



# wwPDB X-ray Structure Validation Summary Report ⓘ

Jan 4, 2024 – 06:52 pm GMT

PDB ID : 4V8P  
Title : T.thermophila 60S ribosomal subunit in complex with initiation factor 6.  
Authors : Klinge, S.; Voigts-Hoffmann, F.; Leibundgut, M.; Arpagaus, S.; Ban, N.  
Deposited on : 2011-09-14  
Resolution : 3.52 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](mailto:validation@mail.wwpdb.org)

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

MolProbity : 4.02b-467  
Xtriage (Phenix) : 1.13  
EDS : 2.36  
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) : 2.36

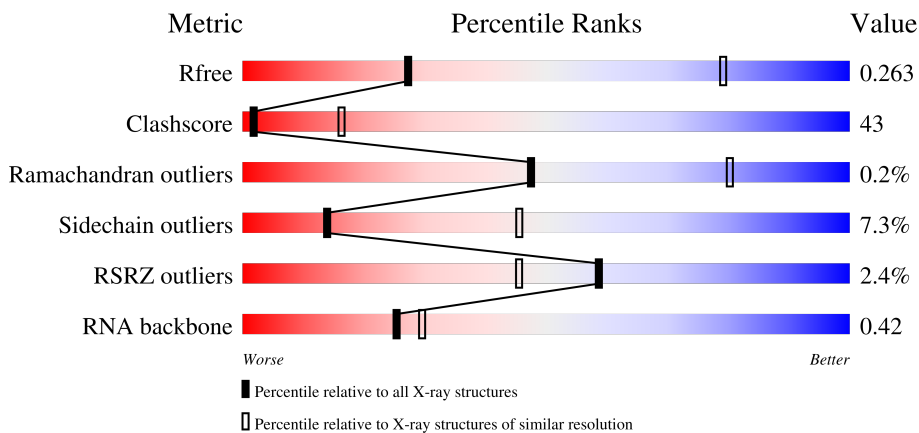
# 1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 3.52 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	1161 (3.60-3.44)
Clashscore	141614	1244 (3.60-3.44)
Ramachandran outliers	138981	1206 (3.60-3.44)
Sidechain outliers	138945	1207 (3.60-3.44)
RSRZ outliers	127900	1080 (3.60-3.44)
RNA backbone	3102	1003 (4.02-3.00)

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  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A1	3354	<div style="display: flex; align-items: center;"> <div style="width: 3%; height: 10px; background-color: red; margin-right: 5px;"></div> <div style="width: 18%; height: 10px; background-color: green; margin-right: 5px;"></div> <div style="width: 44%; height: 10px; background-color: yellow; margin-right: 5px;"></div> <div style="width: 29%; height: 10px; background-color: orange; margin-right: 5px;"></div> <div style="width: 7%; height: 10px; background-color: red; margin-right: 5px;"></div> <div style="width: 1%; height: 10px; background-color: grey;"></div> </div> <p style="font-size: small; margin-top: 5px;">3% 18% 44% 29% 7%</p>
1	D1	3354	<div style="display: flex; align-items: center;"> <div style="width: 0%; height: 10px; background-color: red; margin-right: 5px;"></div> <div style="width: 18%; height: 10px; background-color: green; margin-right: 5px;"></div> <div style="width: 44%; height: 10px; background-color: yellow; margin-right: 5px;"></div> <div style="width: 28%; height: 10px; background-color: orange; margin-right: 5px;"></div> <div style="width: 7%; height: 10px; background-color: red; margin-right: 5px;"></div> <div style="width: 1%; height: 10px; background-color: grey;"></div> </div> <p style="font-size: small; margin-top: 5px;">% 18% 44% 28% 7%</p>
1	F1	3354	<div style="display: flex; align-items: center;"> <div style="width: 2%; height: 10px; background-color: red; margin-right: 5px;"></div> <div style="width: 18%; height: 10px; background-color: green; margin-right: 5px;"></div> <div style="width: 44%; height: 10px; background-color: yellow; margin-right: 5px;"></div> <div style="width: 28%; height: 10px; background-color: orange; margin-right: 5px;"></div> <div style="width: 7%; height: 10px; background-color: red; margin-right: 5px;"></div> <div style="width: 1%; height: 10px; background-color: grey;"></div> </div> <p style="font-size: small; margin-top: 5px;">2% 18% 44% 28% 7%</p>
1	H1	3354	<div style="display: flex; align-items: center;"> <div style="width: 4%; height: 10px; background-color: red; margin-right: 5px;"></div> <div style="width: 17%; height: 10px; background-color: green; margin-right: 5px;"></div> <div style="width: 43%; height: 10px; background-color: yellow; margin-right: 5px;"></div> <div style="width: 29%; height: 10px; background-color: orange; margin-right: 5px;"></div> <div style="width: 7%; height: 10px; background-color: red; margin-right: 5px;"></div> <div style="width: 1%; height: 10px; background-color: grey;"></div> </div> <p style="font-size: small; margin-top: 5px;">4% 17% 43% 29% 7%</p>

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Mol	Chain	Length	Quality of chain
2	AA	94	
2	DA	94	
2	FA	94	
2	HA	94	
3	AB	52	
3	DB	52	
3	FB	52	
3	HB	52	
4	AC	109	
4	DC	109	
4	FC	109	
4	HC	109	
5	AE	191	
5	DE	191	
5	FE	191	
5	HE	191	
6	AF	126	
6	DF	126	
6	FF	126	
6	HF	126	
7	AG	104	
7	DG	104	
7	FG	104	
7	HG	104	
8	AH	113	



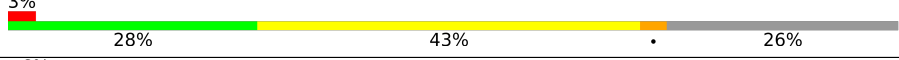
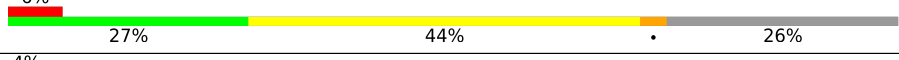
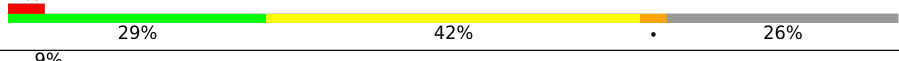
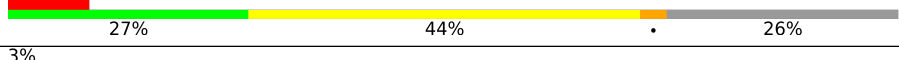
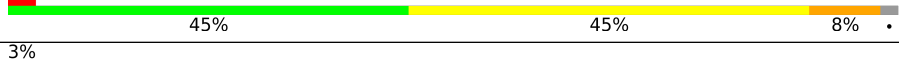
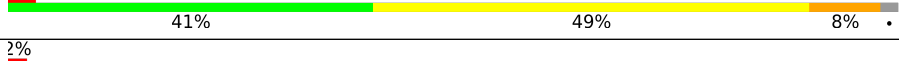
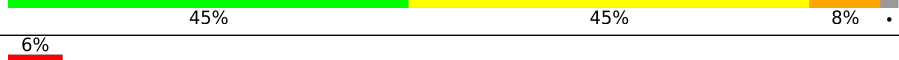

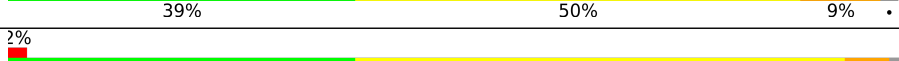
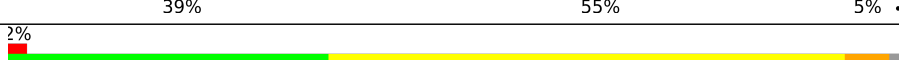
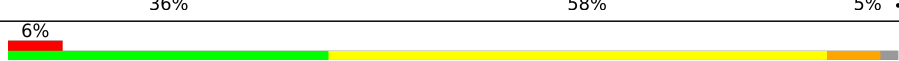
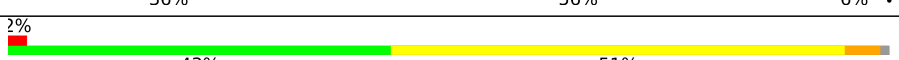
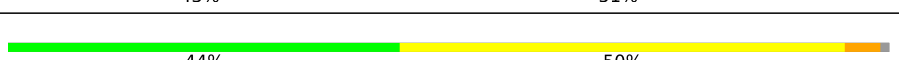
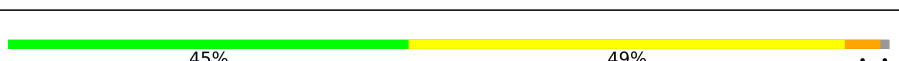
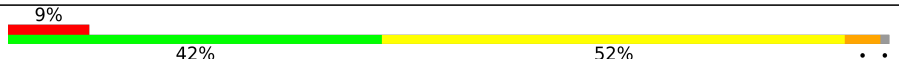
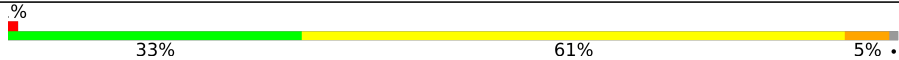


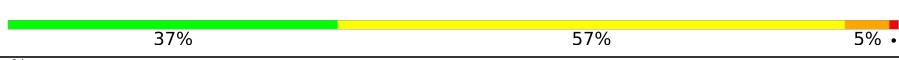
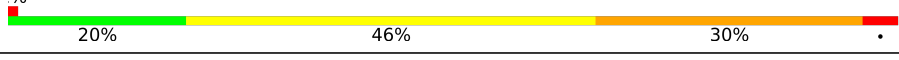

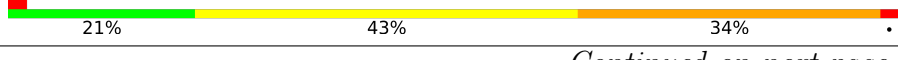

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Mol	Chain	Length	Quality of chain
8	DH	113	
8	FH	113	
8	HH	113	
9	AJ	248	
9	DJ	248	
9	FJ	248	
9	HJ	248	
10	AK	129	
10	DK	129	
10	FK	129	
10	HK	129	
11	AL	123	
11	DL	123	
11	FL	123	
11	HL	123	
12	AM	118	
12	DM	118	
12	FM	118	
12	HM	118	
13	AN	144	
13	DN	144	
13	FN	144	
13	HN	144	
14	AO	134	
14	DO	134	

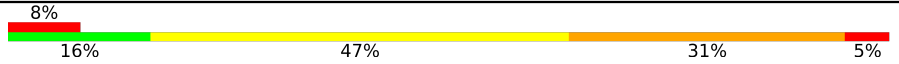
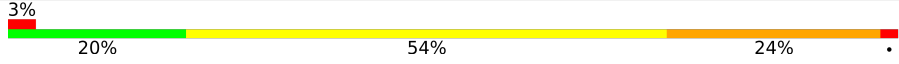
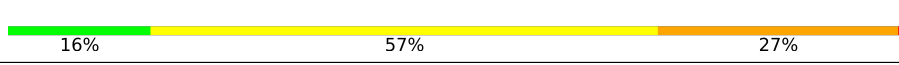
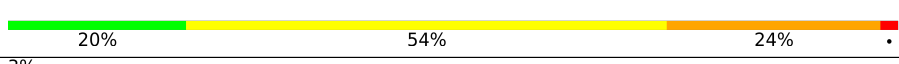
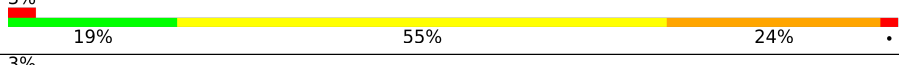
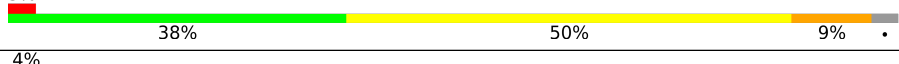
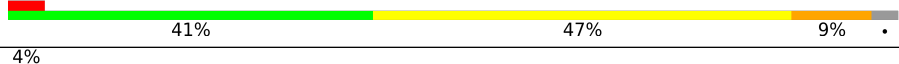
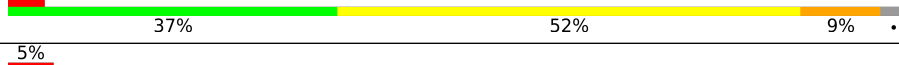
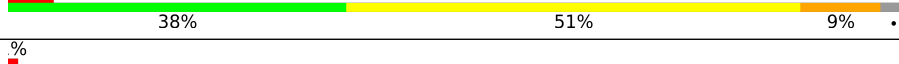
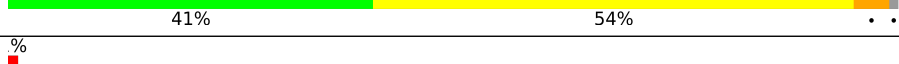

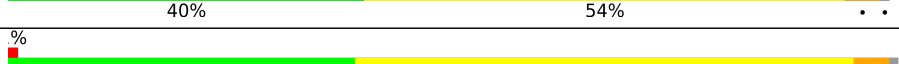
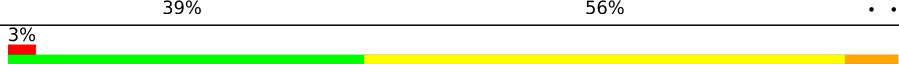
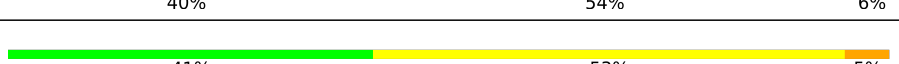
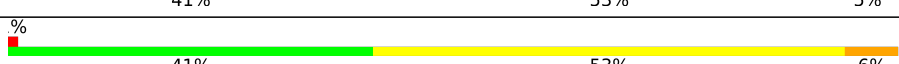
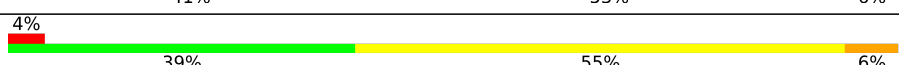
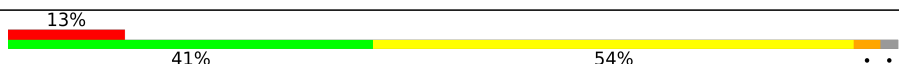
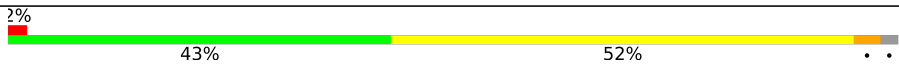
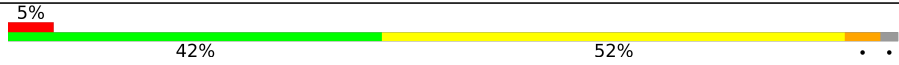






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Mol	Chain	Length	Quality of chain
14	FO	134	 % 39% 55% 6%
14	HO	134	 8% 42% 54%
15	AP	89	 3% 28% 43% 26%
15	DP	89	 6% 27% 44% 26%
15	FP	89	 4% 29% 42% 26%
15	HP	89	 9% 27% 44% 26%
16	AQ	104	 3% 45% 45% 8%
16	DQ	104	 3% 41% 49% 8%
16	FQ	104	 2% 45% 45% 8%
16	HQ	104	 6% 45% 45% 8%
17	AT	66	 6% 39% 50% 9%
17	DT	66	 2% 39% 55% 5%
17	FT	66	 2% 36% 58% 5%
17	HT	66	 6% 36% 56% 6%
18	AU	206	 2% 43% 51%
18	DU	206	 44% 50%
18	FU	206	 45% 49%
18	HU	206	 9% 42% 52%
19	AX	189	 % 33% 61% 5%
19	DX	189	 % 33% 60% 6%
19	FX	189	 % 34% 59% 6%
19	HX	189	 % 37% 57% 5%
20	B2	154	 % 20% 46% 30%
20	C2	154	 % 18% 47% 32%
20	E2	154	 2% 21% 43% 34%

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Mol	Chain	Length	Quality of chain
20	G2	154	
21	B3	120	
21	C3	120	
21	E3	120	
21	G3	120	
22	BA	264	
22	CA	264	
22	EA	264	
22	GA	264	
23	BB	391	
23	CB	391	
23	EB	391	
23	GB	391	
24	BC	410	
24	CC	410	
24	EC	410	
24	GC	410	
25	BD	172	
25	CD	172	
25	ED	172	
25	GD	172	
26	BE	188	
26	CE	188	
26	EE	188	
26	GE	188	




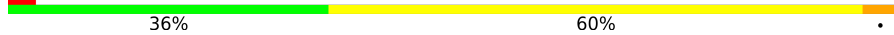
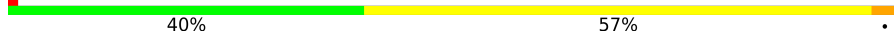
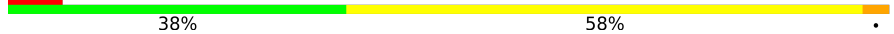
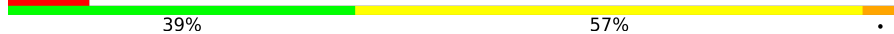
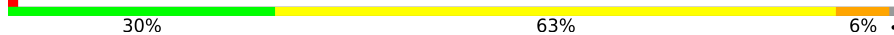
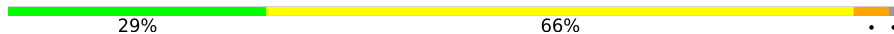
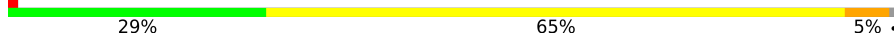
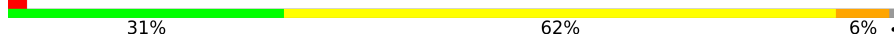

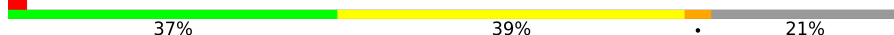
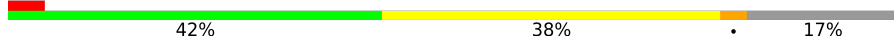











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Mol	Chain	Length	Quality of chain
27	BF	255	3% 39% 49% 9%
27	CF	255	% 37% 51% 9%
27	EF	255	2% 38% 49% 9%
27	GF	255	7% 38% 49% 9%
28	BG	123	65% 35%
28	CG	123	65% 35%
28	EG	123	67% 33%
28	GG	123	61% 39%
29	BH	215	3% 35% 54% 7%
29	CH	215	32% 58% 7%
29	EH	215	% 32% 57% 7%
29	GH	215	% 33% 56% 5% 7%
30	BI	198	% 37% 57% 6%
30	CI	198	36% 59% 6%
30	EI	198	% 39% 57% 3%
30	GI	198	% 38% 56% 6%
31	BJ	141	55% 41%
31	CJ	141	57% 40%
31	EJ	141	2% 56% 40%
31	GJ	141	% 55% 40%
32	BK	149	3% 37% 54% 7%
32	CK	149	38% 54% 7%
32	EK	149	36% 54% 8%
32	GK	149	7% 37% 54% 7%
33	BL	204	43% 54%

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Mol	Chain	Length	Quality of chain
33	CL	204	 38% 58%
33	EL	204	 38% 59%
33	GL	204	 37% 58%
34	BM	301	 36% 60%
34	CM	301	 40% 57%
34	EM	301	 38% 58%
34	GM	301	 39% 57%
35	BN	181	 30% 63% 6%
35	CN	181	 29% 66%
35	EN	181	 29% 65% 5%
35	GN	181	 31% 62% 6%
36	BO	185	 49% 48%
36	EO	185	 37% 39% 21%
36	GO	185	 42% 38% 17%
37	BP	157	 44% 50% 5%
37	CP	157	 46% 48%
37	EP	157	 45% 50%
37	GP	157	 46% 48% 5%
38	BQ	183	 39% 41% 5% 14%
38	CQ	183	 37% 42% 7% 14%
38	EQ	183	 39% 40% 7% 14%
38	GQ	183	 35% 44% 7% 14%
39	BR	150	 37% 40% 19%
39	CR	150	 36% 42% 19%
39	ER	150	 34% 43% 19%

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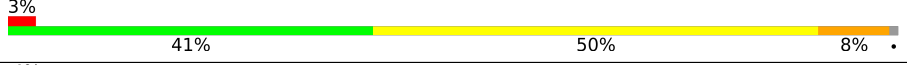
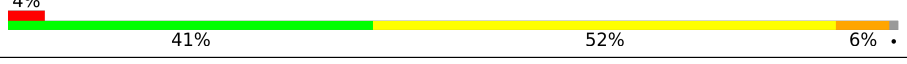



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Mol	Chain	Length	Quality of chain
39	GR	150	6% 34% 43% 19%
40	BS	135	41% 47% 5% 7%
40	CS	135	3% 39% 49% 6% 7%
40	ES	135	4% 41% 48% 7%
40	GS	135	7% 40% 47% 6% 7%
41	BT	158	12% 25% 61%
41	CT	158	11% 25% 61%
41	ET	158	11% 25% 61%
41	GT	158	13% 23% 61%
42	BU	124	39% 54% 6%
42	CU	124	37% 55% 7%
42	EU	124	2% 37% 56% 6%
42	GU	124	15% 35% 58% 6%
43	BV	239	38% 56% 6%
43	CV	239	35% 59% 6%
43	EV	239	35% 59% 5%
43	GV	239	34% 59% 6%
44	BW	111	2% 53% 42% 5%
44	CW	111	50% 45% 5%
44	EW	111	51% 43% 5%
44	GW	111	50% 46% 4%
45	BX	134	37% 46% 11% 7%
45	CX	134	37% 45% 11% 7%
45	EX	134	36% 46% 11% 7%
45	GX	134	3% 36% 46% 11% 7%

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Mol	Chain	Length	Quality of chain
46	BY	103	
46	CY	103	
46	EY	103	
46	GY	103	
47	CO	185	

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
48	MG	A1	3422	-	-	-	X
48	MG	A1	3428	-	-	-	X
48	MG	A1	3430	-	-	-	X
48	MG	A1	3435	-	-	-	X
48	MG	A1	3437	-	-	-	X
48	MG	A1	3472	-	-	-	X
48	MG	A1	3522	-	-	-	X
48	MG	A1	3530	-	-	-	X
48	MG	A1	3555	-	-	-	X
48	MG	A1	3573	-	-	-	X
48	MG	A1	3579	-	-	-	X
48	MG	A1	3583	-	-	-	X
48	MG	A1	3585	-	-	-	X
48	MG	A1	3587	-	-	-	X
48	MG	A1	3593	-	-	-	X
48	MG	A1	3595	-	-	-	X
48	MG	C3	205	-	-	-	X
48	MG	C3	207	-	-	-	X
48	MG	D1	3424	-	-	-	X
48	MG	D1	3434	-	-	-	X
48	MG	D1	3446	-	-	-	X
48	MG	D1	3463	-	-	-	X
48	MG	D1	3497	-	-	-	X
48	MG	D1	3548	-	-	-	X
48	MG	D1	3550	-	-	-	X
48	MG	D1	3571	-	-	-	X
48	MG	D1	3576	-	-	-	X
48	MG	D1	3592	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
48	MG	D1	3596	-	-	-	X
48	MG	D1	3597	-	-	-	X
48	MG	D1	3600	-	-	-	X
48	MG	D1	3603	-	-	-	X
48	MG	D1	3606	-	-	-	X
48	MG	D1	3611	-	-	-	X
48	MG	D1	3624	-	-	-	X
48	MG	DJ	301	-	-	-	X
48	MG	E2	205	-	-	-	X
48	MG	E3	204	-	-	-	X
48	MG	F1	3411	-	-	-	X
48	MG	F1	3451	-	-	-	X
48	MG	F1	3493	-	-	-	X
48	MG	F1	3511	-	-	-	X
48	MG	F1	3515	-	-	-	X
48	MG	F1	3539	-	-	-	X
48	MG	F1	3560	-	-	-	X
48	MG	F1	3565	-	-	-	X
48	MG	F1	3566	-	-	-	X
48	MG	F1	3574	-	-	-	X
48	MG	F1	3576	-	-	-	X
48	MG	F1	3578	-	-	-	X
48	MG	G2	204	-	-	-	X
48	MG	G2	206	-	-	-	X
48	MG	G3	202	-	-	-	X
48	MG	G3	205	-	-	-	X
48	MG	GN	201	-	-	-	X
48	MG	GP	201	-	-	-	X
48	MG	H1	3409	-	-	-	X
48	MG	H1	3410	-	-	-	X
48	MG	H1	3412	-	-	-	X
48	MG	H1	3414	-	-	-	X
48	MG	H1	3450	-	-	-	X
48	MG	H1	3479	-	-	-	X
48	MG	H1	3489	-	-	-	X
48	MG	H1	3524	-	-	-	X
48	MG	H1	3531	-	-	-	X
48	MG	H1	3533	-	-	-	X
48	MG	H1	3534	-	-	-	X
48	MG	H1	3535	-	-	-	X
48	MG	H1	3536	-	-	-	X
48	MG	H1	3543	-	-	-	X

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<b>Mol</b>	<b>Type</b>	<b>Chain</b>	<b>Res</b>	<b>Chirality</b>	<b>Geometry</b>	<b>Clashes</b>	<b>Electron density</b>
48	MG	H1	3544	-	-	-	X
48	MG	H1	3550	-	-	-	X
48	MG	H1	3551	-	-	-	X
48	MG	H1	3554	-	-	-	X

## 2 Entry composition [i](#)

There are 50 unique types of molecules in this entry. The entry contains 511395 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 26S RRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
1	A1	3119	66769	29861	12195	21594	3119	0	0	0
1	D1	3119	66769	29861	12195	21594	3119	0	0	0
1	F1	3119	66769	29861	12195	21594	3119	0	0	0
1	H1	3119	66769	29861	12195	21594	3119	0	0	0

- Molecule 2 is a protein called RIBOSOMAL PROTEIN L37.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	AA	91	721	440	158	116	7	0	0	0
2	DA	91	721	440	158	116	7	0	0	0
2	FA	91	721	440	158	116	7	0	0	0
2	HA	91	721	440	158	116	7	0	0	0

- Molecule 3 is a protein called RPL39.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	AB	51	456	288	97	70	1	0	0	0
3	DB	51	456	288	97	70	1	0	0	0
3	FB	51	456	288	97	70	1	0	0	0
3	HB	51	456	288	97	70	1	0	0	0

- Molecule 4 is a protein called 60S RIBOSOMAL PROTEIN L36A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	AC	103	Total 836	C 526	N 163	O 140	S 7	0	0	0
4	DC	103	Total 836	C 526	N 163	O 140	S 7	0	0	0
4	FC	103	Total 836	C 526	N 163	O 140	S 7	0	0	0
4	HC	103	Total 836	C 526	N 163	O 140	S 7	0	0	0

- Molecule 5 is a protein called RPL6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
5	AE	190	Total 1525	C 966	N 286	O 272	S 1	0	0	0
5	DE	190	Total 1525	C 966	N 286	O 272	S 1	0	0	0
5	FE	190	Total 1525	C 966	N 286	O 272	S 1	0	0	0
5	HE	190	Total 1525	C 966	N 286	O 272	S 1	0	0	0

- Molecule 6 is a protein called RPL14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
6	AF	125	Total 1021	C 659	N 192	O 169	S 1	0	0	0
6	DF	125	Total 1021	C 659	N 192	O 169	S 1	0	0	0
6	FF	125	Total 1021	C 659	N 192	O 169	S 1	0	0	0
6	HF	125	Total 1021	C 659	N 192	O 169	S 1	0	0	0

- Molecule 7 is a protein called RPL30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
7	AG	96	Total 727	C 455	N 129	O 138	S 5	0	0	0
7	DG	96	Total 727	C 455	N 129	O 138	S 5	0	0	0
7	FG	96	Total 727	C 455	N 129	O 138	S 5	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
7	HG	96	727	455	129	138	5	0	0	0

- Molecule 8 is a protein called RPL35A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
8	AH	107	850	540	167	142	1	0	0	0
8	DH	107	850	540	167	142	1	0	0	0
8	FH	107	850	540	167	142	1	0	0	0
8	HH	107	850	540	167	142	1	0	0	0

- Molecule 9 is a protein called TRANSLATION INITIATION FACTOR EIF-6, PUTATIVE FAMILY PROTEIN.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
9	AJ	226	1716	1068	302	336	10	0	0	0
9	DJ	226	1716	1068	302	336	10	0	0	0
9	FJ	226	1716	1068	302	336	10	0	0	0
9	HJ	226	1716	1068	302	336	10	0	0	0

There are 12 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AJ	-2	GLY	-	expression tag	UNP Q245F2
AJ	-1	THR	-	expression tag	UNP Q245F2
AJ	0	SER	-	expression tag	UNP Q245F2
DJ	-2	GLY	-	expression tag	UNP Q245F2
DJ	-1	THR	-	expression tag	UNP Q245F2
DJ	0	SER	-	expression tag	UNP Q245F2
FJ	-2	GLY	-	expression tag	UNP Q245F2
FJ	-1	THR	-	expression tag	UNP Q245F2
FJ	0	SER	-	expression tag	UNP Q245F2
HJ	-2	GLY	-	expression tag	UNP Q245F2
HJ	-1	THR	-	expression tag	UNP Q245F2

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Chain	Residue	Modelled	Actual	Comment	Reference
HJ	0	SER	-	expression tag	UNP Q245F2

- Molecule 10 is a protein called UBIQUITIN-60S RIBOSOMAL PROTEIN L40.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AK	52	Total	C	N	O	S	0	0	0
			415	257	83	69	6			
10	DK	52	Total	C	N	O	S	0	0	0
			415	257	83	69	6			
10	FK	52	Total	C	N	O	S	0	0	0
			415	257	83	69	6			
10	HK	52	Total	C	N	O	S	0	0	0
			415	257	83	69	6			

- Molecule 11 is a protein called RPL34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AL	108	Total	C	N	O	S	0	0	0
			852	529	170	147	6			
11	DL	108	Total	C	N	O	S	0	0	0
			852	529	170	147	6			
11	FL	108	Total	C	N	O	S	0	0	0
			852	529	170	147	6			
11	HL	108	Total	C	N	O	S	0	0	0
			852	529	170	147	6			

- Molecule 12 is a protein called RIBOSOMAL PROTEIN L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AM	100	Total	C	N	O	S	0	0	0
			819	530	137	151	1			
12	DM	100	Total	C	N	O	S	0	0	0
			819	530	137	151	1			
12	FM	100	Total	C	N	O	S	0	0	0
			819	530	137	151	1			
12	HM	100	Total	C	N	O	S	0	0	0
			819	530	137	151	1			

- Molecule 13 is a protein called RPL27.



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AN	143	Total	C	N	O	S	0	0	0
			1170	755	213	199	3			
13	DN	143	Total	C	N	O	S	0	0	0
			1170	755	213	199	3			
13	FN	143	Total	C	N	O	S	0	0	0
			1170	755	213	199	3			
13	HN	143	Total	C	N	O	S	0	0	0
			1170	755	213	199	3			

- Molecule 14 is a protein called RPL28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AO	134	Total	C	N	O	S	0	0	0
			1034	650	204	179	1			
14	DO	134	Total	C	N	O	S	0	0	0
			1034	650	204	179	1			
14	FO	134	Total	C	N	O	S	0	0	0
			1034	650	204	179	1			
14	HO	134	Total	C	N	O	S	0	0	0
			1034	650	204	179	1			

- Molecule 15 is a protein called RPL38.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AP	66	Total	C	N	O	S	0	0	0
			551	367	93	90	1			
15	DP	66	Total	C	N	O	S	0	0	0
			551	367	93	90	1			
15	FP	66	Total	C	N	O	S	0	0	0
			551	367	93	90	1			
15	HP	66	Total	C	N	O	S	0	0	0
			551	367	93	90	1			

- Molecule 16 is a protein called 60S RIBOSOMAL PROTEIN L36.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
16	AQ	102	Total	C	N	O	0	0	0
			803	506	165	132			
16	DQ	102	Total	C	N	O	0	0	0
			803	506	165	132			
16	FQ	102	Total	C	N	O	0	0	0
			803	506	165	132			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
16	HQ	102	803	506	165	132	0	0	0

- Molecule 17 is a protein called RPL29.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
17	AT	65	533	324	117	92	0	0	0
17	DT	65	533	324	117	92	0	0	0
17	FT	65	533	324	117	92	0	0	0
17	HT	65	533	324	117	92	0	0	0

- Molecule 18 is a protein called RPL13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
18	AU	203	1624	1015	328	279	2	0	0	0
18	DU	203	1624	1015	328	279	2	0	0	0
18	FU	203	1624	1015	328	279	2	0	0	0
18	HU	203	1624	1015	328	279	2	0	0	0

- Molecule 19 is a protein called RPL18A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
19	AX	188	1536	972	287	271	6	0	0	0
19	DX	188	1536	972	287	271	6	0	0	0
19	FX	188	1536	972	287	271	6	0	0	0
19	HX	188	1536	972	287	271	6	0	0	0

- Molecule 20 is a RNA chain called 5.8S RRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	B2	154	Total	C	N	O	P	0	0	0
			3300	1475	602	1069	154			
20	C2	154	Total	C	N	O	P	0	0	0
			3300	1475	602	1069	154			
20	E2	154	Total	C	N	O	P	0	0	0
			3300	1475	602	1069	154			
20	G2	154	Total	C	N	O	P	0	0	0
			3300	1475	602	1069	154			

- Molecule 21 is a RNA chain called 5S RRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	B3	120	Total	C	N	O	P	0	0	0
			2566	1145	463	838	120			
21	C3	120	Total	C	N	O	P	0	0	0
			2566	1145	463	838	120			
21	E3	120	Total	C	N	O	P	0	0	0
			2566	1145	463	838	120			
21	G3	120	Total	C	N	O	P	0	0	0
			2566	1145	463	838	120			

- Molecule 22 is a protein called RPL8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	BA	257	Total	C	N	O	S	0	0	0
			1977	1226	400	343	8			
22	CA	257	Total	C	N	O	S	0	0	0
			1977	1226	400	343	8			
22	EA	257	Total	C	N	O	S	0	0	0
			1977	1226	400	343	8			
22	GA	257	Total	C	N	O	S	0	0	0
			1977	1226	400	343	8			

- Molecule 23 is a protein called RIBOSOMAL PROTEIN L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	BB	386	Total	C	N	O	S	0	0	0
			3080	1944	595	530	11			
23	CB	386	Total	C	N	O	S	0	0	0
			3080	1944	595	530	11			
23	EB	386	Total	C	N	O	S	0	0	0
			3080	1944	595	530	11			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
23	GB	386	3080	1944	595	530	11	0	0	0

- Molecule 24 is a protein called RPL4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
24	BC	409	3172	1975	622	571	4	0	0	0
24	CC	409	3172	1975	622	571	4	0	0	0
24	EC	409	3172	1975	622	571	4	0	0	0
24	GC	409	3172	1975	622	571	4	0	0	0

- Molecule 25 is a protein called 60S RIBOSOMAL PROTEIN L11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
25	BD	169	1357	851	254	243	9	0	0	0
25	CD	169	1357	851	254	243	9	0	0	0
25	ED	169	1357	851	254	243	9	0	0	0
25	GD	169	1357	851	254	243	9	0	0	0

- Molecule 26 is a protein called 60S RIBOSOMAL PROTEIN L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
26	BE	186	1481	939	272	264	6	0	0	0
26	CE	186	1481	939	272	264	6	0	0	0
26	EE	186	1481	939	272	264	6	0	0	0
26	GE	186	1481	939	272	264	6	0	0	0

- Molecule 27 is a protein called RPL7A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	BF	231	Total	C	N	O	S	0	0	0
			1860	1191	341	327	1			
27	CF	231	Total	C	N	O	S	0	0	0
			1860	1191	341	327	1			
27	EF	231	Total	C	N	O	S	0	0	0
			1860	1191	341	327	1			
27	GF	231	Total	C	N	O	S	0	0	0
			1860	1191	341	327	1			

- Molecule 28 is a protein called RPLP0.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
28	BG	123	Total	C	N	O	0	0	0
			711	465	123	123			
28	CG	123	Total	C	N	O	0	0	0
			711	465	123	123			
28	EG	123	Total	C	N	O	0	0	0
			711	465	123	123			
28	GG	123	Total	C	N	O	0	0	0
			711	465	123	123			

- Molecule 29 is a protein called 60S RIBOSOMAL PROTEIN L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	BH	201	Total	C	N	O	S	0	0	0
			1620	1027	319	271	3			
29	CH	201	Total	C	N	O	S	0	0	0
			1620	1027	319	271	3			
29	EH	201	Total	C	N	O	S	0	0	0
			1620	1027	319	271	3			
29	GH	201	Total	C	N	O	S	0	0	0
			1620	1027	319	271	3			

- Molecule 30 is a protein called 60S RIBOSOMAL PROTEIN L13A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	BI	198	Total	C	N	O	S	0	0	0
			1594	1019	308	263	4			
30	CI	198	Total	C	N	O	S	0	0	0
			1594	1019	308	263	4			
30	EI	198	Total	C	N	O	S	0	0	0
			1594	1019	308	263	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
30	GI	198	1594	1019	308	263	4	0	0	0

- Molecule 31 is a protein called RPL23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
31	BJ	138	1022	643	193	179	7	0	0	0
31	CJ	138	1022	643	193	179	7	0	0	0
31	EJ	138	1022	643	193	179	7	0	0	0
31	GJ	138	1022	643	193	179	7	0	0	0

- Molecule 32 is a protein called 60S RIBOSOMAL PROTEIN L27A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
32	BK	148	1161	739	234	182	6	0	0	0
32	CK	148	1161	739	234	182	6	0	0	0
32	EK	148	1161	739	234	182	6	0	0	0
32	GK	148	1161	739	234	182	6	0	0	0

- Molecule 33 is a protein called RIBOSOMAL PROTEIN L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
33	BL	203	1691	1061	351	275	4	0	0	0
33	CL	203	1691	1061	351	275	4	0	0	0
33	EL	203	1691	1061	351	275	4	0	0	0
33	GL	203	1691	1061	351	275	4	0	0	0

- Molecule 34 is a protein called 60S RIBOSOMAL PROTEIN L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	BM	298	Total	C	N	O	S	0	0	0
			2409	1530	445	430	4			
34	CM	300	Total	C	N	O	S	0	0	0
			2424	1541	447	432	4			
34	EM	300	Total	C	N	O	S	0	0	0
			2424	1541	447	432	4			
34	GM	300	Total	C	N	O	S	0	0	0
			2424	1541	447	432	4			

- Molecule 35 is a protein called RPL18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BN	180	Total	C	N	O	S	0	0	0
			1441	909	280	249	3			
35	CN	180	Total	C	N	O	S	0	0	0
			1441	909	280	249	3			
35	EN	180	Total	C	N	O	S	0	0	0
			1441	909	280	249	3			
35	GN	180	Total	C	N	O	S	0	0	0
			1441	909	280	249	3			

- Molecule 36 is a protein called RPL19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	BO	184	Total	C	N	O	S	0	0	0
			1491	924	311	251	5			
36	EO	146	Total	C	N	O	S	0	0	0
			1192	745	249	193	5			
36	GO	153	Total	C	N	O	S	0	0	0
			1234	772	256	201	5			

- Molecule 37 is a protein called 60S RIBOSOMAL PROTEIN L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BP	156	Total	C	N	O	S	0	0	0
			1272	804	251	215	2			
37	CP	156	Total	C	N	O	S	0	0	0
			1272	804	251	215	2			
37	EP	156	Total	C	N	O	S	0	0	0
			1272	804	251	215	2			
37	GP	156	Total	C	N	O	S	0	0	0
			1272	804	251	215	2			

- Molecule 38 is a protein called RPL17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BQ	157	Total	C	N	O	S	0	0	0
			1239	771	249	216	3			
38	CQ	157	Total	C	N	O	S	0	0	0
			1239	771	249	216	3			
38	EQ	157	Total	C	N	O	S	0	0	0
			1239	771	249	216	3			
38	GQ	157	Total	C	N	O	S	0	0	0
			1239	771	249	216	3			

- Molecule 39 is a protein called RPL23A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BR	121	Total	C	N	O	S	0	0	0
			965	613	176	173	3			
39	CR	121	Total	C	N	O	S	0	0	0
			965	613	176	173	3			
39	ER	121	Total	C	N	O	S	0	0	0
			965	613	176	173	3			
39	GR	121	Total	C	N	O	S	0	0	0
			965	613	176	173	3			

- Molecule 40 is a protein called RPL26.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BS	126	Total	C	N	O	S	0	0	0
			1013	638	200	173	2			
40	CS	126	Total	C	N	O	S	0	0	0
			1013	638	200	173	2			
40	ES	126	Total	C	N	O	S	0	0	0
			1013	638	200	173	2			
40	GS	126	Total	C	N	O	S	0	0	0
			1013	638	200	173	2			

- Molecule 41 is a protein called RPL24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BT	61	Total	C	N	O	S	0	0	0
			510	331	100	76	3			
41	CT	61	Total	C	N	O	S	0	0	0
			510	331	100	76	3			
41	ET	61	Total	C	N	O	S	0	0	0
			510	331	100	76	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
41	GT	61	Total 510	C 331	N 100	O 76	S 3	0	0	0

- Molecule 42 is a protein called RPL35.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
42	BU	123	Total 990	C 629	N 196	O 165	0	0	0
42	CU	123	Total 990	C 629	N 196	O 165	0	0	0
42	EU	123	Total 990	C 629	N 196	O 165	0	0	0
42	GU	123	Total 990	C 629	N 196	O 165	0	0	0

- Molecule 43 is a protein called 60S RIBOSOMAL PROTEIN L7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
43	BV	234	Total 1910	C 1221	N 362	O 323	S 4	0	0	0
43	CV	234	Total 1910	C 1221	N 362	O 323	S 4	0	0	0
43	EV	234	Total 1910	C 1221	N 362	O 323	S 4	0	0	0
43	GV	234	Total 1910	C 1221	N 362	O 323	S 4	0	0	0

- Molecule 44 is a protein called 60S RIBOSOMAL PROTEIN L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
44	BW	110	Total 901	C 563	N 171	O 164	S 3	0	0	0
44	CW	110	Total 901	C 563	N 171	O 164	S 3	0	0	0
44	EW	110	Total 901	C 563	N 171	O 164	S 3	0	0	0
44	GW	110	Total 901	C 563	N 171	O 164	S 3	0	0	0

- Molecule 45 is a protein called 60S RIBOSOMAL PROTEIN L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	BX	125	Total	C	N	O	S	0	0	0
			1012	639	205	165	3			
45	CX	125	Total	C	N	O	S	0	0	0
			1012	639	205	165	3			
45	EX	125	Total	C	N	O	S	0	0	0
			1012	639	205	165	3			
45	GX	125	Total	C	N	O	S	0	0	0
			1012	639	205	165	3			

- Molecule 46 is a protein called RPL37A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	BY	102	Total	C	N	O	S	0	0	0
			786	502	148	131	5			
46	CY	102	Total	C	N	O	S	0	0	0
			786	502	148	131	5			
46	EY	102	Total	C	N	O	S	0	0	0
			786	502	148	131	5			
46	GY	102	Total	C	N	O	S	0	0	0
			786	502	148	131	5			

- Molecule 47 is a protein called RPL19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	CO	175	Total	C	N	O	S	0	0	0
			1366	861	278	222	5			

- Molecule 48 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
48	A1	200	Total	Mg	0	0
			200	200		
48	AA	2	Total	Mg	0	0
			2	2		
48	AK	1	Total	Mg	0	0
			1	1		
48	B2	8	Total	Mg	0	0
			8	8		
48	B3	3	Total	Mg	0	0
			3	3		
48	BJ	1	Total	Mg	0	0
			1	1		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
48	BL	1	Total 1	Mg 1	0	0
48	BN	1	Total 1	Mg 1	0	0
48	BP	1	Total 1	Mg 1	0	0
48	BQ	2	Total 2	Mg 2	0	0
48	BW	1	Total 1	Mg 1	0	0
48	C2	6	Total 6	Mg 6	0	0
48	C3	7	Total 7	Mg 7	0	0
48	CD	1	Total 1	Mg 1	0	0
48	CJ	1	Total 1	Mg 1	0	0
48	CL	2	Total 2	Mg 2	0	0
48	CN	1	Total 1	Mg 1	0	0
48	CQ	2	Total 2	Mg 2	0	0
48	CW	1	Total 1	Mg 1	0	0
48	CY	1	Total 1	Mg 1	0	0
48	D1	232	Total 232	Mg 232	0	0
48	DA	2	Total 2	Mg 2	0	0
48	DJ	1	Total 1	Mg 1	0	0
48	DK	1	Total 1	Mg 1	0	0
48	DQ	1	Total 1	Mg 1	0	0
48	E2	7	Total 7	Mg 7	0	0
48	E3	6	Total 6	Mg 6	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
48	EJ	1	Total 1	Mg 1	0	0
48	EL	2	Total 2	Mg 2	0	0
48	EN	2	Total 2	Mg 2	0	0
48	EQ	1	Total 1	Mg 1	0	0
48	EW	2	Total 2	Mg 2	0	0
48	F1	184	Total 184	Mg 184	0	0
48	FA	2	Total 2	Mg 2	0	0
48	FK	1	Total 1	Mg 1	0	0
48	FT	1	Total 1	Mg 1	0	0
48	G2	6	Total 6	Mg 6	0	0
48	G3	5	Total 5	Mg 5	0	0
48	GA	1	Total 1	Mg 1	0	0
48	GJ	1	Total 1	Mg 1	0	0
48	GL	1	Total 1	Mg 1	0	0
48	GN	1	Total 1	Mg 1	0	0
48	GO	1	Total 1	Mg 1	0	0
48	GP	2	Total 2	Mg 2	0	0
48	GQ	1	Total 1	Mg 1	0	0
48	GW	1	Total 1	Mg 1	0	0
48	H1	155	Total 155	Mg 155	0	0
48	HT	1	Total 1	Mg 1	0	0

