wwPDB X-ray Structure Validation Summary Report (i)

Oct 9, 2023 – 07:12 PM EDT

PDB ID	:	4V7L
Title	:	The structures of viomycin bound to the 70S ribosome.
Authors	:	Stanley, R.E.; Blaha, G.
Deposited on	:	2009-11-12
Resolution	:	3.00 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 (i) 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 (1)) were used in the production of this report:

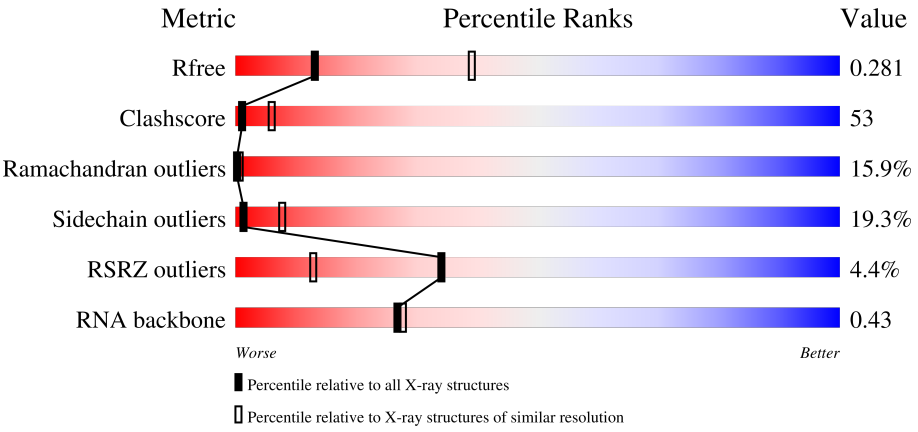
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.35.1
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.35.1

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 3.00 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	2092 (3.00-3.00)
Clashscore	141614	2416 (3.00-3.00)
Ramachandran outliers	138981	2333 (3.00-3.00)
Sidechain outliers	138945	2336 (3.00-3.00)
RSRZ outliers	127900	1990 (3.00-3.00)
RNA backbone	3102	1173 (3.30-2.70)

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 <=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	AA	1509	2% 14% 58% 23%
1	CA	1509	2% 9% 64% 23%
2	AB	256	6% 15% 56% 18% 8%
2	CB	256	5% 15% 60% 16% 8%

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Mol	Chain	Length	Quality of chain
3	AC	239	2% 13% 56% 16% 13%
3	CC	239	4% 22% 51% 12% 13%
4	AD	209	4% 23% 56% 19%
4	CD	209	% 18% 58% 19%
5	AE	162	% 17% 65% 9% 7%
5	CE	162	16% 58% 19% 7%
6	AF	101	26% 59% 14%
6	CF	101	20% 63% 17%
7	AG	156	6% 26% 58% 15%
7	CG	156	4% 23% 63% 11%
8	AH	138	% 22% 57% 21%
8	CH	138	% 20% 63% 15%
9	AI	128	7% 23% 57% 17%
9	CI	128	7% 17% 69% 12%
10	AJ	105	13% 19% 50% 24% 6%
10	CJ	105	10% 12% 59% 23% 6%
11	AK	129	9% 19% 55% 15% 8%
11	CK	129	8% 22% 61% 8% 8%
12	AL	132	19% 54% 20% 5%
12	CL	132	5% 19% 55% 18% 5%
13	AM	126	3% 17% 52% 22% 5%
13	CM	126	3% 13% 51% 24% 7% 6%
14	AN	61	2% 23% 48% 25%
14	CN	61	3% 16% 48% 31%
15	AO	89	4% 17% 60% 22%

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Mol	Chain	Length	Quality of chain
15	CO	89	2% 15% 63% 21%
16	AP	88	6% 18% 59% 16% 5%
16	CP	88	% 17% 65% 13% 5%
17	AQ	105	2% 23% 58% 12% 5%
17	CQ	105	11% 70% 14% 5%
18	AR	88	2% 9% 51% 18% 20%
18	CR	88	23% 45% 9% 20%
19	AS	93	12% 18% 42% 22% 15%
19	CS	93	12% 11% 47% 24% 15%
20	AT	106	7% 19% 50% 24% 7%
20	CT	106	7% 17% 58% 18% 7%
21	AU	27	44% 26% 48% 15% 7%
21	CU	27	44% 22% 56% 15% 7%
22	AV	30	3% 17% 17% 67%
22	CV	30	27% 67%
23	AW	75	20% 19% 61% 20%
23	CW	75	13% 19% 59% 21%
24	AX	77	5% 27% 51% 22%
24	CX	77	4% 25% 52% 23%
25	AY	75	33% 12% 64% 24%
25	CY	75	31% 12% 65% 23%
26	AZ	6	17% 50% 33%
26	CZ	6	17% 67% 17%
27	BA	2915	2% 14% 52% 26%
27	DA	2915	3% 11% 52% 28%

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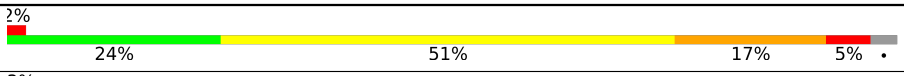
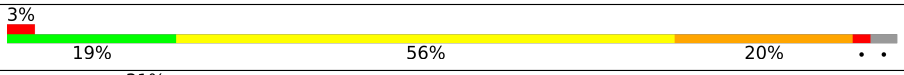
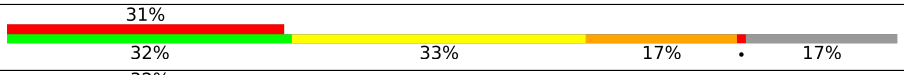
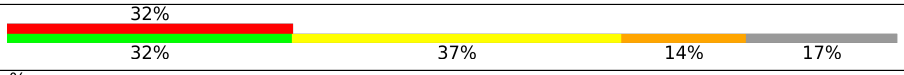
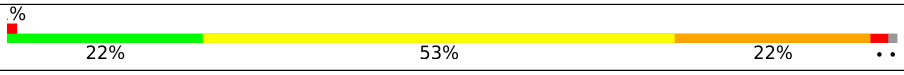
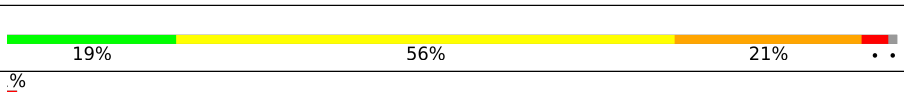
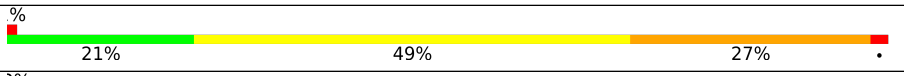
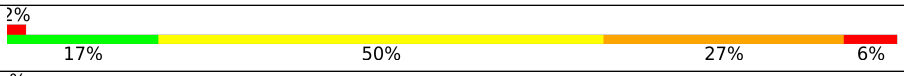
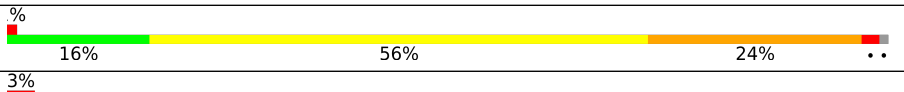
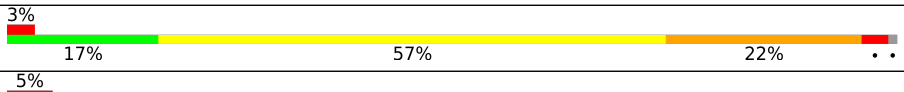
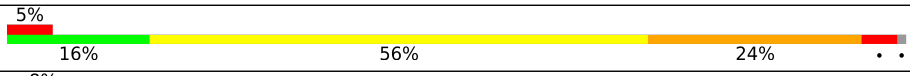
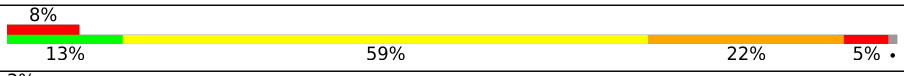
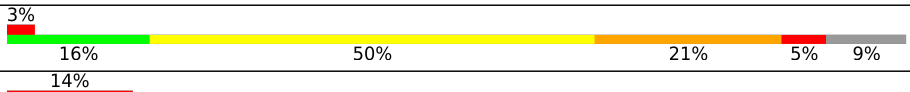
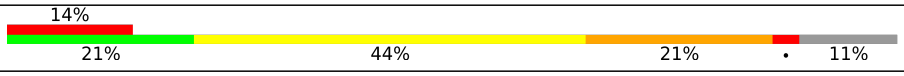
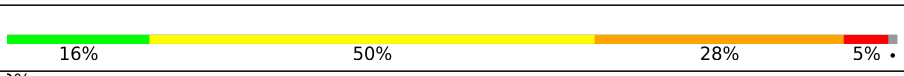
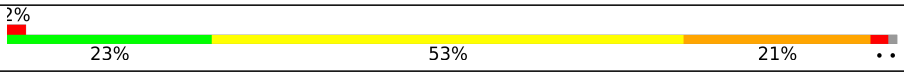
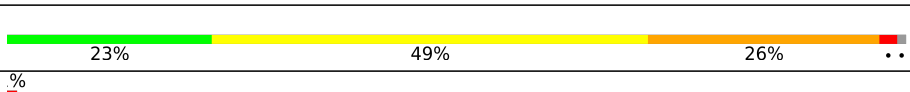
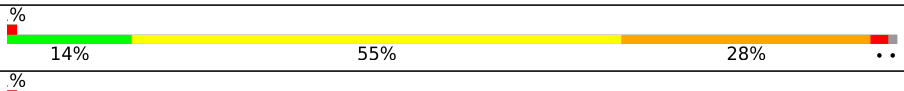
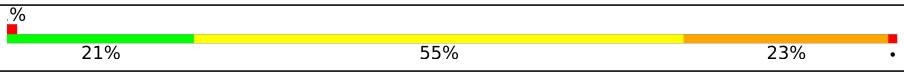
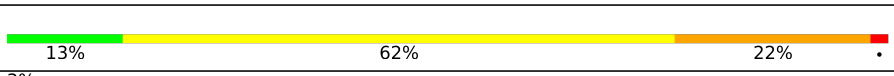
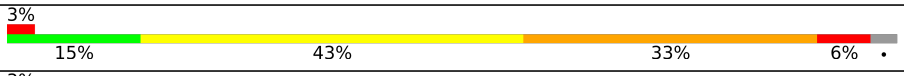
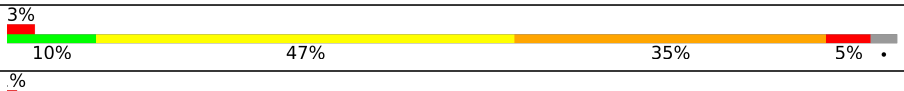
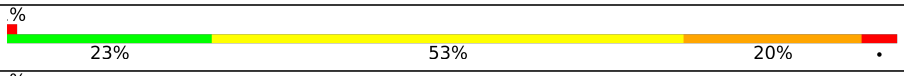
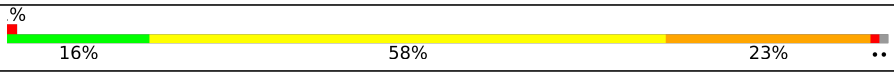
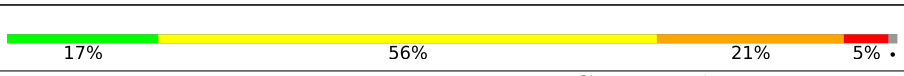
Mol	Chain	Length	Quality of chain
28	BB	122	
28	DB	122	
29	BC	229	
29	DC	229	
30	BD	276	
30	DD	276	
31	BE	206	
31	DE	206	
32	BF	210	
32	DF	210	
33	BG	182	
33	DG	182	
34	BH	180	
34	DH	180	
35	BI	148	
35	DI	148	
36	BN	140	
36	DN	140	
37	BO	122	
37	DO	122	
38	BP	150	
38	DP	150	
39	BQ	141	
39	DQ	141	
40	BR	118	

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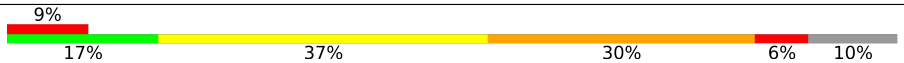
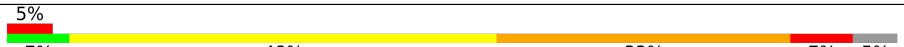
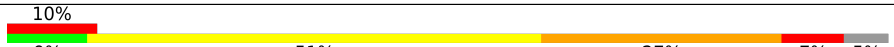
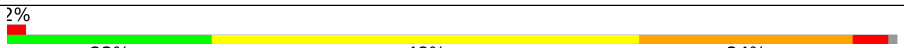
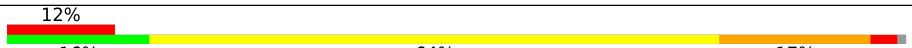
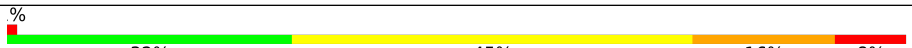
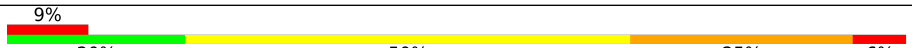
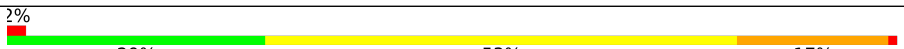
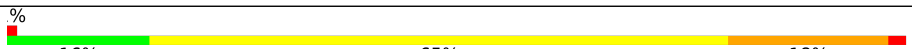
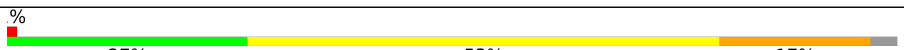
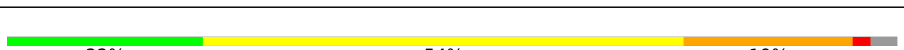
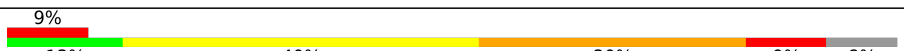
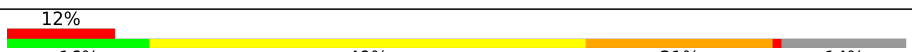
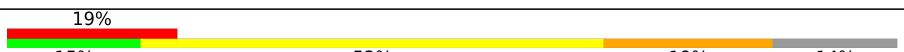
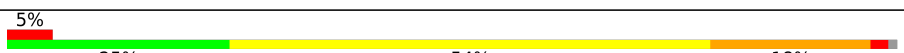
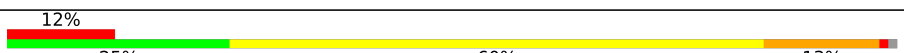
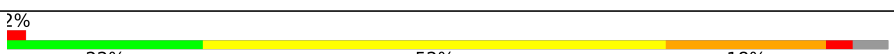
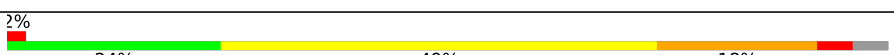
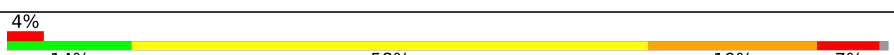
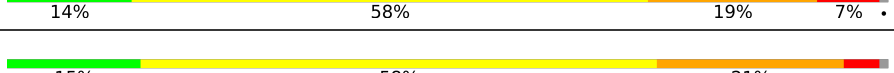
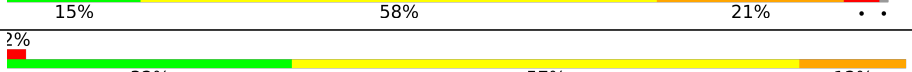
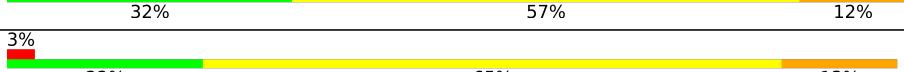
Mol	Chain	Length	Quality of chain
40	DR	118	
41	BS	112	
41	DS	112	
42	BT	146	
42	DT	146	
43	BU	118	
43	DU	118	
44	BV	101	
44	DV	101	
45	BW	113	
45	DW	113	
46	BX	96	
46	DX	96	
47	BY	110	
47	DY	110	
48	BZ	206	
48	DZ	206	
49	B0	85	
49	D0	85	
50	B1	98	
50	D1	98	
51	B2	72	
51	D2	72	
52	B3	60	
52	D3	60	

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Mol	Chain	Length	Quality of chain
53	B4	71	8% 27% 8% 56%
53	D4	71	11% 24% 8% 56%
54	B5	60	5% 23% 50% 15% 10%
54	D5	60	7% 25% 47% 23%
55	B6	54	6% 9% 39% 33% 13% 6%
55	D6	54	17% 31% 39% 11% 15%
56	B7	49	41% 43% 16%
56	D7	49	8% 27% 61% 12%
57	B8	65	2% 18% 60% 14% 6%
57	D8	65	3% 12% 52% 26% 8%
58	B9	37	27% 46% 24%
58	D9	37	27% 19% 57% 22%

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
26	UAL	CZ	5	-	-	X	-
26	5OH	CZ	6	-	-	X	-
59	MG	AA	1707	-	-	-	X
59	MG	AA	1710	-	-	-	X
59	MG	AA	1727	-	-	-	X
59	MG	AW	101	-	-	-	X
59	MG	AW	106	-	-	-	X
59	MG	AX	107	-	-	-	X
59	MG	BA	3004	-	-	-	X
59	MG	BA	3134	-	-	-	X
59	MG	BA	3162	-	-	-	X
59	MG	BA	3165	-	-	-	X
59	MG	BA	3269	-	-	-	X
59	MG	BA	3294	-	-	-	X
59	MG	BA	3297	-	-	-	X
59	MG	BA	3298	-	-	-	X
59	MG	BA	3303	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
59	MG	BA	3307	-	-	-	X
59	MG	BA	3317	-	-	-	X
59	MG	BA	3320	-	-	-	X
59	MG	BA	3332	-	-	-	X
59	MG	BA	3333	-	-	-	X
59	MG	BA	3347	-	-	-	X
59	MG	BX	101	-	-	-	X
59	MG	CA	1603	-	-	-	X
59	MG	CA	1605	-	-	-	X
59	MG	CA	1644	-	-	-	X
59	MG	CA	1675	-	-	-	X
59	MG	CA	1683	-	-	-	X
59	MG	DA	3069	-	-	-	X
59	MG	DA	3095	-	-	-	X
59	MG	DA	3119	-	-	-	X
59	MG	DA	3203	-	-	-	X
59	MG	DA	3211	-	-	-	X
59	MG	DA	3213	-	-	-	X
59	MG	DA	3238	-	-	-	X
59	MG	DA	3273	-	-	-	X
59	MG	DD	301	-	-	-	X

2 Entry composition (i)

There are 60 unique types of molecules in this entry. The entry contains 294559 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
1	AA	1495	Total	C	N	O	P	0	0	0
			32141	14306	5964	10377	1494			
1	CA	1495	Total	C	N	O	P	0	0	0
			32141	14306	5964	10377	1494			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	235	Total	C	N	O	S	0	0	1
			1901	1213	342	341	5			
2	CB	235	Total	C	N	O	S	0	0	1
			1901	1213	342	341	5			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AC	207	Total	C	N	O	S	0	0	1
			1613	1016	315	281	1			
3	CC	207	Total	C	N	O	S	0	0	1
			1613	1016	315	281	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	AD	208	Total	C	N	O	S	0	0	0
			1703	1066	339	291	7			
4	CD	208	Total	C	N	O	S	0	0	0
			1703	1066	339	291	7			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AE	151	Total	C	N	O	S	0	0	1
			1147	724	218	201	4			
5	CE	151	Total	C	N	O	S	0	0	1
			1147	724	218	201	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			
6	CF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			
7	CG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			
8	CH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	AI	127	Total	C	N	O	0	0	0
			1005	636	195	174			
9	CI	127	Total	C	N	O	0	0	0
			1006	637	195	174			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AJ	99	Total	C	N	O	S	0	0	1
			795	499	157	138	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	CJ	99	Total	C	N	O	S	0	0	1
			795	499	157	138	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AK	119	Total	C	N	O	S	0	0	0
			885	549	168	165	3			
11	CK	119	Total	C	N	O	S	0	0	0
			885	549	168	165	3			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AL	125	Total	C	N	O	S	0	0	1
			971	611	196	163	1			
12	CL	125	Total	C	N	O	S	0	0	1
			971	611	196	163	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AM	120	Total	C	N	O	S	0	0	0
			947	585	195	165	2			
13	CM	119	Total	C	N	O	S	0	0	0
			910	564	180	164	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AN	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			
14	CN	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AO	88	Total	C	N	O	S	0	0	0
			734	459	147	126	2			
15	CO	88	Total	C	N	O	S	0	0	0
			734	459	147	126	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AP	84	Total	C	N	O	S	0	0	1
			701	443	140	117	1			
16	CP	84	Total	C	N	O	S	0	0	1
			701	443	140	117	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AQ	100	Total	C	N	O	S	0	0	1
			824	528	152	142	2			
17	CQ	100	Total	C	N	O	S	0	0	1
			824	528	152	142	2			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	AR	70	Total	C	N	O	0	0	0
			574	367	112	95			
18	CR	70	Total	C	N	O	0	0	0
			574	367	112	95			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AS	79	Total	C	N	O	S	0	0	1
			630	403	115	110	2			
19	CS	79	Total	C	N	O	S	0	0	1
			630	403	115	110	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AT	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			
20	CT	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
21	AU	25	Total	C	N	O	0	0	1
			209	128	51	30			
21	CU	25	Total	C	N	O	0	0	1
			209	128	51	30			

- Molecule 22 is a RNA chain called RNA (5'-R(*AP*AP*AP*AP*AP*GP*GP*AP*AP*AP *UP*A*AP*AP*AP*AP*UP*GP*CP*AP*GP*UP*UP*CP*AP*AP*UP*CP*UP*A)-3').

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AV	10	Total	C	N	O	P	0	0	0
			213	97	42	65	9			
22	CV	10	Total	C	N	O	P	0	0	0
			213	97	42	65	9			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	AW	75	Total	C	N	O	P	0	0	0
			1593	711	281	526	75			
23	CW	75	Total	C	N	O	P	0	0	0
			1593	711	281	526	75			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	AX	77	Total	C	N	O	P	0	0	0
			1640	732	297	535	76			
24	CX	77	Total	C	N	O	P	0	0	0
			1640	732	297	535	76			

- Molecule 25 is a RNA chain called tRNA-Gln.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	AY	75	Total	C	N	O	P	0	0	0
			1591	711	280	526	74			
25	CY	75	Total	C	N	O	P	0	0	0
			1591	711	280	526	74			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AY	33	G	C	CONFLICT	GB CP001637.1
AY	44	U	A	CONFLICT	GB CP001637.1

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Chain	Residue	Modelled	Actual	Comment	Reference
CY	33	G	C	CONFLICT	GB CP001637.1
CY	44	U	A	CONFLICT	GB CP001637.1

- Molecule 26 is a protein called Viomycin.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
26	AZ	6	Total	C	N	O	0	0	0
			48	25	13	10			
26	CZ	6	Total	C	N	O	0	0	0
			48	25	13	10			

- Molecule 27 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	BA	2800	Total	C	N	O	P	0	0	0
			60311	26841	11284	19387	2799			
27	DA	2800	Total	C	N	O	P	0	0	0
			60313	26842	11286	19386	2799			

- Molecule 28 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	BB	118	Total	C	N	O	P	0	0	0
			2528	1126	466	819	117			
28	DB	118	Total	C	N	O	P	0	0	0
			2528	1126	466	819	117			

- Molecule 29 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
29	BC	191	Total	C	N	O	0	0	1
			1142	691	221	230			
29	DC	191	Total	C	N	O	0	0	1
			1142	691	221	230			

- Molecule 30 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	BD	272	Total	C	N	O	S	0	0	1
			2105	1329	417	356	3			
30	DD	272	Total	C	N	O	S	0	0	1
			2105	1329	417	356	3			

- Molecule 31 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	BE	205	Total	C	N	O	S	0	0	1
			1564	988	300	270	6			
31	DE	205	Total	C	N	O	S	0	0	1
			1564	988	300	270	6			

- Molecule 32 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	BF	208	Total	C	N	O	S	0	0	1
			1624	1035	304	282	3			
32	DF	208	Total	C	N	O	S	0	0	1
			1624	1035	304	282	3			

- Molecule 33 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	BG	181	Total	C	N	O	S	0	0	0
			1474	942	268	260	4			
33	DG	181	Total	C	N	O	S	0	0	0
			1474	942	268	260	4			

- Molecule 34 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	BH	164	Total	C	N	O	S	0	0	1
			1252	794	233	224	1			
34	DH	160	Total	C	N	O	S	0	0	1
			1223	773	229	220	1			

- Molecule 35 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BI	146	Total	C	N	O	S	0	0	1
			1042	668	175	198	1			
35	DI	146	Total	C	N	O	S	0	0	1
			1046	670	175	200	1			

- Molecule 36 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	BN	139	Total	C	N	O	S	0	0	1
			1105	712	207	182	4			
36	DN	139	Total	C	N	O	S	0	0	1
			1105	712	207	182	4			

- Molecule 37 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BO	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			
37	DO	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

- Molecule 38 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BP	146	Total	C	N	O	S	0	0	0
			1114	692	227	193	2			
38	DP	146	Total	C	N	O	S	0	0	0
			1114	692	227	193	2			

- Molecule 39 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BQ	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			
39	DQ	139	Total	C	N	O	S	0	0	0
			1107	707	209	184	7			

- Molecule 40 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	BR	117	Total	C	N	O	0	0	0
			960	599	202	159			
40	DR	117	Total	C	N	O	0	0	0
			960	599	202	159			

- Molecule 41 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
41	BS	99	Total	C	N	O	0	0	1
			771	486	155	130			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
41	DS	101	Total 777	C 489	N 156	O 132	0	0	1

- Molecule 42 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BT	138	Total 1142	C 710	N 235	O 196	S 1	0	0	1
42	DT	138	Total 1142	C 710	N 235	O 196	S 1	0	0	1

- Molecule 43 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BU	117	Total 958	C 604	N 202	O 151	S 1	0	0	0
43	DU	117	Total 958	C 604	N 202	O 151	S 1	0	0	0

- Molecule 44 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	BV	101	Total 779	C 501	N 142	O 135	S 1	0	0	0
44	DV	101	Total 779	C 501	N 142	O 135	S 1	0	0	0

- Molecule 45 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	BW	113	Total 896	C 563	N 176	O 155	S 2	0	0	0
45	DW	113	Total 896	C 563	N 176	O 155	S 2	0	0	0

- Molecule 46 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
46	BX	93	Total 726	C 471	N 132	O 123	0	0	1
46	DX	93	Total 726	C 471	N 132	O 123	0	0	1

- Molecule 47 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	BY	101	Total	C	N	O	S	0	0	1
			776	500	149	123	4			
47	DY	101	Total	C	N	O	S	0	0	1
			776	500	149	123	4			

- Molecule 48 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	BZ	177	Total	C	N	O	S	0	0	1
			1404	897	253	252	2			
48	DZ	177	Total	C	N	O	S	0	0	1
			1404	897	253	252	2			

- Molecule 49 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	B0	84	Total	C	N	O	S	0	0	0
			662	410	140	111	1			
49	D0	84	Total	C	N	O	S	0	0	0
			662	410	140	111	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	B1	94	Total	C	N	O	S	0	0	1
			715	448	141	125	1			
50	D1	94	Total	C	N	O	S	0	0	1
			732	460	146	125	1			

- Molecule 51 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	B2	71	Total	C	N	O	S	0	0	0
			598	370	121	106	1			
51	D2	71	Total	C	N	O	S	0	0	0
			598	370	121	106	1			

- Molecule 52 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	B3	60	Total	C	N	O	S	0	0	1
			468	298	91	78	1			
52	D3	60	Total	C	N	O	S	0	0	1
			468	298	91	78	1			

- Molecule 53 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	B4	31	Total	C	N	O	S	0	0	1
			226	142	37	43	4			
53	D4	31	Total	C	N	O	S	0	0	1
			226	142	37	43	4			

- Molecule 54 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	B5	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			
54	D5	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			

- Molecule 55 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	B6	51	Total	C	N	O	S	0	0	1
			411	253	84	70	4			
55	D6	46	Total	C	N	O	S	0	0	1
			390	241	80	65	4			

- Molecule 56 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	B7	49	Total	C	N	O	S	0	0	1
			419	257	105	55	2			
56	D7	49	Total	C	N	O	S	0	0	1
			419	257	105	55	2			

- Molecule 57 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	B8	64	Total	C	N	O	S	0	0	1
			508	326	102	78	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	D8	64	Total	C	N	O	S	0	0	1
			508	326	102	78	2			

- Molecule 58 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	B9	36	Total	C	N	O	S	0	0	0
			299	183	67	46	3			
58	D9	36	Total	C	N	O	S	0	0	0
			299	183	67	46	3			

- Molecule 59 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	AA	133	Total	Mg	0	0
			133	133		
59	AC	1	Total	Mg	0	0
			1	1		
59	AD	1	Total	Mg	0	0
			1	1		
59	AE	1	Total	Mg	0	0
			1	1		
59	AF	1	Total	Mg	0	0
			1	1		
59	AH	1	Total	Mg	0	0
			1	1		
59	AK	2	Total	Mg	0	0
			2	2		
59	AL	1	Total	Mg	0	0
			1	1		
59	AO	1	Total	Mg	0	0
			1	1		
59	AT	2	Total	Mg	0	0
			2	2		
59	AW	7	Total	Mg	0	0
			7	7		
59	AX	7	Total	Mg	0	0
			7	7		
59	AY	2	Total	Mg	0	0
			2	2		
59	BA	400	Total	Mg	0	0
			400	400		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	BB	1	Total Mg 1 1	0	0
59	BD	1	Total Mg 1 1	0	0
59	BE	1	Total Mg 1 1	0	0
59	BF	2	Total Mg 2 2	0	0
59	BH	1	Total Mg 1 1	0	0
59	BN	1	Total Mg 1 1	0	0
59	BP	1	Total Mg 1 1	0	0
59	BQ	1	Total Mg 1 1	0	0
59	BR	1	Total Mg 1 1	0	0
59	BU	1	Total Mg 1 1	0	0
59	BX	1	Total Mg 1 1	0	0
59	BY	1	Total Mg 1 1	0	0
59	BZ	1	Total Mg 1 1	0	0
59	B0	2	Total Mg 2 2	0	0
59	B5	1	Total Mg 1 1	0	0
59	CA	92	Total Mg 92 92	0	0
59	CE	2	Total Mg 2 2	0	0
59	CQ	1	Total Mg 1 1	0	0
59	CV	2	Total Mg 2 2	0	0
59	CX	3	Total Mg 3 3	0	0
59	DA	275	Total Mg 275 275	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	DB	1	Total Mg 1 1	0	0
59	DD	3	Total Mg 3 3	0	0
59	DE	3	Total Mg 3 3	0	0
59	DF	1	Total Mg 1 1	0	0
59	DR	1	Total Mg 1 1	0	0
59	DZ	1	Total Mg 1 1	0	0
59	D5	2	Total Mg 2 2	0	0
59	D6	1	Total Mg 1 1	0	0

- Molecule 60 is ZINC ION (three-letter code: ZN) (formula: Zn).

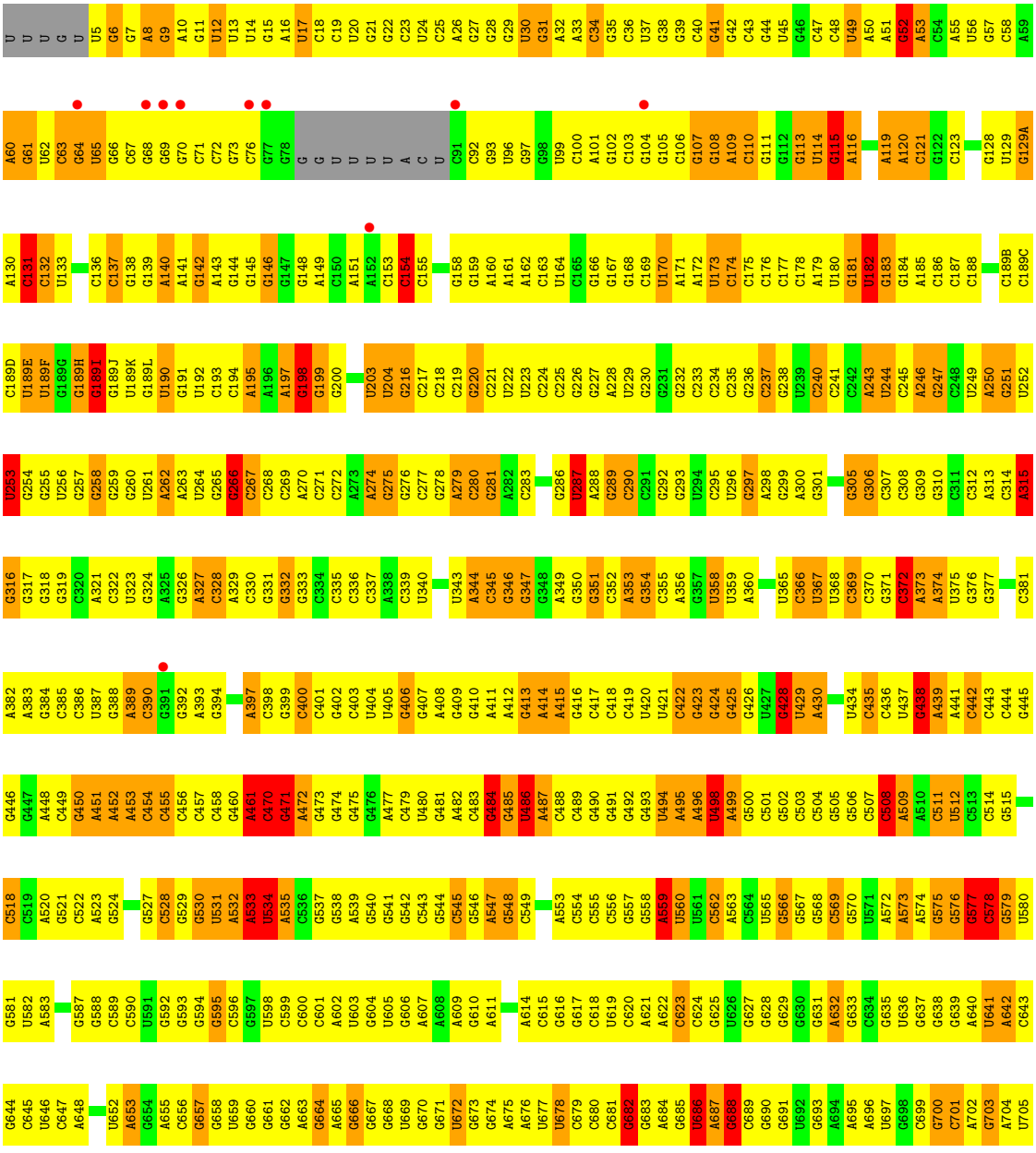
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	AD	1	Total Zn 1 1	0	0
60	B4	1	Total Zn 1 1	0	0
60	B5	1	Total Zn 1 1	0	0
60	B9	1	Total Zn 1 1	0	0
60	CD	1	Total Zn 1 1	0	0
60	D4	1	Total Zn 1 1	0	0
60	D5	1	Total Zn 1 1	0	0
60	D9	1	Total Zn 1 1	0	0

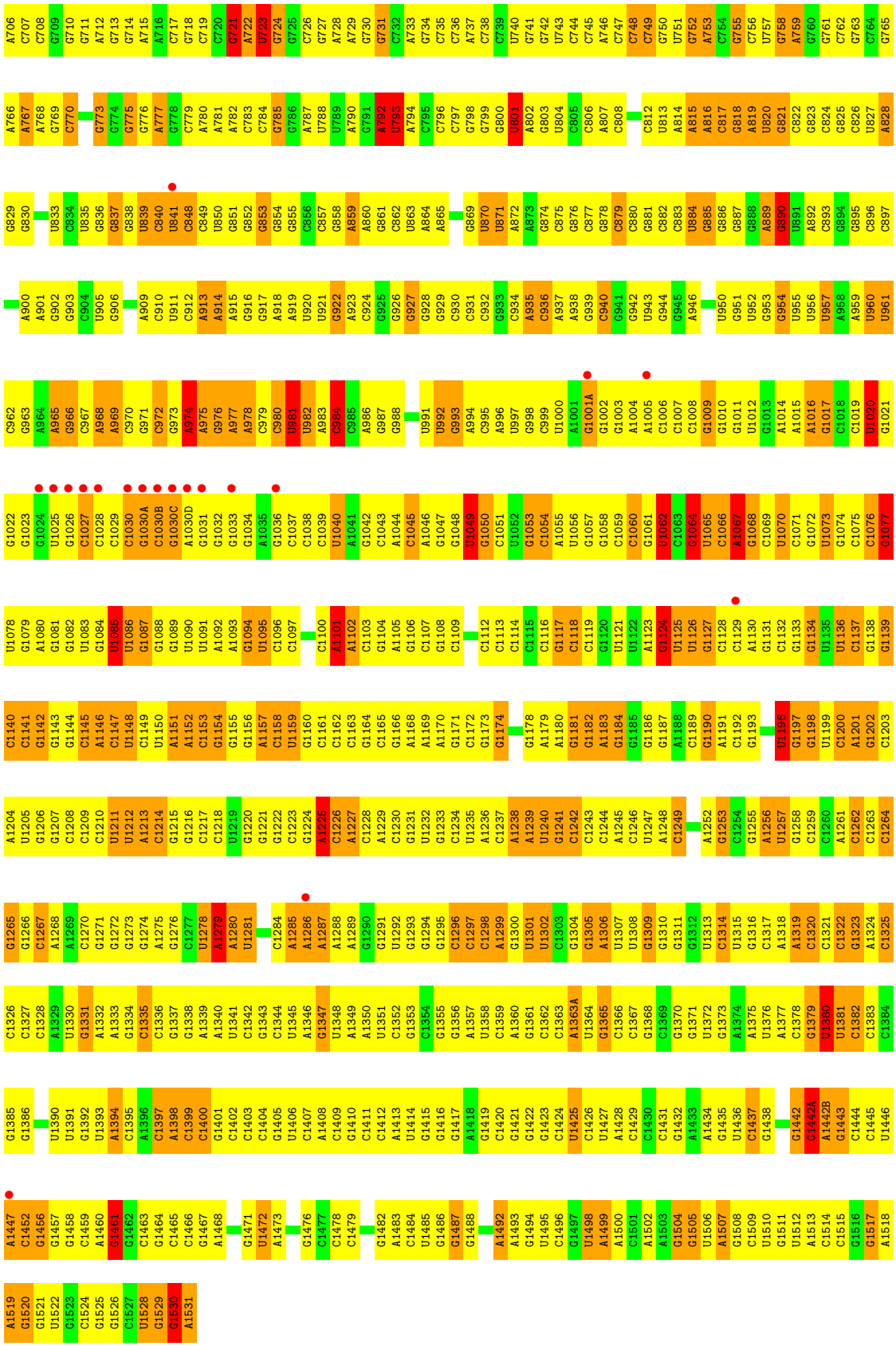
3 Residue-property plots (i)

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.

