



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 18, 2026 – 12:15 AM UTC

PDB ID : 6XHW / pdb_00006xhw
Title : Crystal structure of the A2058-unmethylated *Thermus thermophilus* 70S ribosome in complex with mRNA, aminoacylated A- and P-site tRNAs, and deacylated E-site tRNA at 2.50Å resolution
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Deposited on : 2020-06-19
Resolution : 2.50 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
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

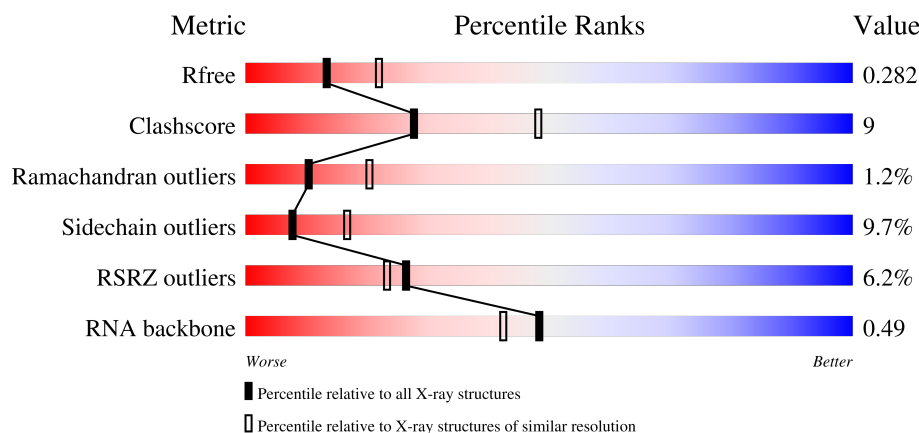
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.50 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	5829 (2.50-2.50)
Clashscore	190562	6492 (2.50-2.50)
Ramachandran outliers	187476	6378 (2.50-2.50)
Sidechain outliers	187428	6380 (2.50-2.50)
RSRZ outliers	180081	5833 (2.50-2.50)
RNA backbone	3983	1003 (2.78-2.22)

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	5% 65% 27% 6%
1	2A	2915	4% 57% 32% 7%
2	1B	121	71% 26%

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Mol	Chain	Length	Quality of chain
2	2B	121	4% 52% 42% 5% .
3	1D	276	% 77% 21% .
3	2D	276	% 75% 23% .
4	1E	206	71% 25% .
4	2E	206	75% 18% 6% .
5	1F	210	73% 20% .
5	2F	210	2% 64% 29% .
6	1G	182	2% 69% 28% .
6	2G	182	13% 54% 37% 8% .
7	1H	180	% 73% 23% .
7	2H	180	19% 58% 32% 7% .
8	1I	148	7% 67% 24% 7% .
8	2I	148	30% 51% 38% 10% .
9	1N	140	% 77% 18% 5%
9	2N	140	5% 75% 21% .
10	1O	122	76% 24%
10	2O	122	68% 30% .
11	1P	150	% 71% 26% .
11	2P	150	5% 71% 25% .
12	1Q	141	77% 21% .
12	2Q	141	4% 72% 27% .
13	1R	118	% 77% 19% .
13	2R	118	72% 26% .
14	1S	112	79% 18% .
14	2S	112	14% 64% 31% .

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Mol	Chain	Length	Quality of chain
15	1T	146	
15	2T	146	
16	1U	118	
16	2U	118	
17	1V	101	
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
20	1Y	110	
20	2Y	110	
21	1Z	206	
21	2Z	206	
22	10	85	
22	20	85	
23	11	98	
23	21	98	
24	12	72	
24	22	72	
25	13	60	
25	23	60	
26	14	71	
26	24	71	
27	15	60	

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Mol	Chain	Length	Quality of chain
27	25	60	 3% 78% 20% .
28	16	54	 65% 26% 7% .
28	26	54	 4% 65% 26% 7% .
29	17	49	 78% 16% . .
29	27	49	 2% 76% 18% . .
30	18	65	 69% 28% . .
30	28	65	 65% 31% . .
31	19	37	 70% 30%
31	29	37	 11% 68% 32%
32	1a	1521	 2% 58% 35% 7% .
32	2a	1521	 4% 49% 41% 9% .
33	1b	256	 13% 49% 35% 7% 10%
33	2b	256	 23% 45% 40% 5% 10%
34	1c	239	 4% 62% 21% . 14%
34	2c	239	 14% 49% 31% 6% 14%
35	1d	209	 4% 66% 31% .
35	2d	209	 19% 50% 44% 5%
36	1e	162	 % 57% 30% . 9%
36	2e	162	 9% 54% 35% . 9%
37	1f	101	 4% 57% 41% . .
37	2f	101	 3% 63% 33% . .
38	1g	156	 8% 71% 22% 6% .
38	2g	156	 19% 59% 33% 7% .
39	1h	138	 2% 76% 20% . .
39	2h	138	 7% 67% 29% . .

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Mol	Chain	Length	Quality of chain
40	1i	128	9% 70% 26% ..
40	2i	128	34% 55% 40% ..
41	1j	105	13% 59% 29% 5% 8%
41	2j	105	32% 50% 34% 7% 9%
42	1k	129	% 61% 24% . 12%
42	2k	129	9% 58% 27% .. 12%
43	1l	132	3% 65% 27% 8%
43	2l	132	5% 73% 18% . 8%
44	1m	126	6% 68% 24% 5% ..
44	2m	126	33% 52% 39% 5% ..
45	1n	61	5% 74% 20% 5% .
45	2n	61	44% 64% 33% ..
46	1o	89	% 66% 29% ..
46	2o	89	12% 73% 24% ..
47	1p	88	14% 57% 34% . 7%
47	2p	88	6% 52% 34% 7% 7%
48	1q	105	3% 70% 22% . 6%
48	2q	105	10% 68% 25% . 6%
49	1r	88	% 57% 19% . 23%
49	2r	88	3% 44% 31% . 23%
50	1s	93	4% 57% 29% . 11%
50	2s	93	19% 48% 35% 5% 11%
51	1t	106	12% 61% 25% .. 9%
51	2t	106	12% 58% 31% . 9%
52	1u	27	4% 59% 22% . 15%

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

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
57	MG	2a	3149	-	-	-	X

2 Entry composition

There are 61 unique types of molecules in this entry. The entry contains 300196 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	123	Total	C	N	O	S	0	0	0
			958	592	198	166	2			
44	2m	122	Total	C	N	O	S	0	0	0
			950	586	197	165	2			

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- Molecule 53 is a RNA chain called mRNA.

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

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

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

- Molecule 55 is a RNA chain called P-site tRNA.

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

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
1x	76	31H	-	expression tag	GB 1848949880
2x	76	31H	-	expression tag	GB 1848949880

- Molecule 56 is a RNA chain called E-site tRNA.

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

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	1A	1297	Total	Mg	0	0
			1297	1297		
57	1a	255	Total	Mg	0	0
			255	255		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	2A	963	Total 963	Mg 963	0	0
57	2a	281	Total 281	Mg 281	0	0

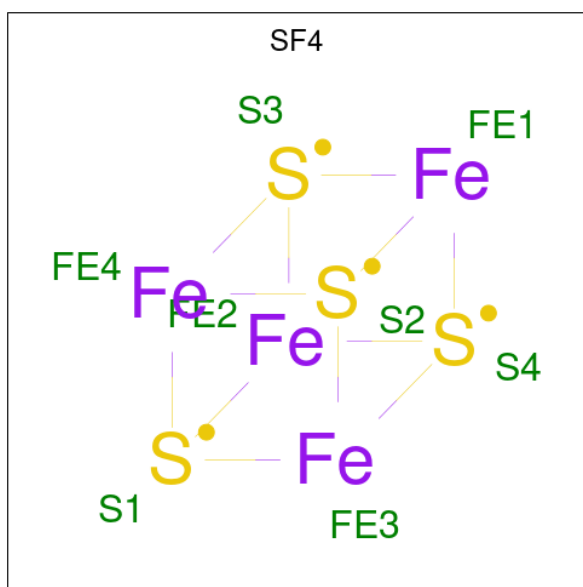
- Molecule 58 is POTASSIUM ION (CCD ID: K) (formula: K).

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

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	1Y	1	Total 1	Zn 1	0	0
59	14	1	Total 1	Zn 1	0	0
59	15	1	Total 1	Zn 1	0	0
59	16	1	Total 1	Zn 1	0	0
59	19	1	Total 1	Zn 1	0	0
59	1n	1	Total 1	Zn 1	0	0
59	2Y	1	Total 1	Zn 1	0	0
59	24	1	Total 1	Zn 1	0	0
59	25	1	Total 1	Zn 1	0	0
59	26	1	Total 1	Zn 1	0	0
59	29	1	Total 1	Zn 1	0	0
59	2n	1	Total 1	Zn 1	0	0

- Molecule 60 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe₄S₄).



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

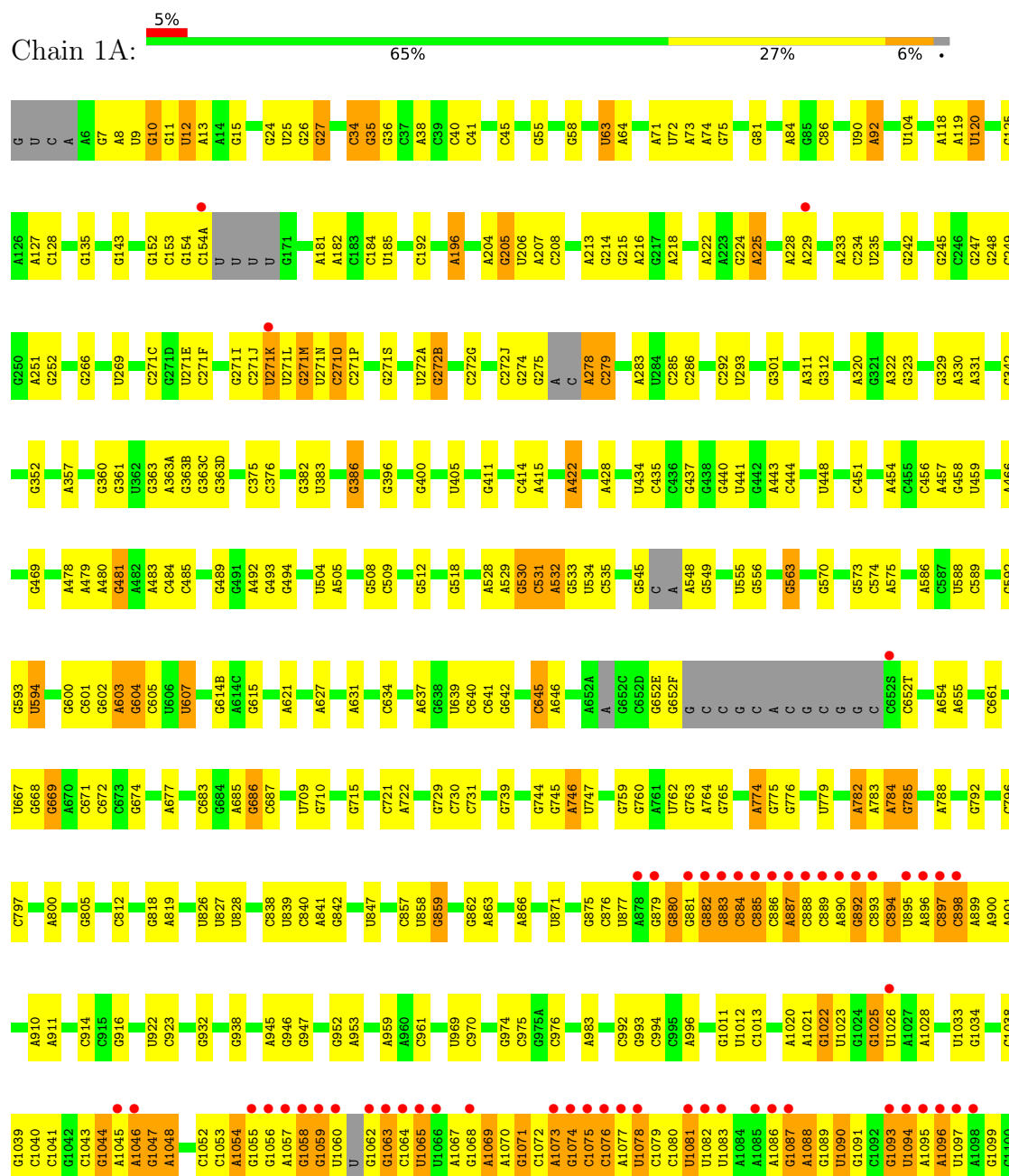
- Molecule 61 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	1A	2319	Total	O	0	0
			2319	2319		
61	1a	422	Total	O	0	0
			422	422		
61	2A	1298	Total	O	0	0
			1298	1298		
61	2a	304	Total	O	0	0
			304	304		

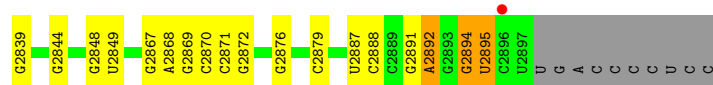
3 Residue-property plots

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.

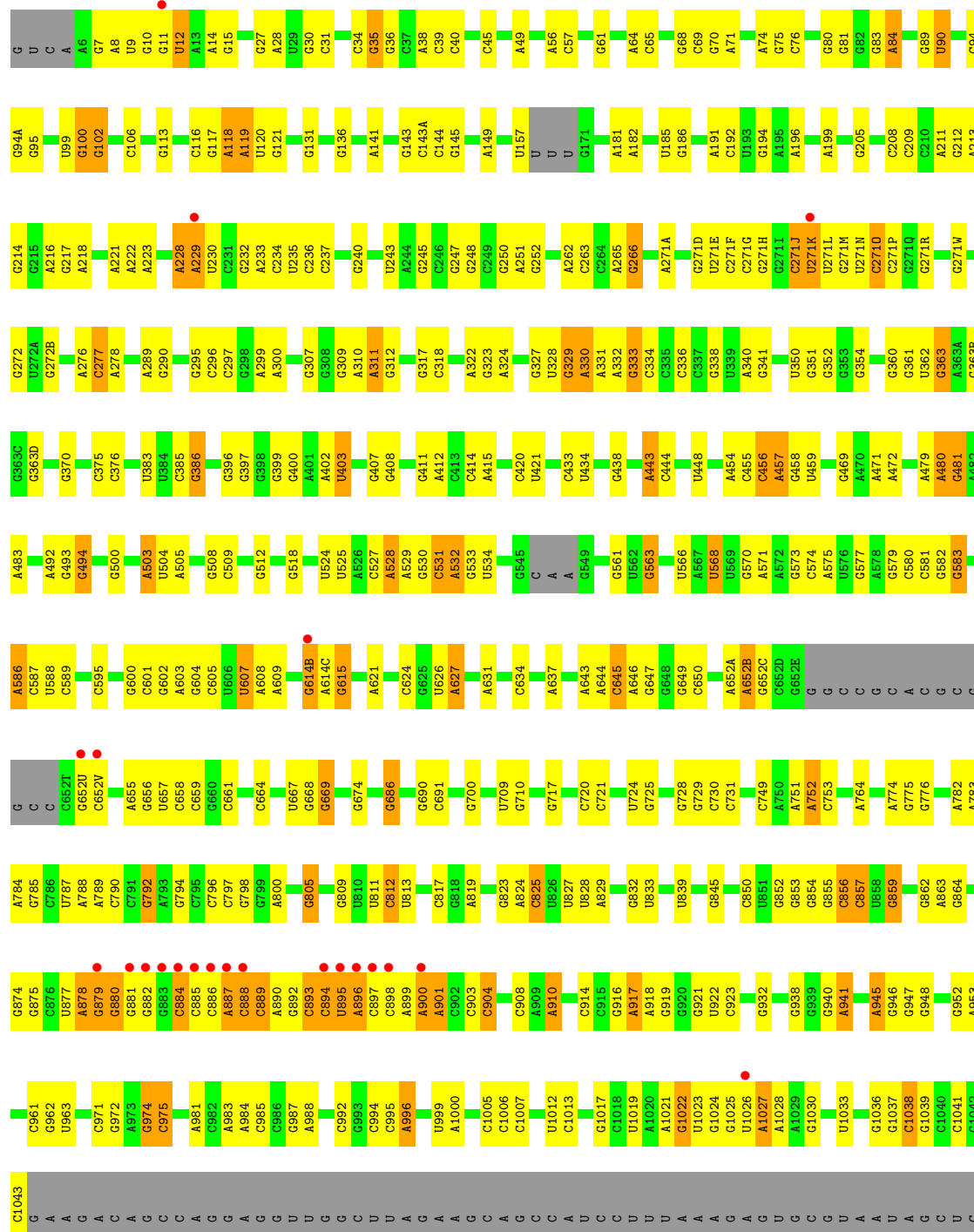
• Molecule 1: 23S Ribosomal RNA



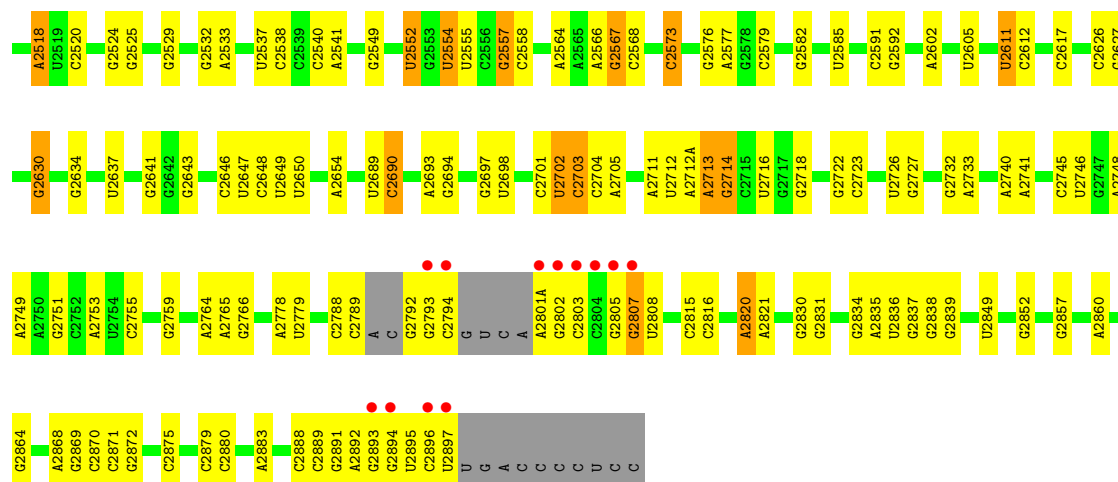
G2732	A2590	G2472	G2351	G2239	G2149	A2059	A1937	G1674	G1505	A1360	G1192	U1101
A2733	C2591	A2476	C2359	U2243	U2150	A2060	A1938	A1810	C1506	A1360	G1193	C1102
A2740	G2592	C2477	A2360	U2244	G2151	G2061	U1939	G1811	A1507	G1365	G1194	A1103
U2745	A2602	A2478	A2361	G2250	G2152	C2066	U1940	G1814	C1508	A1365	C1201	G1104
G2747	G2603	C2483	A2366	G2251	G2153	G2069	C1941	A1815	C1683	G1371	G1202	U1105
A2748	U2604	C2486	G2367	G2252	G2154	G2096	C1942	A1816	A1509A	U1372	G1203	G1106
G2749	G2605	G2253	C2368	G2253	G2155	U2099	A1952	G1817	A1509B		A1220	G1107
C2755	G2608	C2254	G2369	C2254	G2156	U2099	A1953	U1818	C1532	A1379	A1226	G1110
A2758	U2609	U2262	G2371	U2262	A2158	U2099	G1954	A1819	G	G1380	A1226	A1111
	G2610	U2262	G2371	U2262	A2159	U2099	U1955	G1823	A	A1384	G1232	U1113
A2764	C2611	A2377	A2377	A2288	G2160	G2100	C1962	G1823	C	A1385	G1232	G1114
G2765	G2612	A2378	A2378	A2288	G2161	G2101	U1963	C1827	G1537		G1243	G1115
G2766	U2615	G2382	G2382	A2289	G2162	U2102	U1964	G1828	G1538	A1395	G1252	C1116
	A2616	G2383	G2383	A2289	C2163	C2103	C1965	A1829	G1539	U1396	A1252	G1117
C2771	G2617	A2273	G2384	A2273	G2165	G2105	A1966	G1840	U1540	U1405	A1253	C1118
G2772	C2617	G2280	G2385	G2280	G2166	C2106	C1967	G1703		U1406	G1256	C1119
C2773	A2629	A2287	G2386	A2287	U2167	C2107			C1543	C1407		A1128
	G2630	C2283	U2387	C2283	G2168	C2108	A1970	U1709	A1558			
A2778	U2637	C2284	U2387	C2284	A2169	U2109	A1971	C1710	G1559	G1416	G1284	G1135
	G2646	A2285	G2399	A2285	G2170	G2110	A1972	U1720	A1566	G1417	A1265	G1136
G2781	U2647	A2286	A2393	A2286	A2171	G2111	C1983	G1722		G1418	U1267	G1139
G2782	C2648	U2291	G2399	U2291	G2172	U2112		U1758	A1569	G1419	A1268	G1140
G2783	U2649	C2292	G2404	C2292	G2173	A2114	G1982	G1746		U1420	A1269	U1141
G2784	G2535	A2298	G2405	A2298	G2174	G2115	U1993	G1756		G1421	G1270	U1142
U2785	G2536	G2300	G2406	G2300	C2175	G2116	G2012	A1762		G1428	A1271	A1142A
G2786	U2537	A2305	U2406	A2305	A2176	G2117	G2013	G1764		G1429	U1272	A1143
G2787	G2538	C2306	G2407	C2306	G2177	A2118	A2014			G1430	U1273	G1144
C2788	A2541	G2307	G2407	G2307	G2178	G2119	A2015					
G2789	G2542	G2308	A2425	G2308	G2179	G2120	U2016				A1278	G1151
A2790	U2543	C2316	A2426	C2316	U2180	G2121	G2002				G1279	C1152
G2791	G2544	C2317	A2427	C2317	G2181	G2122	G2002				G1280	
G2792	U2545	G2318	G2428	G2318	G2182	U2123	G2013					A1156
G2793	G2546	G2319	A2429	G2319	G2183	G2124	A2014				A1287	A1156
G2794	U2549	A2320	A2430	A2320	G2184	G2125	A2015				U1288	
		G2321	U2431	G2321	G2188	A2126	U2016					
A2801A	G2566	A2322	A2435	A2322	U2189	G2127						
G2802	G2567	G2325	A2435	G2325	G2190	C2128	A2020				U1300	G1164
G2803	C2571	A2328	A2439	A2328	G2191	C2129	C2021				A1301	U1165
G2804	A2572	G2329	C2441	G2329	G2192	U2130	U2022				A1302	C1166
G2805	G2573	G2330	G2441	G2330	G2193	G2131	A1609				G1303	U1167
G2807	G2574	G2331	G2447	G2331	G2198	U2132	A1610					G1171
A2810	C2575	G2334	A2448	G2334	A2198	G2133	U1911				U1313	
	G2576	A2449	U2449	A2449	G2206	A2134	C1914				C1314	G1173
A2820	A2577	U2450	U2451	U2450	G2207	A2135	U1915				C1315	A1174
A2821	G2578	G2337	A2451	G2337	A2208	C2136	A1916				A1322	U1175
G2822	G2579	G2337	G2467	G2337	U2218	C2137	U1917					G1176
A2823	U2580	C2347	G2468	C2347	G2219	C2138	A1918				G1332	A1177
	U2585	G2350	G2471	G2350	A2225	C2139	A1919				C1333	C1178
A2835	G2586				G2226	G2140	G1920				C1345	
					A2227	G2141	A1927				U1352	G1183
					G2228	C2142	U1928					G1184
					G2235	U2143	G1929				U1356	C1185
					G2238	C2144	G1930				G1387	G1186
					G2239	C2145	G1935				G1356	G1187
					G2240	G2146	A1802				U1357	G1190
					G2241	G2147	A1803				G1358	
					G2242	G2148	A1803				A1359	G1191



• Molecule 1: 23S Ribosomal RNA



G2429	C2326	A2225	G2142	G2069	C1962	A1847	U1739	A1618	A1507	A1412	G1303	G1187	A
A2430	A2327	U2233	C2143	G2070	U1963	A1848	G1740	A1623	A1508	G1416	C1306	U1188	C
U2431	A2328	G2234	U2144	A2071	C1967	G1968	G1746	G1623	A1509	C1417	G1315	G1191	U
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A2434	U2332	G2239	G2148	U2076	A1971	G1970	G1754	G1633	G1520	G1422	A1321	C1200	C
A2435	A2333	G2251	G2149	U2079	A1972	G1971	G1755	A1634	G1527	G1423	G1325	C1201	G
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A2451	C2342	C2269	G2155	U2099	U1997	G1891	A1773	G1648	G1533	G1431	G1355	U1211	G
A2456	A2346	A2267	G2156	G2100	C1998	G1896	U1779	A1652	U	A1434	G1355	G1212	A
C2452	A2347	A2268	G2157	G2101	U1999	G1899	A1780	A1654	A	C1437	G1356	A1220	G
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C2456	A2361	A2278	C2162	U2109	G2011	C1907	U1794	A1665	U1540	G1445	G1360	G1224	G
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G2472	A2378	A2288	G2169	G2116	U2022	U1916	G1801	A1676	G1574	G1467	G1367	G1239	G
C2475	C2379	U2291	G2170	A2117	G2023	C1924	A1802	A1677	G1578	C1468	G1368	U1241	G
A2476	G2380	C2292	G2171	U2118	A2031	U1924	A1803	A1677	A1579	A1469	G1369	A1244	G
C2477	G2383	U2296	G2172	G2119	G2032	A1927	C1804	C1678	A1580	G1470	G1376	A1283	G
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G2505	U2419	C2317	G2206	A2135	A2062	A1954	U1834	C1711	C1607	A1496	C1408	U1300	G
U2506	C2420	G2318	G2207	C2136	C2063	G1954	G1835	C1712	A1608	C1497	G1409	A1302	G
C2507	G2421	G2319	A2208	C2137	C2064	U1955	G1836	G1721	A1609	C1502	C1411	A1302	G
G2508	A2422	U2320	U2218	C2138	C2065	U1956	C1837	G1722	A1610	G1503	G1411	A1302	G
C2512	U2423	A2325	G2141	G2139	C2066	G1956	G1840	A1722					



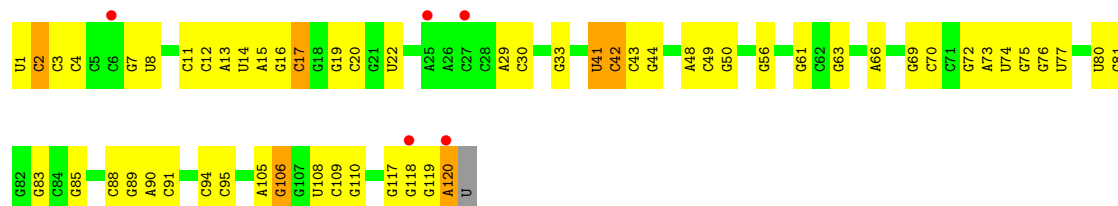
• Molecule 2: 5S Ribosomal RNA

Chain 1B: 71% 26% ..



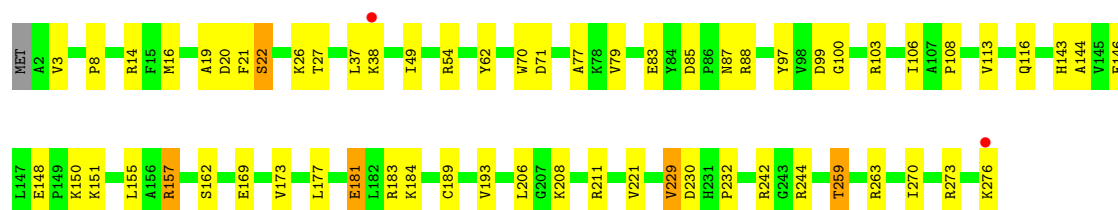
• Molecule 2: 5S Ribosomal RNA

Chain 2B: 4% 52% 42% 5% ..



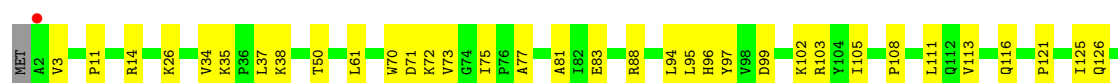
• Molecule 3: 50S ribosomal protein L2

Chain 1D: % 77% 21% ..



• Molecule 3: 50S ribosomal protein L2

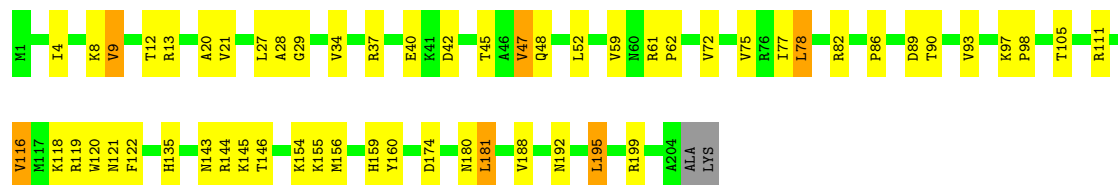
Chain 2D: % 75% 23% ..





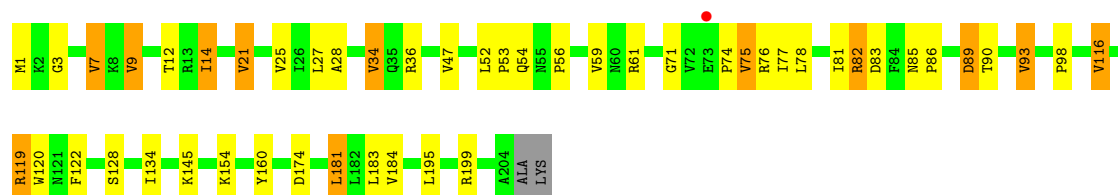
• Molecule 4: 50S ribosomal protein L3

Chain 1E: 71% 25% ..



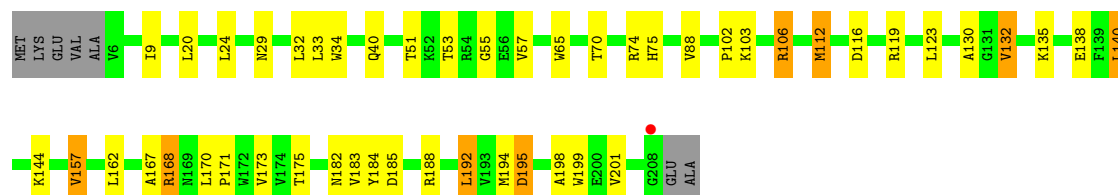
• Molecule 4: 50S ribosomal protein L3

Chain 2E: 75% 18% 6% ..



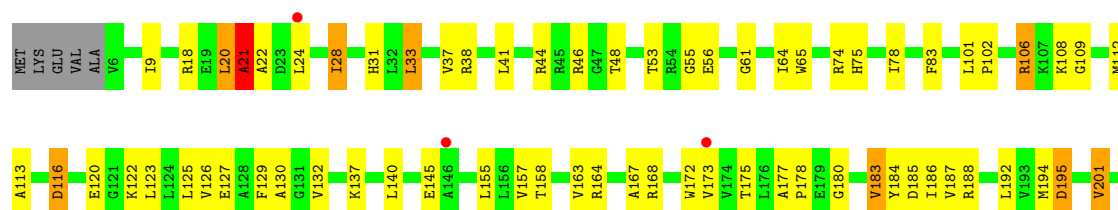
• Molecule 5: 50S ribosomal protein L4

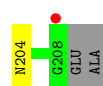
Chain 1F: 73% 20% ..



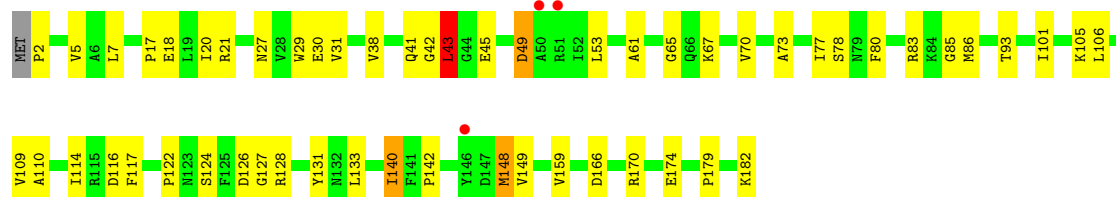
• Molecule 5: 50S ribosomal protein L4

Chain 2F: 2% 64% 29% ..

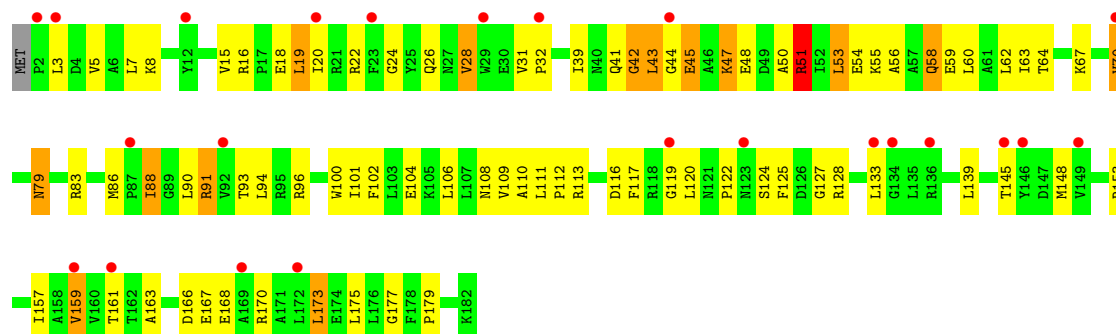




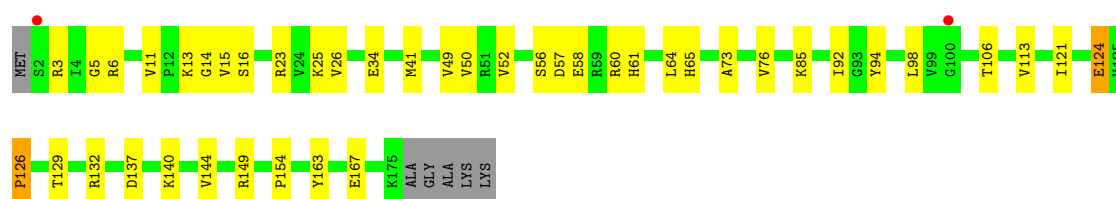
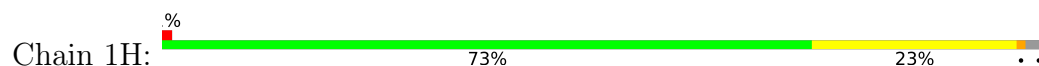
• Molecule 6: 50S ribosomal protein L5



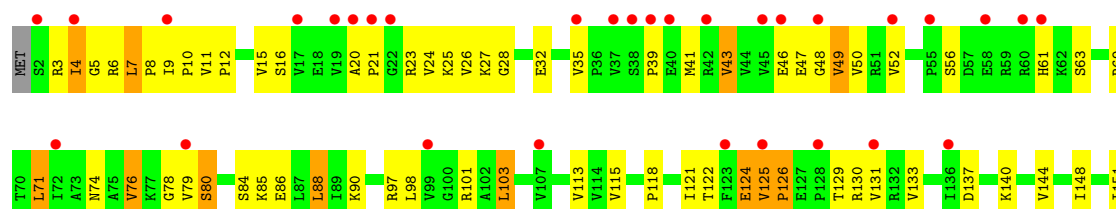
• Molecule 6: 50S ribosomal protein L5



• Molecule 7: 50S ribosomal protein L6



• Molecule 7: 50S ribosomal protein L6

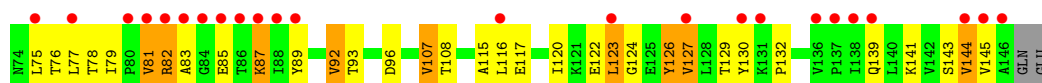
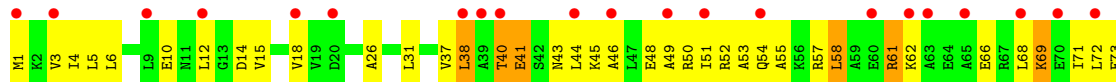




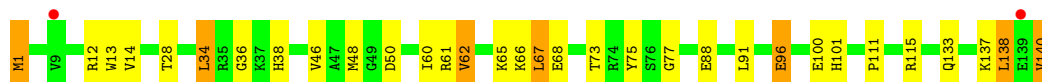
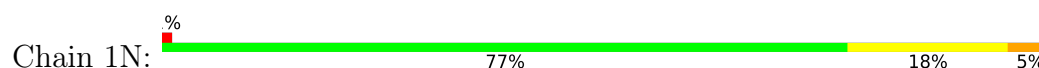
• Molecule 8: 50S ribosomal protein L9



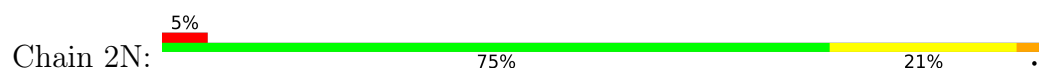
• Molecule 8: 50S ribosomal protein L9



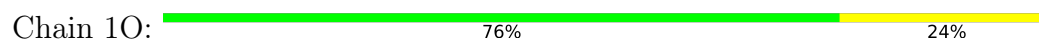
• Molecule 9: 50S ribosomal protein L13



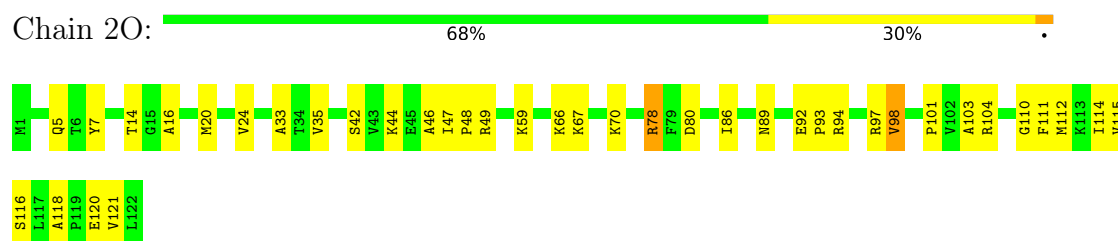
• Molecule 9: 50S ribosomal protein L13



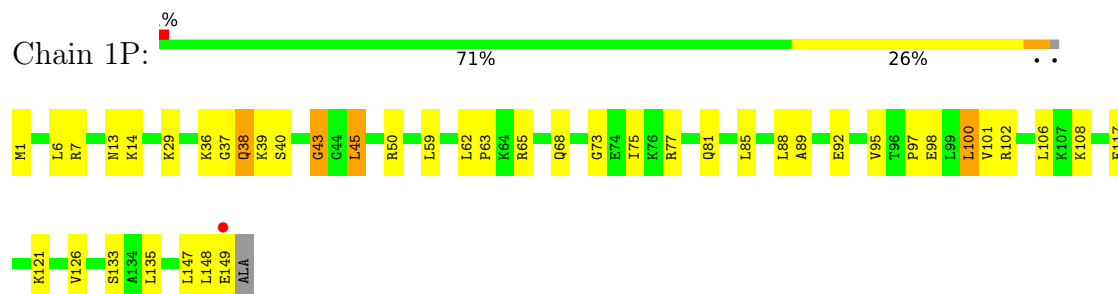
• Molecule 10: 50S ribosomal protein L14



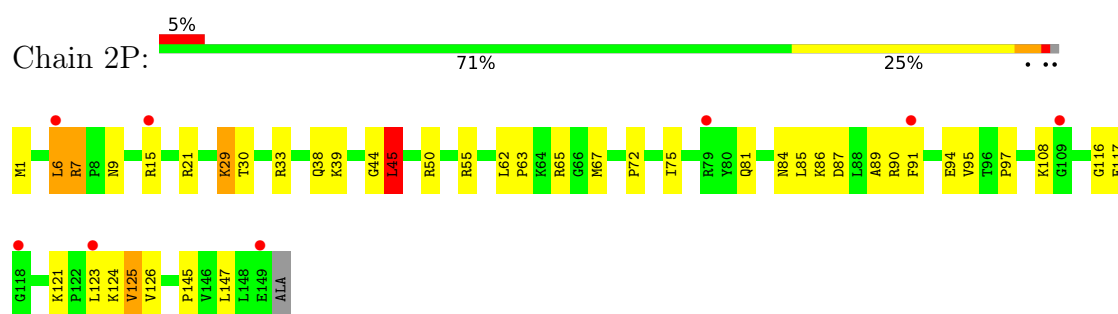
- Molecule 10: 50S ribosomal protein L14



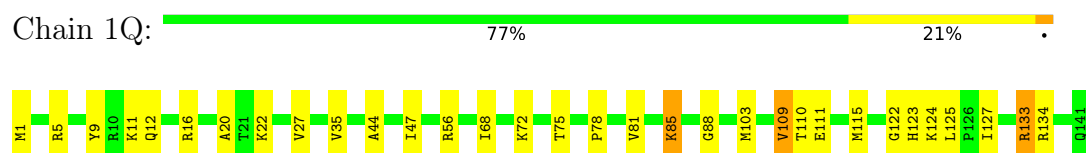
- Molecule 11: 50S ribosomal protein L15



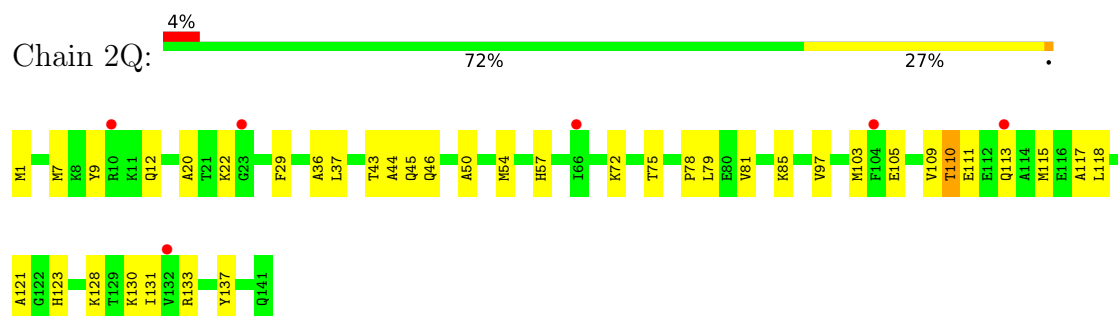
- Molecule 11: 50S ribosomal protein L15



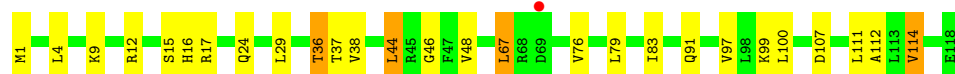
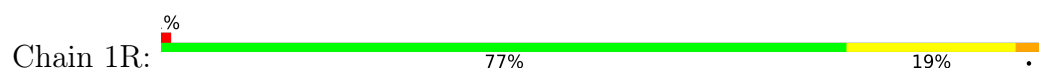
- Molecule 12: 50S ribosomal protein L16



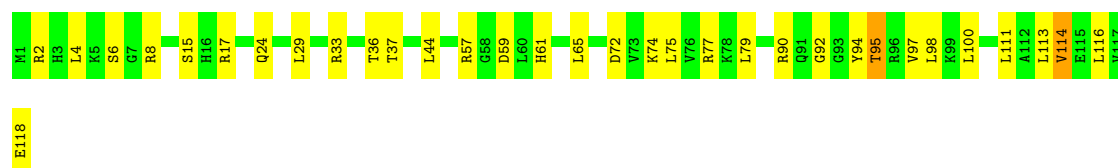
- Molecule 12: 50S ribosomal protein L16



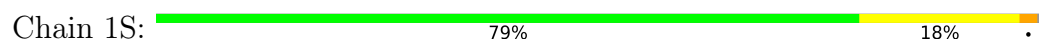
- Molecule 13: 50S ribosomal protein L17



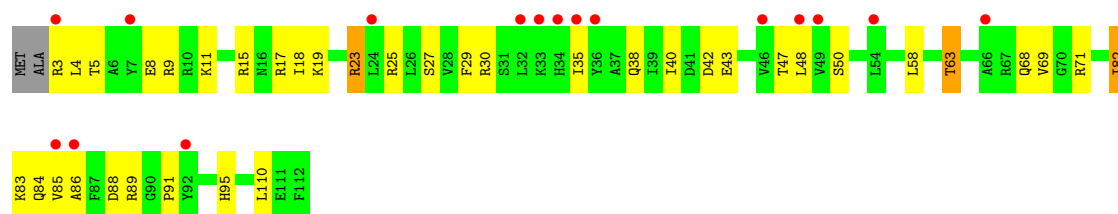
- Molecule 13: 50S ribosomal protein L17



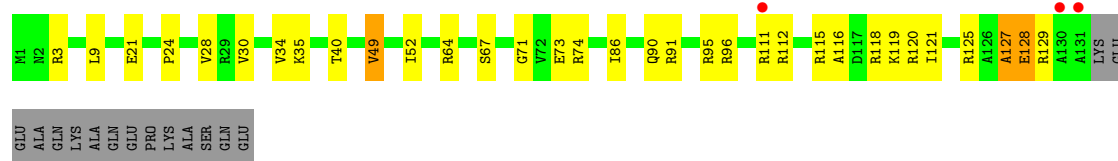
- Molecule 14: 50S ribosomal protein L18



- Molecule 14: 50S ribosomal protein L18

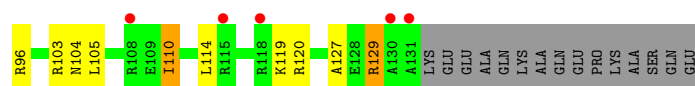


- Molecule 15: 50S ribosomal protein L19



- Molecule 15: 50S ribosomal protein L19





- Molecule 16: 50S ribosomal protein L20

Chain 1U: 76% 20% ..



- Molecule 16: 50S ribosomal protein L20

Chain 2U: 3% 69% 27% ..



- Molecule 17: 50S ribosomal protein L21

Chain 1V: 74% 25% .



- Molecule 17: 50S ribosomal protein L21

Chain 2V: 3% 66% 29% ..



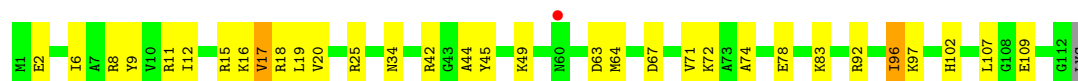
- Molecule 18: 50S ribosomal protein L22

Chain 1W: 74% 22% ..

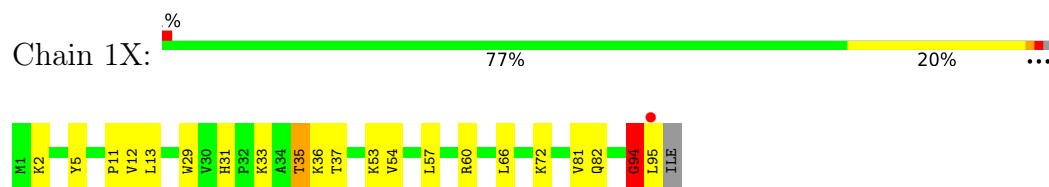


- Molecule 18: 50S ribosomal protein L22

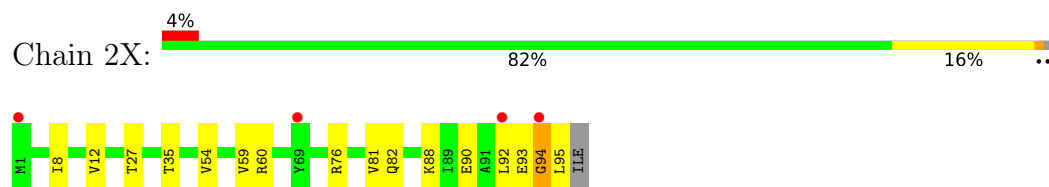
Chain 2W: 71% 27% ..



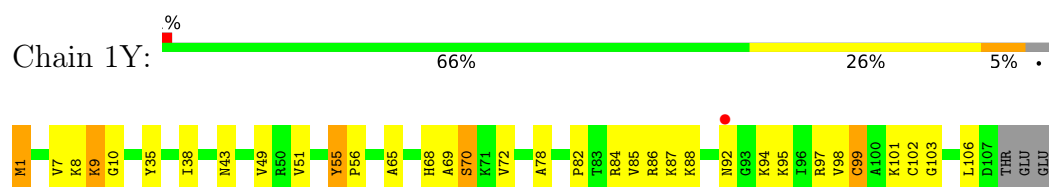
- Molecule 19: 50S ribosomal protein L23



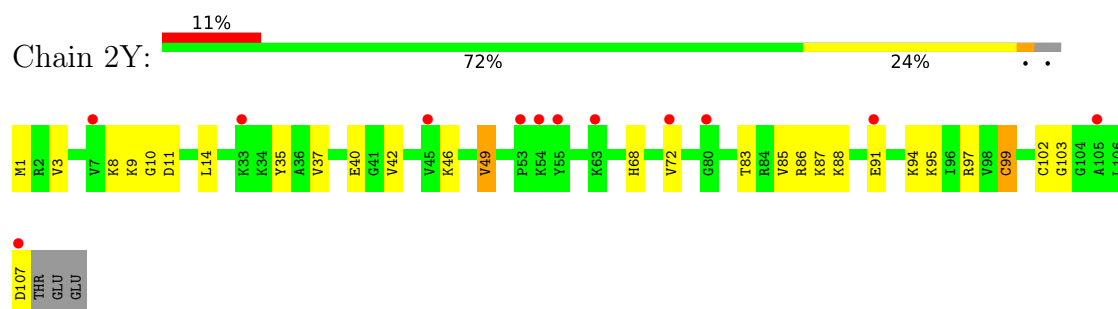
- Molecule 19: 50S ribosomal protein L23



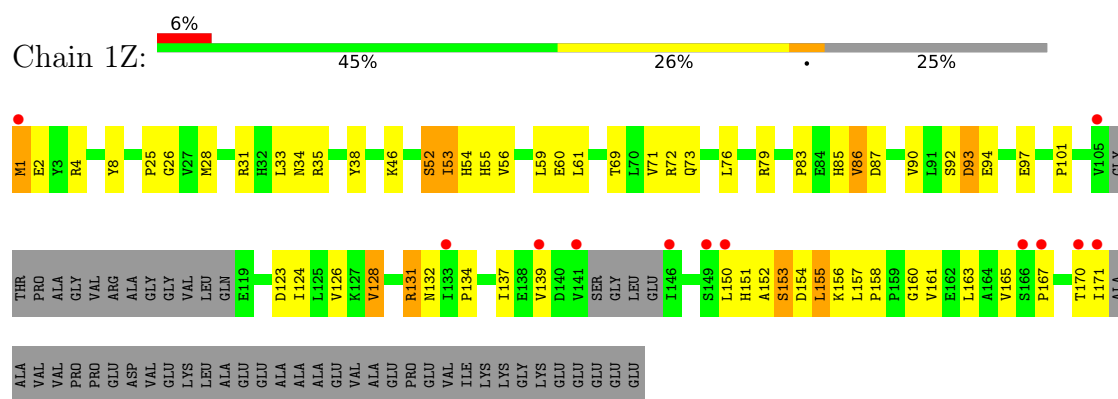
- Molecule 20: 50S ribosomal protein L24



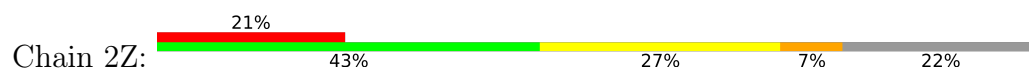
- Molecule 20: 50S ribosomal protein L24

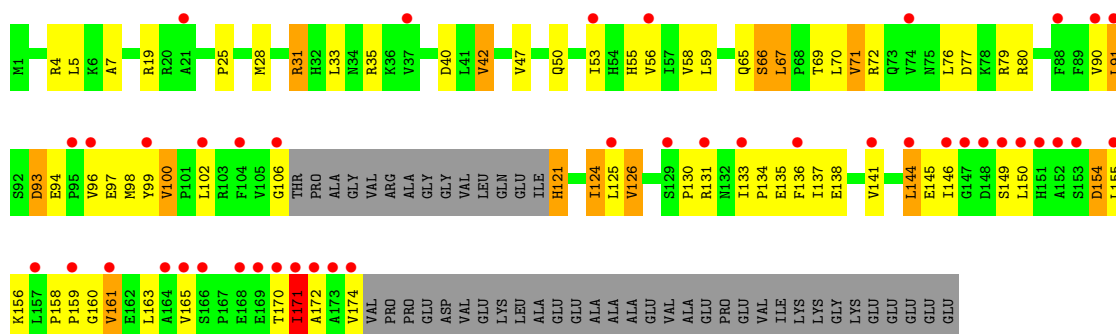


- Molecule 21: 50S ribosomal protein L25



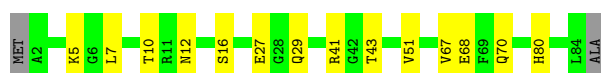
- Molecule 21: 50S ribosomal protein L25





- Molecule 22: 50S ribosomal protein L27

Chain 10: 81% 16%



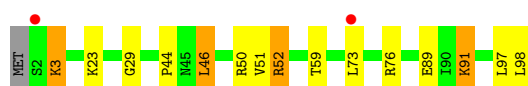
- Molecule 22: 50S ribosomal protein L27

Chain 20: 66% 31% 6%



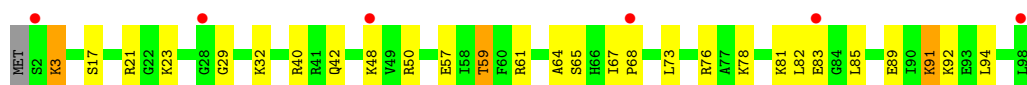
- Molecule 23: 50S ribosomal protein L28

Chain 11: 84% 11% 2%



- Molecule 23: 50S ribosomal protein L28

Chain 21: 70% 26% 6%



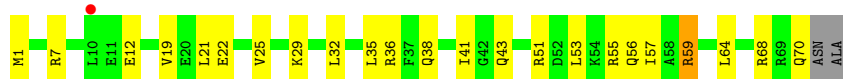
- Molecule 24: 50S ribosomal protein L29

Chain 12: 69% 25% 6%

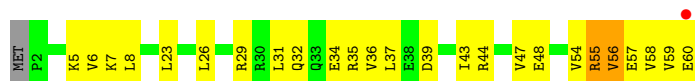


- Molecule 24: 50S ribosomal protein L29

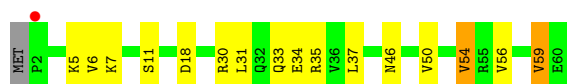
Chain 22: 65% 31% 4%



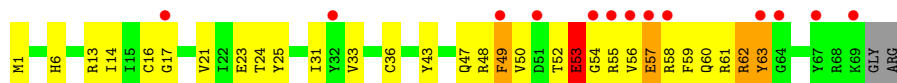
- Molecule 25: 50S ribosomal protein L30



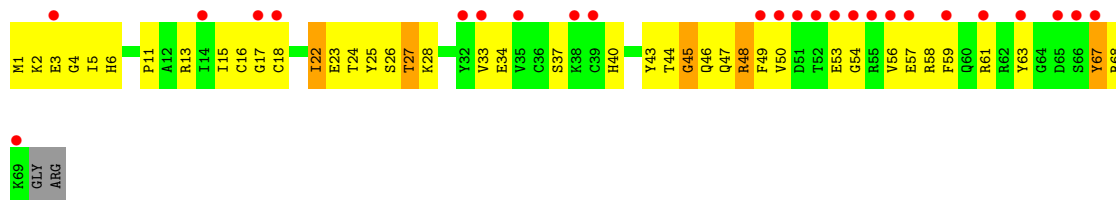
- Molecule 25: 50S ribosomal protein L30



- Molecule 26: 50S ribosomal protein L31



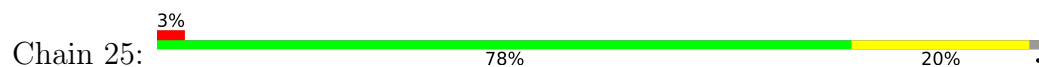
- Molecule 26: 50S ribosomal protein L31



- Molecule 27: 50S ribosomal protein L32



- Molecule 27: 50S ribosomal protein L32



- Molecule 28: 50S ribosomal protein L33

Chain 16:  65% 26% 7% .



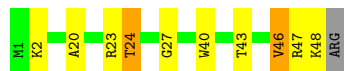
- Molecule 28: 50S ribosomal protein L33

Chain 26:  4% 65% 26% 7% .



- Molecule 29: 50S ribosomal protein L34

Chain 17:  78% 16% . .



- Molecule 29: 50S ribosomal protein L34

Chain 27:  2% 76% 18% . .



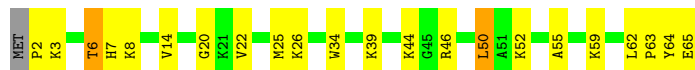
- Molecule 30: 50S ribosomal protein L35

Chain 18:  69% 28% . .



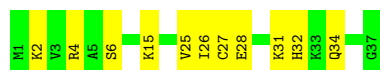
- Molecule 30: 50S ribosomal protein L35

Chain 28:  65% 31% . .

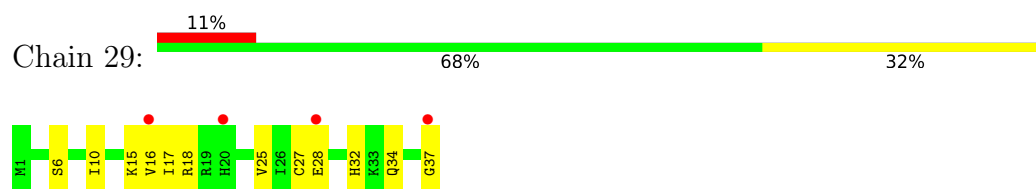


- Molecule 31: 50S ribosomal protein L36

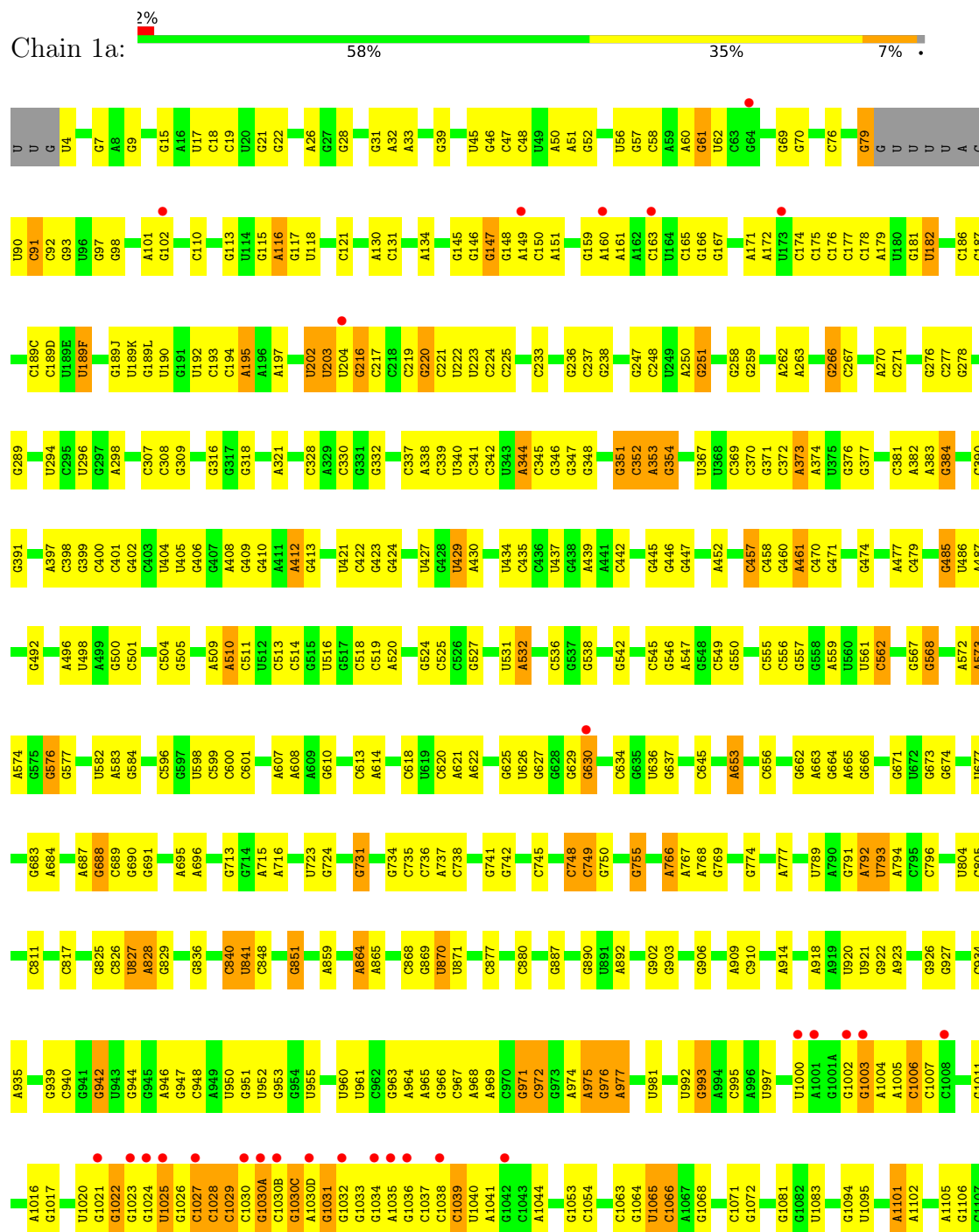
Chain 19:  70% 30%

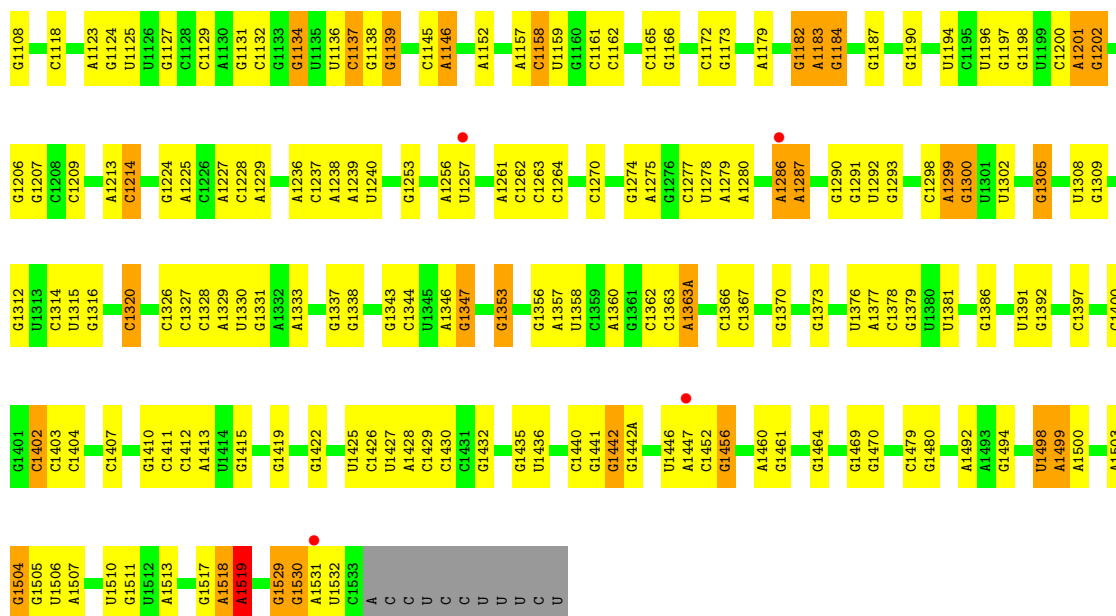


• Molecule 31: 50S ribosomal protein L36

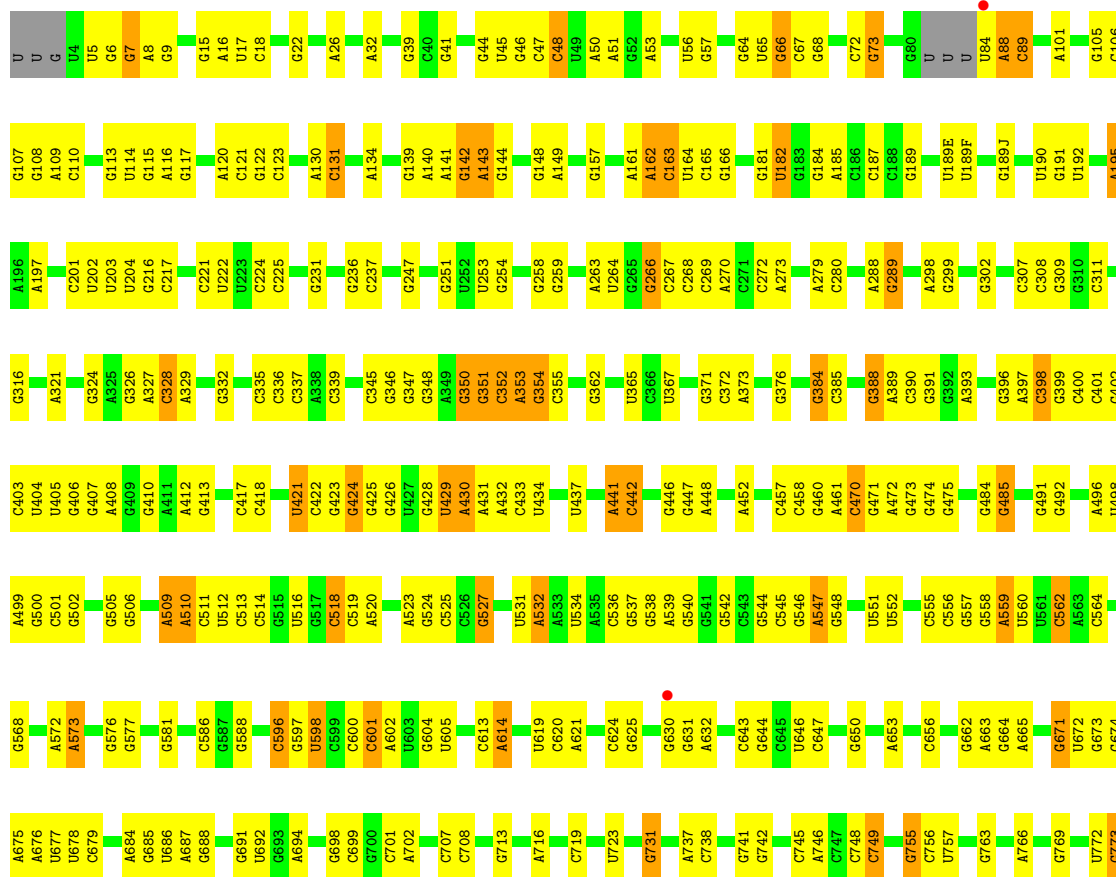


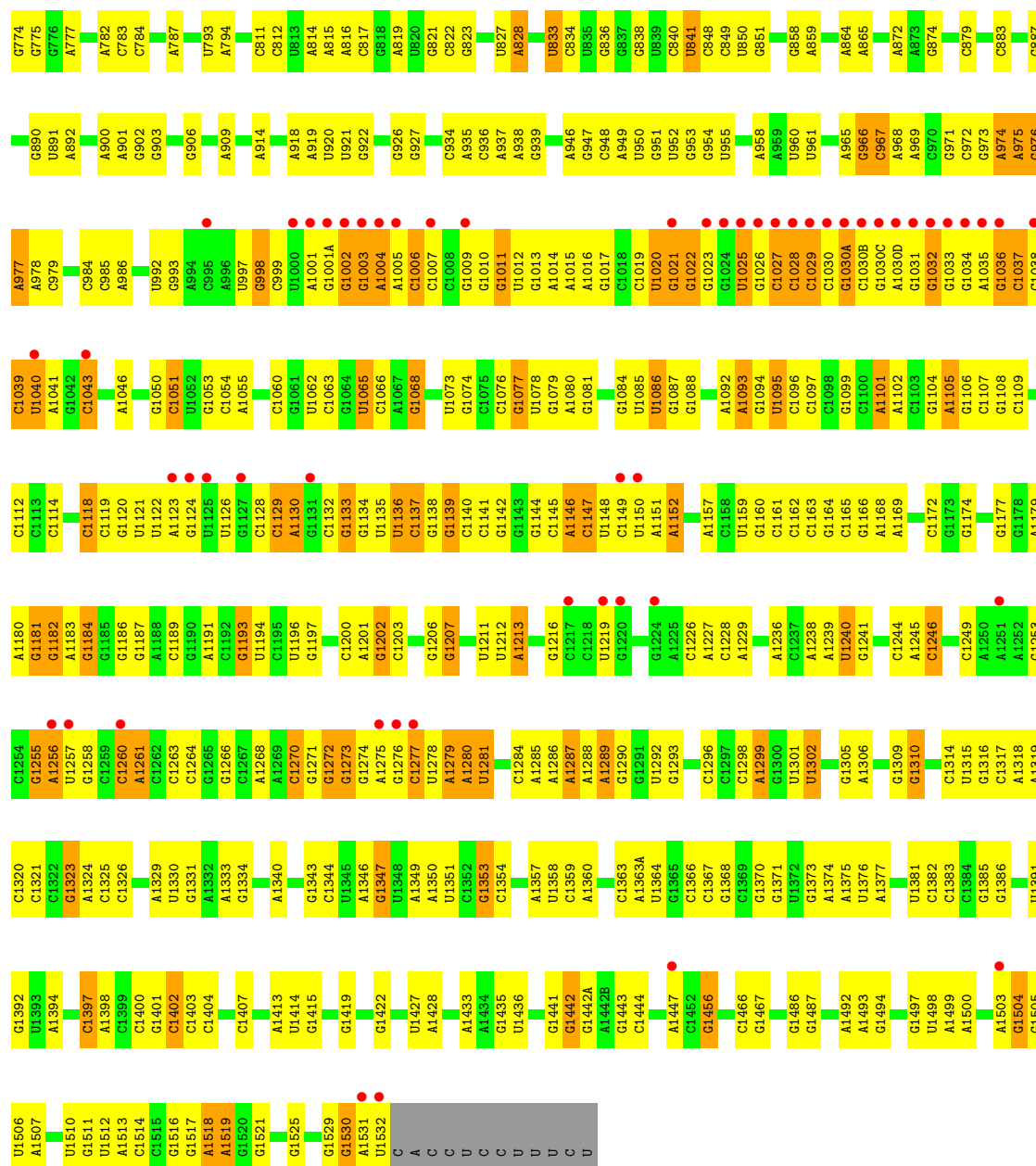
• Molecule 32: 16S Ribosomal RNA



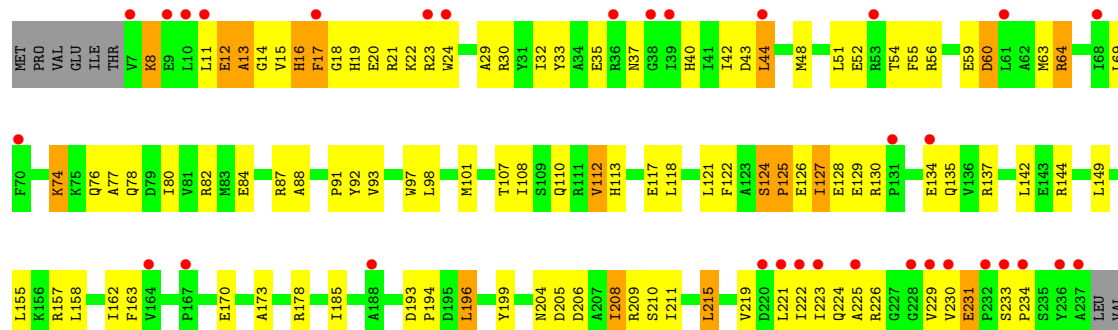


• Molecule 32: 16S Ribosomal RNA



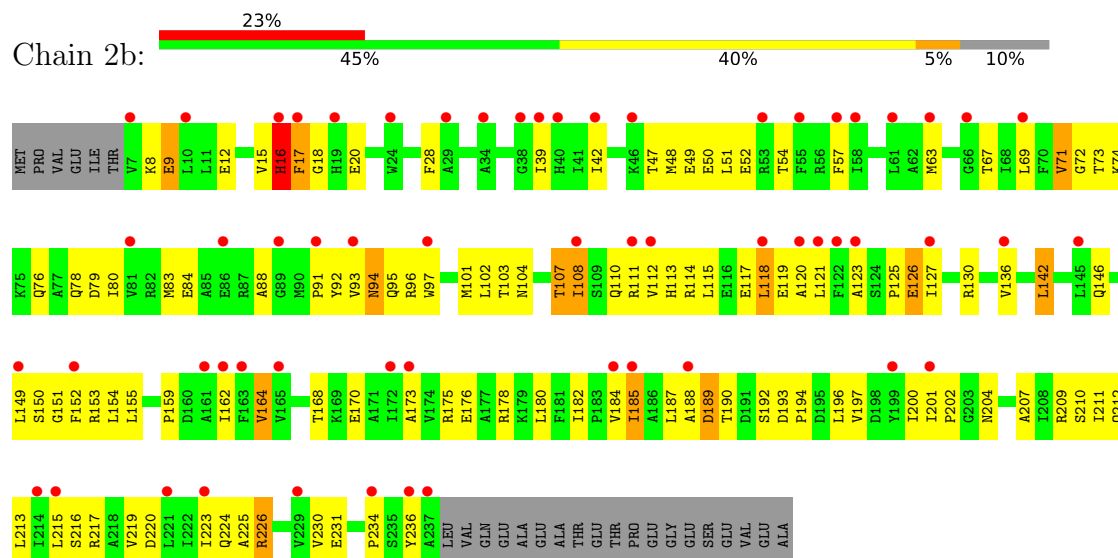


• Molecule 33: 30S ribosomal protein S2

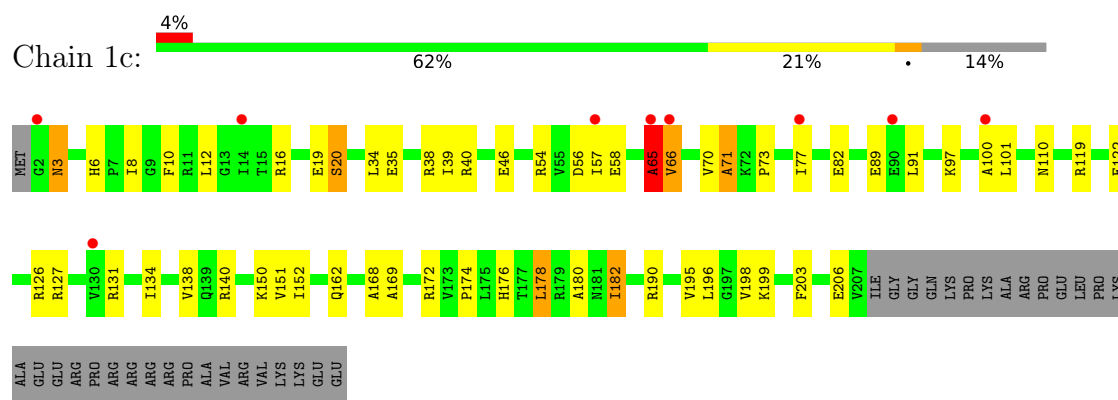


GLN
GLU
ALA
GLU
GLU
ALA
THR
GLU
THR
PRO
GLU
GLY
GLU
SER
GLU
VAL
GLU
ALA

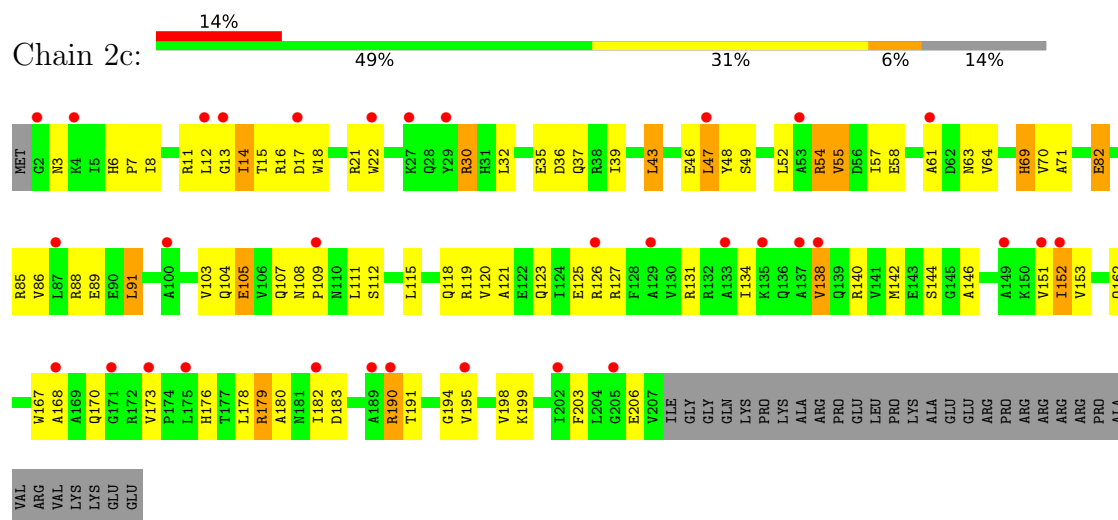
• Molecule 33: 30S ribosomal protein S2



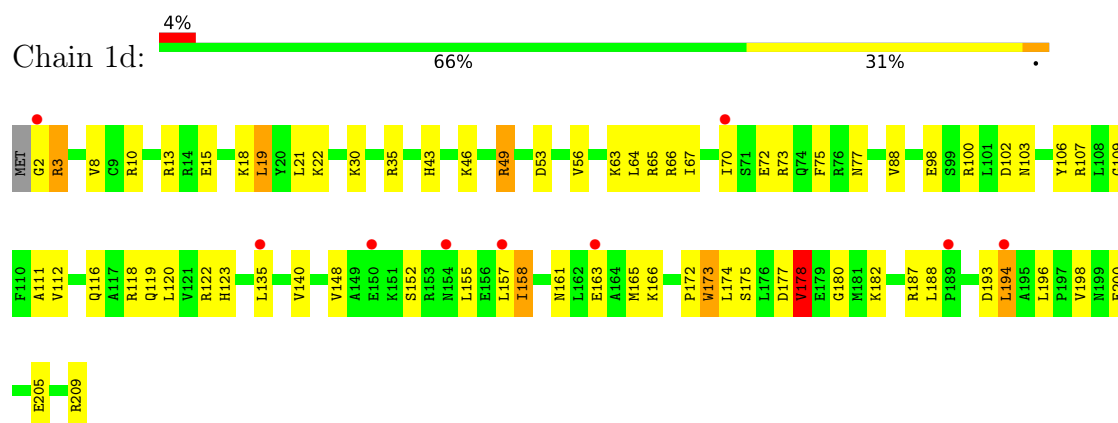
• Molecule 34: 30S ribosomal protein S3



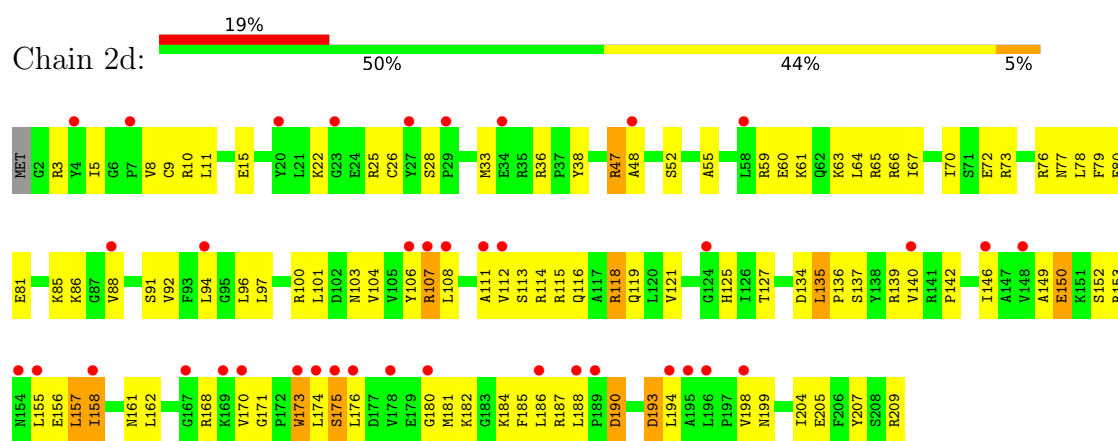
• Molecule 34: 30S ribosomal protein S3



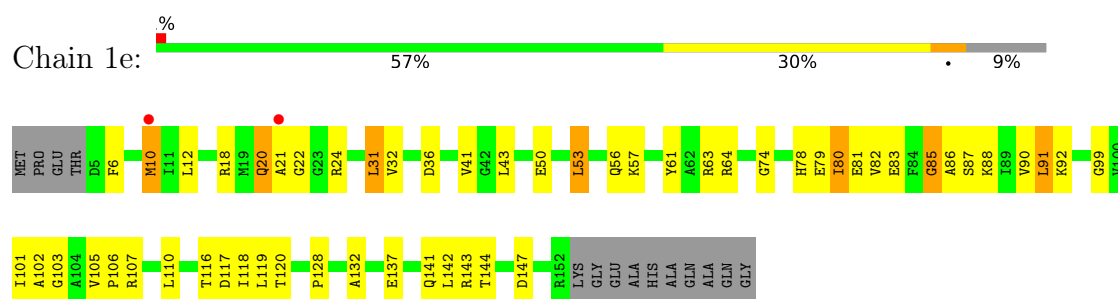
- Molecule 35: 30S ribosomal protein S4



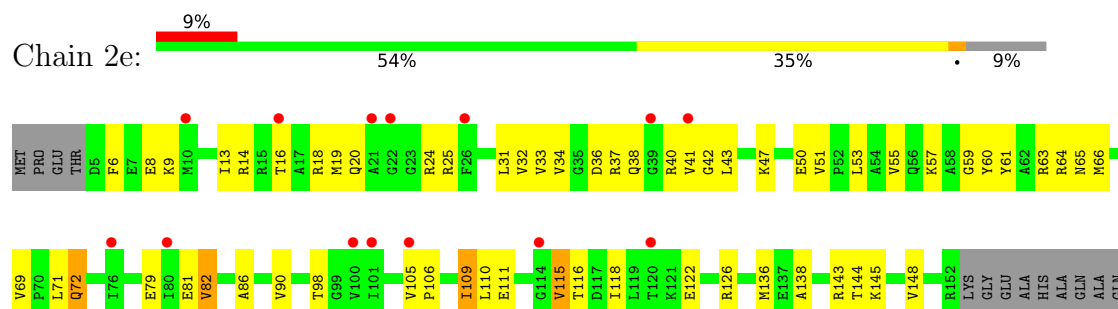
- Molecule 35: 30S ribosomal protein S4



- Molecule 36: 30S ribosomal protein S5



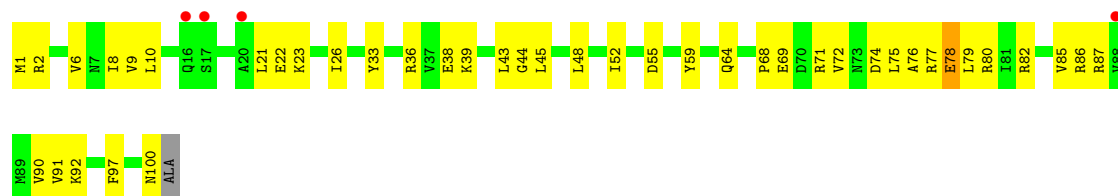
- Molecule 36: 30S ribosomal protein S5



GLY

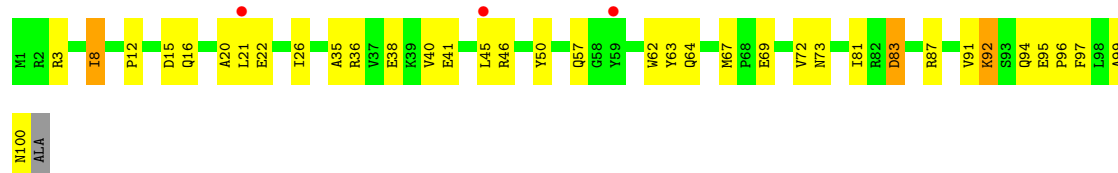
- Molecule 37: 30S ribosomal protein S6

Chain 1f: 



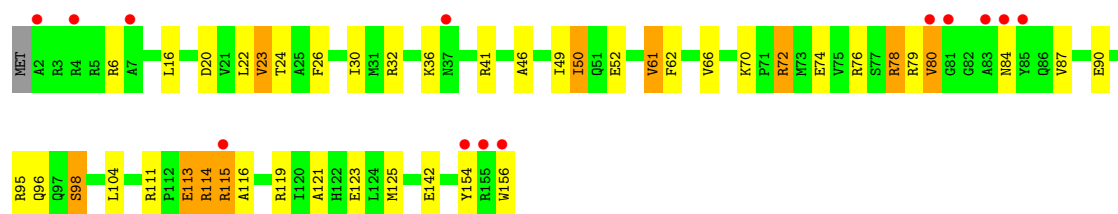
- Molecule 37: 30S ribosomal protein S6

Chain 2f: 



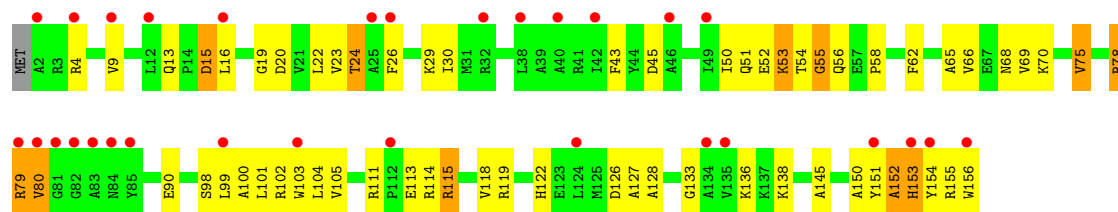
- Molecule 38: 30S ribosomal protein S7

Chain 1g: 



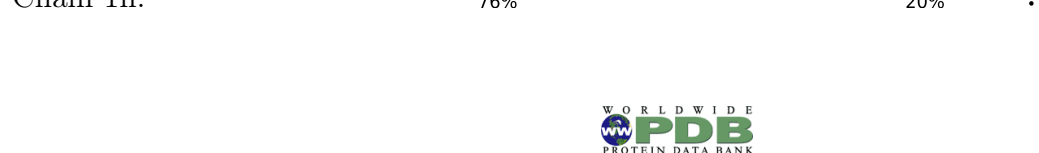
- Molecule 38: 30S ribosomal protein S7

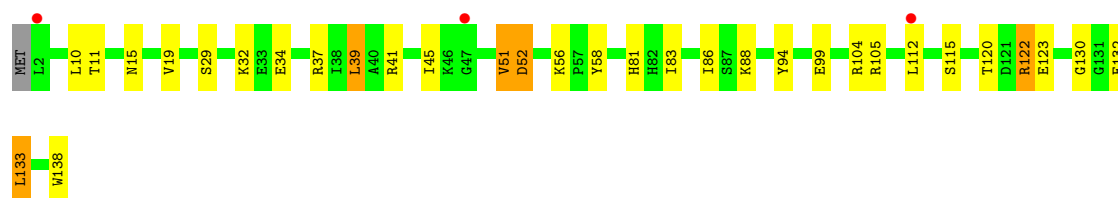
Chain 2g: 



- Molecule 39: 30S ribosomal protein S8

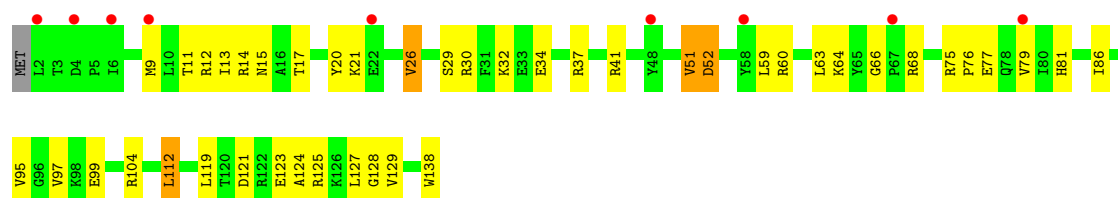
Chain 1h: 





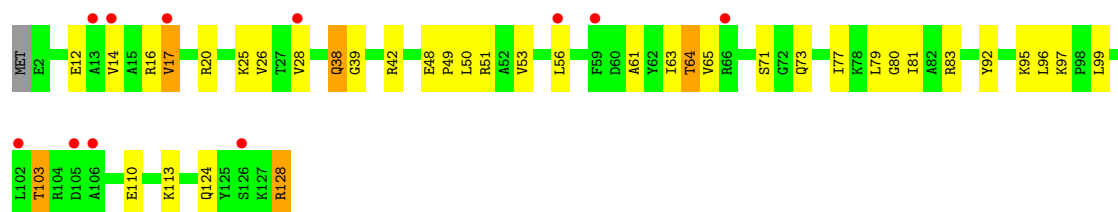
- Molecule 39: 30S ribosomal protein S8

Chain 2h: 7% 67% 29% ..



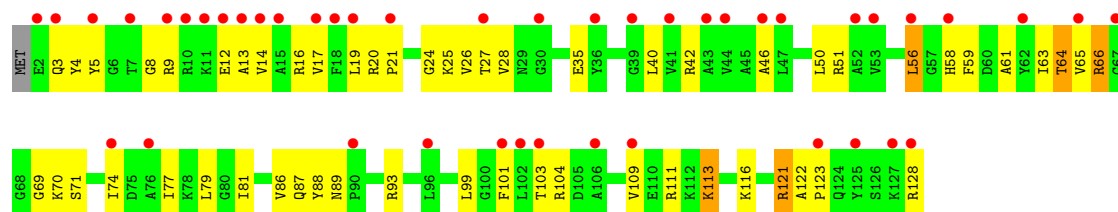
- Molecule 40: 30S ribosomal protein S9

Chain 1i: 9% 70% 26% ..



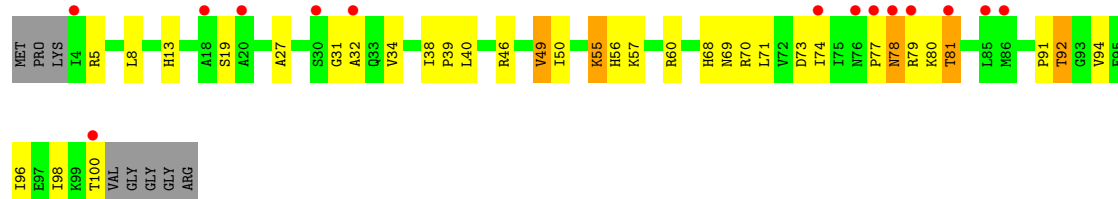
- Molecule 40: 30S ribosomal protein S9

Chain 2i: 34% 55% 40% ..

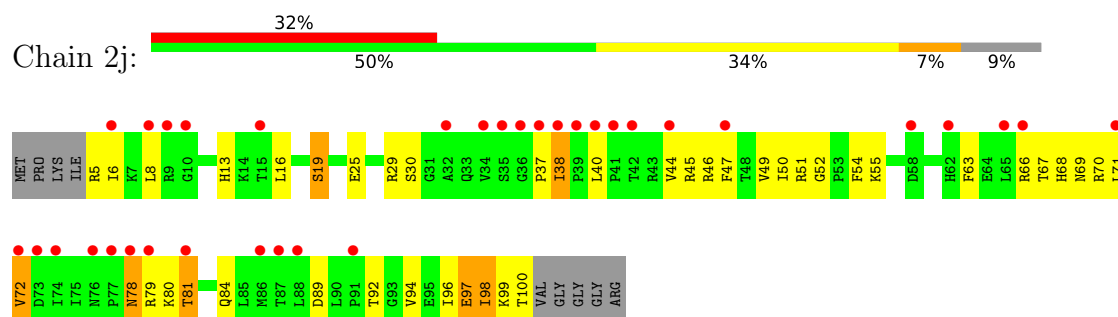


- Molecule 41: 30S ribosomal protein S10

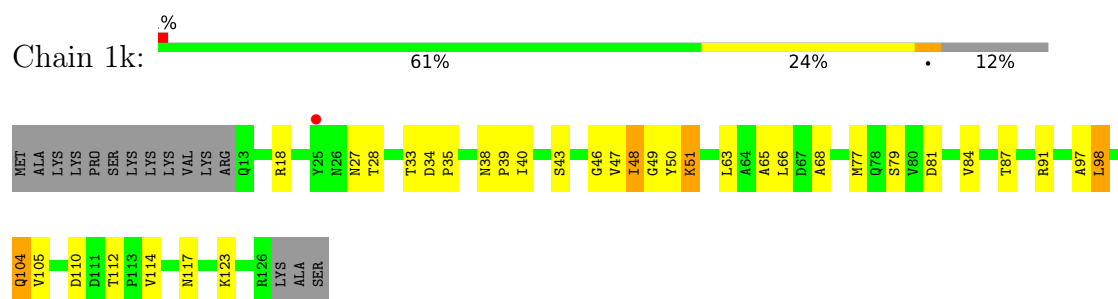
Chain 1j: 13% 59% 29% 5% 8%



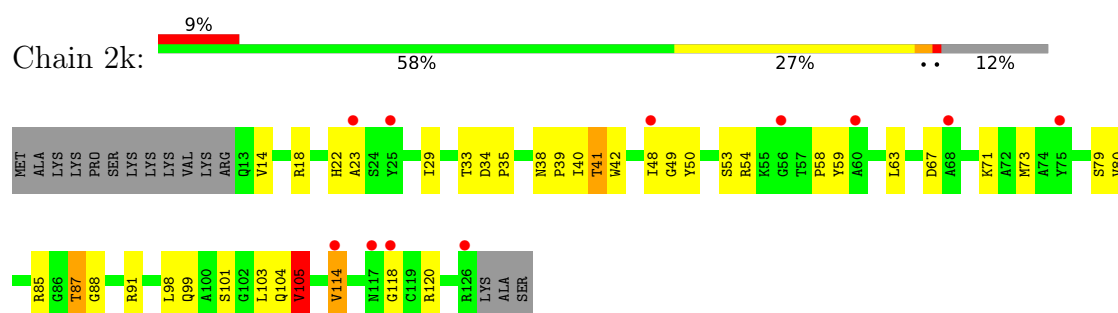
- Molecule 41: 30S ribosomal protein S10



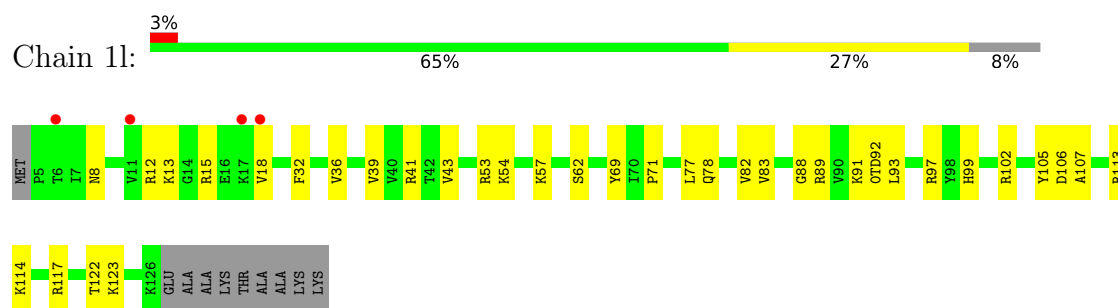
- Molecule 42: 30S ribosomal protein S11



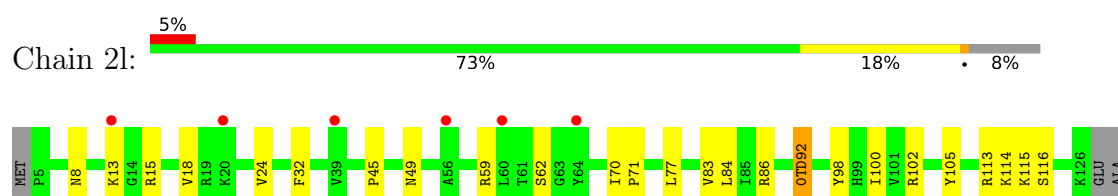
- Molecule 42: 30S ribosomal protein S11



- Molecule 43: 30S ribosomal protein S12



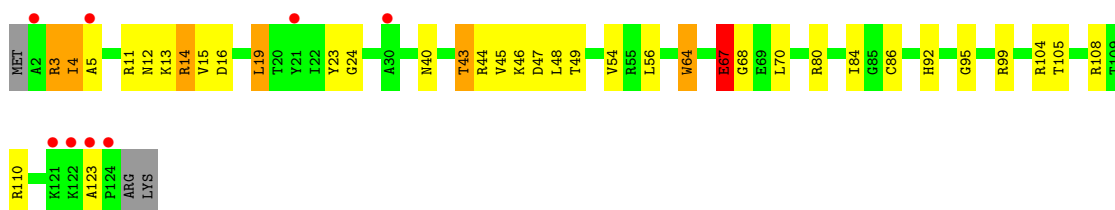
- Molecule 43: 30S ribosomal protein S12



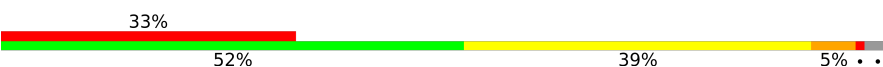
ALA
LYS
THR
ALA
ALA
LYS
LYS

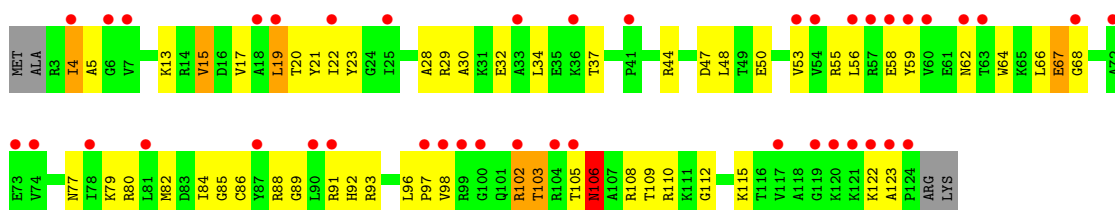
• Molecule 44: 30S ribosomal protein S13

Chain 1m: 



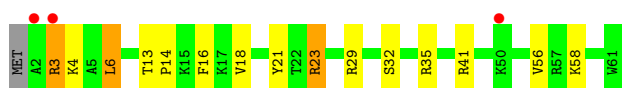
• Molecule 44: 30S ribosomal protein S13

Chain 2m: 



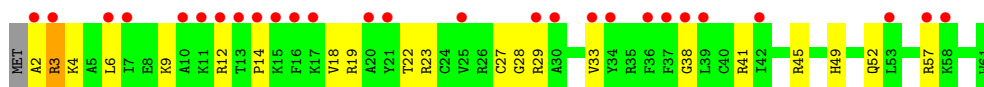
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 1n: 



• Molecule 45: 30S ribosomal protein S14 type Z

Chain 2n: 



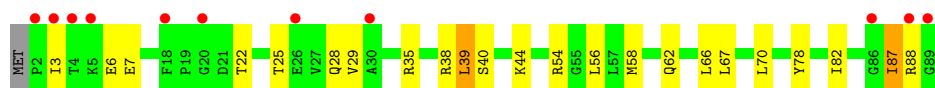
• Molecule 46: 30S ribosomal protein S15

Chain 1o: 

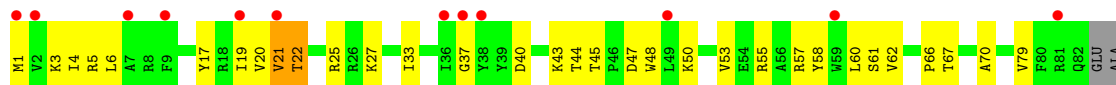


• Molecule 46: 30S ribosomal protein S15

Chain 2o: 

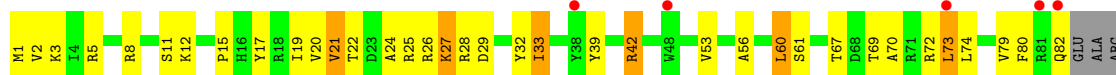


- Molecule 47: 30S ribosomal protein S16



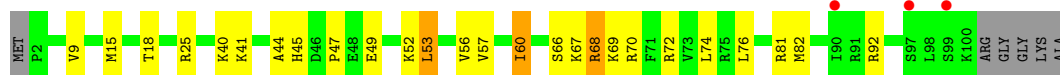
ARG
GLU
GLY
ALA

- Molecule 47: 30S ribosomal protein S16



GLU
GLY
ALA

- Molecule 48: 30S ribosomal protein S17



- Molecule 48: 30S ribosomal protein S17

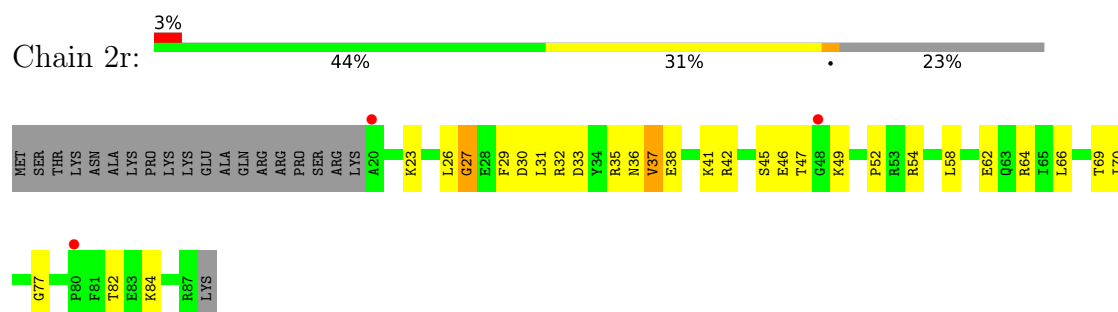


GLY
LYS
ALA

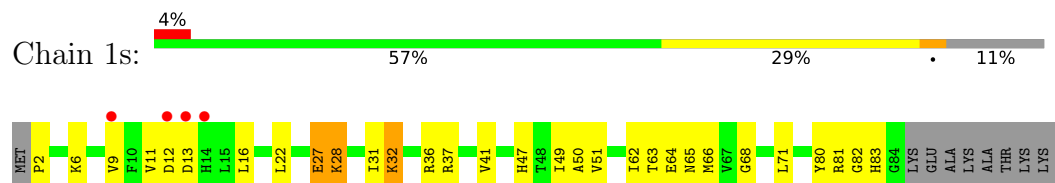
- Molecule 49: 30S ribosomal protein S18



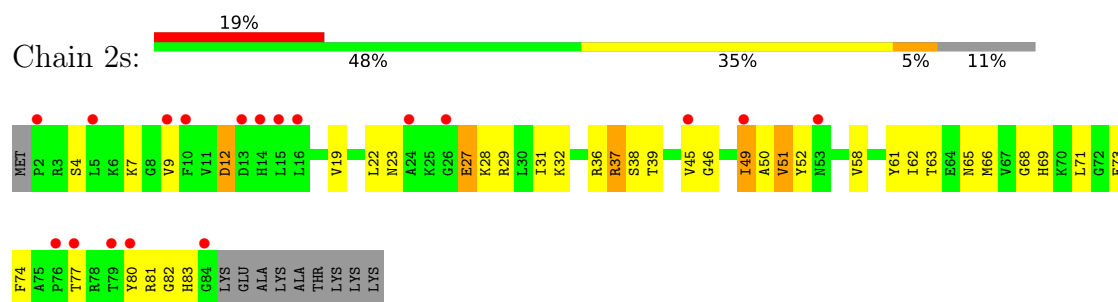
- Molecule 49: 30S ribosomal protein S18



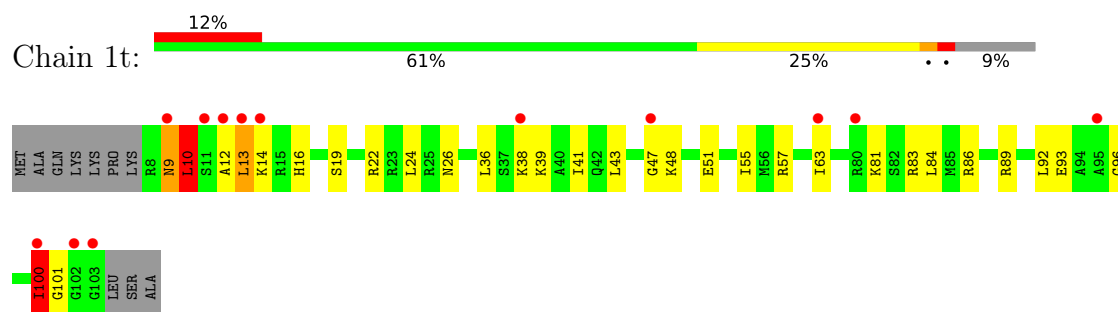
- Molecule 50: 30S ribosomal protein S19



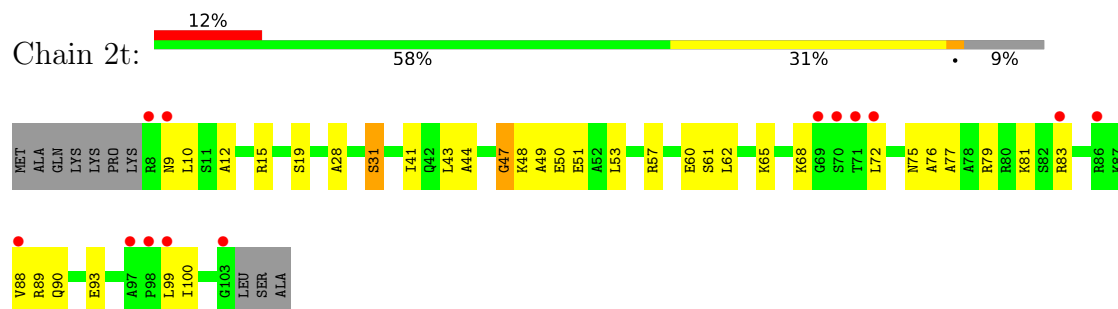
- Molecule 50: 30S ribosomal protein S19



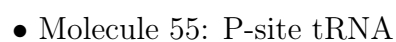
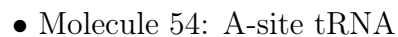
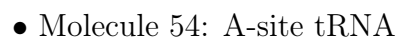
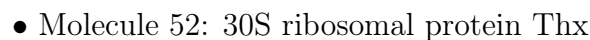
- Molecule 51: 30S ribosomal protein S20

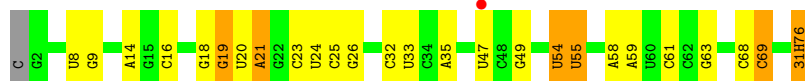


- Molecule 51: 30S ribosomal protein S20

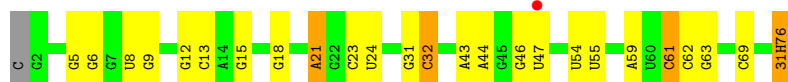


- Molecule 52: 30S ribosomal protein Thx

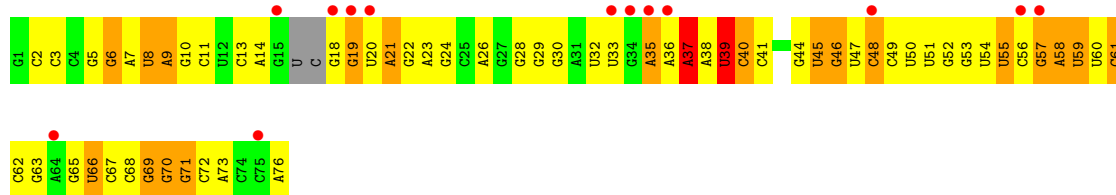
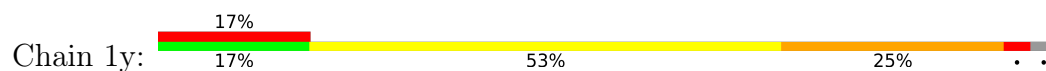




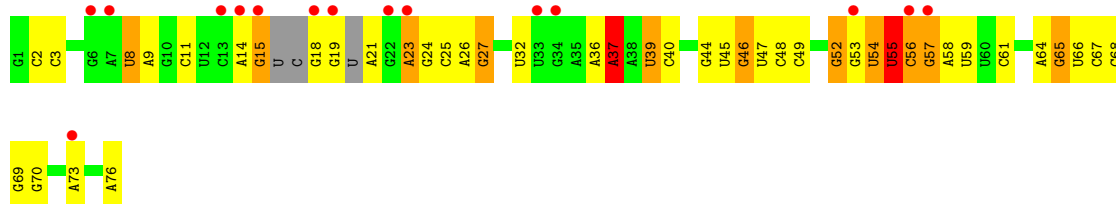
• Molecule 55: P-site tRNA



• Molecule 56: E-site tRNA



• Molecule 56: E-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	209.83Å 448.31Å 622.56Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	311.28 – 2.50 311.28 – 2.50	Depositor EDS
% Data completeness (in resolution range)	97.3 (311.28-2.50) 97.3 (311.28-2.50)	Depositor EDS
R_{merge}	0.15	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.21 (at 2.52Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.233 , 0.281 0.234 , 0.282	Depositor DCC
R_{free} test set	97365 reflections (4.88%)	wwPDB-VP
Wilson B-factor (Å ²)	46.8	Xtriage
Anisotropy	0.125	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.33 , 56.1	EDS
L-test for twinning ²	$\langle L \rangle = 0.36$, $\langle L^2 \rangle = 0.18$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.90	EDS
Total number of atoms	300196	wwPDB-VP
Average B, all atoms (Å ²)	51.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.64% 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: ZN, 31H, 7MG, MA6, 2MU, F3N, MIA, 5MU, 4OC, 0TD, K, 2MA, 4SU, M2G, 5MC, OMG, UR3, 2MG, SF4, PSU, MG

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	0.29	0/69009	0.49	1/107712 (0.0%)
1	2A	0.22	0/67293	0.42	1/105034 (0.0%)
2	1B	0.24	0/2882	0.42	0/4494
2	2B	0.20	0/2879	0.38	0/4487
3	1D	0.29	0/2186	0.52	0/2944
3	2D	0.23	0/2186	0.46	0/2944
4	1E	0.28	0/1592	0.50	0/2149
4	2E	0.22	0/1592	0.44	0/2149
5	1F	0.27	0/1619	0.49	0/2193
5	2F	0.20	0/1615	0.49	2/2188 (0.1%)
6	1G	0.23	0/1448	0.46	0/1957
6	2G	0.21	0/1453	0.47	0/1963
7	1H	0.23	0/1356	0.47	0/1834
7	2H	0.19	0/1356	0.39	0/1834
8	1I	0.20	0/1112	0.43	0/1514
8	2I	0.22	0/1079	0.46	0/1475
9	1N	0.27	0/1144	0.50	0/1543
9	2N	0.19	0/1144	0.41	0/1543
10	1O	0.27	0/943	0.51	0/1269
10	2O	0.22	0/943	0.47	0/1269
11	1P	0.28	0/1152	0.61	2/1533 (0.1%)
11	2P	0.22	0/1152	0.50	0/1533
12	1Q	0.29	0/1143	0.52	0/1527
12	2Q	0.21	0/1143	0.47	0/1527
13	1R	0.30	0/982	0.52	0/1312
13	2R	0.23	0/982	0.45	0/1312
14	1S	0.23	0/883	0.49	0/1176
14	2S	0.22	0/880	0.48	0/1172
15	1T	0.26	0/1105	0.51	0/1477
15	2T	0.22	0/1097	0.47	1/1468 (0.1%)
16	1U	0.29	0/977	0.50	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	2U	0.21	0/977	0.43	0/1301
17	1V	0.28	0/782	0.48	0/1049
17	2V	0.20	0/782	0.41	0/1049
18	1W	0.29	0/897	0.48	0/1205
18	2W	0.23	0/897	0.44	0/1205
19	1X	0.29	0/764	0.57	2/1025 (0.2%)
19	2X	0.23	0/764	0.50	2/1025 (0.2%)
20	1Y	0.26	0/819	0.52	0/1095
20	2Y	0.22	0/819	0.46	0/1095
21	1Z	0.25	0/1267	0.52	0/1717
21	2Z	0.22	0/1299	0.47	0/1763
22	10	0.31	0/662	0.60	2/881 (0.2%)
22	20	0.24	0/662	0.51	0/881
23	11	0.27	0/762	0.48	0/1014
23	21	0.22	0/762	0.47	0/1014
24	12	0.25	0/590	0.45	0/781
24	22	0.21	0/590	0.38	0/781
25	13	0.26	0/474	0.48	0/635
25	23	0.19	0/469	0.42	0/630
26	14	0.25	0/565	0.58	0/761
26	24	0.25	0/545	0.52	0/737
27	15	0.30	0/469	0.49	0/635
27	25	0.22	0/469	0.45	0/635
28	16	0.29	0/460	0.48	0/613
28	26	0.22	0/456	0.44	0/608
29	17	0.33	0/426	0.55	0/561
29	27	0.26	0/426	0.44	0/561
30	18	0.28	0/525	0.50	0/691
30	28	0.21	0/525	0.38	0/691
31	19	0.31	0/310	0.55	0/407
31	29	0.20	0/310	0.41	0/407
32	1a	0.22	1/35795 (0.0%)	0.41	1/55864 (0.0%)
32	2a	0.20	0/35886	0.39	0/56005
33	1b	0.23	0/1881	0.53	0/2542
33	2b	0.22	0/1860	0.50	0/2518
34	1c	0.21	0/1572	0.47	2/2126 (0.1%)
34	2c	0.22	0/1566	0.45	1/2119 (0.0%)
35	1d	0.21	0/1685	0.46	0/2262
35	2d	0.21	0/1704	0.45	0/2284
36	1e	0.23	0/1145	0.47	0/1543
36	2e	0.20	0/1149	0.45	0/1548
37	1f	0.22	0/823	0.42	0/1115
37	2f	0.20	0/829	0.43	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	1g	0.20	0/1250	0.41	0/1679
38	2g	0.21	0/1254	0.43	0/1683
39	1h	0.20	0/1108	0.41	0/1494
39	2h	0.19	0/1108	0.40	0/1494
40	1i	0.22	0/1002	0.53	0/1346
40	2i	0.22	0/997	0.48	0/1343
41	1j	0.23	0/722	0.47	0/982
41	2j	0.22	0/727	0.45	0/988
42	1k	0.21	0/844	0.44	0/1145
42	2k	0.20	0/848	0.41	0/1149
43	1l	0.22	0/937	0.44	0/1260
43	2l	0.20	0/937	0.42	0/1260
44	1m	0.24	0/969	0.46	0/1302
44	2m	0.23	0/961	0.50	0/1291
45	1n	0.21	0/501	0.43	0/664
45	2n	0.19	0/501	0.42	0/664
46	1o	0.20	0/739	0.44	0/985
46	2o	0.19	0/739	0.38	0/985
47	1p	0.21	0/697	0.46	0/939
47	2p	0.20	0/693	0.46	0/935
48	1q	0.22	0/836	0.44	0/1117
48	2q	0.21	0/836	0.45	0/1117
49	1r	0.24	0/560	0.43	0/746
49	2r	0.18	0/560	0.39	0/746
50	1s	0.23	0/667	0.54	0/900
50	2s	0.25	0/661	0.59	0/893
51	1t	0.22	0/730	0.51	0/965
51	2t	0.23	0/729	0.50	0/965
52	1u	0.20	0/203	0.41	0/266
52	2u	0.22	0/203	0.52	0/266
53	1v	0.25	0/310	0.35	0/480
53	2v	0.20	0/310	0.35	0/480
54	1w	0.27	0/1581	0.45	0/2458
54	2w	0.26	0/1531	0.44	0/2379
55	1x	0.29	0/1700	0.45	0/2650
55	2x	0.26	0/1700	0.41	0/2650
56	1y	0.30	1/1606 (0.1%)	0.45	0/2497
56	2y	0.30	1/1583 (0.1%)	0.45	0/2459
All	All	0.24	3/316586 (0.0%)	0.45	17/473957 (0.0%)

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	1y	8	4SU	O3'-P	5.31	1.61	1.56
56	2y	8	4SU	O3'-P	5.22	1.61	1.56
32	1a	1498	UR3	O3'-P	5.13	1.61	1.56

All (17) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	1992	G	C2'-C3'-O3'	6.83	119.75	109.50
11	1P	43	GLY	CA-C-N	6.34	133.83	121.41
11	1P	43	GLY	C-N-CA	6.34	133.83	121.41
34	1c	65	ALA	CA-C-N	6.03	132.82	121.97
34	1c	65	ALA	C-N-CA	6.03	132.82	121.97
22	10	41	ARG	CA-C-N	-5.96	112.80	121.44
22	10	41	ARG	C-N-CA	-5.96	112.80	121.44
1	2A	1992	G	C2'-C3'-O3'	5.63	117.94	109.50
15	2T	129	ARG	N-CA-C	-5.62	107.02	112.97
5	2F	21	ALA	CA-C-N	5.52	131.64	121.70
5	2F	21	ALA	C-N-CA	5.52	131.64	121.70
19	2X	94	GLY	CA-C-N	5.40	131.42	121.70
19	2X	94	GLY	C-N-CA	5.40	131.42	121.70
34	2c	179	ARG	N-CA-C	-5.26	106.12	113.37
32	1a	266	G	C2'-C3'-O3'	5.17	117.26	109.50
19	1X	94	GLY	CA-C-N	5.11	130.90	121.70
19	1X	94	GLY	C-N-CA	5.11	130.90	121.70

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	1A	61852	0	31193	616	0
1	2A	60322	0	30421	718	0
2	1B	2577	0	1305	23	0
2	2B	2575	0	1303	35	0
3	1D	2136	0	2218	38	0
3	2D	2136	0	2218	47	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	1E	1559	0	1618	40	0
4	2E	1559	0	1618	28	0
5	1F	1584	0	1625	28	0
5	2F	1580	0	1619	51	0
6	1G	1423	0	1436	39	0
6	2G	1428	0	1438	57	0
7	1H	1330	0	1407	21	0
7	2H	1330	0	1407	38	0
8	1I	1097	0	1140	29	0
8	2I	1064	0	1082	41	0
9	1N	1117	0	1184	18	0
9	2N	1117	0	1184	19	0
10	1O	933	0	996	20	0
10	2O	933	0	996	26	0
11	1P	1135	0	1212	31	0
11	2P	1135	0	1212	36	0
12	1Q	1122	0	1179	19	0
12	2Q	1122	0	1179	25	0
13	1R	968	0	1033	18	0
13	2R	968	0	1033	21	0
14	1S	873	0	927	17	0
14	2S	870	0	923	27	0
15	1T	1091	0	1151	23	0
15	2T	1083	0	1136	32	0
16	1U	959	0	1019	18	0
16	2U	959	0	1019	21	0
17	1V	771	0	830	11	0
17	2V	771	0	830	18	0
18	1W	886	0	940	18	0
18	2W	886	0	940	17	0
19	1X	750	0	814	14	0
19	2X	750	0	814	10	0
20	1Y	806	0	881	17	0
20	2Y	806	0	881	15	0
21	1Z	1240	0	1240	40	0
21	2Z	1271	0	1273	43	0
22	10	653	0	674	11	0
22	20	653	0	674	24	0
23	11	755	0	826	8	0
23	21	755	0	826	18	0
24	12	588	0	643	14	0
24	22	588	0	643	18	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
25	13	469	0	518	12	0
25	23	464	0	514	10	0
26	14	552	0	533	26	0
26	24	532	0	503	31	0
27	15	455	0	465	4	0
27	25	455	0	465	10	0
28	16	453	0	473	11	0
28	26	449	0	469	11	0
29	17	418	0	467	8	0
29	27	418	0	467	9	0
30	18	517	0	582	14	0
30	28	517	0	582	16	0
31	19	307	0	335	7	0
31	29	307	0	335	8	0
32	1a	32246	0	16296	391	0
32	2a	32327	0	16339	515	0
33	1b	1846	0	1867	68	0
33	2b	1825	0	1828	70	0
34	1c	1548	0	1535	33	0
34	2c	1542	0	1517	62	0
35	1d	1655	0	1672	46	0
35	2d	1674	0	1714	73	0
36	1e	1129	0	1185	41	0
36	2e	1133	0	1191	36	0
37	1f	810	0	804	25	0
37	2f	816	0	808	25	0
38	1g	1231	0	1238	35	0
38	2g	1235	0	1249	49	0
39	1h	1088	0	1126	23	0
39	2h	1088	0	1126	29	0
40	1i	983	0	986	26	0
40	2i	978	0	966	38	0
41	1j	709	0	650	20	0
41	2j	714	0	672	34	0
42	1k	829	0	825	20	0
42	2k	833	0	836	28	0
43	1l	932	0	981	16	0
43	2l	932	0	981	14	0
44	1m	958	0	1002	25	0
44	2m	950	0	988	50	0
45	1n	492	0	529	11	0
45	2n	492	0	529	20	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
46	1o	728	0	760	16	0
46	2o	728	0	760	15	0
47	1p	681	0	697	19	0
47	2p	677	0	686	24	0
48	1q	823	0	891	22	0
48	2q	823	0	891	19	0
49	1r	555	0	618	12	0
49	2r	555	0	618	19	0
50	1s	652	0	662	23	0
50	2s	646	0	644	33	0
51	1t	728	0	798	22	0
51	2t	727	0	796	25	0
52	1u	199	0	208	6	0
52	2u	199	0	208	4	0
53	1v	277	0	140	4	0
53	2v	277	0	140	4	0
54	1w	1603	0	829	25	0
54	2w	1555	0	798	32	0
55	1x	1635	0	838	14	0
55	2x	1635	0	838	10	0
56	1y	1585	0	804	32	0
56	2y	1565	0	795	32	0
57	1A	1297	0	0	0	0
57	1a	255	0	0	0	0
57	2A	963	0	0	0	0
57	2a	281	0	0	0	0
58	1A	1	0	0	0	0
58	2A	1	0	0	0	0
59	14	1	0	0	0	0
59	15	1	0	0	0	0
59	16	1	0	0	0	0
59	19	1	0	0	0	0
59	1Y	1	0	0	0	0
59	1n	1	0	0	0	0
59	24	1	0	0	0	0
59	25	1	0	0	0	0
59	26	1	0	0	0	0
59	29	1	0	0	0	0
59	2Y	1	0	0	0	0
59	2n	1	0	0	0	0
60	1d	8	0	0	1	0
60	2d	8	0	0	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	1A	2319	0	0	119	0
61	1a	422	0	0	30	0
61	2A	1298	0	0	99	0
61	2a	304	0	0	24	0
All	All	300196	0	196727	4309	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 9.