- Molecule 49 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
49	AA	1	Total 1	Zn 1	0	0
49	AC	1	Total 1	Zn 1	0	0
49	AK	1	Total 1	Zn 1	0	0
49	AL	1	Total 1	Zn 1	0	0
49	BY	1	Total 1	Zn 1	0	0
49	CY	1	Total 1	Zn 1	0	0
49	DA	1	Total 1	Zn 1	0	0
49	DC	1	Total 1	Zn 1	0	0
49	DK	1	Total 1	Zn 1	0	0
49	DL	1	Total 1	Zn 1	0	0
49	EY	1	Total 1	Zn 1	0	0
49	FA	1	Total 1	Zn 1	0	0
49	FC	1	Total 1	Zn 1	0	0
49	FK	1	Total 1	Zn 1	0	0
49	FL	1	Total 1	Zn 1	0	0
49	GY	1	Total 1	Zn 1	0	0
49	HA	1	Total 1	Zn 1	0	0
49	HC	1	Total 1	Zn 1	0	0
49	HK	1	Total 1	Zn 1	0	0
49	HL	1	Total 1	Zn 1	0	0

- Molecule 50 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
50	A1	1134	Total 1134	O 1134	0	0
50	AA	8	Total 8	O 8	0	0
50	AB	5	Total 5	O 5	0	0
50	AH	1	Total 1	O 1	0	0
50	AK	3	Total 3	O 3	0	0
50	AM	1	Total 1	O 1	0	0
50	AP	2	Total 2	O 2	0	0
50	AT	3	Total 3	O 3	0	0
50	AU	4	Total 4	O 4	0	0
50	B2	54	Total 54	O 54	0	0
50	B3	23	Total 23	O 23	0	0
50	BA	12	Total 12	O 12	0	0
50	BB	4	Total 4	O 4	0	0
50	BC	7	Total 7	O 7	0	0
50	BE	1	Total 1	O 1	0	0
50	BI	3	Total 3	O 3	0	0
50	BJ	5	Total 5	O 5	0	0
50	BK	3	Total 3	O 3	0	0
50	BL	8	Total 8	O 8	0	0
50	BM	2	Total 2	O 2	0	0
50	BN	5	Total 5	O 5	0	0
50	BO	2	Total 2	O 2	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
50	BP	5	Total 5	O 5	0	0
50	BQ	7	Total 7	O 7	0	0
50	BU	1	Total 1	O 1	0	0
50	BV	7	Total 7	O 7	0	0
50	BW	5	Total 5	O 5	0	0
50	BX	6	Total 6	O 6	0	0
50	BY	5	Total 5	O 5	0	0
50	C2	46	Total 46	O 46	0	0
50	C3	39	Total 39	O 39	0	0
50	CA	11	Total 11	O 11	0	0
50	CB	4	Total 4	O 4	0	0
50	CC	7	Total 7	O 7	0	0
50	CD	4	Total 4	O 4	0	0
50	CE	2	Total 2	O 2	0	0
50	CI	1	Total 1	O 1	0	0
50	CJ	4	Total 4	O 4	0	0
50	CK	3	Total 3	O 3	0	0
50	CL	12	Total 12	O 12	0	0
50	CM	6	Total 6	O 6	0	0
50	CN	7	Total 7	O 7	0	0
50	CO	2	Total 2	O 2	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
50	CP	6	Total O 6 6	0	0
50	CQ	7	Total O 7 7	0	0
50	CU	1	Total O 1 1	0	0
50	CV	4	Total O 4 4	0	0
50	CW	5	Total O 5 5	0	0
50	CX	6	Total O 6 6	0	0
50	CY	5	Total O 5 5	0	0
50	D1	1341	Total O 1341 1341	0	0
50	DA	10	Total O 10 10	0	0
50	DB	4	Total O 4 4	0	0
50	DE	1	Total O 1 1	0	0
50	DJ	2	Total O 2 2	0	0
50	DK	2	Total O 2 2	0	0
50	DP	1	Total O 1 1	0	0
50	DQ	2	Total O 2 2	0	0
50	DT	4	Total O 4 4	0	0
50	DU	3	Total O 3 3	0	0
50	DX	2	Total O 2 2	0	0
50	E2	44	Total O 44 44	0	0
50	E3	34	Total O 34 34	0	0
50	EA	4	Total O 4 4	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
50	EB	3	Total O 3 3	0	0
50	EC	2	Total O 2 2	0	0
50	EE	2	Total O 2 2	0	0
50	EJ	4	Total O 4 4	0	0
50	EK	5	Total O 5 5	0	0
50	EL	10	Total O 10 10	0	0
50	EM	2	Total O 2 2	0	0
50	EN	7	Total O 7 7	0	0
50	EP	6	Total O 6 6	0	0
50	EQ	4	Total O 4 4	0	0
50	EV	6	Total O 6 6	0	0
50	EW	7	Total O 7 7	0	0
50	EX	5	Total O 5 5	0	0
50	EY	5	Total O 5 5	0	0
50	F1	1076	Total O 1076 1076	0	0
50	FA	7	Total O 7 7	0	0
50	FB	4	Total O 4 4	0	0
50	FE	1	Total O 1 1	0	0
50	FH	1	Total O 1 1	0	0
50	FK	2	Total O 2 2	0	0
50	FL	3	Total O 3 3	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
50	FP	2	Total O 2 2	0	0
50	FT	4	Total O 4 4	0	0
50	FU	4	Total O 4 4	0	0
50	G2	34	Total O 34 34	0	0
50	G3	26	Total O 26 26	0	0
50	GA	6	Total O 6 6	0	0
50	GB	3	Total O 3 3	0	0
50	GC	2	Total O 2 2	0	0
50	GE	2	Total O 2 2	0	0
50	GI	1	Total O 1 1	0	0
50	GJ	4	Total O 4 4	0	0
50	GK	2	Total O 2 2	0	0
50	GL	5	Total O 5 5	0	0
50	GM	1	Total O 1 1	0	0
50	GN	2	Total O 2 2	0	0
50	GO	2	Total O 2 2	0	0
50	GP	5	Total O 5 5	0	0
50	GQ	4	Total O 4 4	0	0
50	GV	3	Total O 3 3	0	0
50	GW	4	Total O 4 4	0	0
50	GX	5	Total O 5 5	0	0

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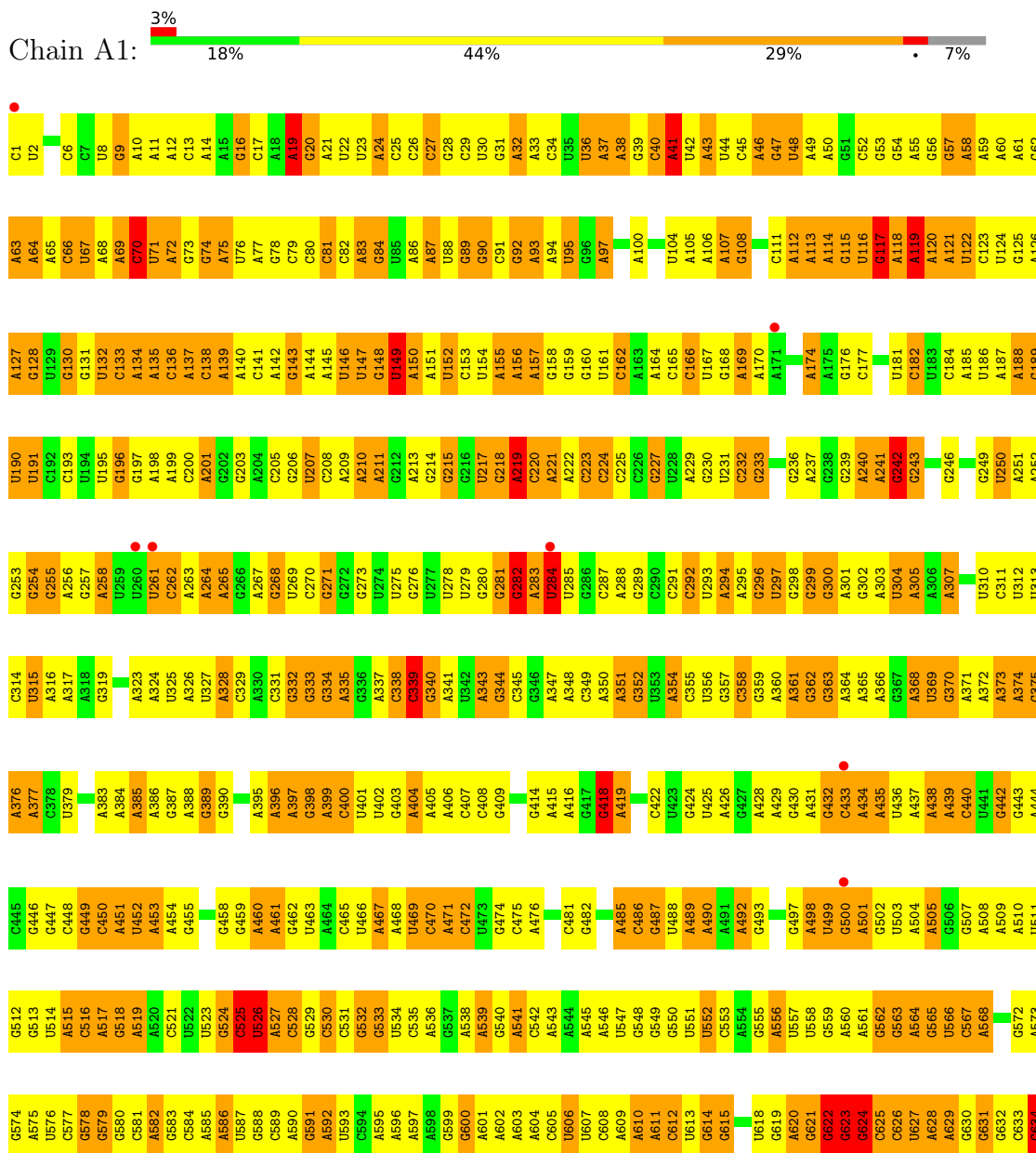
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
50	GY	1	Total 1	O 1	0	0
50	H1	924	Total 924	O 924	0	0
50	HA	4	Total 4	O 4	0	0
50	HB	4	Total 4	O 4	0	0
50	HJ	2	Total 2	O 2	0	0
50	HK	2	Total 2	O 2	0	0
50	HP	1	Total 1	O 1	0	0
50	HT	5	Total 5	O 5	0	0
50	HU	2	Total 2	O 2	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: 26S RRNA



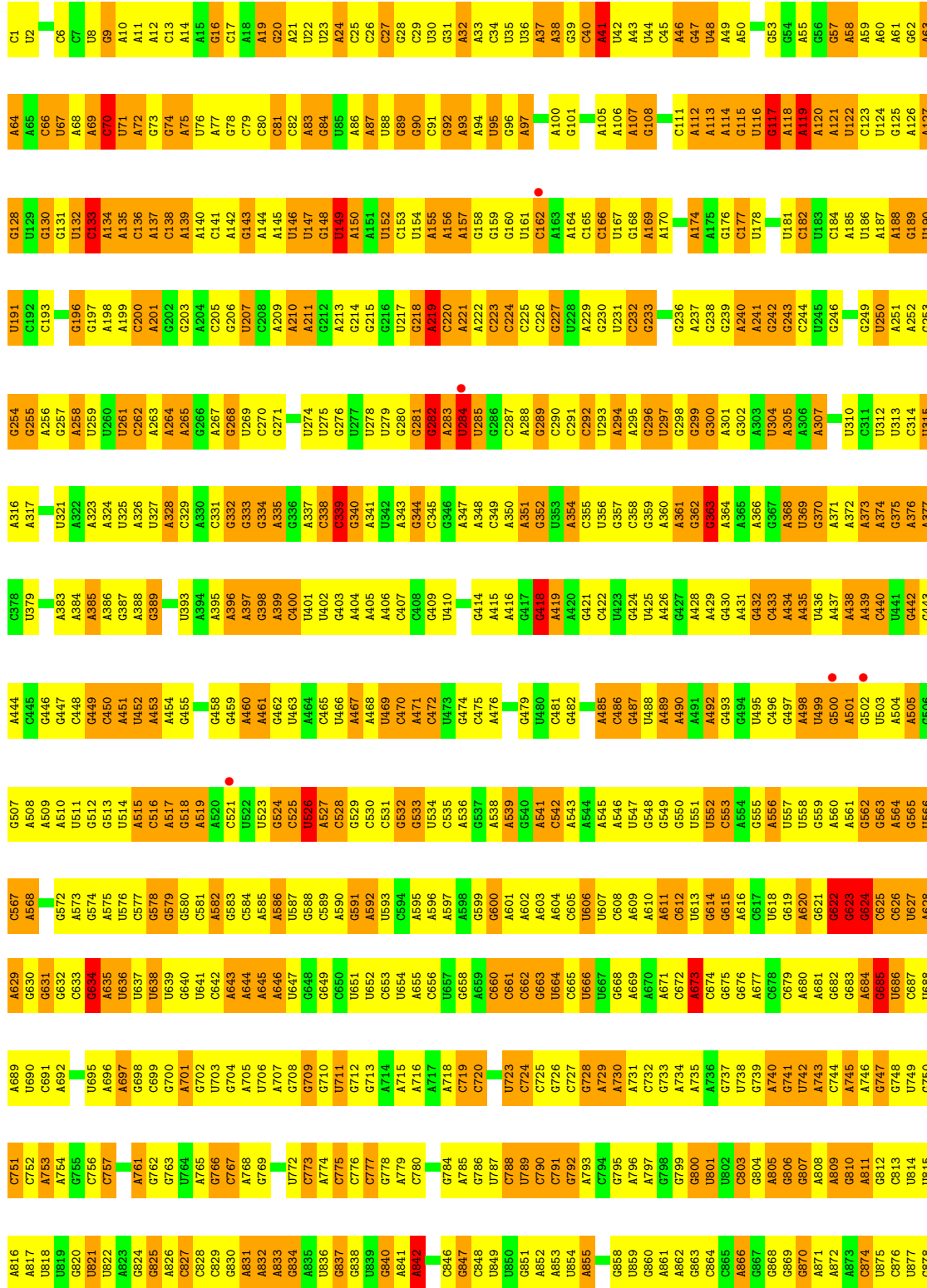
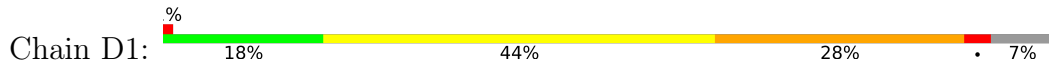
A1459	G1392	G1382	U1332	A1207	C1146	U1083	A1022	U960	G886	U821	C757	A697	A636
G1460	A1593	U1333	G1333	U1208	A1147	G1084	A1023	A961	C886	U822	G757	G698	U636
A1461	G1394	G1334	G1334	G1209	U1148	U1085	A1024	G962	C887	A823	A761	G699	U637
A1462	U1395	U1149	U1149	C1210	U1149	U1086	G1025	C963	C884	G824	G762	G700	U638
C1463	A1396	A1211	A1211	C1211	U1150	A1087	C1026	U954	A895	G825	G763	A701	U639
U1464	G1397	G1212	G1212	C1212	U1151	A1088	G1027	G965	A896	A826	U764	G702	G640
U1465	G1398	G1213	G1213	C1213	U1152	G1089	A1028	G966	A897	C827	A765	U703	U641
G1466	A1399	C1214	C1214	C1214	G1153	A1090	A1029	U967	C898	C828	G766	G704	C642
G1467	G1400	U1215	U1215	C1215	G1154	G1091	U1030	U968	U899	C829	C767	A705	A643
U1468	G1401	C1216	C1216	C1216	U1155	C1092	G1031	C969	U904	G830	A768	U706	A644
G1469	A1402	A1217	A1217	C1217	G1158	G1094	U1034	C970	U905	A831	G769	A707	A645
G1470	C1403	U1218	U1218	C1218	U1159	C1095	U1035	C971	G906	G905	U772	G708	A646
U1471	G1404	C1219	C1219	C1219	G1160	G1096	G1036	C973	A907	A832	U773	U647	U647
A1472	U1405	A1220	A1220	C1220	A1161	G1097	A1037	C974	U908	U836	C773	G710	G648
G1473	G1406	G1221	G1221	C1221	A1162	A1098	A1038	G975	A909	G837	A774	U711	G649
U1474	A1407	A1222	A1222	C1222	A1163	G1099	G1039	G976	U910	G838	C775	G712	G650
A1475	C1408	U1223	U1223	C1223	C1164	A1100	A1040	A977	C911	U839	C776	U651	U651
G1476	G1409	C1224	C1224	C1224	U1165	U1101	U1041	G978	G912	G840	G777	U652	U652
C1477	U1410	C1225	C1225	C1225	G1166	U1102	U1042	U979	C915	A841	A778	A715	C653
U1478	U1411	C1226	C1226	C1226	G1167	A1103	U1043	U980	C916	A842	C780	A716	U654
A1479	U1412	A1227	A1227	C1227	C1168	G1104	G1044	U981	U917	C846	G781	A718	A655
G1480	G1413	G1228	G1228	C1228	U1169	U1105	G1045	C982	U917	C847	G782	C719	C656
U1481	C1414	A1229	A1229	C1229	G1170	U1106	G1046	U983	C918	G847	G783	C720	G658
A1482	C1415	A1230	A1230	C1230	U1171	A1107	G1047	C984	A919	C848	G784	C721	C659
G1483	U1416	U1231	U1231	C1231	G1172	A1108	U1048	U985	A920	U849	G786	G722	C660
U1484	A1417	A1232	A1232	C1232	A1173	U1109	U1049	C986	A921	U850	U787	U723	C661
U1489	U1358	G1233	G1233	C1233	G1174	U1110	C1050	A987	U922	G851	C788	C724	C662
G1490	A1359	U1234	U1234	C1234	U1175	G1111	C1051	U988	G925	A852	U789	C725	G663
A1491	C1360	G1235	G1235	C1235	G1176	U1112	A1052	G989	C926	A853	C790	G726	U664
G1492	U1361	U1236	U1236	C1236	A1177	A1113	G1053	U990	A926	U854	G791	C727	C665
A1493	C1362	U1237	U1237	C1237	U1178	C1114	G1054	U991	G927	A855	C792	U666	U666
A1494	A1363	U1238	U1238	C1238	G1179	U1115	A1055	A992	U928	G856	A793	U729	U667
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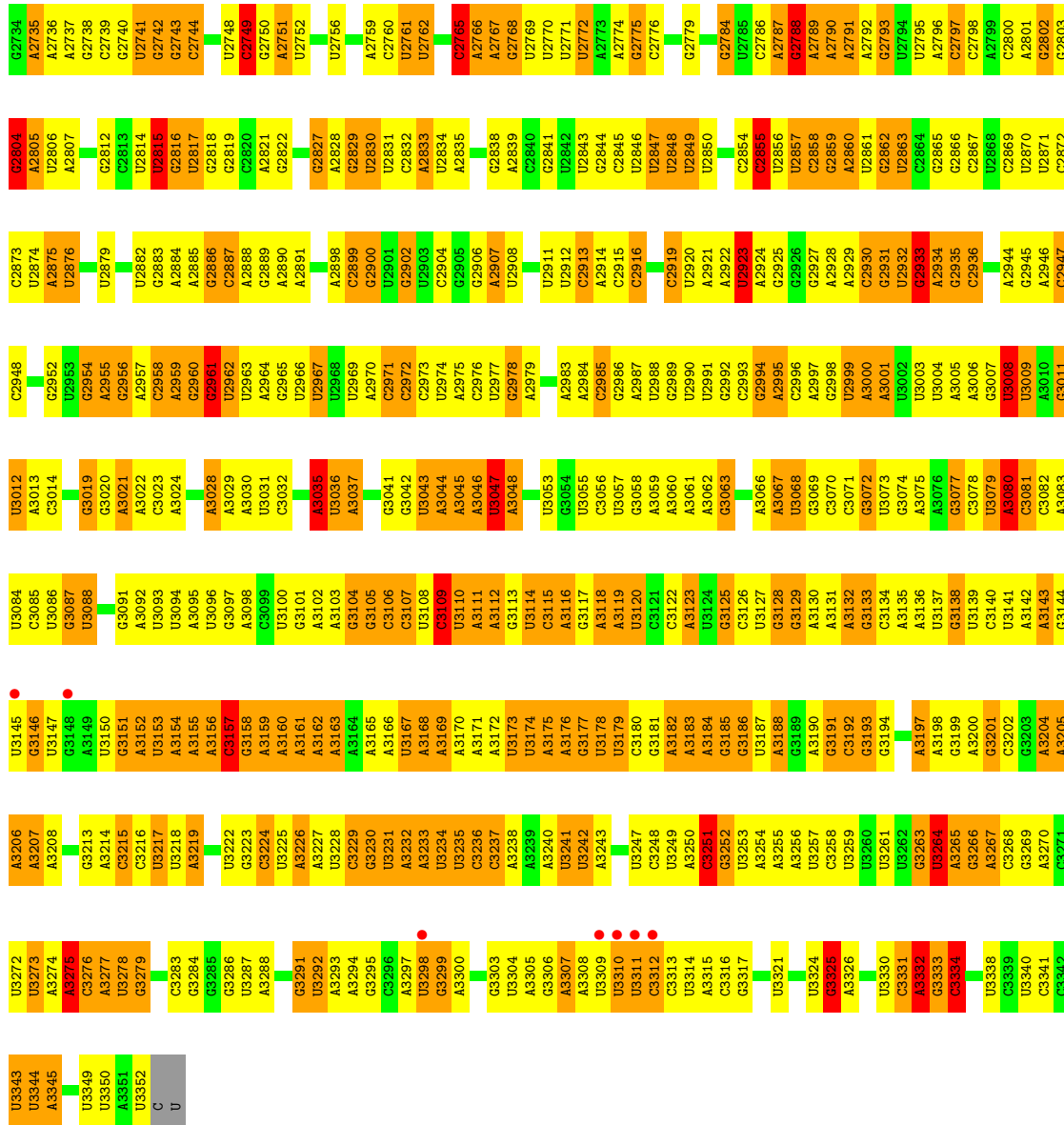
• Molecule 1: 26S RRNA



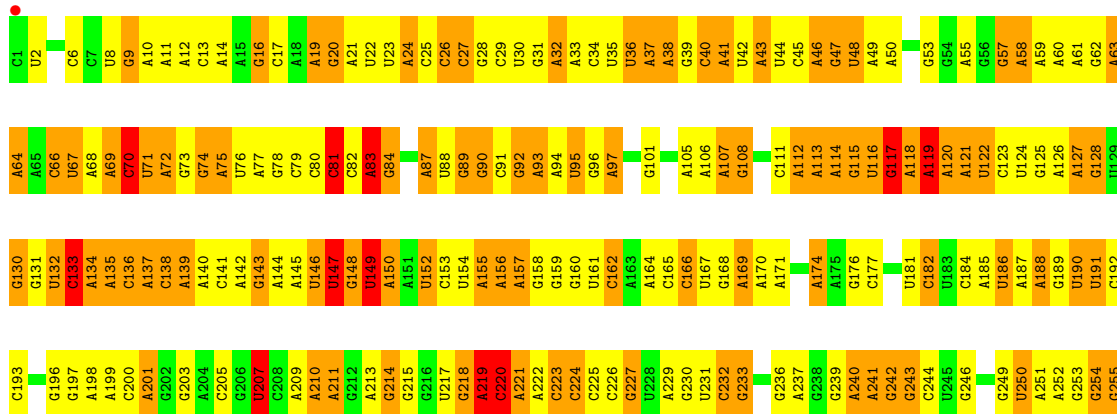
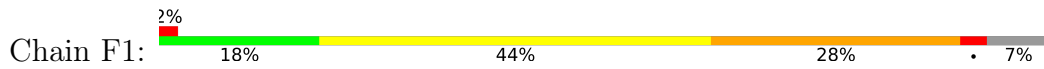


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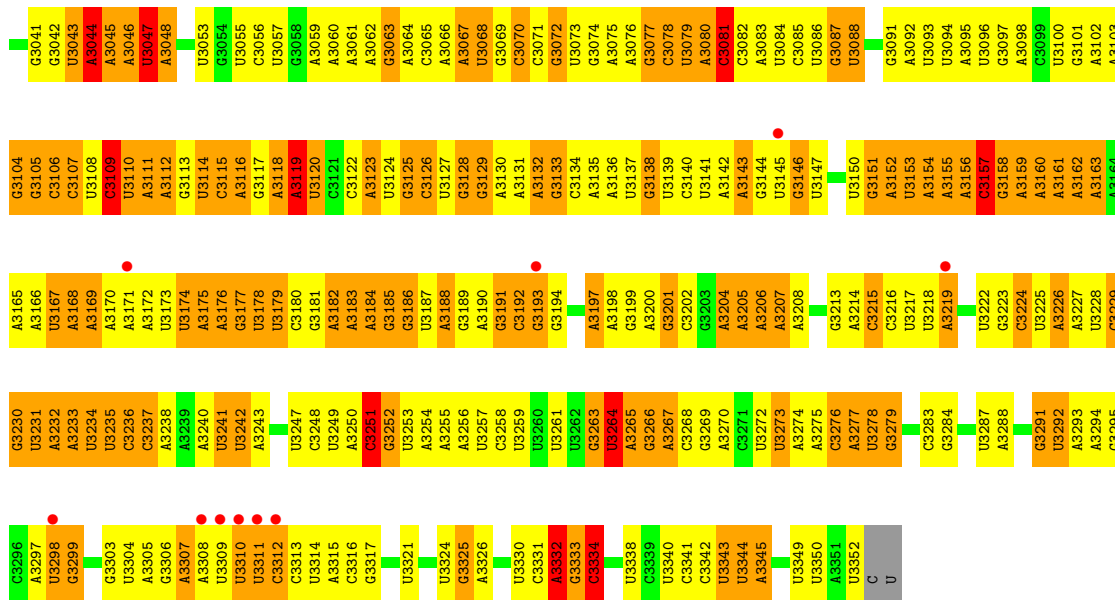
• Molecule 1: 26S RRNA



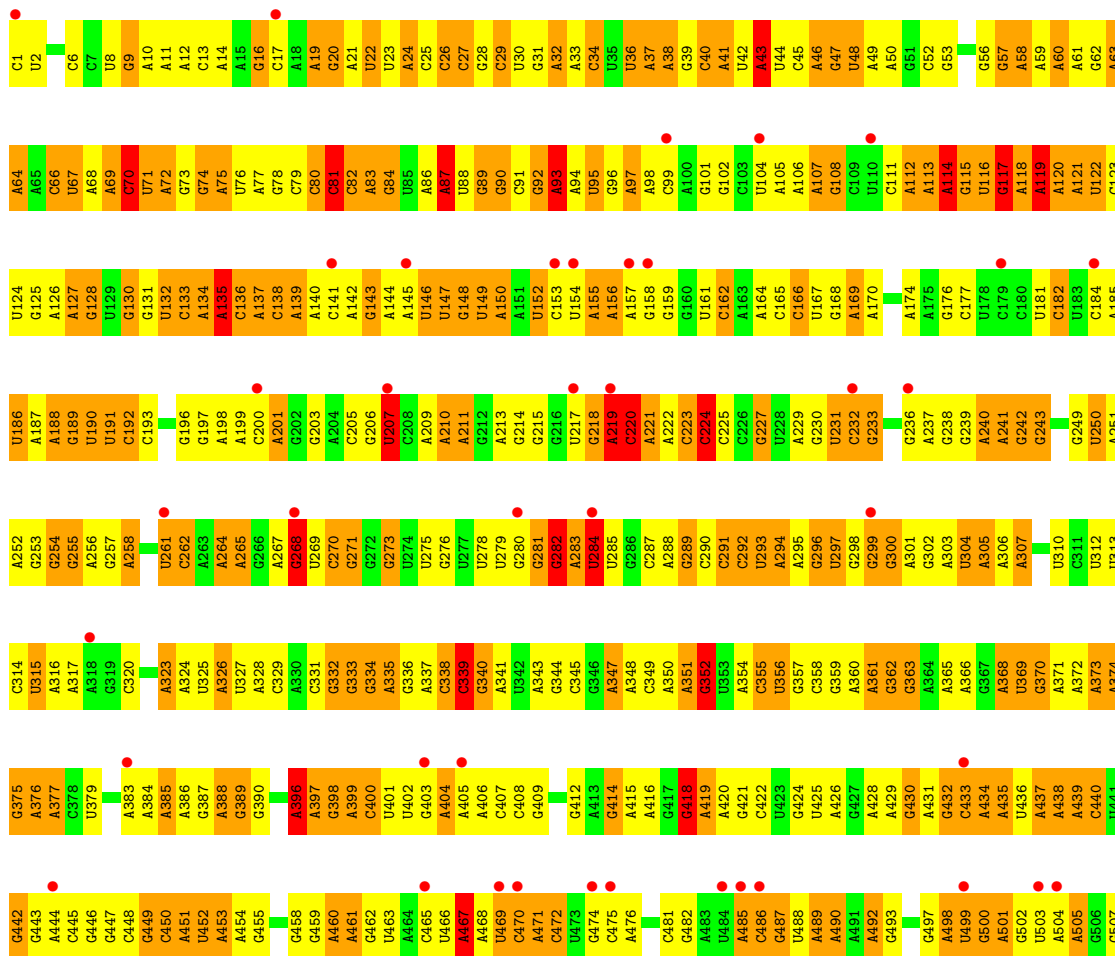
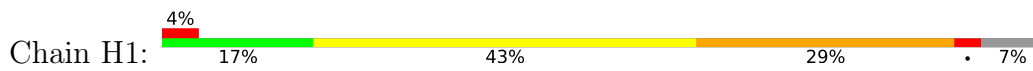
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C1164	U1101	A1039	G834	A768	G705	U641	C581	A519	U452	A388	A326	A263
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• Molecule 1: 26S RRNA

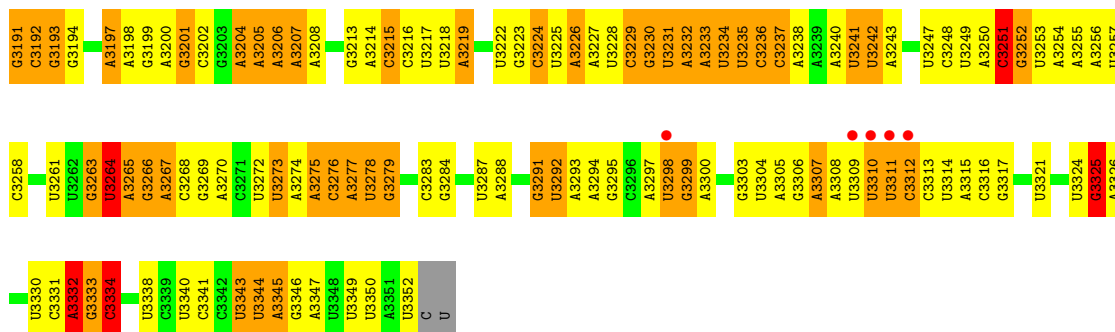




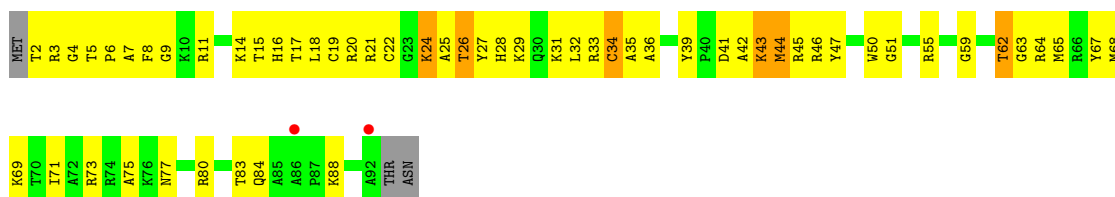


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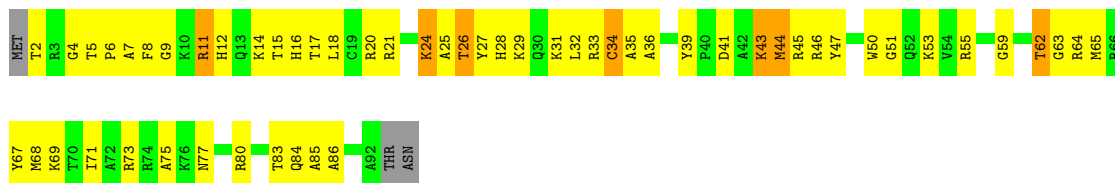
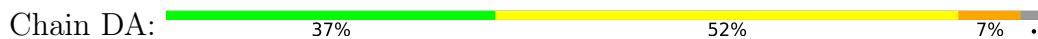
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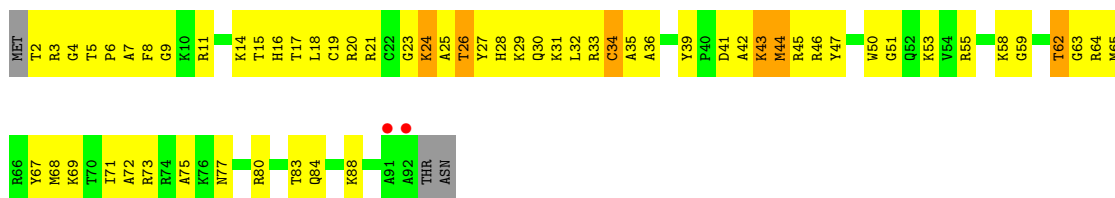
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- Molecule 2: RIBOSOMAL PROTEIN L37

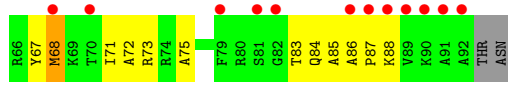


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- Molecule 2: RIBOSOMAL PROTEIN L37

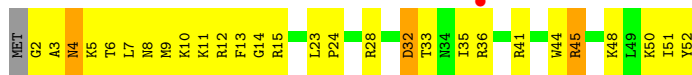




• Molecule 3: RPL39



• Molecule 3: RPL39



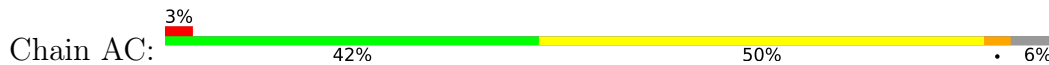
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• Molecule 3: RPL39



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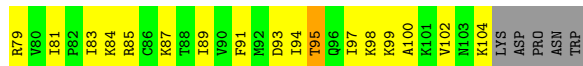


• Molecule 4: 60S RIBOSOMAL PROTEIN L36A

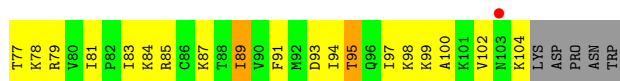
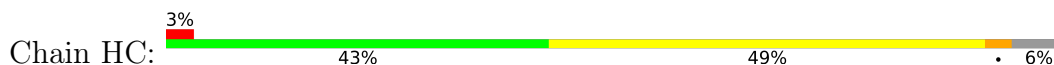




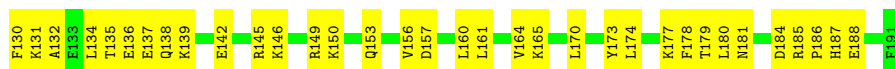
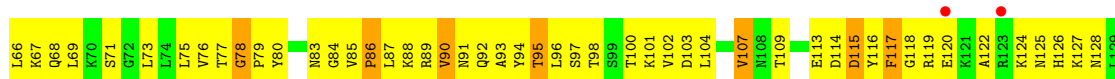
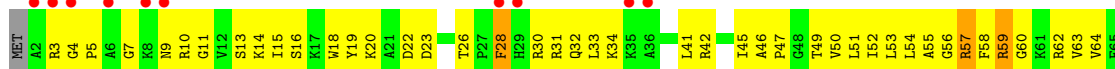
● Molecule 4: 60S RIBOSOMAL PROTEIN L36A



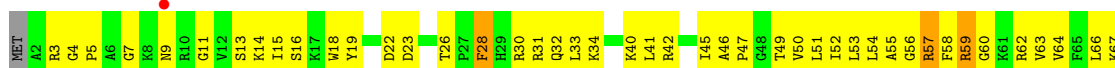
● Molecule 4: 60S RIBOSOMAL PROTEIN L36A



● Molecule 5: RPL6

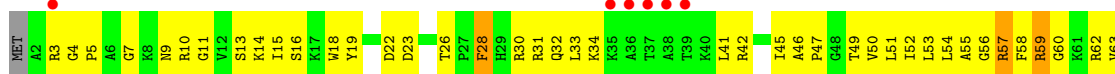


● Molecule 5: RPL6

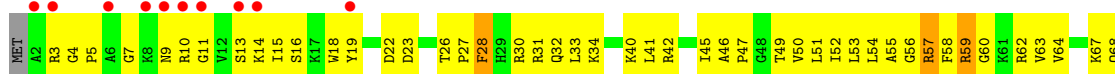




• Molecule 5: RPL6



• Molecule 5: RPL6



• Molecule 6: RPL14

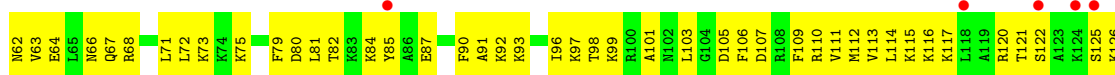


• Molecule 6: RPL14

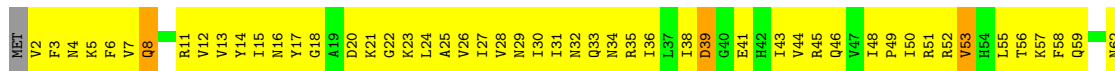
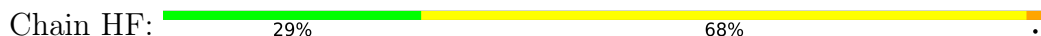




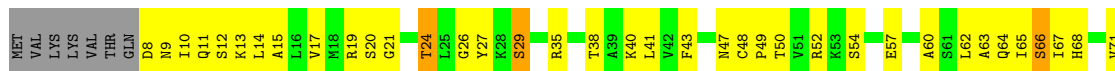
• Molecule 6: RPL14



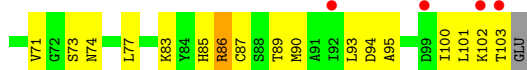
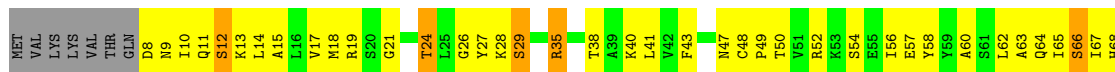
• Molecule 6: RPL14



• Molecule 7: RPL30

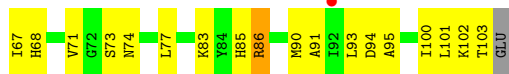
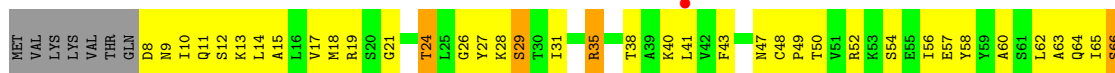


• Molecule 7: RPL30

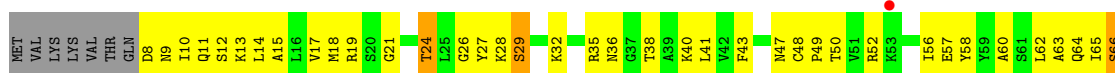


• Molecule 7: RPL30

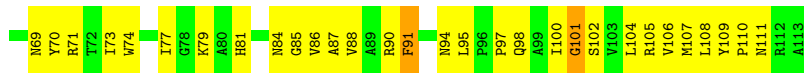




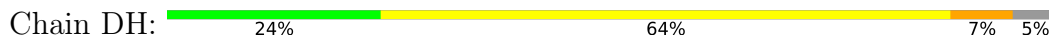
• Molecule 7: RPL30



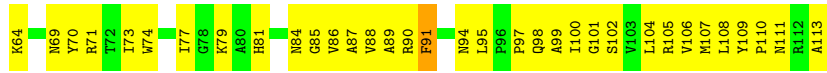
• Molecule 8: RPL35A



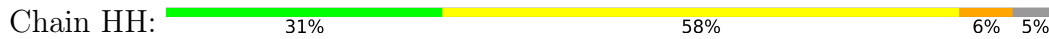
• Molecule 8: RPL35A



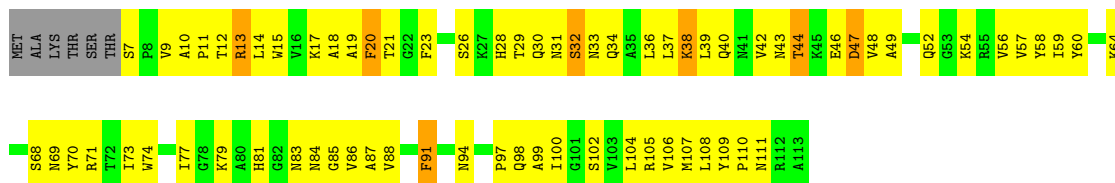
• Molecule 8: RPL35A



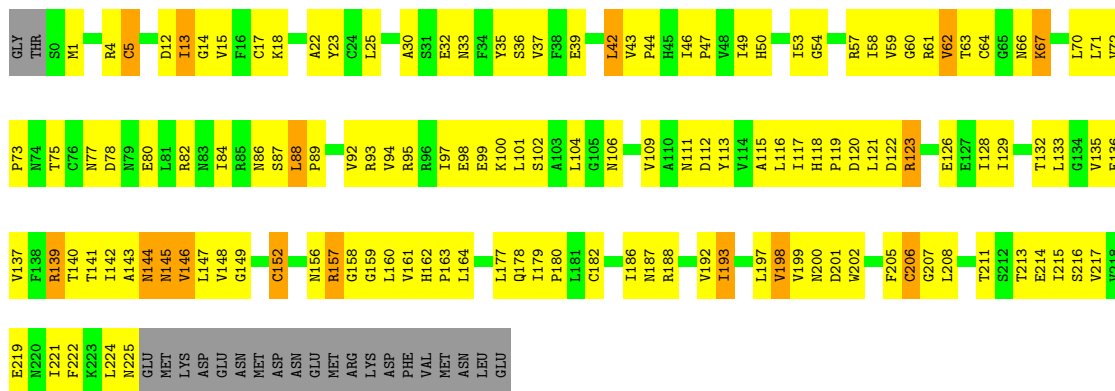
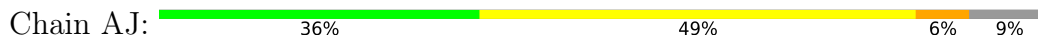
• Molecule 8: RPL35A



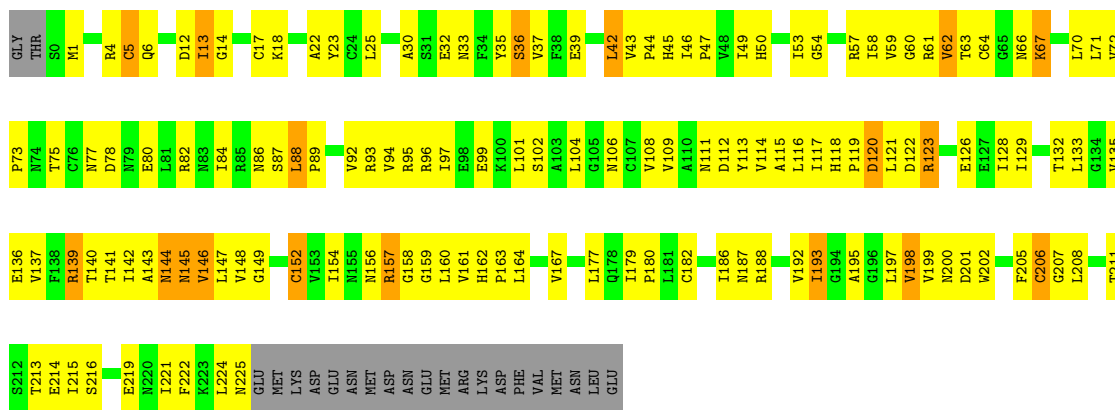




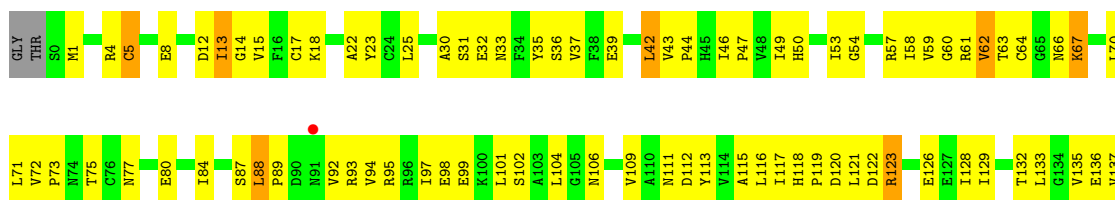
● Molecule 9: TRANSLATION INITIATION FACTOR EIF-6, PUTATIVE FAMILY PROTEIN



● Molecule 9: TRANSLATION INITIATION FACTOR EIF-6, PUTATIVE FAMILY PROTEIN



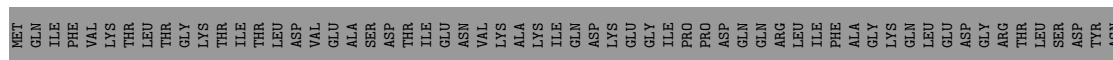
● Molecule 9: TRANSLATION INITIATION FACTOR EIF-6, PUTATIVE FAMILY PROTEIN



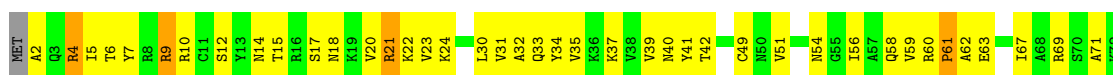




• Molecule 10: UBIQUITIN-60S RIBOSOMAL PROTEIN L40



• Molecule 11: RPL34



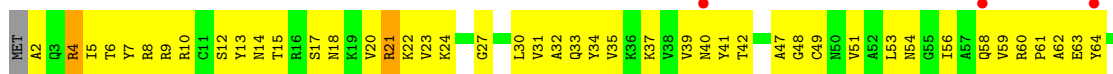
• Molecule 11: RPL34

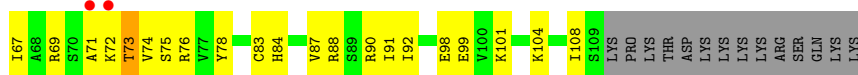


• Molecule 11: RPL34

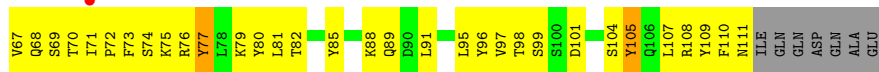
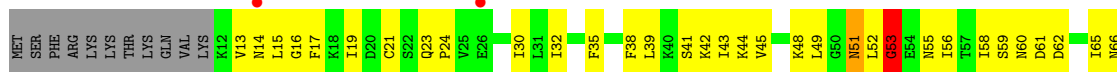


