



wwPDB X-ray Structure Validation Summary Report ⓘ

Mar 30, 2026 – 12:56 PM UTC

PDB ID : 4WSD / pdb_00004wsd
Title : Complex of 70S ribosome with tRNA-Phe and mRNA with C-A mismatch in the second position in the A-site and with antibiotic paromomycin.
Authors : Rozov, A.; Demeshkina, N.; Yusupov, M.; Yusupova, G.
Deposited on : 2014-10-27
Resolution : 2.95 Å (reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

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

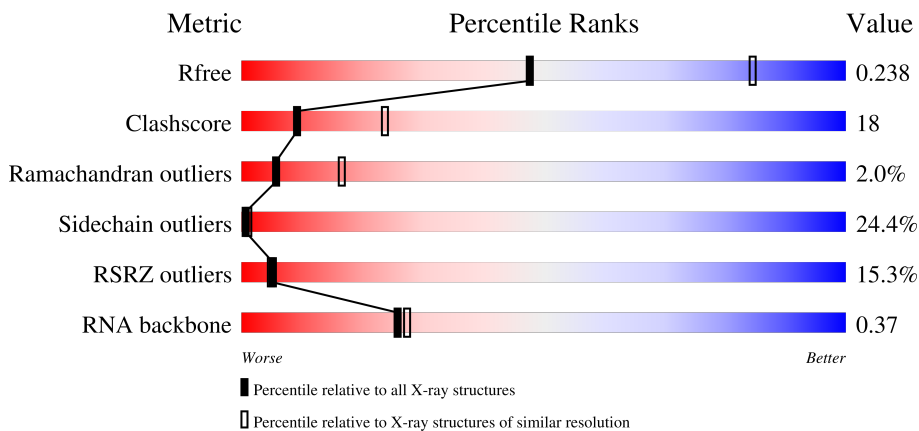
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.95 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	1130 (2.98-2.94)
Clashscore	190562	1157 (2.98-2.94)
Ramachandran outliers	187476	1101 (2.98-2.94)
Sidechain outliers	187428	1101 (2.98-2.94)
RSRZ outliers	180081	1130 (2.98-2.94)
RNA backbone	3983	1046 (3.16-2.76)

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	13	1522	9% (Poor fit) 43% (0 outliers), 42% (1 outlier), 13% (2 outliers), 7% (3+ outliers)
1	1G	1522	14% (Poor fit) 38% (0 outliers), 46% (1 outlier), 14% (2 outliers), 2% (3+ outliers)
2	12	256	34% (Poor fit) 37% (0 outliers), 39% (1 outlier), 16% (2 outliers), 7% (3+ outliers)
2	1E	256	23% (Poor fit) 38% (0 outliers), 44% (1 outlier), 11% (2 outliers), 7% (3+ outliers)

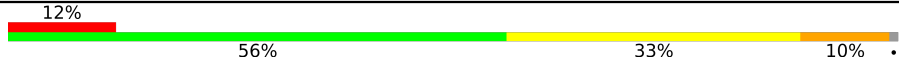
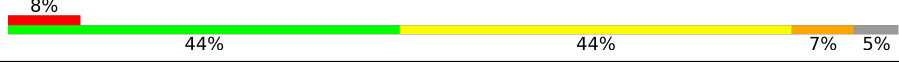
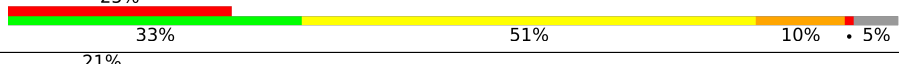


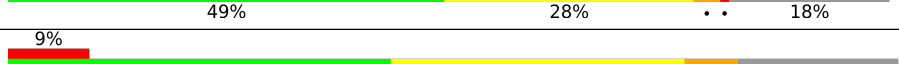
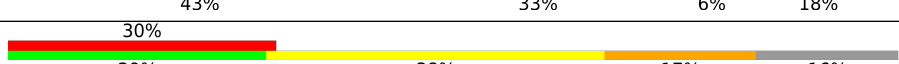
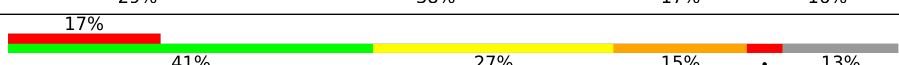
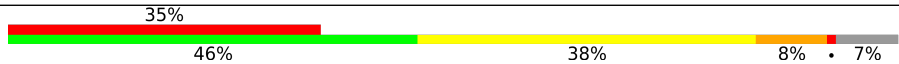

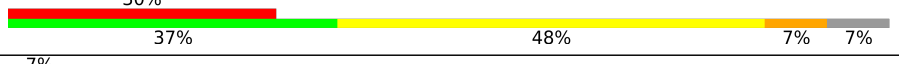
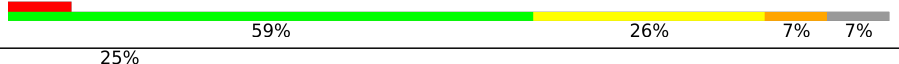
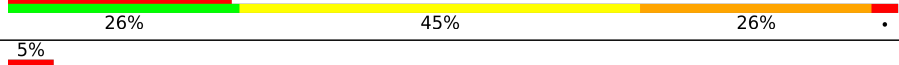

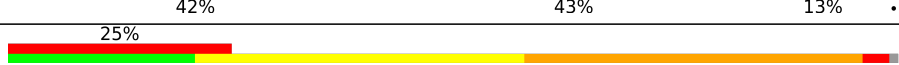
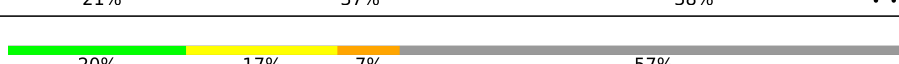
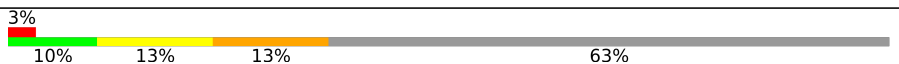
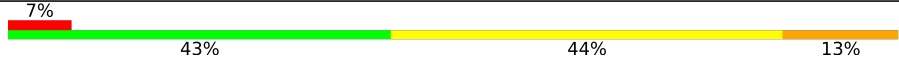
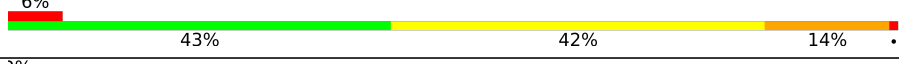






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Mol	Chain	Length	Quality of chain
3	22	239	40% 37% 40% 10% 14%
3	2E	239	8% 48% 30% 8% 14%
4	32	209	24% 49% 39% 10%
4	3E	209	11% 47% 41% 11%
5	42	162	35% 42% 39% 12% 7%
5	4E	162	12% 52% 30% 12% 7%
6	52	101	8% 54% 35% 11%
6	5E	101	9% 51% 42% 7%
7	62	156	28% 51% 38% 9%
7	6E	156	17% 55% 33% 11%
8	72	138	23% 60% 28% 9%
8	7E	138	15% 46% 41% 14%
9	82	128	34% 43% 44% 9%
9	8E	128	16% 42% 45% 12%
10	1A	105	23% 38% 45% 10% 6%
10	1I	105	32% 38% 42% 13% 6%
11	2A	129	21% 50% 28% 12% 10%
11	2I	129	12% 54% 29% 6% 10%
12	3A	132	29% 50% 30% 12% 5%
12	3I	132	20% 48% 34% 12% 5%
13	4A	126	35% 38% 41% 13% 7%
13	4I	126	12% 43% 37% 13% 6%
14	5A	61	34% 49% 38% 8% 5%
14	5I	61	8% 49% 36% 11%
15	6A	89	16% 49% 42% 8%

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Mol	Chain	Length	Quality of chain
15	6I	89	
16	7A	88	
16	7I	88	
17	8A	105	
17	8I	105	
18	9A	88	
18	9I	88	
19	AA	93	
19	AI	93	
20	BA	106	
20	BI	106	
21	1B	27	
21	1F	27	
22	1K	76	
23	2K	77	
23	2L	77	
24	3K	76	
25	4K	30	
25	4L	30	
26	14	2917	
26	1H	2917	
27	16	122	
27	1J	122	
28	11	276	
28	19	276	

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Mol	Chain	Length	Quality of chain
29	21	206	14% 40% 37% 20% .
29	29	206	22% 41% 38% 16% 5%
30	31	210	11% 45% 40% 10% . .
30	39	210	16% 35% 45% 15% 5% .
31	41	182	14% 47% 40% 13% .
31	49	182	22% 42% 48% 9% .
32	51	180	18% 40% 36% 17% . .
32	59	180	39% 34% 43% 16% . 6%
33	61	148	22% 41% 36% 17% . .
33	69	148	45% 43% 36% 15% 5% .
34	15	140	23% 49% 34% 14% . .
34	58	140	14% 48% 38% 10% . .
35	25	122	7% 48% 39% 11% .
35	68	122	10% 52% 39% 8% .
36	35	150	21% 40% 35% 17% 8%
36	78	150	7% 39% 33% 25% .
37	45	141	21% 37% 44% 17% .
37	88	141	6% 42% 30% 23% . .
38	55	118	13% 40% 45% 13% . .
38	98	118	15% 36% 47% 14% .
39	65	112	21% 29% 52% 17% . .
39	A8	112	10% 30% 46% 21% . .
40	75	146	12% 34% 45% 14% . 6%
40	B8	146	20% 35% 38% 18% . 6%
41	85	118	19% 55% 32% 10% . .



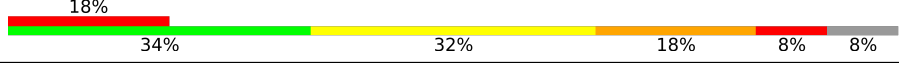
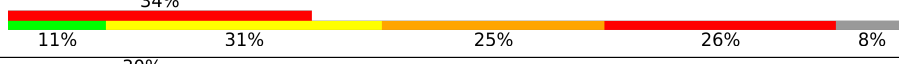
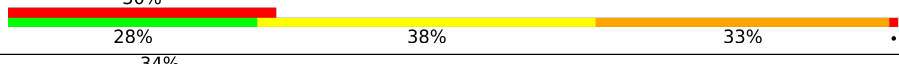

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Mol	Chain	Length	Quality of chain
41	C8	118	
42	95	101	
42	D8	101	
43	A5	113	
43	E8	113	
44	B5	96	
44	F8	96	
45	C5	110	
45	G8	110	
46	D5	206	
46	H8	206	
47	E5	85	
47	I8	85	
48	F5	98	
48	J8	98	
49	G5	72	
49	K8	72	
50	H5	60	
50	L8	60	
51	I5	71	
51	M8	71	
52	J5	60	
52	N8	60	
53	K5	54	
53	O8	54	

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Mol	Chain	Length	Quality of chain
54	L5	49	
54	P8	49	
55	M5	65	
55	Q8	65	
56	1L	76	
57	3L	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
56	PSU	1L	32	-	-	-	X
58	MG	13	1627	-	-	-	X
58	MG	13	1662	-	-	-	X
58	MG	13	1701	-	-	-	X
58	MG	13	1704	-	-	-	X
58	MG	13	1710	-	-	-	X
58	MG	13	1713	-	-	-	X
58	MG	14	3019	-	-	-	X
58	MG	14	3023	-	-	-	X
58	MG	14	3028	-	-	-	X
58	MG	14	3050	-	-	-	X
58	MG	14	3051	-	-	-	X
58	MG	14	3089	-	-	-	X
58	MG	14	3130	-	-	-	X
58	MG	14	3140	-	-	-	X
58	MG	14	3160	-	-	-	X
58	MG	14	3178	-	-	-	X
58	MG	14	3239	-	-	-	X
58	MG	14	3287	-	-	-	X
58	MG	1G	1601	-	-	-	X
58	MG	1G	1616	-	-	-	X
58	MG	1G	1619	-	-	-	X
58	MG	1G	1665	-	-	-	X
58	MG	1G	1677	-	-	-	X
58	MG	1H	3016	-	-	-	X
58	MG	1H	3020	-	-	-	X
58	MG	1H	3051	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	1H	3054	-	-	-	X
58	MG	1H	3098	-	-	-	X
58	MG	1H	3162	-	-	-	X
58	MG	1H	3325	-	-	-	X
58	MG	1J	202	-	-	-	X
58	MG	1J	204	-	-	-	X
58	MG	25	201	-	-	-	X

2 Entry composition [i](#)

There are 61 unique types of molecules in this entry. The entry contains 300252 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 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
1	13	1498	Total 32207	C 14334	N 5973	O 10402	P 1498	0	0	0
1	1G	1498	Total 32204	C 14334	N 5973	O 10400	P 1497	0	0	0

- Molecule 2 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	1E	237	Total 1924	C 1228	N 344	O 347	S 5	0	0	0
2	12	237	Total 1924	C 1228	N 344	O 347	S 5	0	0	0

- Molecule 3 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	2E	205	Total 1605	C 1011	N 313	O 280	S 1	0	0	0
3	22	206	Total 1612	C 1016	N 314	O 281	S 1	0	0	0

- Molecule 4 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	3E	208	Total 1702	C 1066	N 339	O 290	S 7	0	0	0
4	32	208	Total 1702	C 1066	N 339	O 290	S 7	0	0	0

- Molecule 5 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	4E	151	Total	C	N	O	S	0	0	0
			1155	729	218	204	4			
5	42	151	Total	C	N	O	S	0	0	0
			1155	729	218	204	4			

- Molecule 6 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	5E	101	Total	C	N	O	S	0	0	0
			842	531	155	153	3			
6	52	101	Total	C	N	O	S	0	0	0
			842	531	155	153	3			

- Molecule 7 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	6E	155	Total	C	N	O	S	0	0	0
			1256	781	252	217	6			
7	62	152	Total	C	N	O	S	0	0	0
			1243	774	249	214	6			

- Molecule 8 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	7E	138	Total	C	N	O	S	0	0	0
			1115	705	215	192	3			
8	72	138	Total	C	N	O	S	0	0	0
			1115	705	215	192	3			

- Molecule 9 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	8E	127	Total	C	N	O	0	0	0
			1009	639	197	173			
9	82	124	Total	C	N	O	0	0	0
			983	624	190	169			

- Molecule 10 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	1I	99	Total	C	N	O	S	0	0	0
			801	504	157	139	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
10	1A	99	801	504	157	139	1	0	0	0

- Molecule 11 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
11	2I	116	864	537	164	160	3	0	0	0
11	2A	116	864	537	164	160	3	0	0	0

- Molecule 12 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
12	3I	125	975	614	196	164	1	0	0	0
12	3A	125	975	614	196	164	1	0	0	0

- Molecule 13 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
13	4I	118	938	580	193	163	2	0	0	0
13	4A	117	933	577	192	162	2	0	0	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
4I	119	ALA	GLY	conflict	UNP P80377
4A	119	ALA	GLY	conflict	UNP P80377

- Molecule 14 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
14	5I	60	491	312	104	71	4	0	0	0
14	5A	58	475	303	99	69	4	0	0	0

- Molecule 15 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	6I	88	Total	C	N	O	S	0	0	0
			733	459	147	125	2			
15	6A	88	Total	C	N	O	S	0	0	0
			733	459	147	125	2			

- Molecule 16 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	7I	84	Total	C	N	O	S	0	0	0
			705	446	140	118	1			
16	7A	84	Total	C	N	O	S	0	0	0
			705	446	140	118	1			

- Molecule 17 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	8I	100	Total	C	N	O	S	0	0	0
			834	534	155	143	2			
17	8A	100	Total	C	N	O	S	0	0	0
			834	534	155	143	2			

- Molecule 18 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	9I	72	Total	C	N	O	0	0	0
			590	376	117	97			
18	9A	72	Total	C	N	O	0	0	0
			590	376	117	97			

- Molecule 19 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AI	81	Total	C	N	O	S	0	0	0
			647	413	119	113	2			
19	AA	78	Total	C	N	O	S	0	0	0
			624	398	115	109	2			

- Molecule 20 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	BI	99	Total	C	N	O	S	0	0	0
			762	470	162	128	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
20	BA	99	762	470	162	128	2	0	0	0

- Molecule 21 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
21	1F	25	217	134	52	31	0	0	0
21	1B	25	217	134	52	31	0	0	0

- Molecule 22 is a RNA chain called tRNA-Phe.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace	
			Total	C	N	O	P				S
22	1K	76	1627	730	290	530	75	2	0	0	0

- Molecule 23 is a RNA chain called tRNA-fMet.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace	
			Total	C	N	O	P				S
23	2K	77	1646	735	298	535	77	1	0	0	0
23	2L	77	1646	735	298	535	77	1	0	0	0

- Molecule 24 is a RNA chain called tRNA-Phe.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace	
			Total	C	N	O	P				S
24	3K	75	1603	719	285	524	74	1	0	0	0

- Molecule 25 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace	
			Total	C	N	O				P
25	4K	13	279	126	55	85	13	0	0	0
25	4L	11	235	106	45	73	11	0	0	0

- Molecule 26 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	1H	2912	Total	C	N	O	P	0	0	0
			62707	27911	11722	20163	2911			
26	14	2909	Total	C	N	O	P	0	0	0
			62647	27884	11716	20139	2908			

- Molecule 27 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	16	122	Total	C	N	O	P	0	0	0
			2617	1166	486	844	121			
27	1J	122	Total	C	N	O	P	0	0	0
			2617	1166	486	844	121			

- Molecule 28 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	11	272	Total	C	N	O	S	0	0	0
			2115	1335	420	357	3			
28	19	273	Total	C	N	O	S	0	0	0
			2120	1338	421	358	3			

- Molecule 29 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	21	205	Total	C	N	O	S	0	0	0
			1568	991	300	271	6			
29	29	205	Total	C	N	O	S	0	0	0
			1568	991	300	271	6			

- Molecule 30 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	31	202	Total	C	N	O	S	0	0	0
			1585	1011	297	275	2			
30	39	208	Total	C	N	O	S	0	0	0
			1627	1037	304	283	3			

- Molecule 31 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	41	181	Total	C	N	O	S	0	0	0
			1473	942	268	259	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
31	49	181	1473	942	268	259	4	0	0	0

- Molecule 32 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
32	51	174	1336	848	251	236	1	0	0	0
32	59	170	1307	829	245	232	1	0	0	0

- Molecule 33 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
33	61	146	1136	726	201	208	1	0	0	0
33	69	146	1136	726	201	208	1	0	0	0

- Molecule 34 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
34	58	138	1104	712	206	182	4	0	0	0
34	15	138	1104	712	206	182	4	0	0	0

- Molecule 35 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
35	68	122	932	588	171	169	4	0	0	0
35	25	122	932	588	171	169	4	0	0	0

- Molecule 36 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
36	78	150	1144	712	232	197	3	0	0	0
36	35	150	1144	712	232	197	3	0	0	0

- Molecule 37 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	88	138	Total	C	N	O	S	0	0	0
			1086	693	208	179	6			
37	45	141	Total	C	N	O	S	0	0	0
			1121	715	212	187	7			

- Molecule 38 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	98	118	Total	C	N	O	S	0	0	0
			967	604	203	159	1			
38	55	117	Total	C	N	O		0	0	0
			959	599	202	158				

- Molecule 39 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
39	A8	111	Total	C	N	O	0	0	0
			881	556	176	149			
39	65	111	Total	C	N	O	0	0	0
			881	556	176	149			

- Molecule 40 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	B8	137	Total	C	N	O	S	0	0	0
			1141	710	234	196	1			
40	75	137	Total	C	N	O	S	0	0	0
			1141	710	234	196	1			

- Molecule 41 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	C8	117	Total	C	N	O	S	0	0	0
			963	610	202	150	1			
41	85	117	Total	C	N	O	S	0	0	0
			963	610	202	150	1			

- Molecule 42 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	D8	101	Total	C	N	O	S	0	0	0
			778	501	142	134	1			
42	95	101	Total	C	N	O	S	0	0	0
			778	501	142	134	1			

- Molecule 43 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	E8	113	Total	C	N	O	S	0	0	0
			899	566	177	154	2			
43	A5	113	Total	C	N	O	S	0	0	0
			899	566	177	154	2			

- Molecule 44 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	F8	94	Total	C	N	O	S	0	0	0
			742	482	134	125	1			
44	B5	94	Total	C	N	O		0	0	0
			735	477	133	125				

- Molecule 45 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	G8	104	Total	C	N	O	S	0	0	0
			791	510	149	127	5			
45	C5	104	Total	C	N	O	S	0	0	0
			794	510	152	127	5			

- Molecule 46 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	H8	175	Total	C	N	O	S	0	0	0
			1397	892	251	251	3			
46	D5	179	Total	C	N	O	S	0	0	0
			1428	911	255	259	3			

- Molecule 47 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	I8	80	Total	C	N	O	S	0	0	0
			626	388	132	105	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
47	E5	77	612	379	129	103	1	0	0	0

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
I8	6	ALA	GLY	conflict	UNP P60493
I8	8	ALA	GLY	conflict	UNP P60493
E5	6	ALA	GLY	conflict	UNP P60493
E5	8	ALA	GLY	conflict	UNP P60493

- Molecule 48 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
48	J8	97	762	481	150	130	1	0	0	0
48	F5	94	737	463	146	127	1	0	0	0

- Molecule 49 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
49	K8	67	563	349	114	99	1	0	0	0
49	G5	67	563	349	114	99	1	0	0	0

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
50	L8	57	452	288	88	76	0	0	0
50	H5	59	468	298	90	80	0	0	0

- Molecule 51 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
51	M8	66	533	335	96	97	5	0	0	0
51	I5	60	481	305	84	87	5	0	0	0

- Molecule 52 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	N8	58	Total	C	N	O	S	0	0	0
			453	285	89	74	5			
52	J5	59	Total	C	N	O	S	0	0	0
			458	288	90	75	5			

- Molecule 53 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	O8	45	Total	C	N	O	S	0	0	0
			389	241	79	65	4			
53	K5	45	Total	C	N	O	S	0	0	0
			389	241	79	65	4			

- Molecule 54 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	P8	45	Total	C	N	O	S	0	0	0
			391	240	97	52	2			
54	L5	46	Total	C	N	O	S	0	0	0
			398	245	98	53	2			

- Molecule 55 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	Q8	60	Total	C	N	O	S	0	0	0
			480	306	98	74	2			
55	M5	60	Total	C	N	O	S	0	0	0
			477	303	98	74	2			

- Molecule 56 is a RNA chain called tRNA-Phe.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace	
56	1L	76	Total	C	N	O	P	S	0	0	0
			1627	730	290	531	75	1			

- Molecule 57 is a RNA chain called tRNA-Phe.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace	
57	3L	76	Total	C	N	O	P	S	0	0	0
			1624	725	290	532	76	1			

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

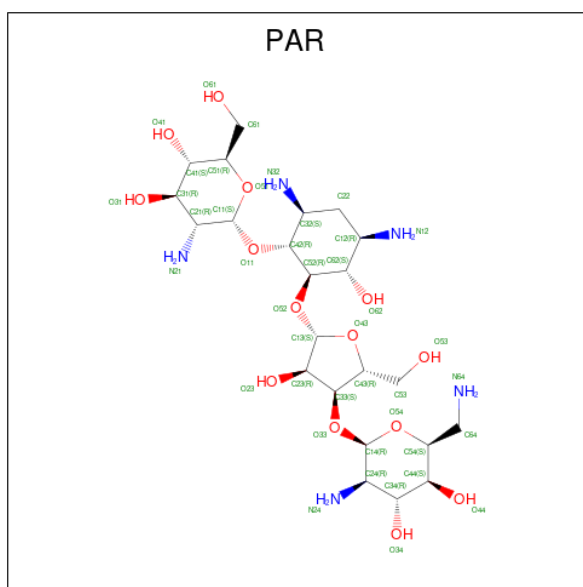
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	13	148	Total Mg 148 148	0	0
58	3E	2	Total Mg 2 2	0	0
58	5E	1	Total Mg 1 1	0	0
58	2I	1	Total Mg 1 1	0	0
58	5I	2	Total Mg 2 2	0	0
58	1K	2	Total Mg 2 2	0	0
58	2K	5	Total Mg 5 5	0	0
58	3K	1	Total Mg 1 1	0	0
58	4K	1	Total Mg 1 1	0	0
58	1H	520	Total Mg 520 520	0	0
58	16	13	Total Mg 13 13	0	0
58	11	4	Total Mg 4 4	0	0
58	21	2	Total Mg 2 2	0	0
58	41	2	Total Mg 2 2	0	0
58	78	1	Total Mg 1 1	0	0
58	88	2	Total Mg 2 2	0	0
58	98	2	Total Mg 2 2	0	0
58	G8	1	Total Mg 1 1	0	0
58	I8	1	Total Mg 1 1	0	0
58	L8	1	Total Mg 1 1	0	0
58	P8	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1G	96	Total 96	Mg 96	0	0
58	2A	2	Total 2	Mg 2	0	0
58	7A	1	Total 1	Mg 1	0	0
58	2L	3	Total 3	Mg 3	0	0
58	3L	2	Total 2	Mg 2	0	0
58	14	407	Total 407	Mg 407	0	0
58	1J	5	Total 5	Mg 5	0	0
58	29	4	Total 4	Mg 4	0	0
58	49	1	Total 1	Mg 1	0	0
58	25	1	Total 1	Mg 1	0	0
58	55	1	Total 1	Mg 1	0	0
58	C5	1	Total 1	Mg 1	0	0
58	J5	1	Total 1	Mg 1	0	0

- Molecule 59 is PAROMOMYCIN (CCD ID: PAR) (formula: $C_{23}H_{45}N_5O_{14}$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
59	13	1	Total	C	N	O	0	0
			42	23	5	14		
59	1G	1	Total	C	N	O	0	0
			42	23	5	14		

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	3E	1	Total	Zn	0	0
			1	1		
60	5I	1	Total	Zn	0	0
			1	1		
60	G8	1	Total	Zn	0	0
			1	1		
60	32	1	Total	Zn	0	0
			1	1		
60	5A	1	Total	Zn	0	0
			1	1		
60	C5	1	Total	Zn	0	0
			1	1		

- Molecule 61 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	13	197	Total	O	0	0
			197	197		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	3E	3	Total O 3 3	0	0
61	8E	2	Total O 2 2	0	0
61	1I	2	Total O 2 2	0	0
61	3I	1	Total O 1 1	0	0
61	5I	2	Total O 2 2	0	0
61	6I	1	Total O 1 1	0	0
61	7I	1	Total O 1 1	0	0
61	1K	5	Total O 5 5	0	0
61	2K	6	Total O 6 6	0	0
61	3K	1	Total O 1 1	0	0
61	4K	2	Total O 2 2	0	0
61	1H	999	Total O 999 999	0	0
61	16	21	Total O 21 21	0	0
61	11	13	Total O 13 13	0	0
61	21	4	Total O 4 4	0	0
61	31	4	Total O 4 4	0	0
61	58	2	Total O 2 2	0	0
61	78	5	Total O 5 5	0	0
61	B8	1	Total O 1 1	0	0
61	C8	3	Total O 3 3	0	0
61	D8	1	Total O 1 1	0	0

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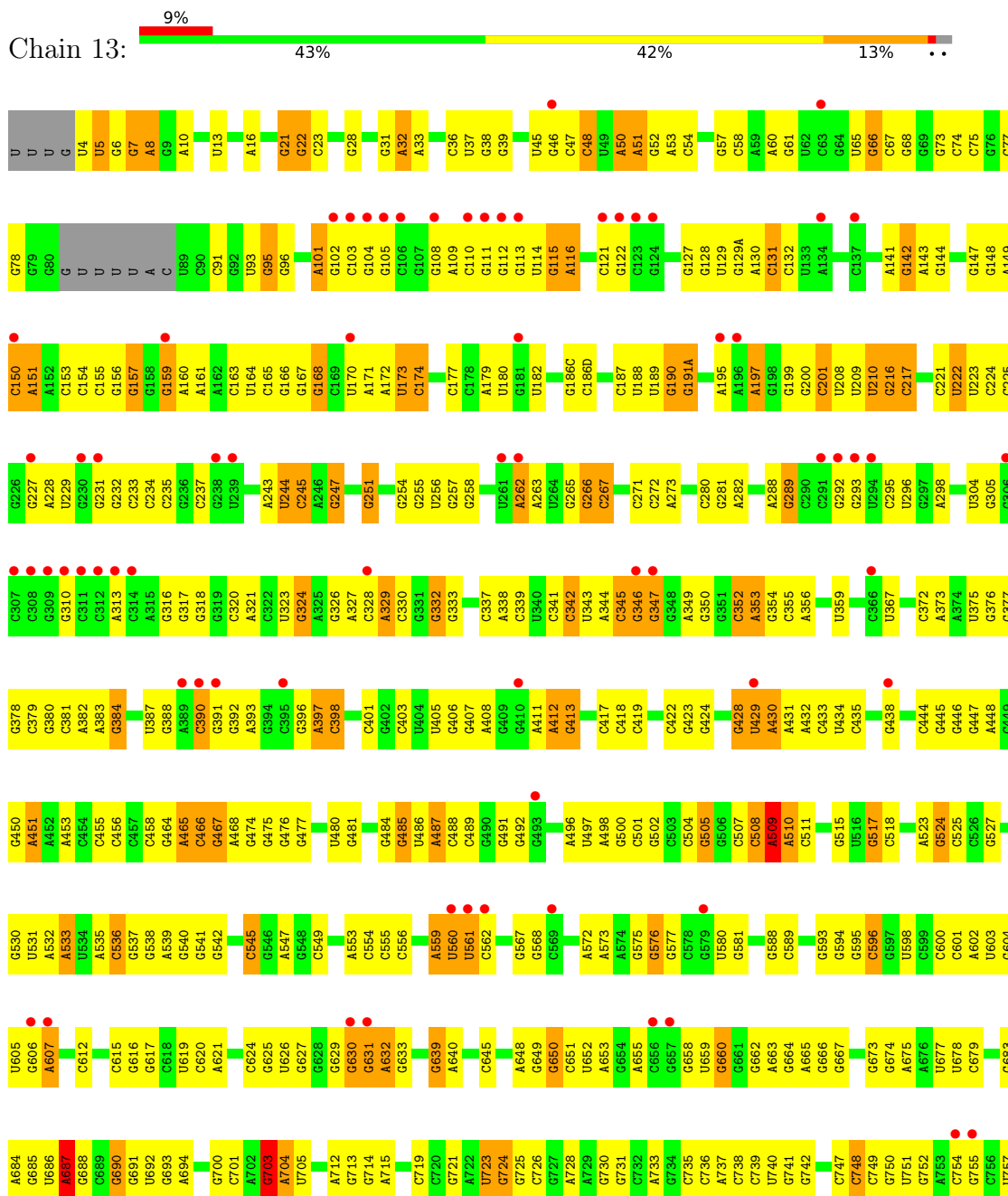
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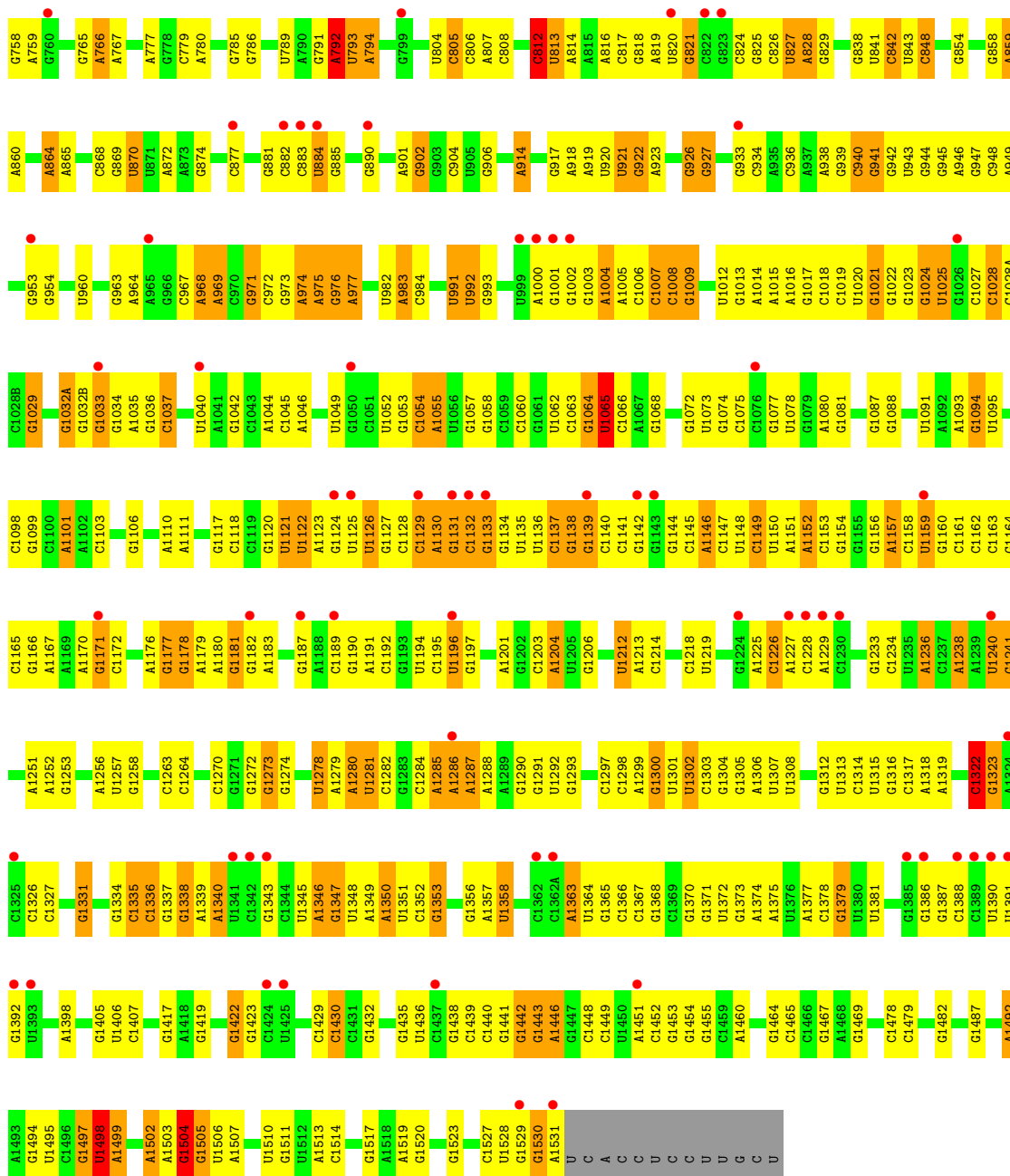
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61	I8	7	Total O 7 7	0	0
61	L8	1	Total O 1 1	0	0
61	P8	1	Total O 1 1	0	0
61	Q8	2	Total O 2 2	0	0
61	1G	82	Total O 82 82	0	0
61	7A	1	Total O 1 1	0	0
61	BA	1	Total O 1 1	0	0
61	3L	6	Total O 6 6	0	0
61	14	598	Total O 598 598	0	0
61	19	13	Total O 13 13	0	0
61	39	7	Total O 7 7	0	0
61	35	1	Total O 1 1	0	0
61	85	1	Total O 1 1	0	0
61	A5	1	Total O 1 1	0	0
61	G5	1	Total O 1 1	0	0
61	L5	1	Total O 1 1	0	0

3 Residue-property plots [i](#)

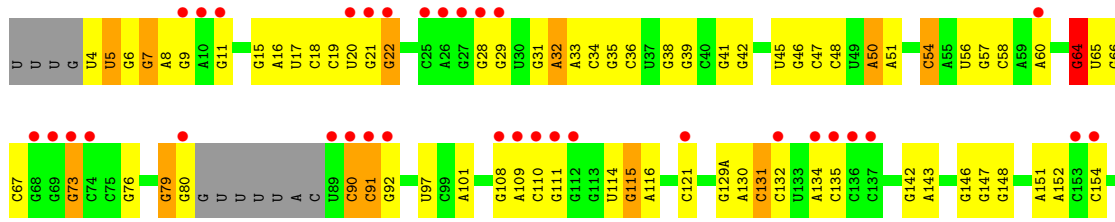
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

