



Full wwPDB X-ray Structure Validation Report ⓘ

Aug 6, 2026 – 01:03 AM EDT

PDB ID : 9O3J / pdb_00009o3j
Title : Crystal structure of the wild-type drug-free *Thermus thermophilus* 70S ribosome in complex with mRNA, aminoacylated A-site Lys-tRNA^{Lys}, P-site fM RC-peptidyl-tRNA^{Met}, and deacylated E-site tRNA^{Lys} at 2.60Å resolution
Authors : Syroegin, E.A.; Aleksandrova, E.V.; Kruglov, A.A.; Paranjpe, M.N.; Svetlov, M.S.; Polikanov, Y.S.
Deposited on : 2025-04-07
Resolution : 2.60 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	:	9.0.015 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.50

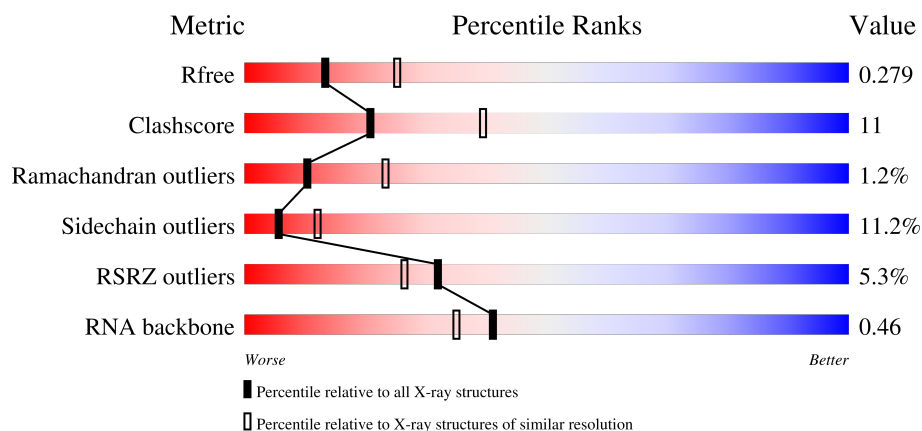
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.60 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	4008 (2.60-2.60)
Clashscore	190562	4347 (2.60-2.60)
Ramachandran outliers	187476	4277 (2.60-2.60)
Sidechain outliers	187428	4277 (2.60-2.60)
RSRZ outliers	180081	4008 (2.60-2.60)
RNA backbone	3983	1014 (2.84-2.36)

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	3% 59% 31% 8% .
1	2A	2915	3% 52% 37% 8% .
2	1B	121	% 59% 37% . .

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

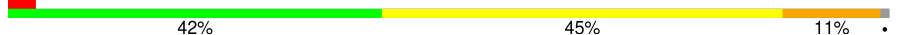
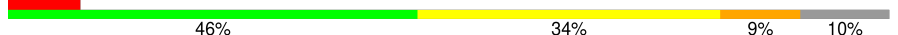
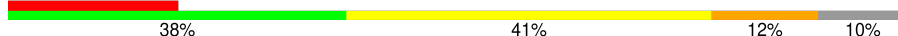
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Mol	Chain	Length	Quality of chain
15	1T	146	
15	2T	146	
16	1U	118	
16	2U	118	
17	1V	101	
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
20	1Y	110	
20	2Y	110	
21	1Z	206	
21	2Z	206	
22	10	85	
22	20	85	
23	11	98	
23	21	98	
24	12	72	
24	22	72	
25	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	
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	
39	2h	138	

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Mol	Chain	Length	Quality of chain
40	1i	128	
40	2i	128	
41	1j	105	
41	2j	105	
42	1k	129	
42	2k	129	
43	1l	132	
43	2l	132	
44	1m	126	
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
46	2o	89	
47	1p	88	
47	2p	88	
48	1q	105	
48	2q	105	
49	1r	88	
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	
51	2t	106	
52	1u	27	

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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	1z	3	
56	2z	3	
57	1y	76	
57	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
58	MG	1U	208	-	-	-	X

2 Entry composition

There are 62 unique types of molecules in this entry. The entry contains 299808 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 MET-LYS-mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1v	13	Total	C	N	O	P	0	0	0
			283	128	59	83	13			
53	2v	13	Total	C	N	O	P	0	0	0
			283	128	59	83	13			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	74	Total	C	N	O	P	S	0	0	0
			1599	718	282	524	74	1			
54	2w	74	Total	C	N	O	P	S	0	0	0
			1599	718	282	524	74	1			

- Molecule 55 is a RNA chain called P-site Peptidyl-tRNA fMRC-tRNAcys RNA-part.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
55	1x	77	Total	C	N	O	P	S	0	0	0
			1646	734	298	536	77	1			
55	2x	77	Total	C	N	O	P	S	0	0	0
			1646	734	298	536	77	1			

- Molecule 56 is a protein called P-site Peptidyl-tRNA fMRC-tRNAcys Peptide-part.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	1z	3	Total	C	N	O	S	0	0	0
			27	15	6	4	2			
56	2z	3	Total	C	N	O	S	0	0	0
			27	15	6	4	2			

- Molecule 57 is a RNA chain called E-site Deacylated tRNAlys.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
57	1y	74	Total	C	N	O	P	S	0	0	0
			1577	705	277	520	74	1			
57	2y	74	Total	C	N	O	P	S	0	0	0
			1577	705	277	520	74	1			

- Molecule 58 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1A	1096	Total	Mg	0	0
			1096	1096		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1B	37	Total 37	Mg 37	0	0
58	1D	13	Total 13	Mg 13	0	0
58	1E	16	Total 16	Mg 16	0	0
58	1F	13	Total 13	Mg 13	0	0
58	1G	5	Total 5	Mg 5	0	0
58	1H	1	Total 1	Mg 1	0	0
58	1I	1	Total 1	Mg 1	0	0
58	1N	5	Total 5	Mg 5	0	0
58	1O	4	Total 4	Mg 4	0	0
58	1P	6	Total 6	Mg 6	0	0
58	1Q	7	Total 7	Mg 7	0	0
58	1R	4	Total 4	Mg 4	0	0
58	1S	3	Total 3	Mg 3	0	0
58	1T	2	Total 2	Mg 2	0	0
58	1U	9	Total 9	Mg 9	0	0
58	1V	9	Total 9	Mg 9	0	0
58	1W	7	Total 7	Mg 7	0	0
58	1X	5	Total 5	Mg 5	0	0
58	1Y	3	Total 3	Mg 3	0	0
58	1Z	2	Total 2	Mg 2	0	0
58	10	9	Total 9	Mg 9	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	11	5	Total 5	Mg 5	0	0
58	12	2	Total 2	Mg 2	0	0
58	13	5	Total 5	Mg 5	0	0
58	14	1	Total 1	Mg 1	0	0
58	15	6	Total 6	Mg 6	0	0
58	16	2	Total 2	Mg 2	0	0
58	17	6	Total 6	Mg 6	0	0
58	18	9	Total 9	Mg 9	0	0
58	1a	210	Total 210	Mg 210	0	0
58	1b	1	Total 1	Mg 1	0	0
58	1d	1	Total 1	Mg 1	0	0
58	1e	2	Total 2	Mg 2	0	0
58	1f	1	Total 1	Mg 1	0	0
58	1k	1	Total 1	Mg 1	0	0
58	1l	2	Total 2	Mg 2	0	0
58	1m	1	Total 1	Mg 1	0	0
58	1n	2	Total 2	Mg 2	0	0
58	1p	1	Total 1	Mg 1	0	0
58	1t	1	Total 1	Mg 1	0	0
58	1v	1	Total 1	Mg 1	0	0
58	1w	3	Total 3	Mg 3	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1x	11	Total 11 Mg 11	0	0
58	2A	863	Total 863 Mg 863	0	0
58	2B	20	Total 20 Mg 20	0	0
58	2D	7	Total 7 Mg 7	0	0
58	2E	7	Total 7 Mg 7	0	0
58	2F	7	Total 7 Mg 7	0	0
58	2G	1	Total 1 Mg 1	0	0
58	2O	2	Total 2 Mg 2	0	0
58	2P	3	Total 3 Mg 3	0	0
58	2Q	2	Total 2 Mg 2	0	0
58	2R	2	Total 2 Mg 2	0	0
58	2T	3	Total 3 Mg 3	0	0
58	2U	2	Total 2 Mg 2	0	0
58	2V	2	Total 2 Mg 2	0	0
58	2W	2	Total 2 Mg 2	0	0
58	2X	1	Total 1 Mg 1	0	0
58	2Y	1	Total 1 Mg 1	0	0
58	2Z	1	Total 1 Mg 1	0	0
58	20	4	Total 4 Mg 4	0	0
58	23	4	Total 4 Mg 4	0	0
58	25	5	Total 5 Mg 5	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	27	3	Total 3	Mg 3	0	0
58	28	1	Total 1	Mg 1	0	0
58	2a	230	Total 230	Mg 230	0	0
58	2d	2	Total 2	Mg 2	0	0
58	2e	1	Total 1	Mg 1	0	0
58	2f	2	Total 2	Mg 2	0	0
58	2g	1	Total 1	Mg 1	0	0
58	2i	1	Total 1	Mg 1	0	0
58	2j	1	Total 1	Mg 1	0	0
58	2k	1	Total 1	Mg 1	0	0
58	2l	4	Total 4	Mg 4	0	0
58	2n	1	Total 1	Mg 1	0	0
58	2q	2	Total 2	Mg 2	0	0
58	2r	1	Total 1	Mg 1	0	0
58	2t	1	Total 1	Mg 1	0	0
58	2v	4	Total 4	Mg 4	0	0
58	2w	1	Total 1	Mg 1	0	0
58	2x	6	Total 6	Mg 6	0	0
58	2y	1	Total 1	Mg 1	0	0

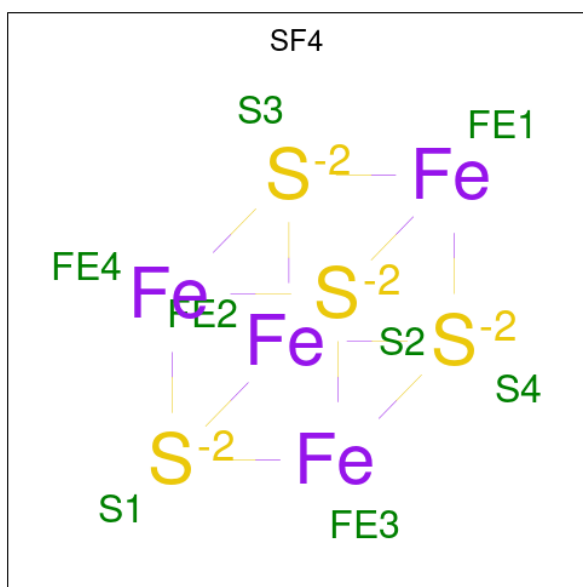
- Molecule 59 is POTASSIUM ION (CCD ID: K) (formula: K).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1A	1	Total K 1 1	0	0
59	2A	1	Total K 1 1	0	0

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

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1Y	1	Total Zn 1 1	0	0
60	14	1	Total Zn 1 1	0	0
60	15	1	Total Zn 1 1	0	0
60	16	1	Total Zn 1 1	0	0
60	19	1	Total Zn 1 1	0	0
60	1n	1	Total Zn 1 1	0	0
60	2Y	1	Total Zn 1 1	0	0
60	24	1	Total Zn 1 1	0	0
60	25	1	Total Zn 1 1	0	0
60	26	1	Total Zn 1 1	0	0
60	29	1	Total Zn 1 1	0	0
60	2n	1	Total Zn 1 1	0	0

- Molecule 61 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe₄S₄).



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

- Molecule 62 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	1A	1886	Total	O	0	0
			1886	1886		
62	1B	61	Total	O	0	0
			61	61		
62	1D	28	Total	O	0	0
			28	28		
62	1E	29	Total	O	0	0
			29	29		
62	1F	15	Total	O	0	0
			15	15		
62	1G	3	Total	O	0	0
			3	3		
62	1H	2	Total	O	0	0
			2	2		
62	1I	1	Total	O	0	0
			1	1		
62	1N	4	Total	O	0	0
			4	4		
62	1O	4	Total	O	0	0
			4	4		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	1P	23	Total 23	O 23	0	0
62	1Q	8	Total 8	O 8	0	0
62	1R	16	Total 16	O 16	0	0
62	1S	5	Total 5	O 5	0	0
62	1T	8	Total 8	O 8	0	0
62	1U	10	Total 10	O 10	0	0
62	1V	11	Total 11	O 11	0	0
62	1W	6	Total 6	O 6	0	0
62	1X	7	Total 7	O 7	0	0
62	1Y	1	Total 1	O 1	0	0
62	1Z	1	Total 1	O 1	0	0
62	10	10	Total 10	O 10	0	0
62	11	12	Total 12	O 12	0	0
62	12	3	Total 3	O 3	0	0
62	13	4	Total 4	O 4	0	0
62	14	1	Total 1	O 1	0	0
62	15	7	Total 7	O 7	0	0
62	16	2	Total 2	O 2	0	0
62	17	11	Total 11	O 11	0	0
62	18	11	Total 11	O 11	0	0
62	1a	308	Total 308	O 308	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	1b	1	Total 1	O 1	0	0
62	1e	1	Total 1	O 1	0	0
62	1f	1	Total 1	O 1	0	0
62	1i	1	Total 1	O 1	0	0
62	1l	7	Total 7	O 7	0	0
62	1m	2	Total 2	O 2	0	0
62	1o	1	Total 1	O 1	0	0
62	1q	2	Total 2	O 2	0	0
62	1u	1	Total 1	O 1	0	0
62	1v	5	Total 5	O 5	0	0
62	1w	8	Total 8	O 8	0	0
62	1x	6	Total 6	O 6	0	0
62	1z	1	Total 1	O 1	0	0
62	1y	1	Total 1	O 1	0	0
62	2A	1000	Total 1000	O 1000	0	0
62	2B	22	Total 22	O 22	0	0
62	2D	24	Total 24	O 24	0	0
62	2E	9	Total 9	O 9	0	0
62	2F	15	Total 15	O 15	0	0
62	2N	1	Total 1	O 1	0	0
62	2O	2	Total 2	O 2	0	0

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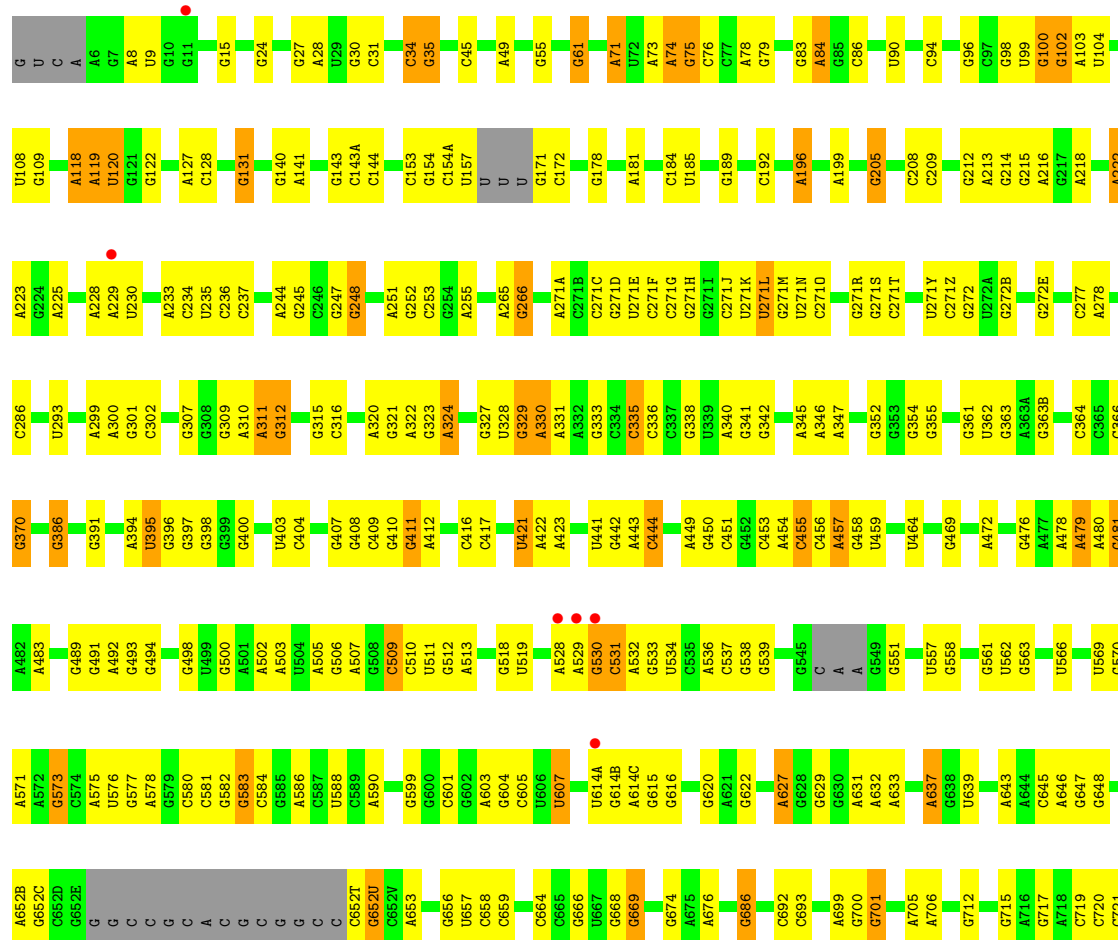
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	2P	11	Total 11	O 11	0	0
62	2Q	1	Total 1	O 1	0	0
62	2R	3	Total 3	O 3	0	0
62	2T	5	Total 5	O 5	0	0
62	2U	3	Total 3	O 3	0	0
62	2W	3	Total 3	O 3	0	0
62	2X	4	Total 4	O 4	0	0
62	2Y	1	Total 1	O 1	0	0
62	2Z	1	Total 1	O 1	0	0
62	20	5	Total 5	O 5	0	0
62	21	13	Total 13	O 13	0	0
62	25	2	Total 2	O 2	0	0
62	27	1	Total 1	O 1	0	0
62	28	3	Total 3	O 3	0	0
62	29	1	Total 1	O 1	0	0
62	2a	198	Total 198	O 198	0	0
62	2d	1	Total 1	O 1	0	0
62	2e	1	Total 1	O 1	0	0
62	2j	1	Total 1	O 1	0	0
62	2l	4	Total 4	O 4	0	0
62	2p	2	Total 2	O 2	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	2r	1	Total	O	0	0
			1	1		
62	2t	1	Total	O	0	0
			1	1		
62	2v	2	Total	O	0	0
			2	2		
62	2w	3	Total	O	0	0
			3	3		
62	2x	5	Total	O	0	0
			5	5		

C2292	C2195	G1950	G1826	G1718	C1588	A1494	G1371	A1247	G1149	A1077	A1010
G2302	A2198	U1951	C1827	G1719	C1589	U1497	U1372	G1252	C1150	U1078	G1011
A2305	A2199	A1952	G1828	U1720	G1594	U1504	A1373	A1253	C1151	C1079	U1012
G2307	C2200	U1955	G1847	A1722	G1595	C1505	A1379	G1256	C1153	U1081	U1013
G2308	U2203	C2061	U1847	A1739	U1602	C1506	G1380	A1256	G1154	U1082	U1014
U2312	C2205	A2062	U1851	G1740	C1607	A1507	A1384	G1264	A1155	U1083	G1015
G2315	G2206	U1963	U1852	A1741	A1608	A1508	G1385	A1265	A1156	A1084	G1016
G2316	C2207	G1964	G1857	G1753	A1609	A1509A	U1394	G1266	U1164	A1085	G1022
G2317	A2208	C2065	G1858	G1753	A1610	A1509B	A1395	G1267	U1165	A1086	U1023
G2318	G2219	U1967	U1864	G1756	A1614	U1512	U1396	A1268	U1167	A1088	G1024
G2319	G2222	G1968	U1865	U1757	A1615	U1513	C1399	G1271	G1168	U1089	G1025
A2320	A2225	A1970	G1866	G1759	C1615	U1514	C1513	A1272	U1090	U1026	U1027
G2325	G2226	A1971	A1876	A1762	G1633	G1515	U1405	A1273	C1092	A1028	
G2326	A2227	A1972	A1877	G1763	G1634	U1518	U1406	A1274	G1093	U1033	
G2327	G2228	G1984	G1878	G1764	G1636	U1519	C1407	A1275	U1094	G1034	
A2328	U2233	G1992	C1882	G1770	A1641	G1520	G1416	A1278	U1177	U1095	
G2329	G2234	U1993	G1883	A1773	G1642	A1528	C1417	G1281	C1178	U1096	
G2330	G2235	G1994	G1889	U1778	G1647	A1528A	G1418	A1287	C1179	G1038	
G2331	G2236	U1995	A1890	U1779	C1648	U1528A	A1419	A1287	C1180	G1039	
A2332	U2237	G1996	G1891	A1781	G1651	G1532	G1420	C1290	U1101	G1040	
G2333	G2238	U1997	G1892	U1781	G1651	G	G1421	G1291	C1102	C1041	
G2334	A2239	G1998	C1892	A1782	G1651	U	G1422	G1292	A1103	G1042	
A2335	C2240	U1999	G1899	G1783	G1651	A	A1423	G1293	C1104	C1043	
G2336	U2243	G2002	A1900	A1784	A1664	C	G1424	U1294	U1105	A1044	
G2337	U2244	G2003	A1901	A1785	A1664	G1537	G1425	C1295	U1106	A1045	
G2338	A2247	G2004	G1903	A1786	A1664	G1538	C1430	G1296	C1109	A1046	
A2339	C2248	A2013	G1906	A1786	A1668	G1539	U1431	U1300	G1110	G1047	
G2340	G2251	A2014	U1911	C1790	A1669	A1542	U1432	A1301	A1111	G1051	
G2341	G2252	A2015	U1912	A1791	U1671	A1546	U1433	A1302	G1112	C1052	
A2342	G2253	A2016	A1913	U1794	U1672	C1546	G1441	G1303	U1113	G1053	
G2343	G2254	A2017	C1914	C1795	U1673	C1547	G1442	C1315	G1114	A1054	
G2344	G2255	A2018	U1915	U1796	C1674	C1548	G1443	G1332	G1115	G1055	
A2345	G2256	A2019	U1916	C1797	C1675	A1554	A1445	G1332	C1116	G1056	
G2346	G2257	A2020	U1917	U1798	A1676	A1555	G1446	G1338	C1118	A1057	
A2347	G2258	A2021	A1918	G1799	A1677	A1558	A1449	U1341	C1119	G1059	
G2348	G2259	A2022	C1920	G1800	G1682	A1558	G1450	A1342	G1125	U1060	
G2349	G2260	A2023	G1921	A1801	C1683	A1566	U1451	A1342	A1126	U	
G2350	G2261	A2024	G1922	A1802	C1684	A1567	U1452	C1345	A1132	G1062	
G2351	G2262	A2025	G1923	A1803	C1685	A1568	U1453	G1346	U1133	C1063	
G2352	G2263	A2026	G1924	C1804	C1686	A1569	G1454	U1352	C1135	U1065	
A2353	G2264	A2027	G1925	A1810	U1687	A1572	A1460	A1353	G1136	U1066	
G2354	G2265	A2028	G1926	G1811	U1688	A1572	C1467	A1353	G1137	A1067	
A2355	G2266	A2029	G1927	G1812	U1689	A1578	A1477	A1354	G1138	G1068	
G2356	A2268	A2030	G1928	G1813	U1690	U1578	A1477	G1355	G1139	A1069	
A2357	A2269	A2031	G1929	A1814	G1699	A1579	A1477	G1355	G1140	A1070	
G2358	G2270	A2032	G1930	A1815	A1700	A1580	G1482	A1359	U1141	G1071	
G2359	G2271	A2033	U1931	G1816	A1700	A1581	G1483	A1360	U1142	C1072	
A2360	G2272	A2034	G1932	U1817	G1703	C1584	A1490	G1364	A1142A	A1073	
G2361	G2273	A2035	G1933	U1818	G1703	A1584	A1490	A1365	A1143	G1074	
G2362	A2274	G2036	G1934	G1823	C1710	A1587	C1493	A1365	G1144	G1075	
G2363	G2275	G2037	A1936	G1823	C1710	A1587	C1493	A1365	G1144	G1075	
A2364	G2276	G2038	A1937	G1823	C1710	A1587	C1493	A1365	G1144	G1075	
G2365	G2277	G2039	A1938	G1823	C1710	A1587	C1493	A1365	G1144	G1075	
A2366	G2278	G2040	U1939	G1823	C1710	A1587	C1493	A1365	G1144	G1075	
G2367	G2279	G2041	C1942	G1823	C1710	A1587	C1493	A1365	G1144	G1075	
A2368	G2280	A2042	G1942	G1823	C1710	A1587	C1493	A1365	G1144	G1075	
G2369	C2283	G2043	G1942	G1823	C1710	A1587	C1493	A1365	G1144	G1075	
U2370	A2287	A2051	G1949	G1823	C1710	A1587	C1493	A1365	G1144	G1075	
G2371	G2291	G2052	G1949	G1823	C1710	A1587	C1493	A1365	G1144	G1075	

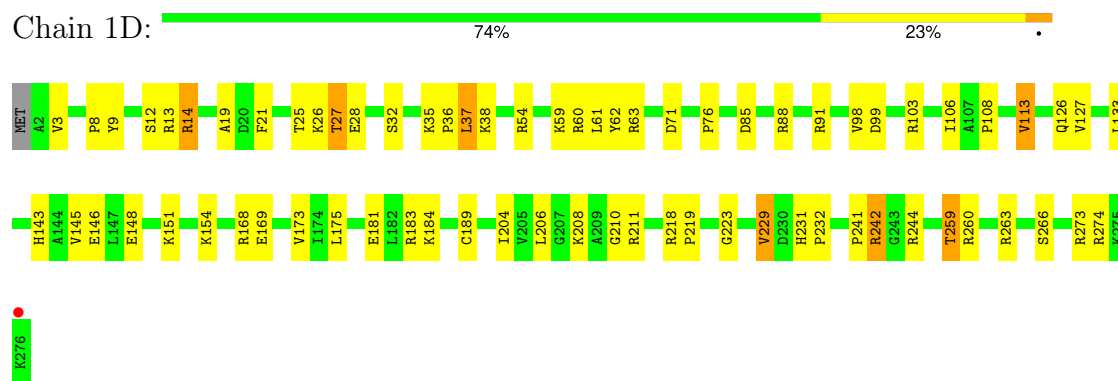


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A1877	U1757	C1451	G1380	A1262	G1186	A	C1043	C975	C889	G809	G723
G1878	G1758	A1452	A1384	U1263	G1187	C	G	G	A890	U811	U724
A1759	A1759	G1640	G1385	G1264	U1188	U	A	A	G892	C812	G725
		G1641	G1386	A1265	U1188	G	G	A	C893	G812	G726
		G1642	G1388	G1266	G1191	G	A	A	C894	A727	
C1882	A1762	C1459	G1389	U1267	G1191	U	C	C	U895	A819	G728
G1883	G1763	C1463	G1389	A1268	G1195	C	A	A	C896	A820	G729
A1884	G1764	C1464			G1195	G	A	A	C897	C731	
A1885					G1196	A	G	G	C898		
A1889	A1773	C1467	U1394	G1271	G1196	A	G	G	C899	A824	
A1890	A1780	A1545	A1395	A1272	C1196	C	C	C	A899	C825	
	G1781	C1468	U1396	U1273	U1113	C	C	C	A900	U826	U740
C1884	C1782	A1469		A1274	U1198	A	A	A	A901	U827	G741
C1895	C1782	G1470	G1400	A1275	U1199	G	G	G	C902	U828	G742
	A1783	A1471	G1401	A1276	C1200	G	G	G	C903		
	A1784	A1472	G1402	G1277	C1201	G	G	G	C904	G831	G743
	A1785	G1473	A1278	A1278	G1202	G	G	G	C905	G744	
A1900	A1786	C1403	C1404	A1287	G1203	G	G	G	U907	A745	
		A1477	U1405	U1288	G1204	G	G	G	C908	A746	
		G1478	U1406	G1295	A1204	U	U	U	C909	U747	
		G1479	G1407	U1288	U1206	G	G	G	C910	U748	
		G1482	C1409	G1296	A1210	G	G	G	A911		
		G1486	G1410	U1300	U1211	G	G	G	C912		
		G1487	C1411	A1301	G1218	C	C	C	U913	A752	
		G1488	A1412	A1302	U1219	G	G	G	A1000	C753	
		U1489	G1413	G1303	A1220	U	U	U	A1001		
		A1490			C1221	C	C	C	U1002		
			G1416	U1313	G1222	G	G	G	C914	G760	
			G1417	U1314	C1221A	C	C	C	C915	A761	
			A1418	G1314	G1223	G	G	G	G916		
			A1419	U1323	C1224	G	G	G	A917		
			U1420	G1324	U1442	C	C	C	A918	A764	
			A1496	G1421	A142A	G	G	G	G919		
			G1422	G1325	A1226	C	C	C	G920	G771	
			G1423	U1326	G1229	G	G	G	G921	C877	
			G1424	G1327	G1230	U	U	U	U922	U773	
				G1328	G1231	C	C	C	C923	A774	
			A1427	U1329		G	G	G	C924	G776	
			G1428			C	C	C	G927		
			G1429	A1336	G1235	G	G	G	G928	U779	
			C1430	G1337	U1236	U	U	U	G932	G780	
			U1431		A1237	C	C	C	A1020	A781	
			C1432	C1345	G1238	G	G	G	A1021	A782	
			U1433		G1239	C	C	C	G1022	A783	
			A1434	C1351	U1240	G	G	G	U1023	A784	
			G1435	U1352	A1241	U	U	U	G938	G785	
			G1436	A1353	A1242	C	C	C	G939		
			C1437	A1354	G1243	G	G	G	A945	C791	
					G1244	U	U	U	G946	G792	
			G1442	A1359	A1247	C	C	C	G947	A793	
			G1443	A1360	G1248	G	G	G	G948		
			G1444	G1364		U	U	U	C955	C796	
			C1445A	A1365	A1253	A	A	A	G1034	C797	
			G1446		U1254	G	G	G	U1035	G798	
			G1447	G1368	U1255	C	C	C	G1036		
			G1448		G1256	G	G	G	U958	A802	
			A1449	U1372		A	A	A	A959		
			G1450		G1260	C	C	C	A960	C884	
						C	C	C	C961	C885	
						U	U	U	G1039	G806	
									C1041	U807	

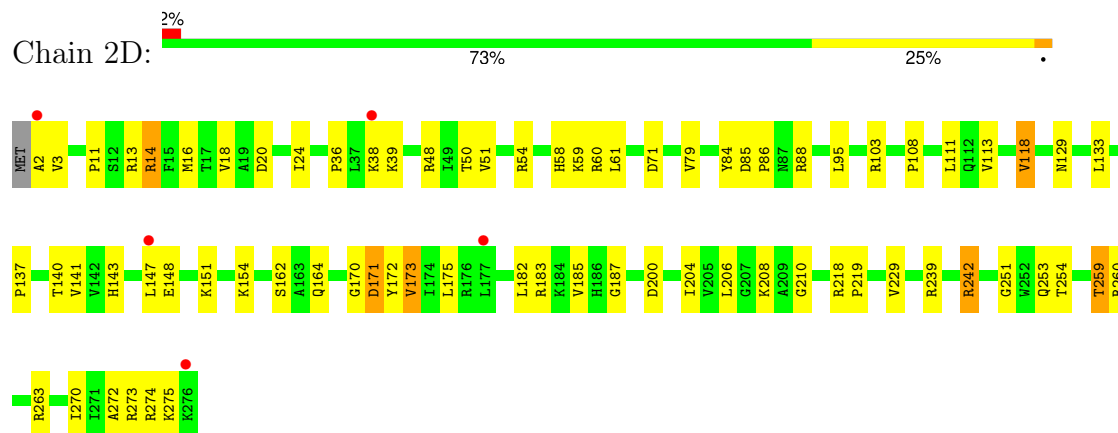
- Molecule 2: 5S Ribosomal RNA



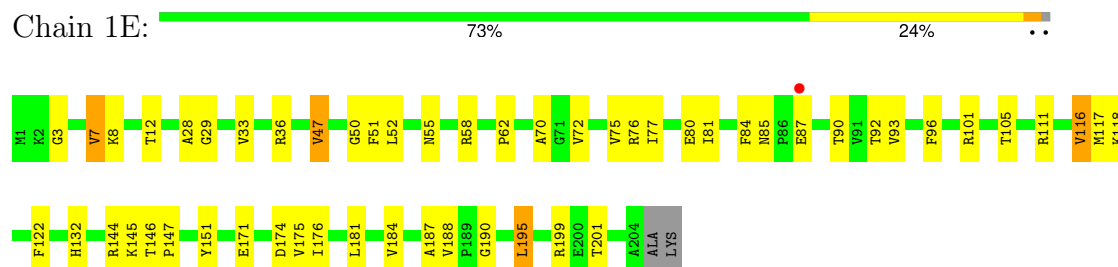
- Molecule 3: 50S ribosomal protein L2



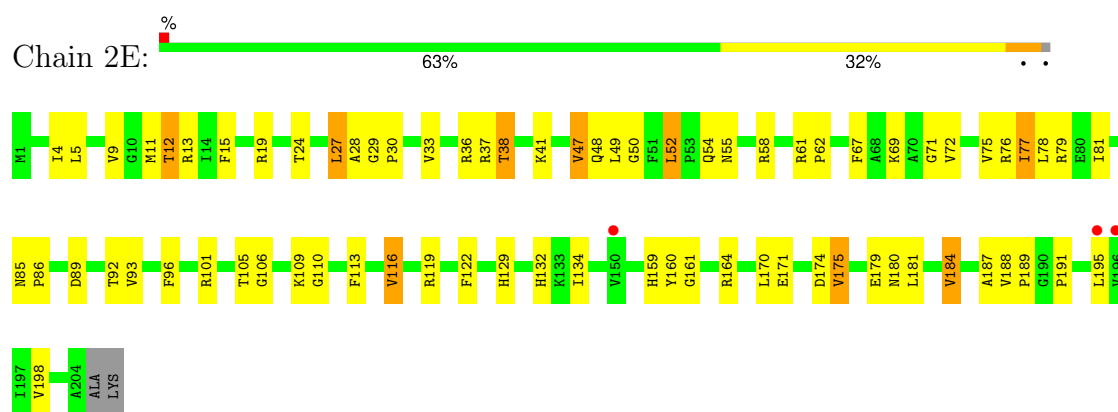
- Molecule 3: 50S ribosomal protein L2



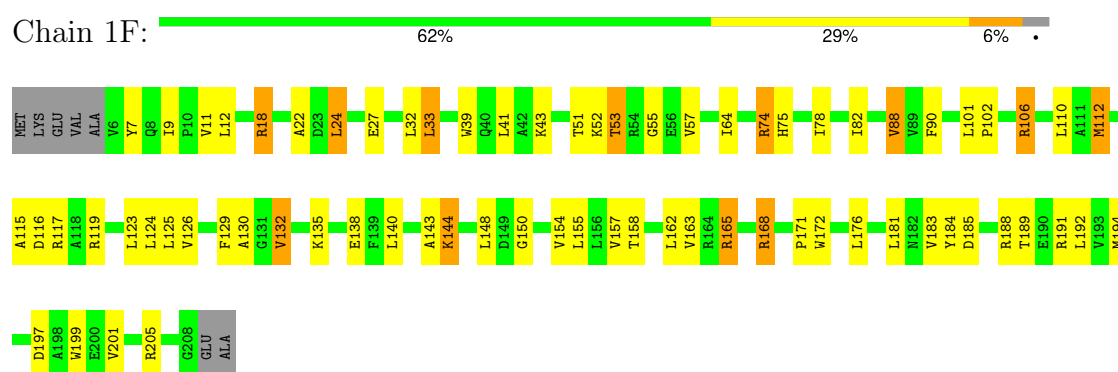
- Molecule 4: 50S ribosomal protein L3



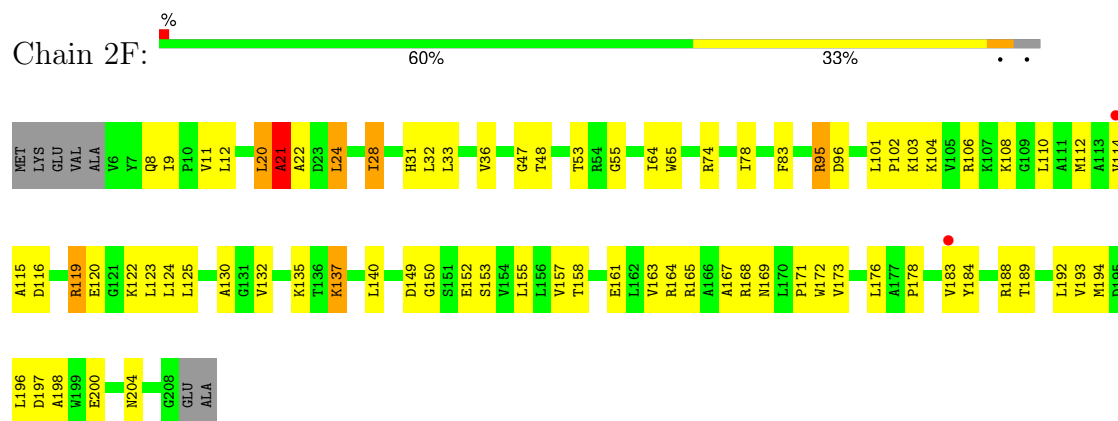
- Molecule 4: 50S ribosomal protein L3



• Molecule 5: 50S ribosomal protein L4

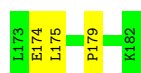


• Molecule 5: 50S ribosomal protein L4

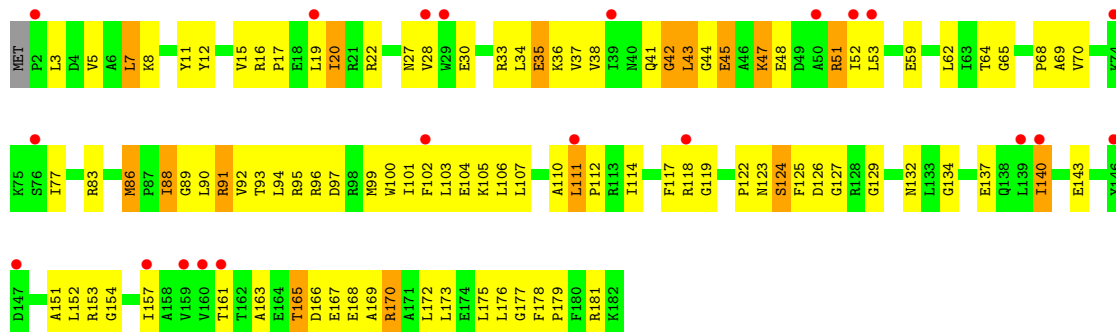
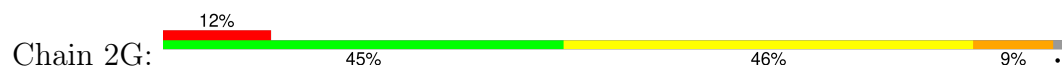


• Molecule 6: 50S ribosomal protein L5

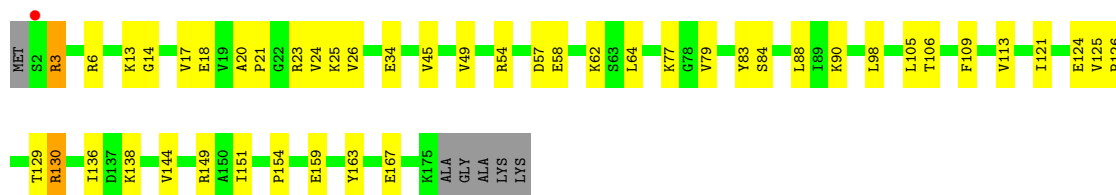
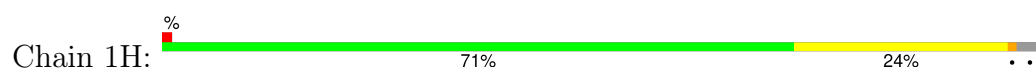




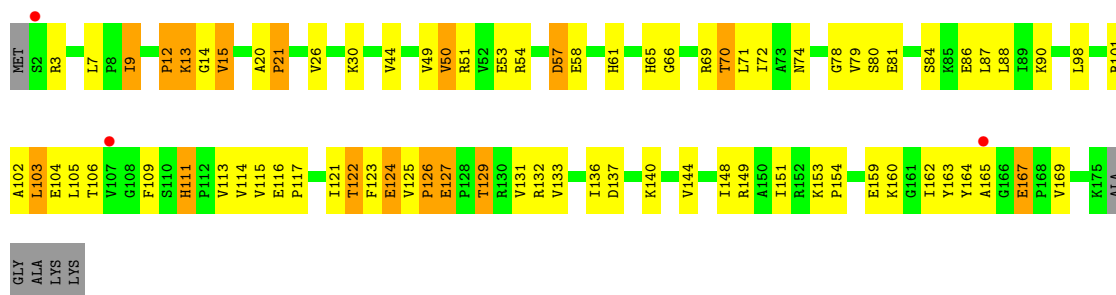
• Molecule 6: 50S ribosomal protein L5



• Molecule 7: 50S ribosomal protein L6



• Molecule 7: 50S ribosomal protein L6

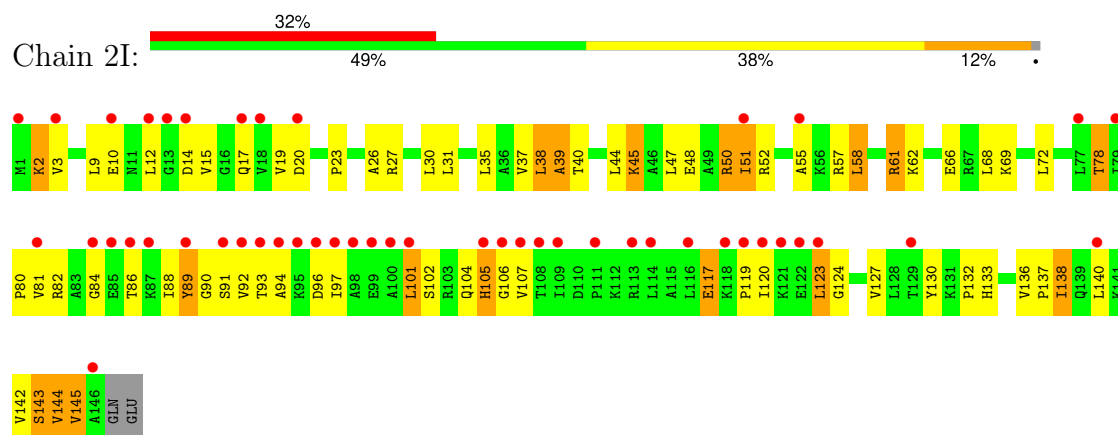


• Molecule 8: 50S ribosomal protein L9

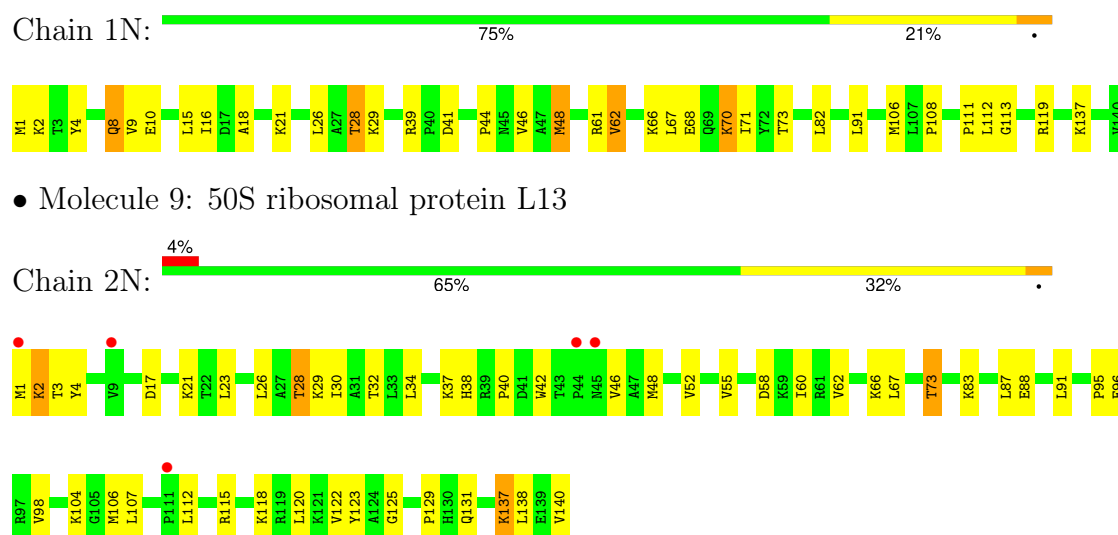




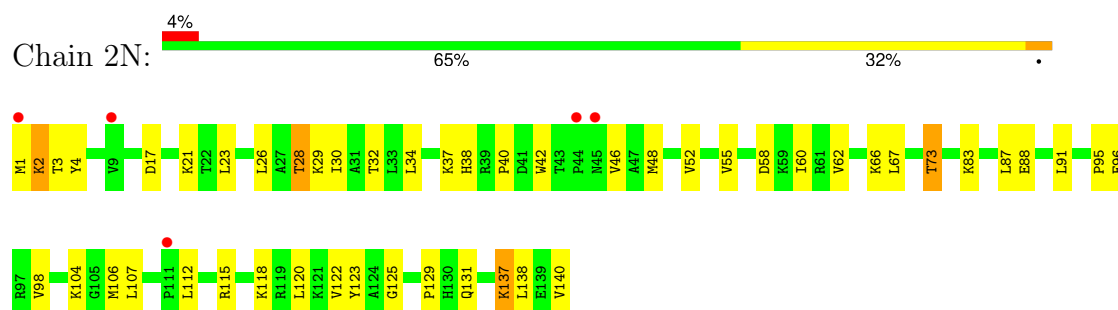
• Molecule 8: 50S ribosomal protein L9



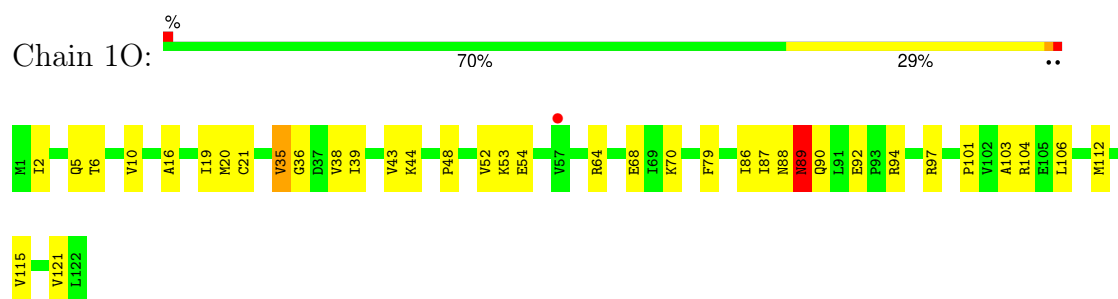
• Molecule 9: 50S ribosomal protein L13



• Molecule 9: 50S ribosomal protein L13

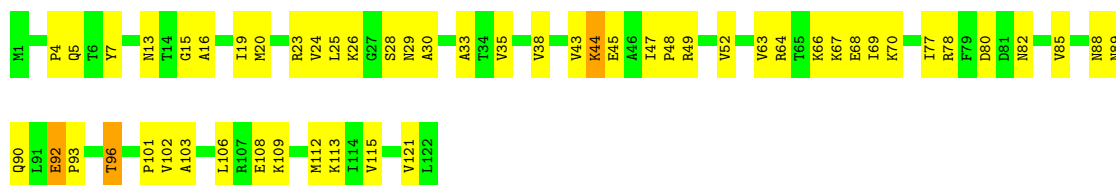


• Molecule 10: 50S ribosomal protein L14



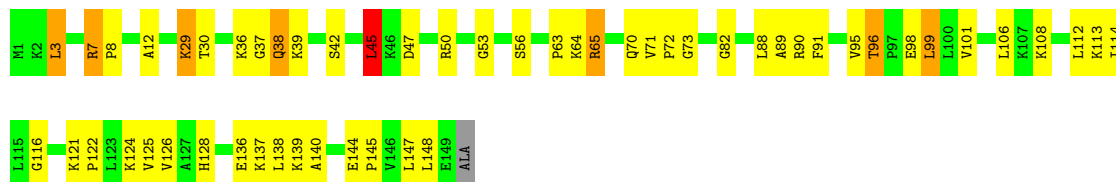
• Molecule 10: 50S ribosomal protein L14





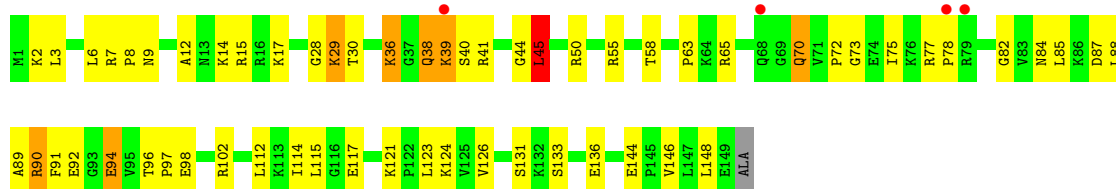
- Molecule 11: 50S ribosomal protein L15

Chain 1P: 63% 31% 5% ..



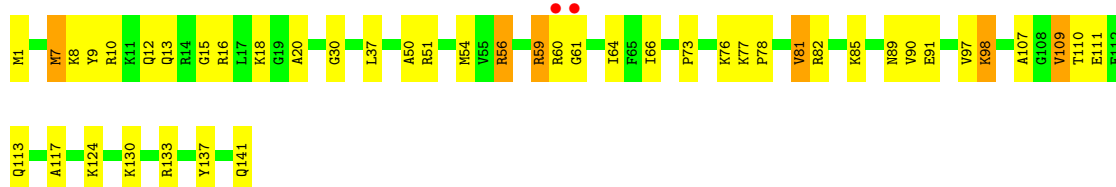
- Molecule 11: 50S ribosomal protein L15

Chain 2P: 3% 60% 34% 5% ..



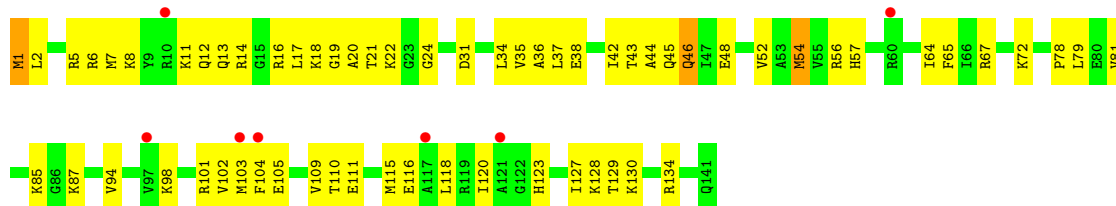
- Molecule 12: 50S ribosomal protein L16

Chain 1Q: 68% 28% 5% ..



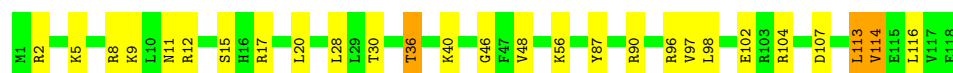
- Molecule 12: 50S ribosomal protein L16

Chain 2Q: 5% 55% 43% 5% ..



- Molecule 13: 50S ribosomal protein L17

Chain 1R:  77% 20% .



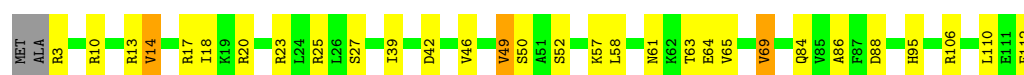
- Molecule 13: 50S ribosomal protein L17

Chain 2R:  2% 74% 25% .



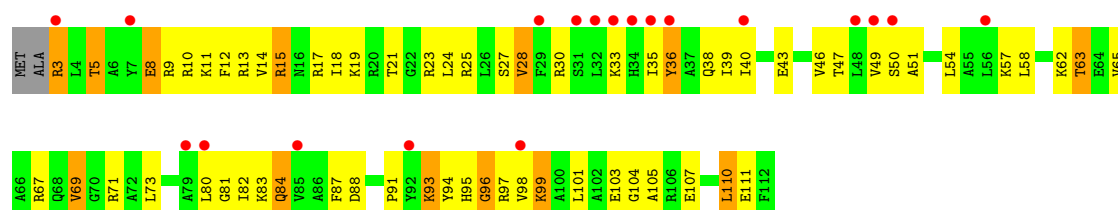
- Molecule 14: 50S ribosomal protein L18

Chain 1S:  71% 24% . .



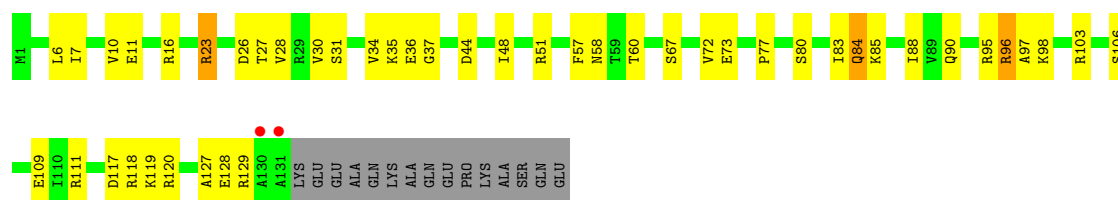
- Molecule 14: 50S ribosomal protein L18

Chain 2S:  17% 41% 46% 12% .



- Molecule 15: 50S ribosomal protein L19

Chain 1T:  % 58% 29% 10% .



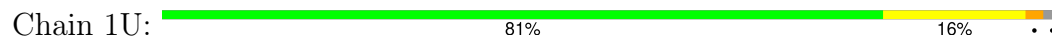
- Molecule 15: 50S ribosomal protein L19

Chain 2T:  % 55% 34% 10% .

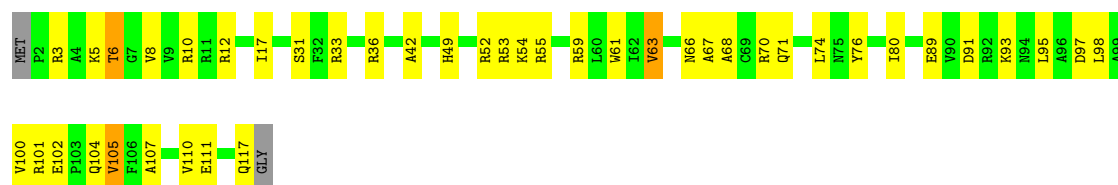




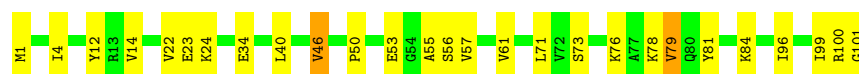
- Molecule 16: 50S ribosomal protein L20



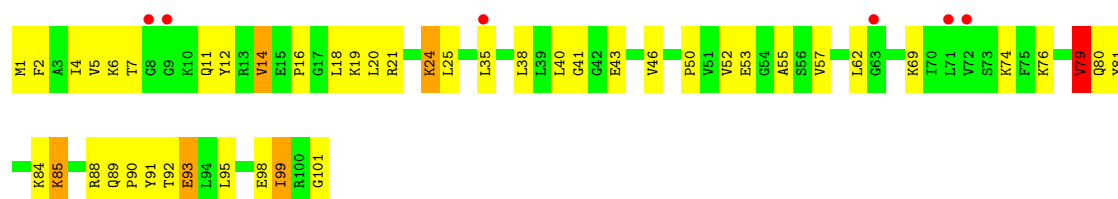
- Molecule 16: 50S ribosomal protein L20



- Molecule 17: 50S ribosomal protein L21



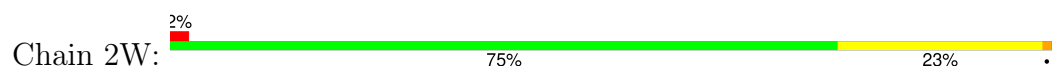
- Molecule 17: 50S ribosomal protein L21



- Molecule 18: 50S ribosomal protein L22

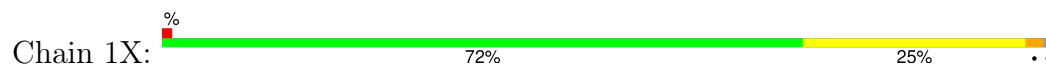


- Molecule 18: 50S ribosomal protein L22

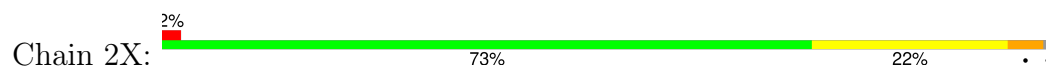




- Molecule 19: 50S ribosomal protein L23



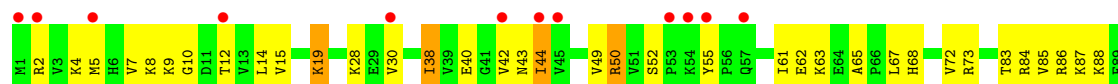
- Molecule 19: 50S ribosomal protein L23



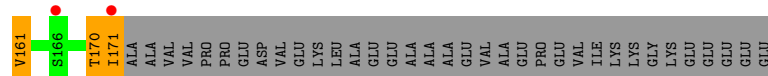
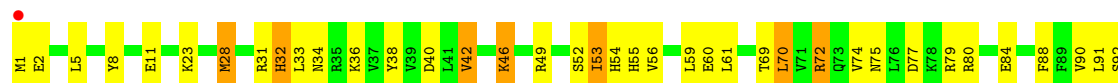
- Molecule 20: 50S ribosomal protein L24



- Molecule 20: 50S ribosomal protein L24



- Molecule 21: 50S ribosomal protein L25



- Chain 12:  %



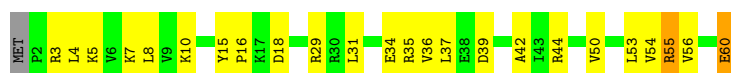
- Molecule 24: 50S ribosomal protein L29

Chain 22: 58% 36% . .



- Molecule 25: 50S ribosomal protein L30

Chain 13: 58% 37% . .



- Molecule 25: 50S ribosomal protein L30

Chain 23: 62% 33% . .



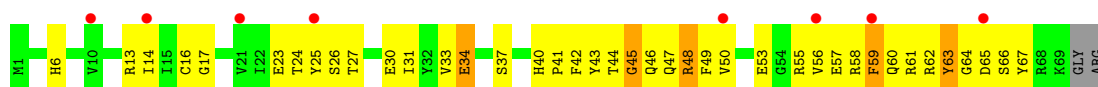
- Molecule 26: 50S ribosomal protein L31

Chain 14: 11% 51% 38% 6% . .



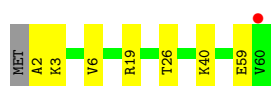
- Molecule 26: 50S ribosomal protein L31

Chain 24: 11% 41% 49% 7% .



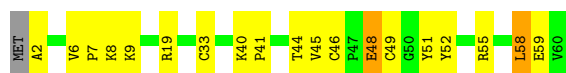
- Molecule 27: 50S ribosomal protein L32

Chain 15: 2% 87% 12% .

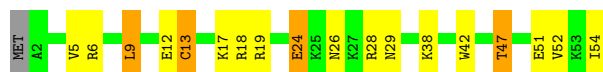


- Molecule 27: 50S ribosomal protein L32

Chain 25: 67% 28% . .



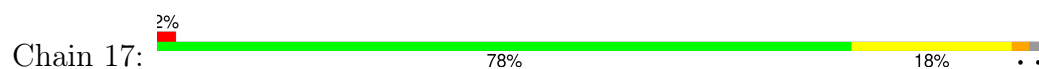
- Molecule 28: 50S ribosomal protein L33



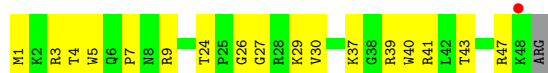
- Molecule 28: 50S ribosomal protein L33



- Molecule 29: 50S ribosomal protein L34



- Molecule 29: 50S ribosomal protein L34



- Molecule 30: 50S ribosomal protein L35

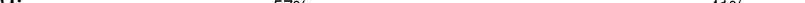


- Molecule 30: 50S ribosomal protein L35

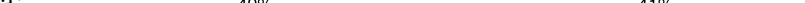


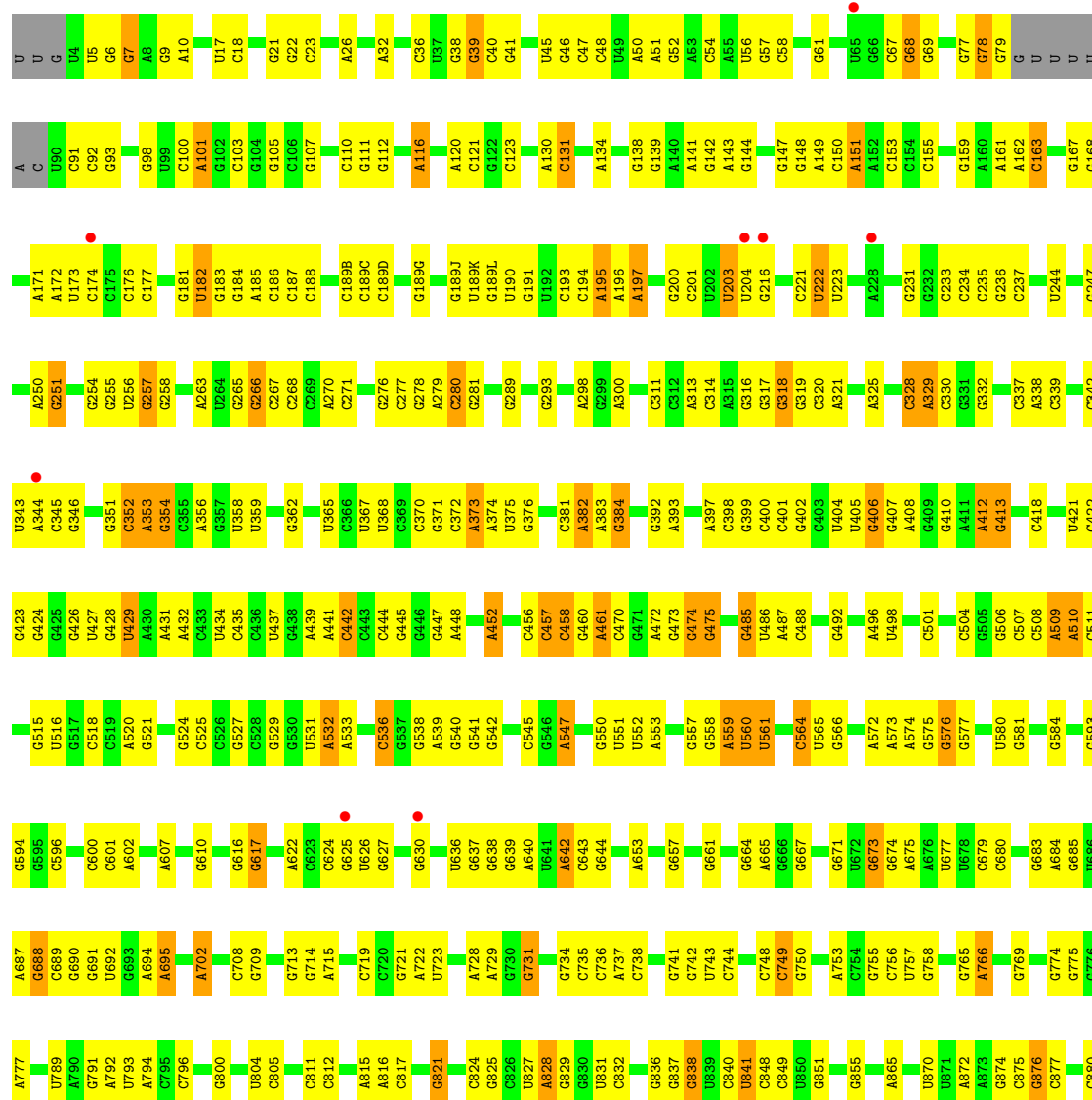
- Molecule 31: 50S ribosomal protein L36

A diagram of a protein structure represented as a horizontal bar. The bar is divided into segments of different colors: green, yellow, green, yellow, green, yellow, and green. The segments are labeled with residue numbers: M1 (green), K15 (yellow), V16 (green), I17 (yellow), K31 (green), K31 (yellow), and G37 (green). The labels are placed below the corresponding segments.

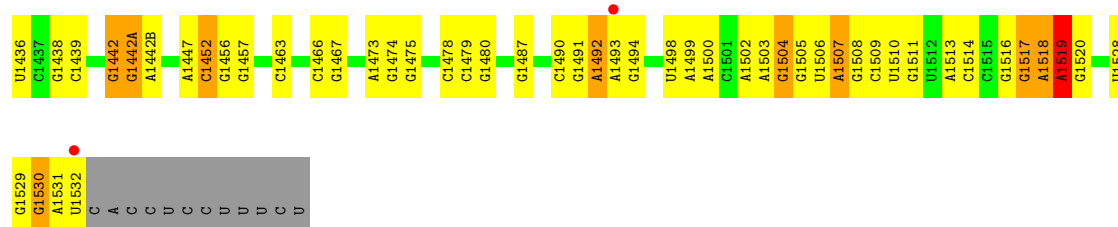
- Chain 29:  8% 57% 41%

Category	Count
M1	1
K2	1
S6	1
V7	1
K15	1
V16	1
I17	1
R18	1
G21	1
R22	1
V23	1
Y24	1
V25	1
I26	1
C27	1
E28	1
K33	1
Q34	1
R35	1
Q36	1
G37	1

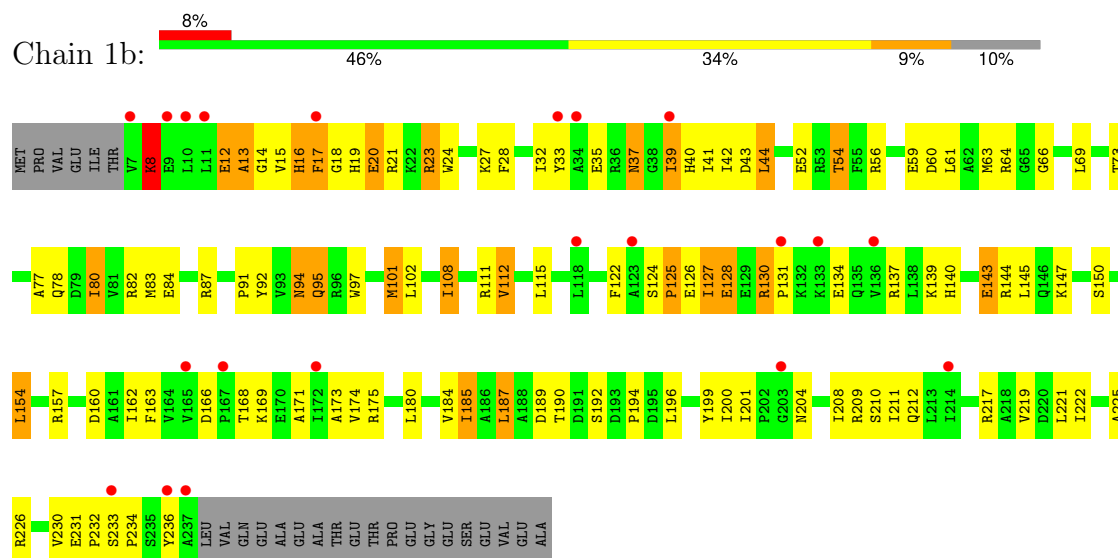
- Chain 1a: 



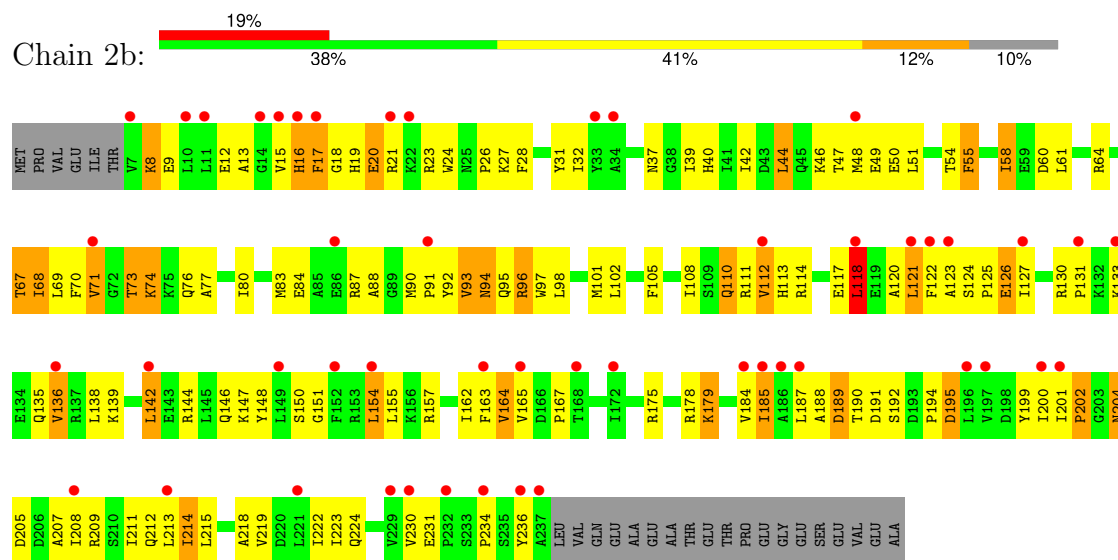
G1292	G1293	A1227	U1159	C1097	G1030C	C972	A901	A777	G688	C599	A535	A452	G384
G1294	G1295	C1228	G1160	C1098	A1030D	G973	A902	A778	G689	C600	C536	A453	C395
G1296	G1297	G1233	C1161	G1099	G1031	A974	G902	A779	G691	A602	G537	A454	G388
U1363A	U1364	G1234	C1162	C1100	G1032	A975	G903	A780	G692	A603	G538	A455	A399
G1365	C1297	U1235	G1166	A1101	G1033	G976	U911	A781	G693	U603	A539	A456	C390
C1298	C1298	A1236	A1170	A1102	G1034	A977	C912	A782	G694	G460	G540	A457	G391
A1239	A1239	G1237	A1171	C1103	A1035	A978	G913	A783	A607	A461	G541	A458	G392
A1239	A1239	G1237	A1172	G1104	G1036	C979	A913	A784	A608	C470	G542	A459	A393
U1301	U1301	G1171	A1173	A1105	C1037	C980	A914	A785	A609	A472	G543	A460	G396
U1302	U1302	G1172	G1173	G1106	C1038	U981	A915	A786	G703	A473	G544	A461	A397
G1303	G1303	G1173	A1176	C1107	C1039	U982	G916	A787	G704	A474	G545	A462	A398
G1304	G1304	G1174	A1177	G1108	U1040	A983	G917	A788	C707	G474	G546	A463	G399
G1305	G1305	G1175	G1177	C1109	C1043	C984	A918	A789	C708	U480	A547	A464	A397
A1306	A1306	G1178	G1178	A1110	U1044	C985	A919	A790	G709	U481	A548	A465	A398
A1374	A1374	A1179	A1179	A1111	C1045	C986	A920	A791	G710	G481	A549	A466	A401
U1376	U1376	G1180	A1180	C1112	A1046	A987	U921	G791	G711	A482	A550	A467	G402
A1377	A1377	G1181	G1181	C1113	U1049	C988	U922	A792	G712	C483	C551	A468	U403
G1380	G1380	C1248	C1182	C1114	G1050	C989	A923	A793	G713	G484	C552	A469	U404
U1381	U1381	A1250	A1183	C1115	G1051	C990	A924	A794	G714	G485	C553	A470	U405
C1382	C1382	A1251	A1184	C1116	G1052	U992	G925	A795	G715	U486	C554	A471	U406
C1383	C1383	G1252	G1185	C1117	A1054	U993	G926	A796	G716	A487	C555	A472	G407
C1384	C1384	G1253	G1186	C1118	A1055	A994	U927	A797	G717	C488	C556	A473	G408
G1385	G1385	C1254	C1187	C1119	A1056	A995	C931	A798	G718	G489	C557	A474	G409
A1386	A1386	G1255	G1188	C1120	G1057	U996	C932	A799	G719	G490	C558	A475	G410
G1387	G1387	A1256	G1189	U1122	G1058	A997	C933	A800	U723	G491	C559	A476	A411
A1388	A1388	U1257	A1191	A1123	C1059	U1000	G934	A801	A728	A496	C560	A477	A412
C1389	C1389	C1258	C1192	G1124	G1060	A1001	A935	A802	A729	A497	C561	A478	A413
C1390	C1390	G1259	G1193	U1125	C1061	G1001A	A936	A803	G730	A498	C562	A479	A414
U1391	U1391	C1260	G1194	U1126	G1062	G1002	A937	A804	G731	A499	C563	A480	A415
G1392	G1392	A1261	C1195	C1127	C1063	U1003	A938	A805	G732	A500	C564	A481	G416
A1396	A1396	C1262	U1196	C1128	G1064	G1004	A939	A806	G733	A501	C565	A482	G417
C1397	C1397	C1263	U1199	C1129	U1065	A1004	G940	A807	G734	A502	C566	A483	C418
C1398	C1398	G1264	C1200	G1131	A1066	C1006	C941	A808	G735	A503	C567	A484	C419
C1399	C1399	G1265	A1201	C1132	A1067	C1007	G942	A809	G736	A504	C568	A485	U420
U1400	U1400	C1267	G1202	G1133	G1068	C1008	A946	A810	A737	A505	C569	A486	G421
G1401	G1401	G1270	C1203	U1134	G1071	G1009	G947	A811	G741	A506	C570	A487	G422
C1402	C1402	G1271	A1204	U1135	U1072	G1010	G948	A812	G742	A507	C571	A488	G423
G1403	G1403	G1272	U1205	C1137	U1073	G1011	A949	A813	G743	A508	C572	A489	G424
G1404	G1404	G1273	G1206	U1138	C1075	G1012	U950	A814	G744	A509	C573	A490	G425
U1406	U1406	G1274	G1207	G1139	G1076	G1013	G951	A815	G745	A510	C574	A491	G426
C1407	C1407	A1275	C1208	G1140	G1077	A1014	U952	A816	C746	A511	C575	A492	U427
G1342	G1342	G1276	C1209	C1141	U1078	A1015	G953	A817	A747	A512	C576	A493	G428
G1343	G1343	C1277	G1210	G1142	G1079	G1016	U957	A818	G748	A513	C577	A494	U429
U1344	U1344	U1278	U1211	G1143	A1080	C1017	U958	A819	G749	A514	C578	A495	A430
A1346	A1346	A1279	U1212	G1144	G1081	C1018	A959	A820	C750	A515	C579	A496	A431
G1347	G1347	A1280	A1213	C1145	G1082	U1020	A960	A821	G751	A516	C580	A497	A432
A1350	A1350	U1281	G1214	A1146	U1083	G1021	U961	A822	C752	A517	C581	A498	A433
U1351	U1351	C1282	G1215	C1147	G1084	G1022	C962	A823	G753	A518	C582	A499	C434
C1352	C1352	G1283	G1216	U1148	U1085	G1023	G963	A824	G754	A519	C583	A500	C435
G1353	G1353	A1284	C1217	C1149	U1086	G1024	A964	A825	G755	A520	C584	A501	G438
C1354	C1354	A1285	U1218	U1150	G1087	U1025	A965	A826	G756	A521	C585	A502	A439
G1355	G1355	A1286	U1219	A1151	G1089	G1026	A966	A827	G757	A522	C586	A503	A440
G1356	G1356	A1287	C1152	C1153	A1092	C1028	C967	A828	U758	A523	C587	A504	G439
U1427	U1427	C1223	G1222	C1154	A1093	C1029	A968	A829	G759	A524	C588	A505	A441
A1428	A1428	G1224	G1156	U1157	G1094	U1029	A969	A830	G760	A525	C589	A506	C442
U1358	U1358	A1225	A1157	C1030A	U1095	G1030A	C970	A831	G761	A526	C590	A507	C443
G1435	G1435	G1291	C1226	C1030B	C1096	C1030B	G971	A832	G762	A527	C591	A508	C444



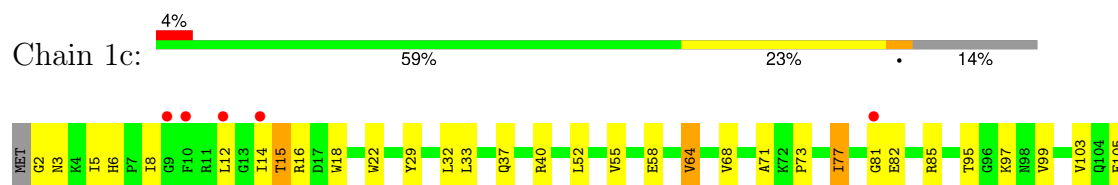
• Molecule 33: 30S ribosomal protein S2

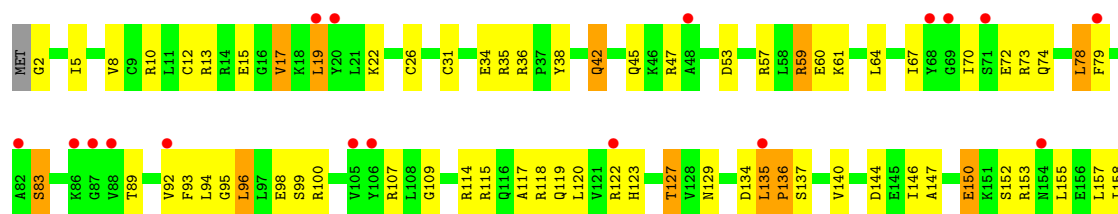


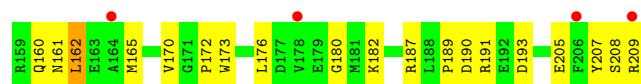
• Molecule 33: 30S ribosomal protein S2



• Molecule 34: 30S ribosomal protein S3



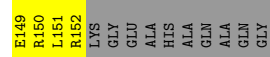
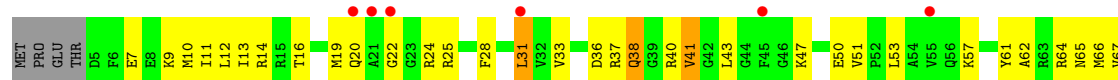




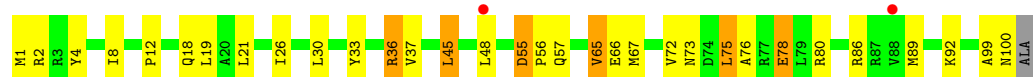
- Molecule 36: 30S ribosomal protein S5



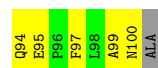
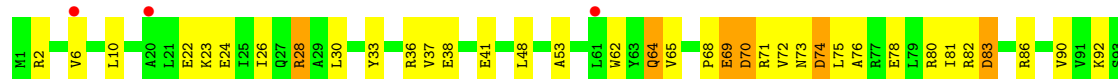
- Molecule 36: 30S ribosomal protein S5



- Molecule 37: 30S ribosomal protein S6

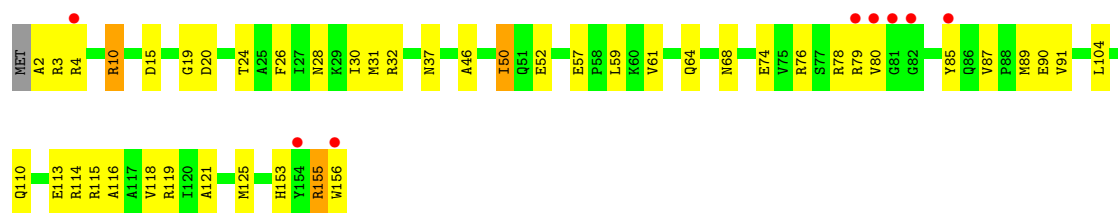


- Molecule 37: 30S ribosomal protein S6

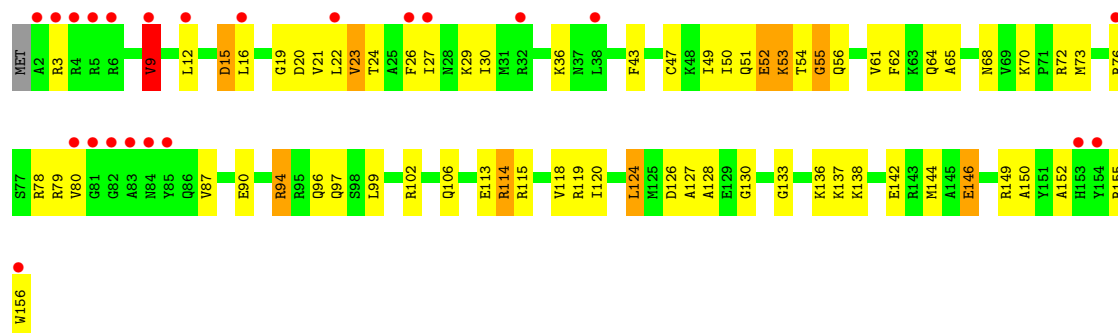


- Molecule 38: 30S ribosomal protein S7

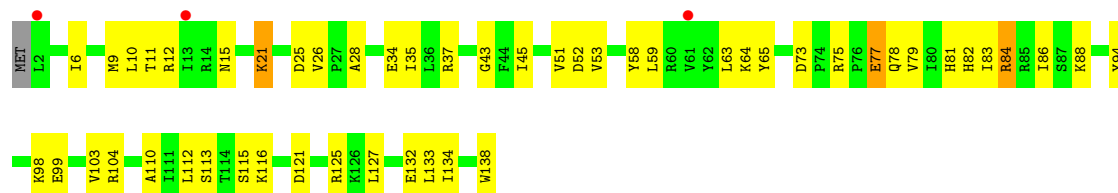




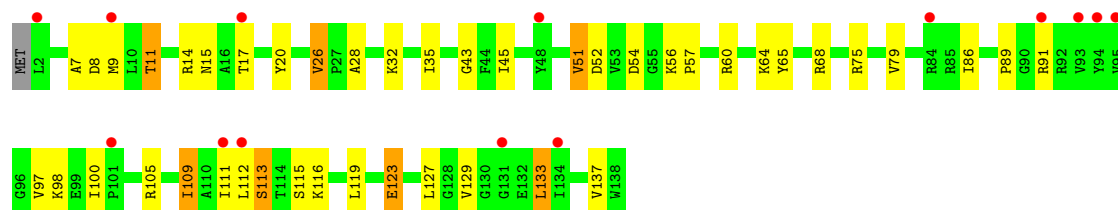
• Molecule 38: 30S ribosomal protein S7



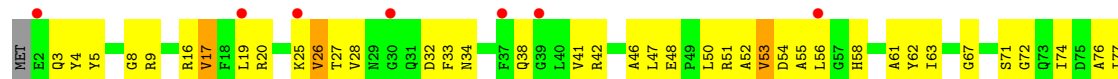
• Molecule 39: 30S ribosomal protein S8

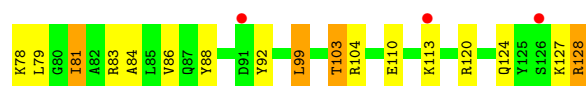


• Molecule 39: 30S ribosomal protein S8

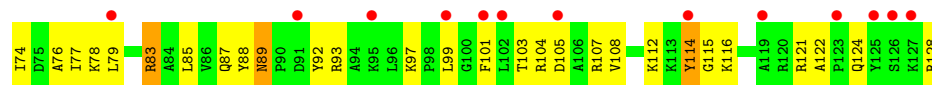


• Molecule 40: 30S ribosomal protein S9

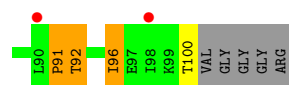
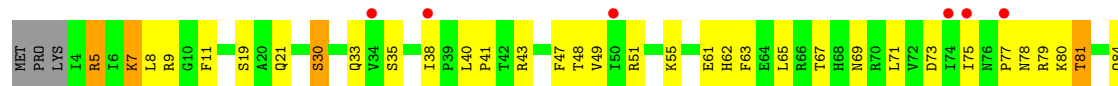




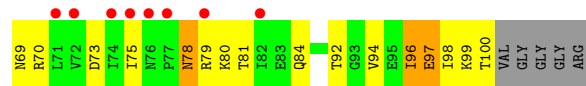
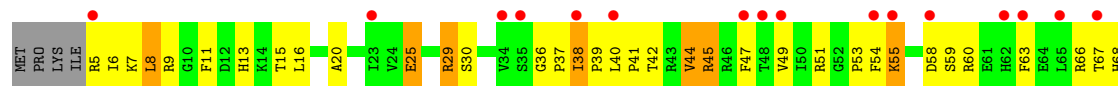
- Molecule 40: 30S ribosomal protein S9



- Molecule 41: 30S ribosomal protein S10



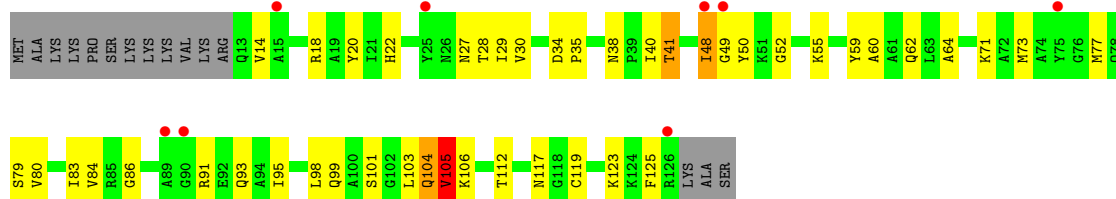
- Molecule 41: 30S ribosomal protein S10



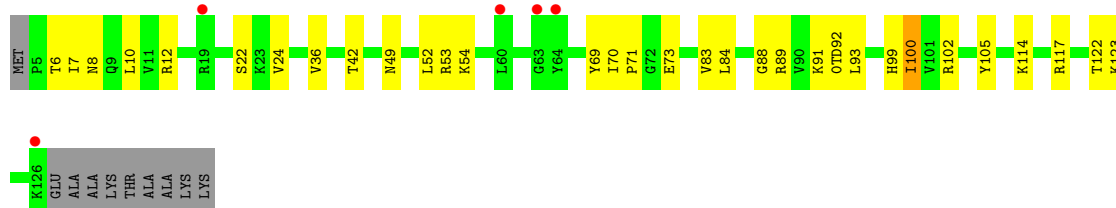
- Molecule 42: 30S ribosomal protein S11



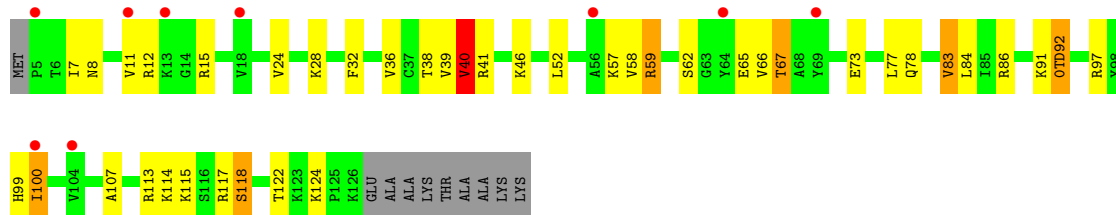
- Molecule 42: 30S ribosomal protein S11



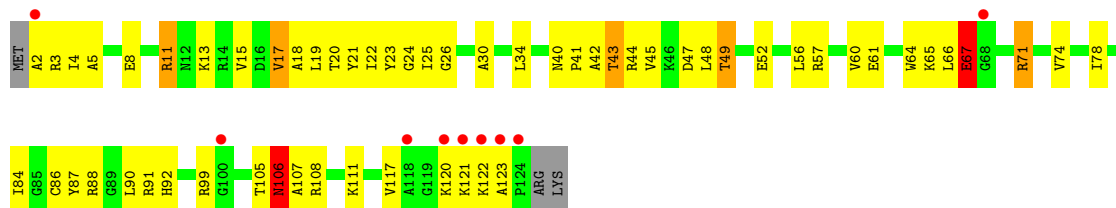
- Molecule 43: 30S ribosomal protein S12



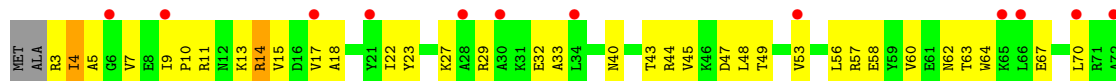
- Molecule 43: 30S ribosomal protein S12



- Molecule 44: 30S ribosomal protein S13



- Molecule 44: 30S ribosomal protein S13





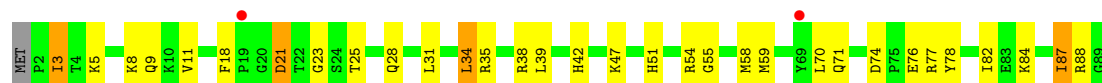
- Molecule 45: 30S ribosomal protein S14 type Z



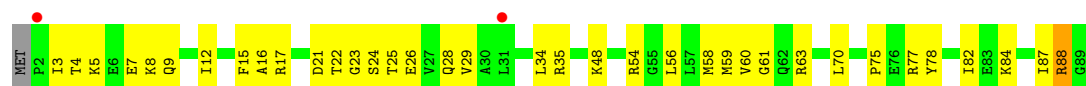
- Molecule 45: 30S ribosomal protein S14 type Z



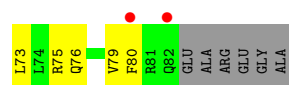
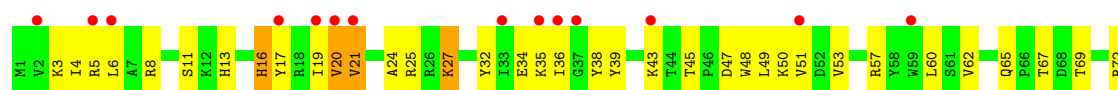
- Molecule 46: 30S ribosomal protein S15



- Molecule 46: 30S ribosomal protein S15

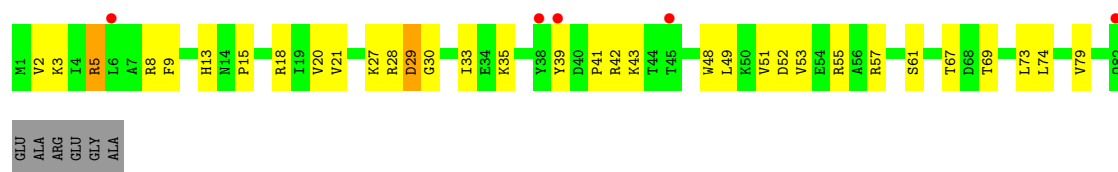


- Molecule 47: 30S ribosomal protein S16

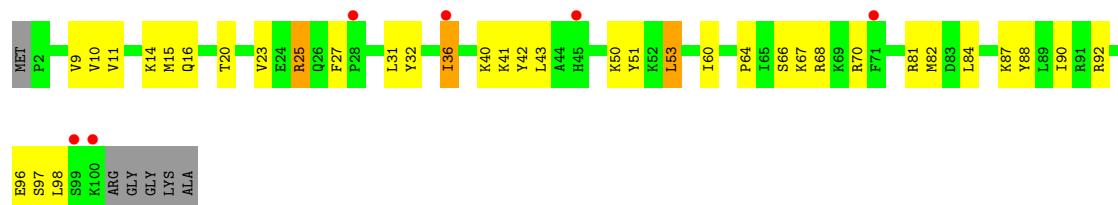


- Molecule 47: 30S ribosomal protein S16

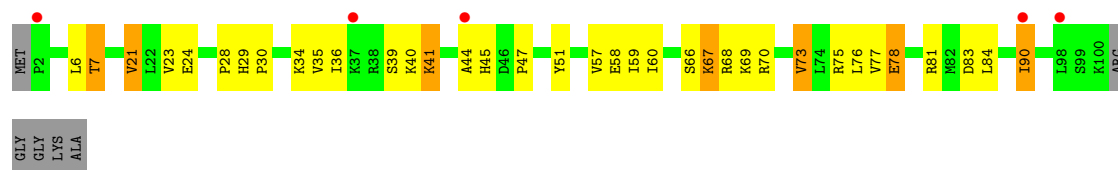




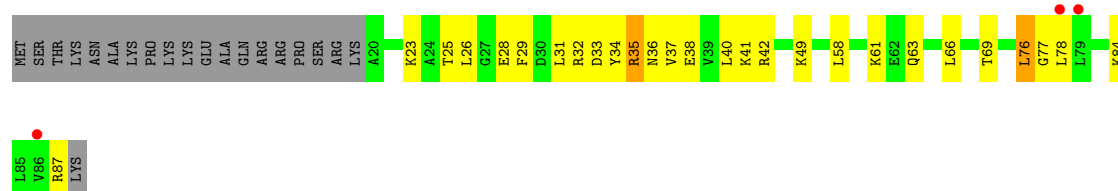
- Molecule 48: 30S ribosomal protein S17



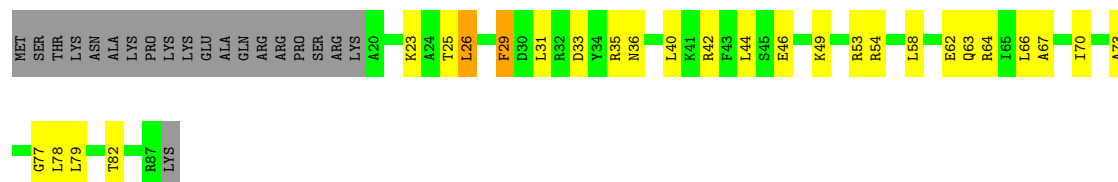
- Molecule 48: 30S ribosomal protein S17



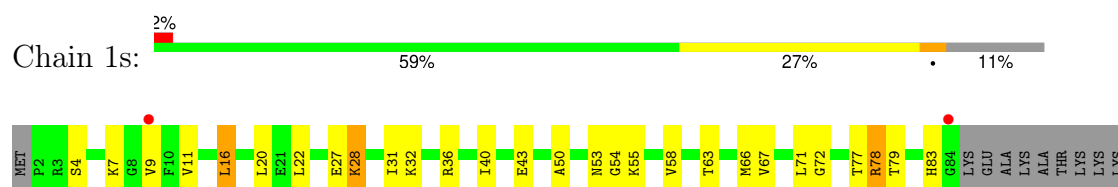
- Molecule 49: 30S ribosomal protein S18



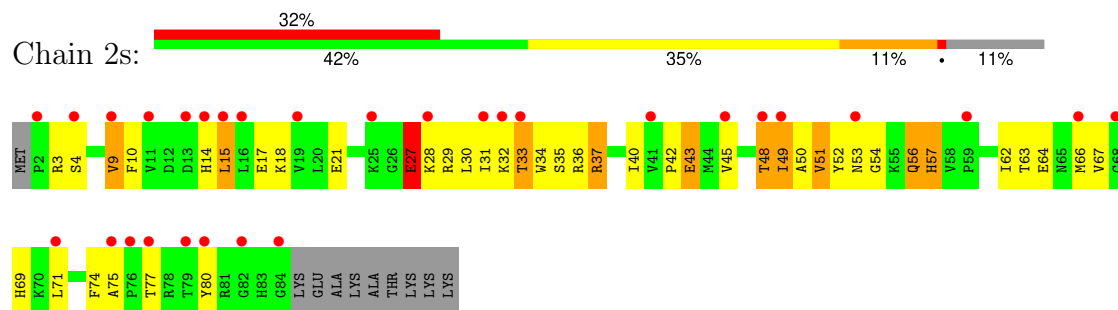
- Molecule 49: 30S ribosomal protein S18



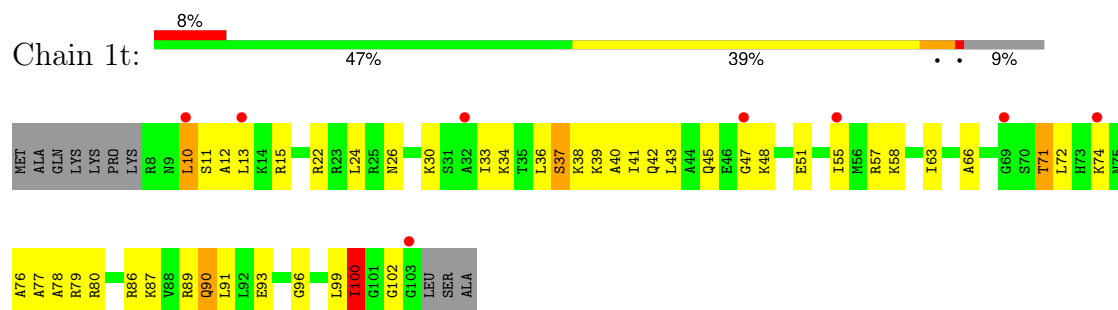
- Molecule 50: 30S ribosomal protein S19



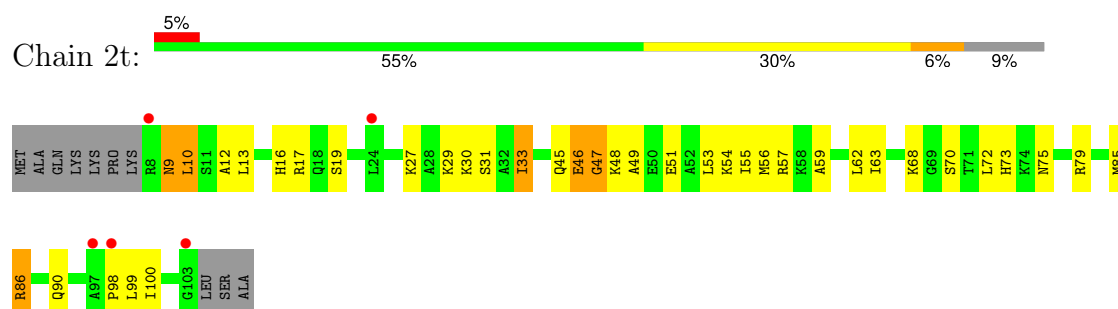
• Molecule 50: 30S ribosomal protein S19



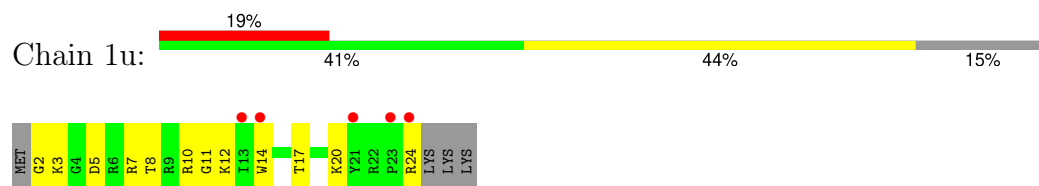
• Molecule 51: 30S ribosomal protein S20



• Molecule 51: 30S ribosomal protein S20



• Molecule 52: 30S ribosomal protein Thx

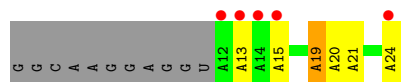
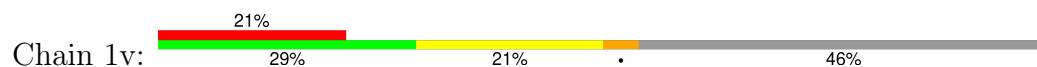


• Molecule 52: 30S ribosomal protein Thx

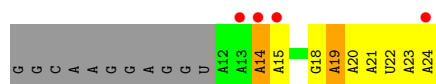




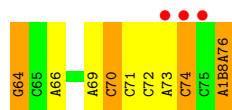
• Molecule 53: MET-LYS-mRNA



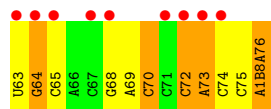
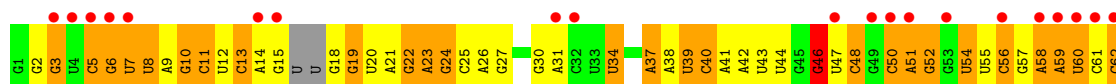
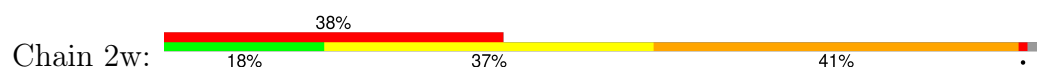
• Molecule 53: MET-LYS-mRNA



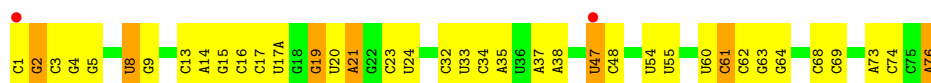
• Molecule 54: A-site Aminoacyl-tRNA Lys-tRNAlys



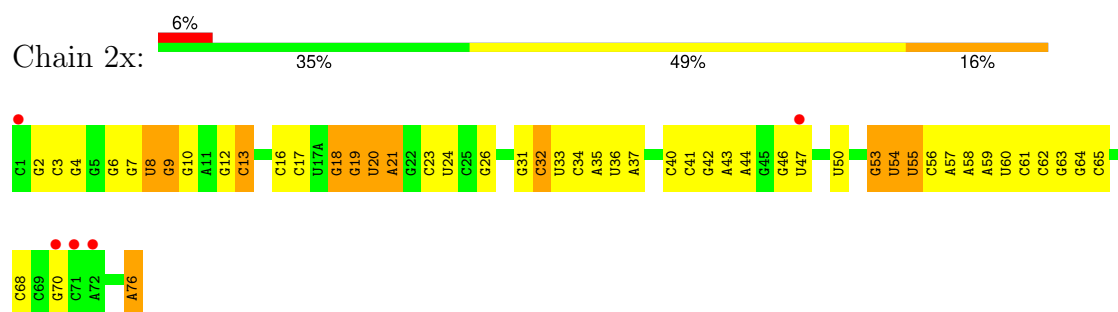
• Molecule 54: A-site Aminoacyl-tRNA Lys-tRNAlys



• Molecule 55: P-site Peptidyl-tRNA fMRC-tRNAcys RNA-part



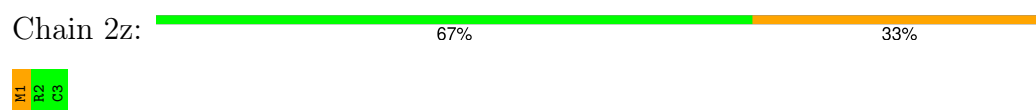
• Molecule 55: P-site Peptidyl-tRNA fMRC-tRNAcys RNA-part



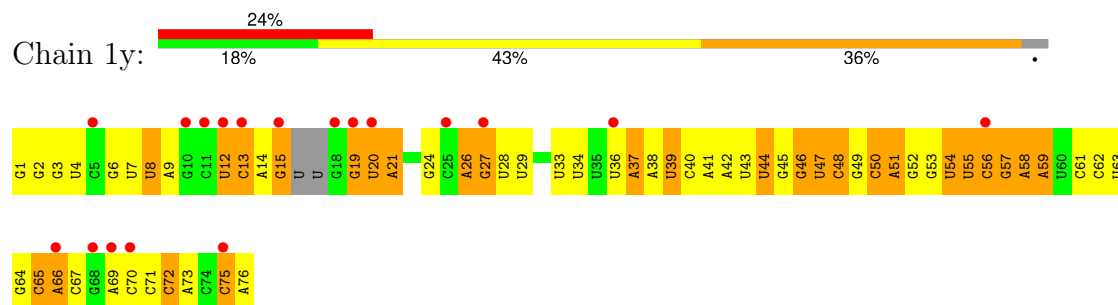
- Molecule 56: P-site Peptidyl-tRNA fMRC-tRNAcys Peptide-part



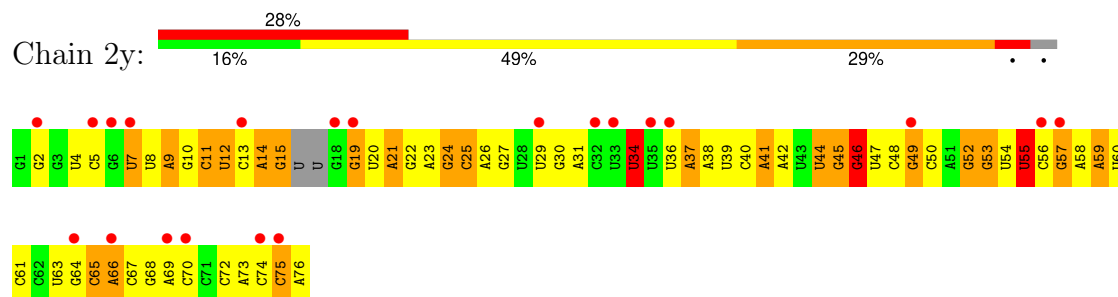
- Molecule 56: P-site Peptidyl-tRNA fMRC-tRNAcys Peptide-part



- Molecule 57: E-site Deacylated tRNAlys



- Molecule 57: E-site Deacylated tRNAlys



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	208.56Å 449.05Å 616.38Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	123.94 – 2.60 123.94 – 2.60	Depositor EDS
% Data completeness (in resolution range)	99.9 (123.94-2.60) 99.9 (123.94-2.60)	Depositor EDS
R_{merge}	0.22	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.18 (at 2.62Å)	Xtriage
Refinement program	PHENIX 1.17.1	Depositor
R, R_{free}	0.229 , 0.278 0.232 , 0.279	Depositor DCC
R_{free} test set	87740 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å ²)	55.2	Xtriage
Anisotropy	0.197	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.31 , 55.2	EDS
L-test for twinning ²	$\langle L \rangle = 0.36$, $\langle L^2 \rangle = 0.19$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.92	EDS
Total number of atoms	299808	wwPDB-VP
Average B, all atoms (Å ²)	59.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.59% 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: T6A, M2G, 0TD, 8AN, U8U, MA6, MG, OMU, 4OC, PSU, 4SU, 2MG, OMG, UR3, OMC, SF4, 2MA, A1B8A, 5MC, FME, ZN, G7M, 5MU, K

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	1/69011 (0.0%)	0.47	1/107720 (0.0%)
1	2A	0.22	1/67295 (0.0%)	0.41	1/105042 (0.0%)
2	1B	0.24	0/2882	0.42	0/4494
2	2B	0.19	0/2879	0.37	0/4487
3	1D	0.29	0/2186	0.51	0/2944
3	2D	0.23	0/2186	0.47	0/2944
4	1E	0.26	0/1592	0.54	0/2149
4	2E	0.21	0/1592	0.45	0/2149
5	1F	0.25	0/1619	0.48	0/2193
5	2F	0.22	0/1615	0.47	3/2188 (0.1%)
6	1G	0.22	0/1448	0.47	1/1957 (0.1%)
6	2G	0.23	0/1453	0.50	1/1963 (0.1%)
7	1H	0.23	0/1356	0.43	0/1834
7	2H	0.19	0/1356	0.40	0/1834
8	1I	0.18	0/1112	0.42	0/1514
8	2I	0.22	0/1079	0.48	0/1475
9	1N	0.25	0/1144	0.49	0/1543
9	2N	0.20	0/1144	0.40	0/1543
10	1O	0.28	0/943	0.49	0/1269
10	2O	0.22	0/943	0.50	0/1269
11	1P	0.26	0/1152	0.50	0/1533
11	2P	0.21	0/1152	0.48	0/1533
12	1Q	0.28	0/1143	0.49	0/1527
12	2Q	0.22	0/1143	0.47	0/1527
13	1R	0.27	0/982	0.50	0/1312
13	2R	0.22	0/982	0.46	0/1312
14	1S	0.21	0/883	0.48	0/1176
14	2S	0.21	0/880	0.46	0/1172
15	1T	0.25	0/1105	0.48	0/1477
15	2T	0.22	0/1097	0.48	0/1468
16	1U	0.28	0/977	0.48	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	2U	0.19	0/977	0.41	0/1301
17	1V	0.26	0/782	0.47	0/1049
17	2V	0.18	0/782	0.39	0/1049
18	1W	0.27	0/897	0.45	0/1205
18	2W	0.21	0/897	0.44	0/1205
19	1X	0.26	0/764	0.55	2/1025 (0.2%)
19	2X	0.23	0/764	0.61	2/1025 (0.2%)
20	1Y	0.23	0/819	0.44	0/1095
20	2Y	0.20	0/819	0.47	1/1095 (0.1%)
21	1Z	0.23	0/1267	0.48	0/1717
21	2Z	0.22	0/1299	0.42	0/1763
22	10	0.27	0/662	0.52	0/881
22	20	0.23	0/662	0.53	0/881
23	11	0.27	0/762	0.46	0/1014
23	21	0.21	0/762	0.41	0/1014
24	12	0.23	0/590	0.43	0/781
24	22	0.22	0/590	0.42	0/781
25	13	0.26	0/474	0.45	0/635
25	23	0.18	0/469	0.39	0/630
26	14	0.25	0/565	0.58	1/761 (0.1%)
26	24	0.28	0/545	0.56	0/737
27	15	0.27	0/469	0.47	0/635
27	25	0.23	0/469	0.48	0/635
28	16	0.29	0/460	0.50	0/613
28	26	0.21	0/456	0.45	0/608
29	17	0.33	0/426	0.56	0/561
29	27	0.25	0/426	0.51	0/561
30	18	0.28	0/525	0.52	0/691
30	28	0.21	0/525	0.42	0/691
31	19	0.27	0/310	0.56	0/407
31	29	0.20	0/310	0.42	0/407
32	1a	0.20	0/35795	0.39	0/55864
32	2a	0.19	0/35886	0.38	1/56005 (0.0%)
33	1b	0.21	0/1881	0.47	0/2542
33	2b	0.26	0/1860	0.52	0/2518
34	1c	0.18	0/1572	0.39	0/2126
34	2c	0.23	0/1566	0.51	1/2119 (0.0%)
35	1d	0.20	0/1685	0.45	0/2262
35	2d	0.21	0/1704	0.46	0/2284
36	1e	0.22	0/1145	0.47	0/1543
36	2e	0.21	0/1149	0.48	0/1548
37	1f	0.18	0/823	0.39	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	0.42	0/1679
38	2g	0.20	0/1254	0.41	0/1683
39	1h	0.19	0/1108	0.41	0/1494
39	2h	0.19	0/1108	0.43	0/1494
40	1i	0.21	0/1002	0.49	0/1346
40	2i	0.23	0/997	0.55	0/1343
41	1j	0.22	0/722	0.47	0/982
41	2j	0.21	0/727	0.46	0/988
42	1k	0.23	0/844	0.43	0/1145
42	2k	0.20	0/848	0.41	0/1149
43	1l	0.20	0/937	0.42	0/1260
43	2l	0.20	0/937	0.45	0/1260
44	1m	0.21	0/969	0.51	0/1302
44	2m	0.21	0/961	0.45	0/1291
45	1n	0.19	0/501	0.41	0/664
45	2n	0.20	0/501	0.45	0/664
46	1o	0.19	0/739	0.43	0/985
46	2o	0.18	0/739	0.40	0/985
47	1p	0.20	0/697	0.45	0/939
47	2p	0.19	0/693	0.49	0/935
48	1q	0.20	0/836	0.42	0/1117
48	2q	0.21	0/836	0.46	0/1117
49	1r	0.20	0/560	0.45	0/746
49	2r	0.19	0/560	0.47	0/746
50	1s	0.19	0/667	0.50	0/900
50	2s	0.24	0/661	0.58	2/893 (0.2%)
51	1t	0.21	0/730	0.48	0/965
51	2t	0.21	0/729	0.48	0/965
52	1u	0.19	0/203	0.43	0/266
52	2u	0.36	0/203	0.58	0/266
53	1v	0.23	0/319	0.40	0/495
53	2v	0.21	0/319	0.44	0/495
54	1w	0.32	2/1593 (0.1%)	0.39	0/2474
54	2w	0.36	2/1593 (0.1%)	0.52	0/2474
55	1x	0.27	0/1723	0.41	0/2684
55	2x	0.25	0/1723	0.40	0/2684
56	1z	0.54	0/16	0.89	0/19
56	2z	0.57	0/16	0.63	0/19
57	1y	0.31	1/1618 (0.1%)	0.45	0/2513
57	2y	0.35	2/1618 (0.1%)	0.53	0/2513
All	All	0.24	9/316807 (0.0%)	0.44	17/474290 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if

the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
12	1Q	0	1
26	24	0	1
33	1b	0	1
33	2b	0	1
51	1t	0	1
All	All	0	5

All (9) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1w	46	G7M	O3'-P	6.04	1.62	1.56
54	2w	46	G7M	O3'-P	5.90	1.62	1.56
57	2y	46	G7M	O3'-P	5.57	1.61	1.56
1	1A	2552	OMU	O3'-P	5.55	1.61	1.56
54	2w	37	T6A	O3'-P	5.41	1.61	1.56
57	2y	37	T6A	O3'-P	5.35	1.61	1.56
57	1y	46	G7M	O3'-P	5.25	1.61	1.56
54	1w	37	T6A	O3'-P	5.15	1.61	1.56
1	2A	2552	OMU	O3'-P	5.03	1.61	1.56

All (17) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	2X	94	GLY	CA-C-N	8.05	136.18	121.70
19	2X	94	GLY	C-N-CA	8.05	136.18	121.70
34	2c	84	ILE	N-CA-C	-6.13	105.04	113.00
6	1G	96	ARG	CB-CA-C	-5.96	109.69	116.54
1	1A	1992	G	C2'-C3'-O3'	5.83	118.25	109.50
20	2Y	91	GLU	N-CA-C	-5.53	104.67	111.75
19	1X	94	GLY	CA-C-N	5.29	131.23	121.70
19	1X	94	GLY	C-N-CA	5.29	131.23	121.70
5	2F	21	ALA	CA-C-N	5.26	131.17	121.70
5	2F	21	ALA	C-N-CA	5.26	131.17	121.70
26	14	60	GLN	N-CA-C	-5.22	107.44	112.97
32	2a	1263	C	N1-C2-O2	5.17	134.42	118.90
5	2F	65	TRP	N-CA-C	5.03	112.55	108.07
6	2G	65	GLY	N-CA-C	-5.01	104.73	113.76
50	2s	27	GLU	CA-C-N	5.01	130.72	121.70
50	2s	27	GLU	C-N-CA	5.01	130.72	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	1992	G	C2'-C3'-O3'	5.01	117.01	109.50

There are no chirality outliers.