• Molecule 11: RPL34





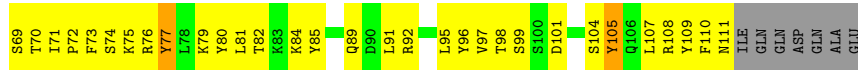
● Molecule 12: RIBOSOMAL PROTEIN L22



● Molecule 12: RIBOSOMAL PROTEIN L22



● Molecule 12: RIBOSOMAL PROTEIN L22

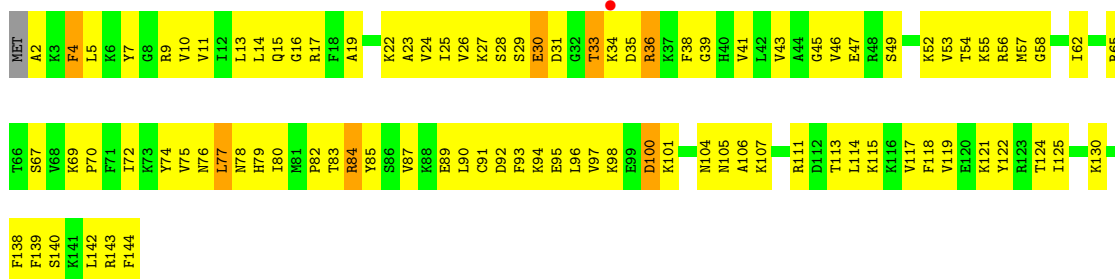


● Molecule 12: RIBOSOMAL PROTEIN L22

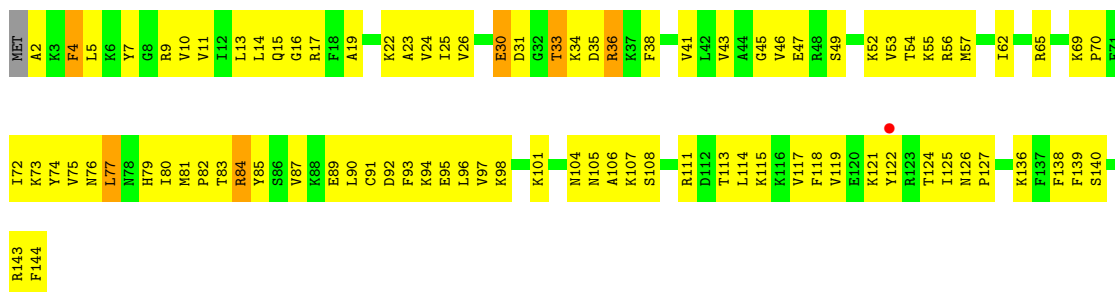


● Molecule 13: RPL27





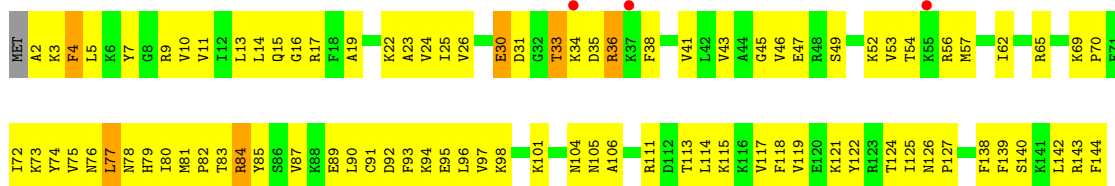
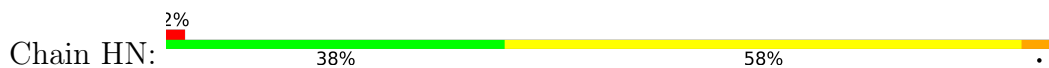
- Molecule 13: RPL27



- Molecule 13: RPL27

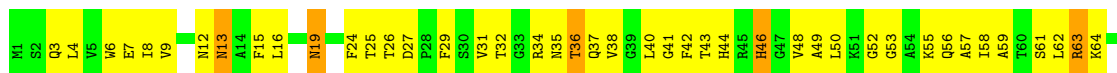


- Molecule 13: RPL27

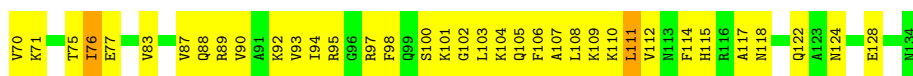
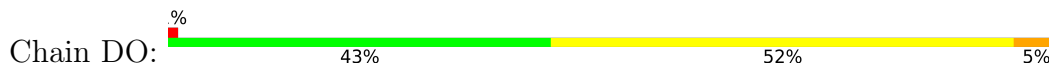


- Molecule 14: RPL28





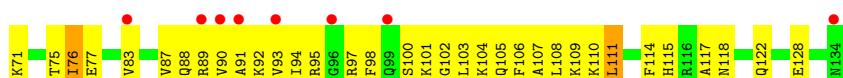
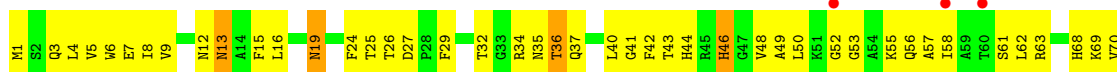
• Molecule 14: RPL28



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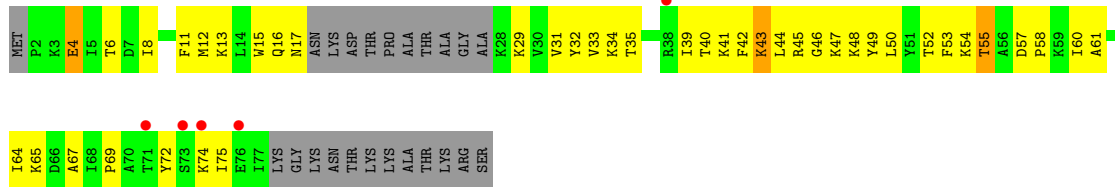
• Molecule 14: RPL28



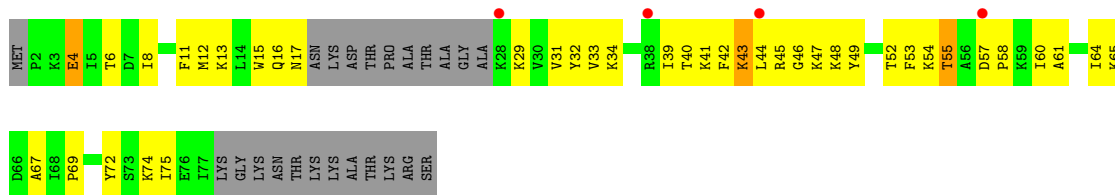
• Molecule 15: RPL38



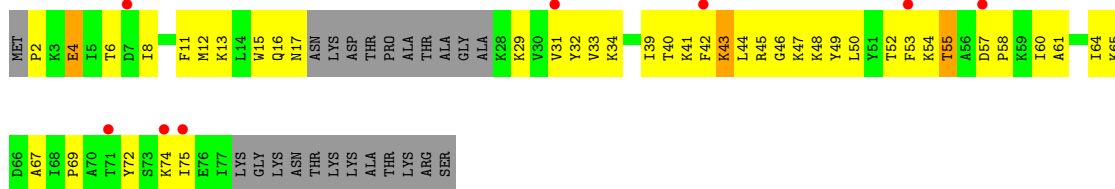
• Molecule 15: RPL38



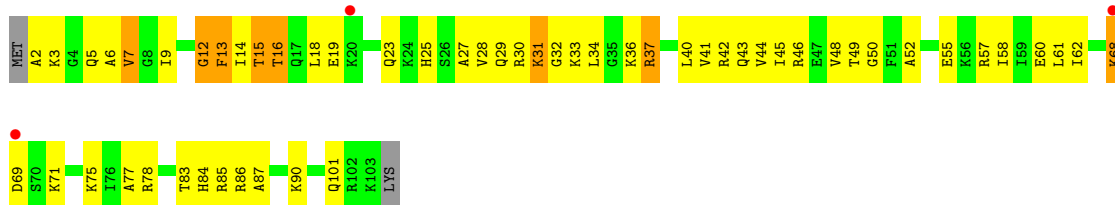
• Molecule 15: RPL38



• Molecule 15: RPL38

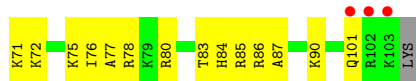


• Molecule 16: 60S RIBOSOMAL PROTEIN L36

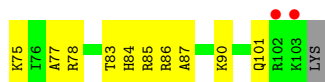


• Molecule 16: 60S RIBOSOMAL PROTEIN L36

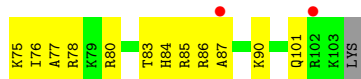




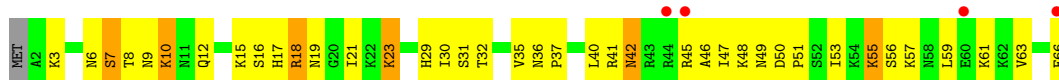
- Molecule 16: 60S RIBOSOMAL PROTEIN L36



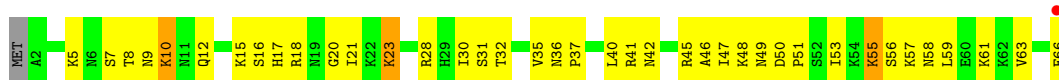
- Molecule 16: 60S RIBOSOMAL PROTEIN L36



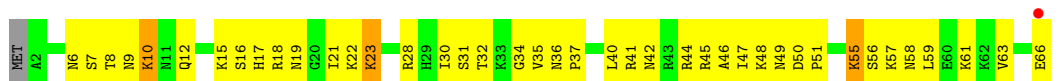
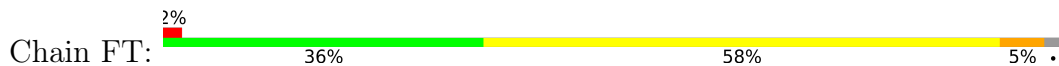
- Molecule 17: RPL29



- Molecule 17: RPL29



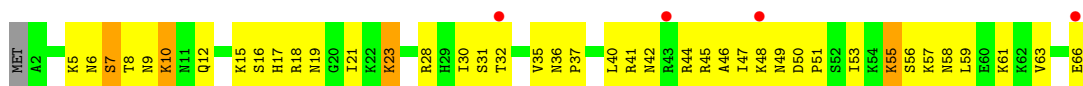
- Molecule 17: RPL29



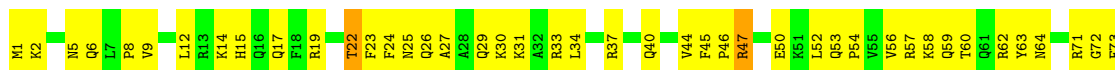
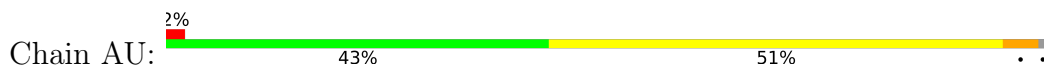
- Molecule 17: RPL29



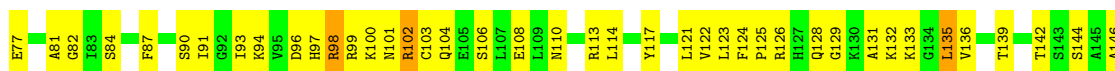




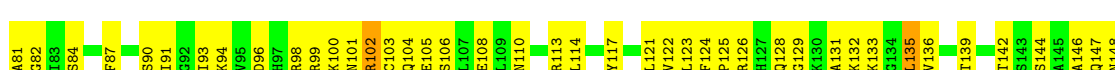
• Molecule 18: RPL13



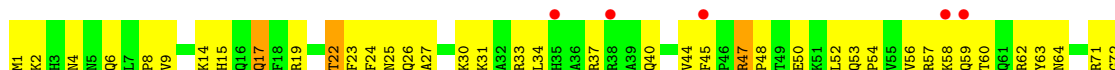
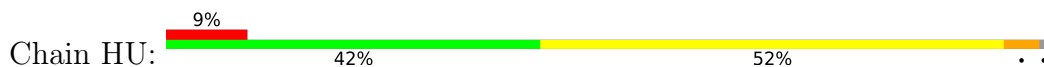
• Molecule 18: RPL13

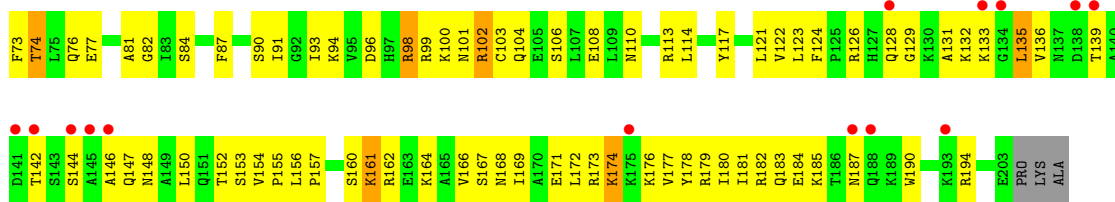


• Molecule 18: RPL13

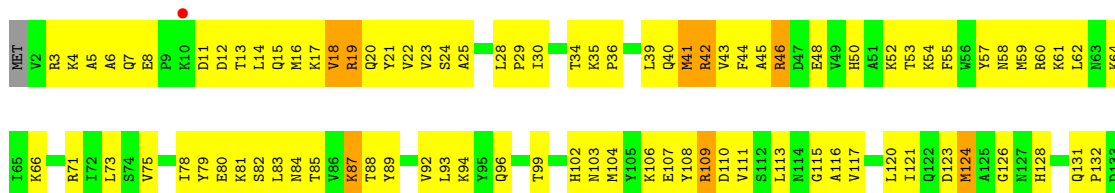


• Molecule 18: RPL13





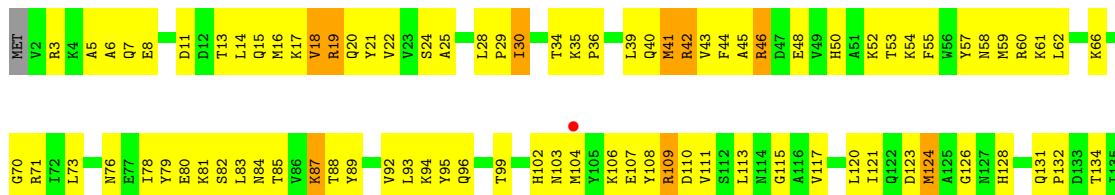
- Molecule 19: RPL18A



- Molecule 19: RPL18A

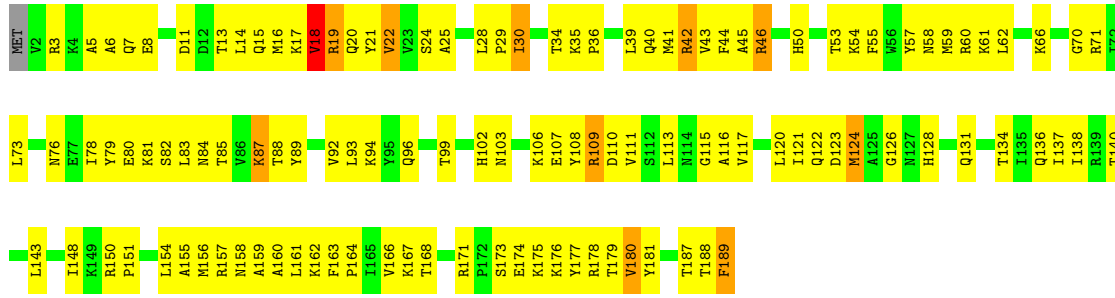


- Molecule 19: RPL18A

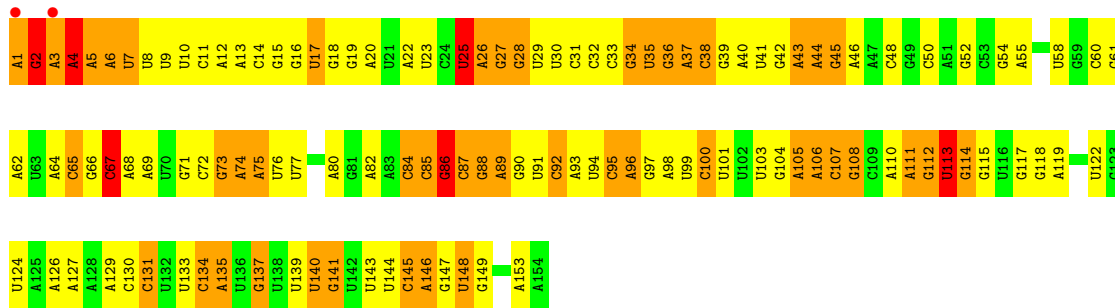
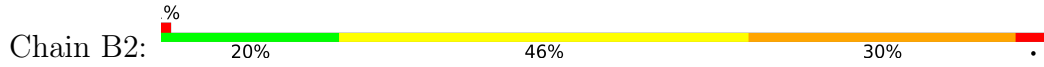


- Molecule 19: RPL18A

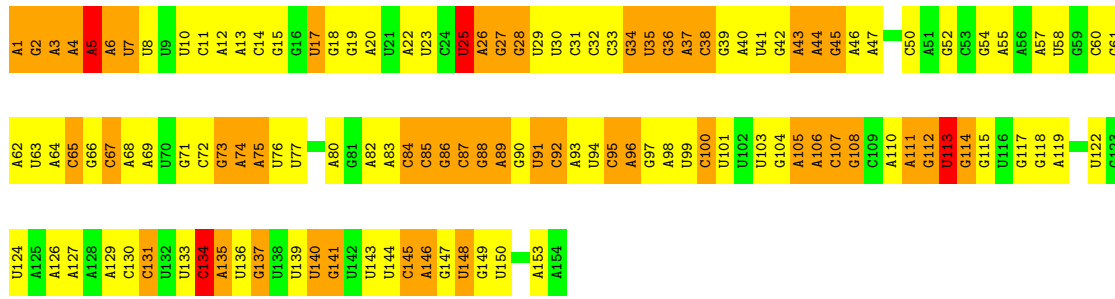
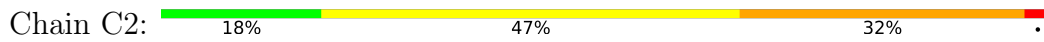




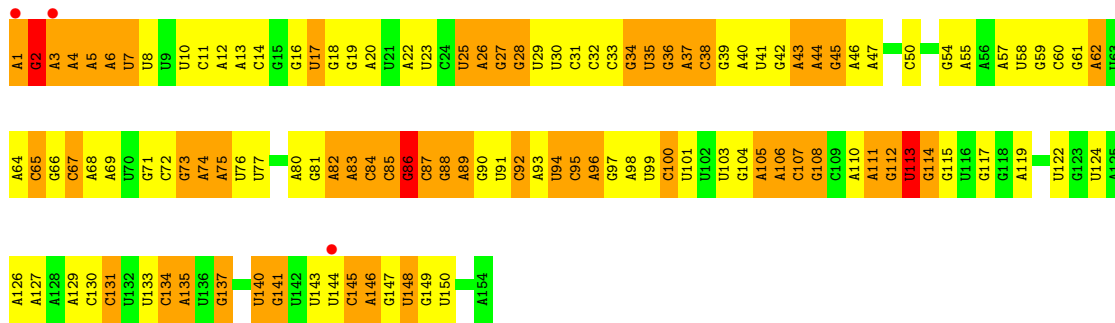
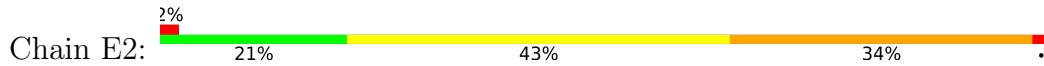
• Molecule 20: 5.8S RRNA



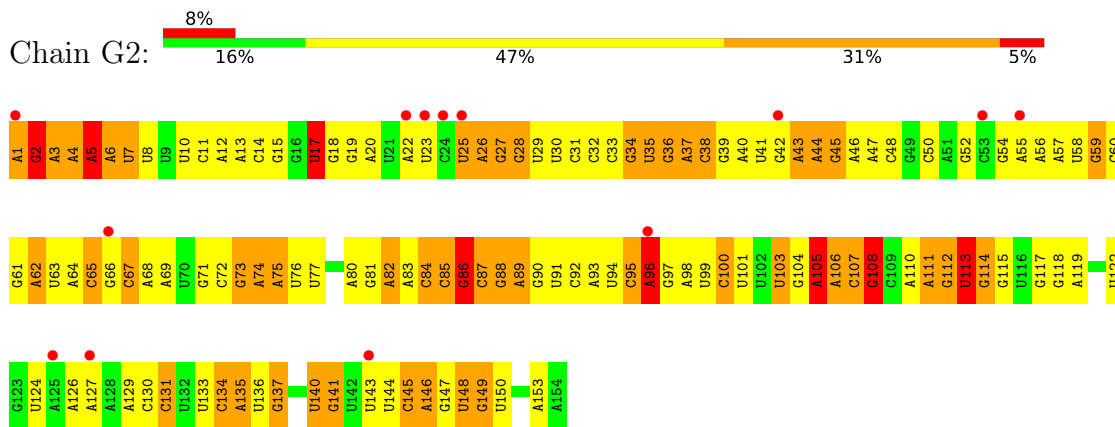
• Molecule 20: 5.8S RRNA



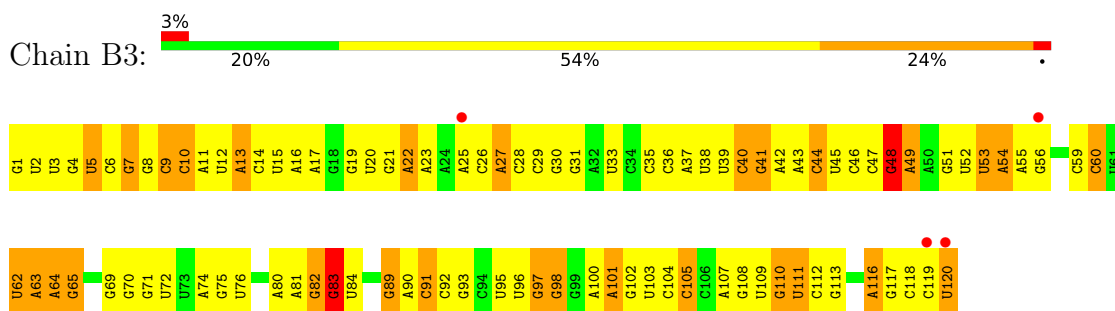
• Molecule 20: 5.8S RRNA



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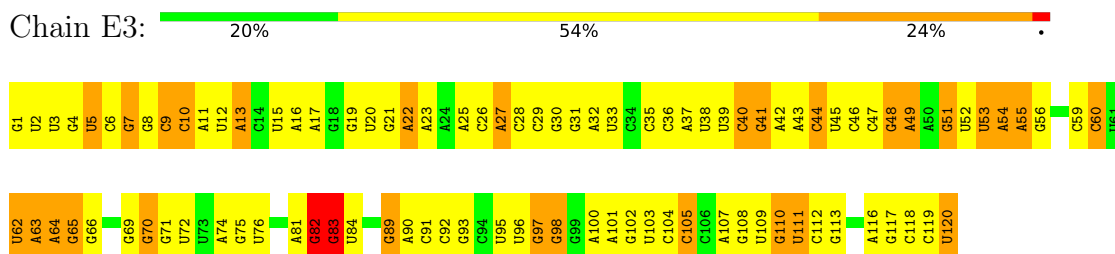
- Molecule 21: 5S RRNA



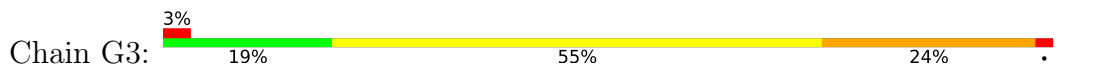
- Molecule 21: 5S RRNA

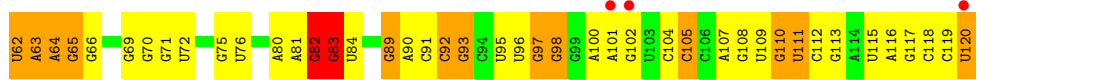
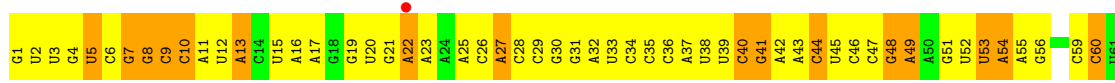


- Molecule 21: 5S RRNA

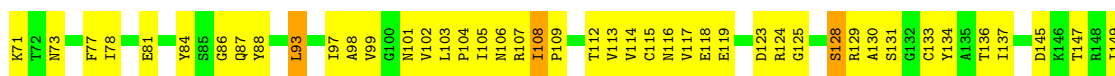


- Molecule 21: 5S RRNA

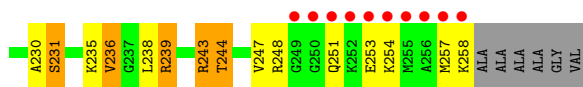
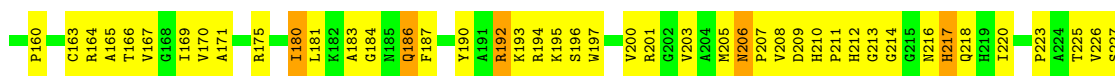
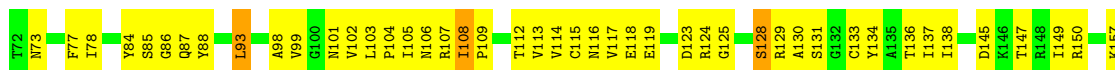
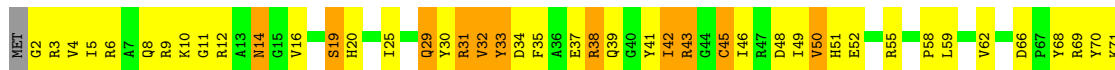




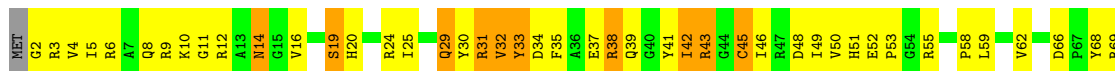
• Molecule 22: RPL8

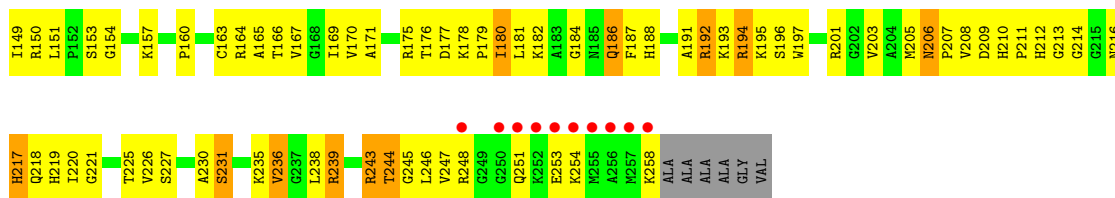


• Molecule 22: RPL8

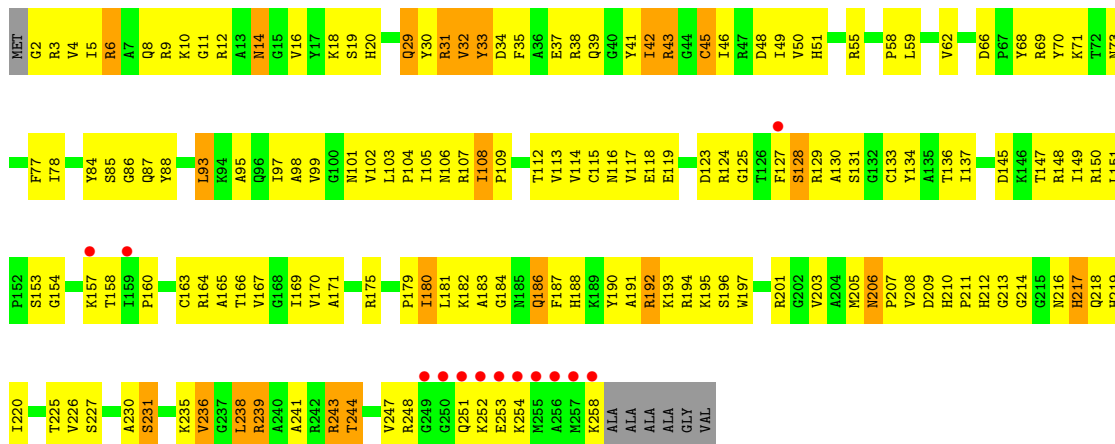


• Molecule 22: RPL8

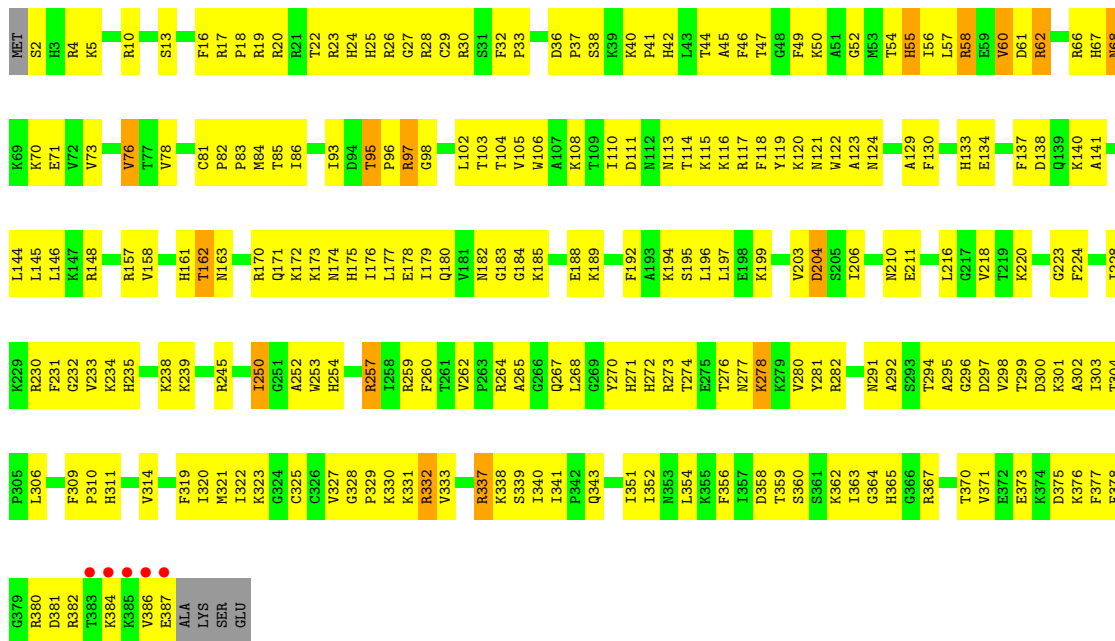




• Molecule 22: RPL8

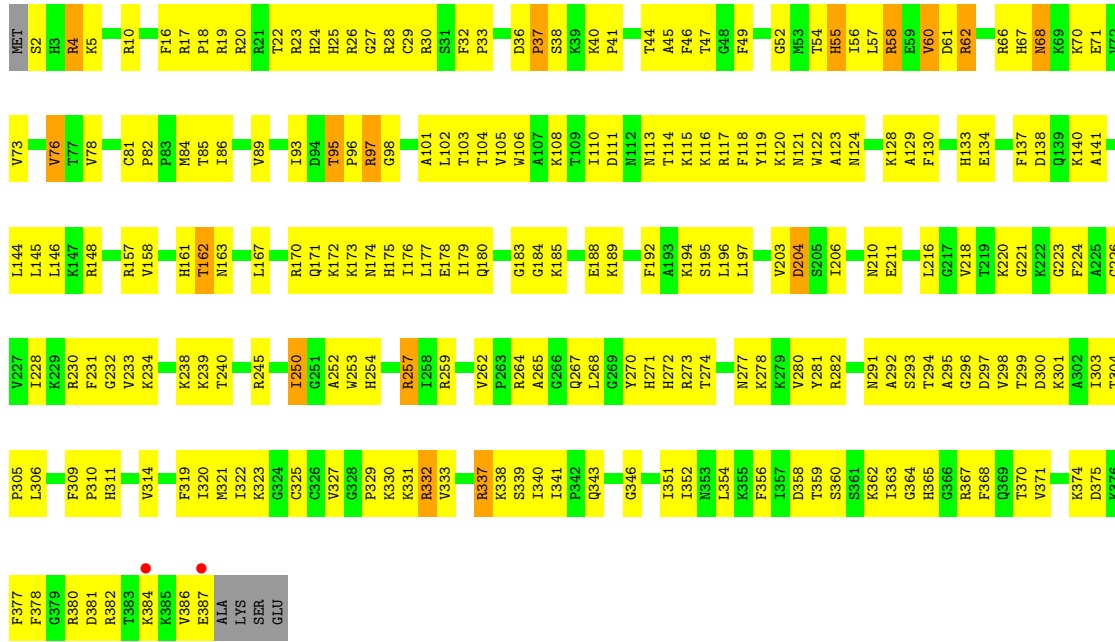


• Molecule 23: RIBOSOMAL PROTEIN L3

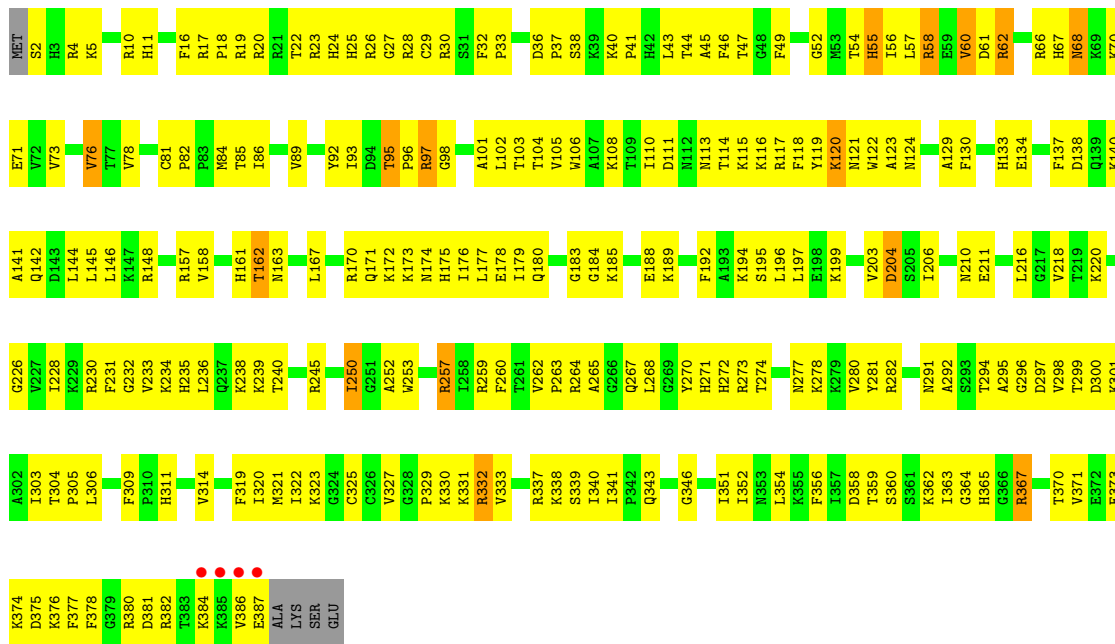


• Molecule 23: RIBOSOMAL PROTEIN L3

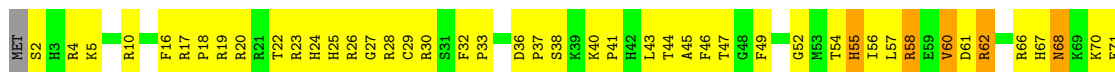


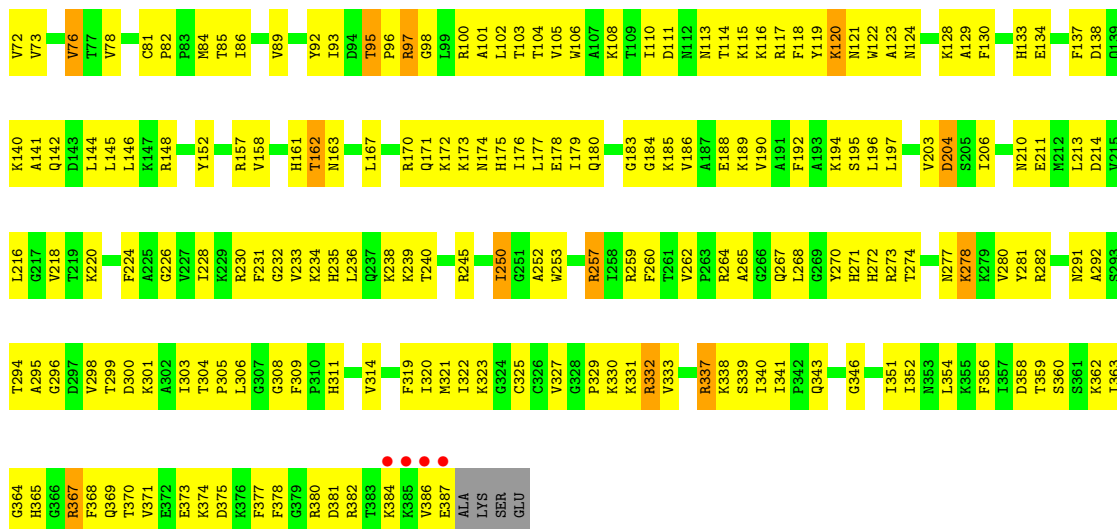


• Molecule 23: RIBOSOMAL PROTEIN L3

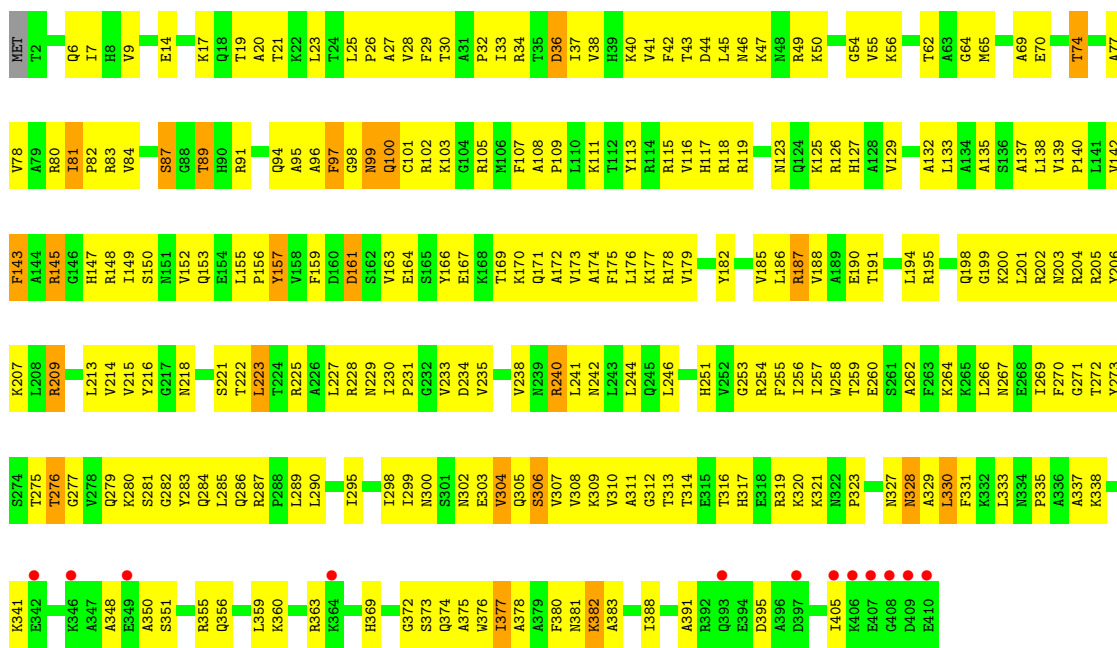


• Molecule 23: RIBOSOMAL PROTEIN L3

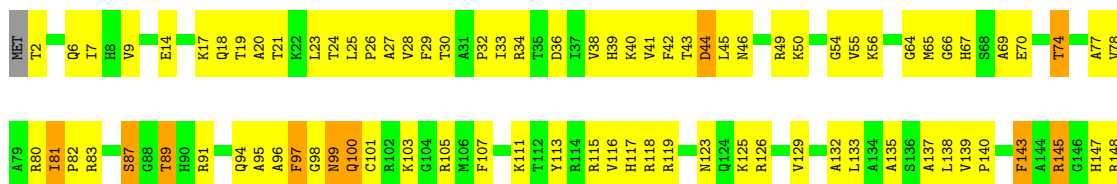




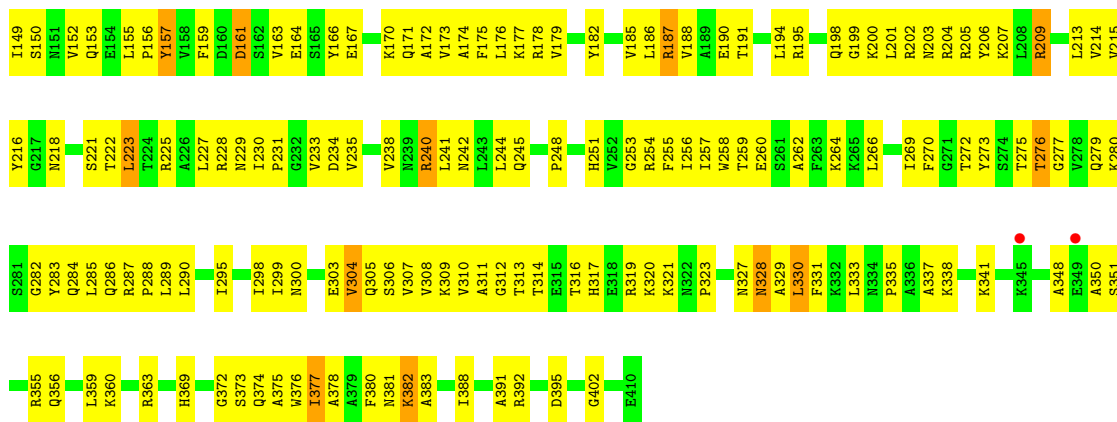
● Molecule 24: RPL4



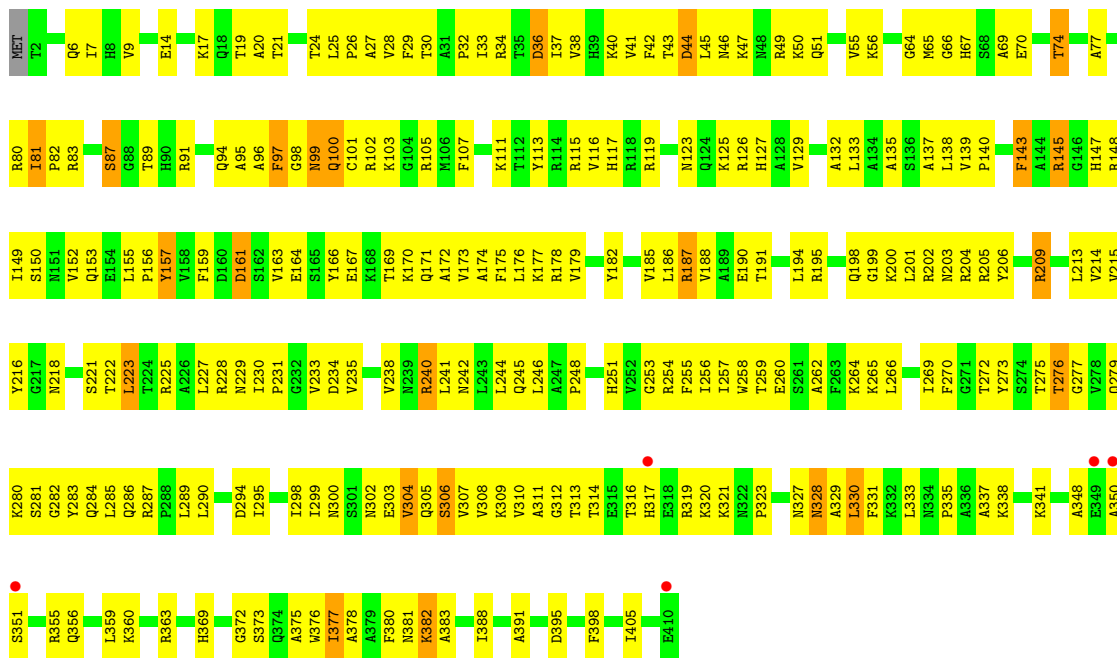
● Molecule 24: RPL4



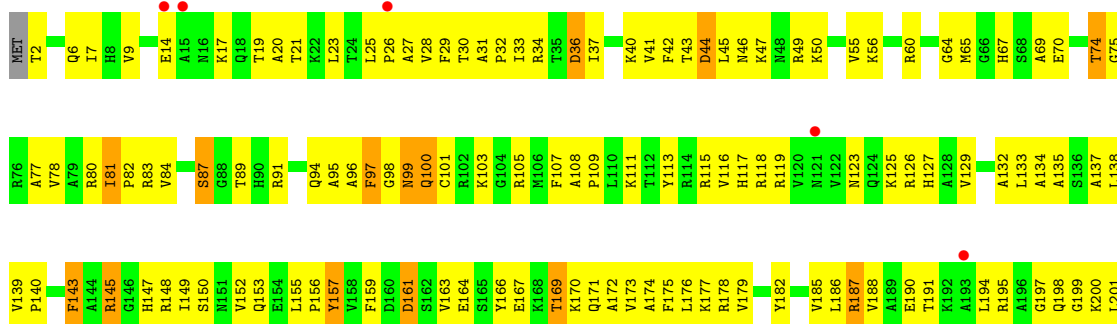


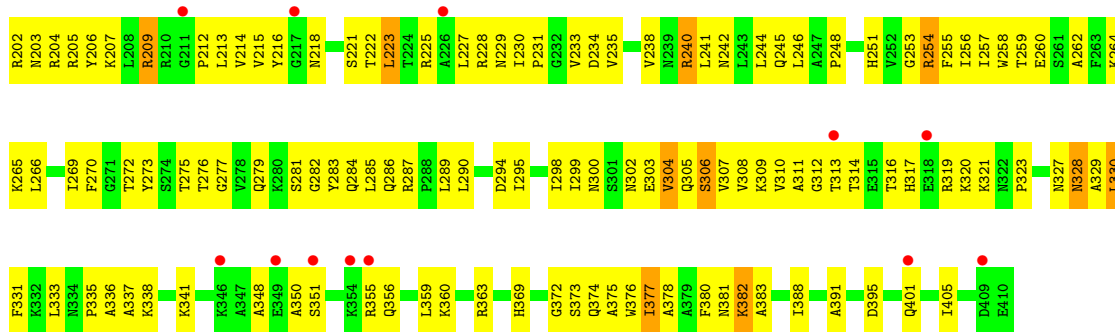


● Molecule 24: RPL4

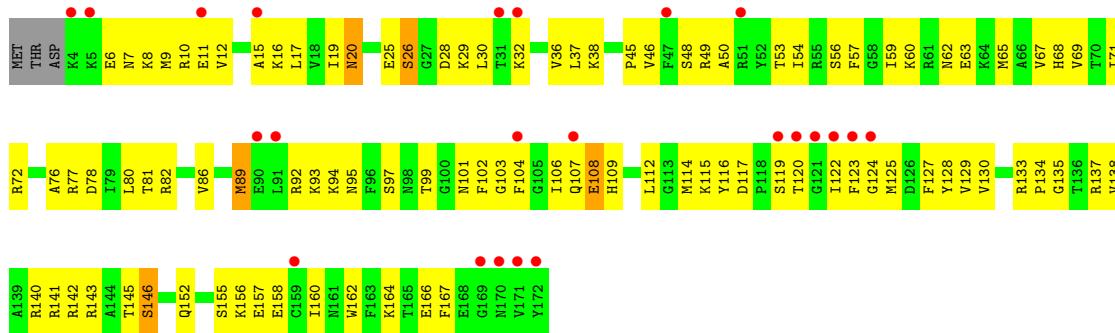
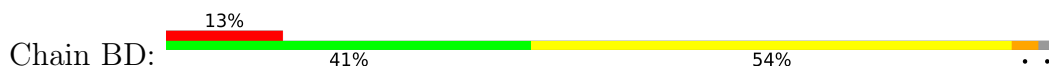