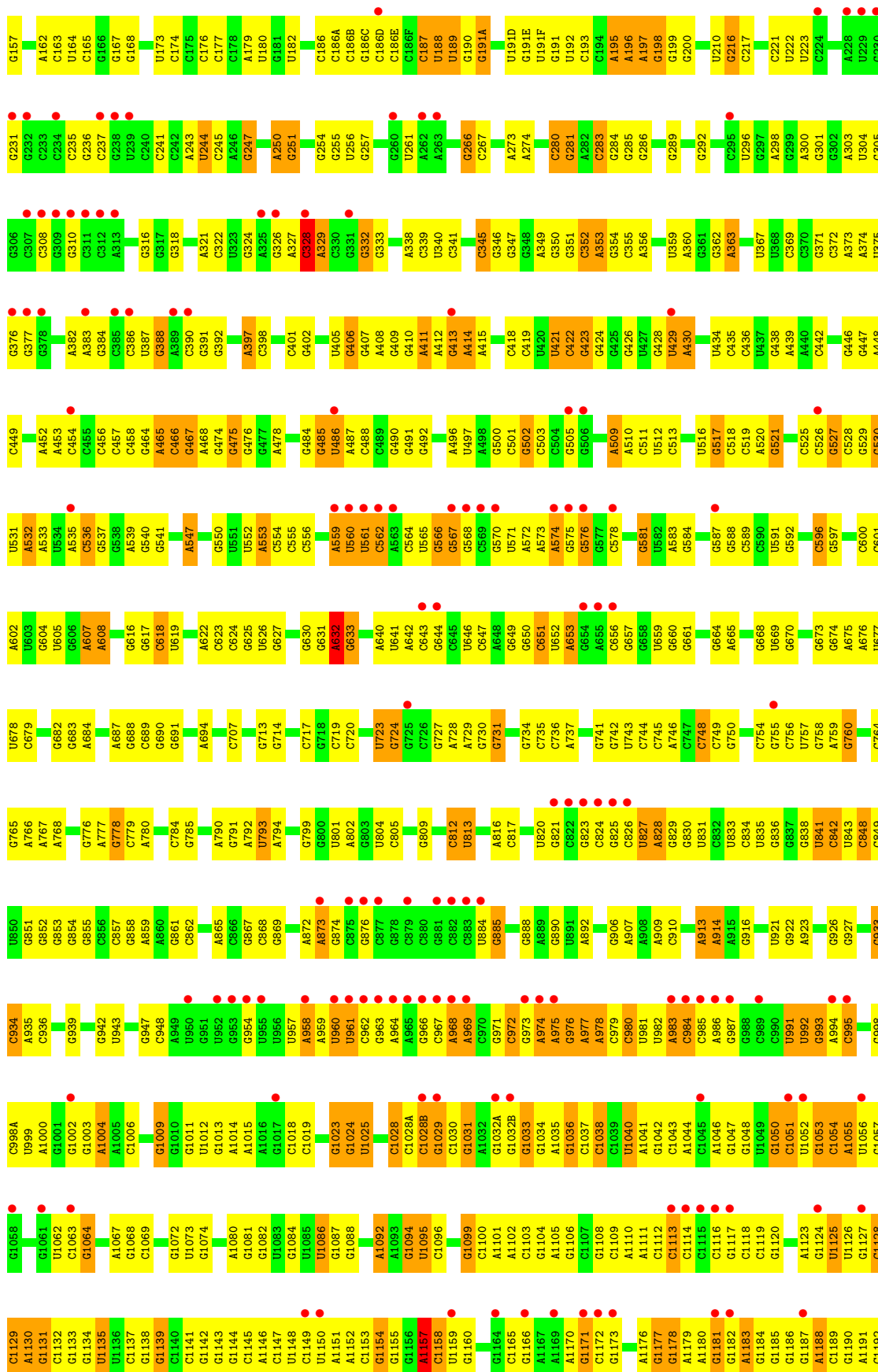
- Molecule 1: 16S ribosomal RNA

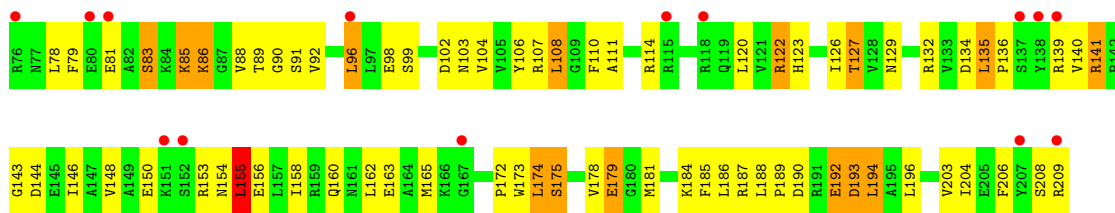




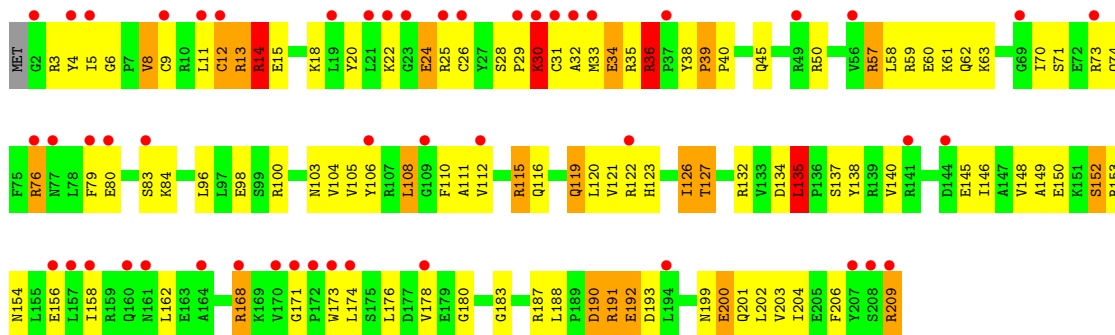
• Molecule 1: 16S ribosomal RNA



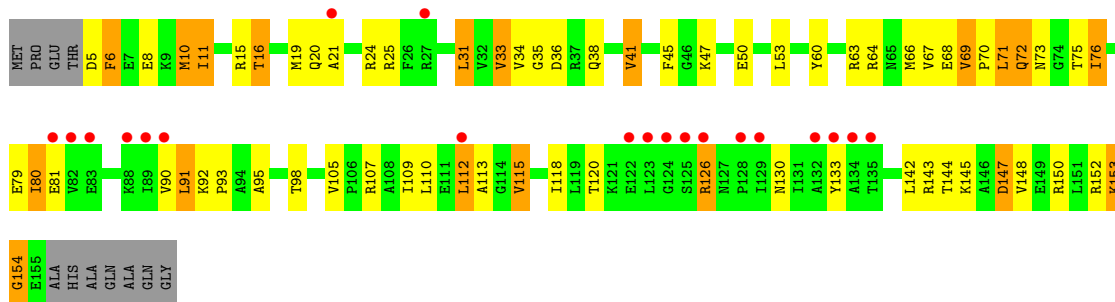




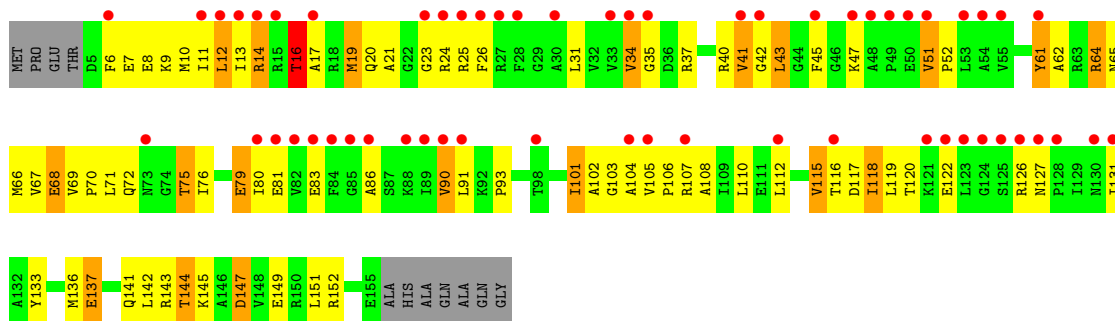
• Molecule 4: 30S ribosomal protein S4



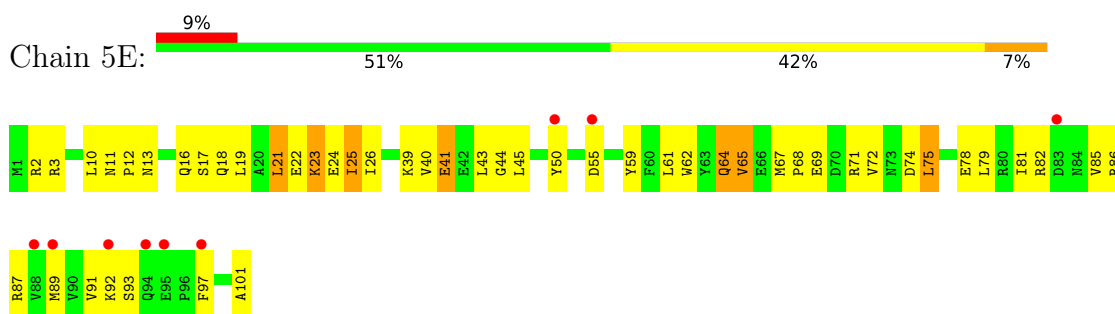
• Molecule 5: 30S ribosomal protein S5



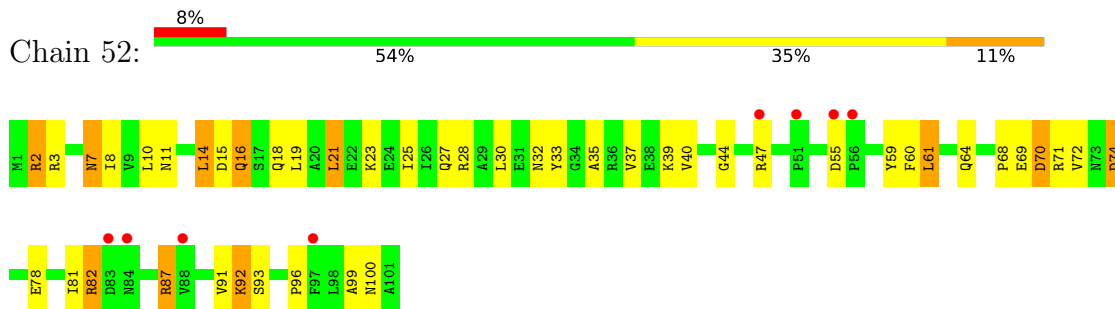
• Molecule 5: 30S ribosomal protein S5



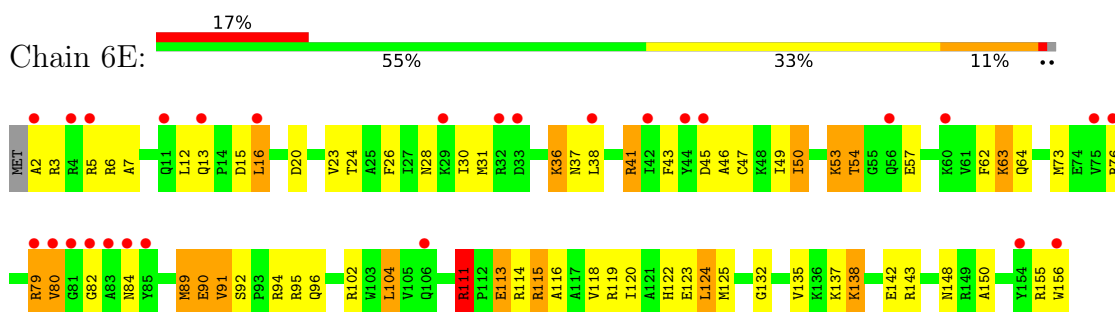
• Molecule 6: 30S ribosomal protein S6



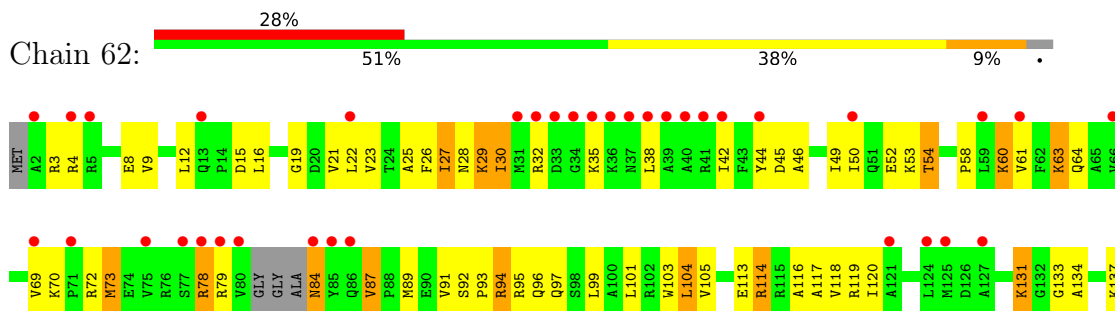
- Molecule 6: 30S ribosomal protein S6



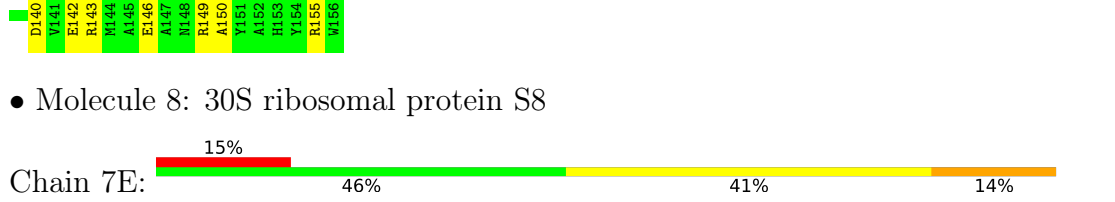
- Molecule 7: 30S ribosomal protein S7



- Molecule 7: 30S ribosomal protein S7

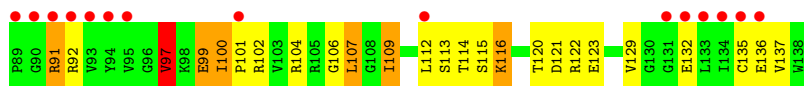


- Molecule 8: 30S ribosomal protein S8

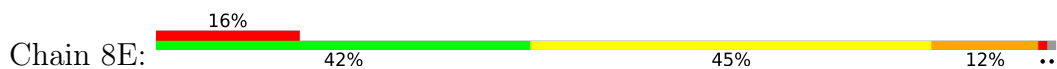




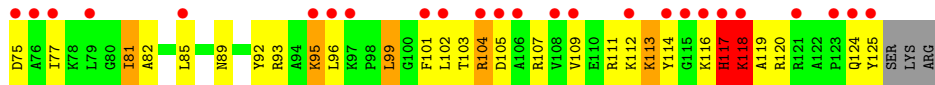
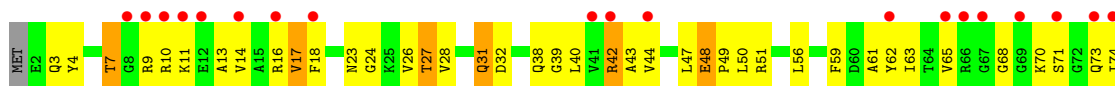
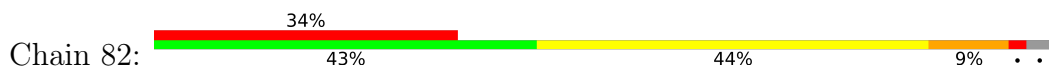
• Molecule 8: 30S ribosomal protein S8



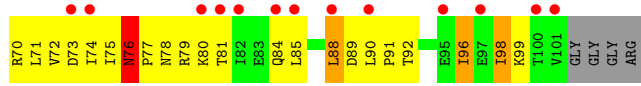
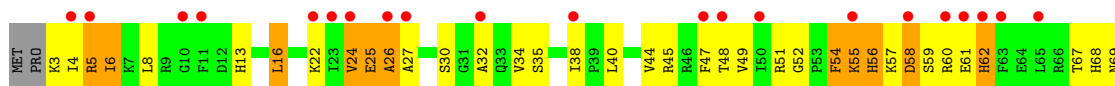
• Molecule 9: 30S ribosomal protein S9



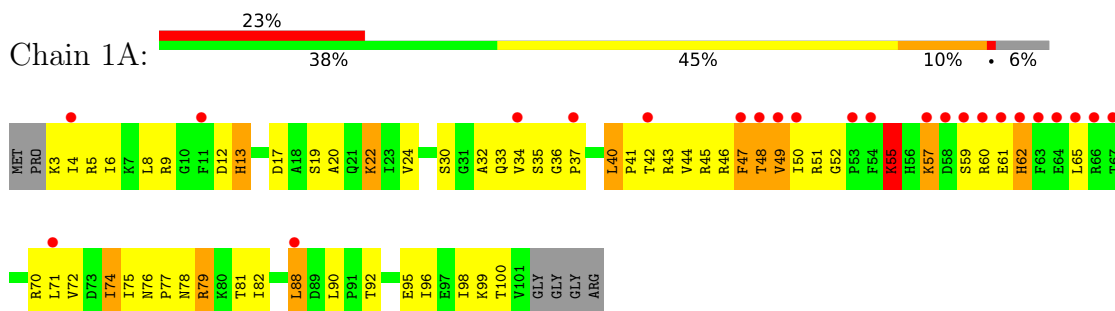
• Molecule 9: 30S ribosomal protein S9



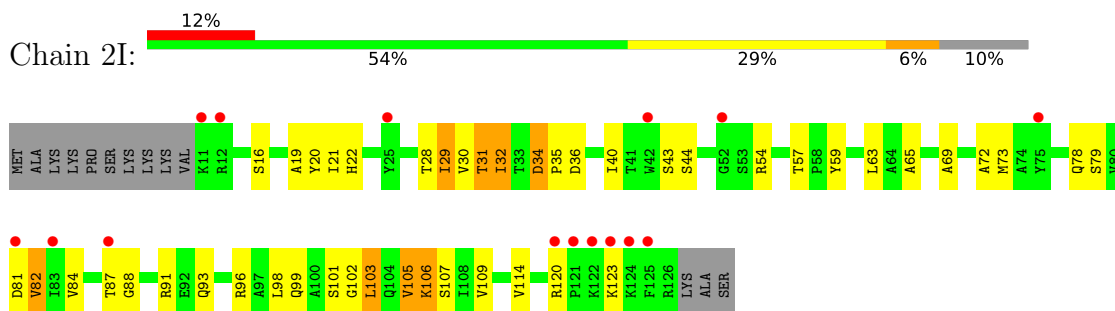
• Molecule 10: 30S ribosomal protein S10



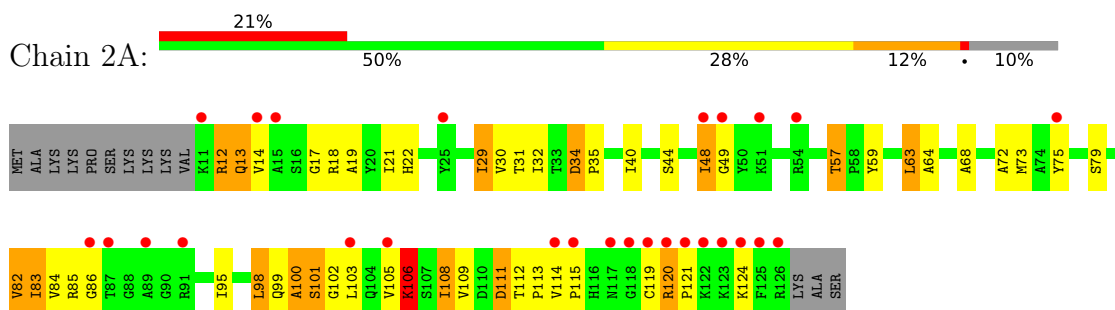
- Molecule 10: 30S ribosomal protein S10



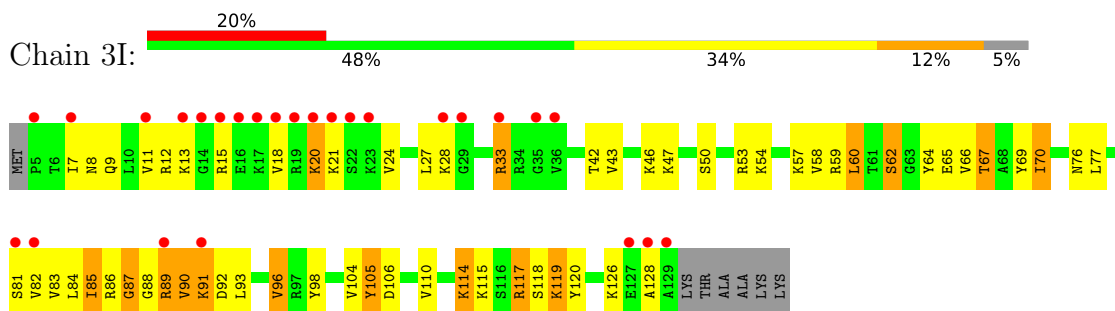
- Molecule 11: 30S ribosomal protein S11



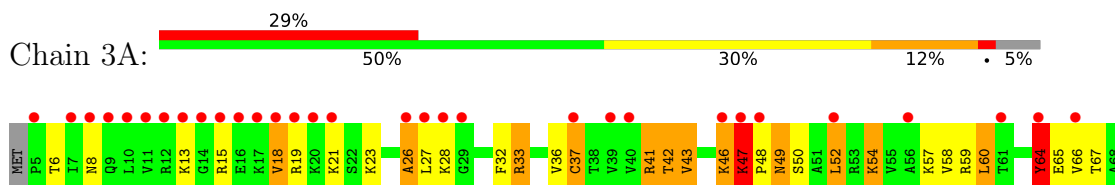
- Molecule 11: 30S ribosomal protein S11



- Molecule 12: 30S ribosomal protein S12

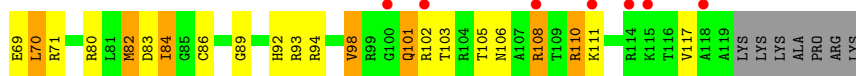
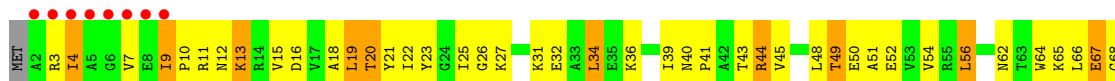


- Molecule 12: 30S ribosomal protein S12

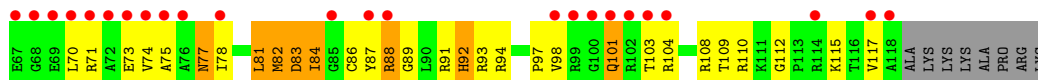




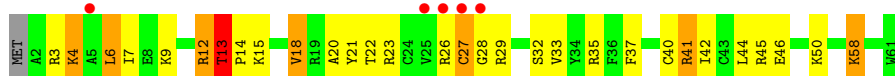
• Molecule 13: 30S ribosomal protein S13



• Molecule 13: 30S ribosomal protein S13



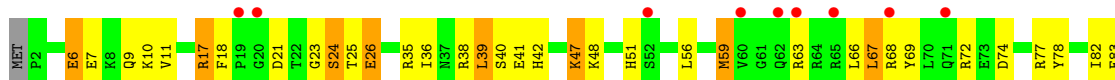
• Molecule 14: 30S ribosomal protein S14 type Z



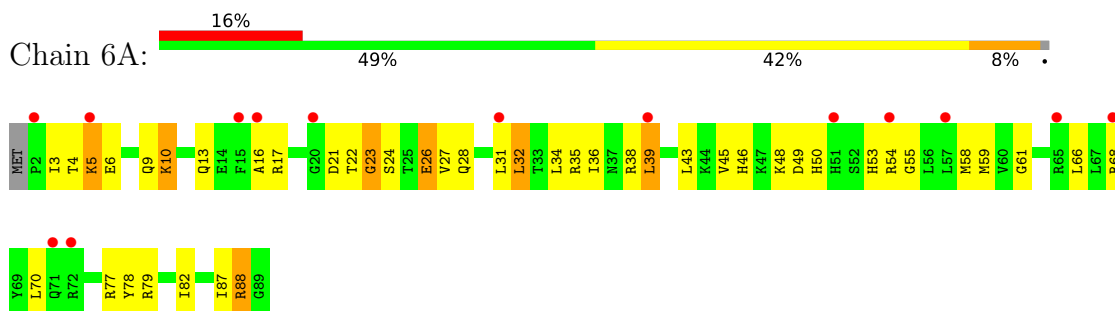
• Molecule 14: 30S ribosomal protein S14 type Z



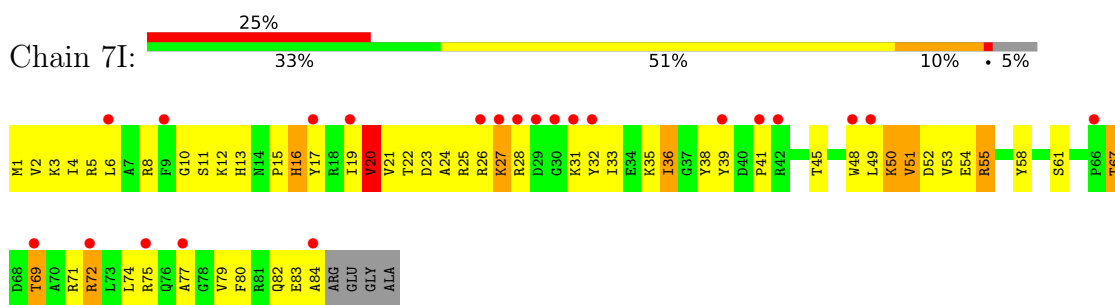
• Molecule 15: 30S ribosomal protein S15



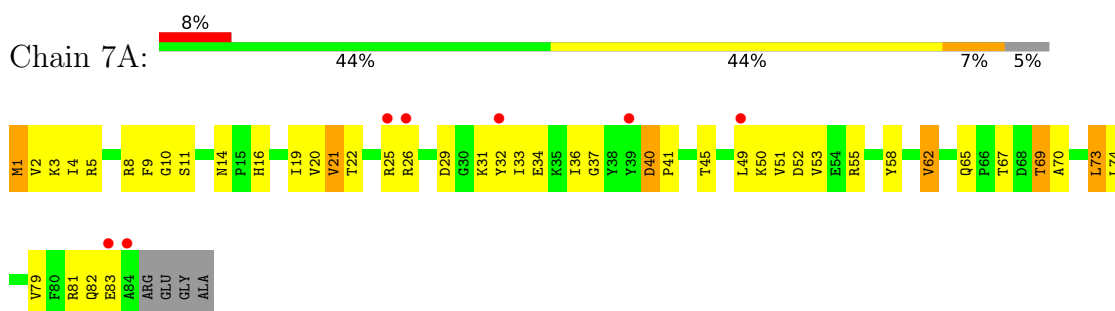
- Molecule 15: 30S ribosomal protein S15



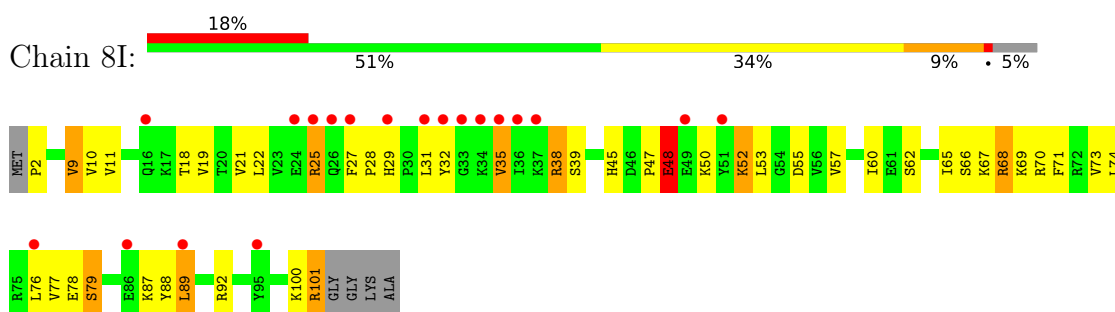
- Molecule 16: 30S ribosomal protein S16



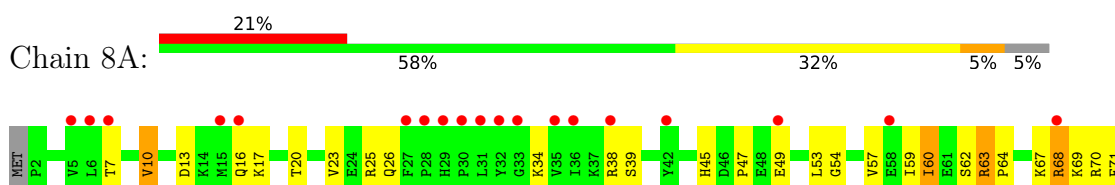
- Molecule 16: 30S ribosomal protein S16



- Molecule 17: 30S ribosomal protein S17

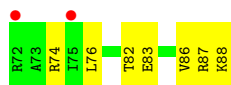
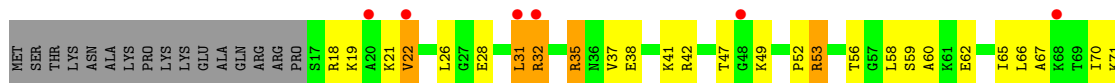


- Molecule 17: 30S ribosomal protein S17

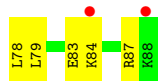
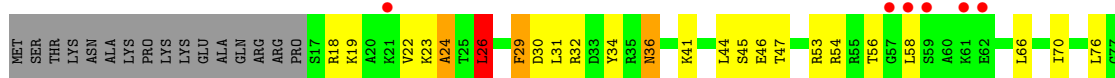




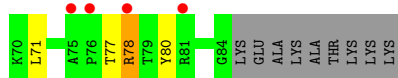
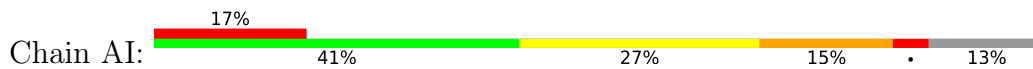
• Molecule 18: 30S ribosomal protein S18



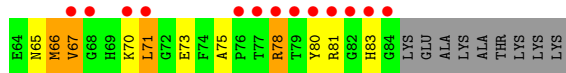
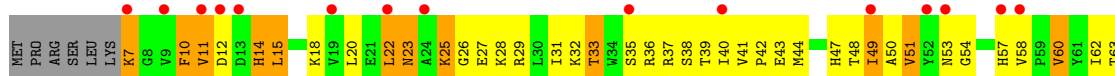
• Molecule 18: 30S ribosomal protein S18



• Molecule 19: 30S ribosomal protein S19

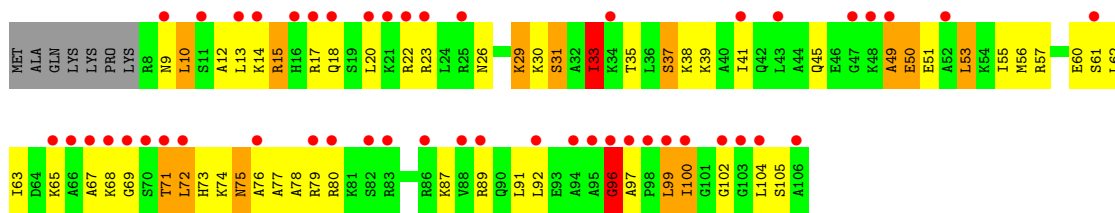


• Molecule 19: 30S ribosomal protein S19

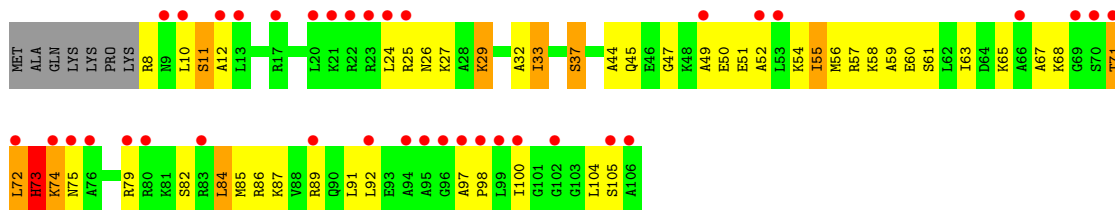


• Molecule 20: 30S ribosomal protein S20





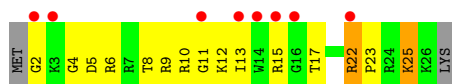
● Molecule 20: 30S ribosomal protein S20



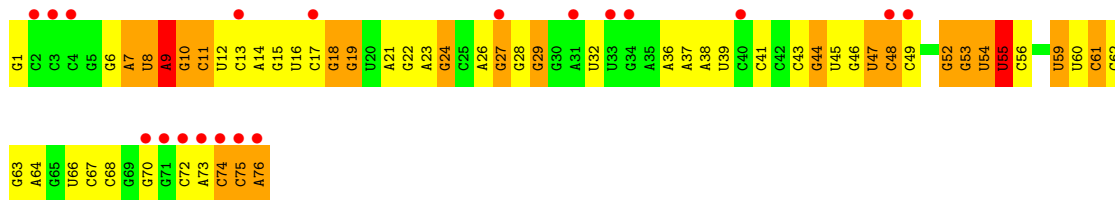
● Molecule 21: 30S ribosomal protein Thx



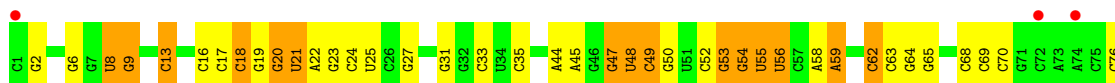
● Molecule 21: 30S ribosomal protein Thx



● Molecule 22: tRNA-Phe

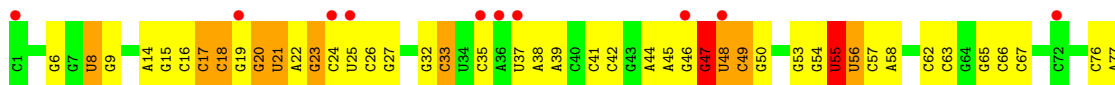


● Molecule 23: tRNA-fMet

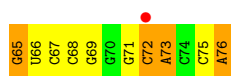
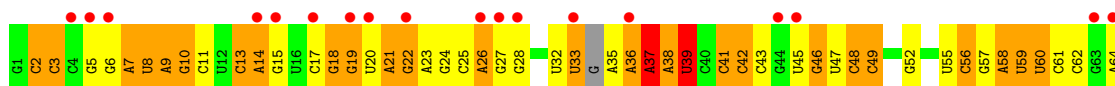
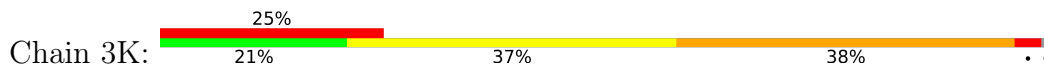


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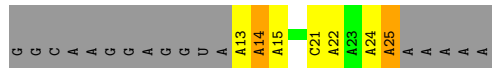
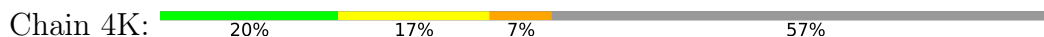
• Molecule 23: tRNA-fMet



• Molecule 24: tRNA-Phe



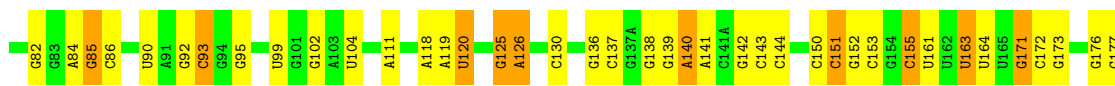
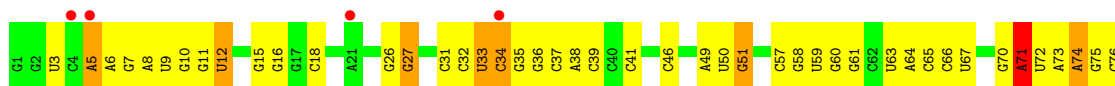
• Molecule 25: mRNA