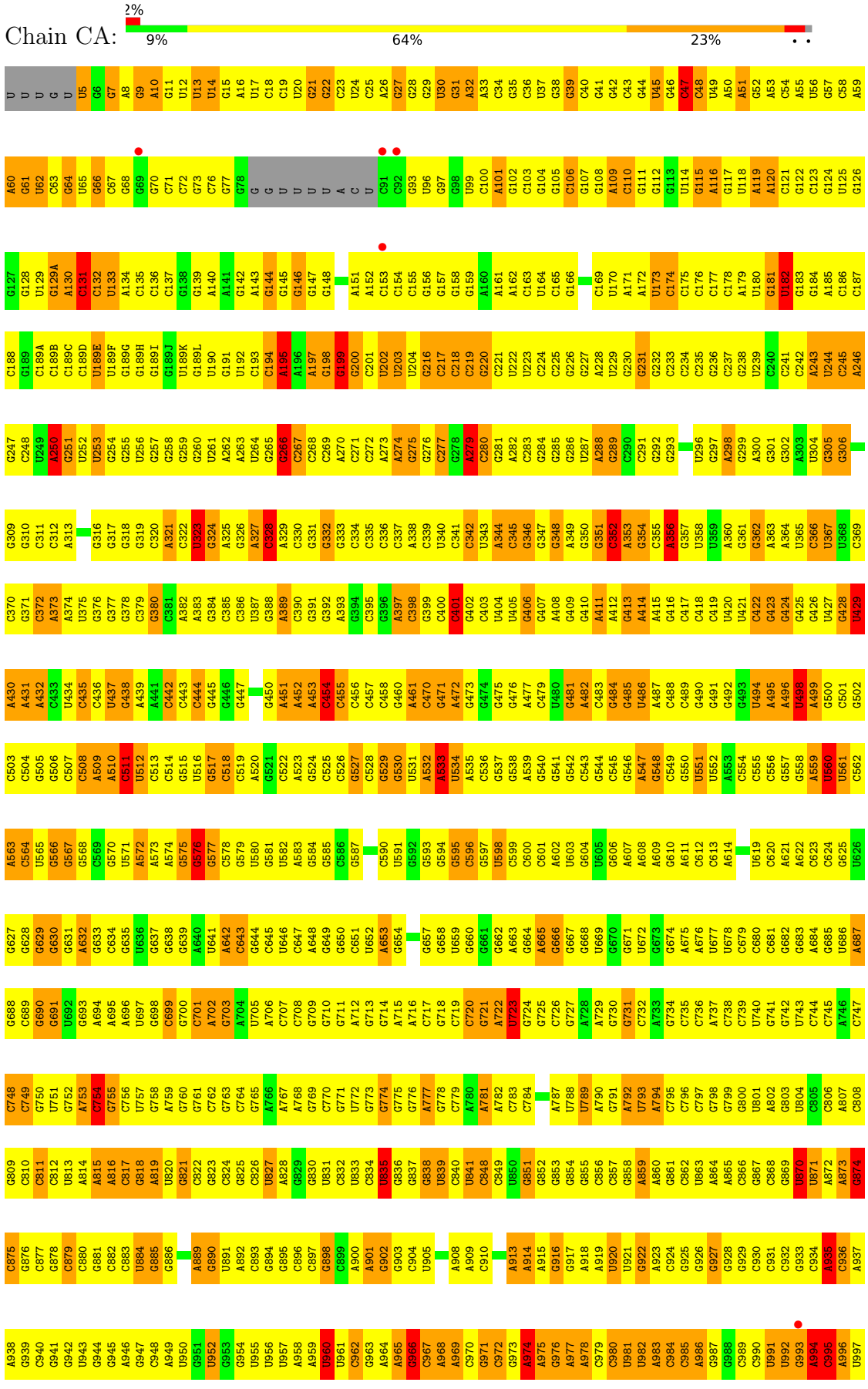
- Molecule 1: 16S ribosomal RNA

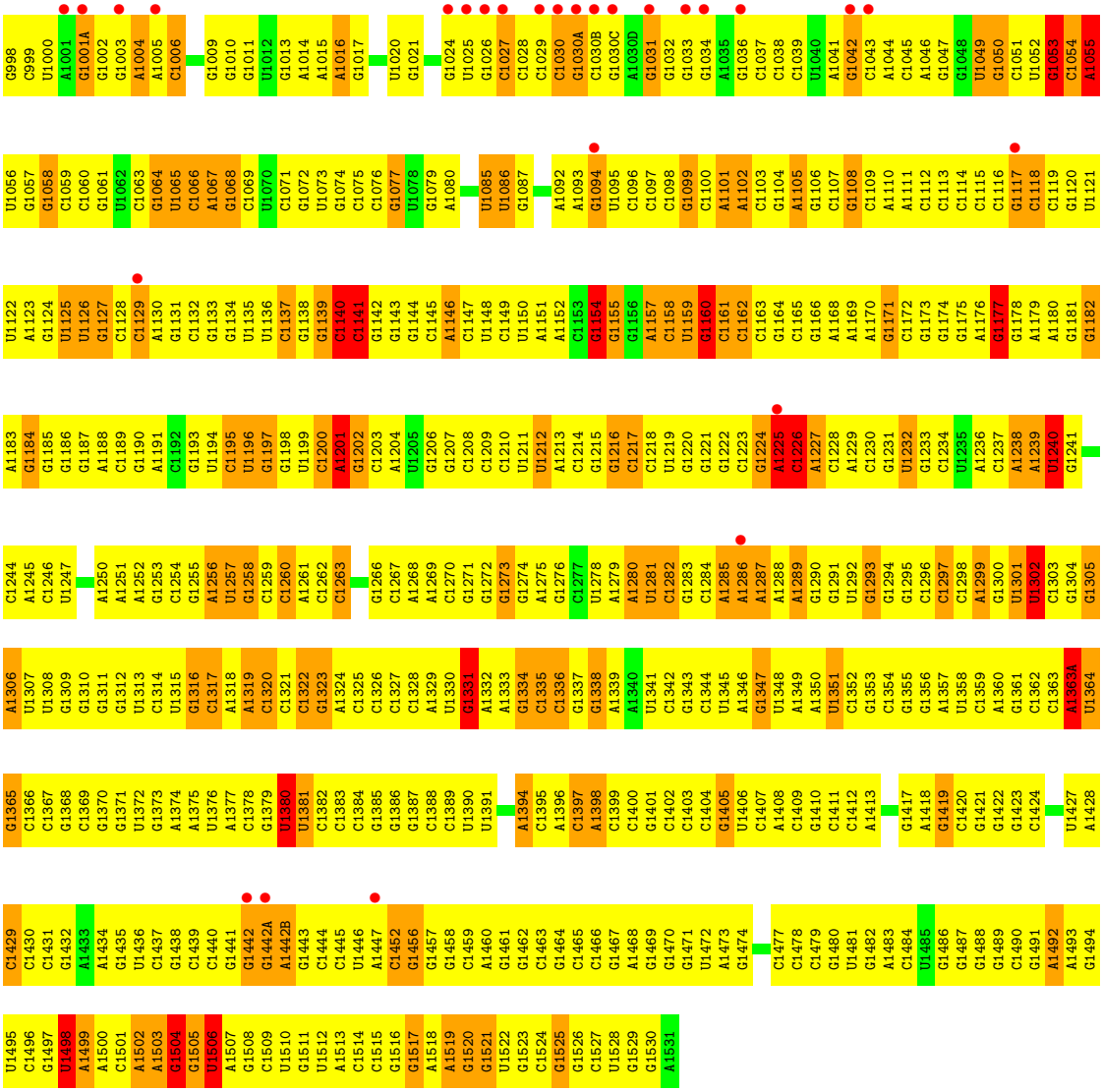
Chain AA: 





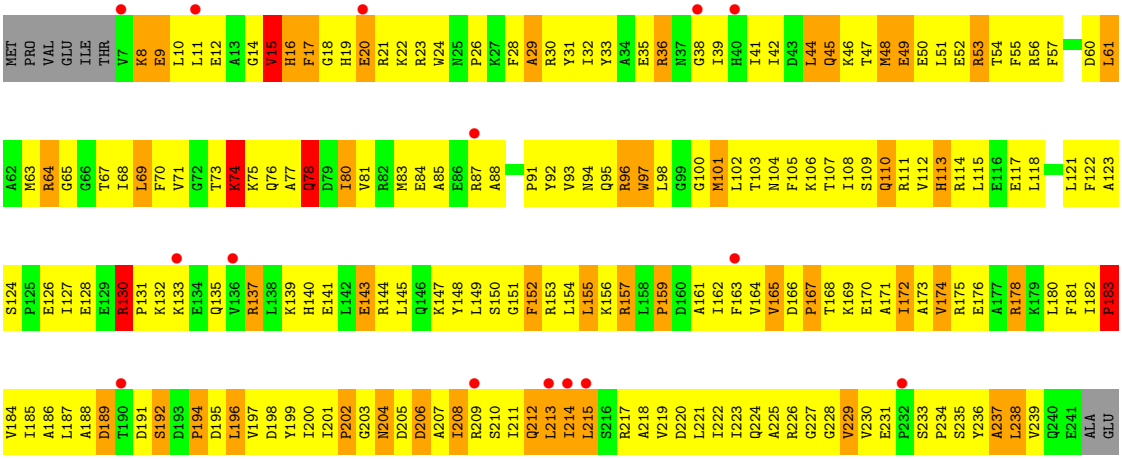
• Molecule 1: 16S ribosomal RNA


Chain CA:
2%
9%
64%
23%

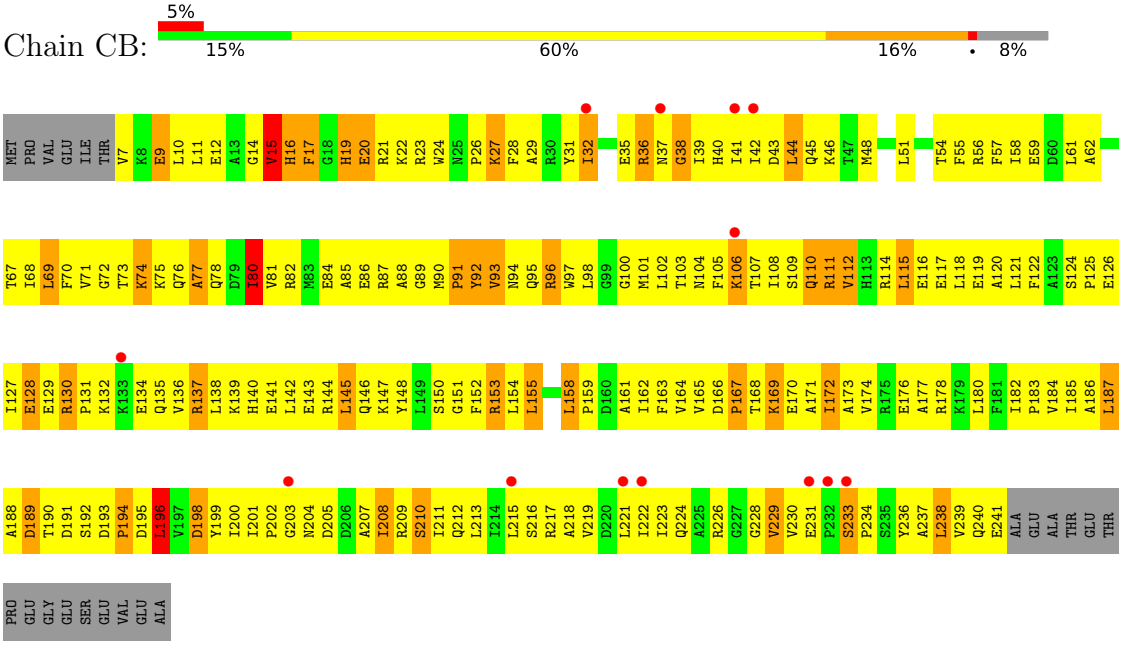


• Molecule 2: 30S ribosomal protein S2

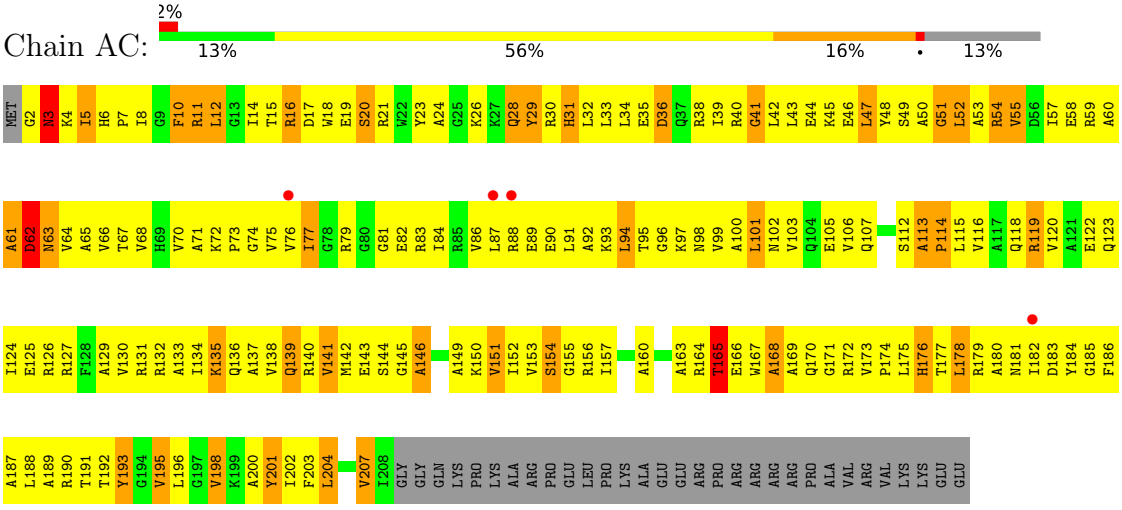
Chain AB:



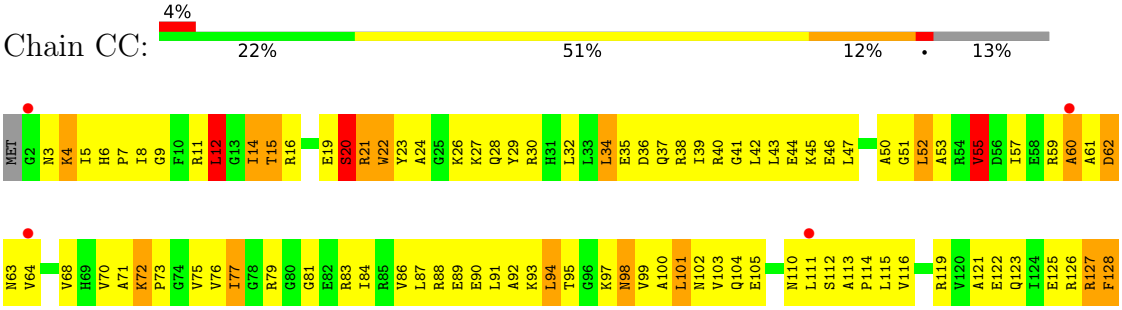
• Molecule 2: 30S ribosomal protein S2

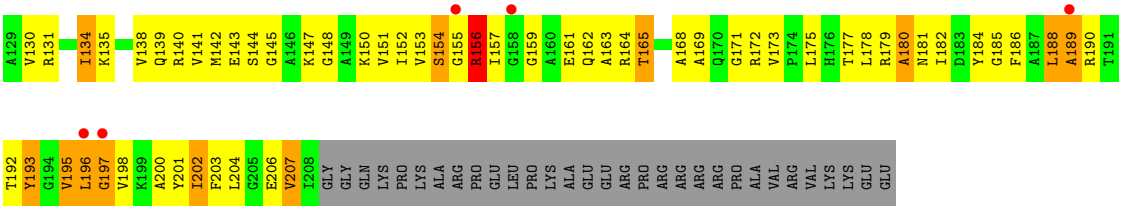


• Molecule 3: 30S ribosomal protein S3



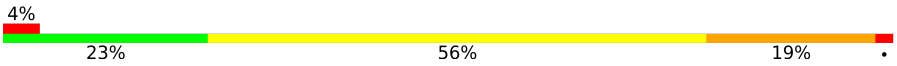
• Molecule 3: 30S ribosomal protein S3

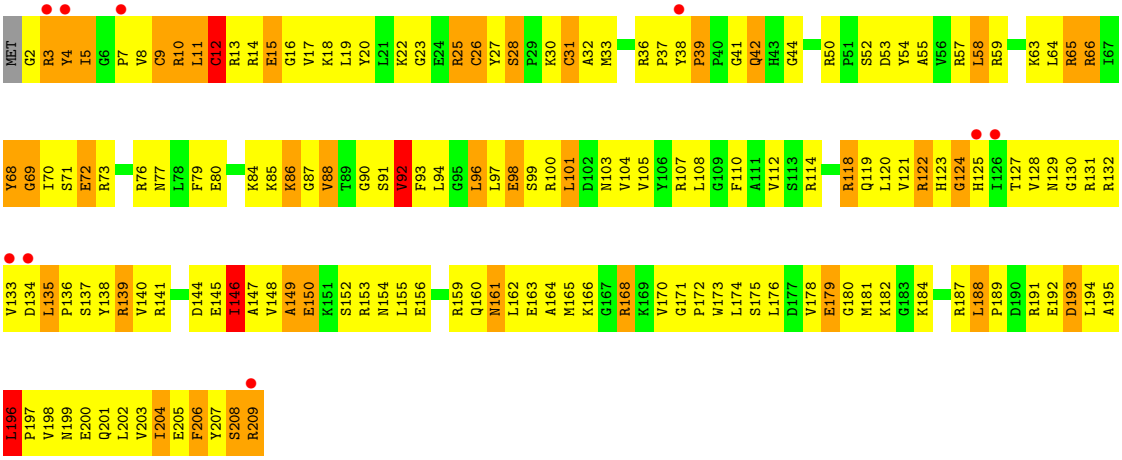




• Molecule 4: 30S ribosomal protein S4

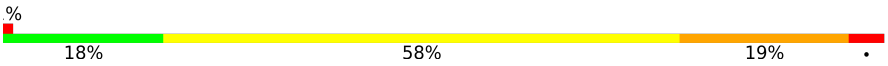
Chain AD:

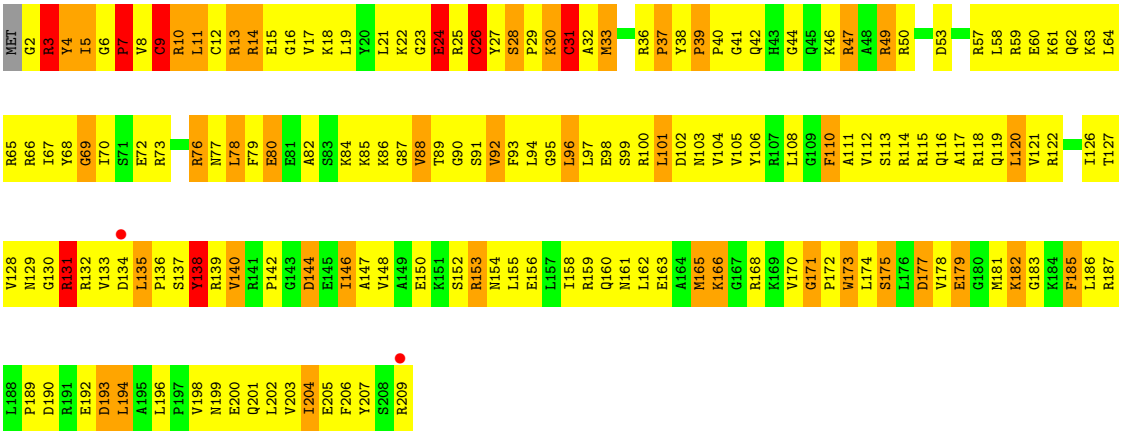




• Molecule 4: 30S ribosomal protein S4

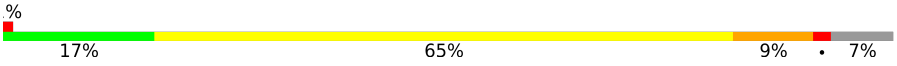
Chain CD:

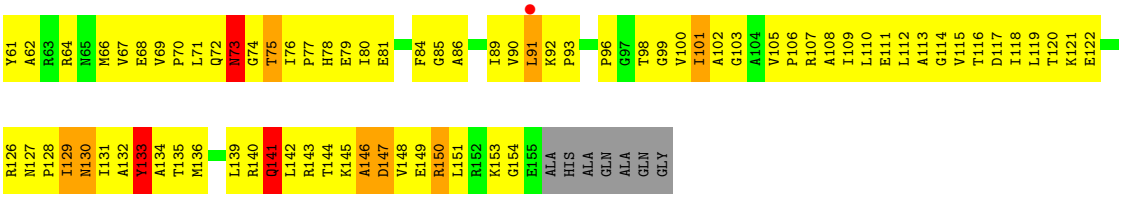




• Molecule 5: 30S ribosomal protein S5

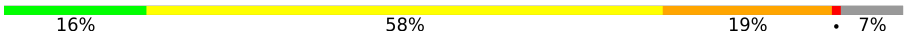
Chain AE:

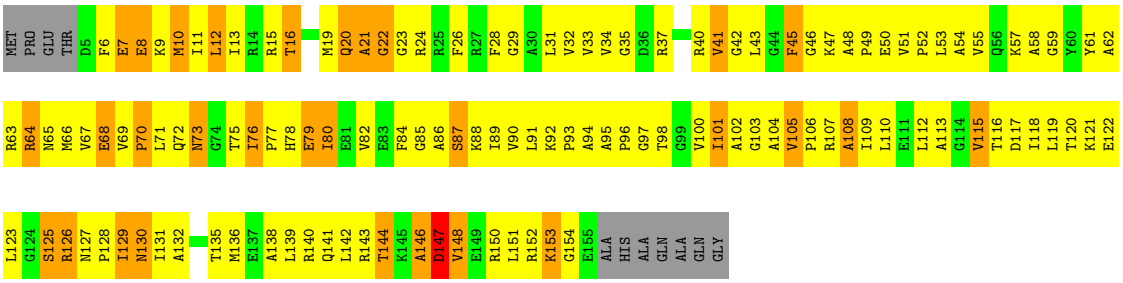




• Molecule 5: 30S ribosomal protein S5

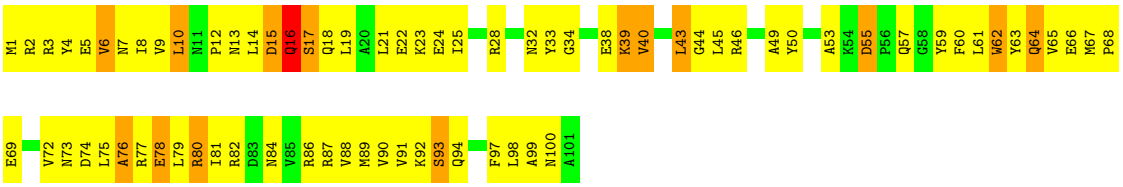
Chain CE:





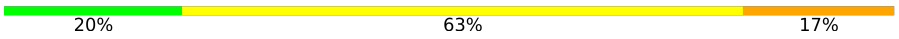
• Molecule 6: 30S ribosomal protein S6

Chain AF:



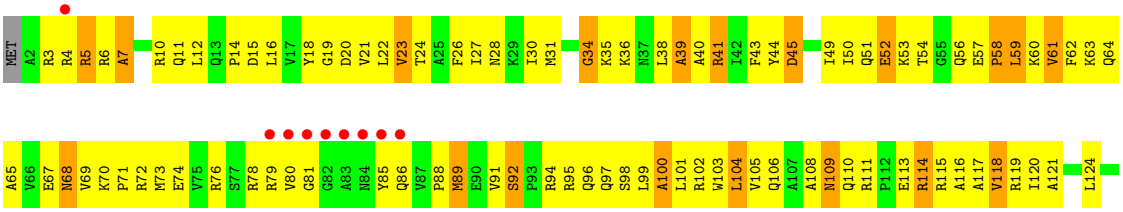
• Molecule 6: 30S ribosomal protein S6

Chain CF:

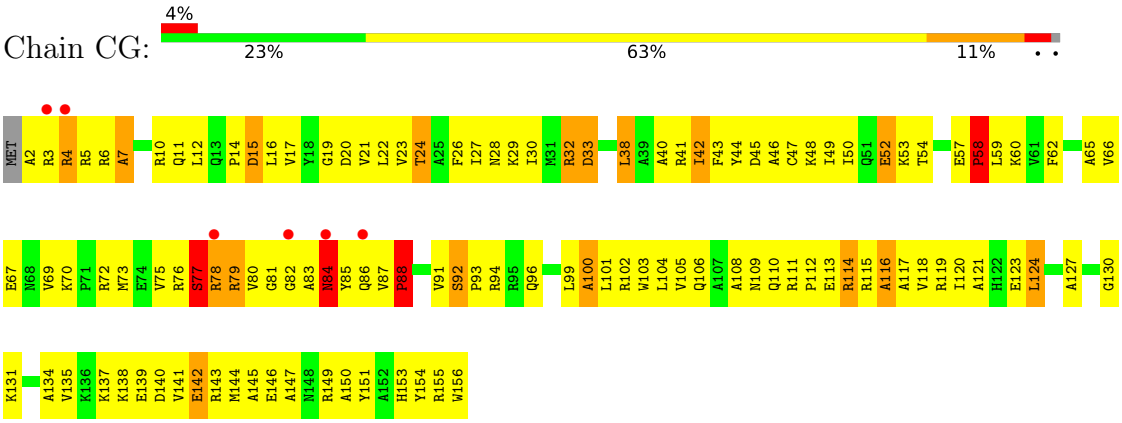


• Molecule 7: 30S ribosomal protein S7

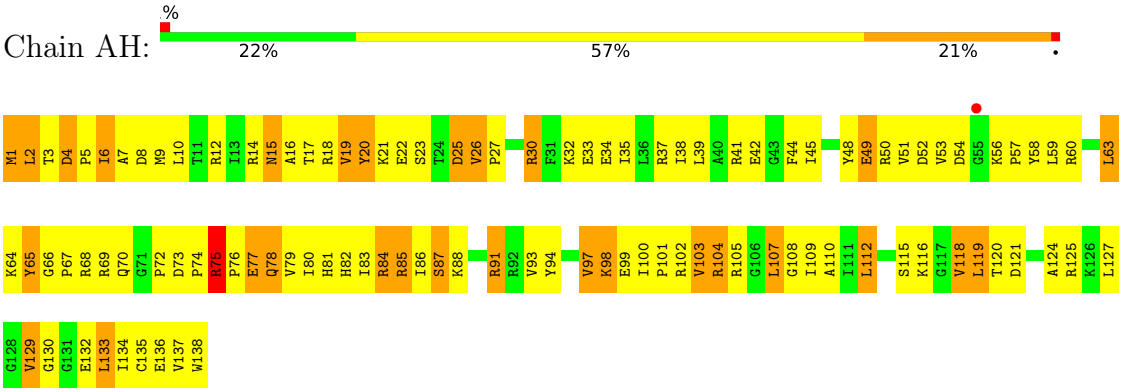
Chain AG:



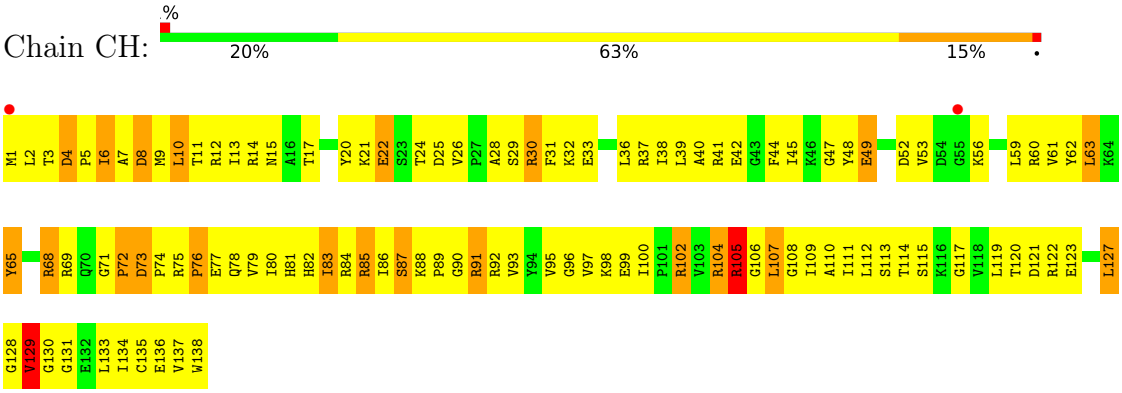
• Molecule 7: 30S ribosomal protein S7



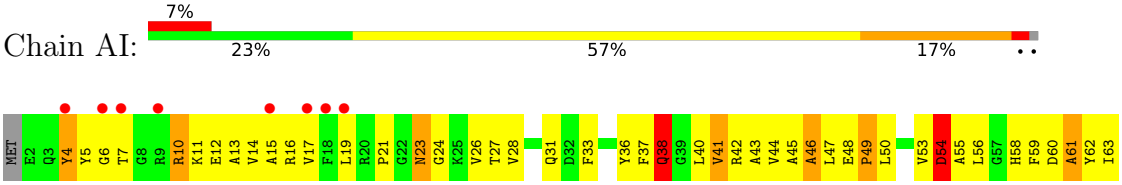
• Molecule 8: 30S ribosomal protein S8

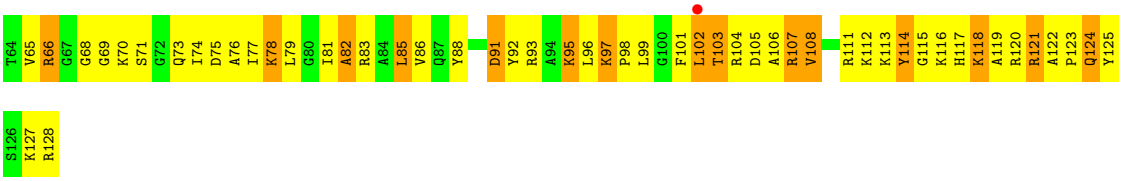


• Molecule 8: 30S ribosomal protein S8

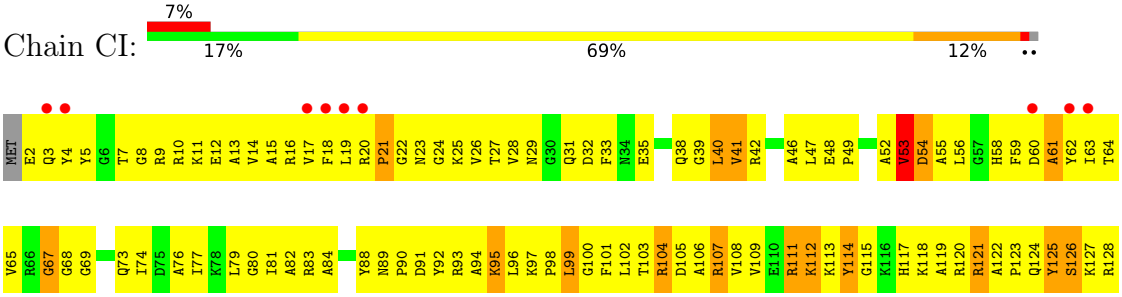


• Molecule 9: 30S ribosomal protein S9

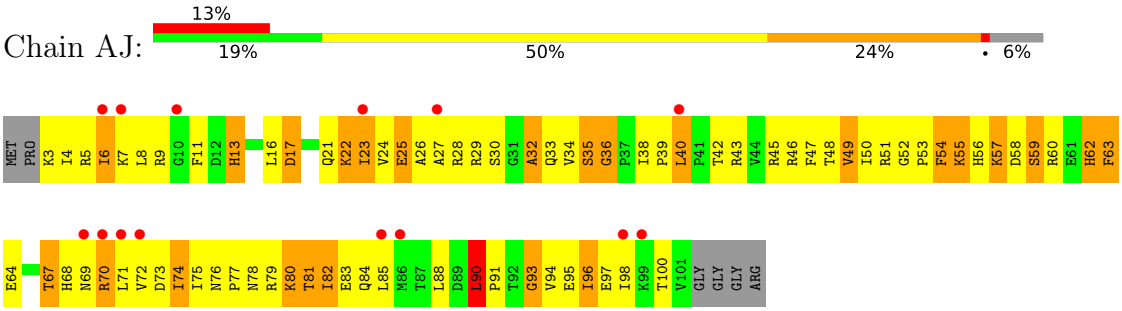




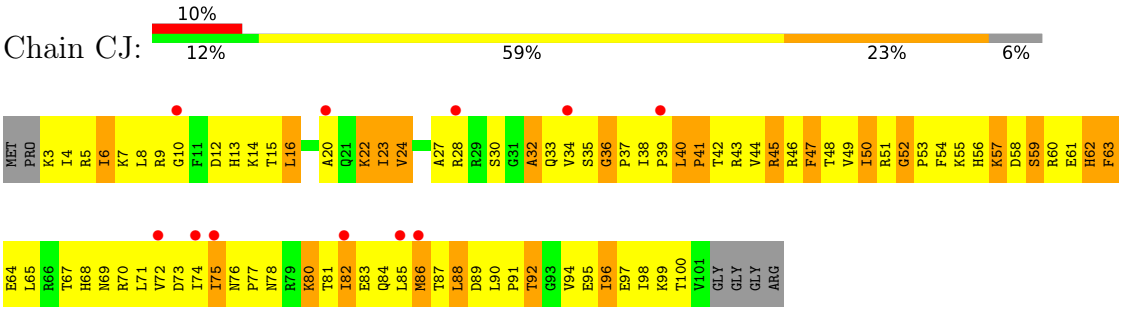
• Molecule 9: 30S ribosomal protein S9



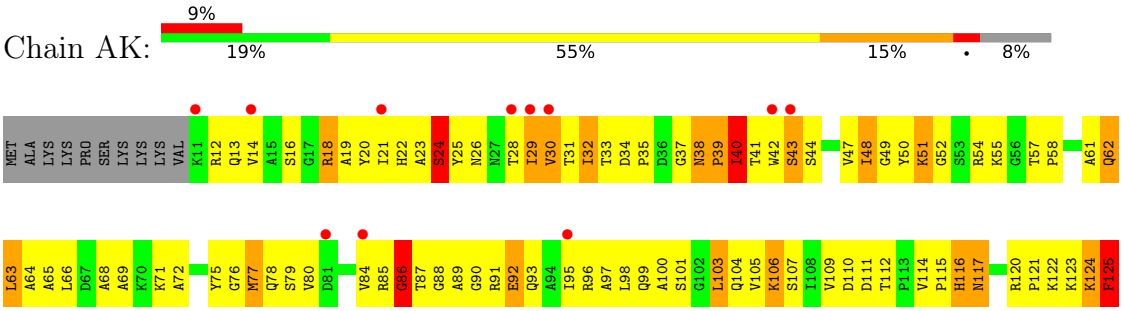
• Molecule 10: 30S ribosomal protein S10



• Molecule 10: 30S ribosomal protein S10

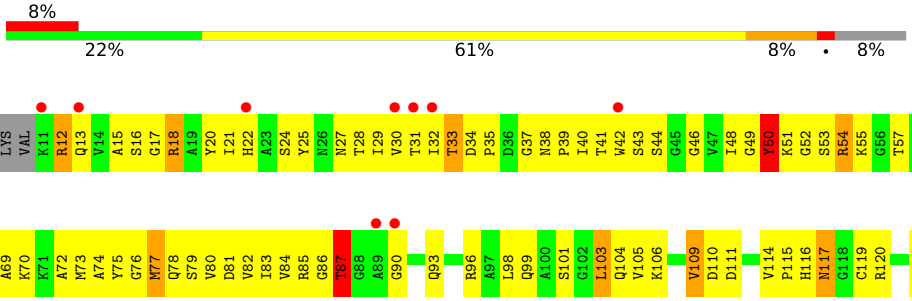


• Molecule 11: 30S ribosomal protein S11



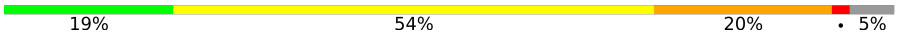
• Molecule 11: 30S ribosomal protein S11

Chain CK:



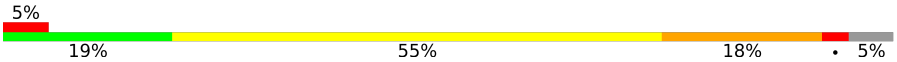
• Molecule 12: 30S ribosomal protein S12

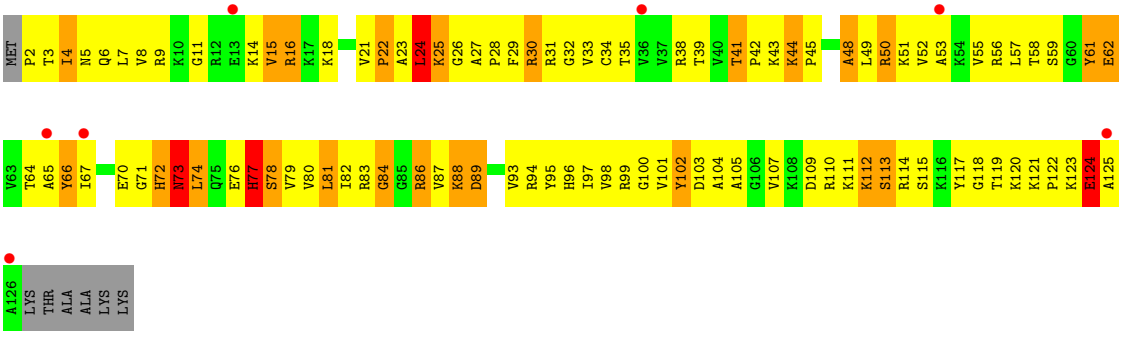
Chain AL:



• Molecule 12: 30S ribosomal protein S12

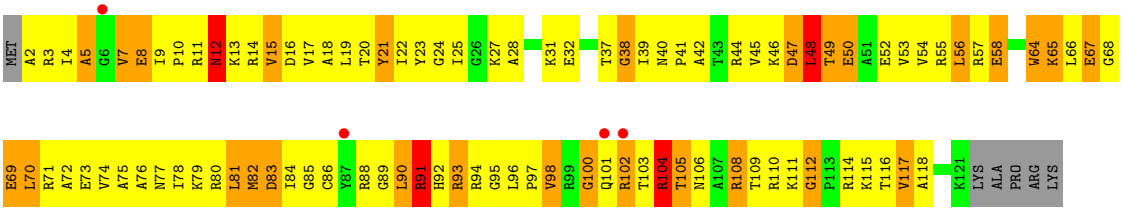
Chain CL:





• Molecule 13: 30S ribosomal protein S13

Chain AM:

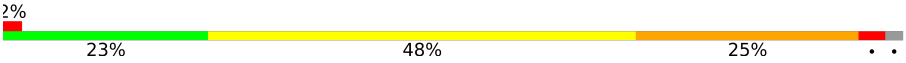


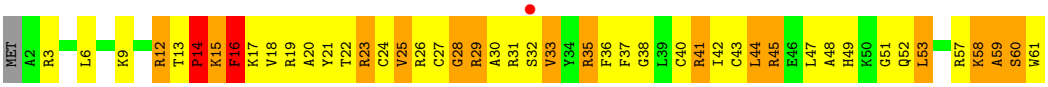
• Molecule 13: 30S ribosomal protein S13

Chain CM:

• Molecule 14: 30S ribosomal protein S14

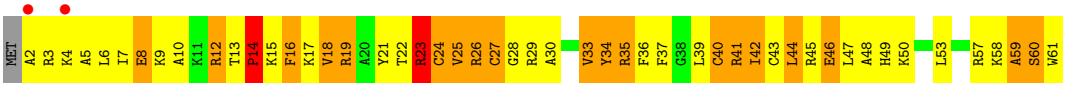
Chain AN:





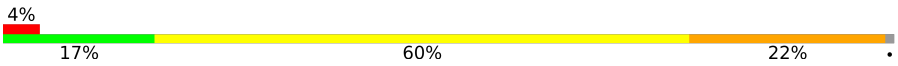
• Molecule 14: 30S ribosomal protein S14

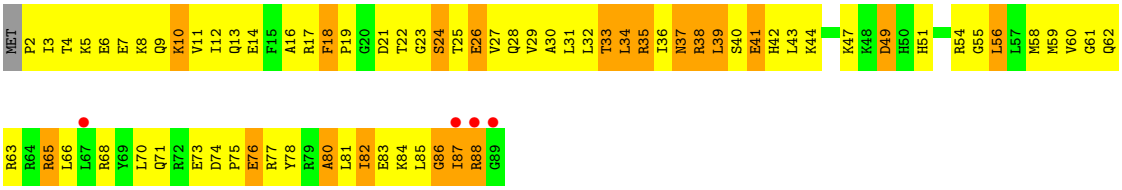
Chain CN:



• Molecule 15: 30S ribosomal protein S15

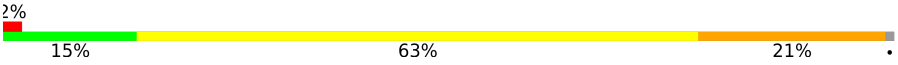
Chain AO:

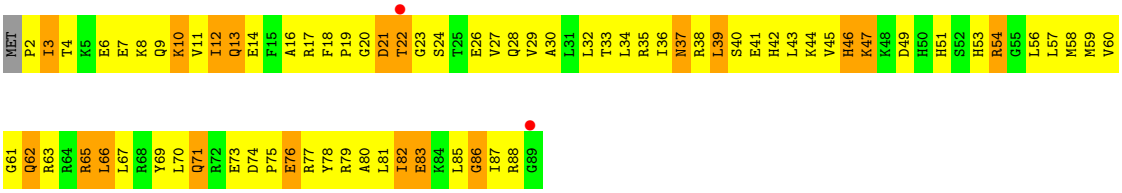




• Molecule 15: 30S ribosomal protein S15

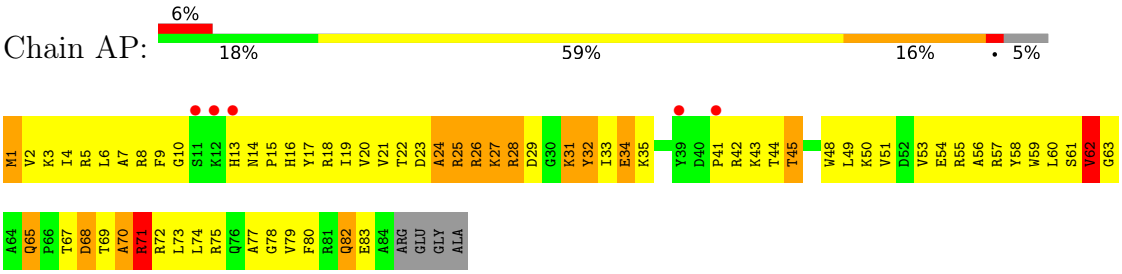
Chain CO:





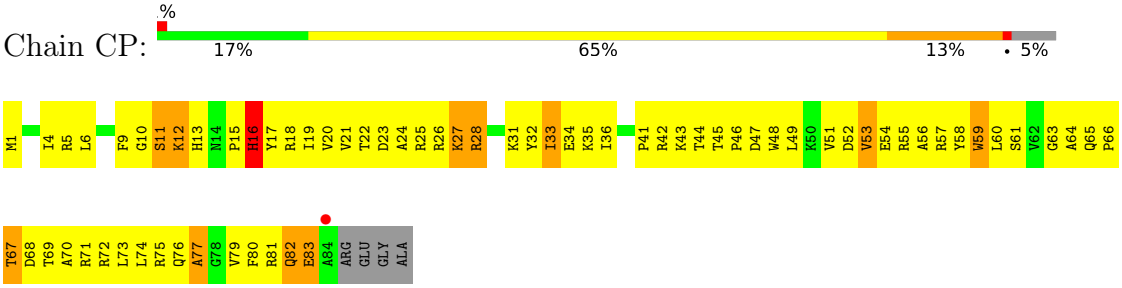
• Molecule 16: 30S ribosomal protein S16

Chain AP:



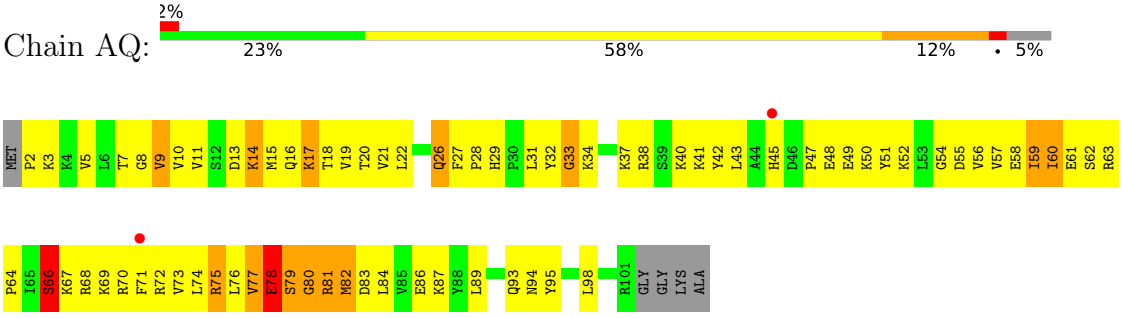
• Molecule 16: 30S ribosomal protein S16

Chain CP:



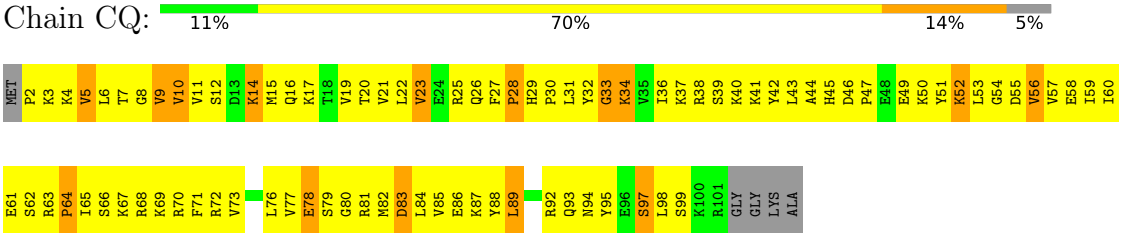
• Molecule 17: 30S ribosomal protein S17

Chain AQ:



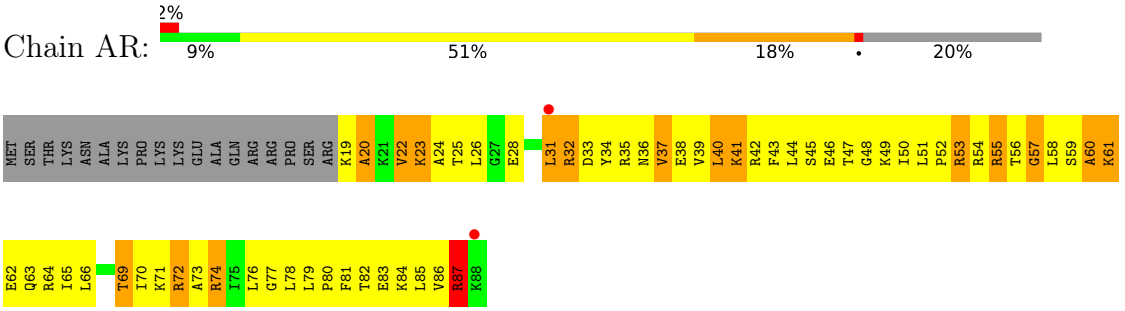
• Molecule 17: 30S ribosomal protein S17

Chain CQ:



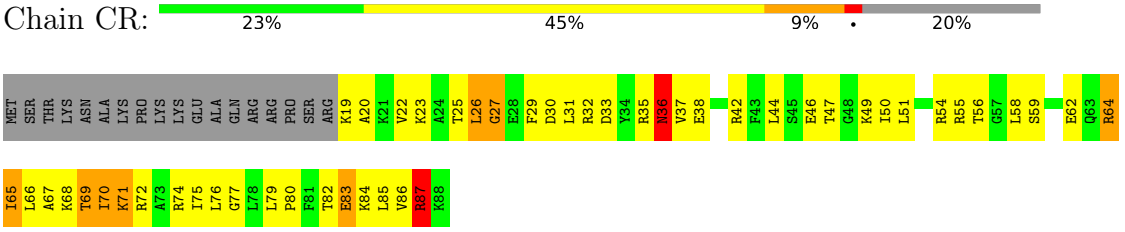
• Molecule 18: 30S ribosomal protein S18

Chain AR:



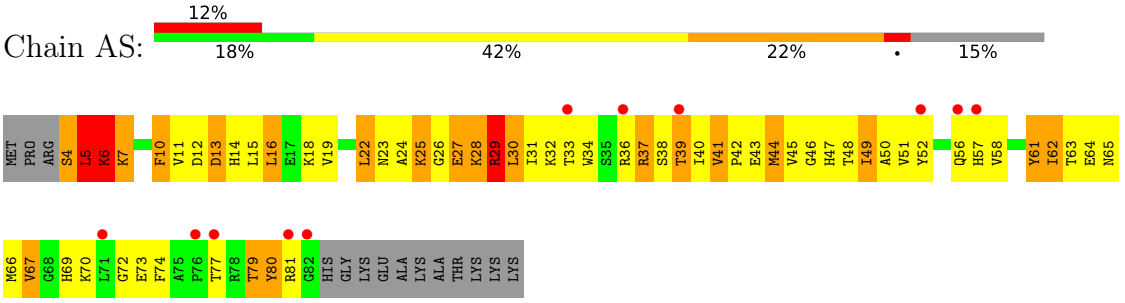
• Molecule 18: 30S ribosomal protein S18

Chain CR:



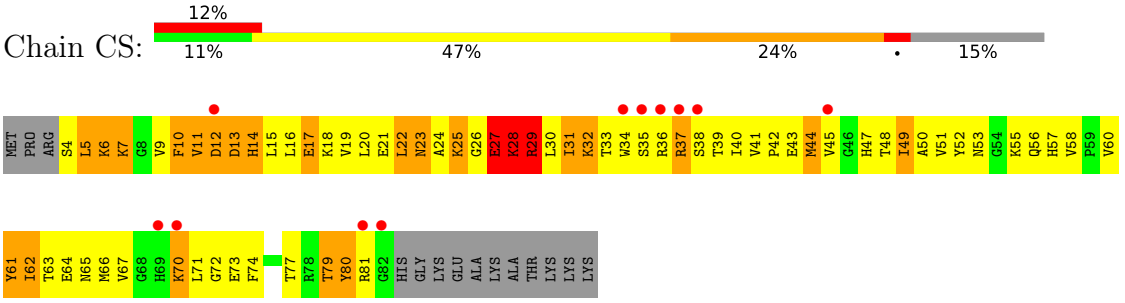
• Molecule 19: 30S ribosomal protein S19

Chain AS:



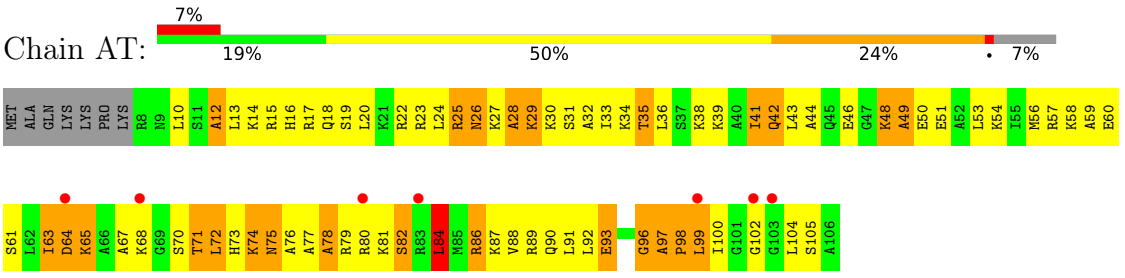
• Molecule 19: 30S ribosomal protein S19

Chain CS:



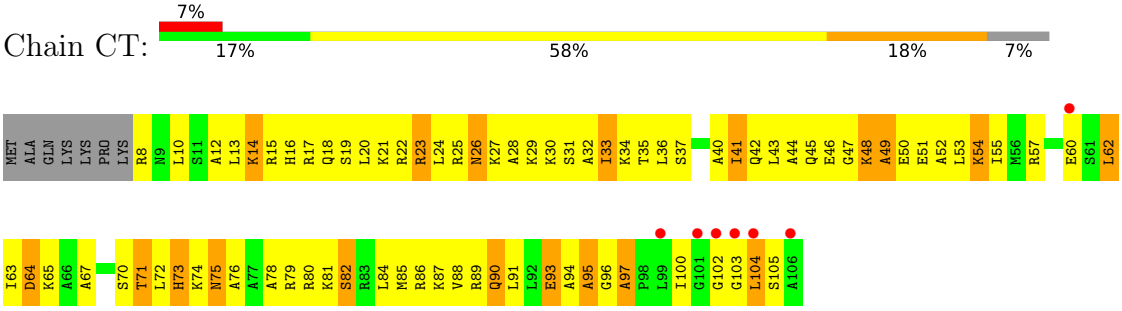
• Molecule 20: 30S ribosomal protein S20

Chain AT:



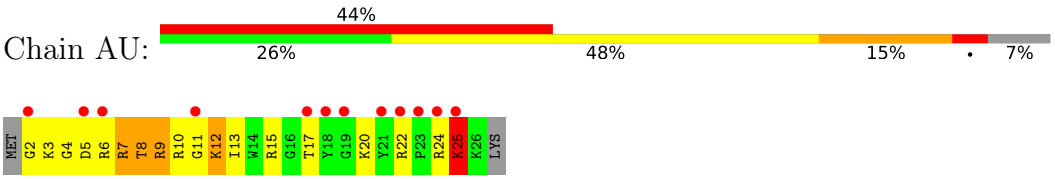
• Molecule 20: 30S ribosomal protein S20

Chain CT:



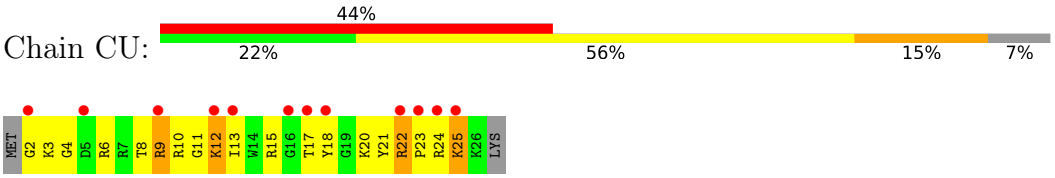
• Molecule 21: 30S ribosomal protein Thx

Chain AU:



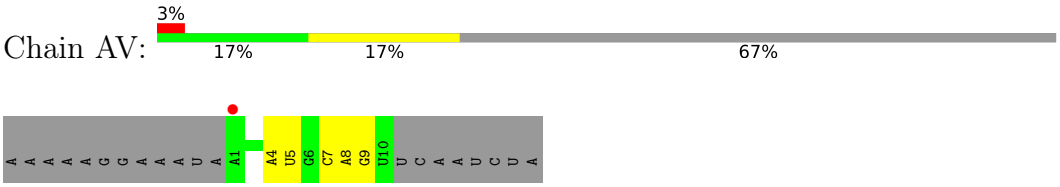
• Molecule 21: 30S ribosomal protein Thx

Chain CU:



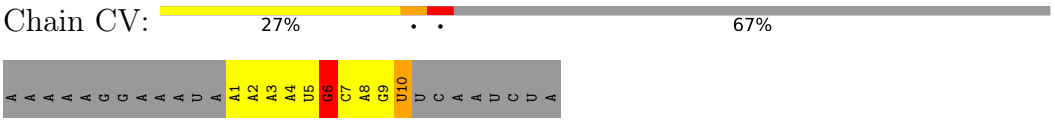
• Molecule 22: RNA (5'-R(*AP*AP*AP*AP*AP*GP*GP*AP*AP*AP*UP*A*AP*AP*AP*AP*UP*GP*CP*AP*GP*UP*UP*CP*AP*AP*UP*CP*UP*A)-3')

Chain AV:



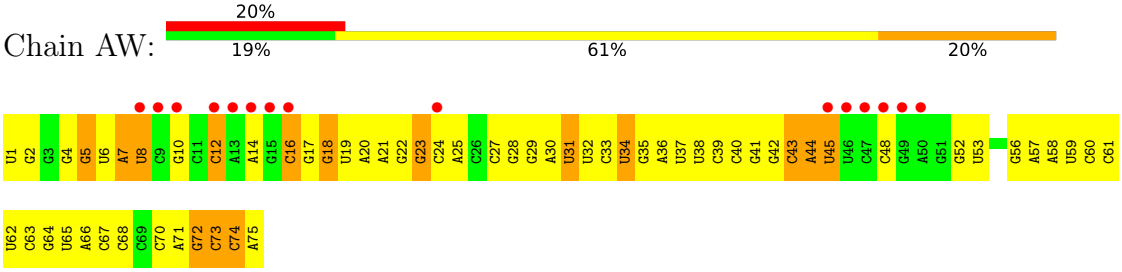
• Molecule 22: RNA (5'-R(*AP*AP*AP*AP*AP*GP*GP*AP*AP*AP*UP*A*AP*AP*AP*AP*UP*GP*CP*AP*GP*UP*UP*CP*AP*AP*UP*CP*UP*A)-3')

Chain CV:



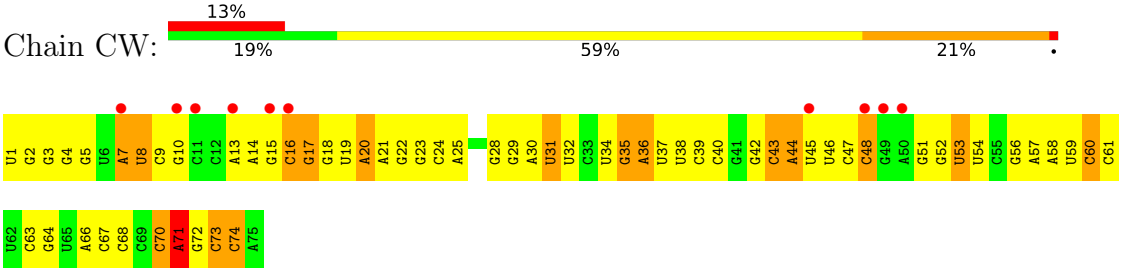
• Molecule 23: tRNA-Gln

Chain AW:



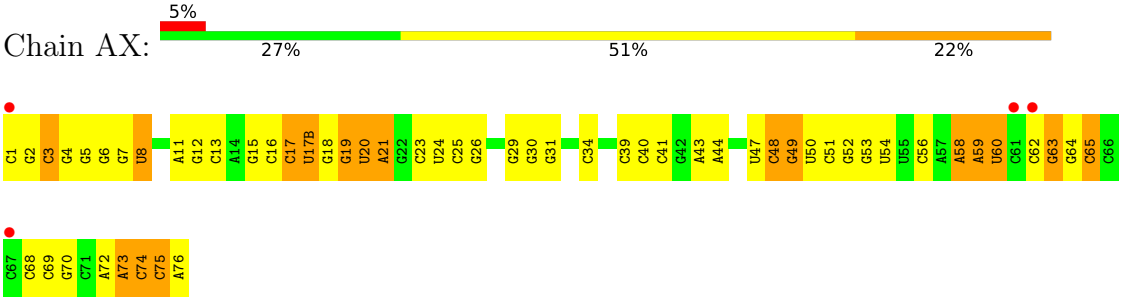
• Molecule 23: tRNA-Gln

Chain CW:



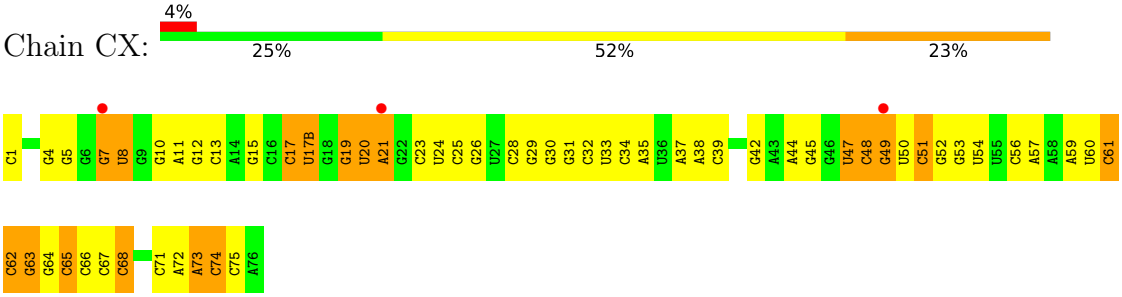
• Molecule 24: tRNA-Met

Chain AX:



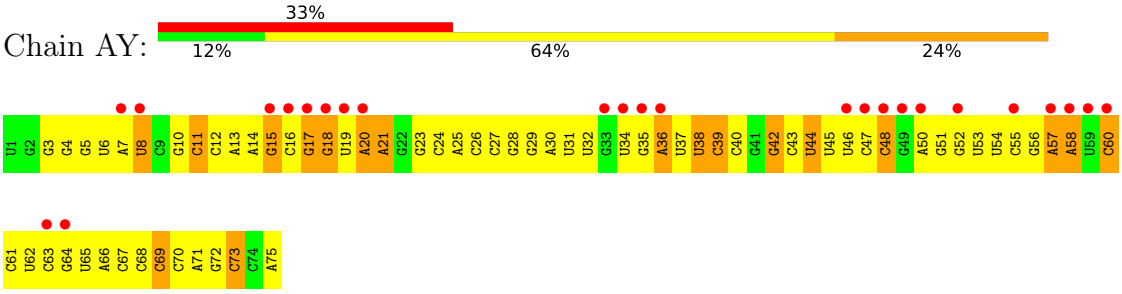
• Molecule 24: tRNA-Met

Chain CX:



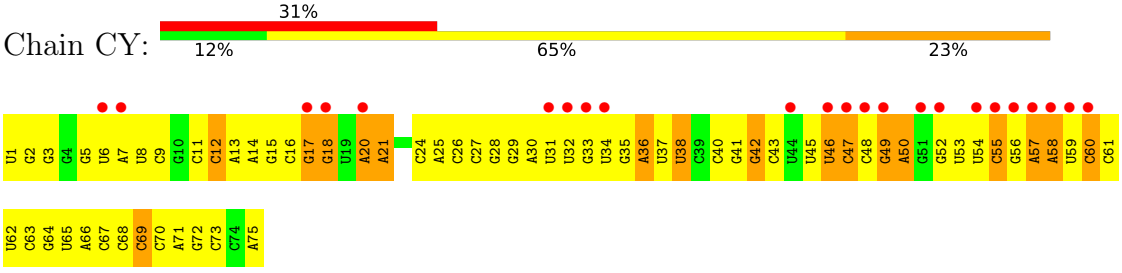
• Molecule 25: tRNA-Gln

Chain AY:



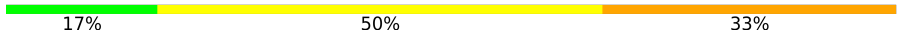
• Molecule 25: tRNA-Gln

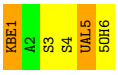
Chain CY:



• Molecule 26: Viomycin

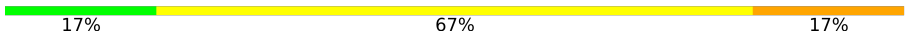
Chain AZ:

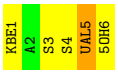




• Molecule 26: Viomycin

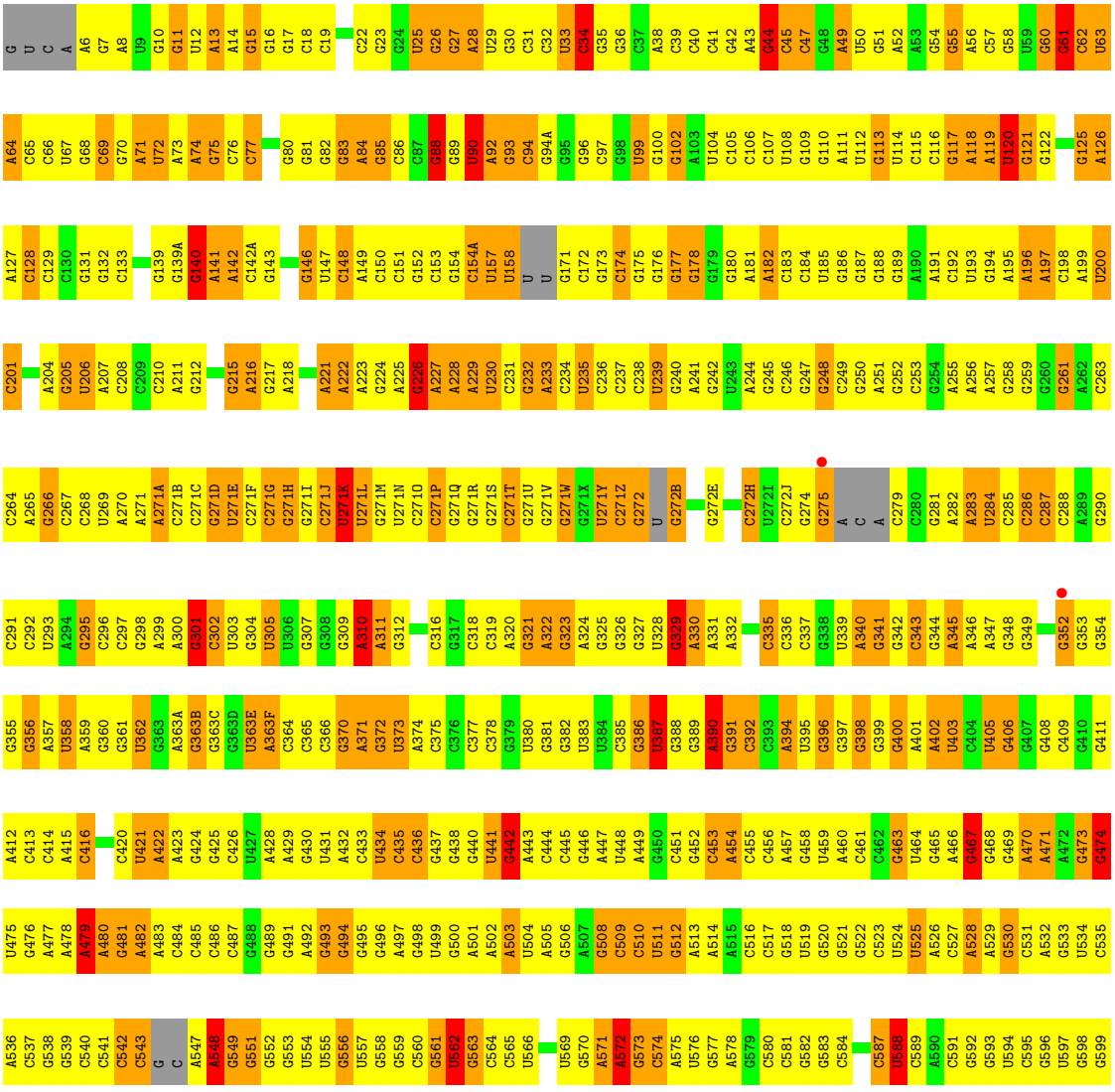
Chain CZ:

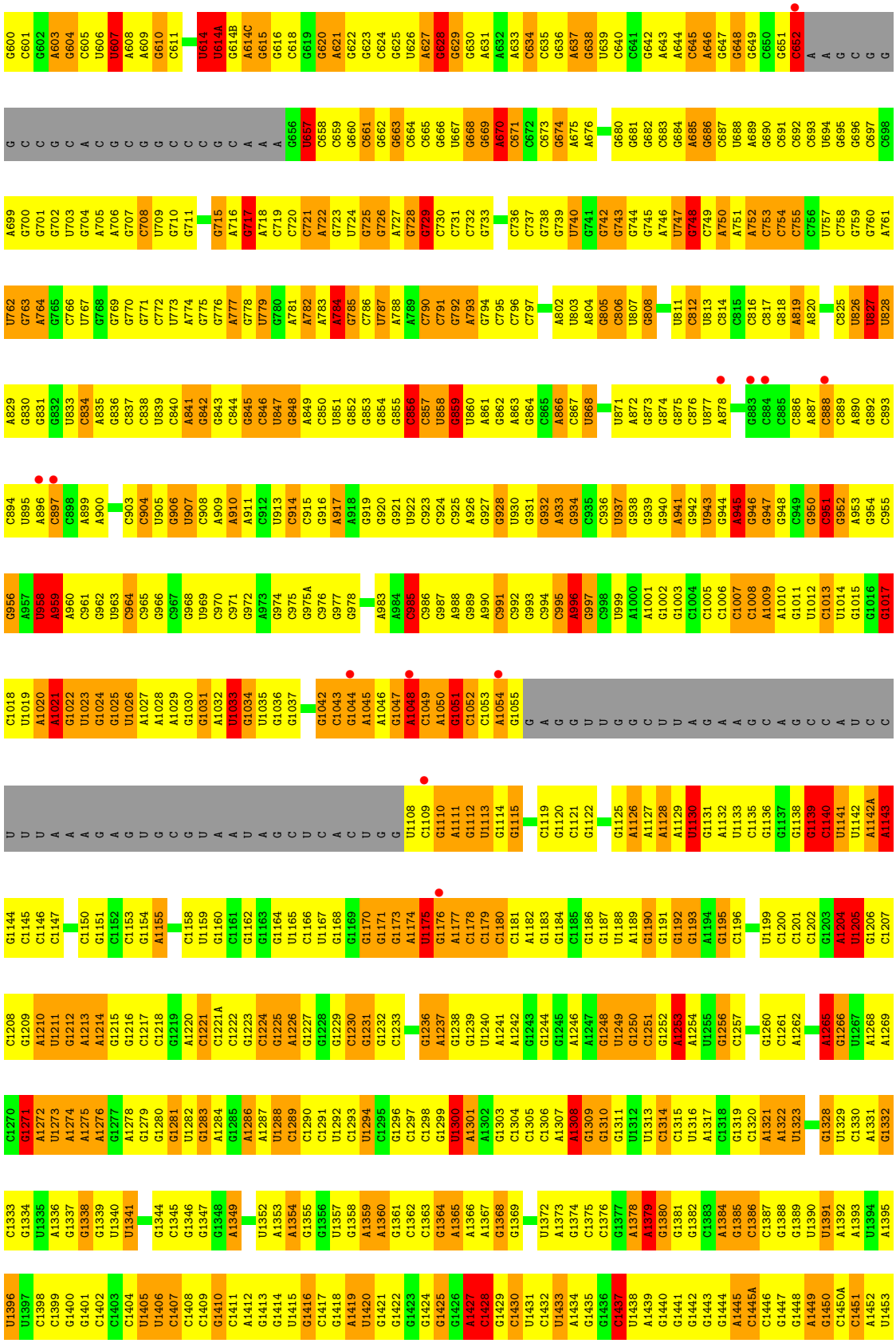


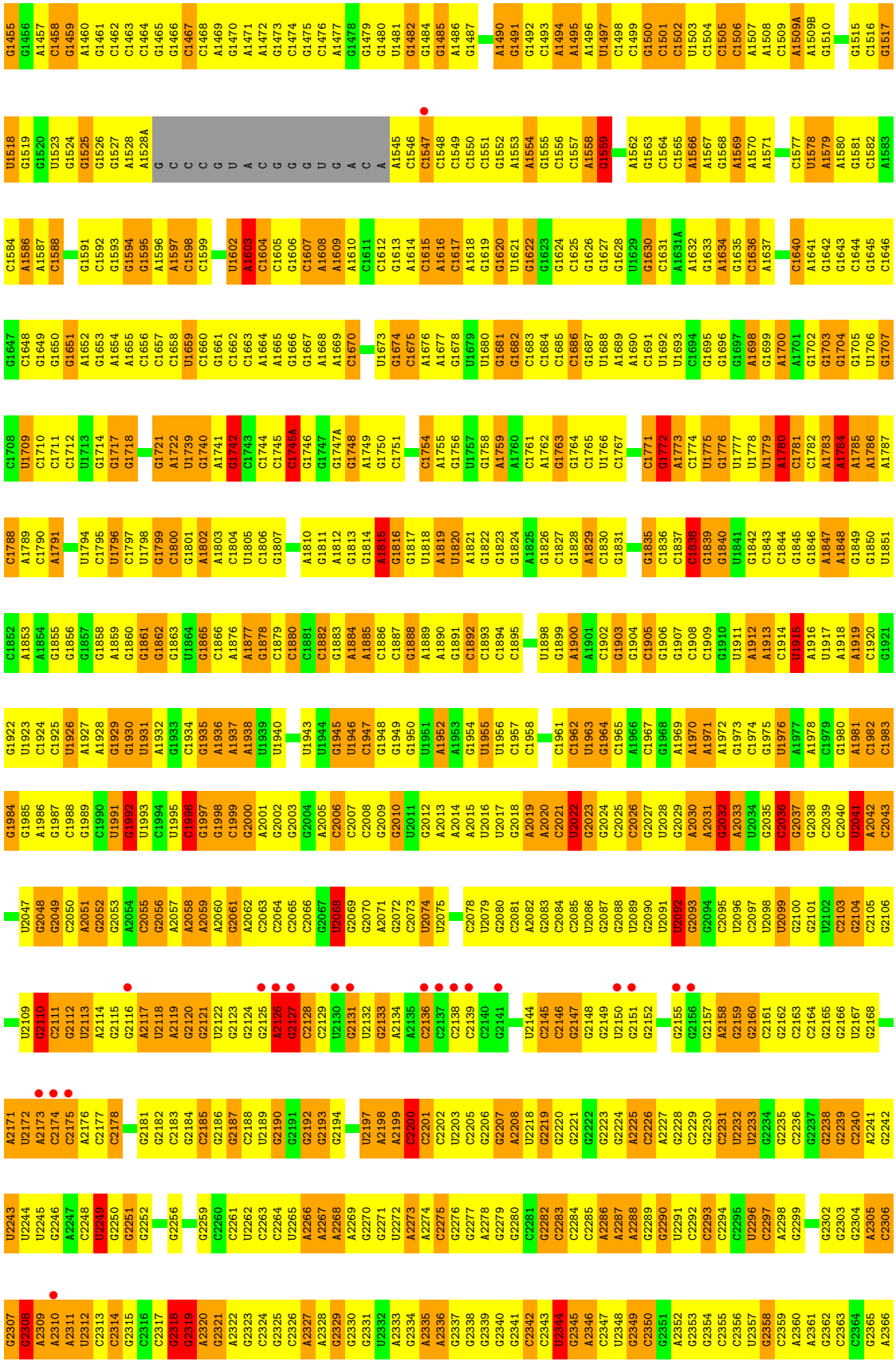


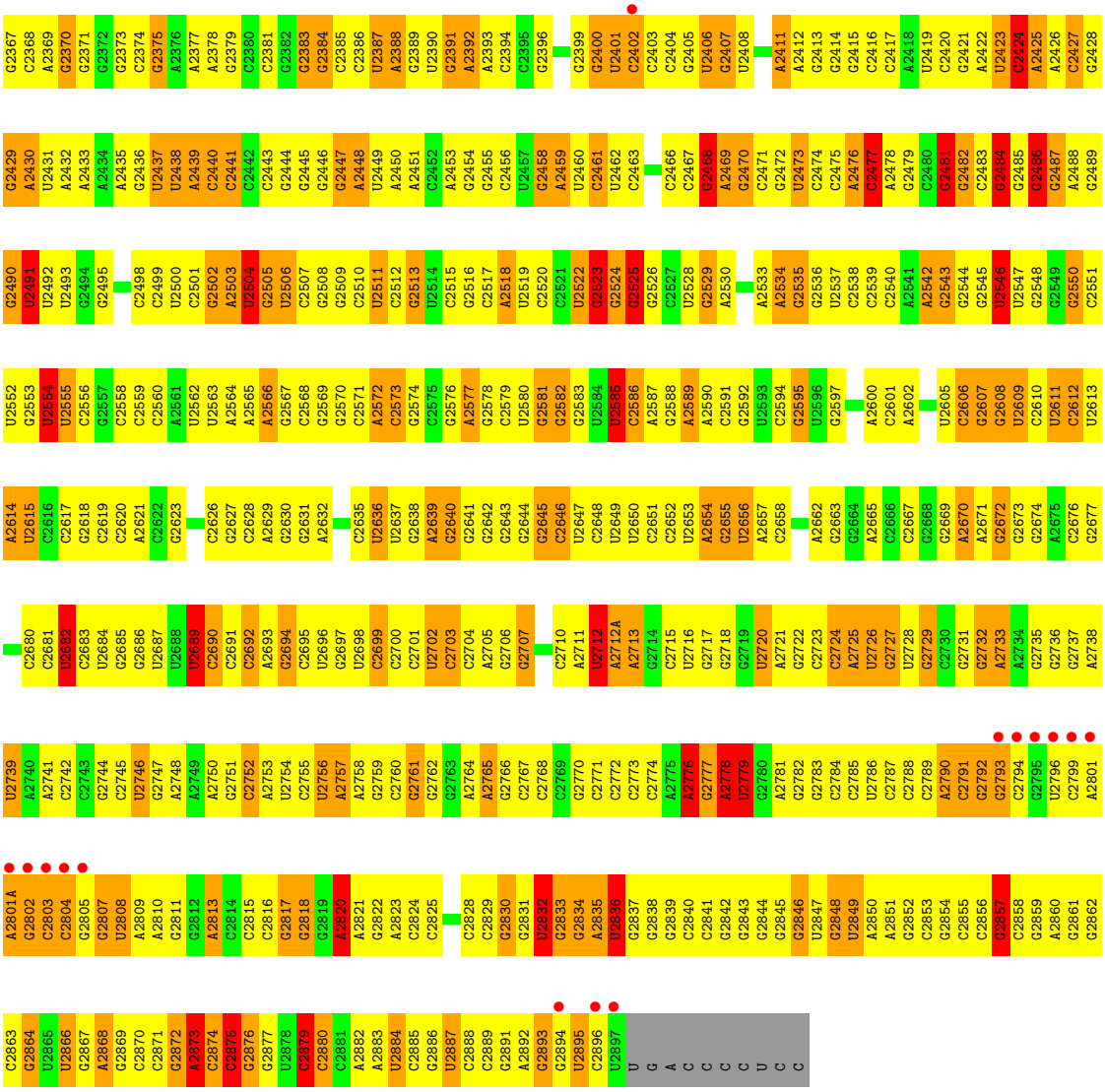
• Molecule 27: 23S ribosomal RNA

Chain BA:



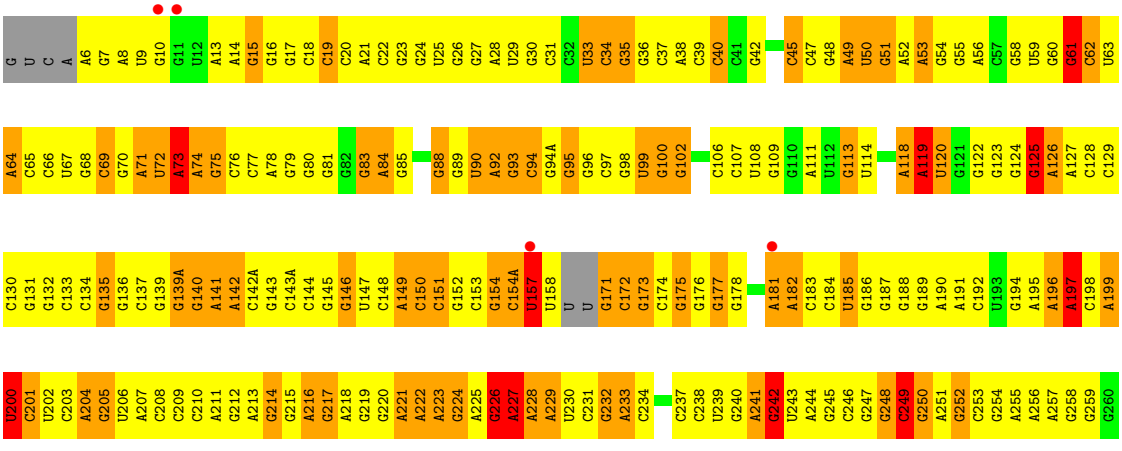


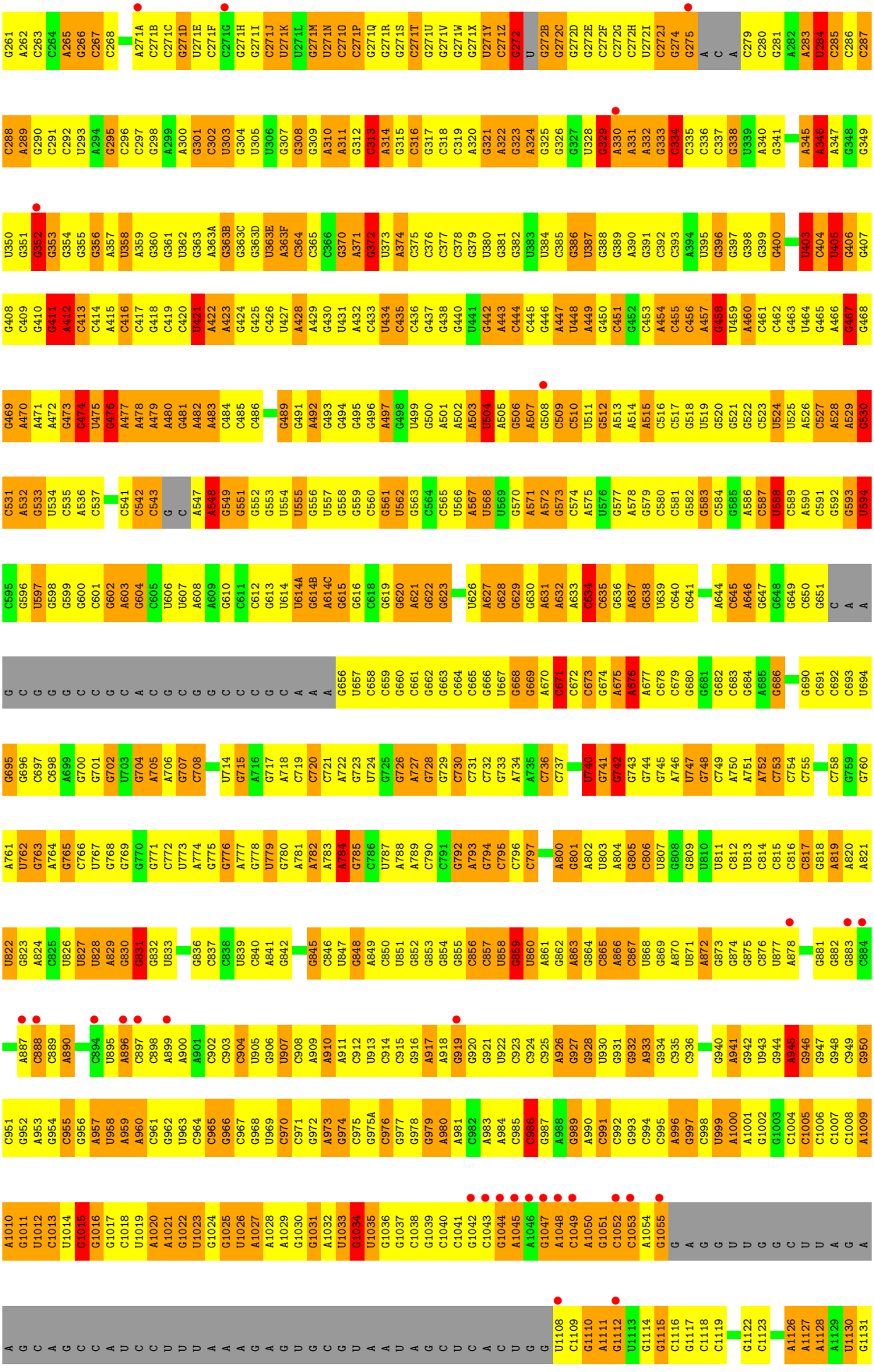


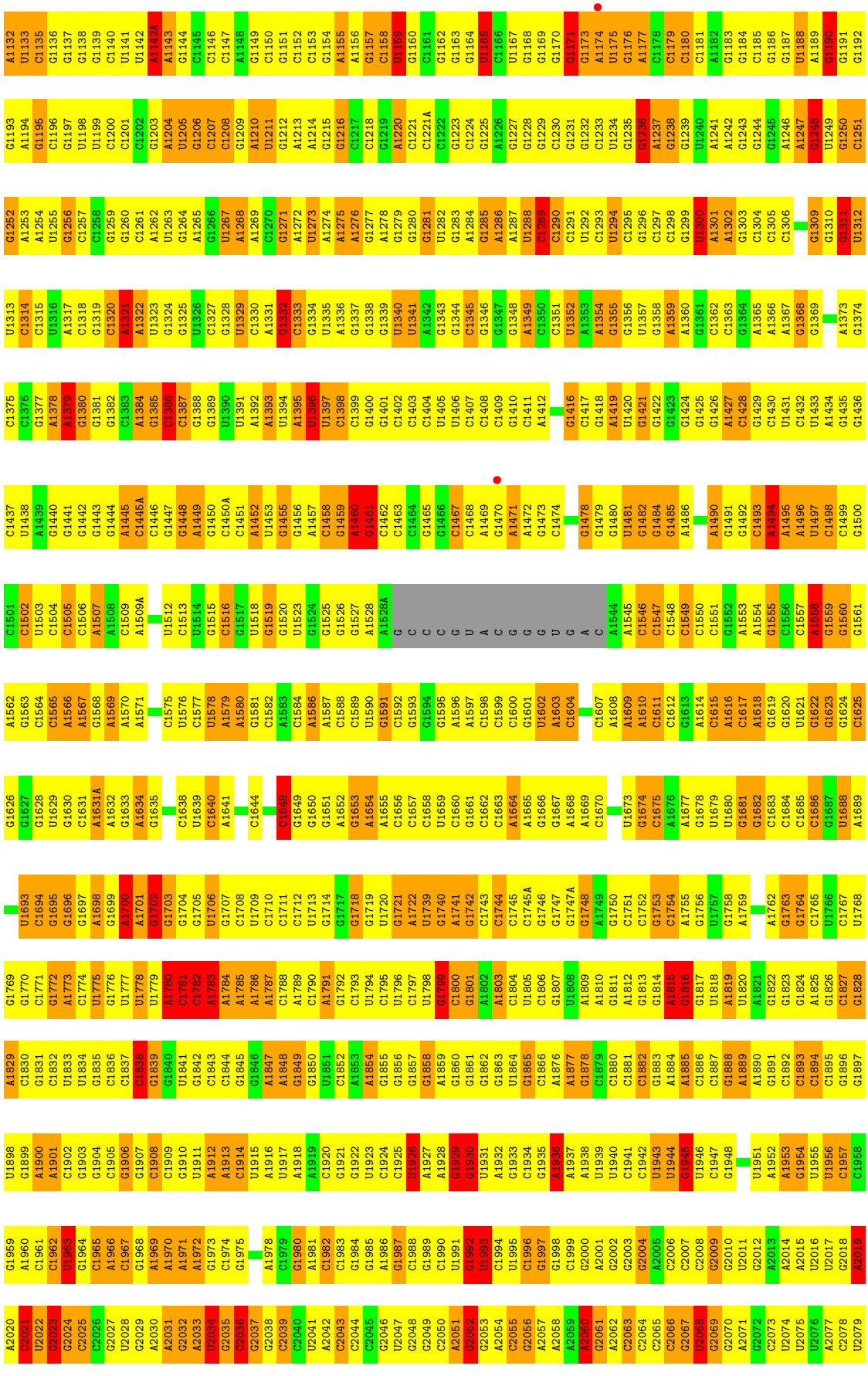


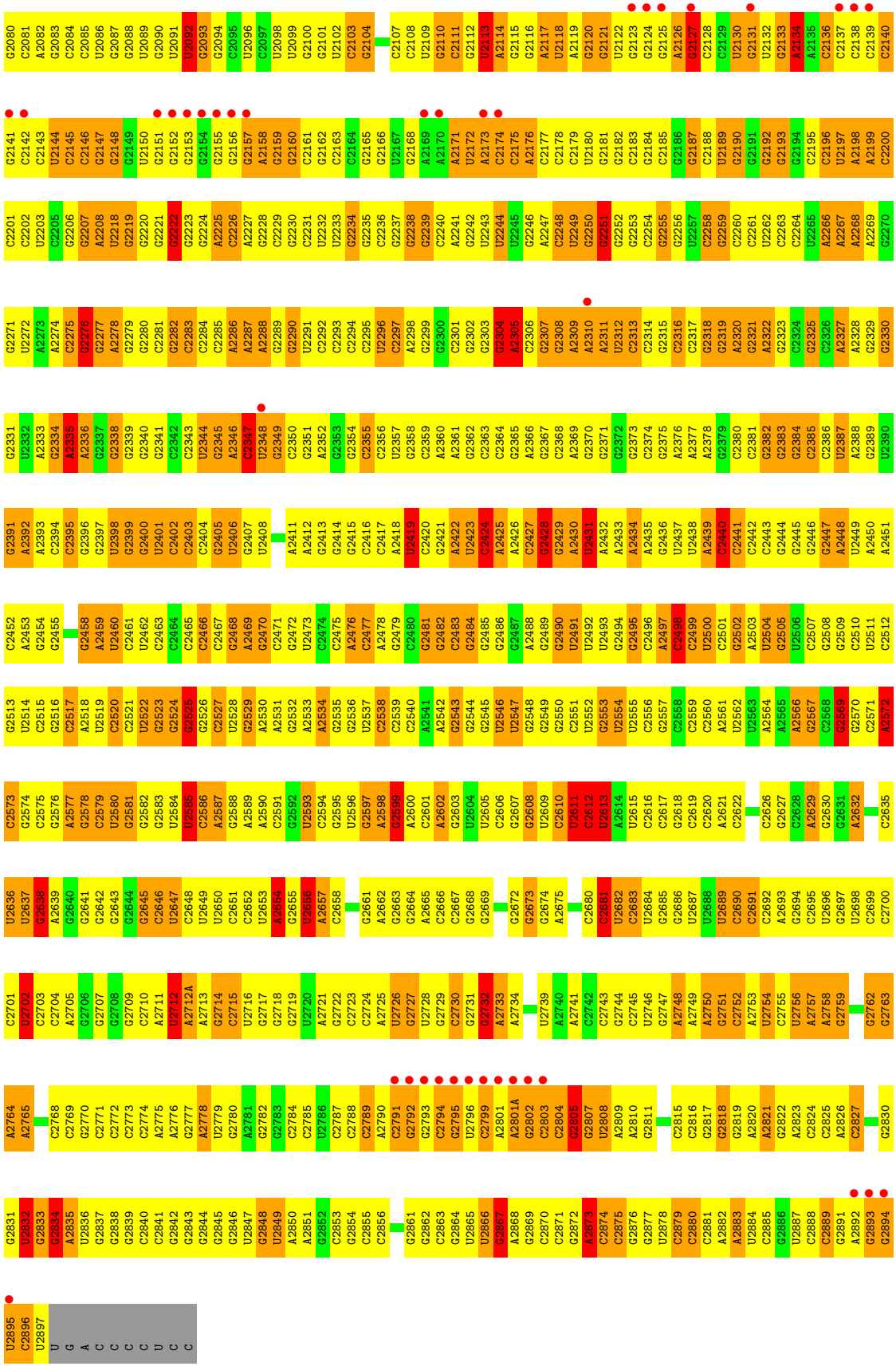
• Molecule 27: 23S ribosomal RNA

Chain DA:



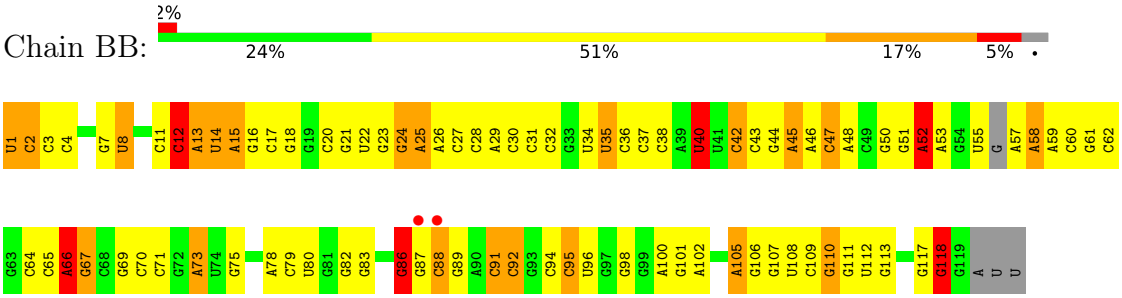






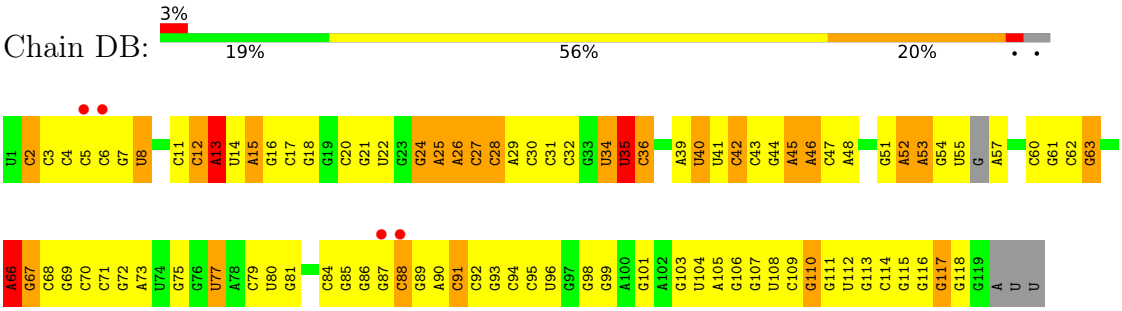
• Molecule 28: 5S ribosomal RNA

Chain BB:



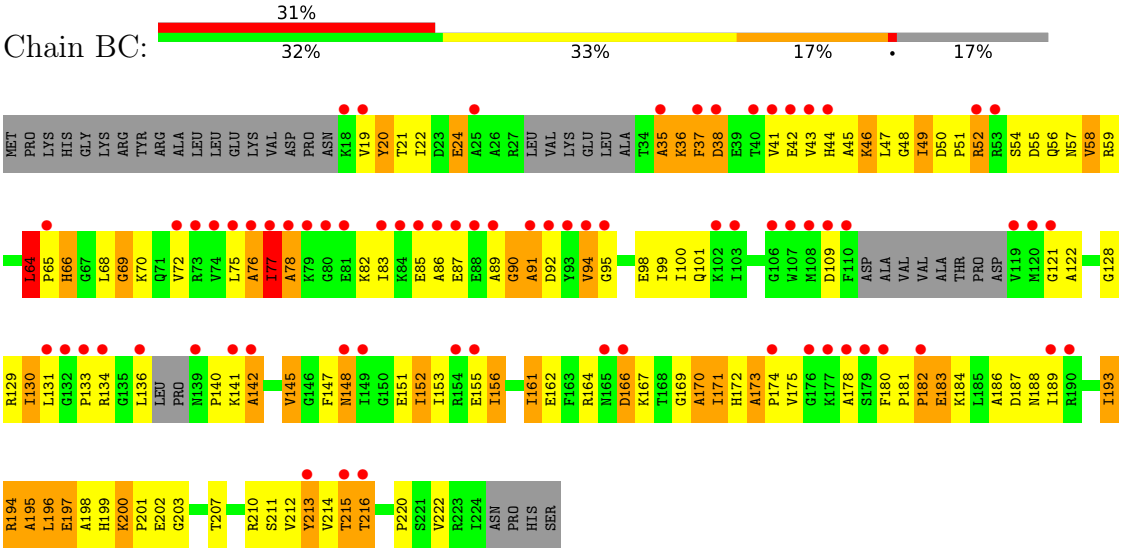
• Molecule 28: 5S ribosomal RNA

Chain DB:



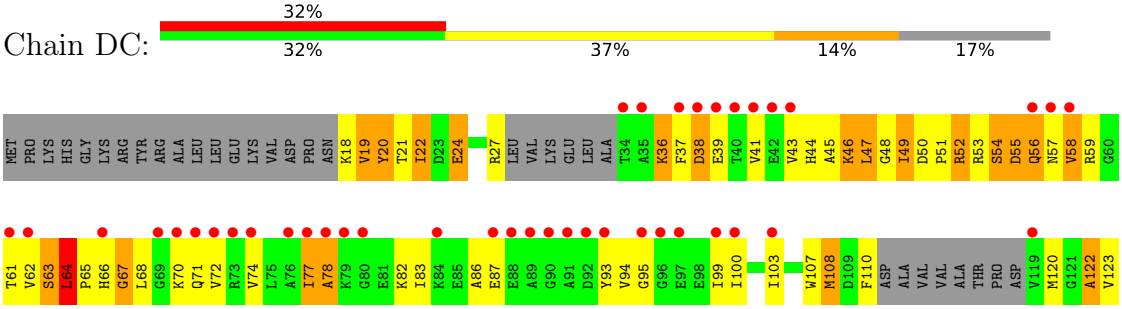
• Molecule 29: 50S ribosomal protein L1

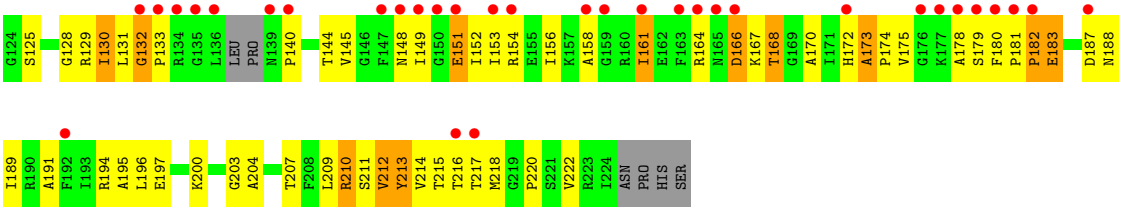
Chain BC:



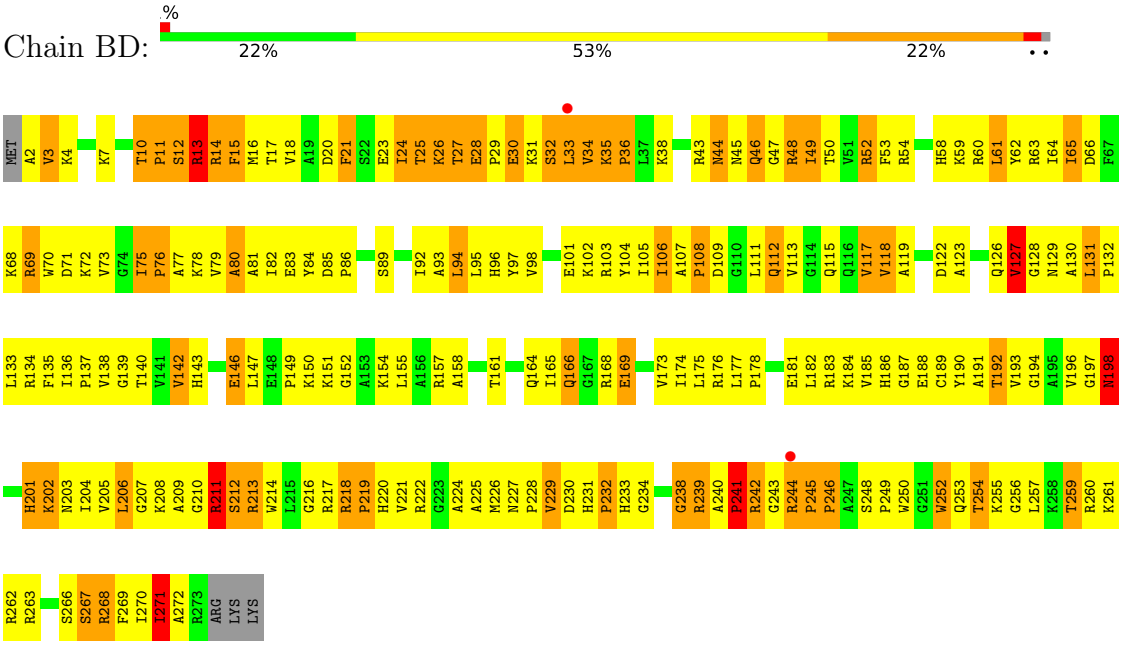
• Molecule 29: 50S ribosomal protein L1

Chain DC:

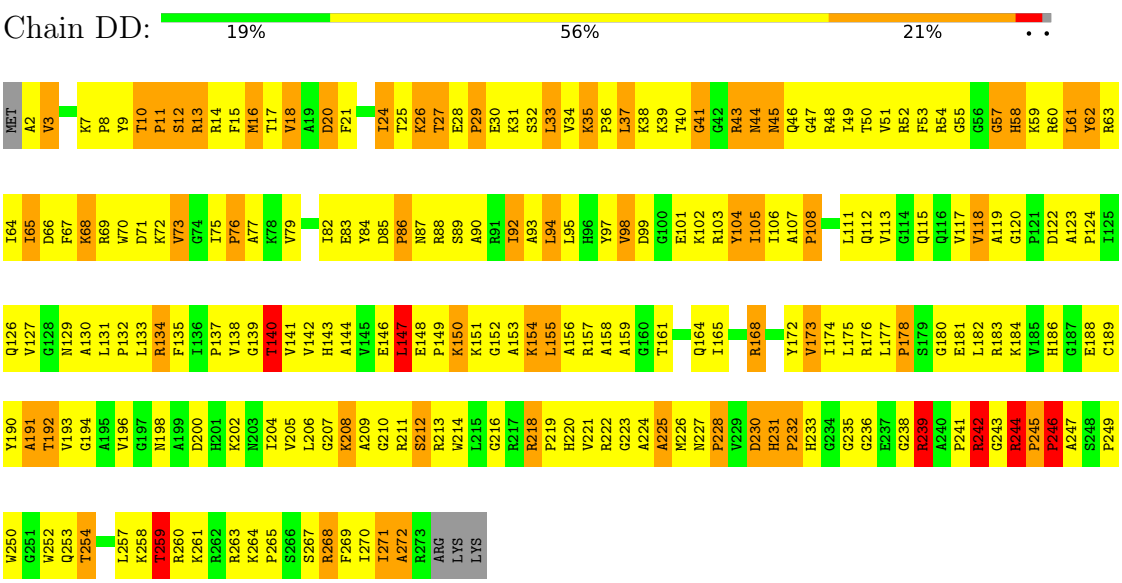




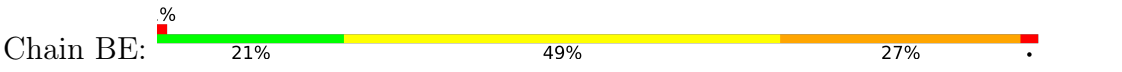
• Molecule 30: 50S ribosomal protein L2

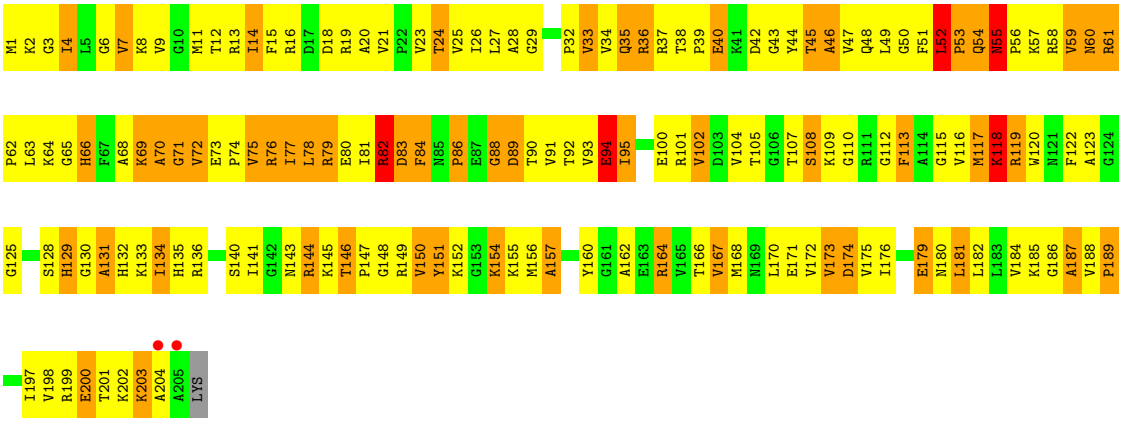


• Molecule 30: 50S ribosomal protein L2

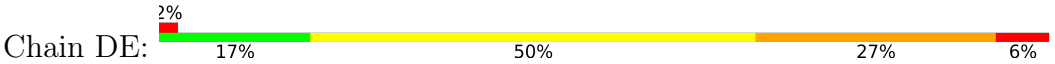


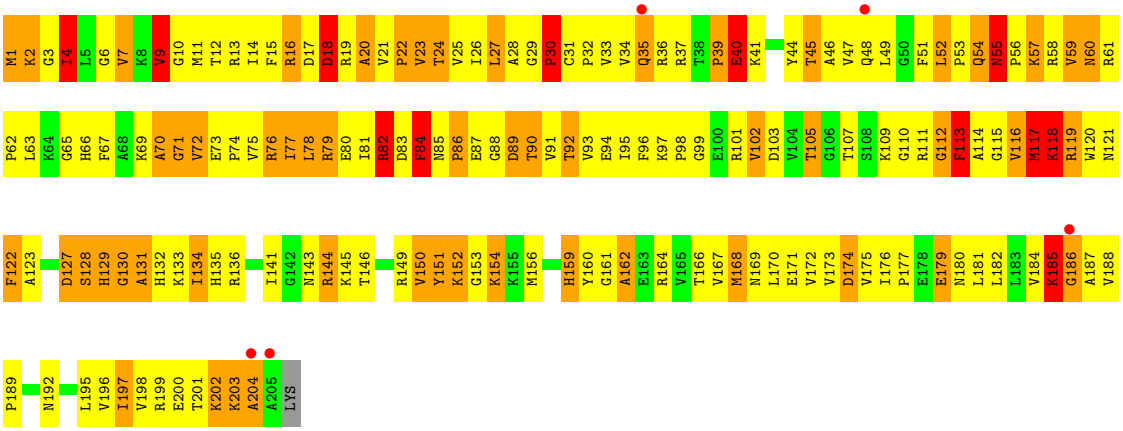
• Molecule 31: 50S ribosomal protein L3



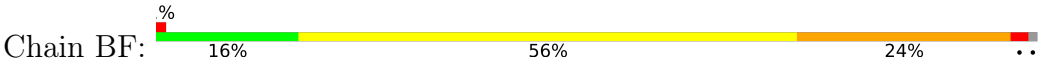


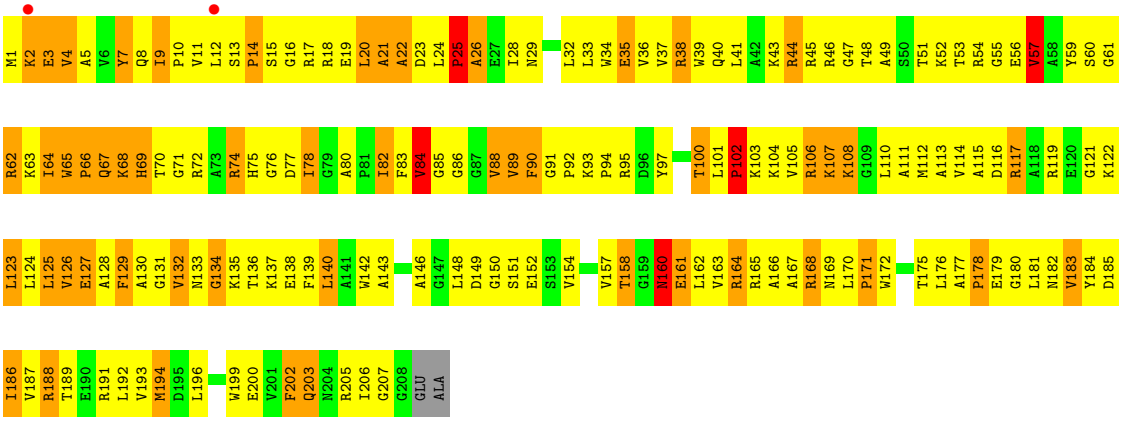
• Molecule 31: 50S ribosomal protein L3



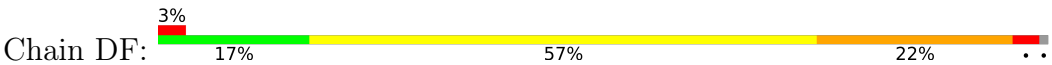


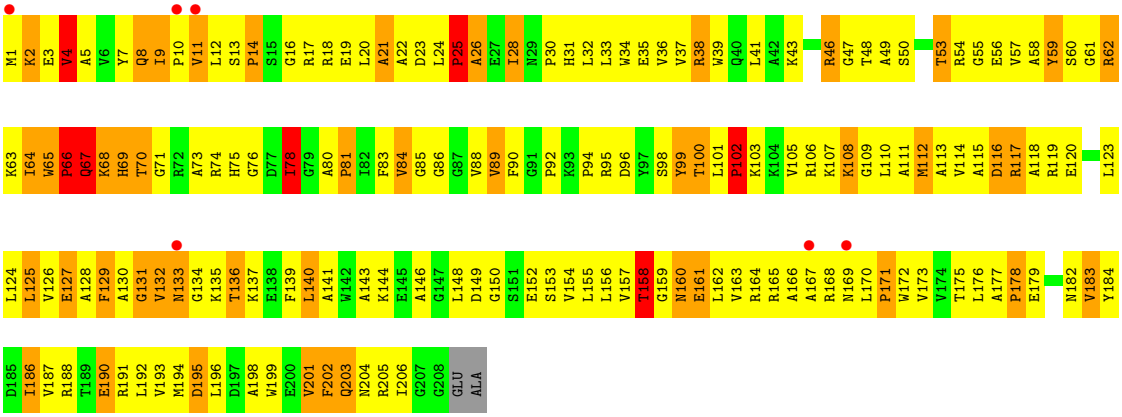
• Molecule 32: 50S ribosomal protein L4





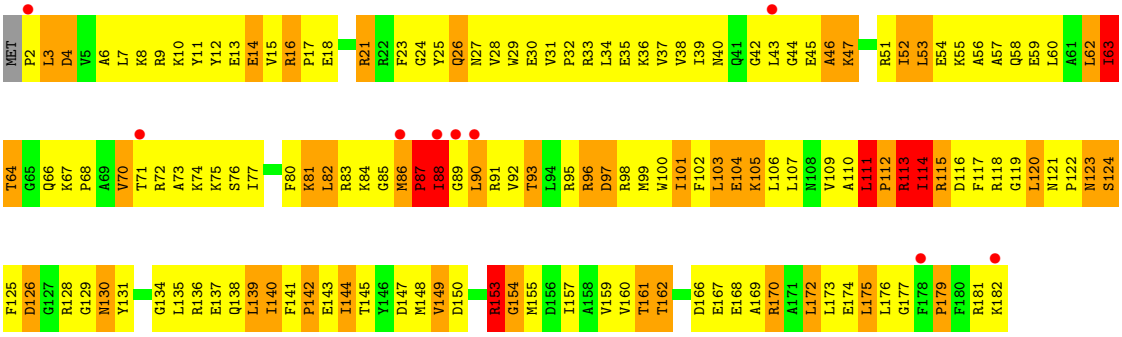
• Molecule 32: 50S ribosomal protein L4





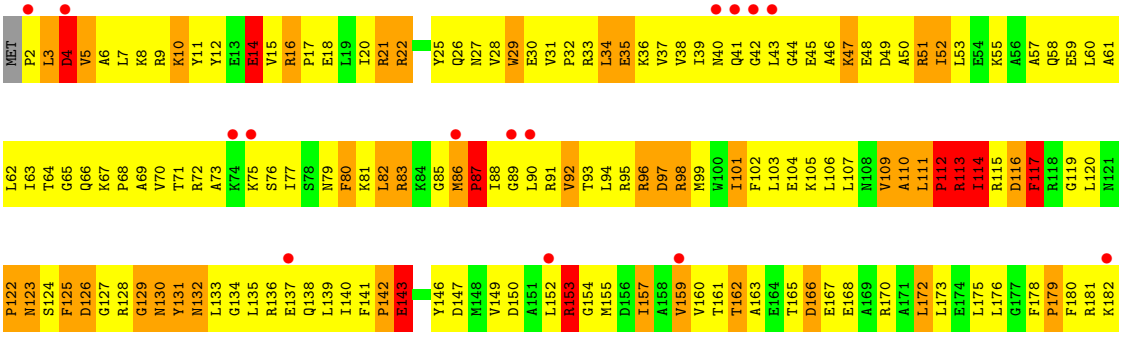
• Molecule 33: 50S ribosomal protein L5

Chain BG:



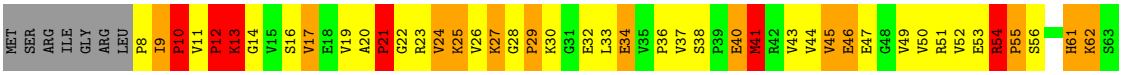
• Molecule 33: 50S ribosomal protein L5

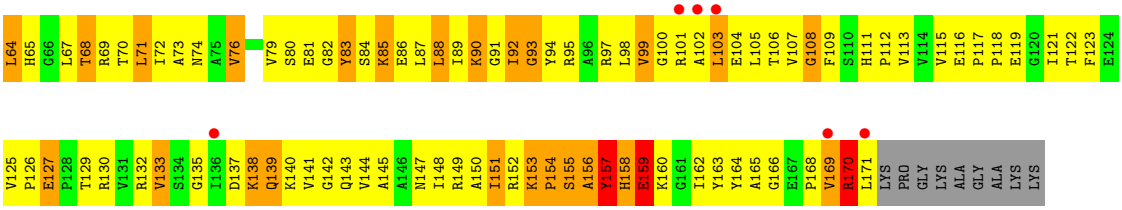
Chain DG:



• Molecule 34: 50S ribosomal protein L6

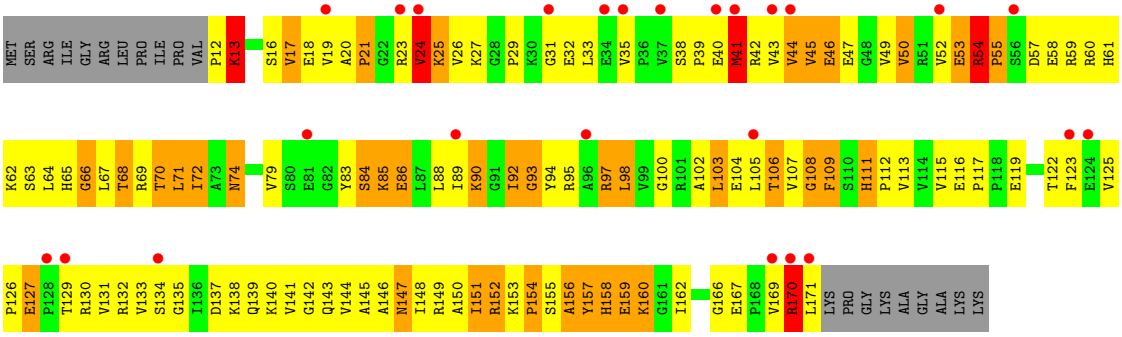
Chain BH:





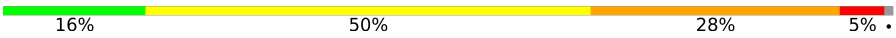
• Molecule 34: 50S ribosomal protein L6

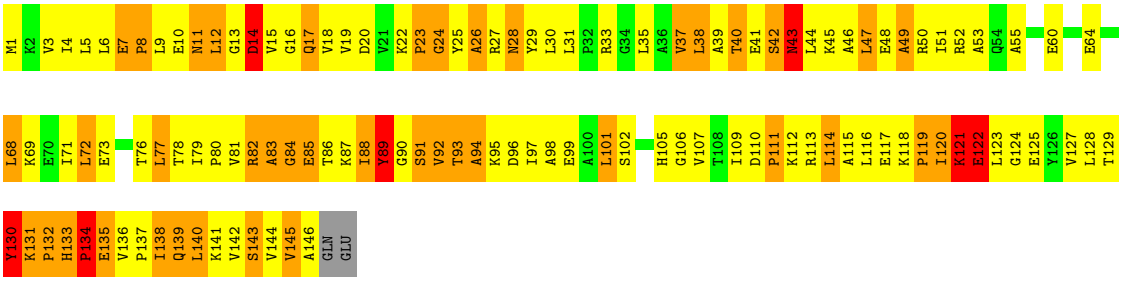
Chain DH:



• Molecule 35: 50S ribosomal protein L9

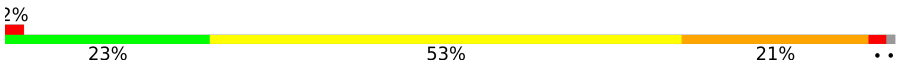
Chain BI:

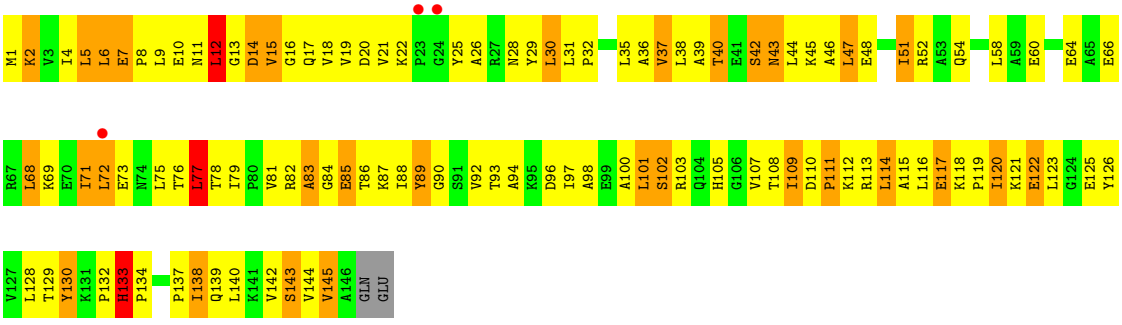




• Molecule 35: 50S ribosomal protein L9

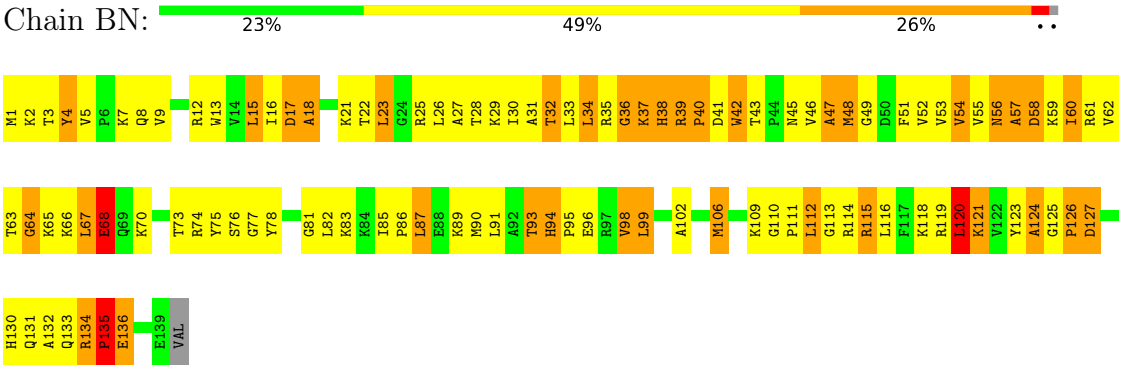
Chain DI:





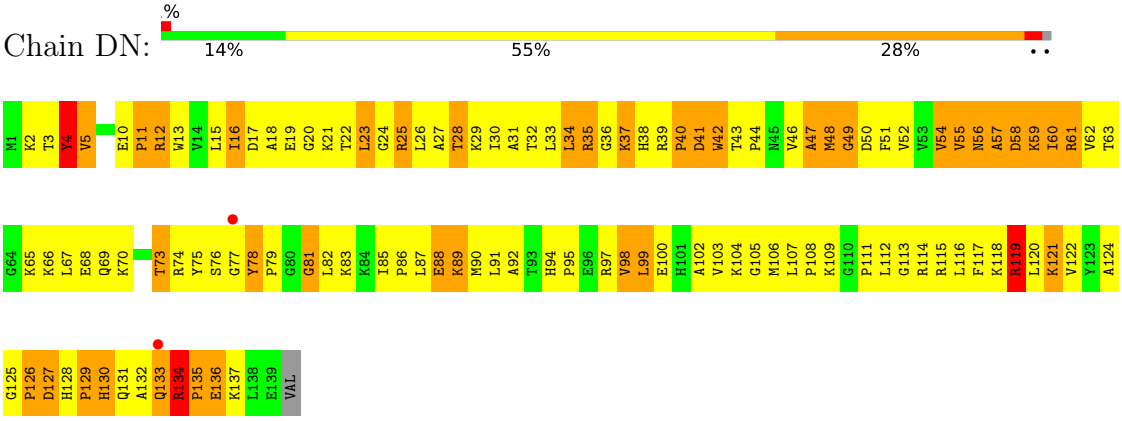
• Molecule 36: 50S ribosomal protein L13

Chain BN:



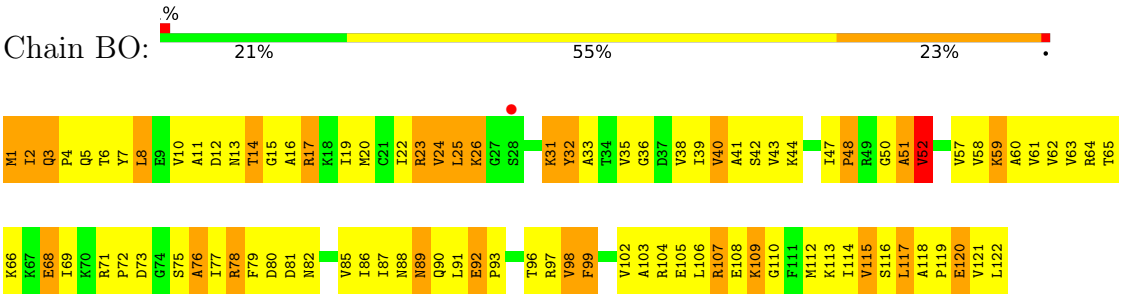
• Molecule 36: 50S ribosomal protein L13

Chain DN:



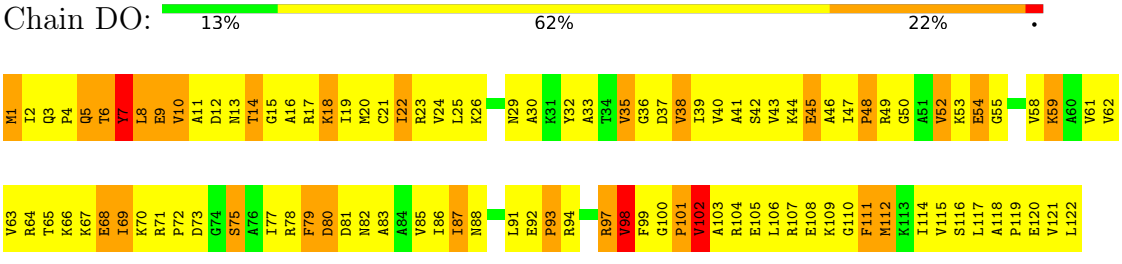
• Molecule 37: 50S ribosomal protein L14

Chain BO:



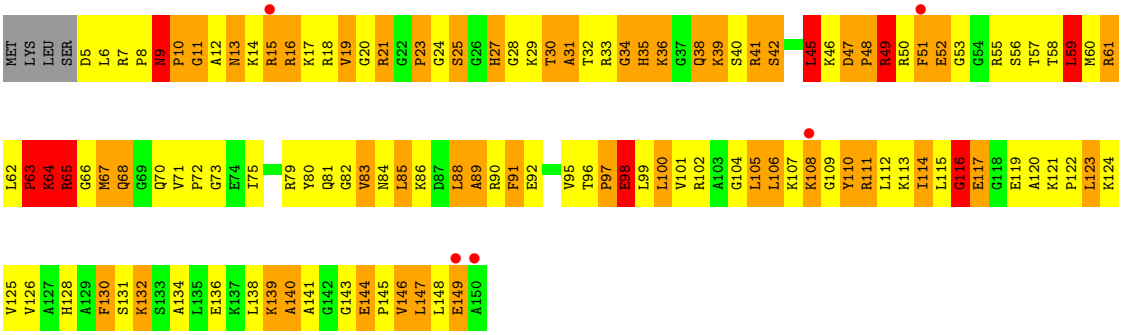
• Molecule 37: 50S ribosomal protein L14

Chain DO:



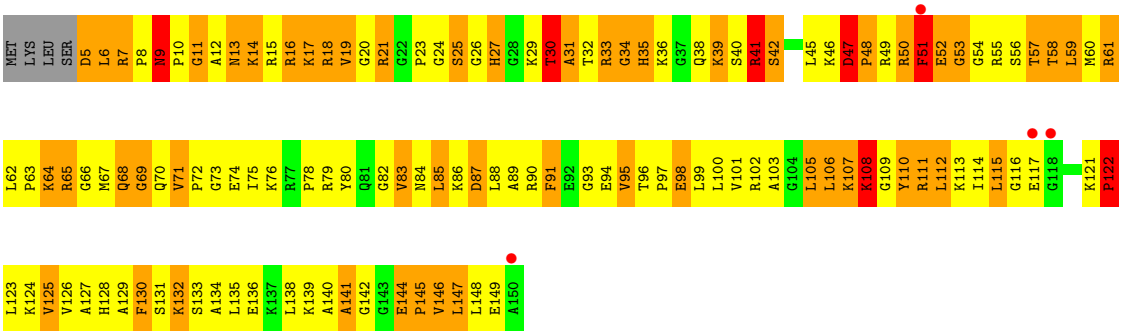
• Molecule 38: 50S ribosomal protein L15

Chain BP:



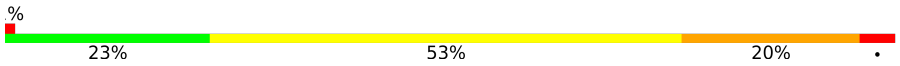
• Molecule 38: 50S ribosomal protein L15

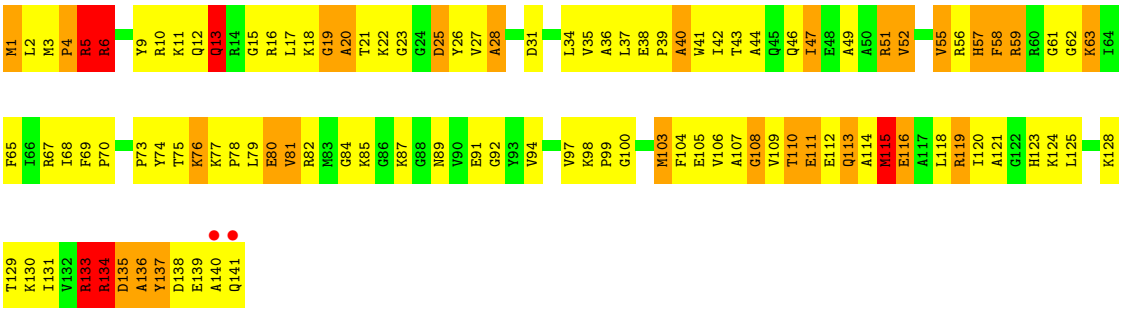
Chain DP:



• Molecule 39: 50S ribosomal protein L16

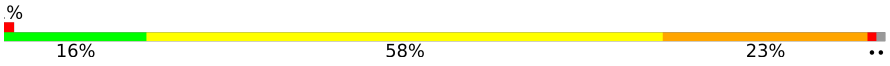
Chain BQ:

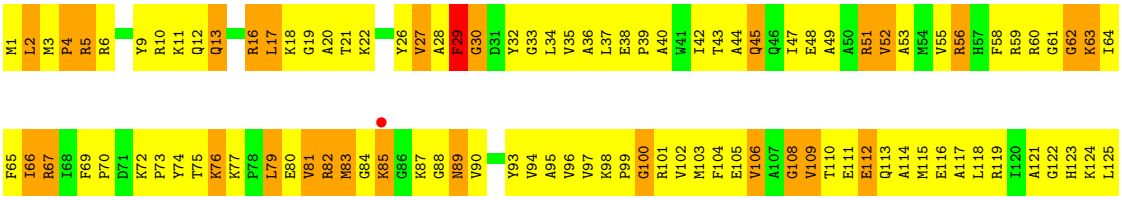




• Molecule 39: 50S ribosomal protein L16

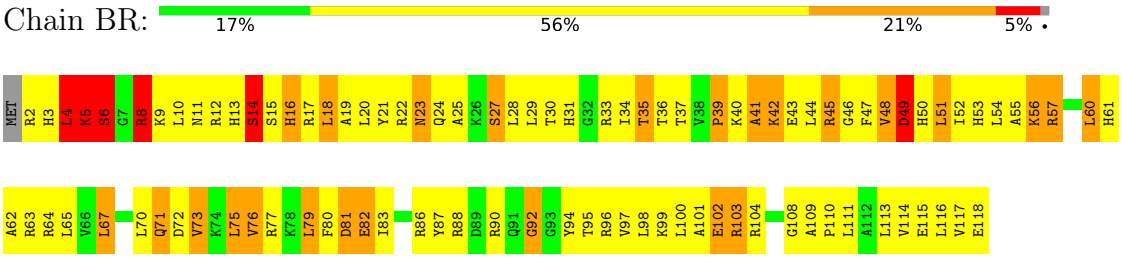
Chain DQ:





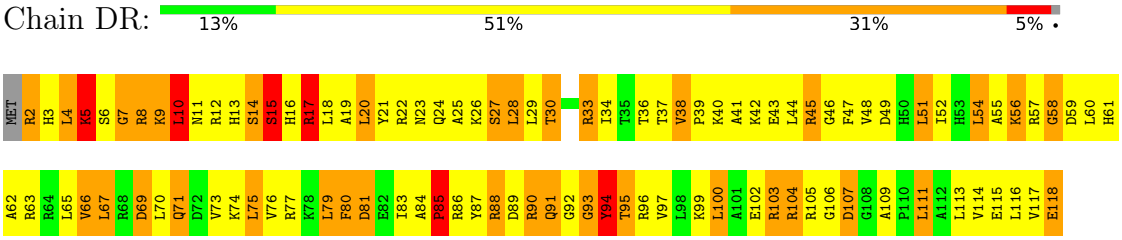
• Molecule 40: 50S ribosomal protein L17

Chain BR:



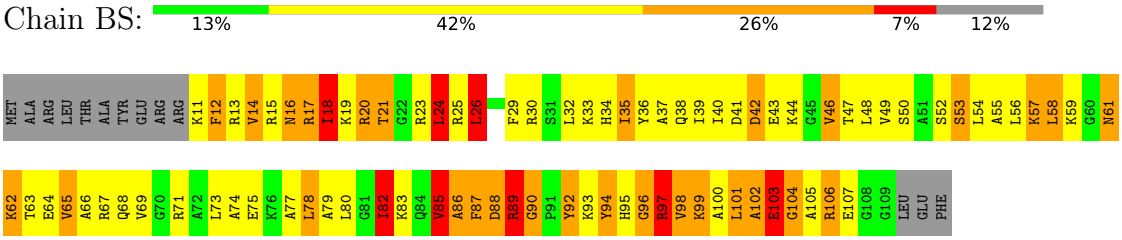
• Molecule 40: 50S ribosomal protein L17

Chain DR:



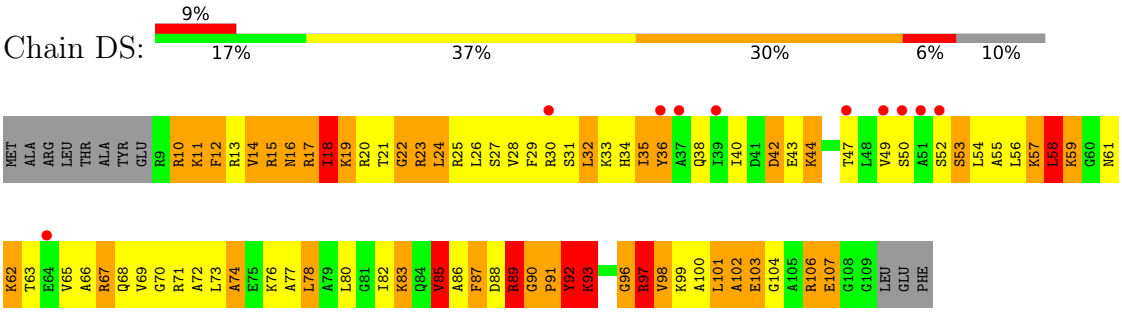
• Molecule 41: 50S ribosomal protein L18

Chain BS:



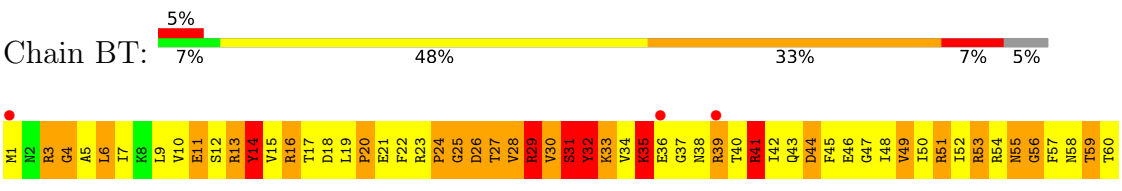
• Molecule 41: 50S ribosomal protein L18

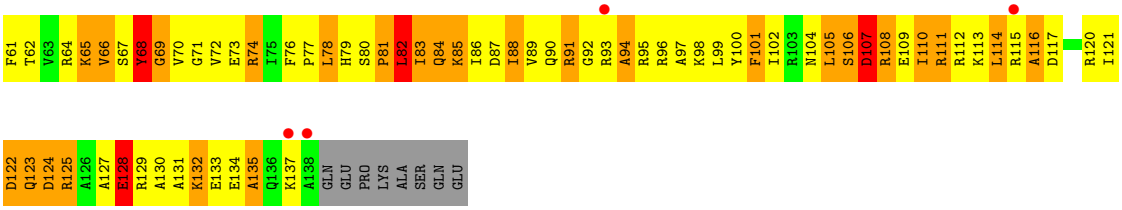
Chain DS:



• Molecule 42: 50S ribosomal protein L19

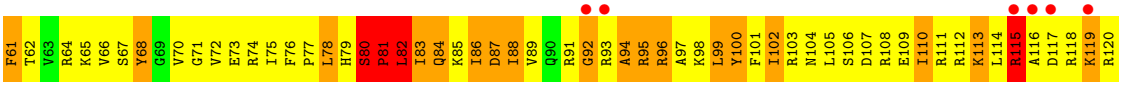
Chain BT:

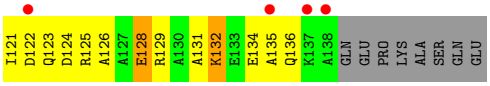




• Molecule 42: 50S ribosomal protein L19

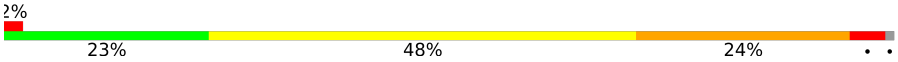
Chain DT:

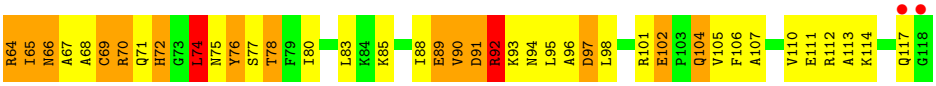




• Molecule 43: 50S ribosomal protein L20

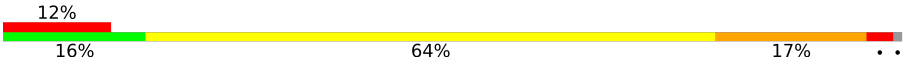
Chain BU:

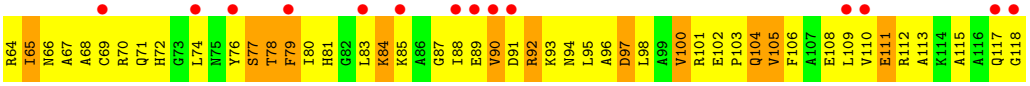




• Molecule 43: 50S ribosomal protein L20

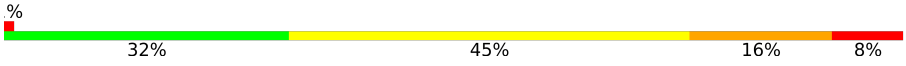
Chain DU:

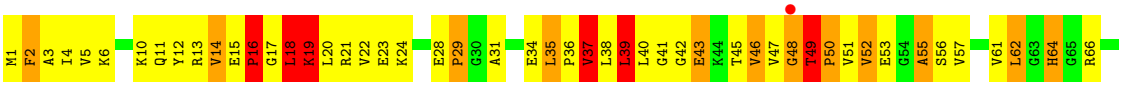


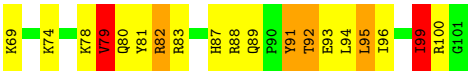


• Molecule 44: 50S ribosomal protein L21

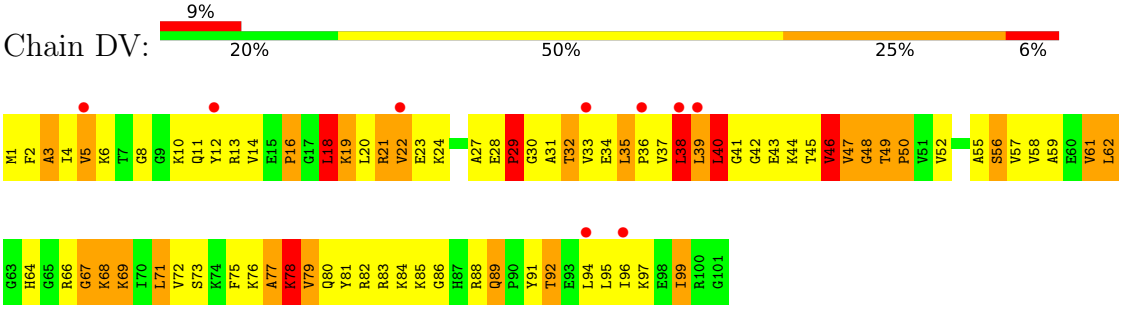
Chain BV:





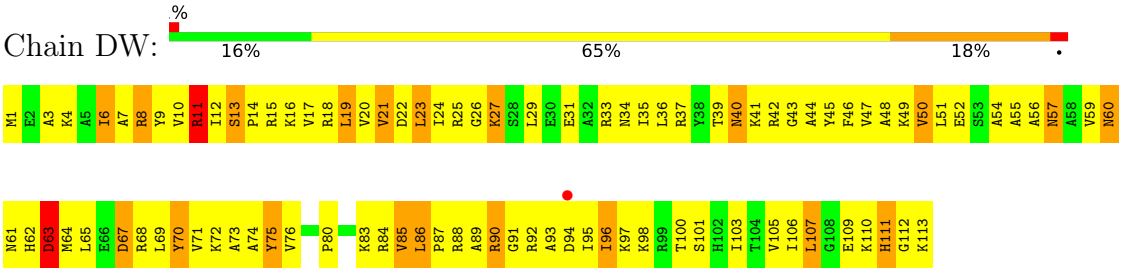


• Molecule 44: 50S ribosomal protein L21

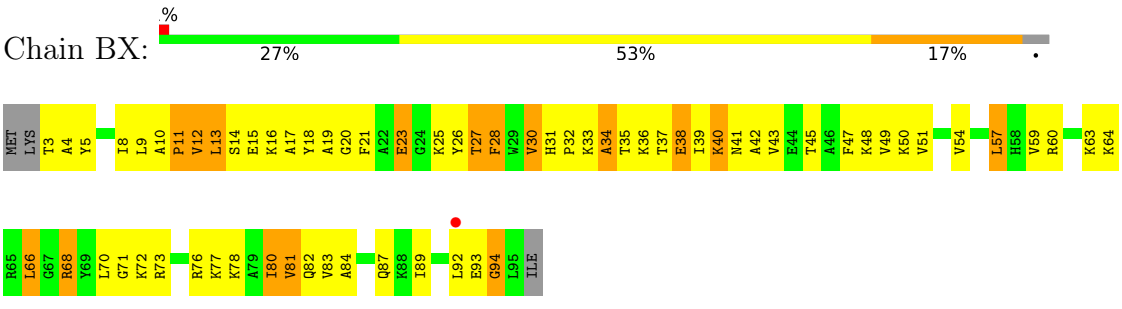


• Molecule 45: 50S ribosomal protein L22

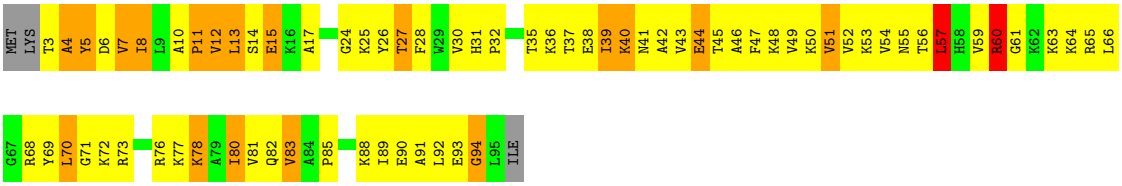
• Molecule 45: 50S ribosomal protein L22



• Molecule 46: 50S ribosomal protein L23



• Molecule 46: 50S ribosomal protein L23

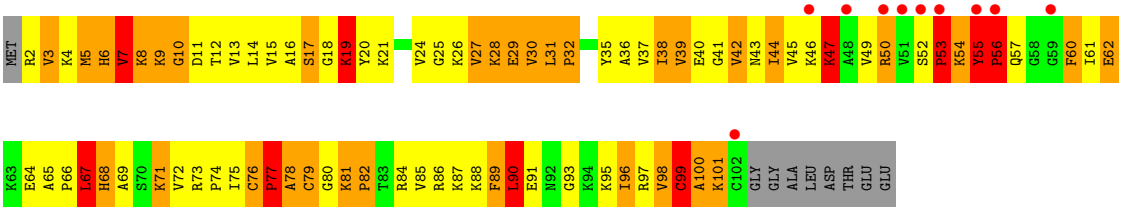


• Molecule 47: 50S ribosomal protein L24

Chain BY:

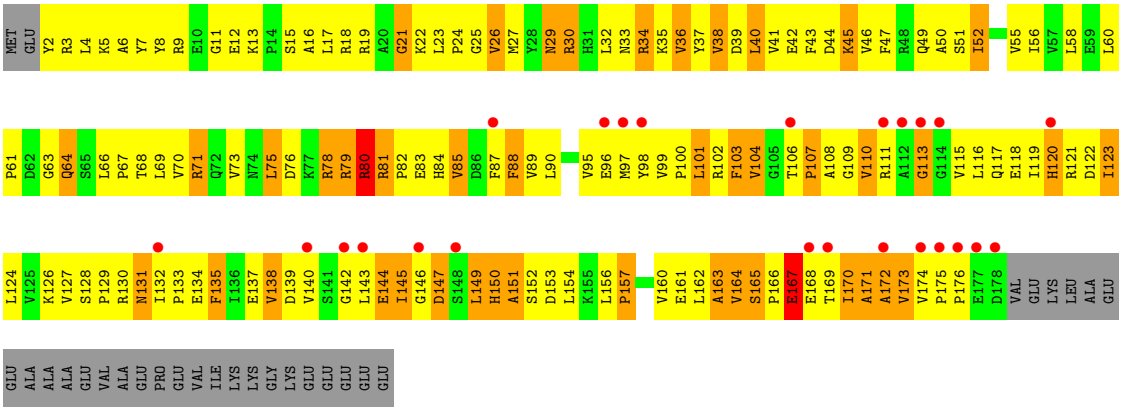
• Molecule 47: 50S ribosomal protein L24

Chain DY:



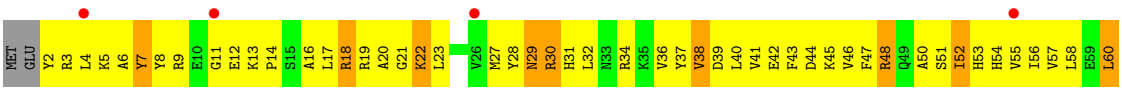
• Molecule 48: 50S ribosomal protein L25

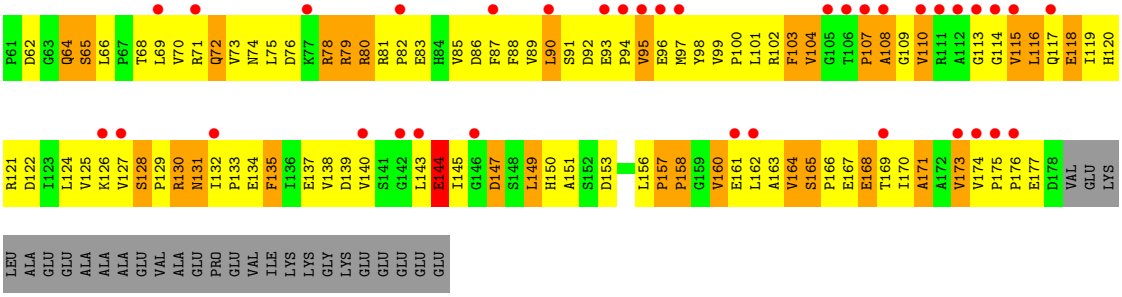
Chain BZ:



• Molecule 48: 50S ribosomal protein L25

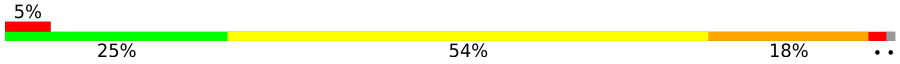
Chain DZ:

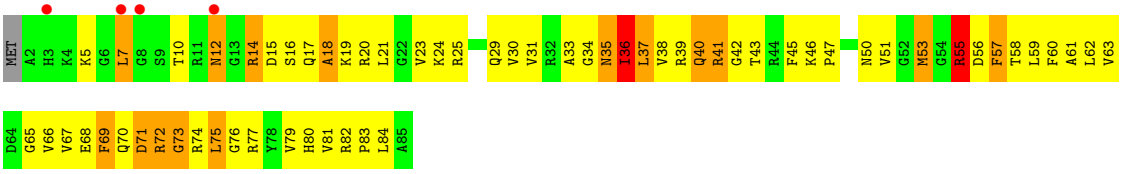




• Molecule 49: 50S ribosomal protein L27

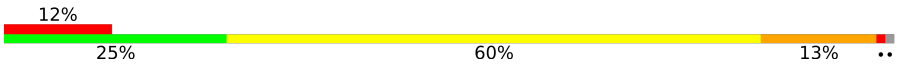
Chain B0:

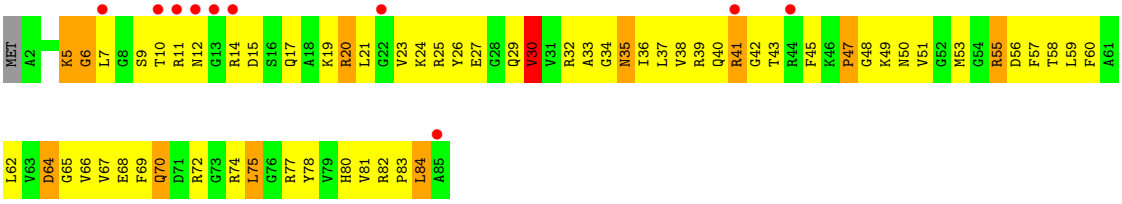




• Molecule 49: 50S ribosomal protein L27

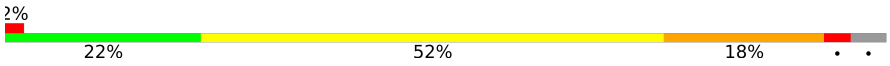
Chain D0:

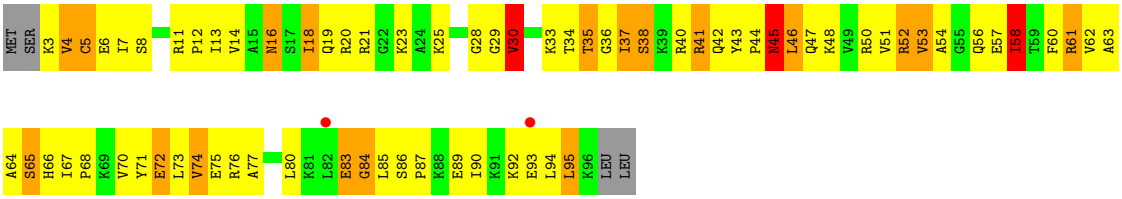




• Molecule 50: 50S ribosomal protein L28

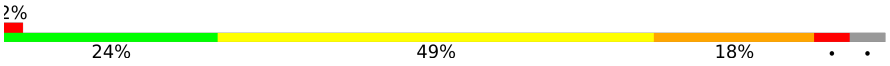
Chain B1:

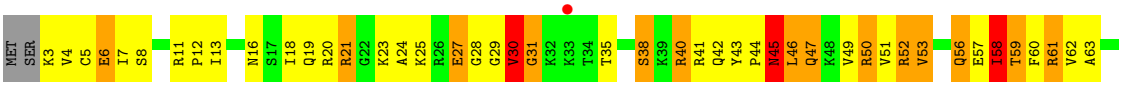


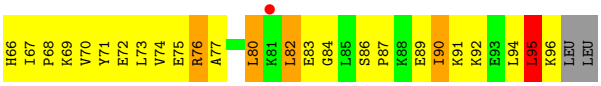


• Molecule 50: 50S ribosomal protein L28

Chain D1:

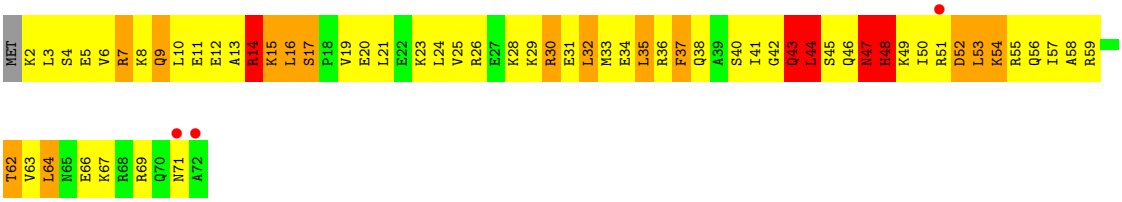






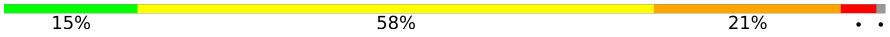
• Molecule 51: 50S ribosomal protein L29

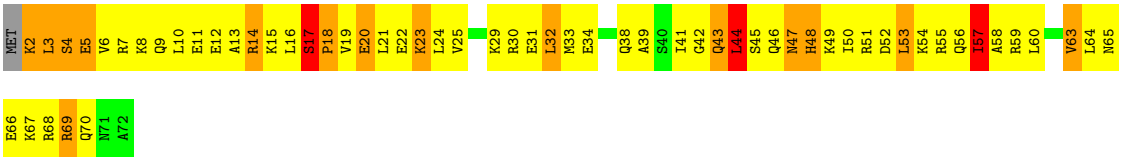
Chain B2:



• Molecule 51: 50S ribosomal protein L29

Chain D2:



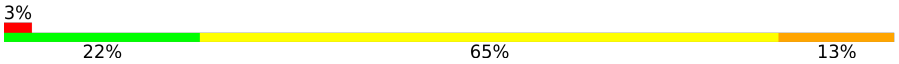


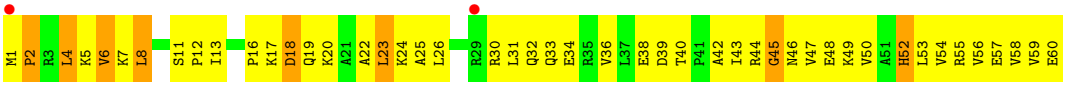
• Molecule 52: 50S ribosomal protein L30

Chain B3:

• Molecule 52: 50S ribosomal protein L30

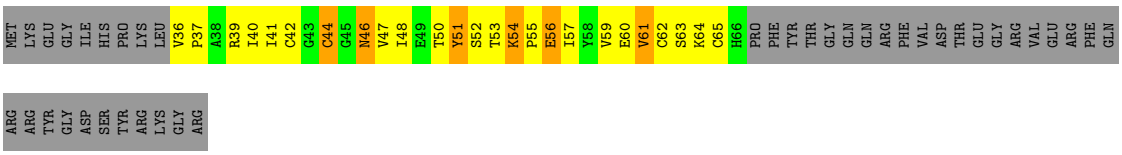
Chain D3:





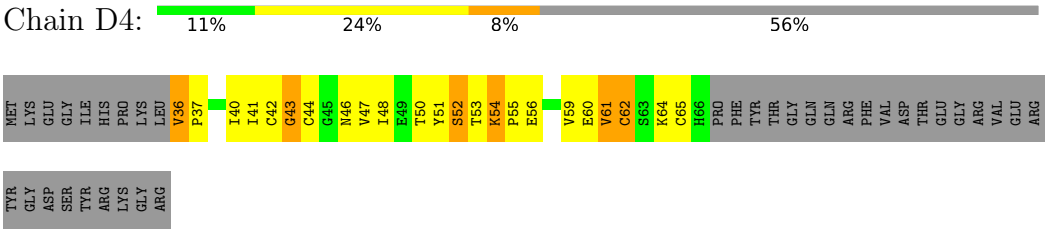
• Molecule 53: 50S ribosomal protein L31

Chain B4:



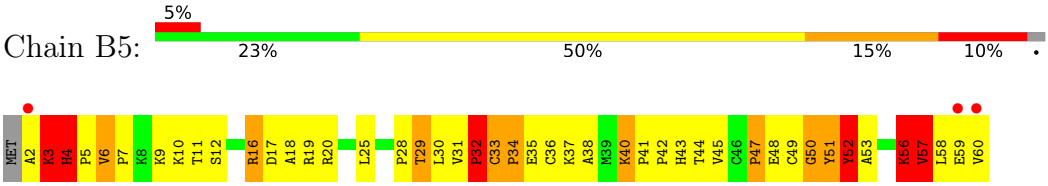
• Molecule 53: 50S ribosomal protein L31

Chain D4:



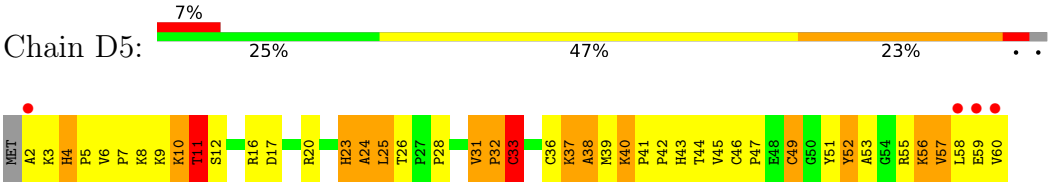
• Molecule 54: 50S ribosomal protein L32

Chain B5:



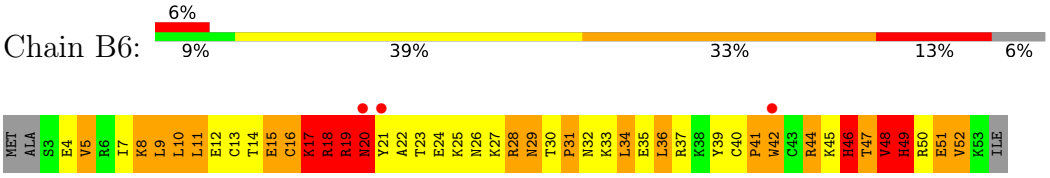
• Molecule 54: 50S ribosomal protein L32

Chain D5:



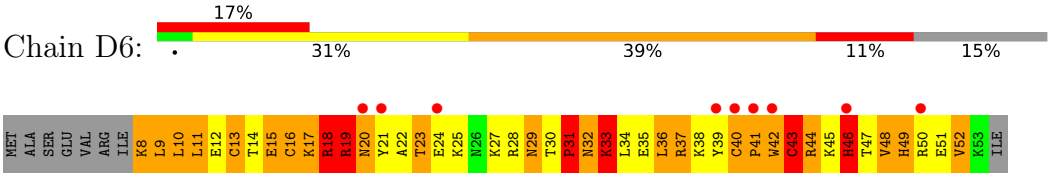
• Molecule 55: 50S ribosomal protein L33

Chain B6:



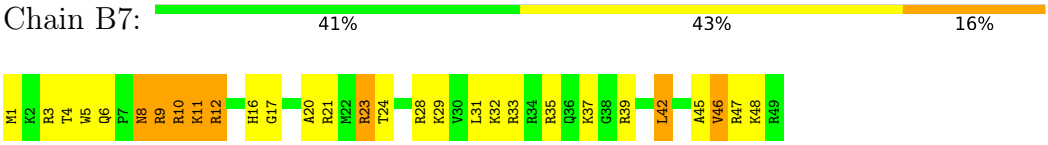
• Molecule 55: 50S ribosomal protein L33

Chain D6:



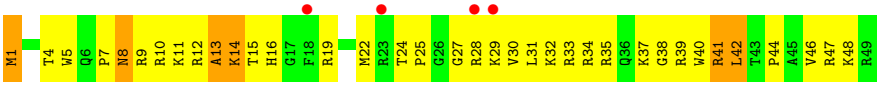
• Molecule 56: 50S ribosomal protein L34

Chain B7:



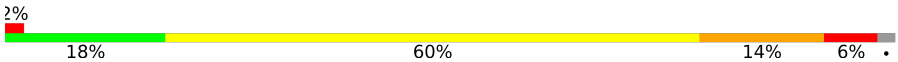
• Molecule 56: 50S ribosomal protein L34

Chain D7:



• Molecule 57: 50S ribosomal protein L35

Chain B8:

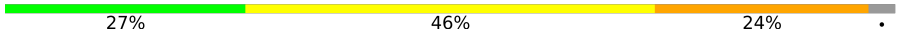


• Molecule 57: 50S ribosomal protein L35

Chain D8:

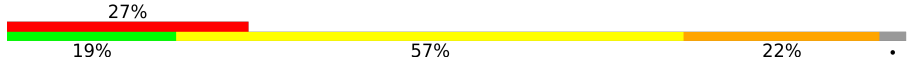
• Molecule 58: 50S ribosomal protein L36

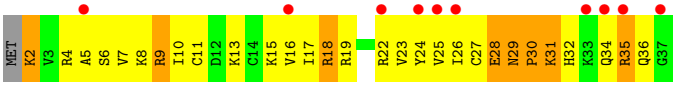
Chain B9:



• Molecule 58: 50S ribosomal protein L36

Chain D9:





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	210.23Å 448.51Å 633.62Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	50.00 – 3.00 49.93 – 3.00	Depositor EDS
% Data completeness (in resolution range)	(Not available) (50.00-3.00) 94.2 (49.93-3.00)	Depositor EDS
R_{merge}	0.31	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.01 (at 3.01Å)	Xtriage
Refinement program	CNS	Depositor
R, R_{free}	0.248 , 0.272 0.250 , 0.281	Depositor DCC
R_{free} test set	55515 reflections (5.01%)	wwPDB-VP
Wilson B-factor (Å^2)	88.5	Xtriage
Anisotropy	0.155	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.27 , 91.4	EDS
L-test for twinning[2]	$< \|L\| > = 0.36$, $< L^2 > = 0.18$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.90	EDS
Total number of atoms	294559	wwPDB-VP
Average B, all atoms (Å^2)	86.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.68% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ 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: ZN, 5OH, MG, KBE, UAL, DPP

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	AA	0.52	0/35980	0.82	47/56157 (0.1%)
1	CA	0.50	0/35980	0.82	32/56157 (0.1%)
2	AB	0.38	0/1936	0.73	0/2611
2	CB	0.37	0/1936	0.71	0/2611
3	AC	0.37	0/1637	0.74	1/2207 (0.0%)
3	CC	0.37	0/1637	0.73	0/2207
4	AD	0.45	0/1733	0.76	1/2318 (0.0%)
4	CD	0.44	0/1733	0.80	2/2318 (0.1%)
5	AE	0.43	0/1163	0.77	0/1566
5	CE	0.43	0/1163	0.77	0/1566
6	AF	0.41	0/856	0.71	0/1154
6	CF	0.41	0/856	0.72	0/1154
7	AG	0.39	0/1276	0.75	1/1709 (0.1%)
7	CG	0.40	0/1276	0.69	0/1709
8	AH	0.42	0/1136	0.76	0/1527
8	CH	0.40	0/1136	0.73	0/1527
9	AI	0.36	0/1023	0.71	0/1371
9	CI	0.37	0/1024	0.68	0/1372
10	AJ	0.37	0/808	0.68	0/1087
10	CJ	0.39	0/808	0.72	0/1087
11	AK	0.40	0/900	0.77	1/1213 (0.1%)
11	CK	0.41	0/900	0.77	1/1213 (0.1%)
12	AL	0.47	0/987	0.89	0/1322
12	CL	0.43	0/987	0.79	0/1322
13	AM	0.44	0/957	0.80	0/1284
13	CM	0.89	5/920 (0.5%)	1.22	13/1241 (1.0%)
14	AN	0.43	0/501	0.73	0/664
14	CN	0.42	0/501	0.72	1/664 (0.2%)
15	AO	0.43	0/745	0.71	0/992
15	CO	0.41	0/745	0.67	0/992
16	AP	0.43	0/717	0.78	1/965 (0.1%)
16	CP	0.40	0/717	0.70	0/965