● Molecule 24: RPL4

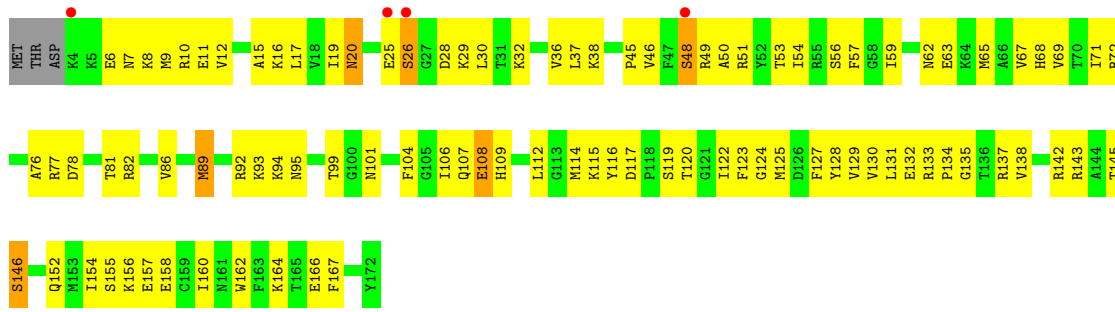
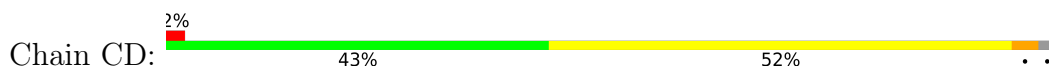




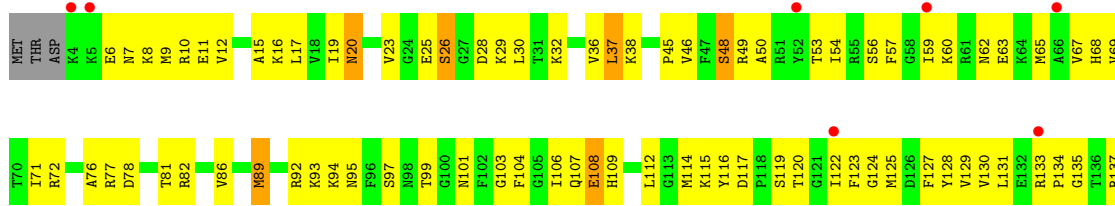
• Molecule 25: 60S RIBOSOMAL PROTEIN L11

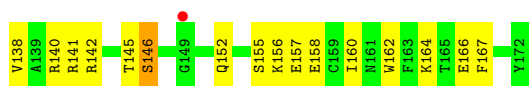


• Molecule 25: 60S RIBOSOMAL PROTEIN L11

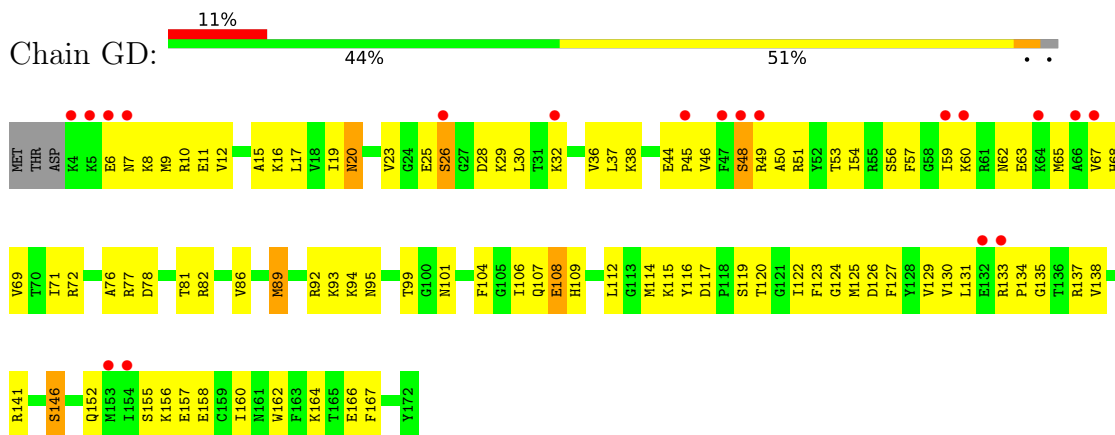


• Molecule 25: 60S RIBOSOMAL PROTEIN L11





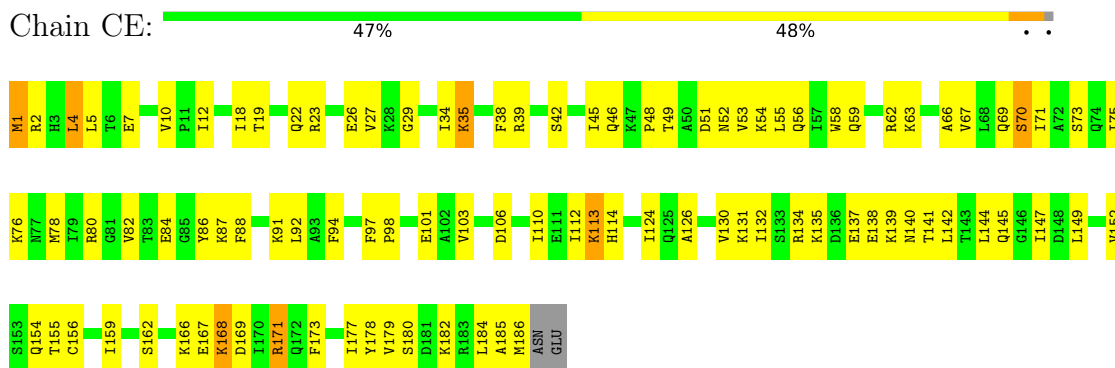
- Molecule 25: 60S RIBOSOMAL PROTEIN L11



- Molecule 26: 60S RIBOSOMAL PROTEIN L9

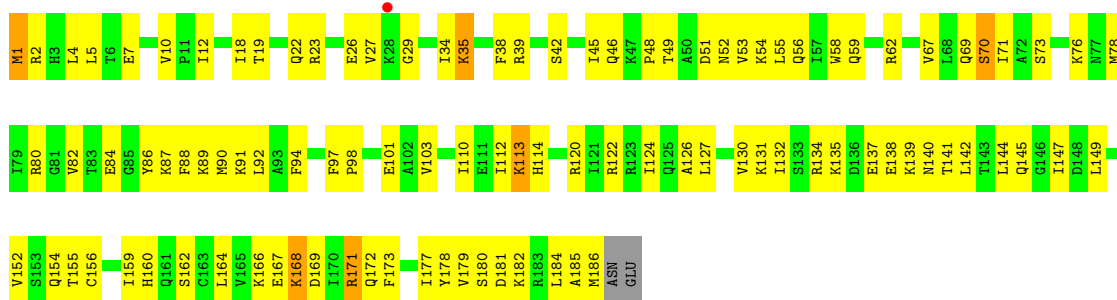


- Molecule 26: 60S RIBOSOMAL PROTEIN L9

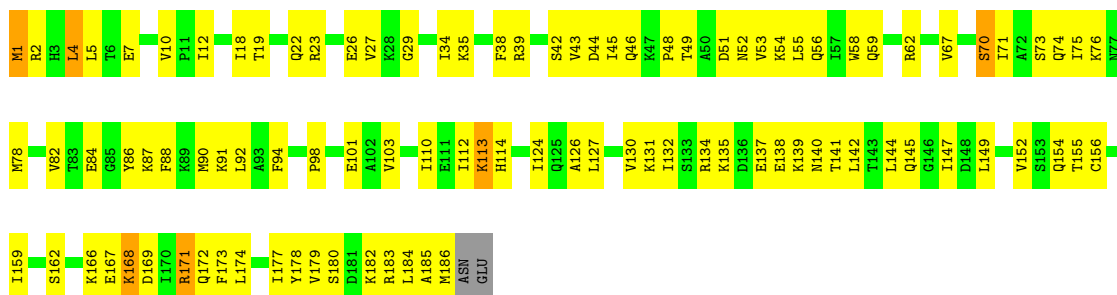


- Molecule 26: 60S RIBOSOMAL PROTEIN L9

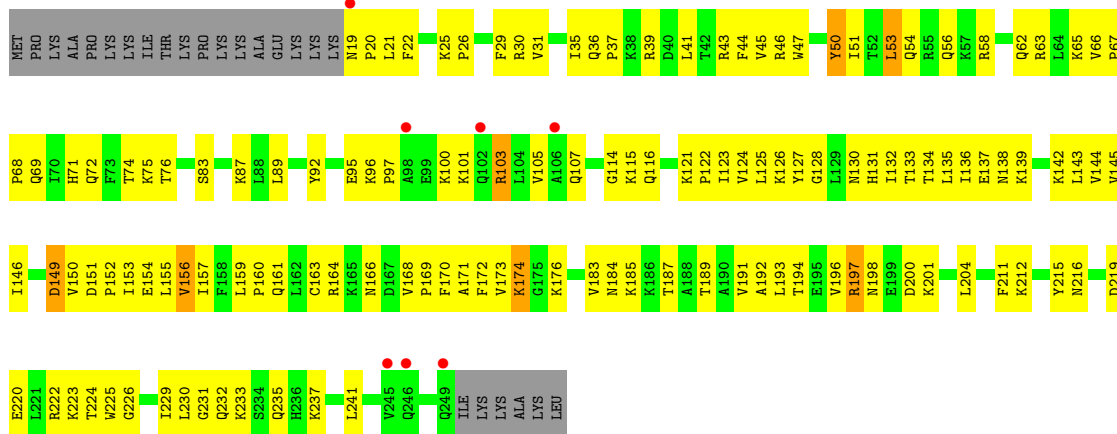




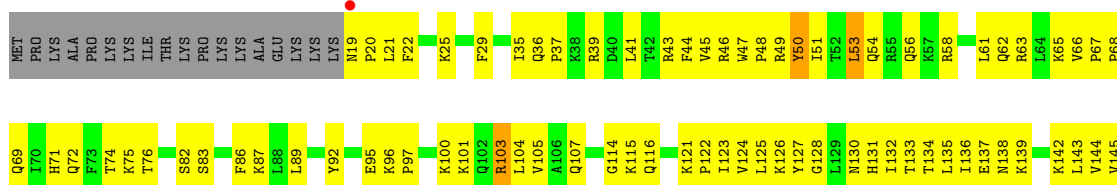
• Molecule 26: 60S RIBOSOMAL PROTEIN L9

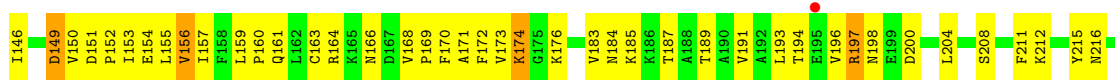


• Molecule 27: RPL7A

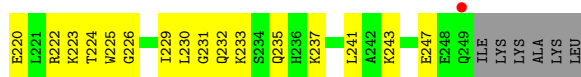
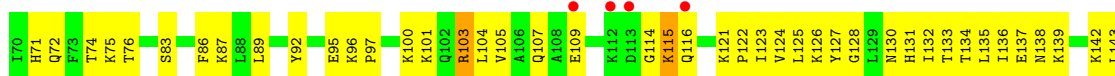


• Molecule 27: RPL7A

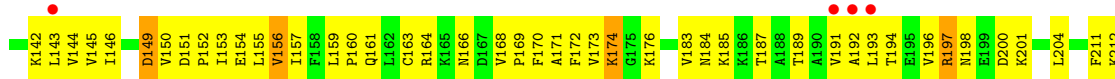
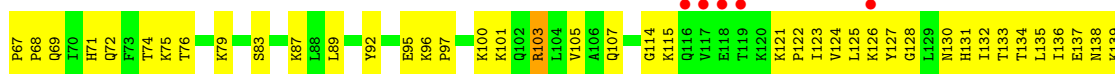
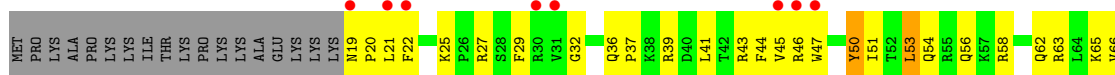




• Molecule 27: RPL7A



• Molecule 27: RPL7A

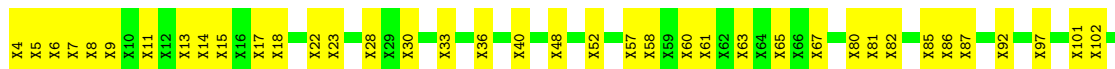


• Molecule 28: RPLP0





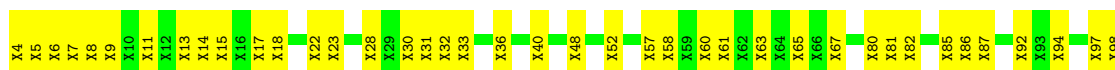
• Molecule 28: RPLP0



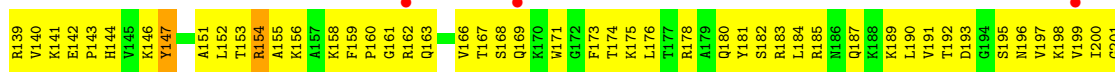
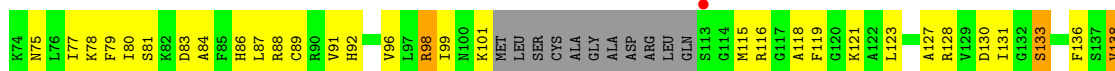
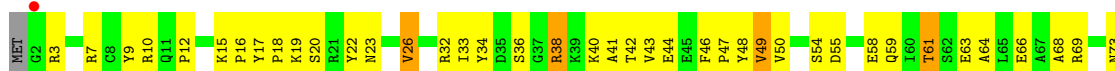
• Molecule 28: RPLP0



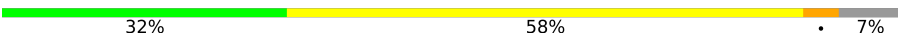
• Molecule 28: RPLP0

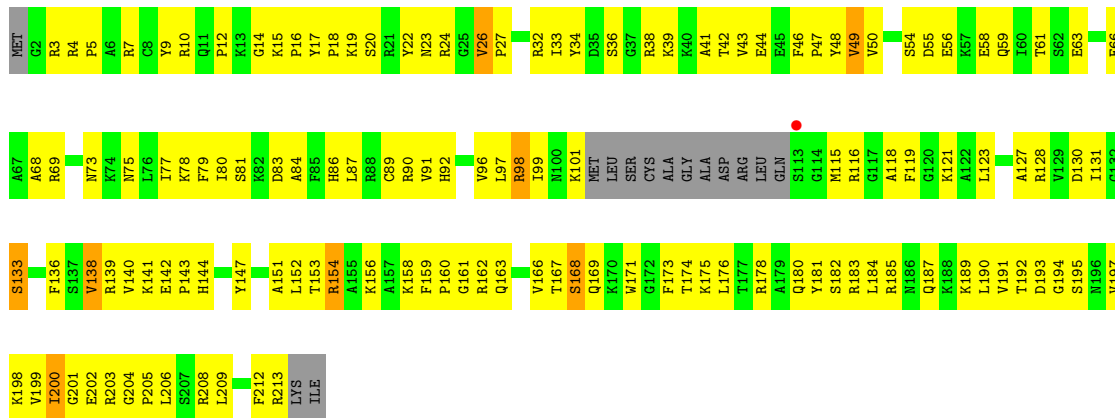


• Molecule 29: 60S RIBOSOMAL PROTEIN L10



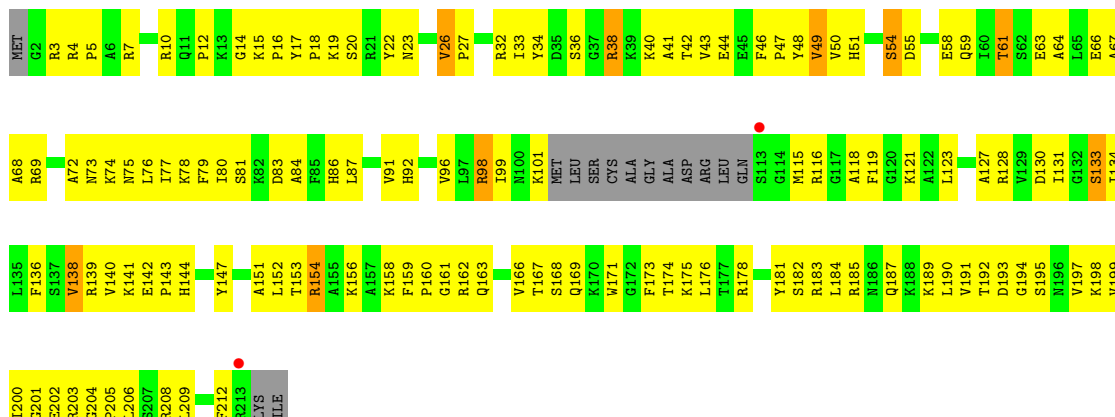
• Molecule 29: 60S RIBOSOMAL PROTEIN L10

Chain CH: 

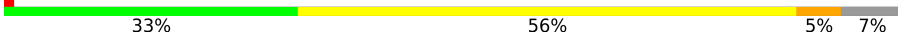


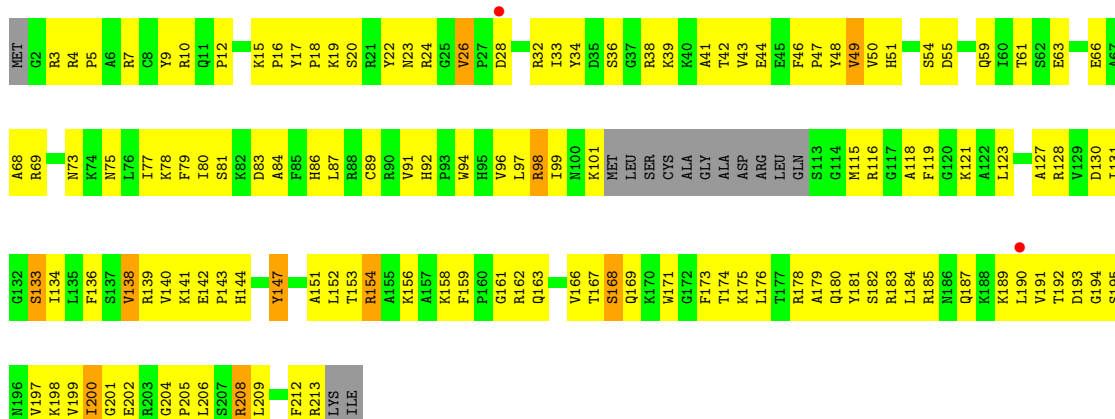
• Molecule 29: 60S RIBOSOMAL PROTEIN L10

Chain EH: 



• Molecule 29: 60S RIBOSOMAL PROTEIN L10

Chain GH: 



- Molecule 30: 60S RIBOSOMAL PROTEIN L13A



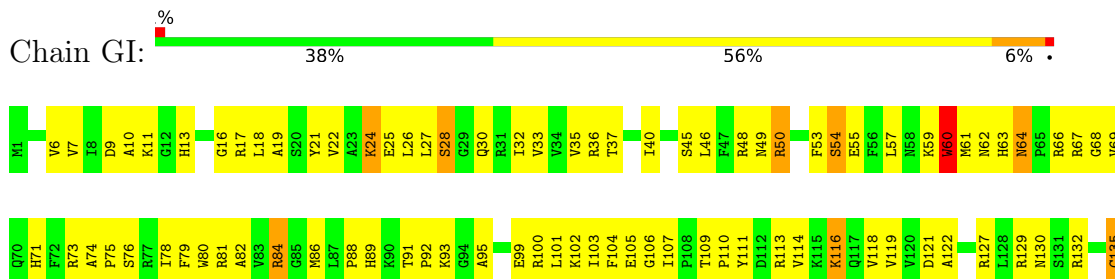
- Molecule 30: 60S RIBOSOMAL PROTEIN L13A



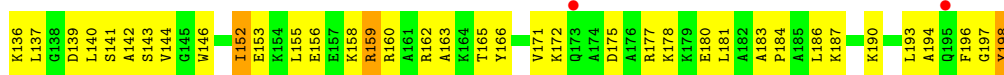
- Molecule 30: 60S RIBOSOMAL PROTEIN L13A



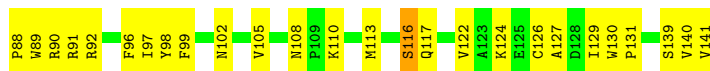
- Molecule 30: 60S RIBOSOMAL PROTEIN L13A



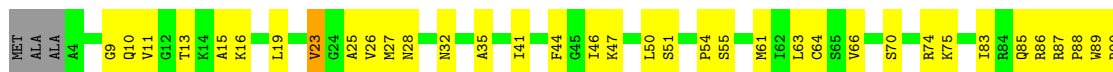




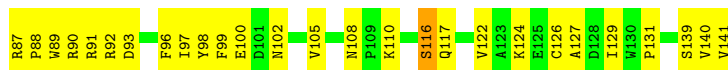
- Molecule 31: RPL23



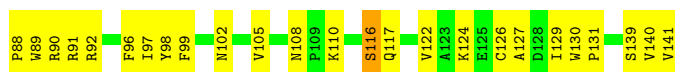
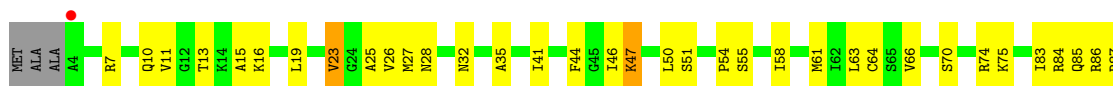
- Molecule 31: RPL23



- Molecule 31: RPL23

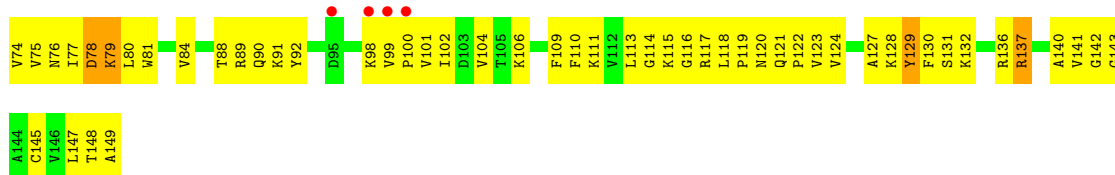


- Molecule 31: RPL23



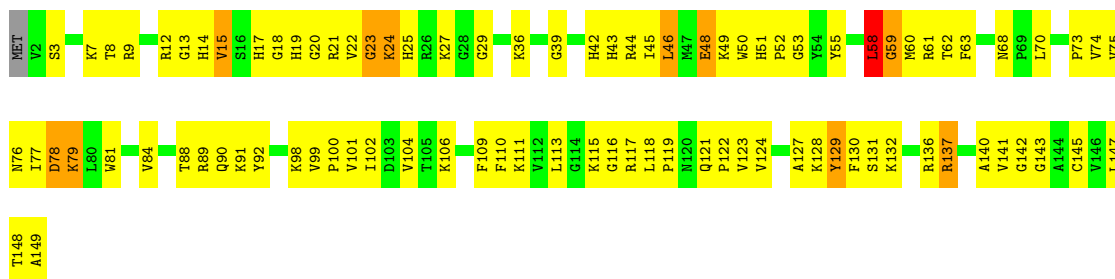
- Molecule 32: 60S RIBOSOMAL PROTEIN L27A





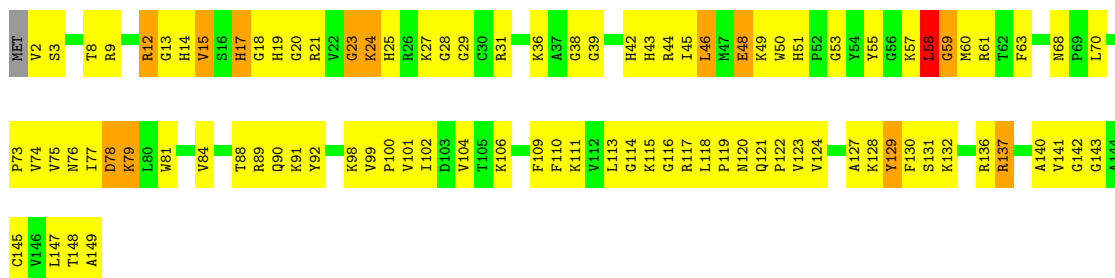
- Molecule 32: 60S RIBOSOMAL PROTEIN L27A

Chain CK: 38% 54% 7% ..



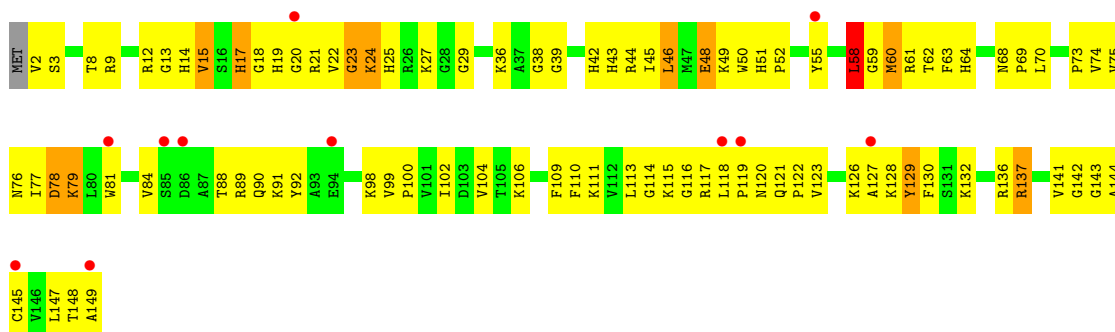
- Molecule 32: 60S RIBOSOMAL PROTEIN L27A

Chain EK: 36% 54% 8% ..



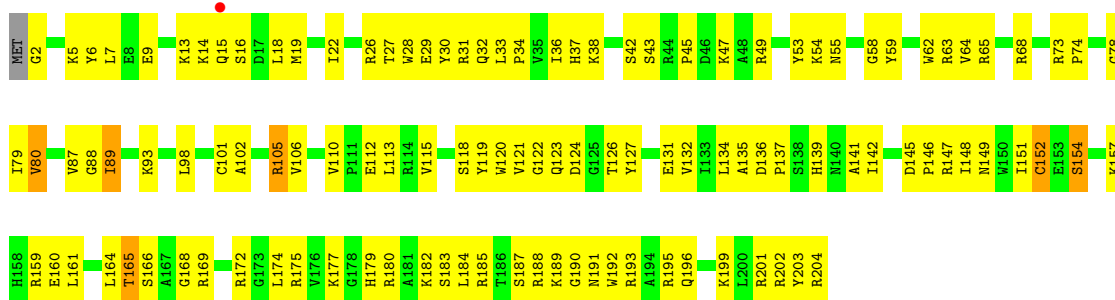
- Molecule 32: 60S RIBOSOMAL PROTEIN L27A

Chain GK: 7% 37% 54% 7% ..



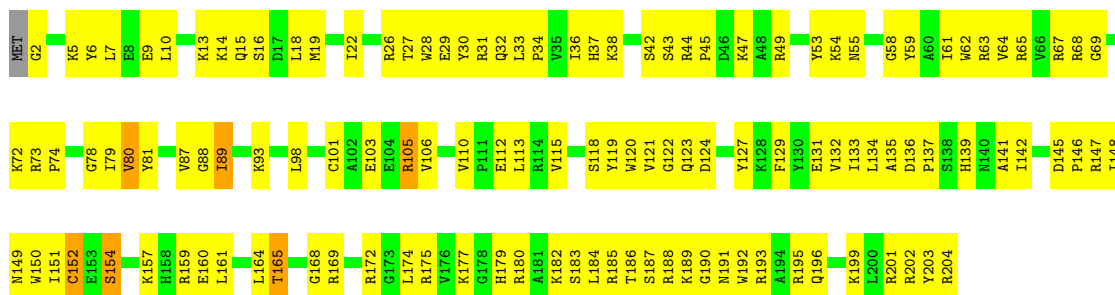
- Molecule 33: RIBOSOMAL PROTEIN L15

Chain BL: 43% 54% ..



