wwPDB EM Validation Summary Report (i)

Dec 19, 2022 – 05:42 am GMT

PDB ID	:	7AS5
EMDB ID	:	EMD-11170
Title	:	126 helix bundle DNA nanostructure
Authors	:	Kube, M.; Kohler, F.; Feigl, E.; 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	:	2020-10-27
Resolution	:	9.80 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 9.80 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	7560	100% 63% 31% 6%
2	AB	7561	100% 62% 32% 6%
3	AC	50	100% 74% 22% .
4	AD	50	100% 46% 48% 6%
5	AE	50	100% 64% 34% .
6	AF	50	100% 56% 38% 6%
7	AG	50	100% 66% 24% 10%
8	AH	50	100% 70% 28% .
9	AI	50	100% 54% 42% .
10	AJ	50	100% 68% 26% 6%
11	AK	50	100% 60% 40%
12	AL	50	100% 62% 36% .
13	AM	50	100% 64% 32% .
14	AN	50	100% 60% 36% .
15	AO	50	100% 70% 30%
16	AP	50	100% 48% 46% 6%
17	AQ	50	100% 54% 36% 10%

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Mol	Chain	Length	Quality of chain
18	AR	50	100% 70% 30%
19	AS	50	100% 52% 42% 6%
20	AT	50	100% 66% 28% 6%
21	AU	50	100% 62% 36%
22	AV	50	100% 70% 28%
23	AW	50	100% 52% 40% 8%
24	AX	50	100% 54% 38% 8%
25	AY	50	100% 66% 28% 6%
26	AZ	50	100% 64% 36%
27	Aa	50	100% 66% 30%
28	Ab	50	100% 52% 44%
29	Ac	50	100% 68% 32%
30	Ad	50	100% 62% 32% 6%
31	Ae	50	100% 66% 28% 6%
32	Af	50	100% 58% 40%
33	Ag	50	100% 62% 32% 6%
34	Ah	50	100% 56% 38% 6%
35	Ai	50	100% 52% 38% 10%
36	Aj	50	100% 58% 38%
37	Ak	50	100% 68% 24% 8%
38	Al	50	100% 70% 26%
39	Am	50	100% 76% 24%
40	An	50	100% 80% 16%
41	Ao	50	100% 66% 32%
42	Ap	50	100% 66% 30%

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Mol	Chain	Length	Quality of chain
43	Aq	50	100% 74% 24%
44	Ar	50	100% 58% 38%
45	As	50	100% 68% 28%
46	At	50	100% 56% 36% 8%
47	Au	50	100% 68% 28%
48	Av	50	100% 72% 24%
49	Aw	50	100% 56% 36% 8%
50	Ax	50	100% 64% 32%
51	Ay	50	100% 48% 46% 6%
52	Az	50	100% 54% 44%
53	A0	50	100% 62% 30% 8%
54	A1	50	100% 68% 24% 8%
55	A2	50	100% 72% 26%
56	A3	50	100% 76% 22%
57	A4	50	100% 52% 44%
58	A5	50	100% 56% 38% 6%
59	A6	50	100% 70% 24% 6%
60	A7	50	100% 64% 32%
61	A8	50	100% 58% 36% 6%
62	A9	50	100% 62% 34%
63	BA	50	100% 52% 46%
64	BB	50	100% 64% 30% 6%
65	BC	50	100% 60% 38%
66	BD	50	100% 60% 32% 8%
67	BE	50	100% 76% 20%

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Mol	Chain	Length	Quality of chain
68	BF	49	100% 65% 29% 6%
69	BG	49	100% 59% 33% 8%
70	BH	49	100% 59% 35% 6%
71	BI	49	100% 63% 35%
72	BJ	49	100% 73% 18% 8%
73	BK	49	100% 65% 31%
74	BL	49	100% 57% 35% 8%
75	BM	49	100% 51% 45%
76	BN	49	100% 76% 18% 6%
77	BO	49	100% 73% 18% 8%
78	BP	49	100% 76% 22%
79	BQ	49	100% 61% 33% 6%
80	BR	49	100% 63% 29% 8%
81	BS	49	100% 63% 33%
82	BT	49	100% 73% 24%
83	BU	49	100% 69% 31%
84	BV	49	100% 67% 31%
85	BW	49	100% 63% 33%
86	BX	49	100% 71% 24%
87	BY	49	100% 69% 29%
88	BZ	49	100% 63% 35%
89	Ba	49	100% 53% 45%
90	Bb	49	100% 67% 29%
91	Bc	49	100% 67% 27% 6%
92	Bd	49	100% 65% 27% 8%

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Mol	Chain	Length	Quality of chain
93	Be	49	100% 51% 43% 6%
94	Bf	49	100% 57% 41%
95	Bg	42	100% 52% 43% 5%
96	Bh	42	100% 60% 38%
97	Bi	42	100% 64% 36%
98	Bj	42	100% 57% 33% 10%
99	Bk	42	100% 69% 26% 5%
100	Bl	42	100% 60% 38%
101	Bm	42	100% 67% 29% 5%
102	Bn	42	100% 50% 45% 5%
103	Bo	42	100% 67% 31%
104	Bp	42	100% 71% 24% 5%
105	Bq	42	100% 67% 33%
106	Br	42	100% 60% 33% 7%
107	Bs	42	100% 69% 26% 5%
108	Bt	42	100% 71% 24% 5%
109	Bu	42	100% 62% 36%
110	Bv	42	100% 71% 26%
111	Bw	42	100% 67% 29% 5%
112	Bx	42	100% 69% 19% 12%
113	By	42	100% 62% 38%
114	Bz	42	100% 62% 29% 10%
115	B0	42	100% 64% 24% 12%
116	B1	42	100% 76% 21%
117	B2	42	100% 55% 38% 7%

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Mol	Chain	Length	Quality of chain
118	B3	42	100% 67% 26% 7%
119	B4	42	100% 57% 36% 7%
120	B5	42	100% 71% 26%
121	B6	42	100% 55% 33% 12%
122	B7	42	100% 67% 29% 5%
123	B8	42	100% 45% 50% 5%
124	B9	42	100% 55% 43%
125	CA	42	100% 57% 38% 5%
126	CB	42	100% 69% 24% 7%
127	CC	42	100% 64% 33%
128	CD	42	100% 55% 45%
129	CE	42	100% 64% 29% 7%
130	CF	42	100% 71% 26%
131	CG	42	100% 69% 29%
132	CH	42	100% 71% 24% 5%
133	CI	42	100% 60% 36% 5%
134	CJ	42	100% 55% 38% 7%
135	CK	42	100% 60% 40%
136	CL	42	100% 67% 24% 10%
137	CM	42	100% 69% 26% 5%
138	CN	42	100% 60% 36% 5%
139	CO	42	100% 69% 29%
140	CP	42	100% 76% 21%
141	CQ	42	100% 40% 48% 12%
142	CR	42	100% 55% 45%

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Mol	Chain	Length	Quality of chain
143	CS	42	100% 62% 33% 5%
144	CT	42	100% 57% 36% 7%
145	CU	42	100% 57% 31% 12%
146	CV	42	100% 69% 26% 5%
147	CW	42	100% 45% 50% 5%
148	CX	42	100% 71% 19% 10%
149	CY	42	100% 81% 17%
150	CZ	42	100% 57% 40%
151	Ca	42	100% 64% 33%
152	Cb	42	100% 67% 31%
153	Cc	42	100% 69% 29%
154	Cd	42	100% 48% 50%
155	Ce	42	100% 50% 43% 7%
156	Cf	42	100% 67% 33%
157	Cg	42	100% 57% 36% 7%
158	Ch	42	100% 69% 26% 5%
159	Ci	42	100% 52% 43% 5%
160	Cj	42	100% 62% 33% 5%
161	Ck	42	100% 57% 40%
162	Cl	42	100% 52% 38% 10%
163	Cm	42	100% 67% 29% 5%
164	Cn	42	100% 60% 38%
165	Co	42	100% 52% 33% 14%
166	Cp	42	100% 71% 24% 5%
167	Cq	42	100% 55% 38% 7%

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Mol	Chain	Length	Quality of chain
168	Cr	42	100% 69% 31%
169	Cs	42	100% 60% 33% 7%
170	Ct	42	100% 60% 33% 7%
171	Cu	42	100% 62% 31% 7%
172	Cv	42	100% 67% 31%
173	Cw	42	100% 71% 29%
174	Cx	42	100% 69% 26% 5%
175	Cy	42	100% 79% 21%
176	Cz	42	100% 67% 31%
177	C0	42	100% 71% 24% 5%
178	C1	42	100% 57% 40%
179	C2	42	100% 76% 24%
180	C3	42	100% 76% 17% 7%
181	C4	42	100% 67% 31%
182	C5	42	100% 71% 26%
183	C6	42	100% 64% 29% 7%
184	C7	42	100% 69% 26% 5%
185	C8	42	100% 57% 38% 5%
186	C9	42	100% 62% 26% 12%
187	DA	42	100% 69% 29%
188	DB	42	100% 45% 48% 7%
189	DC	42	100% 71% 24% 5%
190	DD	42	100% 71% 26%
191	DE	42	100% 67% 31%
192	DF	42	100% 52% 38% 10%

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Mol	Chain	Length	Quality of chain
193	DG	42	100% 69% 17% 14%
194	DH	42	100% 76% 21%
195	DI	42	100% 67% 29% 5%
196	DJ	42	100% 64% 33%
197	DK	42	100% 57% 33% 10%
198	DL	42	100% 50% 48%
199	DM	42	100% 60% 38%
200	DN	42	100% 33% 60% 7%
201	DO	42	100% 76% 21%
202	DP	42	100% 79% 19%
203	DQ	42	100% 62% 38%
204	DR	42	100% 52% 38% 10%
205	DS	42	100% 64% 31% 5%
206	DT	42	100% 48% 45% 7%
207	DU	42	100% 67% 29% 5%
208	DV	42	100% 52% 40% 7%
209	DW	42	100% 64% 36%
210	DX	42	100% 60% 29% 12%
211	DY	42	100% 67% 29% 5%
212	DZ	42	100% 71% 26%
213	Da	42	100% 60% 38%
214	Db	42	100% 71% 26%
215	Dc	42	100% 57% 36% 7%
216	Dd	42	100% 74% 24%
217	De	42	100% 57% 40%

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Mol	Chain	Length	Quality of chain
218	Df	42	100% 60% 38%
219	Dg	42	100% 67% 33%
220	Dh	42	100% 71% 24% 5%
221	Di	42	100% 52% 36% 12%
222	Dj	42	100% 69% 26% 5%
223	Dk	42	100% 74% 21% 5%
224	Dl	42	100% 57% 33% 10%
225	Dm	42	100% 57% 43%
226	Dn	42	100% 71% 24% 5%
227	Do	42	100% 64% 29% 7%
228	Dp	42	100% 71% 26%
229	Dq	42	100% 64% 31% 5%
230	Dr	42	100% 67% 29% 5%
231	Ds	42	100% 69% 24% 7%
232	Dt	42	100% 71% 29%
233	Du	42	100% 60% 36% 5%
234	Dv	42	100% 64% 33%
235	Dw	42	100% 67% 33%
236	Dx	42	100% 62% 29% 10%
237	Dy	42	100% 64% 33%
238	Dz	42	100% 64% 31% 5%
239	D0	42	100% 71% 21% 7%
240	D1	42	100% 67% 29% 5%
241	D2	42	100% 79% 19%
242	D3	42	100% 62% 33% 5%

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Mol	Chain	Length	Quality of chain
243	D4	42	100% 62% 33% 5%
244	D5	42	100% 50% 40% 10%
245	D6	39	100% 64% 36%
246	D7	39	100% 64% 33%
247	D8	39	100% 51% 41% 8%
248	D9	36	100% 50% 44% 6%
249	EA	36	100% 58% 39%
250	EB	35	100% 63% 37%
251	EC	35	100% 66% 23% 11%
252	ED	35	100% 63% 29% 9%
253	EE	35	100% 71% 26%
254	EF	35	100% 69% 31%
255	EG	35	100% 71% 23% 6%
256	EH	35	100% 57% 31% 11%
257	EI	35	100% 71% 23% 6%
258	EJ	35	100% 66% 34%
259	EK	35	100% 54% 43%
260	EL	35	100% 69% 31%
261	EM	35	100% 51% 43% 6%
262	EN	35	100% 54% 40% 6%
263	EO	35	100% 51% 37% 11%
264	EP	35	100% 60% 29% 11%
265	EQ	35	100% 69% 26% 6%
266	ER	35	100% 46% 49% 6%
267	ES	35	100% 63% 34%

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Mol	Chain	Length	Quality of chain
268	ET	35	100% 80% 11% 9%
269	EU	35	100% 57% 29% 14%
270	EV	35	100% 69% 29%
271	EW	35	100% 66% 26% 9%
272	EX	35	100% 74% 26%
273	EY	35	100% 74% 26%
274	EZ	35	100% 57% 37% 6%
275	Ea	35	100% 71% 26%
276	Eb	35	100% 51% 43% 6%
277	Ec	35	100% 74% 26%
278	Ed	35	100% 86% 14%
279	Ee	35	100% 66% 34%
280	Ef	35	100% 60% 40%
281	Eg	35	100% 69% 29%
282	Eh	35	100% 66% 34%
283	Ei	35	100% 66% 29% 6%
284	Ej	35	100% 80% 11% 9%
285	Ek	35	100% 69% 26% 6%
286	El	35	100% 63% 29% 9%
287	Em	35	100% 77% 17% 6%
288	En	35	100% 60% 31% 9%
289	Eo	35	100% 66% 29% 6%
290	Ep	35	100% 66% 31%
291	Eq	35	100% 66% 29% 6%
292	Er	35	100% 63% 34%

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Mol	Chain	Length	Quality of chain
293	Es	35	100% 74% 20% 6%
294	Et	35	100% 46% 40% 14%
295	Eu	35	100% 69% 26% 6%
296	Ev	35	100% 69% 29%
297	Ew	35	100% 57% 43%
298	Ex	35	100% 71% 26%
299	Ey	35	100% 66% 34%
300	Ez	35	100% 80% 14% 6%
301	E0	35	100% 66% 29% 6%
302	E1	35	100% 66% 29% 6%
303	E2	35	100% 71% 20% 9%
304	E3	35	100% 69% 29%
305	E4	35	100% 54% 34% 11%
306	E5	35	100% 66% 31%
307	E6	35	100% 57% 31% 11%
308	E7	35	100% 71% 26%
309	E8	35	100% 74% 23%
310	E9	35	100% 77% 23%
311	FA	35	100% 71% 23% 6%
312	FB	35	100% 66% 31%
313	FC	35	100% 74% 17% 9%
314	FD	35	100% 60% 34% 6%
315	FE	35	100% 66% 34%
316	FF	35	100% 57% 34% 9%
317	FG	35	100% 57% 40%

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Mol	Chain	Length	Quality of chain
318	FH	35	100% 49% 40% 11%
319	FI	35	100% 74% 23%
320	FJ	35	100% 66% 31%
321	FK	35	100% 71% 26%
322	FL	35	100% 63% 34%
323	FM	35	100% 69% 29%
324	FN	35	100% 71% 29%
325	FO	35	100% 69% 29%
326	FP	35	100% 66% 31%
327	FQ	35	100% 63% 34%
328	FR	35	100% 66% 31%
329	FS	35	100% 60% 29% 11%
330	FT	35	100% 69% 20% 11%
331	FU	35	100% 74% 26%
332	FV	35	100% 51% 46%
333	FW	35	100% 60% 34% 6%
334	FX	35	100% 63% 34%
335	FY	35	100% 77% 11% 11%
336	FZ	35	100% 80% 20%
337	Fa	35	100% 69% 29%
338	Fb	35	100% 54% 40% 6%
339	Fc	35	100% 57% 43%
340	Fd	33	100% 70% 27%
341	Fe	32	100% 50% 44% 6%
342	Ff	32	100% 69% 25% 6%

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Mol	Chain	Length	Quality of chain
343	Fg	28	100% 50% 43% 7%
344	Fh	28	100% 64% 32%
345	Fi	28	100% 57% 39%
346	Fj	28	100% 68% 29%
347	Fk	28	100% 61% 39%
348	Fl	28	100% 57% 39%
349	Fm	28	100% 61% 36%
350	Fn	28	100% 68% 29%
351	Fo	28	100% 54% 46%
352	Fp	28	100% 61% 32% 7%
353	Fq	28	100% 68% 25% 7%
354	Fr	28	100% 54% 46%
355	Fs	28	100% 46% 50%
356	Ft	28	100% 79% 18%
357	Fu	28	100% 64% 32%
358	Fv	28	100% 64% 25% 11%
359	Fw	28	100% 54% 43%
360	Fx	28	100% 61% 36%
361	Fy	28	100% 54% 39% 7%
362	Fz	28	100% 71% 25%
363	F0	28	100% 71% 29%
364	F1	28	100% 46% 50%
365	F2	28	100% 50% 46%
366	F3	28	100% 64% 32%
367	F4	28	100% 61% 36%

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Mol	Chain	Length	Quality of chain
368	F5	28	100% 50% 43% 7%
369	F6	28	100% 57% 43%
370	F7	28	100% 68% 29%
371	F8	28	100% 64% 36%
372	F9	28	100% 68% 32%
373	GA	28	100% 61% 36%
374	GB	28	100% 57% 36% 7%
375	GC	28	100% 50% 43% 7%
376	GD	28	100% 61% 36%
377	GE	28	100% 64% 36%
378	GF	28	100% 64% 29% 7%
379	GG	28	100% 61% 36%
380	GH	28	100% 57% 36% 7%
381	GI	28	100% 57% 32% 11%
382	GJ	28	100% 75% 21%
383	GK	28	100% 75% 25%
384	GL	28	100% 75% 21%
385	GM	28	100% 61% 39%
386	GN	28	100% 57% 39%
387	GO	28	100% 68% 18% 14%
388	GP	28	100% 86% 14%
389	GQ	28	100% 50% 43% 7%
390	GR	28	100% 64% 32%
391	GS	28	100% 61% 36%
392	GT	28	100% 61% 36%

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Mol	Chain	Length	Quality of chain
393	GU	28	100% 61% 36%
394	GV	28	100% 61% 36%
395	GW	28	100% 68% 32%
396	GX	28	100% 61% 29% 11%
397	GY	28	100% 64% 25% 11%
398	GZ	28	100% 64% 29% 7%
399	Ga	28	100% 61% 39%
400	Gb	28	100% 64% 32%
401	Gc	28	100% 71% 25%
402	Gd	28	100% 64% 32%
403	Ge	28	100% 54% 36% 11%
404	Gf	28	100% 50% 46%
405	Gg	28	100% 64% 36%
406	Gh	28	100% 71% 25%
407	Gi	28	100% 61% 32% 7%
408	Gj	28	100% 54% 39% 7%
409	Gk	28	100% 71% 29%
410	Gl	28	100% 71% 29%
411	Gm	28	100% 61% 36%
412	Gn	28	100% 61% 29% 11%
413	Go	28	100% 68% 25% 7%
414	Gp	28	100% 54% 46%
415	Gq	28	100% 57% 43%
416	Gr	28	100% 64% 32%
417	Gs	28	100% 68% 25% 7%

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Mol	Chain	Length	Quality of chain
418	Gt	28	100% 64% 36%
419	Gu	28	100% 68% 25% 7%
420	Gv	28	100% 57% 39%
421	Gw	28	100% 68% 29%
422	Gx	28	100% 75% 25%
423	Gy	28	100% 61% 29% 11%
424	Gz	28	100% 61% 32% 7%
425	G0	28	100% 79% 21%
426	G1	28	100% 61% 25% 14%
427	G2	28	100% 57% 43%
428	G3	28	100% 64% 29% 7%
429	G4	28	100% 79% 21%
430	G5	28	100% 54% 32% 14%
431	G6	28	100% 89% 11%
432	G7	28	100% 71% 25%
433	G8	28	100% 75% 21%
434	G9	28	100% 75% 21%
435	HA	28	100% 75% 21%
436	HB	28	100% 61% 36%
437	HC	21	100% 81% 19%
438	HD	21	100% 81% 19%
439	HE	21	100% 62% 29% 10%
440	HF	21	100% 76% 24%
441	HG	21	100% 76% 19% 5%
442	HH	21	100% 62% 29% 10%

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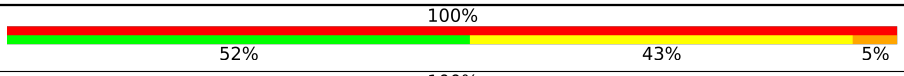
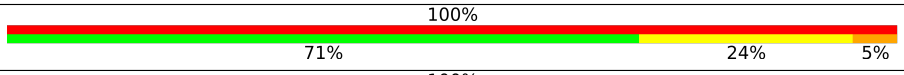
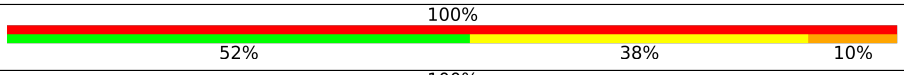
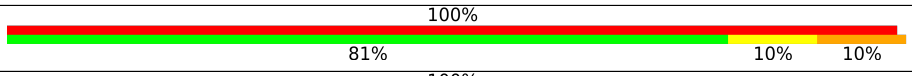
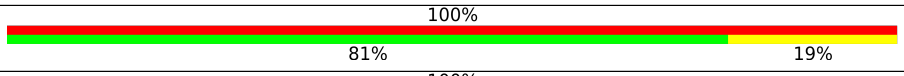
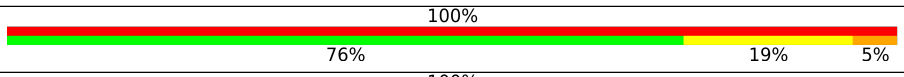
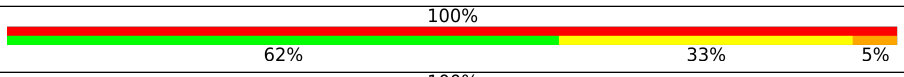
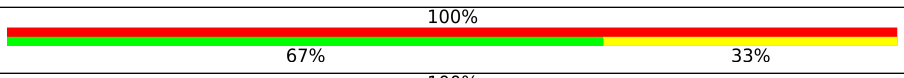
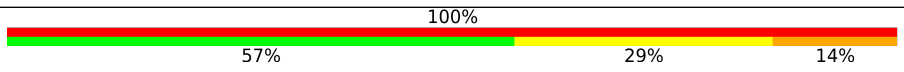
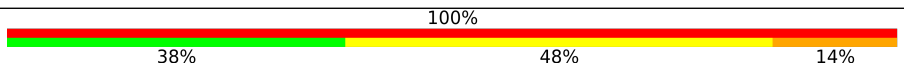
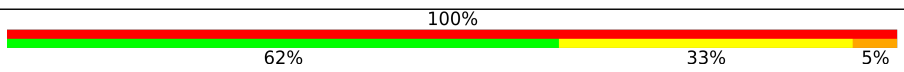
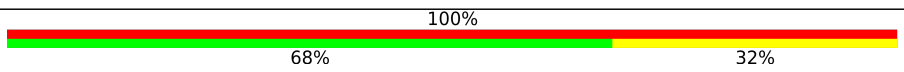
Mol	Chain	Length	Quality of chain
443	HI	21	
444	HJ	21	
445	HK	21	
446	HL	21	
447	HM	21	
448	HN	21	
449	HO	21	
450	HP	21	
451	HQ	21	
452	HR	21	
453	HS	21	
454	HT	21	
455	HU	19	

2 Entry composition (i)

There are 455 unique types of molecules in this entry. The entry contains 662907 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	7560	154518	73798	27731	45430	7559	0	0

- Molecule 2 is a DNA chain called SCAFFOLD STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
2	AB	7561	154665	73996	27107	46002	7560	0	1

- Molecule 3 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
3	AC	50	1020	495	156	320	49	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	1036	497	187	303	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	50	1013	494	154	316	49	0	0

- Molecule 6 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
6	AF	50	1011	494	151	317	49	0	0

- Molecule 7 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	AG	50	Total	C	N	O	P	0	0
			1011	495	147	320	49		

- Molecule 8 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	AH	50	Total	C	N	O	P	0	0
			1009	492	153	315	49		

- Molecule 9 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	AI	50	Total	C	N	O	P	0	0
			1015	495	150	321	49		

- Molecule 10 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	AJ	50	Total	C	N	O	P	0	0
			1028	498	165	316	49		

- Molecule 11 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	AK	50	Total	C	N	O	P	0	0
			1019	495	162	313	49		

- Molecule 12 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	AL	50	Total	C	N	O	P	0	0
			1016	493	158	316	49		

- Molecule 13 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	AM	50	Total	C	N	O	P	0	0
			1018	494	154	321	49		

- Molecule 14 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	AN	50	Total	C	N	O	P	0	0
			1006	489	153	315	49		

- Molecule 15 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	AO	50	Total	C	N	O	P	0	0
			1028	497	166	316	49		

- Molecule 16 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	AP	50	Total	C	N	O	P	0	0
			1005	489	150	317	49		

- Molecule 17 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	AQ	50	Total	C	N	O	P	0	0
			1023	494	166	314	49		

- Molecule 18 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	AR	50	Total	C	N	O	P	0	0
			1008	489	153	317	49		

- Molecule 19 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	AS	50	Total	C	N	O	P	0	0
			1010	492	150	319	49		

- Molecule 20 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	AT	50	Total	C	N	O	P	0	0
			1003	488	154	312	49		

- Molecule 21 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	AU	50	Total	C	N	O	P	0	0
			1011	494	148	320	49		

- Molecule 22 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	AV	50	Total	C	N	O	P	0	0
			1018	495	159	315	49		

- Molecule 23 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	AW	50	Total	C	N	O	P	0	0
			1020	495	159	317	49		

- Molecule 24 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	AX	50	Total	C	N	O	P	0	0
			1016	492	162	313	49		

- Molecule 25 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	AY	50	Total	C	N	O	P	0	0
			1008	489	153	317	49		

- Molecule 26 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	AZ	50	Total	C	N	O	P	0	0
			1007	489	156	313	49		

- Molecule 27 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	Aa	50	Total	C	N	O	P	0	0
			1012	493	152	318	49		

- Molecule 28 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	Ab	50	Total	C	N	O	P	0	0
			1008	492	153	314	49		

- Molecule 29 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	Ac	50	Total	C	N	O	P	0	0
			1027	496	170	312	49		

- Molecule 30 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	Ad	50	Total	C	N	O	P	0	0
			1017	494	157	317	49		

- Molecule 31 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	Ae	50	Total	C	N	O	P	0	0
			1017	493	158	317	49		

- Molecule 32 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	Af	50	Total	C	N	O	P	0	0
			1022	496	164	313	49		

- Molecule 33 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	Ag	50	Total	C	N	O	P	0	0
			1009	493	146	321	49		

- Molecule 34 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	Ah	50	Total	C	N	O	P	0	0
			1029	497	169	314	49		

- Molecule 35 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	Ai	50	Total	C	N	O	P	0	0
			1022	497	163	313	49		

- Molecule 36 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	Aj	50	Total	C	N	O	P	0	0
			1022	496	158	319	49		

- Molecule 37 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	Ak	50	Total	C	N	O	P	0	0
			997	487	140	321	49		

- Molecule 38 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
38	Al	50	Total	C	N	O	P	0	0
			1014	495	150	320	49		

- Molecule 39 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	Am	50	Total	C	N	O	P	0	0
			1013	493	158	313	49		

- Molecule 40 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	An	50	Total	C	N	O	P	0	0
			1022	495	168	310	49		

- Molecule 41 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	Ao	50	Total	C	N	O	P	0	0
			1015	492	168	306	49		

- Molecule 42 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	Ap	50	Total	C	N	O	P	0	0
			1016	495	159	313	49		

- Molecule 43 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	Aq	50	Total	C	N	O	P	0	0
			1021	494	169	309	49		

- Molecule 44 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
44	Ar	50	Total	C	N	O	P	0	0
			1015	495	153	318	49		

- Molecule 45 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	As	50	Total	C	N	O	P	0	0
			1023	496	167	311	49		

- Molecule 46 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	At	50	Total	C	N	O	P	0	0
			1012	494	154	315	49		

- Molecule 47 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	Au	50	Total	C	N	O	P	0	0
			1020	493	173	305	49		

- Molecule 48 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	Av	50	Total	C	N	O	P	0	0
			1009	492	153	315	49		

- Molecule 49 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	Aw	50	Total	C	N	O	P	0	0
			1009	491	157	312	49		

- Molecule 50 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	Ax	50	Total	C	N	O	P	0	0
			1004	489	144	322	49		

- Molecule 51 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	Ay	50	Total	C	N	O	P	0	0
			1010	492	156	313	49		

- Molecule 52 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	Az	50	Total	C	N	O	P	0	0
			1016	494	163	310	49		

- Molecule 53 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	A0	50	Total	C	N	O	P	0	0
			1018	495	168	306	49		

- Molecule 54 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	A1	50	Total	C	N	O	P	0	0
			1014	493	164	308	49		

- Molecule 55 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	A2	50	Total	C	N	O	P	0	0
			1017	495	159	314	49		

- Molecule 56 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	A3	50	Total	C	N	O	P	0	0
			1027	497	166	315	49		

- Molecule 57 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	A4	50	Total	C	N	O	P	0	0
			1024	495	162	318	49		

- Molecule 58 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	A5	50	Total	C	N	O	P	0	0
			1018	495	159	315	49		

- Molecule 59 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
59	A6	50	Total	C	N	O	P	0	0
			1007	494	148	316	49		

- Molecule 60 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
60	A7	50	Total	C	N	O	P	0	0
			1017	496	158	314	49		

- Molecule 61 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
61	A8	50	Total	C	N	O	P	0	0
			1031	494	181	307	49		

- Molecule 62 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
62	A9	50	Total	C	N	O	P	0	0
			1013	491	157	316	49		

- Molecule 63 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
63	BA	50	Total	C	N	O	P	0	0
			1020	494	160	317	49		

- Molecule 64 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
64	BB	50	Total	C	N	O	P	0	0
			1009	491	154	315	49		

- Molecule 65 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
65	BC	50	Total	C	N	O	P	0	0
			1036	498	180	309	49		

- Molecule 66 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
66	BD	50	Total	C	N	O	P	0	0
			1025	496	161	319	49		

- Molecule 67 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
67	BE	50	Total	C	N	O	P	0	0
			1013	495	150	319	49		

- Molecule 68 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
68	BF	49	Total	C	N	O	P	0	0
			991	472	191	280	48		

- Molecule 69 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
69	BG	49	Total	C	N	O	P	0	0
			998	475	182	293	48		

- Molecule 70 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
70	BH	49	Total 996	C 480	N 177	O 291	P 48	0	0

- Molecule 71 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
71	BI	49	Total 995	C 474	N 183	O 290	P 48	0	0

- Molecule 72 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
72	BJ	49	Total 988	C 480	N 153	O 307	P 48	0	0

- Molecule 73 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
73	BK	49	Total 996	C 481	N 170	O 297	P 48	0	0

- Molecule 74 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
74	BL	49	Total 1009	C 483	N 183	O 295	P 48	0	0

- Molecule 75 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
75	BM	49	Total 1005	C 480	N 177	O 300	P 48	0	0

- Molecule 76 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
76	BN	49	Total 1013	C 481	N 203	O 281	P 48	0	0

- Molecule 77 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
77	BO	49	Total	C	N	O	P	0	0
			1002	480	186	288	48		

- Molecule 78 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
78	BP	49	Total	C	N	O	P	0	0
			1006	481	197	280	48		

- Molecule 79 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
79	BQ	49	Total	C	N	O	P	0	0
			998	479	178	293	48		

- Molecule 80 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
80	BR	49	Total	C	N	O	P	0	0
			1015	484	194	289	48		

- Molecule 81 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
81	BS	49	Total	C	N	O	P	0	0
			998	478	176	296	48		

- Molecule 82 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
82	BT	49	Total	C	N	O	P	0	0
			995	481	170	296	48		

- Molecule 83 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
83	BU	49	Total	C	N	O	P	0	0
			1005	480	195	282	48		

- Molecule 84 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
84	BV	49	Total 994	C 474	N 183	O 289	P 48	0	0

- Molecule 85 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
85	BW	49	Total 1010	C 482	N 190	O 290	P 48	0	0

- Molecule 86 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
86	BX	49	Total 999	C 480	N 186	O 285	P 48	0	0

- Molecule 87 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
87	BY	49	Total 1003	C 481	N 182	O 292	P 48	0	0

- Molecule 88 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
88	BZ	49	Total 1003	C 480	N 183	O 292	P 48	0	0

- Molecule 89 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
89	Ba	49	Total 1011	C 479	N 205	O 279	P 48	0	0

- Molecule 90 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
90	Bb	49	Total 991	C 483	N 150	O 310	P 48	0	0

- Molecule 91 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
91	Bc	49	Total	C	N	O	P	0	0
			1010	481	188	293	48		

- Molecule 92 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
92	Bd	49	Total	C	N	O	P	0	0
			999	486	159	306	48		

- Molecule 93 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
93	Be	49	Total	C	N	O	P	0	0
			1007	479	193	287	48		

- Molecule 94 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
94	Bf	49	Total	C	N	O	P	0	0
			1005	481	185	291	48		

- Molecule 95 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
95	Bg	42	Total	C	N	O	P	0	0
			866	411	168	246	41		

- Molecule 96 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
96	Bh	42	Total	C	N	O	P	0	0
			864	414	162	247	41		

- Molecule 97 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
97	Bi	42	Total	C	N	O	P	0	0
			860	412	152	255	41		

- Molecule 98 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
98	Bj	42	Total 871	C 414	N 183	O 233	P 41	0	0