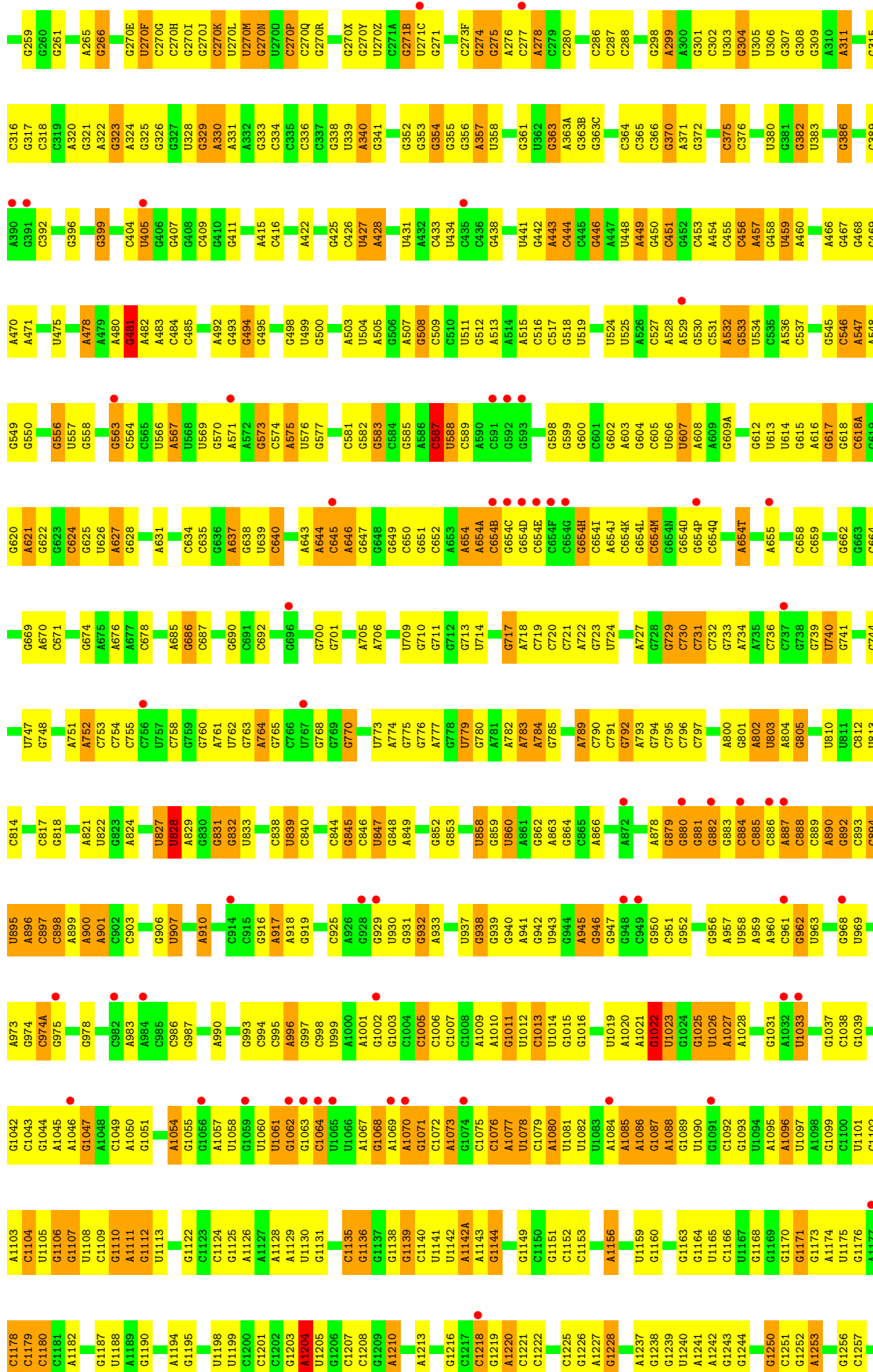


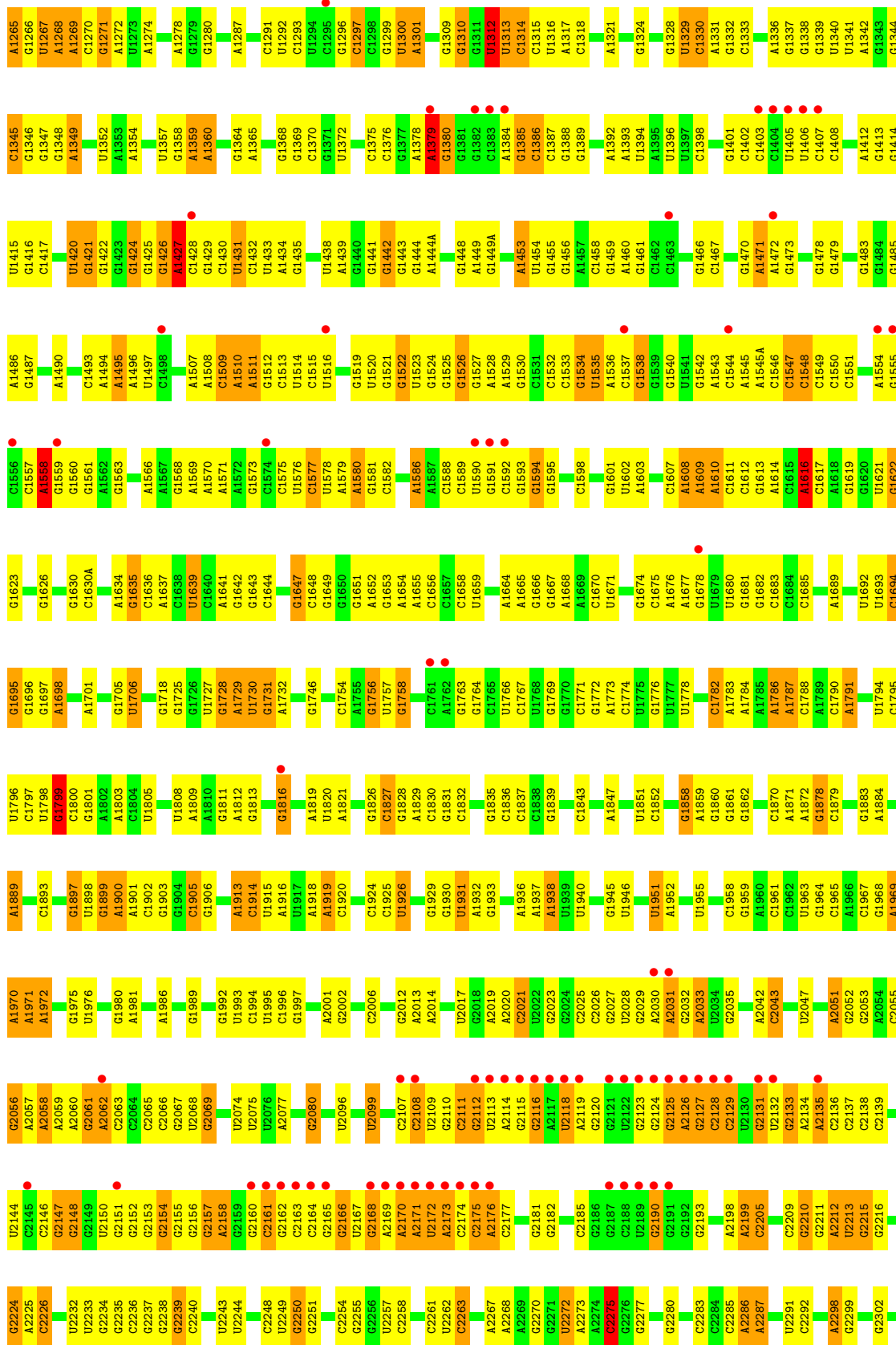
• Molecule 25: mRNA

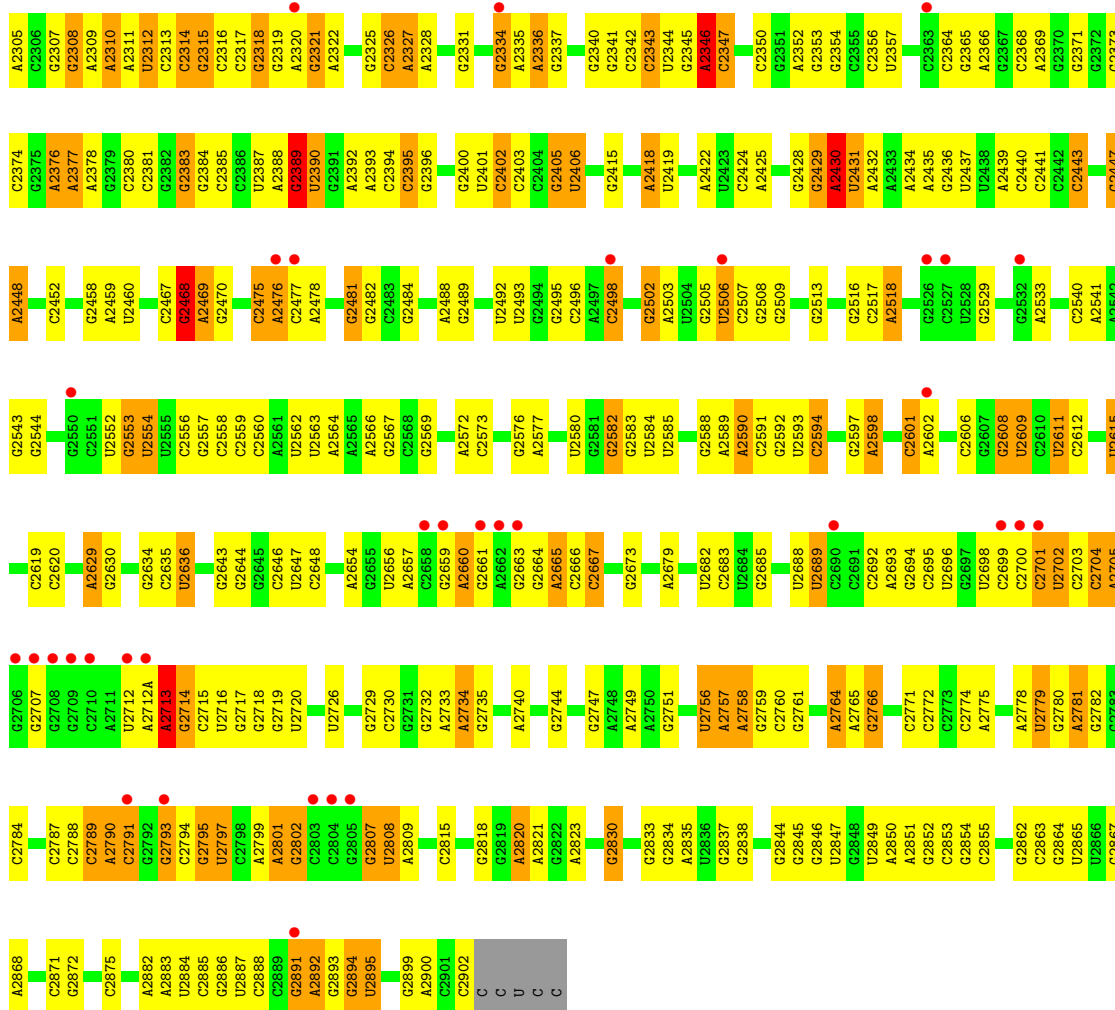


• Molecule 26: 23S ribosomal RNA

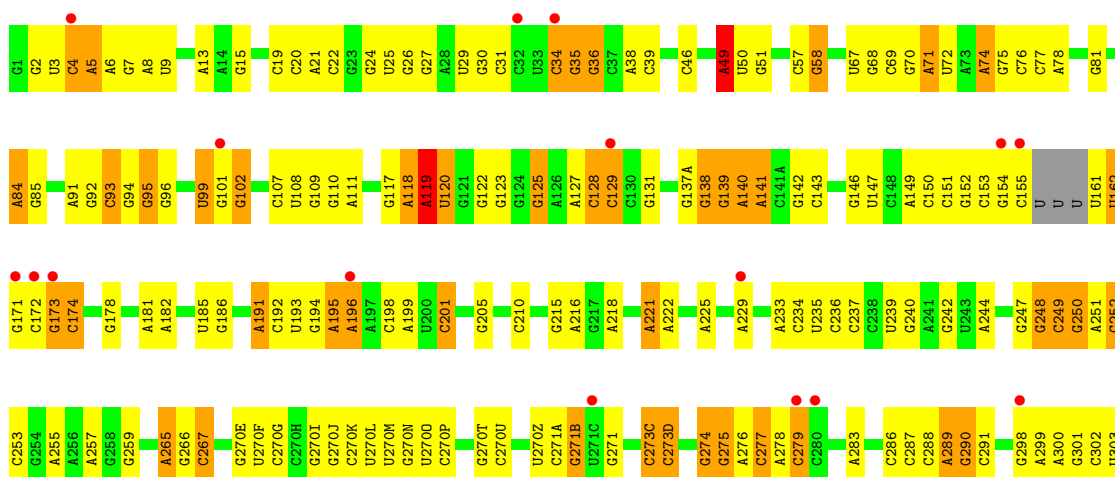


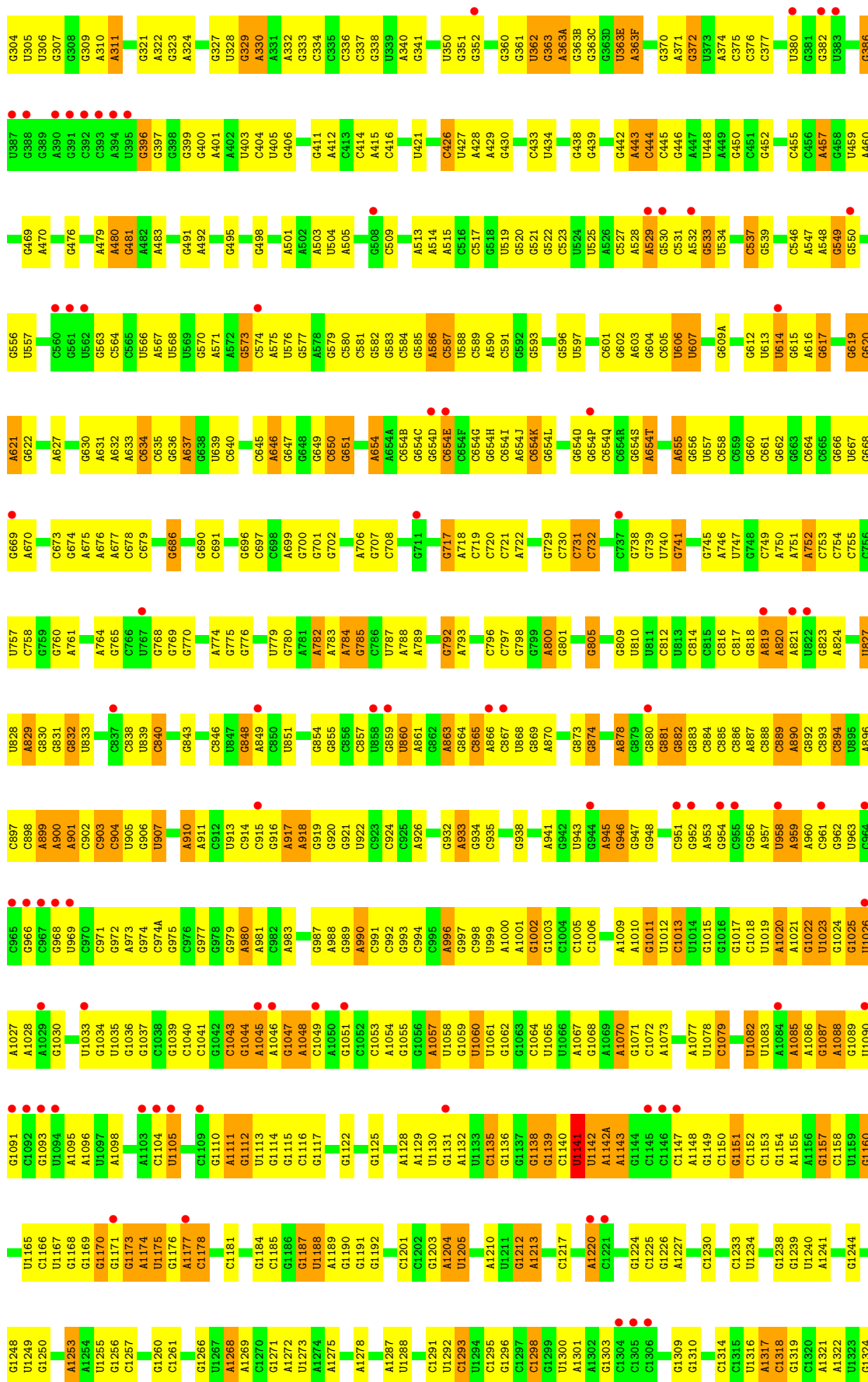


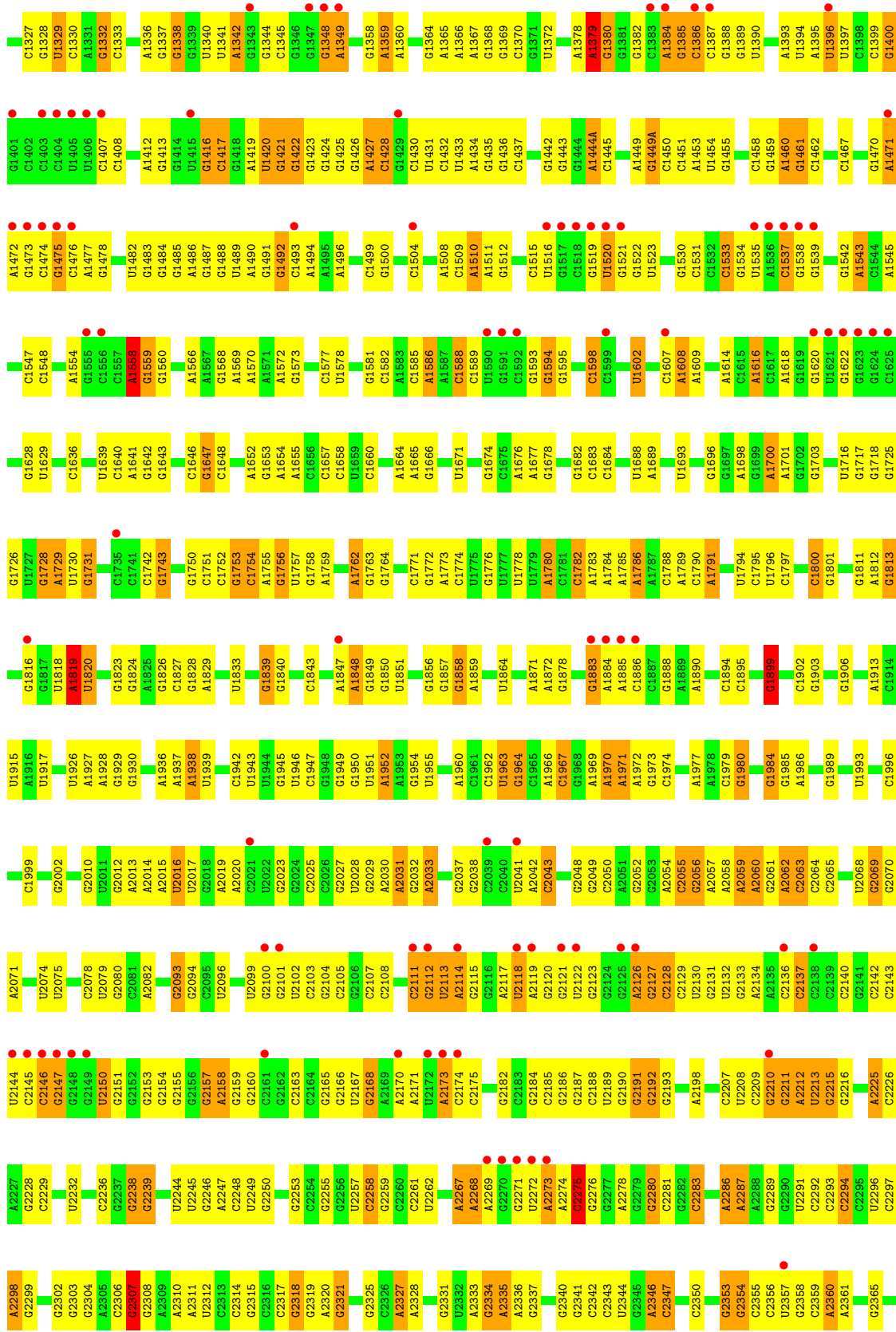


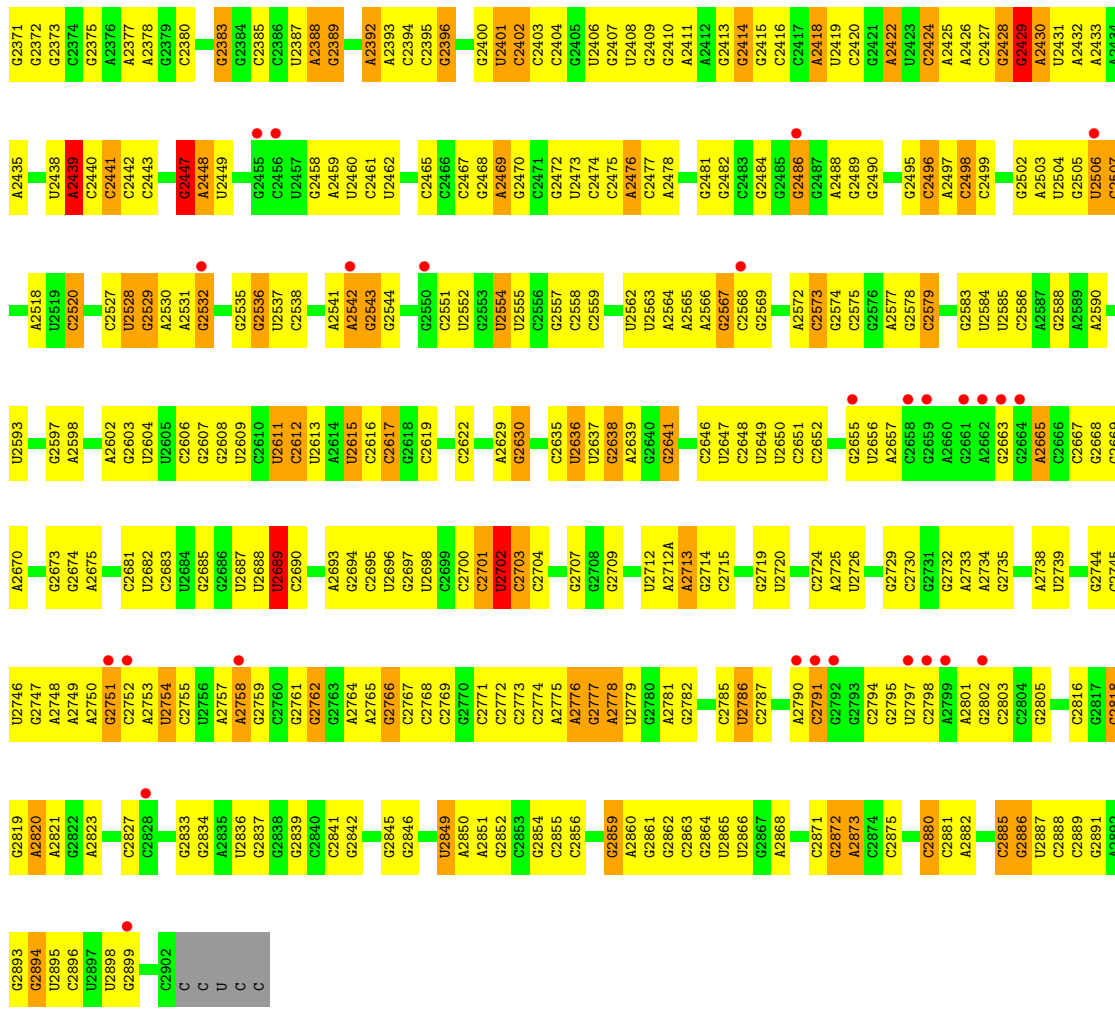


• Molecule 26: 23S ribosomal RNA

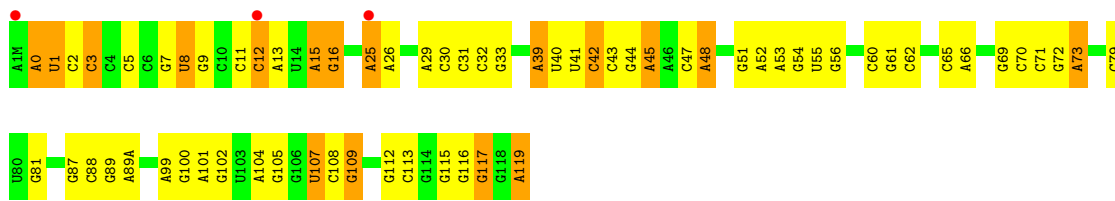




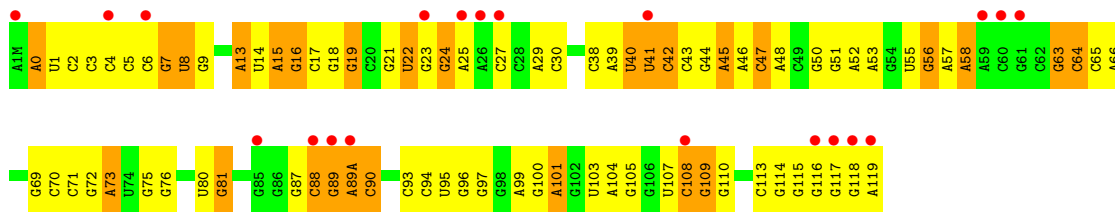




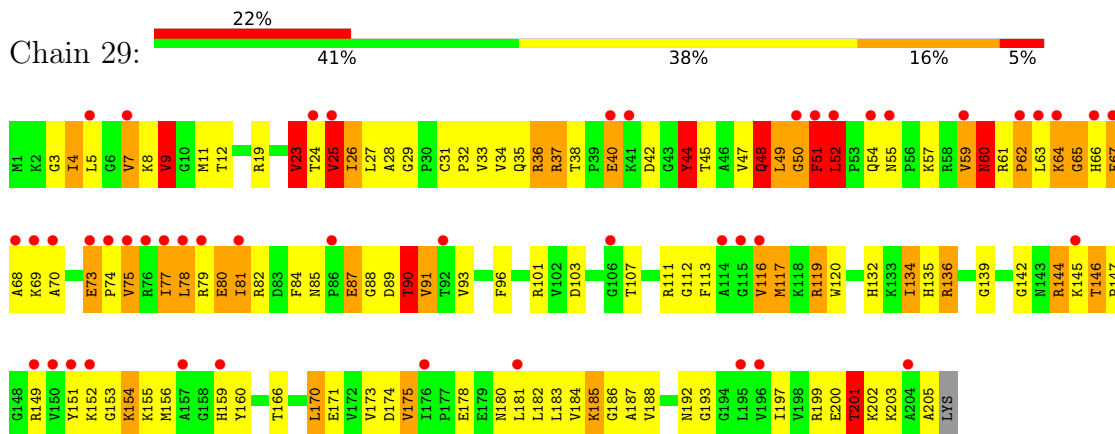
● Molecule 27: 5S ribosomal RNA



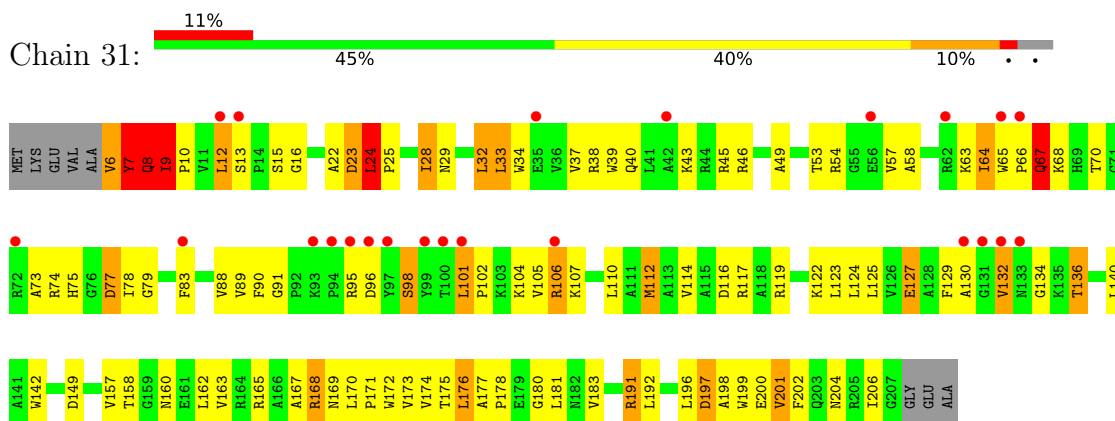
● Molecule 27: 5S ribosomal RNA



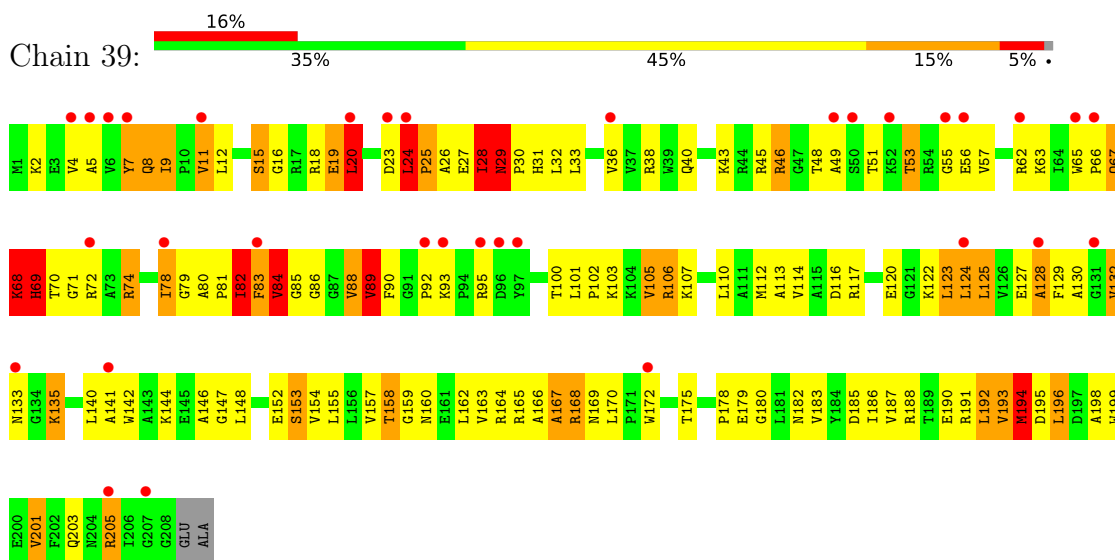
• Molecule 29: 50S ribosomal protein L3



• Molecule 30: 50S ribosomal protein L4

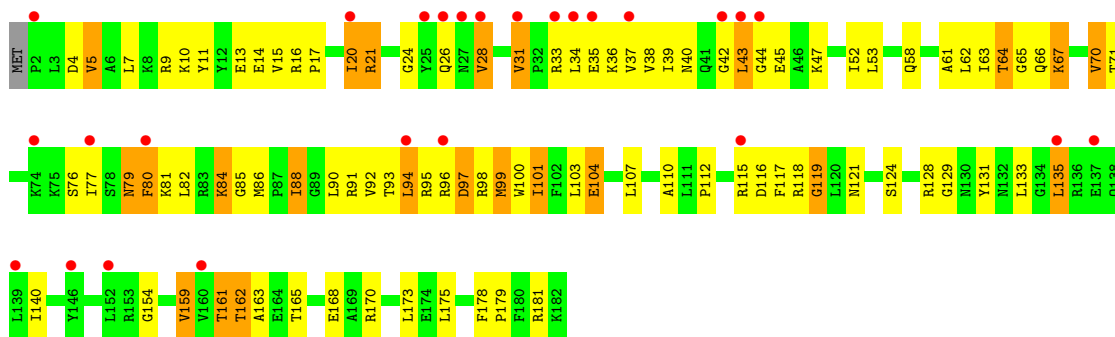


• Molecule 30: 50S ribosomal protein L4

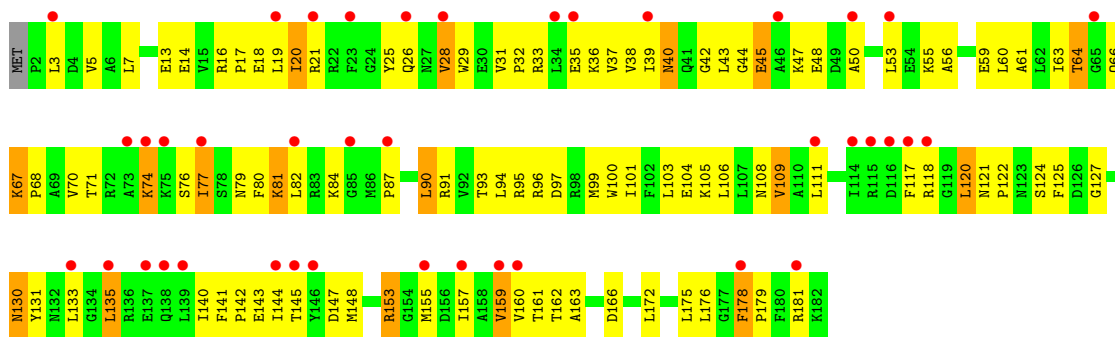
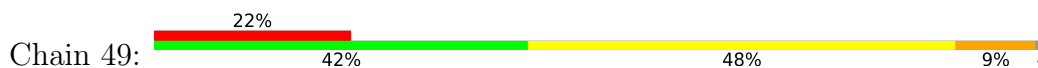


• Molecule 31: 50S ribosomal protein L5

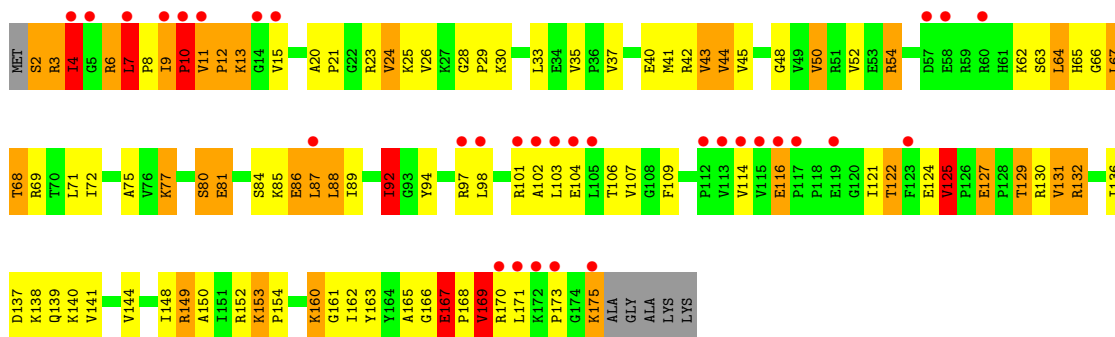




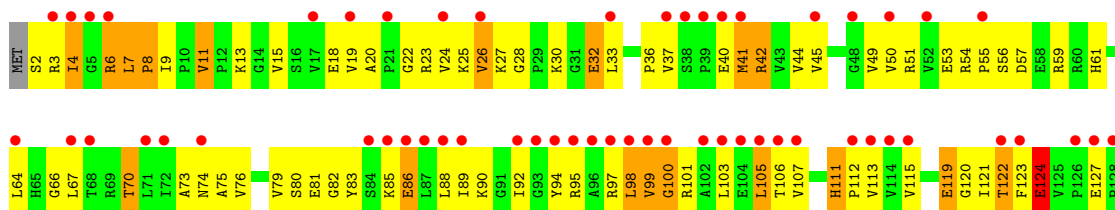
• Molecule 31: 50S ribosomal protein L5

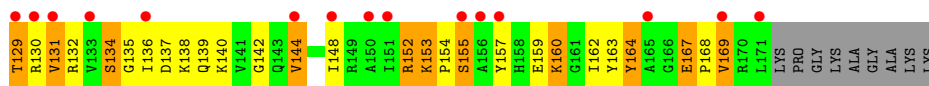


• Molecule 32: 50S ribosomal protein L6

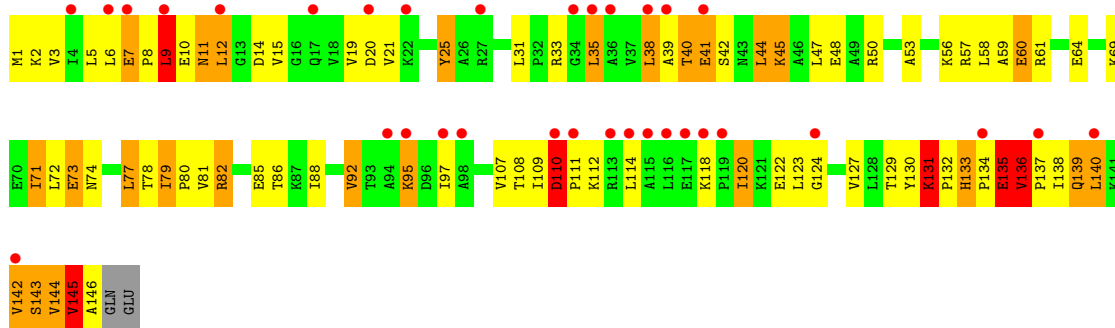


• Molecule 32: 50S ribosomal protein L6

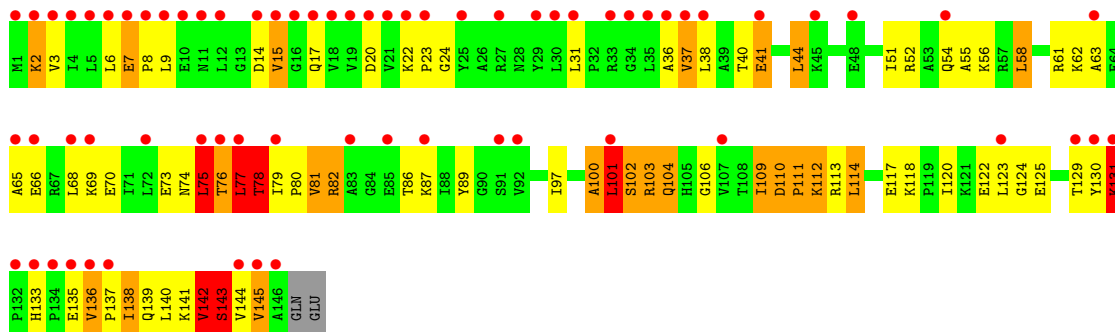
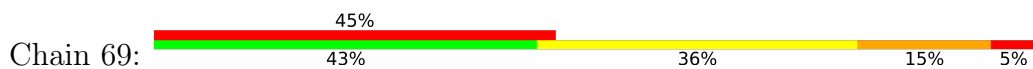




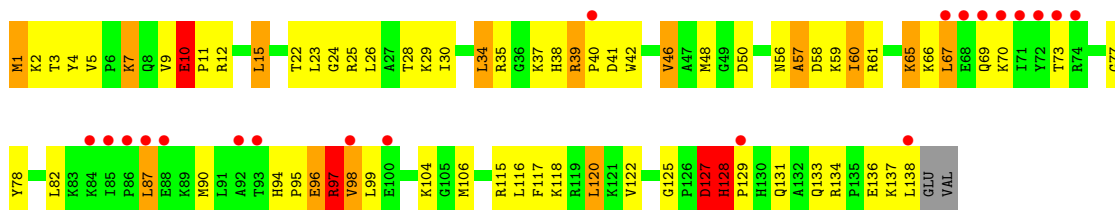
• Molecule 33: 50S ribosomal protein L9



• Molecule 33: 50S ribosomal protein L9

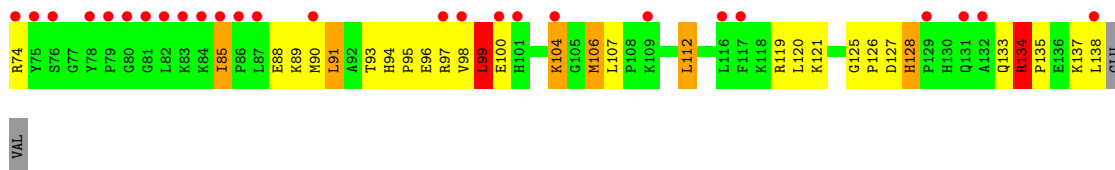


• Molecule 34: 50S ribosomal protein L13

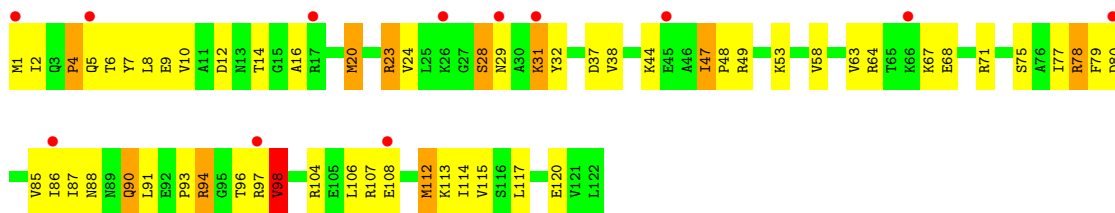


• Molecule 34: 50S ribosomal protein L13

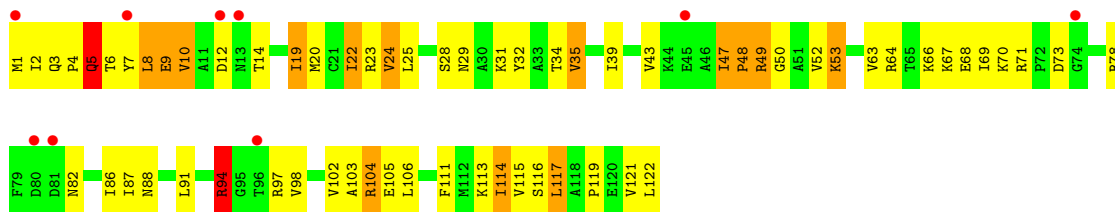




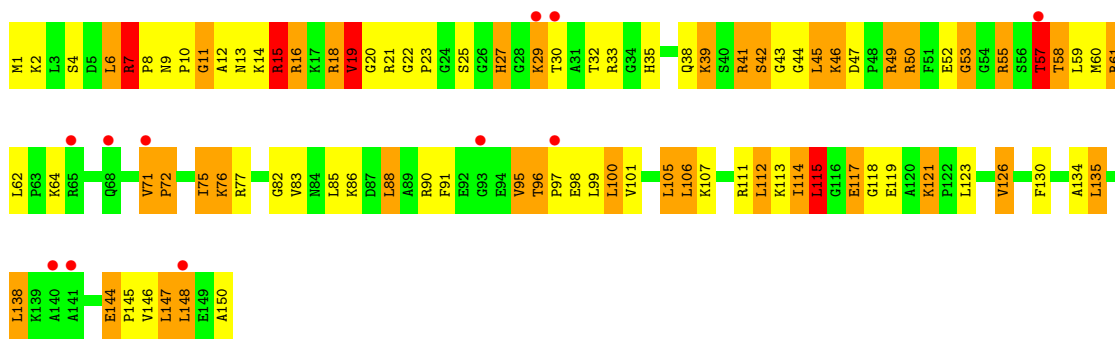
• Molecule 35: 50S ribosomal protein L14



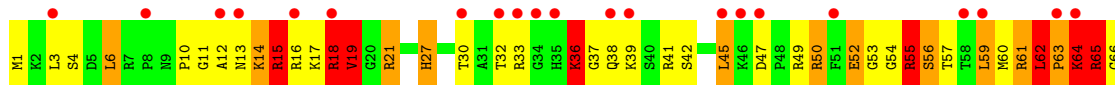
• Molecule 35: 50S ribosomal protein L14