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
17	AQ	0.44	0/837	0.77	0/1119
17	CQ	0.40	0/837	0.74	0/1119
18	AR	0.45	0/579	0.82	0/768
18	CR	0.44	0/579	0.82	0/768
19	AS	0.41	0/643	0.71	0/867
19	CS	0.39	0/643	0.69	0/867
20	AT	0.38	0/765	0.80	0/1007
20	CT	0.39	0/765	0.77	0/1007
21	AU	0.46	0/213	0.77	0/279
21	CU	0.36	0/213	0.66	0/279
22	AV	0.56	0/239	0.66	0/371
22	CV	0.49	0/239	0.81	1/371 (0.3%)
23	AW	0.50	0/1778	0.76	0/2768
23	CW	0.43	0/1778	0.74	0/2768
24	AX	0.50	0/1832	0.74	0/2855
24	CX	0.49	0/1832	0.73	1/2855 (0.0%)
25	AY	0.36	0/1776	0.71	0/2766
25	CY	0.39	0/1776	0.73	0/2766
26	AZ	0.95	0/11	0.62	0/13
26	CZ	1.05	0/11	0.87	0/13
27	BA	0.64	0/67544	0.87	94/105433 (0.1%)
27	DA	0.55	0/67547	0.85	93/105438 (0.1%)
28	BB	0.58	0/2826	0.85	4/4406 (0.1%)
28	DB	0.50	0/2826	0.85	4/4406 (0.1%)
29	BC	0.29	0/1145	0.64	0/1556
29	DC	0.30	0/1145	0.67	0/1556
30	BD	0.60	2/2155 (0.1%)	0.94	3/2907 (0.1%)
30	DD	0.52	0/2155	0.90	5/2907 (0.2%)
31	BE	0.55	0/1597	0.92	0/2155
31	DE	0.46	0/1597	0.89	3/2155 (0.1%)
32	BF	0.50	0/1659	0.83	0/2246
32	DF	0.44	0/1659	0.81	1/2246 (0.0%)
33	BG	0.52	1/1499 (0.1%)	0.91	5/2016 (0.2%)
33	DG	0.50	1/1499 (0.1%)	0.89	5/2016 (0.2%)
34	BH	0.54	1/1277 (0.1%)	0.89	3/1729 (0.2%)
34	DH	0.35	0/1246	0.76	0/1684
35	BI	0.37	0/1057	0.81	0/1453
35	DI	0.38	0/1061	0.81	0/1458
36	BN	0.54	0/1132	0.89	2/1527 (0.1%)
36	DN	0.41	0/1132	0.79	0/1527
37	BO	0.50	0/943	0.90	4/1269 (0.3%)
37	DO	0.48	0/943	0.79	0/1269
38	BP	0.60	0/1131	1.14	9/1504 (0.6%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	DP	0.49	0/1131	0.97	5/1504 (0.3%)
39	BQ	0.52	0/1143	0.79	0/1527
39	DQ	0.41	0/1128	0.73	0/1508
40	BR	0.53	0/974	0.94	6/1302 (0.5%)
40	DR	0.45	0/974	0.87	2/1302 (0.2%)
41	BS	0.50	0/779	1.01	4/1038 (0.4%)
41	DS	0.42	0/785	0.92	3/1048 (0.3%)
42	BT	0.54	0/1156	0.99	5/1544 (0.3%)
42	DT	0.48	0/1156	0.89	2/1544 (0.1%)
43	BU	0.57	0/975	0.86	2/1297 (0.2%)
43	DU	0.42	0/975	0.84	3/1297 (0.2%)
44	BV	0.51	0/790	0.95	3/1057 (0.3%)
44	DV	0.42	0/790	0.82	0/1057
45	BW	0.52	0/907	0.88	2/1216 (0.2%)
45	DW	0.50	0/907	0.85	0/1216
46	BX	0.53	0/740	0.89	0/995
46	DX	0.48	0/740	0.81	1/995 (0.1%)
47	BY	0.56	0/789	1.06	3/1053 (0.3%)
47	DY	0.48	0/789	0.93	3/1053 (0.3%)
48	BZ	0.42	0/1436	0.74	0/1951
48	DZ	0.36	0/1436	0.70	0/1951
49	B0	0.53	0/671	0.81	1/892 (0.1%)
49	D0	0.45	0/671	0.73	0/892
50	B1	0.49	0/722	0.82	0/964
50	D1	0.47	0/739	0.79	0/983
51	B2	0.55	0/600	0.86	1/793 (0.1%)
51	D2	0.42	0/600	0.74	0/793
52	B3	0.52	0/473	0.84	0/636
52	D3	0.41	0/473	0.81	0/636
53	B4	0.42	0/229	0.86	0/311
53	D4	0.50	0/229	1.01	2/311 (0.6%)
54	B5	0.53	0/473	0.95	2/639 (0.3%)
54	D5	0.46	0/473	0.79	0/639
55	B6	0.75	0/418	1.17	3/562 (0.5%)
55	D6	0.80	1/397 (0.3%)	1.20	4/531 (0.8%)
56	B7	0.59	0/427	0.92	1/563 (0.2%)
56	D7	0.50	0/427	0.85	0/563
57	B8	0.59	0/516	1.01	1/681 (0.1%)
57	D8	0.50	0/516	0.95	3/681 (0.4%)
58	B9	0.54	0/302	0.88	0/397
58	D9	0.33	0/302	0.74	0/397
All	All	0.54	11/318953 (0.0%)	0.84	400/477060 (0.1%)

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
1	AA	0	90
1	CA	1	81
13	CM	0	1
22	CV	0	2
23	AW	0	1
23	CW	0	2
27	BA	0	223
27	DA	0	164
28	BB	0	6
28	DB	0	6
30	DD	0	1
36	DN	0	1
47	BY	0	1
54	D5	0	1
55	B6	0	1
55	D6	0	1
All	All	1	582

The worst 5 of 11 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	CM	113	PRO	N-CD	-7.63	1.37	1.47
55	D6	46	HIS	C-N	-6.65	1.18	1.34
34	BH	11	VAL	C-N	6.53	1.46	1.34
13	CM	65	LYS	C-N	6.24	1.48	1.34
33	BG	111	LEU	C-N	5.78	1.45	1.34

The worst 5 of 400 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	CM	70	LEU	N-CA-C	-12.04	78.50	111.00
27	BA	2424	C	N1-C1'-C2'	-11.64	98.86	114.00
55	B6	46	HIS	N-CA-C	11.54	142.16	111.00
38	BP	52	GLU	N-CA-C	11.01	140.73	111.00
27	DA	1782	C	N1-C1'-C2'	-10.49	100.36	114.00

All (1) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	CA	517	G	C3'

5 of 582 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	12	U	Sidechain
1	AA	17	U	Sidechain
1	AA	34	C	Sidechain
1	AA	49	U	Sidechain
1	AA	52	G	Sidechain

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	AA	32141	0	16225	1910	0
1	CA	32141	0	16225	2201	0
2	AB	1901	0	1951	267	0
2	CB	1901	0	1951	267	0
3	AC	1613	0	1677	233	0
3	CC	1613	0	1677	215	0
4	AD	1703	0	1764	222	0
4	CD	1703	0	1764	256	0
5	AE	1147	0	1207	175	0
5	CE	1147	0	1207	184	0
6	AF	843	0	857	110	0
6	CF	843	0	857	121	0
7	AG	1257	0	1296	180	0
7	CG	1257	0	1296	149	0
8	AH	1116	0	1177	206	0
8	CH	1116	0	1177	178	0
9	AI	1005	0	1032	145	0
9	CI	1006	0	1034	145	0
10	AJ	795	0	840	164	0
10	CJ	795	0	840	157	0
11	AK	885	0	904	123	0
11	CK	885	0	904	113	0
12	AL	971	0	1057	167	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
12	CL	971	0	1057	185	0
13	AM	947	0	999	196	0
13	CM	910	0	931	185	0
14	AN	492	0	533	99	0
14	CN	492	0	533	106	0
15	AO	734	0	771	116	0
15	CO	734	0	771	104	0
16	AP	701	0	720	113	0
16	CP	701	0	720	96	0
17	AQ	824	0	891	109	0
17	CQ	824	0	891	121	0
18	AR	574	0	644	90	0
18	CR	574	0	644	73	0
19	AS	630	0	652	109	0
19	CS	630	0	652	106	0
20	AT	763	0	861	118	0
20	CT	763	0	861	132	0
21	AU	209	0	221	24	0
21	CU	209	0	221	33	0
22	AV	213	0	110	6	0
22	CV	213	0	110	12	0
23	AW	1593	0	810	80	0
23	CW	1593	0	810	75	0
24	AX	1640	0	837	69	0
24	CX	1640	0	837	74	0
25	AY	1591	0	810	83	0
25	CY	1591	0	810	87	0
26	AZ	48	0	40	12	0
26	CZ	48	0	40	19	0
27	BA	60311	0	30410	3525	0
27	DA	60313	0	30409	3995	0
28	BB	2528	0	1285	121	0
28	DB	2528	0	1285	140	0
29	BC	1142	0	865	101	0
29	DC	1142	0	865	133	0
30	BD	2105	0	2182	414	0
30	DD	2105	0	2182	386	0
31	BE	1564	0	1629	294	0
31	DE	1564	0	1629	325	0
32	BF	1624	0	1677	321	0
32	DF	1624	0	1677	262	0
33	BG	1474	0	1535	226	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
33	DG	1474	0	1535	259	0
34	BH	1252	0	1316	235	0
34	DH	1223	0	1282	194	0
35	BI	1042	0	1031	193	0
35	DI	1046	0	1035	152	0
36	BN	1105	0	1180	171	0
36	DN	1105	0	1180	214	0
37	BO	933	0	996	170	0
37	DO	933	0	996	165	0
38	BP	1114	0	1187	295	0
38	DP	1114	0	1187	327	0
39	BQ	1122	0	1179	176	0
39	DQ	1107	0	1166	203	0
40	BR	960	0	1021	164	0
40	DR	960	0	1021	179	0
41	BS	771	0	832	160	0
41	DS	777	0	825	148	0
42	BT	1142	0	1202	279	0
42	DT	1142	0	1202	273	0
43	BU	958	0	1015	185	0
43	DU	958	0	1015	196	0
44	BV	779	0	852	166	0
44	DV	779	0	852	168	0
45	BW	896	0	953	103	0
45	DW	896	0	953	157	0
46	BX	726	0	778	103	0
46	DX	726	0	778	127	0
47	BY	776	0	870	215	0
47	DY	776	0	870	191	0
48	BZ	1404	0	1432	184	0
48	DZ	1404	0	1432	221	0
49	B0	662	0	688	89	0
49	D0	662	0	688	103	0
50	B1	715	0	766	118	0
50	D1	732	0	808	98	0
51	B2	598	0	653	112	0
51	D2	598	0	653	84	0
52	B3	468	0	523	56	0
52	D3	468	0	523	84	0
53	B4	226	0	226	40	0
53	D4	226	0	227	33	0
54	B5	459	0	476	76	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
54	D5	459	0	476	70	0
55	B6	411	0	403	122	0
55	D6	390	0	403	103	0
56	B7	419	0	467	49	0
56	D7	419	0	467	80	0
57	B8	508	0	576	122	0
57	D8	508	0	576	135	0
58	B9	299	0	323	50	0
58	D9	299	0	323	49	0
59	AA	133	0	0	0	0
59	AC	1	0	0	0	0
59	AD	1	0	0	0	0
59	AE	1	0	0	0	0
59	AF	1	0	0	0	0
59	AH	1	0	0	0	0
59	AK	2	0	0	0	0
59	AL	1	0	0	0	0
59	AO	1	0	0	0	0
59	AT	2	0	0	0	0
59	AW	7	0	0	0	0
59	AX	7	0	0	0	0
59	AY	2	0	0	0	0
59	B0	2	0	0	0	0
59	B5	1	0	0	0	0
59	BA	400	0	0	0	0
59	BB	1	0	0	0	0
59	BD	1	0	0	0	0
59	BE	1	0	0	0	0
59	BF	2	0	0	0	0
59	BH	1	0	0	0	0
59	BN	1	0	0	0	0
59	BP	1	0	0	0	0
59	BQ	1	0	0	0	0
59	BR	1	0	0	0	0
59	BU	1	0	0	0	0
59	BX	1	0	0	0	0
59	BY	1	0	0	1	0
59	BZ	1	0	0	0	0
59	CA	92	0	0	0	0
59	CE	2	0	0	0	0
59	CQ	1	0	0	0	0
59	CV	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
59	CX	3	0	0	0	0
59	D5	2	0	0	0	0
59	D6	1	0	0	0	0
59	DA	275	0	0	0	0
59	DB	1	0	0	0	0
59	DD	3	0	0	0	0
59	DE	3	0	0	0	0
59	DF	1	0	0	0	0
59	DR	1	0	0	0	0
59	DZ	1	0	0	0	0
60	AD	1	0	0	1	0
60	B4	1	0	0	0	0
60	B5	1	0	0	0	0
60	B9	1	0	0	0	0
60	CD	1	0	0	1	0
60	D4	1	0	0	0	0
60	D5	1	0	0	0	0
60	D9	1	0	0	0	0
All	All	294559	0	198754	25938	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 53.

The worst 5 of 25938 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)
38:BP:59:LEU:HA	38:BP:61:ARG:CZ	1.58	1.32
30:DD:231:HIS:ND1	30:DD:232:PRO:HD2	1.55	1.20
1:CA:1363(A):A:H1'	1:CA:1365:G:N7	1.57	1.19
40:BR:100:LEU:HD21	40:BR:113:LEU:HD13	1.24	1.19
27:BA:2787:C:H1'	31:BE:61:ARG:HG3	1.25	1.18

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	AB	233/256 (91%)	126 (54%)	73 (31%)	34 (15%)	0	1
2	CB	233/256 (91%)	151 (65%)	50 (22%)	32 (14%)	0	1
3	AC	205/239 (86%)	123 (60%)	54 (26%)	28 (14%)	0	1
3	CC	205/239 (86%)	121 (59%)	59 (29%)	25 (12%)	0	1
4	AD	206/209 (99%)	129 (63%)	52 (25%)	25 (12%)	0	1
4	CD	206/209 (99%)	126 (61%)	51 (25%)	29 (14%)	0	1
5	AE	149/162 (92%)	94 (63%)	38 (26%)	17 (11%)	0	2
5	CE	149/162 (92%)	103 (69%)	27 (18%)	19 (13%)	0	1
6	AF	99/101 (98%)	71 (72%)	18 (18%)	10 (10%)	0	2
6	CF	99/101 (98%)	76 (77%)	16 (16%)	7 (7%)	1	5
7	AG	153/156 (98%)	101 (66%)	39 (26%)	13 (8%)	1	4
7	CG	153/156 (98%)	102 (67%)	38 (25%)	13 (8%)	1	4
8	AH	136/138 (99%)	98 (72%)	27 (20%)	11 (8%)	1	4
8	CH	136/138 (99%)	81 (60%)	38 (28%)	17 (12%)	0	1
9	AI	125/128 (98%)	83 (66%)	29 (23%)	13 (10%)	0	2
9	CI	125/128 (98%)	82 (66%)	26 (21%)	17 (14%)	0	1
10	AJ	97/105 (92%)	64 (66%)	26 (27%)	7 (7%)	1	5
10	CJ	97/105 (92%)	55 (57%)	28 (29%)	14 (14%)	0	1
11	AK	117/129 (91%)	70 (60%)	34 (29%)	13 (11%)	0	2
11	CK	117/129 (91%)	87 (74%)	22 (19%)	8 (7%)	1	6
12	AL	123/132 (93%)	75 (61%)	25 (20%)	23 (19%)	0	0
12	CL	123/132 (93%)	76 (62%)	24 (20%)	23 (19%)	0	0
13	AM	118/126 (94%)	64 (54%)	33 (28%)	21 (18%)	0	0
13	CM	117/126 (93%)	64 (55%)	29 (25%)	24 (20%)	0	0
14	AN	58/61 (95%)	29 (50%)	19 (33%)	10 (17%)	0	0
14	CN	58/61 (95%)	35 (60%)	12 (21%)	11 (19%)	0	0
15	AO	86/89 (97%)	56 (65%)	19 (22%)	11 (13%)	0	1
15	CO	86/89 (97%)	49 (57%)	28 (33%)	9 (10%)	0	2
16	AP	82/88 (93%)	49 (60%)	21 (26%)	12 (15%)	0	1
16	CP	82/88 (93%)	45 (55%)	28 (34%)	9 (11%)	0	2

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
17	AQ	98/105 (93%)	73 (74%)	15 (15%)	10 (10%)	0	2
17	CQ	98/105 (93%)	70 (71%)	22 (22%)	6 (6%)	1	8
18	AR	68/88 (77%)	35 (52%)	21 (31%)	12 (18%)	0	0
18	CR	68/88 (77%)	41 (60%)	16 (24%)	11 (16%)	0	1
19	AS	77/93 (83%)	51 (66%)	15 (20%)	11 (14%)	0	1
19	CS	77/93 (83%)	46 (60%)	18 (23%)	13 (17%)	0	0
20	AT	97/106 (92%)	59 (61%)	20 (21%)	18 (19%)	0	0
20	CT	97/106 (92%)	52 (54%)	36 (37%)	9 (9%)	0	3
21	AU	23/27 (85%)	16 (70%)	4 (17%)	3 (13%)	0	1
21	CU	23/27 (85%)	14 (61%)	5 (22%)	4 (17%)	0	0
26	AZ	2/6 (33%)	1 (50%)	1 (50%)	0	100	100
26	CZ	2/6 (33%)	1 (50%)	1 (50%)	0	100	100
29	BC	183/229 (80%)	69 (38%)	49 (27%)	65 (36%)	0	0
29	DC	183/229 (80%)	69 (38%)	59 (32%)	55 (30%)	0	0
30	BD	270/276 (98%)	172 (64%)	66 (24%)	32 (12%)	0	1
30	DD	270/276 (98%)	180 (67%)	57 (21%)	33 (12%)	0	1
31	BE	203/206 (98%)	130 (64%)	38 (19%)	35 (17%)	0	0
31	DE	203/206 (98%)	125 (62%)	34 (17%)	44 (22%)	0	0
32	BF	206/210 (98%)	137 (66%)	31 (15%)	38 (18%)	0	0
32	DF	206/210 (98%)	125 (61%)	40 (19%)	41 (20%)	0	0
33	BG	179/182 (98%)	107 (60%)	47 (26%)	25 (14%)	0	1
33	DG	179/182 (98%)	109 (61%)	42 (24%)	28 (16%)	0	1
34	BH	162/180 (90%)	87 (54%)	43 (26%)	32 (20%)	0	0
34	DH	158/180 (88%)	88 (56%)	35 (22%)	35 (22%)	0	0
35	BI	144/148 (97%)	73 (51%)	33 (23%)	38 (26%)	0	0
35	DI	144/148 (97%)	80 (56%)	41 (28%)	23 (16%)	0	1
36	BN	137/140 (98%)	91 (66%)	27 (20%)	19 (14%)	0	1
36	DN	137/140 (98%)	82 (60%)	28 (20%)	27 (20%)	0	0
37	BO	120/122 (98%)	84 (70%)	25 (21%)	11 (9%)	1	3
37	DO	120/122 (98%)	80 (67%)	23 (19%)	17 (14%)	0	1
38	BP	144/150 (96%)	71 (49%)	42 (29%)	31 (22%)	0	0

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
38	DP	144/150 (96%)	72 (50%)	36 (25%)	36 (25%)	0	0
39	BQ	139/141 (99%)	98 (70%)	21 (15%)	20 (14%)	0	1
39	DQ	137/141 (97%)	88 (64%)	29 (21%)	20 (15%)	0	1
40	BR	115/118 (98%)	75 (65%)	25 (22%)	15 (13%)	0	1
40	DR	115/118 (98%)	66 (57%)	31 (27%)	18 (16%)	0	1
41	BS	97/112 (87%)	45 (46%)	24 (25%)	28 (29%)	0	0
41	DS	99/112 (88%)	51 (52%)	14 (14%)	34 (34%)	0	0
42	BT	136/146 (93%)	78 (57%)	26 (19%)	32 (24%)	0	0
42	DT	136/146 (93%)	68 (50%)	32 (24%)	36 (26%)	0	0
43	BU	115/118 (98%)	70 (61%)	27 (24%)	18 (16%)	0	1
43	DU	115/118 (98%)	69 (60%)	30 (26%)	16 (14%)	0	1
44	BV	99/101 (98%)	61 (62%)	24 (24%)	14 (14%)	0	1
44	DV	99/101 (98%)	61 (62%)	19 (19%)	19 (19%)	0	0
45	BW	111/113 (98%)	77 (69%)	23 (21%)	11 (10%)	0	2
45	DW	111/113 (98%)	71 (64%)	29 (26%)	11 (10%)	0	2
46	BX	91/96 (95%)	67 (74%)	16 (18%)	8 (9%)	1	3
46	DX	91/96 (95%)	60 (66%)	17 (19%)	14 (15%)	0	1
47	BY	99/110 (90%)	42 (42%)	22 (22%)	35 (35%)	0	0
47	DY	99/110 (90%)	37 (37%)	29 (29%)	33 (33%)	0	0
48	BZ	175/206 (85%)	99 (57%)	49 (28%)	27 (15%)	0	1
48	DZ	175/206 (85%)	97 (55%)	51 (29%)	27 (15%)	0	1
49	B0	82/85 (96%)	62 (76%)	12 (15%)	8 (10%)	0	2
49	D0	82/85 (96%)	61 (74%)	14 (17%)	7 (8%)	1	4
50	B1	92/98 (94%)	60 (65%)	20 (22%)	12 (13%)	0	1
50	D1	92/98 (94%)	65 (71%)	16 (17%)	11 (12%)	0	1
51	B2	69/72 (96%)	46 (67%)	14 (20%)	9 (13%)	0	1
51	D2	69/72 (96%)	37 (54%)	20 (29%)	12 (17%)	0	0
52	B3	58/60 (97%)	49 (84%)	7 (12%)	2 (3%)	3	20
52	D3	58/60 (97%)	46 (79%)	10 (17%)	2 (3%)	3	20
53	B4	29/71 (41%)	18 (62%)	6 (21%)	5 (17%)	0	0
53	D4	29/71 (41%)	17 (59%)	9 (31%)	3 (10%)	0	2

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
54	B5	57/60 (95%)	34 (60%)	13 (23%)	10 (18%)	0 0
54	D5	57/60 (95%)	33 (58%)	14 (25%)	10 (18%)	0 0
55	B6	49/54 (91%)	17 (35%)	14 (29%)	18 (37%)	0 0
55	D6	44/54 (82%)	16 (36%)	11 (25%)	17 (39%)	0 0
56	B7	47/49 (96%)	35 (74%)	8 (17%)	4 (8%)	1 4
56	D7	47/49 (96%)	30 (64%)	13 (28%)	4 (8%)	1 4
57	B8	62/65 (95%)	34 (55%)	19 (31%)	9 (14%)	0 1
57	D8	62/65 (95%)	32 (52%)	15 (24%)	15 (24%)	0 0
58	B9	34/37 (92%)	25 (74%)	8 (24%)	1 (3%)	4 24
58	D9	34/37 (92%)	18 (53%)	13 (38%)	3 (9%)	1 3
All	All	11702/12598 (93%)	7090 (61%)	2747 (24%)	1865 (16%)	0 1

5 of 1865 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	9	GLU
2	AB	15	VAL
2	AB	20	GLU
2	AB	96	ARG
2	AB	101	MET

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	AB	202/220 (92%)	169 (84%)	33 (16%)	2 11
2	CB	202/220 (92%)	174 (86%)	28 (14%)	3 16
3	AC	160/188 (85%)	129 (81%)	31 (19%)	1 7
3	CC	160/188 (85%)	140 (88%)	20 (12%)	4 20
4	AD	180/181 (99%)	147 (82%)	33 (18%)	1 9
4	CD	180/181 (99%)	147 (82%)	33 (18%)	1 9

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
5	AE	115/123 (94%)	101 (88%)	14 (12%)	5 21
5	CE	115/123 (94%)	96 (84%)	19 (16%)	2 11
6	AF	90/90 (100%)	80 (89%)	10 (11%)	6 25
6	CF	90/90 (100%)	78 (87%)	12 (13%)	4 17
7	AG	126/127 (99%)	106 (84%)	20 (16%)	2 12
7	CG	126/127 (99%)	106 (84%)	20 (16%)	2 12
8	AH	119/119 (100%)	96 (81%)	23 (19%)	1 8
8	CH	119/119 (100%)	105 (88%)	14 (12%)	5 22
9	AI	97/99 (98%)	80 (82%)	17 (18%)	2 10
9	CI	97/99 (98%)	85 (88%)	12 (12%)	4 20
10	AJ	88/92 (96%)	68 (77%)	20 (23%)	1 4
10	CJ	88/92 (96%)	74 (84%)	14 (16%)	2 12
11	AK	90/99 (91%)	74 (82%)	16 (18%)	2 9
11	CK	90/99 (91%)	78 (87%)	12 (13%)	4 17
12	AL	104/109 (95%)	87 (84%)	17 (16%)	2 11
12	CL	104/109 (95%)	90 (86%)	14 (14%)	4 17
13	AM	94/101 (93%)	75 (80%)	19 (20%)	1 6
13	CM	88/101 (87%)	69 (78%)	19 (22%)	1 5
14	AN	49/50 (98%)	39 (80%)	10 (20%)	1 6
14	CN	49/50 (98%)	37 (76%)	12 (24%)	0 3
15	AO	79/80 (99%)	63 (80%)	16 (20%)	1 6
15	CO	79/80 (99%)	65 (82%)	14 (18%)	2 9
16	AP	72/74 (97%)	63 (88%)	9 (12%)	4 20
16	CP	72/74 (97%)	60 (83%)	12 (17%)	2 11
17	AQ	94/97 (97%)	80 (85%)	14 (15%)	3 14
17	CQ	94/97 (97%)	84 (89%)	10 (11%)	6 26
18	AR	61/77 (79%)	53 (87%)	8 (13%)	4 18
18	CR	61/77 (79%)	55 (90%)	6 (10%)	8 30
19	AS	69/80 (86%)	53 (77%)	16 (23%)	1 4
19	CS	69/80 (86%)	51 (74%)	18 (26%)	0 2
20	AT	76/82 (93%)	63 (83%)	13 (17%)	2 10

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
20	CT	76/82 (93%)	65 (86%)	11 (14%)	3 15
21	AU	19/22 (86%)	16 (84%)	3 (16%)	2 12
21	CU	19/22 (86%)	18 (95%)	1 (5%)	22 58
26	AZ	2/2 (100%)	2 (100%)	0	100 100
26	CZ	2/2 (100%)	2 (100%)	0	100 100
29	BC	61/181 (34%)	56 (92%)	5 (8%)	11 39
29	DC	61/181 (34%)	51 (84%)	10 (16%)	2 11
30	BD	213/218 (98%)	162 (76%)	51 (24%)	0 3
30	DD	213/218 (98%)	173 (81%)	40 (19%)	1 8
31	BE	165/166 (99%)	127 (77%)	38 (23%)	1 4
31	DE	165/166 (99%)	121 (73%)	44 (27%)	0 2
32	BF	165/166 (99%)	136 (82%)	29 (18%)	2 10
32	DF	165/166 (99%)	138 (84%)	27 (16%)	2 11
33	BG	155/156 (99%)	117 (76%)	38 (24%)	0 3
33	DG	155/156 (99%)	125 (81%)	30 (19%)	1 7
34	BH	136/148 (92%)	111 (82%)	25 (18%)	1 9
34	DH	132/148 (89%)	111 (84%)	21 (16%)	2 12
35	BI	102/124 (82%)	79 (78%)	23 (22%)	1 4
35	DI	103/124 (83%)	85 (82%)	18 (18%)	2 10
36	BN	117/119 (98%)	88 (75%)	29 (25%)	0 3
36	DN	117/119 (98%)	92 (79%)	25 (21%)	1 5
37	BO	100/100 (100%)	81 (81%)	19 (19%)	1 8
37	DO	100/100 (100%)	75 (75%)	25 (25%)	0 3
38	BP	112/116 (97%)	76 (68%)	36 (32%)	0 1
38	DP	112/116 (97%)	79 (70%)	33 (30%)	0 1
39	BQ	111/111 (100%)	85 (77%)	26 (23%)	1 4
39	DQ	110/111 (99%)	91 (83%)	19 (17%)	2 10
40	BR	100/101 (99%)	77 (77%)	23 (23%)	1 4
40	DR	100/101 (99%)	67 (67%)	33 (33%)	0 1
41	BS	77/88 (88%)	60 (78%)	17 (22%)	1 4
41	DS	76/88 (86%)	62 (82%)	14 (18%)	1 9

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
42	BT	120/127 (94%)	81 (68%)	39 (32%)	0 1
42	DT	120/127 (94%)	88 (73%)	32 (27%)	0 2
43	BU	92/94 (98%)	71 (77%)	21 (23%)	1 4
43	DU	92/94 (98%)	81 (88%)	11 (12%)	5 22
44	BV	82/82 (100%)	59 (72%)	23 (28%)	0 2
44	DV	82/82 (100%)	60 (73%)	22 (27%)	0 2
45	BW	91/92 (99%)	74 (81%)	17 (19%)	1 8
45	DW	91/92 (99%)	72 (79%)	19 (21%)	1 5
46	BX	74/78 (95%)	60 (81%)	14 (19%)	1 8
46	DX	74/78 (95%)	58 (78%)	16 (22%)	1 5
47	BY	84/91 (92%)	62 (74%)	22 (26%)	0 2
47	DY	84/91 (92%)	63 (75%)	21 (25%)	0 3
48	BZ	155/179 (87%)	127 (82%)	28 (18%)	1 9
48	DZ	155/179 (87%)	135 (87%)	20 (13%)	4 19
49	B0	66/67 (98%)	53 (80%)	13 (20%)	1 7
49	D0	66/67 (98%)	58 (88%)	8 (12%)	5 21
50	B1	74/83 (89%)	56 (76%)	18 (24%)	0 3
50	D1	78/83 (94%)	63 (81%)	15 (19%)	1 8
51	B2	66/67 (98%)	50 (76%)	16 (24%)	0 3
51	D2	66/67 (98%)	53 (80%)	13 (20%)	1 7
52	B3	51/52 (98%)	42 (82%)	9 (18%)	2 10
52	D3	51/52 (98%)	44 (86%)	7 (14%)	3 17
53	B4	27/63 (43%)	23 (85%)	4 (15%)	3 14
53	D4	27/63 (43%)	25 (93%)	2 (7%)	13 44
54	B5	51/52 (98%)	39 (76%)	12 (24%)	1 3
54	D5	51/52 (98%)	42 (82%)	9 (18%)	2 10
55	B6	43/52 (83%)	30 (70%)	13 (30%)	0 1
55	D6	44/52 (85%)	28 (64%)	16 (36%)	0 1
56	B7	41/42 (98%)	34 (83%)	7 (17%)	2 10
56	D7	41/42 (98%)	36 (88%)	5 (12%)	5 21
57	B8	53/55 (96%)	44 (83%)	9 (17%)	2 10

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
57	D8	53/55 (96%)	39 (74%)	14 (26%)	0 2
58	B9	33/34 (97%)	24 (73%)	9 (27%)	0 2
58	D9	33/34 (97%)	28 (85%)	5 (15%)	3 14
All	All	9600/10432 (92%)	7750 (81%)	1850 (19%)	1 8

5 of 1850 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
54	B5	4	HIS
50	D1	59	THR
10	CJ	96	ILE
48	DZ	147	ASP
40	DR	111	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 293 such sidechains are listed below:

Mol	Chain	Res	Type
36	DN	38	HIS
54	D5	43	HIS
38	DP	13	ASN
43	DU	81	HIS
37	BO	82	ASN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1493/1509 (98%)	351 (23%)	136 (9%)
1	CA	1493/1509 (98%)	365 (24%)	120 (8%)
22	AV	9/30 (30%)	0	0
22	CV	9/30 (30%)	0	0
23	AW	74/75 (98%)	17 (22%)	2 (2%)
23	CW	74/75 (98%)	16 (21%)	4 (5%)
24	AX	76/77 (98%)	19 (25%)	1 (1%)
24	CX	76/77 (98%)	19 (25%)	0
25	AY	74/75 (98%)	23 (31%)	1 (1%)
25	CY	74/75 (98%)	22 (29%)	1 (1%)
27	BA	2792/2915 (95%)	798 (28%)	220 (7%)
27	DA	2793/2915 (95%)	905 (32%)	280 (10%)
28	BB	116/122 (95%)	26 (22%)	5 (4%)

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Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
28	DB	116/122 (95%)	28 (24%)	8 (6%)
All	All	9269/9606 (96%)	2589 (27%)	778 (8%)

5 of 2589 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	8	A
1	AA	9	G
1	AA	13	U
1	AA	31	G
1	AA	32	A

5 of 778 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	CA	1211	U
27	DA	740	U
1	CA	1397	C
1	CA	1201	A
27	DA	284	U

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

8 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	$\#\|Z\| > 2$
26	KBE	AZ	1	26	8,8,9	0.59	0	7,8,10	1.29	1 (14%)
26	UAL	CZ	5	26	7,8,9	3.02	2 (28%)	5,9,11	3.74	4 (80%)
26	5OH	CZ	6	26	8,12,13	0.76	0	3,16,18	1.07	0
26	KBE	CZ	1	26	8,8,9	0.65	0	7,8,10	0.76	0
26	5OH	AZ	6	26	8,12,13	0.60	0	3,16,18	0.82	0
26	DPP	CZ	2	26	3,5,6	0.84	0	1,5,7	0.02	0
26	UAL	AZ	5	26	7,8,9	2.47	2 (28%)	5,9,11	1.47	1 (20%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
26	DPP	AZ	2	26	3,5,6	0.41	0	1,5,7	0.16	0

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
26	KBE	AZ	1	26	-	1/7/7/8	-
26	UAL	CZ	5	26	-	0/3/7/9	-
26	5OH	CZ	6	26	-	0/2/18/20	0/1/1/1
26	KBE	CZ	1	26	-	0/7/7/8	-
26	5OH	AZ	6	26	-	0/2/18/20	0/1/1/1
26	DPP	CZ	2	26	-	0/2/4/6	-
26	UAL	AZ	5	26	-	0/3/7/9	-
26	DPP	AZ	2	26	-	0/2/4/6	-

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	CZ	5	UAL	C1-N1	-6.66	1.29	1.40
26	AZ	5	UAL	C-CA	5.14	1.53	1.45
26	CZ	5	UAL	C-CA	3.71	1.51	1.45
26	AZ	5	UAL	C1-N1	-3.10	1.35	1.40

The worst 5 of 6 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	CZ	5	UAL	O2-C1-N2	-6.58	111.92	123.22
26	CZ	5	UAL	CA-CB-N1	-3.05	119.84	125.60
26	AZ	1	KBE	CB-CA-C	2.78	116.35	112.25
26	CZ	5	UAL	N2-C1-N1	2.73	121.55	115.50
26	CZ	5	UAL	O2-C1-N1	2.65	126.51	120.23

There are no chirality outliers.

All (1) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
26	AZ	1	KBE	C-CA-CB-N

There are no ring outliers.

6 monomers are involved in 23 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
26	AZ	1	KBE	3	0
26	CZ	5	UAL	4	0
26	CZ	6	5OH	11	0
26	CZ	1	KBE	1	0
26	AZ	6	5OH	3	0
26	AZ	5	UAL	3	0

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 973 ligands modelled in this entry, 973 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
55	D6	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	D6	46:HIS	C	47:THR	N	1.18

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95^{th} 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	AA	1495/1509 (99%)	-0.10	29 (1%) 66 37	48, 83, 149, 196	0
1	CA	1495/1509 (99%)	-0.03	32 (2%) 63 34	59, 91, 155, 196	0
2	AB	235/256 (91%)	0.18	15 (6%) 19 6	80, 114, 144, 161	0
2	CB	235/256 (91%)	0.07	13 (5%) 25 9	81, 118, 152, 171	0
3	AC	207/239 (86%)	-0.09	4 (1%) 66 37	76, 101, 140, 153	0
3	CC	207/239 (86%)	0.02	9 (4%) 35 13	89, 109, 136, 147	0
4	AD	208/209 (99%)	-0.08	9 (4%) 35 13	65, 84, 101, 114	0
4	CD	208/209 (99%)	-0.26	2 (0%) 82 59	55, 77, 98, 107	0
5	AE	151/162 (93%)	-0.17	2 (1%) 77 51	59, 81, 107, 122	0
5	CE	151/162 (93%)	-0.03	0 100 100	72, 88, 109, 145	0
6	AF	101/101 (100%)	-0.30	0 100 100	63, 84, 93, 110	0
6	CF	101/101 (100%)	-0.24	0 100 100	76, 88, 101, 134	0
7	AG	155/156 (99%)	-0.06	9 (5%) 23 7	74, 94, 129, 151	0
7	CG	155/156 (99%)	-0.11	6 (3%) 39 15	84, 103, 128, 140	0
8	AH	138/138 (100%)	-0.33	1 (0%) 87 69	69, 84, 96, 107	0
8	CH	138/138 (100%)	-0.18	2 (1%) 75 49	74, 91, 102, 117	0
9	AI	127/128 (99%)	0.34	9 (7%) 16 5	76, 115, 136, 144	0
9	CI	127/128 (99%)	0.20	9 (7%) 16 5	89, 121, 139, 143	0
10	AJ	99/105 (94%)	0.81	14 (14%) 2 1	80, 127, 152, 164	0
10	CJ	99/105 (94%)	0.78	11 (11%) 5 1	88, 125, 148, 154	0
11	AK	119/129 (92%)	0.30	12 (10%) 7 2	55, 79, 107, 127	0
11	CK	119/129 (92%)	0.15	10 (8%) 11 3	69, 88, 108, 124	0
12	AL	125/132 (94%)	-0.15	0 100 100	55, 69, 91, 126	0
12	CL	125/132 (94%)	0.17	7 (5%) 24 8	66, 82, 98, 129	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	AM	120/126 (95%)	-0.26	4 (3%) 46 20	58, 86, 98, 107	0
13	CM	119/126 (94%)	-0.15	4 (3%) 45 19	80, 108, 125, 136	0
14	AN	60/61 (98%)	-0.02	1 (1%) 70 41	76, 92, 110, 122	0
14	CN	60/61 (98%)	0.30	2 (3%) 46 20	90, 105, 120, 123	0
15	AO	88/89 (98%)	-0.05	4 (4%) 33 12	64, 76, 99, 114	0
15	CO	88/89 (98%)	0.15	2 (2%) 60 31	71, 84, 106, 117	0
16	AP	84/88 (95%)	0.00	5 (5%) 21 7	68, 86, 108, 124	0
16	CP	84/88 (95%)	0.12	1 (1%) 79 54	71, 81, 105, 136	0
17	AQ	100/105 (95%)	0.16	2 (2%) 65 36	62, 79, 95, 99	0
17	CQ	100/105 (95%)	-0.23	0 100 100	64, 85, 100, 103	0
18	AR	70/88 (79%)	-0.12	2 (2%) 51 23	67, 83, 106, 134	0
18	CR	70/88 (79%)	-0.08	0 100 100	72, 86, 107, 134	0
19	AS	79/93 (84%)	0.66	11 (13%) 2 1	87, 105, 127, 134	0
19	CS	79/93 (84%)	0.71	11 (13%) 2 1	101, 122, 143, 154	0
20	AT	99/106 (93%)	0.06	7 (7%) 16 5	71, 89, 118, 130	0
20	CT	99/106 (93%)	0.03	7 (7%) 16 5	74, 90, 114, 125	0
21	AU	25/27 (92%)	2.00	12 (48%) 0 0	86, 92, 100, 118	0
21	CU	25/27 (92%)	2.32	12 (48%) 0 0	89, 104, 116, 119	0
22	AV	10/30 (33%)	0.45	1 (10%) 7 2	63, 73, 124, 133	0
22	CV	10/30 (33%)	-0.03	0 100 100	68, 85, 125, 130	0
23	AW	75/75 (100%)	0.73	15 (20%) 1 0	46, 119, 161, 185	0
23	CW	75/75 (100%)	0.50	10 (13%) 3 1	79, 141, 174, 184	0
24	AX	77/77 (100%)	0.06	4 (5%) 27 10	48, 89, 121, 130	0
24	CX	77/77 (100%)	0.07	3 (3%) 39 15	69, 98, 125, 132	0
25	AY	75/75 (100%)	1.25	25 (33%) 0 0	51, 157, 193, 194	0
25	CY	75/75 (100%)	1.32	23 (30%) 0 0	67, 167, 194, 194	0
26	AZ	2/6 (33%)	0.41	0 100 100	85, 85, 85, 88	0
26	CZ	2/6 (33%)	0.76	0 100 100	99, 99, 99, 100	0
27	BA	2800/2915 (96%)	-0.12	49 (1%) 68 40	30, 56, 157, 198	0
27	DA	2800/2915 (96%)	-0.01	73 (2%) 56 27	49, 77, 168, 197	0
28	BB	118/122 (96%)	-0.22	2 (1%) 70 41	47, 76, 119, 164	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	DB	118/122 (96%)	0.00	4 (3%) 45 19	80, 104, 136, 162	0
29	BC	191/229 (83%)	1.64	72 (37%) 0 0	130, 167, 187, 195	0
29	DC	191/229 (83%)	2.08	74 (38%) 0 0	122, 173, 188, 191	0
30	BD	272/276 (98%)	-0.38	2 (0%) 87 69	32, 52, 68, 79	0
30	DD	272/276 (98%)	-0.32	0 100 100	46, 61, 78, 92	0
31	BE	205/206 (99%)	-0.24	2 (0%) 82 59	33, 58, 93, 104	0
31	DE	205/206 (99%)	0.01	5 (2%) 59 30	57, 84, 112, 121	0
32	BF	208/210 (99%)	-0.34	2 (0%) 82 59	29, 60, 125, 149	0
32	DF	208/210 (99%)	-0.03	6 (2%) 51 23	54, 86, 132, 152	0
33	BG	181/182 (99%)	-0.02	9 (4%) 28 10	64, 83, 116, 146	0
33	DG	181/182 (99%)	0.34	15 (8%) 11 3	79, 106, 132, 153	0
34	BH	164/180 (91%)	0.06	6 (3%) 41 17	68, 97, 124, 142	0
34	DH	160/180 (88%)	0.87	25 (15%) 2 1	110, 139, 159, 163	0
35	BI	146/148 (98%)	-0.22	0 100 100	62, 119, 140, 144	0
35	DI	146/148 (98%)	-0.03	3 (2%) 63 34	67, 105, 128, 136	0
36	BN	139/140 (99%)	-0.43	0 100 100	42, 57, 86, 104	0
36	DN	139/140 (99%)	-0.26	2 (1%) 75 49	65, 91, 115, 124	0
37	BO	122/122 (100%)	-0.54	1 (0%) 86 65	38, 57, 75, 88	0
37	DO	122/122 (100%)	-0.37	0 100 100	60, 77, 93, 100	0
38	BP	146/150 (97%)	0.13	5 (3%) 45 19	37, 69, 102, 156	0
38	DP	146/150 (97%)	0.28	4 (2%) 54 26	61, 93, 122, 148	0
39	BQ	141/141 (100%)	-0.18	2 (1%) 75 49	42, 60, 92, 118	0
39	DQ	139/141 (98%)	-0.18	1 (0%) 87 69	68, 90, 120, 134	0
40	BR	117/118 (99%)	-0.36	0 100 100	35, 52, 69, 82	0
40	DR	117/118 (99%)	-0.12	0 100 100	58, 71, 83, 96	0
41	BS	99/112 (88%)	-0.19	0 100 100	48, 76, 94, 105	0
41	DS	101/112 (90%)	0.30	10 (9%) 7 2	68, 100, 117, 122	0
42	BT	138/146 (94%)	-0.13	7 (5%) 28 10	51, 70, 126, 152	0
42	DT	138/146 (94%)	0.13	15 (10%) 5 2	61, 90, 149, 175	0
43	BU	117/118 (99%)	-0.22	2 (1%) 70 41	37, 49, 73, 95	0
43	DU	117/118 (99%)	0.32	14 (11%) 4 1	60, 91, 111, 124	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	BV	101/101 (100%)	-0.46	1 (0%) 82 59	35, 65, 90, 116	0
44	DV	101/101 (100%)	0.29	9 (8%) 9 3	59, 106, 121, 129	0
45	BW	113/113 (100%)	-0.31	2 (1%) 68 40	32, 46, 76, 136	0
45	DW	113/113 (100%)	-0.36	1 (0%) 84 63	43, 64, 95, 130	0
46	BX	93/96 (96%)	-0.32	1 (1%) 80 56	43, 53, 70, 91	0
46	DX	93/96 (96%)	-0.28	0 100 100	56, 71, 89, 95	0
47	BY	101/110 (91%)	-0.05	3 (2%) 50 22	58, 78, 145, 163	0
47	DY	101/110 (91%)	0.26	10 (9%) 7 2	73, 94, 149, 156	0
48	BZ	177/206 (85%)	0.57	24 (13%) 3 1	65, 107, 169, 177	0
48	DZ	177/206 (85%)	1.28	40 (22%) 0 0	104, 130, 177, 191	0
49	B0	84/85 (98%)	-0.15	4 (4%) 30 11	43, 56, 83, 103	0
49	D0	84/85 (98%)	0.48	10 (11%) 4 1	71, 83, 100, 118	0
50	B1	94/98 (95%)	-0.21	2 (2%) 63 34	44, 61, 92, 109	0
50	D1	94/98 (95%)	0.06	2 (2%) 63 34	54, 70, 94, 110	0
51	B2	71/72 (98%)	-0.37	3 (4%) 36 14	46, 66, 86, 117	0
51	D2	71/72 (98%)	-0.30	0 100 100	65, 86, 103, 107	0
52	B3	60/60 (100%)	-0.25	1 (1%) 70 41	43, 58, 85, 110	0
52	D3	60/60 (100%)	0.14	2 (3%) 46 20	75, 90, 112, 116	0
53	B4	31/71 (43%)	-0.43	0 100 100	92, 107, 120, 126	0
53	D4	31/71 (43%)	-0.13	0 100 100	108, 119, 128, 135	0
54	B5	59/60 (98%)	-0.23	3 (5%) 28 10	33, 51, 115, 135	0
54	D5	59/60 (98%)	-0.01	4 (6%) 17 5	60, 71, 143, 177	0
55	B6	51/54 (94%)	0.17	3 (5%) 22 7	59, 83, 106, 112	0
55	D6	46/54 (85%)	0.80	9 (19%) 1 0	56, 103, 116, 117	0
56	B7	49/49 (100%)	-0.17	0 100 100	28, 44, 84, 115	0
56	D7	49/49 (100%)	0.49	4 (8%) 11 3	46, 59, 90, 101	0
57	B8	64/65 (98%)	-0.18	1 (1%) 72 44	40, 56, 73, 97	0
57	D8	64/65 (98%)	0.11	2 (3%) 49 21	60, 74, 87, 118	0
58	B9	36/37 (97%)	0.31	0 100 100	46, 63, 80, 93	0
58	D9	36/37 (97%)	1.07	10 (27%) 0 0	88, 122, 133, 137	0
All	All	21214/22204 (95%)	0.03	936 (4%) 34 13	28, 83, 154, 198	0