All (5) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
12	1Q	15	GLY	Peptide
33	1b	130	ARG	Peptide
51	1t	99	LEU	Peptide
26	24	59	PHE	Peptide
33	2b	118	LEU	Peptide

5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	1A	61852	0	31192	762	0
1	2A	60322	0	30422	849	0
2	1B	2577	0	1304	30	0
2	2B	2575	0	1303	61	0
3	1D	2136	0	2218	54	0
3	2D	2136	0	2218	55	0
4	1E	1559	0	1618	32	0
4	2E	1559	0	1618	49	0
5	1F	1584	0	1625	50	0
5	2F	1580	0	1619	55	0
6	1G	1423	0	1436	47	0
6	2G	1428	0	1438	73	0
7	1H	1330	0	1407	20	0
7	2H	1330	0	1407	48	0
8	1I	1097	0	1140	38	0
8	2I	1064	0	1082	55	0
9	1N	1117	0	1184	23	0
9	2N	1117	0	1184	33	0
10	1O	933	0	996	25	0
10	2O	933	0	996	33	0
11	1P	1135	0	1212	40	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
11	2P	1135	0	1212	44	0
12	1Q	1122	0	1179	30	0
12	2Q	1122	0	1179	47	0
13	1R	968	0	1033	16	0
13	2R	968	0	1033	20	0
14	1S	873	0	927	19	0
14	2S	870	0	923	54	0
15	1T	1091	0	1151	30	0
15	2T	1083	0	1136	38	0
16	1U	959	0	1019	20	0
16	2U	959	0	1019	30	0
17	1V	771	0	830	16	0
17	2V	771	0	830	29	0
18	1W	886	0	940	18	0
18	2W	886	0	940	15	0
19	1X	750	0	814	19	0
19	2X	750	0	813	23	0
20	1Y	806	0	881	22	0
20	2Y	806	0	881	23	0
21	1Z	1240	0	1240	38	0
21	2Z	1271	0	1273	56	0
22	10	653	0	674	21	0
22	20	653	0	674	18	0
23	11	755	0	826	24	0
23	21	755	0	825	20	0
24	12	588	0	643	9	0
24	22	588	0	643	22	0
25	13	469	0	518	18	0
25	23	464	0	514	13	0
26	14	552	0	533	21	0
26	24	532	0	503	32	0
27	15	455	0	465	4	0
27	25	455	0	465	11	0
28	16	453	0	473	10	0
28	26	449	0	469	16	0
29	17	418	0	467	6	0
29	27	418	0	467	11	0
30	18	517	0	582	14	0
30	28	517	0	582	14	0
31	19	307	0	335	2	0
31	29	307	0	335	13	0
32	1a	32246	0	16293	497	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
32	2a	32327	0	16338	653	0
33	1b	1846	0	1867	68	0
33	2b	1825	0	1828	93	0
34	1c	1548	0	1535	43	0
34	2c	1542	0	1517	69	0
35	1d	1655	0	1672	56	0
35	2d	1674	0	1714	63	0
36	1e	1129	0	1185	43	0
36	2e	1133	0	1191	48	0
37	1f	810	0	804	22	0
37	2f	816	0	808	27	0
38	1g	1231	0	1238	31	0
38	2g	1235	0	1249	47	0
39	1h	1088	0	1126	31	0
39	2h	1088	0	1126	28	0
40	1i	983	0	986	41	0
40	2i	978	0	966	53	0
41	1j	709	0	650	31	0
41	2j	714	0	672	39	0
42	1k	829	0	825	23	0
42	2k	833	0	834	26	0
43	1l	932	0	981	21	0
43	2l	932	0	981	32	0
44	1m	958	0	1002	40	0
44	2m	950	0	988	46	0
45	1n	492	0	529	21	0
45	2n	492	0	529	25	0
46	1o	728	0	760	21	0
46	2o	728	0	760	22	0
47	1p	681	0	697	33	0
47	2p	677	0	686	22	0
48	1q	823	0	891	24	0
48	2q	823	0	891	26	0
49	1r	555	0	618	20	0
49	2r	555	0	618	19	0
50	1s	652	0	662	21	0
50	2s	646	0	644	38	0
51	1t	728	0	798	29	0
51	2t	727	0	796	26	0
52	1u	199	0	208	9	0
52	2u	199	0	208	11	0
53	1v	283	0	142	8	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
53	2v	283	0	141	7	0
54	1w	1599	0	801	35	0
54	2w	1599	0	801	65	0
55	1x	1646	0	839	22	0
55	2x	1646	0	839	33	0
56	1z	27	0	28	1	0
56	2z	27	0	28	1	0
57	1y	1577	0	799	42	0
57	2y	1577	0	798	47	0
58	10	9	0	0	0	0
58	11	5	0	0	0	0
58	12	2	0	0	0	0
58	13	5	0	0	0	0
58	14	1	0	0	0	0
58	15	6	0	0	0	0
58	16	2	0	0	0	0
58	17	6	0	0	0	0
58	18	9	0	0	0	0
58	1A	1096	0	0	0	0
58	1B	37	0	0	0	0
58	1D	13	0	0	0	0
58	1E	16	0	0	0	0
58	1F	13	0	0	0	0
58	1G	5	0	0	0	0
58	1H	1	0	0	0	0
58	1I	1	0	0	0	0
58	1N	5	0	0	0	0
58	1O	4	0	0	0	0
58	1P	6	0	0	0	0
58	1Q	7	0	0	0	0
58	1R	4	0	0	0	0
58	1S	3	0	0	0	0
58	1T	2	0	0	0	0
58	1U	9	0	0	0	0
58	1V	9	0	0	0	0
58	1W	7	0	0	0	0
58	1X	5	0	0	0	0
58	1Y	3	0	0	0	0
58	1Z	2	0	0	0	0
58	1a	210	0	0	0	0
58	1b	1	0	0	0	0
58	1d	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	1e	2	0	0	0	0
58	1f	1	0	0	0	0
58	1k	1	0	0	0	0
58	1l	2	0	0	0	0
58	1m	1	0	0	0	0
58	1n	2	0	0	0	0
58	1p	1	0	0	0	0
58	1t	1	0	0	0	0
58	1v	1	0	0	0	0
58	1w	3	0	0	0	0
58	1x	11	0	0	0	0
58	20	4	0	0	0	0
58	23	4	0	0	0	0
58	25	5	0	0	0	0
58	27	3	0	0	0	0
58	28	1	0	0	0	0
58	2A	863	0	0	0	0
58	2B	20	0	0	0	0
58	2D	7	0	0	0	0
58	2E	7	0	0	0	0
58	2F	7	0	0	0	0
58	2G	1	0	0	0	0
58	2O	2	0	0	0	0
58	2P	3	0	0	0	0
58	2Q	2	0	0	0	0
58	2R	2	0	0	0	0
58	2T	3	0	0	0	0
58	2U	2	0	0	0	0
58	2V	2	0	0	0	0
58	2W	2	0	0	0	0
58	2X	1	0	0	0	0
58	2Y	1	0	0	0	0
58	2Z	1	0	0	0	0
58	2a	230	0	0	0	0
58	2d	2	0	0	0	0
58	2e	1	0	0	0	0
58	2f	2	0	0	0	0
58	2g	1	0	0	0	0
58	2i	1	0	0	0	0
58	2j	1	0	0	0	0
58	2k	1	0	0	0	0
58	2l	4	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	2n	1	0	0	0	0
58	2q	2	0	0	0	0
58	2r	1	0	0	0	0
58	2t	1	0	0	0	0
58	2v	4	0	0	0	0
58	2w	1	0	0	0	0
58	2x	6	0	0	0	0
58	2y	1	0	0	0	0
59	1A	1	0	0	0	0
59	2A	1	0	0	0	0
60	14	1	0	0	0	0
60	15	1	0	0	0	0
60	16	1	0	0	0	0
60	19	1	0	0	0	0
60	1Y	1	0	0	0	0
60	1n	1	0	0	0	0
60	24	1	0	0	0	0
60	25	1	0	0	0	0
60	26	1	0	0	0	0
60	29	1	0	0	0	0
60	2Y	1	0	0	0	0
60	2n	1	0	0	0	0
61	1d	8	0	0	0	0
61	2d	8	0	0	0	0
62	10	10	0	0	1	0
62	11	12	0	0	0	0
62	12	3	0	0	0	0
62	13	4	0	0	0	0
62	14	1	0	0	0	0
62	15	7	0	0	0	0
62	16	2	0	0	0	0
62	17	11	0	0	1	0
62	18	11	0	0	1	0
62	1A	1886	0	0	92	0
62	1B	61	0	0	1	0
62	1D	28	0	0	2	0
62	1E	29	0	0	2	0
62	1F	15	0	0	1	0
62	1G	3	0	0	0	0
62	1H	2	0	0	0	0
62	1I	1	0	0	0	0
62	1N	4	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
62	1O	4	0	0	0	0
62	1P	23	0	0	1	0
62	1Q	8	0	0	0	0
62	1R	16	0	0	2	0
62	1S	5	0	0	0	0
62	1T	8	0	0	0	0
62	1U	10	0	0	0	0
62	1V	11	0	0	1	0
62	1W	6	0	0	1	0
62	1X	7	0	0	0	0
62	1Y	1	0	0	0	0
62	1Z	1	0	0	0	0
62	1a	308	0	0	25	0
62	1b	1	0	0	0	0
62	1e	1	0	0	0	0
62	1f	1	0	0	0	0
62	1i	1	0	0	0	0
62	1l	7	0	0	0	0
62	1m	2	0	0	0	0
62	1o	1	0	0	0	0
62	1q	2	0	0	0	0
62	1u	1	0	0	0	0
62	1v	5	0	0	0	0
62	1w	8	0	0	1	0
62	1x	6	0	0	0	0
62	1y	1	0	0	0	0
62	1z	1	0	0	1	0
62	20	5	0	0	0	0
62	21	13	0	0	1	0
62	25	2	0	0	1	0
62	27	1	0	0	0	0
62	28	3	0	0	0	0
62	29	1	0	0	0	0
62	2A	1000	0	0	92	0
62	2B	22	0	0	3	0
62	2D	24	0	0	1	0
62	2E	9	0	0	1	0
62	2F	15	0	0	0	0
62	2N	1	0	0	0	0
62	2O	2	0	0	0	0
62	2P	11	0	0	1	0
62	2Q	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
62	2R	3	0	0	0	0
62	2T	5	0	0	0	0
62	2U	3	0	0	2	0
62	2W	3	0	0	0	0
62	2X	4	0	0	0	0
62	2Y	1	0	0	0	0
62	2Z	1	0	0	0	0
62	2a	198	0	0	20	0
62	2d	1	0	0	0	0
62	2e	1	0	0	0	0
62	2j	1	0	0	0	0
62	2l	4	0	0	1	0
62	2p	2	0	0	0	0
62	2r	1	0	0	0	0
62	2t	1	0	0	0	0
62	2v	2	0	0	0	0
62	2w	3	0	0	0	0
62	2x	5	0	0	0	0
All	All	299808	0	196752	5317	0