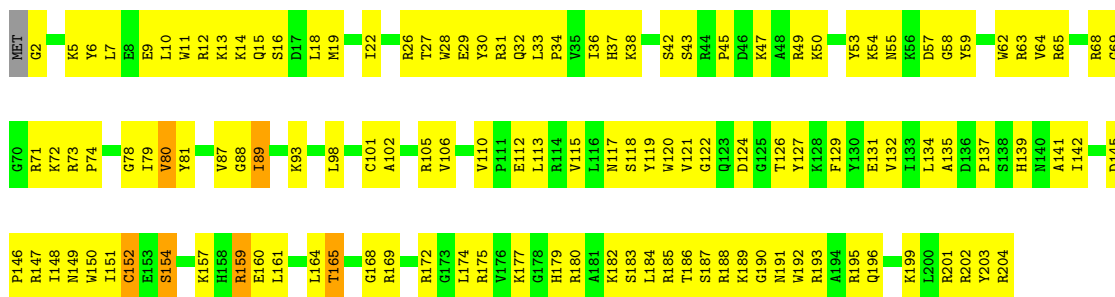
- Molecule 33: RIBOSOMAL PROTEIN L15

Chain CL: 38% 58%



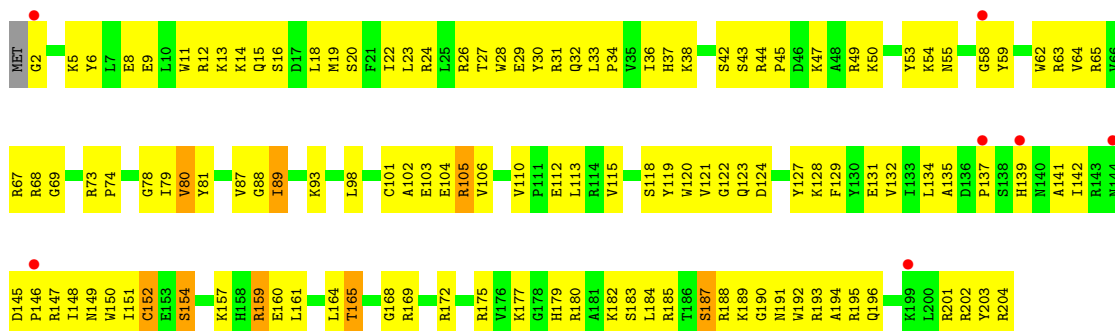
- Molecule 33: RIBOSOMAL PROTEIN L15

Chain EL: 38% 59%

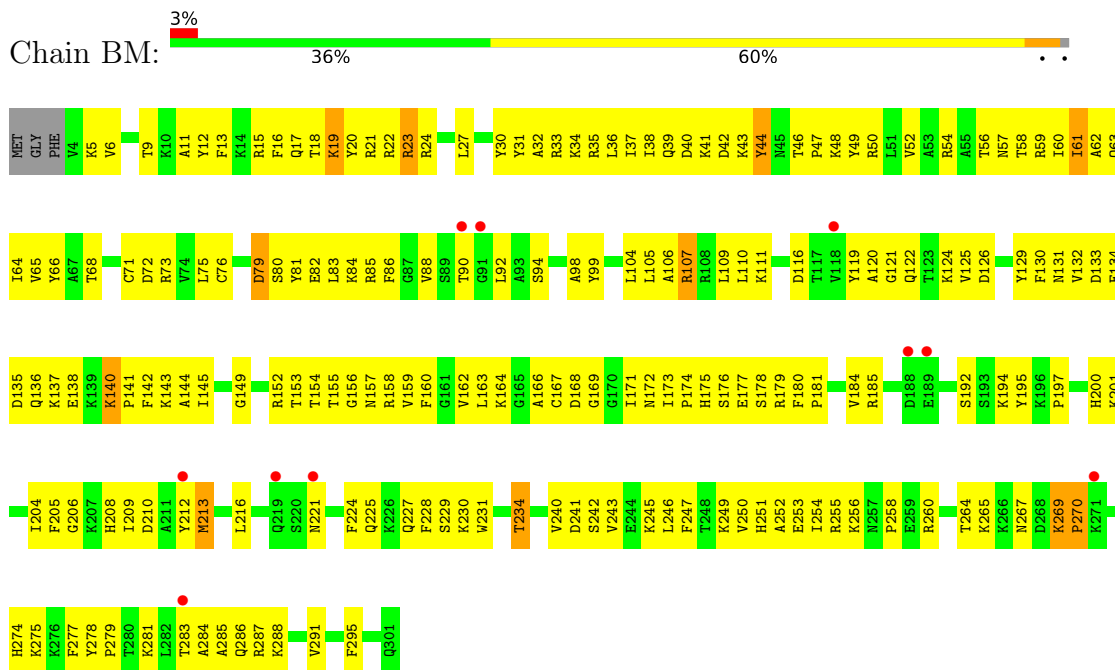


- Molecule 33: RIBOSOMAL PROTEIN L15

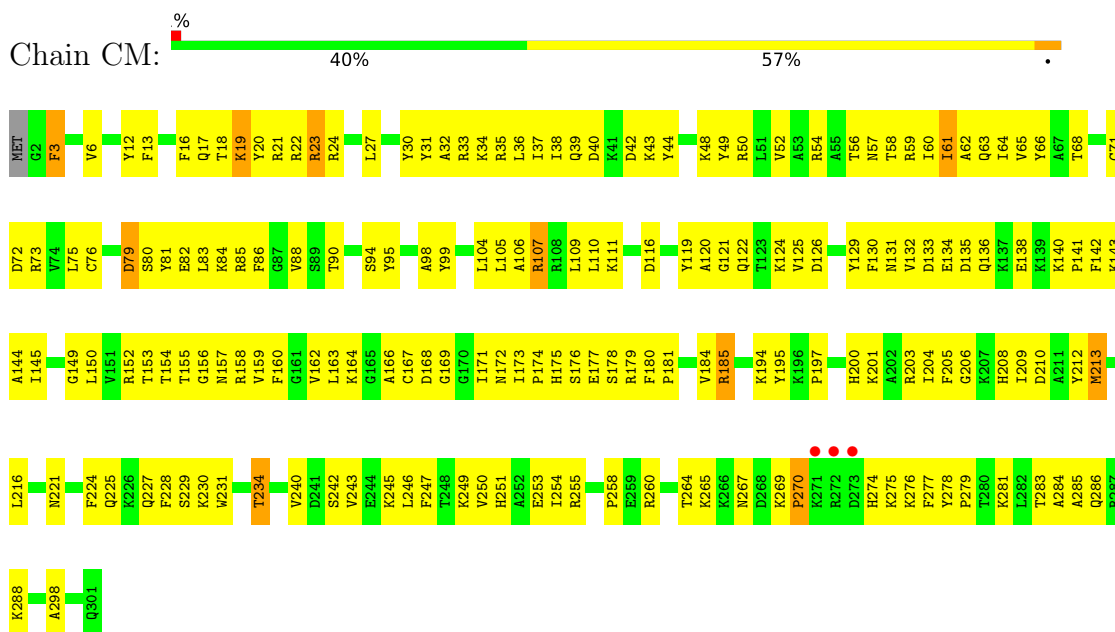
Chain GL: 3% 37% 58%



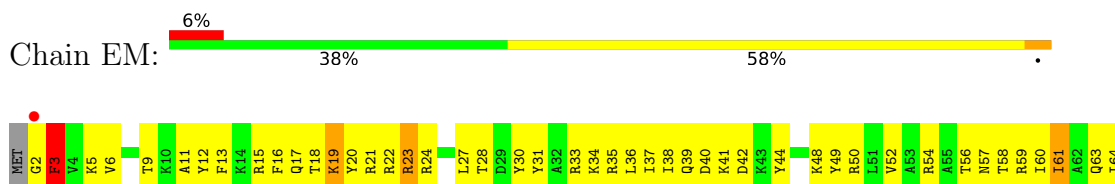
• Molecule 34: 60S RIBOSOMAL PROTEIN L5



• Molecule 34: 60S RIBOSOMAL PROTEIN L5

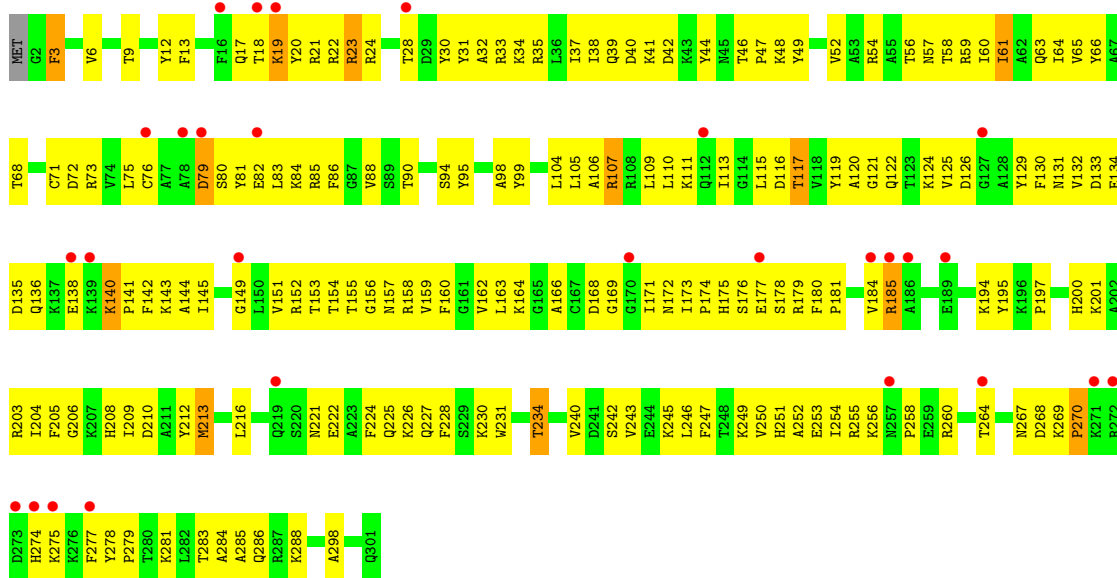


• Molecule 34: 60S RIBOSOMAL PROTEIN L5





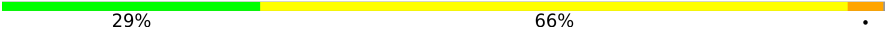
• Molecule 34: 60S RIBOSOMAL PROTEIN L5

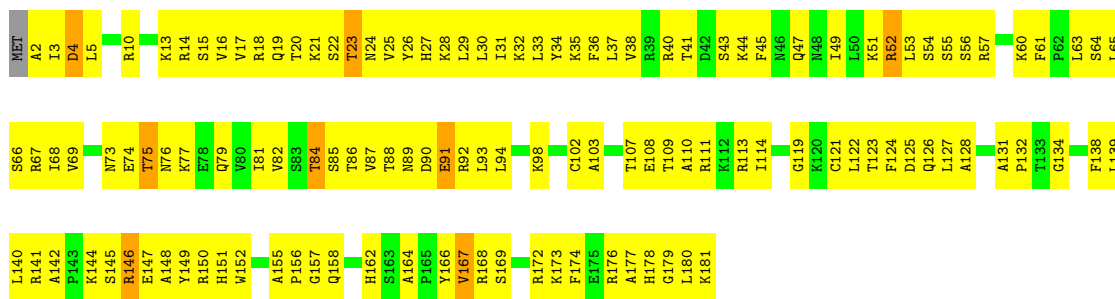


• Molecule 35: RPL18



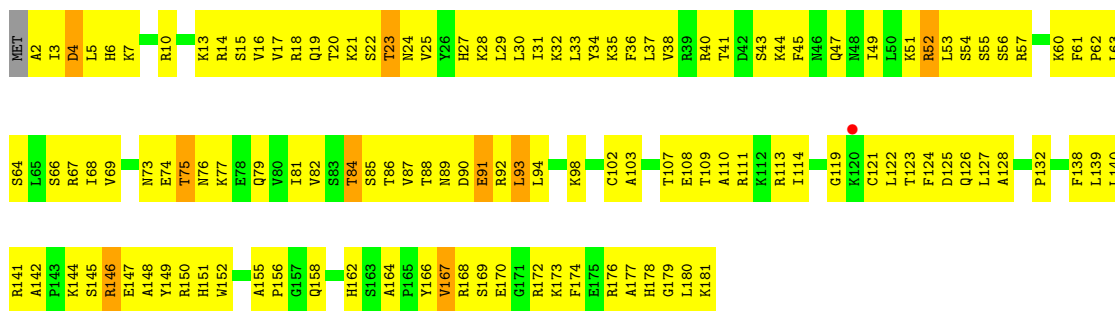
• Molecule 35: RPL18

Chain CN:  29% 66%



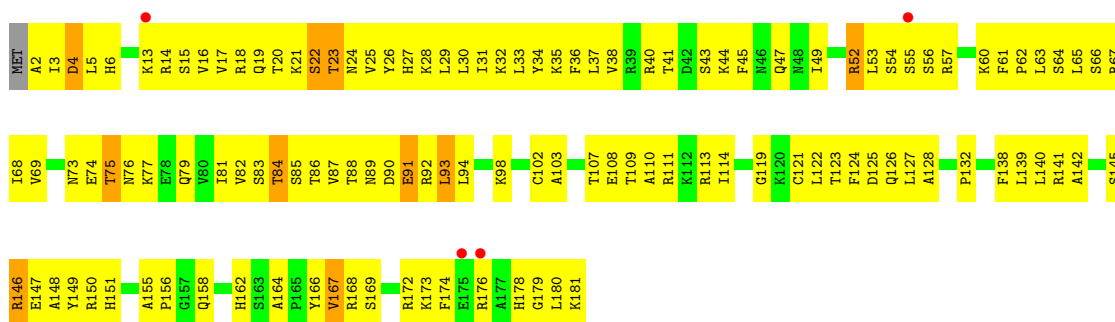
• Molecule 35: RPL18

Chain EN:  29% 65% 5%



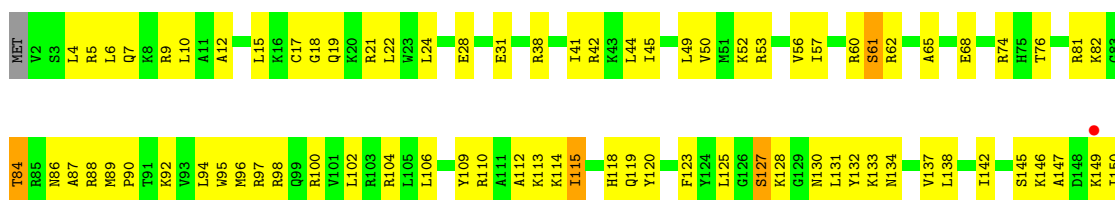
• Molecule 35: RPL18

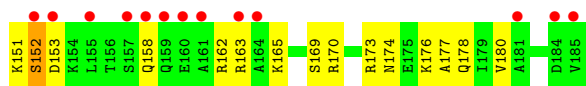
Chain GN:  2% 31% 62% 6%



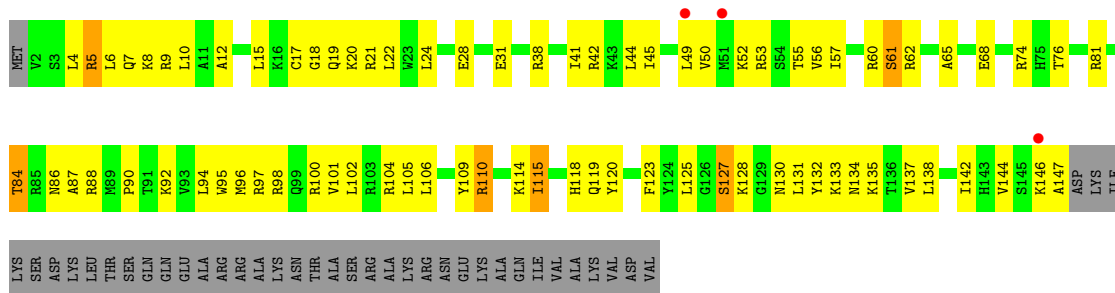
• Molecule 36: RPL19

Chain BO:  8% 49% 48%

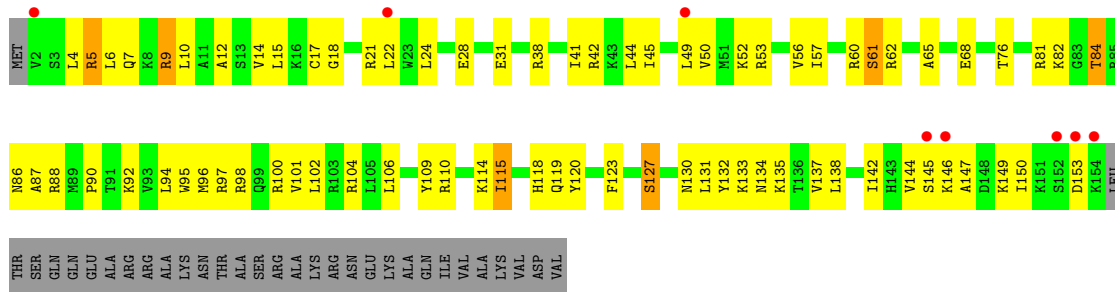




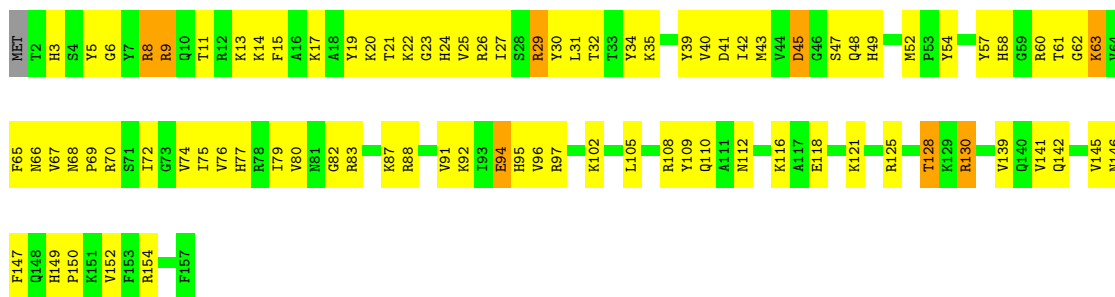
• Molecule 36: RPL19



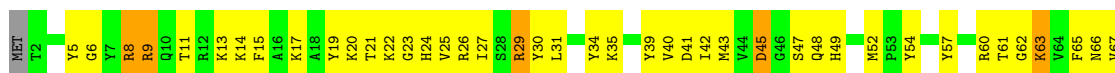
• Molecule 36: RPL19

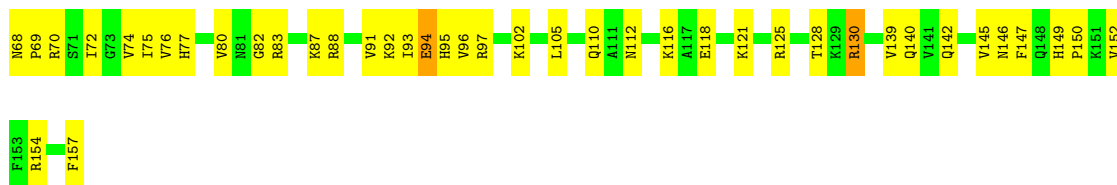


• Molecule 37: 60S RIBOSOMAL PROTEIN L21

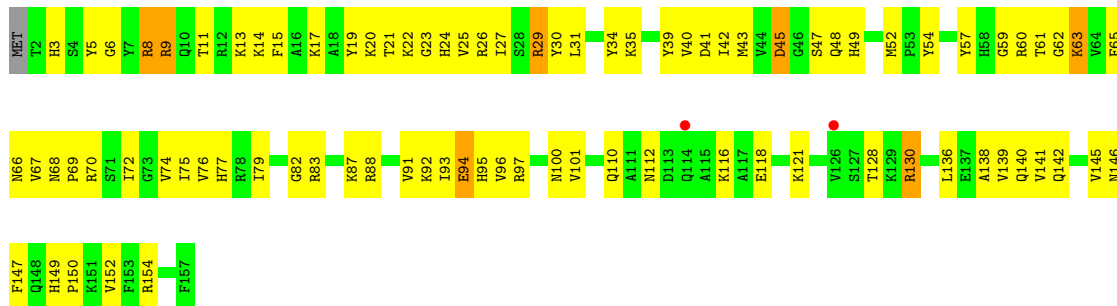


• Molecule 37: 60S RIBOSOMAL PROTEIN L21

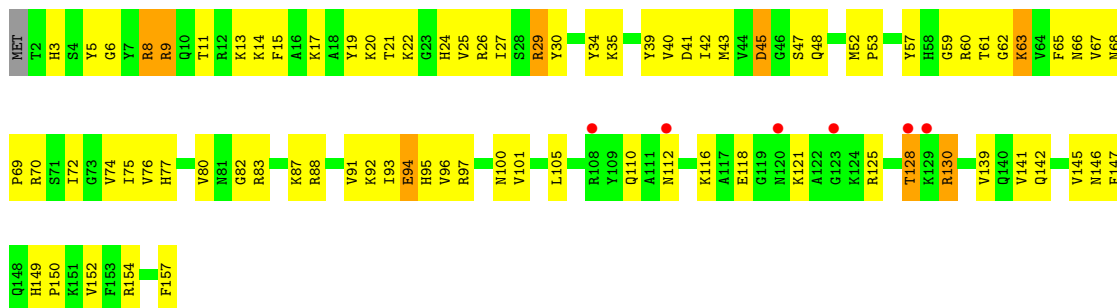




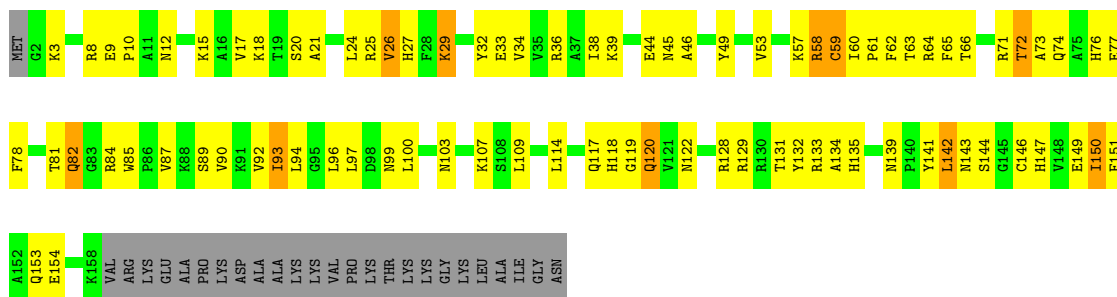
• Molecule 37: 60S RIBOSOMAL PROTEIN L21



• Molecule 37: 60S RIBOSOMAL PROTEIN L21



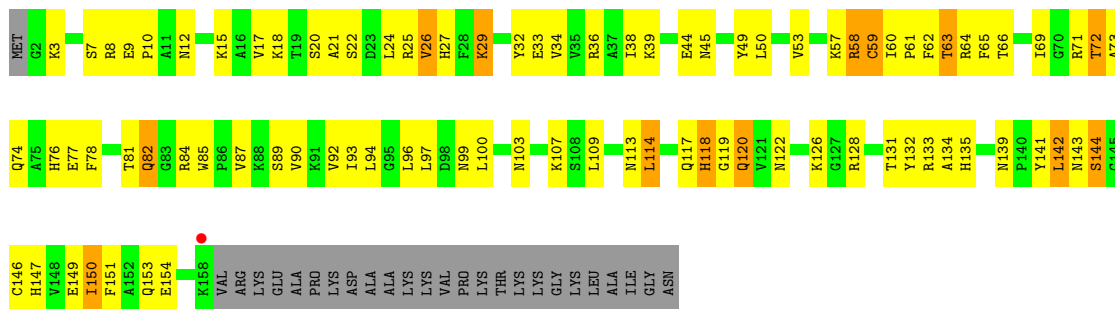
• Molecule 38: RPL17



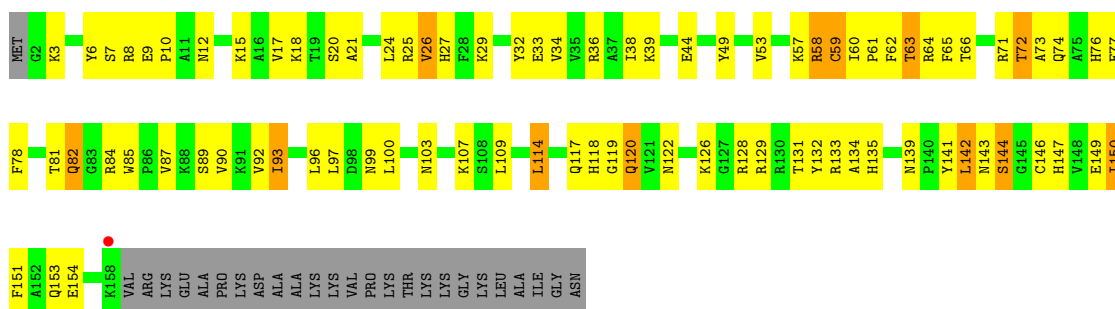
• Molecule 38: RPL17



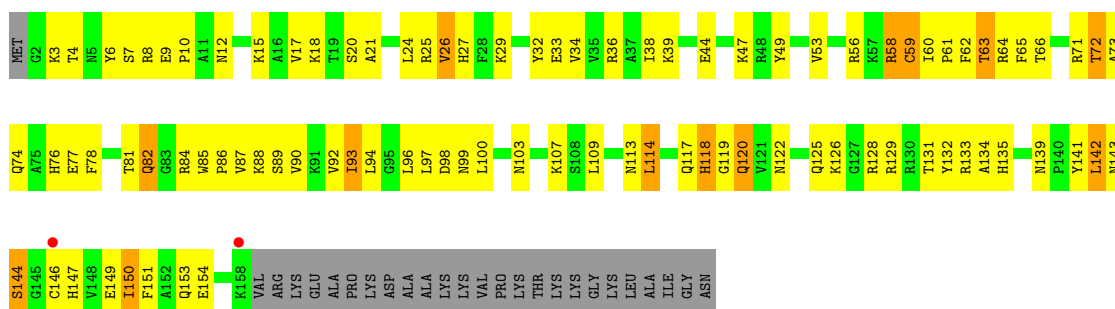




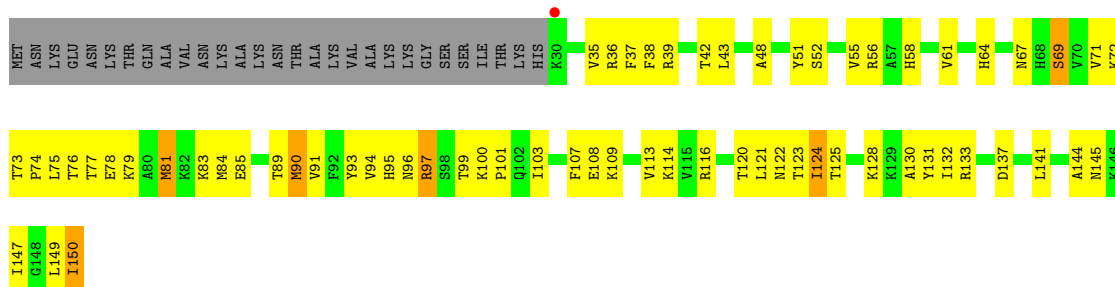
- Molecule 38: RPL17



- Molecule 38: RPL17

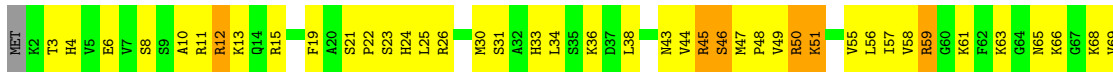


- Molecule 39: RPL23A

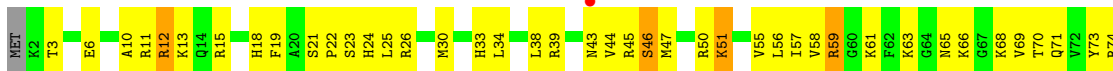




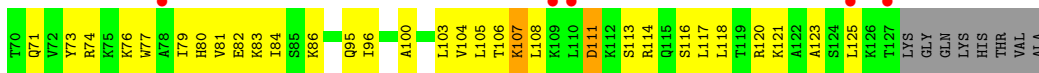
## ● Molecule 40: RPL26

Chain CS:  3% 39% 49% 6% 7%

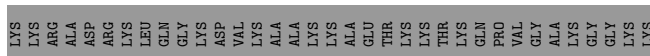
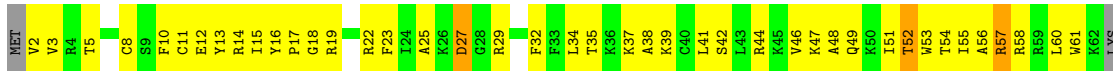
## ● Molecule 40: RPL26

Chain ES:  4% 41% 48% 7%

## ● Molecule 40: RPL26

Chain GS:  7% 40% 47% 6% 7%

## ● Molecule 41: RPL24

Chain BT:  12% 25% 61%

## ● Molecule 41: RPL24

Chain CT:  11% 25% 61%

VAL  
LYS  
LYS  
ALA  
THR  
R4  
ASP  
ASP  
ILE  
ALA  
GLN  
LYS  
GLN  
LYS  
LYS  
LYS  
LYS  
LYS  
LYS  
LYS  
VAL  
VAL  
THR  
VAL  
LYS  
LYS  
ALA  
ALA  
ARG  
ALA  
ALA  
ILE  
THR  
VAL  
GLY  
GLY  
ILE  
K26  
THR  
LYS  
SER  
LEU  
GLN  
PRO  
GLU  
GLU  
VAL  
VAL  
GLY  
ILE  
ALA  
ASN  
ARG  
LYS  
ARG  
ARG  
LYS  
ASN  
LEU  
ASP  
ALA  
ALA  
SER  
HIS  
LYS  
LYS  
LYS  
ALA  
ALA  
VAL  
ARG  
GLU  
LEU  
LEU  
GLU  
GLU

LYS  
LYS  
ARG  
ALA  
ALA  
ASP  
ASP  
LYS  
LYS  
LEU  
GLN  
GLY  
GLY  
ASP  
VAL  
VAL  
LYS  
LYS  
ALA  
ALA  
ALA  
GLU  
THR  
LYS  
LYS  
GLY  
GLY  
THR  
LYS  
LYS  
GLN  
PRO  
GLU  
VAL  
VAL  
GLY  
ILE  
ALA  
ASN  
ARG  
LYS  
ARG  
ARG  
GLY  
GLY  
LYS

- Molecule 41: RPL24

Chain ET: 11% 25% 61%

MET  
V2  
V3  
R4  
T5  
C8  
S9  
F10  
C11  
E12  
Y13  
R14  
I15  
Y16  
P17  
G18  
R19  
R22  
F23  
I24  
A25  
K26  
D27  
G28  
R29  
F32  
F33  
F33  
L34  
T35  
K36  
K37  
A38  
K39  
C40  
L41  
S42  
L43  
R44  
K45  
V46  
K47  
A48  
Q49  
K50  
I51  
T52  
W53  
T54  
I55  
A56  
R57  
R58  
R59  
L60  
W61  
K62  
LYS

VAL  
LYS  
LYS  
THR  
ASP  
ASP  
ILE  
ALA  
GLN  
LYS  
GLN  
LYS  
GLY  
LYS  
LYS  
ASP  
VAL  
VAL  
LYS  
LYS  
VAL  
VAL  
THR  
VAL  
LYS  
LYS  
ALA  
ALA  
ARG  
GLU  
THR  
ILE  
ALA  
VAL  
GLY  
GLY  
ILE  
K26  
THR  
LYS  
SER  
LEU  
GLN  
PRO  
GLU  
VAL  
VAL  
GLY  
ILE  
ALA  
ASN  
ARG  
LYS  
ARG  
ARG  
LYS  
GLY  
GLY  
LYS

LYS  
LYS  
ARG  
ALA  
ASP  
ASP  
LYS  
LYS  
LEU  
GLN  
GLY  
LYS  
LYS  
ASP  
VAL  
VAL  
LYS  
LYS  
VAL  
VAL  
THR  
VAL  
LYS  
LYS  
ALA  
ALA  
ARG  
GLU  
THR  
ILE  
ALA  
VAL  
GLY  
GLY  
ILE  
K26  
THR  
LYS  
SER  
LEU  
GLN  
PRO  
GLU  
VAL  
VAL  
GLY  
ILE  
ALA  
ASN  
ARG  
LYS  
ARG  
ARG  
LYS  
GLY  
GLY  
LYS

- Molecule 41: RPL24

Chain GT: 13% 23% 61%

MET  
V2  
T5  
C8  
S9  
F10  
C11  
E12  
Y13  
R14  
I15  
Y16  
P17  
G18  
R19  
R22  
F23  
I24  
A25  
K26  
D27  
G28  
R29  
F32  
F33  
F33  
L34  
T35  
K36  
K37  
A38  
K39  
C40  
L41  
S42  
L43  
R44  
K45  
V46  
K47  
A48  
Q49  
K50  
I51  
T52  
W53  
T54  
I55  
A56  
R57  
R58  
R59  
L60  
W61  
K62  
VAL

LYS  
ALA  
THR  
ASP  
ILE  
ALA  
GLN  
LYS  
LYS  
LYS  
GLY  
LYS  
ASP  
VAL  
VAL  
LYS  
LYS  
VAL  
VAL  
THR  
VAL  
LYS  
LYS  
ALA  
ALA  
ARG  
GLU  
THR  
ILE  
ALA  
VAL  
GLY  
GLY  
ILE  
K26  
THR  
LYS  
SER  
LEU  
GLN  
PRO  
GLU  
VAL  
VAL  
GLY  
ILE  
ALA  
ASN  
ARG  
LYS  
ARG  
ARG  
LYS  
GLY  
GLY  
LYS

LYS  
ARG  
ALA  
ASP  
ARG  
LYS  
LEU  
GLN  
GLY  
LYS  
LYS  
ASP  
VAL  
VAL  
LYS  
LYS  
VAL  
VAL  
THR  
VAL  
LYS  
LYS  
ALA  
ALA  
ARG  
GLU  
THR  
ILE  
ALA  
VAL  
GLY  
GLY  
ILE  
K26  
THR  
LYS  
SER  
LEU  
GLN  
PRO  
GLU  
VAL  
VAL  
GLY  
ILE  
ALA  
ASN  
ARG  
LYS  
ARG  
ARG  
LYS  
GLY  
GLY  
LYS

- Molecule 42: RPL35

Chain BU: 39% 54% 6%

MET  
D2  
K3  
R11  
T12  
Q13  
E14  
H15  
Q17  
G20  
E21  
L22  
G23  
K24  
L25  
E28  
L32  
R33  
I34  
A35  
K36  
I37  
T41  
A42  
M43  
K44  
L45  
G46  
R47  
I48  
V51  
R52  
K53  
A54  
I55  
Y58  
L59  
T60  
I61  
I62  
N63  
E64  
K65  
R66  
R67  
Q68  
A69  
D72  
Q73  
F74  
K75

G76  
K77  
S78  
L79  
K80  
P81  
L82  
D83  
I84  
R85  
E86  
Q87  
K88  
T89  
R90  
A91  
R92  
R93  
R94  
K95  
L96  
T97  
K98  
K99  
Q100  
R101  
E102  
A103  
V104  
L105  
T108  
Q109  
N113  
R118  
K119  
F120  
R121  
L122  
K123  
I124

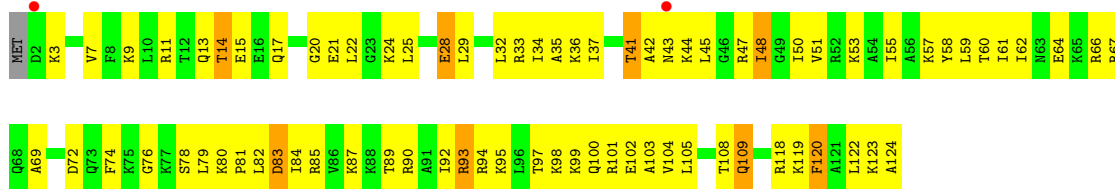
- Molecule 42: RPL35

Chain CU: 37% 55% 7%

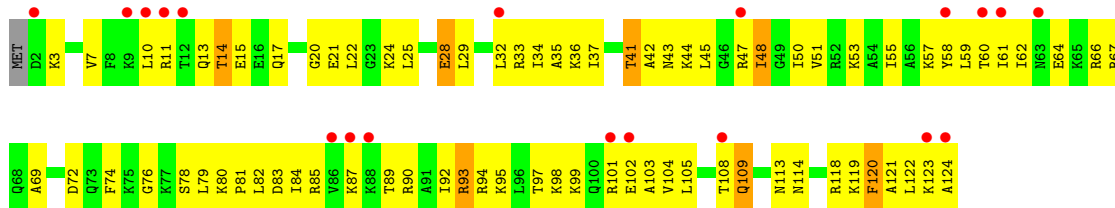
MET  
D2  
K3  
V7  
R11  
T12  
Q13  
E14  
H15  
Q17  
G20  
E21  
L22  
G23  
K24  
L25  
E28  
L32  
R33  
I34  
A35  
K36  
I37  
T41  
A42  
M43  
K44  
L45  
G46  
R47  
I48  
V51  
R52  
K53  
A54  
I55  
Y58  
L59  
T60  
I61  
I62  
N63  
E64  
K65  
R66  
R67  
Q68  
A69  
D72

Q73  
F74  
K75  
G76  
S77  
R78  
L79  
K80  
P81  
R80  
L82  
D83  
I84  
R85  
E86  
Q87  
K88  
T89  
R90  
A91  
R92  
R93  
R94  
K95  
L96  
T97  
K98  
K99  
Q100  
R101  
E102  
A103  
V104  
L105  
T108  
Q109  
N113  
R118  
K119  
R120  
F120  
A121  
L122  
K123  
I124

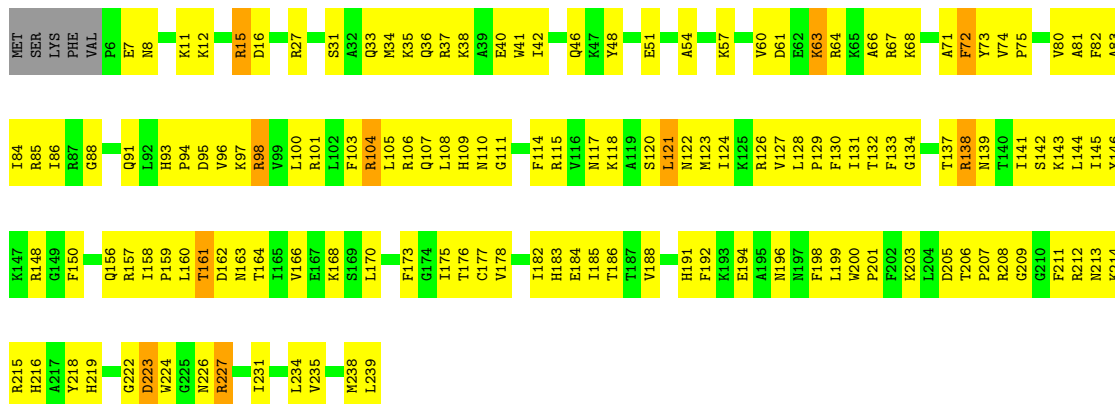
- Molecule 42: RPL35



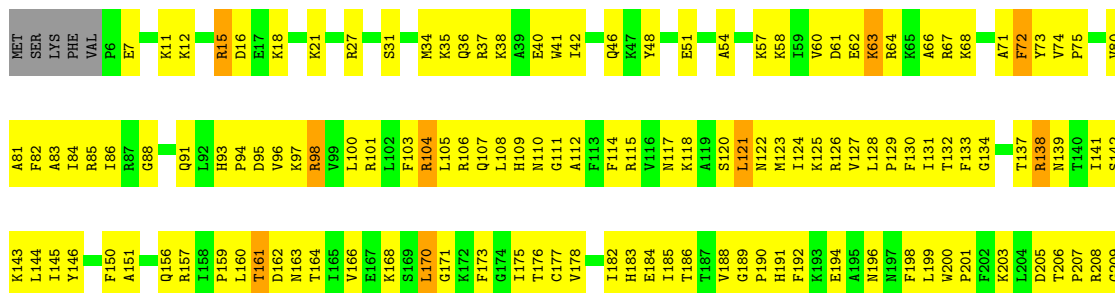
• Molecule 42: RPL35



• Molecule 43: 60S RIBOSOMAL PROTEIN L7

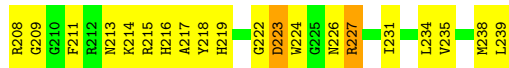
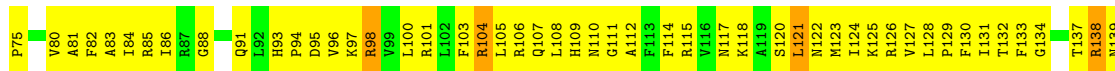


• Molecule 43: 60S RIBOSOMAL PROTEIN L7

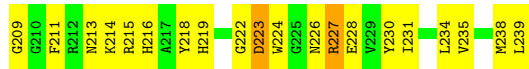
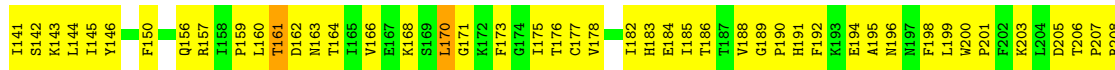
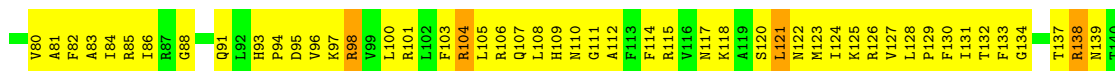




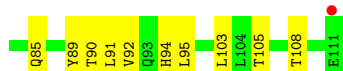
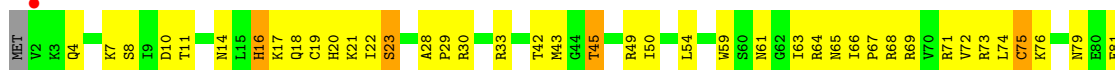
• Molecule 43: 60S RIBOSOMAL PROTEIN L7



• Molecule 43: 60S RIBOSOMAL PROTEIN L7

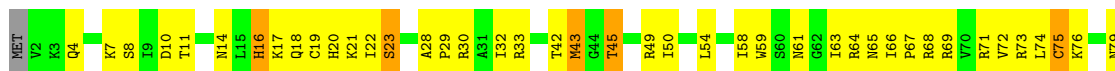


• Molecule 44: 60S RIBOSOMAL PROTEIN L31



• Molecule 44: 60S RIBOSOMAL PROTEIN L31

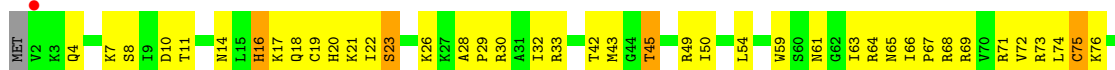




• Molecule 44: 60S RIBOSOMAL PROTEIN L31



• Molecule 44: 60S RIBOSOMAL PROTEIN L31



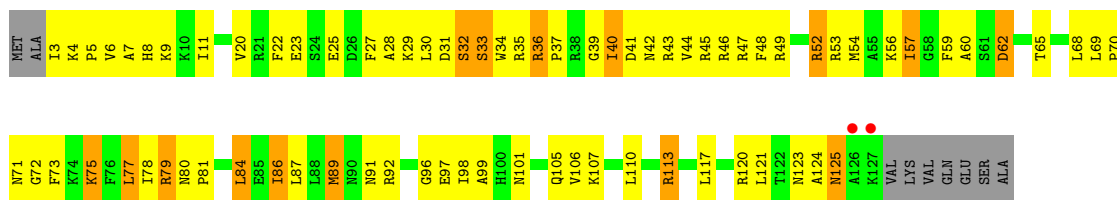
• Molecule 45: 60S RIBOSOMAL PROTEIN L32



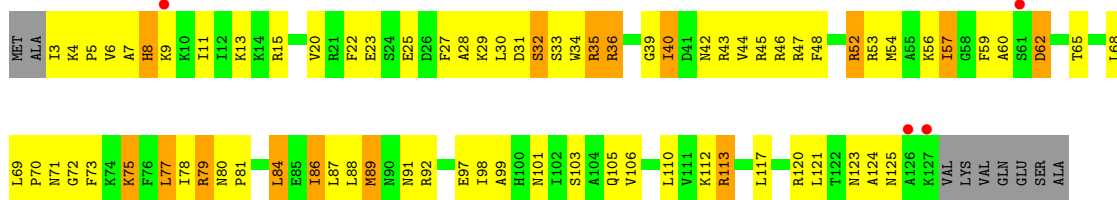
• Molecule 45: 60S RIBOSOMAL PROTEIN L32



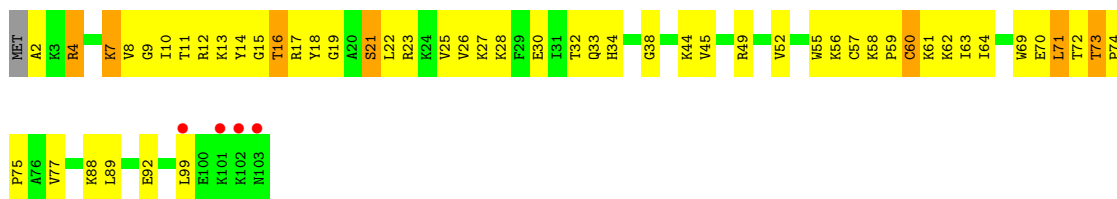
• Molecule 45: 60S RIBOSOMAL PROTEIN L32



• Molecule 45: 60S RIBOSOMAL PROTEIN L32



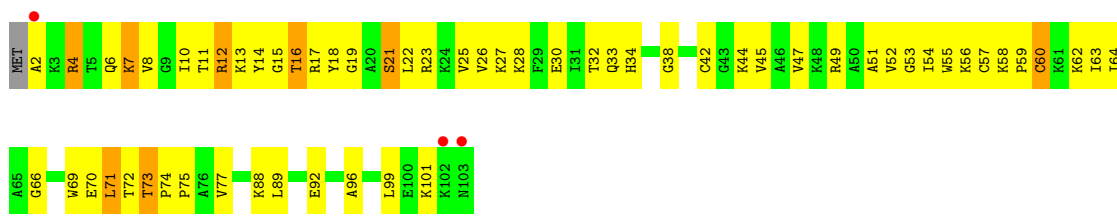
• Molecule 46: RPL37A



• Molecule 46: RPL37A




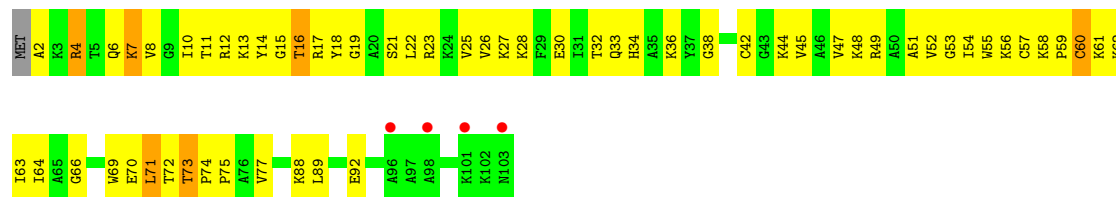
• Molecule 46: RPL37A





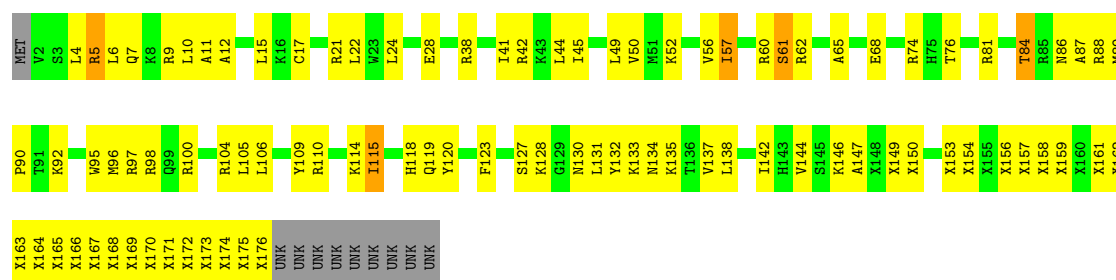
- Molecule 46: RPL37A

Chain GY:  4% 41% 52% 6%



- Molecule 47: RPL19

Chain CO:  44% 48% 5%



## 4 Data and refinement statistics i

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	320.19Å 289.25Å 535.04Å 90.00° 91.22° 90.00°	Depositor
Resolution (Å)	20.00 – 3.52 39.96 – 3.52	Depositor EDS
% Data completeness (in resolution range)	99.4 (20.00-3.52) 99.4 (39.96-3.52)	Depositor EDS
$R_{merge}$	0.13	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.87 (at 3.48Å)	Xtrriage
Refinement program	PHENIX (PHENIX.REFINE)	Depositor
R, $R_{free}$	0.216 , 0.244 0.238 , 0.263	Depositor DCC
$R_{free}$ test set	10000 reflections (0.84%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	96.9	Xtrriage
Anisotropy	0.228	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.27 , 73.9	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.45$ , $\langle L^2 \rangle = 0.28$	Xtrriage
Estimated twinning fraction	0.028 for h,-k,-l	Xtrriage
$F_o, F_c$ correlation	0.91	EDS
Total number of atoms	511395	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	108.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.51% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical values of  $\langle |L| \rangle$ ,  $\langle L^2 \rangle$  for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

## 5 Model quality

### 5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: MG, ZN

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	A1	0.75	14/74792 (0.0%)	1.12	353/116594 (0.3%)
1	D1	0.82	60/74792 (0.1%)	1.14	368/116594 (0.3%)
1	F1	0.74	57/74792 (0.1%)	1.12	384/116594 (0.3%)
1	H1	0.78	8/74792 (0.0%)	1.15	436/116594 (0.4%)
2	AA	0.64	1/734 (0.1%)	0.77	0/972
2	DA	0.63	0/734	0.76	0/972
2	FA	0.61	1/734 (0.1%)	0.75	0/972
2	HA	0.63	0/734	0.77	0/972
3	AB	0.54	0/466	0.62	0/619
3	DB	0.46	0/466	0.62	0/619
3	FB	0.48	0/466	0.62	0/619
3	HB	0.51	0/466	0.62	0/619
4	AC	0.58	0/848	0.71	1/1123 (0.1%)
4	DC	0.53	0/848	0.69	0/1123
4	FC	0.54	0/848	0.70	0/1123
4	HC	0.57	0/848	0.71	1/1123 (0.1%)
5	AE	0.47	0/1550	0.74	2/2077 (0.1%)
5	DE	0.47	0/1550	0.74	2/2077 (0.1%)
5	FE	0.48	0/1550	0.75	2/2077 (0.1%)
5	HE	0.47	0/1550	0.75	2/2077 (0.1%)
6	AF	0.51	0/1033	0.71	0/1380
6	DF	0.51	0/1033	0.71	0/1380
6	FF	0.53	0/1033	0.71	0/1380
6	HF	0.53	0/1033	0.72	0/1380
7	AG	0.50	0/736	0.74	0/990
7	DG	0.47	0/736	0.73	0/990
7	FG	0.47	0/736	0.72	0/990
7	HG	0.46	0/736	0.72	0/990
8	AH	0.63	0/870	0.81	0/1175
8	DH	0.62	0/870	0.82	0/1175
8	FH	0.63	0/870	0.81	0/1175
8	HH	0.58	0/870	0.81	0/1175

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
9	AJ	0.51	0/1739	0.70	0/2368
9	DJ	0.49	0/1739	0.70	0/2368
9	FJ	0.53	0/1739	0.70	0/2368
9	HJ	0.54	0/1739	0.70	0/2368
10	AK	0.48	0/421	0.69	0/558
10	DK	0.45	0/421	0.70	0/558
10	FK	0.46	0/421	0.69	0/558
10	HK	0.48	0/421	0.71	0/558
11	AL	0.64	0/861	0.77	1/1154 (0.1%)
11	DL	0.57	0/861	0.72	0/1154
11	FL	0.51	0/861	0.73	0/1154
11	HL	0.51	0/861	0.74	0/1154
12	AM	0.41	0/832	0.67	0/1113
12	DM	0.41	0/832	0.67	0/1113
12	FM	0.41	0/832	0.67	0/1113
12	HM	0.42	0/832	0.66	0/1113
13	AN	0.43	0/1190	0.63	1/1582 (0.1%)
13	DN	0.38	0/1190	0.58	0/1582
13	FN	0.38	0/1190	0.58	0/1582
13	HN	0.38	0/1190	0.58	0/1582
14	AO	0.47	0/1047	0.77	1/1400 (0.1%)
14	DO	0.47	0/1047	0.77	1/1400 (0.1%)
14	FO	0.46	0/1047	0.76	1/1400 (0.1%)
14	HO	0.51	0/1047	0.78	1/1400 (0.1%)
15	AP	0.41	0/561	0.61	0/745
15	DP	0.38	0/561	0.62	0/745
15	FP	0.40	0/561	0.60	0/745
15	HP	0.40	0/561	0.62	0/745
16	AQ	0.48	0/808	0.70	0/1068
16	DQ	0.48	0/808	0.69	0/1068
16	FQ	0.49	0/808	0.73	0/1068
16	HQ	0.50	0/808	0.70	0/1068
17	AT	0.48	0/539	0.72	0/711
17	DT	0.48	0/539	0.72	0/711
17	FT	0.49	0/539	0.71	0/711
17	HT	0.52	0/539	0.72	0/711
18	AU	0.53	0/1647	0.74	1/2201 (0.0%)
18	DU	0.51	0/1647	0.74	1/2201 (0.0%)
18	FU	0.54	0/1647	0.74	1/2201 (0.0%)
18	HU	0.58	0/1647	0.74	1/2201 (0.0%)
19	AX	0.48	0/1563	0.74	0/2104
19	DX	0.50	0/1563	0.75	1/2104 (0.0%)
19	FX	0.49	0/1563	0.74	0/2104

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
19	HX	0.50	0/1563	0.74	2/2104 (0.1%)
20	B2	0.69	0/3696	1.06	10/5761 (0.2%)
20	C2	0.69	0/3696	1.07	7/5761 (0.1%)
20	E2	0.63	0/3696	1.07	10/5761 (0.2%)
20	G2	0.86	1/3696 (0.0%)	1.17	24/5761 (0.4%)
21	B3	0.70	0/2870	0.96	7/4473 (0.2%)
21	C3	0.61	0/2870	0.97	5/4473 (0.1%)
21	E3	0.59	0/2870	0.95	4/4473 (0.1%)
21	G3	0.63	0/2870	0.98	10/4473 (0.2%)
22	BA	0.63	0/2019	0.79	1/2712 (0.0%)
22	CA	0.61	0/2019	0.77	1/2712 (0.0%)
22	EA	0.61	0/2019	0.77	1/2712 (0.0%)
22	GA	0.60	0/2019	0.76	1/2712 (0.0%)
23	BB	0.56	0/3144	0.72	0/4213
23	CB	0.54	0/3144	0.71	0/4213
23	EB	0.54	0/3144	0.71	0/4213
23	GB	0.52	0/3144	0.72	0/4213
24	BC	0.47	0/3222	0.67	0/4338
24	CC	0.49	0/3222	0.68	0/4338
24	EC	0.49	0/3222	0.68	0/4338
24	GC	0.53	0/3222	0.69	1/4338 (0.0%)
25	BD	0.48	0/1376	0.66	0/1833
25	CD	0.45	0/1376	0.66	0/1833
25	ED	0.46	0/1376	0.66	0/1833
25	GD	0.47	0/1376	0.67	0/1833
26	BE	0.49	0/1501	0.72	2/2015 (0.1%)
26	CE	0.48	0/1501	0.72	2/2015 (0.1%)
26	EE	0.50	0/1501	0.72	1/2015 (0.0%)
26	GE	0.50	0/1501	0.74	2/2015 (0.1%)
27	BF	0.48	0/1893	0.66	0/2548
27	CF	0.48	0/1893	0.66	0/2548
27	EF	0.48	0/1893	0.65	0/2548
27	GF	0.49	0/1893	0.66	0/2548
29	BH	0.48	0/1652	0.68	0/2213
29	CH	0.48	0/1652	0.66	0/2213
29	EH	0.46	0/1652	0.66	0/2213
29	GH	0.46	0/1652	0.67	0/2213
30	BI	0.48	0/1624	0.66	0/2176
30	CI	0.49	0/1624	0.68	0/2176
30	EI	0.49	0/1624	0.66	0/2176
30	GI	0.87	6/1624 (0.4%)	0.92	7/2176 (0.3%)
31	BJ	0.64	1/1038 (0.1%)	0.77	0/1394
31	CJ	0.67	1/1038 (0.1%)	0.77	1/1394 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
31	EJ	0.64	1/1038 (0.1%)	0.76	0/1394
31	GJ	0.68	1/1038 (0.1%)	0.77	2/1394 (0.1%)
32	BK	0.53	0/1189	0.71	0/1589
32	CK	0.53	0/1189	0.73	1/1589 (0.1%)
32	EK	0.52	0/1189	0.73	1/1589 (0.1%)
32	GK	0.58	0/1189	0.74	0/1589
33	BL	0.53	0/1727	0.71	0/2308
33	CL	0.53	0/1727	0.71	0/2308
33	EL	0.53	0/1727	0.72	0/2308
33	GL	0.59	0/1727	0.73	0/2308
34	BM	0.49	0/2453	0.70	1/3285 (0.0%)
34	CM	0.48	0/2469	0.69	1/3306 (0.0%)
34	EM	0.54	1/2469 (0.0%)	0.71	1/3306 (0.0%)
34	GM	0.53	1/2469 (0.0%)	0.72	1/3306 (0.0%)
35	BN	0.54	0/1464	0.77	1/1965 (0.1%)
35	CN	0.52	0/1464	0.77	0/1965
35	EN	0.53	0/1464	0.76	0/1965
35	GN	0.60	0/1464	0.78	1/1965 (0.1%)
36	BO	0.58	0/1507	0.67	0/2001
36	EO	0.44	0/1208	0.62	0/1604
36	GO	0.50	0/1250	0.65	0/1660
37	BP	0.53	0/1300	0.64	0/1743
37	CP	0.49	0/1300	0.62	0/1743
37	EP	0.50	0/1300	0.63	0/1743
37	GP	0.54	0/1300	0.64	0/1743
38	BQ	0.60	0/1259	0.77	0/1693
38	CQ	0.57	0/1259	0.75	1/1693 (0.1%)
38	EQ	0.55	0/1259	0.75	1/1693 (0.1%)
38	GQ	0.56	0/1259	0.78	1/1693 (0.1%)
39	BR	0.52	0/981	0.67	0/1320
39	CR	0.47	0/981	0.66	0/1320
39	ER	0.46	0/981	0.66	0/1320
39	GR	0.52	0/981	0.67	0/1320
40	BS	0.44	0/1028	0.62	0/1372
40	CS	0.42	0/1028	0.61	0/1372
40	ES	0.44	0/1028	0.61	0/1372
40	GS	0.50	0/1028	0.63	0/1372
41	BT	0.60	0/521	0.72	0/693
41	CT	0.57	0/521	0.69	0/693
41	ET	0.55	0/521	0.71	0/693
41	GT	0.53	0/521	0.70	0/693
42	BU	0.44	0/995	0.65	0/1318
42	CU	0.44	0/995	0.64	0/1318

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
42	EU	0.44	0/995	0.65	0/1318
42	GU	0.51	0/995	0.66	0/1318
43	BV	0.48	0/1950	0.66	0/2614
43	CV	0.49	0/1950	0.67	1/2614 (0.0%)
43	EV	0.50	0/1950	0.67	1/2614 (0.0%)
43	GV	0.49	0/1950	0.66	1/2614 (0.0%)
44	BW	0.60	0/913	0.68	0/1222
44	CW	0.55	0/913	0.68	0/1222
44	EW	0.51	0/913	0.67	0/1222
44	GW	0.51	0/913	0.68	0/1222
45	BX	0.48	0/1028	0.67	0/1371
45	CX	0.51	0/1028	0.67	0/1371
45	EX	0.47	0/1028	0.67	0/1371
45	GX	0.56	0/1028	0.68	0/1371
46	BY	0.60	0/799	0.79	0/1069
46	CY	0.60	0/799	0.75	0/1069
46	EY	0.57	0/799	0.76	0/1069
46	GY	0.55	0/799	0.75	0/1069
47	CO	0.46	0/1208	0.63	0/1604
All	All	0.68	154/540737 (0.0%)	0.99	1677/795620 (0.2%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
2	AA	0	1
2	DA	0	1
2	FA	0	1
2	HA	0	1
8	AH	0	1
12	AM	0	1
12	DM	0	1
12	FM	0	1
12	HM	0	1
16	AQ	0	1
16	DQ	0	1
16	FQ	0	1
16	HQ	0	1
18	FU	0	1
27	BF	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
27	CF	0	1
27	EF	0	1
27	GF	0	1
32	BK	0	2
32	CK	0	2
32	EK	0	2
32	GK	0	2
38	CQ	0	1
38	GQ	0	1
42	CU	0	1
45	GX	0	1
All	All	0	30

The worst 5 of 154 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F1	2239	A	O3'-P	25.66	1.92	1.61
30	GI	60	TRP	NE1-CE2	-18.39	1.13	1.37
1	D1	2254	A	C5-C4	17.31	1.50	1.38
1	D1	2254	A	N7-C5	15.90	1.48	1.39
1	D1	2254	A	N3-C4	15.68	1.44	1.34

The worst 5 of 1677 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F1	2253	U	C5-C6-N1	-21.57	111.92	122.70
30	GI	60	TRP	CE2-CD2-CG	-18.64	92.39	107.30
1	D1	284	U	C6-N1-C2	-15.54	111.67	121.00
1	F1	119	A	N1-C6-N6	15.41	127.85	118.60
1	H1	1053	A	C6-N1-C2	-15.06	109.57	118.60

There are no chirality outliers.