- Molecule 99 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
99	Bk	42	Total 879	C 414	N 177	O 247	P 41	0	0

- Molecule 100 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
100	Bl	42	Total 858	C 413	N 148	O 256	P 41	0	0

- Molecule 101 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
101	Bm	42	Total 858	C 410	N 166	O 241	P 41	0	0

- Molecule 102 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
102	Bn	42	Total 872	C 411	N 171	O 249	P 41	0	0

- Molecule 103 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
103	Bo	42	Total 842	C 408	N 132	O 261	P 41	0	0

- Molecule 104 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
104	Bp	42	Total 858	C 413	N 142	O 262	P 41	0	0

- Molecule 105 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
105	Bq	42	Total 861	C 412	N 155	O 253	P 41	0	0

- Molecule 106 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
106	Br	42	Total 865	C 415	N 155	O 254	P 41	0	0

- Molecule 107 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
107	Bs	42	Total 849	C 413	N 136	O 259	P 41	0	0

- Molecule 108 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
108	Bt	42	Total 854	C 408	N 159	O 246	P 41	0	0

- Molecule 109 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
109	Bu	42	Total 855	C 407	N 166	O 241	P 41	0	0

- Molecule 110 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
110	Bv	42	Total 863	C 411	N 177	O 234	P 41	0	0

- Molecule 111 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
111	Bw	42	Total 853	C 413	N 145	O 254	P 41	0	0

- Molecule 112 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
112	Bx	42	Total 864	C 411	N 162	O 250	P 41	0	0

- Molecule 113 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
113	By	42	Total 864	C 417	N 156	O 250	P 41	0	0

- Molecule 114 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
114	Bz	42	Total 860	C 410	N 160	O 249	P 41	0	0

- Molecule 115 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
115	B0	42	Total 847	C 412	N 137	O 257	P 41	0	0

- Molecule 116 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
116	B1	42	Total 867	C 416	N 157	O 253	P 41	0	0

- Molecule 117 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
117	B2	42	Total 874	C 415	N 176	O 242	P 41	0	0

- Molecule 118 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
118	B3	42	Total 856	C 411	N 150	O 254	P 41	0	0

- Molecule 119 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
119	B4	42	Total 864	C 410	N 166	O 247	P 41	0	0

- Molecule 120 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
120	B5	42	Total 861	C 412	N 167	O 241	P 41	0	0

- Molecule 121 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
121	B6	42	Total 854	C 414	N 138	O 261	P 41	0	0

- Molecule 122 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
122	B7	42	Total 853	C 411	N 153	O 248	P 41	0	0

- Molecule 123 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
123	B8	42	Total 852	C 418	N 119	O 274	P 41	0	0

- Molecule 124 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
124	B9	42	Total 864	C 413	N 166	O 244	P 41	0	0

- Molecule 125 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
125	CA	42	Total 855	C 419	N 124	O 271	P 41	0	0

- Molecule 126 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
126	CB	42	Total 855	C 415	N 140	O 259	P 41	0	0

- Molecule 127 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
127	CC	42	Total 870	C 415	N 170	O 244	P 41	0	0

- Molecule 128 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
128	CD	42	Total 852	C 408	N 156	O 247	P 41	0	0

- Molecule 129 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
129	CE	42	Total 862	C 414	N 153	O 254	P 41	0	0

- Molecule 130 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
130	CF	42	Total 845	C 414	N 126	O 264	P 41	0	0

- Molecule 131 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
131	CG	42	Total 849	C 407	N 148	O 253	P 41	0	0

- Molecule 132 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
132	CH	42	Total 865	C 412	N 155	O 257	P 41	0	0

- Molecule 133 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
133	CI	42	Total 860	C 413	N 154	O 252	P 41	0	0

- Molecule 134 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
134	CJ	42	Total 859	C 418	N 131	O 269	P 41	0	0

- Molecule 135 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
135	CK	42	Total 844	C 413	N 115	O 275	P 41	0	0

- Molecule 136 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
136	CL	42	Total 851	C 409	N 149	O 252	P 41	0	0

- Molecule 137 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
137	CM	42	Total 858	C 410	N 160	O 247	P 41	0	0

- Molecule 138 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
138	CN	42	Total 854	C 416	N 127	O 270	P 41	0	0

- Molecule 139 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
139	CO	42	Total 853	C 405	N 162	O 245	P 41	0	0

- Molecule 140 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
140	CP	42	Total 857	C 412	N 149	O 255	P 41	0	0

- Molecule 141 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
141	CQ	42	Total 855	C 410	N 154	O 250	P 41	0	0

- Molecule 142 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
142	CR	42	Total 854	C 415	N 137	O 261	P 41	0	0

- Molecule 143 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
143	CS	42	Total 867	C 415	N 170	O 241	P 41	0	0

- Molecule 144 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
144	CT	42	Total 857	C 411	N 153	O 252	P 41	0	0

- Molecule 145 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
145	CU	42	Total 857	C 409	N 152	O 255	P 41	0	0

- Molecule 146 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
146	CV	42	Total 851	C 411	N 150	O 249	P 41	0	0

- Molecule 147 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
147	CW	42	Total 862	C 414	N 153	O 254	P 41	0	0

- Molecule 148 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
148	CX	42	Total 860	C 410	N 172	O 237	P 41	0	0

- Molecule 149 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
149	CY	42	Total 851	C 411	N 141	O 258	P 41	0	0

- Molecule 150 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
150	CZ	42	Total 852	C 408	N 150	O 253	P 41	0	0

- Molecule 151 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
151	Ca	42	Total 857	C 412	N 155	O 249	P 41	0	0

- Molecule 152 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
152	Cb	42	Total 850	C 405	N 159	O 245	P 41	0	0

- Molecule 153 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
153	Cc	42	Total 846	C 408	N 141	O 256	P 41	0	0

- Molecule 154 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
154	Cd	42	Total 861	C 411	N 153	O 256	P 41	0	0

- Molecule 155 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
155	Ce	42	Total 851	C 409	N 152	O 249	P 41	0	0

- Molecule 156 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
156	Cf	42	Total 855	C 411	N 150	O 253	P 41	0	0

- Molecule 157 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
157	Cg	42	Total 853	C 409	N 149	O 254	P 41	0	0

- Molecule 158 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
158	Ch	42	Total 862	C 412	N 161	O 248	P 41	0	0

- Molecule 159 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
159	Ci	42	Total 852	C 409	N 155	O 247	P 41	0	0

- Molecule 160 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
160	Cj	42	Total 853	C 410	N 154	O 248	P 41	0	0

- Molecule 161 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
161	Ck	42	Total 856	C 411	N 150	O 254	P 41	0	0

- Molecule 162 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
162	Cl	42	Total 863	C 411	N 162	O 249	P 41	0	0

- Molecule 163 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
163	Cm	42	Total 863	C 414	N 162	O 246	P 41	0	0

- Molecule 164 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
164	Cn	42	Total 842	C 406	N 137	O 258	P 41	0	0

- Molecule 165 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
165	Co	42	Total 867	C 412	N 176	O 238	P 41	0	0

- Molecule 166 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
166	Cp	42	Total 854	C 407	N 154	O 252	P 41	0	0

- Molecule 167 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
167	Cq	42	Total 869	C 415	N 167	O 246	P 41	0	0

- Molecule 168 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
168	Cr	42	Total 842	C 413	N 115	O 273	P 41	0	0

- Molecule 169 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
169	Cs	42	Total 868	C 415	N 161	O 251	P 41	0	0

- Molecule 170 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
170	Ct	42	Total 875	C 417	N 174	O 243	P 41	0	0

- Molecule 171 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
171	Cu	42	Total 865	C 414	N 159	O 251	P 41	0	0

- Molecule 172 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
172	Cv	42	Total 855	C 408	N 153	O 253	P 41	0	0

- Molecule 173 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
173	Cw	42	Total 861	C 411	N 156	O 253	P 41	0	0

- Molecule 174 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
174	Cx	42	Total 857	C 412	N 143	O 261	P 41	0	0

- Molecule 175 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
175	Cy	42	Total 860	C 410	N 172	O 237	P 41	0	0

- Molecule 176 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
176	Cz	42	Total 854	C 410	N 151	O 252	P 41	0	0

- Molecule 177 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
177	C0	42	Total 856	C 409	N 158	O 248	P 41	0	0

- Molecule 178 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
178	C1	42	Total 866	C 416	N 166	O 243	P 41	0	0

- Molecule 179 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
179	C2	42	Total 857	C 411	N 150	O 255	P 41	0	0

- Molecule 180 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
180	C3	42	Total 863	C 411	N 159	O 252	P 41	0	0

- Molecule 181 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
181	C4	42	Total 853	C 411	N 156	O 245	P 41	0	0

- Molecule 182 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
182	C5	42	Total 860	C 406	N 170	O 243	P 41	0	0

- Molecule 183 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
183	C6	42	Total 861	C 414	N 153	O 253	P 41	0	0

- Molecule 184 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
184	C7	42	Total 856	C 411	N 153	O 251	P 41	0	0

- Molecule 185 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
185	C8	42	Total 859	C 408	N 162	O 248	P 41	0	0

- Molecule 186 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
186	C9	42	Total 867	C 415	N 161	O 250	P 41	0	0

- Molecule 187 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
187	DA	42	Total 864	C 411	N 171	O 241	P 41	0	0

- Molecule 188 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
188	DB	42	Total 859	C 411	N 159	O 248	P 41	0	0

- Molecule 189 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
189	DC	42	Total 843	C 410	N 127	O 265	P 41	0	0

- Molecule 190 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
190	DD	42	Total 841	C 404	N 148	O 248	P 41	0	0

- Molecule 191 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
191	DE	42	Total 846	C 408	N 144	O 253	P 41	0	0

- Molecule 192 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
192	DF	42	Total 882	C 417	N 183	O 241	P 41	0	0

- Molecule 193 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
193	DG	42	Total 847	C 411	N 141	O 254	P 41	0	0

- Molecule 194 is a DNA chain called STAPLE STRAND.

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

- Molecule 195 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
195	DI	42	Total 863	C 412	N 161	O 249	P 41	0	0

- Molecule 196 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
196	DJ	42	Total 857	C 410	N 163	O 243	P 41	0	0

- Molecule 197 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
197	DK	42	Total 866	C 413	N 157	O 255	P 41	0	0

- Molecule 198 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
198	DL	42	Total 857	C 413	N 154	O 249	P 41	0	0

- Molecule 199 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
199	DM	42	Total 857	C 411	N 153	O 252	P 41	0	0

- Molecule 200 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
200	DN	42	Total 847	C 406	N 152	O 248	P 41	0	0

- Molecule 201 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
201	DO	42	Total 855	C 409	N 167	O 238	P 41	0	0

- Molecule 202 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
202	DP	42	Total 858	C 411	N 159	O 247	P 41	0	0

- Molecule 203 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
203	DQ	42	Total 856	C 411	N 153	O 251	P 41	0	0

- Molecule 204 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
204	DR	42	Total 865	C 418	N 152	O 254	P 41	0	0

- Molecule 205 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
205	DS	42	Total 872	C 417	N 165	O 249	P 41	0	0

- Molecule 206 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
206	DT	42	Total 842	C 405	N 150	O 246	P 41	0	0

- Molecule 207 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
207	DU	42	Total 853	C 412	N 146	O 254	P 41	0	0

- Molecule 208 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
208	DV	42	Total 851	C 407	N 154	O 249	P 41	0	0

- Molecule 209 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
209	DW	42	Total 864	C 414	N 162	O 247	P 41	0	0

- Molecule 210 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
210	DX	42	Total 856	C 412	N 149	O 254	P 41	0	0

- Molecule 211 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
211	DY	42	Total 856	C 413	N 151	O 251	P 41	0	0

- Molecule 212 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
212	DZ	42	Total 849	C 409	N 140	O 259	P 41	0	0

- Molecule 213 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
213	Da	42	Total 855	C 409	N 161	O 244	P 41	0	0

- Molecule 214 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
214	Db	42	Total 848	C 413	N 133	O 261	P 41	0	0

- Molecule 215 is a DNA chain called STAPLE STRAND.

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

- Molecule 216 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
216	Dd	42	Total 858	C 409	N 164	O 244	P 41	0	0

- Molecule 217 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
217	De	42	Total 848	C 406	N 149	O 252	P 41	0	0

- Molecule 218 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
218	Df	42	Total 856	C 411	N 156	O 248	P 41	0	0

- Molecule 219 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
219	Dg	42	Total 852	C 410	N 160	O 241	P 41	0	0

- Molecule 220 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
220	Dh	42	Total 854	C 413	N 136	O 264	P 41	0	0

- Molecule 221 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
221	Di	42	Total 846	C 409	N 146	O 250	P 41	0	0

- Molecule 222 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
222	Dj	42	Total 869	C 416	N 163	O 249	P 41	0	0

- Molecule 223 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
223	Dk	42	Total 858	C 412	N 155	O 250	P 41	0	0

- Molecule 224 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
224	Dl	42	Total 847	C 406	N 158	O 242	P 41	0	0

- Molecule 225 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
225	Dm	42	Total 853	C 406	N 167	O 239	P 41	0	0

- Molecule 226 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
226	Dn	42	Total 868	C 416	N 175	O 236	P 41	0	0

- Molecule 227 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
227	Do	42	Total 863	C 411	N 168	O 243	P 41	0	0

- Molecule 228 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
228	Dp	42	Total 862	C 411	N 171	O 239	P 41	0	0

- Molecule 229 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
229	Dq	42	Total 857	C 412	N 155	O 249	P 41	0	0

- Molecule 230 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
230	Dr	42	Total 853	C 408	N 162	O 242	P 41	0	0

- Molecule 231 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
231	Ds	42	Total 864	C 412	N 158	O 253	P 41	0	0

- Molecule 232 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
232	Dt	42	Total 861	C 414	N 159	O 247	P 41	0	0

- Molecule 233 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
233	Du	42	Total 855	C 413	N 142	O 259	P 41	0	0

- Molecule 234 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
234	Dv	42	Total 862	C 411	N 171	O 239	P 41	0	0

- Molecule 235 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
235	Dw	42	Total 859	C 414	N 153	O 251	P 41	0	0

- Molecule 236 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
236	Dx	42	Total 860	C 410	N 166	O 243	P 41	0	0

- Molecule 237 is a DNA chain called STAPLE STRAND.

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

- Molecule 238 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
238	Dz	42	Total 847	C 409	N 143	O 254	P 41	0	0

- Molecule 239 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
239	D0	42	Total 870	C 413	N 169	O 247	P 41	0	0

- Molecule 240 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
240	D1	42	Total 865	C 414	N 159	O 251	P 41	0	0

- Molecule 241 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
241	D2	42	Total 854	C 408	N 165	O 240	P 41	0	0

- Molecule 242 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
242	D3	42	Total 872	C 416	N 172	O 243	P 41	0	0

- Molecule 243 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
243	D4	42	Total 859	C 412	N 158	O 248	P 41	0	0

- Molecule 244 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
244	D5	42	Total 870	C 412	N 179	O 238	P 41	0	0

- Molecule 245 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
245	D6	39	Total 785	C 383	N 115	O 249	P 38	0	0

- Molecule 246 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
246	D7	39	Total 788	C 380	N 133	O 237	P 38	0	0

- Molecule 247 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
247	D8	39	Total 791	C 383	N 124	O 246	P 38	0	0

- Molecule 248 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
248	D9	36	Total 722	C 354	N 102	O 231	P 35	0	0

- Molecule 249 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
249	EA	36	Total 713	C 352	N 92	O 234	P 35	0	0

- Molecule 250 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
250	EB	35	Total 718	C 342	N 138	O 204	P 34	0	0

- Molecule 251 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
251	EC	35	Total 724	C 346	N 155	O 189	P 34	0	0

- Molecule 252 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
252	ED	35	Total 722	C 342	N 147	O 199	P 34	0	0

- Molecule 253 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
253	EE	35	Total 711	C 342	N 123	O 212	P 34	0	0

- Molecule 254 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
254	EF	35	Total 720	C 345	N 135	O 206	P 34	0	0

- Molecule 255 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
255	EG	35	Total 715	C 344	N 133	O 204	P 34	0	0

- Molecule 256 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
256	EH	35	Total 705	C 340	N 113	O 218	P 34	0	0

- Molecule 257 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
257	EI	35	Total 715	C 342	N 135	O 204	P 34	0	0

- Molecule 258 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
258	EJ	35	Total 720	C 347	N 127	O 212	P 34	0	0

- Molecule 259 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
259	EK	35	Total 715	C 345	N 123	O 213	P 34	0	0

- Molecule 260 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
260	EL	35	Total 722	C 346	N 137	O 205	P 34	0	0

- Molecule 261 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
261	EM	35	Total 717	C 344	N 130	O 209	P 34	0	0

- Molecule 262 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
262	EN	35	Total 707	C 345	N 108	O 220	P 34	0	0

- Molecule 263 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
263	EO	35	Total 722	C 343	N 137	O 208	P 34	0	0

- Molecule 264 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
264	EP	35	Total 719	C 342	N 138	O 205	P 34	0	0

- Molecule 265 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
265	EQ	35	Total 709	C 342	N 132	O 201	P 34	0	0

- Molecule 266 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
266	ER	35	Total 710	C 340	N 128	O 208	P 34	0	0

- Molecule 267 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
267	ES	35	Total 721	C 345	N 135	O 207	P 34	0	0

- Molecule 268 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
268	ET	35	Total 722	C 346	N 128	O 214	P 34	0	0

- Molecule 269 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
269	EU	35	Total 711	C 341	N 121	O 215	P 34	0	0

- Molecule 270 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
270	EV	35	Total 717	C 344	N 133	O 206	P 34	0	0

- Molecule 271 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
271	EW	35	Total 717	C 341	N 142	O 200	P 34	0	0

- Molecule 272 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
272	EX	35	Total 700	C 338	N 118	O 210	P 34	0	0

- Molecule 273 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
273	EY	35	Total 714	C 344	N 124	O 212	P 34	0	0

- Molecule 274 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
274	EZ	35	Total 721	C 345	N 135	O 207	P 34	0	0

- Molecule 275 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
275	Ea	35	Total 716	C 341	N 142	O 199	P 34	0	0

- Molecule 276 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
276	Eb	35	Total 724	C 345	N 153	O 192	P 34	0	0

- Molecule 277 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
277	Ec	35	Total 719	C 343	N 137	O 205	P 34	0	0

- Molecule 278 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
278	Ed	35	Total 726	C 344	N 154	O 194	P 34	0	0

- Molecule 279 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
279	Ee	35	Total 717	C 345	N 117	O 221	P 34	0	0

- Molecule 280 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
280	Ef	35	Total 717	C 346	N 122	O 215	P 34	0	0

- Molecule 281 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
281	Eg	35	Total 714	C 341	N 130	O 209	P 34	0	0

- Molecule 282 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
282	Eh	35	Total 711	C 341	N 130	O 206	P 34	0	0

- Molecule 283 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
283	Ei	35	Total 720	C 342	N 147	O 197	P 34	0	0

- Molecule 284 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
284	Ej	35	Total 722	C 344	N 142	O 202	P 34	0	0

- Molecule 285 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
285	Ek	35	Total 704	C 344	N 103	O 223	P 34	0	0

- Molecule 286 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
286	El	35	Total 711	C 342	N 129	O 206	P 34	0	0

- Molecule 287 is a DNA chain called STAPLE STRAND.

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

- Molecule 288 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
288	En	35	Total 717	C 347	N 121	O 215	P 34	0	0

- Molecule 289 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
289	Eo	35	Total 719	C 344	N 136	O 205	P 34	0	0

- Molecule 290 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
290	Ep	35	Total 718	C 344	N 133	O 207	P 34	0	0

- Molecule 291 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
291	Eq	35	Total 710	C 342	N 123	O 211	P 34	0	0

- Molecule 292 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
292	Er	35	Total 718	C 346	N 128	O 210	P 34	0	0

- Molecule 293 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
293	Es	35	Total 724	C 348	N 132	O 210	P 34	0	0

- Molecule 294 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
294	Et	35	Total 721	C 347	N 127	O 213	P 34	0	0

- Molecule 295 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
295	Eu	35	Total 712	C 341	N 139	O 198	P 34	0	0

- Molecule 296 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
296	Ev	35	Total 716	C 343	N 140	O 199	P 34	0	0

- Molecule 297 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
297	Ew	35	Total 725	C 346	N 140	O 205	P 34	0	0

- Molecule 298 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
298	Ex	35	Total 712	C 343	N 125	O 210	P 34	0	0

- Molecule 299 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
299	Ey	35	Total 716	C 343	N 140	O 199	P 34	0	0

- Molecule 300 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
300	Ez	35	Total 723	C 343	N 143	O 203	P 34	0	0

- Molecule 301 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
301	E0	35	Total 713	C 342	N 135	O 202	P 34	0	0

- Molecule 302 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
302	E1	35	Total 710	C 342	N 129	O 205	P 34	0	0

- Molecule 303 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
303	E2	35	Total 726	C 343	N 149	O 200	P 34	0	0

- Molecule 304 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
304	E3	35	Total 715	C 342	N 129	O 210	P 34	0	0

- Molecule 305 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
305	E4	35	Total 723	C 347	N 136	O 206	P 34	0	0

- Molecule 306 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
306	E5	35	Total 715	C 342	N 129	O 210	P 34	0	0

- Molecule 307 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
307	E6	35	Total 726	C 347	N 139	O 206	P 34	0	0

- Molecule 308 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
308	E7	35	Total 721	C 345	N 132	O 210	P 34	0	0

- Molecule 309 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
309	E8	35	Total 725	C 343	N 143	O 205	P 34	0	0

- Molecule 310 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
310	E9	35	Total 712	C 342	N 132	O 204	P 34	0	0

- Molecule 311 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
311	FA	35	Total 718	C 342	N 135	O 207	P 34	0	0

- Molecule 312 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
312	FB	35	Total 716	C 344	N 130	O 208	P 34	0	0

- Molecule 313 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
313	FC	35	Total 717	C 346	N 131	O 206	P 34	0	0

- Molecule 314 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
314	FD	35	Total 720	C 344	N 136	O 206	P 34	0	0

- Molecule 315 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
315	FE	35	Total 717	C 345	N 138	O 200	P 34	0	0

- Molecule 316 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
316	FF	35	Total 712	C 343	N 125	O 210	P 34	0	0

- Molecule 317 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
317	FG	35	Total 711	C 344	N 118	O 215	P 34	0	0

- Molecule 318 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
318	FH	35	Total 707	C 344	N 112	O 217	P 34	0	0

- Molecule 319 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
319	FI	35	Total 720	C 343	N 143	O 200	P 34	0	0

- Molecule 320 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
320	FJ	35	Total 724	C 344	N 148	O 198	P 34	0	0

- Molecule 321 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
321	FK	35	Total 710	C 344	N 118	O 214	P 34	0	0

- Molecule 322 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
322	FL	35	Total	C	N	O	P	0	0
			718	344	136	204	34		

- Molecule 323 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
323	FM	35	Total	C	N	O	P	0	0
			711	339	132	206	34		

- Molecule 324 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
324	FN	35	Total	C	N	O	P	0	0
			707	345	105	223	34		

- Molecule 325 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
325	FO	35	Total	C	N	O	P	0	0
			708	344	118	212	34		

- Molecule 326 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
326	FP	35	Total	C	N	O	P	0	0
			708	340	125	209	34		

- Molecule 327 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
327	FQ	35	Total	C	N	O	P	0	0
			715	343	137	201	34		

- Molecule 328 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
328	FR	35	Total	C	N	O	P	0	0
			709	347	103	225	34		

- Molecule 329 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
329	FS	35	Total 720	C 342	N 138	O 206	P 34	0	0

- Molecule 330 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
330	FT	35	Total 710	C 343	N 119	O 214	P 34	0	0

- Molecule 331 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
331	FU	35	Total 718	C 350	N 109	O 225	P 34	0	0

- Molecule 332 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
332	FV	35	Total 720	C 342	N 141	O 203	P 34	0	0

- Molecule 333 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
333	FW	35	Total 715	C 344	N 127	O 210	P 34	0	0

- Molecule 334 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
334	FX	35	Total 720	C 345	N 126	O 215	P 34	0	0

- Molecule 335 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
335	FY	35	Total 722	C 346	N 131	O 211	P 34	0	0

- Molecule 336 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
336	FZ	35	Total 734	C 348	N 156	O 196	P 34	0	0

- Molecule 337 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
337	Fa	35	Total 721	C 346	N 137	O 204	P 34	0	0

- Molecule 338 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
338	Fb	35	Total 712	C 343	N 125	O 210	P 34	0	0

- Molecule 339 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
339	Fc	35	Total 727	C 344	N 148	O 201	P 34	0	0

- Molecule 340 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
340	Fd	33	Total 684	C 323	N 145	O 184	P 32	0	0

- Molecule 341 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
341	Fe	32	Total 658	C 313	N 125	O 189	P 31	0	0

- Molecule 342 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
342	Ff	32	Total 644	C 315	N 96	O 202	P 31	0	0

- Molecule 343 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
343	Fg	28	Total 567	C 273	N 102	O 165	P 27	0	0

- Molecule 344 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
344	Fh	28	Total 552	C 269	N 79	O 177	P 27	0	0

- Molecule 345 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
345	Fi	28	Total 565	C 275	N 88	O 175	P 27	0	0

- Molecule 346 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
346	Fj	28	Total 580	C 274	N 113	O 166	P 27	0	0

- Molecule 347 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
347	Fk	28	Total 569	C 278	N 79	O 185	P 27	0	0

- Molecule 348 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
348	Fl	28	Total 583	C 277	N 116	O 163	P 27	0	0

- Molecule 349 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
349	Fm	28	Total 564	C 272	N 100	O 165	P 27	0	0

- Molecule 350 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
350	Fn	28	Total 571	C 273	N 108	O 163	P 27	0	0

- Molecule 351 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
351	Fo	28	Total 569	C 273	N 96	O 173	P 27	0	0

- Molecule 352 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
352	Fp	28	Total 575	C 274	N 110	O 164	P 27	0	0

- Molecule 353 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
353	Fq	28	Total 570	C 275	N 94	O 174	P 27	0	0

- Molecule 354 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
354	Fr	28	Total 565	C 276	N 87	O 175	P 27	0	0

- Molecule 355 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
355	Fs	28	Total 576	C 276	N 108	O 165	P 27	0	0

- Molecule 356 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
356	Ft	28	Total 576	C 275	N 109	O 165	P 27	0	0

- Molecule 357 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
357	Fu	28	Total 572	C 275	N 103	O 167	P 27	0	0

- Molecule 358 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
358	Fv	28	Total 570	C 276	N 90	O 177	P 27	0	0

- Molecule 359 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
359	Fw	28	Total 571	C 272	N 106	O 166	P 27	0	0

- Molecule 360 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
360	Fx	28	Total 562	C 274	N 92	O 169	P 27	0	0

- Molecule 361 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
361	Fy	28	Total 571	C 274	N 104	O 166	P 27	0	0

- Molecule 362 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
362	Fz	28	Total 571	C 276	N 102	O 166	P 27	0	0

- Molecule 363 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
363	F0	28	Total 567	C 277	N 83	O 180	P 27	0	0

- Molecule 364 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
364	F1	28	Total 578	C 276	N 111	O 164	P 27	0	0

- Molecule 365 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
365	F2	28	Total 568	C 276	N 93	O 172	P 27	0	0

- Molecule 366 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
366	F3	28	Total 579	C 277	N 110	O 165	P 27	0	0

- Molecule 367 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
367	F4	28	Total 581	C 276	N 120	O 158	P 27	0	0

- Molecule 368 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
368	F5	28	Total 563	C 274	N 92	O 170	P 27	0	0

- Molecule 369 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
369	F6	28	Total 573	C 273	N 105	O 168	P 27	0	0

- Molecule 370 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
370	F7	28	Total 566	C 276	N 87	O 176	P 27	0	0

- Molecule 371 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
371	F8	28	Total 577	C 274	N 116	O 160	P 27	0	0

- Molecule 372 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
372	F9	28	Total 565	C 276	N 90	O 172	P 27	0	0

- Molecule 373 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
373	GA	28	Total 573	C 277	N 95	O 174	P 27	0	0

- Molecule 374 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
374	GB	28	Total 573	C 278	N 97	O 171	P 27	0	0

- Molecule 375 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
375	GC	28	Total 570	C 276	N 99	O 168	P 27	0	0

- Molecule 376 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
376	GD	28	Total 566	C 273	N 93	O 173	P 27	0	0

- Molecule 377 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
377	GE	28	Total 565	C 275	N 88	O 175	P 27	0	0

- Molecule 378 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
378	GF	28	Total 566	C 272	N 103	O 164	P 27	0	0

- Molecule 379 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
379	GG	28	Total 567	C 272	N 103	O 165	P 27	0	0

- Molecule 380 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
380	GH	28	Total 561	C 275	N 85	O 174	P 27	0	0

- Molecule 381 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
381	GI	28	Total 565	C 272	N 103	O 163	P 27	0	0

- Molecule 382 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
382	GJ	28	Total 570	C 275	N 100	O 168	P 27	0	0

- Molecule 383 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
383	GK	28	Total 571	C 278	N 88	O 178	P 27	0	0

- Molecule 384 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
384	GL	28	Total 577	C 278	N 100	O 172	P 27	0	0

- Molecule 385 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
385	GM	28	Total	C	N	O	P	0	0
			572	273	105	167	27		

- Molecule 386 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
386	GN	28	Total	C	N	O	P	0	0
			565	274	92	172	27		

- Molecule 387 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
387	GO	28	Total	C	N	O	P	0	0
			576	278	97	174	27		

- Molecule 388 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
388	GP	28	Total	C	N	O	P	0	0
			566	274	92	173	27		

- Molecule 389 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
389	GQ	28	Total	C	N	O	P	0	0
			560	272	82	179	27		

- Molecule 390 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
390	GR	28	Total	C	N	O	P	0	0
			573	274	101	171	27		

- Molecule 391 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
391	GS	28	Total	C	N	O	P	0	0
			568	273	102	166	27		

- Molecule 392 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
392	GT	28	Total 581	C 276	N 117	O 161	P 27	0	0

- Molecule 393 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
393	GU	28	Total 577	C 274	N 119	O 157	P 27	0	0

- Molecule 394 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
394	GV	28	Total 575	C 274	N 110	O 164	P 27	0	0

- Molecule 395 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
395	GW	28	Total 565	C 271	N 107	O 160	P 27	0	0

- Molecule 396 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
396	GX	28	Total 570	C 271	N 110	O 162	P 27	0	0

- Molecule 397 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
397	GY	28	Total 568	C 275	N 91	O 175	P 27	0	0

- Molecule 398 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
398	GZ	28	Total 578	C 276	N 114	O 161	P 27	0	0

- Molecule 399 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
399	Ga	28	Total 560	C 269	N 100	O 164	P 27	0	0

- Molecule 400 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
400	Gb	28	Total 568	C 275	N 94	O 172	P 27	0	0

- Molecule 401 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
401	Gc	28	Total 564	C 275	N 88	O 174	P 27	0	0

- Molecule 402 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
402	Gd	28	Total 564	C 275	N 88	O 174	P 27	0	0

- Molecule 403 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
403	Ge	28	Total 562	C 273	N 84	O 178	P 27	0	0

- Molecule 404 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
404	Gf	28	Total 564	C 276	N 90	O 171	P 27	0	0

- Molecule 405 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
405	Gg	28	Total 583	C 278	N 112	O 166	P 27	0	0

- Molecule 406 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
406	Gh	28	Total 569	C 271	N 110	O 161	P 27	0	0

- Molecule 407 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
407	Gi	28	Total 572	C 277	N 95	O 173	P 27	0	0

- Molecule 408 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
408	Gj	28	Total 578	C 276	N 117	O 158	P 27	0	0

- Molecule 409 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
409	Gk	28	Total 571	C 277	N 95	O 172	P 27	0	0

- Molecule 410 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
410	Gl	28	Total 577	C 279	N 96	O 175	P 27	0	0

- Molecule 411 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
411	Gm	28	Total 573	C 277	N 95	O 174	P 27	0	0

- Molecule 412 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
412	Gn	28	Total 566	C 277	N 83	O 179	P 27	0	0

- Molecule 413 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
413	Go	28	Total 573	C 278	N 97	O 171	P 27	0	0

- Molecule 414 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
414	Gp	28	Total 566	C 275	N 94	O 170	P 27	0	0

- Molecule 415 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
415	Gq	28	Total 564	C 277	N 86	O 174	P 27	0	0

- Molecule 416 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
416	Gr	28	Total 573	C 278	N 91	O 177	P 27	0	0

- Molecule 417 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
417	Gs	28	Total 566	C 272	N 100	O 167	P 27	0	0

- Molecule 418 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
418	Gt	28	Total 573	C 278	N 97	O 171	P 27	0	0

- Molecule 419 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
419	Gu	28	Total 573	C 278	N 91	O 177	P 27	0	0

- Molecule 420 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
420	Gv	28	Total 566	C 271	N 104	O 164	P 27	0	0

- Molecule 421 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
421	Gw	28	Total 565	C 277	N 86	O 175	P 27	0	0

- Molecule 422 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
422	Gx	28	Total 578	C 277	N 110	O 164	P 27	0	0

- Molecule 423 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
423	Gy	28	Total 575	C 279	N 96	O 173	P 27	0	0

- Molecule 424 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
424	Gz	28	Total 580	C 276	N 120	O 157	P 27	0	0

- Molecule 425 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
425	G0	28	Total 569	C 272	N 109	O 161	P 27	0	0

- Molecule 426 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
426	G1	28	Total 570	C 273	N 108	O 162	P 27	0	0

- Molecule 427 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
427	G2	28	Total 568	C 278	N 85	O 178	P 27	0	0

- Molecule 428 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
428	G3	28	Total 566	C 275	N 94	O 170	P 27	0	0

- Molecule 429 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
429	G4	28	Total 562	C 275	N 85	O 175	P 27	0	0

- Molecule 430 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
430	G5	28	Total 574	C 276	N 105	O 166	P 27	0	0

- Molecule 431 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
431	G6	28	Total 572	C 274	N 104	O 167	P 27	0	0

- Molecule 432 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
432	G7	28	Total 569	C 271	N 104	O 167	P 27	0	0

- Molecule 433 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
433	G8	28	Total 571	C 275	N 97	O 172	P 27	0	0

- Molecule 434 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
434	G9	28	Total 564	C 269	N 106	O 162	P 27	0	0

- Molecule 435 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
435	HA	28	Total 575	C 274	N 113	O 161	P 27	0	0

- Molecule 436 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
436	HB	28	Total 573	C 275	N 103	O 168	P 27	0	0

- Molecule 437 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
437	HC	21	Total 418	C 206	N 58	O 134	P 20	0	0

- Molecule 438 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
438	HD	21	Total 436	C 209	N 85	O 122	P 20	0	0

- Molecule 439 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
439	HE	21	Total 425	C 206	N 76	O 123	P 20	0	0

- Molecule 440 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
440	HF	21	Total 425	C 209	N 61	O 135	P 20	0	0

- Molecule 441 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
441	HG	21	Total	C	N	O	P	0	0
			425	206	70	129	20		

- Molecule 442 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
442	HH	21	Total	C	N	O	P	0	0
			431	206	85	120	20		

- Molecule 443 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
443	HI	21	Total	C	N	O	P	0	0
			418	205	59	134	20		

- Molecule 444 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
444	HJ	21	Total	C	N	O	P	0	0
			428	208	71	129	20		

- Molecule 445 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
445	HK	21	Total	C	N	O	P	0	0
			421	206	61	134	20		

- Molecule 446 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
446	HL	21	Total	C	N	O	P	0	0
			435	207	90	118	20		

- Molecule 447 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
447	HM	21	Total	C	N	O	P	0	0
			421	206	61	134	20		

- Molecule 448 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
448	HN	21	Total	C	N	O	P	0	0
			426	205	74	127	20		

- Molecule 449 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
449	HO	21	Total	C	N	O	P	0	0
			429	210	63	136	20		

- Molecule 450 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
450	HP	21	Total	C	N	O	P	0	0
			431	209	79	123	20		

- Molecule 451 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
451	HQ	21	Total	C	N	O	P	0	0
			432	208	77	127	20		

- Molecule 452 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
452	HR	21	Total	C	N	O	P	0	0
			431	210	66	135	20		

- Molecule 453 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
453	HS	21	Total	C	N	O	P	0	0
			430	207	72	131	20		

- Molecule 454 is a DNA chain called STAPLE STRAND.