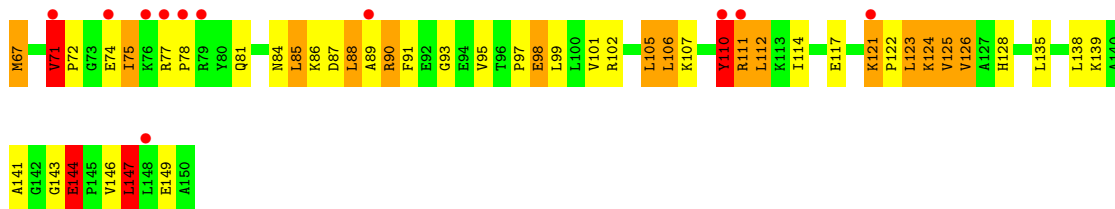


• Molecule 36: 50S ribosomal protein L15

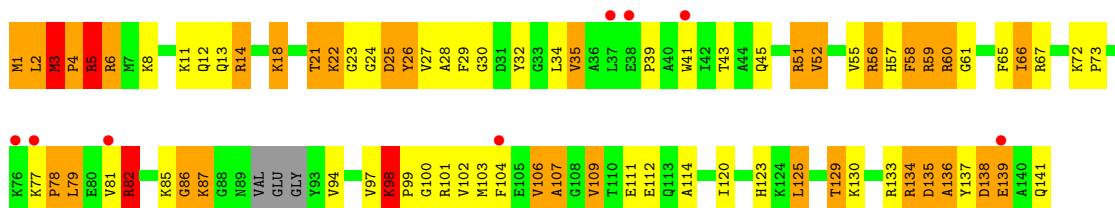


• Molecule 36: 50S ribosomal protein L15

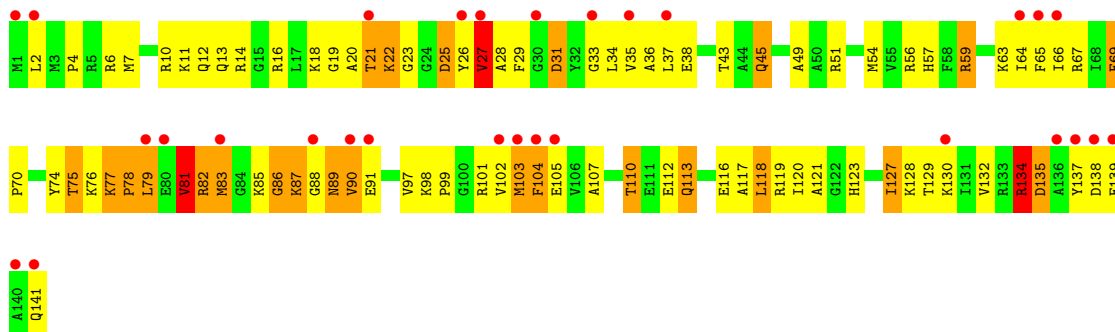




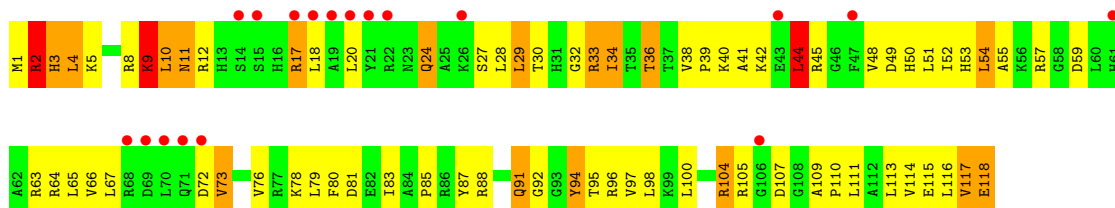
• Molecule 37: 50S ribosomal protein L16



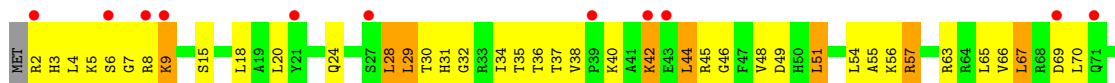
• Molecule 37: 50S ribosomal protein L16



• Molecule 38: 50S ribosomal protein L17

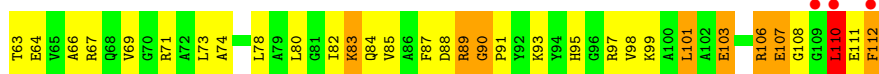


• Molecule 38: 50S ribosomal protein L17

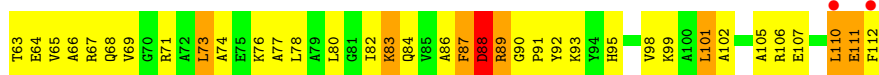
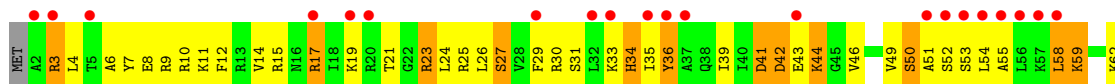




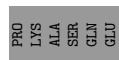
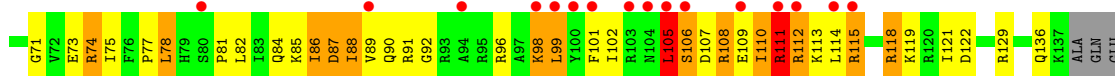
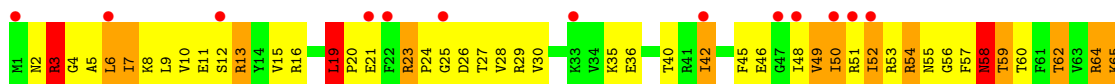
• Molecule 39: 50S ribosomal protein L18



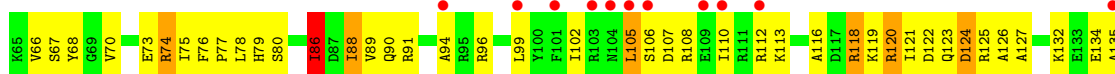
• Molecule 39: 50S ribosomal protein L18

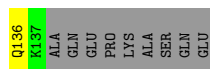


• Molecule 40: 50S ribosomal protein L19

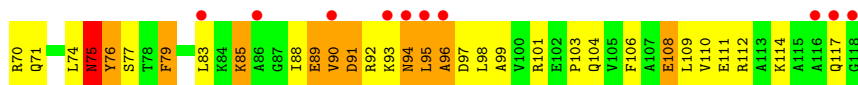


• Molecule 40: 50S ribosomal protein L19

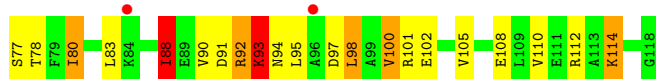
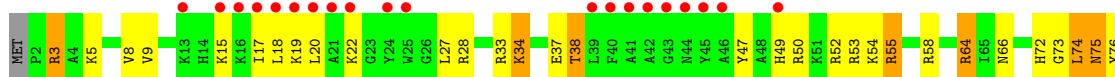




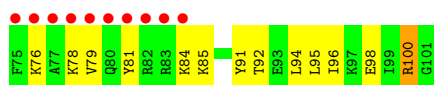
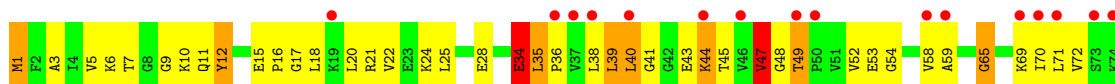
- Molecule 41: 50S ribosomal protein L20



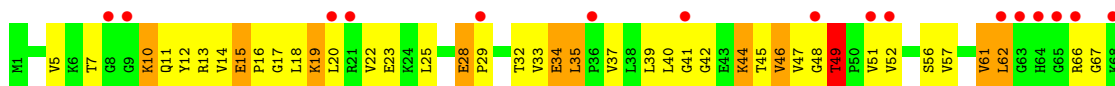
- Molecule 41: 50S ribosomal protein L20



- Molecule 42: 50S ribosomal protein L21

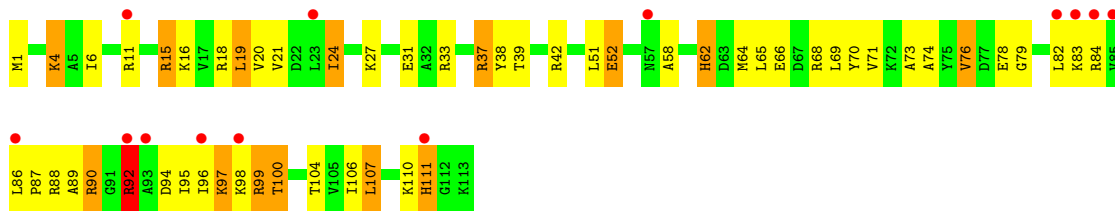


- Molecule 42: 50S ribosomal protein L21

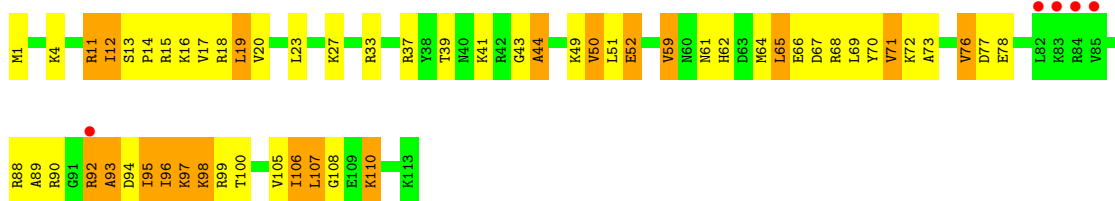


- Molecule 43: 50S ribosomal protein L22

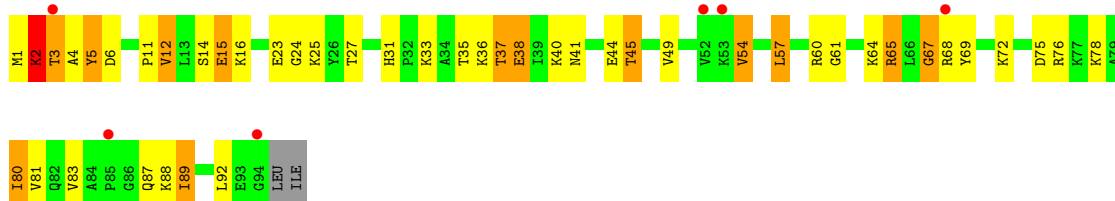




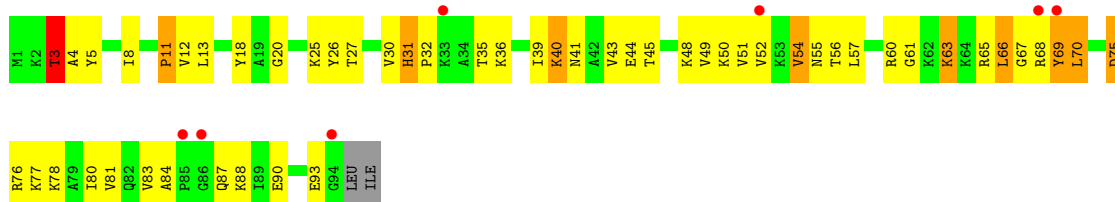
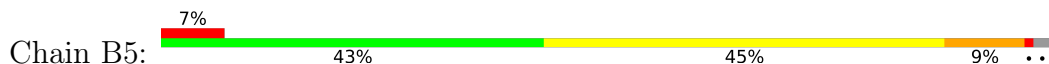
• Molecule 43: 50S ribosomal protein L22



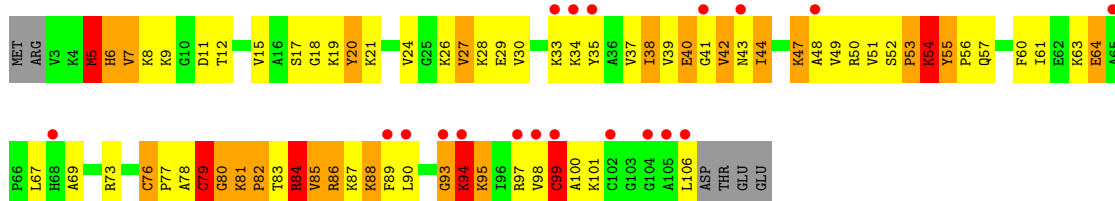
• Molecule 44: 50S ribosomal protein L23



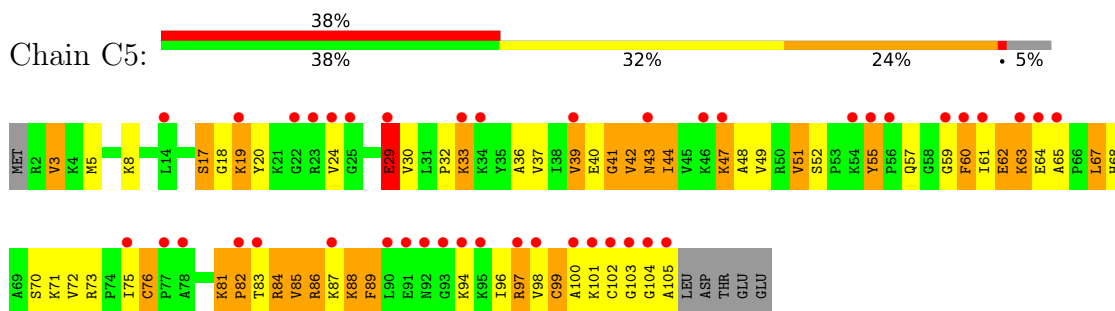
• Molecule 44: 50S ribosomal protein L23



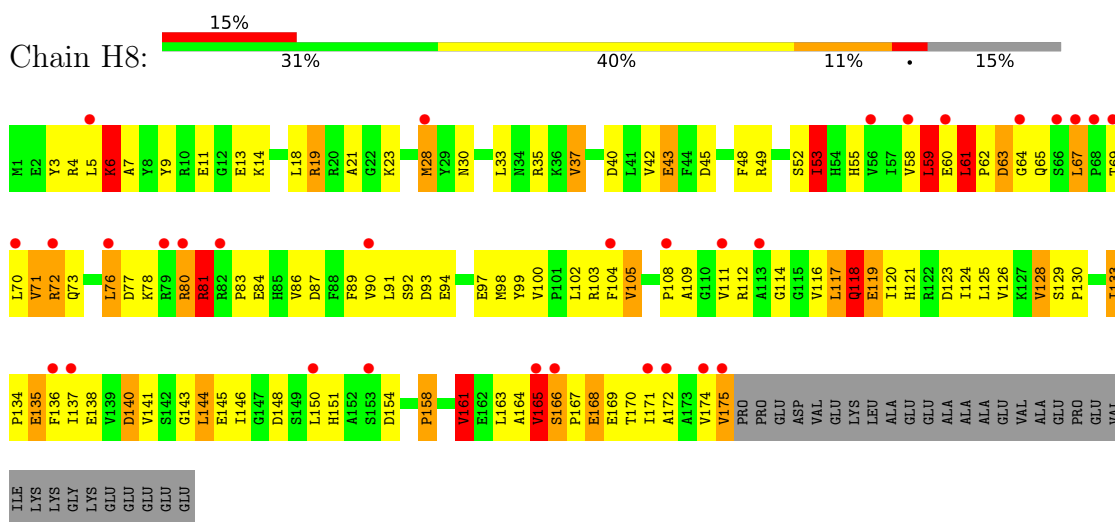
• Molecule 45: 50S ribosomal protein L24



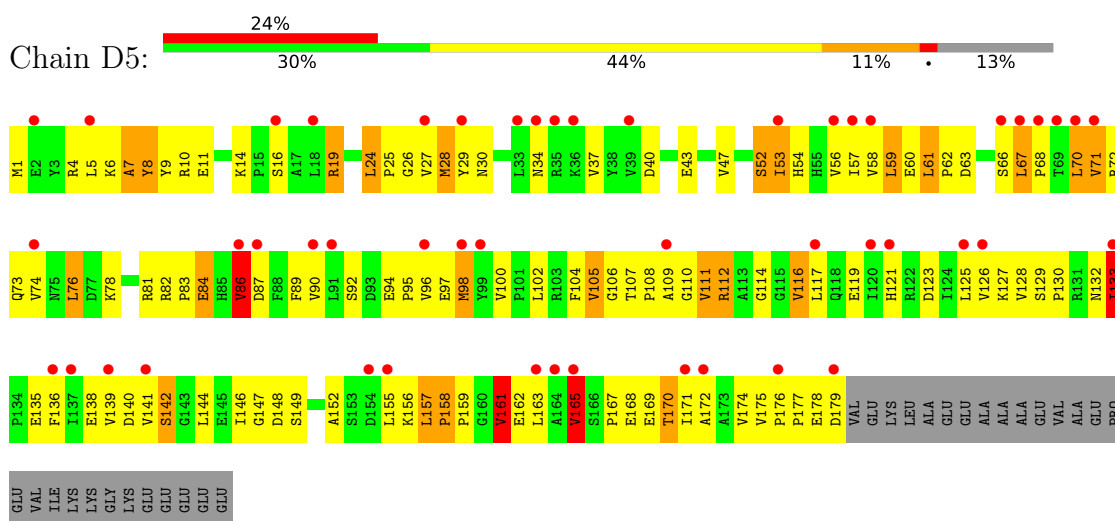
- Molecule 45: 50S ribosomal protein L24



- Molecule 46: 50S ribosomal protein L25

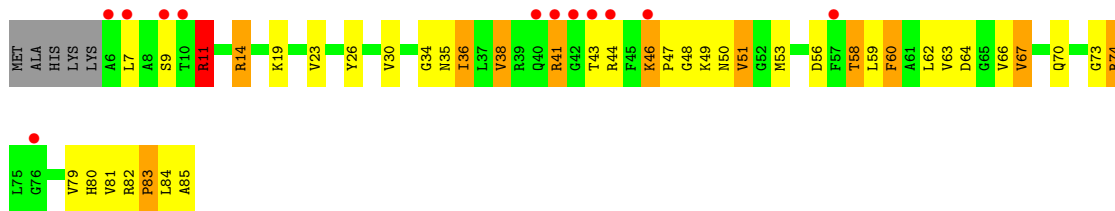


- Molecule 46: 50S ribosomal protein L25

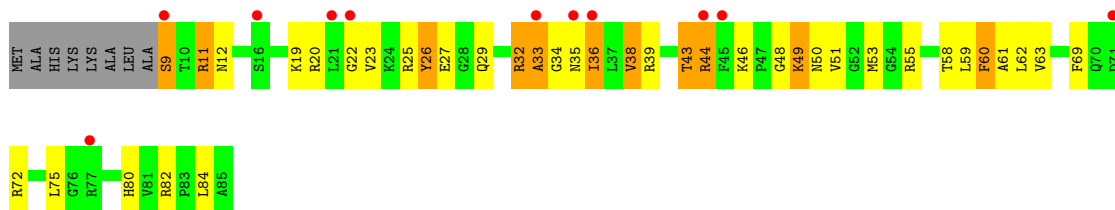


- Molecule 47: 50S ribosomal protein L27

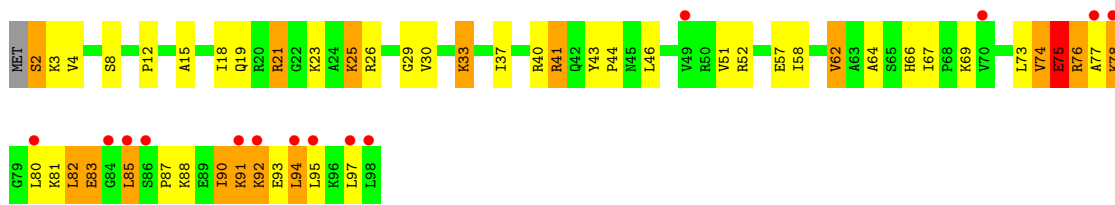




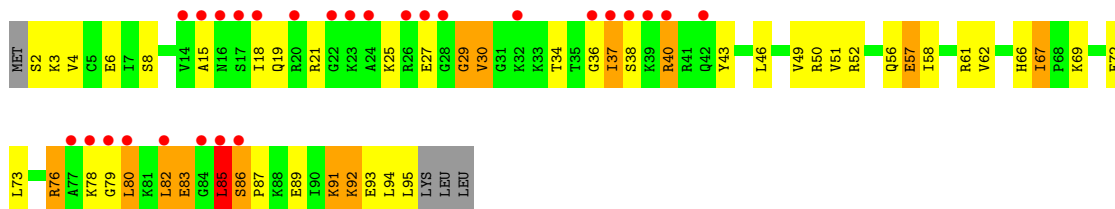
• Molecule 47: 50S ribosomal protein L27



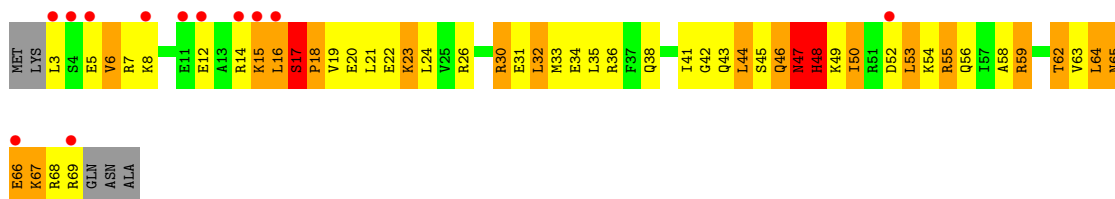
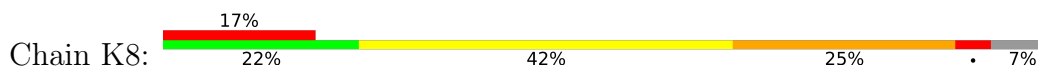
• Molecule 48: 50S ribosomal protein L28



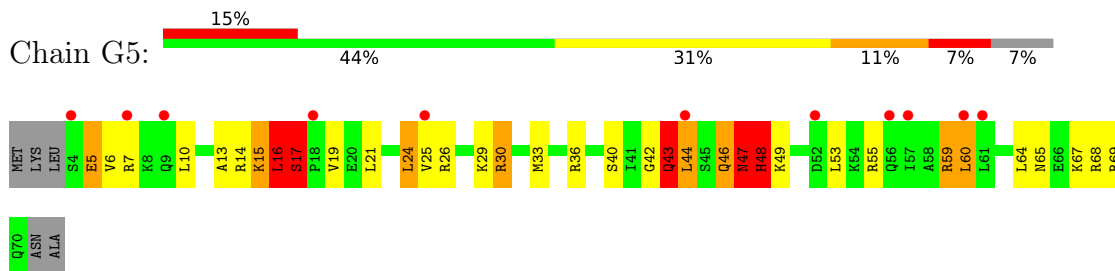
• Molecule 48: 50S ribosomal protein L28



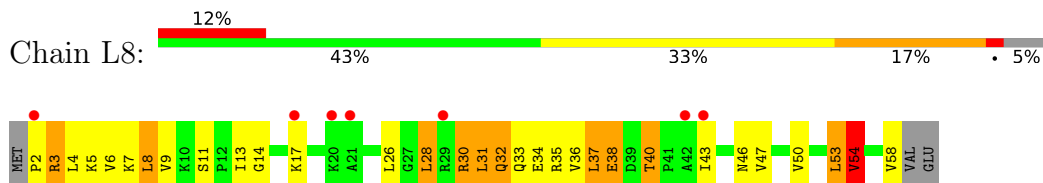
• Molecule 49: 50S ribosomal protein L29



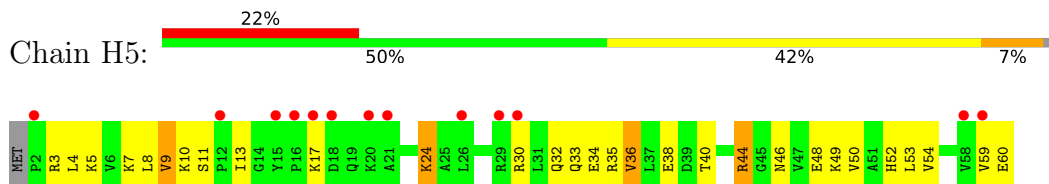
- Molecule 49: 50S ribosomal protein L29



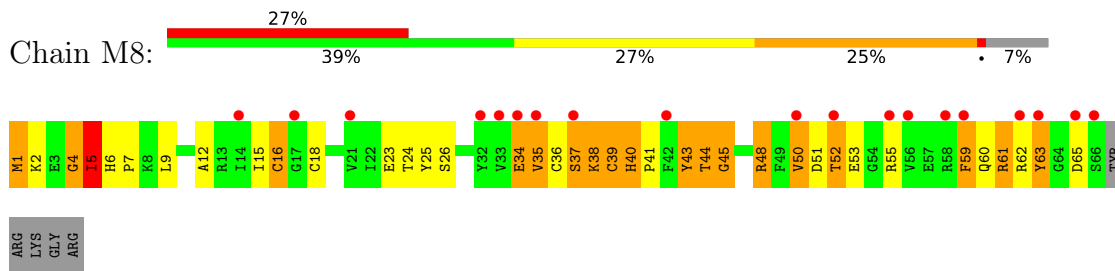
- Molecule 50: 50S ribosomal protein L30



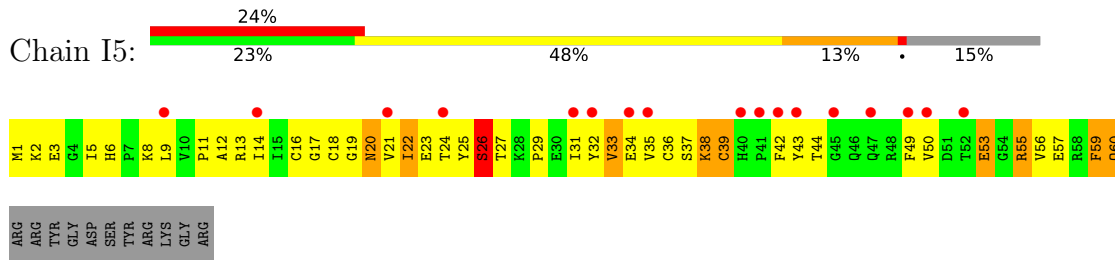
- Molecule 50: 50S ribosomal protein L30



- Molecule 51: 50S ribosomal protein L31

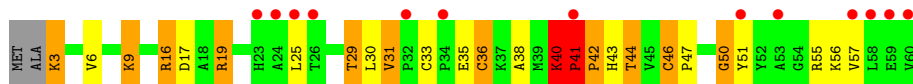


- Molecule 51: 50S ribosomal protein L31

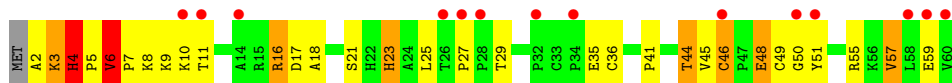


- Molecule 52: 50S ribosomal protein L32

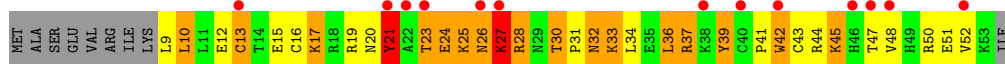




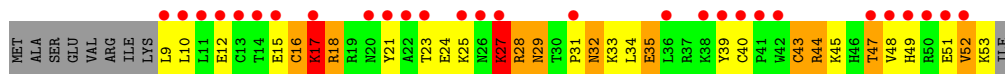
• Molecule 52: 50S ribosomal protein L32



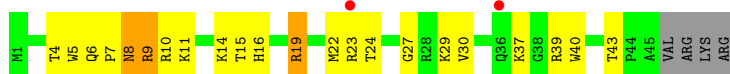
• Molecule 53: 50S ribosomal protein L33



• Molecule 53: 50S ribosomal protein L33



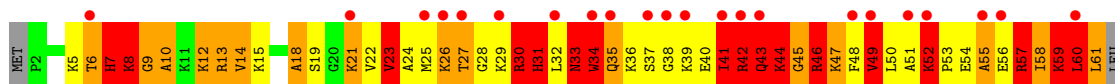
• Molecule 54: 50S ribosomal protein L34



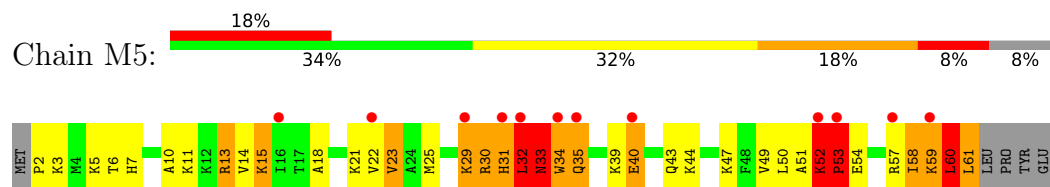
• Molecule 54: 50S ribosomal protein L34



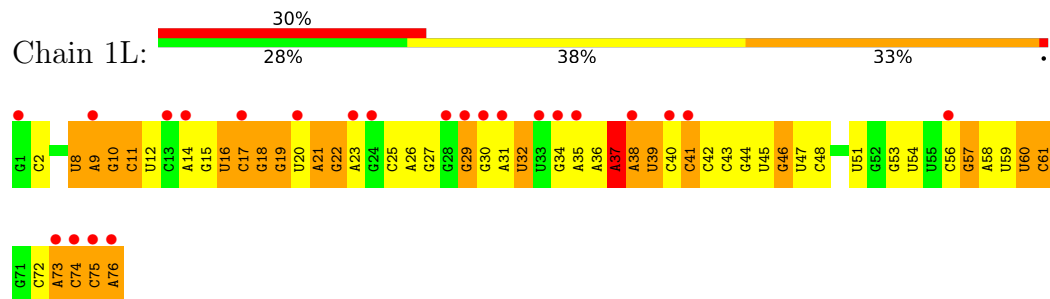
• Molecule 55: 50S ribosomal protein L35



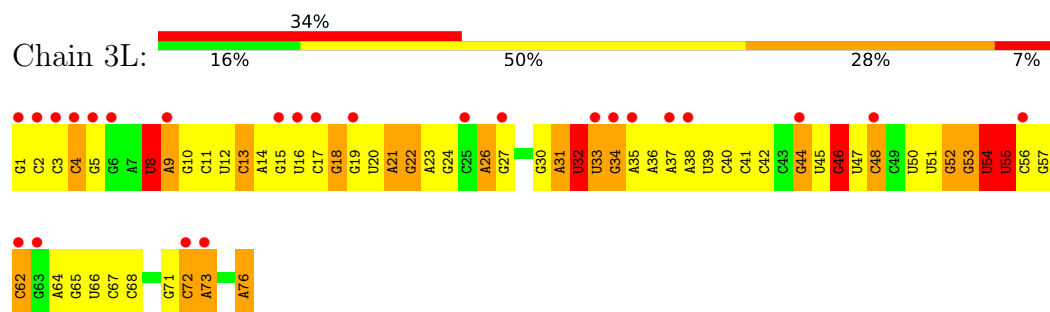
- Molecule 55: 50S ribosomal protein L35



- Molecule 56: tRNA-Phe



- Molecule 57: tRNA-Phe



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	209.40Å 449.20Å 621.20Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	255.47 – 2.95 255.47 – 2.95	Depositor EDS
% Data completeness (in resolution range)	99.9 (255.47-2.95) 94.1 (255.47-2.95)	Depositor EDS
R_{merge}	0.30	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	0.89 (at 2.96Å)	Xtrriage
Refinement program	PHENIX	Depositor
R, R_{free}	0.193 , 0.235 0.195 , 0.238	Depositor DCC
R_{free} test set	1999 reflections (0.16%)	wwPDB-VP
Wilson B-factor (Å ²)	78.0	Xtrriage
Anisotropy	0.287	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.34 , 122.2	EDS
L-test for twinning ²	$\langle L \rangle = 0.45$, $\langle L^2 \rangle = 0.27$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.92	EDS
Total number of atoms	300252	wwPDB-VP
Average B, all atoms (Å ²)	104.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.47% 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 i

5.1 Standard geometry i

Bond lengths and bond angles in the following residue types are not validated in this section: OMC, 4SU, ZN, MIA, 5MU, MG, PSU, 7MG, PAR

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	13	0.50	0/36052	0.77	20/56266 (0.0%)
1	1G	0.42	0/36049	0.69	12/56262 (0.0%)
2	12	0.54	0/1959	1.09	19/2642 (0.7%)
2	1E	0.60	0/1959	1.05	6/2642 (0.2%)
3	22	0.56	0/1636	1.06	8/2205 (0.4%)
3	2E	0.77	0/1629	1.07	4/2195 (0.2%)
4	32	0.69	0/1732	1.19	18/2318 (0.8%)
4	3E	0.84	1/1732 (0.1%)	1.21	16/2318 (0.7%)
5	42	0.66	0/1171	1.17	8/1576 (0.5%)
5	4E	0.83	0/1171	1.20	9/1576 (0.6%)
6	52	0.75	0/855	1.13	3/1154 (0.3%)
6	5E	0.76	0/855	1.07	2/1154 (0.2%)
7	62	0.61	0/1261	1.02	2/1689 (0.1%)
7	6E	0.69	0/1275	1.08	5/1709 (0.3%)
8	72	0.57	0/1135	0.98	1/1527 (0.1%)
8	7E	0.74	0/1135	1.24	10/1527 (0.7%)
9	82	0.58	0/1002	1.06	3/1346 (0.2%)
9	8E	0.67	0/1028	1.10	6/1379 (0.4%)
10	1A	0.54	0/814	1.01	3/1095 (0.3%)
10	1I	0.82	2/814 (0.2%)	1.18	9/1095 (0.8%)
11	2A	0.69	0/879	1.18	6/1187 (0.5%)
11	2I	0.80	0/879	1.22	4/1187 (0.3%)
12	3A	0.79	0/991	1.16	5/1327 (0.4%)
12	3I	1.07	3/991 (0.3%)	1.44	10/1327 (0.8%)
13	4A	0.52	0/943	1.06	9/1265 (0.7%)
13	4I	0.74	0/948	1.07	3/1272 (0.2%)
14	5A	0.57	0/484	0.99	1/643 (0.2%)
14	5I	0.88	2/500 (0.4%)	1.22	3/664 (0.5%)
15	6A	0.69	0/744	0.97	2/992 (0.2%)
15	6I	0.81	1/744 (0.1%)	1.11	1/992 (0.1%)
16	7A	0.73	0/721	1.14	3/970 (0.3%)
16	7I	0.74	0/721	1.11	4/970 (0.4%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	8A	0.67	0/847	1.03	3/1131 (0.3%)
17	8I	0.74	0/847	1.18	4/1131 (0.4%)
18	9A	0.69	0/595	1.06	3/790 (0.4%)
18	9I	0.77	0/595	1.22	4/790 (0.5%)
19	AA	0.58	0/638	1.03	3/860 (0.3%)
19	AI	0.78	0/661	1.27	6/890 (0.7%)
20	BA	0.70	0/764	1.21	8/1007 (0.8%)
20	BI	0.64	0/764	1.10	4/1007 (0.4%)
21	1B	0.64	0/221	1.01	2/288 (0.7%)
21	1F	0.66	0/221	1.10	0/288
22	1K	0.36	0/1673	0.60	2/2606 (0.1%)
23	2K	0.57	1/1721 (0.1%)	0.80	0/2682
23	2L	0.45	0/1721	0.71	0/2682
24	3K	0.37	0/1712	0.63	0/2663
25	4K	0.59	0/313	0.68	0/485
25	4L	0.57	0/262	0.82	0/403
26	14	0.56	0/70167	0.81	44/109541 (0.0%)
26	1H	0.67	1/70233 (0.0%)	0.91	68/109643 (0.1%)
27	16	0.56	0/2928	0.87	0/4568
27	1J	0.46	0/2928	0.73	0/4568
28	11	1.23	8/2165 (0.4%)	1.58	43/2919 (1.5%)
28	19	1.05	2/2170 (0.1%)	1.51	41/2926 (1.4%)
29	21	0.98	2/1601 (0.1%)	1.61	35/2160 (1.6%)
29	29	0.97	1/1601 (0.1%)	1.51	21/2160 (1.0%)
30	31	1.09	0/1620	1.39	16/2194 (0.7%)
30	39	0.89	2/1662 (0.1%)	1.46	28/2249 (1.2%)
31	41	0.80	0/1498	1.19	4/2016 (0.2%)
31	49	0.54	0/1498	1.08	8/2016 (0.4%)
32	51	0.90	1/1362 (0.1%)	1.48	20/1841 (1.1%)
32	59	0.65	0/1332	1.26	15/1802 (0.8%)
33	61	0.76	0/1151	1.25	15/1558 (1.0%)
33	69	0.73	0/1151	1.35	23/1558 (1.5%)
34	15	0.72	0/1131	1.19	10/1525 (0.7%)
34	58	0.85	0/1131	1.30	9/1525 (0.6%)
35	25	0.85	0/942	1.23	2/1269 (0.2%)
35	68	0.99	0/942	1.30	7/1269 (0.6%)
36	35	1.02	2/1161 (0.2%)	1.59	21/1544 (1.4%)
36	78	1.11	3/1161 (0.3%)	1.53	17/1544 (1.1%)
37	45	0.96	2/1142 (0.2%)	1.36	12/1527 (0.8%)
37	88	1.23	5/1106 (0.5%)	1.79	29/1478 (2.0%)
38	55	0.99	0/973	1.32	5/1302 (0.4%)
38	98	0.94	0/981	1.30	8/1312 (0.6%)
39	65	0.78	1/891 (0.1%)	1.30	5/1187 (0.4%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
39	A8	0.93	1/891 (0.1%)	1.31	6/1187 (0.5%)
40	75	0.83	1/1155 (0.1%)	1.19	5/1542 (0.3%)
40	B8	0.99	1/1155 (0.1%)	1.39	10/1542 (0.6%)
41	85	0.81	0/981	1.17	8/1306 (0.6%)
41	C8	1.04	1/981 (0.1%)	1.35	10/1306 (0.8%)
42	95	0.93	3/789 (0.4%)	1.39	7/1057 (0.7%)
42	D8	0.92	0/789	1.45	11/1057 (1.0%)
43	A5	1.04	1/910 (0.1%)	1.23	2/1220 (0.2%)
43	E8	0.98	0/910	1.32	4/1220 (0.3%)
44	B5	1.05	0/749	1.28	7/1007 (0.7%)
44	F8	1.13	0/756	1.39	7/1014 (0.7%)
45	C5	0.92	0/807	1.37	7/1076 (0.7%)
45	G8	1.04	0/804	1.56	20/1073 (1.9%)
46	D5	0.61	0/1460	1.19	15/1982 (0.8%)
46	H8	0.74	2/1427 (0.1%)	1.31	13/1935 (0.7%)
47	E5	0.93	0/620	1.35	11/827 (1.3%)
47	I8	1.10	1/634 (0.2%)	1.41	8/847 (0.9%)
48	F5	0.96	0/744	1.35	7/989 (0.7%)
48	J8	1.07	1/769 (0.1%)	1.33	5/1022 (0.5%)
49	G5	0.76	0/565	1.29	6/748 (0.8%)
49	K8	1.06	0/565	1.50	7/748 (0.9%)
50	H5	0.74	0/473	1.31	2/635 (0.3%)
50	L8	0.91	0/457	1.50	7/613 (1.1%)
51	I5	0.71	0/492	1.21	2/663 (0.3%)
51	M8	0.78	0/545	1.27	4/733 (0.5%)
52	J5	1.02	2/472 (0.4%)	1.51	7/639 (1.1%)
52	N8	0.96	1/467 (0.2%)	1.86	8/632 (1.3%)
53	K5	0.96	0/396	1.41	7/529 (1.3%)
53	O8	1.05	0/396	1.50	9/529 (1.7%)
54	L5	1.03	0/406	1.36	3/536 (0.6%)
54	P8	1.27	1/399 (0.3%)	1.45	2/526 (0.4%)
55	M5	1.29	4/483 (0.8%)	1.73	14/634 (2.2%)
55	Q8	1.79	10/486 (2.1%)	2.49	28/638 (4.4%)
56	1L	0.28	0/1717	0.47	0/2674
57	3L	0.40	1/1698 (0.1%)	0.60	0/2646
All	All	0.66	71/322340 (0.0%)	0.96	1029/482707 (0.2%)

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
2	1E	0	2
4	32	0	2
9	82	0	1
10	1A	0	1
11	2A	0	1
12	3I	0	1
13	4I	0	2
14	5A	0	1
19	AI	0	2
20	BA	0	2
20	BI	0	1
28	11	0	2
28	19	0	5
29	21	0	4
29	29	0	5
30	31	0	3
30	39	0	7
31	41	0	2
31	49	0	1
32	59	0	1
33	61	0	4
33	69	0	3
36	35	0	3
36	78	0	3
37	45	0	6
37	88	0	4
38	55	0	2
38	98	0	2
39	65	0	1
40	75	0	2
40	B8	0	2
41	85	0	2
41	C8	0	1
42	95	0	2
42	D8	0	1
43	A5	0	2
44	B5	0	1
45	C5	0	1
45	G8	0	3
46	D5	0	1
46	H8	0	3
47	I8	0	2
48	F5	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
48	J8	0	2
49	G5	0	4
49	K8	0	2
51	I5	0	1
51	M8	0	2
52	N8	0	1
53	K5	0	4
53	O8	0	2
55	M5	0	3
55	Q8	0	8
All	All	0	127

The worst 5 of 71 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	45	82	ARG	CA-C	9.98	1.65	1.52
55	Q8	49	VAL	CA-CB	9.75	1.67	1.54
37	88	79	LEU	N-CA	9.00	1.57	1.46
37	88	82	ARG	N-CA	8.42	1.57	1.46
36	35	61	ARG	CA-C	7.86	1.61	1.52

The worst 5 of 1029 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	Q8	45	GLY	N-CA-C	-22.03	82.66	111.52
52	N8	40	LYS	CA-C-N	-17.57	102.28	120.38
52	N8	40	LYS	C-N-CA	-17.57	102.28	120.38
37	88	86	GLY	N-CA-C	-17.00	94.70	112.04
28	19	272	ALA	N-CA-C	15.37	131.50	108.14

There are no chirality outliers.