The worst 5 of 936 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
48	DZ	111	ARG	15.7
27	BA	2802	G	15.7
48	DZ	175	PRO	14.5
27	DA	2802	G	13.1
29	DC	165	ASN	13.0

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

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} 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
26	UAL	CZ	5	9/10	0.78	0.28	97,99,99,99	0
26	KBE	CZ	1	9/10	0.79	0.36	89,91,93,94	0
26	UAL	AZ	5	9/10	0.81	0.20	81,82,83,84	0
26	DPP	CZ	2	6/7	0.83	0.15	94,96,97,97	0
26	KBE	AZ	1	9/10	0.85	0.33	78,79,82,82	0
26	5OH	AZ	6	12/13	0.87	0.18	84,89,92,94	0
26	5OH	CZ	6	12/13	0.89	0.28	99,101,102,102	0
26	DPP	AZ	2	6/7	0.93	0.16	79,82,82,84	0

6.3 Carbohydrates (i)

There are no monosaccharides 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, 95^{th} 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
59	MG	DD	301	1/1	0.12	0.57	110,110,110,110	0
59	MG	CA	1605	1/1	0.23	0.47	99,99,99,99	0
59	MG	BA	3332	1/1	0.42	0.45	105,105,105,105	0
59	MG	AT	201	1/1	0.43	0.13	92,92,92,92	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	DA	3069	1/1	0.45	0.83	78,78,78,78	0
59	MG	BA	3297	1/1	0.48	0.69	95,95,95,95	0
59	MG	DA	3203	1/1	0.50	0.91	97,97,97,97	0
59	MG	AA	1710	1/1	0.53	0.65	113,113,113,113	0
59	MG	CA	1672	1/1	0.57	0.27	45,45,45,45	0
59	MG	AA	1620	1/1	0.57	0.34	45,45,45,45	0
59	MG	DA	3247	1/1	0.62	0.35	82,82,82,82	0
59	MG	CA	1630	1/1	0.62	0.37	55,55,55,55	0
59	MG	BA	3290	1/1	0.63	0.17	69,69,69,69	0
59	MG	DA	3181	1/1	0.64	0.25	52,52,52,52	0
59	MG	BA	3307	1/1	0.66	0.45	64,64,64,64	0
59	MG	DA	3183	1/1	0.67	0.11	100,100,100,100	0
59	MG	DA	3108	1/1	0.68	0.34	51,51,51,51	0
59	MG	BA	3294	1/1	0.68	1.08	72,72,72,72	0
59	MG	AA	1676	1/1	0.68	0.19	77,77,77,77	0
59	MG	AX	105	1/1	0.69	0.40	82,82,82,82	0
59	MG	DA	3211	1/1	0.69	1.14	78,78,78,78	0
59	MG	BX	101	1/1	0.70	0.53	53,53,53,53	0
59	MG	BA	3134	1/1	0.70	0.57	39,39,39,39	0
59	MG	DA	3273	1/1	0.70	0.96	106,106,106,106	0
59	MG	AA	1707	1/1	0.70	0.55	59,59,59,59	0
59	MG	DA	3245	1/1	0.71	0.33	86,86,86,86	0
59	MG	BA	3296	1/1	0.72	0.27	61,61,61,61	0
59	MG	AK	202	1/1	0.72	0.29	90,90,90,90	0
59	MG	AA	1727	1/1	0.72	0.53	71,71,71,71	0
59	MG	DA	3077	1/1	0.73	0.33	73,73,73,73	0
59	MG	BA	3347	1/1	0.73	0.84	78,78,78,78	0
59	MG	CA	1670	1/1	0.73	0.29	67,67,67,67	0
59	MG	BA	3004	1/1	0.73	0.50	81,81,81,81	0
59	MG	AA	1647	1/1	0.73	0.29	80,80,80,80	0
59	MG	BA	3298	1/1	0.74	1.43	178,178,178,178	0
59	MG	BA	3265	1/1	0.74	0.24	28,28,28,28	0
59	MG	AX	107	1/1	0.74	0.58	80,80,80,80	0
59	MG	CA	1675	1/1	0.74	0.51	150,150,150,150	0
59	MG	DA	3238	1/1	0.74	0.53	101,101,101,101	0
59	MG	BA	3165	1/1	0.74	0.63	60,60,60,60	0
59	MG	BA	3177	1/1	0.74	0.25	65,65,65,65	0
59	MG	BA	3224	1/1	0.74	0.27	63,63,63,63	0
59	MG	DA	3166	1/1	0.74	0.12	41,41,41,41	0
59	MG	AW	101	1/1	0.75	0.43	135,135,135,135	0
59	MG	AA	1659	1/1	0.75	0.25	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	CA	1683	1/1	0.75	0.55	55,55,55,55	0
59	MG	AA	1667	1/1	0.75	0.38	59,59,59,59	0
59	MG	CA	1623	1/1	0.76	0.21	91,91,91,91	0
59	MG	DA	3213	1/1	0.76	0.64	62,62,62,62	0
59	MG	BA	3162	1/1	0.76	0.64	66,66,66,66	0
59	MG	CA	1686	1/1	0.76	0.30	64,64,64,64	0
59	MG	AA	1624	1/1	0.76	0.18	54,54,54,54	0
59	MG	DA	3190	1/1	0.76	0.14	33,33,33,33	0
59	MG	AA	1627	1/1	0.76	0.40	55,55,55,55	0
59	MG	BA	3269	1/1	0.77	0.95	83,83,83,83	0
59	MG	CA	1644	1/1	0.77	0.80	68,68,68,68	0
59	MG	DA	3217	1/1	0.78	0.39	85,85,85,85	0
59	MG	AW	106	1/1	0.78	0.47	94,94,94,94	0
59	MG	AA	1641	1/1	0.78	0.20	62,62,62,62	0
59	MG	DA	3119	1/1	0.78	0.46	62,62,62,62	0
59	MG	DA	3271	1/1	0.78	0.16	80,80,80,80	0
59	MG	BA	3320	1/1	0.78	1.92	89,89,89,89	0
59	MG	AA	1700	1/1	0.78	0.31	58,58,58,58	0
59	MG	DA	3095	1/1	0.79	1.16	64,64,64,64	0
59	MG	DA	3099	1/1	0.79	0.30	45,45,45,45	0
59	MG	BA	3346	1/1	0.79	0.34	35,35,35,35	0
59	MG	BA	3303	1/1	0.79	0.86	91,91,91,91	0
59	MG	BA	3219	1/1	0.79	0.25	43,43,43,43	0
59	MG	BA	3317	1/1	0.79	0.41	50,50,50,50	0
59	MG	BA	3154	1/1	0.79	0.30	44,44,44,44	0
59	MG	BA	3323	1/1	0.79	0.17	61,61,61,61	0
59	MG	AA	1646	1/1	0.79	0.30	61,61,61,61	0
59	MG	AA	1729	1/1	0.80	0.26	57,57,57,57	0
59	MG	BA	3351	1/1	0.80	0.30	60,60,60,60	0
59	MG	BA	3182	1/1	0.80	0.86	81,81,81,81	0
59	MG	CA	1603	1/1	0.80	0.45	113,113,113,113	0
59	MG	DA	3186	1/1	0.80	0.16	41,41,41,41	0
59	MG	BA	3333	1/1	0.80	0.66	55,55,55,55	0
59	MG	BA	3010	1/1	0.80	0.32	29,29,29,29	0
59	MG	DA	3112	1/1	0.80	0.21	70,70,70,70	0
59	MG	DA	3132	1/1	0.81	0.22	60,60,60,60	0
59	MG	AA	1665	1/1	0.81	0.26	49,49,49,49	0
59	MG	DA	3171	1/1	0.81	0.45	75,75,75,75	0
59	MG	AY	102	1/1	0.81	0.52	96,96,96,96	0
59	MG	CA	1612	1/1	0.81	0.50	80,80,80,80	0
59	MG	AW	102	1/1	0.81	0.12	53,53,53,53	0
59	MG	DA	3250	1/1	0.81	0.41	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	DA	3251	1/1	0.81	0.17	44,44,44,44	0
59	MG	AA	1711	1/1	0.81	0.27	68,68,68,68	0
59	MG	AA	1689	1/1	0.81	0.21	73,73,73,73	0
59	MG	DA	3207	1/1	0.81	0.95	69,69,69,69	0
59	MG	DA	3007	1/1	0.82	0.33	42,42,42,42	0
59	MG	BA	3159	1/1	0.82	0.19	46,46,46,46	0
59	MG	BA	3360	1/1	0.82	0.40	68,68,68,68	0
59	MG	CQ	201	1/1	0.82	0.12	94,94,94,94	0
59	MG	DD	303	1/1	0.82	0.51	95,95,95,95	0
59	MG	BA	3087	1/1	0.83	0.21	39,39,39,39	0
59	MG	BA	3357	1/1	0.83	0.23	54,54,54,54	0
59	MG	DA	3189	1/1	0.83	1.16	92,92,92,92	0
59	MG	BA	3116	1/1	0.83	0.21	54,54,54,54	0
59	MG	BA	3374	1/1	0.83	0.42	31,31,31,31	0
59	MG	BN	201	1/1	0.83	0.35	67,67,67,67	0
59	MG	BA	3184	1/1	0.83	0.26	56,56,56,56	0
59	MG	BA	3127	1/1	0.83	0.24	48,48,48,48	0
59	MG	AA	1621	1/1	0.83	0.37	54,54,54,54	0
59	MG	AA	1634	1/1	0.83	0.12	72,72,72,72	0
59	MG	AK	201	1/1	0.83	0.31	66,66,66,66	0
59	MG	BA	3270	1/1	0.83	0.27	64,64,64,64	0
59	MG	DA	3126	1/1	0.83	0.30	48,48,48,48	0
59	MG	AW	103	1/1	0.83	0.40	73,73,73,73	0
59	MG	DA	3253	1/1	0.83	0.22	46,46,46,46	0
59	MG	DA	3152	1/1	0.83	0.39	54,54,54,54	0
59	MG	BA	3337	1/1	0.83	0.36	61,61,61,61	0
59	MG	BA	3164	1/1	0.83	0.49	37,37,37,37	0
59	MG	AA	1725	1/1	0.83	0.26	84,84,84,84	0
59	MG	DR	201	1/1	0.83	0.32	65,65,65,65	0
59	MG	BR	201	1/1	0.84	0.44	41,41,41,41	0
59	MG	AA	1699	1/1	0.84	0.41	61,61,61,61	0
59	MG	CA	1643	1/1	0.84	0.62	51,51,51,51	0
59	MG	BZ	301	1/1	0.84	0.15	42,42,42,42	0
59	MG	BA	3185	1/1	0.84	0.33	62,62,62,62	0
59	MG	DA	3227	1/1	0.84	0.20	72,72,72,72	0
59	MG	DA	3235	1/1	0.84	0.23	68,68,68,68	0
59	MG	BA	3392	1/1	0.84	0.30	63,63,63,63	0
59	MG	AA	1717	1/1	0.84	0.18	50,50,50,50	0
59	MG	CA	1677	1/1	0.85	0.15	53,53,53,53	0
59	MG	AA	1678	1/1	0.85	0.21	52,52,52,52	0
59	MG	BA	3037	1/1	0.85	0.46	27,27,27,27	0
59	MG	CA	1689	1/1	0.85	0.15	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	BA	3205	1/1	0.85	0.27	86,86,86,86	0
59	MG	BA	3216	1/1	0.85	0.41	42,42,42,42	0
59	MG	DA	3030	1/1	0.85	0.10	17,17,17,17	0
59	MG	DA	3043	1/1	0.85	0.33	48,48,48,48	0
59	MG	BA	3002	1/1	0.85	0.17	59,59,59,59	0
59	MG	BA	3166	1/1	0.85	0.20	35,35,35,35	0
59	MG	DA	3224	1/1	0.85	0.12	53,53,53,53	0
59	MG	DA	3226	1/1	0.85	0.71	70,70,70,70	0
59	MG	BA	3231	1/1	0.85	0.07	54,54,54,54	0
59	MG	DA	3234	1/1	0.85	0.41	84,84,84,84	0
59	MG	BA	3237	1/1	0.85	0.47	32,32,32,32	0
59	MG	CA	1638	1/1	0.85	0.20	46,46,46,46	0
59	MG	BA	3362	1/1	0.85	0.35	51,51,51,51	0
59	MG	BA	3259	1/1	0.85	0.16	35,35,35,35	0
59	MG	DA	3121	1/1	0.85	0.18	37,37,37,37	0
59	MG	CA	1651	1/1	0.85	0.15	50,50,50,50	0
59	MG	CA	1652	1/1	0.85	0.37	86,86,86,86	0
59	MG	DA	3270	1/1	0.85	0.27	61,61,61,61	0
59	MG	DA	3137	1/1	0.85	0.13	28,28,28,28	0
59	MG	BA	3382	1/1	0.85	0.34	37,37,37,37	0
59	MG	DB	201	1/1	0.85	0.15	44,44,44,44	0
59	MG	BA	3156	1/1	0.85	0.29	25,25,25,25	0
59	MG	DA	3170	1/1	0.85	0.14	52,52,52,52	0
59	MG	AA	1637	1/1	0.85	0.21	40,40,40,40	0
59	MG	B0	102	1/1	0.86	0.32	49,49,49,49	0
59	MG	BA	3176	1/1	0.86	0.27	27,27,27,27	0
59	MG	BA	3261	1/1	0.86	0.19	53,53,53,53	0
59	MG	DA	3053	1/1	0.86	0.19	47,47,47,47	0
59	MG	AA	1724	1/1	0.86	0.35	56,56,56,56	0
59	MG	AX	102	1/1	0.86	0.12	51,51,51,51	0
59	MG	BA	3147	1/1	0.86	0.25	33,33,33,33	0
59	MG	DA	3218	1/1	0.86	0.80	75,75,75,75	0
59	MG	DA	3098	1/1	0.86	0.17	37,37,37,37	0
59	MG	AC	301	1/1	0.86	0.15	64,64,64,64	0
59	MG	BA	3028	1/1	0.86	0.22	41,41,41,41	0
59	MG	BA	3352	1/1	0.86	0.47	51,51,51,51	0
59	MG	AX	106	1/1	0.86	0.14	43,43,43,43	0
59	MG	AA	1652	1/1	0.86	0.43	55,55,55,55	0
59	MG	DA	3123	1/1	0.86	0.26	32,32,32,32	0
59	MG	BA	3099	1/1	0.86	0.87	51,51,51,51	0
59	MG	CA	1671	1/1	0.86	0.30	54,54,54,54	0
59	MG	BA	3299	1/1	0.86	1.44	85,85,85,85	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	BA	3302	1/1	0.86	0.15	42,42,42,42	0
59	MG	BA	3227	1/1	0.86	0.15	69,69,69,69	0
59	MG	BA	3112	1/1	0.86	0.13	52,52,52,52	0
59	MG	BA	3315	1/1	0.86	0.39	46,46,46,46	0
59	MG	DA	3176	1/1	0.86	0.18	51,51,51,51	0
59	MG	BA	3232	1/1	0.86	0.32	25,25,25,25	0
59	MG	AA	1655	1/1	0.86	0.40	28,28,28,28	0
59	MG	DA	3005	1/1	0.86	0.25	50,50,50,50	0
59	MG	BA	3126	1/1	0.87	0.33	52,52,52,52	0
59	MG	AA	1714	1/1	0.87	0.37	66,66,66,66	0
59	MG	DA	3220	1/1	0.87	0.18	64,64,64,64	0
59	MG	B0	101	1/1	0.87	0.25	58,58,58,58	0
59	MG	DA	3049	1/1	0.87	0.14	41,41,41,41	0
59	MG	CA	1659	1/1	0.87	0.10	64,64,64,64	0
59	MG	DA	3229	1/1	0.87	0.25	76,76,76,76	0
59	MG	DA	3068	1/1	0.87	0.20	60,60,60,60	0
59	MG	BA	3027	1/1	0.87	0.24	35,35,35,35	0
59	MG	DA	3236	1/1	0.87	1.01	91,91,91,91	0
59	MG	DA	3175	1/1	0.87	0.54	53,53,53,53	0
59	MG	AA	1695	1/1	0.87	0.17	55,55,55,55	0
59	MG	DA	3084	1/1	0.87	0.14	48,48,48,48	0
59	MG	AA	1723	1/1	0.87	0.14	36,36,36,36	0
59	MG	CA	1608	1/1	0.87	0.79	57,57,57,57	0
59	MG	AA	1643	1/1	0.87	0.20	51,51,51,51	0
59	MG	BA	3249	1/1	0.87	0.61	50,50,50,50	0
59	MG	DA	3197	1/1	0.87	0.34	84,84,84,84	0
59	MG	AW	104	1/1	0.87	0.14	57,57,57,57	0
59	MG	DA	3274	1/1	0.87	0.18	62,62,62,62	0
59	MG	CA	1631	1/1	0.87	0.47	45,45,45,45	0
59	MG	DA	3210	1/1	0.87	0.46	57,57,57,57	0
59	MG	AW	105	1/1	0.87	0.21	41,41,41,41	0
59	MG	AA	1648	1/1	0.87	0.24	48,48,48,48	0
59	MG	DA	3193	1/1	0.88	0.18	40,40,40,40	0
59	MG	BA	3316	1/1	0.88	0.43	68,68,68,68	0
59	MG	DA	3200	1/1	0.88	0.31	46,46,46,46	0
59	MG	DA	3078	1/1	0.88	0.24	58,58,58,58	0
59	MG	AA	1654	1/1	0.88	0.25	100,100,100,100	0
59	MG	BA	3386	1/1	0.88	0.18	20,20,20,20	0
59	MG	DA	3097	1/1	0.88	0.37	65,65,65,65	0
59	MG	DA	3212	1/1	0.88	0.43	61,61,61,61	0
59	MG	BA	3003	1/1	0.88	0.39	42,42,42,42	0
59	MG	CA	1657	1/1	0.88	0.69	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	BA	3394	1/1	0.88	0.25	49,49,49,49	0
59	MG	DA	3109	1/1	0.88	0.73	65,65,65,65	0
59	MG	BA	3397	1/1	0.88	0.47	66,66,66,66	0
59	MG	BA	3230	1/1	0.88	0.17	48,48,48,48	0
59	MG	DA	3120	1/1	0.88	0.15	55,55,55,55	0
59	MG	BA	3331	1/1	0.88	0.12	52,52,52,52	0
59	MG	BA	3167	1/1	0.88	0.20	31,31,31,31	0
59	MG	BA	3196	1/1	0.88	0.30	49,49,49,49	0
59	MG	BA	3174	1/1	0.88	0.14	43,43,43,43	0
59	MG	DA	3136	1/1	0.88	0.30	47,47,47,47	0
59	MG	DA	3240	1/1	0.88	0.19	49,49,49,49	0
59	MG	BA	3210	1/1	0.88	0.25	57,57,57,57	0
59	MG	BA	3256	1/1	0.88	0.18	56,56,56,56	0
59	MG	CE	201	1/1	0.88	0.08	71,71,71,71	0
59	MG	DA	3168	1/1	0.88	0.26	43,43,43,43	0
59	MG	BA	3348	1/1	0.88	0.38	62,62,62,62	0
59	MG	DA	3265	1/1	0.88	0.44	51,51,51,51	0
59	MG	CA	1607	1/1	0.88	0.41	36,36,36,36	0
59	MG	BA	3214	1/1	0.88	0.33	87,87,87,87	0
59	MG	BA	3260	1/1	0.88	0.17	58,58,58,58	0
59	MG	CA	1618	1/1	0.88	0.47	69,69,69,69	0
59	MG	BA	3120	1/1	0.88	0.29	49,49,49,49	0
59	MG	BA	3310	1/1	0.88	0.37	55,55,55,55	0
59	MG	AA	1635	1/1	0.88	0.21	46,46,46,46	0
59	MG	BA	3366	1/1	0.88	0.40	64,64,64,64	0
60	ZN	D5	103	1/1	0.88	0.05	92,92,92,92	0
59	MG	DA	3102	1/1	0.89	0.13	84,84,84,84	0
59	MG	BA	3344	1/1	0.89	0.10	37,37,37,37	0
59	MG	AA	1688	1/1	0.89	0.26	47,47,47,47	0
59	MG	AA	1656	1/1	0.89	0.21	42,42,42,42	0
59	MG	AA	1617	1/1	0.89	0.09	48,48,48,48	0
59	MG	BA	3094	1/1	0.89	0.13	12,12,12,12	0
59	MG	BA	3308	1/1	0.89	0.83	49,49,49,49	0
59	MG	DA	3223	1/1	0.89	0.17	61,61,61,61	0
59	MG	BA	3133	1/1	0.89	0.17	20,20,20,20	0
59	MG	BA	3191	1/1	0.89	0.19	31,31,31,31	0
59	MG	AA	1603	1/1	0.89	0.51	58,58,58,58	0
59	MG	BA	3272	1/1	0.89	0.31	30,30,30,30	0
59	MG	BA	3373	1/1	0.89	0.34	55,55,55,55	0
59	MG	CA	1619	1/1	0.89	0.43	80,80,80,80	0
59	MG	DA	3014	1/1	0.89	0.22	79,79,79,79	0
59	MG	BA	3197	1/1	0.89	0.36	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	BA	3103	1/1	0.89	0.65	65,65,65,65	0
59	MG	BA	3295	1/1	0.89	0.42	47,47,47,47	0
59	MG	BA	3389	1/1	0.89	0.20	44,44,44,44	0
59	MG	DA	3061	1/1	0.89	0.31	28,28,28,28	0
59	MG	CA	1639	1/1	0.89	0.31	74,74,74,74	0
59	MG	BA	3245	1/1	0.89	0.67	48,48,48,48	0
59	MG	DA	3254	1/1	0.89	0.17	54,54,54,54	0
59	MG	AA	1684	1/1	0.89	0.09	42,42,42,42	0
59	MG	BA	3334	1/1	0.89	0.17	32,32,32,32	0
59	MG	BA	3398	1/1	0.89	0.40	66,66,66,66	0
59	MG	DA	3088	1/1	0.89	0.15	36,36,36,36	0
59	MG	DA	3196	1/1	0.89	0.40	48,48,48,48	0
59	MG	BF	302	1/1	0.89	0.18	26,26,26,26	0
59	MG	DA	3198	1/1	0.89	0.49	56,56,56,56	0
59	MG	BA	3252	1/1	0.89	0.12	18,18,18,18	0
59	MG	DE	303	1/1	0.89	0.11	32,32,32,32	0
59	MG	CA	1666	1/1	0.89	0.08	68,68,68,68	0
59	MG	CA	1669	1/1	0.89	0.17	36,36,36,36	0
59	MG	DA	3192	1/1	0.90	0.22	39,39,39,39	0
59	MG	BA	3381	1/1	0.90	0.16	43,43,43,43	0
59	MG	AT	202	1/1	0.90	0.42	70,70,70,70	0
59	MG	BA	3019	1/1	0.90	0.31	21,21,21,21	0
59	MG	AX	104	1/1	0.90	0.26	45,45,45,45	0
59	MG	CA	1645	1/1	0.90	0.05	27,27,27,27	0
59	MG	DA	3080	1/1	0.90	0.17	41,41,41,41	0
59	MG	AA	1686	1/1	0.90	0.14	58,58,58,58	0
59	MG	AA	1672	1/1	0.90	0.15	51,51,51,51	0
59	MG	BA	3326	1/1	0.90	0.15	35,35,35,35	0
59	MG	BA	3053	1/1	0.90	0.22	11,11,11,11	0
59	MG	CA	1661	1/1	0.90	0.45	42,42,42,42	0
59	MG	DA	3215	1/1	0.90	0.56	63,63,63,63	0
59	MG	BA	3400	1/1	0.90	0.17	39,39,39,39	0
59	MG	BA	3228	1/1	0.90	0.46	21,21,21,21	0
59	MG	DA	3219	1/1	0.90	0.17	40,40,40,40	0
59	MG	BA	3288	1/1	0.90	0.16	33,33,33,33	0
59	MG	BA	3084	1/1	0.90	0.26	19,19,19,19	0
59	MG	BA	3335	1/1	0.90	0.42	52,52,52,52	0
59	MG	BA	3292	1/1	0.90	0.31	40,40,40,40	0
59	MG	BA	3148	1/1	0.90	0.17	27,27,27,27	0
59	MG	CA	1679	1/1	0.90	0.18	46,46,46,46	0
59	MG	AA	1639	1/1	0.90	0.16	54,54,54,54	0
59	MG	BA	3235	1/1	0.90	0.36	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	CA	1688	1/1	0.90	0.14	59,59,59,59	0
59	MG	AA	1640	1/1	0.90	0.35	37,37,37,37	0
59	MG	CA	1692	1/1	0.90	0.38	73,73,73,73	0
59	MG	AO	101	1/1	0.90	0.12	62,62,62,62	0
59	MG	DA	3163	1/1	0.90	0.62	62,62,62,62	0
59	MG	DA	3164	1/1	0.90	0.38	51,51,51,51	0
59	MG	BA	3246	1/1	0.90	0.51	46,46,46,46	0
59	MG	DA	3167	1/1	0.90	0.15	42,42,42,42	0
59	MG	CX	101	1/1	0.90	0.12	42,42,42,42	0
59	MG	DA	3257	1/1	0.90	0.49	40,40,40,40	0
59	MG	AA	1671	1/1	0.90	0.18	83,83,83,83	0
59	MG	AX	101	1/1	0.90	0.41	57,57,57,57	0
59	MG	BA	3305	1/1	0.90	0.29	32,32,32,32	0
59	MG	BA	3253	1/1	0.90	0.29	56,56,56,56	0
59	MG	DA	3178	1/1	0.90	0.57	36,36,36,36	0
59	MG	CA	1625	1/1	0.90	0.55	54,54,54,54	0
59	MG	DA	3045	1/1	0.90	0.13	41,41,41,41	0
59	MG	BA	3208	1/1	0.90	0.20	54,54,54,54	0
59	MG	DA	3187	1/1	0.90	0.51	51,51,51,51	0
59	MG	DA	3052	1/1	0.90	0.15	30,30,30,30	0
59	MG	DZ	301	1/1	0.90	0.21	55,55,55,55	0
59	MG	BA	3257	1/1	0.90	0.21	21,21,21,21	0
59	MG	AA	1685	1/1	0.91	0.55	50,50,50,50	0
59	MG	BA	3274	1/1	0.91	0.15	36,36,36,36	0
59	MG	BA	3376	1/1	0.91	0.91	66,66,66,66	0
59	MG	DA	3144	1/1	0.91	0.57	57,57,57,57	0
59	MG	DA	3145	1/1	0.91	0.31	45,45,45,45	0
59	MG	BA	3276	1/1	0.91	0.24	45,45,45,45	0
59	MG	BA	3281	1/1	0.91	0.21	41,41,41,41	0
59	MG	CA	1642	1/1	0.91	0.24	29,29,29,29	0
59	MG	BA	3104	1/1	0.91	0.40	52,52,52,52	0
59	MG	BA	3240	1/1	0.91	0.13	60,60,60,60	0
59	MG	BA	3291	1/1	0.91	0.15	42,42,42,42	0
59	MG	BA	3108	1/1	0.91	0.14	44,44,44,44	0
59	MG	BA	3396	1/1	0.91	0.18	37,37,37,37	0
59	MG	DA	3172	1/1	0.91	0.30	55,55,55,55	0
59	MG	BA	3293	1/1	0.91	0.64	44,44,44,44	0
59	MG	AA	1698	1/1	0.91	0.19	49,49,49,49	0
59	MG	BA	3114	1/1	0.91	0.35	53,53,53,53	0
59	MG	BA	3043	1/1	0.91	0.32	22,22,22,22	0
59	MG	DA	3082	1/1	0.91	0.47	37,37,37,37	0
59	MG	BA	3341	1/1	0.91	0.28	86,86,86,86	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	BA	3119	1/1	0.91	0.16	20,20,20,20	0
59	MG	BA	3049	1/1	0.91	0.11	12,12,12,12	0
59	MG	AA	1731	1/1	0.91	0.17	22,22,22,22	0
59	MG	DA	3261	1/1	0.91	0.32	50,50,50,50	0
59	MG	BA	3057	1/1	0.91	0.15	23,23,23,23	0
59	MG	DA	3268	1/1	0.91	0.21	47,47,47,47	0
59	MG	BA	3349	1/1	0.91	0.18	53,53,53,53	0
59	MG	AA	1732	1/1	0.91	0.16	32,32,32,32	0
59	MG	BA	3179	1/1	0.91	0.33	31,31,31,31	0
59	MG	AA	1605	1/1	0.91	0.28	54,54,54,54	0
59	MG	DA	3275	1/1	0.91	0.34	54,54,54,54	0
59	MG	BA	3359	1/1	0.91	0.32	51,51,51,51	0
59	MG	BA	3026	1/1	0.91	0.29	29,29,29,29	0
59	MG	BA	3309	1/1	0.91	0.05	41,41,41,41	0
59	MG	DA	3209	1/1	0.91	0.44	69,69,69,69	0
59	MG	AF	201	1/1	0.91	0.18	39,39,39,39	0
59	MG	CA	1621	1/1	0.91	0.40	42,42,42,42	0
59	MG	BA	3371	1/1	0.91	0.25	57,57,57,57	0
59	MG	AA	1728	1/1	0.92	0.11	59,59,59,59	0
59	MG	BA	3056	1/1	0.92	0.67	59,59,59,59	0
59	MG	CA	1653	1/1	0.92	0.15	46,46,46,46	0
59	MG	BF	301	1/1	0.92	0.15	37,37,37,37	0
59	MG	DA	3079	1/1	0.92	0.28	16,16,16,16	0
59	MG	AA	1691	1/1	0.92	0.44	56,56,56,56	0
59	MG	BA	3183	1/1	0.92	0.23	37,37,37,37	0
59	MG	BA	3067	1/1	0.92	0.37	36,36,36,36	0
59	MG	DA	3087	1/1	0.92	0.84	59,59,59,59	0
59	MG	BA	3128	1/1	0.92	0.43	34,34,34,34	0
59	MG	DA	3091	1/1	0.92	0.18	67,67,67,67	0
59	MG	BA	3078	1/1	0.92	0.12	20,20,20,20	0
59	MG	BA	3079	1/1	0.92	0.15	23,23,23,23	0
59	MG	BA	3144	1/1	0.92	0.14	37,37,37,37	0
59	MG	CA	1674	1/1	0.92	0.33	63,63,63,63	0
59	MG	DA	3100	1/1	0.92	0.37	57,57,57,57	0
59	MG	AA	1693	1/1	0.92	0.16	41,41,41,41	0
59	MG	DA	3103	1/1	0.92	0.07	38,38,38,38	0
59	MG	AA	1712	1/1	0.92	0.43	53,53,53,53	0
59	MG	BA	3153	1/1	0.92	0.17	37,37,37,37	0
59	MG	BA	3089	1/1	0.92	0.15	55,55,55,55	0
59	MG	BA	3268	1/1	0.92	0.47	44,44,44,44	0
59	MG	CA	1687	1/1	0.92	0.15	56,56,56,56	0
59	MG	CA	1615	1/1	0.92	0.63	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	AA	1638	1/1	0.92	0.18	50,50,50,50	0
59	MG	DA	3230	1/1	0.92	0.51	46,46,46,46	0
59	MG	DA	3232	1/1	0.92	0.30	80,80,80,80	0
59	MG	DA	3125	1/1	0.92	0.39	59,59,59,59	0
59	MG	AD	301	1/1	0.92	0.12	49,49,49,49	0
59	MG	DA	3128	1/1	0.92	0.14	26,26,26,26	0
59	MG	BA	3102	1/1	0.92	0.31	49,49,49,49	0
59	MG	CA	1622	1/1	0.92	0.26	49,49,49,49	0
59	MG	DA	3243	1/1	0.92	0.38	35,35,35,35	0
59	MG	DA	3244	1/1	0.92	0.20	33,33,33,33	0
59	MG	CV	101	1/1	0.92	0.24	36,36,36,36	0
59	MG	DA	3140	1/1	0.92	0.41	38,38,38,38	0
59	MG	BA	3379	1/1	0.92	0.51	52,52,52,52	0
59	MG	CX	102	1/1	0.92	0.51	78,78,78,78	0
59	MG	DA	3146	1/1	0.92	0.20	70,70,70,70	0
59	MG	AA	1649	1/1	0.92	0.36	71,71,71,71	0
59	MG	AA	1719	1/1	0.92	0.29	58,58,58,58	0
59	MG	DA	3011	1/1	0.92	0.42	37,37,37,37	0
59	MG	DA	3262	1/1	0.92	0.08	58,58,58,58	0
59	MG	BA	3383	1/1	0.92	0.34	36,36,36,36	0
59	MG	DA	3017	1/1	0.92	0.22	16,16,16,16	0
59	MG	DA	3027	1/1	0.92	0.46	28,28,28,28	0
59	MG	CA	1636	1/1	0.92	0.17	55,55,55,55	0
59	MG	DA	3035	1/1	0.92	0.64	63,63,63,63	0
59	MG	BA	3229	1/1	0.92	0.36	37,37,37,37	0
59	MG	AA	1633	1/1	0.92	0.08	37,37,37,37	0
59	MG	AA	1642	1/1	0.92	0.12	55,55,55,55	0
59	MG	AA	1702	1/1	0.92	0.52	59,59,59,59	0
59	MG	BA	3233	1/1	0.92	0.13	32,32,32,32	0
59	MG	DA	3057	1/1	0.92	0.11	21,21,21,21	0
59	MG	DA	3184	1/1	0.92	0.11	50,50,50,50	0
59	MG	AA	1666	1/1	0.92	0.81	75,75,75,75	0
60	ZN	B4	101	1/1	0.92	0.06	117,117,117,117	0
60	ZN	B5	102	1/1	0.92	0.07	75,75,75,75	0
59	MG	DA	3065	1/1	0.92	0.32	51,51,51,51	0
59	MG	BA	3038	1/1	0.93	0.25	20,20,20,20	0
59	MG	AA	1610	1/1	0.93	0.09	29,29,29,29	0
59	MG	BA	3280	1/1	0.93	0.37	54,54,54,54	0
59	MG	DA	3051	1/1	0.93	0.46	51,51,51,51	0
59	MG	BA	3350	1/1	0.93	0.13	20,20,20,20	0
59	MG	AA	1651	1/1	0.93	0.30	37,37,37,37	0
59	MG	BA	3287	1/1	0.93	0.57	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	AA	1716	1/1	0.93	0.23	44,44,44,44	0
59	MG	BA	3157	1/1	0.93	0.13	42,42,42,42	0
59	MG	BA	3054	1/1	0.93	0.12	22,22,22,22	0
59	MG	CA	1641	1/1	0.93	0.15	28,28,28,28	0
59	MG	DA	3076	1/1	0.93	0.28	48,48,48,48	0
59	MG	BA	3109	1/1	0.93	0.14	34,34,34,34	0
59	MG	BA	3363	1/1	0.93	0.26	56,56,56,56	0
59	MG	DA	3199	1/1	0.93	0.50	38,38,38,38	0
59	MG	BA	3110	1/1	0.93	0.20	39,39,39,39	0
59	MG	AA	1658	1/1	0.93	0.58	42,42,42,42	0
59	MG	CA	1649	1/1	0.93	0.09	48,48,48,48	0
59	MG	AA	1718	1/1	0.93	0.14	36,36,36,36	0
59	MG	BA	3058	1/1	0.93	0.21	20,20,20,20	0
59	MG	BA	3234	1/1	0.93	0.33	35,35,35,35	0
59	MG	DA	3089	1/1	0.93	0.36	26,26,26,26	0
59	MG	BA	3170	1/1	0.93	0.26	57,57,57,57	0
59	MG	DA	3093	1/1	0.93	0.25	40,40,40,40	0
59	MG	BA	3117	1/1	0.93	0.24	38,38,38,38	0
59	MG	BA	3239	1/1	0.93	0.21	25,25,25,25	0
59	MG	BA	3175	1/1	0.93	0.24	43,43,43,43	0
59	MG	BA	3244	1/1	0.93	0.17	31,31,31,31	0
59	MG	BA	3306	1/1	0.93	0.15	29,29,29,29	0
59	MG	DA	3101	1/1	0.93	0.09	28,28,28,28	0
59	MG	BA	3391	1/1	0.93	0.19	31,31,31,31	0
59	MG	BA	3064	1/1	0.93	0.28	32,32,32,32	0
59	MG	AA	1623	1/1	0.93	0.21	27,27,27,27	0
59	MG	BA	3073	1/1	0.93	0.16	10,10,10,10	0
59	MG	DA	3111	1/1	0.93	0.62	71,71,71,71	0
59	MG	BA	3181	1/1	0.93	0.10	46,46,46,46	0
59	MG	DA	3113	1/1	0.93	0.18	49,49,49,49	0
59	MG	BA	3313	1/1	0.93	0.42	55,55,55,55	0
59	MG	AA	1721	1/1	0.93	0.14	54,54,54,54	0
59	MG	DA	3239	1/1	0.93	1.00	78,78,78,78	0
59	MG	BA	3255	1/1	0.93	0.11	22,22,22,22	0
59	MG	AE	201	1/1	0.93	0.21	87,87,87,87	0
59	MG	BA	3131	1/1	0.93	0.84	68,68,68,68	0
59	MG	AA	1722	1/1	0.93	0.15	35,35,35,35	0
59	MG	BA	3324	1/1	0.93	0.45	35,35,35,35	0
59	MG	AA	1660	1/1	0.93	0.41	40,40,40,40	0
59	MG	DA	3133	1/1	0.93	0.15	69,69,69,69	0
59	MG	DA	3252	1/1	0.93	0.35	47,47,47,47	0
59	MG	BA	3135	1/1	0.93	0.25	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	BA	3138	1/1	0.93	0.17	17,17,17,17	0
59	MG	BA	3266	1/1	0.93	0.31	27,27,27,27	0
59	MG	BA	3200	1/1	0.93	0.21	51,51,51,51	0
59	MG	DA	3003	1/1	0.93	0.22	36,36,36,36	0
59	MG	BA	3143	1/1	0.93	0.25	37,37,37,37	0
59	MG	AA	1662	1/1	0.93	0.22	23,23,23,23	0
59	MG	DA	3153	1/1	0.93	0.18	28,28,28,28	0
59	MG	DA	3157	1/1	0.93	0.41	62,62,62,62	0
59	MG	DA	3160	1/1	0.93	0.33	28,28,28,28	0
59	MG	DA	3161	1/1	0.93	0.50	32,32,32,32	0
59	MG	DA	3162	1/1	0.93	0.11	40,40,40,40	0
59	MG	DA	3009	1/1	0.93	0.15	20,20,20,20	0