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

All (5317) 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	1.22	1.38
54:2w:51:A:N6	54:2w:63:U:H3	1.37	1.22
54:2w:51:A:N6	54:2w:63:U:N3	1.94	1.14
1:1A:1082:U:O4	1:1A:1086:A:N1	1.87	1.06
10:2O:48:PRO:HB3	32:2a:1422:G:H5''	1.44	0.99
32:1a:1004:A:N6	32:1a:1037:C:N3	2.14	0.96
32:2a:1133:G:H1	32:2a:1141:C:H42	1.11	0.95
34:2c:156:ARG:HH21	34:2c:161:GLU:HA	1.32	0.94
1:1A:2427:C:OP1	62:1A:4102:HOH:O	1.85	0.93
1:2A:2162:G:H4'	1:2A:2172:U:H2'	1.51	0.93
57:2y:10:G:H1	57:2y:25:C:H42	1.16	0.92
19:1X:31:HIS:HD2	19:1X:33:LYS:H	1.15	0.91
1:2A:2138:C:H42	1:2A:2153:G:H1	1.12	0.91
1:2A:1798:U:H5'	3:2D:259:THR:HG22	1.52	0.90
33:2b:54:THR:HG22	33:2b:199:TYR:HB3	1.55	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:9:VAL:HG23	38:2g:94:ARG:HH21	1.36	0.89
10:2O:35:VAL:HG11	10:2O:103:ALA:HB3	1.55	0.88
44:2m:123:ALA:HB3	54:2w:39:PSU:H4'	1.54	0.88
57:2y:22:G:N7	57:2y:46:G7M:N2	2.21	0.88
2:2B:7:G:H21	14:2S:38:GLN:HE22	1.22	0.87
1:1A:2499:C:OP1	62:1A:4103:HOH:O	1.91	0.86
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.09	0.85
1:2A:2131:G:H4'	1:2A:2132:U:H3'	1.58	0.85
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.57	0.85
53:2v:14:A:N6	57:2y:34:U8U:S2	2.50	0.85
42:1k:48:ILE:HD12	42:1k:63:LEU:HB2	1.59	0.85
32:1a:36:C:OP1	43:1l:123:LYS:NZ	2.09	0.84
1:1A:1057:A:H61	1:1A:1081:U:H3	1.26	0.84
54:2w:51:A:N1	54:2w:63:U:O4	2.11	0.84
8:2I:69:LYS:HD2	8:2I:138:ILE:HG12	1.59	0.84
32:2a:1316:G:H22	32:2a:1319:A:H5''	1.42	0.84
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.58	0.84
1:2A:2138:C:N4	1:2A:2153:G:H1	1.75	0.83
7:2H:159:GLU:HG3	7:2H:169:VAL:HG11	1.60	0.83
1:1A:993:G:OP1	16:1U:50:ARG:NH2	2.11	0.83
15:1T:77:PRO:HG2	15:1T:80:SER:HB2	1.59	0.83
32:1a:1125:U:H4'	41:1j:5:ARG:HH22	1.43	0.82
1:2A:1204:A:H2	1:2A:1241:A:H62	1.25	0.82
1:1A:249:C:O2'	11:1P:64:LYS:NZ	2.13	0.82
1:1A:1670:C:OP2	62:1A:4105:HOH:O	1.98	0.82
8:2I:3:VAL:HG12	8:2I:38:LEU:HA	1.60	0.82
26:24:53:GLU:HG2	26:24:55:ARG:H	1.45	0.82
20:1Y:43:ASN:HD22	20:1Y:65:ALA:HB3	1.44	0.82
1:1A:1673:U:OP1	62:1A:4104:HOH:O	1.97	0.81
3:2D:108:PRO:HB3	3:2D:143:HIS:HE1	1.45	0.81
48:2q:57:VAL:HG12	48:2q:76:LEU:HA	1.63	0.81
50:2s:49:ILE:HG22	50:2s:62:ILE:HD11	1.63	0.81
53:1v:21:A:N1	54:1w:34:U8U:O4	2.13	0.81
32:2a:662:G:O2'	32:2a:836:G:OP1	1.99	0.80
1:1A:1041:C:H42	1:1A:1114:G:H1	1.28	0.80
1:1A:1798:U:H5'	3:1D:259:THR:HG22	1.60	0.80
1:2A:1546:C:H5'	1:2A:1547:C:H5'	1.62	0.80
32:1a:975:A:H4'	32:1a:976:G:H5''	1.64	0.80
4:2E:119:ARG:HD2	4:2E:160:TYR:HB2	1.64	0.80
1:2A:631:A:OP1	11:2P:65:ARG:NH1	2.15	0.80
1:2A:1648:C:OP1	62:2A:3904:HOH:O	2.00	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1952:A:OP1	10:2O:44:LYS:NZ	2.14	0.80
32:1a:501:C:OP1	43:1l:117:ARG:NH2	2.15	0.79
1:1A:1062:G:H22	1:1A:1077:A:H61	1.31	0.79
32:2a:1004:A:H5''	32:2a:1024:G:H22	1.46	0.79
1:2A:1689:A:H62	1:2A:1698:A:H2	1.28	0.79
33:2b:91:PRO:HG3	33:2b:154:LEU:HB2	1.62	0.79
23:11:77:ALA:HB1	23:11:82:LEU:HD11	1.65	0.79
29:17:24:THR:HG22	29:17:27:GLY:H	1.46	0.79
32:1a:1221:G:OP1	32:1a:1320:C:N4	2.16	0.79
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.16	0.79
1:1A:1602:U:O4	62:1A:4106:HOH:O	1.99	0.79
22:20:10:THR:HG22	22:20:12:ASN:H	1.48	0.79
1:1A:631:A:OP1	11:1P:65:ARG:NH1	2.15	0.79
21:2Z:72:ARG:HH22	21:2Z:97:GLU:HB2	1.48	0.78
1:1A:826:U:OP1	62:1A:4102:HOH:O	2.00	0.78
41:2j:49:VAL:HG23	45:2n:41:ARG:HB2	1.65	0.78
32:1a:536:C:OP2	62:1a:4801:HOH:O	2.00	0.78
34:2c:125:GLU:HB2	34:2c:190:ARG:HH21	1.48	0.78
34:2c:142:MET:HG3	34:2c:170:GLN:HB3	1.64	0.78
50:2s:33:THR:H	50:2s:57:HIS:HE1	1.32	0.78
1:1A:2550:G:OP1	62:1A:4105:HOH:O	2.01	0.78
1:1A:1669:A:OP2	62:1A:4105:HOH:O	2.01	0.78
32:1a:1086:U:H3	32:1a:1099:G:H22	1.30	0.78
32:1a:1377:A:HO2'	38:1g:2:ALA:N	1.81	0.78
1:1A:2140:C:H2'	1:1A:2141:G:H8	1.47	0.78
1:1A:2448:A:OP1	62:1A:4103:HOH:O	2.02	0.78
1:2A:1938:A:OP2	62:2A:3905:HOH:O	2.02	0.78
1:1A:761:A:N7	62:1A:4145:HOH:O	2.17	0.78
8:2I:78:THR:HG23	8:2I:143:SER:HB2	1.65	0.78
32:2a:1396:A:OP2	62:2a:1902:HOH:O	2.01	0.78
1:1A:2135:A:H61	1:1A:2156:G:H4'	1.47	0.77
46:2o:54:ARG:HG2	46:2o:58:MET:HE2	1.66	0.77
32:1a:343:U:O2'	32:1a:346:G:O6	2.03	0.77
6:2G:161:THR:HG22	6:2G:163:ALA:H	1.47	0.77
5:1F:157:VAL:HB	5:1F:194:MET:HG2	1.66	0.77
1:2A:2439:A:N6	55:2x:76:8AN:O1P	2.17	0.77
8:2I:94:ALA:HA	8:2I:97:ILE:HB	1.67	0.77
15:1T:84:GLN:HG3	15:1T:85:LYS:HG3	1.67	0.77
32:2a:1133:G:H1	32:2a:1141:C:N4	1.83	0.77
1:2A:805:G:OP1	62:2A:3906:HOH:O	2.02	0.77
33:1b:77:ALA:HB2	33:1b:211:ILE:HD13	1.66	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1371:G:O6	62:1A:4107:HOH:O	2.01	0.77
1:2A:2110:G:OP1	1:2A:2118:U:N3	2.18	0.76
40:2i:28:VAL:HG22	40:2i:63:ILE:HB	1.67	0.76
32:1a:1414:U:H3	32:1a:1486:G:H1	1.31	0.76
7:2H:9:ILE:HB	7:2H:50:VAL:HG13	1.65	0.76
18:2W:34:ASN:OD1	18:2W:37:ARG:NH1	2.19	0.76
26:14:55:ARG:H	26:14:56:VAL:HA	1.51	0.76
1:1A:1014:U:OP2	62:1A:4108:HOH:O	2.03	0.76
26:14:16:CYS:SG	26:14:17:GLY:N	2.52	0.76
22:10:27:GLU:HG3	22:10:68:GLU:HA	1.68	0.76
32:1a:664:G:H22	32:1a:741:G:H1	1.32	0.76
32:2a:1267:C:O2	52:2u:20:LYS:NZ	2.18	0.76
1:1A:135:G:N7	62:1A:4146:HOH:O	2.17	0.76
32:2a:1080:A:H5'	36:2e:14:ARG:HH21	1.52	0.75
32:2a:1082:G:N7	62:2a:1911:HOH:O	2.19	0.75
32:2a:1089:G:H1	32:2a:1096:C:H42	1.33	0.75
56:1z:2:ARG:NH2	62:1z:101:HOH:O	2.20	0.75
1:2A:450:G:O6	62:2A:3909:HOH:O	2.03	0.75
1:2A:2504:U:OP2	62:2A:3907:HOH:O	2.03	0.75
1:2A:2183:C:H2'	1:2A:2184:G:C8	2.22	0.75
32:2a:895:G:N7	62:2a:1912:HOH:O	2.20	0.75
33:2b:219:VAL:HA	33:2b:222:ILE:HG12	1.69	0.75
1:2A:1604:C:OP1	62:2A:3908:HOH:O	2.03	0.75
1:1A:2136:C:N3	1:1A:2155:G:C2	2.55	0.75
1:1A:1342:A:OP2	62:1A:4106:HOH:O	2.03	0.74
1:1A:2821:A:OP2	62:1R:301:HOH:O	2.04	0.74
32:1a:1314:C:OP2	50:1s:4:SER:OG	2.04	0.74
1:2A:2364:C:OP1	22:20:55:ARG:NH1	2.21	0.74
39:1h:34:GLU:OE1	39:1h:37:ARG:NH1	2.20	0.74
41:1j:35:SER:HB3	41:1j:73:ASP:HB2	1.69	0.74
32:2a:126:G:HO2'	32:2a:634:C:HO2'	1.30	0.74
1:1A:1007:C:OP2	62:1A:4109:HOH:O	2.04	0.74
32:1a:1145:C:H4'	32:1a:1146:A:H5'	1.68	0.74
32:2a:299:G:O6	62:2a:1903:HOH:O	2.04	0.74
10:1O:48:PRO:HB3	32:1a:1422:G:H5''	1.68	0.74
12:2Q:1:MET:SD	12:2Q:1:MET:N	2.60	0.74
1:1A:2646:C:OP2	1:1A:2732:G:O2'	2.05	0.74
14:1S:25:ARG:NH1	14:1S:42:ASP:OD1	2.21	0.74
46:1o:54:ARG:HG2	46:1o:58:MET:HE2	1.69	0.74
1:2A:570:G:O6	62:2A:3910:HOH:O	2.05	0.74
54:2w:50:C:H2'	54:2w:51:A:H5''	1.69	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:505:A:OP2	62:1A:4110:HOH:O	2.04	0.74
2:2B:48:A:H4'	14:2S:95:HIS:HD2	1.53	0.74
34:2c:58:GLU:HB3	41:2j:92:THR:HG21	1.70	0.74
38:2g:68:ASN:HD22	38:2g:128:ALA:HA	1.52	0.74
1:2A:1696:G:N7	62:2A:3968:HOH:O	2.20	0.73
32:2a:1402:4OC:HM22	32:2a:1403:C:H5'	1.69	0.73
1:1A:527:C:OP1	62:1A:4111:HOH:O	2.05	0.73
51:1t:33:ILE:O	51:1t:37:SER:OG	2.06	0.73
1:2A:1800:C:OP2	3:2D:183:ARG:NH2	2.21	0.73
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.70	0.73
32:1a:159:G:O2'	32:1a:161:A:N7	2.20	0.73
22:10:9:SER:O	62:10:201:HOH:O	2.06	0.73
32:1a:742:G:OP2	46:1o:35:ARG:NH2	2.20	0.73
1:2A:601:C:O2'	5:2F:104:LYS:NZ	2.21	0.73
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.71	0.73
21:2Z:19:ARG:NH1	21:2Z:84:GLU:O	2.21	0.73
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.21	0.73
38:2g:113:GLU:HG2	38:2g:119:ARG:HG2	1.69	0.73
1:1A:2038:G:O6	62:1A:4113:HOH:O	2.06	0.73
10:2O:24:VAL:HG13	10:2O:33:ALA:HB2	1.69	0.73
1:1A:2128:C:N4	1:1A:2160:G:H1	1.87	0.73
4:1E:105:THR:OG1	4:1E:199:ARG:NH2	2.21	0.73
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.07	0.73
32:2a:974:A:OP2	45:2n:29:ARG:NH2	2.22	0.73
1:1A:1253:A:OP1	62:1A:4112:HOH:O	2.06	0.73
1:1A:1937:A:H1'	1:1A:1939:5MU:H72	1.69	0.73
1:1A:2183:C:H2'	1:1A:2184:G:H8	1.54	0.73
48:1q:66:SER:O	48:1q:70:ARG:NH1	2.21	0.73
32:2a:1181:G:O2'	32:2a:1182:G:N7	2.22	0.73
1:2A:792:G:O6	62:2A:3916:HOH:O	2.07	0.72
1:2A:2133:G:O2'	1:2A:2157:G:N2	2.22	0.72
8:2I:93:THR:HG22	8:2I:119:PRO:HA	1.71	0.72
32:2a:839:U:H3'	32:2a:840:C:H5'	1.70	0.72
1:1A:1332:G:OP1	62:1A:4114:HOH:O	2.07	0.72
46:1o:74:ASP:HB3	46:1o:77:ARG:HB2	1.71	0.72
1:2A:731:C:OP2	62:2A:3911:HOH:O	2.06	0.72
1:2A:2319:G:H22	14:2S:3:ARG:HH11	1.36	0.72
28:26:23:THR:OG1	28:26:24:GLU:N	2.12	0.72
40:2i:5:TYR:O	40:2i:87:GLN:NE2	2.22	0.72
32:1a:1505:G:OP2	62:1a:4802:HOH:O	2.07	0.72
49:1r:38:GLU:HA	49:1r:41:LYS:HE3	1.71	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:948:G:OP1	62:2A:3913:HOH:O	2.06	0.72
1:2A:975:C:OP1	62:2A:3915:HOH:O	2.07	0.72
35:2d:109:GLY:HA3	35:2d:165:MET:HG3	1.72	0.72
1:1A:2629:A:O2'	1:1A:2630:G:OP2	2.07	0.72
11:1P:42:SER:O	62:1P:301:HOH:O	2.06	0.72
33:1b:91:PRO:HG3	33:1b:154:LEU:HB3	1.71	0.72
1:2A:2127:G:N2	1:2A:2173:A:O2'	2.15	0.72
32:2a:826:C:O2	39:2h:15:ASN:ND2	2.23	0.72
33:2b:88:ALA:HA	33:2b:223:ILE:HD11	1.71	0.72
1:1A:1647:G:OP1	62:1A:4115:HOH:O	2.07	0.72
26:14:13:ARG:HB3	26:14:30:GLU:HG2	1.71	0.72
34:1c:55:VAL:HG22	34:1c:68:VAL:HG22	1.72	0.72
1:2A:449:A:OP2	62:2A:3912:HOH:O	2.06	0.72
1:2A:2239:G:OP2	62:2A:3914:HOH:O	2.06	0.72
32:2a:73:G:H1	32:2a:96:U:H3	1.36	0.72
53:1v:20:A:H61	54:1w:35:U:H3	1.34	0.72
18:1W:12:ILE:HD13	18:1W:17:VAL:HG13	1.70	0.72
34:2c:88:ARG:HA	34:2c:91:LEU:HD13	1.72	0.72
34:2c:118:GLN:HA	34:2c:121:ALA:HB3	1.72	0.72
57:2y:12:U:H3	57:2y:23:A:H61	1.37	0.72
1:2A:1449:A:O2'	1:2A:1529:G:N2	2.21	0.72
3:1D:168:ARG:HG2	3:1D:173:VAL:HG12	1.71	0.71
1:2A:2166:G:H3'	1:2A:2167:U:H5''	1.72	0.71
32:2a:1320:C:N3	50:2s:36:ARG:NH2	2.38	0.71
57:2y:10:G:H1	57:2y:25:C:N4	1.87	0.71
1:1A:1783:A:N7	62:1A:4172:HOH:O	2.23	0.71
32:1a:1031:G:H2'	32:1a:1032:G:C8	2.25	0.71
1:2A:2592:G:OP1	62:2A:3918:HOH:O	2.08	0.71
1:2A:2595:G:N7	62:2A:3987:HOH:O	2.23	0.71
1:2A:1394:U:OP1	62:2A:3908:HOH:O	2.08	0.71
12:2Q:31:ASP:OD1	12:2Q:134:ARG:NH1	2.23	0.71
26:14:55:ARG:N	26:14:56:VAL:HA	2.06	0.71
5:1F:185:ASP:HA	5:1F:188:ARG:HD3	1.72	0.71
36:1e:144:THR:H	36:1e:147:ASP:HB2	1.56	0.71
1:2A:1783:A:HO2'	1:2A:2607:G:HO2'	1.36	0.71
1:2A:1627:G:OP1	62:2A:3920:HOH:O	2.09	0.71
1:2A:271(L):U:OP1	8:2I:50:ARG:NH1	2.24	0.71
13:2R:103:ARG:NH1	13:2R:108:GLY:O	2.23	0.71
44:2m:91:ARG:HB2	44:2m:98:VAL:HG13	1.71	0.71
1:1A:2128:C:N3	1:1A:2160:G:N2	2.36	0.71
1:2A:2104:G:H1	1:2A:2185:C:H42	1.36	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:2X:94:GLY:N	19:2X:95:LEU:HB2	2.06	0.71
33:2b:185:ILE:HG22	33:2b:199:TYR:HB2	1.73	0.71
1:1A:2222:G:OP2	62:1A:4117:HOH:O	2.08	0.71
27:25:40:LYS:NZ	27:25:44:THR:O	2.22	0.71
32:2a:1347:G:HO2'	32:2a:1373:G:H1	1.38	0.71
1:1A:365:C:OP2	62:1A:4116:HOH:O	2.07	0.71
32:2a:538:G:H5''	43:2l:114:LYS:HB2	1.71	0.71
34:2c:125:GLU:O	34:2c:190:ARG:NH2	2.24	0.71
38:2g:20:ASP:HB3	38:2g:23:VAL:HB	1.73	0.71
40:2i:21:PRO:HA	40:2i:59:PHE:HA	1.72	0.71
1:2A:2819:G:N7	62:2A:3984:HOH:O	2.23	0.70
1:1A:2128:C:N4	1:1A:2160:G:N1	2.38	0.70
28:16:9:LEU:HD13	28:16:51:GLU:HG3	1.73	0.70
32:1a:1499:A:OP2	62:1a:4802:HOH:O	2.08	0.70
32:2a:289:G:OP2	62:2a:1904:HOH:O	2.10	0.70
39:1h:12:ARG:NH1	39:1h:25:ASP:O	2.25	0.70
1:2A:1937:A:H1'	1:2A:1939:5MU:H72	1.72	0.70
18:1W:25:ARG:NH2	18:1W:74:ALA:O	2.24	0.70
32:1a:56:U:H2'	32:1a:57:G:C8	2.27	0.70
6:1G:15:VAL:HG22	6:1G:175:LEU:HB3	1.72	0.70
57:1y:26:A:H61	57:1y:44:U:H3	1.38	0.70
32:2a:1226:C:O2'	44:2m:111:LYS:NZ	2.17	0.70
32:2a:656:C:O2'	46:2o:28:GLN:OE1	2.08	0.70
49:2r:73:ALA:HB3	49:2r:79:LEU:HD12	1.73	0.70
1:1A:740:U:OP2	62:1A:4118:HOH:O	2.09	0.70
1:2A:2615:U:OP1	62:2A:3917:HOH:O	2.07	0.70
36:1e:91:LEU:HB3	36:1e:118:ILE:HD11	1.74	0.70
1:2A:1237:A:OP1	62:2A:3921:HOH:O	2.09	0.70
1:2A:2547:U:O2	10:2O:23:ARG:NH2	2.24	0.70
32:2a:922:G:H4'	36:2e:20:GLN:HA	1.74	0.70
32:2a:1264:C:H42	32:2a:1271:G:H1	1.39	0.70
40:2i:121:ARG:NH1	40:2i:122:ALA:O	2.25	0.70
11:1P:50:ARG:HD3	30:18:7:HIS:CD2	2.27	0.69
21:1Z:151:HIS:HA	21:1Z:171:ILE:HG23	1.72	0.69
32:1a:542:G:OP1	35:1d:10:ARG:NH2	2.25	0.69
32:1a:1224:G:OP1	62:1a:4805:HOH:O	2.10	0.69
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.26	0.69
17:2V:55:ALA:HA	17:2V:101:GLY:HA2	1.73	0.69
45:2n:48:ALA:HB2	45:2n:53:LEU:HD12	1.74	0.69
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.27	0.69
51:1t:10:LEU:HB3	51:1t:12:ALA:H	1.57	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:695:A:H5'	57:2y:38:A:H4'	1.73	0.69
44:2m:23:TYR:HB3	44:2m:67:GLU:HA	1.74	0.69
46:1o:87:ILE:HG22	46:1o:88:ARG:H	1.57	0.69
21:2Z:106:GLY:HA3	21:2Z:141:VAL:HB	1.74	0.69
38:2g:126:ASP:O	38:2g:130:GLY:N	2.25	0.69
41:2j:44:VAL:HG22	41:2j:66:ARG:HG2	1.73	0.69
1:1A:602:G:O2'	1:1A:655:A:N6	2.25	0.69
1:1A:2445:G:OP1	5:1F:74:ARG:NH2	2.25	0.69
1:2A:810:U:OP1	62:2A:3924:HOH:O	2.10	0.69
6:2G:59:GLU:OE1	6:2G:153:ARG:NH2	2.25	0.69
11:2P:39:LYS:HG3	11:2P:45:LEU:HD22	1.73	0.69
30:28:56:GLU:HA	30:28:59:LYS:HE3	1.75	0.69
37:2f:99:ALA:HB3	49:2r:29:PHE:HE1	1.55	0.69
32:1a:1237:C:O2'	32:1a:1300:G:N2	2.23	0.69
1:2A:1973:G:OP1	62:2A:3919:HOH:O	2.08	0.69
1:2A:2589:A:OP1	62:2A:3922:HOH:O	2.09	0.69
7:2H:105:LEU:HB2	7:2H:113:VAL:HB	1.75	0.69
1:1A:1664:A:OP1	62:1A:4121:HOH:O	2.10	0.69
1:1A:2136:C:C2	1:1A:2155:G:N2	2.61	0.69
40:1i:46:ALA:HA	40:1i:78:LYS:HB2	1.75	0.69
1:2A:245:G:O6	30:28:8:LYS:NZ	2.25	0.69
11:2P:36:LYS:O	62:2P:301:HOH:O	2.11	0.69
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.25	0.69
1:1A:2763:G:OP2	62:1A:4120:HOH:O	2.10	0.69
32:1a:1202:G:O4'	45:1n:29:ARG:NH1	2.26	0.69
51:1t:57:ARG:HH12	51:1t:100:ILE:HD12	1.56	0.69
1:2A:994:C:OP2	16:2U:54:LYS:NZ	2.26	0.69
37:2f:6:VAL:HG13	37:2f:90:VAL:HG22	1.74	0.69
1:1A:1693:U:O2'	3:1D:14:ARG:NH2	2.25	0.69
1:1A:1890:A:OP2	62:1A:4126:HOH:O	2.11	0.69
10:1O:35:VAL:HG11	10:1O:103:ALA:HB3	1.75	0.69
32:1a:945:G:OP1	62:1a:4803:HOH:O	2.09	0.69
41:1j:38:ILE:HD11	41:1j:71:LEU:HD23	1.75	0.69
1:2A:1603:A:OP1	62:2A:3923:HOH:O	2.10	0.69
1:2A:2062:A:OP1	62:2A:3927:HOH:O	2.11	0.69
34:2c:58:GLU:HB2	34:2c:65:ALA:HB3	1.74	0.69
2:1B:42:C:OP1	6:1G:67:LYS:NZ	2.26	0.68
33:1b:82:ARG:NH1	33:1b:92:TYR:OH	2.25	0.68
44:1m:17:VAL:O	44:1m:20:THR:OG1	2.11	0.68
19:2X:72:LYS:NZ	19:2X:75:ASP:OD1	2.26	0.68
1:1A:1054:A:H61	1:1A:1105:U:H3	1.41	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:91:PHE:O	11:1P:121:LYS:NZ	2.25	0.68
21:1Z:156:LYS:HG2	21:1Z:158:PRO:HD3	1.75	0.68
39:1h:21:LYS:O	39:1h:65:TYR:OH	2.11	0.68
32:2a:64:G:H4'	32:2a:65:U:H3'	1.76	0.68
1:1A:1267:U:OP1	62:1A:4124:HOH:O	2.11	0.68
1:1A:2130:U:O2'	1:1A:2158:A:N1	2.25	0.68
3:1D:37:LEU:HD12	3:1D:62:TYR:HB2	1.73	0.68
27:25:41:PRO:O	27:25:44:THR:OG1	2.12	0.68
32:2a:1149:C:O2'	32:2a:1280:A:N1	2.24	0.68
5:1F:11:VAL:HB	5:1F:18:ARG:HB2	1.75	0.68
33:1b:84:GLU:OE1	33:1b:87:ARG:NH1	2.25	0.68
1:2A:2130:U:O2	1:2A:2134:A:O2'	2.11	0.68
8:2I:78:THR:O	8:2I:104:GLN:NE2	2.27	0.68
20:1Y:102:CYS:SG	20:1Y:103:GLY:N	2.66	0.68
1:2A:2857:G:N7	62:2A:4009:HOH:O	2.26	0.68
1:1A:1968:G:OP1	62:1A:4125:HOH:O	2.11	0.68
1:2A:2784:C:H1'	4:2E:37:ARG:HH12	1.59	0.68
1:2A:2788:C:OP1	4:2E:61:ARG:NH2	2.27	0.68
2:2B:75:G:H22	21:2Z:73:GLN:HE21	1.39	0.68
17:2V:62:LEU:HD11	17:2V:95:LEU:HB2	1.76	0.68
32:2a:9:G:H2'	32:2a:10:A:H8	1.59	0.68
32:2a:673:G:H2'	32:2a:674:G:C8	2.28	0.68
32:2a:1346:A:H61	32:2a:1374:A:H3'	1.58	0.68
32:2a:1367:C:OP2	40:2i:112:LYS:NZ	2.27	0.68
33:2b:15:VAL:HG13	33:2b:209:ARG:HB3	1.76	0.68
32:1a:1197:G:OP2	62:1a:4806:HOH:O	2.11	0.68
41:1j:5:ARG:NH2	41:1j:73:ASP:OD2	2.26	0.68
21:2Z:27:VAL:HG12	21:2Z:85:HIS:HE1	1.58	0.68
32:2a:113:G:H1'	32:2a:354:G:H5'	1.75	0.68
1:2A:958:U:O2	2:2B:90:A:O2'	2.12	0.68
7:2H:90:LYS:HD2	7:2H:159:GLU:HG2	1.76	0.68
21:2Z:52:SER:OG	21:2Z:53:ILE:N	2.18	0.68
32:2a:559:A:OP1	36:2e:126:ARG:NH2	2.27	0.68
1:1A:817:C:OP1	62:1A:4122:HOH:O	2.10	0.68
32:1a:376:G:H5''	47:1p:5:ARG:HG2	1.76	0.68
1:2A:854:G:H2'	1:2A:855:G:H8	1.59	0.68
1:2A:1352:U:OP1	62:2A:3926:HOH:O	2.11	0.68
1:1A:762:U:OP1	62:1A:4127:HOH:O	2.11	0.68
34:1c:6:HIS:HD2	34:1c:8:ILE:H	1.42	0.68
1:2A:643:A:N1	1:2A:2369:A:O2'	2.26	0.68
9:2N:30:ILE:HG23	9:2N:52:VAL:HG11	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:773:U:OP1	62:1A:4128:HOH:O	2.12	0.67
32:1a:421:U:O4	34:1c:127:ARG:NH2	2.27	0.67
32:1a:1305:G:H22	32:1a:1331:G:H1'	1.58	0.67
40:1i:53:VAL:O	40:1i:55:ALA:N	2.28	0.67
40:1i:110:GLU:OE2	40:1i:113:LYS:NZ	2.24	0.67
1:2A:648:G:O2'	1:2A:2351:G:OP1	2.10	0.67
1:2A:1313:U:OP1	62:2A:3928:HOH:O	2.12	0.67
4:2E:76:ARG:NH1	62:2E:401:HOH:O	2.27	0.67
32:2a:558:G:OP1	62:2a:1903:HOH:O	2.12	0.67
32:2a:1286:A:C8	32:2a:1287:A:H4'	2.29	0.67
1:1A:739:G:OP1	62:1A:4123:HOH:O	2.10	0.67
1:2A:674:G:H1'	5:2F:74:ARG:HD3	1.76	0.67
21:2Z:77:ASP:OD1	21:2Z:80:ARG:NH1	2.27	0.67
32:2a:663:A:O3'	49:2r:64:ARG:NH2	2.27	0.67
42:2k:48:ILE:HD11	42:2k:64:ALA:HA	1.76	0.67
1:1A:1055:G:H1	1:1A:1104:C:H42	1.41	0.67
1:1A:2023:G:H5'	1:1A:2617:C:H4'	1.77	0.67
1:1A:2136:C:N3	1:1A:2155:G:N2	2.42	0.67
20:2Y:43:ASN:HB2	20:2Y:67:LEU:HD21	1.74	0.67
1:1A:2602:A:OP1	62:1A:4130:HOH:O	2.13	0.67
55:1x:33:U:O2'	55:1x:35:A:N7	2.23	0.67
1:2A:2431:U:OP1	62:2A:3930:HOH:O	2.12	0.67
10:2O:115:VAL:HG13	10:2O:121:VAL:HG21	1.76	0.67
30:28:32:LEU:O	30:28:36:LYS:NZ	2.27	0.67
32:2a:901:A:O2'	32:2a:1513:A:OP1	2.12	0.67
32:2a:1403:C:H2'	32:2a:1404:5MC:HM53	1.77	0.67
5:1F:32:LEU:HB3	5:1F:112:MET:HE1	1.75	0.67
12:1Q:12:GLN:HE21	12:1Q:73:PRO:HD2	1.59	0.67
51:2t:27:LYS:HA	51:2t:30:LYS:HE2	1.75	0.67
1:2A:34:C:N4	1:2A:454:A:O2'	2.28	0.67
1:2A:1159:U:H2'	1:2A:1160:G:H8	1.60	0.67
6:2G:112:PRO:HG3	26:24:43:TYR:HE1	1.59	0.67
19:2X:94:GLY:H	19:2X:95:LEU:HB2	1.59	0.67
1:2A:2042:A:OP1	62:2A:3935:HOH:O	2.13	0.67
4:1E:28:ALA:HB3	4:1E:93:VAL:HG12	1.75	0.67
32:1a:45:U:O4	62:1a:4804:HOH:O	2.09	0.67
48:1q:53:LEU:HD23	48:1q:82:MET:HE1	1.77	0.67
1:2A:880:G:N1	1:2A:898:C:O2	2.28	0.67
1:2A:912:C:OP1	12:2Q:8:LYS:NZ	2.28	0.67
1:2A:2639:A:OP2	62:2A:3931:HOH:O	2.12	0.67
1:2A:2782:G:OP2	62:2A:3933:HOH:O	2.13	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:2S:38:GLN:NE2	14:2S:47:THR:OG1	2.27	0.67
32:2a:407:G:H5''	35:2d:115:ARG:HB3	1.76	0.67
32:1a:515:G:N7	62:1a:4831:HOH:O	2.26	0.67
39:1h:73:ASP:OD1	39:1h:75:ARG:NE	2.27	0.67
1:2A:1300:U:H4'	1:2A:1301:A:H5''	1.76	0.67
32:2a:1352:C:OP1	52:2u:3:LYS:NZ	2.17	0.67
43:2l:40:VAL:HG21	43:2l:78:GLN:HA	1.77	0.67
45:2n:12:ARG:HH21	45:2n:14:PRO:HA	1.60	0.67
1:2A:1791:A:OP2	62:2A:3937:HOH:O	2.14	0.66
1:2A:1970:A:OP1	62:2A:3925:HOH:O	2.11	0.66
1:2A:2499:C:OP2	62:2A:3932:HOH:O	2.13	0.66
44:2m:45:VAL:HA	44:2m:48:LEU:HD12	1.75	0.66
1:1A:1016:G:N7	62:1A:4193:HOH:O	2.27	0.66
1:1A:2206:G:H5''	1:1A:2207:G:C5	2.30	0.66
32:2a:957:U:O2'	32:2a:959:A:N7	2.23	0.66
38:2g:64:GLN:O	38:2g:68:ASN:ND2	2.27	0.66
1:1A:1183:G:O2'	25:13:29:ARG:NH2	2.27	0.66
1:1A:2364:C:OP1	22:10:55:ARG:NH1	2.29	0.66
32:1a:1035:A:N3	32:1a:1036:G:N2	2.41	0.66
33:1b:83:MET:HG2	33:1b:234:PRO:HG3	1.77	0.66
42:1k:85:ARG:HD3	42:1k:113:PRO:HD3	1.75	0.66
44:1m:122:LYS:HG3	44:1m:123:ALA:H	1.58	0.66
17:1V:78:LYS:O	62:1V:301:HOH:O	2.14	0.66
18:1W:18:ARG:HG2	18:1W:76:VAL:HB	1.77	0.66
1:2A:1507:A:O2'	1:2A:1508:A:O5'	2.13	0.66
32:2a:1314:C:OP2	50:2s:4:SER:OG	2.13	0.66
36:1e:78:HIS:HD2	39:1h:104:ARG:HD2	1.58	0.66
19:2X:8:ILE:O	24:22:36:ARG:NH2	2.29	0.66
32:2a:986:A:N3	50:2s:52:TYR:OH	2.26	0.66
54:2w:23:A:H3'	54:2w:24:G:C8	2.31	0.66
1:1A:1453:U:O2'	1:1A:1455:G:N7	2.27	0.66
1:1A:1671:U:O4	62:1A:4105:HOH:O	2.09	0.66
12:1Q:111:GLU:OE2	12:1Q:133:ARG:NH2	2.29	0.66
42:1k:16:SER:HB2	42:1k:79:SER:HB3	1.77	0.66
1:2A:860:U:H1'	1:2A:2268:A:H5'	1.78	0.66
1:2A:963:U:OP2	62:2A:3913:HOH:O	2.13	0.66
11:2P:94:GLU:HG3	11:2P:124:LYS:HE3	1.78	0.66
36:2e:122:GLU:O	36:2e:126:ARG:NH1	2.28	0.66
1:1A:2774:C:OP2	62:1A:4132:HOH:O	2.14	0.66
1:2A:943:U:OP2	62:2A:3934:HOH:O	2.13	0.66
12:2Q:57:HIS:CE1	12:2Q:116:GLU:HG2	2.31	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1490:C:H2'	32:2a:1491:G:O4'	1.95	0.66
44:2m:10:PRO:HD2	44:2m:18:ALA:HB1	1.76	0.66
1:1A:272(J):C:H2'	1:1A:274:G:H8	1.60	0.66
1:1A:1315:C:OP2	62:1A:4114:HOH:O	2.12	0.66
4:1E:29:GLY:HA3	62:1E:403:HOH:O	1.96	0.66
6:1G:82:LEU:HD11	6:1G:88:ILE:HG21	1.76	0.66
22:10:10:THR:HG22	22:10:12:ASN:H	1.60	0.66
32:1a:1220:G:N2	50:1s:54:GLY:O	2.26	0.66
33:1b:16:HIS:HB2	33:1b:204:ASN:HB3	1.78	0.66
1:2A:100:G:O2'	24:22:7:ARG:NH2	2.28	0.66
32:2a:1119:C:OP2	40:2i:9:ARG:NH2	2.27	0.66
46:2o:25:THR:HG21	46:2o:70:LEU:HB2	1.78	0.66
11:1P:39:LYS:HB2	11:1P:45:LEU:HD13	1.77	0.66
32:1a:376:G:O3'	47:1p:5:ARG:NH1	2.29	0.66
34:1c:162:GLN:NE2	53:1v:24:A:O2'	2.29	0.66
1:2A:370:G:OP1	1:2A:403:U:N3	2.23	0.66
1:2A:397:G:N7	62:2A:4026:HOH:O	2.29	0.66
1:2A:2857:G:N2	1:2A:2860:A:OP2	2.28	0.66
8:2I:101:LEU:HD13	8:2I:107:VAL:HB	1.77	0.66
41:2j:25:GLU:OE2	41:2j:29:ARG:NH2	2.28	0.66
1:1A:301:G:OP2	20:1Y:84:ARG:NH2	2.29	0.66
32:1a:1118:C:OP1	40:1i:104:ARG:NH1	2.29	0.66
44:1m:23:TYR:HB3	44:1m:67:GLU:HA	1.77	0.66
7:2H:51:ARG:NH1	7:2H:53:GLU:OE2	2.23	0.66
34:2c:152:ILE:HG22	34:2c:167:TRP:HB3	1.78	0.66
1:1A:1352:U:OP1	62:1A:4129:HOH:O	2.12	0.65
1:2A:1031:G:H21	31:29:36:GLN:HE22	1.40	0.65
14:2S:39:ILE:HB	14:2S:49:VAL:HB	1.77	0.65
32:2a:484:G:O2'	62:2a:1906:HOH:O	2.14	0.65
36:2e:68:GLU:HG2	36:2e:70:PRO:HD3	1.78	0.65
57:2y:4:U:H2'	57:2y:5:C:H5'	1.78	0.65
32:2a:1376:U:H2'	32:2a:1377:A:H8	1.61	0.65
42:2k:86:GLY:O	42:2k:91:ARG:NH1	2.30	0.65
1:1A:2136:C:N4	1:1A:2155:G:N1	2.44	0.65
6:1G:66:GLN:NE2	6:1G:93:THR:O	2.28	0.65
32:1a:1125:U:H4'	41:1j:5:ARG:NH2	2.11	0.65
15:2T:117:ASP:OD2	15:2T:120:ARG:NE	2.21	0.65
25:23:8:LEU:HB2	25:23:28:LEU:HD22	1.78	0.65
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.62	0.65
1:1A:1069:A:H4'	1:1A:1070:A:H5''	1.79	0.65
14:1S:20:ARG:NH2	22:10:51:VAL:O	2.29	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:1j:8:LEU:HD22	41:1j:96:ILE:HG22	1.78	0.65
1:2A:987:G:O2'	1:2A:1000:A:N3	2.29	0.65
57:2y:26:A:N6	57:2y:45:G:O6	2.30	0.65
1:1A:279:C:H42	1:1A:361:G:H1	1.44	0.65
1:1A:2691:C:OP2	62:1A:4134:HOH:O	2.14	0.65
23:11:18:ILE:HG12	23:11:37:ILE:HG12	1.79	0.65
28:16:6:ARG:NH1	28:16:24:GLU:OE2	2.28	0.65
32:1a:557:G:OP1	62:1a:4808:HOH:O	2.14	0.65
32:1a:636:U:H2'	32:1a:637:G:H8	1.61	0.65
34:1c:152:ILE:HB	34:1c:199:LYS:HB2	1.79	0.65
35:1d:7:PRO:HB2	35:1d:10:ARG:HD2	1.77	0.65
1:2A:1420:U:O2'	1:2A:1421:G:OP1	2.11	0.65
6:2G:83:ARG:N	6:2G:86:MET:SD	2.67	0.65
1:1A:2099:U:H3	1:1A:2190:G:H1	1.44	0.65
1:1A:2406:U:O4	11:1P:70:GLN:NE2	2.30	0.65
32:2a:501:C:H2'	32:2a:502:G:H8	1.61	0.65
32:2a:501:C:H2'	32:2a:502:G:C8	2.32	0.65
1:1A:400:G:N7	62:1A:4198:HOH:O	2.28	0.65
1:1A:1770:G:OP1	62:1A:4137:HOH:O	2.14	0.65
6:1G:5:VAL:HG13	6:1G:8:LYS:HE2	1.78	0.65
32:1a:1166:G:N2	32:1a:1170:A:OP2	2.29	0.65
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.31	0.65
32:2a:1010:G:C2	32:2a:1020:U:H1'	2.32	0.65
32:2a:1359:C:O2'	32:2a:1362:C:N4	2.30	0.65
33:2b:178:ARG:HH22	39:2h:68:ARG:HH22	1.43	0.65
40:2i:50:LEU:HD13	40:2i:56:LEU:HA	1.79	0.65
41:2j:11:PHE:HE1	41:2j:67:THR:HG22	1.60	0.65
1:1A:671:C:N4	62:1A:4211:HOH:O	2.29	0.65
1:1A:2483:C:N3	12:1Q:124:LYS:NZ	2.45	0.65
2:1B:25:A:OP1	62:1B:301:HOH:O	2.14	0.65
32:2a:222:U:H2'	32:2a:223:U:C6	2.32	0.65
32:2a:532:A:H2	34:2c:156:ARG:HH22	1.44	0.65
1:1A:428:A:OP1	62:1A:4133:HOH:O	2.14	0.65
1:1A:1818:U:O4	3:1D:154:LYS:NZ	2.29	0.65
1:1A:2790:A:H5'	1:1A:2893:G:H21	1.61	0.65
32:1a:412:A:OP2	35:1d:35:ARG:NH2	2.30	0.65
1:2A:1452:A:OP2	62:2A:3936:HOH:O	2.13	0.65
6:2G:96:ARG:H	6:2G:99:MET:HE2	1.62	0.65
7:2H:3:ARG:HH22	7:2H:65:HIS:HB3	1.62	0.65
12:2Q:1:MET:HB2	12:2Q:44:ALA:HB1	1.79	0.65
41:2j:8:LEU:HB3	41:2j:96:ILE:HG23	1.77	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:2q:21:VAL:HG21	48:2q:59:ILE:HG21	1.79	0.65
5:1F:101:LEU:O	5:1F:106:ARG:NH1	2.29	0.65
7:1H:121:ILE:HG13	7:1H:144:VAL:HG21	1.79	0.65
54:1w:27:G:H1	54:1w:43:U:H3	1.45	0.65
1:1A:2612:C:OP2	27:15:2:ALA:N	2.28	0.64
28:16:13:CYS:SG	28:16:47:THR:HG21	2.36	0.64
35:2d:15:GLU:OE2	35:2d:59:ARG:NH1	2.30	0.64
1:2A:890:A:H2'	1:2A:892:G:H8	1.62	0.64
21:2Z:153:SER:HB2	21:2Z:167:PRO:HB3	1.79	0.64
33:2b:91:PRO:HG2	33:2b:155:LEU:HB2	1.80	0.64
21:1Z:105:VAL:N	21:1Z:139:VAL:O	2.29	0.64
24:12:14:ARG:O	24:12:67:LYS:NZ	2.27	0.64
1:2A:994:C:O2'	1:2A:996:A:OP1	2.15	0.64
1:2A:1568:G:N7	62:2A:4030:HOH:O	2.30	0.64
9:2N:67:LEU:HB3	9:2N:88:GLU:HG3	1.77	0.64
50:2s:53:ASN:ND2	50:2s:56:GLN:O	2.31	0.64
32:1a:1030(D):A:H3'	32:1a:1031:G:H4'	1.78	0.64
57:1y:4:U:H3	57:1y:69:A:H61	1.44	0.64
6:2G:165:THR:HG23	6:2G:168:GLU:HG3	1.79	0.64
7:2H:101:ARG:HH22	7:2H:122:THR:HA	1.63	0.64
32:2a:545:C:OP1	35:2d:61:LYS:NZ	2.29	0.64
1:1A:2787:C:H1'	4:1E:62:PRO:HG3	1.78	0.64
35:1d:122:ARG:NH1	35:1d:134:ASP:O	2.31	0.64
1:2A:335:C:H5''	20:2Y:84:ARG:HD3	1.80	0.64
34:1c:8:ILE:HD13	34:1c:184:TYR:HB3	1.79	0.64
32:2a:1176:A:H2'	32:2a:1177:G:C8	2.33	0.64
35:2d:57:ARG:NH1	35:2d:205:GLU:OE2	2.30	0.64
1:1A:1062:G:H8	1:1A:1070:A:H4'	1.61	0.64
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.31	0.64
32:1a:673:G:H2'	32:1a:674:G:C8	2.31	0.64
32:2a:501:C:OP2	43:2l:124:LYS:NZ	2.26	0.64
32:2a:1286:A:H8	32:2a:1287:A:H4'	1.63	0.64
32:1a:1372:U:OP1	40:1i:72:GLY:N	2.29	0.64
32:2a:11:G:H1	32:2a:23:C:H42	1.46	0.64
1:1A:1057:A:N6	1:1A:1081:U:H3	1.94	0.64
1:2A:1323:U:OP1	18:2W:98:LYS:NZ	2.24	0.64
32:2a:1129:C:O2'	32:2a:1130:A:N7	2.27	0.64
54:2w:51:A:N6	54:2w:63:U:C2	2.66	0.64
1:1A:801:G:O6	62:1A:4138:HOH:O	2.15	0.64
1:1A:968:G:O6	62:1A:4119:HOH:O	2.09	0.64
1:1A:1119:C:N4	62:1A:4242:HOH:O	2.31	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2541:A:N7	62:1A:4217:HOH:O	2.29	0.64
1:2A:307:G:N7	62:2A:4036:HOH:O	2.30	0.64
4:2E:29:GLY:H	4:2E:180:ASN:HB3	1.63	0.64
4:2E:174:ASP:OD1	4:2E:175:VAL:N	2.31	0.64
11:2P:50:ARG:HD3	30:28:7:HIS:CD2	2.33	0.64
32:2a:1226:C:OP2	44:2m:91:ARG:NH1	2.31	0.64
1:1A:1235:G:OP1	62:1A:4110:HOH:O	2.15	0.63
32:1a:116:A:H61	32:1a:313:A:H1'	1.63	0.63
33:1b:16:HIS:HB3	33:1b:210:SER:HB2	1.78	0.63
36:1e:41:VAL:HG23	36:1e:67:VAL:HG12	1.80	0.63
1:2A:1169:G:H22	1:2A:1180:C:H42	1.45	0.63
6:2G:166:ASP:O	6:2G:170:ARG:N	2.29	0.63
32:2a:1271:G:N2	32:2a:1272:G:N7	2.47	0.63
32:2a:1412:C:H2'	32:2a:1413:A:C8	2.34	0.63
40:2i:5:TYR:HE1	40:2i:16:ARG:HB3	1.63	0.63
40:2i:23:ASN:ND2	40:2i:25:LYS:HE2	2.13	0.63
47:2p:21:VAL:HG23	47:2p:33:ILE:HB	1.79	0.63
15:1T:117:ASP:OD2	15:1T:120:ARG:NE	2.31	0.63
1:2A:578:A:OP2	62:2A:3939:HOH:O	2.16	0.63
32:2a:397:A:N7	32:2a:547:A:O2'	2.28	0.63
32:1a:601:C:H2'	32:1a:602:A:H8	1.63	0.63
32:2a:1193:G:O2'	36:2e:25:ARG:NH2	2.32	0.63
45:2n:26:ARG:HD3	45:2n:43:CYS:HB3	1.81	0.63
8:1I:77:LEU:HB3	8:1I:142:VAL:HG12	1.81	0.63
32:1a:429:U:O2'	35:1d:22:LYS:NZ	2.31	0.63
1:2A:300:A:OP2	20:2Y:86:ARG:NH1	2.32	0.63
32:2a:278:G:OP2	48:2q:41:LYS:NZ	2.31	0.63
57:2y:9:A:N3	57:2y:45:G:N2	2.46	0.63
12:1Q:85:LYS:HG2	22:10:7:LEU:HB3	1.80	0.63
32:1a:532:A:N6	32:1a:1206:G:O2'	2.32	0.63
35:1d:88:VAL:HA	36:1e:97:GLY:HA3	1.80	0.63
46:1o:23:GLY:O	46:1o:28:GLN:NE2	2.29	0.63
8:2I:81:VAL:HG21	8:2I:88:ILE:HG12	1.80	0.63
32:2a:539:A:H2'	32:2a:540:G:C8	2.34	0.63
46:2o:16:ALA:HB1	46:2o:21:ASP:HB3	1.79	0.63
10:1O:88:ASN:ND2	10:1O:90:GLN:OE1	2.32	0.63
12:1Q:78:PRO:HD3	55:1x:1:C:N3	2.13	0.63
15:1T:60:THR:HG22	15:1T:77:PRO:HA	1.80	0.63
32:1a:1286:A:H2'	32:1a:1287:A:H4'	1.80	0.63
38:1g:78:ARG:HG3	38:1g:79:ARG:H	1.62	0.63
2:2B:43:C:OP1	26:24:6:HIS:NE2	2.30	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:165:THR:OG1	6:2G:167:GLU:OE1	2.13	0.63
1:2A:607:U:OP1	5:2F:102:PRO:HA	1.98	0.63
1:2A:879:G:H3'	1:2A:880:G:H8	1.62	0.63
27:25:45:VAL:HG11	27:25:58:LEU:HD13	1.81	0.63
32:2a:201:C:H42	32:2a:216:G:H1	1.45	0.63
32:2a:1128:C:H1'	32:2a:1147:C:H42	1.63	0.63
37:2f:41:GLU:OE1	49:2r:35:ARG:NH2	2.32	0.63
43:2l:32:PHE:HB3	43:2l:84:LEU:HD11	1.81	0.63
49:2r:25:THR:O	49:2r:42:ARG:NH2	2.31	0.63
1:1A:329:G:OP1	62:1A:4139:HOH:O	2.15	0.63
1:1A:1482:G:H2'	1:1A:1484:G:H8	1.64	0.63
8:1I:75:LEU:O	8:1I:141:LYS:NZ	2.28	0.63
32:1a:406:G:H21	35:1d:119:GLN:HE22	1.47	0.63
43:1l:70:ILE:HG12	43:1l:100:ILE:HD13	1.81	0.63
1:2A:192:C:O2'	1:2A:802:A:N3	2.32	0.63
1:2A:2690:C:OP1	13:2R:17:ARG:NH2	2.32	0.63
2:2B:103:G:H21	21:2Z:73:GLN:HE22	1.46	0.63
3:2D:148:GLU:HB2	3:2D:151:LYS:HD2	1.79	0.63
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.26	0.63
32:2a:521:G:H4'	43:2l:73:GLU:HG2	1.81	0.63
32:2a:921:U:O2'	36:2e:19:MET:O	2.11	0.63
1:1A:1225:G:H4'	17:1V:84:LYS:HG2	1.79	0.63
1:1A:1762:A:H2'	62:1A:5553:HOH:O	1.98	0.63
32:2a:117:G:OP2	62:2a:1904:HOH:O	2.16	0.63
34:2c:137:ALA:HA	34:2c:140:ARG:HH11	1.63	0.63
37:2f:68:PRO:HB2	37:2f:71:ARG:HG3	1.79	0.63
44:2m:90:LEU:HD21	44:2m:94:ARG:HH11	1.63	0.63
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.14	0.62
1:2A:974:G:OP1	1:2A:1187:G:O2'	2.14	0.62
1:2A:2117:A:N6	1:2A:2166:G:H1	1.97	0.62
3:2D:108:PRO:HG2	3:2D:111:LEU:HB2	1.81	0.62
5:2F:53:THR:HG23	5:2F:55:GLY:H	1.64	0.62
35:2d:173:TRP:CD2	35:2d:189:PRO:HB3	2.34	0.62
38:2g:133:GLY:O	38:2g:137:LYS:N	2.28	0.62
32:1a:702:A:OP2	62:1a:4809:HOH:O	2.16	0.62
32:1a:942:G:H21	40:1i:124:GLN:NE2	1.96	0.62
19:2X:94:GLY:CA	19:2X:95:LEU:HB2	2.28	0.62
1:2A:637:A:H5''	11:2P:117:GLU:HB2	1.82	0.62
1:2A:1324:G:N7	62:2A:4038:HOH:O	2.30	0.62
11:2P:39:LYS:HB2	11:2P:45:LEU:HD13	1.79	0.62
32:2a:1479:C:H2'	32:2a:1480:G:H8	1.64	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:27:LYS:HB3	33:2b:194:PRO:HD2	1.79	0.62
28:16:28:ARG:NH1	28:16:29:ASN:OD1	2.32	0.62
41:1j:40:LEU:HB2	41:1j:69:ASN:HB2	1.81	0.62
1:2A:1021:A:H62	1:2A:1141:U:H3	1.46	0.62
26:24:44:THR:O	26:24:46:GLN:N	2.33	0.62
31:29:15:LYS:HD3	31:29:26:ILE:HD11	1.81	0.62
32:2a:1209:C:O2'	32:2a:1214:C:N4	2.31	0.62
32:2a:1263:C:N3	32:2a:1272:G:O6	2.32	0.62
1:1A:1406:U:H2'	1:1A:1407:C:C6	2.34	0.62
1:2A:2313:C:H4'	6:2G:91:ARG:HG3	1.81	0.62
31:29:25:VAL:HB	31:29:34:GLN:HB2	1.82	0.62
33:2b:71:VAL:HB	33:2b:164:VAL:HG13	1.81	0.62
42:2k:48:ILE:O	42:2k:50:TYR:N	2.32	0.62
1:1A:729:G:C6	3:1D:208:LYS:HB2	2.35	0.62
1:1A:2133:G:H1	1:1A:2157:G:H1'	1.64	0.62
1:2A:1015:G:H2'	1:2A:1016:G:H8	1.64	0.62
4:1E:77:ILE:HD13	4:1E:195:LEU:HD13	1.81	0.62
1:2A:301:G:OP2	20:2Y:84:ARG:NH2	2.31	0.62
1:2A:2183:C:H2'	1:2A:2184:G:H8	1.65	0.62
1:2A:2467:C:H4'	12:2Q:123:HIS:CD2	2.35	0.62
6:2G:19:LEU:HA	6:2G:22:ARG:HB3	1.81	0.62
32:2a:48:C:OP2	62:2a:1907:HOH:O	2.15	0.62
32:2a:1182:G:H4'	32:2a:1183:A:H5''	1.81	0.62
57:2y:21:A:H1'	57:2y:48:C:C4	2.35	0.62
1:1A:588:U:H2'	1:1A:589:C:C6	2.34	0.62
1:1A:2183:C:H2'	1:1A:2184:G:C8	2.34	0.62
54:1w:40:C:H2'	54:1w:41:A:H8	1.65	0.62
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.35	0.62
32:2a:1053:G:N7	32:2a:1200:C:H5''	2.15	0.62
47:2p:5:ARG:HH21	47:2p:28:ARG:HA	1.63	0.62
5:1F:12:LEU:HD12	5:1F:124:LEU:HD21	1.82	0.62
16:1U:47:TYR:HA	16:1U:50:ARG:NH2	2.14	0.62
1:2A:1268:A:OP2	62:2A:3942:HOH:O	2.16	0.62
1:2A:2131:G:N2	1:2A:2158:A:H62	1.97	0.62
1:2A:2379:G:O2'	14:2S:17:ARG:NH1	2.26	0.62
6:2G:114:ILE:HA	6:2G:140:ILE:HD11	1.82	0.62
17:2V:76:LYS:HB2	17:2V:81:TYR:HD2	1.65	0.62
36:2e:143:ARG:HB3	36:2e:147:ASP:HB2	1.81	0.62
54:2w:11:C:H42	54:2w:24:G:H1	1.47	0.62
1:2A:2136:C:N3	1:2A:2155:G:N2	2.47	0.62
32:2a:1317:C:O2	50:2s:37:ARG:NH2	2.33	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:57:ARG:HH12	51:2t:100:ILE:HD12	1.65	0.62
1:1A:2849:U:O4	15:1T:23:ARG:NH2	2.30	0.61
32:1a:444:C:H2'	32:1a:445:G:H8	1.65	0.61
32:1a:624:C:H2'	32:1a:625:G:H8	1.63	0.61
1:2A:1927:A:H2'	1:2A:1928:A:C8	2.35	0.61
1:2A:2130:U:H3	1:2A:2159:G:H1	1.46	0.61
1:2A:2659:G:O2'	1:2A:2661:G:N7	2.29	0.61
6:2G:38:VAL:HG22	6:2G:93:THR:HG23	1.81	0.61
12:2Q:85:LYS:HG2	22:20:7:LEU:HB3	1.80	0.61
32:2a:1130:A:H5''	40:2i:18:PHE:CE2	2.35	0.61
34:2c:129:ALA:HB3	34:2c:132:ARG:HD2	1.82	0.61
54:2w:54:5MU:O2	54:2w:58:A:N7	2.33	0.61
17:1V:1:MET:HB3	17:1V:99:ILE:HD12	1.83	0.61
19:1X:94:GLY:H	19:1X:95:LEU:HB2	1.64	0.61
32:1a:107:G:N7	51:1t:15:ARG:NH2	2.48	0.61
32:1a:236:G:OP1	48:1q:40:LYS:NZ	2.32	0.61
36:1e:18:ARG:HH11	36:1e:27:ARG:HH12	1.48	0.61
14:2S:67:ARG:HG2	14:2S:71:ARG:HD2	1.83	0.61
32:2a:505:G:H2'	32:2a:506:G:H8	1.65	0.61
32:2a:1263:C:C4	32:2a:1272:G:O6	2.52	0.61
41:2j:8:LEU:HD11	41:2j:20:ALA:HB2	1.81	0.61
42:2k:62:GLN:OE1	42:2k:93:GLN:NE2	2.32	0.61
1:1A:1174:A:H4'	1:1A:1175:U:OP1	1.99	0.61
40:1i:52:ALA:HB2	40:1i:99:LEU:HD12	1.81	0.61
49:1r:32:ARG:HA	49:1r:69:THR:HG21	1.82	0.61
3:2D:171:ASP:OD1	3:2D:171:ASP:N	2.32	0.61
32:2a:376:G:H5''	47:2p:5:ARG:HB2	1.81	0.61
32:2a:975:A:H4'	32:2a:976:G:H5''	1.82	0.61
37:2f:37:VAL:HA	37:2f:65:VAL:HG12	1.82	0.61
38:2g:72:ARG:NH2	38:2g:142:GLU:OE2	2.32	0.61
1:1A:2277:G:OP2	22:10:10:THR:HG21	1.99	0.61
11:1P:116:GLY:O	11:1P:137:LYS:NZ	2.32	0.61
1:2A:2010:G:H5''	18:2W:42:ARG:HB2	1.81	0.61
6:2G:42:GLY:HA2	6:2G:89:GLY:HA3	1.81	0.61
12:2Q:54:MET:HE1	12:2Q:104:PHE:HB3	1.82	0.61
33:2b:212:GLN:NE2	33:2b:234:PRO:O	2.33	0.61
43:2l:57:LYS:HG2	43:2l:67:THR:HG22	1.81	0.61
1:1A:2206:G:H3'	1:1A:2207:G:C8	2.36	0.61
5:1F:53:THR:CG2	5:1F:55:GLY:H	2.14	0.61
5:1F:129:PHE:HB3	5:1F:132:VAL:HG13	1.81	0.61
30:18:23:VAL:HG13	30:18:47:LYS:HB3	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:141:A:H1'	32:1a:182:U:C2	2.36	0.61
1:2A:1264:G:OP1	27:25:19:ARG:NH2	2.23	0.61
32:2a:588:G:OP2	62:2a:1909:HOH:O	2.16	0.61
1:1A:1171:G:OP2	1:1A:1174:A:N6	2.34	0.61
32:2a:56:U:H2'	32:2a:57:G:C8	2.35	0.61
39:2h:64:LYS:HD2	39:2h:79:VAL:HG11	1.82	0.61
3:1D:169:GLU:OE2	3:1D:184:LYS:NZ	2.32	0.61
15:2T:85:LYS:NZ	15:2T:87:ASP:OD2	2.28	0.61
32:2a:1244:C:H42	32:2a:1293:G:H1	1.49	0.61
57:2y:19:G:H5'	57:2y:57:G:H1	1.66	0.61
1:1A:2331:G:O2'	1:1A:2336:A:N1	2.25	0.61
9:1N:46:VAL:HG23	9:1N:48:MET:HG2	1.81	0.61
1:2A:947:G:H2'	1:2A:948:G:C8	2.35	0.61
5:2F:155:LEU:HD23	5:2F:192:LEU:HD13	1.82	0.61
12:2Q:20:ALA:HB2	21:2Z:79:ARG:HG3	1.82	0.61
13:2R:33:ARG:NH2	13:2R:115:GLU:OE1	2.31	0.61
24:22:41:ILE:HG13	24:22:43:GLN:HG2	1.82	0.61
38:2g:144:MET:HG3	57:2y:41:A:H1'	1.81	0.61
6:2G:7:LEU:HD13	6:2G:104:GLU:HA	1.81	0.61
32:2a:576:G:OP1	62:2a:1908:HOH:O	2.16	0.61
32:2a:1275:A:H3'	32:2a:1276:G:H8	1.66	0.61
1:1A:154(A):C:H42	1:1A:171:G:H1	1.48	0.60
1:1A:1740:G:H2'	1:1A:1741:A:C8	2.35	0.60
32:1a:1054:C:OP2	62:1a:4806:HOH:O	2.16	0.60
54:1w:63:U:H2'	54:1w:64:G:C8	2.36	0.60
1:2A:2537:U:H2'	1:2A:2538:C:C6	2.36	0.60
1:2A:2741:A:OP1	31:29:22:ARG:NH2	2.28	0.60
17:2V:40:LEU:HB2	17:2V:46:VAL:HG12	1.83	0.60
26:24:24:THR:OG1	26:24:25:TYR:N	2.31	0.60
55:2x:53:G:H3'	55:2x:54:5MU:H73	1.82	0.60
57:2y:48:C:H2'	57:2y:59:A:H1'	1.83	0.60
1:1A:1082:U:N3	1:1A:1086:A:N6	2.07	0.60
32:1a:1040:U:H2'	32:1a:1041:A:C8	2.36	0.60
32:1a:1273:G:H3'	32:1a:1274:G:H8	1.65	0.60
1:2A:2630:G:H2'	1:2A:2631:G:H8	1.66	0.60
1:1A:2507:C:O2'	54:1w:74:C:N4	2.34	0.60
1:1A:2702:U:OP2	62:1A:4142:HOH:O	2.17	0.60
32:1a:731:G:H5'	32:1a:766:A:H4'	1.84	0.60
32:1a:1132:C:H42	32:1a:1142:G:H1	1.47	0.60
1:2A:1786:A:H1'	1:2A:1938:A:N6	2.17	0.60
3:2D:133:LEU:HB3	3:2D:173:VAL:HG11	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2P:85:LEU:HA	11:2P:88:LEU:HD12	1.83	0.60
18:2W:88:ARG:NH1	18:2W:94:ASP:OD2	2.33	0.60
32:2a:1106:G:H5''	34:2c:172:ARG:HB3	1.83	0.60
33:2b:80:ILE:HG21	33:2b:211:ILE:HG21	1.83	0.60
1:1A:1048:A:N1	1:1A:1112:G:O2'	2.32	0.60
33:1b:69:LEU:HB3	33:1b:162:ILE:HG22	1.84	0.60
1:2A:582:G:OP2	62:2A:3941:HOH:O	2.16	0.60
32:2a:737:A:H4'	37:2f:72:VAL:HG11	1.83	0.60
57:2y:30:G:H2'	57:2y:31:A:H8	1.65	0.60
32:1a:584:G:O6	62:1a:4807:HOH:O	2.14	0.60
1:2A:577:G:O6	62:2A:3938:HOH:O	2.14	0.60
27:25:2:ALA:N	62:25:201:HOH:O	2.33	0.60
32:1a:352:C:O2'	32:1a:354:G:OP1	2.18	0.60
32:1a:472:A:OP2	47:1p:75:ARG:NH2	2.34	0.60
18:2W:11:ARG:NH1	18:2W:99:ARG:O	2.35	0.60
24:22:29:LYS:HG2	24:22:57:ILE:HD13	1.84	0.60
32:2a:1089:G:H1	32:2a:1096:C:N4	1.99	0.60
33:2b:120:ALA:O	33:2b:125:PRO:HD2	2.02	0.60
3:1D:8:PRO:HB3	3:1D:14:ARG:HG2	1.84	0.60
6:1G:67:LYS:H	26:14:6:HIS:CE1	2.18	0.60
32:1a:176:C:H2'	32:1a:177:C:H6	1.67	0.60
32:1a:1025:U:O2	32:1a:1036:G:O6	2.19	0.60
36:1e:20:GLN:NE2	36:1e:21:ALA:O	2.35	0.60
1:2A:2831:G:OP1	4:2E:58:ARG:NH2	2.33	0.60
5:2F:24:LEU:HD21	5:2F:114:VAL:HG12	1.84	0.60
26:24:37:SER:HA	26:24:43:TYR:HD1	1.65	0.60
45:2n:29:ARG:HD3	45:2n:40:CYS:HB2	1.83	0.60
1:1A:71:A:N7	19:1X:31:HIS:HE1	1.99	0.60
1:1A:1686:C:H2'	1:1A:1687:G:O4'	2.01	0.60
1:1A:2226:C:OP2	62:1A:4140:HOH:O	2.16	0.60
8:1I:48:GLU:O	8:1I:52:ARG:NH2	2.34	0.60
32:1a:266:G:H5''	32:1a:268:C:H41	1.66	0.60
1:2A:882:G:H22	1:2A:894:C:H42	1.47	0.60
14:2S:71:ARG:NH1	14:2S:107:GLU:OE1	2.34	0.60
32:2a:707:C:H2'	32:2a:708:C:H6	1.67	0.60
54:2w:3:G:H1	54:2w:70:C:H42	1.48	0.60
14:1S:39:ILE:HB	14:1S:49:VAL:HG13	1.82	0.60
32:1a:110:C:O2'	47:1p:25:ARG:O	2.17	0.60
1:2A:571:A:N6	1:2A:2499:C:O3'	2.35	0.60
2:2B:3:C:H2'	2:2B:4:C:C6	2.37	0.60
5:2F:103:LYS:HA	5:2F:106:ARG:HD3	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:62:LEU:HB3	6:2G:143:GLU:HB3	1.82	0.60
32:2a:580:U:H5''	46:2o:58:MET:HG2	1.82	0.60
37:2f:83:ASP:N	37:2f:83:ASP:OD1	2.34	0.60
42:2k:18:ARG:HD2	42:2k:83:ILE:HD11	1.83	0.60
50:2s:49:ILE:HD13	50:2s:51:VAL:HG22	1.83	0.60
54:2w:51:A:H5'	54:2w:52:G:OP2	2.02	0.60
1:1A:607:U:OP1	5:1F:102:PRO:HA	2.02	0.60
1:1A:1062:G:P	1:1A:1070:A:H1'	2.42	0.60
1:1A:1588:C:H2'	1:1A:1589:C:C6	2.37	0.60
13:2R:87:TYR:HB3	13:2R:90:ARG:HB3	1.84	0.60
15:2T:60:THR:HG22	15:2T:77:PRO:HA	1.84	0.60
32:2a:533:A:O2'	32:2a:535:A:OP2	2.18	0.60
1:1A:1062:G:H2'	1:1A:1063:G:C8	2.37	0.59
15:1T:127:ALA:C	15:1T:129:ARG:H	2.09	0.59
33:1b:143:GLU:O	33:1b:147:LYS:N	2.34	0.59
49:1r:58:LEU:HD12	49:1r:66:LEU:HD22	1.84	0.59
1:2A:2165:G:H1	1:2A:2171:A:H8	1.49	0.59
2:2B:106:G:OP1	21:2Z:31:ARG:HB3	2.01	0.59
4:2E:54:GLN:OE1	4:2E:55:ASN:N	2.34	0.59
32:2a:814:A:H2'	32:2a:816:A:H5''	1.84	0.59
33:2b:60:ASP:O	33:2b:64:ARG:HG2	2.02	0.59
34:2c:20:SER:OG	34:2c:40:ARG:NH1	2.29	0.59
36:2e:92:LYS:HB3	36:2e:119:LEU:HB2	1.83	0.59
41:2j:7:LYS:HG3	41:2j:70:ARG:O	2.02	0.59
37:1f:67:MET:HE1	37:1f:75:LEU:HD12	1.83	0.59
1:2A:2404:C:O3'	11:2P:77:ARG:NH2	2.35	0.59
1:2A:2818:G:OP2	13:2R:42:LYS:NZ	2.29	0.59
2:2B:37:C:O2	14:2S:95:HIS:NE2	2.35	0.59
12:2Q:12:GLN:NE2	12:2Q:72:LYS:HG3	2.16	0.59
21:2Z:6:LYS:HE3	21:2Z:8:TYR:HE2	1.65	0.59
21:2Z:45:ASP:OD1	21:2Z:49:ARG:NE	2.34	0.59
32:2a:1002:G:C2	32:2a:1003:G:H1'	2.37	0.59
38:1g:64:GLN:HE21	38:1g:68:ASN:HD21	1.49	0.59
3:2D:108:PRO:HD2	3:2D:111:LEU:HD22	1.84	0.59
32:2a:1084:G:H3'	32:2a:1085:U:H2'	1.84	0.59
39:2h:20:TYR:HE2	39:2h:75:ARG:HD2	1.68	0.59
1:1A:687:C:H5''	29:17:2:LYS:HE2	1.84	0.59
1:2A:2138:C:N3	1:2A:2153:G:N2	2.41	0.59
33:2b:70:PHE:HE2	33:2b:90:MET:HB2	1.65	0.59
1:1A:2810:A:N6	1:1A:2891:G:O2'	2.30	0.59
32:1a:56:U:H2'	32:1a:57:G:H8	1.68	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:427:U:OP1	35:1d:13:ARG:NH1	2.35	0.59
32:1a:444:C:H2'	32:1a:445:G:C8	2.37	0.59
32:1a:953:G:H5'	32:1a:965:A:H61	1.67	0.59
32:1a:1355:G:H2'	32:1a:1356:G:C8	2.36	0.59
53:1v:19:A:H62	54:1w:37:T6A:H152	1.67	0.59
1:2A:459:U:H5''	29:27:40:TRP:CD2	2.38	0.59
1:2A:2630:G:H2'	1:2A:2631:G:C8	2.37	0.59
32:2a:643:C:H2'	32:2a:644:G:H8	1.67	0.59
26:14:14:ILE:HB	26:14:22:ILE:HD12	1.84	0.59
33:1b:84:GLU:HB3	33:1b:219:VAL:HG21	1.84	0.59
40:1i:17:VAL:HG11	40:1i:81:ILE:HA	1.85	0.59
1:2A:309:G:N3	1:2A:329:G:O2'	2.36	0.59
1:2A:1826:G:H4'	3:2D:242:ARG:CZ	2.33	0.59
20:2Y:8:LYS:HD3	20:2Y:97:ARG:NH1	2.16	0.59
32:2a:1063:C:H3'	32:2a:1064:G:H2'	1.85	0.59
32:2a:1122:U:N3	32:2a:1123:A:N7	2.51	0.59
1:1A:956:G:H2'	1:1A:957:A:H2'	1.84	0.59
1:1A:2131:G:H5'	1:1A:2133:G:C8	2.37	0.59
1:1A:2350:C:OP2	62:1A:4143:HOH:O	2.17	0.59
2:1B:24:G:N7	2:1B:56:G:H2'	2.17	0.59
21:1Z:151:HIS:CD2	21:1Z:170:THR:HA	2.37	0.59
32:1a:1077:G:N2	32:1a:1080:A:OP2	2.32	0.59
1:2A:271(G):C:H2'	1:2A:271(H):G:H8	1.67	0.59
1:2A:307:G:N1	1:2A:310:A:OP2	2.35	0.59
1:2A:1639:U:H2'	1:2A:1640:C:H5''	1.85	0.59
15:2T:111:ARG:NH1	32:2a:1463:C:OP1	2.36	0.59
54:2w:51:A:C8	54:2w:64:G:H2'	2.38	0.59
1:1A:751:A:H5'	18:1W:90:ARG:HA	1.84	0.59
1:1A:1359:A:H2	1:1A:1372:U:O4	1.85	0.59
1:1A:2567:G:H2'	1:1A:2568:C:C6	2.38	0.59
4:1E:176:ILE:HB	4:1E:181:LEU:HB2	1.83	0.59
12:1Q:76:LYS:HB3	12:1Q:91:GLU:HG3	1.83	0.59
34:1c:40:ARG:NH1	45:1n:52:GLN:OE1	2.35	0.59
2:2B:102:A:OP2	62:2B:302:HOH:O	2.16	0.59
6:2G:119:GLY:HA3	6:2G:181:ARG:HB2	1.83	0.59
32:2a:838:G:H1	32:2a:848:C:H42	1.50	0.59
38:2g:144:MET:HE1	57:2y:31:A:H1'	1.82	0.59
38:2g:150:ALA:HA	42:2k:59:TYR:HB3	1.84	0.59
54:2w:15:G:N2	54:2w:59:A:N3	2.50	0.59
1:1A:1062:G:C8	1:1A:1070:A:H4'	2.37	0.59
1:1A:2552:OMU:OP2	62:1A:4104:HOH:O	2.16	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2693:A:H2'	1:1A:2694:G:H8	1.68	0.59
13:1R:97:VAL:HG22	13:1R:114:VAL:HG13	1.85	0.59
21:1Z:11:GLU:O	21:1Z:36:LYS:NZ	2.28	0.59
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.38	0.59
36:1e:74:GLY:HA3	36:1e:116:THR:HG22	1.85	0.59
46:1o:55:GLY:HA2	46:1o:58:MET:HE3	1.85	0.59
1:2A:1423:G:H2'	1:2A:1424:G:H8	1.68	0.59
1:2A:2130:U:H2'	1:2A:2158:A:H61	1.68	0.59
15:2T:24:PRO:HA	15:2T:49:VAL:HG12	1.84	0.59
15:2T:118:ARG:HG2	32:2a:1442(A):G:C8	2.37	0.59
32:2a:735:C:H2'	32:2a:736:C:H6	1.68	0.59
32:2a:920:U:H2'	32:2a:921:U:C6	2.38	0.59
15:1T:16:ARG:NH1	15:1T:83:ILE:O	2.24	0.59
39:1h:51:VAL:HG12	39:1h:52:ASP:H	1.68	0.59
57:1y:63:U:H2'	57:1y:64:G:C8	2.38	0.59
1:2A:122:G:N3	62:2A:4041:HOH:O	2.31	0.59
1:2A:1688:U:O2	1:2A:1700:A:H5'	2.02	0.59
10:2O:13:ASN:HD21	10:2O:96:THR:HB	1.68	0.59
11:2P:87:ASP:O	11:2P:90:ARG:NH1	2.36	0.59
17:2V:16:PRO:HD3	17:2V:99:ILE:HD11	1.84	0.59
32:2a:707:C:H2'	32:2a:708:C:C6	2.38	0.59
32:2a:984:C:H2'	32:2a:985:C:H6	1.68	0.59
1:1A:2131:G:H5''	1:1A:2132:U:H3'	1.84	0.58
14:1S:27:SER:HA	14:1S:88:ASP:HB3	1.85	0.58
20:1Y:83:THR:HG21	20:1Y:99:CYS:HB2	1.85	0.58
32:1a:520:A:O2'	43:1l:73:GLU:OE2	2.16	0.58
41:2j:47:PHE:HB2	41:2j:63:PHE:HB2	1.84	0.58
1:1A:1071:G:H1'	1:1A:1089:G:H2'	1.84	0.58
8:1I:103:ARG:HG2	8:1I:104:GLN:HG3	1.84	0.58
32:1a:7:G:H2'	36:1e:119:LEU:HD22	1.86	0.58
32:1a:684:A:N6	62:1a:4848:HOH:O	2.35	0.58
41:1j:30:SER:O	41:1j:30:SER:OG	2.21	0.58
44:1m:107:ALA:HB3	44:1m:111:LYS:HD3	1.83	0.58
1:2A:744:G:OP1	4:2E:132:HIS:ND1	2.33	0.58
2:2B:103:G:O6	62:2B:301:HOH:O	2.12	0.58
14:2S:18:ILE:O	14:2S:21:THR:OG1	2.20	0.58
29:27:24:THR:HG23	29:27:27:GLY:H	1.68	0.58
40:2i:9:ARG:O	40:2i:104:ARG:HG3	2.04	0.58
1:1A:1056:G:H5''	1:1A:1057:A:H5'	1.85	0.58
1:1A:1062:G:H22	1:1A:1077:A:N6	1.99	0.58
1:1A:1077:A:H2'	1:1A:1078:U:H4'	1.84	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1B:31:C:H4'	6:1G:29:TRP:CH2	2.39	0.58
17:1V:55:ALA:HA	17:1V:101:GLY:HA2	1.84	0.58
18:1W:77:ASP:OD1	62:1W:301:HOH:O	2.17	0.58
26:14:15:ILE:HG12	26:14:21:VAL:HG22	1.84	0.58
32:1a:993:G:H2'	32:1a:995:C:H41	1.68	0.58
32:1a:1327:C:OP2	52:1u:12:LYS:NZ	2.36	0.58
1:2A:1027:A:C2	1:2A:2488:A:H5'	2.38	0.58
6:2G:64:THR:HG22	6:2G:94:LEU:HD11	1.83	0.58
49:2r:66:LEU:O	49:2r:70:ILE:HG13	2.03	0.58
1:1A:1156:A:OP1	16:1U:55:ARG:NH1	2.32	0.58
1:1A:2633:G:H2'	1:1A:2634:G:O4'	2.04	0.58
6:1G:18:GLU:HG2	6:1G:175:LEU:HD21	1.83	0.58
32:1a:167:G:H2'	32:1a:168:G:C8	2.37	0.58
32:1a:601:C:H2'	32:1a:602:A:C8	2.38	0.58
32:1a:674:G:H2'	32:1a:675:A:H8	1.68	0.58
36:1e:18:ARG:NH1	36:1e:27:ARG:HH12	2.02	0.58
46:1o:11:VAL:HG21	46:1o:34:LEU:HD22	1.85	0.58
1:2A:1751:C:HO2'	1:2A:2861:G:HO2'	1.48	0.58
1:2A:2693:A:H2'	1:2A:2694:G:H8	1.69	0.58
2:2B:50:G:OP1	14:2S:63:THR:N	2.36	0.58
7:2H:154:PRO:HB3	7:2H:163:TYR:CZ	2.38	0.58
32:2a:56:U:H2'	32:2a:57:G:H8	1.68	0.58
32:2a:936:C:H2'	32:2a:937:A:O4'	2.03	0.58
1:1A:2096:U:H3	1:1A:2193:G:H1	1.49	0.58
1:1A:2564:A:C2	1:1A:2647:U:H4'	2.39	0.58
1:1A:2611:U:C4	27:15:3:LYS:HG2	2.39	0.58
39:1h:6:ILE:HD12	39:1h:35:ILE:HD12	1.85	0.58
1:2A:1325:G:OP1	1:2A:1647:G:O2'	2.18	0.58
1:2A:1507:A:O2'	1:2A:1508:A:O4'	2.21	0.58
7:2H:103:LEU:HG	7:2H:115:VAL:HB	1.85	0.58
21:2Z:79:ARG:HD2	21:2Z:80:ARG:HH12	1.67	0.58
32:2a:951:G:N7	44:2m:102:ARG:NH2	2.52	0.58
1:1A:1054:A:N6	1:1A:1105:U:H3	2.02	0.58
1:2A:321:G:OP1	5:2F:135:LYS:NZ	2.28	0.58
1:2A:2171:A:N3	1:2A:2172:U:N3	2.52	0.58
3:2D:118:VAL:N	3:2D:129:ASN:OD1	2.36	0.58
32:2a:148:G:H2'	32:2a:149:A:C8	2.38	0.58
32:2a:1510:U:H2'	32:2a:1511:G:C8	2.38	0.58
36:2e:7:GLU:OE1	36:2e:37:ARG:NH2	2.32	0.58
51:2t:9:ASN:O	51:2t:10:LEU:HB2	2.03	0.58
1:1A:2727:G:O2'	10:1O:70:LYS:NZ	2.34	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:1R:20:LEU:HD21	13:1R:40:LYS:HD3	1.86	0.58
26:14:15:ILE:O	26:14:33:VAL:N	2.26	0.58
32:1a:877:C:H5'	39:1h:88:LYS:HD3	1.86	0.58
1:2A:1203:G:OP2	1:2A:1204:A:O2'	2.19	0.58
5:2F:157:VAL:HB	5:2F:194:MET:HG2	1.85	0.58
7:2H:164:TYR:HB2	7:2H:167:GLU:HB2	1.85	0.58
8:2I:69:LYS:HG3	8:2I:138:ILE:HG23	1.86	0.58
14:2S:99:LYS:NZ	14:2S:103:GLU:OE2	2.36	0.58
32:2a:9:G:H2'	32:2a:10:A:C8	2.37	0.58
32:2a:401:C:OP2	35:2d:73:ARG:NH2	2.37	0.58
1:1A:1166:C:O2'	62:1A:4141:HOH:O	2.16	0.58
11:1P:89:ALA:HA	11:1P:121:LYS:HD3	1.84	0.58
32:1a:92:C:H2'	32:1a:93:G:C8	2.39	0.58
32:1a:636:U:H2'	32:1a:637:G:C8	2.39	0.58
54:1w:76:A1B8A:N	55:1x:76:8AN:O2'	2.37	0.58
57:1y:2:G:H2'	57:1y:3:G:C8	2.39	0.58
9:2N:138:LEU:HB3	9:2N:140:VAL:HG13	1.86	0.58
32:2a:1058:G:H1	32:2a:1199:U:H3	1.50	0.58
54:2w:12:U:H3	54:2w:23:A:H61	1.50	0.58
1:1A:1568:G:H5'	3:1D:60:ARG:HA	1.86	0.58
1:1A:1800:C:OP2	3:1D:183:ARG:NH2	2.37	0.58
32:1a:426:G:OP1	35:1d:36:ARG:NH1	2.37	0.58
1:1A:323:G:C8	5:1F:171:PRO:HG3	2.39	0.58
6:1G:79:ASN:OD1	6:1G:79:ASN:N	2.37	0.58
32:1a:159:G:N2	32:1a:162:A:OP2	2.36	0.58
35:1d:112:VAL:H	35:1d:116:GLN:HE21	1.51	0.58
1:2A:582:G:H2'	1:2A:583:G:C8	2.38	0.58
1:2A:1514:U:H2'	1:2A:1515:G:H8	1.69	0.58
1:2A:2498:C:OP2	62:2A:3932:HOH:O	2.16	0.58
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.39	0.58
6:2G:112:PRO:HG3	26:24:43:TYR:CE1	2.38	0.58
8:2I:2:LYS:HA	8:2I:20:ASP:HA	1.85	0.58
11:2P:126:VAL:HG12	11:2P:148:LEU:HD22	1.85	0.58
32:2a:427:U:H3'	32:2a:428:G:H2'	1.85	0.58
35:2d:187:ARG:NH2	35:2d:193:ASP:OD1	2.37	0.58
2:1B:92:C:OP1	21:1Z:79:ARG:NH1	2.36	0.57
5:2F:178:PRO:HB3	5:2F:198:ALA:HA	1.86	0.57
6:2G:106:LEU:HG	6:2G:111:LEU:HD12	1.85	0.57
32:2a:67:C:H2'	32:2a:68:G:C8	2.39	0.57
32:2a:1095:U:H2'	32:2a:1096:C:O4'	2.04	0.57
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.03	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2002:G:OP2	13:1R:9:LYS:NZ	2.36	0.57
1:1A:2849:U:OP2	15:1T:95:ARG:NH1	2.38	0.57
18:1W:24:ILE:HA	18:1W:27:LYS:HG3	1.85	0.57
50:1s:22:LEU:HB3	50:1s:27:GLU:HB3	1.87	0.57
57:1y:20:U:O3'	57:1y:21:A:H4'	2.03	0.57
7:2H:20:ALA:HB1	7:2H:21:PRO:HD2	1.86	0.57
12:2Q:18:LYS:O	12:2Q:98:LYS:NZ	2.33	0.57
32:2a:1279:A:O2'	32:2a:1281:U:OP2	2.21	0.57
44:2m:58:GLU:O	44:2m:62:ASN:ND2	2.37	0.57
10:1O:115:VAL:HG13	10:1O:121:VAL:HG21	1.86	0.57
12:1Q:10:ARG:NH1	12:1Q:90:VAL:H	2.03	0.57
32:1a:1039:C:H2'	32:1a:1040:U:C6	2.38	0.57
32:1a:1309:G:N7	44:1m:99:ARG:NH2	2.49	0.57
1:2A:746:A:HO2'	1:2A:2611:U:HO2'	1.53	0.57
1:2A:918:A:N3	2:2B:80:U:O2'	2.36	0.57
32:2a:524:G:H2'	32:2a:525:C:C6	2.38	0.57
32:2a:565:U:OP2	32:2a:566:G:O2'	2.22	0.57
32:2a:964:A:O2'	41:2j:55:LYS:NZ	2.37	0.57
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.39	0.57
33:2b:16:HIS:HB2	33:2b:204:ASN:HB3	1.86	0.57
34:2c:162:GLN:NE2	53:2v:24:A:O2'	2.37	0.57
1:1A:2508:G:H5'	54:1w:74:C:H42	1.68	0.57
32:1a:1518:MA6:H93	32:1a:1519:MA6:H92	1.86	0.57
1:2A:366:C:OP2	1:2A:403:U:O2'	2.17	0.57
6:2G:106:LEU:HA	6:2G:110:ALA:HB3	1.85	0.57
21:2Z:33:LEU:HD21	21:2Z:90:VAL:HG21	1.85	0.57
26:24:58:ARG:HH21	50:2s:69:HIS:CE1	2.22	0.57
32:2a:7:G:H2'	36:2e:119:LEU:HD22	1.85	0.57
32:2a:942:G:N2	40:2i:124:GLN:OE1	2.33	0.57
33:2b:77:ALA:HA	33:2b:80:ILE:HG22	1.85	0.57
1:1A:677:A:OP1	62:1A:4144:HOH:O	2.17	0.57
8:1I:93:THR:H	8:1I:96:ASP:HB2	1.69	0.57
32:1a:1039:C:H2'	32:1a:1040:U:H6	1.69	0.57
39:1h:110:ALA:HB3	39:1h:121:ASP:HB3	1.86	0.57
50:1s:32:LYS:HA	50:1s:50:ALA:HB3	1.87	0.57
1:2A:300:A:P	20:2Y:86:ARG:HH12	2.27	0.57
1:2A:955:C:OP1	12:2Q:87:LYS:NZ	2.22	0.57
1:2A:1794:U:H2'	1:2A:1795:C:C6	2.40	0.57
7:2H:124:GLU:HG2	7:2H:132:ARG:HB3	1.85	0.57
34:2c:46:GLU:CD	34:2c:46:GLU:H	2.12	0.57
32:1a:1101:A:H4'	32:1a:1102:A:O5'	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:60:GLU:OE2	35:1d:63:LYS:NZ	2.31	0.57
37:1f:100:ASN:HB2	49:1r:28:GLU:HA	1.87	0.57
43:1l:52:LEU:O	43:1l:54:LYS:NZ	2.24	0.57
1:2A:1670:C:O2	4:2E:129:HIS:NE2	2.36	0.57
1:1A:800:A:H8	1:1A:800:A:OP1	1.88	0.57
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.40	0.57
32:1a:278:G:OP2	48:1q:92:ARG:NH2	2.38	0.57
32:1a:626:U:H2'	32:1a:627:G:C8	2.39	0.57
32:1a:1355:G:H2'	32:1a:1356:G:H8	1.70	0.57
33:1b:101:MET:HG3	33:1b:108:ILE:HD12	1.86	0.57
1:2A:729:G:C6	3:2D:208:LYS:HB2	2.39	0.57
1:2A:2126:A:N3	1:2A:2127:G:H1'	2.20	0.57
1:2A:2268:A:OP1	62:2A:3944:HOH:O	2.17	0.57
54:2w:63:U:H2'	54:2w:64:G:H8	1.70	0.57
1:1A:1087:G:H1	1:1A:1102:C:H42	1.51	0.57
6:1G:49:ASP:OD1	6:1G:49:ASP:N	2.35	0.57
32:1a:40:C:H2'	32:1a:41:G:C8	2.39	0.57
57:1y:28:U:H3	57:1y:42:A:H61	1.51	0.57
2:2B:17:C:H2'	2:2B:18:G:O4'	2.04	0.57
2:2B:114:C:H2'	2:2B:115:G:C8	2.40	0.57
14:2S:10:ARG:NH2	14:2S:91:PRO:O	2.36	0.57
17:2V:62:LEU:HB2	17:2V:93:GLU:HG2	1.87	0.57
32:2a:148:G:H2'	32:2a:149:A:H8	1.68	0.57
32:2a:457:C:H2'	32:2a:458:C:C6	2.39	0.57
32:2a:1203:C:H2'	32:2a:1204:A:H8	1.70	0.57
50:2s:18:LYS:HD3	50:2s:31:ILE:HG21	1.86	0.57
1:1A:642:G:OP2	62:1A:4147:HOH:O	2.18	0.57
1:1A:2090:G:N2	23:11:45:ASN:OD1	2.30	0.57
11:1P:89:ALA:O	11:1P:121:LYS:NZ	2.33	0.57
18:1W:27:LYS:HD2	18:1W:31:GLU:HG2	1.87	0.57
32:1a:21:G:H2'	32:1a:22:G:C8	2.40	0.57
32:1a:1278:U:H5'	32:1a:1279:A:O4'	2.04	0.57
33:2b:97:TRP:HH2	33:2b:102:LEU:HG	1.69	0.57
39:2h:86:ILE:HD12	39:2h:133:LEU:HD22	1.87	0.57
50:2s:51:VAL:HB	50:2s:75:ALA:HB2	1.86	0.57
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.40	0.57
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.70	0.57
1:1A:1828:G:H8	1:1A:1828:G:OP2	1.88	0.57
1:1A:1876:A:H2'	1:1A:1877:A:C8	2.39	0.57
1:1A:2327:A:H2'	1:1A:2328:A:C8	2.40	0.57
2:1B:14:U:OP2	2:1B:70:C:O2'	2.22	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:1p:3:LYS:HG3	47:1p:24:ALA:HB2	1.87	0.57
1:2A:1557:C:OP2	1:2A:1558:A:O2'	2.21	0.57
1:2A:2273:A:H2'	1:2A:2274:A:C8	2.40	0.57
12:2Q:65:PHE:HB2	12:2Q:105:GLU:HB2	1.87	0.57
32:2a:171:A:H2'	32:2a:172:A:C8	2.40	0.57
32:2a:1065:U:H3	32:2a:1109:C:H5''	1.69	0.57
36:2e:152:ARG:HB3	39:2h:43:GLY:HA3	1.87	0.57
37:2f:24:GLU:O	37:2f:28:ARG:N	2.29	0.57
38:2g:65:ALA:HB1	38:2g:127:ALA:HB3	1.87	0.57
1:1A:55:G:O2'	1:1A:127:A:N1	2.32	0.56
5:1F:9:ILE:HD13	5:1F:22:ALA:HB3	1.86	0.56
10:1O:38:VAL:HG13	10:1O:87:ILE:HD11	1.86	0.56
17:1V:76:LYS:HB2	17:1V:81:TYR:HB3	1.86	0.56
1:2A:1271:G:OP2	62:2A:3904:HOH:O	2.18	0.56
1:2A:2022:U:O2'	1:2A:2617:C:H5'	2.04	0.56
1:2A:2674:G:O2'	10:2O:29:ASN:OD1	2.20	0.56
2:2B:32:C:H2'	2:2B:33:G:O4'	2.05	0.56
4:2E:28:ALA:HB3	4:2E:93:VAL:HG12	1.88	0.56
26:24:14:ILE:HG13	26:24:31:ILE:HB	1.86	0.56
43:2l:11:VAL:HG11	48:2q:36:ILE:HG21	1.85	0.56
1:1A:2347:C:OP1	28:16:38:LYS:NZ	2.38	0.56
1:1A:2430:A:N3	1:1A:2430:A:H2'	2.20	0.56
32:1a:1291:G:OP1	38:1g:37:ASN:ND2	2.36	0.56
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.19	0.56
44:1m:11:ARG:HA	44:1m:45:VAL:HB	1.87	0.56
57:1y:52:G:H1	57:1y:62:C:H42	1.53	0.56
1:2A:120:U:OP2	62:2A:3949:HOH:O	2.18	0.56
6:2G:44:GLY:HA2	6:2G:88:ILE:HG22	1.86	0.56
32:2a:692:U:O2'	32:2a:694:A:N7	2.34	0.56
32:2a:920:U:H2'	32:2a:921:U:H6	1.70	0.56
33:2b:58:ILE:HA	33:2b:61:LEU:HB3	1.87	0.56
55:2x:43:A:H2'	55:2x:44:A:C8	2.39	0.56
1:1A:1188:U:H4'	17:1V:79:VAL:HG22	1.87	0.56
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.40	0.56
6:1G:27:ASN:HB3	6:1G:30:GLU:HG3	1.87	0.56
6:1G:53:LEU:O	6:1G:57:ALA:N	2.36	0.56
32:1a:976:G:H5'	32:1a:1358:U:O2'	2.05	0.56
32:1a:1166:G:O2'	32:1a:1169:A:N7	2.36	0.56
1:2A:458:G:O2'	1:2A:469:G:O6	2.18	0.56
1:2A:577:G:O2'	1:2A:1254:A:OP1	2.21	0.56
1:2A:744:G:OP1	62:2A:3946:HOH:O	2.17	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.39	0.56
8:2I:40:THR:O	8:2I:44:LEU:HB2	2.05	0.56
48:2q:57:VAL:HA	48:2q:77:VAL:HG23	1.86	0.56
1:1A:248:G:OP1	62:1A:4148:HOH:O	2.18	0.56
1:1A:2126:A:H62	1:1A:2163:C:H4'	1.70	0.56
1:1A:2887:U:H2'	1:1A:2888:C:C6	2.40	0.56
8:1I:31:LEU:HD21	8:1I:38:LEU:HD22	1.86	0.56
26:14:58:ARG:O	26:14:61:ARG:HG2	2.06	0.56
32:1a:974:A:OP1	45:1n:29:ARG:NH2	2.38	0.56
40:1i:26:VAL:HG12	40:1i:61:ALA:HB3	1.86	0.56
47:1p:43:LYS:HA	47:1p:48:TRP:CD1	2.41	0.56
1:2A:71:A:H5''	1:2A:73:A:C8	2.40	0.56
1:2A:740:U:OP1	62:2A:3945:HOH:O	2.17	0.56
1:2A:2070:G:H2'	1:2A:2071:A:C8	2.40	0.56
1:2A:2105:C:H2'	1:2A:2106:G:C8	2.41	0.56
1:2A:2143:C:H42	1:2A:2148:G:H1	1.53	0.56
1:2A:2156:G:H2'	1:2A:2157:G:C2	2.40	0.56
1:2A:2314:C:H2'	1:2A:2315:G:H8	1.70	0.56
1:2A:2590:A:H5''	3:2D:239:ARG:HG3	1.88	0.56
8:2I:26:ALA:HA	8:2I:30:LEU:HB2	1.85	0.56
12:2Q:85:LYS:HB2	22:20:7:LEU:HD12	1.88	0.56
15:2T:119:LYS:HG2	15:2T:123:GLN:HE21	1.70	0.56
17:2V:1:MET:HE2	17:2V:43:GLU:HB2	1.86	0.56
26:24:61:ARG:HG2	50:2s:42:PRO:HG2	1.86	0.56
32:2a:662:G:H2'	32:2a:663:A:C8	2.39	0.56
33:2b:80:ILE:HG13	33:2b:215:LEU:HD12	1.86	0.56
38:2g:70:LYS:HG2	38:2g:96:GLN:HB3	1.88	0.56
39:2h:119:LEU:HB3	39:2h:123:GLU:HB3	1.88	0.56
45:2n:16:PHE:HD2	45:2n:19:ARG:HD2	1.71	0.56
1:1A:882:G:H4'	54:1w:19:G:O6	2.05	0.56
1:1A:2155:G:H2'	1:1A:2155:G:N3	2.20	0.56
1:1A:2629:A:HO2'	1:1A:2630:G:P	2.27	0.56
3:1D:274:ARG:NH1	62:1D:402:HOH:O	2.38	0.56
10:1O:97:ARG:NH1	32:1a:339:C:OP2	2.30	0.56
23:11:65:SER:OG	23:11:66:HIS:ND1	2.32	0.56
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.40	0.56
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	1.87	0.56
10:2O:88:ASN:ND2	10:2O:90:GLN:OE1	2.38	0.56
32:2a:333:G:H4'	51:2t:16:HIS:CE1	2.40	0.56
41:2j:8:LEU:HG	41:2j:70:ARG:HB2	1.88	0.56
3:1D:25:THR:HG21	3:1D:113:VAL:HG21	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:1D:206:LEU:HD22	3:1D:211:ARG:HG2	1.86	0.56
19:1X:31:HIS:CD2	19:1X:33:LYS:H	2.07	0.56
32:1a:1493:A:O2'	53:1v:19:A:O2'	2.22	0.56
1:2A:2723:C:OP2	4:2E:109:LYS:NZ	2.38	0.56
5:2F:28:ILE:HG22	5:2F:112:MET:HB3	1.88	0.56
32:2a:708:C:H2'	32:2a:709:G:H8	1.70	0.56
32:2a:1183:A:O2'	32:2a:1185:G:OP2	2.23	0.56
32:2a:1239:A:H62	32:2a:1299:A:N6	2.02	0.56
40:2i:8:GLY:HA2	40:2i:79:LEU:HD23	1.88	0.56
57:2y:12:U:H3	57:2y:23:A:N6	2.03	0.56
1:1A:1028:A:N6	1:1A:1125:G:H2'	2.21	0.56
1:1A:1243:G:O2'	11:1P:7:ARG:NH2	2.39	0.56
1:1A:2130:U:O2'	1:1A:2131:G:N2	2.39	0.56
2:1B:57:A:H1'	6:1G:29:TRP:HB2	1.87	0.56
32:1a:123:C:OP1	32:1a:311:C:O2'	2.22	0.56
32:1a:373:A:H2'	32:1a:374:A:H8	1.71	0.56
32:1a:1150:U:H4'	41:1j:41:PRO:HG3	1.87	0.56
34:1c:22:TRP:CZ2	45:1n:54:PRO:HG2	2.41	0.56
35:1d:65:ARG:NH1	35:1d:72:GLU:OE1	2.36	0.56
44:1m:49:THR:HB	44:1m:52:GLU:H	1.71	0.56
54:1w:11:C:H42	54:1w:24:G:H1	1.53	0.56
1:2A:247:G:H4'	1:2A:386:G:C5	2.40	0.56
1:2A:657:U:H2'	1:2A:658:C:C6	2.41	0.56
5:2F:122:LYS:NZ	5:2F:152:GLU:OE2	2.29	0.56
38:2g:133:GLY:HA2	38:2g:136:LYS:HB2	1.87	0.56
1:1A:1815:A:P	3:1D:54:ARG:HH22	2.29	0.56
1:2A:1803:A:O2'	3:2D:259:THR:HG21	2.06	0.56
1:2A:2781:A:H5''	1:2A:2782:G:H5'	1.88	0.56
2:2B:24:G:N3	2:2B:26:A:N6	2.54	0.56
15:2T:105:LEU:HB2	15:2T:110:ILE:HG13	1.87	0.56
16:2U:76:TYR:CZ	16:2U:80:ILE:HG13	2.41	0.56
20:2Y:44:ILE:HG22	20:2Y:62:GLU:HB3	1.88	0.56
25:23:5:LYS:NZ	25:23:34:GLU:OE2	2.27	0.56
32:2a:72:C:H2'	32:2a:73:G:C8	2.41	0.56
32:2a:1014:A:H1'	50:2s:34:TRP:HB2	1.88	0.56
38:2g:152:ALA:O	38:2g:155:ARG:NH1	2.38	0.56
46:2o:5:LYS:O	46:2o:9:GLN:HG2	2.06	0.56
32:1a:45:U:H2'	32:1a:46:G:C8	2.41	0.56
32:1a:1367:C:H4'	41:1j:48:THR:HG21	1.88	0.56
43:1l:71:PRO:O	43:1l:102:ARG:NH1	2.38	0.56
1:2A:722:A:H2'	1:2A:723:G:C8	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:825:C:O2	11:2P:55:ARG:NH1	2.36	0.56
6:2G:5:VAL:HG23	6:2G:7:LEU:H	1.70	0.56
6:2G:165:THR:OG1	6:2G:166:ASP:N	2.37	0.56
8:2I:55:ALA:HA	8:2I:58:LEU:HB3	1.88	0.56
32:2a:109:A:H5'	32:2a:110:C:C5	2.40	0.56
32:2a:1271:G:C2	32:2a:1272:G:N7	2.74	0.56
36:2e:33:VAL:HG13	36:2e:112:LEU:HD12	1.87	0.56
1:1A:910:A:C5	12:1Q:13:GLN:HG3	2.41	0.56
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	1.87	0.56
33:1b:33:TYR:HB2	33:1b:43:ASP:HB2	1.87	0.56
1:2A:947:G:H2'	1:2A:948:G:H8	1.70	0.56
1:2A:2447:G:OP2	62:2A:3950:HOH:O	2.18	0.56
2:2B:7:G:N2	14:2S:38:GLN:HE22	1.97	0.56
10:2O:4:PRO:O	10:2O:5:GLN:HB2	2.05	0.56
35:2d:122:ARG:NH1	35:2d:134:ASP:O	2.35	0.56
50:2s:15:LEU:HD12	50:2s:18:LYS:HD2	1.89	0.56
1:1A:919:G:N2	1:1A:2269:A:OP2	2.38	0.55
7:1H:25:LYS:HG3	7:1H:34:GLU:HG2	1.88	0.55
21:1Z:72:ARG:NH2	21:1Z:97:GLU:O	2.39	0.55
32:1a:186:C:H2'	32:1a:187:C:C6	2.41	0.55
32:1a:576:G:O6	32:1a:880:C:O2'	2.19	0.55
47:1p:53:VAL:HG13	47:1p:79:VAL:HG22	1.89	0.55
1:2A:959:A:N3	1:2A:2457:U:O2'	2.39	0.55
1:2A:2507:C:H2'	1:2A:2508:G:O4'	2.05	0.55
32:2a:921:U:O2	36:2e:19:MET:HB2	2.05	0.55
32:2a:1166:G:N2	32:2a:1170:A:OP2	2.38	0.55
32:2a:1316:G:N2	32:2a:1319:A:H5''	2.18	0.55
33:2b:12:GLU:HA	33:2b:213:LEU:HD11	1.88	0.55
33:2b:74:LYS:NZ	33:2b:205:ASP:O	2.39	0.55
40:2i:8:GLY:O	40:2i:15:ALA:N	2.39	0.55
46:2o:82:ILE:HG22	46:2o:87:ILE:HB	1.88	0.55
1:1A:1256:G:H1'	5:1F:82:ILE:HD11	1.88	0.55
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.40	0.55
32:1a:1015:A:H2'	32:1a:1016:A:C8	2.41	0.55
33:1b:94:ASN:HB3	33:1b:95:GLN:HG2	1.88	0.55
40:1i:4:TYR:CG	40:1i:88:TYR:HB2	2.41	0.55
1:2A:2065:C:H2'	1:2A:2066:C:H6	1.70	0.55
1:2A:2104:G:H1	1:2A:2185:C:N4	2.04	0.55
1:2A:2371:G:O2'	28:26:46:HIS:ND1	2.32	0.55
1:2A:2818:G:OP1	1:2A:2837:G:O2'	2.14	0.55
32:2a:17:U:H2'	32:2a:18:C:C6	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:6:ILE:HG12	41:2j:98:ILE:HG22	1.88	0.55
42:2k:14:VAL:HG11	42:2k:35:PRO:HD3	1.88	0.55
1:1A:184:C:H2'	1:1A:185:U:C6	2.41	0.55
1:1A:2105:C:H2'	1:1A:2106:G:C8	2.41	0.55
35:1d:178:VAL:C	35:1d:180:GLY:H	2.15	0.55
43:1l:7:ILE:HD13	43:1l:10:LEU:HD12	1.88	0.55
1:2A:2685:G:O6	62:2A:3940:HOH:O	2.16	0.55
2:2B:7:G:H21	14:2S:38:GLN:NE2	1.99	0.55
2:2B:24:G:H4'	2:2B:25:A:C8	2.42	0.55
32:2a:7:G:H5'	32:2a:298:A:O4'	2.06	0.55
32:2a:544:G:OP1	35:2d:59:ARG:NH2	2.40	0.55
32:2a:618:C:N4	32:2a:621:A:N7	2.54	0.55
33:2b:95:GLN:HB3	33:2b:148:TYR:CD1	2.41	0.55
39:2h:91:ARG:HB2	43:2l:7:ILE:HG21	1.89	0.55
50:2s:33:THR:H	50:2s:57:HIS:CE1	2.18	0.55
1:1A:1164:G:H2'	1:1A:1165:U:C6	2.41	0.55
1:1A:2131:G:N2	1:1A:2158:A:N1	2.54	0.55
3:1D:61:LEU:O	3:1D:63:ARG:NH1	2.39	0.55
5:1F:75:HIS:ND1	62:1F:402:HOH:O	2.33	0.55
12:1Q:20:ALA:HB2	21:1Z:79:ARG:HG3	1.89	0.55
15:1T:111:ARG:NH2	32:1a:1464:G:OP2	2.40	0.55
39:1h:9:MET:HG3	39:1h:26:VAL:HG21	1.87	0.55
1:2A:307:G:H21	1:2A:330:A:H62	1.55	0.55
19:2X:46:ALA:HB1	24:22:33:MET:HE1	1.88	0.55
32:2a:412:A:O4'	35:2d:35:ARG:NH2	2.39	0.55
32:2a:427:U:OP2	35:2d:36:ARG:NH2	2.38	0.55
33:2b:71:VAL:HA	33:2b:93:VAL:HG23	1.87	0.55
3:1D:85:ASP:OD2	3:1D:88:ARG:NH1	2.38	0.55
24:12:22:GLU:OE2	24:12:68:ARG:NH2	2.40	0.55
39:1h:82:HIS:CE1	39:1h:84:ARG:HB2	2.41	0.55
32:2a:450:G:H4'	47:2p:41:PRO:HB2	1.87	0.55
32:2a:537:G:H5''	43:2l:113:ARG:NH1	2.22	0.55
32:2a:1029:C:C4	32:2a:1032:G:N1	2.73	0.55
32:2a:1297:C:OP2	44:2m:44:ARG:NH2	2.36	0.55
45:2n:16:PHE:HB2	45:2n:19:ARG:HG3	1.87	0.55
1:1A:1688:U:O2	1:1A:1700:A:H5'	2.07	0.55
8:1I:101:LEU:HD22	8:1I:107:VAL:HB	1.89	0.55
10:1O:21:CYS:HB2	10:1O:39:ILE:HD13	1.89	0.55
25:13:3:ARG:NH2	25:13:60:GLU:OE1	2.40	0.55
32:1a:401:C:H2'	32:1a:402:G:C8	2.42	0.55
32:1a:674:G:H2'	32:1a:675:A:C8	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:78:HIS:CD2	39:1h:104:ARG:HD2	2.40	0.55
40:1i:127:LYS:NZ	55:1x:34:C:OP2	2.38	0.55
43:1l:88:GLY:O	43:1l:99:HIS:HD2	1.89	0.55
57:1y:47:U:H2'	57:1y:50:C:OP1	2.07	0.55
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.42	0.55
1:2A:2682:U:O2'	15:2T:58:ASN:ND2	2.39	0.55
11:2P:77:ARG:HB2	11:2P:78:PRO:HD2	1.89	0.55
48:2q:58:GLU:OE2	48:2q:75:ARG:NH2	2.40	0.55
1:1A:811:U:OP1	62:1A:4150:HOH:O	2.18	0.55
1:1A:1364:G:OP2	23:11:3:LYS:HG3	2.07	0.55
32:1a:270:A:H2'	32:1a:271:C:C6	2.42	0.55
32:1a:661:G:N7	62:1a:4844:HOH:O	2.33	0.55
32:1a:865:A:H2	32:1a:918:A:H4'	1.71	0.55
34:1c:95:THR:C	34:1c:97:LYS:H	2.15	0.55
34:1c:186:PHE:HE2	34:1c:188:LEU:HB2	1.70	0.55
1:2A:2017:U:OP2	62:2A:3948:HOH:O	2.18	0.55
1:2A:2203:U:H2'	1:2A:2205:C:C6	2.42	0.55
2:2B:41:U:H5	6:2G:70:VAL:H	1.53	0.55
32:2a:537:G:H5''	43:2l:113:ARG:HH12	1.71	0.55
32:2a:539:A:OP2	43:2l:115:LYS:NZ	2.34	0.55
32:2a:562:C:H1'	43:2l:15:ARG:HB3	1.88	0.55
32:2a:587:G:N2	32:2a:754:C:OP2	2.36	0.55
34:2c:12:LEU:HB3	34:2c:18:TRP:CH2	2.42	0.55
34:2c:44:GLU:HA	34:2c:52:LEU:HD23	1.87	0.55
34:2c:52:LEU:HD12	34:2c:53:ALA:H	1.71	0.55
39:2h:7:ALA:O	39:2h:11:THR:OG1	2.22	0.55
1:1A:829:A:N7	1:1A:2248:C:H5'	2.21	0.55
1:1A:1023:U:OP2	62:1A:4135:HOH:O	2.18	0.55
1:1A:1779:U:H2'	62:1A:4172:HOH:O	2.06	0.55
20:1Y:82:PRO:O	20:1Y:101:LYS:NZ	2.31	0.55
21:1Z:55:HIS:HE1	21:1Z:135:GLU:HG3	1.72	0.55
1:2A:271(E):U:H2'	1:2A:271(F):C:C6	2.42	0.55
1:2A:1200:C:H5'	62:2A:3992:HOH:O	2.06	0.55
1:2A:1226:A:OP1	17:2V:84:LYS:NZ	2.29	0.55
1:2A:1416:G:O2'	1:2A:1417:C:OP2	2.20	0.55
1:2A:2683:C:O2	10:2O:70:LYS:NZ	2.25	0.55
14:2S:80:LEU:O	14:2S:82:ILE:N	2.40	0.55
32:2a:1323:G:H2'	32:2a:1324:A:C8	2.42	0.55
1:1A:639:U:H2'	1:1A:640:C:C6	2.42	0.55
1:1A:1827:C:C2'	1:1A:1828:G:H5'	2.37	0.55
32:1a:22:G:H4'	32:1a:885:G:C8	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:8:LYS:O	33:1b:217:ARG:NH1	2.39	0.55
55:1x:8:4SU:O5'	55:1x:8:4SU:H6	2.06	0.55
1:2A:1364:G:P	23:21:3:LYS:HG3	2.47	0.55
32:2a:1218:C:H2'	32:2a:1219:U:C6	2.41	0.55
32:2a:1255:G:OP1	41:2j:45:ARG:NH2	2.40	0.55
57:2y:14:A:H2'	57:2y:15:G:C8	2.42	0.55
1:1A:1038:C:H42	1:1A:1117:G:H1	1.55	0.55
1:1A:1641:A:H2'	1:1A:1642:G:O4'	2.05	0.55
1:1A:2630:G:H2'	1:1A:2631:G:C8	2.41	0.55
8:1I:130:TYR:HB3	8:1I:138:ILE:HB	1.88	0.55
1:2A:340:A:H2'	1:2A:341:G:O4'	2.07	0.55
1:2A:911:A:N6	12:2Q:11:LYS:O	2.38	0.55
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.42	0.55
62:2A:4691:HOH:O	11:2P:44:GLY:HA2	2.07	0.55
2:2B:66:A:N6	2:2B:108:U:H3'	2.22	0.55
18:2W:2:GLU:OE2	18:2W:72:LYS:NZ	2.27	0.55
23:21:23:LYS:HB3	23:21:29:GLY:HA3	1.89	0.55
32:2a:630:G:H2'	32:2a:631:G:H8	1.72	0.55
32:2a:1239:A:H62	32:2a:1299:A:H62	1.54	0.55
35:2d:187:ARG:NH1	35:2d:190:ASP:OD1	2.40	0.55
50:2s:33:THR:N	50:2s:57:HIS:HE1	2.02	0.55
54:2w:18:G:O2'	54:2w:57:G:N2	2.40	0.55
1:1A:1056:G:H21	1:1A:1103:A:H62	1.54	0.54
4:1E:36:ARG:NH1	4:1E:85:ASN:OD1	2.39	0.54
25:13:39:ASP:OD1	25:13:44:ARG:NH1	2.39	0.54
30:18:26:LYS:HG2	30:18:46:ARG:O	2.07	0.54
40:1i:77:ILE:O	40:1i:81:ILE:HG22	2.07	0.54
32:2a:1180:A:OP1	40:2i:103:THR:OG1	2.25	0.54
44:2m:3:ARG:N	44:2m:7:VAL:O	2.41	0.54
47:2p:28:ARG:NH1	47:2p:29:ASP:OD1	2.40	0.54
1:1A:249:C:O2	30:18:12:LYS:NZ	2.37	0.54
1:1A:642:G:N2	1:1A:645:C:OP2	2.33	0.54
1:1A:1648:C:OP1	62:1A:4115:HOH:O	2.18	0.54
1:1A:1786:A:H1'	1:1A:1938:A:N6	2.22	0.54
1:1A:2264:C:N4	22:10:15:ASP:OD2	2.39	0.54
32:1a:26:A:O2'	35:1d:209:ARG:NH2	2.41	0.54
32:1a:510:A:OP2	35:1d:49:ARG:NH1	2.39	0.54
32:1a:1053:G:N7	32:1a:1200:C:H5''	2.22	0.54
38:1g:74:GLU:HG2	38:1g:91:VAL:HG22	1.89	0.54
54:1w:8:U:H2'	54:1w:13:C:N4	2.22	0.54
57:1y:38:A:H2'	57:1y:39:PSU:O4'	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1278:A:OP1	13:2R:36:THR:HG23	2.05	0.54
1:2A:2065:C:H2'	1:2A:2066:C:C6	2.42	0.54
1:2A:2066:C:OP1	62:2A:3954:HOH:O	2.19	0.54
1:2A:2540:C:H2'	1:2A:2541:A:O4'	2.07	0.54
8:2I:88:ILE:HG22	8:2I:90:GLY:H	1.71	0.54
10:2O:77:ILE:HD12	15:2T:74:ARG:HD2	1.89	0.54
32:2a:601:C:H2'	32:2a:602:A:C8	2.42	0.54
32:2a:953:G:H5'	32:2a:965:A:H61	1.70	0.54
39:2h:28:ALA:HB3	39:2h:57:PRO:HB2	1.89	0.54
42:2k:98:LEU:O	42:2k:101:SER:OG	2.22	0.54
55:2x:23:C:H2'	55:2x:24:U:C6	2.42	0.54
1:1A:2105:C:H2'	1:1A:2106:G:H8	1.72	0.54
1:1A:2693:A:H2'	1:1A:2694:G:C8	2.43	0.54
11:1P:63:PRO:HD3	30:18:27:THR:HG22	1.89	0.54
7:2H:149:ARG:HA	7:2H:162:ILE:HG21	1.89	0.54
32:2a:1161:C:H2'	32:2a:1162:C:C6	2.42	0.54
33:2b:187:LEU:HD13	33:2b:214:ILE:HG21	1.89	0.54
54:2w:11:C:H2'	54:2w:12:U:C6	2.42	0.54
55:2x:7:G:H5''	55:2x:8:4SU:H5	1.89	0.54
1:1A:414:C:H2'	1:1A:415:A:C8	2.42	0.54
3:1D:12:SER:HB3	3:1D:208:LYS:HB3	1.89	0.54
3:1D:71:ASP:HB2	3:1D:103:ARG:HH12	1.72	0.54
9:1N:21:LYS:HD2	9:1N:26:LEU:HD13	1.90	0.54
29:17:33:ARG:NH2	62:17:201:HOH:O	2.40	0.54
32:1a:7:G:H5'	32:1a:298:A:O4'	2.07	0.54
32:1a:134:A:H61	47:1p:25:ARG:NH1	2.06	0.54
32:1a:437:U:H5'	35:1d:155:LEU:HD11	1.89	0.54
33:1b:185:ILE:HG22	33:1b:199:TYR:HD2	1.72	0.54
52:1u:3:LYS:HB3	52:1u:14:TRP:CG	2.42	0.54
8:2I:92:VAL:HG13	8:2I:96:ASP:HB3	1.89	0.54
20:2Y:28:LYS:N	20:2Y:38:ILE:O	2.40	0.54
34:2c:47:LEU:HB3	34:2c:52:LEU:HB2	1.89	0.54
34:2c:137:ALA:HA	34:2c:140:ARG:NH1	2.22	0.54
37:2f:99:ALA:HB3	49:2r:29:PHE:CE1	2.40	0.54
3:1D:145:VAL:HG11	3:1D:175:LEU:HD11	1.89	0.54
5:1F:53:THR:HG22	5:1F:55:GLY:H	1.72	0.54
32:1a:714:G:H2'	32:1a:715:A:C8	2.42	0.54
32:1a:1531:A:H8	32:1a:1531:A:O5'	1.90	0.54
44:1m:4:ILE:HD12	44:1m:57:ARG:HA	1.89	0.54
1:2A:253:C:OP2	30:28:5:LYS:NZ	2.31	0.54
1:2A:668:G:H5'	1:2A:669:G:OP2	2.06	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2086:U:H2'	1:2A:2087:G:C8	2.42	0.54
1:2A:2353:G:H5''	22:20:32:ARG:HH11	1.72	0.54
1:2A:2482:G:O2'	54:2w:64:G:H4'	2.07	0.54
16:2U:102:GLU:HB3	16:2U:104:GLN:HE22	1.72	0.54
32:2a:429:U:OP1	35:2d:13:ARG:NH1	2.40	0.54
32:2a:598:U:O4	62:2a:1905:HOH:O	2.12	0.54
32:2a:913:A:OP1	43:2l:46:LYS:NZ	2.40	0.54
32:2a:1104:G:H4'	33:2b:111:ARG:HE	1.73	0.54
41:2j:11:PHE:CE1	41:2j:67:THR:HG22	2.42	0.54
44:2m:113:PRO:O	44:2m:115:LYS:NZ	2.41	0.54
1:1A:580:C:H2'	1:1A:581:C:C6	2.43	0.54
32:1a:404:U:OP1	35:1d:118:ARG:NH1	2.40	0.54
32:1a:485:G:O2'	32:1a:486:U:OP2	2.26	0.54
32:1a:625:G:H4'	47:1p:16:HIS:CG	2.42	0.54
34:1c:58:GLU:HB3	41:1j:92:THR:HG21	1.89	0.54
1:2A:398:G:O6	62:2A:3952:HOH:O	2.18	0.54
1:2A:2001:A:H2'	1:2A:2002:G:C8	2.43	0.54
14:2S:11:LYS:O	14:2S:15:ARG:HB2	2.08	0.54
32:2a:35:G:O2'	43:2l:118:SER:O	2.26	0.54
32:2a:1004:A:N3	32:2a:1038:C:C2	2.75	0.54
32:2a:1189:C:OP1	41:2j:51:ARG:NH2	2.40	0.54
32:2a:1530:G:OP1	32:2a:1530:G:H4'	2.07	0.54
1:1A:483:A:O2'	20:1Y:49:VAL:O	2.17	0.54
1:1A:818:G:H5'	1:1A:839:U:OP1	2.07	0.54
6:1G:53:LEU:HD11	6:1G:87:PRO:HB2	1.89	0.54
7:1H:17:VAL:HG13	7:1H:26:VAL:HG22	1.88	0.54
12:1Q:10:ARG:HH12	12:1Q:90:VAL:H	1.54	0.54
1:2A:84:A:N1	1:2A:98:G:O2'	2.35	0.54
4:2E:36:ARG:NH1	4:2E:85:ASN:OD1	2.41	0.54
14:2S:95:HIS:CG	14:2S:96:GLY:H	2.25	0.54
25:23:59:VAL:HG12	25:23:60:GLU:H	1.72	0.54
32:2a:1438:G:H2'	32:2a:1439:C:C6	2.42	0.54
1:1A:2108:C:H42	1:1A:2181:G:H1	1.54	0.54
23:11:73:LEU:HD11	23:11:98:LEU:HD21	1.90	0.54
33:1b:140:HIS:CE1	33:1b:144:ARG:HD2	2.43	0.54
41:1j:7:LYS:HZ1	41:1j:9:ARG:HH22	1.55	0.54
1:2A:879:G:H3'	1:2A:880:G:C8	2.41	0.54
1:2A:1423:G:H2'	1:2A:1424:G:C8	2.41	0.54
2:2B:42:C:C4	2:2B:43:C:C4	2.96	0.54
32:2a:997:U:H3	32:2a:1044:A:H61	1.56	0.54
32:2a:1208:C:H2'	32:2a:1209:C:C6	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1815:A:OP2	3:1D:54:ARG:NH2	2.40	0.54
11:1P:63:PRO:HG2	30:18:25:MET:HB2	1.89	0.54
32:1a:1144:G:N2	32:1a:1146:A:H62	2.06	0.54
1:2A:2377:A:H2'	1:2A:2378:A:C8	2.43	0.54
3:2D:137:PRO:O	3:2D:140:THR:OG1	2.16	0.54
16:2U:98:LEU:HD22	16:2U:105:VAL:HG11	1.89	0.54
32:2a:947:G:O3'	44:2m:109:THR:OG1	2.26	0.54
34:2c:123:GLN:O	34:2c:128:PHE:HB2	2.07	0.54
34:2c:190:ARG:NE	34:2c:190:ARG:O	2.41	0.54
44:2m:78:ILE:HG12	44:2m:92:HIS:CE1	2.42	0.54
1:1A:2492:U:H2'	1:1A:2493:U:C6	2.43	0.54
11:1P:95:VAL:HB	11:1P:125:VAL:HG12	1.88	0.54
32:1a:150:C:H2'	32:1a:151:A:C8	2.43	0.54
32:1a:574:A:OP2	62:1a:4811:HOH:O	2.18	0.54
32:1a:848:C:H2'	32:1a:849:C:C6	2.43	0.54
33:1b:84:GLU:HA	33:1b:87:ARG:HD3	1.90	0.54
51:1t:89:ARG:O	51:1t:93:GLU:HG2	2.07	0.54
1:2A:1824:G:N3	3:2D:254:THR:OG1	2.40	0.54
1:2A:2552:OMU:H6	1:2A:2552:OMU:O5'	2.08	0.54
1:2A:2557:G:H2'	1:2A:2558:C:C6	2.43	0.54
21:2Z:30:ASN:HA	21:2Z:89:PHE:HE1	1.72	0.54
21:2Z:91:LEU:HD22	21:2Z:91:LEU:H	1.73	0.54
32:2a:417:C:H2'	32:2a:418:C:H6	1.73	0.54
37:2f:74:ASP:N	37:2f:74:ASP:OD1	2.40	0.54
40:2i:78:LYS:HE2	40:2i:101:PHE:CE1	2.42	0.54
5:1F:165:ARG:HA	5:1F:168:ARG:HD2	1.90	0.53
44:1m:40:ASN:O	44:1m:43:THR:OG1	2.21	0.53
54:1w:40:C:H2'	54:1w:41:A:C8	2.43	0.53
1:2A:2286:A:OP1	28:26:29:ASN:ND2	2.41	0.53
2:2B:105:A:H5'	2:2B:106:G:OP2	2.08	0.53
4:2E:96:PHE:O	4:2E:175:VAL:HG21	2.08	0.53
6:2G:44:GLY:N	6:2G:88:ILE:O	2.41	0.53
32:2a:1079:G:O3'	36:2e:14:ARG:NH2	2.42	0.53
32:2a:1227:A:OP1	50:2s:80:TYR:OH	2.22	0.53
32:2a:1401:G:OP1	53:2v:18:G:O2'	2.19	0.53
1:1A:1506:C:H2'	1:1A:1507:A:H8	1.73	0.53
9:1N:62:VAL:HG22	9:1N:66:LYS:HD2	1.90	0.53
32:1a:401:C:H2'	32:1a:402:G:H8	1.73	0.53
34:1c:18:TRP:H	34:1c:18:TRP:HE3	1.56	0.53
19:2X:60:ARG:HH21	29:27:47:ARG:HH21	1.57	0.53
21:2Z:72:ARG:NH2	21:2Z:97:GLU:HB2	2.20	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:714:G:H2'	32:2a:715:A:C8	2.43	0.53
32:2a:736:C:H2'	32:2a:737:A:C8	2.43	0.53
39:2h:32:LYS:HA	39:2h:35:ILE:HD12	1.90	0.53
57:2y:48:C:H5'	57:2y:49:G:OP1	2.09	0.53
1:1A:847:U:OP2	62:1A:4149:HOH:O	2.18	0.53
1:1A:2867:G:OP2	15:1T:119:LYS:NZ	2.30	0.53
32:1a:545:C:OP1	35:1d:61:LYS:NZ	2.42	0.53
32:1a:708:C:H2'	32:1a:709:G:H8	1.74	0.53
1:2A:302:C:OP2	20:2Y:73:ARG:NH1	2.41	0.53
1:2A:483:A:O2'	20:2Y:49:VAL:O	2.24	0.53
1:2A:863:A:H2'	1:2A:864:G:C8	2.44	0.53
2:2B:75:G:N2	21:2Z:87:ASP:OD1	2.41	0.53
32:2a:1411:C:H2'	32:2a:1412:C:C6	2.44	0.53
35:2d:172:PRO:HD2	35:2d:173:TRP:CZ3	2.43	0.53
32:1a:112:G:OP2	47:1p:27:LYS:NZ	2.41	0.53
32:1a:800:G:O6	62:1a:4812:HOH:O	2.19	0.53
32:1a:1277:C:O2'	32:1a:1279:A:H1'	2.08	0.53
1:2A:251:A:C5	1:2A:252:G:H1'	2.43	0.53
2:2B:75:G:H22	21:2Z:73:GLN:NE2	2.06	0.53
7:2H:127:GLU:C	7:2H:129:THR:H	2.17	0.53
32:2a:664:G:H22	32:2a:741:G:H1	1.57	0.53
34:2c:156:ARG:H	34:2c:196:LEU:HD22	1.73	0.53
40:2i:15:ALA:HB2	40:2i:65:VAL:HG23	1.90	0.53
8:1I:116:LEU:HD21	8:1I:119:PRO:HA	1.89	0.53
14:1S:23:ARG:HB2	14:1S:86:ALA:HB2	1.91	0.53
32:1a:68:G:H2'	32:1a:69:G:O4'	2.09	0.53
32:1a:130:A:O2'	32:1a:131:C:O5'	2.23	0.53
32:1a:1346:A:OP1	40:1i:120:ARG:NH1	2.41	0.53
33:1b:17:PHE:HB3	33:1b:44:LEU:HD11	1.89	0.53
36:1e:96:PRO:O	36:1e:98:THR:N	2.40	0.53
45:1n:24:CYS:HB2	45:1n:40:CYS:HB3	1.90	0.53
57:1y:71:C:H2'	57:1y:72:C:C6	2.42	0.53
1:2A:1031:G:N2	31:29:36:GLN:HE22	2.06	0.53
1:2A:2331:G:O2'	1:2A:2336:A:N1	2.40	0.53
3:2D:182:LEU:HB2	3:2D:272:ALA:HB3	1.91	0.53
3:2D:218:ARG:HB3	3:2D:219:PRO:HD2	1.91	0.53
8:2I:66:GLU:HA	8:2I:69:LYS:HB3	1.91	0.53
12:2Q:35:VAL:HG22	12:2Q:102:VAL:HG22	1.90	0.53
54:2w:7:U:H3'	54:2w:8:U:C5'	2.39	0.53
1:1A:271(B):C:H42	1:1A:271(V):G:H1	1.56	0.53
1:1A:859:G:O2'	1:1A:916:G:O6	2.26	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:880:G:H2'	1:1A:881:G:C8	2.43	0.53
32:1a:358:U:H2'	32:1a:359:U:H6	1.74	0.53
32:1a:721:G:H4'	32:1a:722:A:O4'	2.09	0.53
32:1a:922:G:H4'	36:1e:20:GLN:HA	1.89	0.53
32:1a:1136:U:H5''	32:1a:1137:C:C2	2.44	0.53
32:1a:1346:A:O2'	38:1g:10:ARG:NH2	2.41	0.53
36:1e:137:GLU:HA	36:1e:140:ARG:HH11	1.73	0.53
45:1n:33:VAL:HA	45:1n:40:CYS:HA	1.91	0.53
47:1p:4:ILE:HG12	47:1p:21:VAL:HG13	1.91	0.53
1:2A:84:A:H5''	20:2Y:8:LYS:HE3	1.91	0.53
1:2A:1009:A:OP2	9:2N:37:LYS:NZ	2.34	0.53
1:2A:1012:U:C5	9:2N:28:THR:HG21	2.44	0.53
1:2A:1514:U:H2'	1:2A:1515:G:C8	2.44	0.53
1:2A:1951:U:OP1	62:2A:3956:HOH:O	2.19	0.53
1:2A:2572:A:OP1	1:2A:2574:G:O2'	2.20	0.53
32:2a:953:G:H5'	32:2a:965:A:N6	2.24	0.53
32:2a:1108:G:O6	62:2a:1910:HOH:O	2.17	0.53
34:2c:107:GLN:O	34:2c:108:ASN:HB2	2.07	0.53
1:1A:226:G:H21	1:1A:228:A:H62	1.56	0.53
7:1H:149:ARG:HH12	7:1H:167:GLU:CD	2.15	0.53
17:1V:14:VAL:HB	17:1V:96:ILE:HG13	1.91	0.53
32:1a:1030(D):A:C3'	32:1a:1031:G:H4'	2.38	0.53
32:1a:1511:G:H2'	32:1a:1512:U:O4'	2.09	0.53
33:1b:60:ASP:HA	33:1b:63:MET:HE3	1.91	0.53
33:1b:125:PRO:HB2	33:1b:128:GLU:H	1.73	0.53
37:1f:48:LEU:N	37:1f:56:PRO:O	2.39	0.53
44:1m:67:GLU:HG3	44:1m:71:ARG:HH21	1.74	0.53
47:1p:19:ILE:HG22	47:1p:36:ILE:HG13	1.90	0.53
1:2A:489:G:N7	18:2W:49:LYS:NZ	2.57	0.53
1:2A:1579:A:H2'	1:2A:1580:A:C8	2.44	0.53
1:2A:1697:G:OP2	1:2A:1698:A:O2'	2.18	0.53
1:2A:2299:G:H2'	1:2A:2300:G:H8	1.74	0.53
32:2a:109:A:H5'	32:2a:110:C:H5	1.74	0.53
33:2b:8:LYS:HZ3	33:2b:51:LEU:HD13	1.72	0.53
36:2e:78:HIS:HA	39:2h:105:ARG:HG3	1.89	0.53
41:2j:13:HIS:HB3	41:2j:68:HIS:CE1	2.44	0.53
1:1A:1045:A:H8	1:1A:1111:A:C6	2.27	0.53
1:1A:1636:C:H2'	1:1A:1637:A:C8	2.44	0.53
1:1A:1798:U:H5'	3:1D:259:THR:CG2	2.37	0.53
6:1G:11:TYR:HA	6:1G:15:VAL:HB	1.91	0.53
6:1G:77:ILE:HG13	6:1G:82:LEU:HD23	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1O:89:ASN:H	10:1O:89:ASN:ND2	2.06	0.53
32:1a:40:C:H2'	32:1a:41:G:H8	1.74	0.53
32:1a:946:A:H2'	32:1a:947:G:C8	2.44	0.53
37:1f:99:ALA:HB1	49:1r:23:LYS:HZ2	1.73	0.53
42:1k:59:TYR:CE2	42:1k:63:LEU:HD11	2.43	0.53
47:1p:47:ASP:OD1	47:1p:47:ASP:N	2.42	0.53
1:2A:692:C:O2'	3:2D:38:LYS:NZ	2.42	0.53
1:2A:882:G:H22	1:2A:894:C:N4	2.06	0.53
1:2A:894:C:O2'	1:2A:895:U:H5''	2.08	0.53
32:2a:417:C:H2'	32:2a:418:C:C6	2.44	0.53
32:2a:542:G:P	35:2d:10:ARG:HH22	2.31	0.53
32:2a:1366:C:H2'	32:2a:1367:C:C6	2.44	0.53
32:2a:1500:A:H5''	32:2a:1508:G:H5''	1.91	0.53
34:2c:22:TRP:CH2	34:2c:32:LEU:HB3	2.44	0.53
54:2w:26:A:H2'	54:2w:27:G:C8	2.43	0.53
1:1A:588:U:O4	1:1A:670:A:H1'	2.09	0.53
1:1A:1168:G:H1	1:1A:1181:C:H42	1.57	0.53
21:1Z:102:LEU:HD11	21:1Z:124:ILE:HB	1.91	0.53
32:1a:971:G:N2	32:1a:1363(A):A:OP2	2.38	0.53
32:1a:1035:A:H2'	32:1a:1036:G:H21	1.73	0.53
34:1c:71:ALA:O	34:1c:73:PRO:HD3	2.09	0.53
36:1e:35:GLY:HA3	36:1e:112:LEU:HB3	1.90	0.53
41:1j:49:VAL:HG11	45:1n:41:ARG:O	2.08	0.53
50:1s:27:GLU:HB2	50:1s:28:LYS:HB3	1.90	0.53
57:1y:4:U:H3	57:1y:69:A:N6	2.05	0.53
1:2A:731:C:OP1	62:2A:3957:HOH:O	2.19	0.53
1:2A:764:A:H5''	3:2D:210:GLY:HA2	1.89	0.53
1:2A:854:G:H2'	1:2A:855:G:C8	2.41	0.53
21:2Z:79:ARG:HB2	21:2Z:80:ARG:NH1	2.24	0.53
26:24:34:GLU:HB3	44:2m:57:ARG:HH21	1.74	0.53
32:2a:523:A:H61	43:2l:92:OTD:CG	2.22	0.53
32:2a:1139:G:N2	32:2a:1142:G:O6	2.36	0.53
32:2a:1295:G:O2'	44:2m:14:ARG:NH2	2.42	0.53
35:2d:36:ARG:HD2	35:2d:38:TYR:OH	2.09	0.53
39:2h:17:THR:HA	39:2h:65:TYR:HE1	1.74	0.53
51:2t:73:HIS:CE1	51:2t:75:ASN:HD22	2.27	0.53
57:2y:11:C:H42	57:2y:24:G:H1	1.57	0.53
1:1A:484:C:OP1	20:1Y:51:VAL:HG22	2.08	0.53
1:1A:946:G:OP1	62:1A:4156:HOH:O	2.19	0.53
1:1A:1338:G:N7	19:1X:62:LYS:NZ	2.48	0.53
1:1A:2065:C:H2'	1:1A:2066:C:C6	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2687:U:H2'	1:1A:2688:U:O4'	2.09	0.53
26:14:53:GLU:OE2	44:1m:65:LYS:NZ	2.42	0.53
28:16:26:ASN:HD21	28:16:28:ARG:NH2	2.07	0.53
40:1i:46:ALA:HB2	40:1i:74:ILE:HG23	1.91	0.53
42:1k:99:GLN:HG2	42:1k:105:VAL:HG21	1.90	0.53
44:1m:120:LYS:HG2	44:1m:121:LYS:H	1.74	0.53
54:1w:34:U8U:O4	54:1w:34:U8U:N	2.42	0.53
1:2A:761:A:OP1	62:2A:3911:HOH:O	2.19	0.53
3:2D:20:ASP:OD1	3:2D:20:ASP:N	2.38	0.53
11:2P:84:ASN:OD1	11:2P:117:GLU:N	2.41	0.53
15:2T:6:LEU:O	15:2T:10:VAL:HG23	2.09	0.53
19:2X:31:HIS:CD2	19:2X:33:LYS:H	2.27	0.53
32:2a:867:G:O2'	32:2a:873:A:N1	2.33	0.53
32:2a:986:A:H1'	50:2s:54:GLY:O	2.09	0.53
33:2b:15:VAL:HG22	33:2b:209:ARG:HD2	1.91	0.53
43:2l:7:ILE:HG22	48:2q:34:LYS:HD2	1.91	0.53
1:1A:8:A:H2'	1:1A:9:U:C6	2.44	0.52
1:1A:580:C:H2'	1:1A:581:C:H6	1.74	0.52
1:1A:784:A:C6	3:1D:229:VAL:HG11	2.44	0.52
1:1A:1634:A:OP2	62:1A:4153:HOH:O	2.19	0.52
48:1q:67:LYS:HA	48:1q:70:ARG:HH12	1.74	0.52
51:1t:66:ALA:HB1	51:1t:71:THR:HG22	1.91	0.52
1:2A:646:A:H2'	1:2A:647:G:O4'	2.09	0.52
1:2A:888:C:OP1	44:2m:93:ARG:NH1	2.42	0.52
1:2A:1253:A:OP1	62:2A:3958:HOH:O	2.19	0.52
1:2A:2131:G:H8	1:2A:2133:G:N3	2.07	0.52
5:2F:31:HIS:HB2	11:2P:9:ASN:OD1	2.09	0.52
10:2O:19:ILE:HG22	10:2O:43:VAL:HA	1.90	0.52
21:2Z:17:ALA:HA	21:2Z:20:ARG:HH11	1.73	0.52
28:26:34:LEU:HB2	28:26:51:GLU:HB2	1.90	0.52
32:2a:537:G:H2'	32:2a:538:G:C8	2.45	0.52
33:2b:92:TYR:CE2	33:2b:151:GLY:HA3	2.44	0.52
38:2g:15:ASP:OD1	38:2g:19:GLY:N	2.42	0.52
40:2i:128:ARG:NH2	55:2x:33:U:OP2	2.33	0.52
44:2m:4:ILE:HD13	44:2m:22:ILE:HG13	1.91	0.52
54:2w:76:A1B8A:N	55:2x:76:8AN:O2'	2.42	0.52
32:1a:184:G:O2'	51:1t:74:LYS:NZ	2.42	0.52
32:1a:405:U:O4	35:1d:2:GLY:N	2.41	0.52
32:1a:757:U:H2'	32:1a:758:G:O4'	2.09	0.52
32:1a:828:A:H2'	32:1a:829:G:O4'	2.08	0.52
1:2A:1959:G:N7	62:2A:4064:HOH:O	2.34	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2068:U:OP2	62:2A:3960:HOH:O	2.19	0.52
2:2B:94:C:H2'	2:2B:95:C:C6	2.45	0.52
7:2H:103:LEU:HD23	7:2H:123:PHE:CD2	2.44	0.52
13:2R:28:LEU:HD23	13:2R:48:VAL:HG21	1.90	0.52
32:2a:737:A:H1'	37:2f:73:ASN:HD21	1.73	0.52
32:2a:837:G:H2'	32:2a:838:G:C8	2.44	0.52
32:2a:967:5MC:H2'	32:2a:968:A:C8	2.44	0.52
32:2a:1261:A:H5'	32:2a:1283:G:O3'	2.10	0.52
33:2b:114:ARG:O	33:2b:118:LEU:HB2	2.10	0.52
35:2d:100:ARG:NH2	35:2d:136:PRO:O	2.42	0.52
55:2x:64:G:H2'	55:2x:65:C:C6	2.44	0.52
1:1A:910:A:N3	1:1A:2264:C:O2'	2.39	0.52
1:1A:1588:C:H2'	1:1A:1589:C:H6	1.74	0.52
1:1A:2023:G:H4'	1:1A:2617:C:O3'	2.10	0.52
2:2B:114:C:H4'	14:2S:46:VAL:HG13	1.91	0.52
8:2I:37:VAL:HG12	8:2I:38:LEU:HD12	1.90	0.52
32:2a:1264:C:N4	32:2a:1271:G:H1	2.06	0.52
32:2a:1353:G:H2'	32:2a:1354:C:C6	2.45	0.52
34:2c:131:ARG:NH2	36:2e:50:GLU:HG3	2.24	0.52
35:2d:114:ARG:O	35:2d:118:ARG:N	2.36	0.52
36:2e:110:LEU:HD13	36:2e:118:ILE:HG21	1.91	0.52
42:2k:22:HIS:HD2	42:2k:29:ILE:HD12	1.73	0.52
1:1A:1173:G:N2	1:1A:1177:A:H2'	2.24	0.52
1:1A:1183:G:H4'	25:13:29:ARG:HH12	1.74	0.52
1:1A:2492:U:H2'	1:1A:2493:U:H6	1.75	0.52
22:10:23:VAL:HG22	22:10:38:VAL:HG22	1.91	0.52
32:1a:279:A:H4'	32:1a:280:C:H5''	1.90	0.52
32:1a:316:G:OP2	32:1a:351:G:O2'	2.24	0.52
32:1a:412:A:H4'	32:1a:413:G:H5'	1.91	0.52
32:1a:565:U:H3'	32:1a:566:G:H2'	1.90	0.52
33:1b:125:PRO:O	33:1b:127:ILE:N	2.43	0.52
35:1d:155:LEU:HB3	35:1d:158:ILE:HD11	1.91	0.52
36:1e:137:GLU:HG3	36:1e:141:GLN:HE21	1.75	0.52
38:1g:46:ALA:HB1	38:1g:121:ALA:HB2	1.91	0.52
57:1y:8:U:H4'	57:1y:48:C:H4'	1.92	0.52
1:2A:1710:C:H5'	1:2A:2859:G:H1'	1.92	0.52
1:2A:1721:G:H8	1:2A:1741:A:H62	1.57	0.52
21:2Z:70:LEU:HB2	21:2Z:91:LEU:HD11	1.91	0.52
32:2a:600:C:H2'	32:2a:601:C:C6	2.45	0.52
43:2l:59:ARG:HA	43:2l:65:GLU:HA	1.92	0.52
1:1A:2747:G:O6	1:1A:2755:C:H5''	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:664:G:N2	32:1a:741:G:H1	2.04	0.52
32:1a:1048:G:OP1	45:1n:3:ARG:HB3	2.10	0.52
33:1b:54:THR:HG23	33:1b:199:TYR:HB3	1.90	0.52
44:1m:87:TYR:O	44:1m:91:ARG:HG2	2.08	0.52
6:2G:41:GLN:O	6:2G:43:LEU:N	2.43	0.52
21:2Z:171:ILE:HD12	21:2Z:172:ALA:H	1.75	0.52
32:2a:1118:C:H1'	32:2a:1179:A:C4	2.44	0.52
44:2m:82:MET:HE2	44:2m:92:HIS:HB3	1.92	0.52
50:2s:32:LYS:HD2	50:2s:34:TRP:CH2	2.44	0.52
55:2x:50:U:H3	55:2x:64:G:H1	1.57	0.52
1:1A:64:A:O3'	19:1X:71:GLY:HA3	2.10	0.52
1:1A:2147:G:H3'	1:1A:2147:G:N3	2.25	0.52
1:1A:2422:A:O4'	57:1y:76:A:N6	2.43	0.52
2:1B:8:U:O3'	14:1S:25:ARG:NH2	2.42	0.52
32:1a:533:A:OP1	62:1a:4814:HOH:O	2.19	0.52
32:1a:719:C:H1'	49:1r:49:LYS:HB3	1.91	0.52
34:1c:121:ALA:O	34:1c:125:GLU:HG3	2.09	0.52
1:2A:222:A:H3'	1:2A:421:U:H5'	1.90	0.52
1:2A:1939:5MU:OP1	1:2A:2604:U:O2'	2.28	0.52
1:2A:2205:C:H1'	1:2A:2220:G:N2	2.25	0.52
5:2F:155:LEU:HB2	5:2F:189:THR:HG21	1.92	0.52
6:2G:41:GLN:HG2	6:2G:154:GLY:O	2.10	0.52
14:2S:14:VAL:O	14:2S:18:ILE:HG12	2.10	0.52
17:2V:25:LEU:N	17:2V:92:THR:OG1	2.37	0.52
32:2a:643:C:H2'	32:2a:644:G:C8	2.43	0.52
32:2a:769:G:H4'	32:2a:1513:A:H4'	1.90	0.52
32:2a:1004:A:N6	32:2a:1037:C:O2	2.27	0.52
32:2a:1105:A:H2'	32:2a:1106:G:C8	2.43	0.52
32:2a:1134:G:C2	32:2a:1135:U:H1'	2.45	0.52
33:2b:188:ALA:HB1	33:2b:192:SER:HB2	1.91	0.52
37:2f:2:ARG:NE	37:2f:69:GLU:HG2	2.25	0.52
1:1A:531:C:H1'	62:1A:4770:HOH:O	2.09	0.52
1:1A:2200:C:OP2	23:11:50:ARG:NH2	2.39	0.52
1:1A:2504:U:OP2	62:1A:4152:HOH:O	2.19	0.52
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.43	0.52
35:1d:149:ALA:HB3	35:1d:152:SER:HB2	1.91	0.52
1:2A:1529:G:O6	1:2A:1530:C:N4	2.43	0.52
5:2F:184:TYR:CZ	5:2F:188:ARG:HD2	2.45	0.52
6:2G:68:PRO:HA	6:2G:92:VAL:HB	1.92	0.52
8:2I:3:VAL:HA	8:2I:39:ALA:H	1.73	0.52
32:2a:642:A:N3	39:2h:113:SER:OG	2.43	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:838:G:H1	32:2a:848:C:N4	2.08	0.52
36:2e:20:GLN:OE1	36:2e:25:ARG:NH1	2.43	0.52
43:2l:41:ARG:HH12	43:2l:57:LYS:HZ1	1.58	0.52
1:1A:886:C:OP1	1:1A:886:C:H4'	2.09	0.52
1:1A:1268:A:C2	1:1A:2013:A:C4	2.98	0.52
1:1A:2482:G:H4'	54:1w:64:G:O2'	2.09	0.52
3:1D:27:THR:O	3:1D:27:THR:OG1	2.27	0.52
11:1P:71:VAL:HG22	11:1P:72:PRO:HA	1.90	0.52
32:1a:677:U:H3	32:1a:713:G:H22	1.58	0.52
44:1m:25:ILE:HD11	44:1m:60:VAL:HG13	1.91	0.52
53:1v:20:A:N6	54:1w:35:U:H3	2.03	0.52
1:2A:208:C:H2'	1:2A:209:C:H6	1.75	0.52
1:2A:1754:C:H5	15:2T:96:ARG:HH21	1.55	0.52
1:2A:2122:U:H3	1:2A:2176:A:H61	1.58	0.52
1:2A:2161:C:H2'	1:2A:2162:G:O4'	2.10	0.52
1:2A:2646:C:H2'	1:2A:2647:U:O4'	2.10	0.52
25:23:40:THR:HG22	25:23:42:ALA:H	1.74	0.52
32:2a:34:C:H2'	32:2a:35:G:C8	2.45	0.52
32:2a:487:A:H2'	32:2a:488:C:O4'	2.10	0.52
32:2a:551:U:H2'	32:2a:552:U:C6	2.44	0.52
32:2a:938:A:N3	32:2a:1376:U:O2'	2.38	0.52
1:1A:322:A:OP1	5:1F:168:ARG:HD3	2.10	0.52
1:1A:536:A:H2'	1:1A:537:C:C6	2.45	0.52
1:1A:1087:G:H2'	1:1A:1089:G:C8	2.45	0.52
17:1V:40:LEU:HB2	17:1V:46:VAL:HG13	1.92	0.52
32:1a:6:G:H2'	36:1e:119:LEU:HD11	1.91	0.52
32:1a:1304:G:OP2	62:1a:4813:HOH:O	2.19	0.52
54:1w:28:U:H2'	54:1w:29:U:C6	2.45	0.52
1:2A:2687:U:H2'	1:2A:2688:U:O4'	2.10	0.52
18:2W:64:MET:HE2	18:2W:109:GLU:HG3	1.91	0.52
20:2Y:15:VAL:HG21	20:2Y:42:VAL:HG11	1.91	0.52
32:2a:1376:U:H2'	32:2a:1377:A:C8	2.42	0.52
1:1A:2125:G:N1	1:1A:2172:U:OP1	2.43	0.52
3:1D:260:ARG:NH2	3:1D:266:SER:OG	2.41	0.52
18:1W:62:HIS:O	18:1W:64:MET:HG3	2.11	0.52
30:18:42:ARG:NH1	62:18:201:HOH:O	2.24	0.52
32:1a:975:A:H5'	32:1a:975:A:H8	1.75	0.52
37:1f:33:TYR:OH	37:1f:78:GLU:OE1	2.23	0.52
1:2A:910:A:OP1	62:2A:3961:HOH:O	2.19	0.52
1:2A:1266:G:O2'	1:2A:2012:G:O6	2.24	0.52
1:2A:2683:C:OP1	15:2T:53:ARG:NH2	2.43	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2698:U:H2'	1:2A:2699:C:C6	2.45	0.52
15:2T:127:ALA:C	15:2T:129:ARG:H	2.18	0.52
16:2U:49:HIS:HD2	16:2U:52:ARG:HD3	1.75	0.52
32:2a:996:A:N1	32:2a:1045:C:O2'	2.41	0.52
32:2a:1049:U:OP1	45:2n:3:ARG:HB2	2.09	0.52
32:2a:1189:C:O2'	34:2c:176:HIS:ND1	2.27	0.52
32:2a:1479:C:H2'	32:2a:1480:G:C8	2.45	0.52
35:2d:150:GLU:HA	35:2d:153:ARG:HG3	1.92	0.52
37:2f:70:ASP:OD1	37:2f:70:ASP:N	2.40	0.52
41:2j:63:PHE:HE1	45:2n:58:LYS:HG3	1.75	0.52
54:2w:51:A:N7	54:2w:64:G:H2'	2.25	0.52
54:2w:63:U:H2'	54:2w:64:G:C8	2.44	0.52
1:1A:2100:G:H1	1:1A:2189:U:H3	1.58	0.51
4:1E:3:GLY:HA3	4:1E:81:ILE:HD12	1.91	0.51
6:1G:25:TYR:CZ	6:1G:32:PRO:HD3	2.45	0.51
32:1a:235:C:H2'	32:1a:236:G:H8	1.74	0.51
32:1a:431:A:H2'	32:1a:432:A:O4'	2.10	0.51
32:1a:691:G:H2'	32:1a:692:U:C6	2.44	0.51
32:1a:1027:C:C2	32:1a:1034:G:N2	2.79	0.51
57:1y:65:C:H2'	57:1y:66:A:H8	1.75	0.51
1:2A:781:A:OP1	62:2A:3955:HOH:O	2.19	0.51
1:2A:1593:G:H2'	1:2A:1594:G:C8	2.44	0.51
1:2A:2704:C:H2'	1:2A:2705:A:O4'	2.10	0.51
1:2A:2880:C:O3'	13:2R:90:ARG:NH1	2.43	0.51
2:2B:103:G:H21	21:2Z:73:GLN:NE2	2.07	0.51
2:2B:118:G:OP2	62:2B:303:HOH:O	2.19	0.51
6:2G:103:LEU:O	6:2G:107:LEU:HG	2.10	0.51
11:2P:63:PRO:HD3	30:28:27:THR:HG22	1.91	0.51
21:2Z:101:PRO:HA	21:2Z:123:ASP:HA	1.92	0.51
32:2a:1274:G:N2	32:2a:1275:A:N7	2.48	0.51
55:2x:33:U:N3	55:2x:36:U:OP2	2.40	0.51
57:2y:29:U:H3	57:2y:41:A:H61	1.58	0.51
1:1A:1794:U:H2'	1:1A:1795:C:H6	1.75	0.51
1:1A:2377:A:H2'	1:1A:2378:A:C8	2.46	0.51
10:1O:64:ARG:HD2	10:1O:79:PHE:CD1	2.44	0.51
32:1a:1025:U:C2	32:1a:1036:G:O6	2.64	0.51
32:1a:1302:U:OP1	44:1m:13:LYS:NZ	2.37	0.51
37:1f:26:ILE:O	37:1f:30:LEU:HG	2.10	0.51
50:1s:11:VAL:HG11	50:1s:16:LEU:HB2	1.92	0.51
1:2A:370:G:N7	62:2A:4067:HOH:O	2.34	0.51
7:2H:54:ARG:NH2	7:2H:57:ASP:OD2	2.38	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:2Q:43:THR:HA	12:2Q:94:VAL:HG12	1.92	0.51
14:2S:93:LYS:NZ	14:2S:93:LYS:HB2	2.26	0.51
23:21:3:LYS:HB2	23:21:61:ARG:HH22	1.75	0.51
32:2a:559:A:H4'	32:2a:560:U:H3'	1.91	0.51
32:2a:1002:G:C6	32:2a:1003:G:H8	2.28	0.51
32:2a:1002:G:N3	32:2a:1003:G:H1'	2.25	0.51
33:2b:142:LEU:HD11	33:2b:146:GLN:HE21	1.74	0.51
44:2m:107:ALA:HB3	44:2m:111:LYS:HE3	1.92	0.51
46:2o:17:ARG:HD3	46:2o:77:ARG:HH21	1.74	0.51
50:2s:64:GLU:CD	50:2s:64:GLU:H	2.18	0.51
51:2t:16:HIS:O	51:2t:19:SER:OG	2.23	0.51
1:1A:2161:C:O2'	1:1A:2162:G:H8	1.93	0.51
1:1A:2470:G:O6	1:1A:2476:A:O2'	2.26	0.51
5:1F:192:LEU:HG	5:1F:194:MET:HE2	1.92	0.51
13:1R:2:ARG:HA	13:1R:5:LYS:HD2	1.92	0.51
32:1a:1021:G:O2'	32:1a:1022:G:O5'	2.28	0.51
34:1c:6:HIS:CD2	34:1c:8:ILE:H	2.27	0.51
36:1e:33:VAL:HG13	36:1e:112:LEU:HD12	1.92	0.51
40:1i:32:ASP:OD1	40:1i:33:PHE:N	2.43	0.51
44:1m:19:LEU:HD11	44:1m:56:LEU:HD21	1.93	0.51
1:2A:1242:A:N1	11:2P:2:LYS:NZ	2.55	0.51
1:2A:2117:A:H61	1:2A:2166:G:H1	1.55	0.51
1:2A:2823:A:OP1	4:2E:113:PHE:HB2	2.10	0.51
12:2Q:16:ARG:HG2	12:2Q:18:LYS:HE2	1.91	0.51
14:2S:69:VAL:HG13	14:2S:101:LEU:HD12	1.91	0.51
21:2Z:23:LYS:HB3	21:2Z:38:TYR:CD1	2.45	0.51
32:2a:735:C:H2'	32:2a:736:C:C6	2.44	0.51
32:2a:1226:C:H6	44:2m:103:THR:HB	1.74	0.51
47:2p:53:VAL:HG13	47:2p:79:VAL:HG22	1.92	0.51
1:1A:428:A:H8	1:1A:428:A:OP2	1.93	0.51
1:1A:1075:C:H2'	1:1A:1076:C:H2'	1.91	0.51
1:1A:2028:U:H2'	1:1A:2029:G:O4'	2.10	0.51
1:2A:872:A:OP1	12:2Q:5:ARG:NH2	2.43	0.51
1:2A:1592:C:H2'	1:2A:1593:G:H8	1.75	0.51
6:2G:51:ARG:HD2	6:2G:52:ILE:H	1.75	0.51
6:2G:95:ARG:HG2	6:2G:96:ARG:HG3	1.93	0.51
9:2N:21:LYS:NZ	9:2N:140:VAL:OXT	2.40	0.51
32:2a:355:C:H1'	32:2a:388:G:H1'	1.92	0.51
32:2a:473:G:H2'	32:2a:474:G:H8	1.75	0.51
32:2a:718:G:H5'	42:2k:117:ASN:OD1	2.10	0.51
41:2j:51:ARG:N	41:2j:59:SER:O	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:271(N):U:O2'	1:1A:271(O):C:H5'	2.10	0.51
1:1A:857:C:N4	1:1A:858:U:O4	2.44	0.51
1:1A:1292:U:H2'	1:1A:1293:C:C6	2.45	0.51
5:1F:9:ILE:HG21	5:1F:125:LEU:HG	1.91	0.51
10:1O:104:ARG:CZ	15:1T:34:VAL:HG11	2.40	0.51
11:1P:126:VAL:HG12	11:1P:148:LEU:HD13	1.93	0.51
14:1S:10:ARG:O	14:1S:14:VAL:HG13	2.09	0.51
32:1a:256:U:H2'	32:1a:257:G:O4'	2.11	0.51
32:1a:1037:C:H2'	32:1a:1038:C:C6	2.46	0.51
33:1b:19:HIS:HA	33:1b:39:ILE:HG23	1.92	0.51
35:1d:15:GLU:OE2	35:1d:66:ARG:NH1	2.42	0.51
35:1d:112:VAL:H	35:1d:116:GLN:NE2	2.08	0.51
47:1p:39:TYR:CD1	47:1p:49:LEU:HD23	2.45	0.51
57:1y:12:U:H2'	57:1y:13:C:O4'	2.11	0.51
1:2A:1434:A:H61	1:2A:1558:A:H62	1.59	0.51
1:2A:2105:C:H2'	1:2A:2106:G:H8	1.74	0.51
8:2I:104:GLN:HG2	8:2I:105:HIS:CE1	2.45	0.51
16:2U:8:VAL:O	16:2U:12:ARG:HG3	2.11	0.51
32:2a:266:G:H2'	32:2a:266:G:N3	2.26	0.51
32:2a:1095:U:OP1	32:2a:1108:G:N2	2.41	0.51
34:2c:63:ASN:HB2	34:2c:98:ASN:HB2	1.93	0.51
38:2g:12:LEU:H	38:2g:12:LEU:HD12	1.76	0.51
42:2k:34:ASP:OD2	42:2k:38:ASN:HB2	2.10	0.51
51:2t:10:LEU:HG	51:2t:12:ALA:H	1.76	0.51
1:1A:72:U:OP1	62:1A:4157:HOH:O	2.19	0.51
1:1A:709:U:H2'	1:1A:710:G:C8	2.45	0.51
1:1A:1364:G:P	23:11:3:LYS:HG3	2.51	0.51
1:1A:2667:C:H1'	7:1H:109:PHE:CD1	2.45	0.51
11:1P:96:THR:HG23	11:1P:99:LEU:HB3	1.93	0.51
32:1a:769:G:H4'	32:1a:1513:A:H4'	1.91	0.51
57:1y:36:U:C2	57:1y:37:T6A:H1'	2.45	0.51
1:2A:729:G:C8	3:2D:208:LYS:HD2	2.46	0.51
1:2A:1019:U:OP1	1:2A:1035:U:O2'	2.29	0.51
1:2A:1218:C:H42	1:2A:1231:G:H1	1.59	0.51
1:2A:1262:A:OP1	18:2W:99:ARG:NH1	2.42	0.51
1:2A:2070:G:H2'	1:2A:2071:A:H8	1.75	0.51
1:2A:2134:A:N6	1:2A:2157:G:O3'	2.43	0.51
3:2D:60:ARG:HD3	3:2D:86:PRO:HB2	1.93	0.51
21:2Z:30:ASN:HB3	21:2Z:90:VAL:HB	1.93	0.51
32:2a:532:A:N1	34:2c:156:ARG:NH1	2.50	0.51
32:2a:728:A:OP1	46:2o:54:ARG:NH1	2.42	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:30:SER:O	41:2j:81:THR:OG1	2.19	0.51
1:1A:606:U:H4'	1:1A:658:C:H4'	1.91	0.51
1:1A:740:U:H2'	1:1A:741:G:C8	2.45	0.51
1:1A:1253:A:OP1	62:1A:4151:HOH:O	2.19	0.51
1:1A:2218:U:O4'	23:11:52:ARG:NH2	2.43	0.51
6:1G:38:VAL:HG22	6:1G:93:THR:HG23	1.93	0.51
9:1N:108:PRO:O	9:1N:113:GLY:HA3	2.11	0.51
32:1a:580:U:H2'	32:1a:581:G:O4'	2.10	0.51
32:1a:624:C:H2'	32:1a:625:G:C8	2.45	0.51
35:1d:159:ARG:O	35:1d:163:GLU:HG3	2.09	0.51
1:2A:184:C:H2'	1:2A:185:U:C6	2.45	0.51
1:2A:1814:G:H4'	3:2D:51:VAL:HG21	1.92	0.51
4:2E:33:VAL:HG12	4:2E:89:ASP:O	2.10	0.51
11:2P:89:ALA:HA	11:2P:121:LYS:HD3	1.93	0.51
33:2b:178:ARG:NH2	39:2h:68:ARG:HH22	2.07	0.51
35:2d:129:ASN:HD21	35:2d:144:ASP:HA	1.76	0.51
40:2i:85:LEU:HB3	40:2i:92:TYR:HD2	1.76	0.51
12:1Q:54:MET:HE3	12:1Q:64:ILE:HG12	1.92	0.51
13:1R:12:ARG:O	13:1R:17:ARG:NH1	2.44	0.51
14:1S:65:VAL:O	14:1S:69:VAL:HG12	2.11	0.51
32:1a:185:A:H2'	32:1a:186:C:C6	2.46	0.51
1:2A:492:A:H2'	1:2A:493:G:O4'	2.11	0.51
1:2A:538:G:H2'	1:2A:539:G:H8	1.75	0.51
1:2A:955:C:OP2	12:2Q:14:ARG:HG3	2.10	0.51
1:2A:1022:G:H22	1:2A:1142(A):A:H2	1.56	0.51
20:2Y:9:LYS:NZ	20:2Y:28:LYS:O	2.43	0.51
32:2a:89:C:H2'	32:2a:90:U:O4'	2.10	0.51
32:2a:1272:G:N2	32:2a:1273:G:C5	2.78	0.51
33:2b:50:GLU:O	33:2b:54:THR:OG1	2.28	0.51
47:2p:57:ARG:O	47:2p:61:SER:HB3	2.11	0.51
51:2t:98:PRO:O	51:2t:99:LEU:HB2	2.11	0.51
1:1A:1095:A:H2'	1:1A:1096:A:H8	1.76	0.51
1:1A:1939:5MU:OP1	1:1A:2604:U:O2'	2.21	0.51
8:1I:37:VAL:HG13	8:1I:38:LEU:HD23	1.92	0.51
9:1N:39:ARG:NH2	9:1N:41:ASP:OD2	2.44	0.51
33:1b:16:HIS:CG	33:1b:17:PHE:N	2.79	0.51
34:1c:15:THR:HG21	34:1c:181:ASN:HA	1.91	0.51
42:1k:59:TYR:CZ	42:1k:63:LEU:HD21	2.46	0.51
42:1k:110:ASP:HB2	49:1r:87:ARG:HH12	1.76	0.51
54:1w:25:C:H2'	54:1w:26:A:O4'	2.11	0.51
1:2A:1756:G:H4'	1:2A:1758:G:O4'	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2176:A:H2'	1:2A:2177:C:C6	2.46	0.51
1:2A:2238:G:H5''	62:2A:4534:HOH:O	2.10	0.51
6:2G:15:VAL:HG22	6:2G:175:LEU:HB3	1.91	0.51
26:24:64:GLY:C	26:24:66:SER:H	2.19	0.51
32:2a:8:A:N6	35:2d:205:GLU:O	2.42	0.51
32:2a:224:C:H2'	32:2a:225:C:H6	1.75	0.51
32:2a:512:U:O2'	35:2d:42:GLN:NE2	2.35	0.51
32:2a:537:G:H2'	32:2a:538:G:H8	1.76	0.51
32:2a:826:C:H42	32:2a:874:G:H1	1.59	0.51
32:2a:833:U:H2'	32:2a:834:C:C6	2.46	0.51
32:2a:931:C:H42	32:2a:1386:G:H1	1.57	0.51
32:2a:1064:G:OP1	32:2a:1386:G:H4'	2.11	0.51
32:2a:1107:C:H5''	34:2c:173:VAL:O	2.11	0.51
32:2a:1346:A:N1	32:2a:1374:A:H5''	2.25	0.51
34:2c:172:ARG:NH2	34:2c:206:GLU:OE1	2.44	0.51
1:1A:2126:A:N6	1:1A:2162:G:O2'	2.44	0.51
10:1O:88:ASN:O	10:1O:90:GLN:N	2.44	0.51
11:1P:38:GLN:O	11:1P:39:LYS:HB3	2.11	0.51
22:10:11:ARG:O	22:10:14:ARG:NH1	2.30	0.51
34:1c:110:ASN:N	34:1c:110:ASN:OD1	2.43	0.51
36:1e:137:GLU:HG3	36:1e:141:GLN:NE2	2.26	0.51
1:2A:96:G:H4'	24:22:48:HIS:CD2	2.46	0.51
1:2A:902:C:H2'	1:2A:903:C:H6	1.76	0.51
1:2A:2319:G:N2	14:2S:3:ARG:HD2	2.25	0.51
12:2Q:43:THR:OG1	12:2Q:46:GLN:NE2	2.44	0.51
32:2a:352:C:O2'	32:2a:354:G:OP1	2.29	0.51
33:2b:98:LEU:HB2	33:2b:101:MET:HE3	1.91	0.51
36:2e:41:VAL:O	36:2e:66:MET:HA	2.09	0.51
40:2i:57:GLY:C	40:2i:59:PHE:H	2.19	0.51
1:1A:302:C:P	20:1Y:73:ARG:HH22	2.34	0.50
1:1A:446:G:OP1	16:1U:3:ARG:NH1	2.43	0.50
2:1B:13:A:N1	2:1B:69:G:O2'	2.37	0.50
32:1a:193:C:H2'	32:1a:194:C:C6	2.45	0.50
32:1a:487:A:H2'	32:1a:488:C:O4'	2.12	0.50
47:1p:38:TYR:O	47:1p:49:LEU:HD22	2.11	0.50
1:2A:2100:G:H1	1:2A:2189:U:H3	1.58	0.50
1:2A:2134:A:H61	1:2A:2158:A:P	2.34	0.50
1:2A:2418:A:P	30:28:29:LYS:HZ1	2.34	0.50
1:2A:2787:C:H1'	4:2E:62:PRO:HG3	1.92	0.50
12:2Q:37:LEU:HD21	12:2Q:130:LYS:HE2	1.93	0.50
21:2Z:157:LEU:HD11	21:2Z:163:LEU:HD13	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:25:33:CYS:HB2	27:25:40:LYS:HD3	1.93	0.50
32:2a:547:A:OP2	35:2d:2:GLY:N	2.44	0.50
32:2a:757:U:H2'	32:2a:758:G:O4'	2.11	0.50
33:2b:70:PHE:CE2	33:2b:90:MET:HB2	2.45	0.50
33:2b:133:LYS:HA	33:2b:136:VAL:HB	1.93	0.50
42:2k:73:MET:HG2	42:2k:103:LEU:HD21	1.94	0.50
1:1A:899:A:HO2'	1:1A:900:A:H8	1.59	0.50
7:1H:20:ALA:HB1	7:1H:21:PRO:HD2	1.93	0.50
38:1g:76:ARG:HD2	38:1g:89:MET:HB2	1.94	0.50
54:1w:55:PSU:O2'	54:1w:57:G:N7	2.38	0.50
57:1y:55:PSU:C4	57:1y:57:G:H5'	2.46	0.50
1:2A:322:A:OP1	5:2F:168:ARG:HD2	2.11	0.50
1:2A:518:G:O2'	62:2A:3951:HOH:O	2.18	0.50
1:2A:884:C:H3'	1:2A:885:C:H6	1.76	0.50
1:2A:1188:U:H4'	17:2V:79:VAL:HG22	1.93	0.50
1:2A:1782:C:O2	1:2A:2608:G:O2'	2.28	0.50
1:2A:2365:G:N7	30:28:39:LYS:NZ	2.59	0.50
1:2A:2693:A:H2'	1:2A:2694:G:C8	2.46	0.50
1:2A:2821:A:H2'	1:2A:2822:G:C8	2.46	0.50
2:2B:95:C:H2'	2:2B:96:U:C6	2.46	0.50
6:2G:35:GLU:HG2	6:2G:36:LYS:HG2	1.93	0.50
15:2T:29:ARG:HB3	15:2T:87:ASP:HB2	1.92	0.50
21:2Z:6:LYS:HE3	21:2Z:8:TYR:CE2	2.44	0.50
32:2a:266:G:O3'	48:2q:67:LYS:HB2	2.11	0.50
32:2a:1423:G:H2'	32:2a:1424:C:C6	2.46	0.50
33:2b:51:LEU:O	33:2b:55:PHE:HB2	2.11	0.50
1:1A:1045:A:OP1	1:1A:1045:A:H4'	2.10	0.50
5:1F:148:LEU:HD22	5:1F:154:VAL:HG21	1.92	0.50
7:1H:90:LYS:HE3	7:1H:159:GLU:HG2	1.93	0.50
32:1a:6:G:H1	36:1e:98:THR:HG21	1.75	0.50
32:1a:520:A:N1	32:1a:536:C:H1'	2.25	0.50
32:1a:1289:A:OP1	52:1u:10:ARG:NH2	2.44	0.50
1:2A:852:G:H2'	1:2A:853:G:C8	2.45	0.50
6:2G:122:PRO:O	6:2G:125:PHE:HD2	1.94	0.50
7:2H:113:VAL:HG11	7:2H:151:ILE:HD13	1.93	0.50
9:2N:4:TYR:CD2	16:2U:100:VAL:HG11	2.47	0.50
10:2O:66:LYS:N	10:2O:82:ASN:OD1	2.37	0.50
28:26:35:GLU:HG3	28:26:50:ARG:HD3	1.93	0.50
32:2a:354:G:N2	32:2a:388:G:O2'	2.37	0.50
32:2a:918:A:H2'	32:2a:919:A:C8	2.46	0.50
32:2a:1517:G:N7	32:2a:1518:MA6:H103	2.26	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:13:ALA:C	33:2b:15:VAL:H	2.19	0.50
37:2f:30:LEU:HA	37:2f:75:LEU:HD11	1.93	0.50
37:2f:33:TYR:HE2	37:2f:78:GLU:HG2	1.76	0.50
1:1A:1993:U:OP2	62:1A:4155:HOH:O	2.19	0.50
1:1A:2163:C:OP1	1:1A:2165:G:N2	2.44	0.50
22:10:43:THR:O	22:10:43:THR:HG23	2.12	0.50
32:1a:750:G:N3	46:1o:23:GLY:HA3	2.27	0.50
32:1a:1187:G:N3	45:1n:60:SER:OG	2.44	0.50
34:1c:14:ILE:HD12	34:1c:178:LEU:HD22	1.93	0.50
1:2A:322:A:P	5:2F:169:ASN:HB2	2.51	0.50
1:2A:856:C:O2'	1:2A:857:C:OP1	2.28	0.50
1:2A:1015:G:H2'	1:2A:1016:G:C8	2.42	0.50
1:2A:1336:A:H2'	1:2A:1337:G:C8	2.46	0.50
1:2A:1509(B):A:H3'	1:2A:1510:G:H8	1.76	0.50
1:2A:2203:U:H2'	1:2A:2205:C:H6	1.75	0.50
6:2G:152:LEU:H	6:2G:152:LEU:HD12	1.77	0.50
7:2H:121:ILE:HG13	7:2H:144:VAL:HG21	1.92	0.50
15:2T:19:LEU:HD13	15:2T:86:ILE:HD12	1.93	0.50
17:2V:76:LYS:HB2	17:2V:81:TYR:CD2	2.46	0.50
32:2a:596:C:H2'	32:2a:597:G:H8	1.76	0.50
32:2a:946:A:H2'	32:2a:947:G:C8	2.47	0.50
32:2a:1320:C:H2'	32:2a:1321:C:O4'	2.12	0.50
34:2c:150:LYS:HG3	34:2c:169:ALA:HB2	1.93	0.50
1:1A:880:G:H2'	1:1A:881:G:H8	1.75	0.50
1:1A:2086:U:H2'	1:1A:2087:G:C8	2.47	0.50
32:1a:399:G:H2'	32:1a:400:C:C6	2.46	0.50
1:2A:1991:U:H2'	1:2A:1992:G:H5''	1.93	0.50
1:2A:2889:C:H2'	1:2A:2891:G:O4'	2.12	0.50
7:2H:98:LEU:HA	7:2H:103:LEU:HA	1.94	0.50
15:2T:88:ILE:HG21	15:2T:91:ARG:NE	2.26	0.50
26:24:46:GLN:NE2	26:24:48:ARG:HD2	2.26	0.50
32:2a:328:C:H4'	32:2a:329:A:H5'	1.93	0.50
32:2a:438:G:H4'	35:2d:123:HIS:ND1	2.26	0.50
32:2a:1132:C:H2'	32:2a:1133:G:C8	2.46	0.50
33:2b:92:TYR:N	33:2b:151:GLY:O	2.24	0.50
40:2i:4:TYR:O	40:2i:19:LEU:N	2.35	0.50
42:2k:123:LYS:C	42:2k:125:PHE:H	2.19	0.50
52:2u:3:LYS:HB3	52:2u:14:TRP:CG	2.47	0.50
57:2y:10:G:O6	57:2y:45:G:C2	2.65	0.50
1:1A:668:G:N7	62:1A:4273:HOH:O	2.34	0.50
1:1A:1866:C:H2'	1:1A:1876:A:O4'	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:189(B):C:H2'	32:1a:189(C):C:C6	2.46	0.50
32:1a:1194:U:H4'	36:1e:22:GLY:HA2	1.93	0.50
32:1a:1314:C:H5	50:1s:4:SER:HB2	1.75	0.50
33:1b:12:GLU:C	33:1b:14:GLY:H	2.19	0.50
35:1d:111:ALA:HA	35:1d:161:ASN:HD22	1.77	0.50
44:1m:74:VAL:O	44:1m:78:ILE:HG13	2.12	0.50
1:2A:75:G:H4'	24:22:55:ARG:NH1	2.26	0.50
1:2A:752:A:P	29:27:3:ARG:HH22	2.35	0.50
1:2A:796:C:H2'	1:2A:797:C:C6	2.47	0.50
1:2A:1166:C:H2'	1:2A:1167:U:C6	2.46	0.50
1:2A:1889:A:H2'	1:2A:1890:A:C8	2.46	0.50
1:2A:2061:G:H5''	1:2A:2503:2MA:C2	2.42	0.50
1:2A:2136:C:N4	1:2A:2155:G:N1	2.60	0.50
12:2Q:78:PRO:HG2	12:2Q:81:VAL:HG11	1.94	0.50
32:2a:542:G:OP1	35:2d:10:ARG:NH2	2.44	0.50
32:2a:824:C:H2'	32:2a:825:G:C8	2.46	0.50
32:2a:1118:C:N3	32:2a:1156:G:N2	2.60	0.50
32:2a:1294:G:H2'	32:2a:1295:G:C8	2.47	0.50
41:2j:5:ARG:N	41:2j:99:LYS:O	2.44	0.50
45:2n:29:ARG:HD3	45:2n:40:CYS:CB	2.41	0.50
1:1A:862:G:N2	62:1A:4373:HOH:O	2.44	0.50
1:1A:2255:G:O2'	55:1x:3:C:H5'	2.11	0.50
1:1A:2572:A:N7	4:1E:145:LYS:HB2	2.27	0.50
1:1A:2630:G:H21	1:1A:2892:A:H1'	1.77	0.50
8:1I:38:LEU:HD21	23:11:75:GLU:CD	2.36	0.50
21:1Z:59:LEU:HD11	21:1Z:88:PHE:CD2	2.46	0.50
32:1a:418:C:H1'	32:1a:540:G:O2'	2.12	0.50
32:1a:1040:U:H2'	32:1a:1041:A:H8	1.75	0.50
1:2A:998:C:H2'	1:2A:999:U:O4'	2.11	0.50
1:2A:1336:A:H2'	1:2A:1337:G:H8	1.77	0.50
1:2A:2400:G:H4'	28:26:18:ARG:HG2	1.94	0.50
1:2A:2557:G:H2'	1:2A:2558:C:H6	1.76	0.50
8:2I:12:LEU:HD22	8:2I:19:VAL:HG21	1.93	0.50
17:2V:5:VAL:HG13	17:2V:14:VAL:HG21	1.94	0.50
24:22:8:LYS:O	24:22:12:GLU:HG2	2.12	0.50
25:23:10:LYS:HB3	25:23:53:LEU:HA	1.94	0.50
32:2a:1018:C:H2'	32:2a:1019:C:O4'	2.11	0.50
32:2a:1079:G:OP2	32:2a:1079:G:H8	1.95	0.50
32:2a:1387:G:H2'	32:2a:1388:C:H6	1.76	0.50
32:2a:1399:C:H4'	32:2a:1400:5MC:H5''	1.94	0.50
36:2e:145:LYS:O	36:2e:149:GLU:N	2.42	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:72:C:H2'	54:2w:73:A:H5''	1.94	0.50
57:2y:63:U:H2'	57:2y:64:G:C8	2.47	0.50
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.46	0.50
1:1A:1794:U:H2'	1:1A:1795:C:C6	2.46	0.50
1:1A:1803:A:H4'	3:1D:259:THR:HG23	1.93	0.50
6:1G:131:TYR:HB3	6:1G:159:VAL:HG13	1.94	0.50
11:1P:88:LEU:HD11	11:1P:114:ILE:HD12	1.94	0.50
34:1c:5:ILE:HG12	34:1c:6:HIS:H	1.77	0.50
37:1f:37:VAL:HA	37:1f:65:VAL:HG12	1.93	0.50
50:1s:31:ILE:O	50:1s:50:ALA:N	2.29	0.50
1:2A:1894:C:H2'	1:2A:1895:C:C6	2.47	0.50
1:2A:2239:G:H5'	3:2D:251:GLY:HA3	1.93	0.50
2:2B:2:C:H2'	2:2B:3:C:H6	1.76	0.50
7:2H:98:LEU:HD23	7:2H:103:LEU:HB3	1.94	0.50
26:24:46:GLN:C	26:24:48:ARG:H	2.19	0.50
32:2a:1352:C:H2'	32:2a:1353:G:C8	2.47	0.50
37:2f:62:TRP:CH2	37:2f:64:GLN:HB2	2.47	0.50
40:2i:63:ILE:HD13	40:2i:77:ILE:HG23	1.93	0.50
1:1A:337:C:H2'	1:1A:338:G:O4'	2.12	0.50
1:1A:1047:G:H2'	1:1A:1110:G:H1	1.76	0.50
1:1A:2585:U:O4	54:1w:76:A1B8A:O2'	2.30	0.50
5:1F:24:LEU:HB3	5:1F:115:ALA:HB2	1.92	0.50
21:1Z:52:SER:C	21:1Z:54:HIS:H	2.20	0.50
32:1a:410:G:OP1	35:1d:30:LYS:NZ	2.41	0.50
32:1a:789:U:O2'	32:1a:791:G:N7	2.40	0.50
32:1a:1329:A:N7	52:1u:7:ARG:NH2	2.60	0.50
54:1w:3:G:H1	54:1w:70:C:H42	1.60	0.50
1:2A:441:U:H2'	1:2A:442:G:C8	2.47	0.50
1:2A:1651:G:H2'	1:2A:1652:A:O4'	2.12	0.50
1:2A:2305:A:H5''	6:2G:134:GLY:HA3	1.93	0.50
7:2H:137:ASP:HB3	7:2H:140:LYS:HB3	1.94	0.50
12:2Q:19:GLY:HA2	21:2Z:79:ARG:NH1	2.27	0.50
14:2S:51:ALA:HB3	14:2S:73:LEU:HD12	1.94	0.50
21:2Z:150:LEU:O	21:2Z:171:ILE:HG13	2.11	0.50
21:2Z:154:ASP:OD1	21:2Z:154:ASP:N	2.29	0.50
32:2a:948:C:H2'	32:2a:949:A:H8	1.77	0.50
32:2a:1142:G:H2'	32:2a:1143:G:O4'	2.12	0.50
33:2b:18:GLY:HA2	33:2b:42:ILE:HG13	1.94	0.50
33:2b:28:PHE:CD2	33:2b:190:THR:HA	2.47	0.50
40:2i:7:THR:O	40:2i:83:ARG:NH1	2.36	0.50
42:2k:34:ASP:HB3	42:2k:40:ILE:HD11	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:2x:58:A:H4'	55:2x:59:A:OP1	2.10	0.50
1:1A:196:A:H2'	1:1A:196:A:N3	2.27	0.49
1:1A:1165:U:H2'	1:1A:1166:C:C6	2.47	0.49
1:1A:2312:U:H5'	6:1G:88:ILE:HD11	1.94	0.49
14:1S:10:ARG:HG3	14:1S:13:ARG:HH12	1.77	0.49
32:1a:690:G:O6	42:1k:51:LYS:NZ	2.45	0.49
32:1a:1080:A:OP1	36:1e:47:LYS:HE2	2.12	0.49
41:1j:33:GLN:O	41:1j:75:ILE:N	2.38	0.49
42:1k:91:ARG:NH1	42:1k:110:ASP:OD1	2.45	0.49
43:1l:53:ARG:HB3	43:1l:69:TYR:HE1	1.76	0.49
49:1r:25:THR:O	49:1r:42:ARG:NH2	2.45	0.49
1:2A:915:C:H3'	1:2A:916:G:H8	1.76	0.49
1:2A:1130:U:O2	1:2A:2025:C:H5''	2.12	0.49
1:2A:2780:G:OP2	9:2N:118:LYS:HD3	2.12	0.49
6:2G:68:PRO:HB2	6:2G:90:LEU:HB3	1.94	0.49
6:2G:69:ALA:HB3	6:2G:91:ARG:HH21	1.76	0.49
7:2H:66:GLY:O	7:2H:70:THR:OG1	2.26	0.49
32:2a:660:G:H1	32:2a:745:C:H42	1.60	0.49
32:2a:1017:G:H2'	32:2a:1018:C:C6	2.47	0.49
32:2a:1029:C:N3	32:2a:1032:G:N2	2.60	0.49
32:2a:1129:C:H2'	32:2a:1139:G:N7	2.27	0.49
36:2e:19:MET:SD	36:2e:24:ARG:HG3	2.52	0.49
55:2x:55:PSU:O2'	55:2x:57:A:N7	2.39	0.49
1:1A:451:C:OP1	5:1F:52:LYS:NZ	2.42	0.49
1:1A:1417:C:H2'	1:1A:1418:G:O4'	2.12	0.49
10:1O:88:ASN:C	10:1O:90:GLN:H	2.20	0.49
32:1a:103:C:O2'	32:1a:172:A:N1	2.39	0.49
32:1a:167:G:H2'	32:1a:168:G:H8	1.77	0.49
34:1c:22:TRP:CE2	45:1n:54:PRO:HG2	2.47	0.49
34:1c:120:VAL:O	34:1c:124:ILE:HG12	2.12	0.49
41:1j:81:THR:HG22	41:1j:84:GLN:HB3	1.93	0.49
46:1o:82:ILE:HD12	46:1o:88:ARG:HB2	1.93	0.49
51:1t:47:GLY:N	51:1t:48:LYS:HB2	2.26	0.49
1:2A:921:G:H4'	1:2A:2269:A:C5	2.47	0.49
1:2A:2320:A:H1'	1:2A:2321:G:C2	2.47	0.49
3:2D:85:ASP:OD2	3:2D:88:ARG:NH1	2.40	0.49
3:2D:253:GLN:HG3	62:2D:418:HOH:O	2.11	0.49
6:2G:91:ARG:HB3	6:2G:91:ARG:CZ	2.42	0.49
9:2N:91:LEU:HA	9:2N:95:PRO:HA	1.94	0.49
32:2a:236:G:OP1	48:2q:40:LYS:NZ	2.44	0.49
32:2a:1122:U:O2'	32:2a:1123:A:H5'	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1305:G:N2	32:2a:1331:G:H1'	2.27	0.49
35:2d:94:LEU:O	35:2d:98:GLU:N	2.44	0.49
1:1A:1903:G:OP1	3:1D:241:PRO:HB2	2.12	0.49
8:1I:40:THR:O	8:1I:44:LEU:HB2	2.12	0.49
8:1I:75:LEU:HD22	8:1I:105:HIS:CD2	2.48	0.49
11:1P:124:LYS:HA	11:1P:144:GLU:HB3	1.94	0.49
12:1Q:54:MET:HG2	12:1Q:117:ALA:HB1	1.93	0.49
25:13:8:LEU:HG	25:13:31:LEU:HD23	1.94	0.49
32:1a:1062:U:H2'	32:1a:1063:C:C6	2.48	0.49
1:2A:442:G:N2	5:2F:48:THR:HB	2.27	0.49
1:2A:902:C:H2'	1:2A:903:C:C6	2.47	0.49
1:2A:1394:U:C4	1:2A:1395:A:C5	3.00	0.49
9:2N:58:ASP:N	9:2N:58:ASP:OD1	2.45	0.49
23:21:44:PRO:HB2	23:21:46:LEU:HD12	1.94	0.49
26:24:37:SER:HA	26:24:43:TYR:CD1	2.46	0.49
32:2a:397:A:H3'	32:2a:397:A:N3	2.28	0.49
32:2a:625:G:H2'	32:2a:626:U:C6	2.48	0.49
32:2a:685:G:N1	32:2a:686:U:O4	2.45	0.49
32:2a:865:A:H2	32:2a:918:A:H4'	1.76	0.49
32:2a:1278:U:H5'	32:2a:1279:A:OP1	2.11	0.49
41:2j:40:LEU:HD12	41:2j:69:ASN:HB3	1.94	0.49
42:2k:50:TYR:CD2	42:2k:60:ALA:HB2	2.47	0.49
51:2t:33:ILE:HG12	51:2t:63:ILE:HG12	1.94	0.49
57:2y:74:C:H2'	57:2y:75:C:C6	2.47	0.49
1:1A:443:A:H1'	1:1A:1201:C:O4'	2.12	0.49
1:1A:530:G:H4'	1:1A:531:C:OP1	2.11	0.49
1:1A:1011:G:OP2	16:1U:66:ASN:ND2	2.38	0.49
6:1G:106:LEU:HA	6:1G:110:ALA:HB3	1.94	0.49
21:1Z:8:TYR:HB2	21:1Z:38:TYR:CE2	2.48	0.49
32:1a:1329:A:H5''	44:1m:26:GLY:H	1.76	0.49
37:1f:8:ILE:HD13	37:1f:26:ILE:HD13	1.94	0.49
42:1k:27:ASN:OD1	42:1k:28:THR:N	2.43	0.49
46:1o:87:ILE:HG22	46:1o:88:ARG:N	2.27	0.49
1:2A:458:G:O2'	29:27:39:ARG:HD3	2.12	0.49
1:2A:861:A:N6	1:2A:916:G:O2'	2.46	0.49
1:2A:884:C:H3'	1:2A:885:C:C6	2.47	0.49
1:2A:2096:U:H2'	1:2A:2097:C:C6	2.48	0.49
7:2H:74:ASN:O	7:2H:78:GLY:N	2.44	0.49
23:21:83:GLU:OE1	23:21:83:GLU:N	2.45	0.49
27:25:8:LYS:HG3	27:25:9:LYS:HG2	1.94	0.49
32:2a:107:G:H2'	32:2a:108:G:O4'	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:186:C:O2'	51:2t:85:MET:SD	2.57	0.49
32:2a:335:C:H2'	32:2a:336:C:C6	2.47	0.49
32:2a:407:G:OP1	35:2d:115:ARG:NH2	2.45	0.49
37:2f:97:PHE:HE2	49:2r:62:GLU:HG2	1.76	0.49
54:2w:63:U:C2'	54:2w:64:G:H5'	2.42	0.49
1:1A:1076:C:O2'	1:1A:1077:A:N7	2.41	0.49
7:1H:3:ARG:HG2	7:1H:6:ARG:HG3	1.95	0.49
10:1O:36:GLY:HA2	10:1O:106:LEU:HD23	1.95	0.49
32:1a:977:A:O2'	32:1a:979:C:OP2	2.30	0.49
35:1d:98:GLU:O	35:1d:103:ASN:ND2	2.45	0.49
45:1n:50:LYS:HD3	45:1n:52:GLN:HE21	1.77	0.49
57:1y:75:C:H5''	57:1y:76:A:H5'	1.95	0.49
1:2A:30:G:H2'	1:2A:31:C:C6	2.47	0.49
1:2A:361:G:O2'	1:2A:362:U:H5'	2.13	0.49
1:2A:1592:C:H2'	1:2A:1593:G:C8	2.47	0.49
1:2A:2151:G:C2	1:2A:2152:G:H1'	2.47	0.49
24:22:35:LEU:HD11	24:22:49:LYS:HE2	1.95	0.49
25:23:6:VAL:HG12	25:23:28:LEU:HD11	1.93	0.49
32:2a:742:G:P	46:2o:35:ARG:HH22	2.35	0.49
32:2a:979:C:H2'	32:2a:980:C:O4'	2.12	0.49
32:2a:1225:A:OP1	44:2m:103:THR:OG1	2.26	0.49
34:2c:122:GLU:HA	34:2c:125:GLU:OE2	2.12	0.49
36:2e:53:LEU:HD12	36:2e:53:LEU:H	1.77	0.49
1:1A:1062:G:N2	1:1A:1077:A:H61	2.05	0.49
1:1A:1379:A:H4'	1:1A:1380:G:OP2	2.12	0.49
1:1A:2611:U:H5'	1:1A:2611:U:H6	1.77	0.49
5:1F:7:TYR:CD2	5:1F:24:LEU:HB2	2.48	0.49
5:1F:129:PHE:HB3	5:1F:132:VAL:CG1	2.43	0.49
5:1F:135:LYS:HB2	5:1F:138:GLU:HG3	1.93	0.49
32:1a:171:A:H2'	32:1a:172:A:C8	2.47	0.49
32:1a:442:C:H42	32:1a:492:G:H1	1.59	0.49
32:1a:456:C:H2'	32:1a:457:C:H6	1.77	0.49
33:1b:97:TRP:CH2	33:1b:173:ALA:HA	2.48	0.49
36:1e:27:ARG:NH1	36:1e:27:ARG:HB2	2.27	0.49
40:1i:28:VAL:HG22	40:1i:63:ILE:HB	1.94	0.49
44:1m:34:LEU:HD13	44:1m:41:PRO:HA	1.95	0.49
1:2A:271(G):C:H2'	1:2A:271(H):G:C8	2.46	0.49
32:2a:1095:U:P	32:2a:1108:G:H1	2.34	0.49
32:2a:1208:C:H2'	32:2a:1209:C:H6	1.78	0.49
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.13	0.49
36:2e:36:ASP:O	36:2e:38:GLN:N	2.41	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:102:ALA:HB2	36:2e:120:THR:HG21	1.95	0.49
40:2i:99:LEU:HB3	40:2i:101:PHE:HE2	1.76	0.49
1:1A:121:G:H4'	1:1A:149:A:H5'	1.93	0.49
1:1A:272(J):C:H2'	1:1A:274:G:C8	2.43	0.49
1:1A:1827:C:H2'	1:1A:1828:G:H5'	1.95	0.49
32:1a:328:C:H4'	32:1a:329:A:H5''	1.94	0.49
32:1a:765:G:C6	32:1a:812:C:C2	3.00	0.49
32:1a:911:U:H2'	32:1a:912:C:C6	2.46	0.49
33:1b:52:GLU:OE2	33:1b:56:ARG:NH2	2.46	0.49
33:1b:166:ASP:OD2	33:1b:169:LYS:HB2	2.12	0.49
39:1h:28:ALA:HA	39:1h:59:LEU:HG	1.95	0.49
41:1j:62:HIS:HB3	45:1n:59:ALA:HB3	1.94	0.49
46:1o:71:GLN:HB2	46:1o:78:TYR:CD1	2.48	0.49
51:1t:30:LYS:HB3	51:1t:34:LYS:HE3	1.94	0.49
1:2A:315:G:H2'	1:2A:316:C:C6	2.47	0.49
1:2A:469:G:O6	29:27:37:LYS:NZ	2.43	0.49
1:2A:881:G:N2	54:2w:56:C:N3	2.60	0.49
7:2H:87:LEU:HB2	7:2H:131:VAL:HB	1.95	0.49
8:2I:132:PRO:HD2	8:2I:136:VAL:O	2.12	0.49
16:2U:89:GLU:O	17:2V:11:GLN:NE2	2.45	0.49
32:2a:976:G:N2	32:2a:1363:C:OP2	2.44	0.49
32:2a:1318:A:H5''	50:2s:3:ARG:NH2	2.28	0.49
35:2d:22:LYS:HB2	35:2d:26:CYS:SG	2.52	0.49
36:2e:84:PHE:HD2	36:2e:130:ASN:HA	1.78	0.49
1:1A:910:A:N1	1:1A:2277:G:H1'	2.28	0.49
1:1A:1095:A:H62	1:1A:1097:U:H3	1.61	0.49
1:1A:1432:C:H2'	1:1A:1433:U:O4'	2.12	0.49
1:1A:1932:A:H2'	1:1A:1933:G:O4'	2.13	0.49
1:1A:2712:U:O2'	1:1A:2712(A):A:OP2	2.28	0.49
1:1A:2869:G:H2'	1:1A:2870:C:O4'	2.13	0.49
4:1E:50:GLY:HA3	4:1E:75:VAL:HG21	1.95	0.49
6:1G:179:PRO:HG3	26:14:43:TYR:OH	2.13	0.49
32:1a:1017:G:H2'	32:1a:1018:C:C6	2.47	0.49
36:1e:95:ALA:HB1	36:1e:96:PRO:HD2	1.95	0.49
39:1h:11:THR:HG22	39:1h:15:ASN:HD21	1.78	0.49
44:1m:87:TYR:HA	44:1m:90:LEU:HD12	1.94	0.49
47:1p:20:VAL:HG21	47:1p:32:TYR:CD2	2.47	0.49
1:2A:234:C:H2'	1:2A:235:U:C6	2.47	0.49
1:2A:1161:C:H2'	1:2A:1162:G:C8	2.47	0.49
1:2A:1580:A:H3'	1:2A:1581:G:H8	1.78	0.49
1:2A:2110:G:C2	1:2A:2120:G:H1'	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2397:G:N2	1:2A:2420:C:H1'	2.27	0.49
2:2B:49:C:OP1	14:2S:97:ARG:HB2	2.12	0.49
4:2E:101:ARG:CZ	4:2E:171:GLU:HB2	2.43	0.49
21:2Z:31:ARG:HD2	21:2Z:94:GLU:CD	2.38	0.49
32:2a:34:C:H2'	32:2a:35:G:H8	1.78	0.49
33:2b:24:TRP:CE2	33:2b:26:PRO:HG3	2.48	0.49
35:2d:64:LEU:HA	35:2d:67:ILE:HD12	1.95	0.49
39:2h:26:VAL:HG13	39:2h:32:LYS:HZ3	1.78	0.49
43:2l:83:VAL:HG21	43:2l:100:ILE:HG12	1.94	0.49
45:2n:3:ARG:C	45:2n:3:ARG:HD3	2.37	0.49
1:1A:251:A:C5	1:1A:252:G:H1'	2.48	0.49
1:1A:613:G:N2	1:1A:614(C):A:O2'	2.45	0.49
1:1A:890:A:H2'	1:1A:892:G:O4'	2.13	0.49
1:1A:1056:G:N2	1:1A:1103:A:H62	2.11	0.49
1:1A:1416:G:HO2'	1:1A:1417:C:H5	1.60	0.49
1:1A:2243:U:H2'	1:1A:2244:U:C6	2.48	0.49
13:1R:56:LYS:NZ	13:1R:90:ARG:O	2.45	0.49
36:1e:151:LEU:HD21	39:1h:77:GLU:HG2	1.94	0.49
1:2A:826:U:H5''	1:2A:2428:G:O3'	2.13	0.49
1:2A:2318:G:H21	14:2S:3:ARG:NE	2.11	0.49
4:2E:52:LEU:O	4:2E:76:ARG:N	2.38	0.49
8:2I:9:LEU:HD21	8:2I:35:LEU:HD13	1.95	0.49
19:2X:4:ALA:HB1	19:2X:42:ALA:HA	1.94	0.49
22:20:56:ASP:OD1	22:20:58:THR:OG1	2.26	0.49
23:21:46:LEU:HD23	23:21:61:ARG:HB3	1.95	0.49
32:2a:381:C:H2'	32:2a:382:A:O4'	2.13	0.49
32:2a:416:G:H1	32:2a:427:U:H3	1.60	0.49
33:2b:162:ILE:HD11	33:2b:184:VAL:HG22	1.95	0.49
47:2p:51:VAL:HG11	47:2p:74:LEU:HD22	1.94	0.49
1:1A:582:G:H2'	1:1A:583:G:C8	2.48	0.49
1:1A:1784:A:OP2	62:1A:4118:HOH:O	2.20	0.49
1:1A:2139:C:H2'	1:1A:2140:C:O4'	2.13	0.49
10:1O:10:VAL:HG11	10:1O:16:ALA:HB3	1.94	0.49
21:1Z:70:LEU:HG	21:1Z:91:LEU:HD11	1.95	0.49
24:12:65:ASN:OD1	24:12:69:ARG:NH1	2.46	0.49
25:13:5:LYS:NZ	25:13:55:ARG:HH12	2.11	0.49
32:1a:1090:U:H2'	32:1a:1091:U:C6	2.48	0.49
32:1a:1412:C:H2'	32:1a:1413:A:C8	2.48	0.49
32:1a:1456:G:C5	51:1t:55:ILE:HD11	2.48	0.49
44:1m:2:ALA:N	44:1m:8:GLU:OE1	2.46	0.49
55:1x:23:C:H2'	55:1x:24:U:C6	2.48	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:746:A:H2'	1:2A:2612:C:H5''	1.94	0.49
1:2A:895:U:H2'	1:2A:897:C:OP2	2.13	0.49
1:2A:1429:G:H2'	1:2A:1430:C:C6	2.47	0.49
6:2G:11:TYR:CZ	6:2G:16:ARG:HD3	2.47	0.49
7:2H:12:PRO:HD2	7:2H:15:VAL:HG21	1.94	0.49
32:2a:143:A:O3'	32:2a:144:G:H8	1.96	0.49
32:2a:940:C:H2'	32:2a:941:G:C8	2.48	0.49
32:2a:950:U:OP2	44:2m:102:ARG:HD3	2.13	0.49
32:2a:1517:G:H2'	32:2a:1518:MA6:H8	1.94	0.49
41:2j:36:GLY:O	41:2j:38:ILE:HD12	2.13	0.49
43:2l:8:ASN:O	43:2l:12:ARG:HG3	2.13	0.49
1:1A:34:C:H5''	1:1A:35:G:OP2	2.13	0.48
1:1A:813:U:H2'	1:1A:814:C:C6	2.48	0.48
1:1A:1187:G:H5''	17:1V:81:TYR:CE1	2.48	0.48
7:1H:57:ASP:O	7:1H:62:LYS:HD2	2.13	0.48
23:11:59:THR:O	23:11:91:LYS:NZ	2.33	0.48
32:1a:401:C:H1'	32:1a:622:A:H1'	1.95	0.48
32:1a:1240:U:OP2	38:1g:116:ALA:N	2.46	0.48
33:1b:80:ILE:O	33:1b:84:GLU:HG2	2.13	0.48
37:1f:1:MET:HE3	37:1f:66:GLU:HG2	1.95	0.48
47:1p:48:TRP:HH2	47:1p:76:GLN:HE22	1.61	0.48
1:2A:271(D):G:H2'	1:2A:271(E):U:C6	2.48	0.48
3:2D:171:ASP:O	3:2D:187:GLY:N	2.40	0.48
9:2N:91:LEU:HG	9:2N:98:VAL:HG21	1.94	0.48
32:2a:1074:G:OP2	36:2e:61:TYR:OH	2.28	0.48
32:2a:1133:G:N2	32:2a:1141:C:N3	2.56	0.48
32:2a:1235:U:O2'	32:2a:1305:G:O5'	2.30	0.48
32:2a:1298:C:H2'	38:2g:114:ARG:NH2	2.28	0.48
34:2c:101:LEU:HD13	34:2c:102:ASN:H	1.77	0.48
40:2i:57:GLY:O	40:2i:59:PHE:N	2.46	0.48
55:2x:40:C:H2'	55:2x:41:C:H6	1.78	0.48
1:1A:1803:A:O2'	3:1D:259:THR:HG21	2.12	0.48
1:1A:2040:C:H2'	1:1A:2041:U:O4'	2.13	0.48
1:1A:2163:C:OP1	1:1A:2171:A:O2'	2.31	0.48
10:1O:20:MET:HE3	10:1O:44:LYS:HE3	1.95	0.48
32:1a:804:U:H5''	32:1a:805:C:OP2	2.14	0.48
32:1a:1060:C:C5	34:1c:2:GLY:HA3	2.47	0.48
32:1a:1143:G:H2'	32:1a:1144:G:C8	2.48	0.48
34:1c:199:LYS:HB3	34:1c:201:TYR:HE2	1.78	0.48
1:2A:2051:A:H5'	1:2A:2578:G:O4'	2.12	0.48
1:2A:2552:OMU:H2'	1:2A:2554:U:OP2	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2D:175:LEU:HD12	3:2D:185:VAL:HG21	1.95	0.48
7:2H:116:GLU:HG3	7:2H:117:PRO:HD2	1.94	0.48
26:24:67:TYR:CD2	50:2s:9:VAL:HB	2.48	0.48
32:2a:336:C:H2'	32:2a:337:C:C6	2.48	0.48
32:2a:1342:C:H2'	32:2a:1343:G:C8	2.48	0.48
33:2b:73:THR:O	33:2b:73:THR:OG1	2.27	0.48
36:2e:31:LEU:HD22	36:2e:43:LEU:HD11	1.95	0.48
42:2k:27:ASN:OD1	42:2k:28:THR:N	2.45	0.48
48:2q:78:GLU:HG2	48:2q:81:ARG:HG2	1.94	0.48
1:1A:795:C:H2'	1:1A:796:C:C6	2.49	0.48
1:1A:1058:G:N2	1:1A:1080:C:N3	2.58	0.48
3:1D:232:PRO:O	62:1D:401:HOH:O	2.20	0.48
11:1P:98:GLU:O	11:1P:101:VAL:HG12	2.13	0.48
32:1a:337:C:H2'	32:1a:338:A:C8	2.48	0.48
33:1b:12:GLU:O	33:1b:15:VAL:HG22	2.14	0.48
43:1l:117:ARG:HB3	43:1l:122:THR:HB	1.94	0.48
51:1t:45:GLN:HB2	51:1t:91:LEU:HD13	1.94	0.48
1:2A:323:G:C8	5:2F:171:PRO:HG3	2.48	0.48
5:2F:9:ILE:HD13	5:2F:123:LEU:HD23	1.96	0.48
8:2I:105:HIS:HB2	8:2I:107:VAL:CG2	2.44	0.48
12:2Q:111:GLU:O	12:2Q:115:MET:HG2	2.14	0.48
16:2U:107:ALA:O	16:2U:111:GLU:HG2	2.13	0.48
28:26:6:ARG:NH1	28:26:26:ASN:HB2	2.28	0.48
32:2a:88:A:H5''	32:2a:89:C:C6	2.48	0.48
32:2a:1304:G:C6	32:2a:1305:G:N1	2.81	0.48
34:2c:148:GLY:HA3	34:2c:203:PHE:HB3	1.95	0.48
35:2d:72:GLU:OE2	35:2d:207:TYR:OH	2.30	0.48
36:2e:83:GLU:HB3	36:2e:88:LYS:HG3	1.95	0.48
38:2g:120:ILE:O	38:2g:124:LEU:HB2	2.12	0.48
40:2i:23:ASN:OD1	40:2i:25:LYS:HG2	2.14	0.48
50:2s:66:MET:HB2	50:2s:74:PHE:CZ	2.48	0.48
1:1A:187:G:OP2	62:1A:4160:HOH:O	2.20	0.48
1:1A:2646:C:H2'	1:1A:2647:U:O4'	2.13	0.48
5:1F:116:ASP:OD1	5:1F:119:ARG:NH2	2.46	0.48
6:1G:44:GLY:O	6:1G:47:LYS:HE2	2.13	0.48
9:1N:16:ILE:HG21	9:1N:26:LEU:HD11	1.94	0.48
26:14:62:ARG:C	26:14:63:TYR:CG	2.91	0.48
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.48	0.48
37:1f:99:ALA:HB1	49:1r:23:LYS:NZ	2.28	0.48
51:1t:86:ARG:O	51:1t:90:GLN:NE2	2.46	0.48
1:2A:479:A:H4'	1:2A:480:A:OP1	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2314:C:H2'	1:2A:2315:G:C8	2.48	0.48
6:2G:111:LEU:HD23	6:2G:117:PHE:CZ	2.47	0.48
14:2S:11:LYS:HG3	14:2S:91:PRO:HD3	1.95	0.48
17:2V:21:ARG:NH2	17:2V:91:TYR:OH	2.47	0.48
32:2a:715:A:H2'	32:2a:716:A:C8	2.48	0.48
32:2a:815:A:N7	32:2a:1509:C:O2'	2.43	0.48
32:2a:1309:G:OP2	44:2m:99:ARG:NH2	2.37	0.48
44:2m:29:ARG:HD3	44:2m:64:TRP:CD2	2.49	0.48
55:2x:61:C:H2'	55:2x:62:C:C6	2.48	0.48
1:1A:226:G:N2	1:1A:228:A:H62	2.11	0.48
1:1A:1490:A:O2'	3:1D:99:ASP:OD1	2.31	0.48
1:1A:1514:U:O2'	1:1A:1558:A:OP2	2.19	0.48
1:1A:1720:U:H2'	1:1A:1721:G:O4'	2.12	0.48
1:1A:2786:U:O2'	4:1E:62:PRO:O	2.27	0.48
5:1F:154:VAL:HG22	5:1F:191:ARG:HB2	1.96	0.48
21:1Z:77:ASP:OD2	21:1Z:80:ARG:NH1	2.47	0.48
32:1a:222:U:H2'	32:1a:223:U:C6	2.49	0.48
32:1a:383:A:C5	32:1a:384:G:H1'	2.49	0.48
32:1a:392:G:H2'	32:1a:393:A:C8	2.48	0.48
32:1a:1202:G:H1'	45:1n:29:ARG:HD2	1.95	0.48
34:1c:64:VAL:HG13	34:1c:99:VAL:HA	1.95	0.48
36:1e:152:ARG:HB3	39:1h:43:GLY:HA3	1.95	0.48
51:1t:43:LEU:HD13	51:1t:51:GLU:HG2	1.96	0.48
1:2A:320:A:O2'	1:2A:322:A:OP2	2.31	0.48
1:2A:994:C:H3'	16:2U:54:LYS:HE3	1.94	0.48
1:2A:1400:G:H2'	1:2A:1401:G:C8	2.49	0.48
1:2A:1598:C:H2'	1:2A:1599:C:C6	2.48	0.48
1:2A:2318:G:H2'	1:2A:2318:G:N3	2.29	0.48
1:2A:2734:A:H2'	1:2A:2735:G:O4'	2.13	0.48
2:2B:2:C:H2'	2:2B:3:C:C6	2.48	0.48
4:2E:9:VAL:HG13	15:2T:3:ARG:HG2	1.95	0.48
12:2Q:16:ARG:HG3	12:2Q:17:LEU:H	1.77	0.48
16:2U:49:HIS:CD2	16:2U:52:ARG:HD3	2.49	0.48
17:2V:4:ILE:HA	17:2V:12:TYR:O	2.14	0.48
26:24:26:SER:OG	26:24:27:THR:N	2.47	0.48
32:2a:607:A:H2'	32:2a:608:A:O4'	2.13	0.48
32:2a:1029:C:N4	32:2a:1032:G:N1	2.61	0.48
32:2a:1401:G:C2	32:2a:1402:4OC:H1'	2.49	0.48
1:1A:570:G:H2'	1:1A:2030:A:C5	2.49	0.48
1:1A:651:G:OP1	30:18:17:THR:OG1	2.25	0.48
1:1A:796:C:H2'	1:1A:797:C:C6	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:862:G:H2'	1:1A:863:A:O4'	2.14	0.48
1:1A:911:A:H2'	12:1Q:9:TYR:OH	2.14	0.48
1:1A:2364:C:H2'	1:1A:2365:G:O4'	2.14	0.48
32:1a:434:U:H2'	32:1a:435:C:C6	2.47	0.48
36:1e:27:ARG:HB2	36:1e:27:ARG:HH11	1.78	0.48
41:1j:11:PHE:HE1	41:1j:67:THR:HG22	1.79	0.48
1:2A:601:C:O2'	1:2A:605:C:H5''	2.12	0.48
1:2A:1477:A:H2'	1:2A:1478:G:O4'	2.13	0.48
1:2A:1803:A:H4'	3:2D:259:THR:HG23	1.96	0.48
1:2A:2705:A:OP2	62:2A:3964:HOH:O	2.20	0.48
7:2H:102:ALA:HA	7:2H:117:PRO:HD3	1.95	0.48
14:2S:95:HIS:O	14:2S:99:LYS:HB3	2.14	0.48
32:2a:109:A:C6	32:2a:326:G:C6	3.01	0.48
32:2a:419:C:OP1	32:2a:513:C:O2'	2.30	0.48
32:2a:976:G:H5'	32:2a:1358:U:O2'	2.14	0.48
36:2e:95:ALA:O	36:2e:97:GLY:N	2.47	0.48
50:2s:17:GLU:O	50:2s:21:GLU:N	2.35	0.48
51:2t:9:ASN:OD1	51:2t:9:ASN:N	2.46	0.48
54:2w:48:C:N3	54:2w:59:A:H1'	2.29	0.48
1:1A:83:G:OP1	20:1Y:95:LYS:NZ	2.44	0.48
1:1A:323:G:H1'	1:1A:1205:U:O2	2.14	0.48
1:1A:855:G:O2'	22:10:27:GLU:OE2	2.22	0.48
1:1A:2590:A:H2'	1:1A:2591:C:C6	2.48	0.48
8:1I:135:GLU:C	8:1I:137:PRO:HD3	2.39	0.48
32:1a:728:A:H2'	32:1a:729:A:C8	2.48	0.48
1:2A:212:G:H2'	1:2A:213:A:O4'	2.13	0.48
1:2A:1385:G:O2'	1:2A:1396:U:O2	2.29	0.48
1:2A:1755:A:OP2	15:2T:113:LYS:NZ	2.44	0.48
4:2E:49:LEU:N	4:2E:79:ARG:O	2.35	0.48
10:2O:25:LEU:HD12	10:2O:38:VAL:HG12	1.95	0.48
11:2P:97:PRO:HG3	11:2P:112:LEU:HD23	1.96	0.48
32:2a:131:C:H2'	32:2a:132:C:C6	2.49	0.48
32:2a:1020:U:H2'	32:2a:1021:G:C8	2.48	0.48
32:2a:1157:A:H5'	32:2a:1158:C:C6	2.49	0.48
38:2g:50:ILE:HD12	38:2g:61:VAL:HB	1.96	0.48
53:2v:21:A:N1	54:2w:34:U8U:O4	2.47	0.48
1:1A:882:G:H1	1:1A:894:C:H42	1.62	0.48
1:1A:1482:G:H2'	1:1A:1484:G:C8	2.46	0.48
1:1A:2112:G:H1'	57:1y:19:G:O2'	2.14	0.48
1:1A:2140:C:H2'	1:1A:2141:G:C8	2.37	0.48
23:11:13:ILE:HD11	23:11:42:GLN:OE1	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:10:A:HO2'	32:1a:507:C:HO2'	1.60	0.48
54:1w:2:G:H2'	54:1w:3:G:C8	2.48	0.48
1:2A:764:A:H5''	3:2D:210:GLY:CA	2.44	0.48
1:2A:1754:C:N3	1:2A:2716:U:O2'	2.46	0.48
7:2H:124:GLU:HG3	7:2H:126:PRO:HD3	1.96	0.48
21:2Z:142:SER:HB3	21:2Z:143:GLY:H	1.54	0.48
23:21:4:VAL:HG21	23:21:11:ARG:HH21	1.78	0.48
32:2a:1385:G:H2'	32:2a:1386:G:C8	2.49	0.48
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.96	0.48
1:1A:383:U:H2'	1:1A:385:C:H5	1.79	0.48
1:1A:530:G:OP2	62:1A:4158:HOH:O	2.20	0.48
1:1A:2439:A:N6	55:1x:76:8AN:O1P	2.47	0.48
10:1O:112:MET:SD	10:1O:112:MET:N	2.80	0.48
20:1Y:97:ARG:HH11	20:1Y:107:ASP:C	2.22	0.48
33:1b:18:GLY:HA3	33:1b:42:ILE:HG13	1.96	0.48
34:1c:131:ARG:HH21	36:1e:50:GLU:HG3	1.79	0.48
34:1c:134:ILE:HG23	34:1c:151:VAL:HB	1.96	0.48
1:2A:271(R):G:OP1	23:21:76:ARG:NE	2.44	0.48
1:2A:996:A:H4'	16:2U:91:ASP:OD2	2.13	0.48
2:2B:22:U:H3	2:2B:61:G:H1	1.61	0.48
2:2B:90:A:N7	2:2B:91:C:H1'	2.29	0.48
32:2a:114:U:H2'	32:2a:115:G:C8	2.49	0.48
32:2a:309:G:O2'	32:2a:607:A:N1	2.44	0.48
32:2a:620:C:C2	35:2d:135:LEU:HG	2.49	0.48
32:2a:859:A:H2'	32:2a:860:A:O4'	2.14	0.48
32:2a:1071:C:H42	32:2a:1104:G:H1	1.62	0.48
32:2a:1135:U:H2'	32:2a:1137:C:N3	2.28	0.48
35:2d:17:VAL:HG12	35:2d:19:LEU:HD13	1.95	0.48
38:2g:23:VAL:O	38:2g:27:ILE:HG13	2.14	0.48
38:2g:115:ARG:O	38:2g:119:ARG:HG3	2.14	0.48
43:2l:32:PHE:CE1	43:2l:86:ARG:HB3	2.48	0.48
47:2p:39:TYR:CG	47:2p:73:LEU:HD21	2.49	0.48
1:1A:621:A:OP2	11:1P:108:LYS:NZ	2.45	0.48
1:1A:900:A:H2'	1:1A:901:A:O4'	2.14	0.48
2:1B:78:A:C2	2:1B:100:A:C4	3.02	0.48
3:1D:146:GLU:HB2	3:1D:189:CYS:HB3	1.96	0.48
4:1E:116:VAL:HG13	4:1E:122:PHE:HB2	1.95	0.48
8:1I:38:LEU:HD11	23:11:75:GLU:HG3	1.96	0.48
32:1a:600:C:H2'	32:1a:601:C:C6	2.49	0.48
32:1a:982:U:H5''	45:1n:6:LEU:HD11	1.94	0.48
32:1a:1239:A:H62	32:1a:1299:A:H62	1.62	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:33:LEU:O	34:1c:37:GLN:HG2	2.14	0.48
37:1f:48:LEU:HD22	49:1r:77:GLY:HA3	1.96	0.48
41:1j:5:ARG:HB2	41:1j:73:ASP:OD1	2.14	0.48
49:1r:31:LEU:HD23	49:1r:31:LEU:H	1.78	0.48
1:2A:131:G:OP1	62:2A:3962:HOH:O	2.19	0.48
1:2A:153:C:H2'	1:2A:154:G:O4'	2.13	0.48
1:2A:686:G:N2	1:2A:788:A:H61	2.11	0.48
1:2A:1662:C:O2'	1:2A:2687:U:OP1	2.30	0.48
1:2A:2657:A:O3'	7:2H:160:LYS:NZ	2.47	0.48
1:2A:2752:C:H2'	1:2A:2753:A:O4'	2.14	0.48
5:2F:32:LEU:O	5:2F:36:VAL:HG23	2.14	0.48
6:2G:15:VAL:HG21	6:2G:176:LEU:HD23	1.94	0.48
6:2G:64:THR:HG21	6:2G:92:VAL:HG11	1.95	0.48
16:2U:97:ASP:OD1	16:2U:101:ARG:HD2	2.14	0.48
23:21:52:ARG:HG3	23:21:56:GLN:O	2.13	0.48
27:25:52:TYR:O	27:25:55:ARG:HG2	2.14	0.48
32:2a:46:G:O2'	32:2a:365:U:H1'	2.14	0.48
32:2a:130:A:N3	32:2a:263:A:O2'	2.39	0.48
32:2a:519:C:H2'	32:2a:520:A:O4'	2.13	0.48
32:2a:1114:C:H42	32:2a:1186:G:H1	1.62	0.48
33:2b:187:LEU:HA	33:2b:201:ILE:HB	1.95	0.48
34:2c:130:VAL:HB	34:2c:157:ILE:HG23	1.96	0.48
44:2m:14:ARG:HA	44:2m:44:ARG:HA	1.95	0.48
54:2w:18:G:HO2'	54:2w:57:G:N2	2.12	0.48
1:1A:686:G:N2	1:1A:788:A:H61	2.12	0.47
1:1A:848:G:O6	1:1A:928:G:H2'	2.14	0.47
1:1A:994:C:OP1	16:1U:53:ARG:NH2	2.46	0.47
1:1A:1113:U:H2'	1:1A:1114:G:C8	2.48	0.47
1:1A:2464:C:H1'	62:1A:5432:HOH:O	2.13	0.47
9:1N:44:PRO:HD3	16:1U:60:LEU:HD13	1.95	0.47
10:1O:43:VAL:HG12	10:1O:54:GLU:HA	1.95	0.47
14:1S:106:ARG:HE	14:1S:112:PHE:C	2.22	0.47
16:1U:85:LYS:HB3	16:1U:85:LYS:HE2	1.61	0.47
21:1Z:1:MET:HA	21:1Z:2:GLU:HA	1.70	0.47
21:1Z:126:VAL:HG11	21:1Z:161:VAL:HB	1.96	0.47
32:1a:1323:G:H2'	32:1a:1324:A:C8	2.48	0.47
32:1a:1361:G:H2'	32:1a:1362:C:O4'	2.14	0.47
36:1e:60:TYR:HE1	36:1e:64:ARG:HE	1.61	0.47
39:1h:9:MET:SD	39:1h:26:VAL:HG11	2.53	0.47
39:1h:21:LYS:O	39:1h:63:LEU:HD12	2.13	0.47
1:2A:892:G:H3'	1:2A:893:C:H5''	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:14:U:O3'	2:2B:108:U:O2'	2.28	0.47
6:2G:151:ALA:HB3	6:2G:153:ARG:NH1	2.29	0.47
6:2G:173:LEU:O	6:2G:178:PHE:N	2.47	0.47
15:2T:23:ARG:HD3	15:2T:120:ARG:CZ	2.45	0.47
32:2a:596:C:H2'	32:2a:597:G:C8	2.49	0.47
32:2a:865:A:C2	32:2a:918:A:H4'	2.49	0.47
32:2a:952:U:H2'	32:2a:953:G:C8	2.49	0.47
32:2a:1071:C:H2'	32:2a:1072:G:C8	2.48	0.47
32:2a:1387:G:H2'	32:2a:1388:C:C6	2.48	0.47
33:2b:16:HIS:HE1	33:2b:42:ILE:HD12	1.78	0.47
36:2e:105:VAL:HG21	36:2e:128:PRO:HB3	1.96	0.47
1:1A:2682:U:O2'	15:1T:58:ASN:ND2	2.48	0.47
8:1I:61:ARG:HD3	8:1I:61:ARG:HA	1.58	0.47
30:18:33:ASN:HA	30:18:36:LYS:HD2	1.96	0.47
32:1a:1261:A:H3'	32:1a:1262:C:C6	2.49	0.47
33:1b:189:ASP:HB3	33:1b:204:ASN:HA	1.95	0.47
35:1d:109:GLY:HA3	35:1d:165:MET:SD	2.54	0.47
39:1h:64:LYS:HD2	39:1h:79:VAL:HG21	1.95	0.47
49:1r:35:ARG:HA	49:1r:78:LEU:HD13	1.96	0.47
52:1u:3:LYS:HD3	52:1u:14:TRP:CD1	2.49	0.47
55:1x:23:C:H2'	55:1x:24:U:H6	1.79	0.47
1:2A:658:C:H2'	1:2A:659:C:C6	2.49	0.47
5:2F:124:LEU:HB3	5:2F:193:VAL:HG22	1.95	0.47
7:2H:26:VAL:O	7:2H:79:VAL:HG11	2.14	0.47
11:2P:70:GLN:N	11:2P:70:GLN:HE21	2.12	0.47
12:2Q:38:GLU:HB2	12:2Q:127:ILE:HB	1.96	0.47
14:2S:67:ARG:HD3	14:2S:71:ARG:HH11	1.79	0.47
32:2a:685:G:C2	32:2a:686:U:C4	3.02	0.47
32:2a:923:A:N6	32:2a:1392:G:O6	2.47	0.47
32:2a:1004:A:N1	32:2a:1037:C:C2	2.82	0.47
32:2a:1194:U:H4'	36:2e:22:GLY:HA2	1.96	0.47
33:2b:175:ARG:HH12	33:2b:179:LYS:HD2	1.79	0.47
48:2q:23:VAL:HG21	48:2q:59:ILE:HD11	1.96	0.47
1:1A:363(C):G:H2'	1:1A:363(D):G:C8	2.49	0.47
1:1A:2228:G:P	3:1D:263:ARG:HH12	2.37	0.47
5:1F:51:THR:HB	5:1F:88:VAL:HG11	1.97	0.47
6:1G:138:GLN:NE2	6:1G:153:ARG:HH21	2.12	0.47
11:1P:8:PRO:HB2	11:1P:12:ALA:HB3	1.96	0.47
28:16:18:ARG:HD2	28:16:42:TRP:CD1	2.49	0.47
32:1a:111:G:H5''	47:1p:27:LYS:HB3	1.97	0.47
32:1a:1004:A:H5'	32:1a:1024:G:N2	2.29	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1270:C:OP2	52:1u:24:ARG:NH2	2.47	0.47
32:1a:1325:C:H2'	32:1a:1326:C:C6	2.49	0.47
32:1a:1525:G:OP1	42:1k:120:ARG:NH2	2.47	0.47
43:1l:89:ARG:CZ	43:1l:91:LYS:HA	2.44	0.47
46:1o:25:THR:HG21	46:1o:70:LEU:HB2	1.95	0.47
51:1t:47:GLY:HA2	51:1t:48:LYS:C	2.38	0.47
1:2A:940:G:N3	1:2A:1191:G:H4'	2.29	0.47
1:2A:2375:G:N2	1:2A:2378:A:OP2	2.42	0.47
1:2A:2503:2MA:OP2	62:2A:3966:HOH:O	2.20	0.47
32:2a:675:A:H2'	32:2a:676:A:O4'	2.14	0.47
32:2a:1079:G:H2'	32:2a:1080:A:C8	2.48	0.47
32:2a:1251:A:H2'	32:2a:1252:A:C8	2.49	0.47
32:2a:1406:U:O2	32:2a:1517:G:N2	2.46	0.47
33:2b:98:LEU:HD23	33:2b:108:ILE:HD12	1.96	0.47
36:2e:102:ALA:O	36:2e:107:ARG:NH2	2.47	0.47
53:2v:23:A:H4'	53:2v:24:A:H5'	1.96	0.47
1:1A:881:G:C2	1:1A:882:G:H1'	2.49	0.47
1:1A:1055:G:H1	1:1A:1104:C:N4	2.09	0.47
1:1A:2144:U:H3'	1:1A:2146:C:N4	2.28	0.47
25:13:4:LEU:O	25:13:36:VAL:HA	2.14	0.47
32:1a:553:A:H5''	43:1l:24:VAL:HG21	1.96	0.47
32:1a:1148:U:H2'	32:1a:1149:C:O4'	2.15	0.47
32:1a:1377:A:O2'	38:1g:2:ALA:N	2.47	0.47
33:1b:59:GLU:HB2	33:1b:221:LEU:HD21	1.96	0.47
54:1w:50:C:H2'	54:1w:51:A:C8	2.49	0.47
1:2A:1745:C:H2'	1:2A:1745(A):C:O4'	2.14	0.47
1:2A:1894:C:H2'	1:2A:1895:C:H6	1.79	0.47
1:2A:2106:G:H2'	1:2A:2107:C:O4'	2.13	0.47
1:2A:2162:G:O2'	1:2A:2172:U:H5'	2.15	0.47
2:2B:56:G:H4'	2:2B:57:A:C8	2.49	0.47
4:2E:12:THR:HG22	4:2E:13:ARG:H	1.78	0.47
8:2I:72:LEU:HD21	8:2I:107:VAL:HG11	1.96	0.47
14:2S:94:TYR:CZ	14:2S:99:LYS:HB2	2.49	0.47
32:2a:728:A:H2'	32:2a:729:A:C8	2.49	0.47
33:2b:84:GLU:OE1	33:2b:87:ARG:NH1	2.44	0.47
38:2g:70:LYS:C	38:2g:138:LYS:HD2	2.40	0.47
39:2h:116:LYS:HD2	39:2h:129:VAL:HG11	1.96	0.47
55:2x:19:G:H3'	55:2x:20:U:H6	1.78	0.47
1:1A:86:C:H4'	1:1A:104:U:H1'	1.97	0.47
1:1A:717:G:H2'	1:1A:718:A:O4'	2.14	0.47
1:1A:1047:G:H2'	1:1A:1110:G:H22	1.78	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1055:G:H2'	1:1A:1056:G:O4'	2.15	0.47
1:1A:1082:U:C4	1:1A:1086:A:N1	2.77	0.47
1:1A:1607:C:H4'	1:1A:1608:A:O5'	2.14	0.47
1:1A:1668:A:O2'	1:1A:1674:G:N7	2.36	0.47
1:1A:2469:A:O2'	12:1Q:56:ARG:HD3	2.15	0.47
1:1A:2829:C:H5''	4:1E:76:ARG:NH2	2.30	0.47
1:1A:2849:U:H4'	1:1A:2868:A:C2	2.49	0.47
1:1A:2887:U:H2'	1:1A:2888:C:H6	1.79	0.47
7:1H:105:LEU:HD12	7:1H:151:ILE:HD12	1.95	0.47
8:1I:27:ARG:HD3	23:11:71:TYR:CE2	2.49	0.47
12:1Q:78:PRO:HG2	12:1Q:81:VAL:HG11	1.96	0.47
18:1W:6:ILE:HA	18:1W:103:ILE:O	2.14	0.47
26:14:54:GLY:N	26:14:55:ARG:HA	2.28	0.47
32:1a:189(K):U:H2'	32:1a:189(L):G:C8	2.49	0.47
32:1a:750:G:O2'	46:1o:21:ASP:OD1	2.33	0.47
1:2A:320:A:H4'	1:2A:322:A:N7	2.29	0.47
1:2A:656:G:H2'	1:2A:657:U:O4'	2.15	0.47
1:2A:779:U:O4	62:2A:3965:HOH:O	2.20	0.47
1:2A:2831:G:OP1	1:2A:2834:G:H4'	2.15	0.47
7:2H:30:LYS:HE3	7:2H:81:GLU:O	2.15	0.47
7:2H:98:LEU:HD11	7:2H:125:VAL:H	1.79	0.47
10:2O:15:GLY:O	10:2O:47:ILE:HG12	2.15	0.47
19:2X:1:MET:H3	24:22:29:LYS:HE3	1.79	0.47
23:21:32:LYS:O	62:21:101:HOH:O	2.19	0.47
32:2a:45:U:H2'	32:2a:46:G:C8	2.50	0.47
32:2a:404:U:H2'	32:2a:405:U:H6	1.78	0.47
32:2a:473:G:H2'	32:2a:474:G:C8	2.49	0.47
32:2a:942:G:C2	32:2a:1342:C:C2	3.02	0.47
32:2a:976:G:P	45:2n:32:SER:H	2.38	0.47
34:2c:77:ILE:HG13	34:2c:78:GLY:H	1.79	0.47
39:2h:54:ASP:HB3	39:2h:56:LYS:HD2	1.96	0.47
1:1A:893:C:H2'	1:1A:894:C:C6	2.50	0.47
1:1A:1139:G:OP2	9:1N:70:LYS:NZ	2.48	0.47
1:1A:1173:G:OP2	1:1A:1173:G:H2'	2.15	0.47
1:1A:2064:C:H2'	1:1A:2065:C:C6	2.50	0.47
3:1D:218:ARG:HB3	3:1D:219:PRO:HD2	1.95	0.47
20:1Y:107:ASP:OD1	20:1Y:107:ASP:N	2.47	0.47
32:1a:872:A:C8	32:1a:874:G:C8	3.02	0.47
32:1a:1074:G:O2'	32:1a:1101:A:N1	2.28	0.47
32:1a:1250:A:O3'	40:1i:67:GLY:HA2	2.15	0.47
32:1a:1457:G:H2'	32:1a:1458:G:H8	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:101:LEU:HD12	35:1d:138:TYR:HB3	1.96	0.47
38:1g:15:ASP:O	38:1g:19:GLY:HA2	2.14	0.47
38:1g:79:ARG:CZ	38:1g:80:VAL:HG22	2.45	0.47
46:1o:3:ILE:HG12	46:1o:38:ARG:HD2	1.97	0.47
50:1s:20:LEU:HD23	50:1s:20:LEU:HA	1.78	0.47
52:1u:5:ASP:O	52:1u:11:GLY:HA3	2.15	0.47
57:1y:52:G:H1	57:1y:62:C:N4	2.12	0.47
3:2D:36:PRO:HA	3:2D:61:LEU:HD23	1.97	0.47
4:2E:4:ILE:HD13	4:2E:28:ALA:HB1	1.96	0.47
6:2G:8:LYS:HD3	6:2G:100:TRP:CD1	2.49	0.47
14:2S:15:ARG:HH21	14:2S:88:ASP:CG	2.23	0.47
14:2S:23:ARG:HG3	14:2S:24:LEU:N	2.29	0.47
17:2V:6:LYS:HB2	17:2V:38:LEU:HD11	1.95	0.47
21:2Z:100:VAL:HG21	21:2Z:134:PRO:HG2	1.96	0.47
31:29:17:ILE:HG13	31:29:24:TYR:HB2	1.94	0.47
32:2a:302:G:N3	32:2a:556:C:H4'	2.30	0.47
33:2b:16:HIS:CG	33:2b:17:PHE:N	2.83	0.47
43:2l:38:THR:OG1	43:2l:57:LYS:O	2.30	0.47
44:2m:40:ASN:HD22	44:2m:43:THR:HG23	1.80	0.47
44:2m:49:THR:O	44:2m:53:VAL:HG13	2.14	0.47
54:2w:43:U:H2'	54:2w:44:U:C6	2.49	0.47
1:1A:616:G:H5'	5:1F:205:ARG:HD3	1.97	0.47
1:1A:848:G:H2'	1:1A:849:A:C8	2.50	0.47
1:1A:1041:C:N4	1:1A:1114:G:H1	2.05	0.47
1:1A:1060:U:N3	1:1A:1088:A:C8	2.80	0.47
1:1A:2079:U:OP1	23:11:21:ARG:NH2	2.28	0.47
1:1A:2347:C:H2'	1:1A:2348:U:C6	2.50	0.47
1:1A:2406:U:H2'	1:1A:2406:U:OP2	2.15	0.47
1:1A:2537:U:H2'	1:1A:2538:C:C6	2.49	0.47
8:1I:92:VAL:HG11	8:1I:144:VAL:HG11	1.97	0.47
21:1Z:155:LEU:HD23	21:1Z:155:LEU:HA	1.73	0.47
32:1a:461:A:O2'	32:1a:470:C:H5'	2.14	0.47
32:1a:626:U:H2'	32:1a:627:G:H8	1.78	0.47
32:1a:811:C:O2'	32:1a:901:A:N1	2.44	0.47
33:1b:115:LEU:HD13	33:1b:145:LEU:HB3	1.94	0.47
40:1i:27:THR:HG23	40:1i:62:TYR:HA	1.97	0.47
48:1q:10:VAL:HA	48:1q:20:THR:O	2.13	0.47
48:1q:41:LYS:HD3	48:1q:88:TYR:CE1	2.50	0.47
53:1v:21:A:H2	54:1w:34:U8U:HN3	1.63	0.47
1:2A:442:G:H21	5:2F:48:THR:HB	1.79	0.47
1:2A:566:U:P	17:2V:80:GLN:HE21	2.37	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:743:G:O2'	1:2A:1659:U:OP1	2.30	0.47
1:2A:748:G:C8	18:2W:89:ALA:HB1	2.50	0.47
1:2A:864:G:OP2	12:2Q:22:LYS:HE3	2.13	0.47
1:2A:900:A:H3'	1:2A:901:A:H8	1.80	0.47
1:2A:921:G:C6	1:2A:922:U:C4	3.03	0.47
1:2A:1919:A:O3'	32:2a:1517:G:H1'	2.14	0.47
1:2A:2875:C:O2'	15:2T:2:ASN:OD1	2.28	0.47
5:2F:164:ARG:O	5:2F:168:ARG:HB2	2.14	0.47
7:2H:54:ARG:HG2	7:2H:65:HIS:CE1	2.50	0.47
7:2H:86:GLU:HA	7:2H:131:VAL:O	2.15	0.47
8:2I:123:LEU:HD12	8:2I:144:VAL:HB	1.97	0.47
9:2N:26:LEU:HG	9:2N:30:ILE:HD11	1.96	0.47
10:2O:80:ASP:CG	15:2T:64:ARG:HH22	2.22	0.47
19:2X:53:LYS:HB3	19:2X:82:GLN:HB3	1.95	0.47
25:23:8:LEU:O	25:23:32:GLN:N	2.40	0.47
32:2a:429:U:H1'	32:2a:430:A:H5''	1.96	0.47
32:2a:585:G:O2'	32:2a:879:C:OP1	2.26	0.47
32:2a:1366:C:H2'	32:2a:1367:C:H6	1.80	0.47
35:2d:83:SER:HA	35:2d:89:THR:OG1	2.15	0.47
35:2d:135:LEU:C	35:2d:137:SER:H	2.23	0.47
35:2d:157:LEU:O	35:2d:161:ASN:ND2	2.35	0.47
36:2e:11:ILE:HD11	36:2e:108:ALA:HB3	1.96	0.47
38:2g:90:GLU:OE1	38:2g:90:GLU:N	2.48	0.47
40:2i:93:ARG:O	40:2i:97:LYS:N	2.46	0.47
44:2m:123:ALA:HB1	44:2m:124:PRO:HD2	1.95	0.47
55:2x:17:C:OP2	55:2x:18:G:H5''	2.14	0.47
57:2y:7:U:H2'	57:2y:49:G:C8	2.50	0.47
57:2y:37:T6A:H2'	57:2y:38:A:O4'	2.15	0.47
57:2y:45:G:N3	57:2y:45:G:H2'	2.29	0.47
1:1A:1372:U:H2'	1:1A:1373:A:O4'	2.15	0.47
1:1A:1537:G:H2'	1:1A:1538:G:H8	1.79	0.47
1:1A:2601:C:H2'	1:1A:2603:G:C8	2.50	0.47
2:1B:4:C:H2'	2:1B:5:C:C6	2.50	0.47
5:1F:132:VAL:HG22	5:1F:163:VAL:HG22	1.97	0.47
8:1I:82:ARG:HE	8:1I:82:ARG:HB3	1.43	0.47
15:1T:106:SER:N	15:1T:109:GLU:OE1	2.40	0.47
19:1X:12:VAL:HG21	19:1X:27:THR:HG22	1.96	0.47
19:1X:61:GLY:HA3	19:1X:73:ARG:O	2.15	0.47
35:1d:17:VAL:HG12	35:1d:19:LEU:HD13	1.97	0.47
35:1d:162:LEU:HD13	35:1d:181:MET:HG2	1.97	0.47
39:1h:10:LEU:HB3	39:1h:83:ILE:HG12	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:1j:35:SER:N	41:1j:73:ASP:O	2.36	0.47
1:2A:479:A:N3	1:2A:481:G:H5''	2.30	0.47
1:2A:518:G:H2'	1:2A:519:U:C6	2.50	0.47
1:2A:590:A:N6	1:2A:666:G:O6	2.48	0.47
1:2A:1149:G:H2'	1:2A:1150:C:C6	2.50	0.47
1:2A:2359:C:H2'	1:2A:2360:A:O4'	2.14	0.47
1:2A:2769:C:H2'	1:2A:2770:G:O4'	2.15	0.47
3:2D:71:ASP:HB2	3:2D:103:ARG:HH12	1.80	0.47
14:2S:30:ARG:HG3	14:2S:97:ARG:NH2	2.30	0.47
23:21:50:ARG:HG2	23:21:59:THR:HG23	1.95	0.47
28:26:12:GLU:OE1	28:26:19:ARG:NH1	2.48	0.47
32:2a:384:G:H2'	32:2a:385:C:C6	2.49	0.47
32:2a:637:G:H2'	32:2a:638:G:C8	2.50	0.47
33:2b:32:ILE:HD13	33:2b:40:HIS:HB3	1.97	0.47
1:1A:528:A:O2'	1:1A:529:A:H5'	2.15	0.47
1:1A:2145:C:O2'	1:1A:2147:G:N7	2.48	0.47
5:1F:117:ARG:NH2	5:1F:189:THR:O	2.47	0.47
5:1F:184:TYR:O	5:1F:188:ARG:HG3	2.15	0.47
22:10:18:ALA:HB3	22:10:20:ARG:NH1	2.30	0.47
32:1a:893:C:O2	62:1a:4810:HOH:O	2.16	0.47
32:1a:1038:C:H2'	32:1a:1039:C:C6	2.48	0.47
32:1a:1189:C:H5''	34:1c:5:ILE:HD12	1.96	0.47
38:1g:50:ILE:HD11	38:1g:125:MET:HG3	1.97	0.47
39:1h:121:ASP:HB2	39:1h:125:ARG:NH2	2.30	0.47
40:1i:79:LEU:O	40:1i:83:ARG:HG3	2.15	0.47
1:2A:345:A:N3	1:2A:347:A:N6	2.63	0.47
1:2A:599:G:H4'	5:2F:31:HIS:HD2	1.78	0.47
1:2A:881:G:N1	1:2A:882:G:H1'	2.30	0.47
1:2A:1165:U:H2'	1:2A:1166:C:C6	2.49	0.47
1:2A:2131:G:H22	1:2A:2158:A:H62	1.63	0.47
1:2A:2166:G:H3'	1:2A:2167:U:C5'	2.43	0.47
4:2E:109:LYS:HE2	4:2E:191:PRO:HB3	1.96	0.47
6:2G:118:ARG:O	6:2G:181:ARG:HB2	2.14	0.47
8:2I:102:SER:O	8:2I:106:GLY:HA2	2.15	0.47
11:2P:38:GLN:C	11:2P:40:SER:H	2.21	0.47
26:24:58:ARG:O	26:24:61:ARG:HB2	2.15	0.47
28:26:34:LEU:H	28:26:51:GLU:HB3	1.80	0.47
32:2a:971:G:H1	32:2a:1363(A):A:H5'	1.79	0.47
32:2a:987:G:H2'	32:2a:988:G:H8	1.79	0.47
38:2g:68:ASN:ND2	38:2g:128:ALA:HA	2.25	0.47
50:2s:51:VAL:O	50:2s:57:HIS:HA	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:13:C:O2'	54:2w:14:A:H5''	2.15	0.47
1:1A:1823:G:OP1	3:1D:54:ARG:NH1	2.48	0.47
1:1A:2139:C:H42	1:1A:2152:G:H1	1.63	0.47
4:1E:28:ALA:HB3	4:1E:93:VAL:CG1	2.44	0.47
15:1T:31:SER:OG	15:1T:44:ASP:OD1	2.30	0.47
35:1d:122:ARG:HD2	35:1d:122:ARG:HA	1.59	0.47
48:1q:27:PHE:CE1	48:1q:36:ILE:HD11	2.49	0.47
1:2A:1412:A:H2'	1:2A:1413:G:C8	2.50	0.47
4:2E:48:GLN:NE2	4:2E:78:LEU:HD13	2.30	0.47
4:2E:50:GLY:HA3	4:2E:75:VAL:HG21	1.97	0.47
6:2G:69:ALA:HB3	6:2G:91:ARG:NH2	2.30	0.47
21:2Z:31:ARG:HG3	21:2Z:32:HIS:CD2	2.50	0.47
32:2a:601:C:H2'	32:2a:602:A:H8	1.80	0.47
32:2a:662:G:H2'	32:2a:663:A:H8	1.77	0.47
32:2a:792:A:H4'	32:2a:793:U:H5''	1.95	0.47
32:2a:858:G:O6	32:2a:869:G:H3'	2.15	0.47
32:2a:1012:U:H2'	32:2a:1013:G:C8	2.50	0.47
32:2a:1068:G:N2	32:2a:1191:A:N3	2.59	0.47
32:2a:1427:U:H2'	32:2a:1428:A:C8	2.50	0.47
32:2a:1502:A:H5'	32:2a:1504:G:N7	2.30	0.47
46:2o:29:VAL:HG13	46:2o:63:ARG:HG3	1.96	0.47
53:2v:19:A:N7	54:2w:37:T6A:H152	2.29	0.47
54:2w:23:A:H3'	54:2w:24:G:H8	1.77	0.47
54:2w:51:A:N1	54:2w:63:U:C4	2.81	0.47
54:2w:63:U:C2	54:2w:64:G:N7	2.83	0.47
1:1A:252:G:P	11:1P:50:ARG:HH12	2.38	0.46
1:1A:295:G:O5'	20:1Y:1:MET:HE3	2.16	0.46
1:1A:305:U:H2'	1:1A:306:U:C6	2.49	0.46
1:1A:1025:G:O2'	62:1A:4135:HOH:O	2.14	0.46
1:1A:1027:A:N3	62:1A:4286:HOH:O	2.36	0.46
1:1A:1399:C:OP1	19:1X:25:LYS:NZ	2.47	0.46
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.50	0.46
4:1E:111:ARG:HG2	4:1E:118:LYS:HD3	1.97	0.46
5:1F:9:ILE:HG12	5:1F:123:LEU:HD23	1.96	0.46
21:1Z:40:ASP:OD2	21:1Z:42:VAL:HG13	2.15	0.46
29:17:31:LEU:HD22	29:17:42:LEU:HB3	1.96	0.46
32:1a:413:G:N2	32:1a:428:G:H1'	2.30	0.46
32:1a:474:G:H5'	32:1a:475:G:OP2	2.15	0.46
32:1a:865:A:C2	32:1a:918:A:H4'	2.49	0.46
32:1a:1260:C:O5'	32:1a:1284:C:H4'	2.15	0.46
32:1a:1325:C:H2'	32:1a:1326:C:H6	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:86:C:H4'	1:2A:104:U:H1'	1.96	0.46
1:2A:1116:C:H2'	1:2A:1117:G:C8	2.51	0.46
1:2A:1913:A:H61	32:2a:1493:A:H2'	1.79	0.46
1:2A:2130:U:H2'	1:2A:2158:A:N6	2.30	0.46
1:2A:2805:G:H2'	1:2A:2807:G:H8	1.80	0.46
4:2E:4:ILE:HG22	4:2E:198:VAL:HB	1.97	0.46
5:2F:197:ASP:O	5:2F:200:GLU:HB3	2.15	0.46
6:2G:37:VAL:HG21	6:2G:103:LEU:HD21	1.96	0.46
6:2G:123:ASN:C	6:2G:125:PHE:H	2.23	0.46
28:26:13:CYS:O	28:26:17:LYS:N	2.45	0.46
32:2a:224:C:H2'	32:2a:225:C:C6	2.49	0.46
32:2a:390:C:H4'	47:2p:28:ARG:HH21	1.80	0.46
32:2a:552:U:H5'	43:2l:86:ARG:HE	1.78	0.46
32:2a:1005:A:H3'	32:2a:1006:C:C6	2.50	0.46
34:2c:22:TRP:HZ3	34:2c:24:ALA:HB2	1.79	0.46
39:2h:9:MET:HB2	39:2h:32:LYS:HZ3	1.81	0.46
54:2w:63:U:H2'	54:2w:64:G:H5'	1.96	0.46
1:1A:488:G:O2'	18:1W:49:LYS:NZ	2.33	0.46
1:1A:604:G:OP2	11:1P:90:ARG:NH2	2.48	0.46
1:1A:657:U:H2'	1:1A:658:C:H6	1.80	0.46
1:1A:786:C:H5''	1:1A:1780:A:N7	2.30	0.46
1:1A:1035:U:H2'	1:1A:1036:G:C8	2.50	0.46
1:1A:2701:C:H2'	1:1A:2702:U:H2'	1.97	0.46
2:1B:88:C:H2'	2:1B:89:G:O4'	2.15	0.46
7:1H:105:LEU:HD23	7:1H:105:LEU:HA	1.78	0.46
9:1N:73:THR:HB	9:1N:82:LEU:HD11	1.95	0.46
21:1Z:52:SER:O	21:1Z:52:SER:OG	2.30	0.46
32:1a:472:A:H5''	47:1p:80:PHE:HB3	1.97	0.46
32:1a:1376:U:H2'	32:1a:1377:A:C8	2.49	0.46
41:1j:38:ILE:CG1	41:1j:71:LEU:HB3	2.45	0.46
1:2A:74:A:H4'	1:2A:75:G:O5'	2.15	0.46
1:2A:981:A:N1	1:2A:2027:G:O2'	2.43	0.46
1:2A:1019:U:H3	1:2A:1142(A):A:H62	1.64	0.46
1:2A:1805:U:O2	3:2D:50:THR:HB	2.15	0.46
3:2D:2:ALA:N	3:2D:200:ASP:OD2	2.48	0.46
18:2W:1:MET:HE2	18:2W:62:HIS:HB3	1.98	0.46
23:21:56:GLN:OE1	23:21:87:PRO:HG3	2.15	0.46
32:2a:442:C:H42	32:2a:492:G:H1	1.63	0.46
32:2a:577:G:H2'	32:2a:578:C:H6	1.80	0.46
32:2a:1228:C:OP1	44:2m:115:LYS:NZ	2.47	0.46
32:2a:1260:C:P	32:2a:1284:C:H4'	2.55	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:140:VAL:HG11	35:2d:146:ILE:HD11	1.97	0.46
35:2d:180:GLY:O	35:2d:182:LYS:HG3	2.14	0.46
38:2g:26:PHE:O	38:2g:30:ILE:HD12	2.14	0.46
55:2x:9:G:N2	55:2x:46:G:OP2	2.48	0.46
55:2x:23:C:H2'	55:2x:24:U:H6	1.80	0.46
1:1A:668:G:H5'	1:1A:669:G:OP2	2.15	0.46
1:1A:1227:G:OP1	16:1U:13:LYS:NZ	2.48	0.46
1:1A:1426:G:O2'	1:1A:1572:A:N6	2.48	0.46
1:1A:2123:G:H2'	1:1A:2124:G:C8	2.50	0.46
1:1A:2336:A:H61	22:10:43:THR:CG2	2.28	0.46
5:1F:126:VAL:HG21	5:1F:129:PHE:CZ	2.50	0.46
24:12:41:ILE:HD12	24:12:43:GLN:HG3	1.97	0.46
32:1a:250:A:H4'	32:1a:251:G:O5'	2.14	0.46
32:1a:539:A:H2'	32:1a:540:G:H8	1.80	0.46
32:1a:1007:C:N3	32:1a:1022:G:O6	2.47	0.46
32:1a:1033:G:H3'	32:1a:1034:G:H8	1.80	0.46
32:1a:1320:C:H2'	32:1a:1321:C:O4'	2.15	0.46
32:1a:1410:G:H2'	32:1a:1411:C:C6	2.50	0.46
40:1i:128:ARG:NH1	55:1x:35:A:OP2	2.48	0.46
54:1w:5:C:H2'	54:1w:6:G:C8	2.50	0.46
57:1y:51:A:C6	57:1y:52:G:C6	3.02	0.46
1:2A:409:C:H2'	1:2A:410:G:C8	2.50	0.46
1:2A:584:C:OP2	16:2U:6:THR:OG1	2.28	0.46
1:2A:1287:A:C5	1:2A:1288:U:C4	3.03	0.46
1:2A:1449:A:N6	1:2A:1450:G:N3	2.63	0.46
8:2I:140:LEU:O	8:2I:142:VAL:HG23	2.15	0.46
9:2N:96:GLU:H	9:2N:96:GLU:CD	2.22	0.46
11:2P:98:GLU:OE2	11:2P:102:ARG:NH1	2.49	0.46
32:2a:390:C:H2'	32:2a:391:G:C8	2.49	0.46
32:2a:768:A:OP2	62:2a:1914:HOH:O	2.20	0.46
32:2a:1203:C:H2'	32:2a:1204:A:C8	2.48	0.46
34:2c:6:HIS:HD2	34:2c:7:PRO:HD2	1.81	0.46
41:2j:49:VAL:O	41:2j:60:ARG:HA	2.15	0.46
49:2r:36:ASN:O	49:2r:40:LEU:HG	2.15	0.46
51:2t:29:LYS:O	51:2t:33:ILE:HD12	2.16	0.46
1:1A:27:G:N2	1:1A:512:G:H1'	2.30	0.46
1:1A:303:U:O4	62:1A:4159:HOH:O	2.20	0.46
1:1A:359:A:H2'	1:1A:360:G:O4'	2.15	0.46
1:1A:1166:C:H2'	1:1A:1167:U:C6	2.50	0.46
6:1G:16:ARG:O	6:1G:20:ILE:HG13	2.15	0.46
13:1R:98:LEU:HB2	13:1R:113:LEU:HD11	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:1T:127:ALA:C	15:1T:129:ARG:N	2.72	0.46
32:1a:78:G:H8	32:1a:78:G:OP2	1.97	0.46
32:1a:447:G:O6	32:1a:485:G:O2'	2.32	0.46
32:1a:1016:A:H2'	32:1a:1017:G:O4'	2.15	0.46
32:1a:1240:U:O2'	38:1g:32:ARG:NH1	2.49	0.46
32:1a:1457:G:H2'	32:1a:1458:G:C8	2.50	0.46
32:1a:1479:C:H2'	32:1a:1480:G:C8	2.50	0.46
33:1b:185:ILE:O	33:1b:185:ILE:HG12	2.15	0.46
34:1c:124:ILE:HG22	34:1c:130:VAL:HG22	1.97	0.46
41:1j:47:PHE:HB2	41:1j:63:PHE:HB2	1.98	0.46
44:1m:15:VAL:HG11	44:1m:48:LEU:HD21	1.98	0.46
51:1t:87:LYS:O	51:1t:91:LEU:HG	2.16	0.46
1:2A:27:G:N2	1:2A:512:G:H1'	2.30	0.46
1:2A:108:U:H2'	1:2A:109:G:C8	2.51	0.46
1:2A:272(E):G:C2	1:2A:364:C:C2	3.03	0.46
1:2A:311:A:C6	1:2A:328:U:C4	3.04	0.46
1:2A:1186:G:H2'	1:2A:1187:G:O4'	2.15	0.46
2:2B:5:C:H42	2:2B:116:G:H1	1.62	0.46
4:2E:19:ARG:HB3	4:2E:19:ARG:HH11	1.81	0.46
5:2F:47:GLY:HA3	5:2F:95:ARG:O	2.15	0.46
14:2S:105:ALA:O	14:2S:110:LEU:HB2	2.15	0.46
32:2a:691:G:H2'	32:2a:692:U:C6	2.50	0.46
32:2a:1004:A:C6	32:2a:1037:C:H1'	2.50	0.46
32:2a:1148:U:H5'	40:2i:16:ARG:HD2	1.97	0.46
32:2a:1343:G:H2'	32:2a:1344:C:C6	2.51	0.46
32:2a:1373:G:H5''	38:2g:36:LYS:HB2	1.96	0.46
34:2c:111:LEU:HD21	34:2c:144:SER:O	2.16	0.46
45:2n:34:TYR:O	45:2n:38:GLY:N	2.47	0.46
55:2x:3:C:H42	55:2x:70:G:H1	1.63	0.46
1:1A:265:A:N1	1:1A:427:U:O2'	2.43	0.46
1:1A:839:U:H1'	1:1A:1191:G:H1'	1.98	0.46
1:1A:875:G:H2'	1:1A:876:C:O4'	2.15	0.46
1:1A:2134:A:N7	1:1A:2156:G:O2'	2.48	0.46
1:1A:2137:C:H2'	1:1A:2138:C:C6	2.50	0.46
13:1R:87:TYR:OH	13:1R:116:LEU:HB3	2.16	0.46
14:1S:61:ASN:HB3	14:1S:64:GLU:HB2	1.98	0.46
32:1a:381:C:H2'	32:1a:382:A:O4'	2.15	0.46
50:1s:53:ASN:HB2	50:1s:77:THR:HA	1.98	0.46
1:2A:1598:C:H2'	1:2A:1599:C:H6	1.81	0.46
1:2A:2684:U:OP1	15:2T:53:ARG:HD3	2.15	0.46
4:2E:27:LEU:HD22	15:2T:1:MET:SD	2.56	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:8:GLN:HA	5:2F:20:LEU:O	2.15	0.46
10:2O:63:VAL:HG11	10:2O:85:VAL:HG23	1.97	0.46
16:2U:49:HIS:HA	16:2U:52:ARG:HB2	1.96	0.46
32:2a:1380:U:C4	38:2g:3:ARG:HG2	2.50	0.46
37:2f:76:ALA:O	37:2f:80:ARG:HG3	2.15	0.46
54:2w:21:A:N6	54:2w:46:G7M:O2'	2.49	0.46
1:1A:247:G:H4'	1:1A:386:G:C5	2.50	0.46
1:1A:411:G:H3'	62:1A:4416:HOH:O	2.15	0.46
1:1A:570:G:H2'	1:1A:2030:A:N7	2.31	0.46
1:1A:657:U:H2'	1:1A:658:C:C6	2.51	0.46
32:1a:266:G:H2'	32:1a:266:G:N3	2.30	0.46
32:1a:539:A:H2'	32:1a:540:G:C8	2.51	0.46
32:1a:683:G:H2'	32:1a:684:A:C8	2.51	0.46
57:1y:55:PSU:N3	57:1y:57:G:H5'	2.30	0.46
1:2A:699:A:H2'	1:2A:700:G:O4'	2.16	0.46
1:2A:1754:C:H5	15:2T:96:ARG:NH2	2.14	0.46
1:2A:2291:U:H2'	1:2A:2292:C:C6	2.51	0.46
2:2B:7:G:H2'	2:2B:8:U:O4'	2.16	0.46
4:2E:47:VAL:HG11	4:2E:86:PRO:HD2	1.97	0.46
5:2F:150:GLY:HA2	5:2F:172:TRP:CD2	2.50	0.46
5:2F:172:TRP:H	5:2F:172:TRP:CD1	2.34	0.46
11:2P:90:ARG:H	11:2P:90:ARG:HG3	1.45	0.46
33:2b:195:ASP:OD1	33:2b:195:ASP:N	2.47	0.46
35:2d:173:TRP:CG	35:2d:189:PRO:HB3	2.51	0.46
41:2j:47:PHE:N	41:2j:63:PHE:O	2.30	0.46
1:1A:1810:A:H2'	1:1A:1811:G:O4'	2.15	0.46
1:1A:2151:G:H2'	1:1A:2152:G:C8	2.51	0.46
1:1A:2189:U:H2'	1:1A:2190:G:C8	2.51	0.46
6:1G:18:GLU:HG3	6:1G:22:ARG:HD2	1.97	0.46
18:1W:7:ALA:HB2	18:1W:50:VAL:HG22	1.98	0.46
20:1Y:68:HIS:ND1	20:1Y:70:SER:HB2	2.31	0.46
23:11:19:GLN:O	23:11:35:THR:HG22	2.16	0.46
26:14:15:ILE:HD12	26:14:32:TYR:CE1	2.51	0.46
32:1a:358:U:H2'	32:1a:359:U:C6	2.49	0.46
32:1a:1134:G:N3	32:1a:1134:G:H2'	2.31	0.46
32:1a:1308:U:H2'	32:1a:1309:G:C8	2.51	0.46
1:2A:127:A:H5''	1:2A:128:C:C6	2.51	0.46
1:2A:1503:U:H2'	1:2A:1504:C:C6	2.51	0.46
1:2A:2332:U:O2'	1:2A:2335:A:N3	2.46	0.46
2:2B:55:U:O3'	6:2G:27:ASN:ND2	2.49	0.46
5:2F:53:THR:HG23	5:2F:55:GLY:N	2.29	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:116:ASP:O	5:2F:120:GLU:HG2	2.16	0.46
9:2N:120:LEU:HD12	9:2N:120:LEU:HA	1.81	0.46
12:2Q:24:GLY:HA2	12:2Q:67:ARG:NH2	2.31	0.46
13:2R:9:LYS:O	13:2R:17:ARG:HD3	2.15	0.46
17:2V:7:THR:HB	17:2V:35:LEU:HD22	1.98	0.46
32:2a:937:A:OP2	62:2a:1915:HOH:O	2.21	0.46
32:2a:994:A:C5	32:2a:1216:G:H4'	2.51	0.46
33:2b:150:SER:OG	33:2b:151:GLY:N	2.49	0.46
34:2c:37:GLN:NE2	45:2n:52:GLN:OE1	2.42	0.46
34:2c:156:ARG:NH2	34:2c:161:GLU:HA	2.15	0.46
44:2m:29:ARG:HD3	44:2m:64:TRP:CE2	2.51	0.46
55:2x:64:G:H2'	55:2x:65:C:H6	1.80	0.46
1:1A:484:C:H2'	1:1A:485:C:C6	2.51	0.46
1:1A:586:A:N1	1:1A:809:G:O2'	2.43	0.46
1:1A:1936:A:OP1	1:1A:1937:A:H5'	2.16	0.46
1:1A:2106:G:H2'	1:1A:2107:C:O4'	2.15	0.46
1:1A:2206:G:OP2	1:1A:2206:G:H4'	2.15	0.46
15:1T:7:ILE:HG22	15:1T:11:GLU:OE1	2.15	0.46
25:13:5:LYS:HZ2	25:13:55:ARG:HH12	1.63	0.46
32:1a:330:C:O2	62:1a:4815:HOH:O	2.20	0.46
32:1a:1004:A:H5'	32:1a:1024:G:H22	1.81	0.46
32:1a:1310:G:OP2	44:1m:88:ARG:NH2	2.47	0.46
32:1a:1316:G:N2	32:1a:1318:A:H3'	2.31	0.46
35:1d:173:TRP:CE3	35:1d:174:LEU:HG	2.51	0.46
41:1j:61:GLU:OE2	45:1n:49:HIS:NE2	2.46	0.46
1:2A:35:G:H1'	1:2A:454:A:C4	2.51	0.46
1:2A:171:G:H2'	1:2A:172:C:C6	2.50	0.46
1:2A:774:A:H2'	1:2A:774:A:N3	2.30	0.46
1:2A:908:C:OP1	12:2Q:22:LYS:HB2	2.16	0.46
1:2A:1655:A:N6	1:2A:2005:A:O2'	2.49	0.46
1:2A:1796:U:H2'	1:2A:1797:C:H6	1.81	0.46
1:2A:2251:OMG:HM23	1:2A:2251:OMG:H1'	1.54	0.46
5:2F:137:LYS:HA	5:2F:140:LEU:HD12	1.97	0.46
8:2I:26:ALA:O	8:2I:31:LEU:HB2	2.16	0.46
8:2I:88:ILE:HD12	8:2I:120:ILE:O	2.16	0.46
15:2T:30:VAL:HG22	15:2T:86:ILE:HG12	1.98	0.46
32:2a:520:A:OP1	43:2l:52:LEU:HB2	2.15	0.46
32:2a:629:G:H2'	32:2a:630:G:O4'	2.16	0.46
32:2a:1252:A:H2'	32:2a:1253:G:O4'	2.15	0.46
34:2c:112:SER:OG	34:2c:115:LEU:HB2	2.15	0.46
37:2f:10:LEU:HD11	37:2f:26:ILE:HD11	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:78:ARG:HG3	38:2g:156:TRP:CZ3	2.50	0.46
45:2n:23:ARG:HH12	45:2n:30:ALA:HB2	1.80	0.46
57:2y:7:U:O4	57:2y:65:C:N4	2.48	0.46
1:1A:620:G:N3	1:1A:620:G:H5'	2.31	0.46
1:1A:1058:G:N2	1:1A:1081:U:O2	2.49	0.46
1:1A:1354:A:H2'	1:1A:1355:G:O4'	2.16	0.46
1:1A:2319:G:H22	14:1S:3:ARG:CZ	2.29	0.46
1:1A:2390:U:P	30:18:35:GLN:HE22	2.39	0.46
3:1D:106:ILE:O	3:1D:108:PRO:HD3	2.16	0.46
32:1a:17:U:H2'	32:1a:18:C:C6	2.51	0.46
32:1a:279:A:N6	48:1q:98:LEU:O	2.48	0.46
32:1a:509:A:O2'	32:1a:510:A:OP1	2.32	0.46
32:1a:1276:G:H2'	32:1a:1277:C:O4'	2.16	0.46
37:1f:99:ALA:HB3	49:1r:29:PHE:CE1	2.51	0.46
38:1g:26:PHE:O	38:1g:30:ILE:HG13	2.16	0.46
57:1y:72:C:H2'	57:1y:73:A:C8	2.51	0.46
9:2N:40:PRO:HB3	16:2U:68:ALA:HB2	1.98	0.46
10:2O:7:TYR:CE2	10:2O:20:MET:HB2	2.51	0.46
11:2P:14:LYS:HG2	11:2P:15:ARG:H	1.81	0.46
11:2P:70:GLN:HE21	11:2P:70:GLN:H	1.62	0.46
11:2P:90:ARG:HD2	11:2P:91:PHE:CE2	2.50	0.46
32:2a:1127:G:N2	32:2a:1147:C:H41	2.14	0.46
32:2a:1310:G:H2'	32:2a:1311:G:O4'	2.16	0.46
47:2p:27:LYS:HG3	47:2p:30:GLY:HA3	1.98	0.46
1:1A:870:A:H2'	1:1A:871:U:O4'	2.16	0.46
1:1A:1058:G:N1	1:1A:1080:C:N4	2.62	0.46
1:1A:1779:U:OP2	62:1A:4165:HOH:O	2.21	0.46
1:1A:2685:G:H5'	10:1O:68:GLU:OE2	2.16	0.46
5:1F:53:THR:HG23	5:1F:55:GLY:H	1.81	0.46
10:1O:2:ILE:HD12	10:1O:6:THR:HG21	1.98	0.46
21:1Z:28:MET:O	21:1Z:34:ASN:HA	2.15	0.46
22:10:46:LYS:HB2	22:10:78:TYR:CE1	2.51	0.46
32:1a:293:G:H5'	32:1a:610:G:C2	2.50	0.46
32:1a:1069:C:O2'	32:1a:1192:C:H1'	2.16	0.46
32:1a:1085:U:H5''	32:1a:1086:U:H5	1.81	0.46
32:1a:1346:A:N1	32:1a:1374:A:H5''	2.31	0.46
33:1b:28:PHE:CD1	33:1b:190:THR:HA	2.51	0.46
34:1c:114:PRO:O	34:1c:118:GLN:NE2	2.49	0.46
43:1l:8:ASN:O	43:1l:12:ARG:HG3	2.15	0.46
1:2A:74:A:H5'	24:22:55:ARG:HH12	1.80	0.46
1:2A:118:A:C8	1:2A:119:A:C8	3.03	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:400:G:O6	62:2A:3953:HOH:O	2.18	0.46
1:2A:700:G:H2'	1:2A:701:G:O4'	2.16	0.46
1:2A:995:C:O2	9:2N:3:THR:OG1	2.27	0.46
1:2A:1463:C:H2'	1:2A:1464:C:C6	2.51	0.46
1:2A:1882:C:H2'	1:2A:1883:G:O4'	2.16	0.46
1:2A:1946:U:H2'	1:2A:1947:C:C6	2.51	0.46
1:2A:2206:G:H5''	1:2A:2207:G:N7	2.30	0.46
17:2V:62:LEU:HD21	17:2V:95:LEU:HB2	1.97	0.46
19:2X:14:SER:C	19:2X:16:LYS:H	2.22	0.46
22:20:36:ILE:HD13	22:20:60:PHE:HB3	1.98	0.46
22:20:66:VAL:O	22:20:81:VAL:HA	2.16	0.46
30:28:26:LYS:HB2	30:28:44:LYS:O	2.15	0.46
32:2a:5:U:H5'	32:2a:6:G:C5	2.51	0.46
32:2a:70:G:H1	32:2a:99:U:H3	1.64	0.46
32:2a:989:C:H1'	32:2a:1016:A:H2	1.80	0.46
32:2a:1123:A:N3	41:2j:39:PRO:HD2	2.31	0.46
35:2d:119:GLN:HG3	35:2d:123:HIS:CD2	2.51	0.46
42:2k:84:VAL:HG21	42:2k:95:ILE:HD11	1.97	0.46
43:2l:28:LYS:HG3	43:2l:62:SER:HB2	1.98	0.46
1:1A:1518:U:H2'	1:1A:1519:G:O4'	2.16	0.45
2:1B:84:C:OP1	25:13:15:TYR:OH	2.28	0.45
6:1G:161:THR:HG21	6:1G:172:LEU:HD23	1.96	0.45
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.61	0.45
15:1T:73:GLU:OE2	15:1T:103:ARG:NE	2.45	0.45
16:1U:16:LYS:HE2	16:1U:16:LYS:HB3	1.65	0.45
23:11:8:SER:OG	23:11:10:LYS:HG3	2.16	0.45
32:1a:190:U:H2'	32:1a:191:G:H8	1.81	0.45
32:1a:547:A:OP2	35:1d:2:GLY:HA2	2.16	0.45
32:1a:551:U:H2'	32:1a:552:U:C6	2.51	0.45
32:1a:998:G:H1	32:1a:1043:C:H42	1.62	0.45
32:1a:1424:C:H2'	32:1a:1425:U:O4'	2.16	0.45
33:1b:163:PHE:HA	33:1b:185:ILE:HG12	1.96	0.45
34:1c:52:LEU:HD21	34:1c:55:VAL:HG23	1.98	0.45
51:1t:11:SER:O	51:1t:11:SER:OG	2.32	0.45
57:1y:3:G:N2	57:1y:71:C:H1'	2.30	0.45
1:2A:208:C:H2'	1:2A:209:C:C6	2.52	0.45
1:2A:1037:G:H2'	1:2A:1038:C:O4'	2.15	0.45
1:2A:1359:A:H2'	1:2A:1360:A:H5'	1.98	0.45
1:2A:1876:A:H2'	1:2A:1877:A:C8	2.51	0.45
16:2U:10:ARG:NH2	62:2U:301:HOH:O	2.49	0.45
30:28:34:TRP:CG	30:28:35:GLN:N	2.84	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:2k:14:VAL:O	42:2k:77:MET:HA	2.16	0.45
55:2x:16:C:H4'	55:2x:60:U:H1'	1.99	0.45
1:1A:880:G:H1	1:1A:898:C:H42	1.64	0.45
1:1A:973:A:H5'	1:1A:1188:U:H1'	1.98	0.45
1:1A:2273:A:H2'	1:1A:2274:A:C8	2.50	0.45
5:1F:132:VAL:HA	5:1F:138:GLU:HB3	1.98	0.45
12:1Q:82:ARG:NH2	22:10:4:LYS:HG3	2.32	0.45
32:1a:540:G:H2'	32:1a:541:G:O4'	2.15	0.45
32:1a:1095:U:P	32:1a:1108:G:H1	2.39	0.45
32:1a:1236:A:OP1	52:1u:2:GLY:HA3	2.16	0.45
43:1l:42:THR:HA	43:1l:53:ARG:O	2.16	0.45
44:1m:105:THR:HG22	44:1m:106:ASN:H	1.80	0.45
57:1y:2:G:H2'	57:1y:3:G:H8	1.80	0.45
1:2A:851:U:O2'	25:23:42:ALA:O	2.30	0.45
1:2A:1495:A:H2'	1:2A:1496:A:C8	2.51	0.45
1:2A:1794:U:H2'	1:2A:1795:C:H6	1.78	0.45
1:2A:2125:G:N3	1:2A:2173:A:N6	2.64	0.45
13:2R:33:ARG:HA	13:2R:114:VAL:O	2.16	0.45
17:2V:1:MET:HB3	17:2V:99:ILE:HD12	1.97	0.45
19:2X:1:MET:HE1	24:22:26:ARG:HH21	1.81	0.45
20:2Y:9:LYS:HA	20:2Y:10:GLY:HA2	1.55	0.45
20:2Y:52:SER:OG	20:2Y:55:TYR:HB2	2.15	0.45
21:2Z:145:GLU:HG3	21:2Z:146:ILE:N	2.28	0.45
32:2a:304:U:H2'	32:2a:305:G:C8	2.51	0.45
32:2a:407:G:O4'	35:2d:119:GLN:NE2	2.50	0.45
32:2a:1111:A:N1	34:2c:177:THR:OG1	2.41	0.45
32:2a:1134:G:N1	32:2a:1135:U:H1'	2.30	0.45
32:2a:1201:A:H4'	32:2a:1202:G:O5'	2.15	0.45
40:2i:128:ARG:NH2	55:2x:32:5MC:H3'	2.32	0.45
41:2j:53:PRO:HA	45:2n:41:ARG:HH12	1.81	0.45
43:2l:58:VAL:N	43:2l:66:VAL:O	2.49	0.45
1:1A:330:A:N7	1:1A:1210:A:O2'	2.33	0.45
1:1A:593:G:H4'	30:18:4:MET:HE2	1.97	0.45
1:1A:2136:C:C4	1:1A:2155:G:N1	2.84	0.45
1:1A:2165:G:N1	1:1A:2171:A:H8	2.15	0.45
11:1P:121:LYS:HB3	11:1P:121:LYS:HE2	1.81	0.45
20:1Y:9:LYS:HA	20:1Y:10:GLY:HA2	1.63	0.45
25:13:5:LYS:NZ	25:13:34:GLU:OE1	2.49	0.45
32:1a:448:A:OP2	32:1a:485:G:N1	2.45	0.45
55:1x:68:C:H2'	55:1x:69:C:C6	2.51	0.45
1:2A:868:U:O2'	12:2Q:8:LYS:HE3	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1996:C:H4'	1:2A:1997:G:OP1	2.15	0.45
1:2A:2286:A:H2	28:26:25:LYS:HA	1.80	0.45
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.52	0.45
1:2A:2370:G:C6	1:2A:2371:G:C6	3.04	0.45
3:2D:108:PRO:HB3	3:2D:143:HIS:CE1	2.36	0.45
9:2N:123:TYR:CZ	9:2N:129:PRO:HD2	2.51	0.45
13:2R:72:ASP:HB3	13:2R:75:LEU:HB3	1.98	0.45
19:2X:1:MET:N	24:22:29:LYS:HE3	2.31	0.45
32:2a:110:C:H2'	32:2a:111:G:O4'	2.15	0.45
32:2a:792:A:H4'	32:2a:793:U:C5'	2.46	0.45
32:2a:1107:C:C4	32:2a:1108:G:C8	3.04	0.45
32:2a:1263:C:H3'	32:2a:1263:C:H6	1.82	0.45
33:2b:124:SER:HB3	33:2b:125:PRO:HD3	1.98	0.45
35:2d:127:THR:HG23	35:2d:147:ALA:HB3	1.98	0.45
42:2k:79:SER:HA	42:2k:104:GLN:HB3	1.98	0.45
49:2r:26:LEU:HD22	49:2r:29:PHE:HD2	1.82	0.45
55:2x:9:G:H21	55:2x:46:G:P	2.40	0.45
57:2y:10:G:N2	57:2y:26:A:H1'	2.31	0.45
1:1A:263:C:H2'	1:1A:264:C:O4'	2.17	0.45
5:1F:155:LEU:HD11	5:1F:176:LEU:HD12	1.99	0.45
8:1I:3:VAL:HG12	8:1I:38:LEU:HA	1.99	0.45
10:1O:86:ILE:HG22	10:1O:94:ARG:HD3	1.97	0.45
32:1a:524:G:H2'	32:1a:525:C:C6	2.51	0.45
32:1a:576:G:OP2	62:1a:4816:HOH:O	2.21	0.45
32:1a:688:G:H5'	42:1k:46:GLY:C	2.41	0.45
32:1a:938:A:C6	32:1a:939:G:C5	3.04	0.45
1:2A:1123:C:H1'	31:29:18:ARG:HH22	1.82	0.45
1:2A:1224:C:O2'	17:2V:85:LYS:HA	2.16	0.45
1:2A:2647:U:H2'	1:2A:2648:C:C6	2.52	0.45
3:2D:16:MET:HG3	3:2D:206:LEU:O	2.17	0.45
6:2G:47:LYS:HG3	6:2G:48:GLU:H	1.81	0.45
12:2Q:38:GLU:OE2	12:2Q:128:LYS:HG3	2.17	0.45
14:2S:38:GLN:HB3	14:2S:40:ILE:HD11	1.97	0.45
15:2T:64:ARG:HH11	15:2T:73:GLU:HG3	1.81	0.45
26:24:40:HIS:CD2	26:24:41:PRO:HD2	2.51	0.45
31:29:2:LYS:HB2	31:29:34:GLN:HG2	1.99	0.45
32:2a:513:C:H2'	32:2a:514:C:C6	2.52	0.45
32:2a:1184:G:H2'	32:2a:1185:G:C8	2.52	0.45
33:2b:44:LEU:H	33:2b:44:LEU:HD12	1.81	0.45
36:2e:83:GLU:HA	36:2e:88:LYS:HA	1.99	0.45
39:2h:116:LYS:HE2	39:2h:127:LEU:HD12	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:9:ARG:O	41:2j:16:LEU:HD21	2.17	0.45
42:2k:86:GLY:H	42:2k:112:THR:HG1	1.63	0.45
57:2y:10:G:N2	57:2y:25:C:N3	2.58	0.45
57:2y:55:PSU:N3	57:2y:57:G:H5'	2.31	0.45
1:1A:1441:G:H2'	1:1A:1442:G:H8	1.82	0.45
1:1A:2319:G:N1	14:1S:3:ARG:HA	2.31	0.45
1:1A:2819:G:OP1	62:1A:4164:HOH:O	2.21	0.45
5:1F:64:ILE:HG21	5:1F:78:ILE:HG23	1.98	0.45
9:1N:61:ARG:HD3	9:1N:61:ARG:HA	1.84	0.45
32:1a:244:U:O2	62:1a:4810:HOH:O	2.19	0.45
32:1a:756:C:H2'	32:1a:757:U:O4'	2.17	0.45
33:1b:16:HIS:HD2	33:1b:204:ASN:H	1.63	0.45
33:1b:131:PRO:HB2	33:1b:134:GLU:H	1.81	0.45
33:1b:187:LEU:HD12	33:1b:201:ILE:O	2.17	0.45
37:1f:2:ARG:HB2	37:1f:4:TYR:CZ	2.51	0.45
37:1f:76:ALA:O	37:1f:80:ARG:HG3	2.16	0.45
39:1h:81:HIS:N	39:1h:138:TRP:O	2.48	0.45
50:1s:20:LEU:HD21	50:1s:43:GLU:HG2	1.98	0.45
1:2A:103:A:H5'	24:22:3:LEU:HD21	1.98	0.45
1:2A:265:A:H1'	1:2A:266:G:O4'	2.16	0.45
1:2A:797:C:H2'	1:2A:798:G:O4'	2.17	0.45
1:2A:870:A:OP1	12:2Q:6:ARG:NE	2.49	0.45
1:2A:897:C:H2'	1:2A:898:C:O4'	2.17	0.45
1:2A:1028:A:N6	1:2A:1125:G:H2'	2.32	0.45
1:2A:1800:C:OP1	3:2D:260:ARG:NH2	2.49	0.45
1:2A:2109:U:H2'	1:2A:2110:G:H5'	1.98	0.45
1:2A:2512:C:H2'	1:2A:2513:G:O4'	2.15	0.45
1:2A:2807:G:H1	1:2A:2892:A:H62	1.64	0.45
2:2B:115:G:O2'	14:2S:50:SER:HB2	2.16	0.45
7:2H:88:LEU:HD11	7:2H:165:ALA:HA	1.97	0.45
21:2Z:4:ARG:HG2	21:2Z:58:VAL:HB	1.99	0.45
32:2a:7:G:O2'	36:2e:120:THR:O	2.35	0.45
32:2a:194:C:H2'	32:2a:195:A:H5''	1.99	0.45
32:2a:670:G:H2'	32:2a:671:G:O4'	2.17	0.45
32:2a:1226:C:H4'	50:2s:80:TYR:CZ	2.52	0.45
51:2t:53:LEU:HD11	51:2t:98:PRO:HB2	1.99	0.45
54:2w:5:C:H2'	54:2w:6:G:C8	2.51	0.45
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.16	0.45
1:1A:2207:G:H4'	1:1A:2208:A:OP2	2.17	0.45
1:1A:2732:G:H3'	1:1A:2733:A:O4'	2.17	0.45
2:1B:11:C:H3'	2:1B:12:C:C6	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:138:LEU:C	11:1P:140:ALA:H	2.25	0.45
21:1Z:5:LEU:O	21:1Z:59:LEU:HA	2.17	0.45
32:1a:138:G:H2'	32:1a:139:G:C8	2.52	0.45
32:1a:392:G:H2'	32:1a:393:A:H8	1.81	0.45
32:1a:642:A:N3	39:1h:113:SER:OG	2.37	0.45
32:1a:743:U:H2'	32:1a:744:C:C6	2.52	0.45
32:1a:1356:G:H2'	32:1a:1357:A:H8	1.81	0.45
32:1a:1456:G:O3'	51:1t:39:LYS:NZ	2.49	0.45
41:1j:78:ASN:O	41:1j:80:LYS:N	2.50	0.45
49:1r:76:LEU:HD13	49:1r:76:LEU:HA	1.79	0.45
57:1y:19:G:N2	57:1y:56:C:N3	2.65	0.45
1:2A:1833:U:O2'	1:2A:1969:A:N1	2.31	0.45
1:2A:2055:C:N3	62:2A:4072:HOH:O	2.36	0.45
1:2A:2391:G:O6	1:2A:2425:A:H8	2.00	0.45
1:2A:2689:U:P	1:2A:2719:G:H22	2.40	0.45
2:2B:40:U:H1'	2:2B:45:A:H61	1.81	0.45
5:2F:64:ILE:HG21	5:2F:78:ILE:HG23	1.99	0.45
5:2F:137:LYS:HB3	5:2F:137:LYS:HE2	1.47	0.45
6:2G:16:ARG:O	6:2G:20:ILE:HB	2.16	0.45
8:2I:88:ILE:HG13	8:2I:123:LEU:HB2	1.99	0.45
11:2P:70:GLN:O	11:2P:73:GLY:N	2.43	0.45
19:2X:31:HIS:CD2	19:2X:33:LYS:HB2	2.51	0.45
32:2a:505:G:H2'	32:2a:506:G:C8	2.49	0.45
32:2a:516:PSU:O2'	32:2a:519:C:N3	2.49	0.45
32:2a:984:C:H2'	32:2a:985:C:C6	2.50	0.45
32:2a:1099:G:H2'	32:2a:1100:C:O4'	2.16	0.45
32:2a:1518:MA6:H93	32:2a:1519:MA6:C9	2.47	0.45
39:2h:109:ILE:HD11	39:2h:111:ILE:HG13	1.99	0.45
48:2q:24:GLU:HA	48:2q:39:SER:HA	1.99	0.45
54:2w:7:U:H3'	54:2w:8:U:H5'	1.98	0.45
1:1A:278:A:H2'	1:1A:279:C:C6	2.51	0.45
1:1A:685:A:OP1	1:1A:686:G:N2	2.49	0.45
1:1A:1045:A:H8	1:1A:1111:A:N6	2.15	0.45
1:1A:1103:A:H2'	1:1A:1104:C:O4'	2.17	0.45
1:1A:1569:A:O4'	3:1D:59:LYS:NZ	2.45	0.45
1:1A:1740:G:H2'	1:1A:1741:A:H8	1.77	0.45
1:1A:2627:G:O2'	1:1A:2781:A:N1	2.35	0.45
7:1H:105:LEU:N	7:1H:113:VAL:O	2.41	0.45
8:1I:86:THR:O	8:1I:123:LEU:HB2	2.16	0.45
32:1a:880:C:OP2	43:1l:6:THR:OG1	2.32	0.45
32:1a:1289:A:N1	32:1a:1371:G:O2'	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1343:G:H2'	32:1a:1344:C:C6	2.52	0.45
35:1d:3:ARG:HH11	35:1d:118:ARG:NH1	2.14	0.45
35:1d:149:ALA:O	35:1d:153:ARG:N	2.49	0.45
46:1o:8:LYS:HE3	46:1o:31:LEU:HD22	1.99	0.45
46:1o:18:PHE:CZ	46:1o:21:ASP:HB2	2.52	0.45
47:1p:6:LEU:HB3	47:1p:17:TYR:CD1	2.52	0.45
1:2A:576:U:O4	62:2A:3963:HOH:O	2.20	0.45
1:2A:740:U:H2'	1:2A:741:G:C8	2.52	0.45
1:2A:1379:A:H4'	1:2A:1380:G:OP2	2.12	0.45
1:2A:2646:C:OP2	1:2A:2732:G:O2'	2.35	0.45
1:2A:2755:C:OP1	62:2A:3967:HOH:O	2.20	0.45
8:2I:104:GLN:HG2	8:2I:105:HIS:ND1	2.32	0.45
15:2T:26:ASP:OD1	15:2T:120:ARG:NH2	2.39	0.45
17:2V:18:LEU:HD12	17:2V:19:LYS:H	1.82	0.45
23:2I:50:ARG:HD2	23:2I:57:GLU:OE2	2.16	0.45
32:2a:625:G:OP1	47:2p:9:PHE:HB3	2.17	0.45
32:2a:719:C:O2'	49:2r:49:LYS:HB3	2.17	0.45
32:2a:997:U:H3	32:2a:1044:A:N6	2.15	0.45
33:2b:31:TYR:CE2	33:2b:200:ILE:HG21	2.52	0.45
46:2o:87:ILE:O	46:2o:88:ARG:HB3	2.16	0.45
48:2q:7:THR:O	48:2q:23:VAL:HG13	2.17	0.45
55:2x:21:A:H61	55:2x:46:G:H2'	1.81	0.45
1:1A:414:C:H2'	1:1A:415:A:H8	1.79	0.45
1:1A:581:C:H2'	1:1A:582:G:C8	2.51	0.45
1:1A:1509(A):A:H3'	1:1A:1509(B):A:H8	1.82	0.45
1:1A:1971:A:C4	3:1D:241:PRO:HD3	2.52	0.45
1:1A:2066:C:H5''	62:1A:5334:HOH:O	2.17	0.45
1:1A:2123:G:H2'	1:1A:2124:G:H8	1.82	0.45
17:1V:24:LYS:HE2	17:1V:24:LYS:HB3	1.82	0.45
26:14:61:ARG:HD3	50:1s:67:VAL:HG12	1.98	0.45
32:1a:1212:U:H5''	32:1a:1213:A:O5'	2.16	0.45
32:1a:1372:U:H2'	32:1a:1373:G:O4'	2.17	0.45
33:1b:171:ALA:HA	33:1b:174:VAL:HB	1.99	0.45
34:1c:134:ILE:O	34:1c:138:VAL:HG23	2.16	0.45
35:1d:158:ILE:H	35:1d:158:ILE:HG13	1.37	0.45
48:1q:87:LYS:HD3	48:1q:87:LYS:HA	1.82	0.45
57:1y:37:T6A:H2'	57:1y:38:A:C8	2.52	0.45
1:2A:500:G:N1	1:2A:503:A:OP2	2.50	0.45
1:2A:839:U:H2'	1:2A:840:C:C6	2.51	0.45
1:2A:1449:A:N6	1:2A:1450:G:C2	2.84	0.45
5:2F:78:ILE:HA	5:2F:83:PHE:CD2	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:2H:7:LEU:HB3	7:2H:69:ARG:NH2	2.32	0.45
8:2I:26:ALA:HB1	8:2I:31:LEU:HD13	1.99	0.45
9:2N:55:VAL:HB	9:2N:125:GLY:O	2.17	0.45
19:2X:26:TYR:O	19:2X:81:VAL:HG23	2.16	0.45
24:22:35:LEU:HD13	24:22:44:LEU:HD21	1.97	0.45
32:2a:296:U:O2'	32:2a:556:C:O2	2.32	0.45
32:2a:473:G:C2	32:2a:474:G:C5	3.05	0.45
32:2a:603:U:H2'	32:2a:604:G:H8	1.82	0.45
32:2a:840:C:H4'	32:2a:841:U:OP1	2.16	0.45
32:2a:1133:G:H2'	32:2a:1134:G:H8	1.81	0.45
32:2a:1150:U:H4'	41:2j:41:PRO:HG3	1.99	0.45
32:2a:1184:G:H2'	32:2a:1185:G:H8	1.82	0.45
33:2b:131:PRO:O	33:2b:135:GLN:HG3	2.17	0.45
34:2c:20:SER:HB3	34:2c:22:TRP:HE1	1.82	0.45
34:2c:39:ILE:HG22	34:2c:43:LEU:HG	1.98	0.45
44:2m:3:ARG:HB3	44:2m:9:ILE:H	1.82	0.45
48:2q:81:ARG:NH2	48:2q:83:ASP:OD2	2.49	0.45
50:2s:28:LYS:HB3	50:2s:29:ARG:HA	1.99	0.45
1:1A:837:C:N4	62:1A:4212:HOH:O	2.29	0.45
1:1A:1345:C:H2'	1:1A:1346:G:H8	1.81	0.45
1:1A:1864:U:OP1	1:1A:2410:G:O2'	2.24	0.45
1:1A:2033:A:O2'	1:1A:2035:G:OP2	2.32	0.45
1:1A:2827:C:H2'	1:1A:2828:C:C6	2.52	0.45
2:1B:48:A:H4'	14:1S:95:HIS:HD2	1.82	0.45
2:1B:50:G:OP1	14:1S:63:THR:N	2.47	0.45
3:1D:26:LYS:HE2	3:1D:28:GLU:O	2.17	0.45
12:1Q:7:MET:HE2	12:1Q:7:MET:HB3	1.64	0.45
13:1R:11:ASN:ND2	62:1R:306:HOH:O	2.50	0.45
23:11:52:ARG:HA	23:11:56:GLN:O	2.17	0.45
32:1a:100:C:H2'	32:1a:101:A:C8	2.51	0.45
32:1a:1028:C:H2'	32:1a:1029:C:O4'	2.16	0.45
38:1g:78:ARG:NH1	38:1g:156:TRP:HE3	2.15	0.45
40:1i:34:ASN:HD22	40:1i:34:ASN:N	2.15	0.45
54:1w:76:A1B8A:OP1	62:1w:201:HOH:O	2.21	0.45
57:1y:48:C:N4	57:1y:59:A:O4'	2.50	0.45
1:2A:881:G:C6	1:2A:882:G:H1'	2.52	0.45
1:2A:2412:A:H2'	1:2A:2413:G:O4'	2.17	0.45
1:2A:2507:C:H4'	54:2w:75:C:O2'	2.17	0.45
1:2A:2722:G:H2'	1:2A:2723:C:C6	2.52	0.45
1:2A:2735:G:H2'	1:2A:2736:G:H8	1.81	0.45
1:2A:2786:U:O2'	4:2E:62:PRO:O	2.33	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2823:A:OP1	4:2E:159:HIS:NE2	2.50	0.45
5:2F:32:LEU:HB3	5:2F:112:MET:HE1	1.98	0.45
6:2G:86:MET:H	6:2G:86:MET:HG3	1.55	0.45
22:20:46:LYS:HG2	22:20:77:ARG:O	2.17	0.45
31:29:27:CYS:SG	31:29:28:GLU:N	2.89	0.45
32:2a:1071:C:H2'	32:2a:1072:G:H8	1.82	0.45
36:2e:40:ARG:CZ	36:2e:68:GLU:HA	2.46	0.45
36:2e:84:PHE:O	36:2e:86:ALA:N	2.45	0.45
52:2u:6:ARG:HD3	52:2u:15:ARG:HE	1.81	0.45
1:1A:630:G:N2	1:1A:633:A:OP2	2.43	0.45
1:1A:784:A:N6	3:1D:229:VAL:HG11	2.32	0.45
1:1A:1179:C:H2'	1:1A:1180:C:H6	1.81	0.45
4:1E:70:ALA:HB3	4:1E:72:VAL:HG22	1.99	0.45
6:1G:5:VAL:HG22	6:1G:8:LYS:H	1.82	0.45
15:1T:84:GLN:CG	15:1T:85:LYS:HG3	2.43	0.45
21:1Z:150:LEU:HD12	21:1Z:154:ASP:HB2	1.99	0.45
21:1Z:158:PRO:O	21:1Z:161:VAL:HG22	2.16	0.45
32:1a:161:A:H2'	32:1a:162:A:C8	2.52	0.45
32:1a:189(C):C:H2'	32:1a:189(D):C:O4'	2.17	0.45
32:1a:841:U:C4	32:1a:848:C:H1'	2.52	0.45
32:1a:1255:G:N7	41:1j:43:ARG:NH2	2.65	0.45
35:1d:190:ASP:H	35:1d:193:ASP:HB2	1.82	0.45
43:1l:84:LEU:HB2	43:1l:105:TYR:CE2	2.52	0.45
47:1p:20:VAL:HG23	47:1p:35:LYS:HA	1.99	0.45
48:1q:15:MET:HE1	48:1q:43:LEU:HD22	1.98	0.45
1:2A:99:U:H4'	1:2A:100:G:H5'	1.98	0.45
1:2A:265:A:C8	1:2A:266:G:H1'	2.52	0.45
1:2A:391:G:O2'	1:2A:410:G:OP1	2.22	0.45
1:2A:394:A:C2'	1:2A:395:U:H5'	2.47	0.45
1:2A:511:U:H4'	1:2A:1235:G:H4'	1.98	0.45
1:2A:898:C:H2'	1:2A:899:A:O4'	2.17	0.45
1:2A:923:C:H2'	1:2A:924:C:C6	2.52	0.45
1:2A:1614:A:C2	18:2W:93:ALA:HB2	2.51	0.45
1:2A:2466:C:H5''	31:29:6:SER:HB3	1.99	0.45
1:2A:2869:G:H2'	1:2A:2870:C:O4'	2.17	0.45
1:2A:2892:A:H2'	1:2A:2893:G:H5'	1.98	0.45
11:2P:82:GLY:HA3	11:2P:115:LEU:HD11	1.99	0.45
12:2Q:45:GLN:OE1	12:2Q:45:GLN:N	2.48	0.45
28:26:10:LEU:HD23	28:26:22:ALA:HB2	1.99	0.45
32:2a:1263:C:H1'	32:2a:1273:G:N2	2.31	0.45
32:2a:1363(A):A:H4'	32:2a:1364:U:H2'	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1478:C:H2'	32:2a:1479:C:C6	2.52	0.45
32:2a:1492:A:H2'	32:2a:1493:A:C8	2.52	0.45
35:2d:191:ARG:NH1	35:2d:191:ARG:O	2.50	0.45
38:2g:115:ARG:HH11	38:2g:118:VAL:HG21	1.82	0.45
40:2i:17:VAL:HA	40:2i:63:ILE:HG12	1.99	0.45
1:1A:730:C:H5'	62:1A:4281:HOH:O	2.16	0.44
1:1A:1022:G:N7	9:1N:66:LYS:HE2	2.33	0.44
1:1A:1633:G:O6	62:1A:4131:HOH:O	2.13	0.44
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.49	0.44
1:1A:2208:A:N7	62:1A:4290:HOH:O	2.36	0.44
1:1A:2320:A:H2'	1:1A:2320:A:N3	2.32	0.44
4:1E:96:PHE:O	4:1E:175:VAL:HG21	2.17	0.44
5:1F:110:LEU:HD11	5:1F:181:LEU:HG	1.99	0.44
32:1a:276:G:O3'	48:1q:68:ARG:NH1	2.46	0.44
32:1a:679:C:H2'	32:1a:680:C:C6	2.53	0.44
32:1a:1239:A:H62	32:1a:1299:A:N6	2.15	0.44
32:1a:1240:U:OP1	38:1g:119:ARG:NH2	2.48	0.44
32:1a:1273:G:H3'	32:1a:1274:G:C8	2.48	0.44
54:1w:61:C:H3'	54:1w:62:C:H5''	1.99	0.44
1:2A:196:A:N3	1:2A:196:A:H2'	2.33	0.44
1:2A:509:C:OP1	62:2A:3972:HOH:O	2.21	0.44
1:2A:705:A:H2'	1:2A:706:A:O4'	2.16	0.44
1:2A:721:C:H2'	1:2A:722:A:C8	2.52	0.44
1:2A:1025:G:C4	1:2A:1135:C:H1'	2.53	0.44
1:2A:1156:A:OP1	16:2U:55:ARG:HD2	2.17	0.44
1:2A:2386:C:H2'	1:2A:2387:U:C6	2.52	0.44
6:2G:125:PHE:HB3	6:2G:166:ASP:CG	2.42	0.44
11:2P:63:PRO:HG2	30:28:25:MET:HB2	1.99	0.44
28:26:5:VAL:HG21	28:26:28:ARG:HB2	1.98	0.44
32:2a:161:A:H2'	32:2a:162:A:C8	2.52	0.44
32:2a:308:C:H2'	32:2a:309:G:C8	2.52	0.44
32:2a:308:C:H2'	32:2a:309:G:H8	1.81	0.44
32:2a:1327:C:H2'	32:2a:1328:C:C6	2.52	0.44
34:2c:108:ASN:HB3	34:2c:111:LEU:HB2	1.99	0.44
35:2d:155:LEU:HD23	35:2d:155:LEU:HA	1.78	0.44
38:2g:54:THR:O	38:2g:56:GLN:N	2.43	0.44
54:2w:3:G:H1	54:2w:70:C:N4	2.15	0.44
54:2w:10:G:C2	54:2w:26:A:H1'	2.51	0.44
54:2w:18:G:H4'	54:2w:60:U:C5	2.51	0.44
1:1A:27:G:C2	1:1A:512:G:N3	2.85	0.44
1:1A:94(A):G:H2'	1:1A:95:G:O4'	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:127:A:H5''	1:1A:128:C:C6	2.52	0.44
1:1A:207:A:H2'	1:1A:208:C:O4'	2.15	0.44
1:1A:744:G:OP1	4:1E:132:HIS:ND1	2.40	0.44
1:1A:1006:C:C2	1:1A:1138:G:N2	2.85	0.44
1:1A:1753:G:N1	1:1A:1756:G:OP2	2.45	0.44
1:1A:2703:C:H2'	1:1A:2704:C:H6	1.82	0.44
6:1G:18:GLU:OE2	6:1G:22:ARG:HD2	2.18	0.44
6:1G:132:ASN:HA	6:1G:157:ILE:O	2.17	0.44
12:1Q:109:VAL:HG13	12:1Q:110:THR:O	2.16	0.44
20:1Y:43:ASN:HB2	20:1Y:67:LEU:HD21	1.99	0.44
32:1a:836:G:OP1	49:1r:61:LYS:NZ	2.35	0.44
32:1a:1452:C:H4'	32:1a:1457:G:C8	2.52	0.44
40:1i:8:GLY:HA3	40:1i:76:ALA:O	2.17	0.44
48:1q:81:ARG:HH21	48:1q:84:LEU:HD21	1.81	0.44
1:2A:140:G:N2	1:2A:1596:A:H4'	2.32	0.44
1:2A:620:G:H8	1:2A:622:G:O6	2.01	0.44
1:2A:910:A:N1	1:2A:2277:G:H1'	2.31	0.44
9:2N:17:ASP:HB2	9:2N:137:LYS:HE3	2.00	0.44
9:2N:26:LEU:O	9:2N:30:ILE:HG13	2.17	0.44
25:23:46:ASN:O	25:23:50:VAL:HG22	2.16	0.44
28:26:13:CYS:SG	28:26:47:THR:HG21	2.58	0.44
32:2a:403:C:H2'	32:2a:404:U:C6	2.52	0.44
32:2a:551:U:H2'	32:2a:552:U:H6	1.82	0.44
34:2c:101:LEU:HD13	34:2c:102:ASN:N	2.33	0.44
36:2e:62:ALA:C	36:2e:64:ARG:H	2.25	0.44
44:2m:3:ARG:HH22	44:2m:11:ARG:HG3	1.81	0.44
46:2o:59:MET:HE3	46:2o:59:MET:HB2	1.79	0.44
47:2p:8:ARG:HB3	47:2p:28:ARG:NH1	2.33	0.44
1:1A:888:C:H2'	1:1A:889:C:C5	2.52	0.44
1:1A:1058:G:H1	1:1A:1080:C:N4	2.16	0.44
1:1A:1059:G:OP2	1:1A:1060:U:H3'	2.16	0.44
1:1A:1594:G:H2'	1:1A:1595:G:O4'	2.17	0.44
1:1A:1889:A:H2'	1:1A:1890:A:C8	2.53	0.44
1:1A:1999:C:H4'	1:1A:2723:C:O2	2.17	0.44
1:1A:2134:A:N6	1:1A:2157:G:OP1	2.51	0.44
1:1A:2238:G:N3	1:1A:2238:G:H2'	2.32	0.44
1:1A:2653:U:H5''	1:1A:2654:A:OP2	2.18	0.44
12:1Q:51:ARG:HD3	12:1Q:66:ILE:HD11	1.98	0.44
32:1a:684:A:H2'	32:1a:685:G:O4'	2.18	0.44
32:1a:824:C:H2'	32:1a:825:G:C8	2.52	0.44
32:1a:1146:A:H2'	32:1a:1147:C:O4'	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:1k:20:TYR:HB2	42:1k:31:THR:HG23	1.98	0.44
57:1y:1:G:H2'	57:1y:2:G:C8	2.52	0.44
1:2A:583:G:N7	62:2A:4075:HOH:O	2.36	0.44
1:2A:824:A:H2'	1:2A:825:C:O4'	2.17	0.44
1:2A:1418:G:H8	1:2A:1418:G:O5'	2.00	0.44
1:2A:1599:C:OP1	62:2A:3969:HOH:O	2.20	0.44
1:2A:1786:A:C4	1:2A:1938:A:C6	3.06	0.44
1:2A:2151:G:N2	1:2A:2152:G:H1'	2.32	0.44
1:2A:2206:G:H3'	1:2A:2207:G:N7	2.31	0.44
1:2A:2245:U:O2'	1:2A:2436:G:OP2	2.32	0.44
1:2A:2461:C:H2'	1:2A:2462:U:H6	1.82	0.44
7:2H:109:PHE:C	7:2H:111:HIS:H	2.23	0.44
8:2I:61:ARG:HA	8:2I:61:ARG:HD3	1.48	0.44
8:2I:80:PRO:HA	8:2I:145:VAL:HG13	1.98	0.44
10:2O:67:LYS:NZ	10:2O:68:GLU:OE2	2.37	0.44
32:2a:780:A:H1'	32:2a:803:G:N2	2.33	0.44
32:2a:933:G:N2	32:2a:935:A:O4'	2.50	0.44
32:2a:1289:A:P	52:2u:9:ARG:HH22	2.39	0.44
34:2c:119:ARG:HE	34:2c:140:ARG:CZ	2.30	0.44
35:2d:78:LEU:HB3	35:2d:93:PHE:HE1	1.83	0.44
1:1A:971:C:H2'	1:1A:972:G:O4'	2.18	0.44
1:1A:1069:A:H1'	1:1A:1096:A:H4'	1.98	0.44
1:1A:1477:A:C2	1:1A:1515:G:C2	3.05	0.44
1:1A:1709:U:H2'	1:1A:1710:C:C6	2.51	0.44
1:1A:1899:G:N3	1:1A:1899:G:H2'	2.32	0.44
1:1A:2108:C:N4	1:1A:2181:G:H1	2.15	0.44
1:1A:2111:C:O2	1:1A:2118:U:H5'	2.17	0.44
5:1F:197:ASP:O	5:1F:201:VAL:HG23	2.17	0.44
7:1H:126:PRO:HG2	7:1H:130:ARG:HH21	1.82	0.44
9:1N:66:LYS:O	9:1N:70:LYS:HB3	2.17	0.44
28:16:17:LYS:HB3	28:16:17:LYS:HE3	1.72	0.44
32:1a:7:G:H21	36:1e:121:LYS:HG2	1.82	0.44
32:1a:1131:G:P	40:1i:20:ARG:HH22	2.40	0.44
32:1a:1241:G:H2'	32:1a:1242:C:C6	2.53	0.44
36:1e:41:VAL:O	36:1e:66:MET:HA	2.17	0.44
40:1i:33:PHE:CZ	40:1i:47:LEU:HD11	2.53	0.44
40:1i:55:ALA:HA	40:1i:58:HIS:CD2	2.52	0.44
51:1t:37:SER:O	51:1t:41:ILE:HG13	2.18	0.44
54:1w:35:U:H2'	54:1w:36:U:O4'	2.17	0.44
1:2A:108:U:OP1	1:2A:293:U:O2'	2.36	0.44
1:2A:1288:U:O4	13:2R:106:GLY:HA3	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2181:G:H2'	1:2A:2182:G:O4'	2.18	0.44
8:2I:124:GLY:O	8:2I:144:VAL:HG23	2.18	0.44
15:2T:127:ALA:C	15:2T:129:ARG:N	2.75	0.44
32:2a:401:C:H2'	32:2a:402:G:C8	2.53	0.44
32:2a:664:G:P	49:2r:64:ARG:HH21	2.40	0.44
32:2a:711:G:O2'	32:2a:712:A:H5'	2.17	0.44
32:2a:1010:G:N1	32:2a:1020:U:H1'	2.32	0.44
32:2a:1148:U:H2'	32:2a:1149:C:O4'	2.17	0.44
32:2a:1516:G:N1	32:2a:1519:MA6:OP2	2.51	0.44
33:2b:165:VAL:O	33:2b:187:LEU:HB3	2.16	0.44
33:2b:219:VAL:HA	33:2b:222:ILE:CG1	2.45	0.44
34:2c:183:ASP:N	34:2c:202:ILE:O	2.49	0.44
35:2d:92:VAL:O	35:2d:96:LEU:HD22	2.18	0.44
40:2i:40:LEU:HB3	40:2i:43:ALA:HB2	1.98	0.44
48:2q:28:PRO:HA	48:2q:35:VAL:HA	1.99	0.44
48:2q:44:ALA:HB1	48:2q:73:VAL:HG22	1.99	0.44
1:1A:84:A:H5''	20:1Y:8:LYS:HG2	2.00	0.44
1:1A:181:A:H2'	1:1A:182:A:C8	2.53	0.44
1:1A:971:C:O2'	1:1A:983:A:N3	2.43	0.44
1:1A:2619:C:H4'	4:1E:151:TYR:O	2.17	0.44
2:1B:106:G:H5'	21:1Z:31:ARG:HG2	1.99	0.44
19:1X:12:VAL:HG22	19:1X:29:TRP:CE2	2.53	0.44
32:1a:203:U:O2	32:1a:216:G:N2	2.51	0.44
32:1a:985:C:H2'	32:1a:986:A:C8	2.53	0.44
33:1b:222:ILE:O	33:1b:226:ARG:HG2	2.18	0.44
38:1g:113:GLU:HG2	38:1g:118:VAL:HG12	2.00	0.44
40:1i:4:TYR:O	40:1i:84:ALA:HB1	2.18	0.44
40:1i:128:ARG:NH2	55:1x:33:U:OP2	2.46	0.44
57:1y:27:G:H1	57:1y:43:U:H3	1.65	0.44
1:2A:783:A:O2'	1:2A:785:G:OP1	2.32	0.44
1:2A:918:A:O2'	2:2B:97:G:N2	2.41	0.44
1:2A:2189:U:H2'	1:2A:2190:G:C8	2.52	0.44
1:2A:2393:A:H5''	11:2P:63:PRO:HB3	2.00	0.44
11:2P:8:PRO:HB2	11:2P:12:ALA:HB3	1.99	0.44
20:2Y:2:ARG:NH1	20:2Y:4:LYS:HA	2.33	0.44
20:2Y:43:ASN:ND2	20:2Y:65:ALA:HB3	2.33	0.44
32:2a:736:C:H2'	32:2a:737:A:H8	1.81	0.44
32:2a:875:C:O2'	39:2h:14:ARG:HD2	2.17	0.44
33:2b:67:THR:O	33:2b:68:ILE:HG13	2.17	0.44
39:2h:11:THR:HG23	39:2h:14:ARG:NH1	2.32	0.44
55:2x:31:G:H5'	55:2x:32:5MC:OP2	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:443:A:N6	5:1F:41:LEU:O	2.46	0.44
1:1A:2848:G:C8	15:1T:97:ALA:HB2	2.52	0.44
1:1A:2870:C:H2'	1:1A:2871:C:O4'	2.18	0.44
1:1A:2882:A:H5'	13:1R:96:ARG:HB2	2.00	0.44
2:1B:28:C:H2'	2:1B:29:A:O4'	2.18	0.44
4:1E:47:VAL:O	4:1E:80:GLU:HA	2.16	0.44
6:1G:5:VAL:HG23	6:1G:104:GLU:OE1	2.17	0.44
12:1Q:137:TYR:O	12:1Q:141:GLN:HG2	2.17	0.44
14:1S:25:ARG:O	14:1S:39:ILE:HA	2.18	0.44
32:1a:277:C:OP2	48:1q:41:LYS:NZ	2.49	0.44
32:1a:452:A:H4'	47:1p:72:ARG:NH1	2.33	0.44
42:1k:84:VAL:CG1	42:1k:91:ARG:HD2	2.48	0.44
1:2A:61:G:OP1	24:22:51:ARG:NH2	2.33	0.44
1:2A:411:G:OP2	1:2A:2406:U:O2'	2.35	0.44
1:2A:489:G:H2'	1:2A:491:G:O4'	2.17	0.44
1:2A:839:U:H2'	1:2A:840:C:H6	1.83	0.44
1:2A:2079:U:O3'	23:21:35:THR:OG1	2.35	0.44
1:2A:2227:A:H5''	3:2D:263:ARG:NH1	2.33	0.44
5:2F:21:ALA:CB	5:2F:22:ALA:HA	2.44	0.44
7:2H:13:LYS:HA	7:2H:14:GLY:HA2	1.63	0.44
7:2H:80:SER:OG	7:2H:81:GLU:OE1	2.17	0.44
15:2T:59:THR:HG23	15:2T:78:LEU:HB3	2.00	0.44
26:24:61:ARG:HH21	50:2s:9:VAL:HG21	1.82	0.44
32:2a:64:G:C4'	32:2a:65:U:H3'	2.45	0.44
32:2a:96:U:H2'	32:2a:97:G:C8	2.52	0.44
32:2a:595:G:H1'	32:2a:596:C:H5	1.82	0.44
32:2a:693:G:H2'	32:2a:694:A:C8	2.53	0.44
32:2a:1328:C:OP1	52:2u:21:TYR:OH	2.28	0.44
33:2b:117:GLU:OE2	33:2b:121:LEU:HD12	2.18	0.44
40:2i:105:ASP:HB2	40:2i:107:ARG:HG3	2.00	0.44
41:2j:78:ASN:O	41:2j:80:LYS:N	2.51	0.44
48:2q:76:LEU:HD12	48:2q:77:VAL:H	1.81	0.44
51:2t:47:GLY:HA2	51:2t:48:LYS:C	2.43	0.44
1:1A:747:U:O2	1:1A:2014:A:H1'	2.18	0.44
1:1A:2127:G:N2	1:1A:2173:A:H1'	2.32	0.44
1:1A:2233:U:H2'	1:1A:2234:G:C8	2.53	0.44
1:1A:2790:A:H5''	1:1A:2791:C:H5''	1.98	0.44
3:1D:148:GLU:HB2	3:1D:151:LYS:HD2	1.98	0.44
8:1I:109:ILE:HG23	8:1I:130:TYR:CZ	2.53	0.44
15:1T:11:GLU:OE2	15:1T:57:PHE:HB3	2.17	0.44
32:1a:263:A:OP1	51:1t:79:ARG:HD3	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:944:G:O6	32:1a:1337:G:H8	2.01	0.44
32:1a:1201:A:H4'	32:1a:1202:G:O5'	2.17	0.44
45:1n:53:LEU:O	45:1n:56:VAL:HG23	2.17	0.44
47:1p:53:VAL:O	47:1p:57:ARG:HG2	2.17	0.44
54:1w:15:G:N2	54:1w:21:A:N3	2.66	0.44
1:2A:218:A:C2	1:2A:235:U:H4'	2.52	0.44
1:2A:536:A:H2'	1:2A:537:C:C6	2.53	0.44
1:2A:724:U:H2'	1:2A:725:G:O4'	2.18	0.44
1:2A:1479:G:H5''	1:2A:1560:G:H4'	2.00	0.44
1:2A:1783:A:H5'	1:2A:2608:G:H4'	2.00	0.44
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.32	0.44
5:2F:176:LEU:HD23	5:2F:176:LEU:HA	1.79	0.44
9:2N:32:THR:HG23	9:2N:37:LYS:HB2	1.99	0.44
14:2S:5:THR:H	14:2S:8:GLU:HG3	1.81	0.44
32:2a:863:U:H2'	32:2a:865:A:OP2	2.18	0.44
32:2a:925:G:H1'	32:2a:1502:A:C4	2.53	0.44
32:2a:1122:U:C2	32:2a:1123:A:N7	2.85	0.44
40:2i:88:TYR:HD2	40:2i:89:ASN:HB2	1.81	0.44
48:2q:66:SER:HB3	48:2q:69:LYS:HB2	1.99	0.44
1:1A:1171:G:N3	1:1A:1171:G:H2'	2.32	0.44
1:1A:1506:C:H2'	1:1A:1507:A:C8	2.53	0.44
1:1A:1826:G:H4'	3:1D:242:ARG:CZ	2.48	0.44
1:1A:2804:C:H2'	1:1A:2805:G:H8	1.83	0.44
5:1F:39:TRP:O	5:1F:43:LYS:HG2	2.17	0.44
8:1I:72:LEU:HA	8:1I:75:LEU:HD11	1.99	0.44
12:1Q:89:ASN:HB2	55:1x:1:C:N3	2.32	0.44
16:1U:89:GLU:HG3	17:1V:50:PRO:HB3	1.99	0.44
18:1W:97:LYS:HE2	18:1W:99:ARG:NH2	2.33	0.44
26:14:57:GLU:HB3	26:14:58:ARG:HD2	1.98	0.44
32:1a:1121:U:H2'	32:1a:1122:U:C6	2.53	0.44
35:1d:144:ASP:OD1	35:1d:144:ASP:N	2.51	0.44
36:1e:69:VAL:HG11	36:1e:113:ALA:HB1	1.99	0.44
38:1g:15:ASP:HB3	38:1g:24:THR:HG23	2.00	0.44
40:1i:17:VAL:HG23	40:1i:63:ILE:HG23	2.00	0.44
47:1p:49:LEU:HD11	47:1p:51:VAL:HG23	1.99	0.44
1:2A:534:U:H5'	16:2U:42:ALA:HB1	2.00	0.44
1:2A:918:A:C5	1:2A:919:G:H1'	2.53	0.44
1:2A:927:G:H2'	1:2A:928:G:O4'	2.16	0.44
1:2A:1388:G:H2'	1:2A:1389:G:H8	1.83	0.44
1:2A:1443:G:H1	1:2A:1548:C:H42	1.66	0.44
1:2A:2006:C:H6	1:2A:2006:C:O5'	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2492:U:H2'	1:2A:2493:U:C6	2.53	0.44
2:2B:103:G:N2	21:2Z:73:GLN:HE22	2.13	0.44
4:2E:77:ILE:HD13	4:2E:195:LEU:HD22	2.00	0.44
21:2Z:56:VAL:HA	21:2Z:70:LEU:CD2	2.48	0.44
21:2Z:102:LEU:HD23	21:2Z:139:VAL:HG21	2.00	0.44
26:24:46:GLN:C	26:24:48:ARG:N	2.76	0.44
32:2a:404:U:H2'	32:2a:405:U:C6	2.52	0.44
32:2a:555:C:H2'	32:2a:556:C:C6	2.53	0.44
32:2a:1005:A:H5''	32:2a:1006:C:C5	2.52	0.44
32:2a:1077:G:N2	32:2a:1079:G:H3'	2.33	0.44
32:2a:1411:C:H2'	32:2a:1412:C:H6	1.83	0.44
33:2b:219:VAL:O	33:2b:223:ILE:HG12	2.17	0.44
34:2c:24:ALA:HB3	34:2c:29:TYR:CD1	2.53	0.44
35:2d:122:ARG:HA	35:2d:122:ARG:HD2	1.50	0.44
40:2i:19:LEU:HD23	40:2i:19:LEU:HA	1.87	0.44
46:2o:75:PRO:HA	46:2o:78:TYR:HB3	2.00	0.44
50:2s:35:SER:O	50:2s:71:LEU:HD12	2.18	0.44
1:1A:400:G:O6	62:1A:4166:HOH:O	2.21	0.44
1:1A:1179:C:H2'	1:1A:1180:C:C6	2.52	0.44
1:1A:1203:G:H5'	11:1P:3:LEU:HD13	2.00	0.44
1:1A:2111:C:C2	1:1A:2118:U:H5'	2.53	0.44
1:1A:2336:A:H61	22:10:43:THR:HG22	1.83	0.44
6:1G:7:LEU:HD23	6:1G:7:LEU:HA	1.84	0.44
6:1G:72:ARG:HA	6:1G:86:MET:O	2.18	0.44
12:1Q:16:ARG:HB3	12:1Q:18:LYS:HE2	2.00	0.44
15:1T:51:ARG:HD2	15:1T:98:LYS:HD2	2.00	0.44
19:1X:31:HIS:CD2	19:1X:33:LYS:HB2	2.53	0.44
32:1a:255:G:H1'	48:1q:16:GLN:OE1	2.18	0.44
32:1a:375:U:OP1	47:1p:69:THR:OG1	2.20	0.44
32:1a:1113:C:H1'	34:1c:178:LEU:HD13	2.00	0.44
33:1b:112:VAL:O	33:1b:115:LEU:HB3	2.18	0.44
37:1f:36:ARG:CZ	37:1f:36:ARG:HB3	2.48	0.44
44:1m:45:VAL:C	44:1m:47:ASP:H	2.24	0.44
48:1q:43:LEU:HB2	48:1q:68:ARG:O	2.17	0.44
54:1w:13:C:H2'	54:1w:14:A:H5''	1.99	0.44
1:2A:557:U:H2'	1:2A:558:G:H8	1.83	0.44
1:2A:1431:U:H2'	1:2A:1432:C:C6	2.52	0.44
1:2A:2126:A:N6	1:2A:2163:C:O4'	2.51	0.44
4:2E:24:THR:HB	4:2E:184:VAL:HG12	2.00	0.44
6:2G:99:MET:O	6:2G:103:LEU:HG	2.17	0.44
9:2N:115:ARG:HA	9:2N:118:LYS:HE2	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:2R:42:LYS:HB3	13:2R:45:ARG:HH21	1.83	0.44
32:2a:6:G:N2	36:2e:98:THR:HG23	2.33	0.44
32:2a:434:U:H2'	32:2a:435:C:C6	2.53	0.44
32:2a:833:U:H2'	32:2a:834:C:H6	1.83	0.44
32:2a:1002:G:H1	32:2a:1038:C:H42	1.66	0.44
32:2a:1442:G:H2'	32:2a:1442:G:N3	2.32	0.44
37:2f:69:GLU:O	37:2f:72:VAL:HG23	2.18	0.44
38:2g:23:VAL:HG13	38:2g:43:PHE:CE2	2.52	0.44
44:2m:56:LEU:O	44:2m:60:VAL:HG23	2.18	0.44
54:2w:11:C:N4	54:2w:24:G:H1	2.13	0.44
54:2w:23:A:H5'	54:2w:24:G:OP2	2.18	0.44
1:1A:284:U:H2'	1:1A:285:C:H6	1.82	0.43
1:1A:795:C:H2'	1:1A:796:C:H6	1.82	0.43
1:1A:1062:G:N3	1:1A:1088:A:C8	2.86	0.43
1:1A:2753:A:N3	31:19:15:LYS:NZ	2.55	0.43
6:1G:37:VAL:HG21	6:1G:103:LEU:HD21	2.00	0.43
6:1G:41:GLN:O	6:1G:43:LEU:N	2.50	0.43
19:1X:13:LEU:HD11	24:12:40:SER:OG	2.18	0.43
32:1a:233:C:H2'	32:1a:234:C:H6	1.83	0.43
32:1a:458:C:H2'	32:1a:460:G:O4'	2.18	0.43
32:1a:529:G:O6	43:1l:49:ASN:HA	2.17	0.43
34:1c:6:HIS:CD2	34:1c:8:ILE:HB	2.53	0.43
54:1w:28:U:H2'	54:1w:29:U:H6	1.81	0.43
1:2A:271(S):G:C6	1:2A:271(T):C:C4	3.06	0.43
1:2A:478:A:N1	1:2A:500:G:H4'	2.32	0.43
1:2A:493:G:H2'	1:2A:494:G:O4'	2.18	0.43
1:2A:1196:C:H2'	1:2A:1197:G:C8	2.53	0.43
1:2A:2103:C:H1'	1:2A:2187:G:N2	2.33	0.43
1:2A:2315:G:H2'	1:2A:2316:C:C6	2.53	0.43
1:2A:2639:A:H2'	1:2A:2640:G:O4'	2.17	0.43
1:2A:2741:A:N6	1:2A:2763:G:O2'	2.47	0.43
1:2A:2871:C:N4	62:2A:4098:HOH:O	2.41	0.43
7:2H:9:ILE:HD12	7:2H:72:ILE:HG22	2.00	0.43
8:2I:66:GLU:CD	8:2I:69:LYS:HB3	2.43	0.43
8:2I:82:ARG:C	8:2I:89:TYR:HB2	2.43	0.43
8:2I:101:LEU:O	8:2I:107:VAL:N	2.42	0.43
12:2Q:36:ALA:HB2	12:2Q:103:MET:SD	2.58	0.43
20:2Y:28:LYS:NZ	20:2Y:40:GLU:HG3	2.33	0.43
20:2Y:44:ILE:HA	20:2Y:63:LYS:O	2.18	0.43
29:27:9:ARG:NH1	29:27:47:ARG:HD3	2.33	0.43
32:2a:447:G:H2'	32:2a:485:G:N2	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:625:G:H2'	32:2a:626:U:H6	1.83	0.43
32:2a:1115:C:H2'	32:2a:1116:C:C6	2.53	0.43
32:2a:1244:C:N4	32:2a:1293:G:H1	2.15	0.43
32:2a:1265:G:C4	32:2a:1271:G:N2	2.86	0.43
33:2b:46:LYS:O	33:2b:50:GLU:HB2	2.18	0.43
40:2i:8:GLY:HA3	40:2i:76:ALA:O	2.18	0.43
40:2i:99:LEU:HB3	40:2i:101:PHE:CE2	2.53	0.43
1:1A:435:C:H2'	1:1A:436:C:H5'	2.00	0.43
1:1A:1448:G:H4'	1:1A:1542:A:OP1	2.19	0.43
1:1A:2074:U:H2'	1:1A:2075:U:C6	2.53	0.43
1:1A:2203:U:O2'	1:1A:2205:C:H5'	2.18	0.43
1:1A:2626:C:H2'	1:1A:2627:G:O4'	2.18	0.43
3:1D:232:PRO:HB3	3:1D:244:ARG:CZ	2.47	0.43
4:1E:101:ARG:NH2	4:1E:171:GLU:HB2	2.33	0.43
20:1Y:20:TYR:CG	20:1Y:42:VAL:HG13	2.53	0.43
25:13:7:LYS:HB2	25:13:34:GLU:HG2	1.99	0.43
32:1a:575:G:O2'	32:1a:821:G:H5'	2.18	0.43
32:1a:958:A:C2	50:1s:55:LYS:HB2	2.54	0.43
32:1a:1090:U:H2'	32:1a:1091:U:H6	1.82	0.43
32:1a:1401:G:C2	32:1a:1402:4OC:H1'	2.53	0.43
33:1b:27:LYS:HB2	33:1b:194:PRO:HD2	2.00	0.43
1:2A:885:C:H2'	1:2A:886:C:O4'	2.19	0.43
1:2A:2134:A:H2'	1:2A:2134:A:N3	2.33	0.43
1:2A:2626:C:H2'	1:2A:2627:G:O4'	2.18	0.43
1:2A:2674:G:H5''	10:2O:26:LYS:HE3	1.99	0.43
1:2A:2748:A:H2'	1:2A:2749:A:O4'	2.19	0.43
2:2B:19:G:H2'	2:2B:20:C:O4'	2.18	0.43
3:2D:170:GLY:C	3:2D:172:TYR:H	2.26	0.43
6:2G:101:ILE:HG22	6:2G:105:LYS:HE2	2.01	0.43
21:2Z:53:ILE:HG22	21:2Z:71:VAL:O	2.18	0.43
21:2Z:79:ARG:HD2	21:2Z:80:ARG:NH1	2.31	0.43
32:2a:8:A:N6	35:2d:209:ARG:HB2	2.33	0.43
32:2a:396:G:O2'	32:2a:398:C:OP1	2.32	0.43
32:2a:988:G:C2	32:2a:989:C:C2	3.06	0.43
32:2a:1060:C:H2'	32:2a:1061:G:H8	1.82	0.43
32:2a:1104:G:H4'	33:2b:111:ARG:NE	2.33	0.43
33:2b:112:VAL:HG12	33:2b:113:HIS:ND1	2.32	0.43
36:2e:43:LEU:H	36:2e:65:ASN:HB3	1.82	0.43
37:2f:64:GLN:HE21	37:2f:64:GLN:HB3	1.59	0.43
50:2s:27:GLU:H	50:2s:27:GLU:HG3	1.37	0.43
57:2y:65:C:C2	57:2y:66:A:N6	2.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:191:A:H2'	1:1A:192:C:C6	2.53	0.43
1:1A:394:A:C6	1:1A:395:U:C4	3.06	0.43
1:1A:2420:C:H5'	28:16:54:ILE:HD11	1.99	0.43
1:1A:2577:A:O4'	27:15:3:LYS:HB2	2.18	0.43
3:1D:126:GLN:HE21	3:1D:127:VAL:H	1.66	0.43
7:1H:98:LEU:HG	7:1H:125:VAL:HG23	1.99	0.43
17:1V:71:LEU:HD23	17:1V:71:LEU:HA	1.80	0.43
32:1a:186:C:H5'	51:1t:78:ALA:HB1	2.01	0.43
32:1a:300:A:O2'	32:1a:564:C:N3	2.44	0.43
32:1a:735:C:H2'	32:1a:736:C:H6	1.84	0.43
32:1a:811:C:N4	62:1a:4859:HOH:O	2.50	0.43
32:1a:1176:A:C6	32:1a:1177:G:C6	3.06	0.43
33:1b:28:PHE:HD2	33:1b:28:PHE:O	2.01	0.43
34:1c:29:TYR:OH	45:1n:54:PRO:O	2.30	0.43
34:1c:73:PRO:HB3	34:1c:103:VAL:HG11	1.99	0.43
35:1d:104:VAL:HG11	35:1d:146:ILE:HD13	2.01	0.43
40:1i:127:LYS:O	40:1i:128:ARG:HG2	2.18	0.43
51:1t:34:LYS:HG2	51:1t:80:ARG:HH22	1.84	0.43
1:2A:171:G:H2'	1:2A:172:C:H6	1.84	0.43
1:2A:271(C):C:H2'	1:2A:271(D):G:O4'	2.19	0.43
1:2A:712:G:H1	1:2A:719:C:H42	1.66	0.43
1:2A:807:U:OP2	11:2P:41:ARG:NH2	2.52	0.43
1:2A:1803:A:HO2'	3:2D:259:THR:HG21	1.83	0.43
1:2A:1865:G:N2	1:2A:1877:A:OP2	2.43	0.43
1:2A:2023:G:H5'	1:2A:2617:C:H4'	1.98	0.43
1:2A:2103:C:H1'	1:2A:2187:G:C2	2.52	0.43
1:2A:2255:G:OP2	62:2A:3974:HOH:O	2.21	0.43
8:2I:84:GLY:C	8:2I:86:THR:H	2.26	0.43
10:2O:63:VAL:HG12	10:2O:106:LEU:HD11	2.01	0.43
11:2P:89:ALA:O	11:2P:121:LYS:NZ	2.40	0.43
18:2W:6:ILE:HG22	18:2W:8:ARG:HG3	1.99	0.43
19:2X:2:LYS:HA	19:2X:2:LYS:HD2	1.74	0.43
21:2Z:171:ILE:HG13	21:2Z:171:ILE:H	1.53	0.43
32:2a:263:A:OP1	51:2t:79:ARG:NH1	2.51	0.43
32:2a:615:C:H2'	32:2a:616:G:O4'	2.18	0.43
32:2a:868:C:H2'	32:2a:869:G:O4'	2.18	0.43
32:2a:1151:A:O2'	32:2a:1152:A:H8	2.01	0.43
32:2a:1367:C:OP1	40:2i:115:GLY:N	2.41	0.43
34:2c:134:ILE:O	34:2c:137:ALA:N	2.52	0.43
45:2n:23:ARG:NH1	45:2n:30:ALA:HB2	2.33	0.43
51:2t:49:ALA:HB1	51:2t:98:PRO:HA	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:8:U:H2'	54:2w:13:C:N4	2.34	0.43
1:1A:1104:C:H2'	1:1A:1105:U:C6	2.53	0.43
1:1A:1345:C:H2'	1:1A:1346:G:C8	2.54	0.43
1:1A:1882:C:H2'	1:1A:1883:G:O4'	2.19	0.43
3:1D:133:LEU:HB3	3:1D:173:VAL:HG21	2.00	0.43
7:1H:6:ARG:HH22	7:1H:54:ARG:HH22	1.67	0.43
11:1P:50:ARG:HG3	30:18:61:LEU:HD21	2.00	0.43
15:1T:27:THR:HB	15:1T:90:GLN:HB3	2.00	0.43
23:11:23:LYS:HB3	23:11:29:GLY:HA3	2.00	0.43
32:1a:57:G:H2'	32:1a:58:C:C6	2.53	0.43
32:1a:353:A:N7	62:1a:4850:HOH:O	2.36	0.43
32:1a:558:G:OP2	32:1a:559:A:O2'	2.29	0.43
32:1a:1104:G:O5'	33:1b:111:ARG:HD2	2.19	0.43
35:1d:173:TRP:CD1	35:1d:173:TRP:H	2.36	0.43
38:1g:28:ASN:HA	38:1g:31:MET:HE2	1.99	0.43
40:1i:53:VAL:HG11	40:1i:92:TYR:CE1	2.54	0.43
41:1j:5:ARG:HH21	41:1j:73:ASP:CG	2.22	0.43
49:1r:32:ARG:O	49:1r:34:TYR:N	2.51	0.43
51:1t:36:LEU:HD13	51:1t:58:LYS:HG3	2.00	0.43
51:1t:57:ARG:NH1	51:1t:100:ILE:HD12	2.30	0.43
1:2A:9:U:OP1	9:2N:115:ARG:NH2	2.51	0.43
1:2A:910:A:C6	1:2A:911:A:C6	3.07	0.43
1:2A:1445(A):C:H2'	1:2A:1446:C:H6	1.83	0.43
1:2A:1445(A):C:H2'	1:2A:1446:C:C6	2.53	0.43
1:2A:2461:C:H2'	1:2A:2462:U:C6	2.53	0.43
1:2A:2837:G:H21	13:2R:45:ARG:NH1	2.17	0.43
9:2N:28:THR:HG22	9:2N:29:LYS:N	2.33	0.43
14:2S:25:ARG:HB3	14:2S:40:ILE:HB	2.01	0.43
16:2U:66:ASN:OD1	16:2U:70:ARG:NE	2.51	0.43
23:21:32:LYS:HE3	23:21:32:LYS:HB3	1.83	0.43
30:28:30:ARG:HD3	30:28:30:ARG:HA	1.79	0.43
32:2a:119:A:H4'	32:2a:120:A:C8	2.54	0.43
32:2a:564:C:O2'	39:2h:91:ARG:NH1	2.43	0.43
32:2a:963:G:N3	41:2j:54:PHE:HZ	2.16	0.43
32:2a:1513:A:H2'	32:2a:1514:C:C6	2.54	0.43
36:2e:40:ARG:HD3	36:2e:67:VAL:O	2.18	0.43
38:2g:99:LEU:HD23	38:2g:102:ARG:HH12	1.83	0.43
1:1A:287:C:H2'	1:1A:288:C:C6	2.53	0.43
1:1A:459:U:H2'	1:1A:460:A:C8	2.54	0.43
1:1A:695:G:OP1	1:1A:1380:G:O2'	2.35	0.43
1:1A:839:U:H2'	1:1A:840:C:C6	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1637:A:H4'	1:1A:2711:A:O2'	2.18	0.43
1:1A:2335:A:C8	1:1A:2337:G:C5	3.07	0.43
1:1A:2629:A:H1'	1:1A:2630:G:C5'	2.49	0.43
12:1Q:18:LYS:O	12:1Q:98:LYS:NZ	2.51	0.43
15:1T:51:ARG:HG3	15:1T:98:LYS:HE3	1.99	0.43
32:1a:162:A:N7	32:1a:163:C:H1'	2.33	0.43
32:1a:188:C:H1'	51:1t:89:ARG:HH11	1.82	0.43
32:1a:313:A:H2'	32:1a:314:C:C6	2.53	0.43
38:1g:153:HIS:C	38:1g:155:ARG:H	2.26	0.43
44:1m:2:ALA:N	44:1m:8:GLU:HB2	2.34	0.43
1:2A:108:U:H2'	1:2A:109:G:H8	1.83	0.43
1:2A:586:A:N1	1:2A:809:G:O2'	2.31	0.43
1:2A:1204:A:N6	1:2A:1240:U:H2'	2.33	0.43
1:2A:2335:A:O2'	1:2A:2336:A:H5''	2.19	0.43
5:2F:12:LEU:HG	5:2F:124:LEU:HD11	2.00	0.43
9:2N:38:HIS:O	16:2U:67:ALA:HB1	2.19	0.43
10:2O:68:GLU:OE1	10:2O:78:ARG:NH1	2.49	0.43
12:2Q:48:GLU:O	12:2Q:52:VAL:HG23	2.19	0.43
28:26:9:LEU:HA	28:26:54:ILE:HB	2.00	0.43
29:27:26:GLY:O	29:27:30:VAL:HG23	2.19	0.43
32:2a:20:U:H2'	32:2a:21:G:O4'	2.18	0.43
32:2a:482:A:OP2	62:2a:1906:HOH:O	2.21	0.43
32:2a:514:C:H2'	32:2a:515:G:H8	1.84	0.43
32:2a:973:G:H3'	32:2a:974:A:H5''	2.00	0.43
32:2a:1200:C:OP1	32:2a:1201:A:O2'	2.19	0.43
34:2c:36:ASP:HA	34:2c:39:ILE:HD12	2.01	0.43
38:2g:78:ARG:HB2	38:2g:87:VAL:HG21	2.00	0.43
50:2s:30:LEU:HA	50:2s:48:THR:O	2.17	0.43
1:1A:652(C):G:N2	1:1A:653:A:H1'	2.34	0.43
1:1A:1406:U:H2'	1:1A:1407:C:H6	1.80	0.43
1:1A:1851:U:H2'	1:1A:1852:C:O4'	2.18	0.43
1:1A:2345:G:N3	1:1A:2381:C:H2'	2.33	0.43
1:1A:2461:C:H2'	1:1A:2462:U:C6	2.54	0.43
1:1A:2680:C:H1'	4:1E:187:ALA:HB1	1.99	0.43
5:1F:74:ARG:H	5:1F:74:ARG:HG3	1.41	0.43
32:1a:504:C:OP1	62:1a:4818:HOH:O	2.21	0.43
32:1a:994:A:C5	32:1a:1216:G:H4'	2.53	0.43
32:1a:1033:G:H3'	32:1a:1034:G:C8	2.53	0.43
32:1a:1187:G:H5''	40:1i:113:LYS:HD3	2.00	0.43
34:1c:124:ILE:HG12	34:1c:124:ILE:H	1.56	0.43
35:1d:173:TRP:CD2	35:1d:189:PRO:HG3	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:1k:70:LYS:HA	42:1k:73:MET:HE2	2.00	0.43
1:2A:83:G:O2'	1:2A:102:G:N2	2.51	0.43
1:2A:857:C:H5''	22:20:77:ARG:NH2	2.34	0.43
1:2A:1908:C:O2	55:2x:12:G:H4'	2.18	0.43
1:2A:2136:C:C4	1:2A:2155:G:N1	2.86	0.43
1:2A:2471:C:H42	1:2A:2479:G:H1	1.65	0.43
1:2A:2680:C:H1'	4:2E:187:ALA:HB1	2.00	0.43
1:2A:2712:U:H2'	1:2A:2714:G:H5''	2.00	0.43
14:2S:36:TYR:OH	14:2S:54:LEU:HD22	2.19	0.43
14:2S:104:GLY:HA2	14:2S:107:GLU:HB2	2.00	0.43
32:2a:952:U:H2'	32:2a:953:G:H8	1.83	0.43
32:2a:1172:C:H2'	32:2a:1173:G:C8	2.53	0.43
32:2a:1423:G:H2'	32:2a:1424:C:H6	1.82	0.43
33:2b:55:PHE:CZ	33:2b:218:ALA:HA	2.53	0.43
33:2b:77:ALA:O	33:2b:94:ASN:ND2	2.51	0.43
33:2b:95:GLN:NE2	33:2b:147:LYS:HE2	2.34	0.43
34:2c:45:LYS:H	34:2c:45:LYS:HG2	1.50	0.43
34:2c:120:VAL:HA	34:2c:123:GLN:HB2	2.00	0.43
34:2c:148:GLY:CA	34:2c:203:PHE:HB3	2.49	0.43
34:2c:180:ALA:O	34:2c:181:ASN:C	2.61	0.43
35:2d:38:TYR:CE1	35:2d:45:GLN:HG3	2.53	0.43
39:2h:51:VAL:HG11	39:2h:60:ARG:CZ	2.48	0.43
53:2v:19:A:H2'	53:2v:20:A:H8	1.83	0.43
54:2w:63:U:H3'	54:2w:63:U:O2	2.19	0.43
1:1A:26:G:C6	1:1A:27:G:N1	2.86	0.43
1:1A:271(G):C:H2'	1:1A:271(H):G:H8	1.83	0.43
1:1A:428:A:OP2	1:1A:428:A:C8	2.72	0.43
1:1A:858:U:O2	1:1A:2268:A:H2'	2.19	0.43
1:1A:1174:A:H1'	1:1A:1175:U:H5''	1.99	0.43
1:1A:2124:G:H3'	1:1A:2125:G:H8	1.83	0.43
62:1A:4504:HOH:O	22:10:41:ARG:HA	2.19	0.43
3:1D:206:LEU:HD23	3:1D:206:LEU:HA	1.75	0.43
8:1I:47:LEU:HD23	8:1I:47:LEU:HA	1.87	0.43
8:1I:109:ILE:HA	8:1I:109:ILE:HD13	1.79	0.43
11:1P:71:VAL:CG2	11:1P:72:PRO:HA	2.48	0.43
12:1Q:50:ALA:O	12:1Q:54:MET:HE2	2.19	0.43
18:1W:77:ASP:HB2	18:1W:102:HIS:HB2	2.01	0.43
20:1Y:6:HIS:HE1	20:1Y:72:VAL:O	2.01	0.43
21:1Z:99:TYR:HA	21:1Z:124:ILE:O	2.19	0.43
25:13:10:LYS:HB3	25:13:53:LEU:HA	1.99	0.43
32:1a:148:G:H2'	32:1a:149:A:C8	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1108:G:OP1	34:1c:175:LEU:HB2	2.19	0.43
33:1b:8:LYS:H	33:1b:8:LYS:HD3	1.84	0.43
35:1d:173:TRP:CE3	35:1d:189:PRO:HG3	2.54	0.43
37:1f:2:ARG:HB2	37:1f:4:TYR:CE2	2.53	0.43
38:1g:79:ARG:HD2	38:1g:80:VAL:N	2.34	0.43
46:1o:39:LEU:HA	46:1o:42:HIS:HB3	2.01	0.43
54:1w:63:U:H2'	54:1w:64:G:H8	1.80	0.43
1:2A:248:G:C2	1:2A:2431:U:H4'	2.54	0.43
1:2A:286:C:H42	1:2A:355:G:H1	1.66	0.43
1:2A:312:G:H4'	1:2A:331:A:N3	2.33	0.43
1:2A:1183:G:H5''	25:23:30:ARG:NH2	2.34	0.43
1:2A:1379:A:O5'	1:2A:1379:A:H8	2.01	0.43
1:2A:1420:U:HO2'	1:2A:1421:G:P	2.36	0.43
1:2A:1448:G:H1'	1:2A:1528:A:N1	2.34	0.43
1:2A:2406:U:C4	11:2P:72:PRO:HD2	2.53	0.43
1:2A:2564:A:C2	1:2A:2647:U:H4'	2.54	0.43
1:2A:2888:C:H2'	1:2A:2889:C:C6	2.54	0.43
3:2D:11:PRO:O	3:2D:14:ARG:HG3	2.19	0.43
7:2H:127:GLU:C	7:2H:129:THR:N	2.77	0.43
8:2I:47:LEU:O	8:2I:51:ILE:HB	2.19	0.43
9:2N:32:THR:CG2	9:2N:37:LYS:HB2	2.49	0.43
9:2N:34:LEU:HD11	9:2N:120:LEU:HD13	2.01	0.43
10:2O:68:GLU:HB3	10:2O:78:ARG:HB2	2.00	0.43
12:2Q:116:GLU:O	12:2Q:120:ILE:HG13	2.18	0.43
31:29:18:ARG:NH1	31:29:21:GLY:O	2.52	0.43
32:2a:516:PSU:O2	62:2a:1913:HOH:O	2.20	0.43
32:2a:750:G:N3	46:2o:23:GLY:HA3	2.34	0.43
32:2a:1102:A:O3'	33:2b:96:ARG:NH2	2.51	0.43
37:2f:2:ARG:HE	37:2f:69:GLU:HG2	1.83	0.43
39:2h:97:VAL:HG13	39:2h:98:LYS:HG3	2.00	0.43
40:2i:54:ASP:C	40:2i:56:LEU:H	2.27	0.43
43:2l:77:LEU:HD23	43:2l:77:LEU:HA	1.83	0.43
46:2o:4:THR:OG1	46:2o:7:GLU:HG3	2.19	0.43
46:2o:8:LYS:O	46:2o:12:ILE:HG13	2.18	0.43
51:2t:72:LEU:HD12	51:2t:72:LEU:HA	1.79	0.43
54:2w:26:A:H2'	54:2w:27:G:H8	1.81	0.43
55:2x:10:G:N2	55:2x:26:G:H1'	2.34	0.43
55:2x:55:PSU:N3	55:2x:58:A:OP2	2.42	0.43
1:1A:1264:G:OP1	27:15:19:ARG:NH2	2.35	0.43
1:1A:2172:U:H3'	1:1A:2173:A:C5'	2.47	0.43
1:1A:2469:A:C2	1:1A:2470:G:H1'	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:254:G:O2'	48:1q:16:GLN:O	2.36	0.43
32:1a:265:G:H5'	48:1q:64:PRO:O	2.19	0.43
32:1a:877:C:OP1	39:1h:88:LYS:NZ	2.35	0.43
32:1a:1008:C:N3	32:1a:1021:G:O6	2.52	0.43
32:1a:1212:U:H4'	32:1a:1213:A:C8	2.54	0.43
33:1b:102:LEU:HB3	33:1b:180:LEU:CD1	2.49	0.43
41:1j:38:ILE:HG12	41:1j:71:LEU:HB3	1.99	0.43
44:1m:40:ASN:HD21	44:1m:42:ALA:HB3	1.83	0.43
1:2A:141:A:C8	1:2A:1408:C:O2'	2.69	0.43
1:2A:443:A:H5''	1:2A:444:C:OP1	2.18	0.43
1:2A:464:U:H4'	29:27:5:TRP:CZ3	2.54	0.43
1:2A:747:U:O2	1:2A:2014:A:H1'	2.18	0.43
1:2A:1388:G:H4'	1:2A:1525:G:O2'	2.18	0.43
1:2A:2249:U:N3	1:2A:2253:G:OP2	2.44	0.43
1:2A:2271:G:OP1	22:20:18:ALA:HB1	2.18	0.43
1:2A:2432:A:H5''	62:2A:4533:HOH:O	2.18	0.43
2:2B:46:A:H2'	2:2B:47:C:C6	2.54	0.43
6:2G:11:TYR:HE1	6:2G:172:LEU:HD11	1.83	0.43
6:2G:96:ARG:O	6:2G:100:TRP:CD1	2.72	0.43
10:2O:64:ARG:NH1	10:2O:101:PRO:O	2.45	0.43
26:24:62:ARG:HB2	26:24:63:TYR:CZ	2.54	0.43
26:24:67:TYR:OH	50:2s:43:GLU:OE1	2.27	0.43
29:27:5:TRP:CD1	29:27:7:PRO:HD3	2.54	0.43
32:2a:971:G:OP1	32:2a:971:G:H3'	2.19	0.43
32:2a:1109:C:H2'	32:2a:1110:A:O4'	2.19	0.43
38:2g:22:LEU:HG	38:2g:62:PHE:HE2	1.83	0.43
44:2m:40:ASN:ND2	44:2m:43:THR:HG23	2.34	0.43
47:2p:55:ARG:HA	47:2p:55:ARG:HH11	1.83	0.43
54:2w:41:A:H2'	54:2w:42:A:O4'	2.18	0.43
1:1A:786:C:H5''	1:1A:1780:A:C8	2.53	0.43
1:1A:1252:G:C2	1:1A:1253:A:C2	3.07	0.43
1:1A:1580:A:OP2	1:1A:1580:A:H8	2.01	0.43
2:1B:33:G:C2	2:1B:50:G:C2	3.07	0.43
3:1D:19:ALA:HB3	3:1D:21:PHE:CE1	2.54	0.43
4:1E:101:ARG:HB2	4:1E:201:THR:HG21	2.01	0.43
6:1G:126:ASP:HB3	6:1G:128:ARG:H	1.84	0.43
6:1G:146:TYR:HD2	6:1G:146:TYR:O	2.02	0.43
8:1I:9:LEU:HD12	8:1I:12:LEU:HD12	2.00	0.43
14:1S:58:LEU:HD23	14:1S:58:LEU:HA	1.78	0.43
16:1U:52:ARG:HE	16:1U:52:ARG:HB3	1.75	0.43
32:1a:196:A:H5''	32:1a:197:A:OP1	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:270:A:H2'	32:1a:271:C:H6	1.83	0.43
32:1a:393:A:OP1	47:1p:13:HIS:HE1	2.02	0.43
32:1a:1292:U:H2'	32:1a:1293:G:C8	2.54	0.43
33:1b:20:GLU:HG2	33:1b:23:ARG:NH1	2.34	0.43
33:1b:163:PHE:HD1	33:1b:185:ILE:HG13	1.83	0.43
47:1p:48:TRP:CE3	47:1p:49:LEU:HB2	2.54	0.43
1:2A:324:A:N6	1:2A:338:G:O2'	2.51	0.43
1:2A:531:C:OP1	1:2A:561:G:N1	2.49	0.43
1:2A:1006:C:O2'	9:2N:106:MET:HB3	2.18	0.43
1:2A:1351:C:O2'	1:2A:1571:A:N3	2.50	0.43
1:2A:2711:A:OP2	62:2A:3975:HOH:O	2.21	0.43
3:2D:58:HIS:ND1	3:2D:59:LYS:O	2.41	0.43
6:2G:7:LEU:HD11	6:2G:107:LEU:HD12	2.01	0.43
6:2G:129:GLY:O	6:2G:161:THR:HB	2.18	0.43
13:2R:62:ALA:O	13:2R:66:VAL:HG23	2.19	0.43
21:2Z:30:ASN:HA	21:2Z:89:PHE:CE1	2.52	0.43
23:21:6:GLU:HB2	23:21:61:ARG:O	2.19	0.43
26:24:13:ARG:HG2	26:24:23:GLU:HA	2.01	0.43
32:2a:1254:C:O4'	32:2a:1356:G:H5''	2.18	0.43
32:2a:1507:A:H61	32:2a:1528:U:H3	1.67	0.43
33:2b:97:TRP:CH2	33:2b:102:LEU:HG	2.52	0.43
33:2b:185:ILE:HG22	33:2b:199:TYR:HD2	1.84	0.43
34:2c:83:ARG:C	34:2c:85:ARG:N	2.77	0.43
55:2x:36:U:H2'	55:2x:37:A:O4'	2.19	0.43
1:1A:271(K):U:H5	8:1I:46:ALA:HB1	1.84	0.43
1:1A:271(K):U:C5	8:1I:46:ALA:HB1	2.54	0.43
1:1A:301:G:C6	1:1A:317:G:C6	3.07	0.43
1:1A:624:C:H6	1:1A:624:C:O5'	2.02	0.43
1:1A:1087:G:H1	1:1A:1102:C:N4	2.16	0.43
1:1A:1614:A:P	1:1A:1614:A:H8	2.42	0.43
3:1D:9:TYR:CE1	3:1D:13:ARG:HG3	2.54	0.43
6:1G:56:ALA:HA	6:1G:59:GLU:CD	2.44	0.43
6:1G:64:THR:HB	6:1G:94:LEU:HD11	2.00	0.43
9:1N:18:ALA:HA	9:1N:21:LYS:HG3	2.01	0.43
11:1P:37:GLY:C	11:1P:38:GLN:O	2.61	0.43
21:1Z:23:LYS:HD2	21:1Z:40:ASP:HA	2.00	0.43
21:1Z:69:THR:HG22	21:1Z:90:VAL:HA	2.00	0.43
21:1Z:99:TYR:HB3	21:1Z:123:ASP:HB2	2.00	0.43
32:1a:221:C:H2'	32:1a:222:U:H6	1.83	0.43
32:1a:1132:C:N4	32:1a:1142:G:H1	2.15	0.43
40:1i:42:ARG:NH1	40:1i:71:SER:OG	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:18:ALA:HA	44:1m:21:TYR:HD2	1.84	0.43
44:1m:24:GLY:HA3	44:1m:66:LEU:HD22	2.00	0.43
1:2A:459:U:H4'	29:27:40:TRP:CZ3	2.54	0.43
1:2A:1926:U:O2'	1:2A:1928:A:N7	2.45	0.43
1:2A:2582:G:OP2	62:2A:3976:HOH:O	2.21	0.43
1:2A:2835:A:N6	1:2A:2879:C:OP2	2.46	0.43
1:2A:2870:C:H2'	1:2A:2871:C:O4'	2.18	0.43
6:2G:33:ARG:O	6:2G:34:LEU:HD23	2.18	0.43
7:2H:58:GLU:HG2	7:2H:61:HIS:H	1.84	0.43
7:2H:149:ARG:HD2	7:2H:164:TYR:CZ	2.54	0.43
8:2I:38:LEU:HD11	23:21:75:GLU:HG3	2.00	0.43
14:2S:13:ARG:HG3	14:2S:14:VAL:N	2.32	0.43
17:2V:12:TYR:CD1	17:2V:20:LEU:HD21	2.54	0.43
24:22:30:ARG:O	24:22:34:GLU:HG3	2.19	0.43
26:24:45:GLY:C	26:24:47:GLN:H	2.27	0.43
32:2a:266:G:H5''	32:2a:268:C:H41	1.83	0.43
32:2a:443:C:H2'	32:2a:444:C:H6	1.84	0.43
35:2d:74:GLN:O	35:2d:78:LEU:HB2	2.18	0.43
45:2n:12:ARG:NH2	45:2n:14:PRO:HA	2.31	0.43
47:2p:3:LYS:HD3	47:2p:3:LYS:HA	1.81	0.43
51:2t:86:ARG:O	51:2t:90:GLN:HB2	2.18	0.43
54:2w:13:C:O2'	54:2w:14:A:H8	2.00	0.43
54:2w:19:G:H1	54:2w:56:C:H42	1.67	0.43
54:2w:62:C:H2'	54:2w:63:U:O4'	2.19	0.43
1:1A:468:G:N7	29:17:39:ARG:NH2	2.60	0.42
1:1A:828:U:H4'	1:1A:831:G:N1	2.33	0.42
1:1A:1095:A:C8	1:1A:1096:A:N7	2.87	0.42
1:1A:1857:G:C6	1:1A:1858:G:C6	3.07	0.42
1:1A:1949:G:C6	1:1A:1950:G:C6	3.06	0.42
1:1A:2251:OMG:HM23	1:1A:2251:OMG:H1'	1.82	0.42
4:1E:174:ASP:OD1	4:1E:175:VAL:N	2.52	0.42
6:1G:106:LEU:HD12	6:1G:110:ALA:HB3	2.01	0.42
8:1I:76:THR:O	8:1I:76:THR:OG1	2.33	0.42
12:1Q:30:GLY:HA2	12:1Q:107:ALA:HB2	1.99	0.42
25:13:35:ARG:HE	25:13:37:LEU:HD21	1.84	0.42
32:1a:134:A:H1'	32:1a:325:A:C5	2.53	0.42
32:1a:942:G:C2	32:1a:1342:C:C2	3.07	0.42
32:1a:971:G:H22	32:1a:1363(A):A:P	2.40	0.42
32:1a:1220:G:H2'	32:1a:1221:G:O4'	2.19	0.42
32:1a:1326:C:OP1	52:1u:17:THR:OG1	2.22	0.42
32:1a:1504:G:OP1	32:1a:1507:A:H4'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:174:VAL:HG13	33:1b:184:VAL:HG11	2.01	0.42
33:1b:230:VAL:HG12	33:1b:232:PRO:HD2	2.01	0.42
34:1c:8:ILE:HG13	34:1c:16:ARG:NE	2.34	0.42
35:1d:142:PRO:HA	35:1d:185:PHE:HD2	1.84	0.42
35:1d:173:TRP:O	35:1d:186:LEU:HB2	2.19	0.42
42:1k:34:ASP:OD1	42:1k:38:ASN:N	2.47	0.42
42:1k:54:ARG:H	42:1k:54:ARG:HG3	1.68	0.42
43:1l:7:ILE:HD13	43:1l:7:ILE:HA	1.87	0.42
50:1s:50:ALA:HA	50:1s:58:VAL:O	2.19	0.42
54:1w:54:5MU:H2'	54:1w:55:PSU:O4'	2.18	0.42
1:2A:55:G:O2'	1:2A:127:A:N1	2.37	0.42
1:2A:506:G:O3'	1:2A:507:A:H8	2.02	0.42
1:2A:1570:A:H5'	3:2D:36:PRO:HD3	2.00	0.42
1:2A:2026:C:H42	1:2A:2037:G:H1	1.65	0.42
1:2A:2320:A:N3	1:2A:2320:A:H2'	2.33	0.42
3:2D:273:ARG:HG2	3:2D:274:ARG:H	1.83	0.42
6:2G:102:PHE:O	6:2G:106:LEU:HB2	2.19	0.42
8:2I:14:ASP:N	8:2I:17:GLN:OE1	2.32	0.42
10:2O:112:MET:HA	10:2O:115:VAL:HB	2.00	0.42
32:2a:46:G:H2'	32:2a:366:C:C5	2.54	0.42
32:2a:256:U:H2'	32:2a:257:G:C8	2.54	0.42
32:2a:321:A:H2	32:2a:332:G:H22	1.67	0.42
32:2a:552:U:C5'	43:2l:86:ARG:HE	2.32	0.42
32:2a:922:G:C2	32:2a:923:A:C4	3.07	0.42
32:2a:977:A:O2'	32:2a:981:U:N3	2.51	0.42
32:2a:1061:G:H5'	41:2j:59:SER:HB3	1.99	0.42
32:2a:1074:G:O2'	32:2a:1101:A:N1	2.47	0.42
33:2b:37:ASN:C	33:2b:39:ILE:H	2.26	0.42
35:2d:114:ARG:HA	35:2d:117:ALA:HB3	2.01	0.42
46:2o:15:PHE:CZ	46:2o:84:LYS:HD2	2.54	0.42
54:2w:51:A:H3'	54:2w:64:G:H21	1.83	0.42
55:2x:18:G:C2	55:2x:58:A:C5	3.07	0.42
1:1A:363(C):G:H2'	1:1A:363(D):G:H8	1.83	0.42
1:1A:764:A:H5''	3:1D:210:GLY:CA	2.49	0.42
1:1A:1010:A:N3	1:1A:1153:C:H1'	2.34	0.42
1:1A:1079:C:C4	1:1A:1088:A:N3	2.88	0.42
1:1A:1138:G:N3	9:1N:106:MET:HE2	2.34	0.42
1:1A:1790:C:H2'	1:1A:1791:A:C5	2.54	0.42
1:1A:2136:C:N4	1:1A:2155:G:C6	2.88	0.42
1:1A:2271:G:H5''	22:10:20:ARG:NH1	2.34	0.42
1:1A:2773:C:H2'	1:1A:2774:C:H6	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:12:LEU:HD23	8:1I:12:LEU:HA	1.80	0.42
9:1N:15:LEU:HB3	9:1N:137:LYS:HA	2.01	0.42
12:1Q:1:MET:HE3	12:1Q:1:MET:HB2	1.86	0.42
12:1Q:89:ASN:HB2	55:1x:1:C:C4	2.54	0.42
17:1V:4:ILE:HA	17:1V:12:TYR:O	2.19	0.42
26:14:57:GLU:OE1	26:14:58:ARG:NH1	2.52	0.42
32:1a:737:A:H2'	32:1a:738:C:C6	2.54	0.42
32:1a:831:U:H2'	32:1a:832:C:C6	2.54	0.42
32:1a:1171:G:H2'	32:1a:1172:C:C6	2.54	0.42
32:1a:1381:U:H1'	38:1g:79:ARG:HG2	2.02	0.42
33:1b:78:GLN:OE1	33:1b:94:ASN:ND2	2.52	0.42
36:1e:9:LYS:HD3	36:1e:10:MET:N	2.33	0.42
41:1j:65:LEU:HD12	45:1n:55:GLY:O	2.19	0.42
44:1m:4:ILE:HA	44:1m:5:ALA:HA	1.82	0.42
1:2A:510:C:H2'	1:2A:511:U:O4'	2.20	0.42
1:2A:580:C:H2'	1:2A:581:C:C6	2.54	0.42
1:2A:2432:A:C6	1:2A:2433:A:C6	3.07	0.42
2:2B:13:A:N1	2:2B:69:G:O2'	2.52	0.42
5:2F:137:LYS:H	5:2F:137:LYS:HG2	1.66	0.42
5:2F:150:GLY:HA2	5:2F:172:TRP:CE3	2.54	0.42
10:2O:92:GLU:H	10:2O:92:GLU:HG3	1.51	0.42
15:2T:28:VAL:HG13	15:2T:86:ILE:HG23	2.01	0.42
32:2a:169:C:H2'	32:2a:170:U:O4'	2.19	0.42
32:2a:826:C:H2'	32:2a:827:U:C6	2.54	0.42
32:2a:848:C:H2'	32:2a:849:C:O4'	2.19	0.42
32:2a:1217:C:H2'	32:2a:1218:C:O4'	2.19	0.42
35:2d:152:SER:O	35:2d:155:LEU:HB2	2.18	0.42
54:2w:12:U:H3	54:2w:23:A:N6	2.14	0.42
57:2y:11:C:N4	57:2y:24:G:H1	2.16	0.42
1:1A:558:G:OP1	9:1N:111:PRO:HD2	2.19	0.42
1:1A:692:C:O2'	3:1D:38:LYS:NZ	2.52	0.42
1:1A:887:A:H1'	1:1A:889:C:OP1	2.19	0.42
1:1A:1365:A:OP2	23:11:3:LYS:HG2	2.19	0.42
1:1A:1952:A:C6	1:1A:1953:A:N1	2.88	0.42
2:1B:2:C:H2'	2:1B:3:C:C6	2.55	0.42
6:1G:27:ASN:OD1	6:1G:28:VAL:N	2.52	0.42
7:1H:64:LEU:HD23	7:1H:64:LEU:HA	1.81	0.42
12:1Q:54:MET:HE3	12:1Q:54:MET:HB2	1.85	0.42
16:1U:76:TYR:CE2	16:1U:80:ILE:HG13	2.55	0.42
23:11:12:PRO:HB2	23:11:41:ARG:NH2	2.35	0.42
32:1a:162:A:H3'	32:1a:163:C:C5'	2.49	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:437:U:O2'	35:1d:123:HIS:HD2	2.01	0.42
32:1a:643:C:H2'	32:1a:644:G:H8	1.83	0.42
32:1a:692:U:O2'	32:1a:694:A:N7	2.33	0.42
32:1a:982:U:H4'	32:1a:983:A:O5'	2.20	0.42
32:1a:993:G:C2'	32:1a:995:C:H41	2.32	0.42
32:1a:1122:U:H2'	32:1a:1123:A:O4'	2.20	0.42
32:1a:1466:C:H2'	32:1a:1467:G:O4'	2.19	0.42
40:1i:86:VAL:C	40:1i:88:TYR:H	2.28	0.42
55:1x:15:G:H21	55:1x:21:A:H1'	1.85	0.42
1:2A:30:G:C6	1:2A:31:C:C4	3.08	0.42
1:2A:118:A:N3	1:2A:178:G:H1'	2.35	0.42
1:2A:455:C:N3	1:2A:472:A:H2'	2.34	0.42
1:2A:632:A:H2'	1:2A:633:A:C8	2.54	0.42
1:2A:877:U:H3	1:2A:899:A:H2	1.66	0.42
1:2A:1178:C:H2'	1:2A:1179:C:C6	2.53	0.42
1:2A:2050:C:N4	1:2A:2051:A:C6	2.87	0.42
1:2A:2280:G:O6	22:20:14:ARG:HD2	2.18	0.42
2:2B:48:A:OP2	14:2S:30:ARG:NH2	2.52	0.42
7:2H:121:ILE:HG21	7:2H:144:VAL:HG11	2.01	0.42
8:2I:38:LEU:O	8:2I:40:THR:N	2.52	0.42
8:2I:45:LYS:HB2	8:2I:45:LYS:HE2	1.66	0.42
15:2T:125:ARG:HE	15:2T:125:ARG:HB3	1.47	0.42
16:2U:10:ARG:NH1	62:2U:302:HOH:O	2.53	0.42
32:2a:677:U:H1'	42:2k:119:CYS:SG	2.59	0.42
32:2a:1216:G:H2'	32:2a:1217:C:C6	2.54	0.42
32:2a:1305:G:H5'	52:2u:4:GLY:HA3	2.01	0.42
33:2b:110:GLN:HG2	33:2b:111:ARG:NH1	2.33	0.42
34:2c:98:ASN:HD22	34:2c:98:ASN:H	1.67	0.42
36:2e:43:LEU:HD21	36:2e:132:ALA:HB1	2.00	0.42
57:2y:9:A:C2	57:2y:45:G:N2	2.87	0.42
1:1A:1011:G:OP1	16:1U:77:SER:OG	2.37	0.42
1:1A:1996:C:H4'	1:1A:1997:G:OP1	2.19	0.42
1:1A:2051:A:H5'	1:1A:2578:G:O4'	2.18	0.42
2:1B:66:A:H61	2:1B:108:U:H2'	1.83	0.42
7:1H:154:PRO:HB3	7:1H:163:TYR:CE1	2.55	0.42
13:1R:28:LEU:HD23	13:1R:48:VAL:HG21	2.00	0.42
16:1U:34:LYS:HA	16:1U:34:LYS:HD2	1.68	0.42
25:13:16:PRO:HB2	25:13:18:ASP:OD1	2.19	0.42
32:1a:23:C:OP2	32:1a:561:U:N3	2.37	0.42
32:1a:538:G:H5''	43:1l:114:LYS:HB2	2.01	0.42
32:1a:667:G:H4'	46:1o:51:HIS:ND1	2.33	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:926:G:C6	32:1a:1505:G:C6	3.06	0.42
32:1a:1158:C:O2'	32:1a:1160:G:OP1	2.31	0.42
32:1a:1318:A:OP1	50:1s:7:LYS:NZ	2.28	0.42
32:1a:1349:A:C2	32:1a:1374:A:C4	3.08	0.42
41:1j:7:LYS:HG3	41:1j:71:LEU:HD13	2.00	0.42
55:1x:47:U:H5'	55:1x:48:C:H5'	2.02	0.42
1:2A:271(Y):U:O3'	1:2A:271(Z):C:H6	2.02	0.42
1:2A:1260:G:C6	1:2A:1261:C:C4	3.07	0.42
1:2A:1264:G:H2'	1:2A:2014:A:N6	2.34	0.42
1:2A:1275:A:N1	1:2A:1295:C:O2'	2.39	0.42
1:2A:1942:5MC:H4'	54:2w:72:C:OP2	2.19	0.42
1:2A:2299:G:H2'	1:2A:2300:G:C8	2.55	0.42
1:2A:2543:G:H2'	1:2A:2544:G:C8	2.53	0.42
4:2E:11:MET:HE2	4:2E:11:MET:HB3	1.96	0.42
5:2F:101:LEU:HD12	5:2F:102:PRO:HD2	2.00	0.42
11:2P:124:LYS:HA	11:2P:144:GLU:O	2.19	0.42
12:2Q:72:LYS:HB3	12:2Q:94:VAL:HG23	2.01	0.42
13:2R:59:ASP:OD2	13:2R:61:HIS:HB3	2.20	0.42
16:2U:61:TRP:CZ2	16:2U:93:LYS:HG3	2.54	0.42
32:2a:982:U:N3	32:2a:1223:C:N3	2.66	0.42
32:2a:1258:G:H8	32:2a:1258:G:OP2	2.02	0.42
41:2j:15:THR:HB	41:2j:94:VAL:HG23	2.01	0.42
43:2l:77:LEU:HD21	43:2l:107:ALA:HB2	2.02	0.42
49:2r:33:ASP:OD2	49:2r:36:ASN:HB2	2.20	0.42
54:2w:50:C:N3	54:2w:64:G:O6	2.52	0.42
1:1A:184:C:H2'	1:1A:185:U:H6	1.83	0.42
1:1A:1239:G:H2'	1:1A:1240:U:O4'	2.19	0.42
1:1A:1278:A:OP1	13:1R:36:THR:HG23	2.20	0.42
1:1A:1512:U:H2'	1:1A:1513:C:C6	2.54	0.42
1:1A:1803:A:C8	1:1A:1804:C:C5	3.08	0.42
1:1A:1916:A:H2'	1:1A:1917:PSU:H6	1.85	0.42
1:1A:2136:C:N4	1:1A:2155:G:H1	2.16	0.42
1:1A:2143:C:H2'	1:1A:2144:U:O4'	2.19	0.42
2:1B:74:U:H2'	2:1B:75:G:O4'	2.20	0.42
3:1D:35:LYS:HB2	3:1D:36:PRO:HD2	2.00	0.42
3:1D:76:PRO:O	3:1D:98:VAL:HG22	2.19	0.42
3:1D:223:GLY:HA3	3:1D:231:HIS:CE1	2.55	0.42
5:1F:150:GLY:HA2	5:1F:172:TRP:CD2	2.54	0.42
17:1V:34:GLU:HB3	17:1V:56:SER:HB2	2.00	0.42
20:1Y:35:TYR:CE2	20:1Y:69:ALA:HB3	2.55	0.42
24:12:3:LEU:O	24:12:7:ARG:HG3	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:13:50:VAL:HB	25:13:53:LEU:HD12	2.01	0.42
32:1a:737:A:H5''	37:1f:92:LYS:HG3	2.01	0.42
32:1a:1518:MA6:H93	32:1a:1519:MA6:C9	2.49	0.42
34:1c:119:ARG:HG2	34:1c:140:ARG:NH2	2.35	0.42
35:1d:117:ALA:O	35:1d:121:VAL:HG23	2.20	0.42
36:1e:146:ALA:O	36:1e:150:ARG:HB2	2.19	0.42
40:1i:48:GLU:HA	40:1i:51:ARG:HD3	2.01	0.42
44:1m:84:ILE:HB	50:1s:66:MET:HE2	2.01	0.42
47:1p:3:LYS:HE3	47:1p:65:GLN:HB2	2.02	0.42
1:2A:700:G:O2'	1:2A:1632:A:N3	2.49	0.42
1:2A:730:C:H2'	1:2A:731:C:H6	1.84	0.42
1:2A:1419:A:H5'	1:2A:1579:A:H61	1.83	0.42
1:2A:1469:A:H2'	1:2A:1470:G:O4'	2.19	0.42
1:2A:2364:C:H2'	1:2A:2365:G:O4'	2.20	0.42
1:2A:2753:A:N3	31:29:15:LYS:NZ	2.66	0.42
2:2B:40:U:O2'	2:2B:41:U:H5'	2.19	0.42
4:2E:101:ARG:HA	4:2E:170:LEU:O	2.19	0.42
5:2F:24:LEU:HD12	5:2F:24:LEU:HA	1.90	0.42
10:2O:48:PRO:HB2	10:2O:49:ARG:CZ	2.49	0.42
14:2S:15:ARG:O	14:2S:19:LYS:HG2	2.19	0.42
21:2Z:27:VAL:HG12	21:2Z:85:HIS:CE1	2.47	0.42
32:2a:200:G:H1	32:2a:217:C:H42	1.68	0.42
32:2a:300:A:H2'	32:2a:301:G:O4'	2.19	0.42
32:2a:1073:U:H2'	32:2a:1074:G:H8	1.84	0.42
32:2a:1376:U:C2	32:2a:1377:A:N7	2.87	0.42
33:2b:98:LEU:HB3	33:2b:101:MET:HG3	2.00	0.42
33:2b:189:ASP:OD1	33:2b:189:ASP:N	2.32	0.42
42:2k:41:THR:HG21	42:2k:71:LYS:C	2.45	0.42
44:2m:117:VAL:HG22	44:2m:118:ALA:H	1.85	0.42
47:2p:18:ARG:HD3	47:2p:35:LYS:HD2	2.00	0.42
48:2q:6:LEU:O	48:2q:58:GLU:HA	2.19	0.42
49:2r:67:ALA:HA	49:2r:70:ILE:HD12	2.00	0.42
1:1A:8:A:H2'	1:1A:9:U:H6	1.83	0.42
1:1A:72:U:H5'	24:12:61:LEU:HD12	2.00	0.42
1:1A:579:G:H2'	1:1A:580:C:C6	2.55	0.42
1:1A:1176:G:H4'	1:1A:1177:A:OP1	2.19	0.42
1:1A:1341:U:OP2	1:1A:1394:U:O2'	2.36	0.42
1:1A:1396:U:H6	1:1A:1396:U:H2'	1.69	0.42
1:1A:2110:G:C2	1:1A:2120:G:H1'	2.55	0.42
1:1A:2142:C:OP1	1:1A:2142:C:H4'	2.19	0.42
1:1A:2193:G:H2'	1:1A:2194:G:H8	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:18:62:LEU:HB3	30:18:65:GLU:HG3	2.00	0.42
32:1a:134:A:H61	47:1p:25:ARG:HH12	1.66	0.42
32:1a:181:G:H4'	32:1a:182:U:H5'	2.00	0.42
32:1a:735:C:H2'	32:1a:736:C:C6	2.54	0.42
32:1a:1089:G:H1	32:1a:1096:C:H42	1.67	0.42
39:1h:77:GLU:HG3	39:1h:78:GLN:N	2.34	0.42
39:1h:134:ILE:HD13	39:1h:134:ILE:HA	1.79	0.42
54:1w:11:C:N4	54:1w:24:G:H1	2.18	0.42
55:1x:37:A:H2'	55:1x:38:A:O4'	2.19	0.42
1:2A:793:A:OP2	1:2A:2071:A:O2'	2.30	0.42
1:2A:910:A:H2	1:2A:2264:C:O2	2.01	0.42
1:2A:1178:C:H2'	1:2A:1179:C:H6	1.84	0.42
1:2A:1530:C:H6	1:2A:1530:C:H2'	1.71	0.42
1:2A:1599:C:OP1	19:2X:36:LYS:HG3	2.20	0.42
1:2A:2118:U:C4	1:2A:2149:G:H1'	2.55	0.42
1:2A:2615:U:C2	27:25:7:PRO:HA	2.54	0.42
4:2E:38:THR:HG23	4:2E:41:LYS:HB3	2.02	0.42
5:2F:115:ALA:O	5:2F:119:ARG:HB2	2.20	0.42
6:2G:179:PRO:HB2	26:24:42:PHE:CE2	2.55	0.42
16:2U:104:GLN:HE21	16:2U:105:VAL:HG23	1.84	0.42
24:22:33:MET:O	24:22:36:ARG:HB2	2.19	0.42
26:24:16:CYS:SG	26:24:17:GLY:N	2.93	0.42
32:2a:1009:G:H2'	32:2a:1010:G:H5'	2.01	0.42
37:2f:53:ALA:HB3	37:2f:86:ARG:CZ	2.50	0.42
40:2i:70:LYS:O	40:2i:74:ILE:N	2.53	0.42
48:2q:29:HIS:CG	48:2q:30:PRO:HD2	2.54	0.42
1:1A:1051:G:H2'	1:1A:1052:C:O4'	2.19	0.42
1:1A:2053:G:OP1	4:1E:144:ARG:HG3	2.20	0.42
1:1A:2161:C:O2'	1:1A:2162:G:H5''	2.19	0.42
1:1A:2316:C:O2'	6:1G:128:ARG:NH2	2.53	0.42
1:1A:2405:G:O2'	1:1A:2406:U:OP1	2.29	0.42
3:1D:38:LYS:HA	3:1D:38:LYS:HD2	1.94	0.42
11:1P:112:LEU:O	11:1P:128:HIS:HB2	2.20	0.42
12:1Q:59:ARG:C	12:1Q:61:GLY:H	2.25	0.42
18:1W:68:ARG:NH1	18:1W:111:HIS:HA	2.35	0.42
21:1Z:75:ASN:O	21:1Z:84:GLU:HG2	2.19	0.42
28:16:12:GLU:OE1	28:16:52:VAL:HG11	2.20	0.42
32:1a:130:A:HO2'	32:1a:131:C:P	2.40	0.42
32:1a:689:C:OP1	42:1k:27:ASN:ND2	2.40	0.42
32:1a:955:U:O2'	50:1s:83:HIS:HD2	2.02	0.42
36:1e:72:GLN:O	36:1e:75:THR:HG22	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:78:HIS:CE1	36:1e:142:LEU:HA	2.55	0.42
36:1e:85:GLY:C	36:1e:87:SER:H	2.27	0.42
39:1h:103:VAL:HG23	39:1h:110:ALA:HB2	2.01	0.42
48:1q:25:ARG:HB2	48:1q:25:ARG:HH11	1.84	0.42
48:1q:50:LYS:HE2	48:1q:51:TYR:CZ	2.54	0.42
51:1t:63:ILE:HG22	51:1t:77:ALA:HB1	2.01	0.42
53:1v:21:A:N1	54:1w:34:U8U:C4	2.82	0.42
57:1y:36:U:C4	57:1y:37:T6A:C4	3.07	0.42
1:2A:557:U:H2'	1:2A:558:G:C8	2.55	0.42
1:2A:892:G:H3'	1:2A:893:C:C5'	2.49	0.42
1:2A:980:A:N3	1:2A:2037:G:O2'	2.53	0.42
1:2A:1022:G:N7	9:2N:66:LYS:HE2	2.35	0.42
1:2A:1131:G:O6	1:2A:2040:C:H1'	2.20	0.42
1:2A:1472:A:H2'	1:2A:1473:G:O4'	2.19	0.42
1:2A:1581:G:H2'	1:2A:1582:C:O4'	2.19	0.42
1:2A:1785:A:N6	62:2A:4126:HOH:O	2.52	0.42
1:2A:2671:A:H2'	1:2A:2672:G:O4'	2.18	0.42
1:2A:2784:C:H1'	4:2E:37:ARG:NH1	2.31	0.42
2:2B:44:G:N3	2:2B:47:C:N4	2.63	0.42
2:2B:114:C:H2'	2:2B:115:G:H8	1.84	0.42
4:2E:5:LEU:HD11	4:2E:79:ARG:HB2	2.01	0.42
9:2N:42:TRP:CE3	16:2U:63:VAL:HG11	2.55	0.42
14:2S:27:SER:HA	14:2S:88:ASP:HB3	2.01	0.42
21:2Z:77:ASP:CG	21:2Z:80:ARG:HH11	2.26	0.42
22:20:46:LYS:HB2	22:20:78:TYR:CE1	2.54	0.42
32:2a:359:U:H2'	32:2a:360:A:C8	2.54	0.42
32:2a:403:C:N4	62:2a:1929:HOH:O	2.51	0.42
32:2a:1241:G:H2'	32:2a:1242:C:C6	2.55	0.42
36:2e:9:LYS:HD3	36:2e:9:LYS:HA	1.84	0.42
38:2g:16:LEU:HD22	40:2i:41:VAL:O	2.20	0.42
42:2k:52:GLY:N	42:2k:55:LYS:HE2	2.34	0.42
51:2t:68:LYS:HB3	51:2t:68:LYS:HE2	1.81	0.42
1:1A:2032:G:OP2	1:1A:2454:G:O2'	2.29	0.42
1:1A:2142:C:H2'	1:1A:2143:C:C6	2.54	0.42
4:1E:7:VAL:HG23	4:1E:51:PHE:HE2	1.85	0.42
5:1F:144:LYS:HE3	5:1F:144:LYS:HB3	1.85	0.42
19:1X:53:LYS:HB3	19:1X:82:GLN:HB3	2.02	0.42
26:14:49:PHE:HB3	26:14:50:VAL:H	1.45	0.42
32:1a:356:A:N3	32:1a:368:U:O2'	2.47	0.42
32:1a:890:G:O2'	32:1a:906:G:O6	2.35	0.42
32:1a:1312:G:N2	32:1a:1326:C:C2	2.88	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:24:TRP:CD1	33:1b:24:TRP:H	2.37	0.42
38:1g:78:ARG:HD3	38:1g:156:TRP:CZ3	2.54	0.42
42:1k:111:ASP:OD1	49:1r:84:LYS:HE3	2.20	0.42
44:1m:44:ARG:HD3	44:1m:44:ARG:HA	1.88	0.42
49:1r:38:GLU:O	49:1r:41:LYS:HG2	2.19	0.42
57:1y:28:U:H3	57:1y:42:A:N6	2.16	0.42
1:2A:569:U:C4	1:2A:570:G:C6	3.08	0.42
1:2A:907:U:O2'	12:2Q:101:ARG:NH2	2.43	0.42
1:2A:1221(A):C:C2	1:2A:1229:G:C2	3.07	0.42
1:2A:2286:A:P	28:26:29:ASN:HD22	2.43	0.42
1:2A:2740:A:C6	1:2A:2764:A:C8	3.08	0.42
2:2B:119:G:H3'	2:2B:120:A:C8	2.55	0.42
5:2F:161:GLU:O	5:2F:165:ARG:HG3	2.19	0.42
25:23:31:LEU:C	25:23:33:GLN:H	2.27	0.42
32:2a:23:C:OP2	32:2a:561:U:N3	2.48	0.42
32:2a:280:C:N3	48:2q:39:SER:OG	2.51	0.42
32:2a:804:U:OP1	62:2a:1916:HOH:O	2.22	0.42
32:2a:1206:G:H2'	32:2a:1207:2MG:O4'	2.19	0.42
32:2a:1225:A:H2'	32:2a:1226:C:C5	2.55	0.42
32:2a:1373:G:H5''	38:2g:36:LYS:CB	2.50	0.42
45:2n:23:ARG:HA	45:2n:29:ARG:O	2.20	0.42
51:2t:54:LYS:HB3	51:2t:54:LYS:HE2	1.79	0.42
57:2y:48:C:C5	57:2y:59:A:H5''	2.55	0.42
1:1A:818:G:H4'	1:1A:838:C:O3'	2.20	0.42
1:1A:1537:G:H2'	1:1A:1538:G:C8	2.55	0.42
1:1A:1558:A:O2'	62:1A:4167:HOH:O	2.22	0.42
1:1A:1651:G:N7	13:1R:11:ASN:ND2	2.68	0.42
1:1A:2188:C:H2'	1:1A:2189:U:O4'	2.19	0.42
1:1A:2556:C:H2'	1:1A:2557:G:O4'	2.20	0.42
1:1A:2567:G:H2'	1:1A:2568:C:H6	1.82	0.42
1:1A:2848:G:H3'	15:1T:95:ARG:O	2.19	0.42
2:1B:108:U:H2'	2:1B:109:C:H5''	2.01	0.42
8:1I:38:LEU:HD23	8:1I:38:LEU:H	1.85	0.42
10:1O:79:PHE:CD1	15:1T:72:VAL:HG22	2.55	0.42
12:1Q:37:LEU:HD21	12:1Q:130:LYS:HB2	2.02	0.42
32:1a:370:C:H2'	32:1a:371:G:C8	2.55	0.42
32:1a:837:G:H2'	32:1a:838:G:O4'	2.20	0.42
32:1a:922:G:H2'	32:1a:923:A:C8	2.55	0.42
33:1b:37:ASN:C	33:1b:39:ILE:H	2.28	0.42
35:1d:101:LEU:HB2	35:1d:138:TYR:HB3	2.02	0.42
37:1f:18:GLN:HA	37:1f:21:LEU:HG	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:1i:79:LEU:HD22	40:1i:104:ARG:HB2	2.02	0.42
42:1k:43:SER:HB3	42:1k:64:ALA:O	2.20	0.42
44:1m:67:GLU:O	44:1m:71:ARG:HB2	2.19	0.42
47:1p:57:ARG:HE	47:1p:79:VAL:HG13	1.85	0.42
50:1s:40:ILE:HB	50:1s:67:VAL:O	2.20	0.42
51:1t:40:ALA:HB2	51:1t:55:ILE:HG22	2.02	0.42
1:2A:252:G:OP1	11:2P:50:ARG:NH1	2.43	0.42
1:2A:453:C:O2	1:2A:457:A:O2'	2.38	0.42
1:2A:728:G:H5''	3:2D:13:ARG:NH2	2.34	0.42
1:2A:1030:G:OP2	12:2Q:128:LYS:NZ	2.51	0.42
1:2A:1401:G:H2'	1:2A:1402:C:O4'	2.19	0.42
2:2B:43:C:C4	2:2B:45:A:C6	3.08	0.42
2:2B:119:G:H5'	2:2B:120:A:OP2	2.20	0.42
3:2D:79:VAL:HA	3:2D:95:LEU:HD23	2.01	0.42
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	2.01	0.42
6:2G:124:SER:OG	6:2G:132:ASN:O	2.37	0.42
8:2I:2:LYS:HB3	8:2I:2:LYS:HE2	1.86	0.42
9:2N:104:LYS:HA	9:2N:107:LEU:HG	2.01	0.42
11:2P:6:LEU:HD23	11:2P:6:LEU:HA	1.72	0.42
15:2T:26:ASP:HA	15:2T:92:GLY:H	1.84	0.42
15:2T:83:ILE:HD13	15:2T:86:ILE:HD11	2.00	0.42
32:2a:197:A:H4'	32:2a:198:G:O5'	2.20	0.42
32:2a:691:G:H2'	32:2a:692:U:H6	1.85	0.42
32:2a:693:G:C6	32:2a:694:A:C6	3.08	0.42
32:2a:947:G:H1	32:2a:1234:C:H42	1.67	0.42
32:2a:1061:G:C5'	41:2j:59:SER:HB3	2.50	0.42
32:2a:1122:U:C2	32:2a:1123:A:C8	3.07	0.42
32:2a:1144:G:C6	32:2a:1145:C:N4	2.88	0.42
32:2a:1157:A:H61	32:2a:1178:G:N2	2.17	0.42
32:2a:1272:G:N2	32:2a:1273:G:N7	2.68	0.42
32:2a:1359:C:H1'	32:2a:1362:C:H41	1.85	0.42
32:2a:1372:U:H2'	32:2a:1373:G:O4'	2.19	0.42
33:2b:28:PHE:CG	33:2b:190:THR:HA	2.54	0.42
36:2e:28:PHE:O	36:2e:47:LYS:HA	2.20	0.42
54:2w:19:G:N2	54:2w:56:C:N3	2.64	0.42
1:1A:218:A:C2	1:1A:235:U:H4'	2.55	0.42
1:1A:476:G:N1	1:1A:479:A:OP2	2.53	0.42
1:1A:2165:G:N2	1:1A:2171:A:O2'	2.53	0.42
8:1I:38:LEU:HD23	8:1I:38:LEU:N	2.34	0.42
8:1I:84:GLY:O	8:1I:86:THR:N	2.52	0.42
19:1X:8:ILE:HD13	19:1X:30:VAL:HG12	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:638:G:C2	32:1a:639:G:C4	3.08	0.42
32:1a:1060:C:H5''	41:1j:51:ARG:HG2	2.01	0.42
32:1a:1082:G:H2'	32:1a:1083:U:O4'	2.20	0.42
33:1b:168:THR:OG1	33:1b:192:SER:HA	2.20	0.42
35:1d:118:ARG:HG3	35:1d:136:PRO:HB3	2.02	0.42
44:1m:108:ARG:HD3	44:1m:108:ARG:HA	1.63	0.42
1:2A:31:C:H5''	1:2A:1239:G:OP1	2.20	0.42
1:2A:76:C:O2'	24:22:59:ARG:HA	2.19	0.42
1:2A:236:C:H2'	1:2A:237:C:C6	2.55	0.42
1:2A:1198:U:H2'	1:2A:1199:U:C6	2.55	0.42
1:2A:1345:C:OP2	62:2A:3978:HOH:O	2.22	0.42
1:2A:1487:G:H2'	1:2A:1488:G:O4'	2.19	0.42
1:2A:1539:G:H2'	1:2A:1540:U:O4'	2.20	0.42
1:2A:1638:C:H2'	1:2A:1639:U:O4'	2.20	0.42
1:2A:1759:A:H1'	1:2A:2711:A:C2	2.55	0.42
1:2A:1990:C:H2'	1:2A:1991:U:O4'	2.20	0.42
3:2D:24:ILE:CD1	3:2D:84:TYR:HB2	2.50	0.42
8:2I:57:ARG:O	8:2I:61:ARG:NH1	2.53	0.42
8:2I:80:PRO:CA	8:2I:145:VAL:HG13	2.50	0.42
10:2O:26:LYS:O	10:2O:30:ALA:HB2	2.19	0.42
10:2O:93:PRO:HD2	10:2O:113:LYS:HG2	2.02	0.42
22:20:69:PHE:CE2	22:20:79:VAL:HG22	2.55	0.42
32:2a:129(A):G:C6	32:2a:189(E):U:H4'	2.55	0.42
32:2a:587:G:OP1	39:2h:89:PRO:HB3	2.20	0.42
32:2a:949:A:O2'	32:2a:971:G:O6	2.25	0.42
32:2a:1151:A:O2'	32:2a:1152:A:O5'	2.37	0.42
34:2c:98:ASN:H	34:2c:98:ASN:ND2	2.17	0.42
38:2g:51:GLN:O	38:2g:55:GLY:HA2	2.20	0.42
44:2m:13:LYS:O	44:2m:45:VAL:N	2.48	0.42
50:2s:30:LEU:HD11	50:2s:50:ALA:HB2	2.02	0.42
57:2y:15:G:N1	57:2y:48:C:N3	2.67	0.42
57:2y:67:C:H2'	57:2y:68:G:C8	2.55	0.42
1:1A:467:G:HO2'	1:1A:796:C:HO2'	1.63	0.41
1:1A:530:G:N1	1:1A:2023:G:OP1	2.38	0.41
1:1A:819:A:C4	1:1A:1189:A:C2	3.07	0.41
1:1A:1068:G:H5''	1:1A:1069:A:OP2	2.20	0.41
1:1A:1155:A:OP1	16:1U:55:ARG:HD2	2.20	0.41
1:1A:1303:G:H1'	1:1A:1641:A:N1	2.35	0.41
1:1A:1676:A:H2'	1:1A:1677:A:O4'	2.20	0.41
1:1A:2086:U:H2'	1:1A:2087:G:H8	1.84	0.41
1:1A:2118:U:H5	1:1A:2148:G:N3	2.17	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2291:U:H2'	1:1A:2292:C:C6	2.55	0.41
2:1B:14:U:O2	2:1B:108:U:H4'	2.20	0.41
4:1E:47:VAL:HG22	4:1E:84:PHE:O	2.20	0.41
4:1E:190:GLY:HA3	62:1E:417:HOH:O	2.20	0.41
15:1T:118:ARG:HG2	32:1a:1442(A):G:C8	2.55	0.41
23:11:73:LEU:HD23	23:11:73:LEU:HA	1.84	0.41
32:1a:38:G:O2'	32:1a:39:G:H5''	2.20	0.41
32:1a:67:C:H4'	32:1a:172:A:H1'	2.01	0.41
32:1a:236:G:H5''	48:1q:42:TYR:OH	2.20	0.41
32:1a:441:A:H3'	32:1a:442:C:C6	2.55	0.41
32:1a:616:G:C2'	32:1a:617:G:H5'	2.50	0.41
32:1a:952:U:H2'	32:1a:953:G:C8	2.55	0.41
32:1a:1492:A:H2'	32:1a:1493:A:C8	2.54	0.41
33:1b:19:HIS:HA	33:1b:39:ILE:CG2	2.50	0.41
36:1e:105:VAL:HB	36:1e:106:PRO:HD3	2.02	0.41
38:1g:26:PHE:CE2	38:1g:30:ILE:HD11	2.55	0.41
40:1i:56:LEU:HD23	40:1i:56:LEU:H	1.85	0.41
43:1l:89:ARG:HE	43:1l:89:ARG:HB2	1.68	0.41
55:1x:63:G:H2'	55:1x:64:G:H8	1.84	0.41
1:2A:76:C:O3'	24:22:59:ARG:HG3	2.19	0.41
1:2A:1248:G:C2	16:2U:3:ARG:HD2	2.55	0.41
1:2A:1288:U:C2	1:2A:1327:C:O2	2.73	0.41
1:2A:1567:A:OP2	3:2D:84:TYR:OH	2.33	0.41
1:2A:1924:C:H4'	55:2x:13:C:O2'	2.20	0.41
1:2A:2142:C:H2'	1:2A:2143:C:C6	2.55	0.41
1:2A:2689:U:OP2	1:2A:2719:G:N2	2.44	0.41
4:2E:30:PRO:HB3	4:2E:92:THR:HG22	2.02	0.41
17:2V:89:GLN:HA	17:2V:90:PRO:HD3	1.92	0.41
19:2X:31:HIS:HA	19:2X:32:PRO:HD3	1.94	0.41
21:2Z:19:ARG:HD3	21:2Z:84:GLU:HA	2.02	0.41
27:25:46:CYS:SG	27:25:48:GLU:HG2	2.60	0.41
32:2a:340:U:H2'	32:2a:341:C:C6	2.55	0.41
32:2a:1134:G:C2	32:2a:1141:C:C2	3.08	0.41
32:2a:1325:C:H5''	52:2u:17:THR:HG21	2.02	0.41
32:2a:1422:G:H2'	32:2a:1423:G:H8	1.85	0.41
34:2c:39:ILE:H	34:2c:39:ILE:HG13	1.70	0.41
35:2d:170:VAL:HG11	35:2d:176:LEU:HD22	2.01	0.41
40:2i:114:TYR:C	40:2i:116:LYS:H	2.27	0.41
46:2o:24:SER:O	46:2o:28:GLN:HG3	2.20	0.41
49:2r:53:ARG:HE	49:2r:53:ARG:HB3	1.58	0.41
49:2r:58:LEU:HB2	49:2r:63:GLN:NE2	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:51:GLU:O	51:2t:55:ILE:HG12	2.20	0.41
1:1A:555:U:O2'	1:1A:556:G:N7	2.47	0.41
1:1A:604:G:P	11:1P:90:ARG:HH21	2.42	0.41
1:1A:725:G:C6	1:1A:726:G:N1	2.88	0.41
1:1A:878:A:H61	1:1A:899:A:H1'	1.85	0.41
1:1A:1101:U:H2'	1:1A:1102:C:O4'	2.20	0.41
1:1A:2839:G:H5'	13:1R:46:GLY:HA2	2.01	0.41
2:1B:31:C:H4'	6:1G:29:TRP:HH2	1.82	0.41
2:1B:90:A:N7	2:1B:91:C:H1'	2.35	0.41
8:1I:101:LEU:HD23	8:1I:105:HIS:HB2	2.02	0.41
17:1V:22:VAL:HG23	17:1V:23:GLU:O	2.20	0.41
19:1X:11:PRO:HD3	24:12:37:PHE:CE1	2.55	0.41
21:1Z:31:ARG:HB2	21:1Z:32:HIS:CE1	2.55	0.41
21:1Z:54:HIS:HB2	21:1Z:55:HIS:CD2	2.55	0.41
25:13:31:LEU:HD23	25:13:31:LEU:HA	1.92	0.41
29:17:33:ARG:HH11	29:17:33:ARG:HD2	1.74	0.41
32:1a:1084:G:C5	32:1a:1085:U:C4	3.09	0.41
32:1a:1438:G:H2'	32:1a:1439:C:C6	2.56	0.41
32:1a:1470:G:H2'	32:1a:1471:G:O4'	2.20	0.41
34:1c:73:PRO:O	34:1c:77:ILE:HG12	2.19	0.41
41:1j:40:LEU:HD12	41:1j:69:ASN:HB3	2.02	0.41
45:1n:15:LYS:HB3	45:1n:16:PHE:CE2	2.55	0.41
55:1x:19:G:H5''	55:1x:60:U:O4	2.20	0.41
1:2A:24:G:O2'	18:2W:77:ASP:HB3	2.20	0.41
1:2A:144:C:H5'	19:2X:2:LYS:HG2	2.00	0.41
1:2A:476:G:H4'	1:2A:502:A:N1	2.35	0.41
1:2A:1169:G:H22	1:2A:1180:C:N4	2.17	0.41
1:2A:1223:G:N2	1:2A:1225:G:H3'	2.35	0.41
1:2A:1580:A:H3'	1:2A:1581:G:C8	2.55	0.41
1:2A:1688:U:H2'	1:2A:1698:A:N6	2.35	0.41
1:2A:2262:U:P	22:20:19:LYS:HE2	2.60	0.41
1:2A:2394:C:N3	57:2y:76:A:O2'	2.37	0.41
1:2A:2579:C:H2'	1:2A:2580:U:O4'	2.20	0.41
7:2H:71:LEU:HD23	7:2H:74:ASN:HD22	1.84	0.41
7:2H:149:ARG:HD2	7:2H:164:TYR:CE2	2.55	0.41
32:2a:1244:C:H2'	32:2a:1245:A:O4'	2.19	0.41
32:2a:1353:G:C2	32:2a:1370:G:C2	3.07	0.41
34:2c:5:ILE:HD12	34:2c:6:HIS:H	1.86	0.41
35:2d:95:GLY:O	35:2d:99:SER:N	2.42	0.41
37:2f:22:GLU:OE1	37:2f:82:ARG:HD3	2.20	0.41
41:2j:92:THR:C	41:2j:94:VAL:H	2.28	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:2l:117:ARG:HB3	43:2l:122:THR:O	2.19	0.41
48:2q:51:TYR:CD1	48:2q:57:VAL:HG11	2.55	0.41
54:2w:22:G:N2	54:2w:23:A:C4	2.88	0.41
54:2w:56:C:H5''	54:2w:57:G:OP2	2.20	0.41
1:1A:271(F):C:H2'	1:1A:271(G):C:O4'	2.19	0.41
1:1A:797:C:H2'	1:1A:798:G:O4'	2.20	0.41
1:1A:1044:G:H5'	1:1A:1045:A:OP2	2.20	0.41
1:1A:1058:G:H4'	1:1A:1058:G:OP1	2.20	0.41
1:1A:1213:A:N3	1:1A:1238:G:O2'	2.52	0.41
1:1A:1287:A:O4'	13:1R:104:ARG:HD3	2.20	0.41
1:1A:1359:A:H2'	1:1A:1360:A:H5'	2.02	0.41
19:1X:26:TYR:HB3	19:1X:92:LEU:HD22	2.02	0.41
33:1b:97:TRP:CZ2	33:1b:173:ALA:HA	2.56	0.41
35:1d:141:ARG:HD3	35:1d:142:PRO:HD2	2.01	0.41
40:1i:99:LEU:HD23	40:1i:99:LEU:HA	1.85	0.41
51:1t:72:LEU:HD22	51:1t:76:ALA:HB1	2.02	0.41
1:2A:601:C:O2	1:2A:605:C:H4'	2.21	0.41
1:2A:828:U:H4'	1:2A:831:G:N1	2.35	0.41
1:2A:850:C:H5''	25:23:18:ASP:HB2	2.02	0.41
1:2A:1503:U:H2'	1:2A:1504:C:H6	1.84	0.41
1:2A:2330:G:H2'	1:2A:2331:G:O4'	2.19	0.41
2:2B:50:G:P	14:2S:62:LYS:HB2	2.60	0.41
6:2G:123:ASN:OD1	6:2G:123:ASN:N	2.54	0.41
6:2G:166:ASP:HA	6:2G:169:ALA:HB3	2.02	0.41
9:2N:96:GLU:HB2	9:2N:122:VAL:HG12	2.02	0.41
11:2P:126:VAL:HA	11:2P:146:VAL:HB	2.03	0.41
14:2S:3:ARG:HD2	14:2S:3:ARG:HA	1.94	0.41
18:2W:46:PHE:O	18:2W:50:VAL:HG23	2.20	0.41
32:2a:382:A:H2'	32:2a:383:A:C8	2.55	0.41
32:2a:492:G:N7	62:2a:1935:HOH:O	2.37	0.41
32:2a:1263:C:C2	32:2a:1272:G:O6	2.73	0.41
32:2a:1270:C:OP2	52:2u:24:ARG:NH2	2.52	0.41
35:2d:13:ARG:HB3	35:2d:38:TYR:O	2.20	0.41
40:2i:85:LEU:HB3	40:2i:92:TYR:CD2	2.55	0.41
40:2i:114:TYR:CD2	41:2j:60:ARG:HB2	2.55	0.41
44:2m:5:ALA:HB3	44:2m:22:ILE:HD12	2.02	0.41
48:2q:45:HIS:NE2	48:2q:47:PRO:HG3	2.34	0.41
48:2q:90:ILE:HD13	48:2q:90:ILE:HA	1.85	0.41
52:2u:5:ASP:C	52:2u:11:GLY:HA3	2.45	0.41
1:1A:1547:C:H2'	1:1A:1548:C:C6	2.55	0.41
1:1A:1668:A:H4'	1:1A:1669:A:O5'	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2168:G:N2	1:1A:2171:A:N7	2.68	0.41
1:1A:2512:C:H2'	1:1A:2513:G:O4'	2.20	0.41
1:1A:2720:U:C4	1:1A:2872:G:C6	3.09	0.41
5:1F:22:ALA:HB1	5:1F:199:TRP:HZ2	1.85	0.41
6:1G:120:LEU:N	6:1G:179:PRO:O	2.52	0.41
15:1T:35:LYS:HB3	15:1T:35:LYS:HE2	1.92	0.41
17:1V:57:VAL:HG11	17:1V:96:ILE:HD12	2.02	0.41
19:1X:94:GLY:N	19:1X:95:LEU:HB2	2.32	0.41
43:1I:53:ARG:HD2	43:1I:93:LEU:HD11	2.03	0.41
46:1o:5:LYS:O	46:1o:9:GLN:HG2	2.20	0.41
1:2A:299:A:N1	1:2A:322:A:O2'	2.45	0.41
1:2A:581:C:OP2	16:2U:33:ARG:HD3	2.20	0.41
1:2A:1518:U:H2'	1:2A:1519:G:O4'	2.20	0.41
1:2A:1536:C:H1'	1:2A:1537:G:C8	2.55	0.41
1:2A:1918:A:O2'	1:2A:1920:OMC:N4	2.54	0.41
5:2F:167:ALA:HB1	5:2F:173:VAL:HG11	2.01	0.41
6:2G:110:ALA:HA	6:2G:140:ILE:O	2.20	0.41
11:2P:29:LYS:HG3	11:2P:30:THR:H	1.85	0.41
21:2Z:130:PRO:HA	21:2Z:133:ILE:HD11	2.02	0.41
32:2a:321:A:N7	32:2a:328:C:O2'	2.46	0.41
32:2a:375:U:OP1	47:2p:69:THR:OG1	2.23	0.41
32:2a:540:G:H2'	32:2a:541:G:O4'	2.20	0.41
32:2a:932:C:N4	32:2a:933:G:O6	2.53	0.41
32:2a:1004:A:N6	32:2a:1036:G:C5	2.88	0.41
32:2a:1101:A:H62	33:2b:175:ARG:NH2	2.18	0.41
32:2a:1123:A:H4'	41:2j:37:PRO:HD2	2.01	0.41
33:2b:167:PRO:HD3	33:2b:187:LEU:O	2.20	0.41
34:2c:6:HIS:ND1	45:2n:49:HIS:HB3	2.35	0.41
34:2c:118:GLN:HA	34:2c:121:ALA:CB	2.46	0.41
38:2g:26:PHE:CE2	38:2g:30:ILE:HD11	2.55	0.41
38:2g:26:PHE:CZ	38:2g:30:ILE:HD11	2.55	0.41
57:2y:66:A:H2'	57:2y:67:C:O4'	2.20	0.41
1:1A:271(H):G:H4'	23:1I:81:LYS:HG2	2.02	0.41
1:1A:327:G:N2	20:1Y:70:SER:OG	2.48	0.41
1:1A:370:G:O5'	1:1A:423:A:N6	2.54	0.41
1:1A:828:U:C5	1:1A:2247:A:H4'	2.55	0.41
1:1A:2101:G:H2'	1:1A:2102:U:H6	1.85	0.41
1:1A:2515:C:O2'	1:1A:2516:G:H5'	2.20	0.41
5:1F:129:PHE:CD2	5:1F:163:VAL:HG21	2.55	0.41
7:1H:83:TYR:CE2	7:1H:138:LYS:HB2	2.56	0.41
10:1O:64:ARG:HD3	10:1O:101:PRO:O	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1Z:54:HIS:O	21:1Z:98:MET:HE1	2.20	0.41
26:14:29:PRO:O	26:14:30:GLU:HG3	2.21	0.41
32:1a:50:A:H1'	32:1a:52:G:C8	2.56	0.41
32:1a:317:G:C6	32:1a:318:G:C5	3.09	0.41
32:1a:640:A:O2'	39:1h:115:SER:O	2.30	0.41
32:1a:1162:C:H42	32:1a:1174:G:H1	1.67	0.41
32:1a:1427:U:H2'	32:1a:1428:A:C8	2.55	0.41
35:1d:11:LEU:HD23	35:1d:66:ARG:HB3	2.02	0.41
37:1f:12:PRO:HG3	37:1f:57:GLN:O	2.20	0.41
38:1g:78:ARG:HD2	38:1g:78:ARG:HA	1.89	0.41
49:1r:26:LEU:HB3	49:1r:29:PHE:HE2	1.85	0.41
57:1y:8:U:C4	57:1y:13:C:C4	3.08	0.41
57:1y:15:G:H2'	57:1y:59:A:C2	2.55	0.41
57:1y:53:G:H2'	57:1y:54:5MU:C6	2.55	0.41
1:2A:443:A:H1'	1:2A:1201:C:O4'	2.20	0.41
1:2A:530:G:C5	1:2A:2022:U:H5''	2.55	0.41
1:2A:879:G:N3	1:2A:879:G:H2'	2.36	0.41
1:2A:1113:U:H2'	1:2A:1114:G:O4'	2.21	0.41
1:2A:1693:U:H1'	3:2D:14:ARG:NH2	2.36	0.41
1:2A:1702:G:H2'	1:2A:1703:G:O4'	2.21	0.41
1:2A:1993:U:H2'	1:2A:1994:C:O4'	2.20	0.41
1:2A:2185:C:H2'	1:2A:2186:G:O4'	2.20	0.41
1:2A:2319:G:H4'	1:2A:2320:A:OP1	2.21	0.41
1:2A:2472:G:H2'	1:2A:2475:C:H42	1.84	0.41
2:2B:68:C:H2'	2:2B:69:G:H8	1.86	0.41
10:2O:16:ALA:HB2	10:2O:52:VAL:HG21	2.02	0.41
14:2S:25:ARG:O	14:2S:39:ILE:HA	2.20	0.41
17:2V:24:LYS:HA	17:2V:92:THR:OG1	2.21	0.41
19:2X:11:PRO:HD3	24:22:37:PHE:CD2	2.55	0.41
19:2X:14:SER:C	19:2X:16:LYS:N	2.78	0.41
22:20:34:GLY:N	22:20:61:ALA:O	2.42	0.41
23:21:67:ILE:N	23:21:68:PRO:HD2	2.36	0.41
32:2a:120:A:C6	32:2a:122:G:C2	3.08	0.41
32:2a:570:G:O6	32:2a:865:A:N6	2.53	0.41
32:2a:581:G:OP1	46:2o:61:GLY:HA3	2.20	0.41
32:2a:826:C:N4	32:2a:874:G:H1	2.19	0.41
32:2a:1138:G:C6	32:2a:1140:C:H1'	2.56	0.41
32:2a:1141:C:H2'	32:2a:1142:G:O4'	2.19	0.41
32:2a:1176:A:H2'	32:2a:1177:G:H8	1.80	0.41
32:2a:1347:G:N2	32:2a:1373:G:H2'	2.34	0.41
40:2i:40:LEU:HD13	40:2i:74:ILE:HD11	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:2p:15:PRO:HD2	47:2p:42:ARG:HD3	2.01	0.41
1:1A:284:U:H2'	1:1A:285:C:C6	2.56	0.41
1:1A:582:G:H2'	1:1A:583:G:H8	1.85	0.41
1:1A:750:A:OP1	1:1A:1615:C:N4	2.48	0.41
1:1A:760:G:H2'	1:1A:761:A:O4'	2.20	0.41
1:1A:1045:A:OP1	1:1A:1046:A:H3'	2.20	0.41
1:1A:1504:C:H2'	1:1A:1505:C:C6	2.56	0.41
1:1A:1682:G:OP1	1:1A:1699:G:N1	2.54	0.41
1:1A:2366:A:H2'	1:1A:2367:G:O4'	2.20	0.41
1:1A:2438:U:O2'	1:1A:2440:C:OP1	2.34	0.41
1:1A:2478:A:H5'	31:19:31:LYS:HD3	2.01	0.41
1:1A:2695:C:H2'	1:1A:2696:U:H6	1.86	0.41
32:1a:692:U:H1'	32:1a:695:A:N7	2.35	0.41
32:1a:1135:U:O2'	32:1a:1138:G:O6	2.25	0.41
32:1a:1223:C:P	50:1s:78:ARG:HH21	2.44	0.41
32:1a:1226:C:O2'	44:1m:111:LYS:NZ	2.54	0.41
39:1h:94:TYR:CE1	39:1h:132:GLU:HB2	2.56	0.41
1:2A:328:U:H4'	20:2Y:68:HIS:CG	2.55	0.41
1:2A:760:G:H2'	1:2A:761:A:O4'	2.20	0.41
1:2A:1123:C:H1'	31:29:18:ARG:NH2	2.36	0.41
1:2A:1401:G:C6	1:2A:1402:C:C4	3.09	0.41
1:2A:1751:C:O2'	1:2A:2861:G:O2'	2.25	0.41
1:2A:1790:C:H5''	1:2A:1791:A:OP1	2.19	0.41
1:2A:1842:G:O2'	3:2D:253:GLN:OE1	2.34	0.41
1:2A:2320:A:H1'	1:2A:2321:G:N1	2.35	0.41
2:2B:52:A:N6	14:2S:33:LYS:HG2	2.35	0.41
13:2R:104:ARG:HB3	13:2R:107:ASP:OD1	2.20	0.41
23:21:72:GLU:O	23:21:76:ARG:HG2	2.20	0.41
25:23:4:LEU:O	25:23:36:VAL:HA	2.21	0.41
26:24:14:ILE:HA	26:24:31:ILE:O	2.20	0.41
32:2a:152:A:N6	32:2a:170:U:C2	2.89	0.41
32:2a:192:U:H4'	51:2t:57:ARG:HD2	2.01	0.41
32:2a:1206:G:C6	32:2a:1207:2MG:C5	3.09	0.41
35:2d:158:ILE:O	35:2d:162:LEU:N	2.46	0.41
45:2n:9:LYS:HD2	45:2n:12:ARG:HH12	1.86	0.41
50:2s:40:ILE:HB	50:2s:67:VAL:O	2.21	0.41
54:2w:51:A:H5'	54:2w:64:G:N2	2.35	0.41
1:1A:271(P):C:H2'	1:1A:271(Q):G:O4'	2.21	0.41
1:1A:515:A:H1'	1:1A:581:C:H1'	2.03	0.41
1:1A:614:U:H2'	1:1A:614(A):U:O4'	2.20	0.41
1:1A:675:A:C8	1:1A:804:A:C6	3.08	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1027:A:C6	1:1A:1126:A:C4	3.09	0.41
1:1A:1142(A):A:C8	1:1A:1144:G:C8	3.09	0.41
1:1A:2010:G:H5''	18:1W:42:ARG:HB2	2.03	0.41
1:1A:2019:A:N6	1:1A:2020:A:C5	2.89	0.41
1:1A:2119:A:H4'	1:1A:2120:G:OP1	2.20	0.41
1:1A:2717:G:H1'	15:1T:96:ARG:HH21	1.86	0.41
5:1F:143:ALA:HB1	5:1F:148:LEU:HB2	2.03	0.41
9:1N:4:TYR:CD2	16:1U:100:VAL:HG11	2.56	0.41
11:1P:82:GLY:HA2	11:1P:113:LYS:O	2.20	0.41
21:1Z:46:LYS:HE3	21:1Z:46:LYS:HB2	1.76	0.41
23:11:23:LYS:HD3	23:11:27:GLU:HB2	2.02	0.41
32:1a:456:C:H2'	32:1a:457:C:C6	2.55	0.41
32:1a:593:G:H2'	32:1a:594:G:O4'	2.21	0.41
32:1a:600:C:H42	32:1a:638:G:H1	1.69	0.41
36:1e:24:ARG:H	36:1e:24:ARG:HG2	1.57	0.41
36:1e:43:LEU:HD12	36:1e:43:LEU:HA	1.90	0.41
37:1f:36:ARG:HB2	37:1f:66:GLU:O	2.20	0.41
38:1g:76:ARG:HD3	38:1g:156:TRP:CZ2	2.56	0.41
1:2A:28:A:H1'	1:2A:513:A:C2	2.56	0.41
1:2A:407:G:H2'	1:2A:408:G:C8	2.55	0.41
1:2A:820:A:H1'	1:2A:943:U:H1'	2.02	0.41
1:2A:839:U:H1'	1:2A:1191:G:H1'	2.03	0.41
1:2A:992:C:OP1	17:2V:74:LYS:NZ	2.45	0.41
1:2A:1328:G:O2'	1:2A:1329:U:H2'	2.20	0.41
1:2A:1815:A:P	3:2D:54:ARG:HH22	2.43	0.41
2:2B:28:C:H2'	2:2B:29:A:O4'	2.21	0.41
4:2E:67:PHE:O	4:2E:71:GLY:N	2.53	0.41
5:2F:119:ARG:NH1	5:2F:119:ARG:HB3	2.36	0.41
5:2F:132:VAL:HG11	5:2F:163:VAL:HA	2.02	0.41
8:2I:130:TYR:CE2	8:2I:132:PRO:HB3	2.56	0.41
22:20:9:SER:OG	22:20:10:THR:N	2.52	0.41
24:22:63:VAL:O	24:22:67:LYS:HG2	2.20	0.41
26:24:30:GLU:C	26:24:31:ILE:HG13	2.46	0.41
32:2a:11:G:H1	32:2a:23:C:N4	2.14	0.41
32:2a:114:U:O2'	32:2a:115:G:H5'	2.21	0.41
32:2a:201:C:H5'	32:2a:202:U:OP2	2.21	0.41
32:2a:451:A:C6	32:2a:480:U:H2'	2.56	0.41
32:2a:598:U:H2'	32:2a:599:C:C6	2.55	0.41
32:2a:1147:C:O2	40:2i:16:ARG:NH1	2.53	0.41
32:2a:1203:C:OP1	45:2n:3:ARG:NE	2.52	0.41
32:2a:1466:C:H2'	32:2a:1467:G:O4'	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:2f:100:ASN:HD21	49:2r:23:LYS:CG	2.33	0.41
43:2l:113:ARG:NH2	62:2l:301:HOH:O	2.53	0.41
44:2m:82:MET:HA	44:2m:89:GLY:HA3	2.02	0.41
47:2p:8:ARG:HH21	47:2p:15:PRO:HG3	1.86	0.41
57:2y:44:U:C2	57:2y:45:G:N7	2.88	0.41
1:1A:600:G:H2'	1:1A:601:C:O4'	2.20	0.41
1:1A:2319:G:C2	14:1S:3:ARG:HA	2.56	0.41
1:1A:2394:C:H5''	11:1P:64:LYS:HD2	2.03	0.41
8:1I:101:LEU:O	8:1I:106:GLY:N	2.54	0.41
18:1W:84:ARG:O	18:1W:96:ILE:N	2.53	0.41
20:1Y:7:VAL:HG21	20:1Y:72:VAL:CG1	2.50	0.41
20:1Y:14:LEU:HB2	20:1Y:75:ILE:HD11	2.02	0.41
21:1Z:92:SER:O	21:1Z:130:PRO:HG2	2.20	0.41
22:10:8:GLY:HA2	55:1x:2:G:H4'	2.02	0.41
32:1a:559:A:H4'	32:1a:560:U:H3'	2.02	0.41
32:1a:657:G:H4'	46:1o:28:GLN:HG2	2.03	0.41
32:1a:1151:A:O2'	32:1a:1152:A:O5'	2.35	0.41
33:1b:32:ILE:HG21	33:1b:40:HIS:HD2	1.84	0.41
39:1h:116:LYS:HD3	39:1h:127:LEU:HD12	2.03	0.41
44:1m:30:ALA:O	44:1m:34:LEU:HG	2.21	0.41
48:1q:31:LEU:HD23	48:1q:32:TYR:CZ	2.56	0.41
1:2A:1191:G:OP1	11:2P:17:LYS:NZ	2.51	0.41
1:2A:1647:G:P	1:2A:1647:G:H3'	2.60	0.41
1:2A:1791:A:H3'	1:2A:1792:G:H8	1.85	0.41
1:2A:2108:C:O2	1:2A:2182:G:N2	2.54	0.41
1:2A:2405:G:H5'	11:2P:75:ILE:HD13	2.02	0.41
7:2H:144:VAL:O	7:2H:148:ILE:HG13	2.20	0.41
12:2Q:79:LEU:HD23	12:2Q:79:LEU:HA	1.86	0.41
14:2S:28:VAL:HG21	14:2S:101:LEU:HD22	2.01	0.41
17:2V:69:LYS:HA	17:2V:88:ARG:HG2	2.03	0.41
23:21:3:LYS:H	23:21:61:ARG:HH12	1.69	0.41
32:2a:51:A:N1	32:2a:314:C:O2'	2.50	0.41
32:2a:164:U:H2'	32:2a:165:C:C6	2.56	0.41
32:2a:518:C:H4'	32:2a:519:C:H5''	2.02	0.41
32:2a:553:A:H5''	43:2l:24:VAL:HG21	2.02	0.41
32:2a:1027:C:H3'	32:2a:1028:C:C6	2.56	0.41
32:2a:1190:G:O2'	34:2c:3:ASN:HB2	2.21	0.41
32:2a:1314:C:H2'	32:2a:1315:U:C6	2.55	0.41
32:2a:1342:C:H2'	32:2a:1343:G:H8	1.84	0.41
33:2b:155:LEU:HG	33:2b:157:ARG:O	2.21	0.41
36:2e:57:LYS:HE3	36:2e:57:LYS:HB2	1.94	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:8:LEU:HD12	41:2j:16:LEU:HD22	2.03	0.41
44:2m:70:LEU:O	44:2m:74:VAL:HG23	2.21	0.41
50:2s:37:ARG:H	50:2s:37:ARG:HG3	1.75	0.41
54:2w:40:C:H2'	54:2w:41:A:C8	2.55	0.41
57:2y:15:G:N2	57:2y:48:C:H42	2.19	0.41
1:1A:35:G:H2'	1:1A:36:G:O4'	2.21	0.41
1:1A:536:A:H5'	16:1U:53:ARG:HD3	2.02	0.41
1:1A:554:U:C4	1:1A:555:U:C4	3.08	0.41
1:1A:581:C:H2'	1:1A:582:G:H8	1.86	0.41
1:1A:583:G:OP2	16:1U:10:ARG:HD2	2.20	0.41
1:1A:647:G:O5'	1:1A:647:G:H8	2.04	0.41
1:1A:1012:U:C5	9:1N:28:THR:HG21	2.56	0.41
1:1A:1076:C:H4'	1:1A:1077:A:OP1	2.21	0.41
1:1A:1178:C:O5'	1:1A:1178:C:H6	2.04	0.41
1:1A:1275:A:N1	1:1A:1295:C:O2'	2.53	0.41
1:1A:1992:G:H5''	1:1A:1993:U:H5	1.85	0.41
1:1A:2138:C:C2	1:1A:2154:G:C2	3.09	0.41
1:1A:2164:C:OP2	1:1A:2165:G:N2	2.54	0.41
1:1A:2302:G:C2	1:1A:2315:G:C2	3.09	0.41
1:1A:2334:G:H4'	1:1A:2335:A:OP2	2.20	0.41
6:1G:33:ARG:O	6:1G:161:THR:HG22	2.20	0.41
6:1G:56:ALA:HB2	6:1G:153:ARG:NH1	2.36	0.41
7:1H:26:VAL:HG12	7:1H:79:VAL:HG21	2.02	0.41
8:1I:65:ALA:HB1	8:1I:136:VAL:HG11	2.03	0.41
10:1O:90:GLN:C	10:1O:92:GLU:H	2.28	0.41
18:1W:88:ARG:NH1	18:1W:94:ASP:OD2	2.54	0.41
19:1X:88:LYS:HB3	19:1X:88:LYS:HE3	1.77	0.41
21:1Z:52:SER:O	21:1Z:54:HIS:N	2.54	0.41
21:1Z:146:ILE:HA	21:1Z:147:GLY:HA2	1.86	0.41
32:1a:189(K):U:H2'	32:1a:189(L):G:H8	1.85	0.41
32:1a:203:U:OP2	32:1a:203:U:H2'	2.21	0.41
32:1a:472:A:H2'	32:1a:473:G:O4'	2.20	0.41
32:1a:774:G:H2'	32:1a:775:G:O4'	2.21	0.41
32:1a:933:G:OP2	38:1g:3:ARG:HB2	2.20	0.41
32:1a:1002:G:H3'	32:1a:1003:G:C4'	2.50	0.41
32:1a:1124:G:N7	32:1a:1145:C:O2'	2.54	0.41
32:1a:1179:A:H2'	32:1a:1180:A:O4'	2.20	0.41
32:1a:1309:G:OP1	44:1m:92:HIS:HE1	2.03	0.41
32:1a:1404:5MC:H2'	32:1a:1405:G:C8	2.56	0.41
32:1a:1530:G:H4'	32:1a:1530:G:OP1	2.21	0.41
33:1b:41:ILE:HD13	33:1b:41:ILE:HA	1.84	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:61:LEU:HD23	33:1b:66:GLY:HA3	2.03	0.41
33:1b:122:PHE:CE2	33:1b:139:LYS:HD2	2.56	0.41
35:1d:13:ARG:NH2	35:1d:40:PRO:HA	2.36	0.41
35:1d:101:LEU:HD22	35:1d:121:VAL:HG21	2.03	0.41
36:1e:131:ILE:HD13	36:1e:131:ILE:HA	1.82	0.41
37:1f:55:ASP:HB2	37:1f:86:ARG:HH12	1.85	0.41
40:1i:19:LEU:HD21	40:1i:81:ILE:HG13	2.03	0.41
41:1j:19:SER:OG	41:1j:91:PRO:HD2	2.20	0.41
47:1p:6:LEU:HD11	47:1p:73:LEU:HD12	2.02	0.41
55:1x:73:A:H5''	55:1x:74:C:H5'	2.02	0.41
57:1y:7:U:O2'	57:1y:8:U:H5'	2.21	0.41
1:2A:307:G:H21	1:2A:330:A:N6	2.19	0.41
1:2A:416:C:H2'	1:2A:417:C:C6	2.56	0.41
1:2A:422:A:H2'	1:2A:423:A:C8	2.55	0.41
1:2A:652(T):C:H2'	1:2A:652(U):G:C8	2.56	0.41
1:2A:676:A:H1'	1:2A:2443:C:H1'	2.02	0.41
1:2A:999:U:O2'	1:2A:1000:A:H5'	2.20	0.41
1:2A:1586:A:H2'	1:2A:1587:A:O4'	2.21	0.41
1:2A:2024:G:H2'	1:2A:2025:C:H6	1.85	0.41
1:2A:2164:C:C5	1:2A:2165:G:H1'	2.56	0.41
1:2A:2408:U:H2'	1:2A:2409:G:C8	2.55	0.41
1:2A:2759:G:OP2	62:2A:3979:HOH:O	2.22	0.41
1:2A:2808:U:H5''	1:2A:2891:G:O6	2.20	0.41
1:2A:2837:G:H21	13:2R:45:ARG:HH12	1.68	0.41
2:2B:80:U:H2'	2:2B:81:G:C8	2.56	0.41
4:2E:105:THR:HG21	4:2E:164:ARG:CZ	2.51	0.41
4:2E:170:LEU:HB3	4:2E:184:VAL:HG22	2.02	0.41
6:2G:12:TYR:O	6:2G:17:PRO:HD3	2.20	0.41
6:2G:107:LEU:HD13	6:2G:177:GLY:O	2.21	0.41
6:2G:111:LEU:HD22	6:2G:179:PRO:HD2	2.03	0.41
7:2H:123:PHE:CD1	7:2H:133:VAL:HG12	2.56	0.41
8:2I:50:ARG:HE	8:2I:50:ARG:HB2	1.44	0.41
10:2O:64:ARG:CZ	15:2T:70:VAL:HG21	2.51	0.41
12:2Q:18:LYS:HE3	12:2Q:18:LYS:HB2	1.94	0.41
12:2Q:34:LEU:HD11	12:2Q:129:THR:HB	2.02	0.41
12:2Q:54:MET:HB2	12:2Q:64:ILE:CD1	2.51	0.41
26:24:61:ARG:HG2	50:2s:42:PRO:CG	2.50	0.41
32:2a:8:A:N7	35:2d:208:SER:OG	2.51	0.41
32:2a:499:A:H4'	32:2a:500:G:OP1	2.21	0.41
32:2a:1103:C:C4	32:2a:1104:G:N7	2.89	0.41
32:2a:1294:G:H2'	32:2a:1295:G:H8	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1318:A:H5'	50:2s:10:PHE:CE1	2.56	0.41
32:2a:1375:A:O2'	38:2g:29:LYS:NZ	2.51	0.41
32:2a:1401:G:H2'	32:2a:1402:4OC:O4'	2.21	0.41
32:2a:1452:C:H5'	32:2a:1457:G:H1'	2.01	0.41
33:2b:207:ALA:O	33:2b:211:ILE:HG13	2.21	0.41
34:2c:53:ALA:HB3	34:2c:69:HIS:HB2	2.03	0.41
35:2d:95:GLY:HA2	35:2d:98:GLU:HB2	2.03	0.41
35:2d:150:GLU:HB3	35:2d:153:ARG:HE	1.86	0.41
36:2e:92:LYS:N	36:2e:119:LEU:O	2.53	0.41
38:2g:22:LEU:HG	38:2g:62:PHE:CE2	2.56	0.41
38:2g:78:ARG:HG3	38:2g:156:TRP:CE3	2.56	0.41
40:2i:63:ILE:HG21	40:2i:77:ILE:HG12	2.03	0.41
46:2o:48:LYS:HA	46:2o:48:LYS:HD3	1.78	0.41
47:2p:28:ARG:HG2	47:2p:29:ASP:OD1	2.21	0.41
54:2w:50:C:H2'	54:2w:50:C:O2	2.21	0.41
55:2x:34:C:C2	55:2x:35:A:C8	3.09	0.41
57:2y:26:A:C6	57:2y:45:G:O6	2.74	0.41
57:2y:65:C:H2'	57:2y:66:A:N7	2.36	0.41
1:1A:30:G:C5	1:1A:31:C:C4	3.09	0.41
1:1A:588:U:H1'	5:1F:90:PHE:CG	2.56	0.41
1:1A:1059:G:H2'	1:1A:1060:U:C5	2.56	0.41
1:1A:1151:G:H2'	1:1A:1152:C:O4'	2.21	0.41
1:1A:1911:PSU:O2	1:1A:1918:A:H2'	2.21	0.41
1:1A:2019:A:O4'	16:1U:34:LYS:HE2	2.20	0.41
1:1A:2146:C:O2	1:1A:2147:G:N1	2.54	0.41
1:1A:2389:G:H5''	1:1A:2390:U:O4'	2.21	0.41
9:1N:28:THR:HG22	9:1N:29:LYS:N	2.35	0.41
11:1P:29:LYS:HG2	11:1P:30:THR:HG23	2.03	0.41
11:1P:138:LEU:HD23	11:1P:145:PRO:HB3	2.02	0.41
14:1S:14:VAL:O	14:1S:18:ILE:HG12	2.21	0.41
32:1a:142:G:O2'	32:1a:195:A:N6	2.54	0.41
32:1a:362:G:N1	32:1a:365:U:OP2	2.54	0.41
32:1a:507:C:OP2	32:1a:508:C:O2'	2.28	0.41
32:1a:1288:A:N1	32:1a:1371:G:H1'	2.36	0.41
32:1a:1309:G:OP2	44:1m:99:ARG:NH2	2.54	0.41
33:1b:134:GLU:HA	33:1b:137:ARG:HE	1.85	0.41
35:1d:63:LYS:HB2	35:1d:63:LYS:HE3	1.85	0.41
40:1i:5:TYR:OH	40:1i:16:ARG:HG2	2.21	0.41
50:1s:71:LEU:HD23	50:1s:71:LEU:HA	1.85	0.41
57:1y:53:G:H2'	57:1y:54:5MU:H6	1.85	0.41
1:2A:143:G:C2	1:2A:143(A):C:C2	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:223:A:N1	1:2A:407:G:O2'	2.45	0.41
1:2A:627:A:N7	11:2P:84:ASN:ND2	2.68	0.41
1:2A:693:C:OP1	3:2D:39:LYS:HE3	2.20	0.41
1:2A:1359:A:H2	1:2A:1372:U:O4	2.03	0.41
1:2A:2030:A:H4'	1:2A:2031:A:C8	2.56	0.41
1:2A:2054:A:OP1	1:2A:2055:C:O2'	2.27	0.41
1:2A:2353:G:H5''	22:20:32:ARG:NH1	2.35	0.41
1:2A:2376:A:N1	14:2S:87:PHE:HB3	2.36	0.41
6:2G:45:GLU:H	6:2G:45:GLU:HG2	1.40	0.41
13:2R:29:LEU:HD22	13:2R:79:LEU:HD13	2.01	0.41
16:2U:52:ARG:HG2	16:2U:55:ARG:NH1	2.36	0.41
20:2Y:83:THR:HG21	20:2Y:99:CYS:HB2	2.02	0.41
21:2Z:35:ARG:HD2	21:2Z:35:ARG:HA	1.76	0.41
30:28:23:VAL:HG22	30:28:47:LYS:HB3	2.02	0.41
32:2a:630:G:H2'	32:2a:631:G:C8	2.55	0.41
32:2a:1347:G:H22	32:2a:1374:A:P	2.44	0.41
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.56	0.41
32:2a:1502:A:C8	32:2a:1505:G:N2	2.89	0.41
33:2b:144:ARG:NH2	33:2b:148:TYR:OH	2.54	0.41
33:2b:185:ILE:CG2	33:2b:199:TYR:HB2	2.48	0.41
37:2f:36:ARG:NH2	37:2f:38:GLU:OE2	2.54	0.41
40:2i:38:GLN:HG2	40:2i:39:GLY:N	2.36	0.41
41:2j:96:ILE:HG22	41:2j:97:GLU:H	1.86	0.41
49:2r:66:LEU:HG	49:2r:70:ILE:HD11	2.03	0.41
57:2y:52:G:H2'	57:2y:53:G:O4'	2.21	0.41
1:1A:969:U:H2'	1:1A:970:C:C6	2.56	0.40
1:1A:1028:A:N3	1:1A:2486:G:O2'	2.49	0.40
1:1A:1079:C:H2'	1:1A:1080:C:O4'	2.20	0.40
1:1A:1528:A:H2'	1:1A:1528(A):A:C8	2.56	0.40
1:1A:1778:U:H2'	1:1A:1784:A:N6	2.37	0.40
1:1A:1913:A:H4'	1:1A:1914:C:H5''	2.03	0.40
1:1A:2406:U:H2'	1:1A:2406:U:H6	1.70	0.40
2:1B:19:G:H2'	2:1B:20:C:O4'	2.21	0.40
8:1I:76:THR:HG22	8:1I:141:LYS:HE2	2.02	0.40
26:14:16:CYS:HB2	26:14:36:CYS:HB3	2.02	0.40
26:14:40:HIS:HB3	26:14:43:TYR:HB2	2.03	0.40
32:1a:748:C:H4'	32:1a:749:C:O5'	2.21	0.40
32:1a:1261:A:H3'	32:1a:1262:C:H6	1.85	0.40
32:1a:1317:C:H2'	32:1a:1318:A:O4'	2.21	0.40
33:1b:27:LYS:O	33:1b:194:PRO:HG2	2.21	0.40
36:1e:67:VAL:HG23	36:1e:140:ARG:HG2	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:1h:53:VAL:HB	39:1h:58:TYR:CD2	2.56	0.40
42:1k:48:ILE:O	42:1k:50:TYR:N	2.54	0.40
45:1n:23:ARG:NH1	45:1n:30:ALA:HB2	2.36	0.40
55:1x:61:C:H2'	55:1x:62:C:C6	2.57	0.40
57:1y:57:G:C2'	57:1y:58:A:H5'	2.52	0.40
1:2A:244:A:C2	1:2A:255:A:C4	3.09	0.40
1:2A:773:U:O2'	3:2D:48:ARG:HD3	2.21	0.40
1:2A:2110:G:OP2	1:2A:2110:G:H2'	2.20	0.40
1:2A:2116:G:H2'	1:2A:2117:A:C2	2.55	0.40
1:2A:2274:A:C5	1:2A:2276:G:C8	3.09	0.40
1:2A:2406:U:C2	11:2P:72:PRO:HG2	2.56	0.40
3:2D:141:VAL:HG22	3:2D:164:GLN:HE21	1.85	0.40
4:2E:106:GLY:HA3	4:2E:189:PRO:HB2	2.02	0.40
5:2F:11:VAL:HG22	5:2F:125:LEU:HD13	2.03	0.40
5:2F:120:GLU:CD	5:2F:122:LYS:HG3	2.46	0.40
5:2F:200:GLU:O	5:2F:204:ASN:HB2	2.21	0.40
8:2I:101:LEU:HB2	8:2I:107:VAL:HB	2.02	0.40
9:2N:73:THR:HA	9:2N:83:LYS:O	2.21	0.40
14:2S:65:VAL:O	14:2S:69:VAL:HG12	2.20	0.40
14:2S:84:GLN:H	14:2S:111:GLU:HB2	1.86	0.40
20:2Y:19:LYS:HB2	20:2Y:19:LYS:HE3	1.86	0.40
21:2Z:40:ASP:OD2	21:2Z:42:VAL:HG13	2.21	0.40
32:2a:160:A:H2'	32:2a:161:A:C8	2.55	0.40
32:2a:362:G:N2	32:2a:365:U:OP2	2.53	0.40
32:2a:546:G:OP1	35:2d:73:ARG:HG2	2.21	0.40
32:2a:814:A:N7	32:2a:816:A:C4	2.89	0.40
32:2a:1038:C:O2'	32:2a:1039:C:H5'	2.21	0.40
33:2b:130:ARG:HA	33:2b:130:ARG:HD3	1.84	0.40
34:2c:122:GLU:HA	34:2c:125:GLU:HG2	2.02	0.40
45:2n:27:CYS:SG	45:2n:29:ARG:HB2	2.61	0.40
50:2s:28:LYS:HB3	50:2s:29:ARG:CA	2.50	0.40
1:1A:143:G:H1'	19:1X:37:THR:HG21	2.02	0.40
1:1A:754:C:H2'	1:1A:755:C:H6	1.86	0.40
1:1A:2206:G:H5''	1:1A:2207:G:N7	2.35	0.40
1:1A:2259:G:C8	1:1A:2427:C:C4	3.09	0.40
5:1F:33:LEU:HD22	5:1F:112:MET:HE3	2.04	0.40
6:1G:32:PRO:HB3	6:1G:163:ALA:HB2	2.03	0.40
9:1N:91:LEU:HD23	9:1N:91:LEU:HA	1.97	0.40
24:12:23:LYS:O	24:12:27:GLU:HG3	2.22	0.40
30:18:52:LYS:N	30:18:53:PRO:HD2	2.37	0.40
32:1a:278:G:OP2	48:1q:41:LYS:HE2	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:407:G:H2'	32:1a:408:A:C8	2.55	0.40
32:1a:741:G:H5''	46:1o:59:MET:HE1	2.03	0.40
32:1a:875:C:C4	32:1a:876:G:N7	2.89	0.40
32:1a:952:U:H2'	32:1a:953:G:H8	1.85	0.40
32:1a:1037:C:H2'	32:1a:1038:C:H6	1.85	0.40
32:1a:1118:C:H1'	32:1a:1179:A:C4	2.56	0.40
32:1a:1308:U:H2'	32:1a:1309:G:H8	1.87	0.40
33:1b:59:GLU:HG3	33:1b:225:ALA:HB2	2.04	0.40
33:1b:171:ALA:O	33:1b:175:ARG:HB2	2.20	0.40
47:1p:34:GLU:HG2	47:1p:35:LYS:N	2.35	0.40
48:1q:90:ILE:HD13	48:1q:90:ILE:HA	1.84	0.40
49:1r:26:LEU:HB3	49:1r:29:PHE:CE2	2.56	0.40
50:1s:36:ARG:NH2	50:1s:72:GLY:O	2.54	0.40
1:2A:189:G:H2'	1:2A:205:G:N2	2.37	0.40
1:2A:720:C:H2'	1:2A:721:C:C6	2.55	0.40
1:2A:1124:C:H2'	1:2A:1125:G:O4'	2.21	0.40
1:2A:1410:G:H2'	1:2A:1411:C:C6	2.56	0.40
1:2A:1709:U:H4'	1:2A:2860:A:O4'	2.21	0.40
1:2A:2073:C:O2'	1:2A:2598:A:O2'	2.34	0.40
1:2A:2841:C:H2'	1:2A:2842:G:C8	2.56	0.40
2:2B:78:A:C2	2:2B:100:A:C4	3.09	0.40
4:2E:179:GLU:HB2	4:2E:181:LEU:HG	2.04	0.40
8:2I:23:PRO:HB3	8:2I:27:ARG:NH2	2.36	0.40
10:2O:102:VAL:HB	10:2O:106:LEU:HD12	2.03	0.40
12:2Q:57:HIS:NE2	12:2Q:116:GLU:HG2	2.36	0.40
15:2T:94:ALA:HB1	15:2T:99:LEU:HD21	2.02	0.40
19:2X:95:LEU:HD23	19:2X:95:LEU:HA	1.90	0.40
26:24:57:GLU:HA	26:24:58:ARG:HA	1.83	0.40
32:2a:219:C:C4	32:2a:220:G:C8	3.09	0.40
32:2a:1250:A:H2	32:2a:1353:G:H21	1.69	0.40
32:2a:1306:A:H1'	32:2a:1332:A:C2	2.56	0.40
32:2a:1390:U:H2'	32:2a:1391:U:C6	2.56	0.40
32:2a:1473:A:H2'	32:2a:1474:G:O4'	2.21	0.40
34:2c:18:TRP:HB2	34:2c:21:ARG:HG2	2.02	0.40
38:2g:146:GLU:OE2	38:2g:149:ARG:NE	2.53	0.40
41:2j:78:ASN:O	41:2j:81:THR:N	2.44	0.40
42:2k:117:ASN:N	42:2k:117:ASN:HD22	2.18	0.40
44:2m:3:ARG:NH2	44:2m:11:ARG:HG3	2.37	0.40
47:2p:43:LYS:HA	47:2p:48:TRP:HB3	2.03	0.40
48:2q:81:ARG:HA	48:2q:81:ARG:HD2	1.78	0.40
51:2t:13:LEU:O	51:2t:17:ARG:HG2	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:46:GLU:H	51:2t:46:GLU:HG3	1.51	0.40
57:2y:10:G:O6	57:2y:45:G:N1	2.54	0.40
1:1A:709:U:H2'	1:1A:710:G:H8	1.86	0.40
1:1A:831:G:N2	11:1P:53:GLY:O	2.54	0.40
1:1A:851:U:O2'	25:13:42:ALA:O	2.39	0.40
1:1A:861:A:H2'	1:1A:862:G:O4'	2.21	0.40
1:1A:1038:C:N4	1:1A:1117:G:H1	2.17	0.40
1:1A:1066:U:H2'	1:1A:1068:G:OP2	2.21	0.40
1:1A:2194:G:H2'	1:1A:2195:C:O4'	2.21	0.40
1:1A:2346:A:H5'	1:1A:2383:G:O4'	2.21	0.40
4:1E:55:ASN:O	4:1E:58:ARG:N	2.54	0.40
4:1E:146:THR:HA	4:1E:147:PRO:HA	1.96	0.40
22:10:11:ARG:H	22:10:11:ARG:HG2	1.55	0.40
33:1b:13:ALA:HB2	33:1b:44:LEU:HD13	2.03	0.40
33:1b:15:VAL:HB	33:1b:209:ARG:HG3	2.02	0.40
34:1c:6:HIS:HD2	34:1c:8:ILE:N	2.13	0.40
35:1d:85:LYS:HD3	35:1d:85:LYS:HA	1.80	0.40
38:1g:79:ARG:HD2	38:1g:79:ARG:C	2.46	0.40
42:1k:58:PRO:O	42:1k:93:GLN:HG2	2.22	0.40
51:1t:22:ARG:O	51:1t:26:ASN:ND2	2.45	0.40
57:1y:19:G:C4'	57:1y:57:G:H22	2.34	0.40
57:1y:37:T6A:C6	57:1y:38:A:C6	3.09	0.40
1:2A:361:G:N1	1:2A:362:U:C4	2.90	0.40
1:2A:573:G:O6	1:2A:2029:G:H2'	2.21	0.40
1:2A:629:G:N3	1:2A:639:U:O2'	2.50	0.40
1:2A:849:A:H2'	1:2A:850:C:O4'	2.22	0.40
1:2A:856:C:HO2'	1:2A:857:C:P	2.43	0.40
1:2A:862:G:H2'	1:2A:863:A:O4'	2.22	0.40
1:2A:910:A:C5	12:2Q:13:GLN:HG3	2.56	0.40
1:2A:1301:A:H2	1:2A:1626:G:N3	2.19	0.40
1:2A:1324:G:O6	62:2A:3970:HOH:O	2.21	0.40
1:2A:1467:C:C5	1:2A:1546:C:H2'	2.57	0.40
1:2A:1641:A:H2'	1:2A:1642:G:O4'	2.21	0.40
1:2A:1878:G:H2'	1:2A:1879:C:C6	2.56	0.40
1:2A:2059:A:C8	1:2A:2503:2MA:HM22	2.57	0.40
1:2A:2158:A:O2'	1:2A:2159:G:OP2	2.38	0.40
1:2A:2406:U:H6	1:2A:2406:U:H2'	1.72	0.40
1:2A:2591:C:H2'	1:2A:2592:G:C8	2.56	0.40
4:2E:15:PHE:CZ	15:2T:80:SER:HA	2.56	0.40
8:2I:130:TYR:N	8:2I:138:ILE:O	2.47	0.40
14:2S:24:LEU:HD23	14:2S:24:LEU:HA	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:2V:2:PHE:CE2	17:2V:41:GLY:HA3	2.56	0.40
21:2Z:97:GLU:HA	21:2Z:126:VAL:O	2.20	0.40
21:2Z:142:SER:C	21:2Z:144:LEU:H	2.28	0.40
27:25:49:CYS:SG	27:25:51:TYR:HB2	2.61	0.40
30:28:26:LYS:HD2	30:28:48:PHE:CD2	2.57	0.40
32:2a:66:G:H8	32:2a:66:G:OP1	2.04	0.40
32:2a:336:C:H2'	32:2a:337:C:H6	1.84	0.40
32:2a:354:G:O2'	32:2a:389:A:OP1	2.37	0.40
32:2a:410:G:H21	32:2a:432:A:H62	1.70	0.40
32:2a:824:C:H2'	32:2a:825:G:H8	1.83	0.40
32:2a:910:C:H2'	32:2a:911:U:O4'	2.21	0.40
32:2a:974:A:P	45:2n:41:ARG:HH21	2.44	0.40
32:2a:1310:G:H5'	44:2m:77:ASN:ND2	2.36	0.40
32:2a:1329:A:OP2	52:2u:7:ARG:NH1	2.47	0.40
32:2a:1371:G:O3'	40:2i:69:GLY:HA3	2.21	0.40
33:2b:16:HIS:O	33:2b:18:GLY:N	2.55	0.40
37:2f:48:LEU:HD22	49:2r:77:GLY:HA3	2.04	0.40
38:2g:78:ARG:HH12	38:2g:156:TRP:HB3	1.86	0.40
39:2h:20:TYR:HD1	39:2h:65:TYR:CD1	2.40	0.40
40:2i:7:THR:HG22	40:2i:83:ARG:NH1	2.37	0.40
40:2i:9:ARG:HA	40:2i:13:ALA:O	2.21	0.40
44:2m:33:ALA:HB2	44:2m:64:TRP:CZ3	2.56	0.40
51:2t:9:ASN:HB2	51:2t:10:LEU:H	1.74	0.40
56:2z:1:FME:HB3	56:2z:1:FME:HE2	1.59	0.40
57:2y:41:A:N6	57:2y:42:A:N1	2.70	0.40
1:1A:185:U:H4'	1:1A:218:A:H4'	2.03	0.40
1:1A:710:G:H1	1:1A:721:C:H42	1.69	0.40
1:1A:754:C:H2'	1:1A:755:C:C6	2.57	0.40
1:1A:864:G:O2'	1:1A:865:C:H5'	2.21	0.40
1:1A:1006:C:O2'	9:1N:106:MET:HB3	2.22	0.40
1:1A:1891:G:C6	1:1A:1892:C:C4	3.09	0.40
1:1A:2053:G:C2	1:1A:2617:C:C2	3.10	0.40
1:1A:2689:U:H4'	1:1A:2690:C:H5'	2.03	0.40
1:1A:2848:G:H1'	1:1A:2867:G:N2	2.37	0.40
2:1B:94:C:H2'	2:1B:95:C:H6	1.86	0.40
4:1E:117:MET:HE2	4:1E:117:MET:HB3	1.92	0.40
4:1E:181:LEU:HD21	15:1T:6:LEU:HD22	2.03	0.40
9:1N:8:GLN:HE21	9:1N:8:GLN:HB3	1.74	0.40
10:1O:19:ILE:HG22	10:1O:43:VAL:HG22	2.03	0.40
13:1R:2:ARG:NH1	13:1R:5:LYS:O	2.55	0.40
32:1a:150:C:H2'	32:1a:151:A:H8	1.83	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:319:G:H2'	32:1a:320:C:O4'	2.22	0.40
32:1a:736:C:H4'	37:1f:89:MET:HE3	2.02	0.40
32:1a:1350:A:C6	32:1a:1351:U:C4	3.10	0.40
38:1g:76:ARG:O	38:1g:87:VAL:HG12	2.21	0.40
44:1m:5:ALA:HA	44:1m:61:GLU:OE2	2.22	0.40
44:1m:20:THR:C	44:1m:22:ILE:H	2.29	0.40
45:1n:6:LEU:HD23	45:1n:6:LEU:HA	1.91	0.40
51:1t:22:ARG:C	51:1t:26:ASN:HD22	2.26	0.40
1:2A:30:G:C5	1:2A:31:C:C4	3.09	0.40
1:2A:974:G:C6	1:2A:1186:G:C6	3.10	0.40
1:2A:1009:A:O4'	16:2U:59:ARG:HD2	2.21	0.40
1:2A:1354:A:H4'	3:2D:38:LYS:NZ	2.36	0.40
1:2A:1509(B):A:H3'	1:2A:1510:G:C8	2.57	0.40
1:2A:2018:G:H2'	1:2A:2019:A:O4'	2.21	0.40
1:2A:2206:G:H3'	1:2A:2207:G:H8	1.84	0.40
1:2A:2228:G:C5	1:2A:2229:C:C4	3.09	0.40
1:2A:2419:U:H2'	1:2A:2420:C:C6	2.56	0.40
1:2A:2750:A:OP1	1:2A:2750:A:H8	2.04	0.40
5:2F:196:LEU:HD23	5:2F:196:LEU:HA	1.90	0.40
12:2Q:34:LEU:HB2	12:2Q:118:LEU:HD22	2.04	0.40
13:2R:38:VAL:HB	13:2R:39:PRO:HD3	2.03	0.40
15:2T:122:ASP:O	15:2T:125:ARG:HG2	2.22	0.40
26:24:34:GLU:H	26:24:34:GLU:HG2	1.73	0.40
32:2a:43:C:H2'	32:2a:44:G:O4'	2.22	0.40
32:2a:393:A:OP1	47:2p:13:HIS:HE1	2.05	0.40
32:2a:403:C:O2'	35:2d:122:ARG:NH2	2.54	0.40
32:2a:590:C:H2'	32:2a:591:U:C6	2.57	0.40
32:2a:1030(A):G:N3	32:2a:1030(C):G:C8	2.89	0.40
32:2a:1097:C:H1'	32:2a:1170:A:H1'	2.03	0.40
32:2a:1260:C:O5'	32:2a:1284:C:H4'	2.22	0.40
32:2a:1275:A:H3'	32:2a:1276:G:C8	2.50	0.40
32:2a:1342:C:H1'	40:2i:124:GLN:OE1	2.21	0.40
32:2a:1350:A:C6	32:2a:1351:U:C4	3.09	0.40
32:2a:1491:G:H5''	32:2a:1492:A:OP1	2.21	0.40
33:2b:16:HIS:HB2	33:2b:204:ASN:CB	2.52	0.40
33:2b:118:LEU:HD22	33:2b:122:PHE:HB2	2.03	0.40
35:2d:79:PHE:O	35:2d:83:SER:OG	2.40	0.40
38:2g:76:ARG:HG3	38:2g:156:TRP:HH2	1.86	0.40
40:2i:11:LYS:HA	40:2i:108:VAL:HG12	2.02	0.40
42:2k:20:TYR:CZ	42:2k:83:ILE:HD13	2.56	0.40
44:2m:17:VAL:HG12	44:2m:27:LYS:NZ	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:59:ALA:O	51:2t:63:ILE:HG13	2.21	0.40
54:2w:8:U:H2'	54:2w:9:A:H5''	2.03	0.40
54:2w:38:A:H2'	54:2w:39:PSU:O4'	2.21	0.40
55:2x:16:C:H5'	55:2x:59:A:N1	2.37	0.40
57:2y:55:PSU:C2	57:2y:57:G:H5'	2.57	0.40
1:1A:118:A:H3'	1:1A:119:A:H5''	2.03	0.40
1:1A:141:A:C6	1:1A:142:A:N1	2.90	0.40
1:1A:220:G:O2'	1:1A:233:A:N3	2.47	0.40
1:1A:245:G:O5'	11:1P:73:GLY:HA2	2.21	0.40
1:1A:539:G:H2'	1:1A:540:C:C6	2.57	0.40
1:1A:604:G:C6	1:1A:605:C:C4	3.09	0.40
1:1A:1814:G:C6	1:1A:1815:A:C6	3.09	0.40
1:1A:2702:U:H4'	1:1A:2703:C:OP1	2.20	0.40
2:1B:31:C:O2'	2:1B:53:A:N1	2.53	0.40
9:1N:67:LEU:HD23	9:1N:67:LEU:HA	1.97	0.40
11:1P:101:VAL:HG23	11:1P:106:LEU:O	2.21	0.40
15:1T:23:ARG:N	15:1T:26:ASP:OD2	2.43	0.40
25:13:5:LYS:HG3	25:13:36:VAL:HG22	2.03	0.40
32:1a:221:C:H2'	32:1a:222:U:C6	2.55	0.40
32:1a:932:C:O3'	38:1g:4:ARG:NH2	2.55	0.40
32:1a:1179:A:H4'	40:1i:103:THR:HA	2.04	0.40
32:1a:1366:C:H2'	32:1a:1367:C:H6	1.86	0.40
35:1d:178:VAL:C	35:1d:180:GLY:N	2.80	0.40
42:1k:33:THR:HA	42:1k:39:PRO:HA	2.04	0.40
47:1p:49:LEU:HD13	47:1p:50:LYS:N	2.37	0.40
57:1y:20:U:H6	57:1y:20:U:H2'	1.67	0.40
57:1y:49:G:C2	57:1y:66:A:C4	3.09	0.40
1:2A:483:A:H5''	20:2Y:50:ARG:HG2	2.03	0.40
1:2A:723:G:H2'	1:2A:724:U:O4'	2.21	0.40
1:2A:864:G:H1'	1:2A:914:C:N4	2.37	0.40
1:2A:1848:A:C4	1:2A:1849:G:C8	3.09	0.40
1:2A:2732:G:H3'	1:2A:2733:A:O4'	2.21	0.40
4:2E:110:GLY:HA2	4:2E:161:GLY:HA3	2.04	0.40
5:2F:120:GLU:OE2	5:2F:122:LYS:HG3	2.22	0.40
6:2G:176:LEU:HD23	6:2G:176:LEU:HA	1.87	0.40
8:2I:38:LEU:HD13	8:2I:40:THR:HG23	2.03	0.40
8:2I:48:GLU:HG3	8:2I:52:ARG:HH11	1.86	0.40
21:2Z:52:SER:C	21:2Z:54:HIS:H	2.29	0.40
21:2Z:69:THR:HB	21:2Z:88:PHE:HB3	2.03	0.40
32:2a:451:A:N1	32:2a:480:U:H2'	2.36	0.40
32:2a:583:A:H2'	32:2a:584:G:O4'	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:658:G:O4'	46:2o:22:THR:HB	2.21	0.40
32:2a:790:A:H2'	32:2a:791:G:C8	2.56	0.40
32:2a:1099:G:OP2	33:2b:144:ARG:NH2	2.55	0.40
32:2a:1226:C:C6	44:2m:103:THR:HB	2.55	0.40
33:2b:19:HIS:CG	33:2b:20:GLU:H	2.39	0.40
33:2b:42:ILE:HG21	33:2b:202:PRO:O	2.22	0.40
33:2b:111:ARG:HA	33:2b:111:ARG:HD3	1.85	0.40
33:2b:126:GLU:N	33:2b:126:GLU:CD	2.80	0.40
36:2e:89:ILE:HD12	36:2e:89:ILE:HA	1.90	0.40
38:2g:49:ILE:O	38:2g:53:LYS:HG3	2.22	0.40
42:2k:99:GLN:HG2	42:2k:105:VAL:HG21	2.04	0.40
54:2w:51:A:H3'	54:2w:64:G:N2	2.35	0.40
57:2y:9:A:C4	57:2y:45:G:N2	2.89	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	1D	273/276 (99%)	257 (94%)	16 (6%)	0	100	100
3	2D	273/276 (99%)	246 (90%)	26 (10%)	1 (0%)	30	51
4	1E	202/206 (98%)	189 (94%)	12 (6%)	1 (0%)	24	46
4	2E	202/206 (98%)	193 (96%)	8 (4%)	1 (0%)	24	46
5	1F	201/210 (96%)	193 (96%)	7 (4%)	1 (0%)	24	46
5	2F	201/210 (96%)	187 (93%)	12 (6%)	2 (1%)	12	28
6	1G	179/182 (98%)	165 (92%)	11 (6%)	3 (2%)	7	15
6	2G	179/182 (98%)	146 (82%)	29 (16%)	4 (2%)	5	10
7	1H	172/180 (96%)	156 (91%)	15 (9%)	1 (1%)	21	42
7	2H	172/180 (96%)	153 (89%)	16 (9%)	3 (2%)	7	15