5 of 127 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	1E	15	VAL	Peptide
2	1E	237	ALA	Peptide
12	3I	87	GLY	Peptide
13	4I	105	THR	Peptide
13	4I	4	ILE	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	13	32207	0	16256	721	0
1	1G	32204	0	16255	827	0
2	12	1924	0	1975	99	0
2	1E	1924	0	1975	106	0
3	22	1612	0	1677	90	0
3	2E	1605	0	1668	54	0
4	32	1702	0	1763	89	0
4	3E	1702	0	1762	65	0
5	42	1155	0	1213	59	0
5	4E	1155	0	1213	54	0
6	52	842	0	857	31	0
6	5E	842	0	857	26	0
7	62	1243	0	1284	59	0
7	6E	1256	0	1296	48	0
8	72	1115	0	1177	42	0
8	7E	1115	0	1177	58	0
9	82	983	0	1006	63	0
9	8E	1009	0	1037	62	0
10	1A	801	0	849	44	0
10	1I	801	0	849	51	0
11	2A	864	0	881	32	0
11	2I	864	0	881	28	0
12	3A	975	0	1062	48	0
12	3I	975	0	1062	49	0
13	4A	933	0	992	68	0
13	4I	938	0	997	56	0
14	5A	475	0	511	30	0
14	5I	491	0	529	24	0
15	6A	733	0	771	35	0
15	6I	733	0	771	30	0
16	7A	705	0	725	30	0
16	7I	705	0	725	55	0
17	8A	834	0	904	22	0
17	8I	834	0	904	36	0
18	9A	590	0	662	20	0
18	9I	590	0	662	28	0
19	AA	624	0	636	47	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
19	AI	647	0	665	52	0
20	BA	762	0	861	33	0
20	BI	762	0	861	48	0
21	1B	217	0	234	19	0
21	1F	217	0	234	9	0
22	1K	1627	0	836	35	0
23	2K	1646	0	845	27	0
23	2L	1646	0	845	33	0
24	3K	1603	0	824	55	0
25	4K	279	0	142	4	0
25	4L	235	0	121	14	0
26	14	62647	0	31578	1353	0
26	1H	62707	0	31600	1535	1
27	16	2617	0	1328	54	0
27	1J	2617	0	1328	107	0
28	11	2115	0	2195	88	0
28	19	2120	0	2197	93	0
29	21	1568	0	1634	91	0
29	29	1568	0	1634	97	0
30	31	1585	0	1632	96	0
30	39	1627	0	1680	110	0
31	41	1473	0	1535	82	0
31	49	1473	0	1535	65	0
32	51	1336	0	1418	72	0
32	59	1307	0	1382	64	0
33	61	1136	0	1223	54	0
33	69	1136	0	1223	57	0
34	15	1104	0	1180	55	0
34	58	1104	0	1180	56	0
35	25	932	0	996	51	0
35	68	932	0	996	37	0
36	35	1144	0	1228	108	0
36	78	1144	0	1228	100	0
37	45	1121	0	1179	78	0
37	88	1086	0	1129	67	0
38	55	959	0	1021	46	0
38	98	967	0	1033	55	0
39	65	881	0	943	71	0
39	A8	881	0	943	61	0
40	75	1141	0	1202	66	0
40	B8	1141	0	1202	69	0
41	85	963	0	1022	51	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
41	C8	963	0	1022	88	0
42	95	778	0	852	72	0
42	D8	778	0	852	35	0
43	A5	899	0	964	32	0
43	E8	899	0	964	35	0
44	B5	735	0	785	32	0
44	F8	742	0	803	44	0
45	C5	794	0	883	61	0
45	G8	791	0	882	61	0
46	D5	1428	0	1454	75	0
46	H8	1397	0	1430	86	0
47	E5	612	0	633	32	0
47	I8	626	0	642	27	0
48	F5	737	0	813	34	0
48	J8	762	0	848	39	0
49	G5	563	0	612	21	1
49	K8	563	0	612	39	0
50	H5	468	0	518	13	0
50	L8	452	0	503	22	0
51	I5	481	0	479	49	0
51	M8	533	0	526	48	0
52	J5	458	0	480	32	0
52	N8	453	0	475	28	0
53	K5	389	0	404	21	0
53	O8	389	0	404	29	0
54	L5	398	0	441	17	0
54	P8	391	0	432	18	0
55	M5	477	0	540	49	0
55	Q8	480	0	549	98	0
56	1L	1627	0	836	39	0
57	3L	1624	0	827	68	0
58	11	4	0	0	0	0
58	13	148	0	0	0	0
58	14	407	0	0	0	0
58	16	13	0	0	0	0
58	1G	96	0	0	0	0
58	1H	520	0	0	0	0
58	1J	5	0	0	0	0
58	1K	2	0	0	0	0
58	21	2	0	0	0	0
58	25	1	0	0	0	0
58	29	4	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	2A	2	0	0	0	0
58	2I	1	0	0	0	0
58	2K	5	0	0	0	0
58	2L	3	0	0	0	0
58	3E	2	0	0	0	0
58	3K	1	0	0	0	0
58	3L	2	0	0	0	0
58	4I	2	0	0	0	0
58	49	1	0	0	0	0
58	4K	1	0	0	0	0
58	55	1	0	0	0	0
58	5E	1	0	0	0	0
58	5I	2	0	0	0	0
58	78	1	0	0	0	0
58	7A	1	0	0	0	0
58	88	2	0	0	0	0
58	98	2	0	0	0	0
58	C5	1	0	0	0	0
58	G8	1	0	0	0	0
58	I8	1	0	0	0	0
58	J5	1	0	0	0	0
58	L8	1	0	0	0	0
58	P8	1	0	0	0	0
59	13	42	0	45	1	0
59	1G	42	0	45	2	0
60	32	1	0	0	0	0
60	3E	1	0	0	0	0
60	5A	1	0	0	0	0
60	5I	1	0	0	0	0
60	C5	1	0	0	0	0
60	G8	1	0	0	0	0
61	11	13	0	0	3	0
61	13	197	0	0	29	0
61	14	598	0	0	153	0
61	16	21	0	0	4	0
61	19	13	0	0	3	0
61	1G	82	0	0	18	0
61	1H	999	0	0	280	0
61	1I	2	0	0	1	0
61	1K	5	0	0	0	0
61	21	4	0	0	0	0
61	2K	6	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	3I	4	0	0	0	0
61	35	1	0	0	0	0
61	39	7	0	0	1	0
61	3E	3	0	0	0	0
61	3I	1	0	0	0	0
61	3K	1	0	0	0	0
61	3L	6	0	0	1	0
61	4K	2	0	0	0	0
61	58	2	0	0	0	0
61	5I	2	0	0	1	0
61	6I	1	0	0	0	0
61	78	5	0	0	1	0
61	7A	1	0	0	0	0
61	7I	1	0	0	0	0
61	85	1	0	0	0	0
61	8E	2	0	0	0	0
61	A5	1	0	0	0	0
61	B8	1	0	0	0	0
61	BA	1	0	0	0	0
61	C8	3	0	0	0	0
61	D8	1	0	0	0	0
61	G5	1	0	0	0	0
61	G8	4	0	0	1	0
61	I8	7	0	0	0	0
61	L5	1	0	0	0	0
61	L8	1	0	0	1	0
61	P8	1	0	0	0	0
61	Q8	2	0	0	0	0
All	All	300252	0	200448	8805	1

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 18.

The worst 5 of 8805 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)
26:14:2701:C:H3'	26:14:2702:U:H5''	1.27	1.15
26:1H:2592:G:OP1	61:1H:4524:HOH:O	1.68	1.10
40:B8:50:ILE:HD11	40:B8:102:ILE:HD11	1.32	1.10
26:1H:1614:A:OP1	61:1H:3947:HOH:O	1.70	1.09
26:1H:945:A:OP1	61:1H:4167:HOH:O	1.70	1.09

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:277:C:O2'	49:G5:49:LYS:NZ[2_564]	2.14	0.06

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	12	235/256 (92%)	192 (82%)	37 (16%)	6 (3%)	4	12
2	1E	235/256 (92%)	197 (84%)	37 (16%)	1 (0%)	30	53
3	22	204/239 (85%)	180 (88%)	23 (11%)	1 (0%)	24	49
3	2E	203/239 (85%)	184 (91%)	19 (9%)	0	100	100
4	32	206/209 (99%)	179 (87%)	25 (12%)	2 (1%)	12	32
4	3E	206/209 (99%)	192 (93%)	12 (6%)	2 (1%)	12	32
5	42	149/162 (92%)	140 (94%)	9 (6%)	0	100	100
5	4E	149/162 (92%)	140 (94%)	8 (5%)	1 (1%)	18	40
6	52	99/101 (98%)	96 (97%)	3 (3%)	0	100	100
6	5E	99/101 (98%)	92 (93%)	7 (7%)	0	100	100
7	62	148/156 (95%)	137 (93%)	11 (7%)	0	100	100
7	6E	153/156 (98%)	144 (94%)	9 (6%)	0	100	100
8	72	136/138 (99%)	122 (90%)	12 (9%)	2 (2%)	8	23
8	7E	136/138 (99%)	125 (92%)	10 (7%)	1 (1%)	18	40
9	82	122/128 (95%)	113 (93%)	8 (7%)	1 (1%)	16	37
9	8E	125/128 (98%)	105 (84%)	19 (15%)	1 (1%)	16	37
10	1A	97/105 (92%)	88 (91%)	9 (9%)	0	100	100
10	1I	97/105 (92%)	89 (92%)	8 (8%)	0	100	100
11	2A	114/129 (88%)	102 (90%)	8 (7%)	4 (4%)	3	7

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
11	2I	114/129 (88%)	99 (87%)	14 (12%)	1 (1%)	14	34
12	3A	123/132 (93%)	101 (82%)	18 (15%)	4 (3%)	3	7
12	3I	123/132 (93%)	103 (84%)	20 (16%)	0	100	100
13	4A	115/126 (91%)	96 (84%)	18 (16%)	1 (1%)	14	34
13	4I	116/126 (92%)	96 (83%)	19 (16%)	1 (1%)	14	34
14	5A	56/61 (92%)	46 (82%)	9 (16%)	1 (2%)	6	19
14	5I	58/61 (95%)	47 (81%)	9 (16%)	2 (3%)	3	7
15	6A	86/89 (97%)	79 (92%)	7 (8%)	0	100	100
15	6I	86/89 (97%)	79 (92%)	7 (8%)	0	100	100
16	7A	82/88 (93%)	75 (92%)	7 (8%)	0	100	100
16	7I	82/88 (93%)	75 (92%)	7 (8%)	0	100	100
17	8A	98/105 (93%)	91 (93%)	7 (7%)	0	100	100
17	8I	98/105 (93%)	94 (96%)	4 (4%)	0	100	100
18	9A	70/88 (80%)	65 (93%)	5 (7%)	0	100	100
18	9I	70/88 (80%)	63 (90%)	6 (9%)	1 (1%)	9	24
19	AA	76/93 (82%)	59 (78%)	15 (20%)	2 (3%)	4	12
19	AI	79/93 (85%)	65 (82%)	11 (14%)	3 (4%)	2	6
20	BA	97/106 (92%)	84 (87%)	12 (12%)	1 (1%)	12	32
20	BI	97/106 (92%)	86 (89%)	10 (10%)	1 (1%)	12	32
21	1B	23/27 (85%)	21 (91%)	2 (9%)	0	100	100
21	1F	23/27 (85%)	22 (96%)	1 (4%)	0	100	100
28	11	270/276 (98%)	253 (94%)	12 (4%)	5 (2%)	6	17
28	19	271/276 (98%)	248 (92%)	16 (6%)	7 (3%)	4	12
29	21	203/206 (98%)	164 (81%)	30 (15%)	9 (4%)	2	4
29	29	203/206 (98%)	156 (77%)	35 (17%)	12 (6%)	1	2
30	31	200/210 (95%)	182 (91%)	15 (8%)	3 (2%)	8	23
30	39	206/210 (98%)	165 (80%)	34 (16%)	7 (3%)	3	7
31	41	179/182 (98%)	156 (87%)	21 (12%)	2 (1%)	11	29
31	49	179/182 (98%)	155 (87%)	22 (12%)	2 (1%)	11	29
32	51	172/180 (96%)	146 (85%)	18 (10%)	8 (5%)	2	4
32	59	168/180 (93%)	131 (78%)	30 (18%)	7 (4%)	2	5

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
33	61	144/148 (97%)	117 (81%)	23 (16%)	4 (3%)	4	11
33	69	144/148 (97%)	112 (78%)	29 (20%)	3 (2%)	5	16
34	15	136/140 (97%)	120 (88%)	15 (11%)	1 (1%)	18	40
34	58	136/140 (97%)	116 (85%)	16 (12%)	4 (3%)	3	10
35	25	120/122 (98%)	110 (92%)	8 (7%)	2 (2%)	7	20
35	68	120/122 (98%)	113 (94%)	7 (6%)	0	100	100
36	35	148/150 (99%)	117 (79%)	27 (18%)	4 (3%)	4	11
36	78	148/150 (99%)	113 (76%)	29 (20%)	6 (4%)	2	5
37	45	139/141 (99%)	111 (80%)	27 (19%)	1 (1%)	18	40
37	88	134/141 (95%)	112 (84%)	15 (11%)	7 (5%)	1	3
38	55	115/118 (98%)	108 (94%)	5 (4%)	2 (2%)	7	20
38	98	116/118 (98%)	104 (90%)	10 (9%)	2 (2%)	7	20
39	65	109/112 (97%)	88 (81%)	18 (16%)	3 (3%)	4	11
39	A8	109/112 (97%)	91 (84%)	16 (15%)	2 (2%)	6	19
40	75	135/146 (92%)	115 (85%)	17 (13%)	3 (2%)	5	15
40	B8	135/146 (92%)	119 (88%)	15 (11%)	1 (1%)	18	40
41	85	115/118 (98%)	102 (89%)	12 (10%)	1 (1%)	14	34
41	C8	115/118 (98%)	104 (90%)	9 (8%)	2 (2%)	7	20
42	95	99/101 (98%)	77 (78%)	17 (17%)	5 (5%)	1	3
42	D8	99/101 (98%)	94 (95%)	4 (4%)	1 (1%)	12	32
43	A5	111/113 (98%)	102 (92%)	7 (6%)	2 (2%)	6	19
43	E8	111/113 (98%)	100 (90%)	11 (10%)	0	100	100
44	B5	92/96 (96%)	83 (90%)	5 (5%)	4 (4%)	2	4
44	F8	92/96 (96%)	83 (90%)	7 (8%)	2 (2%)	5	15
45	C5	102/110 (93%)	75 (74%)	21 (21%)	6 (6%)	1	2
45	G8	102/110 (93%)	80 (78%)	15 (15%)	7 (7%)	1	1
46	D5	177/206 (86%)	134 (76%)	33 (19%)	10 (6%)	1	2
46	H8	173/206 (84%)	142 (82%)	25 (14%)	6 (4%)	3	7
47	E5	75/85 (88%)	67 (89%)	6 (8%)	2 (3%)	4	11
47	I8	78/85 (92%)	68 (87%)	9 (12%)	1 (1%)	9	26
48	F5	92/98 (94%)	87 (95%)	4 (4%)	1 (1%)	11	29

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
48	J8	95/98 (97%)	85 (90%)	8 (8%)	2 (2%)	5	16
49	G5	65/72 (90%)	61 (94%)	2 (3%)	2 (3%)	3	8
49	K8	65/72 (90%)	58 (89%)	4 (6%)	3 (5%)	2	4
50	H5	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
50	L8	55/60 (92%)	51 (93%)	3 (6%)	1 (2%)	6	19
51	I5	58/71 (82%)	29 (50%)	25 (43%)	4 (7%)	1	1
51	M8	64/71 (90%)	43 (67%)	18 (28%)	3 (5%)	2	4
52	J5	57/60 (95%)	48 (84%)	8 (14%)	1 (2%)	6	19
52	N8	56/60 (93%)	48 (86%)	6 (11%)	2 (4%)	2	6
53	K5	43/54 (80%)	27 (63%)	14 (33%)	2 (5%)	2	4
53	O8	43/54 (80%)	28 (65%)	13 (30%)	2 (5%)	2	4
54	L5	44/49 (90%)	42 (96%)	2 (4%)	0	100	100
54	P8	43/49 (88%)	41 (95%)	2 (5%)	0	100	100
55	M5	58/65 (89%)	49 (84%)	6 (10%)	3 (5%)	1	3
55	Q8	58/65 (89%)	30 (52%)	21 (36%)	7 (12%)	0	0
All	All	11318/12054 (94%)	9776 (86%)	1313 (12%)	229 (2%)	6	16

5 of 229 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
29	21	83	ASP
36	78	57	THR
41	C8	89	GLU
41	C8	90	VAL
45	G8	54	LYS

5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	12	205/220 (93%)	162 (79%)	43 (21%)	1	2

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	1E	205/220 (93%)	161 (78%)	44 (22%)	1	2
3	22	160/188 (85%)	125 (78%)	35 (22%)	1	2
3	2E	159/188 (85%)	124 (78%)	35 (22%)	1	2
4	32	180/181 (99%)	145 (81%)	35 (19%)	1	3
4	3E	180/181 (99%)	141 (78%)	39 (22%)	1	2
5	42	116/123 (94%)	89 (77%)	27 (23%)	1	2
5	4E	116/123 (94%)	90 (78%)	26 (22%)	1	2
6	52	90/90 (100%)	70 (78%)	20 (22%)	1	2
6	5E	90/90 (100%)	72 (80%)	18 (20%)	1	3
7	62	126/127 (99%)	100 (79%)	26 (21%)	1	3
7	6E	126/127 (99%)	98 (78%)	28 (22%)	1	2
8	72	119/119 (100%)	97 (82%)	22 (18%)	1	4
8	7E	119/119 (100%)	96 (81%)	23 (19%)	1	3
9	82	95/99 (96%)	79 (83%)	16 (17%)	2	6
9	8E	98/99 (99%)	70 (71%)	28 (29%)	0	0
10	1A	89/92 (97%)	67 (75%)	22 (25%)	1	1
10	1I	89/92 (97%)	73 (82%)	16 (18%)	2	4
11	2A	88/99 (89%)	69 (78%)	19 (22%)	1	2
11	2I	88/99 (89%)	75 (85%)	13 (15%)	3	9
12	3A	104/109 (95%)	79 (76%)	25 (24%)	1	1
12	3I	104/109 (95%)	87 (84%)	17 (16%)	2	7
13	4A	94/101 (93%)	72 (77%)	22 (23%)	1	2
13	4I	94/101 (93%)	71 (76%)	23 (24%)	1	1
14	5A	48/50 (96%)	40 (83%)	8 (17%)	2	6
14	5I	49/50 (98%)	37 (76%)	12 (24%)	1	1
15	6A	79/80 (99%)	65 (82%)	14 (18%)	2	4
15	6I	79/80 (99%)	60 (76%)	19 (24%)	1	1
16	7A	72/74 (97%)	59 (82%)	13 (18%)	2	4
16	7I	72/74 (97%)	57 (79%)	15 (21%)	1	3
17	8A	95/97 (98%)	81 (85%)	14 (15%)	3	9
17	8I	95/97 (98%)	76 (80%)	19 (20%)	1	3

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
18	9A	63/77 (82%)	53 (84%)	10 (16%)	2	8
18	9I	63/77 (82%)	55 (87%)	8 (13%)	4	13
19	AA	67/80 (84%)	49 (73%)	18 (27%)	0	0
19	AI	70/80 (88%)	50 (71%)	20 (29%)	0	0
20	BA	76/82 (93%)	64 (84%)	12 (16%)	2	8
20	BI	76/82 (93%)	52 (68%)	24 (32%)	0	0
21	1B	20/22 (91%)	19 (95%)	1 (5%)	22	47
21	1F	20/22 (91%)	18 (90%)	2 (10%)	7	20
28	11	214/218 (98%)	169 (79%)	45 (21%)	1	2
28	19	214/218 (98%)	163 (76%)	51 (24%)	1	1
29	21	165/166 (99%)	120 (73%)	45 (27%)	0	0
29	29	165/166 (99%)	118 (72%)	47 (28%)	0	0
30	31	161/166 (97%)	124 (77%)	37 (23%)	1	2
30	39	165/166 (99%)	119 (72%)	46 (28%)	0	0
31	41	155/156 (99%)	116 (75%)	39 (25%)	0	1
31	49	155/156 (99%)	126 (81%)	29 (19%)	1	4
32	51	145/148 (98%)	103 (71%)	42 (29%)	0	0
32	59	142/148 (96%)	106 (75%)	36 (25%)	0	1
33	61	122/124 (98%)	83 (68%)	39 (32%)	0	0
33	69	122/124 (98%)	84 (69%)	38 (31%)	0	0
34	15	117/119 (98%)	89 (76%)	28 (24%)	1	1
34	58	117/119 (98%)	92 (79%)	25 (21%)	1	2
35	25	100/100 (100%)	74 (74%)	26 (26%)	0	1
35	68	100/100 (100%)	82 (82%)	18 (18%)	2	4
36	35	116/116 (100%)	72 (62%)	44 (38%)	0	0
36	78	116/116 (100%)	74 (64%)	42 (36%)	0	0
37	45	111/111 (100%)	84 (76%)	27 (24%)	1	1
37	88	104/111 (94%)	78 (75%)	26 (25%)	0	1
38	55	100/101 (99%)	74 (74%)	26 (26%)	0	1
38	98	101/101 (100%)	70 (69%)	31 (31%)	0	0
39	65	87/88 (99%)	62 (71%)	25 (29%)	0	0

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
39	A8	87/88 (99%)	56 (64%)	31 (36%)	0	0
40	75	120/127 (94%)	80 (67%)	40 (33%)	0	0
40	B8	120/127 (94%)	77 (64%)	43 (36%)	0	0
41	85	93/94 (99%)	72 (77%)	21 (23%)	1	2
41	C8	93/94 (99%)	77 (83%)	16 (17%)	2	5
42	95	82/82 (100%)	54 (66%)	28 (34%)	0	0
42	D8	82/82 (100%)	62 (76%)	20 (24%)	1	1
43	A5	92/92 (100%)	66 (72%)	26 (28%)	0	0
43	E8	92/92 (100%)	66 (72%)	26 (28%)	0	0
44	B5	74/78 (95%)	56 (76%)	18 (24%)	1	1
44	F8	76/78 (97%)	57 (75%)	19 (25%)	0	1
45	C5	85/91 (93%)	62 (73%)	23 (27%)	0	0
45	G8	85/91 (93%)	56 (66%)	29 (34%)	0	0
46	D5	158/179 (88%)	121 (77%)	37 (23%)	1	2
46	H8	154/179 (86%)	117 (76%)	37 (24%)	1	1
47	E5	62/67 (92%)	52 (84%)	10 (16%)	2	7
47	I8	61/67 (91%)	45 (74%)	16 (26%)	0	1
48	F5	79/83 (95%)	57 (72%)	22 (28%)	0	0
48	J8	82/83 (99%)	60 (73%)	22 (27%)	0	0
49	G5	62/67 (92%)	41 (66%)	21 (34%)	0	0
49	K8	62/67 (92%)	33 (53%)	29 (47%)	0	0
50	H5	51/52 (98%)	36 (71%)	15 (29%)	0	0
50	L8	49/52 (94%)	35 (71%)	14 (29%)	0	0
51	I5	54/63 (86%)	44 (82%)	10 (18%)	1	4
51	M8	59/63 (94%)	42 (71%)	17 (29%)	0	0
52	J5	51/52 (98%)	37 (72%)	14 (28%)	0	0
52	N8	51/52 (98%)	38 (74%)	13 (26%)	0	1
53	K5	44/52 (85%)	34 (77%)	10 (23%)	1	2
53	O8	44/52 (85%)	30 (68%)	14 (32%)	0	0
54	L5	39/42 (93%)	32 (82%)	7 (18%)	2	4
54	P8	38/42 (90%)	31 (82%)	7 (18%)	1	4

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
55	M5	49/55 (89%)	34 (69%)	15 (31%)	0	0
55	Q8	50/55 (91%)	31 (62%)	19 (38%)	0	0
All	All	9552/9998 (96%)	7220 (76%)	2332 (24%)	1	1

5 of 2332 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
34	15	60	ILE
52	J5	25	LEU
36	35	59	LEU
34	15	48	MET
42	95	19	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 69 such sidechains are listed below:

Mol	Chain	Res	Type
37	45	113	GLN
40	75	58	ASN
47	E5	12	ASN
40	B8	55	ASN
39	A8	84	GLN

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	13	1495/1522 (98%)	329 (22%)	34 (2%)
1	1G	1496/1522 (98%)	354 (23%)	37 (2%)
22	1K	75/76 (98%)	33 (44%)	3 (4%)
23	2K	76/77 (98%)	21 (27%)	2 (2%)
23	2L	76/77 (98%)	16 (21%)	1 (1%)
24	3K	73/76 (96%)	41 (56%)	6 (8%)
25	4K	12/30 (40%)	4 (33%)	0
25	4L	11/30 (36%)	4 (36%)	1 (9%)
26	14	2908/2917 (99%)	726 (24%)	52 (1%)
26	1H	2911/2917 (99%)	704 (24%)	51 (1%)
27	16	121/122 (99%)	27 (22%)	1 (0%)
27	1J	121/122 (99%)	35 (28%)	2 (1%)
56	1L	75/76 (98%)	35 (46%)	3 (4%)
57	3L	75/76 (98%)	37 (49%)	4 (5%)

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Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
All	All	9525/9640 (98%)	2366 (24%)	197 (2%)

5 of 2366 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	13	5	U
1	13	6	G
1	13	7	G
1	13	8	A
1	13	21	G

5 of 197 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1G	793	U
26	14	34	C
1	1G	992	U
1	1G	1346	A
26	14	503	A

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

28 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
57	4SU	3L	8	57	18,21,22	2.14	5 (27%)	25,30,33	2.03	5 (20%)
57	PSU	3L	32	57	18,21,22	1.33	2 (11%)	21,30,33	2.10	7 (33%)
22	4SU	1K	8	22	18,21,22	1.91	5 (27%)	25,30,33	2.23	5 (20%)
22	5MU	1K	54	22	19,22,23	4.00	5 (26%)	27,32,35	3.20	10 (37%)
23	7MG	2L	47	23	23,26,27	3.24	6 (26%)	27,39,42	2.79	11 (40%)
57	5MU	3L	54	57	19,22,23	4.03	5 (26%)	27,32,35	3.05	11 (40%)
56	PSU	1L	32	56	18,21,22	1.27	1 (5%)	21,30,33	1.87	5 (23%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	4SU	2K	8	23	18,21,22	1.81	3 (16%)	25,30,33	3.22	5 (20%)
56	MIA	1L	37	56	28,31,32	2.32	5 (17%)	38,44,47	3.18	12 (31%)
56	5MU	1L	54	56	19,22,23	4.10	5 (26%)	27,32,35	3.09	7 (25%)
23	7MG	2K	47	23	23,26,27	3.10	7 (30%)	27,39,42	2.65	9 (33%)
23	OMC	2L	33	23	19,22,23	1.80	3 (15%)	25,31,34	1.28	4 (16%)
57	7MG	3L	46	57	23,26,27	3.37	7 (30%)	27,39,42	2.78	11 (40%)
22	PSU	1K	39	22	18,21,22	1.21	2 (11%)	21,30,33	1.89	4 (19%)
57	PSU	3L	55	57	18,21,22	1.30	1 (5%)	21,30,33	1.56	4 (19%)
24	PSU	3K	39	24	18,21,22	1.29	1 (5%)	21,30,33	1.57	3 (14%)
24	PSU	3K	32	24	18,21,22	1.37	1 (5%)	21,30,33	1.86	4 (19%)
23	4SU	2L	8	23	18,21,22	2.06	5 (27%)	25,30,33	2.53	5 (20%)
23	5MU	2K	55	58,23	19,22,23	4.05	5 (26%)	27,32,35	3.41	8 (29%)
23	5MU	2L	55	23	19,22,23	4.13	5 (26%)	27,32,35	3.43	11 (40%)
23	PSU	2L	56	23	18,21,22	1.49	2 (11%)	21,30,33	1.88	2 (9%)
24	MIA	3K	37	58,24	28,31,32	2.51	6 (21%)	38,44,47	2.65	11 (28%)
23	PSU	2K	56	23	18,21,22	1.07	1 (5%)	21,30,33	2.18	4 (19%)
56	PSU	1L	39	56	18,21,22	1.14	1 (5%)	21,30,33	1.55	5 (23%)
22	PSU	1K	32	58,22	18,21,22	1.53	2 (11%)	21,30,33	1.86	4 (19%)
22	PSU	1K	55	22	18,21,22	1.45	2 (11%)	21,30,33	1.46	4 (19%)
23	OMC	2K	33	23	19,22,23	1.92	3 (15%)	25,31,34	1.15	2 (8%)
22	MIA	1K	37	22	28,31,32	2.38	4 (14%)	38,44,47	3.37	13 (34%)

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
57	4SU	3L	8	57	-	0/7/25/26	0/2/2/2
57	PSU	3L	32	57	-	1/7/25/26	0/2/2/2
22	4SU	1K	8	22	-	0/7/25/26	0/2/2/2
22	5MU	1K	54	22	-	0/7/25/26	0/2/2/2
23	7MG	2L	47	23	-	0/7/37/38	0/3/3/3
57	5MU	3L	54	57	-	2/7/25/26	0/2/2/2
56	PSU	1L	32	56	-	1/7/25/26	0/2/2/2
23	4SU	2K	8	23	-	0/7/25/26	0/2/2/2
56	MIA	1L	37	56	-	9/15/33/34	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	5MU	1L	54	56	-	0/7/25/26	0/2/2/2
23	7MG	2K	47	23	-	2/7/37/38	0/3/3/3
23	OMC	2L	33	23	-	0/9/27/28	0/2/2/2
57	7MG	3L	46	57	-	0/7/37/38	0/3/3/3
22	PSU	1K	39	22	-	0/7/25/26	0/2/2/2
57	PSU	3L	55	57	-	0/7/25/26	0/2/2/2
24	PSU	3K	39	24	-	4/7/25/26	0/2/2/2
24	PSU	3K	32	24	-	0/7/25/26	0/2/2/2
23	4SU	2L	8	23	-	2/7/25/26	0/2/2/2
23	5MU	2K	55	58,23	-	0/7/25/26	0/2/2/2
23	5MU	2L	55	23	-	3/7/25/26	0/2/2/2
23	PSU	2L	56	23	-	0/7/25/26	0/2/2/2
24	MIA	3K	37	58,24	-	7/15/33/34	0/3/3/3
23	PSU	2K	56	23	-	0/7/25/26	0/2/2/2
56	PSU	1L	39	56	-	0/7/25/26	0/2/2/2
22	PSU	1K	32	58,22	-	0/7/25/26	0/2/2/2
22	PSU	1K	55	22	-	3/7/25/26	0/2/2/2
23	OMC	2K	33	23	-	0/9/27/28	0/2/2/2
22	MIA	1K	37	22	-	2/15/33/34	0/3/3/3

The worst 5 of 100 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	2K	55	5MU	C2-N1	13.42	1.59	1.38
56	1L	54	5MU	C2-N1	13.39	1.59	1.38
23	2L	55	5MU	C2-N1	13.33	1.59	1.38
22	1K	54	5MU	C2-N1	12.46	1.58	1.38
57	3L	54	5MU	C2-N1	12.32	1.57	1.38

The worst 5 of 186 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	1K	37	MIA	C11-S10-C2	11.78	111.09	102.25
22	1K	54	5MU	C5-C4-N3	11.12	124.99	115.32
23	2K	55	5MU	C5-C4-N3	11.01	124.89	115.32
56	1L	37	MIA	C11-S10-C2	10.99	110.49	102.25
23	2K	8	4SU	C4-N3-C2	-10.38	117.36	127.31

There are no chirality outliers.

5 of 36 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
24	3K	37	MIA	C4'-C5'-O5'-P
24	3K	37	MIA	O4'-C4'-C5'-O5'
24	3K	37	MIA	C3'-C4'-C5'-O5'
24	3K	37	MIA	C5-C6-N6-C12
24	3K	37	MIA	C12-C13-C14-C15

There are no ring outliers.

21 monomers are involved in 42 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
57	3L	8	4SU	5	0
57	3L	32	PSU	3	0
22	1K	8	4SU	1	0
22	1K	54	5MU	1	0
23	2L	47	7MG	3	0
57	3L	54	5MU	2	0
23	2K	8	4SU	1	0
56	1L	37	MIA	2	0
23	2K	47	7MG	3	0
23	2L	33	OMC	2	0
57	3L	46	7MG	3	0
57	3L	55	PSU	2	0
24	3K	39	PSU	2	0
23	2L	8	4SU	2	0
23	2K	55	5MU	3	0
23	2L	55	5MU	2	0
23	2L	56	PSU	2	0
24	3K	37	MIA	2	0
23	2K	56	PSU	2	0
56	1L	39	PSU	1	0
22	1K	55	PSU	1	0

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 1246 ligands modelled in this entry, 1244 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
59	PAR	1G	1697	-	44,45,45	0.88	3 (6%)	63,67,67	1.66	14 (22%)
59	PAR	13	1749	-	44,45,45	0.71	1 (2%)	63,67,67	1.63	15 (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
59	PAR	1G	1697	-	-	6/18/94/94	0/4/4/4
59	PAR	13	1749	-	-	4/18/94/94	0/4/4/4

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	1G	1697	PAR	C24-N24	-2.80	1.43	1.47
59	1G	1697	PAR	C34-C24	-2.37	1.50	1.53
59	13	1749	PAR	C21-N21	-2.02	1.44	1.47
59	1G	1697	PAR	C31-C21	-2.02	1.51	1.53

The worst 5 of 29 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	1G	1697	PAR	C13-O52-C52	-4.74	106.75	117.98
59	1G	1697	PAR	C14-O33-C33	-4.26	107.88	117.98
59	13	1749	PAR	C14-O54-C54	3.94	121.42	113.72
59	1G	1697	PAR	O11-C11-C21	-3.40	102.51	108.08
59	1G	1697	PAR	C34-C24-N24	-3.36	104.17	111.05

There are no chirality outliers.

