wwPDB EM Validation Summary Report (i)

Dec 19, 2022 – 04:44 am GMT

PDB ID	:	7ART
EMDB ID	:	EMD-11387
Title	:	48 helix bundle DNA origami brick
Authors	:	Feigl, E.; Kube, M.; Kohler, F.; Nagel-Yuksel, B.; Willner, E.M.; Funke, J.J.; Gerling, T.; Stommer, P.; Honemann, M.N.; Martin, T.G.; Scheres, S.H.W.; Dietz, H.
Deposited on	:	2020-10-26
Resolution	:	10.00 Å(reported)

This is a wwPDB EM Validation Summary Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the (i) symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

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

EMDB validation analysis	:	0.0.1.dev43
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.3

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 10.00 Å.

There are no overall percentile quality scores available for this entry.

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	AA	8064	100% 60% 34% 6%
2	AB	40	100% 62% 35% .
3	AC	44	100% 52% 43% 5%
4	AD	50	100% 74% 22% .
5	AE	47	100% 62% 36% .
6	AF	49	100% 67% 27% 6%
7	AG	49	100% 61% 33% 6%
8	AH	49	100% 71% 24% .
9	AI	49	100% 71% 24% .
10	AJ	42	100% 71% 24% 5%
11	AK	54	100% 69% 31%
12	AL	38	100% 50% 42% 8%
13	AM	44	100% 39% 57% 5%
14	AN	35	100% 69% 31%
15	AO	40	100% 65% 28% 8%
16	AP	42	100% 57% 38% 5%
17	AQ	35	100% 69% 26% 6%

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Mol	Chain	Length	Quality of chain
18	AR	49	100% 67% 27% 6%
19	AS	42	100% 69% 26% 5%
20	AT	38	100% 55% 39% 5%
21	AU	47	100% 57% 40%
22	AV	37	100% 65% 32%
23	AW	54	100% 70% 30%
24	AX	36	100% 58% 39%
25	AY	36	100% 61% 33% 6%
26	AZ	44	100% 57% 39% 5%
27	Aa	38	100% 66% 26% 8%
28	Ab	42	100% 67% 33%
29	Ac	49	100% 67% 31%
30	Ad	42	100% 74% 21% 5%
31	Ae	42	100% 55% 38% 7%
32	Af	35	100% 71% 20% 9%
33	Ag	40	100% 72% 28%
34	Ah	42	100% 60% 38%
35	Ai	42	100% 60% 31% 10%
36	Aj	42	100% 69% 29%
37	Ak	42	100% 71% 24% 5%
38	Al	42	100% 64% 29% 7%
39	Am	44	100% 55% 36% 9%
40	An	38	100% 55% 37% 8%
41	Ao	49	100% 69% 22% 8%
42	Ap	49	100% 67% 27% 6%

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Mol	Chain	Length	Quality of chain
43	Aq	47	100% 57% 34% 9%
44	Ar	42	100% 60% 40%
45	As	42	100% 69% 29%
46	At	51	100% 65% 33%
47	Au	49	100% 59% 37%
48	Av	37	100% 65% 24% 11%
49	Aw	42	100% 67% 31%
50	Ax	44	100% 64% 34%
51	Ay	40	100% 60% 30% 10%
52	Az	36	100% 67% 28% 6%
53	A0	63	100% 60% 33% 6%
54	A1	49	100% 71% 20% 8%
55	A2	42	100% 62% 36%
56	A3	40	100% 38% 52% 10%
57	A4	44	100% 64% 32% 5%
58	A5	50	100% 48% 46% 6%
59	A6	49	100% 61% 39%
60	A7	42	100% 71% 29%
61	A8	50	100% 76% 20%
62	A9	49	100% 67% 27% 6%
63	BA	49	100% 69% 20% 10%
64	BB	49	100% 63% 33%
65	BC	49	100% 61% 35%
66	BD	38	100% 61% 39%
67	BE	44	100% 50% 45% 5%

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Mol	Chain	Length	Quality of chain
68	BF	42	100% 67% 26% 7%
69	BG	42	100% 52% 40% 7%
70	BH	40	100% 80% 15% 5%
71	BI	42	100% 52% 36% 12%
72	BJ	38	100% 74% 21% 5%
73	BK	33	100% 64% 33%
74	BL	43	100% 65% 30% 5%
75	BM	43	100% 63% 37%
76	BN	51	100% 55% 45%
77	BO	35	100% 63% 34%
78	BP	40	100% 70% 28%
79	BQ	37	100% 68% 27% 5%
80	BR	38	100% 50% 45% 5%
81	BS	47	100% 70% 30%
82	BT	37	100% 54% 41% 5%
83	BU	40	100% 68% 32%
84	BV	42	100% 67% 29% 5%
85	BW	35	100% 77% 23%
86	BX	42	100% 79% 19%
87	BY	35	100% 63% 37%
88	BZ	42	100% 57% 33% 10%
89	Ba	49	100% 59% 39%
90	Bb	44	100% 59% 34% 7%
91	Bc	38	100% 53% 42% 5%
92	Bd	42	100% 79% 19%

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Mol	Chain	Length	Quality of chain
93	Be	49	100% 67% 33%
94	Bf	42	100% 64% 36%
95	Bg	49	100% 67% 27% 6%
96	Bh	51	100% 65% 35%
97	Bi	35	100% 63% 34%
98	Bj	37	100% 59% 38%
99	Bk	42	100% 64% 31% 5%
100	Bl	44	100% 55% 43%
101	Bm	40	100% 55% 32% 12%
102	Bn	63	100% 68% 30%
103	Bo	35	100% 74% 23%
104	Bp	42	100% 60% 40%
105	Bq	42	100% 69% 26% 5%
106	Br	49	100% 61% 31% 8%
107	Bs	35	100% 66% 26% 9%
108	Bt	35	100% 63% 29% 9%
109	Bu	40	100% 60% 32% 8%
110	Bv	44	100% 70% 23% 7%
111	Bw	49	100% 61% 35%
112	Bx	47	100% 66% 32%
113	By	40	100% 70% 25% 5%
114	Bz	49	100% 51% 43% 6%
115	B0	43	100% 65% 33%
116	B1	49	100% 65% 33%
117	B2	38	100% 53% 39% 8%

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Mol	Chain	Length	Quality of chain
118	B3	44	100% 61% 34% 5%
119	B4	35	100% 69% 31%
120	B5	35	100% 71% 29%
121	B6	49	100% 67% 24% 8%
122	B7	49	100% 63% 29% 8%
123	B8	42	100% 55% 36% 10%
124	B9	36	100% 64% 33%
125	CA	35	100% 71% 26%
126	CB	35	100% 74% 23%
127	CC	49	100% 61% 37%
128	CD	42	100% 69% 29%
129	CE	35	100% 51% 40% 9%
130	CF	38	100% 66% 34%
131	CG	51	100% 65% 29% 6%
132	CH	50	100% 68% 30%
133	CI	43	100% 63% 26% 12%
134	CJ	40	100% 62% 32% 5%
135	CK	37	100% 65% 35%
136	CL	47	100% 62% 30% 9%
137	CM	38	100% 58% 39%
138	CN	40	100% 68% 22% 10%
139	CO	42	100% 60% 33% 7%
140	CP	35	100% 69% 23% 9%
141	CQ	40	100% 70% 22% 8%
142	CR	35	100% 63% 31% 6%

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Mol	Chain	Length	Quality of chain
143	CS	49	100% 73% 22% •
144	CT	42	100% 62% 33% 5%
145	CU	44	100% 68% 30% •
146	CV	38	100% 66% 29% 5%
147	CW	42	100% 62% 38%
148	CX	42	100% 60% 26% 14%
149	CY	49	100% 63% 35% •
150	CZ	49	100% 55% 37% 8%
151	Ca	42	100% 67% 29% 5%
152	Cb	49	100% 67% 27% 6%
153	Cc	42	100% 67% 31% •
154	Cd	47	100% 72% 23% •
155	Ce	44	100% 50% 43% 7%
156	Cf	40	100% 50% 40% 10%
157	Cg	36	100% 72% 28%
158	Ch	42	100% 71% 21% 7%
159	Ci	56	100% 68% 25% 7%
160	Cj	35	100% 77% 20% •
161	Ck	36	100% 50% 42% 8%
162	Cl	40	100% 42% 45% 12%
163	Cm	44	100% 55% 39% 7%
164	Cn	42	100% 67% 33%
165	Co	35	100% 66% 31% •
166	Cp	49	100% 69% 27% •
167	Cq	44	100% 52% 34% 14%

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Mol	Chain	Length	Quality of chain
168	Cr	49	100% 61% 35% •
169	Cs	44	100% 66% 34%
170	Ct	42	100% 57% 33% 10%
171	Cu	38	100% 55% 26% 18%
172	Cv	44	100% 55% 39% 7%
173	Cw	35	100% 74% 26%
174	Cx	35	100% 57% 40% •
175	Cy	42	100% 52% 43% 5%
176	Cz	49	100% 57% 39% •
177	C0	40	100% 80% 20%
178	C1	42	100% 76% 21% •
179	C2	49	100% 65% 31% •
180	C3	49	100% 67% 27% 6%
181	C4	42	100% 52% 40% 7%
182	C5	42	100% 60% 40%
183	C6	38	100% 58% 37% 5%
184	C7	40	100% 65% 35%
185	C8	36	100% 67% 22% 11%
186	C9	50	100% 62% 34% •
187	DA	44	100% 64% 30% 7%
188	DB	42	100% 64% 33% •
189	DC	35	100% 51% 46% •
190	DD	47	100% 70% 23% 6%
191	DE	37	100% 62% 30% 8%
192	DF	38	100% 45% 47% 8%

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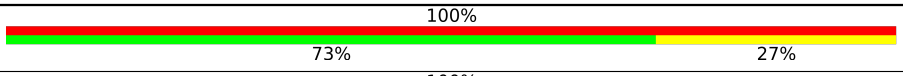
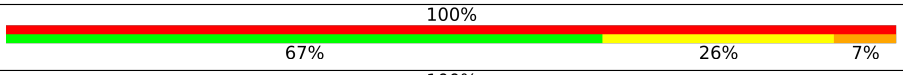
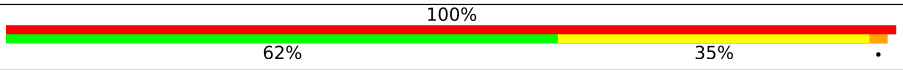
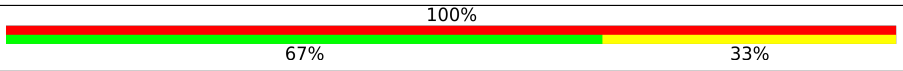
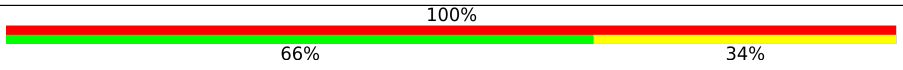
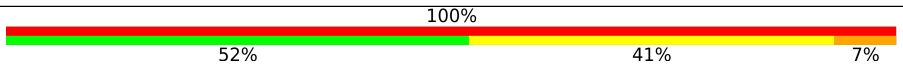
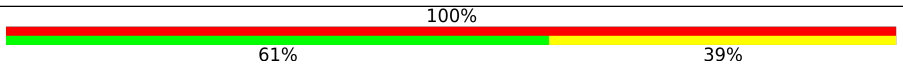
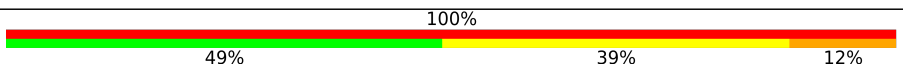
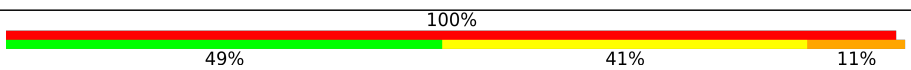
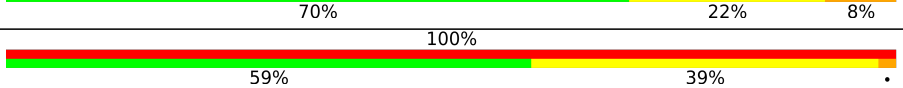
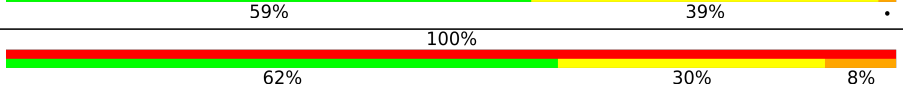
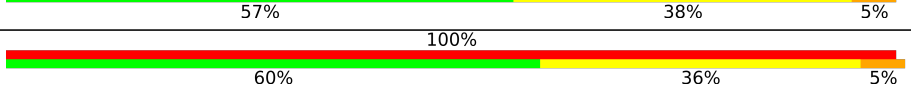
Mol	Chain	Length	Quality of chain
193	DG	49	
194	DH	42	
195	DI	40	
196	DJ	42	
197	DK	35	
198	DL	44	
199	DM	38	
200	DN	42	
201	DO	49	
202	DP	35	
203	DQ	49	
204	DR	49	
205	DS	49	
206	DT	37	
207	DU	42	
208	DV	50	
209	DW	44	
210	DX	40	
211	DY	42	
212	DZ	42	

2 Entry composition (i)

There are 212 unique types of molecules in this entry. The entry contains 349108 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 DNA chain called SCAFFOLD STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
1	AA	8064	164972	78873	29001	49035	8063	0	0

- Molecule 2 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
2	AB	40	813	394	134	246	39	0	0

- Molecule 3 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
3	AC	44	887	432	132	280	43	0	0

- Molecule 4 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
4	AD	50	1032	495	183	305	49	0	0

- Molecule 5 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
5	AE	47	952	456	174	276	46	0	0

- Molecule 6 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
6	AF	49	1008	481	191	288	48	0	0

- Molecule 7 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	AG	49	Total 997	C 477	N 186	O 286	P 48	0	0

- Molecule 8 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	AH	49	Total 1013	C 481	N 197	O 287	P 48	0	0

- Molecule 9 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	AI	49	Total 1005	C 479	N 187	O 291	P 48	0	0

- Molecule 10 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	AJ	42	Total 860	C 412	N 158	O 249	P 41	0	0

- Molecule 11 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	AK	54	Total 1110	C 527	N 214	O 316	P 53	0	0

- Molecule 12 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	AL	38	Total 768	C 376	N 110	O 245	P 37	0	0

- Molecule 13 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	AM	44	Total 893	C 437	N 133	O 280	P 43	0	0

- Molecule 14 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	AN	35	Total 713	C 342	N 132	O 205	P 34	0	0

- Molecule 15 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	AO	40	Total 806	C 391	N 128	O 248	P 39	0	0

- Molecule 16 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	AP	42	Total 852	C 411	N 147	O 253	P 41	0	0

- Molecule 17 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	AQ	35	Total 727	C 346	N 140	O 207	P 34	0	0

- Molecule 18 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	AR	49	Total 1015	C 480	N 210	O 277	P 48	0	0

- Molecule 19 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	AS	42	Total 847	C 408	N 147	O 251	P 41	0	0

- Molecule 20 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	AT	38	Total 772	C 378	N 120	O 237	P 37	0	0

- Molecule 21 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	AU	47	Total 967	C 462	N 195	O 264	P 46	0	0

- Molecule 22 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	AV	37	Total 752	C 359	N 139	O 218	P 36	0	0

- Molecule 23 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	AW	54	Total 1114	C 534	N 216	O 311	P 53	0	0

- Molecule 24 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	AX	36	Total 731	C 353	N 121	O 222	P 35	0	0

- Molecule 25 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	AY	36	Total 735	C 356	N 121	O 223	P 35	0	0

- Molecule 26 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	AZ	44	Total 886	C 422	N 169	O 252	P 43	0	0

- Molecule 27 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	Aa	38	Total 775	C 379	N 119	O 240	P 37	0	0

- Molecule 28 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	Ab	42	Total 872	C 415	N 179	O 237	P 41	0	0

- Molecule 29 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	Ac	49	Total 1006	C 485	N 175	O 298	P 48	0	0

- Molecule 30 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	Ad	42	Total 871	C 414	N 165	O 251	P 41	0	0

- Molecule 31 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	Ae	42	Total 860	C 412	N 173	O 234	P 41	0	0

- Molecule 32 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	Af	35	Total 724	C 345	N 135	O 210	P 34	0	0

- Molecule 33 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	Ag	40	Total 813	C 394	N 137	O 243	P 39	0	0

- Molecule 34 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	Ah	42	Total 866	C 414	N 168	O 243	P 41	0	0

- Molecule 35 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	Ai	42	Total 861	C 413	N 148	O 259	P 41	0	0

- Molecule 36 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	Aj	42	Total 845	C 407	N 145	O 252	P 41	0	0

- Molecule 37 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	Ak	42	Total 859	C 412	N 161	O 245	P 41	0	0

- Molecule 38 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
38	Al	42	Total 855	C 409	N 158	O 247	P 41	0	0

- Molecule 39 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	Am	44	Total 892	C 438	N 126	O 285	P 43	0	0

- Molecule 40 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	An	38	Total 766	C 376	N 110	O 243	P 37	0	0

- Molecule 41 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	Ao	49	Total 1000	C 479	N 196	O 277	P 48	0	0

- Molecule 42 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	Ap	49	Total	C	N	O	P	0	0
			1008	479	208	273	48		

- Molecule 43 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	Aq	47	Total	C	N	O	P	0	0
			950	452	181	271	46		

- Molecule 44 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
44	Ar	42	Total	C	N	O	P	0	0
			850	409	152	248	41		

- Molecule 45 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	As	42	Total	C	N	O	P	0	0
			859	412	164	242	41		

- Molecule 46 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	At	51	Total	C	N	O	P	0	0
			1051	499	197	305	50		

- Molecule 47 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	Au	49	Total	C	N	O	P	0	0
			1004	477	192	287	48		

- Molecule 48 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	Av	37	Total	C	N	O	P	0	0
			760	360	150	214	36		

- Molecule 49 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	Aw	42	Total 869	C 411	N 174	O 243	P 41	0	0

- Molecule 50 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	Ax	44	Total 882	C 430	N 128	O 281	P 43	0	0

- Molecule 51 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	Ay	40	Total 808	C 392	N 127	O 250	P 39	0	0

- Molecule 52 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	Az	36	Total 722	C 353	N 106	O 228	P 35	0	0

- Molecule 53 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	A0	63	Total 1285	C 615	N 234	O 374	P 62	0	0

- Molecule 54 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	A1	49	Total 995	C 477	N 180	O 290	P 48	0	0

- Molecule 55 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	A2	42	Total 864	C 414	N 165	O 244	P 41	0	0

- Molecule 56 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	A3	40	Total 815	C 393	N 141	O 242	P 39	0	0

- Molecule 57 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	A4	44	Total 890	C 434	N 136	O 277	P 43	0	0

- Molecule 58 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	A5	50	Total 1024	C 492	N 186	O 297	P 49	0	0

- Molecule 59 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
59	A6	49	Total 1011	C 484	N 194	O 285	P 48	0	0

- Molecule 60 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
60	A7	42	Total 850	C 407	N 157	O 245	P 41	0	0

- Molecule 61 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
61	A8	50	Total 1015	C 489	N 177	O 300	P 49	0	0

- Molecule 62 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
62	A9	49	Total 994	C 479	N 172	O 295	P 48	0	0

- Molecule 63 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
63	BA	49	Total	C	N	O	P	0	0
			1004	476	208	272	48		

- Molecule 64 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
64	BB	49	Total	C	N	O	P	0	0
			1010	482	196	284	48		

- Molecule 65 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
65	BC	49	Total	C	N	O	P	0	0
			998	476	190	284	48		

- Molecule 66 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
66	BD	38	Total	C	N	O	P	0	0
			771	379	116	239	37		

- Molecule 67 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
67	BE	44	Total	C	N	O	P	0	0
			895	437	139	276	43		

- Molecule 68 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
68	BF	42	Total	C	N	O	P	0	0
			863	414	168	240	41		

- Molecule 69 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
69	BG	42	Total	C	N	O	P	0	0
			871	412	185	233	41		

- Molecule 70 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
70	BH	40	Total 814	C 396	N 138	O 241	P 39	0	0

- Molecule 71 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
71	BI	42	Total 874	C 417	N 171	O 245	P 41	0	0

- Molecule 72 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
72	BJ	38	Total 761	C 376	N 95	O 253	P 37	0	0

- Molecule 73 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
73	BK	33	Total 673	C 320	N 127	O 194	P 32	0	0

- Molecule 74 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
74	BL	43	Total 869	C 424	N 140	O 263	P 42	0	0

- Molecule 75 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
75	BM	43	Total 878	C 425	N 142	O 269	P 42	0	0

- Molecule 76 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
76	BN	51	Total 1048	C 504	N 195	O 299	P 50	0	0

- Molecule 77 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
77	BO	35	Total 714	C 345	N 126	O 209	P 34	0	0

- Molecule 78 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
78	BP	40	Total 815	C 391	N 158	O 227	P 39	0	0

- Molecule 79 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
79	BQ	37	Total 759	C 362	N 148	O 213	P 36	0	0

- Molecule 80 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
80	BR	38	Total 772	C 377	N 115	O 243	P 37	0	0

- Molecule 81 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
81	BS	47	Total 960	C 463	N 164	O 287	P 46	0	0

- Molecule 82 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
82	BT	37	Total 767	C 364	N 158	O 209	P 36	0	0

- Molecule 83 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
83	BU	40	Total 807	C 393	N 129	O 246	P 39	0	0

- Molecule 84 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
84	BV	42	Total 861	C 410	N 175	O 235	P 41	0	0

- Molecule 85 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
85	BW	35	Total 711	C 342	N 135	O 200	P 34	0	0

- Molecule 86 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
86	BX	42	Total 858	C 412	N 161	O 244	P 41	0	0

- Molecule 87 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
87	BY	35	Total 713	C 344	N 130	O 205	P 34	0	0

- Molecule 88 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
88	BZ	42	Total 859	C 409	N 170	O 239	P 41	0	0

- Molecule 89 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
89	Ba	49	Total 1002	C 475	N 194	O 285	P 48	0	0

- Molecule 90 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
90	Bb	44	Total 879	C 432	N 120	O 284	P 43	0	0

- Molecule 91 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
91	Bc	38	Total 768	C 377	N 112	O 242	P 37	0	0

- Molecule 92 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
92	Bd	42	Total 853	C 412	N 155	O 245	P 41	0	0

- Molecule 93 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
93	Be	49	Total 993	C 476	N 184	O 285	P 48	0	0

- Molecule 94 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
94	Bf	42	Total 867	C 410	N 169	O 247	P 41	0	0

- Molecule 95 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
95	Bg	49	Total 1007	C 482	N 190	O 287	P 48	0	0

- Molecule 96 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
96	Bh	51	Total 1044	C 501	N 195	O 298	P 50	0	0

- Molecule 97 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
97	Bi	35	Total 713	C 342	N 129	O 208	P 34	0	0

- Molecule 98 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
98	Bj	37	Total 754	C 361	N 140	O 217	P 36	0	0

- Molecule 99 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
99	Bk	42	Total 850	C 408	N 153	O 248	P 41	0	0

- Molecule 100 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
100	Bl	44	Total 884	C 434	N 121	O 286	P 43	0	0

- Molecule 101 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
101	Bm	40	Total 811	C 397	N 128	O 247	P 39	0	0

- Molecule 102 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
102	Bn	63	Total 1291	C 613	N 248	O 368	P 62	0	0

- Molecule 103 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
103	Bo	35	Total 725	C 345	N 144	O 202	P 34	0	0

- Molecule 104 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
104	Bp	42	Total 860	C 413	N 160	O 246	P 41	0	0

- Molecule 105 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
105	Bq	42	Total 862	C 413	N 160	O 248	P 41	0	0

- Molecule 106 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
106	Br	49	Total 1006	C 483	N 180	O 295	P 48	0	0

- Molecule 107 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
107	Bs	35	Total 716	C 344	N 136	O 202	P 34	0	0

- Molecule 108 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
108	Bt	35	Total 716	C 344	N 127	O 211	P 34	0	0

- Molecule 109 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
109	Bu	40	Total 819	C 397	N 143	O 240	P 39	0	0

- Molecule 110 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
110	Bv	44	Total 888	C 434	N 130	O 281	P 43	0	0

- Molecule 111 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
111	Bw	49	Total 1012	C 484	N 194	O 286	P 48	0	0

- Molecule 112 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
112	Bx	47	Total 962	C 461	N 178	O 277	P 46	0	0

- Molecule 113 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
113	By	40	Total 810	C 389	N 142	O 240	P 39	0	0

- Molecule 114 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
114	Bz	49	Total 1017	C 487	N 194	O 288	P 48	0	0

- Molecule 115 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
115	B0	43	Total 871	C 423	N 144	O 262	P 42	0	0

- Molecule 116 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
116	B1	49	Total 1017	C 480	N 201	O 288	P 48	0	0

- Molecule 117 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
117	B2	38	Total 769	C 376	N 113	O 243	P 37	0	0

- Molecule 118 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
118	B3	44	Total 890	C 438	N 129	O 280	P 43	0	0

- Molecule 119 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
119	B4	35	Total 704	C 342	N 114	O 214	P 34	0	0

- Molecule 120 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
120	B5	35	Total 712	C 344	N 124	O 210	P 34	0	0

- Molecule 121 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
121	B6	49	Total 997	C 477	N 183	O 289	P 48	0	0

- Molecule 122 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
122	B7	49	Total 1011	C 484	N 194	O 285	P 48	0	0

- Molecule 123 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
123	B8	42	Total 864	C 409	N 170	O 244	P 41	0	0

- Molecule 124 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
124	B9	36	Total 729	C 357	N 111	O 226	P 35	0	0

- Molecule 125 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
125	CA	35	Total 716	C 342	N 132	O 208	P 34	0	0

- Molecule 126 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
126	CB	35	Total 710	C 343	N 125	O 208	P 34	0	0

- Molecule 127 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
127	CC	49	Total 1008	C 482	N 190	O 288	P 48	0	0

- Molecule 128 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
128	CD	42	Total 843	C 408	N 144	O 250	P 41	0	0

- Molecule 129 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
129	CE	35	Total 729	C 346	N 149	O 200	P 34	0	0

- Molecule 130 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
130	CF	38	Total 764	C 377	N 103	O 247	P 37	0	0

- Molecule 131 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
131	CG	51	Total 1047	C 504	N 189	O 304	P 50	0	0

- Molecule 132 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
132	CH	50	Total 1020	C 493	N 176	O 302	P 49	0	0

- Molecule 133 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
133	CI	43	Total 862	C 422	N 124	O 274	P 42	0	0

- Molecule 134 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
134	CJ	40	Total 806	C 387	N 144	O 236	P 39	0	0

- Molecule 135 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
135	CK	37	Total 766	C 364	N 158	O 208	P 36	0	0

- Molecule 136 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
136	CL	47	Total 962	C 463	N 179	O 274	P 46	0	0

- Molecule 137 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
137	CM	38	Total 769	C 376	N 113	O 243	P 37	0	0

- Molecule 138 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
138	CN	40	Total 826	C 393	N 165	O 229	P 39	0	0

- Molecule 139 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
139	CO	42	Total 857	C 409	N 164	O 243	P 41	0	0

- Molecule 140 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
140	CP	35	Total 714	C 342	N 132	O 206	P 34	0	0

- Molecule 141 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
141	CQ	40	Total 821	C 396	N 138	O 248	P 39	0	0

- Molecule 142 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
142	CR	35	Total 715	C 338	N 136	O 207	P 34	0	0

- Molecule 143 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
143	CS	49	Total 1016	C 480	N 213	O 275	P 48	0	0

- Molecule 144 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
144	CT	42	Total 873	C 415	N 170	O 247	P 41	0	0

- Molecule 145 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
145	CU	44	Total 879	C 433	N 122	O 281	P 43	0	0

- Molecule 146 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
146	CV	38	Total 767	C 375	N 111	O 244	P 37	0	0

- Molecule 147 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
147	CW	42	Total 858	C 408	N 162	O 247	P 41	0	0

- Molecule 148 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
148	CX	42	Total 867	C 413	N 169	O 244	P 41	0	0

- Molecule 149 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
149	CY	49	Total 1006	C 484	N 185	O 289	P 48	0	0

- Molecule 150 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
150	CZ	49	Total 1000	C 476	N 184	O 292	P 48	0	0

- Molecule 151 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
151	Ca	42	Total 866	C 414	N 162	O 249	P 41	0	0

- Molecule 152 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
152	Cb	49	Total 1008	C 478	N 194	O 288	P 48	0	0

- Molecule 153 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
153	Cc	42	Total 855	C 411	N 162	O 241	P 41	0	0

- Molecule 154 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
154	Cd	47	Total 963	C 464	N 178	O 275	P 46	0	0

- Molecule 155 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
155	Ce	44	Total 892	C 437	N 136	O 276	P 43	0	0

- Molecule 156 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
156	Cf	40	Total 825	C 394	N 143	O 249	P 39	0	0

- Molecule 157 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
157	Cg	36	Total 731	C 353	N 121	O 222	P 35	0	0