5 of 30 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	AA	51	GLY	Peptide
8	AH	101	GLY	Peptide
12	AM	53	GLY	Peptide
16	AQ	12	GLY	Peptide
27	BF	174	LYS	Peptide



## 5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A1	66769	0	33570	4643	2
1	D1	66769	0	33568	4655	1
1	F1	66769	0	33568	4661	3
1	H1	66769	0	33570	4682	4
2	AA	721	0	744	102	0
2	DA	721	0	744	103	0
2	FA	721	0	744	110	0
2	HA	721	0	744	114	0
3	AB	456	0	483	51	0
3	DB	456	0	483	52	0
3	FB	456	0	483	53	0
3	HB	456	0	483	51	0
4	AC	836	0	912	64	0
4	DC	836	0	911	62	0
4	FC	836	0	911	65	0
4	HC	836	0	911	67	0
5	AE	1525	0	1600	230	0
5	DE	1525	0	1600	225	0
5	FE	1525	0	1600	221	0
5	HE	1525	0	1600	231	0
6	AF	1021	0	1119	147	0
6	DF	1021	0	1119	152	0
6	FF	1021	0	1119	152	0
6	HF	1021	0	1119	152	0
7	AG	727	0	747	103	0
7	DG	727	0	747	92	0
7	FG	727	0	747	88	0
7	HG	727	0	747	88	0
8	AH	850	0	870	134	0
8	DH	850	0	870	139	0
8	FH	850	0	870	139	0
8	HH	850	0	870	129	0
9	AJ	1716	0	1712	162	0
9	DJ	1716	0	1712	181	0
9	FJ	1716	0	1712	178	0
9	HJ	1716	0	1712	176	0
10	AK	415	0	446	42	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
10	DK	415	0	446	38	0
10	FK	415	0	446	36	0
10	HK	415	0	446	35	0
11	AL	852	0	906	90	0
11	DL	852	0	906	94	0
11	FL	852	0	906	88	0
11	HL	852	0	906	90	0
12	AM	819	0	855	75	0
12	DM	819	0	855	73	0
12	FM	819	0	855	77	0
12	HM	819	0	855	74	0
13	AN	1170	0	1259	156	0
13	DN	1170	0	1259	134	0
13	FN	1170	0	1259	155	0
13	HN	1170	0	1259	134	0
14	AO	1034	0	1101	143	0
14	DO	1034	0	1101	127	0
14	FO	1034	0	1101	130	0
14	HO	1034	0	1101	119	0
15	AP	551	0	614	53	0
15	DP	551	0	614	57	2
15	FP	551	0	614	49	0
15	HP	551	0	614	58	0
16	AQ	803	0	907	87	2
16	DQ	803	0	907	98	0
16	FQ	803	0	907	100	0
16	HQ	803	0	907	82	0
17	AT	533	0	578	65	0
17	DT	533	0	578	55	0
17	FT	533	0	578	56	0
17	HT	533	0	578	62	0
18	AU	1624	0	1733	210	0
18	DU	1624	0	1733	215	0
18	FU	1624	0	1733	209	0
18	HU	1624	0	1733	236	0
19	AX	1536	0	1613	221	0
19	DX	1536	0	1613	220	0
19	FX	1536	0	1613	222	0
19	HX	1536	0	1613	211	0
20	B2	3300	0	1657	219	1
20	C2	3300	0	1657	225	0
20	E2	3300	0	1657	227	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
20	G2	3300	0	1657	234	0
21	B3	2566	0	1294	179	0
21	C3	2566	0	1294	195	0
21	E3	2566	0	1294	191	0
21	G3	2566	0	1294	187	0
22	BA	1977	0	2000	233	0
22	CA	1977	0	2000	221	0
22	EA	1977	0	2000	240	0
22	GA	1977	0	2000	247	0
23	BB	3080	0	3187	338	0
23	CB	3080	0	3187	332	0
23	EB	3080	0	3187	364	0
23	GB	3080	0	3187	361	0
24	BC	3172	0	3274	422	0
24	CC	3172	0	3274	428	0
24	EC	3172	0	3274	438	0
24	GC	3172	0	3274	443	0
25	BD	1357	0	1400	124	0
25	CD	1357	0	1400	123	0
25	ED	1357	0	1400	125	0
25	GD	1357	0	1400	127	0
26	BE	1481	0	1574	124	0
26	CE	1481	0	1574	119	0
26	EE	1481	0	1574	124	0
26	GE	1481	0	1574	123	0
27	BF	1860	0	1968	208	0
27	CF	1860	0	1968	217	0
27	EF	1860	0	1968	197	1
27	GF	1860	0	1968	208	0
28	BG	711	0	644	56	0
28	CG	711	0	644	44	0
28	EG	711	0	644	46	0
28	GG	711	0	644	86	0
29	BH	1620	0	1701	159	0
29	CH	1620	0	1701	155	0
29	EH	1620	0	1701	165	0
29	GH	1620	0	1701	160	0
30	BI	1594	0	1701	172	0
30	CI	1594	0	1701	179	0
30	EI	1594	0	1701	170	0
30	GI	1594	0	1701	179	0
31	BJ	1022	0	1078	65	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
31	CJ	1022	0	1079	64	0
31	EJ	1022	0	1079	70	0
31	GJ	1022	0	1078	71	0
32	BK	1161	0	1227	189	0
32	CK	1161	0	1227	180	0
32	EK	1161	0	1227	183	0
32	GK	1161	0	1227	195	0
33	BL	1691	0	1762	183	0
33	CL	1691	0	1762	187	0
33	EL	1691	0	1762	195	0
33	GL	1691	0	1762	203	0
34	BM	2409	0	2497	327	0
34	CM	2424	0	2509	312	1
34	EM	2424	0	2509	311	4
34	GM	2424	0	2509	286	2
35	BN	1441	0	1534	218	0
35	CN	1441	0	1534	232	0
35	EN	1441	0	1534	223	0
35	GN	1441	0	1534	234	0
36	BO	1491	0	1618	106	0
36	EO	1192	0	1296	87	0
36	GO	1234	0	1323	87	0
37	BP	1272	0	1310	136	0
37	CP	1272	0	1310	129	0
37	EP	1272	0	1310	137	0
37	GP	1272	0	1310	126	0
38	BQ	1239	0	1276	126	0
38	CQ	1239	0	1276	132	0
38	EQ	1239	0	1276	125	0
38	GQ	1239	0	1276	133	0
39	BR	965	0	1020	96	0
39	CR	965	0	1020	82	0
39	ER	965	0	1020	90	0
39	GR	965	0	1020	97	0
40	BS	1013	0	1101	90	0
40	CS	1013	0	1101	96	1
40	ES	1013	0	1101	94	0
40	GS	1013	0	1101	92	0
41	BT	510	0	546	51	0
41	CT	510	0	546	51	0
41	ET	510	0	546	59	0
41	GT	510	0	546	52	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
42	BU	990	0	1123	98	0
42	CU	990	0	1123	106	0
42	EU	990	0	1123	109	0
42	GU	990	0	1123	117	0
43	BV	1910	0	1983	203	0
43	CV	1910	0	1983	202	0
43	EV	1910	0	1983	212	0
43	GV	1910	0	1983	199	0
44	BW	901	0	937	65	0
44	CW	901	0	937	68	0
44	EW	901	0	937	70	0
44	GW	901	0	937	69	0
45	BX	1012	0	1079	110	0
45	CX	1012	0	1079	108	0
45	EX	1012	0	1079	114	0
45	GX	1012	0	1079	120	0
46	BY	786	0	851	83	0
46	CY	786	0	849	90	0
46	EY	786	0	851	105	0
46	GY	786	0	851	94	0
47	CO	1366	0	1470	140	0
48	A1	200	0	0	0	0
48	AA	2	0	0	0	0
48	AK	1	0	0	0	0
48	B2	8	0	0	0	0
48	B3	3	0	0	0	0
48	BJ	1	0	0	0	0
48	BL	1	0	0	0	0
48	BN	1	0	0	0	0
48	BP	1	0	0	0	0
48	BQ	2	0	0	0	0
48	BW	1	0	0	0	0
48	C2	6	0	0	0	0
48	C3	7	0	0	0	0
48	CD	1	0	0	0	0
48	CJ	1	0	0	0	0
48	CL	2	0	0	0	0
48	CN	1	0	0	0	0
48	CQ	2	0	0	0	0
48	CW	1	0	0	0	0
48	CY	1	0	0	0	0
48	D1	232	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
48	DA	2	0	0	0	0
48	DJ	1	0	0	0	0
48	DK	1	0	0	0	0
48	DQ	1	0	0	0	0
48	E2	7	0	0	0	0
48	E3	6	0	0	0	0
48	EJ	1	0	0	0	0
48	EL	2	0	0	0	0
48	EN	2	0	0	0	0
48	EQ	1	0	0	0	0
48	EW	2	0	0	0	0
48	F1	184	0	0	0	0
48	FA	2	0	0	0	0
48	FK	1	0	0	0	0
48	FT	1	0	0	0	0
48	G2	6	0	0	0	0
48	G3	5	0	0	0	0
48	GA	1	0	0	0	0
48	GJ	1	0	0	0	0
48	GL	1	0	0	0	0
48	GN	1	0	0	0	0
48	GO	1	0	0	0	0
48	GP	2	0	0	0	0
48	GQ	1	0	0	0	0
48	GW	1	0	0	0	0
48	H1	155	0	0	0	0
48	HT	1	0	0	0	0
49	AA	1	0	0	0	0
49	AC	1	0	0	0	0
49	AK	1	0	0	0	0
49	AL	1	0	0	0	0
49	BY	1	0	0	0	0
49	CY	1	0	0	0	0
49	DA	1	0	0	0	0
49	DC	1	0	0	0	0
49	DK	1	0	0	0	0
49	DL	1	0	0	0	0
49	EY	1	0	0	0	0
49	FA	1	0	0	0	0
49	FC	1	0	0	0	0
49	FK	1	0	0	0	0
49	FL	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
49	GY	1	0	0	0	0
49	HA	1	0	0	0	0
49	HC	1	0	0	0	0
49	HK	1	0	0	0	0
49	HL	1	0	0	0	0
50	A1	1134	0	0	292	0
50	AA	8	0	0	2	0
50	AB	5	0	0	2	0
50	AH	1	0	0	0	0
50	AK	3	0	0	1	0
50	AM	1	0	0	0	0
50	AP	2	0	0	0	0
50	AT	3	0	0	3	0
50	AU	4	0	0	3	0
50	B2	54	0	0	5	0
50	B3	23	0	0	6	0
50	BA	12	0	0	3	0
50	BB	4	0	0	1	0
50	BC	7	0	0	0	0
50	BE	1	0	0	0	0
50	BI	3	0	0	1	0
50	BJ	5	0	0	1	0
50	BK	3	0	0	1	0
50	BL	8	0	0	0	0
50	BM	2	0	0	1	0
50	BN	5	0	0	0	0
50	BO	2	0	0	2	0
50	BP	5	0	0	2	0
50	BQ	7	0	0	3	0
50	BU	1	0	0	0	0
50	BV	7	0	0	1	0
50	BW	5	0	0	0	0
50	BX	6	0	0	1	0
50	BY	5	0	0	0	0
50	C2	46	0	0	3	0
50	C3	39	0	0	10	0
50	CA	11	0	0	3	0
50	CB	4	0	0	0	0
50	CC	7	0	0	0	0
50	CD	4	0	0	0	0
50	CE	2	0	0	1	0
50	CI	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
50	CJ	4	0	0	3	0
50	CK	3	0	0	1	0
50	CL	12	0	0	2	0
50	CM	6	0	0	1	0
50	CN	7	0	0	5	0
50	CO	2	0	0	1	0
50	CP	6	0	0	1	0
50	CQ	7	0	0	5	0
50	CU	1	0	0	0	0
50	CV	4	0	0	1	0
50	CW	5	0	0	0	0
50	CX	6	0	0	0	0
50	CY	5	0	0	0	0
50	D1	1341	0	0	313	0
50	DA	10	0	0	1	0
50	DB	4	0	0	2	0
50	DE	1	0	0	0	0
50	DJ	2	0	0	1	0
50	DK	2	0	0	0	0
50	DP	1	0	0	0	0
50	DQ	2	0	0	2	0
50	DT	4	0	0	3	0
50	DU	3	0	0	0	0
50	DX	2	0	0	0	0
50	E2	44	0	0	8	0
50	E3	34	0	0	4	0
50	EA	4	0	0	4	0
50	EB	3	0	0	0	0
50	EC	2	0	0	0	0
50	EE	2	0	0	0	0
50	EJ	4	0	0	1	0
50	EK	5	0	0	1	0
50	EL	10	0	0	1	0
50	EM	2	0	0	0	0
50	EN	7	0	0	6	0
50	EP	6	0	0	1	0
50	EQ	4	0	0	4	0
50	EV	6	0	0	1	0
50	EW	7	0	0	0	0
50	EX	5	0	0	2	0
50	EY	5	0	0	0	0
50	F1	1076	0	0	268	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
50	FA	7	0	0	2	0
50	FB	4	0	0	1	0
50	FE	1	0	0	0	0
50	FH	1	0	0	0	0
50	FK	2	0	0	0	0
50	FL	3	0	0	1	0
50	FP	2	0	0	0	0
50	FT	4	0	0	4	0
50	FU	4	0	0	0	0
50	G2	34	0	0	2	0
50	G3	26	0	0	9	0
50	GA	6	0	0	6	0
50	GB	3	0	0	0	0
50	GC	2	0	0	0	0
50	GE	2	0	0	0	0
50	GI	1	0	0	0	0
50	GJ	4	0	0	2	0
50	GK	2	0	0	2	0
50	GL	5	0	0	1	0
50	GM	1	0	0	1	0
50	GN	2	0	0	1	0
50	GO	2	0	0	1	0
50	GP	5	0	0	0	0
50	GQ	4	0	0	2	0
50	GV	3	0	0	0	0
50	GW	4	0	0	0	0
50	GX	5	0	0	1	0
50	GY	1	0	0	0	0
50	H1	924	0	0	217	0
50	HA	4	0	0	1	0
50	HB	4	0	0	2	0
50	HJ	2	0	0	0	0
50	HK	2	0	0	0	0
50	HP	1	0	0	0	0
50	HT	5	0	0	5	0
50	HU	2	0	0	0	0
All	All	511395	0	371708	37500	12

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 43.

The worst 5 of 37500 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)
28:GG:8:UNK:CG	1:H1:1248:G:N2	1.82	1.41
28:GG:8:UNK:HG3	1:H1:1248:G:N2	1.34	1.40
1:F1:452:U:H5'	14:FO:56:GLN:NE2	1.41	1.35
13:AN:130:LYS:HG2	1:H1:2664:C:OP1	1.22	1.33
46:CY:28:LYS:NZ	1:F1:2252:C:OP1	1.60	1.33

The worst 5 of 12 symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:CM:276:LYS:NZ	1:D1:259:U:O3'[2_546]	1.54	0.66
34:GM:117:THR:OG1	1:H1:192:C:C4'[2_445]	1.57	0.63
34:EM:214:LYS:NZ	1:F1:171:A:O4'[2_456]	1.76	0.44
20:B2:87:C:N4	40:CS:82:GLU:OE2[1_545]	1.84	0.36
1:A1:1840:U:O4	15:DP:74:LYS:N[1_545]	1.88	0.32

## 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	AA	89/94 (95%)	85 (96%)	4 (4%)	0	100	100
2	DA	89/94 (95%)	85 (96%)	4 (4%)	0	100	100
2	FA	89/94 (95%)	85 (96%)	4 (4%)	0	100	100
2	HA	89/94 (95%)	85 (96%)	4 (4%)	0	100	100
3	AB	49/52 (94%)	46 (94%)	3 (6%)	0	100	100
3	DB	49/52 (94%)	46 (94%)	3 (6%)	0	100	100
3	FB	49/52 (94%)	46 (94%)	3 (6%)	0	100	100
3	HB	49/52 (94%)	46 (94%)	3 (6%)	0	100	100
4	AC	101/109 (93%)	99 (98%)	2 (2%)	0	100	100
4	DC	101/109 (93%)	99 (98%)	2 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	FC	101/109 (93%)	99 (98%)	2 (2%)	0	100	100
4	HC	101/109 (93%)	99 (98%)	2 (2%)	0	100	100
5	AE	188/191 (98%)	178 (95%)	9 (5%)	1 (0%)	29	67
5	DE	188/191 (98%)	176 (94%)	11 (6%)	1 (0%)	29	67
5	FE	188/191 (98%)	178 (95%)	9 (5%)	1 (0%)	29	67
5	HE	188/191 (98%)	177 (94%)	10 (5%)	1 (0%)	29	67
6	AF	123/126 (98%)	115 (94%)	8 (6%)	0	100	100
6	DF	123/126 (98%)	116 (94%)	7 (6%)	0	100	100
6	FF	123/126 (98%)	115 (94%)	8 (6%)	0	100	100
6	HF	123/126 (98%)	114 (93%)	9 (7%)	0	100	100
7	AG	94/104 (90%)	90 (96%)	4 (4%)	0	100	100
7	DG	94/104 (90%)	90 (96%)	4 (4%)	0	100	100
7	FG	94/104 (90%)	90 (96%)	4 (4%)	0	100	100
7	HG	94/104 (90%)	90 (96%)	4 (4%)	0	100	100
8	AH	105/113 (93%)	100 (95%)	5 (5%)	0	100	100
8	DH	105/113 (93%)	100 (95%)	5 (5%)	0	100	100
8	FH	105/113 (93%)	100 (95%)	4 (4%)	1 (1%)	15	54
8	HH	105/113 (93%)	100 (95%)	5 (5%)	0	100	100
9	AJ	224/248 (90%)	211 (94%)	11 (5%)	2 (1%)	17	57
9	DJ	224/248 (90%)	211 (94%)	11 (5%)	2 (1%)	17	57
9	FJ	224/248 (90%)	212 (95%)	10 (4%)	2 (1%)	17	57
9	HJ	224/248 (90%)	213 (95%)	9 (4%)	2 (1%)	17	57
10	AK	50/129 (39%)	43 (86%)	7 (14%)	0	100	100
10	DK	50/129 (39%)	44 (88%)	6 (12%)	0	100	100
10	FK	50/129 (39%)	44 (88%)	6 (12%)	0	100	100
10	HK	50/129 (39%)	43 (86%)	7 (14%)	0	100	100
11	AL	106/123 (86%)	98 (92%)	8 (8%)	0	100	100
11	DL	106/123 (86%)	98 (92%)	8 (8%)	0	100	100
11	FL	106/123 (86%)	98 (92%)	8 (8%)	0	100	100
11	HL	106/123 (86%)	98 (92%)	8 (8%)	0	100	100
12	AM	98/118 (83%)	92 (94%)	5 (5%)	1 (1%)	15	54

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
12	DM	98/118 (83%)	94 (96%)	3 (3%)	1 (1%)	15	54
12	FM	98/118 (83%)	93 (95%)	4 (4%)	1 (1%)	15	54
12	HM	98/118 (83%)	92 (94%)	5 (5%)	1 (1%)	15	54
13	AN	141/144 (98%)	133 (94%)	7 (5%)	1 (1%)	22	62
13	DN	141/144 (98%)	133 (94%)	7 (5%)	1 (1%)	22	62
13	FN	141/144 (98%)	133 (94%)	8 (6%)	0	100	100
13	HN	141/144 (98%)	133 (94%)	7 (5%)	1 (1%)	22	62
14	AO	132/134 (98%)	125 (95%)	7 (5%)	0	100	100
14	DO	132/134 (98%)	125 (95%)	7 (5%)	0	100	100
14	FO	132/134 (98%)	125 (95%)	7 (5%)	0	100	100
14	HO	132/134 (98%)	125 (95%)	7 (5%)	0	100	100
15	AP	62/89 (70%)	58 (94%)	4 (6%)	0	100	100
15	DP	62/89 (70%)	58 (94%)	4 (6%)	0	100	100
15	FP	62/89 (70%)	58 (94%)	4 (6%)	0	100	100
15	HP	62/89 (70%)	58 (94%)	4 (6%)	0	100	100
16	AQ	100/104 (96%)	89 (89%)	9 (9%)	2 (2%)	7	41
16	DQ	100/104 (96%)	89 (89%)	9 (9%)	2 (2%)	7	41
16	FQ	100/104 (96%)	88 (88%)	10 (10%)	2 (2%)	7	41
16	HQ	100/104 (96%)	89 (89%)	9 (9%)	2 (2%)	7	41
17	AT	63/66 (96%)	59 (94%)	3 (5%)	1 (2%)	9	45
17	DT	63/66 (96%)	60 (95%)	2 (3%)	1 (2%)	9	45
17	FT	63/66 (96%)	60 (95%)	2 (3%)	1 (2%)	9	45
17	HT	63/66 (96%)	60 (95%)	2 (3%)	1 (2%)	9	45
18	AU	201/206 (98%)	188 (94%)	12 (6%)	1 (0%)	29	67
18	DU	201/206 (98%)	187 (93%)	13 (6%)	1 (0%)	29	67
18	FU	201/206 (98%)	187 (93%)	13 (6%)	1 (0%)	29	67
18	HU	201/206 (98%)	189 (94%)	11 (6%)	1 (0%)	29	67
19	AX	186/189 (98%)	177 (95%)	8 (4%)	1 (0%)	29	67
19	DX	186/189 (98%)	178 (96%)	6 (3%)	2 (1%)	14	53
19	FX	186/189 (98%)	178 (96%)	6 (3%)	2 (1%)	14	53
19	HX	186/189 (98%)	177 (95%)	7 (4%)	2 (1%)	14	53

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
22	BA	255/264 (97%)	236 (92%)	19 (8%)	0	100	100
22	CA	255/264 (97%)	235 (92%)	20 (8%)	0	100	100
22	EA	255/264 (97%)	234 (92%)	21 (8%)	0	100	100
22	GA	255/264 (97%)	237 (93%)	18 (7%)	0	100	100
23	BB	384/391 (98%)	371 (97%)	13 (3%)	0	100	100
23	CB	384/391 (98%)	371 (97%)	13 (3%)	0	100	100
23	EB	384/391 (98%)	371 (97%)	13 (3%)	0	100	100
23	GB	384/391 (98%)	370 (96%)	14 (4%)	0	100	100
24	BC	407/410 (99%)	383 (94%)	24 (6%)	0	100	100
24	CC	407/410 (99%)	387 (95%)	20 (5%)	0	100	100
24	EC	407/410 (99%)	384 (94%)	23 (6%)	0	100	100
24	GC	407/410 (99%)	386 (95%)	21 (5%)	0	100	100
25	BD	167/172 (97%)	156 (93%)	11 (7%)	0	100	100
25	CD	167/172 (97%)	156 (93%)	11 (7%)	0	100	100
25	ED	167/172 (97%)	156 (93%)	11 (7%)	0	100	100
25	GD	167/172 (97%)	156 (93%)	11 (7%)	0	100	100
26	BE	184/188 (98%)	171 (93%)	13 (7%)	0	100	100
26	CE	184/188 (98%)	171 (93%)	13 (7%)	0	100	100
26	EE	184/188 (98%)	171 (93%)	13 (7%)	0	100	100
26	GE	184/188 (98%)	171 (93%)	13 (7%)	0	100	100
27	BF	229/255 (90%)	219 (96%)	10 (4%)	0	100	100
27	CF	229/255 (90%)	219 (96%)	10 (4%)	0	100	100
27	EF	229/255 (90%)	219 (96%)	9 (4%)	1 (0%)	34	71
27	GF	229/255 (90%)	219 (96%)	10 (4%)	0	100	100
29	BH	197/215 (92%)	186 (94%)	11 (6%)	0	100	100
29	CH	197/215 (92%)	187 (95%)	10 (5%)	0	100	100
29	EH	197/215 (92%)	186 (94%)	11 (6%)	0	100	100
29	GH	197/215 (92%)	186 (94%)	11 (6%)	0	100	100
30	BI	196/198 (99%)	189 (96%)	7 (4%)	0	100	100
30	CI	196/198 (99%)	189 (96%)	7 (4%)	0	100	100
30	EI	196/198 (99%)	189 (96%)	7 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
30	GI	196/198 (99%)	189 (96%)	7 (4%)	0	100	100
31	BJ	136/141 (96%)	132 (97%)	4 (3%)	0	100	100
31	CJ	136/141 (96%)	132 (97%)	4 (3%)	0	100	100
31	EJ	136/141 (96%)	131 (96%)	5 (4%)	0	100	100
31	GJ	136/141 (96%)	132 (97%)	4 (3%)	0	100	100
32	BK	146/149 (98%)	136 (93%)	8 (6%)	2 (1%)	11	47
32	CK	146/149 (98%)	135 (92%)	8 (6%)	3 (2%)	7	39
32	EK	146/149 (98%)	137 (94%)	7 (5%)	2 (1%)	11	47
32	GK	146/149 (98%)	135 (92%)	8 (6%)	3 (2%)	7	39
33	BL	201/204 (98%)	191 (95%)	10 (5%)	0	100	100
33	CL	201/204 (98%)	191 (95%)	10 (5%)	0	100	100
33	EL	201/204 (98%)	191 (95%)	10 (5%)	0	100	100
33	GL	201/204 (98%)	193 (96%)	7 (4%)	1 (0%)	29	67
34	BM	296/301 (98%)	282 (95%)	13 (4%)	1 (0%)	41	75
34	CM	298/301 (99%)	282 (95%)	15 (5%)	1 (0%)	41	75
34	EM	298/301 (99%)	283 (95%)	14 (5%)	1 (0%)	41	75
34	GM	298/301 (99%)	285 (96%)	12 (4%)	1 (0%)	41	75
35	BN	178/181 (98%)	168 (94%)	10 (6%)	0	100	100
35	CN	178/181 (98%)	168 (94%)	10 (6%)	0	100	100
35	EN	178/181 (98%)	168 (94%)	10 (6%)	0	100	100
35	GN	178/181 (98%)	168 (94%)	10 (6%)	0	100	100
36	BO	182/185 (98%)	170 (93%)	11 (6%)	1 (0%)	29	67
36	EO	144/185 (78%)	137 (95%)	7 (5%)	0	100	100
36	GO	151/185 (82%)	143 (95%)	8 (5%)	0	100	100
37	BP	154/157 (98%)	148 (96%)	6 (4%)	0	100	100
37	CP	154/157 (98%)	147 (96%)	7 (4%)	0	100	100
37	EP	154/157 (98%)	148 (96%)	6 (4%)	0	100	100
37	GP	154/157 (98%)	147 (96%)	7 (4%)	0	100	100
38	BQ	155/183 (85%)	146 (94%)	9 (6%)	0	100	100
38	CQ	155/183 (85%)	147 (95%)	8 (5%)	0	100	100
38	EQ	155/183 (85%)	147 (95%)	8 (5%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
38	GQ	155/183 (85%)	147 (95%)	8 (5%)	0	100	100
39	BR	119/150 (79%)	115 (97%)	4 (3%)	0	100	100
39	CR	119/150 (79%)	116 (98%)	3 (2%)	0	100	100
39	ER	119/150 (79%)	115 (97%)	4 (3%)	0	100	100
39	GR	119/150 (79%)	114 (96%)	5 (4%)	0	100	100
40	BS	124/135 (92%)	119 (96%)	5 (4%)	0	100	100
40	CS	124/135 (92%)	119 (96%)	5 (4%)	0	100	100
40	ES	124/135 (92%)	119 (96%)	5 (4%)	0	100	100
40	GS	124/135 (92%)	118 (95%)	6 (5%)	0	100	100
41	BT	59/158 (37%)	57 (97%)	2 (3%)	0	100	100
41	CT	59/158 (37%)	56 (95%)	3 (5%)	0	100	100
41	ET	59/158 (37%)	57 (97%)	2 (3%)	0	100	100
41	GT	59/158 (37%)	57 (97%)	2 (3%)	0	100	100
42	BU	121/124 (98%)	112 (93%)	9 (7%)	0	100	100
42	CU	121/124 (98%)	111 (92%)	10 (8%)	0	100	100
42	EU	121/124 (98%)	113 (93%)	8 (7%)	0	100	100
42	GU	121/124 (98%)	112 (93%)	9 (7%)	0	100	100
43	BV	232/239 (97%)	216 (93%)	16 (7%)	0	100	100
43	CV	232/239 (97%)	216 (93%)	16 (7%)	0	100	100
43	EV	232/239 (97%)	216 (93%)	15 (6%)	1 (0%)	34	71
43	GV	232/239 (97%)	216 (93%)	15 (6%)	1 (0%)	34	71
44	BW	108/111 (97%)	102 (94%)	6 (6%)	0	100	100
44	CW	108/111 (97%)	102 (94%)	6 (6%)	0	100	100
44	EW	108/111 (97%)	101 (94%)	7 (6%)	0	100	100
44	GW	108/111 (97%)	102 (94%)	6 (6%)	0	100	100
45	BX	123/134 (92%)	119 (97%)	4 (3%)	0	100	100
45	CX	123/134 (92%)	117 (95%)	6 (5%)	0	100	100
45	EX	123/134 (92%)	118 (96%)	5 (4%)	0	100	100
45	GX	123/134 (92%)	117 (95%)	6 (5%)	0	100	100
46	BY	100/103 (97%)	91 (91%)	9 (9%)	0	100	100
46	CY	100/103 (97%)	90 (90%)	10 (10%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
46	EY	100/103 (97%)	90 (90%)	10 (10%)	0	100	100
46	GY	100/103 (97%)	90 (90%)	10 (10%)	0	100	100
47	CO	145/185 (78%)	138 (95%)	7 (5%)	0	100	100
All	All	26160/28348 (92%)	24720 (94%)	1378 (5%)	62 (0%)	47	80

5 of 62 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
16	AQ	7	VAL
32	BK	24	LYS
32	CK	24	LYS
16	DQ	7	VAL
32	EK	24	LYS

### 5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	AA	69/72 (96%)	58 (84%)	11 (16%)	2	15
2	DA	69/72 (96%)	58 (84%)	11 (16%)	2	15
2	FA	69/72 (96%)	59 (86%)	10 (14%)	3	19
2	HA	69/72 (96%)	58 (84%)	11 (16%)	2	15
3	AB	48/49 (98%)	44 (92%)	4 (8%)	11	40
3	DB	48/49 (98%)	44 (92%)	4 (8%)	11	40
3	FB	48/49 (98%)	44 (92%)	4 (8%)	11	40
3	HB	48/49 (98%)	44 (92%)	4 (8%)	11	40
4	AC	95/101 (94%)	92 (97%)	3 (3%)	39	69
4	DC	95/101 (94%)	92 (97%)	3 (3%)	39	69
4	FC	95/101 (94%)	92 (97%)	3 (3%)	39	69
4	HC	95/101 (94%)	92 (97%)	3 (3%)	39	69
5	AE	162/163 (99%)	152 (94%)	10 (6%)	18	52

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
5	DE	162/163 (99%)	152 (94%)	10 (6%)	18	52
5	FE	162/163 (99%)	151 (93%)	11 (7%)	16	48
5	HE	162/163 (99%)	151 (93%)	11 (7%)	16	48
6	AF	111/112 (99%)	107 (96%)	4 (4%)	35	66
6	DF	111/112 (99%)	106 (96%)	5 (4%)	27	62
6	FF	111/112 (99%)	107 (96%)	4 (4%)	35	66
6	HF	111/112 (99%)	107 (96%)	4 (4%)	35	66
7	AG	80/88 (91%)	76 (95%)	4 (5%)	24	58
7	DG	80/88 (91%)	74 (92%)	6 (8%)	13	44
7	FG	80/88 (91%)	75 (94%)	5 (6%)	18	51
7	HG	80/88 (91%)	76 (95%)	4 (5%)	24	58
8	AH	87/92 (95%)	78 (90%)	9 (10%)	7	32
8	DH	87/92 (95%)	78 (90%)	9 (10%)	7	32
8	FH	87/92 (95%)	78 (90%)	9 (10%)	7	32
8	HH	87/92 (95%)	78 (90%)	9 (10%)	7	32
9	AJ	195/216 (90%)	177 (91%)	18 (9%)	9	37
9	DJ	195/216 (90%)	176 (90%)	19 (10%)	8	34
9	FJ	195/216 (90%)	177 (91%)	18 (9%)	9	37
9	HJ	195/216 (90%)	177 (91%)	18 (9%)	9	37
10	AK	46/113 (41%)	43 (94%)	3 (6%)	17	50
10	DK	46/113 (41%)	43 (94%)	3 (6%)	17	50
10	FK	46/113 (41%)	43 (94%)	3 (6%)	17	50
10	HK	46/113 (41%)	43 (94%)	3 (6%)	17	50
11	AL	92/107 (86%)	87 (95%)	5 (5%)	22	56
11	DL	92/107 (86%)	87 (95%)	5 (5%)	22	56
11	FL	92/107 (86%)	88 (96%)	4 (4%)	29	62
11	HL	92/107 (86%)	87 (95%)	5 (5%)	22	56
12	AM	93/110 (84%)	90 (97%)	3 (3%)	39	69
12	DM	93/110 (84%)	90 (97%)	3 (3%)	39	69
12	FM	93/110 (84%)	90 (97%)	3 (3%)	39	69
12	HM	93/110 (84%)	90 (97%)	3 (3%)	39	69

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
13	AN	130/131 (99%)	123 (95%)	7 (5%)	22	56
13	DN	130/131 (99%)	122 (94%)	8 (6%)	18	52
13	FN	130/131 (99%)	123 (95%)	7 (5%)	22	56
13	HN	130/131 (99%)	123 (95%)	7 (5%)	22	56
14	AO	108/108 (100%)	102 (94%)	6 (6%)	21	55
14	DO	108/108 (100%)	102 (94%)	6 (6%)	21	55
14	FO	108/108 (100%)	100 (93%)	8 (7%)	13	45
14	HO	108/108 (100%)	102 (94%)	6 (6%)	21	55
15	AP	60/77 (78%)	56 (93%)	4 (7%)	16	49
15	DP	60/77 (78%)	56 (93%)	4 (7%)	16	49
15	FP	60/77 (78%)	56 (93%)	4 (7%)	16	49
15	HP	60/77 (78%)	56 (93%)	4 (7%)	16	49
16	AQ	81/83 (98%)	75 (93%)	6 (7%)	13	45
16	DQ	81/83 (98%)	75 (93%)	6 (7%)	13	45
16	FQ	81/83 (98%)	75 (93%)	6 (7%)	13	45
16	HQ	81/83 (98%)	75 (93%)	6 (7%)	13	45
17	AT	61/62 (98%)	55 (90%)	6 (10%)	8	34
17	DT	61/62 (98%)	57 (93%)	4 (7%)	16	50
17	FT	61/62 (98%)	57 (93%)	4 (7%)	16	50
17	HT	61/62 (98%)	57 (93%)	4 (7%)	16	50
18	AU	169/171 (99%)	159 (94%)	10 (6%)	19	53
18	DU	169/171 (99%)	161 (95%)	8 (5%)	26	60
18	FU	169/171 (99%)	160 (95%)	9 (5%)	22	56
18	HU	169/171 (99%)	161 (95%)	8 (5%)	26	60
19	AX	167/168 (99%)	153 (92%)	14 (8%)	11	40
19	DX	167/168 (99%)	152 (91%)	15 (9%)	9	38
19	FX	167/168 (99%)	151 (90%)	16 (10%)	8	35
19	HX	167/168 (99%)	154 (92%)	13 (8%)	12	43
22	BA	196/198 (99%)	165 (84%)	31 (16%)	2	16
22	CA	196/198 (99%)	164 (84%)	32 (16%)	2	14
22	EA	196/198 (99%)	164 (84%)	32 (16%)	2	14

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
22	GA	196/198 (99%)	165 (84%)	31 (16%)	2	16
23	BB	330/334 (99%)	306 (93%)	24 (7%)	14	45
23	CB	330/334 (99%)	307 (93%)	23 (7%)	15	47
23	EB	330/334 (99%)	308 (93%)	22 (7%)	16	49
23	GB	330/334 (99%)	306 (93%)	24 (7%)	14	45
24	BC	325/326 (100%)	302 (93%)	23 (7%)	14	47
24	CC	325/326 (100%)	302 (93%)	23 (7%)	14	47
24	EC	325/326 (100%)	300 (92%)	25 (8%)	13	43
24	GC	325/326 (100%)	300 (92%)	25 (8%)	13	43
25	BD	146/149 (98%)	136 (93%)	10 (7%)	16	48
25	CD	146/149 (98%)	136 (93%)	10 (7%)	16	48
25	ED	146/149 (98%)	135 (92%)	11 (8%)	13	44
25	GD	146/149 (98%)	136 (93%)	10 (7%)	16	48
26	BE	163/165 (99%)	157 (96%)	6 (4%)	34	65
26	CE	163/165 (99%)	157 (96%)	6 (4%)	34	65
26	EE	163/165 (99%)	157 (96%)	6 (4%)	34	65
26	GE	163/165 (99%)	157 (96%)	6 (4%)	34	65
27	BF	201/222 (90%)	194 (96%)	7 (4%)	36	67
27	CF	201/222 (90%)	194 (96%)	7 (4%)	36	67
27	EF	201/222 (90%)	194 (96%)	7 (4%)	36	67
27	GF	201/222 (90%)	194 (96%)	7 (4%)	36	67
29	BH	169/180 (94%)	155 (92%)	14 (8%)	11	40
29	CH	169/180 (94%)	155 (92%)	14 (8%)	11	40
29	EH	169/180 (94%)	156 (92%)	13 (8%)	13	43
29	GH	169/180 (94%)	153 (90%)	16 (10%)	8	35
30	BI	166/166 (100%)	150 (90%)	16 (10%)	8	35
30	CI	166/166 (100%)	149 (90%)	17 (10%)	7	32
30	EI	166/166 (100%)	150 (90%)	16 (10%)	8	35
30	GI	166/166 (100%)	150 (90%)	16 (10%)	8	35
31	BJ	107/108 (99%)	98 (92%)	9 (8%)	11	40
31	CJ	107/108 (99%)	99 (92%)	8 (8%)	13	44

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
31	EJ	107/108 (99%)	99 (92%)	8 (8%)	13	44
31	GJ	107/108 (99%)	99 (92%)	8 (8%)	13	44
32	BK	120/121 (99%)	110 (92%)	10 (8%)	11	40
32	CK	120/121 (99%)	111 (92%)	9 (8%)	13	44
32	EK	120/121 (99%)	110 (92%)	10 (8%)	11	40
32	GK	120/121 (99%)	110 (92%)	10 (8%)	11	40
33	BL	174/175 (99%)	165 (95%)	9 (5%)	23	57
33	CL	174/175 (99%)	165 (95%)	9 (5%)	23	57
33	EL	174/175 (99%)	165 (95%)	9 (5%)	23	57
33	GL	174/175 (99%)	166 (95%)	8 (5%)	27	61
34	BM	252/254 (99%)	239 (95%)	13 (5%)	23	57
34	CM	253/254 (100%)	242 (96%)	11 (4%)	29	62
34	EM	253/254 (100%)	242 (96%)	11 (4%)	29	62
34	GM	253/254 (100%)	240 (95%)	13 (5%)	24	58
35	BN	159/160 (99%)	145 (91%)	14 (9%)	10	39
35	CN	159/160 (99%)	146 (92%)	13 (8%)	11	41
35	EN	159/160 (99%)	145 (91%)	14 (9%)	10	39
35	GN	159/160 (99%)	146 (92%)	13 (8%)	11	41
36	BO	158/159 (99%)	148 (94%)	10 (6%)	18	51
36	EO	126/159 (79%)	116 (92%)	10 (8%)	12	42
36	GO	127/159 (80%)	117 (92%)	10 (8%)	12	42
37	BP	134/135 (99%)	124 (92%)	10 (8%)	13	44
37	CP	134/135 (99%)	126 (94%)	8 (6%)	19	53
37	EP	134/135 (99%)	125 (93%)	9 (7%)	16	49
37	GP	134/135 (99%)	125 (93%)	9 (7%)	16	49
38	BQ	128/148 (86%)	115 (90%)	13 (10%)	7	32
38	CQ	128/148 (86%)	115 (90%)	13 (10%)	7	32
38	EQ	128/148 (86%)	115 (90%)	13 (10%)	7	32
38	GQ	128/148 (86%)	115 (90%)	13 (10%)	7	32
39	BR	108/132 (82%)	101 (94%)	7 (6%)	17	50
39	CR	108/132 (82%)	101 (94%)	7 (6%)	17	50

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
39	ER	108/132 (82%)	102 (94%)	6 (6%)	21	55
39	GR	108/132 (82%)	103 (95%)	5 (5%)	27	61
40	BS	113/120 (94%)	105 (93%)	8 (7%)	14	47
40	CS	113/120 (94%)	104 (92%)	9 (8%)	12	42
40	ES	113/120 (94%)	105 (93%)	8 (7%)	14	47
40	GS	113/120 (94%)	104 (92%)	9 (8%)	12	42
41	BT	52/130 (40%)	46 (88%)	6 (12%)	5	27
41	CT	52/130 (40%)	46 (88%)	6 (12%)	5	27
41	ET	52/130 (40%)	46 (88%)	6 (12%)	5	27
41	GT	52/130 (40%)	46 (88%)	6 (12%)	5	27
42	BU	105/106 (99%)	96 (91%)	9 (9%)	10	39
42	CU	105/106 (99%)	96 (91%)	9 (9%)	10	39
42	EU	105/106 (99%)	96 (91%)	9 (9%)	10	39
42	GU	105/106 (99%)	96 (91%)	9 (9%)	10	39
43	BV	197/202 (98%)	186 (94%)	11 (6%)	21	55
43	CV	197/202 (98%)	187 (95%)	10 (5%)	24	58
43	EV	197/202 (98%)	188 (95%)	9 (5%)	27	61
43	GV	197/202 (98%)	187 (95%)	10 (5%)	24	58
44	BW	100/101 (99%)	96 (96%)	4 (4%)	31	64
44	CW	100/101 (99%)	95 (95%)	5 (5%)	24	58
44	EW	100/101 (99%)	95 (95%)	5 (5%)	24	58
44	GW	100/101 (99%)	96 (96%)	4 (4%)	31	64
45	BX	104/111 (94%)	88 (85%)	16 (15%)	2	17
45	CX	104/111 (94%)	87 (84%)	17 (16%)	2	14
45	EX	104/111 (94%)	88 (85%)	16 (15%)	2	17
45	GX	104/111 (94%)	88 (85%)	16 (15%)	2	17
46	BY	79/80 (99%)	72 (91%)	7 (9%)	9	38
46	CY	79/80 (99%)	71 (90%)	8 (10%)	7	33
46	EY	79/80 (99%)	71 (90%)	8 (10%)	7	33
46	GY	79/80 (99%)	73 (92%)	6 (8%)	13	44
47	CO	126/127 (99%)	116 (92%)	10 (8%)	12	42

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
All	All	22468/23988 (94%)	20823 (93%)	1645 (7%)	14 45

5 of 1645 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
27	EF	103	ARG
7	FG	86	ARG
13	HN	36	ARG
30	EI	135	CYS
27	EF	74	THR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 750 such sidechains are listed below:

Mol	Chain	Res	Type
38	EQ	139	ASN
23	GB	210	ASN
43	EV	219	HIS
38	EQ	135	HIS
11	FL	58	GLN

### 5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	A1	3114/3354 (92%)	1118 (35%)	209 (6%)
1	D1	3114/3354 (92%)	1113 (35%)	215 (6%)
1	F1	3114/3354 (92%)	1113 (35%)	211 (6%)
1	H1	3114/3354 (92%)	1113 (35%)	210 (6%)
20	B2	154/154 (100%)	58 (37%)	13 (8%)
20	C2	154/154 (100%)	60 (38%)	13 (8%)
20	E2	154/154 (100%)	60 (38%)	13 (8%)
20	G2	154/154 (100%)	60 (38%)	13 (8%)
21	B3	119/120 (99%)	38 (31%)	1 (0%)
21	C3	119/120 (99%)	39 (32%)	1 (0%)
21	E3	119/120 (99%)	38 (31%)	1 (0%)
21	G3	119/120 (99%)	38 (31%)	1 (0%)
All	All	13548/14512 (93%)	4848 (35%)	901 (6%)

5 of 4848 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	A1	9	G
1	A1	16	G
1	A1	17	C
1	A1	19	A
1	A1	20	G

5 of 901 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
20	E2	112	G
1	H1	3205	A
1	F1	1617	G
1	H1	3162	A
1	H1	1617	G

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

There are no non-standard protein/DNA/RNA residues in this entry.