5 of 10 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
59	13	1749	PAR	C33-C43-C53-O53
59	13	1749	PAR	O43-C43-C53-O53

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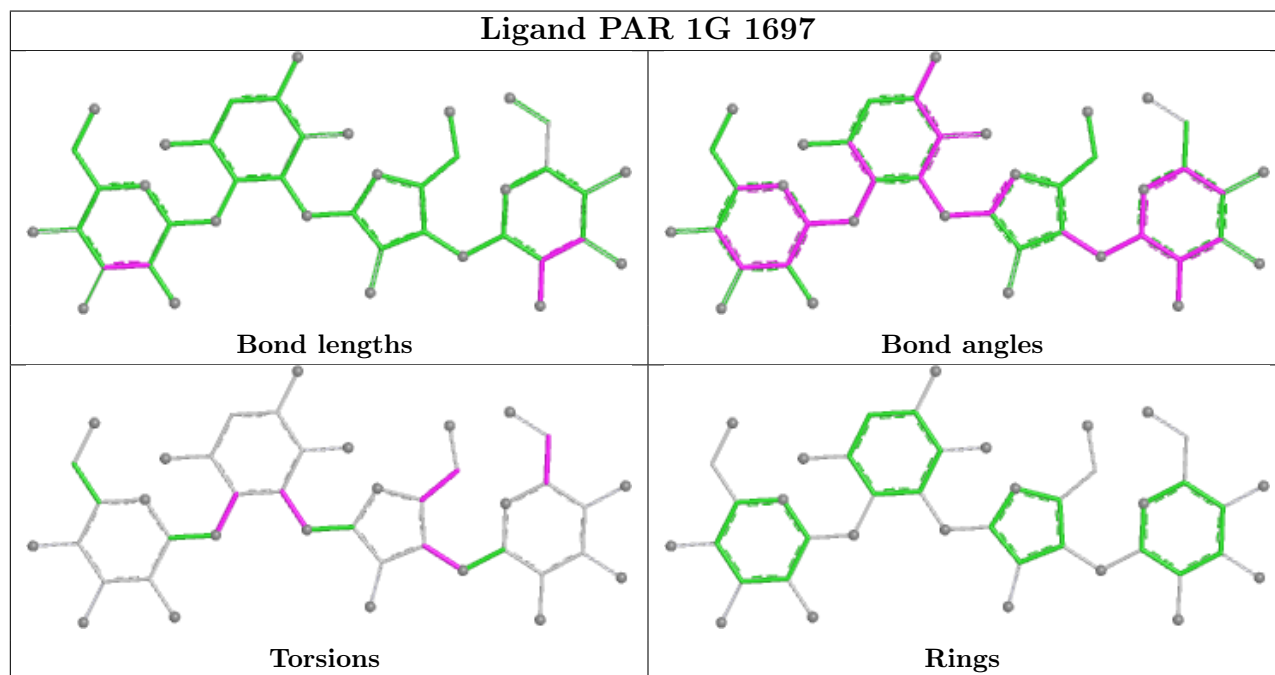
Mol	Chain	Res	Type	Atoms
59	1G	1697	PAR	C44-C54-C64-N64
59	13	1749	PAR	O43-C13-O52-C52
59	1G	1697	PAR	O43-C43-C53-O53

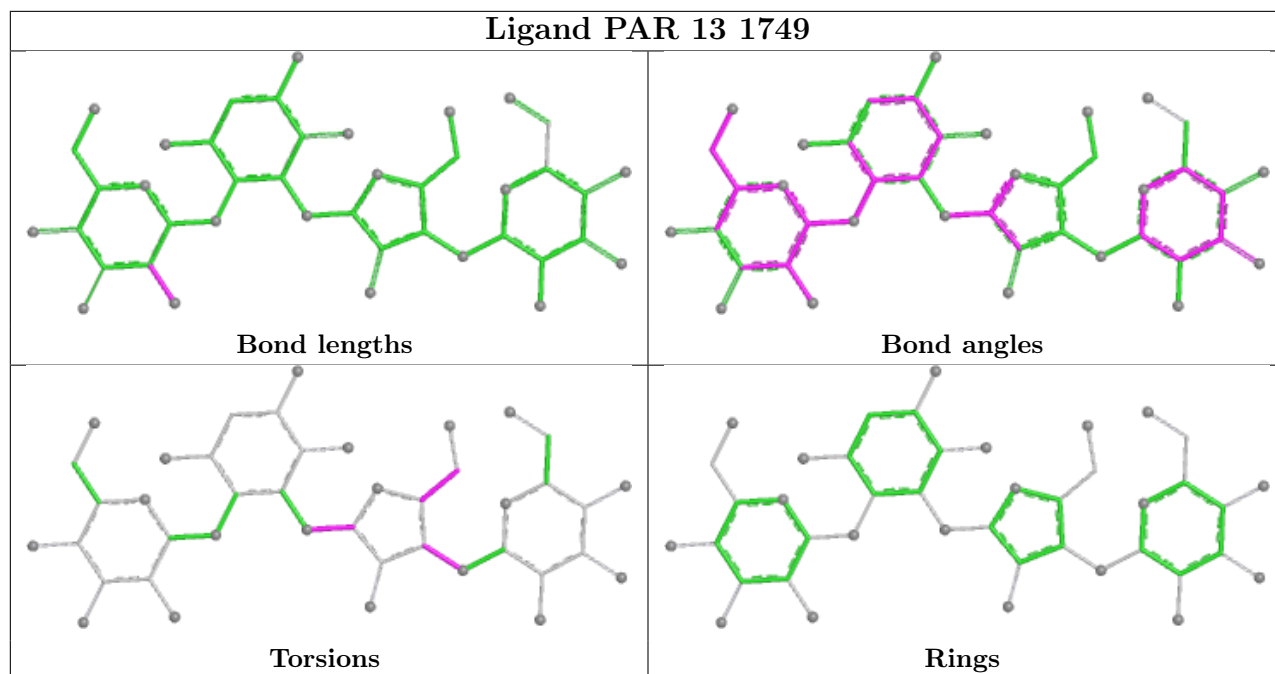
There are no ring outliers.

2 monomers are involved in 3 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
59	1G	1697	PAR	2	0
59	13	1749	PAR	1	0

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





5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
1	13	1
1	1G	1
25	4L	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	13	1530:G	O3'	1531:A	P	3.82
1	1G	1530:G	O3'	1531:A	P	3.28
1	4L	21:C	O3'	22:A	P	3.02

6 Fit of model and data i

6.1 Protein, DNA and RNA chains i

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	13	1498/1522 (98%)	0.52	134 (8%) 15 14	53, 93, 174, 276	0
1	1G	1498/1522 (98%)	0.88	219 (14%) 6 5	69, 116, 188, 285	0
2	12	237/256 (92%)	1.88	88 (37%) 1 1	141, 173, 195, 205	0
2	1E	237/256 (92%)	1.28	58 (24%) 2 2	105, 141, 169, 176	0
3	22	206/239 (86%)	2.20	96 (46%) 0 0	136, 162, 182, 190	0
3	2E	205/239 (85%)	0.66	18 (8%) 15 14	82, 102, 138, 147	0
4	32	208/209 (99%)	1.26	50 (24%) 2 2	93, 114, 138, 145	0
4	3E	208/209 (99%)	1.03	23 (11%) 10 9	75, 100, 123, 134	0
5	42	151/162 (93%)	1.93	57 (37%) 1 0	111, 135, 154, 184	0
5	4E	151/162 (93%)	0.72	20 (13%) 7 7	72, 93, 117, 160	0
6	52	101/101 (100%)	0.65	8 (7%) 18 16	82, 100, 119, 142	0
6	5E	101/101 (100%)	0.83	9 (8%) 15 14	77, 96, 118, 141	0
7	62	152/156 (97%)	1.71	44 (28%) 1 1	112, 127, 147, 160	0
7	6E	155/156 (99%)	1.22	27 (17%) 4 3	92, 111, 146, 163	0
8	72	138/138 (100%)	1.37	32 (23%) 2 2	102, 132, 151, 155	0
8	7E	138/138 (100%)	0.84	21 (15%) 5 5	84, 101, 113, 121	0
9	82	124/128 (96%)	1.78	44 (35%) 1 1	115, 150, 165, 171	0
9	8E	127/128 (99%)	1.08	21 (16%) 4 4	80, 127, 148, 158	0
10	1A	99/105 (94%)	1.41	24 (24%) 2 2	131, 155, 176, 184	0
10	1I	99/105 (94%)	1.69	34 (34%) 1 1	73, 125, 159, 162	0
11	2A	116/129 (89%)	1.55	27 (23%) 2 2	85, 108, 130, 159	0
11	2I	116/129 (89%)	1.00	15 (12%) 7 7	69, 100, 127, 165	0
12	3A	125/132 (94%)	1.90	38 (30%) 1 1	83, 106, 134, 167	0
12	3I	125/132 (94%)	1.13	26 (20%) 2 2	60, 71, 107, 165	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	4A	117/126 (92%)	2.33	44 (37%) 1 0	118, 155, 179, 185	0
13	4I	118/126 (93%)	0.93	15 (12%) 8 7	74, 112, 132, 145	0
14	5A	58/61 (95%)	1.85	21 (36%) 1 1	134, 159, 174, 179	0
14	5I	60/61 (98%)	0.64	5 (8%) 17 15	80, 91, 106, 119	0
15	6A	88/89 (98%)	0.88	14 (15%) 5 4	87, 112, 127, 133	0
15	6I	88/89 (98%)	0.79	11 (12%) 8 7	69, 98, 116, 126	0
16	7A	84/88 (95%)	0.97	7 (8%) 17 15	87, 103, 126, 159	0
16	7I	84/88 (95%)	1.51	22 (26%) 1 1	93, 107, 141, 158	0
17	8A	100/105 (95%)	1.25	22 (22%) 2 2	93, 110, 128, 148	0
17	8I	100/105 (95%)	1.25	19 (19%) 3 3	83, 101, 113, 116	0
18	9A	72/88 (81%)	0.77	8 (11%) 10 9	92, 115, 144, 170	0
18	9I	72/88 (81%)	0.84	8 (11%) 10 9	83, 100, 136, 168	0
19	AA	78/93 (83%)	1.74	28 (35%) 1 1	150, 182, 192, 196	0
19	AI	81/93 (87%)	1.22	16 (19%) 3 3	88, 113, 138, 146	0
20	BA	99/106 (93%)	1.75	37 (37%) 1 1	85, 111, 137, 149	0
20	BI	99/106 (93%)	2.29	48 (48%) 0 0	102, 117, 153, 160	0
21	1B	25/27 (92%)	1.83	8 (32%) 1 1	119, 140, 152, 167	0
21	1F	25/27 (92%)	0.88	2 (8%) 18 16	88, 97, 113, 142	0
22	1K	70/76 (92%)	2.43	19 (27%) 1 1	76, 203, 246, 250	0
23	2K	72/77 (93%)	0.58	4 (5%) 30 25	68, 91, 119, 138	0
23	2L	72/77 (93%)	1.15	10 (13%) 6 6	80, 113, 149, 166	0
24	3K	72/76 (94%)	1.50	19 (26%) 1 1	71, 230, 258, 260	0
25	4K	13/30 (43%)	0.43	0 100 100	64, 80, 130, 131	0
25	4L	11/30 (36%)	1.01	1 (9%) 15 13	93, 124, 136, 143	0
26	14	2909/2917 (99%)	0.27	214 (7%) 20 18	50, 84, 241, 338	0
26	1H	2912/2917 (99%)	0.11	176 (6%) 27 23	37, 70, 222, 303	0
27	16	122/122 (100%)	0.13	3 (2%) 58 50	63, 87, 110, 193	0
27	1J	122/122 (100%)	1.13	20 (16%) 4 4	86, 120, 149, 192	0
28	11	272/276 (98%)	0.14	11 (4%) 42 35	38, 62, 78, 83	0
28	19	273/276 (98%)	0.61	30 (10%) 10 9	46, 71, 87, 97	0
29	21	205/206 (99%)	0.82	28 (13%) 6 6	50, 88, 129, 144	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
29	29	205/206 (99%)	1.26	46 (22%) 2 2	61, 93, 141, 174	0
30	31	202/210 (96%)	0.71	23 (11%) 10 9	43, 73, 113, 131	0
30	39	208/210 (99%)	1.08	33 (15%) 5 4	56, 103, 167, 189	0
31	41	181/182 (99%)	0.87	26 (14%) 6 5	78, 98, 131, 148	0
31	49	181/182 (99%)	1.29	40 (22%) 2 2	120, 142, 168, 178	0
32	51	174/180 (96%)	1.03	32 (18%) 3 3	77, 102, 120, 135	0
32	59	170/180 (94%)	2.14	71 (41%) 0 0	142, 193, 215, 227	0
33	61	146/148 (98%)	1.25	33 (22%) 2 2	71, 129, 146, 151	0
33	69	146/148 (98%)	2.41	67 (45%) 0 0	81, 122, 150, 157	0
34	15	138/140 (98%)	1.51	32 (23%) 2 2	77, 106, 136, 163	0
34	58	138/140 (98%)	1.16	20 (14%) 6 5	62, 89, 128, 145	0
35	25	122/122 (100%)	0.73	9 (7%) 20 18	66, 87, 103, 109	0
35	68	122/122 (100%)	0.51	12 (9%) 13 12	57, 72, 89, 100	0
36	35	150/150 (100%)	1.30	32 (21%) 2 2	58, 106, 138, 169	0
36	78	150/150 (100%)	0.62	11 (7%) 21 18	43, 77, 104, 157	0
37	45	141/141 (100%)	1.15	29 (20%) 2 2	75, 107, 136, 152	0
37	88	138/141 (97%)	0.48	8 (5%) 29 24	50, 76, 98, 128	0
38	55	117/118 (99%)	0.66	15 (12%) 7 7	59, 76, 91, 110	0
38	98	118/118 (100%)	0.91	18 (15%) 5 5	61, 81, 102, 110	0
39	65	111/112 (99%)	1.28	23 (20%) 2 2	91, 114, 131, 139	0
39	A8	111/112 (99%)	0.64	11 (9%) 13 11	73, 84, 108, 123	0
40	75	137/146 (93%)	0.99	18 (13%) 7 7	78, 95, 150, 184	0
40	B8	137/146 (93%)	1.29	29 (21%) 2 2	69, 89, 145, 175	0
41	85	117/118 (99%)	1.41	22 (18%) 3 3	66, 94, 138, 155	0
41	C8	117/118 (99%)	0.90	19 (16%) 4 4	52, 79, 111, 129	0
42	95	101/101 (100%)	1.96	33 (32%) 1 1	66, 124, 140, 157	0
42	D8	101/101 (100%)	1.66	26 (25%) 1 1	54, 103, 129, 140	0
43	A5	113/113 (100%)	0.59	5 (4%) 39 32	60, 72, 105, 150	0
43	E8	113/113 (100%)	0.69	13 (11%) 9 9	56, 72, 105, 146	0
44	B5	94/96 (97%)	0.57	7 (7%) 20 18	68, 83, 109, 120	0
44	F8	94/96 (97%)	0.28	6 (6%) 25 21	55, 69, 90, 108	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
45	C5	104/110 (94%)	1.76	42 (40%) 0 0	92, 115, 146, 153	0
45	G8	104/110 (94%)	1.10	19 (18%) 3 3	70, 90, 131, 142	0
46	D5	179/206 (86%)	1.50	49 (27%) 1 1	113, 151, 230, 237	0
46	H8	175/206 (84%)	1.17	31 (17%) 4 3	80, 119, 203, 216	0
47	E5	77/85 (90%)	1.10	11 (14%) 6 6	67, 88, 106, 145	0
47	I8	80/85 (94%)	0.67	12 (15%) 5 5	54, 67, 101, 108	0
48	F5	94/98 (95%)	1.37	27 (28%) 1 1	60, 79, 122, 132	0
48	J8	97/98 (98%)	0.55	14 (14%) 6 5	50, 69, 122, 149	0
49	G5	67/72 (93%)	1.00	11 (16%) 4 4	80, 100, 121, 144	0
49	K8	67/72 (93%)	0.85	12 (17%) 3 3	61, 77, 95, 125	0
50	H5	59/60 (98%)	1.31	13 (22%) 2 2	77, 100, 140, 153	0
50	L8	57/60 (95%)	0.95	7 (12%) 8 8	57, 78, 102, 109	0
51	I5	60/71 (84%)	1.47	17 (28%) 1 1	151, 187, 203, 206	0
51	M8	66/71 (92%)	1.65	19 (28%) 1 1	104, 144, 179, 189	0
52	J5	59/60 (98%)	1.23	14 (23%) 2 2	57, 81, 150, 183	0
52	N8	58/60 (96%)	1.19	13 (22%) 2 2	48, 97, 160, 163	0
53	K5	45/54 (83%)	2.71	28 (62%) 0 0	123, 152, 165, 172	0
53	O8	45/54 (83%)	1.59	13 (28%) 1 1	106, 137, 157, 161	0
54	L5	46/49 (93%)	-0.11	2 (4%) 40 32	45, 58, 72, 85	0
54	P8	45/49 (91%)	-0.14	2 (4%) 39 32	40, 48, 61, 75	0
55	M5	60/65 (92%)	0.87	12 (20%) 3 3	71, 79, 100, 124	0
55	Q8	60/65 (92%)	1.42	22 (36%) 1 1	56, 72, 98, 109	0
56	1L	72/76 (94%)	2.08	23 (31%) 1 1	122, 239, 257, 262	0
57	3L	71/76 (93%)	2.13	26 (36%) 1 1	82, 208, 243, 253	0
All	All	21028/21694 (96%)	0.83	3211 (15%) 5 5	37, 97, 186, 338	0

The worst 5 of 3211 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
22	1K	73	A	25.3
13	4A	6	GLY	20.3
27	1J	88	C	15.1
13	4A	7	VAL	14.7
11	2A	126	ARG	13.8

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
57	7MG	3L	46	24/25	0.44	0.17	147,158,169,181	0
57	PSU	3L	55	20/21	0.55	0.22	121,143,168,174	0
22	PSU	1K	55	20/21	0.57	0.18	112,129,148,149	0
56	PSU	1L	32	20/21	0.62	0.47	124,129,142,152	0
57	PSU	3L	32	20/21	0.67	0.19	119,134,142,142	0
57	4SU	3L	8	20/21	0.70	0.13	153,160,176,185	0
57	5MU	3L	54	21/22	0.71	0.20	115,149,174,177	0
56	5MU	1L	54	21/22	0.74	0.17	134,151,174,175	0
23	5MU	2L	55	21/22	0.78	0.12	101,107,114,117	0
22	4SU	1K	8	20/21	0.79	0.11	129,144,162,164	0
56	PSU	1L	39	20/21	0.80	0.25	110,121,135,138	0
23	7MG	2L	47	24/25	0.80	0.15	107,115,120,123	0
24	MIA	3K	37	29/30	0.83	0.27	103,119,131,151	0
22	5MU	1K	54	21/22	0.84	0.12	106,112,129,132	0
23	PSU	2L	56	20/21	0.85	0.10	96,107,114,116	0
22	PSU	1K	32	20/21	0.86	0.40	89,96,103,114	0
23	5MU	2K	55	21/22	0.86	0.12	81,93,97,102	0
24	PSU	3K	39	20/21	0.86	0.12	113,120,126,127	0
23	PSU	2K	56	20/21	0.86	0.13	84,91,100,103	0
23	4SU	2L	8	20/21	0.88	0.12	94,105,113,115	0
23	7MG	2K	47	24/25	0.89	0.12	82,93,103,108	0
24	PSU	3K	32	20/21	0.89	0.11	108,124,131,143	0
56	MIA	1L	37	29/30	0.91	0.20	102,116,122,128	0
22	PSU	1K	39	20/21	0.92	0.17	72,86,90,90	0
23	4SU	2K	8	20/21	0.92	0.13	75,84,93,98	0
23	OMC	2L	33	21/22	0.94	0.10	87,93,96,103	0
22	MIA	1K	37	29/30	0.94	0.17	70,75,87,93	0
23	OMC	2K	33	21/22	0.96	0.13	65,68,74,78	0