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
8	1I	144/148 (97%)	125 (87%)	19 (13%)	0	100	100
8	2I	144/148 (97%)	119 (83%)	20 (14%)	5 (4%)	3	4
9	1N	138/140 (99%)	132 (96%)	5 (4%)	1 (1%)	18	38
9	2N	138/140 (99%)	130 (94%)	7 (5%)	1 (1%)	18	38
10	1O	120/122 (98%)	109 (91%)	9 (8%)	2 (2%)	7	15
10	2O	120/122 (98%)	107 (89%)	13 (11%)	0	100	100
11	1P	147/150 (98%)	131 (89%)	10 (7%)	6 (4%)	2	3
11	2P	147/150 (98%)	126 (86%)	17 (12%)	4 (3%)	4	7
12	1Q	139/141 (99%)	129 (93%)	9 (6%)	1 (1%)	18	38
12	2Q	139/141 (99%)	125 (90%)	14 (10%)	0	100	100
13	1R	116/118 (98%)	112 (97%)	3 (3%)	1 (1%)	14	30
13	2R	116/118 (98%)	107 (92%)	9 (8%)	0	100	100
14	1S	108/112 (96%)	102 (94%)	6 (6%)	0	100	100
14	2S	108/112 (96%)	96 (89%)	9 (8%)	3 (3%)	4	6
15	1T	129/146 (88%)	120 (93%)	8 (6%)	1 (1%)	16	34
15	2T	129/146 (88%)	120 (93%)	9 (7%)	0	100	100
16	1U	114/118 (97%)	114 (100%)	0	0	100	100
16	2U	114/118 (97%)	112 (98%)	2 (2%)	0	100	100
17	1V	99/101 (98%)	95 (96%)	2 (2%)	2 (2%)	6	12
17	2V	99/101 (98%)	93 (94%)	4 (4%)	2 (2%)	6	12
18	1W	110/113 (97%)	106 (96%)	4 (4%)	0	100	100
18	2W	110/113 (97%)	106 (96%)	4 (4%)	0	100	100
19	1X	93/96 (97%)	90 (97%)	2 (2%)	1 (1%)	11	25
19	2X	93/96 (97%)	83 (89%)	9 (10%)	1 (1%)	11	25
20	1Y	105/110 (96%)	97 (92%)	8 (8%)	0	100	100
20	2Y	105/110 (96%)	99 (94%)	6 (6%)	0	100	100
21	1Z	148/206 (72%)	126 (85%)	21 (14%)	1 (1%)	18	38
21	2Z	156/206 (76%)	125 (80%)	27 (17%)	4 (3%)	4	7
22	10	81/85 (95%)	77 (95%)	4 (5%)	0	100	100
22	20	81/85 (95%)	73 (90%)	8 (10%)	0	100	100
23	11	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	11	25