59	MG	CA	1609	1/1	0.93	0.48	52,52,52,52	0
59	MG	BA	3340	1/1	0.93	0.13	42,42,42,42	0
59	MG	BA	3271	1/1	0.93	0.49	64,64,64,64	0
59	MG	DA	3021	1/1	0.93	0.17	28,28,28,28	0
59	MG	DA	3022	1/1	0.93	0.17	14,14,14,14	0
59	MG	CA	1617	1/1	0.93	0.28	39,39,39,39	0
59	MG	AA	1645	1/1	0.93	0.41	64,64,64,64	0
59	MG	BA	3273	1/1	0.93	0.21	26,26,26,26	0
59	MG	AA	1663	1/1	0.94	0.44	53,53,53,53	0
59	MG	DA	3169	1/1	0.94	0.14	37,37,37,37	0
59	MG	DA	3029	1/1	0.94	0.34	34,34,34,34	0
59	MG	CA	1614	1/1	0.94	0.16	49,49,49,49	0
59	MG	BA	3343	1/1	0.94	0.20	34,34,34,34	0
59	MG	DA	3173	1/1	0.94	0.20	57,57,57,57	0
59	MG	DA	3039	1/1	0.94	0.32	58,58,58,58	0
59	MG	DA	3042	1/1	0.94	0.29	41,41,41,41	0
59	MG	AX	103	1/1	0.94	0.14	32,32,32,32	0
59	MG	AA	1726	1/1	0.94	0.29	32,32,32,32	0
59	MG	AL	201	1/1	0.94	0.46	44,44,44,44	0
59	MG	BA	3052	1/1	0.94	0.43	37,37,37,37	0
59	MG	AA	1715	1/1	0.94	0.14	34,34,34,34	0
59	MG	AA	1608	1/1	0.94	0.07	26,26,26,26	0
59	MG	AY	101	1/1	0.94	0.17	71,71,71,71	0
59	MG	CA	1626	1/1	0.94	0.33	46,46,46,46	0
59	MG	DA	3191	1/1	0.94	0.08	77,77,77,77	0
59	MG	CA	1627	1/1	0.94	0.15	62,62,62,62	0
59	MG	AA	1604	1/1	0.94	0.30	56,56,56,56	0
59	MG	BA	3354	1/1	0.94	0.11	41,41,41,41	0
59	MG	DA	3074	1/1	0.94	0.35	59,59,59,59	0
59	MG	BA	3173	1/1	0.94	0.11	17,17,17,17	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	AA	1607	1/1	0.94	0.44	43,43,43,43	0
59	MG	BA	3061	1/1	0.94	0.28	21,21,21,21	0
59	MG	AA	1703	1/1	0.94	0.08	41,41,41,41	0
59	MG	BA	3241	1/1	0.94	0.27	38,38,38,38	0
59	MG	DA	3208	1/1	0.94	0.40	62,62,62,62	0
59	MG	BA	3365	1/1	0.94	0.15	36,36,36,36	0
59	MG	BA	3301	1/1	0.94	0.11	21,21,21,21	0
59	MG	BA	3367	1/1	0.94	0.44	35,35,35,35	0
59	MG	CA	1647	1/1	0.94	0.43	51,51,51,51	0
59	MG	BA	3369	1/1	0.94	0.28	38,38,38,38	0
59	MG	DA	3214	1/1	0.94	0.15	34,34,34,34	0
59	MG	BA	3125	1/1	0.94	0.48	43,43,43,43	0
59	MG	BA	3372	1/1	0.94	0.21	26,26,26,26	0
59	MG	DA	3094	1/1	0.94	0.24	27,27,27,27	0
59	MG	AA	1733	1/1	0.94	0.13	30,30,30,30	0
59	MG	BA	3180	1/1	0.94	0.35	22,22,22,22	0
59	MG	BA	3248	1/1	0.94	0.27	37,37,37,37	0
59	MG	AA	1618	1/1	0.94	0.23	22,22,22,22	0
59	MG	CA	1665	1/1	0.94	0.27	34,34,34,34	0
59	MG	BA	3075	1/1	0.94	0.29	32,32,32,32	0
59	MG	CA	1668	1/1	0.94	0.08	42,42,42,42	0
59	MG	AA	1619	1/1	0.94	0.55	47,47,47,47	0
59	MG	DA	3231	1/1	0.94	0.21	43,43,43,43	0
59	MG	BA	3020	1/1	0.94	0.23	22,22,22,22	0
59	MG	BA	3384	1/1	0.94	0.10	39,39,39,39	0
59	MG	BA	3312	1/1	0.94	0.13	42,42,42,42	0
59	MG	BA	3388	1/1	0.94	0.13	13,13,13,13	0
59	MG	AA	1661	1/1	0.94	0.13	34,34,34,34	0
59	MG	BA	3189	1/1	0.94	0.31	18,18,18,18	0
59	MG	AW	107	1/1	0.94	0.14	41,41,41,41	0
59	MG	DA	3241	1/1	0.94	0.30	42,42,42,42	0
59	MG	CA	1681	1/1	0.94	0.07	58,58,58,58	0
59	MG	BA	3393	1/1	0.94	0.15	40,40,40,40	0
59	MG	DA	3124	1/1	0.94	0.05	43,43,43,43	0
59	MG	BA	3195	1/1	0.94	0.15	79,79,79,79	0
59	MG	DA	3248	1/1	0.94	0.46	60,60,60,60	0
59	MG	BA	3319	1/1	0.94	0.41	25,25,25,25	0
59	MG	AA	1629	1/1	0.94	0.15	78,78,78,78	0
59	MG	BA	3322	1/1	0.94	0.68	147,147,147,147	0
59	MG	CA	1691	1/1	0.94	0.15	55,55,55,55	0
59	MG	DA	3134	1/1	0.94	0.26	42,42,42,42	0
59	MG	DA	3256	1/1	0.94	0.12	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	BA	3139	1/1	0.94	0.15	15,15,15,15	0
59	MG	DA	3259	1/1	0.94	0.36	43,43,43,43	0
59	MG	DA	3260	1/1	0.94	0.28	35,35,35,35	0
59	MG	BA	3091	1/1	0.94	0.23	34,34,34,34	0
59	MG	BA	3325	1/1	0.94	0.15	61,61,61,61	0
59	MG	DA	3142	1/1	0.94	0.15	44,44,44,44	0
59	MG	BA	3093	1/1	0.94	0.15	10,10,10,10	0
59	MG	BA	3146	1/1	0.94	0.36	12,12,12,12	0
59	MG	BU	201	1/1	0.94	0.27	22,22,22,22	0
59	MG	DA	3148	1/1	0.94	0.62	40,40,40,40	0
59	MG	DA	3002	1/1	0.94	0.23	31,31,31,31	0
59	MG	BA	3031	1/1	0.94	0.22	12,12,12,12	0
59	MG	DA	3155	1/1	0.94	0.18	56,56,56,56	0
59	MG	BA	3211	1/1	0.94	0.18	16,16,16,16	0
59	MG	BA	3095	1/1	0.94	0.25	30,30,30,30	0
59	MG	DE	302	1/1	0.94	0.65	65,65,65,65	0
59	MG	BA	3098	1/1	0.94	0.31	18,18,18,18	0
59	MG	DF	301	1/1	0.94	0.09	31,31,31,31	0
59	MG	BA	3336	1/1	0.94	0.30	23,23,23,23	0
59	MG	BA	3034	1/1	0.94	0.32	37,37,37,37	0
59	MG	BA	3338	1/1	0.94	0.07	60,60,60,60	0
59	MG	BA	3339	1/1	0.94	0.39	66,66,66,66	0
60	ZN	D4	101	1/1	0.94	0.17	147,147,147,147	0
59	MG	BA	3223	1/1	0.94	0.25	46,46,46,46	0
59	MG	CA	1654	1/1	0.95	0.12	63,63,63,63	0
59	MG	AA	1628	1/1	0.95	0.47	46,46,46,46	0
59	MG	BA	3206	1/1	0.95	0.16	36,36,36,36	0
59	MG	CA	1660	1/1	0.95	0.11	45,45,45,45	0
59	MG	BA	3086	1/1	0.95	0.53	46,46,46,46	0
59	MG	BA	3209	1/1	0.95	0.11	27,27,27,27	0
59	MG	BA	3158	1/1	0.95	0.12	40,40,40,40	0
59	MG	AA	1697	1/1	0.95	0.34	73,73,73,73	0
59	MG	BA	3395	1/1	0.95	0.18	46,46,46,46	0
59	MG	DA	3201	1/1	0.95	0.12	33,33,33,33	0
59	MG	DA	3202	1/1	0.95	0.11	34,34,34,34	0
59	MG	BA	3213	1/1	0.95	0.54	54,54,54,54	0
59	MG	BA	3122	1/1	0.95	0.20	38,38,38,38	0
59	MG	AA	1680	1/1	0.95	0.41	63,63,63,63	0
59	MG	BA	3218	1/1	0.95	0.12	21,21,21,21	0
59	MG	AA	1614	1/1	0.95	0.20	45,45,45,45	0
59	MG	BA	3024	1/1	0.95	0.18	22,22,22,22	0
59	MG	BA	3278	1/1	0.95	0.31	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	BP	201	1/1	0.95	0.11	21,21,21,21	0
59	MG	CA	1682	1/1	0.95	0.50	61,61,61,61	0
59	MG	BQ	201	1/1	0.95	0.13	48,48,48,48	0
59	MG	DA	3216	1/1	0.95	0.29	35,35,35,35	0
59	MG	CA	1684	1/1	0.95	0.51	49,49,49,49	0
59	MG	AA	1730	1/1	0.95	0.50	60,60,60,60	0
59	MG	AA	1653	1/1	0.95	0.25	47,47,47,47	0
59	MG	DA	3116	1/1	0.95	0.13	43,43,43,43	0
59	MG	DA	3221	1/1	0.95	0.39	59,59,59,59	0
59	MG	BA	3283	1/1	0.95	0.27	46,46,46,46	0
59	MG	BA	3284	1/1	0.95	0.37	33,33,33,33	0
59	MG	BA	3286	1/1	0.95	0.20	26,26,26,26	0
59	MG	BA	3171	1/1	0.95	0.50	51,51,51,51	0
59	MG	BA	3132	1/1	0.95	0.17	87,87,87,87	0
59	MG	AA	1670	1/1	0.95	0.22	36,36,36,36	0
59	MG	AA	1687	1/1	0.95	0.06	27,27,27,27	0
59	MG	DA	3127	1/1	0.95	0.28	48,48,48,48	0
59	MG	CV	102	1/1	0.95	0.35	44,44,44,44	0
59	MG	AA	1611	1/1	0.95	0.16	52,52,52,52	0
59	MG	BA	3137	1/1	0.95	0.17	34,34,34,34	0
59	MG	DA	3237	1/1	0.95	0.09	39,39,39,39	0
59	MG	BA	3069	1/1	0.95	0.22	20,20,20,20	0
59	MG	CA	1613	1/1	0.95	0.06	66,66,66,66	0
59	MG	BA	3070	1/1	0.95	0.08	14,14,14,14	0
59	MG	DA	3138	1/1	0.95	0.12	19,19,19,19	0
59	MG	DA	3242	1/1	0.95	0.17	34,34,34,34	0
59	MG	BA	3142	1/1	0.95	0.26	18,18,18,18	0
59	MG	BA	3238	1/1	0.95	0.14	26,26,26,26	0
59	MG	BA	3106	1/1	0.95	0.30	29,29,29,29	0
59	MG	BA	3035	1/1	0.95	0.17	22,22,22,22	0
59	MG	CA	1620	1/1	0.95	0.40	40,40,40,40	0
59	MG	DA	3249	1/1	0.95	0.41	54,54,54,54	0
59	MG	DA	3020	1/1	0.95	0.26	45,45,45,45	0
59	MG	DA	3149	1/1	0.95	0.36	42,42,42,42	0
59	MG	BA	3361	1/1	0.95	0.11	25,25,25,25	0
59	MG	BA	3300	1/1	0.95	0.13	40,40,40,40	0
59	MG	BA	3145	1/1	0.95	0.31	13,13,13,13	0
59	MG	DA	3255	1/1	0.95	0.15	13,13,13,13	0
59	MG	DA	3028	1/1	0.95	0.33	35,35,35,35	0
59	MG	DA	3158	1/1	0.95	0.33	38,38,38,38	0
59	MG	BA	3243	1/1	0.95	0.29	35,35,35,35	0
59	MG	AA	1622	1/1	0.95	0.29	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	AA	1674	1/1	0.95	0.05	42,42,42,42	0
59	MG	CA	1629	1/1	0.95	0.29	52,52,52,52	0
59	MG	AA	1644	1/1	0.95	0.25	48,48,48,48	0
59	MG	DA	3165	1/1	0.95	0.07	49,49,49,49	0
59	MG	DA	3269	1/1	0.95	0.15	43,43,43,43	0
59	MG	BA	3247	1/1	0.95	0.08	29,29,29,29	0
59	MG	DA	3044	1/1	0.95	0.13	22,22,22,22	0
59	MG	DA	3272	1/1	0.95	0.52	60,60,60,60	0
59	MG	BA	3193	1/1	0.95	0.36	58,58,58,58	0
59	MG	CA	1637	1/1	0.95	0.07	29,29,29,29	0
59	MG	BA	3150	1/1	0.95	0.14	33,33,33,33	0
59	MG	BA	3151	1/1	0.95	0.29	22,22,22,22	0
59	MG	BA	3375	1/1	0.95	0.20	38,38,38,38	0
59	MG	BA	3311	1/1	0.95	0.87	54,54,54,54	0
59	MG	BA	3378	1/1	0.95	0.29	25,25,25,25	0
59	MG	BA	3082	1/1	0.95	0.12	15,15,15,15	0
59	MG	BA	3380	1/1	0.95	0.19	47,47,47,47	0
59	MG	BA	3254	1/1	0.95	0.08	43,43,43,43	0
59	MG	CA	1648	1/1	0.95	0.18	56,56,56,56	0
59	MG	D5	101	1/1	0.95	0.14	28,28,28,28	0
59	MG	D5	102	1/1	0.95	0.22	91,91,91,91	0
59	MG	D6	101	1/1	0.95	0.30	37,37,37,37	0
60	ZN	AD	302	1/1	0.95	0.24	67,67,67,67	0
59	MG	BA	3199	1/1	0.95	0.25	54,54,54,54	0
59	MG	BA	3083	1/1	0.95	0.17	6,6,6,6	0
59	MG	BA	3201	1/1	0.95	0.17	111,111,111,111	0
59	MG	BA	3202	1/1	0.95	0.12	28,28,28,28	0
60	ZN	D9	101	1/1	0.95	0.02	109,109,109,109	0
59	MG	AA	1669	1/1	0.96	0.16	36,36,36,36	0
59	MG	DA	3034	1/1	0.96	0.07	30,30,30,30	0
59	MG	CA	1628	1/1	0.96	0.08	27,27,27,27	0
59	MG	DA	3037	1/1	0.96	0.17	26,26,26,26	0
59	MG	BA	3258	1/1	0.96	0.13	26,26,26,26	0
59	MG	AA	1681	1/1	0.96	0.07	30,30,30,30	0
59	MG	BA	3060	1/1	0.96	0.13	13,13,13,13	0
59	MG	DA	3179	1/1	0.96	0.15	33,33,33,33	0
59	MG	AA	1682	1/1	0.96	0.12	53,53,53,53	0
59	MG	AA	1683	1/1	0.96	0.10	31,31,31,31	0
59	MG	DA	3046	1/1	0.96	0.18	15,15,15,15	0
59	MG	BA	3377	1/1	0.96	0.36	43,43,43,43	0
59	MG	DA	3050	1/1	0.96	0.35	70,70,70,70	0
59	MG	DA	3188	1/1	0.96	0.34	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	BA	3314	1/1	0.96	0.18	68,68,68,68	0
59	MG	CA	1640	1/1	0.96	0.10	47,47,47,47	0
59	MG	BA	3029	1/1	0.96	0.15	23,23,23,23	0
59	MG	DA	3054	1/1	0.96	0.11	42,42,42,42	0
59	MG	BA	3267	1/1	0.96	0.12	31,31,31,31	0
59	MG	DA	3058	1/1	0.96	0.07	33,33,33,33	0
59	MG	BA	3220	1/1	0.96	0.52	52,52,52,52	0
59	MG	DA	3062	1/1	0.96	0.18	24,24,24,24	0
59	MG	BA	3318	1/1	0.96	0.35	41,41,41,41	0
59	MG	BA	3221	1/1	0.96	0.24	25,25,25,25	0
59	MG	CA	1646	1/1	0.96	0.32	40,40,40,40	0
59	MG	DA	3073	1/1	0.96	0.22	18,18,18,18	0
59	MG	BA	3222	1/1	0.96	0.20	18,18,18,18	0
59	MG	BA	3385	1/1	0.96	0.11	32,32,32,32	0
59	MG	BA	3321	1/1	0.96	0.23	51,51,51,51	0
59	MG	CA	1650	1/1	0.96	0.43	69,69,69,69	0
59	MG	BA	3068	1/1	0.96	0.22	15,15,15,15	0
59	MG	BA	3030	1/1	0.96	0.13	18,18,18,18	0
59	MG	DA	3081	1/1	0.96	0.20	48,48,48,48	0
59	MG	BA	3390	1/1	0.96	0.19	53,53,53,53	0
59	MG	DA	3083	1/1	0.96	0.31	35,35,35,35	0
59	MG	BA	3226	1/1	0.96	0.09	33,33,33,33	0
59	MG	CA	1656	1/1	0.96	0.22	51,51,51,51	0
59	MG	AA	1601	1/1	0.96	0.08	38,38,38,38	0
59	MG	BA	3275	1/1	0.96	0.12	93,93,93,93	0
59	MG	BA	3327	1/1	0.96	0.35	44,44,44,44	0
59	MG	BA	3329	1/1	0.96	0.09	48,48,48,48	0
59	MG	CA	1664	1/1	0.96	0.41	44,44,44,44	0
59	MG	DA	3222	1/1	0.96	0.11	50,50,50,50	0
59	MG	BA	3033	1/1	0.96	0.29	26,26,26,26	0
59	MG	BA	3277	1/1	0.96	0.32	60,60,60,60	0
59	MG	DA	3225	1/1	0.96	0.76	55,55,55,55	0
59	MG	CA	1667	1/1	0.96	0.26	37,37,37,37	0
59	MG	BA	3001	1/1	0.96	0.18	72,72,72,72	0
59	MG	BA	3399	1/1	0.96	0.19	41,41,41,41	0
59	MG	AA	1626	1/1	0.96	0.11	48,48,48,48	0
59	MG	BA	3149	1/1	0.96	0.43	31,31,31,31	0
59	MG	BA	3282	1/1	0.96	0.22	48,48,48,48	0
59	MG	DA	3107	1/1	0.96	0.11	32,32,32,32	0
59	MG	CA	1673	1/1	0.96	0.32	71,71,71,71	0
59	MG	BH	201	1/1	0.96	0.13	71,71,71,71	0
59	MG	DA	3110	1/1	0.96	0.09	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	AA	1664	1/1	0.96	0.10	20,20,20,20	0
59	MG	BA	3186	1/1	0.96	0.21	30,30,30,30	0
59	MG	BA	3285	1/1	0.96	0.20	28,28,28,28	0
59	MG	BA	3187	1/1	0.96	0.37	35,35,35,35	0
59	MG	DA	3118	1/1	0.96	0.16	41,41,41,41	0
59	MG	AA	1630	1/1	0.96	0.07	26,26,26,26	0
59	MG	BA	3190	1/1	0.96	0.18	29,29,29,29	0
59	MG	BA	3289	1/1	0.96	0.18	36,36,36,36	0
59	MG	CA	1685	1/1	0.96	0.08	36,36,36,36	0
59	MG	BA	3345	1/1	0.96	0.24	31,31,31,31	0
59	MG	BA	3042	1/1	0.96	0.20	22,22,22,22	0
59	MG	CA	1602	1/1	0.96	0.37	46,46,46,46	0
59	MG	BA	3121	1/1	0.96	0.16	38,38,38,38	0
59	MG	CA	1690	1/1	0.96	0.14	46,46,46,46	0
59	MG	DA	3131	1/1	0.96	0.17	38,38,38,38	0
59	MG	CA	1604	1/1	0.96	0.11	21,21,21,21	0
59	MG	AA	1632	1/1	0.96	0.37	53,53,53,53	0
59	MG	CA	1606	1/1	0.96	0.66	52,52,52,52	0
59	MG	CE	202	1/1	0.96	0.21	40,40,40,40	0
59	MG	BA	3123	1/1	0.96	0.17	45,45,45,45	0
59	MG	BA	3047	1/1	0.96	0.22	30,30,30,30	0
59	MG	DA	3139	1/1	0.96	0.08	18,18,18,18	0
59	MG	BA	3198	1/1	0.96	0.08	16,16,16,16	0
59	MG	DA	3263	1/1	0.96	0.43	62,62,62,62	0
59	MG	DA	3264	1/1	0.96	0.36	41,41,41,41	0
59	MG	DA	3141	1/1	0.96	0.14	46,46,46,46	0
59	MG	DA	3267	1/1	0.96	0.28	53,53,53,53	0
59	MG	CA	1610	1/1	0.96	0.34	27,27,27,27	0
59	MG	CA	1611	1/1	0.96	0.21	38,38,38,38	0
59	MG	CX	103	1/1	0.96	0.21	50,50,50,50	0
59	MG	BA	3011	1/1	0.96	0.14	31,31,31,31	0
59	MG	BA	3160	1/1	0.96	0.27	13,13,13,13	0
59	MG	DA	3004	1/1	0.96	0.23	54,54,54,54	0
59	MG	DA	3150	1/1	0.96	0.18	43,43,43,43	0
59	MG	DA	3151	1/1	0.96	0.13	14,14,14,14	0
59	MG	BA	3051	1/1	0.96	0.22	1,1,1,1	0
59	MG	BA	3163	1/1	0.96	0.12	22,22,22,22	0
59	MG	CA	1616	1/1	0.96	0.23	46,46,46,46	0
59	MG	DA	3156	1/1	0.96	0.29	28,28,28,28	0
59	MG	BA	3204	1/1	0.96	0.10	2,2,2,2	0
59	MG	DA	3012	1/1	0.96	0.25	33,33,33,33	0
59	MG	DA	3159	1/1	0.96	0.14	16,16,16,16	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	DA	3013	1/1	0.96	0.42	32,32,32,32	0
59	MG	BA	3251	1/1	0.96	0.27	34,34,34,34	0
59	MG	DA	3016	1/1	0.96	0.12	54,54,54,54	0
59	MG	BA	3014	1/1	0.96	0.24	63,63,63,63	0
59	MG	AA	1720	1/1	0.96	0.16	52,52,52,52	0
59	MG	BA	3304	1/1	0.96	0.46	22,22,22,22	0
59	MG	AA	1606	1/1	0.96	0.28	63,63,63,63	0
59	MG	BA	3022	1/1	0.96	0.16	12,12,12,12	0
59	MG	BA	3168	1/1	0.96	0.14	37,37,37,37	0
59	MG	BA	3370	1/1	0.96	0.15	28,28,28,28	0
59	MG	AA	1677	1/1	0.97	0.38	75,75,75,75	0
59	MG	CA	1632	1/1	0.97	0.30	47,47,47,47	0
59	MG	BA	3016	1/1	0.97	0.41	27,27,27,27	0
59	MG	BA	3242	1/1	0.97	0.58	44,44,44,44	0
59	MG	BA	3118	1/1	0.97	0.25	18,18,18,18	0
59	MG	AA	1625	1/1	0.97	0.20	32,32,32,32	0
59	MG	DA	3104	1/1	0.97	0.11	36,36,36,36	0
59	MG	DA	3105	1/1	0.97	0.22	28,28,28,28	0
59	MG	DA	3204	1/1	0.97	0.14	41,41,41,41	0
59	MG	DA	3106	1/1	0.97	0.21	51,51,51,51	0
59	MG	DA	3006	1/1	0.97	0.31	20,20,20,20	0
59	MG	BA	3085	1/1	0.97	0.41	18,18,18,18	0
59	MG	AA	1694	1/1	0.97	0.27	24,24,24,24	0
59	MG	BA	3342	1/1	0.97	0.21	21,21,21,21	0
59	MG	BA	3036	1/1	0.97	0.32	20,20,20,20	0
59	MG	BA	3203	1/1	0.97	0.16	38,38,38,38	0
59	MG	BA	3088	1/1	0.97	0.34	22,22,22,22	0
59	MG	DA	3015	1/1	0.97	0.42	37,37,37,37	0
59	MG	DA	3117	1/1	0.97	0.08	32,32,32,32	0
59	MG	BA	3059	1/1	0.97	0.06	33,33,33,33	0
59	MG	BD	301	1/1	0.97	0.16	13,13,13,13	0
59	MG	DA	3018	1/1	0.97	0.17	14,14,14,14	0
59	MG	BE	301	1/1	0.97	0.23	12,12,12,12	0
59	MG	DA	3122	1/1	0.97	0.20	31,31,31,31	0
59	MG	BA	3090	1/1	0.97	0.14	32,32,32,32	0
59	MG	AH	201	1/1	0.97	0.29	31,31,31,31	0
59	MG	DA	3024	1/1	0.97	0.17	29,29,29,29	0
59	MG	AA	1673	1/1	0.97	0.20	35,35,35,35	0
59	MG	BA	3130	1/1	0.97	0.08	13,13,13,13	0
59	MG	BA	3025	1/1	0.97	0.17	20,20,20,20	0
59	MG	DA	3228	1/1	0.97	0.05	16,16,16,16	0
59	MG	BA	3172	1/1	0.97	0.39	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	DA	3033	1/1	0.97	0.12	10,10,10,10	0
59	MG	BA	3353	1/1	0.97	0.38	50,50,50,50	0
59	MG	BA	3066	1/1	0.97	0.29	20,20,20,20	0
59	MG	DA	3233	1/1	0.97	0.34	58,58,58,58	0
59	MG	CA	1658	1/1	0.97	0.13	40,40,40,40	0
59	MG	DA	3038	1/1	0.97	0.14	25,25,25,25	0
59	MG	BA	3355	1/1	0.97	0.17	33,33,33,33	0
59	MG	DA	3041	1/1	0.97	0.29	7,7,7,7	0
59	MG	BA	3215	1/1	0.97	0.15	12,12,12,12	0
59	MG	BA	3358	1/1	0.97	0.09	49,49,49,49	0
59	MG	CA	1662	1/1	0.97	0.08	23,23,23,23	0
59	MG	BA	3097	1/1	0.97	0.10	21,21,21,21	0
59	MG	B5	101	1/1	0.97	0.48	37,37,37,37	0
59	MG	DA	3047	1/1	0.97	0.17	25,25,25,25	0
59	MG	CA	1601	1/1	0.97	0.17	29,29,29,29	0
59	MG	BA	3217	1/1	0.97	0.17	11,11,11,11	0
59	MG	BA	3262	1/1	0.97	0.23	27,27,27,27	0
59	MG	BA	3264	1/1	0.97	0.26	34,34,34,34	0
59	MG	AA	1657	1/1	0.97	0.16	53,53,53,53	0
59	MG	BA	3364	1/1	0.97	0.18	8,8,8,8	0
59	MG	DA	3055	1/1	0.97	0.39	42,42,42,42	0
59	MG	BA	3046	1/1	0.97	0.14	30,30,30,30	0
59	MG	BA	3100	1/1	0.97	0.21	22,22,22,22	0
59	MG	DA	3060	1/1	0.97	0.12	16,16,16,16	0
59	MG	BA	3178	1/1	0.97	0.37	11,11,11,11	0
59	MG	BA	3368	1/1	0.97	0.10	24,24,24,24	0
59	MG	DA	3063	1/1	0.97	0.15	53,53,53,53	0
59	MG	DA	3258	1/1	0.97	0.19	29,29,29,29	0
59	MG	CA	1676	1/1	0.97	0.17	55,55,55,55	0
59	MG	DA	3066	1/1	0.97	0.27	31,31,31,31	0
59	MG	BA	3101	1/1	0.97	0.11	25,25,25,25	0
59	MG	CA	1678	1/1	0.97	0.17	45,45,45,45	0
59	MG	DA	3070	1/1	0.97	0.14	10,10,10,10	0
59	MG	DA	3072	1/1	0.97	0.29	28,28,28,28	0
59	MG	BA	3005	1/1	0.97	0.08	17,17,17,17	0
59	MG	BA	3048	1/1	0.97	0.10	6,6,6,6	0
59	MG	BA	3225	1/1	0.97	0.25	43,43,43,43	0
59	MG	BA	3071	1/1	0.97	0.05	42,42,42,42	0
59	MG	BA	3105	1/1	0.97	0.22	14,14,14,14	0
59	MG	AA	1675	1/1	0.97	0.49	38,38,38,38	0
59	MG	BA	3107	1/1	0.97	0.16	13,13,13,13	0
59	MG	BA	3074	1/1	0.97	0.18	12,12,12,12	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	DA	3177	1/1	0.97	0.42	29,29,29,29	0
59	MG	BA	3050	1/1	0.97	0.28	4,4,4,4	0
59	MG	BA	3188	1/1	0.97	0.42	22,22,22,22	0
59	MG	DA	3180	1/1	0.97	0.50	27,27,27,27	0
59	MG	DD	302	1/1	0.97	0.48	34,34,34,34	0
59	MG	AA	1636	1/1	0.97	0.25	21,21,21,21	0
59	MG	DA	3182	1/1	0.97	0.16	33,33,33,33	0
59	MG	DA	3085	1/1	0.97	0.25	22,22,22,22	0
59	MG	DA	3086	1/1	0.97	0.16	26,26,26,26	0
59	MG	DA	3185	1/1	0.97	0.08	42,42,42,42	0
59	MG	BA	3013	1/1	0.97	0.24	6,6,6,6	0
59	MG	CA	1624	1/1	0.97	0.15	24,24,24,24	0
59	MG	BA	3328	1/1	0.97	0.21	35,35,35,35	0
59	MG	BA	3113	1/1	0.97	0.40	34,34,34,34	0
59	MG	BA	3236	1/1	0.97	0.22	23,23,23,23	0
59	MG	BA	3080	1/1	0.97	0.24	26,26,26,26	0
59	MG	BA	3194	1/1	0.97	0.31	33,33,33,33	0
60	ZN	CD	301	1/1	0.97	0.25	61,61,61,61	0
59	MG	BA	3115	1/1	0.97	0.27	22,22,22,22	0
59	MG	DA	3194	1/1	0.97	0.33	52,52,52,52	0
59	MG	DA	3195	1/1	0.97	0.30	38,38,38,38	0
59	MG	BA	3017	1/1	0.98	0.19	14,14,14,14	0
59	MG	BA	3018	1/1	0.98	0.25	23,23,23,23	0
59	MG	DA	3026	1/1	0.98	0.16	36,36,36,36	0
59	MG	DA	3090	1/1	0.98	0.19	24,24,24,24	0
59	MG	BA	3044	1/1	0.98	0.28	28,28,28,28	0
59	MG	DA	3092	1/1	0.98	0.36	51,51,51,51	0
59	MG	BA	3263	1/1	0.98	0.16	37,37,37,37	0
59	MG	BA	3076	1/1	0.98	0.42	34,34,34,34	0
59	MG	BA	3077	1/1	0.98	0.07	23,23,23,23	0
59	MG	DA	3096	1/1	0.98	0.19	38,38,38,38	0
59	MG	DA	3031	1/1	0.98	0.16	31,31,31,31	0
59	MG	BA	3045	1/1	0.98	0.14	23,23,23,23	0
59	MG	BA	3111	1/1	0.98	0.27	28,28,28,28	0
59	MG	AA	1704	1/1	0.98	0.06	40,40,40,40	0
59	MG	DA	3036	1/1	0.98	0.35	31,31,31,31	0
59	MG	AA	1705	1/1	0.98	0.10	47,47,47,47	0
59	MG	BA	3081	1/1	0.98	0.33	6,6,6,6	0
59	MG	DA	3174	1/1	0.98	0.04	47,47,47,47	0
59	MG	CA	1680	1/1	0.98	0.17	59,59,59,59	0
59	MG	DA	3040	1/1	0.98	0.07	34,34,34,34	0
59	MG	BB	201	1/1	0.98	0.07	18,18,18,18	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	BA	3356	1/1	0.98	0.17	41,41,41,41	0
59	MG	BA	3152	1/1	0.98	0.39	18,18,18,18	0
59	MG	CA	1633	1/1	0.98	0.22	38,38,38,38	0
59	MG	CA	1634	1/1	0.98	0.04	17,17,17,17	0
59	MG	BA	3021	1/1	0.98	0.24	3,3,3,3	0
59	MG	BA	3192	1/1	0.98	0.25	29,29,29,29	0
59	MG	DA	3048	1/1	0.98	0.18	48,48,48,48	0
59	MG	DA	3114	1/1	0.98	0.08	42,42,42,42	0
59	MG	AA	1613	1/1	0.98	0.08	51,51,51,51	0
59	MG	BA	3155	1/1	0.98	0.08	9,9,9,9	0
59	MG	BA	3023	1/1	0.98	0.25	23,23,23,23	0
59	MG	AA	1708	1/1	0.98	0.04	64,64,64,64	0
59	MG	AA	1696	1/1	0.98	0.20	34,34,34,34	0
59	MG	BA	3279	1/1	0.98	0.16	62,62,62,62	0
59	MG	AA	1602	1/1	0.98	0.16	44,44,44,44	0
59	MG	DA	3056	1/1	0.98	0.21	31,31,31,31	0
59	MG	AA	1690	1/1	0.98	0.21	40,40,40,40	0
59	MG	AA	1713	1/1	0.98	0.16	57,57,57,57	0
59	MG	DA	3266	1/1	0.98	0.38	72,72,72,72	0
59	MG	BA	3007	1/1	0.98	0.57	39,39,39,39	0
59	MG	BA	3124	1/1	0.98	0.15	27,27,27,27	0
59	MG	BA	3009	1/1	0.98	0.25	30,30,30,30	0
59	MG	DA	3129	1/1	0.98	0.40	35,35,35,35	0
59	MG	BA	3092	1/1	0.98	0.08	20,20,20,20	0
59	MG	DA	3001	1/1	0.98	0.09	25,25,25,25	0
59	MG	AA	1616	1/1	0.98	0.08	16,16,16,16	0
59	MG	DA	3067	1/1	0.98	0.27	50,50,50,50	0
59	MG	DA	3135	1/1	0.98	0.33	58,58,58,58	0
59	MG	BA	3330	1/1	0.98	0.09	21,21,21,21	0
59	MG	BA	3032	1/1	0.98	0.15	21,21,21,21	0
59	MG	BA	3207	1/1	0.98	0.19	24,24,24,24	0
59	MG	DA	3071	1/1	0.98	0.18	27,27,27,27	0
59	MG	DE	301	1/1	0.98	0.20	43,43,43,43	0
59	MG	BA	3169	1/1	0.98	0.12	51,51,51,51	0
59	MG	AA	1692	1/1	0.98	0.04	55,55,55,55	0
59	MG	BA	3250	1/1	0.98	0.13	21,21,21,21	0
59	MG	DA	3010	1/1	0.98	0.26	39,39,39,39	0
59	MG	BA	3012	1/1	0.98	0.29	31,31,31,31	0
59	MG	BA	3065	1/1	0.98	0.10	13,13,13,13	0
59	MG	DA	3147	1/1	0.98	0.40	44,44,44,44	0
59	MG	AA	1701	1/1	0.98	0.29	36,36,36,36	0
59	MG	AA	1609	1/1	0.98	0.11	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	CA	1663	1/1	0.98	0.20	50,50,50,50	0
59	MG	BA	3015	1/1	0.98	0.38	25,25,25,25	0
60	ZN	B9	101	1/1	0.98	0.06	64,64,64,64	0
59	MG	AA	1612	1/1	0.98	0.04	32,32,32,32	0
59	MG	BA	3039	1/1	0.98	0.24	18,18,18,18	0
59	MG	BA	3040	1/1	0.98	0.06	9,9,9,9	0
59	MG	BA	3140	1/1	0.98	0.04	30,30,30,30	0
59	MG	DA	3115	1/1	0.99	0.15	59,59,59,59	0
59	MG	BA	3006	1/1	0.99	0.33	16,16,16,16	0
59	MG	BA	3161	1/1	0.99	0.44	16,16,16,16	0
59	MG	AA	1615	1/1	0.99	0.22	42,42,42,42	0
59	MG	BA	3096	1/1	0.99	0.11	17,17,17,17	0
59	MG	DA	3154	1/1	0.99	0.07	64,64,64,64	0
59	MG	BA	3055	1/1	0.99	0.18	21,21,21,21	0
59	MG	BA	3008	1/1	0.99	0.20	13,13,13,13	0
59	MG	DA	3059	1/1	0.99	0.03	28,28,28,28	0
59	MG	CA	1655	1/1	0.99	0.29	41,41,41,41	0
59	MG	DA	3032	1/1	0.99	0.09	9,9,9,9	0
59	MG	BA	3129	1/1	0.99	0.13	27,27,27,27	0
59	MG	AA	1679	1/1	0.99	0.04	27,27,27,27	0
59	MG	DA	3064	1/1	0.99	0.15	48,48,48,48	0
59	MG	AA	1631	1/1	0.99	0.10	25,25,25,25	0
59	MG	CA	1635	1/1	0.99	0.28	32,32,32,32	0
59	MG	DA	3130	1/1	0.99	0.31	27,27,27,27	0
59	MG	DA	3008	1/1	0.99	0.05	39,39,39,39	0
59	MG	BA	3387	1/1	0.99	0.13	46,46,46,46	0
59	MG	BA	3072	1/1	0.99	0.23	16,16,16,16	0
59	MG	AA	1706	1/1	0.99	0.29	43,43,43,43	0
59	MG	DA	3205	1/1	0.99	0.25	27,27,27,27	0
59	MG	DA	3206	1/1	0.99	0.26	27,27,27,27	0
59	MG	AA	1668	1/1	0.99	0.19	194,194,194,194	0
59	MG	AA	1650	1/1	0.99	0.20	26,26,26,26	0
59	MG	DA	3246	1/1	0.99	0.14	23,23,23,23	0
59	MG	BY	201	1/1	0.99	0.16	32,32,32,32	0
59	MG	BA	3136	1/1	0.99	0.07	30,30,30,30	0
59	MG	DA	3075	1/1	0.99	0.13	32,32,32,32	0
59	MG	BA	3212	1/1	0.99	0.14	25,25,25,25	0
59	MG	BA	3062	1/1	0.99	0.14	14,14,14,14	0
59	MG	BA	3063	1/1	0.99	0.23	19,19,19,19	0
59	MG	DA	3143	1/1	0.99	0.27	30,30,30,30	0
59	MG	DA	3019	1/1	0.99	0.19	13,13,13,13	0
59	MG	BA	3041	1/1	0.99	0.21	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	MG	AA	1709	1/1	0.99	0.10	44,44,44,44	0
59	MG	BA	3141	1/1	0.99	0.23	1,1,1,1	0
59	MG	DA	3023	1/1	0.99	0.05	33,33,33,33	0
59	MG	DA	3025	1/1	1.00	0.16	5,5,5,5	0

6.5 Other polymers (i)

There are no such residues in this entry.