- Molecule 158 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
158	Ch	42	Total 853	C 407	N 154	O 251	P 41	0	0

- Molecule 159 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
159	Ci	56	Total 1145	C 553	N 203	O 334	P 55	0	0

- Molecule 160 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
160	Cj	35	Total 713	C 339	N 135	O 205	P 34	0	0

- Molecule 161 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
161	Ck	36	Total 724	C 351	N 114	O 224	P 35	0	0

- Molecule 162 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
162	Cl	40	Total 829	C 396	N 156	O 238	P 39	0	0

- Molecule 163 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
163	Cm	44	Total 897	C 436	N 137	O 281	P 43	0	0

- Molecule 164 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
164	Cn	42	Total 850	C 405	N 150	O 254	P 41	0	0

- Molecule 165 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
165	Co	35	Total 708	C 340	N 122	O 212	P 34	0	0

- Molecule 166 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
166	Cp	49	Total 1005	C 478	N 185	O 294	P 48	0	0

- Molecule 167 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
167	Cq	44	Total 889	C 425	N 157	O 264	P 43	0	0

- Molecule 168 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
168	Cr	49	Total	C	N	O	P	0	0
			1009	477	195	289	48		

- Molecule 169 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
169	Cs	44	Total	C	N	O	P	0	0
			902	428	178	253	43		

- Molecule 170 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
170	Ct	42	Total	C	N	O	P	0	0
			861	410	160	250	41		

- Molecule 171 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
171	Cu	38	Total	C	N	O	P	0	0
			769	377	109	246	37		

- Molecule 172 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
172	Cv	44	Total	C	N	O	P	0	0
			881	434	115	289	43		

- Molecule 173 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
173	Cw	35	Total	C	N	O	P	0	0
			705	340	119	212	34		

- Molecule 174 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
174	Cx	35	Total	C	N	O	P	0	0
			727	343	143	207	34		

- Molecule 175 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
175	Cy	42	Total 865	C 412	N 164	O 248	P 41	0	0

- Molecule 176 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
176	Cz	49	Total 1004	C 475	N 191	O 290	P 48	0	0

- Molecule 177 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
177	C0	40	Total 820	C 395	N 136	O 250	P 39	0	0

- Molecule 178 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
178	C1	42	Total 863	C 410	N 169	O 243	P 41	0	0

- Molecule 179 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
179	C2	49	Total 1006	C 478	N 197	O 283	P 48	0	0

- Molecule 180 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
180	C3	49	Total 1008	C 480	N 195	O 285	P 48	0	0

- Molecule 181 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
181	C4	42	Total 865	C 415	N 152	O 257	P 41	0	0

- Molecule 182 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
182	C5	42	Total 851	C 410	N 148	O 252	P 41	0	0

- Molecule 183 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
183	C6	38	Total 769	C 375	N 114	O 243	P 37	0	0

- Molecule 184 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
184	C7	40	Total 808	C 390	N 138	O 241	P 39	0	0

- Molecule 185 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
185	C8	36	Total 734	C 354	N 123	O 222	P 35	0	0

- Molecule 186 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
186	C9	50	Total 1007	C 486	N 156	O 316	P 49	0	0

- Molecule 187 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
187	DA	44	Total 913	C 429	N 186	O 255	P 43	0	0

- Molecule 188 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
188	DB	42	Total 857	C 409	N 167	O 240	P 41	0	0

- Molecule 189 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
189	DC	35	Total 708	C 338	N 130	O 206	P 34	0	0

- Molecule 190 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
190	DD	47	Total 962	C 459	N 186	O 271	P 46	0	0

- Molecule 191 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
191	DE	37	Total 759	C 359	N 154	O 210	P 36	0	0

- Molecule 192 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
192	DF	38	Total 770	C 377	N 109	O 247	P 37	0	0

- Molecule 193 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
193	DG	49	Total 990	C 472	N 173	O 297	P 48	0	0

- Molecule 194 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
194	DH	42	Total 866	C 412	N 164	O 249	P 41	0	0

- Molecule 195 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
195	DI	40	Total 827	C 398	N 142	O 248	P 39	0	0

- Molecule 196 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
196	DJ	42	Total 852	C 407	N 154	O 250	P 41	0	0

- Molecule 197 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
197	DK	35	Total 718	C 340	N 146	O 198	P 34	0	0

- Molecule 198 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
198	DL	44	Total 888	C 435	N 123	O 287	P 43	0	0

- Molecule 199 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
199	DM	38	Total 771	C 374	N 115	O 245	P 37	0	0

- Molecule 200 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
200	DN	42	Total 870	C 408	N 180	O 241	P 41	0	0

- Molecule 201 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
201	DO	49	Total 990	C 475	N 167	O 300	P 48	0	0

- Molecule 202 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
202	DP	35	Total 710	C 340	N 122	O 214	P 34	0	0

- Molecule 203 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
203	DQ	49	Total	C	N	O	P	0	0
			1003	478	188	289	48		

- Molecule 204 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
204	DR	49	Total	C	N	O	P	0	0
			1023	483	204	288	48		

- Molecule 205 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
205	DS	49	Total	C	N	O	P	0	0
			992	476	172	296	48		

- Molecule 206 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
206	DT	37	Total	C	N	O	P	0	0
			756	357	144	219	36		

- Molecule 207 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
207	DU	42	Total	C	N	O	P	0	0
			855	409	146	259	41		

- Molecule 208 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
208	DV	50	Total	C	N	O	P	0	0
			1009	484	167	309	49		

- Molecule 209 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
209	DW	44	Total	C	N	O	P	0	0
			891	436	128	284	43		

- Molecule 210 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
210	DX	40	Total	C	N	O	P	0	0
			813	391	137	246	39		

- Molecule 211 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
211	DY	42	Total	C	N	O	P	0	0
			857	410	154	252	41		

- Molecule 212 is a DNA chain called STAPLE STRAND.

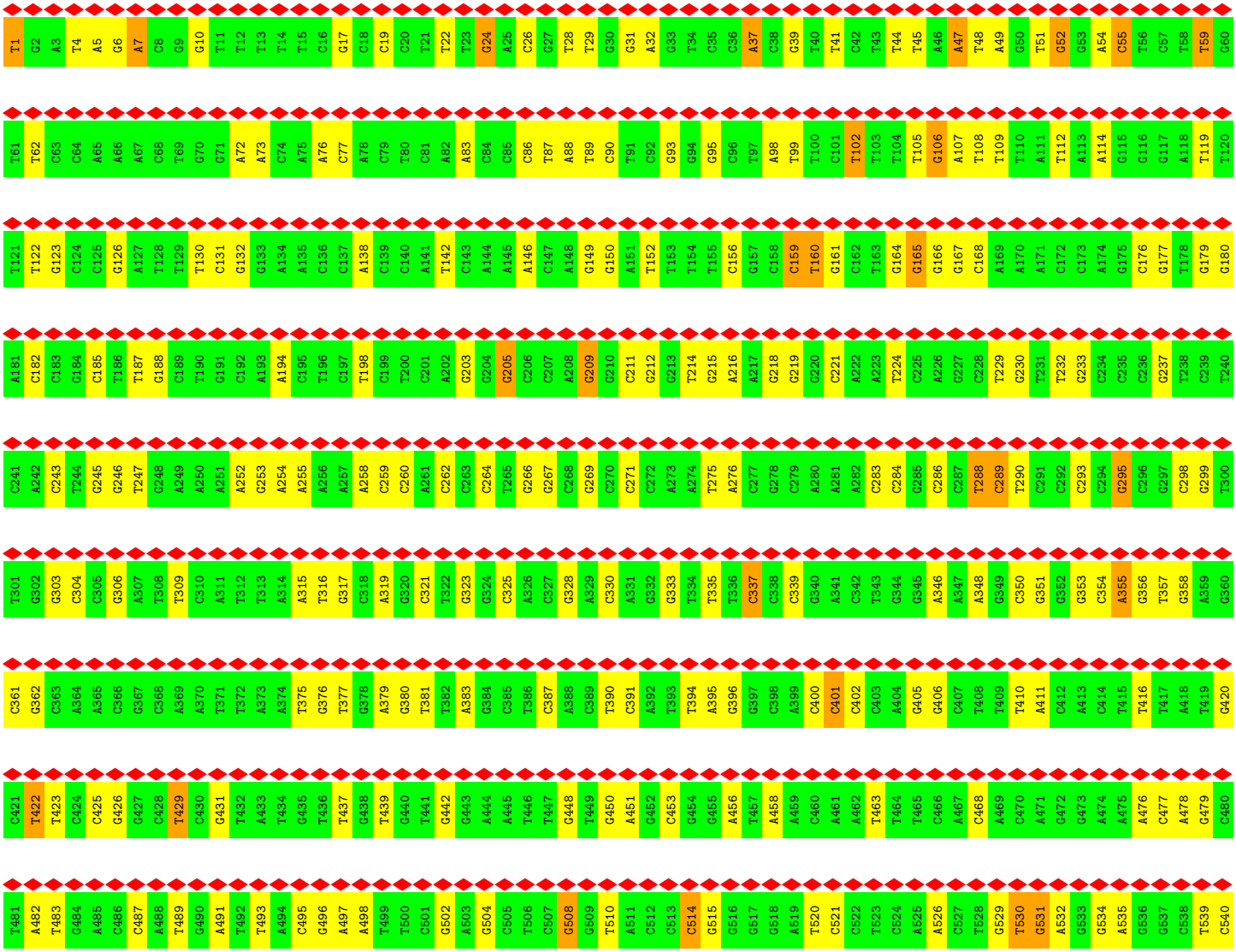
Mol	Chain	Residues	Atoms					AltConf	Trace
212	DZ	42	Total	C	N	O	P	0	0
			854	412	152	249	41		

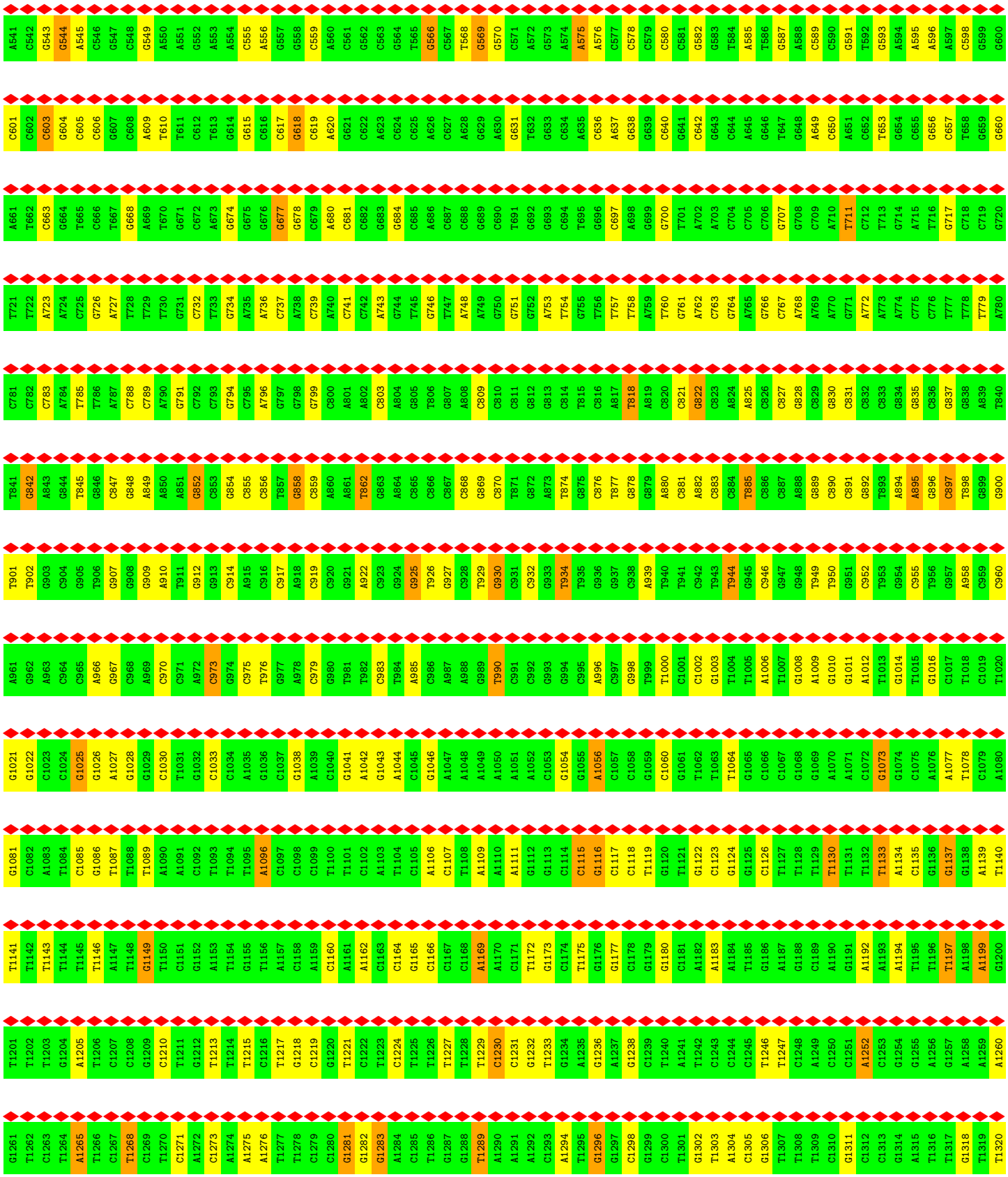
3 Residue-property plots (i)

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 atom inclusion in map 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 diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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: SCAFFOLD STRAND

Chain AA:

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C601 C602 C603 G604 C605 C606 G607 C608 A609 T610 T611 C612 T613 G614 G615 C616 C617 G618 C619 A620 G621 C622 A623 C624 C625 A626 C627 A628 G629 A630 G631 T632 G633 C634 A635 C636 A637 G638 G639 C640 G641 C642 G643 C644 A645 G646 T647 G648 A649 C650 A651 C652 T653 G654 C655 G656 C657 T658 G659 G660
A661 T662 C663 G664 T665 C666 T667 G668 A669 T670 G671 C672 A673 G674 G675 G676 G677 G678 C679 A680 C681 C682 G683 G684 C685 A686 C687 C688 G689 C690 T691 G692 G693 C694 T695 G696 C697 A698 G699 G700 T701 A702 A703 C704 C705 C706 G707 G708 C709 A710 T711 C712 T713 G714 A715 T716 G717 C718 C719 G720
T721 T722 A723 A724 C725 G726 A727 T728 T729 T730 G731 C732 T733 G734 A735 A736 C737 A738 C739 A740 C741 C742 A743 G744 T745 G746 T747 A748 A749 G750 G751 G752 A753 T754 G755 T756 T757 T758 A759 T760 G761 A762 C763 G764 A765 G766 C767 A768 A769 A770 G771 A772 A773 A774 C775 C776 T777 T778 T779 A780
C781 C782 C783 A784 T785 T786 A787 C788 C789 A790 G791 C792 C793 G794 C795 A796 G797 G798 G799 C800 A801 A802 C803 A804 G805 T806 G807 A808 C809 C810 C811 G812 G813 C814 T815 C816 A817 T818 A819 C820 C821 G822 C823 A824 A825 C826 C827 G828 C829 G830 C831 C832 C833 G834 G835 C836 G837 G838 A839 T840
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A961 G962 A963 C964 C965 A966 G967 C968 A969 C970 C971 A972 G973 G974 C975 T976 G977 A978 C979 G980 T981 T982 C983 T984 A985 C986 A987 A988 G989 T990 C991 C992 G993 G994 C995 A996 C997 G998 T999 T1000 C1001 C1002 G1003 T1004 T1005 A1006 T1007 G1008 A1009 G1010 G1011 A1012 T1013 G1014 T1015 G1016 C1017 T1018 C1019 T1020
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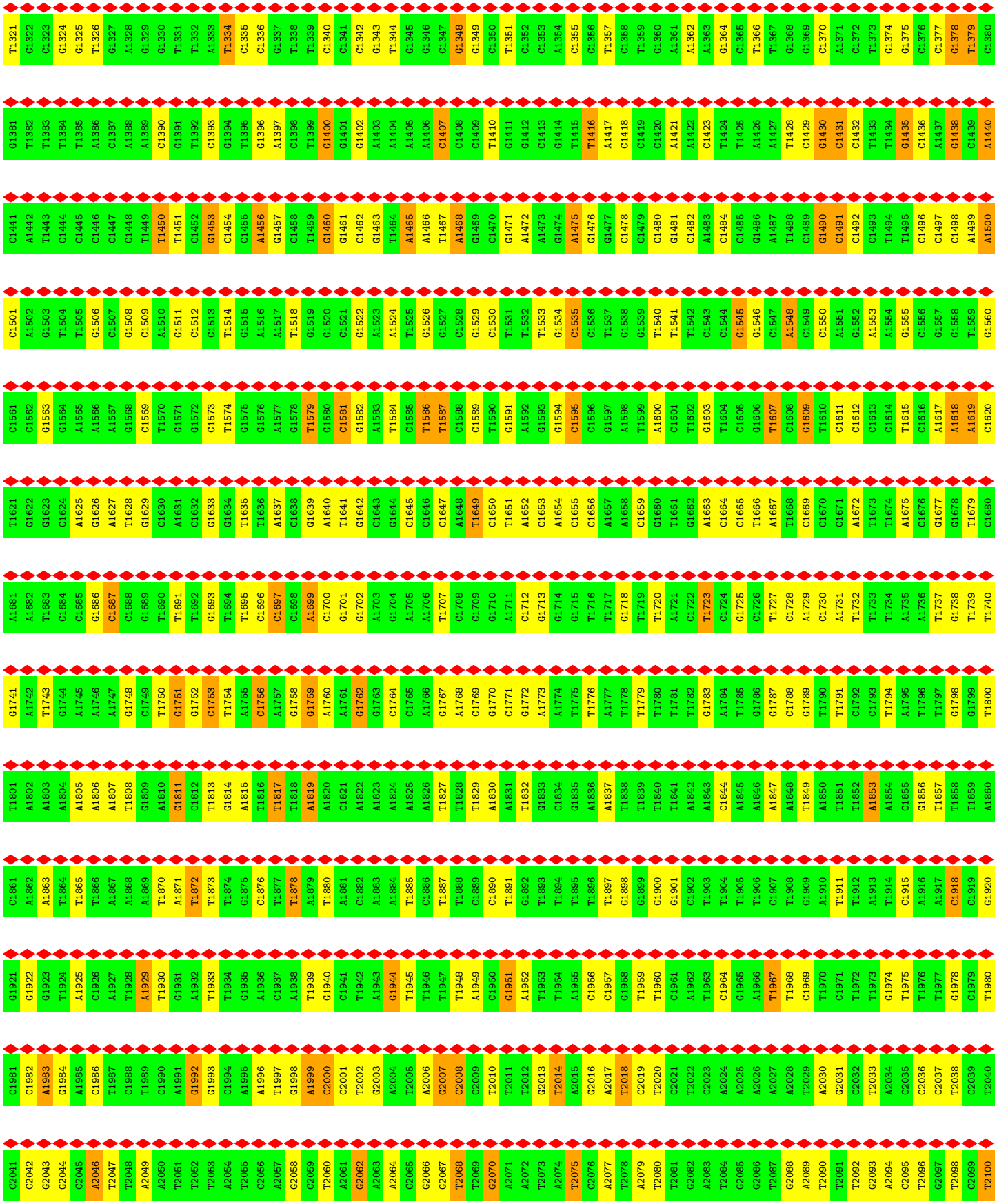
T1141 T1142 T1143 T1144 T1145 T1146 A1147 T1148 G1149 T1150 C1151 G1152 A1153 T1154 G1155 T1156 A1157 C1158 A1159 C1160 A1161 A1162 C1163 C1164 G1165 C1166 C1167 C1168 A1169 A1170 C1171 T1172 G1173 C1174 T1175 G1176 G1177 C1178 G1179 G1180 C1181 A1182 A1183 A1184 T1185 G1186 A1187 G1188 C1189 A1190 G1191 A1192 A1193 A1194 T1195 T1196 T1197 A1198 A1199 G1200
T1201 T1202 T1203 G1204 A1205 T1206 C1207 C1208 G1209 C1210 T1211 G1212 T1213 T1214 T1215 C1216 T1217 G1218 C1219 G1220 T1221 C1222 T1223 C1224 T1225 T1226 T1227 T1228 T1229 C1230 C1231 G1232 T1233 G1234 A1235 G1236 A1237 G1238 C1239 T1240 A1241 T1242 C1243 C1244 C1245 T1246 T1247 C1248 A1249 C1250 C1251 A1252 C1253 G1254 G1255 A1256 G1257 A1258 A1259 A1260
G1261 T1262 C1263 T1264 A1265 T1266 C1267 T1268 C1269 T1270 C1271 A1272 C1273 A1274 A1275 A1276 T1277 T1278 C1279 C1280 G1281 G1282 G1283 A1284 C1285 T1286 G1287 G1288 T1289 A1290 A1291 A1292 C1293 A1294 T1295 G1296 G1297 C1298 G1299 C1300 T1301 G1302 T1303 A1304 C1305 G1306 T1307 T1308 T1309 C1310 G1311 C1312 C1313 G1314 A1315 T1316 T1317 G1318 T1319 T1320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G1381 T1382 T1383 T1384 T1385 A1386 C1387 A1388 A1389 C1390 G1391 T1392 C1393 G1394 T1395 G1396 A1397 C1398 T1399 G1400 C1401 G1402 A1403 A1404 A1405 A1406 C1407 C1408 C1409 T1410 G1411 G1412 C1413 G1414 T1415 T1416 A1417 C1418 C1419 C1420 A1421 A1422 C1423 T1424 T1425 A1426 A1427 T1428 C1429 G1430 C1431 C1432 T1433 T1434 G1435 C1436 A1437 G1438 C1439 A1440
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C1981 C1982 A1983 G1984 A1985 C1986 T1987 C1988 T1989 C1990 A1991 G1992 G1993 C1994 A1995 A1996 T1997 G1998 A1999 C2000 C2001 T2002 G2003 A2004 T2005 A2006 G2007 C2008 C2009 T2010 T2011 T2012 G2013 T2014 A2015 G2016 A2017 T2018 C2019 T2020 C2021 T2022 C2023 A2024 A2025 A2026 A2027 A2028 T2029 A2030 G2031 C2032 T2033 A2034 C2035 C2036 C2037 T2038 C2039 T2040
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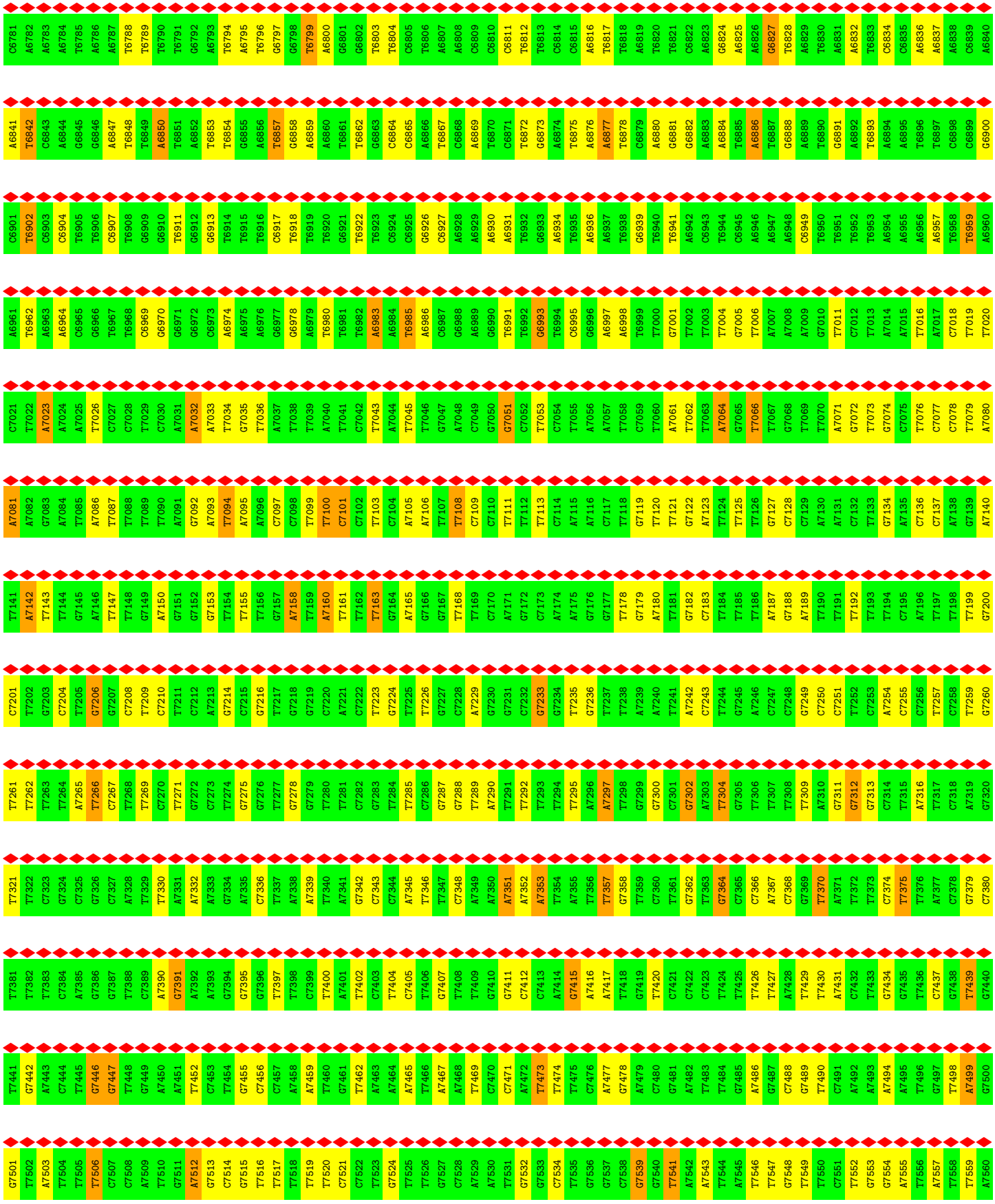
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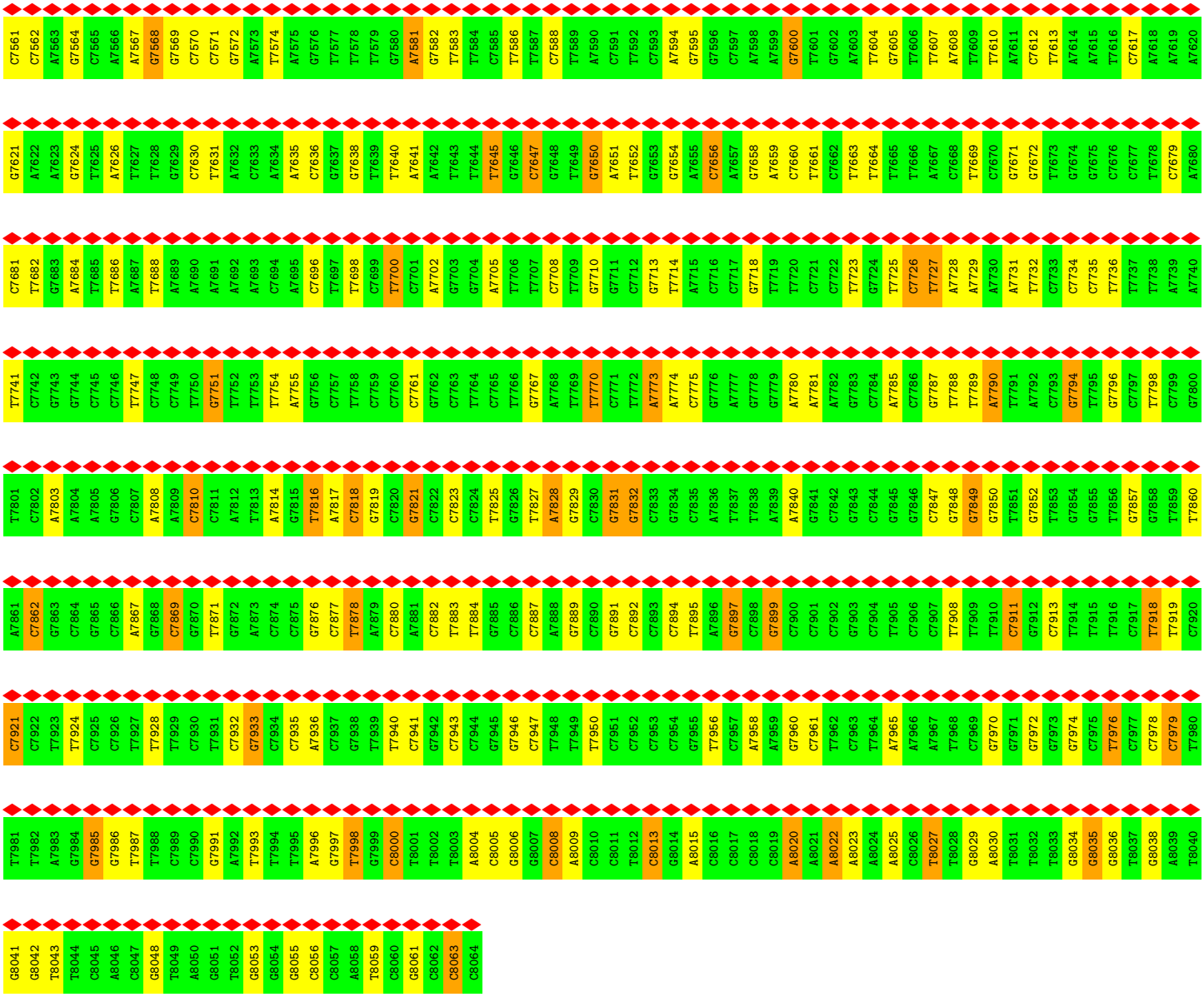
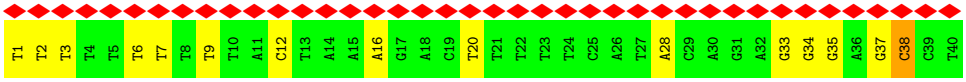
T7261 T7262 T7263 T7264 A7265 T7266 C7267 T7268 T7269 C7270 T7271 G7272 C7273 T7274 G7275 G7276 T7277 G7278 G7279 T7280 T7281 C7282 G7283 T7284 T7285 C7286 G7287 G7288 T7289 A7290 T7291 T7292 T7293 T7294 T7295 A7296 A7297 T7298 G7299 G7300 C7301 G7302 A7303 T7304 G7305 T7306 T7307 T7308 T7309 A7310 G7311 G7312 G7313 C7314 T7315 A7316 T7317 C7318 A7319 G7320
T7321 T7322 C7323 G7324 C7325 G7326 C7327 A7328 T7329 T7330 A7331 A7332 A7333 G7334 A7335 C7336 T7337 A7338 A7339 T7340 A7341 G7342 C7343 C7344 A7345 T7346 T7347 C7348 A7349 A7350 A7351 A7352 A7353 T7354 A7355 T7356 T7357 G7358 T7359 C7360 T7361 G7362 T7363 G7364 C7365 C7366 A7367 C7368 G7369 T7370 A7371 T7372 T7373 C7374 T7375 T7376 A7377 C7378 G7379 C7380
T7381 T7382 T7383 C7384 A7385 G7386 G7387 T7388 C7389 A7390 G7391 A7392 A7393 G7394 G7395 G7396 T7397 T7398 C7399 T7400 A7401 T7402 C7403 T7404 C7405 T7406 G7407 T7408 T7409 G7410 G7411 C7412 C7413 A7414 G7415 A7416 A7417 T7418 G7419 T7420 C7421 C7422 C7423 T7424 T7425 T7426 T7427 A7428 T7429 T7430 A7431 C7432 T7433 G7434 G7435 T7436 C7437 G7438 T7439 G7440
T7441 G7442 A7443 C7444 T7445 G7446 G7447 T7448 G7449 A7450 A7451 T7452 C7453 T7454 G7455 C7456 C7457 A7458 A7459 T7460 G7461 T7462 A7463 A7464 A7465 T7466 A7467 A7468 T7469 C7470 C7471 A7472 T7473 T7474 T7475 C7476 A7477 G7478 A7479 G7480 G7481 A7482 T7483 T7484 G7485 A7486 G7487 C7488 G7489 T7490 C7491 A7492 A7493 A7494 A7495 T7496 G7497 T7498 A7499 G7500
G7501 T7502 A7503 T7504 T7505 T7506 C7507 C7508 A7509 T7510 G7511 A7512 G7513 C7514 G7515 T7516 T7517 T7518 T7519 T7520 C7521 C7522 T7523 G7524 T7525 T7526 G7527 C7528 A7529 A7530 T7531 G7532 G7533 C7534 T7535 G7536 G7537 C7538 G7539 G7540 T7541 A7542 A7543 T7544 A7545 T7546 T7547 G7548 T7549 T7550 C7551 T7552 G7553 G7554 A7555 T7556 A7557 T7558 T7559 A7560