6.3 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

6.4 Ligands i

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
58	MG	13	1710	1/1	-0.03	0.44	148,148,148,148	0
58	MG	14	3253	1/1	0.31	0.26	151,151,151,151	0
58	MG	14	3051	1/1	0.35	0.45	102,102,102,102	0
58	MG	14	3287	1/1	0.44	0.46	96,96,96,96	0
58	MG	1G	1665	1/1	0.45	0.44	127,127,127,127	0
58	MG	14	3178	1/1	0.48	0.48	88,88,88,88	0
58	MG	14	3160	1/1	0.49	0.41	82,82,82,82	0
58	MG	14	3028	1/1	0.53	0.40	99,99,99,99	0
58	MG	1G	1607	1/1	0.56	0.18	85,85,85,85	0
58	MG	13	1704	1/1	0.56	0.42	102,102,102,102	0
58	MG	1H	3020	1/1	0.59	0.41	90,90,90,90	0
58	MG	14	3239	1/1	0.59	0.45	98,98,98,98	0
58	MG	1J	202	1/1	0.59	0.49	88,88,88,88	0
58	MG	1H	3299	1/1	0.60	0.37	98,98,98,98	0
58	MG	1G	1679	1/1	0.60	0.39	120,120,120,120	0
58	MG	1H	3343	1/1	0.61	0.40	99,99,99,99	0
58	MG	1H	3334	1/1	0.62	0.38	95,95,95,95	0
58	MG	1G	1660	1/1	0.62	0.36	98,98,98,98	0
58	MG	1H	3247	1/1	0.62	0.37	92,92,92,92	0
58	MG	14	3293	1/1	0.63	0.31	94,94,94,94	0
58	MG	14	3165	1/1	0.63	0.35	83,83,83,83	0
58	MG	13	1670	1/1	0.64	0.28	91,91,91,91	0
58	MG	1H	3162	1/1	0.64	0.46	89,89,89,89	0
58	MG	14	3167	1/1	0.65	0.37	86,86,86,86	0
58	MG	3E	302	1/1	0.66	0.39	108,108,108,108	0
58	MG	14	3050	1/1	0.66	0.44	94,94,94,94	0
58	MG	49	201	1/1	0.66	0.26	128,128,128,128	0
58	MG	1H	3025	1/1	0.67	0.26	90,90,90,90	0
58	MG	14	3199	1/1	0.68	0.39	96,96,96,96	0
58	MG	1H	3224	1/1	0.68	0.38	92,92,92,92	0
58	MG	13	1627	1/1	0.68	0.42	90,90,90,90	0
58	MG	14	3016	1/1	0.68	0.24	91,91,91,91	0
58	MG	13	1701	1/1	0.68	0.43	99,99,99,99	0
58	MG	14	3294	1/1	0.68	0.27	94,94,94,94	0
58	MG	1H	3325	1/1	0.68	0.43	92,92,92,92	0
58	MG	14	3198	1/1	0.68	0.33	94,94,94,94	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	13	1622	1/1	0.69	0.31	66,66,66,66	0
58	MG	14	3246	1/1	0.69	0.28	85,85,85,85	0
58	MG	1G	1649	1/1	0.69	0.35	101,101,101,101	0
58	MG	1H	3345	1/1	0.69	0.33	81,81,81,81	0
58	MG	14	3019	1/1	0.70	0.43	84,84,84,84	0
58	MG	1G	1624	1/1	0.70	0.20	85,85,85,85	0
58	MG	1J	204	1/1	0.70	0.56	94,94,94,94	0
58	MG	1H	3051	1/1	0.70	0.40	97,97,97,97	0
58	MG	1G	1676	1/1	0.71	0.33	95,95,95,95	0
58	MG	1H	3342	1/1	0.71	0.38	89,89,89,89	0
58	MG	14	3073	1/1	0.71	0.37	91,91,91,91	0
58	MG	1H	3074	1/1	0.71	0.34	88,88,88,88	0
58	MG	13	1626	1/1	0.71	0.38	90,90,90,90	0
58	MG	1H	3262	1/1	0.71	0.39	96,96,96,96	0
58	MG	1H	3337	1/1	0.72	0.24	86,86,86,86	0
58	MG	13	1671	1/1	0.72	0.24	95,95,95,95	0
58	MG	13	1662	1/1	0.72	0.60	115,115,115,115	0
58	MG	1G	1626	1/1	0.72	0.37	99,99,99,99	0
58	MG	14	3259	1/1	0.72	0.21	102,102,102,102	0
58	MG	14	3285	1/1	0.72	0.29	104,104,104,104	0
58	MG	25	201	1/1	0.72	0.42	102,102,102,102	0
58	MG	C5	201	1/1	0.72	0.30	105,105,105,105	0
58	MG	1G	1678	1/1	0.73	0.28	108,108,108,108	0
58	MG	16	205	1/1	0.73	0.31	81,81,81,81	0
58	MG	1H	3054	1/1	0.73	0.54	92,92,92,92	0
58	MG	14	3140	1/1	0.73	0.43	69,69,69,69	0
58	MG	1H	3169	1/1	0.73	0.38	85,85,85,85	0
58	MG	14	3023	1/1	0.73	0.47	90,90,90,90	0
58	MG	2K	103	1/1	0.73	0.36	88,88,88,88	0
58	MG	14	3168	1/1	0.73	0.36	92,92,92,92	0
58	MG	1G	1627	1/1	0.74	0.22	88,88,88,88	0
58	MG	2A	202	1/1	0.74	0.18	98,98,98,98	0
58	MG	13	1713	1/1	0.74	0.40	88,88,88,88	0
58	MG	88	201	1/1	0.74	0.31	84,84,84,84	0
58	MG	13	1693	1/1	0.74	0.40	94,94,94,94	0
58	MG	1H	3098	1/1	0.74	0.40	71,71,71,71	0
58	MG	16	201	1/1	0.74	0.27	79,79,79,79	0
58	MG	14	3170	1/1	0.74	0.24	84,84,84,84	0
58	MG	13	1648	1/1	0.75	0.35	78,78,78,78	0
58	MG	14	3122	1/1	0.75	0.36	79,79,79,79	0
58	MG	1H	3290	1/1	0.75	0.35	84,84,84,84	0
58	MG	13	1712	1/1	0.75	0.29	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
58	MG	1H	3310	1/1	0.75	0.24	105,105,105,105	0
58	MG	13	1661	1/1	0.75	0.39	97,97,97,97	0
58	MG	14	3299	1/1	0.76	0.35	76,76,76,76	0
58	MG	1H	3021	1/1	0.76	0.29	68,68,68,68	0
58	MG	1H	3177	1/1	0.76	0.35	86,86,86,86	0
58	MG	1H	3322	1/1	0.76	0.19	88,88,88,88	0
58	MG	1G	1663	1/1	0.76	0.20	112,112,112,112	0
58	MG	14	3193	1/1	0.76	0.40	89,89,89,89	0
58	MG	1G	1601	1/1	0.77	0.45	90,90,90,90	0
58	MG	14	3169	1/1	0.77	0.37	92,92,92,92	0
58	MG	1H	3185	1/1	0.77	0.19	72,72,72,72	0
58	MG	3L	101	1/1	0.77	0.18	99,99,99,99	0
58	MG	14	3011	1/1	0.77	0.31	70,70,70,70	0
58	MG	1H	3196	1/1	0.77	0.38	102,102,102,102	0
58	MG	14	3158	1/1	0.77	0.37	95,95,95,95	0
58	MG	14	3227	1/1	0.77	0.29	84,84,84,84	0
58	MG	1H	3266	1/1	0.77	0.32	91,91,91,91	0
58	MG	1H	3166	1/1	0.77	0.29	64,64,64,64	0
58	MG	1G	1629	1/1	0.77	0.30	96,96,96,96	0
60	ZN	G8	202	1/1	0.77	0.19	164,164,164,164	0
58	MG	14	3148	1/1	0.78	0.39	65,65,65,65	0
58	MG	1H	3230	1/1	0.78	0.38	91,91,91,91	0
58	MG	1H	3161	1/1	0.78	0.30	89,89,89,89	0
58	MG	1H	3055	1/1	0.78	0.31	85,85,85,85	0
58	MG	1G	1674	1/1	0.78	0.33	98,98,98,98	0
58	MG	13	1690	1/1	0.78	0.28	90,90,90,90	0
58	MG	14	3042	1/1	0.78	0.18	87,87,87,87	0
58	MG	13	1678	1/1	0.78	0.29	89,89,89,89	0
58	MG	16	206	1/1	0.78	0.20	74,74,74,74	0
58	MG	1G	1636	1/1	0.78	0.38	106,106,106,106	0
58	MG	14	3118	1/1	0.78	0.26	72,72,72,72	0
58	MG	2L	103	1/1	0.78	0.29	93,93,93,93	0
58	MG	14	3130	1/1	0.78	0.42	85,85,85,85	0
58	MG	1H	3294	1/1	0.78	0.16	61,61,61,61	0
58	MG	14	3272	1/1	0.79	0.35	85,85,85,85	0
58	MG	1G	1677	1/1	0.79	0.45	97,97,97,97	0
58	MG	1G	1638	1/1	0.79	0.32	84,84,84,84	0
58	MG	1G	1619	1/1	0.79	0.48	92,92,92,92	0
58	MG	14	3034	1/1	0.79	0.36	82,82,82,82	0
58	MG	13	1675	1/1	0.79	0.21	78,78,78,78	0
58	MG	14	3301	1/1	0.79	0.28	87,87,87,87	0
58	MG	1H	3033	1/1	0.79	0.40	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	13	1688	1/1	0.79	0.30	97,97,97,97	0
58	MG	2K	102	1/1	0.79	0.22	80,80,80,80	0
58	MG	14	3089	1/1	0.79	0.42	81,81,81,81	0
58	MG	14	3255	1/1	0.79	0.34	92,92,92,92	0
58	MG	1G	1616	1/1	0.79	0.40	86,86,86,86	0
58	MG	14	3047	1/1	0.80	0.23	92,92,92,92	0
58	MG	1G	1645	1/1	0.80	0.32	142,142,142,142	0
58	MG	1H	3035	1/1	0.80	0.33	89,89,89,89	0
58	MG	1H	3046	1/1	0.80	0.15	84,84,84,84	0
58	MG	14	3077	1/1	0.80	0.27	77,77,77,77	0
58	MG	13	1708	1/1	0.80	0.41	90,90,90,90	0
58	MG	14	3115	1/1	0.80	0.30	66,66,66,66	0
58	MG	1H	3313	1/1	0.80	0.27	78,78,78,78	0
58	MG	1H	3016	1/1	0.80	0.43	97,97,97,97	0
58	MG	1J	203	1/1	0.80	0.22	100,100,100,100	0
58	MG	1H	3268	1/1	0.80	0.32	71,71,71,71	0
58	MG	1J	205	1/1	0.80	0.23	78,78,78,78	0
58	MG	1H	3282	1/1	0.80	0.31	98,98,98,98	0
58	MG	13	1687	1/1	0.80	0.22	98,98,98,98	0
58	MG	14	3039	1/1	0.80	0.26	74,74,74,74	0
58	MG	1G	1606	1/1	0.80	0.34	83,83,83,83	0
58	MG	1G	1659	1/1	0.81	0.54	95,95,95,95	0
58	MG	13	1695	1/1	0.81	0.21	83,83,83,83	0
58	MG	14	3026	1/1	0.81	0.29	71,71,71,71	0
58	MG	14	3260	1/1	0.81	0.29	100,100,100,100	0
58	MG	13	1664	1/1	0.81	0.36	74,74,74,74	0
58	MG	14	3282	1/1	0.81	0.41	88,88,88,88	0
58	MG	14	3284	1/1	0.81	0.34	94,94,94,94	0
58	MG	13	1665	1/1	0.81	0.38	88,88,88,88	0
58	MG	1G	1623	1/1	0.81	0.25	91,91,91,91	0
58	MG	1H	3302	1/1	0.81	0.23	77,77,77,77	0
58	MG	1H	3309	1/1	0.81	0.21	70,70,70,70	0
58	MG	13	1705	1/1	0.81	0.25	91,91,91,91	0
58	MG	13	1657	1/1	0.81	0.38	89,89,89,89	0
58	MG	13	1682	1/1	0.81	0.34	73,73,73,73	0
58	MG	14	3184	1/1	0.81	0.24	91,91,91,91	0
58	MG	1H	3280	1/1	0.81	0.33	82,82,82,82	0
58	MG	1G	1642	1/1	0.81	0.22	92,92,92,92	0
58	MG	14	3095	1/1	0.81	0.39	83,83,83,83	0
58	MG	14	3003	1/1	0.81	0.38	77,77,77,77	0
58	MG	1G	1602	1/1	0.81	0.22	93,93,93,93	0
58	MG	1H	3211	1/1	0.81	0.34	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	14	3137	1/1	0.82	0.16	78,78,78,78	0
58	MG	1H	3024	1/1	0.82	0.40	77,77,77,77	0
58	MG	13	1608	1/1	0.82	0.33	85,85,85,85	0
58	MG	1H	3031	1/1	0.82	0.33	90,90,90,90	0
58	MG	14	3271	1/1	0.82	0.31	86,86,86,86	0
58	MG	14	3064	1/1	0.82	0.33	86,86,86,86	0
58	MG	14	3070	1/1	0.82	0.27	79,79,79,79	0
58	MG	14	3072	1/1	0.82	0.44	74,74,74,74	0
58	MG	3E	301	1/1	0.82	0.22	109,109,109,109	0
58	MG	13	1651	1/1	0.82	0.39	79,79,79,79	0
58	MG	14	3083	1/1	0.82	0.16	88,88,88,88	0
58	MG	1H	3132	1/1	0.82	0.26	62,62,62,62	0
58	MG	14	3094	1/1	0.82	0.38	76,76,76,76	0
58	MG	1H	3134	1/1	0.82	0.31	50,50,50,50	0
58	MG	1H	3041	1/1	0.82	0.21	88,88,88,88	0
58	MG	1H	3236	1/1	0.82	0.22	79,79,79,79	0
58	MG	14	3222	1/1	0.82	0.33	75,75,75,75	0
58	MG	2L	102	1/1	0.82	0.38	85,85,85,85	0
58	MG	14	3235	1/1	0.82	0.40	80,80,80,80	0
58	MG	13	1653	1/1	0.82	0.26	87,87,87,87	0
58	MG	14	3131	1/1	0.82	0.37	87,87,87,87	0
58	MG	14	3252	1/1	0.82	0.13	91,91,91,91	0
58	MG	1H	3319	1/1	0.83	0.38	83,83,83,83	0
58	MG	14	3229	1/1	0.83	0.31	91,91,91,91	0
58	MG	1H	3099	1/1	0.83	0.29	63,63,63,63	0
58	MG	1H	3271	1/1	0.83	0.41	80,80,80,80	0
58	MG	14	3102	1/1	0.83	0.16	73,73,73,73	0
58	MG	1H	3326	1/1	0.83	0.20	90,90,90,90	0
58	MG	1H	3330	1/1	0.83	0.30	75,75,75,75	0
58	MG	1H	3331	1/1	0.83	0.20	67,67,67,67	0
58	MG	1H	3273	1/1	0.83	0.27	84,84,84,84	0
58	MG	1H	3275	1/1	0.83	0.39	82,82,82,82	0
58	MG	14	3262	1/1	0.83	0.18	78,78,78,78	0
58	MG	14	3268	1/1	0.83	0.36	87,87,87,87	0
58	MG	1H	3004	1/1	0.83	0.30	68,68,68,68	0
58	MG	1H	3006	1/1	0.83	0.29	57,57,57,57	0
58	MG	1G	1644	1/1	0.83	0.26	110,110,110,110	0
58	MG	14	3033	1/1	0.83	0.50	76,76,76,76	0
58	MG	1H	3285	1/1	0.83	0.20	80,80,80,80	0
58	MG	1H	3492	1/1	0.83	0.26	82,82,82,82	0
58	MG	1H	3156	1/1	0.83	0.36	78,78,78,78	0
58	MG	13	1673	1/1	0.83	0.28	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
58	MG	1G	1661	1/1	0.83	0.20	99,99,99,99	0
58	MG	1H	3045	1/1	0.83	0.29	72,72,72,72	0
58	MG	4I	202	1/1	0.83	0.27	81,81,81,81	0
58	MG	1H	3077	1/1	0.83	0.21	54,54,54,54	0
58	MG	13	1703	1/1	0.83	0.30	89,89,89,89	0
58	MG	1H	3172	1/1	0.83	0.30	79,79,79,79	0
58	MG	1H	3174	1/1	0.83	0.29	70,70,70,70	0
58	MG	14	3203	1/1	0.83	0.36	83,83,83,83	0
58	MG	14	3217	1/1	0.83	0.27	101,101,101,101	0
58	MG	1H	3314	1/1	0.83	0.22	84,84,84,84	0
58	MG	1H	3029	1/1	0.84	0.39	72,72,72,72	0
58	MG	1G	1633	1/1	0.84	0.46	82,82,82,82	0
58	MG	1G	1634	1/1	0.84	0.18	84,84,84,84	0
58	MG	1H	3195	1/1	0.84	0.31	81,81,81,81	0
58	MG	1H	3023	1/1	0.84	0.40	88,88,88,88	0
58	MG	14	3258	1/1	0.84	0.18	82,82,82,82	0
58	MG	1H	3118	1/1	0.84	0.16	53,53,53,53	0
58	MG	14	3166	1/1	0.84	0.38	81,81,81,81	0
58	MG	1H	3122	1/1	0.84	0.18	68,68,68,68	0
58	MG	1G	1608	1/1	0.84	0.26	72,72,72,72	0
58	MG	14	3001	1/1	0.84	0.39	89,89,89,89	0
58	MG	1G	1647	1/1	0.84	0.17	94,94,94,94	0
58	MG	13	1645	1/1	0.84	0.27	69,69,69,69	0
58	MG	1H	3234	1/1	0.84	0.26	67,67,67,67	0
58	MG	1G	1622	1/1	0.84	0.40	81,81,81,81	0
58	MG	13	1667	1/1	0.84	0.28	82,82,82,82	0
58	MG	1H	3287	1/1	0.84	0.37	77,77,77,77	0
58	MG	14	3200	1/1	0.84	0.28	94,94,94,94	0
58	MG	14	3027	1/1	0.84	0.34	81,81,81,81	0
58	MG	1H	3097	1/1	0.84	0.22	69,69,69,69	0
58	MG	14	3406	1/1	0.84	0.17	112,112,112,112	0
58	MG	14	3220	1/1	0.84	0.17	66,66,66,66	0
58	MG	14	3121	1/1	0.84	0.34	75,75,75,75	0
58	MG	1G	1672	1/1	0.84	0.36	88,88,88,88	0
58	MG	1H	3178	1/1	0.84	0.16	63,63,63,63	0
58	MG	14	3233	1/1	0.84	0.14	63,63,63,63	0
58	MG	14	3234	1/1	0.84	0.29	80,80,80,80	0
58	MG	14	3035	1/1	0.84	0.34	72,72,72,72	0
58	MG	14	3238	1/1	0.84	0.19	86,86,86,86	0
58	MG	1H	3321	1/1	0.85	0.19	72,72,72,72	0
58	MG	14	3123	1/1	0.85	0.32	78,78,78,78	0
58	MG	13	1656	1/1	0.85	0.30	79,79,79,79	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
58	MG	14	3029	1/1	0.85	0.39	87,87,87,87	0
58	MG	1H	3274	1/1	0.85	0.26	83,83,83,83	0
58	MG	1H	3188	1/1	0.85	0.34	73,73,73,73	0
58	MG	14	3142	1/1	0.85	0.33	88,88,88,88	0
58	MG	14	3143	1/1	0.85	0.34	85,85,85,85	0
58	MG	13	1638	1/1	0.85	0.28	62,62,62,62	0
58	MG	1G	1671	1/1	0.85	0.17	82,82,82,82	0
58	MG	1H	3146	1/1	0.85	0.26	67,67,67,67	0
58	MG	1H	3151	1/1	0.85	0.28	73,73,73,73	0
58	MG	14	3048	1/1	0.85	0.28	76,76,76,76	0
58	MG	13	1658	1/1	0.85	0.22	92,92,92,92	0
58	MG	1H	3289	1/1	0.85	0.29	89,89,89,89	0
58	MG	14	3063	1/1	0.85	0.27	70,70,70,70	0
58	MG	14	3277	1/1	0.85	0.15	104,104,104,104	0
58	MG	4K	101	1/1	0.85	0.26	73,73,73,73	0
58	MG	14	3283	1/1	0.85	0.44	82,82,82,82	0
58	MG	14	3172	1/1	0.85	0.21	72,72,72,72	0
58	MG	14	3174	1/1	0.85	0.24	84,84,84,84	0
58	MG	13	1660	1/1	0.85	0.21	86,86,86,86	0
58	MG	14	3179	1/1	0.85	0.30	72,72,72,72	0
58	MG	1G	1631	1/1	0.85	0.23	82,82,82,82	0
58	MG	1H	3084	1/1	0.85	0.25	69,69,69,69	0
58	MG	14	3197	1/1	0.85	0.31	73,73,73,73	0
58	MG	13	1637	1/1	0.85	0.24	66,66,66,66	0
58	MG	1H	3308	1/1	0.85	0.23	75,75,75,75	0
58	MG	1H	3012	1/1	0.85	0.26	78,78,78,78	0
58	MG	13	1646	1/1	0.85	0.24	61,61,61,61	0
58	MG	1H	3267	1/1	0.85	0.25	71,71,71,71	0
58	MG	29	304	1/1	0.85	0.32	95,95,95,95	0
58	MG	13	1654	1/1	0.85	0.29	76,76,76,76	0
58	MG	13	1702	1/1	0.85	0.12	81,81,81,81	0
58	MG	1G	1604	1/1	0.85	0.23	98,98,98,98	0
58	MG	1G	1657	1/1	0.85	0.15	107,107,107,107	0
58	MG	1G	1675	1/1	0.86	0.29	90,90,90,90	0
58	MG	13	1636	1/1	0.86	0.35	77,77,77,77	0
58	MG	1H	3159	1/1	0.86	0.26	73,73,73,73	0
58	MG	14	3159	1/1	0.86	0.19	73,73,73,73	0
58	MG	14	3049	1/1	0.86	0.41	86,86,86,86	0
58	MG	1H	3116	1/1	0.86	0.32	51,51,51,51	0
58	MG	16	202	1/1	0.86	0.28	81,81,81,81	0
58	MG	14	3057	1/1	0.86	0.29	62,62,62,62	0
58	MG	1G	1682	1/1	0.86	0.29	103,103,103,103	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	1H	3202	1/1	0.86	0.32	58,58,58,58	0
58	MG	7A	101	1/1	0.86	0.20	90,90,90,90	0
58	MG	1H	3022	1/1	0.86	0.26	88,88,88,88	0
58	MG	11	304	1/1	0.86	0.26	73,73,73,73	0
58	MG	14	3074	1/1	0.86	0.30	73,73,73,73	0
58	MG	1H	3216	1/1	0.86	0.19	71,71,71,71	0
58	MG	1H	3318	1/1	0.86	0.33	85,85,85,85	0
58	MG	1H	3010	1/1	0.86	0.47	87,87,87,87	0
58	MG	14	3196	1/1	0.86	0.37	65,65,65,65	0
58	MG	14	3292	1/1	0.86	0.19	84,84,84,84	0
58	MG	2I	201	1/1	0.86	0.28	77,77,77,77	0
58	MG	1H	3283	1/1	0.86	0.14	73,73,73,73	0
58	MG	1H	3323	1/1	0.86	0.32	78,78,78,78	0
58	MG	14	3103	1/1	0.86	0.27	78,78,78,78	0
58	MG	14	3020	1/1	0.86	0.21	75,75,75,75	0
58	MG	5I	101	1/1	0.86	0.14	81,81,81,81	0
58	MG	1H	3286	1/1	0.86	0.17	71,71,71,71	0
58	MG	1H	3027	1/1	0.86	0.27	76,76,76,76	0
58	MG	1H	3246	1/1	0.86	0.32	75,75,75,75	0
58	MG	2K	101	1/1	0.86	0.21	66,66,66,66	0
58	MG	1H	3154	1/1	0.86	0.25	59,59,59,59	0
58	MG	1H	3155	1/1	0.86	0.21	58,58,58,58	0
58	MG	1G	1673	1/1	0.86	0.41	92,92,92,92	0
58	MG	1H	3301	1/1	0.86	0.13	59,59,59,59	0
58	MG	1H	3102	1/1	0.87	0.27	60,60,60,60	0
58	MG	14	3037	1/1	0.87	0.37	82,82,82,82	0
58	MG	14	3181	1/1	0.87	0.32	79,79,79,79	0
58	MG	14	3182	1/1	0.87	0.59	86,86,86,86	0
58	MG	1H	3332	1/1	0.87	0.13	74,74,74,74	0
58	MG	1H	3110	1/1	0.87	0.14	45,45,45,45	0
58	MG	13	1681	1/1	0.87	0.27	66,66,66,66	0
58	MG	1H	3340	1/1	0.87	0.37	82,82,82,82	0
58	MG	1H	3341	1/1	0.87	0.31	96,96,96,96	0
58	MG	1H	3279	1/1	0.87	0.21	67,67,67,67	0
58	MG	13	1672	1/1	0.87	0.21	72,72,72,72	0
58	MG	1H	3186	1/1	0.87	0.41	74,74,74,74	0
58	MG	14	3208	1/1	0.87	0.18	83,83,83,83	0
58	MG	14	3215	1/1	0.87	0.25	73,73,73,73	0
58	MG	14	3059	1/1	0.87	0.19	55,55,55,55	0
58	MG	14	3062	1/1	0.87	0.26	75,75,75,75	0
58	MG	1H	3019	1/1	0.87	0.28	85,85,85,85	0
58	MG	14	3223	1/1	0.87	0.26	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
58	MG	1H	3520	1/1	0.87	0.26	97,97,97,97	0
58	MG	1G	1662	1/1	0.87	0.37	83,83,83,83	0
58	MG	1H	3191	1/1	0.87	0.33	70,70,70,70	0
58	MG	1H	3130	1/1	0.87	0.16	59,59,59,59	0
58	MG	16	204	1/1	0.87	0.19	67,67,67,67	0
58	MG	14	3236	1/1	0.87	0.20	86,86,86,86	0
58	MG	14	3075	1/1	0.87	0.20	89,89,89,89	0
58	MG	13	1612	1/1	0.87	0.35	89,89,89,89	0
58	MG	14	3240	1/1	0.87	0.29	83,83,83,83	0
58	MG	14	3245	1/1	0.87	0.35	77,77,77,77	0
58	MG	14	3080	1/1	0.87	0.32	62,62,62,62	0
58	MG	13	1674	1/1	0.87	0.09	77,77,77,77	0
58	MG	11	301	1/1	0.87	0.14	50,50,50,50	0
58	MG	1H	3138	1/1	0.87	0.26	65,65,65,65	0
58	MG	1H	3292	1/1	0.87	0.34	84,84,84,84	0
58	MG	14	3096	1/1	0.87	0.24	73,73,73,73	0
58	MG	13	1652	1/1	0.87	0.17	85,85,85,85	0
58	MG	98	202	1/1	0.87	0.44	95,95,95,95	0
58	MG	14	3267	1/1	0.87	0.11	79,79,79,79	0
58	MG	1H	3298	1/1	0.87	0.37	68,68,68,68	0
58	MG	1H	3218	1/1	0.87	0.14	55,55,55,55	0
58	MG	2A	201	1/1	0.87	0.25	91,91,91,91	0
58	MG	14	3273	1/1	0.87	0.15	62,62,62,62	0
58	MG	13	1677	1/1	0.87	0.31	74,74,74,74	0
58	MG	1H	3227	1/1	0.87	0.35	87,87,87,87	0
58	MG	2K	104	1/1	0.87	0.37	80,80,80,80	0
58	MG	13	1694	1/1	0.87	0.16	78,78,78,78	0
58	MG	1G	1609	1/1	0.87	0.23	81,81,81,81	0
58	MG	14	3286	1/1	0.87	0.43	71,71,71,71	0
58	MG	1G	1612	1/1	0.87	0.30	83,83,83,83	0
58	MG	1G	1614	1/1	0.87	0.29	91,91,91,91	0
58	MG	13	1624	1/1	0.87	0.24	68,68,68,68	0
58	MG	14	3145	1/1	0.87	0.34	87,87,87,87	0
58	MG	14	3013	1/1	0.87	0.37	56,56,56,56	0
58	MG	1H	3244	1/1	0.87	0.13	98,98,98,98	0
58	MG	14	3302	1/1	0.87	0.25	83,83,83,83	0
58	MG	1H	3078	1/1	0.87	0.26	67,67,67,67	0
58	MG	13	1698	1/1	0.87	0.14	80,80,80,80	0
58	MG	1H	3252	1/1	0.87	0.23	60,60,60,60	0
58	MG	14	3025	1/1	0.87	0.31	81,81,81,81	0
58	MG	1H	3091	1/1	0.87	0.25	77,77,77,77	0
58	MG	29	301	1/1	0.87	0.37	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	1H	3030	1/1	0.87	0.20	67,67,67,67	0
58	MG	1H	3167	1/1	0.87	0.19	56,56,56,56	0
58	MG	13	1699	1/1	0.87	0.16	61,61,61,61	0
58	MG	1H	3269	1/1	0.87	0.18	72,72,72,72	0
58	MG	1H	3032	1/1	0.87	0.34	82,82,82,82	0
58	MG	1H	3203	1/1	0.88	0.39	79,79,79,79	0
58	MG	1G	1646	1/1	0.88	0.57	95,95,95,95	0
58	MG	1H	3316	1/1	0.88	0.18	81,81,81,81	0
58	MG	1H	3206	1/1	0.88	0.27	54,54,54,54	0
58	MG	1H	3208	1/1	0.88	0.30	70,70,70,70	0
58	MG	1H	3015	1/1	0.88	0.17	73,73,73,73	0
58	MG	1H	3164	1/1	0.88	0.28	58,58,58,58	0
58	MG	14	3124	1/1	0.88	0.32	76,76,76,76	0
58	MG	14	3126	1/1	0.88	0.44	79,79,79,79	0
58	MG	14	3031	1/1	0.88	0.32	78,78,78,78	0
58	MG	1H	3034	1/1	0.88	0.29	73,73,73,73	0
58	MG	1H	3221	1/1	0.88	0.28	63,63,63,63	0
58	MG	14	3242	1/1	0.88	0.34	78,78,78,78	0
58	MG	14	3244	1/1	0.88	0.19	68,68,68,68	0
58	MG	14	3139	1/1	0.88	0.27	63,63,63,63	0
58	MG	1H	3281	1/1	0.88	0.30	98,98,98,98	0
58	MG	14	3250	1/1	0.88	0.23	72,72,72,72	0
58	MG	13	1635	1/1	0.88	0.19	48,48,48,48	0
58	MG	1H	3040	1/1	0.88	0.40	76,76,76,76	0
58	MG	14	3254	1/1	0.88	0.27	92,92,92,92	0
58	MG	1H	3089	1/1	0.88	0.24	72,72,72,72	0
58	MG	14	3043	1/1	0.88	0.27	76,76,76,76	0
58	MG	14	3151	1/1	0.88	0.49	91,91,91,91	0
58	MG	14	3154	1/1	0.88	0.18	68,68,68,68	0
58	MG	14	3044	1/1	0.88	0.19	57,57,57,57	0
58	MG	14	3265	1/1	0.88	0.43	90,90,90,90	0
58	MG	1H	3135	1/1	0.88	0.37	61,61,61,61	0
58	MG	1H	3026	1/1	0.88	0.30	80,80,80,80	0
58	MG	14	3161	1/1	0.88	0.31	74,74,74,74	0
58	MG	1H	3338	1/1	0.88	0.22	80,80,80,80	0
58	MG	1G	1620	1/1	0.88	0.23	77,77,77,77	0
58	MG	14	3276	1/1	0.88	0.28	80,80,80,80	0
58	MG	1H	3140	1/1	0.88	0.15	69,69,69,69	0
58	MG	13	1609	1/1	0.88	0.38	81,81,81,81	0
58	MG	1H	3291	1/1	0.88	0.26	86,86,86,86	0
58	MG	1G	1681	1/1	0.88	0.18	75,75,75,75	0
58	MG	1G	1625	1/1	0.88	0.14	129,129,129,129	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	13	1644	1/1	0.88	0.31	78,78,78,78	0
58	MG	1H	3248	1/1	0.88	0.30	75,75,75,75	0
58	MG	14	3289	1/1	0.88	0.20	78,78,78,78	0
58	MG	14	3290	1/1	0.88	0.48	79,79,79,79	0
58	MG	1G	1628	1/1	0.88	0.30	88,88,88,88	0
58	MG	13	1659	1/1	0.88	0.38	68,68,68,68	0
58	MG	1H	3255	1/1	0.88	0.33	83,83,83,83	0
58	MG	1H	3259	1/1	0.88	0.53	82,82,82,82	0
58	MG	14	3185	1/1	0.88	0.18	81,81,81,81	0
58	MG	14	3191	1/1	0.88	0.23	70,70,70,70	0
58	MG	14	3076	1/1	0.88	0.23	73,73,73,73	0
58	MG	13	1649	1/1	0.88	0.32	79,79,79,79	0
58	MG	14	3078	1/1	0.88	0.19	63,63,63,63	0
58	MG	1G	1635	1/1	0.88	0.38	92,92,92,92	0
58	MG	14	3082	1/1	0.88	0.27	63,63,63,63	0
58	MG	1H	3264	1/1	0.88	0.27	67,67,67,67	0
58	MG	1H	3109	1/1	0.88	0.14	46,46,46,46	0
58	MG	14	3015	1/1	0.88	0.35	80,80,80,80	0
58	MG	14	3212	1/1	0.88	0.22	75,75,75,75	0
58	MG	13	1683	1/1	0.88	0.18	76,76,76,76	0
58	MG	1H	3059	1/1	0.88	0.24	56,56,56,56	0
60	ZN	C5	202	1/1	0.88	0.14	181,181,181,181	0
58	MG	14	3106	1/1	0.89	0.22	62,62,62,62	0
58	MG	14	3226	1/1	0.89	0.17	67,67,67,67	0
58	MG	14	3111	1/1	0.89	0.23	92,92,92,92	0
58	MG	1G	1637	1/1	0.89	0.43	79,79,79,79	0
58	MG	14	3230	1/1	0.89	0.44	82,82,82,82	0
58	MG	1H	3257	1/1	0.89	0.11	69,69,69,69	0
58	MG	13	1650	1/1	0.89	0.22	72,72,72,72	0
58	MG	1H	3042	1/1	0.89	0.23	64,64,64,64	0
58	MG	16	207	1/1	0.89	0.11	88,88,88,88	0
58	MG	16	209	1/1	0.89	0.28	65,65,65,65	0
58	MG	1H	3119	1/1	0.89	0.23	91,91,91,91	0
58	MG	14	3127	1/1	0.89	0.28	54,54,54,54	0
58	MG	1H	3083	1/1	0.89	0.34	68,68,68,68	0
58	MG	1G	1651	1/1	0.89	0.37	77,77,77,77	0
58	MG	1G	1653	1/1	0.89	0.15	78,78,78,78	0
58	MG	1H	3165	1/1	0.89	0.22	60,60,60,60	0
58	MG	1H	3212	1/1	0.89	0.19	70,70,70,70	0
58	MG	1H	3123	1/1	0.89	0.26	49,49,49,49	0
58	MG	1H	3217	1/1	0.89	0.20	54,54,54,54	0
58	MG	13	1709	1/1	0.89	0.41	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	1H	3085	1/1	0.89	0.10	69,69,69,69	0
58	MG	14	3045	1/1	0.89	0.36	70,70,70,70	0
58	MG	14	3046	1/1	0.89	0.26	68,68,68,68	0
58	MG	1G	1605	1/1	0.89	0.36	83,83,83,83	0
58	MG	14	3261	1/1	0.89	0.28	84,84,84,84	0
58	MG	1G	1667	1/1	0.89	0.21	92,92,92,92	0
58	MG	14	3263	1/1	0.89	0.14	76,76,76,76	0
58	MG	14	3264	1/1	0.89	0.22	77,77,77,77	0
58	MG	13	1616	1/1	0.89	0.20	65,65,65,65	0
58	MG	1H	3324	1/1	0.89	0.36	76,76,76,76	0
58	MG	14	3162	1/1	0.89	0.22	81,81,81,81	0
58	MG	14	3270	1/1	0.89	0.61	95,95,95,95	0
58	MG	14	3163	1/1	0.89	0.43	71,71,71,71	0
58	MG	1H	3226	1/1	0.89	0.21	89,89,89,89	0
58	MG	13	1711	1/1	0.89	0.37	76,76,76,76	0
58	MG	1H	3327	1/1	0.89	0.28	77,77,77,77	0
58	MG	14	3060	1/1	0.89	0.22	58,58,58,58	0
58	MG	1G	1613	1/1	0.89	0.18	87,87,87,87	0
58	MG	1H	3229	1/1	0.89	0.19	50,50,50,50	0
58	MG	1H	3052	1/1	0.89	0.33	83,83,83,83	0
58	MG	14	3066	1/1	0.89	0.33	59,59,59,59	0
58	MG	1H	3232	1/1	0.89	0.15	72,72,72,72	0
58	MG	13	1620	1/1	0.89	0.24	72,72,72,72	0
58	MG	1H	3235	1/1	0.89	0.38	83,83,83,83	0
58	MG	1H	3183	1/1	0.89	0.22	60,60,60,60	0
58	MG	13	1680	1/1	0.89	0.21	97,97,97,97	0
58	MG	13	1605	1/1	0.89	0.40	76,76,76,76	0
58	MG	14	3189	1/1	0.89	0.18	46,46,46,46	0
58	MG	1H	3106	1/1	0.89	0.23	49,49,49,49	0
58	MG	1H	3073	1/1	0.89	0.38	73,73,73,73	0
58	MG	1H	3250	1/1	0.89	0.37	86,86,86,86	0
58	MG	14	3385	1/1	0.89	0.09	91,91,91,91	0
58	MG	14	3081	1/1	0.89	0.31	80,80,80,80	0
58	MG	1H	3491	1/1	0.89	0.09	105,105,105,105	0
58	MG	1H	3295	1/1	0.89	0.33	87,87,87,87	0
58	MG	14	3085	1/1	0.89	0.23	52,52,52,52	0
58	MG	14	3008	1/1	0.89	0.17	65,65,65,65	0
58	MG	14	3090	1/1	0.89	0.24	68,68,68,68	0
58	MG	1G	1632	1/1	0.89	0.53	83,83,83,83	0
58	MG	14	3214	1/1	0.89	0.09	75,75,75,75	0
58	MG	1H	3251	1/1	0.89	0.24	79,79,79,79	0
58	MG	3K	101	1/1	0.89	0.10	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	1H	3157	1/1	0.89	0.28	84,84,84,84	0
58	MG	16	203	1/1	0.89	0.28	81,81,81,81	0
58	MG	1H	3075	1/1	0.90	0.14	76,76,76,76	0
58	MG	13	1633	1/1	0.90	0.20	49,49,49,49	0
58	MG	14	3237	1/1	0.90	0.28	79,79,79,79	0
58	MG	13	1618	1/1	0.90	0.19	63,63,63,63	0
58	MG	1H	3120	1/1	0.90	0.34	70,70,70,70	0
58	MG	13	1614	1/1	0.90	0.21	86,86,86,86	0
58	MG	1H	3228	1/1	0.90	0.25	83,83,83,83	0
58	MG	1H	3047	1/1	0.90	0.39	76,76,76,76	0
58	MG	1G	1610	1/1	0.90	0.16	88,88,88,88	0
58	MG	1H	3050	1/1	0.90	0.29	63,63,63,63	0
58	MG	14	3157	1/1	0.90	0.29	71,71,71,71	0
58	MG	13	1631	1/1	0.90	0.19	82,82,82,82	0
58	MG	1H	3133	1/1	0.90	0.18	53,53,53,53	0
58	MG	13	1689	1/1	0.90	0.26	118,118,118,118	0
58	MG	1H	3092	1/1	0.90	0.23	57,57,57,57	0
58	MG	1H	3136	1/1	0.90	0.20	73,73,73,73	0
58	MG	1G	1680	1/1	0.90	0.42	101,101,101,101	0
58	MG	1H	3094	1/1	0.90	0.15	54,54,54,54	0
58	MG	14	3065	1/1	0.90	0.31	62,62,62,62	0
58	MG	1H	3187	1/1	0.90	0.33	78,78,78,78	0
58	MG	1H	3139	1/1	0.90	0.28	52,52,52,52	0
58	MG	1H	3293	1/1	0.90	0.09	67,67,67,67	0
58	MG	1H	3346	1/1	0.90	0.28	80,80,80,80	0
58	MG	14	3266	1/1	0.90	0.32	84,84,84,84	0
58	MG	1H	3400	1/1	0.90	0.17	54,54,54,54	0
58	MG	1H	3403	1/1	0.90	0.17	72,72,72,72	0
58	MG	14	3269	1/1	0.90	0.18	77,77,77,77	0
58	MG	14	3175	1/1	0.90	0.21	87,87,87,87	0
58	MG	1H	3428	1/1	0.90	0.14	74,74,74,74	0
58	MG	1G	1630	1/1	0.90	0.11	78,78,78,78	0
58	MG	14	3002	1/1	0.90	0.35	64,64,64,64	0
58	MG	13	1663	1/1	0.90	0.29	62,62,62,62	0
58	MG	13	1691	1/1	0.90	0.14	75,75,75,75	0
58	MG	14	3281	1/1	0.90	0.14	84,84,84,84	0
58	MG	14	3009	1/1	0.90	0.21	66,66,66,66	0
58	MG	1H	3499	1/1	0.90	0.08	105,105,105,105	0
58	MG	1H	3513	1/1	0.90	0.12	82,82,82,82	0
58	MG	1H	3297	1/1	0.90	0.25	78,78,78,78	0
58	MG	1H	3148	1/1	0.90	0.32	78,78,78,78	0
58	MG	14	3017	1/1	0.90	0.36	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	1H	3254	1/1	0.90	0.32	78,78,78,78	0
58	MG	1H	3056	1/1	0.90	0.58	97,97,97,97	0
58	MG	14	3022	1/1	0.90	0.41	78,78,78,78	0
58	MG	1G	1639	1/1	0.90	0.23	80,80,80,80	0
58	MG	14	3204	1/1	0.90	0.18	63,63,63,63	0
58	MG	14	3297	1/1	0.90	0.18	75,75,75,75	0
58	MG	14	3206	1/1	0.90	0.12	50,50,50,50	0
58	MG	14	3104	1/1	0.90	0.16	74,74,74,74	0
58	MG	14	3209	1/1	0.90	0.47	81,81,81,81	0
58	MG	14	3370	1/1	0.90	0.09	106,106,106,106	0
58	MG	1H	3256	1/1	0.90	0.19	58,58,58,58	0
58	MG	1H	3307	1/1	0.90	0.20	60,60,60,60	0
58	MG	1H	3152	1/1	0.90	0.29	71,71,71,71	0
58	MG	1H	3100	1/1	0.90	0.32	64,64,64,64	0
58	MG	1H	3037	1/1	0.90	0.34	62,62,62,62	0
58	MG	1H	3104	1/1	0.90	0.19	68,68,68,68	0
58	MG	1H	3265	1/1	0.90	0.31	79,79,79,79	0
58	MG	1H	3063	1/1	0.90	0.17	64,64,64,64	0
58	MG	1H	3214	1/1	0.90	0.18	67,67,67,67	0
58	MG	13	1647	1/1	0.90	0.16	87,87,87,87	0
58	MG	55	201	1/1	0.90	0.19	58,58,58,58	0
58	MG	14	3129	1/1	0.90	0.30	69,69,69,69	0
58	MG	14	3038	1/1	0.90	0.39	86,86,86,86	0
58	MG	1H	3028	1/1	0.90	0.40	64,64,64,64	0
58	MG	14	3177	1/1	0.91	0.20	84,84,84,84	0
58	MG	1H	3137	1/1	0.91	0.24	71,71,71,71	0
58	MG	1H	3192	1/1	0.91	0.24	71,71,71,71	0
58	MG	1H	3076	1/1	0.91	0.23	51,51,51,51	0
58	MG	14	3117	1/1	0.91	0.28	57,57,57,57	0
58	MG	16	208	1/1	0.91	0.24	77,77,77,77	0
58	MG	1H	3163	1/1	0.91	0.26	65,65,65,65	0
58	MG	14	3186	1/1	0.91	0.39	85,85,85,85	0
58	MG	1G	1664	1/1	0.91	0.13	92,92,92,92	0
58	MG	14	3190	1/1	0.91	0.13	53,53,53,53	0
58	MG	1H	3233	1/1	0.91	0.26	70,70,70,70	0
58	MG	1G	1666	1/1	0.91	0.13	84,84,84,84	0
58	MG	14	3125	1/1	0.91	0.21	70,70,70,70	0
58	MG	1H	3198	1/1	0.91	0.21	70,70,70,70	0
58	MG	21	301	1/1	0.91	0.29	54,54,54,54	0
58	MG	13	1606	1/1	0.91	0.22	88,88,88,88	0
58	MG	14	3024	1/1	0.91	0.27	82,82,82,82	0
58	MG	13	1629	1/1	0.91	0.19	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	14	3133	1/1	0.91	0.17	77,77,77,77	0
58	MG	1H	3080	1/1	0.91	0.16	56,56,56,56	0
58	MG	14	3280	1/1	0.91	0.49	87,87,87,87	0
58	MG	14	3138	1/1	0.91	0.09	94,94,94,94	0
58	MG	P8	101	1/1	0.91	0.21	73,73,73,73	0
58	MG	1H	3147	1/1	0.91	0.27	63,63,63,63	0
58	MG	1H	3209	1/1	0.91	0.19	57,57,57,57	0
58	MG	1H	3347	1/1	0.91	0.33	78,78,78,78	0
58	MG	14	3144	1/1	0.91	0.40	81,81,81,81	0
58	MG	14	3032	1/1	0.91	0.29	82,82,82,82	0
58	MG	14	3079	1/1	0.91	0.29	73,73,73,73	0
58	MG	1H	3048	1/1	0.91	0.52	81,81,81,81	0
58	MG	14	3152	1/1	0.91	0.31	75,75,75,75	0
58	MG	1H	3150	1/1	0.91	0.27	69,69,69,69	0
58	MG	14	3155	1/1	0.91	0.26	65,65,65,65	0
58	MG	1H	3101	1/1	0.91	0.31	72,72,72,72	0
58	MG	14	3298	1/1	0.91	0.12	93,93,93,93	0
58	MG	14	3232	1/1	0.91	0.11	52,52,52,52	0
58	MG	13	1700	1/1	0.91	0.28	92,92,92,92	0
58	MG	14	3084	1/1	0.91	0.17	81,81,81,81	0
58	MG	1H	3066	1/1	0.91	0.23	48,48,48,48	0
58	MG	14	3087	1/1	0.91	0.20	48,48,48,48	0
58	MG	14	3387	1/1	0.91	0.08	93,93,93,93	0
58	MG	1H	3011	1/1	0.91	0.27	72,72,72,72	0
58	MG	1H	3044	1/1	0.91	0.30	61,61,61,61	0
58	MG	14	3093	1/1	0.91	0.24	63,63,63,63	0
58	MG	1H	3036	1/1	0.91	0.33	65,65,65,65	0
58	MG	1H	3258	1/1	0.91	0.17	64,64,64,64	0
58	MG	1H	3225	1/1	0.91	0.18	79,79,79,79	0
58	MG	14	3097	1/1	0.91	0.31	77,77,77,77	0
58	MG	14	3099	1/1	0.91	0.16	55,55,55,55	0
58	MG	14	3247	1/1	0.91	0.12	85,85,85,85	0
58	MG	14	3248	1/1	0.91	0.30	79,79,79,79	0
58	MG	1H	3112	1/1	0.91	0.28	71,71,71,71	0
58	MG	1H	3160	1/1	0.91	0.31	79,79,79,79	0
58	MG	1G	1658	1/1	0.91	0.11	92,92,92,92	0
58	MG	14	3116	1/1	0.92	0.32	80,80,80,80	0
58	MG	14	3055	1/1	0.92	0.18	54,54,54,54	0
58	MG	14	3007	1/1	0.92	0.32	68,68,68,68	0
58	MG	14	3256	1/1	0.92	0.13	57,57,57,57	0