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
23	21	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	11	25
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100	100
24	22	68/72 (94%)	64 (94%)	4 (6%)	0	100	100
25	13	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
25	23	57/60 (95%)	52 (91%)	5 (9%)	0	100	100
26	14	67/71 (94%)	54 (81%)	9 (13%)	4 (6%)	1	1
26	24	67/71 (94%)	47 (70%)	17 (25%)	3 (4%)	2	2
27	15	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
27	25	57/60 (95%)	54 (95%)	3 (5%)	0	100	100
28	16	51/54 (94%)	49 (96%)	2 (4%)	0	100	100
28	26	51/54 (94%)	43 (84%)	8 (16%)	0	100	100
29	17	46/49 (94%)	45 (98%)	1 (2%)	0	100	100
29	27	46/49 (94%)	45 (98%)	1 (2%)	0	100	100
30	18	62/65 (95%)	61 (98%)	1 (2%)	0	100	100
30	28	62/65 (95%)	59 (95%)	3 (5%)	0	100	100
31	19	35/37 (95%)	34 (97%)	1 (3%)	0	100	100
31	29	35/37 (95%)	34 (97%)	1 (3%)	0	100	100
33	1b	229/256 (90%)	195 (85%)	23 (10%)	11 (5%)	2	2
33	2b	229/256 (90%)	182 (80%)	37 (16%)	10 (4%)	2	2
34	1c	204/239 (85%)	180 (88%)	21 (10%)	3 (2%)	8	18
34	2c	204/239 (85%)	160 (78%)	37 (18%)	7 (3%)	3	4
35	1d	206/209 (99%)	191 (93%)	14 (7%)	1 (0%)	24	46
35	2d	206/209 (99%)	186 (90%)	19 (9%)	1 (0%)	24	46
36	1e	146/162 (90%)	128 (88%)	16 (11%)	2 (1%)	9	19
36	2e	146/162 (90%)	124 (85%)	19 (13%)	3 (2%)	5	11
37	1f	98/101 (97%)	93 (95%)	4 (4%)	1 (1%)	12	28
37	2f	98/101 (97%)	94 (96%)	4 (4%)	0	100	100
38	1g	153/156 (98%)	136 (89%)	16 (10%)	1 (1%)	18	38
38	2g	153/156 (98%)	135 (88%)	14 (9%)	4 (3%)	4	7
39	1h	135/138 (98%)	126 (93%)	9 (7%)	0	100	100
39	2h	135/138 (98%)	123 (91%)	12 (9%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
40	1i	125/128 (98%)	109 (87%)	15 (12%)	1 (1%)	16	34
40	2i	125/128 (98%)	107 (86%)	16 (13%)	2 (2%)	7	16
41	1j	95/105 (90%)	77 (81%)	13 (14%)	5 (5%)	1	1
41	2j	94/105 (90%)	76 (81%)	15 (16%)	3 (3%)	3	5
42	1k	112/129 (87%)	98 (88%)	12 (11%)	2 (2%)	6	14
42	2k	112/129 (87%)	96 (86%)	12 (11%)	4 (4%)	2	4
43	1l	119/132 (90%)	109 (92%)	10 (8%)	0	100	100
43	2l	119/132 (90%)	101 (85%)	16 (13%)	2 (2%)	7	15
44	1m	121/126 (96%)	106 (88%)	13 (11%)	2 (2%)	7	15
44	2m	120/126 (95%)	101 (84%)	18 (15%)	1 (1%)	16	34
45	1n	58/61 (95%)	53 (91%)	5 (9%)	0	100	100
45	2n	58/61 (95%)	50 (86%)	7 (12%)	1 (2%)	7	15
46	1o	86/89 (97%)	76 (88%)	10 (12%)	0	100	100
46	2o	86/89 (97%)	80 (93%)	5 (6%)	1 (1%)	10	23
47	1p	80/88 (91%)	69 (86%)	11 (14%)	0	100	100
47	2p	80/88 (91%)	70 (88%)	9 (11%)	1 (1%)	9	21
48	1q	97/105 (92%)	93 (96%)	4 (4%)	0	100	100
48	2q	97/105 (92%)	84 (87%)	12 (12%)	1 (1%)	12	28
49	1r	66/88 (75%)	58 (88%)	7 (11%)	1 (2%)	8	18
49	2r	66/88 (75%)	63 (96%)	3 (4%)	0	100	100
50	1s	81/93 (87%)	70 (86%)	11 (14%)	0	100	100
50	2s	81/93 (87%)	67 (83%)	13 (16%)	1 (1%)	10	23
51	1t	94/106 (89%)	82 (87%)	9 (10%)	3 (3%)	3	5
51	2t	94/106 (89%)	84 (89%)	8 (8%)	2 (2%)	5	11
52	1u	21/27 (78%)	18 (86%)	3 (14%)	0	100	100
52	2u	21/27 (78%)	18 (86%)	1 (5%)	2 (10%)	0	0
56	1z	1/3 (33%)	0	1 (100%)	0	100	100
56	2z	1/3 (33%)	0	1 (100%)	0	100	100
All	All	11372/12134 (94%)	10242 (90%)	989 (9%)	141 (1%)	10	23

All (141) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	1F	130	ALA
11	1P	38	GLN
23	11	3	LYS
26	14	49	PHE
36	1e	96	PRO
40	1i	54	ASP
44	1m	67	GLU
6	2G	126	ASP
8	2I	10	GLU
14	2S	81	GLY
33	2b	17	PHE
33	2b	123	ALA
34	2c	108	ASN
36	2e	98	THR
38	2g	80	VAL
48	2q	68	ARG
6	1G	43	LEU
11	1P	29	LYS
15	1T	37	GLY
21	1Z	53	ILE
26	14	47	GLN
26	14	62	ARG
33	1b	17	PHE
33	1b	126	GLU
34	1c	107	GLN
36	1e	85	GLY
38	1g	52	GLU
44	1m	106	ASN
49	1r	33	ASP
51	1t	96	GLY
51	1t	100	ILE
6	2G	42	GLY
6	2G	124	SER
7	2H	126	PRO
8	2I	127	VAL
11	2P	36	LYS
14	2S	96	GLY
17	2V	79	VAL
21	2Z	149	SER
26	24	45	GLY
34	2c	181	ASN
38	2g	9	VAL
38	2g	55	GLY

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Mol	Chain	Res	Type
42	2k	49	GLY
51	2t	47	GLY
10	1O	89	ASN
13	1R	107	ASP
26	14	53	GLU
33	1b	16	HIS
35	1d	173	TRP
37	1f	45	LEU
41	1j	79	ARG
3	2D	275	LYS
5	2F	130	ALA
6	2G	127	GLY
8	2I	39	ALA
8	2I	117	GLU
11	2P	28	GLY
11	2P	38	GLN
33	2b	21	ARG
33	2b	204	ASN
40	2i	56	LEU
41	2j	79	ARG
42	2k	104	GLN
42	2k	106	LYS
46	2o	88	ARG
47	2p	52	ASP
4	1E	52	LEU
10	1O	5	GLN
11	1P	36	LYS
11	1P	45	LEU
11	1P	139	LYS
12	1Q	60	ARG
17	1V	100	ARG
19	1X	2	LYS
33	1b	8	LYS
33	1b	20	GLU
33	1b	124	SER
33	1b	127	ILE
33	1b	130	ARG
34	1c	12	LEU
34	1c	81	GLY
41	1j	30	SER
4	2E	52	LEU
9	2N	2	LYS

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Mol	Chain	Res	Type
14	2S	84	GLN
23	21	3	LYS
33	2b	20	GLU
33	2b	74	LYS
33	2b	105	PHE
34	2c	98	ASN
34	2c	135	LYS
34	2c	177	THR
40	2i	58	HIS
41	2j	75	ILE
41	2j	78	ASN
44	2m	106	ASN
50	2s	9	VAL
51	2t	10	LEU
52	2u	6	ARG
7	1H	3	ARG
17	1V	53	GLU
33	1b	13	ALA
41	1j	55	LYS
42	1k	25	TYR
42	1k	49	GLY
5	2F	21	ALA
19	2X	19	ALA
21	2Z	158	PRO
26	24	60	GLN
26	24	65	ASP
33	2b	154	LEU
34	2c	60	ALA
34	2c	95	THR
36	2e	85	GLY
38	2g	52	GLU
6	1G	42	GLY
6	1G	74	LYS
9	1N	2	LYS
7	2H	21	PRO
11	2P	45	LEU
33	2b	202	PRO
36	2e	96	PRO
43	2l	91	LYS
45	2n	14	PRO
41	1j	77	PRO
7	2H	12	PRO

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Mol	Chain	Res	Type
35	2d	136	PRO
11	1P	122	PRO
51	1t	102	GLY
42	2k	105	VAL
33	1b	231	GLU
41	1j	91	PRO
8	2I	137	PRO
52	2u	23	PRO
21	2Z	147	GLY
43	2l	40	VAL
21	2Z	146	ILE
33	2b	231	GLU
33	1b	125	PRO
17	2V	50	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%)	202 (94%)	13 (6%)	17	37
3	2D	215/218 (99%)	200 (93%)	15 (7%)	14	31
4	1E	164/166 (99%)	152 (93%)	12 (7%)	13	29
4	2E	164/166 (99%)	151 (92%)	13 (8%)	11	26
5	1F	160/166 (96%)	142 (89%)	18 (11%)	5	12
5	2F	159/166 (96%)	145 (91%)	14 (9%)	9	21
6	1G	143/156 (92%)	123 (86%)	20 (14%)	3	6
6	2G	143/156 (92%)	121 (85%)	22 (15%)	2	5
7	1H	144/148 (97%)	130 (90%)	14 (10%)	8	17
7	2H	144/148 (97%)	123 (85%)	21 (15%)	3	6
8	1I	113/124 (91%)	90 (80%)	23 (20%)	1	2
8	2I	105/124 (85%)	83 (79%)	22 (21%)	1	2
9	1N	118/119 (99%)	106 (90%)	12 (10%)	7	15

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
9	2N	118/119 (99%)	105 (89%)	13 (11%)	6	13
10	1O	100/100 (100%)	96 (96%)	4 (4%)	28	55
10	2O	100/100 (100%)	91 (91%)	9 (9%)	9	20
11	1P	115/116 (99%)	105 (91%)	10 (9%)	9	21
11	2P	115/116 (99%)	99 (86%)	16 (14%)	3	7
12	1Q	111/111 (100%)	101 (91%)	10 (9%)	9	20
12	2Q	111/111 (100%)	101 (91%)	10 (9%)	9	20
13	1R	101/101 (100%)	94 (93%)	7 (7%)	14	32
13	2R	101/101 (100%)	95 (94%)	6 (6%)	18	38
14	1S	86/88 (98%)	76 (88%)	10 (12%)	5	11
14	2S	85/88 (97%)	67 (79%)	18 (21%)	1	2
15	1T	115/127 (91%)	104 (90%)	11 (10%)	8	17
15	2T	113/127 (89%)	107 (95%)	6 (5%)	20	43
16	1U	93/94 (99%)	88 (95%)	5 (5%)	20	42
16	2U	93/94 (99%)	81 (87%)	12 (13%)	4	8
17	1V	80/82 (98%)	76 (95%)	4 (5%)	22	46
17	2V	80/82 (98%)	70 (88%)	10 (12%)	4	9
18	1W	90/92 (98%)	86 (96%)	4 (4%)	25	50
18	2W	90/92 (98%)	84 (93%)	6 (7%)	15	33
19	1X	77/78 (99%)	73 (95%)	4 (5%)	21	44
19	2X	77/78 (99%)	72 (94%)	5 (6%)	15	35
20	1Y	85/91 (93%)	72 (85%)	13 (15%)	3	5
20	2Y	85/91 (93%)	68 (80%)	17 (20%)	1	2
21	1Z	135/179 (75%)	110 (82%)	25 (18%)	1	3
21	2Z	137/179 (76%)	112 (82%)	25 (18%)	2	3
22	10	65/67 (97%)	62 (95%)	3 (5%)	24	49
22	20	65/67 (97%)	60 (92%)	5 (8%)	12	27
23	11	80/83 (96%)	75 (94%)	5 (6%)	16	36
23	21	80/83 (96%)	71 (89%)	9 (11%)	5	12
24	12	65/67 (97%)	58 (89%)	7 (11%)	6	13
24	22	65/67 (97%)	58 (89%)	7 (11%)	6	13

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
25	13	51/52 (98%)	47 (92%)	4 (8%)	11	26
25	23	50/52 (96%)	46 (92%)	4 (8%)	11	25
26	14	59/63 (94%)	49 (83%)	10 (17%)	2	4
26	24	53/63 (84%)	45 (85%)	8 (15%)	3	5
27	15	50/52 (96%)	46 (92%)	4 (8%)	11	25
27	25	50/52 (96%)	46 (92%)	4 (8%)	11	25
28	16	51/52 (98%)	45 (88%)	6 (12%)	5	10
28	26	50/52 (96%)	43 (86%)	7 (14%)	3	6
29	17	41/42 (98%)	37 (90%)	4 (10%)	7	17
29	27	41/42 (98%)	36 (88%)	5 (12%)	5	10
30	18	54/55 (98%)	51 (94%)	3 (6%)	19	40
30	28	54/55 (98%)	51 (94%)	3 (6%)	19	40
31	19	34/34 (100%)	33 (97%)	1 (3%)	37	65
31	29	34/34 (100%)	31 (91%)	3 (9%)	9	21
33	1b	192/220 (87%)	161 (84%)	31 (16%)	2	4
33	2b	187/220 (85%)	146 (78%)	41 (22%)	1	2
34	1c	142/188 (76%)	124 (87%)	18 (13%)	4	9
34	2c	140/188 (74%)	120 (86%)	20 (14%)	3	6
35	1d	169/181 (93%)	142 (84%)	27 (16%)	2	4
35	2d	173/181 (96%)	150 (87%)	23 (13%)	4	8
36	1e	113/123 (92%)	101 (89%)	12 (11%)	6	14
36	2e	114/123 (93%)	100 (88%)	14 (12%)	4	9
37	1f	84/90 (93%)	75 (89%)	9 (11%)	6	14
37	2f	85/90 (94%)	74 (87%)	11 (13%)	4	8
38	1g	119/127 (94%)	106 (89%)	13 (11%)	6	13
38	2g	120/127 (94%)	104 (87%)	16 (13%)	4	8
39	1h	114/119 (96%)	105 (92%)	9 (8%)	11	26
39	2h	114/119 (96%)	100 (88%)	14 (12%)	4	9
40	1i	90/99 (91%)	78 (87%)	12 (13%)	4	8
40	2i	89/99 (90%)	82 (92%)	7 (8%)	11	26
41	1j	66/92 (72%)	59 (89%)	7 (11%)	6	14

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
41	2j	69/92 (75%)	55 (80%)	14 (20%)	1	2
42	1k	82/99 (83%)	71 (87%)	11 (13%)	4	7
42	2k	83/99 (84%)	78 (94%)	5 (6%)	17	37
43	1l	96/108 (89%)	92 (96%)	4 (4%)	26	52
43	2l	96/108 (89%)	86 (90%)	10 (10%)	7	14
44	1m	93/101 (92%)	82 (88%)	11 (12%)	5	10
44	2m	92/101 (91%)	78 (85%)	14 (15%)	3	5
45	1n	49/50 (98%)	45 (92%)	4 (8%)	10	24
45	2n	49/50 (98%)	42 (86%)	7 (14%)	3	6
46	1o	78/80 (98%)	71 (91%)	7 (9%)	9	20
46	2o	78/80 (98%)	73 (94%)	5 (6%)	16	35
47	1p	69/74 (93%)	59 (86%)	10 (14%)	3	6
47	2p	68/74 (92%)	62 (91%)	6 (9%)	9	21
48	1q	94/97 (97%)	84 (89%)	10 (11%)	6	14
48	2q	94/97 (97%)	85 (90%)	9 (10%)	8	17
49	1r	59/77 (77%)	53 (90%)	6 (10%)	7	15
49	2r	59/77 (77%)	51 (86%)	8 (14%)	3	7
50	1s	69/80 (86%)	63 (91%)	6 (9%)	9	21
50	2s	67/80 (84%)	53 (79%)	14 (21%)	1	2
51	1t	70/82 (85%)	61 (87%)	9 (13%)	4	8
51	2t	70/82 (85%)	61 (87%)	9 (13%)	4	8
52	1u	18/22 (82%)	16 (89%)	2 (11%)	6	12
52	2u	18/22 (82%)	17 (94%)	1 (6%)	19	40
56	1z	2/2 (100%)	2 (100%)	0	100	100
56	2z	2/2 (100%)	2 (100%)	0	100	100
All	All	9307/10068 (92%)	8260 (89%)	1047 (11%)	6	12

All (1047) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	14	ARG
3	1D	27	THR

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Mol	Chain	Res	Type
3	1D	32	SER
3	1D	37	LEU
3	1D	91	ARG
3	1D	113	VAL
3	1D	181	GLU
3	1D	204	ILE
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	273	ARG
4	1E	7	VAL
4	1E	8	LYS
4	1E	12	THR
4	1E	33	VAL
4	1E	47	VAL
4	1E	87	GLU
4	1E	90	THR
4	1E	92	THR
4	1E	116	VAL
4	1E	184	VAL
4	1E	188	VAL
4	1E	195	LEU
5	1F	18	ARG
5	1F	24	LEU
5	1F	27	GLU
5	1F	33	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	74	ARG
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	158	THR
5	1F	162	LEU
5	1F	165	ARG
5	1F	168	ARG
5	1F	183	VAL
6	1G	3	LEU
6	1G	5	VAL

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Mol	Chain	Res	Type
6	1G	7	LEU
6	1G	31	VAL
6	1G	43	LEU
6	1G	49	ASP
6	1G	60	LEU
6	1G	77	ILE
6	1G	79	ASN
6	1G	91	ARG
6	1G	108	ASN
6	1G	116	ASP
6	1G	133	LEU
6	1G	139	LEU
6	1G	140	ILE
6	1G	149	VAL
6	1G	159	VAL
6	1G	161	THR
6	1G	165	THR
6	1G	174	GLU
7	1H	18	GLU
7	1H	23	ARG
7	1H	24	VAL
7	1H	45	VAL
7	1H	49	VAL
7	1H	58	GLU
7	1H	77	LYS
7	1H	84	SER
7	1H	88	LEU
7	1H	106	THR
7	1H	124	GLU
7	1H	129	THR
7	1H	130	ARG
7	1H	136	ILE
8	1I	2	LYS
8	1I	9	LEU
8	1I	10	GLU
8	1I	12	LEU
8	1I	38	LEU
8	1I	40	THR
8	1I	41	GLU
8	1I	47	LEU
8	1I	60	GLU
8	1I	61	ARG

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Mol	Chain	Res	Type
8	1I	74	ASN
8	1I	75	LEU
8	1I	81	VAL
8	1I	82	ARG
8	1I	86	THR
8	1I	87	LYS
8	1I	92	VAL
8	1I	101	LEU
8	1I	102	SER
8	1I	103	ARG
8	1I	109	ILE
8	1I	127	VAL
8	1I	142	VAL
9	1N	1	MET
9	1N	8	GLN
9	1N	9	VAL
9	1N	10	GLU
9	1N	28	THR
9	1N	48	MET
9	1N	62	VAL
9	1N	68	GLU
9	1N	70	LYS
9	1N	71	ILE
9	1N	112	LEU
9	1N	119	ARG
10	1O	35	VAL
10	1O	52	VAL
10	1O	53	LYS
10	1O	89	ASN
11	1P	3	LEU
11	1P	7	ARG
11	1P	45	LEU
11	1P	47	ASP
11	1P	56	SER
11	1P	65	ARG
11	1P	96	THR
11	1P	99	LEU
11	1P	136	GLU
11	1P	147	LEU
12	1Q	7	MET
12	1Q	8	LYS
12	1Q	56	ARG

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Mol	Chain	Res	Type
12	1Q	59	ARG
12	1Q	77	LYS
12	1Q	81	VAL
12	1Q	97	VAL
12	1Q	98	LYS
12	1Q	109	VAL
12	1Q	113	GLN
13	1R	8	ARG
13	1R	15	SER
13	1R	30	THR
13	1R	36	THR
13	1R	102	GLU
13	1R	113	LEU
13	1R	114	VAL
14	1S	14	VAL
14	1S	17	ARG
14	1S	46	VAL
14	1S	49	VAL
14	1S	50	SER
14	1S	52	SER
14	1S	57	LYS
14	1S	69	VAL
14	1S	84	GLN
14	1S	110	LEU
15	1T	10	VAL
15	1T	23	ARG
15	1T	28	VAL
15	1T	30	VAL
15	1T	36	GLU
15	1T	48	ILE
15	1T	67	SER
15	1T	84	GLN
15	1T	88	ILE
15	1T	96	ARG
15	1T	128	GLU
16	1U	17	ILE
16	1U	74	LEU
16	1U	77	SER
16	1U	95	LEU
16	1U	100	VAL
17	1V	46	VAL
17	1V	61	VAL

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Mol	Chain	Res	Type
17	1V	73	SER
17	1V	79	VAL
18	1W	11	ARG
18	1W	15	ARG
18	1W	17	VAL
18	1W	103	ILE
19	1X	43	VAL
19	1X	75	ASP
19	1X	87	GLN
19	1X	88	LYS
20	1Y	7	VAL
20	1Y	9	LYS
20	1Y	11	ASP
20	1Y	23	ARG
20	1Y	43	ASN
20	1Y	44	ILE
20	1Y	52	SER
20	1Y	70	SER
20	1Y	72	VAL
20	1Y	91	GLU
20	1Y	99	CYS
20	1Y	106	LEU
20	1Y	107	ASP
21	1Z	28	MET
21	1Z	32	HIS
21	1Z	33	LEU
21	1Z	42	VAL
21	1Z	46	LYS
21	1Z	49	ARG
21	1Z	53	ILE
21	1Z	56	VAL
21	1Z	60	GLU
21	1Z	61	LEU
21	1Z	70	LEU
21	1Z	72	ARG
21	1Z	74	VAL
21	1Z	102	LEU
21	1Z	119	GLU
21	1Z	128	VAL
21	1Z	140	ASP
21	1Z	146	ILE
21	1Z	150	LEU

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Mol	Chain	Res	Type
21	1Z	153	SER
21	1Z	154	ASP
21	1Z	156	LYS
21	1Z	161	VAL
21	1Z	170	THR
21	1Z	171	ILE
22	10	10	THR
22	10	11	ARG
22	10	46	LYS
23	11	40	ARG
23	11	46	LEU
23	11	51	VAL
23	11	59	THR
23	11	80	LEU
24	12	1	MET
24	12	5	GLU
24	12	28	LYS
24	12	40	SER
24	12	41	ILE
24	12	55	ARG
24	12	65	ASN
25	13	54	VAL
25	13	55	ARG
25	13	56	VAL
25	13	60	GLU
26	14	1	MET
26	14	22	ILE
26	14	27	THR
26	14	33	VAL
26	14	49	PHE
26	14	52	THR
26	14	53	GLU
26	14	63	TYR
26	14	65	ASP
26	14	67	TYR
27	15	6	VAL
27	15	26	THR
27	15	40	LYS
27	15	59	GLU
28	16	5	VAL
28	16	9	LEU
28	16	13	CYS

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Mol	Chain	Res	Type
28	16	19	ARG
28	16	24	GLU
28	16	47	THR
29	17	1	MET
29	17	24	THR
29	17	43	THR
29	17	46	VAL
30	18	14	VAL
30	18	23	VAL
30	18	29	LYS
31	19	17	ILE
33	1b	8	LYS
33	1b	12	GLU
33	1b	21	ARG
33	1b	23	ARG
33	1b	35	GLU
33	1b	37	ASN
33	1b	39	ILE
33	1b	44	LEU
33	1b	54	THR
33	1b	64	ARG
33	1b	73	THR
33	1b	80	ILE
33	1b	94	ASN
33	1b	95	GLN
33	1b	101	MET
33	1b	108	ILE
33	1b	112	VAL
33	1b	128	GLU
33	1b	143	GLU
33	1b	150	SER
33	1b	154	LEU
33	1b	157	ARG
33	1b	160	ASP
33	1b	185	ILE
33	1b	187	LEU
33	1b	196	LEU
33	1b	200	ILE
33	1b	208	ILE
33	1b	212	GLN
33	1b	233	SER
33	1b	236	TYR

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Mol	Chain	Res	Type
34	1c	15	THR
34	1c	32	LEU
34	1c	64	VAL
34	1c	77	ILE
34	1c	82	GLU
34	1c	85	ARG
34	1c	105	GLU
34	1c	110	ASN
34	1c	112	SER
34	1c	115	LEU
34	1c	124	ILE
34	1c	175	LEU
34	1c	188	LEU
34	1c	190	ARG
34	1c	192	THR
34	1c	195	VAL
34	1c	201	TYR
34	1c	207	VAL
35	1d	3	ARG
35	1d	8	VAL
35	1d	17	VAL
35	1d	19	LEU
35	1d	31	CYS
35	1d	36	ARG
35	1d	47	ARG
35	1d	59	ARG
35	1d	76	ARG
35	1d	83	SER
35	1d	85	LYS
35	1d	88	VAL
35	1d	100	ARG
35	1d	120	LEU
35	1d	141	ARG
35	1d	144	ASP
35	1d	157	LEU
35	1d	158	ILE
35	1d	170	VAL
35	1d	177	ASP
35	1d	178	VAL
35	1d	188	LEU
35	1d	190	ASP
35	1d	193	ASP

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Mol	Chain	Res	Type
35	1d	194	LEU
35	1d	198	VAL
35	1d	200	GLU
36	1e	11	ILE
36	1e	12	LEU
36	1e	32	VAL
36	1e	41	VAL
36	1e	51	VAL
36	1e	53	LEU
36	1e	56	GLN
36	1e	79	GLU
36	1e	82	VAL
36	1e	92	LYS
36	1e	120	THR
36	1e	151	LEU
37	1f	19	LEU
37	1f	36	ARG
37	1f	45	LEU
37	1f	55	ASP
37	1f	65	VAL
37	1f	72	VAL
37	1f	73	ASN
37	1f	75	LEU
37	1f	78	GLU
38	1g	10	ARG
38	1g	20	ASP
38	1g	50	ILE
38	1g	57	GLU
38	1g	59	LEU
38	1g	61	VAL
38	1g	85	TYR
38	1g	90	GLU
38	1g	104	LEU
38	1g	110	GLN
38	1g	114	ARG
38	1g	115	ARG
38	1g	155	ARG
39	1h	21	LYS
39	1h	45	ILE
39	1h	77	GLU
39	1h	84	ARG
39	1h	86	ILE

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Mol	Chain	Res	Type
39	1h	98	LYS
39	1h	99	GLU
39	1h	112	LEU
39	1h	133	LEU
40	1i	3	GLN
40	1i	9	ARG
40	1i	17	VAL
40	1i	25	LYS
40	1i	26	VAL
40	1i	38	GLN
40	1i	41	VAL
40	1i	53	VAL
40	1i	81	ILE
40	1i	99	LEU
40	1i	103	THR
40	1i	128	ARG
41	1j	5	ARG
41	1j	7	LYS
41	1j	21	GLN
41	1j	81	THR
41	1j	92	THR
41	1j	96	ILE
41	1j	100	THR
42	1k	14	VAL
42	1k	25	TYR
42	1k	48	ILE
42	1k	51	LYS
42	1k	63	LEU
42	1k	77	MET
42	1k	80	VAL
42	1k	109	VAL
42	1k	114	VAL
42	1k	117	ASN
42	1k	125	PHE
43	1l	22	SER
43	1l	36	VAL
43	1l	83	VAL
43	1l	100	ILE
44	1m	3	ARG
44	1m	11	ARG
44	1m	17	VAL
44	1m	43	THR

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Mol	Chain	Res	Type
44	1m	49	THR
44	1m	64	TRP
44	1m	67	GLU
44	1m	71	ARG
44	1m	86	CYS
44	1m	106	ASN
44	1m	117	VAL
45	1n	13	THR
45	1n	15	LYS
45	1n	50	LYS
45	1n	56	VAL
46	1o	3	ILE
46	1o	21	ASP
46	1o	34	LEU
46	1o	47	LYS
46	1o	76	GLU
46	1o	84	LYS
46	1o	87	ILE
47	1p	8	ARG
47	1p	11	SER
47	1p	16	HIS
47	1p	20	VAL
47	1p	21	VAL
47	1p	27	LYS
47	1p	45	THR
47	1p	60	LEU
47	1p	62	VAL
47	1p	67	THR
48	1q	9	VAL
48	1q	11	VAL
48	1q	14	LYS
48	1q	23	VAL
48	1q	25	ARG
48	1q	36	ILE
48	1q	53	LEU
48	1q	60	ILE
48	1q	96	GLU
48	1q	97	SER
49	1r	35	ARG
49	1r	36	ASN
49	1r	37	VAL
49	1r	40	LEU

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Mol	Chain	Res	Type
49	1r	63	GLN
49	1r	76	LEU
50	1s	9	VAL
50	1s	16	LEU
50	1s	28	LYS
50	1s	63	THR
50	1s	78	ARG
50	1s	79	THR
51	1t	10	LEU
51	1t	13	LEU
51	1t	24	LEU
51	1t	37	SER
51	1t	38	LYS
51	1t	42	GLN
51	1t	71	THR
51	1t	90	GLN
51	1t	100	ILE
52	1u	8	THR
52	1u	20	LYS
3	2D	3	VAL
3	2D	14	ARG
3	2D	18	VAL
3	2D	113	VAL
3	2D	118	VAL
3	2D	147	LEU
3	2D	154	LYS
3	2D	162	SER
3	2D	171	ASP
3	2D	173	VAL
3	2D	204	ILE
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	270	ILE
4	2E	12	THR
4	2E	27	LEU
4	2E	38	THR
4	2E	47	VAL
4	2E	69	LYS
4	2E	72	VAL
4	2E	77	ILE
4	2E	81	ILE

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Mol	Chain	Res	Type
4	2E	116	VAL
4	2E	134	ILE
4	2E	175	VAL
4	2E	184	VAL
4	2E	188	VAL
5	2F	20	LEU
5	2F	24	LEU
5	2F	28	ILE
5	2F	33	LEU
5	2F	95	ARG
5	2F	96	ASP
5	2F	108	LYS
5	2F	110	LEU
5	2F	119	ARG
5	2F	137	LYS
5	2F	149	ASP
5	2F	153	SER
5	2F	158	THR
5	2F	183	VAL
6	2G	3	LEU
6	2G	7	LEU
6	2G	20	ILE
6	2G	28	VAL
6	2G	30	GLU
6	2G	35	GLU
6	2G	43	LEU
6	2G	45	GLU
6	2G	47	LYS
6	2G	51	ARG
6	2G	53	LEU
6	2G	77	ILE
6	2G	86	MET
6	2G	88	ILE
6	2G	91	ARG
6	2G	97	ASP
6	2G	111	LEU
6	2G	137	GLU
6	2G	140	ILE
6	2G	157	ILE
6	2G	165	THR
6	2G	170	ARG
7	2H	9	ILE

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Mol	Chain	Res	Type
7	2H	13	LYS
7	2H	15	VAL
7	2H	44	VAL
7	2H	49	VAL
7	2H	50	VAL
7	2H	57	ASP
7	2H	70	THR
7	2H	84	SER
7	2H	103	LEU
7	2H	104	GLU
7	2H	106	THR
7	2H	111	HIS
7	2H	114	VAL
7	2H	122	THR
7	2H	124	GLU
7	2H	127	GLU
7	2H	129	THR
7	2H	136	ILE
7	2H	153	LYS
7	2H	167	GLU
8	2I	2	LYS
8	2I	15	VAL
8	2I	38	LEU
8	2I	45	LYS
8	2I	50	ARG
8	2I	51	ILE
8	2I	58	LEU
8	2I	61	ARG
8	2I	62	LYS
8	2I	68	LEU
8	2I	78	THR
8	2I	89	TYR
8	2I	91	SER
8	2I	101	LEU
8	2I	105	HIS
8	2I	117	GLU
8	2I	123	LEU
8	2I	133	HIS
8	2I	138	ILE
8	2I	143	SER
8	2I	144	VAL
8	2I	145	VAL

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Mol	Chain	Res	Type
9	2N	1	MET
9	2N	2	LYS
9	2N	23	LEU
9	2N	28	THR
9	2N	46	VAL
9	2N	48	MET
9	2N	60	ILE
9	2N	62	VAL
9	2N	73	THR
9	2N	87	LEU
9	2N	112	LEU
9	2N	131	GLN
9	2N	137	LYS
10	2O	28	SER
10	2O	44	LYS
10	2O	45	GLU
10	2O	69	ILE
10	2O	89	ASN
10	2O	92	GLU
10	2O	96	THR
10	2O	108	GLU
10	2O	109	LYS
11	2P	3	LEU
11	2P	7	ARG
11	2P	29	LYS
11	2P	39	LYS
11	2P	45	LEU
11	2P	58	THR
11	2P	70	GLN
11	2P	90	ARG
11	2P	92	GLU
11	2P	94	GLU
11	2P	96	THR
11	2P	114	ILE
11	2P	123	LEU
11	2P	131	SER
11	2P	133	SER
11	2P	136	GLU
12	2Q	1	MET
12	2Q	2	LEU
12	2Q	7	MET
12	2Q	21	THR

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Mol	Chain	Res	Type
12	2Q	42	ILE
12	2Q	46	GLN
12	2Q	54	MET
12	2Q	56	ARG
12	2Q	109	VAL
12	2Q	110	THR
13	2R	6	SER
13	2R	20	LEU
13	2R	24	GLN
13	2R	36	THR
13	2R	49	ASP
13	2R	114	VAL
14	2S	3	ARG
14	2S	5	THR
14	2S	8	GLU
14	2S	12	PHE
14	2S	15	ARG
14	2S	28	VAL
14	2S	35	ILE
14	2S	36	TYR
14	2S	43	GLU
14	2S	57	LYS
14	2S	58	LEU
14	2S	63	THR
14	2S	69	VAL
14	2S	83	LYS
14	2S	93	LYS
14	2S	98	VAL
14	2S	99	LYS
14	2S	110	LEU
15	2T	28	VAL
15	2T	51	ARG
15	2T	63	VAL
15	2T	89	VAL
15	2T	95	ARG
15	2T	125	ARG
16	2U	5	LYS
16	2U	6	THR
16	2U	17	ILE
16	2U	31	SER
16	2U	36	ARG
16	2U	63	VAL

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Mol	Chain	Res	Type
16	2U	71	GLN
16	2U	74	LEU
16	2U	95	LEU
16	2U	105	VAL
16	2U	110	VAL
16	2U	117	GLN
17	2V	14	VAL
17	2V	24	LYS
17	2V	52	VAL
17	2V	53	GLU
17	2V	57	VAL
17	2V	79	VAL
17	2V	85	LYS
17	2V	93	GLU
17	2V	98	GLU
17	2V	99	ILE
18	2W	11	ARG
18	2W	17	VAL
18	2W	59	VAL
18	2W	65	LEU
18	2W	67	ASP
18	2W	85	VAL
19	2X	69	TYR
19	2X	72	LYS
19	2X	75	ASP
19	2X	81	VAL
19	2X	92	LEU
20	2Y	5	MET
20	2Y	7	VAL
20	2Y	12	THR
20	2Y	14	LEU
20	2Y	19	LYS
20	2Y	30	VAL
20	2Y	38	ILE
20	2Y	44	ILE
20	2Y	50	ARG
20	2Y	61	ILE
20	2Y	72	VAL
20	2Y	85	VAL
20	2Y	87	LYS
20	2Y	88	LYS
20	2Y	98	VAL

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Mol	Chain	Res	Type
20	2Y	99	CYS
20	2Y	106	LEU
21	2Z	6	LYS
21	2Z	20	ARG
21	2Z	33	LEU
21	2Z	40	ASP
21	2Z	42	VAL
21	2Z	47	VAL
21	2Z	56	VAL
21	2Z	67	LEU
21	2Z	70	LEU
21	2Z	84	GLU
21	2Z	91	LEU
21	2Z	94	GLU
21	2Z	100	VAL
21	2Z	121	HIS
21	2Z	131	ARG
21	2Z	136	PHE
21	2Z	137	ILE
21	2Z	142	SER
21	2Z	144	LEU
21	2Z	145	GLU
21	2Z	154	ASP
21	2Z	157	LEU
21	2Z	161	VAL
21	2Z	170	THR
21	2Z	171	ILE
22	20	9	SER
22	20	46	LYS
22	20	63	VAL
22	20	64	ASP
22	20	68	GLU
23	21	6	GLU
23	21	11	ARG
23	21	26	ARG
23	21	40	ARG
23	21	41	ARG
23	21	46	LEU
23	21	59	THR
23	21	78	LYS
23	21	85	LEU
24	22	19	VAL

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Mol	Chain	Res	Type
24	22	30	ARG
24	22	35	LEU
24	22	46	GLN
24	22	53	LEU
24	22	65	ASN
24	22	70	GLN
25	23	23	LEU
25	23	31	LEU
25	23	56	VAL
25	23	59	VAL
26	24	33	VAL
26	24	34	GLU
26	24	48	ARG
26	24	49	PHE
26	24	50	VAL
26	24	56	VAL
26	24	59	PHE
26	24	63	TYR
27	25	6	VAL
27	25	48	GLU
27	25	58	LEU
27	25	59	GLU
28	26	7	ILE
28	26	19	ARG
28	26	20	ASN
28	26	23	THR
28	26	34	LEU
28	26	45	LYS
28	26	48	VAL
29	27	1	MET
29	27	4	THR
29	27	29	LYS
29	27	41	ARG
29	27	43	THR
30	28	14	VAL
30	28	37	SER
30	28	49	VAL
31	29	6	SER
31	29	7	VAL
31	29	33	LYS
33	2b	8	LYS
33	2b	9	GLU

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Mol	Chain	Res	Type
33	2b	16	HIS
33	2b	23	ARG
33	2b	44	LEU
33	2b	47	THR
33	2b	48	MET
33	2b	49	GLU
33	2b	55	PHE
33	2b	58	ILE
33	2b	67	THR
33	2b	68	ILE
33	2b	71	VAL
33	2b	73	THR
33	2b	76	GLN
33	2b	83	MET
33	2b	93	VAL
33	2b	94	ASN
33	2b	96	ARG
33	2b	110	GLN
33	2b	112	VAL
33	2b	118	LEU
33	2b	121	LEU
33	2b	126	GLU
33	2b	127	ILE
33	2b	136	VAL
33	2b	138	LEU
33	2b	139	LYS
33	2b	142	LEU
33	2b	163	PHE
33	2b	164	VAL
33	2b	179	LYS
33	2b	185	ILE
33	2b	189	ASP
33	2b	191	ASP
33	2b	195	ASP
33	2b	208	ILE
33	2b	214	ILE
33	2b	224	GLN
33	2b	230	VAL
33	2b	236	TYR
34	2c	5	ILE
34	2c	32	LEU
34	2c	35	GLU

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Mol	Chain	Res	Type
34	2c	45	LYS
34	2c	47	LEU
34	2c	55	VAL
34	2c	68	VAL
34	2c	70	VAL
34	2c	91	LEU
34	2c	101	LEU
34	2c	102	ASN
34	2c	104	GLN
34	2c	105	GLU
34	2c	128	PHE
34	2c	132	ARG
34	2c	138	VAL
34	2c	153	VAL
34	2c	172	ARG
34	2c	182	ILE
34	2c	190	ARG
35	2d	5	ILE
35	2d	8	VAL
35	2d	12	CYS
35	2d	17	VAL
35	2d	19	LEU
35	2d	31	CYS
35	2d	34	GLU
35	2d	42	GLN
35	2d	47	ARG
35	2d	53	ASP
35	2d	59	ARG
35	2d	60	GLU
35	2d	70	ILE
35	2d	78	LEU
35	2d	83	SER
35	2d	96	LEU
35	2d	107	ARG
35	2d	120	LEU
35	2d	127	THR
35	2d	135	LEU
35	2d	150	GLU
35	2d	160	GLN
35	2d	162	LEU
36	2e	10	MET
36	2e	12	LEU

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Mol	Chain	Res	Type
36	2e	13	ILE
36	2e	16	THR
36	2e	31	LEU
36	2e	38	GLN
36	2e	41	VAL
36	2e	51	VAL
36	2e	78	HIS
36	2e	82	VAL
36	2e	91	LEU
36	2e	120	THR
36	2e	150	ARG
36	2e	151	LEU
37	2f	23	LYS
37	2f	28	ARG
37	2f	64	GLN
37	2f	69	GLU
37	2f	70	ASP
37	2f	74	ASP
37	2f	81	ILE
37	2f	83	ASP
37	2f	92	LYS
37	2f	94	GLN
37	2f	95	GLU
38	2g	9	VAL
38	2g	15	ASP
38	2g	21	VAL
38	2g	23	VAL
38	2g	24	THR
38	2g	47	CYS
38	2g	52	GLU
38	2g	53	LYS
38	2g	73	MET
38	2g	79	ARG
38	2g	94	ARG
38	2g	97	GLN
38	2g	106	GLN
38	2g	114	ARG
38	2g	124	LEU
38	2g	146	GLU
39	2h	8	ASP
39	2h	11	THR
39	2h	26	VAL

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Mol	Chain	Res	Type
39	2h	45	ILE
39	2h	51	VAL
39	2h	52	ASP
39	2h	100	ILE
39	2h	109	ILE
39	2h	112	LEU
39	2h	113	SER
39	2h	115	SER
39	2h	123	GLU
39	2h	133	LEU
39	2h	137	VAL
40	2i	7	THR
40	2i	42	ARG
40	2i	58	HIS
40	2i	65	VAL
40	2i	83	ARG
40	2i	89	ASN
40	2i	114	TYR
41	2j	8	LEU
41	2j	25	GLU
41	2j	29	ARG
41	2j	38	ILE
41	2j	42	THR
41	2j	44	VAL
41	2j	45	ARG
41	2j	55	LYS
41	2j	58	ASP
41	2j	73	ASP
41	2j	84	GLN
41	2j	96	ILE
41	2j	97	GLU
41	2j	100	THR
42	2k	30	VAL
42	2k	41	THR
42	2k	48	ILE
42	2k	80	VAL
42	2k	105	VAL
43	2l	36	VAL
43	2l	39	VAL
43	2l	40	VAL
43	2l	59	ARG
43	2l	67	THR

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Mol	Chain	Res	Type
43	2l	83	VAL
43	2l	97	ARG
43	2l	99	HIS
43	2l	100	ILE
43	2l	118	SER
44	2m	4	ILE
44	2m	14	ARG
44	2m	15	VAL
44	2m	32	GLU
44	2m	47	ASP
44	2m	63	THR
44	2m	86	CYS
44	2m	92	HIS
44	2m	93	ARG
44	2m	98	VAL
44	2m	103	THR
44	2m	106	ASN
44	2m	114	ARG
44	2m	116	THR
45	2n	3	ARG
45	2n	9	LYS
45	2n	15	LYS
45	2n	19	ARG
45	2n	33	VAL
45	2n	56	VAL
45	2n	58	LYS
46	2o	3	ILE
46	2o	26	GLU
46	2o	34	LEU
46	2o	56	LEU
46	2o	60	VAL
47	2p	2	VAL
47	2p	5	ARG
47	2p	20	VAL
47	2p	29	ASP
47	2p	49	LEU
47	2p	67	THR
48	2q	7	THR
48	2q	21	VAL
48	2q	41	LYS
48	2q	60	ILE
48	2q	67	LYS

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Mol	Chain	Res	Type
48	2q	73	VAL
48	2q	78	GLU
48	2q	84	LEU
48	2q	90	ILE
49	2r	26	LEU
49	2r	29	PHE
49	2r	31	LEU
49	2r	44	LEU
49	2r	46	GLU
49	2r	54	ARG
49	2r	78	LEU
49	2r	82	THR
50	2s	14	HIS
50	2s	15	LEU
50	2s	27	GLU
50	2s	33	THR
50	2s	37	ARG
50	2s	43	GLU
50	2s	45	VAL
50	2s	48	THR
50	2s	49	ILE
50	2s	51	VAL
50	2s	56	GLN
50	2s	57	HIS
50	2s	63	THR
50	2s	77	THR
51	2t	9	ASN
51	2t	31	SER
51	2t	33	ILE
51	2t	45	GLN
51	2t	46	GLU
51	2t	56	MET
51	2t	62	LEU
51	2t	70	SER
51	2t	86	ARG
52	2u	20	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (146) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	87	ASN
3	1D	126	GLN

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Mol	Chain	Res	Type
3	1D	164	GLN
3	1D	201	HIS
4	1E	121	ASN
5	1F	69	HIS
5	1F	133	ASN
5	1F	203	GLN
6	1G	26	GLN
9	1N	8	GLN
12	1Q	12	GLN
14	1S	84	GLN
14	1S	95	HIS
15	1T	58	ASN
15	1T	84	GLN
16	1U	71	GLN
16	1U	94	ASN
16	1U	117	GLN
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
20	1Y	43	ASN
21	1Z	32	HIS
21	1Z	151	HIS
22	10	35	ASN
24	12	38	GLN
25	13	32	GLN
26	14	60	GLN
30	18	35	GLN
33	1b	40	HIS
33	1b	94	ASN
33	1b	110	GLN
33	1b	140	HIS
33	1b	212	GLN
34	1c	6	HIS
34	1c	98	ASN
34	1c	108	ASN
34	1c	118	GLN
34	1c	123	GLN
34	1c	136	GLN
34	1c	162	GLN
35	1d	42	GLN
35	1d	77	ASN
35	1d	116	GLN

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Mol	Chain	Res	Type
35	1d	119	GLN
35	1d	123	HIS
35	1d	125	HIS
35	1d	160	GLN
35	1d	161	ASN
35	1d	201	GLN
36	1e	78	HIS
37	1f	57	GLN
37	1f	73	ASN
37	1f	100	ASN
38	1g	28	ASN
38	1g	64	GLN
38	1g	109	ASN
40	1i	34	ASN
40	1i	58	HIS
40	1i	124	GLN
41	1j	56	HIS
42	1k	104	GLN
43	1l	99	HIS
44	1m	77	ASN
44	1m	92	HIS
46	1o	9	GLN
46	1o	62	GLN
46	1o	71	GLN
47	1p	13	HIS
47	1p	76	GLN
48	1q	26	GLN
49	1r	63	GLN
50	1s	14	HIS
50	1s	83	HIS
51	1t	90	GLN
3	2D	164	GLN
4	2E	48	GLN
4	2E	121	ASN
4	2E	192	ASN
5	2F	69	HIS
7	2H	111	HIS
9	2N	56	ASN
9	2N	69	GLN
10	2O	5	GLN
11	2P	70	GLN
12	2Q	12	GLN

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Mol	Chain	Res	Type
12	2Q	46	GLN
12	2Q	57	HIS
12	2Q	123	HIS
13	2R	13	HIS
13	2R	50	HIS
14	2S	38	GLN
14	2S	84	GLN
15	2T	58	ASN
15	2T	90	GLN
15	2T	123	GLN
16	2U	104	GLN
16	2U	117	GLN
18	2W	111	HIS
21	2Z	73	GLN
24	22	38	GLN
24	22	43	GLN
26	24	46	GLN
28	26	20	ASN
31	29	36	GLN
33	2b	19	HIS
33	2b	40	HIS
33	2b	76	GLN
33	2b	95	GLN
33	2b	135	GLN
33	2b	146	GLN
34	2c	98	ASN
34	2c	102	ASN
34	2c	123	GLN
34	2c	162	GLN
35	2d	42	GLN
35	2d	116	GLN
35	2d	119	GLN
35	2d	125	HIS
35	2d	129	ASN
36	2e	130	ASN
37	2f	64	GLN
37	2f	73	ASN
37	2f	100	ASN
38	2g	28	ASN
38	2g	68	ASN
38	2g	86	GLN
38	2g	106	GLN

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Mol	Chain	Res	Type
38	2g	148	ASN
40	2i	31	GLN
40	2i	87	GLN
42	2k	22	HIS
42	2k	117	ASN
43	2l	9	GLN
43	2l	99	HIS
44	2m	62	ASN
44	2m	92	HIS
46	2o	9	GLN
47	2p	16	HIS
49	2r	63	GLN
50	2s	47	HIS
50	2s	57	HIS
50	2s	69	HIS
50	2s	83	HIS
51	2t	42	GLN
51	2t	75	ASN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	494 (17%)	22 (0%)
1	2A	2791/2915 (95%)	522 (18%)	27 (0%)
2	1B	119/121 (98%)	11 (9%)	0
2	2B	118/121 (97%)	33 (27%)	0
32	1a	1497/1521 (98%)	273 (18%)	0
32	2a	1501/1521 (98%)	335 (22%)	0
53	1v	12/24 (50%)	3 (25%)	0
53	2v	12/24 (50%)	4 (33%)	0
54	1w	71/76 (93%)	32 (45%)	0
54	2w	71/76 (93%)	38 (53%)	0
55	1x	75/77 (97%)	14 (18%)	0
55	2x	75/77 (97%)	15 (20%)	0
57	1y	72/76 (94%)	35 (48%)	0
57	2y	72/76 (94%)	41 (56%)	0
All	All	9350/9620 (97%)	1850 (19%)	49 (0%)

All (1850) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	10	G
1	1A	34	C
1	1A	45	C
1	1A	50	U
1	1A	55	G
1	1A	63	U
1	1A	71	A
1	1A	72	U
1	1A	74	A
1	1A	75	G
1	1A	78	A
1	1A	84	A
1	1A	95	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	125	G
1	1A	154	G
1	1A	154(A)	C
1	1A	173	G
1	1A	182	A
1	1A	196	A
1	1A	199	A
1	1A	205	G
1	1A	214	G
1	1A	215	G
1	1A	216	A
1	1A	222	A
1	1A	225	A
1	1A	226	G
1	1A	228	A
1	1A	229	A
1	1A	233	A
1	1A	248	G
1	1A	269	U
1	1A	271(B)	C
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(O)	C
1	1A	272(A)	U
1	1A	272(B)	G