#### 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

#### 5.6 Ligand geometry [i](#)

Of 885 ligands modelled in this entry, 885 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

The following chains have linkage breaks:

Mol	Chain	Number of breaks
1	F1	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	F1	2239:A	O3'	2240:C	P	1.91



## 6 Fit of model and data i

### 6.1 Protein, DNA and RNA chains i

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
1	A1	3119/3354 (92%)	0.13	90 (2%) 51 38	42, 91, 187, 390	0
1	D1	3119/3354 (92%)	0.05	34 (1%) 80 69	40, 79, 164, 330	0
1	F1	3119/3354 (92%)	0.18	62 (1%) 65 52	51, 94, 176, 357	0
1	H1	3119/3354 (92%)	0.49	136 (4%) 34 25	54, 121, 213, 367	0
2	AA	91/94 (96%)	-0.16	2 (2%) 62 48	29, 65, 120, 243	0
2	DA	91/94 (96%)	-0.09	0 100 100	34, 66, 123, 226	0
2	FA	91/94 (96%)	0.21	2 (2%) 62 48	47, 83, 132, 204	0
2	HA	91/94 (96%)	0.86	12 (13%) 3 3	74, 119, 186, 243	0
3	AB	51/52 (98%)	-0.20	1 (1%) 65 52	44, 63, 110, 148	0
3	DB	51/52 (98%)	-0.13	1 (1%) 65 52	49, 69, 111, 146	0
3	FB	51/52 (98%)	0.09	0 100 100	59, 86, 118, 167	0
3	HB	51/52 (98%)	0.79	8 (15%) 2 2	90, 114, 144, 197	0
4	AC	103/109 (94%)	0.37	3 (2%) 51 38	73, 117, 154, 228	0
4	DC	103/109 (94%)	-0.01	0 100 100	46, 84, 135, 194	0
4	FC	103/109 (94%)	0.01	1 (0%) 82 71	58, 96, 156, 192	0
4	HC	103/109 (94%)	0.32	3 (2%) 51 38	81, 130, 176, 199	0
5	AE	190/191 (99%)	0.19	12 (6%) 20 15	69, 122, 171, 214	0
5	DE	190/191 (99%)	0.08	1 (0%) 91 84	74, 124, 169, 226	0
5	FE	190/191 (99%)	0.20	8 (4%) 36 27	60, 123, 176, 227	0
5	HE	190/191 (99%)	0.35	14 (7%) 14 12	76, 141, 194, 227	0
6	AF	125/126 (99%)	0.02	5 (4%) 38 28	71, 111, 156, 213	0
6	DF	125/126 (99%)	-0.22	2 (1%) 72 59	70, 106, 157, 190	0
6	FF	125/126 (99%)	0.01	6 (4%) 30 23	63, 109, 166, 245	0
6	HF	125/126 (99%)	0.02	0 100 100	74, 113, 163, 224	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
7	AG	96/104 (92%)	0.08	1 (1%) 82 71	62, 103, 188, 218	0
7	DG	96/104 (92%)	0.06	4 (4%) 36 27	57, 114, 179, 222	0
7	FG	96/104 (92%)	0.18	2 (2%) 63 50	81, 112, 176, 199	0
7	HG	96/104 (92%)	0.21	1 (1%) 82 71	94, 134, 183, 218	0
8	AH	107/113 (94%)	-0.11	0 100 100	61, 91, 127, 159	0
8	DH	107/113 (94%)	-0.12	0 100 100	54, 89, 127, 138	0
8	FH	107/113 (94%)	-0.04	0 100 100	57, 89, 122, 164	0
8	HH	107/113 (94%)	0.14	0 100 100	68, 109, 141, 181	0
9	AJ	226/248 (91%)	-0.40	0 100 100	52, 90, 138, 190	0
9	DJ	226/248 (91%)	-0.36	0 100 100	51, 89, 136, 206	0
9	FJ	226/248 (91%)	-0.41	1 (0%) 92 87	38, 82, 130, 183	0
9	HJ	226/248 (91%)	-0.49	0 100 100	40, 78, 123, 155	0
10	AK	52/129 (40%)	0.12	2 (3%) 40 30	73, 101, 146, 182	0
10	DK	52/129 (40%)	-0.32	1 (1%) 66 53	53, 79, 134, 151	0
10	FK	52/129 (40%)	-0.40	0 100 100	56, 81, 139, 189	0
10	HK	52/129 (40%)	-0.27	0 100 100	61, 77, 118, 158	0
11	AL	108/123 (87%)	-0.12	1 (0%) 84 73	38, 73, 130, 165	0
11	DL	108/123 (87%)	-0.10	1 (0%) 84 73	47, 85, 144, 217	0
11	FL	108/123 (87%)	0.13	1 (0%) 84 73	66, 98, 135, 174	0
11	HL	108/123 (87%)	0.51	5 (4%) 32 24	90, 117, 156, 183	0
12	AM	100/118 (84%)	0.20	3 (3%) 50 37	72, 121, 155, 185	0
12	DM	100/118 (84%)	0.16	4 (4%) 38 28	73, 126, 179, 199	0
12	FM	100/118 (84%)	0.29	2 (2%) 65 52	93, 144, 196, 208	0
12	HM	100/118 (84%)	0.06	2 (2%) 65 52	98, 151, 195, 214	0
13	AN	143/144 (99%)	-0.20	1 (0%) 87 79	59, 97, 163, 189	0
13	DN	143/144 (99%)	-0.06	1 (0%) 87 79	73, 121, 179, 214	0
13	FN	143/144 (99%)	-0.02	1 (0%) 87 79	72, 122, 175, 208	0
13	HN	143/144 (99%)	0.30	3 (2%) 63 50	92, 148, 189, 217	0
14	AO	134/134 (100%)	-0.20	1 (0%) 87 79	66, 116, 162, 202	0
14	DO	134/134 (100%)	-0.11	1 (0%) 87 79	52, 99, 151, 209	0
14	FO	134/134 (100%)	0.04	2 (1%) 73 61	65, 118, 167, 219	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
14	HO	134/134 (100%)	0.48	11 (8%) 11 10	96, 143, 197, 227	0
15	AP	66/89 (74%)	0.39	3 (4%) 33 24	55, 128, 209, 241	0
15	DP	66/89 (74%)	0.32	5 (7%) 13 11	73, 116, 176, 245	0
15	FP	66/89 (74%)	0.56	4 (6%) 21 16	99, 143, 202, 214	0
15	HP	66/89 (74%)	1.03	8 (12%) 4 4	99, 149, 219, 247	0
16	AQ	102/104 (98%)	0.09	3 (2%) 51 38	72, 122, 172, 208	0
16	DQ	102/104 (98%)	-0.01	3 (2%) 51 38	63, 105, 151, 186	0
16	FQ	102/104 (98%)	0.01	2 (1%) 65 52	72, 114, 166, 190	0
16	HQ	102/104 (98%)	0.57	6 (5%) 22 16	110, 154, 195, 203	0
17	AT	65/66 (98%)	0.37	4 (6%) 20 15	76, 121, 156, 193	0
17	DT	65/66 (98%)	0.11	1 (1%) 73 61	51, 87, 122, 211	0
17	FT	65/66 (98%)	0.26	1 (1%) 73 61	51, 107, 144, 201	0
17	HT	65/66 (98%)	0.76	4 (6%) 20 15	69, 136, 171, 222	0
18	AU	203/206 (98%)	0.09	4 (1%) 65 52	74, 122, 179, 233	0
18	DU	203/206 (98%)	-0.13	0 100 100	48, 98, 158, 198	0
18	FU	203/206 (98%)	-0.07	1 (0%) 91 84	67, 116, 174, 203	0
18	HU	203/206 (98%)	0.54	19 (9%) 8 6	102, 155, 206, 240	0
19	AX	188/189 (99%)	-0.20	1 (0%) 91 84	72, 105, 145, 201	0
19	DX	188/189 (99%)	-0.29	0 100 100	54, 89, 128, 170	0
19	FX	188/189 (99%)	-0.09	1 (0%) 91 84	62, 98, 141, 179	0
19	HX	188/189 (99%)	-0.03	0 100 100	74, 106, 135, 193	0
20	B2	154/154 (100%)	-0.11	2 (1%) 77 65	61, 80, 118, 192	0
20	C2	154/154 (100%)	-0.03	0 100 100	54, 80, 120, 186	0
20	E2	154/154 (100%)	0.16	3 (1%) 66 53	74, 105, 142, 189	0
20	G2	154/154 (100%)	0.73	13 (8%) 11 9	98, 146, 182, 210	0
21	B3	120/120 (100%)	0.46	4 (3%) 46 35	90, 150, 184, 217	0
21	C3	120/120 (100%)	-0.10	0 100 100	64, 98, 116, 161	0
21	E3	120/120 (100%)	0.03	0 100 100	72, 120, 147, 172	0
21	G3	120/120 (100%)	0.45	4 (3%) 46 35	95, 138, 175, 235	0
22	BA	257/264 (97%)	-0.02	9 (3%) 44 33	30, 70, 134, 233	0
22	CA	257/264 (97%)	-0.18	10 (3%) 39 29	31, 75, 139, 238	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
22	EA	257/264 (97%)	-0.16	10 (3%) 39 29	40, 79, 136, 217	0
22	GA	257/264 (97%)	0.22	13 (5%) 28 20	60, 106, 157, 242	0
23	BB	386/391 (98%)	-0.32	5 (1%) 77 65	33, 69, 120, 227	0
23	CB	386/391 (98%)	-0.44	2 (0%) 91 84	34, 75, 123, 222	0
23	EB	386/391 (98%)	-0.36	4 (1%) 82 71	38, 75, 123, 230	0
23	GB	386/391 (98%)	-0.35	4 (1%) 82 71	51, 82, 132, 217	0
24	BC	409/410 (99%)	-0.01	12 (2%) 51 38	37, 107, 173, 241	0
24	CC	409/410 (99%)	-0.20	2 (0%) 91 84	40, 91, 151, 206	0
24	EC	409/410 (99%)	-0.07	5 (1%) 79 67	54, 107, 162, 237	0
24	GC	409/410 (99%)	0.34	17 (4%) 36 27	77, 143, 195, 252	0
25	BD	169/172 (98%)	0.96	23 (13%) 3 3	116, 159, 200, 225	0
25	CD	169/172 (98%)	0.12	4 (2%) 59 45	70, 110, 151, 188	0
25	ED	169/172 (98%)	0.49	8 (4%) 31 23	89, 133, 179, 209	0
25	GD	169/172 (98%)	0.66	19 (11%) 5 5	96, 139, 182, 216	0
26	BE	186/188 (98%)	-0.08	0 100 100	65, 109, 150, 194	0
26	CE	186/188 (98%)	-0.19	0 100 100	59, 94, 131, 171	0
26	EE	186/188 (98%)	-0.08	1 (0%) 91 84	60, 94, 139, 195	0
26	GE	186/188 (98%)	-0.12	0 100 100	53, 91, 135, 220	0
27	BF	231/255 (90%)	0.18	7 (3%) 50 37	70, 122, 176, 252	0
27	CF	231/255 (90%)	-0.14	3 (1%) 77 65	71, 115, 175, 233	0
27	EF	231/255 (90%)	0.00	6 (2%) 56 42	76, 120, 187, 241	0
27	GF	231/255 (90%)	0.60	17 (7%) 14 12	112, 166, 210, 233	0
28	BG	0/123	-	-	-	-
28	CG	0/123	-	-	-	-
28	EG	0/123	-	-	-	-
28	GG	0/123	-	-	-	-
29	BH	201/215 (93%)	0.18	6 (2%) 50 37	79, 133, 181, 221	0
29	CH	201/215 (93%)	-0.24	1 (0%) 91 84	42, 93, 139, 153	0
29	EH	201/215 (93%)	-0.15	2 (0%) 82 71	50, 105, 158, 202	0
29	GH	201/215 (93%)	0.08	2 (0%) 82 71	71, 118, 171, 203	0
30	BI	198/198 (100%)	-0.21	2 (1%) 82 71	51, 85, 152, 185	0
30	CI	198/198 (100%)	-0.36	0 100 100	48, 78, 149, 208	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
30	EI	198/198 (100%)	-0.26	2 (1%) 82 71	47, 79, 152, 174	0
30	GI	198/198 (100%)	-0.20	2 (1%) 82 71	53, 91, 151, 195	0
31	BJ	138/141 (97%)	-0.43	0 100 100	42, 68, 112, 160	0
31	CJ	138/141 (97%)	-0.47	0 100 100	40, 65, 108, 150	0
31	EJ	138/141 (97%)	-0.44	3 (2%) 62 48	40, 65, 108, 202	0
31	GJ	138/141 (97%)	-0.41	1 (0%) 87 79	30, 60, 98, 186	0
32	BK	148/149 (99%)	0.01	4 (2%) 54 41	50, 105, 158, 221	0
32	CK	148/149 (99%)	-0.27	0 100 100	36, 74, 124, 184	0
32	EK	148/149 (99%)	-0.10	0 100 100	50, 95, 140, 228	0
32	GK	148/149 (99%)	0.53	11 (7%) 14 12	78, 129, 181, 208	0
33	BL	203/204 (99%)	-0.26	1 (0%) 91 84	57, 83, 120, 153	0
33	CL	203/204 (99%)	-0.36	0 100 100	37, 74, 106, 180	0
33	EL	203/204 (99%)	-0.10	0 100 100	51, 89, 121, 160	0
33	GL	203/204 (99%)	0.39	7 (3%) 45 34	89, 133, 165, 205	0
34	BM	298/301 (99%)	0.35	10 (3%) 45 34	87, 152, 201, 240	0
34	CM	300/301 (99%)	-0.12	3 (1%) 82 71	61, 110, 166, 208	0
34	EM	300/301 (99%)	0.23	17 (5%) 23 17	76, 127, 183, 233	0
34	GM	300/301 (99%)	0.69	28 (9%) 8 7	98, 157, 204, 233	0
35	BN	180/181 (99%)	0.04	1 (0%) 89 81	68, 110, 150, 224	0
35	CN	180/181 (99%)	-0.33	0 100 100	47, 82, 125, 185	0
35	EN	180/181 (99%)	-0.10	1 (0%) 89 81	63, 101, 142, 187	0
35	GN	180/181 (99%)	0.28	4 (2%) 62 48	94, 139, 188, 248	0
36	BO	184/185 (99%)	0.27	14 (7%) 13 11	29, 78, 184, 207	0
36	EO	146/185 (78%)	0.19	3 (2%) 63 50	57, 95, 128, 194	0
36	GO	153/185 (82%)	0.39	8 (5%) 27 20	67, 109, 153, 262	0
37	BP	156/157 (99%)	0.16	0 100 100	70, 116, 169, 203	0
37	CP	156/157 (99%)	-0.27	0 100 100	42, 79, 136, 152	0
37	EP	156/157 (99%)	-0.09	2 (1%) 77 65	56, 100, 148, 183	0
37	GP	156/157 (99%)	0.46	6 (3%) 40 30	69, 122, 163, 222	0
38	BQ	157/183 (85%)	-0.34	0 100 100	31, 68, 121, 173	0
38	CQ	157/183 (85%)	-0.32	1 (0%) 89 81	26, 70, 124, 158	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
38	EQ	157/183 (85%)	-0.18	1 (0%) 89 81	48, 86, 141, 177	0
38	GQ	157/183 (85%)	0.16	2 (1%) 77 65	60, 106, 157, 200	0
39	BR	121/150 (80%)	-0.20	1 (0%) 86 75	42, 78, 129, 185	0
39	CR	121/150 (80%)	0.05	1 (0%) 86 75	54, 88, 129, 172	0
39	ER	121/150 (80%)	0.18	5 (4%) 37 27	65, 112, 146, 172	0
39	GR	121/150 (80%)	0.45	9 (7%) 14 12	97, 138, 175, 191	0
40	BS	126/135 (93%)	-0.17	0 100 100	62, 98, 133, 177	0
40	CS	126/135 (93%)	0.02	4 (3%) 47 36	46, 89, 127, 152	0
40	ES	126/135 (93%)	0.16	5 (3%) 38 28	74, 112, 151, 184	0
40	GS	126/135 (93%)	0.58	9 (7%) 16 13	101, 143, 186, 218	0
41	BT	61/158 (38%)	-0.38	0 100 100	39, 73, 127, 158	0
41	CT	61/158 (38%)	-0.31	0 100 100	37, 73, 105, 137	0
41	ET	61/158 (38%)	-0.35	0 100 100	45, 78, 113, 147	0
41	GT	61/158 (38%)	-0.20	0 100 100	42, 76, 115, 138	0
42	BU	123/124 (99%)	-0.12	1 (0%) 86 75	59, 101, 139, 204	0
42	CU	123/124 (99%)	-0.22	1 (0%) 86 75	49, 92, 143, 163	0
42	EU	123/124 (99%)	-0.06	2 (1%) 72 59	79, 114, 157, 220	0
42	GU	123/124 (99%)	0.80	19 (15%) 2 2	113, 156, 193, 233	0
43	BV	234/239 (97%)	-0.32	0 100 100	61, 107, 160, 213	0
43	CV	234/239 (97%)	-0.44	0 100 100	47, 87, 145, 213	0
43	EV	234/239 (97%)	-0.36	1 (0%) 92 87	53, 102, 159, 232	0
43	GV	234/239 (97%)	-0.15	1 (0%) 92 87	75, 121, 173, 239	0
44	BW	110/111 (99%)	-0.21	2 (1%) 68 55	36, 64, 155, 204	0
44	CW	110/111 (99%)	-0.19	0 100 100	43, 76, 138, 178	0
44	EW	110/111 (99%)	-0.00	1 (0%) 84 73	56, 88, 170, 227	0
44	GW	110/111 (99%)	0.09	1 (0%) 84 73	63, 102, 183, 216	0
45	BX	125/134 (93%)	-0.01	2 (1%) 72 59	53, 89, 128, 202	0
45	CX	125/134 (93%)	-0.27	1 (0%) 86 75	40, 78, 116, 196	0
45	EX	125/134 (93%)	-0.13	2 (1%) 72 59	49, 88, 129, 233	0
45	GX	125/134 (93%)	0.34	4 (3%) 47 36	73, 117, 162, 215	0
46	BY	102/103 (99%)	-0.11	4 (3%) 39 29	40, 74, 164, 222	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
46	CY	102/103 (99%)	-0.21	4 (3%) 39 29	41, 83, 173, 196	0
46	EY	102/103 (99%)	-0.08	3 (2%) 51 38	45, 84, 156, 193	0
46	GY	102/103 (99%)	0.05	4 (3%) 39 29	53, 102, 189, 222	0
47	CO	146/185 (78%)	-0.08	0 100 100	45, 79, 115, 148	0
All	All	40083/43352 (92%)	0.07	964 (2%) 59 45	26, 101, 177, 390	0

The worst 5 of 964 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
2	HA	92	ALA	14.8
1	A1	2500	C	11.2
1	H1	1597	U	11.2
1	A1	1597	U	10.4
23	BB	387	GLU	10.1

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

There are no non-standard protein/DNA/RNA residues in this entry.