All (4309) 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	1.34
1:2A:2138:C:N4	1:2A:2153:G:H1	1.45	1.12
1:1A:1082:U:O4	1:1A:1086:A:N1	1.88	1.06
29:27:24:THR:HG22	29:27:27:GLY:H	1.24	1.02
5:1F:53:THR:HG22	5:1F:55:GLY:H	1.23	1.01
1:1A:2139:C:N4	1:1A:2152:G:H1	1.60	0.98
1:1A:1039:G:H1	1:1A:1116:C:H42	1.09	0.94
1:1A:2136:C:N3	1:1A:2155:G:C2	2.37	0.92
56:1y:51:U:H3	56:1y:63:G:H1	1.16	0.92
32:1a:1027:C:C2	32:1a:1034:G:N2	2.38	0.91
2:2B:7:G:H21	14:2S:38:GLN:HE22	1.16	0.91
21:1Z:52:SER:O	21:1Z:54:HIS:N	2.04	0.90
1:2A:2104:G:H1	1:2A:2185:C:H42	1.20	0.89
1:1A:881:G:N2	1:1A:897:C:O2	2.04	0.89
1:1A:642:G:OP1	61:1A:6780:HOH:O	1.92	0.88
1:1A:279:C:H42	1:1A:361:G:H1	1.20	0.88
1:2A:1648:C:OP1	61:2A:5609:HOH:O	1.92	0.87
1:2A:1798:U:H5'	3:2D:259:THR:HG22	1.56	0.87
1:2A:2099:U:H3	1:2A:2190:G:H1	1.22	0.87
1:1A:1065:U:O2	1:1A:1073:A:N6	2.07	0.86
1:1A:1603:A:OP1	61:1A:6883:HOH:O	1.93	0.86
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	1.56	0.86
45:2n:23:ARG:NH1	45:2n:28:GLY:O	2.08	0.86
1:1A:993:G:OP1	16:1U:50:ARG:NH2	2.08	0.86
1:2A:882:G:H1	1:2A:894:C:H42	1.22	0.86
1:2A:300:A:OP1	20:2Y:86:ARG:NH2	2.07	0.86
1:1A:2139:C:H42	1:1A:2152:G:H1	0.87	0.85
1:1A:2427:C:OP1	61:1A:6887:HOH:O	1.93	0.85
34:2c:58:GLU:HB3	41:2j:92:THR:HG21	1.59	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2099:U:H3	1:1A:2190:G:H1	0.90	0.85
36:1e:78:HIS:HE1	36:1e:143:ARG:H	1.25	0.84
56:1y:19:G:N2	56:1y:56:C:N3	2.25	0.84
1:1A:400:G:N7	61:1A:6374:HOH:O	2.11	0.83
40:2i:21:PRO:HA	40:2i:59:PHE:HA	1.59	0.83
1:1A:744:G:OP1	61:1A:6188:HOH:O	1.96	0.83
1:2A:631:A:OP1	11:2P:65:ARG:NH1	2.11	0.83
35:2d:103:ASN:OD1	35:2d:114:ARG:NE	2.11	0.83
1:1A:1057:A:H61	1:1A:1081:U:H3	1.26	0.83
1:1A:2499:C:OP1	61:1A:6468:HOH:O	1.95	0.83
37:2f:46:ARG:HH22	49:2r:37:VAL:HG11	1.43	0.83
1:2A:83:G:H1	1:2A:102:G:HO2'	1.25	0.83
32:1a:664:G:H22	32:1a:741:G:H1	1.23	0.82
7:2H:90:LYS:HD2	7:2H:159:GLU:HG2	1.59	0.82
1:1A:1648:C:OP1	61:1A:6562:HOH:O	1.97	0.82
1:2A:2100:G:H1	1:2A:2189:U:H3	1.28	0.81
1:2A:2711:A:OP2	61:2A:5506:HOH:O	1.97	0.81
25:13:55:ARG:HH22	25:13:57:GLU:HB2	1.46	0.81
1:2A:1689:A:H62	1:2A:1698:A:H2	1.27	0.81
1:2A:1812:A:OP2	61:2A:5135:HOH:O	1.97	0.81
32:2a:1025:U:H3	32:2a:1036:G:H1	1.29	0.81
38:2g:99:LEU:HD23	38:2g:102:ARG:HH12	1.45	0.81
17:1V:98:GLU:OE2	17:1V:100:ARG:NH1	2.14	0.80
33:1b:82:ARG:NH1	33:1b:92:TYR:OH	2.14	0.80
1:2A:1636:C:OP2	61:2A:5837:HOH:O	2.00	0.80
1:2A:2138:C:N3	1:2A:2153:G:N2	2.26	0.80
54:2w:18:G:O2'	54:2w:57:G:N2	2.15	0.80
33:1b:16:HIS:HB2	33:1b:204:ASN:HB2	1.63	0.80
1:2A:1670:C:OP1	61:2A:6050:HOH:O	1.98	0.80
61:1A:5527:HOH:O	4:1E:122:PHE:O	1.99	0.79
26:14:58:ARG:HD3	44:1m:80:ARG:HH12	1.47	0.79
1:1A:2136:C:N4	1:1A:2155:G:C6	2.51	0.79
43:1l:71:PRO:O	43:1l:102:ARG:NH1	2.15	0.79
33:2b:91:PRO:HG2	33:2b:155:LEU:HD13	1.63	0.79
10:1O:35:VAL:HG11	10:1O:103:ALA:HB3	1.64	0.79
1:1A:1647:G:OP1	61:1A:6562:HOH:O	1.99	0.79
25:13:39:ASP:OD1	25:13:44:ARG:NH1	2.16	0.79
1:2A:2365:G:N7	30:28:39:LYS:NZ	2.31	0.79
26:24:58:ARG:HD2	50:2s:68:GLY:H	1.46	0.79
1:1A:1053:C:H42	1:1A:1106:G:H1	1.29	0.78
1:2A:731:C:OP2	61:2A:5648:HOH:O	2.01	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1204:A:H2	1:2A:1241:A:H62	1.28	0.78
8:2I:57:ARG:HB2	8:2I:61:ARG:HH12	1.48	0.78
25:13:5:LYS:HG3	25:13:36:VAL:HG22	1.65	0.78
32:1a:79:G:O6	32:1a:90:U:O2	2.02	0.78
24:22:1:MET:SD	24:22:56:GLN:NE2	2.56	0.78
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.00	0.78
1:1A:11:G:H2'	1:1A:12:U:H5''	1.64	0.78
1:1A:826:U:OP1	61:1A:6887:HOH:O	2.02	0.78
1:1A:2128:C:N3	1:1A:2160:G:N2	2.32	0.78
1:1A:2879:C:OP2	61:1A:6108:HOH:O	2.01	0.78
3:2D:180:GLY:HA3	3:2D:275:LYS:HG2	1.66	0.78
32:2a:673:G:H2'	32:2a:674:G:C8	2.19	0.77
32:1a:1002:G:H3'	32:1a:1003:G:H4'	1.66	0.77
32:2a:157:G:N2	32:2a:164:U:O2	2.17	0.77
1:1A:2139:C:N3	1:1A:2152:G:N2	2.32	0.77
1:2A:2316:C:O2'	6:2G:128:ARG:NH2	2.17	0.77
32:2a:117:G:OP2	61:2a:5271:HOH:O	2.02	0.77
36:2e:50:GLU:HB2	36:2e:53:LEU:HD13	1.64	0.77
32:1a:1292:U:OP2	38:1g:41:ARG:NH2	2.17	0.77
38:2g:113:GLU:HG2	38:2g:119:ARG:HG2	1.66	0.77
1:2A:2138:C:H42	1:2A:2153:G:H1	0.77	0.77
1:1A:631:A:OP1	11:1P:65:ARG:NH1	2.17	0.76
1:1A:2128:C:N4	1:1A:2160:G:N1	2.34	0.76
1:2A:963:U:OP2	61:2A:5663:HOH:O	2.03	0.76
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.49	0.76
1:1A:884:C:H42	1:1A:892:G:H1	1.32	0.76
1:1A:1993:U:OP2	61:1A:7202:HOH:O	2.03	0.76
1:1A:1419:A:N6	1:1A:1578:U:O2	2.17	0.76
1:2A:2127:G:N1	1:2A:2161:C:N4	2.33	0.76
32:2a:544:G:OP1	35:2d:59:ARG:NH2	2.18	0.76
34:1c:162:GLN:NE2	53:1v:24:A:O2'	2.19	0.76
1:2A:563:G:OP2	61:2A:6155:HOH:O	2.04	0.76
32:2a:1514:C:OP1	61:2a:5065:HOH:O	2.03	0.76
1:1A:2541:A:OP2	61:1A:5931:HOH:O	2.03	0.76
1:2A:570:G:O6	61:2A:6020:HOH:O	2.04	0.76
32:2a:586:C:O2	32:2a:755:G:N2	2.16	0.76
39:1h:10:LEU:HD22	39:1h:83:ILE:HD11	1.67	0.76
1:1A:1023:U:OP2	61:1A:6329:HOH:O	2.03	0.75
1:1A:2156:G:H2'	1:1A:2157:G:C2	2.22	0.75
1:1A:782:A:N1	61:1A:5102:HOH:O	2.19	0.75
1:2A:1376:C:OP1	61:2A:5732:HOH:O	2.04	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2136:C:N4	1:1A:2155:G:N1	2.34	0.75
1:2A:1345:C:OP2	61:2A:6030:HOH:O	2.05	0.75
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.68	0.75
1:1A:1452:A:OP2	61:1A:5673:HOH:O	2.04	0.75
1:2A:1125:G:H5'	31:29:37:GLY:HA2	1.67	0.75
1:2A:627:A:H62	11:2P:84:ASN:HD21	1.34	0.75
32:2a:1118:C:OP1	40:2i:104:ARG:NH1	2.19	0.75
1:2A:1647:G:OP1	61:2A:5609:HOH:O	2.05	0.75
1:2A:2049:G:OP2	61:2A:6100:HOH:O	2.04	0.75
1:1A:2142:C:N3	1:1A:2149:G:O6	2.20	0.74
1:1A:2285:C:OP2	28:16:6:ARG:NH1	2.20	0.74
1:2A:792:G:O6	61:2A:5590:HOH:O	2.05	0.74
32:2a:975:A:H4'	32:2a:976:G:H5''	1.69	0.74
23:11:50:ARG:HG2	23:11:59:THR:HG22	1.69	0.74
32:1a:975:A:H4'	32:1a:976:G:H5''	1.70	0.74
1:2A:10:G:O2'	1:2A:2801(A):A:N7	2.19	0.74
1:2A:2127:G:N2	1:2A:2161:C:N3	2.36	0.74
54:1w:5:G:H2'	54:1w:6:G:H8	1.53	0.74
1:1A:2316:C:O2'	6:1G:128:ARG:NH2	2.19	0.74
33:1b:84:GLU:OE1	33:1b:87:ARG:NH1	2.20	0.74
1:2A:948:G:OP1	61:2A:5663:HOH:O	2.05	0.74
32:2a:598:U:O4	61:2a:5125:HOH:O	2.05	0.74
1:1A:2615:U:OP1	61:1A:5936:HOH:O	2.05	0.74
34:2c:30:ARG:HH21	45:2n:38:GLY:HA2	1.53	0.74
10:2O:48:PRO:HB3	32:2a:1422:G:H5''	1.68	0.74
10:2O:97:ARG:NH1	32:2a:339:C:OP2	2.19	0.74
1:1A:1680:U:O2'	1:1A:1763:G:N7	2.20	0.74
61:1A:5500:HOH:O	2:1B:99:G:OP2	2.05	0.74
1:2A:2108:C:H42	1:2A:2181:G:H1	1.36	0.74
1:2A:2115:G:O2'	1:2A:2117:A:N7	2.16	0.74
1:2A:2451:A:N7	61:2A:5004:HOH:O	2.21	0.74
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.20	0.74
37:1f:39:LYS:HB2	37:1f:64:GLN:HB3	1.70	0.73
50:1s:27:GLU:HB2	50:1s:28:LYS:HA	1.70	0.73
1:2A:962:G:OP1	61:2A:5663:HOH:O	2.06	0.73
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.22	0.73
1:2A:2345:G:H4'	1:2A:2346:A:H5''	1.70	0.73
1:1A:2683:C:O2	10:1O:70:LYS:NZ	2.20	0.73
32:1a:1381:U:H1'	38:1g:79:ARG:HG2	1.68	0.73
32:2a:393:A:OP1	61:2a:5139:HOH:O	2.04	0.73
32:2a:677:U:H3	32:2a:713:G:H22	1.35	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:2s:49:ILE:HG22	50:2s:62:ILE:HD11	1.70	0.73
33:1b:48:MET:HA	33:1b:51:LEU:HB2	1.69	0.73
1:2A:2079:U:OP1	23:21:21:ARG:NH2	2.21	0.73
32:2a:596:C:OP2	61:2a:5125:HOH:O	2.05	0.73
1:1A:2136:C:N3	1:1A:2155:G:N2	2.36	0.73
32:1a:836:G:OP1	49:1r:61:LYS:NZ	2.20	0.73
2:2B:20:C:N4	2:2B:63:G:O6	2.14	0.73
6:2G:161:THR:HG22	6:2G:163:ALA:H	1.52	0.73
1:1A:1359:A:H2'	1:1A:1360:A:H5'	1.69	0.73
22:10:10:THR:HG22	22:10:12:ASN:H	1.52	0.73
1:2A:1970:A:OP1	61:2A:5447:HOH:O	2.07	0.73
33:1b:69:LEU:HB3	33:1b:162:ILE:HG22	1.69	0.73
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	1.70	0.73
61:1A:5501:HOH:O	3:1D:230:ASP:OD2	2.06	0.73
4:2E:119:ARG:HD2	4:2E:160:TYR:HB2	1.71	0.73
8:2I:40:THR:OG1	8:2I:41:GLU:N	2.20	0.73
1:1A:1798:U:H5'	3:1D:259:THR:HG22	1.70	0.73
1:1A:2821:A:OP2	61:1A:6769:HOH:O	2.05	0.73
1:1A:1890:A:OP2	61:1A:7103:HOH:O	2.05	0.73
32:1a:79:G:C6	32:1a:90:U:O2	2.42	0.73
10:2O:35:VAL:HG11	10:2O:103:ALA:HB3	1.70	0.72
32:2a:1051:C:H42	32:2a:1207:2MG:HN1	1.33	0.72
32:1a:684:A:N6	61:1a:5223:HOH:O	2.19	0.72
1:2A:2630:G:H1	1:2A:2788:C:H42	1.37	0.72
44:2m:58:GLU:O	44:2m:62:ASN:ND2	2.22	0.72
1:1A:1264:G:OP1	27:15:19:ARG:NH2	2.14	0.72
1:2A:2127:G:C2	1:2A:2161:C:N3	2.58	0.72
37:2f:83:ASP:N	37:2f:83:ASP:OD1	2.21	0.72
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.69	0.72
41:2j:49:VAL:HG23	45:2n:41:ARG:HB2	1.70	0.72
1:1A:2788:C:OP1	4:1E:61:ARG:NH2	2.21	0.72
1:2A:2104:G:H1	1:2A:2185:C:N4	1.88	0.72
61:2a:5042:HOH:O	41:2j:98:ILE:O	2.07	0.72
42:1k:48:ILE:HD12	42:1k:63:LEU:HB2	1.70	0.72
49:1r:26:LEU:HD11	49:1r:42:ARG:HD3	1.71	0.72
32:2a:1086:U:H3	32:2a:1099:G:H22	1.35	0.72
1:1A:1332:G:OP1	61:1A:6153:HOH:O	2.08	0.72
41:1j:38:ILE:HD11	41:1j:71:LEU:HD23	1.72	0.72
23:21:59:THR:O	23:21:91:LYS:NZ	2.22	0.72
1:2A:1253:A:OP1	61:2A:5282:HOH:O	2.07	0.71
1:2A:2690:C:OP1	13:2R:17:ARG:NH2	2.22	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2714:G:OP2	61:2A:5506:HOH:O	2.08	0.71
32:2a:1002:G:C2	32:2a:1003:G:H1'	2.23	0.71
1:2A:400:G:N7	61:2A:5739:HOH:O	2.22	0.71
32:2a:1095:U:OP2	61:2a:5234:HOH:O	2.07	0.71
1:1A:2134:A:N3	1:1A:2159:G:O2'	2.23	0.71
28:16:6:ARG:HH12	28:16:26:ASN:HB2	1.55	0.71
16:2U:34:LYS:NZ	16:2U:37:GLU:OE1	2.18	0.71
32:2a:966:M2G:HM23	32:2a:967:5MC:H1'	1.71	0.71
33:2b:120:ALA:O	33:2b:125:PRO:HD2	1.90	0.71
1:2A:2183:C:H2'	1:2A:2184:G:H8	1.55	0.71
5:2F:157:VAL:HB	5:2F:194:MET:HG2	1.72	0.71
19:2X:8:ILE:O	24:22:36:ARG:NH2	2.24	0.71
32:1a:410:G:OP1	35:1d:30:LYS:NZ	2.19	0.71
1:2A:1840:G:OP2	61:2A:5757:HOH:O	2.08	0.71
32:1a:79:G:O6	32:1a:90:U:C2	2.44	0.71
15:2T:41:ARG:NH1	32:2a:346:G:OP1	2.22	0.71
32:2a:44:G:N7	61:2a:5213:HOH:O	2.22	0.71
39:2h:9:MET:HG3	39:2h:26:VAL:HG11	1.70	0.71
1:1A:2629:A:O2'	1:1A:2630:G:OP2	2.09	0.71
18:2W:25:ARG:NH2	18:2W:74:ALA:O	2.21	0.71
1:1A:1356:G:OP2	61:1A:6359:HOH:O	2.09	0.71
1:1A:2206:G:H3'	1:1A:2207:G:C8	2.26	0.71
1:2A:2506:U:H1'	54:2w:76:F3N:HD2	1.73	0.71
1:1A:1315:C:OP2	61:1A:6153:HOH:O	2.08	0.71
34:1c:172:ARG:NH2	34:1c:206:GLU:OE2	2.23	0.71
1:2A:2100:G:H2'	1:2A:2101:G:H8	1.55	0.71
1:2A:2319:G:H22	14:2S:3:ARG:HH11	1.38	0.71
12:2Q:20:ALA:HB2	21:2Z:79:ARG:HG3	1.73	0.71
12:2Q:111:GLU:OE2	12:2Q:133:ARG:NH2	2.24	0.71
35:2d:193:ASP:OD1	35:2d:193:ASP:N	2.20	0.71
1:1A:493:G:O6	61:1A:6069:HOH:O	2.08	0.70
1:1A:1650:G:OP2	61:1A:5118:HOH:O	2.09	0.70
29:17:24:THR:HG22	29:17:27:GLY:H	1.55	0.70
32:2a:1129:C:O2'	32:2a:1130:A:N7	2.24	0.70
1:1A:1243:G:O2'	11:1P:7:ARG:NH2	2.24	0.70
32:1a:1505:G:OP2	61:1a:5253:HOH:O	2.08	0.70
38:1g:50:ILE:HG13	38:1g:61:VAL:HG11	1.73	0.70
1:2A:311:A:OP2	61:2A:5280:HOH:O	2.09	0.70
6:2G:15:VAL:HG22	6:2G:175:LEU:HB3	1.74	0.70
32:2a:403:C:N4	61:2a:5205:HOH:O	2.24	0.70
35:2d:15:GLU:OE2	35:2d:59:ARG:NH1	2.23	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1971:A:OP1	61:1A:6838:HOH:O	2.09	0.70
32:1a:1224:G:OP1	61:1a:5181:HOH:O	2.08	0.70
1:2A:2121:G:H1	1:2A:2177:C:H42	1.39	0.70
33:2b:15:VAL:HB	33:2b:209:ARG:HB3	1.72	0.70
25:13:5:LYS:NZ	25:13:34:GLU:OE2	2.23	0.70
41:2j:44:VAL:HG22	41:2j:66:ARG:HB3	1.73	0.70
1:2A:2518:A:OP2	61:2A:5485:HOH:O	2.09	0.70
1:1A:135:G:N7	61:1A:6650:HOH:O	2.24	0.70
1:1A:1664:A:OP1	61:1A:6482:HOH:O	2.08	0.70
28:16:13:CYS:SG	28:16:47:THR:HG21	2.31	0.70
56:2y:9:A:O2'	56:2y:11:C:N4	2.23	0.70
3:1D:183:ARG:HG3	3:1D:270:ILE:HD13	1.73	0.70
49:1r:32:ARG:HA	49:1r:69:THR:HG21	1.74	0.70
32:2a:664:G:H22	32:2a:741:G:H1	1.39	0.70
45:1n:21:TYR:HE1	45:1n:23:ARG:HE	1.39	0.70
1:2A:1356:G:OP1	61:2A:5826:HOH:O	2.09	0.70
31:19:25:VAL:HB	31:19:34:GLN:HB2	1.74	0.70
32:1a:1362:C:OP2	61:1a:5025:HOH:O	2.09	0.70
1:2A:333:G:N7	61:2A:5096:HOH:O	2.25	0.70
1:2A:2127:G:N2	1:2A:2161:C:C2	2.59	0.70
32:2a:811:C:O2'	32:2a:901:A:N1	2.23	0.70
1:2A:194:G:N7	61:2A:5666:HOH:O	2.24	0.69
1:2A:1693:U:O2'	3:2D:14:ARG:NH2	2.24	0.69
1:2A:2130:U:H2'	1:2A:2158:A:H61	1.57	0.69
1:1A:1669:A:OP2	61:1A:6444:HOH:O	2.10	0.69
1:1A:2810:A:N6	1:1A:2891:G:O2'	2.23	0.69
1:2A:1271:G:OP2	61:2A:5609:HOH:O	2.09	0.69
15:2T:60:THR:HG22	15:2T:77:PRO:HA	1.73	0.69
1:1A:1252:G:OP2	61:1A:5458:HOH:O	2.10	0.69
1:1A:2163:C:OP2	1:1A:2164:C:N4	2.26	0.69
32:1a:330:C:O2	61:1a:5146:HOH:O	2.09	0.69
4:1E:105:THR:OG1	4:1E:199:ARG:NH2	2.25	0.69
4:2E:36:ARG:NH1	4:2E:85:ASN:OD1	2.26	0.69
34:1c:150:LYS:HG3	34:1c:169:ALA:HB2	1.74	0.69
50:1s:49:ILE:HG13	50:1s:62:ILE:HD11	1.74	0.69
1:2A:2162:G:H4'	1:2A:2172:U:H2'	1.74	0.69
12:2Q:85:LYS:HE2	22:20:7:LEU:HD12	1.75	0.69
32:2a:1239:A:H62	32:2a:1299:A:N6	1.90	0.69
1:1A:1693:U:O2'	3:1D:14:ARG:NH2	2.25	0.69
32:1a:134:A:H61	47:1p:25:ARG:HH12	1.40	0.69
41:1j:49:VAL:HG23	45:1n:41:ARG:HB2	1.72	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:2A:5228:HOH:O	4:2E:76:ARG:NH1	2.25	0.69
1:1A:2719:G:OP2	61:1A:6307:HOH:O	2.10	0.69
8:1I:93:THR:H	8:1I:96:ASP:HB2	1.58	0.69
39:1h:86:ILE:HD12	39:1h:133:LEU:HD22	1.74	0.69
49:1r:52:PRO:HB2	49:1r:54:ARG:HG3	1.75	0.69
34:2c:39:ILE:HG22	34:2c:43:LEU:HD11	1.74	0.69
1:1A:763:G:OP1	61:1A:6594:HOH:O	2.10	0.69
1:1A:1418:G:OP2	61:1A:6096:HOH:O	2.11	0.69
48:1q:66:SER:O	48:1q:70:ARG:NH1	2.26	0.69
2:2B:22:U:H3	2:2B:61:G:H1	1.39	0.69
1:2A:2136:C:N4	1:2A:2155:G:H1	1.90	0.68
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.75	0.68
32:2a:64:G:H4'	32:2a:65:U:H3'	1.75	0.68
33:2b:223:ILE:HA	33:2b:226:ARG:HD3	1.75	0.68
1:1A:1064:C:N3	1:1A:1074:G:O6	2.26	0.68
1:1A:1819:A:N1	61:1A:5048:HOH:O	2.25	0.68
1:1A:1054:A:N6	1:1A:1105:U:H3	1.92	0.68
32:1a:1065:U:O2'	32:1a:1066:C:OP2	2.09	0.68
1:2A:2134:A:H62	1:2A:2157:G:H4'	1.57	0.68
32:2a:84:U:H4'	32:2a:89:C:C4	2.28	0.68
33:2b:155:LEU:HD21	33:2b:159:PRO:HG3	1.75	0.68
44:2m:80:ARG:NH2	50:2s:65:ASN:O	2.26	0.68
32:1a:1083:U:OP1	61:1a:5231:HOH:O	2.09	0.68
1:2A:947:G:O6	61:2A:5503:HOH:O	2.07	0.68
35:1d:205:GLU:OE2	36:1e:107:ARG:NH1	2.26	0.68
38:1g:50:ILE:HD11	38:1g:125:MET:HG2	1.75	0.68
32:2a:946:A:O2'	32:2a:1333:A:N3	2.26	0.68
39:2h:29:SER:HB3	39:2h:32:LYS:HD2	1.75	0.68
1:1A:1082:U:N3	1:1A:1086:A:N6	2.10	0.68
2:1B:103:G:H21	21:1Z:73:GLN:HE22	1.41	0.68
5:1F:140:LEU:HD11	5:1F:170:LEU:HD21	1.76	0.68
1:2A:1147:C:H2'	1:2A:1148:A:H8	1.59	0.68
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.27	0.68
26:14:55:ARG:N	26:14:56:VAL:HA	2.09	0.68
32:1a:405:U:O4	35:1d:2:GLY:N	2.25	0.68
40:1i:128:ARG:NH2	55:1x:33:U:OP2	2.26	0.68
8:2I:55:ALA:HA	8:2I:58:LEU:HB3	1.74	0.68
31:29:25:VAL:HB	31:29:34:GLN:HB2	1.75	0.68
32:2a:547:A:OP1	61:2a:5206:HOH:O	2.12	0.68
33:2b:189:ASP:OD1	33:2b:189:ASP:N	2.27	0.68
34:2c:104:GLN:NE2	34:2c:105:GLU:O	2.27	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:938:G:OP2	30:18:52:LYS:NZ	2.26	0.68
1:2A:1604:C:OP2	61:2A:5813:HOH:O	2.11	0.68
32:2a:1004:A:N6	32:2a:1037:C:H1'	2.08	0.68
35:2d:175:SER:HB3	35:2d:184:LYS:HB3	1.75	0.68
56:2y:14:A:O2'	56:2y:15:G:OP1	2.12	0.68
1:1A:278:A:O2'	1:1A:279:C:OP1	2.12	0.67
24:12:14:ARG:O	24:12:67:LYS:NZ	2.26	0.67
38:1g:76:ARG:O	38:1g:87:VAL:N	2.22	0.67
1:2A:700:G:O2'	1:2A:1632:A:N3	2.25	0.67
32:2a:1310:G:H5'	44:2m:77:ASN:HD21	1.59	0.67
43:2l:71:PRO:O	43:2l:102:ARG:NH1	2.27	0.67
32:1a:972:C:O2'	41:1j:55:LYS:O	2.12	0.67
1:1A:2448:A:OP1	61:1A:6468:HOH:O	2.11	0.67
1:1A:2142:C:O2	1:1A:2149:G:N1	2.19	0.67
54:1w:5:G:H2'	54:1w:6:G:C8	2.28	0.67
56:1y:19:G:N1	56:1y:56:C:N4	2.42	0.67
1:2A:2127:G:C6	1:2A:2161:C:N4	2.63	0.67
21:2Z:121:HIS:N	21:2Z:171:ILE:O	2.27	0.67
1:1A:2022:U:OP1	61:1A:6856:HOH:O	2.11	0.67
32:1a:1021:G:O2'	32:1a:1022:G:O5'	2.12	0.67
1:2A:568:U:H5'	1:2A:945:A:N1	2.09	0.67
1:2A:783:A:OP2	61:2A:6152:HOH:O	2.13	0.67
1:1A:1054:A:H61	1:1A:1105:U:H3	1.42	0.67
32:1a:1025:U:O2	32:1a:1036:G:O6	2.13	0.67
1:2A:1604:C:OP1	61:2A:5494:HOH:O	2.11	0.67
54:2w:68:C:H2'	54:2w:69:G:H8	1.60	0.67
24:12:38:GLN:HG3	24:12:43:GLN:HB2	1.75	0.67
33:1b:185:ILE:HG22	33:1b:199:TYR:HB2	1.75	0.67
1:2A:2183:C:H2'	1:2A:2184:G:C8	2.29	0.67
48:2q:81:ARG:HH21	48:2q:84:LEU:HD21	1.58	0.67
1:1A:1143:A:OP2	61:1A:6535:HOH:O	2.12	0.67
61:1A:7116:HOH:O	55:1x:76:31H:OP2	2.13	0.67
35:1d:98:GLU:OE1	35:1d:103:ASN:ND2	2.28	0.67
33:2b:200:ILE:HG22	33:2b:202:PRO:HD3	1.76	0.67
32:2a:53:A:OP2	61:2a:5075:HOH:O	2.11	0.67
1:1A:1811:G:N7	61:1A:5316:HOH:O	2.27	0.67
14:2S:38:GLN:NE2	14:2S:47:THR:OG1	2.28	0.67
40:2i:121:ARG:NH1	40:2i:122:ALA:O	2.28	0.67
1:2A:500:G:N1	1:2A:503:A:OP2	2.27	0.66
32:2a:1080:A:H5'	36:2e:14:ARG:HH21	1.60	0.66
47:2p:19:ILE:HD11	47:2p:73:LEU:HD23	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:683:G:N7	61:1a:5224:HOH:O	2.28	0.66
1:2A:2129:C:N3	1:2A:2159:G:N2	2.41	0.66
32:2a:1309:G:OP1	44:2m:88:ARG:NH2	2.27	0.66
50:2s:80:TYR:O	50:2s:82:GLY:N	2.29	0.66
32:1a:574:A:OP2	61:1a:5271:HOH:O	2.12	0.66
32:1a:1182:G:H4'	32:1a:1183:A:H5''	1.77	0.66
51:1t:43:LEU:O	51:1t:47:GLY:N	2.24	0.66
8:2I:45:LYS:O	8:2I:49:ALA:N	2.28	0.66
24:22:41:ILE:HG13	24:22:43:GLN:HG2	1.77	0.66
6:2G:18:GLU:O	6:2G:22:ARG:N	2.28	0.66
28:26:9:LEU:HD13	28:26:51:GLU:HG3	1.76	0.66
40:2i:4:TYR:HB2	40:2i:19:LEU:HB2	1.77	0.66
1:1A:192:C:OP1	61:1A:5678:HOH:O	2.14	0.66
1:2A:2727:G:O2'	10:2O:70:LYS:NZ	2.28	0.66
32:1a:504:C:OP1	61:1a:5237:HOH:O	2.13	0.66
1:2A:988:A:N7	61:2A:5376:HOH:O	2.28	0.66
32:2a:48:C:OP2	61:2a:5170:HOH:O	2.14	0.66
33:2b:88:ALA:HB2	33:2b:219:VAL:HG13	1.77	0.66
35:2d:25:ARG:HA	35:2d:28:SER:HB3	1.76	0.66
1:1A:1993:U:O3'	61:1A:5224:HOH:O	2.13	0.66
3:1D:85:ASP:OD2	3:1D:88:ARG:NH1	2.29	0.66
11:1P:126:VAL:HG12	11:1P:148:LEU:HD22	1.78	0.66
32:2a:1119:C:OP2	40:2i:9:ARG:NH2	2.29	0.66
1:1A:739:G:OP1	61:1A:6498:HOH:O	2.14	0.66
32:2a:1270:C:OP2	52:2u:24:ARG:NH2	2.28	0.66
34:2c:6:HIS:HD2	34:2c:7:PRO:HD2	1.61	0.66
1:1A:947:G:OP2	61:1A:6582:HOH:O	2.12	0.66
61:1A:5597:HOH:O	18:1W:31:GLU:OE1	2.13	0.66
33:1b:77:ALA:HB2	33:1b:211:ILE:HD13	1.78	0.66
61:2A:5250:HOH:O	15:2T:105:LEU:O	2.14	0.66
32:2a:1174:G:N7	61:2a:5032:HOH:O	2.29	0.66
1:1A:1058:G:N2	1:1A:1081:U:O2	2.28	0.66
1:1A:1232:G:O6	61:1A:5077:HOH:O	2.12	0.66
1:1A:1670:C:OP2	61:1A:6444:HOH:O	2.14	0.66
34:1c:119:ARG:HE	34:1c:140:ARG:NH2	1.94	0.66
56:2y:18:G:N2	56:2y:55:PSU:N3	2.44	0.66
37:1f:82:ARG:HB2	37:1f:85:VAL:HG23	1.77	0.65
1:2A:624:C:OP1	61:2A:5362:HOH:O	2.13	0.65
32:2a:1139:G:N2	32:2a:1142:G:O6	2.22	0.65
1:1A:1176:G:N2	1:1A:1178:C:OP2	2.29	0.65
1:1A:1779:U:OP2	61:1A:6496:HOH:O	2.13	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:1h:41:ARG:NH2	39:1h:123:GLU:OE2	2.29	0.65
32:1a:17:U:H2'	32:1a:18:C:C6	2.32	0.65
1:2A:307:G:N1	1:2A:310:A:OP2	2.29	0.65
1:2A:674:G:N3	61:2A:5033:HOH:O	2.28	0.65
1:2A:1299:G:OP1	61:2A:5834:HOH:O	2.14	0.65
10:2O:24:VAL:HG13	10:2O:33:ALA:HB2	1.78	0.65
11:2P:87:ASP:O	11:2P:90:ARG:NH1	2.30	0.65
35:2d:158:ILE:O	35:2d:162:LEU:N	2.24	0.65
1:1A:1056:G:H1'	1:1A:1103:A:H61	1.61	0.65
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.29	0.65
32:1a:964:A:OP1	61:1a:5188:HOH:O	2.15	0.65
32:1a:1198:G:N7	61:1a:5132:HOH:O	2.29	0.65
36:1e:144:THR:H	36:1e:147:ASP:HB2	1.62	0.65
2:2B:50:G:OP1	14:2S:63:THR:OG1	2.14	0.65
32:2a:656:C:O2'	46:2o:28:GLN:OE1	2.11	0.65
1:2A:1156:A:OP2	61:2A:5689:HOH:O	2.14	0.65
32:2a:539:A:OP2	43:2l:115:LYS:NZ	2.30	0.65
36:2e:32:VAL:HG11	36:2e:59:GLY:HA2	1.78	0.65
36:2e:40:ARG:HB3	36:2e:66:MET:HG3	1.79	0.65
44:2m:37:THR:O	44:2m:55:ARG:NH1	2.28	0.65
19:1X:60:ARG:HH22	29:17:47:ARG:HH12	1.45	0.65
33:1b:30:ARG:HH21	33:1b:194:PRO:HB2	1.61	0.65
33:1b:59:GLU:HG3	33:1b:225:ALA:HB2	1.79	0.65
46:1o:39:LEU:HD13	46:1o:56:LEU:HB2	1.79	0.65
1:2A:84:A:H5''	20:2Y:8:LYS:HE3	1.79	0.65
1:1A:73:A:OP1	61:1A:5105:HOH:O	2.14	0.65
1:1A:1840:G:N7	61:1A:5894:HOH:O	2.28	0.65
21:1Z:4:ARG:HH21	21:1Z:60:GLU:HG2	1.61	0.65
32:1a:953:G:H5'	32:1a:965:A:H61	1.60	0.65
3:2D:108:PRO:HB3	3:2D:143:HIS:HE1	1.62	0.65
8:2I:4:ILE:HG12	8:2I:18:VAL:HG22	1.79	0.65
32:2a:165:C:H2'	32:2a:166:G:H8	1.61	0.65
32:2a:1286:A:C8	32:2a:1287:A:H4'	2.32	0.65
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.79	0.65
34:2c:61:ALA:N	34:2c:63:ASN:OD1	2.30	0.65
41:1j:5:ARG:NH2	41:1j:73:ASP:OD2	2.29	0.65
1:2A:880:G:H2'	1:2A:881:G:H8	1.62	0.65
1:2A:2028:U:O4	61:2A:5427:HOH:O	2.11	0.65
34:2c:13:GLY:HA3	45:2n:57:ARG:HH11	1.60	0.65
1:1A:1056:G:N2	1:1A:1102:C:OP2	2.29	0.65
1:1A:1494:A:OP1	61:1A:5427:HOH:O	2.14	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:370:G:OP2	61:2A:5322:HOH:O	2.13	0.65
24:22:38:GLN:HG3	24:22:43:GLN:HB2	1.78	0.65
1:1A:2168:G:N2	1:1A:2171:A:N7	2.45	0.64
8:2I:129:THR:HG22	8:2I:139:GLN:HG3	1.77	0.64
25:23:5:LYS:NZ	25:23:34:GLU:OE2	2.26	0.64
1:1A:1071:G:H1'	1:1A:1089:G:H2'	1.79	0.64
32:1a:636:U:H2'	32:1a:637:G:H8	1.62	0.64
1:2A:8:A:H2'	1:2A:9:U:C6	2.32	0.64
13:2R:57:ARG:NE	13:2R:59:ASP:OD1	2.29	0.64
32:2a:1128:C:H1'	32:2a:1147:C:H42	1.61	0.64
1:2A:2133:G:O2'	1:2A:2157:G:N2	2.30	0.64
1:2A:2820:A:OP2	13:2R:2:ARG:NH2	2.30	0.64
3:2D:108:PRO:HB3	3:2D:143:HIS:CE1	2.31	0.64
8:2I:122:GLU:O	8:2I:126:TYR:OH	2.14	0.64
32:2a:1279:A:H4'	32:2a:1280:A:OP1	1.98	0.64
35:2d:140:VAL:HG11	35:2d:146:ILE:HD11	1.80	0.64
1:1A:301:G:OP2	20:1Y:84:ARG:NH2	2.30	0.64
1:1A:2128:C:N4	1:1A:2161:C:N3	2.45	0.64
1:1A:2867:G:OP2	15:1T:119:LYS:NZ	2.24	0.64
32:1a:1031:G:H2'	32:1a:1032:G:C8	2.32	0.64
1:2A:397:G:N7	61:2A:5880:HOH:O	2.30	0.64
1:2A:2049:G:N7	61:2A:6056:HOH:O	2.28	0.64
54:2w:68:C:H2'	54:2w:69:G:C8	2.31	0.64
1:1A:1174:A:H4'	1:1A:1175:U:OP1	1.95	0.64
32:1a:567:G:N3	61:1a:5155:HOH:O	2.29	0.64
8:2I:66:GLU:HA	8:2I:69:LYS:HB3	1.79	0.64
8:2I:83:ALA:O	8:2I:89:TYR:OH	2.12	0.64
32:2a:1030(A):G:N1	32:2a:1030(D):A:OP2	2.30	0.64
1:1A:2121:G:H1	1:1A:2177:C:H42	1.44	0.64
13:1R:97:VAL:HG22	13:1R:114:VAL:HG13	1.80	0.64
1:1A:143:G:H4'	19:1X:35:THR:HG21	1.79	0.64
1:2A:299:A:OP1	20:2Y:86:ARG:NH1	2.30	0.64
1:2A:2110:G:H3'	1:2A:2111:C:H5'	1.78	0.64
32:2a:663:A:O3'	49:2r:64:ARG:NH2	2.30	0.64
44:1m:3:ARG:HG3	44:1m:4:ILE:HG22	1.80	0.64
44:1m:19:LEU:HD21	44:1m:56:LEU:HD21	1.79	0.64
1:2A:2129:C:N4	1:2A:2159:G:H1	1.95	0.64
50:2s:28:LYS:HB3	50:2s:29:ARG:HA	1.80	0.64
1:1A:1671:U:O4	61:1A:6444:HOH:O	2.13	0.64
13:1R:67:LEU:HD13	13:1R:76:VAL:HG21	1.79	0.64
4:2E:28:ALA:HB3	4:2E:93:VAL:HG12	1.80	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:2f:97:PHE:HD2	49:2r:31:LEU:HD11	1.61	0.64
41:2j:8:LEU:HD12	41:2j:16:LEU:HD22	1.78	0.64
38:1g:78:ARG:HH21	38:1g:79:ARG:HH11	1.46	0.64
1:2A:2127:G:N1	1:2A:2161:C:C4	2.65	0.64
5:2F:18:ARG:NH1	5:2F:127:GLU:OE2	2.29	0.64
32:2a:165:C:H2'	32:2a:166:G:C8	2.33	0.64
36:2e:33:VAL:HG21	36:2e:109:ILE:HA	1.79	0.64
39:2h:26:VAL:HG23	39:2h:59:LEU:HB2	1.80	0.64
44:1m:123:ALA:HB2	54:1w:39:PSU:H1'	1.79	0.63
1:2A:852:G:H2'	1:2A:853:G:H8	1.62	0.63
1:2A:2137:C:N4	1:2A:2154:G:H1	1.95	0.63
5:2F:53:THR:HG23	5:2F:55:GLY:H	1.63	0.63
7:2H:25:LYS:HD3	7:2H:27:LYS:HZ1	1.62	0.63
26:24:46:GLN:HE21	26:24:48:ARG:HD3	1.61	0.63
15:1T:127:ALA:C	15:1T:129:ARG:H	2.06	0.63
40:1i:49:PRO:HG2	40:1i:81:ILE:HG23	1.78	0.63
32:2a:263:A:OP1	51:2t:79:ARG:NH1	2.31	0.63
1:1A:2134:A:O2'	1:1A:2135:A:OP1	2.15	0.63
6:2G:67:LYS:HD3	26:24:5:ILE:HD12	1.80	0.63
32:2a:952:U:H2'	32:2a:953:G:H8	1.62	0.63
1:1A:272(G):C:H42	1:1A:363(C):G:H1	1.45	0.63
32:1a:903:G:OP1	61:1a:5094:HOH:O	2.16	0.63
32:1a:1004:A:H5'	32:1a:1024:G:H1	1.63	0.63
1:2A:2100:G:H2'	1:2A:2101:G:C8	2.34	0.63
22:20:27:GLU:HG3	22:20:68:GLU:HA	1.80	0.63
32:2a:1228:C:OP1	44:2m:115:LYS:NZ	2.28	0.63
1:2A:1021:A:H62	1:2A:1141:U:H3	1.47	0.63
1:2A:2033:A:OP1	61:2A:5427:HOH:O	2.15	0.63
1:2A:2128:C:H2'	1:2A:2129:C:O4'	1.99	0.63
32:2a:737:A:H2'	32:2a:738:C:C6	2.33	0.63
1:1A:674:G:O2'	5:1F:74:ARG:HD3	1.97	0.63
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.31	0.63
32:1a:662:G:H2'	32:1a:663:A:C8	2.33	0.63
1:2A:2129:C:N4	1:2A:2159:G:N1	2.47	0.63
23:21:50:ARG:HG2	23:21:59:THR:HG22	1.80	0.63
28:26:32:ASN:N	28:26:32:ASN:OD1	2.30	0.63
32:2a:324:G:N1	32:2a:327:A:OP2	2.32	0.63
54:2w:6:G:O6	54:2w:67:C:N3	2.31	0.63
4:2E:47:VAL:HG11	4:2E:86:PRO:HD2	1.80	0.63
17:2V:57:VAL:HG22	17:2V:99:ILE:HG23	1.80	0.63
26:24:67:TYR:HD2	50:2s:9:VAL:HB	1.63	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:289:G:OP2	61:2a:5271:HOH:O	2.16	0.63
1:1A:1203:G:O6	61:1A:6301:HOH:O	2.13	0.63
32:1a:1131:G:OP1	40:1i:20:ARG:NH2	2.32	0.63
56:1y:18:G:O2'	56:1y:57:G:O6	2.13	0.63
35:2d:175:SER:OG	35:2d:176:LEU:N	2.31	0.63
41:2j:38:ILE:HG13	41:2j:71:LEU:HD23	1.80	0.63
1:1A:2849:U:OP2	15:1T:95:ARG:NH1	2.32	0.63
17:1V:55:ALA:HA	17:1V:101:GLY:HA2	1.81	0.63
47:1p:40:ASP:OD2	47:1p:44:THR:OG1	2.17	0.63
1:2A:1385:G:O2'	1:2A:1396:U:O2	2.16	0.63
1:2A:2136:C:N3	1:2A:2155:G:N2	2.43	0.63
38:2g:113:GLU:HG3	38:2g:118:VAL:HG12	1.80	0.63
1:2A:1165:U:H2'	1:2A:1166:C:C6	2.34	0.62
8:2I:92:VAL:HG13	8:2I:120:ILE:HB	1.80	0.62
42:2k:48:ILE:O	42:2k:50:TYR:N	2.29	0.62
1:1A:120:U:OP2	61:1A:7069:HOH:O	2.16	0.62
1:2A:764:A:H5''	3:2D:210:GLY:HA2	1.80	0.62
1:2A:2141:G:O6	1:2A:2150:U:O2	2.16	0.62
23:21:3:LYS:HB2	23:21:61:ARG:HH12	1.64	0.62
35:2d:94:LEU:HA	35:2d:97:LEU:HD12	1.81	0.62
54:2w:9:A:O2'	54:2w:10:G:N7	2.31	0.62
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.34	0.62
23:11:59:THR:O	23:11:91:LYS:NZ	2.33	0.62
32:1a:1194:U:H4'	36:1e:22:GLY:HA2	1.79	0.62
1:2A:921:G:O6	61:2A:5884:HOH:O	2.11	0.62
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.34	0.62
8:2I:50:ARG:O	8:2I:54:GLN:N	2.32	0.62
32:2a:1040:U:H2'	32:2a:1041:A:H8	1.64	0.62
33:2b:188:ALA:HB1	33:2b:192:SER:HB2	1.81	0.62
1:1A:272(J):C:H2'	1:1A:274:G:H8	1.63	0.62
61:2A:5849:HOH:O	5:2F:61:GLY:O	2.15	0.62
15:2T:26:ASP:OD1	15:2T:120:ARG:NH2	2.30	0.62
31:19:2:LYS:HE2	31:19:31:LYS:O	2.00	0.62
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.34	0.62
33:1b:118:LEU:HB3	33:1b:142:LEU:HD12	1.81	0.62
36:1e:78:HIS:CE1	36:1e:143:ARG:H	2.11	0.62
32:2a:473:G:H2'	32:2a:474:G:C8	2.34	0.62
38:2g:111:ARG:NH2	38:2g:126:ASP:OD2	2.33	0.62
42:2k:79:SER:HA	42:2k:104:GLN:HB3	1.81	0.62
44:2m:108:ARG:NH1	44:2m:112:GLY:O	2.32	0.62
1:1A:969:U:H2'	1:1A:970:C:C6	2.34	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:1T:111:ARG:NH2	32:1a:1464:G:OP2	2.30	0.62
32:1a:890:G:O2'	32:1a:906:G:O6	2.13	0.62
32:1a:971:G:N2	32:1a:1363(A):A:OP2	2.28	0.62
54:1w:13:C:H2'	54:1w:14:A:H5''	1.82	0.62
1:2A:1557:C:OP2	1:2A:1558:A:O2'	2.17	0.62
2:2B:43:C:H5''	26:24:1:MET:HG2	1.82	0.62
32:2a:909:A:N3	32:2a:1413:A:O2'	2.30	0.62
40:2i:28:VAL:HG22	40:2i:63:ILE:HB	1.82	0.62
54:2w:10:G:H2'	54:2w:11:C:C6	2.34	0.62
1:1A:1918:A:N6	61:1A:6695:HOH:O	2.33	0.62
40:1i:16:ARG:HH11	40:1i:64:THR:HG21	1.64	0.62
48:1q:18:THR:OG1	48:1q:69:LYS:NZ	2.32	0.62
1:2A:1837:C:O2'	1:2A:1927:A:N3	2.30	0.62
1:2A:2849:U:OP2	15:2T:95:ARG:NH1	2.33	0.62
8:2I:26:ALA:HB1	8:2I:31:LEU:HD13	1.82	0.62
32:2a:15:G:H21	36:2e:18:ARG:HA	1.64	0.62
32:2a:142:G:H2'	32:2a:143:A:C8	2.34	0.62
32:2a:1189:C:OP1	41:2j:51:ARG:NH2	2.31	0.62
48:1q:45:HIS:HB3	48:1q:72:ARG:HG3	1.81	0.62
1:2A:1264:G:OP1	27:25:19:ARG:NH2	2.30	0.62
1:2A:1652:A:OP1	13:2R:8:ARG:NH1	2.32	0.62
32:2a:948:C:H2'	32:2a:949:A:H8	1.64	0.62
48:2q:67:LYS:HA	48:2q:70:ARG:HH12	1.63	0.62
4:2E:89:ASP:N	4:2E:89:ASP:OD1	2.32	0.62
14:2S:15:ARG:HB3	14:2S:19:LYS:HE3	1.82	0.62
15:2T:127:ALA:C	15:2T:129:ARG:H	2.07	0.62
32:2a:745:C:H2'	32:2a:746:A:H8	1.62	0.62
34:2c:123:GLN:HA	34:2c:126:ARG:HD2	1.82	0.62
36:2e:71:LEU:HD23	36:2e:115:VAL:HG23	1.82	0.62
1:2A:2722:G:H5'	13:2R:4:LEU:HD12	1.82	0.61
1:1A:994:C:OP1	16:1U:53:ARG:NH2	2.33	0.61
1:1A:2128:C:N4	1:1A:2160:G:H1	1.95	0.61
32:1a:677:U:H3	32:1a:713:G:H22	1.47	0.61
32:1a:993:G:H2'	32:1a:995:C:H41	1.66	0.61
36:1e:78:HIS:HD2	39:1h:104:ARG:HD2	1.65	0.61
32:2a:947:G:O3'	44:2m:109:THR:OG1	2.17	0.61
35:2d:111:ALA:HB1	35:2d:116:GLN:HE21	1.66	0.61
1:1A:1077:A:H2'	1:1A:1078:U:H4'	1.82	0.61
1:1A:2123:G:H2'	1:1A:2124:G:C8	2.34	0.61
32:1a:955:U:O4	61:1a:5261:HOH:O	2.14	0.61
2:2B:83:G:N2	2:2B:94:C:O2	2.28	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:2W:2:GLU:OE2	18:2W:72:LYS:NZ	2.23	0.61
32:2a:920:U:H2'	32:2a:921:U:C6	2.36	0.61
1:1A:2319:G:N1	14:1S:3:ARG:HA	2.15	0.61
7:2H:9:ILE:HB	7:2H:50:VAL:HB	1.81	0.61
18:2W:83:LYS:HE2	18:2W:97:LYS:HE3	1.81	0.61
21:2Z:55:HIS:HE1	21:2Z:135:GLU:HB2	1.64	0.61
34:2c:6:HIS:HB3	45:2n:49:HIS:CD2	2.35	0.61
32:1a:421:U:O4	34:1c:127:ARG:NH2	2.30	0.61
1:2A:1696:G:N7	61:2A:5775:HOH:O	2.31	0.61
1:2A:1816:G:O6	3:2D:35:LYS:NZ	2.28	0.61
1:2A:1891:G:O6	61:2A:5771:HOH:O	2.15	0.61
1:2A:2127:G:O2'	1:2A:2173:A:N3	2.33	0.61
3:2D:71:ASP:HB2	3:2D:103:ARG:HH12	1.64	0.61
37:2f:41:GLU:OE1	49:2r:35:ARG:NH2	2.23	0.61
50:1s:31:ILE:O	50:1s:50:ALA:N	2.29	0.61
1:2A:296:C:O3'	20:2Y:95:LYS:NZ	2.34	0.61
1:2A:614(B):G:H2'	5:2F:44:ARG:HH11	1.65	0.61
1:2A:2012:G:H4'	18:2W:96:ILE:HD13	1.81	0.61
1:2A:2110:G:OP1	1:2A:2118:U:N3	2.34	0.61
38:2g:52:GLU:HG2	38:2g:53:LYS:H	1.65	0.61
1:1A:2136:C:C2	1:1A:2155:G:N2	2.69	0.61
1:1A:2431:U:OP2	61:1A:5838:HOH:O	2.16	0.61
1:2A:531:C:OP1	1:2A:561:G:N1	2.34	0.61
32:2a:157:G:H1	32:2a:164:U:H3	1.48	0.61
40:2i:71:SER:HA	40:2i:74:ILE:HD12	1.83	0.61
48:2q:6:LEU:HB2	48:2q:59:ILE:HG12	1.83	0.61
1:1A:839:U:H2'	1:1A:840:C:C6	2.36	0.61
1:2A:31:C:OP1	61:2A:5641:HOH:O	2.17	0.61
1:2A:136:G:H1	1:2A:143(A):C:H42	1.48	0.61
4:2E:77:ILE:HD13	4:2E:195:LEU:HD13	1.83	0.61
34:2c:127:ARG:HH12	34:2c:191:THR:HG22	1.66	0.61
32:1a:1500:A:OP2	61:1a:5254:HOH:O	2.16	0.61
36:1e:74:GLY:HA3	36:1e:116:THR:HG22	1.82	0.61
1:2A:859:G:N2	1:2A:917:A:OP2	2.33	0.61
1:2A:2611:U:C4	27:25:3:LYS:HG2	2.36	0.61
33:2b:121:LEU:HG	33:2b:130:ARG:HH12	1.64	0.61
48:2q:9:VAL:HG22	48:2q:56:VAL:HG22	1.82	0.61
1:1A:880:G:H2'	1:1A:881:G:C8	2.36	0.60
1:1A:2548:G:O6	61:1A:6587:HOH:O	2.14	0.60
1:1A:2706:G:N7	61:1A:6207:HOH:O	2.31	0.60
11:1P:50:ARG:HD3	30:18:7:HIS:CD2	2.36	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:1f:74:ASP:OD1	37:1f:77:ARG:NH2	2.34	0.60
1:2A:1022:G:N2	1:2A:1023:U:O4	2.29	0.60
1:2A:2788:C:OP1	4:2E:61:ARG:NH2	2.34	0.60
28:16:6:ARG:NH1	28:16:26:ASN:HB2	2.16	0.60
32:1a:278:G:OP2	48:1q:92:ARG:NH2	2.34	0.60
36:1e:91:LEU:HD12	36:1e:120:THR:HG22	1.83	0.60
50:1s:80:TYR:CZ	50:1s:82:GLY:HA2	2.36	0.60
8:2I:93:THR:OG1	8:2I:96:ASP:OD1	2.14	0.60
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.34	0.60
44:2m:15:VAL:HG22	44:2m:48:LEU:HD11	1.82	0.60
1:1A:530:G:N1	1:1A:2023:G:OP1	2.29	0.60
1:1A:796:C:H2'	1:1A:797:C:C6	2.37	0.60
6:1G:49:ASP:N	6:1G:49:ASP:OD1	2.34	0.60
10:1O:120:GLU:OE1	15:1T:67:SER:OG	2.10	0.60
1:2A:1376:C:OP2	61:2A:5311:HOH:O	2.15	0.60
1:2A:2064:C:OP2	61:2A:5665:HOH:O	2.16	0.60
38:2g:153:HIS:CE1	42:2k:58:PRO:HD2	2.37	0.60
1:1A:668:G:H5'	1:1A:669:G:OP2	2.01	0.60
32:1a:750:G:O2'	46:1o:21:ASP:OD1	2.19	0.60
32:1a:1507:A:OP2	53:1v:13:A:N6	2.35	0.60
1:2A:1794:U:H2'	1:2A:1795:C:C6	2.36	0.60
22:20:10:THR:HG22	22:20:12:ASN:H	1.66	0.60
40:2i:40:LEU:HD13	40:2i:74:ILE:HD11	1.82	0.60
1:1A:1156:A:OP1	16:1U:55:ARG:NH1	2.34	0.60
1:2A:586:A:N1	1:2A:809:G:O2'	2.27	0.60
1:2A:1507:A:O2'	1:2A:1508:A:O4'	2.19	0.60
23:21:85:LEU:HD23	23:21:89:GLU:HB3	1.83	0.60
32:2a:473:G:H2'	32:2a:474:G:H8	1.64	0.60
33:2b:92:TYR:N	33:2b:151:GLY:O	2.30	0.60
1:1A:2136:C:C4	1:1A:2155:G:C2	2.89	0.60
11:1P:89:ALA:HA	11:1P:121:LYS:HD3	1.83	0.60
32:1a:445:G:H2'	32:1a:446:G:C8	2.37	0.60
32:1a:673:G:H2'	32:1a:674:G:C8	2.36	0.60
32:1a:1027:C:C4	32:1a:1034:G:N1	2.69	0.60
32:1a:1036:G:H5''	32:1a:1037:C:C5	2.36	0.60
32:1a:1239:A:O2'	38:1g:114:ARG:O	2.18	0.60
36:1e:20:GLN:NE2	36:1e:21:ALA:O	2.35	0.60
32:2a:953:G:H5'	32:2a:965:A:H61	1.67	0.60
34:2c:191:THR:OG1	34:2c:194:GLY:O	2.20	0.60
3:1D:206:LEU:HD22	3:1D:211:ARG:HG2	1.84	0.60
35:1d:18:LYS:HG2	60:1d:501:SF4:S1	2.42	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:114:ARG:HB2	38:2g:115:ARG:NH2	2.17	0.60
6:1G:73:ALA:HB3	6:1G:85:GLY:H	1.67	0.60
18:1W:19:LEU:HB3	27:15:25:LEU:HD11	1.83	0.60
1:2A:2857:G:N2	1:2A:2860:A:OP2	2.35	0.60
32:2a:662:G:H2'	32:2a:663:A:H8	1.65	0.60
32:2a:1315:U:O2'	32:2a:1360:A:N3	2.33	0.60
7:1H:3:ARG:NH1	7:1H:5:GLY:H	2.00	0.60
46:1o:82:ILE:O	46:1o:86:GLY:N	2.35	0.60
1:2A:2879:C:OP2	61:2A:5565:HOH:O	2.16	0.60
1:1A:760:G:OP1	61:1A:6343:HOH:O	2.17	0.60
1:1A:1062:G:H22	1:1A:1077:A:N6	1.99	0.60
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.16	0.60
33:1b:224:GLN:HG2	33:1b:229:VAL:HG22	1.84	0.60
36:1e:12:LEU:HD12	36:1e:128:PRO:HB2	1.83	0.60
1:2A:1187:G:H5'	17:2V:81:TYR:CE1	2.36	0.60
21:2Z:130:PRO:HA	21:2Z:133:ILE:HG13	1.83	0.60
27:25:56:LYS:NZ	27:25:58:LEU:O	2.33	0.60
46:2o:25:THR:HG21	46:2o:70:LEU:HB2	1.83	0.60
54:2w:4:C:H42	54:2w:69:G:H1	1.49	0.60
1:1A:2537:U:H2'	1:1A:2538:C:C6	2.37	0.59
1:1A:2746:U:OP1	7:1H:85:LYS:NZ	2.35	0.59
21:1Z:4:ARG:NE	21:1Z:60:GLU:OE2	2.35	0.59
35:1d:15:GLU:OE2	35:1d:66:ARG:NH1	2.35	0.59
42:1k:34:ASP:HB3	42:1k:40:ILE:HD11	1.83	0.59
23:21:50:ARG:HD2	23:21:57:GLU:OE2	2.02	0.59
50:2s:27:GLU:HB2	50:2s:28:LYS:HD3	1.84	0.59
1:1A:278:A:H2'	1:1A:279:C:C6	2.36	0.59
1:1A:1053:C:N4	1:1A:1106:G:H1	1.97	0.59
1:1A:2319:G:H1	14:1S:3:ARG:HA	1.67	0.59
21:1Z:155:LEU:HD12	21:1Z:156:LYS:H	1.67	0.59
38:1g:78:ARG:NH1	38:1g:154:TYR:O	2.35	0.59
40:1i:26:VAL:HG13	40:1i:61:ALA:HB3	1.83	0.59
43:1l:39:VAL:HG11	43:1l:41:ARG:HH11	1.66	0.59
1:2A:271(W):G:O6	61:2A:5701:HOH:O	2.15	0.59
32:1a:1425:U:H2'	32:1a:1426:C:C6	2.37	0.59
39:1h:120:THR:H	39:1h:123:GLU:HB2	1.67	0.59
1:2A:243:U:OP1	30:28:6:THR:OG1	2.19	0.59
1:2A:2126:A:N6	1:2A:2162:G:O2'	2.32	0.59
1:1A:2793:G:N1	1:1A:2803:C:O2	2.35	0.59
32:1a:952:U:H2'	32:1a:953:G:H8	1.65	0.59
33:1b:13:ALA:HB2	33:1b:44:LEU:HD13	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:24:TRP:CD1	33:1b:24:TRP:H	2.20	0.59
41:1j:40:LEU:HB2	41:1j:69:ASN:HB2	1.85	0.59
1:2A:577:G:O6	61:2A:5643:HOH:O	2.13	0.59
1:2A:2136:C:N4	1:2A:2155:G:N1	2.50	0.59
1:2A:2144:U:O2'	1:2A:2147:G:O6	2.20	0.59
1:2A:2299:G:H2'	1:2A:2300:G:H8	1.67	0.59
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.36	0.59
35:2d:63:LYS:HD2	35:2d:198:VAL:HG22	1.84	0.59
1:1A:1827:C:H2'	1:1A:1828:G:H5'	1.83	0.59
35:1d:65:ARG:HH11	35:1d:72:GLU:HB2	1.67	0.59
1:2A:2306:C:N4	6:2G:42:GLY:O	2.35	0.59
32:2a:782:A:OP1	32:2a:1521:G:N2	2.35	0.59
32:2a:939:G:H1	32:2a:1344:C:H42	1.48	0.59
1:1A:81:G:H21	20:1Y:1:MET:HE1	1.66	0.59
1:1A:1025:G:O2'	61:1A:6329:HOH:O	2.14	0.59
1:1A:2123:G:H2'	1:1A:2124:G:H8	1.67	0.59
1:1A:2163:C:OP1	1:1A:2165:G:N2	2.35	0.59
32:1a:7:G:H5'	32:1a:298:A:O4'	2.03	0.59
1:2A:89:G:H3'	1:2A:90:U:H5''	1.83	0.59
32:2a:972:C:O2'	41:2j:55:LYS:O	2.21	0.59
51:2t:50:GLU:HG3	51:2t:100:ILE:HD13	1.84	0.59
5:1F:185:ASP:HA	5:1F:188:ARG:HD3	1.83	0.59
21:1Z:73:GLN:HB3	21:1Z:87:ASP:HB2	1.85	0.59
32:2a:1065:U:H3	32:2a:1109:C:H5''	1.68	0.59
10:1O:110:GLY:HA2	10:1O:112:MET:HE2	1.85	0.59
1:2A:881:G:H3'	1:2A:882:G:H8	1.68	0.59
6:2G:7:LEU:HD13	6:2G:104:GLU:HA	1.84	0.59
22:20:12:ASN:O	22:20:14:ARG:N	2.34	0.59
32:2a:976:G:OP2	32:2a:1358:U:O2'	2.20	0.59
42:2k:22:HIS:HB3	42:2k:29:ILE:HB	1.85	0.59
1:1A:2787:C:H1'	4:1E:62:PRO:HG3	1.84	0.59
32:2a:588:G:OP2	61:2a:5079:HOH:O	2.17	0.59
33:2b:104:ASN:OD1	33:2b:107:THR:OG1	2.20	0.59
33:2b:217:ARG:HA	33:2b:220:ASP:HB2	1.84	0.59
34:2c:71:ALA:HB1	34:2c:109:PRO:HB3	1.85	0.59
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.38	0.59
6:1G:77:ILE:HG22	6:1G:80:PHE:H	1.68	0.59
1:2A:2269:A:OP1	61:2A:5567:HOH:O	2.16	0.59
32:2a:890:G:O2'	32:2a:906:G:O6	2.20	0.59
32:2a:1004:A:H61	32:2a:1037:C:H1'	1.67	0.59
32:2a:1253:G:OP1	41:2j:46:ARG:NH1	2.30	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:15:VAL:HG23	33:2b:16:HIS:HD2	1.67	0.59
41:2j:8:LEU:HB3	41:2j:96:ILE:HG23	1.85	0.59
46:2o:7:GLU:OE1	46:2o:38:ARG:NH2	2.35	0.59
47:2p:5:ARG:HH21	47:2p:28:ARG:HA	1.68	0.59
1:1A:563:G:N7	61:1A:5045:HOH:O	2.32	0.58
36:1e:78:HIS:CD2	39:1h:104:ARG:HD2	2.37	0.58
32:2a:410:G:H21	32:2a:432:A:H62	1.51	0.58
40:2i:99:LEU:HB3	40:2i:101:PHE:CE2	2.38	0.58
41:2j:5:ARG:N	41:2j:99:LYS:O	2.36	0.58
1:1A:458:G:O2'	1:1A:469:G:O6	2.16	0.58
1:1A:2552:2MU:O5'	1:1A:2552:2MU:H6	2.03	0.58
1:2A:621:A:OP2	11:2P:108:LYS:NZ	2.36	0.58
7:2H:118:PRO:HD2	7:2H:121:ILE:HB	1.85	0.58
12:2Q:78:PRO:HG2	12:2Q:81:VAL:HG11	1.85	0.58
38:2g:54:THR:O	38:2g:56:GLN:N	2.36	0.58
1:1A:1827:C:C2'	1:1A:1828:G:H5'	2.33	0.58
3:1D:8:PRO:HB3	3:1D:14:ARG:HG2	1.84	0.58
32:1a:557:G:OP1	61:1a:5113:HOH:O	2.17	0.58
32:1a:1136:U:H5''	32:1a:1137:C:N3	2.19	0.58
1:2A:143:G:H4'	19:2X:35:THR:HG21	1.85	0.58
1:2A:1645:G:H5''	1:2A:1646:C:H5'	1.85	0.58
1:2A:2264:C:N4	22:20:15:ASP:OD2	2.33	0.58
19:2X:88:LYS:NZ	19:2X:90:GLU:OE1	2.27	0.58
32:2a:184:G:H2'	32:2a:185:A:H8	1.68	0.58
32:2a:662:G:H2'	32:2a:663:A:C8	2.37	0.58
34:2c:85:ARG:O	34:2c:89:GLU:N	2.36	0.58
39:1h:34:GLU:OE1	39:1h:37:ARG:NH1	2.36	0.58
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.38	0.58
42:2k:33:THR:HG22	42:2k:39:PRO:HA	1.84	0.58
1:1A:759:G:N7	61:1A:5668:HOH:O	2.32	0.58
1:1A:1057:A:N6	1:1A:1081:U:H3	2.00	0.58
1:1A:1113:U:H2'	1:1A:1114:G:H8	1.69	0.58
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.36	0.58
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.38	0.58
3:1D:70:TRP:CE2	3:1D:150:LYS:HD2	2.38	0.58
12:1Q:11:LYS:NZ	12:1Q:88:GLY:O	2.32	0.58
34:1c:57:ILE:HG12	34:1c:66:VAL:HG12	1.86	0.58
56:1y:33:U:O2'	56:1y:35:A:N7	2.35	0.58
1:2A:2131:G:N7	1:2A:2133:G:N2	2.51	0.58
3:2D:108:PRO:HD2	3:2D:111:LEU:HD22	1.84	0.58
32:2a:448:A:P	32:2a:485:G:H22	2.26	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:977:A:O2'	32:2a:979:C:OP2	2.19	0.58
32:2a:1239:A:H4'	32:2a:1240:U:H5''	1.86	0.58
32:2a:1359:C:OP1	45:2n:22:THR:OG1	2.15	0.58
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.37	0.58
1:1A:2161:C:HO2'	1:1A:2162:G:H5''	1.69	0.58
21:1Z:128:VAL:HG23	21:1Z:161:VAL:HG12	1.85	0.58
26:14:16:CYS:SG	26:14:17:GLY:N	2.76	0.58
32:1a:447:G:O6	32:1a:485:G:O2'	2.22	0.58
10:2O:120:GLU:OE1	15:2T:67:SER:OG	2.22	0.58
34:2c:108:ASN:HB3	34:2c:111:LEU:HB2	1.85	0.58
32:1a:165:C:H2'	32:1a:166:G:H8	1.68	0.58
32:1a:1373:G:H5''	38:1g:36:LYS:HE2	1.84	0.58
1:2A:1362:C:HO2'	1:2A:1810:A:HO2'	1.51	0.58
1:2A:1671:U:OP2	61:2A:6050:HOH:O	2.16	0.58
5:2F:20:LEU:HD13	5:2F:125:LEU:HD13	1.86	0.58
32:2a:1255:G:OP2	41:2j:45:ARG:NH2	2.36	0.58
34:2c:190:ARG:NE	34:2c:190:ARG:O	2.37	0.58
50:2s:28:LYS:NZ	50:2s:46:GLY:O	2.29	0.58
1:1A:2727:G:O2'	10:1O:70:LYS:NZ	2.36	0.58
32:1a:1386:G:N7	61:1a:5358:HOH:O	2.32	0.58
1:2A:1779:U:OP2	61:2A:5924:HOH:O	2.17	0.58
1:2A:2875:C:O2'	15:2T:2:ASN:OD1	2.20	0.58
11:2P:125:VAL:HG23	11:2P:145:PRO:HA	1.84	0.58
32:2a:1272:G:N2	32:2a:1273:G:N7	2.52	0.58
33:2b:78:GLN:HA	33:2b:94:ASN:HD21	1.69	0.58
43:2l:32:PHE:HB3	43:2l:84:LEU:HD11	1.86	0.58
33:1b:80:ILE:HD13	33:1b:211:ILE:HG22	1.85	0.58
1:2A:855:G:O2'	22:20:27:GLU:OE2	2.22	0.58
1:2A:2318:G:H21	14:2S:3:ARG:NE	2.02	0.58
7:2H:46:GLU:HB2	7:2H:49:VAL:HG12	1.86	0.58
22:20:56:ASP:CG	22:20:58:THR:HG1	2.12	0.58
44:2m:19:LEU:HD21	44:2m:56:LEU:HD21	1.85	0.58
1:1A:7:G:H2'	1:1A:8:A:O4'	2.03	0.58
35:1d:3:ARG:HD3	35:1d:118:ARG:HD3	1.85	0.58
1:2A:2291:U:H2'	1:2A:2292:C:C6	2.39	0.58
5:2F:113:ALA:HB1	5:2F:186:ILE:HG21	1.84	0.58
16:2U:58:ARG:HA	16:2U:61:TRP:CE3	2.38	0.58
21:2Z:47:VAL:HA	21:2Z:50:GLN:HE22	1.69	0.58
32:2a:307:C:OP1	61:2a:5105:HOH:O	2.17	0.58
32:2a:1020:U:H2'	32:2a:1021:G:C8	2.39	0.58
34:2c:6:HIS:ND1	45:2n:49:HIS:HB3	2.19	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:1F:195:ASP:HB3	5:1F:198:ALA:H	1.67	0.57
32:1a:972:C:OP2	41:1j:57:LYS:NZ	2.35	0.57
9:2N:67:LEU:HD23	9:2N:88:GLU:HG2	1.85	0.57
1:1A:1688:U:O2	1:1A:1700:A:H5'	2.04	0.57
32:1a:1305:G:H22	32:1a:1331:G:H1'	1.69	0.57
43:1l:117:ARG:HB3	43:1l:122:THR:HB	1.85	0.57
51:1t:22:ARG:O	51:1t:26:ASN:ND2	2.37	0.57
1:2A:438:G:N7	61:2A:5491:HOH:O	2.32	0.57
1:1A:654:A:OP2	61:1A:6208:HOH:O	2.17	0.57
4:1E:47:VAL:HG11	4:1E:86:PRO:HD2	1.86	0.57
7:1H:56:SER:OG	7:1H:57:ASP:N	2.36	0.57
8:1I:75:LEU:HD22	8:1I:105:HIS:CD2	2.39	0.57
20:1Y:82:PRO:O	20:1Y:101:LYS:NZ	2.31	0.57
1:2A:787:U:OP2	61:2A:5413:HOH:O	2.18	0.57
1:2A:1023:U:OP2	61:2A:5892:HOH:O	2.17	0.57
5:2F:185:ASP:HA	5:2F:188:ARG:HD3	1.85	0.57
12:2Q:110:THR:HB	12:2Q:113:GLN:H	1.68	0.57
1:1A:887:A:H2	1:1A:889:C:H3'	1.68	0.57
1:1A:1113:U:H2'	1:1A:1114:G:C8	2.39	0.57
32:1a:942:G:H21	40:1i:124:GLN:NE2	2.02	0.57
32:1a:1427:U:H2'	32:1a:1428:A:C8	2.38	0.57
51:1t:47:GLY:N	51:1t:48:LYS:HB2	2.19	0.57
1:2A:890:A:H2'	1:2A:892:G:H8	1.68	0.57
1:2A:2035:G:OP1	61:2A:5599:HOH:O	2.17	0.57
1:2A:2336:A:H61	22:20:43:THR:HG22	1.68	0.57
1:2A:2646:C:OP2	1:2A:2732:G:O2'	2.21	0.57
32:2a:288:A:H2'	32:2a:289:G:H4'	1.86	0.57
32:2a:737:A:H1'	37:2f:73:ASN:HD21	1.69	0.57
34:2c:18:TRP:HB2	34:2c:21:ARG:HG2	1.87	0.57
39:2h:17:THR:HG22	39:2h:63:LEU:HD13	1.85	0.57
32:1a:656:C:O2'	46:1o:28:GLN:OE1	2.19	0.57
32:1a:1003:G:C4	32:1a:1004:A:H2	2.23	0.57
1:2A:1747(A):G:H2'	1:2A:1748:G:H8	1.68	0.57
32:2a:472:A:O2'	47:2p:82:GLN:N	2.37	0.57
32:2a:675:A:O2'	42:2k:114:VAL:O	2.22	0.57
1:1A:271(E):U:H2'	1:1A:271(F):C:C6	2.40	0.57
1:1A:2646:C:H2'	1:1A:2647:U:O4'	2.04	0.57
19:1X:31:HIS:CD2	19:1X:33:LYS:H	2.23	0.57
36:1e:137:GLU:OE2	36:1e:141:GLN:NE2	2.34	0.57
10:2O:20:MET:HE3	10:2O:44:LYS:HE3	1.87	0.57
34:2c:37:GLN:NE2	45:2n:52:GLN:OE1	2.34	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1068:G:H1'	1:1A:1096:A:N3	2.20	0.57
1:1A:2131:G:H5''	1:1A:2132:U:H3'	1.86	0.57
8:1I:3:VAL:HG12	8:1I:38:LEU:HA	1.86	0.57
29:17:46:VAL:HG22	29:17:48:LYS:HG2	1.87	0.57
32:1a:194:C:H2'	32:1a:195:A:H5''	1.87	0.57
37:1f:1:MET:HE2	37:1f:68:PRO:HD3	1.87	0.57
43:1l:88:GLY:O	43:1l:99:HIS:HD2	1.87	0.57
1:2A:1325:G:OP1	61:2A:5608:HOH:O	2.18	0.57
1:2A:1803:A:H4'	3:2D:259:THR:HG23	1.86	0.57
21:2Z:171:ILE:HD12	21:2Z:172:ALA:H	1.68	0.57
17:1V:62:LEU:HD12	17:1V:93:GLU:HG2	1.85	0.57
1:2A:276:A:H5''	1:2A:277:C:H5'	1.86	0.57
1:2A:995:C:OP2	16:2U:54:LYS:NZ	2.38	0.57
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.39	0.57
32:2a:417:C:H2'	32:2a:418:C:C6	2.40	0.57
35:2d:153:ARG:NH2	35:2d:180:GLY:O	2.38	0.57
1:1A:2206:G:H3'	1:1A:2207:G:H8	1.67	0.57
10:1O:48:PRO:HB3	32:1a:1422:G:H5''	1.87	0.57
10:1O:115:VAL:HG13	10:1O:121:VAL:HG21	1.85	0.57
1:2A:794:G:OP1	61:2A:5974:HOH:O	2.17	0.57
1:2A:1847:A:H3'	1:2A:1848:A:H5'	1.87	0.57
1:2A:2143:C:H2'	1:2A:2144:U:O4'	2.04	0.57
6:2G:125:PHE:HB3	6:2G:166:ASP:CG	2.30	0.57
32:2a:142:G:H2'	32:2a:143:A:H8	1.70	0.57
32:2a:1310:G:H5'	44:2m:77:ASN:ND2	2.20	0.57
40:2i:16:ARG:HB2	40:2i:64:THR:HG22	1.86	0.57
56:2y:15:G:N2	56:2y:21:A:H1'	2.19	0.57
4:1E:119:ARG:HD2	4:1E:160:TYR:HB2	1.87	0.57
1:2A:80:G:H1	1:2A:106:C:H42	1.53	0.57
7:2H:76:VAL:O	7:2H:80:SER:OG	2.23	0.57
15:2T:24:PRO:HD3	15:2T:52:ILE:HD12	1.85	0.57
17:2V:62:LEU:HD12	17:2V:93:GLU:HG2	1.86	0.57
26:24:58:ARG:HD2	50:2s:68:GLY:N	2.19	0.57
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.04	0.57
32:2a:1513:A:H2'	32:2a:1514:C:C6	2.40	0.57
1:1A:2291:U:H2'	1:1A:2292:C:C6	2.41	0.56
1:1A:2483:C:OP2	61:1A:5404:HOH:O	2.18	0.56
11:1P:63:PRO:HD3	30:18:27:THR:HG22	1.86	0.56
16:1U:75:ASN:OD1	16:1U:78:THR:OG1	2.22	0.56
35:1d:111:ALA:HB2	35:1d:120:LEU:HD12	1.87	0.56
1:2A:1434:A:H61	1:2A:1558:A:H62	1.53	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2150:U:H2'	1:2A:2151:G:H8	1.68	0.56
1:2A:2637:U:OP1	4:2E:82:ARG:NH1	2.37	0.56
6:2G:104:GLU:OE1	26:24:24:THR:OG1	2.20	0.56
32:2a:390:C:H2'	32:2a:391:G:C8	2.38	0.56
1:1A:1453:U:O2'	1:1A:1455:G:N7	2.38	0.56
10:1O:20:MET:HE3	10:1O:44:LYS:HE3	1.87	0.56
19:1X:94:GLY:H	19:1X:95:LEU:C	2.13	0.56
32:1a:1499:A:OP2	61:1a:5253:HOH:O	2.18	0.56
37:1f:23:LYS:HA	37:1f:26:ILE:HD12	1.86	0.56
1:2A:724:U:H2'	1:2A:725:G:O4'	2.05	0.56
32:2a:113:G:N3	32:2a:353:A:O2'	2.38	0.56
32:2a:1179:A:H4'	40:2i:103:THR:HA	1.87	0.56
1:1A:884:C:N4	1:1A:892:G:H1	2.00	0.56
1:1A:2319:G:H22	14:1S:3:ARG:HD3	1.70	0.56
3:1D:106:ILE:HD11	3:1D:144:ALA:HB2	1.88	0.56
7:1H:149:ARG:NH1	7:1H:167:GLU:OE1	2.38	0.56
20:1Y:102:CYS:SG	20:1Y:103:GLY:N	2.78	0.56
32:1a:258:G:H2'	32:1a:259:G:H8	1.70	0.56
32:1a:841:U:C4	32:1a:848:C:H1'	2.41	0.56
32:1a:1286:A:H2'	32:1a:1287:A:H4'	1.87	0.56
32:1a:1412:C:H2'	32:1a:1413:A:C8	2.40	0.56
33:1b:193:ASP:HB3	33:1b:196:LEU:HD22	1.87	0.56
39:1h:29:SER:HB3	39:1h:32:LYS:HD3	1.86	0.56
40:1i:42:ARG:NH1	40:1i:71:SER:OG	2.37	0.56
56:1y:40:C:H2'	56:1y:41:C:H6	1.69	0.56
1:2A:252:G:OP1	11:2P:50:ARG:NH1	2.29	0.56
1:2A:2643:G:O6	61:2A:5987:HOH:O	2.14	0.56
7:2H:101:ARG:HH12	7:2H:122:THR:HA	1.70	0.56
10:2O:59:LYS:NZ	10:2O:89:ASN:OD1	2.34	0.56
11:2P:84:ASN:OD1	11:2P:117:GLU:N	2.38	0.56
32:2a:1074:G:O2'	32:2a:1101:A:N1	2.36	0.56
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.06	0.56
32:2a:1323:G:H2'	32:2a:1324:A:C8	2.40	0.56
61:2a:5212:HOH:O	47:2p:12:LYS:NZ	2.33	0.56
37:2f:3:ARG:NE	37:2f:38:GLU:OE2	2.38	0.56
44:2m:82:MET:HE3	44:2m:92:HIS:HB3	1.87	0.56
48:2q:81:ARG:NH2	48:2q:84:LEU:HD21	2.19	0.56
1:1A:602:G:O2'	1:1A:655:A:N6	2.35	0.56
1:1A:1062:G:P	1:1A:1070:A:H1'	2.44	0.56
1:1A:1740:G:H2'	1:1A:1741:A:H8	1.69	0.56
1:1A:2108:C:H2'	1:1A:2109:U:H6	1.69	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:13:7:LYS:HE3	25:13:32:GLN:HE21	1.71	0.56
42:1k:48:ILE:O	42:1k:50:TYR:N	2.37	0.56
1:2A:882:G:H1	1:2A:894:C:N4	1.97	0.56
1:2A:1449:A:O2'	1:2A:1529:G:N2	2.32	0.56
16:2U:29:SER:OG	16:2U:30:LYS:NZ	2.29	0.56
32:2a:745:C:H2'	32:2a:746:A:C8	2.40	0.56
32:2a:1004:A:N6	32:2a:1037:C:O2	2.35	0.56
32:2a:1051:C:N4	32:2a:1207:2MG:HN1	2.02	0.56
37:2f:8:ILE:HD12	37:2f:26:ILE:HD13	1.87	0.56
32:1a:811:C:N4	61:1a:5103:HOH:O	2.38	0.56
1:2A:2506:U:O2'	54:2w:76:F3N:H4'	2.06	0.56
9:2N:96:GLU:CD	9:2N:96:GLU:H	2.12	0.56
28:26:40:CYS:O	28:26:44:ARG:N	2.34	0.56
32:2a:701:C:OP1	32:2a:702:A:O2'	2.22	0.56
36:2e:105:VAL:HB	36:2e:106:PRO:HD3	1.88	0.56
32:1a:952:U:H2'	32:1a:953:G:C8	2.40	0.56
33:1b:112:VAL:HG12	33:1b:149:LEU:HD13	1.87	0.56
37:1f:2:ARG:HD2	37:1f:69:GLU:HB3	1.87	0.56
1:2A:2567:G:H2'	1:2A:2568:C:C6	2.40	0.56
14:2S:48:LEU:HD23	14:2S:82:ILE:HD11	1.88	0.56
32:2a:814:A:H2'	32:2a:816:A:H5''	1.87	0.56
46:2o:6:GLU:OE1	46:2o:6:GLU:N	2.39	0.56
1:1A:322:A:OP1	5:1F:168:ARG:HD3	2.05	0.56
56:1y:36:A:H2'	56:1y:37:MIA:O4'	2.06	0.56
32:2a:1289:A:H3'	32:2a:1290:G:H8	1.70	0.56
41:2j:40:LEU:HB2	41:2j:69:ASN:HB3	1.86	0.56
49:2r:26:LEU:HD11	49:2r:42:ARG:HD3	1.88	0.56
1:1A:731:C:OP1	61:1A:6342:HOH:O	2.18	0.56
1:1A:1300:U:H4'	1:1A:1301:A:H5''	1.87	0.56
1:1A:2629:A:H1'	1:1A:2630:G:C5'	2.35	0.56
15:1T:24:PRO:HA	15:1T:49:VAL:HG22	1.87	0.56
32:1a:1027:C:N1	32:1a:1034:G:N2	2.53	0.56
33:1b:170:GLU:HG3	33:1b:173:ALA:HB3	1.87	0.56
38:1g:113:GLU:HG2	38:1g:119:ARG:HG2	1.88	0.56
10:2O:80:ASP:OD2	15:2T:64:ARG:NH2	2.39	0.56
21:2Z:98:MET:HE2	21:2Z:100:VAL:HG23	1.87	0.56
54:2w:51:U:H2'	54:2w:52:G:H8	1.70	0.56
1:1A:1823:G:OP1	3:1D:54:ARG:NH1	2.39	0.56
1:1A:1851:U:H4'	56:1y:71:G:H4'	1.88	0.56
12:1Q:1:MET:HG2	12:1Q:44:ALA:HB1	1.88	0.56
32:1a:341:C:H2'	32:1a:342:C:C6	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:1s:28:LYS:HD3	50:1s:47:HIS:CD2	2.41	0.56
12:2Q:45:GLN:N	12:2Q:45:GLN:OE1	2.34	0.56
1:1A:1173:G:N1	1:1A:1176:G:OP2	2.37	0.56
1:1A:1740:G:H2'	1:1A:1741:A:C8	2.40	0.56
2:1B:33:G:H5'	6:1G:2:PRO:HD3	1.87	0.56
32:1a:45:U:H2'	32:1a:46:G:C8	2.41	0.56
12:2Q:36:ALA:HB2	12:2Q:103:MET:SD	2.45	0.56
24:22:64:LEU:HD11	24:22:68:ARG:HH21	1.71	0.56
32:2a:1397:C:OP2	36:2e:24:ARG:NH2	2.39	0.56
34:2c:142:MET:HG3	34:2c:170:GLN:HB3	1.87	0.56
36:2e:60:TYR:CZ	36:2e:64:ARG:HD3	2.41	0.56
1:1A:1938:A:OP2	61:1A:5274:HOH:O	2.17	0.55
1:1A:2016:U:OP2	61:1A:6829:HOH:O	2.18	0.55
1:1A:2123:G:H1	1:1A:2175:C:H42	1.52	0.55
11:1P:38:GLN:O	11:1P:40:SER:N	2.35	0.55
1:2A:81:G:HO2'	1:2A:295:G:HO2'	1.53	0.55
1:2A:2081:C:O2'	61:2A:5052:HOH:O	2.16	0.55
26:24:46:GLN:NE2	26:24:48:ARG:HD3	2.21	0.55
32:2a:134:A:H61	47:2p:25:ARG:NH1	2.04	0.55
1:1A:783:A:O2'	1:1A:785:G:OP1	2.23	0.55
1:1A:2155:G:H2'	1:1A:2155:G:N3	2.21	0.55
5:1F:116:ASP:OD1	5:1F:119:ARG:NH2	2.39	0.55
15:1T:30:VAL:HG22	15:1T:86:ILE:HG12	1.88	0.55
33:1b:16:HIS:CG	33:1b:17:PHE:N	2.74	0.55
1:2A:212:G:H2'	1:2A:213:A:O4'	2.05	0.55
1:2A:1300:U:H4'	1:2A:1301:A:H5''	1.87	0.55
1:2A:1462:C:H4'	1:2A:2703:C:H5'	1.88	0.55
1:2A:1858:G:O6	61:2A:5745:HOH:O	2.16	0.55
61:2A:6264:HOH:O	23:21:48:LYS:O	2.18	0.55
40:2i:3:GLN:HE21	40:2i:20:ARG:HE	1.53	0.55
56:2y:15:G:N1	56:2y:48:C:N3	2.53	0.55
1:1A:1058:G:H1	1:1A:1080:C:H42	1.55	0.55
17:1V:1:MET:HB3	17:1V:99:ILE:HD12	1.88	0.55
19:1X:54:VAL:HG22	19:1X:81:VAL:HG12	1.89	0.55
32:1a:159:G:O2'	32:1a:161:A:N7	2.33	0.55
1:2A:1794:U:H2'	1:2A:1795:C:H6	1.70	0.55
1:2A:1800:C:OP2	3:2D:183:ARG:NH2	2.38	0.55
15:2T:92:GLY:O	15:2T:120:ARG:NH2	2.39	0.55
38:2g:50:ILE:HD11	38:2g:58:PRO:HA	1.88	0.55
1:1A:2591:C:H2'	1:1A:2592:G:C8	2.41	0.55
35:1d:173:TRP:CD1	35:1d:173:TRP:H	2.23	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:14:ARG:NH2	44:1m:16:ASP:OD2	2.35	0.55
1:2A:362:U:O2'	1:2A:363:G:H5'	2.07	0.55
32:2a:148:G:H2'	32:2a:149:A:H8	1.69	0.55
32:2a:407:G:OP1	35:2d:115:ARG:NH2	2.39	0.55
33:2b:16:HIS:HB3	33:2b:210:SER:HB2	1.88	0.55
35:2d:170:VAL:HG11	35:2d:176:LEU:HD22	1.88	0.55
1:1A:882:G:H4'	54:1w:19:G:O6	2.07	0.55
1:1A:1187:G:H5''	17:1V:81:TYR:CE1	2.41	0.55
1:1A:2108:C:H2'	1:1A:2109:U:C6	2.42	0.55
32:1a:171:A:H2'	32:1a:172:A:C8	2.41	0.55
32:1a:1239:A:H62	32:1a:1299:A:N6	2.05	0.55
40:1i:28:VAL:HG22	40:1i:63:ILE:HB	1.88	0.55
51:1t:83:ARG:HA	51:1t:86:ARG:HH11	1.71	0.55
1:2A:643:A:N1	1:2A:2369:A:O2'	2.39	0.55
1:2A:2206:G:H3'	1:2A:2207:G:H8	1.68	0.55
3:2D:26:LYS:NZ	3:2D:83:GLU:OE2	2.38	0.55
6:2G:54:GLU:O	6:2G:58:GLN:N	2.30	0.55
7:2H:43:VAL:HG13	7:2H:52:VAL:HG22	1.87	0.55
32:2a:7:G:H5'	32:2a:298:A:O4'	2.07	0.55
1:1A:1022:G:OP2	9:1N:65:LYS:NZ	2.40	0.55
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.42	0.55
1:1A:2765:A:OP2	61:1A:6380:HOH:O	2.18	0.55
24:12:17:SER:N	24:12:20:GLU:OE1	2.23	0.55
32:1a:828:A:H2'	32:1a:829:G:O4'	2.06	0.55
32:1a:1016:A:H2'	32:1a:1017:G:O4'	2.07	0.55
32:2a:624:C:H2'	32:2a:625:G:H8	1.70	0.55
61:2a:5044:HOH:O	43:2l:86:ARG:NH1	2.38	0.55
1:1A:847:U:OP2	61:1A:7290:HOH:O	2.18	0.55
1:1A:1278:A:OP1	13:1R:36:THR:HG23	2.07	0.55
1:1A:2790:A:H3'	1:1A:2790:A:N3	2.22	0.55
32:1a:755:G:OP2	46:1o:65:ARG:HD2	2.07	0.55
32:1a:1320:C:O2	50:1s:36:ARG:NH2	2.39	0.55
1:2A:332:A:O2'	1:2A:334:C:OP2	2.20	0.55
1:2A:500:G:H22	1:2A:503:A:H5'	1.70	0.55
32:2a:973:G:H3'	32:2a:974:A:H5''	1.89	0.55
32:2a:1239:A:H62	32:2a:1299:A:H61	1.53	0.55
37:2f:67:MET:HE3	37:2f:72:VAL:HG22	1.88	0.55
1:1A:2262:U:H5	22:10:16:SER:HB3	1.72	0.55
1:1A:2517:C:OP1	61:1A:6970:HOH:O	2.18	0.55
5:1F:184:TYR:CE2	5:1F:188:ARG:HD2	2.42	0.55
34:1c:131:ARG:HH21	36:1e:50:GLU:HG3	1.70	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:59:LEU:HD12	21:2Z:69:THR:HG21	1.89	0.55
32:2a:148:G:H2'	32:2a:149:A:C8	2.42	0.55
1:1A:2156:G:OP2	1:1A:2156:G:H8	1.90	0.55
8:1I:79:ILE:HB	8:1I:144:VAL:HG12	1.89	0.55
15:1T:127:ALA:O	15:1T:129:ARG:N	2.36	0.55
18:1W:4:LYS:HD3	18:1W:6:ILE:HD11	1.89	0.55
32:1a:165:C:H2'	32:1a:166:G:C8	2.42	0.55
32:1a:636:U:H2'	32:1a:637:G:C8	2.42	0.55
33:1b:208:ILE:HD13	33:1b:208:ILE:H	1.71	0.55
43:1l:53:ARG:HB3	43:1l:69:TYR:HE1	1.71	0.55
1:2A:1266:G:O5'	18:2W:15:ARG:NH2	2.39	0.55
1:2A:2482:G:O2'	54:2w:64:A:O2'	2.21	0.55
1:1A:382:G:O6	61:1A:7137:HOH:O	2.18	0.55
25:13:8:LEU:HG	25:13:31:LEU:HD23	1.87	0.55
32:1a:401:C:H2'	32:1a:402:G:H8	1.72	0.55
37:1f:8:ILE:HD11	37:1f:79:LEU:HD13	1.88	0.55
16:2U:17:ILE:HA	16:2U:20:LEU:HD12	1.89	0.55
32:2a:123:C:OP1	32:2a:311:C:O2'	2.22	0.55
32:2a:1026:G:O6	32:2a:1036:G:N2	2.40	0.55
32:2a:1261:A:H5'	32:2a:1284:C:OP1	2.07	0.55
35:2d:107:ARG:HH12	35:2d:194:LEU:HD23	1.72	0.55
51:2t:10:LEU:HG	51:2t:12:ALA:H	1.72	0.55
1:1A:2317:C:H2'	1:1A:2318:G:O4'	2.07	0.54
34:1c:174:PRO:HD2	34:1c:182:ILE:HD11	1.88	0.54
41:1j:34:VAL:HA	41:1j:74:ILE:HA	1.88	0.54
54:1w:60:U:H5''	54:1w:61:C:H5	1.73	0.54
1:2A:1225:G:H4'	17:2V:84:LYS:HG2	1.88	0.54
19:2X:60:ARG:HH12	29:27:47:ARG:HH12	1.55	0.54
21:2Z:72:ARG:NH1	21:2Z:97:GLU:O	2.37	0.54
22:20:27:GLU:HB2	22:20:69:PHE:HD1	1.72	0.54
32:2a:130:A:O2'	32:2a:131:C:O5'	2.25	0.54
34:2c:112:SER:HB3	34:2c:115:LEU:HD22	1.88	0.54
1:1A:1062:G:H22	1:1A:1077:A:H61	1.55	0.54
32:1a:789:U:O2'	32:1a:791:G:N7	2.32	0.54
32:1a:1002:G:H3'	32:1a:1003:G:C4'	2.36	0.54
1:2A:566:U:OP1	17:2V:80:GLN:NE2	2.41	0.54
1:2A:887:A:H4'	1:2A:888:C:C5	2.42	0.54
1:2A:894:C:O2'	1:2A:895:U:H5''	2.07	0.54
7:2H:11:VAL:HG13	7:2H:15:VAL:HG23	1.89	0.54
32:2a:335:C:O2'	32:2a:1433:A:N3	2.33	0.54
32:2a:1015:A:H2'	32:2a:1016:A:C8	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:30:SER:O	41:2j:81:THR:OG1	2.15	0.54
54:2w:43:C:H2'	54:2w:44:G:C8	2.41	0.54
1:1A:2447:G:OP2	61:1A:7286:HOH:O	2.18	0.54
32:1a:976:G:H5'	32:1a:1358:U:O2'	2.08	0.54
37:1f:6:VAL:HG22	37:1f:90:VAL:HG22	1.88	0.54
37:1f:44:GLY:HA2	37:1f:59:TYR:CZ	2.43	0.54
1:2A:7:G:H2'	1:2A:8:A:C8	2.43	0.54
1:2A:2206:G:H5''	1:2A:2207:G:N7	2.22	0.54
1:2A:2564:A:C2	1:2A:2647:U:H4'	2.42	0.54
30:28:63:PRO:HG2	30:28:64:TYR:CE2	2.42	0.54
33:2b:83:MET:HE2	33:2b:234:PRO:HG3	1.88	0.54
39:2h:11:THR:HG22	39:2h:15:ASN:HD21	1.71	0.54
1:1A:1062:G:H8	1:1A:1070:A:H4'	1.73	0.54
1:1A:1068:G:O2'	1:1A:1070:A:N7	2.40	0.54
1:1A:1119:C:N4	61:1A:6616:HOH:O	2.41	0.54
61:1A:7170:HOH:O	2:1B:23:G:O6	2.17	0.54
14:1S:106:ARG:HG3	14:1S:112:PHE:CE2	2.42	0.54
21:1Z:156:LYS:HE3	21:1Z:158:PRO:HD3	1.90	0.54
26:14:57:GLU:OE2	26:14:58:ARG:NH1	2.39	0.54
1:2A:8:A:H2'	1:2A:9:U:H6	1.72	0.54
1:2A:271(G):C:O2	1:2A:271(R):G:N2	2.41	0.54
1:2A:1223:G:N2	1:2A:1226:A:OP2	2.30	0.54
3:2D:95:LEU:HD11	3:2D:105:ILE:HD13	1.89	0.54
7:2H:24:VAL:HG22	7:2H:35:VAL:HB	1.89	0.54
1:1A:1155:A:P	16:1U:55:ARG:HD2	2.47	0.54
1:1A:1778:U:H2'	1:1A:1784:A:N6	2.21	0.54
1:1A:2306:C:N4	6:1G:42:GLY:O	2.39	0.54
7:1H:25:LYS:HG3	7:1H:34:GLU:HG2	1.89	0.54
32:1a:236:G:OP1	48:1q:40:LYS:NZ	2.40	0.54
39:1h:51:VAL:HG12	39:1h:52:ASP:H	1.71	0.54
54:1w:7:A:H61	54:1w:66:U:H3	1.54	0.54
1:2A:340:A:H2'	1:2A:341:G:O4'	2.07	0.54
1:2A:400:G:O6	61:2A:5736:HOH:O	2.16	0.54
32:2a:864:A:H5'	36:2e:86:ALA:HB2	1.89	0.54
32:2a:1193:G:O2'	36:2e:25:ARG:NH2	2.41	0.54
33:2b:28:PHE:CD2	33:2b:190:THR:HA	2.42	0.54
38:2g:22:LEU:HG	38:2g:62:PHE:HE2	1.72	0.54
1:1A:2161:C:O2'	1:1A:2162:G:H5''	2.07	0.54
32:1a:1071:C:H2'	32:1a:1072:G:H8	1.73	0.54
33:1b:101:MET:HA	33:1b:108:ILE:HD12	1.89	0.54
1:2A:1147:C:H2'	1:2A:1148:A:C8	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:53:THR:N	5:2F:56:GLU:OE1	2.24	0.54
32:2a:1033:G:H2'	32:2a:1034:G:H8	1.72	0.54
47:2p:70:ALA:O	47:2p:74:LEU:HG	2.07	0.54
54:2w:8:4SU:N3	54:2w:15:G:O6	2.41	0.54
1:1A:1280:G:O6	61:1A:6978:HOH:O	2.16	0.54
1:1A:2136:C:C4	1:1A:2155:G:N1	2.76	0.54
1:1A:2286:A:H4'	1:1A:2287:A:O4'	2.08	0.54
32:1a:250:A:H4'	32:1a:251:G:O5'	2.08	0.54
32:1a:613:C:H2'	32:1a:614:A:H8	1.73	0.54
32:1a:748:C:H4'	32:1a:749:C:O5'	2.07	0.54
1:2A:1423:G:OP1	1:2A:1492:G:O2'	2.26	0.54
7:2H:159:GLU:HG3	7:2H:169:VAL:HG11	1.89	0.54
11:2P:39:LYS:HB2	11:2P:45:LEU:HD13	1.89	0.54
32:2a:1129:C:OP1	40:2i:66:ARG:NH1	2.41	0.54
32:2a:1164:G:H1	32:2a:1172:C:H42	1.54	0.54
33:2b:103:THR:HG22	33:2b:180:LEU:HD21	1.89	0.54
1:1A:1039:G:H1	1:1A:1116:C:N4	1.91	0.54
16:1U:52:ARG:HG2	16:1U:55:ARG:NH2	2.22	0.54
22:10:10:THR:HG22	22:10:12:ASN:N	2.20	0.54
31:19:27:CYS:SG	31:19:28:GLU:N	2.81	0.54
56:1y:38:A:H2'	56:1y:39:PSU:O4'	2.08	0.54
12:2Q:1:MET:HG2	12:2Q:44:ALA:HB1	1.90	0.54
32:2a:1136:U:OP2	32:2a:1137:C:N4	2.41	0.54
32:2a:1202:G:O4'	45:2n:29:ARG:NH1	2.41	0.54
33:2b:170:GLU:HB3	33:2b:173:ALA:HB3	1.90	0.54
1:1A:2371:G:O6	61:1A:5998:HOH:O	2.17	0.54
33:1b:24:TRP:H	33:1b:24:TRP:HD1	1.55	0.54
1:2A:811:U:H2'	11:2P:21:ARG:HA	1.90	0.54
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.43	0.54
12:2Q:57:HIS:CD2	12:2Q:117:ALA:HB2	2.43	0.54
20:2Y:102:CYS:SG	20:2Y:103:GLY:N	2.81	0.54
32:2a:1053:G:N7	32:2a:1200:C:H5''	2.22	0.54
1:1A:1044:G:H5'	1:1A:1045:A:OP2	2.08	0.54
1:1A:1701:A:OP2	61:1A:6383:HOH:O	2.18	0.54
6:1G:179:PRO:HG3	26:14:43:TYR:CZ	2.43	0.54
10:1O:36:GLY:HA3	10:1O:109:LYS:HD2	1.90	0.54
32:1a:1469:G:H2'	32:1a:1470:G:H8	1.73	0.54
34:1c:35:GLU:OE1	34:1c:97:LYS:NZ	2.39	0.54
38:1g:78:ARG:HE	38:1g:79:ARG:HE	1.55	0.54
49:1r:48:GLY:O	49:1r:74:ARG:NH2	2.41	0.54
13:2R:97:VAL:HG22	13:2R:114:VAL:HG13	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:447:G:O6	32:2a:485:G:O2'	2.23	0.54
33:2b:118:LEU:HD23	33:2b:142:LEU:HB2	1.90	0.54
38:2g:114:ARG:HB2	38:2g:115:ARG:HH22	1.72	0.54
2:1B:14:U:OP2	2:1B:70:C:O2'	2.23	0.53
15:1T:127:ALA:C	15:1T:129:ARG:N	2.65	0.53
33:1b:84:GLU:HB3	33:1b:219:VAL:HG21	1.90	0.53
36:1e:81:GLU:HG2	36:1e:90:VAL:HG13	1.90	0.53
36:1e:92:LYS:HB3	36:1e:119:LEU:HB2	1.90	0.53
36:1e:101:ILE:O	36:1e:120:THR:OG1	2.22	0.53
42:1k:91:ARG:NH1	42:1k:110:ASP:OD1	2.41	0.53
54:1w:18:G:O2'	54:1w:57:G:N2	2.34	0.53
1:2A:884:C:H3'	1:2A:885:C:C6	2.43	0.53
3:2D:97:TYR:C	3:2D:99:ASP:H	2.15	0.53
6:2G:53:LEU:HD12	6:2G:56:ALA:HB2	1.90	0.53
18:2W:12:ILE:HD13	18:2W:17:VAL:HG13	1.89	0.53
32:2a:513:C:H2'	32:2a:514:C:C6	2.43	0.53
32:2a:921:U:O2'	36:2e:19:MET:O	2.23	0.53
33:2b:187:LEU:HA	33:2b:201:ILE:HB	1.90	0.53
1:1A:2467:C:H4'	12:1Q:123:HIS:CD2	2.43	0.53
32:1a:1240:U:OP2	38:1g:116:ALA:N	2.40	0.53
21:2Z:93:ASP:HB3	21:2Z:131:ARG:HH22	1.73	0.53
32:2a:299:G:H8	32:2a:299:G:O5'	1.92	0.53
34:2c:16:ARG:NH2	34:2c:183:ASP:OD1	2.41	0.53
44:2m:80:ARG:HH22	50:2s:69:HIS:HE1	1.56	0.53
47:2p:22:THR:HA	47:2p:33:ILE:HG13	1.91	0.53
1:1A:871:U:OP2	12:1Q:5:ARG:NH1	2.42	0.53
1:1A:1889:A:H2'	1:1A:1890:A:C8	2.44	0.53
19:1X:35:THR:HG22	19:1X:37:THR:N	2.23	0.53
40:1i:63:ILE:HG21	40:1i:77:ILE:HG12	1.90	0.53
1:2A:903:C:H2'	1:2A:904:C:C6	2.44	0.53
1:2A:981:A:N1	1:2A:2027:G:O2'	2.36	0.53
1:2A:2123:G:H2'	1:2A:2124:G:C8	2.43	0.53
1:2A:2133:G:HO2'	1:2A:2157:G:N2	2.05	0.53
5:2F:101:LEU:O	5:2F:106:ARG:NH1	2.39	0.53
21:2Z:97:GLU:HA	21:2Z:126:VAL:O	2.09	0.53
1:1A:2334:G:H5'	14:1S:9:ARG:HG2	1.91	0.53
12:1Q:20:ALA:HB2	21:1Z:79:ARG:HG3	1.90	0.53
26:14:61:ARG:HH21	50:1s:9:VAL:HG21	1.72	0.53
32:1a:948:C:N4	61:1a:5233:HOH:O	2.40	0.53
36:1e:80:ILE:HG13	36:1e:81:GLU:N	2.23	0.53
42:1k:43:SER:HA	42:1k:47:VAL:HG21	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:44:GLY:HA2	6:2G:88:ILE:HG22	1.90	0.53
9:2N:67:LEU:HA	9:2N:87:LEU:HD23	1.90	0.53
32:2a:984:C:H2'	32:2a:985:C:C6	2.44	0.53
33:2b:71:VAL:HB	33:2b:164:VAL:HG13	1.89	0.53
33:2b:73:THR:OG1	33:2b:170:GLU:OE2	2.26	0.53
34:2c:13:GLY:HA3	45:2n:57:ARG:NH1	2.24	0.53
35:2d:157:LEU:O	35:2d:161:ASN:ND2	2.33	0.53
41:2j:47:PHE:HB2	41:2j:63:PHE:HB2	1.89	0.53
48:2q:45:HIS:NE2	48:2q:47:PRO:HG3	2.23	0.53
56:2y:26:A:H2'	56:2y:27:G:H5'	1.90	0.53
1:1A:1385:G:O2'	1:1A:1396:U:O2	2.24	0.53
1:1A:1800:C:OP2	3:1D:183:ARG:NH2	2.42	0.53
4:1E:77:ILE:HD13	4:1E:195:LEU:HD22	1.91	0.53
5:1F:9:ILE:HG12	5:1F:123:LEU:HD23	1.89	0.53
21:1Z:151:HIS:CE1	21:1Z:170:THR:HG22	2.44	0.53
32:1a:1183:A:O2'	32:1a:1184:G:OP1	2.25	0.53
33:1b:21:ARG:O	33:1b:23:ARG:HG2	2.08	0.53
36:1e:12:LEU:HB3	36:1e:31:LEU:HB2	1.90	0.53
44:1m:15:VAL:HG11	44:1m:48:LEU:HD21	1.90	0.53
54:1w:19:G:H4'	54:1w:20:U:OP1	2.09	0.53
8:2I:58:LEU:O	8:2I:62:LYS:HG3	2.08	0.53
15:2T:39:ARG:NH2	15:2T:41:ARG:HD3	2.23	0.53
34:2c:82:GLU:O	34:2c:86:VAL:N	2.31	0.53
42:2k:34:ASP:OD2	42:2k:38:ASN:HB2	2.08	0.53
1:1A:279:C:N3	1:1A:361:G:N2	2.41	0.53
14:1S:106:ARG:NE	14:1S:112:PHE:OXT	2.36	0.53
32:1a:826:C:H2'	32:1a:827:U:C6	2.44	0.53
32:1a:1172:C:H2'	32:1a:1173:G:H8	1.74	0.53
44:1m:95:GLY:O	44:1m:110:ARG:HG3	2.08	0.53
54:1w:26:A:H61	54:1w:44:G:H1	1.56	0.53
1:2A:81:G:N7	61:2A:5277:HOH:O	2.34	0.53
1:2A:131:G:OP1	61:2A:5327:HOH:O	2.19	0.53
1:2A:974:G:OP1	1:2A:1187:G:O2'	2.22	0.53
32:2a:16:A:OP2	61:2a:5163:HOH:O	2.19	0.53
32:2a:1385:G:H2'	32:2a:1386:G:H8	1.73	0.53
33:2b:28:PHE:HD1	33:2b:194:PRO:HG3	1.72	0.53
3:1D:169:GLU:OE2	3:1D:184:LYS:NZ	2.27	0.53
8:1I:116:LEU:HD12	8:1I:128:LEU:HD13	1.90	0.53
33:1b:93:VAL:HG11	33:1b:97:TRP:HD1	1.74	0.53
54:1w:63:G:H2'	54:1w:64:A:C8	2.43	0.53
32:2a:404:U:H2'	32:2a:405:U:C6	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:429:U:H1'	32:2a:430:A:H5''	1.90	0.53
32:2a:512:U:H2'	32:2a:513:C:H6	1.74	0.53
32:2a:539:A:H2'	32:2a:540:G:C8	2.43	0.53
32:2a:1376:U:H2'	32:2a:1377:A:H8	1.74	0.53
34:2c:39:ILE:O	34:2c:43:LEU:HG	2.09	0.53
42:2k:54:ARG:NH2	56:2y:39:PSU:H4'	2.23	0.53
54:2w:46:7MG:O2'	54:2w:47:U:H5'	2.09	0.53
1:1A:483:A:O2'	20:1Y:49:VAL:O	2.19	0.53
3:1D:62:TYR:HA	3:1D:87:ASN:OD1	2.09	0.53
3:1D:71:ASP:HB2	3:1D:103:ARG:HH12	1.72	0.53
32:1a:1108:G:H5'	34:1c:176:HIS:CD2	2.43	0.53
38:1g:26:PHE:CE2	38:1g:30:ILE:HD11	2.44	0.53
1:2A:825:C:O2	11:2P:55:ARG:NH1	2.41	0.53
1:2A:919:G:N2	1:2A:2269:A:OP2	2.41	0.53
1:2A:1028:A:N6	1:2A:1125:G:H2'	2.23	0.53
1:2A:1607:C:H4'	1:2A:1608:A:O5'	2.09	0.53
1:2A:2693:A:H2'	1:2A:2694:G:H8	1.74	0.53
4:2E:1:MET:HB3	4:2E:83:ASP:O	2.09	0.53
32:2a:613:C:H2'	32:2a:614:A:H8	1.73	0.53
32:2a:1263:C:H1'	32:2a:1273:G:N2	2.24	0.53
39:2h:51:VAL:HG11	39:2h:60:ARG:HH12	1.74	0.53
42:2k:22:HIS:HD2	42:2k:29:ILE:HD12	1.74	0.53
56:2y:66:U:H2'	56:2y:67:C:O4'	2.09	0.53
1:1A:323:G:C8	5:1F:171:PRO:HG3	2.44	0.53
1:1A:1429:G:H2'	1:1A:1430:C:H6	1.73	0.53
61:1A:5984:HOH:O	13:1R:15:SER:HB3	2.08	0.53
5:1F:123:LEU:HD13	5:1F:192:LEU:HD13	1.89	0.53
11:1P:85:LEU:HA	11:1P:88:LEU:HD12	1.91	0.53
47:1p:67:THR:HB	47:1p:70:ALA:H	1.73	0.53
1:2A:2405:G:H5'	11:2P:75:ILE:HD13	1.91	0.53
8:2I:3:VAL:HG12	8:2I:38:LEU:HA	1.90	0.53
12:2Q:37:LEU:HD21	12:2Q:130:LYS:HE2	1.90	0.53
32:2a:619:U:N3	35:2d:134:ASP:OD1	2.33	0.53
32:2a:977:A:H2'	32:2a:978:A:H5''	1.90	0.53
49:2r:52:PRO:HB2	49:2r:54:ARG:HG2	1.90	0.53
1:1A:588:U:H2'	1:1A:589:C:C6	2.44	0.53
1:1A:1358:G:OP2	61:1A:7018:HOH:O	2.19	0.53
4:1E:9:VAL:HB	15:1T:3:ARG:HG2	1.90	0.53
21:1Z:132:ASN:O	21:1Z:134:PRO:HD3	2.09	0.53
28:16:18:ARG:HD2	28:16:42:TRP:CD1	2.44	0.53
34:1c:19:GLU:HG2	34:1c:54:ARG:CZ	2.39	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:99:GLY:N	36:1e:117:ASP:OD1	2.32	0.53
40:1i:56:LEU:H	40:1i:56:LEU:HD12	1.74	0.53
40:1i:128:ARG:NH1	55:1x:35:A:OP2	2.42	0.53
42:1k:27:ASN:OD1	42:1k:28:THR:N	2.39	0.53
1:2A:121:G:H4'	1:2A:149:A:H5'	1.90	0.53
4:2E:119:ARG:HG2	4:2E:120:TRP:CE2	2.43	0.53
18:2W:71:VAL:HA	18:2W:107:LEU:HD23	1.90	0.53
19:2X:92:LEU:O	19:2X:94:GLY:N	2.42	0.53
32:2a:631:G:H2'	32:2a:632:A:H8	1.74	0.53
38:2g:16:LEU:HD22	40:2i:42:ARG:HA	1.90	0.53
39:2h:30:ARG:O	39:2h:34:GLU:HG2	2.08	0.53
42:2k:99:GLN:HG3	42:2k:105:VAL:HG21	1.91	0.53
44:2m:84:ILE:HB	50:2s:66:MET:HE2	1.91	0.53
1:1A:687:C:H5''	29:17:2:LYS:HE2	1.91	0.52
6:1G:106:LEU:HD12	6:1G:110:ALA:HB3	1.91	0.52
20:1Y:8:LYS:HD3	20:1Y:97:ARG:NH1	2.24	0.52
32:1a:294:U:OP1	32:1a:610:G:O2'	2.26	0.52
38:1g:72:ARG:HD3	38:1g:142:GLU:OE2	2.09	0.52
56:1y:21:A:H2'	56:1y:22:G:H8	1.73	0.52
8:2I:14:ASP:OD1	8:2I:15:VAL:N	2.39	0.52
13:2R:29:LEU:HD22	13:2R:79:LEU:HD13	1.91	0.52
19:2X:60:ARG:HH12	29:27:47:ARG:NH1	2.06	0.52
23:21:40:ARG:NH2	23:21:42:GLN:HG2	2.24	0.52
26:24:26:SER:OG	26:24:28:LYS:O	2.26	0.52
32:2a:643:C:H2'	32:2a:644:G:H8	1.74	0.52
32:2a:1163:C:H2'	32:2a:1164:G:C8	2.43	0.52
51:2t:77:ALA:O	51:2t:81:LYS:HG3	2.08	0.52
7:1H:58:GLU:OE2	7:1H:60:ARG:NH1	2.41	0.52
20:1Y:87:LYS:HB3	20:1Y:95:LYS:HD2	1.91	0.52
32:1a:189(K):U:H2'	32:1a:189(L):G:C8	2.45	0.52
32:1a:532:A:N6	32:1a:1206:G:O2'	2.41	0.52
34:1c:65:ALA:O	34:1c:66:VAL:HG22	2.09	0.52
36:1e:85:GLY:O	36:1e:87:SER:N	2.42	0.52
56:1y:6:G:O6	56:1y:7:A:N6	2.42	0.52
1:2A:375:C:H2'	1:2A:376:C:C6	2.44	0.52
1:2A:1354:A:H5''	3:2D:38:LYS:HD3	1.91	0.52
21:2Z:154:ASP:OD1	21:2Z:154:ASP:N	2.36	0.52
26:24:2:LYS:O	26:24:4:GLY:N	2.43	0.52
32:2a:984:C:H2'	32:2a:985:C:H6	1.74	0.52
32:2a:998:G:H1	32:2a:1043:C:H42	1.57	0.52
1:1A:1062:G:H5''	1:1A:1070:A:O2'	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:1x:20:U:H5''	55:1x:21:A:OP2	2.10	0.52
1:2A:652(U):G:H2'	1:2A:652(V):C:O4'	2.09	0.52
19:2X:59:VAL:HB	19:2X:76:ARG:HB2	1.90	0.52
23:21:73:LEU:HB3	23:21:94:LEU:HD22	1.91	0.52
32:2a:903:G:OP1	61:2a:5197:HOH:O	2.19	0.52
56:2y:15:G:N2	56:2y:48:C:H42	2.07	0.52
1:1A:2100:G:H1	1:1A:2189:U:H3	0.64	0.52
5:1F:116:ASP:OD2	11:1P:1:MET:N	2.32	0.52
6:1G:122:PRO:HB3	6:1G:170:ARG:HH12	1.73	0.52
8:1I:4:ILE:HG12	8:1I:18:VAL:HG22	1.92	0.52
32:1a:178:C:H2'	32:1a:179:A:H8	1.72	0.52
32:1a:542:G:OP1	35:1d:10:ARG:NH2	2.40	0.52
1:2A:995:C:N4	9:2N:2:LYS:HD2	2.24	0.52
1:2A:1592:C:H2'	1:2A:1593:G:H8	1.74	0.52
1:2A:2238:G:OP2	61:2A:5131:HOH:O	2.19	0.52
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	1.92	0.52
5:2F:20:LEU:HD23	5:2F:21:ALA:H	1.74	0.52
5:2F:53:THR:HG23	5:2F:55:GLY:N	2.24	0.52
7:2H:144:VAL:O	7:2H:148:ILE:HG13	2.10	0.52
9:2N:38:HIS:CE1	9:2N:39:ARG:HG3	2.44	0.52
25:23:7:LYS:NZ	25:23:34:GLU:OE1	2.41	0.52
32:2a:67:C:H2'	32:2a:68:G:C8	2.44	0.52
32:2a:163:C:H2'	32:2a:164:U:H6	1.75	0.52
32:2a:772:U:H2'	32:2a:773:G:O4'	2.09	0.52
32:2a:1004:A:C6	32:2a:1037:C:H1'	2.45	0.52
32:2a:1314:C:OP2	50:2s:4:SER:OG	2.21	0.52
1:1A:667:U:O2	30:18:2:PRO:HD2	2.10	0.52
1:1A:1076:C:O2'	1:1A:1077:A:N7	2.43	0.52
6:1G:114:ILE:HG12	6:1G:140:ILE:HG12	1.89	0.52
13:1R:44:LEU:HD22	13:1R:48:VAL:HG23	1.92	0.52
32:1a:977:A:O2'	32:1a:981:U:N3	2.38	0.52
33:1b:82:ARG:HH11	33:1b:92:TYR:HH	1.52	0.52
47:1p:4:ILE:HB	47:1p:66:PRO:HA	1.91	0.52
1:2A:975:C:O2'	61:2A:6158:HOH:O	2.16	0.52
4:2E:119:ARG:HG2	4:2E:120:TRP:NE1	2.24	0.52
6:2G:41:GLN:O	6:2G:43:LEU:N	2.42	0.52
23:21:64:ALA:HA	23:21:67:ILE:HG13	1.91	0.52
29:27:12:ARG:NH2	29:27:44:PRO:HB3	2.24	0.52
32:2a:742:G:OP2	46:2o:35:ARG:NH2	2.39	0.52
32:2a:1456:G:H22	51:2t:43:LEU:HD11	1.74	0.52
34:2c:36:ASP:HA	34:2c:39:ILE:HD12	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1173:G:O2'	1:1A:1174:A:O4'	2.27	0.52
1:1A:2052:G:H4'	4:1E:143:ASN:O	2.09	0.52
61:1A:6189:HOH:O	4:1E:135:HIS:NE2	2.34	0.52
32:1a:130:A:N3	32:1a:263:A:O2'	2.37	0.52
32:1a:1040:U:H2'	32:1a:1041:A:H8	1.73	0.52
33:1b:32:ILE:HD13	33:1b:40:HIS:CD2	2.44	0.52
36:1e:85:GLY:C	36:1e:87:SER:H	2.18	0.52
37:1f:76:ALA:O	37:1f:80:ARG:HG3	2.09	0.52
1:2A:2127:G:C2	1:2A:2161:C:C4	2.98	0.52
1:2A:2165:G:H22	1:2A:2172:U:H5	1.55	0.52
1:2A:2690:C:N4	1:2A:2713:A:H1'	2.25	0.52
2:2B:48:A:H4'	14:2S:95:HIS:HD2	1.74	0.52
6:2G:7:LEU:HD23	6:2G:100:TRP:HE3	1.74	0.52
15:2T:26:ASP:O	15:2T:49:VAL:HG23	2.09	0.52
32:2a:822:C:H2'	32:2a:823:G:H8	1.75	0.52
32:2a:1013:G:N2	32:2a:1016:A:OP2	2.42	0.52
33:2b:50:GLU:O	33:2b:54:THR:N	2.33	0.52
34:2c:134:ILE:HG22	34:2c:168:ALA:HB3	1.92	0.52
36:2e:6:PHE:HB3	36:2e:34:VAL:HG22	1.92	0.52
37:2f:62:TRP:CH2	37:2f:64:GLN:HB2	2.44	0.52
1:1A:1406:U:H2'	1:1A:1407:C:C6	2.45	0.52
1:1A:1786:A:H1'	1:1A:1938:A:N6	2.25	0.52
1:1A:1803:A:O2'	3:1D:259:THR:HG21	2.09	0.52
1:1A:2183:C:O2'	1:1A:2184:G:OP1	2.28	0.52
61:1A:5609:HOH:O	22:10:5:LYS:N	2.32	0.52
5:1F:132:VAL:HA	5:1F:138:GLU:HB3	1.92	0.52
9:1N:1:MET:HE1	16:1U:94:ASN:ND2	2.25	0.52
32:1a:189(C):C:H2'	32:1a:189(D):C:O4'	2.10	0.52
32:1a:1469:G:H2'	32:1a:1470:G:C8	2.45	0.52
1:2A:600:G:O3'	5:2F:108:LYS:HE3	2.10	0.52
1:2A:608:A:H2'	1:2A:609:A:C8	2.45	0.52
1:2A:646:A:H2'	1:2A:647:G:O4'	2.10	0.52
6:2G:5:VAL:HG22	6:2G:8:LYS:HE2	1.90	0.52
6:2G:62:LEU:O	26:24:27:THR:OG1	2.27	0.52
21:2Z:126:VAL:HG13	21:2Z:161:VAL:HG23	1.91	0.52
32:2a:631:G:H2'	32:2a:632:A:C8	2.45	0.52
32:2a:1292:U:H2'	32:2a:1293:G:H8	1.75	0.52
35:2d:76:ARG:O	35:2d:80:GLU:HG2	2.09	0.52
46:2o:54:ARG:HG2	46:2o:58:MET:HE2	1.92	0.52
1:1A:859:G:O2'	1:1A:916:G:O6	2.24	0.52
1:1A:1075:C:H2'	1:1A:1076:C:H5'	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2608:G:N7	61:1A:5963:HOH:O	2.34	0.52
1:1A:2801(A):A:H1'	1:1A:2895:U:H1'	1.92	0.52
6:1G:67:LYS:H	26:14:6:HIS:CE1	2.28	0.52
21:1Z:132:ASN:HD22	21:1Z:160:GLY:HA3	1.75	0.52
24:12:41:ILE:HG13	24:12:43:GLN:HG3	1.92	0.52
32:1a:505:G:N7	61:1a:5238:HOH:O	2.34	0.52
33:1b:74:LYS:NZ	33:1b:205:ASP:O	2.35	0.52
33:1b:93:VAL:HG11	33:1b:97:TRP:CD1	2.45	0.52
56:1y:9:A:O3'	56:1y:45:U:O2'	2.27	0.52
1:2A:2263:C:OP2	61:2A:6263:HOH:O	2.19	0.52
8:2I:69:LYS:HZ2	8:2I:73:GLU:HB2	1.75	0.52
28:26:14:THR:OG1	28:26:48:VAL:O	2.25	0.52
32:2a:195:A:N3	32:2a:222:U:O2'	2.30	0.52
32:2a:1029:C:N4	32:2a:1032:G:N1	2.58	0.52
33:2b:12:GLU:HA	33:2b:213:LEU:HD11	1.91	0.52
44:2m:13:LYS:HA	44:2m:44:ARG:HH11	1.75	0.52
48:2q:62:SER:OG	48:2q:72:ARG:HB2	2.09	0.52
1:1A:2228:G:P	3:1D:263:ARG:HH12	2.33	0.52
32:1a:160:A:H1'	32:1a:344:A:C8	2.45	0.52
1:2A:265:A:C8	1:2A:266:G:H1'	2.45	0.52
1:2A:1579:A:H2'	1:2A:1580:A:C8	2.45	0.52
13:2R:118:GLU:CD	13:2R:118:GLU:H	2.18	0.52
32:2a:662:G:O2'	32:2a:836:G:OP1	2.27	0.52
32:2a:1343:G:H2'	32:2a:1344:C:C6	2.44	0.52
40:2i:3:GLN:HE21	40:2i:20:ARG:NE	2.08	0.52
46:2o:3:ILE:HG12	46:2o:38:ARG:HE	1.75	0.52
1:1A:1762:A:N1	61:1A:6293:HOH:O	2.34	0.52
1:1A:2439:A:N6	55:1x:76:31H:OP1	2.43	0.52
2:1B:66:A:H61	2:1B:109:C:H5'	1.75	0.52
6:1G:114:ILE:HA	6:1G:140:ILE:HD11	1.91	0.52
21:1Z:153:SER:HB3	21:1Z:167:PRO:HB3	1.91	0.52
24:12:38:GLN:NE2	24:12:43:GLN:O	2.37	0.52
55:1x:25:C:H2'	55:1x:26:G:O4'	2.10	0.52
1:2A:1183:G:H5''	25:23:30:ARG:NH2	2.25	0.52
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.25	0.52
1:2A:2060:A:N3	61:2A:5560:HOH:O	2.34	0.52
8:2I:50:ARG:HA	8:2I:53:ALA:HB3	1.91	0.52
11:2P:94:GLU:HG3	11:2P:124:LYS:HE2	1.92	0.52
32:2a:8:A:N6	35:2d:205:GLU:O	2.41	0.52
32:2a:601:C:H2'	32:2a:602:A:C8	2.45	0.52
32:2a:1203:C:OP1	45:2n:3:ARG:NH1	2.42	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1272:G:N2	32:2a:1273:G:C5	2.78	0.52
34:2c:178:LEU:C	34:2c:180:ALA:H	2.17	0.52
35:2d:47:ARG:NH1	35:2d:48:ALA:O	2.43	0.52
1:1A:899:A:H2'	1:1A:899:A:N3	2.25	0.51
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.11	0.51
12:1Q:68:ILE:HD13	12:1Q:103:MET:HG2	1.91	0.51
15:1T:116:ALA:HB1	15:1T:121:ILE:HD11	1.92	0.51
19:1X:53:LYS:HB3	19:1X:82:GLN:HB3	1.91	0.51
32:1a:573:A:OP1	61:1a:5274:HOH:O	2.19	0.51
32:1a:1028:C:H2'	32:1a:1029:C:O4'	2.10	0.51
32:1a:1518:MA6:H93	32:1a:1519:MA6:H92	1.92	0.51
35:1d:187:ARG:NH2	35:1d:193:ASP:OD2	2.43	0.51
1:2A:674:G:H1'	5:2F:74:ARG:HD3	1.92	0.51
3:2D:70:TRP:CE2	3:2D:150:LYS:HD3	2.45	0.51
17:2V:16:PRO:HD3	17:2V:99:ILE:HD11	1.92	0.51
18:1W:58:ALA:HB1	18:1W:64:MET:HB2	1.92	0.51
20:1Y:92:ASN:ND2	20:1Y:94:LYS:HG3	2.25	0.51
26:14:58:ARG:HE	50:1s:68:GLY:HA3	1.74	0.51
32:1a:865:A:H2	32:1a:918:A:H4'	1.74	0.51
1:2A:271(J):C:O2'	1:2A:271(K):U:OP2	2.27	0.51
1:2A:493:G:H2'	1:2A:494:G:O4'	2.11	0.51
1:2A:1024:G:OP2	61:2A:5892:HOH:O	2.19	0.51
1:2A:1112:G:H2'	1:2A:1113:U:O4'	2.10	0.51
1:2A:1580:A:H3'	1:2A:1581:G:H8	1.75	0.51
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.40	0.51
1:2A:2557:G:H2'	1:2A:2558:C:C6	2.45	0.51
26:24:40:HIS:O	26:24:44:THR:HG22	2.10	0.51
32:2a:266:G:H5''	32:2a:268:C:H41	1.75	0.51
32:2a:376:G:H5''	47:2p:5:ARG:HB2	1.92	0.51
32:2a:457:C:H2'	32:2a:458:C:C6	2.45	0.51
32:2a:532:A:N6	32:2a:1206:G:O2'	2.43	0.51
32:2a:950:U:H2'	32:2a:951:G:C8	2.45	0.51
32:2a:1105:A:H2'	32:2a:1106:G:C8	2.38	0.51
32:2a:1112:C:O2	34:2c:179:ARG:N	2.42	0.51
36:2e:145:LYS:HA	36:2e:148:VAL:HB	1.92	0.51
38:2g:103:TRP:HZ3	38:2g:138:LYS:HA	1.75	0.51
56:2y:15:G:H22	56:2y:21:A:H1'	1.75	0.51
1:1A:607:U:OP1	5:1F:102:PRO:HA	2.10	0.51
1:1A:784:A:H5'	1:1A:785:G:OP1	2.10	0.51
1:1A:1267:U:OP1	61:1A:6439:HOH:O	2.19	0.51
1:1A:2368:C:OP2	61:1A:5464:HOH:O	2.19	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2382:G:H21	30:18:42:ARG:NH2	2.08	0.51
37:1f:48:LEU:HD13	37:1f:52:ILE:HD12	1.93	0.51
48:1q:9:VAL:HG22	48:1q:56:VAL:HG22	1.92	0.51
1:2A:228:A:H4'	1:2A:229:A:OP1	2.11	0.51
1:2A:947:G:H2'	1:2A:948:G:C8	2.45	0.51
1:2A:1257:C:H4'	5:2F:83:PHE:CD1	2.46	0.51
1:2A:1786:A:H1'	1:2A:1938:A:N6	2.25	0.51
6:2G:55:LYS:O	6:2G:59:GLU:N	2.41	0.51
8:2I:48:GLU:HA	8:2I:51:ILE:HG22	1.93	0.51
32:2a:1349:A:H2'	32:2a:1350:A:H8	1.74	0.51
1:1A:2001:A:H2'	1:1A:2002:G:C8	2.45	0.51
3:1D:26:LYS:NZ	3:1D:83:GLU:OE2	2.30	0.51
4:1E:13:ARG:HD2	4:1E:20:ALA:HB1	1.93	0.51
21:1Z:1:MET:H1	21:1Z:55:HIS:HB3	1.74	0.51
1:2A:887:A:O2'	1:2A:889:C:OP2	2.22	0.51
1:2A:995:C:O2	9:2N:3:THR:OG1	2.25	0.51
1:2A:1239:G:H2'	1:2A:1240:U:O4'	2.10	0.51
1:2A:2061:G:H5''	1:2A:2503:2MA:C2	2.39	0.51
1:2A:2379:G:O2'	14:2S:17:ARG:NH1	2.43	0.51
1:2A:2524:G:N7	61:2A:6205:HOH:O	2.33	0.51
1:2A:2576:G:O2'	1:2A:2579:C:OP2	2.21	0.51
1:2A:2820:A:P	13:2R:2:ARG:HH22	2.32	0.51
32:2a:1145:C:H4'	32:2a:1146:A:H5'	1.91	0.51
32:2a:1263:C:C4	32:2a:1272:G:O6	2.62	0.51
38:2g:65:ALA:O	38:2g:69:VAL:HG23	2.10	0.51
38:2g:152:ALA:O	38:2g:154:TYR:N	2.43	0.51
56:2y:26:A:N1	56:2y:44:G:C6	2.79	0.51
1:1A:312:G:H5'	1:1A:331:A:O2'	2.11	0.51
1:1A:528:A:O2'	1:1A:529:A:H5'	2.10	0.51
1:1A:642:G:N2	1:1A:645:C:OP2	2.42	0.51
1:1A:2206:G:H5''	1:1A:2207:G:N7	2.25	0.51
8:1I:77:LEU:HG	8:1I:101:LEU:HD13	1.91	0.51
11:1P:39:LYS:HB2	11:1P:45:LEU:HD13	1.91	0.51
32:1a:316:G:OP2	32:1a:351:G:O2'	2.29	0.51
32:1a:576:G:O6	32:1a:880:C:O2'	2.26	0.51
32:1a:840:C:H4'	32:1a:841:U:OP1	2.11	0.51
32:1a:1004:A:H5''	32:1a:1025:U:C5	2.45	0.51
1:2A:900:A:O2'	1:2A:901:A:OP1	2.26	0.51
1:2A:2134:A:N6	1:2A:2157:G:H4'	2.22	0.51
3:2D:96:HIS:HD2	3:2D:102:LYS:HG2	1.74	0.51
12:2Q:97:VAL:HG21	12:2Q:103:MET:HE3	1.90	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:559:A:H4'	32:2a:560:U:H3'	1.93	0.51
32:2a:952:U:H2'	32:2a:953:G:C8	2.44	0.51
32:2a:1298:C:H4'	32:2a:1299:A:C4	2.46	0.51
33:2b:101:MET:HA	33:2b:108:ILE:HD12	1.93	0.51
35:2d:100:ARG:NH1	35:2d:137:SER:OG	2.43	0.51
54:2w:19:G:H1	54:2w:56:C:H42	1.58	0.51
1:1A:2422:A:O4'	56:1y:76:A:N6	2.44	0.51
50:1s:22:LEU:HB3	50:1s:27:GLU:HB3	1.91	0.51
1:2A:208:C:H2'	1:2A:209:C:C6	2.45	0.51
1:2A:614(C):A:C4	5:2F:180:GLY:HA2	2.45	0.51
1:2A:2379:G:O2'	14:2S:17:ARG:NH2	2.39	0.51
1:2A:2431:U:O2'	1:2A:2433:A:N7	2.42	0.51
1:2A:2591:C:H2'	1:2A:2592:G:C8	2.45	0.51
32:2a:1054:C:C5	54:2w:34:G:H1'	2.45	0.51
44:2m:50:GLU:HA	44:2m:53:VAL:HG22	1.93	0.51
47:2p:1:MET:O	47:2p:24:ALA:N	2.32	0.51
1:1A:1486:A:H2'	1:1A:1487:G:C8	2.46	0.51
4:1E:28:ALA:HB3	4:1E:93:VAL:HG12	1.93	0.51
17:1V:34:GLU:HB3	17:1V:56:SER:HB2	1.93	0.51
23:11:23:LYS:HB3	23:11:29:GLY:HA3	1.92	0.51
35:1d:116:GLN:NE2	35:1d:161:ASN:HD21	2.08	0.51
1:2A:2693:A:H2'	1:2A:2694:G:C8	2.46	0.51
1:2A:2849:U:H4'	1:2A:2868:A:C2	2.46	0.51
4:2E:56:PRO:HG3	4:2E:74:PRO:HG2	1.93	0.51
6:2G:64:THR:HB	6:2G:94:LEU:HD21	1.93	0.51
6:2G:70:VAL:HA	6:2G:90:LEU:HD23	1.93	0.51
11:2P:38:GLN:O	11:2P:39:LYS:HB3	2.10	0.51
24:22:22:GLU:OE2	24:22:68:ARG:NH2	2.44	0.51
32:2a:694:A:H5''	42:2k:53:SER:OG	2.11	0.51
32:2a:1277:C:HO2'	32:2a:1279:A:H8	1.54	0.51
33:2b:178:ARG:NH1	33:2b:196:LEU:O	2.44	0.51
34:2c:48:TYR:OH	34:2c:118:GLN:HB3	2.11	0.51
36:2e:61:TYR:HA	36:2e:64:ARG:HG3	1.92	0.51
44:2m:85:GLY:HA2	44:2m:93:ARG:NH2	2.24	0.51
51:2t:44:ALA:HB2	51:2t:88:VAL:HG13	1.93	0.51
1:1A:204:A:N3	61:1A:5012:HOH:O	2.34	0.51
1:1A:534:U:H2'	1:1A:535:C:C6	2.46	0.51
1:1A:2121:G:H1	1:1A:2177:C:N4	2.09	0.51
32:1a:92:C:H2'	32:1a:93:G:C8	2.46	0.51
32:1a:352:C:O2'	32:1a:354:G:OP1	2.26	0.51
32:1a:445:G:H2'	32:1a:446:G:H8	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:877:C:OP1	39:1h:88:LYS:NZ	2.27	0.51
1:2A:479:A:H4'	1:2A:480:A:OP1	2.11	0.51
1:2A:1801:G:OP2	3:2D:154:LYS:NZ	2.43	0.51
11:2P:7:ARG:HH21	11:2P:7:ARG:HB3	1.75	0.51
11:2P:91:PHE:O	11:2P:121:LYS:NZ	2.44	0.51
21:2Z:4:ARG:NH2	21:2Z:66:SER:OG	2.44	0.51
32:2a:716:A:N3	42:2k:118:GLY:HA2	2.26	0.51
32:2a:1346:A:N1	32:2a:1374:A:H5''	2.26	0.51
44:2m:82:MET:O	44:2m:93:ARG:NH2	2.44	0.51
49:2r:32:ARG:HA	49:2r:69:THR:HG21	1.92	0.51
19:1X:35:THR:HG22	19:1X:37:THR:H	1.76	0.51
22:10:27:GLU:HG3	22:10:68:GLU:HA	1.92	0.51
26:14:24:THR:OG1	26:14:25:TYR:N	2.44	0.51
32:1a:613:C:H2'	32:1a:614:A:C8	2.46	0.51
32:1a:921:U:O4	61:1a:5110:HOH:O	2.19	0.51
32:1a:1425:U:H2'	32:1a:1426:C:H6	1.75	0.51
33:1b:76:GLN:NE2	33:1b:206:ASP:OD1	2.44	0.51
44:1m:12:ASN:O	44:1m:44:ARG:NH1	2.42	0.51
1:2A:531:C:H4'	1:2A:532:A:H5''	1.93	0.51
1:2A:2401:U:OP1	28:26:18:ARG:NH2	2.36	0.51
6:2G:124:SER:O	6:2G:124:SER:OG	2.29	0.51
12:2Q:12:GLN:NE2	12:2Q:72:LYS:HG3	2.25	0.51
32:2a:976:G:H5'	32:2a:1358:U:O2'	2.11	0.51
32:2a:1456:G:N2	51:2t:43:LEU:HD11	2.25	0.51
37:2f:100:ASN:HD21	49:2r:23:LYS:HG2	1.76	0.51
44:2m:23:TYR:HB3	44:2m:67:GLU:HA	1.92	0.51
1:1A:1268:A:H2'	1:1A:1269:A:O4'	2.11	0.51
1:1A:2887:U:H2'	1:1A:2888:C:C6	2.46	0.51
26:14:55:ARG:H	26:14:56:VAL:HA	1.75	0.51
32:1a:1376:U:OP1	38:1g:98:SER:OG	2.27	0.51
41:1j:78:ASN:O	41:1j:80:LYS:N	2.44	0.51
42:1k:43:SER:HB3	42:1k:68:ALA:HB2	1.93	0.51
48:1q:53:LEU:HD23	48:1q:82:MET:HE1	1.93	0.51
55:1x:58:A:H4'	55:1x:59:A:OP1	2.11	0.51
1:2A:245:G:O6	30:28:8:LYS:NZ	2.44	0.51
1:2A:322:A:OP1	5:2F:168:ARG:HD2	2.11	0.51
1:2A:1019:U:H3	1:2A:1142(A):A:H62	1.59	0.51
61:2A:6197:HOH:O	23:21:32:LYS:O	2.19	0.51
21:2Z:4:ARG:HG2	21:2Z:58:VAL:HB	1.93	0.51
54:2w:54:5MU:H2'	54:2w:55:PSU:O4'	2.11	0.51
1:1A:422:A:OP2	61:1A:6603:HOH:O	2.18	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1048:A:N1	1:1A:1112:G:O2'	2.34	0.50
32:1a:920:U:H2'	32:1a:921:U:C6	2.46	0.50
32:1a:1432:G:N7	61:1a:5160:HOH:O	2.35	0.50
32:1a:1529:G:H4'	32:1a:1530:G:OP2	2.11	0.50
44:1m:84:ILE:HB	50:1s:66:MET:HE2	1.93	0.50
52:1u:3:LYS:HD3	52:1u:14:TRP:CD1	2.46	0.50
1:2A:300:A:P	20:2Y:86:ARG:HH22	2.34	0.50
1:2A:864:G:OP2	12:2Q:22:LYS:HE3	2.11	0.50
1:2A:1027:A:C2	1:2A:2488:A:H5'	2.46	0.50
1:2A:2439:A:N6	55:2x:76:31H:OP1	2.44	0.50
5:2F:31:HIS:HB2	11:2P:9:ASN:OD1	2.10	0.50
30:28:26:LYS:HB2	30:28:44:LYS:O	2.11	0.50
32:2a:404:U:OP2	35:2d:118:ARG:NH2	2.44	0.50
33:2b:71:VAL:HG13	33:2b:93:VAL:HG23	1.92	0.50
33:2b:84:GLU:HB3	33:2b:219:VAL:HG21	1.93	0.50
37:2f:96:PRO:HB3	49:2r:30:ASP:OD2	2.11	0.50
1:1A:1047:G:H2'	1:1A:1110:G:N2	2.26	0.50
1:1A:2252:G:OP2	61:1A:7132:HOH:O	2.19	0.50
10:1O:97:ARG:NH1	32:1a:339:C:OP2	2.34	0.50
32:1a:955:U:O2'	50:1s:83:HIS:HD2	1.94	0.50
1:2A:987:G:O2'	1:2A:1000:A:N3	2.41	0.50
5:2F:33:LEU:HB3	11:2P:6:LEU:HD21	1.92	0.50
7:2H:5:GLY:HA2	7:2H:69:ARG:HB2	1.94	0.50
13:2R:74:LYS:HG2	13:2R:77:ARG:HH21	1.76	0.50
23:21:23:LYS:HB3	23:21:29:GLY:HA3	1.93	0.50
31:29:16:VAL:HG22	31:29:25:VAL:HG22	1.92	0.50
32:2a:950:U:H2'	32:2a:951:G:H8	1.77	0.50
32:2a:1029:C:N3	32:2a:1032:G:N2	2.55	0.50
32:2a:1507:A:OP2	53:2v:13:A:N6	2.44	0.50
46:2o:39:LEU:HD13	46:2o:56:LEU:HB2	1.92	0.50
48:2q:6:LEU:HD12	48:2q:59:ILE:HD11	1.93	0.50
54:2w:15:G:H22	54:2w:48:C:H42	1.58	0.50
1:1A:1448:G:N7	61:1A:6700:HOH:O	2.35	0.50
1:1A:1709:U:H2'	1:1A:1710:C:C6	2.47	0.50
8:1I:37:VAL:HG12	8:1I:38:LEU:HD23	1.94	0.50
11:1P:39:LYS:HG3	11:1P:45:LEU:HD22	1.93	0.50
31:19:15:LYS:HD3	31:19:26:ILE:HD11	1.93	0.50
32:1a:60:A:H4'	32:1a:61:G:H5'	1.91	0.50
32:1a:224:C:H2'	32:1a:225:C:H6	1.75	0.50
32:1a:1101:A:H4'	32:1a:1102:A:O5'	2.11	0.50
52:1u:6:ARG:O	52:1u:12:LYS:NZ	2.36	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:1y:48:C:C2	56:1y:59:U:H1'	2.46	0.50
1:2A:856:C:H2'	1:2A:857:C:C6	2.46	0.50
1:2A:1502:C:H2'	1:2A:1503:U:H6	1.76	0.50
32:2a:371:G:O2'	32:2a:373:A:N7	2.43	0.50
39:2h:11:THR:HG22	39:2h:15:ASN:ND2	2.26	0.50
1:1A:884:C:C5	1:1A:885:C:H1'	2.47	0.50
1:1A:1405:U:H2'	1:1A:1406:U:H6	1.77	0.50
38:1g:20:ASP:HB3	38:1g:23:VAL:HB	1.92	0.50
50:1s:12:ASP:OD1	50:1s:37:ARG:NH2	2.44	0.50
1:2A:652(A):A:H3'	1:2A:652(B):A:H5''	1.91	0.50
1:2A:2466:C:H5''	31:29:6:SER:HB3	1.94	0.50
1:2A:2870:C:H2'	1:2A:2871:C:O4'	2.11	0.50
2:2B:50:G:OP1	14:2S:63:THR:N	2.44	0.50
5:2F:167:ALA:HB1	5:2F:173:VAL:HG11	1.93	0.50
18:2W:64:MET:HE2	18:2W:109:GLU:HG3	1.93	0.50
32:2a:108:G:C6	51:2t:15:ARG:HG2	2.46	0.50
35:2d:65:ARG:HG3	35:2d:70:ILE:HG23	1.93	0.50
42:2k:59:TYR:CZ	42:2k:63:LEU:HD11	2.46	0.50
1:1A:570:G:H2'	1:1A:2030:A:N7	2.27	0.50
1:1A:1087:G:H2'	1:1A:1089:G:C8	2.46	0.50
1:1A:1796:U:H2'	1:1A:1797:C:H6	1.75	0.50
32:1a:202:U:H3'	32:1a:203:U:C5	2.46	0.50
32:1a:401:C:H2'	32:1a:402:G:C8	2.47	0.50
61:1a:5309:HOH:O	52:1u:5:ASP:OD2	2.19	0.50
43:1l:8:ASN:O	43:1l:12:ARG:HG3	2.12	0.50
51:1t:83:ARG:HA	51:1t:86:ARG:NH1	2.26	0.50
54:1w:2:C:H2'	54:1w:3:C:C6	2.46	0.50
1:2A:11:G:C2'	1:2A:12:U:H5'	2.41	0.50
1:2A:2745:C:H2'	1:2A:2746:U:O4'	2.12	0.50
32:2a:1402:4OC:HM22	32:2a:1403:C:H5'	1.93	0.50
36:2e:143:ARG:NH2	39:2h:77:GLU:OE1	2.29	0.50
61:1A:6767:HOH:O	4:1E:121:ASN:ND2	2.44	0.50
6:1G:106:LEU:HA	6:1G:110:ALA:HB3	1.94	0.50
13:1R:38:VAL:HG22	13:1R:112:ALA:HB2	1.93	0.50
14:1S:20:ARG:NH2	22:10:51:VAL:O	2.39	0.50
18:1W:72:LYS:HB3	18:1W:106:ILE:HG22	1.93	0.50
21:1Z:53:ILE:HG22	21:1Z:71:VAL:HG12	1.94	0.50
33:1b:211:ILE:HG23	33:1b:215:LEU:HD13	1.92	0.50
36:1e:53:LEU:O	36:1e:56:GLN:HG2	2.11	0.50
1:2A:2334:G:H4'	1:2A:2335:A:OP2	2.10	0.50
1:2A:2740:A:H2'	1:2A:2741:A:C8	2.47	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:44:GLY:N	6:2G:88:ILE:O	2.45	0.50
9:2N:15:LEU:HB2	9:2N:135:PRO:HB2	1.94	0.50
32:2a:551:U:H2'	32:2a:552:U:C6	2.47	0.50
32:2a:1026:G:N2	32:2a:1027:C:O4'	2.41	0.50
32:2a:1029:C:C4	32:2a:1032:G:N1	2.76	0.50
44:2m:17:VAL:O	44:2m:20:THR:OG1	2.18	0.50
1:1A:1790:C:H2'	1:1A:1791:A:C5	2.47	0.50
8:1I:38:LEU:HD23	8:1I:38:LEU:H	1.77	0.50
32:1a:102:G:O2'	32:1a:151:A:N3	2.45	0.50
32:1a:1460:A:H2'	32:1a:1461:G:O4'	2.11	0.50
33:1b:12:GLU:O	33:1b:15:VAL:HG22	2.12	0.50
34:1c:34:LEU:O	34:1c:38:ARG:HG3	2.11	0.50
35:1d:172:PRO:C	35:1d:174:LEU:H	2.19	0.50
51:1t:10:LEU:HD12	51:1t:12:ALA:H	1.76	0.50
1:2A:99:U:H4'	1:2A:100:G:H5'	1.93	0.50
1:2A:2131:G:C8	1:2A:2133:G:C2	2.99	0.50
8:2I:5:LEU:H	8:2I:5:LEU:HD12	1.77	0.50
10:2O:110:GLY:HA2	10:2O:112:MET:HE2	1.93	0.50
15:2T:110:ILE:HG23	15:2T:114:LEU:HD12	1.94	0.50
32:2a:259:G:OP2	51:2t:83:ARG:NH1	2.44	0.50
42:2k:87:THR:HA	42:2k:91:ARG:CZ	2.42	0.50
1:1A:184:C:H2'	1:1A:185:U:C6	2.46	0.50
6:1G:122:PRO:HG3	6:1G:182:LYS:H	1.76	0.50
32:1a:399:G:H2'	32:1a:400:C:C6	2.46	0.50
33:1b:134:GLU:HA	33:1b:137:ARG:HE	1.75	0.50
33:1b:162:ILE:O	33:1b:185:ILE:HG12	2.11	0.50
1:2A:38:A:H2'	1:2A:39:C:C6	2.47	0.50
1:2A:247:G:H4'	1:2A:386:G:C5	2.47	0.50
1:2A:1470:G:N2	1:2A:1520:G:OP2	2.42	0.50
8:2I:124:GLY:H	8:2I:144:VAL:HG23	1.76	0.50
28:26:10:LEU:HB2	28:26:52:VAL:HG13	1.92	0.50
31:29:27:CYS:SG	31:29:28:GLU:N	2.85	0.50
32:2a:224:C:H2'	32:2a:225:C:C6	2.47	0.50
32:2a:407:G:H2'	32:2a:408:A:H8	1.77	0.50
32:2a:1314:C:H2'	32:2a:1315:U:H6	1.77	0.50
32:2a:1525:G:OP1	42:2k:120:ARG:NH2	2.44	0.50
14:1S:87:PHE:HB2	14:1S:112:PHE:CD1	2.46	0.50
17:1V:65:GLY:HA3	17:1V:91:TYR:CZ	2.46	0.50
32:1a:69:G:H2'	32:1a:70:G:C8	2.46	0.50
32:1a:238:G:O6	61:1a:5108:HOH:O	2.17	0.50
32:1a:600:C:H2'	32:1a:601:C:C6	2.46	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1039:C:H2'	32:1a:1040:U:C6	2.47	0.50
32:1a:1071:C:H2'	32:1a:1072:G:C8	2.47	0.50
51:1t:57:ARG:HH22	51:1t:100:ILE:HD12	1.77	0.50
8:2I:53:ALA:O	8:2I:57:ARG:HG2	2.12	0.50
32:2a:115:G:OP2	61:2a:5103:HOH:O	2.20	0.50
42:2k:73:MET:HG2	42:2k:103:LEU:HD21	1.93	0.50
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.47	0.49
3:1D:146:GLU:HB2	3:1D:189:CYS:HB3	1.94	0.49
7:1H:124:GLU:O	7:1H:126:PRO:HD3	2.12	0.49
32:1a:308:C:H2'	32:1a:309:G:H8	1.76	0.49
32:1a:950:U:H2'	32:1a:951:G:H8	1.77	0.49
45:1n:21:TYR:HE1	45:1n:23:ARG:NE	2.09	0.49
1:2A:859:G:O2'	1:2A:916:G:O6	2.20	0.49
1:2A:1507:A:O2'	1:2A:1508:A:O5'	2.30	0.49
1:2A:1837:C:OP1	32:2a:784:C:H4'	2.12	0.49
1:2A:2137:C:H42	1:2A:2154:G:H1	1.58	0.49
1:2A:2262:U:OP2	22:20:16:SER:OG	2.25	0.49
21:2Z:158:PRO:O	21:2Z:161:VAL:HG12	2.12	0.49
32:2a:1122:U:C4	32:2a:1123:A:N7	2.80	0.49
54:2w:51:U:H2'	54:2w:52:G:C8	2.47	0.49
1:1A:884:C:H3'	1:1A:885:C:H4'	1.94	0.49
12:1Q:111:GLU:OE2	12:1Q:133:ARG:NH2	2.37	0.49
33:1b:91:PRO:HG2	33:1b:155:LEU:HD13	1.93	0.49
46:1o:11:VAL:HG21	46:1o:34:LEU:HD22	1.93	0.49
32:2a:1124:G:N7	32:2a:1145:C:O2'	2.45	0.49
34:2c:138:VAL:HG23	34:2c:151:VAL:HG23	1.94	0.49
1:1A:745:G:O6	61:1A:7004:HOH:O	2.20	0.49
6:1G:38:VAL:HG22	6:1G:93:THR:HG23	1.93	0.49
32:1a:1136:U:H5''	32:1a:1137:C:C4	2.47	0.49
1:2A:185:U:H2'	1:2A:186:G:C8	2.47	0.49
1:2A:252:G:P	11:2P:50:ARG:HH12	2.34	0.49
1:2A:271(A):A:N7	1:2A:271(W):G:N2	2.55	0.49
7:2H:88:LEU:HD11	7:2H:165:ALA:HA	1.93	0.49
8:2I:72:LEU:HD21	8:2I:107:VAL:HG11	1.94	0.49
11:2P:89:ALA:HA	11:2P:121:LYS:HD3	1.95	0.49
14:2S:25:ARG:NH1	14:2S:42:ASP:OD2	2.43	0.49
15:2T:73:GLU:OE2	15:2T:103:ARG:NE	2.45	0.49
22:20:11:ARG:O	22:20:14:ARG:NH2	2.45	0.49
34:2c:151:VAL:O	34:2c:167:TRP:HB2	2.13	0.49
47:2p:17:TYR:HD2	47:2p:39:TYR:HD2	1.60	0.49
54:2w:24:G:H2'	54:2w:25:C:O4'	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:67:C:H2'	54:2w:68:C:C6	2.47	0.49
56:2y:65:G:H2'	56:2y:66:U:C6	2.47	0.49
1:1A:1074:G:N1	1:1A:1075:C:H1'	2.27	0.49
1:1A:2576:G:H1'	61:1A:6001:HOH:O	2.11	0.49
4:1E:154:LYS:HG2	4:1E:156:MET:HE3	1.94	0.49
12:1Q:27:VAL:HB	12:1Q:134:ARG:HG3	1.93	0.49
15:1T:90:GLN:HG3	15:1T:91:ARG:N	2.28	0.49
32:1a:69:G:H2'	32:1a:70:G:H8	1.76	0.49
32:1a:922:G:H4'	36:1e:20:GLN:HA	1.95	0.49
32:1a:1291:G:O2'	40:1i:38:GLN:OE1	2.29	0.49
56:1y:2:C:H2'	56:1y:3:C:C6	2.47	0.49
1:2A:2121:G:H1	1:2A:2177:C:N4	2.07	0.49
32:2a:139:G:H2'	32:2a:140:A:H8	1.77	0.49
32:2a:1039:C:C2	32:2a:1040:U:H1'	2.48	0.49
32:2a:1285:A:H5'	32:2a:1286:A:C2	2.47	0.49
38:2g:15:ASP:OD1	38:2g:19:GLY:N	2.45	0.49
50:2s:66:MET:HB2	50:2s:74:PHE:CZ	2.48	0.49
1:1A:252:G:P	11:1P:50:ARG:HH12	2.35	0.49
1:1A:893:C:H2'	1:1A:894:C:C6	2.48	0.49
1:1A:2687:U:H2'	1:1A:2688:U:O4'	2.11	0.49
7:1H:124:GLU:HG2	7:1H:132:ARG:HB3	1.94	0.49
8:1I:40:THR:O	8:1I:44:LEU:HB2	2.13	0.49
15:1T:112:ARG:HG3	15:1T:115:ARG:NH2	2.28	0.49
32:1a:21:G:H2'	32:1a:22:G:C8	2.48	0.49
38:1g:113:GLU:CG	38:1g:119:ARG:HG2	2.43	0.49
1:2A:236:C:H2'	1:2A:237:C:H6	1.77	0.49
1:2A:992:C:OP1	16:2U:47:TYR:OH	2.24	0.49
1:2A:1007:C:OP1	9:2N:35:ARG:NH1	2.40	0.49
1:2A:1257:C:H2'	1:2A:1258:C:C6	2.47	0.49
1:2A:1582:C:H2'	1:2A:1583:A:H8	1.78	0.49
1:2A:2030:A:H4'	1:2A:2031:A:C8	2.48	0.49
1:2A:2313:C:H4'	6:2G:91:ARG:HG3	1.94	0.49
21:2Z:121:HIS:N	21:2Z:172:ALA:HB2	2.26	0.49
32:2a:1163:C:H2'	32:2a:1164:G:H8	1.76	0.49
32:2a:1266:G:N2	32:2a:1268:A:H3'	2.28	0.49
32:2a:1288:A:N1	32:2a:1371:G:H1'	2.27	0.49
36:2e:122:GLU:O	36:2e:126:ARG:NH1	2.45	0.49
52:2u:5:ASP:O	52:2u:8:THR:OG1	2.26	0.49
2:1B:75:G:H22	21:1Z:73:GLN:NE2	2.11	0.49
6:1G:78:SER:OG	55:1x:19:G:N2	2.42	0.49
22:10:70:GLN:OE1	22:10:80:HIS:NE2	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:16:CYS:HB2	26:14:36:CYS:HB3	1.94	0.49
28:16:9:LEU:HD21	28:16:25:LYS:HB3	1.94	0.49
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.48	0.49
34:1c:6:HIS:HD2	34:1c:8:ILE:H	1.60	0.49
36:1e:6:PHE:CD1	36:1e:36:ASP:HB3	2.47	0.49
1:2A:480:A:O2'	20:2Y:46:LYS:O	2.25	0.49
1:2A:800:A:H8	1:2A:800:A:OP1	1.95	0.49
14:2S:27:SER:HA	14:2S:88:ASP:HB3	1.95	0.49
16:2U:46:ALA:O	16:2U:50:ARG:HG3	2.13	0.49
16:2U:74:LEU:H	16:2U:74:LEU:HD12	1.77	0.49
21:2Z:28:MET:O	21:2Z:35:ARG:N	2.40	0.49
32:2a:407:G:H2'	32:2a:408:A:C8	2.48	0.49
34:2c:6:HIS:CE1	34:2c:8:ILE:HB	2.48	0.49
34:2c:121:ALA:HB2	34:2c:198:VAL:HG21	1.94	0.49
35:2d:106:TYR:O	35:2d:108:LEU:N	2.45	0.49
38:2g:152:ALA:O	38:2g:155:ARG:HD3	2.12	0.49
40:2i:63:ILE:HG21	40:2i:77:ILE:HG12	1.94	0.49
45:2n:12:ARG:NH1	45:2n:14:PRO:HA	2.28	0.49
50:2s:51:VAL:O	50:2s:58:VAL:N	2.44	0.49
1:1A:152:G:H2'	1:1A:153:C:C6	2.47	0.49
1:1A:1288:U:OP1	61:1A:6980:HOH:O	2.19	0.49
12:1Q:44:ALA:HA	12:1Q:47:ILE:HD12	1.95	0.49
36:1e:90:VAL:O	36:1e:120:THR:HA	2.13	0.49
1:2A:324:A:N6	1:2A:338:G:O2'	2.45	0.49
1:2A:527:C:C4	1:2A:2779:U:H2'	2.48	0.49
1:2A:938:G:OP2	30:28:52:LYS:NZ	2.42	0.49
1:2A:2010:G:H5''	18:2W:42:ARG:HB2	1.93	0.49
1:2A:2161:C:H2'	1:2A:2162:G:O4'	2.13	0.49
2:2B:41:U:H5	6:2G:70:VAL:N	2.11	0.49
2:2B:105:A:H5'	2:2B:106:G:OP2	2.12	0.49
4:2E:7:VAL:HG13	4:2E:27:LEU:HB3	1.95	0.49
8:2I:123:LEU:HD11	8:2I:145:VAL:C	2.37	0.49
32:2a:45:U:H2'	32:2a:46:G:C8	2.48	0.49
33:2b:91:PRO:HG3	33:2b:154:LEU:HB2	1.94	0.49
34:2c:22:TRP:CH2	34:2c:32:LEU:HB3	2.48	0.49
10:1O:104:ARG:CZ	15:1T:34:VAL:HG11	2.43	0.49
18:1W:71:VAL:HA	18:1W:107:LEU:HD23	1.95	0.49
21:1Z:8:TYR:HB2	21:1Z:38:TYR:CE2	2.47	0.49
33:1b:163:PHE:CD1	33:1b:185:ILE:HG13	2.48	0.49
34:1c:152:ILE:HB	34:1c:199:LYS:HB2	1.94	0.49
47:1p:5:ARG:HD3	47:1p:22:THR:HG23	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2171:A:H1'	1:2A:2172:U:C6	2.48	0.49
10:2O:48:PRO:HB2	10:2O:49:ARG:NH1	2.27	0.49
32:2a:512:U:H2'	32:2a:513:C:C6	2.47	0.49
32:2a:1275:A:H3'	32:2a:1276:G:H8	1.78	0.49
32:2a:1347:G:O2'	32:2a:1373:G:O6	2.25	0.49
44:2m:13:LYS:NZ	44:2m:21:TYR:OH	2.46	0.49
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.48	0.49
1:1A:2319:G:H1	14:1S:3:ARG:HD3	1.78	0.49
4:1E:89:ASP:OD1	4:1E:89:ASP:N	2.46	0.49
32:1a:276:G:O3'	48:1q:68:ARG:NH1	2.45	0.49
32:1a:946:A:O2'	32:1a:1333:A:N3	2.35	0.49
32:1a:1029:C:H41	32:1a:1030(A):G:H21	1.61	0.49
32:1a:1179:A:O3'	40:1i:103:THR:HB	2.13	0.49
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.48	0.49
51:1t:43:LEU:HD13	51:1t:51:GLU:HB3	1.94	0.49
1:2A:141:A:H8	1:2A:1408:C:HO2'	1.56	0.49
1:2A:414:C:H2'	1:2A:415:A:C8	2.48	0.49
1:2A:2144:U:H1'	1:2A:2148:G:N2	2.28	0.49
4:2E:14:ILE:HG13	4:2E:21:VAL:HG13	1.94	0.49
9:2N:67:LEU:O	9:2N:88:GLU:HG3	2.13	0.49
11:2P:50:ARG:HD3	30:28:7:HIS:CD2	2.48	0.49
32:2a:203:U:O5'	32:2a:203:U:H6	1.95	0.49
32:2a:437:U:O2'	35:2d:125:HIS:HE1	1.96	0.49
32:2a:542:G:OP1	35:2d:10:ARG:NH2	2.40	0.49
32:2a:1228:C:H2'	32:2a:1229:A:H8	1.77	0.49
32:2a:1286:A:H8	32:2a:1287:A:H4'	1.75	0.49
33:2b:15:VAL:HG12	33:2b:209:ARG:HD2	1.95	0.49
40:2i:24:GLY:C	40:2i:25:LYS:HD2	2.38	0.49
44:2m:86:CYS:HB2	50:2s:73:GLU:HG2	1.94	0.49
1:1A:2176:A:H2'	1:1A:2177:C:C6	2.48	0.49
1:1A:2182:G:H2'	1:1A:2183:C:C6	2.48	0.49
1:1A:2844:G:O6	61:1A:6538:HOH:O	2.19	0.49
2:1B:14:U:O2	2:1B:108:U:H4'	2.13	0.49
3:1D:20:ASP:OD2	3:1D:22:SER:OG	2.30	0.49
11:1P:98:GLU:O	11:1P:101:VAL:HG12	2.13	0.49
12:1Q:78:PRO:HG2	12:1Q:81:VAL:HG11	1.95	0.49
32:1a:1353:G:OP1	52:1u:10:ARG:NH1	2.46	0.49
45:1n:6:LEU:HD23	45:1n:23:ARG:HH22	1.78	0.49
1:2A:1153:C:H2'	1:2A:1154:G:O4'	2.12	0.49
1:2A:1394:U:C4	1:2A:1395:A:C5	3.01	0.49
1:2A:1514:U:H2'	1:2A:1515:G:C8	2.48	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:23:30:ARG:HB2	25:23:33:GLN:HB2	1.95	0.49
31:29:6:SER:O	31:29:6:SER:OG	2.23	0.49
32:2a:542:G:P	35:2d:10:ARG:HH22	2.35	0.49
32:2a:1108:G:H5'	34:2c:176:HIS:NE2	2.28	0.49
33:2b:97:TRP:HH2	33:2b:102:LEU:HD13	1.78	0.49
50:2s:80:TYR:C	50:2s:82:GLY:H	2.18	0.49
1:1A:1094:U:N3	1:1A:1097:U:OP2	2.46	0.48
5:1F:135:LYS:HB2	5:1F:138:GLU:HG3	1.95	0.48
7:1H:137:ASP:HB3	7:1H:140:LYS:HB3	1.94	0.48
32:1a:1343:G:H2'	32:1a:1344:C:C6	2.48	0.48
38:1g:70:LYS:HG2	38:1g:96:GLN:HB3	1.94	0.48
1:2A:271(D):G:H2'	1:2A:271(E):U:C6	2.48	0.48
1:2A:845:G:OP2	1:2A:845:G:N2	2.39	0.48
6:2G:106:LEU:HA	6:2G:110:ALA:HB3	1.95	0.48
9:2N:108:PRO:O	9:2N:113:GLY:HA3	2.13	0.48
26:24:45:GLY:C	26:24:47:GLN:H	2.21	0.48
32:2a:691:G:H2'	32:2a:692:U:C6	2.48	0.48
32:2a:1079:G:O2'	36:2e:14:ARG:NH2	2.43	0.48
35:2d:101:LEU:HA	35:2d:104:VAL:HG22	1.93	0.48
39:2h:81:HIS:ND1	39:2h:138:TRP:OXT	2.37	0.48
50:2s:19:VAL:O	50:2s:23:ASN:ND2	2.46	0.48
1:1A:588:U:OP1	61:1A:6771:HOH:O	2.19	0.48
37:1f:100:ASN:HB2	49:1r:27:GLY:O	2.13	0.48
40:1i:77:ILE:O	40:1i:81:ILE:HG22	2.13	0.48
51:1t:9:ASN:O	51:1t:10:LEU:HB2	2.12	0.48
1:2A:582:G:OP2	61:2A:5285:HOH:O	2.20	0.48
1:2A:1181:C:H2'	1:2A:1182:A:C8	2.48	0.48
1:2A:2237:G:OP1	61:2A:5978:HOH:O	2.19	0.48
12:2Q:29:PHE:HB2	12:2Q:105:GLU:OE1	2.13	0.48
30:28:62:LEU:HB3	30:28:65:GLU:HG2	1.94	0.48
32:2a:828:A:OP1	39:2h:21:LYS:NZ	2.46	0.48
35:2d:116:GLN:NE2	35:2d:157:LEU:HD21	2.28	0.48
1:1A:922:U:H2'	1:1A:923:C:C6	2.48	0.48
1:1A:1815:A:P	3:1D:54:ARG:HH22	2.37	0.48
1:1A:2188:C:H2'	1:1A:2189:U:O4'	2.14	0.48
5:1F:184:TYR:O	5:1F:188:ARG:HG3	2.13	0.48
6:1G:17:PRO:HA	6:1G:20:ILE:HD12	1.94	0.48
12:1Q:85:LYS:HD3	22:10:7:LEU:HD13	1.94	0.48
32:1a:148:G:H2'	32:1a:149:A:C8	2.48	0.48
32:1a:1030(D):A:H2'	32:1a:1031:G:H4'	1.95	0.48
32:1a:1228:C:P	44:1m:108:ARG:HH22	2.35	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1309:G:OP1	44:1m:92:HIS:HE1	1.96	0.48
56:1y:59:U:H3'	56:1y:60:U:H6	1.79	0.48
1:2A:582:G:H2'	1:2A:583:G:C8	2.48	0.48
9:2N:103:VAL:HG11	9:2N:120:LEU:HD22	1.94	0.48
14:2S:11:LYS:HG3	14:2S:91:PRO:HB3	1.95	0.48
16:2U:69:CYS:HB3	16:2U:74:LEU:HD13	1.94	0.48
16:2U:85:LYS:HB2	16:2U:116:ALA:HB1	1.94	0.48
26:24:2:LYS:HD2	26:24:5:ILE:HD13	1.96	0.48
32:2a:6:G:H1	36:2e:98:THR:HG1	1.61	0.48
32:2a:347:G:H8	32:2a:347:G:OP2	1.96	0.48
32:2a:437:U:O2	35:2d:119:GLN:NE2	2.46	0.48
35:2d:64:LEU:HB2	35:2d:198:VAL:HG11	1.94	0.48
51:2t:72:LEU:HG	51:2t:76:ALA:HB3	1.95	0.48
1:1A:911:A:H2'	12:1Q:9:TYR:OH	2.14	0.48
1:1A:2451:A:C6	54:1w:76:F3N:HE1	2.48	0.48
38:1g:22:LEU:HG	38:1g:62:PHE:HE2	1.79	0.48
1:2A:236:C:H2'	1:2A:237:C:C6	2.49	0.48
1:2A:2108:C:N4	1:2A:2181:G:H1	2.06	0.48
1:2A:2361:A:OP2	30:28:26:LYS:NZ	2.41	0.48
1:2A:2646:C:H2'	1:2A:2647:U:O4'	2.13	0.48
5:2F:120:GLU:OE2	5:2F:122:LYS:HG3	2.13	0.48
32:2a:537:G:H5''	43:2l:113:ARG:NH1	2.28	0.48
1:1A:492:A:H2'	1:1A:493:G:O4'	2.12	0.48
4:1E:40:GLU:CD	4:1E:40:GLU:H	2.21	0.48
8:1I:92:VAL:HG11	8:1I:144:VAL:HG11	1.94	0.48
19:1X:12:VAL:HG22	19:1X:29:TRP:CE2	2.47	0.48
32:1a:224:C:H2'	32:1a:225:C:C6	2.48	0.48
32:1a:390:C:H2'	32:1a:391:G:C8	2.48	0.48
32:1a:1530:G:H2'	32:1a:1531:A:C8	2.48	0.48
34:1c:8:ILE:HD12	34:1c:16:ARG:HG3	1.96	0.48
34:1c:39:ILE:HG23	34:1c:91:LEU:HD11	1.94	0.48
46:1o:6:GLU:OE1	46:1o:6:GLU:N	2.46	0.48
56:1y:21:A:H2'	56:1y:22:G:C8	2.48	0.48
1:2A:336:C:HO2'	20:2Y:35:TYR:HH	1.60	0.48
1:2A:471:A:H2'	1:2A:472:A:O4'	2.14	0.48
1:2A:686:G:N2	1:2A:788:A:H61	2.12	0.48
1:2A:1429:G:H2'	1:2A:1430:C:C6	2.49	0.48
1:2A:2419:U:H2'	1:2A:2420:C:C6	2.48	0.48
61:2A:6253:HOH:O	20:2Y:94:LYS:NZ	2.42	0.48
6:2G:47:LYS:HG3	6:2G:48:GLU:H	1.78	0.48
6:2G:133:LEU:HG	6:2G:157:ILE:HB	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:2N:13:TRP:CZ2	9:2N:133:GLN:HG2	2.49	0.48
14:2S:4:LEU:HD22	14:2S:8:GLU:HB2	1.95	0.48
32:2a:1212:U:H5'	32:2a:1213:A:C8	2.48	0.48
32:2a:1319:A:O2'	32:2a:1323:G:N7	2.39	0.48
47:2p:28:ARG:HG2	47:2p:29:ASP:OD1	2.14	0.48
48:2q:68:ARG:H	48:2q:70:ARG:NH1	2.10	0.48
1:1A:800:A:H8	1:1A:800:A:OP1	1.95	0.48
1:1A:1173:G:OP2	1:1A:1173:G:H2'	2.13	0.48
2:1B:13:A:N1	2:1B:69:G:O2'	2.40	0.48
5:1F:34:TRP:HB2	11:1P:6:LEU:HD22	1.96	0.48
21:1Z:69:THR:HG22	21:1Z:90:VAL:HA	1.96	0.48
32:1a:262:A:H2'	32:1a:263:A:C8	2.49	0.48
32:1a:434:U:H2'	32:1a:435:C:C6	2.48	0.48
32:1a:1179:A:H4'	40:1i:103:THR:HA	1.95	0.48
55:1x:19:G:H4'	55:1x:20:U:OP2	2.13	0.48
1:2A:668:G:H5'	1:2A:669:G:OP2	2.13	0.48
1:2A:729:G:C6	3:2D:208:LYS:HB2	2.47	0.48
1:2A:731:C:H5''	61:2A:6038:HOH:O	2.13	0.48
14:2S:25:ARG:HB3	14:2S:40:ILE:HB	1.94	0.48
32:2a:719:C:O2'	49:2r:49:LYS:HB3	2.14	0.48
32:2a:1314:C:H2'	32:2a:1315:U:C6	2.48	0.48
40:2i:8:GLY:HA2	40:2i:79:LEU:HD23	1.94	0.48
41:2j:6:ILE:HB	41:2j:72:VAL:HG22	1.95	0.48
47:2p:26:ARG:HG3	47:2p:27:LYS:N	2.29	0.48
1:1A:774:A:N3	1:1A:774:A:H2'	2.29	0.48
1:1A:1178:C:H2'	1:1A:1179:C:C6	2.49	0.48
1:1A:1371:G:H2'	1:1A:1372:U:H5	1.78	0.48
32:1a:373:A:H2'	32:1a:374:A:H8	1.78	0.48
1:2A:887:A:H4'	1:2A:888:C:H5	1.78	0.48
1:2A:1037:G:H2'	1:2A:1038:C:O4'	2.13	0.48
2:2B:41:U:H5	6:2G:70:VAL:H	1.60	0.48
6:2G:101:ILE:HG12	26:24:25:TYR:HB2	1.95	0.48
10:2O:49:ARG:NH1	32:2a:1422:G:O3'	2.41	0.48
11:2P:29:LYS:HG3	11:2P:30:THR:H	1.78	0.48
12:2Q:50:ALA:HB1	12:2Q:121:ALA:HB1	1.96	0.48
17:2V:37:VAL:HG22	17:2V:57:VAL:HG23	1.96	0.48
21:2Z:7:ALA:HB2	21:2Z:59:LEU:HD22	1.95	0.48
21:2Z:159:PRO:HA	21:2Z:160:GLY:HA2	1.48	0.48
32:2a:513:C:H2'	32:2a:514:C:H6	1.78	0.48
32:2a:601:C:H2'	32:2a:602:A:H8	1.77	0.48
32:2a:604:G:H2'	32:2a:605:U:O4'	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:22:LEU:HD21	38:2g:66:VAL:HG11	1.94	0.48
44:2m:85:GLY:HA2	44:2m:93:ARG:HH22	1.79	0.48
1:1A:1183:G:O3'	25:13:29:ARG:NH1	2.47	0.48
1:1A:1266:G:O2'	1:1A:2012:G:O6	2.28	0.48
1:1A:2128:C:N4	1:1A:2160:G:C6	2.82	0.48
1:1A:2786:U:O2'	4:1E:62:PRO:O	2.29	0.48
4:1E:116:VAL:HG13	4:1E:122:PHE:HB2	1.95	0.48
12:1Q:12:GLN:NE2	12:1Q:72:LYS:HG3	2.27	0.48
16:1U:83:LEU:HD12	16:1U:113:ALA:HB2	1.95	0.48
32:1a:975:A:H5'	32:1a:975:A:H8	1.78	0.48
32:1a:977:A:HO2'	32:1a:981:U:H3	1.61	0.48
32:1a:1165:C:N4	32:1a:1166:G:O6	2.46	0.48
33:1b:88:ALA:O	33:1b:226:ARG:NH1	2.46	0.48
35:1d:65:ARG:NH1	35:1d:72:GLU:HB2	2.27	0.48
37:1f:38:GLU:HB2	37:1f:64:GLN:HG3	1.96	0.48
40:1i:65:VAL:HB	40:1i:73:GLN:HG2	1.95	0.48
40:1i:110:GLU:OE2	40:1i:113:LYS:NZ	2.28	0.48
47:1p:6:LEU:HB3	47:1p:17:TYR:CD1	2.48	0.48
1:2A:1913:A:C8	32:2a:1494:G:H4'	2.49	0.48
1:2A:2065:C:H2'	1:2A:2066:C:C6	2.48	0.48
1:2A:2320:A:N3	1:2A:2320:A:H2'	2.29	0.48
32:2a:26:A:N6	32:2a:558:G:O2'	2.40	0.48
32:2a:646:U:H2'	32:2a:647:C:C6	2.49	0.48
32:2a:1518:MA6:H93	32:2a:1519:MA6:H92	1.96	0.48
49:2r:58:LEU:HD22	49:2r:62:GLU:HB3	1.94	0.48
1:1A:897:C:H2'	1:1A:898:C:C6	2.49	0.48
1:1A:1052:C:H2'	1:1A:1053:C:H6	1.79	0.48
1:1A:1506:C:H2'	1:1A:1507:A:H8	1.79	0.48
1:1A:2319:G:H22	14:1S:3:ARG:CD	2.26	0.48
9:1N:36:GLY:HA2	9:1N:38:HIS:CE1	2.49	0.48
21:1Z:26:GLY:HA3	21:1Z:86:VAL:HG23	1.96	0.48
32:1a:461:A:O2'	32:1a:471:G:N7	2.45	0.48
33:1b:55:PHE:CD1	33:1b:221:LEU:HD22	2.49	0.48
34:1c:58:GLU:HB3	41:1j:92:THR:HG21	1.94	0.48
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.96	0.48
1:2A:1420:U:O2'	1:2A:1421:G:OP1	2.28	0.48
3:2D:142:VAL:HG12	3:2D:163:ALA:HB3	1.96	0.48
28:26:23:THR:OG1	28:26:24:GLU:N	2.47	0.48
32:2a:272:C:H2'	32:2a:273:A:H8	1.79	0.48
32:2a:833:U:H2'	32:2a:834:C:H6	1.78	0.48
32:2a:1002:G:N3	32:2a:1003:G:H1'	2.29	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:2f:35:ALA:HA	37:2f:67:MET:HB3	1.95	0.48
1:1A:218:A:C2	1:1A:235:U:H4'	2.49	0.48
1:1A:603:A:H4'	1:1A:604:G:H5'	1.95	0.48
1:1A:2023:G:H5'	1:1A:2617:C:H4'	1.96	0.48
1:1A:2206:G:H5''	1:1A:2207:G:C8	2.49	0.48
1:1A:2377:A:H2'	1:1A:2378:A:C8	2.49	0.48
32:1a:189(L):G:H2'	32:1a:190:U:C6	2.48	0.48
32:1a:437:U:H5'	35:1d:155:LEU:HD21	1.95	0.48
32:1a:1064:G:O2'	32:1a:1190:G:N2	2.45	0.48
33:1b:59:GLU:HB2	33:1b:221:LEU:HD11	1.96	0.48
33:1b:155:LEU:HD12	33:1b:155:LEU:HA	1.71	0.48
38:1g:76:ARG:N	38:1g:87:VAL:O	2.43	0.48
44:1m:11:ARG:C	44:1m:13:LYS:H	2.22	0.48
55:1x:54:5MU:H2'	55:1x:55:PSU:O4'	2.13	0.48
1:2A:1153:C:OP1	16:2U:92:ARG:NH2	2.42	0.48
1:2A:1502:C:H2'	1:2A:1503:U:C6	2.49	0.48
1:2A:1641:A:H2'	1:2A:1642:G:O4'	2.14	0.48
1:2A:2406:U:C2	11:2P:72:PRO:HG2	2.48	0.48
1:2A:2507:C:H2'	1:2A:2508:G:O4'	2.14	0.48
3:2D:11:PRO:O	3:2D:14:ARG:HG3	2.14	0.48
6:2G:28:VAL:O	6:2G:31:VAL:N	2.33	0.48
6:2G:79:ASN:OD1	6:2G:79:ASN:N	2.47	0.48
21:2Z:33:LEU:HD11	21:2Z:90:VAL:HG21	1.96	0.48
32:2a:1325:C:H2'	32:2a:1326:C:H6	1.79	0.48
46:2o:39:LEU:HB3	46:2o:56:LEU:HD13	1.95	0.48
1:1A:234:C:H2'	1:1A:235:U:C6	2.49	0.47
1:1A:360:G:H2'	1:1A:361:G:C8	2.49	0.47
1:1A:2254:C:N4	61:1A:7127:HOH:O	2.47	0.47
4:1E:48:GLN:NE2	4:1E:78:LEU:HG	2.29	0.47
5:1F:40:GLN:NE2	5:1F:182:ASN:HB2	2.28	0.47
6:1G:43:LEU:HD23	6:1G:53:LEU:HD23	1.96	0.47
15:1T:118:ARG:HA	15:1T:121:ILE:HD12	1.95	0.47
18:1W:64:MET:HE3	18:1W:109:GLU:HG3	1.96	0.47
21:1Z:124:ILE:HG23	21:1Z:126:VAL:HG23	1.96	0.47
26:14:13:ARG:NH1	26:14:23:GLU:OE2	2.46	0.47
32:1a:161:A:N1	32:1a:347:G:O2'	2.43	0.47
32:1a:545:C:O2'	32:1a:549:C:OP1	2.31	0.47
32:1a:599:C:H4'	39:1h:130:GLY:C	2.38	0.47
32:1a:868:C:H2'	32:1a:869:G:O4'	2.14	0.47
1:2A:208:C:H2'	1:2A:209:C:H6	1.79	0.47
1:2A:524:U:H2'	1:2A:525:U:C6	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:878:A:H61	1:2A:899:A:H1'	1.78	0.47
7:2H:137:ASP:HB3	7:2H:140:LYS:HB3	1.96	0.47
13:2R:95:THR:HG23	13:2R:116:LEU:HD23	1.95	0.47
15:2T:19:LEU:HD13	15:2T:86:ILE:HD12	1.95	0.47
32:2a:72:C:H2'	32:2a:73:G:O4'	2.14	0.47
32:2a:162:A:H8	32:2a:162:A:O5'	1.97	0.47
32:2a:1330:U:H4'	44:2m:23:TYR:CZ	2.49	0.47
37:2f:12:PRO:HG3	37:2f:57:GLN:C	2.39	0.47
42:2k:23:ALA:HB1	42:2k:88:GLY:H	1.79	0.47
56:2y:36:A:H2'	56:2y:37:MIA:O4'	2.14	0.47
1:1A:34:C:H5''	1:1A:35:G:OP2	2.13	0.47
1:1A:747:U:O2	1:1A:2014:A:H1'	2.14	0.47
7:1H:149:ARG:HH12	7:1H:167:GLU:CD	2.22	0.47
17:1V:14:VAL:HB	17:1V:96:ILE:HG13	1.96	0.47
21:1Z:152:ALA:HB1	21:1Z:163:LEU:HD11	1.96	0.47
25:13:6:VAL:HG22	25:13:56:VAL:HG13	1.96	0.47
32:1a:1225:A:N6	61:1a:5261:HOH:O	2.43	0.47
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.29	0.47
33:1b:33:TYR:HB2	33:1b:43:ASP:HB2	1.94	0.47
39:1h:11:THR:HG22	39:1h:15:ASN:ND2	2.30	0.47
1:2A:323:G:C2	1:2A:333:G:H1'	2.49	0.47
1:2A:1539:G:H2'	1:2A:1540:U:O4'	2.13	0.47
1:2A:2267:A:H5''	1:2A:2268:A:H5'	1.96	0.47
1:2A:2504:U:OP2	61:2A:5592:HOH:O	2.20	0.47
1:2A:2831:G:OP1	1:2A:2834:G:H4'	2.13	0.47
2:2B:7:G:H5'	14:2S:29:PHE:CE2	2.48	0.47
7:2H:20:ALA:HB1	7:2H:21:PRO:HD2	1.95	0.47
7:2H:84:SER:HA	7:2H:133:VAL:O	2.14	0.47
30:28:14:VAL:HG13	30:28:22:VAL:HG13	1.96	0.47
32:2a:441:A:H3'	32:2a:442:C:H6	1.79	0.47
32:2a:1497:G:H1'	32:2a:1518:MA6:H2	1.96	0.47
33:2b:39:ILE:H	33:2b:39:ILE:HD12	1.78	0.47
47:2p:53:VAL:HG13	47:2p:79:VAL:HG22	1.96	0.47
1:1A:8:A:H2'	1:1A:9:U:C6	2.50	0.47
1:1A:2390:U:P	30:18:35:GLN:HE22	2.38	0.47
1:1A:2839:G:H5'	13:1R:46:GLY:HA2	1.95	0.47
32:1a:909:A:H2'	32:1a:910:C:O4'	2.14	0.47
32:1a:1025:U:O2	32:1a:1036:G:C6	2.67	0.47
32:1a:1030(B):C:H2'	32:1a:1030(C):G:H5'	1.95	0.47
37:1f:33:TYR:OH	37:1f:78:GLU:HG3	2.14	0.47
40:1i:17:VAL:HG11	40:1i:80:GLY:C	2.39	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:89:G:C6	1:2A:90:U:C4	3.03	0.47
1:2A:191:A:H2'	1:2A:192:C:C6	2.50	0.47
1:2A:299:A:N1	1:2A:322:A:O2'	2.38	0.47
1:2A:407:G:H2'	1:2A:408:G:C8	2.50	0.47
1:2A:910:A:N3	1:2A:2264:C:O2'	2.38	0.47
1:2A:947:G:H2'	1:2A:948:G:H8	1.79	0.47
1:2A:1999:C:H5''	1:2A:2723:C:O2'	2.14	0.47
1:2A:2391:G:O6	1:2A:2425:A:H8	1.98	0.47
4:2E:34:VAL:HG11	4:2E:78:LEU:HD11	1.95	0.47
8:2I:37:VAL:HG12	8:2I:38:LEU:HD12	1.95	0.47
24:22:35:LEU:HD12	24:22:53:LEU:HD12	1.96	0.47
25:23:46:ASN:O	25:23:50:VAL:HG22	2.14	0.47
32:2a:1004:A:N3	32:2a:1038:C:C2	2.82	0.47
33:2b:185:ILE:HG12	33:2b:185:ILE:O	2.15	0.47
40:2i:17:VAL:HG11	40:2i:81:ILE:HA	1.96	0.47
51:2t:60:GLU:HG3	51:2t:81:LYS:HD2	1.96	0.47
1:1A:531:C:H4'	1:1A:532:A:H5''	1.95	0.47
1:1A:883:G:O2'	1:1A:884:C:H5	1.97	0.47
1:1A:1090:U:C2	1:1A:1102:C:H1'	2.49	0.47
61:1A:5519:HOH:O	4:1E:29:GLY:HA3	2.13	0.47
2:1B:66:A:H61	2:1B:108:U:H2'	1.80	0.47
5:1F:157:VAL:HB	5:1F:194:MET:HG2	1.95	0.47
13:1R:36:THR:HG22	13:1R:37:THR:H	1.78	0.47
32:1a:621:A:H2'	32:1a:622:A:C8	2.49	0.47
33:1b:19:HIS:NE2	33:1b:206:ASP:OD2	2.44	0.47
33:1b:20:GLU:HG2	33:1b:23:ARG:HH11	1.80	0.47
47:1p:57:ARG:O	47:1p:61:SER:N	2.42	0.47
50:1s:11:VAL:HG11	50:1s:16:LEU:HB2	1.96	0.47
55:1x:68:C:H2'	55:1x:69:C:C6	2.49	0.47
1:2A:27:G:N2	1:2A:512:G:H1'	2.30	0.47
2:2B:42:C:O2	6:2G:93:THR:N	2.36	0.47
4:2E:27:LEU:HD22	15:2T:1:MET:SD	2.54	0.47
6:2G:166:ASP:O	6:2G:170:ARG:HB2	2.15	0.47
8:2I:107:VAL:HG12	8:2I:108:THR:H	1.79	0.47
26:24:53:GLU:HG3	26:24:56:VAL:HG12	1.96	0.47
32:2a:253:U:H2'	32:2a:254:G:C8	2.49	0.47
32:2a:1151:A:O2'	32:2a:1152:A:O5'	2.30	0.47
42:2k:87:THR:O	42:2k:87:THR:OG1	2.27	0.47
1:1A:1226:A:OP1	16:1U:16:LYS:NZ	2.46	0.47
1:1A:1417:C:H2'	1:1A:1418:G:O4'	2.15	0.47
10:1O:75:SER:HB2	15:1T:74:ARG:HH12	1.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:115:G:H4'	32:1a:116:A:O5'	2.13	0.47
32:1a:376:G:H5''	47:1p:5:ARG:HB3	1.96	0.47
35:1d:178:VAL:C	35:1d:180:GLY:H	2.21	0.47
38:1g:74:GLU:OE2	38:1g:95:ARG:NE	2.41	0.47
14:2S:15:ARG:O	14:2S:19:LYS:HG2	2.14	0.47
32:2a:401:C:H2'	32:2a:402:G:C8	2.49	0.47
32:2a:1299:A:H2'	32:2a:1299:A:N3	2.29	0.47
32:2a:1375:A:H4'	38:2g:29:LYS:HD3	1.97	0.47
38:2g:13:GLN:O	38:2g:24:THR:HG21	2.14	0.47
1:1A:746:A:H2'	1:1A:2612:C:H5''	1.96	0.47
1:1A:1082:U:H3	1:1A:1086:A:H61	0.54	0.47
1:1A:1166:C:H2'	1:1A:1167:U:C6	2.49	0.47
23:11:76:ARG:NH1	23:11:97:LEU:O	2.48	0.47
26:14:50:VAL:HG21	44:1m:64:TRP:C	2.39	0.47
26:14:53:GLU:H	26:14:53:GLU:HG3	1.50	0.47
32:1a:221:C:H2'	32:1a:222:U:H6	1.79	0.47
32:1a:1145:C:H4'	32:1a:1146:A:H5'	1.95	0.47
32:1a:1498:UR3:OP2	53:1v:16:A:O2'	2.27	0.47
56:1y:19:G:C6	56:1y:56:C:N4	2.82	0.47
1:2A:83:G:N1	1:2A:102:G:O2'	2.27	0.47
1:2A:1231:G:H2'	1:2A:1232:G:C8	2.49	0.47
2:2B:1:U:H2'	2:2B:2:C:C6	2.50	0.47
4:2E:9:VAL:HG13	4:2E:25:VAL:O	2.14	0.47
6:2G:19:LEU:HD22	6:2G:32:PRO:HD2	1.97	0.47
8:2I:71:ILE:O	8:2I:75:LEU:HG	2.14	0.47
8:2I:78:THR:HA	8:2I:143:SER:O	2.14	0.47
32:2a:1271:G:C2	32:2a:1272:G:N7	2.82	0.47
33:2b:180:LEU:HB2	33:2b:182:ILE:HG13	1.95	0.47
40:2i:26:VAL:HG13	40:2i:61:ALA:HB3	1.95	0.47
41:2j:69:ASN:O	41:2j:70:ARG:NH1	2.41	0.47
1:1A:86:C:H4'	1:1A:104:U:H1'	1.97	0.47
1:1A:207:A:H2'	1:1A:208:C:O4'	2.15	0.47
1:1A:234:C:H2'	1:1A:235:U:H6	1.79	0.47
1:1A:443:A:H1'	1:1A:1201:C:O4'	2.15	0.47
1:1A:459:U:H4'	29:17:40:TRP:CH2	2.49	0.47
1:1A:1020:A:N1	1:1A:1141:U:O2'	2.47	0.47
1:1A:1062:G:N2	1:1A:1077:A:H61	2.12	0.47
1:1A:2099:U:O2	1:1A:2190:G:N2	2.38	0.47
1:1A:2322:A:N6	61:1A:5125:HOH:O	2.22	0.47
1:1A:2504:U:OP2	61:1A:6150:HOH:O	2.20	0.47
1:1A:2629:A:HO2'	1:1A:2630:G:P	2.37	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:1H:56:SER:HB3	7:1H:61:HIS:ND1	2.30	0.47
21:1Z:92:SER:O	21:1Z:94:GLU:N	2.47	0.47
21:1Z:93:ASP:HB3	21:1Z:131:ARG:HH22	1.80	0.47
31:19:32:HIS:O	31:19:34:GLN:HG3	2.14	0.47
32:1a:437:U:H5''	35:1d:155:LEU:HD11	1.95	0.47
32:1a:946:A:H2'	32:1a:947:G:C8	2.49	0.47
32:1a:1129:C:O2'	32:1a:1139:G:N7	2.37	0.47
33:1b:15:VAL:HB	33:1b:209:ARG:HG3	1.96	0.47
34:1c:110:ASN:ND2	34:1c:140:ARG:HB3	2.30	0.47
35:1d:109:GLY:HA3	35:1d:165:MET:HG3	1.96	0.47
35:1d:111:ALA:HB1	35:1d:116:GLN:HB3	1.97	0.47
35:1d:158:ILE:H	35:1d:158:ILE:HG13	1.59	0.47
41:1j:27:ALA:HA	41:1j:81:THR:HG21	1.97	0.47
43:1l:89:ARG:HH12	43:1l:91:LYS:HG3	1.79	0.47
51:1t:10:LEU:HB3	51:1t:12:ALA:H	1.79	0.47
56:1y:68:C:C2	56:1y:69:G:C8	3.03	0.47
1:2A:1188:U:H4'	17:2V:79:VAL:HG22	1.97	0.47
1:2A:1406:U:H2'	1:2A:1407:C:C6	2.49	0.47
1:2A:1474:C:H2'	1:2A:1475:G:C8	2.50	0.47
1:2A:1490:A:O2'	3:2D:99:ASP:OD1	2.32	0.47
1:2A:1805:U:O2	3:2D:50:THR:HB	2.14	0.47
1:2A:1991:U:H2'	1:2A:1992:G:H5''	1.97	0.47
6:2G:45:GLU:H	6:2G:45:GLU:HG2	1.39	0.47
11:2P:67:MET:HE3	11:2P:67:MET:HB2	1.80	0.47
20:2Y:83:THR:HG21	20:2Y:99:CYS:HB2	1.96	0.47
29:27:24:THR:CG2	29:27:27:GLY:H	2.11	0.47
32:2a:236:G:OP1	48:2q:40:LYS:NZ	2.35	0.47
32:2a:430:A:OP1	35:2d:9:CYS:HB2	2.14	0.47
32:2a:431:A:H2'	32:2a:432:A:O4'	2.14	0.47
32:2a:546:G:OP1	35:2d:73:ARG:HG2	2.14	0.47
32:2a:918:A:H2'	32:2a:919:A:C8	2.50	0.47
34:2c:35:GLU:O	34:2c:39:ILE:HG13	2.15	0.47
39:2h:12:ARG:HD3	39:2h:26:VAL:HG12	1.95	0.47
42:2k:98:LEU:O	42:2k:101:SER:OG	2.25	0.47
54:2w:25:C:H2'	54:2w:26:A:H8	1.79	0.47
55:2x:15:G:H2'	55:2x:59:A:N1	2.30	0.47
56:2y:14:A:H61	56:2y:21:A:H2	1.62	0.47
1:1A:11:G:C2'	1:1A:12:U:H5''	2.42	0.47
1:1A:1810:A:H2'	1:1A:1811:G:O4'	2.14	0.47
6:1G:126:ASP:HB3	6:1G:128:ARG:H	1.80	0.47
32:1a:545:C:H2'	32:1a:546:G:O4'	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1157:A:H4'	32:1a:1158:C:O5'	2.15	0.47
33:1b:18:GLY:HA3	33:1b:42:ILE:HG13	1.96	0.47
35:1d:43:HIS:HB3	35:1d:46:LYS:HD2	1.97	0.47
50:1s:27:GLU:HG3	50:1s:28:LYS:HE3	1.97	0.47
1:2A:1666:G:OP1	10:2O:66:LYS:HD3	2.15	0.47
1:2A:2864:G:OP1	15:2T:119:LYS:HD2	2.15	0.47
5:2F:183:VAL:O	5:2F:187:VAL:HG23	2.15	0.47
25:23:11:SER:HA	25:23:31:LEU:HD21	1.97	0.47
32:2a:620:C:C2	35:2d:135:LEU:HG	2.49	0.47
32:2a:1401:G:OP1	53:2v:18:G:O2'	2.29	0.47
1:1A:641:C:O2'	1:1A:2350:C:OP1	2.18	0.47
1:1A:2637:U:H5''	4:1E:82:ARG:HH12	1.79	0.47
6:1G:101:ILE:HG22	6:1G:105:LYS:HE2	1.95	0.47
37:1f:68:PRO:HG2	37:1f:71:ARG:HD2	1.96	0.47
1:2A:30:G:H2'	1:2A:31:C:C6	2.50	0.47
1:2A:1030:G:OP2	12:2Q:128:LYS:NZ	2.48	0.47
1:2A:1149:G:H2'	1:2A:1150:C:C6	2.49	0.47
1:2A:1423:G:H2'	1:2A:1424:G:H8	1.80	0.47
1:2A:1469:A:H2'	1:2A:1470:G:O4'	2.14	0.47
1:2A:1508:A:H5'	1:2A:1509(A):A:C8	2.49	0.47
1:2A:1791:A:H8	1:2A:1791:A:OP2	1.98	0.47
2:2B:1:U:H2'	2:2B:2:C:H6	1.80	0.47
5:2F:172:TRP:H	5:2F:172:TRP:CD1	2.33	0.47
7:2H:12:PRO:O	7:2H:15:VAL:HG22	2.14	0.47
19:2X:54:VAL:HG22	19:2X:81:VAL:HG12	1.96	0.47
29:27:46:VAL:HG13	29:27:48:LYS:NZ	2.30	0.47
32:2a:1002:G:N1	32:2a:1003:G:H8	2.13	0.47
32:2a:1108:G:H5'	34:2c:176:HIS:CD2	2.50	0.47
35:2d:10:ARG:HG3	35:2d:11:LEU:HD12	1.97	0.47
1:1A:271(K):U:H1'	8:1I:50:ARG:NH1	2.30	0.47
1:1A:729:G:C6	3:1D:208:LYS:HB2	2.50	0.47
1:1A:2869:G:H2'	1:1A:2870:C:O4'	2.15	0.47
6:1G:124:SER:HB2	6:1G:131:TYR:CE1	2.50	0.47
10:1O:80:ASP:OD2	15:1T:71:GLY:HA3	2.14	0.47
21:1Z:158:PRO:O	21:1Z:161:VAL:HG22	2.15	0.47
32:1a:1376:U:H2'	32:1a:1377:A:C8	2.50	0.47
38:1g:111:ARG:HD2	38:1g:123:GLU:HB2	1.97	0.47
1:2A:11:G:H22	1:2A:2627:G:H5''	1.79	0.47
1:2A:289:A:H2'	1:2A:290:G:O4'	2.15	0.47
1:2A:402:A:H2'	1:2A:403:U:H5'	1.96	0.47
1:2A:2176:A:H2'	1:2A:2177:C:C6	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:120:LEU:N	6:2G:179:PRO:O	2.42	0.47
7:2H:20:ALA:HB3	7:2H:23:ARG:HB2	1.97	0.47
7:2H:56:SER:HB3	7:2H:61:HIS:ND1	2.30	0.47
12:2Q:7:MET:HE3	12:2Q:9:TYR:O	2.15	0.47
21:2Z:100:VAL:HG21	21:2Z:134:PRO:HG2	1.95	0.47
21:2Z:163:LEU:HG	21:2Z:165:VAL:HG22	1.96	0.47
24:22:53:LEU:HA	24:22:53:LEU:HD23	1.76	0.47
32:2a:181:G:H4'	32:2a:182:U:H5'	1.97	0.47
32:2a:748:C:H4'	32:2a:749:C:O5'	2.14	0.47
32:2a:1016:A:H2'	32:2a:1017:G:O4'	2.14	0.47
34:2c:11:ARG:HH21	34:2c:180:ALA:HB3	1.80	0.47
34:2c:162:GLN:NE2	53:2v:24:A:O3'	2.28	0.47
35:2d:60:GLU:HA	35:2d:63:LYS:HE3	1.97	0.47
37:2f:91:VAL:HG12	37:2f:92:LYS:H	1.80	0.47
44:2m:29:ARG:HH11	44:2m:64:TRP:CG	2.32	0.47
1:1A:360:G:H2'	1:1A:361:G:H8	1.78	0.46
1:1A:1041:C:H42	1:1A:1114:G:H1	1.64	0.46
1:1A:2100:G:N1	1:1A:2189:U:N3	2.21	0.46
1:1A:2870:C:H2'	1:1A:2871:C:O4'	2.14	0.46
3:1D:79:VAL:HG12	3:1D:113:VAL:HA	1.96	0.46
8:1I:116:LEU:HD21	8:1I:119:PRO:HA	1.96	0.46
28:16:28:ARG:NH1	28:16:29:ASN:OD1	2.48	0.46
32:1a:663:A:O3'	49:1r:64:ARG:NH2	2.47	0.46
54:1w:60:U:H5''	54:1w:61:C:C5	2.50	0.46
1:2A:1355:G:OP1	3:2D:38:LYS:NZ	2.48	0.46
1:2A:1686:C:H2'	1:2A:1687:G:O4'	2.15	0.46
1:2A:2626:C:H2'	1:2A:2627:G:O4'	2.16	0.46
3:2D:97:TYR:C	3:2D:99:ASP:N	2.73	0.46
13:2R:92:GLY:HA2	13:2R:94:TYR:CZ	2.50	0.46
15:2T:36:GLU:CD	15:2T:41:ARG:HE	2.22	0.46
21:2Z:28:MET:N	21:2Z:35:ARG:O	2.46	0.46
32:2a:471:G:H2'	32:2a:472:A:C8	2.49	0.46
32:2a:954:G:H2'	32:2a:955:U:O4'	2.15	0.46
32:2a:1456:G:N1	51:2t:51:GLU:OE2	2.48	0.46
33:2b:15:VAL:O	33:2b:17:PHE:N	2.43	0.46
33:2b:113:HIS:O	33:2b:117:GLU:HB2	2.15	0.46
34:2c:88:ARG:HA	34:2c:91:LEU:HB2	1.97	0.46
34:2c:119:ARG:HE	34:2c:140:ARG:NH2	2.13	0.46
35:2d:106:TYR:C	35:2d:108:LEU:H	2.23	0.46
41:2j:16:LEU:HD23	41:2j:94:VAL:HG22	1.97	0.46
1:1A:2105:C:H2'	1:1A:2106:G:C8	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:194:C:C2'	32:1a:195:A:H5''	2.45	0.46
32:1a:1032:G:H2'	32:1a:1033:G:O4'	2.14	0.46
33:1b:98:LEU:HB2	33:1b:101:MET:HG3	1.96	0.46
38:1g:78:ARG:HD3	38:1g:80:VAL:HG23	1.97	0.46
47:1p:21:VAL:HG22	47:1p:33:ILE:HD13	1.97	0.46
1:2A:2108:C:H2'	1:2A:2109:U:C6	2.50	0.46
1:2A:2163:C:OP1	1:2A:2165:G:N2	2.49	0.46
1:2A:2316:C:H2'	1:2A:2317:C:H6	1.80	0.46
2:2B:7:G:N2	14:2S:38:GLN:HE22	1.98	0.46
14:2S:85:VAL:HG22	14:2S:86:ALA:H	1.80	0.46
26:24:24:THR:OG1	26:24:25:TYR:N	2.32	0.46
30:28:22:VAL:HB	30:28:55:ALA:HB1	1.97	0.46
32:2a:336:C:H2'	32:2a:337:C:H6	1.80	0.46
32:2a:1033:G:H2'	32:2a:1034:G:C8	2.49	0.46
40:2i:4:TYR:CE2	40:2i:88:TYR:HD1	2.34	0.46
40:2i:58:HIS:H	40:2i:58:HIS:CD2	2.32	0.46
1:1A:2127:G:N2	1:1A:2162:G:H1'	2.30	0.46
2:1B:8:U:O3'	14:1S:25:ARG:NH2	2.49	0.46
6:1G:83:ARG:O	6:1G:86:MET:HG3	2.14	0.46
8:1I:100:ALA:HA	8:1I:103:ARG:HH11	1.81	0.46
32:1a:192:U:H4'	51:1t:57:ARG:HD3	1.98	0.46
32:1a:510:A:OP2	35:1d:49:ARG:NH1	2.49	0.46
32:1a:1530:G:H4'	32:1a:1530:G:OP1	2.15	0.46
34:1c:65:ALA:HA	34:1c:100:ALA:HB3	1.97	0.46
35:1d:194:LEU:HA	35:1d:194:LEU:HD13	1.64	0.46
37:1f:22:GLU:O	37:1f:26:ILE:HG13	2.16	0.46
44:1m:3:ARG:HG3	44:1m:4:ILE:N	2.31	0.46
46:1o:82:ILE:HD12	46:1o:88:ARG:HG3	1.97	0.46
47:1p:43:LYS:HG2	47:1p:48:TRP:CD2	2.51	0.46
51:1t:47:GLY:HA2	51:1t:48:LYS:C	2.40	0.46
1:2A:2150:U:H2'	1:2A:2151:G:C8	2.49	0.46
1:2A:2697:G:H2'	1:2A:2698:U:O4'	2.16	0.46
6:2G:113:ARG:NH2	6:2G:139:LEU:O	2.48	0.46
10:2O:86:ILE:HG22	10:2O:94:ARG:HD3	1.96	0.46
15:2T:127:ALA:C	15:2T:129:ARG:N	2.73	0.46
32:2a:17:U:H2'	32:2a:18:C:C6	2.51	0.46
32:2a:472:A:H4'	47:2p:80:PHE:O	2.15	0.46
32:2a:849:C:H2'	32:2a:850:U:O4'	2.16	0.46
32:2a:1073:U:H2'	32:2a:1074:G:H8	1.81	0.46
32:2a:1260:C:P	32:2a:1284:C:H4'	2.55	0.46
9:1N:12:ARG:HB3	9:1N:50:ASP:OD1	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:15:G:H21	36:1e:18:ARG:HA	1.80	0.46
32:1a:56:U:H2'	32:1a:57:G:C8	2.49	0.46
32:1a:216:G:H2'	32:1a:217:C:C6	2.51	0.46
32:1a:427:U:OP1	35:1d:13:ARG:NH1	2.46	0.46
32:1a:1370:G:H5''	40:1i:12:GLU:HG3	1.96	0.46
35:1d:112:VAL:HG23	35:1d:116:GLN:HE22	1.81	0.46
39:1h:81:HIS:N	39:1h:138:TRP:O	2.49	0.46
41:1j:31:GLY:HA3	41:1j:32:ALA:HA	1.73	0.46
44:1m:108:ARG:HD3	44:1m:108:ARG:HA	1.65	0.46
1:2A:144:C:H2'	1:2A:145:G:H8	1.81	0.46
1:2A:614(C):A:N3	1:2A:615:G:H1'	2.30	0.46
1:2A:1366:A:H2'	1:2A:1367:A:O4'	2.15	0.46
1:2A:2104:G:N2	1:2A:2185:C:N3	2.60	0.46
1:2A:2164:C:C5	1:2A:2165:G:H1'	2.50	0.46
1:2A:2280:G:O6	61:2A:6256:HOH:O	2.20	0.46
1:2A:2704:C:H2'	1:2A:2705:A:O4'	2.16	0.46
1:2A:2801(A):A:H1'	1:2A:2895:U:H1'	1.97	0.46
5:2F:155:LEU:HD22	5:2F:185:ASP:O	2.15	0.46
17:2V:55:ALA:HA	17:2V:101:GLY:HA2	1.97	0.46
32:2a:428:G:OP2	35:2d:10:ARG:NH1	2.49	0.46
39:2h:41:ARG:NH2	39:2h:123:GLU:OE2	2.48	0.46
40:2i:99:LEU:HB3	40:2i:101:PHE:CD2	2.50	0.46
50:2s:22:LEU:HD22	50:2s:31:ILE:HD11	1.96	0.46
1:1A:2110:G:OP2	1:1A:2118:U:N3	2.49	0.46
1:1A:2773:C:H5'	61:1A:5221:HOH:O	2.13	0.46
5:1F:29:ASN:H	5:1F:112:MET:HE3	1.80	0.46
18:1W:11:ARG:HA	18:1W:100:THR:HG22	1.97	0.46
35:1d:163:GLU:HA	35:1d:166:LYS:HG3	1.98	0.46
50:1s:32:LYS:HA	50:1s:50:ALA:HB3	1.98	0.46
1:2A:588:U:H2'	1:2A:589:C:C6	2.51	0.46
1:2A:658:C:H2'	1:2A:659:C:C6	2.51	0.46
1:2A:1508:A:H4'	1:2A:1509(A):A:C5	2.50	0.46
1:2A:1582:C:H2'	1:2A:1583:A:C8	2.50	0.46
1:2A:2022:U:O2'	1:2A:2617:C:H5'	2.15	0.46
1:2A:2332:U:O4	61:2A:5697:HOH:O	2.18	0.46
1:2A:2554:U:H2'	1:2A:2555:U:C6	2.50	0.46
7:2H:97:ARG:O	7:2H:103:LEU:HD12	2.16	0.46
18:2W:45:TYR:CZ	18:2W:49:LYS:HE3	2.49	0.46
25:23:6:VAL:HG13	25:23:56:VAL:HG22	1.97	0.46
26:24:53:GLU:HG2	26:24:54:GLY:N	2.31	0.46
32:2a:1183:A:H3'	32:2a:1184:G:H5''	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:162:ILE:HD11	33:2b:184:VAL:HG22	1.97	0.46
35:2d:171:GLY:HA3	35:2d:173:TRP:CZ3	2.50	0.46
47:2p:3:LYS:N	47:2p:22:THR:O	2.39	0.46
1:1A:272(A):U:HO2'	1:1A:272(B):G:P	2.35	0.46
1:1A:1364:G:P	23:11:3:LYS:HG3	2.56	0.46
10:1O:49:ARG:NH1	32:1a:1422:G:O3'	2.47	0.46
32:1a:339:C:H2'	32:1a:340:U:C6	2.50	0.46
36:1e:10:MET:HA	36:1e:32:VAL:HG22	1.98	0.46
39:1h:29:SER:HB3	39:1h:32:LYS:CD	2.45	0.46
47:1p:22:THR:HA	47:1p:33:ILE:HD12	1.98	0.46
56:1y:58:A:N3	56:1y:60:U:C5	2.84	0.46
1:2A:1796:U:H2'	1:2A:1797:C:H6	1.78	0.46
3:2D:96:HIS:CD2	3:2D:102:LYS:HG2	2.50	0.46
7:2H:90:LYS:HE3	7:2H:90:LYS:HB2	1.70	0.46
21:2Z:106:GLY:HA3	21:2Z:141:VAL:HB	1.97	0.46
32:2a:441:A:H3'	32:2a:442:C:C6	2.51	0.46
32:2a:524:G:H2'	32:2a:525:C:C6	2.51	0.46
32:2a:538:G:H5''	43:2l:114:LYS:HB2	1.98	0.46
32:2a:1316:G:H22	32:2a:1319:A:C5'	2.28	0.46
33:2b:92:TYR:CE2	33:2b:151:GLY:HA3	2.51	0.46
35:2d:104:VAL:HG21	35:2d:140:VAL:HG21	1.98	0.46
40:2i:70:LYS:O	40:2i:74:ILE:N	2.43	0.46
44:2m:91:ARG:NE	44:2m:97:PRO:O	2.49	0.46
47:2p:53:VAL:HG22	47:2p:79:VAL:HG22	1.98	0.46
1:1A:1064:C:H2'	1:1A:1065:U:H5'	1.98	0.46
1:1A:1165:U:H2'	1:1A:1166:C:C6	2.51	0.46
1:1A:1379:A:H4'	1:1A:1380:G:OP2	2.15	0.46
1:1A:1683:C:H2'	1:1A:1684:C:C6	2.51	0.46
1:1A:1683:C:H2'	1:1A:1684:C:H6	1.81	0.46
1:1A:1799:G:O2'	3:1D:181:GLU:OE2	2.28	0.46
32:1a:1291:G:H4'	40:1i:39:GLY:HA3	1.96	0.46
33:1b:230:VAL:HG22	33:1b:231:GLU:H	1.80	0.46
1:2A:448:U:O4	1:2A:583:G:H1'	2.16	0.46
1:2A:881:G:H3'	1:2A:882:G:C8	2.49	0.46
1:2A:1647:G:H3'	1:2A:1647:G:OP2	2.16	0.46
1:2A:1754:C:N3	1:2A:2716:U:O2'	2.49	0.46
1:2A:2354:G:H21	22:20:36:ILE:HD11	1.81	0.46
32:2a:221:C:H2'	32:2a:222:U:C6	2.51	0.46
35:2d:79:PHE:HE1	35:2d:204:ILE:HD13	1.80	0.46
44:2m:15:VAL:O	44:2m:19:LEU:HD22	2.16	0.46
1:1A:251:A:C5	1:1A:252:G:H1'	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:555:U:O2'	1:1A:556:G:N7	2.43	0.46
1:1A:1022:G:N7	9:1N:66:LYS:HE2	2.30	0.46
32:1a:175:C:H2'	32:1a:176:C:C6	2.51	0.46
32:1a:737:A:H2'	32:1a:738:C:C6	2.50	0.46
32:1a:841:U:P	32:1a:841:U:H6	2.39	0.46
33:1b:178:ARG:HE	33:1b:178:ARG:HB3	1.53	0.46
1:2A:11:G:H2'	1:2A:12:U:H5'	1.97	0.46
1:2A:234:C:H2'	1:2A:235:U:C6	2.51	0.46
1:2A:893:C:H2'	1:2A:894:C:C4	2.51	0.46
1:2A:1141:U:H5''	9:2N:25:ARG:HH21	1.81	0.46
1:2A:2836:U:H2'	1:2A:2837:G:H8	1.79	0.46
5:2F:65:TRP:CZ2	5:2F:75:HIS:HD2	2.34	0.46
26:24:1:MET:HE2	26:24:6:HIS:CE1	2.51	0.46
32:2a:920:U:H2'	32:2a:921:U:H6	1.79	0.46
38:2g:70:LYS:O	38:2g:138:LYS:HD2	2.15	0.46
47:2p:56:ALA:O	47:2p:60:LEU:HB2	2.16	0.46
55:2x:21:A:N6	55:2x:46:G:H2'	2.30	0.46
1:1A:224:G:H2'	1:1A:225:A:O4'	2.16	0.46
1:1A:875:G:H2'	1:1A:876:C:C6	2.51	0.46
1:1A:1069:A:H4'	1:1A:1070:A:H5''	1.98	0.46
1:1A:2336:A:H61	22:10:43:THR:CG2	2.29	0.46
1:1A:2430:A:N3	1:1A:2430:A:H2'	2.31	0.46
8:1I:10:GLU:H	8:1I:10:GLU:HG3	1.60	0.46
10:1O:7:TYR:HE2	10:1O:20:MET:HE2	1.81	0.46
18:1W:19:LEU:HD23	27:15:25:LEU:HD21	1.97	0.46
23:11:52:ARG:HE	23:11:52:ARG:HB2	1.46	0.46
32:1a:181:G:H4'	32:1a:182:U:H5'	1.98	0.46
32:1a:277:C:P	48:1q:68:ARG:HH12	2.39	0.46
32:1a:584:G:O6	61:1a:5089:HOH:O	2.16	0.46
32:1a:1025:U:C2	32:1a:1036:G:O6	2.68	0.46
33:1b:128:GLU:HG3	33:1b:135:GLN:NE2	2.31	0.46
47:1p:47:ASP:OD1	47:1p:47:ASP:N	2.41	0.46
48:1q:67:LYS:HA	48:1q:70:ARG:HH12	1.81	0.46
1:2A:68:G:H2'	1:2A:69:C:O4'	2.16	0.46
1:2A:182:A:N3	1:2A:433:C:O2'	2.43	0.46
1:2A:185:U:H2'	1:2A:186:G:H8	1.80	0.46
1:2A:850:C:H5''	25:23:18:ASP:HB2	1.98	0.46
1:2A:1372:U:H2'	1:2A:1373:A:O4'	2.15	0.46
1:2A:2319:G:N2	14:2S:3:ARG:HH11	2.09	0.46
1:2A:2888:C:H2'	1:2A:2889:C:C6	2.50	0.46
6:2G:179:PRO:HG3	26:24:43:TYR:CZ	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:2W:6:ILE:HG22	18:2W:8:ARG:HG3	1.98	0.46
32:2a:109:A:C6	32:2a:326:G:C6	3.04	0.46
32:2a:266:G:H2'	32:2a:266:G:N3	2.29	0.46
32:2a:1114:C:H42	32:2a:1186:G:H1	1.64	0.46
32:2a:1146:A:H2'	32:2a:1147:C:O4'	2.15	0.46
32:2a:1168:A:C6	32:2a:1169:A:C6	3.04	0.46
32:2a:1321:C:O2'	50:2s:77:THR:HG21	2.16	0.46
55:2x:23:C:H2'	55:2x:24:U:C6	2.50	0.46
1:1A:213:A:H2'	1:1A:214:G:O4'	2.16	0.46
1:1A:875:G:H2'	1:1A:876:C:H6	1.81	0.46
1:1A:2849:U:H4'	1:1A:2868:A:C2	2.51	0.46
7:1H:11:VAL:HG21	7:1H:50:VAL:HG23	1.98	0.46
8:1I:2:LYS:HB2	8:1I:2:LYS:NZ	2.31	0.46
32:1a:1002:G:C5	32:1a:1003:G:H1'	2.51	0.46
32:1a:1033:G:C4	32:1a:1034:G:C8	3.04	0.46
33:1b:52:GLU:HG2	33:1b:56:ARG:HH21	1.81	0.46
36:1e:83:GLU:HG2	36:1e:88:LYS:HG3	1.96	0.46
44:1m:45:VAL:C	44:1m:47:ASP:H	2.23	0.46
1:2A:884:C:H3'	1:2A:885:C:H6	1.81	0.46
1:2A:1514:U:H2'	1:2A:1515:G:H8	1.81	0.46
2:2B:94:C:H2'	2:2B:95:C:C6	2.51	0.46
7:2H:8:PRO:O	7:2H:10:PRO:HD3	2.16	0.46
32:2a:107:G:H2'	32:2a:108:G:O4'	2.16	0.46
32:2a:109:A:H5'	32:2a:110:C:H5	1.80	0.46
32:2a:671:G:H2'	32:2a:672:U:O4'	2.16	0.46
32:2a:1085:U:H3'	32:2a:1086:U:C5	2.51	0.46
32:2a:1123:A:H4'	41:2j:37:PRO:HD2	1.98	0.46
32:2a:1191:A:OP2	34:2c:3:ASN:ND2	2.48	0.46
32:2a:1216:G:OP1	45:2n:2:ALA:HA	2.16	0.46
32:2a:1518:MA6:H93	32:2a:1519:MA6:C9	2.46	0.46
34:2c:69:HIS:CG	34:2c:104:GLN:HG2	2.51	0.46
38:2g:115:ARG:O	38:2g:119:ARG:HG3	2.16	0.46
1:1A:363(C):G:H2'	1:1A:363(D):G:C8	2.50	0.45
1:1A:414:C:H2'	1:1A:415:A:C8	2.51	0.45
1:1A:484:C:OP1	20:1Y:51:VAL:HG22	2.17	0.45
7:1H:52:VAL:O	7:1H:65:HIS:NE2	2.44	0.45
15:1T:64:ARG:HB2	15:1T:73:GLU:HG2	1.97	0.45
35:1d:53:ASP:O	35:1d:56:VAL:HG22	2.16	0.45
1:2A:1803:A:O2'	3:2D:259:THR:HG21	2.15	0.45
1:2A:2064:C:OP2	61:2A:5664:HOH:O	2.21	0.45
1:2A:2299:G:N1	1:2A:2318:G:N7	2.63	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:14:U:OP2	2:2B:70:C:O2'	2.29	0.45
2:2B:90:A:C5	2:2B:91:C:H1'	2.50	0.45
15:2T:1:MET:HE2	15:2T:1:MET:HB3	1.90	0.45
32:2a:1040:U:C2	32:2a:1041:A:C8	3.04	0.45
34:2c:125:GLU:CB	34:2c:190:ARG:HH21	2.29	0.45
35:2d:176:LEU:HD12	35:2d:176:LEU:HA	1.72	0.45
39:2h:112:LEU:HD11	39:2h:124:ALA:HB2	1.98	0.45
54:2w:15:G:H22	54:2w:48:C:N4	2.14	0.45
1:1A:10:G:O2'	1:1A:2801(A):A:N7	2.39	0.45
1:1A:1916:A:H2'	1:1A:1917:PSU:O4'	2.16	0.45
1:1A:2131:G:N2	1:1A:2158:A:N1	2.64	0.45
13:1R:12:ARG:HG2	13:1R:16:HIS:ND1	2.31	0.45
32:1a:870:U:H4'	32:1a:871:U:H5''	1.98	0.45
32:1a:1034:G:H2'	32:1a:1035:A:C8	2.52	0.45
1:2A:796:C:H2'	1:2A:797:C:C6	2.50	0.45
1:2A:2315:G:H2'	1:2A:2316:C:C6	2.51	0.45
1:2A:2507:C:H5''	1:2A:2573:C:N4	2.30	0.45
9:2N:123:TYR:CZ	9:2N:129:PRO:HD2	2.51	0.45
12:2Q:79:LEU:HD23	12:2Q:79:LEU:HA	1.72	0.45
24:22:70:GLN:OE1	24:22:70:GLN:N	2.39	0.45
32:2a:328:C:H4'	32:2a:329:A:H5'	1.98	0.45
33:2b:149:LEU:HD22	33:2b:152:PHE:CD2	2.50	0.45
33:2b:211:ILE:O	33:2b:215:LEU:HB2	2.16	0.45
36:2e:81:GLU:HG2	36:2e:90:VAL:HG22	1.98	0.45
36:2e:110:LEU:HD13	36:2e:118:ILE:HG21	1.97	0.45
37:2f:36:ARG:NH2	37:2f:38:GLU:HG2	2.30	0.45
37:2f:99:ALA:HB3	49:2r:29:PHE:CE1	2.51	0.45
45:2n:45:ARG:HE	45:2n:49:HIS:CE1	2.34	0.45
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.52	0.45
1:1A:1914:C:H2'	1:1A:1915:5MU:O4'	2.17	0.45
1:1A:2693:A:H2'	1:1A:2694:G:C8	2.51	0.45
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.61	0.45
20:1Y:86:ARG:HB2	20:1Y:98:VAL:HG23	1.99	0.45
23:11:44:PRO:HB2	23:11:46:LEU:HD12	1.97	0.45
32:1a:1429:C:H2'	32:1a:1430:C:C6	2.51	0.45
32:1a:1531:A:H8	32:1a:1531:A:O5'	2.00	0.45
35:1d:63:LYS:HD2	35:1d:198:VAL:HG22	1.98	0.45
44:1m:15:VAL:HG13	44:1m:43:THR:O	2.17	0.45
44:1m:40:ASN:O	44:1m:43:THR:OG1	2.30	0.45
1:2A:307:G:H21	1:2A:330:A:N6	2.14	0.45
1:2A:383:U:H2'	1:2A:385:C:H5	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1593:G:H2'	1:2A:1594:G:C8	2.51	0.45
2:2B:3:C:H2'	2:2B:4:C:C6	2.51	0.45
5:2F:126:VAL:HG21	5:2F:129:PHE:CZ	2.51	0.45
32:2a:88:A:H5''	32:2a:89:C:C6	2.52	0.45
32:2a:141:A:H1'	32:2a:182:U:O2	2.17	0.45
32:2a:559:A:OP2	36:2e:126:ARG:NH2	2.50	0.45
32:2a:783:C:H2'	32:2a:784:C:C6	2.51	0.45
32:2a:1012:U:H2'	32:2a:1013:G:C8	2.51	0.45
32:2a:1183:A:H3'	32:2a:1184:G:C5'	2.47	0.45
32:2a:1226:C:H6	44:2m:103:THR:HB	1.81	0.45
37:2f:20:ALA:C	37:2f:22:GLU:H	2.23	0.45
38:2g:51:GLN:O	38:2g:55:GLY:HA2	2.17	0.45
48:2q:81:ARG:HB3	48:2q:84:LEU:HG	1.97	0.45
51:2t:9:ASN:O	51:2t:10:LEU:HB2	2.16	0.45
1:1A:271(O):C:H2'	1:1A:271(P):C:C6	2.51	0.45
1:1A:479:A:N3	1:1A:481:G:H5''	2.31	0.45
1:1A:570:G:H2'	1:1A:2030:A:C5	2.52	0.45
1:1A:1936:A:OP1	1:1A:1937:A:H5'	2.16	0.45
1:1A:2648:C:H2'	1:1A:2649:U:C6	2.52	0.45
2:1B:73:A:N1	21:1Z:34:ASN:ND2	2.65	0.45
3:1D:177:LEU:HD12	3:1D:181:GLU:HG2	1.97	0.45
10:1O:88:ASN:HD21	10:1O:92:GLU:HB2	1.81	0.45
11:1P:68:GLN:OE1	30:18:12:LYS:HG2	2.17	0.45
20:1Y:43:ASN:HB3	20:1Y:65:ALA:HB3	1.97	0.45
24:12:30:ARG:O	24:12:34:GLU:HG3	2.15	0.45
32:1a:458:C:H2'	32:1a:460:G:O4'	2.17	0.45
32:1a:500:G:H2'	32:1a:501:C:C6	2.51	0.45
32:1a:1305:G:H5''	52:1u:4:GLY:HA3	1.98	0.45
32:1a:1315:U:H2'	32:1a:1316:G:O4'	2.17	0.45
51:1t:100:ILE:HB	51:1t:101:GLY:H	1.63	0.45
1:2A:2115:G:H4'	1:2A:2167:U:C4	2.52	0.45
1:2A:2641:G:H5''	9:2N:76:SER:HB3	1.98	0.45
5:2F:9:ILE:HD12	5:2F:22:ALA:HB3	1.98	0.45
16:2U:58:ARG:HA	16:2U:61:TRP:HE3	1.80	0.45
21:2Z:91:LEU:HG	21:2Z:130:PRO:HB3	1.98	0.45
32:2a:187:C:O2'	51:2t:89:ARG:NH2	2.50	0.45
32:2a:424:G:H2'	32:2a:425:G:H8	1.82	0.45
32:2a:1272:G:N2	32:2a:1273:G:C8	2.85	0.45
32:2a:1353:G:H2'	32:2a:1354:C:H6	1.82	0.45
33:2b:204:ASN:ND2	33:2b:207:ALA:H	2.13	0.45
34:2c:121:ALA:O	34:2c:125:GLU:HG2	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:78:ARG:HG3	38:2g:156:TRP:CZ3	2.51	0.45
41:2j:78:ASN:O	41:2j:80:LYS:N	2.50	0.45
54:2w:4:C:N4	54:2w:69:G:H1	2.13	0.45
56:2y:2:C:H2'	56:2y:3:C:C6	2.52	0.45
1:1A:1865:G:N2	1:1A:1877:A:OP2	2.42	0.45
1:1A:1899:G:N3	1:1A:1899:G:H2'	2.32	0.45
2:1B:75:G:N2	21:1Z:87:ASP:OD1	2.48	0.45
11:1P:135:LEU:HD23	11:1P:135:LEU:HA	1.74	0.45
17:1V:2:PHE:CE2	17:1V:41:GLY:HA3	2.52	0.45
32:1a:92:C:H2'	32:1a:93:G:H8	1.81	0.45
32:1a:270:A:H2'	32:1a:271:C:C6	2.52	0.45
33:1b:157:ARG:HG2	33:1b:158:LEU:N	2.31	0.45
48:1q:18:THR:HG23	48:1q:44:ALA:O	2.16	0.45
1:2A:2096:U:H3	1:2A:2193:G:H1	1.64	0.45
5:2F:132:VAL:HG11	5:2F:163:VAL:HA	1.98	0.45
7:2H:39:PRO:C	7:2H:41:MET:H	2.23	0.45
8:2I:58:LEU:HG	8:2I:62:LYS:HD2	1.98	0.45
32:2a:163:C:H2'	32:2a:164:U:C6	2.51	0.45
35:2d:60:GLU:OE1	35:2d:199:ASN:HB3	2.16	0.45
35:2d:149:ALA:HB3	35:2d:152:SER:HB2	1.99	0.45
36:2e:43:LEU:HD22	36:2e:136:MET:HG3	1.97	0.45
37:2f:91:VAL:HG12	37:2f:92:LYS:N	2.32	0.45
39:2h:11:THR:HG23	39:2h:14:ARG:NH1	2.31	0.45
41:2j:8:LEU:HG	41:2j:70:ARG:HB2	1.97	0.45
44:2m:56:LEU:HD12	44:2m:59:TYR:HD2	1.81	0.45
1:1A:285:C:H2'	1:1A:286:C:C6	2.51	0.45
1:1A:1900:A:N1	1:1A:1970:A:C6	2.84	0.45
1:1A:2630:G:H21	1:1A:2892:A:H1'	1.82	0.45
1:1A:2637:U:H5''	4:1E:82:ARG:NH1	2.32	0.45
1:1A:2693:A:H2'	1:1A:2694:G:H8	1.81	0.45
6:1G:116:ASP:OD2	44:1m:68:GLY:HA3	2.16	0.45
24:12:28:LYS:HD3	24:12:53:LEU:HD21	1.98	0.45
32:1a:57:G:H2'	32:1a:58:C:C6	2.52	0.45
32:1a:731:G:H5'	32:1a:766:A:H4'	1.99	0.45
32:1a:953:G:N7	44:1m:104:ARG:NH2	2.65	0.45
33:1b:128:GLU:HG3	33:1b:135:GLN:HE22	1.81	0.45
35:1d:19:LEU:O	35:1d:21:LEU:HG	2.16	0.45
43:1l:53:ARG:HB2	43:1l:93:LEU:HD11	1.98	0.45
47:1p:1:MET:HG3	47:1p:3:LYS:HG3	1.98	0.45
1:2A:661:C:OP1	5:2F:38:ARG:NH2	2.50	0.45
1:2A:690:G:H2'	1:2A:691:C:C6	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1316:U:H2'	1:2A:1317:A:C8	2.52	0.45
5:2F:46:ARG:HB3	5:2F:48:THR:HG23	1.97	0.45
5:2F:157:VAL:O	5:2F:194:MET:HA	2.16	0.45
7:2H:35:VAL:HG13	7:2H:71:LEU:HD13	1.99	0.45
7:2H:124:GLU:O	7:2H:126:PRO:HD3	2.16	0.45
17:2V:29:PRO:HA	17:2V:61:VAL:HG22	1.97	0.45
21:2Z:144:LEU:HG	21:2Z:145:GLU:H	1.81	0.45
32:2a:1120:G:C6	32:2a:1121:U:C4	3.05	0.45
32:2a:1147:C:H5'	32:2a:1148:U:OP2	2.17	0.45
33:2b:28:PHE:CD1	33:2b:194:PRO:HG3	2.50	0.45
43:2l:113:ARG:HH21	43:2l:116:SER:HB2	1.81	0.45
51:2t:47:GLY:HA2	51:2t:48:LYS:C	2.41	0.45
1:1A:1501:C:O4'	3:1D:100:GLY:HA2	2.17	0.45
1:1A:2571:C:O2'	4:1E:146:THR:O	2.32	0.45
5:1F:53:THR:HG22	5:1F:55:GLY:N	2.08	0.45
6:1G:142:PRO:HB2	26:14:31:ILE:HG21	1.98	0.45
9:1N:13:TRP:CZ2	9:1N:133:GLN:HG2	2.52	0.45
32:1a:26:A:O2'	35:1d:209:ARG:NH2	2.50	0.45
32:1a:61:G:H2'	32:1a:62:U:O4'	2.17	0.45
32:1a:1239:A:H62	32:1a:1299:A:H62	1.64	0.45
35:1d:49:ARG:H	35:1d:49:ARG:HG3	1.58	0.45
39:1h:56:LYS:HB2	39:1h:58:TYR:HE2	1.82	0.45
41:1j:19:SER:OG	41:1j:91:PRO:HD2	2.17	0.45
56:1y:72:C:H2'	56:1y:73:A:O4'	2.16	0.45
1:2A:143:G:H2'	1:2A:143(A):C:C6	2.51	0.45
1:2A:312:G:H4'	1:2A:331:A:N3	2.31	0.45
1:2A:2389:G:H5''	1:2A:2390:U:O4'	2.16	0.45
1:2A:2807:G:C2	1:2A:2808:U:H1'	2.51	0.45
5:2F:201:VAL:HA	5:2F:204:ASN:HD22	1.81	0.45
15:2T:24:PRO:HA	15:2T:49:VAL:O	2.17	0.45
21:2Z:19:ARG:HG2	21:2Z:25:PRO:HD3	1.99	0.45
24:22:29:LYS:HG2	24:22:57:ILE:HD13	1.98	0.45
32:2a:279:A:C5	48:2q:98:LEU:HD13	2.51	0.45
32:2a:1181:G:O2'	32:2a:1182:G:C5	2.70	0.45
33:2b:150:SER:OG	33:2b:151:GLY:N	2.50	0.45
33:2b:178:ARG:HH22	39:2h:68:ARG:HH12	1.64	0.45
40:2i:128:ARG:HH21	55:2x:32:5MC:P	2.40	0.45
56:2y:23:A:C5	56:2y:24:G:C8	3.05	0.45
1:1A:952:G:OP1	12:1Q:16:ARG:NH2	2.50	0.45
1:1A:1178:C:O5'	1:1A:1178:C:H6	2.00	0.45
3:1D:19:ALA:HB3	3:1D:21:PHE:CE1	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:1G:170:ARG:O	6:1G:174:GLU:HB2	2.16	0.45
8:1I:9:LEU:HB3	8:1I:12:LEU:HB2	1.99	0.45
16:1U:9:VAL:O	16:1U:13:LYS:HG3	2.16	0.45
16:1U:28:ARG:NH1	16:1U:38:THR:OG1	2.48	0.45
32:1a:28:G:O2'	32:1a:296:U:OP1	2.35	0.45
32:1a:1262:C:H2'	32:1a:1263:C:H6	1.80	0.45
32:1a:1298:C:C4	38:1g:114:ARG:HD2	2.52	0.45
42:1k:34:ASP:HB2	42:1k:35:PRO:HD2	1.97	0.45
1:2A:2648:C:H2'	1:2A:2649:U:C6	2.52	0.45
1:2A:2889:C:H2'	1:2A:2891:G:O4'	2.17	0.45
3:2D:275:LYS:NZ	32:2a:775:G:OP1	2.48	0.45
6:2G:122:PRO:HB3	6:2G:170:ARG:HH21	1.82	0.45
19:2X:12:VAL:HG21	19:2X:27:THR:HG22	1.99	0.45
26:24:2:LYS:HB2	26:24:5:ILE:HG12	1.97	0.45
32:2a:433:C:H2'	32:2a:434:U:C6	2.52	0.45
32:2a:936:C:H2'	32:2a:937:A:O4'	2.17	0.45
32:2a:1320:C:N3	50:2s:36:ARG:NH2	2.65	0.45
56:2y:18:G:N2	56:2y:55:PSU:C4	2.85	0.45
1:1A:375:C:H2'	1:1A:376:C:C6	2.52	0.45
1:1A:1608:A:H1'	1:1A:1610:A:OP2	2.17	0.45
1:1A:2732:G:H3'	1:1A:2733:A:O4'	2.17	0.45
32:1a:501:C:H1'	32:1a:549:C:H1'	1.99	0.45
32:1a:1504:G:OP1	32:1a:1507:A:H4'	2.17	0.45
36:1e:102:ALA:HA	36:1e:120:THR:OG1	2.17	0.45
38:1g:78:ARG:HG3	38:1g:156:TRP:HZ3	1.82	0.45
1:2A:657:U:H2'	1:2A:658:C:C6	2.52	0.45
1:2A:751:A:C6	1:2A:789:A:C5	3.05	0.45
6:2G:91:ARG:CZ	6:2G:91:ARG:HB3	2.46	0.45
6:2G:109:VAL:C	6:2G:112:PRO:HD2	2.42	0.45
27:25:51:TYR:CE2	27:25:56:LYS:HD3	2.51	0.45
32:2a:45:U:H2'	32:2a:46:G:H8	1.81	0.45
32:2a:269:C:H2'	32:2a:270:A:C8	2.52	0.45
32:2a:1002:G:C2	32:2a:1039:C:N4	2.85	0.45
32:2a:1076:C:H2'	32:2a:1077:G:H5''	1.98	0.45
32:2a:1129:C:H5'	40:2i:16:ARG:HH22	1.82	0.45
32:2a:1255:G:O3'	32:2a:1258:G:H1'	2.16	0.45
32:2a:1305:G:O2'	32:2a:1331:G:N2	2.50	0.45
32:2a:1493:A:O2'	53:2v:19:U:O2'	2.25	0.45
34:2c:52:LEU:HD11	34:2c:55:VAL:HB	1.99	0.45
34:2c:120:VAL:HG11	34:2c:134:ILE:HD13	1.99	0.45
35:2d:8:VAL:HA	35:2d:11:LEU:HD13	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:79:ARG:NH2	38:2g:80:VAL:HA	2.32	0.45
47:2p:60:LEU:HD12	47:2p:60:LEU:HA	1.86	0.45
48:2q:22:LEU:HD13	48:2q:41:LYS:HG2	1.99	0.45
51:2t:75:ASN:HD22	51:2t:75:ASN:N	2.15	0.45
54:2w:15:G:N2	54:2w:48:C:H42	2.15	0.45
1:1A:434:U:H4'	1:1A:435:C:OP1	2.16	0.45
2:1B:7:G:H5'	14:1S:29:PHE:CE2	2.52	0.45
9:1N:13:TRP:CE2	9:1N:133:GLN:HG2	2.52	0.45
32:1a:600:C:H2'	32:1a:601:C:H6	1.82	0.45
32:1a:664:G:P	49:1r:64:ARG:HH21	2.40	0.45
32:1a:923:A:H5''	36:1e:21:ALA:HB2	1.98	0.45
32:1a:1040:U:H2'	32:1a:1041:A:C8	2.51	0.45
32:1a:1347:G:O2'	32:1a:1373:G:O6	2.29	0.45
43:1l:54:LYS:HD2	43:1l:54:LYS:N	2.32	0.45
51:1t:36:LEU:HA	51:1t:39:LYS:HB3	1.99	0.45
1:2A:300:A:N1	1:2A:333:G:O2'	2.41	0.45
1:2A:1169:G:N2	1:2A:1181:C:N3	2.64	0.45
1:2A:2119:A:C6	1:2A:2170:A:C5	3.05	0.45
2:2B:105:A:P	21:2Z:72:ARG:HE	2.40	0.45
16:2U:19:LYS:O	16:2U:22:LYS:HG3	2.17	0.45
17:2V:40:LEU:HB2	17:2V:46:VAL:HG12	1.99	0.45
21:2Z:102:LEU:HD21	21:2Z:124:ILE:HB	1.99	0.45
26:24:44:THR:O	26:24:46:GLN:N	2.39	0.45
32:2a:354:G:N2	32:2a:388:G:O2'	2.40	0.45
33:2b:193:ASP:OD2	33:2b:196:LEU:HD13	2.17	0.45
56:2y:8:4SU:H1'	56:2y:48:C:H1'	1.97	0.45
1:1A:27:G:C2	1:1A:512:G:N3	2.85	0.44
1:1A:862:G:H2'	1:1A:863:A:O4'	2.17	0.44
1:1A:2331:G:O2'	22:10:43:THR:HG22	2.17	0.44
9:1N:96:GLU:O	9:1N:100:GLU:HG3	2.18	0.44
26:14:48:ARG:HA	26:14:48:ARG:HD3	1.74	0.44
26:14:59:PHE:CE2	50:1s:64:GLU:HB3	2.52	0.44
30:18:62:LEU:HB3	30:18:65:GLU:HG3	1.99	0.44
51:1t:92:LEU:O	51:1t:96:GLY:HA2	2.17	0.44
56:1y:55:PSU:O5'	56:1y:55:PSU:H6	2.00	0.44
1:2A:656:G:H2'	1:2A:657:U:O4'	2.16	0.44
1:2A:2379:G:H2'	1:2A:2380:C:C6	2.52	0.44
7:2H:125:VAL:HG13	7:2H:131:VAL:HG22	1.99	0.44
14:2S:30:ARG:HB2	14:2S:35:ILE:HD12	1.98	0.44
22:20:43:THR:HG23	22:20:43:THR:O	2.16	0.44
27:25:6:VAL:HG22	27:25:7:PRO:HD2	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:838:G:H1	32:2a:848:C:H42	1.65	0.44
32:2a:1256:A:N1	32:2a:1278:U:H1'	2.32	0.44
32:2a:1268:A:H1'	32:2a:1326:C:O2'	2.16	0.44
44:2m:4:ILE:HG23	44:2m:5:ALA:H	1.82	0.44
54:2w:12:U:O4	54:2w:13:C:N4	2.51	0.44
1:1A:27:G:N2	1:1A:512:G:H1'	2.32	0.44
1:1A:1155:A:OP1	16:1U:55:ARG:HD2	2.16	0.44
1:1A:2698:U:H2'	1:1A:2699:C:C6	2.53	0.44
4:1E:119:ARG:HG2	4:1E:120:TRP:NE1	2.31	0.44
32:1a:345:C:H5'	32:1a:346:G:C4	2.52	0.44
32:1a:376:G:OP2	47:1p:67:THR:HG21	2.17	0.44
32:1a:1209:C:O2'	32:1a:1214:C:N4	2.47	0.44
35:1d:119:GLN:HG2	35:1d:123:HIS:CD2	2.52	0.44
50:1s:32:LYS:HB3	50:1s:32:LYS:HE2	1.83	0.44
1:2A:1790:C:H5''	1:2A:1791:A:OP1	2.16	0.44
1:2A:2298:A:N6	1:2A:2318:G:C8	2.86	0.44
1:2A:2394:C:N3	56:2y:76:A:O2'	2.45	0.44
1:2A:2815:C:H2'	1:2A:2816:C:C6	2.52	0.44
6:2G:167:GLU:OE1	6:2G:167:GLU:N	2.51	0.44
8:2I:1:MET:HE3	8:2I:1:MET:HB2	1.73	0.44
25:23:50:VAL:O	25:23:54:VAL:HB	2.17	0.44
26:24:58:ARG:HH21	44:2m:80:ARG:HH22	1.65	0.44
32:2a:110:C:O2'	47:2p:25:ARG:O	2.34	0.44
32:2a:264:U:O2'	48:2q:64:PRO:O	2.35	0.44
32:2a:1068:G:H8	32:2a:1068:G:OP2	2.00	0.44
34:2c:182:ILE:HG22	34:2c:203:PHE:HA	1.98	0.44
46:2o:40:SER:O	46:2o:44:LYS:HG3	2.17	0.44
50:2s:38:SER:HB2	50:2s:71:LEU:HD22	1.99	0.44
54:2w:19:G:N2	54:2w:56:C:N3	2.62	0.44
1:1A:639:U:H2'	1:1A:640:C:C6	2.53	0.44
1:1A:1074:G:C6	1:1A:1075:C:H1'	2.52	0.44
1:1A:1720:U:H2'	1:1A:1721:G:O4'	2.16	0.44
1:1A:2747:G:O6	1:1A:2755:C:H5''	2.18	0.44
3:1D:232:PRO:HB3	3:1D:244:ARG:CZ	2.47	0.44
8:1I:109:ILE:HD13	8:1I:109:ILE:HA	1.68	0.44
15:1T:91:ARG:HD2	15:1T:120:ARG:NH1	2.33	0.44
28:16:18:ARG:HD2	28:16:42:TRP:CG	2.52	0.44
32:1a:1161:C:H2'	32:1a:1162:C:C6	2.52	0.44
36:1e:142:LEU:O	36:1e:143:ARG:NH1	2.50	0.44
38:1g:78:ARG:HG3	38:1g:156:TRP:CZ3	2.52	0.44
47:1p:19:ILE:N	47:1p:37:GLY:O	2.34	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2156:G:H2'	1:2A:2157:G:C2	2.51	0.44
1:2A:2472:G:H2'	1:2A:2475:C:H42	1.82	0.44
7:2H:26:VAL:O	7:2H:32:GLU:HA	2.17	0.44
8:2I:87:LYS:HE2	8:2I:87:LYS:HB3	1.24	0.44
21:2Z:138:GLU:H	21:2Z:156:LYS:HE2	1.82	0.44
26:24:57:GLU:HA	26:24:58:ARG:HA	1.80	0.44
32:2a:520:A:N1	32:2a:536:C:H1'	2.33	0.44
32:2a:1129:C:H2'	32:2a:1139:G:O6	2.18	0.44
32:2a:1149:C:H2'	32:2a:1150:U:C6	2.52	0.44
32:2a:1316:G:H22	32:2a:1319:A:H5'	1.83	0.44
33:2b:146:GLN:O	33:2b:150:SER:HB3	2.17	0.44
34:2c:109:PRO:C	34:2c:111:LEU:H	2.25	0.44
34:2c:111:LEU:HD21	34:2c:144:SER:O	2.17	0.44
36:2e:57:LYS:HE3	36:2e:57:LYS:HB2	1.82	0.44
36:2e:82:VAL:HB	36:2e:138:ALA:HB2	2.00	0.44
44:2m:97:PRO:HA	44:2m:110:ARG:HD3	1.99	0.44
45:2n:12:ARG:HH12	45:2n:14:PRO:HA	1.82	0.44
56:2y:57:G:N3	56:2y:57:G:H2'	2.32	0.44
1:1A:1064:C:H1'	1:1A:1076:C:H5	1.81	0.44
1:1A:1762:A:H2'	61:1A:6485:HOH:O	2.18	0.44
1:1A:2404:C:O3'	11:1P:77:ARG:NH2	2.51	0.44
6:1G:127:GLY:H	6:1G:166:ASP:CG	2.25	0.44
12:1Q:1:MET:HE3	12:1Q:1:MET:HB2	1.77	0.44
25:13:43:ILE:O	25:13:47:VAL:HG23	2.18	0.44
32:1a:383:A:C5	32:1a:384:G:H1'	2.52	0.44
32:1a:412:A:C6	35:1d:35:ARG:HB3	2.52	0.44
32:1a:688:G:H5'	42:1k:46:GLY:C	2.42	0.44
32:1a:804:U:H5''	32:1a:805:C:OP2	2.17	0.44
32:1a:1030(B):C:H2'	32:1a:1030(B):C:O2	2.16	0.44
32:1a:1134:G:N3	32:1a:1134:G:H2'	2.33	0.44
32:1a:1378:C:H5''	38:1g:6:ARG:HD3	1.99	0.44
33:1b:12:GLU:C	33:1b:14:GLY:H	2.25	0.44
34:1c:10:PHE:CE2	34:1c:178:LEU:HD11	2.52	0.44
35:1d:63:LYS:O	35:1d:67:ILE:HG13	2.18	0.44
42:1k:18:ARG:NH2	42:1k:35:PRO:O	2.50	0.44
1:2A:879:G:C6	1:2A:880:G:C2	3.06	0.44
1:2A:888:C:OP1	44:2m:93:ARG:HD3	2.17	0.44
1:2A:940:G:N3	1:2A:1191:G:H4'	2.32	0.44
1:2A:2705:A:O2'	1:2A:2852:G:OP1	2.31	0.44
2:2B:72:G:O2'	2:2B:105:A:N6	2.50	0.44
4:2E:181:LEU:HD11	15:2T:6:LEU:HD22	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:2H:98:LEU:HG	7:2H:125:VAL:HG23	2.00	0.44
13:2R:61:HIS:O	13:2R:65:LEU:HG	2.18	0.44
22:20:38:VAL:HG12	22:20:40:GLN:HG2	1.99	0.44
32:2a:1126:U:H3	41:2j:40:LEU:HD11	1.80	0.44
33:2b:69:LEU:HD11	33:2b:93:VAL:HG22	1.99	0.44
45:2n:3:ARG:HG3	45:2n:4:LYS:N	2.32	0.44
1:1A:271(M):G:O2'	1:1A:271(N):U:H5''	2.17	0.44
1:1A:1815:A:H8	1:1A:1815:A:OP1	2.00	0.44
1:1A:2784:C:H1'	4:1E:37:ARG:NH1	2.32	0.44
26:14:56:VAL:HB	26:14:60:GLN:HG3	1.98	0.44
26:14:59:PHE:CD2	50:1s:64:GLU:HB3	2.53	0.44
32:1a:149:A:H2'	32:1a:150:C:C6	2.53	0.44
32:1a:769:G:H4'	32:1a:1513:A:H4'	1.99	0.44
32:1a:950:U:H2'	32:1a:951:G:C8	2.52	0.44
32:1a:1347:G:N2	32:1a:1373:G:H2'	2.32	0.44
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.52	0.44
32:1a:1452:C:O2'	32:1a:1456:G:H5''	2.17	0.44
34:1c:20:SER:HB2	34:1c:40:ARG:HH22	1.82	0.44
42:1k:65:ALA:HB1	42:1k:98:LEU:HD23	1.99	0.44
50:1s:62:ILE:HD12	50:1s:62:ILE:H	1.83	0.44
50:1s:63:THR:OG1	50:1s:65:ASN:OD1	2.22	0.44
1:2A:39:C:H2'	1:2A:40:C:C6	2.52	0.44
1:2A:479:A:N3	1:2A:481:G:H5''	2.33	0.44
1:2A:962:G:H2'	1:2A:963:U:C6	2.53	0.44
1:2A:1833:U:O2'	1:2A:1969:A:N1	2.47	0.44
1:2A:1916:A:H2'	1:2A:1917:PSU:O4'	2.18	0.44
2:2B:80:U:O2'	2:2B:81:G:H8	2.01	0.44
3:2D:148:GLU:HB2	3:2D:151:LYS:HD2	1.99	0.44
8:2I:127:VAL:HG23	8:2I:139:GLN:HB3	2.00	0.44
12:2Q:43:THR:N	12:2Q:46:GLN:OE1	2.35	0.44
32:2a:1002:G:H1	32:2a:1038:C:H42	1.65	0.44
32:2a:1273:G:H3'	32:2a:1274:G:H8	1.83	0.44
32:2a:1280:A:OP1	32:2a:1281:U:H5	2.00	0.44
1:1A:185:U:H4'	1:1A:218:A:H4'	2.00	0.44
1:1A:1265:A:OP2	61:1A:5936:HOH:O	2.21	0.44
1:1A:1322:A:N1	1:1A:1333:C:O2'	2.43	0.44
1:1A:1503:U:H2'	1:1A:1504:C:C6	2.53	0.44
1:1A:1851:U:H2'	1:1A:1852:C:O4'	2.17	0.44
1:1A:2337:G:OP1	61:1A:5764:HOH:O	2.20	0.44
1:1A:2577:A:OP2	27:15:3:LYS:NZ	2.42	0.44
11:1P:6:LEU:HD23	11:1P:6:LEU:HA	1.74	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:1T:24:PRO:HD3	15:1T:52:ILE:HD12	2.00	0.44
20:1Y:68:HIS:CE1	20:1Y:70:SER:HB3	2.53	0.44
32:1a:189(F):U:C4	48:1q:72:ARG:NH2	2.85	0.44
32:1a:629:G:H2'	32:1a:630:G:O4'	2.18	0.44
32:1a:1298:C:OP2	38:1g:114:ARG:NH2	2.50	0.44
1:2A:10:G:H2'	1:2A:11:G:C8	2.52	0.44
1:2A:307:G:H21	1:2A:330:A:H62	1.65	0.44
1:2A:518:G:H4'	18:2W:18:ARG:NE	2.32	0.44
1:2A:1155:A:H5''	16:2U:55:ARG:NE	2.33	0.44
1:2A:1817:G:OP1	3:2D:88:ARG:NH2	2.43	0.44
1:2A:2015:A:C2	27:25:6:VAL:HG23	2.52	0.44
1:2A:2331:G:O2'	22:20:43:THR:HG22	2.18	0.44
1:2A:2378:A:H5''	14:2S:23:ARG:HH22	1.81	0.44
3:2D:129:ASN:O	3:2D:193:VAL:HG23	2.18	0.44
6:2G:5:VAL:HG23	6:2G:8:LYS:H	1.83	0.44
11:2P:6:LEU:HA	11:2P:6:LEU:HD23	1.59	0.44
21:2Z:77:ASP:OD2	21:2Z:80:ARG:NH1	2.45	0.44
23:21:81:LYS:H	23:21:81:LYS:HG2	1.62	0.44
32:2a:106:C:N4	61:2a:5015:HOH:O	2.49	0.44
32:2a:678:U:H2'	32:2a:679:C:C6	2.52	0.44
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.53	0.44
32:2a:1085:U:H3'	32:2a:1086:U:C6	2.52	0.44
32:2a:1104:G:O3'	33:2b:111:ARG:NH2	2.51	0.44
33:2b:8:LYS:HE3	33:2b:48:MET:HA	1.99	0.44
36:2e:36:ASP:OD1	36:2e:38:GLN:HB2	2.18	0.44
38:2g:118:VAL:HG13	38:2g:122:HIS:NE2	2.33	0.44
44:2m:64:TRP:HB2	44:2m:66:LEU:HD21	1.98	0.44
47:2p:8:ARG:HB3	47:2p:28:ARG:NH1	2.33	0.44
51:2t:57:ARG:HH12	51:2t:100:ILE:HD12	1.82	0.44
1:1A:593:G:C6	1:1A:594:U:C4	3.06	0.44
1:1A:2629:A:H1'	1:1A:2630:G:H5''	1.98	0.44
1:1A:2785:C:H2'	1:1A:2786:U:O4'	2.18	0.44
24:12:32:LEU:O	24:12:36:ARG:HG3	2.18	0.44
32:1a:519:C:H2'	32:1a:520:A:C8	2.52	0.44
36:1e:43:LEU:HD21	36:1e:132:ALA:HB1	1.99	0.44
39:1h:122:ARG:HE	39:1h:122:ARG:HB2	1.41	0.44
51:1t:13:LEU:HD12	51:1t:14:LYS:N	2.33	0.44
1:2A:2130:U:H2'	1:2A:2158:A:N6	2.30	0.44
1:2A:2467:C:H4'	12:2Q:123:HIS:CD2	2.52	0.44
3:2D:72:LYS:HB3	3:2D:75:ILE:HD12	2.00	0.44
5:2F:53:THR:HG22	5:2F:56:GLU:HG3	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:22:LYS:O	35:2d:113:SER:HB2	2.17	0.44
44:2m:91:ARG:HD2	44:2m:96:LEU:HB3	1.99	0.44
51:2t:79:ARG:HD2	51:2t:83:ARG:NH2	2.32	0.44
1:1A:383:U:O4	61:1A:7139:HOH:O	2.20	0.44
1:1A:601:C:O2'	1:1A:605:C:H5''	2.18	0.44
1:1A:1139:G:OP1	9:1N:101:HIS:ND1	2.43	0.44
1:1A:2118:U:O4	1:1A:2149:G:H1'	2.18	0.44
1:1A:2133:G:C2	1:1A:2157:G:N3	2.86	0.44
3:1D:148:GLU:OE1	3:1D:151:LYS:NZ	2.42	0.44
14:1S:11:LYS:O	14:1S:15:ARG:HB2	2.18	0.44
15:1T:35:LYS:HB3	15:1T:35:LYS:HE2	1.82	0.44
32:1a:189(F):U:O4	48:1q:72:ARG:NH2	2.51	0.44
32:1a:222:U:H2'	32:1a:223:U:C6	2.53	0.44
32:1a:865:A:C2	32:1a:918:A:H4'	2.52	0.44
32:1a:1237:C:O2'	32:1a:1300:G:N2	2.49	0.44
33:1b:16:HIS:CD2	33:1b:204:ASN:H	2.36	0.44
33:1b:129:GLU:O	33:1b:130:ARG:HG3	2.18	0.44
42:1k:48:ILE:O	42:1k:48:ILE:HG12	2.18	0.44
56:1y:48:C:OP1	56:1y:48:C:H2'	2.18	0.44
1:2A:76:C:O3'	24:22:59:ARG:HG3	2.17	0.44
1:2A:862:G:H2'	1:2A:863:A:O4'	2.18	0.44
1:2A:1364:G:P	23:21:3:LYS:HG3	2.58	0.44
1:2A:1669:A:O2'	1:2A:2549:G:OP1	2.34	0.44
3:2D:77:ALA:HB2	3:2D:97:TYR:CD1	2.52	0.44
3:2D:121:PRO:HB3	3:2D:135:PHE:CE2	2.53	0.44
15:2T:65:LYS:HE3	15:2T:67:SER:HB2	1.99	0.44
21:2Z:99:TYR:CE2	21:2Z:125:LEU:HD13	2.53	0.44
26:24:16:CYS:C	26:24:18:CYS:H	2.26	0.44
27:25:35:GLU:HG2	27:25:51:TYR:CG	2.53	0.44
28:26:6:ARG:NH1	28:26:26:ASN:HB2	2.32	0.44
32:2a:1329:A:H5'	44:2m:29:ARG:HE	1.83	0.44
32:2a:1366:C:H2'	32:2a:1367:C:C6	2.53	0.44
36:2e:42:GLY:HA2	36:2e:65:ASN:O	2.18	0.44
40:2i:5:TYR:H	40:2i:87:GLN:NE2	2.15	0.44
40:2i:116:LYS:HA	40:2i:123:PRO:HD3	1.99	0.44
42:2k:18:ARG:NH2	42:2k:35:PRO:O	2.33	0.44
42:2k:67:ASP:O	42:2k:71:LYS:HG3	2.18	0.44
1:1A:218:A:H2	1:1A:235:U:H4'	1.83	0.44
1:1A:271(I):G:N7	1:1A:271(J):C:N4	2.65	0.44
1:1A:671:C:H2'	1:1A:672:C:C6	2.53	0.44
1:1A:1508:A:O2'	1:1A:1509:C:OP1	2.26	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2393:A:H5''	11:1P:63:PRO:HB3	2.00	0.44
1:1A:2399:G:H1'	61:1A:5633:HOH:O	2.18	0.44
5:1F:167:ALA:HB1	5:1F:173:VAL:HG11	1.99	0.44
8:1I:12:LEU:HD23	8:1I:12:LEU:HA	1.73	0.44
21:1Z:1:MET:HA	21:1Z:2:GLU:HA	1.55	0.44
28:16:26:ASN:HD21	28:16:28:ARG:NH2	2.15	0.44
33:1b:124:SER:HA	33:1b:125:PRO:HA	1.68	0.44
42:1k:51:LYS:HA	42:1k:51:LYS:HD3	1.75	0.44
54:1w:48:C:C2	54:1w:59:U:H1'	2.53	0.44
1:2A:667:U:O2	30:28:2:PRO:HD2	2.18	0.44
1:2A:1996:C:H4'	1:2A:1997:G:OP1	2.18	0.44
1:2A:2156:G:H2'	1:2A:2157:G:C4	2.53	0.44
2:2B:48:A:H2'	2:2B:49:C:C6	2.53	0.44
8:2I:82:ARG:HE	8:2I:82:ARG:HB2	1.33	0.44
10:2O:111:PHE:O	10:2O:115:VAL:HG23	2.17	0.44
11:2P:121:LYS:O	11:2P:123:LEU:N	2.47	0.44
15:2T:91:ARG:HD2	15:2T:120:ARG:NH1	2.33	0.44
22:20:23:VAL:HG22	22:20:38:VAL:HG22	1.99	0.44
24:22:25:VAL:HG13	24:22:57:ILE:HG23	2.00	0.44
32:2a:399:G:H2'	32:2a:400:C:C6	2.53	0.44
32:2a:1292:U:H2'	32:2a:1293:G:C8	2.53	0.44
32:2a:1371:G:H5''	40:2i:69:GLY:H	1.83	0.44
38:2g:90:GLU:OE1	38:2g:90:GLU:N	2.49	0.44
38:2g:113:GLU:CG	38:2g:119:ARG:HG2	2.43	0.44
42:2k:34:ASP:N	42:2k:40:ILE:HD11	2.33	0.44
44:2m:86:CYS:O	44:2m:89:GLY:N	2.48	0.44
49:2r:33:ASP:OD2	49:2r:36:ASN:HB2	2.18	0.44
50:2s:80:TYR:HE1	50:2s:83:HIS:CE1	2.35	0.44
52:2u:6:ARG:C	52:2u:8:THR:H	2.26	0.44
1:1A:292:C:H2'	1:1A:293:U:C6	2.53	0.43
1:1A:1043:C:O2	1:1A:1112:G:N2	2.42	0.43
1:1A:1673:U:OP1	61:1A:6484:HOH:O	2.21	0.43
1:1A:2123:G:H1	1:1A:2175:C:N4	2.16	0.43
1:1A:2250:G:OP1	12:1Q:85:LYS:NZ	2.43	0.43
1:1A:2359:C:H2'	1:1A:2360:A:O4'	2.18	0.43
1:1A:2590:A:H2'	1:1A:2591:C:C6	2.52	0.43
4:1E:4:ILE:HD11	4:1E:29:GLY:HA2	2.00	0.43
7:1H:121:ILE:HG13	7:1H:144:VAL:HG21	2.00	0.43
10:1O:68:GLU:HB3	10:1O:78:ARG:HB2	2.00	0.43
26:14:63:TYR:N	26:14:63:TYR:CD1	2.85	0.43
32:1a:278:G:OP2	48:1q:41:LYS:HE2	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:337:C:H2'	32:1a:338:A:C8	2.53	0.43
32:1a:976:G:OP2	32:1a:1358:U:O2'	2.29	0.43
32:1a:1262:C:H2'	32:1a:1263:C:C6	2.53	0.43
42:1k:79:SER:HA	42:1k:104:GLN:HB3	2.00	0.43
56:1y:19:G:C2	56:1y:56:C:N3	2.85	0.43
1:2A:407:G:H1	1:2A:420:C:H42	1.64	0.43
1:2A:1231:G:H2'	1:2A:1232:G:H8	1.83	0.43
1:2A:1359:A:C2	1:2A:1372:U:O4	2.71	0.43
1:2A:1401:G:H2'	1:2A:1402:C:O4'	2.18	0.43
1:2A:1592:C:H2'	1:2A:1593:G:C8	2.53	0.43
3:2D:141:VAL:HG12	3:2D:162:SER:HB2	2.00	0.43
8:2I:43:ASN:HA	8:2I:46:ALA:HB3	2.00	0.43
11:2P:86:LYS:HG2	11:2P:117:GLU:O	2.18	0.43
19:2X:94:GLY:H	19:2X:95:LEU:HB2	1.83	0.43
32:2a:939:G:H1	32:2a:1344:C:N4	2.14	0.43
34:2c:14:ILE:HG21	34:2c:178:LEU:HB3	2.00	0.43
38:2g:20:ASP:HB3	38:2g:23:VAL:HB	1.98	0.43
38:2g:151:TYR:OH	42:2k:54:ARG:HD3	2.17	0.43
40:2i:56:LEU:N	40:2i:58:HIS:HD2	2.16	0.43
44:2m:29:ARG:HD3	44:2m:64:TRP:CE2	2.53	0.43
49:2r:66:LEU:O	49:2r:70:ILE:HG13	2.18	0.43
1:1A:1599:C:P	19:1X:36:LYS:HG3	2.58	0.43
1:1A:2602:A:N6	55:1x:76:31H:H2'	2.32	0.43
1:1A:2781:A:H5''	1:1A:2782:G:H5'	2.00	0.43
1:1A:2817:G:OP1	13:1R:99:LYS:NZ	2.48	0.43
32:1a:1053:G:N7	32:1a:1200:C:H5''	2.33	0.43
33:1b:60:ASP:OD1	33:1b:64:ARG:NE	2.50	0.43
37:1f:9:VAL:HA	37:1f:59:TYR:O	2.18	0.43
38:1g:113:GLU:HG2	38:1g:113:GLU:H	1.62	0.43
1:2A:240:G:O6	61:2A:5794:HOH:O	2.21	0.43
1:2A:1199:U:H2'	1:2A:1200:C:C6	2.53	0.43
1:2A:1423:G:P	1:2A:1492:G:HO2'	2.41	0.43
1:2A:1932:A:H2'	1:2A:1933:G:O4'	2.18	0.43
1:2A:2316:C:H2'	1:2A:2317:C:C6	2.53	0.43
61:2A:5455:HOH:O	3:2D:241:PRO:O	2.21	0.43
4:2E:1:MET:HE3	4:2E:199:ARG:HD2	1.99	0.43
9:2N:46:VAL:HG23	9:2N:48:MET:HG2	2.00	0.43
11:2P:97:PRO:HD3	11:2P:126:VAL:O	2.18	0.43
32:2a:253:U:H2'	32:2a:254:G:H8	1.82	0.43
32:2a:921:U:H2'	32:2a:922:G:O4'	2.18	0.43
32:2a:948:C:H2'	32:2a:949:A:C8	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1006:C:H2'	32:2a:1007:C:C6	2.53	0.43
32:2a:1029:C:H1'	32:2a:1033:G:H22	1.84	0.43
32:2a:1371:G:H5''	40:2i:69:GLY:N	2.32	0.43
32:2a:1516:G:N2	32:2a:1519:MA6:OP2	2.49	0.43
36:2e:63:ARG:HA	36:2e:66:MET:HE1	2.00	0.43
38:2g:26:PHE:CZ	38:2g:30:ILE:HD11	2.54	0.43
41:2j:44:VAL:HG13	41:2j:66:ARG:HB3	1.99	0.43
43:2l:24:VAL:HG12	43:2l:98:TYR:CE1	2.53	0.43
51:2t:61:SER:OG	51:2t:62:LEU:N	2.51	0.43
1:1A:127:A:H5''	1:1A:128:C:C6	2.53	0.43
1:1A:484:C:H2'	1:1A:485:C:C6	2.53	0.43
1:1A:1171:G:N3	1:1A:1171:G:H2'	2.33	0.43
1:1A:1176:G:H21	1:1A:1178:C:P	2.40	0.43
1:1A:1508:A:O2'	1:1A:1509:C:H5''	2.18	0.43
1:1A:2142:C:N3	1:1A:2149:G:C6	2.85	0.43
2:1B:31:C:H4'	6:1G:29:TRP:CH2	2.53	0.43
5:1F:32:LEU:HB3	5:1F:112:MET:HE1	1.99	0.43
5:1F:168:ARG:HB2	5:1F:175:THR:HG21	2.01	0.43
8:1I:81:VAL:HG22	8:1I:145:VAL:O	2.18	0.43
11:1P:37:GLY:C	11:1P:38:GLN:O	2.62	0.43
20:1Y:35:TYR:CE2	20:1Y:69:ALA:HB3	2.54	0.43
32:1a:524:G:H2'	32:1a:525:C:C6	2.52	0.43
32:1a:1004:A:N6	32:1a:1037:C:C2	2.87	0.43
33:1b:52:GLU:HG2	33:1b:56:ARG:NH2	2.32	0.43
36:1e:116:THR:HG23	36:1e:117:ASP:OD2	2.18	0.43
43:1l:77:LEU:HD21	43:1l:107:ALA:HB2	1.99	0.43
46:1o:18:PHE:CZ	46:1o:21:ASP:HB2	2.53	0.43
54:1w:56:C:H2'	54:1w:57:G:O4'	2.18	0.43
1:2A:566:U:OP1	11:2P:29:LYS:HD3	2.18	0.43
1:2A:2070:G:H2'	1:2A:2071:A:C8	2.52	0.43
5:2F:53:THR:HG22	5:2F:56:GLU:CG	2.49	0.43
6:2G:15:VAL:HG13	6:2G:175:LEU:HD12	2.01	0.43
11:2P:62:LEU:HD11	30:28:50:LEU:HD11	2.01	0.43
13:2R:36:THR:HG22	13:2R:37:THR:N	2.33	0.43
21:2Z:65:GLN:HB3	21:2Z:67:LEU:HD23	1.99	0.43
26:24:44:THR:OG1	26:24:45:GLY:N	2.51	0.43
32:2a:120:A:C6	32:2a:122:G:C2	3.05	0.43
32:2a:555:C:H2'	32:2a:556:C:C6	2.52	0.43
1:1A:153:C:H2'	1:1A:154:G:C8	2.53	0.43
1:1A:478:A:C6	1:1A:480:A:C6	3.06	0.43
1:1A:1056:G:H5''	1:1A:1057:A:O4'	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:1S:15:ARG:O	14:1S:19:LYS:HG3	2.18	0.43
16:1U:66:ASN:CG	16:1U:76:TYR:HB2	2.43	0.43
32:1a:1038:C:O2'	32:1a:1039:C:H5'	2.18	0.43
1:2A:116:C:H2'	1:2A:117:G:O4'	2.19	0.43
1:2A:2298:A:N6	1:2A:2318:G:H8	2.15	0.43
5:2F:37:VAL:O	5:2F:41:LEU:HG	2.19	0.43
20:2Y:40:GLU:O	20:2Y:42:VAL:HG23	2.18	0.43
26:24:61:ARG:HH22	50:2s:9:VAL:HG21	1.83	0.43
32:2a:1077:G:N2	32:2a:1080:A:OP2	2.48	0.43
32:2a:1132:C:H2'	32:2a:1133:G:C8	2.52	0.43
38:2g:23:VAL:HG13	38:2g:43:PHE:CE2	2.52	0.43
48:2q:53:LEU:HD23	48:2q:82:MET:HE1	2.01	0.43
54:2w:46:7MG:H81	54:2w:46:7MG:H2'	1.82	0.43
1:1A:1059:G:H2'	1:1A:1060:U:C5	2.53	0.43
1:1A:1062:G:H1'	1:1A:1088:A:C8	2.54	0.43
1:1A:1641:A:H2'	1:1A:1642:G:O4'	2.19	0.43
1:1A:2784:C:H1'	4:1E:37:ARG:HH12	1.84	0.43
3:1D:77:ALA:HB2	3:1D:97:TYR:CD1	2.53	0.43
4:1E:181:LEU:HD12	4:1E:181:LEU:HA	1.73	0.43
12:1Q:122:GLY:HA2	12:1Q:125:LEU:HD12	2.00	0.43
18:1W:68:ARG:NH1	18:1W:111:HIS:HA	2.32	0.43
21:1Z:72:ARG:NH2	21:1Z:97:GLU:O	2.51	0.43
24:12:51:ARG:O	24:12:55:ARG:HG2	2.19	0.43
26:14:53:GLU:HB2	26:14:55:ARG:O	2.17	0.43
32:1a:176:C:H2'	32:1a:177:C:H6	1.83	0.43
32:1a:922:G:C6	32:1a:923:A:C6	3.06	0.43
35:1d:103:ASN:O	35:1d:107:ARG:HG2	2.18	0.43
1:2A:720:C:H2'	1:2A:721:C:C6	2.53	0.43
1:2A:918:A:N3	2:2B:80:U:H4'	2.33	0.43
1:2A:1927:A:C6	1:2A:1928:A:C6	3.06	0.43
2:2B:29:A:H2'	2:2B:30:C:C6	2.53	0.43
7:2H:11:VAL:HB	7:2H:48:GLY:C	2.44	0.43
8:2I:41:GLU:HA	8:2I:44:LEU:HB3	2.00	0.43
32:2a:985:C:H2'	32:2a:986:A:C8	2.53	0.43
32:2a:1164:G:H1	32:2a:1172:C:N4	2.16	0.43
32:2a:1187:G:OP1	40:2i:113:LYS:NZ	2.51	0.43
35:2d:116:GLN:CD	35:2d:157:LEU:HD21	2.44	0.43
38:2g:29:LYS:O	38:2g:105:VAL:HG11	2.18	0.43
39:2h:66:GLY:N	39:2h:77:GLU:O	2.49	0.43
1:1A:621:A:OP2	11:1P:108:LYS:NZ	2.47	0.43
61:1A:5515:HOH:O	3:1D:99:ASP:OD1	2.21	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:1N:96:GLU:H	9:1N:96:GLU:CD	2.26	0.43
30:18:38:GLY:O	30:18:42:ARG:HB2	2.18	0.43
32:1a:370:C:H2'	32:1a:371:G:C8	2.53	0.43
32:1a:381:C:H2'	32:1a:382:A:O4'	2.18	0.43
32:1a:923:A:C5'	36:1e:21:ALA:HB2	2.49	0.43
34:1c:180:ALA:HB1	34:1c:203:PHE:CE1	2.54	0.43
42:1k:33:THR:HA	42:1k:39:PRO:HA	1.99	0.43
46:1o:62:GLN:O	46:1o:66:LEU:HG	2.18	0.43
54:1w:27:G:H2'	54:1w:28:G:C8	2.53	0.43
1:2A:360:G:H2'	1:2A:361:G:H8	1.84	0.43
1:2A:534:U:O2'	16:2U:49:HIS:ND1	2.43	0.43
1:2A:805:G:N2	1:2A:829:A:OP1	2.48	0.43
1:2A:839:U:H1'	1:2A:1191:G:H1'	2.00	0.43
1:2A:1702:G:H2'	1:2A:1703:G:O4'	2.19	0.43
1:2A:2753:A:N3	31:29:15:LYS:NZ	2.64	0.43
61:2A:5253:HOH:O	16:2U:66:ASN:HB3	2.19	0.43
2:2B:11:C:OP2	2:2B:12:C:N4	2.35	0.43
3:2D:218:ARG:HB3	3:2D:219:PRO:HD2	2.00	0.43
6:2G:117:PHE:CE2	6:2G:119:GLY:HA2	2.54	0.43
7:2H:74:ASN:O	7:2H:78:GLY:N	2.52	0.43
8:2I:48:GLU:HG3	8:2I:52:ARG:NH1	2.34	0.43
32:2a:892:A:O2'	32:2a:1415:G:H4'	2.18	0.43
32:2a:1333:A:H2'	32:2a:1334:G:O4'	2.19	0.43
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.54	0.43
33:2b:15:VAL:HG23	33:2b:16:HIS:CD2	2.52	0.43
35:2d:73:ARG:HD2	35:2d:73:ARG:HA	1.71	0.43
35:2d:101:LEU:HD23	35:2d:121:VAL:HG13	2.01	0.43
37:2f:16:GLN:CD	37:2f:16:GLN:H	2.27	0.43
39:2h:81:HIS:N	39:2h:138:TRP:O	2.48	0.43
51:2t:53:LEU:HB2	51:2t:100:ILE:HD11	2.01	0.43
1:1A:247:G:H4'	1:1A:386:G:C5	2.53	0.43
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.83	0.43
1:1A:2406:U:H6	1:1A:2406:U:H2'	1.66	0.43
1:1A:2848:G:H3'	15:1T:95:ARG:O	2.18	0.43
4:1E:98:PRO:HG3	4:1E:174:ASP:HA	2.01	0.43
5:1F:103:LYS:O	5:1F:106:ARG:HG2	2.19	0.43
8:1I:77:LEU:HB3	8:1I:142:VAL:HG12	2.00	0.43
9:1N:67:LEU:O	9:1N:88:GLU:HG3	2.18	0.43
32:1a:130:A:N6	32:1a:233:C:O2	2.51	0.43
32:1a:715:A:H2'	32:1a:716:A:C8	2.54	0.43
54:1w:27:G:H2'	54:1w:28:G:H8	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:528:A:N1	1:2A:2042:A:H2'	2.33	0.43
1:2A:1740:G:H2'	1:2A:1740:G:N3	2.34	0.43
1:2A:2082:A:H2'	1:2A:2083:G:O4'	2.18	0.43
1:2A:2251:OMG:HM23	1:2A:2251:OMG:H1'	1.67	0.43
1:2A:2307:G:H8	1:2A:2307:G:OP1	2.01	0.43
1:2A:2422:A:O4'	56:2y:76:A:N6	2.52	0.43
7:2H:113:VAL:HG11	7:2H:151:ILE:HG21	2.01	0.43
32:2a:362:G:N2	32:2a:365:U:OP2	2.51	0.43
32:2a:460:G:O6	32:2a:470:C:H4'	2.19	0.43
32:2a:756:C:H2'	32:2a:757:U:O4'	2.19	0.43
56:2y:9:A:H4'	56:2y:46:7MG:H5'	2.01	0.43
1:1A:242:G:C8	30:18:5:LYS:HG2	2.53	0.43
1:1A:292:C:H2'	1:1A:293:U:H6	1.84	0.43
11:1P:62:LEU:HD11	30:18:50:LEU:HD11	1.99	0.43
11:1P:100:LEU:HA	11:1P:100:LEU:HD12	1.79	0.43
21:1Z:93:ASP:HB2	21:1Z:131:ARG:HH12	1.84	0.43
22:10:29:GLN:O	22:10:67:VAL:HG23	2.18	0.43
32:1a:79:G:H1'	32:1a:91:C:O2	2.19	0.43
32:1a:186:C:H2'	32:1a:187:C:H6	1.84	0.43
32:1a:690:G:C6	32:1a:691:G:C6	3.06	0.43
33:1b:122:PHE:HD2	33:1b:142:LEU:HD13	1.83	0.43
35:1d:106:TYR:HD2	35:1d:107:ARG:HD3	1.84	0.43
36:1e:57:LYS:HG2	36:1e:61:TYR:CE2	2.53	0.43
37:1f:69:GLU:H	37:1f:69:GLU:CD	2.27	0.43
51:1t:89:ARG:O	51:1t:93:GLU:HG2	2.19	0.43
1:2A:94(A):G:H2'	1:2A:95:G:O4'	2.19	0.43
1:2A:2391:G:O2'	1:2A:2422:A:N7	2.52	0.43
1:2A:2512:C:H2'	1:2A:2513:G:O4'	2.19	0.43
26:24:13:ARG:HG2	26:24:23:GLU:HG2	2.00	0.43
32:2a:236:G:C6	32:2a:237:C:C4	3.07	0.43
32:2a:384:G:H2'	32:2a:385:C:C6	2.54	0.43
32:2a:1381:U:H1'	38:2g:79:ARG:HD3	2.00	0.43
35:2d:150:GLU:CD	35:2d:150:GLU:H	2.24	0.43
39:2h:127:LEU:HD23	39:2h:127:LEU:HA	1.68	0.43
45:2n:27:CYS:SG	45:2n:29:ARG:HB2	2.58	0.43
51:2t:49:ALA:HB3	51:2t:99:LEU:HD12	2.01	0.43
56:2y:66:U:C4	56:2y:67:C:C4	3.06	0.43
1:1A:271(K):U:H1'	8:1I:50:ARG:CZ	2.49	0.43
1:1A:1301:A:O2'	1:1A:1302:A:H3'	2.18	0.43
1:1A:1828:G:H8	1:1A:1828:G:OP2	2.02	0.43
1:1A:1886:C:H2'	1:1A:1887:C:H6	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1965:C:OP1	1:1A:1966:A:O2'	2.26	0.43
1:1A:2749:A:OP1	7:1H:3:ARG:NH1	2.51	0.43
32:1a:1314:C:N4	50:1s:2:PRO:O	2.51	0.43
32:1a:1429:C:H2'	32:1a:1430:C:H6	1.83	0.43
33:1b:113:HIS:O	33:1b:117:GLU:N	2.50	0.43
34:1c:66:VAL:HG23	34:1c:101:LEU:HD13	2.00	0.43
1:2A:100:G:O2'	24:22:7:ARG:NH2	2.52	0.43
1:2A:456:C:O2'	1:2A:457:A:OP2	2.35	0.43
1:2A:1908:C:O2'	55:2x:12:G:H5''	2.19	0.43
1:2A:2649:U:H2'	1:2A:2650:U:C6	2.54	0.43
1:2A:2701:C:H2'	1:2A:2702:U:H2'	2.01	0.43
32:2a:161:A:N6	32:2a:347:G:O2'	2.41	0.43
32:2a:685:G:C2	32:2a:686:U:C4	3.07	0.43
32:2a:1510:U:H2'	32:2a:1511:G:C8	2.53	0.43
34:2c:17:ASP:O	34:2c:54:ARG:NH2	2.52	0.43
41:2j:97:GLU:C	41:2j:98:ILE:HD12	2.44	0.43
50:2s:32:LYS:HA	50:2s:50:ALA:HB3	2.00	0.43
1:1A:1095:A:H62	1:1A:1097:U:H3	1.66	0.43
1:1A:2544:G:H1'	1:1A:2646:C:H4'	2.01	0.43
6:1G:27:ASN:HB3	6:1G:30:GLU:HG3	2.01	0.43
6:1G:43:LEU:C	6:1G:45:GLU:H	2.26	0.43
7:1H:94:TYR:HA	7:1H:106:THR:O	2.19	0.43
8:1I:130:TYR:HB3	8:1I:138:ILE:HB	2.00	0.43
25:13:26:LEU:O	25:13:35:ARG:NE	2.49	0.43
32:1a:538:G:H5''	43:1l:114:LYS:HB2	2.01	0.43
32:1a:689:C:OP1	42:1k:27:ASN:ND2	2.52	0.43
32:1a:1402:4OC:O5'	32:1a:1402:4OC:H6	2.18	0.43
36:1e:6:PHE:HD1	36:1e:36:ASP:HB3	1.84	0.43
40:1i:95:LYS:O	40:1i:99:LEU:HD13	2.17	0.43
47:1p:55:ARG:NH2	47:1p:58:TYR:HD2	2.17	0.43
48:1q:57:VAL:HG12	48:1q:76:LEU:HA	2.01	0.43
1:2A:211:A:H2'	1:2A:212:G:O4'	2.18	0.43
1:2A:518:G:H4'	18:2W:18:ARG:HE	1.83	0.43
1:2A:908:C:OP1	12:2Q:22:LYS:HB3	2.19	0.43
1:2A:1658:C:H5''	61:2A:6230:HOH:O	2.19	0.43
1:2A:2552:2MU:H6	1:2A:2552:2MU:O5'	2.18	0.43
4:2E:78:LEU:HD12	4:2E:78:LEU:HA	1.94	0.43
22:20:51:VAL:HG22	22:20:81:VAL:HG23	2.00	0.43
25:23:35:ARG:HG2	25:23:37:LEU:HD21	2.00	0.43
32:2a:1030(A):G:N3	32:2a:1030(C):G:C8	2.86	0.43
32:2a:1249:C:N4	32:2a:1287:A:H5''	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1271:G:C2	32:2a:1272:G:C8	3.07	0.43
32:2a:1375:A:O2'	38:2g:29:LYS:NZ	2.52	0.43
36:2e:47:LYS:O	36:2e:57:LYS:HD2	2.19	0.43
37:2f:50:TYR:CE2	49:2r:77:GLY:HA2	2.54	0.43
38:2g:68:ASN:HD22	38:2g:128:ALA:HA	1.82	0.43
38:2g:100:ALA:O	38:2g:104:LEU:HG	2.19	0.43
38:2g:103:TRP:N	38:2g:103:TRP:CD1	2.87	0.43
47:2p:15:PRO:HD2	47:2p:42:ARG:HD3	2.00	0.43
1:1A:1371:G:H2'	1:1A:1372:U:C5	2.54	0.42
6:1G:61:ALA:O	6:1G:65:GLY:N	2.52	0.42
9:1N:62:VAL:CG1	9:1N:66:LYS:HB2	2.49	0.42
13:1R:9:LYS:O	13:1R:17:ARG:HD3	2.18	0.42
24:12:65:ASN:OD1	24:12:69:ARG:NH1	2.52	0.42
32:1a:202:U:H3'	32:1a:203:U:C6	2.54	0.42
32:1a:408:A:H2'	32:1a:409:G:O4'	2.19	0.42
32:1a:457:C:H2'	32:1a:458:C:C6	2.54	0.42
32:1a:1004:A:H5''	32:1a:1025:U:H5	1.82	0.42
34:1c:119:ARG:HE	34:1c:140:ARG:CZ	2.32	0.42
38:1g:46:ALA:HA	38:1g:49:ILE:HD12	2.00	0.42
43:1l:82:VAL:O	43:1l:106:ASP:HB2	2.19	0.42
1:2A:309:G:N3	1:2A:329:G:O2'	2.50	0.42
1:2A:601:C:O2'	1:2A:605:C:H5''	2.19	0.42
1:2A:896:A:H4'	1:2A:897:C:OP1	2.18	0.42
1:2A:1779:U:H2'	61:2A:5804:HOH:O	2.19	0.42
1:2A:2023:G:H5'	1:2A:2617:C:H4'	2.01	0.42
1:2A:2184:G:H2'	1:2A:2185:C:C6	2.54	0.42
1:2A:2406:U:C4	11:2P:72:PRO:HD2	2.54	0.42
1:2A:2807:G:N1	1:2A:2893:G:O6	2.49	0.42
12:2Q:137:TYR:HB3	21:2Z:76:LEU:HD21	2.01	0.42
16:2U:49:HIS:HA	16:2U:52:ARG:HB2	2.00	0.42
21:2Z:70:LEU:HD12	21:2Z:71:VAL:H	1.83	0.42
26:24:13:ARG:HA	26:24:22:ILE:O	2.19	0.42
32:2a:280:C:N3	48:2q:39:SER:OG	2.46	0.42
32:2a:396:G:O2'	32:2a:398:C:OP1	2.31	0.42
32:2a:707:C:H5''	42:2k:85:ARG:NH1	2.34	0.42
32:2a:1010:G:H2'	32:2a:1011:G:H8	1.84	0.42
32:2a:1226:C:H2'	44:2m:103:THR:HB	2.01	0.42
38:2g:15:ASP:HA	38:2g:24:THR:HG23	2.00	0.42
46:2o:29:VAL:HG11	46:2o:67:LEU:HD21	2.01	0.42
1:1A:196:A:H2'	1:1A:196:A:N3	2.34	0.42
1:1A:272(J):C:H2'	1:1A:274:G:C8	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1069:A:H1'	1:1A:1096:A:H4'	2.01	0.42
1:1A:1142(A):A:C8	1:1A:1144:G:C8	3.07	0.42
1:1A:2366:A:H2'	1:1A:2367:G:O4'	2.18	0.42
4:1E:119:ARG:HG2	4:1E:120:TRP:CE2	2.54	0.42
7:1H:73:ALA:O	7:1H:76:VAL:HG12	2.18	0.42
21:1Z:52:SER:C	21:1Z:54:HIS:H	2.19	0.42
28:16:38:LYS:HE3	28:16:38:LYS:HB3	1.66	0.42
32:1a:767:A:H2'	32:1a:768:A:O4'	2.19	0.42
32:1a:1027:C:H5	32:1a:1028:C:C4	2.37	0.42
32:1a:1035:A:C4	32:1a:1036:G:N2	2.87	0.42
32:1a:1360:A:OP2	45:1n:35:ARG:NH2	2.52	0.42
33:1b:16:HIS:HB3	33:1b:210:SER:HB2	2.01	0.42
54:1w:66:U:H2'	54:1w:67:C:C6	2.54	0.42
1:2A:297:C:OP1	20:2Y:87:LYS:HG3	2.19	0.42
1:2A:1400:G:H2'	1:2A:1401:G:C8	2.53	0.42
1:2A:1530:C:N4	1:2A:1539:G:H1	2.17	0.42
1:2A:2419:U:H2'	1:2A:2420:C:H6	1.83	0.42
3:2D:75:ILE:HG21	3:2D:99:ASP:HB2	2.01	0.42
5:2F:137:LYS:HA	5:2F:140:LEU:HD12	2.01	0.42
6:2G:39:ILE:HD11	6:2G:102:PHE:CZ	2.54	0.42
7:2H:86:GLU:HA	7:2H:131:VAL:O	2.19	0.42
13:2R:98:LEU:HB2	13:2R:113:LEU:HD11	2.00	0.42
16:2U:27:LEU:HB3	16:2U:31:SER:HB3	2.00	0.42
32:2a:5:U:H6	32:2a:5:U:H2'	1.72	0.42
32:2a:620:C:H2'	32:2a:621:A:O4'	2.19	0.42
32:2a:664:G:P	49:2r:64:ARG:HH21	2.41	0.42
32:2a:698:G:C6	32:2a:699:C:C4	3.08	0.42
33:2b:18:GLY:HA2	33:2b:42:ILE:HG13	2.00	0.42
34:2c:111:LEU:HD22	34:2c:146:ALA:HB2	2.01	0.42
35:2d:101:LEU:HG	35:2d:101:LEU:O	2.17	0.42
40:2i:8:GLY:HA2	40:2i:79:LEU:HB3	2.01	0.42
56:2y:2:C:H2'	56:2y:3:C:H6	1.84	0.42
1:1A:841:A:H2'	1:1A:842:G:C8	2.54	0.42
1:1A:883:G:N2	1:1A:893:C:H42	2.18	0.42
1:1A:1790:C:H5''	1:1A:1791:A:OP1	2.18	0.42
1:1A:2096:U:H3	1:1A:2193:G:H1	1.66	0.42
1:1A:2183:C:H2'	1:1A:2184:G:H8	1.85	0.42
6:1G:41:GLN:O	6:1G:43:LEU:N	2.51	0.42
7:1H:154:PRO:HB3	7:1H:163:TYR:CZ	2.54	0.42
32:1a:562:C:H1'	43:1l:15:ARG:HB3	2.01	0.42
32:1a:892:A:O2'	32:1a:1415:G:H4'	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:32:ILE:HG21	33:1b:40:HIS:HD2	1.84	0.42
37:1f:97:PHE:N	49:1r:30:ASP:OD1	2.51	0.42
43:1l:113:ARG:HB3	43:1l:122:THR:HG21	2.01	0.42
1:2A:823:G:C2'	1:2A:824:A:H5'	2.49	0.42
1:2A:852:G:H2'	1:2A:853:G:C8	2.49	0.42
1:2A:1902:C:OP1	3:2D:242:ARG:HD2	2.19	0.42
1:2A:2456:C:N4	61:2A:5574:HOH:O	2.52	0.42
1:2A:2461:C:H2'	1:2A:2462:U:H6	1.83	0.42
4:2E:59:VAL:HG21	4:2E:74:PRO:HB3	2.01	0.42
10:2O:120:GLU:HB2	15:2T:68:TYR:HE2	1.85	0.42
21:2Z:40:ASP:OD2	21:2Z:42:VAL:HG13	2.19	0.42
21:2Z:150:LEU:O	21:2Z:171:ILE:HG13	2.19	0.42
22:20:36:ILE:HD13	22:20:58:THR:HG21	2.02	0.42
32:2a:65:U:H1'	32:2a:66:G:OP2	2.19	0.42
32:2a:84:U:H4'	32:2a:89:C:N4	2.34	0.42
33:2b:16:HIS:CG	33:2b:17:PHE:N	2.87	0.42
33:2b:176:GLU:O	33:2b:180:LEU:HG	2.19	0.42
39:2h:51:VAL:HG12	39:2h:52:ASP:H	1.84	0.42
40:2i:17:VAL:HG21	40:2i:81:ILE:HG13	2.01	0.42
42:2k:41:THR:OG1	42:2k:42:TRP:N	2.51	0.42
46:2o:54:ARG:O	46:2o:58:MET:HG3	2.20	0.42
48:2q:9:VAL:HG21	48:2q:84:LEU:HD12	2.01	0.42
51:2t:90:GLN:O	51:2t:93:GLU:HG3	2.19	0.42
55:2x:61:C:H2'	55:2x:62:C:H6	1.84	0.42
1:1A:818:G:H4'	1:1A:838:C:O3'	2.19	0.42
1:1A:1011:G:OP2	16:1U:70:ARG:NH2	2.53	0.42
1:1A:1939:5MU:OP1	1:1A:2604:U:O2'	2.31	0.42
1:1A:2105:C:H2'	1:1A:2106:G:H8	1.84	0.42
1:1A:2262:U:OP1	1:1A:2387:U:O2'	2.34	0.42
1:1A:2298:A:H2'	1:1A:2299:G:O4'	2.20	0.42
1:1A:2483:C:N3	12:1Q:124:LYS:NZ	2.64	0.42
1:1A:2647:U:H2'	1:1A:2648:C:C6	2.53	0.42
1:1A:2823:A:OP1	4:1E:159:HIS:NE2	2.52	0.42
6:1G:43:LEU:O	6:1G:45:GLU:N	2.49	0.42
18:1W:62:HIS:O	18:1W:64:MET:HG3	2.20	0.42
19:1X:31:HIS:HD2	19:1X:33:LYS:H	1.65	0.42
32:1a:485:G:O2'	32:1a:486:U:OP2	2.38	0.42
34:1c:134:ILE:HG22	34:1c:168:ALA:HB3	2.02	0.42
41:1j:8:LEU:HD22	41:1j:96:ILE:HG22	2.01	0.42
42:1k:66:LEU:HG	42:1k:97:ALA:HB1	2.00	0.42
1:2A:70:G:O2'	1:2A:113:G:O2'	2.31	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:271(E):U:H2'	1:2A:271(F):C:C6	2.55	0.42
1:2A:709:U:H2'	1:2A:710:G:C8	2.54	0.42
1:2A:832:G:H2'	1:2A:833:U:C6	2.55	0.42
1:2A:1541:G:OP2	1:2A:1542:A:O2'	2.34	0.42
1:2A:1817:G:C6	1:2A:1818:U:C4	3.07	0.42
1:2A:1952:A:OP1	10:2O:42:SER:OG	2.36	0.42
1:2A:2286:A:H4'	1:2A:2287:A:O4'	2.20	0.42
5:2F:164:ARG:O	5:2F:168:ARG:HB2	2.19	0.42
6:2G:16:ARG:O	6:2G:20:ILE:HG13	2.19	0.42
6:2G:20:ILE:O	6:2G:24:GLY:HA2	2.20	0.42
6:2G:116:ASP:OD2	44:2m:68:GLY:HA3	2.18	0.42
7:2H:101:ARG:NH1	7:2H:122:THR:HA	2.33	0.42
15:2T:56:GLY:O	15:2T:59:THR:HG22	2.19	0.42
24:22:21:LEU:O	24:22:25:VAL:HG23	2.19	0.42
32:2a:352:C:O2'	32:2a:353:A:O5'	2.36	0.42
32:2a:421:U:H4'	32:2a:422:C:OP2	2.18	0.42
32:2a:828:A:N6	32:2a:858:G:O2'	2.52	0.42
32:2a:1055:A:C5	32:2a:1206:G:C2	3.07	0.42
32:2a:1077:G:H2'	32:2a:1079:G:N7	2.34	0.42
32:2a:1161:C:H2'	32:2a:1162:C:H6	1.84	0.42
32:2a:1329:A:H5'	44:2m:29:ARG:NE	2.33	0.42
33:2b:51:LEU:HD21	33:2b:201:ILE:HG23	2.01	0.42
33:2b:119:GLU:CD	33:2b:153:ARG:HH12	2.27	0.42
34:2c:134:ILE:HD12	34:2c:151:VAL:HG11	2.01	0.42
38:2g:22:LEU:HG	38:2g:62:PHE:CE2	2.54	0.42
39:2h:34:GLU:OE1	39:2h:37:ARG:NH1	2.53	0.42
41:2j:16:LEU:O	41:2j:19:SER:N	2.52	0.42
1:1A:26:G:C6	1:1A:27:G:N1	2.88	0.42
1:1A:1684:C:H2'	1:1A:1685:C:C6	2.55	0.42
1:1A:2145:C:C3'	1:1A:2146:C:H5'	2.50	0.42
1:1A:2378:A:H2'	14:1S:21:THR:HG21	2.01	0.42
1:1A:2471:C:H2'	1:1A:2472:G:O4'	2.18	0.42
11:1P:59:LEU:HD21	30:18:10:ALA:HB2	2.01	0.42
21:1Z:28:MET:HE2	21:1Z:35:ARG:HB2	2.02	0.42
21:1Z:76:LEU:HD23	21:1Z:83:PRO:HA	2.02	0.42
49:1r:58:LEU:HD22	49:1r:62:GLU:HB3	2.02	0.42
50:1s:22:LEU:HD22	50:1s:27:GLU:HA	2.00	0.42
1:2A:817:C:O2'	1:2A:839:U:H5''	2.20	0.42
1:2A:823:G:O2'	1:2A:824:A:H5'	2.19	0.42
1:2A:2063:C:OP1	61:2A:5664:HOH:O	2.21	0.42
1:2A:2134:A:H2'	1:2A:2134:A:N3	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2203:U:H2'	1:2A:2205:C:C6	2.54	0.42
1:2A:2537:U:H2'	1:2A:2538:C:C6	2.53	0.42
3:2D:77:ALA:HA	3:2D:97:TYR:HA	2.02	0.42
5:2F:123:LEU:HD11	5:2F:194:MET:HE2	2.00	0.42
10:2O:92:GLU:HG2	10:2O:93:PRO:HD2	2.01	0.42
21:2Z:70:LEU:HB2	21:2Z:91:LEU:HD21	2.01	0.42
24:22:51:ARG:O	24:22:55:ARG:HG2	2.19	0.42
32:2a:547:A:H4'	32:2a:548:G:O5'	2.19	0.42
32:2a:573:A:N3	32:2a:883:C:O2'	2.47	0.42
32:2a:1028:C:H2'	32:2a:1029:C:O4'	2.20	0.42
32:2a:1106:G:H2'	32:2a:1107:C:H6	1.83	0.42
32:2a:1414:U:H3	32:2a:1486:G:H1	1.68	0.42
32:2a:1427:U:H2'	32:2a:1428:A:H8	1.84	0.42
35:2d:63:LYS:O	35:2d:67:ILE:HG13	2.19	0.42
41:2j:25:GLU:OE2	41:2j:29:ARG:NH2	2.31	0.42
50:2s:12:ASP:OD2	50:2s:37:ARG:HD2	2.20	0.42
1:1A:857:C:N4	1:1A:858:U:O4	2.53	0.42
1:1A:2051:A:H5'	1:1A:2578:G:O4'	2.19	0.42
1:1A:2335:A:C8	1:1A:2337:G:C5	3.08	0.42
8:1I:47:LEU:HD22	8:1I:47:LEU:HA	1.92	0.42
9:1N:75:TYR:CE2	9:1N:77:GLY:HA2	2.55	0.42
16:1U:108:GLU:O	16:1U:112:ARG:HG2	2.19	0.42
32:1a:45:U:OP1	32:1a:307:C:O2'	2.32	0.42
32:1a:741:G:H2'	32:1a:742:G:O4'	2.20	0.42
32:1a:976:G:OP1	45:1n:32:SER:N	2.46	0.42
32:1a:1328:C:H2'	32:1a:1329:A:O4'	2.19	0.42
33:1b:107:THR:O	33:1b:110:GLN:HB3	2.19	0.42
35:1d:182:LYS:HB2	35:1d:182:LYS:HE3	1.77	0.42
49:1r:25:THR:OG1	49:1r:42:ARG:NH2	2.52	0.42
51:1t:39:LYS:HG2	51:1t:55:ILE:HG21	2.02	0.42
52:1u:6:ARG:H	52:1u:6:ARG:HG2	1.63	0.42
1:2A:27:G:O2'	1:2A:28:A:OP2	2.35	0.42
1:2A:350:U:H2'	1:2A:351:G:O4'	2.20	0.42
1:2A:483:A:O2'	20:2Y:49:VAL:O	2.26	0.42
1:2A:1665:A:H4'	10:2O:67:LYS:HB2	2.01	0.42
1:2A:2074:U:H2'	1:2A:2075:U:C6	2.55	0.42
1:2A:2116:G:H8	1:2A:2166:G:H22	1.66	0.42
2:2B:12:C:O2'	22:20:74:ARG:HG2	2.19	0.42
6:2G:108:ASN:HD22	26:24:22:ILE:HG21	1.85	0.42
6:2G:127:GLY:H	6:2G:166:ASP:CG	2.27	0.42
10:2O:7:TYR:CE2	10:2O:20:MET:HB2	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:557:G:C6	32:2a:558:G:C6	3.07	0.42
32:2a:1040:U:H2'	32:2a:1041:A:C8	2.50	0.42
37:2f:95:GLU:O	49:2r:32:ARG:NH1	2.51	0.42
38:2g:65:ALA:HB1	38:2g:127:ALA:HB3	2.00	0.42
44:2m:79:LYS:HA	44:2m:82:MET:HG3	2.01	0.42
50:2s:51:VAL:N	50:2s:58:VAL:O	2.53	0.42
56:2y:52:G:OP2	56:2y:52:G:H8	2.03	0.42
1:1A:2226:C:OP2	61:1A:6572:HOH:O	2.22	0.42
10:1O:48:PRO:CB	32:1a:1422:G:H5''	2.49	0.42
21:1Z:155:LEU:HD13	21:1Z:155:LEU:HA	1.83	0.42
32:1a:4:U:O4	39:1h:105:ARG:HD3	2.19	0.42
32:1a:738:C:OP2	37:1f:92:LYS:HD3	2.20	0.42
32:1a:1261:A:N6	32:1a:1274:G:O2'	2.50	0.42
32:1a:1308:U:OP2	44:1m:99:ARG:HD2	2.19	0.42
37:1f:86:ARG:O	37:1f:87:ARG:HG2	2.19	0.42
38:1g:115:ARG:H	38:1g:115:ARG:HG2	1.58	0.42
39:1h:81:HIS:HB2	39:1h:138:TRP:CD1	2.54	0.42
41:1j:55:LYS:HE2	41:1j:56:HIS:CE1	2.54	0.42
48:1q:67:LYS:O	48:1q:68:ARG:HB2	2.20	0.42
1:2A:492:A:H2'	1:2A:493:G:O4'	2.20	0.42
1:2A:1139:G:O2'	1:2A:1143:A:N1	2.48	0.42
1:2A:2749:A:H1'	7:2H:63:SER:OG	2.20	0.42
5:2F:116:ASP:O	5:2F:120:GLU:HG2	2.20	0.42
15:2T:11:GLU:O	15:2T:15:VAL:HG23	2.20	0.42
17:2V:71:LEU:HD23	17:2V:71:LEU:HA	1.86	0.42
24:22:64:LEU:HD11	24:22:68:ARG:NH2	2.35	0.42
32:2a:841:U:OP2	32:2a:841:U:H6	2.02	0.42
32:2a:950:U:OP2	44:2m:102:ARG:HD3	2.20	0.42
35:2d:111:ALA:HB1	35:2d:116:GLN:HG2	2.01	0.42
35:2d:187:ARG:NH1	35:2d:190:ASP:OD1	2.53	0.42
40:2i:86:VAL:HG11	40:2i:93:ARG:HE	1.85	0.42
43:2l:70:ILE:HD13	43:2l:77:LEU:HD12	2.02	0.42
44:2m:80:ARG:O	44:2m:84:ILE:HG12	2.20	0.42
48:2q:10:VAL:HG13	48:2q:19:VAL:HB	2.01	0.42
54:2w:24:G:C6	54:2w:25:C:C4	3.08	0.42
1:1A:205:G:O2'	1:1A:206:U:OP2	2.38	0.42
1:1A:1935:G:H1'	1:1A:1964:G:N2	2.35	0.42
3:1D:206:LEU:HD23	3:1D:206:LEU:HA	1.75	0.42
4:1E:111:ARG:HG2	4:1E:118:LYS:HD3	2.01	0.42
8:1I:81:VAL:HG21	8:1I:88:ILE:HG12	2.01	0.42
32:1a:149:A:H2'	32:1a:150:C:H6	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:429:U:O2'	35:1d:22:LYS:NZ	2.53	0.42
32:1a:1440:C:H2'	32:1a:1441:G:O4'	2.19	0.42
46:1o:37:ASN:O	46:1o:41:GLU:HG2	2.20	0.42
1:2A:443:A:H1'	1:2A:1201:C:O4'	2.19	0.42
1:2A:857:C:H1'	22:20:26:TYR:HE1	1.84	0.42
1:2A:996:A:OP2	16:2U:93:LYS:NZ	2.34	0.42
2:2B:76:G:H2'	2:2B:77:U:O4'	2.20	0.42
4:2E:54:GLN:NE2	4:2E:76:ARG:HG2	2.35	0.42
8:2I:75:LEU:O	8:2I:76:THR:OG1	2.32	0.42
12:2Q:118:LEU:HB2	12:2Q:131:ILE:HD13	2.00	0.42
22:20:37:LEU:HD21	22:20:61:ALA:HB2	2.02	0.42
32:2a:401:C:H2'	32:2a:402:G:H8	1.84	0.42
32:2a:1324:A:H2'	32:2a:1325:C:C6	2.55	0.42
32:2a:1512:U:H2'	32:2a:1513:A:C8	2.55	0.42
39:2h:20:TYR:HE2	39:2h:75:ARG:HD2	1.84	0.42
50:2s:27:GLU:H	50:2s:27:GLU:HG2	1.46	0.42
1:1A:24:G:O2'	18:1W:78:GLU:O	2.36	0.42
1:1A:721:C:H2'	1:1A:722:A:C8	2.55	0.42
1:1A:1866:C:H2'	1:1A:1876:A:O4'	2.20	0.42
1:1A:2137:C:H2'	1:1A:2138:C:C6	2.55	0.42
1:1A:2590:A:H2'	1:1A:2591:C:H6	1.85	0.42
20:1Y:88:LYS:O	20:1Y:95:LYS:HA	2.20	0.42
32:1a:1030(B):C:O2	32:1a:1030(C):G:H5'	2.20	0.42
40:1i:48:GLU:HA	40:1i:51:ARG:HD3	2.00	0.42
44:1m:11:ARG:HG3	44:1m:12:ASN:ND2	2.35	0.42
54:1w:27:G:H1	54:1w:43:C:H42	1.68	0.42
1:2A:271(H):G:H1	1:2A:271(P):C:H42	1.68	0.42
1:2A:579:G:O2'	1:2A:2019:A:OP1	2.31	0.42
1:2A:1232:G:H2'	1:2A:1233:C:C6	2.55	0.42
3:2D:81:ALA:HB3	3:2D:94:LEU:HB3	2.01	0.42
3:2D:245:PRO:HB2	3:2D:253:GLN:HG2	2.02	0.42
4:2E:3:GLY:HA3	4:2E:81:ILE:HD12	2.02	0.42
15:2T:3:ARG:HA	15:2T:6:LEU:HD12	2.02	0.42
32:2a:558:G:H2'	32:2a:559:A:H2	1.84	0.42
32:2a:596:C:H2'	32:2a:597:G:H8	1.85	0.42
32:2a:650:G:N7	61:2a:5173:HOH:O	2.37	0.42
32:2a:1245:A:H2'	32:2a:1246:C:O4'	2.20	0.42
32:2a:1296:C:H5''	44:2m:44:ARG:NH2	2.35	0.42
33:2b:126:GLU:H	33:2b:126:GLU:CD	2.22	0.42
34:2c:71:ALA:CB	34:2c:109:PRO:HB3	2.48	0.42
35:2d:22:LYS:HB2	35:2d:26:CYS:SG	2.60	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:75:VAL:HG13	38:2g:145:ALA:HA	2.01	0.42
42:2k:54:ARG:HH22	56:2y:39:PSU:H4'	1.85	0.42
54:2w:18:G:N2	54:2w:57:G:H2'	2.35	0.42
1:1A:2130:U:H1'	1:1A:2159:G:N2	2.35	0.42
1:1A:2518:A:OP1	61:1A:6972:HOH:O	2.21	0.42
9:1N:111:PRO:O	9:1N:115:ARG:HG3	2.19	0.42
21:1Z:59:LEU:HD12	21:1Z:69:THR:HG21	2.01	0.42
26:14:13:ARG:HG2	26:14:21:VAL:HG13	2.02	0.42
32:1a:113:G:N3	32:1a:353:A:O2'	2.45	0.42
35:1d:73:ARG:HA	35:1d:73:ARG:HD2	1.89	0.42
46:1o:8:LYS:O	46:1o:12:ILE:HG13	2.20	0.42
53:1v:13:A:H8	53:1v:13:A:O5'	2.03	0.42
54:1w:25:C:H2'	54:1w:26:A:O4'	2.19	0.42
55:1x:23:C:H2'	55:1x:24:U:C6	2.55	0.42
1:2A:234:C:H2'	1:2A:235:U:H6	1.84	0.42
1:2A:1201:C:H2'	1:2A:1202:C:C6	2.55	0.42
1:2A:1529:G:O6	1:2A:1530:C:N4	2.53	0.42
1:2A:2014:A:H2'	1:2A:2015:A:C8	2.55	0.42
1:2A:2158:A:H2	1:2A:2159:G:C2	2.38	0.42
1:2A:2285:C:OP2	28:26:6:ARG:NH1	2.50	0.42
1:2A:2334:G:H5'	14:2S:9:ARG:HG2	2.00	0.42
1:2A:2341:G:H2'	1:2A:2342:C:C6	2.55	0.42
1:2A:2370:G:C6	1:2A:2371:G:C6	3.08	0.42
17:2V:4:ILE:HA	17:2V:12:TYR:O	2.20	0.42
18:2W:9:TYR:H	18:2W:102:HIS:CE1	2.36	0.42
18:2W:16:LYS:O	18:2W:19:LEU:HB2	2.20	0.42
21:2Z:31:ARG:HH11	21:2Z:94:GLU:HG2	1.85	0.42
32:2a:350:G:H5'	32:2a:351:G:OP2	2.20	0.42
32:2a:509:A:H5''	35:2d:55:ALA:HB2	2.01	0.42
33:2b:212:GLN:OE1	33:2b:216:SER:HB3	2.20	0.42
35:2d:15:GLU:OE2	35:2d:66:ARG:NH1	2.53	0.42
39:2h:13:ILE:O	39:2h:17:THR:HG23	2.20	0.42
1:1A:518:G:H4'	18:1W:18:ARG:NE	2.35	0.41
1:1A:1151:G:H2'	1:1A:1152:C:O4'	2.20	0.41
1:1A:1764:G:N7	61:1A:5239:HOH:O	2.37	0.41
1:1A:2429:G:OP1	61:1A:6887:HOH:O	2.22	0.41
1:1A:2506:U:C2	1:1A:2585:U:O4	2.73	0.41
1:1A:2690:C:OP1	13:1R:17:ARG:NH2	2.52	0.41
1:1A:2788:C:P	4:1E:61:ARG:HH21	2.43	0.41
4:1E:111:ARG:HA	13:1R:1:MET:SD	2.60	0.41
6:1G:109:VAL:HG21	6:1G:142:PRO:HG3	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:38:LEU:H	8:1I:38:LEU:CD2	2.33	0.41
11:1P:1:MET:HE3	11:1P:1:MET:HB2	1.83	0.41
26:14:16:CYS:HA	26:14:33:VAL:O	2.19	0.41
31:19:2:LYS:HD3	31:19:4:ARG:NH2	2.35	0.41
32:1a:195:A:H1'	32:1a:222:U:O2'	2.20	0.41
32:1a:219:C:H2'	32:1a:220:G:O4'	2.20	0.41
32:1a:582:U:H2'	32:1a:583:A:C8	2.55	0.41
32:1a:645:C:O5'	32:1a:645:C:H6	2.03	0.41
32:1a:939:G:H2'	32:1a:940:C:C6	2.55	0.41
32:1a:1105:A:H2'	32:1a:1106:G:C8	2.55	0.41
32:1a:1277:C:O2'	32:1a:1279:A:H1'	2.20	0.41
35:1d:196:LEU:C	35:1d:198:VAL:H	2.28	0.41
38:1g:26:PHE:O	38:1g:30:ILE:HG13	2.20	0.41
39:1h:94:TYR:CE1	39:1h:132:GLU:HB2	2.55	0.41
41:1j:13:HIS:HB3	41:1j:68:HIS:CD2	2.54	0.41
46:1o:43:LEU:HD12	46:1o:56:LEU:HD22	2.02	0.41
48:1q:53:LEU:HB3	48:1q:82:MET:HE1	2.01	0.41
1:2A:797:C:H2'	1:2A:798:G:O4'	2.19	0.41
1:2A:984:A:H5''	1:2A:985:C:H5	1.84	0.41
1:2A:1711:C:H2'	1:2A:1712:C:H6	1.85	0.41
1:2A:1860:G:C6	1:2A:1883:G:N2	2.88	0.41
1:2A:2880:C:O3'	13:2R:90:ARG:NH1	2.53	0.41
15:2T:55:ASN:H	15:2T:59:THR:HB	1.85	0.41
30:28:8:LYS:HD3	30:28:8:LYS:HA	1.91	0.41
32:2a:491:G:H2'	32:2a:492:G:O4'	2.20	0.41
32:2a:811:C:H4'	32:2a:900:A:N6	2.35	0.41
34:2c:152:ILE:HG13	34:2c:199:LYS:HB2	2.01	0.41
36:2e:72:GLN:H	36:2e:72:GLN:HG2	1.72	0.41
41:2j:50:ILE:HG22	41:2j:52:GLY:O	2.19	0.41
49:2r:38:GLU:HA	49:2r:41:LYS:HG2	2.01	0.41
51:2t:28:ALA:HA	51:2t:31:SER:HB2	2.02	0.41
52:2u:12:LYS:HB3	52:2u:17:THR:O	2.20	0.41
1:1A:40:C:H2'	1:1A:41:C:C6	2.55	0.41
1:1A:1268:A:C2	1:1A:2013:A:C4	3.08	0.41
1:1A:1419:A:C8	1:1A:1421:G:C6	3.08	0.41
1:1A:2023:G:H4'	1:1A:2617:C:O3'	2.19	0.41
1:1A:2100:G:H2'	1:1A:2101:G:C8	2.55	0.41
61:1A:5623:HOH:O	24:12:55:ARG:HB2	2.19	0.41
2:1B:95:C:H2'	2:1B:96:U:C6	2.55	0.41
4:1E:120:TRP:CE3	4:1E:155:LYS:HD3	2.55	0.41
19:1X:11:PRO:HG2	19:1X:13:LEU:HD21	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:117:G:H2'	32:1a:118:U:O4'	2.20	0.41
32:1a:792:A:H4'	32:1a:793:U:H5''	2.02	0.41
36:1e:103:GLY:O	36:1e:106:PRO:HD2	2.20	0.41
41:1j:39:PRO:HA	41:1j:70:ARG:HD3	2.03	0.41
54:1w:63:G:H2'	54:1w:64:A:H8	1.85	0.41
1:2A:250:G:H2'	1:2A:251:A:C8	2.55	0.41
1:2A:607:U:OP1	5:2F:102:PRO:HA	2.20	0.41
1:2A:812:C:H2'	1:2A:813:U:H6	1.85	0.41
1:2A:1324:G:N7	61:2A:5390:HOH:O	2.36	0.41
1:2A:1608:A:H1'	1:2A:1610:A:OP2	2.20	0.41
1:2A:1954:G:O2'	1:2A:1956:U:O4	2.26	0.41
1:2A:2108:C:N3	1:2A:2181:G:N2	2.61	0.41
1:2A:2376:A:N6	14:2S:89:ARG:HD3	2.35	0.41
1:2A:2746:U:O4	1:2A:2755:C:H4'	2.20	0.41
1:2A:2801(A):A:O2'	1:2A:2895:U:O4'	2.36	0.41
61:2A:5152:HOH:O	23:21:3:LYS:HE2	2.19	0.41
2:2B:29:A:H2'	2:2B:30:C:O4'	2.20	0.41
2:2B:66:A:N6	2:2B:109:C:O5'	2.53	0.41
3:2D:137:PRO:O	3:2D:140:THR:OG1	2.33	0.41
9:2N:12:ARG:HB3	9:2N:50:ASP:OD1	2.20	0.41
9:2N:123:TYR:OH	9:2N:130:HIS:NE2	2.53	0.41
10:2O:98:VAL:HG22	10:2O:118:ALA:HA	2.02	0.41
30:28:20:GLY:O	30:28:59:LYS:NZ	2.43	0.41
32:2a:600:C:H2'	32:2a:601:C:C6	2.55	0.41
32:2a:619:U:C2	35:2d:135:LEU:HD22	2.55	0.41
32:2a:643:C:H2'	32:2a:644:G:C8	2.54	0.41
32:2a:1391:U:H2'	32:2a:1392:G:C8	2.55	0.41
33:2b:57:PHE:CD2	33:2b:185:ILE:HG21	2.56	0.41
35:2d:106:TYR:C	35:2d:108:LEU:N	2.79	0.41
38:2g:150:ALA:HB2	42:2k:50:TYR:OH	2.20	0.41
42:2k:33:THR:HA	42:2k:40:ILE:HG12	2.00	0.41
46:2o:62:GLN:O	46:2o:66:LEU:HG	2.20	0.41
56:2y:39:PSU:H2'	56:2y:40:C:O4'	2.20	0.41
1:1A:320:A:H4'	1:1A:322:A:N7	2.35	0.41
1:1A:489:G:N7	18:1W:49:LYS:NZ	2.69	0.41
1:1A:1818:U:OP2	3:1D:157:ARG:NH2	2.49	0.41
1:1A:2740:A:C6	1:1A:2764:A:C8	3.08	0.41
6:1G:18:GLU:OE2	6:1G:21:ARG:NH1	2.54	0.41
10:1O:90:GLN:O	10:1O:91:LEU:HB2	2.21	0.41
13:1R:79:LEU:HD12	13:1R:83:ILE:HB	2.03	0.41
32:1a:1228:C:H2'	32:1a:1229:A:H8	1.84	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1410:G:H2'	32:1a:1411:C:C6	2.55	0.41
39:1h:94:TYR:HE1	39:1h:132:GLU:HB2	1.86	0.41
42:1k:38:ASN:HA	42:1k:39:PRO:HD3	1.93	0.41
47:1p:53:VAL:HG13	47:1p:79:VAL:HG22	2.02	0.41
1:2A:1430:C:H2'	1:2A:1431:U:C6	2.55	0.41
2:2B:16:G:C2'	2:2B:17:C:H5'	2.50	0.41
2:2B:119:G:H5'	2:2B:120:A:OP2	2.20	0.41
6:2G:43:LEU:HD11	6:2G:153:ARG:HG2	2.02	0.41
7:2H:28:GLY:HA3	7:2H:79:VAL:HB	2.00	0.41
11:2P:85:LEU:HG	11:2P:116:GLY:HA2	2.02	0.41
13:2R:33:ARG:HA	13:2R:114:VAL:O	2.20	0.41
32:2a:302:G:N3	32:2a:556:C:H4'	2.36	0.41
32:2a:673:G:H5''	37:2f:87:ARG:NH1	2.36	0.41
32:2a:822:C:H2'	32:2a:823:G:C8	2.54	0.41
32:2a:1006:C:N4	32:2a:1022:G:O6	2.53	0.41
32:2a:1086:U:H2'	32:2a:1087:G:O4'	2.21	0.41
32:2a:1263:C:N3	32:2a:1272:G:O6	2.53	0.41
32:2a:1296:C:H5''	44:2m:44:ARG:HH22	1.85	0.41
32:2a:1298:C:P	38:2g:114:ARG:HH22	2.44	0.41
32:2a:1530:G:OP1	32:2a:1530:G:H4'	2.20	0.41
34:2c:134:ILE:HG23	34:2c:151:VAL:HB	2.01	0.41
35:2d:142:PRO:HA	35:2d:185:PHE:HD2	1.84	0.41
38:2g:152:ALA:O	38:2g:155:ARG:N	2.53	0.41
41:2j:30:SER:OG	41:2j:84:GLN:OE1	2.28	0.41
47:2p:3:LYS:HA	47:2p:3:LYS:HD2	1.93	0.41
1:1A:24:G:H2'	1:1A:25:U:O4'	2.20	0.41
1:1A:1070:A:H3'	1:1A:1072:C:OP2	2.21	0.41
1:1A:2066:C:H5''	61:1A:5943:HOH:O	2.21	0.41
2:1B:41:U:C5	6:1G:70:VAL:O	2.74	0.41
6:1G:170:ARG:NH2	6:1G:174:GLU:OE2	2.41	0.41
17:1V:2:PHE:CZ	17:1V:41:GLY:HA3	2.55	0.41
32:1a:1201:A:H4'	32:1a:1202:G:O5'	2.19	0.41
34:1c:71:ALA:O	34:1c:73:PRO:HD3	2.19	0.41
43:1l:102:ARG:HA	43:1l:102:ARG:HD2	1.91	0.41
1:2A:35:G:H2'	1:2A:36:G:O4'	2.20	0.41
1:2A:643:A:C8	28:26:44:ARG:NH1	2.87	0.41
1:2A:752:A:H3'	29:27:1:MET:HE1	2.02	0.41
1:2A:2134:A:H1'	1:2A:2158:A:C2	2.55	0.41
4:2E:53:PRO:HA	4:2E:75:VAL:HA	2.02	0.41
10:2O:78:ARG:HG2	15:2T:73:GLU:HB2	2.02	0.41
12:2Q:54:MET:SD	12:2Q:118:LEU:HD23	2.60	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:2V:1:MET:HE2	17:2V:43:GLU:HB2	2.02	0.41
26:24:16:CYS:SG	26:24:17:GLY:N	2.94	0.41
32:2a:56:U:H2'	32:2a:57:G:C8	2.55	0.41
32:2a:509:A:H2'	32:2a:510:A:C8	2.55	0.41
32:2a:518:C:H4'	32:2a:519:C:H5''	2.02	0.41
32:2a:769:G:H4'	32:2a:1513:A:H4'	2.01	0.41
32:2a:1219:U:OP1	45:2n:19:ARG:NH1	2.39	0.41
32:2a:1318:A:H1'	50:2s:37:ARG:HE	1.85	0.41
32:2a:1443:G:H2'	32:2a:1444:C:C6	2.55	0.41
35:2d:36:ARG:HD2	35:2d:38:TYR:OH	2.19	0.41
35:2d:180:GLY:O	35:2d:182:LYS:HG3	2.19	0.41
44:2m:122:LYS:HG3	44:2m:123:ALA:H	1.84	0.41
56:2y:55:PSU:H6	56:2y:57:G:OP2	2.03	0.41
1:1A:494:G:H4'	18:1W:6:ILE:HB	2.02	0.41
1:1A:729:G:C8	3:1D:208:LYS:HD2	2.56	0.41
1:1A:1047:G:H2'	1:1A:1110:G:H22	1.86	0.41
1:1A:1069:A:H2'	1:1A:1073:A:N7	2.36	0.41
1:1A:1173:G:N2	1:1A:1177:A:OP2	2.43	0.41
1:1A:1357:U:H2'	1:1A:1358:G:O4'	2.20	0.41
1:1A:1588:C:H2'	1:1A:1589:C:C6	2.56	0.41
2:1B:78:A:C2	2:1B:100:A:C4	3.08	0.41
14:1S:3:ARG:HA	14:1S:3:ARG:HD3	1.69	0.41
16:1U:70:ARG:C	16:1U:72:HIS:H	2.29	0.41
16:1U:74:LEU:HD11	16:1U:110:VAL:HG13	2.00	0.41
32:1a:1292:U:H2'	32:1a:1293:G:C8	2.55	0.41
32:1a:1330:U:OP1	44:1m:24:GLY:N	2.43	0.41
39:1h:39:LEU:HB3	39:1h:45:ILE:HG12	2.02	0.41
44:1m:4:ILE:HA	44:1m:5:ALA:HA	1.74	0.41
45:1n:3:ARG:HG3	45:1n:4:LYS:N	2.36	0.41
46:1o:54:ARG:HG2	46:1o:58:MET:HE2	2.02	0.41
48:1q:45:HIS:CD2	48:1q:47:PRO:HG3	2.56	0.41
48:1q:60:ILE:HG22	48:1q:74:LEU:HB2	2.02	0.41
51:1t:16:HIS:O	51:1t:19:SER:OG	2.31	0.41
51:1t:38:LYS:HA	51:1t:41:ILE:HD12	2.02	0.41
55:1x:19:G:H3'	55:1x:20:U:C5	2.56	0.41
1:2A:271(R):G:OP1	23:21:76:ARG:NE	2.53	0.41
1:2A:458:G:O2'	1:2A:469:G:O6	2.23	0.41
1:2A:2118:U:OP1	1:2A:2148:G:H4'	2.21	0.41
1:2A:2461:C:H2'	1:2A:2462:U:C6	2.55	0.41
1:2A:2838:G:C6	1:2A:2839:G:C5	3.09	0.41
1:2A:2869:G:H2'	1:2A:2870:C:O4'	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:33:LEU:HD22	5:2F:112:MET:HE3	2.02	0.41
8:2I:130:TYR:CD2	8:2I:132:PRO:HD3	2.56	0.41
9:2N:9:VAL:HG11	9:2N:39:ARG:NH2	2.36	0.41
10:2O:16:ALA:HA	10:2O:46:ALA:HA	2.01	0.41
10:2O:101:PRO:HB3	10:2O:120:GLU:HB3	2.03	0.41
11:2P:63:PRO:HG2	30:28:25:MET:HB2	2.02	0.41
18:2W:34:ASN:ND2	27:25:39:MET:HG3	2.36	0.41
32:2a:308:C:H2'	32:2a:309:G:C8	2.56	0.41
32:2a:755:G:H2'	32:2a:756:C:C6	2.56	0.41
32:2a:1027:C:H2'	32:2a:1034:G:H22	1.86	0.41
32:2a:1039:C:N4	32:2a:1040:U:C2	2.88	0.41
39:2h:20:TYR:CE1	39:2h:76:PRO:HG2	2.55	0.41
40:2i:113:LYS:HD2	40:2i:113:LYS:H	1.85	0.41
41:2j:6:ILE:HG12	41:2j:98:ILE:HG13	2.02	0.41
56:2y:26:A:C2'	56:2y:27:G:H5'	2.51	0.41
56:2y:64:A:C2'	56:2y:65:G:H5'	2.50	0.41
1:1A:880:G:H2'	1:1A:881:G:H8	1.80	0.41
1:1A:1075:C:C2'	1:1A:1076:C:H5'	2.50	0.41
1:1A:1086:A:H5'	1:1A:1087:G:H5'	2.03	0.41
1:1A:1190:G:H2'	1:1A:1191:G:H8	1.85	0.41
1:1A:1684:C:H2'	1:1A:1685:C:H6	1.85	0.41
1:1A:1952:A:C6	1:1A:1953:A:N1	2.88	0.41
4:1E:37:ARG:HA	4:1E:42:ASP:OD2	2.21	0.41
8:1I:12:LEU:HD22	8:1I:19:VAL:HG21	2.02	0.41
26:14:61:ARG:HG3	26:14:62:ARG:N	2.35	0.41
32:1a:60:A:N6	32:1a:110:C:N3	2.65	0.41
32:1a:766:A:OP2	61:1a:5102:HOH:O	2.22	0.41
32:1a:1456:G:N2	51:1t:51:GLU:OE2	2.51	0.41
33:1b:127:ILE:HD12	33:1b:130:ARG:HD3	2.01	0.41
37:1f:48:LEU:HD22	49:1r:77:GLY:HA3	2.02	0.41
48:1q:68:ARG:H	48:1q:70:ARG:NH1	2.18	0.41
51:1t:63:ILE:HG21	51:1t:81:LYS:HG3	2.02	0.41
56:1y:10:G:H2'	56:1y:10:G:N3	2.36	0.41
1:2A:587:C:N3	11:2P:33:ARG:NE	2.66	0.41
1:2A:971:C:H2'	1:2A:972:G:O4'	2.20	0.41
1:2A:1203:G:OP2	1:2A:1204:A:O2'	2.27	0.41
1:2A:1427:A:H4'	1:2A:1428:C:O5'	2.20	0.41
1:2A:1453:U:OP1	13:2R:77:ARG:NH1	2.47	0.41
1:2A:1634:A:OP1	61:2A:6039:HOH:O	2.22	0.41
1:2A:2135:A:H2'	1:2A:2136:C:C5	2.55	0.41
2:2B:118:G:C2	2:2B:119:G:H1'	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:177:ALA:HB1	5:2F:178:PRO:HD2	2.03	0.41
8:2I:126:TYR:O	8:2I:141:LYS:HA	2.21	0.41
10:2O:104:ARG:NH2	10:2O:121:VAL:O	2.54	0.41
21:2Z:50:GLN:OE1	21:2Z:50:GLN:N	2.54	0.41
32:2a:501:C:H2'	32:2a:502:G:C8	2.56	0.41
32:2a:707:C:H2'	32:2a:708:C:C6	2.55	0.41
32:2a:1084:G:C5	32:2a:1085:U:C4	3.09	0.41
33:2b:114:ARG:HA	33:2b:117:GLU:HB2	2.02	0.41
36:2e:106:PRO:O	36:2e:110:LEU:HG	2.21	0.41
38:2g:78:ARG:HG3	38:2g:156:TRP:CE3	2.56	0.41
50:2s:28:LYS:HB3	50:2s:29:ARG:CA	2.48	0.41
50:2s:61:TYR:CD2	50:2s:63:THR:HG22	2.56	0.41
55:2x:21:A:H61	55:2x:46:G:H2'	1.84	0.41
1:1A:1287:A:C5	1:1A:1288:U:C4	3.09	0.41
1:1A:2053:G:OP1	4:1E:144:ARG:HG3	2.20	0.41
1:1A:2126:A:N1	1:1A:2162:G:O2'	2.49	0.41
1:1A:2227:A:OP2	61:1A:6230:HOH:O	2.22	0.41
1:1A:2243:U:H2'	1:1A:2244:U:C6	2.56	0.41
1:1A:2350:C:H2'	1:1A:2351:G:O4'	2.20	0.41
1:1A:2820:A:O2'	1:1A:2821:A:OP1	2.30	0.41
2:1B:103:G:N2	21:1Z:73:GLN:HE22	2.11	0.41
4:1E:37:ARG:O	4:1E:45:THR:HA	2.19	0.41
9:1N:138:LEU:HD22	9:1N:140:VAL:HG12	2.02	0.41
32:1a:237:C:O3'	48:1q:25:ARG:NH2	2.53	0.41
32:1a:404:U:H2'	32:1a:405:U:C6	2.55	0.41
32:1a:513:C:H2'	32:1a:514:C:C6	2.55	0.41
32:1a:567:G:H2'	32:1a:568:G:O4'	2.21	0.41
32:1a:620:C:H2'	32:1a:621:A:O4'	2.21	0.41
32:1a:1037:C:H2'	32:1a:1038:C:H6	1.85	0.41
32:1a:1190:G:H5'	34:1c:176:HIS:CE1	2.55	0.41
36:1e:105:VAL:HB	36:1e:106:PRO:HD3	2.03	0.41
40:1i:79:LEU:HD21	40:1i:83:ARG:NH1	2.36	0.41
47:1p:50:LYS:HD2	47:1p:50:LYS:HA	1.96	0.41
1:2A:602:G:O2'	1:2A:655:A:N6	2.54	0.41
1:2A:1198:U:H2'	1:2A:1199:U:C6	2.56	0.41
1:2A:1422:G:C6	1:2A:1423:G:C5	3.08	0.41
1:2A:1494:A:N6	1:2A:1495:A:N1	2.69	0.41
1:2A:1993:U:H4'	4:2E:128:SER:OG	2.20	0.41
1:2A:2070:G:H2'	1:2A:2071:A:H8	1.84	0.41
5:2F:64:ILE:HD11	5:2F:75:HIS:HB2	2.03	0.41
15:2T:62:THR:HA	15:2T:74:ARG:O	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:2W:20:VAL:HG11	18:2W:44:ALA:HA	2.02	0.41
22:20:65:GLY:HA3	22:20:82:ARG:O	2.20	0.41
32:2a:731:G:OP1	32:2a:766:A:H1'	2.21	0.41
32:2a:1087:G:H2'	32:2a:1088:G:H8	1.84	0.41
32:2a:1401:G:C2	32:2a:1402:4OC:H1'	2.55	0.41
33:2b:49:GLU:HG3	33:2b:52:GLU:OE1	2.21	0.41
35:2d:77:ASN:HD22	35:2d:77:ASN:HA	1.68	0.41
35:2d:96:LEU:HD12	35:2d:139:ARG:NE	2.36	0.41
35:2d:150:GLU:HA	35:2d:153:ARG:HD2	2.02	0.41
41:2j:13:HIS:HB3	41:2j:68:HIS:NE2	2.36	0.41
44:2m:105:THR:HB	44:2m:106:ASN:OD1	2.20	0.41
45:2n:9:LYS:HG3	45:2n:12:ARG:HH21	1.86	0.41
1:1A:1028:A:N3	1:1A:2486:G:O2'	2.47	0.41
1:1A:1058:G:H1	1:1A:1080:C:N4	2.18	0.41
1:1A:1193:G:OP1	11:1P:14:LYS:NZ	2.48	0.41
1:1A:1784:A:H4'	1:1A:1785:A:O5'	2.21	0.41
5:1F:195:ASP:O	5:1F:199:TRP:N	2.28	0.41
6:1G:148:MET:HE2	6:1G:148:MET:HB2	1.89	0.41
9:1N:34:LEU:HD12	9:1N:34:LEU:HA	1.97	0.41
15:1T:121:ILE:HG22	15:1T:125:ARG:HH12	1.86	0.41
18:1W:46:PHE:O	18:1W:50:VAL:HG23	2.21	0.41
21:1Z:46:LYS:HB3	21:1Z:46:LYS:HE2	1.70	0.41
32:1a:477:A:H2'	32:1a:479:C:C6	2.55	0.41
32:1a:653:A:OP1	39:1h:56:LYS:NZ	2.53	0.41
32:1a:745:C:H5'	32:1a:851:G:H21	1.85	0.41
32:1a:1035:A:O5'	32:1a:1035:A:H8	2.04	0.41
33:1b:29:ALA:HA	33:1b:32:ILE:HD12	2.02	0.41
36:1e:31:LEU:HD23	36:1e:31:LEU:HA	1.93	0.41
40:1i:53:VAL:HG21	40:1i:92:TYR:CE2	2.56	0.41
1:2A:65:C:O2'	1:2A:456:C:N3	2.53	0.41
1:2A:118:A:H5'	1:2A:119:A:H8	1.86	0.41
1:2A:880:G:N1	1:2A:898:C:O2	2.45	0.41
1:2A:922:U:H2'	1:2A:923:C:C6	2.55	0.41
1:2A:1306:C:C2	1:2A:1623:G:C2	3.08	0.41
1:2A:1527:G:H5''	1:2A:1528:A:OP1	2.21	0.41
1:2A:2275:C:H6	1:2A:2275:C:H5'	1.86	0.41
1:2A:2748:A:H5'	7:2H:4:ILE:HD12	2.02	0.41
1:2A:2836:U:C4	1:2A:2883:A:N6	2.89	0.41
6:2G:28:VAL:O	6:2G:31:VAL:HG12	2.21	0.41
6:2G:59:GLU:O	6:2G:63:ILE:HG13	2.21	0.41
8:2I:68:LEU:O	8:2I:72:LEU:HD12	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:2R:72:ASP:HB3	13:2R:75:LEU:HB3	2.03	0.41
31:29:10:ILE:HD12	31:29:32:HIS:CD2	2.55	0.41
32:2a:676:A:N6	61:2a:5290:HOH:O	2.42	0.41
32:2a:865:A:H5'	32:2a:1078:U:O4	2.20	0.41
32:2a:985:C:H2'	32:2a:986:A:H8	1.84	0.41
32:2a:1092:A:C6	32:2a:1093:A:C6	3.09	0.41
32:2a:1102:A:O3'	33:2b:96:ARG:NH2	2.47	0.41
32:2a:1161:C:H2'	32:2a:1162:C:C6	2.56	0.41
33:2b:63:MET:HG2	33:2b:225:ALA:HB1	2.03	0.41
33:2b:207:ALA:O	33:2b:211:ILE:HG13	2.21	0.41
34:2c:8:ILE:O	34:2c:12:LEU:HG	2.21	0.41
36:2e:37:ARG:NH1	36:2e:111:GLU:O	2.54	0.41
1:1A:715:G:C2	46:1o:56:LEU:HD21	2.55	0.41
1:1A:1062:G:H2'	1:1A:1063:G:C8	2.56	0.41
1:1A:1062:G:C8	1:1A:1070:A:H4'	2.55	0.41
1:1A:1185:C:OP1	61:1A:6176:HOH:O	2.21	0.41
1:1A:1359:A:C2	1:1A:1372:U:O4	2.74	0.41
1:1A:2059:A:C8	1:1A:2503:2MA:HM22	2.55	0.41
1:1A:2114:A:H2'	1:1A:2115:G:O4'	2.20	0.41
1:1A:2155:G:H5'	1:1A:2156:G:OP2	2.21	0.41
1:1A:2467:C:OP1	31:19:6:SER:OG	2.38	0.41
1:1A:2507:C:H2'	1:1A:2508:G:O4'	2.21	0.41
1:1A:2771:C:H2'	1:1A:2772:C:C6	2.56	0.41
1:1A:2820:A:C5	13:1R:4:LEU:HD11	2.56	0.41
3:1D:77:ALA:HA	3:1D:97:TYR:HA	2.03	0.41
13:1R:24:GLN:HB3	13:1R:44:LEU:HD11	2.03	0.41
13:1R:24:GLN:HE21	13:1R:44:LEU:HG	1.86	0.41
13:1R:29:LEU:HD23	13:1R:29:LEU:HA	1.90	0.41
20:1Y:9:LYS:HA	20:1Y:10:GLY:HA2	1.62	0.41
26:14:54:GLY:N	26:14:55:ARG:HA	2.34	0.41
32:1a:160:A:H2'	32:1a:161:A:O4'	2.21	0.41
32:1a:193:C:H2'	32:1a:194:C:H6	1.85	0.41
32:1a:258:G:H2'	32:1a:259:G:C8	2.51	0.41
32:1a:339:C:H2'	32:1a:340:U:H6	1.86	0.41
32:1a:598:U:H2'	32:1a:599:C:H6	1.85	0.41
32:1a:625:G:H2'	32:1a:626:U:C6	2.56	0.41
32:1a:691:G:H1'	32:1a:696:A:H62	1.85	0.41
32:1a:738:C:H5''	37:1f:69:GLU:HB2	2.03	0.41
32:1a:963:G:H5'	61:1a:5197:HOH:O	2.21	0.41
32:1a:1118:C:H1'	32:1a:1179:A:C4	2.56	0.41
32:1a:1263:C:H2'	32:1a:1264:C:C6	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:1g:121:ALA:O	38:1g:125:MET:HG3	2.21	0.41
40:1i:50:LEU:O	40:1i:56:LEU:HG	2.21	0.41
45:1n:14:PRO:HG2	45:1n:16:PHE:O	2.21	0.41
54:1w:8:4SU:O5'	54:1w:8:4SU:H6	2.21	0.41
56:1y:66:U:H2'	56:1y:67:C:C6	2.56	0.41
56:1y:69:G:H5'	56:1y:70:G:OP2	2.19	0.41
1:2A:56:A:H2'	1:2A:57:C:O4'	2.21	0.41
1:2A:323:G:O2'	1:2A:1205:U:N3	2.39	0.41
1:2A:644:A:H4'	1:2A:645:C:C5	2.56	0.41
1:2A:664:C:H4'	1:2A:941:A:OP1	2.21	0.41
1:2A:1355:G:O6	61:2A:6143:HOH:O	2.22	0.41
1:2A:1688:U:O2	1:2A:1700:A:H5'	2.21	0.41
1:2A:2259:G:C2	1:2A:2282:G:C6	3.09	0.41
1:2A:2448:A:OP1	61:2A:6020:HOH:O	2.21	0.41
1:2A:2712:U:O2'	1:2A:2713:A:H5'	2.21	0.41
1:2A:2895:U:H2'	1:2A:2896:C:O4'	2.21	0.41
6:2G:83:ARG:N	6:2G:86:MET:SD	2.80	0.41
6:2G:173:LEU:O	6:2G:177:GLY:N	2.48	0.41
8:2I:6:LEU:O	8:2I:15:VAL:HG23	2.20	0.41
28:26:13:CYS:SG	28:26:47:THR:HG21	2.61	0.41
32:2a:184:G:H2'	32:2a:185:A:C8	2.53	0.41
32:2a:446:G:H2'	32:2a:447:G:O4'	2.21	0.41
32:2a:545:C:OP1	35:2d:61:LYS:NZ	2.43	0.41
32:2a:562:C:H1'	43:2l:15:ARG:HB3	2.01	0.41
32:2a:1010:G:H2'	32:2a:1011:G:C8	2.56	0.41
32:2a:1014:A:H2	32:2a:1219:U:H1'	1.86	0.41
32:2a:1134:G:C2	32:2a:1135:U:H1'	2.56	0.41
32:2a:1226:C:H4'	50:2s:80:TYR:CZ	2.55	0.41
32:2a:1376:U:OP1	38:2g:98:SER:OG	2.24	0.41
32:2a:1466:C:H2'	32:2a:1467:G:O4'	2.21	0.41
32:2a:1504:G:OP1	32:2a:1507:A:H4'	2.21	0.41
35:2d:88:VAL:O	35:2d:92:VAL:HG12	2.21	0.41
35:2d:153:ARG:HE	35:2d:181:MET:HG3	1.86	0.41
35:2d:173:TRP:CD1	35:2d:174:LEU:HG	2.56	0.41
38:2g:133:GLY:HA2	38:2g:136:LYS:HB2	2.03	0.41
39:2h:11:THR:HG23	39:2h:14:ARG:HH12	1.84	0.41
43:2l:59:ARG:HE	43:2l:59:ARG:HB3	1.42	0.41
44:2m:67:GLU:HB3	44:2m:68:GLY:H	1.57	0.41
46:2o:78:TYR:CZ	46:2o:82:ILE:HD13	2.56	0.41
47:2p:21:VAL:O	47:2p:32:TYR:HB2	2.20	0.41
54:2w:70:G:H8	54:2w:70:G:OP2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:2y:8:4SU:C2	56:2y:14:A:H62	2.34	0.41
1:1A:992:C:H4'	17:1V:72:VAL:HG11	2.03	0.41
1:1A:1021:A:H3'	1:1A:1021:A:N3	2.36	0.41
1:1A:1509(A):A:H2'	1:1A:1509(B):A:O4'	2.21	0.41
1:1A:2144:U:H1'	1:1A:2148:G:N2	2.36	0.41
1:1A:2771:C:H2'	1:1A:2772:C:H6	1.86	0.41
2:1B:19:G:H2'	2:1B:20:C:O4'	2.20	0.41
4:1E:27:LEU:HD12	4:1E:180:ASN:O	2.21	0.41
6:1G:110:ALA:HB1	6:1G:140:ILE:HG23	2.02	0.41
6:1G:114:ILE:HB	6:1G:117:PHE:HB2	2.03	0.41
10:1O:86:ILE:HG22	10:1O:94:ARG:HD3	2.02	0.41
21:1Z:25:PRO:O	21:1Z:85:HIS:HA	2.20	0.41
32:1a:166:G:H2'	32:1a:167:G:H8	1.86	0.41
32:1a:486:U:H2'	32:1a:487:A:H8	1.85	0.41
34:1c:122:GLU:O	34:1c:126:ARG:HD2	2.21	0.41
34:1c:134:ILE:HG23	34:1c:151:VAL:HB	2.03	0.41
35:1d:3:ARG:HD3	35:1d:118:ARG:CD	2.50	0.41
36:1e:24:ARG:H	36:1e:24:ARG:HG2	1.53	0.41
41:1j:78:ASN:C	41:1j:80:LYS:H	2.29	0.41
54:1w:20:U:OP1	54:1w:20:U:H4'	2.20	0.41
56:1y:60:U:O2'	56:1y:61:C:H5'	2.20	0.41
1:2A:262:A:H2'	1:2A:263:C:O4'	2.20	0.41
1:2A:649:G:C5	1:2A:650:C:C4	3.08	0.41
1:2A:749:C:O2	1:2A:1618:A:H2'	2.21	0.41
1:2A:832:G:H5'	11:2P:45:LEU:HD11	2.02	0.41
1:2A:1798:U:OP2	3:2D:273:ARG:NH2	2.54	0.41
1:2A:2540:C:H2'	1:2A:2541:A:O4'	2.21	0.41
2:2B:15:A:OP2	2:2B:69:G:N2	2.51	0.41
21:2Z:91:LEU:HD13	21:2Z:91:LEU:HA	1.86	0.41
22:20:26:TYR:O	22:20:29:GLN:HB2	2.21	0.41
32:2a:192:U:H4'	51:2t:57:ARG:HD2	2.03	0.41
32:2a:336:C:H2'	32:2a:337:C:C6	2.56	0.41
32:2a:499:A:H4'	32:2a:500:G:OP1	2.20	0.41
32:2a:865:A:H5'	32:2a:1078:U:C5	2.56	0.41
32:2a:1109:C:H6	32:2a:1109:C:O5'	2.04	0.41
32:2a:1144:G:N2	32:2a:1146:A:H62	2.19	0.41
32:2a:1201:A:H1'	32:2a:1202:G:OP2	2.21	0.41
32:2a:1441:G:H4'	32:2a:1442:G:C2	2.56	0.41
33:2b:47:THR:HG22	33:2b:51:LEU:HD11	2.03	0.41
33:2b:91:PRO:HB3	33:2b:154:LEU:HB2	2.02	0.41
34:2c:6:HIS:CD2	34:2c:7:PRO:HD2	2.49	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:33:MET:HB2	60:2d:501:SF4:S2	2.61	0.41
37:2f:12:PRO:HG3	37:2f:57:GLN:O	2.21	0.41
39:2h:121:ASP:HB2	39:2h:125:ARG:NH2	2.36	0.41
44:2m:28:ALA:C	44:2m:30:ALA:H	2.29	0.41
47:2p:69:THR:HA	47:2p:72:ARG:HB3	2.03	0.41
50:2s:36:ARG:HD2	50:2s:52:TYR:O	2.21	0.41
1:1A:2178:C:H2'	1:1A:2179:C:C6	2.56	0.40
7:1H:41:MET:HE3	7:1H:64:LEU:HB2	2.03	0.40
12:1Q:109:VAL:HG13	12:1Q:110:THR:O	2.22	0.40
18:1W:86:LEU:HB2	18:1W:96:ILE:HD12	2.03	0.40
24:12:9:GLN:HE22	24:12:56:GLN:HG2	1.86	0.40
26:14:53:GLU:CD	26:14:54:GLY:H	2.29	0.40
32:1a:19:C:H4'	32:1a:864:A:O4'	2.21	0.40
32:1a:146:G:C2	32:1a:147:G:C4	3.09	0.40
32:1a:944:G:O6	32:1a:1337:G:H8	2.04	0.40
32:1a:1006:C:H2'	32:1a:1007:C:C6	2.56	0.40
33:1b:219:VAL:O	33:1b:222:ILE:N	2.53	0.40
34:1c:12:LEU:HD23	34:1c:12:LEU:HA	1.91	0.40
35:1d:172:PRO:C	35:1d:174:LEU:N	2.79	0.40
41:1j:50:ILE:HA	41:1j:60:ARG:HD3	2.03	0.40
41:1j:55:LYS:O	41:1j:57:LYS:N	2.54	0.40
50:1s:11:VAL:C	50:1s:13:ASP:H	2.28	0.40
1:2A:459:U:H4'	29:27:40:TRP:CE3	2.56	0.40
1:2A:459:U:H4'	29:27:40:TRP:CZ3	2.56	0.40
1:2A:854:G:H2'	1:2A:855:G:H8	1.87	0.40
1:2A:881:G:C6	1:2A:897:C:N3	2.89	0.40
1:2A:1594:G:H2'	1:2A:1595:G:C8	2.57	0.40
1:2A:2106:G:O6	1:2A:2183:C:N3	2.54	0.40
1:2A:2233:U:H2'	1:2A:2234:G:C8	2.56	0.40
1:2A:2312:U:H5'	6:2G:88:ILE:HD11	2.02	0.40
1:2A:2331:G:C6	1:2A:2332:U:C4	3.09	0.40
1:2A:2466:C:C2	1:2A:2485:G:C2	3.09	0.40
1:2A:2577:A:OP2	27:25:3:LYS:NZ	2.50	0.40
5:2F:184:TYR:CE2	5:2F:188:ARG:HD2	2.55	0.40
14:2S:68:GLN:HA	14:2S:71:ARG:HD3	2.02	0.40
17:2V:25:LEU:HB2	17:2V:92:THR:HG21	2.02	0.40
20:2Y:9:LYS:HA	20:2Y:10:GLY:HA2	1.55	0.40
22:20:26:TYR:N	22:20:29:GLN:OE1	2.38	0.40
23:21:67:ILE:N	23:21:68:PRO:HD2	2.36	0.40
32:2a:562:C:H1'	43:2l:15:ARG:HD2	2.03	0.40
32:2a:1244:C:H42	32:2a:1293:G:H1	1.68	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:9:ARG:HA	40:2i:13:ALA:O	2.21	0.40
41:2j:8:LEU:HA	41:2j:96:ILE:HA	2.04	0.40
54:2w:29:G:H2'	54:2w:30:G:H8	1.86	0.40
1:1A:440:G:H2'	1:1A:441:U:O4'	2.21	0.40
1:1A:677:A:OP1	61:1A:7278:HOH:O	2.22	0.40
1:1A:709:U:H2'	1:1A:710:G:O4'	2.22	0.40
1:1A:779:U:OP1	3:1D:49:ILE:HG13	2.21	0.40
1:1A:876:C:N3	1:1A:901:A:N6	2.69	0.40
1:1A:1045:A:OP1	1:1A:1046:A:H3'	2.21	0.40
1:1A:1164:G:H2'	1:1A:1165:U:C6	2.57	0.40
1:1A:2178:C:H2'	1:1A:2179:C:H6	1.85	0.40
1:1A:2789:C:O2	1:1A:2894:G:N1	2.51	0.40
61:1A:5636:HOH:O	29:17:24:THR:HG23	2.21	0.40
61:1A:6167:HOH:O	11:1P:43:GLY:HA3	2.22	0.40
2:1B:48:A:H2'	2:1B:49:C:C6	2.56	0.40
20:1Y:55:TYR:N	20:1Y:56:PRO:HD3	2.36	0.40
24:12:38:GLN:HG2	24:12:44:LEU:HB2	2.03	0.40
30:18:61:LEU:C	30:18:63:PRO:HD3	2.46	0.40
32:1a:33:A:N3	43:1l:32:PHE:HE2	2.19	0.40
32:1a:626:U:H2'	32:1a:627:G:C8	2.56	0.40
32:1a:877:C:H5''	39:1h:88:LYS:HD3	2.03	0.40
32:1a:1326:C:H2'	32:1a:1327:C:C6	2.56	0.40
33:1b:32:ILE:HD13	33:1b:40:HIS:HD2	1.87	0.40
33:1b:233:SER:HB2	33:1b:234:PRO:HD2	2.04	0.40
35:1d:102:ASP:OD1	35:1d:103:ASN:N	2.54	0.40
41:1j:49:VAL:CG2	45:1n:41:ARG:HB2	2.47	0.40
42:1k:18:ARG:HA	42:1k:81:ASP:H	1.86	0.40
46:1o:29:VAL:HG12	46:1o:85:LEU:HD13	2.02	0.40
48:1q:81:ARG:HA	48:1q:81:ARG:HD2	1.79	0.40
54:1w:18:G:H4'	54:1w:60:U:C5	2.56	0.40
56:1y:37:MIA:H2'	56:1y:38:A:C8	2.56	0.40
1:2A:328:U:H4'	20:2Y:68:HIS:CG	2.55	0.40
1:2A:580:C:H2'	1:2A:581:C:C6	2.56	0.40
1:2A:1224:C:H2'	1:2A:1225:G:O4'	2.21	0.40
1:2A:1224:C:O2'	17:2V:85:LYS:HA	2.21	0.40
1:2A:1278:A:OP1	13:2R:36:THR:HG23	2.20	0.40
1:2A:1472:A:H2'	1:2A:1473:G:O4'	2.20	0.40
1:2A:1786:A:C4	1:2A:1938:A:C6	3.09	0.40
1:2A:2335:A:C8	1:2A:2337:G:C5	3.09	0.40
1:2A:2611:U:H6	1:2A:2611:U:H5'	1.85	0.40
3:2D:125:ILE:HB	37:2f:81:ILE:HD11	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2D:146:GLU:HA	3:2D:153:ALA:HA	2.02	0.40
4:2E:98:PRO:HG3	4:2E:174:ASP:HA	2.02	0.40
5:2F:108:LYS:HB2	5:2F:108:LYS:HE2	1.86	0.40
5:2F:108:LYS:O	5:2F:112:MET:HG3	2.22	0.40
5:2F:158:THR:OG1	5:2F:195:ASP:OD2	2.36	0.40
7:2H:7:LEU:HD23	7:2H:69:ARG:NH2	2.36	0.40
10:2O:98:VAL:HG11	10:2O:114:ILE:HG23	2.03	0.40
16:2U:11:ARG:O	16:2U:15:LYS:HG3	2.21	0.40
32:2a:523:A:H61	43:2l:92:OTD:CG	2.34	0.40
32:2a:1014:A:C2	32:2a:1219:U:H1'	2.56	0.40
32:2a:1060:C:H5'	45:2n:45:ARG:HH12	1.86	0.40
32:2a:1095:U:C4	32:2a:1096:C:C4	3.09	0.40
33:2b:118:LEU:HD12	33:2b:118:LEU:HA	1.88	0.40
34:2c:47:LEU:HD12	34:2c:70:VAL:HG11	2.02	0.40
34:2c:131:ARG:NH2	36:2e:50:GLU:HG3	2.36	0.40
36:2e:79:GLU:OE2	39:2h:104:ARG:HA	2.20	0.40
55:2x:43:A:H2'	55:2x:44:A:C8	2.56	0.40
56:2y:18:G:O6	56:2y:56:C:N4	2.54	0.40
1:1A:63:U:O2'	61:1A:5413:HOH:O	2.21	0.40
1:1A:90:U:H1'	1:1A:92:A:N7	2.36	0.40
1:1A:466:A:N3	1:1A:683:C:H1'	2.36	0.40
1:1A:530:G:H4'	1:1A:531:C:OP1	2.21	0.40
1:1A:2128:C:C4	1:1A:2160:G:N1	2.87	0.40
1:1A:2347:C:O2'	28:16:21:TYR:OH	2.37	0.40
2:1B:75:G:H22	21:1Z:73:GLN:HE21	1.67	0.40
8:1I:38:LEU:HG	8:1I:40:THR:HG22	2.02	0.40
9:1N:91:LEU:HD23	9:1N:91:LEU:HA	1.85	0.40
19:1X:5:TYR:CE1	24:12:30:ARG:HG3	2.56	0.40
25:13:5:LYS:HD3	25:13:59:VAL:HG11	2.03	0.40
25:13:44:ARG:O	25:13:48:GLU:HG3	2.20	0.40
29:17:20:ALA:HA	29:17:23:ARG:HH21	1.86	0.40
30:18:26:LYS:HD2	30:18:48:PHE:CD2	2.56	0.40
32:1a:166:G:H2'	32:1a:167:G:C8	2.56	0.40
32:1a:953:G:H5'	32:1a:965:A:N6	2.30	0.40
32:1a:1202:G:O4'	45:1n:29:ARG:NH1	2.54	0.40
32:1a:1366:C:H2'	32:1a:1367:C:C6	2.56	0.40
35:1d:64:LEU:HD23	35:1d:75:PHE:HZ	1.87	0.40
37:1f:91:VAL:HG12	37:1f:92:LYS:O	2.22	0.40
38:1g:78:ARG:O	38:1g:84:ASN:HA	2.21	0.40
56:1y:23:A:H2'	56:1y:24:G:C8	2.56	0.40
56:1y:70:G:C4	56:1y:71:G:C8	3.09	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:217:G:H2'	1:2A:218:A:O4'	2.21	0.40
1:2A:271(O):C:H2'	1:2A:271(P):C:C6	2.55	0.40
1:2A:1006:C:C2	1:2A:1138:G:N2	2.89	0.40
1:2A:1170:G:C6	1:2A:1171:G:C6	3.09	0.40
1:2A:2101:G:H2'	1:2A:2102:U:O4'	2.22	0.40
1:2A:2453:A:N7	61:2A:5518:HOH:O	2.37	0.40
3:2D:146:GLU:HG2	3:2D:152:GLY:C	2.46	0.40
5:2F:28:ILE:HG21	11:2P:1:MET:HE1	2.03	0.40
5:2F:109:GLY:HA2	5:2F:112:MET:HE2	2.02	0.40
6:2G:50:ALA:O	6:2G:51:ARG:C	2.64	0.40
32:2a:114:U:H2'	32:2a:115:G:C8	2.57	0.40
32:2a:684:A:C6	32:2a:685:G:C6	3.09	0.40
32:2a:757:U:O2'	32:2a:879:C:O2	2.35	0.40
32:2a:872:A:C4	32:2a:874:G:N7	2.89	0.40
32:2a:1004:A:N6	32:2a:1036:G:C5	2.89	0.40
32:2a:1030(B):C:N4	32:2a:1030(C):G:C2	2.89	0.40
32:2a:1165:C:H2'	32:2a:1166:G:O4'	2.22	0.40
32:2a:1317:C:O2	50:2s:37:ARG:NH2	2.55	0.40
32:2a:1394:A:N1	32:2a:1500:A:O2'	2.48	0.40
39:2h:97:VAL:HG21	39:2h:128:GLY:HA2	2.03	0.40
46:2o:39:LEU:HD23	46:2o:39:LEU:HA	1.90	0.40
1:1A:64:A:H1'	19:1X:66:LEU:HB2	2.03	0.40
1:1A:245:G:O5'	11:1P:73:GLY:HA2	2.22	0.40
1:1A:271(O):C:O5'	1:1A:271(O):C:H6	2.04	0.40
1:1A:459:U:H4'	29:17:40:TRP:CZ3	2.56	0.40
1:1A:600:G:H5'	5:1F:32:LEU:HD12	2.03	0.40
1:1A:1093:G:C2	1:1A:1097:U:H5	2.40	0.40
7:1H:3:ARG:HG2	7:1H:6:ARG:HE	1.85	0.40
9:1N:60:ILE:HG13	9:1N:61:ARG:H	1.87	0.40
14:1S:93:LYS:HG2	14:1S:95:HIS:HB2	2.04	0.40
16:1U:76:TYR:CE2	16:1U:80:ILE:HG13	2.56	0.40
32:1a:377:G:H5'	47:1p:5:ARG:HH12	1.86	0.40
34:1c:56:ASP:O	34:1c:66:VAL:HA	2.21	0.40
35:1d:178:VAL:O	35:1d:180:GLY:N	2.49	0.40
38:1g:74:GLU:CD	38:1g:95:ARG:HE	2.28	0.40
44:1m:23:TYR:HB3	44:1m:67:GLU:HA	2.03	0.40
1:2A:223:A:N1	1:2A:407:G:O2'	2.45	0.40
1:2A:383:U:C2	1:2A:385:C:C4	3.10	0.40
1:2A:402:A:C2'	1:2A:403:U:H5'	2.51	0.40
1:2A:626:U:O4	11:2P:81:GLN:NE2	2.55	0.40
1:2A:910:A:H2	1:2A:2264:C:O2	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1395:A:OP1	61:2A:5813:HOH:O	2.22	0.40
1:2A:1676:A:H2'	1:2A:1677:A:O4'	2.22	0.40
1:2A:1814:G:C6	1:2A:1815:A:C6	3.10	0.40
1:2A:2184:G:O2'	1:2A:2185:C:H5'	2.21	0.40
12:2Q:50:ALA:O	12:2Q:54:MET:HG3	2.22	0.40
13:2R:36:THR:HG22	13:2R:37:THR:H	1.86	0.40
24:22:32:LEU:O	24:22:36:ARG:HG3	2.22	0.40
24:22:35:LEU:HD23	24:22:35:LEU:HA	1.90	0.40
32:2a:191:G:C6	32:2a:192:U:C4	3.09	0.40
32:2a:938:A:C6	32:2a:939:G:C5	3.10	0.40
32:2a:1029:C:N4	32:2a:1032:G:H1	2.14	0.40
36:2e:8:GLU:HG2	36:2e:34:VAL:HG23	2.03	0.40
37:2f:100:ASN:HB2	49:2r:27:GLY:O	2.22	0.40
39:2h:64:LYS:HG2	39:2h:79:VAL:HG21	2.04	0.40
43:2l:45:PRO:HG2	43:2l:49:ASN:O	2.22	0.40
1:1A:661:C:H4'	11:1P:13:ASN:OD1	2.22	0.40
1:1A:686:G:N2	1:1A:788:A:H61	2.19	0.40
1:1A:784:A:N6	3:1D:229:VAL:HG11	2.36	0.40
1:1A:1814:G:C6	1:1A:1815:A:C6	3.09	0.40
1:1A:2441:C:OP2	1:1A:2586:C:O2'	2.36	0.40
4:1E:8:LYS:HG2	4:1E:192:ASN:HA	2.04	0.40
5:1F:65:TRP:CZ2	5:1F:75:HIS:HD2	2.38	0.40
11:1P:81:GLN:OE1	11:1P:106:LEU:HD12	2.22	0.40
11:1P:97:PRO:HD3	11:1P:126:VAL:O	2.21	0.40
20:1Y:99:CYS:HB2	20:1Y:106:LEU:HD21	2.04	0.40
21:1Z:101:PRO:HA	21:1Z:123:ASP:HB3	2.04	0.40
23:11:73:LEU:HD11	23:11:98:LEU:HG	2.03	0.40
32:1a:555:C:H2'	32:1a:556:C:C6	2.56	0.40
32:1a:607:A:H2'	32:1a:608:A:H8	1.85	0.40
32:1a:735:C:H2'	32:1a:736:C:H6	1.87	0.40
32:1a:1003:G:H2'	32:1a:1004:A:N3	2.36	0.40
32:1a:1479:C:H2'	32:1a:1480:G:C8	2.57	0.40
33:1b:20:GLU:HG2	33:1b:23:ARG:NH1	2.37	0.40
37:1f:44:GLY:HA2	37:1f:59:TYR:CE2	2.57	0.40
42:1k:84:VAL:CG1	42:1k:91:ARG:HD2	2.51	0.40
45:1n:58:LYS:HB3	45:1n:58:LYS:HE3	1.82	0.40
56:1y:50:U:H2'	56:1y:51:U:C6	2.57	0.40
1:2A:571:A:O2'	17:2V:78:LYS:HE2	2.20	0.40
1:2A:1586:A:H8	1:2A:1586:A:O5'	2.04	0.40
1:2A:1924:C:H4'	55:2x:13:C:O2'	2.21	0.40
1:2A:2532:G:H2'	1:2A:2533:A:C8	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2630:G:H1	1:2A:2788:C:N4	2.12	0.40
1:2A:2712:U:OP1	1:2A:2714:G:H4'	2.22	0.40
1:2A:2792:G:H2'	1:2A:2792:G:N3	2.36	0.40
5:2F:64:ILE:HG21	5:2F:78:ILE:HG23	2.04	0.40
21:2Z:149:SER:O	21:2Z:150:LEU:HD12	2.22	0.40
23:21:83:GLU:N	23:21:83:GLU:OE1	2.55	0.40
27:25:33:CYS:C	27:25:35:GLU:H	2.29	0.40
32:2a:1086:U:H3	32:2a:1099:G:N2	2.10	0.40
32:2a:1350:A:C6	32:2a:1351:U:C4	3.09	0.40
34:2c:111:LEU:HD23	34:2c:111:LEU:HA	1.89	0.40
35:2d:72:GLU:OE2	35:2d:207:TYR:OH	2.33	0.40
38:2g:22:LEU:HD11	38:2g:101:LEU:HD21	2.01	0.40
41:2j:13:HIS:HB3	41:2j:68:HIS:CE1	2.57	0.40
41:2j:38:ILE:HG12	41:2j:71:LEU:O	2.21	0.40
41:2j:54:PHE:CD2	41:2j:55:LYS:HB3	2.57	0.40
51:2t:65:LYS:O	51:2t:68:LYS:HB2	2.22	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%)	254 (93%)	19 (7%)	0	100	100
3	2D	273/276 (99%)	256 (94%)	17 (6%)	0	100	100
4	1E	202/206 (98%)	184 (91%)	17 (8%)	1 (0%)	24	43
4	2E	202/206 (98%)	187 (93%)	13 (6%)	2 (1%)	12	24
5	1F	201/210 (96%)	195 (97%)	5 (2%)	1 (0%)	24	43
5	2F	201/210 (96%)	177 (88%)	22 (11%)	2 (1%)	12	24
6	1G	179/182 (98%)	163 (91%)	15 (8%)	1 (1%)	21	38