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Mol	Chain	Res	Type
1	1A	272(H)	C
1	1A	275	G
1	1A	279	C
1	1A	311	A
1	1A	325	G
1	1A	329	G
1	1A	330	A
1	1A	331	A
1	1A	333	G
1	1A	345	A
1	1A	352	G
1	1A	357	A
1	1A	363	G
1	1A	363(B)	G
1	1A	363(E)	U
1	1A	370	G
1	1A	386	G
1	1A	396	G
1	1A	405	U
1	1A	411	G
1	1A	412	A
1	1A	428	A
1	1A	444	C
1	1A	448	U
1	1A	449	A
1	1A	451	C
1	1A	456	C
1	1A	481	G
1	1A	504	U
1	1A	505	A
1	1A	509	C
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	534	U
1	1A	545	G
1	1A	549	G
1	1A	551	G
1	1A	563	G
1	1A	573	G
1	1A	575	A

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Mol	Chain	Res	Type
1	1A	586	A
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	614(C)	A
1	1A	615	G
1	1A	616	G
1	1A	627	A
1	1A	634	C
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(D)	C
1	1A	652(F)	G
1	1A	668	G
1	1A	669	G
1	1A	686	G
1	1A	730	C
1	1A	746	A
1	1A	747	U
1	1A	762	U
1	1A	764	A
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	783	A
1	1A	784	A
1	1A	785	G
1	1A	790	C
1	1A	792	G
1	1A	805	G
1	1A	812	C
1	1A	819	A
1	1A	827	U
1	1A	828	U
1	1A	830	G
1	1A	859	G
1	1A	866	A
1	1A	880	G
1	1A	883	G
1	1A	884	C

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Mol	Chain	Res	Type
1	1A	885	C
1	1A	886	C
1	1A	887	A
1	1A	888	C
1	1A	889	C
1	1A	890	A
1	1A	895	U
1	1A	896	A
1	1A	897	C
1	1A	898	C
1	1A	907	U
1	1A	910	A
1	1A	911	A
1	1A	931	G
1	1A	932	G
1	1A	938	G
1	1A	945	A
1	1A	946	G
1	1A	959	A
1	1A	961	C
1	1A	963	U
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1025	G
1	1A	1026	U
1	1A	1033	U
1	1A	1038	C
1	1A	1039	G
1	1A	1041	C
1	1A	1042	G
1	1A	1043	C
1	1A	1044	G
1	1A	1045	A
1	1A	1046	A
1	1A	1047	G
1	1A	1048	A
1	1A	1054	A

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Mol	Chain	Res	Type
1	1A	1055	G
1	1A	1057	A
1	1A	1058	G
1	1A	1059	G
1	1A	1063	G
1	1A	1068	G
1	1A	1069	A
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1076	C
1	1A	1077	A
1	1A	1078	U
1	1A	1079	C
1	1A	1080	C
1	1A	1081	U
1	1A	1083	U
1	1A	1085	A
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1091	G
1	1A	1093	G
1	1A	1094	U
1	1A	1097	U
1	1A	1099	G
1	1A	1101	U
1	1A	1104	C
1	1A	1109	C
1	1A	1110	G
1	1A	1111	A
1	1A	1112	G
1	1A	1115	G
1	1A	1116	C
1	1A	1117	G
1	1A	1132	A
1	1A	1135	C
1	1A	1136	G
1	1A	1141	U
1	1A	1149	G
1	1A	1156	A
1	1A	1171	G

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Mol	Chain	Res	Type
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1220	A
1	1A	1241	A
1	1A	1244	G
1	1A	1247	A
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U
1	1A	1281	G
1	1A	1290	C
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1384	A
1	1A	1385	G
1	1A	1395	A
1	1A	1396	U
1	1A	1416	G
1	1A	1417	C
1	1A	1418	G
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	1482	G
1	1A	1493	C
1	1A	1494	A
1	1A	1497	U

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Mol	Chain	Res	Type
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1519	G
1	1A	1520	G
1	1A	1532	C
1	1A	1539	G
1	1A	1546	C
1	1A	1554	A
1	1A	1555	G
1	1A	1558	A
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	1609	A
1	1A	1610	A
1	1A	1647	G
1	1A	1648	C
1	1A	1674	G
1	1A	1682	G
1	1A	1684	C
1	1A	1700	A
1	1A	1703	G
1	1A	1718	G
1	1A	1719	G
1	1A	1722	A
1	1A	1739	U
1	1A	1756	G
1	1A	1758	G
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

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Mol	Chain	Res	Type
1	1A	1817	G
1	1A	1828	G
1	1A	1829	A
1	1A	1847	A
1	1A	1858	G
1	1A	1877	A
1	1A	1878	G
1	1A	1889	A
1	1A	1900	A
1	1A	1906	G
1	1A	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	1965	C
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1984	G
1	1A	1992	G
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2032	G
1	1A	2033	A
1	1A	2034	U
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2062	A
1	1A	2069	G
1	1A	2097	C
1	1A	2098	U
1	1A	2100	G
1	1A	2101	G

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Mol	Chain	Res	Type
1	1A	2108	C
1	1A	2110	G
1	1A	2113	U
1	1A	2114	A
1	1A	2116	G
1	1A	2117	A
1	1A	2118	U
1	1A	2119	A
1	1A	2120	G
1	1A	2121	G
1	1A	2122	U
1	1A	2123	G
1	1A	2126	A
1	1A	2127	G
1	1A	2129	C
1	1A	2130	U
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2135	A
1	1A	2136	C
1	1A	2137	C
1	1A	2138	C
1	1A	2142	C
1	1A	2143	C
1	1A	2144	U
1	1A	2146	C
1	1A	2150	U
1	1A	2151	G
1	1A	2156	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2160	G
1	1A	2161	C
1	1A	2164	C
1	1A	2166	G
1	1A	2167	U
1	1A	2168	G
1	1A	2170	A
1	1A	2171	A
1	1A	2172	U

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Mol	Chain	Res	Type
1	1A	2173	A
1	1A	2174	C
1	1A	2175	C
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	2219	G
1	1A	2225	A
1	1A	2238	G
1	1A	2240	C
1	1A	2268	A
1	1A	2269	A
1	1A	2273	A
1	1A	2279	G
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	2336	A
1	1A	2347	C
1	1A	2350	C
1	1A	2354	G
1	1A	2361	A
1	1A	2383	G
1	1A	2385	C
1	1A	2396	G
1	1A	2405	G
1	1A	2406	U
1	1A	2410	G
1	1A	2414	G
1	1A	2422	A
1	1A	2423	U

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Mol	Chain	Res	Type
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2432	A
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2448	A
1	1A	2449	U
1	1A	2469	A
1	1A	2474	C
1	1A	2476	A
1	1A	2490	G
1	1A	2492	U
1	1A	2502	G
1	1A	2505	G
1	1A	2518	A
1	1A	2525	G
1	1A	2529	G
1	1A	2535	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	2608	G
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2641	G
1	1A	2654	A
1	1A	2673	G
1	1A	2689	U
1	1A	2690	C
1	1A	2702	U
1	1A	2703	C
1	1A	2712(A)	A

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Mol	Chain	Res	Type
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2739	U
1	1A	2758	A
1	1A	2764	A
1	1A	2765	A
1	1A	2766	G
1	1A	2769	C
1	1A	2778	A
1	1A	2780	G
1	1A	2790	A
1	1A	2791	C
1	1A	2793	G
1	1A	2794	C
1	1A	2802	G
1	1A	2804	C
1	1A	2807	G
1	1A	2818	G
1	1A	2820	A
1	1A	2821	A
1	1A	2831	G
1	1A	2833	G
1	1A	2834	G
1	1A	2835	A
1	1A	2861	G
1	1A	2872	G
1	1A	2873	A
1	1A	2880	C
1	1A	2894	G
2	1B	12	C
2	1B	25	A
2	1B	35	U
2	1B	52	A
2	1B	56	G
2	1B	65	C
2	1B	73	A
2	1B	85	G
2	1B	87	G
2	1B	106	G
2	1B	110	G

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Mol	Chain	Res	Type
32	1a	5	U
32	1a	7	G
32	1a	9	G
32	1a	32	A
32	1a	39	G
32	1a	47	C
32	1a	48	C
32	1a	51	A
32	1a	54	C
32	1a	61	G
32	1a	68	G
32	1a	77	G
32	1a	78	G
32	1a	79	G
32	1a	91	C
32	1a	98	G
32	1a	101	A
32	1a	105	G
32	1a	116	A
32	1a	120	A
32	1a	121	C
32	1a	131	C
32	1a	143	A
32	1a	144	G
32	1a	147	G
32	1a	151	A
32	1a	153	C
32	1a	155	C
32	1a	163	C
32	1a	173	U
32	1a	174	C
32	1a	182	U
32	1a	183	G
32	1a	189(G)	G
32	1a	189(J)	G
32	1a	195	A
32	1a	197	A
32	1a	200	G
32	1a	201	C
32	1a	203	U
32	1a	204	U
32	1a	222	U

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Mol	Chain	Res	Type
32	1a	231	G
32	1a	237	C
32	1a	247	G
32	1a	251	G
32	1a	257	G
32	1a	258	G
32	1a	266	G
32	1a	267	C
32	1a	280	C
32	1a	281	G
32	1a	289	G
32	1a	318	G
32	1a	321	A
32	1a	328	C
32	1a	329	A
32	1a	332	G
32	1a	342	C
32	1a	344	A
32	1a	345	C
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	382	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	439	A
32	1a	442	C
32	1a	452	A
32	1a	457	C
32	1a	458	C
32	1a	461	A

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Mol	Chain	Res	Type
32	1a	474	G
32	1a	475	G
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	506	G
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	518	C
32	1a	521	G
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	560	U
32	1a	561	U
32	1a	564	C
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	607	A
32	1a	617	G
32	1a	630	G
32	1a	642	A
32	1a	653	A
32	1a	665	A
32	1a	671	G
32	1a	673	G
32	1a	687	A
32	1a	688	G
32	1a	695	A
32	1a	702	A
32	1a	723	U
32	1a	731	G
32	1a	734	G
32	1a	749	C
32	1a	753	A

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Mol	Chain	Res	Type
32	1a	755	G
32	1a	766	A
32	1a	777	A
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	796	C
32	1a	815	A
32	1a	816	A
32	1a	817	C
32	1a	821	G
32	1a	827	U
32	1a	828	A
32	1a	838	G
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	855	G
32	1a	870	U
32	1a	876	G
32	1a	902	G
32	1a	913	A
32	1a	914	A
32	1a	916	G
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	935	A
32	1a	942	G
32	1a	958	A
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	991	U
32	1a	992	U
32	1a	993	G

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Mol	Chain	Res	Type
32	1a	995	C
32	1a	997	U
32	1a	999	C
32	1a	1000	U
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1008	C
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	1037	C
32	1a	1038	C
32	1a	1043	C
32	1a	1053	G
32	1a	1065	U
32	1a	1066	C
32	1a	1081	G
32	1a	1085	U
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1123	A
32	1a	1125	U
32	1a	1126	U
32	1a	1134	G
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
32	1a	1140	C
32	1a	1146	A
32	1a	1152	A
32	1a	1154	G

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Mol	Chain	Res	Type
32	1a	1159	U
32	1a	1184	G
32	1a	1196	U
32	1a	1197	G
32	1a	1202	G
32	1a	1213	A
32	1a	1225	A
32	1a	1227	A
32	1a	1236	A
32	1a	1238	A
32	1a	1246	C
32	1a	1250	A
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1260	C
32	1a	1263	C
32	1a	1268	A
32	1a	1269	A
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	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1305	G
32	1a	1312	G
32	1a	1319	A
32	1a	1323	G
32	1a	1331	G
32	1a	1346	A
32	1a	1347	G
32	1a	1350	A
32	1a	1353	G
32	1a	1363	C
32	1a	1364	U
32	1a	1370	G
32	1a	1378	C
32	1a	1381	U

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Mol	Chain	Res	Type
32	1a	1406	U
32	1a	1419	G
32	1a	1425	U
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1442(B)	A
32	1a	1446	U
32	1a	1447	A
32	1a	1452	C
32	1a	1456	G
32	1a	1487	G
32	1a	1492	A
32	1a	1494	G
32	1a	1503	A
32	1a	1504	G
32	1a	1506	U
32	1a	1517	G
32	1a	1519	MA6
32	1a	1520	G
32	1a	1529	G
32	1a	1530	G
53	1v	13	A
53	1v	15	A
53	1v	19	A
54	1w	2	G
54	1w	7	U
54	1w	8	U
54	1w	9	A
54	1w	12	U
54	1w	14	A
54	1w	19	G
54	1w	20	U
54	1w	22	G
54	1w	23	A
54	1w	24	G
54	1w	25	C
54	1w	27	G
54	1w	31	A
54	1w	44	U
54	1w	45	G
54	1w	46	G7M
54	1w	47	U

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Mol	Chain	Res	Type
54	1w	48	C
54	1w	51	A
54	1w	53	G
54	1w	54	5MU
54	1w	56	C
54	1w	62	C
54	1w	64	G
54	1w	66	A
54	1w	69	A
54	1w	70	C
54	1w	71	C
54	1w	72	C
54	1w	73	A
54	1w	74	C
55	1x	2	G
55	1x	4	G
55	1x	5	G
55	1x	9	G
55	1x	13	C
55	1x	14	A
55	1x	16	C
55	1x	17	C
55	1x	17(A)	U
55	1x	19	G
55	1x	20	U
55	1x	21	A
55	1x	47	U
55	1x	61	C
57	1y	6	G
57	1y	8	U
57	1y	9	A
57	1y	12	U
57	1y	13	C
57	1y	14	A
57	1y	15	G
57	1y	19	G
57	1y	20	U
57	1y	21	A
57	1y	24	G
57	1y	26	A
57	1y	27	G
57	1y	29	U

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Mol	Chain	Res	Type
57	1y	33	U
57	1y	40	C
57	1y	41	A
57	1y	44	U
57	1y	45	G
57	1y	46	G7M
57	1y	47	U
57	1y	48	C
57	1y	50	C
57	1y	51	A
57	1y	56	C
57	1y	57	G
57	1y	58	A
57	1y	59	A
57	1y	61	C
57	1y	65	C
57	1y	66	A
57	1y	67	C
57	1y	70	C
57	1y	72	C
57	1y	75	C
1	2A	8	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	71	A
1	2A	74	A
1	2A	75	G
1	2A	78	A
1	2A	79	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	131	G

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Mol	Chain	Res	Type
1	2A	154(A)	C
1	2A	157	U
1	2A	181	A
1	2A	196	A
1	2A	199	A
1	2A	205	G
1	2A	214	G
1	2A	215	G
1	2A	216	A
1	2A	222	A
1	2A	225	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	233	A
1	2A	248	G
1	2A	266	G
1	2A	271(A)	A
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	312	G
1	2A	324	A
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	333	G
1	2A	335	C
1	2A	336	C
1	2A	342	G
1	2A	346	A
1	2A	352	G
1	2A	354	G
1	2A	363	G

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Mol	Chain	Res	Type
1	2A	363(B)	G
1	2A	370	G
1	2A	386	G
1	2A	395	U
1	2A	396	G
1	2A	404	C
1	2A	411	G
1	2A	412	A
1	2A	421	U
1	2A	444	C
1	2A	451	C
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	479	A
1	2A	481	G
1	2A	498	G
1	2A	505	A
1	2A	509	C
1	2A	528	A
1	2A	529	A
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	551	G
1	2A	562	U
1	2A	563	G
1	2A	573	G
1	2A	575	A
1	2A	583	G
1	2A	588	U
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(A)	U
1	2A	614(B)	G
1	2A	614(C)	A
1	2A	615	G
1	2A	616	G
1	2A	627	A
1	2A	637	A

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Mol	Chain	Res	Type
1	2A	645	C
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	652(U)	G
1	2A	653	A
1	2A	664	C
1	2A	669	G
1	2A	686	G
1	2A	701	G
1	2A	715	G
1	2A	717	G
1	2A	726	G
1	2A	730	C
1	2A	752	A
1	2A	753	C
1	2A	771	G
1	2A	774	A
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	790	C
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	819	A
1	2A	825	C
1	2A	827	U
1	2A	847	U
1	2A	857	C
1	2A	858	U
1	2A	859	G
1	2A	861	A
1	2A	866	A
1	2A	869	G
1	2A	872	A
1	2A	874	G
1	2A	878	A
1	2A	879	G
1	2A	880	G
1	2A	882	G

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Mol	Chain	Res	Type
1	2A	884	C
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	892	G
1	2A	893	C
1	2A	894	C
1	2A	895	U
1	2A	896	A
1	2A	897	C
1	2A	900	A
1	2A	901	A
1	2A	902	C
1	2A	910	A
1	2A	914	C
1	2A	915	C
1	2A	917	A
1	2A	932	G
1	2A	938	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	990	A
1	2A	996	A
1	2A	999	U
1	2A	1002	G
1	2A	1005	C
1	2A	1006	C
1	2A	1012	U
1	2A	1013	C
1	2A	1017	G
1	2A	1022	G
1	2A	1023	U
1	2A	1025	G
1	2A	1026	U
1	2A	1027	A
1	2A	1033	U

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Mol	Chain	Res	Type
1	2A	1038	C
1	2A	1039	G
1	2A	1041	C
1	2A	1042	G
1	2A	1043	C
1	2A	1114	G
1	2A	1116	C
1	2A	1117	G
1	2A	1126	A
1	2A	1129	A
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1166	C
1	2A	1167	U
1	2A	1169	G
1	2A	1170	G
1	2A	1171	G
1	2A	1195	G
1	2A	1206	G
1	2A	1210	A
1	2A	1211	U
1	2A	1220	A
1	2A	1221	C
1	2A	1229	G
1	2A	1236	G
1	2A	1242	A
1	2A	1244	G
1	2A	1247	A
1	2A	1248	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1276	A
1	2A	1288	U
1	2A	1296	G
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G

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Mol	Chain	Res	Type
1	2A	1314	C
1	2A	1327	C
1	2A	1345	C
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G
1	2A	1403	C
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	1435	G
1	2A	1437	C
1	2A	1443	G
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1451	C
1	2A	1459	G
1	2A	1460	A
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1486	A
1	2A	1490	A
1	2A	1493	C
1	2A	1497	U
1	2A	1506	C
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1510	G
1	2A	1528(A)	A
1	2A	1531	C
1	2A	1532	C
1	2A	1544	A

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Mol	Chain	Res	Type
1	2A	1558	A
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1582	C
1	2A	1583	A
1	2A	1584	C
1	2A	1593	G
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1640	C
1	2A	1647	G
1	2A	1648	C
1	2A	1653	G
1	2A	1654	A
1	2A	1667	G
1	2A	1674	G
1	2A	1680	U
1	2A	1695	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	1739	U
1	2A	1740	G
1	2A	1745(A)	C
1	2A	1746	G
1	2A	1756	G
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1786	A
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1812	A
1	2A	1816	G

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Mol	Chain	Res	Type
1	2A	1820	U
1	2A	1829	A
1	2A	1847	A
1	2A	1848	A
1	2A	1878	G
1	2A	1885	A
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	1931	U
1	2A	1936	A
1	2A	1938	A
1	2A	1946	U
1	2A	1955	U
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1975	G
1	2A	1984	G
1	2A	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	2032	G
1	2A	2033	A
1	2A	2039	C
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2067	G
1	2A	2069	G
1	2A	2108	C
1	2A	2109	U
1	2A	2110	G

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Mol	Chain	Res	Type
1	2A	2111	C
1	2A	2113	U
1	2A	2116	G
1	2A	2117	A
1	2A	2118	U
1	2A	2119	A
1	2A	2120	G
1	2A	2122	U
1	2A	2124	G
1	2A	2125	G
1	2A	2126	A
1	2A	2130	U
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2136	C
1	2A	2138	C
1	2A	2142	C
1	2A	2143	C
1	2A	2146	C
1	2A	2149	G
1	2A	2150	U
1	2A	2151	G
1	2A	2152	G
1	2A	2153	G
1	2A	2156	G
1	2A	2157	G
1	2A	2158	A
1	2A	2159	G
1	2A	2160	G
1	2A	2161	C
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2168	G
1	2A	2169	A
1	2A	2171	A
1	2A	2172	U
1	2A	2173	A
1	2A	2174	C

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Mol	Chain	Res	Type
1	2A	2175	C
1	2A	2176	A
1	2A	2178	C
1	2A	2182	G
1	2A	2185	C
1	2A	2188	C
1	2A	2189	U
1	2A	2192	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2219	G
1	2A	2225	A
1	2A	2239	G
1	2A	2268	A
1	2A	2273	A
1	2A	2275	C
1	2A	2278	A
1	2A	2280	G
1	2A	2283	C
1	2A	2287	A
1	2A	2297	C
1	2A	2298	A
1	2A	2305	A
1	2A	2307	G
1	2A	2308	G
1	2A	2310	A
1	2A	2311	A
1	2A	2320	A
1	2A	2325	G
1	2A	2334	G
1	2A	2336	A
1	2A	2340	G
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2366	A
1	2A	2376	A
1	2A	2383	G
1	2A	2385	C

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Mol	Chain	Res	Type
1	2A	2391	G
1	2A	2402	C
1	2A	2406	U
1	2A	2410	G
1	2A	2417	C
1	2A	2422	A
1	2A	2423	U
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2435	A
1	2A	2439	A
1	2A	2440	C
1	2A	2441	C
1	2A	2448	A
1	2A	2458	G
1	2A	2469	A
1	2A	2474	C
1	2A	2476	A
1	2A	2477	C
1	2A	2481	G
1	2A	2490	G
1	2A	2494	G
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2518	A
1	2A	2520	C
1	2A	2529	G
1	2A	2554	U
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2578	G
1	2A	2582	G
1	2A	2602	A
1	2A	2609	U
1	2A	2611	U
1	2A	2612	C
1	2A	2615	U
1	2A	2629	A
1	2A	2630	G

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Mol	Chain	Res	Type
1	2A	2632	A
1	2A	2634	G
1	2A	2646	C
1	2A	2652	C
1	2A	2654	A
1	2A	2661	G
1	2A	2662	A
1	2A	2689	U
1	2A	2690	C
1	2A	2691	C
1	2A	2702	U
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2744	G
1	2A	2751	G
1	2A	2761	G
1	2A	2764	A
1	2A	2765	A
1	2A	2766	G
1	2A	2778	A
1	2A	2780	G
1	2A	2793	G
1	2A	2803	C
1	2A	2808	U
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2860	A
1	2A	2872	G
1	2A	2880	C
1	2A	2886	G
1	2A	2892	A
1	2A	2894	G
1	2A	2897	U
2	2B	2	C
2	2B	3	C
2	2B	5	C

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Mol	Chain	Res	Type
2	2B	8	U
2	2B	13	A
2	2B	17	C
2	2B	20	C
2	2B	22	U
2	2B	26	A
2	2B	30	C
2	2B	32	C
2	2B	33	G
2	2B	35	U
2	2B	41	U
2	2B	46	A
2	2B	52	A
2	2B	53	A
2	2B	58	A
2	2B	63	G
2	2B	65	C
2	2B	73	A
2	2B	74	U
2	2B	75	G
2	2B	84	C
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	111	G
2	2B	116	G
2	2B	120	A
32	2a	9	G
32	2a	22	G
32	2a	30	U
32	2a	32	A
32	2a	39	G
32	2a	44	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	65	U
32	2a	66	G

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Mol	Chain	Res	Type
32	2a	73	G
32	2a	79	G
32	2a	88	A
32	2a	89	C
32	2a	97	G
32	2a	101	A
32	2a	116	A
32	2a	121	C
32	2a	126	G
32	2a	127	G
32	2a	131	C
32	2a	137	C
32	2a	142	G
32	2a	143	A
32	2a	144	G
32	2a	159	G
32	2a	163	C
32	2a	182	U
32	2a	189(E)	U
32	2a	189(F)	U
32	2a	189(I)	G
32	2a	189(J)	G
32	2a	195	A
32	2a	197	A
32	2a	201	C
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	247	G
32	2a	250	A
32	2a	251	G
32	2a	266	G
32	2a	267	C
32	2a	281	G
32	2a	289	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	344	A
32	2a	346	G
32	2a	350	G

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Mol	Chain	Res	Type
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	363	A
32	2a	367	U
32	2a	372	C
32	2a	373	A
32	2a	384	G
32	2a	389	A
32	2a	397	A
32	2a	398	C
32	2a	404	U
32	2a	406	G
32	2a	410	G
32	2a	412	A
32	2a	413	G
32	2a	415	A
32	2a	421	U
32	2a	422	C
32	2a	423	G
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	443	C
32	2a	452	A
32	2a	453	A
32	2a	461	A
32	2a	470	C
32	2a	471	G
32	2a	484	G
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	505	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	517	G
32	2a	518	C

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Mol	Chain	Res	Type
32	2a	521	G
32	2a	527	G7M
32	2a	528	C
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	559	A
32	2a	564	C
32	2a	568	G
32	2a	572	A
32	2a	573	A
32	2a	575	G
32	2a	576	G
32	2a	577	G
32	2a	596	C
32	2a	597	G
32	2a	601	C
32	2a	608	A
32	2a	630	G
32	2a	641	U
32	2a	653	A
32	2a	657	G
32	2a	665	A
32	2a	671	G
32	2a	687	A
32	2a	688	G
32	2a	693	G
32	2a	702	A
32	2a	703	G
32	2a	712	A
32	2a	723	U
32	2a	731	G
32	2a	733	A
32	2a	746	A
32	2a	749	C
32	2a	755	G
32	2a	763	G
32	2a	764	C
32	2a	774	G
32	2a	777	A
32	2a	787	A

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Mol	Chain	Res	Type
32	2a	790	A
32	2a	793	U
32	2a	794	A
32	2a	815	A
32	2a	816	A
32	2a	817	C
32	2a	828	A
32	2a	840	C
32	2a	841	U
32	2a	857	C
32	2a	858	G
32	2a	859	A
32	2a	872	A
32	2a	902	G
32	2a	914	A
32	2a	916	G
32	2a	924	C
32	2a	926	G
32	2a	927	G
32	2a	931	C
32	2a	932	C
32	2a	933	G
32	2a	934	C
32	2a	935	A
32	2a	942	G
32	2a	958	A
32	2a	960	U
32	2a	961	U
32	2a	968	A
32	2a	969	A
32	2a	970	C
32	2a	971	G
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	979	C
32	2a	982	U
32	2a	984	C
32	2a	989	C
32	2a	992	U
32	2a	993	G

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Mol	Chain	Res	Type
32	2a	995	C
32	2a	997	U
32	2a	1000	U
32	2a	1002	G
32	2a	1003	G
32	2a	1004	A
32	2a	1005	A
32	2a	1006	C
32	2a	1008	C
32	2a	1009	G
32	2a	1016	A
32	2a	1020	U
32	2a	1021	G
32	2a	1022	G
32	2a	1023	G
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1029	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1030(D)	A
32	2a	1033	G
32	2a	1035	A
32	2a	1037	C
32	2a	1039	C
32	2a	1040	U
32	2a	1043	C
32	2a	1045	C
32	2a	1050	G
32	2a	1053	G
32	2a	1054	C
32	2a	1055	A
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1076	C
32	2a	1077	G
32	2a	1079	G
32	2a	1081	G
32	2a	1084	G
32	2a	1085	U

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Mol	Chain	Res	Type
32	2a	1086	U
32	2a	1092	A
32	2a	1093	A
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1103	C
32	2a	1105	A
32	2a	1108	G
32	2a	1109	C
32	2a	1112	C
32	2a	1117	G
32	2a	1122	U
32	2a	1123	A
32	2a	1125	U
32	2a	1126	U
32	2a	1129	C
32	2a	1130	A
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1142	G
32	2a	1145	C
32	2a	1146	A
32	2a	1147	C
32	2a	1152	A
32	2a	1153	C
32	2a	1157	A
32	2a	1159	U
32	2a	1160	G
32	2a	1181	G
32	2a	1182	G
32	2a	1183	A
32	2a	1184	G
32	2a	1196	U
32	2a	1199	U
32	2a	1202	G
32	2a	1208	C
32	2a	1211	U
32	2a	1213	A
32	2a	1214	C

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Mol	Chain	Res	Type
32	2a	1215	G
32	2a	1227	A
32	2a	1228	C
32	2a	1233	G
32	2a	1236	A
32	2a	1238	A
32	2a	1246	C
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1260	C
32	2a	1262	C
32	2a	1270	C
32	2a	1272	G
32	2a	1275	A
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A
32	2a	1281	U
32	2a	1283	G
32	2a	1285	A
32	2a	1286	A
32	2a	1287	A
32	2a	1291	G
32	2a	1299	A
32	2a	1300	G
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1311	G
32	2a	1312	G
32	2a	1319	A
32	2a	1322	C
32	2a	1323	G
32	2a	1336	C
32	2a	1346	A
32	2a	1347	G
32	2a	1358	U
32	2a	1363	C
32	2a	1368	G
32	2a	1370	G
32	2a	1380	U

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Mol	Chain	Res	Type
32	2a	1381	U
32	2a	1382	C
32	2a	1400	5MC
32	2a	1404	5MC
32	2a	1406	U
32	2a	1410	G
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1442(B)	A
32	2a	1447	A
32	2a	1452	C
32	2a	1456	G
32	2a	1475	G
32	2a	1487	G
32	2a	1492	A
32	2a	1494	G
32	2a	1499	A
32	2a	1503	A
32	2a	1504	G
32	2a	1506	U
32	2a	1507	A
32	2a	1517	G
32	2a	1519	MA6
32	2a	1520	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	14	A
53	2v	15	A
53	2v	19	A
53	2v	22	U
54	2w	2	G
54	2w	3	G
54	2w	5	C
54	2w	6	G
54	2w	7	U
54	2w	8	U
54	2w	10	G
54	2w	11	C
54	2w	13	C

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Mol	Chain	Res	Type
54	2w	19	G
54	2w	20	U
54	2w	22	G
54	2w	23	A
54	2w	24	G
54	2w	25	C
54	2w	30	G
54	2w	31	A
54	2w	40	C
54	2w	46	G7M
54	2w	47	U
54	2w	48	C
54	2w	50	C
54	2w	51	A
54	2w	52	G
54	2w	56	C
54	2w	58	A
54	2w	59	A
54	2w	60	U
54	2w	61	C
54	2w	62	C
54	2w	64	G
54	2w	65	C
54	2w	68	G
54	2w	69	A
54	2w	70	C
54	2w	72	C
54	2w	73	A
54	2w	74	C
55	2x	2	G
55	2x	4	G
55	2x	6	G
55	2x	9	G
55	2x	13	C
55	2x	18	G
55	2x	19	G
55	2x	20	U
55	2x	21	A
55	2x	42	G
55	2x	47	U
55	2x	53	G
55	2x	56	C

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Mol	Chain	Res	Type
55	2x	63	G
55	2x	68	C
57	2y	2	G
57	2y	7	U
57	2y	8	U
57	2y	9	A
57	2y	11	C
57	2y	12	U
57	2y	13	C
57	2y	14	A
57	2y	15	G
57	2y	19	G
57	2y	20	U
57	2y	21	A
57	2y	24	G
57	2y	25	C
57	2y	27	G
57	2y	34	U8U
57	2y	36	U
57	2y	40	C
57	2y	41	A
57	2y	44	U
57	2y	45	G
57	2y	46	G7M
57	2y	47	U
57	2y	49	G
57	2y	50	C
57	2y	52	G
57	2y	53	G
57	2y	55	PSU
57	2y	56	C
57	2y	57	G
57	2y	58	A
57	2y	59	A
57	2y	60	U
57	2y	61	C
57	2y	65	C
57	2y	66	A
57	2y	69	A
57	2y	70	C
57	2y	72	C
57	2y	73	A

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Mol	Chain	Res	Type
57	2y	75	C

All (49) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	196	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	548	A
1	1A	746	A
1	1A	827	U
1	1A	1047	G
1	1A	1142(A)	A
1	1A	1174	A
1	1A	1176	G
1	1A	1442	G
1	1A	1508	A
1	1A	1992	G
1	1A	2134	A
1	1A	2183	C
1	1A	2406	U
1	1A	2422	A
1	1A	2430	A
1	1A	2439	A
1	1A	2629	A
1	1A	2689	U
1	2A	196	A
1	2A	228	A
1	2A	229	A
1	2A	266	G
1	2A	271(K)	U
1	2A	271(M)	G
1	2A	277	C
1	2A	528	A
1	2A	752	A
1	2A	774	A
1	2A	827	U
1	2A	856	C
1	2A	896	A
1	2A	1026	U
1	2A	1210	A

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Mol	Chain	Res	Type
1	2A	1275	A
1	2A	1379	A
1	2A	1420	U
1	2A	1442	G
1	2A	1530	C
1	2A	1608	A
1	2A	1653	G
1	2A	1913	A
1	2A	1992	G
1	2A	2119	A
1	2A	2422	A
1	2A	2689	U

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

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
32	MA6	2a	1518	32	23,26,27	0.41	0	33,38,41	2.02	9 (27%)
1	5MC	1A	1942	1	19,22,23	1.67	3 (15%)	26,32,35	1.29	5 (19%)
32	M2G	1a	966	32	24,27,28	1.29	4 (16%)	33,40,43	1.83	6 (18%)
32	5MC	1a	1400	32	19,22,23	1.58	3 (15%)	26,32,35	1.13	3 (11%)
56	FME	1z	1	56	8,9,10	1.03	0	8,9,11	1.24	2 (25%)
55	5MC	2x	32	55	19,22,23	1.70	3 (15%)	26,32,35	1.20	3 (11%)
54	5MU	1w	54	54	19,22,23	1.39	5 (26%)	27,32,35	2.11	6 (22%)
32	MA6	2a	1519	32	23,26,27	0.42	0	33,38,41	2.10	10 (30%)
1	OMG	2A	2251	55,1	23,26,27	1.25	4 (17%)	32,38,41	1.78	6 (18%)
54	PSU	1w	55	54	18,21,22	1.39	2 (11%)	21,30,33	1.97	3 (14%)
43	0TD	1l	92	43	8,9,10	4.39	1 (12%)	6,11,13	4.50	2 (33%)
1	PSU	2A	2605	1	18,21,22	1.36	2 (11%)	21,30,33	1.85	4 (19%)
1	OMU	2A	2552	58,1	19,22,23	1.20	2 (10%)	25,31,34	1.77	5 (20%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
56	FME	2z	1	56	8,9,10	0.99	0	8,9,11	1.04	1 (12%)
54	A1B8A	2w	76	54	30,33,34	1.28	3 (10%)	36,46,49	1.87	8 (22%)
57	G7M	1y	46	57	23,26,27	1.59	3 (13%)	34,39,42	1.72	3 (8%)
32	G7M	2a	527	32,58	23,26,27	1.53	4 (17%)	34,39,42	1.72	5 (14%)
54	U8U	1w	34	53,54	20,24,25	1.38	2 (10%)	22,34,37	1.34	4 (18%)
1	OMC	1A	1920	1	19,22,23	0.83	0	25,31,34	1.05	2 (8%)
32	MA6	1a	1518	32	23,26,27	0.43	0	33,38,41	1.96	10 (30%)
57	5MU	1y	54	57	19,22,23	1.36	5 (26%)	27,32,35	2.03	6 (22%)
43	0TD	2l	92	43	8,9,10	4.46	1 (12%)	6,11,13	5.24	1 (16%)
57	PSU	2y	55	57	18,21,22	1.42	2 (11%)	21,30,33	2.10	3 (14%)
32	5MC	2a	967	32,58	19,22,23	1.88	3 (15%)	26,32,35	1.17	3 (11%)
55	4SU	2x	8	55	18,21,22	2.25	5 (27%)	25,30,33	1.55	6 (24%)
57	PSU	1y	39	57	18,21,22	1.34	2 (11%)	21,30,33	2.04	3 (14%)
54	A1B8A	1w	76	54	30,33,34	1.31	5 (16%)	36,46,49	1.81	8 (22%)
32	5MC	1a	1407	32	19,22,23	1.71	3 (15%)	26,32,35	1.27	3 (11%)
32	5MC	2a	1407	32	19,22,23	1.59	3 (15%)	26,32,35	1.24	3 (11%)
57	U8U	2y	34	57,53	17,21,25	1.57	4 (23%)	21,30,37	1.54	3 (14%)
55	8AN	2x	76	56,58,55	21,24,25	1.43	3 (14%)	26,35,38	2.58	9 (34%)
1	OMG	1A	2251	58,55,1	23,26,27	1.27	3 (13%)	32,38,41	2.00	6 (18%)
57	T6A	2y	37	32,57	21,24,35	1.59	3 (14%)	30,35,52	2.02	8 (26%)
1	2MA	2A	2503	58,1	22,25,26	1.42	4 (18%)	32,37,40	2.35	9 (28%)
1	PSU	1A	1917	1	18,21,22	1.37	3 (16%)	21,30,33	1.96	4 (19%)
54	5MU	2w	54	54	19,22,23	1.45	5 (26%)	27,32,35	1.67	5 (18%)
57	PSU	1y	55	57	18,21,22	1.40	2 (11%)	21,30,33	1.95	3 (14%)
57	PSU	2y	39	57,42	18,21,22	1.36	2 (11%)	21,30,33	1.95	4 (19%)
54	U8U	2w	34	53,54	20,24,25	1.30	2 (10%)	22,34,37	1.07	2 (9%)
54	T6A	2w	37	53,54	31,34,35	1.40	4 (12%)	43,49,52	1.86	9 (20%)
1	5MU	2A	1915	1	19,22,23	1.45	5 (26%)	27,32,35	2.07	6 (22%)
1	PSU	2A	1911	1	18,21,22	1.39	2 (11%)	21,30,33	1.98	3 (14%)
32	UR3	2a	1498	32	19,22,23	1.02	2 (10%)	26,32,35	1.73	3 (11%)
55	5MU	2x	54	55	19,22,23	1.36	4 (21%)	27,32,35	2.17	6 (22%)
32	5MC	1a	1404	32	19,22,23	1.77	3 (15%)	26,32,35	1.13	2 (7%)
57	5MU	2y	54	57	19,22,23	1.43	6 (31%)	27,32,35	2.11	6 (22%)
54	G7M	1w	46	54	23,26,27	1.50	3 (13%)	34,39,42	1.74	5 (14%)
55	PSU	2x	55	55	18,21,22	1.37	2 (11%)	21,30,33	2.07	4 (19%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
1	OMC	2A	1920	1	19,22,23	0.78	0	25,31,34	0.75	0
1	2MA	1A	2503	58,1	22,25,26	1.39	5 (22%)	32,37,40	2.38	10 (31%)
55	4SU	1x	8	55	18,21,22	2.28	5 (27%)	25,30,33	1.53	6 (24%)
32	UR3	1a	1498	32	19,22,23	1.00	2 (10%)	26,32,35	1.78	4 (15%)
57	G7M	2y	46	57	23,26,27	1.59	3 (13%)	34,39,42	1.76	4 (11%)
32	4OC	2a	1402	32,58	20,23,24	0.78	0	25,32,35	1.13	3 (12%)
1	5MU	1A	1939	1	19,22,23	1.39	5 (26%)	27,32,35	2.17	7 (25%)
32	2MG	1a	1207	32,58	23,26,27	1.24	2 (8%)	33,38,41	2.29	9 (27%)
1	PSU	1A	1911	1	18,21,22	1.37	2 (11%)	21,30,33	2.00	3 (14%)
55	5MU	1x	54	55	19,22,23	1.45	5 (26%)	27,32,35	1.89	6 (22%)
1	5MC	2A	1962	58,1	19,22,23	1.58	3 (15%)	26,32,35	1.15	3 (11%)
54	G7M	2w	46	54	23,26,27	1.45	3 (13%)	34,39,42	1.70	5 (14%)
57	T6A	1y	37	57	21,24,35	1.57	4 (19%)	30,35,52	2.06	9 (30%)
55	8AN	1x	76	56,58,55	21,24,25	1.44	3 (14%)	26,35,38	2.31	10 (38%)
1	PSU	2A	1917	1	18,21,22	1.38	2 (11%)	21,30,33	2.01	3 (14%)
32	5MC	1a	967	32	19,22,23	1.51	3 (15%)	26,32,35	1.14	2 (7%)
1	5MC	1A	1962	58,1	19,22,23	1.79	3 (15%)	26,32,35	1.18	3 (11%)
55	5MC	1x	32	55	19,22,23	1.67	3 (15%)	26,32,35	1.25	3 (11%)
32	PSU	1a	516	32,58	18,21,22	1.44	3 (16%)	21,30,33	1.95	5 (23%)
32	M2G	2a	966	32	24,27,28	1.35	4 (16%)	33,40,43	1.87	6 (18%)
32	4OC	1a	1402	32	20,23,24	0.74	0	25,32,35	0.95	1 (4%)
32	G7M	1a	527	32,58	23,26,27	1.52	3 (13%)	34,39,42	1.75	5 (14%)
32	MA6	1a	1519	32	23,26,27	0.43	0	33,38,41	2.02	10 (30%)
54	PSU	2w	55	54	18,21,22	1.36	2 (11%)	21,30,33	1.99	4 (19%)
1	5MU	1A	1915	1	19,22,23	1.37	5 (26%)	27,32,35	2.04	7 (25%)
32	5MC	2a	1404	32	19,22,23	1.66	3 (15%)	26,32,35	1.12	2 (7%)
32	2MG	2a	1207	32	23,26,27	1.26	4 (17%)	33,38,41	2.17	7 (21%)
54	PSU	2w	39	54	18,21,22	1.31	2 (11%)	21,30,33	2.26	3 (14%)
55	PSU	1x	55	55	18,21,22	1.37	2 (11%)	21,30,33	2.13	4 (19%)
1	5MC	2A	1942	1	19,22,23	1.60	3 (15%)	26,32,35	1.10	2 (7%)
1	5MU	2A	1939	1	19,22,23	1.40	5 (26%)	27,32,35	2.23	6 (22%)
57	U8U	1y	34	57	17,21,25	1.59	3 (17%)	21,30,37	1.46	3 (14%)
32	PSU	2a	516	32,58	18,21,22	1.41	3 (16%)	21,30,33	2.12	4 (19%)
1	PSU	1A	2605	58,1	18,21,22	1.40	4 (22%)	21,30,33	2.10	3 (14%)
32	5MC	2a	1400	32	19,22,23	1.83	3 (15%)	26,32,35	1.24	4 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
54	PSU	1w	39	54	18,21,22	1.38	2 (11%)	21,30,33	1.91	4 (19%)
1	OMU	1A	2552	58,1	19,22,23	1.18	3 (15%)	25,31,34	1.85	5 (20%)
54	T6A	1w	37	54	31,34,35	1.41	4 (12%)	43,49,52	1.87	10 (23%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	MA6	2a	1518	32	-	0/11/29/30	0/3/3/3
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	1/11/29/30	0/3/3/3
32	5MC	1a	1400	32	-	2/7/25/26	0/2/2/2
56	FME	1z	1	56	-	4/7/9/11	-
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
54	5MU	1w	54	54	-	1/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	3/11/29/30	0/3/3/3
1	OMG	2A	2251	55,1	-	1/9/27/28	0/3/3/3
54	PSU	1w	55	54	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	3/7/12/14	-
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
1	OMU	2A	2552	58,1	-	0/9/27/28	0/2/2/2
56	FME	2z	1	56	-	2/7/9/11	-
54	A1B8A	2w	76	54	-	2/20/38/39	0/3/3/3
57	G7M	1y	46	57	-	1/7/25/26	0/3/3/3
32	G7M	2a	527	32,58	-	3/7/25/26	0/3/3/3
54	U8U	1w	34	53,54	-	2/10/28/29	0/2/2/2
1	OMC	1A	1920	1	-	1/9/27/28	0/2/2/2
32	MA6	1a	1518	32	-	0/11/29/30	0/3/3/3
57	5MU	1y	54	57	-	0/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	2/7/12/14	-
57	PSU	2y	55	57	-	2/7/25/26	0/2/2/2
32	5MC	2a	967	32,58	-	0/7/25/26	0/2/2/2
55	4SU	2x	8	55	-	1/7/25/26	0/2/2/2
57	PSU	1y	39	57	-	0/7/25/26	0/2/2/2
54	A1B8A	1w	76	54	-	2/20/38/39	0/3/3/3
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
57	U8U	2y	34	57,53	-	1/7/25/29	0/2/2/2
55	8AN	2x	76	56,58,55	-	0/7/25/26	0/3/3/3
1	OMG	1A	2251	58,55,1	-	0/9/27/28	0/3/3/3
57	T6A	2y	37	32,57	-	0/7/25/42	0/3/3/3
1	2MA	2A	2503	58,1	-	1/7/25/26	0/3/3/3
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
57	PSU	1y	55	57	-	1/7/25/26	0/2/2/2
57	PSU	2y	39	57,42	-	2/7/25/26	0/2/2/2
54	U8U	2w	34	53,54	-	2/10/28/29	0/2/2/2
54	T6A	2w	37	53,54	-	4/23/41/42	0/3/3/3
1	5MU	2A	1915	1	-	0/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
57	5MU	2y	54	57	-	0/7/25/26	0/2/2/2
54	G7M	1w	46	54	-	2/7/25/26	0/3/3/3
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
1	2MA	1A	2503	58,1	-	1/7/25/26	0/3/3/3
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
57	G7M	2y	46	57	-	2/7/25/26	0/3/3/3
32	4OC	2a	1402	32,58	-	3/9/29/30	0/2/2/2
1	5MU	1A	1939	1	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32,58	-	0/9/27/28	0/3/3/3
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
55	5MU	1x	54	55	-	0/7/25/26	0/2/2/2
1	5MC	2A	1962	58,1	-	4/7/25/26	0/2/2/2
54	G7M	2w	46	54	-	1/7/25/26	0/3/3/3
57	T6A	1y	37	57	-	1/7/25/42	0/3/3/3
55	8AN	1x	76	56,58,55	-	3/7/25/26	0/3/3/3
1	PSU	2A	1917	1	-	2/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	1/7/25/26	0/2/2/2
1	5MC	1A	1962	58,1	-	1/7/25/26	0/2/2/2
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	32,58	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/11/29/30	0/3/3/3
32	4OC	1a	1402	32	-	2/9/29/30	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	G7M	1a	527	32,58	-	2/7/25/26	0/3/3/3
32	MA6	1a	1519	32	-	3/11/29/30	0/3/3/3
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	2/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	0/9/27/28	0/3/3/3
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
1	5MU	2A	1939	1	-	0/7/25/26	0/2/2/2
57	U8U	1y	34	57	-	0/7/25/29	0/2/2/2
32	PSU	2a	516	32,58	-	0/7/25/26	0/2/2/2
1	PSU	1A	2605	58,1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	4/7/25/26	0/2/2/2
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
1	OMU	1A	2552	58,1	-	0/9/27/28	0/2/2/2
54	T6A	1w	37	54	-	6/23/41/42	0/3/3/3

All (243) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-12.21	1.70	1.82
43	1l	92	0TD	CB-SB	-11.90	1.70	1.82
32	2a	967	5MC	C5-C4	7.05	1.49	1.44
32	2a	1400	5MC	C5-C4	6.88	1.49	1.44
1	1A	1962	5MC	C5-C4	6.79	1.49	1.44
32	1a	1404	5MC	C5-C4	6.54	1.49	1.44
32	1a	1407	5MC	C5-C4	6.25	1.48	1.44
55	2x	32	5MC	C5-C4	6.19	1.48	1.44
55	1x	32	5MC	C5-C4	6.18	1.48	1.44
32	2a	1404	5MC	C5-C4	6.02	1.48	1.44
1	1A	1942	5MC	C5-C4	5.87	1.48	1.44
55	2x	8	4SU	C4-N3	-5.68	1.31	1.37
32	1a	1400	5MC	C5-C4	5.65	1.48	1.44
55	1x	8	4SU	C4-N3	-5.63	1.31	1.37
1	2A	1942	5MC	C5-C4	5.63	1.48	1.44
32	2a	1407	5MC	C5-C4	5.62	1.48	1.44
1	2A	1962	5MC	C5-C4	5.61	1.48	1.44
32	1a	967	5MC	C5-C4	5.38	1.48	1.44
57	1y	37	T6A	C5-C4	5.12	1.48	1.39
57	2y	37	T6A	C5-C4	5.09	1.48	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2w	37	T6A	C5-C4	5.02	1.48	1.39
32	1a	527	G7M	C5-N7	-4.93	1.33	1.39
54	1w	37	T6A	C5-C4	4.85	1.47	1.39
57	2y	46	G7M	C5-N7	-4.66	1.33	1.39
55	2x	8	4SU	C4-S4	-4.60	1.60	1.68
54	1w	34	U8U	C2-S2	-4.60	1.60	1.67
32	2a	527	G7M	C5-N7	-4.59	1.33	1.39
55	1x	8	4SU	C4-S4	-4.57	1.60	1.68
57	1y	34	U8U	C2-S2	-4.57	1.60	1.67
57	2y	34	U8U	C2-S2	-4.46	1.60	1.67
57	1y	46	G7M	C5-N7	-4.44	1.34	1.39
54	1w	46	G7M	C5-N7	-4.38	1.34	1.39
54	1w	76	A1B8A	C5-N7	-4.36	1.31	1.39
54	2w	34	U8U	C2-S2	-4.22	1.61	1.67
55	2x	76	8AN	C5-N7	-4.17	1.31	1.39
54	1w	55	PSU	C6-C5	4.16	1.39	1.35
54	2w	46	G7M	C5-N7	-4.12	1.34	1.39
1	2A	2503	2MA	C5-C4	4.09	1.46	1.39
54	2w	76	A1B8A	C5-N7	-4.09	1.31	1.39
57	2y	55	PSU	C6-C5	3.99	1.39	1.35
54	2w	55	PSU	C6-C5	3.98	1.39	1.35
1	1A	2503	2MA	C5-C4	3.95	1.46	1.39
57	1y	39	PSU	C6-C5	3.89	1.39	1.35
57	1y	55	PSU	C6-C5	3.88	1.39	1.35
55	1x	76	8AN	C5-N7	-3.87	1.32	1.39
57	2y	39	PSU	C6-C5	3.84	1.39	1.35
32	1a	516	PSU	C6-C5	3.74	1.39	1.35
55	1x	8	4SU	C2-N3	-3.73	1.31	1.38
57	2y	46	G7M	C5-C4	3.72	1.47	1.38
1	2A	2605	PSU	C6-C5	3.70	1.39	1.35
55	1x	55	PSU	C6-C5	3.69	1.39	1.35
54	1w	39	PSU	C6-C5	3.69	1.39	1.35
55	1x	8	4SU	C5-C4	-3.67	1.38	1.42
1	2A	1917	PSU	C6-C5	3.65	1.39	1.35
32	2a	516	PSU	C6-C5	3.64	1.39	1.35
55	2x	8	4SU	C2-N3	-3.53	1.31	1.38
55	2x	55	PSU	C6-C5	3.51	1.39	1.35
57	1y	46	G7M	C5-C4	3.47	1.46	1.38
54	2w	39	PSU	C6-C5	3.43	1.39	1.35
32	2a	527	G7M	C5-C4	3.39	1.46	1.38
1	1A	1917	PSU	C6-C5	3.32	1.39	1.35
54	1w	46	G7M	C5-C4	3.31	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	966	M2G	C5-C4	3.26	1.47	1.38
32	2a	1207	2MG	C5-C4	3.26	1.47	1.38
32	1a	527	G7M	C5-C4	3.24	1.46	1.38
55	2x	8	4SU	C5-C4	-3.23	1.38	1.42
54	2w	46	G7M	C5-C4	3.21	1.46	1.38
1	2A	1911	PSU	C6-C5	3.20	1.38	1.35
57	2y	37	T6A	C5-C6	3.19	1.49	1.41
1	1A	1911	PSU	C6-C5	3.15	1.38	1.35
32	1a	966	M2G	C5-C4	3.13	1.47	1.38
1	1A	2251	OMG	C5-C4	3.12	1.47	1.38
1	2A	2251	OMG	C5-C4	3.11	1.47	1.38
54	1w	37	T6A	C5-C6	3.09	1.49	1.41
32	2a	966	M2G	C2-N2	3.07	1.40	1.35
55	1x	76	8AN	C5-C4	-3.07	1.33	1.39
55	1x	54	5MU	C6-C5	3.06	1.39	1.34
1	2A	1942	5MC	C6-C5	3.03	1.39	1.34
32	1a	1207	2MG	C5-C4	3.02	1.47	1.38
54	2w	37	T6A	C5-C6	3.02	1.49	1.41
57	2y	54	5MU	C6-C5	3.01	1.39	1.34
54	1w	54	5MU	C6-C5	2.99	1.39	1.34
1	2A	1915	5MU	C6-C5	2.97	1.39	1.34
1	1A	2605	PSU	C4-N3	-2.94	1.33	1.38
55	2x	76	8AN	C5-C4	-2.92	1.33	1.39
54	2w	54	5MU	C6-C5	2.91	1.39	1.34
32	1a	1407	5MC	C6-C5	2.87	1.39	1.34
55	2x	54	5MU	C6-C5	2.87	1.39	1.34
32	1a	1404	5MC	C6-C5	2.85	1.39	1.34
55	2x	32	5MC	C6-C5	2.83	1.39	1.34
57	1y	34	U8U	C4-N3	-2.82	1.33	1.38
32	2a	967	5MC	C6-C5	2.81	1.39	1.34
32	1a	966	M2G	C2-N2	2.81	1.40	1.35
32	1a	516	PSU	C4-N3	-2.81	1.33	1.38
1	1A	1939	5MU	C4-N3	-2.81	1.33	1.38
54	2w	76	A1B8A	C5-C4	-2.80	1.34	1.39
32	1a	1400	5MC	C6-C5	2.78	1.39	1.34
1	1A	2605	PSU	C6-C5	2.78	1.38	1.35
57	1y	54	5MU	C6-C5	2.77	1.39	1.34
57	1y	37	T6A	C5-C6	2.76	1.48	1.41
1	2A	2552	OMU	C4-N3	-2.75	1.33	1.38
32	2a	1407	5MC	C6-C5	2.73	1.39	1.34
55	1x	54	5MU	C4-N3	-2.72	1.33	1.38
1	2A	1915	5MU	C4-C5	2.71	1.49	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	1939	5MU	C4-N3	-2.71	1.33	1.38
32	2a	1404	5MC	C6-C5	2.71	1.39	1.34
1	1A	1911	PSU	C4-N3	-2.71	1.33	1.38
1	2A	1939	5MU	C6-C5	2.69	1.39	1.34
1	1A	1939	5MU	C2-N3	-2.68	1.33	1.38
1	1A	1915	5MU	C6-C5	2.67	1.39	1.34
1	2A	1911	PSU	C4-N3	-2.65	1.33	1.38
57	2y	54	5MU	C4-C5	2.64	1.49	1.44
1	1A	1942	5MC	C6-C5	2.64	1.38	1.34
55	1x	76	8AN	C5-C6	-2.64	1.33	1.41
54	1w	39	PSU	C4-N3	-2.63	1.33	1.38
57	2y	34	U8U	C5-C4	2.62	1.49	1.43
54	1w	76	A1B8A	C5-C4	-2.62	1.34	1.39
54	2w	54	5MU	C2-N1	2.60	1.42	1.38
1	1A	1942	5MC	C6-N1	-2.60	1.33	1.38
32	1a	1207	2MG	C6-N1	-2.58	1.34	1.38
1	2A	2503	2MA	C5-C6	2.58	1.48	1.41
1	2A	2251	OMG	C6-N1	-2.58	1.34	1.38
55	2x	55	PSU	C4-N3	-2.57	1.34	1.38
1	1A	1917	PSU	C4-N3	-2.57	1.34	1.38
57	2y	54	5MU	C4-N3	-2.57	1.34	1.38
32	2a	1400	5MC	C6-C5	2.55	1.38	1.34
54	1w	34	U8U	C4-N3	-2.55	1.34	1.38
55	2x	54	5MU	C4-N3	-2.55	1.34	1.38
1	2A	1915	5MU	C4-N3	-2.53	1.34	1.38
54	1w	54	5MU	C4-N3	-2.53	1.34	1.38
1	1A	1939	5MU	C6-C5	2.52	1.38	1.34
1	1A	2503	2MA	C5-N7	-2.52	1.34	1.39
54	2w	54	5MU	C4-N3	-2.51	1.34	1.38
55	1x	8	4SU	O2-C2	2.51	1.27	1.23
1	1A	1939	5MU	C6-N1	-2.50	1.33	1.38
54	1w	37	T6A	C8-N7	2.50	1.36	1.31
1	2A	2251	OMG	C5-N7	-2.50	1.34	1.39
1	1A	1915	5MU	C4-N3	-2.49	1.34	1.38
54	2w	76	A1B8A	C5-C6	-2.49	1.34	1.41
1	2A	1962	5MC	C6-C5	2.49	1.38	1.34
1	1A	1962	5MC	C6-C5	2.48	1.38	1.34
57	1y	46	G7M	C6-N1	-2.48	1.34	1.38
55	2x	54	5MU	C4-C5	2.48	1.48	1.44
57	2y	37	T6A	C8-N7	2.48	1.36	1.31
57	2y	34	U8U	C4-N3	-2.47	1.34	1.38
54	1w	76	A1B8A	C5-C6	-2.47	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1x	32	5MC	C6-C5	2.47	1.38	1.34
57	1y	54	5MU	C4-C5	2.46	1.48	1.44
1	1A	2251	OMG	C5-N7	-2.45	1.34	1.39
32	2a	1400	5MC	C6-N1	-2.45	1.33	1.38
1	1A	1962	5MC	C6-N1	-2.45	1.33	1.38
1	2A	1917	PSU	C4-N3	-2.44	1.34	1.38
57	1y	55	PSU	C4-N3	-2.44	1.34	1.38
1	1A	2251	OMG	C6-N1	-2.43	1.34	1.38
1	2A	1962	5MC	C6-N1	-2.43	1.33	1.38
32	1a	967	5MC	C6-N1	-2.42	1.33	1.38
1	1A	2552	OMU	C4-N3	-2.42	1.34	1.38
57	1y	34	U8U	C5-C4	2.42	1.49	1.43
55	1x	54	5MU	C2-N1	2.42	1.42	1.38
57	2y	46	G7M	C6-N1	-2.42	1.34	1.38
55	2x	76	8AN	C5-C6	-2.41	1.34	1.41
54	2w	37	T6A	C8-N7	2.41	1.36	1.31
57	2y	55	PSU	C4-N3	-2.41	1.34	1.38
1	1A	2552	OMU	C5-C4	-2.40	1.38	1.43
54	2w	54	5MU	C4-C5	2.39	1.48	1.44
32	2a	966	M2G	C6-N1	-2.39	1.34	1.38
32	1a	966	M2G	C6-N1	-2.37	1.34	1.38
32	2a	527	G7M	C6-N1	-2.37	1.34	1.38
32	1a	967	5MC	C6-C5	2.36	1.38	1.34
57	2y	39	PSU	C4-N3	-2.36	1.34	1.38
1	2A	1939	5MU	C4-C5	2.36	1.48	1.44
32	2a	516	PSU	C4-N3	-2.36	1.34	1.38
1	2A	1915	5MU	C2-N1	2.36	1.42	1.38
1	2A	2605	PSU	C4-N3	-2.36	1.34	1.38
32	2a	1404	5MC	C6-N1	-2.35	1.34	1.38
32	2a	1207	2MG	C6-N1	-2.35	1.34	1.38
1	2A	1939	5MU	C6-N1	-2.35	1.34	1.38
55	1x	54	5MU	C4-C5	2.34	1.48	1.44
1	1A	1939	5MU	C4-C5	2.34	1.48	1.44
55	1x	32	5MC	C6-N1	-2.34	1.34	1.38
1	2A	1939	5MU	C2-N3	-2.33	1.33	1.38
54	2w	54	5MU	O2-C2	2.31	1.27	1.23
32	1a	1498	UR3	C2-N1	2.29	1.41	1.38
57	1y	37	T6A	C5-N7	-2.29	1.34	1.39
54	2w	55	PSU	C4-N3	-2.28	1.34	1.38
32	2a	1407	5MC	C6-N1	-2.28	1.34	1.38
57	1y	54	5MU	C2-N1	2.28	1.42	1.38
32	2a	966	M2G	C5-N7	-2.27	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1915	5MU	C4-C5	2.27	1.48	1.44
1	1A	2605	PSU	C2-N1	-2.26	1.33	1.36
54	1w	54	5MU	C2-N1	2.26	1.42	1.38
55	1x	55	PSU	C4-N3	-2.26	1.34	1.38
57	1y	39	PSU	C4-N3	-2.22	1.34	1.38
55	2x	32	5MC	C6-N1	-2.22	1.34	1.38
57	1y	54	5MU	C4-N3	-2.22	1.34	1.38
32	1a	1404	5MC	C6-N1	-2.22	1.34	1.38
1	2A	2503	2MA	C8-N7	2.21	1.35	1.31
1	2A	2552	OMU	C2-N3	-2.21	1.34	1.38
1	1A	1915	5MU	C2-N1	2.20	1.41	1.38
57	1y	37	T6A	C8-N7	2.20	1.35	1.31
32	1a	1400	5MC	C6-N1	-2.19	1.34	1.38
54	1w	46	G7M	C5-C6	2.19	1.49	1.43
32	2a	1498	UR3	C2-N1	2.19	1.41	1.38
32	2a	967	5MC	C6-N1	-2.19	1.34	1.38
32	1a	527	G7M	C4-N9	-2.18	1.32	1.38
1	1A	2552	OMU	C2-N3	-2.18	1.34	1.38
57	2y	54	5MU	C2-N1	2.18	1.41	1.38
54	1w	37	T6A	C5-N7	-2.16	1.35	1.39
1	1A	2503	2MA	C8-N7	2.15	1.35	1.31
32	2a	516	PSU	O4'-C1'	-2.15	1.40	1.43
54	2w	39	PSU	C4-N3	-2.14	1.34	1.38
54	2w	34	U8U	C4-N3	-2.14	1.34	1.38
1	1A	1915	5MU	C6-N1	-2.13	1.34	1.38
54	1w	54	5MU	C4-C5	2.12	1.48	1.44
57	2y	54	5MU	C2-N3	-2.12	1.34	1.38
1	2A	1942	5MC	C6-N1	-2.10	1.34	1.38
55	2x	54	5MU	C2-N3	-2.10	1.34	1.38
1	1A	2503	2MA	C5-C6	2.10	1.46	1.41
32	2a	1207	2MG	C5-N7	-2.09	1.34	1.39
57	1y	54	5MU	C6-N1	-2.09	1.34	1.38
54	1w	76	A1B8A	C3'-N3'	2.08	1.49	1.45
1	2A	1915	5MU	C6-N1	-2.08	1.34	1.38
1	1A	2605	PSU	C2-N3	-2.08	1.34	1.37
55	1x	54	5MU	C2-N3	-2.08	1.34	1.38
55	2x	8	4SU	O2-C2	2.08	1.26	1.23
1	2A	2251	OMG	C4-N9	-2.08	1.32	1.38
32	2a	1498	UR3	C6-C5	2.07	1.39	1.35
54	2w	37	T6A	C5-N7	-2.07	1.35	1.39
54	1w	54	5MU	C6-N1	-2.07	1.34	1.38
1	1A	1917	PSU	C2-N3	-2.06	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	966	M2G	C5-N7	-2.05	1.35	1.39
32	2a	527	G7M	C5-C6	2.05	1.48	1.43
1	1A	2503	2MA	C4-N9	-2.05	1.33	1.37
57	2y	34	U8U	C6-C5	2.05	1.39	1.35
32	1a	1407	5MC	C6-N1	-2.04	1.34	1.38
32	1a	516	PSU	C2-N3	-2.04	1.34	1.37
1	2A	2503	2MA	C5-N7	-2.04	1.35	1.39
32	1a	1498	UR3	C6-C5	2.03	1.39	1.35
54	1w	55	PSU	C4-N3	-2.02	1.35	1.38
57	2y	54	5MU	C6-N1	-2.02	1.34	1.38
54	2w	46	G7M	C5-C6	2.02	1.48	1.43
54	1w	76	A1B8A	O4'-C1'	2.01	1.46	1.42
32	2a	1207	2MG	C4-N9	-2.00	1.33	1.38

All (415) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	2l	92	0TD	CSB-SB-CB	-12.58	79.76	102.36
43	1l	92	0TD	CSB-SB-CB	-10.57	83.37	102.36
1	2A	2503	2MA	C5-C4-N3	-8.14	118.61	127.18
1	1A	2503	2MA	C5-C4-N3	-7.55	119.22	127.18
32	1a	1207	2MG	C2-N3-C4	7.22	121.03	112.00
32	1a	1498	UR3	C4-N3-C2	-7.08	118.89	124.58
32	2a	1498	UR3	C4-N3-C2	-6.87	119.05	124.58
32	2a	1207	2MG	C2-N3-C4	6.79	120.50	112.00
54	2w	39	PSU	N1-C2-N3	6.69	122.22	115.17
55	2x	76	8AN	O4'-C1'-N9	6.65	120.85	108.09
57	2y	55	PSU	N1-C2-N3	6.55	122.08	115.17
1	1A	2605	PSU	N1-C2-N3	6.52	122.05	115.17
1	2A	2503	2MA	N3-C4-N9	6.51	135.25	126.99
55	1x	55	PSU	N1-C2-N3	6.50	122.03	115.17
1	1A	2503	2MA	N3-C4-N9	6.48	135.22	126.99
55	2x	55	PSU	N1-C2-N3	6.44	121.96	115.17
32	2a	516	PSU	N1-C2-N3	6.41	121.93	115.17
1	2A	1917	PSU	N1-C2-N3	6.40	121.92	115.17
57	1y	55	PSU	N1-C2-N3	6.34	121.85	115.17
57	1y	39	PSU	N1-C2-N3	6.25	121.76	115.17
32	2a	966	M2G	C5-C4-N3	-6.23	118.47	128.39
54	1w	39	PSU	N1-C2-N3	6.14	121.65	115.17
32	1a	1207	2MG	C5-C4-N3	-6.13	118.63	128.39
1	2A	1911	PSU	N1-C2-N3	6.08	121.58	115.17
32	1a	516	PSU	N1-C2-N3	6.08	121.58	115.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	2y	37	T6A	C5-C4-N3	-6.06	118.37	126.72
1	1A	1911	PSU	N1-C2-N3	6.05	121.55	115.17
32	1a	966	M2G	C5-C4-N3	-6.03	118.79	128.39
57	1y	37	T6A	C5-C4-N3	-6.03	118.41	126.72
54	1w	55	PSU	N1-C2-N3	6.01	121.50	115.17
54	2w	37	T6A	C5-C4-N3	-5.94	118.54	126.72
54	2w	55	PSU	N1-C2-N3	5.93	121.42	115.17
1	1A	2251	OMG	C5-C4-N3	-5.92	118.97	128.39
1	1A	1917	PSU	N1-C2-N3	5.91	121.40	115.17
55	2x	76	8AN	N1-C2-N3	-5.87	119.69	128.58
54	2w	76	A1B8A	N3-C2-N1	-5.78	119.83	128.58
32	2a	1207	2MG	C5-C4-N3	-5.75	119.24	128.39
55	1x	76	8AN	N1-C2-N3	-5.74	119.89	128.58
57	2y	39	PSU	N1-C2-N3	5.74	121.22	115.17
54	1w	37	T6A	C5-C4-N3	-5.71	118.86	126.72
54	1w	76	A1B8A	N3-C2-N1	-5.65	120.03	128.58
57	2y	46	G7M	N9-C4-N3	5.56	137.07	125.95
55	2x	54	5MU	N3-C2-N1	5.55	122.12	114.89
32	2a	527	G7M	N9-C4-N3	5.54	137.03	125.95
32	2a	527	G7M	C5-C4-N3	-5.48	117.80	128.15
1	2A	2605	PSU	N1-C2-N3	5.47	120.94	115.17
57	1y	46	G7M	N9-C4-N3	5.46	136.87	125.95
57	2y	46	G7M	C5-C4-N3	-5.42	117.91	128.15
1	2A	1939	5MU	C4-N3-C2	-5.41	120.25	127.34
32	1a	527	G7M	N9-C4-N3	5.35	136.64	125.95
1	2A	1915	5MU	N3-C2-N1	5.33	121.83	114.89
54	1w	46	G7M	C5-C4-N3	-5.33	118.08	128.15
1	2A	2251	OMG	C5-C4-N3	-5.31	119.94	128.39
1	1A	1939	5MU	C4-N3-C2	-5.30	120.39	127.34
57	2y	54	5MU	N3-C2-N1	5.29	121.78	114.89
55	2x	54	5MU	C4-N3-C2	-5.22	120.49	127.34
57	1y	46	G7M	C5-C4-N3	-5.22	118.28	128.15
57	2y	34	U8U	C2-N3-C4	-5.20	120.93	127.33
54	2w	39	PSU	O2-C2-N1	-5.17	117.45	122.79
57	2y	54	5MU	C4-N3-C2	-5.14	120.60	127.34
1	2A	1915	5MU	C4-N3-C2	-5.13	120.61	127.34
1	2A	1939	5MU	N3-C2-N1	5.11	121.54	114.89
54	1w	54	5MU	C4-N3-C2	-5.10	120.65	127.34
32	1a	527	G7M	C5-C4-N3	-5.07	118.58	128.15
57	1y	37	T6A	N3-C4-N9	5.04	135.73	127.17
55	1x	76	8AN	C5-C4-N3	-5.03	119.80	126.72
1	1A	1915	5MU	N3-C2-N1	5.02	121.42	114.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	1w	54	5MU	N3-C2-N1	5.01	121.41	114.89
55	1x	54	5MU	N3-C2-N1	4.98	121.37	114.89
32	2a	1518	MA6	N1-C2-N3	-4.98	121.05	128.58
1	1A	1939	5MU	N3-C2-N1	4.97	121.36	114.89
57	1y	34	U8U	C2-N3-C4	-4.95	121.23	127.33
32	2a	1519	MA6	N1-C2-N3	-4.92	121.14	128.58
54	2w	76	A1B8A	C5-C4-N3	-4.92	119.95	126.72
32	2a	1519	MA6	C5-C4-N3	-4.89	119.99	126.72
57	1y	54	5MU	C4-N3-C2	-4.86	120.97	127.34
1	1A	1915	5MU	C4-N3-C2	-4.86	120.97	127.34
57	1y	46	G7M	C2-N3-C4	4.86	120.67	112.30
54	2w	46	G7M	N9-C4-N3	4.86	135.67	125.95
32	2a	966	M2G	N9-C4-N3	4.85	135.66	125.95
1	1A	2251	OMG	C2-N3-C4	4.85	120.65	112.30
1	1A	1939	5MU	C5-C4-N3	4.84	119.53	115.32
1	1A	2251	OMG	N9-C4-N3	4.82	135.59	125.95
54	1w	46	G7M	C2-N3-C4	4.82	120.60	112.30
57	2y	46	G7M	C2-N3-C4	4.82	120.60	112.30
54	1w	46	G7M	N9-C4-N3	4.78	135.52	125.95
32	1a	1519	MA6	N1-C2-N3	-4.76	121.38	128.58
54	2w	46	G7M	C5-C4-N3	-4.73	119.21	128.15
55	2x	76	8AN	C5-C4-N3	-4.71	120.24	126.72
32	1a	1518	MA6	N1-C2-N3	-4.70	121.47	128.58
54	1w	76	A1B8A	C5-C4-N3	-4.67	120.28	126.72
32	2a	527	G7M	C2-N3-C4	4.64	120.30	112.30
32	1a	527	G7M	C2-N3-C4	4.64	120.29	112.30
54	2w	37	T6A	N3-C4-N9	4.63	135.05	127.17
54	1w	54	5MU	O4-C4-C5	-4.62	119.63	124.92
1	1A	2552	OMU	N3-C2-N1	4.62	120.90	114.89
57	1y	54	5MU	N3-C2-N1	4.61	120.90	114.89
1	1A	2552	OMU	C4-N3-C2	-4.61	120.89	126.61
54	2w	39	PSU	C4-N3-C2	-4.61	120.02	126.37
1	2A	2552	OMU	C4-N3-C2	-4.60	120.90	126.61
54	2w	46	G7M	C2-N3-C4	4.55	120.14	112.30
1	1A	2503	2MA	N6-C6-N1	4.55	123.17	117.03
57	2y	37	T6A	N3-C4-N9	4.55	134.90	127.17
1	2A	1939	5MU	C5-C6-N1	-4.51	118.41	123.31
32	2a	1518	MA6	C5-C4-N3	-4.51	120.51	126.72
32	1a	966	M2G	C2-N3-C4	4.50	120.84	112.51
1	2A	1939	5MU	C5-C4-N3	4.45	119.19	115.32
1	2A	2552	OMU	N3-C2-N1	4.43	120.66	114.89
32	2a	966	M2G	C2-N3-C4	4.43	120.70	112.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	1w	54	5MU	C5-C4-N3	4.43	119.17	115.32
55	2x	55	PSU	C4-N3-C2	-4.39	120.32	126.37
57	1y	54	5MU	O4-C4-C5	-4.38	119.91	124.92
32	1a	966	M2G	N9-C4-N3	4.35	134.65	125.95
55	1x	54	5MU	C4-N3-C2	-4.32	121.67	127.34
57	2y	55	PSU	O2-C2-N1	-4.31	118.34	122.79
57	2y	54	5MU	C5-C4-N3	4.31	119.07	115.32
1	2A	2251	OMG	N9-C4-N3	4.30	134.56	125.95
54	1w	37	T6A	N3-C4-N9	4.28	134.44	127.17
57	1y	54	5MU	C5-C4-N3	4.27	119.04	115.32
1	2A	1939	5MU	O4-C4-C5	-4.25	120.05	124.92
1	1A	2605	PSU	C4-N3-C2	-4.25	120.52	126.37
57	1y	39	PSU	C4-N3-C2	-4.17	120.63	126.37
55	2x	54	5MU	C5-C4-N3	4.16	118.94	115.32
1	2A	1915	5MU	C5-C4-N3	4.13	118.92	115.32
32	1a	1519	MA6	C2-N1-C6	4.13	121.92	111.83
32	1a	1519	MA6	C5-C4-N3	-4.12	121.05	126.72
1	1A	1915	5MU	C5-C4-N3	4.09	118.88	115.32
55	1x	55	PSU	C4-N3-C2	-4.09	120.74	126.37
54	1w	55	PSU	O2-C2-N1	-4.08	118.58	122.79
32	2a	1518	MA6	C2-N1-C6	4.08	121.79	111.83
32	1a	1207	2MG	N9-C4-N3	4.07	134.10	125.95
32	1a	1518	MA6	C2-N1-C6	4.06	121.75	111.83
1	2A	2251	OMG	C2-N3-C4	4.03	119.25	112.30
1	1A	1911	PSU	C4-N3-C2	-4.01	120.84	126.37
32	2a	1519	MA6	C4-C5-N7	-4.01	106.00	110.58
55	2x	54	5MU	O4-C4-C5	-4.00	120.34	124.92
54	2w	55	PSU	C4-N3-C2	-3.99	120.87	126.37
55	1x	8	4SU	C6-C5-C4	-3.98	116.50	119.95
57	2y	39	PSU	C4-N3-C2	-3.96	120.92	126.37
1	1A	1915	5MU	O4-C4-C5	-3.96	120.39	124.92
1	2A	1917	PSU	C4-N3-C2	-3.95	120.92	126.37
55	1x	55	PSU	O2-C2-N1	-3.95	118.72	122.79
1	1A	2605	PSU	O2-C2-N1	-3.95	118.72	122.79
32	1a	1518	MA6	C5-C4-N3	-3.94	121.29	126.72
57	2y	55	PSU	C4-N3-C2	-3.94	120.94	126.37
1	1A	1939	5MU	C5-C6-N1	-3.93	119.04	123.31
1	2A	1911	PSU	C4-N3-C2	-3.93	120.96	126.37
57	2y	37	T6A	C4-C5-N7	-3.93	106.09	110.58
32	1a	1519	MA6	C5-N7-C8	3.92	109.61	103.45
32	2a	516	PSU	O2-C2-N1	-3.90	118.77	122.79
32	1a	1207	2MG	C6-C5-N7	3.90	137.38	130.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2w	54	5MU	C5-C4-N3	3.87	118.68	115.32
1	1A	1917	PSU	C4-N3-C2	-3.86	121.05	126.37
32	2a	516	PSU	C4-N3-C2	-3.85	121.07	126.37
1	1A	1911	PSU	O2-C2-N1	-3.84	118.82	122.79
32	1a	516	PSU	C4-N3-C2	-3.84	121.08	126.37
55	1x	32	5MC	C5-C6-N1	-3.83	119.15	123.31
32	2a	1519	MA6	C5-N7-C8	3.82	109.46	103.45
32	2a	967	5MC	C5-C6-N1	-3.82	119.17	123.31
1	2A	1911	PSU	O2-C2-N1	-3.79	118.88	122.79
32	1a	1518	MA6	C5-N7-C8	3.78	109.39	103.45
32	2a	1400	5MC	C5-C6-N1	-3.77	119.22	123.31
32	2a	1207	2MG	C6-C5-N7	3.76	137.13	130.29
54	1w	37	T6A	C6-C5-N7	3.75	136.52	132.43
32	2a	1519	MA6	C2-N1-C6	3.74	120.97	111.83
54	2w	54	5MU	C4-N3-C2	-3.73	122.44	127.34
54	1w	37	T6A	C2-N3-C4	3.73	120.94	111.83
32	2a	1519	MA6	C2-N3-C4	3.72	120.91	111.83
54	1w	37	T6A	C4-C5-N7	-3.72	106.33	110.58
1	2A	2605	PSU	C4-N3-C2	-3.71	121.26	126.37
32	1a	1519	MA6	C4-C5-N7	-3.71	106.34	110.58
32	1a	1407	5MC	C5-C6-N1	-3.70	119.29	123.31
57	2y	37	T6A	C2-N3-C4	3.70	120.86	111.83
57	1y	37	T6A	C2-N3-C4	3.68	120.82	111.83
54	2w	54	5MU	N3-C2-N1	3.67	119.67	114.89
57	2y	54	5MU	O4-C4-C5	-3.65	120.74	124.92
32	2a	1407	5MC	C5-C6-N1	-3.65	119.35	123.31
32	1a	1518	MA6	N9-C8-N7	-3.64	108.77	113.94
54	2w	37	T6A	N6-C10-N11	3.64	118.77	113.77
55	2x	54	5MU	O2-C2-N1	-3.63	118.07	122.80
55	1x	54	5MU	C5-C4-N3	3.62	118.47	115.32
32	2a	1518	MA6	C5-N7-C8	3.61	109.12	103.45
32	1a	1519	MA6	N9-C8-N7	-3.60	108.82	113.94
54	1w	55	PSU	C4-N3-C2	-3.60	121.41	126.37
54	2w	37	T6A	C2-N3-C4	3.60	120.61	111.83
32	2a	1404	5MC	C5-C6-N1	-3.60	119.41	123.31
32	2a	1207	2MG	N9-C4-N3	3.59	133.13	125.95
55	1x	54	5MU	O4-C4-C5	-3.59	120.81	124.92
32	1a	1404	5MC	C5-C6-N1	-3.58	119.42	123.31
57	2y	54	5MU	C5-C6-N1	-3.58	119.42	123.31
1	1A	1939	5MU	O4-C4-C5	-3.58	120.82	124.92
57	1y	39	PSU	O2-C2-N1	-3.58	119.10	122.79
57	1y	55	PSU	C4-N3-C2	-3.58	121.44	126.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	2503	2MA	C4-C5-N7	-3.57	106.50	110.58
54	1w	54	5MU	C5-C6-N1	-3.55	119.46	123.31
1	2A	2552	OMU	C5-C4-N3	3.55	119.77	114.80
54	1w	39	PSU	C4-N3-C2	-3.53	121.51	126.37
1	2A	1915	5MU	O4-C4-C5	-3.53	120.88	124.92
54	1w	76	A1B8A	N9-C8-N7	-3.52	108.94	113.94
1	2A	1917	PSU	O2-C2-N1	-3.52	119.16	122.79
1	2A	1942	5MC	C5-C6-N1	-3.52	119.49	123.31
54	2w	54	5MU	O4-C4-C5	-3.52	120.89	124.92
32	2a	1518	MA6	C4-C5-N7	-3.51	106.57	110.58
55	2x	76	8AN	N9-C8-N7	-3.50	108.97	113.94
55	2x	54	5MU	C5-C6-N1	-3.50	119.52	123.31
54	2w	37	T6A	C4-C5-N7	-3.49	106.59	110.58
54	2w	76	A1B8A	N9-C8-N7	-3.48	109.00	113.94
32	2a	1518	MA6	C2-N3-C4	3.46	120.28	111.83
1	1A	2552	OMU	C5-C4-N3	3.43	119.60	114.80
1	1A	1917	PSU	O2-C2-N1	-3.43	119.25	122.79
55	1x	76	8AN	N9-C8-N7	-3.42	109.09	113.94
54	2w	76	A1B8A	C2-N3-C4	3.42	120.17	111.83
55	2x	76	8AN	C2-N3-C4	3.39	120.12	111.83
55	2x	8	4SU	C1'-N1-C2	3.39	123.69	117.59
54	1w	34	U8U	O4-C4-C5	-3.38	119.03	124.71
1	1A	2503	2MA	C4-N9-C8	3.38	109.28	105.74
1	2A	2503	2MA	C4-N9-C8	3.37	109.28	105.74
55	1x	76	8AN	C2-N3-C4	3.37	120.05	111.83
54	2w	34	U8U	C1'-N1-C6	-3.34	115.64	121.15
54	1w	76	A1B8A	C2-N3-C4	3.34	119.99	111.83
54	2w	55	PSU	O2-C2-N1	-3.34	119.35	122.79
32	1a	1400	5MC	C5-C6-N1	-3.33	119.69	123.31
32	1a	1518	MA6	C4-C5-N7	-3.32	106.78	110.58
1	2A	1915	5MU	C5-C6-N1	-3.32	119.71	123.31
54	1w	76	A1B8A	C5-N7-C8	3.30	108.64	103.45
57	1y	55	PSU	O2-C2-N1	-3.30	119.39	122.79
54	1w	34	U8U	C5-C4-N3	3.29	120.24	115.21
54	1w	37	T6A	N3-C2-N1	-3.29	123.60	128.58
32	1a	1407	5MC	C5-C4-N3	-3.29	118.39	121.75
55	2x	8	4SU	O2-C2-N1	3.27	127.05	122.80
57	1y	37	T6A	N3-C2-N1	-3.26	123.65	128.58
32	1a	967	5MC	C5-C6-N1	-3.25	119.78	123.31
55	1x	8	4SU	O2-C2-N1	3.21	126.97	122.80
32	1a	1207	2MG	C4-C5-N7	-3.20	105.60	110.67
32	2a	1498	UR3	C5-C4-N3	3.20	119.25	115.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	1a	1519	MA6	C2-N3-C4	3.19	119.63	111.83
54	1w	39	PSU	O2-C2-N1	-3.19	119.50	122.79
32	1a	966	M2G	C6-C5-N7	3.18	136.09	130.29
32	2a	1518	MA6	N9-C8-N7	-3.17	109.44	113.94
55	1x	32	5MC	C5-C4-N3	-3.16	118.52	121.75
32	2a	1519	MA6	N9-C8-N7	-3.15	109.47	113.94
1	2A	1939	5MU	O2-C2-N1	-3.15	118.70	122.80
1	1A	2552	OMU	O4-C4-C5	-3.15	119.74	125.16
57	2y	34	U8U	C5-C4-N3	3.14	119.19	114.80
57	1y	37	T6A	C4-C5-N7	-3.14	107.00	110.58
32	1a	1518	MA6	C2-N3-C4	3.12	119.46	111.83
54	2w	76	A1B8A	C5-N7-C8	3.12	108.35	103.45
32	2a	1207	2MG	N1-C2-N2	3.11	119.73	116.56
32	2a	1207	2MG	C4-C5-N7	-3.10	105.75	110.67
57	1y	54	5MU	C5-C6-N1	-3.10	119.95	123.31
1	1A	1942	5MC	C5-C6-N1	-3.09	119.96	123.31
32	1a	1498	UR3	C5-C4-N3	3.07	119.08	115.04
55	2x	55	PSU	O2-C2-N1	-3.04	119.66	122.79
57	2y	54	5MU	O2-C2-N1	-3.03	118.85	122.80
55	1x	76	8AN	C4'-O4'-C1'	-3.02	102.79	109.47
55	1x	76	8AN	C5-N7-C8	3.01	108.19	103.45
54	2w	37	T6A	C6-C5-N7	3.01	135.71	132.43
1	1A	2552	OMU	O2-C2-N1	-2.99	118.90	122.80
1	1A	2251	OMG	C6-C5-N7	2.98	135.72	130.29
32	1a	527	G7M	O6-C6-C5	-2.95	121.42	128.01
32	2a	1207	2MG	N2-C2-N3	-2.95	116.76	120.51
55	2x	32	5MC	C5-C4-N3	-2.94	118.74	121.75
55	1x	8	4SU	C5-C4-N3	2.94	117.48	114.75
1	1A	1962	5MC	CM5-C5-C6	-2.94	118.88	122.85
55	2x	76	8AN	C5-N7-C8	2.93	108.06	103.45
55	2x	76	8AN	C4'-O4'-C1'	-2.90	103.06	109.47
54	2w	37	T6A	N3-C2-N1	-2.90	124.19	128.58
55	2x	32	5MC	C5-C6-N1	-2.89	120.17	123.31
55	1x	54	5MU	C5-C6-N1	-2.89	120.18	123.31
57	1y	34	U8U	C5-C4-N3	2.89	118.84	114.80
1	2A	1962	5MC	C5-C6-N1	-2.88	120.19	123.31
1	1A	1915	5MU	C5-C6-N1	-2.87	120.20	123.31
32	2a	1518	MA6	N3-C4-N9	2.85	132.02	127.17
55	2x	8	4SU	C5-C4-N3	2.83	117.38	114.75
57	2y	37	T6A	N3-C2-N1	-2.82	124.31	128.58
1	1A	1962	5MC	C5-C6-N1	-2.82	120.25	123.31
54	1w	54	5MU	O2-C2-N1	-2.81	119.14	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	1519	MA6	N3-C4-N9	2.79	131.92	127.17
1	2A	2552	OMU	O2-C2-N1	-2.79	119.16	122.80
55	1x	8	4SU	S4-C4-N3	-2.77	117.30	120.20
55	2x	32	5MC	O2-C2-N3	-2.77	117.96	122.33
57	2y	37	T6A	C5-N7-C8	2.76	107.79	103.45
1	2A	2251	OMG	C6-C5-N7	2.75	135.29	130.29
1	2A	2503	2MA	N6-C6-N1	2.75	120.74	117.03
32	1a	1518	MA6	N3-C4-N9	2.75	131.84	127.17
1	2A	2605	PSU	O2-C2-N1	-2.74	119.96	122.79
1	2A	2503	2MA	C5-N7-C8	2.73	107.74	103.45
1	1A	2503	2MA	C4-C5-N7	-2.72	107.47	110.58
1	2A	1962	5MC	C5-C4-N3	-2.72	118.96	121.75
1	2A	1942	5MC	C5-C4-N3	-2.72	118.97	121.75
32	2a	1407	5MC	C5-C4-N3	-2.71	118.98	121.75
32	2a	516	PSU	O4'-C1'-C2'	2.70	108.89	105.15
54	1w	37	T6A	N6-C10-N11	2.70	117.49	113.77
32	2a	966	M2G	C6-C5-N7	2.70	135.20	130.29
55	2x	8	4SU	C6-C5-C4	-2.70	117.62	119.95
1	1A	1962	5MC	C5-C4-N3	-2.69	119.00	121.75
54	2w	46	G7M	O6-C6-C5	-2.69	122.02	128.01
1	1A	2503	2MA	C2-N1-C6	2.68	122.22	118.10
1	1A	1942	5MC	C5-C4-N3	-2.67	119.02	121.75
32	1a	1404	5MC	C5-C4-N3	-2.67	119.02	121.75
54	2w	76	A1B8A	N3-C4-N9	2.67	131.71	127.17
55	2x	76	8AN	N3-C4-N9	2.66	131.70	127.17
1	2A	1915	5MU	O2-C2-N1	-2.65	119.35	122.80
32	2a	1400	5MC	C5-C4-N3	-2.64	119.05	121.75
32	2a	1404	5MC	C5-C4-N3	-2.64	119.05	121.75
54	1w	46	G7M	O6-C6-C5	-2.63	122.13	128.01
55	1x	76	8AN	C5-C4-N9	2.63	108.67	105.81
1	1A	2251	OMG	O6-C6-C5	-2.63	119.60	126.53
32	2a	1402	4OC	O2-C2-N3	-2.62	118.19	122.33
54	2w	54	5MU	C5-C6-N1	-2.62	120.46	123.31
32	1a	1400	5MC	C5-C4-N3	-2.62	119.07	121.75
55	2x	8	4SU	S4-C4-N3	-2.61	117.47	120.20
32	1a	1519	MA6	N3-C4-N9	2.60	131.60	127.17
32	2a	967	5MC	C5-C4-N3	-2.60	119.09	121.75
54	1w	76	A1B8A	N3-C4-N9	2.60	131.59	127.17
54	1w	37	T6A	C5-N7-C8	2.57	107.49	103.45
55	1x	76	8AN	N3-C4-N9	2.56	131.52	127.17
1	1A	1915	5MU	O2-C2-N1	-2.54	119.49	122.80
1	2A	2503	2MA	N9-C8-N7	-2.54	110.34	113.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	2y	34	U8U	O4-C4-C5	-2.53	120.80	125.16
32	1a	966	M2G	C4-C5-N7	-2.53	106.67	110.67
32	1a	1207	2MG	N1-C2-N2	2.52	119.13	116.56
32	2a	1400	5MC	CM5-C5-C6	-2.51	119.45	122.85
32	2a	1518	MA6	C4-C5-C6	2.51	118.50	115.91
1	1A	1942	5MC	O2-C2-N3	-2.51	118.38	122.33
32	1a	1402	4OC	C6-C5-C4	2.50	120.02	117.00
54	2w	37	T6A	C5-N7-C8	2.49	107.37	103.45
32	2a	1407	5MC	O2-C2-N3	-2.49	118.40	122.33
55	2x	8	4SU	O2-C2-N3	-2.49	116.89	121.49
55	2x	55	PSU	C5-C6-N1	-2.49	118.69	122.14
1	1A	1917	PSU	C6-C5-C4	-2.48	116.50	118.17
1	2A	2552	OMU	O4-C4-C5	-2.48	120.89	125.16
57	1y	54	5MU	O2-C2-N1	-2.44	119.61	122.80
57	2y	39	PSU	O2-C2-N1	-2.44	120.27	122.79
32	1a	967	5MC	C5-C4-N3	-2.44	119.26	121.75
1	1A	1939	5MU	C5M-C5-C4	2.44	121.38	118.78
1	1A	1920	OMC	O2-C2-N3	-2.44	118.49	122.33
54	1w	34	U8U	C5-C6-N1	-2.43	119.67	122.94
1	1A	2503	2MA	N9-C8-N7	-2.43	110.49	113.94
1	1A	1939	5MU	O2-C2-N1	-2.42	119.65	122.80
32	1a	516	PSU	O2-C2-N1	-2.41	120.30	122.79
32	1a	1207	2MG	N2-C2-N3	-2.40	117.45	120.51
56	2z	1	FME	CA-N-CN	2.40	126.52	122.82
57	1y	37	T6A	C5-N7-C8	2.38	107.20	103.45
1	1A	2503	2MA	C5-N7-C8	2.38	107.19	103.45
32	1a	1207	2MG	C2-N1-C6	-2.35	121.70	124.55
1	2A	2251	OMG	O6-C6-C5	-2.35	120.32	126.53
1	1A	1942	5MC	CM5-C5-C6	-2.35	119.67	122.85
57	1y	34	U8U	O4-C4-C5	-2.35	121.11	125.16
43	1l	92	0TD	OD2-CG-CB	2.35	118.23	113.15
32	1a	1519	MA6	C4-C5-C6	2.34	118.33	115.91
54	1w	37	T6A	C4-N9-C8	2.34	108.20	105.74
57	1y	37	T6A	C4-N9-C8	2.34	108.19	105.74
32	2a	1402	4OC	CM4-N4-C4	-2.34	117.89	122.45
54	2w	34	U8U	O4-C4-C5	-2.33	120.78	124.71
1	1A	2251	OMG	C4-C5-N7	-2.33	106.98	110.67
54	2w	76	A1B8A	C5-C4-N9	2.32	108.34	105.81
32	1a	1518	MA6	C4-N9-C8	2.32	108.18	105.74
32	2a	966	M2G	C4-C5-N7	-2.32	107.00	110.67
1	2A	2503	2MA	C6-C5-N7	2.31	136.54	132.09
32	1a	516	PSU	O4'-C1'-C2'	2.30	108.33	105.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	1915	5MU	C5M-C5-C4	2.29	121.22	118.78
57	2y	37	T6A	C6-C5-N7	2.29	136.50	132.09
55	1x	55	PSU	C5-C6-N1	-2.28	118.97	122.14
32	2a	527	G7M	O6-C6-C5	-2.28	122.93	128.01
1	2A	2605	PSU	C6-C5-C4	-2.25	116.66	118.17
56	1z	1	FME	CB-CA-N	2.25	114.61	110.52
32	2a	1519	MA6	C4-C5-C6	2.25	118.23	115.91
32	2a	966	M2G	O6-C6-C5	-2.23	120.64	126.53
57	2y	37	T6A	C4-N9-C8	2.23	108.08	105.74
55	1x	8	4SU	C4-N3-C2	2.23	129.45	127.31
32	1a	1207	2MG	C8-N7-C5	2.23	108.22	104.26
1	2A	2503	2MA	C2-N1-C6	2.22	121.51	118.10
54	2w	37	T6A	C4-N9-C8	2.21	108.06	105.74
32	1a	527	G7M	C5-C6-N1	2.21	116.41	111.84
55	1x	76	8AN	C6-C5-C4	2.20	120.19	117.18
1	2A	2251	OMG	C4-C5-N7	-2.19	107.20	110.67
55	1x	76	8AN	C4-C5-N7	-2.19	108.08	110.58
55	1x	32	5MC	CM5-C5-C6	-2.19	119.89	122.85
54	1w	34	U8U	C1'-N1-C6	-2.18	117.55	121.15
56	1z	1	FME	CA-N-CN	-2.18	119.47	122.82
54	1w	46	G7M	C5-C6-N1	2.17	116.33	111.84
32	2a	1402	4OC	C6-C5-C4	2.17	119.61	117.00
54	1w	76	A1B8A	C5-C4-N9	2.13	108.13	105.81
32	1a	1518	MA6	C4-C5-C6	2.12	118.11	115.91
32	2a	967	5MC	CM5-C5-C6	-2.12	119.98	122.85
54	2w	55	PSU	C6-C5-C4	-2.11	116.75	118.17
32	1a	516	PSU	O2-C2-N3	-2.11	118.12	121.86
32	1a	1498	UR3	C6-N1-C2	-2.10	120.08	121.80
1	2A	1962	5MC	C1'-N1-C6	-2.10	117.69	121.15
32	2a	1519	MA6	C5-C4-N9	2.10	108.09	105.81
1	1A	2503	2MA	N3-C2-N1	-2.09	122.08	125.77
57	2y	46	G7M	O6-C6-C5	-2.08	123.36	128.01
1	1A	1942	5MC	C1'-N1-C6	-2.08	117.72	121.15
54	2w	46	G7M	C5-C6-N1	2.08	116.14	111.84
54	1w	39	PSU	O4'-C1'-C2'	2.08	108.03	105.15
32	2a	1400	5MC	O2-C2-N3	-2.08	119.06	122.33
55	1x	8	4SU	C1'-N1-C2	2.07	121.31	117.59
55	1x	54	5MU	O2-C2-N1	-2.07	120.10	122.80
32	2a	527	G7M	C5-C6-N1	2.07	116.11	111.84
55	2x	76	8AN	C5-C4-N9	2.06	108.06	105.81
57	2y	39	PSU	C5-C6-N1	-2.06	119.28	122.14
32	2a	1498	UR3	C6-N1-C2	-2.06	120.12	121.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2w	76	A1B8A	C4-C5-N7	-2.05	108.23	110.58
1	1A	2503	2MA	C5-C6-N6	-2.05	118.20	123.29
57	1y	37	T6A	C1'-N9-C8	-2.05	122.54	127.09
1	1A	1920	OMC	C1'-N1-C2	2.03	122.93	118.44
32	1a	1519	MA6	C4-N9-C8	2.03	107.87	105.74
54	1w	37	T6A	C2-N1-C6	2.03	121.97	115.24
57	1y	37	T6A	C2-N1-C6	2.03	122.06	118.73
32	1a	966	M2G	O6-C6-C5	-2.03	121.19	126.53
54	1w	76	A1B8A	C4-C5-N7	-2.02	108.28	110.58
32	1a	1400	5MC	O2-C2-N3	-2.02	119.15	122.33
32	1a	1407	5MC	N1-C2-N3	2.02	122.30	118.80
32	1a	1498	UR3	C3U-N3-C4	2.01	120.66	117.87

There are no chirality outliers.

All (84) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
32	1a	1519	MA6	O4'-C4'-C5'-O5'
43	1l	92	0TD	O-C-CA-CB
1	2A	2251	OMG	C1'-C2'-O2'-CM2
32	2a	1400	5MC	O4'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
54	1w	34	U8U	N-C-C5-C4
54	1w	34	U8U	N-C-C5-C6
54	2w	34	U8U	N-C-C5-C4
54	1w	37	T6A	O10-C10-N6-C6
54	1w	37	T6A	N11-C10-N6-C6
54	1w	37	T6A	C14-C12-C13-ODA
54	1w	37	T6A	C14-C12-C13-ODB
54	2w	37	T6A	C5-C6-N6-C10
54	2w	37	T6A	O10-C10-N6-C6
54	2w	37	T6A	N11-C10-N6-C6
54	2w	37	T6A	C13-C12-C14-C15
54	1w	46	G7M	O4'-C4'-C5'-O5'
56	1z	1	FME	O1-CN-N-CA
56	1z	1	FME	N-CA-CB-CG
56	1z	1	FME	C-CA-CB-CG
55	1x	76	8AN	C3'-C4'-C5'-O5'
32	1a	1402	4OC	O4'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
54	1w	46	G7M	C3'-C4'-C5'-O5'
54	1w	76	A1B8A	C-CA-CB-CG

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Mol	Chain	Res	Type	Atoms
54	2w	76	A1B8A	C-CA-CB-CG
56	1z	1	FME	CA-CB-CG-SD
1	2A	1917	PSU	O4'-C4'-C5'-O5'
32	2a	1400	5MC	C3'-C4'-C5'-O5'
32	2a	1404	5MC	C3'-C4'-C5'-O5'
57	2y	46	G7M	O4'-C4'-C5'-O5'
57	2y	55	PSU	C3'-C4'-C5'-O5'
32	1a	527	G7M	C3'-C4'-C5'-O5'
55	1x	76	8AN	O4'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	1404	5MC	O4'-C4'-C5'-O5'
57	2y	55	PSU	O4'-C4'-C5'-O5'
56	2z	1	FME	CB-CG-SD-CE
32	1a	1402	4OC	C3'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
57	2y	46	G7M	C3'-C4'-C5'-O5'
54	1w	76	A1B8A	CA-CB-CG-CD
32	2a	1402	4OC	O4'-C4'-C5'-O5'
57	2y	39	PSU	O4'-C4'-C5'-O5'
32	1a	527	G7M	O4'-C4'-C5'-O5'
57	2y	39	PSU	C3'-C4'-C5'-O5'
1	2A	1962	5MC	C2'-C1'-N1-C6
54	2w	46	G7M	C4'-C5'-O5'-P
32	1a	1400	5MC	O4'-C4'-C5'-O5'
43	1l	92	0TD	SB-CB-CG-OD1
43	2l	92	0TD	SB-CB-CG-OD1
56	2z	1	FME	CA-CB-CG-SD
32	2a	527	G7M	C4'-C5'-O5'-P
55	1x	76	8AN	C4'-C5'-O5'-P
57	1y	55	PSU	O4'-C1'-C5-C4
1	2A	2503	2MA	O4'-C4'-C5'-O5'
57	2y	34	U8U	O4'-C4'-C5'-O5'
1	2A	1962	5MC	O4'-C1'-N1-C6
57	1y	46	G7M	C4'-C5'-O5'-P
32	1a	1519	MA6	C4'-C5'-O5'-P
1	2A	1917	PSU	C3'-C4'-C5'-O5'
54	1w	54	5MU	C4'-C5'-O5'-P
57	1y	37	T6A	C4'-C5'-O5'-P
54	2w	34	U8U	N-C-C5-C6
32	2a	1519	MA6	C4'-C5'-O5'-P
32	2a	1402	4OC	C2'-C1'-N1-C2
43	1l	92	0TD	CG-CB-SB-CSB

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Mol	Chain	Res	Type	Atoms
43	2l	92	0TD	CG-CB-SB-CSB
54	1w	37	T6A	N11-C12-C13-ODA
54	1w	37	T6A	N11-C12-C13-ODB
32	2a	527	G7M	O4'-C4'-C5'-O5'
1	2A	1962	5MC	O4'-C1'-N1-C2
1	1A	1962	5MC	C2'-C1'-N1-C6
32	2a	1400	5MC	C2'-C1'-N1-C6
1	1A	1920	OMC	C2'-C1'-N1-C2
54	2w	76	A1B8A	N-CA-CB-CG
32	1a	1400	5MC	C3'-C4'-C5'-O5'
32	2a	1402	4OC	C3'-C4'-C5'-O5'
1	1A	2503	2MA	C4'-C5'-O5'-P
32	1a	966	M2G	C4'-C5'-O5'-P
1	2A	1962	5MC	C2'-C1'-N1-C2
55	2x	8	4SU	C2'-C1'-N1-C2
32	2a	1400	5MC	O4'-C1'-N1-C6
32	1a	967	5MC	O4'-C4'-C5'-O5'

There are no ring outliers.

51 monomers are involved in 77 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
32	2a	1518	MA6	3	0
55	2x	32	5MC	2	0
54	1w	54	5MU	1	0
32	2a	1519	MA6	2	0
1	2A	2251	OMG	1	0
54	1w	55	PSU	2	0
1	2A	2552	OMU	2	0
56	2z	1	FME	1	0
54	2w	76	A1B8A	1	0
54	1w	34	U8U	4	0
32	1a	1518	MA6	2	0
57	1y	54	5MU	2	0
43	2l	92	0TD	1	0
57	2y	55	PSU	2	0
32	2a	967	5MC	1	0
55	2x	8	4SU	1	0
57	1y	39	PSU	1	0
54	1w	76	A1B8A	3	0
57	2y	34	U8U	1	0
55	2x	76	8AN	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
1	1A	2251	OMG	1	0
57	2y	37	T6A	1	0
1	2A	2503	2MA	3	0
1	1A	1917	PSU	1	0
54	2w	54	5MU	1	0
57	1y	55	PSU	2	0
54	2w	34	U8U	1	0
54	2w	37	T6A	1	0
55	2x	54	5MU	1	0
32	1a	1404	5MC	1	0
55	2x	55	PSU	2	0
1	2A	1920	OMC	1	0
55	1x	8	4SU	1	0
57	2y	46	G7M	1	0
32	2a	1402	4OC	3	0
1	1A	1939	5MU	2	0
1	1A	1911	PSU	1	0
54	2w	46	G7M	1	0
57	1y	37	T6A	4	0
55	1x	76	8AN	2	0
32	1a	1402	4OC	2	0
32	1a	1519	MA6	2	0
32	2a	1404	5MC	1	0
32	2a	1207	2MG	2	0
54	2w	39	PSU	2	0
1	2A	1942	5MC	1	0
1	2A	1939	5MU	2	0
32	2a	516	PSU	2	0
32	2a	1400	5MC	1	0
1	1A	2552	OMU	1	0
54	1w	37	T6A	1	0

5.5 Carbohydrates

There are no oligosaccharides in this entry.

5.6 Ligand geometry

Of 2750 ligands modelled in this entry, 2748 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	$\# Z > 2$
61	SF4	1d	302	35	0,12,12	-	-	-		
61	SF4	2d	303	35	0,12,12	-	-	-		

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
61	SF4	1d	302	35	-	-	0/6/5/5
61	SF4	2d	303	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.

No monomer is involved in short contacts.

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%)	-0.57	83 (2%)	53	48	18, 36, 91, 104	0
1	2A	2789/2915 (95%)	-0.05	80 (2%)	53	48	32, 58, 88, 103	0
2	1B	120/121 (99%)	-0.49	1 (0%)	82	80	29, 49, 62, 81	0
2	2B	120/121 (99%)	0.75	8 (6%)	24	19	61, 78, 85, 93	0
3	1D	275/276 (99%)	-0.22	1 (0%)	88	86	19, 37, 50, 71	0
3	2D	275/276 (99%)	0.28	5 (1%)	67	63	30, 50, 63, 80	0
4	1E	204/206 (99%)	-0.14	1 (0%)	87	85	17, 42, 58, 69	0
4	2E	204/206 (99%)	0.29	3 (1%)	72	68	36, 57, 69, 78	0
5	1F	203/210 (96%)	-0.14	0	100	100	18, 43, 66, 78	0
5	2F	203/210 (96%)	0.47	2 (0%)	79	76	37, 66, 77, 82	0
6	1G	181/182 (99%)	0.38	4 (2%)	62	57	39, 57, 70, 80	0
6	2G	181/182 (99%)	1.17	21 (11%)	9	7	64, 77, 82, 92	0
7	1H	174/180 (96%)	0.22	1 (0%)	85	83	38, 51, 64, 68	0
7	2H	174/180 (96%)	0.86	3 (1%)	69	64	67, 77, 84, 87	0
8	1I	146/148 (98%)	0.61	4 (2%)	56	50	44, 70, 79, 82	0
8	2I	146/148 (98%)	1.64	48 (32%)	1	1	52, 79, 87, 92	0
9	1N	140/140 (100%)	-0.08	0	100	100	24, 40, 56, 73	0
9	2N	140/140 (100%)	0.59	5 (3%)	46	40	44, 63, 75, 79	0
10	1O	122/122 (100%)	-0.10	1 (0%)	82	80	26, 41, 57, 63	0
10	2O	122/122 (100%)	0.38	0	100	100	44, 56, 68, 73	0
11	1P	149/150 (99%)	-0.01	0	100	100	20, 45, 64, 73	0
11	2P	149/150 (99%)	0.54	4 (2%)	56	50	38, 66, 77, 85	0
12	1Q	141/141 (100%)	-0.05	2 (1%)	73	69	23, 40, 54, 67	0
12	2Q	141/141 (100%)	0.81	7 (4%)	34	28	49, 64, 73, 80	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	1R	118/118 (100%)	-0.24	0 100 100	26, 35, 46, 55	0
13	2R	118/118 (100%)	0.19	2 (1%) 69 64	38, 52, 60, 66	0
14	1S	110/112 (98%)	0.03	0 100 100	36, 48, 59, 64	0
14	2S	110/112 (98%)	1.22	19 (17%) 4 3	62, 72, 78, 82	0
15	1T	131/146 (89%)	0.14	2 (1%) 72 68	32, 46, 69, 74	0
15	2T	131/146 (89%)	0.43	1 (0%) 82 80	48, 59, 71, 75	0
16	1U	116/118 (98%)	-0.33	0 100 100	21, 32, 48, 55	0
16	2U	116/118 (98%)	0.33	0 100 100	45, 61, 73, 75	0
17	1V	101/101 (100%)	-0.21	0 100 100	21, 41, 57, 65	0
17	2V	101/101 (100%)	0.70	6 (5%) 28 23	45, 69, 75, 82	0
18	1W	112/113 (99%)	-0.33	0 100 100	24, 33, 51, 73	0
18	2W	112/113 (99%)	0.40	2 (1%) 67 63	35, 52, 64, 84	0
19	1X	95/96 (98%)	-0.15	1 (1%) 78 74	26, 38, 57, 64	0
19	2X	95/96 (98%)	0.50	2 (2%) 63 58	44, 58, 72, 78	0
20	1Y	107/110 (97%)	0.24	2 (1%) 66 61	35, 49, 65, 76	0
20	2Y	107/110 (97%)	1.05	14 (13%) 7 5	60, 69, 78, 82	0
21	1Z	154/206 (74%)	0.73	14 (9%) 15 11	40, 61, 82, 94	0
21	2Z	160/206 (77%)	1.23	22 (13%) 6 5	64, 77, 86, 94	0
22	10	83/85 (97%)	0.07	4 (4%) 35 30	27, 38, 62, 69	0
22	20	83/85 (97%)	1.05	8 (9%) 13 10	45, 64, 71, 84	0
23	11	97/98 (98%)	0.06	1 (1%) 79 76	26, 45, 67, 71	0
23	21	97/98 (98%)	0.34	3 (3%) 51 45	40, 56, 70, 75	0
24	12	70/72 (97%)	0.07	1 (1%) 73 69	35, 49, 57, 72	0
24	22	70/72 (97%)	0.76	0 100 100	59, 68, 75, 76	0
25	13	59/60 (98%)	-0.24	0 100 100	26, 37, 57, 64	0
25	23	59/60 (98%)	0.46	0 100 100	52, 63, 74, 77	0
26	14	69/71 (97%)	0.74	8 (11%) 9 7	55, 73, 85, 92	0
26	24	69/71 (97%)	1.27	8 (11%) 9 7	71, 82, 89, 94	0
27	15	59/60 (98%)	-0.34	1 (1%) 69 64	20, 33, 53, 66	0
27	25	59/60 (98%)	0.21	0 100 100	38, 51, 63, 77	0
28	16	53/54 (98%)	-0.21	0 100 100	32, 41, 53, 56	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	26	53/54 (98%)	0.68	1 (1%) 66 61	52, 62, 67, 73	0
29	17	48/49 (97%)	-0.30	1 (2%) 63 58	21, 26, 52, 59	0
29	27	48/49 (97%)	0.07	1 (2%) 63 58	35, 43, 60, 70	0
30	18	64/65 (98%)	-0.12	1 (1%) 70 66	28, 34, 42, 52	0
30	28	64/65 (98%)	0.68	2 (3%) 51 45	45, 56, 62, 69	0
31	19	37/37 (100%)	-0.21	0 100 100	29, 40, 60, 60	0
31	29	37/37 (100%)	1.13	3 (8%) 18 14	58, 65, 73, 75	0
32	1a	1488/1521 (97%)	0.19	26 (1%) 69 64	33, 66, 88, 100	0
32	2a	1491/1521 (98%)	0.50	53 (3%) 46 40	53, 77, 92, 102	0
33	1b	231/256 (90%)	0.82	21 (9%) 15 11	61, 75, 83, 86	0
33	2b	231/256 (90%)	1.30	49 (21%) 2 2	71, 81, 87, 90	0
34	1c	206/239 (86%)	0.70	9 (4%) 39 33	57, 69, 77, 84	0
34	2c	206/239 (86%)	1.53	57 (27%) 1 1	71, 82, 86, 90	0
35	1d	208/209 (99%)	0.87	19 (9%) 15 11	54, 67, 76, 80	0
35	2d	208/209 (99%)	1.02	21 (10%) 12 9	61, 71, 78, 85	0
36	1e	148/162 (91%)	0.41	1 (0%) 84 82	52, 62, 69, 79	0
36	2e	148/162 (91%)	1.12	19 (12%) 7 6	65, 75, 81, 88	0
37	1f	100/101 (99%)	0.50	2 (2%) 65 60	55, 65, 73, 76	0
37	2f	100/101 (99%)	0.55	3 (3%) 52 47	61, 71, 77, 79	0
38	1g	155/156 (99%)	0.63	8 (5%) 33 27	58, 69, 82, 87	0
38	2g	155/156 (99%)	1.19	23 (14%) 5 4	70, 78, 84, 87	0
39	1h	137/138 (99%)	0.60	3 (2%) 62 57	56, 65, 73, 76	0
39	2h	137/138 (99%)	1.13	14 (10%) 12 9	66, 74, 79, 83	0
40	1i	127/128 (99%)	1.03	10 (7%) 18 14	57, 73, 79, 82	0
40	2i	127/128 (99%)	1.45	28 (22%) 2 2	71, 80, 86, 88	0
41	1j	97/105 (92%)	1.04	8 (8%) 17 14	57, 74, 82, 85	0
41	2j	96/105 (91%)	1.50	24 (25%) 2 1	67, 81, 87, 89	0
42	1k	114/129 (88%)	0.79	6 (5%) 32 26	44, 66, 77, 82	0
42	2k	114/129 (88%)	0.89	8 (7%) 22 18	60, 73, 79, 82	0
43	1l	121/132 (91%)	0.49	5 (4%) 41 36	45, 58, 66, 72	0
43	2l	121/132 (91%)	0.71	9 (7%) 20 16	55, 69, 75, 82	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	1m	123/126 (97%)	0.74	9 (7%) 21 17	56, 68, 77, 89	0
44	2m	122/126 (96%)	1.60	28 (22%) 2 1	70, 80, 86, 88	0
45	1n	60/61 (98%)	0.90	5 (8%) 17 13	58, 65, 71, 72	0
45	2n	60/61 (98%)	1.69	20 (33%) 1 1	70, 81, 85, 88	0
46	1o	88/89 (98%)	0.61	2 (2%) 61 55	49, 63, 73, 80	0
46	2o	88/89 (98%)	0.74	2 (2%) 61 55	62, 71, 79, 82	0
47	1p	82/88 (93%)	1.21	16 (19%) 3 2	58, 71, 76, 84	0
47	2p	82/88 (93%)	0.70	5 (6%) 27 22	53, 68, 74, 76	0
48	1q	99/105 (94%)	0.83	6 (6%) 27 22	56, 66, 74, 77	0
48	2q	99/105 (94%)	0.85	5 (5%) 33 28	60, 70, 77, 79	0
49	1r	68/88 (77%)	0.50	3 (4%) 39 33	53, 65, 74, 78	0
49	2r	68/88 (77%)	0.54	0 100 100	64, 71, 78, 81	0
50	1s	83/93 (89%)	0.70	2 (2%) 59 54	62, 71, 79, 83	0
50	2s	83/93 (89%)	1.73	30 (36%) 1 0	76, 83, 89, 91	0
51	1t	96/106 (90%)	0.98	8 (8%) 17 13	59, 68, 75, 79	0
51	2t	96/106 (90%)	0.59	5 (5%) 33 27	56, 68, 78, 82	0
52	1u	23/27 (85%)	1.16	5 (21%) 2 2	59, 67, 72, 75	0
52	2u	23/27 (85%)	2.11	12 (52%) 0 0	74, 77, 81, 81	0
53	1v	13/24 (54%)	1.48	5 (38%) 1 0	48, 77, 88, 91	0
53	2v	13/24 (54%)	1.99	4 (30%) 1 1	72, 87, 94, 96	0
54	1w	67/76 (88%)	1.52	17 (25%) 1 1	63, 95, 99, 102	0
54	2w	67/76 (88%)	1.93	29 (43%) 0 0	80, 96, 101, 104	0
55	1x	72/77 (93%)	0.48	2 (2%) 55 49	30, 63, 78, 84	0
55	2x	72/77 (93%)	0.89	5 (6%) 23 18	49, 79, 86, 93	0
56	1z	2/3 (66%)	0.65	0 100 100	39, 39, 39, 40	0
56	2z	2/3 (66%)	0.75	0 100 100	53, 53, 53, 58	0
57	1y	68/76 (89%)	1.59	18 (26%) 1 1	54, 95, 100, 102	0
57	2y	68/76 (89%)	1.69	21 (30%) 1 1	68, 96, 100, 102	0
All	All	20884/21754 (96%)	0.32	1104 (5%) 32 26	17, 63, 87, 104	0

All (1104) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
44	2m	124	PRO	11.0
45	1n	2	ALA	7.1
44	2m	123	ALA	6.7
44	1m	123	ALA	6.2
21	2Z	174	VAL	5.9
44	2m	102	ARG	5.7
44	1m	124	PRO	5.6
21	2Z	173	ALA	5.6
21	2Z	144	LEU	5.5
41	2j	47	PHE	5.5
32	1a	1257	U	5.5
21	1Z	146	ILE	5.4
8	2I	100	ALA	5.3
1	1A	2145	C	5.2
22	10	6	GLY	5.1
45	2n	25	VAL	5.1
23	11	2	SER	5.0
1	2A	2112	G	4.9
8	2I	119	PRO	4.9
1	2A	2155	G	4.9
44	1m	122	LYS	4.9
21	1Z	141	VAL	4.9
45	2n	2	ALA	4.8
1	2A	2146	C	4.8
44	2m	122	LYS	4.7
7	1H	2	SER	4.6
1	1A	1094	U	4.6
38	2g	80	VAL	4.5
1	1A	2115	G	4.5
38	1g	81	GLY	4.4
1	2A	2115	G	4.4
38	2g	82	GLY	4.3
21	2Z	146	ILE	4.3
34	2c	124	ILE	4.3
38	1g	80	VAL	4.3
6	2G	160	VAL	4.3
8	2I	95	LYS	4.3
38	2g	83	ALA	4.3
1	1A	1068	G	4.3
8	2I	107	VAL	4.2
40	2i	14	VAL	4.2
40	1i	19	LEU	4.2
1	2A	2159	G	4.2

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Mol	Chain	Res	Type	RSRZ
53	2v	24	A	4.2
32	2a	1257	U	4.2
1	2A	2147	G	4.2
6	2G	102	PHE	4.2
33	2b	165	VAL	4.2
8	2I	146	ALA	4.1
15	1T	131	ALA	4.1
1	2A	2113	U	4.1
1	2A	2145	C	4.1
40	1i	2	GLU	4.1
1	2A	2174	C	4.1
33	1b	7	VAL	4.1
44	2m	121	LYS	4.0
32	2a	1251	A	4.0
39	2h	131	GLY	4.0
34	2c	189	ALA	4.0
52	2u	11	GLY	4.0
1	1A	2146	C	4.0
22	20	6	GLY	4.0
33	1b	133	LYS	4.0
33	1b	34	ALA	3.9
33	1b	237	ALA	3.9
1	2A	2123	G	3.9
22	10	7	LEU	3.9
32	2a	1224	G	3.9
32	2a	1356	G	3.9
45	2n	34	TYR	3.9
32	2a	1114	C	3.9
55	2x	1	C	3.9
1	1A	2147	G	3.9
34	2c	87	LEU	3.9
33	2b	236	TYR	3.8
54	2w	15	G	3.8
57	2y	33	U	3.8
22	20	5	LYS	3.8
1	2A	2133	G	3.8
1	1A	1095	A	3.8
1	2A	2111	C	3.8
8	2I	94	ALA	3.8
1	2A	2154	G	3.8
6	2G	29	TRP	3.7
1	1A	2144	U	3.7

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Mol	Chain	Res	Type	RSRZ
32	2a	1116	C	3.7
1	1A	1096	A	3.7
1	2A	2160	G	3.7
57	2y	36	U	3.7
50	2s	15	LEU	3.7
1	1A	2174	C	3.7
21	1Z	119	GLU	3.7
1	1A	2114	A	3.6
53	2v	14	A	3.6
1	1A	2113	U	3.6
57	2y	35	U	3.6
17	2V	71	LEU	3.6
22	20	7	LEU	3.6
1	1A	2150	U	3.6
1	2A	2158	A	3.6
26	24	65	ASP	3.6
35	2d	164	ALA	3.6
21	2Z	141	VAL	3.6
8	2I	123	LEU	3.6
14	2S	33	LYS	3.6
53	2v	13	A	3.6
34	2c	2	GLY	3.6
8	2I	18	VAL	3.6
33	2b	7	VAL	3.6
8	2I	93	THR	3.6
21	1Z	104	PHE	3.6
40	1i	126	SER	3.6
1	2A	2169	A	3.5
20	2Y	1	MET	3.5
51	1t	103	GLY	3.5
8	2I	111	PRO	3.5
39	2h	112	LEU	3.5
54	1w	73	A	3.5
33	2b	237	ALA	3.5
33	2b	187	LEU	3.5
1	2A	2129	C	3.5
22	20	4	LYS	3.5
32	2a	1357	A	3.5
54	2w	32	C	3.4
15	1T	130	ALA	3.4
38	2g	84	ASN	3.4
53	1v	24	A	3.4

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Mol	Chain	Res	Type	RSRZ
21	2Z	143	GLY	3.4
54	1w	61	C	3.4
33	2b	86	GLU	3.4
21	1Z	150	LEU	3.4
40	2i	102	LEU	3.4
32	1a	1001(A)	G	3.4
42	2k	90	GLY	3.4
44	2m	119	GLY	3.4
8	2I	20	ASP	3.4
1	1A	1064	C	3.4
32	2a	1254	C	3.4
41	2j	75	ILE	3.4
31	29	37	GLY	3.4
42	1k	15	ALA	3.4
32	2a	1358	U	3.3
55	1x	1	C	3.3
44	2m	6	GLY	3.3
17	2V	72	VAL	3.3
1	1A	1026	U	3.3
1	1A	2122	U	3.3
1	1A	2138	C	3.3
1	2A	2175	C	3.3
38	1g	79	ARG	3.3
54	2w	62	C	3.3
18	2W	112	GLY	3.3
6	2G	28	VAL	3.3
1	2A	2114	A	3.3
1	2A	2127	G	3.3
52	2u	14	TRP	3.3
36	2e	22	GLY	3.3
8	2I	121	LYS	3.3
53	1v	12	A	3.3
1	1A	2112	G	3.3
1	1A	2159	G	3.3
1	2A	2116	G	3.3
33	2b	11	LEU	3.3
35	1d	2	GLY	3.3
1	2A	2144	U	3.3
1	1A	2111	C	3.2
54	2w	74	C	3.2
14	2S	80	LEU	3.2
34	2c	137	ALA	3.2

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Mol	Chain	Res	Type	RSRZ
1	1A	2141	G	3.2
1	2A	2802	G	3.2
32	2a	1036	G	3.2
50	2s	49	ILE	3.2
41	2j	76	ASN	3.2
1	1A	1065	U	3.2
32	2a	1532	U	3.2
51	1t	47	GLY	3.2
32	1a	1531	A	3.2
32	2a	1250	A	3.2
47	1p	19	ILE	3.2
8	2I	96	ASP	3.2
32	2a	1034	G	3.2
1	1A	1066	U	3.2
32	1a	204	U	3.2
32	2a	950	U	3.2
40	2i	45	ALA	3.2
1	1A	1078	U	3.2
32	2a	1033	G	3.2
54	1w	7	U	3.2
33	2b	136	VAL	3.2
45	2n	21	TYR	3.2
1	1A	2143	C	3.1
1	2A	2804	C	3.1
52	2u	24	ARG	3.1
40	2i	127	LYS	3.1
14	2S	32	LEU	3.1
53	1v	14	A	3.1
54	2w	31	A	3.1
8	2I	98	ALA	3.1
23	2I	2	SER	3.1
38	2g	9	VAL	3.1
47	1p	20	VAL	3.1
38	2g	154	TYR	3.1
1	2A	2138	C	3.1
1	2A	2161	C	3.1
57	1y	75	C	3.1
1	1A	2169	A	3.1
36	2e	120	THR	3.1
44	2m	120	LYS	3.1
39	2h	9	MET	3.1
38	2g	16	LEU	3.1

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Mol	Chain	Res	Type	RSRZ
1	2A	2162	G	3.1
8	2I	99	GLU	3.1
35	1d	179	GLU	3.1
8	2I	17	GLN	3.1
32	2a	1030(B)	C	3.1
54	2w	5	C	3.1
34	2c	158	GLY	3.1
50	2s	82	GLY	3.1
32	2a	1252	A	3.1
34	2c	55	VAL	3.1
34	2c	128	PHE	3.1
1	1A	2121	G	3.1
8	2I	106	GLY	3.1
54	1w	1	G	3.1
34	2c	129	ALA	3.1
1	2A	2136	C	3.1
50	2s	41	VAL	3.1
54	2w	61	C	3.1
1	1A	2170	A	3.0
14	2S	7	TYR	3.0
33	2b	131	PRO	3.0
20	2Y	54	LYS	3.0
8	2I	120	ILE	3.0
34	2c	157	ILE	3.0
34	2c	182	ILE	3.0
34	2c	185	GLY	3.0
51	1t	69	GLY	3.0
34	2c	53	ALA	3.0
34	2c	149	ALA	3.0
12	2Q	104	PHE	3.0
35	2d	92	VAL	3.0
49	1r	86	VAL	3.0
1	1A	2133	G	3.0
32	2a	973	G	3.0
45	2n	39	LEU	3.0
1	2A	1536	C	3.0
1	2A	2128	C	3.0
1	2A	2803	C	3.0
32	1a	1533	C	3.0
34	2c	48	TYR	3.0
1	1A	2119	A	3.0
48	1q	100	LYS	3.0

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Mol	Chain	Res	Type	RSRZ
40	2i	10	ARG	3.0
20	2Y	45	VAL	3.0
8	2I	91	SER	3.0
8	2I	114	LEU	3.0
21	2Z	150	LEU	3.0
41	2j	40	LEU	3.0
38	2g	85	TYR	3.0
52	1u	23	PRO	3.0
1	2A	2125	G	3.0
2	2B	23	G	3.0
8	2I	118	LYS	3.0
34	2c	199	LYS	3.0
1	2A	2143	C	3.0
21	1Z	120	ILE	3.0
21	2Z	172	ALA	3.0
42	1k	14	VAL	3.0
50	2s	9	VAL	3.0
21	2Z	145	GLU	3.0
44	1m	121	LYS	3.0
8	2I	1	MET	3.0
38	2g	4	ARG	3.0
44	2m	104	ARG	3.0
1	1A	1099	G	3.0
1	1A	2165	G	3.0
32	2a	1202	G	3.0
32	2a	1255	G	3.0
1	2A	2170	A	3.0
8	2I	116	LEU	2.9
6	1G	146	TYR	2.9
8	2I	97	ILE	2.9
21	2Z	171	ILE	2.9
42	2k	15	ALA	2.9
8	2I	92	VAL	2.9
35	1d	157	LEU	2.9
1	1A	2188	C	2.9
32	2a	1149	C	2.9
32	2a	1283	G	2.9
54	1w	49	G	2.9
54	1w	74	C	2.9
54	2w	6	G	2.9
20	2Y	5	MET	2.9
35	2d	209	ARG	2.9