## 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<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
48	MG	D1	3463	1/1	-0.16	1.03	176,176,176,176	0
48	MG	G2	204	1/1	-0.14	0.92	181,181,181,181	0
48	MG	EW	201	1/1	-0.02	0.33	172,172,172,172	0
48	MG	H1	3529	1/1	0.04	0.33	214,214,214,214	0
48	MG	F1	3411	1/1	0.09	0.65	142,142,142,142	0
48	MG	H1	3489	1/1	0.10	0.45	206,206,206,206	0
48	MG	H1	3551	1/1	0.12	3.30	202,202,202,202	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	H1	3534	1/1	0.16	1.54	221,221,221,221	0
48	MG	G3	202	1/1	0.20	0.62	136,136,136,136	0
48	MG	H1	3519	1/1	0.21	0.31	151,151,151,151	0
48	MG	A1	3527	1/1	0.28	0.30	119,119,119,119	0
48	MG	F1	3561	1/1	0.30	0.24	167,167,167,167	0
48	MG	A1	3568	1/1	0.34	0.36	173,173,173,173	0
48	MG	F1	3415	1/1	0.35	0.32	118,118,118,118	0
48	MG	E3	204	1/1	0.36	1.60	199,199,199,199	0
48	MG	D1	3528	1/1	0.39	0.26	123,123,123,123	0
48	MG	H1	3548	1/1	0.40	0.38	188,188,188,188	0
48	MG	F1	3515	1/1	0.40	0.42	143,143,143,143	0
48	MG	D1	3611	1/1	0.41	0.63	205,205,205,205	0
48	MG	H1	3406	1/1	0.42	0.16	143,143,143,143	0
48	MG	H1	3525	1/1	0.42	0.39	157,157,157,157	0
48	MG	A1	3422	1/1	0.44	0.58	144,144,144,144	0
48	MG	H1	3547	1/1	0.44	0.31	175,175,175,175	0
48	MG	H1	3481	1/1	0.44	0.29	134,134,134,134	0
48	MG	F1	3575	1/1	0.44	0.25	130,130,130,130	0
48	MG	H1	3544	1/1	0.45	0.99	146,146,146,146	0
48	MG	F1	3539	1/1	0.46	1.11	187,187,187,187	0
48	MG	H1	3541	1/1	0.46	0.35	154,154,154,154	0
48	MG	A1	3585	1/1	0.47	0.45	152,152,152,152	0
48	MG	D1	3437	1/1	0.50	0.32	148,148,148,148	0
48	MG	E2	206	1/1	0.51	0.32	151,151,151,151	0
48	MG	D1	3608	1/1	0.52	0.23	115,115,115,115	0
48	MG	H1	3543	1/1	0.52	0.46	183,183,183,183	0
48	MG	A1	3428	1/1	0.52	0.60	159,159,159,159	0
48	MG	D1	3401	1/1	0.53	0.25	109,109,109,109	0
48	MG	H1	3450	1/1	0.53	0.73	156,156,156,156	0
48	MG	H1	3479	1/1	0.53	0.43	132,132,132,132	0
48	MG	F1	3540	1/1	0.53	0.21	111,111,111,111	0
48	MG	E2	205	1/1	0.53	0.60	140,140,140,140	0
48	MG	A1	3573	1/1	0.54	0.47	186,186,186,186	0
48	MG	H1	3409	1/1	0.54	0.55	193,193,193,193	0
48	MG	F1	3490	1/1	0.55	0.22	139,139,139,139	0
48	MG	D1	3606	1/1	0.55	1.19	157,157,157,157	0
48	MG	F1	3419	1/1	0.56	0.11	124,124,124,124	0
48	MG	D1	3624	1/1	0.57	0.61	162,162,162,162	0
48	MG	D1	3470	1/1	0.58	0.38	134,134,134,134	0
48	MG	F1	3522	1/1	0.58	0.18	111,111,111,111	0
48	MG	A1	3430	1/1	0.58	0.50	146,146,146,146	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	H1	3412	1/1	0.59	0.89	173,173,173,173	0
48	MG	H1	3414	1/1	0.59	0.54	169,169,169,169	0
48	MG	F1	3421	1/1	0.59	0.35	174,174,174,174	0
48	MG	A1	3556	1/1	0.59	0.18	124,124,124,124	0
48	MG	B3	201	1/1	0.59	0.29	129,129,129,129	0
48	MG	H1	3538	1/1	0.59	0.27	140,140,140,140	0
48	MG	H1	3536	1/1	0.60	0.86	168,168,168,168	0
48	MG	F1	3578	1/1	0.60	0.79	161,161,161,161	0
48	MG	F1	3496	1/1	0.61	0.24	122,122,122,122	0
48	MG	D1	3598	1/1	0.61	0.24	159,159,159,159	0
48	MG	D1	3616	1/1	0.61	0.20	150,150,150,150	0
48	MG	A1	3427	1/1	0.61	0.26	152,152,152,152	0
48	MG	F1	3430	1/1	0.61	0.15	128,128,128,128	0
48	MG	A1	3588	1/1	0.61	0.26	144,144,144,144	0
48	MG	A1	3402	1/1	0.62	0.31	143,143,143,143	0
48	MG	A1	3578	1/1	0.62	0.18	117,117,117,117	0
48	MG	H1	3554	1/1	0.62	0.68	128,128,128,128	0
48	MG	A1	3522	1/1	0.63	1.27	146,146,146,146	0
48	MG	H1	3470	1/1	0.63	0.16	140,140,140,140	0
48	MG	H1	3540	1/1	0.63	0.20	136,136,136,136	0
48	MG	H1	3533	1/1	0.63	1.06	153,153,153,153	0
48	MG	D1	3592	1/1	0.63	0.97	159,159,159,159	0
48	MG	A1	3583	1/1	0.64	0.44	112,112,112,112	0
48	MG	H1	3535	1/1	0.64	0.99	150,150,150,150	0
48	MG	G3	205	1/1	0.64	0.94	171,171,171,171	0
48	MG	G2	205	1/1	0.64	0.18	146,146,146,146	0
48	MG	F1	3414	1/1	0.65	0.20	123,123,123,123	0
48	MG	H1	3401	1/1	0.65	0.12	146,146,146,146	0
48	MG	F1	3509	1/1	0.65	0.34	144,144,144,144	0
48	MG	A1	3417	1/1	0.66	0.28	150,150,150,150	0
48	MG	A1	3593	1/1	0.66	0.72	158,158,158,158	0
48	MG	F1	3469	1/1	0.66	0.16	112,112,112,112	0
48	MG	D1	3605	1/1	0.66	0.13	108,108,108,108	0
48	MG	H1	3415	1/1	0.66	0.13	133,133,133,133	0
48	MG	D1	3446	1/1	0.66	0.83	176,176,176,176	0
48	MG	B2	207	1/1	0.66	0.38	149,149,149,149	0
48	MG	A1	3436	1/1	0.66	0.23	110,110,110,110	0
48	MG	D1	3521	1/1	0.66	0.28	129,129,129,129	0
48	MG	GN	201	1/1	0.66	0.52	212,212,212,212	0
48	MG	H1	3511	1/1	0.66	0.27	140,140,140,140	0
48	MG	H1	3516	1/1	0.66	0.28	129,129,129,129	0
48	MG	BQ	201	1/1	0.66	0.21	122,122,122,122	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
48	MG	H1	3402	1/1	0.66	0.23	118,118,118,118	0
48	MG	A1	3515	1/1	0.67	0.25	111,111,111,111	0
48	MG	EN	201	1/1	0.67	0.17	111,111,111,111	0
48	MG	G2	206	1/1	0.67	0.90	174,174,174,174	0
48	MG	F1	3570	1/1	0.67	0.27	113,113,113,113	0
48	MG	F1	3493	1/1	0.67	0.51	145,145,145,145	0
48	MG	D1	3497	1/1	0.67	0.53	151,151,151,151	0
48	MG	H1	3477	1/1	0.68	0.30	103,103,103,103	0
48	MG	B3	203	1/1	0.68	0.23	160,160,160,160	0
48	MG	H1	3532	1/1	0.68	0.39	162,162,162,162	0
48	MG	F1	3577	1/1	0.68	0.26	152,152,152,152	0
48	MG	D1	3548	1/1	0.68	0.96	183,183,183,183	0
48	MG	A1	3592	1/1	0.68	0.30	134,134,134,134	0
48	MG	H1	3550	1/1	0.68	0.44	152,152,152,152	0
48	MG	F1	3566	1/1	0.68	1.27	146,146,146,146	0
48	MG	A1	3580	1/1	0.68	0.21	130,130,130,130	0
48	MG	F1	3583	1/1	0.69	0.18	104,104,104,104	0
48	MG	C3	207	1/1	0.69	0.62	160,160,160,160	0
48	MG	H1	3542	1/1	0.69	0.36	137,137,137,137	0
48	MG	H1	3420	1/1	0.69	0.26	113,113,113,113	0
48	MG	E2	202	1/1	0.69	0.18	89,89,89,89	0
48	MG	F1	3555	1/1	0.70	0.27	168,168,168,168	0
48	MG	A1	3507	1/1	0.70	0.20	129,129,129,129	0
48	MG	D1	3597	1/1	0.70	0.83	158,158,158,158	0
48	MG	H1	3531	1/1	0.70	0.59	157,157,157,157	0
48	MG	A1	3435	1/1	0.71	0.54	151,151,151,151	0
48	MG	D1	3547	1/1	0.71	0.28	109,109,109,109	0
48	MG	A1	3451	1/1	0.71	0.16	146,146,146,146	0
48	MG	D1	3550	1/1	0.71	0.59	136,136,136,136	0
48	MG	D1	3467	1/1	0.72	0.18	123,123,123,123	0
48	MG	A1	3401	1/1	0.72	0.12	108,108,108,108	0
48	MG	F1	3489	1/1	0.72	0.10	85,85,85,85	0
48	MG	A1	3483	1/1	0.72	0.14	83,83,83,83	0
48	MG	D1	3603	1/1	0.72	0.44	125,125,125,125	0
48	MG	D1	3418	1/1	0.72	0.16	114,114,114,114	0
48	MG	D1	3576	1/1	0.72	0.54	150,150,150,150	0
48	MG	F1	3574	1/1	0.72	0.70	161,161,161,161	0
48	MG	D1	3579	1/1	0.72	0.10	97,97,97,97	0
48	MG	D1	3600	1/1	0.73	0.40	123,123,123,123	0
48	MG	F1	3563	1/1	0.73	0.18	124,124,124,124	0
48	MG	A1	3454	1/1	0.73	0.18	101,101,101,101	0
48	MG	H1	3410	1/1	0.73	0.44	192,192,192,192	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	A1	3595	1/1	0.73	1.09	151,151,151,151	0
48	MG	F1	3488	1/1	0.73	0.37	110,110,110,110	0
48	MG	D1	3596	1/1	0.73	0.66	165,165,165,165	0
48	MG	B2	201	1/1	0.73	0.20	119,119,119,119	0
48	MG	D1	3541	1/1	0.73	0.34	114,114,114,114	0
48	MG	D1	3424	1/1	0.74	0.43	150,150,150,150	0
48	MG	H1	3526	1/1	0.74	0.22	94,94,94,94	0
48	MG	D1	3429	1/1	0.74	0.23	113,113,113,113	0
48	MG	A1	3491	1/1	0.74	0.24	125,125,125,125	0
48	MG	H1	3418	1/1	0.74	0.21	141,141,141,141	0
48	MG	F1	3462	1/1	0.74	0.15	118,118,118,118	0
48	MG	A1	3416	1/1	0.74	0.23	140,140,140,140	0
48	MG	E3	206	1/1	0.74	0.35	132,132,132,132	0
48	MG	H1	3521	1/1	0.74	0.29	123,123,123,123	0
48	MG	H1	3524	1/1	0.74	0.57	139,139,139,139	0
48	MG	A1	3449	1/1	0.75	0.23	115,115,115,115	0
48	MG	D1	3434	1/1	0.75	0.63	144,144,144,144	0
48	MG	C3	205	1/1	0.75	1.45	175,175,175,175	0
48	MG	A1	3587	1/1	0.75	1.09	182,182,182,182	0
48	MG	GA	301	1/1	0.75	0.24	142,142,142,142	0
48	MG	A1	3420	1/1	0.75	0.30	155,155,155,155	0
48	MG	A1	3582	1/1	0.75	0.19	110,110,110,110	0
48	MG	A1	3437	1/1	0.75	0.48	141,141,141,141	0
48	MG	EW	202	1/1	0.75	0.20	121,121,121,121	0
48	MG	H1	3408	1/1	0.75	0.30	111,111,111,111	0
48	MG	D1	3625	1/1	0.75	0.39	164,164,164,164	0
48	MG	F1	3560	1/1	0.75	0.47	169,169,169,169	0
48	MG	A1	3576	1/1	0.76	0.40	122,122,122,122	0
48	MG	A1	3414	1/1	0.76	0.19	142,142,142,142	0
48	MG	D1	3583	1/1	0.76	0.32	139,139,139,139	0
48	MG	H1	3537	1/1	0.76	0.18	152,152,152,152	0
48	MG	E3	205	1/1	0.76	0.17	127,127,127,127	0
48	MG	H1	3539	1/1	0.76	0.34	128,128,128,128	0
48	MG	F1	3451	1/1	0.76	0.49	122,122,122,122	0
48	MG	F1	3580	1/1	0.76	0.21	147,147,147,147	0
48	MG	A1	3579	1/1	0.76	0.52	94,94,94,94	0
48	MG	F1	3554	1/1	0.76	0.18	131,131,131,131	0
48	MG	D1	3593	1/1	0.76	0.36	180,180,180,180	0
48	MG	A1	3567	1/1	0.76	0.30	144,144,144,144	0
48	MG	A1	3408	1/1	0.76	0.27	122,122,122,122	0
48	MG	A1	3547	1/1	0.76	0.16	81,81,81,81	0
48	MG	F1	3564	1/1	0.76	0.38	143,143,143,143	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	D1	3551	1/1	0.76	0.18	142,142,142,142	0
48	MG	D1	3514	1/1	0.77	0.20	128,128,128,128	0
48	MG	F1	3576	1/1	0.77	0.46	142,142,142,142	0
48	MG	F1	3511	1/1	0.77	0.71	154,154,154,154	0
48	MG	A1	3503	1/1	0.77	0.16	95,95,95,95	0
48	MG	F1	3519	1/1	0.77	0.16	65,65,65,65	0
48	MG	DJ	301	1/1	0.77	0.45	150,150,150,150	0
48	MG	H1	3446	1/1	0.77	0.34	120,120,120,120	0
48	MG	D1	3571	1/1	0.77	0.43	130,130,130,130	0
48	MG	D1	3588	1/1	0.77	0.18	156,156,156,156	0
48	MG	F1	3468	1/1	0.77	0.16	103,103,103,103	0
48	MG	A1	3431	1/1	0.78	0.12	90,90,90,90	0
48	MG	D1	3448	1/1	0.78	0.22	125,125,125,125	0
48	MG	H1	3492	1/1	0.78	0.13	96,96,96,96	0
48	MG	A1	3530	1/1	0.78	0.48	149,149,149,149	0
48	MG	F1	3503	1/1	0.78	0.18	129,129,129,129	0
48	MG	H1	3413	1/1	0.78	0.20	117,117,117,117	0
48	MG	H1	3473	1/1	0.78	0.19	123,123,123,123	0
48	MG	A1	3577	1/1	0.78	0.14	104,104,104,104	0
48	MG	H1	3478	1/1	0.78	0.10	114,114,114,114	0
48	MG	B2	202	1/1	0.78	0.12	103,103,103,103	0
48	MG	A1	3433	1/1	0.79	0.10	84,84,84,84	0
48	MG	F1	3483	1/1	0.79	0.32	129,129,129,129	0
48	MG	F1	3448	1/1	0.79	0.15	126,126,126,126	0
48	MG	F1	3550	1/1	0.79	0.21	154,154,154,154	0
48	MG	GP	201	1/1	0.79	0.47	109,109,109,109	0
48	MG	GP	202	1/1	0.79	0.24	137,137,137,137	0
48	MG	A1	3555	1/1	0.79	0.58	128,128,128,128	0
48	MG	FT	101	1/1	0.79	0.11	124,124,124,124	0
48	MG	F1	3572	1/1	0.79	0.36	155,155,155,155	0
48	MG	D1	3427	1/1	0.79	0.26	153,153,153,153	0
48	MG	D1	3442	1/1	0.79	0.35	126,126,126,126	0
48	MG	H1	3486	1/1	0.80	0.15	105,105,105,105	0
48	MG	A1	3591	1/1	0.80	0.27	121,121,121,121	0
48	MG	A1	3472	1/1	0.80	0.63	149,149,149,149	0
48	MG	C3	202	1/1	0.80	0.15	135,135,135,135	0
48	MG	A1	3419	1/1	0.80	0.14	100,100,100,100	0
48	MG	F1	3565	1/1	0.80	0.86	168,168,168,168	0
48	MG	A1	3551	1/1	0.80	0.33	123,123,123,123	0
48	MG	H1	3549	1/1	0.80	0.47	124,124,124,124	0
48	MG	B3	202	1/1	0.80	0.15	113,113,113,113	0
48	MG	D1	3417	1/1	0.80	0.20	132,132,132,132	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	D1	3516	1/1	0.80	0.36	82,82,82,82	0
48	MG	H1	3433	1/1	0.81	0.19	132,132,132,132	0
48	MG	H1	3434	1/1	0.81	0.18	93,93,93,93	0
48	MG	CD	201	1/1	0.81	0.16	93,93,93,93	0
48	MG	D1	3604	1/1	0.81	0.44	141,141,141,141	0
48	MG	D1	3626	1/1	0.81	0.20	137,137,137,137	0
48	MG	F1	3548	1/1	0.81	0.12	106,106,106,106	0
48	MG	D1	3627	1/1	0.81	0.08	119,119,119,119	0
48	MG	F1	3501	1/1	0.81	0.16	116,116,116,116	0
48	MG	C2	206	1/1	0.81	0.31	123,123,123,123	0
48	MG	A1	3589	1/1	0.81	0.13	113,113,113,113	0
48	MG	A1	3425	1/1	0.81	0.16	107,107,107,107	0
48	MG	D1	3586	1/1	0.81	0.16	109,109,109,109	0
48	MG	A1	3586	1/1	0.81	0.72	177,177,177,177	0
48	MG	H1	3553	1/1	0.81	0.39	146,146,146,146	0
48	MG	H1	3503	1/1	0.81	0.26	91,91,91,91	0
48	MG	HT	101	1/1	0.81	0.35	174,174,174,174	0
48	MG	F1	3422	1/1	0.82	0.29	149,149,149,149	0
48	MG	F1	3425	1/1	0.82	0.33	115,115,115,115	0
48	MG	F1	3428	1/1	0.82	0.30	111,111,111,111	0
48	MG	A1	3499	1/1	0.82	0.16	117,117,117,117	0
48	MG	H1	3436	1/1	0.82	0.43	146,146,146,146	0
48	MG	H1	3443	1/1	0.82	0.42	157,157,157,157	0
48	MG	F1	3447	1/1	0.82	0.30	156,156,156,156	0
48	MG	H1	3448	1/1	0.82	0.15	98,98,98,98	0
48	MG	A1	3461	1/1	0.82	0.14	67,67,67,67	0
48	MG	F1	3567	1/1	0.82	0.42	128,128,128,128	0
48	MG	D1	3557	1/1	0.82	0.13	116,116,116,116	0
48	MG	H1	3530	1/1	0.82	0.34	154,154,154,154	0
48	MG	H1	3411	1/1	0.82	0.32	120,120,120,120	0
48	MG	F1	3498	1/1	0.82	0.22	141,141,141,141	0
48	MG	D1	3565	1/1	0.82	0.33	114,114,114,114	0
48	MG	D1	3594	1/1	0.82	0.23	106,106,106,106	0
48	MG	F1	3506	1/1	0.82	0.32	114,114,114,114	0
48	MG	D1	3433	1/1	0.83	0.14	149,149,149,149	0
48	MG	D1	3425	1/1	0.83	0.59	123,123,123,123	0
48	MG	F1	3573	1/1	0.83	0.08	84,84,84,84	0
48	MG	D1	3435	1/1	0.83	0.14	108,108,108,108	0
48	MG	F1	3482	1/1	0.83	0.21	130,130,130,130	0
48	MG	A1	3453	1/1	0.83	0.72	184,184,184,184	0
48	MG	E2	201	1/1	0.83	0.34	156,156,156,156	0
48	MG	F1	3549	1/1	0.83	0.20	125,125,125,125	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	A1	3444	1/1	0.83	0.13	126,126,126,126	0
48	MG	H1	3482	1/1	0.83	0.61	162,162,162,162	0
48	MG	D1	3540	1/1	0.83	0.20	139,139,139,139	0
48	MG	D1	3609	1/1	0.83	0.67	120,120,120,120	0
48	MG	D1	3574	1/1	0.83	0.12	80,80,80,80	0
48	MG	D1	3613	1/1	0.83	0.23	120,120,120,120	0
48	MG	H1	3509	1/1	0.83	0.18	143,143,143,143	0
48	MG	D1	3615	1/1	0.83	0.24	132,132,132,132	0
48	MG	D1	3484	1/1	0.83	0.31	96,96,96,96	0
48	MG	H1	3422	1/1	0.83	0.46	151,151,151,151	0
48	MG	G3	204	1/1	0.83	0.36	143,143,143,143	0
48	MG	D1	3485	1/1	0.83	0.17	120,120,120,120	0
48	MG	H1	3552	1/1	0.83	0.18	131,131,131,131	0
48	MG	F1	3453	1/1	0.83	0.23	131,131,131,131	0
48	MG	H1	3438	1/1	0.83	0.29	120,120,120,120	0
48	MG	F1	3461	1/1	0.83	0.49	106,106,106,106	0
48	MG	H1	3462	1/1	0.84	0.36	131,131,131,131	0
48	MG	H1	3465	1/1	0.84	0.42	143,143,143,143	0
48	MG	A1	3412	1/1	0.84	0.33	117,117,117,117	0
48	MG	A1	3409	1/1	0.84	0.14	87,87,87,87	0
48	MG	D1	3607	1/1	0.84	0.30	89,89,89,89	0
48	MG	F1	3464	1/1	0.84	0.23	120,120,120,120	0
48	MG	A1	3565	1/1	0.84	0.13	132,132,132,132	0
48	MG	D1	3530	1/1	0.84	0.16	94,94,94,94	0
48	MG	H1	3417	1/1	0.84	0.11	114,114,114,114	0
48	MG	BN	201	1/1	0.84	0.22	147,147,147,147	0
48	MG	A1	3513	1/1	0.84	0.33	133,133,133,133	0
48	MG	H1	3490	1/1	0.84	0.55	122,122,122,122	0
48	MG	F1	3424	1/1	0.84	0.31	114,114,114,114	0
48	MG	H1	3426	1/1	0.84	0.15	105,105,105,105	0
48	MG	GO	201	1/1	0.84	0.44	141,141,141,141	0
48	MG	E3	203	1/1	0.84	0.17	104,104,104,104	0
48	MG	D1	3614	1/1	0.84	0.19	129,129,129,129	0
48	MG	C2	205	1/1	0.84	0.19	127,127,127,127	0
48	MG	H1	3441	1/1	0.84	0.15	102,102,102,102	0
48	MG	D1	3582	1/1	0.84	0.19	93,93,93,93	0
48	MG	A1	3553	1/1	0.84	0.16	108,108,108,108	0
48	MG	F1	3558	1/1	0.84	0.17	144,144,144,144	0
48	MG	H1	3528	1/1	0.84	0.23	119,119,119,119	0
48	MG	B2	208	1/1	0.84	0.42	138,138,138,138	0
48	MG	F1	3413	1/1	0.85	0.38	110,110,110,110	0
48	MG	H1	3487	1/1	0.85	0.19	122,122,122,122	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
48	MG	A1	3594	1/1	0.85	0.28	150,150,150,150	0
48	MG	A1	3528	1/1	0.85	0.37	120,120,120,120	0
48	MG	D1	3426	1/1	0.85	0.38	143,143,143,143	0
48	MG	F1	3545	1/1	0.85	0.21	137,137,137,137	0
48	MG	D1	3482	1/1	0.85	0.15	106,106,106,106	0
48	MG	A1	3450	1/1	0.85	0.20	133,133,133,133	0
48	MG	D1	3534	1/1	0.85	0.20	98,98,98,98	0
48	MG	A1	3569	1/1	0.85	0.09	91,91,91,91	0
48	MG	A1	3571	1/1	0.85	0.24	100,100,100,100	0
48	MG	H1	3546	1/1	0.85	0.27	120,120,120,120	0
48	MG	D1	3580	1/1	0.85	0.11	95,95,95,95	0
48	MG	G2	201	1/1	0.85	0.14	141,141,141,141	0
48	MG	F1	3433	1/1	0.85	0.64	95,95,95,95	0
48	MG	D1	3542	1/1	0.85	0.13	71,71,71,71	0
48	MG	EN	202	1/1	0.85	1.14	238,238,238,238	0
48	MG	D1	3499	1/1	0.85	0.14	118,118,118,118	0
48	MG	D1	3513	1/1	0.85	0.16	89,89,89,89	0
48	MG	F1	3403	1/1	0.85	0.11	96,96,96,96	0
48	MG	D1	3631	1/1	0.85	0.08	78,78,78,78	0
48	MG	F1	3529	1/1	0.86	0.71	140,140,140,140	0
48	MG	H1	3484	1/1	0.86	0.24	166,166,166,166	0
48	MG	F1	3569	1/1	0.86	0.40	130,130,130,130	0
48	MG	F1	3408	1/1	0.86	0.14	82,82,82,82	0
48	MG	D1	3515	1/1	0.86	0.15	106,106,106,106	0
48	MG	F1	3542	1/1	0.86	0.13	107,107,107,107	0
48	MG	F1	3544	1/1	0.86	0.13	97,97,97,97	0
48	MG	GQ	201	1/1	0.86	0.30	102,102,102,102	0
48	MG	D1	3622	1/1	0.86	0.30	133,133,133,133	0
48	MG	A1	3584	1/1	0.86	0.23	125,125,125,125	0
48	MG	H1	3512	1/1	0.86	0.31	121,121,121,121	0
48	MG	F1	3495	1/1	0.86	0.12	83,83,83,83	0
48	MG	A1	3552	1/1	0.86	0.10	97,97,97,97	0
48	MG	D1	3522	1/1	0.86	0.64	162,162,162,162	0
48	MG	D1	3444	1/1	0.86	0.22	139,139,139,139	0
48	MG	F1	3463	1/1	0.86	0.19	100,100,100,100	0
48	MG	D1	3504	1/1	0.86	0.27	98,98,98,98	0
48	MG	CQ	201	1/1	0.86	0.18	127,127,127,127	0
48	MG	DQ	201	1/1	0.86	0.32	118,118,118,118	0
48	MG	F1	3477	1/1	0.86	0.68	146,146,146,146	0
48	MG	D1	3561	1/1	0.86	0.19	57,57,57,57	0
48	MG	D1	3421	1/1	0.86	0.22	126,126,126,126	0
48	MG	D1	3439	1/1	0.87	0.38	146,146,146,146	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	A1	3566	1/1	0.87	0.11	75,75,75,75	0
48	MG	F1	3423	1/1	0.87	0.08	56,56,56,56	0
48	MG	F1	3491	1/1	0.87	0.18	96,96,96,96	0
48	MG	F1	3492	1/1	0.87	0.20	78,78,78,78	0
48	MG	H1	3459	1/1	0.87	0.10	97,97,97,97	0
48	MG	D1	3525	1/1	0.87	0.34	113,113,113,113	0
48	MG	A1	3574	1/1	0.87	0.15	119,119,119,119	0
48	MG	D1	3563	1/1	0.87	0.12	93,93,93,93	0
48	MG	D1	3595	1/1	0.87	0.23	94,94,94,94	0
48	MG	D1	3445	1/1	0.87	0.19	126,126,126,126	0
48	MG	F1	3434	1/1	0.87	0.13	83,83,83,83	0
48	MG	D1	3618	1/1	0.87	0.09	95,95,95,95	0
48	MG	D1	3621	1/1	0.87	0.15	110,110,110,110	0
48	MG	D1	3532	1/1	0.87	0.14	119,119,119,119	0
48	MG	D1	3623	1/1	0.87	0.26	151,151,151,151	0
48	MG	A1	3531	1/1	0.87	0.28	128,128,128,128	0
48	MG	F1	3401	1/1	0.87	0.35	101,101,101,101	0
48	MG	F1	3527	1/1	0.87	0.30	105,105,105,105	0
48	MG	H1	3545	1/1	0.87	0.19	156,156,156,156	0
48	MG	D1	3575	1/1	0.87	0.13	124,124,124,124	0
48	MG	F1	3532	1/1	0.87	0.19	87,87,87,87	0
48	MG	F1	3538	1/1	0.87	0.36	113,113,113,113	0
48	MG	A1	3455	1/1	0.87	0.13	111,111,111,111	0
48	MG	D1	3422	1/1	0.87	0.22	150,150,150,150	0
48	MG	A1	3474	1/1	0.87	0.13	88,88,88,88	0
48	MG	F1	3473	1/1	0.87	0.42	156,156,156,156	0
48	MG	DA	102	1/1	0.87	0.20	115,115,115,115	0
48	MG	A1	3497	1/1	0.87	0.12	116,116,116,116	0
48	MG	D1	3475	1/1	0.87	0.51	120,120,120,120	0
48	MG	H1	3407	1/1	0.88	0.20	105,105,105,105	0
48	MG	A1	3404	1/1	0.88	0.12	94,94,94,94	0
48	MG	F1	3500	1/1	0.88	0.17	105,105,105,105	0
48	MG	B2	206	1/1	0.88	0.45	139,139,139,139	0
48	MG	H1	3472	1/1	0.88	0.32	104,104,104,104	0
48	MG	D1	3496	1/1	0.88	0.16	78,78,78,78	0
48	MG	A1	3424	1/1	0.88	0.37	150,150,150,150	0
48	MG	F1	3556	1/1	0.88	0.08	90,90,90,90	0
48	MG	D1	3498	1/1	0.88	0.47	99,99,99,99	0
48	MG	D1	3620	1/1	0.88	0.15	106,106,106,106	0
48	MG	D1	3599	1/1	0.88	0.27	126,126,126,126	0
48	MG	G3	201	1/1	0.88	0.12	119,119,119,119	0
48	MG	H1	3485	1/1	0.88	0.12	104,104,104,104	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	F1	3516	1/1	0.88	0.30	121,121,121,121	0
48	MG	A1	3554	1/1	0.88	0.14	76,76,76,76	0
48	MG	H1	3425	1/1	0.88	0.31	108,108,108,108	0
48	MG	D1	3602	1/1	0.88	0.19	118,118,118,118	0
48	MG	F1	3485	1/1	0.88	0.16	117,117,117,117	0
48	MG	A1	3516	1/1	0.88	0.23	88,88,88,88	0
48	MG	H1	3504	1/1	0.88	0.11	111,111,111,111	0
48	MG	D1	3505	1/1	0.88	0.16	84,84,84,84	0
48	MG	H1	3510	1/1	0.88	0.24	120,120,120,120	0
48	MG	A1	3536	1/1	0.88	0.14	104,104,104,104	0
48	MG	A1	3542	1/1	0.88	0.22	96,96,96,96	0
48	MG	CW	201	1/1	0.88	0.29	90,90,90,90	0
48	MG	A1	3415	1/1	0.88	0.20	120,120,120,120	0
48	MG	BP	200	1/1	0.88	0.10	123,123,123,123	0
48	MG	A1	3512	1/1	0.88	0.10	90,90,90,90	0
48	MG	H1	3452	1/1	0.88	0.10	108,108,108,108	0
48	MG	D1	3523	1/1	0.89	0.10	105,105,105,105	0
48	MG	A1	3563	1/1	0.89	0.13	100,100,100,100	0
48	MG	A1	3423	1/1	0.89	0.21	115,115,115,115	0
48	MG	A1	3492	1/1	0.89	0.28	127,127,127,127	0
48	MG	F1	3502	1/1	0.89	0.26	108,108,108,108	0
48	MG	A1	3438	1/1	0.89	0.23	148,148,148,148	0
48	MG	H1	3404	1/1	0.89	0.11	132,132,132,132	0
48	MG	A1	3479	1/1	0.89	0.22	120,120,120,120	0
48	MG	C2	201	1/1	0.89	0.15	121,121,121,121	0
48	MG	H1	3496	1/1	0.89	0.44	141,141,141,141	0
48	MG	H1	3499	1/1	0.89	0.11	75,75,75,75	0
48	MG	H1	3501	1/1	0.89	0.30	110,110,110,110	0
48	MG	F1	3431	1/1	0.89	0.17	103,103,103,103	0
48	MG	D1	3468	1/1	0.89	0.13	75,75,75,75	0
48	MG	F1	3559	1/1	0.89	0.10	133,133,133,133	0
48	MG	F1	3484	1/1	0.89	0.17	78,78,78,78	0
48	MG	D1	3577	1/1	0.89	0.22	121,121,121,121	0
48	MG	H1	3464	1/1	0.89	0.15	108,108,108,108	0
48	MG	F1	3446	1/1	0.89	0.20	130,130,130,130	0
48	MG	H1	3468	1/1	0.89	0.23	121,121,121,121	0
48	MG	A1	3532	1/1	0.89	0.07	74,74,74,74	0
48	MG	A1	3590	1/1	0.89	0.26	142,142,142,142	0
48	MG	A1	3500	1/1	0.89	0.30	89,89,89,89	0
48	MG	D1	3440	1/1	0.89	0.12	99,99,99,99	0
48	MG	F1	3456	1/1	0.89	0.07	62,62,62,62	0
48	MG	H1	3555	1/1	0.89	0.15	123,123,123,123	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	A1	3470	1/1	0.89	0.32	164,164,164,164	0
48	MG	A1	3443	1/1	0.90	0.14	90,90,90,90	0
48	MG	C2	202	1/1	0.90	0.23	112,112,112,112	0
48	MG	F1	3553	1/1	0.90	0.09	68,68,68,68	0
48	MG	H1	3442	1/1	0.90	0.09	79,79,79,79	0
48	MG	H1	3518	1/1	0.90	0.15	110,110,110,110	0
48	MG	A1	3596	1/1	0.90	0.30	163,163,163,163	0
48	MG	F1	3457	1/1	0.90	0.27	91,91,91,91	0
48	MG	H1	3523	1/1	0.90	0.12	167,167,167,167	0
48	MG	A1	3600	1/1	0.90	0.11	111,111,111,111	0
48	MG	H1	3449	1/1	0.90	0.62	118,118,118,118	0
48	MG	A1	3575	1/1	0.90	0.62	143,143,143,143	0
48	MG	C3	203	1/1	0.90	0.08	69,69,69,69	0
48	MG	H1	3457	1/1	0.90	0.56	147,147,147,147	0
48	MG	A1	3510	1/1	0.90	0.21	109,109,109,109	0
48	MG	E2	207	1/1	0.90	0.41	147,147,147,147	0
48	MG	D1	3535	1/1	0.90	0.17	86,86,86,86	0
48	MG	F1	3513	1/1	0.90	0.17	79,79,79,79	0
48	MG	F1	3472	1/1	0.90	0.15	111,111,111,111	0
48	MG	D1	3538	1/1	0.90	0.10	119,119,119,119	0
48	MG	F1	3475	1/1	0.90	0.17	93,93,93,93	0
48	MG	D1	3511	1/1	0.90	0.24	118,118,118,118	0
48	MG	D1	3472	1/1	0.90	0.10	82,82,82,82	0
48	MG	EL	302	1/1	0.90	0.09	68,68,68,68	0
48	MG	A1	3471	1/1	0.90	0.31	88,88,88,88	0
48	MG	F1	3534	1/1	0.90	0.08	79,79,79,79	0
48	MG	F1	3535	1/1	0.90	0.11	58,58,58,58	0
48	MG	F1	3537	1/1	0.90	0.21	136,136,136,136	0
48	MG	D1	3481	1/1	0.90	0.39	114,114,114,114	0
48	MG	A1	3529	1/1	0.90	0.10	96,96,96,96	0
48	MG	F1	3579	1/1	0.90	0.12	166,166,166,166	0
48	MG	H1	3488	1/1	0.90	0.19	108,108,108,108	0
48	MG	F1	3439	1/1	0.90	0.09	62,62,62,62	0
48	MG	F1	3581	1/1	0.90	0.38	144,144,144,144	0
48	MG	F1	3541	1/1	0.90	0.23	112,112,112,112	0
48	MG	F1	3440	1/1	0.90	0.11	82,82,82,82	0
48	MG	D1	3549	1/1	0.90	0.13	99,99,99,99	0
48	MG	H1	3430	1/1	0.90	0.20	82,82,82,82	0
48	MG	D1	3628	1/1	0.90	0.07	107,107,107,107	0
48	MG	CL	301	1/1	0.90	0.15	109,109,109,109	0
48	MG	H1	3435	1/1	0.90	0.17	116,116,116,116	0
49	ZN	HC	201	1/1	0.90	0.04	168,168,168,168	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
48	MG	E3	202	1/1	0.91	0.20	122,122,122,122	0
48	MG	F1	3429	1/1	0.91	0.17	73,73,73,73	0
48	MG	D1	3543	1/1	0.91	0.27	127,127,127,127	0
48	MG	F1	3568	1/1	0.91	0.13	98,98,98,98	0
48	MG	GW	201	1/1	0.91	0.22	114,114,114,114	0
48	MG	H1	3455	1/1	0.91	0.14	113,113,113,113	0
48	MG	H1	3456	1/1	0.91	0.76	145,145,145,145	0
48	MG	D1	3545	1/1	0.91	0.15	88,88,88,88	0
48	MG	A1	3498	1/1	0.91	0.11	116,116,116,116	0
48	MG	F1	3571	1/1	0.91	0.29	132,132,132,132	0
48	MG	A1	3447	1/1	0.91	0.13	58,58,58,58	0
48	MG	D1	3476	1/1	0.91	0.08	43,43,43,43	0
48	MG	D1	3441	1/1	0.91	0.15	75,75,75,75	0
48	MG	A1	3403	1/1	0.91	0.13	96,96,96,96	0
48	MG	A1	3496	1/1	0.91	0.24	137,137,137,137	0
48	MG	CY	201	1/1	0.91	0.20	99,99,99,99	0
48	MG	A1	3467	1/1	0.91	0.19	106,106,106,106	0
48	MG	D1	3447	1/1	0.91	0.23	101,101,101,101	0
48	MG	F1	3497	1/1	0.91	0.12	93,93,93,93	0
48	MG	D1	3568	1/1	0.91	0.17	105,105,105,105	0
48	MG	H1	3416	1/1	0.91	0.66	113,113,113,113	0
48	MG	D1	3406	1/1	0.91	0.14	67,67,67,67	0
48	MG	FA	101	1/1	0.91	0.11	97,97,97,97	0
48	MG	FK	201	1/1	0.91	0.50	168,168,168,168	0
48	MG	D1	3572	1/1	0.91	0.23	69,69,69,69	0
48	MG	D1	3573	1/1	0.91	0.14	126,126,126,126	0
48	MG	G2	202	1/1	0.91	0.34	122,122,122,122	0
48	MG	H1	3429	1/1	0.91	0.14	87,87,87,87	0
48	MG	D1	3409	1/1	0.91	0.13	57,57,57,57	0
48	MG	H1	3432	1/1	0.91	0.09	91,91,91,91	0
48	MG	D1	3416	1/1	0.91	0.24	110,110,110,110	0
48	MG	F1	3466	1/1	0.91	0.34	140,140,140,140	0
48	MG	A1	3572	1/1	0.91	0.23	121,121,121,121	0
48	MG	D1	3506	1/1	0.91	0.30	132,132,132,132	0
48	MG	D1	3507	1/1	0.91	0.10	75,75,75,75	0
48	MG	A1	3519	1/1	0.91	0.10	113,113,113,113	0
48	MG	D1	3512	1/1	0.91	0.14	101,101,101,101	0
48	MG	F1	3520	1/1	0.91	0.19	85,85,85,85	0
48	MG	D1	3581	1/1	0.92	0.08	68,68,68,68	0
48	MG	H1	3505	1/1	0.92	0.11	95,95,95,95	0
48	MG	H1	3508	1/1	0.92	0.16	80,80,80,80	0
48	MG	G3	203	1/1	0.92	0.13	86,86,86,86	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	D1	3451	1/1	0.92	0.42	115,115,115,115	0
48	MG	D1	3452	1/1	0.92	0.15	106,106,106,106	0
48	MG	A1	3518	1/1	0.92	0.24	109,109,109,109	0
48	MG	A1	3509	1/1	0.92	0.12	128,128,128,128	0
48	MG	F1	3562	1/1	0.92	0.40	140,140,140,140	0
48	MG	H1	3447	1/1	0.92	0.25	110,110,110,110	0
48	MG	D1	3432	1/1	0.92	0.17	118,118,118,118	0
48	MG	F1	3402	1/1	0.92	0.09	83,83,83,83	0
48	MG	AK	202	1/1	0.92	0.72	179,179,179,179	0
48	MG	F1	3407	1/1	0.92	0.10	111,111,111,111	0
48	MG	D1	3403	1/1	0.92	0.07	89,89,89,89	0
48	MG	F1	3517	1/1	0.92	0.11	62,62,62,62	0
48	MG	H1	3403	1/1	0.92	0.14	111,111,111,111	0
48	MG	A1	3521	1/1	0.92	0.12	105,105,105,105	0
48	MG	D1	3552	1/1	0.92	0.06	55,55,55,55	0
48	MG	D1	3517	1/1	0.92	0.31	127,127,127,127	0
48	MG	F1	3470	1/1	0.92	0.09	49,49,49,49	0
48	MG	H1	3467	1/1	0.92	0.11	95,95,95,95	0
48	MG	D1	3407	1/1	0.92	0.09	70,70,70,70	0
48	MG	D1	3562	1/1	0.92	0.22	93,93,93,93	0
48	MG	A1	3429	1/1	0.92	0.11	122,122,122,122	0
48	MG	B2	204	1/1	0.92	0.08	85,85,85,85	0
48	MG	H1	3474	1/1	0.92	0.09	123,123,123,123	0
48	MG	A1	3548	1/1	0.92	0.17	124,124,124,124	0
48	MG	A1	3511	1/1	0.92	0.08	90,90,90,90	0
48	MG	D1	3491	1/1	0.92	0.15	97,97,97,97	0
48	MG	H1	3480	1/1	0.92	0.14	81,81,81,81	0
48	MG	D1	3443	1/1	0.92	0.48	112,112,112,112	0
48	MG	A1	3468	1/1	0.92	0.18	109,109,109,109	0
48	MG	A1	3581	1/1	0.92	0.32	126,126,126,126	0
48	MG	F1	3543	1/1	0.92	0.09	71,71,71,71	0
48	MG	D1	3537	1/1	0.92	0.28	121,121,121,121	0
48	MG	H1	3424	1/1	0.92	0.08	96,96,96,96	0
48	MG	D1	3610	1/1	0.92	0.21	66,66,66,66	0
48	MG	A1	3501	1/1	0.92	0.22	102,102,102,102	0
48	MG	A1	3490	1/1	0.92	0.21	105,105,105,105	0
48	MG	A1	3464	1/1	0.92	0.06	64,64,64,64	0
48	MG	H1	3431	1/1	0.92	0.25	94,94,94,94	0
48	MG	F1	3442	1/1	0.92	0.27	109,109,109,109	0
48	MG	F1	3444	1/1	0.92	0.42	155,155,155,155	0
48	MG	EL	301	1/1	0.92	0.12	119,119,119,119	0
48	MG	H1	3451	1/1	0.93	0.13	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	H1	3405	1/1	0.93	0.25	101,101,101,101	0
48	MG	H1	3513	1/1	0.93	0.11	87,87,87,87	0
48	MG	F1	3479	1/1	0.93	0.29	81,81,81,81	0
48	MG	H1	3517	1/1	0.93	0.16	79,79,79,79	0
48	MG	A1	3560	1/1	0.93	0.45	138,138,138,138	0
48	MG	A1	3562	1/1	0.93	0.20	91,91,91,91	0
48	MG	H1	3520	1/1	0.93	0.17	114,114,114,114	0
48	MG	A1	3549	1/1	0.93	0.13	54,54,54,54	0
48	MG	H1	3522	1/1	0.93	0.16	107,107,107,107	0
48	MG	H1	3461	1/1	0.93	0.15	134,134,134,134	0
48	MG	D1	3585	1/1	0.93	0.08	108,108,108,108	0
48	MG	A1	3564	1/1	0.93	0.07	141,141,141,141	0
48	MG	F1	3436	1/1	0.93	0.10	70,70,70,70	0
48	MG	H1	3527	1/1	0.93	0.14	99,99,99,99	0
48	MG	A1	3493	1/1	0.93	0.21	113,113,113,113	0
48	MG	D1	3412	1/1	0.93	0.35	95,95,95,95	0
48	MG	D1	3414	1/1	0.93	0.15	96,96,96,96	0
48	MG	A1	3488	1/1	0.93	0.17	91,91,91,91	0
48	MG	FA	102	1/1	0.93	0.10	84,84,84,84	0
48	MG	F1	3494	1/1	0.93	0.12	97,97,97,97	0
48	MG	H1	3419	1/1	0.93	0.17	62,62,62,62	0
48	MG	D1	3520	1/1	0.93	0.11	93,93,93,93	0
48	MG	A1	3541	1/1	0.93	0.35	86,86,86,86	0
48	MG	F1	3551	1/1	0.93	0.24	91,91,91,91	0
48	MG	C3	204	1/1	0.93	0.11	85,85,85,85	0
48	MG	F1	3405	1/1	0.93	0.13	79,79,79,79	0
48	MG	F1	3406	1/1	0.93	0.08	83,83,83,83	0
48	MG	F1	3455	1/1	0.93	0.09	65,65,65,65	0
48	MG	A1	3475	1/1	0.93	0.22	80,80,80,80	0
48	MG	D1	3487	1/1	0.93	0.09	65,65,65,65	0
48	MG	F1	3458	1/1	0.93	0.09	95,95,95,95	0
48	MG	D1	3527	1/1	0.93	0.28	106,106,106,106	0
48	MG	A1	3441	1/1	0.93	0.50	127,127,127,127	0
48	MG	D1	3494	1/1	0.93	0.13	78,78,78,78	0
48	MG	H1	3495	1/1	0.93	0.06	65,65,65,65	0
48	MG	D1	3531	1/1	0.93	0.08	87,87,87,87	0
48	MG	A1	3570	1/1	0.93	0.08	70,70,70,70	0
48	MG	F1	3420	1/1	0.93	0.09	88,88,88,88	0
48	MG	A1	3439	1/1	0.93	0.08	106,106,106,106	0
48	MG	BL	301	1/1	0.93	0.09	71,71,71,71	0
48	MG	A1	3559	1/1	0.93	0.06	89,89,89,89	0
48	MG	A1	3599	1/1	0.93	0.12	103,103,103,103	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	D1	3454	1/1	0.93	0.14	64,64,64,64	0
48	MG	D1	3458	1/1	0.93	0.06	51,51,51,51	0
48	MG	H1	3428	1/1	0.94	0.12	77,77,77,77	0
48	MG	F1	3531	1/1	0.94	0.09	95,95,95,95	0
48	MG	A1	3504	1/1	0.94	0.49	138,138,138,138	0
48	MG	F1	3533	1/1	0.94	0.18	101,101,101,101	0
48	MG	F1	3417	1/1	0.94	0.17	110,110,110,110	0
48	MG	F1	3471	1/1	0.94	0.17	90,90,90,90	0
48	MG	F1	3536	1/1	0.94	0.20	67,67,67,67	0
48	MG	F1	3418	1/1	0.94	0.12	126,126,126,126	0
48	MG	DA	101	1/1	0.94	0.07	82,82,82,82	0
48	MG	D1	3564	1/1	0.94	0.21	92,92,92,92	0
48	MG	H1	3440	1/1	0.94	0.08	73,73,73,73	0
48	MG	A1	3505	1/1	0.94	0.12	137,137,137,137	0
48	MG	F1	3478	1/1	0.94	0.12	73,73,73,73	0
48	MG	D1	3601	1/1	0.94	0.22	124,124,124,124	0
48	MG	F1	3480	1/1	0.94	0.12	59,59,59,59	0
48	MG	D1	3431	1/1	0.94	0.19	95,95,95,95	0
48	MG	D1	3455	1/1	0.94	0.09	80,80,80,80	0
48	MG	E2	203	1/1	0.94	0.07	77,77,77,77	0
48	MG	B2	205	1/1	0.94	0.09	81,81,81,81	0
48	MG	A1	3407	1/1	0.94	0.11	83,83,83,83	0
48	MG	C3	201	1/1	0.94	0.34	123,123,123,123	0
48	MG	H1	3454	1/1	0.94	0.12	111,111,111,111	0
48	MG	A1	3448	1/1	0.94	0.14	78,78,78,78	0
48	MG	D1	3508	1/1	0.94	0.05	86,86,86,86	0
48	MG	D1	3413	1/1	0.94	0.09	51,51,51,51	0
48	MG	A1	3533	1/1	0.94	0.22	73,73,73,73	0
48	MG	F1	3557	1/1	0.94	0.15	84,84,84,84	0
48	MG	F1	3437	1/1	0.94	0.17	100,100,100,100	0
48	MG	A1	3481	1/1	0.94	0.16	88,88,88,88	0
48	MG	EJ	201	1/1	0.94	0.12	69,69,69,69	0
48	MG	D1	3612	1/1	0.94	0.23	123,123,123,123	0
48	MG	F1	3443	1/1	0.94	0.06	104,104,104,104	0
48	MG	H1	3469	1/1	0.94	0.34	119,119,119,119	0
48	MG	A1	3405	1/1	0.94	0.08	65,65,65,65	0
48	MG	H1	3471	1/1	0.94	0.21	124,124,124,124	0
48	MG	D1	3478	1/1	0.94	0.12	81,81,81,81	0
48	MG	A1	3494	1/1	0.94	0.07	98,98,98,98	0
48	MG	D1	3584	1/1	0.94	0.13	101,101,101,101	0
48	MG	H1	3475	1/1	0.94	0.10	70,70,70,70	0
48	MG	D1	3617	1/1	0.94	0.34	113,113,113,113	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	F1	3507	1/1	0.94	0.17	87,87,87,87	0
48	MG	BJ	201	1/1	0.94	0.17	66,66,66,66	0
48	MG	AA	102	1/1	0.94	0.08	98,98,98,98	0
48	MG	D1	3423	1/1	0.94	0.17	67,67,67,67	0
48	MG	D1	3589	1/1	0.94	0.26	107,107,107,107	0
48	MG	AA	103	1/1	0.94	0.08	56,56,56,56	0
48	MG	D1	3553	1/1	0.94	0.07	90,90,90,90	0
48	MG	A1	3558	1/1	0.94	0.10	91,91,91,91	0
48	MG	F1	3410	1/1	0.94	0.17	42,42,42,42	0
48	MG	D1	3558	1/1	0.94	0.07	56,56,56,56	0
48	MG	D1	3492	1/1	0.94	0.34	125,125,125,125	0
48	MG	A1	3469	1/1	0.94	0.17	113,113,113,113	0
48	MG	F1	3530	1/1	0.94	0.15	107,107,107,107	0
48	MG	H1	3427	1/1	0.94	0.14	83,83,83,83	0
48	MG	H1	3423	1/1	0.95	0.11	98,98,98,98	0
48	MG	D1	3474	1/1	0.95	0.10	58,58,58,58	0
48	MG	A1	3434	1/1	0.95	0.16	74,74,74,74	0
48	MG	H1	3491	1/1	0.95	0.13	111,111,111,111	0
48	MG	F1	3524	1/1	0.95	0.14	56,56,56,56	0
48	MG	A1	3550	1/1	0.95	0.04	69,69,69,69	0
48	MG	D1	3524	1/1	0.95	0.06	69,69,69,69	0
48	MG	D1	3477	1/1	0.95	0.09	60,60,60,60	0
48	MG	H1	3500	1/1	0.95	0.16	82,82,82,82	0
48	MG	F1	3582	1/1	0.95	0.20	77,77,77,77	0
48	MG	D1	3402	1/1	0.95	0.08	52,52,52,52	0
48	MG	F1	3584	1/1	0.95	0.16	97,97,97,97	0
48	MG	A1	3484	1/1	0.95	0.13	108,108,108,108	0
48	MG	H1	3507	1/1	0.95	0.07	64,64,64,64	0
48	MG	A1	3485	1/1	0.95	0.15	137,137,137,137	0
48	MG	D1	3483	1/1	0.95	0.09	88,88,88,88	0
48	MG	F1	3412	1/1	0.95	0.11	60,60,60,60	0
48	MG	A1	3486	1/1	0.95	0.15	93,93,93,93	0
48	MG	D1	3408	1/1	0.95	0.30	106,106,106,106	0
48	MG	A1	3487	1/1	0.95	0.23	121,121,121,121	0
48	MG	F1	3416	1/1	0.95	0.45	116,116,116,116	0
48	MG	D1	3488	1/1	0.95	0.18	97,97,97,97	0
48	MG	A1	3445	1/1	0.95	0.18	88,88,88,88	0
48	MG	A1	3506	1/1	0.95	0.12	77,77,77,77	0
48	MG	F1	3481	1/1	0.95	0.13	45,45,45,45	0
48	MG	A1	3411	1/1	0.95	0.17	83,83,83,83	0
48	MG	D1	3629	1/1	0.95	0.11	121,121,121,121	0
48	MG	D1	3415	1/1	0.95	0.11	117,117,117,117	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	GJ	201	1/1	0.95	0.13	69,69,69,69	0
48	MG	GL	301	1/1	0.95	0.11	113,113,113,113	0
48	MG	D1	3590	1/1	0.95	0.20	89,89,89,89	0
48	MG	D1	3591	1/1	0.95	0.10	55,55,55,55	0
48	MG	A1	3508	1/1	0.95	0.12	89,89,89,89	0
48	MG	F1	3552	1/1	0.95	0.15	139,139,139,139	0
48	MG	H1	3460	1/1	0.95	0.13	69,69,69,69	0
48	MG	DK	201	1/1	0.95	0.29	101,101,101,101	0
48	MG	A1	3406	1/1	0.95	0.10	75,75,75,75	0
48	MG	H1	3463	1/1	0.95	0.11	78,78,78,78	0
48	MG	A1	3477	1/1	0.95	0.13	62,62,62,62	0
48	MG	D1	3449	1/1	0.95	0.09	68,68,68,68	0
48	MG	H1	3466	1/1	0.95	0.08	107,107,107,107	0
48	MG	D1	3450	1/1	0.95	0.07	49,49,49,49	0
48	MG	D1	3419	1/1	0.95	0.10	92,92,92,92	0
48	MG	A1	3535	1/1	0.95	0.09	99,99,99,99	0
48	MG	A1	3478	1/1	0.95	0.08	79,79,79,79	0
48	MG	E3	201	1/1	0.95	0.09	90,90,90,90	0
48	MG	D1	3510	1/1	0.95	0.19	81,81,81,81	0
48	MG	D1	3555	1/1	0.95	0.39	119,119,119,119	0
48	MG	A1	3418	1/1	0.95	0.10	117,117,117,117	0
48	MG	D1	3457	1/1	0.95	0.12	34,34,34,34	0
48	MG	H1	3476	1/1	0.95	0.08	52,52,52,52	0
48	MG	F1	3504	1/1	0.95	0.13	84,84,84,84	0
48	MG	A1	3480	1/1	0.95	0.31	120,120,120,120	0
48	MG	A1	3544	1/1	0.95	0.48	135,135,135,135	0
48	MG	A1	3545	1/1	0.95	0.30	71,71,71,71	0
48	MG	CN	201	1/1	0.95	0.29	175,175,175,175	0
48	MG	F1	3452	1/1	0.95	0.10	50,50,50,50	0
48	MG	H1	3483	1/1	0.95	0.14	108,108,108,108	0
48	MG	A1	3459	1/1	0.95	0.20	90,90,90,90	0
48	MG	D1	3566	1/1	0.95	0.14	80,80,80,80	0
48	MG	D1	3567	1/1	0.95	0.26	60,60,60,60	0
48	MG	A1	3482	1/1	0.95	0.06	62,62,62,62	0
48	MG	H1	3502	1/1	0.96	0.07	82,82,82,82	0
48	MG	D1	3493	1/1	0.96	0.33	128,128,128,128	0
48	MG	A1	3523	1/1	0.96	0.12	91,91,91,91	0
48	MG	D1	3526	1/1	0.96	0.05	54,54,54,54	0
48	MG	D1	3495	1/1	0.96	0.07	88,88,88,88	0
48	MG	D1	3465	1/1	0.96	0.09	65,65,65,65	0
48	MG	D1	3529	1/1	0.96	0.10	80,80,80,80	0
48	MG	H1	3453	1/1	0.96	0.11	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
48	MG	F1	3508	1/1	0.96	0.24	127,127,127,127	0
48	MG	D1	3466	1/1	0.96	0.22	132,132,132,132	0
48	MG	F1	3465	1/1	0.96	0.26	101,101,101,101	0
48	MG	H1	3514	1/1	0.96	0.07	66,66,66,66	0
48	MG	F1	3512	1/1	0.96	0.11	94,94,94,94	0
48	MG	C3	206	1/1	0.96	0.15	120,120,120,120	0
48	MG	F1	3514	1/1	0.96	0.13	70,70,70,70	0
48	MG	A1	3465	1/1	0.96	0.08	54,54,54,54	0
48	MG	D1	3500	1/1	0.96	0.09	44,44,44,44	0
48	MG	A1	3462	1/1	0.96	0.10	46,46,46,46	0
48	MG	F1	3518	1/1	0.96	0.13	77,77,77,77	0
48	MG	CJ	201	1/1	0.96	0.14	64,64,64,64	0
48	MG	D1	3473	1/1	0.96	0.11	63,63,63,63	0
48	MG	F1	3521	1/1	0.96	0.09	65,65,65,65	0
48	MG	D1	3539	1/1	0.96	0.14	57,57,57,57	0
48	MG	D1	3578	1/1	0.96	0.07	88,88,88,88	0
48	MG	F1	3526	1/1	0.96	0.14	72,72,72,72	0
48	MG	F1	3476	1/1	0.96	0.16	99,99,99,99	0
48	MG	A1	3537	1/1	0.96	0.12	54,54,54,54	0
48	MG	A1	3539	1/1	0.96	0.08	46,46,46,46	0
48	MG	A1	3463	1/1	0.96	0.10	59,59,59,59	0
48	MG	A1	3520	1/1	0.96	0.16	70,70,70,70	0
48	MG	D1	3544	1/1	0.96	0.09	50,50,50,50	0
48	MG	A1	3514	1/1	0.96	0.14	59,59,59,59	0
48	MG	A1	3442	1/1	0.96	0.10	52,52,52,52	0
48	MG	D1	3619	1/1	0.96	0.07	101,101,101,101	0
48	MG	EQ	201	1/1	0.96	0.18	88,88,88,88	0
48	MG	F1	3486	1/1	0.96	0.11	90,90,90,90	0
48	MG	F1	3487	1/1	0.96	0.09	60,60,60,60	0
48	MG	D1	3436	1/1	0.96	0.16	78,78,78,78	0
48	MG	A1	3546	1/1	0.96	0.23	51,51,51,51	0
48	MG	D1	3438	1/1	0.96	0.08	39,39,39,39	0
48	MG	G2	203	1/1	0.96	0.10	112,112,112,112	0
48	MG	A1	3557	1/1	0.96	0.20	104,104,104,104	0
48	MG	F1	3445	1/1	0.96	0.16	78,78,78,78	0
48	MG	D1	3518	1/1	0.96	0.21	92,92,92,92	0
48	MG	F1	3547	1/1	0.96	0.10	112,112,112,112	0
48	MG	D1	3519	1/1	0.96	0.08	72,72,72,72	0
48	MG	D1	3404	1/1	0.96	0.11	55,55,55,55	0
48	MG	H1	3494	1/1	0.96	0.14	56,56,56,56	0
48	MG	D1	3459	1/1	0.96	0.07	63,63,63,63	0
48	MG	D1	3460	1/1	0.96	0.09	85,85,85,85	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
48	MG	H1	3498	1/1	0.96	0.07	60,60,60,60	0
48	MG	F1	3409	1/1	0.96	0.16	60,60,60,60	0
48	MG	H1	3445	1/1	0.96	0.14	68,68,68,68	0
49	ZN	AC	201	1/1	0.96	0.08	143,143,143,143	0
49	ZN	FL	201	1/1	0.96	0.09	86,86,86,86	0
48	MG	D1	3461	1/1	0.96	0.10	86,86,86,86	0
48	MG	D1	3464	1/1	0.97	0.08	44,44,44,44	0
48	MG	A1	3458	1/1	0.97	0.10	59,59,59,59	0
48	MG	F1	3441	1/1	0.97	0.19	111,111,111,111	0
48	MG	H1	3506	1/1	0.97	0.12	75,75,75,75	0
48	MG	A1	3526	1/1	0.97	0.10	48,48,48,48	0
48	MG	A1	3538	1/1	0.97	0.08	49,49,49,49	0
48	MG	D1	3501	1/1	0.97	0.13	51,51,51,51	0
48	MG	D1	3536	1/1	0.97	0.10	73,73,73,73	0
48	MG	D1	3503	1/1	0.97	0.14	82,82,82,82	0
48	MG	A1	3466	1/1	0.97	0.12	40,40,40,40	0
48	MG	CL	302	1/1	0.97	0.10	68,68,68,68	0
48	MG	F1	3449	1/1	0.97	0.10	90,90,90,90	0
48	MG	H1	3515	1/1	0.97	0.09	73,73,73,73	0
48	MG	D1	3420	1/1	0.97	0.08	105,105,105,105	0
48	MG	A1	3540	1/1	0.97	0.15	66,66,66,66	0
48	MG	BQ	202	1/1	0.97	0.07	53,53,53,53	0
48	MG	F1	3404	1/1	0.97	0.10	75,75,75,75	0
48	MG	D1	3509	1/1	0.97	0.09	41,41,41,41	0
48	MG	F1	3510	1/1	0.97	0.10	95,95,95,95	0
48	MG	CQ	202	1/1	0.97	0.06	62,62,62,62	0
48	MG	BW	201	1/1	0.97	0.09	67,67,67,67	0
48	MG	F1	3459	1/1	0.97	0.07	79,79,79,79	0
48	MG	D1	3546	1/1	0.97	0.10	49,49,49,49	0
48	MG	D1	3587	1/1	0.97	0.14	93,93,93,93	0
48	MG	A1	3446	1/1	0.97	0.19	64,64,64,64	0
48	MG	B2	203	1/1	0.97	0.06	81,81,81,81	0
48	MG	D1	3479	1/1	0.97	0.04	50,50,50,50	0
48	MG	C2	203	1/1	0.97	0.06	63,63,63,63	0
48	MG	D1	3630	1/1	0.97	0.14	71,71,71,71	0
48	MG	C2	204	1/1	0.97	0.07	75,75,75,75	0
48	MG	D1	3632	1/1	0.97	0.12	83,83,83,83	0
48	MG	D1	3453	1/1	0.97	0.11	54,54,54,54	0
48	MG	F1	3525	1/1	0.97	0.09	73,73,73,73	0
48	MG	A1	3517	1/1	0.97	0.08	74,74,74,74	0
48	MG	A1	3426	1/1	0.97	0.09	73,73,73,73	0
48	MG	F1	3474	1/1	0.97	0.13	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
48	MG	D1	3486	1/1	0.97	0.13	47,47,47,47	0
48	MG	D1	3456	1/1	0.97	0.11	70,70,70,70	0
48	MG	D1	3559	1/1	0.97	0.08	55,55,55,55	0
48	MG	D1	3560	1/1	0.97	0.10	64,64,64,64	0
48	MG	A1	3452	1/1	0.97	0.10	90,90,90,90	0
48	MG	E2	204	1/1	0.97	0.06	75,75,75,75	0
48	MG	F1	3426	1/1	0.97	0.24	110,110,110,110	0
48	MG	F1	3427	1/1	0.97	0.16	51,51,51,51	0
48	MG	D1	3490	1/1	0.97	0.16	92,92,92,92	0
48	MG	A1	3456	1/1	0.97	0.12	49,49,49,49	0
48	MG	A1	3495	1/1	0.97	0.06	70,70,70,70	0
48	MG	H1	3437	1/1	0.97	0.11	93,93,93,93	0
48	MG	H1	3493	1/1	0.97	0.12	79,79,79,79	0
48	MG	A1	3597	1/1	0.97	0.38	133,133,133,133	0
48	MG	H1	3439	1/1	0.97	0.12	75,75,75,75	0
48	MG	F1	3432	1/1	0.97	0.08	68,68,68,68	0
48	MG	A1	3598	1/1	0.97	0.21	111,111,111,111	0
48	MG	D1	3462	1/1	0.97	0.19	116,116,116,116	0
48	MG	A1	3457	1/1	0.97	0.35	94,94,94,94	0
48	MG	H1	3444	1/1	0.97	0.06	65,65,65,65	0
48	MG	D1	3570	1/1	0.97	0.20	54,54,54,54	0
48	MG	A1	3432	1/1	0.98	0.07	45,45,45,45	0
48	MG	H1	3421	1/1	0.98	0.13	97,97,97,97	0
48	MG	D1	3428	1/1	0.98	0.06	106,106,106,106	0
48	MG	D1	3405	1/1	0.98	0.10	59,59,59,59	0
48	MG	D1	3569	1/1	0.98	0.09	48,48,48,48	0
48	MG	F1	3528	1/1	0.98	0.06	75,75,75,75	0
48	MG	F1	3460	1/1	0.98	0.14	36,36,36,36	0
48	MG	F1	3505	1/1	0.98	0.10	83,83,83,83	0
48	MG	D1	3469	1/1	0.98	0.10	64,64,64,64	0
48	MG	D1	3430	1/1	0.98	0.08	59,59,59,59	0
48	MG	A1	3410	1/1	0.98	0.21	62,62,62,62	0
48	MG	H1	3458	1/1	0.98	0.06	90,90,90,90	0
48	MG	A1	3543	1/1	0.98	0.08	96,96,96,96	0
48	MG	D1	3556	1/1	0.98	0.07	76,76,76,76	0
48	MG	D1	3489	1/1	0.98	0.07	44,44,44,44	0
48	MG	A1	3440	1/1	0.98	0.04	78,78,78,78	0
48	MG	A1	3561	1/1	0.98	0.14	60,60,60,60	0
48	MG	D1	3411	1/1	0.98	0.11	44,44,44,44	0
48	MG	A1	3421	1/1	0.98	0.06	71,71,71,71	0
48	MG	F1	3450	1/1	0.98	0.09	59,59,59,59	0
48	MG	A1	3476	1/1	0.98	0.07	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
48	MG	A1	3524	1/1	0.98	0.12	63,63,63,63	0
48	MG	D1	3480	1/1	0.98	0.09	32,32,32,32	0
48	MG	F1	3454	1/1	0.98	0.15	56,56,56,56	0
48	MG	F1	3546	1/1	0.98	0.07	59,59,59,59	0
49	ZN	AA	101	1/1	0.98	0.14	64,64,64,64	0
48	MG	A1	3525	1/1	0.98	0.08	51,51,51,51	0
49	ZN	AK	201	1/1	0.98	0.10	89,89,89,89	0
49	ZN	BY	201	1/1	0.98	0.10	59,59,59,59	0
49	ZN	DC	201	1/1	0.98	0.07	89,89,89,89	0
49	ZN	DL	201	1/1	0.98	0.17	86,86,86,86	0
49	ZN	EY	201	1/1	0.98	0.10	77,77,77,77	0
49	ZN	FC	201	1/1	0.98	0.04	108,108,108,108	0
48	MG	F1	3499	1/1	0.98	0.04	57,57,57,57	0
49	ZN	GY	201	1/1	0.98	0.10	116,116,116,116	0
49	ZN	HA	101	1/1	0.98	0.14	112,112,112,112	0
48	MG	F1	3523	1/1	0.98	0.09	55,55,55,55	0
49	ZN	HL	201	1/1	0.98	0.08	118,118,118,118	0
48	MG	A1	3489	1/1	0.99	0.07	33,33,33,33	0
48	MG	D1	3533	1/1	0.99	0.07	41,41,41,41	0
48	MG	H1	3497	1/1	0.99	0.13	50,50,50,50	0
48	MG	F1	3467	1/1	0.99	0.10	57,57,57,57	0
48	MG	D1	3554	1/1	0.99	0.12	59,59,59,59	0
49	ZN	AL	201	1/1	0.99	0.09	70,70,70,70	0
48	MG	A1	3502	1/1	0.99	0.10	80,80,80,80	0
49	ZN	CY	202	1/1	0.99	0.08	70,70,70,70	0
49	ZN	DA	103	1/1	0.99	0.14	69,69,69,69	0
48	MG	D1	3410	1/1	0.99	0.12	39,39,39,39	0
49	ZN	DK	202	1/1	0.99	0.11	68,68,68,68	0
48	MG	A1	3413	1/1	0.99	0.18	136,136,136,136	0
48	MG	A1	3534	1/1	0.99	0.13	62,62,62,62	0
49	ZN	FA	103	1/1	0.99	0.12	80,80,80,80	0
48	MG	A1	3460	1/1	0.99	0.13	61,61,61,61	0
49	ZN	FK	202	1/1	0.99	0.12	74,74,74,74	0
48	MG	D1	3502	1/1	0.99	0.07	38,38,38,38	0
48	MG	F1	3435	1/1	0.99	0.11	44,44,44,44	0
48	MG	A1	3473	1/1	0.99	0.08	55,55,55,55	0
48	MG	D1	3471	1/1	0.99	0.20	40,40,40,40	0
49	ZN	HK	201	1/1	0.99	0.11	70,70,70,70	0
48	MG	F1	3438	1/1	0.99	0.14	58,58,58,58	0

## 6.5 Other polymers [i](#)

There are no such residues in this entry.