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	2G	179/182 (98%)	156 (87%)	17 (10%)	6 (3%)	3	4
7	1H	172/180 (96%)	157 (91%)	14 (8%)	1 (1%)	21	38
7	2H	172/180 (96%)	153 (89%)	17 (10%)	2 (1%)	10	20
8	1I	144/148 (97%)	127 (88%)	16 (11%)	1 (1%)	18	34
8	2I	144/148 (97%)	116 (81%)	23 (16%)	5 (4%)	3	4
9	1N	138/140 (99%)	130 (94%)	8 (6%)	0	100	100
9	2N	138/140 (99%)	126 (91%)	11 (8%)	1 (1%)	18	34
10	1O	120/122 (98%)	110 (92%)	10 (8%)	0	100	100
10	2O	120/122 (98%)	109 (91%)	10 (8%)	1 (1%)	16	31
11	1P	147/150 (98%)	130 (88%)	14 (10%)	3 (2%)	6	10
11	2P	147/150 (98%)	129 (88%)	15 (10%)	3 (2%)	6	10
12	1Q	139/141 (99%)	127 (91%)	12 (9%)	0	100	100
12	2Q	139/141 (99%)	123 (88%)	16 (12%)	0	100	100
13	1R	116/118 (98%)	108 (93%)	7 (6%)	1 (1%)	14	27
13	2R	116/118 (98%)	112 (97%)	4 (3%)	0	100	100
14	1S	108/112 (96%)	105 (97%)	3 (3%)	0	100	100
14	2S	108/112 (96%)	101 (94%)	6 (6%)	1 (1%)	14	27
15	1T	129/146 (88%)	119 (92%)	8 (6%)	2 (2%)	7	14
15	2T	129/146 (88%)	120 (93%)	9 (7%)	0	100	100
16	1U	114/118 (97%)	111 (97%)	3 (3%)	0	100	100
16	2U	114/118 (97%)	109 (96%)	5 (4%)	0	100	100
17	1V	99/101 (98%)	91 (92%)	6 (6%)	2 (2%)	6	10
17	2V	99/101 (98%)	93 (94%)	5 (5%)	1 (1%)	12	24
18	1W	110/113 (97%)	108 (98%)	2 (2%)	0	100	100
18	2W	110/113 (97%)	107 (97%)	3 (3%)	0	100	100
19	1X	93/96 (97%)	89 (96%)	2 (2%)	2 (2%)	5	9
19	2X	93/96 (97%)	85 (91%)	7 (8%)	1 (1%)	11	22
20	1Y	105/110 (96%)	99 (94%)	4 (4%)	2 (2%)	6	11
20	2Y	105/110 (96%)	98 (93%)	7 (7%)	0	100	100
21	1Z	148/206 (72%)	130 (88%)	14 (10%)	4 (3%)	4	6
21	2Z	156/206 (76%)	128 (82%)	25 (16%)	3 (2%)	6	11

