1/1	0.98	0.06	32,32,32,32	0
55	MG	2A	3668	1/1	0.98	0.03	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3940	1/1	0.98	0.12	22,22,22,22	0
55	MG	1A	3627	1/1	0.98	0.12	10,10,10,10	0
55	MG	1A	3942	1/1	0.98	0.05	35,35,35,35	0
55	MG	2U	202	1/1	0.98	0.04	23,23,23,23	0
55	MG	1A	3149	1/1	0.98	0.11	23,23,23,23	0
55	MG	1A	3482	1/1	0.98	0.10	28,28,28,28	0
55	MG	2A	3674	1/1	0.98	0.05	36,36,36,36	0
55	MG	1A	3945	1/1	0.98	0.17	24,24,24,24	0
55	MG	1A	3946	1/1	0.98	0.03	30,30,30,30	0
55	MG	1A	3947	1/1	0.98	0.06	25,25,25,25	0
55	MG	1a	3008	1/1	0.98	0.07	54,54,54,54	0
55	MG	2I	102	1/1	0.98	0.05	40,40,40,40	0
55	MG	2I	103	1/1	0.98	0.08	18,18,18,18	0
55	MG	1A	3018	1/1	0.98	0.05	16,16,16,16	0
55	MG	1A	3949	1/1	0.98	0.03	31,31,31,31	0
55	MG	1A	3950	1/1	0.98	0.12	27,27,27,27	0
55	MG	2A	3467	1/1	0.98	0.20	34,34,34,34	0
55	MG	1A	3278	1/1	0.98	0.05	32,32,32,32	0
55	MG	1A	3724	1/1	0.98	0.06	20,20,20,20	0
55	MG	2A	3100	1/1	0.98	0.14	22,22,22,22	0
55	MG	2I	202	1/1	0.98	0.03	42,42,42,42	0
55	MG	1D	310	1/1	0.98	0.04	36,36,36,36	0
55	MG	25	103	1/1	0.98	0.06	27,27,27,27	0
55	MG	1A	3244	1/1	0.98	0.18	20,20,20,20	0
55	MG	1A	3125	1/1	0.98	0.09	29,29,29,29	0
55	MG	2A	3104	1/1	0.98	0.06	28,28,28,28	0
55	MG	1A	3551	1/1	0.98	0.08	19,19,19,19	0
55	MG	2A	3476	1/1	0.98	0.11	24,24,24,24	0
55	MG	1E	304	1/1	0.98	0.08	24,24,24,24	0
55	MG	2a	1601	1/1	0.98	0.04	23,23,23,23	0
55	MG	2a	1602	1/1	0.98	0.04	51,51,51,51	0
55	MG	2A	3107	1/1	0.98	0.10	39,39,39,39	0
55	MG	1E	305	1/1	0.98	0.04	34,34,34,34	0
55	MG	1A	3838	1/1	0.98	0.08	26,26,26,26	0
55	MG	2A	3481	1/1	0.98	0.18	39,39,39,39	0
55	MG	1A	3552	1/1	0.98	0.07	21,21,21,21	0
55	MG	1A	3012	1/1	0.98	0.16	27,27,27,27	0
57	ZN	2Y	203	1/1	0.98	0.05	98,98,98,98	0
55	MG	1A	3554	1/1	0.98	0.06	18,18,18,18	0
55	MG	2A	3485	1/1	0.98	0.03	22,22,22,22	0
55	MG	1A	3247	1/1	0.98	0.05	37,37,37,37	0
55	MG	2A	3293	1/1	0.98	0.10	16,16,16,16	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	2A	3299	1/1	0.99	0.04	46,46,46,46	0
55	MG	1A	3135	1/1	0.99	0.05	23,23,23,23	0
55	MG	1A	3978	1/1	0.99	0.12	21,21,21,21	0
55	MG	1A	3796	1/1	0.99	0.03	10,10,10,10	0
55	MG	1A	3797	1/1	0.99	0.04	20,20,20,20	0
55	MG	1A	3745	1/1	0.99	0.05	32,32,32,32	0
55	MG	1A	3375	1/1	0.99	0.14	29,29,29,29	0
55	MG	1A	3335	1/1	0.99	0.04	19,19,19,19	0
55	MG	2A	3767	1/1	0.99	0.07	40,40,40,40	0
55	MG	1A	3802	1/1	0.99	0.03	38,38,38,38	0
55	MG	1A	3010	1/1	0.99	0.07	33,33,33,33	0