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Mol	Chain	Res	Type	RSRZ
38	2g	81	GLY	2.9
44	1m	2	ALA	2.9
45	2n	20	ALA	2.9
41	2j	55	LYS	2.9
50	2s	2	PRO	2.9
1	1A	2135	A	2.9
1	1A	2164	C	2.9
1	1A	2109	U	2.9
1	1A	2131	G	2.9
1	2A	2166	G	2.9
1	2A	2168	G	2.9
54	2w	53	G	2.9
33	2b	201	ILE	2.9
40	2i	91	ASP	2.9
34	2c	168	ALA	2.9
30	28	15	LYS	2.9
49	1r	78	LEU	2.9
8	1I	117	GLU	2.9
38	2g	153	HIS	2.9
45	2n	42	ILE	2.9
48	1q	36	ILE	2.9
1	1A	2803	C	2.9
1	2A	2167	U	2.9
32	2a	1369	C	2.9
40	2i	5	TYR	2.9
54	2w	50	C	2.9
1	2A	2110	G	2.9
34	2c	52	LEU	2.9
47	1p	2	VAL	2.9
41	2j	77	PRO	2.8
21	1Z	171	ILE	2.8
44	2m	9	ILE	2.8
8	2I	84	GLY	2.8
21	2Z	147	GLY	2.8
52	2u	4	GLY	2.8
8	2I	77	LEU	2.8
1	2A	229	A	2.8
32	1a	1532	U	2.8
41	1j	34	VAL	2.8
1	1A	2136	C	2.8
1	1A	2178	C	2.8
8	2I	10	GLU	2.8

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Mol	Chain	Res	Type	RSRZ
32	2a	1363(A)	A	2.8
54	1w	56	C	2.8
40	2i	123	PRO	2.8
40	2i	126	SER	2.8
3	1D	276	LYS	2.8
43	1l	63	GLY	2.8
6	2G	146	TYR	2.8
21	2Z	155	LEU	2.8
8	2I	108	THR	2.8
45	2n	5	ALA	2.8
14	2S	34	HIS	2.8
26	24	56	VAL	2.8
33	2b	163	PHE	2.8
43	2l	104	VAL	2.8
1	1A	1081	U	2.8
1	2A	2109	U	2.8
6	2G	118	ARG	2.8
1	2A	2117	A	2.8
1	1A	2142	C	2.8
54	2w	65	C	2.8
22	10	8	GLY	2.8
34	2c	41	GLY	2.8
38	2g	2	ALA	2.8
33	1b	9	GLU	2.8
12	2Q	60	ARG	2.8
52	2u	23	PRO	2.8
1	2A	2118	U	2.8
51	1t	55	ILE	2.8
7	2H	2	SER	2.8
15	2T	131	ALA	2.8
26	14	56	VAL	2.8
33	2b	71	VAL	2.8
34	2c	163	ALA	2.8
44	2m	66	LEU	2.7
8	1I	146	ALA	2.7
35	1d	195	ALA	2.7
22	20	69	PHE	2.7
50	1s	9	VAL	2.7
8	2I	89	TYR	2.7
48	1q	28	PRO	2.7
1	2A	2148	G	2.7
55	2x	70	G	2.7

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Mol	Chain	Res	Type	RSRZ
47	1p	33	ILE	2.7
6	2G	139	LEU	2.7
40	1i	56	LEU	2.7
47	2p	6	LEU	2.7
26	14	57	GLU	2.7
20	2Y	42	VAL	2.7
33	1b	136	VAL	2.7
34	2c	153	VAL	2.7
45	1n	3	ARG	2.7
47	2p	82	GLN	2.7
12	2Q	103	MET	2.7
34	2c	188	LEU	2.7
40	2i	56	LEU	2.7
1	1A	2160	G	2.7
1	1A	2166	G	2.7
1	2A	11	G	2.7
1	2A	2156	G	2.7
1	2A	2157	G	2.7
33	2b	14	GLY	2.7
11	2P	79	ARG	2.7
40	2i	66	ARG	2.7
52	1u	24	ARG	2.7
34	2c	92	ALA	2.7
34	2c	192	THR	2.7
44	1m	120	LYS	2.7
54	2w	47	U	2.7
36	2e	133	TYR	2.7
38	1g	85	TYR	2.7
40	2i	36	TYR	2.7
1	2A	2173	A	2.7
54	2w	14	A	2.7
14	2S	35	ILE	2.7
41	1j	75	ILE	2.7
1	2A	2137	C	2.7
1	2A	2142	C	2.7
57	1y	5	C	2.7
33	1b	11	LEU	2.7
34	2c	79	ARG	2.7
34	2c	194	GLY	2.7
51	2t	103	GLY	2.7
38	2g	156	TRP	2.7
47	1p	59	TRP	2.7

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Mol	Chain	Res	Type	RSRZ
8	1I	3	VAL	2.7
27	15	60	VAL	2.7
34	2c	121	ALA	2.7
41	2j	63	PHE	2.7
1	2A	530	G	2.6
2	2B	119	G	2.6
20	2Y	55	TYR	2.6
38	1g	154	TYR	2.6
6	2G	52	ILE	2.6
44	2m	78	ILE	2.6
34	2c	91	LEU	2.6
39	2h	2	LEU	2.6
40	2i	99	LEU	2.6
45	2n	3	ARG	2.6
40	2i	11	LYS	2.6
19	2X	91	ALA	2.6
34	2c	187	ALA	2.6
50	2s	76	PRO	2.6
50	2s	13	ASP	2.6
6	2G	140	ILE	2.6
26	14	63	TYR	2.6
1	2A	1533	G	2.6
1	2A	2120	G	2.6
32	2a	951	G	2.6
54	2w	60	U	2.6
43	1l	19	ARG	2.6
45	2n	40	CYS	2.6
8	2I	13	GLY	2.6
50	1s	84	GLY	2.6
1	2A	2176	A	2.6
53	1v	13	A	2.6
34	2c	75	VAL	2.6
11	2P	78	PRO	2.6
35	2d	48	ALA	2.6
32	2a	972	C	2.6
8	2I	51	ILE	2.6
33	1b	172	ILE	2.6
33	1b	10	LEU	2.6
12	2Q	10	ARG	2.6
1	1A	2132	U	2.6
6	2G	74	LYS	2.6
35	2d	86	LYS	2.6

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Mol	Chain	Res	Type	RSRZ
57	1y	12	U	2.6
35	1d	150	GLU	2.6
1	1A	2120	G	2.6
1	2A	2141	G	2.6
54	1w	2	G	2.6
57	2y	49	G	2.6
21	2Z	167	PRO	2.6
34	2c	130	VAL	2.6
44	1m	118	ALA	2.6
44	2m	72	ALA	2.6
50	2s	53	ASN	2.6
1	1A	2158	A	2.6
1	2A	529	A	2.6
57	1y	66	A	2.6
52	2u	13	ILE	2.6
32	2a	1354	C	2.6
51	1t	13	LEU	2.6
35	2d	68	TYR	2.6
35	1d	163	GLU	2.6
50	2s	68	GLY	2.6
1	1A	2130	U	2.6
1	2A	2189	U	2.6
41	2j	49	VAL	2.6
55	2x	47	U	2.6
6	2G	50	ALA	2.6
23	2l	24	ALA	2.6
6	1G	76	SER	2.5
34	1c	177	THR	2.5
1	1A	880	G	2.5
57	1y	19	G	2.5
26	24	14	ILE	2.5
1	1A	1077	A	2.5
6	2G	19	LEU	2.5
8	2I	101	LEU	2.5
32	2a	1286	A	2.5
53	2v	15	A	2.5
39	2h	91	ARG	2.5
50	2s	32	LYS	2.5
51	1t	74	LYS	2.5
35	2d	106	TYR	2.5
1	1A	888	C	2.5
1	1A	1100	C	2.5

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Mol	Chain	Res	Type	RSRZ
32	2a	1249	C	2.5
54	2w	72	C	2.5
31	29	21	GLY	2.5
44	2m	95	GLY	2.5
7	2H	107	VAL	2.5
33	2b	234	PRO	2.5
33	1b	17	PHE	2.5
40	2i	119	ALA	2.5
8	2I	86	THR	2.5
1	2A	1026	U	2.5
1	2A	2122	U	2.5
21	1Z	157	LEU	2.5
35	1d	21	LEU	2.5
35	2d	122	ARG	2.5
26	24	25	TYR	2.5
50	2s	80	TYR	2.5
33	1b	165	VAL	2.5
35	2d	88	VAL	2.5
21	2Z	164	ALA	2.5
33	2b	186	ALA	2.5
1	1A	2161	C	2.5
6	2G	76	SER	2.5
3	2D	276	LYS	2.5
8	2I	14	ASP	2.5
38	2g	32	ARG	2.5
41	2j	5	ARG	2.5
41	2j	74	ILE	2.5
41	2j	79	ARG	2.5
54	1w	47	U	2.5
8	2I	105	HIS	2.5
39	2h	94	TYR	2.5
1	2A	2119	A	2.5
1	2A	2134	A	2.5
2	2B	90	A	2.5
32	1a	216	G	2.5
32	2a	965	A	2.5
54	1w	15	G	2.5
57	2y	19	G	2.5
29	27	48	LYS	2.5
50	2s	25	LYS	2.5
34	2c	33	LEU	2.5
38	2g	27	ILE	2.5

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Mol	Chain	Res	Type	RSRZ
38	1g	156	TRP	2.5
57	1y	36	U	2.5
57	2y	7	U	2.5
6	2G	2	PRO	2.5
26	14	67	TYR	2.5
34	2c	197	GLY	2.5
38	1g	82	GLY	2.5
52	2u	2	GLY	2.5
21	1Z	1	MET	2.5
33	2b	48	MET	2.5
36	2e	90	VAL	2.5
14	2S	29	PHE	2.5
35	1d	111	ALA	2.5
45	2n	36	PHE	2.5
43	2l	13	LYS	2.4
21	2Z	170	THR	2.4
41	2j	48	THR	2.4
36	2e	130	ASN	2.4
52	2u	22	ARG	2.4
57	1y	69	A	2.4
8	2I	12	LEU	2.4
19	1X	95	LEU	2.4
45	2n	6	LEU	2.4
51	1t	10	LEU	2.4
1	1A	2148	G	2.4
1	2A	2149	G	2.4
32	1a	1031	G	2.4
6	2G	147	ASP	2.4
1	1A	885	C	2.4
32	1a	1000	U	2.4
9	2N	44	PRO	2.4
14	2S	92	TYR	2.4
14	2S	85	VAL	2.4
35	1d	169	LYS	2.4
41	2j	54	PHE	2.4
34	2c	165	THR	2.4
44	2m	103	THR	2.4
50	2s	79	THR	2.4
33	2b	208	ILE	2.4
34	1c	178	LEU	2.4
14	2S	31	SER	2.4
1	2A	2135	A	2.4

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Mol	Chain	Res	Type	RSRZ
57	2y	69	A	2.4
1	2A	2182	G	2.4
1	2A	2893	G	2.4
32	1a	1003	G	2.4
54	2w	49	G	2.4
57	2y	2	G	2.4
26	14	64	GLY	2.4
51	2t	98	PRO	2.4
8	2I	87	LYS	2.4
47	1p	43	LYS	2.4
1	1A	2108	C	2.4
34	2c	207	VAL	2.4
35	1d	8	VAL	2.4
39	1h	61	VAL	2.4
54	2w	71	C	2.4
8	2I	55	ALA	2.4
32	1a	1025	U	2.4
34	2c	200	ALA	2.4
35	2d	206	PHE	2.4
14	2S	3	ARG	2.4
36	2e	21	ALA	2.4
36	2e	108	ALA	2.4
37	2f	20	ALA	2.4
45	1n	20	ALA	2.4
20	2Y	44	ILE	2.4
20	2Y	90	LEU	2.4
33	2b	213	LEU	2.4
50	2s	71	LEU	2.4
9	2N	45	ASN	2.4
20	2Y	107	ASP	2.4
1	1A	1070	A	2.4
1	1A	1098	A	2.4
3	2D	38	LYS	2.4
47	1p	35	LYS	2.4
54	2w	59	A	2.4
33	1b	167	PRO	2.4
34	2c	171	GLY	2.4
36	2e	93	PRO	2.4
40	1i	30	GLY	2.4
8	2I	3	VAL	2.4
28	26	5	VAL	2.4
33	2b	112	VAL	2.4

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Mol	Chain	Res	Type	RSRZ
34	1c	207	VAL	2.4
37	1f	88	VAL	2.4
50	2s	45	VAL	2.4
1	1A	2168	G	2.4
14	2S	36	TYR	2.4
18	2W	92	ARG	2.4
32	2a	1190	G	2.4
33	1b	236	TYR	2.4
33	2b	152	PHE	2.4
34	2c	146	ALA	2.4
35	2d	82	ALA	2.4
40	2i	33	PHE	2.4
44	2m	118	ALA	2.4
57	2y	6	G	2.4
57	2y	57	G	2.4
1	1A	2189	U	2.4
6	2G	39	ILE	2.4
38	2g	12	LEU	2.4
45	2n	7	ILE	2.4
51	2t	24	LEU	2.4
26	14	52	THR	2.4
1	2A	2139	C	2.4
32	1a	1040	U	2.4
50	2s	48	THR	2.4
57	2y	70	C	2.4
8	2I	85	GLU	2.4
9	2N	1	MET	2.4
40	2i	95	LYS	2.4
33	2b	232	PRO	2.4
17	2V	63	GLY	2.4
22	20	38	VAL	2.4
33	2b	21	ARG	2.4
33	2b	230	VAL	2.4
35	2d	178	VAL	2.4
45	2n	33	VAL	2.4
2	2B	120	A	2.4
35	1d	110	PHE	2.4
50	2s	75	ALA	2.4
21	2Z	76	LEU	2.3
34	1c	12	LEU	2.3
39	1h	2	LEU	2.3
39	2h	48	TYR	2.3

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Mol	Chain	Res	Type	RSRZ
41	2j	65	LEU	2.3
34	2c	6	HIS	2.3
41	2j	62	HIS	2.3
1	1A	1093	G	2.3
1	1A	2167	U	2.3
32	1a	1030(A)	G	2.3
32	1a	1036	G	2.3
32	2a	971	G	2.3
57	1y	27	G	2.3
1	1A	2103	C	2.3
1	2A	2108	C	2.3
11	2P	39	LYS	2.3
33	2b	22	LYS	2.3
44	2m	65	LYS	2.3
55	2x	71	C	2.3
57	2y	32	C	2.3
57	2y	56	C	2.3
51	2t	8	ARG	2.3
5	2F	114	VAL	2.3
6	2G	159	VAL	2.3
10	1O	57	VAL	2.3
50	2s	11	VAL	2.3
3	2D	147	LEU	2.3
14	2S	48	LEU	2.3
33	1b	118	LEU	2.3
35	1d	135	LEU	2.3
45	2n	53	LEU	2.3
6	2G	157	ILE	2.3
33	2b	127	ILE	2.3
41	2j	82	ILE	2.3
34	1c	184	TYR	2.3
1	1A	2171	A	2.3
1	2A	528	A	2.3
1	2A	2801(A)	A	2.3
22	20	43	THR	2.3
52	2u	8	THR	2.3
55	2x	72	A	2.3
43	1l	126	LYS	2.3
33	1b	233	SER	2.3
1	1A	2123	G	2.3
1	1A	2149	G	2.3
1	1A	2154	G	2.3

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Mol	Chain	Res	Type	RSRZ
2	2B	118	G	2.3
32	2a	630	G	2.3
54	1w	19	G	2.3
8	2I	113	ARG	2.3
12	1Q	60	ARG	2.3
34	2c	190	ARG	2.3
38	2g	3	ARG	2.3
54	1w	50	C	2.3
57	1y	56	C	2.3
14	2S	98	VAL	2.3
47	1p	21	VAL	2.3
47	1p	51	VAL	2.3
14	2S	79	ALA	2.3
22	20	84	LEU	2.3
33	2b	34	ALA	2.3
33	2b	123	ALA	2.3
33	2b	221	LEU	2.3
40	2i	18	PHE	2.3
8	2I	122	GLU	2.3
1	1A	1057	A	2.3
1	2A	2126	A	2.3
32	1a	1001	A	2.3
32	1a	1030(D)	A	2.3
33	1b	131	PRO	2.3
34	1c	9	GLY	2.3
34	2c	107	GLN	2.3
34	2c	167	TRP	2.3
12	1Q	61	GLY	2.3
45	2n	38	GLY	2.3
8	2I	81	VAL	2.3
26	24	59	PHE	2.3
33	2b	17	PHE	2.3
33	2b	154	LEU	2.3
34	2c	32	LEU	2.3
48	1q	71	PHE	2.3
6	1G	50	ALA	2.3
34	1c	14	ILE	2.3
36	2e	129	ILE	2.3
41	1j	38	ILE	2.3
41	1j	98	ILE	2.3
41	2j	38	ILE	2.3
43	2l	56	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
32	2a	1027	C	2.3
32	2a	1032	G	2.3
33	2b	16	HIS	2.3
48	1q	45	HIS	2.3
54	2w	3	G	2.3
57	1y	15	G	2.3
57	1y	70	C	2.3
40	1i	113	LYS	2.3
44	2m	105	THR	2.3
50	2s	28	LYS	2.3
50	2s	33	THR	2.3
43	1l	64	TYR	2.3
36	2e	81	GLU	2.3
21	2Z	154	ASP	2.3
24	12	69	ARG	2.3
34	2c	73	PRO	2.3
46	1o	19	PRO	2.3
1	2A	896	A	2.3
32	2a	1285	A	2.3
5	2F	183	VAL	2.3
8	1I	12	LEU	2.3
33	2b	196	LEU	2.3
33	2b	197	VAL	2.3
38	2g	22	LEU	2.3
42	1k	98	LEU	2.3
36	2e	84	PHE	2.3
38	2g	26	PHE	2.3
2	2B	55	U	2.2
33	1b	123	ALA	2.2
43	2l	100	ILE	2.2
50	2s	31	ILE	2.2
4	1E	87	GLU	2.2
44	2m	21	TYR	2.2
44	2m	87	TYR	2.2
1	1A	2140	C	2.2
1	2A	2164	C	2.2
1	2A	2794	C	2.2
32	1a	174	C	2.2
57	1y	25	C	2.2
57	2y	74	C	2.2
1	1A	275	G	2.2
52	2u	15	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
13	2R	69	ASP	2.2
36	2e	74	GLY	2.2
50	2s	84	GLY	2.2
3	2D	177	LEU	2.2
6	2G	111	LEU	2.2
14	2S	49	VAL	2.2
33	2b	184	VAL	2.2
36	2e	31	LEU	2.2
43	2l	18	VAL	2.2
44	2m	34	LEU	2.2
46	2o	31	LEU	2.2
47	1p	6	LEU	2.2
1	1A	1460	A	2.2
7	2H	165	ALA	2.2
8	2I	79	ILE	2.2
44	2m	28	ALA	2.2
47	1p	36	ILE	2.2
48	2q	44	ALA	2.2
53	1v	15	A	2.2
1	1A	1175	U	2.2
1	2A	614(A)	U	2.2
32	2a	5	U	2.2
35	1d	138	TYR	2.2
38	1g	4	ARG	2.2
9	2N	111	PRO	2.2
41	1j	77	PRO	2.2
2	1B	88	C	2.2
32	2a	1260	C	2.2
54	1w	5	C	2.2
54	1w	75	C	2.2
14	2S	50	SER	2.2
1	1A	2125	G	2.2
1	2A	2318	G	2.2
21	2Z	106	GLY	2.2
35	2d	69	GLY	2.2
35	2d	87	GLY	2.2
40	1i	91	ASP	2.2
40	2i	105	ASP	2.2
41	2j	58	ASP	2.2
6	2G	53	LEU	2.2
32	1a	630	G	2.2
33	2b	121	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
35	1d	120	LEU	2.2
57	1y	18	G	2.2
26	24	50	VAL	2.2
34	2c	4	LYS	2.2
41	2j	34	VAL	2.2
34	1c	10	PHE	2.2
36	2e	109	ILE	2.2
50	2s	66	MET	2.2
32	1a	1447	A	2.2
32	2a	1035	A	2.2
41	2j	67	THR	2.2
45	2n	13	THR	2.2
38	2g	6	ARG	2.2
21	1Z	95	PRO	2.2
43	2l	5	PRO	2.2
42	1k	13	GLN	2.2
17	2V	35	LEU	2.2
33	1b	203	GLY	2.2
35	2d	19	LEU	2.2
52	2u	3	LYS	2.2
4	2E	150	VAL	2.2
1	1A	2175	C	2.2
8	2I	109	ILE	2.2
21	2Z	121	HIS	2.2
32	2a	979	C	2.2
34	2c	77	ILE	2.2
48	2q	90	ILE	2.2
57	1y	13	C	2.2
1	2A	2153	G	2.2
1	1A	2117	A	2.2
32	1a	228	A	2.2
32	2a	1287	A	2.2
39	2h	101	PRO	2.2
43	2l	64	TYR	2.2
54	2w	58	A	2.2
20	2Y	57	GLN	2.2
32	2a	1219	U	2.2
47	1p	82	GLN	2.2
54	2w	4	U	2.2
17	2V	9	GLY	2.2
21	1Z	147	GLY	2.2
37	1f	48	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
37	2f	61	LEU	2.2
40	2i	50	LEU	2.2
43	1l	60	LEU	2.2
44	2m	70	LEU	2.2
21	1Z	166	SER	2.2
26	24	10	VAL	2.2
34	2c	138	VAL	2.2
35	1d	71	SER	2.2
35	1d	170	VAL	2.2
35	2d	79	PHE	2.2
40	2i	101	PHE	2.2
45	1n	16	PHE	2.2
1	1A	1509	C	2.1
20	2Y	2	ARG	2.1
26	14	58	ARG	2.1
33	2b	168	THR	2.1
38	2g	5	ARG	2.1
47	1p	5	ARG	2.1
47	2p	45	THR	2.1
54	2w	56	C	2.1
1	1A	2101	G	2.1
32	2a	1001(A)	G	2.1
32	2a	1222	G	2.1
34	2c	7	PRO	2.1
54	1w	18	G	2.1
57	1y	10	G	2.1
11	2P	68	GLN	2.1
42	2k	25	TYR	2.1
42	2k	75	TYR	2.1
33	2b	10	LEU	2.1
32	1a	1286	A	2.1
36	1e	85	GLY	2.1
40	2i	6	GLY	2.1
42	2k	49	GLY	2.1
54	2w	51	A	2.1
54	2w	73	A	2.1
4	2E	196	VAL	2.1
21	1Z	133	ILE	2.1
21	1Z	154	ASP	2.1
32	2a	1150	U	2.1
32	2a	1235	U	2.1
33	2b	200	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
36	2e	101	ILE	2.1
39	2h	95	VAL	2.1
44	2m	117	VAL	2.1
55	1x	47	U	2.1
57	2y	29	U	2.1
40	1i	37	PHE	2.1
12	2Q	121	ALA	2.1
44	2m	30	ALA	2.1
8	2I	129	THR	2.1
20	2Y	12	THR	2.1
23	2I	68	PRO	2.1
33	2b	91	PRO	2.1
48	2q	37	LYS	2.1
1	1A	2804	C	2.1
33	2b	118	LEU	2.1
43	2l	69	TYR	2.1
47	1p	17	TYR	2.1
47	2p	38	TYR	2.1
19	2X	67	GLY	2.1
34	2c	74	GLY	2.1
52	2u	19	GLY	2.1
1	2A	2151	G	2.1
1	2A	2181	G	2.1
32	1a	1002	G	2.1
32	2a	1117	G	2.1
33	2b	15	VAL	2.1
39	2h	93	VAL	2.1
41	1j	50	ILE	2.1
41	2j	72	VAL	2.1
44	2m	17	VAL	2.1
52	1u	13	ILE	2.1
57	1y	68	G	2.1
41	2j	35	SER	2.1
48	1q	99	SER	2.1
1	2A	2130	U	2.1
1	2A	2150	U	2.1
2	2B	59	A	2.1
32	2a	978	A	2.1
45	1n	59	ALA	2.1
38	2g	76	ARG	2.1
44	2m	88	ARG	2.1
42	1k	51	LYS	2.1

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Mol	Chain	Res	Type	RSRZ
45	2n	14	PRO	2.1
33	2b	142	LEU	2.1
35	2d	135	LEU	2.1
41	1j	90	LEU	2.1
22	10	3	HIS	2.1
33	1b	33	TYR	2.1
35	2d	20	TYR	2.1
40	2i	114	TYR	2.1
40	2i	125	TYR	2.1
42	1k	25	TYR	2.1
44	1m	68	GLY	2.1
47	1p	37	GLY	2.1
9	2N	9	VAL	2.1
20	2Y	30	VAL	2.1
32	2a	307	C	2.1
33	1b	214	ILE	2.1
34	2c	5	ILE	2.1
35	2d	105	VAL	2.1
37	2f	6	VAL	2.1
39	1h	13	ILE	2.1
41	2j	23	ILE	2.1
43	2l	11	VAL	2.1
44	2m	53	VAL	2.1
50	2s	19	VAL	2.1
57	2y	5	C	2.1
47	1p	80	PHE	2.1
3	2D	2	ALA	2.1
21	2Z	149	SER	2.1
35	2d	71	SER	2.1
50	2s	4	SER	2.1
6	1G	48	GLU	2.1
13	2R	68	ARG	2.1
40	2i	9	ARG	2.1
51	2t	97	ALA	2.1
32	2a	1002	G	2.1
54	2w	64	G	2.1
57	2y	64	G	2.1
2	2B	58	A	2.1
6	2G	161	THR	2.1
32	2a	1493	A	2.1
54	1w	4	U	2.1
54	2w	63	U	2.1

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Mol	Chain	Res	Type	RSRZ
57	1y	20	U	2.1
35	1d	51	PRO	2.1
36	2e	20	GLN	2.1
8	2I	140	LEU	2.1
35	1d	19	LEU	2.1
50	2s	16	LEU	2.1
35	2d	154	ASN	2.1
26	14	54	GLY	2.1
40	1i	39	GLY	2.1
33	2b	172	ILE	2.1
33	2b	185	ILE	2.1
34	2c	39	ILE	2.1
39	2h	111	ILE	2.1
41	1j	74	ILE	2.1
12	2Q	97	VAL	2.1
21	2Z	165	VAL	2.1
26	24	21	VAL	2.1
34	2c	141	VAL	2.1
40	2i	26	VAL	2.1
33	2b	122	PHE	2.1
45	2n	16	PHE	2.1
30	18	46	ARG	2.0
39	2h	84	ARG	2.0
51	1t	32	ALA	2.0
30	28	21	LYS	2.0
40	1i	25	LYS	2.0
54	2w	67	C	2.0
57	1y	11	C	2.0
57	2y	13	C	2.0
20	1Y	1	MET	2.0
46	2o	2	PRO	2.0
48	2q	2	PRO	2.0
4	2E	195	LEU	2.0
14	2S	56	LEU	2.0
20	1Y	90	LEU	2.0
32	1a	65	U	2.0
33	2b	149	LEU	2.0
40	2i	79	LEU	2.0
41	2j	71	LEU	2.0
48	2q	98	LEU	2.0
1	2A	2100	G	2.0
32	1a	625	G	2.0

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Mol	Chain	Res	Type	RSRZ
32	1a	1034	G	2.0
32	2a	1370	G	2.0
54	1w	6	G	2.0
54	2w	68	G	2.0
57	2y	18	G	2.0
34	2c	181	ASN	2.0
14	2S	40	ILE	2.0
31	29	17	ILE	2.0
34	1c	81	GLY	2.0
35	1d	5	ILE	2.0
39	2h	134	ILE	2.0
42	2k	48	ILE	2.0
33	2b	33	TYR	2.0
40	2i	4	TYR	2.0
36	2e	45	PHE	2.0
12	2Q	117	ALA	2.0
29	17	45	ALA	2.0
33	2b	133	LYS	2.0
34	2c	45	LYS	2.0
42	2k	89	ALA	2.0
36	2e	96	PRO	2.0
39	2h	17	THR	2.0
45	2n	22	THR	2.0
50	2s	59	PRO	2.0
50	2s	77	THR	2.0
52	1u	14	TRP	2.0
20	2Y	53	PRO	2.0
1	1A	889	C	2.0
21	2Z	102	LEU	2.0
32	2a	1383	C	2.0
38	2g	38	LEU	2.0
49	1r	79	LEU	2.0
57	2y	75	C	2.0
50	2s	14	HIS	2.0
1	1A	1060	U	2.0
54	2w	7	U	2.0
17	2V	8	GLY	2.0
33	1b	39	ILE	2.0
34	2c	152	ILE	2.0
44	1m	100	GLY	2.0
1	1A	229	A	2.0
1	1A	899	A	2.0