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
22	10	81/85 (95%)	78 (96%)	3 (4%)	0	100	100
22	20	81/85 (95%)	77 (95%)	3 (4%)	1 (1%)	10	20
23	11	95/98 (97%)	93 (98%)	1 (1%)	1 (1%)	11	22
23	21	95/98 (97%)	91 (96%)	3 (3%)	1 (1%)	11	22
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100	100
24	22	68/72 (94%)	66 (97%)	2 (3%)	0	100	100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
25	23	57/60 (95%)	54 (95%)	2 (4%)	1 (2%)	6	12
26	14	67/71 (94%)	51 (76%)	11 (16%)	5 (8%)	1	0
26	24	67/71 (94%)	43 (64%)	20 (30%)	4 (6%)	1	1
27	15	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
27	25	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
28	16	51/54 (94%)	50 (98%)	1 (2%)	0	100	100
28	26	51/54 (94%)	47 (92%)	4 (8%)	0	100	100
29	17	46/49 (94%)	45 (98%)	1 (2%)	0	100	100
29	27	46/49 (94%)	46 (100%)	0	0	100	100
30	18	62/65 (95%)	62 (100%)	0	0	100	100
30	28	62/65 (95%)	61 (98%)	1 (2%)	0	100	100
31	19	35/37 (95%)	35 (100%)	0	0	100	100
31	29	35/37 (95%)	35 (100%)	0	0	100	100
33	1b	229/256 (90%)	193 (84%)	27 (12%)	9 (4%)	2	3
33	2b	229/256 (90%)	184 (80%)	35 (15%)	10 (4%)	2	2
34	1c	204/239 (85%)	188 (92%)	13 (6%)	3 (2%)	8	16
34	2c	204/239 (85%)	177 (87%)	24 (12%)	3 (2%)	8	16
35	1d	206/209 (99%)	193 (94%)	10 (5%)	3 (2%)	8	16
35	2d	206/209 (99%)	182 (88%)	19 (9%)	5 (2%)	4	8
36	1e	146/162 (90%)	134 (92%)	10 (7%)	2 (1%)	9	17
36	2e	146/162 (90%)	130 (89%)	15 (10%)	1 (1%)	18	34
37	1f	98/101 (97%)	89 (91%)	9 (9%)	0	100	100
37	2f	98/101 (97%)	92 (94%)	6 (6%)	0	100	100
38	1g	153/156 (98%)	137 (90%)	14 (9%)	2 (1%)	9	18