58	MG	14	3257	1/1	0.92	0.20	58,58,58,58	0
58	MG	14	3120	1/1	0.92	0.31	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	1H	3197	1/1	0.92	0.18	63,63,63,63	0
58	MG	13	1643	1/1	0.92	0.35	78,78,78,78	0
58	MG	1G	1618	1/1	0.92	0.15	78,78,78,78	0
58	MG	1H	3061	1/1	0.92	0.28	56,56,56,56	0
58	MG	14	3014	1/1	0.92	0.33	77,77,77,77	0
58	MG	13	1601	1/1	0.92	0.23	52,52,52,52	0
58	MG	1H	3175	1/1	0.92	0.15	65,65,65,65	0
58	MG	14	3067	1/1	0.92	0.14	81,81,81,81	0
58	MG	13	1692	1/1	0.92	0.22	79,79,79,79	0
58	MG	13	1611	1/1	0.92	0.32	71,71,71,71	0
58	MG	1H	3179	1/1	0.92	0.22	67,67,67,67	0
58	MG	14	3021	1/1	0.92	0.23	73,73,73,73	0
58	MG	1H	3270	1/1	0.92	0.37	77,77,77,77	0
58	MG	1H	3181	1/1	0.92	0.06	63,63,63,63	0
58	MG	14	3205	1/1	0.92	0.15	58,58,58,58	0
58	MG	1G	1669	1/1	0.92	0.23	80,80,80,80	0
58	MG	13	1742	1/1	0.92	0.12	95,95,95,95	0
58	MG	14	3279	1/1	0.92	0.26	74,74,74,74	0
58	MG	13	1630	1/1	0.92	0.09	67,67,67,67	0
58	MG	14	3211	1/1	0.92	0.16	81,81,81,81	0
58	MG	1H	3249	1/1	0.92	0.50	76,76,76,76	0
58	MG	14	3213	1/1	0.92	0.29	75,75,75,75	0
58	MG	1H	3277	1/1	0.92	0.21	70,70,70,70	0
58	MG	14	3147	1/1	0.92	0.24	81,81,81,81	0
58	MG	14	3216	1/1	0.92	0.08	63,63,63,63	0
58	MG	1H	3344	1/1	0.92	0.13	70,70,70,70	0
58	MG	13	1666	1/1	0.92	0.23	82,82,82,82	0
58	MG	L8	101	1/1	0.92	0.22	79,79,79,79	0
58	MG	13	1706	1/1	0.92	0.57	81,81,81,81	0
58	MG	14	3224	1/1	0.92	0.29	77,77,77,77	0
58	MG	13	1707	1/1	0.92	0.39	80,80,80,80	0
58	MG	1H	3253	1/1	0.92	0.13	76,76,76,76	0
58	MG	1G	1603	1/1	0.92	0.12	87,87,87,87	0
58	MG	1H	3317	1/1	0.92	0.24	84,84,84,84	0
58	MG	1H	3422	1/1	0.92	0.09	66,66,66,66	0
58	MG	1H	3190	1/1	0.92	0.32	69,69,69,69	0
58	MG	1H	3460	1/1	0.92	0.09	81,81,81,81	0
58	MG	2L	101	1/1	0.92	0.25	88,88,88,88	0
58	MG	13	1641	1/1	0.92	0.17	69,69,69,69	0
58	MG	1H	3128	1/1	0.92	0.25	66,66,66,66	0
58	MG	1J	201	1/1	0.92	0.44	76,76,76,76	0
58	MG	1G	1648	1/1	0.92	0.32	79,79,79,79	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	1H	3129	1/1	0.92	0.21	63,63,63,63	0
58	MG	1H	3509	1/1	0.92	0.09	68,68,68,68	0
58	MG	14	3107	1/1	0.92	0.21	58,58,58,58	0
58	MG	14	3171	1/1	0.92	0.40	80,80,80,80	0
58	MG	13	1642	1/1	0.92	0.24	64,64,64,64	0
58	MG	14	3173	1/1	0.92	0.25	79,79,79,79	0
58	MG	14	3112	1/1	0.92	0.22	65,65,65,65	0
58	MG	14	3114	1/1	0.92	0.28	79,79,79,79	0
58	MG	14	3176	1/1	0.92	0.08	58,58,58,58	0
58	MG	14	3251	1/1	0.92	0.47	84,84,84,84	0
58	MG	14	3005	1/1	0.92	0.39	60,60,60,60	0
58	MG	1G	1670	1/1	0.93	0.16	88,88,88,88	0
58	MG	1H	3053	1/1	0.93	0.24	66,66,66,66	0
58	MG	14	3030	1/1	0.93	0.13	70,70,70,70	0
58	MG	1H	3210	1/1	0.93	0.25	67,67,67,67	0
58	MG	1H	3127	1/1	0.93	0.16	50,50,50,50	0
58	MG	1H	3043	1/1	0.93	0.19	77,77,77,77	0
58	MG	1K	101	1/1	0.93	0.08	85,85,85,85	0
58	MG	14	3100	1/1	0.93	0.21	66,66,66,66	0
58	MG	1H	3288	1/1	0.93	0.09	58,58,58,58	0
58	MG	13	1669	1/1	0.93	0.13	68,68,68,68	0
58	MG	1H	3329	1/1	0.93	0.41	85,85,85,85	0
58	MG	1H	3184	1/1	0.93	0.28	78,78,78,78	0
58	MG	14	3040	1/1	0.93	0.36	82,82,82,82	0
58	MG	14	3180	1/1	0.93	0.28	74,74,74,74	0
58	MG	1H	3131	1/1	0.93	0.19	57,57,57,57	0
58	MG	1H	3220	1/1	0.93	0.16	74,74,74,74	0
58	MG	14	3183	1/1	0.93	0.20	66,66,66,66	0
58	MG	13	1679	1/1	0.93	0.14	75,75,75,75	0
58	MG	1H	3081	1/1	0.93	0.27	90,90,90,90	0
58	MG	1H	3060	1/1	0.93	0.18	52,52,52,52	0
58	MG	88	202	1/1	0.93	0.08	64,64,64,64	0
58	MG	98	201	1/1	0.93	0.22	56,56,56,56	0
58	MG	1H	3296	1/1	0.93	0.12	72,72,72,72	0
58	MG	1H	3107	1/1	0.93	0.13	52,52,52,52	0
58	MG	14	3195	1/1	0.93	0.40	70,70,70,70	0
58	MG	1H	3038	1/1	0.93	0.42	73,73,73,73	0
58	MG	1H	3039	1/1	0.93	0.28	75,75,75,75	0
58	MG	14	3056	1/1	0.93	0.30	58,58,58,58	0
58	MG	1H	3193	1/1	0.93	0.14	60,60,60,60	0
58	MG	14	3278	1/1	0.93	0.12	89,89,89,89	0
58	MG	14	3058	1/1	0.93	0.20	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	13	1676	1/1	0.93	0.06	88,88,88,88	0
58	MG	14	3128	1/1	0.93	0.12	58,58,58,58	0
58	MG	14	3004	1/1	0.93	0.53	78,78,78,78	0
58	MG	14	3061	1/1	0.93	0.18	58,58,58,58	0
58	MG	1H	3303	1/1	0.93	0.13	76,76,76,76	0
58	MG	14	3132	1/1	0.93	0.07	44,44,44,44	0
58	MG	14	3006	1/1	0.93	0.22	62,62,62,62	0
58	MG	14	3134	1/1	0.93	0.20	62,62,62,62	0
58	MG	1H	3306	1/1	0.93	0.36	78,78,78,78	0
58	MG	1H	3113	1/1	0.93	0.28	68,68,68,68	0
58	MG	1H	3070	1/1	0.93	0.25	68,68,68,68	0
58	MG	14	3010	1/1	0.93	0.35	78,78,78,78	0
58	MG	14	3069	1/1	0.93	0.17	60,60,60,60	0
58	MG	14	3296	1/1	0.93	0.22	74,74,74,74	0
58	MG	14	3218	1/1	0.93	0.21	71,71,71,71	0
58	MG	1G	1654	1/1	0.93	0.22	85,85,85,85	0
58	MG	14	3012	1/1	0.93	0.27	69,69,69,69	0
58	MG	1G	1656	1/1	0.93	0.13	140,140,140,140	0
58	MG	1H	3072	1/1	0.93	0.24	61,61,61,61	0
58	MG	14	3319	1/1	0.93	0.09	65,65,65,65	0
58	MG	14	3326	1/1	0.93	0.11	61,61,61,61	0
58	MG	1H	3200	1/1	0.93	0.15	35,35,35,35	0
58	MG	14	3372	1/1	0.93	0.07	76,76,76,76	0
58	MG	1H	3443	1/1	0.93	0.07	66,66,66,66	0
58	MG	14	3228	1/1	0.93	0.19	85,85,85,85	0
58	MG	13	1625	1/1	0.93	0.25	82,82,82,82	0
58	MG	14	3407	1/1	0.93	0.09	117,117,117,117	0
58	MG	14	3153	1/1	0.93	0.28	60,60,60,60	0
58	MG	14	3018	1/1	0.93	0.26	50,50,50,50	0
58	MG	1H	3469	1/1	0.93	0.09	99,99,99,99	0
58	MG	14	3156	1/1	0.93	0.33	63,63,63,63	0
58	MG	1H	3243	1/1	0.93	0.24	81,81,81,81	0
58	MG	1G	1615	1/1	0.93	0.10	85,85,85,85	0
58	MG	29	303	1/1	0.93	0.22	73,73,73,73	0
58	MG	1H	3315	1/1	0.93	0.20	80,80,80,80	0
58	MG	1H	3096	1/1	0.93	0.08	50,50,50,50	0
58	MG	1H	3205	1/1	0.93	0.26	68,68,68,68	0
58	MG	5I	102	1/1	0.93	0.31	90,90,90,90	0
58	MG	1G	1668	1/1	0.93	0.10	84,84,84,84	0
58	MG	14	3088	1/1	0.93	0.24	45,45,45,45	0
58	MG	1H	3176	1/1	0.93	0.19	82,82,82,82	0
58	MG	1H	3194	1/1	0.94	0.28	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	1H	3068	1/1	0.94	0.12	50,50,50,50	0
58	MG	1H	3369	1/1	0.94	0.15	55,55,55,55	0
58	MG	14	3275	1/1	0.94	0.20	86,86,86,86	0
58	MG	14	3068	1/1	0.94	0.30	60,60,60,60	0
58	MG	1H	3392	1/1	0.94	0.06	94,94,94,94	0
58	MG	1H	3103	1/1	0.94	0.33	58,58,58,58	0
58	MG	13	1632	1/1	0.94	0.22	71,71,71,71	0
58	MG	1H	3153	1/1	0.94	0.26	72,72,72,72	0
58	MG	1H	3071	1/1	0.94	0.17	39,39,39,39	0
58	MG	1G	1643	1/1	0.94	0.21	74,74,74,74	0
58	MG	13	1696	1/1	0.94	0.11	70,70,70,70	0
58	MG	1H	3459	1/1	0.94	0.09	73,73,73,73	0
58	MG	13	1619	1/1	0.94	0.14	75,75,75,75	0
58	MG	13	1728	1/1	0.94	0.12	95,95,95,95	0
58	MG	13	1634	1/1	0.94	0.16	47,47,47,47	0
58	MG	1H	3095	1/1	0.94	0.17	49,49,49,49	0
58	MG	1G	1650	1/1	0.94	0.38	81,81,81,81	0
58	MG	3L	102	1/1	0.94	0.09	151,151,151,151	0
58	MG	14	3241	1/1	0.94	0.19	80,80,80,80	0
58	MG	1H	3114	1/1	0.94	0.14	66,66,66,66	0
58	MG	14	3295	1/1	0.94	0.22	79,79,79,79	0
58	MG	14	3243	1/1	0.94	0.18	70,70,70,70	0
58	MG	14	3187	1/1	0.94	0.25	47,47,47,47	0
58	MG	1G	1611	1/1	0.94	0.13	91,91,91,91	0
58	MG	1H	3500	1/1	0.94	0.09	54,54,54,54	0
58	MG	1H	3003	1/1	0.94	0.19	49,49,49,49	0
58	MG	1H	3117	1/1	0.94	0.33	43,43,43,43	0
58	MG	14	3249	1/1	0.94	0.25	65,65,65,65	0
58	MG	1H	3519	1/1	0.94	0.11	101,101,101,101	0
58	MG	14	3337	1/1	0.94	0.09	73,73,73,73	0
58	MG	14	3091	1/1	0.94	0.27	57,57,57,57	0
58	MG	1H	3239	1/1	0.94	0.10	67,67,67,67	0
58	MG	1H	3240	1/1	0.94	0.28	77,77,77,77	0
58	MG	14	3386	1/1	0.94	0.06	94,94,94,94	0
58	MG	1H	3017	1/1	0.94	0.35	66,66,66,66	0
58	MG	14	3395	1/1	0.94	0.10	75,75,75,75	0
58	MG	14	3397	1/1	0.94	0.08	52,52,52,52	0
58	MG	14	3404	1/1	0.94	0.09	66,66,66,66	0
58	MG	1H	3213	1/1	0.94	0.09	43,43,43,43	0
58	MG	1H	3300	1/1	0.94	0.47	72,72,72,72	0
58	MG	14	3052	1/1	0.94	0.16	59,59,59,59	0
58	MG	14	3054	1/1	0.94	0.19	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	1H	3272	1/1	0.94	0.13	68,68,68,68	0
58	MG	14	3207	1/1	0.94	0.06	68,68,68,68	0
58	MG	1H	3336	1/1	0.94	0.08	62,62,62,62	0
58	MG	1H	3245	1/1	0.94	0.28	81,81,81,81	0
58	MG	29	302	1/1	0.94	0.23	57,57,57,57	0
58	MG	1H	3018	1/1	0.94	0.31	73,73,73,73	0
58	MG	1H	3304	1/1	0.94	0.07	71,71,71,71	0
58	MG	14	3108	1/1	0.94	0.17	50,50,50,50	0
58	MG	1H	3305	1/1	0.94	0.24	75,75,75,75	0
58	MG	1H	3079	1/1	0.94	0.16	53,53,53,53	0
58	MG	13	1621	1/1	0.94	0.17	74,74,74,74	0
58	MG	1H	3005	1/1	0.94	0.09	53,53,53,53	0
58	MG	1H	3219	1/1	0.94	0.25	70,70,70,70	0
58	MG	1H	3171	1/1	0.95	0.12	58,58,58,58	0
58	MG	13	1736	1/1	0.95	0.07	116,116,116,116	0
58	MG	14	3110	1/1	0.95	0.16	55,55,55,55	0
58	MG	14	3041	1/1	0.95	0.25	66,66,66,66	0
58	MG	1H	3173	1/1	0.95	0.33	65,65,65,65	0
58	MG	14	3113	1/1	0.95	0.53	62,62,62,62	0
58	MG	13	1655	1/1	0.95	0.08	77,77,77,77	0
58	MG	1H	3082	1/1	0.95	0.11	61,61,61,61	0
58	MG	1H	3111	1/1	0.95	0.16	44,44,44,44	0
58	MG	1H	3348	1/1	0.95	0.27	73,73,73,73	0
58	MG	1H	3142	1/1	0.95	0.21	39,39,39,39	0
58	MG	1H	3215	1/1	0.95	0.19	60,60,60,60	0
58	MG	14	3194	1/1	0.95	0.17	61,61,61,61	0
58	MG	1H	3145	1/1	0.95	0.32	76,76,76,76	0
58	MG	13	1602	1/1	0.95	0.22	49,49,49,49	0
58	MG	1H	3406	1/1	0.95	0.08	49,49,49,49	0
58	MG	14	3274	1/1	0.95	0.39	88,88,88,88	0
58	MG	13	1628	1/1	0.95	0.08	58,58,58,58	0
58	MG	14	3053	1/1	0.95	0.12	45,45,45,45	0
58	MG	1H	3260	1/1	0.95	0.14	35,35,35,35	0
58	MG	1H	3440	1/1	0.95	0.07	52,52,52,52	0
58	MG	1H	3261	1/1	0.95	0.21	64,64,64,64	0
58	MG	1H	3447	1/1	0.95	0.10	55,55,55,55	0
58	MG	1H	3453	1/1	0.95	0.06	105,105,105,105	0
58	MG	5E	201	1/1	0.95	0.12	67,67,67,67	0
58	MG	1H	3149	1/1	0.95	0.10	61,61,61,61	0
58	MG	1H	3462	1/1	0.95	0.06	79,79,79,79	0
58	MG	1H	3088	1/1	0.95	0.14	77,77,77,77	0
58	MG	14	3135	1/1	0.95	0.15	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	14	3136	1/1	0.95	0.18	49,49,49,49	0
58	MG	1H	3474	1/1	0.95	0.07	100,100,100,100	0
58	MG	1H	3223	1/1	0.95	0.19	60,60,60,60	0
58	MG	14	3291	1/1	0.95	0.09	70,70,70,70	0
58	MG	1H	3065	1/1	0.95	0.19	43,43,43,43	0
58	MG	1H	3493	1/1	0.95	0.16	79,79,79,79	0
58	MG	1H	3311	1/1	0.95	0.20	81,81,81,81	0
58	MG	1H	3312	1/1	0.95	0.25	73,73,73,73	0
58	MG	1H	3503	1/1	0.95	0.19	73,73,73,73	0
58	MG	1H	3007	1/1	0.95	0.32	64,64,64,64	0
58	MG	14	3146	1/1	0.95	0.13	64,64,64,64	0
58	MG	1H	3067	1/1	0.95	0.20	46,46,46,46	0
58	MG	1H	3189	1/1	0.95	0.14	61,61,61,61	0
58	MG	1H	3009	1/1	0.95	0.35	73,73,73,73	0
58	MG	1G	1641	1/1	0.95	0.10	98,98,98,98	0
58	MG	1H	3069	1/1	0.95	0.17	52,52,52,52	0
58	MG	14	3332	1/1	0.95	0.07	64,64,64,64	0
58	MG	13	1686	1/1	0.95	0.34	80,80,80,80	0
58	MG	14	3338	1/1	0.95	0.07	74,74,74,74	0
58	MG	14	3366	1/1	0.95	0.09	94,94,94,94	0
58	MG	14	3367	1/1	0.95	0.07	103,103,103,103	0
58	MG	1H	3126	1/1	0.95	0.17	60,60,60,60	0
58	MG	13	1697	1/1	0.95	0.06	73,73,73,73	0
58	MG	14	3379	1/1	0.95	0.11	106,106,106,106	0
58	MG	1H	3276	1/1	0.95	0.11	55,55,55,55	0
58	MG	13	1610	1/1	0.95	0.32	66,66,66,66	0
58	MG	1H	3014	1/1	0.95	0.13	58,58,58,58	0
58	MG	14	3389	1/1	0.95	0.07	75,75,75,75	0
58	MG	14	3392	1/1	0.95	0.10	77,77,77,77	0
58	MG	14	3394	1/1	0.95	0.07	53,53,53,53	0
58	MG	13	1603	1/1	0.95	0.27	50,50,50,50	0
58	MG	1H	3238	1/1	0.95	0.09	52,52,52,52	0
58	MG	13	1668	1/1	0.95	0.18	66,66,66,66	0
58	MG	1G	1652	1/1	0.95	0.39	81,81,81,81	0
58	MG	14	3164	1/1	0.95	0.31	78,78,78,78	0
58	MG	1H	3328	1/1	0.95	0.20	56,56,56,56	0
58	MG	13	1604	1/1	0.95	0.36	81,81,81,81	0
58	MG	1G	1655	1/1	0.95	0.07	86,86,86,86	0
58	MG	41	201	1/1	0.95	0.13	67,67,67,67	0
58	MG	1H	3284	1/1	0.95	0.27	74,74,74,74	0
58	MG	1H	3241	1/1	0.95	0.24	71,71,71,71	0
58	MG	1H	3242	1/1	0.95	0.33	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	1H	3333	1/1	0.95	0.09	71,71,71,71	0
58	MG	1H	3201	1/1	0.95	0.17	41,41,41,41	0
58	MG	13	1613	1/1	0.95	0.24	83,83,83,83	0
58	MG	13	1723	1/1	0.95	0.08	70,70,70,70	0
58	MG	1H	3105	1/1	0.95	0.24	71,71,71,71	0
58	MG	1H	3339	1/1	0.95	0.13	75,75,75,75	0
59	PAR	13	1749	42/42	0.95	0.08	52,62,69,75	0
59	PAR	1G	1697	42/42	0.95	0.09	75,80,88,91	0
58	MG	13	1639	1/1	0.95	0.18	55,55,55,55	0
58	MG	1H	3207	1/1	0.95	0.23	56,56,56,56	0
58	MG	1H	3386	1/1	0.96	0.06	50,50,50,50	0
58	MG	13	1607	1/1	0.96	0.47	71,71,71,71	0
58	MG	13	1617	1/1	0.96	0.16	60,60,60,60	0
58	MG	14	3101	1/1	0.96	0.08	65,65,65,65	0
58	MG	1H	3168	1/1	0.96	0.20	64,64,64,64	0
58	MG	13	1684	1/1	0.96	0.40	94,94,94,94	0
58	MG	14	3149	1/1	0.96	0.14	62,62,62,62	0
58	MG	14	3150	1/1	0.96	0.21	50,50,50,50	0
58	MG	1H	3415	1/1	0.96	0.07	63,63,63,63	0
58	MG	14	3300	1/1	0.96	0.17	63,63,63,63	0
58	MG	14	3105	1/1	0.96	0.17	45,45,45,45	0
58	MG	1H	3121	1/1	0.96	0.19	35,35,35,35	0
58	MG	14	3201	1/1	0.96	0.11	69,69,69,69	0
58	MG	14	3202	1/1	0.96	0.07	64,64,64,64	0
58	MG	1G	1685	1/1	0.96	0.09	88,88,88,88	0
58	MG	14	3333	1/1	0.96	0.06	67,67,67,67	0
58	MG	1G	1689	1/1	0.96	0.06	84,84,84,84	0
58	MG	14	3109	1/1	0.96	0.09	62,62,62,62	0
58	MG	14	3361	1/1	0.96	0.07	76,76,76,76	0
58	MG	14	3365	1/1	0.96	0.10	83,83,83,83	0
58	MG	13	1733	1/1	0.96	0.06	104,104,104,104	0
58	MG	1H	3335	1/1	0.96	0.06	59,59,59,59	0
58	MG	1H	3231	1/1	0.96	0.29	74,74,74,74	0
58	MG	1G	1617	1/1	0.96	0.12	74,74,74,74	0
58	MG	14	3375	1/1	0.96	0.08	89,89,89,89	0
58	MG	1H	3057	1/1	0.96	0.12	44,44,44,44	0
58	MG	14	3071	1/1	0.96	0.19	42,42,42,42	0
58	MG	1H	3125	1/1	0.96	0.17	47,47,47,47	0
58	MG	13	1735	1/1	0.96	0.07	84,84,84,84	0
58	MG	14	3036	1/1	0.96	0.33	67,67,67,67	0
58	MG	14	3390	1/1	0.96	0.12	109,109,109,109	0
58	MG	1H	3158	1/1	0.96	0.08	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	1H	3049	1/1	0.96	0.28	69,69,69,69	0
58	MG	1H	3465	1/1	0.96	0.06	76,76,76,76	0
58	MG	2I	302	1/1	0.96	0.07	68,68,68,68	0
58	MG	14	3400	1/1	0.96	0.12	65,65,65,65	0
58	MG	1H	3466	1/1	0.96	0.06	67,67,67,67	0
58	MG	1H	3143	1/1	0.96	0.14	50,50,50,50	0
58	MG	78	201	1/1	0.96	0.14	80,80,80,80	0
58	MG	1H	3008	1/1	0.96	0.27	68,68,68,68	0
58	MG	1H	3475	1/1	0.96	0.11	109,109,109,109	0
58	MG	1H	3484	1/1	0.96	0.12	73,73,73,73	0
58	MG	1H	3485	1/1	0.96	0.05	87,87,87,87	0
58	MG	14	3086	1/1	0.96	0.36	67,67,67,67	0
58	MG	14	3231	1/1	0.96	0.06	70,70,70,70	0
58	MG	1H	3488	1/1	0.96	0.13	69,69,69,69	0
58	MG	1H	3180	1/1	0.96	0.18	77,77,77,77	0
58	MG	1H	3062	1/1	0.96	0.11	44,44,44,44	0
58	MG	1H	3087	1/1	0.96	0.14	75,75,75,75	0
58	MG	1H	3222	1/1	0.96	0.09	58,58,58,58	0
58	MG	14	3092	1/1	0.96	0.24	48,48,48,48	0
58	MG	1H	3001	1/1	0.96	0.29	53,53,53,53	0
58	MG	1H	3002	1/1	0.96	0.14	60,60,60,60	0
58	MG	14	3288	1/1	0.96	0.17	78,78,78,78	0
60	ZN	3E	303	1/1	0.96	0.33	97,97,97,97	0
58	MG	1G	1640	1/1	0.96	0.09	83,83,83,83	0
58	MG	1H	3504	1/1	0.96	0.08	66,66,66,66	0
58	MG	1H	3349	1/1	0.97	0.08	40,40,40,40	0
58	MG	1H	3352	1/1	0.97	0.07	45,45,45,45	0
58	MG	1G	1621	1/1	0.97	0.07	90,90,90,90	0
58	MG	1G	1687	1/1	0.97	0.07	104,104,104,104	0
58	MG	1G	1688	1/1	0.97	0.12	102,102,102,102	0
58	MG	1H	3354	1/1	0.97	0.06	49,49,49,49	0
58	MG	1G	1690	1/1	0.97	0.04	104,104,104,104	0
58	MG	1G	1691	1/1	0.97	0.12	89,89,89,89	0
58	MG	1G	1692	1/1	0.97	0.06	83,83,83,83	0
58	MG	1G	1695	1/1	0.97	0.11	96,96,96,96	0
58	MG	1G	1696	1/1	0.97	0.04	109,109,109,109	0
58	MG	1H	3494	1/1	0.97	0.09	82,82,82,82	0
58	MG	1H	3496	1/1	0.97	0.05	59,59,59,59	0
58	MG	1H	3359	1/1	0.97	0.05	60,60,60,60	0
58	MG	1H	3361	1/1	0.97	0.10	64,64,64,64	0
58	MG	14	3210	1/1	0.97	0.21	51,51,51,51	0
58	MG	1H	3364	1/1	0.97	0.05	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	1H	3115	1/1	0.97	0.17	37,37,37,37	0
58	MG	1H	3506	1/1	0.97	0.09	44,44,44,44	0
58	MG	1H	3508	1/1	0.97	0.06	55,55,55,55	0
58	MG	14	3141	1/1	0.97	0.20	46,46,46,46	0
58	MG	1H	3374	1/1	0.97	0.08	90,90,90,90	0
58	MG	1H	3510	1/1	0.97	0.17	51,51,51,51	0
58	MG	1H	3511	1/1	0.97	0.06	82,82,82,82	0
58	MG	1H	3378	1/1	0.97	0.06	79,79,79,79	0
58	MG	14	3221	1/1	0.97	0.12	72,72,72,72	0
58	MG	1H	3514	1/1	0.97	0.04	77,77,77,77	0
58	MG	1H	3518	1/1	0.97	0.07	94,94,94,94	0
58	MG	1H	3383	1/1	0.97	0.06	61,61,61,61	0
58	MG	14	3225	1/1	0.97	0.31	57,57,57,57	0
58	MG	1H	3170	1/1	0.97	0.35	77,77,77,77	0
58	MG	14	3307	1/1	0.97	0.07	49,49,49,49	0
58	MG	14	3315	1/1	0.97	0.06	57,57,57,57	0
58	MG	1H	3013	1/1	0.97	0.23	52,52,52,52	0
58	MG	14	3321	1/1	0.97	0.06	55,55,55,55	0
58	MG	1H	3394	1/1	0.97	0.15	70,70,70,70	0
58	MG	1H	3058	1/1	0.97	0.12	36,36,36,36	0
58	MG	13	1745	1/1	0.97	0.11	107,107,107,107	0
58	MG	14	3334	1/1	0.97	0.06	49,49,49,49	0
58	MG	1H	3237	1/1	0.97	0.35	72,72,72,72	0
58	MG	1H	3408	1/1	0.97	0.05	49,49,49,49	0
58	MG	14	3346	1/1	0.97	0.05	74,74,74,74	0
58	MG	14	3352	1/1	0.97	0.14	99,99,99,99	0
58	MG	14	3353	1/1	0.97	0.06	82,82,82,82	0
58	MG	14	3354	1/1	0.97	0.05	56,56,56,56	0
58	MG	1H	3414	1/1	0.97	0.15	64,64,64,64	0
58	MG	1H	3086	1/1	0.97	0.13	54,54,54,54	0
58	MG	1H	3420	1/1	0.97	0.07	50,50,50,50	0
58	MG	1K	102	1/1	0.97	0.20	72,72,72,72	0
58	MG	14	3369	1/1	0.97	0.05	102,102,102,102	0
58	MG	11	303	1/1	0.97	0.05	41,41,41,41	0
58	MG	1H	3426	1/1	0.97	0.06	88,88,88,88	0
58	MG	13	1747	1/1	0.97	0.05	96,96,96,96	0
58	MG	14	3377	1/1	0.97	0.04	107,107,107,107	0
58	MG	1H	3430	1/1	0.97	0.04	73,73,73,73	0
58	MG	14	3380	1/1	0.97	0.05	76,76,76,76	0
58	MG	1H	3431	1/1	0.97	0.08	94,94,94,94	0
58	MG	1H	3437	1/1	0.97	0.06	54,54,54,54	0
58	MG	1H	3439	1/1	0.97	0.07	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	1H	3263	1/1	0.97	0.08	56,56,56,56	0
58	MG	13	1748	1/1	0.97	0.07	82,82,82,82	0
58	MG	13	1615	1/1	0.97	0.38	84,84,84,84	0
58	MG	14	3393	1/1	0.97	0.14	76,76,76,76	0
58	MG	1H	3199	1/1	0.97	0.09	44,44,44,44	0
58	MG	I8	101	1/1	0.97	0.07	56,56,56,56	0
58	MG	1H	3454	1/1	0.97	0.10	67,67,67,67	0
58	MG	14	3398	1/1	0.97	0.08	70,70,70,70	0
58	MG	1H	3456	1/1	0.97	0.06	80,80,80,80	0
58	MG	14	3402	1/1	0.97	0.08	76,76,76,76	0
58	MG	14	3403	1/1	0.97	0.08	66,66,66,66	0
58	MG	1H	3458	1/1	0.97	0.06	45,45,45,45	0
58	MG	14	3405	1/1	0.97	0.08	75,75,75,75	0
58	MG	1H	3124	1/1	0.97	0.15	39,39,39,39	0
58	MG	1H	3064	1/1	0.97	0.10	43,43,43,43	0
58	MG	1H	3144	1/1	0.97	0.22	49,49,49,49	0
58	MG	1H	3464	1/1	0.97	0.05	84,84,84,84	0
58	MG	1H	3182	1/1	0.97	0.31	61,61,61,61	0
58	MG	1H	3093	1/1	0.97	0.07	53,53,53,53	0
58	MG	13	1716	1/1	0.97	0.06	73,73,73,73	0
58	MG	1H	3320	1/1	0.97	0.23	71,71,71,71	0
58	MG	13	1640	1/1	0.97	0.14	64,64,64,64	0
58	MG	1H	3477	1/1	0.97	0.17	62,62,62,62	0
58	MG	1H	3478	1/1	0.97	0.05	91,91,91,91	0
58	MG	1H	3479	1/1	0.97	0.05	79,79,79,79	0
58	MG	1H	3480	1/1	0.97	0.05	88,88,88,88	0
58	MG	14	3188	1/1	0.97	0.15	53,53,53,53	0
58	MG	1H	3481	1/1	0.97	0.12	132,132,132,132	0
58	MG	J5	101	1/1	0.97	0.10	52,52,52,52	0
58	MG	13	1740	1/1	0.97	0.05	70,70,70,70	0
58	MG	14	3119	1/1	0.97	0.14	49,49,49,49	0
58	MG	14	3192	1/1	0.97	0.12	59,59,59,59	0
58	MG	13	1741	1/1	0.97	0.05	82,82,82,82	0
60	ZN	32	301	1/1	0.97	0.26	112,112,112,112	0
60	ZN	5A	101	1/1	0.97	0.06	143,143,143,143	0
58	MG	13	1685	1/1	0.97	0.08	74,74,74,74	0
58	MG	1H	3470	1/1	0.98	0.09	73,73,73,73	0
58	MG	1H	3471	1/1	0.98	0.05	63,63,63,63	0
58	MG	14	3335	1/1	0.98	0.05	80,80,80,80	0
58	MG	1H	3472	1/1	0.98	0.10	72,72,72,72	0
58	MG	14	3098	1/1	0.98	0.35	71,71,71,71	0
58	MG	14	3344	1/1	0.98	0.06	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
58	MG	13	1743	1/1	0.98	0.04	60,60,60,60	0
58	MG	14	3350	1/1	0.98	0.05	92,92,92,92	0
58	MG	13	1744	1/1	0.98	0.04	89,89,89,89	0
58	MG	1H	3417	1/1	0.98	0.04	66,66,66,66	0
58	MG	1H	3418	1/1	0.98	0.05	70,70,70,70	0
58	MG	14	3355	1/1	0.98	0.07	64,64,64,64	0
58	MG	14	3358	1/1	0.98	0.08	82,82,82,82	0
58	MG	1H	3204	1/1	0.98	0.06	41,41,41,41	0
58	MG	14	3363	1/1	0.98	0.04	54,54,54,54	0
58	MG	1H	3421	1/1	0.98	0.06	46,46,46,46	0
58	MG	1H	3367	1/1	0.98	0.06	54,54,54,54	0
58	MG	1H	3483	1/1	0.98	0.04	90,90,90,90	0
58	MG	1H	3423	1/1	0.98	0.04	59,59,59,59	0
58	MG	1H	3424	1/1	0.98	0.05	73,73,73,73	0
58	MG	1H	3425	1/1	0.98	0.05	49,49,49,49	0
58	MG	14	3374	1/1	0.98	0.11	86,86,86,86	0
58	MG	1H	3489	1/1	0.98	0.06	53,53,53,53	0
58	MG	13	1623	1/1	0.98	0.17	62,62,62,62	0
58	MG	1H	3371	1/1	0.98	0.04	45,45,45,45	0
58	MG	14	3219	1/1	0.98	0.05	51,51,51,51	0
58	MG	14	3382	1/1	0.98	0.05	81,81,81,81	0
58	MG	14	3383	1/1	0.98	0.08	66,66,66,66	0
58	MG	1H	3373	1/1	0.98	0.09	75,75,75,75	0
58	MG	13	1746	1/1	0.98	0.06	84,84,84,84	0
58	MG	1H	3434	1/1	0.98	0.05	63,63,63,63	0
58	MG	1H	3497	1/1	0.98	0.06	42,42,42,42	0
58	MG	1H	3498	1/1	0.98	0.06	47,47,47,47	0
58	MG	14	3391	1/1	0.98	0.06	97,97,97,97	0
58	MG	1H	3435	1/1	0.98	0.04	82,82,82,82	0
58	MG	1H	3436	1/1	0.98	0.04	67,67,67,67	0
58	MG	1H	3501	1/1	0.98	0.09	42,42,42,42	0
58	MG	1H	3375	1/1	0.98	0.08	81,81,81,81	0
58	MG	14	3396	1/1	0.98	0.04	53,53,53,53	0
58	MG	1H	3376	1/1	0.98	0.05	67,67,67,67	0
58	MG	1H	3505	1/1	0.98	0.05	41,41,41,41	0
58	MG	13	1738	1/1	0.98	0.06	84,84,84,84	0
58	MG	1H	3507	1/1	0.98	0.05	43,43,43,43	0
58	MG	13	1739	1/1	0.98	0.05	85,85,85,85	0
58	MG	1H	3384	1/1	0.98	0.04	34,34,34,34	0
58	MG	1H	3448	1/1	0.98	0.07	51,51,51,51	0
58	MG	1H	3449	1/1	0.98	0.04	74,74,74,74	0
58	MG	1H	3450	1/1	0.98	0.05	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
58	MG	1H	3451	1/1	0.98	0.06	55,55,55,55	0
58	MG	1H	3452	1/1	0.98	0.06	74,74,74,74	0
58	MG	13	1724	1/1	0.98	0.15	96,96,96,96	0
58	MG	1H	3389	1/1	0.98	0.07	74,74,74,74	0
58	MG	1H	3390	1/1	0.98	0.18	56,56,56,56	0
58	MG	13	1734	1/1	0.98	0.05	100,100,100,100	0
58	MG	1H	3393	1/1	0.98	0.10	58,58,58,58	0
58	MG	13	1725	1/1	0.98	0.04	77,77,77,77	0
58	MG	1H	3398	1/1	0.98	0.04	57,57,57,57	0
58	MG	1H	3351	1/1	0.98	0.05	53,53,53,53	0
58	MG	1G	1686	1/1	0.98	0.05	84,84,84,84	0
58	MG	1H	3278	1/1	0.98	0.10	106,106,106,106	0
58	MG	14	3310	1/1	0.98	0.04	56,56,56,56	0
58	MG	14	3314	1/1	0.98	0.05	58,58,58,58	0
58	MG	1H	3353	1/1	0.98	0.08	40,40,40,40	0
58	MG	14	3316	1/1	0.98	0.04	62,62,62,62	0
58	MG	14	3317	1/1	0.98	0.05	48,48,48,48	0
58	MG	1H	3467	1/1	0.98	0.06	69,69,69,69	0
58	MG	16	210	1/1	0.98	0.05	73,73,73,73	0
58	MG	1H	3468	1/1	0.98	0.04	63,63,63,63	0
58	MG	2K	105	1/1	0.98	0.04	81,81,81,81	0
58	MG	13	1726	1/1	0.99	0.03	93,93,93,93	0
58	MG	14	3309	1/1	0.99	0.04	59,59,59,59	0
58	MG	1H	3380	1/1	0.99	0.03	77,77,77,77	0
58	MG	14	3311	1/1	0.99	0.04	65,65,65,65	0
58	MG	14	3312	1/1	0.99	0.05	88,88,88,88	0
58	MG	14	3313	1/1	0.99	0.03	48,48,48,48	0
58	MG	1H	3432	1/1	0.99	0.05	70,70,70,70	0
58	MG	1H	3433	1/1	0.99	0.07	73,73,73,73	0
58	MG	1H	3381	1/1	0.99	0.10	62,62,62,62	0
58	MG	1H	3502	1/1	0.99	0.05	66,66,66,66	0
58	MG	14	3318	1/1	0.99	0.05	47,47,47,47	0
58	MG	1H	3382	1/1	0.99	0.04	71,71,71,71	0
58	MG	14	3320	1/1	0.99	0.04	42,42,42,42	0
58	MG	1H	3141	1/1	0.99	0.06	40,40,40,40	0
58	MG	14	3322	1/1	0.99	0.03	72,72,72,72	0
58	MG	14	3323	1/1	0.99	0.07	65,65,65,65	0
58	MG	14	3324	1/1	0.99	0.08	62,62,62,62	0
58	MG	14	3325	1/1	0.99	0.06	76,76,76,76	0
58	MG	1H	3350	1/1	0.99	0.03	51,51,51,51	0
58	MG	14	3327	1/1	0.99	0.09	58,58,58,58	0
58	MG	14	3328	1/1	0.99	0.04	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	14	3329	1/1	0.99	0.04	54,54,54,54	0
58	MG	14	3330	1/1	0.99	0.04	53,53,53,53	0
58	MG	14	3331	1/1	0.99	0.03	56,56,56,56	0
58	MG	1H	3438	1/1	0.99	0.05	55,55,55,55	0
58	MG	1H	3385	1/1	0.99	0.05	45,45,45,45	0
58	MG	13	1727	1/1	0.99	0.04	55,55,55,55	0
58	MG	1H	3442	1/1	0.99	0.05	54,54,54,54	0
58	MG	14	3336	1/1	0.99	0.05	60,60,60,60	0
58	MG	1H	3387	1/1	0.99	0.05	65,65,65,65	0
58	MG	1H	3444	1/1	0.99	0.06	82,82,82,82	0
58	MG	14	3339	1/1	0.99	0.10	62,62,62,62	0
58	MG	14	3340	1/1	0.99	0.10	67,67,67,67	0
58	MG	14	3342	1/1	0.99	0.06	49,49,49,49	0
58	MG	1H	3512	1/1	0.99	0.04	44,44,44,44	0
58	MG	14	3345	1/1	0.99	0.08	51,51,51,51	0
58	MG	1H	3446	1/1	0.99	0.04	59,59,59,59	0
58	MG	14	3347	1/1	0.99	0.04	48,48,48,48	0
58	MG	14	3348	1/1	0.99	0.04	76,76,76,76	0
58	MG	14	3349	1/1	0.99	0.11	62,62,62,62	0
58	MG	1H	3388	1/1	0.99	0.08	59,59,59,59	0
58	MG	14	3351	1/1	0.99	0.13	87,87,87,87	0
58	MG	1H	3515	1/1	0.99	0.07	83,83,83,83	0
58	MG	1H	3516	1/1	0.99	0.03	86,86,86,86	0
58	MG	1H	3517	1/1	0.99	0.11	57,57,57,57	0
58	MG	13	1718	1/1	0.99	0.05	69,69,69,69	0
58	MG	14	3356	1/1	0.99	0.03	65,65,65,65	0
58	MG	14	3357	1/1	0.99	0.03	69,69,69,69	0
58	MG	13	1729	1/1	0.99	0.09	86,86,86,86	0
58	MG	14	3359	1/1	0.99	0.04	73,73,73,73	0
58	MG	14	3360	1/1	0.99	0.04	69,69,69,69	0
58	MG	1H	3391	1/1	0.99	0.08	60,60,60,60	0
58	MG	14	3362	1/1	0.99	0.04	56,56,56,56	0
58	MG	13	1730	1/1	0.99	0.03	67,67,67,67	0
58	MG	14	3364	1/1	0.99	0.07	75,75,75,75	0
58	MG	1H	3355	1/1	0.99	0.04	57,57,57,57	0
58	MG	1H	3356	1/1	0.99	0.02	52,52,52,52	0
58	MG	1H	3395	1/1	0.99	0.04	36,36,36,36	0
58	MG	14	3368	1/1	0.99	0.04	89,89,89,89	0
58	MG	1H	3455	1/1	0.99	0.06	66,66,66,66	0
58	MG	1H	3396	1/1	0.99	0.04	69,69,69,69	0
58	MG	14	3371	1/1	0.99	0.04	79,79,79,79	0
58	MG	1H	3457	1/1	0.99	0.10	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	14	3373	1/1	0.99	0.09	64,64,64,64	0
58	MG	1H	3397	1/1	0.99	0.08	49,49,49,49	0
58	MG	1H	3357	1/1	0.99	0.04	35,35,35,35	0
58	MG	14	3376	1/1	0.99	0.07	119,119,119,119	0
58	MG	1H	3399	1/1	0.99	0.09	52,52,52,52	0
58	MG	14	3378	1/1	0.99	0.07	71,71,71,71	0
58	MG	16	212	1/1	0.99	0.12	81,81,81,81	0
58	MG	1H	3461	1/1	0.99	0.05	51,51,51,51	0
58	MG	14	3381	1/1	0.99	0.04	91,91,91,91	0
58	MG	11	302	1/1	0.99	0.04	35,35,35,35	0
58	MG	13	1732	1/1	0.99	0.03	78,78,78,78	0
58	MG	14	3384	1/1	0.99	0.03	68,68,68,68	0
58	MG	1H	3463	1/1	0.99	0.09	66,66,66,66	0
58	MG	1H	3401	1/1	0.99	0.07	47,47,47,47	0
58	MG	1H	3402	1/1	0.99	0.03	53,53,53,53	0
58	MG	14	3388	1/1	0.99	0.08	79,79,79,79	0
58	MG	1H	3360	1/1	0.99	0.03	46,46,46,46	0
58	MG	1H	3404	1/1	0.99	0.05	48,48,48,48	0
58	MG	13	1719	1/1	0.99	0.03	67,67,67,67	0
58	MG	1H	3407	1/1	0.99	0.03	43,43,43,43	0
58	MG	1H	3362	1/1	0.99	0.08	41,41,41,41	0
58	MG	1H	3410	1/1	0.99	0.04	33,33,33,33	0
58	MG	1H	3411	1/1	0.99	0.03	46,46,46,46	0
58	MG	G8	201	1/1	0.99	0.13	73,73,73,73	0
58	MG	1H	3473	1/1	0.99	0.05	85,85,85,85	0
58	MG	1H	3412	1/1	0.99	0.05	50,50,50,50	0
58	MG	14	3399	1/1	0.99	0.07	77,77,77,77	0
58	MG	1H	3413	1/1	0.99	0.03	50,50,50,50	0
58	MG	1H	3476	1/1	0.99	0.04	70,70,70,70	0
58	MG	13	1721	1/1	0.99	0.05	83,83,83,83	0
58	MG	1H	3366	1/1	0.99	0.04	56,56,56,56	0
58	MG	1H	3416	1/1	0.99	0.08	67,67,67,67	0
58	MG	13	1722	1/1	0.99	0.08	76,76,76,76	0
58	MG	1H	3368	1/1	0.99	0.04	56,56,56,56	0
58	MG	1H	3482	1/1	0.99	0.03	54,54,54,54	0
58	MG	1H	3419	1/1	0.99	0.07	47,47,47,47	0
58	MG	1H	3090	1/1	0.99	0.07	37,37,37,37	0
58	MG	1G	1683	1/1	0.99	0.06	61,61,61,61	0
58	MG	1G	1684	1/1	0.99	0.06	70,70,70,70	0
58	MG	1H	3370	1/1	0.99	0.05	55,55,55,55	0
58	MG	1H	3486	1/1	0.99	0.20	50,50,50,50	0
58	MG	1H	3487	1/1	0.99	0.09	100,100,100,100	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
58	MG	13	1715	1/1	0.99	0.07	89,89,89,89	0
58	MG	13	1737	1/1	0.99	0.03	93,93,93,93	0
58	MG	1H	3490	1/1	0.99	0.04	64,64,64,64	0
58	MG	13	1714	1/1	0.99	0.03	45,45,45,45	0
58	MG	1H	3108	1/1	0.99	0.07	50,50,50,50	0
58	MG	1G	1693	1/1	0.99	0.07	82,82,82,82	0
58	MG	1G	1694	1/1	0.99	0.04	67,67,67,67	0
58	MG	13	1717	1/1	0.99	0.04	76,76,76,76	0
58	MG	1H	3427	1/1	0.99	0.03	41,41,41,41	0
60	ZN	5I	103	1/1	0.99	0.03	91,91,91,91	0
58	MG	1H	3495	1/1	0.99	0.04	47,47,47,47	0
58	MG	1H	3377	1/1	0.99	0.05	61,61,61,61	0
58	MG	14	3303	1/1	0.99	0.07	53,53,53,53	0
58	MG	14	3305	1/1	0.99	0.04	69,69,69,69	0
58	MG	16	213	1/1	1.00	0.03	66,66,66,66	0
58	MG	1H	3379	1/1	1.00	0.06	72,72,72,72	0
58	MG	1H	3409	1/1	1.00	0.08	41,41,41,41	0
58	MG	13	1731	1/1	1.00	0.03	68,68,68,68	0
58	MG	1H	3429	1/1	1.00	0.07	72,72,72,72	0
58	MG	14	3304	1/1	1.00	0.05	50,50,50,50	0
58	MG	1H	3363	1/1	1.00	0.06	40,40,40,40	0
58	MG	14	3306	1/1	1.00	0.01	52,52,52,52	0
58	MG	14	3341	1/1	1.00	0.11	41,41,41,41	0
58	MG	1H	3441	1/1	1.00	0.02	51,51,51,51	0
58	MG	14	3343	1/1	1.00	0.01	47,47,47,47	0
58	MG	14	3401	1/1	1.00	0.02	45,45,45,45	0
58	MG	14	3308	1/1	1.00	0.02	46,46,46,46	0
58	MG	13	1720	1/1	1.00	0.03	82,82,82,82	0
58	MG	1H	3365	1/1	1.00	0.04	44,44,44,44	0
58	MG	1H	3405	1/1	1.00	0.02	43,43,43,43	0
58	MG	1H	3445	1/1	1.00	0.03	44,44,44,44	0
58	MG	1H	3358	1/1	1.00	0.02	43,43,43,43	0
58	MG	16	211	1/1	1.00	0.02	70,70,70,70	0
58	MG	1H	3372	1/1	1.00	0.05	64,64,64,64	0

6.5 Other polymers [\(i\)](#)

There are no such residues in this entry.