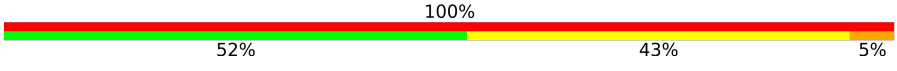
• Molecule 2: STAPLE STRAND

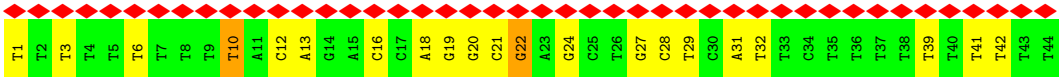
Chain AB:



• Molecule 3: STAPLE STRAND

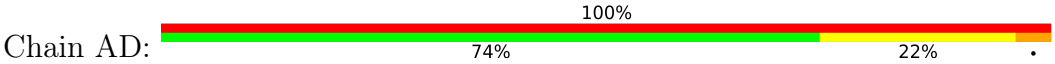
Chain AC:

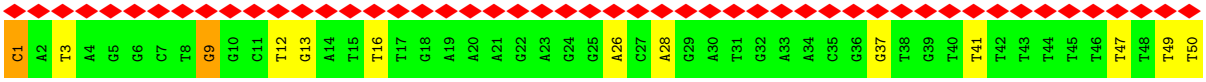




• Molecule 4: STAPLE STRAND

Chain AD:



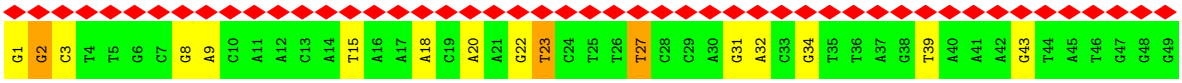


• Molecule 5: STAPLE STRAND

Chain AE:

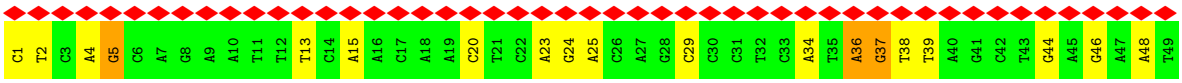
• Molecule 6: STAPLE STRAND

Chain AF:



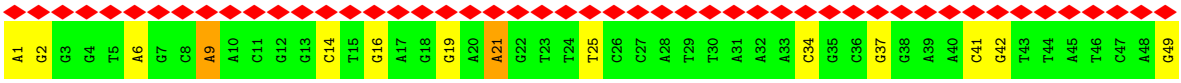
• Molecule 7: STAPLE STRAND

Chain AG:



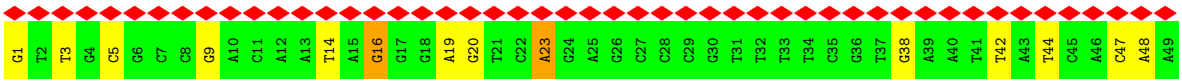
• Molecule 8: STAPLE STRAND

Chain AH:



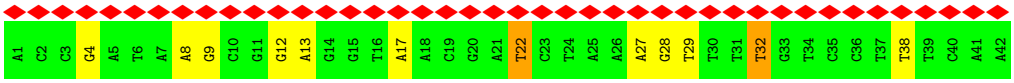
• Molecule 9: STAPLE STRAND

Chain AI:



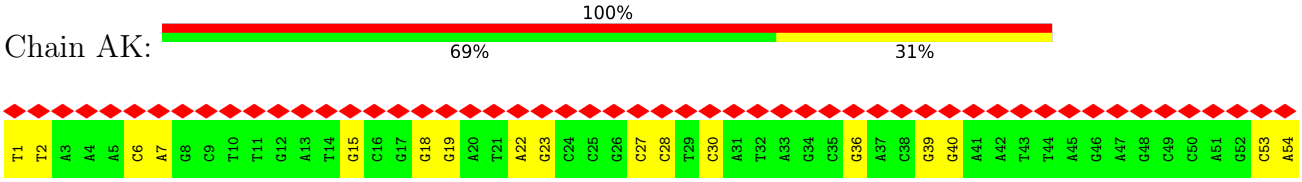
• Molecule 10: STAPLE STRAND

Chain AJ:



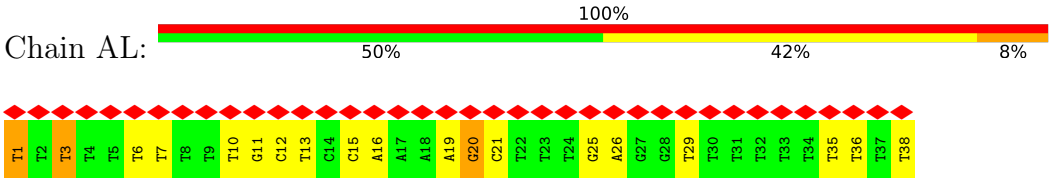
• Molecule 11: STAPLE STRAND

Chain AK:



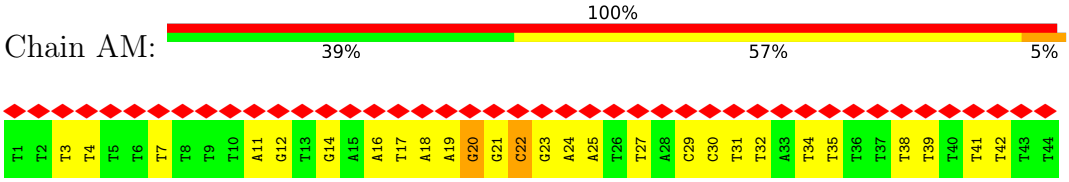
• Molecule 12: STAPLE STRAND

Chain AL:



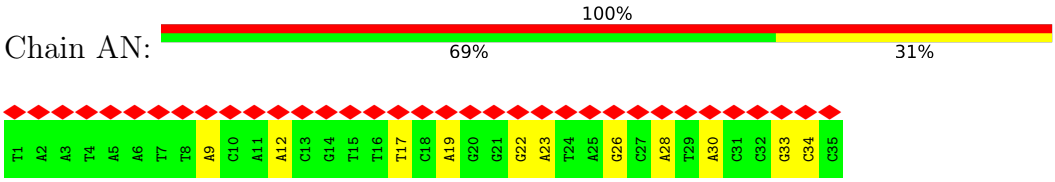
• Molecule 13: STAPLE STRAND

Chain AM:



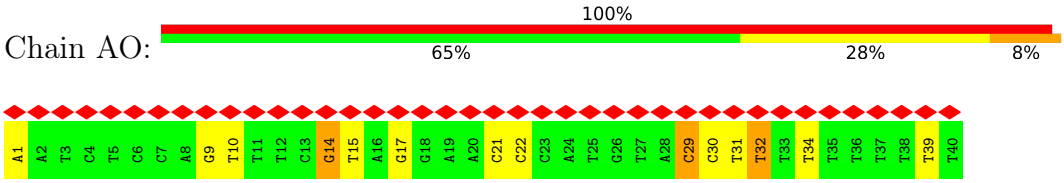
• Molecule 14: STAPLE STRAND

Chain AN:



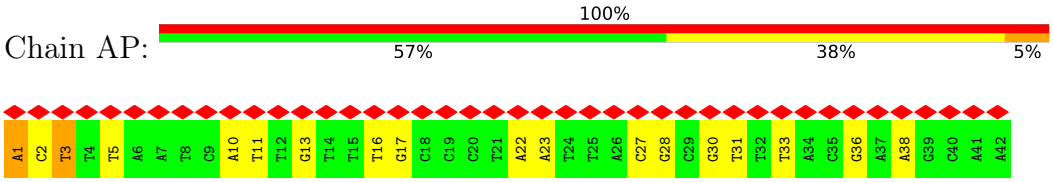
• Molecule 15: STAPLE STRAND

Chain AO:



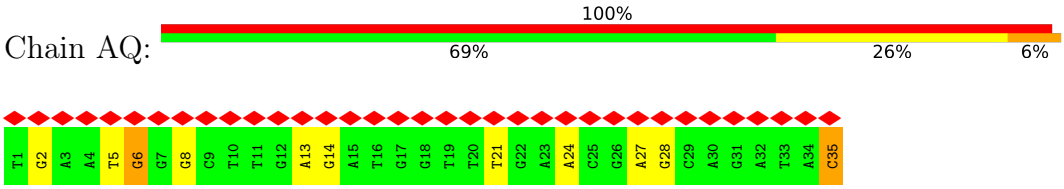
• Molecule 16: STAPLE STRAND

Chain AP:



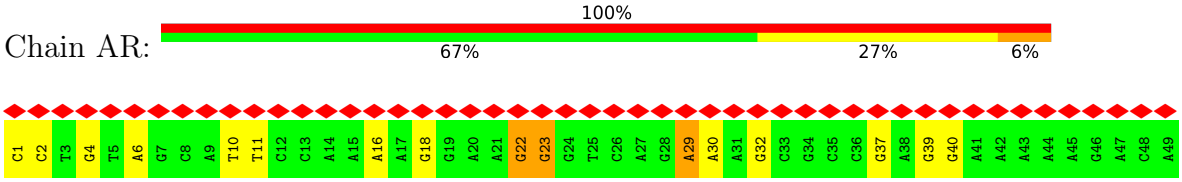
• Molecule 17: STAPLE STRAND

Chain AQ:



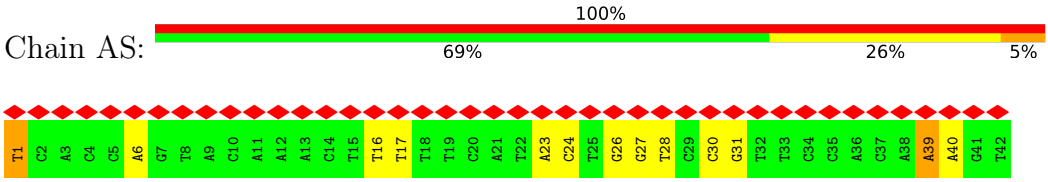
• Molecule 18: STAPLE STRAND

Chain AR:



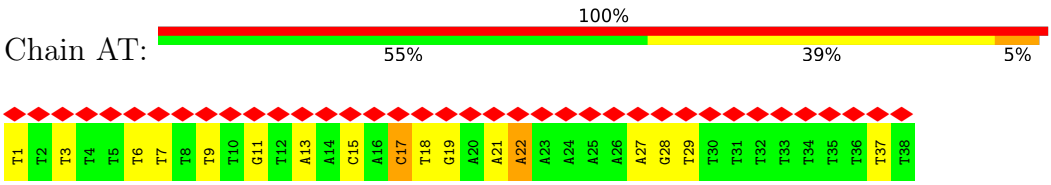
• Molecule 19: STAPLE STRAND

Chain AS:



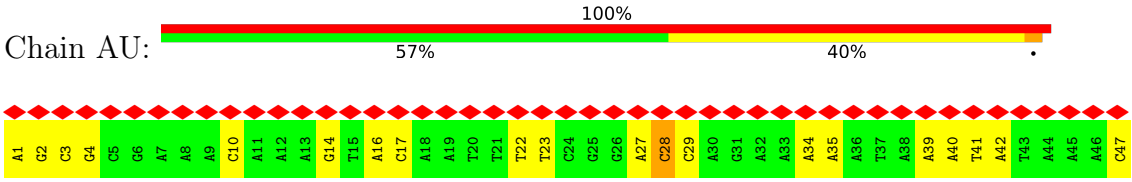
• Molecule 20: STAPLE STRAND

Chain AT:



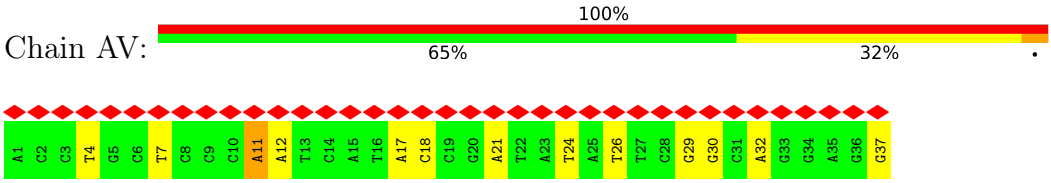
• Molecule 21: STAPLE STRAND

Chain AU:



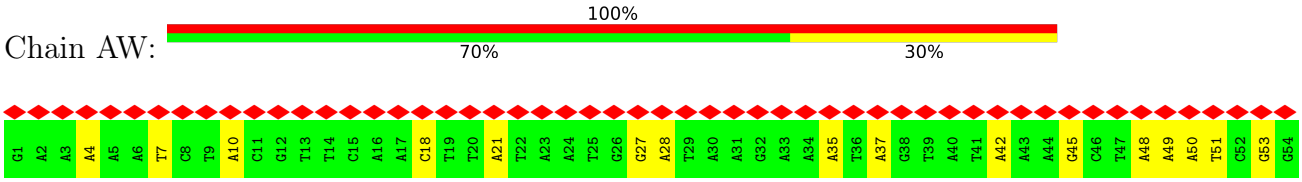
• Molecule 22: STAPLE STRAND

Chain AV:



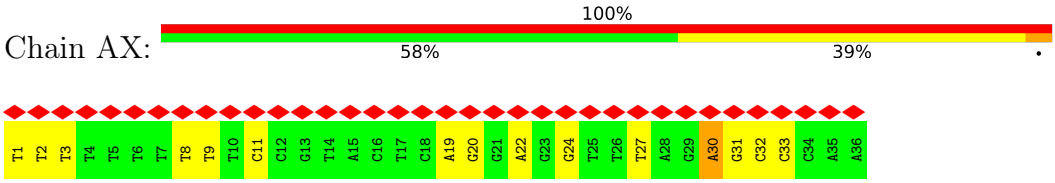
• Molecule 23: STAPLE STRAND

Chain AW:



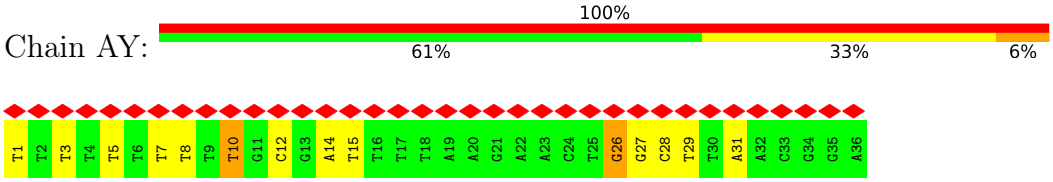
• Molecule 24: STAPLE STRAND

Chain AX:



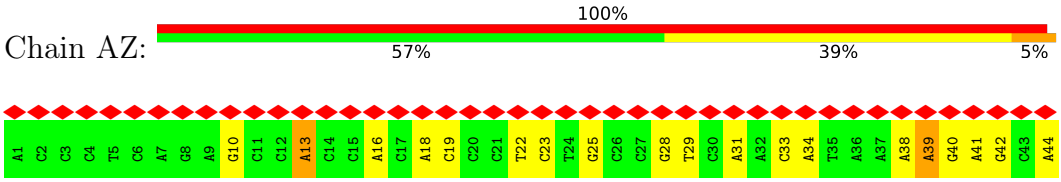
• Molecule 25: STAPLE STRAND

Chain AY:



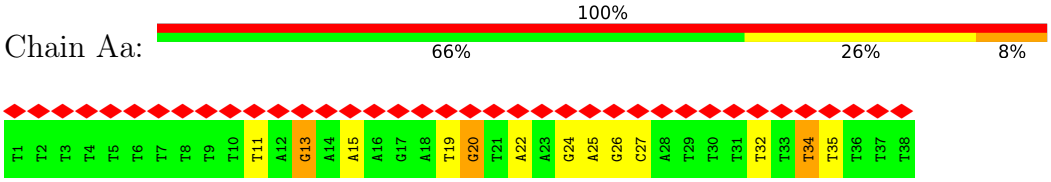
• Molecule 26: STAPLE STRAND

Chain AZ:



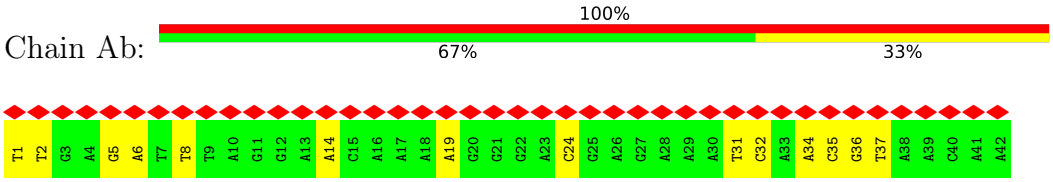
• Molecule 27: STAPLE STRAND

Chain Aa:



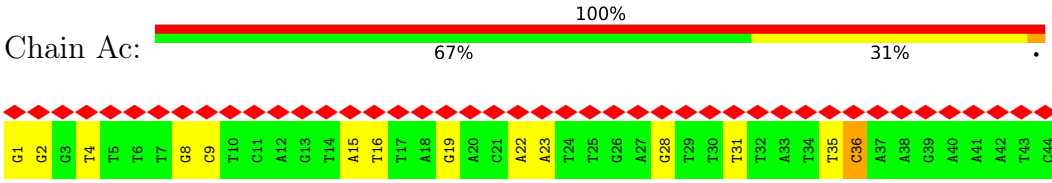
• Molecule 28: STAPLE STRAND

Chain Ab:



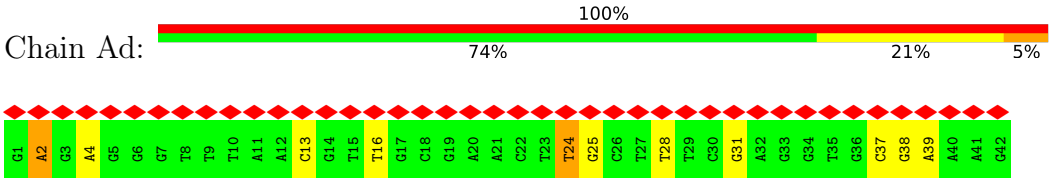
• Molecule 29: STAPLE STRAND

Chain Ac:



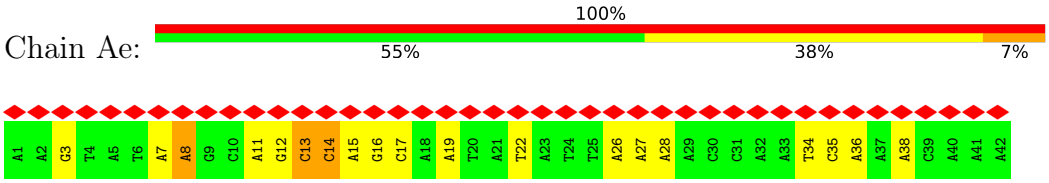
• Molecule 30: STAPLE STRAND

Chain Ad:



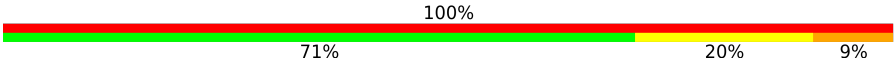
• Molecule 31: STAPLE STRAND

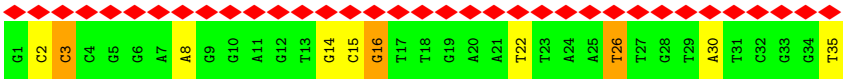
Chain Ae:



• Molecule 32: STAPLE STRAND

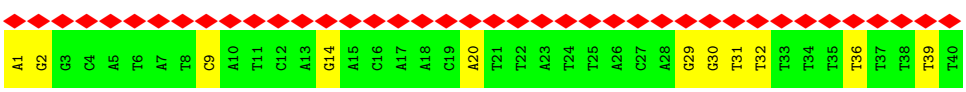
Chain Af:





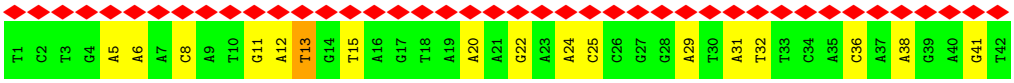
• Molecule 33: STAPLE STRAND

Chain Ag:



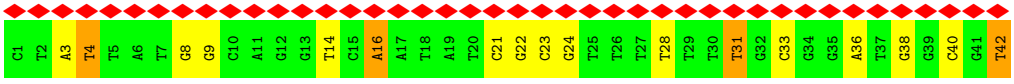
• Molecule 34: STAPLE STRAND

Chain Ah:



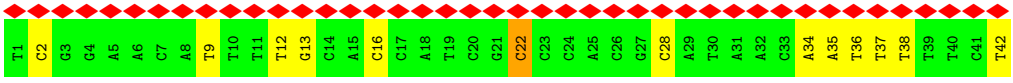
• Molecule 35: STAPLE STRAND

Chain Ai:



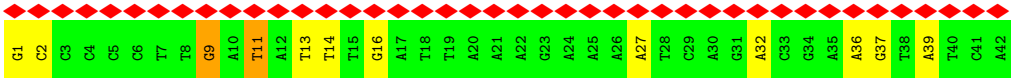
• Molecule 36: STAPLE STRAND

Chain Aj:



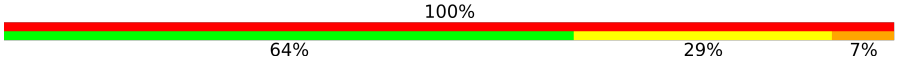
• Molecule 37: STAPLE STRAND

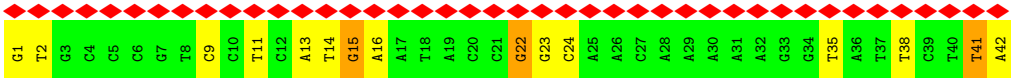
Chain Ak:



• Molecule 38: STAPLE STRAND

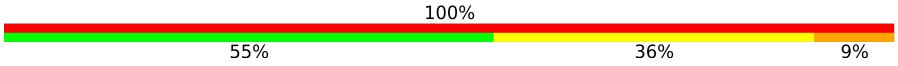
Chain Al:

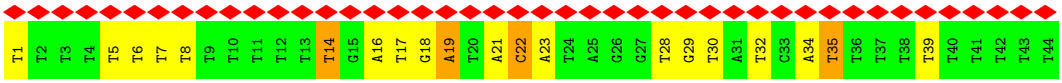




• Molecule 39: STAPLE STRAND

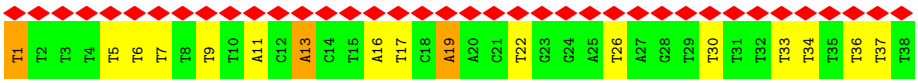
Chain Am:





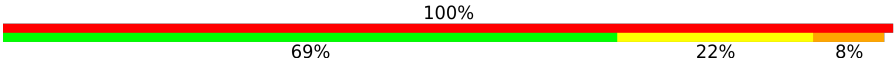
• Molecule 40: STAPLE STRAND

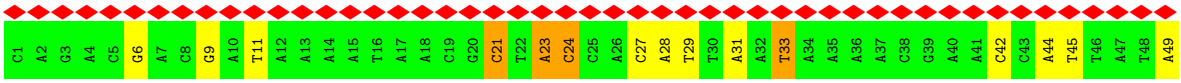
Chain An:



• Molecule 41: STAPLE STRAND

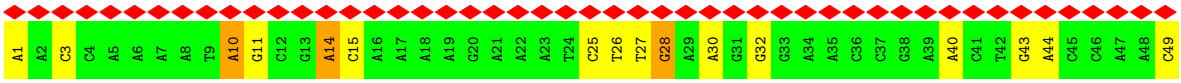
Chain Ao:





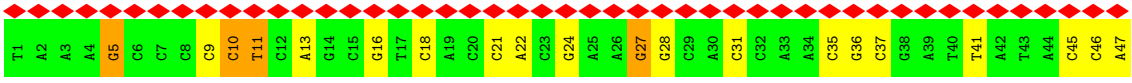
• Molecule 42: STAPLE STRAND

Chain Ap:



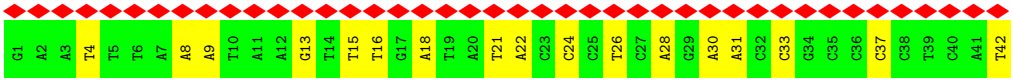
• Molecule 43: STAPLE STRAND

Chain Aq:



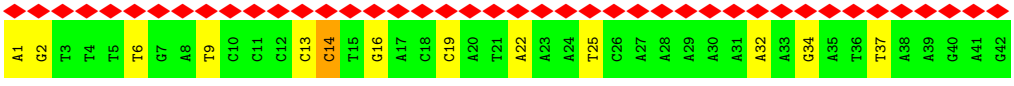
• Molecule 44: STAPLE STRAND

Chain Ar:



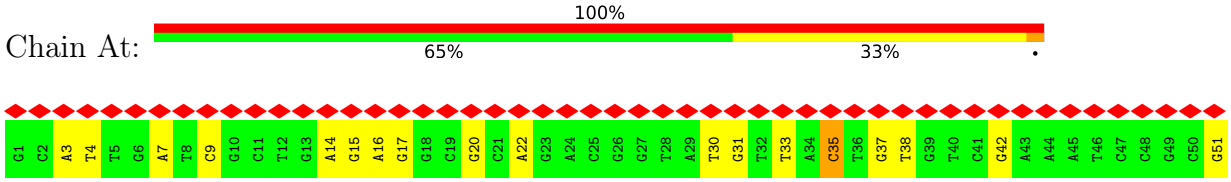
• Molecule 45: STAPLE STRAND

Chain As:



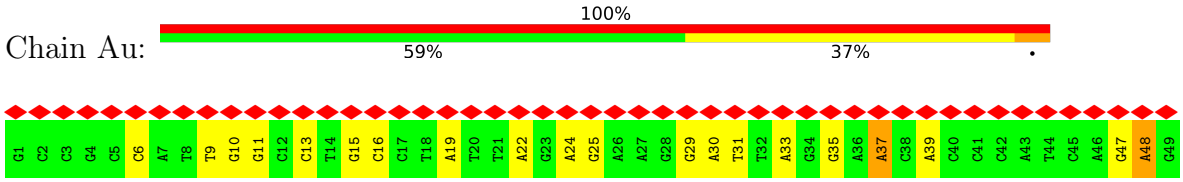
• Molecule 46: STAPLE STRAND

Chain At:



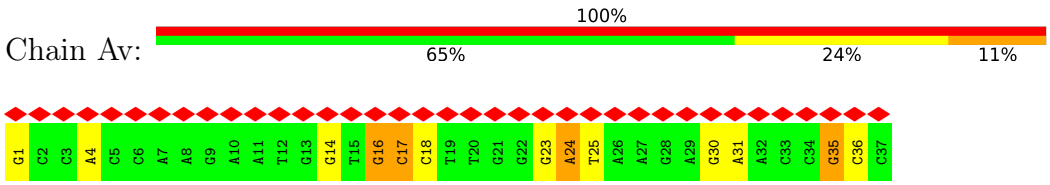
• Molecule 47: STAPLE STRAND

Chain Au:



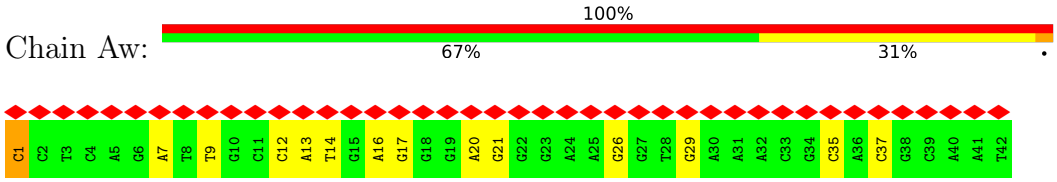
• Molecule 48: STAPLE STRAND

Chain Av:



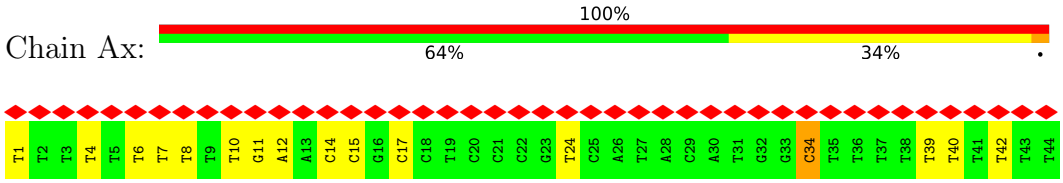
• Molecule 49: STAPLE STRAND

Chain Aw:



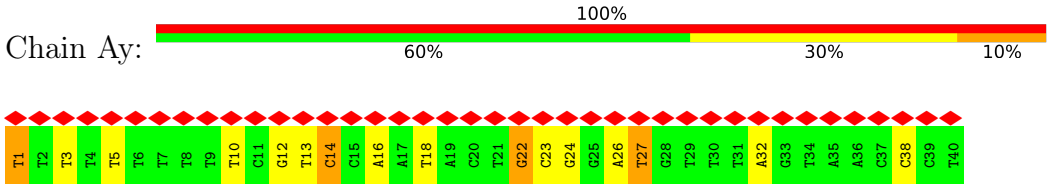
• Molecule 50: STAPLE STRAND

Chain Ax:



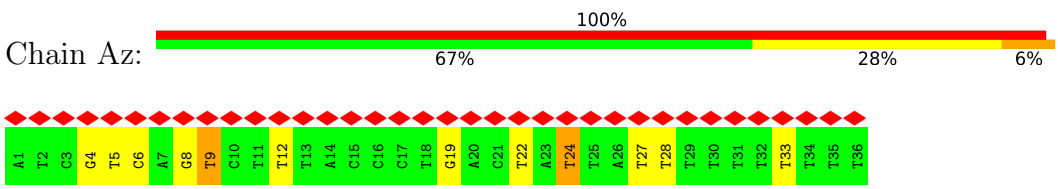
• Molecule 51: STAPLE STRAND

Chain Ay:



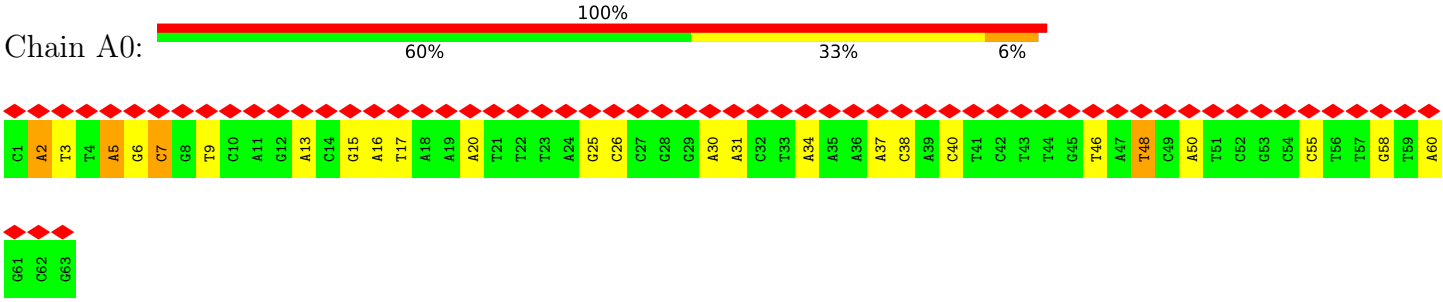
• Molecule 52: STAPLE STRAND

Chain Az:



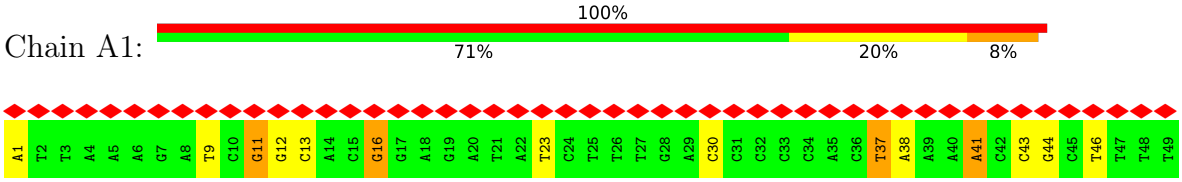
• Molecule 53: STAPLE STRAND

Chain A0:



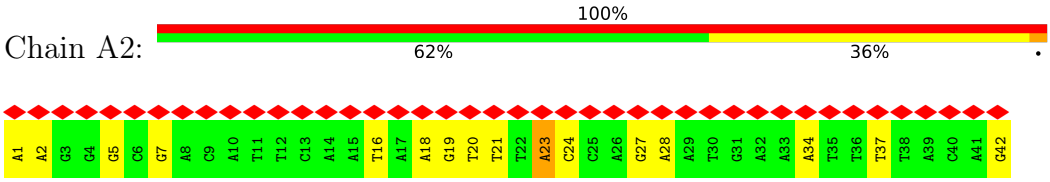
- Molecule 54: STAPLE STRAND

Chain A1:



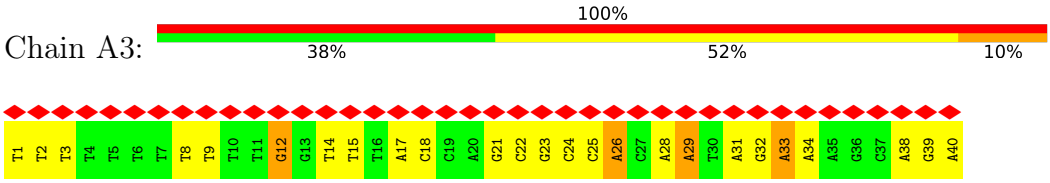
- Molecule 55: STAPLE STRAND

Chain A2:



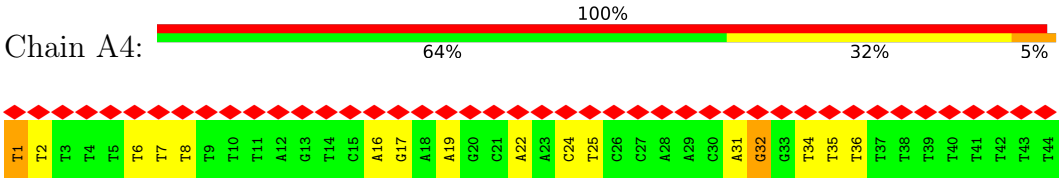
- Molecule 56: STAPLE STRAND

Chain A3:



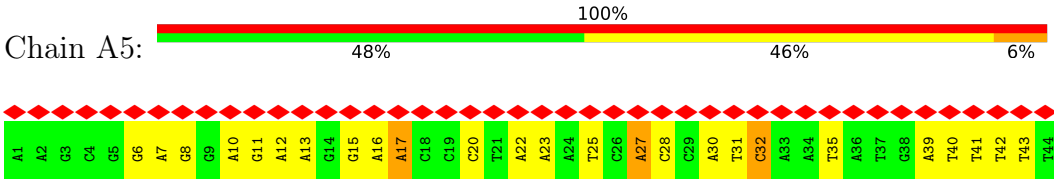
- Molecule 57: STAPLE STRAND

Chain A4:



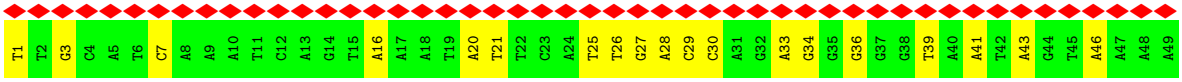
- Molecule 58: STAPLE STRAND

Chain A5:



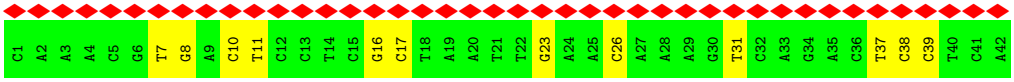
- Molecule 59: STAPLE STRAND

Chain A6:



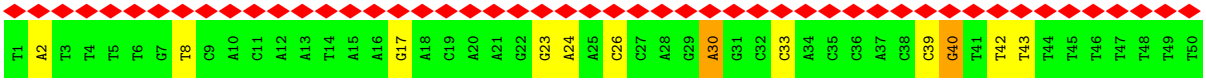
• Molecule 60: STAPLE STRAND

Chain A7:



• Molecule 61: STAPLE STRAND

Chain A8:

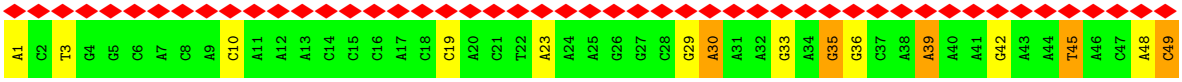


• Molecule 62: STAPLE STRAND

Chain A9:

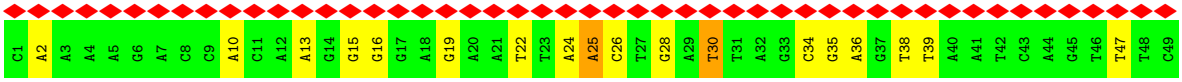
• Molecule 63: STAPLE STRAND

Chain BA:



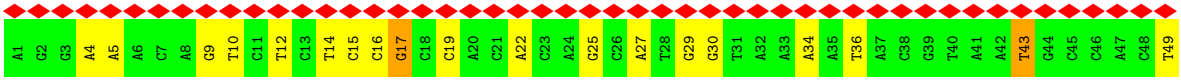
• Molecule 64: STAPLE STRAND

Chain BB:



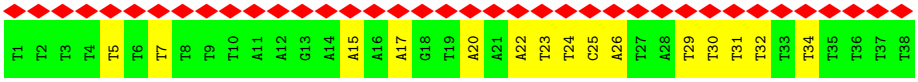
• Molecule 65: STAPLE STRAND

Chain BC:



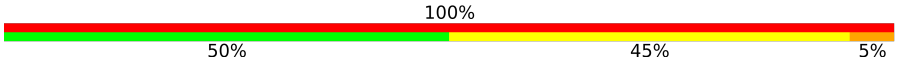
• Molecule 66: STAPLE STRAND

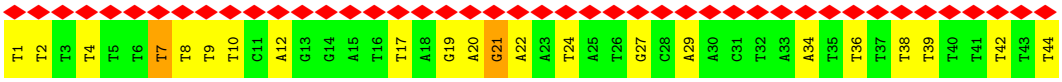
Chain BD:



• Molecule 67: STAPLE STRAND

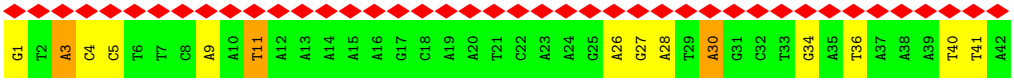
Chain BE:





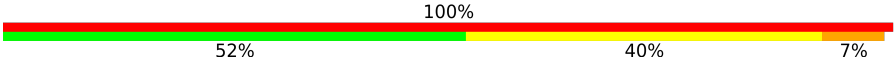
• Molecule 68: STAPLE STRAND

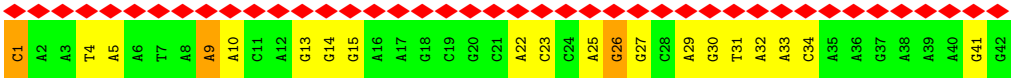
Chain BF:



• Molecule 69: STAPLE STRAND

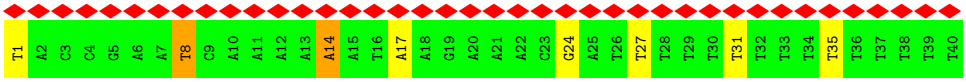
Chain BG:





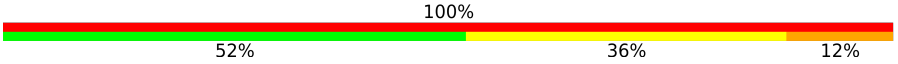
• Molecule 70: STAPLE STRAND

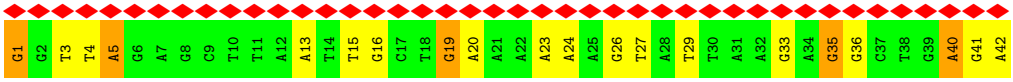
Chain BH:



• Molecule 71: STAPLE STRAND

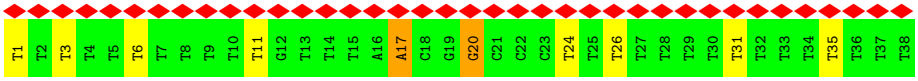
Chain BI:





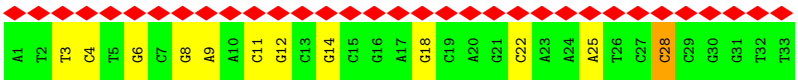
• Molecule 72: STAPLE STRAND

Chain BJ:



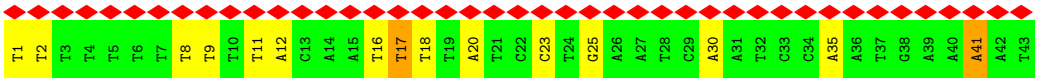
• Molecule 73: STAPLE STRAND

Chain BK:



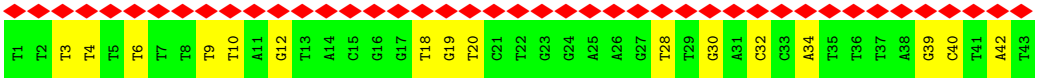
• Molecule 74: STAPLE STRAND

Chain BL:



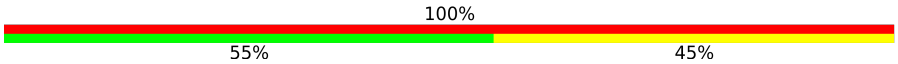
• Molecule 75: STAPLE STRAND

Chain BM:



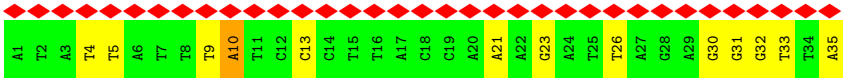
• Molecule 76: STAPLE STRAND

Chain BN:



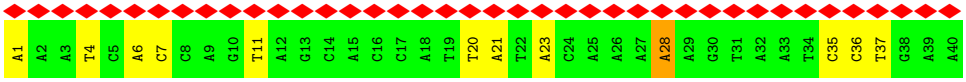
• Molecule 77: STAPLE STRAND

Chain BO:



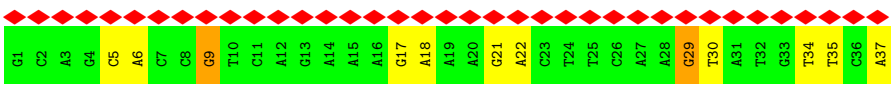
• Molecule 78: STAPLE STRAND

Chain BP:



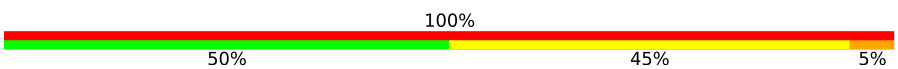
• Molecule 79: STAPLE STRAND

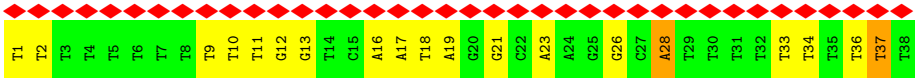
Chain BQ:



• Molecule 80: STAPLE STRAND

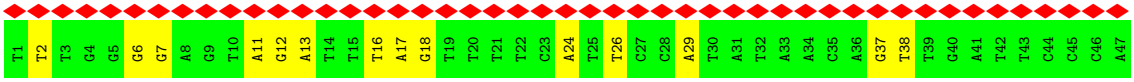
Chain BR:





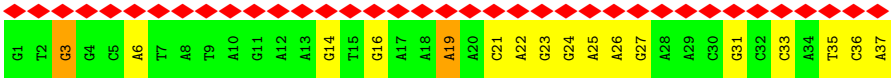
• Molecule 81: STAPLE STRAND

Chain BS:



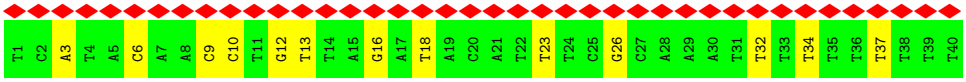
• Molecule 82: STAPLE STRAND

Chain BT:



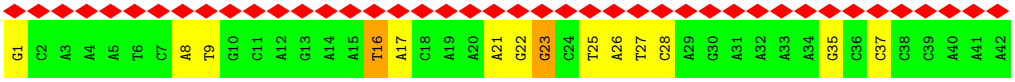
• Molecule 83: STAPLE STRAND

Chain BU:



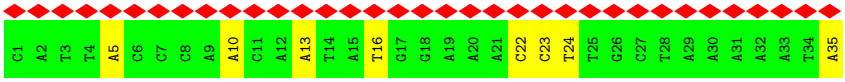
• Molecule 84: STAPLE STRAND

Chain BV:



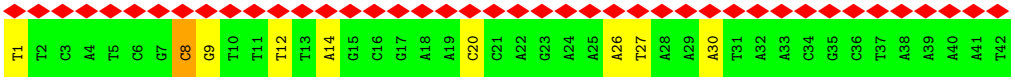
• Molecule 85: STAPLE STRAND

Chain BW:



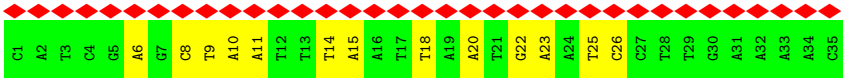
• Molecule 86: STAPLE STRAND

Chain BX:



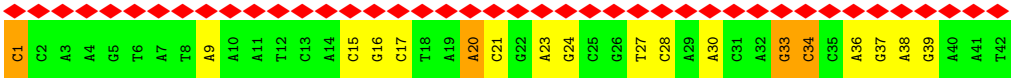
• Molecule 87: STAPLE STRAND

Chain BY:



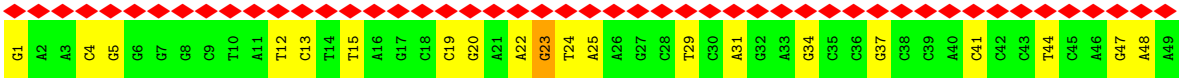
- Molecule 88: STAPLE STRAND

Chain BZ:



- Molecule 89: STAPLE STRAND

Chain Ba:

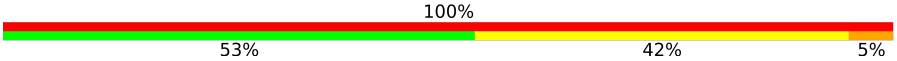


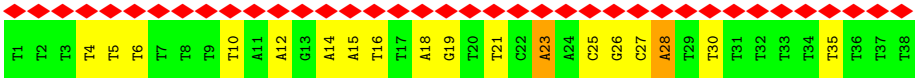
- Molecule 90: STAPLE STRAND

Chain Bb:

- Molecule 91: STAPLE STRAND

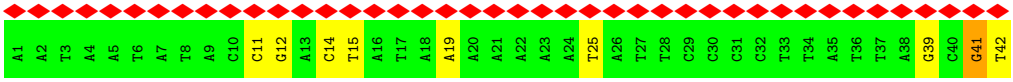
Chain Bc:





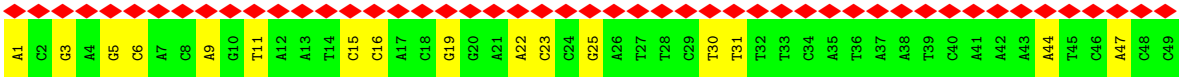
- Molecule 92: STAPLE STRAND

Chain Bd:



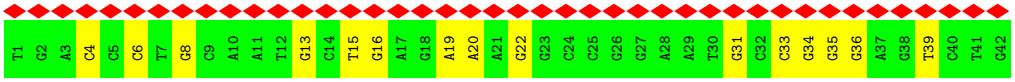
- Molecule 93: STAPLE STRAND

Chain Be:



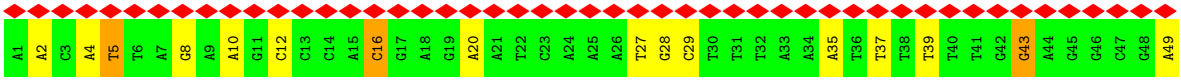
- Molecule 94: STAPLE STRAND

Chain Bf:



• Molecule 95: STAPLE STRAND

Chain Bg:

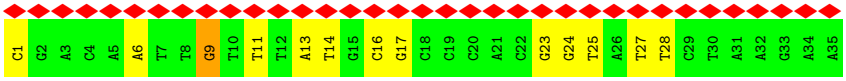


• Molecule 96: STAPLE STRAND

Chain Bh:

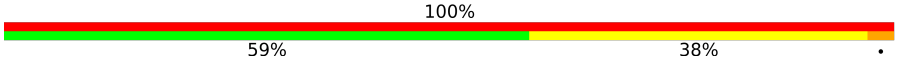
• Molecule 97: STAPLE STRAND

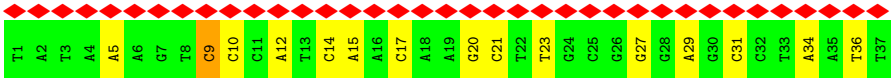
Chain Bi:



• Molecule 98: STAPLE STRAND

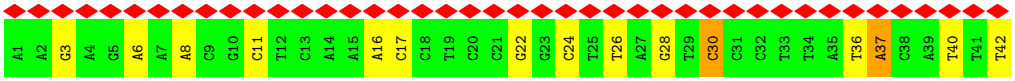
Chain Bj:





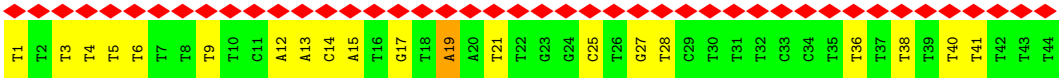
• Molecule 99: STAPLE STRAND

Chain Bk:



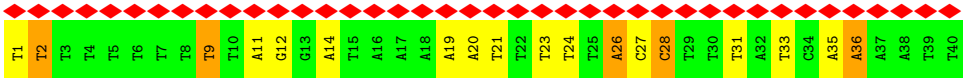
• Molecule 100: STAPLE STRAND

Chain Bl:



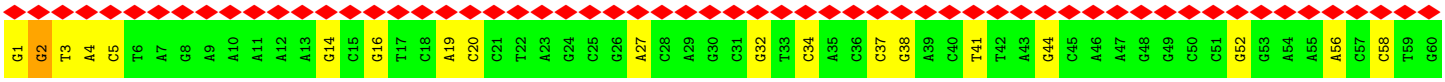
• Molecule 101: STAPLE STRAND

Chain Bm:



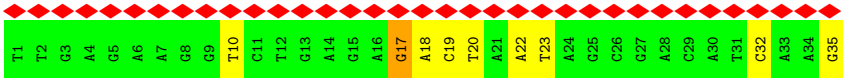
• Molecule 102: STAPLE STRAND

Chain Bn:



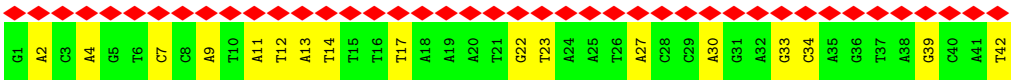
• Molecule 103: STAPLE STRAND

Chain Bo:



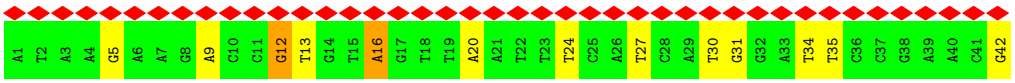
• Molecule 104: STAPLE STRAND

Chain Bp:



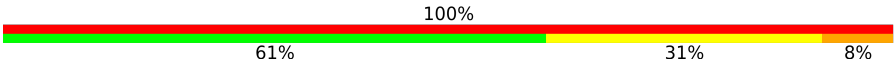
• Molecule 105: STAPLE STRAND

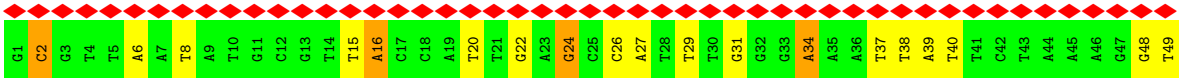
Chain Bq:



• Molecule 106: STAPLE STRAND

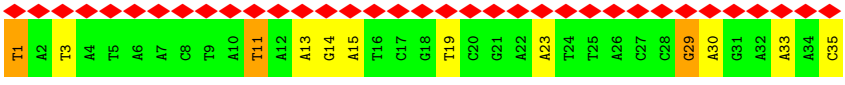
Chain Br:





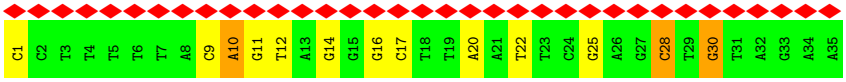
• Molecule 107: STAPLE STRAND

Chain Bs:



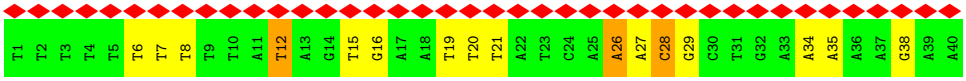
• Molecule 108: STAPLE STRAND

Chain Bt:



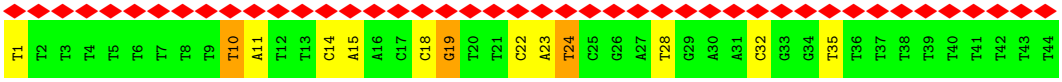
• Molecule 109: STAPLE STRAND

Chain Bu:



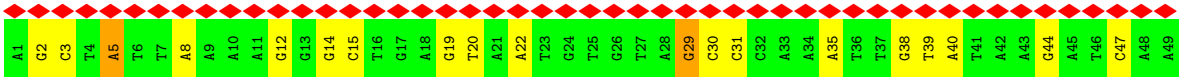
• Molecule 110: STAPLE STRAND

Chain Bv:



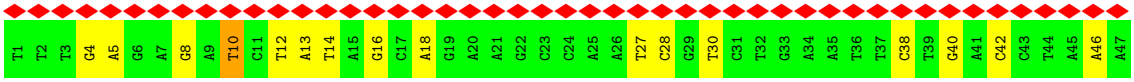
• Molecule 111: STAPLE STRAND

Chain Bw:



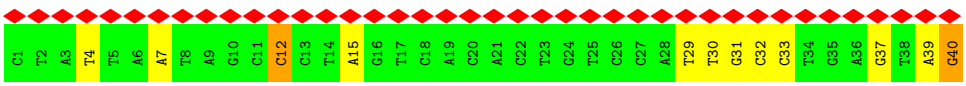
• Molecule 112: STAPLE STRAND

Chain Bx:



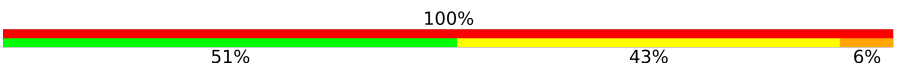
• Molecule 113: STAPLE STRAND

Chain By:



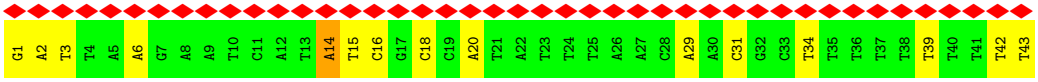
• Molecule 114: STAPLE STRAND

Chain Bz:



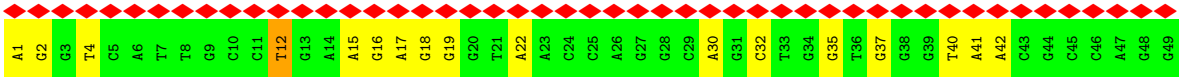
• Molecule 115: STAPLE STRAND

Chain B0:



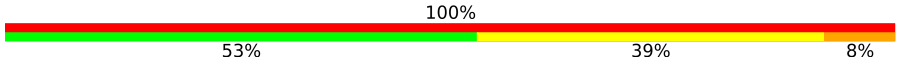
• Molecule 116: STAPLE STRAND

Chain B1:



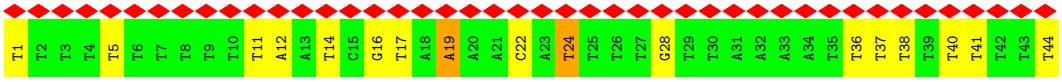
• Molecule 117: STAPLE STRAND

Chain B2:



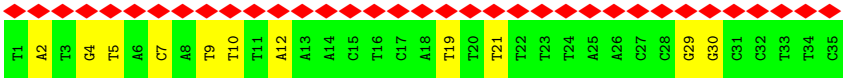
• Molecule 118: STAPLE STRAND

Chain B3:



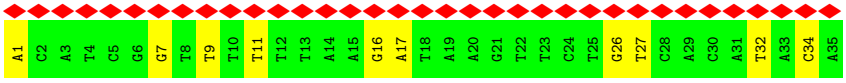
• Molecule 119: STAPLE STRAND

Chain B4:



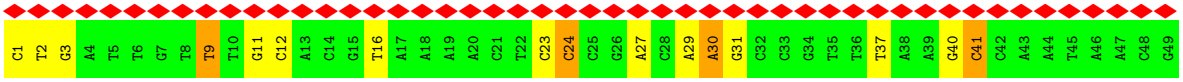
• Molecule 120: STAPLE STRAND

Chain B5:



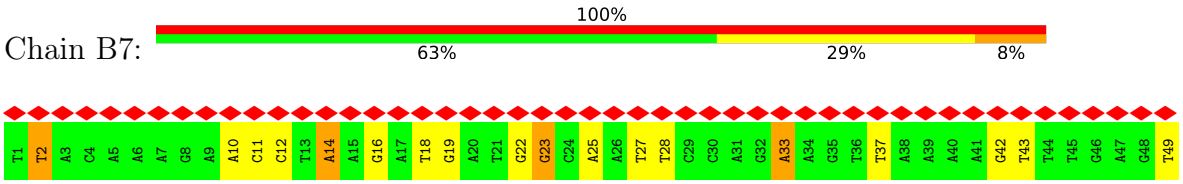
• Molecule 121: STAPLE STRAND

Chain B6:



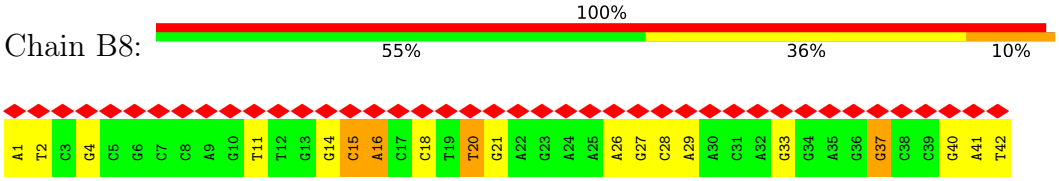
• Molecule 122: STAPLE STRAND

Chain B7:



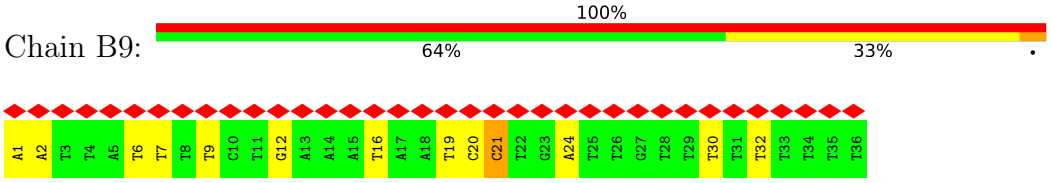
• Molecule 123: STAPLE STRAND

Chain B8:



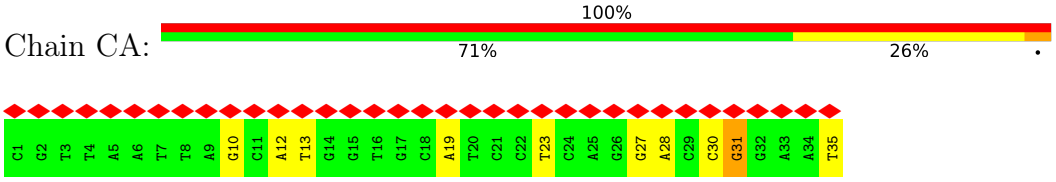
• Molecule 124: STAPLE STRAND

Chain B9:



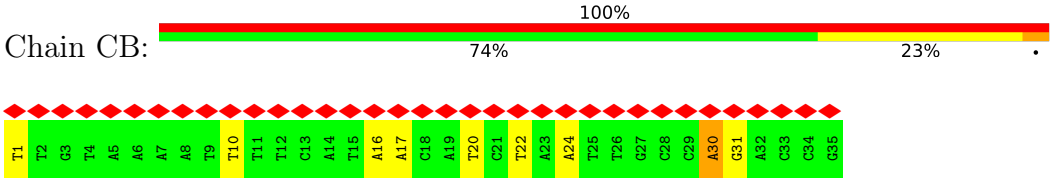
• Molecule 125: STAPLE STRAND

Chain CA:



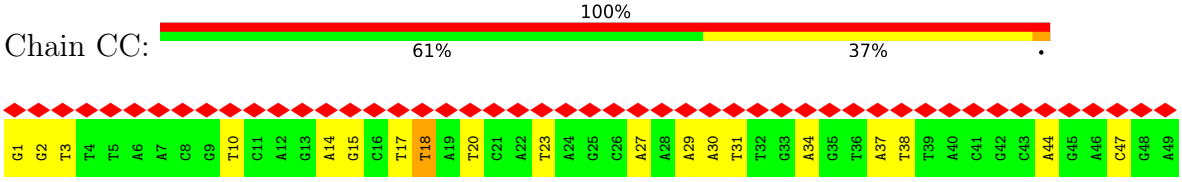
• Molecule 126: STAPLE STRAND

Chain CB:



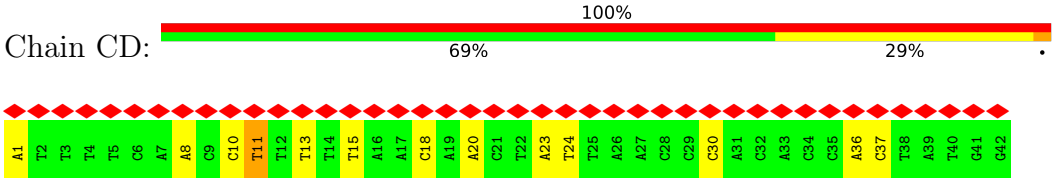
• Molecule 127: STAPLE STRAND

Chain CC:



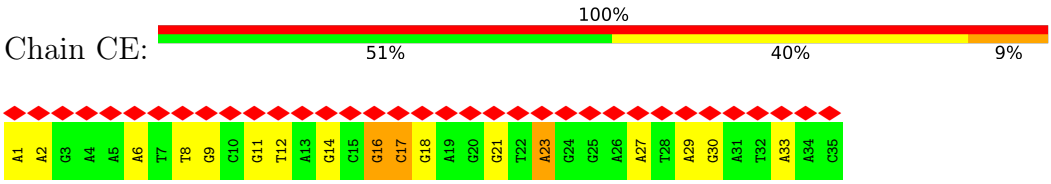
• Molecule 128: STAPLE STRAND

Chain CD:



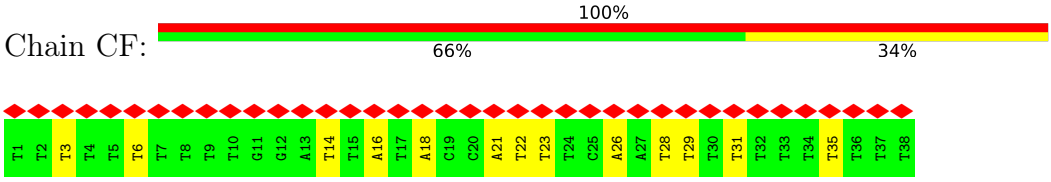
• Molecule 129: STAPLE STRAND

Chain CE:



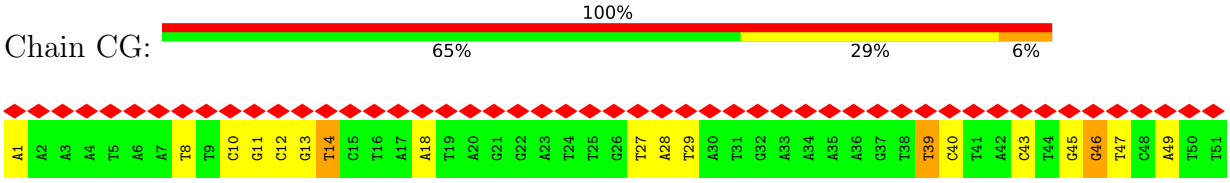
• Molecule 130: STAPLE STRAND

Chain CF:



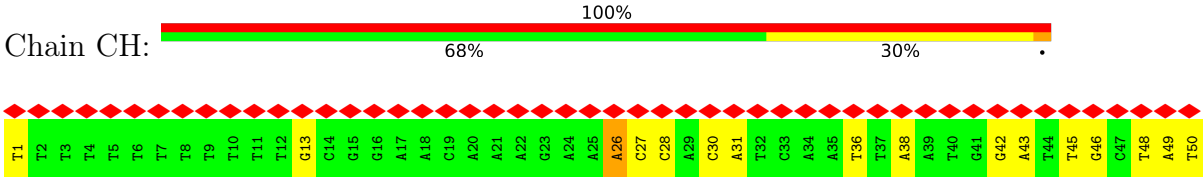
• Molecule 131: STAPLE STRAND

Chain CG:



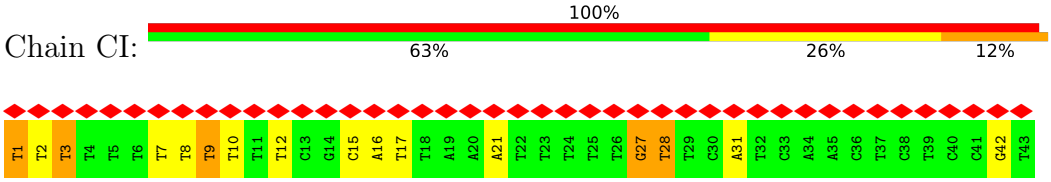
• Molecule 132: STAPLE STRAND

Chain CH:



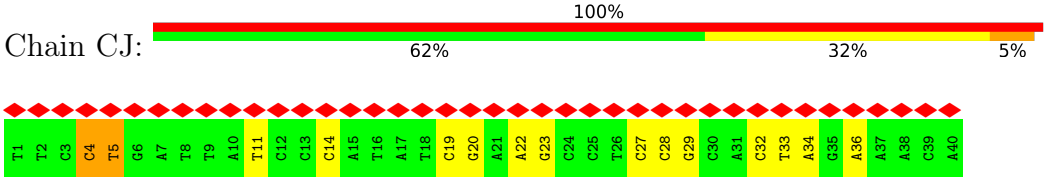
• Molecule 133: STAPLE STRAND

Chain CI:



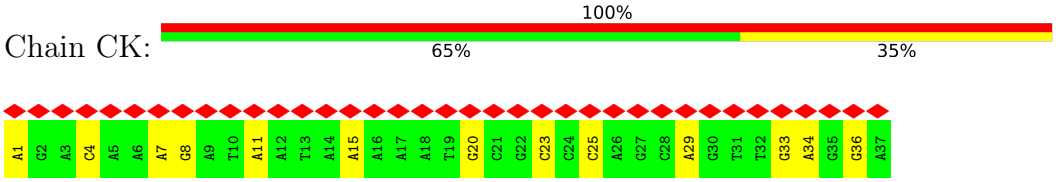
• Molecule 134: STAPLE STRAND

Chain CJ:



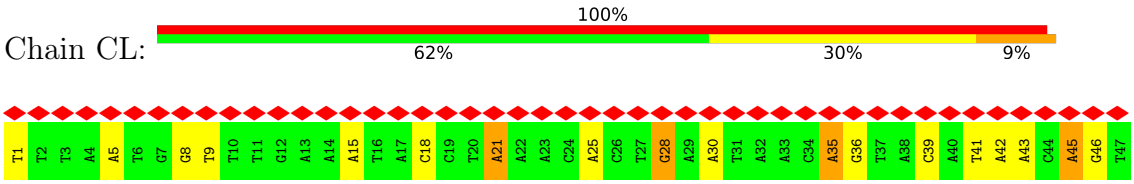
• Molecule 135: STAPLE STRAND

Chain CK:



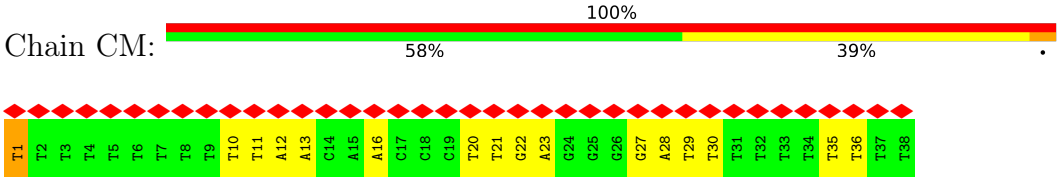
- Molecule 136: STAPLE STRAND

Chain CL:



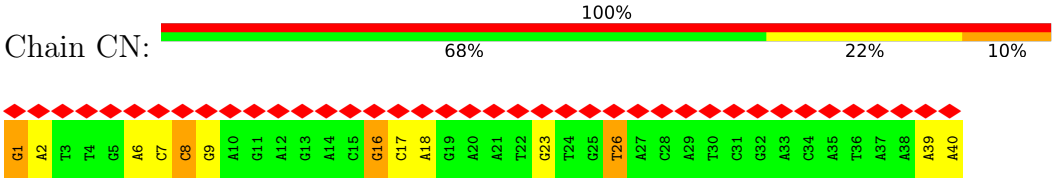
- Molecule 137: STAPLE STRAND

Chain CM:



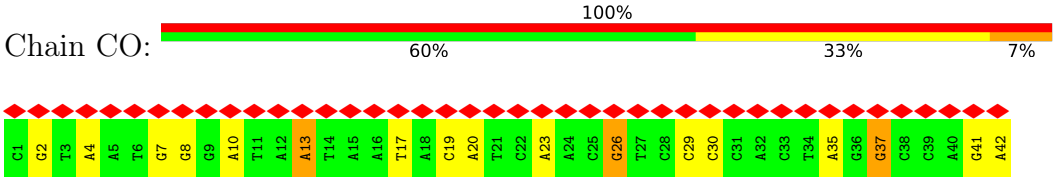
- Molecule 138: STAPLE STRAND

Chain CN:



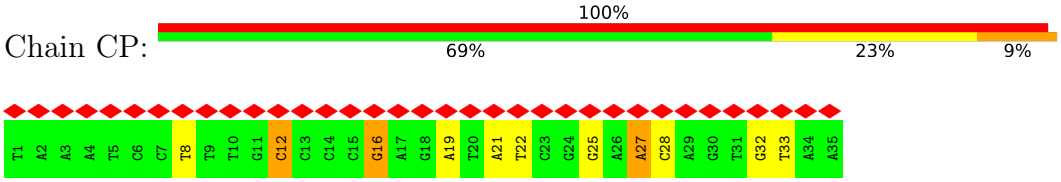
- Molecule 139: STAPLE STRAND

Chain CO:



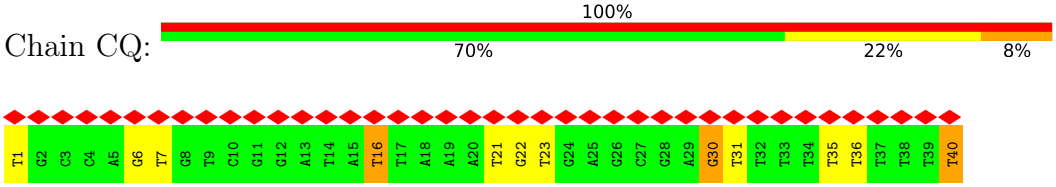
- Molecule 140: STAPLE STRAND

Chain CP:



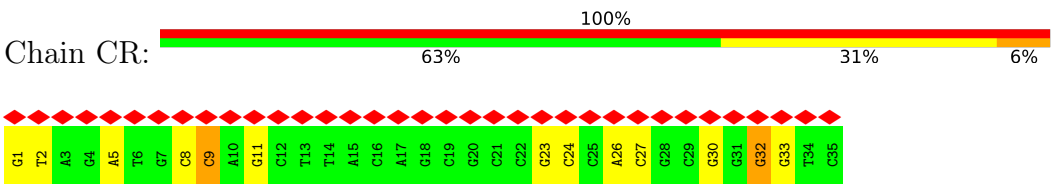
- Molecule 141: STAPLE STRAND

Chain CQ:



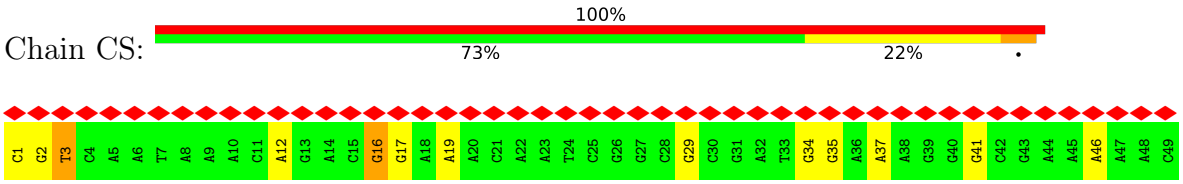
- Molecule 142: STAPLE STRAND

Chain CR:



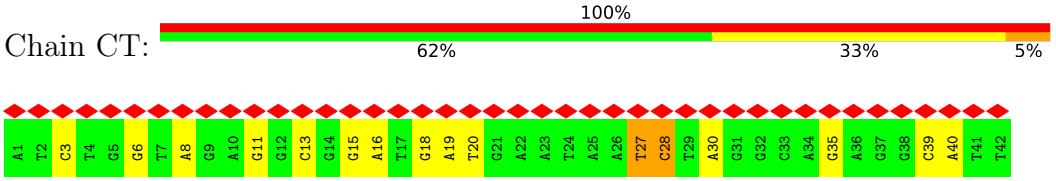
• Molecule 143: STAPLE STRAND

Chain CS:



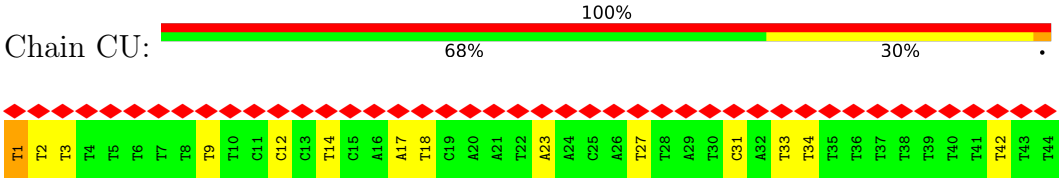
• Molecule 144: STAPLE STRAND

Chain CT:



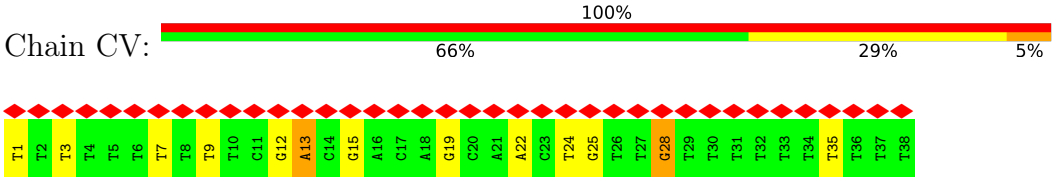
• Molecule 145: STAPLE STRAND

Chain CU:



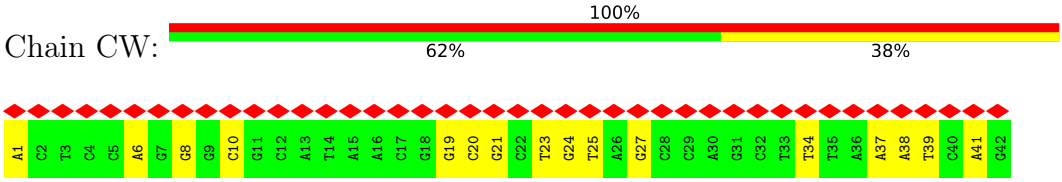
• Molecule 146: STAPLE STRAND

Chain CV:



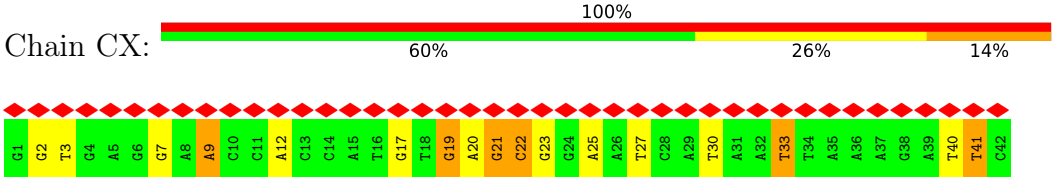
• Molecule 147: STAPLE STRAND

Chain CW:



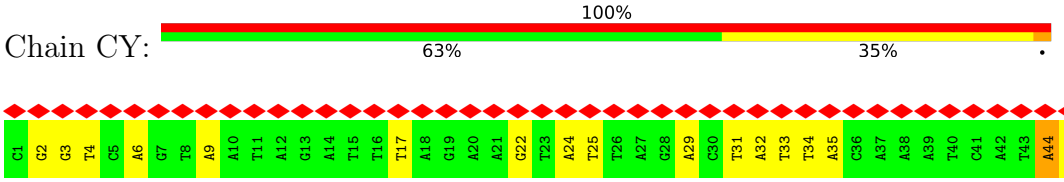
• Molecule 148: STAPLE STRAND

Chain CX:



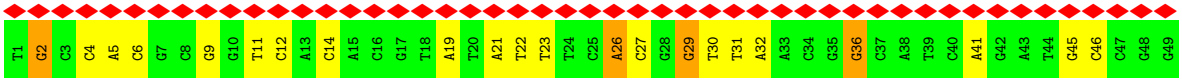
• Molecule 149: STAPLE STRAND

Chain CY:



• Molecule 150: STAPLE STRAND

Chain CZ:

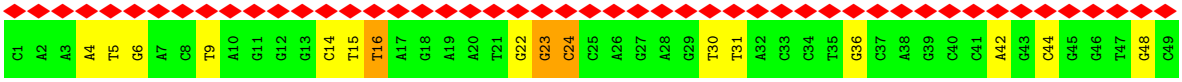


• Molecule 151: STAPLE STRAND

Chain Ca:

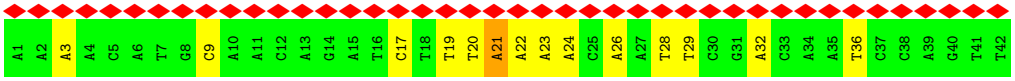
• Molecule 152: STAPLE STRAND

Chain Cb:



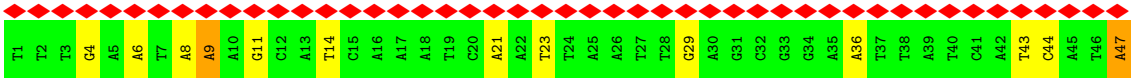
• Molecule 153: STAPLE STRAND

Chain Cc:



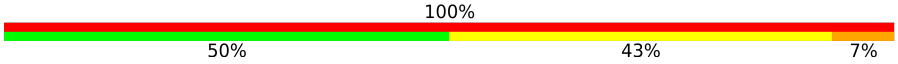
• Molecule 154: STAPLE STRAND

Chain Cd:



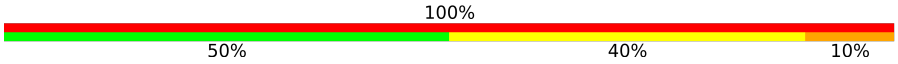
• Molecule 155: STAPLE STRAND

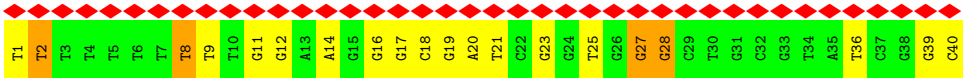
Chain Ce:



• Molecule 156: STAPLE STRAND

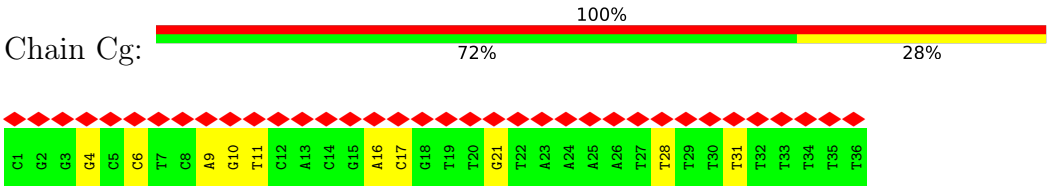
Chain Cf:





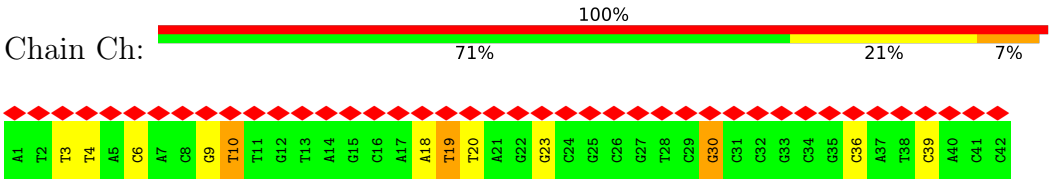
• Molecule 157: STAPLE STRAND

Chain Cg:



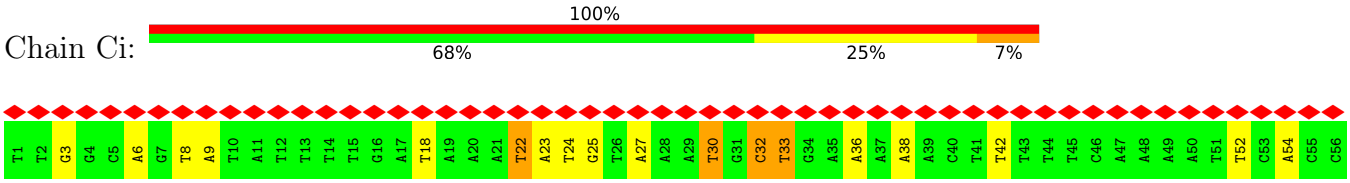
• Molecule 158: STAPLE STRAND

Chain Ch:



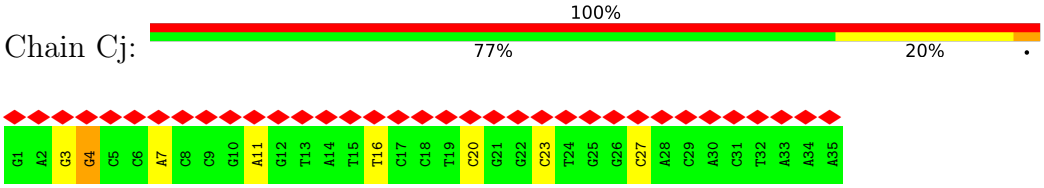
• Molecule 159: STAPLE STRAND

Chain Ci:



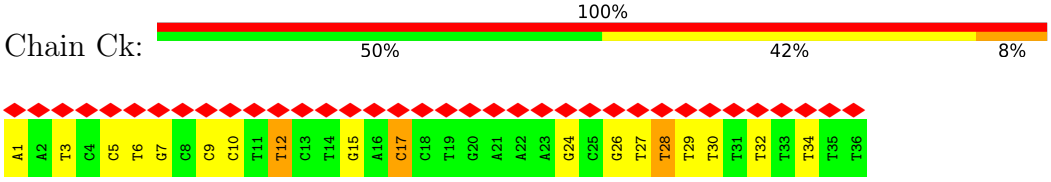
• Molecule 160: STAPLE STRAND

Chain Cj:



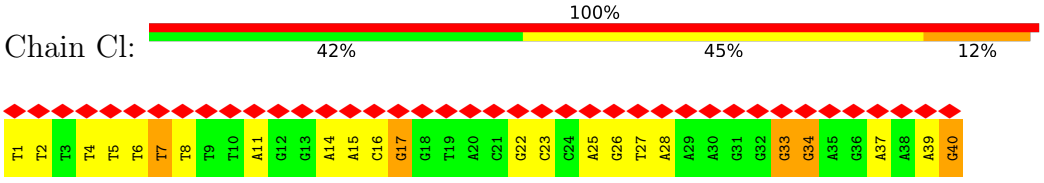
• Molecule 161: STAPLE STRAND

Chain Ck:



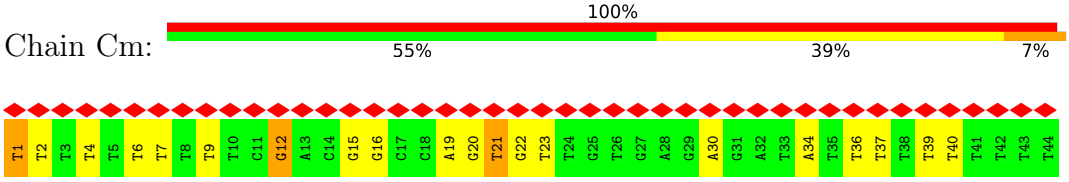
• Molecule 162: STAPLE STRAND

Chain Cl:



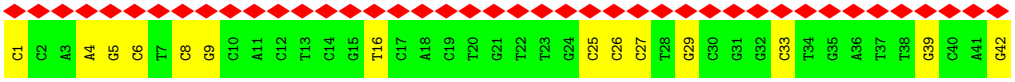
• Molecule 163: STAPLE STRAND

Chain Cm:



- Molecule 164: STAPLE STRAND

Chain Cn:

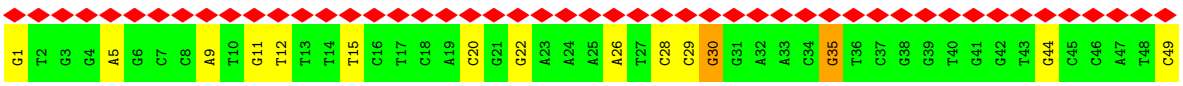


- Molecule 165: STAPLE STRAND

Chain Co:

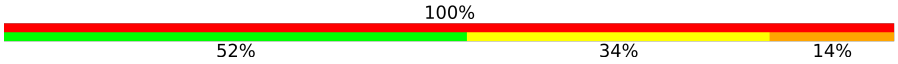
- Molecule 166: STAPLE STRAND

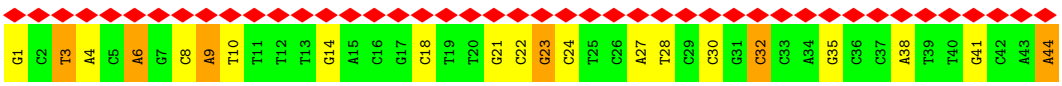
Chain Cp:



- Molecule 167: STAPLE STRAND

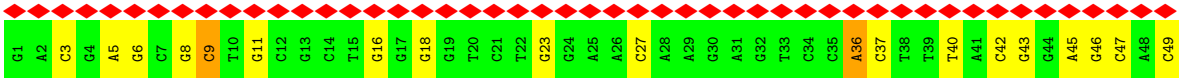
Chain Cq:





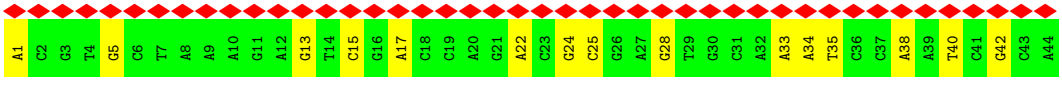
- Molecule 168: STAPLE STRAND

Chain Cr:



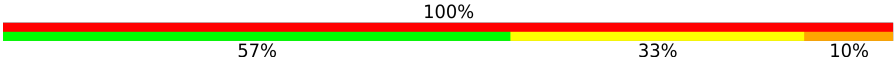
- Molecule 169: STAPLE STRAND

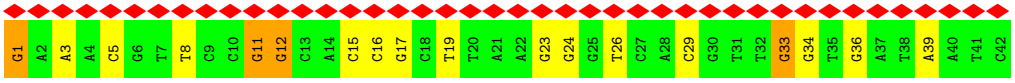
Chain Cs:



- Molecule 170: STAPLE STRAND

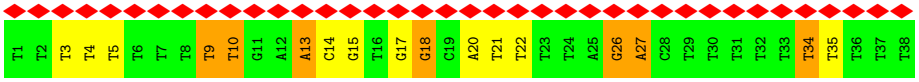
Chain Ct:





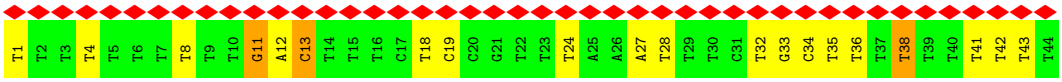
• Molecule 171: STAPLE STRAND

Chain Cu:



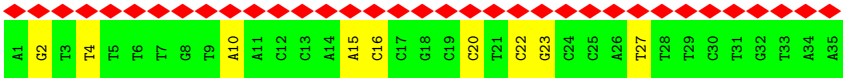
• Molecule 172: STAPLE STRAND

Chain Cv:



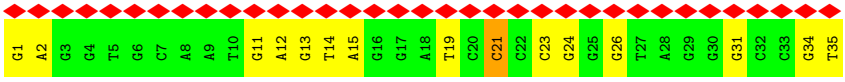
• Molecule 173: STAPLE STRAND

Chain Cw:



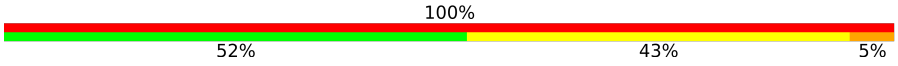
• Molecule 174: STAPLE STRAND

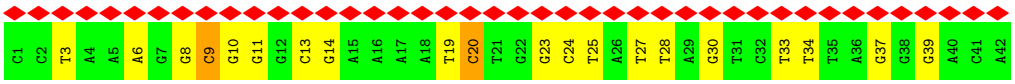
Chain Cx:



• Molecule 175: STAPLE STRAND

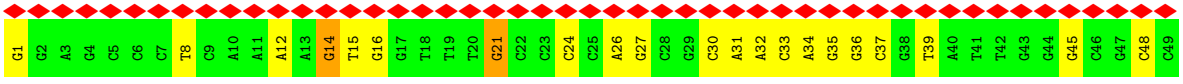
Chain Cy:





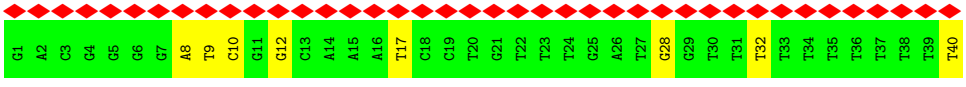
• Molecule 176: STAPLE STRAND

Chain Cz:



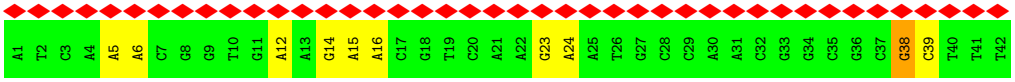
• Molecule 177: STAPLE STRAND

Chain C0:



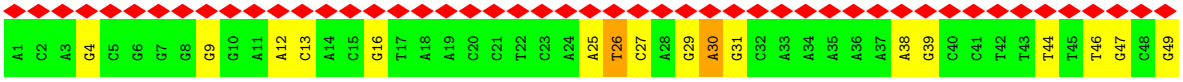
• Molecule 178: STAPLE STRAND

Chain C1:



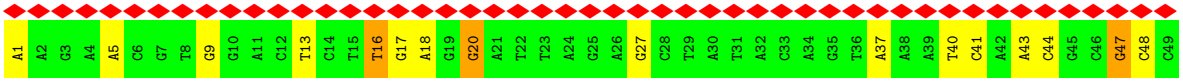
• Molecule 179: STAPLE STRAND

Chain C2:



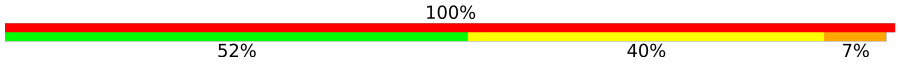
• Molecule 180: STAPLE STRAND

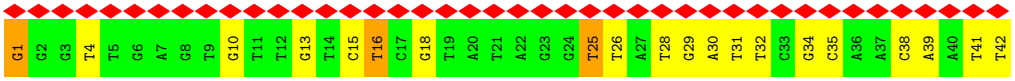
Chain C3:



• Molecule 181: STAPLE STRAND

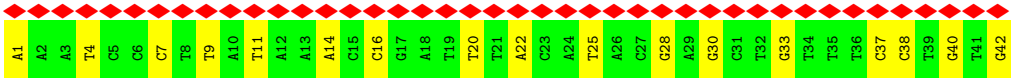
Chain C4:





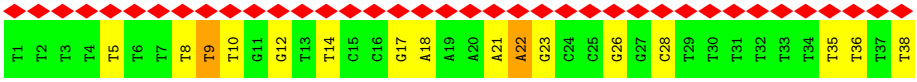
• Molecule 182: STAPLE STRAND

Chain C5:



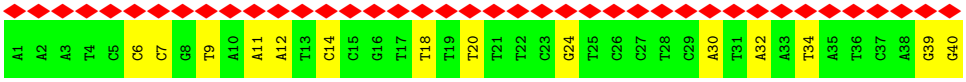
• Molecule 183: STAPLE STRAND

Chain C6:



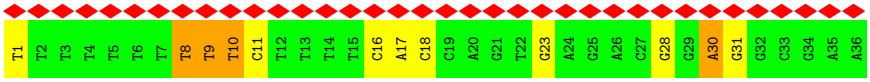
• Molecule 184: STAPLE STRAND

Chain C7:



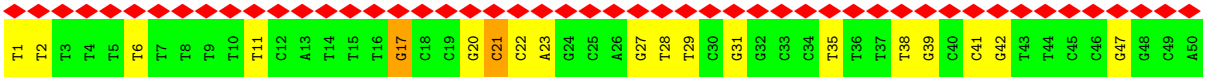
• Molecule 185: STAPLE STRAND

Chain C8:



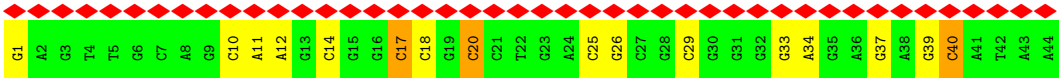
• Molecule 186: STAPLE STRAND

Chain C9:



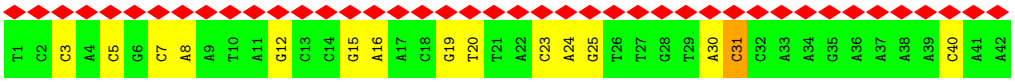
• Molecule 187: STAPLE STRAND

Chain DA:



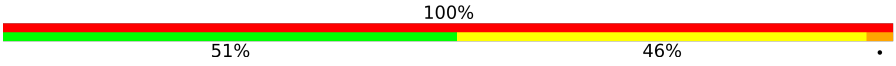
• Molecule 188: STAPLE STRAND

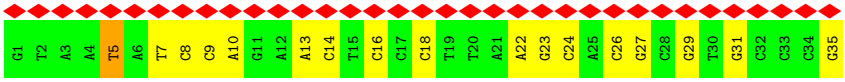
Chain DB:



• Molecule 189: STAPLE STRAND

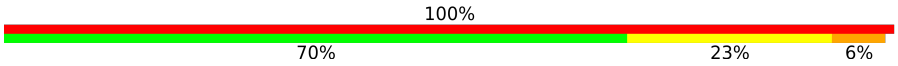
Chain DC:





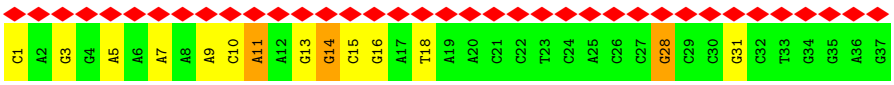
• Molecule 190: STAPLE STRAND

Chain DD:



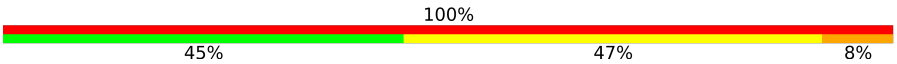
• Molecule 191: STAPLE STRAND

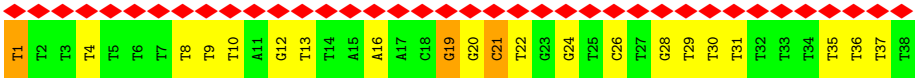
Chain DE:



• Molecule 192: STAPLE STRAND

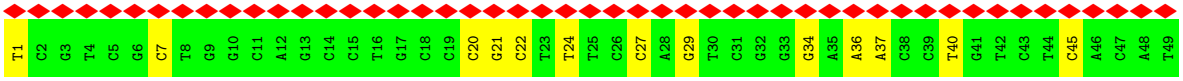
Chain DF:





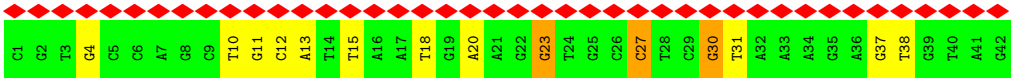
• Molecule 193: STAPLE STRAND

Chain DG:



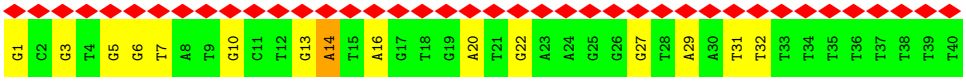
• Molecule 194: STAPLE STRAND

Chain DH:



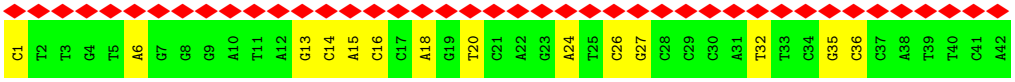
• Molecule 195: STAPLE STRAND

Chain DI:



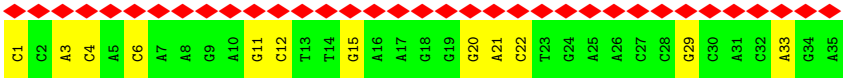
• Molecule 196: STAPLE STRAND

Chain DJ:



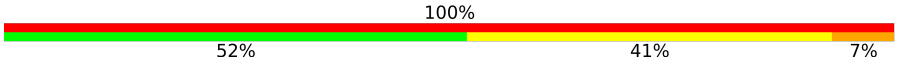
• Molecule 197: STAPLE STRAND

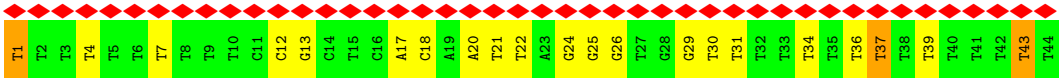
Chain DK:



• Molecule 198: STAPLE STRAND

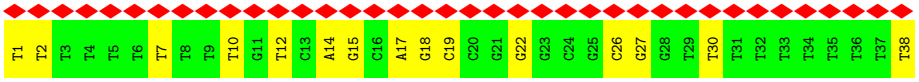
Chain DL:





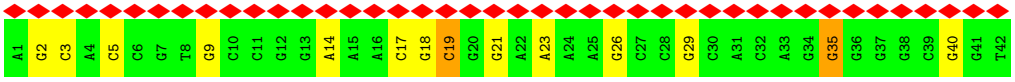
- Molecule 199: STAPLE STRAND

Chain DM:



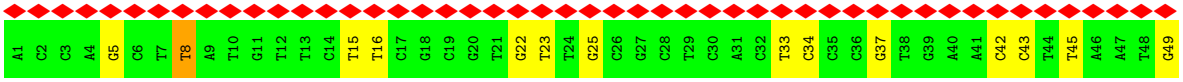
- Molecule 200: STAPLE STRAND

Chain DN:



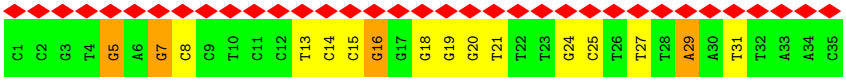
- Molecule 201: STAPLE STRAND

Chain DO:



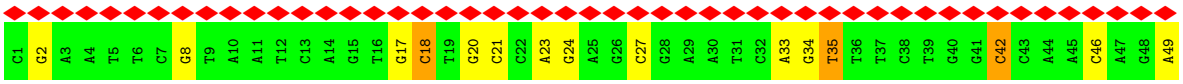
- Molecule 202: STAPLE STRAND

Chain DP:



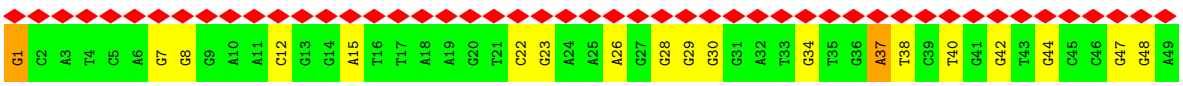
- Molecule 203: STAPLE STRAND

Chain DQ:



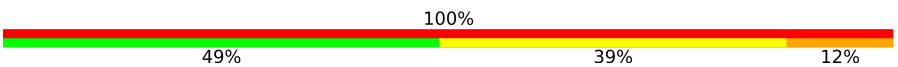
- Molecule 204: STAPLE STRAND

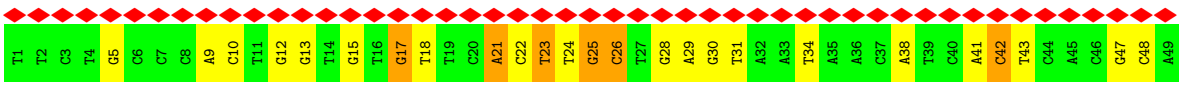
Chain DR:



- Molecule 205: STAPLE STRAND

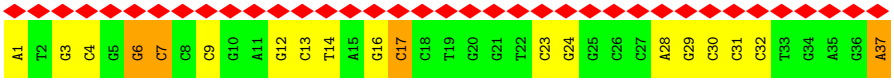
Chain DS:





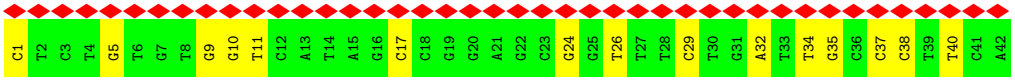
• Molecule 206: STAPLE STRAND

Chain DT:



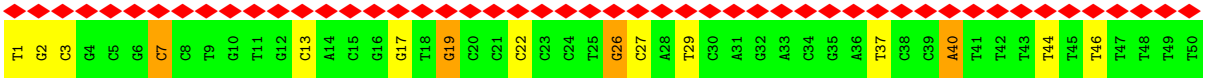
• Molecule 207: STAPLE STRAND

Chain DU:



• Molecule 208: STAPLE STRAND

Chain DV:

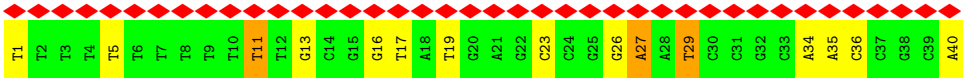


• Molecule 209: STAPLE STRAND

Chain DW:

• Molecule 210: STAPLE STRAND

Chain DX:

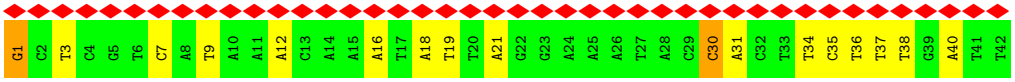


• Molecule 211: STAPLE STRAND

Chain DY:

• Molecule 212: STAPLE STRAND

Chain DZ:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	31931	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	50	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	FEI FALCON III (4k x 4k)	Depositor
Maximum map value	0.194	Depositor
Minimum map value	-0.064	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.009	Depositor
Recommended contour level	0.06	Depositor
Map size (Å)	921.6, 921.6, 921.6	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.8, 1.8, 1.8	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	AA	1.22	14/184801 (0.0%)	1.44	2945/285260 (1.0%)
2	AB	1.23	1/908 (0.1%)	1.28	10/1400 (0.7%)
3	AC	1.20	0/986	1.40	16/1520 (1.1%)
4	AD	1.21	0/1157	1.32	15/1788 (0.8%)
5	AE	1.22	0/1067	1.37	9/1642 (0.5%)
6	AF	1.22	0/1133	1.29	12/1748 (0.7%)
7	AG	1.19	0/1119	1.41	17/1723 (1.0%)
8	AH	1.21	0/1140	1.30	12/1760 (0.7%)
9	AI	1.25	0/1128	1.37	10/1740 (0.6%)
10	AJ	1.21	0/965	1.34	10/1488 (0.7%)
11	AK	1.24	0/1248	1.44	15/1925 (0.8%)
12	AL	1.21	0/853	1.44	17/1316 (1.3%)
13	AM	1.21	0/994	1.50	18/1534 (1.2%)
14	AN	1.20	0/800	1.33	7/1232 (0.6%)
15	AO	1.18	0/898	1.46	12/1383 (0.9%)
16	AP	1.17	1/953 (0.1%)	1.42	13/1468 (0.9%)
17	AQ	1.25	0/818	1.42	12/1264 (0.9%)
18	AR	1.25	0/1146	1.44	19/1768 (1.1%)
19	AS	1.24	0/947	1.48	16/1457 (1.1%)
20	AT	1.21	0/861	1.74	29/1328 (2.2%)
21	AU	1.21	0/1091	1.40	13/1681 (0.8%)
22	AV	1.22	0/843	1.38	8/1298 (0.6%)
23	AW	1.20	0/1255	1.27	12/1936 (0.6%)
24	AX	1.21	0/816	1.34	10/1258 (0.8%)
25	AY	1.19	0/821	1.55	17/1267 (1.3%)
26	AZ	1.24	0/994	1.52	13/1527 (0.9%)
27	Aa	1.27	2/864 (0.2%)	1.35	8/1334 (0.6%)
28	Ab	1.20	0/985	1.42	17/1520 (1.1%)
29	Ac	1.24	0/1127	1.33	14/1740 (0.8%)
30	Ad	1.25	0/979	1.33	7/1513 (0.5%)
31	Ae	1.22	0/970	1.33	11/1493 (0.7%)
32	Af	1.24	0/813	1.41	11/1256 (0.9%)
33	Ag	1.17	0/909	1.17	3/1401 (0.2%)
34	Ah	1.23	0/975	1.33	6/1504 (0.4%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
35	Ai	1.24	0/963	1.41	13/1487 (0.9%)
36	Aj	1.19	0/944	1.30	7/1452 (0.5%)
37	Ak	1.21	0/965	1.27	9/1487 (0.6%)
38	Al	1.22	0/959	1.34	6/1477 (0.4%)
39	Am	1.22	0/991	1.55	21/1530 (1.4%)
40	An	1.18	0/851	1.40	15/1312 (1.1%)
41	Ao	1.17	0/1126	1.34	12/1733 (0.7%)
42	Ap	1.21	0/1138	1.31	8/1753 (0.5%)
43	Aq	1.22	0/1066	1.46	17/1639 (1.0%)
44	Ar	1.24	0/952	1.48	12/1465 (0.8%)
45	As	1.19	0/966	1.38	10/1488 (0.7%)
46	At	1.22	0/1180	1.32	12/1822 (0.7%)
47	Au	1.25	0/1128	1.43	12/1739 (0.7%)
48	Av	1.25	0/855	1.40	11/1318 (0.8%)
49	Aw	1.25	0/979	1.34	12/1511 (0.8%)
50	Ax	1.19	0/979	1.44	13/1508 (0.9%)
51	Ay	1.19	0/900	1.49	19/1387 (1.4%)
52	Az	1.16	0/802	1.30	8/1235 (0.6%)
53	A0	1.24	0/1441	1.44	23/2221 (1.0%)
54	A1	1.23	1/1115 (0.1%)	1.34	12/1717 (0.7%)
55	A2	1.22	0/972	1.45	21/1499 (1.4%)
56	A3	1.24	0/912	1.66	26/1406 (1.8%)
57	A4	1.21	1/991 (0.1%)	1.37	15/1528 (1.0%)
58	A5	1.23	0/1149	1.31	13/1772 (0.7%)
59	A6	1.19	0/1138	1.32	16/1756 (0.9%)
60	A7	1.26	0/953	1.43	13/1466 (0.9%)
61	A8	1.19	0/1136	1.26	7/1750 (0.4%)
62	A9	1.18	0/1112	1.34	10/1713 (0.6%)
63	BA	1.24	0/1133	1.41	17/1744 (1.0%)
64	BB	1.24	0/1137	1.34	11/1754 (0.6%)
65	BC	1.25	0/1121	1.43	14/1726 (0.8%)
66	BD	1.18	0/859	1.44	15/1325 (1.1%)
67	BE	1.26	2/998 (0.2%)	1.39	17/1540 (1.1%)
68	BF	1.20	0/972	1.41	13/1498 (0.9%)
69	BG	1.26	0/985	1.51	17/1519 (1.1%)
70	BH	1.15	0/911	1.26	7/1404 (0.5%)
71	BI	1.21	0/985	1.36	14/1522 (0.9%)
72	BJ	1.18	0/841	1.32	9/1297 (0.7%)
73	BK	1.22	0/755	1.33	6/1163 (0.5%)
74	BL	1.17	0/970	1.29	10/1494 (0.7%)
75	BM	1.21	0/980	1.27	8/1513 (0.5%)
76	BN	1.22	0/1178	1.36	14/1817 (0.8%)
77	BO	1.21	0/800	1.37	13/1233 (1.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
78	BP	1.23	0/917	1.30	6/1411 (0.4%)
79	BQ	1.20	0/854	1.41	6/1316 (0.5%)
80	BR	1.23	0/859	1.41	10/1326 (0.8%)
81	BS	1.19	0/1074	1.28	11/1657 (0.7%)
82	BT	1.26	0/866	1.52	15/1336 (1.1%)
83	BU	1.18	0/900	1.26	6/1386 (0.4%)
84	BV	1.22	0/971	1.47	12/1495 (0.8%)
85	BW	1.19	0/799	1.20	2/1229 (0.2%)
86	BX	1.21	0/964	1.26	6/1485 (0.4%)
87	BY	1.22	0/800	1.30	3/1232 (0.2%)
88	BZ	1.26	0/967	1.53	18/1489 (1.2%)
89	Ba	1.22	0/1126	1.39	13/1735 (0.7%)
90	Bb	1.17	0/974	1.33	11/1500 (0.7%)
91	Bc	1.21	0/854	1.44	20/1317 (1.5%)
92	Bd	1.21	0/957	1.23	1/1473 (0.1%)
93	Be	1.18	0/1114	1.30	13/1714 (0.8%)
94	Bf	1.27	0/975	1.37	10/1505 (0.7%)
95	Bg	1.20	0/1132	1.39	13/1746 (0.7%)
96	Bh	1.18	0/1173	1.24	7/1808 (0.4%)
97	Bi	1.18	0/799	1.24	6/1231 (0.5%)
98	Bj	1.24	0/846	1.48	12/1303 (0.9%)
99	Bk	1.21	0/952	1.47	15/1465 (1.0%)
100	Bl	1.20	1/980 (0.1%)	1.33	10/1511 (0.7%)
101	Bm	1.20	0/905	1.42	16/1395 (1.1%)
102	Bn	1.22	0/1451	1.39	16/2237 (0.7%)
103	Bo	1.20	0/817	1.30	7/1261 (0.6%)
104	Bp	1.21	0/966	1.40	11/1489 (0.7%)
105	Bq	1.21	0/968	1.40	11/1493 (0.7%)
106	Br	1.26	0/1128	1.34	12/1741 (0.7%)
107	Bs	1.19	0/805	1.33	8/1240 (0.6%)
108	Bt	1.25	0/802	1.53	17/1237 (1.4%)
109	Bu	1.18	0/918	1.40	8/1416 (0.6%)
110	Bv	1.23	0/987	1.56	22/1522 (1.4%)
111	Bw	1.21	0/1139	1.35	12/1758 (0.7%)
112	Bx	1.21	0/1080	1.33	7/1665 (0.4%)
113	By	1.23	0/906	1.36	7/1395 (0.5%)
114	Bz	1.24	0/1145	1.47	20/1769 (1.1%)
115	B0	1.15	0/973	1.23	7/1499 (0.5%)
116	B1	1.27	0/1145	1.37	15/1769 (0.8%)
117	B2	1.24	0/855	1.44	19/1319 (1.4%)
118	B3	1.15	0/990	1.33	13/1527 (0.9%)
119	B4	1.18	0/785	1.31	5/1208 (0.4%)
120	B5	1.23	0/797	1.34	8/1228 (0.7%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
121	B6	1.24	0/1118	1.40	12/1722 (0.7%)
122	B7	1.22	0/1138	1.33	11/1756 (0.6%)
123	B8	1.24	0/972	1.51	21/1499 (1.4%)
124	B9	1.18	0/812	1.27	10/1252 (0.8%)
125	CA	1.19	0/803	1.34	7/1238 (0.6%)
126	CB	1.16	0/795	1.31	8/1224 (0.7%)
127	CC	1.17	0/1133	1.39	15/1748 (0.9%)
128	CD	1.15	0/942	1.35	13/1448 (0.9%)
129	CE	1.25	0/823	1.42	12/1271 (0.9%)
130	CF	1.17	0/847	1.32	10/1306 (0.8%)
131	CG	1.22	0/1175	1.41	17/1813 (0.9%)
132	CH	1.19	0/1142	1.36	10/1761 (0.6%)
133	CI	1.20	0/957	1.49	19/1474 (1.3%)
134	CJ	1.25	0/902	1.50	15/1387 (1.1%)
135	CK	1.24	0/865	1.35	7/1334 (0.5%)
136	CL	1.18	0/1081	1.30	11/1666 (0.7%)
137	CM	1.23	0/855	1.29	7/1319 (0.5%)
138	CN	1.22	0/931	1.48	19/1436 (1.3%)
139	CO	1.23	0/963	1.35	15/1483 (1.0%)
140	CP	1.23	0/801	1.36	8/1234 (0.6%)
141	CQ	1.21	0/918	1.30	8/1418 (0.6%)
142	CR	1.25	0/802	1.36	10/1236 (0.8%)
143	CS	1.23	0/1148	1.37	14/1771 (0.8%)
144	CT	1.26	0/983	1.41	14/1519 (0.9%)
145	CU	1.15	0/975	1.28	7/1501 (0.5%)
146	CV	1.24	0/852	1.58	20/1314 (1.5%)
147	CW	1.25	0/963	1.38	5/1484 (0.3%)
148	CX	1.25	0/976	1.36	11/1506 (0.7%)
149	CY	1.20	0/1130	1.28	12/1743 (0.7%)
150	CZ	1.26	0/1121	1.39	15/1728 (0.9%)
151	Ca	1.21	0/973	1.35	8/1502 (0.5%)
152	Cb	1.20	0/1133	1.35	16/1748 (0.9%)
153	Cc	1.19	0/961	1.27	6/1479 (0.4%)
154	Cd	1.21	0/1082	1.33	8/1668 (0.5%)
155	Ce	1.18	0/994	1.58	26/1533 (1.7%)
156	Cf	1.26	0/923	1.49	19/1427 (1.3%)
157	Cg	1.19	0/816	1.31	5/1258 (0.4%)
158	Ch	1.23	0/955	1.34	9/1471 (0.6%)
159	Ci	1.21	0/1284	1.29	10/1980 (0.5%)
160	Cj	1.26	0/800	1.37	5/1232 (0.4%)
161	Ck	1.20	0/806	1.44	16/1241 (1.3%)
162	Cl	1.27	0/932	1.45	13/1440 (0.9%)
163	Cm	1.22	0/999	1.54	20/1543 (1.3%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
164	Cn	1.21	0/950	1.36	10/1463 (0.7%)
165	Co	1.20	0/791	1.33	7/1218 (0.6%)
166	Cp	1.27	0/1127	1.43	19/1739 (1.1%)
167	Cq	1.24	0/994	1.46	18/1530 (1.2%)
168	Cr	1.26	0/1134	1.35	13/1750 (0.7%)
169	Cs	1.23	0/1015	1.40	11/1564 (0.7%)
170	Ct	1.26	0/966	1.48	16/1490 (1.1%)
171	Cu	1.22	0/854	1.41	14/1318 (1.1%)
172	Cv	1.17	0/975	1.40	16/1503 (1.1%)
173	Cw	1.22	0/787	1.32	3/1211 (0.2%)
174	Cx	1.26	0/818	1.44	11/1264 (0.9%)
175	Cy	1.24	0/972	1.32	11/1500 (0.7%)
176	Cz	1.24	0/1127	1.42	16/1738 (0.9%)
177	C0	1.23	0/916	1.22	3/1415 (0.2%)
178	C1	1.24	0/971	1.30	6/1497 (0.4%)
179	C2	1.23	0/1132	1.30	8/1745 (0.5%)
180	C3	1.22	0/1134	1.36	12/1749 (0.7%)
181	C4	1.23	0/969	1.34	8/1497 (0.5%)
182	C5	1.20	0/952	1.49	18/1466 (1.2%)
183	C6	1.22	1/855 (0.1%)	1.40	12/1319 (0.9%)
184	C7	1.17	0/903	1.47	12/1390 (0.9%)
185	C8	1.23	0/820	1.49	14/1265 (1.1%)
186	C9	1.25	0/1120	1.36	14/1726 (0.8%)
187	DA	1.24	0/1029	1.35	8/1589 (0.5%)
188	DB	1.26	0/964	1.41	12/1484 (0.8%)
189	DC	1.23	0/793	1.50	16/1220 (1.3%)
190	DD	1.22	0/1082	1.37	12/1667 (0.7%)
191	DE	1.24	1/855 (0.1%)	1.42	10/1317 (0.8%)
192	DF	1.21	0/855	1.44	19/1320 (1.4%)
193	DG	1.23	0/1106	1.36	14/1703 (0.8%)
194	DH	1.22	0/973	1.36	11/1502 (0.7%)
195	DI	1.21	0/926	1.38	16/1432 (1.1%)
196	DJ	1.24	0/954	1.46	11/1469 (0.7%)
197	DK	1.20	0/809	1.43	10/1246 (0.8%)
198	DL	1.25	0/985	1.50	18/1520 (1.2%)
199	DM	1.26	0/857	1.57	22/1323 (1.7%)
200	DN	1.26	0/981	1.38	15/1514 (1.0%)
201	DO	1.18	0/1105	1.38	12/1702 (0.7%)
202	DP	1.25	0/793	1.46	9/1222 (0.7%)
203	DQ	1.22	0/1126	1.38	15/1736 (0.9%)
204	DR	1.28	0/1153	1.34	9/1783 (0.5%)
205	DS	1.25	0/1109	1.50	21/1708 (1.2%)
206	DT	1.24	0/848	1.41	14/1307 (1.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
207	DU	1.21	0/955	1.42	15/1473 (1.0%)
208	DV	1.23	0/1125	1.50	25/1733 (1.4%)
209	DW	1.20	0/990	1.29	8/1528 (0.5%)
210	DX	1.24	0/908	1.55	16/1400 (1.1%)
211	DY	1.21	0/960	1.39	15/1480 (1.0%)
212	DZ	1.16	0/957	1.30	9/1474 (0.6%)
All	All	1.22	25/391128 (0.0%)	1.41	5547/603352 (0.9%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	AA	15	1914
2	AB	0	8
3	AC	0	11
4	AD	0	8
5	AE	0	13
6	AF	0	9
7	AG	0	10
8	AH	0	6
9	AI	0	8
10	AJ	0	7
11	AK	0	9
12	AL	0	10
13	AM	0	16
14	AN	0	7
15	AO	0	10
16	AP	0	13
17	AQ	0	7
18	AR	0	7
19	AS	0	7
20	AT	0	7
21	AU	0	12
22	AV	0	8
23	AW	0	8
24	AX	0	11
25	AY	0	6
26	AZ	0	12
27	Aa	0	8
28	Ab	0	4