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
38	2g	153/156 (98%)	134 (88%)	15 (10%)	4 (3%)	4	7
39	1h	135/138 (98%)	128 (95%)	7 (5%)	0	100	100
39	2h	135/138 (98%)	124 (92%)	11 (8%)	0	100	100
40	1i	125/128 (98%)	106 (85%)	19 (15%)	0	100	100
40	2i	125/128 (98%)	104 (83%)	19 (15%)	2 (2%)	7	14
41	1j	95/105 (90%)	81 (85%)	11 (12%)	3 (3%)	3	4
41	2j	94/105 (90%)	78 (83%)	14 (15%)	2 (2%)	5	9
42	1k	112/129 (87%)	98 (88%)	11 (10%)	3 (3%)	4	6
42	2k	112/129 (87%)	101 (90%)	9 (8%)	2 (2%)	6	12
43	1l	119/132 (90%)	112 (94%)	6 (5%)	1 (1%)	16	31
43	2l	119/132 (90%)	112 (94%)	6 (5%)	1 (1%)	16	31
44	1m	121/126 (96%)	107 (88%)	12 (10%)	2 (2%)	7	13
44	2m	120/126 (95%)	104 (87%)	14 (12%)	2 (2%)	7	13
45	1n	58/61 (95%)	56 (97%)	2 (3%)	0	100	100
45	2n	58/61 (95%)	53 (91%)	5 (9%)	0	100	100
46	1o	86/89 (97%)	78 (91%)	5 (6%)	3 (4%)	3	4
46	2o	86/89 (97%)	80 (93%)	5 (6%)	1 (1%)	10	20
47	1p	80/88 (91%)	76 (95%)	4 (5%)	0	100	100
47	2p	80/88 (91%)	75 (94%)	5 (6%)	0	100	100
48	1q	97/105 (92%)	85 (88%)	10 (10%)	2 (2%)	5	9
48	2q	97/105 (92%)	86 (89%)	10 (10%)	1 (1%)	12	24
49	1r	66/88 (75%)	60 (91%)	6 (9%)	0	100	100
49	2r	66/88 (75%)	61 (92%)	4 (6%)	1 (2%)	8	16
50	1s	81/93 (87%)	71 (88%)	8 (10%)	2 (2%)	4	7
50	2s	81/93 (87%)	68 (84%)	11 (14%)	2 (2%)	4	7
51	1t	94/106 (89%)	83 (88%)	9 (10%)	2 (2%)	5	9
51	2t	94/106 (89%)	84 (89%)	9 (10%)	1 (1%)	11	22
52	1u	21/27 (78%)	21 (100%)	0	0	100	100
52	2u	21/27 (78%)	18 (86%)	3 (14%)	0	100	100
All	All	11370/12128 (94%)	10332 (91%)	901 (8%)	137 (1%)	10	20

All (137) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
11	1P	38	GLN
21	1Z	53	ILE
26	14	53	GLU
33	1b	17	PHE
34	1c	66	VAL
44	1m	67	GLU
50	1s	27	GLU
50	1s	81	ARG
5	2F	130	ALA
6	2G	51	ARG
8	2I	40	THR
11	2P	45	LEU
33	2b	17	PHE
33	2b	74	LYS
38	2g	55	GLY
40	2i	56	LEU
50	2s	81	ARG
17	1V	100	ARG
20	1Y	78	ALA
21	1Z	52	SER
21	1Z	93	ASP
26	14	49	PHE
26	14	57	GLU
33	1b	8	LYS
33	1b	22	LYS
34	1c	65	ALA
35	1d	173	TRP
36	1e	85	GLY
41	1j	79	ARG
48	1q	68	ARG
51	1t	100	ILE
6	2G	42	GLY
6	2G	47	LYS
6	2G	96	ARG
7	2H	47	GLU
8	2I	10	GLU
11	2P	29	LYS
19	2X	93	GLU
23	21	3	LYS
26	24	3	GLU
26	24	48	ARG
33	2b	126	GLU
33	2b	224	GLN

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Mol	Chain	Res	Type
35	2d	3	ARG
38	2g	80	VAL
38	2g	153	HIS
40	2i	121	ARG
42	2k	49	GLY
44	2m	67	GLU
44	2m	106	ASN
48	2q	68	ARG
5	1F	130	ALA
11	1P	29	LYS
11	1P	36	LYS
17	1V	43	GLU
19	1X	2	LYS
26	14	62	ARG
33	1b	13	ALA
33	1b	126	GLU
36	1e	86	ALA
38	1g	52	GLU
42	1k	105	VAL
44	1m	46	LYS
46	1o	87	ILE
46	1o	88	ARG
48	1q	49	GLU
51	1t	10	LEU
8	2I	115	ALA
17	2V	79	VAL
21	2Z	93	ASP
21	2Z	146	ILE
22	20	13	GLY
33	2b	20	GLU
41	2j	79	ARG
4	1E	52	LEU
6	1G	43	LEU
15	1T	127	ALA
15	1T	128	GLU
33	1b	16	HIS
33	1b	124	SER
33	1b	231	GLU
34	1c	71	ALA
41	1j	78	ASN
42	1k	77	MET
4	2E	52	LEU

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Mol	Chain	Res	Type
5	2F	21	ALA
6	2G	43	LEU
7	2H	126	PRO
9	2N	2	LYS
10	2O	5	GLN
14	2S	84	GLN
33	2b	9	GLU
33	2b	123	ALA
33	2b	231	GLU
35	2d	107	ARG
35	2d	173	TRP
41	2j	78	ASN
43	2l	105	TYR
13	1R	107	ASP
23	1l	3	LYS
26	14	47	GLN
42	1k	49	GLY
43	1l	105	TYR
46	1o	19	PRO
8	2I	41	GLU
11	2P	44	GLY
25	23	59	VAL
34	2c	54	ARG
34	2c	107	GLN
35	2d	5	ILE
46	2o	87	ILE
50	2s	7	LYS
51	2t	47	GLY
8	1I	10	GLU
41	1j	77	PRO
8	2I	81	VAL
33	2b	16	HIS
34	2c	64	VAL
38	2g	152	ALA
20	1Y	55	TYR
21	1Z	157	LEU
35	1d	88	VAL
38	1g	80	VAL
4	2E	71	GLY
19	1X	94	GLY
6	2G	159	VAL
26	24	11	PRO

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Mol	Chain	Res	Type
26	24	45	GLY
33	2b	72	GLY
49	2r	27	GLY
35	1d	178	VAL
42	2k	105	VAL
7	1H	126	PRO
36	2e	69	VAL
21	2Z	171	ILE
35	2d	136	PRO
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%)	196 (91%)	19 (9%)	9	20
3	2D	215/218 (99%)	196 (91%)	19 (9%)	9	20
4	1E	164/166 (99%)	148 (90%)	16 (10%)	7	16
4	2E	164/166 (99%)	145 (88%)	19 (12%)	5	11
5	1F	160/166 (96%)	141 (88%)	19 (12%)	5	11
5	2F	159/166 (96%)	147 (92%)	12 (8%)	12	26
6	1G	143/156 (92%)	133 (93%)	10 (7%)	14	29
6	2G	143/156 (92%)	124 (87%)	19 (13%)	4	8
7	1H	144/148 (97%)	134 (93%)	10 (7%)	14	30
7	2H	144/148 (97%)	126 (88%)	18 (12%)	4	9
8	1I	113/124 (91%)	90 (80%)	23 (20%)	1	2
8	2I	105/124 (85%)	86 (82%)	19 (18%)	2	3
9	1N	118/119 (99%)	104 (88%)	14 (12%)	5	11
9	2N	118/119 (99%)	105 (89%)	13 (11%)	6	13
10	1O	100/100 (100%)	98 (98%)	2 (2%)	48	75
10	2O	100/100 (100%)	95 (95%)	5 (5%)	22	44

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
11	1P	115/116 (99%)	105 (91%)	10 (9%)	9	21
11	2P	115/116 (99%)	108 (94%)	7 (6%)	17	35
12	1Q	111/111 (100%)	102 (92%)	9 (8%)	11	23
12	2Q	111/111 (100%)	107 (96%)	4 (4%)	31	58
13	1R	101/101 (100%)	94 (93%)	7 (7%)	14	30
13	2R	101/101 (100%)	93 (92%)	8 (8%)	11	24
14	1S	86/88 (98%)	76 (88%)	10 (12%)	5	11
14	2S	85/88 (97%)	74 (87%)	11 (13%)	4	9
15	1T	115/127 (91%)	108 (94%)	7 (6%)	17	35
15	2T	113/127 (89%)	103 (91%)	10 (9%)	9	20
16	1U	93/94 (99%)	88 (95%)	5 (5%)	20	41
16	2U	93/94 (99%)	86 (92%)	7 (8%)	12	26
17	1V	80/82 (98%)	73 (91%)	7 (9%)	9	20
17	2V	80/82 (98%)	66 (82%)	14 (18%)	2	3
18	1W	90/92 (98%)	83 (92%)	7 (8%)	11	24
18	2W	90/92 (98%)	83 (92%)	7 (8%)	11	24
19	1X	77/78 (99%)	74 (96%)	3 (4%)	28	55
19	2X	77/78 (99%)	76 (99%)	1 (1%)	61	82
20	1Y	85/91 (93%)	77 (91%)	8 (9%)	8	18
20	2Y	85/91 (93%)	72 (85%)	13 (15%)	3	5
21	1Z	135/179 (75%)	119 (88%)	16 (12%)	5	11
21	2Z	137/179 (76%)	114 (83%)	23 (17%)	2	4
22	10	65/67 (97%)	65 (100%)	0	100	100
22	20	65/67 (97%)	64 (98%)	1 (2%)	57	80
23	11	80/83 (96%)	75 (94%)	5 (6%)	16	34
23	21	80/83 (96%)	73 (91%)	7 (9%)	9	20
24	12	65/67 (97%)	63 (97%)	2 (3%)	35	62
24	22	65/67 (97%)	62 (95%)	3 (5%)	24	48
25	13	51/52 (98%)	44 (86%)	7 (14%)	3	7
25	23	50/52 (96%)	48 (96%)	2 (4%)	28	54
26	14	59/63 (94%)	53 (90%)	6 (10%)	7	15

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
26	24	53/63 (84%)	41 (77%)	12 (23%)	1	1
27	15	50/52 (96%)	48 (96%)	2 (4%)	28	54
27	25	50/52 (96%)	48 (96%)	2 (4%)	28	54
28	16	51/52 (98%)	41 (80%)	10 (20%)	1	2
28	26	50/52 (96%)	44 (88%)	6 (12%)	5	10
29	17	41/42 (98%)	38 (93%)	3 (7%)	13	27
29	27	41/42 (98%)	37 (90%)	4 (10%)	7	16
30	18	54/55 (98%)	51 (94%)	3 (6%)	19	39
30	28	54/55 (98%)	49 (91%)	5 (9%)	8	18
31	19	34/34 (100%)	34 (100%)	0	100	100
31	29	34/34 (100%)	32 (94%)	2 (6%)	18	37
33	1b	192/220 (87%)	172 (90%)	20 (10%)	7	14
33	2b	187/220 (85%)	160 (86%)	27 (14%)	3	6
34	1c	142/188 (76%)	128 (90%)	14 (10%)	7	16
34	2c	140/188 (74%)	119 (85%)	21 (15%)	3	6
35	1d	169/181 (93%)	149 (88%)	20 (12%)	5	11
35	2d	173/181 (96%)	150 (87%)	23 (13%)	4	8
36	1e	113/123 (92%)	102 (90%)	11 (10%)	8	17
36	2e	114/123 (93%)	100 (88%)	14 (12%)	4	10
37	1f	84/90 (93%)	75 (89%)	9 (11%)	6	13
37	2f	85/90 (94%)	75 (88%)	10 (12%)	5	11
38	1g	119/127 (94%)	104 (87%)	15 (13%)	4	9
38	2g	120/127 (94%)	110 (92%)	10 (8%)	10	22
39	1h	114/119 (96%)	105 (92%)	9 (8%)	11	24
39	2h	114/119 (96%)	105 (92%)	9 (8%)	11	24
40	1i	90/99 (91%)	81 (90%)	9 (10%)	7	15
40	2i	89/99 (90%)	76 (85%)	13 (15%)	3	6
41	1j	66/92 (72%)	58 (88%)	8 (12%)	5	10
41	2j	69/92 (75%)	60 (87%)	9 (13%)	4	8
42	1k	82/99 (83%)	73 (89%)	9 (11%)	6	13
42	2k	83/99 (84%)	77 (93%)	6 (7%)	13	28

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
43	1l	96/108 (89%)	86 (90%)	10 (10%)	7	14
43	2l	96/108 (89%)	90 (94%)	6 (6%)	16	34
44	1m	93/101 (92%)	81 (87%)	12 (13%)	4	9
44	2m	92/101 (91%)	81 (88%)	11 (12%)	5	10
45	1n	49/50 (98%)	43 (88%)	6 (12%)	5	10
45	2n	49/50 (98%)	45 (92%)	4 (8%)	10	23
46	1o	78/80 (98%)	71 (91%)	7 (9%)	9	19
46	2o	78/80 (98%)	74 (95%)	4 (5%)	21	43
47	1p	69/74 (93%)	62 (90%)	7 (10%)	7	15
47	2p	68/74 (92%)	57 (84%)	11 (16%)	2	4
48	1q	94/97 (97%)	90 (96%)	4 (4%)	26	51
48	2q	94/97 (97%)	89 (95%)	5 (5%)	20	42
49	1r	59/77 (77%)	56 (95%)	3 (5%)	21	43
49	2r	59/77 (77%)	53 (90%)	6 (10%)	7	15
50	1s	69/80 (86%)	63 (91%)	6 (9%)	9	21
50	2s	67/80 (84%)	60 (90%)	7 (10%)	7	14
51	1t	70/82 (85%)	64 (91%)	6 (9%)	10	21
51	2t	70/82 (85%)	67 (96%)	3 (4%)	26	51
52	1u	18/22 (82%)	17 (94%)	1 (6%)	19	39
52	2u	18/22 (82%)	17 (94%)	1 (6%)	19	39
All	All	9303/10064 (92%)	8404 (90%)	899 (10%)	8	17

All (899) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	16	MET
3	1D	22	SER
3	1D	27	THR
3	1D	37	LEU
3	1D	38	LYS
3	1D	116	GLN
3	1D	155	LEU
3	1D	157	ARG
3	1D	162	SER

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Mol	Chain	Res	Type
3	1D	173	VAL
3	1D	181	GLU
3	1D	193	VAL
3	1D	221	VAL
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	273	ARG
3	1D	276	LYS
4	1E	9	VAL
4	1E	12	THR
4	1E	21	VAL
4	1E	34	VAL
4	1E	47	VAL
4	1E	59	VAL
4	1E	72	VAL
4	1E	75	VAL
4	1E	78	LEU
4	1E	90	THR
4	1E	97	LYS
4	1E	116	VAL
4	1E	145	LYS
4	1E	181	LEU
4	1E	188	VAL
4	1E	195	LEU
5	1F	20	LEU
5	1F	24	LEU
5	1F	33	LEU
5	1F	51	THR
5	1F	57	VAL
5	1F	70	THR
5	1F	88	VAL
5	1F	106	ARG
5	1F	112	MET
5	1F	132	VAL
5	1F	140	LEU
5	1F	144	LYS
5	1F	157	VAL
5	1F	162	LEU
5	1F	168	ARG
5	1F	183	VAL
5	1F	192	LEU

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Mol	Chain	Res	Type
5	1F	195	ASP
5	1F	201	VAL
6	1G	5	VAL
6	1G	7	LEU
6	1G	31	VAL
6	1G	43	LEU
6	1G	49	ASP
6	1G	133	LEU
6	1G	140	ILE
6	1G	148	MET
6	1G	149	VAL
6	1G	159	VAL
7	1H	15	VAL
7	1H	16	SER
7	1H	23	ARG
7	1H	26	VAL
7	1H	49	VAL
7	1H	92	ILE
7	1H	98	LEU
7	1H	113	VAL
7	1H	124	GLU
7	1H	129	THR
8	1I	2	LYS
8	1I	9	LEU
8	1I	10	GLU
8	1I	12	LEU
8	1I	15	VAL
8	1I	37	VAL
8	1I	40	THR
8	1I	41	GLU
8	1I	45	LYS
8	1I	47	LEU
8	1I	50	ARG
8	1I	58	LEU
8	1I	77	LEU
8	1I	85	GLU
8	1I	87	LYS
8	1I	92	VAL
8	1I	101	LEU
8	1I	108	THR
8	1I	109	ILE
8	1I	123	LEU

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Mol	Chain	Res	Type
8	1I	127	VAL
8	1I	133	HIS
8	1I	140	LEU
9	1N	1	MET
9	1N	14	VAL
9	1N	28	THR
9	1N	34	LEU
9	1N	46	VAL
9	1N	48	MET
9	1N	62	VAL
9	1N	67	LEU
9	1N	68	GLU
9	1N	73	THR
9	1N	96	GLU
9	1N	137	LYS
9	1N	138	LEU
9	1N	140	VAL
10	1O	98	VAL
10	1O	116	SER
11	1P	45	LEU
11	1P	75	ILE
11	1P	92	GLU
11	1P	95	VAL
11	1P	100	LEU
11	1P	102	ARG
11	1P	117	GLU
11	1P	133	SER
11	1P	147	LEU
11	1P	149	GLU
12	1Q	22	LYS
12	1Q	35	VAL
12	1Q	56	ARG
12	1Q	75	THR
12	1Q	85	LYS
12	1Q	109	VAL
12	1Q	115	MET
12	1Q	127	ILE
12	1Q	133	ARG
13	1R	36	THR
13	1R	44	LEU
13	1R	67	LEU
13	1R	91	GLN

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Mol	Chain	Res	Type
13	1R	100	LEU
13	1R	111	LEU
13	1R	114	VAL
14	1S	3	ARG
14	1S	14	VAL
14	1S	15	ARG
14	1S	18	ILE
14	1S	50	SER
14	1S	68	GLN
14	1S	69	VAL
14	1S	85	VAL
14	1S	98	VAL
14	1S	110	LEU
15	1T	9	LEU
15	1T	21	GLU
15	1T	28	VAL
15	1T	40	THR
15	1T	49	VAL
15	1T	96	ARG
15	1T	128	GLU
16	1U	31	SER
16	1U	74	LEU
16	1U	78	THR
16	1U	95	LEU
16	1U	100	VAL
17	1V	28	GLU
17	1V	58	VAL
17	1V	61	VAL
17	1V	73	SER
17	1V	79	VAL
17	1V	82	ARG
17	1V	85	LYS
18	1W	11	ARG
18	1W	17	VAL
18	1W	50	VAL
18	1W	60	ASN
18	1W	63	ASP
18	1W	95	ILE
18	1W	96	ILE
19	1X	35	THR
19	1X	57	LEU
19	1X	72	LYS

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Mol	Chain	Res	Type
20	1Y	1	MET
20	1Y	7	VAL
20	1Y	9	LYS
20	1Y	38	ILE
20	1Y	70	SER
20	1Y	72	VAL
20	1Y	85	VAL
20	1Y	99	CYS
21	1Z	1	MET
21	1Z	31	ARG
21	1Z	33	LEU
21	1Z	56	VAL
21	1Z	61	LEU
21	1Z	86	VAL
21	1Z	128	VAL
21	1Z	131	ARG
21	1Z	137	ILE
21	1Z	139	VAL
21	1Z	150	LEU
21	1Z	153	SER
21	1Z	154	ASP
21	1Z	155	LEU
21	1Z	165	VAL
21	1Z	171	ILE
23	11	46	LEU
23	11	51	VAL
23	11	52	ARG
23	11	89	GLU
23	11	91	LYS
24	12	53	LEU
24	12	67	LYS
25	13	23	LEU
25	13	37	LEU
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	14	ILE
26	14	49	PHE
26	14	52	THR

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Mol	Chain	Res	Type
26	14	53	GLU
26	14	63	TYR
27	15	6	VAL
27	15	40	LYS
28	16	4	GLU
28	16	5	VAL
28	16	6	ARG
28	16	9	LEU
28	16	14	THR
28	16	19	ARG
28	16	29	ASN
28	16	35	GLU
28	16	47	THR
28	16	48	VAL
29	17	24	THR
29	17	43	THR
29	17	46	VAL
30	18	14	VAL
30	18	23	VAL
30	18	50	LEU
33	1b	8	LYS
33	1b	11	LEU
33	1b	12	GLU
33	1b	35	GLU
33	1b	37	ASN
33	1b	44	LEU
33	1b	54	THR
33	1b	60	ASP
33	1b	63	MET
33	1b	64	ARG
33	1b	74	LYS
33	1b	78	GLN
33	1b	112	VAL
33	1b	121	LEU
33	1b	127	ILE
33	1b	144	ARG
33	1b	196	LEU
33	1b	208	ILE
33	1b	215	LEU
33	1b	223	ILE
34	1c	3	ASN
34	1c	20	SER

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Mol	Chain	Res	Type
34	1c	46	GLU
34	1c	70	VAL
34	1c	77	ILE
34	1c	82	GLU
34	1c	89	GLU
34	1c	138	VAL
34	1c	178	LEU
34	1c	182	ILE
34	1c	190	ARG
34	1c	195	VAL
34	1c	196	LEU
34	1c	198	VAL
35	1d	3	ARG
35	1d	8	VAL
35	1d	19	LEU
35	1d	49	ARG
35	1d	70	ILE
35	1d	77	ASN
35	1d	100	ARG
35	1d	122	ARG
35	1d	135	LEU
35	1d	140	VAL
35	1d	148	VAL
35	1d	152	SER
35	1d	157	LEU
35	1d	158	ILE
35	1d	175	SER
35	1d	177	ASP
35	1d	178	VAL
35	1d	188	LEU
35	1d	194	LEU
35	1d	200	GLU
36	1e	10	MET
36	1e	20	GLN
36	1e	31	LEU
36	1e	41	VAL
36	1e	53	LEU
36	1e	63	ARG
36	1e	64	ARG
36	1e	79	GLU
36	1e	80	ILE
36	1e	82	VAL

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Mol	Chain	Res	Type
36	1e	91	LEU
37	1f	10	LEU
37	1f	21	LEU
37	1f	36	ARG
37	1f	43	LEU
37	1f	45	LEU
37	1f	55	ASP
37	1f	72	VAL
37	1f	75	LEU
37	1f	78	GLU
38	1g	16	LEU
38	1g	23	VAL
38	1g	24	THR
38	1g	32	ARG
38	1g	50	ILE
38	1g	61	VAL
38	1g	66	VAL
38	1g	72	ARG
38	1g	78	ARG
38	1g	90	GLU
38	1g	98	SER
38	1g	104	LEU
38	1g	113	GLU
38	1g	114	ARG
38	1g	115	ARG
39	1h	19	VAL
39	1h	39	LEU
39	1h	51	VAL
39	1h	52	ASP
39	1h	99	GLU
39	1h	112	LEU
39	1h	115	SER
39	1h	122	ARG
39	1h	133	LEU
40	1i	14	VAL
40	1i	17	VAL
40	1i	25	LYS
40	1i	38	GLN
40	1i	64	THR
40	1i	96	LEU
40	1i	97	LYS
40	1i	103	THR

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Mol	Chain	Res	Type
40	1i	128	ARG
41	1j	46	ARG
41	1j	49	VAL
41	1j	55	LYS
41	1j	81	THR
41	1j	92	THR
41	1j	94	VAL
41	1j	98	ILE
41	1j	100	THR
42	1k	48	ILE
42	1k	51	LYS
42	1k	87	THR
42	1k	98	LEU
42	1k	104	GLN
42	1k	112	THR
42	1k	114	VAL
42	1k	117	ASN
42	1k	123	LYS
43	1l	13	LYS
43	1l	18	VAL
43	1l	36	VAL
43	1l	43	VAL
43	1l	57	LYS
43	1l	62	SER
43	1l	78	GLN
43	1l	83	VAL
43	1l	97	ARG
43	1l	123	LYS
44	1m	3	ARG
44	1m	4	ILE
44	1m	14	ARG
44	1m	19	LEU
44	1m	43	THR
44	1m	49	THR
44	1m	54	VAL
44	1m	64	TRP
44	1m	67	GLU
44	1m	70	LEU
44	1m	86	CYS
44	1m	105	THR
45	1n	3	ARG
45	1n	6	LEU

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Mol	Chain	Res	Type
45	1n	13	THR
45	1n	18	VAL
45	1n	23	ARG
45	1n	56	VAL
46	1o	24	SER
46	1o	27	VAL
46	1o	39	LEU
46	1o	45	VAL
46	1o	84	LYS
46	1o	87	ILE
46	1o	88	ARG
47	1p	20	VAL
47	1p	21	VAL
47	1p	22	THR
47	1p	27	LYS
47	1p	45	THR
47	1p	60	LEU
47	1p	62	VAL
48	1q	15	MET
48	1q	52	LYS
48	1q	53	LEU
48	1q	60	ILE
49	1r	31	LEU
49	1r	54	ARG
49	1r	84	LYS
50	1s	6	LYS
50	1s	28	LYS
50	1s	32	LYS
50	1s	41	VAL
50	1s	51	VAL
50	1s	71	LEU
51	1t	9	ASN
51	1t	10	LEU
51	1t	13	LEU
51	1t	24	LEU
51	1t	84	LEU
51	1t	100	ILE
52	1u	6	ARG
3	2D	3	VAL
3	2D	34	VAL
3	2D	37	LEU
3	2D	61	LEU

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Mol	Chain	Res	Type
3	2D	73	VAL
3	2D	113	VAL
3	2D	116	GLN
3	2D	126	GLN
3	2D	140	THR
3	2D	141	VAL
3	2D	142	VAL
3	2D	155	LEU
3	2D	173	VAL
3	2D	193	VAL
3	2D	204	ILE
3	2D	221	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	267	SER
4	2E	7	VAL
4	2E	9	VAL
4	2E	12	THR
4	2E	14	ILE
4	2E	21	VAL
4	2E	34	VAL
4	2E	75	VAL
4	2E	82	ARG
4	2E	89	ASP
4	2E	90	THR
4	2E	93	VAL
4	2E	116	VAL
4	2E	119	ARG
4	2E	134	ILE
4	2E	145	LYS
4	2E	154	LYS
4	2E	181	LEU
4	2E	183	LEU
4	2E	184	VAL
5	2F	20	LEU
5	2F	24	LEU
5	2F	28	ILE
5	2F	33	LEU
5	2F	106	ARG
5	2F	116	ASP
5	2F	145	GLU
5	2F	175	THR

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Mol	Chain	Res	Type
5	2F	183	VAL
5	2F	192	LEU
5	2F	195	ASP
5	2F	201	VAL
6	2G	3	LEU
6	2G	19	LEU
6	2G	26	GLN
6	2G	28	VAL
6	2G	45	GLU
6	2G	51	ARG
6	2G	53	LEU
6	2G	58	GLN
6	2G	60	LEU
6	2G	70	VAL
6	2G	79	ASN
6	2G	88	ILE
6	2G	91	ARG
6	2G	111	LEU
6	2G	145	THR
6	2G	148	MET
6	2G	159	VAL
6	2G	168	GLU
6	2G	173	LEU
7	2H	3	ARG
7	2H	4	ILE
7	2H	6	ARG
7	2H	7	LEU
7	2H	16	SER
7	2H	43	VAL
7	2H	49	VAL
7	2H	71	LEU
7	2H	76	VAL
7	2H	80	SER
7	2H	85	LYS
7	2H	88	LEU
7	2H	103	LEU
7	2H	115	VAL
7	2H	124	GLU
7	2H	125	VAL
7	2H	129	THR
7	2H	130	ARG
8	2I	12	LEU

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Mol	Chain	Res	Type
8	2I	38	LEU
8	2I	58	LEU
8	2I	61	ARG
8	2I	69	LYS
8	2I	77	LEU
8	2I	79	ILE
8	2I	81	VAL
8	2I	82	ARG
8	2I	85	GLU
8	2I	87	LYS
8	2I	92	VAL
8	2I	107	VAL
8	2I	116	LEU
8	2I	117	GLU
8	2I	123	LEU
8	2I	126	TYR
8	2I	127	VAL
8	2I	144	VAL
9	2N	1	MET
9	2N	5	VAL
9	2N	9	VAL
9	2N	14	VAL
9	2N	15	LEU
9	2N	34	LEU
9	2N	38	HIS
9	2N	48	MET
9	2N	55	VAL
9	2N	62	VAL
9	2N	67	LEU
9	2N	68	GLU
9	2N	131	GLN
10	2O	14	THR
10	2O	47	ILE
10	2O	78	ARG
10	2O	98	VAL
10	2O	116	SER
11	2P	6	LEU
11	2P	7	ARG
11	2P	15	ARG
11	2P	45	LEU
11	2P	95	VAL
11	2P	125	VAL

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Mol	Chain	Res	Type
11	2P	147	LEU
12	2Q	75	THR
12	2Q	109	VAL
12	2Q	110	THR
12	2Q	115	MET
13	2R	6	SER
13	2R	15	SER
13	2R	24	GLN
13	2R	44	LEU
13	2R	95	THR
13	2R	100	LEU
13	2R	111	LEU
13	2R	114	VAL
14	2S	5	THR
14	2S	18	ILE
14	2S	23	ARG
14	2S	43	GLU
14	2S	50	SER
14	2S	58	LEU
14	2S	63	THR
14	2S	69	VAL
14	2S	82	ILE
14	2S	83	LYS
14	2S	110	LEU
15	2T	9	LEU
15	2T	28	VAL
15	2T	34	VAL
15	2T	39	ARG
15	2T	49	VAL
15	2T	50	ILE
15	2T	89	VAL
15	2T	96	ARG
15	2T	104	ASN
15	2T	110	ILE
16	2U	5	LYS
16	2U	8	VAL
16	2U	55	ARG
16	2U	60	LEU
16	2U	74	LEU
16	2U	95	LEU
16	2U	111	GLU
17	2V	7	THR

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Mol	Chain	Res	Type
17	2V	28	GLU
17	2V	32	THR
17	2V	33	VAL
17	2V	38	LEU
17	2V	46	VAL
17	2V	52	VAL
17	2V	56	SER
17	2V	61	VAL
17	2V	66	ARG
17	2V	79	VAL
17	2V	85	LYS
17	2V	98	GLU
17	2V	99	ILE
18	2W	11	ARG
18	2W	17	VAL
18	2W	63	ASP
18	2W	67	ASP
18	2W	78	GLU
18	2W	92	ARG
18	2W	96	ILE
19	2X	82	GLN
20	2Y	1	MET
20	2Y	3	VAL
20	2Y	11	ASP
20	2Y	14	LEU
20	2Y	37	VAL
20	2Y	49	VAL
20	2Y	72	VAL
20	2Y	85	VAL
20	2Y	88	LYS
20	2Y	91	GLU
20	2Y	97	ARG
20	2Y	99	CYS
20	2Y	107	ASP
21	2Z	5	LEU
21	2Z	31	ARG
21	2Z	42	VAL
21	2Z	53	ILE
21	2Z	56	VAL
21	2Z	66	SER
21	2Z	67	LEU
21	2Z	71	VAL

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Mol	Chain	Res	Type
21	2Z	91	LEU
21	2Z	96	VAL
21	2Z	100	VAL
21	2Z	121	HIS
21	2Z	124	ILE
21	2Z	126	VAL
21	2Z	136	PHE
21	2Z	137	ILE
21	2Z	144	LEU
21	2Z	154	ASP
21	2Z	155	LEU
21	2Z	161	VAL
21	2Z	170	THR
21	2Z	171	ILE
21	2Z	174	VAL
22	20	14	ARG
23	21	17	SER
23	21	59	THR
23	21	65	SER
23	21	78	LYS
23	21	82	LEU
23	21	91	LYS
23	21	92	LYS
24	22	12	GLU
24	22	19	VAL
24	22	59	ARG
25	23	54	VAL
25	23	59	VAL
26	24	15	ILE
26	24	22	ILE
26	24	27	THR
26	24	33	VAL
26	24	34	GLU
26	24	37	SER
26	24	49	PHE
26	24	50	VAL
26	24	59	PHE
26	24	63	TYR
26	24	67	TYR
26	24	68	ARG
27	25	40	LYS
27	25	55	ARG

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Mol	Chain	Res	Type
28	26	5	VAL
28	26	9	LEU
28	26	14	THR
28	26	32	ASN
28	26	45	LYS
28	26	48	VAL
29	27	11	LYS
29	27	24	THR
29	27	43	THR
29	27	46	VAL
30	28	3	LYS
30	28	6	THR
30	28	34	TRP
30	28	46	ARG
30	28	50	LEU
31	29	17	ILE
31	29	18	ARG
33	2b	9	GLU
33	2b	16	HIS
33	2b	67	THR
33	2b	71	VAL
33	2b	76	GLN
33	2b	79	ASP
33	2b	80	ILE
33	2b	94	ASN
33	2b	95	GLN
33	2b	107	THR
33	2b	108	ILE
33	2b	110	GLN
33	2b	112	VAL
33	2b	115	LEU
33	2b	118	LEU
33	2b	127	ILE
33	2b	136	VAL
33	2b	142	LEU
33	2b	164	VAL
33	2b	168	THR
33	2b	175	ARG
33	2b	185	ILE
33	2b	189	ASP
33	2b	197	VAL
33	2b	226	ARG

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Mol	Chain	Res	Type
33	2b	230	VAL
33	2b	236	TYR
34	2c	14	ILE
34	2c	15	THR
34	2c	30	ARG
34	2c	43	LEU
34	2c	46	GLU
34	2c	47	LEU
34	2c	49	SER
34	2c	55	VAL
34	2c	57	ILE
34	2c	69	HIS
34	2c	82	GLU
34	2c	91	LEU
34	2c	103	VAL
34	2c	105	GLU
34	2c	138	VAL
34	2c	152	ILE
34	2c	153	VAL
34	2c	173	VAL
34	2c	190	ARG
34	2c	195	VAL
34	2c	206	GLU
35	2d	47	ARG
35	2d	52	SER
35	2d	78	LEU
35	2d	81	GLU
35	2d	85	LYS
35	2d	86	LYS
35	2d	91	SER
35	2d	112	VAL
35	2d	118	ARG
35	2d	127	THR
35	2d	135	LEU
35	2d	150	GLU
35	2d	155	LEU
35	2d	156	GLU
35	2d	157	LEU
35	2d	158	ILE
35	2d	168	ARG
35	2d	175	SER
35	2d	186	LEU

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Mol	Chain	Res	Type
35	2d	188	LEU
35	2d	190	ASP
35	2d	193	ASP
35	2d	209	ARG
36	2e	9	LYS
36	2e	13	ILE
36	2e	16	THR
36	2e	20	GLN
36	2e	31	LEU
36	2e	41	VAL
36	2e	51	VAL
36	2e	55	VAL
36	2e	72	GLN
36	2e	82	VAL
36	2e	109	ILE
36	2e	115	VAL
36	2e	116	THR
36	2e	144	THR
37	2f	8	ILE
37	2f	15	ASP
37	2f	21	LEU
37	2f	40	VAL
37	2f	45	LEU
37	2f	63	TYR
37	2f	69	GLU
37	2f	83	ASP
37	2f	92	LYS
37	2f	94	GLN
38	2g	4	ARG
38	2g	9	VAL
38	2g	15	ASP
38	2g	24	THR
38	2g	45	ASP
38	2g	53	LYS
38	2g	75	VAL
38	2g	78	ARG
38	2g	79	ARG
38	2g	115	ARG
39	2h	26	VAL
39	2h	51	VAL
39	2h	52	ASP
39	2h	86	ILE

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Mol	Chain	Res	Type
39	2h	95	VAL
39	2h	99	GLU
39	2h	112	LEU
39	2h	119	LEU
39	2h	129	VAL
40	2i	12	GLU
40	2i	14	VAL
40	2i	27	THR
40	2i	35	GLU
40	2i	50	LEU
40	2i	51	ARG
40	2i	64	THR
40	2i	65	VAL
40	2i	66	ARG
40	2i	89	ASN
40	2i	109	VAL
40	2i	111	ARG
40	2i	113	LYS
41	2j	19	SER
41	2j	38	ILE
41	2j	67	THR
41	2j	72	VAL
41	2j	81	THR
41	2j	89	ASP
41	2j	97	GLU
41	2j	98	ILE
41	2j	100	THR
42	2k	14	VAL
42	2k	41	THR
42	2k	80	VAL
42	2k	87	THR
42	2k	105	VAL
42	2k	114	VAL
43	2l	8	ASN
43	2l	13	LYS
43	2l	18	VAL
43	2l	62	SER
43	2l	83	VAL
43	2l	100	ILE
44	2m	4	ILE
44	2m	15	VAL
44	2m	19	LEU

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Mol	Chain	Res	Type
44	2m	22	ILE
44	2m	32	GLU
44	2m	34	LEU
44	2m	47	ASP
44	2m	98	VAL
44	2m	102	ARG
44	2m	103	THR
44	2m	106	ASN
45	2n	3	ARG
45	2n	6	LEU
45	2n	18	VAL
45	2n	33	VAL
46	2o	22	THR
46	2o	39	LEU
46	2o	87	ILE
46	2o	88	ARG
47	2p	2	VAL
47	2p	11	SER
47	2p	20	VAL
47	2p	21	VAL
47	2p	27	LYS
47	2p	33	ILE
47	2p	42	ARG
47	2p	60	LEU
47	2p	61	SER
47	2p	67	THR
47	2p	73	LEU
48	2q	14	LYS
48	2q	60	ILE
48	2q	72	ARG
48	2q	73	VAL
48	2q	86	GLU
49	2r	37	VAL
49	2r	45	SER
49	2r	46	GLU
49	2r	47	THR
49	2r	82	THR
49	2r	84	LYS
50	2s	12	ASP
50	2s	27	GLU
50	2s	37	ARG
50	2s	39	THR

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Mol	Chain	Res	Type
50	2s	45	VAL
50	2s	49	ILE
50	2s	51	VAL
51	2t	19	SER
51	2t	31	SER
51	2t	41	ILE
52	2u	20	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (138) such sidechains are listed below:

Mol	Chain	Res	Type
4	1E	48	GLN
4	1E	54	GLN
4	1E	121	ASN
5	1F	69	HIS
9	1N	8	GLN
9	1N	94	HIS
12	1Q	12	GLN
13	1R	13	HIS
13	1R	31	HIS
14	1S	61	ASN
15	1T	84	GLN
16	1U	81	HIS
16	1U	94	ASN
18	1W	111	HIS
19	1X	31	HIS
20	1Y	6	HIS
21	1Z	34	ASN
21	1Z	73	GLN
21	1Z	151	HIS
23	11	56	GLN
24	12	9	GLN
25	13	32	GLN
26	14	40	HIS
33	1b	16	HIS
33	1b	40	HIS
33	1b	140	HIS
33	1b	212	GLN
34	1c	6	HIS
34	1c	123	GLN
34	1c	139	GLN
34	1c	162	GLN

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Mol	Chain	Res	Type
35	1d	77	ASN
35	1d	116	GLN
35	1d	123	HIS
35	1d	125	HIS
36	1e	38	GLN
36	1e	78	HIS
37	1f	13	ASN
37	1f	57	GLN
37	1f	73	ASN
37	1f	84	ASN
38	1g	13	GLN
38	1g	28	ASN
38	1g	86	GLN
38	1g	148	ASN
40	1i	31	GLN
40	1i	89	ASN
40	1i	124	GLN
41	1j	56	HIS
41	1j	68	HIS
43	1l	99	HIS
44	1m	12	ASN
44	1m	92	HIS
46	1o	9	GLN
46	1o	62	GLN
50	1s	47	HIS
50	1s	83	HIS
51	1t	73	HIS
3	2D	116	GLN
4	2E	48	GLN
5	2F	69	HIS
5	2F	160	ASN
5	2F	203	GLN
5	2F	204	ASN
6	2G	26	GLN
6	2G	40	ASN
6	2G	41	GLN
6	2G	132	ASN
8	2I	133	HIS
9	2N	8	GLN
9	2N	101	HIS
9	2N	133	GLN
11	2P	27	HIS

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Mol	Chain	Res	Type
12	2Q	12	GLN
12	2Q	57	HIS
13	2R	13	HIS
13	2R	50	HIS
13	2R	61	HIS
13	2R	71	GLN
14	2S	38	GLN
14	2S	84	GLN
14	2S	95	HIS
15	2T	43	GLN
15	2T	58	ASN
15	2T	84	GLN
16	2U	94	ASN
18	2W	62	HIS
21	2Z	50	GLN
21	2Z	55	HIS
22	20	70	GLN
25	23	32	GLN
26	24	46	GLN
27	25	22	HIS
31	29	20	HIS
33	2b	76	GLN
33	2b	94	ASN
33	2b	110	GLN
33	2b	135	GLN
33	2b	140	HIS
33	2b	224	GLN
34	2c	37	GLN
34	2c	98	ASN
34	2c	118	GLN
34	2c	123	GLN
34	2c	162	GLN
34	2c	170	GLN
35	2d	42	GLN
35	2d	77	ASN
35	2d	116	GLN
35	2d	119	GLN
35	2d	123	HIS
35	2d	125	HIS
37	2f	73	ASN
37	2f	84	ASN
38	2g	86	GLN

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Mol	Chain	Res	Type
40	2i	3	GLN
40	2i	58	HIS
40	2i	117	HIS
41	2j	13	HIS
41	2j	21	GLN
41	2j	33	GLN
41	2j	62	HIS
42	2k	22	HIS
42	2k	117	ASN
43	2l	80	HIS
44	2m	62	ASN
44	2m	77	ASN
45	2n	49	HIS
45	2n	52	GLN
46	2o	9	GLN
47	2p	13	HIS
47	2p	16	HIS
50	2s	23	ASN
50	2s	47	HIS
50	2s	69	HIS
50	2s	83	HIS
51	2t	18	GLN
51	2t	75	ASN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	442 (15%)	30 (1%)
1	2A	2791/2915 (95%)	474 (16%)	23 (0%)
2	1B	119/121 (98%)	10 (8%)	0
2	2B	118/121 (97%)	21 (17%)	0
32	1a	1497/1521 (98%)	243 (16%)	0
32	2a	1501/1521 (98%)	283 (18%)	0
53	1v	12/24 (50%)	1 (8%)	0
53	2v	12/24 (50%)	1 (8%)	0
54	1w	71/76 (93%)	25 (35%)	0
54	2w	68/76 (89%)	18 (26%)	0
55	1x	74/77 (96%)	11 (14%)	0
55	2x	74/77 (96%)	10 (13%)	0
56	1y	72/76 (94%)	36 (50%)	0
56	2y	70/76 (92%)	23 (32%)	0

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Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
All	All	9343/9620 (97%)	1598 (17%)	53 (0%)

All (1598) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	10	G
1	1A	12	U
1	1A	13	A
1	1A	15	G
1	1A	27	G
1	1A	34	C
1	1A	35	G
1	1A	36	G
1	1A	38	A
1	1A	45	C
1	1A	55	G
1	1A	58	G
1	1A	63	U
1	1A	71	A
1	1A	72	U
1	1A	74	A
1	1A	75	G
1	1A	84	A
1	1A	92	A
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	125	G
1	1A	154(A)	C
1	1A	181	A
1	1A	182	A
1	1A	196	A
1	1A	205	G
1	1A	215	G
1	1A	216	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	266	G

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Mol	Chain	Res	Type
1	1A	269	U
1	1A	271(C)	C
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(O)	C
1	1A	271(S)	G
1	1A	272(B)	G
1	1A	275	G
1	1A	279	C
1	1A	283	A
1	1A	311	A
1	1A	329	G
1	1A	330	A
1	1A	342	G
1	1A	352	G
1	1A	357	A
1	1A	363	G
1	1A	363(A)	A
1	1A	363(B)	G
1	1A	386	G
1	1A	396	G
1	1A	405	U
1	1A	411	G
1	1A	422	A
1	1A	428	A
1	1A	437	G
1	1A	444	C
1	1A	448	U
1	1A	451	C
1	1A	454	A
1	1A	456	C
1	1A	457	A
1	1A	481	G
1	1A	504	U
1	1A	505	A
1	1A	508	G
1	1A	509	C
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G

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Mol	Chain	Res	Type
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	574	C
1	1A	575	A
1	1A	586	A
1	1A	592	G
1	1A	594	U
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	634	C
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(E)	G
1	1A	652(F)	G
1	1A	652(T)	C
1	1A	669	G
1	1A	686	G
1	1A	730	C
1	1A	762	U
1	1A	764	A
1	1A	765	G
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	784	A
1	1A	785	G
1	1A	792	G
1	1A	805	G
1	1A	812	C
1	1A	819	A
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	866	A
1	1A	877	U

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Mol	Chain	Res	Type
1	1A	879	G
1	1A	880	G
1	1A	882	G
1	1A	883	G
1	1A	884	C
1	1A	885	C
1	1A	886	C
1	1A	887	A
1	1A	888	C
1	1A	890	A
1	1A	892	G
1	1A	894	C
1	1A	896	A
1	1A	897	C
1	1A	898	C
1	1A	900	A
1	1A	910	A
1	1A	914	C
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	953	A
1	1A	959	A
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	976	C
1	1A	983	A
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1025	G
1	1A	1026	U
1	1A	1033	U
1	1A	1034	G
1	1A	1038	C
1	1A	1040	C
1	1A	1044	G
1	1A	1046	A
1	1A	1047	G
1	1A	1048	A

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Mol	Chain	Res	Type
1	1A	1054	A
1	1A	1055	G
1	1A	1058	G
1	1A	1059	G
1	1A	1063	G
1	1A	1069	A
1	1A	1071	G
1	1A	1073	A
1	1A	1074	G
1	1A	1075	C
1	1A	1076	C
1	1A	1078	U
1	1A	1079	C
1	1A	1081	U
1	1A	1083	U
1	1A	1087	G
1	1A	1088	A
1	1A	1090	U
1	1A	1091	G
1	1A	1093	G
1	1A	1094	U
1	1A	1096	A
1	1A	1099	G
1	1A	1101	U
1	1A	1102	C
1	1A	1111	A
1	1A	1112	G
1	1A	1115	G
1	1A	1116	C
1	1A	1118	C
1	1A	1128	A
1	1A	1135	C
1	1A	1136	G
1	1A	1142	U
1	1A	1155	A
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

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Mol	Chain	Res	Type
1	1A	1220	A
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1313	U
1	1A	1345	C
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G
1	1A	1395	A
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	1445	A
1	1A	1450	G
1	1A	1455	G
1	1A	1467	C
1	1A	1468	C
1	1A	1482	G
1	1A	1493	C
1	1A	1494	A
1	1A	1500	G
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1539	G
1	1A	1540	U
1	1A	1543	C
1	1A	1558	A
1	1A	1559	G

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Mol	Chain	Res	Type
1	1A	1566	A
1	1A	1569	A
1	1A	1578	U
1	1A	1581	G
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1610	A
1	1A	1647	G
1	1A	1648	C
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
1	1A	1722	A
1	1A	1746	G
1	1A	1756	G
1	1A	1762	A
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1816	G
1	1A	1828	G
1	1A	1829	A
1	1A	1847	A
1	1A	1861	G
1	1A	1877	A
1	1A	1878	G
1	1A	1900	A
1	1A	1906	G
1	1A	1927	A
1	1A	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1941	C

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Mol	Chain	Res	Type
1	1A	1955	U
1	1A	1963	U
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1983	C
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2032	G
1	1A	2033	A
1	1A	2039	C
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2069	G
1	1A	2102	U
1	1A	2108	C
1	1A	2110	G
1	1A	2113	U
1	1A	2116	G
1	1A	2118	U
1	1A	2120	G
1	1A	2121	G
1	1A	2127	G
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2136	C
1	1A	2140	C
1	1A	2141	G
1	1A	2142	C
1	1A	2144	U
1	1A	2146	C
1	1A	2149	G

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Mol	Chain	Res	Type
1	1A	2150	U
1	1A	2151	G
1	1A	2156	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2161	C
1	1A	2162	G
1	1A	2165	G
1	1A	2166	G
1	1A	2171	A
1	1A	2172	U
1	1A	2173	A
1	1A	2181	G
1	1A	2182	G
1	1A	2183	C
1	1A	2184	G
1	1A	2189	U
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2218	U
1	1A	2219	G
1	1A	2225	A
1	1A	2235	G
1	1A	2238	G
1	1A	2239	G
1	1A	2268	A
1	1A	2269	A
1	1A	2273	A
1	1A	2280	G
1	1A	2283	C
1	1A	2287	A
1	1A	2305	A
1	1A	2307	G
1	1A	2308	G
1	1A	2320	A
1	1A	2325	G
1	1A	2334	G
1	1A	2347	C

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Mol	Chain	Res	Type
1	1A	2361	A
1	1A	2383	G
1	1A	2385	C
1	1A	2406	U
1	1A	2407	G
1	1A	2422	A
1	1A	2423	U
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2431	U
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2448	A
1	1A	2449	U
1	1A	2468	G
1	1A	2476	A
1	1A	2478	A
1	1A	2491	U
1	1A	2502	G
1	1A	2505	G
1	1A	2518	A
1	1A	2529	G
1	1A	2535	G
1	1A	2549	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2574	G
1	1A	2578	G
1	1A	2582	G
1	1A	2602	A
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2615	U
1	1A	2629	A
1	1A	2630	G
1	1A	2654	A
1	1A	2686	G

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Mol	Chain	Res	Type
1	1A	2689	U
1	1A	2690	C
1	1A	2691	C
1	1A	2702	U
1	1A	2703	C
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2758	A
1	1A	2765	A
1	1A	2766	G
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2792	G
1	1A	2802	G
1	1A	2803	C
1	1A	2820	A
1	1A	2821	A
1	1A	2835	A
1	1A	2872	G
1	1A	2876	G
1	1A	2892	A
1	1A	2894	G
1	1A	2895	U
2	1B	2	C
2	1B	15	A
2	1B	24	G
2	1B	56	G
2	1B	57	A
2	1B	65	C
2	1B	73	A
2	1B	85	G
2	1B	96	U
2	1B	110	G
32	1a	9	G
32	1a	31	G
32	1a	32	A
32	1a	39	G
32	1a	47	C

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Mol	Chain	Res	Type
32	1a	48	C
32	1a	50	A
32	1a	51	A
32	1a	52	G
32	1a	61	G
32	1a	76	C
32	1a	79	G
32	1a	91	C
32	1a	97	G
32	1a	98	G
32	1a	101	A
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	145	G
32	1a	147	G
32	1a	163	C
32	1a	174	C
32	1a	182	U
32	1a	189(F)	U
32	1a	189(J)	G
32	1a	195	A
32	1a	197	A
32	1a	202	U
32	1a	203	U
32	1a	204	U
32	1a	216	G
32	1a	220	G
32	1a	247	G
32	1a	248	C
32	1a	251	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	318	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	344	A
32	1a	348	G
32	1a	351	G
32	1a	352	C

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Mol	Chain	Res	Type
32	1a	353	A
32	1a	354	G
32	1a	367	U
32	1a	369	C
32	1a	372	C
32	1a	373	A
32	1a	384	G
32	1a	397	A
32	1a	398	C
32	1a	406	G
32	1a	412	A
32	1a	413	G
32	1a	422	C
32	1a	423	G
32	1a	424	G
32	1a	429	U
32	1a	430	A
32	1a	439	A
32	1a	442	C
32	1a	452	A
32	1a	457	C
32	1a	461	A
32	1a	470	C
32	1a	474	G
32	1a	485	G
32	1a	492	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	531	U
32	1a	532	A
32	1a	536	C
32	1a	547	A
32	1a	550	G
32	1a	559	A
32	1a	561	U
32	1a	562	C
32	1a	568	G
32	1a	572	A

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Mol	Chain	Res	Type
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	618	C
32	1a	630	G
32	1a	634	C
32	1a	653	A
32	1a	665	A
32	1a	666	G
32	1a	671	G
32	1a	687	A
32	1a	688	G
32	1a	695	A
32	1a	723	U
32	1a	724	G
32	1a	731	G
32	1a	734	G
32	1a	748	C
32	1a	749	C
32	1a	755	G
32	1a	766	A
32	1a	774	G
32	1a	777	A
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	796	C
32	1a	817	C
32	1a	825	G
32	1a	827	U
32	1a	828	A
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	859	A
32	1a	864	A
32	1a	870	U
32	1a	887	G
32	1a	902	G
32	1a	914	A
32	1a	926	G

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Mol	Chain	Res	Type
32	1a	927	G
32	1a	934	C
32	1a	935	A
32	1a	942	G
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	972	C
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	992	U
32	1a	993	G
32	1a	997	U
32	1a	1000	U
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1011	G
32	1a	1020	U
32	1a	1022	G
32	1a	1023	G
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(C)	G
32	1a	1031	G
32	1a	1039	C
32	1a	1044	A
32	1a	1054	C
32	1a	1063	C
32	1a	1065	U
32	1a	1066	C
32	1a	1068	G
32	1a	1081	G

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Mol	Chain	Res	Type
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1123	A
32	1a	1124	G
32	1a	1125	U
32	1a	1127	G
32	1a	1132	C
32	1a	1134	G
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
32	1a	1146	A
32	1a	1152	A
32	1a	1158	C
32	1a	1159	U
32	1a	1182	G
32	1a	1183	A
32	1a	1184	G
32	1a	1187	G
32	1a	1196	U
32	1a	1197	G
32	1a	1201	A
32	1a	1202	G
32	1a	1213	A
32	1a	1214	C
32	1a	1227	A
32	1a	1236	A
32	1a	1238	A
32	1a	1253	G
32	1a	1256	A
32	1a	1257	U
32	1a	1270	C
32	1a	1275	A
32	1a	1278	U
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1290	G
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U

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Mol	Chain	Res	Type
32	1a	1305	G
32	1a	1312	G
32	1a	1320	C
32	1a	1338	G
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1363(A)	A
32	1a	1379	G
32	1a	1397	C
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1446	U
32	1a	1447	A
32	1a	1456	G
32	1a	1492	A
32	1a	1494	G
32	1a	1499	A
32	1a	1503	A
32	1a	1504	G
32	1a	1506	U
32	1a	1517	G
32	1a	1519	MA6
32	1a	1529	G
32	1a	1530	G
32	1a	1532	U
53	1v	13	A
54	1w	2	C
54	1w	3	C
54	1w	6	G
54	1w	8	4SU
54	1w	9	A
54	1w	14	A
54	1w	19	G
54	1w	20	U
54	1w	21	A
54	1w	23	A
54	1w	24	G
54	1w	25	C
54	1w	27	G

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Mol	Chain	Res	Type
54	1w	46	7MG
54	1w	47	U
54	1w	48	C
54	1w	50	U
54	1w	60	U
54	1w	62	C
54	1w	66	U
54	1w	67	C
54	1w	68	C
54	1w	70	G
54	1w	73	A
54	1w	74	C
55	1x	9	G
55	1x	14	A
55	1x	16	C
55	1x	18	G
55	1x	19	G
55	1x	21	A
55	1x	47	U
55	1x	49	G
55	1x	61	C
55	1x	63	G
55	1x	69	C
56	1y	5	G
56	1y	6	G
56	1y	8	4SU
56	1y	9	A
56	1y	11	C
56	1y	13	C
56	1y	14	A
56	1y	19	G
56	1y	20	U
56	1y	21	A
56	1y	26	A
56	1y	28	G
56	1y	29	G
56	1y	30	G
56	1y	35	A
56	1y	37	MIA
56	1y	39	PSU
56	1y	40	C
56	1y	44	G

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Mol	Chain	Res	Type
56	1y	45	U
56	1y	46	7MG
56	1y	47	U
56	1y	48	C
56	1y	49	C
56	1y	52	G
56	1y	53	G
56	1y	57	G
56	1y	58	A
56	1y	59	U
56	1y	61	C
56	1y	62	C
56	1y	65	G
56	1y	66	U
56	1y	69	G
56	1y	70	G
56	1y	71	G
1	2A	12	U
1	2A	14	A
1	2A	15	G
1	2A	34	C
1	2A	35	G
1	2A	45	C
1	2A	49	A
1	2A	61	G
1	2A	64	A
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	84	A
1	2A	90	U
1	2A	94	C
1	2A	100	G
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	157	U
1	2A	181	A
1	2A	196	A
1	2A	199	A
1	2A	205	G

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Mol	Chain	Res	Type
1	2A	214	G
1	2A	216	A
1	2A	221	A
1	2A	222	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	232	G
1	2A	233	A
1	2A	248	G
1	2A	271(J)	C
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	271(O)	C
1	2A	272	G
1	2A	272(B)	G
1	2A	277	C
1	2A	278	A
1	2A	311	A
1	2A	317	G
1	2A	318	C
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	333	G
1	2A	352	G
1	2A	354	G
1	2A	363	G
1	2A	363(B)	G
1	2A	363(D)	G
1	2A	386	G
1	2A	396	G
1	2A	399	G
1	2A	403	U
1	2A	411	G
1	2A	412	A
1	2A	421	U
1	2A	434	U
1	2A	443	A
1	2A	444	C

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Mol	Chain	Res	Type
1	2A	454	A
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	480	A
1	2A	481	G
1	2A	494	G
1	2A	503	A
1	2A	504	U
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	529	A
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	563	G
1	2A	568	U
1	2A	573	G
1	2A	574	C
1	2A	575	A
1	2A	583	G
1	2A	586	A
1	2A	595	C
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(B)	G
1	2A	615	G
1	2A	627	A
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	669	G
1	2A	686	G
1	2A	717	G
1	2A	728	G
1	2A	730	C
1	2A	752	A

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Mol	Chain	Res	Type
1	2A	753	C
1	2A	774	A
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	790	C
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	819	A
1	2A	825	C
1	2A	827	U
1	2A	828	U
1	2A	857	C
1	2A	859	G
1	2A	874	G
1	2A	875	G
1	2A	877	U
1	2A	878	A
1	2A	879	G
1	2A	880	G
1	2A	884	C
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	893	C
1	2A	894	C
1	2A	895	U
1	2A	896	A
1	2A	900	A
1	2A	901	A
1	2A	904	C
1	2A	910	A
1	2A	914	C
1	2A	917	A
1	2A	932	G
1	2A	941	A
1	2A	945	A
1	2A	946	G

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Mol	Chain	Res	Type
1	2A	952	G
1	2A	953	A
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	996	A
1	2A	999	U
1	2A	1005	C
1	2A	1012	U
1	2A	1013	C
1	2A	1017	G
1	2A	1022	G
1	2A	1025	G
1	2A	1026	U
1	2A	1027	A
1	2A	1033	U
1	2A	1036	G
1	2A	1038	C
1	2A	1039	G
1	2A	1041	C
1	2A	1043	C
1	2A	1114	G
1	2A	1116	C
1	2A	1126	A
1	2A	1128	A
1	2A	1129	A
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1142(A)	A
1	2A	1144	G
1	2A	1148	A
1	2A	1169	G
1	2A	1171	G
1	2A	1210	A
1	2A	1211	U
1	2A	1212	G
1	2A	1220	A
1	2A	1236	G
1	2A	1244	G

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Mol	Chain	Res	Type
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1287	A
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1314	C
1	2A	1321	A
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	1373	A
1	2A	1379	A
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1410	G
1	2A	1412	A
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1427	A
1	2A	1428	C
1	2A	1437	C
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1455	G
1	2A	1460	A
1	2A	1461	G
1	2A	1463	C
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1490	A

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Mol	Chain	Res	Type
1	2A	1493	C
1	2A	1494	A
1	2A	1496	A
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1531	C
1	2A	1532	C
1	2A	1533	G
1	2A	1545	A
1	2A	1547	C
1	2A	1558	A
1	2A	1569	A
1	2A	1574	C
1	2A	1578	U
1	2A	1580	A
1	2A	1583	A
1	2A	1584	C
1	2A	1586	A
1	2A	1588	C
1	2A	1595	G
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1629	U
1	2A	1648	C
1	2A	1653	G
1	2A	1654	A
1	2A	1674	G
1	2A	1696	G
1	2A	1700	A
1	2A	1701	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1740	G
1	2A	1746	G
1	2A	1756	G
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G

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Mol	Chain	Res	Type
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1812	A
1	2A	1816	G
1	2A	1829	A
1	2A	1835	G
1	2A	1847	A
1	2A	1848	A
1	2A	1861	G
1	2A	1877	A
1	2A	1878	G
1	2A	1889	A
1	2A	1896	G
1	2A	1900	A
1	2A	1906	G
1	2A	1913	A
1	2A	1914	C
1	2A	1929	G
1	2A	1930	G
1	2A	1936	A
1	2A	1938	A
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
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	2033	A
1	2A	2035	G
1	2A	2036	C
1	2A	2043	C
1	2A	2044	C
1	2A	2055	C

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Mol	Chain	Res	Type
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2069	G
1	2A	2093	G
1	2A	2099	U
1	2A	2101	G
1	2A	2110	G
1	2A	2111	C
1	2A	2112	G
1	2A	2113	U
1	2A	2116	G
1	2A	2117	A
1	2A	2120	G
1	2A	2122	U
1	2A	2125	G
1	2A	2126	A
1	2A	2127	G
1	2A	2128	C
1	2A	2129	C
1	2A	2131	G
1	2A	2132	U
1	2A	2134	A
1	2A	2135	A
1	2A	2136	C
1	2A	2137	C
1	2A	2138	C
1	2A	2139	C
1	2A	2141	G
1	2A	2145	C
1	2A	2146	C
1	2A	2150	U
1	2A	2151	G
1	2A	2153	G
1	2A	2154	G
1	2A	2156	G
1	2A	2157	G
1	2A	2158	A
1	2A	2159	G
1	2A	2161	C
1	2A	2165	G
1	2A	2166	G

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Mol	Chain	Res	Type
1	2A	2167	U
1	2A	2168	G
1	2A	2172	U
1	2A	2176	A
1	2A	2178	C
1	2A	2183	C
1	2A	2185	C
1	2A	2189	U
1	2A	2192	G
1	2A	2193	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2225	A
1	2A	2238	G
1	2A	2239	G
1	2A	2267	A
1	2A	2275	C
1	2A	2278	A
1	2A	2280	G
1	2A	2283	C
1	2A	2287	A
1	2A	2288	A
1	2A	2298	A
1	2A	2305	A
1	2A	2308	G
1	2A	2319	G
1	2A	2320	A
1	2A	2325	G
1	2A	2327	A
1	2A	2334	G
1	2A	2335	A
1	2A	2336	A
1	2A	2346	A
1	2A	2347	C
1	2A	2354	G
1	2A	2376	A
1	2A	2383	G
1	2A	2385	C
1	2A	2403	C

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Mol	Chain	Res	Type
1	2A	2406	U
1	2A	2422	A
1	2A	2424	C
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2434	A
1	2A	2435	A
1	2A	2439	A
1	2A	2441	C
1	2A	2445	G
1	2A	2448	A
1	2A	2465	C
1	2A	2469	A
1	2A	2476	A
1	2A	2477	C
1	2A	2480	C
1	2A	2481	G
1	2A	2482	G
1	2A	2491	U
1	2A	2494	G
1	2A	2502	G
1	2A	2505	G
1	2A	2507	C
1	2A	2518	A
1	2A	2520	C
1	2A	2525	G
1	2A	2529	G
1	2A	2554	U
1	2A	2557	G
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2582	G
1	2A	2585	U
1	2A	2602	A
1	2A	2611	U
1	2A	2612	C
1	2A	2630	G
1	2A	2634	G
1	2A	2654	A
1	2A	2689	U

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Mol	Chain	Res	Type
1	2A	2690	C
1	2A	2702	U
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2718	G
1	2A	2726	U
1	2A	2733	A
1	2A	2751	G
1	2A	2759	G
1	2A	2764	A
1	2A	2765	A
1	2A	2766	G
1	2A	2778	A
1	2A	2789	C
1	2A	2793	G
1	2A	2794	C
1	2A	2802	G
1	2A	2803	C
1	2A	2807	G
1	2A	2820	A
1	2A	2821	A
1	2A	2830	G
1	2A	2835	A
1	2A	2872	G
1	2A	2892	A
1	2A	2894	G
1	2A	2897	U
2	2B	2	C
2	2B	8	U
2	2B	13	A
2	2B	17	C
2	2B	19	G
2	2B	33	G
2	2B	41	U
2	2B	42	C
2	2B	44	G
2	2B	56	G
2	2B	73	A
2	2B	74	U
2	2B	75	G

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Mol	Chain	Res	Type
2	2B	85	G
2	2B	88	C
2	2B	89	G
2	2B	106	G
2	2B	108	U
2	2B	110	G
2	2B	117	G
2	2B	120	A
32	2a	7	G
32	2a	9	G
32	2a	22	G
32	2a	32	A
32	2a	39	G
32	2a	41	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	66	G
32	2a	73	G
32	2a	88	A
32	2a	89	C
32	2a	101	A
32	2a	105	G
32	2a	116	A
32	2a	121	C
32	2a	131	C
32	2a	142	G
32	2a	143	A
32	2a	144	G
32	2a	162	A
32	2a	163	C
32	2a	182	U
32	2a	189	G
32	2a	189(E)	U
32	2a	189(F)	U
32	2a	189(J)	G
32	2a	190	U
32	2a	195	A
32	2a	197	A
32	2a	201	C
32	2a	202	U

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Mol	Chain	Res	Type
32	2a	204	U
32	2a	216	G
32	2a	217	C
32	2a	231	G
32	2a	247	G
32	2a	251	G
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	289	G
32	2a	316	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	345	C
32	2a	348	G
32	2a	350	G
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	355	C
32	2a	367	U
32	2a	372	C
32	2a	384	G
32	2a	388	G
32	2a	389	A
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	421	U
32	2a	423	G
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	441	A
32	2a	442	C
32	2a	452	A
32	2a	461	A
32	2a	470	C

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Mol	Chain	Res	Type
32	2a	475	G
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	527	7MG
32	2a	531	U
32	2a	532	A
32	2a	534	U
32	2a	547	A
32	2a	559	A
32	2a	562	C
32	2a	564	C
32	2a	568	G
32	2a	572	A
32	2a	573	A
32	2a	576	G
32	2a	577	G
32	2a	581	G
32	2a	596	C
32	2a	598	U
32	2a	601	C
32	2a	614	A
32	2a	630	G
32	2a	653	A
32	2a	665	A
32	2a	671	G
32	2a	687	A
32	2a	688	G
32	2a	723	U
32	2a	731	G
32	2a	749	C
32	2a	755	G
32	2a	763	G
32	2a	773	G
32	2a	774	G

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Mol	Chain	Res	Type
32	2a	777	A
32	2a	787	A
32	2a	793	U
32	2a	794	A
32	2a	812	C
32	2a	815	A
32	2a	817	C
32	2a	819	A
32	2a	821	G
32	2a	827	U
32	2a	828	A
32	2a	833	U
32	2a	840	C
32	2a	841	U
32	2a	851	G
32	2a	859	A
32	2a	887	G
32	2a	891	U
32	2a	902	G
32	2a	914	A
32	2a	926	G
32	2a	927	G
32	2a	934	C
32	2a	935	A
32	2a	958	A
32	2a	960	U
32	2a	961	U
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	992	U
32	2a	993	G
32	2a	997	U
32	2a	998	G
32	2a	999	C
32	2a	1001	A
32	2a	1001(A)	G
32	2a	1002	G

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Mol	Chain	Res	Type
32	2a	1003	G
32	2a	1004	A
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G
32	2a	1011	G
32	2a	1019	C
32	2a	1020	U
32	2a	1021	G
32	2a	1022	G
32	2a	1023	G
32	2a	1025	U
32	2a	1027	C
32	2a	1028	C
32	2a	1029	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1031	G
32	2a	1032	G
32	2a	1035	A
32	2a	1036	G
32	2a	1037	C
32	2a	1039	C
32	2a	1040	U
32	2a	1043	C
32	2a	1046	A
32	2a	1050	G
32	2a	1051	C
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1077	G
32	2a	1081	G
32	2a	1086	U
32	2a	1093	A
32	2a	1094	G
32	2a	1095	U
32	2a	1097	C
32	2a	1101	A
32	2a	1105	A
32	2a	1118	C
32	2a	1129	C

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Mol	Chain	Res	Type
32	2a	1130	A
32	2a	1133	G
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1140	C
32	2a	1141	C
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	1177	G
32	2a	1181	G
32	2a	1182	G
32	2a	1184	G
32	2a	1193	G
32	2a	1194	U
32	2a	1196	U
32	2a	1197	G
32	2a	1202	G
32	2a	1211	U
32	2a	1213	A
32	2a	1227	A
32	2a	1236	A
32	2a	1238	A
32	2a	1240	U
32	2a	1241	G
32	2a	1246	C
32	2a	1255	G
32	2a	1256	A
32	2a	1257	U
32	2a	1260	C
32	2a	1261	A
32	2a	1264	C
32	2a	1270	C
32	2a	1272	G
32	2a	1273	G
32	2a	1277	C
32	2a	1279	A

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Mol	Chain	Res	Type
32	2a	1280	A
32	2a	1281	U
32	2a	1287	A
32	2a	1289	A
32	2a	1299	A
32	2a	1302	U
32	2a	1306	A
32	2a	1310	G
32	2a	1323	G
32	2a	1340	A
32	2a	1347	G
32	2a	1353	G
32	2a	1357	A
32	2a	1363	C
32	2a	1363(A)	A
32	2a	1364	U
32	2a	1368	G
32	2a	1370	G
32	2a	1382	C
32	2a	1383	C
32	2a	1397	C
32	2a	1398	A
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1447	A
32	2a	1456	G
32	2a	1487	G
32	2a	1492	A
32	2a	1499	A
32	2a	1503	A
32	2a	1504	G
32	2a	1505	G
32	2a	1506	U
32	2a	1517	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	13	A
54	2w	3	C
54	2w	4	C

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Mol	Chain	Res	Type
54	2w	5	G
54	2w	8	4SU
54	2w	13	C
54	2w	14	A
54	2w	19	G
54	2w	22	G
54	2w	46	7MG
54	2w	48	C
54	2w	62	C
54	2w	63	G
54	2w	65	G
54	2w	68	C
54	2w	69	G
54	2w	70	G
54	2w	73	A
54	2w	74	C
55	2x	5	G
55	2x	6	G
55	2x	9	G
55	2x	18	G
55	2x	21	A
55	2x	31	G
55	2x	47	U
55	2x	61	C
55	2x	63	G
55	2x	69	C
56	2y	15	G
56	2y	19	G
56	2y	23	A
56	2y	25	C
56	2y	27	G
56	2y	37	MIA
56	2y	45	U
56	2y	47	U
56	2y	49	C
56	2y	52	G
56	2y	53	G
56	2y	54	5MU
56	2y	55	PSU
56	2y	56	C
56	2y	57	G
56	2y	58	A

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Mol	Chain	Res	Type
56	2y	59	U
56	2y	61	C
56	2y	65	G
56	2y	68	C
56	2y	69	G
56	2y	70	G
56	2y	73	A

All (53) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	196	A
1	1A	249	C
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	548	A
1	1A	685	A
1	1A	746	A
1	1A	764	A
1	1A	774	A
1	1A	827	U
1	1A	895	U
1	1A	974	G
1	1A	1047	G
1	1A	1065	U
1	1A	1067	A
1	1A	1174	A
1	1A	1176	G
1	1A	1379	A
1	1A	1442	G
1	1A	1508	A
1	1A	1992	G
1	1A	2134	A
1	1A	2181	G
1	1A	2183	C
1	1A	2406	U
1	1A	2422	A
1	1A	2430	A
1	1A	2629	A
1	1A	2689	U
1	2A	196	A

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Mol	Chain	Res	Type
1	2A	228	A
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	528	A
1	2A	752	A
1	2A	827	U
1	2A	856	C
1	2A	900	A
1	2A	1026	U
1	2A	1210	A
1	2A	1420	U
1	2A	1442	G
1	2A	1460	A
1	2A	1530	C
1	2A	1608	A
1	2A	1653	G
1	2A	1913	A
1	2A	1992	G
1	2A	2119	A
1	2A	2126	A
1	2A	2689	U

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

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
1	PSU	1A	1911	1	18,21,22	1.39	2 (11%)	21,30,33	2.17	4 (19%)
1	5MC	1A	1942	1	19,22,23	1.58	3 (15%)	26,32,35	1.20	2 (7%)
56	MIA	2y	37	56	21,24,32	1.61	3 (14%)	30,35,47	2.02	9 (30%)
54	MIA	2w	37	54	24,27,32	2.10	6 (25%)	32,39,47	2.87	12 (37%)
1	PSU	2A	1911	1	18,21,22	1.39	2 (11%)	21,30,33	2.00	4 (19%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
54	5MU	2w	54	54	19,22,23	1.45	5 (26%)	27,32,35	1.80	5 (18%)
32	5MC	2a	1400	32	19,22,23	1.67	3 (15%)	26,32,35	1.11	2 (7%)
55	PSU	2x	55	55	18,21,22	1.36	2 (11%)	21,30,33	1.94	4 (19%)
32	5MC	2a	1404	32	19,22,23	1.72	3 (15%)	26,32,35	1.11	2 (7%)
1	5MU	1A	1939	57,1	19,22,23	1.45	5 (26%)	27,32,35	2.39	8 (29%)
32	PSU	1a	516	32	18,21,22	1.35	2 (11%)	21,30,33	2.10	5 (23%)
32	5MC	1a	967	32	19,22,23	1.74	3 (15%)	26,32,35	1.12	3 (11%)
43	0TD	2l	92	43	8,9,10	4.50	1 (12%)	6,11,13	5.15	3 (50%)
56	7MG	2y	46	56	23,26,27	1.42	4 (17%)	27,39,42	2.64	7 (25%)
55	5MC	2x	32	55	19,22,23	1.59	3 (15%)	26,32,35	1.20	3 (11%)
1	5MU	2A	1939	57,1	19,22,23	1.38	5 (26%)	27,32,35	2.22	8 (29%)
54	PSU	1w	39	54	18,21,22	1.23	2 (11%)	21,30,33	2.33	4 (19%)
32	MA6	1a	1518	32	23,26,27	0.43	0	33,38,41	2.07	9 (27%)
32	5MC	1a	1404	32	19,22,23	1.71	3 (15%)	26,32,35	1.09	2 (7%)
32	MA6	2a	1519	32	23,26,27	0.44	0	33,38,41	2.14	8 (24%)
56	PSU	2y	55	56	18,21,22	1.30	2 (11%)	21,30,33	1.91	4 (19%)
32	4OC	1a	1402	32	20,23,24	0.75	0	25,32,35	0.92	1 (4%)
1	5MC	2A	1942	1	19,22,23	1.78	3 (15%)	26,32,35	1.21	3 (11%)
1	4OC	1A	1920	1	19,22,24	0.83	0	25,31,35	0.90	1 (4%)
56	4SU	2y	8	56	18,21,22	1.72	4 (22%)	25,30,33	2.36	6 (24%)
56	PSU	2y	39	56	18,21,22	1.48	2 (11%)	21,30,33	1.59	4 (19%)
54	5MU	1w	54	54	19,22,23	1.38	5 (26%)	27,32,35	2.07	6 (22%)
1	PSU	1A	1917	1	18,21,22	1.38	2 (11%)	21,30,33	2.16	4 (19%)
56	7MG	1y	46	56	23,26,27	1.39	3 (13%)	27,39,42	2.66	7 (25%)
1	PSU	1A	2605	57,1	18,21,22	1.43	2 (11%)	21,30,33	2.01	3 (14%)
1	5MU	1A	1915	1	19,22,23	1.41	4 (21%)	27,32,35	2.12	5 (18%)
32	5MC	2a	967	57,32	19,22,23	1.65	3 (15%)	26,32,35	1.11	2 (7%)
56	PSU	1y	55	56	18,21,22	1.42	2 (11%)	21,30,33	2.08	4 (19%)
54	PSU	2w	55	54	18,21,22	1.42	2 (11%)	21,30,33	1.96	4 (19%)
55	PSU	1x	55	55	18,21,22	1.39	2 (11%)	21,30,33	1.93	3 (14%)
1	2MU	1A	2552	1	19,22,24	1.26	3 (15%)	25,31,36	1.85	6 (24%)
32	MA6	2a	1518	32	23,26,27	0.44	0	33,38,41	2.07	9 (27%)
54	7MG	1w	46	54	23,26,27	1.38	3 (13%)	27,39,42	2.53	7 (25%)
1	PSU	2A	2605	1	18,21,22	1.41	3 (16%)	21,30,33	2.15	5 (23%)
55	5MU	2x	54	55	19,22,23	1.38	5 (26%)	27,32,35	2.16	6 (22%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
32	5MC	2a	1407	32	19,22,23	1.63	3 (15%)	26,32,35	1.22	3 (11%)
54	PSU	1w	55	54	18,21,22	1.42	2 (11%)	21,30,33	2.11	3 (14%)
55	31H	2x	76	55,57	31,34,35	1.24	3 (9%)	35,47,50	2.03	12 (34%)
55	31H	1x	76	55,57	31,34,35	1.23	3 (9%)	35,47,50	2.05	11 (31%)
32	4OC	2a	1402	57,32	20,23,24	0.78	0	25,32,35	1.14	2 (8%)
32	UR3	1a	1498	32	19,22,23	1.07	2 (10%)	26,32,35	1.89	6 (23%)
54	7MG	2w	46	54	23,26,27	1.32	3 (13%)	27,39,42	2.66	7 (25%)
1	5MC	2A	1962	57,1	19,22,23	1.77	3 (15%)	26,32,35	1.19	2 (7%)
32	MA6	1a	1519	32	23,26,27	0.44	0	33,38,41	2.06	8 (24%)
32	7MG	2a	527	57,32	23,26,27	1.32	4 (17%)	27,39,42	2.53	6 (22%)
54	MIA	1w	37	54	28,31,32	2.28	7 (25%)	38,44,47	2.80	12 (31%)
43	0TD	1l	92	43	8,9,10	4.36	1 (12%)	6,11,13	5.21	2 (33%)
32	7MG	1a	527	32	23,26,27	1.39	3 (13%)	27,39,42	2.53	6 (22%)
1	4OC	2A	1920	1	19,22,24	0.76	0	25,31,35	0.84	0
56	PSU	2y	32	56	18,21,22	1.36	2 (11%)	21,30,33	1.98	4 (19%)
32	5MC	1a	1400	32	19,22,23	1.55	3 (15%)	26,32,35	1.07	3 (11%)
1	OMG	1A	2251	57,1,55	23,26,27	1.25	3 (13%)	32,38,41	2.06	6 (18%)
56	5MU	2y	54	56	19,22,23	1.45	4 (21%)	27,32,35	1.93	7 (25%)
54	PSU	2w	39	54	18,21,22	1.32	2 (11%)	21,30,33	2.27	4 (19%)
1	5MC	1A	1962	1	19,22,23	1.66	3 (15%)	26,32,35	1.09	3 (11%)
54	F3N	2w	76	1,54	33,36,37	1.43	4 (12%)	41,51,54	1.74	9 (21%)
56	PSU	1y	39	56	18,21,22	1.37	2 (11%)	21,30,33	2.01	3 (14%)
32	5MC	1a	1407	32	19,22,23	1.60	2 (10%)	26,32,35	1.13	2 (7%)
56	MIA	1y	37	56	21,24,32	1.60	4 (19%)	30,35,47	2.01	6 (20%)
55	4SU	1x	8	55	18,21,22	2.14	5 (27%)	25,30,33	1.71	6 (24%)
1	5MU	2A	1915	57,1	19,22,23	1.43	6 (31%)	27,32,35	1.99	5 (18%)
54	F3N	1w	76	1,54	33,36,37	1.45	4 (12%)	41,51,54	1.69	7 (17%)
55	5MC	1x	32	55	19,22,23	1.60	3 (15%)	26,32,35	1.20	3 (11%)
32	2MG	1a	1207	32	23,26,27	1.28	3 (13%)	33,38,41	2.20	7 (21%)
1	PSU	2A	1917	1	18,21,22	1.43	3 (16%)	21,30,33	1.92	4 (19%)
32	2MG	2a	1207	32	23,26,27	1.23	2 (8%)	33,38,41	2.13	8 (24%)
56	4SU	1y	8	56	18,21,22	1.79	4 (22%)	25,30,33	2.24	5 (20%)
56	5MU	1y	54	56	19,22,23	1.40	4 (21%)	27,32,35	1.81	6 (22%)
1	2MA	2A	2503	57,1	22,25,26	1.54	5 (22%)	32,37,40	2.19	9 (28%)
55	4SU	2x	8	55	18,21,22	2.11	6 (33%)	25,30,33	1.77	7 (28%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
54	PSU	2w	32	54	18,21,22	1.35	2 (11%)	21,30,33	1.82	4 (19%)
1	2MA	1A	2503	57,1	22,25,26	1.42	3 (13%)	32,37,40	2.44	8 (25%)
55	5MU	1x	54	55	19,22,23	1.45	4 (21%)	27,32,35	1.92	8 (29%)
56	PSU	1y	32	56	18,21,22	1.34	2 (11%)	21,30,33	2.00	4 (19%)
32	PSU	2a	516	32	18,21,22	1.36	2 (11%)	21,30,33	1.99	3 (14%)
54	4SU	2w	8	54	18,21,22	1.62	4 (22%)	25,30,33	2.37	5 (20%)
1	OMG	2A	2251	57,1,55	23,26,27	1.25	4 (17%)	32,38,41	1.92	7 (21%)
54	PSU	1w	32	57,54	18,21,22	1.31	2 (11%)	21,30,33	1.96	3 (14%)
32	M2G	1a	966	32	24,27,28	1.31	3 (12%)	33,40,43	1.88	5 (15%)
54	4SU	1w	8	54	18,21,22	1.80	5 (27%)	25,30,33	2.09	4 (16%)
32	M2G	2a	966	32	24,27,28	1.32	4 (16%)	33,40,43	1.89	5 (15%)
1	2MU	2A	2552	57,1	19,22,24	1.15	2 (10%)	25,31,36	1.83	6 (24%)
32	UR3	2a	1498	32	19,22,23	1.10	2 (10%)	26,32,35	1.82	4 (15%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
56	MIA	2y	37	56	-	3/7/25/34	0/3/3/3
54	MIA	2w	37	54	-	2/11/29/34	0/3/3/3
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	0/7/25/26	0/2/2/2
1	5MU	1A	1939	57,1	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	32	-	1/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	1/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	3/7/12/14	-
56	7MG	2y	46	56	-	3/7/37/38	0/3/3/3
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
1	5MU	2A	1939	57,1	-	0/7/25/26	0/2/2/2
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/11/29/30	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	MA6	2a	1519	32	-	3/11/29/30	0/3/3/3
56	PSU	2y	55	56	-	3/7/25/26	0/2/2/2
32	4OC	1a	1402	32	-	2/9/29/30	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
1	4OC	1A	1920	1	-	0/9/27/30	0/2/2/2
56	4SU	2y	8	56	-	0/7/25/26	0/2/2/2
56	PSU	2y	39	56	-	0/7/25/26	0/2/2/2
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
56	7MG	1y	46	56	-	4/7/37/38	0/3/3/3
1	PSU	1A	2605	57,1	-	0/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	0/7/25/26	0/2/2/2
32	5MC	2a	967	57,32	-	0/7/25/26	0/2/2/2
56	PSU	1y	55	56	-	2/7/25/26	0/2/2/2
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2
1	2MU	1A	2552	1	-	0/9/27/28	0/2/2/2
32	MA6	2a	1518	32	-	0/11/29/30	0/3/3/3
54	7MG	1w	46	54	-	3/7/37/38	0/3/3/3
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
54	PSU	1w	55	54	-	0/7/25/26	0/2/2/2
55	31H	2x	76	55,57	-	3/22/40/41	0/3/3/3
55	31H	1x	76	55,57	-	3/22/40/41	0/3/3/3
32	4OC	2a	1402	57,32	-	2/9/29/30	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
54	7MG	2w	46	54	-	2/7/37/38	0/3/3/3
1	5MC	2A	1962	57,1	-	2/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	2/11/29/30	0/3/3/3
32	7MG	2a	527	57,32	-	3/7/37/38	0/3/3/3
54	MIA	1w	37	54	-	3/15/33/34	0/3/3/3
43	0TD	1l	92	43	-	1/7/12/14	-
32	7MG	1a	527	32	-	2/7/37/38	0/3/3/3
1	4OC	2A	1920	1	-	0/9/27/30	0/2/2/2
56	PSU	2y	32	56	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	1/7/25/26	0/2/2/2
1	OMG	1A	2251	57,1,55	-	0/9/27/28	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	5MU	2y	54	56	-	2/7/25/26	0/2/2/2
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	1	-	0/7/25/26	0/2/2/2
54	F3N	2w	76	1,54	-	0/19/37/38	0/4/4/4
56	PSU	1y	39	56	-	0/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
56	MIA	1y	37	56	-	2/7/25/34	0/3/3/3
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
1	5MU	2A	1915	57,1	-	0/7/25/26	0/2/2/2
54	F3N	1w	76	1,54	-	0/19/37/38	0/4/4/4
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	2/9/27/28	0/3/3/3
1	PSU	2A	1917	1	-	2/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	0/9/27/28	0/3/3/3
56	4SU	1y	8	56	-	2/7/25/26	0/2/2/2
56	5MU	1y	54	56	-	0/7/25/26	0/2/2/2
1	2MA	2A	2503	57,1	-	1/7/25/26	0/3/3/3
55	4SU	2x	8	55	-	0/7/25/26	0/2/2/2
54	PSU	2w	32	54	-	0/7/25/26	0/2/2/2
1	2MA	1A	2503	57,1	-	1/7/25/26	0/3/3/3
55	5MU	1x	54	55	-	0/7/25/26	0/2/2/2
56	PSU	1y	32	56	-	0/7/25/26	0/2/2/2
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
54	4SU	2w	8	54	-	0/7/25/26	0/2/2/2
1	OMG	2A	2251	57,1,55	-	1/9/27/28	0/3/3/3
54	PSU	1w	32	57,54	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/11/29/30	0/3/3/3
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/11/29/30	0/3/3/3
1	2MU	2A	2552	57,1	-	0/9/27/28	0/2/2/2
32	UR3	2a	1498	32	-	2/7/25/26	0/2/2/2