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Mol	Chain	Res	Type	RSRZ
1	1A	2173	A	2.0
32	1a	344	A	2.0
33	2b	229	VAL	2.0
34	2c	76	VAL	2.0
34	2c	83	ARG	2.0
36	2e	55	VAL	2.0
42	2k	126	ARG	2.0
57	2y	66	A	2.0
46	1o	69	TYR	2.0
47	2p	39	TYR	2.0
52	1u	21	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
54	PSU	2w	55	20/21	0.27	0.17	93,100,111,117	0
57	G7M	2y	46	24/25	0.42	0.15	89,98,109,123	0
54	G7M	2w	46	24/25	0.44	0.15	88,97,107,115	0
54	G7M	1w	46	24/25	0.45	0.15	80,94,105,110	0
54	5MU	2w	54	21/22	0.52	0.18	83,96,102,106	0
54	PSU	1w	55	20/21	0.57	0.17	82,96,103,105	0
57	U8U	2y	34	20/24	0.57	0.24	93,100,106,118	0
57	G7M	1y	46	24/25	0.60	0.15	86,93,98,107	0
57	PSU	2y	55	20/21	0.61	0.14	83,95,103,115	0
57	5MU	2y	54	21/22	0.63	0.14	88,95,104,117	0
57	PSU	2y	39	20/21	0.64	0.15	89,92,102,108	0
57	T6A	1y	37	22/33	0.66	0.16	81,91,100,107	0
57	PSU	1y	39	20/21	0.67	0.14	84,92,101,107	0
57	U8U	1y	34	20/24	0.69	0.17	82,92,98,102	0
57	PSU	1y	55	20/21	0.70	0.14	91,94,102,104	0
57	T6A	2y	37	22/33	0.72	0.17	85,93,99,105	0
54	U8U	1w	34	23/24	0.75	0.17	64,83,93,99	0
1	5MU	2A	1915	21/22	0.76	0.18	79,84,89,96	0
54	T6A	2w	37	32/33	0.76	0.17	71,91,100,108	0
54	5MU	1w	54	21/22	0.76	0.13	80,89,93,94	0
57	5MU	1y	54	21/22	0.78	0.12	83,91,96,103	0
54	U8U	2w	34	23/24	0.81	0.16	82,87,92,96	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
54	T6A	1w	37	32/33	0.82	0.14	70,79,82,83	0
32	2MG	2a	1207	24/25	0.83	0.13	78,83,89,94	0
54	PSU	2w	39	20/21	0.83	0.16	82,93,96,96	0
32	PSU	2a	516	20/21	0.84	0.12	75,82,90,90	0
54	A1B8A	2w	76	31/32	0.84	0.16	52,68,78,82	0
55	4SU	2x	8	20/21	0.85	0.12	74,78,83,87	0
32	M2G	2a	966	25/26	0.86	0.17	59,70,87,92	0
54	PSU	1w	39	20/21	0.86	0.12	76,82,88,94	0
55	5MU	2x	54	21/22	0.87	0.13	76,79,84,94	0
55	PSU	2x	55	20/21	0.87	0.11	69,76,80,89	0
54	A1B8A	1w	76	31/32	0.87	0.14	36,52,62,70	0
32	5MC	2a	967	21/22	0.87	0.15	66,71,81,83	0
43	0TD	1l	92	10/11	0.88	0.13	48,54,58,66	0
43	0TD	2l	92	10/11	0.90	0.12	68,70,73,87	0
1	PSU	2A	1911	20/21	0.90	0.12	64,70,78,82	0
1	5MU	1A	1915	21/22	0.90	0.10	53,61,69,79	0
32	PSU	1a	516	20/21	0.91	0.09	58,64,70,77	0
1	PSU	2A	1917	20/21	0.91	0.12	62,75,79,81	0
55	5MU	1x	54	21/22	0.92	0.11	60,66,70,74	0
32	2MG	1a	1207	24/25	0.92	0.11	59,68,74,81	0
32	5MC	2a	1400	21/22	0.92	0.15	65,72,76,78	0
56	FME	2z	1	10/11	0.92	0.16	49,55,58,65	0
32	G7M	2a	527	24/25	0.93	0.10	60,68,72,74	0
32	4OC	2a	1402	22/23	0.93	0.11	55,66,69,74	0
55	PSU	1x	55	20/21	0.93	0.09	49,58,67,71	0
1	OMC	2A	1920	21/22	0.94	0.11	57,65,72,74	0
55	5MC	1x	32	21/22	0.94	0.13	48,52,62,62	0
32	5MC	2a	1407	21/22	0.94	0.10	56,61,62,66	0
56	FME	1z	1	10/11	0.94	0.15	37,45,49,51	0
55	4SU	1x	8	20/21	0.94	0.11	59,64,69,73	0
32	UR3	2a	1498	21/22	0.95	0.11	55,60,66,73	0
32	MA6	2a	1518	24/25	0.95	0.11	52,66,70,72	0
1	5MC	2A	1942	21/22	0.95	0.10	46,60,65,69	0
1	5MC	2A	1962	21/22	0.95	0.11	42,52,56,76	0
55	5MC	2x	32	21/22	0.95	0.12	63,72,77,83	0
32	G7M	1a	527	24/25	0.95	0.09	41,47,54,58	0
32	5MC	1a	967	21/22	0.95	0.09	56,61,66,69	0
55	8AN	2x	76	22/23	0.95	0.10	43,52,58,59	0
32	5MC	2a	1404	21/22	0.95	0.10	53,62,64,67	0
1	PSU	1A	1917	20/21	0.95	0.07	46,55,62,62	0
32	M2G	1a	966	25/26	0.96	0.10	44,58,64,67	0
1	OMG	2A	2251	24/25	0.96	0.09	36,41,47,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
1	OMU	2A	2552	21/22	0.96	0.09	33,45,50,51	0
1	PSU	2A	2605	20/21	0.96	0.09	31,41,47,47	0
32	5MC	1a	1400	21/22	0.96	0.10	47,50,55,61	0
32	5MC	1a	1404	21/22	0.96	0.09	35,43,48,52	0
32	MA6	1a	1519	24/25	0.96	0.09	36,43,47,50	0
32	MA6	2a	1519	24/25	0.96	0.12	54,65,72,74	0
1	5MC	1A	1942	21/22	0.96	0.09	38,44,50,52	0
32	MA6	1a	1518	24/25	0.97	0.09	34,44,49,50	0
1	5MU	2A	1939	21/22	0.97	0.07	33,40,45,47	0
1	PSU	1A	1911	20/21	0.97	0.08	41,49,54,57	0
55	8AN	1x	76	22/23	0.97	0.08	24,34,42,44	0
32	4OC	1a	1402	22/23	0.97	0.09	43,48,53,57	0
1	2MA	2A	2503	23/24	0.97	0.08	26,37,41,47	0
1	OMC	1A	1920	21/22	0.97	0.07	34,45,50,52	0
32	5MC	1a	1407	21/22	0.97	0.07	33,42,47,48	0
1	PSU	1A	2605	20/21	0.98	0.07	21,28,34,34	0
1	5MU	1A	1939	21/22	0.98	0.05	22,29,31,35	0
1	5MC	1A	1962	21/22	0.98	0.06	22,31,36,45	0
1	OMG	1A	2251	24/25	0.98	0.05	21,26,29,31	0
32	UR3	1a	1498	21/22	0.98	0.07	33,42,44,45	0
1	2MA	1A	2503	23/24	0.98	0.06	16,23,27,27	0
1	OMU	1A	2552	21/22	0.98	0.06	23,28,32,35	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
58	MG	2a	1798	1/1	0.55	0.17	81,81,81,81	0
58	MG	2A	3385	1/1	0.58	0.16	84,84,84,84	0
58	MG	2a	1756	1/1	0.62	0.18	82,82,82,82	0
58	MG	1B	229	1/1	0.63	0.20	74,74,74,74	0
58	MG	2A	3451	1/1	0.63	0.28	83,83,83,83	0
58	MG	2A	3437	1/1	0.64	0.29	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1a	1804	1/1	0.65	0.18	72,72,72,72	0
58	MG	1A	3260	1/1	0.65	0.20	85,85,85,85	0
58	MG	1a	1738	1/1	0.65	0.21	77,77,77,77	0
58	MG	1B	230	1/1	0.66	0.23	78,78,78,78	0
58	MG	2A	3755	1/1	0.66	0.26	59,59,59,59	0
58	MG	1A	3683	1/1	0.67	0.20	63,63,63,63	0
58	MG	2A	3113	1/1	0.67	0.30	70,70,70,70	0
58	MG	2A	3171	1/1	0.68	0.20	80,80,80,80	0
58	MG	1A	3844	1/1	0.68	0.19	77,77,77,77	0
58	MG	2A	3669	1/1	0.68	0.18	77,77,77,77	0
58	MG	2A	3731	1/1	0.69	0.15	81,81,81,81	0
58	MG	2A	3608	1/1	0.69	0.20	63,63,63,63	0
58	MG	2A	3615	1/1	0.69	0.23	68,68,68,68	0
58	MG	2A	3175	1/1	0.69	0.23	68,68,68,68	0
58	MG	1A	3643	1/1	0.70	0.16	69,69,69,69	0
58	MG	2a	1789	1/1	0.70	0.20	70,70,70,70	0
58	MG	2a	1638	1/1	0.70	0.12	81,81,81,81	0
58	MG	1a	1809	1/1	0.71	0.18	72,72,72,72	0
58	MG	2G	201	1/1	0.71	0.23	75,75,75,75	0
58	MG	2A	3573	1/1	0.71	0.22	69,69,69,69	0
58	MG	1a	1733	1/1	0.72	0.17	85,85,85,85	0
58	MG	2A	3273	1/1	0.72	0.20	71,71,71,71	0
58	MG	2A	3332	1/1	0.73	0.25	72,72,72,72	0
58	MG	2A	3664	1/1	0.73	0.25	69,69,69,69	0
58	MG	1a	1802	1/1	0.73	0.24	81,81,81,81	0
58	MG	2a	1622	1/1	0.73	0.22	83,83,83,83	0
58	MG	2a	1607	1/1	0.74	0.36	67,67,67,67	0
58	MG	2A	3679	1/1	0.74	0.16	72,72,72,72	0
58	MG	2a	1805	1/1	0.74	0.20	68,68,68,68	0
58	MG	2A	3526	1/1	0.75	0.17	66,66,66,66	0
58	MG	2A	3704	1/1	0.75	0.20	69,69,69,69	0
58	MG	2a	1818	1/1	0.75	0.18	79,79,79,79	0
58	MG	2B	214	1/1	0.76	0.18	71,71,71,71	0
58	MG	1a	1731	1/1	0.76	0.18	66,66,66,66	0
58	MG	2a	1601	1/1	0.77	0.19	74,74,74,74	0
58	MG	1A	3772	1/1	0.77	0.14	20,20,20,20	0
58	MG	2A	3192	1/1	0.77	0.20	69,69,69,69	0
58	MG	1A	4083	1/1	0.77	0.16	58,58,58,58	0
58	MG	2a	1725	1/1	0.77	0.27	80,80,80,80	0
58	MG	1a	1760	1/1	0.77	0.12	67,67,67,67	0
58	MG	2A	3335	1/1	0.77	0.21	77,77,77,77	0
58	MG	2A	3833	1/1	0.77	0.20	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3355	1/1	0.77	0.18	69,69,69,69	0
58	MG	2a	1812	1/1	0.77	0.18	83,83,83,83	0
58	MG	2a	1815	1/1	0.77	0.14	76,76,76,76	0
58	MG	1A	4089	1/1	0.77	0.17	45,45,45,45	0
58	MG	1A	3466	1/1	0.78	0.18	62,62,62,62	0
58	MG	1A	3882	1/1	0.78	0.13	23,23,23,23	0
58	MG	1x	109	1/1	0.78	0.34	68,68,68,68	0
58	MG	2A	3327	1/1	0.78	0.16	71,71,71,71	0
58	MG	2A	3508	1/1	0.78	0.12	29,29,29,29	0
58	MG	2A	3690	1/1	0.78	0.12	70,70,70,70	0
58	MG	1A	4082	1/1	0.78	0.14	60,60,60,60	0
58	MG	1A	3267	1/1	0.78	0.20	62,62,62,62	0
58	MG	2a	1821	1/1	0.78	0.24	69,69,69,69	0
58	MG	2R	201	1/1	0.79	0.24	77,77,77,77	0
58	MG	1a	1755	1/1	0.79	0.12	60,60,60,60	0
58	MG	2A	3670	1/1	0.79	0.14	68,68,68,68	0
58	MG	1U	208	1/1	0.79	0.48	67,67,67,67	0
58	MG	1a	1622	1/1	0.79	0.20	66,66,66,66	0
58	MG	2a	1706	1/1	0.79	0.19	77,77,77,77	0
58	MG	1a	1697	1/1	0.79	0.17	66,66,66,66	0
58	MG	2A	3723	1/1	0.79	0.15	68,68,68,68	0
58	MG	1A	3752	1/1	0.79	0.13	65,65,65,65	0
58	MG	2A	3738	1/1	0.79	0.17	46,46,46,46	0
58	MG	1A	3468	1/1	0.79	0.13	56,56,56,56	0
58	MG	2A	3758	1/1	0.79	0.12	67,67,67,67	0
58	MG	1A	3687	1/1	0.79	0.13	64,64,64,64	0
58	MG	2A	3152	1/1	0.79	0.23	60,60,60,60	0
58	MG	2A	3380	1/1	0.79	0.29	76,76,76,76	0
58	MG	2j	201	1/1	0.79	0.20	71,71,71,71	0
58	MG	1A	3960	1/1	0.80	0.15	58,58,58,58	0
58	MG	2a	1655	1/1	0.80	0.17	80,80,80,80	0
58	MG	2A	3418	1/1	0.80	0.32	68,68,68,68	0
58	MG	2A	3653	1/1	0.80	0.14	65,65,65,65	0
58	MG	2A	3432	1/1	0.80	0.23	54,54,54,54	0
58	MG	1A	3957	1/1	0.80	0.10	46,46,46,46	0
58	MG	2A	3205	1/1	0.80	0.11	60,60,60,60	0
58	MG	2a	1800	1/1	0.80	0.17	86,86,86,86	0
58	MG	2A	3483	1/1	0.80	0.31	67,67,67,67	0
58	MG	2P	202	1/1	0.80	0.23	66,66,66,66	0
58	MG	2A	3097	1/1	0.80	0.15	72,72,72,72	0
58	MG	2A	3357	1/1	0.80	0.19	54,54,54,54	0
58	MG	2A	3705	1/1	0.80	0.18	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3276	1/1	0.80	0.19	72,72,72,72	0
58	MG	2A	3024	1/1	0.81	0.15	61,61,61,61	0
58	MG	2A	3159	1/1	0.81	0.24	66,66,66,66	0
58	MG	2a	1733	1/1	0.81	0.22	70,70,70,70	0
58	MG	2a	1735	1/1	0.81	0.18	69,69,69,69	0
58	MG	1A	3326	1/1	0.81	0.11	65,65,65,65	0
58	MG	2A	3173	1/1	0.81	0.20	78,78,78,78	0
58	MG	2A	3678	1/1	0.81	0.12	56,56,56,56	0
58	MG	2A	3106	1/1	0.81	0.30	72,72,72,72	0
58	MG	2A	3337	1/1	0.81	0.18	76,76,76,76	0
58	MG	1B	213	1/1	0.81	0.19	67,67,67,67	0
58	MG	2A	3115	1/1	0.81	0.22	62,62,62,62	0
58	MG	2A	3605	1/1	0.81	0.17	75,75,75,75	0
58	MG	2A	3256	1/1	0.81	0.14	58,58,58,58	0
58	MG	2A	3270	1/1	0.81	0.15	78,78,78,78	0
58	MG	2y	101	1/1	0.81	0.33	71,71,71,71	0
58	MG	2A	3773	1/1	0.82	0.10	46,46,46,46	0
58	MG	2A	3817	1/1	0.82	0.17	48,48,48,48	0
58	MG	1A	3878	1/1	0.82	0.12	61,61,61,61	0
58	MG	2B	208	1/1	0.82	0.10	62,62,62,62	0
58	MG	2A	3212	1/1	0.82	0.14	67,67,67,67	0
58	MG	2D	303	1/1	0.82	0.19	64,64,64,64	0
58	MG	2F	307	1/1	0.82	0.11	64,64,64,64	0
58	MG	2A	3502	1/1	0.82	0.16	55,55,55,55	0
58	MG	1B	234	1/1	0.82	0.16	66,66,66,66	0
58	MG	1A	3458	1/1	0.82	0.21	63,63,63,63	0
58	MG	20	104	1/1	0.82	0.11	55,55,55,55	0
58	MG	1A	3893	1/1	0.82	0.17	73,73,73,73	0
58	MG	2A	3600	1/1	0.82	0.17	55,55,55,55	0
58	MG	2A	3051	1/1	0.82	0.27	69,69,69,69	0
58	MG	2A	3291	1/1	0.82	0.14	59,59,59,59	0
58	MG	2A	3325	1/1	0.82	0.23	68,68,68,68	0
58	MG	2a	1704	1/1	0.82	0.14	55,55,55,55	0
58	MG	1a	1636	1/1	0.82	0.28	73,73,73,73	0
58	MG	1a	1683	1/1	0.82	0.28	68,68,68,68	0
58	MG	1A	3294	1/1	0.82	0.20	55,55,55,55	0
58	MG	1A	3707	1/1	0.82	0.11	29,29,29,29	0
58	MG	2A	3350	1/1	0.82	0.14	63,63,63,63	0
58	MG	2a	1757	1/1	0.82	0.09	89,89,89,89	0
58	MG	1A	3749	1/1	0.82	0.14	51,51,51,51	0
58	MG	1a	1737	1/1	0.82	0.24	62,62,62,62	0
58	MG	1A	3251	1/1	0.82	0.14	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3536	1/1	0.82	0.12	59,59,59,59	0
58	MG	2A	3390	1/1	0.82	0.19	68,68,68,68	0
58	MG	2a	1814	1/1	0.82	0.20	63,63,63,63	0
58	MG	2A	3728	1/1	0.82	0.19	56,56,56,56	0
58	MG	1A	3809	1/1	0.82	0.14	51,51,51,51	0
58	MG	2A	3191	1/1	0.82	0.32	69,69,69,69	0
58	MG	1A	3383	1/1	0.82	0.14	61,61,61,61	0
58	MG	2x	103	1/1	0.82	0.19	69,69,69,69	0
58	MG	2A	3444	1/1	0.82	0.12	67,67,67,67	0
58	MG	2A	3300	1/1	0.83	0.22	59,59,59,59	0
58	MG	2A	3472	1/1	0.83	0.10	72,72,72,72	0
58	MG	1A	4019	1/1	0.83	0.15	75,75,75,75	0
58	MG	2a	1641	1/1	0.83	0.28	67,67,67,67	0
58	MG	1A	3801	1/1	0.83	0.14	53,53,53,53	0
58	MG	2a	1681	1/1	0.83	0.24	71,71,71,71	0
58	MG	2a	1700	1/1	0.83	0.13	75,75,75,75	0
58	MG	1w	101	1/1	0.83	0.15	77,77,77,77	0
58	MG	1w	103	1/1	0.83	0.17	87,87,87,87	0
58	MG	2a	1714	1/1	0.83	0.28	67,67,67,67	0
58	MG	2a	1715	1/1	0.83	0.12	63,63,63,63	0
58	MG	1E	314	1/1	0.83	0.30	50,50,50,50	0
58	MG	2A	3023	1/1	0.83	0.20	71,71,71,71	0
58	MG	1A	3329	1/1	0.83	0.13	52,52,52,52	0
58	MG	2A	3782	1/1	0.83	0.14	79,79,79,79	0
58	MG	2A	3044	1/1	0.83	0.20	66,66,66,66	0
58	MG	1A	3923	1/1	0.83	0.13	30,30,30,30	0
58	MG	2A	3646	1/1	0.83	0.13	77,77,77,77	0
58	MG	2A	3384	1/1	0.83	0.15	66,66,66,66	0
58	MG	2B	216	1/1	0.83	0.16	72,72,72,72	0
58	MG	2A	3052	1/1	0.83	0.22	67,67,67,67	0
58	MG	2A	3065	1/1	0.83	0.17	77,77,77,77	0
58	MG	2A	3075	1/1	0.83	0.17	72,72,72,72	0
58	MG	2A	3672	1/1	0.83	0.17	68,68,68,68	0
58	MG	1A	3626	1/1	0.83	0.16	48,48,48,48	0
58	MG	1a	1680	1/1	0.83	0.19	67,67,67,67	0
58	MG	2l	202	1/1	0.83	0.23	68,68,68,68	0
58	MG	2x	102	1/1	0.83	0.18	65,65,65,65	0
58	MG	28	101	1/1	0.83	0.26	64,64,64,64	0
58	MG	1A	3470	1/1	0.83	0.15	60,60,60,60	0
58	MG	20	103	1/1	0.84	0.16	59,59,59,59	0
58	MG	2A	3364	1/1	0.84	0.14	71,71,71,71	0
58	MG	2a	1742	1/1	0.84	0.26	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2a	1752	1/1	0.84	0.10	71,71,71,71	0
58	MG	2A	3089	1/1	0.84	0.14	58,58,58,58	0
58	MG	2A	3457	1/1	0.84	0.17	72,72,72,72	0
58	MG	1x	105	1/1	0.84	0.32	69,69,69,69	0
58	MG	2A	3634	1/1	0.84	0.15	41,41,41,41	0
58	MG	2A	3849	1/1	0.84	0.17	61,61,61,61	0
58	MG	1A	3992	1/1	0.84	0.10	29,29,29,29	0
58	MG	2A	3313	1/1	0.84	0.13	59,59,59,59	0
58	MG	2A	3654	1/1	0.84	0.21	73,73,73,73	0
58	MG	2B	220	1/1	0.84	0.18	76,76,76,76	0
58	MG	2A	3729	1/1	0.84	0.16	66,66,66,66	0
58	MG	1a	1670	1/1	0.84	0.18	55,55,55,55	0
58	MG	2d	302	1/1	0.84	0.14	70,70,70,70	0
58	MG	2A	3197	1/1	0.84	0.16	66,66,66,66	0
58	MG	2k	201	1/1	0.84	0.12	64,64,64,64	0
58	MG	2A	3743	1/1	0.84	0.21	48,48,48,48	0
58	MG	2a	1717	1/1	0.84	0.20	76,76,76,76	0
58	MG	2a	1720	1/1	0.84	0.16	68,68,68,68	0
58	MG	2A	3359	1/1	0.84	0.12	75,75,75,75	0
58	MG	2A	3193	1/1	0.85	0.23	62,62,62,62	0
58	MG	2A	3530	1/1	0.85	0.22	63,63,63,63	0
58	MG	2A	3554	1/1	0.85	0.15	55,55,55,55	0
58	MG	2a	1674	1/1	0.85	0.22	67,67,67,67	0
58	MG	2A	3195	1/1	0.85	0.15	69,69,69,69	0
58	MG	2a	1684	1/1	0.85	0.22	62,62,62,62	0
58	MG	2A	3746	1/1	0.85	0.15	61,61,61,61	0
58	MG	2A	3582	1/1	0.85	0.19	81,81,81,81	0
58	MG	1a	1743	1/1	0.85	0.18	64,64,64,64	0
58	MG	1A	3810	1/1	0.85	0.14	46,46,46,46	0
58	MG	2A	3366	1/1	0.85	0.16	57,57,57,57	0
58	MG	2A	3792	1/1	0.85	0.10	73,73,73,73	0
58	MG	1a	1628	1/1	0.85	0.11	56,56,56,56	0
58	MG	1a	1776	1/1	0.85	0.11	66,66,66,66	0
58	MG	2A	3635	1/1	0.85	0.12	46,46,46,46	0
58	MG	2A	3862	1/1	0.85	0.18	62,62,62,62	0
58	MG	2B	203	1/1	0.85	0.20	63,63,63,63	0
58	MG	2B	204	1/1	0.85	0.16	70,70,70,70	0
58	MG	2B	206	1/1	0.85	0.17	58,58,58,58	0
58	MG	2A	3091	1/1	0.85	0.12	70,70,70,70	0
58	MG	2a	1781	1/1	0.85	0.14	63,63,63,63	0
58	MG	2a	1787	1/1	0.85	0.13	72,72,72,72	0
58	MG	2a	1788	1/1	0.85	0.15	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1B	222	1/1	0.85	0.17	58,58,58,58	0
58	MG	2A	3391	1/1	0.85	0.12	66,66,66,66	0
58	MG	1A	3245	1/1	0.85	0.12	59,59,59,59	0
58	MG	2A	3667	1/1	0.85	0.18	56,56,56,56	0
58	MG	1A	3956	1/1	0.85	0.10	45,45,45,45	0
58	MG	1A	3236	1/1	0.85	0.21	42,42,42,42	0
58	MG	1a	1687	1/1	0.85	0.31	52,52,52,52	0
58	MG	1A	3388	1/1	0.85	0.17	61,61,61,61	0
58	MG	1G	203	1/1	0.85	0.10	68,68,68,68	0
58	MG	1P	206	1/1	0.85	0.24	55,55,55,55	0
58	MG	2A	3482	1/1	0.85	0.17	54,54,54,54	0
58	MG	1A	4094	1/1	0.85	0.17	53,53,53,53	0
58	MG	1W	207	1/1	0.85	0.19	32,32,32,32	0
58	MG	2t	201	1/1	0.85	0.19	48,48,48,48	0
58	MG	2w	101	1/1	0.85	0.27	84,84,84,84	0
58	MG	2a	1608	1/1	0.85	0.35	78,78,78,78	0
58	MG	1a	1739	1/1	0.85	0.15	62,62,62,62	0
58	MG	2a	1633	1/1	0.85	0.21	73,73,73,73	0
58	MG	1a	1768	1/1	0.86	0.14	64,64,64,64	0
58	MG	2A	3264	1/1	0.86	0.19	67,67,67,67	0
58	MG	2a	1630	1/1	0.86	0.17	62,62,62,62	0
58	MG	1A	3946	1/1	0.86	0.19	67,67,67,67	0
58	MG	2A	3434	1/1	0.86	0.20	59,59,59,59	0
58	MG	2A	3701	1/1	0.86	0.11	39,39,39,39	0
58	MG	2A	3703	1/1	0.86	0.17	63,63,63,63	0
58	MG	2A	3272	1/1	0.86	0.17	66,66,66,66	0
58	MG	1A	3191	1/1	0.86	0.18	53,53,53,53	0
58	MG	1A	3595	1/1	0.86	0.10	52,52,52,52	0
58	MG	1A	3833	1/1	0.86	0.13	46,46,46,46	0
58	MG	2a	1702	1/1	0.86	0.16	55,55,55,55	0
58	MG	2A	3292	1/1	0.86	0.30	73,73,73,73	0
58	MG	1b	301	1/1	0.86	0.20	81,81,81,81	0
58	MG	2A	3302	1/1	0.86	0.16	62,62,62,62	0
58	MG	2A	3739	1/1	0.86	0.14	72,72,72,72	0
58	MG	2A	3485	1/1	0.86	0.20	61,61,61,61	0
58	MG	2A	3495	1/1	0.86	0.15	64,64,64,64	0
58	MG	2A	3126	1/1	0.86	0.09	66,66,66,66	0
58	MG	1A	3599	1/1	0.86	0.22	73,73,73,73	0
58	MG	2a	1734	1/1	0.86	0.17	70,70,70,70	0
58	MG	2A	3763	1/1	0.86	0.20	74,74,74,74	0
58	MG	2A	3509	1/1	0.86	0.18	65,65,65,65	0
58	MG	2A	3153	1/1	0.86	0.14	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2a	1754	1/1	0.86	0.12	67,67,67,67	0
58	MG	1a	1714	1/1	0.86	0.24	58,58,58,58	0
58	MG	2A	3541	1/1	0.86	0.09	46,46,46,46	0
58	MG	2a	1766	1/1	0.86	0.17	79,79,79,79	0
58	MG	2A	3165	1/1	0.86	0.08	41,41,41,41	0
58	MG	2A	3561	1/1	0.86	0.09	35,35,35,35	0
58	MG	2A	3859	1/1	0.86	0.33	68,68,68,68	0
58	MG	1a	1730	1/1	0.86	0.11	69,69,69,69	0
58	MG	2A	3348	1/1	0.86	0.17	59,59,59,59	0
58	MG	1A	3864	1/1	0.86	0.13	52,52,52,52	0
58	MG	1A	4061	1/1	0.86	0.14	45,45,45,45	0
58	MG	2a	1806	1/1	0.86	0.25	61,61,61,61	0
58	MG	1A	4078	1/1	0.86	0.12	49,49,49,49	0
58	MG	2A	3613	1/1	0.86	0.18	65,65,65,65	0
58	MG	2A	3358	1/1	0.86	0.11	70,70,70,70	0
58	MG	2A	3029	1/1	0.86	0.20	77,77,77,77	0
58	MG	2A	3362	1/1	0.86	0.17	65,65,65,65	0
58	MG	2a	1829	1/1	0.86	0.21	72,72,72,72	0
58	MG	1A	3610	1/1	0.86	0.12	35,35,35,35	0
58	MG	2A	3649	1/1	0.86	0.14	70,70,70,70	0
58	MG	1A	3621	1/1	0.86	0.12	33,33,33,33	0
58	MG	1A	3502	1/1	0.86	0.13	45,45,45,45	0
58	MG	2n	101	1/1	0.86	0.29	72,72,72,72	0
58	MG	2A	3657	1/1	0.86	0.13	64,64,64,64	0
58	MG	1A	3531	1/1	0.86	0.21	50,50,50,50	0
58	MG	2A	3206	1/1	0.86	0.17	66,66,66,66	0
58	MG	2A	3389	1/1	0.86	0.11	68,68,68,68	0
58	MG	1B	203	1/1	0.86	0.22	49,49,49,49	0
58	MG	1A	3889	1/1	0.87	0.12	34,34,34,34	0
58	MG	2A	3607	1/1	0.87	0.11	31,31,31,31	0
58	MG	2A	3103	1/1	0.87	0.20	58,58,58,58	0
58	MG	2A	3387	1/1	0.87	0.14	57,57,57,57	0
58	MG	1a	1631	1/1	0.87	0.32	59,59,59,59	0
58	MG	2a	1707	1/1	0.87	0.29	69,69,69,69	0
58	MG	2A	3804	1/1	0.87	0.13	55,55,55,55	0
58	MG	1A	3435	1/1	0.87	0.11	59,59,59,59	0
58	MG	1a	1664	1/1	0.87	0.17	59,59,59,59	0
58	MG	2A	3412	1/1	0.87	0.18	54,54,54,54	0
58	MG	1A	4093	1/1	0.87	0.11	69,69,69,69	0
58	MG	1A	3791	1/1	0.87	0.10	31,31,31,31	0
58	MG	2A	3864	1/1	0.87	0.16	64,64,64,64	0
58	MG	1A	3525	1/1	0.87	0.11	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3951	1/1	0.87	0.18	65,65,65,65	0
58	MG	2a	1744	1/1	0.87	0.24	65,65,65,65	0
58	MG	2A	3317	1/1	0.87	0.18	52,52,52,52	0
58	MG	1x	101	1/1	0.87	0.32	62,62,62,62	0
58	MG	2B	210	1/1	0.87	0.14	71,71,71,71	0
58	MG	1a	1690	1/1	0.87	0.23	63,63,63,63	0
58	MG	1A	3244	1/1	0.87	0.13	53,53,53,53	0
58	MG	2A	3334	1/1	0.87	0.25	70,70,70,70	0
58	MG	1A	3646	1/1	0.87	0.11	35,35,35,35	0
58	MG	2D	306	1/1	0.87	0.24	53,53,53,53	0
58	MG	1A	3824	1/1	0.87	0.08	35,35,35,35	0
58	MG	2A	3686	1/1	0.87	0.12	45,45,45,45	0
58	MG	2A	3338	1/1	0.87	0.11	73,73,73,73	0
58	MG	1A	3335	1/1	0.87	0.20	64,64,64,64	0
58	MG	1A	3543	1/1	0.87	0.09	62,62,62,62	0
58	MG	1A	4043	1/1	0.87	0.12	45,45,45,45	0
58	MG	1O	204	1/1	0.87	0.14	71,71,71,71	0
58	MG	2A	3721	1/1	0.87	0.12	69,69,69,69	0
58	MG	2a	1817	1/1	0.87	0.22	73,73,73,73	0
58	MG	1A	3187	1/1	0.87	0.10	52,52,52,52	0
58	MG	2A	3067	1/1	0.87	0.23	58,58,58,58	0
58	MG	1A	4076	1/1	0.87	0.21	47,47,47,47	0
58	MG	2a	1623	1/1	0.87	0.10	59,59,59,59	0
58	MG	2A	3232	1/1	0.87	0.43	54,54,54,54	0
58	MG	2A	3572	1/1	0.87	0.19	55,55,55,55	0
58	MG	2a	1637	1/1	0.87	0.36	67,67,67,67	0
58	MG	1A	3261	1/1	0.87	0.14	52,52,52,52	0
58	MG	2A	3740	1/1	0.87	0.20	60,60,60,60	0
58	MG	2a	1650	1/1	0.87	0.10	57,57,57,57	0
58	MG	2A	3576	1/1	0.87	0.10	55,55,55,55	0
58	MG	2A	3376	1/1	0.87	0.12	61,61,61,61	0
58	MG	2x	106	1/1	0.87	0.11	59,59,59,59	0
58	MG	1A	3472	1/1	0.87	0.31	64,64,64,64	0
58	MG	2B	218	1/1	0.88	0.16	76,76,76,76	0
58	MG	2A	3594	1/1	0.88	0.09	35,35,35,35	0
58	MG	1a	1774	1/1	0.88	0.11	54,54,54,54	0
58	MG	2A	3601	1/1	0.88	0.22	71,71,71,71	0
58	MG	1A	3913	1/1	0.88	0.08	30,30,30,30	0
58	MG	1A	3457	1/1	0.88	0.19	61,61,61,61	0
58	MG	1A	3584	1/1	0.88	0.10	34,34,34,34	0
58	MG	1A	3486	1/1	0.88	0.11	46,46,46,46	0
58	MG	1a	1642	1/1	0.88	0.19	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1B	211	1/1	0.88	0.09	44,44,44,44	0
58	MG	2A	3185	1/1	0.88	0.23	63,63,63,63	0
58	MG	1A	3208	1/1	0.88	0.17	63,63,63,63	0
58	MG	1A	3839	1/1	0.88	0.27	65,65,65,65	0
58	MG	1x	102	1/1	0.88	0.23	65,65,65,65	0
58	MG	1A	3507	1/1	0.88	0.11	59,59,59,59	0
58	MG	2A	3370	1/1	0.88	0.33	62,62,62,62	0
58	MG	2A	3372	1/1	0.88	0.12	67,67,67,67	0
58	MG	1a	1684	1/1	0.88	0.10	62,62,62,62	0
58	MG	2A	3668	1/1	0.88	0.10	57,57,57,57	0
58	MG	2A	3198	1/1	0.88	0.26	64,64,64,64	0
58	MG	1A	3848	1/1	0.88	0.12	61,61,61,61	0
58	MG	2a	1642	1/1	0.88	0.24	69,69,69,69	0
58	MG	1A	3386	1/1	0.88	0.24	27,27,27,27	0
58	MG	2A	3676	1/1	0.88	0.16	59,59,59,59	0
58	MG	2a	1657	1/1	0.88	0.10	61,61,61,61	0
58	MG	2a	1663	1/1	0.88	0.15	84,84,84,84	0
58	MG	1a	1694	1/1	0.88	0.19	49,49,49,49	0
58	MG	2a	1677	1/1	0.88	0.22	63,63,63,63	0
58	MG	2A	3213	1/1	0.88	0.12	53,53,53,53	0
58	MG	2a	1682	1/1	0.88	0.11	75,75,75,75	0
58	MG	1E	311	1/1	0.88	0.08	29,29,29,29	0
58	MG	2A	3687	1/1	0.88	0.14	58,58,58,58	0
58	MG	2a	1701	1/1	0.88	0.17	73,73,73,73	0
58	MG	2A	3237	1/1	0.88	0.19	57,57,57,57	0
58	MG	2A	3395	1/1	0.88	0.11	65,65,65,65	0
58	MG	2A	3404	1/1	0.88	0.20	52,52,52,52	0
58	MG	2A	3243	1/1	0.88	0.14	60,60,60,60	0
58	MG	2a	1708	1/1	0.88	0.14	66,66,66,66	0
58	MG	2A	3247	1/1	0.88	0.12	64,64,64,64	0
58	MG	2A	3422	1/1	0.88	0.32	68,68,68,68	0
58	MG	1E	313	1/1	0.88	0.14	61,61,61,61	0
58	MG	1A	3167	1/1	0.88	0.10	38,38,38,38	0
58	MG	1A	3881	1/1	0.88	0.13	49,49,49,49	0
58	MG	2a	1728	1/1	0.88	0.15	61,61,61,61	0
58	MG	1A	3781	1/1	0.88	0.10	36,36,36,36	0
58	MG	2A	3733	1/1	0.88	0.12	77,77,77,77	0
58	MG	2A	3737	1/1	0.88	0.19	69,69,69,69	0
58	MG	2a	1737	1/1	0.88	0.09	66,66,66,66	0
58	MG	1A	3639	1/1	0.88	0.09	41,41,41,41	0
58	MG	1A	3367	1/1	0.88	0.15	47,47,47,47	0
58	MG	2a	1750	1/1	0.88	0.14	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3280	1/1	0.88	0.19	67,67,67,67	0
58	MG	2A	3288	1/1	0.88	0.28	65,65,65,65	0
58	MG	1A	3897	1/1	0.88	0.10	35,35,35,35	0
58	MG	1Z	301	1/1	0.88	0.09	70,70,70,70	0
58	MG	2a	1761	1/1	0.88	0.21	65,65,65,65	0
58	MG	2A	3757	1/1	0.88	0.14	76,76,76,76	0
58	MG	2A	3295	1/1	0.88	0.09	76,76,76,76	0
58	MG	2a	1784	1/1	0.88	0.16	86,86,86,86	0
58	MG	2A	3297	1/1	0.88	0.16	60,60,60,60	0
58	MG	2A	3098	1/1	0.88	0.14	77,77,77,77	0
58	MG	2A	3775	1/1	0.88	0.10	62,62,62,62	0
58	MG	2a	1794	1/1	0.88	0.20	66,66,66,66	0
58	MG	2A	3776	1/1	0.88	0.12	62,62,62,62	0
58	MG	1a	1747	1/1	0.88	0.07	49,49,49,49	0
58	MG	2a	1801	1/1	0.88	0.19	60,60,60,60	0
58	MG	2a	1802	1/1	0.88	0.26	68,68,68,68	0
58	MG	2A	3783	1/1	0.88	0.11	69,69,69,69	0
58	MG	2A	3510	1/1	0.88	0.10	44,44,44,44	0
58	MG	2A	3522	1/1	0.88	0.10	43,43,43,43	0
58	MG	2A	3809	1/1	0.88	0.09	37,37,37,37	0
58	MG	2A	3304	1/1	0.88	0.12	69,69,69,69	0
58	MG	1Z	302	1/1	0.88	0.13	55,55,55,55	0
58	MG	2A	3846	1/1	0.88	0.11	69,69,69,69	0
58	MG	2A	3540	1/1	0.88	0.12	50,50,50,50	0
58	MG	2a	1825	1/1	0.88	0.30	68,68,68,68	0
58	MG	2a	1826	1/1	0.88	0.14	58,58,58,58	0
58	MG	2A	3852	1/1	0.88	0.14	68,68,68,68	0
58	MG	2A	3110	1/1	0.88	0.08	72,72,72,72	0
58	MG	2A	3860	1/1	0.88	0.22	70,70,70,70	0
58	MG	2A	3324	1/1	0.88	0.12	51,51,51,51	0
58	MG	2l	201	1/1	0.88	0.09	66,66,66,66	0
58	MG	10	105	1/1	0.88	0.13	66,66,66,66	0
58	MG	2A	3564	1/1	0.88	0.16	55,55,55,55	0
58	MG	1a	1761	1/1	0.88	0.11	62,62,62,62	0
58	MG	2A	3329	1/1	0.88	0.25	72,72,72,72	0
58	MG	1a	1602	1/1	0.88	0.32	62,62,62,62	0
58	MG	2A	3578	1/1	0.88	0.19	60,60,60,60	0
58	MG	2x	105	1/1	0.88	0.26	68,68,68,68	0
58	MG	2A	3127	1/1	0.88	0.12	68,68,68,68	0
58	MG	2A	3585	1/1	0.88	0.09	60,60,60,60	0
58	MG	1A	3131	1/1	0.89	0.10	42,42,42,42	0
58	MG	1A	4047	1/1	0.89	0.07	17,17,17,17	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	20	102	1/1	0.89	0.26	69,69,69,69	0
58	MG	1a	1677	1/1	0.89	0.21	52,52,52,52	0
58	MG	2A	3090	1/1	0.89	0.15	49,49,49,49	0
58	MG	1A	3590	1/1	0.89	0.24	59,59,59,59	0
58	MG	2A	3092	1/1	0.89	0.12	57,57,57,57	0
58	MG	1A	3265	1/1	0.89	0.21	66,66,66,66	0
58	MG	2A	3636	1/1	0.89	0.11	49,49,49,49	0
58	MG	2a	1610	1/1	0.89	0.12	59,59,59,59	0
58	MG	2a	1612	1/1	0.89	0.12	64,64,64,64	0
58	MG	2a	1621	1/1	0.89	0.25	69,69,69,69	0
58	MG	2A	3642	1/1	0.89	0.10	51,51,51,51	0
58	MG	1A	3817	1/1	0.89	0.09	52,52,52,52	0
58	MG	2a	1624	1/1	0.89	0.20	56,56,56,56	0
58	MG	2a	1627	1/1	0.89	0.19	66,66,66,66	0
58	MG	1A	3350	1/1	0.89	0.22	59,59,59,59	0
58	MG	1A	3601	1/1	0.89	0.10	47,47,47,47	0
58	MG	1A	3253	1/1	0.89	0.09	44,44,44,44	0
58	MG	1a	1695	1/1	0.89	0.26	60,60,60,60	0
58	MG	2A	3662	1/1	0.89	0.14	64,64,64,64	0
58	MG	1A	3840	1/1	0.89	0.10	47,47,47,47	0
58	MG	2a	1644	1/1	0.89	0.14	56,56,56,56	0
58	MG	1a	1701	1/1	0.89	0.17	54,54,54,54	0
58	MG	2a	1653	1/1	0.89	0.16	63,63,63,63	0
58	MG	1A	3372	1/1	0.89	0.27	50,50,50,50	0
58	MG	2A	3136	1/1	0.89	0.13	52,52,52,52	0
58	MG	2A	3146	1/1	0.89	0.21	66,66,66,66	0
58	MG	2a	1665	1/1	0.89	0.13	63,63,63,63	0
58	MG	1A	3254	1/1	0.89	0.16	62,62,62,62	0
58	MG	1A	3480	1/1	0.89	0.13	51,51,51,51	0
58	MG	2A	3374	1/1	0.89	0.11	59,59,59,59	0
58	MG	1A	3866	1/1	0.89	0.14	52,52,52,52	0
58	MG	1A	3870	1/1	0.89	0.08	38,38,38,38	0
58	MG	1A	3306	1/1	0.89	0.10	52,52,52,52	0
58	MG	2A	3689	1/1	0.89	0.17	63,63,63,63	0
58	MG	1A	3496	1/1	0.89	0.12	53,53,53,53	0
58	MG	1A	3651	1/1	0.89	0.13	55,55,55,55	0
58	MG	1B	235	1/1	0.89	0.11	61,61,61,61	0
58	MG	1a	1754	1/1	0.89	0.12	76,76,76,76	0
58	MG	1E	302	1/1	0.89	0.14	36,36,36,36	0
58	MG	2A	3707	1/1	0.89	0.14	65,65,65,65	0
58	MG	2A	3716	1/1	0.89	0.12	60,60,60,60	0
58	MG	1A	3888	1/1	0.89	0.10	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3321	1/1	0.89	0.13	47,47,47,47	0
58	MG	1A	3394	1/1	0.89	0.18	75,75,75,75	0
58	MG	1a	1773	1/1	0.89	0.10	37,37,37,37	0
58	MG	1A	3518	1/1	0.89	0.09	82,82,82,82	0
58	MG	2A	3423	1/1	0.89	0.23	52,52,52,52	0
58	MG	2A	3425	1/1	0.89	0.18	58,58,58,58	0
58	MG	1G	205	1/1	0.89	0.19	69,69,69,69	0
58	MG	2A	3433	1/1	0.89	0.21	56,56,56,56	0
58	MG	1a	1793	1/1	0.89	0.10	60,60,60,60	0
58	MG	1a	1795	1/1	0.89	0.24	69,69,69,69	0
58	MG	2A	3441	1/1	0.89	0.22	51,51,51,51	0
58	MG	2A	3216	1/1	0.89	0.29	73,73,73,73	0
58	MG	2A	3224	1/1	0.89	0.18	57,57,57,57	0
58	MG	1A	3905	1/1	0.89	0.09	51,51,51,51	0
58	MG	2a	1760	1/1	0.89	0.19	73,73,73,73	0
58	MG	2A	3470	1/1	0.89	0.11	53,53,53,53	0
58	MG	2A	3236	1/1	0.89	0.18	67,67,67,67	0
58	MG	2a	1772	1/1	0.89	0.09	85,85,85,85	0
58	MG	2a	1776	1/1	0.89	0.12	70,70,70,70	0
58	MG	1A	3405	1/1	0.89	0.18	43,43,43,43	0
58	MG	1A	3414	1/1	0.89	0.10	57,57,57,57	0
58	MG	1A	3934	1/1	0.89	0.14	51,51,51,51	0
58	MG	1t	201	1/1	0.89	0.18	57,57,57,57	0
58	MG	2A	3501	1/1	0.89	0.11	46,46,46,46	0
58	MG	2A	3260	1/1	0.89	0.16	56,56,56,56	0
58	MG	1A	3429	1/1	0.89	0.12	46,46,46,46	0
58	MG	1A	3539	1/1	0.89	0.12	59,59,59,59	0
58	MG	2A	3827	1/1	0.89	0.12	68,68,68,68	0
58	MG	1A	3783	1/1	0.89	0.14	54,54,54,54	0
58	MG	2A	3837	1/1	0.89	0.09	51,51,51,51	0
58	MG	2A	3841	1/1	0.89	0.12	54,54,54,54	0
58	MG	1a	1601	1/1	0.89	0.13	61,61,61,61	0
58	MG	1A	3785	1/1	0.89	0.10	62,62,62,62	0
58	MG	1a	1618	1/1	0.89	0.23	55,55,55,55	0
58	MG	2A	3853	1/1	0.89	0.11	51,51,51,51	0
58	MG	2A	3856	1/1	0.89	0.14	73,73,73,73	0
58	MG	1A	3958	1/1	0.89	0.08	23,23,23,23	0
58	MG	2A	3290	1/1	0.89	0.14	55,55,55,55	0
58	MG	1A	3202	1/1	0.89	0.09	47,47,47,47	0
58	MG	1A	3985	1/1	0.89	0.07	24,24,24,24	0
58	MG	2A	3563	1/1	0.89	0.09	40,40,40,40	0
58	MG	1a	1635	1/1	0.89	0.10	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3798	1/1	0.89	0.09	20,20,20,20	0
58	MG	1a	1637	1/1	0.89	0.23	55,55,55,55	0
58	MG	2A	3574	1/1	0.89	0.16	60,60,60,60	0
58	MG	2A	3055	1/1	0.89	0.09	63,63,63,63	0
58	MG	2A	3058	1/1	0.89	0.21	58,58,58,58	0
58	MG	2v	101	1/1	0.89	0.13	63,63,63,63	0
58	MG	2v	102	1/1	0.89	0.18	58,58,58,58	0
58	MG	2v	103	1/1	0.89	0.48	72,72,72,72	0
58	MG	2v	104	1/1	0.89	0.17	67,67,67,67	0
58	MG	2A	3309	1/1	0.89	0.26	56,56,56,56	0
58	MG	2A	3063	1/1	0.89	0.10	46,46,46,46	0
58	MG	1A	3799	1/1	0.89	0.10	39,39,39,39	0
58	MG	2A	3598	1/1	0.89	0.15	57,57,57,57	0
58	MG	2A	3321	1/1	0.89	0.21	61,61,61,61	0
58	MG	2A	3066	1/1	0.89	0.15	52,52,52,52	0
58	MG	1A	3592	1/1	0.90	0.20	63,63,63,63	0
58	MG	1A	3059	1/1	0.90	0.10	36,36,36,36	0
58	MG	1a	1608	1/1	0.90	0.23	64,64,64,64	0
58	MG	1A	3369	1/1	0.90	0.24	53,53,53,53	0
58	MG	2A	3042	1/1	0.90	0.24	61,61,61,61	0
58	MG	2E	303	1/1	0.90	0.08	47,47,47,47	0
58	MG	1A	3971	1/1	0.90	0.11	58,58,58,58	0
58	MG	2A	3046	1/1	0.90	0.14	59,59,59,59	0
58	MG	2O	201	1/1	0.90	0.17	71,71,71,71	0
58	MG	2A	3580	1/1	0.90	0.12	49,49,49,49	0
58	MG	1A	3974	1/1	0.90	0.11	71,71,71,71	0
58	MG	2A	3301	1/1	0.90	0.14	60,60,60,60	0
58	MG	1A	3212	1/1	0.90	0.07	50,50,50,50	0
58	MG	2A	3303	1/1	0.90	0.08	63,63,63,63	0
58	MG	1A	3811	1/1	0.90	0.09	36,36,36,36	0
58	MG	1A	3995	1/1	0.90	0.09	25,25,25,25	0
58	MG	2A	3310	1/1	0.90	0.11	58,58,58,58	0
58	MG	1A	3815	1/1	0.90	0.18	58,58,58,58	0
58	MG	1a	1639	1/1	0.90	0.17	53,53,53,53	0
58	MG	2a	1611	1/1	0.90	0.18	66,66,66,66	0
58	MG	2A	3320	1/1	0.90	0.15	69,69,69,69	0
58	MG	2a	1616	1/1	0.90	0.12	65,65,65,65	0
58	MG	2a	1618	1/1	0.90	0.11	52,52,52,52	0
58	MG	1A	4020	1/1	0.90	0.11	53,53,53,53	0
58	MG	1a	1659	1/1	0.90	0.13	65,65,65,65	0
58	MG	1A	4027	1/1	0.90	0.11	46,46,46,46	0
58	MG	2A	3083	1/1	0.90	0.15	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2a	1625	1/1	0.90	0.12	64,64,64,64	0
58	MG	2A	3641	1/1	0.90	0.09	42,42,42,42	0
58	MG	1A	4030	1/1	0.90	0.10	63,63,63,63	0
58	MG	2a	1631	1/1	0.90	0.25	64,64,64,64	0
58	MG	2a	1632	1/1	0.90	0.08	74,74,74,74	0
58	MG	1a	1672	1/1	0.90	0.16	59,59,59,59	0
58	MG	1A	4034	1/1	0.90	0.13	50,50,50,50	0
58	MG	1A	3375	1/1	0.90	0.11	39,39,39,39	0
58	MG	2a	1639	1/1	0.90	0.14	55,55,55,55	0
58	MG	1a	1681	1/1	0.90	0.12	48,48,48,48	0
58	MG	1A	3820	1/1	0.90	0.09	42,42,42,42	0
58	MG	2A	3344	1/1	0.90	0.18	72,72,72,72	0
58	MG	2a	1649	1/1	0.90	0.09	73,73,73,73	0
58	MG	1A	3380	1/1	0.90	0.10	45,45,45,45	0
58	MG	2A	3666	1/1	0.90	0.12	51,51,51,51	0
58	MG	1A	4068	1/1	0.90	0.08	44,44,44,44	0
58	MG	1A	3259	1/1	0.90	0.21	72,72,72,72	0
58	MG	2a	1658	1/1	0.90	0.10	62,62,62,62	0
58	MG	1A	3638	1/1	0.90	0.09	45,45,45,45	0
58	MG	2A	3114	1/1	0.90	0.20	63,63,63,63	0
58	MG	2a	1666	1/1	0.90	0.16	69,69,69,69	0
58	MG	1A	3292	1/1	0.90	0.23	56,56,56,56	0
58	MG	2A	3675	1/1	0.90	0.19	67,67,67,67	0
58	MG	2a	1680	1/1	0.90	0.26	59,59,59,59	0
58	MG	1A	3481	1/1	0.90	0.11	42,42,42,42	0
58	MG	2A	3363	1/1	0.90	0.24	63,63,63,63	0
58	MG	1A	3332	1/1	0.90	0.31	68,68,68,68	0
58	MG	2a	1687	1/1	0.90	0.19	67,67,67,67	0
58	MG	2A	3680	1/1	0.90	0.12	51,51,51,51	0
58	MG	2A	3684	1/1	0.90	0.09	57,57,57,57	0
58	MG	2A	3128	1/1	0.90	0.16	51,51,51,51	0
58	MG	2A	3368	1/1	0.90	0.19	61,61,61,61	0
58	MG	1A	3391	1/1	0.90	0.10	64,64,64,64	0
58	MG	2A	3371	1/1	0.90	0.24	63,63,63,63	0
58	MG	2A	3696	1/1	0.90	0.14	48,48,48,48	0
58	MG	2a	1711	1/1	0.90	0.08	71,71,71,71	0
58	MG	2A	3140	1/1	0.90	0.28	65,65,65,65	0
58	MG	1a	1718	1/1	0.90	0.30	66,66,66,66	0
58	MG	2a	1716	1/1	0.90	0.13	64,64,64,64	0
58	MG	1A	3661	1/1	0.90	0.07	25,25,25,25	0
58	MG	1A	3868	1/1	0.90	0.14	42,42,42,42	0
58	MG	2a	1724	1/1	0.90	0.14	76,76,76,76	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1B	208	1/1	0.90	0.11	63,63,63,63	0
58	MG	2A	3710	1/1	0.90	0.13	61,61,61,61	0
58	MG	2a	1731	1/1	0.90	0.24	47,47,47,47	0
58	MG	1B	210	1/1	0.90	0.10	50,50,50,50	0
58	MG	2A	3719	1/1	0.90	0.16	67,67,67,67	0
58	MG	2A	3386	1/1	0.90	0.09	52,52,52,52	0
58	MG	2A	3168	1/1	0.90	0.13	61,61,61,61	0
58	MG	2a	1740	1/1	0.90	0.23	52,52,52,52	0
58	MG	2A	3726	1/1	0.90	0.10	49,49,49,49	0
58	MG	1A	3680	1/1	0.90	0.08	43,43,43,43	0
58	MG	2a	1749	1/1	0.90	0.13	71,71,71,71	0
58	MG	1A	3877	1/1	0.90	0.14	28,28,28,28	0
58	MG	1A	3023	1/1	0.90	0.26	51,51,51,51	0
58	MG	2A	3179	1/1	0.90	0.16	68,68,68,68	0
58	MG	2A	3401	1/1	0.90	0.29	58,58,58,58	0
58	MG	1B	225	1/1	0.90	0.09	57,57,57,57	0
58	MG	2A	3187	1/1	0.90	0.19	60,60,60,60	0
58	MG	2A	3190	1/1	0.90	0.33	69,69,69,69	0
58	MG	1A	3403	1/1	0.90	0.14	52,52,52,52	0
58	MG	2A	3745	1/1	0.90	0.23	64,64,64,64	0
58	MG	1A	3692	1/1	0.90	0.08	13,13,13,13	0
58	MG	1A	3404	1/1	0.90	0.13	51,51,51,51	0
58	MG	1A	3715	1/1	0.90	0.16	64,64,64,64	0
58	MG	1D	312	1/1	0.90	0.16	40,40,40,40	0
58	MG	1A	3891	1/1	0.90	0.08	29,29,29,29	0
58	MG	1A	3338	1/1	0.90	0.11	42,42,42,42	0
58	MG	2a	1790	1/1	0.90	0.11	59,59,59,59	0
58	MG	2a	1792	1/1	0.90	0.13	62,62,62,62	0
58	MG	1A	3894	1/1	0.90	0.08	37,37,37,37	0
58	MG	2a	1795	1/1	0.90	0.22	63,63,63,63	0
58	MG	1a	1788	1/1	0.90	0.10	70,70,70,70	0
58	MG	2A	3779	1/1	0.90	0.15	64,64,64,64	0
58	MG	2A	3447	1/1	0.90	0.16	65,65,65,65	0
58	MG	1a	1791	1/1	0.90	0.09	75,75,75,75	0
58	MG	2A	3454	1/1	0.90	0.10	65,65,65,65	0
58	MG	2A	3801	1/1	0.90	0.09	80,80,80,80	0
58	MG	1A	3407	1/1	0.90	0.15	46,46,46,46	0
58	MG	2A	3469	1/1	0.90	0.24	65,65,65,65	0
58	MG	2A	3812	1/1	0.90	0.09	53,53,53,53	0
58	MG	2A	3218	1/1	0.90	0.24	59,59,59,59	0
58	MG	2A	3826	1/1	0.90	0.22	69,69,69,69	0
58	MG	1A	3757	1/1	0.90	0.12	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3348	1/1	0.90	0.14	50,50,50,50	0
58	MG	1A	3418	1/1	0.90	0.14	65,65,65,65	0
58	MG	2A	3484	1/1	0.90	0.14	66,66,66,66	0
58	MG	2A	3845	1/1	0.90	0.10	67,67,67,67	0
58	MG	2e	201	1/1	0.90	0.09	73,73,73,73	0
58	MG	1A	3927	1/1	0.90	0.15	47,47,47,47	0
58	MG	2A	3848	1/1	0.90	0.15	64,64,64,64	0
58	MG	2A	3238	1/1	0.90	0.14	64,64,64,64	0
58	MG	2A	3241	1/1	0.90	0.10	48,48,48,48	0
58	MG	1A	3299	1/1	0.90	0.07	26,26,26,26	0
58	MG	1d	301	1/1	0.90	0.34	62,62,62,62	0
58	MG	2A	3253	1/1	0.90	0.21	73,73,73,73	0
58	MG	2A	3254	1/1	0.90	0.11	62,62,62,62	0
58	MG	1A	3939	1/1	0.90	0.10	26,26,26,26	0
58	MG	1Y	203	1/1	0.90	0.31	49,49,49,49	0
58	MG	1A	3544	1/1	0.90	0.08	62,62,62,62	0
58	MG	1A	3357	1/1	0.90	0.08	55,55,55,55	0
58	MG	1A	3448	1/1	0.90	0.13	61,61,61,61	0
58	MG	2A	3542	1/1	0.90	0.12	38,38,38,38	0
58	MG	1x	104	1/1	0.90	0.23	57,57,57,57	0
58	MG	14	101	1/1	0.90	0.17	69,69,69,69	0
58	MG	2B	209	1/1	0.91	0.10	67,67,67,67	0
58	MG	2A	3007	1/1	0.91	0.21	63,63,63,63	0
58	MG	1A	3393	1/1	0.91	0.25	69,69,69,69	0
58	MG	1A	3760	1/1	0.91	0.08	16,16,16,16	0
58	MG	1A	3887	1/1	0.91	0.07	39,39,39,39	0
58	MG	2B	219	1/1	0.91	0.19	77,77,77,77	0
58	MG	2A	3551	1/1	0.91	0.16	40,40,40,40	0
58	MG	2A	3035	1/1	0.91	0.06	31,31,31,31	0
58	MG	2A	3036	1/1	0.91	0.15	53,53,53,53	0
58	MG	2A	3287	1/1	0.91	0.09	56,56,56,56	0
58	MG	2E	307	1/1	0.91	0.18	63,63,63,63	0
58	MG	2F	303	1/1	0.91	0.07	40,40,40,40	0
58	MG	2F	304	1/1	0.91	0.13	66,66,66,66	0
58	MG	2A	3038	1/1	0.91	0.13	35,35,35,35	0
58	MG	2A	3568	1/1	0.91	0.09	47,47,47,47	0
58	MG	2A	3571	1/1	0.91	0.09	45,45,45,45	0
58	MG	2A	3039	1/1	0.91	0.21	58,58,58,58	0
58	MG	1A	3768	1/1	0.91	0.09	27,27,27,27	0
58	MG	2R	202	1/1	0.91	0.14	62,62,62,62	0
58	MG	2T	3501	1/1	0.91	0.24	65,65,65,65	0
58	MG	2W	201	1/1	0.91	0.18	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3051	1/1	0.91	0.11	34,34,34,34	0
58	MG	2A	3045	1/1	0.91	0.08	75,75,75,75	0
58	MG	1a	1646	1/1	0.91	0.15	68,68,68,68	0
58	MG	27	103	1/1	0.91	0.08	44,44,44,44	0
58	MG	2A	3047	1/1	0.91	0.17	72,72,72,72	0
58	MG	1a	1651	1/1	0.91	0.12	46,46,46,46	0
58	MG	2a	1602	1/1	0.91	0.23	63,63,63,63	0
58	MG	2a	1606	1/1	0.91	0.22	67,67,67,67	0
58	MG	1a	1656	1/1	0.91	0.13	62,62,62,62	0
58	MG	1A	3401	1/1	0.91	0.12	47,47,47,47	0
58	MG	2A	3596	1/1	0.91	0.10	58,58,58,58	0
58	MG	1a	1661	1/1	0.91	0.17	56,56,56,56	0
58	MG	2A	3599	1/1	0.91	0.12	60,60,60,60	0
58	MG	2A	3307	1/1	0.91	0.16	65,65,65,65	0
58	MG	2A	3308	1/1	0.91	0.13	57,57,57,57	0
58	MG	1A	3892	1/1	0.91	0.12	22,22,22,22	0
58	MG	1A	3288	1/1	0.91	0.12	57,57,57,57	0
58	MG	1A	3370	1/1	0.91	0.09	42,42,42,42	0
58	MG	2A	3316	1/1	0.91	0.09	49,49,49,49	0
58	MG	1a	1676	1/1	0.91	0.13	55,55,55,55	0
58	MG	2A	3624	1/1	0.91	0.11	55,55,55,55	0
58	MG	2a	1628	1/1	0.91	0.10	62,62,62,62	0
58	MG	2A	3632	1/1	0.91	0.13	54,54,54,54	0
58	MG	2A	3319	1/1	0.91	0.10	62,62,62,62	0
58	MG	1A	3477	1/1	0.91	0.11	42,42,42,42	0
58	MG	1A	3151	1/1	0.91	0.21	29,29,29,29	0
58	MG	1A	3052	1/1	0.91	0.09	46,46,46,46	0
58	MG	1A	3002	1/1	0.91	0.07	47,47,47,47	0
58	MG	1B	224	1/1	0.91	0.10	50,50,50,50	0
58	MG	1A	3488	1/1	0.91	0.10	40,40,40,40	0
58	MG	2A	3651	1/1	0.91	0.16	66,66,66,66	0
58	MG	2A	3331	1/1	0.91	0.12	59,59,59,59	0
58	MG	2a	1647	1/1	0.91	0.14	61,61,61,61	0
58	MG	1a	1688	1/1	0.91	0.14	51,51,51,51	0
58	MG	1A	3344	1/1	0.91	0.08	38,38,38,38	0
58	MG	2A	3660	1/1	0.91	0.09	66,66,66,66	0
58	MG	2A	3100	1/1	0.91	0.24	44,44,44,44	0
58	MG	2a	1656	1/1	0.91	0.14	85,85,85,85	0
58	MG	2A	3663	1/1	0.91	0.18	56,56,56,56	0
58	MG	2A	3102	1/1	0.91	0.25	67,67,67,67	0
58	MG	2a	1659	1/1	0.91	0.19	60,60,60,60	0
58	MG	2a	1660	1/1	0.91	0.20	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3420	1/1	0.91	0.08	40,40,40,40	0
58	MG	1A	3945	1/1	0.91	0.11	58,58,58,58	0
58	MG	2A	3107	1/1	0.91	0.17	55,55,55,55	0
58	MG	2a	1672	1/1	0.91	0.11	56,56,56,56	0
58	MG	2A	3349	1/1	0.91	0.21	61,61,61,61	0
58	MG	1a	1696	1/1	0.91	0.27	59,59,59,59	0
58	MG	2a	1679	1/1	0.91	0.20	60,60,60,60	0
58	MG	1A	3650	1/1	0.91	0.09	60,60,60,60	0
58	MG	2A	3673	1/1	0.91	0.08	64,64,64,64	0
58	MG	2A	3356	1/1	0.91	0.30	48,48,48,48	0
58	MG	1A	3506	1/1	0.91	0.14	57,57,57,57	0
58	MG	1a	1705	1/1	0.91	0.24	63,63,63,63	0
58	MG	2A	3124	1/1	0.91	0.26	66,66,66,66	0
58	MG	1a	1706	1/1	0.91	0.24	55,55,55,55	0
58	MG	1A	3653	1/1	0.91	0.09	40,40,40,40	0
58	MG	2A	3685	1/1	0.91	0.19	65,65,65,65	0
58	MG	1a	1717	1/1	0.91	0.09	60,60,60,60	0
58	MG	1E	307	1/1	0.91	0.30	59,59,59,59	0
58	MG	1A	3427	1/1	0.91	0.08	56,56,56,56	0
58	MG	1A	3428	1/1	0.91	0.07	53,53,53,53	0
58	MG	2a	1713	1/1	0.91	0.13	55,55,55,55	0
58	MG	2A	3692	1/1	0.91	0.09	67,67,67,67	0
58	MG	1A	3837	1/1	0.91	0.10	52,52,52,52	0
58	MG	1F	313	1/1	0.91	0.15	50,50,50,50	0
58	MG	1A	3838	1/1	0.91	0.17	61,61,61,61	0
58	MG	2a	1718	1/1	0.91	0.13	74,74,74,74	0
58	MG	1A	3061	1/1	0.91	0.21	43,43,43,43	0
58	MG	2A	3377	1/1	0.91	0.15	58,58,58,58	0
58	MG	1A	3977	1/1	0.91	0.08	67,67,67,67	0
58	MG	1A	3978	1/1	0.91	0.09	57,57,57,57	0
58	MG	2a	1729	1/1	0.91	0.17	61,61,61,61	0
58	MG	1S	201	1/1	0.91	0.25	41,41,41,41	0
58	MG	1A	3312	1/1	0.91	0.06	34,34,34,34	0
58	MG	2A	3178	1/1	0.91	0.11	44,44,44,44	0
58	MG	1a	1757	1/1	0.91	0.18	51,51,51,51	0
58	MG	1W	201	1/1	0.91	0.15	49,49,49,49	0
58	MG	1A	3440	1/1	0.91	0.18	46,46,46,46	0
58	MG	2A	3394	1/1	0.91	0.09	60,60,60,60	0
58	MG	1Y	202	1/1	0.91	0.15	66,66,66,66	0
58	MG	2A	3732	1/1	0.91	0.10	58,58,58,58	0
58	MG	1a	1772	1/1	0.91	0.10	66,66,66,66	0
58	MG	2A	3734	1/1	0.91	0.12	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3735	1/1	0.91	0.12	54,54,54,54	0
58	MG	1A	3446	1/1	0.91	0.12	52,52,52,52	0
58	MG	2A	3407	1/1	0.91	0.15	41,41,41,41	0
58	MG	1A	4016	1/1	0.91	0.10	58,58,58,58	0
58	MG	2A	3417	1/1	0.91	0.19	49,49,49,49	0
58	MG	1A	3855	1/1	0.91	0.12	55,55,55,55	0
58	MG	2a	1768	1/1	0.91	0.08	74,74,74,74	0
58	MG	2A	3420	1/1	0.91	0.25	64,64,64,64	0
58	MG	1A	3860	1/1	0.91	0.41	40,40,40,40	0
58	MG	2a	1778	1/1	0.91	0.11	52,52,52,52	0
58	MG	13	101	1/1	0.91	0.12	54,54,54,54	0
58	MG	2A	3756	1/1	0.91	0.10	63,63,63,63	0
58	MG	2A	3200	1/1	0.91	0.10	47,47,47,47	0
58	MG	2A	3428	1/1	0.91	0.20	62,62,62,62	0
58	MG	2A	3431	1/1	0.91	0.20	57,57,57,57	0
58	MG	2A	3204	1/1	0.91	0.12	58,58,58,58	0
58	MG	13	103	1/1	0.91	0.10	44,44,44,44	0
58	MG	1A	3862	1/1	0.91	0.11	52,52,52,52	0
58	MG	1A	3095	1/1	0.91	0.09	66,66,66,66	0
58	MG	1A	3728	1/1	0.91	0.16	56,56,56,56	0
58	MG	2A	3214	1/1	0.91	0.09	64,64,64,64	0
58	MG	2A	3786	1/1	0.91	0.10	55,55,55,55	0
58	MG	1a	1603	1/1	0.91	0.15	64,64,64,64	0
58	MG	2A	3794	1/1	0.91	0.21	67,67,67,67	0
58	MG	1a	1607	1/1	0.91	0.14	56,56,56,56	0
58	MG	2a	1811	1/1	0.91	0.07	70,70,70,70	0
58	MG	2A	3802	1/1	0.91	0.11	52,52,52,52	0
58	MG	1A	3743	1/1	0.91	0.09	19,19,19,19	0
58	MG	2A	3225	1/1	0.91	0.23	55,55,55,55	0
58	MG	2A	3460	1/1	0.91	0.10	71,71,71,71	0
58	MG	2A	3465	1/1	0.91	0.18	59,59,59,59	0
58	MG	2a	1819	1/1	0.91	0.17	55,55,55,55	0
58	MG	1a	1611	1/1	0.91	0.21	63,63,63,63	0
58	MG	1a	1613	1/1	0.91	0.13	61,61,61,61	0
58	MG	2A	3830	1/1	0.91	0.09	49,49,49,49	0
58	MG	1w	102	1/1	0.91	0.09	67,67,67,67	0
58	MG	2A	3481	1/1	0.91	0.23	54,54,54,54	0
58	MG	2A	3840	1/1	0.91	0.08	66,66,66,66	0
58	MG	2g	201	1/1	0.91	0.06	71,71,71,71	0
58	MG	2i	201	1/1	0.91	0.14	71,71,71,71	0
58	MG	1a	1615	1/1	0.91	0.11	60,60,60,60	0
58	MG	1a	1616	1/1	0.91	0.13	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3456	1/1	0.91	0.07	45,45,45,45	0
58	MG	2A	3244	1/1	0.91	0.13	60,60,60,60	0
58	MG	2I	203	1/1	0.91	0.09	62,62,62,62	0
58	MG	1A	3751	1/1	0.91	0.11	35,35,35,35	0
58	MG	2A	3248	1/1	0.91	0.08	53,53,53,53	0
58	MG	2A	3250	1/1	0.91	0.10	50,50,50,50	0
58	MG	2A	3505	1/1	0.91	0.14	69,69,69,69	0
58	MG	1A	4067	1/1	0.91	0.12	55,55,55,55	0
58	MG	1x	106	1/1	0.91	0.20	56,56,56,56	0
58	MG	1A	3392	1/1	0.91	0.17	51,51,51,51	0
58	MG	2A	3513	1/1	0.91	0.14	56,56,56,56	0
58	MG	2A	3514	1/1	0.91	0.11	46,46,46,46	0
58	MG	2A	3519	1/1	0.91	0.13	51,51,51,51	0
58	MG	2A	3258	1/1	0.91	0.15	57,57,57,57	0
58	MG	2A	3005	1/1	0.91	0.24	58,58,58,58	0
58	MG	2F	302	1/1	0.92	0.08	58,58,58,58	0
58	MG	1A	4056	1/1	0.92	0.12	46,46,46,46	0
58	MG	1A	3331	1/1	0.92	0.09	41,41,41,41	0
58	MG	1A	3450	1/1	0.92	0.10	56,56,56,56	0
58	MG	1a	1658	1/1	0.92	0.24	65,65,65,65	0
58	MG	2A	3314	1/1	0.92	0.07	49,49,49,49	0
58	MG	2A	3586	1/1	0.92	0.14	52,52,52,52	0
58	MG	2A	3588	1/1	0.92	0.08	47,47,47,47	0
58	MG	2A	3589	1/1	0.92	0.10	64,64,64,64	0
58	MG	1A	3714	1/1	0.92	0.07	63,63,63,63	0
58	MG	2U	201	1/1	0.92	0.28	50,50,50,50	0
58	MG	1A	4071	1/1	0.92	0.10	44,44,44,44	0
58	MG	1A	3266	1/1	0.92	0.28	52,52,52,52	0
58	MG	1a	1667	1/1	0.92	0.14	48,48,48,48	0
58	MG	1A	3867	1/1	0.92	0.07	39,39,39,39	0
58	MG	25	105	1/1	0.92	0.09	48,48,48,48	0
58	MG	2A	3322	1/1	0.92	0.23	55,55,55,55	0
58	MG	2A	3081	1/1	0.92	0.26	55,55,55,55	0
58	MG	1A	3720	1/1	0.92	0.22	58,58,58,58	0
58	MG	1A	3180	1/1	0.92	0.16	52,52,52,52	0
58	MG	2a	1603	1/1	0.92	0.08	68,68,68,68	0
58	MG	2A	3328	1/1	0.92	0.10	57,57,57,57	0
58	MG	1A	3546	1/1	0.92	0.38	40,40,40,40	0
58	MG	1A	3555	1/1	0.92	0.21	49,49,49,49	0
58	MG	2a	1609	1/1	0.92	0.17	73,73,73,73	0
58	MG	2A	3625	1/1	0.92	0.19	62,62,62,62	0
58	MG	1A	3569	1/1	0.92	0.14	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3333	1/1	0.92	0.12	55,55,55,55	0
58	MG	1A	4097	1/1	0.92	0.17	47,47,47,47	0
58	MG	1A	3283	1/1	0.92	0.25	45,45,45,45	0
58	MG	2A	3638	1/1	0.92	0.12	57,57,57,57	0
58	MG	1A	3460	1/1	0.92	0.12	59,59,59,59	0
58	MG	1A	3758	1/1	0.92	0.14	47,47,47,47	0
58	MG	2A	3643	1/1	0.92	0.14	54,54,54,54	0
58	MG	1A	3185	1/1	0.92	0.07	37,37,37,37	0
58	MG	2A	3345	1/1	0.92	0.11	53,53,53,53	0
58	MG	2A	3347	1/1	0.92	0.14	61,61,61,61	0
58	MG	2A	3652	1/1	0.92	0.10	75,75,75,75	0
58	MG	1a	1693	1/1	0.92	0.21	55,55,55,55	0
58	MG	1A	3593	1/1	0.92	0.17	48,48,48,48	0
58	MG	1A	3769	1/1	0.92	0.11	36,36,36,36	0
58	MG	2A	3353	1/1	0.92	0.11	61,61,61,61	0
58	MG	1B	223	1/1	0.92	0.16	51,51,51,51	0
58	MG	1A	3114	1/1	0.92	0.06	37,37,37,37	0
58	MG	2a	1640	1/1	0.92	0.15	76,76,76,76	0
58	MG	1a	1699	1/1	0.92	0.10	58,58,58,58	0
58	MG	1A	3776	1/1	0.92	0.08	33,33,33,33	0
58	MG	1A	3895	1/1	0.92	0.17	37,37,37,37	0
58	MG	2A	3361	1/1	0.92	0.14	63,63,63,63	0
58	MG	1A	3777	1/1	0.92	0.07	60,60,60,60	0
58	MG	1a	1713	1/1	0.92	0.23	64,64,64,64	0
58	MG	2A	3129	1/1	0.92	0.10	67,67,67,67	0
58	MG	2A	3132	1/1	0.92	0.08	55,55,55,55	0
58	MG	1B	231	1/1	0.92	0.08	61,61,61,61	0
58	MG	1A	3596	1/1	0.92	0.17	55,55,55,55	0
58	MG	2A	3142	1/1	0.92	0.13	52,52,52,52	0
58	MG	1A	3907	1/1	0.92	0.07	46,46,46,46	0
58	MG	1a	1726	1/1	0.92	0.09	44,44,44,44	0
58	MG	2A	3683	1/1	0.92	0.09	67,67,67,67	0
58	MG	2A	3375	1/1	0.92	0.21	66,66,66,66	0
58	MG	1A	3129	1/1	0.92	0.07	56,56,56,56	0
58	MG	1A	3354	1/1	0.92	0.16	53,53,53,53	0
58	MG	1A	3475	1/1	0.92	0.13	42,42,42,42	0
58	MG	1A	3355	1/1	0.92	0.10	63,63,63,63	0
58	MG	2a	1678	1/1	0.92	0.17	62,62,62,62	0
58	MG	2A	3170	1/1	0.92	0.12	59,59,59,59	0
58	MG	2A	3691	1/1	0.92	0.07	66,66,66,66	0
58	MG	1A	3479	1/1	0.92	0.29	54,54,54,54	0
58	MG	1A	3940	1/1	0.92	0.09	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1a	1742	1/1	0.92	0.09	70,70,70,70	0
58	MG	2A	3702	1/1	0.92	0.11	45,45,45,45	0
58	MG	2a	1693	1/1	0.92	0.20	70,70,70,70	0
58	MG	2a	1698	1/1	0.92	0.30	58,58,58,58	0
58	MG	1A	3942	1/1	0.92	0.14	66,66,66,66	0
58	MG	1A	3072	1/1	0.92	0.06	15,15,15,15	0
58	MG	2A	3393	1/1	0.92	0.12	62,62,62,62	0
58	MG	1A	3411	1/1	0.92	0.12	47,47,47,47	0
58	MG	2A	3709	1/1	0.92	0.14	51,51,51,51	0
58	MG	1A	3640	1/1	0.92	0.11	57,57,57,57	0
58	MG	1A	3641	1/1	0.92	0.06	22,22,22,22	0
58	MG	2a	1709	1/1	0.92	0.07	73,73,73,73	0
58	MG	2a	1710	1/1	0.92	0.12	75,75,75,75	0
58	MG	1A	3813	1/1	0.92	0.07	45,45,45,45	0
58	MG	1S	202	1/1	0.92	0.12	46,46,46,46	0
58	MG	1a	1762	1/1	0.92	0.12	61,61,61,61	0
58	MG	2A	3725	1/1	0.92	0.16	53,53,53,53	0
58	MG	2A	3415	1/1	0.92	0.17	63,63,63,63	0
58	MG	2A	3416	1/1	0.92	0.25	59,59,59,59	0
58	MG	2A	3194	1/1	0.92	0.11	55,55,55,55	0
58	MG	2a	1719	1/1	0.92	0.18	63,63,63,63	0
58	MG	1a	1767	1/1	0.92	0.10	55,55,55,55	0
58	MG	2a	1722	1/1	0.92	0.18	64,64,64,64	0
58	MG	2a	1723	1/1	0.92	0.16	64,64,64,64	0
58	MG	2A	3196	1/1	0.92	0.23	65,65,65,65	0
58	MG	1A	3814	1/1	0.92	0.18	48,48,48,48	0
58	MG	1A	3305	1/1	0.92	0.22	53,53,53,53	0
58	MG	1A	3964	1/1	0.92	0.10	30,30,30,30	0
58	MG	1A	3087	1/1	0.92	0.22	36,36,36,36	0
58	MG	2A	3429	1/1	0.92	0.14	39,39,39,39	0
58	MG	2A	3430	1/1	0.92	0.27	60,60,60,60	0
58	MG	1A	3310	1/1	0.92	0.08	49,49,49,49	0
58	MG	1a	1780	1/1	0.92	0.12	47,47,47,47	0
58	MG	2a	1738	1/1	0.92	0.08	48,48,48,48	0
58	MG	1A	3045	1/1	0.92	0.09	37,37,37,37	0
58	MG	2a	1741	1/1	0.92	0.18	61,61,61,61	0
58	MG	1A	3313	1/1	0.92	0.09	53,53,53,53	0
58	MG	2a	1743	1/1	0.92	0.09	60,60,60,60	0
58	MG	2A	3435	1/1	0.92	0.22	55,55,55,55	0
58	MG	2a	1747	1/1	0.92	0.09	72,72,72,72	0
58	MG	1a	1792	1/1	0.92	0.14	60,60,60,60	0
58	MG	1A	3980	1/1	0.92	0.09	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2a	1751	1/1	0.92	0.24	70,70,70,70	0
58	MG	1A	3376	1/1	0.92	0.09	49,49,49,49	0
58	MG	1A	3676	1/1	0.92	0.12	18,18,18,18	0
58	MG	2A	3765	1/1	0.92	0.14	64,64,64,64	0
58	MG	13	104	1/1	0.92	0.10	28,28,28,28	0
58	MG	2a	1758	1/1	0.92	0.07	65,65,65,65	0
58	MG	1A	3678	1/1	0.92	0.06	21,21,21,21	0
58	MG	16	101	1/1	0.92	0.20	43,43,43,43	0
58	MG	2A	3778	1/1	0.92	0.09	51,51,51,51	0
58	MG	2a	1767	1/1	0.92	0.10	69,69,69,69	0
58	MG	2A	3459	1/1	0.92	0.11	67,67,67,67	0
58	MG	2A	3780	1/1	0.92	0.10	56,56,56,56	0
58	MG	2a	1773	1/1	0.92	0.20	70,70,70,70	0
58	MG	18	109	1/1	0.92	0.12	49,49,49,49	0
58	MG	2A	3464	1/1	0.92	0.22	51,51,51,51	0
58	MG	2A	3785	1/1	0.92	0.10	46,46,46,46	0
58	MG	1f	201	1/1	0.92	0.14	49,49,49,49	0
58	MG	2A	3467	1/1	0.92	0.16	56,56,56,56	0
58	MG	1n	101	1/1	0.92	0.14	57,57,57,57	0
58	MG	2A	3242	1/1	0.92	0.31	51,51,51,51	0
58	MG	1A	3997	1/1	0.92	0.11	65,65,65,65	0
58	MG	2A	3473	1/1	0.92	0.14	57,57,57,57	0
58	MG	1v	101	1/1	0.92	0.20	75,75,75,75	0
58	MG	2A	3811	1/1	0.92	0.11	51,51,51,51	0
58	MG	2a	1797	1/1	0.92	0.14	69,69,69,69	0
58	MG	1A	3998	1/1	0.92	0.11	72,72,72,72	0
58	MG	2A	3814	1/1	0.92	0.08	60,60,60,60	0
58	MG	1A	4011	1/1	0.92	0.12	56,56,56,56	0
58	MG	1A	3168	1/1	0.92	0.17	57,57,57,57	0
58	MG	1A	4018	1/1	0.92	0.10	61,61,61,61	0
58	MG	2A	3486	1/1	0.92	0.09	59,59,59,59	0
58	MG	2a	1810	1/1	0.92	0.11	64,64,64,64	0
58	MG	1A	3262	1/1	0.92	0.18	59,59,59,59	0
58	MG	1A	3847	1/1	0.92	0.09	46,46,46,46	0
58	MG	1A	4021	1/1	0.92	0.10	45,45,45,45	0
58	MG	2A	3504	1/1	0.92	0.15	58,58,58,58	0
58	MG	1A	3685	1/1	0.92	0.08	42,42,42,42	0
58	MG	2A	3263	1/1	0.92	0.21	59,59,59,59	0
58	MG	1A	3854	1/1	0.92	0.14	66,66,66,66	0
58	MG	2A	3001	1/1	0.92	0.28	53,53,53,53	0
58	MG	2A	3271	1/1	0.92	0.10	61,61,61,61	0
58	MG	1a	1620	1/1	0.92	0.16	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3241	1/1	0.92	0.19	50,50,50,50	0
58	MG	2A	3013	1/1	0.92	0.08	49,49,49,49	0
58	MG	2A	3525	1/1	0.92	0.11	68,68,68,68	0
58	MG	1a	1623	1/1	0.92	0.12	47,47,47,47	0
58	MG	1a	1626	1/1	0.92	0.22	64,64,64,64	0
58	MG	2B	202	1/1	0.92	0.07	65,65,65,65	0
58	MG	2A	3534	1/1	0.92	0.09	54,54,54,54	0
58	MG	1a	1627	1/1	0.92	0.19	52,52,52,52	0
58	MG	1A	4035	1/1	0.92	0.07	50,50,50,50	0
58	MG	1a	1630	1/1	0.92	0.20	60,60,60,60	0
58	MG	2A	3547	1/1	0.92	0.08	37,37,37,37	0
58	MG	1A	4039	1/1	0.92	0.10	27,27,27,27	0
58	MG	1a	1632	1/1	0.92	0.22	63,63,63,63	0
58	MG	2A	3041	1/1	0.92	0.23	55,55,55,55	0
58	MG	2B	217	1/1	0.92	0.10	62,62,62,62	0
58	MG	1A	3856	1/1	0.92	0.08	27,27,27,27	0
58	MG	1A	4045	1/1	0.92	0.08	52,52,52,52	0
58	MG	1A	3859	1/1	0.92	0.11	62,62,62,62	0
58	MG	1A	4049	1/1	0.92	0.14	57,57,57,57	0
58	MG	1A	4051	1/1	0.92	0.09	58,58,58,58	0
58	MG	2A	3306	1/1	0.92	0.10	51,51,51,51	0
58	MG	2A	3048	1/1	0.92	0.08	46,46,46,46	0
58	MG	1A	3198	1/1	0.93	0.10	32,32,32,32	0
58	MG	2A	3549	1/1	0.93	0.10	44,44,44,44	0
58	MG	2E	302	1/1	0.93	0.13	58,58,58,58	0
58	MG	1a	1647	1/1	0.93	0.25	54,54,54,54	0
58	MG	2A	3552	1/1	0.93	0.09	41,41,41,41	0
58	MG	2A	3296	1/1	0.93	0.13	56,56,56,56	0
58	MG	1A	4096	1/1	0.93	0.20	56,56,56,56	0
58	MG	2A	3298	1/1	0.93	0.14	51,51,51,51	0
58	MG	1a	1653	1/1	0.93	0.07	46,46,46,46	0
58	MG	1a	1655	1/1	0.93	0.11	60,60,60,60	0
58	MG	2A	3570	1/1	0.93	0.06	41,41,41,41	0
58	MG	2O	202	1/1	0.93	0.10	55,55,55,55	0
58	MG	2P	201	1/1	0.93	0.10	50,50,50,50	0
58	MG	1A	3803	1/1	0.93	0.10	64,64,64,64	0
58	MG	1A	3909	1/1	0.93	0.20	39,39,39,39	0
58	MG	1B	205	1/1	0.93	0.21	61,61,61,61	0
58	MG	1A	3808	1/1	0.93	0.35	28,28,28,28	0
58	MG	1A	3918	1/1	0.93	0.07	58,58,58,58	0
58	MG	2U	202	1/1	0.93	0.09	60,60,60,60	0
58	MG	1A	3300	1/1	0.93	0.11	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2Z	301	1/1	0.93	0.13	78,78,78,78	0
58	MG	2A	3054	1/1	0.93	0.27	60,60,60,60	0
58	MG	1a	1668	1/1	0.93	0.15	51,51,51,51	0
58	MG	2A	3057	1/1	0.93	0.16	72,72,72,72	0
58	MG	25	101	1/1	0.93	0.25	62,62,62,62	0
58	MG	1B	212	1/1	0.93	0.17	64,64,64,64	0
58	MG	2A	3315	1/1	0.93	0.18	54,54,54,54	0
58	MG	2A	3060	1/1	0.93	0.15	55,55,55,55	0
58	MG	1A	3537	1/1	0.93	0.15	52,52,52,52	0
58	MG	1a	1674	1/1	0.93	0.17	56,56,56,56	0
58	MG	1A	3656	1/1	0.93	0.10	39,39,39,39	0
58	MG	1A	3812	1/1	0.93	0.10	42,42,42,42	0
58	MG	2A	3073	1/1	0.93	0.08	43,43,43,43	0
58	MG	2A	3323	1/1	0.93	0.15	57,57,57,57	0
58	MG	2A	3603	1/1	0.93	0.09	57,57,57,57	0
58	MG	2A	3604	1/1	0.93	0.15	60,60,60,60	0
58	MG	1a	1679	1/1	0.93	0.14	59,59,59,59	0
58	MG	2A	3606	1/1	0.93	0.08	23,23,23,23	0
58	MG	2a	1614	1/1	0.93	0.22	74,74,74,74	0
58	MG	2A	3080	1/1	0.93	0.09	40,40,40,40	0
58	MG	1A	3349	1/1	0.93	0.13	52,52,52,52	0
58	MG	1A	3665	1/1	0.93	0.06	35,35,35,35	0
58	MG	1B	226	1/1	0.93	0.07	48,48,48,48	0
58	MG	2A	3616	1/1	0.93	0.09	33,33,33,33	0
58	MG	1A	3667	1/1	0.93	0.08	19,19,19,19	0
58	MG	1A	3540	1/1	0.93	0.14	53,53,53,53	0
58	MG	2A	3631	1/1	0.93	0.08	42,42,42,42	0
58	MG	1A	3301	1/1	0.93	0.31	51,51,51,51	0
58	MG	1a	1689	1/1	0.93	0.30	51,51,51,51	0
58	MG	1B	233	1/1	0.93	0.08	46,46,46,46	0
58	MG	1a	1692	1/1	0.93	0.27	47,47,47,47	0
58	MG	1A	3057	1/1	0.93	0.07	41,41,41,41	0
58	MG	2A	3340	1/1	0.93	0.09	54,54,54,54	0
58	MG	1A	3205	1/1	0.93	0.12	53,53,53,53	0
58	MG	1A	3836	1/1	0.93	0.08	36,36,36,36	0
58	MG	1A	3551	1/1	0.93	0.13	24,24,24,24	0
58	MG	1A	3308	1/1	0.93	0.13	47,47,47,47	0
58	MG	1A	3968	1/1	0.93	0.07	68,68,68,68	0
58	MG	1A	3969	1/1	0.93	0.10	60,60,60,60	0
58	MG	2A	3352	1/1	0.93	0.19	62,62,62,62	0
58	MG	2a	1648	1/1	0.93	0.09	60,60,60,60	0
58	MG	1a	1702	1/1	0.93	0.14	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3354	1/1	0.93	0.09	46,46,46,46	0
58	MG	1A	3564	1/1	0.93	0.14	36,36,36,36	0
58	MG	2A	3125	1/1	0.93	0.14	50,50,50,50	0
58	MG	1E	316	1/1	0.93	0.07	36,36,36,36	0
58	MG	1a	1708	1/1	0.93	0.47	69,69,69,69	0
58	MG	1A	3972	1/1	0.93	0.08	40,40,40,40	0
58	MG	1G	201	1/1	0.93	0.10	41,41,41,41	0
58	MG	2A	3130	1/1	0.93	0.08	47,47,47,47	0
58	MG	2a	1662	1/1	0.93	0.16	69,69,69,69	0
58	MG	1a	1715	1/1	0.93	0.17	53,53,53,53	0
58	MG	2A	3133	1/1	0.93	0.12	80,80,80,80	0
58	MG	2A	3134	1/1	0.93	0.08	40,40,40,40	0
58	MG	2a	1668	1/1	0.93	0.08	67,67,67,67	0
58	MG	2a	1670	1/1	0.93	0.25	66,66,66,66	0
58	MG	2A	3367	1/1	0.93	0.09	54,54,54,54	0
58	MG	1A	3699	1/1	0.93	0.09	36,36,36,36	0
58	MG	2a	1675	1/1	0.93	0.27	63,63,63,63	0
58	MG	2A	3137	1/1	0.93	0.19	58,58,58,58	0
58	MG	1A	3841	1/1	0.93	0.06	38,38,38,38	0
58	MG	1a	1725	1/1	0.93	0.07	46,46,46,46	0
58	MG	1O	201	1/1	0.93	0.08	54,54,54,54	0
58	MG	2A	3147	1/1	0.93	0.12	48,48,48,48	0
58	MG	2A	3148	1/1	0.93	0.23	52,52,52,52	0
58	MG	1A	3360	1/1	0.93	0.10	37,37,37,37	0
58	MG	2a	1685	1/1	0.93	0.29	68,68,68,68	0
58	MG	2A	3378	1/1	0.93	0.16	62,62,62,62	0
58	MG	2a	1688	1/1	0.93	0.13	60,60,60,60	0
58	MG	1A	3712	1/1	0.93	0.13	52,52,52,52	0
58	MG	2a	1694	1/1	0.93	0.20	62,62,62,62	0
58	MG	2A	3381	1/1	0.93	0.07	50,50,50,50	0
58	MG	2A	3156	1/1	0.93	0.21	56,56,56,56	0
58	MG	1Q	207	1/1	0.93	0.09	32,32,32,32	0
58	MG	1R	202	1/1	0.93	0.10	49,49,49,49	0
58	MG	2A	3694	1/1	0.93	0.08	19,19,19,19	0
58	MG	1R	204	1/1	0.93	0.11	44,44,44,44	0
58	MG	2A	3388	1/1	0.93	0.12	68,68,68,68	0
58	MG	1A	3473	1/1	0.93	0.14	46,46,46,46	0
58	MG	1a	1741	1/1	0.93	0.10	61,61,61,61	0
58	MG	2A	3172	1/1	0.93	0.16	56,56,56,56	0
58	MG	2A	3392	1/1	0.93	0.22	68,68,68,68	0
58	MG	1A	3987	1/1	0.93	0.08	40,40,40,40	0
58	MG	1U	204	1/1	0.93	0.25	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3586	1/1	0.93	0.06	42,42,42,42	0
58	MG	1V	209	1/1	0.93	0.10	55,55,55,55	0
58	MG	1A	3073	1/1	0.93	0.26	53,53,53,53	0
58	MG	2A	3720	1/1	0.93	0.12	56,56,56,56	0
58	MG	1A	3724	1/1	0.93	0.11	63,63,63,63	0
58	MG	2A	3411	1/1	0.93	0.12	41,41,41,41	0
58	MG	2a	1721	1/1	0.93	0.17	54,54,54,54	0
58	MG	1A	3727	1/1	0.93	0.07	68,68,68,68	0
58	MG	1A	3170	1/1	0.93	0.19	39,39,39,39	0
58	MG	1A	3416	1/1	0.93	0.18	48,48,48,48	0
58	MG	1A	3863	1/1	0.93	0.10	54,54,54,54	0
58	MG	1A	3213	1/1	0.93	0.13	50,50,50,50	0
58	MG	10	108	1/1	0.93	0.14	52,52,52,52	0
58	MG	2a	1730	1/1	0.93	0.11	66,66,66,66	0
58	MG	11	104	1/1	0.93	0.10	63,63,63,63	0
58	MG	1A	3225	1/1	0.93	0.07	48,48,48,48	0
58	MG	1A	3230	1/1	0.93	0.09	45,45,45,45	0
58	MG	2A	3736	1/1	0.93	0.07	61,61,61,61	0
58	MG	2A	3426	1/1	0.93	0.11	71,71,71,71	0
58	MG	1A	3025	1/1	0.93	0.07	43,43,43,43	0
58	MG	2a	1739	1/1	0.93	0.35	59,59,59,59	0
58	MG	1a	1782	1/1	0.93	0.06	50,50,50,50	0
58	MG	1a	1783	1/1	0.93	0.07	63,63,63,63	0
58	MG	1A	3608	1/1	0.93	0.07	29,29,29,29	0
58	MG	2A	3744	1/1	0.93	0.16	51,51,51,51	0
58	MG	15	106	1/1	0.93	0.09	46,46,46,46	0
58	MG	1A	3872	1/1	0.93	0.27	44,44,44,44	0
58	MG	2A	3753	1/1	0.93	0.10	40,40,40,40	0
58	MG	18	102	1/1	0.93	0.15	37,37,37,37	0
58	MG	18	105	1/1	0.93	0.17	40,40,40,40	0
58	MG	18	106	1/1	0.93	0.14	56,56,56,56	0
58	MG	1A	3875	1/1	0.93	0.28	51,51,51,51	0
58	MG	1a	1808	1/1	0.93	0.20	56,56,56,56	0
58	MG	2A	3227	1/1	0.93	0.14	57,57,57,57	0
58	MG	2A	3770	1/1	0.93	0.13	58,58,58,58	0
58	MG	2a	1759	1/1	0.93	0.08	71,71,71,71	0
58	MG	2A	3231	1/1	0.93	0.17	41,41,41,41	0
58	MG	2A	3774	1/1	0.93	0.13	61,61,61,61	0
58	MG	2a	1765	1/1	0.93	0.06	68,68,68,68	0
58	MG	1A	3182	1/1	0.93	0.09	53,53,53,53	0
58	MG	1A	4040	1/1	0.93	0.06	39,39,39,39	0
58	MG	1A	3617	1/1	0.93	0.12	11,11,11,11	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3620	1/1	0.93	0.09	65,65,65,65	0
58	MG	2A	3240	1/1	0.93	0.09	38,38,38,38	0
58	MG	2a	1775	1/1	0.93	0.13	61,61,61,61	0
58	MG	1A	3149	1/1	0.93	0.32	34,34,34,34	0
58	MG	2A	3466	1/1	0.93	0.16	50,50,50,50	0
58	MG	1A	3883	1/1	0.93	0.07	28,28,28,28	0
58	MG	1A	3053	1/1	0.93	0.10	42,42,42,42	0
58	MG	2a	1785	1/1	0.93	0.11	65,65,65,65	0
58	MG	2A	3791	1/1	0.93	0.11	71,71,71,71	0
58	MG	1a	1614	1/1	0.93	0.19	54,54,54,54	0
58	MG	2A	3245	1/1	0.93	0.12	50,50,50,50	0
58	MG	2A	3800	1/1	0.93	0.11	60,60,60,60	0
58	MG	1A	4053	1/1	0.93	0.18	36,36,36,36	0
58	MG	2A	3475	1/1	0.93	0.14	60,60,60,60	0
58	MG	1A	3630	1/1	0.93	0.06	28,28,28,28	0
58	MG	2A	3808	1/1	0.93	0.14	35,35,35,35	0
58	MG	1A	3162	1/1	0.93	0.11	47,47,47,47	0
58	MG	2a	1799	1/1	0.93	0.13	71,71,71,71	0
58	MG	2A	3251	1/1	0.93	0.22	62,62,62,62	0
58	MG	1A	4062	1/1	0.93	0.09	23,23,23,23	0
58	MG	1A	3516	1/1	0.93	0.11	49,49,49,49	0
58	MG	2a	1803	1/1	0.93	0.12	53,53,53,53	0
58	MG	1A	3390	1/1	0.93	0.23	36,36,36,36	0
58	MG	2A	3819	1/1	0.93	0.17	63,63,63,63	0
58	MG	2a	1808	1/1	0.93	0.12	74,74,74,74	0
58	MG	2A	3487	1/1	0.93	0.10	51,51,51,51	0
58	MG	2A	3494	1/1	0.93	0.10	62,62,62,62	0
58	MG	2A	3257	1/1	0.93	0.14	48,48,48,48	0
58	MG	2A	3500	1/1	0.93	0.13	63,63,63,63	0
58	MG	1A	4069	1/1	0.93	0.09	45,45,45,45	0
58	MG	2a	1816	1/1	0.93	0.15	68,68,68,68	0
58	MG	1x	107	1/1	0.93	0.24	67,67,67,67	0
58	MG	2A	3503	1/1	0.93	0.13	40,40,40,40	0
58	MG	1A	3519	1/1	0.93	0.06	50,50,50,50	0
58	MG	1x	110	1/1	0.93	0.21	63,63,63,63	0
58	MG	2A	3507	1/1	0.93	0.18	57,57,57,57	0
58	MG	2A	3268	1/1	0.93	0.20	65,65,65,65	0
58	MG	2a	1828	1/1	0.93	0.11	71,71,71,71	0
58	MG	1A	4073	1/1	0.93	0.08	32,32,32,32	0
58	MG	1A	3793	1/1	0.93	0.10	39,39,39,39	0
58	MG	1A	3523	1/1	0.93	0.22	36,36,36,36	0
58	MG	2f	202	1/1	0.93	0.10	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3008	1/1	0.93	0.13	55,55,55,55	0
58	MG	2A	3515	1/1	0.93	0.11	60,60,60,60	0
58	MG	2A	3518	1/1	0.93	0.08	49,49,49,49	0
58	MG	2A	3275	1/1	0.93	0.24	55,55,55,55	0
58	MG	2A	3520	1/1	0.93	0.10	33,33,33,33	0
58	MG	2A	3521	1/1	0.93	0.13	58,58,58,58	0
58	MG	1A	4081	1/1	0.93	0.09	55,55,55,55	0
58	MG	2A	3524	1/1	0.93	0.08	40,40,40,40	0
58	MG	2q	201	1/1	0.93	0.08	72,72,72,72	0
58	MG	2A	3277	1/1	0.93	0.10	58,58,58,58	0
58	MG	1A	3339	1/1	0.93	0.08	52,52,52,52	0
58	MG	2A	3529	1/1	0.93	0.10	57,57,57,57	0
58	MG	2B	211	1/1	0.93	0.13	57,57,57,57	0
58	MG	2B	213	1/1	0.93	0.20	62,62,62,62	0
58	MG	2A	3286	1/1	0.93	0.08	47,47,47,47	0
58	MG	1A	3898	1/1	0.93	0.07	54,54,54,54	0
58	MG	2A	3537	1/1	0.93	0.08	35,35,35,35	0
58	MG	1A	4084	1/1	0.93	0.17	56,56,56,56	0
58	MG	1A	3902	1/1	0.93	0.13	44,44,44,44	0
58	MG	1A	3903	1/1	0.93	0.22	29,29,29,29	0
59	K	1A	3556	1/1	0.93	0.20	72,72,72,72	0
58	MG	2A	3810	1/1	0.94	0.11	59,59,59,59	0
58	MG	1A	4055	1/1	0.94	0.07	40,40,40,40	0
58	MG	1A	3829	1/1	0.94	0.09	35,35,35,35	0
58	MG	1A	3597	1/1	0.94	0.15	32,32,32,32	0
58	MG	1a	1669	1/1	0.94	0.18	63,63,63,63	0
58	MG	2A	3424	1/1	0.94	0.28	58,58,58,58	0
58	MG	2A	3820	1/1	0.94	0.13	44,44,44,44	0
58	MG	1A	3433	1/1	0.94	0.14	44,44,44,44	0
58	MG	2A	3131	1/1	0.94	0.09	44,44,44,44	0
58	MG	2A	3427	1/1	0.94	0.15	46,46,46,46	0
58	MG	2A	3831	1/1	0.94	0.08	73,73,73,73	0
58	MG	1a	1671	1/1	0.94	0.26	68,68,68,68	0
58	MG	2A	3835	1/1	0.94	0.08	45,45,45,45	0
58	MG	1A	3064	1/1	0.94	0.11	49,49,49,49	0
58	MG	1A	3605	1/1	0.94	0.07	46,46,46,46	0
58	MG	1a	1675	1/1	0.94	0.16	48,48,48,48	0
58	MG	1A	3606	1/1	0.94	0.12	24,24,24,24	0
58	MG	1A	3439	1/1	0.94	0.20	42,42,42,42	0
58	MG	1A	3242	1/1	0.94	0.06	45,45,45,45	0
58	MG	2A	3145	1/1	0.94	0.16	43,43,43,43	0
58	MG	1A	4074	1/1	0.94	0.12	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3441	1/1	0.94	0.12	37,37,37,37	0
58	MG	1A	3445	1/1	0.94	0.06	52,52,52,52	0
58	MG	2A	3857	1/1	0.94	0.12	53,53,53,53	0
58	MG	1A	4079	1/1	0.94	0.11	55,55,55,55	0
58	MG	2A	3449	1/1	0.94	0.15	50,50,50,50	0
58	MG	2A	3861	1/1	0.94	0.10	54,54,54,54	0
58	MG	1a	1686	1/1	0.94	0.11	38,38,38,38	0
58	MG	2A	3452	1/1	0.94	0.10	48,48,48,48	0
58	MG	2B	201	1/1	0.94	0.13	63,63,63,63	0
58	MG	1A	4080	1/1	0.94	0.16	66,66,66,66	0
58	MG	2A	3456	1/1	0.94	0.45	45,45,45,45	0
58	MG	2A	3157	1/1	0.94	0.14	43,43,43,43	0
58	MG	1A	3243	1/1	0.94	0.15	57,57,57,57	0
58	MG	2A	3161	1/1	0.94	0.17	68,68,68,68	0
58	MG	2A	3462	1/1	0.94	0.14	71,71,71,71	0
58	MG	2A	3163	1/1	0.94	0.20	66,66,66,66	0
58	MG	1A	3853	1/1	0.94	0.16	45,45,45,45	0
58	MG	2A	3166	1/1	0.94	0.11	51,51,51,51	0
58	MG	2A	3167	1/1	0.94	0.11	47,47,47,47	0
58	MG	2B	215	1/1	0.94	0.12	63,63,63,63	0
58	MG	1A	3624	1/1	0.94	0.09	43,43,43,43	0
58	MG	1a	1691	1/1	0.94	0.23	60,60,60,60	0
58	MG	1A	3337	1/1	0.94	0.07	45,45,45,45	0
58	MG	1A	4086	1/1	0.94	0.16	50,50,50,50	0
58	MG	1A	3157	1/1	0.94	0.06	51,51,51,51	0
58	MG	1A	4092	1/1	0.94	0.15	55,55,55,55	0
58	MG	2A	3176	1/1	0.94	0.12	73,73,73,73	0
58	MG	2D	307	1/1	0.94	0.09	53,53,53,53	0
58	MG	2E	301	1/1	0.94	0.17	63,63,63,63	0
58	MG	1A	3634	1/1	0.94	0.11	46,46,46,46	0
58	MG	1A	3451	1/1	0.94	0.10	50,50,50,50	0
58	MG	2E	306	1/1	0.94	0.07	30,30,30,30	0
58	MG	2A	3181	1/1	0.94	0.11	47,47,47,47	0
58	MG	2F	301	1/1	0.94	0.20	60,60,60,60	0
58	MG	2A	3182	1/1	0.94	0.18	52,52,52,52	0
58	MG	1a	1698	1/1	0.94	0.19	50,50,50,50	0
58	MG	2A	3488	1/1	0.94	0.15	58,58,58,58	0
58	MG	2F	305	1/1	0.94	0.20	47,47,47,47	0
58	MG	2A	3489	1/1	0.94	0.32	57,57,57,57	0
58	MG	1A	3050	1/1	0.94	0.11	38,38,38,38	0
58	MG	1a	1700	1/1	0.94	0.08	54,54,54,54	0
58	MG	2A	3498	1/1	0.94	0.09	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3248	1/1	0.94	0.06	54,54,54,54	0
58	MG	1A	3163	1/1	0.94	0.24	61,61,61,61	0
58	MG	1a	1703	1/1	0.94	0.18	62,62,62,62	0
58	MG	1a	1704	1/1	0.94	0.13	55,55,55,55	0
58	MG	2T	3500	1/1	0.94	0.08	63,63,63,63	0
58	MG	1B	204	1/1	0.94	0.05	35,35,35,35	0
58	MG	1A	3865	1/1	0.94	0.07	23,23,23,23	0
58	MG	1B	206	1/1	0.94	0.06	40,40,40,40	0
58	MG	1a	1710	1/1	0.94	0.12	52,52,52,52	0
58	MG	2Y	201	1/1	0.94	0.18	48,48,48,48	0
58	MG	2A	3199	1/1	0.94	0.21	56,56,56,56	0
58	MG	1a	1711	1/1	0.94	0.12	46,46,46,46	0
58	MG	2A	3201	1/1	0.94	0.28	67,67,67,67	0
58	MG	1A	3164	1/1	0.94	0.13	48,48,48,48	0
58	MG	23	101	1/1	0.94	0.09	46,46,46,46	0
58	MG	1A	3645	1/1	0.94	0.10	28,28,28,28	0
58	MG	1A	3465	1/1	0.94	0.15	49,49,49,49	0
58	MG	1A	3869	1/1	0.94	0.27	32,32,32,32	0
58	MG	1A	3021	1/1	0.94	0.08	39,39,39,39	0
58	MG	1a	1724	1/1	0.94	0.09	58,58,58,58	0
58	MG	1B	215	1/1	0.94	0.10	53,53,53,53	0
58	MG	1A	3871	1/1	0.94	0.23	38,38,38,38	0
58	MG	2a	1605	1/1	0.94	0.14	58,58,58,58	0
58	MG	2A	3220	1/1	0.94	0.13	48,48,48,48	0
58	MG	1A	3352	1/1	0.94	0.16	37,37,37,37	0
58	MG	2A	3528	1/1	0.94	0.18	58,58,58,58	0
58	MG	1A	3258	1/1	0.94	0.20	50,50,50,50	0
58	MG	1A	3654	1/1	0.94	0.11	40,40,40,40	0
58	MG	2A	3531	1/1	0.94	0.14	42,42,42,42	0
58	MG	1a	1734	1/1	0.94	0.16	51,51,51,51	0
58	MG	1A	3081	1/1	0.94	0.16	36,36,36,36	0
58	MG	2A	3539	1/1	0.94	0.12	39,39,39,39	0
58	MG	2a	1617	1/1	0.94	0.16	49,49,49,49	0
58	MG	2A	3235	1/1	0.94	0.10	41,41,41,41	0
58	MG	2a	1619	1/1	0.94	0.06	43,43,43,43	0
58	MG	1A	3001	1/1	0.94	0.06	39,39,39,39	0
58	MG	1A	3663	1/1	0.94	0.05	23,23,23,23	0
58	MG	1a	1740	1/1	0.94	0.09	56,56,56,56	0
58	MG	1A	3358	1/1	0.94	0.08	47,47,47,47	0
58	MG	1A	3094	1/1	0.94	0.10	43,43,43,43	0
58	MG	2a	1626	1/1	0.94	0.09	65,65,65,65	0
58	MG	1A	3670	1/1	0.94	0.08	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3673	1/1	0.94	0.07	20,20,20,20	0
58	MG	2a	1629	1/1	0.94	0.12	64,64,64,64	0
58	MG	1A	3890	1/1	0.94	0.06	25,25,25,25	0
58	MG	1A	3363	1/1	0.94	0.22	42,42,42,42	0
58	MG	2A	3246	1/1	0.94	0.11	62,62,62,62	0
58	MG	2A	3567	1/1	0.94	0.09	64,64,64,64	0
58	MG	2a	1635	1/1	0.94	0.17	53,53,53,53	0
58	MG	2a	1636	1/1	0.94	0.26	59,59,59,59	0
58	MG	1A	3004	1/1	0.94	0.05	24,24,24,24	0
58	MG	1a	1759	1/1	0.94	0.09	56,56,56,56	0
58	MG	2A	3249	1/1	0.94	0.06	63,63,63,63	0
58	MG	1E	310	1/1	0.94	0.10	48,48,48,48	0
58	MG	1A	3101	1/1	0.94	0.09	36,36,36,36	0
58	MG	1A	3483	1/1	0.94	0.14	50,50,50,50	0
58	MG	1a	1763	1/1	0.94	0.09	64,64,64,64	0
58	MG	2A	3255	1/1	0.94	0.07	68,68,68,68	0
58	MG	1A	3104	1/1	0.94	0.11	29,29,29,29	0
58	MG	1A	3487	1/1	0.94	0.08	47,47,47,47	0
58	MG	2A	3583	1/1	0.94	0.06	52,52,52,52	0
58	MG	2a	1651	1/1	0.94	0.05	51,51,51,51	0
58	MG	2a	1652	1/1	0.94	0.27	66,66,66,66	0
58	MG	2A	3584	1/1	0.94	0.08	63,63,63,63	0
58	MG	1a	1769	1/1	0.94	0.12	60,60,60,60	0
58	MG	1F	309	1/1	0.94	0.09	40,40,40,40	0
58	MG	1A	3040	1/1	0.94	0.07	30,30,30,30	0
58	MG	1A	3697	1/1	0.94	0.10	41,41,41,41	0
58	MG	2A	3266	1/1	0.94	0.16	54,54,54,54	0
58	MG	1A	3489	1/1	0.94	0.18	47,47,47,47	0
58	MG	2A	3269	1/1	0.94	0.10	62,62,62,62	0
58	MG	1A	3705	1/1	0.94	0.13	37,37,37,37	0
58	MG	2a	1664	1/1	0.94	0.08	62,62,62,62	0
58	MG	1A	3270	1/1	0.94	0.19	39,39,39,39	0
58	MG	1A	3711	1/1	0.94	0.12	56,56,56,56	0
58	MG	1a	1785	1/1	0.94	0.09	63,63,63,63	0
58	MG	1A	3500	1/1	0.94	0.09	58,58,58,58	0
58	MG	1a	1790	1/1	0.94	0.07	73,73,73,73	0
58	MG	2a	1673	1/1	0.94	0.11	66,66,66,66	0
58	MG	1Q	204	1/1	0.94	0.13	60,60,60,60	0
58	MG	1Q	206	1/1	0.94	0.09	51,51,51,51	0
58	MG	2A	3285	1/1	0.94	0.07	61,61,61,61	0
58	MG	2A	3609	1/1	0.94	0.07	50,50,50,50	0
58	MG	2A	3610	1/1	0.94	0.10	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3271	1/1	0.94	0.07	46,46,46,46	0
58	MG	1a	1794	1/1	0.94	0.13	65,65,65,65	0
58	MG	1A	3922	1/1	0.94	0.07	45,45,45,45	0
58	MG	2a	1683	1/1	0.94	0.08	61,61,61,61	0
58	MG	2A	3617	1/1	0.94	0.11	44,44,44,44	0
58	MG	2A	3623	1/1	0.94	0.07	37,37,37,37	0
58	MG	2a	1686	1/1	0.94	0.18	66,66,66,66	0
58	MG	1a	1796	1/1	0.94	0.09	68,68,68,68	0
58	MG	1a	1797	1/1	0.94	0.06	47,47,47,47	0
58	MG	2a	1689	1/1	0.94	0.23	60,60,60,60	0
58	MG	2a	1690	1/1	0.94	0.15	64,64,64,64	0
58	MG	2a	1691	1/1	0.94	0.27	60,60,60,60	0
58	MG	2A	3627	1/1	0.94	0.15	53,53,53,53	0
58	MG	1A	3505	1/1	0.94	0.07	46,46,46,46	0
58	MG	2a	1695	1/1	0.94	0.11	76,76,76,76	0
58	MG	2A	3293	1/1	0.94	0.24	56,56,56,56	0
58	MG	2a	1699	1/1	0.94	0.14	57,57,57,57	0
58	MG	1a	1803	1/1	0.94	0.23	58,58,58,58	0
58	MG	1A	3924	1/1	0.94	0.06	40,40,40,40	0
58	MG	1a	1805	1/1	0.94	0.14	53,53,53,53	0
58	MG	1A	3926	1/1	0.94	0.10	45,45,45,45	0
58	MG	1T	202	1/1	0.94	0.10	41,41,41,41	0
58	MG	1U	203	1/1	0.94	0.07	57,57,57,57	0
58	MG	1A	3379	1/1	0.94	0.20	38,38,38,38	0
58	MG	2A	3644	1/1	0.94	0.24	53,53,53,53	0
58	MG	1e	202	1/1	0.94	0.10	54,54,54,54	0
58	MG	1A	3280	1/1	0.94	0.39	33,33,33,33	0
58	MG	1l	202	1/1	0.94	0.06	55,55,55,55	0
58	MG	1A	3508	1/1	0.94	0.12	63,63,63,63	0
58	MG	1A	3281	1/1	0.94	0.07	42,42,42,42	0
58	MG	1A	3941	1/1	0.94	0.08	51,51,51,51	0
58	MG	1A	3734	1/1	0.94	0.11	61,61,61,61	0
58	MG	2A	3659	1/1	0.94	0.13	50,50,50,50	0
58	MG	2A	3311	1/1	0.94	0.11	62,62,62,62	0
58	MG	2A	3312	1/1	0.94	0.11	68,68,68,68	0
58	MG	1A	3943	1/1	0.94	0.07	51,51,51,51	0
58	MG	1A	3735	1/1	0.94	0.17	57,57,57,57	0
58	MG	1A	3517	1/1	0.94	0.17	60,60,60,60	0
58	MG	1A	3747	1/1	0.94	0.17	62,62,62,62	0
58	MG	10	106	1/1	0.94	0.10	64,64,64,64	0
58	MG	1A	3954	1/1	0.94	0.07	44,44,44,44	0
58	MG	1l	101	1/1	0.94	0.30	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3671	1/1	0.94	0.10	47,47,47,47	0
58	MG	1A	3955	1/1	0.94	0.05	34,34,34,34	0
58	MG	2a	1732	1/1	0.94	0.26	59,59,59,59	0
58	MG	1A	3194	1/1	0.94	0.28	36,36,36,36	0
58	MG	1A	3195	1/1	0.94	0.21	47,47,47,47	0
58	MG	1x	111	1/1	0.94	0.21	55,55,55,55	0
58	MG	2a	1736	1/1	0.94	0.26	43,43,43,43	0
58	MG	1A	3115	1/1	0.94	0.08	40,40,40,40	0
58	MG	1A	3524	1/1	0.94	0.18	47,47,47,47	0
58	MG	15	103	1/1	0.94	0.17	30,30,30,30	0
58	MG	2A	3681	1/1	0.94	0.06	68,68,68,68	0
58	MG	1A	3962	1/1	0.94	0.07	16,16,16,16	0
58	MG	1A	3119	1/1	0.94	0.08	33,33,33,33	0
58	MG	2A	3014	1/1	0.94	0.08	45,45,45,45	0
58	MG	2A	3016	1/1	0.94	0.10	74,74,74,74	0
58	MG	2a	1745	1/1	0.94	0.09	77,77,77,77	0
58	MG	17	102	1/1	0.94	0.10	45,45,45,45	0
58	MG	18	101	1/1	0.94	0.13	47,47,47,47	0
58	MG	1A	3965	1/1	0.94	0.12	54,54,54,54	0
58	MG	2A	3033	1/1	0.94	0.20	51,51,51,51	0
58	MG	1A	3296	1/1	0.94	0.30	60,60,60,60	0
58	MG	2A	3341	1/1	0.94	0.16	68,68,68,68	0
58	MG	2A	3695	1/1	0.94	0.10	65,65,65,65	0
58	MG	1A	3763	1/1	0.94	0.07	20,20,20,20	0
58	MG	18	108	1/1	0.94	0.12	48,48,48,48	0
58	MG	2A	3346	1/1	0.94	0.07	55,55,55,55	0
58	MG	1A	3970	1/1	0.94	0.09	62,62,62,62	0
58	MG	1A	3767	1/1	0.94	0.08	25,25,25,25	0
58	MG	2a	1762	1/1	0.94	0.07	56,56,56,56	0
58	MG	1A	3532	1/1	0.94	0.19	57,57,57,57	0
58	MG	2A	3706	1/1	0.94	0.13	53,53,53,53	0
58	MG	2A	3043	1/1	0.94	0.14	67,67,67,67	0
58	MG	2A	3351	1/1	0.94	0.17	64,64,64,64	0
58	MG	2a	1770	1/1	0.94	0.07	79,79,79,79	0
58	MG	1A	3120	1/1	0.94	0.10	33,33,33,33	0
58	MG	1a	1604	1/1	0.94	0.13	64,64,64,64	0
58	MG	1A	3207	1/1	0.94	0.10	52,52,52,52	0
58	MG	1A	3774	1/1	0.94	0.09	20,20,20,20	0
58	MG	1A	3397	1/1	0.94	0.20	31,31,31,31	0
58	MG	1A	3981	1/1	0.94	0.08	39,39,39,39	0
58	MG	1A	3017	1/1	0.94	0.17	34,34,34,34	0
58	MG	1A	3986	1/1	0.94	0.23	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3727	1/1	0.94	0.18	48,48,48,48	0
58	MG	1A	3047	1/1	0.94	0.09	19,19,19,19	0
58	MG	1A	3135	1/1	0.94	0.11	31,31,31,31	0
58	MG	1A	3219	1/1	0.94	0.10	42,42,42,42	0
58	MG	2a	1791	1/1	0.94	0.23	71,71,71,71	0
58	MG	1a	1621	1/1	0.94	0.05	46,46,46,46	0
58	MG	2A	3061	1/1	0.94	0.14	60,60,60,60	0
58	MG	2A	3062	1/1	0.94	0.07	41,41,41,41	0
58	MG	2a	1796	1/1	0.94	0.12	53,53,53,53	0
58	MG	1A	3222	1/1	0.94	0.16	47,47,47,47	0
58	MG	1A	3552	1/1	0.94	0.27	29,29,29,29	0
58	MG	1A	3794	1/1	0.94	0.11	52,52,52,52	0
58	MG	1A	3554	1/1	0.94	0.14	54,54,54,54	0
58	MG	2A	3373	1/1	0.94	0.11	52,52,52,52	0
58	MG	1A	3223	1/1	0.94	0.12	43,43,43,43	0
58	MG	2A	3741	1/1	0.94	0.06	42,42,42,42	0
58	MG	1A	3142	1/1	0.94	0.09	43,43,43,43	0
58	MG	2A	3078	1/1	0.94	0.11	50,50,50,50	0
58	MG	1A	3319	1/1	0.94	0.07	40,40,40,40	0
58	MG	1A	3571	1/1	0.94	0.07	39,39,39,39	0
58	MG	2A	3748	1/1	0.94	0.08	63,63,63,63	0
58	MG	2A	3751	1/1	0.94	0.07	51,51,51,51	0
58	MG	2A	3379	1/1	0.94	0.20	46,46,46,46	0
58	MG	1A	3582	1/1	0.94	0.12	54,54,54,54	0
58	MG	2A	3085	1/1	0.94	0.14	55,55,55,55	0
58	MG	2A	3383	1/1	0.94	0.28	58,58,58,58	0
58	MG	1A	3583	1/1	0.94	0.08	38,38,38,38	0
58	MG	2A	3762	1/1	0.94	0.08	53,53,53,53	0
58	MG	1A	4032	1/1	0.94	0.09	33,33,33,33	0
58	MG	2a	1822	1/1	0.94	0.23	64,64,64,64	0
58	MG	2a	1824	1/1	0.94	0.16	61,61,61,61	0
58	MG	1A	3227	1/1	0.94	0.11	28,28,28,28	0
58	MG	2A	3768	1/1	0.94	0.07	51,51,51,51	0
58	MG	1A	3585	1/1	0.94	0.12	35,35,35,35	0
58	MG	2A	3093	1/1	0.94	0.06	42,42,42,42	0
58	MG	2d	301	1/1	0.94	0.40	60,60,60,60	0
58	MG	1a	1643	1/1	0.94	0.13	50,50,50,50	0
58	MG	1A	3419	1/1	0.94	0.08	40,40,40,40	0
58	MG	1A	3322	1/1	0.94	0.12	56,56,56,56	0
58	MG	1A	4042	1/1	0.94	0.07	37,37,37,37	0
58	MG	1A	3324	1/1	0.94	0.11	45,45,45,45	0
58	MG	2A	3105	1/1	0.94	0.12	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3781	1/1	0.94	0.14	74,74,74,74	0
58	MG	1a	1654	1/1	0.94	0.15	60,60,60,60	0
58	MG	2A	3396	1/1	0.94	0.08	52,52,52,52	0
58	MG	1A	3147	1/1	0.94	0.09	30,30,30,30	0
58	MG	1A	3062	1/1	0.94	0.21	40,40,40,40	0
58	MG	2A	3789	1/1	0.94	0.08	52,52,52,52	0
58	MG	1a	1657	1/1	0.94	0.10	65,65,65,65	0
58	MG	2A	3410	1/1	0.94	0.10	42,42,42,42	0
58	MG	1A	3823	1/1	0.94	0.08	23,23,23,23	0
58	MG	2A	3795	1/1	0.94	0.09	40,40,40,40	0
58	MG	1A	3432	1/1	0.94	0.13	39,39,39,39	0
58	MG	2A	3413	1/1	0.94	0.28	52,52,52,52	0
58	MG	2x	101	1/1	0.94	0.08	56,56,56,56	0
58	MG	2A	3414	1/1	0.94	0.14	54,54,54,54	0
58	MG	2A	3119	1/1	0.94	0.18	57,57,57,57	0
58	MG	2A	3806	1/1	0.94	0.07	37,37,37,37	0
58	MG	2A	3807	1/1	0.94	0.08	52,52,52,52	0
58	MG	1A	3827	1/1	0.94	0.08	37,37,37,37	0
58	MG	1a	1663	1/1	0.94	0.11	54,54,54,54	0
58	MG	2A	3446	1/1	0.95	0.28	48,48,48,48	0
58	MG	2A	3828	1/1	0.95	0.07	56,56,56,56	0
58	MG	1B	228	1/1	0.95	0.08	46,46,46,46	0
58	MG	2A	3164	1/1	0.95	0.09	53,53,53,53	0
58	MG	1A	3425	1/1	0.95	0.12	50,50,50,50	0
58	MG	2A	3834	1/1	0.95	0.13	55,55,55,55	0
58	MG	1A	3900	1/1	0.95	0.08	44,44,44,44	0
58	MG	2A	3453	1/1	0.95	0.07	42,42,42,42	0
58	MG	1A	3158	1/1	0.95	0.12	27,27,27,27	0
58	MG	2A	3455	1/1	0.95	0.17	45,45,45,45	0
58	MG	2A	3843	1/1	0.95	0.09	52,52,52,52	0
58	MG	1a	1707	1/1	0.95	0.18	41,41,41,41	0
58	MG	1A	3713	1/1	0.95	0.14	52,52,52,52	0
58	MG	2A	3847	1/1	0.95	0.06	66,66,66,66	0
58	MG	1A	3272	1/1	0.95	0.26	47,47,47,47	0
58	MG	1A	3274	1/1	0.95	0.09	41,41,41,41	0
58	MG	2A	3851	1/1	0.95	0.10	51,51,51,51	0
58	MG	1A	3542	1/1	0.95	0.09	61,61,61,61	0
58	MG	2A	3174	1/1	0.95	0.13	47,47,47,47	0
58	MG	1A	3346	1/1	0.95	0.07	39,39,39,39	0
58	MG	1E	304	1/1	0.95	0.12	35,35,35,35	0
58	MG	1A	3915	1/1	0.95	0.16	28,28,28,28	0
58	MG	2A	3468	1/1	0.95	0.14	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1E	308	1/1	0.95	0.08	40,40,40,40	0
58	MG	1a	1720	1/1	0.95	0.10	49,49,49,49	0
58	MG	2A	3471	1/1	0.95	0.09	37,37,37,37	0
58	MG	1a	1721	1/1	0.95	0.17	54,54,54,54	0
58	MG	1A	3278	1/1	0.95	0.14	28,28,28,28	0
58	MG	1A	3919	1/1	0.95	0.07	31,31,31,31	0
58	MG	2A	3476	1/1	0.95	0.22	53,53,53,53	0
58	MG	2B	205	1/1	0.95	0.08	48,48,48,48	0
58	MG	2A	3477	1/1	0.95	0.06	61,61,61,61	0
58	MG	2B	207	1/1	0.95	0.07	62,62,62,62	0
58	MG	2A	3480	1/1	0.95	0.12	37,37,37,37	0
58	MG	1A	3920	1/1	0.95	0.07	46,46,46,46	0
58	MG	1A	3921	1/1	0.95	0.12	69,69,69,69	0
58	MG	1E	315	1/1	0.95	0.05	45,45,45,45	0
58	MG	2B	212	1/1	0.95	0.25	62,62,62,62	0
58	MG	1a	1732	1/1	0.95	0.08	52,52,52,52	0
58	MG	1A	3545	1/1	0.95	0.18	60,60,60,60	0
58	MG	1F	303	1/1	0.95	0.12	29,29,29,29	0
58	MG	1A	3434	1/1	0.95	0.10	52,52,52,52	0
58	MG	1F	310	1/1	0.95	0.14	47,47,47,47	0
58	MG	1F	311	1/1	0.95	0.17	40,40,40,40	0
58	MG	2A	3493	1/1	0.95	0.18	44,44,44,44	0
58	MG	1A	3016	1/1	0.95	0.14	61,61,61,61	0
58	MG	1A	3736	1/1	0.95	0.07	42,42,42,42	0
58	MG	1A	3737	1/1	0.95	0.07	64,64,64,64	0
58	MG	1G	204	1/1	0.95	0.12	52,52,52,52	0
58	MG	1A	3111	1/1	0.95	0.17	39,39,39,39	0
58	MG	1a	1749	1/1	0.95	0.14	53,53,53,53	0
58	MG	2A	3207	1/1	0.95	0.08	55,55,55,55	0
58	MG	2E	304	1/1	0.95	0.08	61,61,61,61	0
58	MG	2A	3208	1/1	0.95	0.08	42,42,42,42	0
58	MG	1a	1752	1/1	0.95	0.09	48,48,48,48	0
58	MG	1a	1753	1/1	0.95	0.19	58,58,58,58	0
58	MG	1H	201	1/1	0.95	0.09	36,36,36,36	0
58	MG	2A	3215	1/1	0.95	0.10	67,67,67,67	0
58	MG	1I	201	1/1	0.95	0.08	59,59,59,59	0
58	MG	2A	3217	1/1	0.95	0.14	44,44,44,44	0
58	MG	2F	306	1/1	0.95	0.34	50,50,50,50	0
58	MG	1N	201	1/1	0.95	0.08	39,39,39,39	0
58	MG	2A	3219	1/1	0.95	0.15	46,46,46,46	0
58	MG	2A	3516	1/1	0.95	0.07	42,42,42,42	0
58	MG	1A	3076	1/1	0.95	0.22	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3222	1/1	0.95	0.17	50,50,50,50	0
58	MG	2A	3223	1/1	0.95	0.20	52,52,52,52	0
58	MG	2Q	201	1/1	0.95	0.08	56,56,56,56	0
58	MG	1O	202	1/1	0.95	0.17	55,55,55,55	0
58	MG	1A	3748	1/1	0.95	0.07	49,49,49,49	0
58	MG	1P	204	1/1	0.95	0.36	57,57,57,57	0
58	MG	2A	3228	1/1	0.95	0.08	53,53,53,53	0
58	MG	2T	3502	1/1	0.95	0.10	52,52,52,52	0
58	MG	2A	3229	1/1	0.95	0.07	67,67,67,67	0
58	MG	2A	3527	1/1	0.95	0.07	39,39,39,39	0
58	MG	2A	3230	1/1	0.95	0.07	31,31,31,31	0
58	MG	1A	3353	1/1	0.95	0.18	54,54,54,54	0
58	MG	1a	1765	1/1	0.95	0.07	60,60,60,60	0
58	MG	1Q	202	1/1	0.95	0.09	33,33,33,33	0
58	MG	2A	3532	1/1	0.95	0.14	52,52,52,52	0
58	MG	1Q	203	1/1	0.95	0.06	38,38,38,38	0
58	MG	1A	3557	1/1	0.95	0.08	41,41,41,41	0
58	MG	2A	3538	1/1	0.95	0.08	49,49,49,49	0
58	MG	25	102	1/1	0.95	0.20	39,39,39,39	0
58	MG	1a	1771	1/1	0.95	0.09	66,66,66,66	0
58	MG	2A	3239	1/1	0.95	0.10	63,63,63,63	0
58	MG	1A	3563	1/1	0.95	0.23	58,58,58,58	0
58	MG	1A	3442	1/1	0.95	0.28	44,44,44,44	0
58	MG	1A	3286	1/1	0.95	0.12	52,52,52,52	0
58	MG	1a	1775	1/1	0.95	0.12	58,58,58,58	0
58	MG	2A	3550	1/1	0.95	0.12	46,46,46,46	0
58	MG	1A	3950	1/1	0.95	0.07	45,45,45,45	0
58	MG	1a	1779	1/1	0.95	0.09	69,69,69,69	0
58	MG	2A	3553	1/1	0.95	0.07	29,29,29,29	0
58	MG	1A	3570	1/1	0.95	0.20	32,32,32,32	0
58	MG	2A	3560	1/1	0.95	0.07	44,44,44,44	0
58	MG	1A	3953	1/1	0.95	0.06	43,43,43,43	0
58	MG	1S	203	1/1	0.95	0.11	61,61,61,61	0
58	MG	1A	3761	1/1	0.95	0.13	45,45,45,45	0
58	MG	2A	3565	1/1	0.95	0.16	54,54,54,54	0
58	MG	2A	3566	1/1	0.95	0.07	45,45,45,45	0
58	MG	1A	3027	1/1	0.95	0.20	27,27,27,27	0
58	MG	1A	3764	1/1	0.95	0.06	25,25,25,25	0
58	MG	1U	205	1/1	0.95	0.09	31,31,31,31	0
58	MG	1U	206	1/1	0.95	0.32	30,30,30,30	0
58	MG	1A	3573	1/1	0.95	0.14	40,40,40,40	0
58	MG	1V	208	1/1	0.95	0.08	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3577	1/1	0.95	0.08	45,45,45,45	0
58	MG	1A	3959	1/1	0.95	0.10	49,49,49,49	0
58	MG	2A	3577	1/1	0.95	0.10	53,53,53,53	0
58	MG	1W	202	1/1	0.95	0.13	53,53,53,53	0
58	MG	2A	3262	1/1	0.95	0.28	58,58,58,58	0
58	MG	1a	1798	1/1	0.95	0.08	66,66,66,66	0
58	MG	1A	3580	1/1	0.95	0.12	23,23,23,23	0
58	MG	1A	3356	1/1	0.95	0.09	43,43,43,43	0
58	MG	1A	3449	1/1	0.95	0.12	47,47,47,47	0
58	MG	2a	1634	1/1	0.95	0.14	64,64,64,64	0
58	MG	1A	3116	1/1	0.95	0.07	41,41,41,41	0
58	MG	1a	1807	1/1	0.95	0.07	51,51,51,51	0
58	MG	1A	3967	1/1	0.95	0.07	53,53,53,53	0
58	MG	2A	3591	1/1	0.95	0.13	53,53,53,53	0
58	MG	2A	3592	1/1	0.95	0.14	53,53,53,53	0
58	MG	2A	3593	1/1	0.95	0.10	58,58,58,58	0
58	MG	1A	3085	1/1	0.95	0.14	31,31,31,31	0
58	MG	2A	3595	1/1	0.95	0.14	62,62,62,62	0
58	MG	1A	3453	1/1	0.95	0.09	41,41,41,41	0
58	MG	2a	1646	1/1	0.95	0.08	61,61,61,61	0
58	MG	2A	3597	1/1	0.95	0.13	53,53,53,53	0
58	MG	1A	3588	1/1	0.95	0.12	50,50,50,50	0
58	MG	10	109	1/1	0.95	0.07	46,46,46,46	0
58	MG	1A	3240	1/1	0.95	0.20	34,34,34,34	0
58	MG	1l	201	1/1	0.95	0.05	76,76,76,76	0
58	MG	2A	3602	1/1	0.95	0.11	54,54,54,54	0
58	MG	2A	3281	1/1	0.95	0.08	47,47,47,47	0
58	MG	2a	1654	1/1	0.95	0.06	58,58,58,58	0
58	MG	2A	3282	1/1	0.95	0.07	44,44,44,44	0
58	MG	2A	3284	1/1	0.95	0.11	71,71,71,71	0
58	MG	1A	3788	1/1	0.95	0.08	58,58,58,58	0
58	MG	1l	105	1/1	0.95	0.07	42,42,42,42	0
58	MG	1n	102	1/1	0.95	0.26	59,59,59,59	0
58	MG	1p	101	1/1	0.95	0.11	51,51,51,51	0
58	MG	2a	1661	1/1	0.95	0.12	70,70,70,70	0
58	MG	2A	3289	1/1	0.95	0.12	58,58,58,58	0
58	MG	2A	3612	1/1	0.95	0.15	37,37,37,37	0
58	MG	1A	3591	1/1	0.95	0.12	53,53,53,53	0
58	MG	13	102	1/1	0.95	0.07	34,34,34,34	0
58	MG	1A	3361	1/1	0.95	0.12	36,36,36,36	0
58	MG	1A	3297	1/1	0.95	0.11	35,35,35,35	0
58	MG	2A	3619	1/1	0.95	0.07	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3621	1/1	0.95	0.13	38,38,38,38	0
58	MG	2A	3294	1/1	0.95	0.09	61,61,61,61	0
58	MG	1A	3795	1/1	0.95	0.06	23,23,23,23	0
58	MG	1A	3594	1/1	0.95	0.16	52,52,52,52	0
58	MG	15	105	1/1	0.95	0.16	38,38,38,38	0
58	MG	1A	3982	1/1	0.95	0.11	35,35,35,35	0
58	MG	2A	3299	1/1	0.95	0.15	48,48,48,48	0
58	MG	1A	3459	1/1	0.95	0.09	31,31,31,31	0
58	MG	1A	3179	1/1	0.95	0.13	23,23,23,23	0
58	MG	1A	3461	1/1	0.95	0.15	37,37,37,37	0
58	MG	1A	3598	1/1	0.95	0.11	37,37,37,37	0
58	MG	2A	3639	1/1	0.95	0.15	54,54,54,54	0
58	MG	1A	3993	1/1	0.95	0.05	16,16,16,16	0
58	MG	1A	3464	1/1	0.95	0.08	54,54,54,54	0
58	MG	18	107	1/1	0.95	0.10	58,58,58,58	0
58	MG	2A	3002	1/1	0.95	0.27	49,49,49,49	0
58	MG	1A	3368	1/1	0.95	0.12	53,53,53,53	0
58	MG	1A	3033	1/1	0.95	0.17	30,30,30,30	0
58	MG	2A	3650	1/1	0.95	0.18	60,60,60,60	0
58	MG	2a	1692	1/1	0.95	0.12	82,82,82,82	0
58	MG	1A	4000	1/1	0.95	0.14	39,39,39,39	0
58	MG	1A	4002	1/1	0.95	0.07	24,24,24,24	0
58	MG	1A	3467	1/1	0.95	0.20	47,47,47,47	0
58	MG	2a	1696	1/1	0.95	0.18	60,60,60,60	0
58	MG	2A	3015	1/1	0.95	0.09	48,48,48,48	0
58	MG	1A	4015	1/1	0.95	0.13	58,58,58,58	0
58	MG	2A	3658	1/1	0.95	0.05	48,48,48,48	0
58	MG	2A	3020	1/1	0.95	0.08	56,56,56,56	0
58	MG	1a	1605	1/1	0.95	0.10	47,47,47,47	0
58	MG	2a	1703	1/1	0.95	0.12	59,59,59,59	0
58	MG	1a	1606	1/1	0.95	0.12	65,65,65,65	0
58	MG	2A	3025	1/1	0.95	0.10	52,52,52,52	0
58	MG	2A	3026	1/1	0.95	0.16	46,46,46,46	0
58	MG	2A	3028	1/1	0.95	0.13	58,58,58,58	0
58	MG	1A	3181	1/1	0.95	0.10	48,48,48,48	0
58	MG	2A	3030	1/1	0.95	0.12	44,44,44,44	0
58	MG	1A	3304	1/1	0.95	0.23	56,56,56,56	0
58	MG	1A	3373	1/1	0.95	0.07	37,37,37,37	0
58	MG	1A	3124	1/1	0.95	0.27	32,32,32,32	0
58	MG	1A	3183	1/1	0.95	0.14	67,67,67,67	0
58	MG	1A	4022	1/1	0.95	0.07	49,49,49,49	0
58	MG	1A	3307	1/1	0.95	0.09	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3128	1/1	0.95	0.11	33,33,33,33	0
58	MG	2A	3677	1/1	0.95	0.11	54,54,54,54	0
58	MG	1A	4031	1/1	0.95	0.12	38,38,38,38	0
58	MG	1A	3826	1/1	0.95	0.06	33,33,33,33	0
58	MG	2A	3336	1/1	0.95	0.17	59,59,59,59	0
58	MG	1A	3309	1/1	0.95	0.13	45,45,45,45	0
58	MG	1A	3828	1/1	0.95	0.12	33,33,33,33	0
58	MG	1a	1624	1/1	0.95	0.27	54,54,54,54	0
58	MG	2a	1726	1/1	0.95	0.25	63,63,63,63	0
58	MG	2a	1727	1/1	0.95	0.17	62,62,62,62	0
58	MG	1A	4036	1/1	0.95	0.06	37,37,37,37	0
58	MG	2A	3342	1/1	0.95	0.11	55,55,55,55	0
58	MG	2A	3343	1/1	0.95	0.20	52,52,52,52	0
58	MG	2A	3688	1/1	0.95	0.06	69,69,69,69	0
58	MG	2A	3050	1/1	0.95	0.11	47,47,47,47	0
58	MG	1A	3632	1/1	0.95	0.06	30,30,30,30	0
58	MG	1A	3088	1/1	0.95	0.09	38,38,38,38	0
58	MG	1A	3835	1/1	0.95	0.09	51,51,51,51	0
58	MG	2A	3693	1/1	0.95	0.07	51,51,51,51	0
58	MG	1A	3636	1/1	0.95	0.06	20,20,20,20	0
58	MG	1A	3090	1/1	0.95	0.08	39,39,39,39	0
58	MG	1a	1634	1/1	0.95	0.28	74,74,74,74	0
58	MG	2A	3697	1/1	0.95	0.27	61,61,61,61	0
58	MG	2A	3698	1/1	0.95	0.11	55,55,55,55	0
58	MG	2A	3699	1/1	0.95	0.12	44,44,44,44	0
58	MG	1A	3484	1/1	0.95	0.22	52,52,52,52	0
58	MG	1A	4048	1/1	0.95	0.11	53,53,53,53	0
58	MG	1A	3389	1/1	0.95	0.28	46,46,46,46	0
58	MG	2a	1746	1/1	0.95	0.17	63,63,63,63	0
58	MG	1A	4050	1/1	0.95	0.06	39,39,39,39	0
58	MG	1a	1640	1/1	0.95	0.17	56,56,56,56	0
58	MG	1A	3091	1/1	0.95	0.10	36,36,36,36	0
58	MG	1A	3315	1/1	0.95	0.06	26,26,26,26	0
58	MG	2A	3068	1/1	0.95	0.18	52,52,52,52	0
58	MG	2A	3070	1/1	0.95	0.05	34,34,34,34	0
58	MG	2A	3711	1/1	0.95	0.10	54,54,54,54	0
58	MG	2A	3712	1/1	0.95	0.08	48,48,48,48	0
58	MG	2A	3714	1/1	0.95	0.08	40,40,40,40	0
58	MG	2A	3072	1/1	0.95	0.10	46,46,46,46	0
58	MG	2A	3718	1/1	0.95	0.15	58,58,58,58	0
58	MG	1A	3843	1/1	0.95	0.07	40,40,40,40	0
58	MG	1A	3644	1/1	0.95	0.06	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2a	1763	1/1	0.95	0.15	55,55,55,55	0
58	MG	2a	1764	1/1	0.95	0.09	51,51,51,51	0
58	MG	2A	3076	1/1	0.95	0.10	48,48,48,48	0
58	MG	1a	1650	1/1	0.95	0.10	50,50,50,50	0
58	MG	1A	4058	1/1	0.95	0.09	43,43,43,43	0
58	MG	1a	1652	1/1	0.95	0.19	56,56,56,56	0
58	MG	2a	1769	1/1	0.95	0.07	55,55,55,55	0
58	MG	2A	3082	1/1	0.95	0.07	44,44,44,44	0
58	MG	1A	3256	1/1	0.95	0.07	39,39,39,39	0
58	MG	1A	3495	1/1	0.95	0.23	45,45,45,45	0
58	MG	1A	3648	1/1	0.95	0.06	26,26,26,26	0
58	MG	1A	3649	1/1	0.95	0.05	29,29,29,29	0
58	MG	2a	1777	1/1	0.95	0.14	64,64,64,64	0
58	MG	1A	3137	1/1	0.95	0.33	34,34,34,34	0
58	MG	1A	3499	1/1	0.95	0.13	57,57,57,57	0
58	MG	2a	1783	1/1	0.95	0.19	58,58,58,58	0
58	MG	1A	3858	1/1	0.95	0.10	36,36,36,36	0
58	MG	2A	3094	1/1	0.95	0.14	52,52,52,52	0
58	MG	1A	3092	1/1	0.95	0.10	47,47,47,47	0
58	MG	1A	3006	1/1	0.95	0.11	40,40,40,40	0
58	MG	2A	3099	1/1	0.95	0.11	55,55,55,55	0
58	MG	1A	3861	1/1	0.95	0.06	45,45,45,45	0
58	MG	2A	3101	1/1	0.95	0.23	59,59,59,59	0
58	MG	1a	1665	1/1	0.95	0.21	56,56,56,56	0
58	MG	1A	3399	1/1	0.95	0.13	40,40,40,40	0
58	MG	2A	3104	1/1	0.95	0.10	34,34,34,34	0
58	MG	1A	3657	1/1	0.95	0.06	31,31,31,31	0
58	MG	2A	3747	1/1	0.95	0.10	53,53,53,53	0
58	MG	1A	3148	1/1	0.95	0.18	43,43,43,43	0
58	MG	1A	3327	1/1	0.95	0.23	48,48,48,48	0
58	MG	2A	3108	1/1	0.95	0.11	62,62,62,62	0
58	MG	1A	3664	1/1	0.95	0.09	46,46,46,46	0
58	MG	2A	3111	1/1	0.95	0.12	51,51,51,51	0
58	MG	1A	3328	1/1	0.95	0.21	52,52,52,52	0
58	MG	2a	1804	1/1	0.95	0.24	53,53,53,53	0
58	MG	1a	1673	1/1	0.95	0.14	48,48,48,48	0
58	MG	2A	3760	1/1	0.95	0.07	51,51,51,51	0
58	MG	1A	3206	1/1	0.95	0.07	33,33,33,33	0
58	MG	2a	1809	1/1	0.95	0.18	63,63,63,63	0
58	MG	2A	3399	1/1	0.95	0.17	39,39,39,39	0
58	MG	2A	3400	1/1	0.95	0.10	39,39,39,39	0
58	MG	1A	4087	1/1	0.95	0.10	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3403	1/1	0.95	0.19	49,49,49,49	0
58	MG	2A	3120	1/1	0.95	0.08	42,42,42,42	0
58	MG	2A	3123	1/1	0.95	0.08	48,48,48,48	0
58	MG	2A	3409	1/1	0.95	0.09	37,37,37,37	0
58	MG	1A	3024	1/1	0.95	0.06	38,38,38,38	0
58	MG	1A	4090	1/1	0.95	0.13	58,58,58,58	0
58	MG	1a	1678	1/1	0.95	0.08	54,54,54,54	0
58	MG	1A	3671	1/1	0.95	0.09	40,40,40,40	0
58	MG	2a	1823	1/1	0.95	0.18	59,59,59,59	0
58	MG	1A	3100	1/1	0.95	0.17	49,49,49,49	0
58	MG	1A	3333	1/1	0.95	0.06	48,48,48,48	0
58	MG	1A	3873	1/1	0.95	0.19	34,34,34,34	0
58	MG	2a	1827	1/1	0.95	0.14	63,63,63,63	0
58	MG	1A	3520	1/1	0.95	0.09	45,45,45,45	0
58	MG	1B	201	1/1	0.95	0.06	42,42,42,42	0
58	MG	2a	1830	1/1	0.95	0.11	65,65,65,65	0
58	MG	1A	3521	1/1	0.95	0.07	44,44,44,44	0
58	MG	2A	3421	1/1	0.95	0.17	47,47,47,47	0
58	MG	1A	3334	1/1	0.95	0.11	56,56,56,56	0
58	MG	2A	3793	1/1	0.95	0.07	60,60,60,60	0
58	MG	2A	3135	1/1	0.95	0.10	57,57,57,57	0
58	MG	1A	3152	1/1	0.95	0.23	40,40,40,40	0
58	MG	2A	3797	1/1	0.95	0.13	65,65,65,65	0
58	MG	2A	3798	1/1	0.95	0.06	43,43,43,43	0
58	MG	1A	3336	1/1	0.95	0.06	57,57,57,57	0
58	MG	1A	3691	1/1	0.95	0.08	17,17,17,17	0
58	MG	1A	3527	1/1	0.95	0.11	44,44,44,44	0
58	MG	2l	204	1/1	0.95	0.05	61,61,61,61	0
58	MG	2A	3803	1/1	0.95	0.06	41,41,41,41	0
58	MG	1A	3528	1/1	0.95	0.19	49,49,49,49	0
58	MG	2q	202	1/1	0.95	0.09	65,65,65,65	0
58	MG	1A	3698	1/1	0.95	0.06	28,28,28,28	0
58	MG	1A	3529	1/1	0.95	0.21	38,38,38,38	0
58	MG	1A	3700	1/1	0.95	0.07	28,28,28,28	0
58	MG	1B	221	1/1	0.95	0.10	60,60,60,60	0
58	MG	1A	3701	1/1	0.95	0.04	25,25,25,25	0
58	MG	2A	3155	1/1	0.95	0.16	57,57,57,57	0
58	MG	1A	3055	1/1	0.95	0.14	37,37,37,37	0
58	MG	1A	3422	1/1	0.95	0.10	40,40,40,40	0
58	MG	2A	3440	1/1	0.95	0.07	47,47,47,47	0
58	MG	2x	104	1/1	0.95	0.26	55,55,55,55	0
58	MG	1A	3709	1/1	0.95	0.14	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3442	1/1	0.95	0.06	54,54,54,54	0
58	MG	2A	3823	1/1	0.95	0.09	60,60,60,60	0
58	MG	1A	3710	1/1	0.95	0.08	42,42,42,42	0
58	MG	1A	4095	1/1	0.96	0.16	37,37,37,37	0
58	MG	1A	3579	1/1	0.96	0.07	34,34,34,34	0
58	MG	2A	3562	1/1	0.96	0.11	45,45,45,45	0
58	MG	1A	3381	1/1	0.96	0.17	35,35,35,35	0
58	MG	1a	1644	1/1	0.96	0.18	38,38,38,38	0
58	MG	1A	3904	1/1	0.96	0.11	53,53,53,53	0
58	MG	1A	3320	1/1	0.96	0.16	46,46,46,46	0
58	MG	1A	3742	1/1	0.96	0.05	54,54,54,54	0
58	MG	1A	3067	1/1	0.96	0.13	45,45,45,45	0
58	MG	1A	3469	1/1	0.96	0.10	40,40,40,40	0
58	MG	1A	3914	1/1	0.96	0.06	27,27,27,27	0
58	MG	1B	209	1/1	0.96	0.13	48,48,48,48	0
58	MG	1A	3138	1/1	0.96	0.10	41,41,41,41	0
58	MG	2A	3049	1/1	0.96	0.12	33,33,33,33	0
58	MG	1A	3916	1/1	0.96	0.11	49,49,49,49	0
58	MG	1A	3917	1/1	0.96	0.06	39,39,39,39	0
58	MG	1A	3471	1/1	0.96	0.20	51,51,51,51	0
58	MG	2A	3579	1/1	0.96	0.11	55,55,55,55	0
58	MG	2A	3053	1/1	0.96	0.12	66,66,66,66	0
58	MG	2A	3305	1/1	0.96	0.31	60,60,60,60	0
58	MG	1A	3323	1/1	0.96	0.13	51,51,51,51	0
58	MG	1a	1660	1/1	0.96	0.12	67,67,67,67	0
58	MG	2A	3056	1/1	0.96	0.09	48,48,48,48	0
58	MG	1B	219	1/1	0.96	0.09	38,38,38,38	0
58	MG	2P	203	1/1	0.96	0.08	55,55,55,55	0
58	MG	1A	3210	1/1	0.96	0.11	41,41,41,41	0
58	MG	2A	3059	1/1	0.96	0.15	49,49,49,49	0
58	MG	1A	3754	1/1	0.96	0.09	44,44,44,44	0
58	MG	1A	3264	1/1	0.96	0.21	45,45,45,45	0
58	MG	1a	1666	1/1	0.96	0.23	63,63,63,63	0
58	MG	1A	3476	1/1	0.96	0.11	41,41,41,41	0
58	MG	2A	3064	1/1	0.96	0.10	68,68,68,68	0
58	MG	1A	3759	1/1	0.96	0.08	43,43,43,43	0
58	MG	2V	201	1/1	0.96	0.23	52,52,52,52	0
58	MG	2A	3318	1/1	0.96	0.07	51,51,51,51	0
58	MG	1A	3169	1/1	0.96	0.06	38,38,38,38	0
58	MG	1A	3044	1/1	0.96	0.05	30,30,30,30	0
58	MG	1A	3215	1/1	0.96	0.15	40,40,40,40	0
58	MG	2A	3069	1/1	0.96	0.06	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3395	1/1	0.96	0.25	43,43,43,43	0
58	MG	2A	3071	1/1	0.96	0.13	50,50,50,50	0
58	MG	23	102	1/1	0.96	0.07	57,57,57,57	0
58	MG	23	103	1/1	0.96	0.08	59,59,59,59	0
58	MG	1A	3482	1/1	0.96	0.09	46,46,46,46	0
58	MG	1A	3330	1/1	0.96	0.13	43,43,43,43	0
58	MG	2A	3074	1/1	0.96	0.10	49,49,49,49	0
58	MG	27	102	1/1	0.96	0.07	53,53,53,53	0
58	MG	1A	3269	1/1	0.96	0.12	44,44,44,44	0
58	MG	2A	3330	1/1	0.96	0.10	43,43,43,43	0
58	MG	1A	3600	1/1	0.96	0.11	37,37,37,37	0
58	MG	1B	236	1/1	0.96	0.10	44,44,44,44	0
58	MG	1D	302	1/1	0.96	0.18	36,36,36,36	0
58	MG	2a	1604	1/1	0.96	0.10	52,52,52,52	0
58	MG	1D	308	1/1	0.96	0.06	37,37,37,37	0
58	MG	1D	310	1/1	0.96	0.27	27,27,27,27	0
58	MG	1D	311	1/1	0.96	0.08	42,42,42,42	0
58	MG	1A	3216	1/1	0.96	0.10	40,40,40,40	0
58	MG	2A	3618	1/1	0.96	0.15	51,51,51,51	0
58	MG	2A	3086	1/1	0.96	0.07	47,47,47,47	0
58	MG	2A	3620	1/1	0.96	0.11	51,51,51,51	0
58	MG	2A	3087	1/1	0.96	0.06	44,44,44,44	0
58	MG	2a	1613	1/1	0.96	0.10	46,46,46,46	0
58	MG	1E	301	1/1	0.96	0.28	37,37,37,37	0
58	MG	1A	3602	1/1	0.96	0.07	38,38,38,38	0
58	MG	1A	3949	1/1	0.96	0.06	49,49,49,49	0
58	MG	1E	306	1/1	0.96	0.14	29,29,29,29	0
58	MG	2A	3628	1/1	0.96	0.18	54,54,54,54	0
58	MG	2a	1620	1/1	0.96	0.07	62,62,62,62	0
58	MG	1A	3603	1/1	0.96	0.08	24,24,24,24	0
58	MG	1A	3217	1/1	0.96	0.13	38,38,38,38	0
58	MG	2A	3095	1/1	0.96	0.13	50,50,50,50	0
58	MG	2A	3096	1/1	0.96	0.07	31,31,31,31	0
58	MG	1A	3176	1/1	0.96	0.04	26,26,26,26	0
58	MG	1A	3220	1/1	0.96	0.07	45,45,45,45	0
58	MG	1A	3786	1/1	0.96	0.08	43,43,43,43	0
58	MG	2A	3640	1/1	0.96	0.10	32,32,32,32	0
58	MG	1A	3609	1/1	0.96	0.06	41,41,41,41	0
58	MG	1A	3790	1/1	0.96	0.06	34,34,34,34	0
58	MG	1A	3490	1/1	0.96	0.06	47,47,47,47	0
58	MG	1F	301	1/1	0.96	0.15	40,40,40,40	0
58	MG	1A	3792	1/1	0.96	0.09	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1F	307	1/1	0.96	0.15	25,25,25,25	0
58	MG	1A	3493	1/1	0.96	0.18	36,36,36,36	0
58	MG	1A	3619	1/1	0.96	0.07	30,30,30,30	0
58	MG	2A	3360	1/1	0.96	0.10	46,46,46,46	0
58	MG	1A	3963	1/1	0.96	0.08	47,47,47,47	0
58	MG	2A	3109	1/1	0.96	0.16	50,50,50,50	0
58	MG	2A	3655	1/1	0.96	0.10	58,58,58,58	0
58	MG	2A	3656	1/1	0.96	0.07	38,38,38,38	0
58	MG	1A	3177	1/1	0.96	0.04	22,22,22,22	0
58	MG	2a	1643	1/1	0.96	0.28	63,63,63,63	0
58	MG	1A	3408	1/1	0.96	0.09	46,46,46,46	0
58	MG	2a	1645	1/1	0.96	0.08	66,66,66,66	0
58	MG	1A	3497	1/1	0.96	0.04	28,28,28,28	0
58	MG	1A	3498	1/1	0.96	0.07	39,39,39,39	0
58	MG	1A	3627	1/1	0.96	0.05	21,21,21,21	0
58	MG	2A	3118	1/1	0.96	0.17	48,48,48,48	0
58	MG	1A	3629	1/1	0.96	0.07	31,31,31,31	0
58	MG	1A	3409	1/1	0.96	0.06	35,35,35,35	0
58	MG	2A	3121	1/1	0.96	0.07	49,49,49,49	0
58	MG	2A	3122	1/1	0.96	0.09	69,69,69,69	0
58	MG	1A	3026	1/1	0.96	0.19	69,69,69,69	0
58	MG	1N	202	1/1	0.96	0.05	35,35,35,35	0
58	MG	1N	204	1/1	0.96	0.06	38,38,38,38	0
58	MG	1A	3973	1/1	0.96	0.05	59,59,59,59	0
58	MG	1a	1716	1/1	0.96	0.13	67,67,67,67	0
58	MG	2A	3674	1/1	0.96	0.12	53,53,53,53	0
58	MG	1A	3501	1/1	0.96	0.10	46,46,46,46	0
58	MG	1A	3976	1/1	0.96	0.09	58,58,58,58	0
58	MG	2A	3382	1/1	0.96	0.08	59,59,59,59	0
58	MG	1P	202	1/1	0.96	0.17	28,28,28,28	0
58	MG	1A	3412	1/1	0.96	0.15	44,44,44,44	0
58	MG	1A	3413	1/1	0.96	0.05	50,50,50,50	0
58	MG	1A	3015	1/1	0.96	0.10	49,49,49,49	0
58	MG	2a	1667	1/1	0.96	0.12	44,44,44,44	0
58	MG	1A	3415	1/1	0.96	0.33	44,44,44,44	0
58	MG	2a	1669	1/1	0.96	0.07	56,56,56,56	0
58	MG	1a	1727	1/1	0.96	0.11	33,33,33,33	0
58	MG	1a	1729	1/1	0.96	0.08	51,51,51,51	0
58	MG	1A	3079	1/1	0.96	0.07	57,57,57,57	0
58	MG	2A	3138	1/1	0.96	0.09	40,40,40,40	0
58	MG	1A	3509	1/1	0.96	0.14	37,37,37,37	0
58	MG	1A	3511	1/1	0.96	0.23	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3144	1/1	0.96	0.11	47,47,47,47	0
58	MG	1A	3514	1/1	0.96	0.07	38,38,38,38	0
58	MG	1A	3988	1/1	0.96	0.07	43,43,43,43	0
58	MG	1A	3515	1/1	0.96	0.06	49,49,49,49	0
58	MG	1A	3340	1/1	0.96	0.18	48,48,48,48	0
58	MG	2A	3150	1/1	0.96	0.09	61,61,61,61	0
58	MG	2A	3402	1/1	0.96	0.18	45,45,45,45	0
58	MG	1A	3994	1/1	0.96	0.09	27,27,27,27	0
58	MG	1A	3341	1/1	0.96	0.18	36,36,36,36	0
58	MG	2A	3405	1/1	0.96	0.13	48,48,48,48	0
58	MG	1A	3996	1/1	0.96	0.06	34,34,34,34	0
58	MG	2A	3408	1/1	0.96	0.22	51,51,51,51	0
58	MG	1A	3150	1/1	0.96	0.21	37,37,37,37	0
58	MG	1A	3231	1/1	0.96	0.05	50,50,50,50	0
58	MG	1a	1745	1/1	0.96	0.12	44,44,44,44	0
58	MG	2A	3160	1/1	0.96	0.08	63,63,63,63	0
58	MG	1a	1746	1/1	0.96	0.14	47,47,47,47	0
58	MG	1A	3999	1/1	0.96	0.06	61,61,61,61	0
58	MG	1A	3834	1/1	0.96	0.09	48,48,48,48	0
58	MG	1V	202	1/1	0.96	0.23	28,28,28,28	0
58	MG	1V	206	1/1	0.96	0.17	43,43,43,43	0
58	MG	2A	3713	1/1	0.96	0.15	59,59,59,59	0
58	MG	1A	3347	1/1	0.96	0.08	34,34,34,34	0
58	MG	2A	3419	1/1	0.96	0.22	45,45,45,45	0
58	MG	1A	4004	1/1	0.96	0.06	35,35,35,35	0
58	MG	1a	1756	1/1	0.96	0.05	47,47,47,47	0
58	MG	1A	4005	1/1	0.96	0.07	25,25,25,25	0
58	MG	1a	1758	1/1	0.96	0.12	63,63,63,63	0
58	MG	1A	3426	1/1	0.96	0.17	57,57,57,57	0
58	MG	1A	4012	1/1	0.96	0.15	68,68,68,68	0
58	MG	1X	101	1/1	0.96	0.34	34,34,34,34	0
58	MG	1X	102	1/1	0.96	0.09	39,39,39,39	0
58	MG	1A	3290	1/1	0.96	0.13	36,36,36,36	0
58	MG	1A	3291	1/1	0.96	0.07	37,37,37,37	0
58	MG	2A	3180	1/1	0.96	0.05	59,59,59,59	0
58	MG	1A	4017	1/1	0.96	0.06	51,51,51,51	0
58	MG	1A	3659	1/1	0.96	0.08	28,28,28,28	0
58	MG	2A	3183	1/1	0.96	0.11	57,57,57,57	0
58	MG	10	101	1/1	0.96	0.08	34,34,34,34	0
58	MG	2A	3186	1/1	0.96	0.14	67,67,67,67	0
58	MG	2A	3436	1/1	0.96	0.12	41,41,41,41	0
58	MG	10	102	1/1	0.96	0.10	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	10	104	1/1	0.96	0.12	36,36,36,36	0
58	MG	1A	3660	1/1	0.96	0.05	29,29,29,29	0
58	MG	1A	3232	1/1	0.96	0.15	41,41,41,41	0
58	MG	2A	3443	1/1	0.96	0.12	58,58,58,58	0
58	MG	10	107	1/1	0.96	0.07	39,39,39,39	0
58	MG	2A	3445	1/1	0.96	0.11	52,52,52,52	0
58	MG	1A	3526	1/1	0.96	0.16	35,35,35,35	0
58	MG	1a	1777	1/1	0.96	0.10	49,49,49,49	0
58	MG	1a	1778	1/1	0.96	0.06	46,46,46,46	0
58	MG	2A	3750	1/1	0.96	0.08	54,54,54,54	0
58	MG	1A	3430	1/1	0.96	0.05	42,42,42,42	0
58	MG	2A	3752	1/1	0.96	0.12	57,57,57,57	0
58	MG	1A	3846	1/1	0.96	0.11	44,44,44,44	0
58	MG	11	102	1/1	0.96	0.08	43,43,43,43	0
58	MG	11	103	1/1	0.96	0.06	48,48,48,48	0
58	MG	1A	4029	1/1	0.96	0.07	47,47,47,47	0
58	MG	2A	3202	1/1	0.96	0.14	50,50,50,50	0
58	MG	2A	3759	1/1	0.96	0.14	56,56,56,56	0
58	MG	2A	3203	1/1	0.96	0.12	55,55,55,55	0
58	MG	2A	3458	1/1	0.96	0.07	57,57,57,57	0
58	MG	1A	3431	1/1	0.96	0.10	39,39,39,39	0
58	MG	2A	3764	1/1	0.96	0.09	57,57,57,57	0
58	MG	1A	3351	1/1	0.96	0.11	55,55,55,55	0
58	MG	2A	3767	1/1	0.96	0.12	59,59,59,59	0
58	MG	1A	3530	1/1	0.96	0.12	39,39,39,39	0
58	MG	2A	3769	1/1	0.96	0.07	48,48,48,48	0
58	MG	1A	4033	1/1	0.96	0.07	29,29,29,29	0
58	MG	2A	3771	1/1	0.96	0.05	69,69,69,69	0
58	MG	1A	3049	1/1	0.96	0.05	23,23,23,23	0
58	MG	2a	1753	1/1	0.96	0.07	56,56,56,56	0
58	MG	2A	3209	1/1	0.96	0.08	47,47,47,47	0
58	MG	13	105	1/1	0.96	0.05	31,31,31,31	0
58	MG	1A	3238	1/1	0.96	0.10	36,36,36,36	0
58	MG	2A	3777	1/1	0.96	0.06	48,48,48,48	0
58	MG	15	101	1/1	0.96	0.30	35,35,35,35	0
58	MG	15	102	1/1	0.96	0.14	33,33,33,33	0
58	MG	1A	3534	1/1	0.96	0.09	25,25,25,25	0
58	MG	1A	3857	1/1	0.96	0.11	22,22,22,22	0
58	MG	1A	3127	1/1	0.96	0.15	45,45,45,45	0
58	MG	1A	3153	1/1	0.96	0.07	30,30,30,30	0
58	MG	2A	3784	1/1	0.96	0.11	48,48,48,48	0
58	MG	16	102	1/1	0.96	0.06	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3221	1/1	0.96	0.20	60,60,60,60	0
58	MG	2A	3787	1/1	0.96	0.10	52,52,52,52	0
58	MG	2A	3479	1/1	0.96	0.10	43,43,43,43	0
58	MG	2A	3790	1/1	0.96	0.08	58,58,58,58	0
58	MG	2a	1771	1/1	0.96	0.10	63,63,63,63	0
58	MG	1A	3682	1/1	0.96	0.04	27,27,27,27	0
58	MG	17	104	1/1	0.96	0.06	32,32,32,32	0
58	MG	17	105	1/1	0.96	0.07	28,28,28,28	0
58	MG	1a	1810	1/1	0.96	0.14	56,56,56,56	0
58	MG	17	106	1/1	0.96	0.11	54,54,54,54	0
58	MG	2A	3796	1/1	0.96	0.10	52,52,52,52	0
58	MG	2a	1780	1/1	0.96	0.10	56,56,56,56	0
58	MG	1A	3189	1/1	0.96	0.09	35,35,35,35	0
58	MG	2a	1782	1/1	0.96	0.11	56,56,56,56	0
58	MG	1A	3019	1/1	0.96	0.07	40,40,40,40	0
58	MG	2A	3799	1/1	0.96	0.07	47,47,47,47	0
58	MG	18	103	1/1	0.96	0.07	35,35,35,35	0
58	MG	2a	1786	1/1	0.96	0.08	54,54,54,54	0
58	MG	1A	3541	1/1	0.96	0.06	40,40,40,40	0
58	MG	1A	3690	1/1	0.96	0.06	35,35,35,35	0
58	MG	2A	3491	1/1	0.96	0.13	49,49,49,49	0
58	MG	1m	3001	1/1	0.96	0.05	59,59,59,59	0
58	MG	1A	3103	1/1	0.96	0.12	28,28,28,28	0
58	MG	1A	3161	1/1	0.96	0.37	35,35,35,35	0
58	MG	2a	1793	1/1	0.96	0.06	65,65,65,65	0
58	MG	1A	3694	1/1	0.96	0.08	69,69,69,69	0
58	MG	2A	3499	1/1	0.96	0.07	63,63,63,63	0
58	MG	1A	3246	1/1	0.96	0.05	46,46,46,46	0
58	MG	1A	3447	1/1	0.96	0.21	35,35,35,35	0
58	MG	1A	3196	1/1	0.96	0.04	30,30,30,30	0
58	MG	1A	3365	1/1	0.96	0.09	40,40,40,40	0
58	MG	1A	3197	1/1	0.96	0.21	32,32,32,32	0
58	MG	1A	4063	1/1	0.96	0.05	36,36,36,36	0
58	MG	2A	3506	1/1	0.96	0.10	28,28,28,28	0
58	MG	2A	3821	1/1	0.96	0.08	51,51,51,51	0
58	MG	2A	3822	1/1	0.96	0.10	47,47,47,47	0
58	MG	1A	3703	1/1	0.96	0.06	17,17,17,17	0
58	MG	2A	3824	1/1	0.96	0.07	46,46,46,46	0
58	MG	1x	103	1/1	0.96	0.18	53,53,53,53	0
58	MG	1A	3039	1/1	0.96	0.07	49,49,49,49	0
58	MG	1A	3009	1/1	0.96	0.07	28,28,28,28	0
58	MG	2A	3512	1/1	0.96	0.09	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1a	1612	1/1	0.96	0.10	26,26,26,26	0
58	MG	2a	1813	1/1	0.96	0.05	63,63,63,63	0
58	MG	2A	3832	1/1	0.96	0.15	59,59,59,59	0
58	MG	1A	4070	1/1	0.96	0.06	32,32,32,32	0
58	MG	1x	108	1/1	0.96	0.06	26,26,26,26	0
58	MG	1A	3311	1/1	0.96	0.21	44,44,44,44	0
58	MG	1A	3879	1/1	0.96	0.06	25,25,25,25	0
58	MG	2A	3838	1/1	0.96	0.07	40,40,40,40	0
58	MG	2a	1820	1/1	0.96	0.14	61,61,61,61	0
58	MG	1A	3562	1/1	0.96	0.08	57,57,57,57	0
58	MG	1a	1617	1/1	0.96	0.05	52,52,52,52	0
58	MG	2A	3842	1/1	0.96	0.07	46,46,46,46	0
58	MG	1A	3371	1/1	0.96	0.29	47,47,47,47	0
58	MG	2A	3844	1/1	0.96	0.09	45,45,45,45	0
58	MG	1A	3255	1/1	0.96	0.09	22,22,22,22	0
58	MG	2A	3523	1/1	0.96	0.05	47,47,47,47	0
58	MG	2A	3259	1/1	0.96	0.09	53,53,53,53	0
58	MG	2A	3006	1/1	0.96	0.23	55,55,55,55	0
58	MG	1A	3884	1/1	0.96	0.12	30,30,30,30	0
58	MG	1A	3203	1/1	0.96	0.14	21,21,21,21	0
58	MG	2A	3009	1/1	0.96	0.07	52,52,52,52	0
58	MG	2A	3010	1/1	0.96	0.09	61,61,61,61	0
58	MG	1A	3314	1/1	0.96	0.17	53,53,53,53	0
58	MG	1A	3136	1/1	0.96	0.14	22,22,22,22	0
58	MG	2A	3858	1/1	0.96	0.08	53,53,53,53	0
58	MG	1A	3717	1/1	0.96	0.07	49,49,49,49	0
58	MG	2A	3533	1/1	0.96	0.20	60,60,60,60	0
58	MG	1A	3719	1/1	0.96	0.06	47,47,47,47	0
58	MG	2A	3536	1/1	0.96	0.09	55,55,55,55	0
58	MG	2A	3863	1/1	0.96	0.08	58,58,58,58	0
58	MG	2A	3017	1/1	0.96	0.07	40,40,40,40	0
58	MG	2A	3018	1/1	0.96	0.17	49,49,49,49	0
58	MG	1A	4085	1/1	0.96	0.11	39,39,39,39	0
58	MG	1A	3572	1/1	0.96	0.05	35,35,35,35	0
58	MG	1A	3316	1/1	0.96	0.21	31,31,31,31	0
58	MG	2A	3278	1/1	0.96	0.08	60,60,60,60	0
58	MG	2A	3543	1/1	0.96	0.07	52,52,52,52	0
58	MG	2A	3544	1/1	0.96	0.06	37,37,37,37	0
58	MG	1A	4088	1/1	0.96	0.06	47,47,47,47	0
58	MG	1A	3725	1/1	0.96	0.06	33,33,33,33	0
58	MG	1A	3574	1/1	0.96	0.11	40,40,40,40	0
58	MG	1A	3575	1/1	0.96	0.12	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3729	1/1	0.96	0.08	63,63,63,63	0
58	MG	2A	3031	1/1	0.96	0.08	48,48,48,48	0
58	MG	1A	3165	1/1	0.96	0.16	35,35,35,35	0
58	MG	2A	3556	1/1	0.96	0.06	41,41,41,41	0
58	MG	2A	3557	1/1	0.96	0.07	36,36,36,36	0
58	MG	2A	3558	1/1	0.96	0.08	62,62,62,62	0
59	K	2A	3448	1/1	0.96	0.07	65,65,65,65	0
60	ZN	14	102	1/1	0.96	0.10	112,112,112,112	0
58	MG	1A	3398	1/1	0.97	0.09	31,31,31,31	0
58	MG	1A	3071	1/1	0.97	0.15	28,28,28,28	0
58	MG	1A	3400	1/1	0.97	0.06	36,36,36,36	0
58	MG	1B	207	1/1	0.97	0.15	46,46,46,46	0
58	MG	2A	3326	1/1	0.97	0.07	36,36,36,36	0
58	MG	1A	3204	1/1	0.97	0.10	27,27,27,27	0
58	MG	1A	3263	1/1	0.97	0.23	46,46,46,46	0
58	MG	2Q	202	1/1	0.97	0.06	45,45,45,45	0
58	MG	1A	3730	1/1	0.97	0.07	47,47,47,47	0
58	MG	1A	3005	1/1	0.97	0.05	26,26,26,26	0
58	MG	1A	3901	1/1	0.97	0.10	33,33,33,33	0
58	MG	2A	3611	1/1	0.97	0.08	36,36,36,36	0
58	MG	1a	1662	1/1	0.97	0.05	47,47,47,47	0
58	MG	1A	3107	1/1	0.97	0.21	31,31,31,31	0
58	MG	2A	3614	1/1	0.97	0.08	45,45,45,45	0
58	MG	1B	214	1/1	0.97	0.19	51,51,51,51	0
58	MG	2V	202	1/1	0.97	0.05	51,51,51,51	0
58	MG	1A	3406	1/1	0.97	0.09	42,42,42,42	0
58	MG	2X	101	1/1	0.97	0.07	64,64,64,64	0
58	MG	1B	218	1/1	0.97	0.05	40,40,40,40	0
58	MG	1A	3034	1/1	0.97	0.06	45,45,45,45	0
58	MG	20	101	1/1	0.97	0.16	64,64,64,64	0
58	MG	1B	220	1/1	0.97	0.08	31,31,31,31	0
58	MG	2A	3339	1/1	0.97	0.05	51,51,51,51	0
58	MG	2A	3077	1/1	0.97	0.09	37,37,37,37	0
58	MG	2A	3622	1/1	0.97	0.10	51,51,51,51	0
58	MG	1A	3738	1/1	0.97	0.09	58,58,58,58	0
58	MG	2A	3079	1/1	0.97	0.07	24,24,24,24	0
58	MG	1A	3739	1/1	0.97	0.07	37,37,37,37	0
58	MG	2A	3626	1/1	0.97	0.07	41,41,41,41	0
58	MG	25	103	1/1	0.97	0.08	47,47,47,47	0
58	MG	1A	3908	1/1	0.97	0.10	33,33,33,33	0
58	MG	27	101	1/1	0.97	0.16	51,51,51,51	0
58	MG	1A	3741	1/1	0.97	0.07	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3629	1/1	0.97	0.07	37,37,37,37	0
58	MG	1A	3910	1/1	0.97	0.14	32,32,32,32	0
58	MG	2A	3084	1/1	0.97	0.06	43,43,43,43	0
58	MG	2A	3633	1/1	0.97	0.08	52,52,52,52	0
58	MG	1A	3912	1/1	0.97	0.03	26,26,26,26	0
58	MG	1B	227	1/1	0.97	0.06	39,39,39,39	0
58	MG	1A	3154	1/1	0.97	0.10	49,49,49,49	0
58	MG	2A	3088	1/1	0.97	0.06	50,50,50,50	0
58	MG	1A	3268	1/1	0.97	0.23	40,40,40,40	0
58	MG	1A	3745	1/1	0.97	0.06	42,42,42,42	0
58	MG	1A	3491	1/1	0.97	0.12	46,46,46,46	0
58	MG	1A	3492	1/1	0.97	0.10	36,36,36,36	0
58	MG	1A	3209	1/1	0.97	0.06	36,36,36,36	0
58	MG	1a	1682	1/1	0.97	0.05	48,48,48,48	0
58	MG	2A	3645	1/1	0.97	0.06	51,51,51,51	0
58	MG	1A	3494	1/1	0.97	0.09	45,45,45,45	0
58	MG	2a	1615	1/1	0.97	0.07	67,67,67,67	0
58	MG	1A	3112	1/1	0.97	0.10	32,32,32,32	0
58	MG	1a	1685	1/1	0.97	0.12	55,55,55,55	0
58	MG	1A	3753	1/1	0.97	0.04	38,38,38,38	0
58	MG	1D	303	1/1	0.97	0.14	40,40,40,40	0
58	MG	1A	3113	1/1	0.97	0.08	33,33,33,33	0
58	MG	1D	309	1/1	0.97	0.04	32,32,32,32	0
58	MG	1A	3755	1/1	0.97	0.07	32,32,32,32	0
58	MG	1A	3756	1/1	0.97	0.07	33,33,33,33	0
58	MG	1A	3925	1/1	0.97	0.07	49,49,49,49	0
58	MG	1D	313	1/1	0.97	0.10	31,31,31,31	0
58	MG	1A	3010	1/1	0.97	0.07	34,34,34,34	0
58	MG	1A	3273	1/1	0.97	0.05	44,44,44,44	0
58	MG	1A	3928	1/1	0.97	0.04	17,17,17,17	0
58	MG	1A	3932	1/1	0.97	0.04	33,33,33,33	0
58	MG	1A	3933	1/1	0.97	0.05	34,34,34,34	0
58	MG	1A	3018	1/1	0.97	0.14	39,39,39,39	0
58	MG	1A	3417	1/1	0.97	0.10	37,37,37,37	0
58	MG	1A	3607	1/1	0.97	0.07	46,46,46,46	0
58	MG	1A	3342	1/1	0.97	0.22	37,37,37,37	0
58	MG	2A	3116	1/1	0.97	0.25	56,56,56,56	0
58	MG	1A	3276	1/1	0.97	0.09	29,29,29,29	0
58	MG	1A	3765	1/1	0.97	0.06	29,29,29,29	0
58	MG	1A	3766	1/1	0.97	0.07	39,39,39,39	0
58	MG	1A	3503	1/1	0.97	0.05	36,36,36,36	0
58	MG	1F	302	1/1	0.97	0.18	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3947	1/1	0.97	0.07	57,57,57,57	0
58	MG	1a	1709	1/1	0.97	0.13	45,45,45,45	0
58	MG	1F	304	1/1	0.97	0.07	51,51,51,51	0
58	MG	1A	3948	1/1	0.97	0.09	47,47,47,47	0
58	MG	1a	1712	1/1	0.97	0.20	55,55,55,55	0
58	MG	1F	308	1/1	0.97	0.17	29,29,29,29	0
58	MG	2A	3682	1/1	0.97	0.13	35,35,35,35	0
58	MG	1A	3616	1/1	0.97	0.04	36,36,36,36	0
58	MG	1A	3345	1/1	0.97	0.16	33,33,33,33	0
58	MG	1A	3770	1/1	0.97	0.13	25,25,25,25	0
58	MG	1F	312	1/1	0.97	0.05	48,48,48,48	0
58	MG	1A	3952	1/1	0.97	0.07	55,55,55,55	0
58	MG	1a	1719	1/1	0.97	0.10	52,52,52,52	0
58	MG	1A	3771	1/1	0.97	0.05	23,23,23,23	0
58	MG	1G	202	1/1	0.97	0.20	50,50,50,50	0
58	MG	1a	1722	1/1	0.97	0.08	45,45,45,45	0
58	MG	1a	1723	1/1	0.97	0.06	44,44,44,44	0
58	MG	1A	3421	1/1	0.97	0.13	42,42,42,42	0
58	MG	1A	3773	1/1	0.97	0.04	45,45,45,45	0
58	MG	2A	3143	1/1	0.97	0.17	41,41,41,41	0
58	MG	1A	3277	1/1	0.97	0.32	44,44,44,44	0
58	MG	1A	3423	1/1	0.97	0.06	42,42,42,42	0
58	MG	1A	3424	1/1	0.97	0.10	43,43,43,43	0
58	MG	1A	3779	1/1	0.97	0.06	21,21,21,21	0
58	MG	1A	3780	1/1	0.97	0.06	29,29,29,29	0
58	MG	1A	3510	1/1	0.97	0.29	31,31,31,31	0
58	MG	1A	3782	1/1	0.97	0.06	41,41,41,41	0
58	MG	1A	3041	1/1	0.97	0.16	28,28,28,28	0
58	MG	1a	1735	1/1	0.97	0.10	45,45,45,45	0
58	MG	1O	203	1/1	0.97	0.07	52,52,52,52	0
58	MG	2a	1671	1/1	0.97	0.11	53,53,53,53	0
58	MG	1A	3784	1/1	0.97	0.05	17,17,17,17	0
58	MG	2A	3158	1/1	0.97	0.11	47,47,47,47	0
58	MG	1P	201	1/1	0.97	0.14	23,23,23,23	0
58	MG	1A	3628	1/1	0.97	0.07	53,53,53,53	0
58	MG	2a	1676	1/1	0.97	0.09	51,51,51,51	0
58	MG	1A	3513	1/1	0.97	0.10	24,24,24,24	0
58	MG	1P	205	1/1	0.97	0.04	33,33,33,33	0
58	MG	1A	3787	1/1	0.97	0.03	23,23,23,23	0
58	MG	2A	3715	1/1	0.97	0.10	50,50,50,50	0
58	MG	1Q	201	1/1	0.97	0.23	32,32,32,32	0
58	MG	1A	3082	1/1	0.97	0.21	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3083	1/1	0.97	0.12	35,35,35,35	0
58	MG	1A	3633	1/1	0.97	0.05	20,20,20,20	0
58	MG	1a	1750	1/1	0.97	0.08	59,59,59,59	0
58	MG	1a	1751	1/1	0.97	0.05	54,54,54,54	0
58	MG	1A	3166	1/1	0.97	0.06	39,39,39,39	0
58	MG	1A	3122	1/1	0.97	0.12	29,29,29,29	0
58	MG	1A	3637	1/1	0.97	0.07	54,54,54,54	0
58	MG	1A	3287	1/1	0.97	0.06	45,45,45,45	0
58	MG	1A	3797	1/1	0.97	0.07	16,16,16,16	0
58	MG	1A	3979	1/1	0.97	0.12	46,46,46,46	0
58	MG	1A	3123	1/1	0.97	0.12	35,35,35,35	0
58	MG	1T	201	1/1	0.97	0.12	46,46,46,46	0
58	MG	1A	3224	1/1	0.97	0.08	48,48,48,48	0
58	MG	1A	3084	1/1	0.97	0.14	32,32,32,32	0
58	MG	2a	1697	1/1	0.97	0.11	40,40,40,40	0
58	MG	1A	3802	1/1	0.97	0.05	40,40,40,40	0
58	MG	2A	3184	1/1	0.97	0.10	43,43,43,43	0
58	MG	1A	3642	1/1	0.97	0.04	15,15,15,15	0
58	MG	1A	3804	1/1	0.97	0.05	23,23,23,23	0
58	MG	1a	1766	1/1	0.97	0.08	66,66,66,66	0
58	MG	2A	3189	1/1	0.97	0.06	63,63,63,63	0
58	MG	1A	3805	1/1	0.97	0.07	22,22,22,22	0
58	MG	1V	201	1/1	0.97	0.17	23,23,23,23	0
58	MG	1A	3226	1/1	0.97	0.11	32,32,32,32	0
58	MG	1A	3125	1/1	0.97	0.15	35,35,35,35	0
58	MG	1A	3438	1/1	0.97	0.14	41,41,41,41	0
58	MG	1A	3229	1/1	0.97	0.08	36,36,36,36	0
58	MG	2A	3749	1/1	0.97	0.05	45,45,45,45	0
58	MG	2a	1712	1/1	0.97	0.14	57,57,57,57	0
58	MG	1A	3171	1/1	0.97	0.05	34,34,34,34	0
58	MG	1A	3175	1/1	0.97	0.09	29,29,29,29	0
58	MG	1W	203	1/1	0.97	0.09	38,38,38,38	0
58	MG	1W	206	1/1	0.97	0.12	26,26,26,26	0
58	MG	2A	3754	1/1	0.97	0.08	41,41,41,41	0
58	MG	1A	3126	1/1	0.97	0.20	32,32,32,32	0
58	MG	2A	3463	1/1	0.97	0.11	62,62,62,62	0
58	MG	1A	3443	1/1	0.97	0.11	28,28,28,28	0
58	MG	1A	3816	1/1	0.97	0.05	24,24,24,24	0
58	MG	1a	1781	1/1	0.97	0.06	51,51,51,51	0
58	MG	1A	3652	1/1	0.97	0.08	34,34,34,34	0
58	MG	1A	4003	1/1	0.97	0.04	25,25,25,25	0
58	MG	1A	3818	1/1	0.97	0.30	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1a	1786	1/1	0.97	0.10	52,52,52,52	0
58	MG	1A	3444	1/1	0.97	0.08	32,32,32,32	0
58	MG	2A	3766	1/1	0.97	0.07	40,40,40,40	0
58	MG	1A	4008	1/1	0.97	0.05	37,37,37,37	0
58	MG	2A	3210	1/1	0.97	0.05	48,48,48,48	0
58	MG	2A	3474	1/1	0.97	0.04	45,45,45,45	0
58	MG	2A	3211	1/1	0.97	0.06	48,48,48,48	0
58	MG	1A	4009	1/1	0.97	0.06	29,29,29,29	0
58	MG	1A	4010	1/1	0.97	0.04	37,37,37,37	0
58	MG	1A	3822	1/1	0.97	0.04	25,25,25,25	0
58	MG	1A	3364	1/1	0.97	0.18	32,32,32,32	0
58	MG	1A	4013	1/1	0.97	0.07	66,66,66,66	0
58	MG	1A	3533	1/1	0.97	0.26	39,39,39,39	0
58	MG	1A	3233	1/1	0.97	0.07	62,62,62,62	0
58	MG	1A	3658	1/1	0.97	0.12	55,55,55,55	0
58	MG	1a	1800	1/1	0.97	0.06	60,60,60,60	0
58	MG	1a	1801	1/1	0.97	0.21	48,48,48,48	0
58	MG	1A	3535	1/1	0.97	0.20	41,41,41,41	0
58	MG	1A	3366	1/1	0.97	0.24	37,37,37,37	0
58	MG	1A	3830	1/1	0.97	0.09	29,29,29,29	0
58	MG	1A	3831	1/1	0.97	0.08	48,48,48,48	0
58	MG	2A	3226	1/1	0.97	0.08	42,42,42,42	0
58	MG	2a	1748	1/1	0.97	0.04	58,58,58,58	0
58	MG	12	101	1/1	0.97	0.08	42,42,42,42	0
58	MG	2A	3788	1/1	0.97	0.06	62,62,62,62	0
58	MG	1A	3832	1/1	0.97	0.06	45,45,45,45	0
58	MG	2A	3497	1/1	0.97	0.09	52,52,52,52	0
58	MG	1A	4023	1/1	0.97	0.07	62,62,62,62	0
58	MG	1A	4024	1/1	0.97	0.09	30,30,30,30	0
58	MG	1A	3234	1/1	0.97	0.26	37,37,37,37	0
58	MG	1A	4028	1/1	0.97	0.05	40,40,40,40	0
58	MG	2A	3233	1/1	0.97	0.07	36,36,36,36	0
58	MG	1A	3662	1/1	0.97	0.04	22,22,22,22	0
58	MG	1A	3043	1/1	0.97	0.07	33,33,33,33	0
58	MG	1A	3237	1/1	0.97	0.19	28,28,28,28	0
58	MG	1A	3058	1/1	0.97	0.10	47,47,47,47	0
58	MG	15	104	1/1	0.97	0.27	26,26,26,26	0
58	MG	1A	3014	1/1	0.97	0.11	37,37,37,37	0
58	MG	1A	3668	1/1	0.97	0.05	19,19,19,19	0
58	MG	1A	3455	1/1	0.97	0.19	38,38,38,38	0
58	MG	1A	3130	1/1	0.97	0.13	43,43,43,43	0
58	MG	2A	3805	1/1	0.97	0.10	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	4038	1/1	0.97	0.08	26,26,26,26	0
58	MG	1A	3842	1/1	0.97	0.11	40,40,40,40	0
58	MG	1A	3008	1/1	0.97	0.04	30,30,30,30	0
58	MG	1A	3675	1/1	0.97	0.05	17,17,17,17	0
58	MG	2A	3517	1/1	0.97	0.06	53,53,53,53	0
58	MG	2a	1774	1/1	0.97	0.07	64,64,64,64	0
58	MG	1A	3845	1/1	0.97	0.09	47,47,47,47	0
58	MG	1A	4044	1/1	0.97	0.05	28,28,28,28	0
58	MG	1A	3132	1/1	0.97	0.21	31,31,31,31	0
58	MG	2A	3816	1/1	0.97	0.05	46,46,46,46	0
58	MG	2a	1779	1/1	0.97	0.05	46,46,46,46	0
58	MG	18	104	1/1	0.97	0.14	33,33,33,33	0
58	MG	2A	3252	1/1	0.97	0.12	61,61,61,61	0
58	MG	1A	3547	1/1	0.97	0.07	35,35,35,35	0
58	MG	1A	3548	1/1	0.97	0.05	44,44,44,44	0
58	MG	1A	3849	1/1	0.97	0.13	41,41,41,41	0
58	MG	1A	3851	1/1	0.97	0.17	31,31,31,31	0
58	MG	1A	3852	1/1	0.97	0.06	16,16,16,16	0
58	MG	1A	3681	1/1	0.97	0.10	44,44,44,44	0
58	MG	1A	3550	1/1	0.97	0.18	33,33,33,33	0
58	MG	1A	3134	1/1	0.97	0.08	27,27,27,27	0
58	MG	1A	3046	1/1	0.97	0.13	28,28,28,28	0
58	MG	2A	3003	1/1	0.97	0.28	55,55,55,55	0
58	MG	2A	3004	1/1	0.97	0.26	44,44,44,44	0
58	MG	2A	3265	1/1	0.97	0.14	47,47,47,47	0
58	MG	2A	3535	1/1	0.97	0.06	44,44,44,44	0
58	MG	1A	4059	1/1	0.97	0.09	15,15,15,15	0
58	MG	2A	3836	1/1	0.97	0.09	44,44,44,44	0
58	MG	2A	3267	1/1	0.97	0.07	50,50,50,50	0
58	MG	1A	3686	1/1	0.97	0.05	29,29,29,29	0
58	MG	2A	3839	1/1	0.97	0.07	42,42,42,42	0
58	MG	1A	3553	1/1	0.97	0.14	34,34,34,34	0
58	MG	1A	3689	1/1	0.97	0.04	22,22,22,22	0
58	MG	1a	1609	1/1	0.97	0.07	54,54,54,54	0
58	MG	1a	1610	1/1	0.97	0.19	48,48,48,48	0
58	MG	2A	3011	1/1	0.97	0.11	53,53,53,53	0
58	MG	2A	3274	1/1	0.97	0.08	62,62,62,62	0
58	MG	2A	3545	1/1	0.97	0.04	44,44,44,44	0
58	MG	2a	1807	1/1	0.97	0.20	51,51,51,51	0
58	MG	2A	3012	1/1	0.97	0.04	37,37,37,37	0
58	MG	1A	4066	1/1	0.97	0.12	47,47,47,47	0
58	MG	1A	3188	1/1	0.97	0.11	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3463	1/1	0.97	0.12	40,40,40,40	0
58	MG	2A	3279	1/1	0.97	0.09	48,48,48,48	0
58	MG	1A	3247	1/1	0.97	0.19	36,36,36,36	0
58	MG	1A	3693	1/1	0.97	0.04	26,26,26,26	0
58	MG	2A	3555	1/1	0.97	0.06	54,54,54,54	0
58	MG	1A	3559	1/1	0.97	0.14	26,26,26,26	0
58	MG	2A	3019	1/1	0.97	0.08	38,38,38,38	0
58	MG	1A	4072	1/1	0.97	0.08	38,38,38,38	0
58	MG	2A	3559	1/1	0.97	0.06	39,39,39,39	0
58	MG	1A	3560	1/1	0.97	0.06	22,22,22,22	0
58	MG	1a	1619	1/1	0.97	0.05	57,57,57,57	0
58	MG	1A	3063	1/1	0.97	0.09	35,35,35,35	0
58	MG	1A	3384	1/1	0.97	0.26	43,43,43,43	0
58	MG	2A	3027	1/1	0.97	0.05	47,47,47,47	0
58	MG	1A	4077	1/1	0.97	0.13	44,44,44,44	0
58	MG	1A	3318	1/1	0.97	0.09	31,31,31,31	0
58	MG	1A	3566	1/1	0.97	0.26	36,36,36,36	0
58	MG	1a	1625	1/1	0.97	0.12	58,58,58,58	0
58	MG	2A	3569	1/1	0.97	0.10	43,43,43,43	0
58	MG	2A	3032	1/1	0.97	0.05	51,51,51,51	0
58	MG	1A	3028	1/1	0.97	0.12	34,34,34,34	0
58	MG	1A	3193	1/1	0.97	0.11	25,25,25,25	0
58	MG	1A	3706	1/1	0.97	0.04	25,25,25,25	0
58	MG	2f	201	1/1	0.97	0.09	49,49,49,49	0
58	MG	1a	1629	1/1	0.97	0.18	43,43,43,43	0
58	MG	2A	3575	1/1	0.97	0.04	27,27,27,27	0
58	MG	1A	3065	1/1	0.97	0.08	29,29,29,29	0
58	MG	2A	3040	1/1	0.97	0.17	51,51,51,51	0
58	MG	1A	3099	1/1	0.97	0.04	38,38,38,38	0
58	MG	1A	3145	1/1	0.97	0.10	27,27,27,27	0
58	MG	1A	3031	1/1	0.97	0.11	23,23,23,23	0
58	MG	1A	3474	1/1	0.97	0.10	41,41,41,41	0
58	MG	1A	3880	1/1	0.97	0.05	55,55,55,55	0
58	MG	2D	301	1/1	0.97	0.06	39,39,39,39	0
58	MG	2D	302	1/1	0.97	0.22	43,43,43,43	0
58	MG	1A	3576	1/1	0.97	0.09	36,36,36,36	0
58	MG	2r	101	1/1	0.97	0.12	50,50,50,50	0
58	MG	2D	304	1/1	0.97	0.07	34,34,34,34	0
58	MG	1a	1638	1/1	0.97	0.15	57,57,57,57	0
58	MG	1A	3325	1/1	0.97	0.14	30,30,30,30	0
58	MG	1A	4091	1/1	0.97	0.06	47,47,47,47	0
58	MG	1a	1641	1/1	0.97	0.10	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3590	1/1	0.97	0.06	47,47,47,47	0
58	MG	1A	3578	1/1	0.97	0.12	49,49,49,49	0
58	MG	1A	3069	1/1	0.97	0.07	16,16,16,16	0
58	MG	1A	3886	1/1	0.97	0.07	48,48,48,48	0
58	MG	1a	1645	1/1	0.97	0.12	44,44,44,44	0
58	MG	1A	3718	1/1	0.97	0.06	36,36,36,36	0
58	MG	1A	3102	1/1	0.97	0.13	42,42,42,42	0
58	MG	1a	1649	1/1	0.97	0.09	43,43,43,43	0
58	MG	1A	3478	1/1	0.97	0.05	60,60,60,60	0
58	MG	1A	3722	1/1	0.97	0.06	32,32,32,32	0
58	MG	1A	3723	1/1	0.97	0.05	22,22,22,22	0
60	ZN	24	501	1/1	0.97	0.12	124,124,124,124	0
61	SF4	2d	303	8/8	0.97	0.05	77,84,90,103	0
58	MG	1A	3695	1/1	0.98	0.07	23,23,23,23	0
58	MG	1A	3587	1/1	0.98	0.21	29,29,29,29	0
58	MG	2A	3112	1/1	0.98	0.10	45,45,45,45	0
58	MG	1B	202	1/1	0.98	0.13	43,43,43,43	0
58	MG	1a	1764	1/1	0.98	0.05	57,57,57,57	0
58	MG	1A	3174	1/1	0.98	0.10	24,24,24,24	0
58	MG	17	103	1/1	0.98	0.13	25,25,25,25	0
58	MG	2A	3117	1/1	0.98	0.26	62,62,62,62	0
58	MG	1A	3819	1/1	0.98	0.03	21,21,21,21	0
58	MG	1A	3589	1/1	0.98	0.09	40,40,40,40	0
58	MG	1A	3821	1/1	0.98	0.03	21,21,21,21	0
58	MG	1A	3105	1/1	0.98	0.07	28,28,28,28	0
58	MG	1A	3106	1/1	0.98	0.04	26,26,26,26	0
58	MG	1A	3702	1/1	0.98	0.06	28,28,28,28	0
58	MG	1A	3825	1/1	0.98	0.04	29,29,29,29	0
58	MG	1A	3020	1/1	0.98	0.04	21,21,21,21	0
58	MG	1A	3704	1/1	0.98	0.04	15,15,15,15	0
58	MG	2A	3761	1/1	0.98	0.06	48,48,48,48	0
58	MG	1A	3108	1/1	0.98	0.15	34,34,34,34	0
58	MG	1A	3504	1/1	0.98	0.07	32,32,32,32	0
58	MG	1A	3110	1/1	0.98	0.04	35,35,35,35	0
58	MG	1B	217	1/1	0.98	0.09	45,45,45,45	0
58	MG	1A	3961	1/1	0.98	0.06	38,38,38,38	0
58	MG	1A	3708	1/1	0.98	0.04	30,30,30,30	0
58	MG	1A	3293	1/1	0.98	0.07	54,54,54,54	0
58	MG	1a	1784	1/1	0.98	0.06	41,41,41,41	0
58	MG	2A	3546	1/1	0.98	0.05	37,37,37,37	0
58	MG	1A	3139	1/1	0.98	0.10	32,32,32,32	0
58	MG	2A	3772	1/1	0.98	0.06	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3548	1/1	0.98	0.11	36,36,36,36	0
58	MG	1A	3359	1/1	0.98	0.07	49,49,49,49	0
58	MG	1A	3966	1/1	0.98	0.06	41,41,41,41	0
58	MG	1a	1789	1/1	0.98	0.04	52,52,52,52	0
58	MG	2A	3139	1/1	0.98	0.05	39,39,39,39	0
58	MG	1A	3140	1/1	0.98	0.06	29,29,29,29	0
58	MG	2A	3141	1/1	0.98	0.12	40,40,40,40	0
58	MG	1A	3235	1/1	0.98	0.15	23,23,23,23	0
58	MG	1A	3362	1/1	0.98	0.11	46,46,46,46	0
58	MG	1A	3512	1/1	0.98	0.23	25,25,25,25	0
58	MG	1A	3716	1/1	0.98	0.03	12,12,12,12	0
58	MG	1A	3141	1/1	0.98	0.09	17,17,17,17	0
58	MG	1A	3604	1/1	0.98	0.09	43,43,43,43	0
58	MG	1A	3007	1/1	0.98	0.10	35,35,35,35	0
58	MG	1B	232	1/1	0.98	0.04	46,46,46,46	0
58	MG	1a	1799	1/1	0.98	0.09	51,51,51,51	0
58	MG	1A	3436	1/1	0.98	0.08	42,42,42,42	0
58	MG	2A	3154	1/1	0.98	0.11	41,41,41,41	0
58	MG	1A	3437	1/1	0.98	0.20	33,33,33,33	0
58	MG	1A	3143	1/1	0.98	0.09	54,54,54,54	0
58	MG	1A	3303	1/1	0.98	0.04	29,29,29,29	0
58	MG	1B	237	1/1	0.98	0.03	27,27,27,27	0
58	MG	1D	301	1/1	0.98	0.19	42,42,42,42	0
58	MG	1a	1806	1/1	0.98	0.10	56,56,56,56	0
58	MG	1A	3239	1/1	0.98	0.20	33,33,33,33	0
58	MG	2A	3162	1/1	0.98	0.15	39,39,39,39	0
58	MG	1A	3726	1/1	0.98	0.13	56,56,56,56	0
58	MG	1D	305	1/1	0.98	0.08	33,33,33,33	0
58	MG	1D	306	1/1	0.98	0.14	35,35,35,35	0
58	MG	1A	3611	1/1	0.98	0.09	47,47,47,47	0
58	MG	1A	3983	1/1	0.98	0.04	18,18,18,18	0
58	MG	1e	201	1/1	0.98	0.03	49,49,49,49	0
58	MG	2A	3169	1/1	0.98	0.08	54,54,54,54	0
58	MG	2A	3581	1/1	0.98	0.06	38,38,38,38	0
58	MG	1A	3984	1/1	0.98	0.06	28,28,28,28	0
58	MG	2A	3369	1/1	0.98	0.15	40,40,40,40	0
58	MG	1A	3850	1/1	0.98	0.07	49,49,49,49	0
58	MG	1k	201	1/1	0.98	0.13	45,45,45,45	0
58	MG	1A	3612	1/1	0.98	0.06	29,29,29,29	0
58	MG	1A	3613	1/1	0.98	0.08	36,36,36,36	0
58	MG	1A	3615	1/1	0.98	0.06	19,19,19,19	0
58	MG	2a	1705	1/1	0.98	0.10	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3989	1/1	0.98	0.04	40,40,40,40	0
58	MG	2A	3177	1/1	0.98	0.08	31,31,31,31	0
58	MG	2A	3818	1/1	0.98	0.10	69,69,69,69	0
58	MG	1E	303	1/1	0.98	0.15	44,44,44,44	0
58	MG	1A	3991	1/1	0.98	0.05	33,33,33,33	0
58	MG	1E	305	1/1	0.98	0.07	28,28,28,28	0
58	MG	1A	3731	1/1	0.98	0.04	37,37,37,37	0
58	MG	1A	3732	1/1	0.98	0.03	27,27,27,27	0
58	MG	1A	3733	1/1	0.98	0.05	20,20,20,20	0
58	MG	1E	309	1/1	0.98	0.09	49,49,49,49	0
58	MG	1A	3144	1/1	0.98	0.10	35,35,35,35	0
58	MG	1A	3054	1/1	0.98	0.09	29,29,29,29	0
58	MG	2A	3829	1/1	0.98	0.04	66,66,66,66	0
58	MG	1A	3522	1/1	0.98	0.04	35,35,35,35	0
58	MG	2A	3188	1/1	0.98	0.07	46,46,46,46	0
58	MG	1A	3190	1/1	0.98	0.21	31,31,31,31	0
58	MG	1A	3146	1/1	0.98	0.12	26,26,26,26	0
58	MG	1A	3622	1/1	0.98	0.08	24,24,24,24	0
58	MG	1A	3740	1/1	0.98	0.06	48,48,48,48	0
58	MG	1A	3192	1/1	0.98	0.21	29,29,29,29	0
58	MG	1A	3086	1/1	0.98	0.18	25,25,25,25	0
58	MG	1A	3374	1/1	0.98	0.09	36,36,36,36	0
58	MG	1F	305	1/1	0.98	0.04	29,29,29,29	0
58	MG	1A	4006	1/1	0.98	0.03	38,38,38,38	0
58	MG	2A	3397	1/1	0.98	0.15	42,42,42,42	0
58	MG	2A	3398	1/1	0.98	0.11	48,48,48,48	0
58	MG	1A	4007	1/1	0.98	0.04	44,44,44,44	0
58	MG	1A	3068	1/1	0.98	0.10	31,31,31,31	0
58	MG	1A	3035	1/1	0.98	0.05	32,32,32,32	0
58	MG	1A	3377	1/1	0.98	0.07	41,41,41,41	0
58	MG	1A	3631	1/1	0.98	0.04	16,16,16,16	0
58	MG	1A	3378	1/1	0.98	0.13	24,24,24,24	0
58	MG	1A	3452	1/1	0.98	0.05	45,45,45,45	0
58	MG	2A	3850	1/1	0.98	0.09	53,53,53,53	0
58	MG	2A	3406	1/1	0.98	0.19	38,38,38,38	0
58	MG	1A	4014	1/1	0.98	0.06	37,37,37,37	0
58	MG	1A	3089	1/1	0.98	0.07	32,32,32,32	0
58	MG	2A	3855	1/1	0.98	0.04	64,64,64,64	0
58	MG	1A	3874	1/1	0.98	0.23	29,29,29,29	0
58	MG	1A	3454	1/1	0.98	0.17	50,50,50,50	0
58	MG	1A	3876	1/1	0.98	0.12	29,29,29,29	0
58	MG	1A	3249	1/1	0.98	0.05	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3250	1/1	0.98	0.06	48,48,48,48	0
58	MG	1A	3382	1/1	0.98	0.04	33,33,33,33	0
58	MG	2A	3630	1/1	0.98	0.07	46,46,46,46	0
58	MG	1N	203	1/1	0.98	0.04	32,32,32,32	0
58	MG	1A	3538	1/1	0.98	0.14	37,37,37,37	0
58	MG	1N	205	1/1	0.98	0.04	36,36,36,36	0
58	MG	1A	3117	1/1	0.98	0.11	23,23,23,23	0
58	MG	2a	1755	1/1	0.98	0.04	64,64,64,64	0
58	MG	2A	3021	1/1	0.98	0.06	30,30,30,30	0
58	MG	2A	3022	1/1	0.98	0.09	42,42,42,42	0
58	MG	2A	3637	1/1	0.98	0.06	36,36,36,36	0
58	MG	1A	3317	1/1	0.98	0.05	43,43,43,43	0
58	MG	1A	3385	1/1	0.98	0.30	25,25,25,25	0
58	MG	1A	3118	1/1	0.98	0.05	35,35,35,35	0
58	MG	1A	3885	1/1	0.98	0.05	43,43,43,43	0
58	MG	1A	3387	1/1	0.98	0.16	21,21,21,21	0
58	MG	1P	203	1/1	0.98	0.17	32,32,32,32	0
58	MG	1A	3199	1/1	0.98	0.10	23,23,23,23	0
58	MG	1A	3647	1/1	0.98	0.06	27,27,27,27	0
58	MG	1A	3201	1/1	0.98	0.12	31,31,31,31	0
58	MG	2A	3647	1/1	0.98	0.15	55,55,55,55	0
58	MG	2A	3648	1/1	0.98	0.12	63,63,63,63	0
58	MG	1A	3037	1/1	0.98	0.09	34,34,34,34	0
58	MG	1A	3257	1/1	0.98	0.11	38,38,38,38	0
58	MG	2A	3034	1/1	0.98	0.06	49,49,49,49	0
58	MG	1A	3038	1/1	0.98	0.21	31,31,31,31	0
58	MG	1A	4037	1/1	0.98	0.10	26,26,26,26	0
58	MG	2A	3037	1/1	0.98	0.15	44,44,44,44	0
58	MG	2A	3234	1/1	0.98	0.27	37,37,37,37	0
58	MG	1Q	205	1/1	0.98	0.04	45,45,45,45	0
58	MG	2D	305	1/1	0.98	0.24	39,39,39,39	0
58	MG	2A	3438	1/1	0.98	0.16	46,46,46,46	0
58	MG	2A	3439	1/1	0.98	0.23	53,53,53,53	0
58	MG	1A	3155	1/1	0.98	0.13	27,27,27,27	0
58	MG	1A	3156	1/1	0.98	0.04	30,30,30,30	0
58	MG	2A	3661	1/1	0.98	0.08	38,38,38,38	0
58	MG	1R	201	1/1	0.98	0.08	30,30,30,30	0
58	MG	2E	305	1/1	0.98	0.08	35,35,35,35	0
58	MG	1A	3121	1/1	0.98	0.16	29,29,29,29	0
58	MG	1A	4041	1/1	0.98	0.09	36,36,36,36	0
58	MG	2A	3665	1/1	0.98	0.17	41,41,41,41	0
58	MG	1A	3896	1/1	0.98	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
58	MG	1A	3396	1/1	0.98	0.05	32,32,32,32	0
58	MG	1A	3775	1/1	0.98	0.06	20,20,20,20	0
58	MG	1A	3899	1/1	0.98	0.08	49,49,49,49	0
58	MG	1A	4046	1/1	0.98	0.06	42,42,42,42	0
58	MG	1U	201	1/1	0.98	0.10	30,30,30,30	0
58	MG	1A	3048	1/1	0.98	0.08	25,25,25,25	0
58	MG	1A	3159	1/1	0.98	0.09	25,25,25,25	0
58	MG	1A	3778	1/1	0.98	0.04	33,33,33,33	0
58	MG	1A	3074	1/1	0.98	0.04	29,29,29,29	0
58	MG	1A	3558	1/1	0.98	0.06	28,28,28,28	0
58	MG	1U	209	1/1	0.98	0.07	44,44,44,44	0
58	MG	1A	4052	1/1	0.98	0.06	34,34,34,34	0
58	MG	1A	3060	1/1	0.98	0.10	49,49,49,49	0
58	MG	2A	3461	1/1	0.98	0.08	51,51,51,51	0
58	MG	1V	204	1/1	0.98	0.19	30,30,30,30	0
58	MG	1V	205	1/1	0.98	0.18	29,29,29,29	0
58	MG	1A	3906	1/1	0.98	0.07	36,36,36,36	0
58	MG	1V	207	1/1	0.98	0.03	36,36,36,36	0
58	MG	1A	3211	1/1	0.98	0.15	33,33,33,33	0
58	MG	1A	4057	1/1	0.98	0.03	43,43,43,43	0
58	MG	2A	3261	1/1	0.98	0.05	53,53,53,53	0
58	MG	1A	3402	1/1	0.98	0.07	39,39,39,39	0
58	MG	1A	3096	1/1	0.98	0.04	32,32,32,32	0
58	MG	1A	3097	1/1	0.98	0.07	33,33,33,33	0
58	MG	1W	204	1/1	0.98	0.09	30,30,30,30	0
58	MG	1W	205	1/1	0.98	0.10	32,32,32,32	0
58	MG	1A	3565	1/1	0.98	0.27	38,38,38,38	0
58	MG	1A	3214	1/1	0.98	0.12	34,34,34,34	0
58	MG	1A	3669	1/1	0.98	0.04	18,18,18,18	0
58	MG	1A	3789	1/1	0.98	0.04	45,45,45,45	0
58	MG	2A	3478	1/1	0.98	0.06	48,48,48,48	0
58	MG	1X	103	1/1	0.98	0.23	43,43,43,43	0
58	MG	1X	104	1/1	0.98	0.10	33,33,33,33	0
58	MG	23	104	1/1	0.98	0.07	49,49,49,49	0
58	MG	1X	105	1/1	0.98	0.04	47,47,47,47	0
58	MG	1Y	201	1/1	0.98	0.05	41,41,41,41	0
58	MG	1A	3568	1/1	0.98	0.18	35,35,35,35	0
58	MG	1a	1728	1/1	0.98	0.05	38,38,38,38	0
58	MG	1A	3077	1/1	0.98	0.06	29,29,29,29	0
58	MG	1A	3078	1/1	0.98	0.10	26,26,26,26	0
58	MG	1A	3674	1/1	0.98	0.08	24,24,24,24	0
58	MG	1A	3029	1/1	0.98	0.14	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3485	1/1	0.98	0.07	36,36,36,36	0
58	MG	2A	3490	1/1	0.98	0.14	33,33,33,33	0
58	MG	10	103	1/1	0.98	0.05	35,35,35,35	0
58	MG	2A	3283	1/1	0.98	0.25	52,52,52,52	0
58	MG	1A	3218	1/1	0.98	0.06	37,37,37,37	0
58	MG	1A	4075	1/1	0.98	0.13	46,46,46,46	0
58	MG	1A	3410	1/1	0.98	0.06	32,32,32,32	0
58	MG	2A	3717	1/1	0.98	0.04	33,33,33,33	0
58	MG	1A	3080	1/1	0.98	0.17	29,29,29,29	0
58	MG	1A	3275	1/1	0.98	0.13	21,21,21,21	0
58	MG	1A	3012	1/1	0.98	0.14	30,30,30,30	0
58	MG	1A	3684	1/1	0.98	0.05	22,22,22,22	0
58	MG	2A	3722	1/1	0.98	0.06	38,38,38,38	0
58	MG	1A	3221	1/1	0.98	0.10	32,32,32,32	0
58	MG	2A	3724	1/1	0.98	0.10	50,50,50,50	0
58	MG	1a	1744	1/1	0.98	0.14	38,38,38,38	0
58	MG	1A	3929	1/1	0.98	0.04	48,48,48,48	0
58	MG	1A	3930	1/1	0.98	0.04	58,58,58,58	0
58	MG	1A	3931	1/1	0.98	0.05	29,29,29,29	0
58	MG	1a	1748	1/1	0.98	0.10	61,61,61,61	0
58	MG	2A	3730	1/1	0.98	0.04	61,61,61,61	0
58	MG	1A	3032	1/1	0.98	0.25	29,29,29,29	0
58	MG	1A	3133	1/1	0.98	0.04	33,33,33,33	0
58	MG	1A	3688	1/1	0.98	0.05	26,26,26,26	0
58	MG	1A	3937	1/1	0.98	0.11	46,46,46,46	0
58	MG	1A	3938	1/1	0.98	0.03	36,36,36,36	0
58	MG	1A	3581	1/1	0.98	0.03	37,37,37,37	0
58	MG	1A	3172	1/1	0.98	0.13	40,40,40,40	0
58	MG	1A	3282	1/1	0.98	0.12	39,39,39,39	0
58	MG	1A	3173	1/1	0.98	0.22	31,31,31,31	0
58	MG	1A	3284	1/1	0.98	0.05	50,50,50,50	0
58	MG	1A	3944	1/1	0.98	0.07	40,40,40,40	0
60	ZN	2Y	202	1/1	0.98	0.04	96,96,96,96	0
58	MG	2A	3742	1/1	0.98	0.04	49,49,49,49	0
60	ZN	25	106	1/1	0.98	0.03	67,67,67,67	0
60	ZN	29	501	1/1	0.98	0.04	62,62,62,62	0
60	ZN	2n	102	1/1	0.98	0.05	92,92,92,92	0
61	SF4	1d	302	8/8	0.98	0.06	62,67,71,80	0
58	MG	1A	3285	1/1	0.98	0.23	46,46,46,46	0
58	MG	2A	3365	1/1	0.99	0.08	37,37,37,37	0
58	MG	1A	3066	1/1	0.99	0.02	27,27,27,27	0
58	MG	1A	3696	1/1	0.99	0.03	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3036	1/1	0.99	0.10	24,24,24,24	0
58	MG	1A	3623	1/1	0.99	0.05	22,22,22,22	0
58	MG	1A	3561	1/1	0.99	0.23	30,30,30,30	0
58	MG	1A	3625	1/1	0.99	0.07	51,51,51,51	0
58	MG	2A	3450	1/1	0.99	0.15	26,26,26,26	0
58	MG	1F	306	1/1	0.99	0.06	42,42,42,42	0
58	MG	1A	3935	1/1	0.99	0.06	45,45,45,45	0
58	MG	1A	3936	1/1	0.99	0.03	40,40,40,40	0
58	MG	1A	3990	1/1	0.99	0.05	44,44,44,44	0
58	MG	1A	3022	1/1	0.99	0.04	16,16,16,16	0
58	MG	1A	3252	1/1	0.99	0.04	26,26,26,26	0
58	MG	2A	3149	1/1	0.99	0.06	36,36,36,36	0
58	MG	1A	3744	1/1	0.99	0.07	20,20,20,20	0
58	MG	2A	3151	1/1	0.99	0.04	37,37,37,37	0
58	MG	1A	3298	1/1	0.99	0.09	23,23,23,23	0
58	MG	1B	216	1/1	0.99	0.04	43,43,43,43	0
58	MG	2A	3708	1/1	0.99	0.03	49,49,49,49	0
58	MG	1A	3746	1/1	0.99	0.03	11,11,11,11	0
58	MG	1A	3160	1/1	0.99	0.05	24,24,24,24	0
58	MG	1A	4054	1/1	0.99	0.06	22,22,22,22	0
58	MG	1a	1770	1/1	0.99	0.03	39,39,39,39	0
58	MG	1A	3013	1/1	0.99	0.03	26,26,26,26	0
58	MG	1A	3666	1/1	0.99	0.03	36,36,36,36	0
58	MG	1A	3750	1/1	0.99	0.03	26,26,26,26	0
58	MG	1A	3796	1/1	0.99	0.09	21,21,21,21	0
58	MG	1A	4001	1/1	0.99	0.03	30,30,30,30	0
58	MG	1A	3567	1/1	0.99	0.19	39,39,39,39	0
58	MG	1A	3070	1/1	0.99	0.05	28,28,28,28	0
58	MG	1A	3302	1/1	0.99	0.04	32,32,32,32	0
58	MG	1a	1633	1/1	0.99	0.11	28,28,28,28	0
58	MG	1A	4064	1/1	0.99	0.04	31,31,31,31	0
58	MG	1A	3800	1/1	0.99	0.04	34,34,34,34	0
58	MG	1A	3178	1/1	0.99	0.09	33,33,33,33	0
58	MG	1A	3635	1/1	0.99	0.05	27,27,27,27	0
58	MG	1A	3672	1/1	0.99	0.06	30,30,30,30	0
58	MG	1A	3093	1/1	0.99	0.06	17,17,17,17	0
58	MG	1A	3279	1/1	0.99	0.12	28,28,28,28	0
58	MG	1A	3806	1/1	0.99	0.03	32,32,32,32	0
58	MG	2A	3813	1/1	0.99	0.06	32,32,32,32	0
58	MG	12	102	1/1	0.99	0.06	39,39,39,39	0
58	MG	2A	3815	1/1	0.99	0.04	43,43,43,43	0
58	MG	1A	3807	1/1	0.99	0.04	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	1A	3011	1/1	0.99	0.04	26,26,26,26	0
58	MG	1A	3462	1/1	0.99	0.10	35,35,35,35	0
58	MG	1A	3677	1/1	0.99	0.04	27,27,27,27	0
58	MG	1A	3762	1/1	0.99	0.07	35,35,35,35	0
58	MG	1a	1648	1/1	0.99	0.03	49,49,49,49	0
58	MG	1D	304	1/1	0.99	0.04	19,19,19,19	0
58	MG	1A	3003	1/1	0.99	0.06	23,23,23,23	0
58	MG	2A	3492	1/1	0.99	0.11	25,25,25,25	0
58	MG	2A	3825	1/1	0.99	0.07	20,20,20,20	0
58	MG	1A	3911	1/1	0.99	0.03	23,23,23,23	0
58	MG	1D	307	1/1	0.99	0.12	28,28,28,28	0
58	MG	1A	3679	1/1	0.99	0.02	27,27,27,27	0
58	MG	2A	3496	1/1	0.99	0.03	61,61,61,61	0
58	MG	1A	3200	1/1	0.99	0.03	30,30,30,30	0
58	MG	1R	203	1/1	0.99	0.12	34,34,34,34	0
58	MG	1A	3721	1/1	0.99	0.04	40,40,40,40	0
58	MG	1A	3109	1/1	0.99	0.13	28,28,28,28	0
58	MG	17	101	1/1	0.99	0.05	29,29,29,29	0
58	MG	1A	3030	1/1	0.99	0.14	23,23,23,23	0
58	MG	1A	3184	1/1	0.99	0.04	35,35,35,35	0
58	MG	2W	202	1/1	0.99	0.15	37,37,37,37	0
58	MG	1A	4025	1/1	0.99	0.03	26,26,26,26	0
58	MG	1A	4026	1/1	0.99	0.03	41,41,41,41	0
58	MG	2A	3587	1/1	0.99	0.04	35,35,35,35	0
58	MG	1A	3549	1/1	0.99	0.17	36,36,36,36	0
58	MG	1a	1736	1/1	0.99	0.08	41,41,41,41	0
58	MG	1U	202	1/1	0.99	0.15	36,36,36,36	0
58	MG	1A	3056	1/1	0.99	0.05	29,29,29,29	0
58	MG	1A	3186	1/1	0.99	0.11	34,34,34,34	0
58	MG	2A	3511	1/1	0.99	0.07	38,38,38,38	0
58	MG	1A	3098	1/1	0.99	0.11	16,16,16,16	0
58	MG	1A	3614	1/1	0.99	0.05	34,34,34,34	0
58	MG	1U	207	1/1	0.99	0.13	26,26,26,26	0
58	MG	1A	3975	1/1	0.99	0.03	49,49,49,49	0
58	MG	1A	3289	1/1	0.99	0.09	24,24,24,24	0
58	MG	25	104	1/1	0.99	0.05	52,52,52,52	0
60	ZN	1Y	204	1/1	0.99	0.03	70,70,70,70	0
58	MG	1A	3075	1/1	0.99	0.02	33,33,33,33	0
60	ZN	19	501	1/1	0.99	0.11	60,60,60,60	0
60	ZN	1n	103	1/1	0.99	0.02	65,65,65,65	0
58	MG	1A	3042	1/1	0.99	0.20	33,33,33,33	0
58	MG	1V	203	1/1	0.99	0.04	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	MG	2A	3854	1/1	0.99	0.13	39,39,39,39	0
60	ZN	26	501	1/1	0.99	0.05	61,61,61,61	0
58	MG	1E	312	1/1	0.99	0.11	21,21,21,21	0
58	MG	1A	3343	1/1	0.99	0.11	34,34,34,34	0
58	MG	1A	3228	1/1	0.99	0.15	33,33,33,33	0
58	MG	1A	3655	1/1	0.99	0.06	30,30,30,30	0
58	MG	1a	1787	1/1	1.00	0.02	47,47,47,47	0
58	MG	1A	4065	1/1	1.00	0.04	22,22,22,22	0
58	MG	1A	3295	1/1	1.00	0.02	28,28,28,28	0
58	MG	1A	4060	1/1	1.00	0.04	21,21,21,21	0
60	ZN	15	107	1/1	1.00	0.01	38,38,38,38	0
60	ZN	16	103	1/1	1.00	0.02	39,39,39,39	0
58	MG	1A	3618	1/1	1.00	0.05	31,31,31,31	0
58	MG	2A	3700	1/1	1.00	0.06	26,26,26,26	0

6.5 Other polymers [i](#)

There are no such residues in this entry.