55	MG	13	101	1/1	0.99	0.04	30,30,30,30	0
55	MG	2A	3771	1/1	0.99	0.11	26,26,26,26	0
55	MG	1A	3337	1/1	0.99	0.05	16,16,16,16	0
55	MG	1A	3107	1/1	0.99	0.06	14,14,14,14	0
55	MG	2A	3400	1/1	0.99	0.10	13,13,13,13	0
55	MG	1A	3404	1/1	0.99	0.03	21,21,21,21	0
55	MG	1A	3432	1/1	0.99	0.09	20,20,20,20	0
55	MG	1A	3234	1/1	0.99	0.05	28,28,28,28	0
55	MG	1A	3667	1/1	0.99	0.08	18,18,18,18	0
55	MG	2a	1763	1/1	0.99	0.10	31,31,31,31	0
55	MG	1a	3135	1/1	0.99	0.08	26,26,26,26	0
55	MG	15	102	1/1	0.99	0.06	33,33,33,33	0
55	MG	1A	3929	1/1	0.99	0.07	18,18,18,18	0
55	MG	1A	3494	1/1	0.99	0.18	10,10,10,10	0
55	MG	1a	3139	1/1	0.99	0.02	30,30,30,30	0
55	MG	1A	3631	1/1	0.99	0.05	42,42,42,42	0
55	MG	1A	3708	1/1	0.99	0.04	26,26,26,26	0
55	MG	2F	305	1/1	0.99	0.06	27,27,27,27	0
55	MG	1A	3709	1/1	0.99	0.03	28,28,28,28	0
55	MG	1A	3075	1/1	0.99	0.13	10,10,10,10	0
55	MG	2A	3325	1/1	0.99	0.04	22,22,22,22	0
55	MG	2A	3691	1/1	0.99	0.08	24,24,24,24	0
55	MG	2P	202	1/1	0.99	0.06	29,29,29,29	0
55	MG	1A	3711	1/1	0.99	0.07	10,10,10,10	0
55	MG	2A	3791	1/1	0.99	0.02	22,22,22,22	0
55	MG	1A	3109	1/1	0.99	0.07	21,21,21,21	0
55	MG	2a	1672	1/1	0.99	0.08	21,21,21,21	0
55	MG	1a	3146	1/1	0.99	0.14	29,29,29,29	0
55	MG	1A	3465	1/1	0.99	0.04	22,22,22,22	0
55	MG	1B	227	1/1	0.99	0.04	31,31,31,31	0
55	MG	1A	3022	1/1	0.99	0.07	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3819	1/1	0.99	0.05	22,22,22,22	0
55	MG	2A	3699	1/1	0.99	0.07	20,20,20,20	0
55	MG	1A	3120	1/1	0.99	0.08	30,30,30,30	0
55	MG	2A	3800	1/1	0.99	0.07	20,20,20,20	0
55	MG	1A	3500	1/1	0.99	0.07	34,34,34,34	0
55	MG	1A	3717	1/1	0.99	0.08	25,25,25,25	0
55	MG	1A	3823	1/1	0.99	0.05	16,16,16,16	0
55	MG	1A	3385	1/1	0.99	0.04	26,26,26,26	0
55	MG	18	106	1/1	0.99	0.03	10,10,10,10	0
55	MG	2A	3518	1/1	0.99	0.03	34,34,34,34	0
55	MG	1A	4008	1/1	0.99	0.03	24,24,24,24	0
55	MG	1B	236	1/1	0.99	0.08	21,21,21,21	0
55	MG	1A	3177	1/1	0.99	0.04	26,26,26,26	0
55	MG	1A	3178	1/1	0.99	0.03	17,17,17,17	0
55	MG	2A	3084	1/1	0.99	0.07	28,28,28,28	0
55	MG	1A	3388	1/1	0.99	0.04	19,19,19,19	0
55	MG	1A	3828	1/1	0.99	0.07	28,28,28,28	0
55	MG	1A	3153	1/1	0.99	0.12	30,30,30,30	0
55	MG	2A	3816	1/1	0.99	0.03	25,25,25,25	0
55	MG	1A	3723	1/1	0.99	0.03	36,36,36,36	0
55	MG	1A	4015	1/1	0.99	0.05	19,19,19,19	0
55	MG	1a	3084	1/1	0.99	0.10	10,10,10,10	0
55	MG	1D	308	1/1	0.99	0.07	42,42,42,42	0
55	MG	1A	3327	1/1	0.99	0.07	26,26,26,26	0
55	MG	1U	204	1/1	0.99	0.03	17,17,17,17	0