All (254) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-12.33	1.69	1.82
43	1l	92	0TD	CB-SB	-11.87	1.70	1.82
54	1w	37	MIA	C2-S10	-6.80	1.70	1.75
54	1w	37	MIA	C13-C14	6.72	1.52	1.32
54	2w	37	MIA	C2-S10	-6.67	1.70	1.75
1	2A	1942	5MC	C5-C4	6.62	1.49	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	967	5MC	C5-C4	6.47	1.49	1.44
1	2A	1962	5MC	C5-C4	6.43	1.49	1.44
32	2a	1404	5MC	C5-C4	6.20	1.48	1.44
32	2a	1400	5MC	C5-C4	6.10	1.48	1.44
32	1a	1404	5MC	C5-C4	6.00	1.48	1.44
1	1A	1962	5MC	C5-C4	5.98	1.48	1.44
32	2a	967	5MC	C5-C4	5.89	1.48	1.44
32	1a	1407	5MC	C5-C4	5.86	1.48	1.44
32	2a	1407	5MC	C5-C4	5.81	1.48	1.44
1	1A	1942	5MC	C5-C4	5.70	1.48	1.44
55	2x	32	5MC	C5-C4	5.59	1.48	1.44
55	1x	32	5MC	C5-C4	5.52	1.48	1.44
32	1a	1400	5MC	C5-C4	5.44	1.48	1.44
54	2w	37	MIA	C5-C4	5.12	1.48	1.39
56	1y	37	MIA	C5-C4	5.09	1.48	1.39
56	2y	37	MIA	C5-C4	5.08	1.48	1.39
54	1w	8	4SU	C4-S4	-4.87	1.60	1.68
56	2y	8	4SU	C4-S4	-4.86	1.60	1.68
55	1x	8	4SU	C4-N3	-4.80	1.32	1.37
55	2x	8	4SU	C4-S4	-4.80	1.60	1.68
1	2A	2503	2MA	C5-C4	4.77	1.47	1.39
56	1y	8	4SU	C4-S4	-4.76	1.60	1.68
55	1x	76	31H	C5-N7	-4.63	1.30	1.39
54	1w	37	MIA	C5-C4	4.61	1.47	1.39
54	1w	76	F3N	CB-CG	-4.52	1.40	1.51
56	2y	39	PSU	C6-C5	4.46	1.40	1.35
54	2w	8	4SU	C4-S4	-4.44	1.60	1.68
54	2w	76	F3N	CB-CG	-4.39	1.41	1.51
55	2x	8	4SU	C4-N3	-4.35	1.33	1.37
55	1x	8	4SU	C4-S4	-4.17	1.61	1.68
54	2w	76	F3N	C5-N7	-4.06	1.31	1.39
56	1y	55	PSU	C6-C5	4.03	1.39	1.35
54	2w	55	PSU	C6-C5	4.01	1.39	1.35
54	1w	55	PSU	C6-C5	4.00	1.39	1.35
54	1w	76	F3N	C5-N7	-3.98	1.31	1.39
1	1A	2605	PSU	C6-C5	3.97	1.39	1.35
56	1y	39	PSU	C6-C5	3.97	1.39	1.35
1	1A	2503	2MA	C5-C4	3.86	1.46	1.39
54	2w	32	PSU	C6-C5	3.77	1.39	1.35
54	2w	39	PSU	C6-C5	3.77	1.39	1.35
56	2y	32	PSU	C6-C5	3.76	1.39	1.35
1	1A	1917	PSU	C6-C5	3.76	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	2x	76	31H	C5-N7	-3.75	1.32	1.39
55	1x	8	4SU	C2-N3	-3.73	1.31	1.38
56	1y	32	PSU	C6-C5	3.73	1.39	1.35
55	1x	8	4SU	C5-C4	-3.72	1.38	1.42
56	2y	46	7MG	C5-C4	3.65	1.48	1.37
55	2x	55	PSU	C6-C5	3.64	1.39	1.35
55	2x	8	4SU	C5-C4	-3.63	1.38	1.42
32	1a	527	7MG	C4-N9	-3.62	1.33	1.37
32	2a	516	PSU	C6-C5	3.62	1.39	1.35
1	1A	1911	PSU	C6-C5	3.61	1.39	1.35
55	2x	76	31H	C5-C4	-3.58	1.32	1.39
56	1y	46	7MG	C5-C4	3.57	1.48	1.37
1	2A	2605	PSU	C6-C5	3.55	1.39	1.35
1	2A	1917	PSU	C6-C5	3.55	1.39	1.35
54	1w	32	PSU	C6-C5	3.50	1.39	1.35
55	1x	55	PSU	C6-C5	3.50	1.39	1.35
32	2a	527	7MG	C4-N9	-3.43	1.33	1.37
54	1w	46	7MG	C5-C4	3.36	1.48	1.37
1	2A	1911	PSU	C6-C5	3.34	1.39	1.35
32	2a	966	M2G	C5-C4	3.34	1.47	1.38
54	1w	46	7MG	C4-N9	-3.31	1.33	1.37
32	1a	1404	5MC	C6-C5	3.28	1.40	1.34
32	1a	527	7MG	C5-C4	3.27	1.47	1.37
54	2w	46	7MG	C5-C4	3.25	1.47	1.37
32	2a	1207	2MG	C5-C4	3.24	1.47	1.38
32	1a	516	PSU	C6-C5	3.24	1.38	1.35
32	2a	527	7MG	C5-C4	3.24	1.47	1.37
54	2w	46	7MG	C4-N9	-3.22	1.33	1.37
54	1w	8	4SU	C4-N3	-3.21	1.34	1.37
54	1w	76	F3N	C5-C4	-3.19	1.33	1.39
1	1A	2251	OMG	C5-C4	3.14	1.47	1.38
32	1a	966	M2G	C5-C4	3.13	1.47	1.38
32	1a	1207	2MG	C5-C4	3.09	1.47	1.38
1	2A	2251	OMG	C5-C4	3.04	1.47	1.38
54	1w	39	PSU	C6-C5	3.04	1.38	1.35
56	2y	55	PSU	C6-C5	3.01	1.38	1.35
56	2y	54	5MU	C2-N1	3.01	1.43	1.38
54	2w	76	F3N	C5-C4	-3.00	1.33	1.39
54	2w	37	MIA	C5-C6	2.99	1.49	1.41
1	2A	2251	OMG	C6-N1	-2.96	1.33	1.38
55	1x	54	5MU	C6-C5	2.95	1.39	1.34
32	2a	1404	5MC	C6-C5	2.93	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	2552	2MU	C4-N3	-2.93	1.33	1.38
32	1a	1400	5MC	C6-C5	2.92	1.39	1.34
54	2w	54	5MU	C6-C5	2.92	1.39	1.34
56	2y	37	MIA	C5-C6	2.92	1.49	1.41
56	1y	8	4SU	C2-N1	2.91	1.43	1.38
55	2x	32	5MC	C6-C5	2.91	1.39	1.34
32	2a	1400	5MC	C6-C5	2.91	1.39	1.34
32	2a	967	5MC	C6-C5	2.91	1.39	1.34
1	1A	1915	5MU	C4-N3	-2.88	1.33	1.38
54	1w	37	MIA	C5-C6	2.85	1.48	1.41
54	1w	54	5MU	C6-C5	2.85	1.39	1.34
56	1y	54	5MU	C6-C5	2.83	1.39	1.34
1	2A	1915	5MU	C6-C5	2.83	1.39	1.34
32	2a	1498	UR3	C2-N1	2.83	1.42	1.38
1	2A	1917	PSU	C4-N3	-2.82	1.33	1.38
1	2A	1962	5MC	C6-C5	2.82	1.39	1.34
56	1y	37	MIA	C5-C6	2.81	1.48	1.41
56	2y	8	4SU	C5-C4	-2.81	1.39	1.42
32	2a	966	M2G	C2-N2	2.80	1.40	1.35
32	1a	1207	2MG	C6-N1	-2.80	1.33	1.38
1	2A	1911	PSU	C4-N3	-2.79	1.33	1.38
1	2A	2503	2MA	C5-C6	2.79	1.48	1.41
1	1A	1915	5MU	C6-C5	2.79	1.39	1.34
55	1x	32	5MC	C6-C5	2.78	1.39	1.34
1	1A	1962	5MC	C6-N1	-2.78	1.33	1.38
32	1a	966	M2G	C2-N2	2.77	1.40	1.35
1	1A	1939	5MU	C4-N3	-2.76	1.33	1.38
1	1A	1939	5MU	C2-N3	-2.76	1.33	1.38
55	1x	54	5MU	C4-C5	2.75	1.49	1.44
32	1a	1498	UR3	C2-N1	2.73	1.42	1.38
1	2A	1942	5MC	C6-C5	2.72	1.39	1.34
32	1a	966	M2G	C6-N1	-2.71	1.33	1.38
56	2y	54	5MU	C6-C5	2.71	1.39	1.34
56	1y	8	4SU	C4-N3	-2.70	1.34	1.37
56	1y	8	4SU	C5-C4	-2.69	1.39	1.42
55	2x	8	4SU	C2-N3	-2.69	1.33	1.38
1	2A	1915	5MU	C4-N3	-2.69	1.33	1.38
1	2A	1939	5MU	C6-N1	-2.68	1.33	1.38
32	1a	1407	5MC	C6-C5	2.66	1.39	1.34
1	1A	2503	2MA	C5-N7	-2.63	1.34	1.39
55	2x	54	5MU	C4-N3	-2.63	1.33	1.38
54	2w	54	5MU	C4-N3	-2.63	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1w	8	4SU	C5-C4	-2.62	1.39	1.42
55	1x	76	31H	C5-C4	-2.61	1.34	1.39
56	2y	46	7MG	C8-N9	2.59	1.47	1.45
1	1A	1939	5MU	C6-C5	2.59	1.38	1.34
1	1A	1942	5MC	C6-C5	2.59	1.38	1.34
32	2a	1407	5MC	C6-C5	2.59	1.38	1.34
54	2w	8	4SU	C4-N3	-2.59	1.34	1.37
1	1A	1915	5MU	C2-N1	2.58	1.42	1.38
56	1y	46	7MG	C8-N9	2.58	1.47	1.45
55	2x	54	5MU	C6-C5	2.57	1.38	1.34
55	2x	8	4SU	C2-N1	2.57	1.42	1.38
54	2w	76	F3N	C5-C6	-2.57	1.33	1.41
1	2A	1915	5MU	C2-N1	2.56	1.42	1.38
56	2y	37	MIA	C8-N7	2.56	1.36	1.31
1	1A	1911	PSU	C4-N3	-2.55	1.34	1.38
1	1A	1917	PSU	C4-N3	-2.54	1.34	1.38
55	1x	54	5MU	C4-N3	-2.54	1.34	1.38
32	2a	516	PSU	C4-N3	-2.54	1.34	1.38
32	1a	967	5MC	C6-C5	2.54	1.38	1.34
54	1w	54	5MU	C4-N3	-2.54	1.34	1.38
55	2x	76	31H	C5-C6	-2.53	1.33	1.41
1	1A	1939	5MU	C6-N1	-2.53	1.33	1.38
54	2w	55	PSU	C4-N3	-2.51	1.34	1.38
1	2A	1939	5MU	C4-N3	-2.50	1.34	1.38
1	1A	1962	5MC	C6-C5	2.50	1.38	1.34
1	2A	2605	PSU	C4-N3	-2.49	1.34	1.38
1	1A	2605	PSU	C4-N3	-2.48	1.34	1.38
1	2A	2552	2MU	C4-N3	-2.48	1.34	1.38
1	2A	1962	5MC	C6-N1	-2.47	1.33	1.38
54	1w	46	7MG	C6-N1	-2.46	1.34	1.38
55	1x	8	4SU	O2-C2	2.46	1.27	1.23
56	2y	39	PSU	C4-N3	-2.45	1.34	1.38
32	1a	516	PSU	C4-N3	-2.45	1.34	1.38
54	1w	37	MIA	C8-N7	2.45	1.36	1.31
1	1A	2251	OMG	C6-N1	-2.44	1.34	1.38
54	2w	54	5MU	C2-N1	2.44	1.42	1.38
56	1y	54	5MU	C4-N3	-2.43	1.34	1.38
32	2a	1407	5MC	C6-N1	-2.42	1.33	1.38
54	2w	37	MIA	C5-N7	-2.42	1.34	1.39
56	1y	32	PSU	C4-N3	-2.41	1.34	1.38
1	2A	1939	5MU	C6-C5	2.41	1.38	1.34
55	2x	54	5MU	C2-N1	2.40	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	2503	2MA	C5-C6	2.40	1.47	1.41
55	1x	76	31H	C5-C6	-2.39	1.34	1.41
56	1y	37	MIA	C8-N7	2.39	1.36	1.31
56	2y	54	5MU	C4-N3	-2.39	1.34	1.38
56	2y	8	4SU	C4-N3	-2.39	1.35	1.37
55	2x	55	PSU	C4-N3	-2.39	1.34	1.38
56	1y	54	5MU	C2-N1	2.38	1.42	1.38
32	1a	967	5MC	C6-N1	-2.38	1.34	1.38
32	2a	1207	2MG	C6-N1	-2.38	1.34	1.38
55	1x	55	PSU	C4-N3	-2.38	1.34	1.38
56	2y	46	7MG	C6-N1	-2.35	1.34	1.38
56	2y	55	PSU	C4-N3	-2.35	1.34	1.38
56	1y	54	5MU	C4-C5	2.35	1.48	1.44
1	2A	2605	PSU	C2-N3	-2.34	1.33	1.37
54	2w	37	MIA	C2-N3	2.33	1.37	1.34
55	2x	8	4SU	O2-C2	2.33	1.27	1.23
54	1w	32	PSU	C4-N3	-2.32	1.34	1.38
56	2y	54	5MU	C4-C5	2.31	1.48	1.44
54	2w	32	PSU	C4-N3	-2.30	1.34	1.38
1	2A	1939	5MU	C4-C5	2.30	1.48	1.44
32	1a	527	7MG	C6-N1	-2.30	1.34	1.38
1	1A	1942	5MC	C6-N1	-2.29	1.34	1.38
32	2a	966	M2G	C5-N7	-2.28	1.34	1.39
54	1w	54	5MU	C4-C5	2.28	1.48	1.44
54	2w	54	5MU	C4-C5	2.28	1.48	1.44
56	2y	8	4SU	C2-N1	2.27	1.42	1.38
1	1A	1939	5MU	C4-C5	2.27	1.48	1.44
1	2A	1939	5MU	C2-N3	-2.27	1.34	1.38
54	1w	37	MIA	C4-N9	-2.27	1.33	1.37
1	2A	1942	5MC	C6-N1	-2.26	1.34	1.38
1	2A	1915	5MU	C4-C5	2.26	1.48	1.44
54	2w	8	4SU	C5-C4	-2.26	1.39	1.42
1	2A	2251	OMG	C5-N7	-2.25	1.34	1.39
55	2x	54	5MU	C6-N1	-2.25	1.34	1.38
56	2y	32	PSU	C4-N3	-2.25	1.34	1.38
55	1x	32	5MC	C6-N1	-2.24	1.34	1.38
32	2a	966	M2G	C6-N1	-2.24	1.34	1.38
55	1x	54	5MU	C2-N1	2.23	1.42	1.38
56	2y	46	7MG	C4-N9	-2.23	1.35	1.37
1	1A	1915	5MU	C2-N3	-2.23	1.34	1.38
56	1y	55	PSU	C4-N3	-2.22	1.34	1.38
1	2A	2503	2MA	C8-N7	2.22	1.36	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	1y	39	PSU	C4-N3	-2.22	1.34	1.38
32	2a	967	5MC	C6-N1	-2.21	1.34	1.38
1	1A	2552	2MU	C2-N3	-2.21	1.34	1.38
56	1y	46	7MG	C6-N1	-2.20	1.34	1.38
1	2A	2503	2MA	C4-N9	-2.20	1.33	1.37
54	2w	46	7MG	C6-N1	-2.19	1.34	1.38
54	1w	37	MIA	C5-N7	-2.19	1.35	1.39
54	1w	76	F3N	C5-C6	-2.18	1.34	1.41
32	2a	527	7MG	C5-C6	2.18	1.49	1.43
54	2w	54	5MU	C2-N3	-2.18	1.34	1.38
56	1y	37	MIA	C5-N7	-2.18	1.35	1.39
54	2w	39	PSU	C4-N3	-2.17	1.34	1.38
32	1a	1498	UR3	C6-C5	2.17	1.40	1.35
1	1A	2251	OMG	C5-N7	-2.17	1.34	1.39
54	1w	8	4SU	C2-N3	-2.17	1.34	1.38
54	1w	55	PSU	C4-N3	-2.17	1.34	1.38
1	2A	1917	PSU	C2-N3	-2.13	1.34	1.37
55	2x	32	5MC	C6-N1	-2.13	1.34	1.38
54	1w	54	5MU	C2-N1	2.13	1.41	1.38
32	2a	1400	5MC	C6-N1	-2.12	1.34	1.38
54	1w	8	4SU	C2-N1	2.12	1.41	1.38
54	2w	8	4SU	C2-N1	2.11	1.41	1.38
1	2A	2251	OMG	C4-N9	-2.11	1.32	1.38
1	1A	2552	2MU	C5-C4	2.11	1.48	1.43
32	1a	1404	5MC	C6-N1	-2.11	1.34	1.38
54	2w	37	MIA	C8-N7	2.09	1.35	1.31
54	1w	54	5MU	C2-N3	-2.07	1.34	1.38
1	2A	1915	5MU	C6-N1	-2.06	1.34	1.38
32	1a	1207	2MG	C2-N3	2.06	1.35	1.32
54	1w	39	PSU	C4-N3	-2.05	1.35	1.38
1	2A	1915	5MU	C2-N3	-2.05	1.34	1.38
1	2A	2503	2MA	C5-N7	-2.03	1.35	1.39
32	2a	1498	UR3	C6-C5	2.03	1.39	1.35
32	2a	527	7MG	C6-N1	-2.03	1.35	1.38
55	2x	54	5MU	C4-C5	2.03	1.48	1.44
32	2a	1404	5MC	C6-N1	-2.02	1.34	1.38
1	2A	2552	2MU	C5-C4	2.01	1.48	1.43
32	1a	1400	5MC	C6-N1	-2.01	1.34	1.38

All (454) bond angle outliers are listed below:

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	1l	92	0TD	CSB-SB-CB	12.10	124.11	102.36
43	2l	92	0TD	CSB-SB-CB	-11.78	81.18	102.36
54	1w	37	MIA	C12-C13-C14	-9.75	109.52	127.01
54	2w	37	MIA	C5-C4-N3	-9.54	117.14	127.18
56	1y	46	7MG	N9-C4-N3	9.38	139.21	125.46
56	2y	46	7MG	N9-C4-N3	9.21	138.96	125.46
54	2w	46	7MG	N9-C4-N3	8.88	138.48	125.46
54	1w	46	7MG	N9-C4-N3	8.66	138.15	125.46
32	1a	527	7MG	N9-C4-N3	8.59	138.04	125.46
32	2a	527	7MG	N9-C4-N3	8.29	137.61	125.46
54	2w	37	MIA	N3-C4-N9	7.91	137.03	126.99
1	1A	2503	2MA	C5-C4-N3	-7.83	118.93	127.18
54	1w	37	MIA	C5-C4-N3	-7.34	119.44	127.18
54	2w	8	4SU	C4-N3-C2	-7.29	120.33	127.31
1	2A	2503	2MA	C5-C4-N3	-7.29	119.50	127.18
32	1a	1207	2MG	C2-N3-C4	7.27	121.10	112.00
32	2a	1498	UR3	C4-N3-C2	-7.08	118.88	124.58
32	1a	1498	UR3	C4-N3-C2	-7.03	118.92	124.58
1	1A	2503	2MA	N3-C4-N9	6.93	135.79	126.99
1	2A	2605	PSU	N1-C2-N3	6.87	122.41	115.17
54	2w	39	PSU	N1-C2-N3	6.86	122.40	115.17
54	1w	39	PSU	N1-C2-N3	6.81	122.36	115.17
1	1A	1911	PSU	N1-C2-N3	6.67	122.20	115.17
56	2y	8	4SU	C4-N3-C2	-6.65	120.94	127.31
32	2a	1207	2MG	C2-N3-C4	6.54	120.19	112.00
1	1A	2251	OMG	C5-C4-N3	-6.50	118.04	128.39
1	1A	1917	PSU	N1-C2-N3	6.49	122.02	115.17
56	1y	55	PSU	N1-C2-N3	6.46	121.98	115.17
54	1w	55	PSU	N1-C2-N3	6.40	121.92	115.17
32	2a	966	M2G	C5-C4-N3	-6.36	118.27	128.39
56	1y	39	PSU	N1-C2-N3	6.33	121.85	115.17
1	1A	2605	PSU	N1-C2-N3	6.32	121.83	115.17
32	1a	516	PSU	N1-C2-N3	6.25	121.76	115.17
1	2A	1917	PSU	N1-C2-N3	6.22	121.73	115.17
56	1y	32	PSU	N1-C2-N3	6.18	121.69	115.17
1	2A	1911	PSU	N1-C2-N3	6.18	121.69	115.17
56	1y	37	MIA	C5-C4-N3	-6.17	118.22	126.72
32	2a	516	PSU	N1-C2-N3	6.07	121.57	115.17
54	1w	8	4SU	C4-N3-C2	-6.04	121.53	127.31
32	1a	966	M2G	C5-C4-N3	-6.02	118.81	128.39
54	1w	32	PSU	N1-C2-N3	6.01	121.51	115.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	2x	55	PSU	N1-C2-N3	5.97	121.47	115.17
55	1x	55	PSU	N1-C2-N3	5.95	121.44	115.17
1	2A	2251	OMG	C5-C4-N3	-5.93	118.95	128.39
32	1a	1207	2MG	C5-C4-N3	-5.92	118.97	128.39
1	2A	2503	2MA	N3-C4-N9	5.86	134.43	126.99
54	2w	55	PSU	N1-C2-N3	5.85	121.34	115.17
56	2y	32	PSU	N1-C2-N3	5.84	121.33	115.17
56	1y	8	4SU	C4-N3-C2	-5.80	121.76	127.31
32	2a	527	7MG	N9-C8-N7	-5.79	95.17	103.37
55	2x	76	31H	N1-C2-N3	-5.78	119.84	128.58
54	1w	76	F3N	N1-C2-N3	-5.71	119.94	128.58
54	2w	76	F3N	N1-C2-N3	-5.70	119.95	128.58
32	2a	1207	2MG	C5-C4-N3	-5.68	119.35	128.39
1	1A	1939	5MU	C4-N3-C2	-5.67	119.91	127.34
54	1w	8	4SU	C5-C4-N3	5.65	120.01	114.75
55	1x	76	31H	N1-C2-N3	-5.65	120.03	128.58
56	2y	8	4SU	C5-C4-N3	5.63	119.99	114.75
54	1w	46	7MG	N9-C8-N7	-5.57	95.49	103.37
32	1a	527	7MG	N9-C8-N7	-5.54	95.53	103.37
56	2y	37	MIA	C5-C4-N3	-5.53	119.10	126.72
1	1A	2251	OMG	C2-N3-C4	5.53	121.82	112.30
1	1A	1939	5MU	C5-C4-N3	5.52	120.12	115.32
56	2y	55	PSU	N1-C2-N3	5.47	120.94	115.17
54	2w	8	4SU	C5-C4-N3	5.45	119.82	114.75
1	2A	1939	5MU	C4-N3-C2	-5.44	120.20	127.34
56	1y	46	7MG	C5-C4-N3	-5.43	117.93	128.13
54	2w	46	7MG	N9-C8-N7	-5.41	95.71	103.37
54	2w	46	7MG	C5-C4-N3	-5.41	117.97	128.13
1	1A	2552	2MU	N3-C2-N1	5.41	121.93	114.89
54	2w	32	PSU	N1-C2-N3	5.35	120.81	115.17
56	1y	8	4SU	C5-C4-N3	5.34	119.72	114.75
55	2x	54	5MU	C4-N3-C2	-5.29	120.40	127.34
54	1w	39	PSU	C4-N3-C2	-5.28	119.10	126.37
32	1a	527	7MG	C5-C4-N3	-5.21	118.36	128.13
56	2y	46	7MG	C5-C4-N3	-5.18	118.41	128.13
1	2A	1915	5MU	N3-C2-N1	5.15	121.60	114.89
32	1a	1519	MA6	N1-C2-N3	-5.15	120.78	128.58
54	1w	37	MIA	N3-C4-N9	5.15	133.53	126.99
32	2a	966	M2G	N9-C4-N3	5.13	136.21	125.95
1	1A	1915	5MU	C5-C4-N3	5.07	119.73	115.32
55	2x	54	5MU	N3-C2-N1	5.05	121.47	114.89
54	2w	39	PSU	C4-N3-C2	-5.04	119.43	126.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	1x	54	5MU	N3-C2-N1	5.01	121.41	114.89
1	1A	1915	5MU	C4-N3-C2	-4.99	120.80	127.34
56	2y	46	7MG	N9-C8-N7	-4.98	96.32	103.37
32	2a	1519	MA6	N1-C2-N3	-4.98	121.04	128.58
56	2y	8	4SU	C5-C4-S4	-4.98	118.62	124.31
55	2x	76	31H	C5-C4-N3	-4.98	119.87	126.72
32	1a	1518	MA6	N1-C2-N3	-4.95	121.08	128.58
1	2A	1939	5MU	N3-C2-N1	4.92	121.30	114.89
32	2a	527	7MG	C5-C4-N3	-4.91	118.92	128.13
1	1A	1915	5MU	N3-C2-N1	4.91	121.28	114.89
56	1y	46	7MG	N9-C8-N7	-4.86	96.49	103.37
54	1w	54	5MU	C4-N3-C2	-4.86	120.97	127.34
55	2x	8	4SU	C1'-N1-C2	4.86	126.32	117.59
56	2y	39	PSU	N1-C2-N3	4.84	120.28	115.17
54	1w	54	5MU	N3-C2-N1	4.81	121.15	114.89
54	1w	46	7MG	C5-C4-N3	-4.81	119.11	128.13
54	2w	76	F3N	C5-C4-N3	-4.81	120.10	126.72
1	1A	1939	5MU	N3-C2-N1	4.80	121.14	114.89
56	1y	37	MIA	N3-C4-N9	4.79	135.31	127.17
32	2a	1518	MA6	C5-C4-N3	-4.79	120.13	126.72
32	2a	1518	MA6	N1-C2-N3	-4.78	121.34	128.58
1	2A	2552	2MU	N3-C2-N1	4.75	121.08	114.89
54	2w	37	MIA	C11-S10-C2	-4.75	98.69	102.25
1	1A	2251	OMG	N9-C4-N3	4.71	135.37	125.95
1	2A	1915	5MU	C4-N3-C2	-4.71	121.17	127.34
54	1w	54	5MU	C5-C4-N3	4.67	119.38	115.32
1	2A	2251	OMG	N9-C4-N3	4.63	135.22	125.95
1	2A	2251	OMG	C2-N3-C4	4.62	120.26	112.30
54	2w	8	4SU	N3-C2-N1	4.62	120.91	114.89
55	2x	54	5MU	C5-C4-N3	4.61	119.33	115.32
1	1A	1939	5MU	C5-C6-N1	-4.60	118.32	123.31
32	1a	1518	MA6	C5-C4-N3	-4.60	120.39	126.72
1	1A	1915	5MU	O4-C4-C5	-4.60	119.66	124.92
56	2y	54	5MU	C5-C4-N3	4.60	119.32	115.32
32	2a	1519	MA6	C5-C4-N3	-4.59	120.39	126.72
1	1A	1917	PSU	C4-N3-C2	-4.57	120.08	126.37
56	1y	46	7MG	C2-N3-C4	4.55	120.13	112.30
1	1A	2503	2MA	N6-C6-N1	4.55	123.16	117.03
54	1w	76	F3N	C5-C4-N3	-4.54	120.47	126.72
54	1w	37	MIA	C15-C14-C13	-4.53	109.05	122.66
32	1a	966	M2G	C2-N3-C4	4.51	120.85	112.51
32	2a	966	M2G	C2-N3-C4	4.51	120.84	112.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	1y	55	PSU	O2-C2-N1	-4.50	118.15	122.79
54	2w	46	7MG	C2-N3-C4	4.48	120.01	112.30
56	1y	8	4SU	C5-C4-S4	-4.48	119.19	124.31
54	1w	37	MIA	C6-C5-N7	4.45	137.28	132.43
54	1w	55	PSU	O2-C2-N1	-4.45	118.20	122.79
54	2w	54	5MU	N3-C2-N1	4.43	120.66	114.89
54	2w	8	4SU	C5-C4-S4	-4.42	119.26	124.31
56	2y	37	MIA	N3-C4-N9	4.40	134.66	127.17
55	1x	54	5MU	C4-N3-C2	-4.40	121.57	127.34
1	2A	1939	5MU	C5-C4-N3	4.40	119.15	115.32
1	1A	2552	2MU	C4-N3-C2	-4.38	121.17	126.61
1	1A	1911	PSU	C4-N3-C2	-4.38	120.34	126.37
54	1w	39	PSU	O2-C2-N1	-4.37	118.29	122.79
56	2y	46	7MG	C2-N3-C4	4.36	119.81	112.30
54	2w	37	MIA	C12-N6-C6	-4.35	118.81	122.85
56	2y	54	5MU	O4-C4-C5	-4.35	119.94	124.92
32	1a	516	PSU	C4-N3-C2	-4.35	120.39	126.37
1	2A	2552	2MU	C4-N3-C2	-4.34	121.23	126.61
55	2x	54	5MU	O4-C4-C5	-4.31	119.99	124.92
55	1x	76	31H	C5-C4-N3	-4.29	120.81	126.72
32	2a	527	7MG	C2-N3-C4	4.28	119.68	112.30
1	2A	2605	PSU	C4-N3-C2	-4.25	120.52	126.37
32	1a	966	M2G	N9-C4-N3	4.23	134.41	125.95
55	1x	8	4SU	O2-C2-N1	4.21	128.27	122.80
1	2A	1939	5MU	C5-C6-N1	-4.18	118.77	123.31
1	2A	1939	5MU	O4-C4-C5	-4.17	120.15	124.92
56	1y	32	PSU	C4-N3-C2	-4.15	120.66	126.37
32	1a	1518	MA6	C2-N1-C6	4.15	121.96	111.83
1	1A	1911	PSU	O2-C2-N1	-4.12	118.54	122.79
32	1a	527	7MG	C2-N3-C4	4.12	119.40	112.30
32	2a	1519	MA6	C4-C5-N7	-4.11	105.88	110.58
55	1x	8	4SU	C6-C5-C4	-4.10	116.40	119.95
32	2a	1519	MA6	C5-N7-C8	4.09	109.88	103.45
1	1A	2605	PSU	C4-N3-C2	-4.09	120.74	126.37
32	1a	1519	MA6	C5-C4-N3	-4.08	121.10	126.72
32	2a	516	PSU	C4-N3-C2	-4.08	120.75	126.37
32	1a	1207	2MG	N9-C4-N3	4.06	134.06	125.95
56	1y	54	5MU	N3-C2-N1	4.06	120.17	114.89
56	1y	54	5MU	C4-N3-C2	-4.05	122.03	127.34
1	2A	1911	PSU	C4-N3-C2	-4.04	120.81	126.37
56	2y	54	5MU	C4-N3-C2	-4.02	122.07	127.34
54	2w	54	5MU	C4-N3-C2	-4.01	122.08	127.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	1y	39	PSU	C4-N3-C2	-4.01	120.85	126.37
55	2x	55	PSU	C4-N3-C2	-4.00	120.86	126.37
1	1A	1939	5MU	O4-C4-C5	-3.98	120.36	124.92
32	1a	1519	MA6	C2-N1-C6	3.98	121.55	111.83
56	2y	32	PSU	O2-C2-N1	-3.97	118.70	122.79
32	1a	1207	2MG	C6-C5-N7	3.96	137.50	130.29
56	1y	8	4SU	C1'-N1-C2	3.96	124.70	117.59
56	2y	8	4SU	N3-C2-N1	3.92	119.99	114.89
54	2w	55	PSU	C4-N3-C2	-3.91	120.98	126.37
54	1w	54	5MU	O4-C4-C5	-3.91	120.44	124.92
55	1x	55	PSU	C4-N3-C2	-3.90	120.99	126.37
54	1w	46	7MG	C2-N3-C4	3.85	118.93	112.30
32	2a	1518	MA6	C5-N7-C8	3.85	109.50	103.45
54	2w	39	PSU	O2-C2-N1	-3.85	118.82	122.79
54	1w	8	4SU	C5-C4-S4	-3.84	119.92	124.31
56	1y	54	5MU	O4-C4-C5	-3.83	120.54	124.92
56	1y	54	5MU	C5-C4-N3	3.82	118.65	115.32
56	2y	55	PSU	O2-C2-N1	-3.82	118.84	122.79
55	2x	8	4SU	C5-C4-N3	3.82	118.31	114.75
32	1a	516	PSU	O2-C2-N1	-3.82	118.85	122.79
32	2a	1518	MA6	C2-N1-C6	3.81	121.14	111.83
1	2A	1915	5MU	C5-C4-N3	3.81	118.64	115.32
32	1a	1518	MA6	C4-C5-N7	-3.80	106.24	110.58
32	2a	1207	2MG	N9-C4-N3	3.80	133.55	125.95
54	1w	32	PSU	C4-N3-C2	-3.79	121.15	126.37
32	2a	1519	MA6	C2-N1-C6	3.78	121.06	111.83
32	2a	1518	MA6	C4-C5-N7	-3.78	106.27	110.58
32	1a	1518	MA6	C5-N7-C8	3.77	109.38	103.45
54	1w	32	PSU	O2-C2-N1	-3.77	118.90	122.79
56	2y	32	PSU	C4-N3-C2	-3.76	121.19	126.37
32	1a	1519	MA6	C4-C5-N7	-3.76	106.28	110.58
1	1A	1917	PSU	O2-C2-N1	-3.76	118.91	122.79
56	2y	37	MIA	N3-C2-N1	-3.76	122.89	128.58
55	2x	32	5MC	C5-C6-N1	-3.74	119.25	123.31
54	1w	55	PSU	C4-N3-C2	-3.74	121.22	126.37
56	1y	37	MIA	C2-N3-C4	3.73	120.94	111.83
1	2A	2552	2MU	O2-C2-N1	-3.73	117.94	122.80
56	2y	37	MIA	C2-N3-C4	3.71	120.88	111.83
54	1w	37	MIA	C4-C5-N7	-3.69	106.36	110.58
55	1x	76	31H	O4'-C1'-N9	3.69	115.18	108.09
1	2A	1942	5MC	C5-C6-N1	-3.68	119.31	123.31
32	1a	1519	MA6	C5-N7-C8	3.66	109.21	103.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	1917	PSU	C4-N3-C2	-3.66	121.33	126.37
32	2a	1519	MA6	C2-N3-C4	3.66	120.76	111.83
32	2a	1400	5MC	C5-C6-N1	-3.65	119.35	123.31
32	2a	1207	2MG	C6-C5-N7	3.64	136.92	130.29
54	2w	54	5MU	C5-C4-N3	3.64	118.49	115.32
32	1a	966	M2G	C6-C5-N7	3.63	136.90	130.29
54	2w	54	5MU	O4-C4-C5	-3.62	120.77	124.92
54	1w	8	4SU	N3-C2-N1	3.62	119.60	114.89
54	1w	37	MIA	C16-C14-C13	-3.61	111.82	122.66
1	2A	2503	2MA	C4-C5-N7	-3.60	106.46	110.58
32	2a	967	5MC	C5-C6-N1	-3.60	119.41	123.31
56	1y	8	4SU	N3-C2-N1	3.59	119.57	114.89
55	1x	76	31H	N9-C8-N7	-3.59	108.84	113.94
54	2w	32	PSU	C4-N3-C2	-3.59	121.43	126.37
32	2a	1518	MA6	C2-N3-C4	3.56	120.53	111.83
56	2y	54	5MU	N3-C2-N1	3.56	119.53	114.89
32	2a	1519	MA6	N9-C8-N7	-3.56	108.88	113.94
1	1A	1942	5MC	C5-C6-N1	-3.53	119.48	123.31
55	1x	32	5MC	C5-C6-N1	-3.51	119.50	123.31
54	1w	37	MIA	C2-N3-C4	3.50	121.47	112.29
56	1y	55	PSU	C4-N3-C2	-3.50	121.55	126.37
32	1a	1519	MA6	C2-N3-C4	3.50	120.37	111.83
56	2y	37	MIA	C4-C5-N7	-3.49	106.59	110.58
1	1A	2503	2MA	C4-N9-C8	3.49	109.41	105.74
56	1y	32	PSU	O2-C2-N1	-3.49	119.19	122.79
43	2l	92	0TD	OD2-CG-CB	3.48	120.68	113.15
54	2w	76	F3N	N9-C8-N7	-3.46	109.03	113.94
32	1a	1518	MA6	C2-N3-C4	3.42	120.19	111.83
56	1y	37	MIA	C4-C5-N7	-3.42	106.67	110.58
54	2w	37	MIA	C2-N3-C4	3.41	121.22	112.29
55	2x	54	5MU	C5-C6-N1	-3.39	119.63	123.31
54	1w	76	F3N	N9-C8-N7	-3.37	109.15	113.94
32	2a	1407	5MC	C5-C6-N1	-3.37	119.65	123.31
32	2a	1518	MA6	N9-C8-N7	-3.37	109.16	113.94
55	1x	54	5MU	C5-C4-N3	3.37	118.25	115.32
55	2x	76	31H	N9-C8-N7	-3.37	109.16	113.94
54	2w	37	MIA	C4-C5-N7	-3.36	106.74	110.58
56	1y	39	PSU	O2-C2-N1	-3.36	119.33	122.79
1	2A	1915	5MU	O4-C4-C5	-3.34	121.09	124.92
55	2x	76	31H	C2-N3-C4	3.34	120.00	111.83
54	2w	76	F3N	C2-N3-C4	3.33	119.97	111.83
1	1A	1915	5MU	C5-C6-N1	-3.30	119.73	123.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	1y	37	MIA	N3-C2-N1	-3.29	123.59	128.58
54	1w	76	F3N	C2-N3-C4	3.29	119.87	111.83
1	2A	2503	2MA	C4-N9-C8	3.28	109.18	105.74
32	1a	1518	MA6	N9-C8-N7	-3.26	109.31	113.94
55	1x	76	31H	C5-N7-C8	3.26	108.57	103.45
1	2A	1911	PSU	O2-C2-N1	-3.25	119.43	122.79
55	1x	76	31H	C2-N3-C4	3.25	119.77	111.83
32	2a	1498	UR3	C5-C4-N3	3.25	119.31	115.04
55	1x	8	4SU	C1'-N1-C2	3.23	123.39	117.59
1	1A	2251	OMG	C6-C5-N7	3.22	136.15	130.29
54	1w	54	5MU	C5-C6-N1	-3.21	119.83	123.31
32	2a	1404	5MC	C5-C4-N3	-3.19	118.48	121.75
1	2A	1962	5MC	C5-C6-N1	-3.17	119.87	123.31
55	2x	55	PSU	O2-C2-N1	-3.17	119.52	122.79
32	1a	1404	5MC	C5-C4-N3	-3.16	118.51	121.75
55	1x	55	PSU	O2-C2-N1	-3.16	119.53	122.79
56	2y	55	PSU	C6-C5-C4	-3.16	116.04	118.17
56	2y	55	PSU	C4-N3-C2	-3.14	122.04	126.37
55	2x	76	31H	C4'-O4'-C1'	-3.14	102.53	109.47
32	1a	1519	MA6	N9-C8-N7	-3.14	109.48	113.94
32	2a	516	PSU	O2-C2-N1	-3.11	119.58	122.79
54	2w	76	F3N	C5-N7-C8	3.07	108.27	103.45
32	1a	1207	2MG	C4-C5-N7	-3.06	105.82	110.67
55	2x	8	4SU	C6-C5-C4	-3.05	117.31	119.95
32	1a	1404	5MC	C5-C6-N1	-3.05	120.00	123.31
1	2A	1962	5MC	C5-C4-N3	-3.02	118.66	121.75
1	2A	1915	5MU	C5-C6-N1	-3.01	120.04	123.31
55	1x	54	5MU	C5-C6-N1	-3.01	120.04	123.31
32	1a	967	5MC	C5-C6-N1	-3.01	120.05	123.31
32	2a	1207	2MG	C4-C5-N7	-3.00	105.91	110.67
1	2A	1917	PSU	O2-C2-N1	-3.00	119.69	122.79
1	1A	1939	5MU	C5M-C5-C4	2.99	121.97	118.78
32	2a	1518	MA6	N3-C4-N9	2.98	132.23	127.17
32	1a	1407	5MC	C5-C4-N3	-2.97	118.71	121.75
43	1l	92	0TD	OD2-CG-CB	2.95	119.52	113.15
32	1a	1498	UR3	C5-C4-N3	2.93	118.90	115.04
32	1a	1407	5MC	C5-C6-N1	-2.93	120.13	123.31
1	2A	2251	OMG	C6-C5-N7	2.92	135.61	130.29
1	1A	2605	PSU	O2-C2-N1	-2.92	119.78	122.79
56	2y	46	7MG	C5-C4-N9	-2.91	102.61	106.33
54	2w	8	4SU	O2-C2-N1	-2.91	119.02	122.80
55	1x	32	5MC	C5-C4-N3	-2.88	118.80	121.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	1402	4OC	C6-C5-C4	2.87	120.46	117.00
32	1a	966	M2G	C4-C5-N7	-2.87	106.12	110.67
54	1w	76	F3N	C5-N7-C8	2.87	107.95	103.45
32	1a	1400	5MC	C5-C6-N1	-2.85	120.21	123.31
1	2A	2552	2MU	O4-C4-C5	-2.85	120.24	125.16
1	2A	2552	2MU	C5-C4-N3	2.85	118.79	114.80
1	1A	1962	5MC	C5-C6-N1	-2.84	120.23	123.31
32	1a	1518	MA6	C4-C5-C6	2.84	118.85	115.91
55	2x	76	31H	C5-N7-C8	2.84	107.91	103.45
54	2w	46	7MG	C5-C6-N1	2.84	115.93	110.94
1	2A	2503	2MA	C2-N1-C6	2.84	122.46	118.10
1	2A	2605	PSU	O2-C2-N1	-2.83	119.87	122.79
32	2a	1404	5MC	C5-C6-N1	-2.82	120.25	123.31
55	2x	76	31H	C5-C4-N9	2.81	108.88	105.81
56	1y	54	5MU	C5-C6-N1	-2.81	120.26	123.31
1	1A	1942	5MC	C5-C4-N3	-2.81	118.88	121.75
54	1w	46	7MG	C5-C4-N9	-2.81	102.74	106.33
1	1A	2251	OMG	C4-C5-N7	-2.80	106.23	110.67
1	1A	2503	2MA	C4-C5-N7	-2.80	107.38	110.58
1	1A	1962	5MC	C5-C4-N3	-2.79	118.89	121.75
54	2w	54	5MU	C5-C6-N1	-2.78	120.30	123.31
1	2A	1939	5MU	O2-C2-N1	-2.77	119.19	122.80
55	2x	32	5MC	C5-C4-N3	-2.77	118.92	121.75
54	2w	32	PSU	O2-C2-N1	-2.76	119.94	122.79
32	2a	1407	5MC	C5-C4-N3	-2.76	118.93	121.75
56	2y	39	PSU	C4-N3-C2	-2.74	122.59	126.37
55	1x	54	5MU	O4-C4-C5	-2.73	121.79	124.92
56	2y	54	5MU	C5-C6-N1	-2.73	120.35	123.31
1	1A	2503	2MA	C2-N1-C6	2.73	122.29	118.10
56	2y	8	4SU	C1'-N1-C2	2.72	122.48	117.59
56	1y	46	7MG	C5-C4-N9	-2.72	102.86	106.33
32	1a	1518	MA6	N3-C4-N9	2.71	131.78	127.17
32	1a	1400	5MC	C5-C4-N3	-2.71	118.98	121.75
56	2y	54	5MU	C1'-N1-C6	-2.70	116.70	121.15
54	2w	55	PSU	O2-C2-N1	-2.70	120.01	122.79
55	1x	54	5MU	C5M-C5-C4	2.69	121.66	118.78
1	1A	2552	2MU	C5-C4-N3	2.68	118.56	114.80
32	2a	1519	MA6	N3-C4-N9	2.67	131.71	127.17
32	1a	967	5MC	C5-C4-N3	-2.66	119.03	121.75
1	1A	1917	PSU	C5-C6-N1	-2.66	118.45	122.14
32	2a	1407	5MC	O2-C2-N3	-2.66	118.14	122.33
1	2A	2503	2MA	N6-C6-N1	2.65	120.60	117.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	1a	1498	UR3	C6-N1-C2	-2.64	119.64	121.80
54	2w	37	MIA	C5-N7-C8	2.63	107.58	103.45
1	2A	2605	PSU	C5-C6-N1	-2.62	118.50	122.14
32	2a	967	5MC	C5-C4-N3	-2.62	119.07	121.75
56	2y	37	MIA	C4-N9-C8	2.62	108.48	105.74
1	2A	1942	5MC	C5-C4-N3	-2.60	119.09	121.75
54	1w	54	5MU	O2-C2-N1	-2.60	119.42	122.80
56	2y	54	5MU	C1'-N1-C2	2.60	122.26	117.59
1	1A	2503	2MA	C5-N7-C8	2.60	107.53	103.45
54	1w	37	MIA	N3-C2-N1	-2.59	122.27	127.00
32	2a	1400	5MC	C5-C4-N3	-2.58	119.11	121.75
55	1x	54	5MU	O2-C2-N1	-2.57	119.45	122.80
54	2w	37	MIA	C1'-N9-C8	-2.55	121.43	127.09
55	1x	76	31H	N3-C4-N9	2.55	131.50	127.17
55	1x	76	31H	C4'-O4'-C1'	-2.55	103.84	109.47
32	2a	1518	MA6	C4-C5-C6	2.54	118.54	115.91
1	2A	2503	2MA	C5-N7-C8	2.54	107.44	103.45
54	2w	76	F3N	N3-C4-N9	2.54	131.48	127.17
32	2a	966	M2G	O6-C6-C5	-2.53	119.85	126.53
55	2x	76	31H	C6-C5-C4	2.53	120.63	117.18
32	1a	1498	UR3	C3U-N3-C4	2.52	121.37	117.87
1	1A	2552	2MU	O2-C2-N1	-2.52	119.52	122.80
56	2y	37	MIA	C5-N7-C8	2.52	107.41	103.45
32	2a	1207	2MG	N2-C2-N3	-2.51	117.31	120.51
32	1a	1498	UR3	C1'-N1-C2	2.51	121.15	117.04
1	1A	2503	2MA	N9-C8-N7	-2.50	110.40	113.94
56	1y	37	MIA	C5-N7-C8	2.49	107.37	103.45
32	2a	1207	2MG	N1-C2-N2	2.49	119.10	116.56
55	1x	8	4SU	C5-C4-N3	2.49	117.07	114.75
54	1w	37	MIA	C5-N7-C8	2.46	107.32	103.45
54	2w	32	PSU	C6-C5-C4	-2.46	116.51	118.17
55	2x	8	4SU	O2-C2-N1	2.46	125.99	122.80
32	2a	527	7MG	C5-C6-N1	2.45	115.26	110.94
55	2x	8	4SU	C1'-N1-C6	-2.45	115.54	120.78
32	2a	1498	UR3	C3U-N3-C4	2.45	121.26	117.87
54	1w	39	PSU	C5-C6-N1	-2.44	118.76	122.14
54	1w	76	F3N	N3-C4-N9	2.42	131.28	127.17
54	2w	55	PSU	C6-C5-C4	-2.42	116.54	118.17
56	2y	8	4SU	O2-C2-N1	-2.41	119.66	122.80
32	1a	1402	4OC	C6-C5-C4	2.41	119.90	117.00
55	2x	76	31H	N3-C4-N9	2.40	131.25	127.17
32	1a	527	7MG	C5-C6-N1	2.39	115.16	110.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2w	76	F3N	C5-C4-N9	2.39	108.42	105.81
1	1A	1962	5MC	CM5-C5-C6	-2.39	119.62	122.85
32	2a	966	M2G	C6-C5-N7	2.39	134.63	130.29
55	2x	54	5MU	O2-C2-N1	-2.38	119.70	122.80
1	2A	2251	OMG	O6-C6-C5	-2.38	120.26	126.53
54	1w	37	MIA	C2-N1-C6	2.37	122.04	117.54
55	2x	8	4SU	C6-N1-C2	-2.36	118.12	121.00
55	1x	8	4SU	C4-N3-C2	2.35	129.57	127.31
55	1x	76	31H	O2'-C2'-C3'	2.34	116.90	111.16
1	2A	2605	PSU	O2-C2-N3	-2.33	117.71	121.86
56	1y	46	7MG	C5-C6-N1	2.32	115.02	110.94
1	1A	1939	5MU	C5M-C5-C6	-2.31	119.72	122.85
55	1x	54	5MU	C5M-C5-C6	-2.31	119.72	122.85
1	1A	1920	4OC	O2-C2-N3	-2.31	118.69	122.33
32	1a	516	PSU	C5-C6-N1	-2.30	118.95	122.14
54	1w	37	MIA	C4-N9-C8	2.29	108.15	105.74
1	2A	2503	2MA	C6-C5-N7	2.29	136.50	132.09
56	1y	54	5MU	O2-C2-N1	-2.29	119.82	122.80
32	1a	1519	MA6	N3-C4-N9	2.28	131.04	127.17
1	1A	2552	2MU	O4-C4-C5	-2.28	121.24	125.16
1	2A	1911	PSU	C5-C6-N1	-2.27	118.98	122.14
54	2w	46	7MG	O6-C6-C5	-2.27	122.04	127.62
32	2a	1402	4OC	O2-C2-N3	-2.27	118.76	122.33
1	1A	2552	2MU	C2'-C1'-N1	-2.25	109.96	114.24
43	2l	92	0TD	OD1-CG-CB	-2.25	117.73	122.44
1	1A	1939	5MU	O2-C2-N1	-2.25	119.87	122.80
55	1x	8	4SU	O2-C2-N3	-2.24	117.36	121.49
56	2y	39	PSU	O2-C2-N3	-2.24	117.89	121.86
32	2a	527	7MG	C5-C4-N9	-2.24	103.47	106.33
1	2A	2552	2MU	C2'-C1'-N1	-2.24	110.00	114.24
54	1w	76	F3N	C5-C4-N9	2.24	108.25	105.81
56	2y	46	7MG	C5-C6-N1	2.23	114.86	110.94
56	2y	32	PSU	C6-C5-C4	-2.23	116.67	118.17
54	2w	76	F3N	C3'-N3'-C	-2.21	119.83	123.20
55	2x	32	5MC	O2-C2-N3	-2.21	118.85	122.33
56	2y	39	PSU	C6-C5-C4	-2.19	116.70	118.17
32	1a	967	5MC	CM5-C5-C6	-2.18	119.90	122.85
32	1a	1207	2MG	C8-N7-C5	2.18	108.14	104.26
1	2A	2503	2MA	N9-C8-N7	-2.18	110.85	113.94
54	2w	46	7MG	C5-C4-N9	-2.18	103.55	106.33
32	1a	516	PSU	O4'-C1'-C2'	2.17	108.16	105.15
32	2a	1207	2MG	CM2-N2-C2	-2.17	118.98	123.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	1x	76	31H	OCN-CN-N	-2.15	119.75	125.32
54	2w	37	MIA	C2-N1-C6	2.15	121.62	117.54
56	2y	37	MIA	C6-C5-N7	2.15	136.23	132.09
56	1y	32	PSU	C5-C6-N1	-2.15	119.16	122.14
54	2w	37	MIA	C4-C5-C6	2.15	118.56	116.78
54	2w	37	MIA	C4-N9-C8	2.15	107.99	105.74
32	1a	527	7MG	C5-C4-N9	-2.15	103.59	106.33
54	1w	46	7MG	C5-C6-N1	2.13	114.69	110.94
56	2y	46	7MG	O4'-C1'-N9	-2.13	106.40	109.30
54	2w	39	PSU	C5-C6-N1	-2.13	119.19	122.14
56	2y	37	MIA	C2-N1-C6	2.12	122.22	118.73
1	2A	2251	OMG	C4-C5-N7	-2.11	107.32	110.67
1	2A	1939	5MU	C5M-C5-C4	2.10	121.03	118.78
32	1a	1498	UR3	O2-C2-N3	-2.10	118.43	121.33
32	1a	1400	5MC	O2-C2-N3	-2.09	119.04	122.33
1	2A	1939	5MU	C5M-C5-C6	-2.08	120.03	122.85
54	2w	37	MIA	C6-C5-N7	2.08	134.70	132.43
1	1A	2251	OMG	C8-N7-C5	2.07	107.94	104.26
55	2x	76	31H	O2'-C2'-C3'	2.06	116.22	111.16
55	2x	8	4SU	O2-C2-N3	-2.06	117.69	121.49
1	2A	2251	OMG	C5-C6-N1	2.05	118.47	113.25
55	1x	32	5MC	O2-C2-N3	-2.05	119.10	122.33
32	1a	1207	2MG	N1-C2-N2	2.05	118.65	116.56
1	1A	1911	PSU	C5-C6-N1	-2.04	119.31	122.14
54	2w	76	F3N	C4-C5-N7	-2.04	108.25	110.58
56	1y	46	7MG	O6-C6-C5	-2.04	122.62	127.62
56	1y	55	PSU	O4'-C1'-C2'	2.03	107.97	105.15
1	2A	1917	PSU	C5-C6-N1	-2.03	119.32	122.14
55	1x	76	31H	CA-N-CN	-2.03	119.70	122.82
55	2x	55	PSU	C5-C6-N1	-2.03	119.32	122.14
55	2x	76	31H	OCN-CN-N	-2.02	120.09	125.32
32	2a	1498	UR3	O2-C2-N3	-2.02	118.54	121.33
1	2A	1942	5MC	CM5-C5-C6	-2.01	120.13	122.85
55	2x	76	31H	C4-C5-N7	-2.01	108.29	110.58
54	1w	46	7MG	O6-C6-C5	-2.00	122.70	127.62

There are no chirality outliers.

All (69) 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

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Mol	Chain	Res	Type	Atoms
32	1a	1519	MA6	O4'-C4'-C5'-O5'
1	2A	2251	OMG	C1'-C2'-O2'-CM2
54	1w	37	MIA	C12-C13-C14-C15
54	1w	37	MIA	C12-C13-C14-C16
55	1x	76	31H	C3'-C4'-C5'-O5'
56	1y	46	7MG	C4'-C5'-O5'-P
55	2x	76	31H	C3'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
56	2y	37	MIA	C3'-C4'-C5'-O5'
56	2y	54	5MU	C3'-C4'-C5'-O5'
56	2y	54	5MU	O4'-C4'-C5'-O5'
56	2y	55	PSU	C3'-C4'-C5'-O5'
55	2x	76	31H	CB-CG-SD-CE
1	2A	1917	PSU	O4'-C4'-C5'-O5'
32	2a	527	7MG	C3'-C4'-C5'-O5'
55	1x	76	31H	O4'-C4'-C5'-O5'
55	2x	76	31H	O4'-C4'-C5'-O5'
56	1y	37	MIA	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
56	2y	37	MIA	O4'-C4'-C5'-O5'
56	1y	37	MIA	O4'-C4'-C5'-O5'
56	2y	55	PSU	O4'-C4'-C5'-O5'
56	2y	46	7MG	O4'-C1'-N9-C4
32	2a	527	7MG	O4'-C4'-C5'-O5'
32	2a	1402	4OC	O4'-C4'-C5'-O5'
32	2a	1498	UR3	O4'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
56	1y	8	4SU	O4'-C4'-C5'-O5'
56	1y	46	7MG	C2'-C1'-N9-C8
56	2y	46	7MG	C2'-C1'-N9-C8
56	1y	8	4SU	C3'-C4'-C5'-O5'
43	1l	92	0TD	CG-CB-SB-CSB
32	1a	527	7MG	C3'-C4'-C5'-O5'
54	1w	46	7MG	C2'-C1'-N9-C8
32	2a	527	7MG	C4'-C5'-O5'-P
55	1x	76	31H	C4'-C5'-O5'-P
32	1a	516	PSU	O4'-C1'-C5-C4
56	1y	55	PSU	O4'-C1'-C5-C4
32	2a	1498	UR3	C3'-C4'-C5'-O5'
56	1y	46	7MG	C3'-C4'-C5'-O5'
54	1w	37	MIA	N6-C12-C13-C14
1	2A	1917	PSU	C3'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
54	2w	37	MIA	N3-C2-S10-C11
32	1a	527	7MG	C4'-C5'-O5'-P
56	2y	46	7MG	O4'-C1'-N9-C8
32	1a	967	5MC	O4'-C4'-C5'-O5'
32	1a	1400	5MC	O4'-C4'-C5'-O5'
54	2w	37	MIA	N1-C2-S10-C11
56	1y	46	7MG	O4'-C1'-N9-C8
32	2a	1519	MA6	C4'-C5'-O5'-P
54	1w	46	7MG	C4'-C5'-O5'-P
32	1a	1402	4OC	O4'-C4'-C5'-O5'
43	2l	92	0TD	CA-CB-SB-CSB
43	2l	92	0TD	SB-CB-CG-OD2
56	1y	55	PSU	O4'-C1'-C5-C6
56	2y	55	PSU	O4'-C1'-C5-C6
32	1a	1402	4OC	C3'-C2'-O2'-CM2
1	1A	2503	2MA	C4'-C5'-O5'-P
54	1w	46	7MG	O4'-C1'-N9-C8
43	2l	92	0TD	CG-CB-SB-CSB
1	2A	2503	2MA	O4'-C4'-C5'-O5'
1	2A	1962	5MC	C2'-C1'-N1-C6
54	2w	46	7MG	C2'-C1'-N9-C8
1	2A	1962	5MC	O4'-C1'-N1-C6
32	2a	1402	4OC	C3'-C4'-C5'-O5'
56	2y	37	MIA	C4'-C5'-O5'-P
54	2w	46	7MG	C3'-C4'-C5'-O5'

There are no ring outliers.

41 monomers are involved in 52 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
56	2y	37	MIA	1	0
54	2w	54	5MU	1	0
1	1A	1939	5MU	1	0
43	2l	92	0TD	1	0
56	2y	46	7MG	1	0
55	2x	32	5MC	1	0
54	1w	39	PSU	1	0
32	1a	1518	MA6	1	0
32	2a	1519	MA6	3	0
56	2y	55	PSU	3	0
32	1a	1402	4OC	2	0
56	2y	8	4SU	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
56	2y	39	PSU	3	0
1	1A	1917	PSU	1	0
1	1A	1915	5MU	1	0
32	2a	967	5MC	1	0
56	1y	55	PSU	1	0
54	2w	55	PSU	1	0
55	1x	55	PSU	1	0
1	1A	2552	2MU	1	0
32	2a	1518	MA6	3	0
55	2x	76	31H	1	0
55	1x	76	31H	3	0
32	2a	1402	4OC	2	0
32	1a	1498	UR3	1	0
54	2w	46	7MG	2	0
32	1a	1519	MA6	1	0
54	2w	76	F3N	2	0
56	1y	39	PSU	1	0
56	1y	37	MIA	2	0
54	1w	76	F3N	1	0
1	2A	1917	PSU	1	0
32	2a	1207	2MG	2	0
1	2A	2503	2MA	1	0
1	1A	2503	2MA	1	0
55	1x	54	5MU	1	0
54	2w	8	4SU	1	0
1	2A	2251	OMG	1	0
54	1w	8	4SU	1	0
32	2a	966	M2G	1	0
1	2A	2552	2MU	1	0

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 2812 ligands modelled in this entry, 2810 are monoatomic - leaving 2 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	$\# Z > 2$
60	SF4	2d	501	35	0,12,12	-	-	-		
60	SF4	1d	501	35	0,12,12	-	-	-		

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
60	SF4	2d	501	35	-	-	0/6/5/5
60	SF4	1d	501	35	-	-	0/6/5/5

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

2 monomers are involved in 2 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
60	2d	501	SF4	1	0
60	1d	501	SF4	1	0

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%)	-0.53	142 (4%) 34 30	15, 31, 83, 96	0
1	2A	2789/2915 (95%)	-0.00	117 (4%) 40 36	27, 50, 81, 93	0
2	1B	120/121 (99%)	-0.53	0 100 100	24, 41, 55, 75	0
2	2B	120/121 (99%)	0.68	5 (4%) 40 36	56, 66, 73, 77	0
3	1D	275/276 (99%)	-0.13	2 (0%) 84 81	17, 33, 46, 63	0
3	2D	275/276 (99%)	0.36	4 (1%) 72 68	26, 45, 56, 77	0
4	1E	204/206 (99%)	-0.07	0 100 100	16, 37, 54, 61	0
4	2E	204/206 (99%)	0.44	1 (0%) 87 85	25, 52, 63, 72	0
5	1F	203/210 (96%)	-0.07	1 (0%) 87 85	16, 37, 58, 70	0
5	2F	203/210 (96%)	0.53	4 (1%) 65 61	28, 59, 70, 80	0
6	1G	181/182 (99%)	0.45	3 (1%) 69 65	31, 50, 63, 73	0
6	2G	181/182 (99%)	1.29	23 (12%) 8 6	56, 67, 74, 79	0
7	1H	174/180 (96%)	0.47	2 (1%) 78 75	33, 48, 58, 64	0
7	2H	174/180 (96%)	1.45	35 (20%) 3 2	58, 70, 77, 83	0
8	1I	146/148 (98%)	0.91	11 (7%) 20 18	35, 63, 72, 76	0
8	2I	146/148 (98%)	1.66	45 (30%) 1 1	49, 67, 77, 83	0
9	1N	140/140 (100%)	-0.08	2 (1%) 73 70	23, 34, 53, 66	0
9	2N	140/140 (100%)	0.75	7 (5%) 34 30	36, 56, 68, 79	0
10	1O	122/122 (100%)	-0.18	0 100 100	24, 37, 51, 58	0
10	2O	122/122 (100%)	0.37	0 100 100	36, 49, 61, 66	0
11	1P	149/150 (99%)	0.12	1 (0%) 84 81	15, 40, 62, 69	0
11	2P	149/150 (99%)	0.84	8 (5%) 31 27	34, 58, 72, 81	0
12	1Q	141/141 (100%)	-0.11	0 100 100	18, 34, 47, 58	0
12	2Q	141/141 (100%)	0.84	6 (4%) 40 35	33, 55, 65, 68	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	1R	118/118 (100%)	-0.24	1 (0%) 82 80	22, 30, 41, 50	0
13	2R	118/118 (100%)	0.27	0 100 100	35, 45, 58, 61	0
14	1S	110/112 (98%)	0.06	0 100 100	30, 41, 52, 57	0
14	2S	110/112 (98%)	1.17	16 (14%) 6 5	51, 61, 68, 72	0
15	1T	131/146 (89%)	0.21	3 (2%) 61 57	29, 39, 61, 72	0
15	2T	131/146 (89%)	0.62	7 (5%) 32 28	42, 53, 66, 72	0
16	1U	116/118 (98%)	-0.38	0 100 100	18, 26, 42, 55	0
16	2U	116/118 (98%)	0.64	3 (2%) 57 52	38, 52, 63, 69	0
17	1V	101/101 (100%)	-0.21	0 100 100	16, 35, 48, 56	0
17	2V	101/101 (100%)	0.88	3 (2%) 52 48	37, 61, 68, 74	0
18	1W	112/113 (99%)	-0.31	1 (0%) 81 78	20, 28, 46, 75	0
18	2W	112/113 (99%)	0.37	1 (0%) 81 78	36, 45, 59, 74	0
19	1X	95/96 (98%)	-0.17	1 (1%) 78 75	21, 32, 51, 70	0
19	2X	95/96 (98%)	0.69	4 (4%) 40 36	39, 53, 66, 70	0
20	1Y	107/110 (97%)	0.23	1 (0%) 81 78	30, 44, 58, 68	0
20	2Y	107/110 (97%)	1.16	12 (11%) 10 8	51, 62, 72, 79	0
21	1Z	154/206 (74%)	0.69	12 (7%) 19 17	29, 53, 69, 72	0
21	2Z	160/206 (77%)	1.55	43 (26%) 1 1	55, 68, 76, 83	0
22	10	83/85 (97%)	-0.14	0 100 100	22, 29, 43, 54	0
22	20	83/85 (97%)	0.81	5 (6%) 27 24	36, 53, 61, 67	0
23	11	97/98 (98%)	0.21	2 (2%) 63 59	22, 40, 60, 66	0
23	21	97/98 (98%)	0.84	6 (6%) 26 23	36, 52, 66, 70	0
24	12	70/72 (97%)	0.20	0 100 100	28, 43, 51, 58	0
24	22	70/72 (97%)	0.91	1 (1%) 73 70	53, 60, 67, 72	0
25	13	59/60 (98%)	-0.17	1 (1%) 69 65	17, 31, 53, 67	0
25	23	59/60 (98%)	0.61	1 (1%) 69 65	48, 56, 71, 78	0
26	14	69/71 (97%)	1.01	13 (18%) 3 2	43, 64, 77, 82	0
26	24	69/71 (97%)	1.77	25 (36%) 1 1	66, 73, 81, 85	0
27	15	59/60 (98%)	-0.37	0 100 100	17, 28, 43, 54	0
27	25	59/60 (98%)	0.24	2 (3%) 48 43	32, 45, 57, 72	0
28	16	53/54 (98%)	-0.21	0 100 100	27, 35, 48, 51	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	26	53/54 (98%)	0.69	2 (3%) 44 39	42, 52, 58, 61	0
29	17	48/49 (97%)	-0.25	0 100 100	17, 24, 45, 53	0
29	27	48/49 (97%)	0.15	1 (2%) 63 59	29, 37, 54, 66	0
30	18	64/65 (98%)	-0.41	0 100 100	22, 29, 37, 43	0
30	28	64/65 (98%)	0.56	0 100 100	38, 49, 54, 58	0
31	19	37/37 (100%)	-0.07	0 100 100	27, 35, 44, 48	0
31	29	37/37 (100%)	1.08	4 (10%) 11 9	48, 57, 64, 65	0
32	1a	1488/1521 (97%)	0.14	32 (2%) 62 58	28, 55, 80, 91	0
32	2a	1491/1521 (98%)	0.51	56 (3%) 44 39	44, 66, 82, 95	0
33	1b	231/256 (90%)	1.12	33 (14%) 6 5	53, 64, 74, 80	0
33	2b	231/256 (90%)	1.52	59 (25%) 1 1	63, 72, 77, 82	0
34	1c	206/239 (86%)	0.85	9 (4%) 39 34	45, 58, 69, 75	0
34	2c	206/239 (86%)	1.34	33 (16%) 5 4	61, 71, 76, 82	0
35	1d	208/209 (99%)	0.75	9 (4%) 40 35	43, 57, 66, 71	0
35	2d	208/209 (99%)	1.38	39 (18%) 3 2	55, 64, 72, 76	0
36	1e	148/162 (91%)	0.55	2 (1%) 73 70	41, 54, 65, 75	0
36	2e	148/162 (91%)	1.07	14 (9%) 14 12	58, 66, 71, 75	0
37	1f	100/101 (99%)	0.63	4 (4%) 42 38	43, 52, 65, 69	0
37	2f	100/101 (99%)	0.88	3 (3%) 52 48	51, 59, 67, 70	0
38	1g	155/156 (99%)	0.87	13 (8%) 17 15	49, 61, 73, 84	0
38	2g	155/156 (99%)	1.37	30 (19%) 3 2	61, 69, 75, 79	0
39	1h	137/138 (99%)	0.64	3 (2%) 62 58	46, 56, 63, 70	0
39	2h	137/138 (99%)	1.00	9 (6%) 24 21	57, 67, 72, 77	0
40	1i	127/128 (99%)	1.00	11 (8%) 16 14	43, 62, 71, 78	0
40	2i	127/128 (99%)	1.73	44 (34%) 1 1	62, 71, 76, 79	0
41	1j	97/105 (92%)	1.14	14 (14%) 6 5	45, 64, 72, 79	0
41	2j	96/105 (91%)	1.74	34 (35%) 1 1	65, 72, 77, 78	0
42	1k	114/129 (88%)	0.67	1 (0%) 81 78	34, 58, 67, 71	0
42	2k	114/129 (88%)	1.01	11 (9%) 13 11	50, 63, 70, 72	0
43	1l	121/132 (91%)	0.40	4 (3%) 49 45	37, 45, 57, 65	0
43	2l	121/132 (91%)	0.69	6 (4%) 34 30	46, 56, 63, 66	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	1m	123/126 (97%)	0.89	8 (6%) 25 22	43, 57, 65, 77	0
44	2m	122/126 (96%)	1.73	42 (34%) 1 1	60, 70, 74, 76	0
45	1n	60/61 (98%)	0.69	3 (5%) 34 30	42, 53, 60, 63	0
45	2n	60/61 (98%)	2.07	27 (45%) 0 0	60, 70, 75, 76	0
46	1o	88/89 (98%)	0.62	1 (1%) 78 75	35, 54, 64, 66	0
46	2o	88/89 (98%)	1.11	11 (12%) 8 6	46, 63, 70, 74	0
47	1p	82/88 (93%)	1.13	12 (14%) 6 4	47, 60, 66, 71	0
47	2p	82/88 (93%)	0.94	5 (6%) 27 23	52, 60, 67, 74	0
48	1q	99/105 (94%)	0.84	3 (3%) 52 48	45, 58, 65, 68	0
48	2q	99/105 (94%)	1.00	11 (11%) 10 8	56, 63, 70, 74	0
49	1r	68/88 (77%)	0.49	1 (1%) 72 68	45, 55, 64, 66	0
49	2r	68/88 (77%)	1.04	3 (4%) 39 34	56, 64, 72, 76	0
50	1s	83/93 (89%)	0.97	4 (4%) 35 31	48, 58, 67, 72	0
50	2s	83/93 (89%)	1.53	18 (21%) 2 2	63, 71, 75, 81	0
51	1t	96/106 (90%)	1.16	13 (13%) 7 5	52, 60, 67, 75	0
51	2t	96/106 (90%)	1.04	13 (13%) 7 5	48, 60, 70, 76	0
52	1u	23/27 (85%)	0.96	1 (4%) 40 35	49, 56, 63, 66	0
52	2u	23/27 (85%)	1.62	7 (30%) 1 1	64, 70, 72, 79	0
53	1v	13/24 (54%)	0.49	2 (15%) 5 4	36, 41, 79, 87	0
53	2v	13/24 (54%)	1.21	4 (30%) 1 1	55, 63, 85, 91	0
54	1w	66/76 (86%)	0.99	12 (18%) 3 2	23, 71, 84, 89	0
54	2w	64/76 (84%)	1.02	8 (12%) 8 6	37, 78, 85, 90	0
55	1x	71/77 (92%)	0.05	1 (1%) 73 70	19, 50, 69, 82	0
55	2x	71/77 (92%)	0.54	1 (1%) 73 70	32, 65, 75, 84	0
56	1y	67/76 (88%)	1.59	13 (19%) 3 2	55, 85, 89, 92	0
56	2y	66/76 (86%)	1.66	15 (22%) 2 2	64, 86, 90, 91	0
All	All	20871/21748 (95%)	0.38	1302 (6%) 26 23	15, 54, 76, 96	0

All (1302) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
44	1m	124	PRO	9.0
8	2I	83	ALA	8.1

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Mol	Chain	Res	Type	RSRZ
44	2m	123	ALA	6.6
45	2n	2	ALA	6.6
1	2A	2146	C	6.5
44	2m	124	PRO	6.4
1	2A	883	G	6.4
1	1A	2115	G	6.0
1	1A	2174	C	5.9
45	1n	2	ALA	5.6
1	1A	2112	G	5.5
1	2A	2112	G	5.4
1	1A	2145	C	5.3
1	1A	2109	U	5.1
44	2m	122	LYS	5.1
1	2A	2147	G	5.0
1	2A	2145	C	5.0
1	2A	884	C	4.9
21	1Z	141	VAL	4.9
1	2A	2155	G	4.8
1	1A	2114	A	4.8
1	1A	885	C	4.8
33	2b	121	LEU	4.7
1	1A	884	C	4.7
1	2A	2111	C	4.7
1	1A	2119	A	4.7
1	2A	2110	G	4.7
23	2l	2	SER	4.6
1	2A	885	C	4.6
1	2A	2133	G	4.6
1	1A	2111	C	4.6
21	2Z	149	SER	4.6
1	1A	2143	C	4.5
44	2m	102	ARG	4.5
1	2A	2118	U	4.4
1	2A	882	G	4.4
15	1T	130	ALA	4.4
1	1A	2113	U	4.4
1	1A	2159	G	4.4
32	2a	1033	G	4.3
38	2g	80	VAL	4.3
44	1m	2	ALA	4.3
8	2I	80	PRO	4.3
21	2Z	147	GLY	4.3

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Mol	Chain	Res	Type	RSRZ
1	2A	2115	G	4.3
1	1A	1096	A	4.3
1	2A	2803	C	4.2
1	2A	2144	U	4.2
33	2b	34	ALA	4.2
1	1A	2803	C	4.1
8	2I	86	THR	4.1
21	2Z	174	VAL	4.1
1	1A	2121	G	4.1
21	2Z	96	VAL	4.1
54	2w	72	C	4.1
1	1A	2110	G	4.1
8	2I	68	LEU	4.1
40	2i	14	VAL	4.1
1	1A	888	C	4.1
6	2G	2	PRO	4.1
26	24	57	GLU	4.1
1	1A	2117	A	4.1
21	2Z	172	ALA	4.0
8	2I	81	VAL	4.0
15	1T	131	ALA	4.0
1	2A	2143	C	4.0
1	1A	1078	U	4.0
40	2i	11	LYS	3.9
51	1t	103	GLY	3.9
1	2A	881	G	3.9
1	1A	2173	A	3.9
1	2A	2126	A	3.9
1	2A	2169	A	3.9
26	24	66	SER	3.9
1	1A	2175	C	3.9
44	1m	122	LYS	3.9
1	2A	2113	U	3.9
1	1A	883	G	3.9
1	1A	1064	C	3.9
6	2G	146	TYR	3.9
33	2b	188	ALA	3.9
23	1l	2	SER	3.9
1	1A	2128	C	3.8
40	2i	102	LEU	3.8
1	2A	896	A	3.8
1	2A	2109	U	3.8

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Mol	Chain	Res	Type	RSRZ
1	1A	882	G	3.8
1	1A	2120	G	3.8
1	2A	2127	G	3.8
9	2N	8	GLN	3.8
1	2A	2149	G	3.8
32	2a	1034	G	3.8
7	2H	20	ALA	3.8
21	2Z	150	LEU	3.8
1	2A	2138	C	3.8
1	1A	2147	G	3.8
35	2d	154	ASN	3.7
1	2A	2793	G	3.7
38	1g	80	VAL	3.7
21	2Z	144	LEU	3.7
21	2Z	146	ILE	3.7
26	24	51	ASP	3.7
45	2n	13	THR	3.7
33	2b	165	VAL	3.7
33	2b	237	ALA	3.7
18	1W	112	GLY	3.7
8	2I	72	LEU	3.7
21	1Z	171	ILE	3.7
1	1A	2130	U	3.7
26	14	63	TYR	3.7
51	2t	103	GLY	3.7
1	1A	2123	G	3.7
1	2A	2170	A	3.6
41	2j	34	VAL	3.6
1	2A	2804	C	3.6
38	2g	40	ALA	3.6
8	2I	82	ARG	3.6
32	2a	1036	G	3.6
35	2d	173	TRP	3.6
1	2A	2119	A	3.6
33	1b	9	GLU	3.6
1	1A	2108	C	3.6
1	1A	2161	C	3.6
26	24	55	ARG	3.6
1	1A	2181	G	3.6
1	1A	2182	G	3.6
1	2A	2802	G	3.6
32	2a	1032	G	3.6

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Mol	Chain	Res	Type	RSRZ
26	14	56	VAL	3.6
33	1b	230	VAL	3.6
35	2d	194	LEU	3.6
44	2m	119	GLY	3.6
54	1w	72	C	3.6
1	2A	2123	G	3.6
32	2a	1026	G	3.6
40	2i	109	VAL	3.6
1	1A	2172	U	3.5
40	2i	10	ARG	3.5
21	2Z	164	ALA	3.5
34	1c	65	ALA	3.5
34	2c	13	GLY	3.5
39	1h	2	LEU	3.5
1	1A	887	A	3.5
1	1A	1075	C	3.5
32	2a	1030(B)	C	3.5
21	2Z	155	LEU	3.5
44	2m	6	GLY	3.5
1	2A	2117	A	3.5
21	2Z	152	ALA	3.5
34	1c	100	ALA	3.5
1	1A	2141	G	3.5
45	2n	3	ARG	3.5
41	2j	65	LEU	3.5
45	2n	16	PHE	3.5
34	2c	2	GLY	3.4
8	2I	65	ALA	3.4
1	2A	2154	G	3.4
1	2A	2160	G	3.4
33	1b	7	VAL	3.4
35	2d	111	ALA	3.4
1	1A	1081	U	3.4
1	1A	2171	A	3.4
32	1a	1447	A	3.4
21	2Z	106	GLY	3.4
51	2t	97	ALA	3.4
54	2w	71	G	3.4
8	2I	89	TYR	3.4
26	24	63	TYR	3.4
34	2c	4	LYS	3.4
1	1A	1057	A	3.4

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Mol	Chain	Res	Type	RSRZ
1	1A	2169	A	3.4
6	2G	172	LEU	3.4
14	2S	32	LEU	3.4
7	2H	165	ALA	3.4
6	1G	146	TYR	3.3
34	2c	195	VAL	3.3
44	2m	60	VAL	3.3
50	2s	2	PRO	3.3
1	2A	2134	A	3.3
44	1m	123	ALA	3.3
1	1A	1068	G	3.3
1	1A	2125	G	3.3
54	1w	71	G	3.3
21	1Z	105	VAL	3.3
32	2a	1005	A	3.3
1	1A	2160	G	3.3
32	2a	1030(A)	G	3.3
1	2A	2128	C	3.3
50	2s	79	THR	3.3
36	2e	21	ALA	3.3
1	2A	2114	A	3.3
32	1a	1001	A	3.3
32	2a	1035	A	3.3
21	2Z	166	SER	3.3
20	2Y	55	TYR	3.3
38	2g	99	LEU	3.3
1	1A	2162	G	3.3
35	2d	158	ILE	3.3
53	1v	13	A	3.2
37	2f	21	LEU	3.2
38	2g	16	LEU	3.2
41	1j	85	LEU	3.2
33	2b	7	VAL	3.2
50	1s	9	VAL	3.2
35	2d	23	GLY	3.2
1	1A	2136	C	3.2
8	2I	63	ALA	3.2
32	2a	1031	G	3.2
38	1g	83	ALA	3.2
26	14	58	ARG	3.2
38	2g	84	ASN	3.2
45	2n	21	TYR	3.2

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Mol	Chain	Res	Type	RSRZ
1	1A	2122	U	3.2
44	2m	7	VAL	3.2
44	2m	121	LYS	3.2
1	1A	2107	C	3.2
1	1A	2104	G	3.2
54	1w	70	G	3.2
6	2G	70	VAL	3.2
26	24	50	VAL	3.2
38	1g	81	GLY	3.2
40	2i	17	VAL	3.2
52	2u	13	ILE	3.2
32	2a	1030	C	3.2
1	2A	2805	G	3.2
54	2w	70	G	3.2
33	1b	10	LEU	3.2
46	2o	5	LYS	3.2
1	1A	2135	A	3.2
1	1A	2170	A	3.2
32	2a	1030(D)	A	3.2
35	2d	180	GLY	3.2
41	2j	42	THR	3.2
45	2n	42	ILE	3.2
34	2c	190	ARG	3.1
45	2n	57	ARG	3.1
33	2b	122	PHE	3.1
1	1A	2164	C	3.1
7	2H	128	PRO	3.1
32	2a	1027	C	3.1
45	2n	14	PRO	3.1
33	1b	11	LEU	3.1
1	2A	2159	G	3.1
1	1A	896	A	3.1
26	24	54	GLY	3.1
26	24	56	VAL	3.1
33	2b	38	GLY	3.1
51	1t	47	GLY	3.1
21	2Z	21	ALA	3.1
26	24	65	ASP	3.1
41	2j	77	PRO	3.1
1	1A	886	C	3.1
32	1a	1036	G	3.1
40	1i	66	ARG	3.1

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Mol	Chain	Res	Type	RSRZ
50	2s	77	THR	3.1
40	2i	46	ALA	3.1
40	2i	18	PHE	3.1
8	2I	123	LEU	3.1
1	1A	2129	C	3.1
41	2j	44	VAL	3.1
45	2n	25	VAL	3.1
43	1l	6	THR	3.1
1	1A	1077	A	3.1
51	1t	12	ALA	3.1
1	1A	1094	U	3.1
33	1b	232	PRO	3.1
8	2I	38	LEU	3.1
38	2g	4	ARG	3.1
1	1A	2178	C	3.1
33	2b	173	ALA	3.0
51	1t	95	ALA	3.0
1	1A	2158	A	3.0
1	2A	2173	A	3.0
1	1A	1058	G	3.0
1	1A	1087	G	3.0
33	1b	17	PHE	3.0
7	2H	2	SER	3.0
38	2g	156	TRP	3.0
7	2H	4	ILE	3.0
14	2S	85	VAL	3.0
33	1b	229	VAL	3.0
35	2d	112	VAL	3.0
41	2j	74	ILE	3.0
1	2A	1509	C	3.0
1	2A	2174	C	3.0
8	1I	117	GLU	3.0
1	1A	2189	U	3.0
1	2A	2135	A	3.0
40	2i	19	LEU	3.0
1	1A	2124	G	3.0
1	1A	2165	G	3.0
8	2I	84	GLY	3.0
46	2o	3	ILE	3.0
45	2n	34	TYR	3.0
32	2a	1001	A	3.0
54	1w	73	A	3.0

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Mol	Chain	Res	Type	RSRZ
3	1D	276	LYS	3.0
1	1A	2116	G	3.0
1	1A	2133	G	3.0
35	2d	167	GLY	3.0
33	2b	172	ILE	3.0
40	1i	17	VAL	3.0
46	2o	4	THR	3.0
34	2c	137	ALA	3.0
49	2r	20	ALA	3.0
8	2I	137	PRO	3.0
40	2i	62	TYR	3.0
15	2T	108	ARG	3.0
33	2b	215	LEU	3.0
1	2A	2132	U	3.0
33	2b	57	PHE	3.0
53	2v	12	A	3.0
1	1A	1176	G	2.9
1	2A	2166	G	2.9
21	2Z	168	GLU	2.9
38	1g	156	TRP	2.9
45	2n	20	ALA	2.9
7	2H	21	PRO	2.9
7	2H	60	ARG	2.9
8	2I	75	LEU	2.9
33	2b	118	LEU	2.9
35	2d	174	LEU	2.9
1	2A	2137	C	2.9
40	1i	126	SER	2.9
38	2g	82	GLY	2.9
20	2Y	7	VAL	2.9
27	25	59	GLU	2.9
51	1t	100	ILE	2.9
35	2d	140	VAL	2.9
1	2A	2893	G	2.9
32	1a	1021	G	2.9
51	2t	98	PRO	2.9
43	2l	13	LYS	2.9
1	1A	2144	U	2.9
1	2A	886	C	2.9
1	2A	2142	C	2.9
1	1A	1073	A	2.9
33	2b	185	ILE	2.9

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Mol	Chain	Res	Type	RSRZ
56	1y	35	A	2.9
56	1y	36	A	2.9
16	2U	90	VAL	2.9
6	2G	161	THR	2.9
25	23	2	PRO	2.9
23	21	98	LEU	2.9
51	1t	13	LEU	2.9
1	1A	2101	G	2.9
1	1A	2131	G	2.9
1	2A	2168	G	2.9
42	2k	75	TYR	2.9
26	24	49	PHE	2.9
11	2P	149	GLU	2.9
20	2Y	80	GLY	2.9
26	24	17	GLY	2.9
50	2s	84	GLY	2.9
32	1a	1000	U	2.9
1	2A	2136	C	2.9
32	2a	1149	C	2.9
44	2m	78	ILE	2.9
3	2D	276	LYS	2.9
53	1v	12	A	2.9
6	2G	145	THR	2.9
40	2i	7	THR	2.9
33	1b	237	ALA	2.9
40	2i	76	ALA	2.9
35	2d	155	LEU	2.9
1	2A	614(B)	G	2.9
1	2A	2125	G	2.9
19	2X	69	TYR	2.9
35	2d	27	TYR	2.9
56	2y	18	G	2.9
34	2c	171	GLY	2.9
18	2W	60	ASN	2.8
38	1g	115	ARG	2.8
41	2j	38	ILE	2.8
51	2t	9	ASN	2.8
44	2m	120	LYS	2.8
7	2H	125	VAL	2.8
35	2d	176	LEU	2.8
45	2n	39	LEU	2.8
45	2n	36	PHE	2.8

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Mol	Chain	Res	Type	RSRZ
35	2d	20	TYR	2.8
52	1u	24	ARG	2.8
1	1A	2166	G	2.8
44	2m	4	ILE	2.8
42	2k	114	VAL	2.8
56	1y	20	U	2.8
52	2u	23	PRO	2.8
1	1A	2138	C	2.8
1	2A	897	C	2.8
34	2c	129	ALA	2.8
44	2m	72	ALA	2.8
1	1A	1086	A	2.8
1	2A	2171	A	2.8
8	2I	44	LEU	2.8
33	2b	236	TYR	2.8
35	2d	146	ILE	2.8
21	1Z	166	SER	2.8
31	29	16	VAL	2.8
35	2d	29	PRO	2.8
35	2d	189	PRO	2.8
41	2j	91	PRO	2.8
51	2t	88	VAL	2.8
1	1A	1060	U	2.8
1	1A	1083	U	2.8
27	25	29	THR	2.8
32	1a	1257	U	2.8
3	2D	2	ALA	2.8
40	2i	106	ALA	2.8
44	2m	33	ALA	2.8
45	2n	6	LEU	2.8
1	1A	2140	C	2.8
8	2I	87	LYS	2.8
20	2Y	54	LYS	2.8
38	2g	79	ARG	2.8
33	2b	17	PHE	2.8
6	2G	12	TYR	2.8
50	2s	80	TYR	2.8
1	1A	2132	U	2.8
5	2F	146	ALA	2.8
33	1b	225	ALA	2.8
36	1e	21	ALA	2.8
38	2g	2	ALA	2.8

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Mol	Chain	Res	Type	RSRZ
32	2a	1030(C)	G	2.8
1	1A	1095	A	2.8
1	1A	1098	A	2.8
1	1A	2146	C	2.8
20	2Y	107	ASP	2.8
33	1b	24	TRP	2.7
52	2u	14	TRP	2.7
7	2H	107	VAL	2.7
34	2c	87	LEU	2.7
41	2j	15	THR	2.7
44	2m	19	LEU	2.7
43	2l	56	ALA	2.7
44	2m	105	THR	2.7
32	2a	1000	U	2.7
45	2n	15	LYS	2.7
15	2T	115	ARG	2.7
1	2A	2100	G	2.7
32	2a	1003	G	2.7
21	2Z	148	ASP	2.7
32	2a	1531	A	2.7
53	2v	14	A	2.7
45	2n	37	PHE	2.7
52	2u	11	GLY	2.7
21	2Z	171	ILE	2.7
45	2n	7	ILE	2.7
9	2N	45	ASN	2.7
23	2l	68	PRO	2.7
41	1j	76	ASN	2.7
44	2m	97	PRO	2.7
7	2H	45	VAL	2.7
38	2g	85	TYR	2.7
40	2i	36	TYR	2.7
6	2G	3	LEU	2.7
33	1b	61	LEU	2.7
41	2j	8	LEU	2.7
8	2I	49	ALA	2.7
38	1g	2	ALA	2.7
8	1I	67	ARG	2.7
7	2H	40	GLU	2.7
1	2A	2167	U	2.7
54	1w	20	U	2.7
56	2y	33	U	2.7

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Mol	Chain	Res	Type	RSRZ
1	1A	881	G	2.7
1	1A	2793	G	2.7
1	2A	1533	G	2.7
56	2y	19	G	2.7
26	24	59	PHE	2.7
54	2w	67	C	2.7
7	2H	17	VAL	2.7
8	2I	145	VAL	2.7
21	2Z	141	VAL	2.7
21	2Z	165	VAL	2.7
40	2i	53	VAL	2.7
50	2s	45	VAL	2.7
8	2I	1	MET	2.7
14	2S	92	TYR	2.7
35	2d	4	TYR	2.7
41	2j	88	LEU	2.7
8	2I	146	ALA	2.7
35	2d	195	ALA	2.7
41	1j	20	ALA	2.7
44	1m	30	ALA	2.7
1	1A	2167	U	2.7
26	24	18	CYS	2.7
34	1c	2	GLY	2.7
33	2b	152	PHE	2.7
1	2A	2104	G	2.7
32	1a	630	G	2.7
32	1a	1023	G	2.7
1	1A	2137	C	2.7
1	2A	898	C	2.7
1	2A	2139	C	2.7
33	2b	10	LEU	2.7
38	1g	155	ARG	2.7
48	2q	98	LEU	2.7
11	1P	149	GLU	2.7
38	1g	85	TYR	2.7
44	2m	87	TYR	2.7
21	2Z	173	ALA	2.7
41	1j	100	THR	2.7
47	2p	82	GLN	2.7
41	2j	62	HIS	2.7
1	2A	2189	U	2.7
31	29	37	GLY	2.6

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Mol	Chain	Res	Type	RSRZ
40	2i	39	GLY	2.6
7	2H	39	PRO	2.6
34	1c	14	ILE	2.6
1	1A	1076	C	2.6
1	1A	2142	C	2.6
1	2A	2129	C	2.6
6	2G	92	VAL	2.6
21	2Z	91	LEU	2.6
32	1a	1035	A	2.6
33	2b	112	VAL	2.6
35	2d	186	LEU	2.6
35	2d	188	LEU	2.6
40	2i	41	VAL	2.6
50	2s	16	LEU	2.6
1	2A	2157	G	2.6
1	2A	2165	G	2.6
1	2A	2177	C	2.6
32	1a	1030(B)	C	2.6
56	2y	13	C	2.6
33	1b	134	GLU	2.6
9	2N	73	THR	2.6
33	1b	188	ALA	2.6
38	2g	154	TYR	2.6
39	2h	58	TYR	2.6
32	2a	1025	U	2.6
38	2g	81	GLY	2.6
39	1h	47	GLY	2.6
43	2l	20	LYS	2.6
11	2P	79	ARG	2.6
11	2P	6	LEU	2.6
14	2S	24	LEU	2.6
38	1g	84	ASN	2.6
44	2m	90	LEU	2.6
32	1a	1531	A	2.6
41	2j	35	SER	2.6
1	1A	889	C	2.6
8	2I	54	GLN	2.6
32	1a	1008	C	2.6
40	2i	15	ALA	2.6
44	2m	63	THR	2.6
45	2n	10	ALA	2.6
1	2A	2141	G	2.6

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Mol	Chain	Res	Type	RSRZ
32	1a	1030(A)	G	2.6
32	2a	1224	G	2.6
8	2I	20	ASP	2.6
26	14	17	GLY	2.6
33	2b	89	GLY	2.6
6	2G	32	PRO	2.6
35	1d	70	ILE	2.6
8	2I	60	GLU	2.6
51	2t	99	LEU	2.6
47	1p	21	VAL	2.6
21	1Z	149	SER	2.6
51	2t	70	SER	2.6
20	2Y	105	ALA	2.6
44	1m	5	ALA	2.6
1	1A	898	C	2.6
1	2A	888	C	2.6
1	2A	2183	C	2.6
1	1A	1063	G	2.6
1	1A	2168	G	2.6
1	2A	2807	G	2.6
6	2G	29	TRP	2.6
33	2b	24	TRP	2.6
6	1G	51	ARG	2.6
6	2G	44	GLY	2.6
14	2S	3	ARG	2.6
35	2d	7	PRO	2.6
35	2d	107	ARG	2.6
42	2k	56	GLY	2.6
46	2o	88	ARG	2.6
6	2G	20	ILE	2.6
9	2N	60	ILE	2.6
33	2b	127	ILE	2.6
51	1t	63	ILE	2.6
1	2A	2122	U	2.6
7	2H	99	VAL	2.6
8	2I	136	VAL	2.6
41	2j	72	VAL	2.6
41	2j	76	ASN	2.6
21	2Z	129	SER	2.6
40	2i	13	ALA	2.6
40	2i	52	ALA	2.6
41	1j	30	SER	2.6

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Mol	Chain	Res	Type	RSRZ
41	2j	87	THR	2.6
51	1t	14	LYS	2.6
32	1a	163	C	2.5
51	2t	83	ARG	2.5
51	2t	86	ARG	2.5
56	1y	75	C	2.5
7	2H	48	GLY	2.5
26	14	54	GLY	2.5
50	2s	13	ASP	2.5
50	2s	76	PRO	2.5
51	1t	102	GLY	2.5
1	1A	2149	G	2.5
1	1A	2802	G	2.5
12	2Q	66	ILE	2.5
32	1a	1024	G	2.5
32	2a	1021	G	2.5
40	2i	12	GLU	2.5
19	1X	95	LEU	2.5
44	2m	56	LEU	2.5
33	2b	184	VAL	2.5
8	1I	65	ALA	2.5
8	2I	131	LYS	2.5
34	2c	53	ALA	2.5
38	2g	25	ALA	2.5
50	2s	24	ALA	2.5
8	2I	40	THR	2.5
11	2P	15	ARG	2.5
14	2S	7	TYR	2.5
1	1A	897	C	2.5
41	2j	10	GLY	2.5
41	2j	36	GLY	2.5
1	2A	2106	G	2.5
1	2A	2182	G	2.5
11	2P	123	LEU	2.5
41	2j	40	LEU	2.5
1	2A	895	U	2.5
36	2e	105	VAL	2.5
42	2k	117	ASN	2.5
44	2m	98	VAL	2.5
50	2s	9	VAL	2.5
38	2g	46	ALA	2.5
41	2j	66	ARG	2.5

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Mol	Chain	Res	Type	RSRZ
51	2t	8	ARG	2.5
39	2h	9	MET	2.5
1	1A	1045	A	2.5
1	2A	887	A	2.5
7	2H	22	GLY	2.5
8	1I	70	GLU	2.5
50	1s	12	ASP	2.5
17	2V	96	ILE	2.5
40	2i	74	ILE	2.5
1	1A	2804	C	2.5
1	2A	894	C	2.5
1	2A	2794	C	2.5
32	2a	1038	C	2.5
56	2y	56	C	2.5
33	1b	221	LEU	2.5
34	2c	135	LYS	2.5
1	1A	895	U	2.5
7	2H	79	VAL	2.5
32	2a	1532	U	2.5
36	2e	41	VAL	2.5
38	1g	37	ASN	2.5
45	2n	33	VAL	2.5
51	1t	9	ASN	2.5
1	2A	2148	G	2.5
1	2A	2152	G	2.5
1	2A	2153	G	2.5
1	2A	2156	G	2.5
56	2y	15	G	2.5
15	2T	130	ALA	2.5
45	2n	30	ALA	2.5
47	2p	81	ARG	2.5
41	2j	41	PRO	2.5
7	2H	58	GLU	2.5
11	2P	109	GLY	2.5
35	1d	163	GLU	2.5
44	2m	58	GLU	2.5
45	2n	38	GLY	2.5
38	2g	49	ILE	2.5
1	2A	229	A	2.5
1	2A	2801(A)	A	2.5
2	2B	120	A	2.5
21	2Z	102	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
35	1d	157	LEU	2.5
38	2g	26	PHE	2.5
20	1Y	92	ASN	2.5
33	2b	136	VAL	2.5
33	2b	111	ARG	2.5
33	2b	123	ALA	2.5
33	2b	161	ALA	2.5
34	2c	189	ALA	2.5
1	2A	2162	G	2.5
1	2A	2181	G	2.5
32	1a	1002	G	2.5
32	2a	1124	G	2.5
48	2q	99	SER	2.5
5	2F	208	GLY	2.4
23	2l	28	GLY	2.4
21	1Z	146	ILE	2.4
39	2h	4	ASP	2.4
35	2d	58	LEU	2.4
35	2d	108	LEU	2.4
45	2n	53	LEU	2.4
1	1A	2801(A)	A	2.4
11	2P	91	PHE	2.4
56	1y	64	A	2.4
47	1p	81	ARG	2.4
1	1A	154(A)	C	2.4
9	2N	140	VAL	2.4
32	1a	1027	C	2.4
34	2c	138	VAL	2.4
1	1A	1097	U	2.4
38	2g	134	ALA	2.4
48	2q	44	ALA	2.4
36	2e	16	THR	2.4
7	2H	38	SER	2.4
40	2i	2	GLU	2.4
1	1A	2100	G	2.4
5	1F	208	GLY	2.4
15	2T	25	GLY	2.4
32	1a	1003	G	2.4
32	2a	1001(A)	G	2.4
32	2a	1220	G	2.4
7	2H	136	ILE	2.4
21	1Z	133	ILE	2.4

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Mol	Chain	Res	Type	RSRZ
21	2Z	53	ILE	2.4
24	22	10	LEU	2.4
26	14	67	TYR	2.4
37	1f	16	GLN	2.4
7	2H	61	HIS	2.4
33	1b	70	PHE	2.4
7	2H	35	VAL	2.4
8	2I	144	VAL	2.4
21	2Z	90	VAL	2.4
26	24	33	VAL	2.4
35	2d	178	VAL	2.4
1	2A	2108	C	2.4
41	1j	32	ALA	2.4
32	2a	1150	U	2.4
40	2i	27	THR	2.4
8	1I	42	SER	2.4
41	2j	37	PRO	2.4
6	2G	119	GLY	2.4
8	2I	138	ILE	2.4
16	2U	62	ILE	2.4
34	2c	182	ILE	2.4
1	1A	1055	G	2.4
1	1A	1056	G	2.4
1	1A	2157	G	2.4
1	2A	2894	G	2.4
5	2F	24	LEU	2.4
8	2I	116	LEU	2.4
32	1a	1034	G	2.4
32	2a	630	G	2.4
54	1w	1	G	2.4
56	1y	19	G	2.4
56	1y	34	G	2.4
33	1b	36	ARG	2.4
44	2m	99	ARG	2.4
26	14	32	TYR	2.4
40	2i	125	TYR	2.4
9	1N	9	VAL	2.4
9	2N	9	VAL	2.4
20	2Y	45	VAL	2.4
41	2j	86	MET	2.4
1	1A	2134	A	2.4
53	2v	15	A	2.4

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Mol	Chain	Res	Type	RSRZ
38	2g	83	ALA	2.4
7	2H	175	LYS	2.4
20	2Y	91	GLU	2.4
26	14	57	GLU	2.4
1	2A	2164	C	2.4
1	2A	2896	C	2.4
32	2a	1007	C	2.4
40	2i	21	PRO	2.4
32	2a	1125	U	2.4
55	2x	47	U	2.4
56	1y	56	C	2.4
51	2t	69	GLY	2.4
33	2b	223	ILE	2.4
8	2I	77	LEU	2.4
33	2b	53	ARG	2.4
41	2j	58	ASP	2.4
1	1A	892	G	2.4
1	1A	1059	G	2.4
1	1A	2190	G	2.4
1	1A	2792	G	2.4
32	2a	1127	G	2.4
35	2d	106	TYR	2.4
38	1g	154	TYR	2.4
41	2j	47	PHE	2.4
54	1w	5	G	2.4
56	1y	15	G	2.4
7	2H	131	VAL	2.4
14	2S	46	VAL	2.4
21	2Z	161	VAL	2.4
34	1c	66	VAL	2.4
34	2c	151	VAL	2.4
47	1p	2	VAL	2.4
14	2S	33	LYS	2.4
32	2a	1251	A	2.4
40	2i	43	ALA	2.4
42	2k	23	ALA	2.4
53	2v	13	A	2.4
26	24	52	THR	2.3
51	1t	11	SER	2.3
1	2A	2150	U	2.3
47	1p	37	GLY	2.3
33	2b	108	ILE	2.3

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Mol	Chain	Res	Type	RSRZ
41	2j	6	ILE	2.3
42	2k	48	ILE	2.3
34	2c	17	ASP	2.3
50	2s	15	LEU	2.3
26	24	39	CYS	2.3
21	2Z	88	PHE	2.3
26	24	32	TYR	2.3
26	24	67	TYR	2.3
33	2b	199	TYR	2.3
40	2i	5	TYR	2.3
44	1m	21	TYR	2.3
12	2Q	132	VAL	2.3
44	2m	53	VAL	2.3
44	2m	74	VAL	2.3
48	2q	11	VAL	2.3
48	2q	85	VAL	2.3
1	1A	2805	G	2.3
8	1I	46	ALA	2.3
34	2c	133	ALA	2.3
34	2c	168	ALA	2.3
21	2Z	95	PRO	2.3
46	2o	2	PRO	2.3
40	2i	103	THR	2.3
1	1A	890	A	2.3
1	2A	2158	A	2.3
32	2a	1004	A	2.3
32	2a	1447	A	2.3
33	2b	66	GLY	2.3
36	2e	39	GLY	2.3
40	2i	67	GLY	2.3
46	1o	89	GLY	2.3
52	2u	24	ARG	2.3
1	1A	1066	U	2.3
33	2b	40	HIS	2.3
33	2b	69	LEU	2.3
33	2b	201	ILE	2.3
36	2e	101	ILE	2.3
1	1A	1509	C	2.3
1	1A	2794	C	2.3
44	2m	36	LYS	2.3
14	2S	36	TYR	2.3
15	2T	10	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
42	2k	25	TYR	2.3
8	1I	115	ALA	2.3
33	2b	120	ALA	2.3
34	2c	149	ALA	2.3
37	1f	20	ALA	2.3
40	1i	106	ALA	2.3
40	2i	90	PRO	2.3
1	2A	2124	G	2.3
21	2Z	170	THR	2.3
32	2a	1002	G	2.3
38	1g	4	ARG	2.3
56	2y	6	G	2.3
1	1A	229	A	2.3
1	1A	1046	A	2.3
1	1A	1085	A	2.3
54	2w	73	A	2.3
8	2I	51	ILE	2.3
14	2S	54	LEU	2.3
33	2b	42	ILE	2.3
1	2A	271(K)	U	2.3
1	1A	2188	C	2.3
26	14	69	LYS	2.3
32	1a	1038	C	2.3
54	1w	3	C	2.3
7	2H	37	VAL	2.3
8	2I	85	GLU	2.3
9	1N	139	GLU	2.3
26	24	35	VAL	2.3
33	1b	236	TYR	2.3
33	2b	93	VAL	2.3
42	1k	25	TYR	2.3
44	2m	54	VAL	2.3
46	2o	26	GLU	2.3
49	1r	86	VAL	2.3
6	2G	169	ALA	2.3
7	2H	55	PRO	2.3
34	2c	61	ALA	2.3
45	2n	29	ARG	2.3
51	1t	80	ARG	2.3
41	2j	81	THR	2.3
8	2I	139	GLN	2.3
38	2g	153	HIS	2.3

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Mol	Chain	Res	Type	RSRZ
1	1A	2127	G	2.3
1	1A	2156	G	2.3
48	1q	99	SER	2.3
47	1p	19	ILE	2.3
56	2y	53	G	2.3
1	2A	1508	A	2.3
56	2y	14	A	2.3
56	2y	23	A	2.3
33	2b	46	LYS	2.3
44	1m	121	LYS	2.3
45	2n	11	LYS	2.3
45	2n	58	LYS	2.3
50	1s	13	ASP	2.3
32	2a	1257	U	2.3
1	1A	893	C	2.3
4	2E	73	GLU	2.3
32	2a	1029	C	2.3
32	2a	1043	C	2.3
5	2F	173	VAL	2.3
7	2H	52	VAL	2.3
15	2T	118	ARG	2.3
38	1g	7	ALA	2.2
16	2U	81	HIS	2.2
36	2e	114	GLY	2.2
46	2o	86	GLY	2.2
6	2G	133	LEU	2.2
8	1I	140	LEU	2.2
8	2I	88	ILE	2.2
33	1b	233	SER	2.2
33	2b	221	LEU	2.2
34	2c	202	ILE	2.2
35	2d	196	LEU	2.2
38	2g	124	LEU	2.2
51	1t	38	LYS	2.2
1	2A	1445	A	2.2
2	2B	25	A	2.2
32	2a	1256	A	2.2
32	2a	1503	A	2.2
54	1w	7	A	2.2
56	2y	7	A	2.2
1	1A	2154	G	2.2
1	2A	879	G	2.2

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Mol	Chain	Res	Type	RSRZ
32	2a	1023	G	2.2
32	2a	1024	G	2.2
32	2a	1040	U	2.2
35	1d	150	GLU	2.2
48	2q	96	GLU	2.2
21	2Z	136	PHE	2.2
36	2e	26	PHE	2.2
47	1p	9	PHE	2.2
1	2A	1536	C	2.2
8	2I	18	VAL	2.2
33	1b	53	ARG	2.2
32	2a	995	C	2.2
33	2b	91	PRO	2.2
35	2d	88	VAL	2.2
38	2g	135	VAL	2.2
40	1i	28	VAL	2.2
54	1w	2	C	2.2
8	2I	39	ALA	2.2
15	2T	131	ALA	2.2
34	2c	100	ALA	2.2
44	2m	18	ALA	2.2
34	2c	29	TYR	2.2
3	1D	38	LYS	2.2
23	21	48	LYS	2.2
33	2b	63	MET	2.2
52	2u	16	GLY	2.2
19	2X	92	LEU	2.2
35	2d	94	LEU	2.2
47	1p	49	LEU	2.2
21	2Z	153	SER	2.2
33	1b	68	ILE	2.2
33	2b	214	ILE	2.2
35	2d	175	SER	2.2
38	2g	42	ILE	2.2
9	2N	68	GLU	2.2
33	2b	86	GLU	2.2
1	1A	271(K)	U	2.2
1	1A	1082	U	2.2
1	1A	2118	U	2.2
1	2A	2897	U	2.2
32	1a	64	G	2.2
40	2i	9	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
41	1j	79	ARG	2.2
48	2q	71	PHE	2.2
14	2S	49	VAL	2.2
17	2V	5	VAL	2.2
33	2b	234	PRO	2.2
35	1d	189	PRO	2.2
43	1l	18	VAL	2.2
1	2A	2140	C	2.2
14	2S	66	ALA	2.2
32	2a	1028	C	2.2
35	1d	154	ASN	2.2
8	2I	130	TYR	2.2
21	2Z	99	TYR	2.2
47	1p	38	TYR	2.2
48	2q	100	LYS	2.2
41	1j	81	THR	2.2
52	2u	17	THR	2.2
8	1I	38	LEU	2.2
12	2Q	23	GLY	2.2
21	1Z	150	LEU	2.2
33	2b	145	LEU	2.2
35	2d	124	GLY	2.2
46	2o	89	GLY	2.2
41	1j	4	ILE	2.2
41	2j	73	ASP	2.2
7	2H	46	GLU	2.2
8	2I	70	GLU	2.2
22	20	68	GLU	2.2
44	2m	73	GLU	2.2
21	2Z	131	ARG	2.2
40	2i	128	ARG	2.2
44	2m	91	ARG	2.2
41	2j	39	PRO	2.2
55	1x	47	U	2.2
22	20	23	VAL	2.2
1	2A	2120	G	2.2
1	2A	2121	G	2.2
2	2B	118	G	2.2
7	2H	156	ALA	2.2
8	1I	146	ALA	2.2
8	2I	46	ALA	2.2
8	2I	62	LYS	2.2

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Mol	Chain	Res	Type	RSRZ
26	24	38	LYS	2.2
56	2y	34	G	2.2
14	2S	34	HIS	2.2
22	20	12	ASN	2.2
42	2k	68	ALA	2.2
3	2D	166	GLN	2.2
1	2A	2163	C	2.2
21	1Z	170	THR	2.2
8	1I	44	LEU	2.2
33	1b	228	GLY	2.2
34	2c	205	GLY	2.2
38	2g	151	TYR	2.2
46	2o	20	GLY	2.2
48	2q	80	GLY	2.2
50	2s	26	GLY	2.2
28	26	54	ILE	2.2
33	1b	39	ILE	2.2
34	1c	77	ILE	2.2
39	2h	6	ILE	2.2
34	1c	90	GLU	2.2
34	2c	126	ARG	2.2
42	2k	126	ARG	2.2
21	1Z	167	PRO	2.2
33	1b	131	PRO	2.2
33	1b	234	PRO	2.2
41	1j	77	PRO	2.2
47	1p	59	TRP	2.2
1	1A	2150	U	2.2
7	2H	123	PHE	2.2
17	2V	19	LYS	2.2
32	2a	1123	A	2.1
35	2d	169	LYS	2.2
6	2G	149	VAL	2.1
21	2Z	37	VAL	2.1
38	2g	9	VAL	2.1
33	2b	19	HIS	2.1
40	1i	13	ALA	2.1
1	1A	1093	G	2.1
1	2A	2131	G	2.1
1	2A	2190	G	2.1
11	2P	118	GLY	2.1
33	2b	61	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
33	2b	149	LEU	2.1
34	2c	47	LEU	2.1
36	2e	22	GLY	2.1
36	2e	120	THR	2.1
41	2j	71	LEU	2.1
44	2m	100	GLY	2.1
48	2q	84	LEU	2.1
49	2r	48	GLY	2.1
51	2t	71	THR	2.1
51	2t	72	LEU	2.1
14	2S	35	ILE	2.1
33	2b	39	ILE	2.1
33	2b	162	ILE	2.1
44	2m	25	ILE	2.1
32	2a	1277	C	2.1
12	2Q	10	ARG	2.1
21	2Z	169	GLU	2.1
26	14	55	ARG	2.1
26	24	61	ARG	2.1
45	1n	3	ARG	2.1
34	2c	27	LYS	2.1
43	1l	17	LYS	2.1
49	2r	80	PRO	2.1
21	2Z	104	PHE	2.1
33	2b	55	PHE	2.1
33	1b	164	VAL	2.1
34	2c	22	TRP	2.1
50	2s	10	PHE	2.1
21	2Z	56	VAL	2.1
40	2i	58	HIS	2.1
40	2i	65	VAL	2.1
43	2l	39	VAL	2.1
44	2m	117	VAL	2.1
12	2Q	113	GLN	2.1
32	1a	1025	U	2.1
54	1w	47	U	2.1
1	1A	878	A	2.1
1	2A	900	A	2.1
1	2A	2176	A	2.1
6	1G	50	ALA	2.1
32	1a	160	A	2.1
32	2a	1275	A	2.1

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Mol	Chain	Res	Type	RSRZ
41	1j	18	ALA	2.1
47	1p	7	ALA	2.1
8	2I	12	LEU	2.1
21	2Z	125	LEU	2.1
22	20	43	THR	2.1
33	1b	44	LEU	2.1
35	1d	2	GLY	2.1
39	2h	2	LEU	2.1
40	1i	56	LEU	2.1
40	2i	56	LEU	2.1
26	24	14	ILE	2.1
33	1b	222	ILE	2.1
33	1b	223	ILE	2.1
34	1c	57	ILE	2.1
36	2e	76	ILE	2.1
1	1A	879	G	2.1
1	2A	11	G	2.1
1	2A	652(U)	G	2.1
1	2A	1171	G	2.1
1	2A	2151	G	2.1
25	13	60	GLU	2.1
26	24	3	GLU	2.1
41	2j	79	ARG	2.1
44	2m	104	ARG	2.1
47	2p	38	TYR	2.1
32	2a	1276	G	2.1
56	1y	18	G	2.1
1	1A	2896	C	2.1
1	2A	2107	C	2.1
2	2B	27	C	2.1
26	14	51	ASP	2.1
32	1a	1030	C	2.1
40	2i	127	LYS	2.1
6	2G	87	PRO	2.1
38	2g	112	PRO	2.1
12	2Q	104	PHE	2.1
21	2Z	151	HIS	2.1
33	2b	163	PHE	2.1
47	1p	1	MET	2.1
50	1s	14	HIS	2.1
21	2Z	74	VAL	2.1
34	1c	130	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
36	2e	100	VAL	2.1
39	2h	79	VAL	2.1
43	1l	11	VAL	2.1
33	2b	97	TRP	2.1
1	1A	2180	U	2.1
32	1a	204	U	2.1
35	2d	48	ALA	2.1
41	2j	32	ALA	2.1
42	2k	60	ALA	2.1
56	1y	33	U	2.1
6	2G	134	GLY	2.1
8	2I	9	LEU	2.1
19	2X	94	GLY	2.1
21	2Z	157	LEU	2.1
34	2c	12	LEU	2.1
39	1h	112	LEU	2.1
44	2m	68	GLY	2.1
50	2s	5	LEU	2.1
41	2j	9	ARG	2.1
26	24	53	GLU	2.1
41	1j	74	ILE	2.1
37	2f	59	TYR	2.1
44	2m	59	TYR	2.1
20	2Y	33	LYS	2.1
26	24	69	LYS	2.1
45	2n	17	LYS	2.1
7	1H	2	SER	2.1
1	1A	1074	G	2.1
1	1A	2155	G	2.1
32	2a	1131	G	2.1
54	2w	69	G	2.1
1	1A	2177	C	2.1
1	2A	2175	C	2.1
1	2A	2188	C	2.1
21	2Z	159	PRO	2.1
56	1y	48	C	2.1
33	2b	16	HIS	2.1
36	1e	10	MET	2.1
50	2s	14	HIS	2.1
6	2G	159	VAL	2.1
8	2I	3	VAL	2.1
35	2d	148	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
35	2d	170	VAL	2.1
40	1i	59	PHE	2.1
40	2i	44	VAL	2.1
46	2o	30	ALA	2.1
6	2G	136	ARG	2.1
7	2H	42	ARG	2.1
14	2S	48	LEU	2.1
23	1l	73	LEU	2.1
33	1b	23	ARG	2.1
34	2c	175	LEU	2.1
38	2g	12	LEU	2.1
38	2g	38	LEU	2.1
40	1i	102	LEU	2.1
41	1j	78	ASN	2.1
43	2l	60	LEU	2.1
44	2m	62	ASN	2.1
44	2m	57	ARG	2.1
44	2m	81	LEU	2.1
47	2p	73	LEU	2.1
40	2i	30	GLY	2.1
39	2h	22	GLU	2.1
7	2H	9	ILE	2.1
21	2Z	133	ILE	2.1
33	2b	58	ILE	2.1
34	2c	152	ILE	2.1
36	2e	80	ILE	2.1
48	1q	90	ILE	2.1
45	1n	50	LYS	2.1
48	1q	97	SER	2.1
20	2Y	53	PRO	2.1
33	1b	167	PRO	2.1
44	2m	41	PRO	2.1
19	2X	1	MET	2.1
29	27	1	MET	2.1
1	1A	1062	G	2.0
1	2A	652(V)	C	2.1
32	1a	102	G	2.0
32	1a	1032	G	2.0
32	1a	1042	G	2.0
32	2a	1009	G	2.0
32	2a	1217	C	2.1
32	2a	1260	C	2.1