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Mol	Chain	#Chirality outliers	#Planarity outliers
29	Ac	0	8
30	Ad	0	7
31	Ae	0	15
32	Af	0	7
33	Ag	0	8
34	Ah	0	12
35	Ai	0	11
36	Aj	0	7
37	Ak	0	8
38	Al	0	13
39	Am	0	13
40	An	0	10
41	Ao	0	9
42	Ap	0	12
43	Aq	0	11
44	Ar	0	9
45	As	0	6
46	At	0	10
47	Au	0	13
48	Av	0	10
49	Aw	0	7
50	Ax	0	9
51	Ay	0	8
52	Az	0	8
53	A0	0	13
54	A1	0	9
55	A2	0	6
56	A3	0	12
57	A4	0	8
58	A5	0	19
59	A6	0	7
60	A7	0	5
61	A8	0	9
62	A9	0	11
63	BA	0	10
64	BB	0	12
65	BC	0	13
66	BD	0	8
67	BE	0	11
68	BF	0	8
69	BG	0	13
70	BH	0	5

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Mol	Chain	#Chirality outliers	#Planarity outliers
71	BI	0	13
72	BJ	0	8
73	BK	0	8
74	BL	0	10
75	BM	0	12
76	BN	0	14
77	BO	0	6
78	BP	0	9
79	BQ	0	9
80	BR	0	13
81	BS	0	8
82	BT	0	9
83	BU	0	9
84	BV	0	7
85	BW	0	6
86	BX	0	6
87	BY	0	11
88	BZ	0	12
89	Ba	0	11
90	Bb	0	12
91	Bc	0	11
92	Bd	0	9
93	Be	0	7
94	Bf	0	9
95	Bg	0	11
96	Bh	0	11
97	Bi	0	10
98	Bj	0	7
99	Bk	0	8
100	Bl	0	11
101	Bm	0	13
102	Bn	0	12
103	Bo	0	5
104	Bp	0	9
105	Bq	0	9
106	Br	0	12
107	Bs	0	8
108	Bt	0	7
109	Bu	0	13
110	Bv	0	7
111	Bw	0	14
112	Bx	0	12

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Mol	Chain	#Chirality outliers	#Planarity outliers
113	By	0	9
114	Bz	0	17
115	B0	0	9
116	B1	0	10
117	B2	0	10
118	B3	0	12
119	B4	0	7
120	B5	0	6
121	B6	0	12
122	B7	0	12
123	B8	0	12
124	B9	0	6
125	CA	0	8
126	CB	0	5
127	CC	0	12
128	CD	0	6
129	CE	0	14
130	CF	0	6
131	CG	0	11
132	CH	0	12
133	CI	0	10
134	CJ	0	7
135	CK	0	8
136	CL	0	14
137	CM	0	12
138	CN	0	7
139	CO	0	9
140	CP	0	8
141	CQ	0	8
142	CR	0	10
143	CS	0	8
144	CT	0	8
145	CU	0	10
146	CV	0	6
147	CW	0	12
148	CX	0	13
149	CY	0	9
150	CZ	0	12
151	Ca	0	10
152	Cb	0	9
153	Cc	0	10
154	Cd	0	9

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Mol	Chain	#Chirality outliers	#Planarity outliers
155	Ce	0	10
156	Cf	0	11
157	Cg	0	7
158	Ch	0	8
159	Ci	0	14
160	Cj	0	4
161	Ck	0	9
162	Cl	0	17
163	Cm	0	11
164	Cn	0	5
165	Co	0	7
166	Cp	0	9
167	Cq	0	15
168	Cr	0	9
169	Cs	0	6
170	Ct	0	11
171	Cu	0	14
172	Cv	0	12
173	Cw	0	7
174	Cx	0	8
175	Cy	0	12
176	Cz	0	14
177	C0	0	5
178	C1	0	7
179	C2	0	12
180	C3	0	9
181	C4	0	16
182	C5	0	6
183	C6	0	9
184	C7	0	9
185	C8	0	7
186	C9	0	12
187	DA	0	13
188	DB	0	7
189	DC	0	10
190	DD	0	8
191	DE	0	8
192	DF	0	13
193	DG	0	7
194	DH	0	9
195	DI	0	8
196	DJ	0	8

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Mol	Chain	#Chirality outliers	#Planarity outliers
197	DK	0	5
198	DL	0	13
199	DM	0	4
200	DN	0	7
201	DO	0	7
202	DP	0	14
203	DQ	0	8
204	DR	0	13
205	DS	0	17
206	DT	0	12
207	DU	0	6
208	DV	0	6
209	DW	0	13
210	DX	0	8
211	DY	0	12
212	DZ	0	12
All	All	15	3939

The worst 5 of 25 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	259	DC	C5'-C4'	5.69	1.57	1.51
191	DE	14	DG	C2-N2	-5.68	1.28	1.34
1	AA	205	DG	C2-N2	-5.65	1.28	1.34
1	AA	1752	DG	C2-N2	-5.58	1.28	1.34
100	Bl	36	DT	C5'-C4'	5.51	1.57	1.51

The worst 5 of 5547 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	108	DT	P-O3'-C3'	16.36	139.33	119.70
1	AA	1707	DT	O4'-C4'-C3'	-15.91	96.45	106.00
26	AZ	25	DG	P-O3'-C3'	15.86	138.73	119.70
39	Am	19	DA	P-O3'-C3'	15.64	138.47	119.70
99	Bk	30	DC	P-O3'-C3'	15.28	138.03	119.70

5 of 15 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	AA	137	DC	C3'
1	AA	892	DG	C3'
1	AA	1026	DG	C3'

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Mol	Chain	Res	Type	Atom
1	AA	3017	DA	C3'
1	AA	3647	DT	C3'

5 of 3939 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	1	DT	Sidechain
1	AA	17	DG	Sidechain
1	AA	4	DT	Sidechain
1	AA	5	DA	Sidechain
1	AA	7	DA	Sidechain

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	164972	0	91297	0	0
2	AB	813	0	460	0	0
3	AC	887	0	510	0	0
4	AD	1032	0	571	0	0
5	AE	952	0	530	0	0
6	AF	1008	0	553	0	0
7	AG	997	0	552	0	0
8	AH	1013	0	551	0	0
9	AI	1005	0	553	0	0
10	AJ	860	0	476	0	0
11	AK	1110	0	606	0	0
12	AL	768	0	444	0	0
13	AM	893	0	513	0	0
14	AN	713	0	396	0	0
15	AO	806	0	460	0	0
16	AP	852	0	479	0	0
17	AQ	727	0	396	0	0
18	AR	1015	0	546	0	0
19	AS	847	0	477	0	0
20	AT	772	0	442	0	0
21	AU	967	0	527	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
22	AV	752	0	417	0	0
23	AW	1114	0	610	0	0
24	AX	731	0	413	0	0
25	AY	735	0	415	0	0
26	AZ	886	0	491	0	0
27	Aa	775	0	443	0	0
28	Ab	872	0	471	0	0
29	Ac	1006	0	561	0	0
30	Ad	871	0	475	0	0
31	Ae	860	0	471	0	0
32	Af	724	0	397	0	0
33	Ag	813	0	459	0	0
34	Ah	866	0	474	0	0
35	Ai	861	0	480	0	0
36	Aj	845	0	477	0	0
37	Ak	859	0	475	0	0
38	Al	855	0	474	0	0
39	Am	892	0	516	0	0
40	An	766	0	444	0	0
41	Ao	1000	0	550	0	0
42	Ap	1008	0	546	0	0
43	Aq	950	0	525	0	0
44	Ar	850	0	476	0	0
45	As	859	0	474	0	0
46	At	1051	0	575	0	0
47	Au	1004	0	550	0	0
48	Av	760	0	414	0	0
49	Aw	869	0	470	0	0
50	Ax	882	0	510	0	0
51	Ay	808	0	461	0	0
52	Az	722	0	418	0	0
53	A0	1285	0	712	0	0
54	A1	995	0	552	0	0
55	A2	864	0	475	0	0
56	A3	815	0	457	0	0
57	A4	890	0	510	0	0
58	A5	1024	0	568	0	0
59	A6	1011	0	554	0	0
60	A7	850	0	473	0	0
61	A8	1015	0	569	0	0
62	A9	994	0	558	0	0
63	BA	1004	0	544	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
64	BB	1010	0	552	0	0
65	BC	998	0	550	0	0
66	BD	771	0	444	0	0
67	BE	895	0	511	0	0
68	BF	863	0	474	0	0
69	BG	871	0	467	0	0
70	BH	814	0	460	0	0
71	BI	874	0	475	0	0
72	BJ	761	0	449	0	0
73	BK	673	0	371	0	0
74	BL	869	0	496	0	0
75	BM	878	0	496	0	0
76	BN	1048	0	579	0	0
77	BO	714	0	400	0	0
78	BP	815	0	450	0	0
79	BQ	759	0	416	0	0
80	BR	772	0	443	0	0
81	BS	960	0	538	0	0
82	BT	767	0	414	0	0
83	BU	807	0	461	0	0
84	BV	861	0	469	0	0
85	BW	711	0	395	0	0
86	BX	858	0	475	0	0
87	BY	713	0	398	0	0
88	BZ	859	0	470	0	0
89	Ba	1002	0	548	0	0
90	Bb	879	0	514	0	0
91	Bc	768	0	444	0	0
92	Bd	853	0	477	0	0
93	Be	993	0	552	0	0
94	Bf	867	0	471	0	0
95	Bg	1007	0	554	0	0
96	Bh	1044	0	577	0	0
97	Bi	713	0	397	0	0
98	Bj	754	0	418	0	0
99	Bk	850	0	475	0	0
100	Bl	884	0	515	0	0
101	Bm	811	0	464	0	0
102	Bn	1291	0	706	0	0
103	Bo	725	0	394	0	0
104	Bp	860	0	476	0	0
105	Bq	862	0	476	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
106	Br	1006	0	558	0	0
107	Bs	716	0	396	0	0
108	Bt	716	0	399	0	0
109	Bu	819	0	459	0	0
110	Bv	888	0	512	0	0
111	Bw	1012	0	554	0	0
112	Bx	962	0	532	0	0
113	By	810	0	454	0	0
114	Bz	1017	0	556	0	0
115	B0	871	0	494	0	0
116	B1	1017	0	549	0	0
117	B2	769	0	443	0	0
118	B3	890	0	515	0	0
119	B4	704	0	402	0	0
120	B5	712	0	400	0	0
121	B6	997	0	553	0	0
122	B7	1011	0	554	0	0
123	B8	864	0	470	0	0
124	B9	729	0	419	0	0
125	CA	716	0	396	0	0
126	CB	710	0	399	0	0
127	CC	1008	0	554	0	0
128	CD	843	0	478	0	0
129	CE	729	0	393	0	0
130	CF	764	0	447	0	0
131	CG	1047	0	581	0	0
132	CH	1020	0	572	0	0
133	CI	862	0	500	0	0
134	CJ	806	0	452	0	0
135	CK	766	0	414	0	0
136	CL	962	0	533	0	0
137	CM	769	0	443	0	0
138	CN	826	0	449	0	0
139	CO	857	0	472	0	0
140	CP	714	0	396	0	0
141	CQ	821	0	460	0	0
142	CR	715	0	392	0	0
143	CS	1016	0	545	0	0
144	CT	873	0	474	0	0
145	CU	879	0	514	0	0
146	CV	767	0	443	0	0
147	CW	858	0	472	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
148	CX	867	0	473	0	0
149	CY	1006	0	557	0	0
150	CZ	1000	0	552	0	0
151	Ca	866	0	476	0	0
152	Cb	1008	0	550	0	0
153	Cc	855	0	474	0	0
154	Cd	963	0	534	0	0
155	Ce	892	0	512	0	0
156	Cf	825	0	457	0	0
157	Cg	731	0	413	0	0
158	Ch	853	0	474	0	0
159	Ci	1145	0	639	0	0
160	Cj	713	0	393	0	0
161	Ck	724	0	414	0	0
162	Cl	829	0	454	0	0
163	Cm	897	0	511	0	0
164	Cn	850	0	474	0	0
165	Co	708	0	398	0	0
166	Cp	1005	0	553	0	0
167	Cq	889	0	497	0	0
168	Cr	1009	0	549	0	0
169	Cs	902	0	492	0	0
170	Ct	861	0	474	0	0
171	Cu	769	0	445	0	0
172	Cv	881	0	517	0	0
173	Cw	705	0	399	0	0
174	Cx	727	0	393	0	0
175	Cy	865	0	474	0	0
176	Cz	1004	0	549	0	0
177	C0	820	0	460	0	0
178	C1	863	0	471	0	0
179	C2	1006	0	549	0	0
180	C3	1008	0	551	0	0
181	C4	865	0	480	0	0
182	C5	851	0	478	0	0
183	C6	769	0	442	0	0
184	C7	808	0	456	0	0
185	C8	734	0	413	0	0
186	C9	1007	0	574	0	0
187	DA	913	0	490	0	0
188	DB	857	0	471	0	0
189	DC	708	0	394	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
190	DD	962	0	528	0	0
191	DE	759	0	410	0	0
192	DF	770	0	445	0	0
193	DG	990	0	553	0	0
194	DH	866	0	474	0	0
195	DI	827	0	460	0	0
196	DJ	852	0	474	0	0
197	DK	718	0	390	0	0
198	DL	888	0	515	0	0
199	DM	771	0	441	0	0
200	DN	870	0	466	0	0
201	DO	990	0	557	0	0
202	DP	710	0	398	0	0
203	DQ	1003	0	552	0	0
204	DR	1023	0	550	0	0
205	DS	992	0	556	0	0
206	DT	756	0	414	0	0
207	DU	855	0	478	0	0
208	DV	1009	0	569	0	0
209	DW	891	0	514	0	0
210	DX	813	0	457	0	0
211	DY	857	0	476	0	0
212	DZ	854	0	478	0	0
All	All	349108	0	193833	0	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). Clashscore could not be calculated for this entry.

There are no clashes within the asymmetric unit.

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

There are no protein molecules in this entry.

5.3.2 Protein sidechains (i)

There are no protein molecules in this entry.

5.3.3 RNA

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates

There are no monosaccharides in this entry.

5.6 Ligand geometry

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

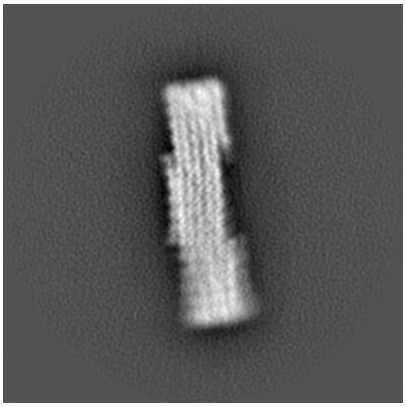
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-11387. These allow visual inspection of the internal detail of the map and identification of artifacts.

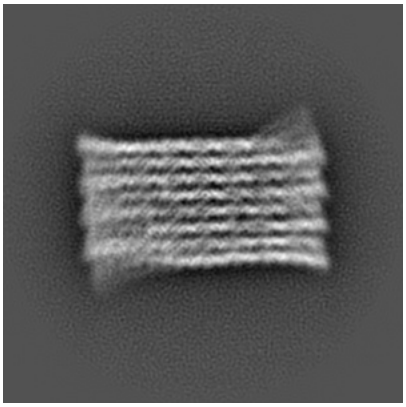
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

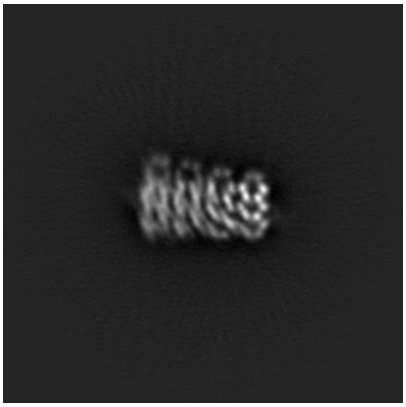
6.1.1 Primary map



X



Y

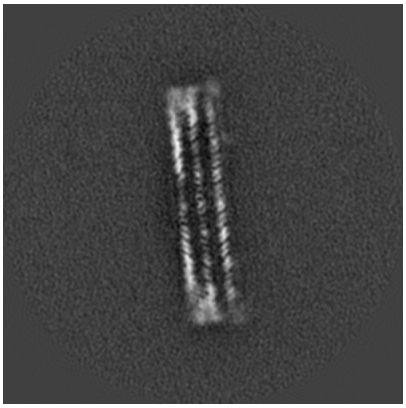


Z

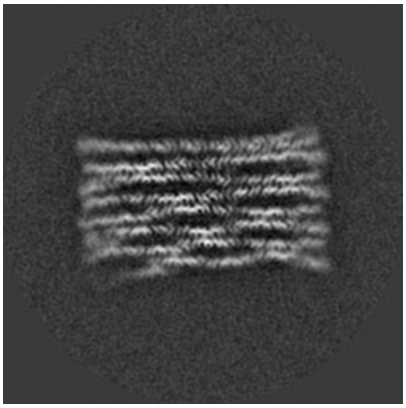
The images above show the map projected in three orthogonal directions.

6.2 Central slices

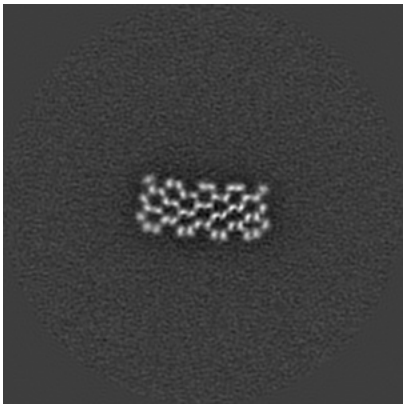
6.2.1 Primary map



X Index: 256



Y Index: 256

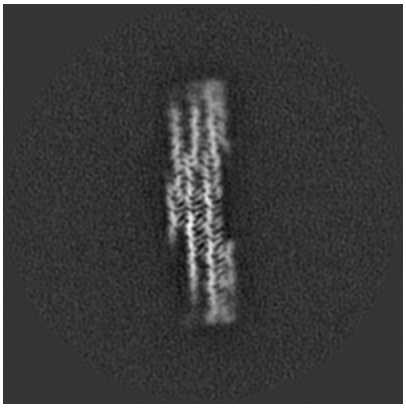


Z Index: 256

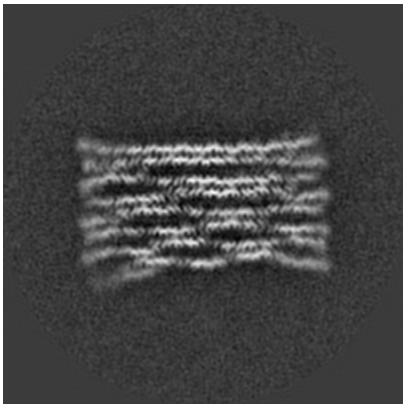
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

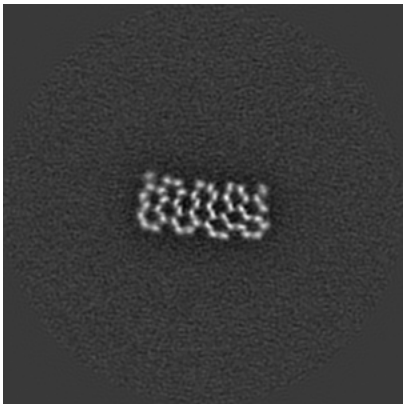
6.3.1 Primary map



X Index: 310



Y Index: 262



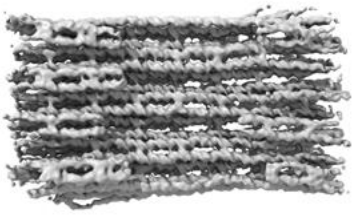
Z Index: 241

The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views (i)

6.4.1 Primary map

X



Y

Z

The images above show the 3D surface view of the map at the recommended contour level 0.06. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

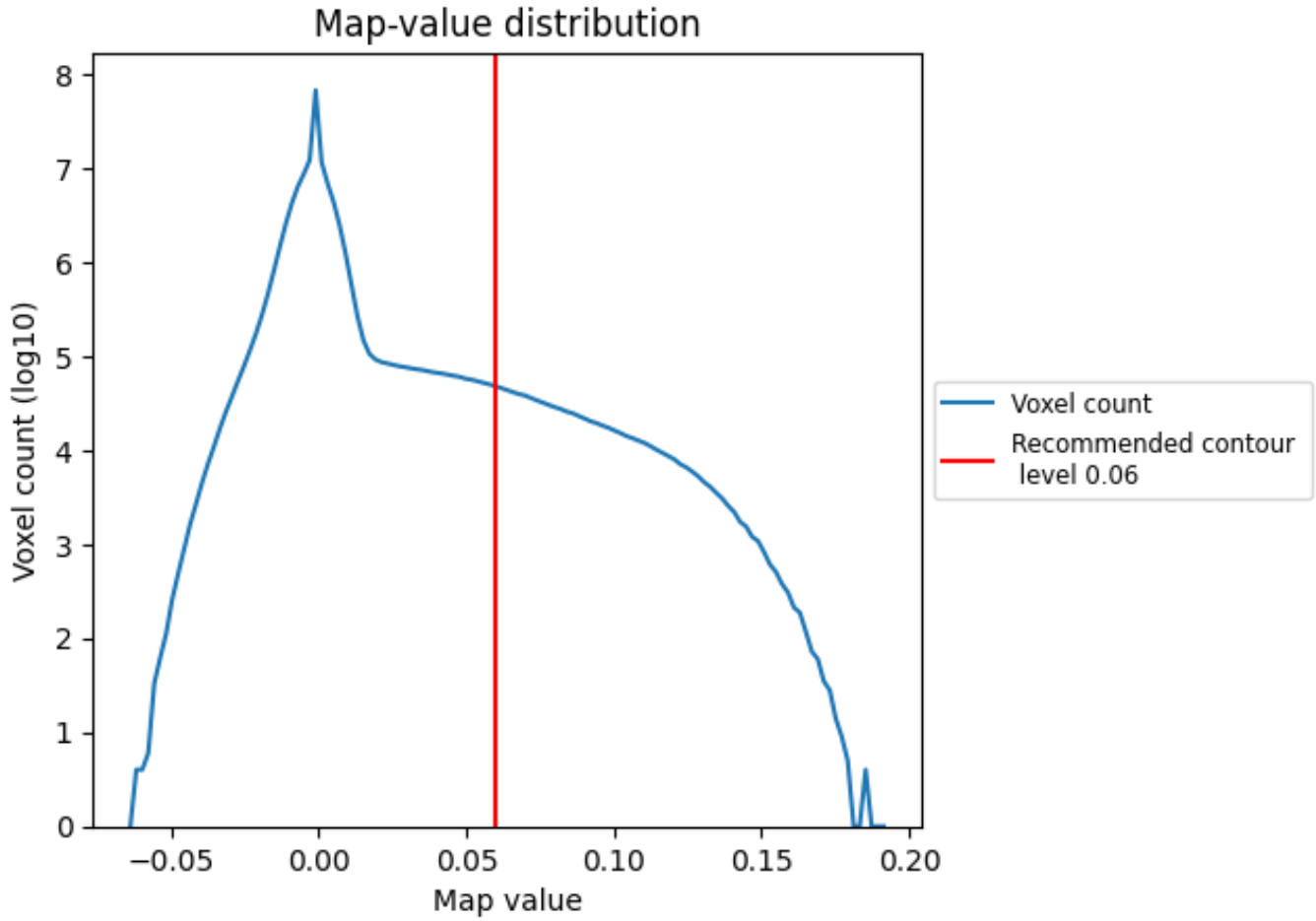
6.5 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis

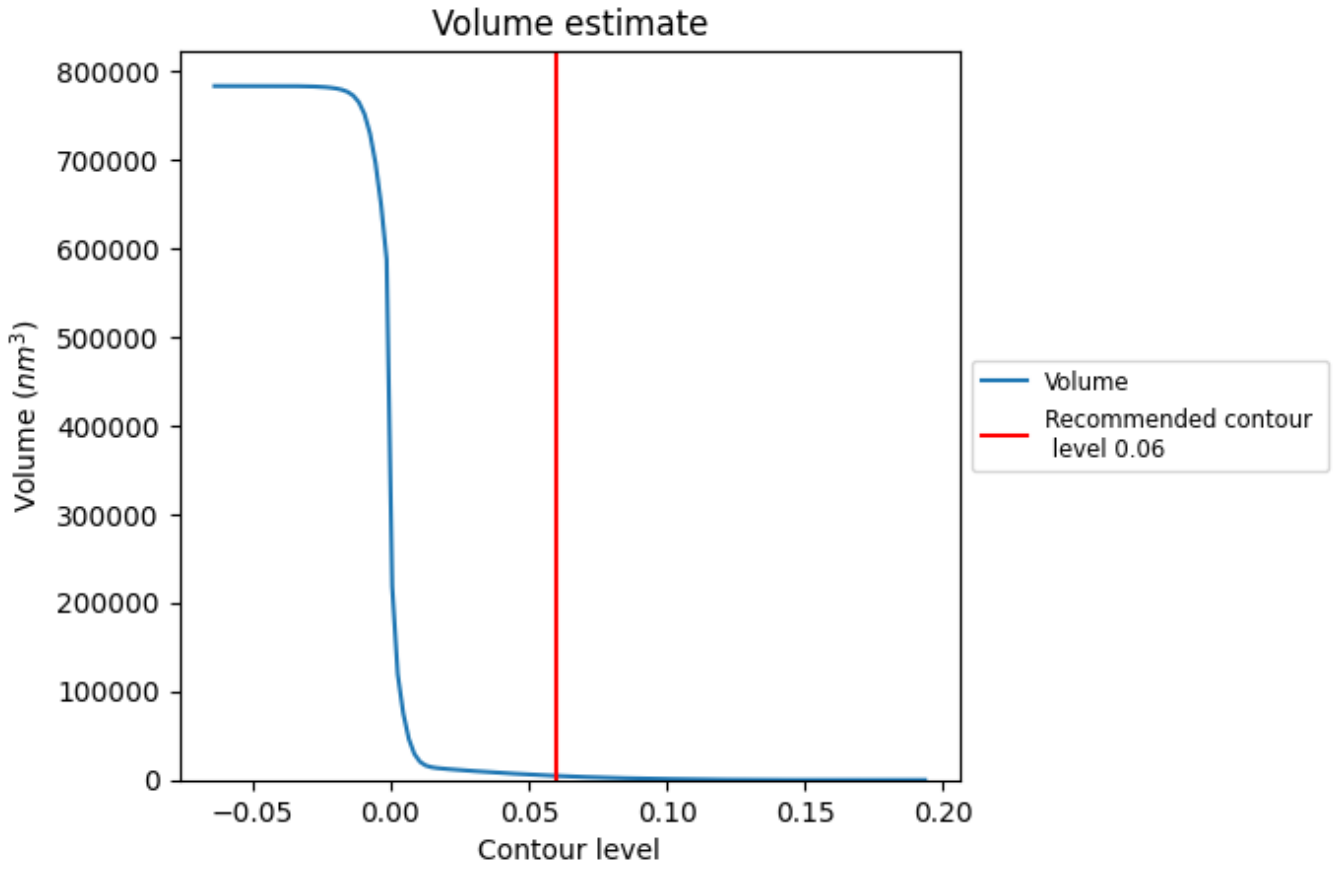
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

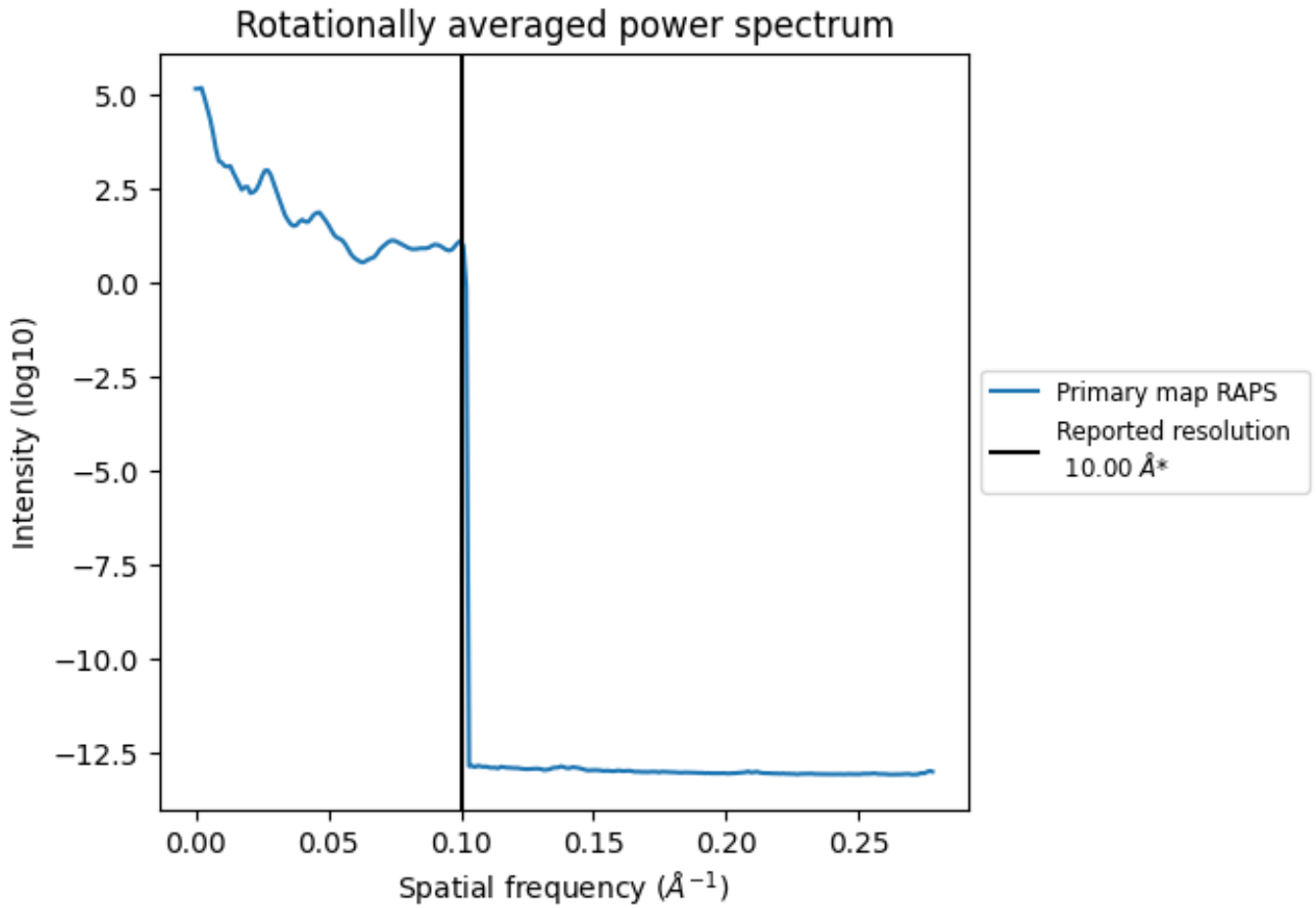
7.2 Volume estimate (i)



The volume at the recommended contour level is 4633 nm^3; this corresponds to an approximate mass of 4185 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)

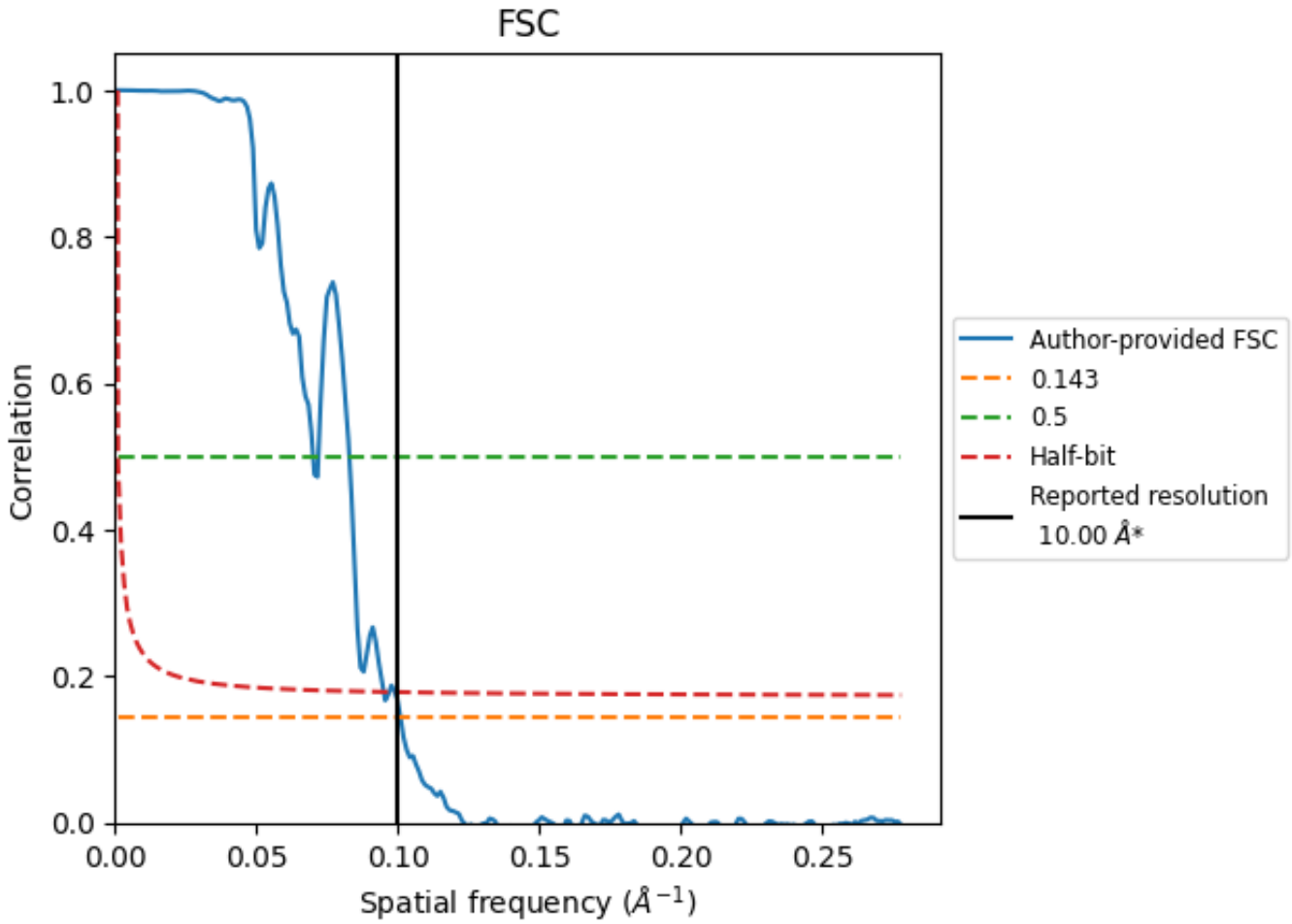


*Reported resolution corresponds to spatial frequency of 0.100 $Å^{-1}$

8 Fourier-Shell correlation

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC



*Reported resolution corresponds to spatial frequency of 0.100 Å^{-1}

8.2 Resolution estimates (i)

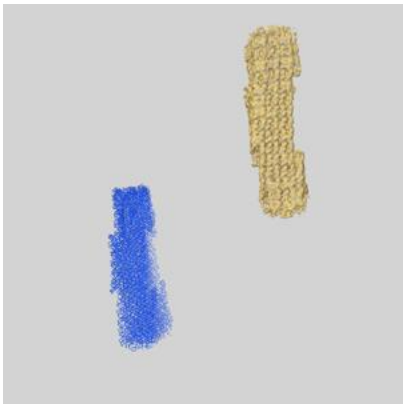
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	10.00	-	-
Author-provided FSC curve	9.91	14.27	10.53
Unmasked-calculated*	-	-	-

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

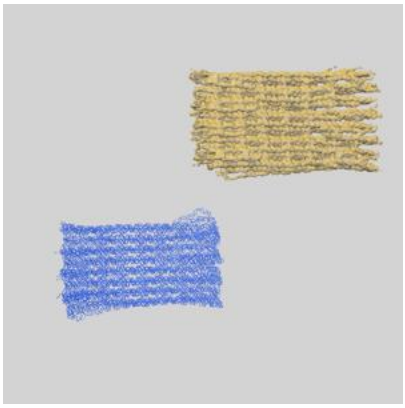
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-11387 and PDB model 7ART. Per-residue inclusion information can be found in section 3 on page 42.

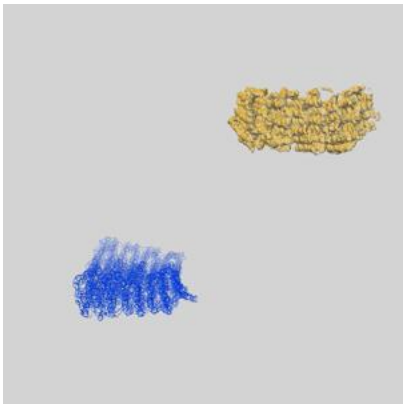
9.1 Map-model overlay



X



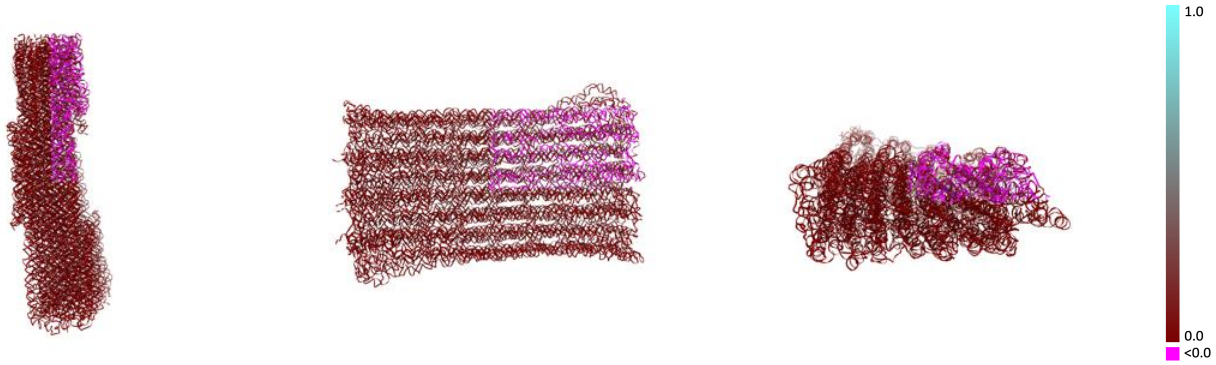
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.06 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

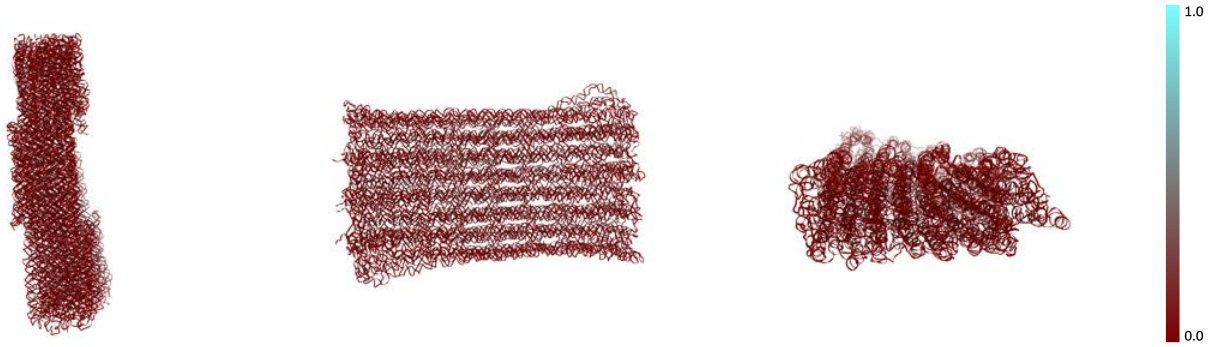
9.2 Q-score mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

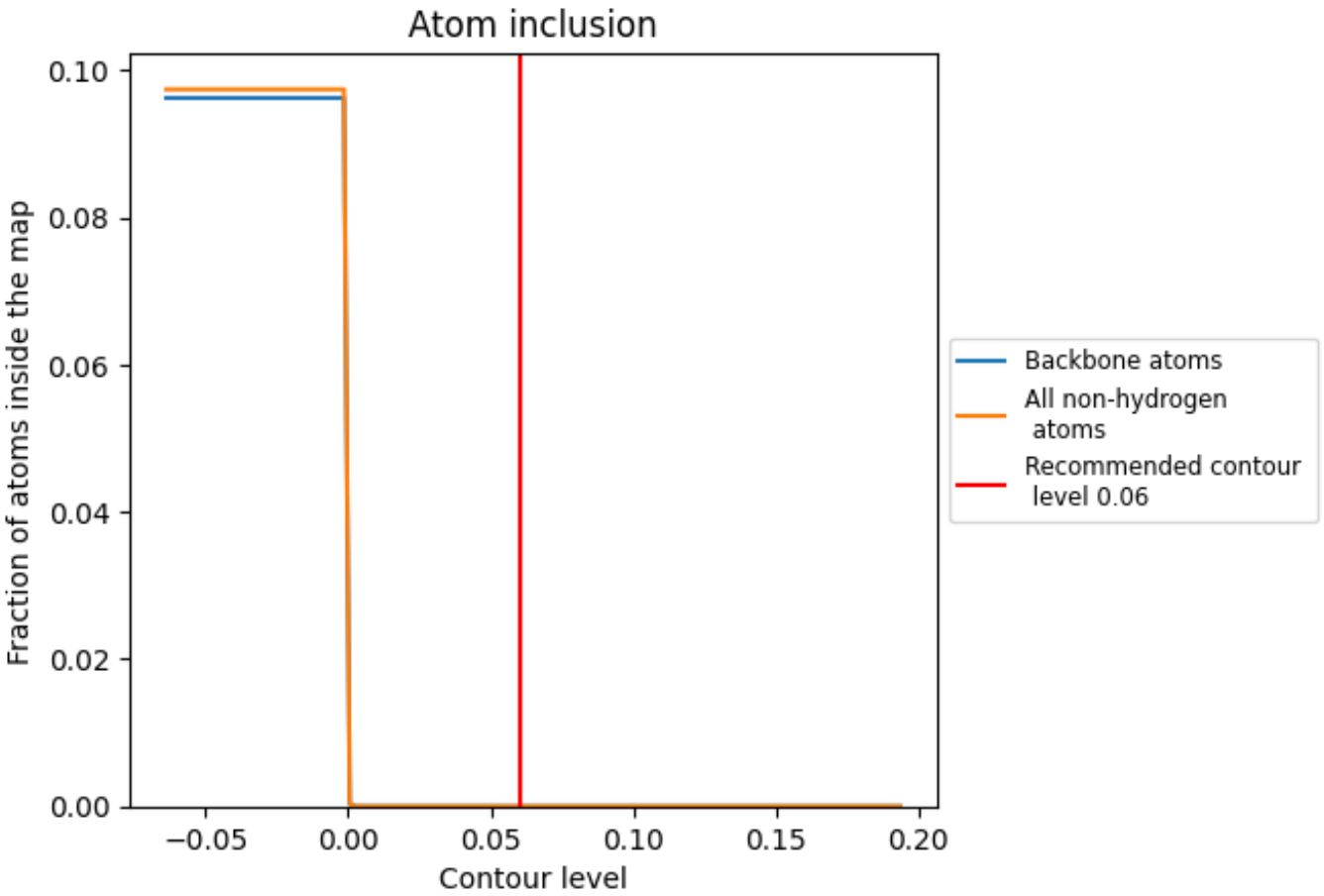
9.3 Atom inclusion mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.06).

9.4 Atom inclusion (i)



At the recommended contour level, 0% of all backbone atoms, 0% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.06) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.0000	-0.0010
A0	0.0000	0.0000
A1	0.0000	0.0000
A2	0.0000	0.0000
A3	0.0000	0.0000
A4	0.0000	0.0000
A5	0.0000	0.0000
A6	0.0000	0.0000
A7	0.0000	-0.0350
A8	0.0000	0.0000
A9	0.0000	-0.0080
AA	0.0000	-0.0010
AB	0.0000	0.0000
AC	0.0000	-0.0040
AD	0.0000	0.0000
AE	0.0000	0.0110
AF	0.0000	0.0230
AG	0.0000	0.0000
AH	0.0000	0.0000
AI	0.0000	-0.0020
AJ	0.0000	0.0030
AK	0.0000	0.0000
AL	0.0000	0.0000
AM	0.0000	0.0110
AN	0.0000	0.0000
AO	0.0000	0.0000
AP	0.0000	-0.0280
AQ	0.0000	-0.0240
AR	0.0000	0.0000
AS	0.0000	0.0000
AT	0.0000	0.0000
AU	0.0000	0.0000
AV	0.0000	0.0000
AW	0.0000	-0.0370
AX	0.0000	0.0000

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Chain	Atom inclusion	Q-score
AY	0.0000	0.0000
AZ	0.0000	0.0000
Aa	0.0000	-0.0160
Ab	0.0000	-0.0040
Ac	0.0000	0.0000
Ad	0.0000	0.0000
Ae	0.0000	0.0000
Af	0.0000	0.0000
Ag	0.0000	0.0060
Ah	0.0000	-0.0040
Ai	0.0000	-0.0160
Aj	0.0000	-0.0060
Ak	0.0000	-0.0060
Al	0.0000	0.0000
Am	0.0000	0.0000
An	0.0000	0.0000
Ao	0.0000	0.0060
Ap	0.0000	0.0000
Aq	0.0000	0.0000
Ar	0.0000	0.0000
As	0.0000	0.0000
At	0.0000	0.0000
Au	0.0000	-0.0130
Av	0.0000	0.0000
Aw	0.0000	0.0000
Ax	0.0000	0.0000
Ay	0.0000	0.0000
Az	0.0000	0.0000
B0	0.0000	0.0000
B1	0.0000	0.0000
B2	0.0000	0.0000
B3	0.0000	-0.0010
B4	0.0000	-0.0010
B5	0.0000	-0.0020
B6	0.0000	0.0000
B7	0.0000	0.0000
B8	0.0000	0.0000
B9	0.0000	0.0000
BA	0.0000	0.0000
BB	0.0000	-0.0060
BC	0.0000	0.0000
BD	0.0000	0.0000

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Chain	Atom inclusion	Q-score
BE	0.0000	0.0130
BF	0.0000	0.0100
BG	0.0000	0.0000
BH	0.0000	0.0000
BI	0.0000	0.0220
BJ	0.0000	0.0000
BK	0.0000	0.0060
BL	0.0000	0.0000
BM	0.0000	-0.0330
BN	0.0000	0.0000
BO	0.0000	0.0000
BP	0.0000	0.0000
BQ	0.0000	0.0000
BR	0.0000	0.0100
BS	0.0000	-0.0280
BT	0.0000	0.0020
BU	0.0000	0.0090
BV	0.0000	0.0010
BW	0.0000	-0.0010
BX	0.0000	0.0000
BY	0.0000	0.0000
BZ	0.0000	0.0000
Ba	0.0000	0.0000
Bb	0.0000	0.0000
Bc	0.0000	0.0000
Bd	0.0000	0.0000
Be	0.0000	0.0000
Bf	0.0000	0.0000
Bg	0.0000	0.0000
Bh	0.0000	0.0000
Bi	0.0000	-0.0310
Bj	0.0000	0.0000
Bk	0.0000	0.0000
Bl	0.0000	0.0000
Bm	0.0000	0.0000
Bn	0.0000	0.0000
Bo	0.0000	0.0000
Bp	0.0000	-0.0030
Bq	0.0000	0.0000
Br	0.0000	0.0000
Bs	0.0000	0.0000
Bt	0.0000	0.0000

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Chain	Atom inclusion	Q-score
Bu	0.0000	0.0000
Bv	0.0000	0.0000
Bw	0.0000	-0.0010
Bx	0.0000	0.0000
By	0.0000	0.0000
Bz	0.0000	0.0000
C0	0.0000	0.0000
C1	0.0000	0.0000
C2	0.0000	0.0000
C3	0.0000	-0.0000
C4	0.0000	0.0000
C5	0.0000	0.0000
C6	0.0000	0.0000
C7	0.0000	0.0000
C8	0.0000	0.0000
C9	0.0000	0.0000
CA	0.0000	0.0000
CB	0.0000	-0.0120
CC	0.0000	0.0130
CD	0.0000	-0.0030
CE	0.0000	-0.0100
CF	0.0000	0.0000
CG	0.0000	0.0020
CH	0.0000	0.0000
CI	0.0000	0.0000
CJ	0.0000	0.0000
CK	0.0000	0.0000
CL	0.0000	0.0000
CM	0.0000	0.0000
CN	0.0000	0.0000
CO	0.0000	0.0000
CP	0.0000	0.0000
CQ	0.0000	0.0000
CR	0.0000	0.0000
CS	0.0000	0.0000
CT	0.0000	0.0000
CU	0.0000	0.0000
CV	0.0000	0.0000
CW	0.0000	0.0000
CX	0.0000	0.0000
CY	0.0000	0.0000
CZ	0.0000	0.0000

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Chain	Atom inclusion	Q-score
Ca	0.0000	0.0000
Cb	0.0000	0.0000
Cc	0.0000	0.0000
Cd	0.0000	0.0000
Ce	0.0000	0.0000
Cf	0.0000	0.0000
Cg	0.0000	0.0000
Ch	0.0000	0.0000
Ci	0.0000	0.0000
Cj	0.0000	0.0000
Ck	0.0000	0.0000
Cl	0.0000	0.0000
Cm	0.0000	0.0000
Cn	0.0000	0.0000
Co	0.0000	0.0000
Cp	0.0000	0.0000
Cq	0.0000	0.0000
Cr	0.0000	0.0000
Cs	0.0000	0.0000
Ct	0.0000	0.0000
Cu	0.0000	0.0000
Cv	0.0000	0.0000
Cw	0.0000	0.0000
Cx	0.0000	0.0000
Cy	0.0000	0.0000
Cz	0.0000	0.0000
DA	0.0000	0.0000
DB	0.0000	0.0000
DC	0.0000	0.0000
DD	0.0000	0.0000
DE	0.0000	0.0000
DF	0.0000	0.0000
DG	0.0000	0.0000
DH	0.0000	0.0000
DI	0.0000	0.0000
DJ	0.0000	0.0000
DK	0.0000	0.0000
DL	0.0000	0.0000
DM	0.0000	0.0000
DN	0.0000	0.0000
DO	0.0000	0.0000
DP	0.0000	0.0000

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Chain	Atom inclusion	Q-score
DQ	0.0000	0.0000
DR	0.0000	0.0000
DS	0.0000	0.0000
DT	0.0000	0.0000
DU	0.0000	0.0000
DV	0.0000	0.0000
DW	0.0000	0.0000
DX	0.0000	0.0000
DY	0.0000	0.0000
DZ	0.0000	0.0000