55	MG	1A	3725	1/1	0.99	0.09	26,26,26,26	0
55	MG	1A	3391	1/1	0.99	0.04	37,37,37,37	0
55	MG	1A	3834	1/1	0.99	0.04	11,11,11,11	0
55	MG	1A	3573	1/1	0.99	0.07	24,24,24,24	0
55	MG	28	102	1/1	0.99	0.11	29,29,29,29	0
55	MG	1A	3728	1/1	0.99	0.03	24,24,24,24	0
55	MG	2A	3538	1/1	0.99	0.05	35,35,35,35	0
55	MG	1A	4022	1/1	0.99	0.09	27,27,27,27	0
55	MG	1A	3646	1/1	0.99	0.05	16,16,16,16	0
55	MG	2A	3633	1/1	0.99	0.13	30,30,30,30	0
55	MG	1E	307	1/1	0.99	0.04	23,23,23,23	0
55	MG	1A	3032	1/1	0.99	0.05	16,16,16,16	0
55	MG	1a	3097	1/1	0.99	0.14	23,23,23,23	0
55	MG	1A	3731	1/1	0.99	0.06	25,25,25,25	0
55	MG	2A	3190	1/1	0.99	0.03	42,42,42,42	0
55	MG	1a	3099	1/1	0.99	0.19	18,18,18,18	0
55	MG	1A	4026	1/1	0.99	0.04	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	MG	1A	3960	1/1	0.99	0.09	14,14,14,14	0
55	MG	2A	3642	1/1	0.99	0.12	12,12,12,12	0
55	MG	1A	3112	1/1	0.99	0.08	16,16,16,16	0
55	MG	1A	3211	1/1	0.99	0.03	37,37,37,37	0
55	MG	1W	207	1/1	0.99	0.08	23,23,23,23	0
55	MG	1A	3783	1/1	0.99	0.09	21,21,21,21	0
55	MG	1A	3784	1/1	0.99	0.05	24,24,24,24	0
55	MG	1A	3020	1/1	0.99	0.08	24,24,24,24	0
55	MG	2A	3030	1/1	0.99	0.25	33,33,33,33	0
55	MG	1A	3845	1/1	0.99	0.05	19,19,19,19	0
55	MG	2A	3557	1/1	0.99	0.09	15,15,15,15	0
55	MG	1A	3197	1/1	0.99	0.11	16,16,16,16	0
55	MG	1A	3906	1/1	0.99	0.04	21,21,21,21	0
55	MG	1A	3450	1/1	0.99	0.04	14,14,14,14	0
55	MG	1A	3422	1/1	0.99	0.06	36,36,36,36	0
55	MG	2a	1627	1/1	0.99	0.12	27,27,27,27	0
55	MG	1A	3099	1/1	0.99	0.07	23,23,23,23	0
57	ZN	1Y	203	1/1	0.99	0.03	62,62,62,62	0
55	MG	2A	3121	1/1	0.99	0.04	29,29,29,29	0
55	MG	1A	3739	1/1	0.99	0.08	34,34,34,34	0
57	ZN	16	104	1/1	0.99	0.02	36,36,36,36	0
57	ZN	1n	104	1/1	0.99	0.03	68,68,68,68	0
55	MG	1A	3424	1/1	0.99	0.03	21,21,21,21	0
55	MG	1A	3549	1/1	0.99	0.08	16,16,16,16	0
55	MG	2B	208	1/1	0.99	0.03	22,22,22,22	0
57	ZN	26	102	1/1	0.99	0.03	40,40,40,40	0
57	ZN	29	501	1/1	0.99	0.05	60,60,60,60	0
55	MG	1A	3584	1/1	0.99	0.04	31,31,31,31	0
55	MG	1A	3743	1/1	0.99	0.10	10,10,10,10	0
59	SF4	1d	302	8/8	0.99	0.03	47,72,75,78	0
59	SF4	2d	303	8/8	0.99	0.03	45,64,72,73	0
55	MG	1A	3620	1/1	1.00	0.03	15,15,15,15	0
57	ZN	2n	102	1/1	1.00	0.02	52,52,52,52	0
55	MG	1A	3801	1/1	1.00	0.06	10,10,10,10	0
55	MG	2A	3803	1/1	1.00	0.06	32,32,32,32	0
55	MG	2Y	202	1/1	1.00	0.11	20,20,20,20	0
57	ZN	19	103	1/1	1.00	0.01	41,41,41,41	0

6.5 Other polymers ⓘ

There are no such residues in this entry.