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Mol	Chain	Res	Type	RSRZ
54	1w	67	C	2.1
40	2i	3	GLN	2.0
54	2w	19	G	2.0
56	2y	57	G	2.0
7	2H	19	VAL	2.0
8	2I	127	VAL	2.0
20	2Y	72	VAL	2.0
21	1Z	139	VAL	2.0
26	14	49	PHE	2.0
33	2b	81	VAL	2.0
35	2d	198	VAL	2.0
40	1i	14	VAL	2.0
46	2o	18	PHE	2.0
14	2S	86	ALA	2.0
15	1T	111	ARG	2.0
28	26	20	ASN	2.0
35	1d	194	LEU	2.0
37	2f	45	LEU	2.0
40	2i	47	LEU	2.0
41	2j	78	ASN	2.0
50	2s	53	ASN	2.0
7	1H	100	GLY	2.0
22	20	42	GLY	2.0
35	2d	34	GLU	2.0
38	2g	103	TRP	2.0
42	2k	118	GLY	2.0
1	1A	1065	U	2.0
1	1A	1101	U	2.0
20	2Y	63	LYS	2.0
32	2a	84	U	2.0
47	2p	48	TRP	2.0
50	2s	49	ILE	2.0
1	2A	1847	A	2.0
7	2H	164	TYR	2.0
39	2h	48	TYR	2.0
40	1i	105	ASP	2.0
34	2c	109	PRO	2.0
39	2h	67	PRO	2.0
40	2i	123	PRO	2.0
1	1A	652(S)	C	2.0
2	2B	6	C	2.0
6	2G	23	PHE	2.0

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Mol	Chain	Res	Type	RSRZ
33	2b	229	VAL	2.0
34	2c	173	VAL	2.0
37	1f	88	VAL	2.0
38	2g	32	ARG	2.0
40	2i	101	PHE	2.0
45	2n	12	ARG	2.0
54	2w	2	C	2.0
1	1A	1107	G	2.0
1	1A	2807	G	2.0
33	2b	29	ALA	2.0
56	1y	57	G	2.0
56	2y	22	G	2.0
3	2D	275	LYS	2.0
23	21	83	GLU	2.0
31	29	28	GLU	2.0
35	1d	135	LEU	2.0
40	2i	96	LEU	2.0
6	2G	123	ASN	2.0
26	14	64	GLY	2.0
33	1b	38	GLY	2.0
48	2q	8	GLY	2.0
7	2H	72	ILE	2.0
44	2m	22	ILE	2.0
47	1p	36	ILE	2.0
1	1A	1026	U	2.0
1	2A	1026	U	2.0
32	1a	173	U	2.0
32	2a	1219	U	2.0
13	1R	69	ASP	2.0
32	1a	149	A	2.0
32	1a	1030(D)	A	2.0
32	1a	1286	A	2.0
33	1b	220	ASP	2.0
56	2y	73	A	2.0
21	1Z	1	MET	2.0
36	2e	10	MET	2.0
41	1j	86	MET	2.0
31	29	20	HIS	2.0
37	1f	17	SER	2.0
43	2l	64	TYR	2.0

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	7MG	2y	46	24/25	0.52	0.17	80,91,96,105	0
56	MIA	2y	37	22/30	0.57	0.16	76,85,95,115	0
56	PSU	2y	55	20/21	0.59	0.18	76,83,96,102	0
56	7MG	1y	46	24/25	0.62	0.17	77,85,94,100	0
56	4SU	2y	8	20/21	0.63	0.15	81,89,99,105	0
56	PSU	2y	39	20/21	0.65	0.16	75,85,94,103	0
56	MIA	1y	37	22/30	0.67	0.17	72,78,92,106	0
56	PSU	1y	55	20/21	0.68	0.16	79,86,94,95	0
56	PSU	2y	32	20/21	0.70	0.14	68,85,93,104	0
54	7MG	2w	46	24/25	0.71	0.15	67,75,92,102	0
56	5MU	2y	54	21/22	0.71	0.17	79,83,91,106	0
56	PSU	1y	32	20/21	0.72	0.16	74,80,92,102	0
56	4SU	1y	8	20/21	0.72	0.13	79,86,91,104	0
56	PSU	1y	39	20/21	0.76	0.14	68,82,89,89	0
56	5MU	1y	54	21/22	0.78	0.13	77,82,87,93	0
54	7MG	1w	46	24/25	0.79	0.14	61,70,88,106	0
54	4SU	2w	8	20/21	0.83	0.13	72,78,91,92	0
54	PSU	2w	55	20/21	0.84	0.12	66,73,79,85	0
32	2MG	2a	1207	24/25	0.87	0.12	68,72,77,82	0
43	0TD	2l	92	10/11	0.87	0.14	50,55,64,82	0
54	5MU	2w	54	21/22	0.88	0.12	61,67,76,78	0
54	PSU	2w	32	20/21	0.88	0.13	63,70,75,76	0
55	4SU	2x	8	20/21	0.89	0.11	62,65,70,70	0
54	PSU	2w	39	20/21	0.89	0.12	64,68,73,73	0
54	4SU	1w	8	20/21	0.90	0.12	66,73,81,84	0
55	PSU	2x	55	20/21	0.91	0.10	59,66,75,75	0
54	MIA	2w	37	25/30	0.92	0.11	50,63,71,88	0
55	5MU	1x	54	21/22	0.92	0.11	50,58,60,61	0
55	PSU	1x	55	20/21	0.92	0.10	44,50,59,61	0
32	M2G	2a	966	25/26	0.92	0.13	46,55,71,79	0
55	5MU	2x	54	21/22	0.92	0.11	65,68,74,85	0
32	5MC	2a	967	21/22	0.93	0.12	55,61,65,69	0
55	5MC	2x	32	21/22	0.93	0.11	59,63,67,72	0
32	PSU	2a	516	20/21	0.93	0.09	55,61,69,69	0
43	0TD	1l	92	10/11	0.93	0.11	39,45,47,55	0
54	PSU	1w	55	20/21	0.93	0.09	53,61,67,69	0
32	5MC	2a	1407	21/22	0.94	0.10	46,52,56,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
55	4SU	1x	8	20/21	0.94	0.10	40,50,58,59	0
32	2MG	1a	1207	24/25	0.94	0.11	46,54,57,62	0
54	5MU	1w	54	21/22	0.94	0.08	40,50,58,61	0
54	PSU	1w	32	20/21	0.94	0.10	43,49,58,59	0
32	7MG	2a	527	24/25	0.94	0.11	44,58,64,65	0
32	5MC	2a	1400	21/22	0.94	0.13	48,59,63,64	0
32	MA6	2a	1519	24/25	0.95	0.10	48,56,59,60	0
1	5MC	1A	1942	21/22	0.95	0.09	31,40,45,49	0
1	5MU	1A	1915	21/22	0.95	0.10	31,40,48,52	0
1	5MU	2A	1915	21/22	0.95	0.09	46,55,60,61	0
1	PSU	2A	1917	20/21	0.95	0.09	42,51,56,56	0
1	4OC	2A	1920	21/23	0.95	0.09	44,51,54,57	0
32	4OC	2a	1402	22/23	0.95	0.11	42,53,58,58	0
32	5MC	2a	1404	21/22	0.95	0.09	41,54,57,60	0
55	5MC	1x	32	21/22	0.95	0.10	39,43,50,60	0
32	UR3	2a	1498	21/22	0.95	0.10	41,50,54,56	0
54	MIA	1w	37	29/30	0.95	0.11	32,42,59,72	0
32	PSU	1a	516	20/21	0.96	0.09	40,48,54,54	0
1	PSU	2A	1911	20/21	0.96	0.08	41,53,60,63	0
32	MA6	2a	1518	24/25	0.96	0.10	49,54,59,63	0
32	M2G	1a	966	25/26	0.96	0.09	34,39,42,47	0
1	PSU	1A	1917	20/21	0.96	0.08	29,44,50,51	0
32	5MC	1a	1400	21/22	0.96	0.11	28,39,43,51	0
1	5MC	2A	1942	21/22	0.96	0.09	40,48,52,58	0
1	5MC	2A	1962	21/22	0.96	0.09	31,42,49,56	0
1	OMG	2A	2251	24/25	0.96	0.09	27,34,37,41	0
55	31H	2x	76	32/33	0.97	0.08	24,34,44,48	0
32	5MC	1a	967	21/22	0.97	0.08	35,42,46,49	0
1	4OC	1A	1920	21/23	0.97	0.07	35,40,42,43	0
1	2MU	2A	2552	21/23	0.97	0.08	32,38,43,44	0
32	7MG	1a	527	24/25	0.97	0.08	33,41,49,51	0
54	PSU	1w	39	20/21	0.97	0.08	32,51,57,60	0
32	4OC	1a	1402	22/23	0.97	0.07	37,43,46,48	0
32	5MC	1a	1404	21/22	0.97	0.08	29,37,39,42	0
32	5MC	1a	1407	21/22	0.97	0.07	23,37,40,43	0
32	MA6	1a	1518	24/25	0.97	0.08	30,36,40,40	0
32	MA6	1a	1519	24/25	0.97	0.07	29,36,39,44	0
1	5MU	2A	1939	21/22	0.97	0.08	28,33,36,41	0
1	PSU	1A	1911	20/21	0.97	0.07	39,42,46,50	0
54	F3N	2w	76	33/34	0.97	0.08	30,35,41,42	0
55	31H	1x	76	32/33	0.97	0.08	13,21,26,33	10
54	F3N	1w	76	33/34	0.98	0.06	15,20,23,25	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	0.98	0.07	23,32,38,39	0
1	2MA	1A	2503	23/24	0.98	0.06	10,17,23,28	0
32	UR3	1a	1498	21/22	0.98	0.07	26,31,37,38	0
1	2MU	1A	2552	21/23	0.98	0.06	16,25,29,32	0
1	5MU	1A	1939	21/22	0.98	0.07	17,23,29,30	0
1	5MC	1A	1962	21/22	0.98	0.06	18,25,34,37	0
1	2MA	2A	2503	23/24	0.98	0.07	26,29,33,38	0
1	OMG	1A	2251	24/25	0.98	0.06	15,23,26,28	0
1	PSU	1A	2605	20/21	0.99	0.05	17,22,26,27	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
57	MG	2A	3917	1/1	0.30	0.22	77,77,77,77	0
57	MG	1A	4227	1/1	0.52	0.17	65,65,65,65	0
57	MG	1a	3245	1/1	0.60	0.23	66,66,66,66	0
57	MG	1A	4167	1/1	0.61	0.15	65,65,65,65	0
57	MG	2A	3724	1/1	0.62	0.23	69,69,69,69	0
57	MG	1A	4212	1/1	0.63	0.20	55,55,55,55	0
57	MG	2a	3268	1/1	0.63	0.15	74,74,74,74	0
57	MG	2A	3840	1/1	0.64	0.27	57,57,57,57	0
57	MG	2A	3943	1/1	0.66	0.21	57,57,57,57	0
57	MG	2a	3020	1/1	0.67	0.25	65,65,65,65	0
57	MG	2a	3235	1/1	0.67	0.16	73,73,73,73	0
57	MG	2A	3791	1/1	0.67	0.15	60,60,60,60	0
57	MG	2a	3062	1/1	0.68	0.31	79,79,79,79	0
57	MG	1A	3910	1/1	0.69	0.10	15,15,15,15	0
57	MG	1A	3563	1/1	0.69	0.21	53,53,53,53	0
57	MG	1A	3515	1/1	0.70	0.17	53,53,53,53	0
57	MG	1A	3402	1/1	0.71	0.30	66,66,66,66	0
57	MG	2a	3149	1/1	0.71	0.42	77,77,77,77	0
57	MG	1A	4278	1/1	0.72	0.15	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	4279	1/1	0.73	0.23	31,31,31,31	0
57	MG	2A	3590	1/1	0.73	0.18	55,55,55,55	0
57	MG	2A	3833	1/1	0.74	0.14	62,62,62,62	0
57	MG	2A	3093	1/1	0.74	0.14	68,68,68,68	0
57	MG	2A	3753	1/1	0.74	0.26	73,73,73,73	0
57	MG	2A	3923	1/1	0.74	0.15	60,60,60,60	0
57	MG	1A	3899	1/1	0.74	0.15	38,38,38,38	0
57	MG	2a	3005	1/1	0.75	0.18	70,70,70,70	0
57	MG	2A	3748	1/1	0.75	0.24	65,65,65,65	0
57	MG	2A	3867	1/1	0.75	0.11	47,47,47,47	0
57	MG	2A	3033	1/1	0.75	0.20	54,54,54,54	0
57	MG	2A	3190	1/1	0.75	0.29	68,68,68,68	0
57	MG	2a	3262	1/1	0.75	0.17	66,66,66,66	0
57	MG	2A	3731	1/1	0.75	0.17	67,67,67,67	0
57	MG	1A	4022	1/1	0.76	0.19	62,62,62,62	0
57	MG	1A	3483	1/1	0.76	0.18	74,74,74,74	0
57	MG	1A	4183	1/1	0.76	0.15	49,49,49,49	0
57	MG	2a	3058	1/1	0.76	0.17	61,61,61,61	0
57	MG	2A	3209	1/1	0.76	0.16	54,54,54,54	0
57	MG	1a	3148	1/1	0.76	0.22	59,59,59,59	0
57	MG	2A	3648	1/1	0.76	0.18	59,59,59,59	0
57	MG	1A	3818	1/1	0.76	0.17	57,57,57,57	0
57	MG	1a	3247	1/1	0.76	0.15	73,73,73,73	0
57	MG	2A	3396	1/1	0.77	0.21	75,75,75,75	0
57	MG	1A	4009	1/1	0.77	0.15	43,43,43,43	0
57	MG	1a	3244	1/1	0.77	0.15	65,65,65,65	0
57	MG	1A	3821	1/1	0.77	0.14	60,60,60,60	0
57	MG	1A	4085	1/1	0.77	0.10	21,21,21,21	0
57	MG	1A	4274	1/1	0.77	0.20	69,69,69,69	0
57	MG	1A	3931	1/1	0.77	0.21	73,73,73,73	0
57	MG	1A	4182	1/1	0.77	0.16	45,45,45,45	0
57	MG	2a	3219	1/1	0.77	0.14	55,55,55,55	0
57	MG	1a	3095	1/1	0.77	0.31	57,57,57,57	0
57	MG	2A	3249	1/1	0.77	0.14	63,63,63,63	0
57	MG	2A	3355	1/1	0.77	0.29	69,69,69,69	0
57	MG	1A	4296	1/1	0.78	0.17	61,61,61,61	0
57	MG	2A	3315	1/1	0.78	0.17	61,61,61,61	0
57	MG	1A	4068	1/1	0.78	0.10	26,26,26,26	0
57	MG	2A	3127	1/1	0.78	0.25	66,66,66,66	0
57	MG	2A	3176	1/1	0.78	0.20	64,64,64,64	0
57	MG	2a	3116	1/1	0.78	0.15	63,63,63,63	0
57	MG	2A	3599	1/1	0.78	0.19	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2a	3183	1/1	0.78	0.18	72,72,72,72	0
57	MG	2A	3862	1/1	0.78	0.11	45,45,45,45	0
57	MG	1A	3439	1/1	0.78	0.17	66,66,66,66	0
57	MG	2A	3710	1/1	0.78	0.14	33,33,33,33	0
57	MG	1a	3254	1/1	0.78	0.19	58,58,58,58	0
57	MG	2A	3264	1/1	0.79	0.23	70,70,70,70	0
57	MG	2A	3899	1/1	0.79	0.12	51,51,51,51	0
57	MG	1A	3849	1/1	0.79	0.11	48,48,48,48	0
57	MG	2A	3615	1/1	0.79	0.21	58,58,58,58	0
57	MG	2a	3185	1/1	0.79	0.11	65,65,65,65	0
57	MG	1a	3252	1/1	0.79	0.22	53,53,53,53	0
57	MG	2A	3660	1/1	0.79	0.15	56,56,56,56	0
57	MG	2A	3257	1/1	0.79	0.28	62,62,62,62	0
57	MG	2A	3422	1/1	0.79	0.15	61,61,61,61	0
57	MG	2A	3220	1/1	0.80	0.30	66,66,66,66	0
57	MG	1a	3180	1/1	0.80	0.13	38,38,38,38	0
57	MG	1A	3845	1/1	0.80	0.13	25,25,25,25	0
57	MG	2a	3071	1/1	0.80	0.16	66,66,66,66	0
57	MG	2a	3079	1/1	0.80	0.20	61,61,61,61	0
57	MG	2A	3616	1/1	0.80	0.13	41,41,41,41	0
57	MG	2a	3128	1/1	0.80	0.37	72,72,72,72	0
57	MG	1A	4029	1/1	0.80	0.18	37,37,37,37	0
57	MG	1A	3999	1/1	0.80	0.12	49,49,49,49	0
57	MG	2A	3184	1/1	0.80	0.19	64,64,64,64	0
57	MG	2A	3712	1/1	0.80	0.14	49,49,49,49	0
57	MG	2a	3232	1/1	0.80	0.14	70,70,70,70	0
57	MG	1A	4006	1/1	0.80	0.14	47,47,47,47	0
57	MG	1A	3346	1/1	0.80	0.14	48,48,48,48	0
57	MG	2A	3496	1/1	0.80	0.32	71,71,71,71	0
57	MG	1a	3241	1/1	0.81	0.17	61,61,61,61	0
57	MG	2a	3027	1/1	0.81	0.21	74,74,74,74	0
57	MG	2a	3050	1/1	0.81	0.12	69,69,69,69	0
57	MG	1A	3805	1/1	0.81	0.12	35,35,35,35	0
57	MG	1A	4197	1/1	0.81	0.18	65,65,65,65	0
57	MG	1A	3943	1/1	0.81	0.13	50,50,50,50	0
57	MG	1A	4174	1/1	0.81	0.12	57,57,57,57	0
57	MG	1A	4251	1/1	0.81	0.14	49,49,49,49	0
57	MG	1A	3957	1/1	0.81	0.19	54,54,54,54	0
57	MG	2a	3133	1/1	0.81	0.17	60,60,60,60	0
57	MG	2A	3643	1/1	0.81	0.13	40,40,40,40	0
57	MG	2a	3153	1/1	0.81	0.20	75,75,75,75	0
57	MG	1a	3204	1/1	0.81	0.19	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3273	1/1	0.81	0.39	69,69,69,69	0
57	MG	2A	3107	1/1	0.81	0.33	63,63,63,63	0
57	MG	2A	3924	1/1	0.81	0.13	71,71,71,71	0
57	MG	2A	3322	1/1	0.81	0.15	50,50,50,50	0
57	MG	1a	3237	1/1	0.81	0.13	77,77,77,77	0
57	MG	2a	3011	1/1	0.81	0.23	64,64,64,64	0
57	MG	1A	4208	1/1	0.82	0.21	53,53,53,53	0
57	MG	1A	4025	1/1	0.82	0.12	36,36,36,36	0
57	MG	1a	3083	1/1	0.82	0.15	57,57,57,57	0
57	MG	2A	3882	1/1	0.82	0.14	51,51,51,51	0
57	MG	1A	3781	1/1	0.82	0.12	68,68,68,68	0
57	MG	1a	3135	1/1	0.82	0.12	72,72,72,72	0
57	MG	1A	3275	1/1	0.82	0.22	36,36,36,36	0
57	MG	2A	3215	1/1	0.82	0.18	64,64,64,64	0
57	MG	1a	3166	1/1	0.82	0.19	79,79,79,79	0
57	MG	1A	4074	1/1	0.82	0.15	44,44,44,44	0
57	MG	2A	3766	1/1	0.82	0.13	46,46,46,46	0
57	MG	2a	3215	1/1	0.82	0.14	69,69,69,69	0
57	MG	2A	3770	1/1	0.82	0.15	83,83,83,83	0
57	MG	2A	3083	1/1	0.82	0.28	62,62,62,62	0
57	MG	2a	3233	1/1	0.82	0.18	67,67,67,67	0
57	MG	2a	3043	1/1	0.82	0.19	61,61,61,61	0
57	MG	2a	3044	1/1	0.82	0.16	50,50,50,50	0
57	MG	1A	3505	1/1	0.82	0.22	66,66,66,66	0
57	MG	2a	3272	1/1	0.82	0.17	65,65,65,65	0
57	MG	1A	4239	1/1	0.83	0.19	64,64,64,64	0
57	MG	2A	3905	1/1	0.83	0.14	32,32,32,32	0
57	MG	1A	4096	1/1	0.83	0.17	48,48,48,48	0
57	MG	1A	4151	1/1	0.83	0.12	50,50,50,50	0
57	MG	2A	3606	1/1	0.83	0.18	54,54,54,54	0
57	MG	1A	3447	1/1	0.83	0.14	60,60,60,60	0
57	MG	1A	4023	1/1	0.83	0.12	37,37,37,37	0
57	MG	2A	3624	1/1	0.83	0.16	41,41,41,41	0
57	MG	2A	3629	1/1	0.83	0.16	49,49,49,49	0
57	MG	1A	3860	1/1	0.83	0.12	38,38,38,38	0
57	MG	2a	3030	1/1	0.83	0.15	66,66,66,66	0
57	MG	1a	3041	1/1	0.83	0.28	58,58,58,58	0
57	MG	1a	3248	1/1	0.83	0.20	73,73,73,73	0
57	MG	2A	3672	1/1	0.83	0.21	50,50,50,50	0
57	MG	2A	3259	1/1	0.83	0.29	71,71,71,71	0
57	MG	1a	3074	1/1	0.83	0.17	60,60,60,60	0
57	MG	2a	3066	1/1	0.83	0.14	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2a	3068	1/1	0.83	0.15	67,67,67,67	0
57	MG	1A	3977	1/1	0.83	0.14	50,50,50,50	0
57	MG	2A	3310	1/1	0.83	0.13	69,69,69,69	0
57	MG	2a	3110	1/1	0.83	0.17	56,56,56,56	0
57	MG	2A	3733	1/1	0.83	0.14	51,51,51,51	0
57	MG	2A	3736	1/1	0.83	0.16	61,61,61,61	0
57	MG	1A	3580	1/1	0.83	0.13	53,53,53,53	0
57	MG	1A	3604	1/1	0.83	0.11	54,54,54,54	0
57	MG	2A	3354	1/1	0.83	0.23	66,66,66,66	0
57	MG	1a	3141	1/1	0.83	0.24	64,64,64,64	0
57	MG	2A	3785	1/1	0.83	0.21	58,58,58,58	0
57	MG	2A	3356	1/1	0.83	0.14	68,68,68,68	0
57	MG	2A	3388	1/1	0.83	0.34	63,63,63,63	0
57	MG	1A	4082	1/1	0.83	0.16	55,55,55,55	0
57	MG	1A	3330	1/1	0.83	0.17	63,63,63,63	0
57	MG	2A	3865	1/1	0.83	0.13	50,50,50,50	0
57	MG	2A	3441	1/1	0.83	0.16	43,43,43,43	0
57	MG	2A	3456	1/1	0.83	0.28	64,64,64,64	0
57	MG	2A	3886	1/1	0.83	0.11	65,65,65,65	0
57	MG	2a	3276	1/1	0.83	0.22	70,70,70,70	0
57	MG	1A	3349	1/1	0.84	0.11	46,46,46,46	0
57	MG	1a	3027	1/1	0.84	0.25	65,65,65,65	0
57	MG	2A	3941	1/1	0.84	0.19	66,66,66,66	0
57	MG	2A	3636	1/1	0.84	0.10	32,32,32,32	0
57	MG	2A	3964	1/1	0.84	0.13	64,64,64,64	0
57	MG	2a	3003	1/1	0.84	0.14	53,53,53,53	0
57	MG	2A	3289	1/1	0.84	0.12	50,50,50,50	0
57	MG	1A	3986	1/1	0.84	0.11	43,43,43,43	0
57	MG	1A	3995	1/1	0.84	0.11	61,61,61,61	0
57	MG	1A	3996	1/1	0.84	0.09	20,20,20,20	0
57	MG	2A	3328	1/1	0.84	0.15	46,46,46,46	0
57	MG	2A	3329	1/1	0.84	0.18	57,57,57,57	0
57	MG	2A	3715	1/1	0.84	0.15	43,43,43,43	0
57	MG	2A	3353	1/1	0.84	0.14	69,69,69,69	0
57	MG	2a	3056	1/1	0.84	0.18	57,57,57,57	0
57	MG	2A	3053	1/1	0.84	0.26	66,66,66,66	0
57	MG	2a	3061	1/1	0.84	0.13	73,73,73,73	0
57	MG	1a	3084	1/1	0.84	0.12	64,64,64,64	0
57	MG	1A	3077	1/1	0.84	0.18	62,62,62,62	0
57	MG	2A	3741	1/1	0.84	0.17	54,54,54,54	0
57	MG	2A	3373	1/1	0.84	0.15	57,57,57,57	0
57	MG	1A	3609	1/1	0.84	0.16	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2a	3091	1/1	0.84	0.19	69,69,69,69	0
57	MG	2A	3764	1/1	0.84	0.12	67,67,67,67	0
57	MG	1A	3747	1/1	0.84	0.10	55,55,55,55	0
57	MG	1A	3872	1/1	0.84	0.10	58,58,58,58	0
57	MG	1A	3752	1/1	0.84	0.11	39,39,39,39	0
57	MG	1A	3768	1/1	0.84	0.09	53,53,53,53	0
57	MG	2A	3797	1/1	0.84	0.11	58,58,58,58	0
57	MG	2a	3158	1/1	0.84	0.25	66,66,66,66	0
57	MG	2A	3465	1/1	0.84	0.12	53,53,53,53	0
57	MG	2A	3483	1/1	0.84	0.13	60,60,60,60	0
57	MG	2a	3202	1/1	0.84	0.12	62,62,62,62	0
57	MG	1a	3199	1/1	0.84	0.12	68,68,68,68	0
57	MG	2A	3560	1/1	0.84	0.14	60,60,60,60	0
57	MG	1A	3104	1/1	0.84	0.20	53,53,53,53	0
57	MG	2A	3875	1/1	0.84	0.14	65,65,65,65	0
57	MG	1A	3938	1/1	0.84	0.10	14,14,14,14	0
57	MG	1A	3521	1/1	0.84	0.14	57,57,57,57	0
57	MG	2A	3611	1/1	0.84	0.12	41,41,41,41	0
57	MG	1A	3949	1/1	0.84	0.14	53,53,53,53	0
57	MG	1A	3211	1/1	0.84	0.24	48,48,48,48	0
57	MG	2A	3472	1/1	0.85	0.16	61,61,61,61	0
57	MG	1A	3461	1/1	0.85	0.14	51,51,51,51	0
57	MG	1a	3176	1/1	0.85	0.26	59,59,59,59	0
57	MG	2A	3557	1/1	0.85	0.20	60,60,60,60	0
57	MG	2a	3037	1/1	0.85	0.18	75,75,75,75	0
57	MG	1A	4292	1/1	0.85	0.13	57,57,57,57	0
57	MG	2A	3571	1/1	0.85	0.17	58,58,58,58	0
57	MG	2A	3776	1/1	0.85	0.15	62,62,62,62	0
57	MG	2A	3779	1/1	0.85	0.15	57,57,57,57	0
57	MG	1a	3193	1/1	0.85	0.13	57,57,57,57	0
57	MG	1A	3137	1/1	0.85	0.14	61,61,61,61	0
57	MG	2A	3792	1/1	0.85	0.10	37,37,37,37	0
57	MG	2A	3119	1/1	0.85	0.17	50,50,50,50	0
57	MG	2A	3325	1/1	0.85	0.20	54,54,54,54	0
57	MG	1A	3557	1/1	0.85	0.13	62,62,62,62	0
57	MG	2A	3857	1/1	0.85	0.12	59,59,59,59	0
57	MG	1a	3211	1/1	0.85	0.13	54,54,54,54	0
57	MG	2A	3342	1/1	0.85	0.16	61,61,61,61	0
57	MG	1A	3905	1/1	0.85	0.09	21,21,21,21	0
57	MG	2a	3122	1/1	0.85	0.19	67,67,67,67	0
57	MG	1A	3748	1/1	0.85	0.10	24,24,24,24	0
57	MG	2A	3202	1/1	0.85	0.19	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3492	1/1	0.85	0.21	64,64,64,64	0
57	MG	1A	4228	1/1	0.85	0.13	52,52,52,52	0
57	MG	2a	3154	1/1	0.85	0.11	71,71,71,71	0
57	MG	2A	3381	1/1	0.85	0.16	62,62,62,62	0
57	MG	2a	3163	1/1	0.85	0.10	67,67,67,67	0
57	MG	2a	3174	1/1	0.85	0.22	66,66,66,66	0
57	MG	1A	4026	1/1	0.85	0.11	20,20,20,20	0
57	MG	1A	4168	1/1	0.85	0.10	56,56,56,56	0
57	MG	2a	3199	1/1	0.85	0.13	67,67,67,67	0
57	MG	2A	3412	1/1	0.85	0.18	55,55,55,55	0
57	MG	2A	3931	1/1	0.85	0.11	44,44,44,44	0
57	MG	2A	3932	1/1	0.85	0.12	42,42,42,42	0
57	MG	2A	3252	1/1	0.85	0.20	59,59,59,59	0
57	MG	2A	3256	1/1	0.85	0.30	61,61,61,61	0
57	MG	2A	3948	1/1	0.85	0.23	69,69,69,69	0
57	MG	2a	3247	1/1	0.85	0.21	56,56,56,56	0
57	MG	1A	3435	1/1	0.85	0.23	60,60,60,60	0
57	MG	2a	3265	1/1	0.85	0.17	69,69,69,69	0
57	MG	2a	3002	1/1	0.85	0.10	69,69,69,69	0
57	MG	2a	3269	1/1	0.85	0.15	65,65,65,65	0
57	MG	1A	4180	1/1	0.85	0.08	31,31,31,31	0
57	MG	2a	3273	1/1	0.85	0.12	60,60,60,60	0
57	MG	2A	3737	1/1	0.85	0.13	63,63,63,63	0
57	MG	2A	3045	1/1	0.86	0.14	59,59,59,59	0
57	MG	1A	3788	1/1	0.86	0.17	58,58,58,58	0
57	MG	1A	3964	1/1	0.86	0.07	17,17,17,17	0
57	MG	1a	3131	1/1	0.86	0.10	45,45,45,45	0
57	MG	2A	3100	1/1	0.86	0.20	56,56,56,56	0
57	MG	1A	3287	1/1	0.86	0.17	55,55,55,55	0
57	MG	1a	3138	1/1	0.86	0.11	69,69,69,69	0
57	MG	1A	3873	1/1	0.86	0.10	46,46,46,46	0
57	MG	2A	3411	1/1	0.86	0.17	51,51,51,51	0
57	MG	2a	3060	1/1	0.86	0.17	62,62,62,62	0
57	MG	1A	3424	1/1	0.86	0.24	66,66,66,66	0
57	MG	1a	3163	1/1	0.86	0.14	64,64,64,64	0
57	MG	1A	3759	1/1	0.86	0.06	18,18,18,18	0
57	MG	2A	3447	1/1	0.86	0.18	49,49,49,49	0
57	MG	2A	3196	1/1	0.86	0.23	58,58,58,58	0
57	MG	1A	4126	1/1	0.86	0.12	62,62,62,62	0
57	MG	1A	4266	1/1	0.86	0.12	45,45,45,45	0
57	MG	2a	3105	1/1	0.86	0.14	58,58,58,58	0
57	MG	1a	3182	1/1	0.86	0.12	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3486	1/1	0.86	0.14	61,61,61,61	0
57	MG	1A	4141	1/1	0.86	0.11	48,48,48,48	0
57	MG	2A	3533	1/1	0.86	0.14	56,56,56,56	0
57	MG	2A	3542	1/1	0.86	0.13	53,53,53,53	0
57	MG	2A	3235	1/1	0.86	0.22	57,57,57,57	0
57	MG	2a	3151	1/1	0.86	0.23	65,65,65,65	0
57	MG	1a	3196	1/1	0.86	0.09	51,51,51,51	0
57	MG	1A	4275	1/1	0.86	0.14	40,40,40,40	0
57	MG	2A	3582	1/1	0.86	0.23	53,53,53,53	0
57	MG	2A	3877	1/1	0.86	0.11	46,46,46,46	0
57	MG	2a	3166	1/1	0.86	0.10	70,70,70,70	0
57	MG	1A	4143	1/1	0.86	0.09	24,24,24,24	0
57	MG	1A	3906	1/1	0.86	0.10	27,27,27,27	0
57	MG	2a	3184	1/1	0.86	0.29	68,68,68,68	0
57	MG	2A	3893	1/1	0.86	0.10	43,43,43,43	0
57	MG	2a	3191	1/1	0.86	0.10	74,74,74,74	0
57	MG	1A	3822	1/1	0.86	0.06	17,17,17,17	0
57	MG	1A	3843	1/1	0.86	0.11	45,45,45,45	0
57	MG	1A	3844	1/1	0.86	0.11	22,22,22,22	0
57	MG	1a	3028	1/1	0.86	0.17	57,57,57,57	0
57	MG	2a	3222	1/1	0.86	0.13	51,51,51,51	0
57	MG	2A	3298	1/1	0.86	0.17	57,57,57,57	0
57	MG	2A	3307	1/1	0.86	0.29	64,64,64,64	0
57	MG	2a	3234	1/1	0.86	0.15	59,59,59,59	0
57	MG	1a	3032	1/1	0.86	0.27	54,54,54,54	0
57	MG	1A	3941	1/1	0.86	0.11	51,51,51,51	0
57	MG	2a	3260	1/1	0.86	0.17	62,62,62,62	0
57	MG	1a	3251	1/1	0.86	0.17	69,69,69,69	0
57	MG	2A	3657	1/1	0.86	0.12	55,55,55,55	0
57	MG	1a	3069	1/1	0.86	0.20	53,53,53,53	0
57	MG	1A	3652	1/1	0.86	0.13	62,62,62,62	0
57	MG	2A	3699	1/1	0.86	0.11	36,36,36,36	0
57	MG	2A	3008	1/1	0.86	0.14	53,53,53,53	0
57	MG	1A	3601	1/1	0.86	0.24	45,45,45,45	0
57	MG	2A	3728	1/1	0.87	0.18	62,62,62,62	0
57	MG	2a	3042	1/1	0.87	0.14	61,61,61,61	0
57	MG	2A	3191	1/1	0.87	0.10	43,43,43,43	0
57	MG	2A	3391	1/1	0.87	0.20	47,47,47,47	0
57	MG	1A	3425	1/1	0.87	0.18	55,55,55,55	0
57	MG	2A	3199	1/1	0.87	0.10	63,63,63,63	0
57	MG	1a	3207	1/1	0.87	0.15	62,62,62,62	0
57	MG	1A	4163	1/1	0.87	0.10	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3320	1/1	0.87	0.13	35,35,35,35	0
57	MG	1A	3743	1/1	0.87	0.11	36,36,36,36	0
57	MG	1a	3243	1/1	0.87	0.22	56,56,56,56	0
57	MG	2A	3464	1/1	0.87	0.30	59,59,59,59	0
57	MG	1A	3438	1/1	0.87	0.13	53,53,53,53	0
57	MG	1A	3268	1/1	0.87	0.13	55,55,55,55	0
57	MG	2a	3090	1/1	0.87	0.18	59,59,59,59	0
57	MG	1A	3178	1/1	0.87	0.17	52,52,52,52	0
57	MG	2a	3092	1/1	0.87	0.24	66,66,66,66	0
57	MG	1A	3848	1/1	0.87	0.13	38,38,38,38	0
57	MG	2a	3106	1/1	0.87	0.17	56,56,56,56	0
57	MG	2A	3258	1/1	0.87	0.14	64,64,64,64	0
57	MG	1A	3567	1/1	0.87	0.08	46,46,46,46	0
57	MG	2A	3825	1/1	0.87	0.10	31,31,31,31	0
57	MG	2A	3261	1/1	0.87	0.09	64,64,64,64	0
57	MG	2A	3262	1/1	0.87	0.23	52,52,52,52	0
57	MG	2a	3140	1/1	0.87	0.13	58,58,58,58	0
57	MG	2a	3146	1/1	0.87	0.17	59,59,59,59	0
57	MG	2a	3147	1/1	0.87	0.14	50,50,50,50	0
57	MG	2a	3148	1/1	0.87	0.21	63,63,63,63	0
57	MG	1A	4202	1/1	0.87	0.12	44,44,44,44	0
57	MG	2A	3272	1/1	0.87	0.12	57,57,57,57	0
57	MG	2A	3573	1/1	0.87	0.10	64,64,64,64	0
57	MG	1a	3116	1/1	0.87	0.13	43,43,43,43	0
57	MG	2A	3006	1/1	0.87	0.24	51,51,51,51	0
57	MG	2A	3295	1/1	0.87	0.12	64,64,64,64	0
57	MG	1A	4040	1/1	0.87	0.21	48,48,48,48	0
57	MG	1A	4045	1/1	0.87	0.11	44,44,44,44	0
57	MG	2a	3181	1/1	0.87	0.14	64,64,64,64	0
57	MG	1A	3856	1/1	0.87	0.13	35,35,35,35	0
57	MG	2A	3049	1/1	0.87	0.20	52,52,52,52	0
57	MG	2A	3619	1/1	0.87	0.10	39,39,39,39	0
57	MG	2A	3320	1/1	0.87	0.25	61,61,61,61	0
57	MG	2A	3625	1/1	0.87	0.11	44,44,44,44	0
57	MG	1A	3284	1/1	0.87	0.15	58,58,58,58	0
57	MG	1A	3862	1/1	0.87	0.22	56,56,56,56	0
57	MG	1A	3980	1/1	0.87	0.10	31,31,31,31	0
57	MG	2A	3647	1/1	0.87	0.13	50,50,50,50	0
57	MG	2a	3231	1/1	0.87	0.14	69,69,69,69	0
57	MG	1A	4264	1/1	0.87	0.13	52,52,52,52	0
57	MG	1A	4090	1/1	0.87	0.10	50,50,50,50	0
57	MG	2A	3351	1/1	0.87	0.12	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3668	1/1	0.87	0.16	63,63,63,63	0
57	MG	2a	3236	1/1	0.87	0.21	63,63,63,63	0
57	MG	2A	3116	1/1	0.87	0.16	65,65,65,65	0
57	MG	2a	3248	1/1	0.87	0.16	59,59,59,59	0
57	MG	2a	3250	1/1	0.87	0.10	49,49,49,49	0
57	MG	1A	3599	1/1	0.87	0.24	71,71,71,71	0
57	MG	2a	3261	1/1	0.87	0.14	68,68,68,68	0
57	MG	1A	4120	1/1	0.87	0.12	53,53,53,53	0
57	MG	1A	3987	1/1	0.87	0.10	46,46,46,46	0
57	MG	2a	3267	1/1	0.87	0.20	61,61,61,61	0
57	MG	2a	3021	1/1	0.87	0.11	67,67,67,67	0
57	MG	2a	3026	1/1	0.87	0.41	68,68,68,68	0
57	MG	1A	3247	1/1	0.87	0.19	60,60,60,60	0
57	MG	1A	3314	1/1	0.87	0.16	57,57,57,57	0
57	MG	2a	3031	1/1	0.87	0.14	64,64,64,64	0
57	MG	2A	3690	1/1	0.88	0.11	55,55,55,55	0
57	MG	1a	3058	1/1	0.88	0.17	49,49,49,49	0
57	MG	2a	3045	1/1	0.88	0.26	55,55,55,55	0
57	MG	2A	3214	1/1	0.88	0.09	52,52,52,52	0
57	MG	2a	3054	1/1	0.88	0.18	72,72,72,72	0
57	MG	1a	3063	1/1	0.88	0.10	45,45,45,45	0
57	MG	1a	3068	1/1	0.88	0.26	60,60,60,60	0
57	MG	2A	3400	1/1	0.88	0.15	58,58,58,58	0
57	MG	2A	3409	1/1	0.88	0.18	50,50,50,50	0
57	MG	2A	3730	1/1	0.88	0.11	55,55,55,55	0
57	MG	2A	3410	1/1	0.88	0.10	70,70,70,70	0
57	MG	2A	3222	1/1	0.88	0.11	53,53,53,53	0
57	MG	1A	3052	1/1	0.88	0.17	53,53,53,53	0
57	MG	2A	3417	1/1	0.88	0.10	69,69,69,69	0
57	MG	1A	3660	1/1	0.88	0.08	56,56,56,56	0
57	MG	2A	3426	1/1	0.88	0.12	57,57,57,57	0
57	MG	1A	4210	1/1	0.88	0.11	53,53,53,53	0
57	MG	1A	3730	1/1	0.88	0.08	49,49,49,49	0
57	MG	1A	3876	1/1	0.88	0.12	45,45,45,45	0
57	MG	2A	3458	1/1	0.88	0.25	50,50,50,50	0
57	MG	2A	3001	1/1	0.88	0.17	44,44,44,44	0
57	MG	1A	3881	1/1	0.88	0.06	20,20,20,20	0
57	MG	1a	3125	1/1	0.88	0.12	54,54,54,54	0
57	MG	2A	3790	1/1	0.88	0.10	50,50,50,50	0
57	MG	2a	3134	1/1	0.88	0.16	55,55,55,55	0
57	MG	2A	3474	1/1	0.88	0.19	51,51,51,51	0
57	MG	1A	3991	1/1	0.88	0.33	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3036	1/1	0.88	0.13	51,51,51,51	0
57	MG	2A	3811	1/1	0.88	0.11	51,51,51,51	0
57	MG	2A	3489	1/1	0.88	0.12	57,57,57,57	0
57	MG	2A	3495	1/1	0.88	0.20	62,62,62,62	0
57	MG	1A	3894	1/1	0.88	0.07	23,23,23,23	0
57	MG	2A	3515	1/1	0.88	0.15	63,63,63,63	0
57	MG	1A	4254	1/1	0.88	0.17	37,37,37,37	0
57	MG	2A	3275	1/1	0.88	0.12	48,48,48,48	0
57	MG	2A	3279	1/1	0.88	0.16	67,67,67,67	0
57	MG	2A	3874	1/1	0.88	0.15	55,55,55,55	0
57	MG	2a	3179	1/1	0.88	0.25	55,55,55,55	0
57	MG	1A	4257	1/1	0.88	0.10	60,60,60,60	0
57	MG	1A	3480	1/1	0.88	0.13	53,53,53,53	0
57	MG	1A	3829	1/1	0.88	0.13	30,30,30,30	0
57	MG	2A	3094	1/1	0.88	0.13	59,59,59,59	0
57	MG	1A	3831	1/1	0.88	0.06	22,22,22,22	0
57	MG	1A	3316	1/1	0.88	0.11	47,47,47,47	0
57	MG	2A	3605	1/1	0.88	0.14	48,48,48,48	0
57	MG	2a	3204	1/1	0.88	0.11	65,65,65,65	0
57	MG	2A	3318	1/1	0.88	0.12	69,69,69,69	0
57	MG	2A	3608	1/1	0.88	0.11	44,44,44,44	0
57	MG	1A	4019	1/1	0.88	0.12	43,43,43,43	0
57	MG	1A	3912	1/1	0.88	0.09	51,51,51,51	0
57	MG	1A	3570	1/1	0.88	0.20	52,52,52,52	0
57	MG	2A	3149	1/1	0.88	0.14	66,66,66,66	0
57	MG	1A	4293	1/1	0.88	0.13	56,56,56,56	0
57	MG	2A	3341	1/1	0.88	0.18	66,66,66,66	0
57	MG	2A	3953	1/1	0.88	0.17	69,69,69,69	0
57	MG	2A	3626	1/1	0.88	0.13	40,40,40,40	0
57	MG	1A	3262	1/1	0.88	0.20	56,56,56,56	0
57	MG	1a	3015	1/1	0.88	0.09	47,47,47,47	0
57	MG	2A	3638	1/1	0.88	0.12	34,34,34,34	0
57	MG	1A	3502	1/1	0.88	0.15	64,64,64,64	0
57	MG	1A	3355	1/1	0.88	0.27	64,64,64,64	0
57	MG	2a	3264	1/1	0.88	0.12	64,64,64,64	0
57	MG	1A	3327	1/1	0.88	0.11	46,46,46,46	0
57	MG	1A	3419	1/1	0.88	0.10	42,42,42,42	0
57	MG	2A	3359	1/1	0.88	0.10	56,56,56,56	0
57	MG	2A	3667	1/1	0.88	0.12	57,57,57,57	0
57	MG	2A	3205	1/1	0.88	0.18	52,52,52,52	0
57	MG	2A	3374	1/1	0.88	0.14	55,55,55,55	0
57	MG	2A	3675	1/1	0.88	0.11	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2a	3277	1/1	0.88	0.21	56,56,56,56	0
57	MG	2A	3104	1/1	0.89	0.25	54,54,54,54	0
57	MG	2A	3492	1/1	0.89	0.14	54,54,54,54	0
57	MG	2A	3309	1/1	0.89	0.12	60,60,60,60	0
57	MG	1A	3020	1/1	0.89	0.20	39,39,39,39	0
57	MG	2A	3500	1/1	0.89	0.16	53,53,53,53	0
57	MG	1A	3835	1/1	0.89	0.07	25,25,25,25	0
57	MG	2a	3065	1/1	0.89	0.24	55,55,55,55	0
57	MG	2A	3527	1/1	0.89	0.14	57,57,57,57	0
57	MG	2A	3771	1/1	0.89	0.15	72,72,72,72	0
57	MG	2a	3069	1/1	0.89	0.11	57,57,57,57	0
57	MG	1A	3753	1/1	0.89	0.08	25,25,25,25	0
57	MG	1A	4298	1/1	0.89	0.08	52,52,52,52	0
57	MG	2A	3548	1/1	0.89	0.18	64,64,64,64	0
57	MG	2A	3135	1/1	0.89	0.20	63,63,63,63	0
57	MG	2A	3143	1/1	0.89	0.16	59,59,59,59	0
57	MG	1A	3758	1/1	0.89	0.11	53,53,53,53	0
57	MG	1A	3940	1/1	0.89	0.06	38,38,38,38	0
57	MG	2A	3178	1/1	0.89	0.20	69,69,69,69	0
57	MG	2A	3819	1/1	0.89	0.21	61,61,61,61	0
57	MG	2A	3822	1/1	0.89	0.15	45,45,45,45	0
57	MG	2A	3587	1/1	0.89	0.12	42,42,42,42	0
57	MG	2A	3588	1/1	0.89	0.18	62,62,62,62	0
57	MG	1A	3042	1/1	0.89	0.18	48,48,48,48	0
57	MG	2A	3842	1/1	0.89	0.13	59,59,59,59	0
57	MG	2a	3141	1/1	0.89	0.15	45,45,45,45	0
57	MG	2A	3347	1/1	0.89	0.20	56,56,56,56	0
57	MG	1a	3230	1/1	0.89	0.10	65,65,65,65	0
57	MG	1A	3554	1/1	0.89	0.12	56,56,56,56	0
57	MG	1a	3040	1/1	0.89	0.22	58,58,58,58	0
57	MG	1A	3779	1/1	0.89	0.10	25,25,25,25	0
57	MG	1A	3462	1/1	0.89	0.15	50,50,50,50	0
57	MG	1A	3786	1/1	0.89	0.06	21,21,21,21	0
57	MG	2A	3880	1/1	0.89	0.10	35,35,35,35	0
57	MG	2A	3360	1/1	0.89	0.10	56,56,56,56	0
57	MG	2A	3885	1/1	0.89	0.09	54,54,54,54	0
57	MG	1A	3230	1/1	0.89	0.09	49,49,49,49	0
57	MG	1A	3792	1/1	0.89	0.13	56,56,56,56	0
57	MG	1A	4223	1/1	0.89	0.08	42,42,42,42	0
57	MG	1A	3799	1/1	0.89	0.08	24,24,24,24	0
57	MG	1A	3365	1/1	0.89	0.09	40,40,40,40	0
57	MG	2A	3919	1/1	0.89	0.11	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3732	1/1	0.89	0.23	64,64,64,64	0
57	MG	2A	3641	1/1	0.89	0.11	38,38,38,38	0
57	MG	1A	4244	1/1	0.89	0.06	35,35,35,35	0
57	MG	1A	4097	1/1	0.89	0.15	51,51,51,51	0
57	MG	2A	3933	1/1	0.89	0.13	49,49,49,49	0
57	MG	2A	3937	1/1	0.89	0.13	54,54,54,54	0
57	MG	2A	3016	1/1	0.89	0.17	62,62,62,62	0
57	MG	2A	3651	1/1	0.89	0.10	59,59,59,59	0
57	MG	1A	4101	1/1	0.89	0.09	30,30,30,30	0
57	MG	2A	3034	1/1	0.89	0.12	53,53,53,53	0
57	MG	1A	4255	1/1	0.89	0.11	53,53,53,53	0
57	MG	1A	4110	1/1	0.89	0.15	38,38,38,38	0
57	MG	2A	3048	1/1	0.89	0.18	58,58,58,58	0
57	MG	2a	3238	1/1	0.89	0.12	48,48,48,48	0
57	MG	2a	3245	1/1	0.89	0.18	67,67,67,67	0
57	MG	2A	3430	1/1	0.89	0.25	42,42,42,42	0
57	MG	2A	3684	1/1	0.89	0.12	43,43,43,43	0
57	MG	1A	3269	1/1	0.89	0.11	50,50,50,50	0
57	MG	2a	3259	1/1	0.89	0.09	55,55,55,55	0
57	MG	2A	3697	1/1	0.89	0.11	30,30,30,30	0
57	MG	1A	3411	1/1	0.89	0.09	55,55,55,55	0
57	MG	2A	3060	1/1	0.89	0.36	63,63,63,63	0
57	MG	2a	3029	1/1	0.89	0.13	49,49,49,49	0
57	MG	2A	3457	1/1	0.89	0.12	49,49,49,49	0
57	MG	2a	3266	1/1	0.89	0.20	52,52,52,52	0
57	MG	2A	3274	1/1	0.89	0.12	44,44,44,44	0
57	MG	2A	3065	1/1	0.89	0.13	48,48,48,48	0
57	MG	1A	3825	1/1	0.89	0.07	48,48,48,48	0
57	MG	1A	4003	1/1	0.89	0.11	39,39,39,39	0
57	MG	2A	3291	1/1	0.89	0.18	59,59,59,59	0
57	MG	1A	3440	1/1	0.89	0.12	46,46,46,46	0
57	MG	1A	4159	1/1	0.89	0.11	41,41,41,41	0
57	MG	2A	3005	1/1	0.90	0.20	55,55,55,55	0
57	MG	2A	3940	1/1	0.90	0.20	56,56,56,56	0
57	MG	2A	3277	1/1	0.90	0.22	64,64,64,64	0
57	MG	2A	3278	1/1	0.90	0.09	60,60,60,60	0
57	MG	1a	3031	1/1	0.90	0.19	49,49,49,49	0
57	MG	2A	3284	1/1	0.90	0.23	50,50,50,50	0
57	MG	1A	3920	1/1	0.90	0.08	31,31,31,31	0
57	MG	1A	3546	1/1	0.90	0.12	59,59,59,59	0
57	MG	1A	3273	1/1	0.90	0.11	63,63,63,63	0
57	MG	2A	3296	1/1	0.90	0.08	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2a	3008	1/1	0.90	0.20	58,58,58,58	0
57	MG	1a	3050	1/1	0.90	0.27	56,56,56,56	0
57	MG	2a	3012	1/1	0.90	0.11	51,51,51,51	0
57	MG	2a	3016	1/1	0.90	0.15	58,58,58,58	0
57	MG	2a	3018	1/1	0.90	0.15	54,54,54,54	0
57	MG	1A	4185	1/1	0.90	0.18	46,46,46,46	0
57	MG	1A	4187	1/1	0.90	0.07	42,42,42,42	0
57	MG	2a	3022	1/1	0.90	0.12	56,56,56,56	0
57	MG	2A	3046	1/1	0.90	0.10	46,46,46,46	0
57	MG	1a	3067	1/1	0.90	0.14	55,55,55,55	0
57	MG	2A	3317	1/1	0.90	0.29	70,70,70,70	0
57	MG	1A	4194	1/1	0.90	0.07	36,36,36,36	0
57	MG	1A	4196	1/1	0.90	0.09	42,42,42,42	0
57	MG	2a	3032	1/1	0.90	0.19	74,74,74,74	0
57	MG	2a	3036	1/1	0.90	0.20	61,61,61,61	0
57	MG	1a	3073	1/1	0.90	0.08	45,45,45,45	0
57	MG	2a	3038	1/1	0.90	0.28	67,67,67,67	0
57	MG	2A	3062	1/1	0.90	0.15	50,50,50,50	0
57	MG	1A	3393	1/1	0.90	0.16	36,36,36,36	0
57	MG	2A	3067	1/1	0.90	0.10	56,56,56,56	0
57	MG	2A	3069	1/1	0.90	0.18	51,51,51,51	0
57	MG	2a	3048	1/1	0.90	0.12	53,53,53,53	0
57	MG	1A	3172	1/1	0.90	0.12	51,51,51,51	0
57	MG	2a	3052	1/1	0.90	0.19	53,53,53,53	0
57	MG	2A	3345	1/1	0.90	0.10	66,66,66,66	0
57	MG	1A	3099	1/1	0.90	0.11	56,56,56,56	0
57	MG	1A	4071	1/1	0.90	0.15	46,46,46,46	0
57	MG	1a	3109	1/1	0.90	0.16	55,55,55,55	0
57	MG	1A	4211	1/1	0.90	0.07	36,36,36,36	0
57	MG	2A	3673	1/1	0.90	0.11	55,55,55,55	0
57	MG	1A	3333	1/1	0.90	0.16	53,53,53,53	0
57	MG	2A	3678	1/1	0.90	0.09	58,58,58,58	0
57	MG	1A	4221	1/1	0.90	0.13	41,41,41,41	0
57	MG	2A	3358	1/1	0.90	0.17	61,61,61,61	0
57	MG	1A	4079	1/1	0.90	0.11	43,43,43,43	0
57	MG	2A	3125	1/1	0.90	0.26	67,67,67,67	0
57	MG	2a	3083	1/1	0.90	0.23	53,53,53,53	0
57	MG	2A	3364	1/1	0.90	0.11	52,52,52,52	0
57	MG	2A	3368	1/1	0.90	0.15	47,47,47,47	0
57	MG	2A	3714	1/1	0.90	0.09	42,42,42,42	0
57	MG	2a	3093	1/1	0.90	0.10	53,53,53,53	0
57	MG	2a	3094	1/1	0.90	0.10	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2a	3097	1/1	0.90	0.20	56,56,56,56	0
57	MG	2A	3369	1/1	0.90	0.10	58,58,58,58	0
57	MG	2A	3717	1/1	0.90	0.31	70,70,70,70	0
57	MG	2a	3108	1/1	0.90	0.17	52,52,52,52	0
57	MG	1A	4224	1/1	0.90	0.08	48,48,48,48	0
57	MG	2a	3111	1/1	0.90	0.11	59,59,59,59	0
57	MG	2A	3727	1/1	0.90	0.11	62,62,62,62	0
57	MG	2a	3118	1/1	0.90	0.09	53,53,53,53	0
57	MG	2a	3121	1/1	0.90	0.18	58,58,58,58	0
57	MG	1A	3334	1/1	0.90	0.10	41,41,41,41	0
57	MG	1A	4084	1/1	0.90	0.07	19,19,19,19	0
57	MG	1a	3157	1/1	0.90	0.08	51,51,51,51	0
57	MG	2A	3154	1/1	0.90	0.15	54,54,54,54	0
57	MG	2a	3138	1/1	0.90	0.12	59,59,59,59	0
57	MG	2A	3734	1/1	0.90	0.07	24,24,24,24	0
57	MG	2A	3392	1/1	0.90	0.15	57,57,57,57	0
57	MG	2A	3156	1/1	0.90	0.20	60,60,60,60	0
57	MG	2A	3163	1/1	0.90	0.13	54,54,54,54	0
57	MG	2A	3742	1/1	0.90	0.12	52,52,52,52	0
57	MG	1a	3158	1/1	0.90	0.09	48,48,48,48	0
57	MG	1A	3761	1/1	0.90	0.07	27,27,27,27	0
57	MG	1A	3851	1/1	0.90	0.10	37,37,37,37	0
57	MG	1a	3168	1/1	0.90	0.08	35,35,35,35	0
57	MG	2A	3413	1/1	0.90	0.21	60,60,60,60	0
57	MG	1a	3170	1/1	0.90	0.23	64,64,64,64	0
57	MG	2a	3164	1/1	0.90	0.10	69,69,69,69	0
57	MG	2a	3165	1/1	0.90	0.12	69,69,69,69	0
57	MG	2A	3192	1/1	0.90	0.22	66,66,66,66	0
57	MG	2a	3168	1/1	0.90	0.16	60,60,60,60	0
57	MG	2a	3172	1/1	0.90	0.16	46,46,46,46	0
57	MG	1a	3171	1/1	0.90	0.14	42,42,42,42	0
57	MG	1A	4246	1/1	0.90	0.08	56,56,56,56	0
57	MG	2A	3435	1/1	0.90	0.21	41,41,41,41	0
57	MG	1A	3068	1/1	0.90	0.21	56,56,56,56	0
57	MG	1A	3600	1/1	0.90	0.13	54,54,54,54	0
57	MG	1A	3433	1/1	0.90	0.10	36,36,36,36	0
57	MG	2a	3186	1/1	0.90	0.12	70,70,70,70	0
57	MG	1A	3782	1/1	0.90	0.09	62,62,62,62	0
57	MG	2A	3812	1/1	0.90	0.11	49,49,49,49	0
57	MG	1A	4117	1/1	0.90	0.10	59,59,59,59	0
57	MG	1A	3083	1/1	0.90	0.22	58,58,58,58	0
57	MG	2A	3221	1/1	0.90	0.13	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	4271	1/1	0.90	0.12	48,48,48,48	0
57	MG	2a	3221	1/1	0.90	0.11	53,53,53,53	0
57	MG	1A	3507	1/1	0.90	0.14	52,52,52,52	0
57	MG	2a	3226	1/1	0.90	0.23	64,64,64,64	0
57	MG	2A	3841	1/1	0.90	0.13	63,63,63,63	0
57	MG	2A	3242	1/1	0.90	0.18	64,64,64,64	0
57	MG	2A	3243	1/1	0.90	0.13	57,57,57,57	0
57	MG	2A	3247	1/1	0.90	0.15	49,49,49,49	0
57	MG	1A	4140	1/1	0.90	0.08	43,43,43,43	0
57	MG	2A	3493	1/1	0.90	0.19	61,61,61,61	0
57	MG	1A	3613	1/1	0.90	0.10	40,40,40,40	0
57	MG	2a	3240	1/1	0.90	0.11	56,56,56,56	0
57	MG	2a	3242	1/1	0.90	0.12	42,42,42,42	0
57	MG	1A	3643	1/1	0.90	0.10	45,45,45,45	0
57	MG	1A	3271	1/1	0.90	0.17	49,49,49,49	0
57	MG	2A	3504	1/1	0.90	0.23	48,48,48,48	0
57	MG	2A	3511	1/1	0.90	0.17	48,48,48,48	0
57	MG	2a	3252	1/1	0.90	0.20	61,61,61,61	0
57	MG	2a	3253	1/1	0.90	0.13	59,59,59,59	0
57	MG	1A	4154	1/1	0.90	0.09	31,31,31,31	0
57	MG	1A	3357	1/1	0.90	0.09	47,47,47,47	0
57	MG	2A	3531	1/1	0.90	0.14	66,66,66,66	0
57	MG	1A	3706	1/1	0.90	0.17	51,51,51,51	0
57	MG	1a	3012	1/1	0.90	0.08	45,45,45,45	0
57	MG	2A	3906	1/1	0.90	0.10	33,33,33,33	0
57	MG	1A	4021	1/1	0.90	0.29	34,34,34,34	0
57	MG	2A	3554	1/1	0.90	0.18	65,65,65,65	0
57	MG	2A	3921	1/1	0.90	0.11	60,60,60,60	0
57	MG	2A	3266	1/1	0.90	0.16	47,47,47,47	0
57	MG	2a	3270	1/1	0.90	0.17	61,61,61,61	0
57	MG	1a	3024	1/1	0.90	0.20	54,54,54,54	0
57	MG	1A	3537	1/1	0.90	0.09	60,60,60,60	0
57	MG	1A	3545	1/1	0.90	0.09	46,46,46,46	0
57	MG	2A	3580	1/1	0.90	0.19	53,53,53,53	0
57	MG	1a	3056	1/1	0.91	0.15	49,49,49,49	0
57	MG	1A	3560	1/1	0.91	0.12	55,55,55,55	0
57	MG	1A	3883	1/1	0.91	0.09	24,24,24,24	0
57	MG	2A	3576	1/1	0.91	0.09	32,32,32,32	0
57	MG	2A	3578	1/1	0.91	0.14	52,52,52,52	0
57	MG	1A	3890	1/1	0.91	0.09	57,57,57,57	0
57	MG	1A	3696	1/1	0.91	0.08	55,55,55,55	0
57	MG	2A	3952	1/1	0.91	0.12	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3585	1/1	0.91	0.12	63,63,63,63	0
57	MG	2A	3961	1/1	0.91	0.15	53,53,53,53	0
57	MG	2A	3299	1/1	0.91	0.16	65,65,65,65	0
57	MG	2A	3305	1/1	0.91	0.13	60,60,60,60	0
57	MG	1A	3698	1/1	0.91	0.08	50,50,50,50	0
57	MG	2A	3054	1/1	0.91	0.09	48,48,48,48	0
57	MG	1A	4030	1/1	0.91	0.08	35,35,35,35	0
57	MG	2a	3009	1/1	0.91	0.23	62,62,62,62	0
57	MG	2A	3311	1/1	0.91	0.14	57,57,57,57	0
57	MG	1A	4033	1/1	0.91	0.10	23,23,23,23	0
57	MG	2A	3316	1/1	0.91	0.08	44,44,44,44	0
57	MG	2a	3017	1/1	0.91	0.14	43,43,43,43	0
57	MG	1a	3076	1/1	0.91	0.20	58,58,58,58	0
57	MG	1A	4203	1/1	0.91	0.08	16,16,16,16	0
57	MG	1A	3903	1/1	0.91	0.07	23,23,23,23	0
57	MG	1a	3092	1/1	0.91	0.28	46,46,46,46	0
57	MG	2a	3023	1/1	0.91	0.23	69,69,69,69	0
57	MG	1A	4044	1/1	0.91	0.10	53,53,53,53	0
57	MG	1a	3098	1/1	0.91	0.11	46,46,46,46	0
57	MG	2a	3028	1/1	0.91	0.11	55,55,55,55	0
57	MG	2A	3099	1/1	0.91	0.21	55,55,55,55	0
57	MG	2A	3331	1/1	0.91	0.12	58,58,58,58	0
57	MG	2A	3332	1/1	0.91	0.12	60,60,60,60	0
57	MG	2A	3338	1/1	0.91	0.13	58,58,58,58	0
57	MG	1A	3795	1/1	0.91	0.10	35,35,35,35	0
57	MG	2A	3644	1/1	0.91	0.09	37,37,37,37	0
57	MG	1A	4055	1/1	0.91	0.21	35,35,35,35	0
57	MG	2a	3041	1/1	0.91	0.18	50,50,50,50	0
57	MG	1A	3797	1/1	0.91	0.17	36,36,36,36	0
57	MG	2A	3109	1/1	0.91	0.15	61,61,61,61	0
57	MG	1A	3444	1/1	0.91	0.13	56,56,56,56	0
57	MG	1a	3132	1/1	0.91	0.17	53,53,53,53	0
57	MG	2a	3046	1/1	0.91	0.24	59,59,59,59	0
57	MG	1A	3801	1/1	0.91	0.07	17,17,17,17	0
57	MG	1A	4077	1/1	0.91	0.08	33,33,33,33	0
57	MG	1A	3708	1/1	0.91	0.11	42,42,42,42	0
57	MG	1a	3142	1/1	0.91	0.14	54,54,54,54	0
57	MG	2A	3148	1/1	0.91	0.13	49,49,49,49	0
57	MG	1A	3922	1/1	0.91	0.12	44,44,44,44	0
57	MG	2A	3681	1/1	0.91	0.07	28,28,28,28	0
57	MG	2A	3683	1/1	0.91	0.11	36,36,36,36	0
57	MG	1a	3151	1/1	0.91	0.25	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3687	1/1	0.91	0.11	41,41,41,41	0
57	MG	2A	3367	1/1	0.91	0.11	58,58,58,58	0
57	MG	2A	3693	1/1	0.91	0.14	50,50,50,50	0
57	MG	1A	3929	1/1	0.91	0.07	30,30,30,30	0
57	MG	1A	3725	1/1	0.91	0.26	38,38,38,38	0
57	MG	2a	3072	1/1	0.91	0.17	54,54,54,54	0
57	MG	2A	3700	1/1	0.91	0.07	51,51,51,51	0
57	MG	2a	3081	1/1	0.91	0.32	64,64,64,64	0
57	MG	2A	3165	1/1	0.91	0.17	59,59,59,59	0
57	MG	2a	3086	1/1	0.91	0.14	60,60,60,60	0
57	MG	2a	3087	1/1	0.91	0.12	54,54,54,54	0
57	MG	2A	3168	1/1	0.91	0.13	50,50,50,50	0
57	MG	1A	4249	1/1	0.91	0.17	53,53,53,53	0
57	MG	2A	3385	1/1	0.91	0.08	61,61,61,61	0
57	MG	1a	3164	1/1	0.91	0.13	59,59,59,59	0
57	MG	2A	3721	1/1	0.91	0.26	65,65,65,65	0
57	MG	2A	3723	1/1	0.91	0.09	65,65,65,65	0
57	MG	2a	3101	1/1	0.91	0.17	57,57,57,57	0
57	MG	1a	3165	1/1	0.91	0.07	47,47,47,47	0
57	MG	1A	4086	1/1	0.91	0.14	70,70,70,70	0
57	MG	1A	3092	1/1	0.91	0.08	43,43,43,43	0
57	MG	1A	3234	1/1	0.91	0.14	36,36,36,36	0
57	MG	2A	3407	1/1	0.91	0.10	55,55,55,55	0
57	MG	2A	3408	1/1	0.91	0.14	57,57,57,57	0
57	MG	1A	3823	1/1	0.91	0.09	43,43,43,43	0
57	MG	1A	4100	1/1	0.91	0.07	36,36,36,36	0
57	MG	1A	3739	1/1	0.91	0.09	42,42,42,42	0
57	MG	2A	3738	1/1	0.91	0.10	56,56,56,56	0
57	MG	2a	3129	1/1	0.91	0.17	61,61,61,61	0
57	MG	2A	3740	1/1	0.91	0.12	53,53,53,53	0
57	MG	1A	3742	1/1	0.91	0.08	36,36,36,36	0
57	MG	1A	3520	1/1	0.91	0.18	47,47,47,47	0
57	MG	2A	3747	1/1	0.91	0.12	58,58,58,58	0
57	MG	1A	3744	1/1	0.91	0.09	32,32,32,32	0
57	MG	2A	3750	1/1	0.91	0.12	49,49,49,49	0
57	MG	2A	3419	1/1	0.91	0.12	58,58,58,58	0
57	MG	2A	3754	1/1	0.91	0.18	46,46,46,46	0
57	MG	2A	3758	1/1	0.91	0.14	60,60,60,60	0
57	MG	2A	3759	1/1	0.91	0.09	40,40,40,40	0
57	MG	2A	3761	1/1	0.91	0.17	37,37,37,37	0
57	MG	1A	3586	1/1	0.91	0.09	52,52,52,52	0
57	MG	1a	3203	1/1	0.91	0.09	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3768	1/1	0.91	0.15	57,57,57,57	0
57	MG	1A	3001	1/1	0.91	0.06	31,31,31,31	0
57	MG	1A	4282	1/1	0.91	0.12	27,27,27,27	0
57	MG	2A	3224	1/1	0.91	0.15	51,51,51,51	0
57	MG	2A	3445	1/1	0.91	0.19	55,55,55,55	0
57	MG	2A	3780	1/1	0.91	0.13	47,47,47,47	0
57	MG	2A	3233	1/1	0.91	0.11	54,54,54,54	0
57	MG	2a	3178	1/1	0.91	0.09	43,43,43,43	0
57	MG	2A	3450	1/1	0.91	0.13	47,47,47,47	0
57	MG	2a	3180	1/1	0.91	0.07	60,60,60,60	0
57	MG	2A	3234	1/1	0.91	0.18	51,51,51,51	0
57	MG	1A	3526	1/1	0.91	0.15	50,50,50,50	0
57	MG	1a	3227	1/1	0.91	0.16	60,60,60,60	0
57	MG	2A	3463	1/1	0.91	0.25	49,49,49,49	0
57	MG	1A	3534	1/1	0.91	0.07	42,42,42,42	0
57	MG	2A	3815	1/1	0.91	0.09	51,51,51,51	0
57	MG	2A	3244	1/1	0.91	0.15	66,66,66,66	0
57	MG	1A	4150	1/1	0.91	0.13	77,77,77,77	0
57	MG	1A	3467	1/1	0.91	0.25	53,53,53,53	0
57	MG	2a	3214	1/1	0.91	0.10	71,71,71,71	0
57	MG	2A	3826	1/1	0.91	0.13	49,49,49,49	0
57	MG	2A	3827	1/1	0.91	0.28	37,37,37,37	0
57	MG	2A	3828	1/1	0.91	0.06	30,30,30,30	0
57	MG	2A	3478	1/1	0.91	0.13	36,36,36,36	0
57	MG	1a	3004	1/1	0.91	0.08	50,50,50,50	0
57	MG	1a	3009	1/1	0.91	0.25	47,47,47,47	0
57	MG	1A	3201	1/1	0.91	0.09	44,44,44,44	0
57	MG	2A	3845	1/1	0.91	0.08	52,52,52,52	0
57	MG	1A	3853	1/1	0.91	0.14	59,59,59,59	0
57	MG	2A	3861	1/1	0.91	0.09	56,56,56,56	0
57	MG	1a	3020	1/1	0.91	0.13	49,49,49,49	0
57	MG	1A	3610	1/1	0.91	0.13	48,48,48,48	0
57	MG	1A	3266	1/1	0.91	0.09	51,51,51,51	0
57	MG	1A	3777	1/1	0.91	0.09	35,35,35,35	0
57	MG	1a	3030	1/1	0.91	0.11	46,46,46,46	0
57	MG	2A	3505	1/1	0.91	0.13	50,50,50,50	0
57	MG	2A	3509	1/1	0.91	0.09	62,62,62,62	0
57	MG	2A	3270	1/1	0.91	0.10	48,48,48,48	0
57	MG	1A	4171	1/1	0.91	0.09	49,49,49,49	0
57	MG	2A	3517	1/1	0.91	0.12	49,49,49,49	0
57	MG	2a	3256	1/1	0.91	0.10	62,62,62,62	0
57	MG	2A	3522	1/1	0.91	0.07	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3894	1/1	0.91	0.07	29,29,29,29	0
57	MG	1A	3631	1/1	0.91	0.14	39,39,39,39	0
57	MG	1A	3166	1/1	0.91	0.08	39,39,39,39	0
57	MG	1A	4181	1/1	0.91	0.08	46,46,46,46	0
57	MG	2A	3911	1/1	0.91	0.11	61,61,61,61	0
57	MG	2A	3030	1/1	0.91	0.18	54,54,54,54	0
57	MG	2A	3032	1/1	0.91	0.12	59,59,59,59	0
57	MG	2A	3550	1/1	0.91	0.14	45,45,45,45	0
57	MG	2A	3922	1/1	0.91	0.14	58,58,58,58	0
57	MG	1a	3048	1/1	0.91	0.08	51,51,51,51	0
57	MG	1A	3218	1/1	0.91	0.09	43,43,43,43	0
57	MG	2A	3929	1/1	0.91	0.12	56,56,56,56	0
57	MG	2A	3930	1/1	0.91	0.06	30,30,30,30	0
57	MG	2A	3558	1/1	0.91	0.25	67,67,67,67	0
57	MG	2a	3281	1/1	0.91	0.20	59,59,59,59	0
57	MG	1A	4272	1/1	0.92	0.07	41,41,41,41	0
57	MG	2A	3541	1/1	0.92	0.25	67,67,67,67	0
57	MG	1A	3937	1/1	0.92	0.13	22,22,22,22	0
57	MG	2A	3546	1/1	0.92	0.08	61,61,61,61	0
57	MG	2A	3918	1/1	0.92	0.08	56,56,56,56	0
57	MG	1A	3457	1/1	0.92	0.09	43,43,43,43	0
57	MG	1A	4276	1/1	0.92	0.12	40,40,40,40	0
57	MG	1a	3232	1/1	0.92	0.08	39,39,39,39	0
57	MG	1A	3263	1/1	0.92	0.14	49,49,49,49	0
57	MG	1A	3422	1/1	0.92	0.14	63,63,63,63	0
57	MG	2A	3267	1/1	0.92	0.09	44,44,44,44	0
57	MG	1A	3735	1/1	0.92	0.14	48,48,48,48	0
57	MG	2A	3572	1/1	0.92	0.09	46,46,46,46	0
57	MG	1A	4103	1/1	0.92	0.07	24,24,24,24	0
57	MG	2A	3575	1/1	0.92	0.13	64,64,64,64	0
57	MG	2A	3935	1/1	0.92	0.11	50,50,50,50	0
57	MG	1A	4105	1/1	0.92	0.28	38,38,38,38	0
57	MG	2A	3577	1/1	0.92	0.25	63,63,63,63	0
57	MG	1A	3828	1/1	0.92	0.07	27,27,27,27	0
57	MG	1A	4297	1/1	0.92	0.17	47,47,47,47	0
57	MG	1a	3250	1/1	0.92	0.13	65,65,65,65	0
57	MG	1A	4112	1/1	0.92	0.09	47,47,47,47	0
57	MG	1A	3171	1/1	0.92	0.14	41,41,41,41	0
57	MG	1a	3007	1/1	0.92	0.21	49,49,49,49	0
57	MG	1A	3478	1/1	0.92	0.10	46,46,46,46	0
57	MG	2A	3596	1/1	0.92	0.07	40,40,40,40	0
57	MG	2A	3597	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
57	MG	2a	3004	1/1	0.92	0.12	51,51,51,51	0
57	MG	2A	3003	1/1	0.92	0.28	54,54,54,54	0
57	MG	2A	3601	1/1	0.92	0.09	46,46,46,46	0
57	MG	1A	3976	1/1	0.92	0.08	25,25,25,25	0
57	MG	2a	3010	1/1	0.92	0.14	64,64,64,64	0
57	MG	1A	4132	1/1	0.92	0.08	26,26,26,26	0
57	MG	1A	4136	1/1	0.92	0.09	42,42,42,42	0
57	MG	2A	3010	1/1	0.92	0.11	48,48,48,48	0
57	MG	2A	3613	1/1	0.92	0.10	32,32,32,32	0
57	MG	2A	3300	1/1	0.92	0.11	58,58,58,58	0
57	MG	2A	3301	1/1	0.92	0.30	60,60,60,60	0
57	MG	1a	3022	1/1	0.92	0.20	58,58,58,58	0
57	MG	2A	3623	1/1	0.92	0.08	63,63,63,63	0
57	MG	2A	3023	1/1	0.92	0.23	63,63,63,63	0
57	MG	2A	3026	1/1	0.92	0.08	46,46,46,46	0
57	MG	1A	4137	1/1	0.92	0.20	37,37,37,37	0
57	MG	1A	3282	1/1	0.92	0.19	53,53,53,53	0
57	MG	1A	3431	1/1	0.92	0.09	44,44,44,44	0
57	MG	1a	3029	1/1	0.92	0.12	47,47,47,47	0
57	MG	1A	3982	1/1	0.92	0.12	50,50,50,50	0
57	MG	2A	3642	1/1	0.92	0.08	68,68,68,68	0
57	MG	1A	4147	1/1	0.92	0.07	29,29,29,29	0
57	MG	1A	3984	1/1	0.92	0.09	64,64,64,64	0
57	MG	1A	3484	1/1	0.92	0.11	45,45,45,45	0
57	MG	1A	3487	1/1	0.92	0.10	56,56,56,56	0
57	MG	2A	3327	1/1	0.92	0.11	58,58,58,58	0
57	MG	2A	3652	1/1	0.92	0.12	48,48,48,48	0
57	MG	1A	3432	1/1	0.92	0.08	33,33,33,33	0
57	MG	1A	3493	1/1	0.92	0.09	44,44,44,44	0
57	MG	1A	4166	1/1	0.92	0.13	48,48,48,48	0
57	MG	2a	3047	1/1	0.92	0.23	50,50,50,50	0
57	MG	2A	3061	1/1	0.92	0.14	57,57,57,57	0
57	MG	2a	3049	1/1	0.92	0.11	53,53,53,53	0
57	MG	2A	3671	1/1	0.92	0.12	57,57,57,57	0
57	MG	2a	3051	1/1	0.92	0.22	73,73,73,73	0
57	MG	1A	3500	1/1	0.92	0.09	54,54,54,54	0
57	MG	1A	3359	1/1	0.92	0.10	48,48,48,48	0
57	MG	2A	3066	1/1	0.92	0.10	55,55,55,55	0
57	MG	1a	3066	1/1	0.92	0.15	51,51,51,51	0
57	MG	1A	3606	1/1	0.92	0.25	59,59,59,59	0
57	MG	2A	3070	1/1	0.92	0.17	63,63,63,63	0
57	MG	1A	3857	1/1	0.92	0.09	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3685	1/1	0.92	0.17	39,39,39,39	0
57	MG	2A	3084	1/1	0.92	0.12	52,52,52,52	0
57	MG	2a	3067	1/1	0.92	0.08	54,54,54,54	0
57	MG	2A	3087	1/1	0.92	0.11	47,47,47,47	0
57	MG	1A	4178	1/1	0.92	0.10	43,43,43,43	0
57	MG	2A	3357	1/1	0.92	0.10	56,56,56,56	0
57	MG	1a	3070	1/1	0.92	0.10	46,46,46,46	0
57	MG	1A	4007	1/1	0.92	0.10	54,54,54,54	0
57	MG	2A	3703	1/1	0.92	0.11	34,34,34,34	0
57	MG	2A	3708	1/1	0.92	0.12	38,38,38,38	0
57	MG	2A	3709	1/1	0.92	0.16	60,60,60,60	0
57	MG	1A	3765	1/1	0.92	0.05	17,17,17,17	0
57	MG	2A	3363	1/1	0.92	0.25	44,44,44,44	0
57	MG	1A	4012	1/1	0.92	0.12	31,31,31,31	0
57	MG	1A	4013	1/1	0.92	0.23	39,39,39,39	0
57	MG	1A	4014	1/1	0.92	0.05	29,29,29,29	0
57	MG	1A	4186	1/1	0.92	0.09	55,55,55,55	0
57	MG	2a	3096	1/1	0.92	0.18	48,48,48,48	0
57	MG	2A	3370	1/1	0.92	0.09	52,52,52,52	0
57	MG	2A	3371	1/1	0.92	0.10	49,49,49,49	0
57	MG	2a	3104	1/1	0.92	0.14	41,41,41,41	0
57	MG	2A	3726	1/1	0.92	0.08	57,57,57,57	0
57	MG	1A	3361	1/1	0.92	0.24	36,36,36,36	0
57	MG	2A	3122	1/1	0.92	0.16	46,46,46,46	0
57	MG	1A	4189	1/1	0.92	0.09	26,26,26,26	0
57	MG	2A	3384	1/1	0.92	0.13	52,52,52,52	0
57	MG	1a	3100	1/1	0.92	0.14	53,53,53,53	0
57	MG	2A	3132	1/1	0.92	0.20	61,61,61,61	0
57	MG	1a	3102	1/1	0.92	0.17	54,54,54,54	0
57	MG	1A	3865	1/1	0.92	0.11	54,54,54,54	0
57	MG	2a	3126	1/1	0.92	0.14	66,66,66,66	0
57	MG	1A	3776	1/1	0.92	0.08	36,36,36,36	0
57	MG	1a	3117	1/1	0.92	0.15	55,55,55,55	0
57	MG	2A	3401	1/1	0.92	0.08	54,54,54,54	0
57	MG	2A	3150	1/1	0.92	0.17	42,42,42,42	0
57	MG	2a	3135	1/1	0.92	0.07	65,65,65,65	0
57	MG	2A	3745	1/1	0.92	0.10	54,54,54,54	0
57	MG	1a	3120	1/1	0.92	0.21	53,53,53,53	0
57	MG	1A	3195	1/1	0.92	0.15	46,46,46,46	0
57	MG	2A	3749	1/1	0.92	0.08	46,46,46,46	0
57	MG	1A	3778	1/1	0.92	0.10	49,49,49,49	0
57	MG	2A	3752	1/1	0.92	0.08	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3212	1/1	0.92	0.05	27,27,27,27	0
57	MG	1A	3295	1/1	0.92	0.16	39,39,39,39	0
57	MG	2A	3175	1/1	0.92	0.11	56,56,56,56	0
57	MG	1a	3136	1/1	0.92	0.14	52,52,52,52	0
57	MG	2A	3760	1/1	0.92	0.08	44,44,44,44	0
57	MG	2a	3161	1/1	0.92	0.11	62,62,62,62	0
57	MG	1a	3137	1/1	0.92	0.15	64,64,64,64	0
57	MG	2A	3763	1/1	0.92	0.11	33,33,33,33	0
57	MG	2A	3421	1/1	0.92	0.06	46,46,46,46	0
57	MG	1A	3197	1/1	0.92	0.11	54,54,54,54	0
57	MG	2A	3186	1/1	0.92	0.07	50,50,50,50	0
57	MG	2A	3429	1/1	0.92	0.24	55,55,55,55	0
57	MG	1A	3525	1/1	0.92	0.09	41,41,41,41	0
57	MG	2A	3772	1/1	0.92	0.10	55,55,55,55	0
57	MG	2A	3775	1/1	0.92	0.10	26,26,26,26	0
57	MG	1A	3896	1/1	0.92	0.15	42,42,42,42	0
57	MG	2A	3778	1/1	0.92	0.20	63,63,63,63	0
57	MG	2A	3438	1/1	0.92	0.22	51,51,51,51	0
57	MG	1A	3445	1/1	0.92	0.09	52,52,52,52	0
57	MG	1A	3661	1/1	0.92	0.17	41,41,41,41	0
57	MG	2A	3787	1/1	0.92	0.11	59,59,59,59	0
57	MG	2A	3197	1/1	0.92	0.14	52,52,52,52	0
57	MG	1A	4047	1/1	0.92	0.11	37,37,37,37	0
57	MG	1A	4052	1/1	0.92	0.09	39,39,39,39	0
57	MG	2A	3796	1/1	0.92	0.07	38,38,38,38	0
57	MG	2a	3205	1/1	0.92	0.09	42,42,42,42	0
57	MG	2a	3213	1/1	0.92	0.09	73,73,73,73	0
57	MG	2A	3204	1/1	0.92	0.12	44,44,44,44	0
57	MG	2A	3801	1/1	0.92	0.17	44,44,44,44	0
57	MG	2A	3809	1/1	0.92	0.07	44,44,44,44	0
57	MG	2a	3220	1/1	0.92	0.22	55,55,55,55	0
57	MG	2A	3810	1/1	0.92	0.09	50,50,50,50	0
57	MG	1a	3162	1/1	0.92	0.08	51,51,51,51	0
57	MG	1A	3674	1/1	0.92	0.15	34,34,34,34	0
57	MG	2a	3229	1/1	0.92	0.10	54,54,54,54	0
57	MG	2A	3813	1/1	0.92	0.08	63,63,63,63	0
57	MG	2A	3210	1/1	0.92	0.09	62,62,62,62	0
57	MG	2A	3213	1/1	0.92	0.07	55,55,55,55	0
57	MG	2A	3466	1/1	0.92	0.16	40,40,40,40	0
57	MG	2A	3470	1/1	0.92	0.16	46,46,46,46	0
57	MG	1A	4061	1/1	0.92	0.09	41,41,41,41	0
57	MG	1A	4065	1/1	0.92	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
57	MG	1A	3684	1/1	0.92	0.16	49,49,49,49	0
57	MG	1A	3527	1/1	0.92	0.09	41,41,41,41	0
57	MG	2a	3244	1/1	0.92	0.10	56,56,56,56	0
57	MG	1A	3446	1/1	0.92	0.08	34,34,34,34	0
57	MG	2A	3488	1/1	0.92	0.11	72,72,72,72	0
57	MG	1A	3417	1/1	0.92	0.16	25,25,25,25	0
57	MG	2A	3490	1/1	0.92	0.19	59,59,59,59	0
57	MG	2A	3851	1/1	0.92	0.07	44,44,44,44	0
57	MG	2A	3230	1/1	0.92	0.27	64,64,64,64	0
57	MG	1a	3175	1/1	0.92	0.09	57,57,57,57	0
57	MG	1A	3809	1/1	0.92	0.07	32,32,32,32	0
57	MG	2A	3864	1/1	0.92	0.11	64,64,64,64	0
57	MG	1A	3924	1/1	0.92	0.07	41,41,41,41	0
57	MG	2A	3238	1/1	0.92	0.36	46,46,46,46	0
57	MG	1A	4258	1/1	0.92	0.09	42,42,42,42	0
57	MG	1A	3814	1/1	0.92	0.09	21,21,21,21	0
57	MG	1A	3451	1/1	0.92	0.14	51,51,51,51	0
57	MG	2A	3510	1/1	0.92	0.19	52,52,52,52	0
57	MG	1A	4267	1/1	0.92	0.13	60,60,60,60	0
57	MG	1a	3200	1/1	0.92	0.07	52,52,52,52	0
57	MG	1A	4268	1/1	0.92	0.09	53,53,53,53	0
57	MG	2A	3887	1/1	0.92	0.12	38,38,38,38	0
57	MG	2A	3253	1/1	0.92	0.22	66,66,66,66	0
57	MG	2a	3274	1/1	0.92	0.18	60,60,60,60	0
57	MG	2A	3254	1/1	0.92	0.18	45,45,45,45	0
57	MG	1A	3936	1/1	0.92	0.06	16,16,16,16	0
57	MG	2a	3280	1/1	0.92	0.13	60,60,60,60	0
57	MG	2A	3904	1/1	0.92	0.13	58,58,58,58	0
57	MG	2A	3523	1/1	0.93	0.12	46,46,46,46	0
57	MG	2A	3526	1/1	0.93	0.17	54,54,54,54	0
57	MG	1a	3231	1/1	0.93	0.07	57,57,57,57	0
57	MG	2A	3530	1/1	0.93	0.10	67,67,67,67	0
57	MG	2A	3888	1/1	0.93	0.08	37,37,37,37	0
57	MG	2A	3890	1/1	0.93	0.10	39,39,39,39	0
57	MG	1A	3363	1/1	0.93	0.12	48,48,48,48	0
57	MG	1A	3312	1/1	0.93	0.12	42,42,42,42	0
57	MG	2A	3896	1/1	0.93	0.05	38,38,38,38	0
57	MG	2A	3534	1/1	0.93	0.12	43,43,43,43	0
57	MG	2A	3255	1/1	0.93	0.15	60,60,60,60	0
57	MG	1A	3382	1/1	0.93	0.11	62,62,62,62	0
57	MG	2A	3543	1/1	0.93	0.13	47,47,47,47	0
57	MG	1A	3847	1/1	0.93	0.08	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3121	1/1	0.93	0.12	41,41,41,41	0
57	MG	1A	3989	1/1	0.93	0.14	46,46,46,46	0
57	MG	1A	3469	1/1	0.93	0.09	44,44,44,44	0
57	MG	2A	3920	1/1	0.93	0.20	53,53,53,53	0
57	MG	1A	4152	1/1	0.93	0.05	17,17,17,17	0
57	MG	1A	3315	1/1	0.93	0.09	45,45,45,45	0
57	MG	1A	3852	1/1	0.93	0.06	47,47,47,47	0
57	MG	2A	3561	1/1	0.93	0.16	62,62,62,62	0
57	MG	2A	3565	1/1	0.93	0.15	33,33,33,33	0
57	MG	1A	3132	1/1	0.93	0.30	36,36,36,36	0
57	MG	1A	4164	1/1	0.93	0.07	57,57,57,57	0
57	MG	1A	3319	1/1	0.93	0.22	43,43,43,43	0
57	MG	2A	3574	1/1	0.93	0.10	52,52,52,52	0
57	MG	1A	3065	1/1	0.93	0.07	34,34,34,34	0
57	MG	1a	3039	1/1	0.93	0.24	47,47,47,47	0
57	MG	1A	3764	1/1	0.93	0.15	50,50,50,50	0
57	MG	1A	3421	1/1	0.93	0.25	30,30,30,30	0
57	MG	1A	4011	1/1	0.93	0.09	31,31,31,31	0
57	MG	2A	3947	1/1	0.93	0.10	45,45,45,45	0
57	MG	2A	3014	1/1	0.93	0.10	35,35,35,35	0
57	MG	2A	3280	1/1	0.93	0.07	59,59,59,59	0
57	MG	1A	3864	1/1	0.93	0.13	60,60,60,60	0
57	MG	2A	3955	1/1	0.93	0.07	61,61,61,61	0
57	MG	2A	3286	1/1	0.93	0.08	48,48,48,48	0
57	MG	2A	3963	1/1	0.93	0.11	46,46,46,46	0
57	MG	1a	3055	1/1	0.93	0.14	51,51,51,51	0
57	MG	2A	3594	1/1	0.93	0.13	57,57,57,57	0
57	MG	1A	3325	1/1	0.93	0.27	46,46,46,46	0
57	MG	1A	3022	1/1	0.93	0.11	40,40,40,40	0
57	MG	2A	3598	1/1	0.93	0.17	53,53,53,53	0
57	MG	2a	3007	1/1	0.93	0.10	51,51,51,51	0
57	MG	1A	3093	1/1	0.93	0.12	42,42,42,42	0
57	MG	1A	3611	1/1	0.93	0.11	57,57,57,57	0
57	MG	1A	3878	1/1	0.93	0.09	50,50,50,50	0
57	MG	1A	3879	1/1	0.93	0.06	41,41,41,41	0
57	MG	2A	3038	1/1	0.93	0.11	52,52,52,52	0
57	MG	2A	3302	1/1	0.93	0.10	51,51,51,51	0
57	MG	2A	3304	1/1	0.93	0.10	42,42,42,42	0
57	MG	2A	3614	1/1	0.93	0.07	31,31,31,31	0
57	MG	2A	3043	1/1	0.93	0.10	42,42,42,42	0
57	MG	2A	3306	1/1	0.93	0.12	51,51,51,51	0
57	MG	1A	3501	1/1	0.93	0.13	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3614	1/1	0.93	0.10	43,43,43,43	0
57	MG	1A	3887	1/1	0.93	0.06	35,35,35,35	0
57	MG	1A	3624	1/1	0.93	0.20	58,58,58,58	0
57	MG	2A	3051	1/1	0.93	0.12	25,25,25,25	0
57	MG	2A	3627	1/1	0.93	0.07	44,44,44,44	0
57	MG	2A	3628	1/1	0.93	0.07	24,24,24,24	0
57	MG	1a	3075	1/1	0.93	0.18	53,53,53,53	0
57	MG	2A	3632	1/1	0.93	0.07	31,31,31,31	0
57	MG	2a	3035	1/1	0.93	0.08	54,54,54,54	0
57	MG	2A	3633	1/1	0.93	0.10	57,57,57,57	0
57	MG	1A	3426	1/1	0.93	0.23	29,29,29,29	0
57	MG	2A	3055	1/1	0.93	0.12	64,64,64,64	0
57	MG	2a	3040	1/1	0.93	0.21	59,59,59,59	0
57	MG	2A	3640	1/1	0.93	0.09	60,60,60,60	0
57	MG	2A	3057	1/1	0.93	0.17	60,60,60,60	0
57	MG	1A	3053	1/1	0.93	0.08	23,23,23,23	0
57	MG	1A	3898	1/1	0.93	0.06	18,18,18,18	0
57	MG	1a	3085	1/1	0.93	0.08	54,54,54,54	0
57	MG	1a	3088	1/1	0.93	0.25	56,56,56,56	0
57	MG	1A	4205	1/1	0.93	0.09	41,41,41,41	0
57	MG	2A	3330	1/1	0.93	0.08	45,45,45,45	0
57	MG	1a	3094	1/1	0.93	0.29	46,46,46,46	0
57	MG	1A	3789	1/1	0.93	0.09	49,49,49,49	0
57	MG	2A	3337	1/1	0.93	0.10	57,57,57,57	0
57	MG	2A	3665	1/1	0.93	0.10	47,47,47,47	0
57	MG	1a	3097	1/1	0.93	0.14	52,52,52,52	0
57	MG	2a	3055	1/1	0.93	0.14	57,57,57,57	0
57	MG	2A	3074	1/1	0.93	0.07	44,44,44,44	0
57	MG	2a	3057	1/1	0.93	0.24	62,62,62,62	0
57	MG	2A	3082	1/1	0.93	0.08	52,52,52,52	0
57	MG	1A	3081	1/1	0.93	0.06	24,24,24,24	0
57	MG	1A	3508	1/1	0.93	0.08	37,37,37,37	0
57	MG	2A	3085	1/1	0.93	0.22	60,60,60,60	0
57	MG	2a	3064	1/1	0.93	0.09	65,65,65,65	0
57	MG	1A	3337	1/1	0.93	0.21	52,52,52,52	0
57	MG	2A	3091	1/1	0.93	0.19	46,46,46,46	0
57	MG	1a	3103	1/1	0.93	0.17	56,56,56,56	0
57	MG	1a	3105	1/1	0.93	0.12	43,43,43,43	0
57	MG	1a	3108	1/1	0.93	0.11	59,59,59,59	0
57	MG	2a	3070	1/1	0.93	0.16	46,46,46,46	0
57	MG	1A	4213	1/1	0.93	0.06	42,42,42,42	0
57	MG	1a	3112	1/1	0.93	0.07	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	4058	1/1	0.93	0.07	21,21,21,21	0
57	MG	2A	3696	1/1	0.93	0.17	51,51,51,51	0
57	MG	2A	3361	1/1	0.93	0.17	52,52,52,52	0
57	MG	2a	3084	1/1	0.93	0.17	53,53,53,53	0
57	MG	1A	3798	1/1	0.93	0.07	30,30,30,30	0
57	MG	2A	3110	1/1	0.93	0.11	44,44,44,44	0
57	MG	2a	3088	1/1	0.93	0.14	63,63,63,63	0
57	MG	2A	3702	1/1	0.93	0.08	38,38,38,38	0
57	MG	2A	3114	1/1	0.93	0.09	48,48,48,48	0
57	MG	1A	3239	1/1	0.93	0.20	50,50,50,50	0
57	MG	1A	3680	1/1	0.93	0.11	31,31,31,31	0
57	MG	2A	3120	1/1	0.93	0.11	50,50,50,50	0
57	MG	2A	3711	1/1	0.93	0.11	36,36,36,36	0
57	MG	2A	3121	1/1	0.93	0.18	45,45,45,45	0
57	MG	2a	3098	1/1	0.93	0.15	67,67,67,67	0
57	MG	1A	3803	1/1	0.93	0.06	28,28,28,28	0
57	MG	1A	4230	1/1	0.93	0.07	39,39,39,39	0
57	MG	2A	3379	1/1	0.93	0.11	59,59,59,59	0
57	MG	2A	3720	1/1	0.93	0.12	49,49,49,49	0
57	MG	2a	3107	1/1	0.93	0.09	59,59,59,59	0
57	MG	2A	3126	1/1	0.93	0.11	48,48,48,48	0
57	MG	2A	3722	1/1	0.93	0.13	54,54,54,54	0
57	MG	1a	3134	1/1	0.93	0.12	39,39,39,39	0
57	MG	2a	3113	1/1	0.93	0.15	50,50,50,50	0
57	MG	2A	3128	1/1	0.93	0.12	48,48,48,48	0
57	MG	2a	3117	1/1	0.93	0.14	69,69,69,69	0
57	MG	2A	3386	1/1	0.93	0.10	65,65,65,65	0
57	MG	2a	3119	1/1	0.93	0.23	56,56,56,56	0
57	MG	2a	3120	1/1	0.93	0.11	52,52,52,52	0
57	MG	2A	3387	1/1	0.93	0.11	52,52,52,52	0
57	MG	1A	4232	1/1	0.93	0.09	57,57,57,57	0
57	MG	1A	4072	1/1	0.93	0.07	38,38,38,38	0
57	MG	2a	3127	1/1	0.93	0.11	59,59,59,59	0
57	MG	2A	3140	1/1	0.93	0.18	52,52,52,52	0
57	MG	2A	3394	1/1	0.93	0.22	50,50,50,50	0
57	MG	2a	3130	1/1	0.93	0.23	47,47,47,47	0
57	MG	1A	4240	1/1	0.93	0.12	39,39,39,39	0
57	MG	2A	3735	1/1	0.93	0.07	46,46,46,46	0
57	MG	2A	3397	1/1	0.93	0.16	41,41,41,41	0
57	MG	2A	3398	1/1	0.93	0.19	54,54,54,54	0
57	MG	2A	3146	1/1	0.93	0.20	38,38,38,38	0
57	MG	1A	3436	1/1	0.93	0.13	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2a	3144	1/1	0.93	0.08	64,64,64,64	0
57	MG	1A	3347	1/1	0.93	0.08	26,26,26,26	0
57	MG	1A	3242	1/1	0.93	0.09	33,33,33,33	0
57	MG	1A	3935	1/1	0.93	0.07	10,10,10,10	0
57	MG	1A	3702	1/1	0.93	0.15	54,54,54,54	0
57	MG	2A	3157	1/1	0.93	0.18	51,51,51,51	0
57	MG	2a	3152	1/1	0.93	0.11	55,55,55,55	0
57	MG	1a	3152	1/1	0.93	0.14	47,47,47,47	0
57	MG	1a	3155	1/1	0.93	0.15	45,45,45,45	0
57	MG	1A	3353	1/1	0.93	0.09	36,36,36,36	0
57	MG	2a	3159	1/1	0.93	0.11	48,48,48,48	0
57	MG	2A	3174	1/1	0.93	0.09	61,61,61,61	0
57	MG	1A	3443	1/1	0.93	0.08	50,50,50,50	0
57	MG	1A	3939	1/1	0.93	0.08	28,28,28,28	0
57	MG	1A	4093	1/1	0.93	0.12	44,44,44,44	0
57	MG	1A	3246	1/1	0.93	0.07	31,31,31,31	0
57	MG	1A	3543	1/1	0.93	0.09	48,48,48,48	0
57	MG	2a	3170	1/1	0.93	0.07	44,44,44,44	0
57	MG	2A	3431	1/1	0.93	0.11	35,35,35,35	0
57	MG	1A	4099	1/1	0.93	0.10	48,48,48,48	0
57	MG	2a	3177	1/1	0.93	0.09	53,53,53,53	0
57	MG	2A	3436	1/1	0.93	0.16	46,46,46,46	0
57	MG	2A	3767	1/1	0.93	0.08	43,43,43,43	0
57	MG	1A	3356	1/1	0.93	0.18	54,54,54,54	0
57	MG	1A	3109	1/1	0.93	0.14	45,45,45,45	0
57	MG	2A	3442	1/1	0.93	0.11	45,45,45,45	0
57	MG	2A	3195	1/1	0.93	0.08	57,57,57,57	0
57	MG	2A	3774	1/1	0.93	0.10	55,55,55,55	0
57	MG	1A	3950	1/1	0.93	0.09	46,46,46,46	0
57	MG	2A	3449	1/1	0.93	0.25	38,38,38,38	0
57	MG	2a	3195	1/1	0.93	0.08	57,57,57,57	0
57	MG	1a	3173	1/1	0.93	0.07	44,44,44,44	0
57	MG	2A	3453	1/1	0.93	0.38	50,50,50,50	0
57	MG	2A	3455	1/1	0.93	0.21	51,51,51,51	0
57	MG	2A	3784	1/1	0.93	0.09	42,42,42,42	0
57	MG	2A	3198	1/1	0.93	0.34	62,62,62,62	0
57	MG	1A	3953	1/1	0.93	0.10	54,54,54,54	0
57	MG	2A	3788	1/1	0.93	0.09	45,45,45,45	0
57	MG	2a	3218	1/1	0.93	0.14	58,58,58,58	0
57	MG	2A	3201	1/1	0.93	0.27	48,48,48,48	0
57	MG	1A	3955	1/1	0.93	0.10	59,59,59,59	0
57	MG	2A	3203	1/1	0.93	0.13	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1a	3178	1/1	0.93	0.09	43,43,43,43	0
57	MG	2a	3223	1/1	0.93	0.14	40,40,40,40	0
57	MG	1A	4277	1/1	0.93	0.08	40,40,40,40	0
57	MG	2A	3799	1/1	0.93	0.12	50,50,50,50	0
57	MG	1A	3289	1/1	0.93	0.08	35,35,35,35	0
57	MG	2A	3804	1/1	0.93	0.09	60,60,60,60	0
57	MG	2A	3808	1/1	0.93	0.08	49,49,49,49	0
57	MG	2A	3471	1/1	0.93	0.10	36,36,36,36	0
57	MG	1a	3186	1/1	0.93	0.19	46,46,46,46	0
57	MG	1a	3187	1/1	0.93	0.10	57,57,57,57	0
57	MG	2a	3237	1/1	0.93	0.15	57,57,57,57	0
57	MG	2A	3475	1/1	0.93	0.12	51,51,51,51	0
57	MG	2A	3477	1/1	0.93	0.08	45,45,45,45	0
57	MG	1A	3958	1/1	0.93	0.18	26,26,26,26	0
57	MG	2A	3818	1/1	0.93	0.18	38,38,38,38	0
57	MG	2A	3480	1/1	0.93	0.10	57,57,57,57	0
57	MG	2a	3246	1/1	0.93	0.07	48,48,48,48	0
57	MG	1a	3195	1/1	0.93	0.09	45,45,45,45	0
57	MG	2A	3485	1/1	0.93	0.14	49,49,49,49	0
57	MG	2a	3249	1/1	0.93	0.20	62,62,62,62	0
57	MG	2A	3218	1/1	0.93	0.18	57,57,57,57	0
57	MG	1A	3832	1/1	0.93	0.12	60,60,60,60	0
57	MG	1a	3198	1/1	0.93	0.09	47,47,47,47	0
57	MG	1A	3971	1/1	0.93	0.12	48,48,48,48	0
57	MG	2A	3491	1/1	0.93	0.08	58,58,58,58	0
57	MG	1A	4128	1/1	0.93	0.09	53,53,53,53	0
57	MG	2A	3226	1/1	0.93	0.07	43,43,43,43	0
57	MG	2A	3227	1/1	0.93	0.12	52,52,52,52	0
57	MG	1A	4294	1/1	0.93	0.06	40,40,40,40	0
57	MG	2A	3855	1/1	0.93	0.12	45,45,45,45	0
57	MG	1A	4295	1/1	0.93	0.17	46,46,46,46	0
57	MG	2A	3859	1/1	0.93	0.08	59,59,59,59	0
57	MG	1A	4131	1/1	0.93	0.09	28,28,28,28	0
57	MG	1a	3208	1/1	0.93	0.09	34,34,34,34	0
57	MG	1a	3209	1/1	0.93	0.07	44,44,44,44	0
57	MG	1A	3252	1/1	0.93	0.22	29,29,29,29	0
57	MG	1a	3220	1/1	0.93	0.07	63,63,63,63	0
57	MG	1a	3225	1/1	0.93	0.09	63,63,63,63	0
57	MG	1A	3836	1/1	0.93	0.09	25,25,25,25	0
57	MG	2A	3876	1/1	0.93	0.08	55,55,55,55	0
57	MG	2A	3521	1/1	0.93	0.08	51,51,51,51	0
57	MG	1a	3003	1/1	0.93	0.09	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	ZN	14	501	1/1	0.93	0.11	106,106,106,106	0
57	MG	1a	3153	1/1	0.94	0.14	53,53,53,53	0
57	MG	1a	3154	1/1	0.94	0.16	61,61,61,61	0
57	MG	1A	3988	1/1	0.94	0.08	47,47,47,47	0
57	MG	1A	4199	1/1	0.94	0.09	37,37,37,37	0
57	MG	2A	3494	1/1	0.94	0.10	51,51,51,51	0
57	MG	1A	4200	1/1	0.94	0.08	49,49,49,49	0
57	MG	2A	3884	1/1	0.94	0.06	45,45,45,45	0
57	MG	2A	3211	1/1	0.94	0.09	42,42,42,42	0
57	MG	1A	3490	1/1	0.94	0.26	34,34,34,34	0
57	MG	2A	3501	1/1	0.94	0.07	44,44,44,44	0
57	MG	1A	3990	1/1	0.94	0.11	45,45,45,45	0
57	MG	1A	3150	1/1	0.94	0.06	41,41,41,41	0
57	MG	2A	3506	1/1	0.94	0.16	49,49,49,49	0
57	MG	1A	3994	1/1	0.94	0.07	64,64,64,64	0
57	MG	1A	3324	1/1	0.94	0.20	44,44,44,44	0
57	MG	2A	3897	1/1	0.94	0.08	32,32,32,32	0
57	MG	1a	3167	1/1	0.94	0.12	35,35,35,35	0
57	MG	1A	3634	1/1	0.94	0.16	54,54,54,54	0
57	MG	1A	3636	1/1	0.94	0.06	29,29,29,29	0
57	MG	1A	3494	1/1	0.94	0.08	23,23,23,23	0
57	MG	2A	3909	1/1	0.94	0.13	31,31,31,31	0
57	MG	1A	4217	1/1	0.94	0.14	45,45,45,45	0
57	MG	2A	3912	1/1	0.94	0.07	48,48,48,48	0
57	MG	2A	3228	1/1	0.94	0.11	52,52,52,52	0
57	MG	2A	3229	1/1	0.94	0.12	47,47,47,47	0
57	MG	1A	4219	1/1	0.94	0.07	47,47,47,47	0
57	MG	2A	3231	1/1	0.94	0.09	51,51,51,51	0
57	MG	2A	3232	1/1	0.94	0.34	42,42,42,42	0
57	MG	1A	3644	1/1	0.94	0.07	56,56,56,56	0
57	MG	1A	4222	1/1	0.94	0.09	51,51,51,51	0
57	MG	1A	3646	1/1	0.94	0.14	47,47,47,47	0
57	MG	2A	3927	1/1	0.94	0.20	62,62,62,62	0
57	MG	1A	3165	1/1	0.94	0.12	32,32,32,32	0
57	MG	2A	3241	1/1	0.94	0.14	54,54,54,54	0
57	MG	1A	3224	1/1	0.94	0.09	56,56,56,56	0
57	MG	1A	3837	1/1	0.94	0.10	25,25,25,25	0
57	MG	1a	3190	1/1	0.94	0.08	54,54,54,54	0
57	MG	2A	3245	1/1	0.94	0.09	50,50,50,50	0
57	MG	2A	3555	1/1	0.94	0.14	46,46,46,46	0
57	MG	1A	4229	1/1	0.94	0.09	58,58,58,58	0
57	MG	2A	3248	1/1	0.94	0.08	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1a	3194	1/1	0.94	0.07	43,43,43,43	0
57	MG	1A	3840	1/1	0.94	0.07	23,23,23,23	0
57	MG	1A	4231	1/1	0.94	0.07	37,37,37,37	0
57	MG	1A	3270	1/1	0.94	0.23	57,57,57,57	0
57	MG	1A	3664	1/1	0.94	0.19	40,40,40,40	0
57	MG	1A	3666	1/1	0.94	0.19	27,27,27,27	0
57	MG	2A	3956	1/1	0.94	0.16	46,46,46,46	0
57	MG	2A	3959	1/1	0.94	0.12	49,49,49,49	0
57	MG	2A	3960	1/1	0.94	0.16	37,37,37,37	0
57	MG	1a	3202	1/1	0.94	0.08	55,55,55,55	0
57	MG	2A	3962	1/1	0.94	0.15	47,47,47,47	0
57	MG	1A	4241	1/1	0.94	0.08	47,47,47,47	0
57	MG	1A	3120	1/1	0.94	0.10	31,31,31,31	0
57	MG	1A	3062	1/1	0.94	0.08	34,34,34,34	0
57	MG	1A	3683	1/1	0.94	0.10	42,42,42,42	0
57	MG	2A	3263	1/1	0.94	0.09	49,49,49,49	0
57	MG	1A	3429	1/1	0.94	0.11	38,38,38,38	0
57	MG	1A	3237	1/1	0.94	0.10	31,31,31,31	0
57	MG	2A	3586	1/1	0.94	0.10	50,50,50,50	0
57	MG	1a	3215	1/1	0.94	0.07	54,54,54,54	0
57	MG	2A	3268	1/1	0.94	0.10	49,49,49,49	0
57	MG	2A	3269	1/1	0.94	0.08	45,45,45,45	0
57	MG	1A	3516	1/1	0.94	0.10	40,40,40,40	0
57	MG	2a	3014	1/1	0.94	0.13	58,58,58,58	0
57	MG	1A	4256	1/1	0.94	0.12	34,34,34,34	0
57	MG	1A	3854	1/1	0.94	0.09	10,10,10,10	0
57	MG	1A	4034	1/1	0.94	0.08	33,33,33,33	0
57	MG	2a	3019	1/1	0.94	0.12	51,51,51,51	0
57	MG	1A	4037	1/1	0.94	0.07	16,16,16,16	0
57	MG	1A	4039	1/1	0.94	0.06	34,34,34,34	0
57	MG	1a	3234	1/1	0.94	0.06	49,49,49,49	0
57	MG	1a	3236	1/1	0.94	0.12	65,65,65,65	0
57	MG	1A	3340	1/1	0.94	0.07	46,46,46,46	0
57	MG	2A	3610	1/1	0.94	0.09	48,48,48,48	0
57	MG	2A	3282	1/1	0.94	0.08	47,47,47,47	0
57	MG	1a	3238	1/1	0.94	0.14	64,64,64,64	0
57	MG	2A	3285	1/1	0.94	0.07	52,52,52,52	0
57	MG	1a	3240	1/1	0.94	0.08	55,55,55,55	0
57	MG	2A	3288	1/1	0.94	0.10	54,54,54,54	0
57	MG	1A	4043	1/1	0.94	0.09	47,47,47,47	0
57	MG	1a	3242	1/1	0.94	0.12	55,55,55,55	0
57	MG	2A	3293	1/1	0.94	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
57	MG	1A	3704	1/1	0.94	0.10	44,44,44,44	0
57	MG	1A	3859	1/1	0.94	0.10	36,36,36,36	0
57	MG	1A	3238	1/1	0.94	0.15	35,35,35,35	0
57	MG	1A	3126	1/1	0.94	0.09	31,31,31,31	0
57	MG	1A	3709	1/1	0.94	0.13	37,37,37,37	0
57	MG	1A	3129	1/1	0.94	0.08	42,42,42,42	0
57	MG	1A	3727	1/1	0.94	0.06	30,30,30,30	0
57	MG	1A	4062	1/1	0.94	0.06	23,23,23,23	0
57	MG	1a	3253	1/1	0.94	0.13	55,55,55,55	0
57	MG	1A	4280	1/1	0.94	0.11	36,36,36,36	0
57	MG	1A	3351	1/1	0.94	0.15	45,45,45,45	0
57	MG	1A	4284	1/1	0.94	0.07	44,44,44,44	0
57	MG	1A	4290	1/1	0.94	0.09	59,59,59,59	0
57	MG	1A	4291	1/1	0.94	0.09	56,56,56,56	0
57	MG	2a	3053	1/1	0.94	0.17	60,60,60,60	0
57	MG	2A	3312	1/1	0.94	0.10	56,56,56,56	0
57	MG	2A	3314	1/1	0.94	0.08	42,42,42,42	0
57	MG	1A	4067	1/1	0.94	0.09	48,48,48,48	0
57	MG	1A	3874	1/1	0.94	0.08	25,25,25,25	0
57	MG	2A	3653	1/1	0.94	0.12	53,53,53,53	0
57	MG	2A	3011	1/1	0.94	0.11	39,39,39,39	0
57	MG	2A	3658	1/1	0.94	0.07	52,52,52,52	0
57	MG	2A	3659	1/1	0.94	0.12	48,48,48,48	0
57	MG	1A	4070	1/1	0.94	0.07	39,39,39,39	0
57	MG	2A	3664	1/1	0.94	0.09	55,55,55,55	0
57	MG	1A	3875	1/1	0.94	0.07	45,45,45,45	0
57	MG	1A	3532	1/1	0.94	0.05	35,35,35,35	0
57	MG	1A	3733	1/1	0.94	0.23	52,52,52,52	0
57	MG	2A	3326	1/1	0.94	0.15	57,57,57,57	0
57	MG	2A	3029	1/1	0.94	0.23	42,42,42,42	0
57	MG	1A	3029	1/1	0.94	0.14	51,51,51,51	0
57	MG	2A	3674	1/1	0.94	0.19	56,56,56,56	0
57	MG	2a	3075	1/1	0.94	0.07	53,53,53,53	0
57	MG	1a	3002	1/1	0.94	0.08	50,50,50,50	0
57	MG	1A	3736	1/1	0.94	0.09	52,52,52,52	0
57	MG	1A	3094	1/1	0.94	0.06	33,33,33,33	0
57	MG	2A	3682	1/1	0.94	0.08	23,23,23,23	0
57	MG	1a	3006	1/1	0.94	0.18	47,47,47,47	0
57	MG	2A	3336	1/1	0.94	0.11	55,55,55,55	0
57	MG	1A	3740	1/1	0.94	0.09	38,38,38,38	0
57	MG	1A	3741	1/1	0.94	0.07	24,24,24,24	0
57	MG	2A	3340	1/1	0.94	0.10	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3691	1/1	0.94	0.09	36,36,36,36	0
57	MG	1A	3538	1/1	0.94	0.08	33,33,33,33	0
57	MG	2A	3695	1/1	0.94	0.06	37,37,37,37	0
57	MG	1A	3895	1/1	0.94	0.09	49,49,49,49	0
57	MG	2A	3344	1/1	0.94	0.07	34,34,34,34	0
57	MG	1A	3540	1/1	0.94	0.12	53,53,53,53	0
57	MG	2a	3100	1/1	0.94	0.21	44,44,44,44	0
57	MG	1A	4095	1/1	0.94	0.07	45,45,45,45	0
57	MG	2A	3348	1/1	0.94	0.12	44,44,44,44	0
57	MG	1A	3302	1/1	0.94	0.34	29,29,29,29	0
57	MG	2A	3707	1/1	0.94	0.09	39,39,39,39	0
57	MG	1a	3025	1/1	0.94	0.15	38,38,38,38	0
57	MG	1A	3746	1/1	0.94	0.08	23,23,23,23	0
57	MG	1A	4098	1/1	0.94	0.08	41,41,41,41	0
57	MG	2A	3056	1/1	0.94	0.12	53,53,53,53	0
57	MG	2a	3112	1/1	0.94	0.14	54,54,54,54	0
57	MG	1A	3901	1/1	0.94	0.11	20,20,20,20	0
57	MG	2a	3114	1/1	0.94	0.17	55,55,55,55	0
57	MG	1A	3305	1/1	0.94	0.10	27,27,27,27	0
57	MG	1A	3308	1/1	0.94	0.08	51,51,51,51	0
57	MG	1A	4102	1/1	0.94	0.06	42,42,42,42	0
57	MG	1A	3310	1/1	0.94	0.12	45,45,45,45	0
57	MG	1A	4104	1/1	0.94	0.07	55,55,55,55	0
57	MG	1A	3362	1/1	0.94	0.08	43,43,43,43	0
57	MG	1A	4108	1/1	0.94	0.09	50,50,50,50	0
57	MG	2a	3123	1/1	0.94	0.09	54,54,54,54	0
57	MG	2a	3124	1/1	0.94	0.08	55,55,55,55	0
57	MG	2a	3125	1/1	0.94	0.16	66,66,66,66	0
57	MG	1A	4109	1/1	0.94	0.06	18,18,18,18	0
57	MG	2A	3071	1/1	0.94	0.08	46,46,46,46	0
57	MG	1A	3558	1/1	0.94	0.13	66,66,66,66	0
57	MG	2A	3076	1/1	0.94	0.18	52,52,52,52	0
57	MG	2A	3080	1/1	0.94	0.05	39,39,39,39	0
57	MG	2a	3131	1/1	0.94	0.11	43,43,43,43	0
57	MG	1A	3917	1/1	0.94	0.08	41,41,41,41	0
57	MG	2A	3732	1/1	0.94	0.12	49,49,49,49	0
57	MG	2A	3376	1/1	0.94	0.12	47,47,47,47	0
57	MG	2a	3137	1/1	0.94	0.05	42,42,42,42	0
57	MG	2A	3377	1/1	0.94	0.12	59,59,59,59	0
57	MG	1A	4113	1/1	0.94	0.11	47,47,47,47	0
57	MG	1a	3059	1/1	0.94	0.09	64,64,64,64	0
57	MG	2A	3382	1/1	0.94	0.21	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1a	3062	1/1	0.94	0.17	61,61,61,61	0
57	MG	1A	3918	1/1	0.94	0.05	20,20,20,20	0
57	MG	1A	3559	1/1	0.94	0.09	58,58,58,58	0
57	MG	1A	4122	1/1	0.94	0.07	50,50,50,50	0
57	MG	2A	3743	1/1	0.94	0.09	52,52,52,52	0
57	MG	1A	3450	1/1	0.94	0.11	56,56,56,56	0
57	MG	2A	3095	1/1	0.94	0.13	42,42,42,42	0
57	MG	1A	3249	1/1	0.94	0.08	44,44,44,44	0
57	MG	2a	3157	1/1	0.94	0.14	52,52,52,52	0
57	MG	1A	4129	1/1	0.94	0.08	59,59,59,59	0
57	MG	1a	3072	1/1	0.94	0.07	43,43,43,43	0
57	MG	1A	3925	1/1	0.94	0.07	40,40,40,40	0
57	MG	1A	3455	1/1	0.94	0.14	28,28,28,28	0
57	MG	2A	3399	1/1	0.94	0.08	58,58,58,58	0
57	MG	2A	3755	1/1	0.94	0.16	47,47,47,47	0
57	MG	1A	3198	1/1	0.94	0.06	31,31,31,31	0
57	MG	1A	3772	1/1	0.94	0.10	46,46,46,46	0
57	MG	1a	3078	1/1	0.94	0.18	47,47,47,47	0
57	MG	1A	3573	1/1	0.94	0.20	54,54,54,54	0
57	MG	2A	3762	1/1	0.94	0.07	57,57,57,57	0
57	MG	2a	3176	1/1	0.94	0.24	46,46,46,46	0
57	MG	1A	3575	1/1	0.94	0.18	54,54,54,54	0
57	MG	1A	4142	1/1	0.94	0.07	34,34,34,34	0
57	MG	1A	3375	1/1	0.94	0.08	34,34,34,34	0
57	MG	1A	3581	1/1	0.94	0.09	41,41,41,41	0
57	MG	1A	4148	1/1	0.94	0.05	42,42,42,42	0
57	MG	2A	3769	1/1	0.94	0.11	56,56,56,56	0
57	MG	1A	3585	1/1	0.94	0.06	53,53,53,53	0
57	MG	2A	3418	1/1	0.94	0.07	50,50,50,50	0
57	MG	1A	3256	1/1	0.94	0.07	31,31,31,31	0
57	MG	2a	3190	1/1	0.94	0.06	47,47,47,47	0
57	MG	1A	3592	1/1	0.94	0.15	27,27,27,27	0
57	MG	1a	3099	1/1	0.94	0.16	45,45,45,45	0
57	MG	2A	3136	1/1	0.94	0.08	56,56,56,56	0
57	MG	2a	3200	1/1	0.94	0.06	78,78,78,78	0
57	MG	2A	3777	1/1	0.94	0.08	41,41,41,41	0
57	MG	1A	3946	1/1	0.94	0.06	29,29,29,29	0
57	MG	1A	3593	1/1	0.94	0.14	44,44,44,44	0
57	MG	2A	3145	1/1	0.94	0.15	48,48,48,48	0
57	MG	2A	3433	1/1	0.94	0.30	39,39,39,39	0
57	MG	1A	4161	1/1	0.94	0.11	42,42,42,42	0
57	MG	1A	3594	1/1	0.94	0.14	21,21,21,21	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3437	1/1	0.94	0.25	46,46,46,46	0
57	MG	1A	3595	1/1	0.94	0.29	35,35,35,35	0
57	MG	1A	3954	1/1	0.94	0.07	46,46,46,46	0
57	MG	1A	3794	1/1	0.94	0.06	35,35,35,35	0
57	MG	2A	3794	1/1	0.94	0.16	57,57,57,57	0
57	MG	1a	3113	1/1	0.94	0.17	52,52,52,52	0
57	MG	2A	3446	1/1	0.94	0.18	44,44,44,44	0
57	MG	1A	3466	1/1	0.94	0.10	36,36,36,36	0
57	MG	2A	3159	1/1	0.94	0.09	52,52,52,52	0
57	MG	2A	3162	1/1	0.94	0.11	47,47,47,47	0
57	MG	1A	3384	1/1	0.94	0.12	55,55,55,55	0
57	MG	2A	3164	1/1	0.94	0.10	56,56,56,56	0
57	MG	1A	3142	1/1	0.94	0.12	28,28,28,28	0
57	MG	1A	3473	1/1	0.94	0.13	37,37,37,37	0
57	MG	1A	3974	1/1	0.94	0.09	54,54,54,54	0
57	MG	2a	3239	1/1	0.94	0.17	53,53,53,53	0
57	MG	2A	3459	1/1	0.94	0.17	44,44,44,44	0
57	MG	2A	3460	1/1	0.94	0.09	59,59,59,59	0
57	MG	2A	3461	1/1	0.94	0.13	37,37,37,37	0
57	MG	1A	3399	1/1	0.94	0.21	51,51,51,51	0
57	MG	1A	3607	1/1	0.94	0.06	36,36,36,36	0
57	MG	1A	3978	1/1	0.94	0.11	53,53,53,53	0
57	MG	2A	3181	1/1	0.94	0.09	56,56,56,56	0
57	MG	2A	3467	1/1	0.94	0.22	41,41,41,41	0
57	MG	1A	4184	1/1	0.94	0.05	21,21,21,21	0
57	MG	2A	3832	1/1	0.94	0.07	50,50,50,50	0
57	MG	1A	3979	1/1	0.94	0.11	48,48,48,48	0
57	MG	2a	3254	1/1	0.94	0.16	40,40,40,40	0
57	MG	2A	3837	1/1	0.94	0.10	49,49,49,49	0
57	MG	2A	3838	1/1	0.94	0.07	37,37,37,37	0
57	MG	2A	3839	1/1	0.94	0.12	34,34,34,34	0
57	MG	1A	3400	1/1	0.94	0.16	45,45,45,45	0
57	MG	2A	3473	1/1	0.94	0.23	46,46,46,46	0
57	MG	2a	3263	1/1	0.94	0.14	64,64,64,64	0
57	MG	1a	3140	1/1	0.94	0.21	51,51,51,51	0
57	MG	2A	3843	1/1	0.94	0.07	54,54,54,54	0
57	MG	1A	3808	1/1	0.94	0.09	22,22,22,22	0
57	MG	1A	3317	1/1	0.94	0.10	27,27,27,27	0
57	MG	1a	3143	1/1	0.94	0.20	53,53,53,53	0
57	MG	2A	3479	1/1	0.94	0.18	57,57,57,57	0
57	MG	2A	3858	1/1	0.94	0.14	56,56,56,56	0
57	MG	1A	4190	1/1	0.94	0.11	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1a	3149	1/1	0.94	0.19	46,46,46,46	0
57	MG	1a	3150	1/1	0.94	0.10	45,45,45,45	0
57	MG	2A	3200	1/1	0.94	0.08	47,47,47,47	0
57	MG	1A	3408	1/1	0.94	0.07	32,32,32,32	0
57	MG	2a	3278	1/1	0.94	0.08	57,57,57,57	0
57	MG	2A	3866	1/1	0.94	0.13	54,54,54,54	0
57	MG	1A	3145	1/1	0.94	0.13	28,28,28,28	0
58	K	2A	3484	1/1	0.94	0.06	40,40,40,40	0
57	MG	2A	3872	1/1	0.94	0.08	51,51,51,51	0
57	MG	1A	3745	1/1	0.95	0.06	37,37,37,37	0
57	MG	1A	3556	1/1	0.95	0.12	56,56,56,56	0
57	MG	1A	3360	1/1	0.95	0.07	43,43,43,43	0
57	MG	2A	3151	1/1	0.95	0.19	52,52,52,52	0
57	MG	1a	3101	1/1	0.95	0.21	42,42,42,42	0
57	MG	1A	3063	1/1	0.95	0.06	23,23,23,23	0
57	MG	1A	3264	1/1	0.95	0.14	49,49,49,49	0
57	MG	1a	3104	1/1	0.95	0.14	51,51,51,51	0
57	MG	2A	3160	1/1	0.95	0.16	44,44,44,44	0
57	MG	1A	4153	1/1	0.95	0.06	23,23,23,23	0
57	MG	1a	3106	1/1	0.95	0.08	45,45,45,45	0
57	MG	1A	3448	1/1	0.95	0.13	43,43,43,43	0
57	MG	1A	4155	1/1	0.95	0.10	23,23,23,23	0
57	MG	2A	3167	1/1	0.95	0.11	47,47,47,47	0
57	MG	1a	3111	1/1	0.95	0.08	55,55,55,55	0
57	MG	2A	3868	1/1	0.95	0.11	62,62,62,62	0
57	MG	2A	3870	1/1	0.95	0.06	34,34,34,34	0
57	MG	2A	3171	1/1	0.95	0.18	47,47,47,47	0
57	MG	1A	3754	1/1	0.95	0.07	31,31,31,31	0
57	MG	1A	3089	1/1	0.95	0.24	26,26,26,26	0
57	MG	1a	3115	1/1	0.95	0.18	55,55,55,55	0
57	MG	1A	3364	1/1	0.95	0.10	42,42,42,42	0
57	MG	2A	3878	1/1	0.95	0.08	56,56,56,56	0
57	MG	2A	3481	1/1	0.95	0.18	44,44,44,44	0
57	MG	2A	3482	1/1	0.95	0.24	53,53,53,53	0
57	MG	2A	3180	1/1	0.95	0.09	44,44,44,44	0
57	MG	1A	3091	1/1	0.95	0.14	34,34,34,34	0
57	MG	1a	3119	1/1	0.95	0.15	48,48,48,48	0
57	MG	2A	3487	1/1	0.95	0.14	54,54,54,54	0
57	MG	1A	3369	1/1	0.95	0.13	46,46,46,46	0
57	MG	2A	3889	1/1	0.95	0.11	46,46,46,46	0
57	MG	2A	3188	1/1	0.95	0.09	42,42,42,42	0
57	MG	2A	3892	1/1	0.95	0.09	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3189	1/1	0.95	0.10	32,32,32,32	0
57	MG	1a	3122	1/1	0.95	0.15	53,53,53,53	0
57	MG	2A	3895	1/1	0.95	0.11	36,36,36,36	0
57	MG	1a	3123	1/1	0.95	0.20	48,48,48,48	0
57	MG	1A	3574	1/1	0.95	0.22	51,51,51,51	0
57	MG	2A	3194	1/1	0.95	0.09	49,49,49,49	0
57	MG	2A	3901	1/1	0.95	0.09	50,50,50,50	0
57	MG	1A	3373	1/1	0.95	0.09	22,22,22,22	0
57	MG	1A	3769	1/1	0.95	0.05	13,13,13,13	0
57	MG	2A	3499	1/1	0.95	0.10	20,20,20,20	0
57	MG	2A	3908	1/1	0.95	0.07	57,57,57,57	0
57	MG	1A	4172	1/1	0.95	0.13	52,52,52,52	0
57	MG	1A	3577	1/1	0.95	0.12	39,39,39,39	0
57	MG	1A	4175	1/1	0.95	0.06	32,32,32,32	0
57	MG	1A	3774	1/1	0.95	0.05	18,18,18,18	0
57	MG	1A	3578	1/1	0.95	0.09	46,46,46,46	0
57	MG	2A	3508	1/1	0.95	0.06	41,41,41,41	0
57	MG	1a	3139	1/1	0.95	0.23	35,35,35,35	0
57	MG	1A	3959	1/1	0.95	0.05	33,33,33,33	0
57	MG	1A	3318	1/1	0.95	0.25	52,52,52,52	0
57	MG	2A	3514	1/1	0.95	0.19	37,37,37,37	0
57	MG	1A	3968	1/1	0.95	0.07	40,40,40,40	0
57	MG	2A	3925	1/1	0.95	0.10	60,60,60,60	0
57	MG	2A	3926	1/1	0.95	0.15	64,64,64,64	0
57	MG	2A	3516	1/1	0.95	0.07	52,52,52,52	0
57	MG	2A	3208	1/1	0.95	0.14	49,49,49,49	0
57	MG	1A	3464	1/1	0.95	0.17	24,24,24,24	0
57	MG	1a	3144	1/1	0.95	0.15	46,46,46,46	0
57	MG	1a	3146	1/1	0.95	0.11	46,46,46,46	0
57	MG	2A	3525	1/1	0.95	0.23	43,43,43,43	0
57	MG	2A	3212	1/1	0.95	0.12	57,57,57,57	0
57	MG	1a	3147	1/1	0.95	0.15	49,49,49,49	0
57	MG	2A	3529	1/1	0.95	0.05	45,45,45,45	0
57	MG	1A	3972	1/1	0.95	0.10	48,48,48,48	0
57	MG	2A	3942	1/1	0.95	0.05	43,43,43,43	0
57	MG	1A	3582	1/1	0.95	0.08	46,46,46,46	0
57	MG	2A	3945	1/1	0.95	0.12	42,42,42,42	0
57	MG	2A	3532	1/1	0.95	0.10	55,55,55,55	0
57	MG	2A	3217	1/1	0.95	0.11	52,52,52,52	0
57	MG	1A	3584	1/1	0.95	0.08	47,47,47,47	0
57	MG	2A	3536	1/1	0.95	0.25	40,40,40,40	0
57	MG	2A	3954	1/1	0.95	0.10	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3537	1/1	0.95	0.13	57,57,57,57	0
57	MG	2A	3538	1/1	0.95	0.10	48,48,48,48	0
57	MG	2A	3539	1/1	0.95	0.08	54,54,54,54	0
57	MG	1A	3376	1/1	0.95	0.11	46,46,46,46	0
57	MG	1A	3378	1/1	0.95	0.06	35,35,35,35	0
57	MG	1A	3380	1/1	0.95	0.07	54,54,54,54	0
57	MG	1A	3472	1/1	0.95	0.12	51,51,51,51	0
57	MG	1A	3981	1/1	0.95	0.08	29,29,29,29	0
57	MG	1a	3156	1/1	0.95	0.06	46,46,46,46	0
57	MG	2A	3552	1/1	0.95	0.10	41,41,41,41	0
57	MG	1A	3051	1/1	0.95	0.06	15,15,15,15	0
57	MG	1A	3477	1/1	0.95	0.07	31,31,31,31	0
57	MG	2A	3556	1/1	0.95	0.13	58,58,58,58	0
57	MG	1A	3383	1/1	0.95	0.10	53,53,53,53	0
57	MG	1A	3127	1/1	0.95	0.16	38,38,38,38	0
57	MG	1A	4204	1/1	0.95	0.09	43,43,43,43	0
57	MG	1A	3482	1/1	0.95	0.10	33,33,33,33	0
57	MG	1A	3390	1/1	0.95	0.11	49,49,49,49	0
57	MG	2A	3567	1/1	0.95	0.06	57,57,57,57	0
57	MG	2a	3015	1/1	0.95	0.10	53,53,53,53	0
57	MG	1A	3800	1/1	0.95	0.06	18,18,18,18	0
57	MG	2A	3237	1/1	0.95	0.10	39,39,39,39	0
57	MG	1A	3322	1/1	0.95	0.05	28,28,28,28	0
57	MG	1A	3992	1/1	0.95	0.06	14,14,14,14	0
57	MG	1A	3802	1/1	0.95	0.05	41,41,41,41	0
57	MG	1a	3172	1/1	0.95	0.12	54,54,54,54	0
57	MG	1A	4216	1/1	0.95	0.06	37,37,37,37	0
57	MG	1A	3486	1/1	0.95	0.09	51,51,51,51	0
57	MG	2a	3024	1/1	0.95	0.15	64,64,64,64	0
57	MG	2a	3025	1/1	0.95	0.09	50,50,50,50	0
57	MG	1A	3323	1/1	0.95	0.09	36,36,36,36	0
57	MG	1A	3806	1/1	0.95	0.04	24,24,24,24	0
57	MG	2A	3584	1/1	0.95	0.06	34,34,34,34	0
57	MG	1A	4001	1/1	0.95	0.15	23,23,23,23	0
57	MG	1A	3002	1/1	0.95	0.07	41,41,41,41	0
57	MG	1A	4004	1/1	0.95	0.06	38,38,38,38	0
57	MG	1A	4005	1/1	0.95	0.10	47,47,47,47	0
57	MG	1a	3188	1/1	0.95	0.10	52,52,52,52	0
57	MG	1a	3189	1/1	0.95	0.07	39,39,39,39	0
57	MG	1A	3188	1/1	0.95	0.13	27,27,27,27	0
57	MG	1a	3191	1/1	0.95	0.08	56,56,56,56	0
57	MG	2a	3039	1/1	0.95	0.19	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3612	1/1	0.95	0.09	47,47,47,47	0
57	MG	1A	3240	1/1	0.95	0.08	35,35,35,35	0
57	MG	1A	4010	1/1	0.95	0.06	43,43,43,43	0
57	MG	1A	3820	1/1	0.95	0.06	20,20,20,20	0
57	MG	1A	3329	1/1	0.95	0.13	41,41,41,41	0
57	MG	1A	3498	1/1	0.95	0.14	45,45,45,45	0
57	MG	1A	3626	1/1	0.95	0.27	44,44,44,44	0
57	MG	1A	3130	1/1	0.95	0.12	24,24,24,24	0
57	MG	1A	4245	1/1	0.95	0.16	46,46,46,46	0
57	MG	1A	3332	1/1	0.95	0.17	43,43,43,43	0
57	MG	1a	3206	1/1	0.95	0.09	50,50,50,50	0
57	MG	1A	3283	1/1	0.95	0.11	31,31,31,31	0
57	MG	1A	4250	1/1	0.95	0.17	44,44,44,44	0
57	MG	1A	3830	1/1	0.95	0.06	22,22,22,22	0
57	MG	1A	3638	1/1	0.95	0.13	25,25,25,25	0
57	MG	1A	3640	1/1	0.95	0.07	32,32,32,32	0
57	MG	1a	3217	1/1	0.95	0.10	56,56,56,56	0
57	MG	1A	3503	1/1	0.95	0.09	43,43,43,43	0
57	MG	1a	3224	1/1	0.95	0.07	52,52,52,52	0
57	MG	2a	3059	1/1	0.95	0.13	50,50,50,50	0
57	MG	2A	3283	1/1	0.95	0.09	50,50,50,50	0
57	MG	1A	3504	1/1	0.95	0.09	40,40,40,40	0
57	MG	1a	3226	1/1	0.95	0.10	68,68,68,68	0
57	MG	1A	3645	1/1	0.95	0.09	55,55,55,55	0
57	MG	1A	4259	1/1	0.95	0.09	39,39,39,39	0
57	MG	1A	3069	1/1	0.95	0.05	27,27,27,27	0
57	MG	1A	4035	1/1	0.95	0.05	27,27,27,27	0
57	MG	1A	3841	1/1	0.95	0.07	23,23,23,23	0
57	MG	1A	4038	1/1	0.95	0.08	50,50,50,50	0
57	MG	1A	3647	1/1	0.95	0.19	45,45,45,45	0
57	MG	2A	3297	1/1	0.95	0.05	51,51,51,51	0
57	MG	1A	3648	1/1	0.95	0.07	37,37,37,37	0
57	MG	2A	3649	1/1	0.95	0.11	58,58,58,58	0
57	MG	2a	3076	1/1	0.95	0.08	53,53,53,53	0
57	MG	1a	3239	1/1	0.95	0.19	41,41,41,41	0
57	MG	1A	4273	1/1	0.95	0.05	30,30,30,30	0
57	MG	2a	3082	1/1	0.95	0.09	49,49,49,49	0
57	MG	1A	3650	1/1	0.95	0.15	43,43,43,43	0
57	MG	2A	3655	1/1	0.95	0.06	36,36,36,36	0
57	MG	2a	3085	1/1	0.95	0.16	56,56,56,56	0
57	MG	1A	3506	1/1	0.95	0.10	44,44,44,44	0
57	MG	2A	3303	1/1	0.95	0.28	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3653	1/1	0.95	0.12	43,43,43,43	0
57	MG	1A	3654	1/1	0.95	0.10	45,45,45,45	0
57	MG	2A	3661	1/1	0.95	0.21	41,41,41,41	0
57	MG	1A	4050	1/1	0.95	0.07	30,30,30,30	0
57	MG	1A	3655	1/1	0.95	0.16	23,23,23,23	0
57	MG	1A	4054	1/1	0.95	0.23	36,36,36,36	0
57	MG	2a	3095	1/1	0.95	0.12	49,49,49,49	0
57	MG	1a	3249	1/1	0.95	0.15	59,59,59,59	0
57	MG	1A	3423	1/1	0.95	0.09	37,37,37,37	0
57	MG	1A	3028	1/1	0.95	0.07	39,39,39,39	0
57	MG	2A	3313	1/1	0.95	0.13	43,43,43,43	0
57	MG	1A	4059	1/1	0.95	0.07	29,29,29,29	0
57	MG	1A	4060	1/1	0.95	0.12	37,37,37,37	0
57	MG	2A	3676	1/1	0.95	0.10	56,56,56,56	0
57	MG	2A	3677	1/1	0.95	0.11	36,36,36,36	0
57	MG	1A	3510	1/1	0.95	0.12	46,46,46,46	0
57	MG	1A	3855	1/1	0.95	0.10	47,47,47,47	0
57	MG	1A	3513	1/1	0.95	0.09	38,38,38,38	0
57	MG	2A	3319	1/1	0.95	0.07	55,55,55,55	0
57	MG	1A	3668	1/1	0.95	0.15	43,43,43,43	0
57	MG	1A	3669	1/1	0.95	0.04	36,36,36,36	0
57	MG	2A	3686	1/1	0.95	0.07	42,42,42,42	0
57	MG	2A	3324	1/1	0.95	0.09	47,47,47,47	0
57	MG	2A	3688	1/1	0.95	0.17	44,44,44,44	0
57	MG	2A	3689	1/1	0.95	0.11	48,48,48,48	0
57	MG	2A	3007	1/1	0.95	0.15	45,45,45,45	0
57	MG	1A	4069	1/1	0.95	0.07	41,41,41,41	0
57	MG	2A	3009	1/1	0.95	0.07	36,36,36,36	0
57	MG	1A	3339	1/1	0.95	0.12	21,21,21,21	0
57	MG	1A	3679	1/1	0.95	0.12	42,42,42,42	0
57	MG	1A	3101	1/1	0.95	0.05	26,26,26,26	0
57	MG	1A	3681	1/1	0.95	0.08	52,52,52,52	0
57	MG	2A	3022	1/1	0.95	0.13	37,37,37,37	0
57	MG	2A	3334	1/1	0.95	0.18	46,46,46,46	0
57	MG	2A	3335	1/1	0.95	0.08	38,38,38,38	0
57	MG	1A	3866	1/1	0.95	0.11	55,55,55,55	0
57	MG	1A	4078	1/1	0.95	0.06	28,28,28,28	0
57	MG	1A	3867	1/1	0.95	0.07	56,56,56,56	0
57	MG	1A	3869	1/1	0.95	0.07	33,33,33,33	0
57	MG	1a	3013	1/1	0.95	0.07	60,60,60,60	0
57	MG	1a	3014	1/1	0.95	0.21	52,52,52,52	0
57	MG	2A	3343	1/1	0.95	0.10	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3682	1/1	0.95	0.06	29,29,29,29	0
57	MG	1a	3018	1/1	0.95	0.08	44,44,44,44	0
57	MG	2A	3718	1/1	0.95	0.18	40,40,40,40	0
57	MG	2A	3719	1/1	0.95	0.08	38,38,38,38	0
57	MG	2A	3346	1/1	0.95	0.22	53,53,53,53	0
57	MG	2A	3037	1/1	0.95	0.06	26,26,26,26	0
57	MG	1a	3019	1/1	0.95	0.06	46,46,46,46	0
57	MG	2A	3349	1/1	0.95	0.13	46,46,46,46	0
57	MG	2A	3350	1/1	0.95	0.07	58,58,58,58	0
57	MG	2A	3725	1/1	0.95	0.11	41,41,41,41	0
57	MG	2A	3039	1/1	0.95	0.06	28,28,28,28	0
57	MG	2A	3352	1/1	0.95	0.17	45,45,45,45	0
57	MG	1A	3428	1/1	0.95	0.16	20,20,20,20	0
57	MG	2A	3729	1/1	0.95	0.15	60,60,60,60	0
57	MG	1A	3345	1/1	0.95	0.12	28,28,28,28	0
57	MG	2a	3160	1/1	0.95	0.11	55,55,55,55	0
57	MG	1a	3023	1/1	0.95	0.14	56,56,56,56	0
57	MG	1A	4087	1/1	0.95	0.08	47,47,47,47	0
57	MG	1A	3522	1/1	0.95	0.20	43,43,43,43	0
57	MG	1a	3026	1/1	0.95	0.21	42,42,42,42	0
57	MG	1A	3697	1/1	0.95	0.10	37,37,37,37	0
57	MG	1A	3430	1/1	0.95	0.12	31,31,31,31	0
57	MG	1A	3251	1/1	0.95	0.09	55,55,55,55	0
57	MG	1A	3048	1/1	0.95	0.05	17,17,17,17	0
57	MG	1A	3528	1/1	0.95	0.11	53,53,53,53	0
57	MG	2a	3175	1/1	0.95	0.13	50,50,50,50	0
57	MG	1A	3886	1/1	0.95	0.07	41,41,41,41	0
57	MG	1a	3037	1/1	0.95	0.08	37,37,37,37	0
57	MG	1A	3529	1/1	0.95	0.22	38,38,38,38	0
57	MG	2A	3063	1/1	0.95	0.15	42,42,42,42	0
57	MG	1A	3304	1/1	0.95	0.10	40,40,40,40	0
57	MG	2A	3372	1/1	0.95	0.09	49,49,49,49	0
57	MG	1A	3892	1/1	0.95	0.11	37,37,37,37	0
57	MG	1a	3042	1/1	0.95	0.20	57,57,57,57	0
57	MG	2A	3068	1/1	0.95	0.14	50,50,50,50	0
57	MG	1a	3043	1/1	0.95	0.08	45,45,45,45	0
57	MG	2A	3378	1/1	0.95	0.20	51,51,51,51	0
57	MG	1a	3045	1/1	0.95	0.06	38,38,38,38	0
57	MG	2a	3193	1/1	0.95	0.06	74,74,74,74	0
57	MG	2A	3756	1/1	0.95	0.11	55,55,55,55	0
57	MG	2a	3197	1/1	0.95	0.12	56,56,56,56	0
57	MG	2A	3380	1/1	0.95	0.08	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3714	1/1	0.95	0.07	37,37,37,37	0
57	MG	2A	3073	1/1	0.95	0.10	45,45,45,45	0
57	MG	1A	3719	1/1	0.95	0.08	36,36,36,36	0
57	MG	1A	3254	1/1	0.95	0.10	36,36,36,36	0
57	MG	2a	3206	1/1	0.95	0.11	60,60,60,60	0
57	MG	2a	3209	1/1	0.95	0.10	63,63,63,63	0
57	MG	2a	3210	1/1	0.95	0.08	49,49,49,49	0
57	MG	1A	3897	1/1	0.95	0.07	41,41,41,41	0
57	MG	1A	3726	1/1	0.95	0.12	34,34,34,34	0
57	MG	1A	3535	1/1	0.95	0.08	32,32,32,32	0
57	MG	1a	3061	1/1	0.95	0.06	46,46,46,46	0
57	MG	1A	3728	1/1	0.95	0.12	46,46,46,46	0
57	MG	2A	3393	1/1	0.95	0.12	30,30,30,30	0
57	MG	1A	3307	1/1	0.95	0.10	31,31,31,31	0
57	MG	2A	3088	1/1	0.95	0.10	48,48,48,48	0
57	MG	2A	3090	1/1	0.95	0.14	44,44,44,44	0
57	MG	1a	3064	1/1	0.95	0.16	48,48,48,48	0
57	MG	2a	3227	1/1	0.95	0.16	61,61,61,61	0
57	MG	1A	4114	1/1	0.95	0.11	40,40,40,40	0
57	MG	1A	3354	1/1	0.95	0.10	40,40,40,40	0
57	MG	1A	4119	1/1	0.95	0.08	58,58,58,58	0
57	MG	2A	3406	1/1	0.95	0.07	48,48,48,48	0
57	MG	2A	3097	1/1	0.95	0.09	40,40,40,40	0
57	MG	1A	3147	1/1	0.95	0.11	35,35,35,35	0
57	MG	2A	3783	1/1	0.95	0.08	30,30,30,30	0
57	MG	1A	3541	1/1	0.95	0.07	39,39,39,39	0
57	MG	1a	3071	1/1	0.95	0.15	51,51,51,51	0
57	MG	2A	3786	1/1	0.95	0.11	49,49,49,49	0
57	MG	1A	3911	1/1	0.95	0.07	26,26,26,26	0
57	MG	2A	3108	1/1	0.95	0.07	51,51,51,51	0
57	MG	1A	3261	1/1	0.95	0.14	45,45,45,45	0
57	MG	2A	3415	1/1	0.95	0.07	55,55,55,55	0
57	MG	1A	3915	1/1	0.95	0.05	30,30,30,30	0
57	MG	2A	3113	1/1	0.95	0.10	60,60,60,60	0
57	MG	1A	3737	1/1	0.95	0.09	54,54,54,54	0
57	MG	2A	3115	1/1	0.95	0.11	43,43,43,43	0
57	MG	1A	3441	1/1	0.95	0.08	46,46,46,46	0
57	MG	2a	3251	1/1	0.95	0.15	51,51,51,51	0
57	MG	2A	3800	1/1	0.95	0.19	50,50,50,50	0
57	MG	2A	3118	1/1	0.95	0.23	54,54,54,54	0
57	MG	2A	3802	1/1	0.95	0.07	53,53,53,53	0
57	MG	2a	3255	1/1	0.95	0.09	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3427	1/1	0.95	0.14	54,54,54,54	0
57	MG	2a	3257	1/1	0.95	0.08	44,44,44,44	0
57	MG	1a	3077	1/1	0.95	0.09	40,40,40,40	0
57	MG	1A	4133	1/1	0.95	0.06	15,15,15,15	0
57	MG	1a	3079	1/1	0.95	0.11	40,40,40,40	0
57	MG	2A	3432	1/1	0.95	0.13	40,40,40,40	0
57	MG	1a	3082	1/1	0.95	0.07	48,48,48,48	0
57	MG	2A	3123	1/1	0.95	0.17	37,37,37,37	0
57	MG	1A	3214	1/1	0.95	0.05	34,34,34,34	0
57	MG	1A	3548	1/1	0.95	0.10	25,25,25,25	0
57	MG	1A	4138	1/1	0.95	0.08	48,48,48,48	0
57	MG	1a	3086	1/1	0.95	0.18	55,55,55,55	0
57	MG	2A	3824	1/1	0.95	0.07	47,47,47,47	0
57	MG	1A	3550	1/1	0.95	0.10	33,33,33,33	0
57	MG	2A	3134	1/1	0.95	0.13	45,45,45,45	0
57	MG	1a	3089	1/1	0.95	0.08	57,57,57,57	0
57	MG	1A	3313	1/1	0.95	0.07	42,42,42,42	0
57	MG	2A	3139	1/1	0.95	0.15	40,40,40,40	0
57	MG	1a	3093	1/1	0.95	0.15	46,46,46,46	0
57	MG	2A	3836	1/1	0.95	0.07	46,46,46,46	0
57	MG	2a	3279	1/1	0.95	0.11	45,45,45,45	0
57	MG	2A	3451	1/1	0.95	0.07	41,41,41,41	0
57	MG	1A	3926	1/1	0.95	0.05	20,20,20,20	0
57	MG	1A	3555	1/1	0.95	0.12	41,41,41,41	0
57	MG	1A	4145	1/1	0.95	0.12	21,21,21,21	0
57	MG	1A	3057	1/1	0.96	0.08	36,36,36,36	0
57	MG	1A	3672	1/1	0.96	0.27	33,33,33,33	0
57	MG	1A	4260	1/1	0.96	0.07	45,45,45,45	0
57	MG	1A	4261	1/1	0.96	0.07	52,52,52,52	0
57	MG	1a	3197	1/1	0.96	0.07	64,64,64,64	0
57	MG	1A	4263	1/1	0.96	0.04	24,24,24,24	0
57	MG	2A	3524	1/1	0.96	0.16	34,34,34,34	0
57	MG	2A	3883	1/1	0.96	0.05	39,39,39,39	0
57	MG	1A	4036	1/1	0.96	0.05	28,28,28,28	0
57	MG	2A	3236	1/1	0.96	0.15	36,36,36,36	0
57	MG	1A	3418	1/1	0.96	0.16	19,19,19,19	0
57	MG	2A	3528	1/1	0.96	0.10	30,30,30,30	0
57	MG	1A	3675	1/1	0.96	0.12	31,31,31,31	0
57	MG	2A	3239	1/1	0.96	0.16	36,36,36,36	0
57	MG	1A	3141	1/1	0.96	0.11	34,34,34,34	0
57	MG	2A	3891	1/1	0.96	0.06	31,31,31,31	0
57	MG	1A	3420	1/1	0.96	0.36	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3244	1/1	0.96	0.09	20,20,20,20	0
57	MG	1A	3059	1/1	0.96	0.13	35,35,35,35	0
57	MG	2A	3535	1/1	0.96	0.09	49,49,49,49	0
57	MG	1A	3061	1/1	0.96	0.07	40,40,40,40	0
57	MG	1A	3248	1/1	0.96	0.11	45,45,45,45	0
57	MG	1A	3861	1/1	0.96	0.08	18,18,18,18	0
57	MG	1a	3214	1/1	0.96	0.05	57,57,57,57	0
57	MG	1A	3689	1/1	0.96	0.10	34,34,34,34	0
57	MG	1a	3216	1/1	0.96	0.05	41,41,41,41	0
57	MG	1A	3863	1/1	0.96	0.10	35,35,35,35	0
57	MG	1a	3218	1/1	0.96	0.05	53,53,53,53	0
57	MG	1A	3328	1/1	0.96	0.14	40,40,40,40	0
57	MG	1A	3006	1/1	0.96	0.07	47,47,47,47	0
57	MG	1A	3536	1/1	0.96	0.09	49,49,49,49	0
57	MG	2A	3913	1/1	0.96	0.06	53,53,53,53	0
57	MG	2A	3914	1/1	0.96	0.05	51,51,51,51	0
57	MG	2A	3916	1/1	0.96	0.09	18,18,18,18	0
57	MG	1A	3699	1/1	0.96	0.15	35,35,35,35	0
57	MG	2A	3260	1/1	0.96	0.08	52,52,52,52	0
57	MG	1A	4285	1/1	0.96	0.13	51,51,51,51	0
57	MG	1A	4286	1/1	0.96	0.17	58,58,58,58	0
57	MG	1A	4289	1/1	0.96	0.06	43,43,43,43	0
57	MG	2A	3559	1/1	0.96	0.30	62,62,62,62	0
57	MG	1A	3868	1/1	0.96	0.09	36,36,36,36	0
57	MG	1A	3095	1/1	0.96	0.07	35,35,35,35	0
57	MG	2A	3562	1/1	0.96	0.09	26,26,26,26	0
57	MG	2A	3563	1/1	0.96	0.13	53,53,53,53	0
57	MG	1A	3152	1/1	0.96	0.09	37,37,37,37	0
57	MG	2A	3928	1/1	0.96	0.09	32,32,32,32	0
57	MG	2A	3566	1/1	0.96	0.21	43,43,43,43	0
57	MG	1A	3158	1/1	0.96	0.10	30,30,30,30	0
57	MG	2A	3568	1/1	0.96	0.12	42,42,42,42	0
57	MG	2A	3570	1/1	0.96	0.10	41,41,41,41	0
57	MG	1A	3160	1/1	0.96	0.09	29,29,29,29	0
57	MG	2A	3934	1/1	0.96	0.09	60,60,60,60	0
57	MG	1A	3335	1/1	0.96	0.05	30,30,30,30	0
57	MG	2A	3936	1/1	0.96	0.09	30,30,30,30	0
57	MG	1A	3710	1/1	0.96	0.10	41,41,41,41	0
57	MG	1A	3544	1/1	0.96	0.11	43,43,43,43	0
57	MG	1A	3717	1/1	0.96	0.07	28,28,28,28	0
57	MG	1a	3001	1/1	0.96	0.08	51,51,51,51	0
57	MG	2A	3276	1/1	0.96	0.07	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3096	1/1	0.96	0.06	43,43,43,43	0
57	MG	2A	3946	1/1	0.96	0.17	47,47,47,47	0
57	MG	1A	3721	1/1	0.96	0.05	39,39,39,39	0
57	MG	1a	3246	1/1	0.96	0.05	49,49,49,49	0
57	MG	2A	3583	1/1	0.96	0.10	36,36,36,36	0
57	MG	1A	3098	1/1	0.96	0.12	41,41,41,41	0
57	MG	1A	3045	1/1	0.96	0.11	20,20,20,20	0
57	MG	1A	3888	1/1	0.96	0.08	37,37,37,37	0
57	MG	1a	3008	1/1	0.96	0.10	45,45,45,45	0
57	MG	2A	3957	1/1	0.96	0.08	42,42,42,42	0
57	MG	1A	3344	1/1	0.96	0.11	42,42,42,42	0
57	MG	2A	3589	1/1	0.96	0.06	42,42,42,42	0
57	MG	1A	3551	1/1	0.96	0.07	45,45,45,45	0
57	MG	2A	3591	1/1	0.96	0.05	33,33,33,33	0
57	MG	1A	3552	1/1	0.96	0.13	23,23,23,23	0
57	MG	2A	3595	1/1	0.96	0.07	41,41,41,41	0
57	MG	1A	3047	1/1	0.96	0.09	31,31,31,31	0
57	MG	1a	3255	1/1	0.96	0.18	44,44,44,44	0
57	MG	1A	3175	1/1	0.96	0.06	29,29,29,29	0
57	MG	1a	3016	1/1	0.96	0.12	44,44,44,44	0
57	MG	2a	3006	1/1	0.96	0.09	49,49,49,49	0
57	MG	1A	4092	1/1	0.96	0.08	55,55,55,55	0
57	MG	2A	3603	1/1	0.96	0.13	49,49,49,49	0
57	MG	2A	3604	1/1	0.96	0.12	34,34,34,34	0
57	MG	1A	3734	1/1	0.96	0.12	44,44,44,44	0
57	MG	1A	3102	1/1	0.96	0.10	20,20,20,20	0
57	MG	1A	3181	1/1	0.96	0.06	41,41,41,41	0
57	MG	2A	3609	1/1	0.96	0.08	44,44,44,44	0
57	MG	1A	3350	1/1	0.96	0.06	41,41,41,41	0
57	MG	1A	3738	1/1	0.96	0.10	40,40,40,40	0
57	MG	2A	3612	1/1	0.96	0.08	37,37,37,37	0
57	MG	1A	3904	1/1	0.96	0.07	28,28,28,28	0
57	MG	2A	3012	1/1	0.96	0.06	34,34,34,34	0
57	MG	1A	3182	1/1	0.96	0.16	33,33,33,33	0
57	MG	1A	3352	1/1	0.96	0.07	35,35,35,35	0
57	MG	2A	3020	1/1	0.96	0.07	49,49,49,49	0
57	MG	1A	3907	1/1	0.96	0.07	20,20,20,20	0
57	MG	1A	3067	1/1	0.96	0.07	31,31,31,31	0
57	MG	1A	3565	1/1	0.96	0.14	35,35,35,35	0
57	MG	2A	3028	1/1	0.96	0.05	38,38,38,38	0
57	MG	1A	3566	1/1	0.96	0.11	35,35,35,35	0
57	MG	1A	4106	1/1	0.96	0.05	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1a	3035	1/1	0.96	0.16	54,54,54,54	0
57	MG	2A	3631	1/1	0.96	0.07	42,42,42,42	0
57	MG	1a	3036	1/1	0.96	0.22	49,49,49,49	0
57	MG	1A	4107	1/1	0.96	0.07	45,45,45,45	0
57	MG	1A	3914	1/1	0.96	0.06	23,23,23,23	0
57	MG	1A	3105	1/1	0.96	0.06	38,38,38,38	0
57	MG	2A	3639	1/1	0.96	0.13	33,33,33,33	0
57	MG	1A	3916	1/1	0.96	0.05	47,47,47,47	0
57	MG	1A	3568	1/1	0.96	0.19	41,41,41,41	0
57	MG	2A	3321	1/1	0.96	0.23	44,44,44,44	0
57	MG	2A	3041	1/1	0.96	0.13	43,43,43,43	0
57	MG	2A	3042	1/1	0.96	0.07	38,38,38,38	0
57	MG	2A	3645	1/1	0.96	0.08	40,40,40,40	0
57	MG	1A	3106	1/1	0.96	0.08	48,48,48,48	0
57	MG	1A	3280	1/1	0.96	0.08	41,41,41,41	0
57	MG	1A	3921	1/1	0.96	0.07	40,40,40,40	0
57	MG	2A	3047	1/1	0.96	0.21	52,52,52,52	0
57	MG	1A	3453	1/1	0.96	0.07	38,38,38,38	0
57	MG	1A	3750	1/1	0.96	0.14	38,38,38,38	0
57	MG	2A	3050	1/1	0.96	0.07	48,48,48,48	0
57	MG	1A	3281	1/1	0.96	0.14	42,42,42,42	0
57	MG	2A	3333	1/1	0.96	0.13	55,55,55,55	0
57	MG	1a	3057	1/1	0.96	0.17	40,40,40,40	0
57	MG	1A	4123	1/1	0.96	0.05	56,56,56,56	0
57	MG	1A	3008	1/1	0.96	0.04	24,24,24,24	0
57	MG	1A	4127	1/1	0.96	0.09	60,60,60,60	0
57	MG	1A	3459	1/1	0.96	0.05	45,45,45,45	0
57	MG	2A	3666	1/1	0.96	0.05	38,38,38,38	0
57	MG	1A	3460	1/1	0.96	0.11	48,48,48,48	0
57	MG	1A	4130	1/1	0.96	0.10	21,21,21,21	0
57	MG	2A	3669	1/1	0.96	0.08	21,21,21,21	0
57	MG	2A	3670	1/1	0.96	0.14	56,56,56,56	0
57	MG	2a	3063	1/1	0.96	0.09	63,63,63,63	0
57	MG	1A	3933	1/1	0.96	0.08	49,49,49,49	0
57	MG	1A	3199	1/1	0.96	0.06	41,41,41,41	0
57	MG	1A	3119	1/1	0.96	0.07	32,32,32,32	0
57	MG	1A	3583	1/1	0.96	0.10	32,32,32,32	0
57	MG	1A	3208	1/1	0.96	0.10	33,33,33,33	0
57	MG	1A	3767	1/1	0.96	0.04	32,32,32,32	0
57	MG	1A	3465	1/1	0.96	0.08	40,40,40,40	0
57	MG	1A	3050	1/1	0.96	0.07	26,26,26,26	0
57	MG	2A	3680	1/1	0.96	0.08	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3770	1/1	0.96	0.05	22,22,22,22	0
57	MG	1A	3944	1/1	0.96	0.06	24,24,24,24	0
57	MG	1A	3771	1/1	0.96	0.06	23,23,23,23	0
57	MG	2A	3075	1/1	0.96	0.04	36,36,36,36	0
57	MG	1A	4146	1/1	0.96	0.07	16,16,16,16	0
57	MG	2A	3078	1/1	0.96	0.09	38,38,38,38	0
57	MG	1A	3294	1/1	0.96	0.18	39,39,39,39	0
57	MG	1A	3071	1/1	0.96	0.06	36,36,36,36	0
57	MG	1a	3080	1/1	0.96	0.09	42,42,42,42	0
57	MG	1a	3081	1/1	0.96	0.11	48,48,48,48	0
57	MG	1A	4149	1/1	0.96	0.05	45,45,45,45	0
57	MG	2a	3089	1/1	0.96	0.08	52,52,52,52	0
57	MG	2A	3692	1/1	0.96	0.07	33,33,33,33	0
57	MG	1A	3951	1/1	0.96	0.06	29,29,29,29	0
57	MG	2A	3694	1/1	0.96	0.12	49,49,49,49	0
57	MG	2A	3362	1/1	0.96	0.08	47,47,47,47	0
57	MG	1A	3952	1/1	0.96	0.10	39,39,39,39	0
57	MG	2A	3089	1/1	0.96	0.07	49,49,49,49	0
57	MG	1A	3470	1/1	0.96	0.09	38,38,38,38	0
57	MG	1A	3471	1/1	0.96	0.14	35,35,35,35	0
57	MG	1a	3087	1/1	0.96	0.11	57,57,57,57	0
57	MG	1A	3597	1/1	0.96	0.13	38,38,38,38	0
57	MG	1A	3296	1/1	0.96	0.13	29,29,29,29	0
57	MG	1a	3091	1/1	0.96	0.24	45,45,45,45	0
57	MG	1A	3213	1/1	0.96	0.15	33,33,33,33	0
57	MG	1A	3124	1/1	0.96	0.10	37,37,37,37	0
57	MG	2A	3375	1/1	0.96	0.08	56,56,56,56	0
57	MG	2A	3101	1/1	0.96	0.09	40,40,40,40	0
57	MG	2a	3109	1/1	0.96	0.24	51,51,51,51	0
57	MG	2A	3713	1/1	0.96	0.06	37,37,37,37	0
57	MG	2A	3102	1/1	0.96	0.07	40,40,40,40	0
57	MG	2A	3103	1/1	0.96	0.14	49,49,49,49	0
57	MG	1A	3960	1/1	0.96	0.07	31,31,31,31	0
57	MG	2A	3105	1/1	0.96	0.15	47,47,47,47	0
57	MG	1A	3961	1/1	0.96	0.05	21,21,21,21	0
57	MG	1a	3096	1/1	0.96	0.21	40,40,40,40	0
57	MG	2A	3383	1/1	0.96	0.14	34,34,34,34	0
57	MG	1A	3783	1/1	0.96	0.15	29,29,29,29	0
57	MG	1A	3965	1/1	0.96	0.09	31,31,31,31	0
57	MG	1A	3966	1/1	0.96	0.07	30,30,30,30	0
57	MG	1A	4169	1/1	0.96	0.10	48,48,48,48	0
57	MG	1A	4170	1/1	0.96	0.08	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3967	1/1	0.96	0.06	35,35,35,35	0
57	MG	1A	3125	1/1	0.96	0.10	33,33,33,33	0
57	MG	1A	3970	1/1	0.96	0.06	44,44,44,44	0
57	MG	1A	3377	1/1	0.96	0.11	37,37,37,37	0
57	MG	2A	3395	1/1	0.96	0.05	39,39,39,39	0
57	MG	1A	3481	1/1	0.96	0.14	45,45,45,45	0
57	MG	1a	3107	1/1	0.96	0.12	46,46,46,46	0
57	MG	1A	3973	1/1	0.96	0.10	47,47,47,47	0
57	MG	2a	3132	1/1	0.96	0.12	49,49,49,49	0
57	MG	1A	3790	1/1	0.96	0.08	28,28,28,28	0
57	MG	1a	3110	1/1	0.96	0.05	39,39,39,39	0
57	MG	1A	3223	1/1	0.96	0.07	46,46,46,46	0
57	MG	2A	3403	1/1	0.96	0.08	50,50,50,50	0
57	MG	1A	3379	1/1	0.96	0.19	45,45,45,45	0
57	MG	1A	3026	1/1	0.96	0.10	35,35,35,35	0
57	MG	1A	3796	1/1	0.96	0.07	36,36,36,36	0
57	MG	2a	3142	1/1	0.96	0.07	59,59,59,59	0
57	MG	2a	3143	1/1	0.96	0.11	50,50,50,50	0
57	MG	1A	3381	1/1	0.96	0.06	29,29,29,29	0
57	MG	2a	3145	1/1	0.96	0.10	58,58,58,58	0
57	MG	2A	3744	1/1	0.96	0.08	37,37,37,37	0
57	MG	1A	3225	1/1	0.96	0.12	30,30,30,30	0
57	MG	1a	3118	1/1	0.96	0.19	44,44,44,44	0
57	MG	1A	4188	1/1	0.96	0.12	35,35,35,35	0
57	MG	2a	3150	1/1	0.96	0.15	39,39,39,39	0
57	MG	2A	3141	1/1	0.96	0.14	34,34,34,34	0
57	MG	2A	3414	1/1	0.96	0.06	56,56,56,56	0
57	MG	2A	3142	1/1	0.96	0.09	37,37,37,37	0
57	MG	2A	3416	1/1	0.96	0.07	48,48,48,48	0
57	MG	2a	3155	1/1	0.96	0.13	40,40,40,40	0
57	MG	1A	3311	1/1	0.96	0.15	33,33,33,33	0
57	MG	2A	3144	1/1	0.96	0.14	30,30,30,30	0
57	MG	1A	3983	1/1	0.96	0.06	36,36,36,36	0
57	MG	1A	4192	1/1	0.96	0.06	43,43,43,43	0
57	MG	1A	4193	1/1	0.96	0.05	37,37,37,37	0
57	MG	2a	3162	1/1	0.96	0.21	51,51,51,51	0
57	MG	2A	3423	1/1	0.96	0.05	51,51,51,51	0
57	MG	2A	3424	1/1	0.96	0.12	44,44,44,44	0
57	MG	2A	3425	1/1	0.96	0.09	47,47,47,47	0
57	MG	1a	3128	1/1	0.96	0.15	37,37,37,37	0
57	MG	1a	3129	1/1	0.96	0.19	32,32,32,32	0
57	MG	2a	3169	1/1	0.96	0.13	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3616	1/1	0.96	0.20	28,28,28,28	0
57	MG	2a	3171	1/1	0.96	0.18	46,46,46,46	0
57	MG	1A	3623	1/1	0.96	0.24	23,23,23,23	0
57	MG	2a	3173	1/1	0.96	0.08	47,47,47,47	0
57	MG	1a	3133	1/1	0.96	0.09	47,47,47,47	0
57	MG	1A	3491	1/1	0.96	0.06	33,33,33,33	0
57	MG	2A	3158	1/1	0.96	0.08	43,43,43,43	0
57	MG	2A	3434	1/1	0.96	0.21	40,40,40,40	0
57	MG	1A	3226	1/1	0.96	0.07	36,36,36,36	0
57	MG	2A	3773	1/1	0.96	0.06	46,46,46,46	0
57	MG	1A	3630	1/1	0.96	0.12	21,21,21,21	0
57	MG	2A	3161	1/1	0.96	0.06	29,29,29,29	0
57	MG	2a	3182	1/1	0.96	0.20	59,59,59,59	0
57	MG	1A	4201	1/1	0.96	0.05	42,42,42,42	0
57	MG	1A	3385	1/1	0.96	0.15	29,29,29,29	0
57	MG	1A	3228	1/1	0.96	0.06	36,36,36,36	0
57	MG	2A	3444	1/1	0.96	0.12	41,41,41,41	0
57	MG	1A	3495	1/1	0.96	0.06	46,46,46,46	0
57	MG	1A	3229	1/1	0.96	0.10	36,36,36,36	0
57	MG	2a	3192	1/1	0.96	0.16	75,75,75,75	0
57	MG	1A	3815	1/1	0.96	0.05	20,20,20,20	0
57	MG	2A	3169	1/1	0.96	0.14	32,32,32,32	0
57	MG	2A	3170	1/1	0.96	0.31	56,56,56,56	0
57	MG	1A	4209	1/1	0.96	0.07	35,35,35,35	0
57	MG	2A	3172	1/1	0.96	0.09	33,33,33,33	0
57	MG	2A	3173	1/1	0.96	0.16	54,54,54,54	0
57	MG	2a	3203	1/1	0.96	0.08	62,62,62,62	0
57	MG	1A	3499	1/1	0.96	0.12	38,38,38,38	0
57	MG	1a	3145	1/1	0.96	0.18	52,52,52,52	0
57	MG	2A	3793	1/1	0.96	0.08	50,50,50,50	0
57	MG	1A	3395	1/1	0.96	0.06	45,45,45,45	0
57	MG	2A	3177	1/1	0.96	0.07	46,46,46,46	0
57	MG	1A	3398	1/1	0.96	0.20	39,39,39,39	0
57	MG	1A	4002	1/1	0.96	0.06	40,40,40,40	0
57	MG	2A	3462	1/1	0.96	0.12	47,47,47,47	0
57	MG	2a	3216	1/1	0.96	0.06	56,56,56,56	0
57	MG	2a	3217	1/1	0.96	0.06	57,57,57,57	0
57	MG	1A	3080	1/1	0.96	0.15	43,43,43,43	0
57	MG	1A	3016	1/1	0.96	0.06	43,43,43,43	0
57	MG	2A	3803	1/1	0.96	0.08	43,43,43,43	0
57	MG	1A	4218	1/1	0.96	0.07	36,36,36,36	0
57	MG	2A	3806	1/1	0.96	0.07	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3187	1/1	0.96	0.15	55,55,55,55	0
57	MG	1A	3401	1/1	0.96	0.11	45,45,45,45	0
57	MG	1A	3018	1/1	0.96	0.12	26,26,26,26	0
57	MG	2a	3228	1/1	0.96	0.05	45,45,45,45	0
57	MG	1A	3649	1/1	0.96	0.09	36,36,36,36	0
57	MG	1A	3403	1/1	0.96	0.16	27,27,27,27	0
57	MG	1A	3404	1/1	0.96	0.05	30,30,30,30	0
57	MG	1A	3405	1/1	0.96	0.14	30,30,30,30	0
57	MG	1A	3834	1/1	0.96	0.06	35,35,35,35	0
57	MG	1a	3160	1/1	0.96	0.09	28,28,28,28	0
57	MG	2A	3820	1/1	0.96	0.06	59,59,59,59	0
57	MG	2A	3821	1/1	0.96	0.08	45,45,45,45	0
57	MG	1a	3161	1/1	0.96	0.06	30,30,30,30	0
57	MG	1A	3056	1/1	0.96	0.07	36,36,36,36	0
57	MG	1A	3511	1/1	0.96	0.10	29,29,29,29	0
57	MG	1A	4015	1/1	0.96	0.14	26,26,26,26	0
57	MG	1A	4016	1/1	0.96	0.20	32,32,32,32	0
57	MG	1A	4238	1/1	0.96	0.11	21,21,21,21	0
57	MG	2A	3829	1/1	0.96	0.12	39,39,39,39	0
57	MG	2A	3830	1/1	0.96	0.11	48,48,48,48	0
57	MG	1A	4018	1/1	0.96	0.17	34,34,34,34	0
57	MG	1A	3658	1/1	0.96	0.07	36,36,36,36	0
57	MG	2A	3834	1/1	0.96	0.13	51,51,51,51	0
57	MG	2A	3835	1/1	0.96	0.06	41,41,41,41	0
57	MG	1A	4020	1/1	0.96	0.11	27,27,27,27	0
57	MG	2A	3206	1/1	0.96	0.19	51,51,51,51	0
57	MG	2A	3207	1/1	0.96	0.05	43,43,43,43	0
57	MG	1A	4242	1/1	0.96	0.09	27,27,27,27	0
57	MG	1A	3839	1/1	0.96	0.05	37,37,37,37	0
57	MG	1A	3134	1/1	0.96	0.25	34,34,34,34	0
57	MG	1A	3412	1/1	0.96	0.05	40,40,40,40	0
57	MG	1A	4247	1/1	0.96	0.04	45,45,45,45	0
57	MG	1a	3177	1/1	0.96	0.10	34,34,34,34	0
57	MG	1A	3413	1/1	0.96	0.07	37,37,37,37	0
57	MG	2A	3854	1/1	0.96	0.08	48,48,48,48	0
57	MG	2A	3497	1/1	0.96	0.18	48,48,48,48	0
57	MG	2A	3856	1/1	0.96	0.12	64,64,64,64	0
57	MG	1A	3665	1/1	0.96	0.05	33,33,33,33	0
57	MG	2A	3216	1/1	0.96	0.05	41,41,41,41	0
57	MG	1A	4027	1/1	0.96	0.04	19,19,19,19	0
57	MG	2A	3860	1/1	0.96	0.08	57,57,57,57	0
57	MG	1a	3184	1/1	0.96	0.10	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1a	3185	1/1	0.96	0.08	54,54,54,54	0
57	MG	2A	3863	1/1	0.96	0.07	58,58,58,58	0
57	MG	1A	4252	1/1	0.96	0.08	17,17,17,17	0
57	MG	2a	3275	1/1	0.96	0.19	54,54,54,54	0
57	MG	1A	4253	1/1	0.96	0.07	44,44,44,44	0
57	MG	1A	4028	1/1	0.96	0.05	24,24,24,24	0
57	MG	1A	3519	1/1	0.96	0.14	32,32,32,32	0
57	MG	1A	3667	1/1	0.96	0.23	37,37,37,37	0
57	MG	2A	3869	1/1	0.96	0.07	38,38,38,38	0
57	MG	2A	3512	1/1	0.96	0.10	49,49,49,49	0
57	MG	2A	3871	1/1	0.96	0.10	54,54,54,54	0
57	MG	1A	3414	1/1	0.96	0.08	35,35,35,35	0
57	MG	1A	4094	1/1	0.97	0.04	46,46,46,46	0
57	MG	1A	3722	1/1	0.97	0.08	29,29,29,29	0
57	MG	2A	3002	1/1	0.97	0.15	46,46,46,46	0
57	MG	2A	3903	1/1	0.97	0.09	51,51,51,51	0
57	MG	1A	3724	1/1	0.97	0.20	42,42,42,42	0
57	MG	2A	3004	1/1	0.97	0.12	43,43,43,43	0
57	MG	1A	3437	1/1	0.97	0.16	36,36,36,36	0
57	MG	1A	3553	1/1	0.97	0.11	31,31,31,31	0
57	MG	1A	3032	1/1	0.97	0.14	28,28,28,28	0
57	MG	1A	3148	1/1	0.97	0.08	25,25,25,25	0
57	MG	1A	3902	1/1	0.97	0.04	27,27,27,27	0
57	MG	1A	3336	1/1	0.97	0.11	38,38,38,38	0
57	MG	2A	3281	1/1	0.97	0.14	53,53,53,53	0
57	MG	2A	3915	1/1	0.97	0.04	46,46,46,46	0
57	MG	1A	3731	1/1	0.97	0.12	29,29,29,29	0
57	MG	1A	3100	1/1	0.97	0.14	31,31,31,31	0
57	MG	2A	3013	1/1	0.97	0.04	35,35,35,35	0
57	MG	1A	3442	1/1	0.97	0.13	34,34,34,34	0
57	MG	1A	3151	1/1	0.97	0.07	51,51,51,51	0
57	MG	2A	3287	1/1	0.97	0.05	48,48,48,48	0
57	MG	2A	3018	1/1	0.97	0.16	49,49,49,49	0
57	MG	1a	3033	1/1	0.97	0.15	47,47,47,47	0
57	MG	2A	3290	1/1	0.97	0.17	40,40,40,40	0
57	MG	2A	3021	1/1	0.97	0.05	26,26,26,26	0
57	MG	2A	3292	1/1	0.97	0.08	38,38,38,38	0
57	MG	1a	3034	1/1	0.97	0.10	23,23,23,23	0
57	MG	2A	3294	1/1	0.97	0.06	42,42,42,42	0
57	MG	1A	3908	1/1	0.97	0.11	19,19,19,19	0
57	MG	2A	3593	1/1	0.97	0.05	41,41,41,41	0
57	MG	2A	3025	1/1	0.97	0.05	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3035	1/1	0.97	0.27	19,19,19,19	0
57	MG	1A	3341	1/1	0.97	0.07	35,35,35,35	0
57	MG	1a	3038	1/1	0.97	0.21	38,38,38,38	0
57	MG	1A	3564	1/1	0.97	0.09	36,36,36,36	0
57	MG	1A	3913	1/1	0.97	0.05	15,15,15,15	0
57	MG	1A	3342	1/1	0.97	0.07	41,41,41,41	0
57	MG	2A	3939	1/1	0.97	0.06	30,30,30,30	0
57	MG	2A	3602	1/1	0.97	0.05	39,39,39,39	0
57	MG	1A	3154	1/1	0.97	0.10	20,20,20,20	0
57	MG	2A	3035	1/1	0.97	0.10	37,37,37,37	0
57	MG	1A	4115	1/1	0.97	0.09	43,43,43,43	0
57	MG	1a	3044	1/1	0.97	0.08	41,41,41,41	0
57	MG	1A	4116	1/1	0.97	0.10	43,43,43,43	0
57	MG	2A	3308	1/1	0.97	0.31	61,61,61,61	0
57	MG	1a	3046	1/1	0.97	0.16	41,41,41,41	0
57	MG	2A	3949	1/1	0.97	0.05	49,49,49,49	0
57	MG	2A	3950	1/1	0.97	0.08	35,35,35,35	0
57	MG	2A	3951	1/1	0.97	0.09	42,42,42,42	0
57	MG	2A	3040	1/1	0.97	0.09	21,21,21,21	0
57	MG	1a	3047	1/1	0.97	0.15	42,42,42,42	0
57	MG	1A	3156	1/1	0.97	0.19	28,28,28,28	0
57	MG	1A	3073	1/1	0.97	0.09	16,16,16,16	0
57	MG	2A	3044	1/1	0.97	0.20	53,53,53,53	0
57	MG	1a	3051	1/1	0.97	0.09	36,36,36,36	0
57	MG	2A	3958	1/1	0.97	0.11	46,46,46,46	0
57	MG	1a	3054	1/1	0.97	0.11	44,44,44,44	0
57	MG	2A	3620	1/1	0.97	0.05	27,27,27,27	0
57	MG	2A	3621	1/1	0.97	0.09	39,39,39,39	0
57	MG	2A	3622	1/1	0.97	0.13	44,44,44,44	0
57	MG	1A	3569	1/1	0.97	0.21	41,41,41,41	0
57	MG	1A	4121	1/1	0.97	0.04	26,26,26,26	0
57	MG	2a	3001	1/1	0.97	0.07	46,46,46,46	0
57	MG	1A	3250	1/1	0.97	0.16	34,34,34,34	0
57	MG	1A	3572	1/1	0.97	0.10	38,38,38,38	0
57	MG	1A	3452	1/1	0.97	0.05	35,35,35,35	0
57	MG	1a	3060	1/1	0.97	0.05	40,40,40,40	0
57	MG	2A	3323	1/1	0.97	0.06	46,46,46,46	0
57	MG	2A	3630	1/1	0.97	0.09	61,61,61,61	0
57	MG	1A	3348	1/1	0.97	0.15	40,40,40,40	0
57	MG	1A	3159	1/1	0.97	0.18	29,29,29,29	0
57	MG	1A	3576	1/1	0.97	0.12	21,21,21,21	0
57	MG	1A	3927	1/1	0.97	0.04	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3058	1/1	0.97	0.06	40,40,40,40	0
57	MG	2a	3013	1/1	0.97	0.05	40,40,40,40	0
57	MG	2A	3059	1/1	0.97	0.19	49,49,49,49	0
57	MG	1A	3928	1/1	0.97	0.05	32,32,32,32	0
57	MG	1A	3749	1/1	0.97	0.09	40,40,40,40	0
57	MG	1A	3930	1/1	0.97	0.03	13,13,13,13	0
57	MG	1A	4134	1/1	0.97	0.05	25,25,25,25	0
57	MG	2A	3064	1/1	0.97	0.10	40,40,40,40	0
57	MG	1A	4135	1/1	0.97	0.04	21,21,21,21	0
57	MG	1A	3456	1/1	0.97	0.13	41,41,41,41	0
57	MG	1A	3932	1/1	0.97	0.13	48,48,48,48	0
57	MG	1A	3751	1/1	0.97	0.05	39,39,39,39	0
57	MG	2A	3650	1/1	0.97	0.09	24,24,24,24	0
57	MG	2A	3339	1/1	0.97	0.21	46,46,46,46	0
57	MG	1A	3103	1/1	0.97	0.06	32,32,32,32	0
57	MG	1A	3161	1/1	0.97	0.07	24,24,24,24	0
57	MG	1A	3075	1/1	0.97	0.21	25,25,25,25	0
57	MG	2A	3072	1/1	0.97	0.04	30,30,30,30	0
57	MG	1A	3259	1/1	0.97	0.24	35,35,35,35	0
57	MG	1A	3076	1/1	0.97	0.06	9,9,9,9	0
57	MG	1A	3760	1/1	0.97	0.06	23,23,23,23	0
57	MG	2a	3033	1/1	0.97	0.11	50,50,50,50	0
57	MG	1A	3167	1/1	0.97	0.09	19,19,19,19	0
57	MG	2A	3077	1/1	0.97	0.08	49,49,49,49	0
57	MG	1A	3054	1/1	0.97	0.17	36,36,36,36	0
57	MG	2A	3079	1/1	0.97	0.13	36,36,36,36	0
57	MG	1A	3107	1/1	0.97	0.05	26,26,26,26	0
57	MG	1A	3945	1/1	0.97	0.04	16,16,16,16	0
57	MG	1A	3587	1/1	0.97	0.09	42,42,42,42	0
57	MG	1A	3590	1/1	0.97	0.11	46,46,46,46	0
57	MG	1A	3591	1/1	0.97	0.09	17,17,17,17	0
57	MG	2A	3086	1/1	0.97	0.08	35,35,35,35	0
57	MG	1A	3174	1/1	0.97	0.20	28,28,28,28	0
57	MG	1A	3468	1/1	0.97	0.10	52,52,52,52	0
57	MG	1A	4158	1/1	0.97	0.04	23,23,23,23	0
57	MG	1A	3267	1/1	0.97	0.17	32,32,32,32	0
57	MG	1A	3773	1/1	0.97	0.07	27,27,27,27	0
57	MG	2A	3092	1/1	0.97	0.09	28,28,28,28	0
57	MG	1A	4162	1/1	0.97	0.04	44,44,44,44	0
57	MG	1A	3079	1/1	0.97	0.06	19,19,19,19	0
57	MG	2A	3365	1/1	0.97	0.22	42,42,42,42	0
57	MG	1A	3176	1/1	0.97	0.12	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3096	1/1	0.97	0.17	40,40,40,40	0
57	MG	1A	3598	1/1	0.97	0.11	29,29,29,29	0
57	MG	1A	3113	1/1	0.97	0.14	26,26,26,26	0
57	MG	1A	3179	1/1	0.97	0.08	9,9,9,9	0
57	MG	1A	3780	1/1	0.97	0.06	11,11,11,11	0
57	MG	1A	3963	1/1	0.97	0.05	21,21,21,21	0
57	MG	1A	3180	1/1	0.97	0.19	36,36,36,36	0
57	MG	1A	3367	1/1	0.97	0.28	33,33,33,33	0
57	MG	1A	3605	1/1	0.97	0.04	26,26,26,26	0
57	MG	2A	3106	1/1	0.97	0.04	30,30,30,30	0
57	MG	1A	3784	1/1	0.97	0.08	28,28,28,28	0
57	MG	1A	3114	1/1	0.97	0.19	25,25,25,25	0
57	MG	1A	4179	1/1	0.97	0.07	38,38,38,38	0
57	MG	1A	3969	1/1	0.97	0.09	39,39,39,39	0
57	MG	2A	3111	1/1	0.97	0.13	47,47,47,47	0
57	MG	2A	3112	1/1	0.97	0.17	36,36,36,36	0
57	MG	1A	3787	1/1	0.97	0.05	29,29,29,29	0
57	MG	1A	3279	1/1	0.97	0.05	34,34,34,34	0
57	MG	2a	3074	1/1	0.97	0.11	58,58,58,58	0
57	MG	2A	3705	1/1	0.97	0.05	29,29,29,29	0
57	MG	1A	3608	1/1	0.97	0.21	39,39,39,39	0
57	MG	2a	3077	1/1	0.97	0.12	43,43,43,43	0
57	MG	2a	3078	1/1	0.97	0.15	50,50,50,50	0
57	MG	1A	3115	1/1	0.97	0.04	34,34,34,34	0
57	MG	2A	3117	1/1	0.97	0.05	50,50,50,50	0
57	MG	2A	3389	1/1	0.97	0.05	50,50,50,50	0
57	MG	1A	3791	1/1	0.97	0.07	37,37,37,37	0
57	MG	1A	3975	1/1	0.97	0.07	25,25,25,25	0
57	MG	1A	3184	1/1	0.97	0.09	33,33,33,33	0
57	MG	1A	3118	1/1	0.97	0.10	23,23,23,23	0
57	MG	1A	3485	1/1	0.97	0.06	37,37,37,37	0
57	MG	2A	3716	1/1	0.97	0.04	37,37,37,37	0
57	MG	1A	3190	1/1	0.97	0.06	24,24,24,24	0
57	MG	2A	3124	1/1	0.97	0.14	36,36,36,36	0
57	MG	1A	4191	1/1	0.97	0.06	27,27,27,27	0
57	MG	1A	3191	1/1	0.97	0.06	14,14,14,14	0
57	MG	1a	3121	1/1	0.97	0.12	60,60,60,60	0
57	MG	1A	3286	1/1	0.97	0.15	37,37,37,37	0
57	MG	2A	3402	1/1	0.97	0.12	47,47,47,47	0
57	MG	2A	3129	1/1	0.97	0.04	48,48,48,48	0
57	MG	2A	3405	1/1	0.97	0.07	42,42,42,42	0
57	MG	2A	3130	1/1	0.97	0.06	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3194	1/1	0.97	0.09	41,41,41,41	0
57	MG	2A	3133	1/1	0.97	0.10	41,41,41,41	0
57	MG	2a	3102	1/1	0.97	0.12	48,48,48,48	0
57	MG	2a	3103	1/1	0.97	0.08	39,39,39,39	0
57	MG	1A	4195	1/1	0.97	0.04	17,17,17,17	0
57	MG	1A	3288	1/1	0.97	0.17	42,42,42,42	0
57	MG	1A	3037	1/1	0.97	0.05	28,28,28,28	0
57	MG	2A	3137	1/1	0.97	0.05	41,41,41,41	0
57	MG	2A	3138	1/1	0.97	0.11	37,37,37,37	0
57	MG	1a	3130	1/1	0.97	0.11	33,33,33,33	0
57	MG	1A	4198	1/1	0.97	0.05	9,9,9,9	0
57	MG	1A	3627	1/1	0.97	0.15	22,22,22,22	0
57	MG	1A	3291	1/1	0.97	0.17	38,38,38,38	0
57	MG	1A	3293	1/1	0.97	0.09	41,41,41,41	0
57	MG	1A	3496	1/1	0.97	0.12	27,27,27,27	0
57	MG	2a	3115	1/1	0.97	0.07	61,61,61,61	0
57	MG	2A	3420	1/1	0.97	0.10	42,42,42,42	0
57	MG	1A	3807	1/1	0.97	0.05	15,15,15,15	0
57	MG	1A	3497	1/1	0.97	0.04	29,29,29,29	0
57	MG	1A	3389	1/1	0.97	0.06	54,54,54,54	0
57	MG	1A	4206	1/1	0.97	0.03	23,23,23,23	0
57	MG	1A	4207	1/1	0.97	0.07	16,16,16,16	0
57	MG	1A	3993	1/1	0.97	0.14	42,42,42,42	0
57	MG	2A	3152	1/1	0.97	0.17	36,36,36,36	0
57	MG	2A	3428	1/1	0.97	0.16	34,34,34,34	0
57	MG	2A	3751	1/1	0.97	0.05	29,29,29,29	0
57	MG	1A	3812	1/1	0.97	0.10	19,19,19,19	0
57	MG	1A	3038	1/1	0.97	0.08	29,29,29,29	0
57	MG	1A	3641	1/1	0.97	0.05	31,31,31,31	0
57	MG	1A	3997	1/1	0.97	0.08	24,24,24,24	0
57	MG	1A	3998	1/1	0.97	0.11	29,29,29,29	0
57	MG	2A	3757	1/1	0.97	0.09	42,42,42,42	0
57	MG	1A	4215	1/1	0.97	0.08	38,38,38,38	0
57	MG	1A	3816	1/1	0.97	0.06	15,15,15,15	0
57	MG	1A	4000	1/1	0.97	0.24	30,30,30,30	0
57	MG	1A	3392	1/1	0.97	0.06	35,35,35,35	0
57	MG	2a	3136	1/1	0.97	0.05	62,62,62,62	0
57	MG	1A	3819	1/1	0.97	0.05	51,51,51,51	0
57	MG	1A	3082	1/1	0.97	0.05	23,23,23,23	0
57	MG	2a	3139	1/1	0.97	0.11	48,48,48,48	0
57	MG	1A	3122	1/1	0.97	0.09	22,22,22,22	0
57	MG	1A	3396	1/1	0.97	0.15	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3397	1/1	0.97	0.11	37,37,37,37	0
57	MG	1A	4226	1/1	0.97	0.07	28,28,28,28	0
57	MG	1A	3300	1/1	0.97	0.17	33,33,33,33	0
57	MG	2A	3448	1/1	0.97	0.15	43,43,43,43	0
57	MG	1A	3200	1/1	0.97	0.17	38,38,38,38	0
57	MG	1A	3013	1/1	0.97	0.15	21,21,21,21	0
57	MG	1A	3202	1/1	0.97	0.15	29,29,29,29	0
57	MG	2A	3452	1/1	0.97	0.28	53,53,53,53	0
57	MG	1A	3509	1/1	0.97	0.08	41,41,41,41	0
57	MG	1A	3306	1/1	0.97	0.12	47,47,47,47	0
57	MG	1A	4233	1/1	0.97	0.06	61,61,61,61	0
57	MG	1A	4234	1/1	0.97	0.05	38,38,38,38	0
57	MG	1A	3833	1/1	0.97	0.06	19,19,19,19	0
57	MG	1A	3203	1/1	0.97	0.11	27,27,27,27	0
57	MG	2a	3156	1/1	0.97	0.06	52,52,52,52	0
57	MG	2A	3782	1/1	0.97	0.09	23,23,23,23	0
57	MG	2A	3183	1/1	0.97	0.09	44,44,44,44	0
57	MG	1A	3657	1/1	0.97	0.11	31,31,31,31	0
57	MG	2A	3185	1/1	0.97	0.16	46,46,46,46	0
57	MG	1A	4017	1/1	0.97	0.11	27,27,27,27	0
57	MG	1A	3512	1/1	0.97	0.12	35,35,35,35	0
57	MG	1A	3205	1/1	0.97	0.06	39,39,39,39	0
57	MG	2A	3789	1/1	0.97	0.05	45,45,45,45	0
57	MG	1A	3838	1/1	0.97	0.03	10,10,10,10	0
57	MG	1A	3514	1/1	0.97	0.17	41,41,41,41	0
57	MG	2a	3167	1/1	0.97	0.12	55,55,55,55	0
57	MG	2A	3469	1/1	0.97	0.21	40,40,40,40	0
57	MG	1A	3309	1/1	0.97	0.12	45,45,45,45	0
57	MG	1A	3407	1/1	0.97	0.10	43,43,43,43	0
57	MG	2A	3193	1/1	0.97	0.06	45,45,45,45	0
57	MG	1A	4024	1/1	0.97	0.05	39,39,39,39	0
57	MG	2A	3798	1/1	0.97	0.10	37,37,37,37	0
57	MG	1a	3179	1/1	0.97	0.06	42,42,42,42	0
57	MG	1A	3518	1/1	0.97	0.17	43,43,43,43	0
57	MG	2A	3476	1/1	0.97	0.09	34,34,34,34	0
57	MG	1a	3181	1/1	0.97	0.16	61,61,61,61	0
57	MG	1A	3086	1/1	0.97	0.21	37,37,37,37	0
57	MG	1A	3409	1/1	0.97	0.08	24,24,24,24	0
57	MG	2A	3805	1/1	0.97	0.15	61,61,61,61	0
57	MG	1A	3846	1/1	0.97	0.07	35,35,35,35	0
57	MG	2A	3807	1/1	0.97	0.11	39,39,39,39	0
57	MG	1A	3087	1/1	0.97	0.12	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3060	1/1	0.97	0.08	30,30,30,30	0
57	MG	1A	3673	1/1	0.97	0.20	22,22,22,22	0
57	MG	1A	3850	1/1	0.97	0.12	43,43,43,43	0
57	MG	2a	3187	1/1	0.97	0.08	62,62,62,62	0
57	MG	2a	3188	1/1	0.97	0.11	48,48,48,48	0
57	MG	1A	3523	1/1	0.97	0.12	28,28,28,28	0
57	MG	1A	3004	1/1	0.97	0.06	18,18,18,18	0
57	MG	1A	3046	1/1	0.97	0.08	29,29,29,29	0
57	MG	2A	3816	1/1	0.97	0.18	36,36,36,36	0
57	MG	2a	3194	1/1	0.97	0.07	50,50,50,50	0
57	MG	2A	3817	1/1	0.97	0.06	49,49,49,49	0
57	MG	1A	3217	1/1	0.97	0.06	31,31,31,31	0
57	MG	2a	3198	1/1	0.97	0.05	52,52,52,52	0
57	MG	1A	3131	1/1	0.97	0.10	29,29,29,29	0
57	MG	1A	4265	1/1	0.97	0.06	44,44,44,44	0
57	MG	1A	3221	1/1	0.97	0.14	45,45,45,45	0
57	MG	1A	3017	1/1	0.97	0.10	44,44,44,44	0
57	MG	1A	3064	1/1	0.97	0.11	42,42,42,42	0
57	MG	1A	4270	1/1	0.97	0.06	24,24,24,24	0
57	MG	1a	3201	1/1	0.97	0.05	59,59,59,59	0
57	MG	1A	3686	1/1	0.97	0.10	42,42,42,42	0
57	MG	2A	3498	1/1	0.97	0.05	36,36,36,36	0
57	MG	2a	3211	1/1	0.97	0.09	58,58,58,58	0
57	MG	2a	3212	1/1	0.97	0.10	38,38,38,38	0
57	MG	1A	4046	1/1	0.97	0.08	35,35,35,35	0
57	MG	1A	3135	1/1	0.97	0.08	47,47,47,47	0
57	MG	2A	3831	1/1	0.97	0.09	50,50,50,50	0
57	MG	2A	3219	1/1	0.97	0.07	48,48,48,48	0
57	MG	1a	3205	1/1	0.97	0.07	51,51,51,51	0
57	MG	1A	4048	1/1	0.97	0.19	24,24,24,24	0
57	MG	1A	4049	1/1	0.97	0.06	45,45,45,45	0
57	MG	2A	3507	1/1	0.97	0.04	33,33,33,33	0
57	MG	2A	3223	1/1	0.97	0.05	36,36,36,36	0
57	MG	1A	3692	1/1	0.97	0.04	27,27,27,27	0
57	MG	1A	4051	1/1	0.97	0.06	44,44,44,44	0
57	MG	2a	3225	1/1	0.97	0.11	45,45,45,45	0
57	MG	1A	3694	1/1	0.97	0.08	32,32,32,32	0
57	MG	1a	3212	1/1	0.97	0.11	45,45,45,45	0
57	MG	1A	3321	1/1	0.97	0.08	23,23,23,23	0
57	MG	1A	3027	1/1	0.97	0.12	31,31,31,31	0
57	MG	2A	3844	1/1	0.97	0.08	52,52,52,52	0
57	MG	1A	4057	1/1	0.97	0.03	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3846	1/1	0.97	0.07	44,44,44,44	0
57	MG	2A	3848	1/1	0.97	0.08	46,46,46,46	0
57	MG	2A	3850	1/1	0.97	0.05	59,59,59,59	0
57	MG	1A	3227	1/1	0.97	0.14	23,23,23,23	0
57	MG	2A	3518	1/1	0.97	0.07	46,46,46,46	0
57	MG	2A	3520	1/1	0.97	0.07	52,52,52,52	0
57	MG	1A	3539	1/1	0.97	0.12	35,35,35,35	0
57	MG	1A	3700	1/1	0.97	0.09	35,35,35,35	0
57	MG	2a	3241	1/1	0.97	0.19	50,50,50,50	0
57	MG	1A	4287	1/1	0.97	0.08	35,35,35,35	0
57	MG	2a	3243	1/1	0.97	0.10	46,46,46,46	0
57	MG	1A	3138	1/1	0.97	0.11	29,29,29,29	0
57	MG	1A	3703	1/1	0.97	0.09	34,34,34,34	0
57	MG	1A	4063	1/1	0.97	0.04	54,54,54,54	0
57	MG	1a	3229	1/1	0.97	0.06	56,56,56,56	0
57	MG	2A	3240	1/1	0.97	0.06	34,34,34,34	0
57	MG	1A	3139	1/1	0.97	0.04	26,26,26,26	0
57	MG	1A	3705	1/1	0.97	0.13	32,32,32,32	0
57	MG	1A	3011	1/1	0.97	0.09	27,27,27,27	0
57	MG	1a	3233	1/1	0.97	0.09	46,46,46,46	0
57	MG	1A	3707	1/1	0.97	0.07	31,31,31,31	0
57	MG	1A	3877	1/1	0.97	0.04	44,44,44,44	0
57	MG	1A	3232	1/1	0.97	0.07	29,29,29,29	0
57	MG	1A	3233	1/1	0.97	0.12	50,50,50,50	0
57	MG	2A	3250	1/1	0.97	0.08	59,59,59,59	0
57	MG	2A	3873	1/1	0.97	0.05	53,53,53,53	0
57	MG	2A	3251	1/1	0.97	0.11	35,35,35,35	0
57	MG	1A	3880	1/1	0.97	0.06	41,41,41,41	0
57	MG	2A	3540	1/1	0.97	0.11	46,46,46,46	0
57	MG	1A	4075	1/1	0.97	0.05	61,61,61,61	0
57	MG	1A	3097	1/1	0.97	0.07	20,20,20,20	0
57	MG	2A	3879	1/1	0.97	0.12	52,52,52,52	0
57	MG	1A	3882	1/1	0.97	0.14	28,28,28,28	0
57	MG	2A	3881	1/1	0.97	0.06	47,47,47,47	0
57	MG	1a	3005	1/1	0.97	0.06	47,47,47,47	0
57	MG	2A	3547	1/1	0.97	0.16	39,39,39,39	0
57	MG	1A	3713	1/1	0.97	0.11	35,35,35,35	0
57	MG	2a	3271	1/1	0.97	0.12	44,44,44,44	0
57	MG	2A	3549	1/1	0.97	0.11	33,33,33,33	0
57	MG	1A	4081	1/1	0.97	0.06	44,44,44,44	0
57	MG	1A	3884	1/1	0.97	0.05	12,12,12,12	0
57	MG	2A	3553	1/1	0.97	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
57	MG	1A	3885	1/1	0.97	0.10	48,48,48,48	0
57	MG	1a	3010	1/1	0.97	0.11	57,57,57,57	0
57	MG	1A	3547	1/1	0.97	0.11	19,19,19,19	0
57	MG	1A	3715	1/1	0.97	0.04	42,42,42,42	0
57	MG	1A	3331	1/1	0.97	0.10	34,34,34,34	0
57	MG	1A	3718	1/1	0.97	0.05	38,38,38,38	0
57	MG	1A	3143	1/1	0.97	0.07	36,36,36,36	0
57	MG	1A	3019	1/1	0.97	0.06	36,36,36,36	0
59	ZN	2Y	501	1/1	0.97	0.05	88,88,88,88	0
59	ZN	24	501	1/1	0.97	0.12	114,114,114,114	0
59	ZN	2n	501	1/1	0.97	0.04	79,79,79,79	0
57	MG	1A	3474	1/1	0.98	0.12	28,28,28,28	0
57	MG	2A	3468	1/1	0.98	0.24	41,41,41,41	0
57	MG	1A	3716	1/1	0.98	0.16	21,21,21,21	0
57	MG	1A	3476	1/1	0.98	0.17	28,28,28,28	0
57	MG	1A	3388	1/1	0.98	0.07	33,33,33,33	0
57	MG	1A	3236	1/1	0.98	0.04	34,34,34,34	0
57	MG	1A	3579	1/1	0.98	0.18	53,53,53,53	0
57	MG	1A	3030	1/1	0.98	0.09	23,23,23,23	0
57	MG	1A	3723	1/1	0.98	0.16	32,32,32,32	0
57	MG	1A	3391	1/1	0.98	0.12	24,24,24,24	0
57	MG	1A	3031	1/1	0.98	0.11	34,34,34,34	0
57	MG	1a	3090	1/1	0.98	0.14	31,31,31,31	0
57	MG	1A	3870	1/1	0.98	0.03	20,20,20,20	0
57	MG	1A	3871	1/1	0.98	0.06	15,15,15,15	0
57	MG	1A	3136	1/1	0.98	0.06	22,22,22,22	0
57	MG	1A	3394	1/1	0.98	0.14	42,42,42,42	0
57	MG	1A	3085	1/1	0.98	0.12	28,28,28,28	0
57	MG	1A	3729	1/1	0.98	0.10	22,22,22,22	0
57	MG	1A	3241	1/1	0.98	0.09	38,38,38,38	0
57	MG	2a	3034	1/1	0.98	0.21	54,54,54,54	0
57	MG	2A	3265	1/1	0.98	0.07	39,39,39,39	0
57	MG	1A	3009	1/1	0.98	0.05	17,17,17,17	0
57	MG	2A	3052	1/1	0.98	0.07	33,33,33,33	0
57	MG	2A	3739	1/1	0.98	0.06	25,25,25,25	0
57	MG	1A	4031	1/1	0.98	0.06	46,46,46,46	0
57	MG	1A	4032	1/1	0.98	0.06	29,29,29,29	0
57	MG	1A	3588	1/1	0.98	0.12	26,26,26,26	0
57	MG	2A	3271	1/1	0.98	0.19	45,45,45,45	0
57	MG	1A	3488	1/1	0.98	0.05	38,38,38,38	0
57	MG	1A	3489	1/1	0.98	0.07	39,39,39,39	0
57	MG	2A	3746	1/1	0.98	0.04	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3183	1/1	0.98	0.28	30,30,30,30	0
57	MG	1A	3245	1/1	0.98	0.17	25,25,25,25	0
57	MG	1A	3108	1/1	0.98	0.12	28,28,28,28	0
57	MG	1A	4214	1/1	0.98	0.05	44,44,44,44	0
57	MG	1A	3187	1/1	0.98	0.14	18,18,18,18	0
57	MG	1A	3596	1/1	0.98	0.28	33,33,33,33	0
57	MG	2A	3502	1/1	0.98	0.05	25,25,25,25	0
57	MG	2A	3503	1/1	0.98	0.18	35,35,35,35	0
57	MG	1A	4041	1/1	0.98	0.12	32,32,32,32	0
57	MG	1A	4042	1/1	0.98	0.06	23,23,23,23	0
57	MG	1A	3033	1/1	0.98	0.10	21,21,21,21	0
57	MG	1A	4220	1/1	0.98	0.08	39,39,39,39	0
57	MG	1A	3111	1/1	0.98	0.04	21,21,21,21	0
57	MG	1A	3112	1/1	0.98	0.07	21,21,21,21	0
57	MG	1A	3889	1/1	0.98	0.06	36,36,36,36	0
57	MG	1A	3193	1/1	0.98	0.10	33,33,33,33	0
57	MG	1A	3406	1/1	0.98	0.06	34,34,34,34	0
57	MG	2A	3513	1/1	0.98	0.08	38,38,38,38	0
57	MG	2A	3765	1/1	0.98	0.07	54,54,54,54	0
57	MG	1A	3144	1/1	0.98	0.14	18,18,18,18	0
57	MG	1A	3088	1/1	0.98	0.13	29,29,29,29	0
57	MG	1A	3255	1/1	0.98	0.09	27,27,27,27	0
57	MG	1A	3410	1/1	0.98	0.13	29,29,29,29	0
57	MG	1a	3124	1/1	0.98	0.11	41,41,41,41	0
57	MG	2A	3519	1/1	0.98	0.03	32,32,32,32	0
57	MG	1A	4053	1/1	0.98	0.05	31,31,31,31	0
57	MG	1a	3127	1/1	0.98	0.18	28,28,28,28	0
57	MG	2a	3073	1/1	0.98	0.10	47,47,47,47	0
57	MG	1A	3196	1/1	0.98	0.08	34,34,34,34	0
57	MG	2A	3081	1/1	0.98	0.03	18,18,18,18	0
57	MG	1A	3258	1/1	0.98	0.09	26,26,26,26	0
57	MG	1A	4056	1/1	0.98	0.03	25,25,25,25	0
57	MG	1A	4235	1/1	0.98	0.07	32,32,32,32	0
57	MG	1A	4236	1/1	0.98	0.07	10,10,10,10	0
57	MG	2a	3080	1/1	0.98	0.08	33,33,33,33	0
57	MG	1A	4237	1/1	0.98	0.11	30,30,30,30	0
57	MG	2A	3781	1/1	0.98	0.07	30,30,30,30	0
57	MG	1A	3066	1/1	0.98	0.09	29,29,29,29	0
57	MG	1A	3260	1/1	0.98	0.06	42,42,42,42	0
57	MG	1A	3415	1/1	0.98	0.16	31,31,31,31	0
57	MG	1A	3090	1/1	0.98	0.11	23,23,23,23	0
57	MG	1A	3755	1/1	0.98	0.10	7,7,7,7	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	4243	1/1	0.98	0.04	17,17,17,17	0
57	MG	1A	3149	1/1	0.98	0.06	16,16,16,16	0
57	MG	1A	3615	1/1	0.98	0.10	37,37,37,37	0
57	MG	1A	4064	1/1	0.98	0.04	26,26,26,26	0
57	MG	1A	3116	1/1	0.98	0.13	19,19,19,19	0
57	MG	1A	4248	1/1	0.98	0.06	41,41,41,41	0
57	MG	2A	3098	1/1	0.98	0.08	34,34,34,34	0
57	MG	1A	4066	1/1	0.98	0.06	48,48,48,48	0
57	MG	2A	3795	1/1	0.98	0.04	24,24,24,24	0
57	MG	1A	3909	1/1	0.98	0.03	25,25,25,25	0
57	MG	1A	3617	1/1	0.98	0.03	13,13,13,13	0
57	MG	2A	3545	1/1	0.98	0.13	29,29,29,29	0
57	MG	1A	3762	1/1	0.98	0.07	27,27,27,27	0
57	MG	1A	3763	1/1	0.98	0.10	32,32,32,32	0
57	MG	1A	3618	1/1	0.98	0.03	28,28,28,28	0
57	MG	1A	3619	1/1	0.98	0.10	26,26,26,26	0
57	MG	1A	3620	1/1	0.98	0.13	28,28,28,28	0
57	MG	2A	3551	1/1	0.98	0.11	41,41,41,41	0
57	MG	1A	3622	1/1	0.98	0.04	31,31,31,31	0
57	MG	1A	3025	1/1	0.98	0.20	16,16,16,16	0
57	MG	1A	3036	1/1	0.98	0.13	20,20,20,20	0
57	MG	1A	3919	1/1	0.98	0.06	14,14,14,14	0
57	MG	1A	4080	1/1	0.98	0.05	31,31,31,31	0
57	MG	1A	3153	1/1	0.98	0.23	26,26,26,26	0
57	MG	1A	3204	1/1	0.98	0.25	31,31,31,31	0
57	MG	1A	4083	1/1	0.98	0.04	41,41,41,41	0
57	MG	1A	3628	1/1	0.98	0.06	16,16,16,16	0
57	MG	2A	3814	1/1	0.98	0.05	47,47,47,47	0
57	MG	1A	3923	1/1	0.98	0.06	17,17,17,17	0
57	MG	1A	3007	1/1	0.98	0.04	29,29,29,29	0
57	MG	1A	3775	1/1	0.98	0.08	49,49,49,49	0
57	MG	1A	4088	1/1	0.98	0.04	45,45,45,45	0
57	MG	1A	3206	1/1	0.98	0.15	28,28,28,28	0
57	MG	1A	4091	1/1	0.98	0.08	51,51,51,51	0
57	MG	1A	3633	1/1	0.98	0.06	40,40,40,40	0
57	MG	2A	3569	1/1	0.98	0.06	57,57,57,57	0
57	MG	2A	3823	1/1	0.98	0.05	48,48,48,48	0
57	MG	1A	3517	1/1	0.98	0.06	42,42,42,42	0
57	MG	1A	3155	1/1	0.98	0.06	31,31,31,31	0
57	MG	1A	3427	1/1	0.98	0.06	17,17,17,17	0
57	MG	1a	3174	1/1	0.98	0.07	49,49,49,49	0
57	MG	1A	3639	1/1	0.98	0.17	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3272	1/1	0.98	0.05	24,24,24,24	0
57	MG	1A	3210	1/1	0.98	0.22	27,27,27,27	0
57	MG	1A	4281	1/1	0.98	0.04	28,28,28,28	0
57	MG	2A	3131	1/1	0.98	0.10	30,30,30,30	0
57	MG	2A	3579	1/1	0.98	0.06	28,28,28,28	0
57	MG	1A	3934	1/1	0.98	0.05	29,29,29,29	0
57	MG	2A	3581	1/1	0.98	0.12	17,17,17,17	0
57	MG	1A	4283	1/1	0.98	0.04	37,37,37,37	0
57	MG	1A	3642	1/1	0.98	0.07	33,33,33,33	0
57	MG	1A	3785	1/1	0.98	0.04	20,20,20,20	0
57	MG	1a	3183	1/1	0.98	0.08	58,58,58,58	0
57	MG	1A	3274	1/1	0.98	0.06	53,53,53,53	0
57	MG	1A	3012	1/1	0.98	0.09	22,22,22,22	0
57	MG	1A	4288	1/1	0.98	0.04	49,49,49,49	0
57	MG	1A	3524	1/1	0.98	0.09	37,37,37,37	0
57	MG	1A	3276	1/1	0.98	0.04	41,41,41,41	0
57	MG	1A	3277	1/1	0.98	0.05	32,32,32,32	0
57	MG	2A	3592	1/1	0.98	0.05	43,43,43,43	0
57	MG	2A	3847	1/1	0.98	0.05	29,29,29,29	0
57	MG	1A	3942	1/1	0.98	0.04	29,29,29,29	0
57	MG	2A	3849	1/1	0.98	0.05	31,31,31,31	0
57	MG	1A	3434	1/1	0.98	0.06	46,46,46,46	0
57	MG	1A	3278	1/1	0.98	0.05	32,32,32,32	0
57	MG	2A	3852	1/1	0.98	0.03	44,44,44,44	0
57	MG	2A	3853	1/1	0.98	0.05	37,37,37,37	0
57	MG	1A	3157	1/1	0.98	0.22	31,31,31,31	0
57	MG	2A	3147	1/1	0.98	0.10	27,27,27,27	0
57	MG	1A	3651	1/1	0.98	0.07	41,41,41,41	0
57	MG	1A	3948	1/1	0.98	0.21	13,13,13,13	0
57	MG	2A	3600	1/1	0.98	0.05	29,29,29,29	0
57	MG	1A	3530	1/1	0.98	0.06	27,27,27,27	0
57	MG	1A	3531	1/1	0.98	0.12	32,32,32,32	0
57	MG	1A	3072	1/1	0.98	0.05	19,19,19,19	0
57	MG	1A	3533	1/1	0.98	0.07	36,36,36,36	0
57	MG	2A	3155	1/1	0.98	0.09	33,33,33,33	0
57	MG	1A	4118	1/1	0.98	0.06	53,53,53,53	0
57	MG	2A	3607	1/1	0.98	0.09	37,37,37,37	0
57	MG	1A	3123	1/1	0.98	0.06	26,26,26,26	0
57	MG	1A	3216	1/1	0.98	0.05	32,32,32,32	0
57	MG	1A	3659	1/1	0.98	0.06	34,34,34,34	0
57	MG	1A	3956	1/1	0.98	0.05	22,22,22,22	0
57	MG	1A	3055	1/1	0.98	0.07	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	4124	1/1	0.98	0.04	33,33,33,33	0
57	MG	1A	4125	1/1	0.98	0.06	42,42,42,42	0
57	MG	1A	3804	1/1	0.98	0.04	31,31,31,31	0
57	MG	1A	3074	1/1	0.98	0.07	29,29,29,29	0
57	MG	2A	3617	1/1	0.98	0.08	42,42,42,42	0
57	MG	1A	3285	1/1	0.98	0.18	35,35,35,35	0
57	MG	1a	3213	1/1	0.98	0.04	40,40,40,40	0
57	MG	1A	3358	1/1	0.98	0.05	37,37,37,37	0
57	MG	1a	3017	1/1	0.98	0.13	39,39,39,39	0
57	MG	1A	3219	1/1	0.98	0.09	19,19,19,19	0
57	MG	1A	3163	1/1	0.98	0.08	36,36,36,36	0
57	MG	1A	3811	1/1	0.98	0.08	11,11,11,11	0
57	MG	1a	3219	1/1	0.98	0.05	32,32,32,32	0
57	MG	2A	3390	1/1	0.98	0.09	45,45,45,45	0
57	MG	1A	3222	1/1	0.98	0.10	31,31,31,31	0
57	MG	1a	3221	1/1	0.98	0.04	46,46,46,46	0
57	MG	1a	3222	1/1	0.98	0.04	35,35,35,35	0
57	MG	1a	3223	1/1	0.98	0.04	52,52,52,52	0
57	MG	2A	3179	1/1	0.98	0.04	40,40,40,40	0
57	MG	1A	3813	1/1	0.98	0.04	10,10,10,10	0
57	MG	2A	3634	1/1	0.98	0.05	36,36,36,36	0
57	MG	2A	3635	1/1	0.98	0.03	40,40,40,40	0
57	MG	2a	3196	1/1	0.98	0.06	56,56,56,56	0
57	MG	1A	3040	1/1	0.98	0.15	29,29,29,29	0
57	MG	2A	3637	1/1	0.98	0.07	35,35,35,35	0
57	MG	1A	3290	1/1	0.98	0.11	32,32,32,32	0
57	MG	1A	3449	1/1	0.98	0.10	41,41,41,41	0
57	MG	2a	3201	1/1	0.98	0.05	59,59,59,59	0
57	MG	1a	3228	1/1	0.98	0.06	56,56,56,56	0
57	MG	2A	3898	1/1	0.98	0.04	28,28,28,28	0
57	MG	1A	3817	1/1	0.98	0.03	22,22,22,22	0
57	MG	1A	4139	1/1	0.98	0.06	42,42,42,42	0
57	MG	2A	3902	1/1	0.98	0.06	42,42,42,42	0
57	MG	2a	3208	1/1	0.98	0.07	49,49,49,49	0
57	MG	1A	3041	1/1	0.98	0.17	26,26,26,26	0
57	MG	2A	3404	1/1	0.98	0.12	45,45,45,45	0
57	MG	1A	3292	1/1	0.98	0.08	28,28,28,28	0
57	MG	2A	3646	1/1	0.98	0.06	23,23,23,23	0
57	MG	2A	3907	1/1	0.98	0.06	34,34,34,34	0
57	MG	1A	3677	1/1	0.98	0.23	21,21,21,21	0
57	MG	1A	3678	1/1	0.98	0.14	19,19,19,19	0
57	MG	1a	3235	1/1	0.98	0.06	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	4144	1/1	0.98	0.05	11,11,11,11	0
57	MG	1A	3549	1/1	0.98	0.13	24,24,24,24	0
57	MG	1A	3366	1/1	0.98	0.08	28,28,28,28	0
57	MG	1A	3128	1/1	0.98	0.06	19,19,19,19	0
57	MG	1A	3454	1/1	0.98	0.15	32,32,32,32	0
57	MG	2A	3656	1/1	0.98	0.08	32,32,32,32	0
57	MG	1A	3168	1/1	0.98	0.04	17,17,17,17	0
57	MG	2a	3224	1/1	0.98	0.07	47,47,47,47	0
57	MG	1A	3372	1/1	0.98	0.09	29,29,29,29	0
57	MG	1A	3170	1/1	0.98	0.24	33,33,33,33	0
57	MG	1A	3687	1/1	0.98	0.16	24,24,24,24	0
57	MG	1A	3458	1/1	0.98	0.05	38,38,38,38	0
57	MG	2A	3663	1/1	0.98	0.04	26,26,26,26	0
57	MG	2a	3230	1/1	0.98	0.10	49,49,49,49	0
57	MG	1A	3690	1/1	0.98	0.04	27,27,27,27	0
57	MG	1A	3691	1/1	0.98	0.12	30,30,30,30	0
57	MG	1A	4156	1/1	0.98	0.04	19,19,19,19	0
57	MG	1A	4157	1/1	0.98	0.05	31,31,31,31	0
57	MG	1A	3374	1/1	0.98	0.16	20,20,20,20	0
57	MG	1A	3693	1/1	0.98	0.07	34,34,34,34	0
57	MG	1a	3049	1/1	0.98	0.07	51,51,51,51	0
57	MG	1A	4160	1/1	0.98	0.06	23,23,23,23	0
57	MG	1A	3058	1/1	0.98	0.07	33,33,33,33	0
57	MG	1a	3053	1/1	0.98	0.07	34,34,34,34	0
57	MG	1A	3695	1/1	0.98	0.09	34,34,34,34	0
57	MG	1A	3298	1/1	0.98	0.19	26,26,26,26	0
57	MG	1A	3003	1/1	0.98	0.03	11,11,11,11	0
57	MG	1A	4165	1/1	0.98	0.03	28,28,28,28	0
57	MG	2A	3938	1/1	0.98	0.09	44,44,44,44	0
57	MG	1A	3842	1/1	0.98	0.03	7,7,7,7	0
57	MG	2A	3679	1/1	0.98	0.09	43,43,43,43	0
57	MG	1A	3561	1/1	0.98	0.07	51,51,51,51	0
57	MG	1A	3562	1/1	0.98	0.05	35,35,35,35	0
57	MG	1A	3463	1/1	0.98	0.04	41,41,41,41	0
57	MG	2A	3944	1/1	0.98	0.10	41,41,41,41	0
57	MG	1A	3701	1/1	0.98	0.04	39,39,39,39	0
57	MG	1A	3301	1/1	0.98	0.12	23,23,23,23	0
57	MG	2A	3439	1/1	0.98	0.25	47,47,47,47	0
57	MG	2A	3440	1/1	0.98	0.10	30,30,30,30	0
57	MG	1A	3173	1/1	0.98	0.12	26,26,26,26	0
57	MG	1a	3065	1/1	0.98	0.08	41,41,41,41	0
57	MG	2a	3258	1/1	0.98	0.04	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	2A	3443	1/1	0.98	0.20	41,41,41,41	0
57	MG	2A	3225	1/1	0.98	0.07	43,43,43,43	0
57	MG	1A	3303	1/1	0.98	0.05	38,38,38,38	0
57	MG	1A	3231	1/1	0.98	0.05	31,31,31,31	0
57	MG	2A	3015	1/1	0.98	0.07	39,39,39,39	0
57	MG	1A	4176	1/1	0.98	0.04	24,24,24,24	0
57	MG	2A	3017	1/1	0.98	0.11	40,40,40,40	0
57	MG	1A	4177	1/1	0.98	0.04	46,46,46,46	0
57	MG	2A	3019	1/1	0.98	0.09	33,33,33,33	0
57	MG	2A	3698	1/1	0.98	0.09	44,44,44,44	0
57	MG	1A	3043	1/1	0.98	0.05	22,22,22,22	0
57	MG	1A	3015	1/1	0.98	0.10	21,21,21,21	0
57	MG	2A	3701	1/1	0.98	0.06	51,51,51,51	0
57	MG	2A	3454	1/1	0.98	0.16	54,54,54,54	0
57	MG	1A	3133	1/1	0.98	0.23	38,38,38,38	0
57	MG	2A	3704	1/1	0.98	0.09	30,30,30,30	0
57	MG	1A	3571	1/1	0.98	0.12	28,28,28,28	0
57	MG	2A	3706	1/1	0.98	0.08	32,32,32,32	0
57	MG	2A	3024	1/1	0.98	0.05	29,29,29,29	0
57	MG	1A	3235	1/1	0.98	0.08	36,36,36,36	0
57	MG	1A	4008	1/1	0.98	0.04	16,16,16,16	0
57	MG	2A	3027	1/1	0.98	0.06	37,37,37,37	0
57	MG	1A	3711	1/1	0.98	0.08	33,33,33,33	0
58	K	1A	3602	1/1	0.98	0.04	24,24,24,24	0
57	MG	1A	3386	1/1	0.98	0.06	45,45,45,45	0
57	MG	1A	3858	1/1	0.98	0.07	37,37,37,37	0
57	MG	2A	3031	1/1	0.98	0.14	32,32,32,32	0
57	MG	1A	3387	1/1	0.98	0.06	35,35,35,35	0
57	MG	2A	3246	1/1	0.98	0.04	34,34,34,34	0
60	SF4	2d	501	8/8	0.98	0.05	62,69,73,85	0
57	MG	2A	3153	1/1	0.99	0.07	30,30,30,30	0
57	MG	1A	3215	1/1	0.99	0.07	18,18,18,18	0
57	MG	1A	3146	1/1	0.99	0.03	29,29,29,29	0
57	MG	1A	3479	1/1	0.99	0.11	32,32,32,32	0
57	MG	1A	3189	1/1	0.99	0.03	17,17,17,17	0
57	MG	1A	3947	1/1	0.99	0.03	20,20,20,20	0
57	MG	2a	3189	1/1	0.99	0.04	61,61,61,61	0
57	MG	1A	4262	1/1	0.99	0.05	20,20,20,20	0
57	MG	1A	3044	1/1	0.99	0.07	21,21,21,21	0
57	MG	2A	3544	1/1	0.99	0.05	19,19,19,19	0
57	MG	1A	3023	1/1	0.99	0.09	11,11,11,11	0
57	MG	1a	3052	1/1	0.99	0.07	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3220	1/1	0.99	0.05	24,24,24,24	0
57	MG	1A	3621	1/1	0.99	0.03	32,32,32,32	0
57	MG	1A	3192	1/1	0.99	0.03	27,27,27,27	0
57	MG	2A	3166	1/1	0.99	0.12	28,28,28,28	0
57	MG	1A	3810	1/1	0.99	0.03	37,37,37,37	0
57	MG	1A	4269	1/1	0.99	0.05	38,38,38,38	0
57	MG	1A	3117	1/1	0.99	0.04	28,28,28,28	0
57	MG	1A	3253	1/1	0.99	0.17	20,20,20,20	0
57	MG	2A	3654	1/1	0.99	0.10	42,42,42,42	0
57	MG	2a	3099	1/1	0.99	0.15	42,42,42,42	0
57	MG	1A	3625	1/1	0.99	0.11	22,22,22,22	0
57	MG	1A	3685	1/1	0.99	0.12	31,31,31,31	0
57	MG	2a	3207	1/1	0.99	0.08	53,53,53,53	0
57	MG	1A	4111	1/1	0.99	0.04	31,31,31,31	0
57	MG	1A	3169	1/1	0.99	0.08	21,21,21,21	0
57	MG	1A	3024	1/1	0.99	0.17	26,26,26,26	0
57	MG	2A	3366	1/1	0.99	0.02	33,33,33,33	0
57	MG	1A	3688	1/1	0.99	0.09	33,33,33,33	0
57	MG	2A	3662	1/1	0.99	0.06	28,28,28,28	0
57	MG	1A	3078	1/1	0.99	0.03	23,23,23,23	0
57	MG	1A	3962	1/1	0.99	0.03	18,18,18,18	0
57	MG	2A	3564	1/1	0.99	0.10	38,38,38,38	0
57	MG	1A	3629	1/1	0.99	0.14	24,24,24,24	0
57	MG	1A	3257	1/1	0.99	0.09	20,20,20,20	0
57	MG	1A	3891	1/1	0.99	0.03	34,34,34,34	0
57	MG	2A	3182	1/1	0.99	0.05	28,28,28,28	0
57	MG	1a	3159	1/1	0.99	0.03	21,21,21,21	0
57	MG	1A	3326	1/1	0.99	0.02	23,23,23,23	0
57	MG	1A	3893	1/1	0.99	0.06	21,21,21,21	0
57	MG	1A	3632	1/1	0.99	0.03	31,31,31,31	0
57	MG	1A	3756	1/1	0.99	0.10	30,30,30,30	0
57	MG	1A	3757	1/1	0.99	0.08	25,25,25,25	0
57	MG	1A	3826	1/1	0.99	0.06	21,21,21,21	0
57	MG	1A	3827	1/1	0.99	0.06	19,19,19,19	0
57	MG	1A	3005	1/1	0.99	0.03	32,32,32,32	0
57	MG	1A	3900	1/1	0.99	0.07	27,27,27,27	0
57	MG	1a	3169	1/1	0.99	0.06	35,35,35,35	0
57	MG	1A	3039	1/1	0.99	0.06	16,16,16,16	0
57	MG	1A	3635	1/1	0.99	0.12	26,26,26,26	0
57	MG	1A	3049	1/1	0.99	0.02	23,23,23,23	0
57	MG	1A	3637	1/1	0.99	0.07	43,43,43,43	0
57	MG	1A	3368	1/1	0.99	0.04	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3070	1/1	0.99	0.04	26,26,26,26	0
57	MG	1A	3370	1/1	0.99	0.08	22,22,22,22	0
57	MG	1A	3766	1/1	0.99	0.04	43,43,43,43	0
57	MG	1A	3542	1/1	0.99	0.08	22,22,22,22	0
57	MG	1A	3371	1/1	0.99	0.14	20,20,20,20	0
57	MG	1A	3985	1/1	0.99	0.03	61,61,61,61	0
57	MG	1A	3589	1/1	0.99	0.05	29,29,29,29	0
57	MG	1A	3014	1/1	0.99	0.08	17,17,17,17	0
57	MG	1A	3177	1/1	0.99	0.08	23,23,23,23	0
57	MG	1A	3297	1/1	0.99	0.11	24,24,24,24	0
57	MG	1A	3416	1/1	0.99	0.20	21,21,21,21	0
57	MG	1A	4225	1/1	0.99	0.03	33,33,33,33	0
57	MG	2A	3900	1/1	0.99	0.05	35,35,35,35	0
57	MG	1a	3011	1/1	0.99	0.06	19,19,19,19	0
57	MG	1A	3140	1/1	0.99	0.14	21,21,21,21	0
57	MG	1A	3299	1/1	0.99	0.19	35,35,35,35	0
57	MG	1A	3265	1/1	0.99	0.12	20,20,20,20	0
57	MG	1A	3712	1/1	0.99	0.06	24,24,24,24	0
57	MG	1a	3192	1/1	0.99	0.05	44,44,44,44	0
57	MG	1A	3110	1/1	0.99	0.07	31,31,31,31	0
57	MG	1A	3338	1/1	0.99	0.03	26,26,26,26	0
57	MG	1A	3084	1/1	0.99	0.19	29,29,29,29	0
57	MG	2A	3910	1/1	0.99	0.04	18,18,18,18	0
57	MG	1A	4073	1/1	0.99	0.05	10,10,10,10	0
57	MG	1A	3021	1/1	0.99	0.06	19,19,19,19	0
57	MG	1a	3021	1/1	0.99	0.04	40,40,40,40	0
57	MG	1A	3207	1/1	0.99	0.17	19,19,19,19	0
57	MG	1A	4076	1/1	0.99	0.06	26,26,26,26	0
57	MG	1A	3656	1/1	0.99	0.18	18,18,18,18	0
57	MG	1A	3603	1/1	0.99	0.06	37,37,37,37	0
57	MG	1A	3720	1/1	0.99	0.08	25,25,25,25	0
57	MG	1A	3034	1/1	0.99	0.11	22,22,22,22	0
57	MG	1a	3114	1/1	0.99	0.07	34,34,34,34	0
57	MG	1A	3343	1/1	0.99	0.10	36,36,36,36	0
57	MG	1A	3209	1/1	0.99	0.19	22,22,22,22	0
57	MG	2A	3618	1/1	0.99	0.04	37,37,37,37	0
57	MG	1A	3162	1/1	0.99	0.07	23,23,23,23	0
57	MG	1A	3662	1/1	0.99	0.04	31,31,31,31	0
57	MG	1a	3210	1/1	0.99	0.05	52,52,52,52	0
57	MG	1A	3663	1/1	0.99	0.21	28,28,28,28	0
57	MG	1A	3010	1/1	0.99	0.09	29,29,29,29	0
57	MG	1A	3793	1/1	0.99	0.05	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
57	MG	1A	3185	1/1	0.99	0.07	21,21,21,21	0
57	MG	1A	4089	1/1	0.99	0.04	43,43,43,43	0
57	MG	1A	3186	1/1	0.99	0.09	32,32,32,32	0
57	MG	1A	3243	1/1	0.99	0.08	23,23,23,23	0
57	MG	1a	3126	1/1	0.99	0.13	39,39,39,39	0
59	ZN	1Y	501	1/1	0.99	0.02	56,56,56,56	0
57	MG	1A	3475	1/1	0.99	0.15	40,40,40,40	0
59	ZN	15	501	1/1	0.99	0.04	37,37,37,37	0
59	ZN	19	501	1/1	0.99	0.03	35,35,35,35	0
59	ZN	1n	501	1/1	0.99	0.03	47,47,47,47	0
57	MG	1A	3164	1/1	0.99	0.17	26,26,26,26	0
57	MG	1A	4173	1/1	0.99	0.04	42,42,42,42	0
59	ZN	25	501	1/1	0.99	0.03	52,52,52,52	0
59	ZN	26	501	1/1	0.99	0.04	53,53,53,53	0
59	ZN	29	501	1/1	0.99	0.03	59,59,59,59	0
57	MG	1A	3670	1/1	0.99	0.10	30,30,30,30	0
60	SF4	1d	501	8/8	0.99	0.06	47,48,61,68	0
57	MG	1A	3671	1/1	0.99	0.14	26,26,26,26	0
57	MG	1A	3824	1/1	1.00	0.03	16,16,16,16	0
59	ZN	16	501	1/1	1.00	0.02	36,36,36,36	0
57	MG	1A	3676	1/1	1.00	0.21	18,18,18,18	0

6.5 Other polymers

There are no such residues in this entry.