Mol	Chain	Residues	Atoms					AltConf	Trace
454	HT	21	Total	C	N	O	P	0	0
			421	204	69	128	20		

- Molecule 455 is a DNA chain called STAPLE STRAND.

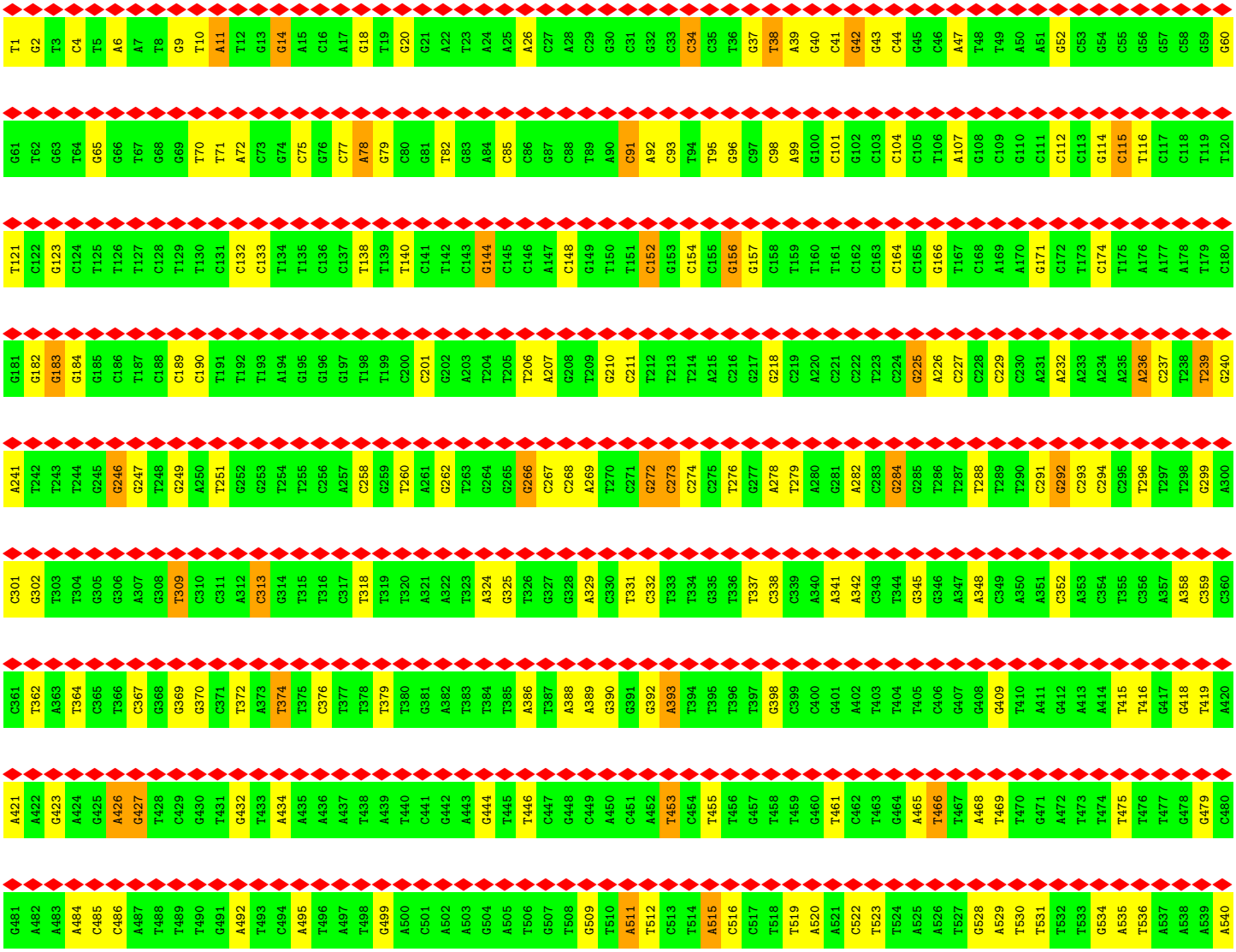
Mol	Chain	Residues	Atoms					AltConf	Trace
455	HU	19	Total	C	N	O	P	0	0
			393	189	69	117	18		

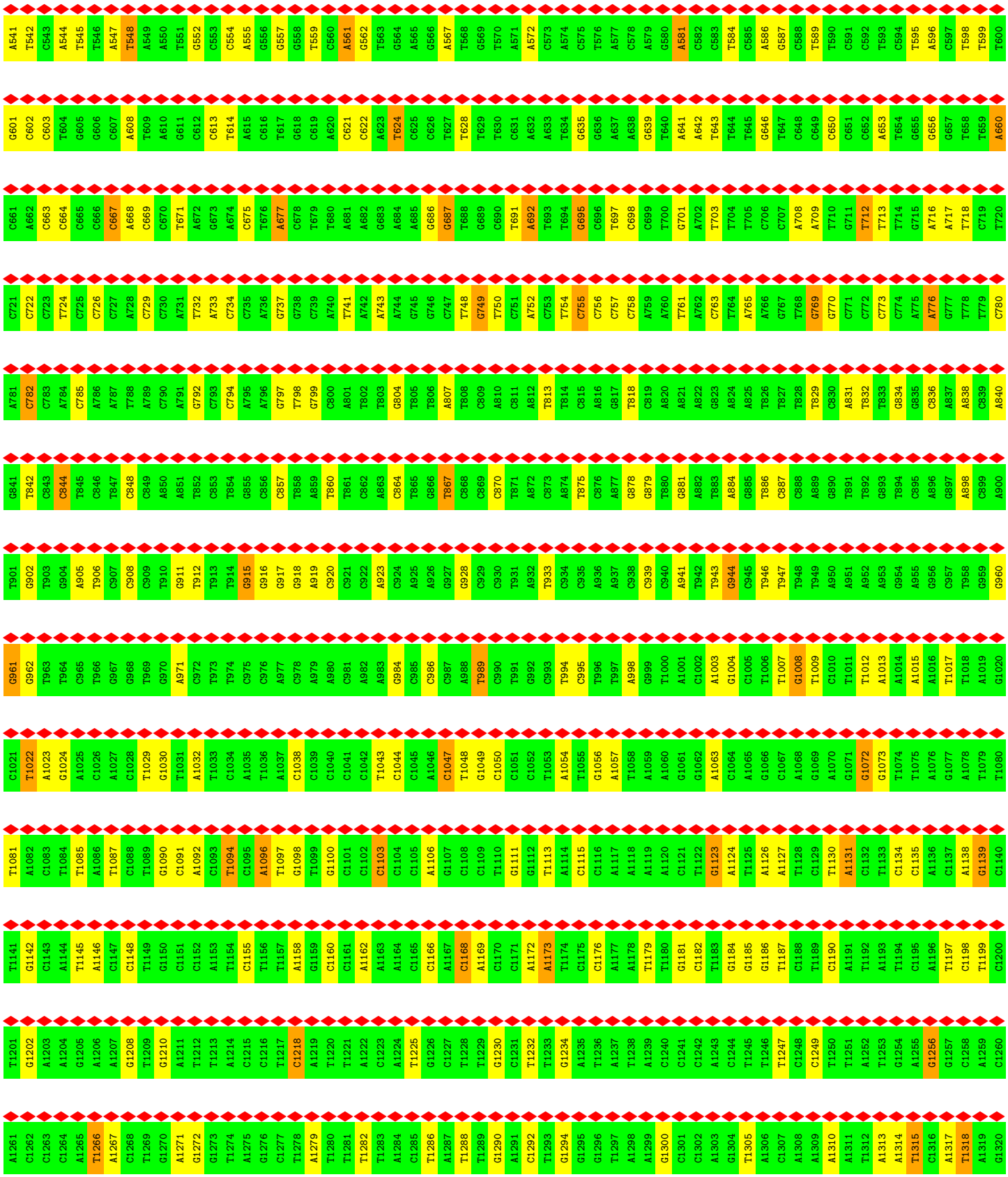
3 Residue-property plots (i)

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:




A541 T542 C543 A544 T545 T546 A547 T548 A549 A550 T551 G552 C553 C554 A555 G556 G557 G558 T559 C560 A561 G562 T563 G564 A565 G566 A567 T568 G569 T570 A571 A572 C573 A574 C575 T576 A577 C578 A579 G580 A581 C582 C583 T584 C585 A586 G587 C588 T589 T590 C591 C592 T593 C594 T595 A596 C597 T598 T599 T600
G601 C602 C603 T604 G605 G606 C607 A608 T609 A610 G611 C612 C613 T614 A615 C616 T617 G618 C619 A620 C621 C622 A623 T624 C625 C626 T627 T628 T629 T630 C631 A632 A633 T634 G635 G636 A637 A638 G639 T640 A641 A642 T643 T644 T645 G646 T647 C648 C649 C650 C651 C652 A653 T654 G655 G656 G657 T658 T659 A660
C661 A662 C663 C664 C665 C666 C667 A668 C669 C670 T671 A672 G673 A674 C675 T676 A677 C678 T679 T680 A681 A682 G683 A684 A685 G686 G687 T688 G689 C690 T691 A692 T693 T694 G695 C696 T697 C698 C699 T700 G701 A702 T703 T704 T705 C706 C707 A708 A709 T710 G711 T712 T713 T714 G715 A716 A717 T718 C719 T720
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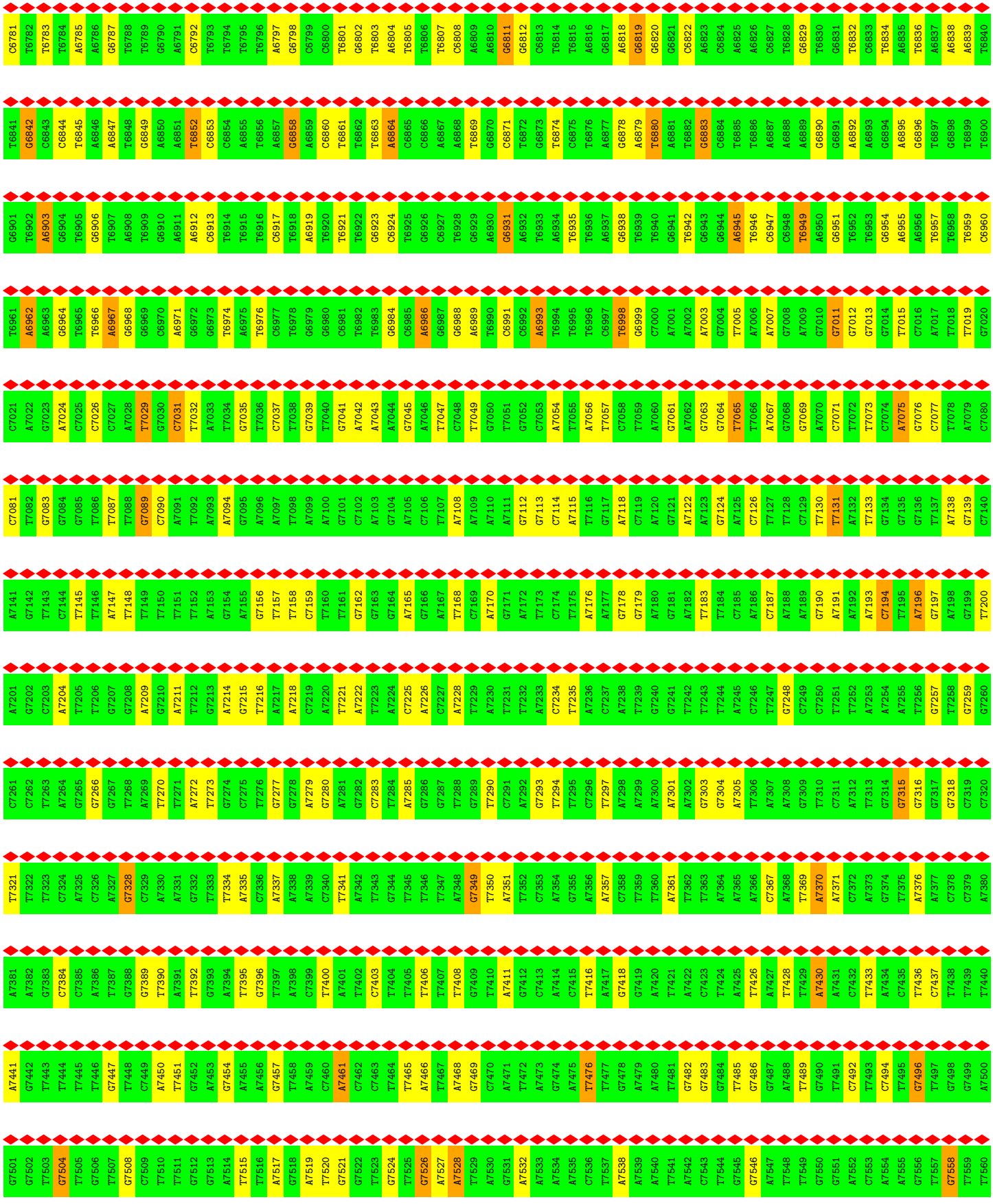
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• Molecule 2: SCAFFOLD STRAND

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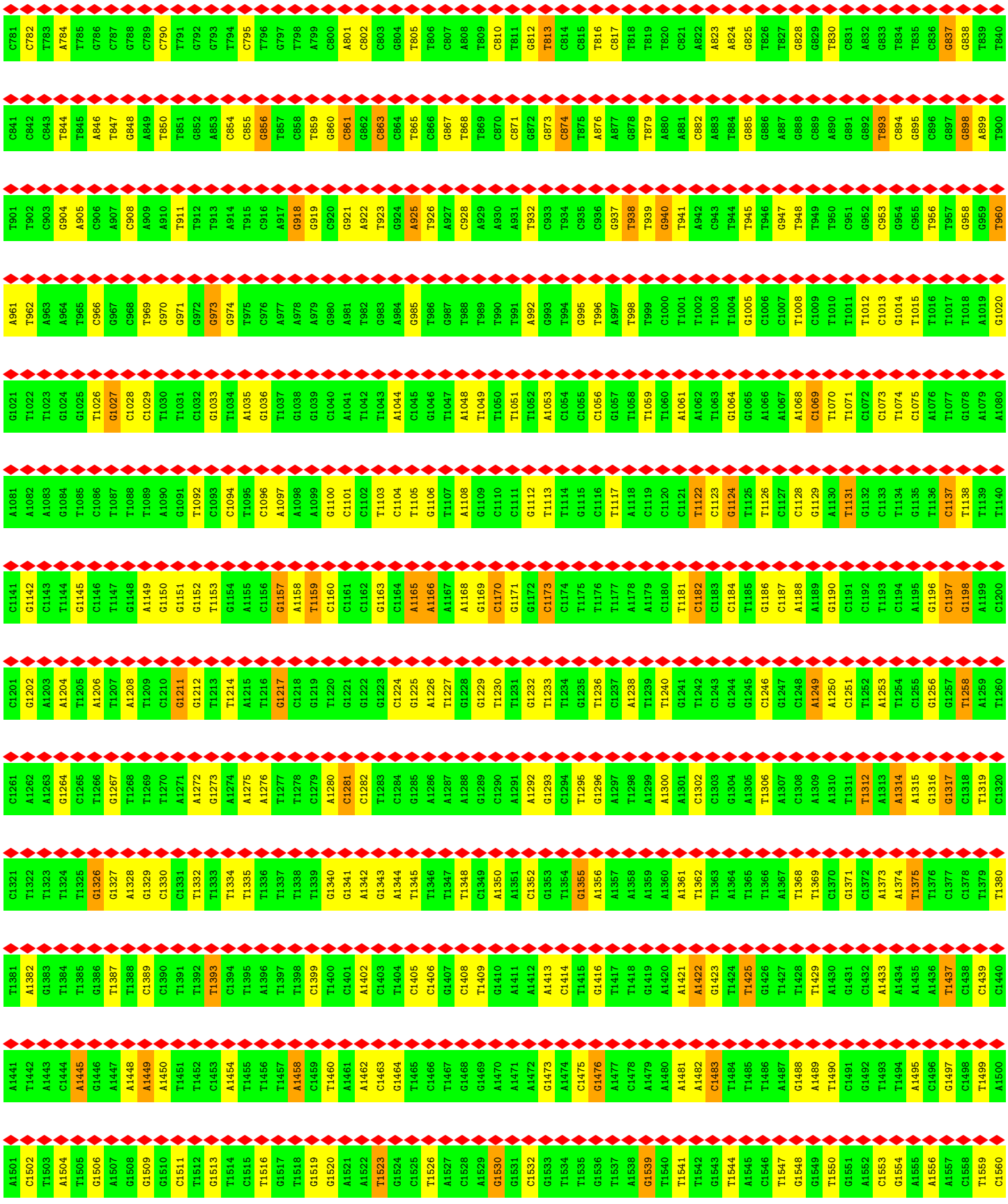
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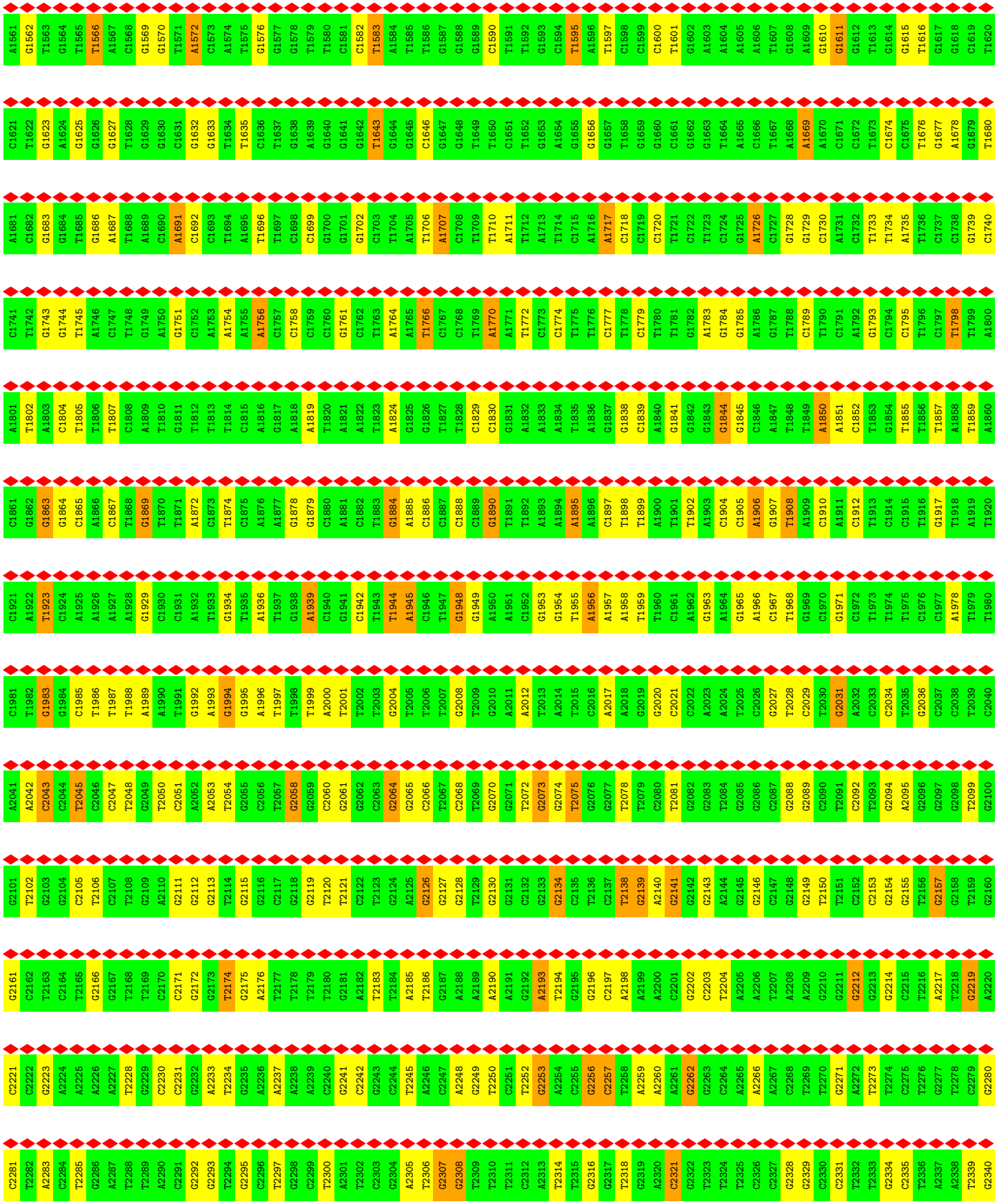
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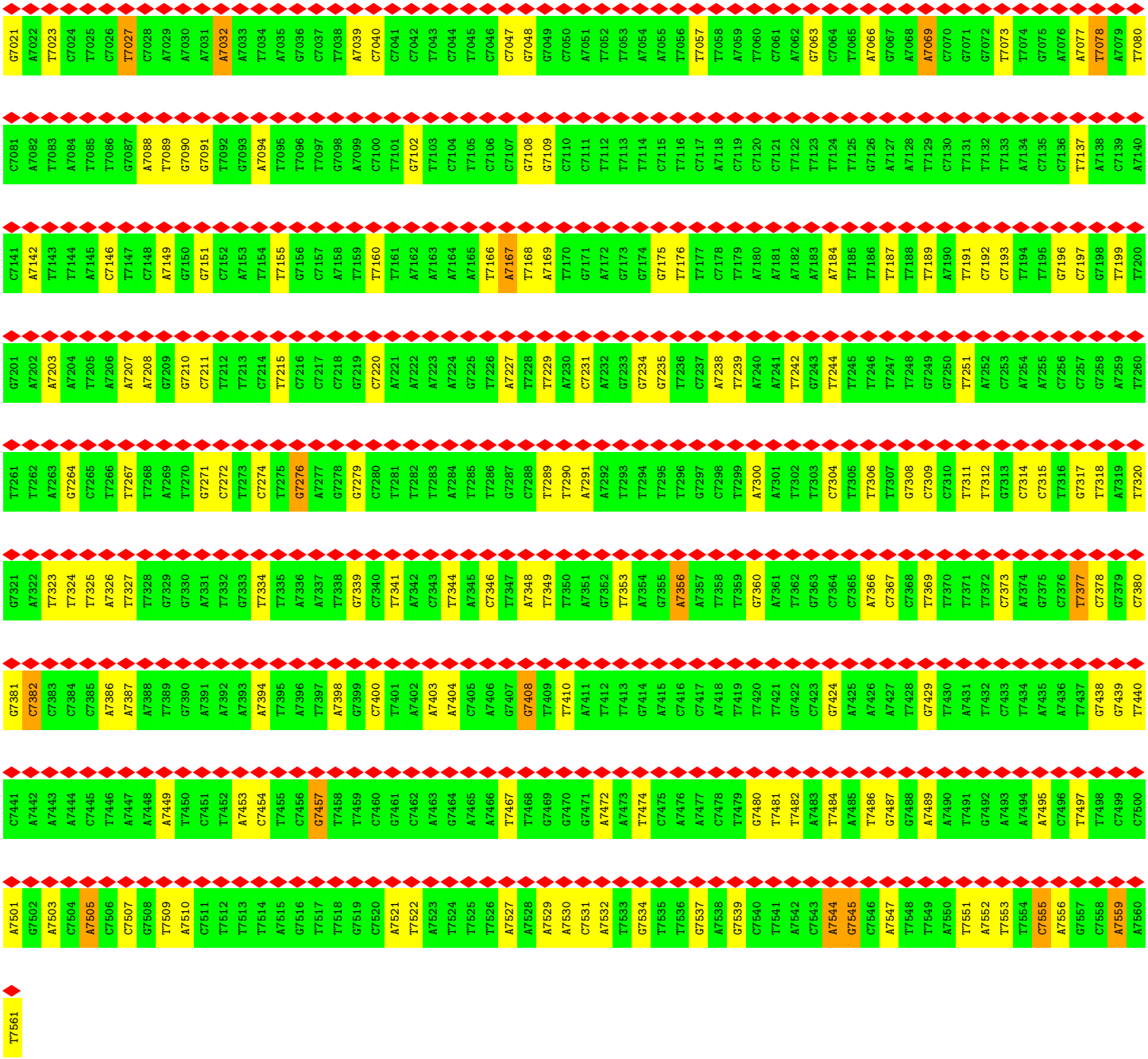
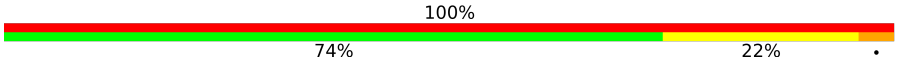
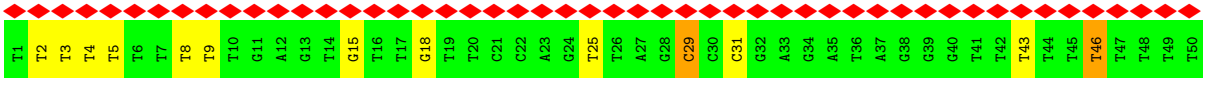
T6901 T6902 G6903 G6904 G6905 G6906 C6907 T6908 T6909 T6910 T6911 C6912 T6913 G6914 A6915 T6916 T6917 A6918 T6919 C6920 A6921 A6922 C6923 C6924 G6925 G6926 G6927 G6928 T6929 A6930 C6931 A6932 T6933 A6934 T6935 G6936 A6937 T6938 T6939 G6940 A6941 C6942 A6943 T6944 G6945 C6946 T6947 A6948 G6949 T6950 T6951 T6952 T6953 A6954 C6955 G6956 A6957 T6958 T6959 A6960
C6961 C6962 G6963 T6964 T6965 C6966 A6967 T6968 C6969 G6970 A6971 T6972 T6973 C6974 T6975 C6976 T6977 T6978 G6979 T6980 T6981 T6982 G6983 C6984 T6985 C6986 C6987 A6988 G6989 A6990 C6991 T6992 G6993 T6994 C6995 A6996 G6997 G6998 C6999 A7000 A7001 T7002 G7003 A7004 C7005 C7006 T7007 G7008 A7009 T7010 A7011 G7012 C7013 C7014 T7015 T7016 T7017 G7018 T7019 A7020



• Molecule 3: STAPLE STRAND

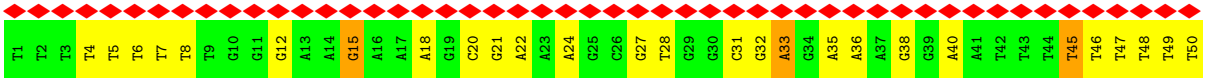
Chain AC:





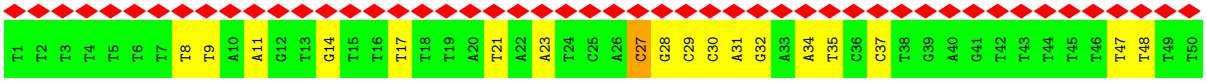
• Molecule 4: STAPLE STRAND

Chain AD:



• Molecule 5: STAPLE STRAND

Chain AE:

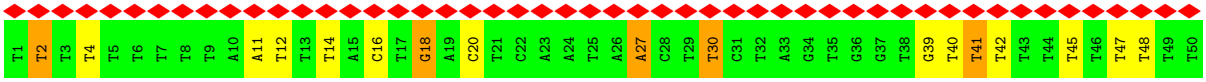


• Molecule 6: STAPLE STRAND

Chain AF:

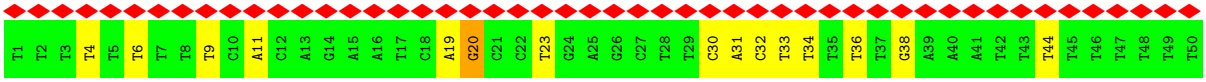
• Molecule 7: STAPLE STRAND

Chain AG:



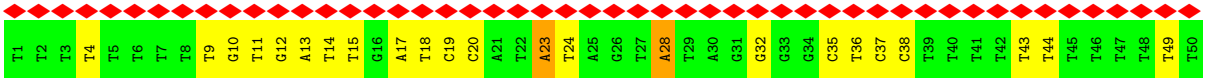
• Molecule 8: STAPLE STRAND

Chain AH:



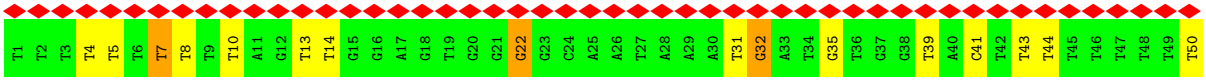
• Molecule 9: STAPLE STRAND

Chain AI:



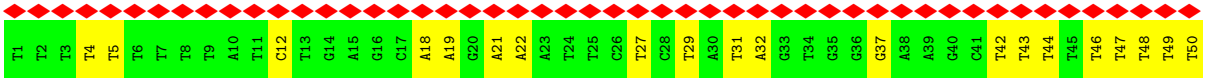
• Molecule 10: STAPLE STRAND

Chain AJ:



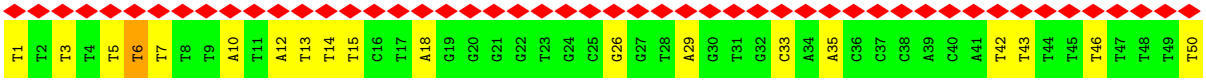
• Molecule 11: STAPLE STRAND

Chain AK:



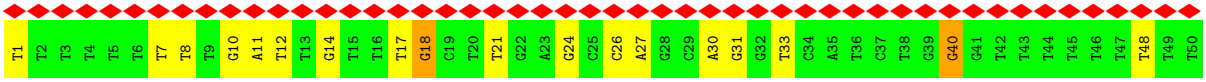
• Molecule 12: STAPLE STRAND

Chain AL:



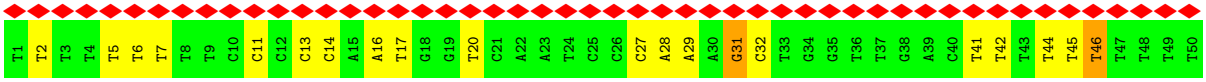
• Molecule 13: STAPLE STRAND

Chain AM:



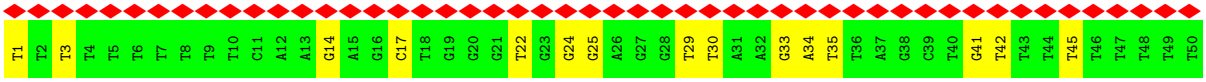
• Molecule 14: STAPLE STRAND

Chain AN:



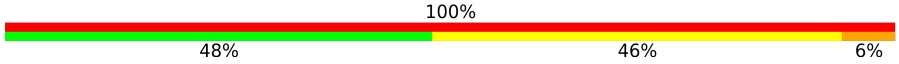
• Molecule 15: STAPLE STRAND

Chain AO:



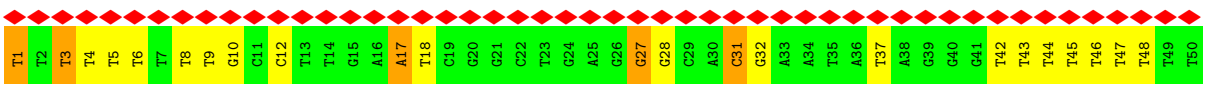
• Molecule 16: STAPLE STRAND

Chain AP:



• Molecule 17: STAPLE STRAND

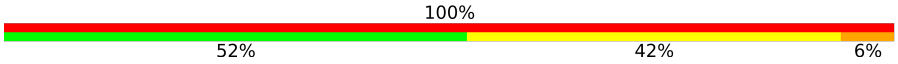
Chain AQ:



• Molecule 18: STAPLE STRAND

Chain AR:

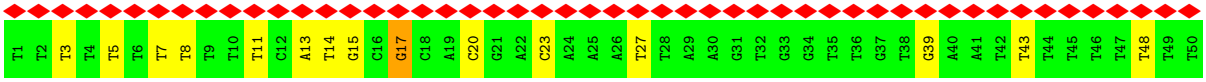
• Molecule 19: STAPLE STRAND



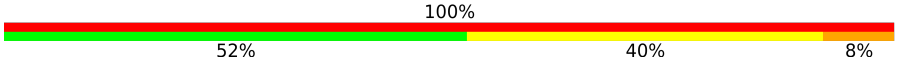
• Molecule 20: STAPLE STRAND

• Molecule 21: STAPLE STRAND

• Molecule 22: STAPLE STRAND

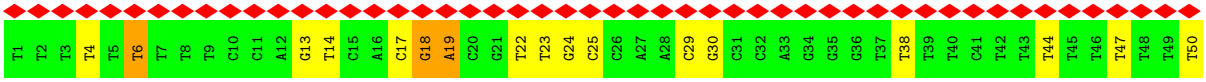


• Molecule 23: STAPLE STRAND



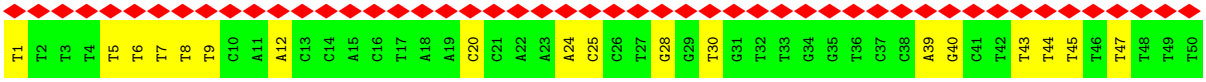
• Molecule 24: STAPLE STRAND

• Molecule 25: STAPLE STRAND



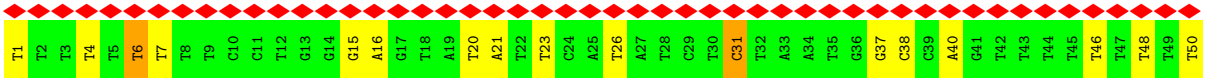
- Molecule 26: STAPLE STRAND

Chain AZ:



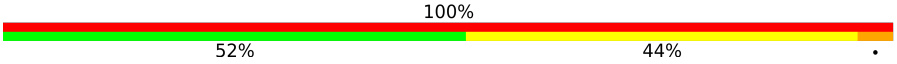
- Molecule 27: STAPLE STRAND

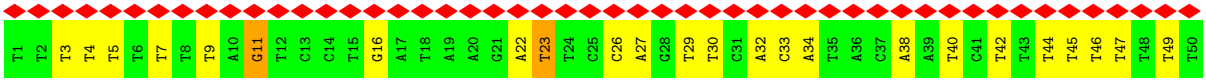
Chain Aa:



- Molecule 28: STAPLE STRAND

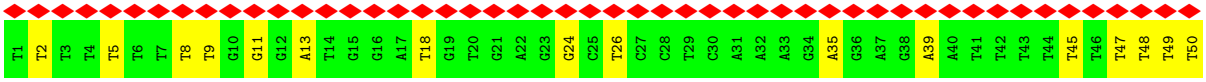
Chain Ab:





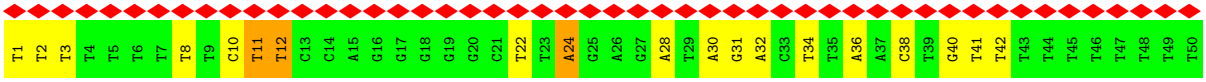
- Molecule 29: STAPLE STRAND

Chain Ac:



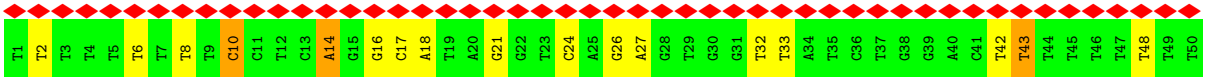
- Molecule 30: STAPLE STRAND

Chain Ad:



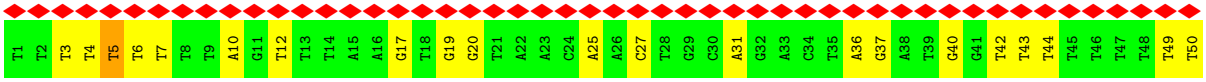
- Molecule 31: STAPLE STRAND

Chain Ae:



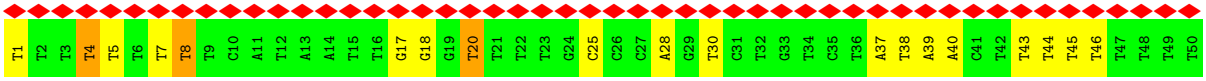
- Molecule 32: STAPLE STRAND

Chain Af:



• Molecule 33: STAPLE STRAND

Chain Ag:

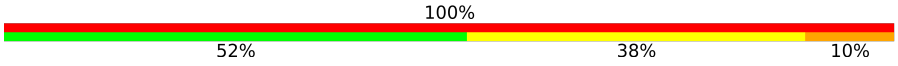


• Molecule 34: STAPLE STRAND

Chain Ah:

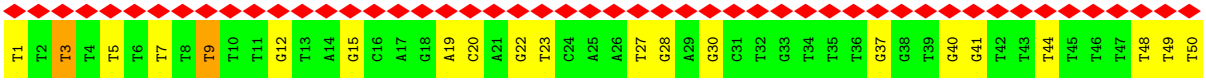
• Molecule 35: STAPLE STRAND

Chain Ai:



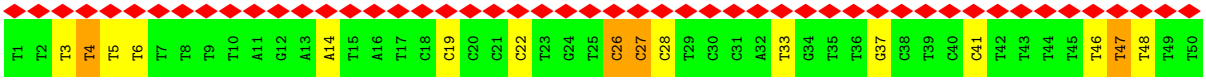
• Molecule 36: STAPLE STRAND

Chain Aj:



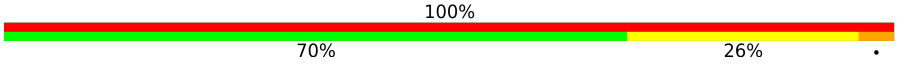
• Molecule 37: STAPLE STRAND

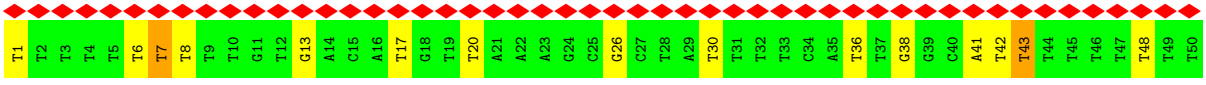
Chain Ak:



• Molecule 38: STAPLE STRAND

Chain Al:



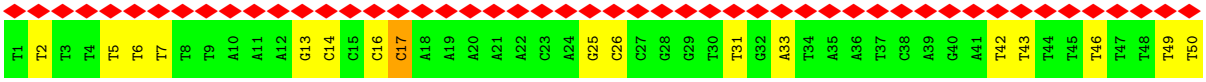


• Molecule 39: STAPLE STRAND

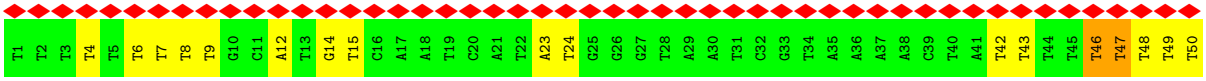
Chain Am:

• Molecule 40: STAPLE STRAND

• Molecule 41: STAPLE STRAND



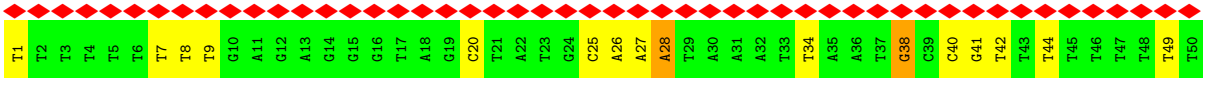
• Molecule 42: STAPLE STRAND



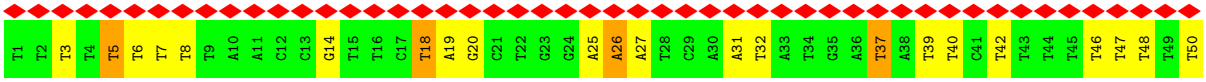
• Molecule 43: STAPLE STRAND

• Molecule 44: STAPLE STRAND

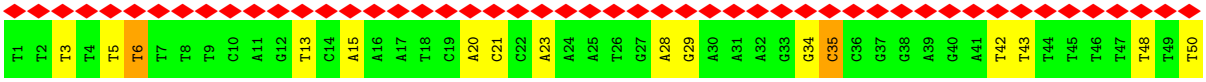
• Molecule 45: STAPLE STRAND



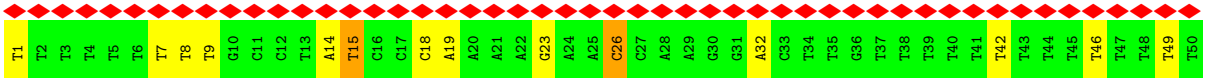
• Molecule 46: STAPLE STRAND



• Molecule 47: STAPLE STRAND

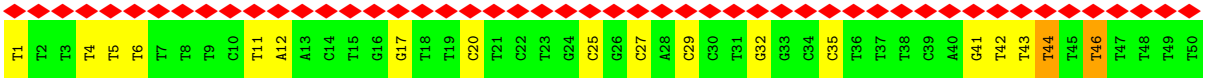


• Molecule 48: STAPLE STRAND

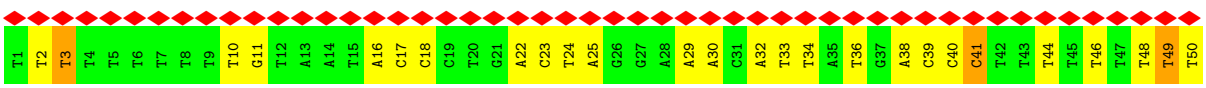


• Molecule 49: STAPLE STRAND

• Molecule 50: STAPLE STRAND



• Molecule 51: STAPLE STRAND

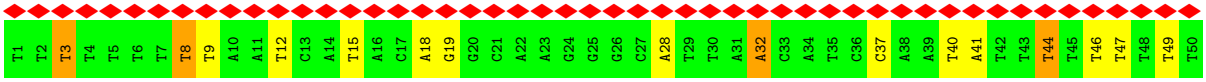


• Molecule 52: STAPLE STRAND

• Molecule 53: STAPLE STRAND

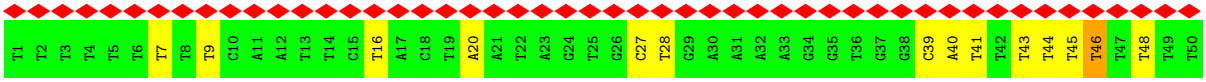
• Molecule 54: STAPLE STRAND

Chain A1:



• Molecule 55: STAPLE STRAND

Chain A2:

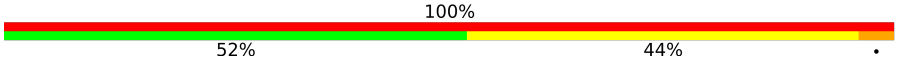


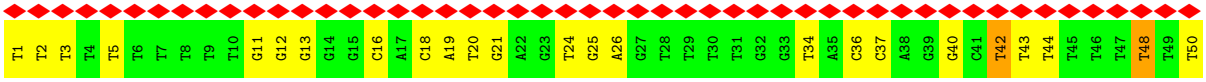
• Molecule 56: STAPLE STRAND

Chain A3:

• Molecule 57: STAPLE STRAND

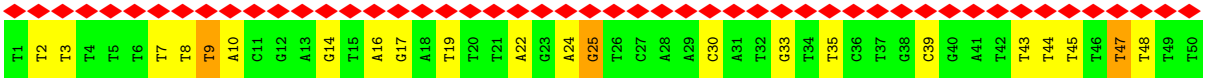
Chain A4:





• Molecule 58: STAPLE STRAND

Chain A5:



• Molecule 59: STAPLE STRAND

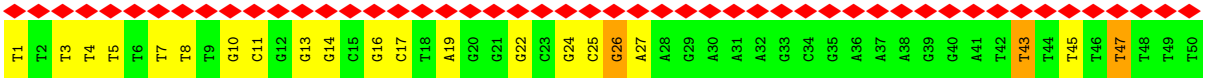
Chain A6:

• Molecule 60: STAPLE STRAND

Chain A7:

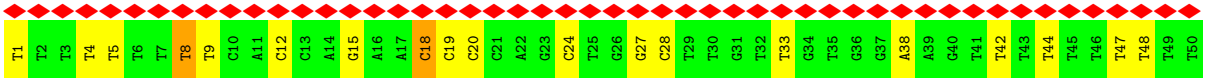
• Molecule 61: STAPLE STRAND

Chain A8:



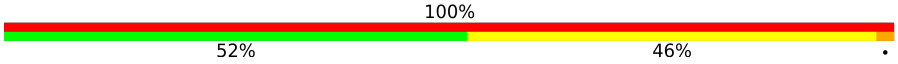
• Molecule 62: STAPLE STRAND

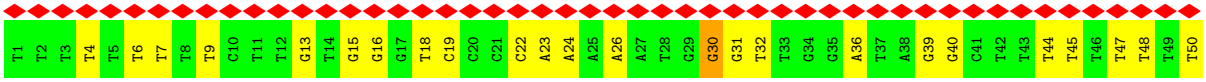
Chain A9:



• Molecule 63: STAPLE STRAND

Chain BA:



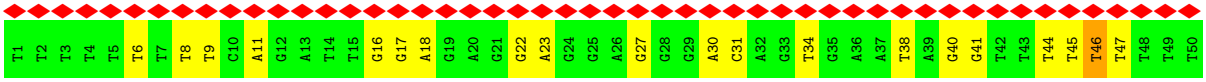


• Molecule 64: STAPLE STRAND

Chain BB:

• Molecule 65: STAPLE STRAND

Chain BC:



• Molecule 66: STAPLE STRAND

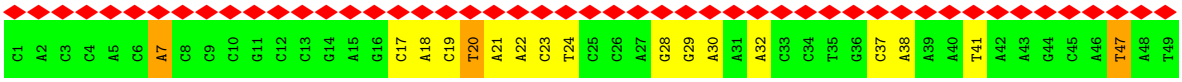
Chain BD:

• Molecule 67: STAPLE STRAND

Chain BE:

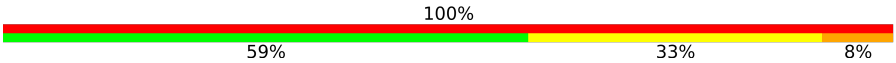
• Molecule 68: STAPLE STRAND

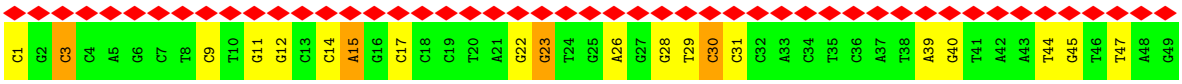
Chain BF:



• Molecule 69: STAPLE STRAND

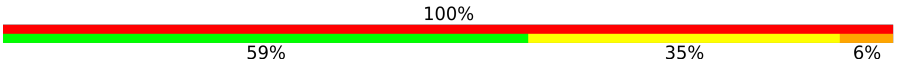
Chain BG:

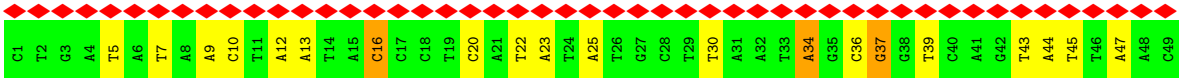




• Molecule 70: STAPLE STRAND

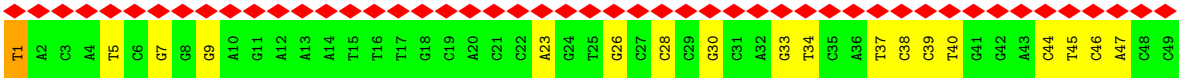
Chain BH:





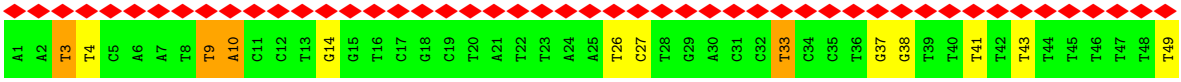
• Molecule 71: STAPLE STRAND

Chain BI:



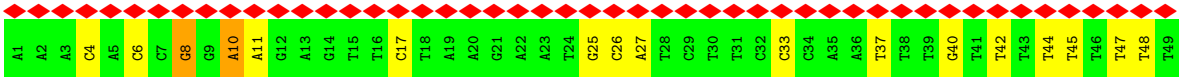
• Molecule 72: STAPLE STRAND

Chain BJ:



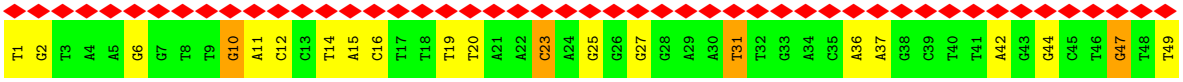
• Molecule 73: STAPLE STRAND

Chain BK:

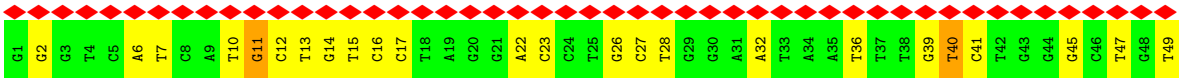


• Molecule 74: STAPLE STRAND

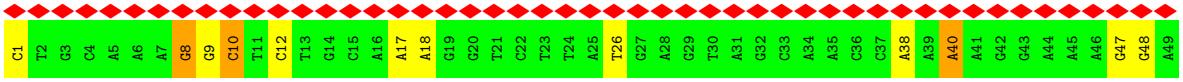
Chain BL:



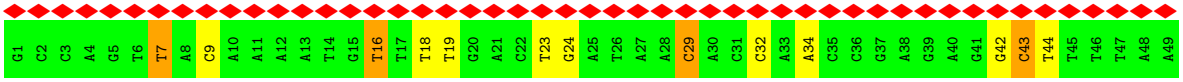
• Molecule 75: STAPLE STRAND



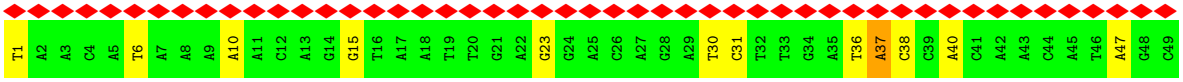
• Molecule 76: STAPLE STRAND



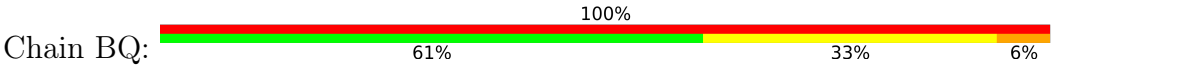
• Molecule 77: STAPLE STRAND

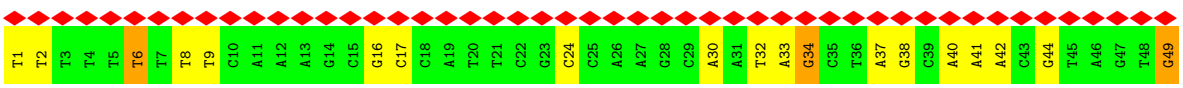


• Molecule 78: STAPLE STRAND

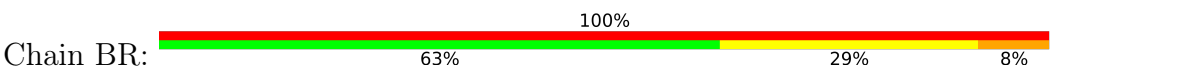


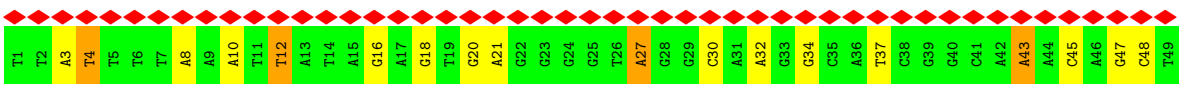
• Molecule 79: STAPLE STRAND



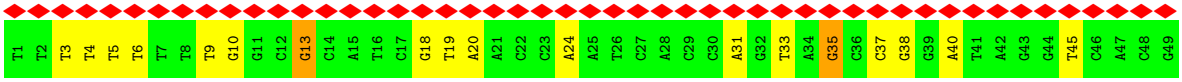


• Molecule 80: STAPLE STRAND





• Molecule 81: STAPLE STRAND



• Molecule 82: STAPLE STRAND

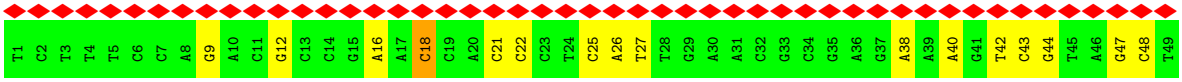
Chain BT:

• Molecule 83: STAPLE STRAND

Chain BU:

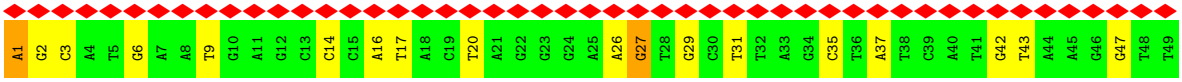
• Molecule 84: STAPLE STRAND

Chain BV:



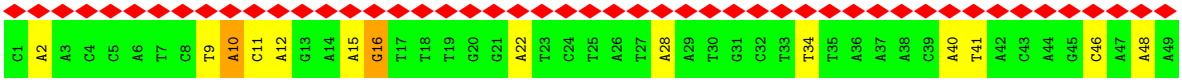
• Molecule 85: STAPLE STRAND

Chain BW:



• Molecule 86: STAPLE STRAND

Chain BX:

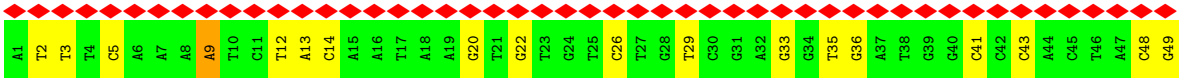


• Molecule 87: STAPLE STRAND

Chain BY:

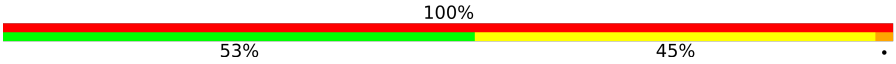
• Molecule 88: STAPLE STRAND

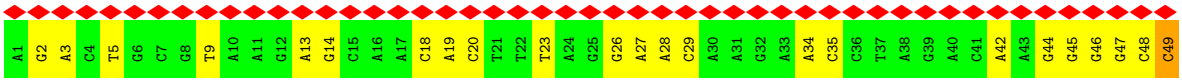
Chain BZ:



• Molecule 89: STAPLE STRAND

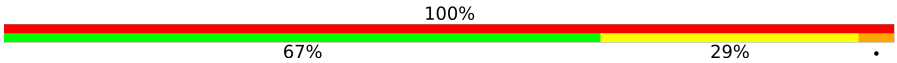
Chain Ba:

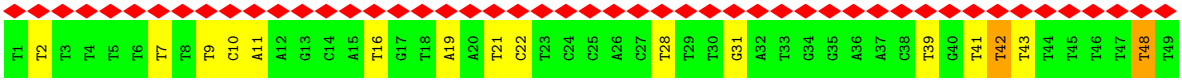




• Molecule 90: STAPLE STRAND

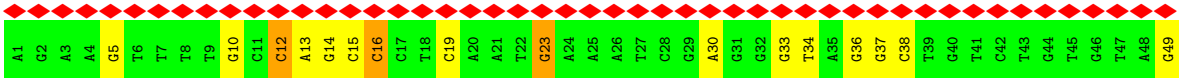
Chain Bb:





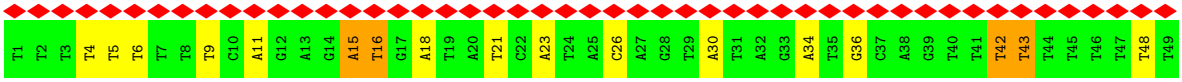
• Molecule 91: STAPLE STRAND

Chain Bc:



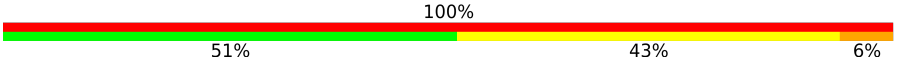
• Molecule 92: STAPLE STRAND

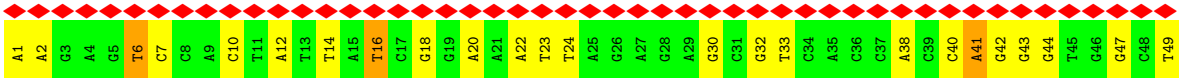
Chain Bd:



• Molecule 93: STAPLE STRAND

Chain Be:



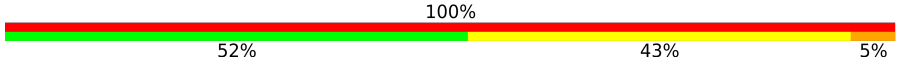


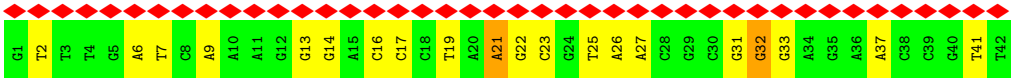
• Molecule 94: STAPLE STRAND

Chain Bf:

• Molecule 95: STAPLE STRAND

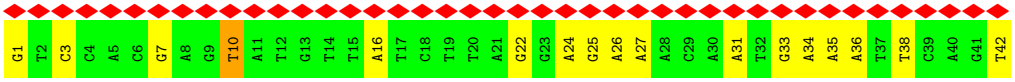
Chain Bg:





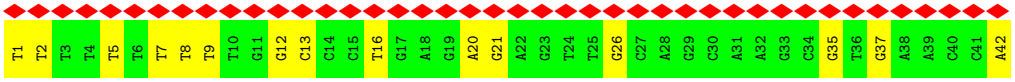
• Molecule 96: STAPLE STRAND

Chain Bh:



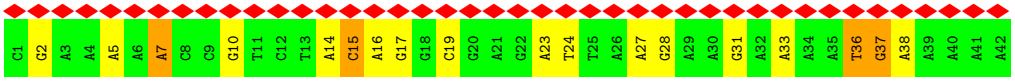
• Molecule 97: STAPLE STRAND

Chain Bi:



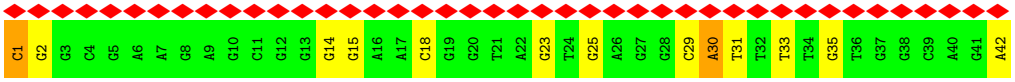
• Molecule 98: STAPLE STRAND

Chain Bj:



• Molecule 99: STAPLE STRAND

Chain Bk:

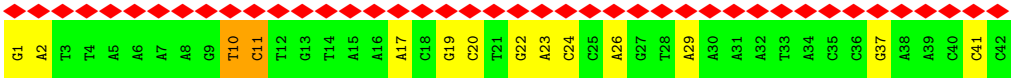


• Molecule 100: STAPLE STRAND

Chain Bl:

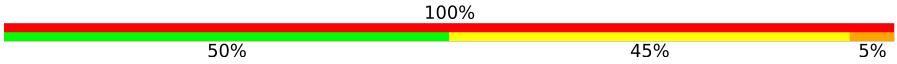
• Molecule 101: STAPLE STRAND

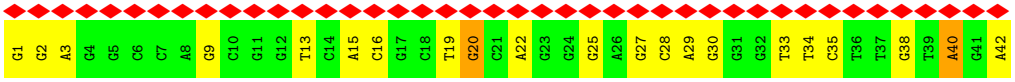
Chain Bm:



• Molecule 102: STAPLE STRAND

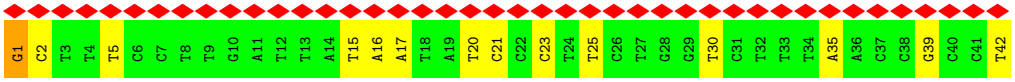
Chain Bn:





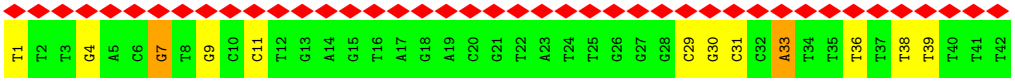
• Molecule 103: STAPLE STRAND

Chain Bo:



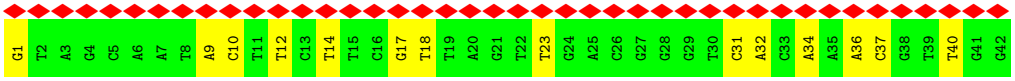
• Molecule 104: STAPLE STRAND

Chain Bp:



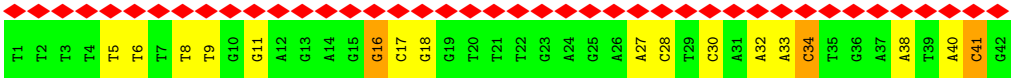
• Molecule 105: STAPLE STRAND

Chain Bq:



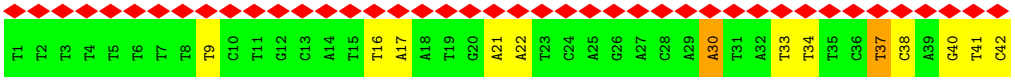
• Molecule 106: STAPLE STRAND

Chain Br:



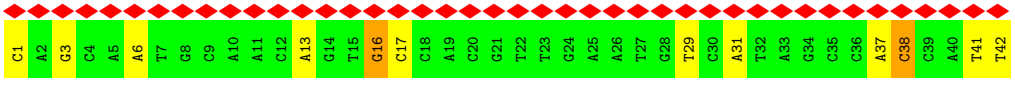
• Molecule 107: STAPLE STRAND

Chain Bs:



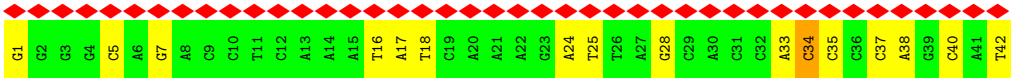
• Molecule 108: STAPLE STRAND

Chain Bt:



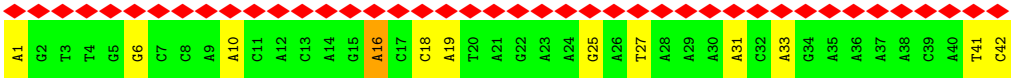
• Molecule 109: STAPLE STRAND

Chain Bu:



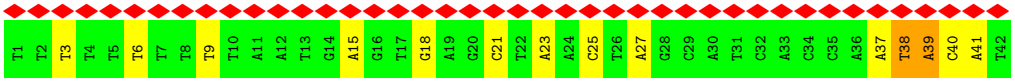
• Molecule 110: STAPLE STRAND

Chain Bv:



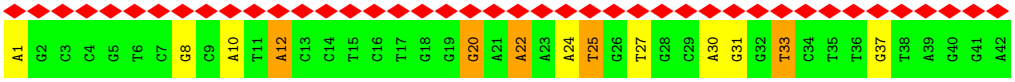
• Molecule 111: STAPLE STRAND

Chain Bw:



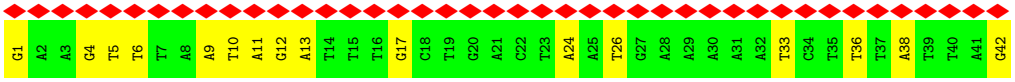
• Molecule 112: STAPLE STRAND

Chain Bx:



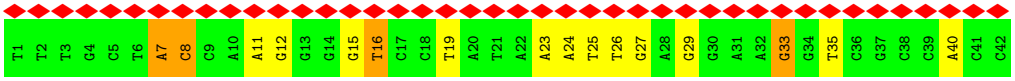
• Molecule 113: STAPLE STRAND

Chain By:



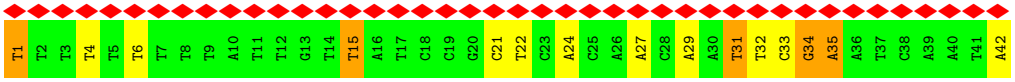
• Molecule 114: STAPLE STRAND

Chain Bz:



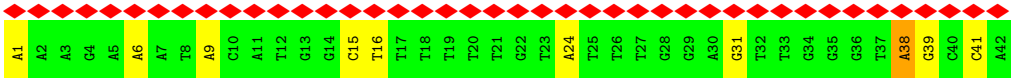
• Molecule 115: STAPLE STRAND

Chain B0:



• Molecule 116: STAPLE STRAND

Chain B1:

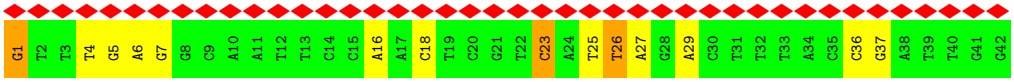


• Molecule 117: STAPLE STRAND

Chain B2:

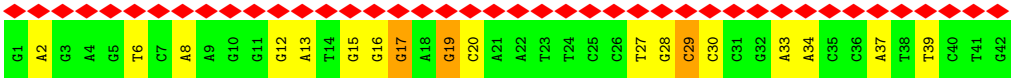
• Molecule 118: STAPLE STRAND

Chain B3:



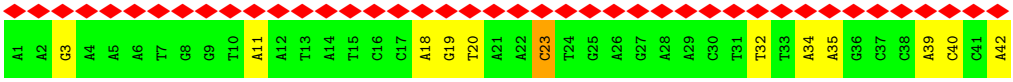
• Molecule 119: STAPLE STRAND

Chain B4:



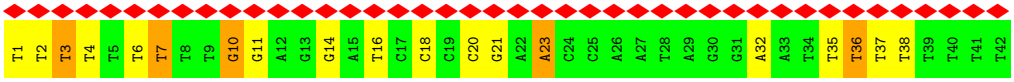
• Molecule 120: STAPLE STRAND

Chain B5:



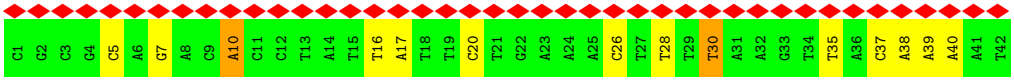
• Molecule 121: STAPLE STRAND

Chain B6:



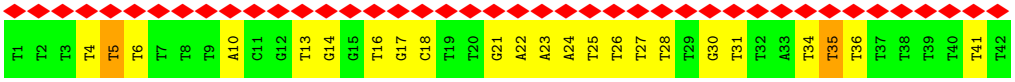
• Molecule 122: STAPLE STRAND

Chain B7:



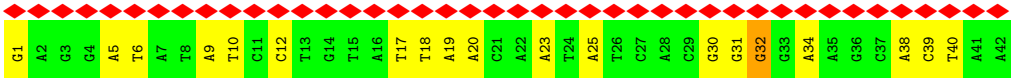
• Molecule 123: STAPLE STRAND

Chain B8:



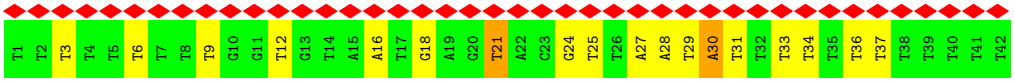
• Molecule 124: STAPLE STRAND

Chain B9:



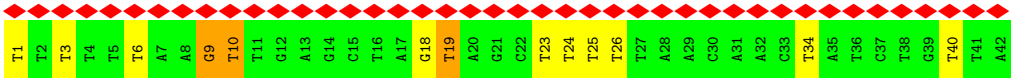
• Molecule 125: STAPLE STRAND

Chain CA:



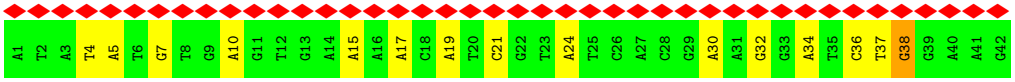
• Molecule 126: STAPLE STRAND

Chain CB:



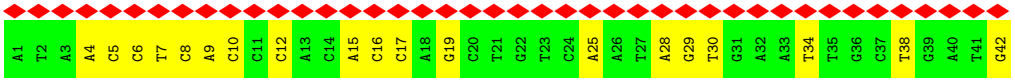
• Molecule 127: STAPLE STRAND

Chain CC:



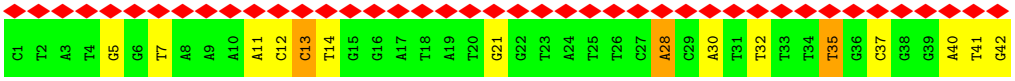
• Molecule 128: STAPLE STRAND

Chain CD:



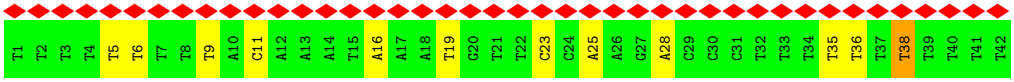
• Molecule 129: STAPLE STRAND

Chain CE:



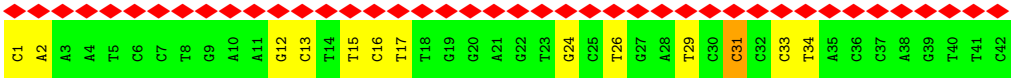
• Molecule 130: STAPLE STRAND

Chain CF:



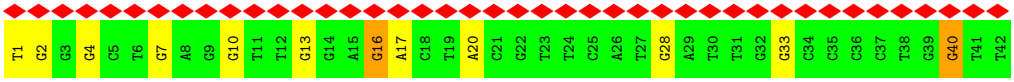
• Molecule 131: STAPLE STRAND

Chain CG:



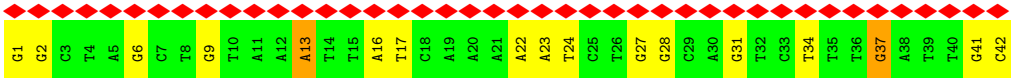
• Molecule 132: STAPLE STRAND

Chain CH:



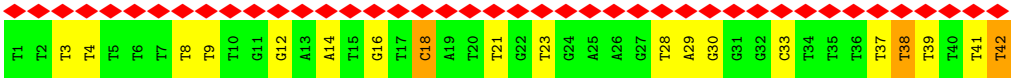
• Molecule 133: STAPLE STRAND

Chain CI:



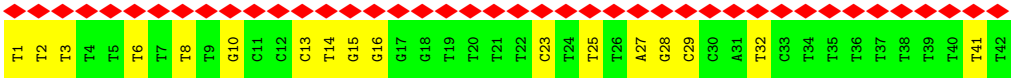
• Molecule 134: STAPLE STRAND

Chain CJ:



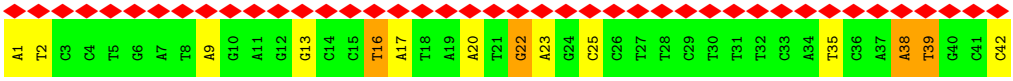
• Molecule 135: STAPLE STRAND

Chain CK:



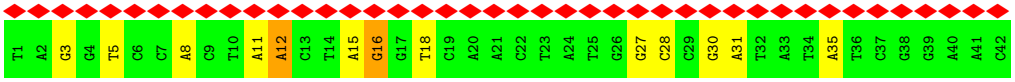
• Molecule 136: STAPLE STRAND

Chain CL:

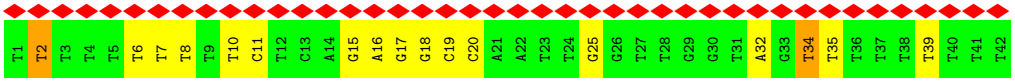


• Molecule 137: STAPLE STRAND

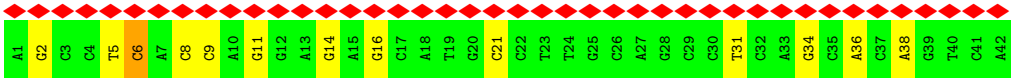
Chain CM:



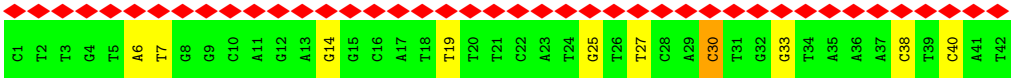
• Molecule 138: STAPLE STRAND



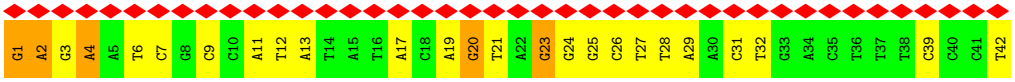
• Molecule 139: STAPLE STRAND



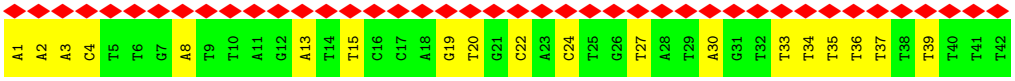
• Molecule 140: STAPLE STRAND



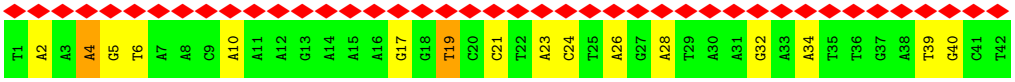
• Molecule 141: STAPLE STRAND



• Molecule 142: STAPLE STRAND

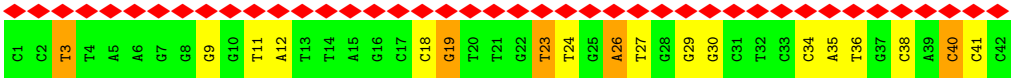


• Molecule 143: STAPLE STRAND



• Molecule 144: STAPLE STRAND

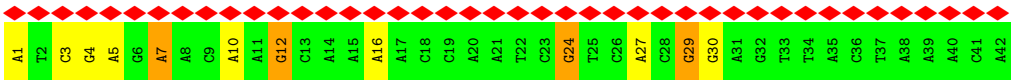
• Molecule 145: STAPLE STRAND



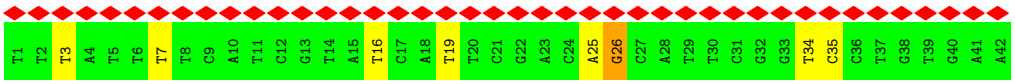
• Molecule 146: STAPLE STRAND

• Molecule 147: STAPLE STRAND

• Molecule 148: STAPLE STRAND

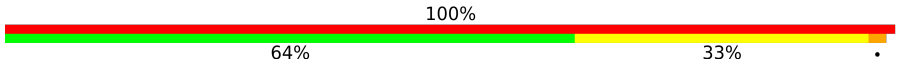


• Molecule 149: STAPLE STRAND

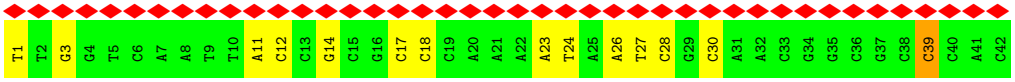


• Molecule 150: STAPLE STRAND

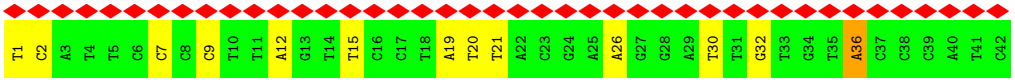
• Molecule 151: STAPLE STRAND



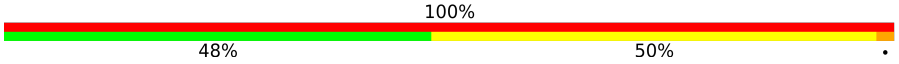
• Molecule 152: STAPLE STRAND

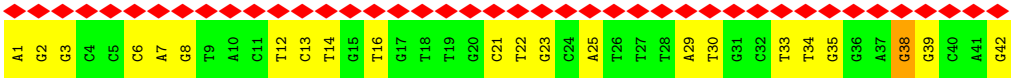


• Molecule 153: STAPLE STRAND

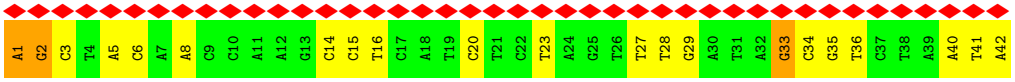


• Molecule 154: STAPLE STRAND

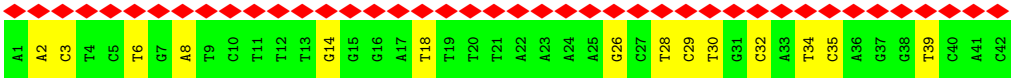




• Molecule 155: STAPLE STRAND



• Molecule 156: STAPLE STRAND

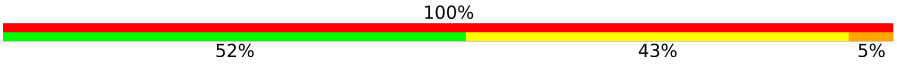


• Molecule 157: STAPLE STRAND

• Molecule 158: STAPLE STRAND

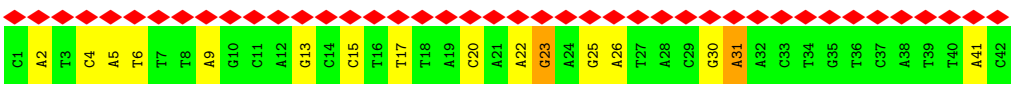
• Molecule 159: STAPLE STRAND

Chain Ci:



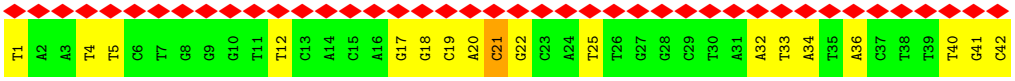
• Molecule 160: STAPLE STRAND

Chain Cj:



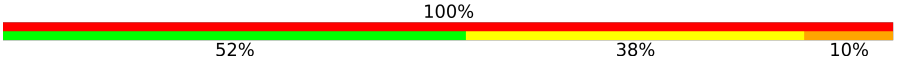
• Molecule 161: STAPLE STRAND

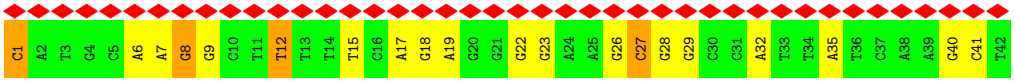
Chain Ck:



• Molecule 162: STAPLE STRAND

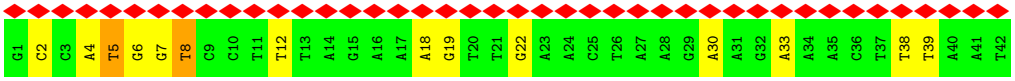
Chain Cl:





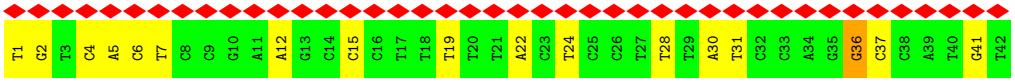
• Molecule 163: STAPLE STRAND

Chain Cm:



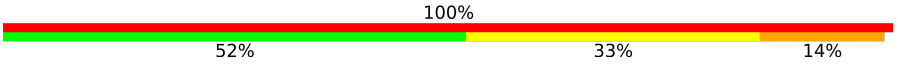
• Molecule 164: STAPLE STRAND

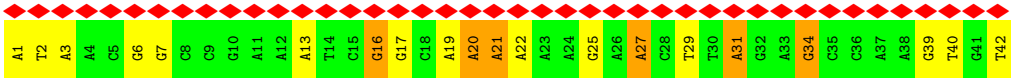
Chain Cn:



• Molecule 165: STAPLE STRAND

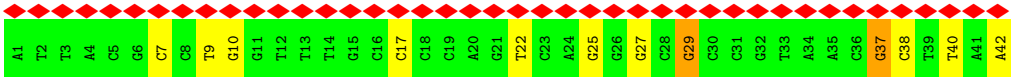
Chain Co:





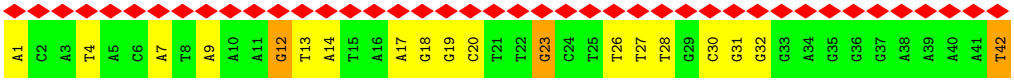
• Molecule 166: STAPLE STRAND

Chain Cp:



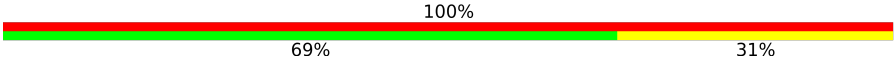
• Molecule 167: STAPLE STRAND

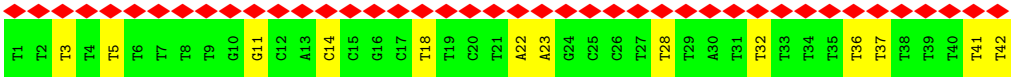
Chain Cq:



• Molecule 168: STAPLE STRAND

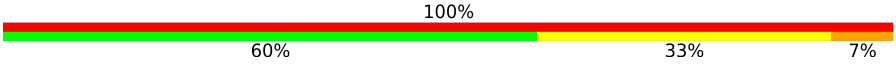
Chain Cr:

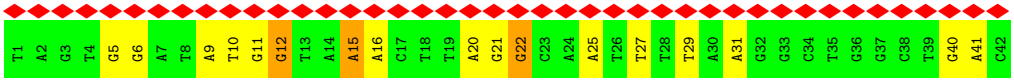




• Molecule 169: STAPLE STRAND

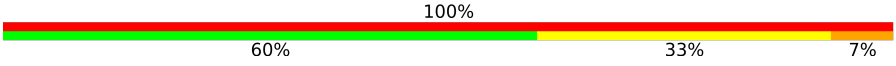
Chain Cs:

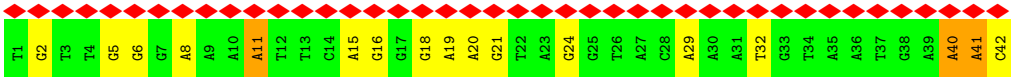




• Molecule 170: STAPLE STRAND

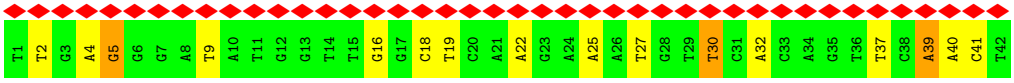
Chain Ct:





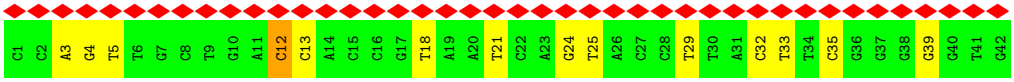
• Molecule 171: STAPLE STRAND

Chain Cu:



• Molecule 172: STAPLE STRAND

Chain Cv:

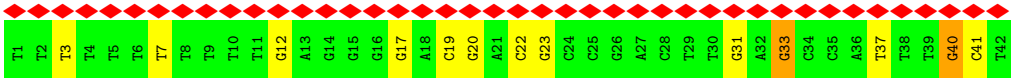


• Molecule 173: STAPLE STRAND

Chain Cw:

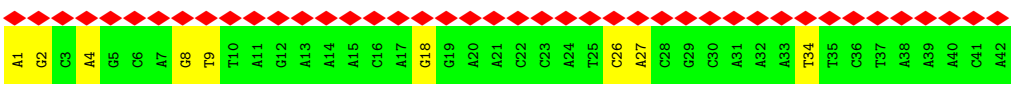
• Molecule 174: STAPLE STRAND

Chain Cx:



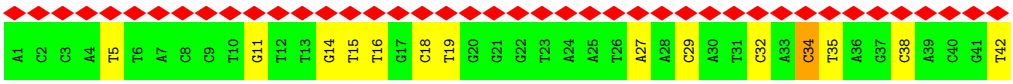
• Molecule 175: STAPLE STRAND

Chain Cy:



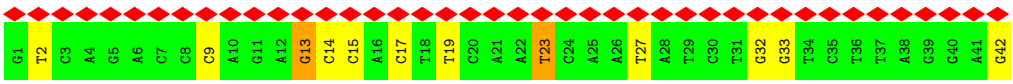
• Molecule 176: STAPLE STRAND

Chain Cz:



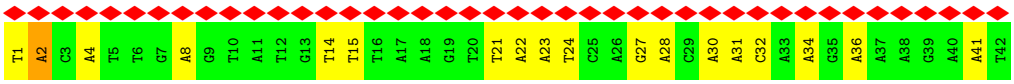
• Molecule 177: STAPLE STRAND

Chain C0:



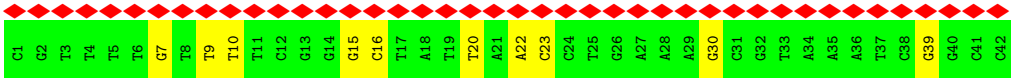
• Molecule 178: STAPLE STRAND

Chain C1:



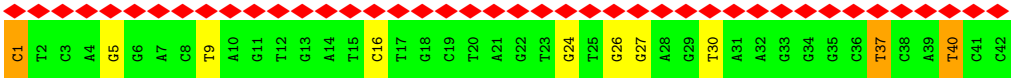
• Molecule 179: STAPLE STRAND

Chain C2:



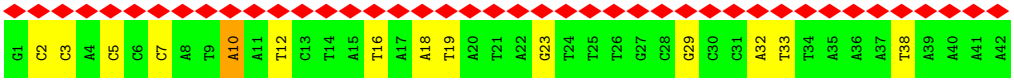
• Molecule 180: STAPLE STRAND

Chain C3:



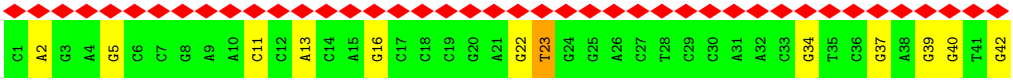
• Molecule 181: STAPLE STRAND

Chain C4:



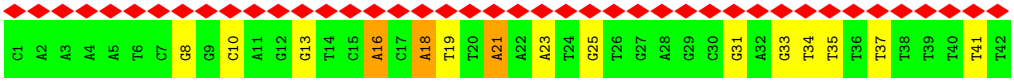
• Molecule 182: STAPLE STRAND

Chain C5:



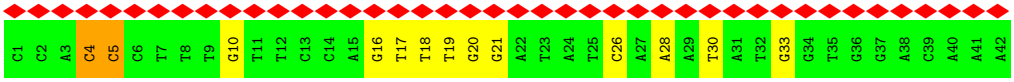
• Molecule 183: STAPLE STRAND

Chain C6:



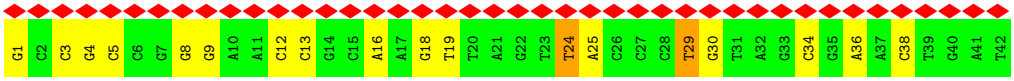
• Molecule 184: STAPLE STRAND

Chain C7:



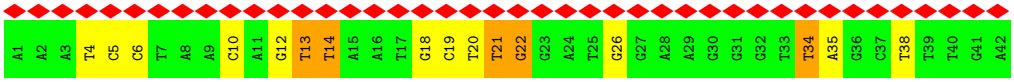
• Molecule 185: STAPLE STRAND

Chain C8:

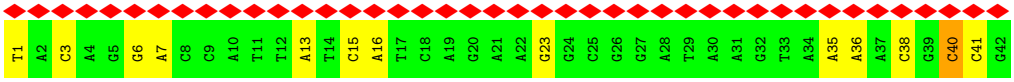


• Molecule 186: STAPLE STRAND

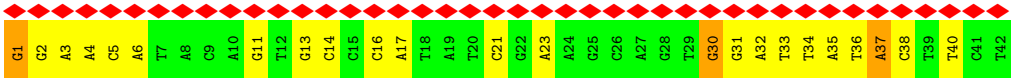
Chain C9:



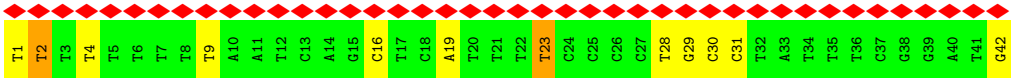
• Molecule 187: STAPLE STRAND



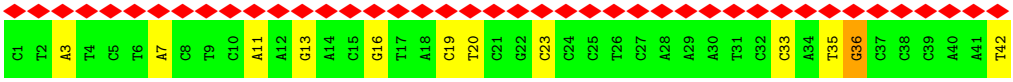
• Molecule 188: STAPLE STRAND



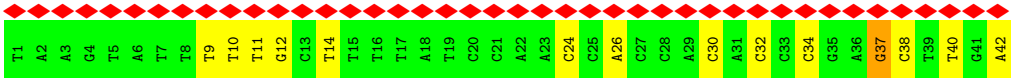
• Molecule 189: STAPLE STRAND



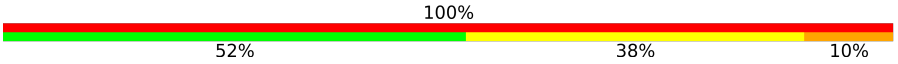
• Molecule 190: STAPLE STRAND

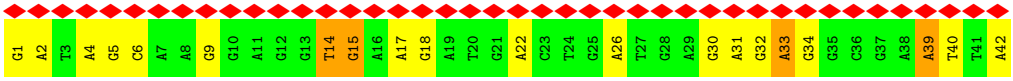


• Molecule 191: STAPLE STRAND

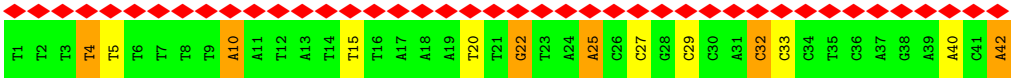


• Molecule 192: STAPLE STRAND



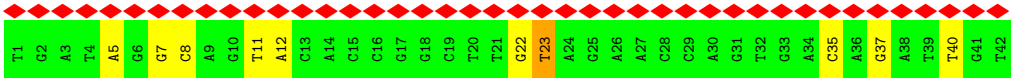


• Molecule 193: STAPLE STRAND



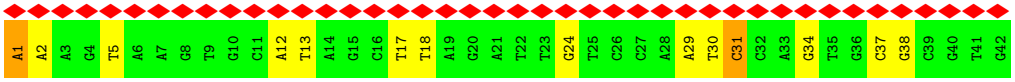
• Molecule 194: STAPLE STRAND

Chain DH:



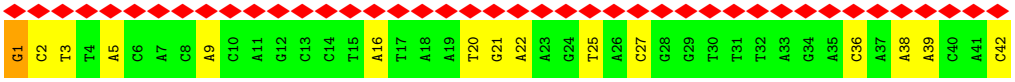
• Molecule 195: STAPLE STRAND

Chain DI:



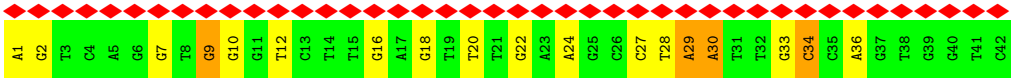
• Molecule 196: STAPLE STRAND

Chain DJ:



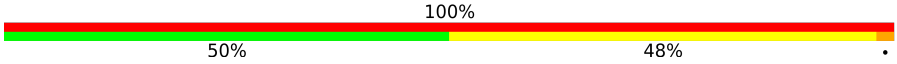
• Molecule 197: STAPLE STRAND

Chain DK:



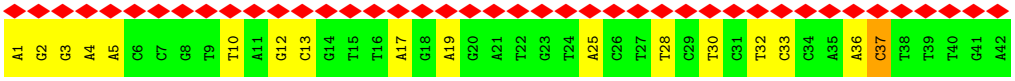
• Molecule 198: STAPLE STRAND

Chain DL:



• Molecule 199: STAPLE STRAND

Chain DM:

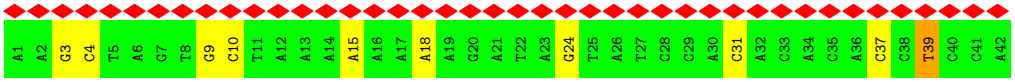


• Molecule 200: STAPLE STRAND

Chain DN:

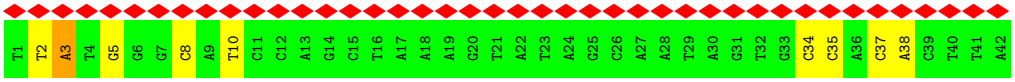
• Molecule 201: STAPLE STRAND

Chain DO:



• Molecule 202: STAPLE STRAND

Chain DP:

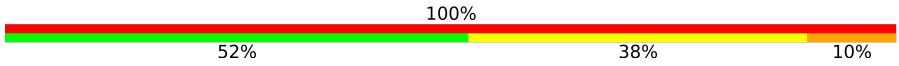


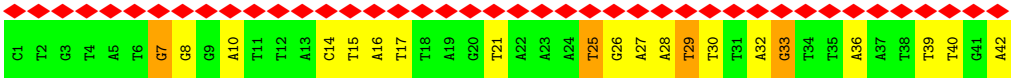
• Molecule 203: STAPLE STRAND

Chain DQ:

• Molecule 204: STAPLE STRAND

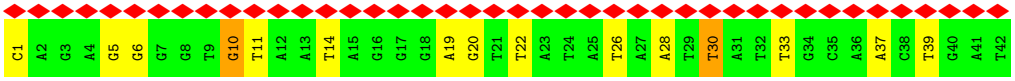
Chain DR:





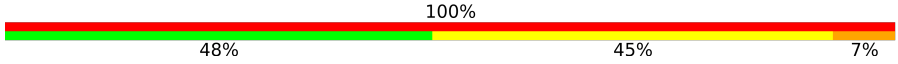
• Molecule 205: STAPLE STRAND

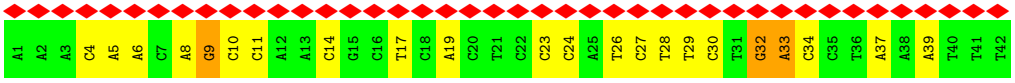
Chain DS:



• Molecule 206: STAPLE STRAND

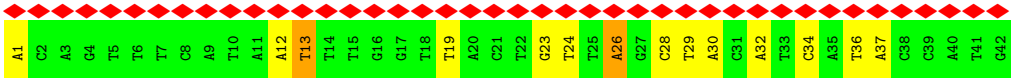
Chain DT:



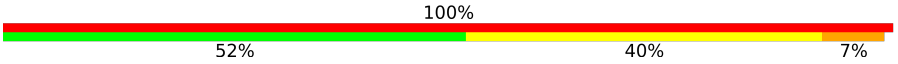


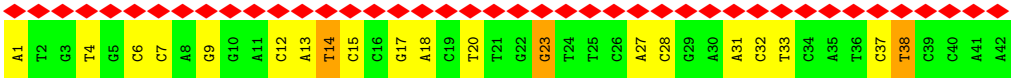
• Molecule 207: STAPLE STRAND

Chain DU:

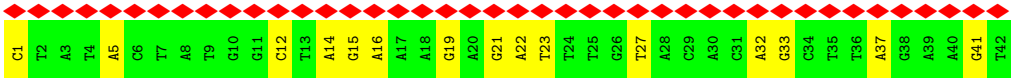


• Molecule 208: STAPLE STRAND



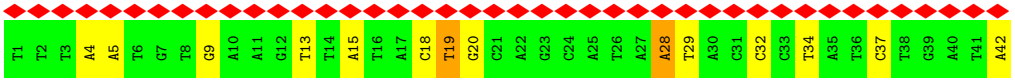


• Molecule 209: STAPLE STRAND

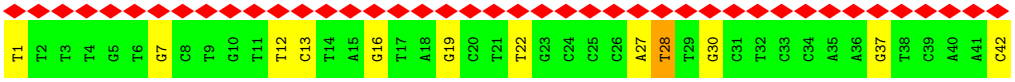


• Molecule 210: STAPLE STRAND

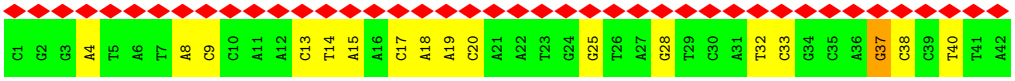
• Molecule 211: STAPLE STRAND



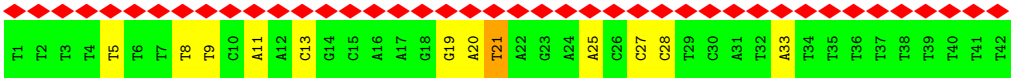
• Molecule 212: STAPLE STRAND



• Molecule 213: STAPLE STRAND

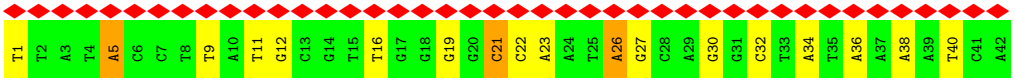


• Molecule 214: STAPLE STRAND



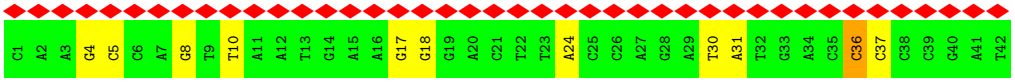
• Molecule 215: STAPLE STRAND

Chain Dc:



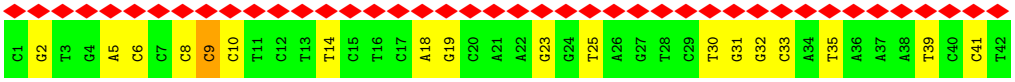
• Molecule 216: STAPLE STRAND

Chain Dd:



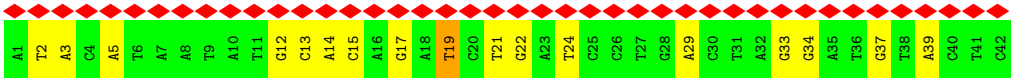
• Molecule 217: STAPLE STRAND

Chain De:



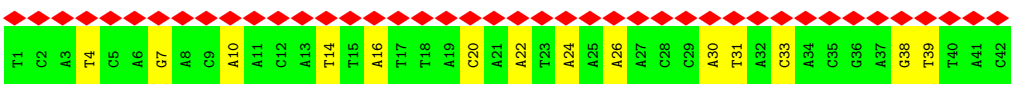
• Molecule 218: STAPLE STRAND

Chain Df:



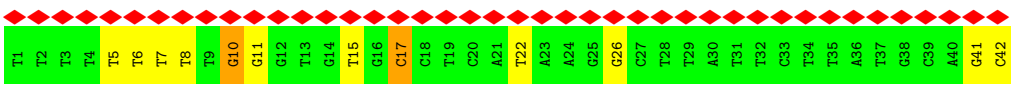
• Molecule 219: STAPLE STRAND

Chain Dg:



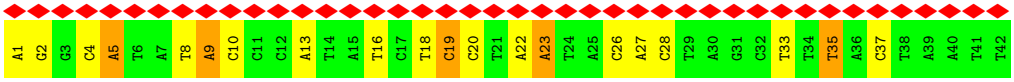
• Molecule 220: STAPLE STRAND

Chain Dh:



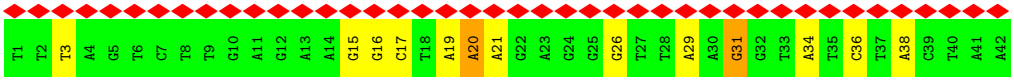
• Molecule 221: STAPLE STRAND

Chain Di:



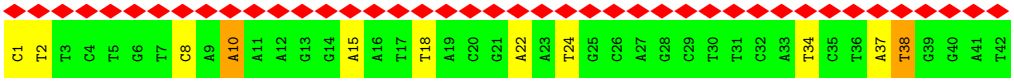
• Molecule 222: STAPLE STRAND

Chain Dj:



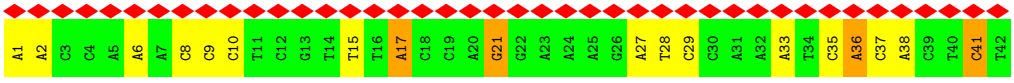
• Molecule 223: STAPLE STRAND

Chain Dk:



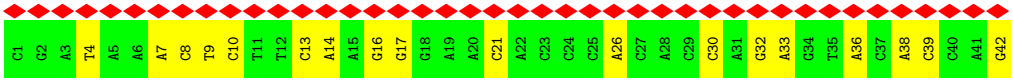
• Molecule 224: STAPLE STRAND

Chain Dl:



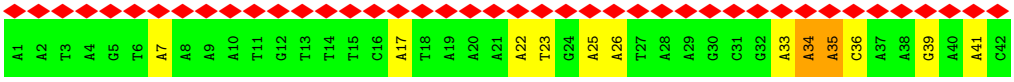
• Molecule 225: STAPLE STRAND

Chain Dm:



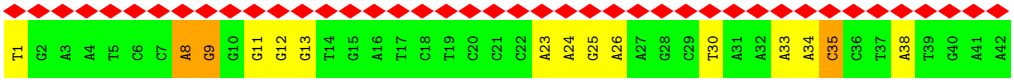
• Molecule 226: STAPLE STRAND

Chain Dn:



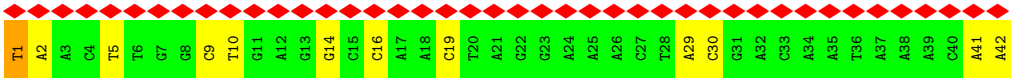
• Molecule 227: STAPLE STRAND

Chain Do:



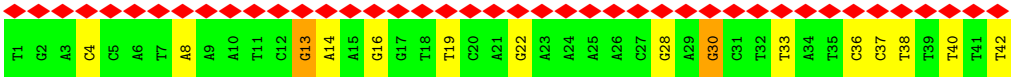
• Molecule 228: STAPLE STRAND

Chain Dp:



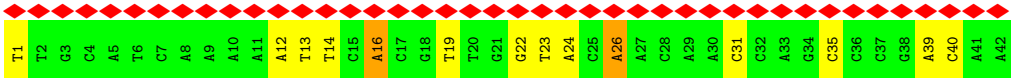
• Molecule 229: STAPLE STRAND

Chain Dq:



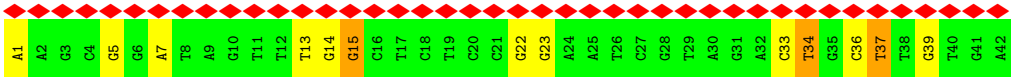
• Molecule 230: STAPLE STRAND

Chain Dr:



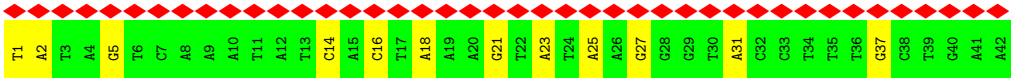
• Molecule 231: STAPLE STRAND

Chain Ds:



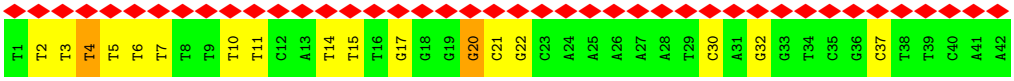
• Molecule 232: STAPLE STRAND

Chain Dt:



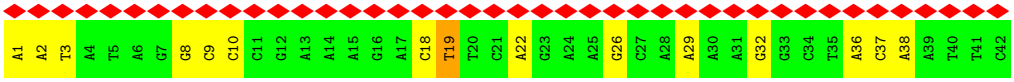
• Molecule 233: STAPLE STRAND

Chain Du:



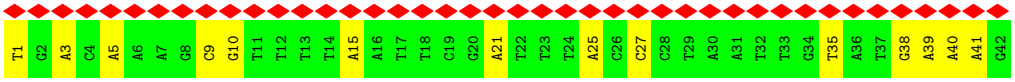
• Molecule 234: STAPLE STRAND

Chain Dv:



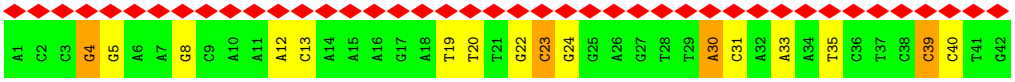
• Molecule 235: STAPLE STRAND

Chain Dw:



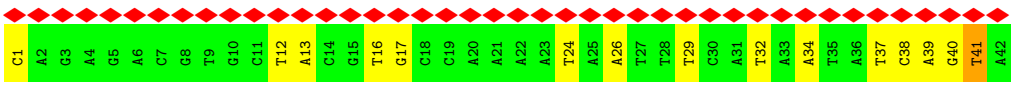
• Molecule 236: STAPLE STRAND

Chain Dx:



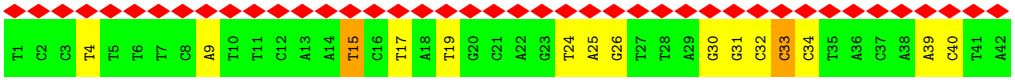
• Molecule 237: STAPLE STRAND

Chain Dy:



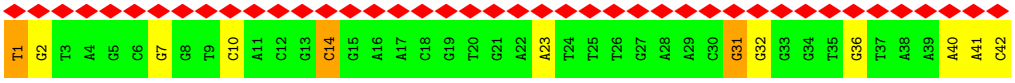
• Molecule 238: STAPLE STRAND

Chain Dz:



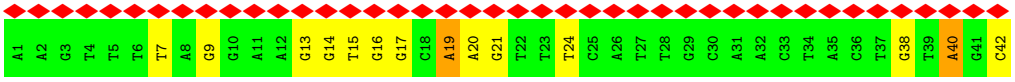
• Molecule 239: STAPLE STRAND

Chain D0:



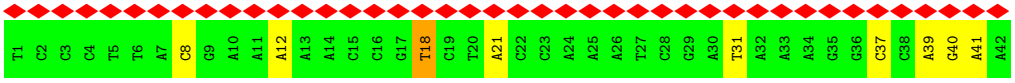
• Molecule 240: STAPLE STRAND

Chain D1:



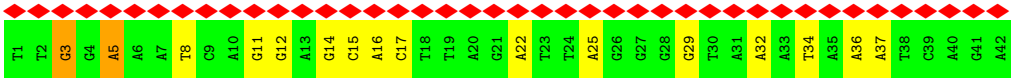
• Molecule 241: STAPLE STRAND

Chain D2:



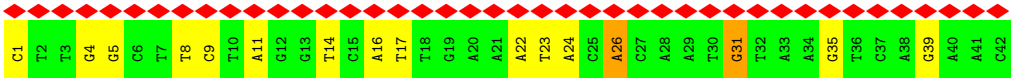
• Molecule 242: STAPLE STRAND

Chain D3:



• Molecule 243: STAPLE STRAND

Chain D4:

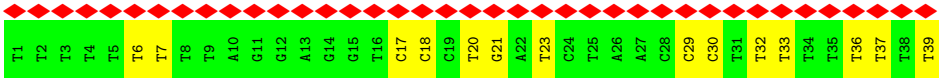


• Molecule 244: STAPLE STRAND

Chain D5:

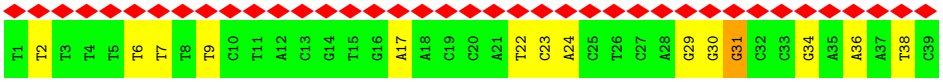
• Molecule 245: STAPLE STRAND

Chain D6:



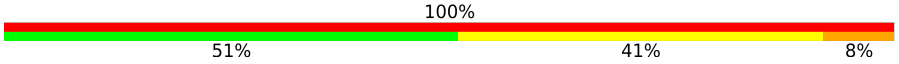
• Molecule 246: STAPLE STRAND

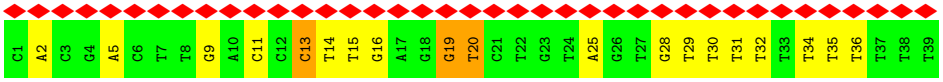
Chain D7:



• Molecule 247: STAPLE STRAND

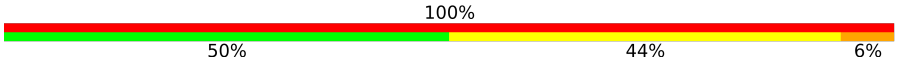
Chain D8:

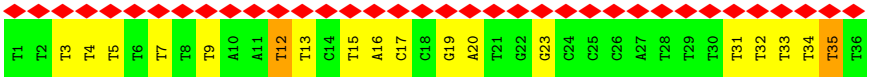




• Molecule 248: STAPLE STRAND

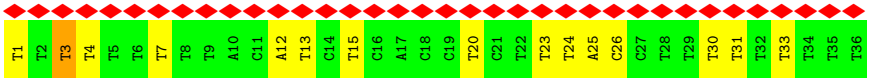
Chain D9:





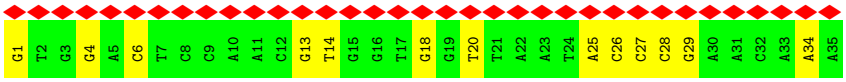
• Molecule 249: STAPLE STRAND

Chain EA:



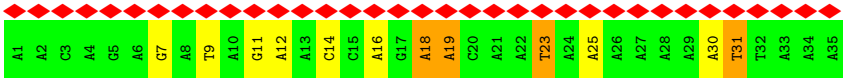
• Molecule 250: STAPLE STRAND

Chain EB:



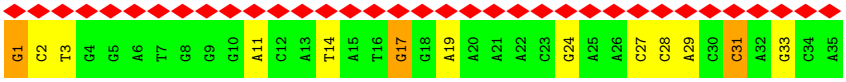
• Molecule 251: STAPLE STRAND

Chain EC:



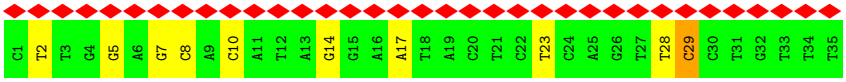
• Molecule 252: STAPLE STRAND

Chain ED:



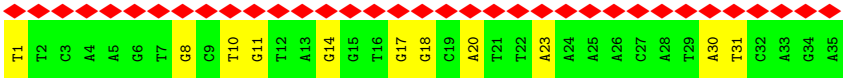
• Molecule 253: STAPLE STRAND

Chain EE:



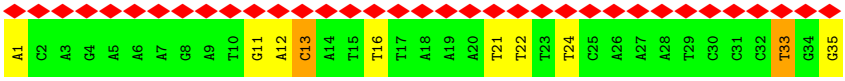
• Molecule 254: STAPLE STRAND

Chain EF:



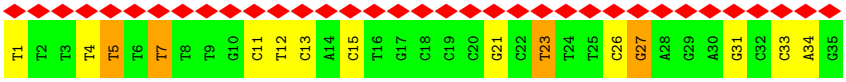
• Molecule 255: STAPLE STRAND

Chain EG:

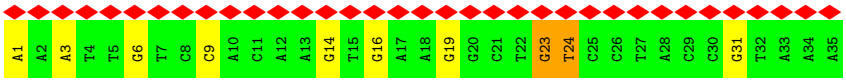


• Molecule 256: STAPLE STRAND

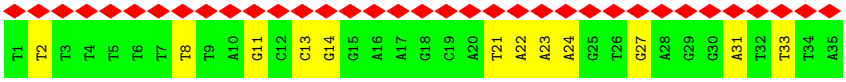
Chain EH:



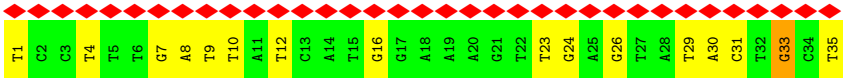
• Molecule 257: STAPLE STRAND



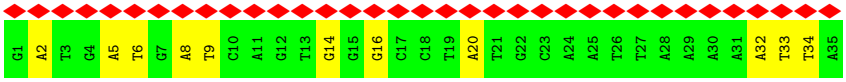
• Molecule 258: STAPLE STRAND



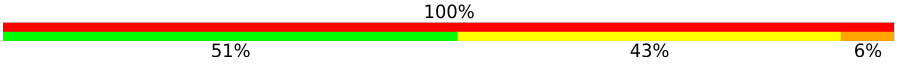
• Molecule 259: STAPLE STRAND

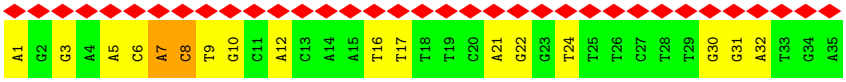


• Molecule 260: STAPLE STRAND

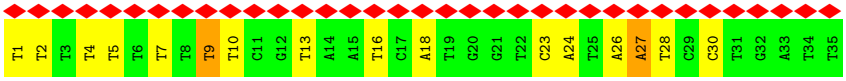


• Molecule 261: STAPLE STRAND

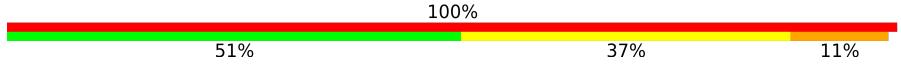


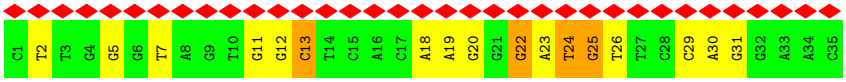


• Molecule 262: STAPLE STRAND

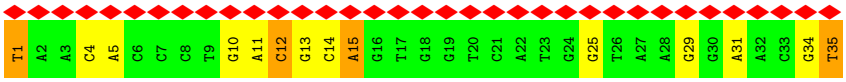


• Molecule 263: STAPLE STRAND

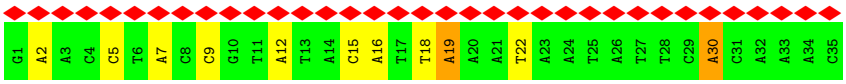




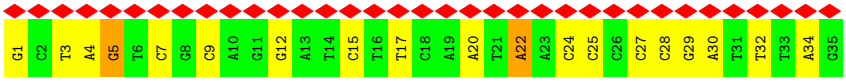
• Molecule 264: STAPLE STRAND



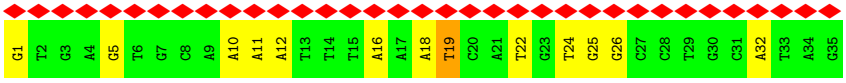
• Molecule 265: STAPLE STRAND



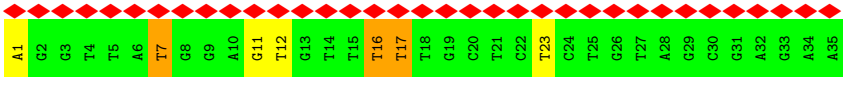
• Molecule 266: STAPLE STRAND



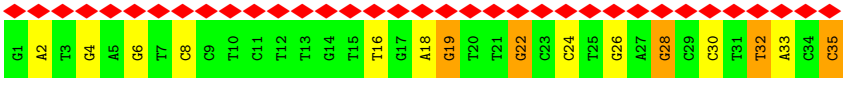
• Molecule 267: STAPLE STRAND



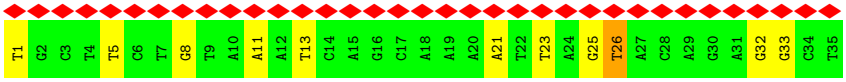
• Molecule 268: STAPLE STRAND



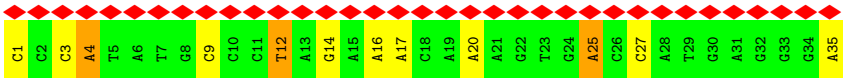
• Molecule 269: STAPLE STRAND



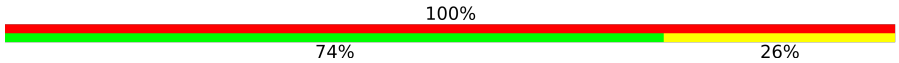
• Molecule 270: STAPLE STRAND

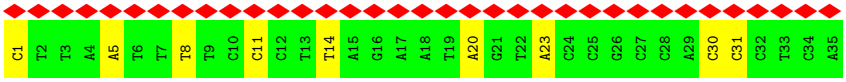


• Molecule 271: STAPLE STRAND

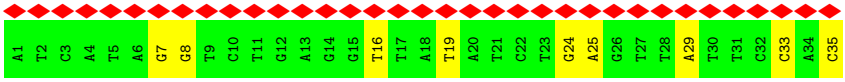


• Molecule 272: STAPLE STRAND

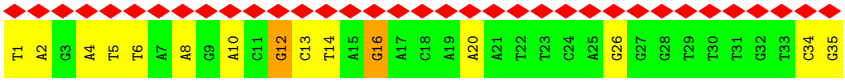




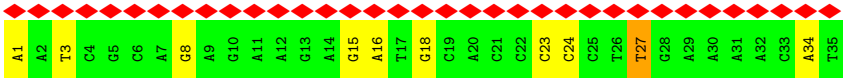
• Molecule 273: STAPLE STRAND



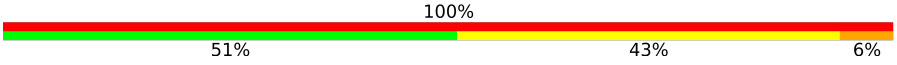
• Molecule 274: STAPLE STRAND

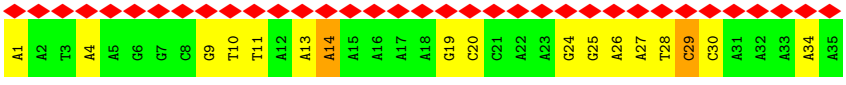


• Molecule 275: STAPLE STRAND

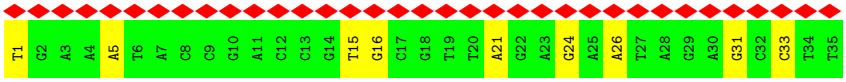


• Molecule 276: STAPLE STRAND

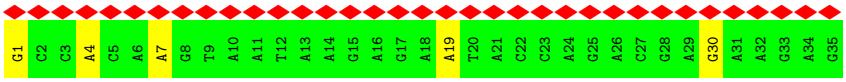




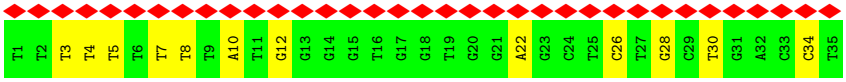
• Molecule 277: STAPLE STRAND



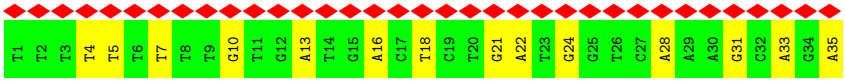
• Molecule 278: STAPLE STRAND



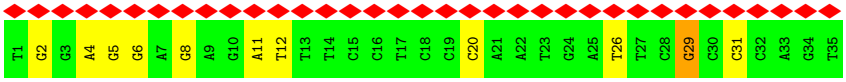
• Molecule 279: STAPLE STRAND



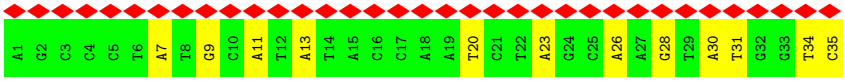
• Molecule 280: STAPLE STRAND



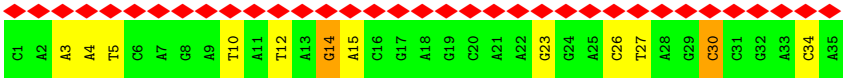
• Molecule 281: STAPLE STRAND



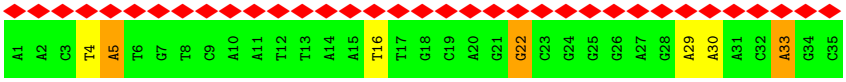
• Molecule 282: STAPLE STRAND



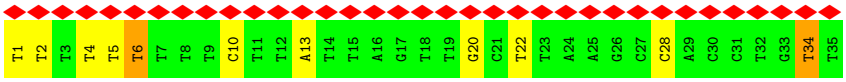
• Molecule 283: STAPLE STRAND



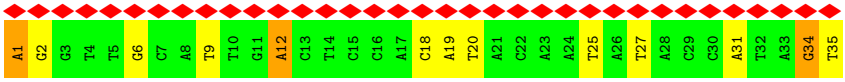
• Molecule 284: STAPLE STRAND



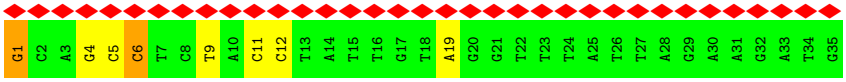
• Molecule 285: STAPLE STRAND



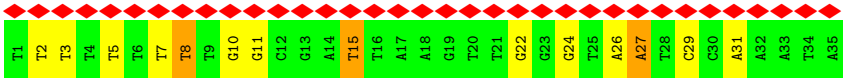
• Molecule 286: STAPLE STRAND



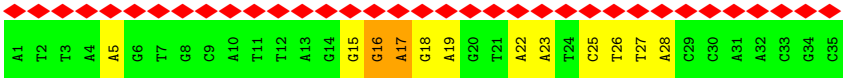
• Molecule 287: STAPLE STRAND



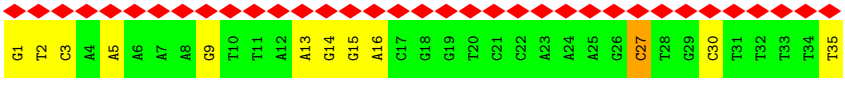
• Molecule 288: STAPLE STRAND



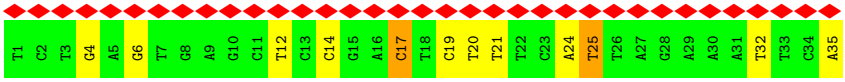
• Molecule 289: STAPLE STRAND



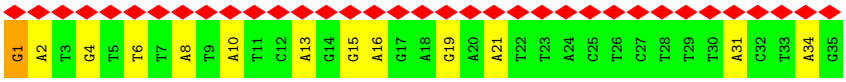
• Molecule 290: STAPLE STRAND



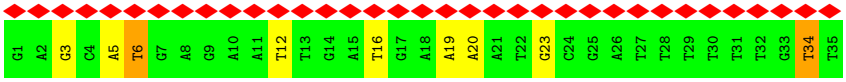
• Molecule 291: STAPLE STRAND



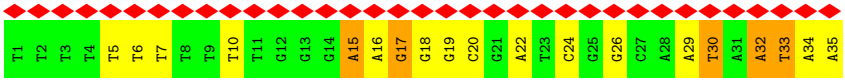
• Molecule 292: STAPLE STRAND



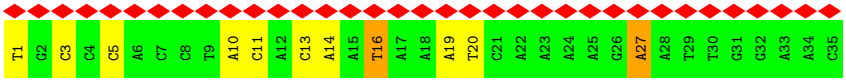
• Molecule 293: STAPLE STRAND



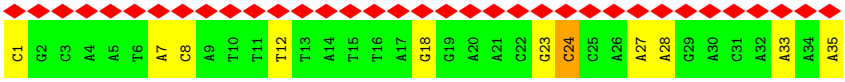
• Molecule 294: STAPLE STRAND



• Molecule 295: STAPLE STRAND

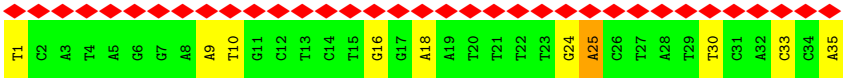


• Molecule 296: STAPLE STRAND



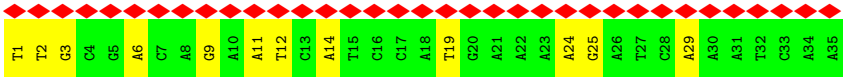
• Molecule 297: STAPLE STRAND

• Molecule 298: STAPLE STRAND



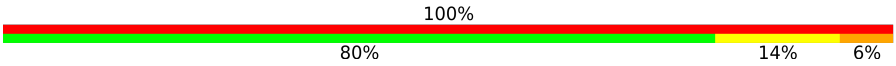
• Molecule 299: STAPLE STRAND

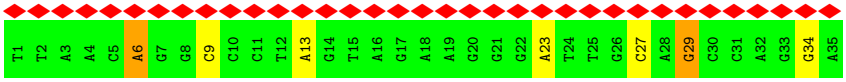
Chain Ey:



• Molecule 300: STAPLE STRAND

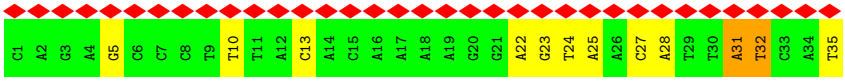
Chain Ez:





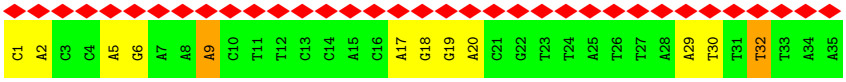
• Molecule 301: STAPLE STRAND

Chain E0:



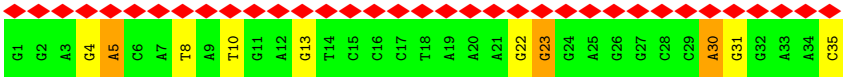
• Molecule 302: STAPLE STRAND

Chain E1:



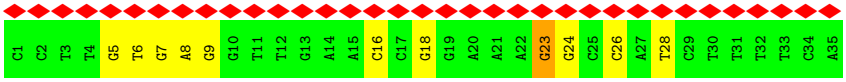
• Molecule 303: STAPLE STRAND

Chain E2:



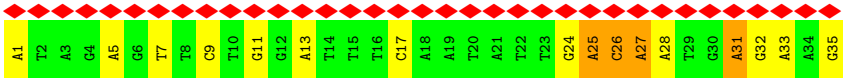
• Molecule 304: STAPLE STRAND

Chain E3:



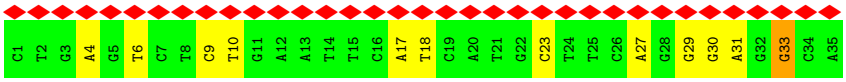
• Molecule 305: STAPLE STRAND

Chain E4:



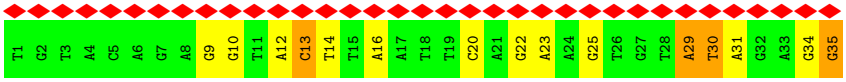
• Molecule 306: STAPLE STRAND

Chain E5:



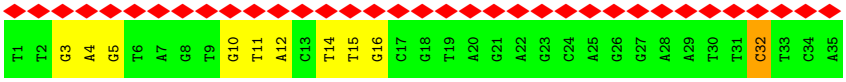
• Molecule 307: STAPLE STRAND

Chain E6:



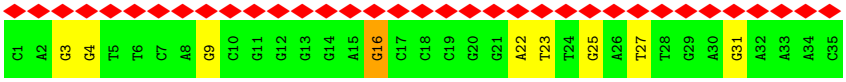
• Molecule 308: STAPLE STRAND

Chain E7:



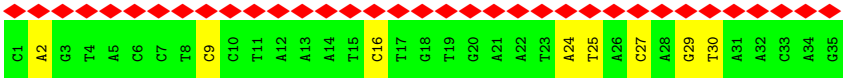
• Molecule 309: STAPLE STRAND

Chain E8:



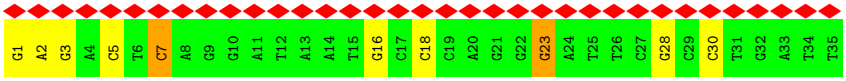
• Molecule 310: STAPLE STRAND

Chain E9:



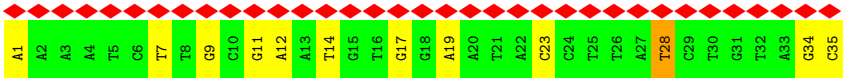
• Molecule 311: STAPLE STRAND

Chain FA:

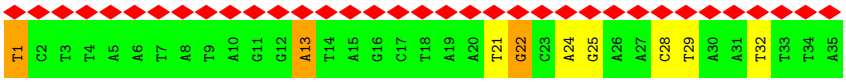


• Molecule 312: STAPLE STRAND

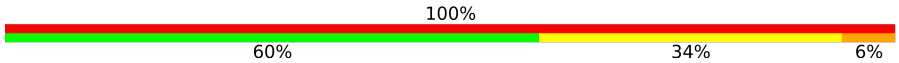
Chain FB:

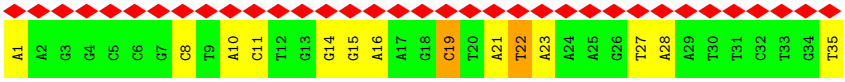


• Molecule 313: STAPLE STRAND

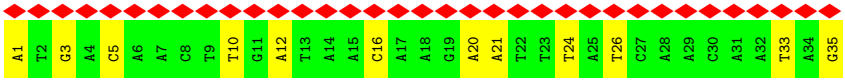


• Molecule 314: STAPLE STRAND

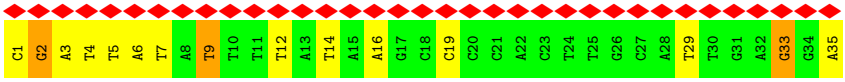




• Molecule 315: STAPLE STRAND

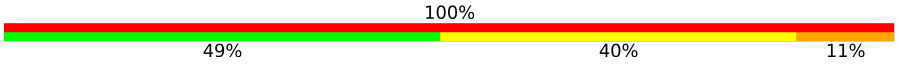


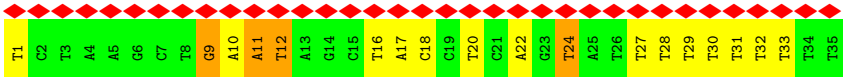
• Molecule 316: STAPLE STRAND



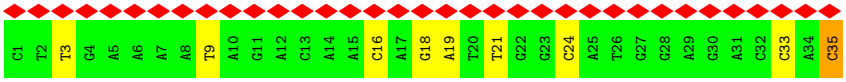
• Molecule 317: STAPLE STRAND

• Molecule 318: STAPLE STRAND

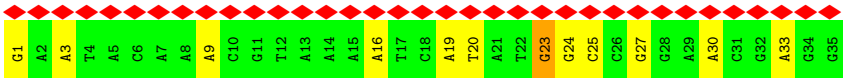




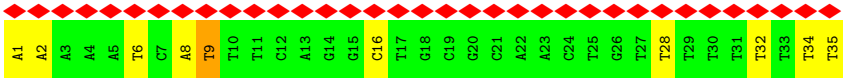
• Molecule 319: STAPLE STRAND



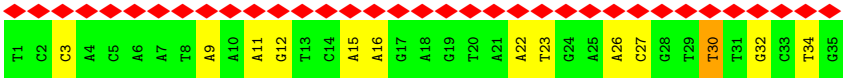
• Molecule 320: STAPLE STRAND



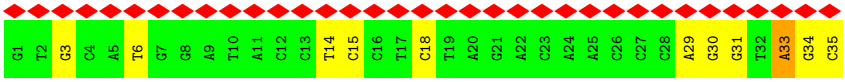
• Molecule 321: STAPLE STRAND



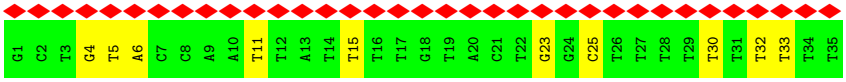
• Molecule 322: STAPLE STRAND



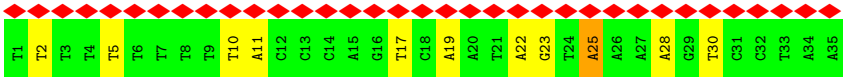
• Molecule 323: STAPLE STRAND



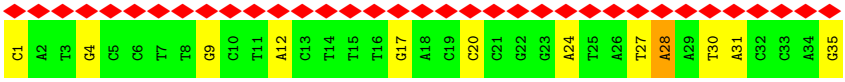
• Molecule 324: STAPLE STRAND



• Molecule 325: STAPLE STRAND

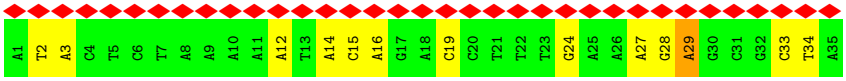


• Molecule 326: STAPLE STRAND



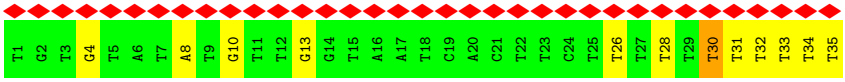
• Molecule 327: STAPLE STRAND

Chain FQ:



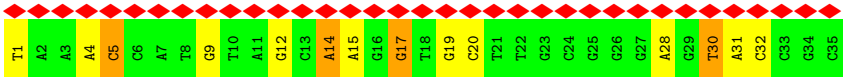
• Molecule 328: STAPLE STRAND

Chain FR:



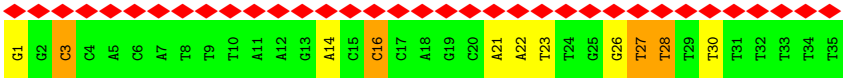
• Molecule 329: STAPLE STRAND

Chain FS:



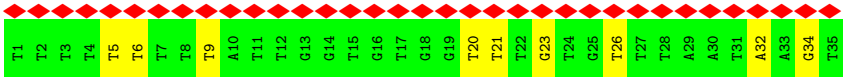
• Molecule 330: STAPLE STRAND

Chain FT:



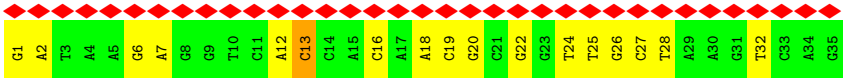
• Molecule 331: STAPLE STRAND

Chain FU:



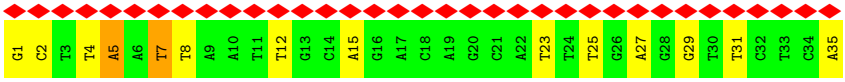
• Molecule 332: STAPLE STRAND

Chain FV:



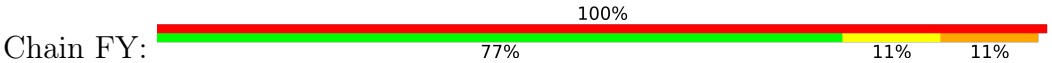
• Molecule 333: STAPLE STRAND

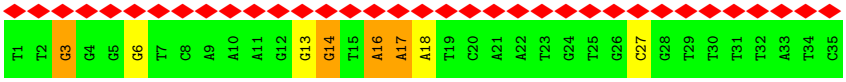
Chain FW:



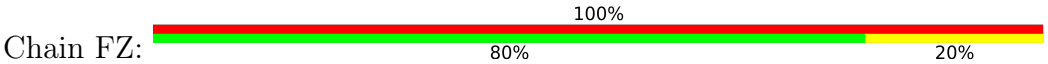
• Molecule 334: STAPLE STRAND

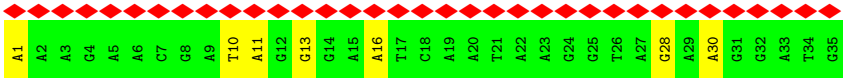
• Molecule 335: STAPLE STRAND



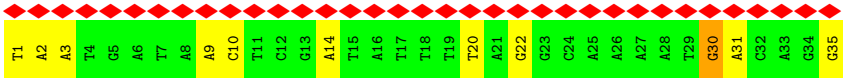


• Molecule 336: STAPLE STRAND



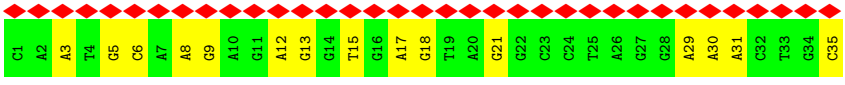


• Molecule 337: STAPLE STRAND

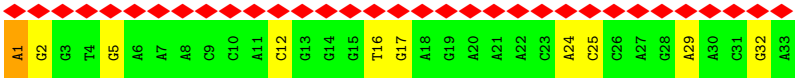


• Molecule 338: STAPLE STRAND

• Molecule 339: STAPLE STRAND

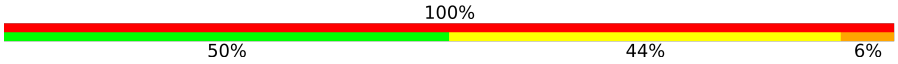


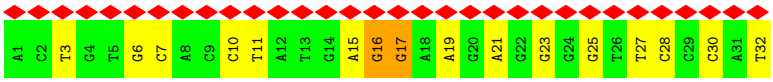
• Molecule 340: STAPLE STRAND



• Molecule 341: STAPLE STRAND

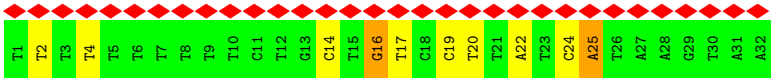
Chain Fe:





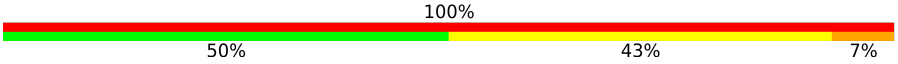
• Molecule 342: STAPLE STRAND

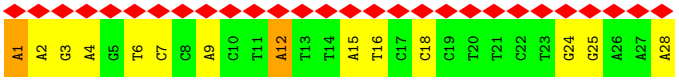
Chain Ff:



• Molecule 343: STAPLE STRAND

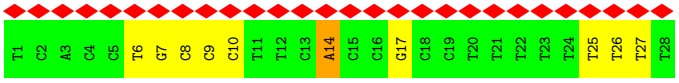
Chain Fg:





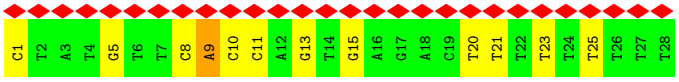
• Molecule 344: STAPLE STRAND

Chain Fh:



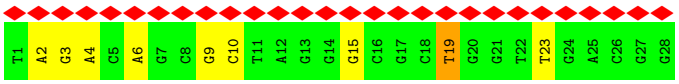
• Molecule 345: STAPLE STRAND

Chain Fi:



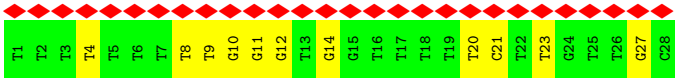
• Molecule 346: STAPLE STRAND

Chain Fj:



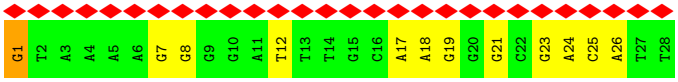
• Molecule 347: STAPLE STRAND

Chain Fk:



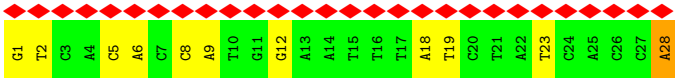
• Molecule 348: STAPLE STRAND

Chain Fl:



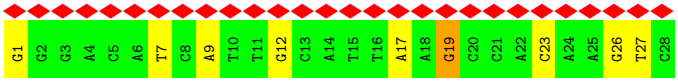
• Molecule 349: STAPLE STRAND

Chain Fm:



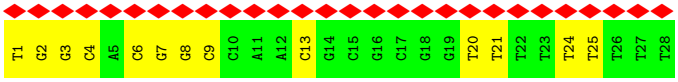
• Molecule 350: STAPLE STRAND

Chain Fn:



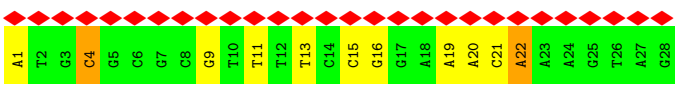
• Molecule 351: STAPLE STRAND

Chain Fo:



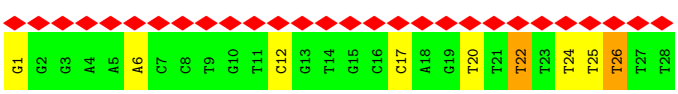
• Molecule 352: STAPLE STRAND

Chain Fp:



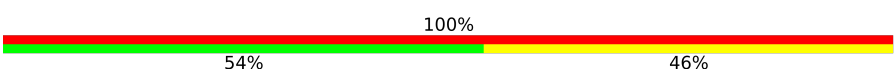
• Molecule 353: STAPLE STRAND

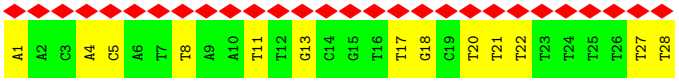
Chain Fq:



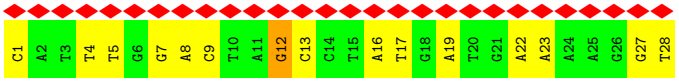
• Molecule 354: STAPLE STRAND

Chain Fr:

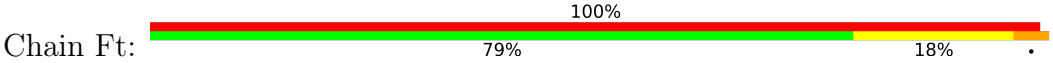


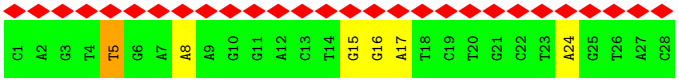


• Molecule 355: STAPLE STRAND

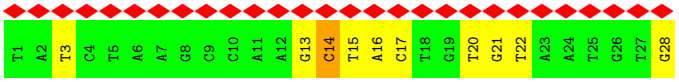


• Molecule 356: STAPLE STRAND

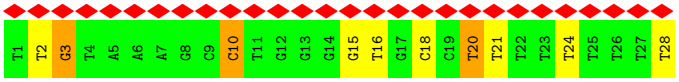




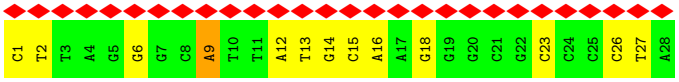
• Molecule 357: STAPLE STRAND



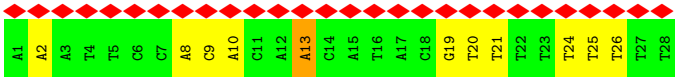
• Molecule 358: STAPLE STRAND



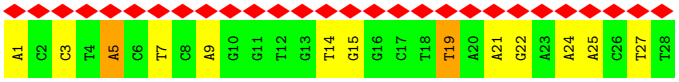
• Molecule 359: STAPLE STRAND



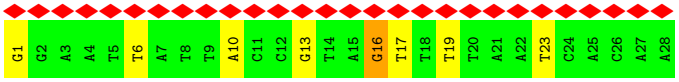
• Molecule 360: STAPLE STRAND



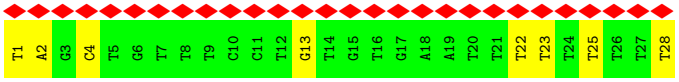
• Molecule 361: STAPLE STRAND



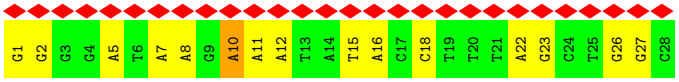
• Molecule 362: STAPLE STRAND



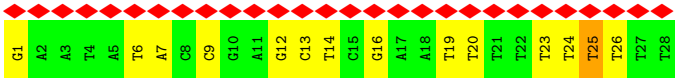
• Molecule 363: STAPLE STRAND



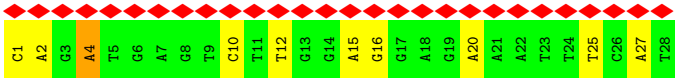
• Molecule 364: STAPLE STRAND



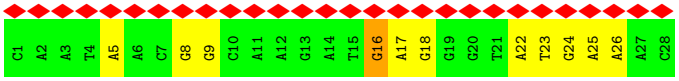
• Molecule 365: STAPLE STRAND



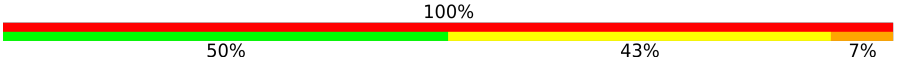
• Molecule 366: STAPLE STRAND

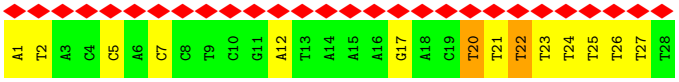


• Molecule 367: STAPLE STRAND



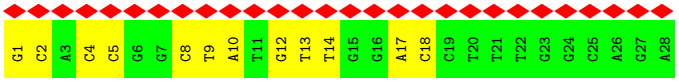
• Molecule 368: STAPLE STRAND





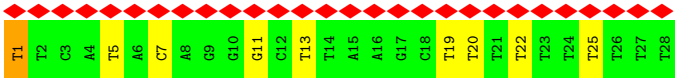
• Molecule 369: STAPLE STRAND

Chain F6:



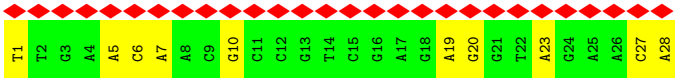
• Molecule 370: STAPLE STRAND

Chain F7:



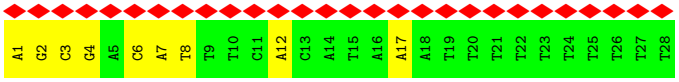
• Molecule 371: STAPLE STRAND

Chain F8:



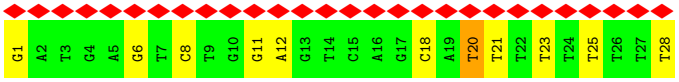
• Molecule 372: STAPLE STRAND

Chain F9:



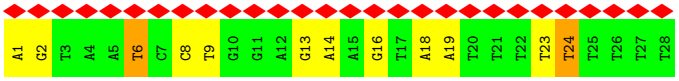
• Molecule 373: STAPLE STRAND

Chain GA:



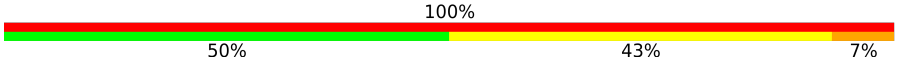
• Molecule 374: STAPLE STRAND

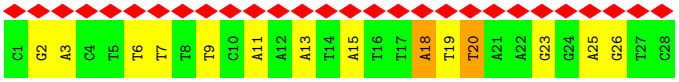
Chain GB:



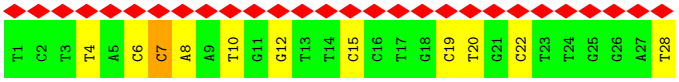
• Molecule 375: STAPLE STRAND

Chain GC:

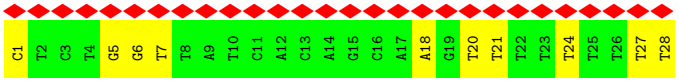




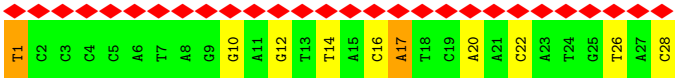
• Molecule 376: STAPLE STRAND



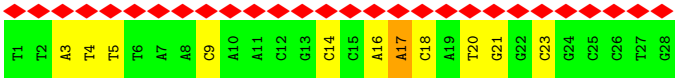
• Molecule 377: STAPLE STRAND



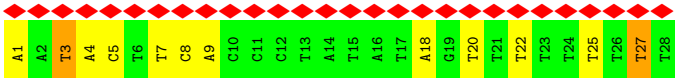
• Molecule 378: STAPLE STRAND



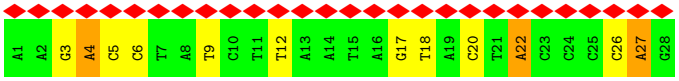
• Molecule 379: STAPLE STRAND



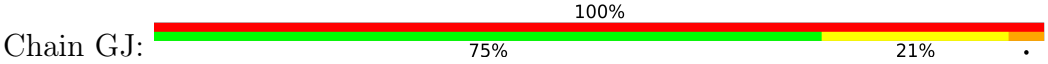
• Molecule 380: STAPLE STRAND

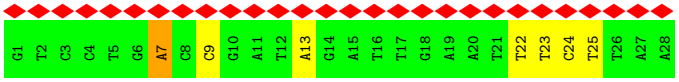


• Molecule 381: STAPLE STRAND



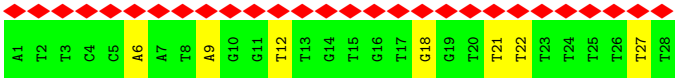
• Molecule 382: STAPLE STRAND





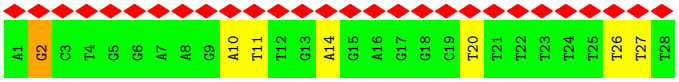
• Molecule 383: STAPLE STRAND

Chain GK:



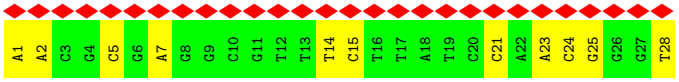
• Molecule 384: STAPLE STRAND

Chain GL:



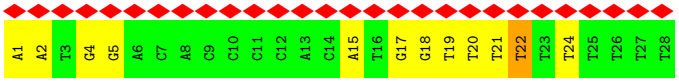
• Molecule 385: STAPLE STRAND

Chain GM:



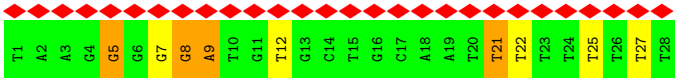
• Molecule 386: STAPLE STRAND

Chain GN:



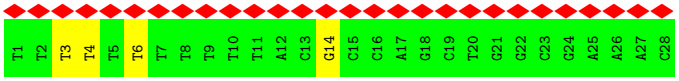
• Molecule 387: STAPLE STRAND

Chain GO:



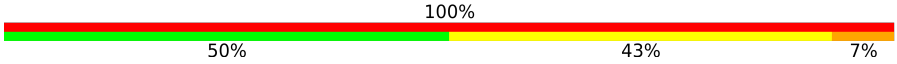
• Molecule 388: STAPLE STRAND

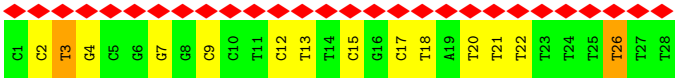
Chain GP:



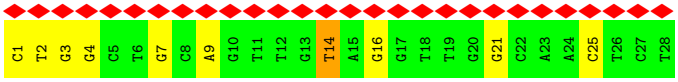
• Molecule 389: STAPLE STRAND

Chain GQ:



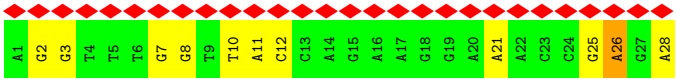


• Molecule 390: STAPLE STRAND

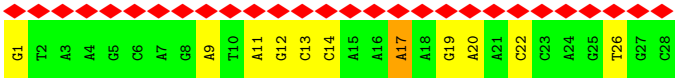


• Molecule 391: STAPLE STRAND

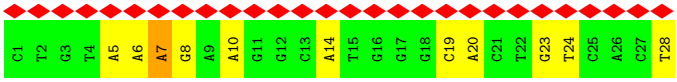
• Molecule 392: STAPLE STRAND



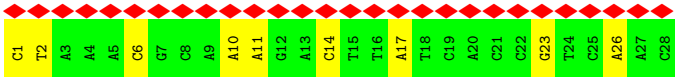
• Molecule 393: STAPLE STRAND



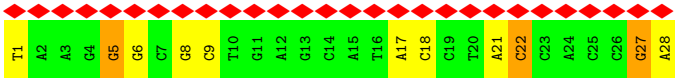
• Molecule 394: STAPLE STRAND



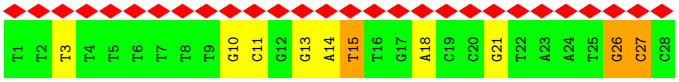
• Molecule 395: STAPLE STRAND



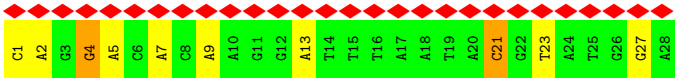
• Molecule 396: STAPLE STRAND



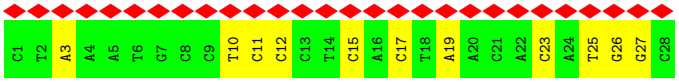
• Molecule 397: STAPLE STRAND



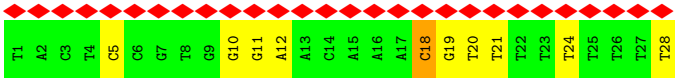
• Molecule 398: STAPLE STRAND



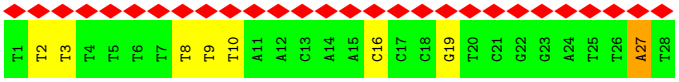
• Molecule 399: STAPLE STRAND



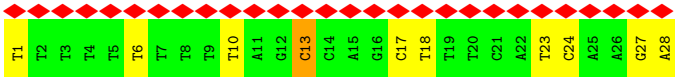
• Molecule 400: STAPLE STRAND



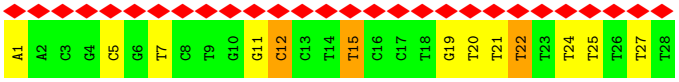
• Molecule 401: STAPLE STRAND



• Molecule 402: STAPLE STRAND

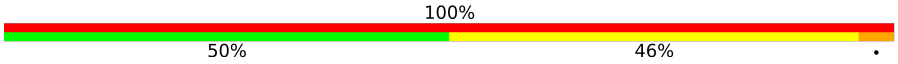


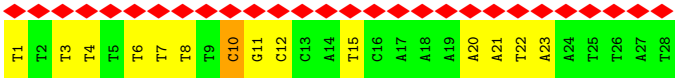
• Molecule 403: STAPLE STRAND



• Molecule 404: STAPLE STRAND

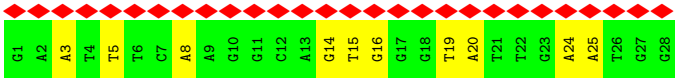
Chain Gf:





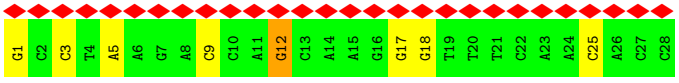
• Molecule 405: STAPLE STRAND

Chain Gg:



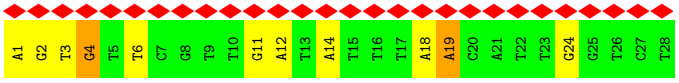
• Molecule 406: STAPLE STRAND

Chain Gh:



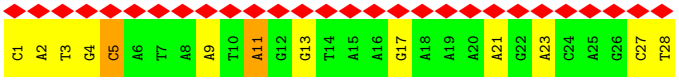
• Molecule 407: STAPLE STRAND

Chain Gi:



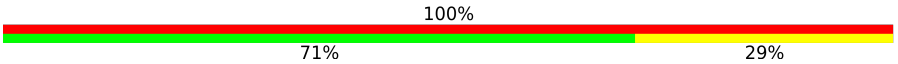
• Molecule 408: STAPLE STRAND

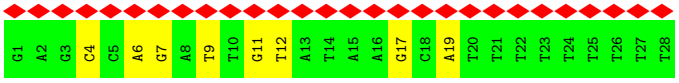
Chain Gj:



• Molecule 409: STAPLE STRAND

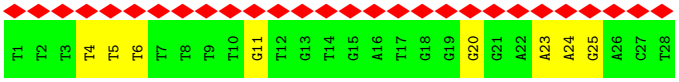
Chain Gk:



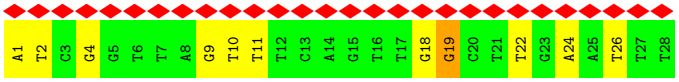


• Molecule 410: STAPLE STRAND

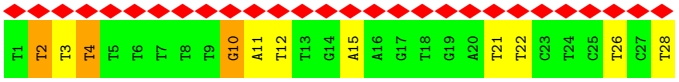
Chain Gl:



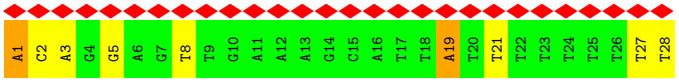
• Molecule 411: STAPLE STRAND



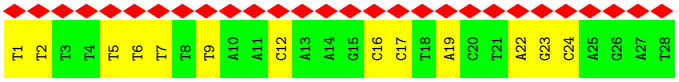
• Molecule 412: STAPLE STRAND



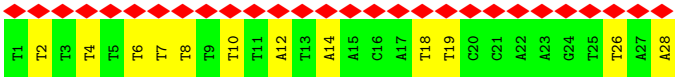
• Molecule 413: STAPLE STRAND



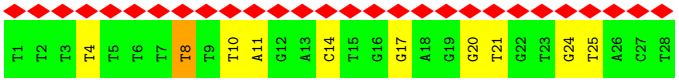
• Molecule 414: STAPLE STRAND



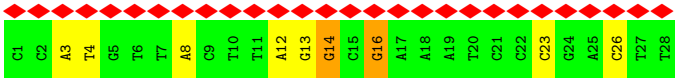
• Molecule 415: STAPLE STRAND



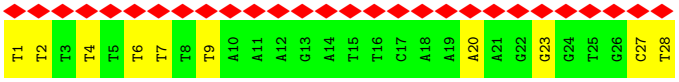
• Molecule 416: STAPLE STRAND



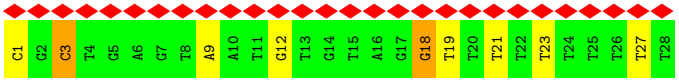
• Molecule 417: STAPLE STRAND



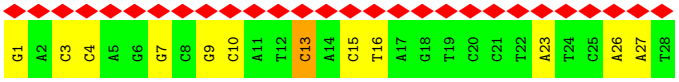
• Molecule 418: STAPLE STRAND



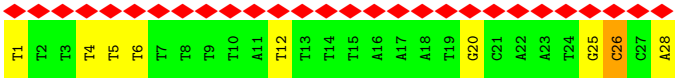
• Molecule 419: STAPLE STRAND



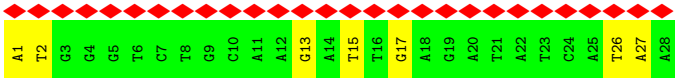
• Molecule 420: STAPLE STRAND



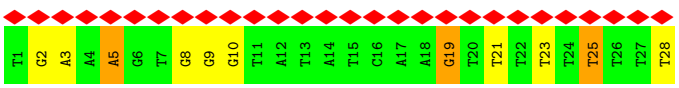
• Molecule 421: STAPLE STRAND



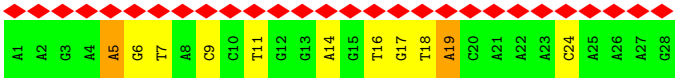
• Molecule 422: STAPLE STRAND



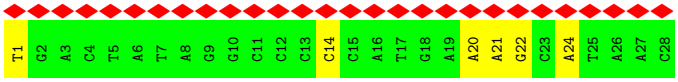
• Molecule 423: STAPLE STRAND



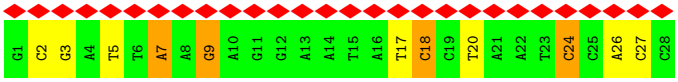
• Molecule 424: STAPLE STRAND



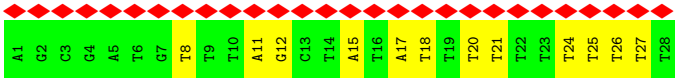
• Molecule 425: STAPLE STRAND



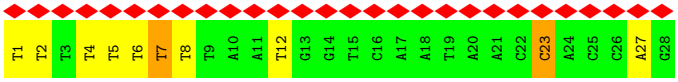
• Molecule 426: STAPLE STRAND



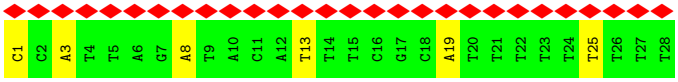
• Molecule 427: STAPLE STRAND



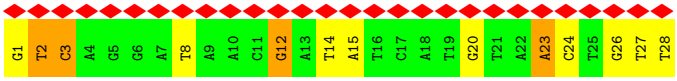
• Molecule 428: STAPLE STRAND



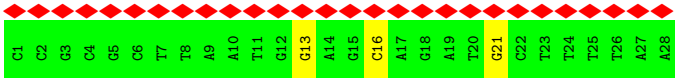
• Molecule 429: STAPLE STRAND



• Molecule 430: STAPLE STRAND

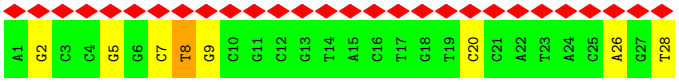


• Molecule 431: STAPLE STRAND



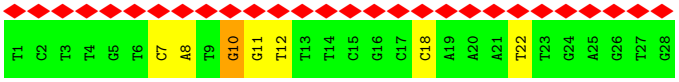
• Molecule 432: STAPLE STRAND

Chain G7:



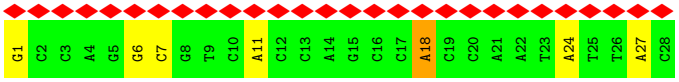
• Molecule 433: STAPLE STRAND

Chain G8:



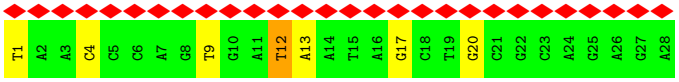
• Molecule 434: STAPLE STRAND

Chain G9:



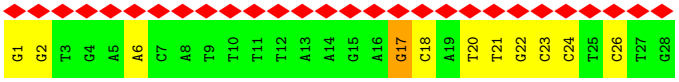
• Molecule 435: STAPLE STRAND

Chain HA:



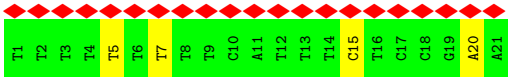
• Molecule 436: STAPLE STRAND

Chain HB:



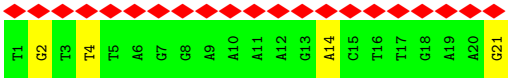
• Molecule 437: STAPLE STRAND

Chain HC:



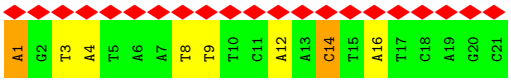
• Molecule 438: STAPLE STRAND

Chain HD:



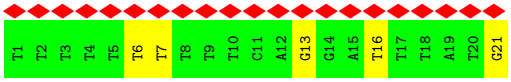
• Molecule 439: STAPLE STRAND

Chain HE:



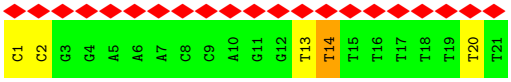
• Molecule 440: STAPLE STRAND

Chain HF:



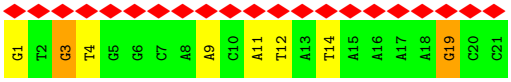
• Molecule 441: STAPLE STRAND

Chain HG:



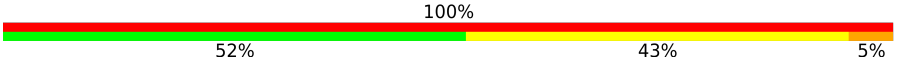
• Molecule 442: STAPLE STRAND

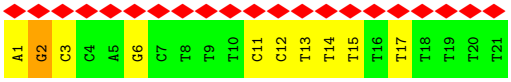
Chain HH:



• Molecule 443: STAPLE STRAND

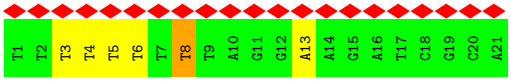
Chain HI:





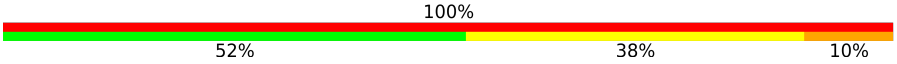
• Molecule 444: STAPLE STRAND

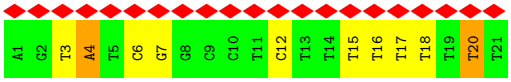
Chain HJ:



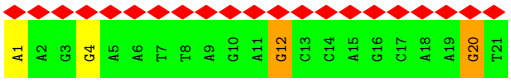
• Molecule 445: STAPLE STRAND

Chain HK:

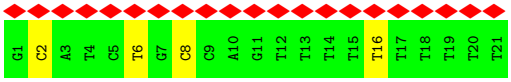




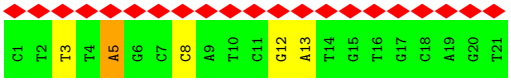
• Molecule 446: STAPLE STRAND



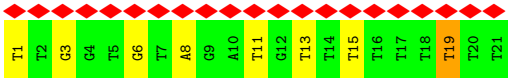
• Molecule 447: STAPLE STRAND



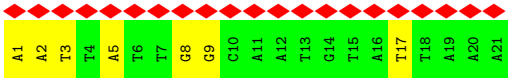
• Molecule 448: STAPLE STRAND



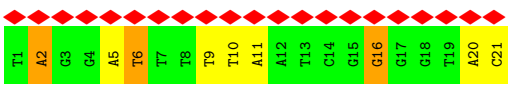
• Molecule 449: STAPLE STRAND



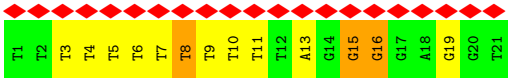
• Molecule 450: STAPLE STRAND



• Molecule 451: STAPLE STRAND

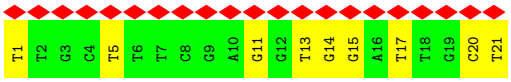


• Molecule 452: STAPLE STRAND



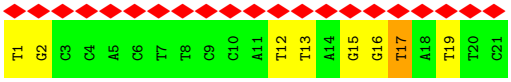
• Molecule 453: STAPLE STRAND

Chain HS:



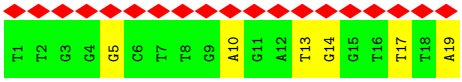
• Molecule 454: STAPLE STRAND

Chain HT:



• Molecule 455: STAPLE STRAND

Chain HU:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	122493	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)	368.8	Depositor
Maximum defocus (nm)	3605.6	Depositor
Magnification	47000	Depositor
Image detector	FEI FALCON III (4k x 4k)	Depositor
Maximum map value	0.494	Depositor
Minimum map value	-0.185	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.026	Depositor
Recommended contour level	0.08	Depositor
Map size (Å)	834.0, 834.0, 834.0	wwPDB
Map dimensions	300, 300, 300	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	2.78, 2.78, 2.78	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	1.21	12/173240 (0.0%)	1.41	2530/267277 (0.9%)
2	AB	1.21	13/173242 (0.0%)	1.41	2553/267423 (1.0%)
3	AC	1.22	0/1136	1.20	9/1755 (0.5%)
4	AD	1.24	1/1163 (0.1%)	1.46	23/1798 (1.3%)
5	AE	1.18	0/1128	1.41	21/1740 (1.2%)
6	AF	1.18	1/1125 (0.1%)	1.46	20/1735 (1.2%)
7	AG	1.20	0/1124	1.37	17/1734 (1.0%)
8	AH	1.20	0/1123	1.40	12/1731 (0.7%)
9	AI	1.22	0/1129	1.54	22/1743 (1.3%)
10	AJ	1.20	1/1148 (0.1%)	1.44	16/1775 (0.9%)
11	AK	1.25	1/1137 (0.1%)	1.31	11/1755 (0.6%)
12	AL	1.23	1/1132 (0.1%)	1.42	18/1747 (1.0%)
13	AM	1.18	0/1133	1.39	14/1750 (0.8%)
14	AN	1.24	1/1119 (0.1%)	1.42	16/1724 (0.9%)
15	AO	1.20	0/1148	1.37	12/1775 (0.7%)
16	AP	1.21	1/1117 (0.1%)	1.32	11/1721 (0.6%)
17	AQ	1.21	0/1142	1.43	19/1764 (1.1%)
18	AR	1.23	1/1121 (0.1%)	1.35	12/1728 (0.7%)
19	AS	1.20	1/1123 (0.1%)	1.35	9/1732 (0.5%)
20	AT	1.23	2/1116 (0.2%)	1.33	11/1718 (0.6%)
21	AU	1.21	1/1124 (0.1%)	1.45	20/1734 (1.2%)
22	AV	1.18	1/1135 (0.1%)	1.35	13/1752 (0.7%)
23	AW	1.21	1/1137 (0.1%)	1.51	26/1756 (1.5%)
24	AX	1.25	2/1133 (0.2%)	1.35	13/1748 (0.7%)
25	AY	1.27	0/1121	1.49	21/1728 (1.2%)
26	AZ	1.21	1/1121 (0.1%)	1.43	20/1727 (1.2%)
27	Aa	1.17	0/1126	1.30	9/1737 (0.5%)
28	Ab	1.24	5/1122 (0.4%)	1.45	20/1729 (1.2%)
29	Ac	1.22	0/1148	1.43	15/1774 (0.8%)
30	Ad	1.22	0/1133	1.43	18/1749 (1.0%)
31	Ae	1.20	0/1133	1.32	14/1749 (0.8%)
32	Af	1.20	1/1141 (0.1%)	1.34	16/1762 (0.9%)
33	Ag	1.19	1/1121 (0.1%)	1.24	8/1729 (0.5%)
34	Ah	1.23	0/1150	1.34	14/1778 (0.8%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
35	Ai	1.21	0/1141	1.45	21/1762 (1.2%)
36	Aj	1.21	1/1139 (0.1%)	1.44	22/1760 (1.2%)
37	Ak	1.19	1/1105 (0.1%)	1.34	11/1701 (0.6%)
38	Al	1.16	1/1128 (0.1%)	1.27	11/1741 (0.6%)
39	Am	1.17	0/1129	1.23	9/1741 (0.5%)
40	An	1.19	1/1142 (0.1%)	1.31	10/1763 (0.6%)
41	Ao	1.19	1/1134 (0.1%)	1.43	15/1748 (0.9%)
42	Ap	1.17	0/1133	1.25	11/1748 (0.6%)
43	Aq	1.20	0/1141	1.30	8/1761 (0.5%)
44	Ar	1.22	1/1130 (0.1%)	1.42	16/1744 (0.9%)
45	As	1.20	0/1143	1.33	13/1765 (0.7%)
46	At	1.19	1/1127 (0.1%)	1.42	17/1738 (1.0%)
47	Au	1.20	0/1141	1.29	9/1760 (0.5%)
48	Av	1.20	0/1123	1.47	15/1731 (0.9%)
49	Aw	1.22	0/1124	1.49	21/1732 (1.2%)
50	Ax	1.20	1/1114 (0.1%)	1.42	16/1717 (0.9%)
51	Ay	1.18	0/1125	1.31	11/1734 (0.6%)
52	Az	1.20	1/1134 (0.1%)	1.43	19/1749 (1.1%)
53	A0	1.20	1/1138 (0.1%)	1.35	15/1755 (0.9%)
54	A1	1.18	1/1132 (0.1%)	1.37	17/1745 (1.0%)
55	A2	1.17	0/1134	1.38	16/1750 (0.9%)
56	A3	1.21	0/1147	1.26	5/1773 (0.3%)
57	A4	1.24	2/1142 (0.2%)	1.44	17/1765 (1.0%)
58	A5	1.21	1/1135 (0.1%)	1.45	22/1752 (1.3%)
59	A6	1.19	1/1120 (0.1%)	1.32	13/1726 (0.8%)
60	A7	1.20	1/1134 (0.1%)	1.28	10/1750 (0.6%)
61	A8	1.22	0/1155	1.39	13/1785 (0.7%)
62	A9	1.21	1/1128 (0.1%)	1.36	13/1740 (0.7%)
63	BA	1.23	1/1137 (0.1%)	1.42	15/1756 (0.9%)
64	BB	1.21	1/1123 (0.1%)	1.40	13/1731 (0.8%)
65	BC	1.27	1/1161 (0.1%)	1.40	17/1796 (0.9%)
66	BD	1.24	2/1143 (0.2%)	1.37	13/1767 (0.7%)
67	BE	1.17	0/1127	1.29	10/1739 (0.6%)
68	BF	1.21	0/1113	1.43	13/1711 (0.8%)
69	BG	1.28	0/1118	1.41	13/1723 (0.8%)
70	BH	1.23	0/1116	1.47	18/1719 (1.0%)
71	BI	1.23	0/1115	1.36	10/1717 (0.6%)
72	BJ	1.18	0/1100	1.33	10/1695 (0.6%)
73	BK	1.21	1/1114 (0.1%)	1.40	17/1717 (1.0%)
74	BL	1.23	0/1132	1.51	22/1748 (1.3%)
75	BM	1.24	0/1125	1.39	16/1737 (0.9%)
76	BN	1.23	0/1142	1.33	11/1762 (0.6%)
77	BO	1.21	0/1125	1.36	13/1734 (0.7%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
78	BP	1.22	0/1133	1.29	8/1746 (0.5%)
79	BQ	1.24	0/1118	1.49	16/1723 (0.9%)
80	BR	1.27	0/1142	1.42	18/1764 (1.0%)
81	BS	1.20	0/1117	1.49	20/1722 (1.2%)
82	BT	1.17	1/1113 (0.1%)	1.29	10/1715 (0.6%)
83	BU	1.23	0/1131	1.30	6/1743 (0.3%)
84	BV	1.21	0/1114	1.40	15/1715 (0.9%)
85	BW	1.22	0/1135	1.37	16/1752 (0.9%)
86	BX	1.20	0/1122	1.37	13/1728 (0.8%)
87	BY	1.21	0/1125	1.23	5/1735 (0.3%)
88	BZ	1.22	0/1125	1.39	15/1735 (0.9%)
89	Ba	1.25	0/1140	1.38	13/1758 (0.7%)
90	Bb	1.18	0/1103	1.32	12/1701 (0.7%)
91	Bc	1.25	0/1134	1.35	13/1751 (0.7%)
92	Bd	1.20	1/1115 (0.1%)	1.38	12/1721 (0.7%)
93	Be	1.27	0/1132	1.44	21/1746 (1.2%)
94	Bf	1.25	0/1128	1.31	9/1740 (0.5%)
95	Bg	1.24	0/974	1.37	13/1503 (0.9%)
96	Bh	1.23	0/971	1.40	20/1498 (1.3%)
97	Bi	1.23	2/963 (0.2%)	1.36	13/1486 (0.9%)
98	Bj	1.25	0/985	1.34	9/1519 (0.6%)
99	Bk	1.24	0/991	1.26	10/1533 (0.7%)
100	Bl	1.20	2/960 (0.2%)	1.37	12/1481 (0.8%)
101	Bm	1.23	0/965	1.41	14/1486 (0.9%)
102	Bn	1.29	0/981	1.42	17/1516 (1.1%)
103	Bo	1.23	0/937	1.40	10/1442 (0.7%)
104	Bp	1.22	1/958 (0.1%)	1.33	13/1479 (0.9%)
105	Bq	1.25	0/965	1.41	11/1489 (0.7%)
106	Br	1.23	2/970 (0.2%)	1.53	20/1498 (1.3%)
107	Bs	1.17	0/947	1.34	11/1459 (0.8%)
108	Bt	1.24	1/958 (0.1%)	1.34	9/1475 (0.6%)
109	Bu	1.25	0/961	1.39	7/1479 (0.5%)
110	Bv	1.22	0/974	1.30	7/1500 (0.5%)
111	Bw	1.17	0/954	1.26	9/1470 (0.6%)
112	Bx	1.26	0/970	1.42	13/1497 (0.9%)
113	By	1.19	0/970	1.37	16/1497 (1.1%)
114	Bz	1.27	0/965	1.42	11/1488 (0.7%)
115	B0	1.19	0/945	1.39	16/1455 (1.1%)
116	B1	1.20	0/973	1.25	8/1503 (0.5%)
117	B2	1.26	0/986	1.40	16/1523 (1.1%)
118	B3	1.22	0/958	1.48	14/1477 (0.9%)
119	B4	1.30	1/971 (0.1%)	1.49	14/1498 (0.9%)
120	B5	1.22	0/969	1.31	8/1493 (0.5%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
121	B6	1.22	0/953	1.49	22/1470 (1.5%)
122	B7	1.19	0/956	1.37	9/1472 (0.6%)
123	B8	1.21	2/946 (0.2%)	1.47	15/1461 (1.0%)
124	B9	1.22	0/972	1.46	13/1499 (0.9%)
125	CA	1.19	0/951	1.36	11/1469 (0.7%)
126	CB	1.17	0/955	1.26	8/1473 (0.5%)
127	CC	1.26	0/980	1.34	7/1513 (0.5%)
128	CD	1.21	0/955	1.45	15/1470 (1.0%)
129	CE	1.18	0/966	1.34	11/1491 (0.7%)
130	CF	1.18	0/940	1.32	12/1448 (0.8%)
131	CG	1.22	0/949	1.30	7/1461 (0.5%)
132	CH	1.24	0/969	1.38	13/1497 (0.9%)
133	CI	1.23	0/964	1.45	17/1487 (1.1%)
134	CJ	1.21	1/957 (0.1%)	1.47	17/1479 (1.1%)
135	CK	1.20	2/935 (0.2%)	1.41	9/1442 (0.6%)
136	CL	1.20	0/952	1.40	13/1466 (0.9%)
137	CM	1.21	0/963	1.29	8/1484 (0.5%)
138	CN	1.19	0/950	1.37	16/1467 (1.1%)
139	CO	1.20	0/957	1.41	9/1473 (0.6%)
140	CP	1.25	0/959	1.40	8/1479 (0.5%)
141	CQ	1.23	0/958	1.59	30/1476 (2.0%)
142	CR	1.18	0/953	1.40	21/1470 (1.4%)
143	CS	1.21	0/977	1.28	9/1507 (0.6%)
144	CT	1.24	0/960	1.37	12/1480 (0.8%)
145	CU	1.22	0/959	1.42	12/1479 (0.8%)
146	CV	1.20	0/953	1.40	13/1467 (0.9%)
147	CW	1.21	1/966 (0.1%)	1.45	16/1491 (1.1%)
148	CX	1.20	1/969 (0.1%)	1.39	11/1492 (0.7%)
149	CY	1.16	0/950	1.28	5/1464 (0.3%)
150	CZ	1.21	1/953 (0.1%)	1.33	14/1468 (1.0%)
151	Ca	1.21	0/961	1.35	12/1481 (0.8%)
152	Cb	1.18	0/953	1.28	6/1466 (0.4%)
153	Cc	1.17	0/944	1.29	7/1453 (0.5%)
154	Cd	1.25	0/964	1.65	31/1488 (2.1%)
155	Ce	1.22	0/953	1.42	13/1467 (0.9%)
156	Cf	1.22	0/957	1.35	14/1475 (0.9%)
157	Cg	1.20	0/954	1.35	13/1470 (0.9%)
158	Ch	1.22	0/968	1.31	7/1493 (0.5%)
159	Ci	1.22	0/955	1.40	11/1470 (0.7%)
160	Cj	1.19	0/956	1.33	11/1472 (0.7%)
161	Ck	1.27	0/958	1.36	11/1477 (0.7%)
162	Cl	1.28	0/969	1.53	14/1495 (0.9%)
163	Cm	1.21	0/970	1.31	9/1496 (0.6%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
164	Cn	1.20	0/938	1.50	15/1443 (1.0%)
165	Co	1.24	1/978 (0.1%)	1.38	16/1508 (1.1%)
166	Cp	1.24	0/956	1.44	8/1473 (0.5%)
167	Cq	1.22	0/978	1.43	16/1510 (1.1%)
168	Cr	1.21	0/933	1.29	9/1438 (0.6%)
169	Cs	1.28	0/975	1.45	15/1506 (1.0%)
170	Ct	1.30	0/987	1.43	15/1525 (1.0%)
171	Cu	1.26	0/971	1.33	10/1499 (0.7%)
172	Cv	1.20	1/957 (0.1%)	1.28	9/1475 (0.6%)
173	Cw	1.23	0/965	1.42	15/1489 (1.0%)
174	Cx	1.21	0/957	1.40	14/1477 (0.9%)
175	Cy	1.24	0/969	1.38	7/1492 (0.5%)
176	Cz	1.16	0/956	1.28	8/1473 (0.5%)
177	C0	1.24	0/960	1.42	12/1479 (0.8%)
178	C1	1.24	0/975	1.43	15/1504 (1.0%)
179	C2	1.23	0/959	1.39	9/1479 (0.6%)
180	C3	1.22	0/968	1.34	11/1494 (0.7%)
181	C4	1.20	0/957	1.36	11/1473 (0.7%)
182	C5	1.26	0/967	1.36	9/1490 (0.6%)
183	C6	1.18	0/965	1.27	8/1489 (0.5%)
184	C7	1.21	0/959	1.39	17/1478 (1.2%)
185	C8	1.29	0/964	1.40	12/1486 (0.8%)
186	C9	1.23	0/974	1.40	12/1504 (0.8%)
187	DA	1.25	0/973	1.36	10/1500 (0.7%)
188	DB	1.19	0/964	1.45	16/1486 (1.1%)
189	DC	1.20	0/937	1.36	10/1443 (0.7%)
190	DD	1.18	0/940	1.34	10/1444 (0.7%)
191	DE	1.20	0/945	1.34	8/1454 (0.6%)
192	DF	1.27	0/997	1.41	15/1542 (1.0%)
193	DG	1.18	0/946	1.34	12/1456 (0.8%)
194	DH	1.21	0/972	1.28	6/1500 (0.4%)
195	DI	1.22	0/969	1.37	8/1495 (0.5%)
196	DJ	1.21	0/963	1.31	12/1483 (0.8%)
197	DK	1.24	0/971	1.52	20/1500 (1.3%)
198	DL	1.20	0/961	1.36	9/1481 (0.6%)
199	DM	1.20	0/960	1.27	6/1480 (0.4%)
200	DN	1.20	0/948	1.60	28/1458 (1.9%)
201	DO	1.19	0/962	1.29	8/1480 (0.5%)
202	DP	1.20	0/963	1.33	9/1484 (0.6%)
203	DQ	1.24	0/959	1.39	13/1478 (0.9%)
204	DR	1.22	0/970	1.44	16/1498 (1.1%)
205	DS	1.22	0/981	1.31	10/1516 (0.7%)
206	DT	1.29	0/942	1.63	24/1447 (1.7%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
207	DU	1.15	0/954	1.36	15/1470 (1.0%)
208	DV	1.25	0/953	1.45	15/1467 (1.0%)
209	DW	1.22	0/971	1.30	10/1498 (0.7%)
210	DX	1.21	0/958	1.61	25/1477 (1.7%)
211	DY	1.22	0/959	1.31	10/1478 (0.7%)
212	DZ	1.17	0/947	1.31	11/1459 (0.8%)
213	Da	1.19	0/960	1.27	5/1478 (0.3%)
214	Db	1.16	0/945	1.31	11/1456 (0.8%)
215	Dc	1.23	0/965	1.40	15/1488 (1.0%)
216	Dd	1.22	0/964	1.38	11/1485 (0.7%)
217	De	1.21	0/948	1.36	7/1459 (0.5%)
218	Df	1.25	0/960	1.42	15/1479 (1.0%)
219	Dg	1.15	0/957	1.31	8/1472 (0.5%)
220	Dh	1.21	0/952	1.29	8/1469 (0.5%)
221	Di	1.21	0/946	1.36	10/1455 (0.7%)
222	Dj	1.19	0/977	1.24	5/1509 (0.3%)
223	Dk	1.21	0/962	1.30	9/1483 (0.6%)
224	Dl	1.18	0/950	1.40	12/1460 (0.8%)
225	Dm	1.21	0/959	1.27	5/1475 (0.3%)
226	Dn	1.18	0/980	1.20	6/1511 (0.4%)
227	Do	1.19	0/971	1.41	14/1497 (0.9%)
228	Dp	1.21	0/971	1.33	8/1496 (0.5%)
229	Dq	1.20	1/961 (0.1%)	1.38	16/1481 (1.1%)
230	Dr	1.19	0/958	1.37	9/1474 (0.6%)
231	Ds	1.24	0/969	1.42	12/1496 (0.8%)
232	Dt	1.21	0/967	1.38	10/1491 (0.7%)
233	Du	1.18	0/955	1.34	13/1473 (0.9%)
234	Dv	1.24	0/971	1.34	8/1496 (0.5%)
235	Dw	1.18	0/963	1.28	9/1485 (0.6%)
236	Dx	1.21	0/967	1.36	11/1490 (0.7%)
237	Dy	1.21	0/965	1.25	4/1487 (0.3%)
238	Dz	1.21	0/946	1.35	6/1456 (0.4%)
239	D0	1.27	0/979	1.35	8/1512 (0.5%)
240	D1	1.19	0/971	1.28	7/1499 (0.5%)
241	D2	1.22	0/960	1.43	12/1477 (0.8%)
242	D3	1.27	0/983	1.43	21/1518 (1.4%)
243	D4	1.23	0/964	1.39	13/1486 (0.9%)
244	D5	1.24	0/982	1.45	15/1515 (1.0%)
245	D6	1.24	0/872	1.44	13/1344 (1.0%)
246	D7	1.21	1/880 (0.1%)	1.43	14/1355 (1.0%)
247	D8	1.27	0/881	1.47	12/1359 (0.9%)
248	D9	1.20	1/801 (0.1%)	1.35	10/1234 (0.8%)
249	EA	1.18	0/788	1.40	8/1212 (0.7%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
250	EB	1.25	0/807	1.44	11/1244 (0.9%)
251	EC	1.23	0/820	1.44	13/1263 (1.0%)
252	ED	1.26	0/814	1.46	17/1255 (1.4%)
253	EE	1.19	0/795	1.41	12/1225 (1.0%)
254	EF	1.20	0/809	1.29	6/1248 (0.5%)
255	EG	1.19	0/803	1.31	6/1237 (0.5%)
256	EH	1.27	2/785 (0.3%)	1.50	13/1209 (1.1%)
257	EI	1.24	0/803	1.30	8/1237 (0.6%)
258	EJ	1.21	0/807	1.38	12/1246 (1.0%)
259	EK	1.22	0/800	1.32	10/1234 (0.8%)
260	EL	1.25	0/812	1.31	6/1253 (0.5%)
261	EM	1.20	0/804	1.49	14/1240 (1.1%)
262	EN	1.22	0/787	1.42	12/1213 (1.0%)
263	EO	1.29	1/811 (0.1%)	1.55	17/1252 (1.4%)
264	EP	1.24	0/808	1.55	19/1246 (1.5%)
265	EQ	1.18	0/796	1.32	8/1224 (0.7%)
266	ER	1.27	0/795	1.42	12/1224 (1.0%)
267	ES	1.23	0/810	1.42	11/1250 (0.9%)
268	ET	1.26	0/809	1.41	10/1250 (0.8%)
269	EU	1.26	0/794	1.57	20/1224 (1.6%)
270	EV	1.20	0/805	1.36	9/1241 (0.7%)
271	EW	1.19	0/807	1.39	14/1243 (1.1%)
272	EX	1.15	0/781	1.41	8/1200 (0.7%)
273	EY	1.20	0/799	1.26	6/1232 (0.5%)
274	EZ	1.22	0/810	1.30	8/1250 (0.6%)
275	Ea	1.18	0/806	1.30	7/1241 (0.6%)
276	Eb	1.21	0/819	1.30	7/1262 (0.6%)
277	Ec	1.20	0/808	1.25	4/1246 (0.3%)
278	Ed	1.19	0/821	1.22	3/1266 (0.2%)
279	Ee	1.19	0/800	1.28	7/1236 (0.6%)
280	Ef	1.17	0/802	1.32	6/1238 (0.5%)
281	Eg	1.23	0/800	1.33	6/1233 (0.5%)
282	Eh	1.22	0/797	1.25	5/1227 (0.4%)
283	Ei	1.20	0/812	1.30	9/1251 (0.7%)
284	Ej	1.18	0/813	1.25	6/1254 (0.5%)
285	Ek	1.20	0/782	1.43	11/1205 (0.9%)
286	El	1.23	0/797	1.44	16/1227 (1.3%)
287	Em	1.21	0/802	1.39	10/1237 (0.8%)
288	En	1.23	0/802	1.47	14/1238 (1.1%)
289	Eo	1.21	0/808	1.40	9/1246 (0.7%)
290	Ep	1.21	0/806	1.37	12/1243 (1.0%)
291	Eq	1.23	0/794	1.40	10/1223 (0.8%)
292	Er	1.23	0/805	1.43	12/1242 (1.0%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
293	Es	1.20	0/813	1.37	13/1256 (1.0%)
294	Et	1.28	1/808 (0.1%)	1.55	19/1248 (1.5%)
295	Eu	1.21	0/801	1.42	9/1232 (0.7%)
296	Ev	1.22	0/806	1.43	13/1241 (1.0%)
297	Ew	1.23	0/816	1.38	13/1260 (1.0%)
298	Ex	1.17	0/797	1.36	8/1228 (0.7%)
299	Ey	1.18	0/806	1.38	8/1241 (0.6%)
300	Ez	1.26	0/814	1.27	4/1256 (0.3%)
301	E0	1.22	0/801	1.30	5/1233 (0.4%)
302	E1	1.19	0/796	1.33	8/1225 (0.7%)
303	E2	1.27	0/819	1.41	10/1264 (0.8%)
304	E3	1.22	0/801	1.41	12/1235 (1.0%)
305	E4	1.22	0/813	1.28	12/1255 (1.0%)
306	E5	1.25	0/801	1.30	7/1235 (0.6%)
307	E6	1.24	0/817	1.47	19/1262 (1.5%)
308	E7	1.21	0/809	1.24	5/1249 (0.4%)
309	E8	1.30	0/816	1.37	10/1260 (0.8%)
310	E9	1.21	0/799	1.41	7/1230 (0.6%)
311	FA	1.21	0/806	1.24	4/1243 (0.3%)
312	FB	1.22	0/803	1.33	7/1238 (0.6%)
313	FC	1.18	0/805	1.37	11/1241 (0.9%)
314	FD	1.21	0/809	1.27	5/1248 (0.4%)
315	FE	1.16	0/807	1.16	5/1243 (0.4%)
316	FF	1.21	0/797	1.38	9/1228 (0.7%)
317	FG	1.18	0/794	1.30	9/1224 (0.7%)
318	FH	1.20	1/788 (0.1%)	1.40	15/1214 (1.2%)
319	FI	1.20	0/811	1.29	8/1250 (0.6%)
320	FJ	1.22	0/817	1.35	11/1260 (0.9%)
321	FK	1.19	0/793	1.34	10/1222 (0.8%)
322	FL	1.23	0/807	1.38	10/1244 (0.8%)
323	FM	1.22	0/797	1.36	7/1227 (0.6%)
324	FN	1.18	0/786	1.33	8/1212 (0.7%)
325	FO	1.17	0/791	1.32	10/1218 (0.8%)
326	FP	1.21	0/792	1.38	10/1219 (0.8%)
327	FQ	1.21	0/804	1.38	9/1238 (0.7%)
328	FR	1.19	0/788	1.38	10/1216 (0.8%)
329	FS	1.25	0/809	1.46	15/1248 (1.2%)
330	FT	1.17	0/793	1.41	12/1222 (1.0%)
331	FU	1.22	1/800 (0.1%)	1.35	10/1237 (0.8%)
332	FV	1.24	0/810	1.31	7/1249 (0.6%)
333	FW	1.21	0/801	1.33	7/1235 (0.6%)
334	FX	1.24	0/806	1.28	6/1245 (0.5%)
335	FY	1.25	0/810	1.25	6/1251 (0.5%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
336	FZ	1.24	0/831	1.25	2/1284 (0.2%)
337	Fa	1.19	0/811	1.24	3/1251 (0.2%)
338	Fb	1.21	0/797	1.33	10/1228 (0.8%)
339	Fc	1.23	0/820	1.35	13/1266 (1.0%)
340	Fd	1.25	0/773	1.40	9/1192 (0.8%)
341	Fe	1.22	0/739	1.57	19/1140 (1.7%)
342	Ff	1.18	1/716 (0.1%)	1.36	9/1103 (0.8%)
343	Fg	1.22	0/635	1.54	11/977 (1.1%)
344	Fh	1.20	0/611	1.36	7/938 (0.7%)
345	Fi	1.18	0/629	1.40	10/969 (1.0%)
346	Fj	1.24	0/652	1.26	7/1007 (0.7%)
347	Fk	1.20	0/631	1.33	7/975 (0.7%)
348	Fl	1.24	0/657	1.58	13/1015 (1.3%)
349	Fm	1.23	0/631	1.30	6/970 (0.6%)
350	Fn	1.25	0/641	1.40	6/987 (0.6%)
351	Fo	1.22	1/635 (0.2%)	1.42	9/979 (0.9%)
352	Fp	1.26	0/646	1.37	9/996 (0.9%)
353	Fq	1.20	0/636	1.33	9/981 (0.9%)
354	Fr	1.16	2/629 (0.3%)	1.27	6/969 (0.6%)
355	Fs	1.24	0/647	1.42	6/998 (0.6%)
356	Ft	1.21	0/647	1.23	2/998 (0.2%)
357	Fu	1.20	0/641	1.34	8/988 (0.8%)
358	Fv	1.20	0/635	1.35	8/980 (0.8%)
359	Fw	1.28	0/640	1.37	7/986 (0.7%)
360	Fx	1.21	0/627	1.35	8/964 (0.8%)
361	Fy	1.21	0/640	1.52	13/986 (1.3%)
362	Fz	1.22	0/640	1.34	4/986 (0.4%)
363	F0	1.21	0/630	1.35	7/972 (0.7%)
364	F1	1.28	0/650	1.47	10/1003 (1.0%)
365	F2	1.24	2/634 (0.3%)	1.40	9/977 (0.9%)
366	F3	1.21	0/651	1.36	7/1005 (0.7%)
367	F4	1.26	0/656	1.43	11/1012 (1.1%)
368	F5	1.22	0/628	1.36	9/966 (0.9%)
369	F6	1.27	0/642	1.50	15/990 (1.5%)
370	F7	1.21	0/630	1.50	13/971 (1.3%)
371	F8	1.21	0/650	1.38	8/1002 (0.8%)
372	F9	1.12	0/630	1.26	5/970 (0.5%)
373	GA	1.18	0/640	1.25	5/988 (0.5%)
374	GB	1.16	0/641	1.37	12/989 (1.2%)
375	GC	1.23	0/638	1.66	20/983 (2.0%)
376	GD	1.27	1/631 (0.2%)	1.32	8/972 (0.8%)
377	GE	1.16	0/629	1.29	4/969 (0.4%)
378	GF	1.20	0/634	1.50	15/975 (1.5%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
379	GG	1.22	0/635	1.41	10/977 (1.0%)
380	GH	1.16	0/624	1.33	10/960 (1.0%)
381	GI	1.18	0/633	1.41	11/973 (1.1%)
382	GJ	1.17	0/638	1.25	4/983 (0.4%)
383	GK	1.17	0/636	1.38	8/982 (0.8%)
384	GL	1.20	0/646	1.26	5/998 (0.5%)
385	GM	1.23	1/641 (0.2%)	1.41	10/988 (1.0%)
386	GN	1.21	0/630	1.42	9/970 (0.9%)
387	GO	1.19	0/644	1.31	8/995 (0.8%)
388	GP	1.16	0/631	1.19	2/972 (0.2%)
389	GQ	1.24	0/621	1.60	14/956 (1.5%)
390	GR	1.25	0/641	1.44	8/989 (0.8%)
391	GS	1.21	0/636	1.37	7/979 (0.7%)
392	GT	1.26	0/655	1.44	8/1011 (0.8%)
393	GU	1.26	0/651	1.45	6/1003 (0.6%)
394	GV	1.25	0/646	1.46	11/996 (1.1%)
395	GW	1.16	0/634	1.30	6/974 (0.6%)
396	GX	1.25	0/640	1.47	9/985 (0.9%)
397	GY	1.19	0/633	1.36	11/976 (1.1%)
398	GZ	1.26	0/651	1.29	6/1004 (0.6%)
399	Ga	1.23	0/626	1.30	5/961 (0.5%)
400	Gb	1.20	0/634	1.43	8/977 (0.8%)
401	Gc	1.17	1/628 (0.2%)	1.37	8/967 (0.8%)
402	Gd	1.20	0/628	1.41	8/967 (0.8%)
403	Ge	1.23	1/624 (0.2%)	1.42	10/961 (1.0%)
404	Gf	1.12	0/629	1.47	17/968 (1.8%)
405	Gg	1.23	0/656	1.56	15/1014 (1.5%)
406	Gh	1.19	0/639	1.47	10/983 (1.0%)
407	Gi	1.23	0/639	1.40	10/986 (1.0%)
408	Gj	1.28	0/652	1.43	13/1005 (1.3%)
409	Gk	1.18	0/638	1.24	1/984 (0.1%)
410	Gl	1.24	0/645	1.43	9/997 (0.9%)
411	Gm	1.20	0/640	1.40	9/988 (0.9%)
412	Gn	1.19	0/629	1.32	8/970 (0.8%)
413	Go	1.17	0/641	1.38	12/989 (1.2%)
414	Gp	1.18	0/632	1.36	12/973 (1.2%)
415	Gq	1.12	0/628	1.29	6/967 (0.6%)
416	Gr	1.23	0/639	1.44	10/987 (1.0%)
417	Gs	1.22	0/633	1.56	12/974 (1.2%)
418	Gt	1.20	1/641 (0.2%)	1.28	7/989 (0.7%)
419	Gu	1.20	0/639	1.40	12/987 (1.2%)
420	Gv	1.21	0/634	1.49	10/975 (1.0%)
421	Gw	1.12	0/629	1.23	5/969 (0.5%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
422	Gx	1.18	0/650	1.31	6/1003 (0.6%)
423	Gy	1.20	0/643	1.35	9/993 (0.9%)
424	Gz	1.22	0/655	1.32	7/1010 (0.7%)
425	G0	1.19	0/639	1.29	3/983 (0.3%)
426	G1	1.27	0/640	1.51	11/985 (1.1%)
427	G2	1.16	1/632 (0.2%)	1.37	13/975 (1.3%)
428	G3	1.20	1/632 (0.2%)	1.40	9/973 (0.9%)
429	G4	1.15	0/625	1.25	3/962 (0.3%)
430	G5	1.22	0/644	1.42	8/993 (0.8%)
431	G6	1.14	0/641	1.20	2/988 (0.2%)
432	G7	1.23	0/637	1.39	10/981 (1.0%)
433	G8	1.23	0/638	1.38	6/984 (0.6%)
434	G9	1.24	0/632	1.49	8/971 (0.8%)
435	HA	1.21	0/647	1.29	4/997 (0.4%)
436	HB	1.24	0/642	1.51	11/990 (1.1%)
437	HC	1.16	0/463	1.20	3/712 (0.4%)
438	HD	1.19	0/491	1.26	6/758 (0.8%)
439	HE	1.23	0/476	1.54	10/732 (1.4%)
440	HF	1.17	1/472 (0.2%)	1.19	4/728 (0.5%)
441	HG	1.19	1/474 (0.2%)	1.36	7/730 (1.0%)
442	HH	1.19	0/485	1.40	6/747 (0.8%)
443	HI	1.22	0/463	1.57	9/712 (1.3%)
444	HJ	1.17	0/478	1.23	3/737 (0.4%)
445	HK	1.30	0/467	1.56	10/719 (1.4%)
446	HL	1.19	0/491	1.38	6/757 (0.8%)
447	HM	1.21	0/467	1.27	3/719 (0.4%)
448	HN	1.25	0/476	1.29	1/733 (0.1%)
449	HO	1.24	0/477	1.52	10/737 (1.4%)
450	HP	1.23	0/484	1.33	6/746 (0.8%)
451	HQ	1.30	0/484	1.46	8/747 (1.1%)
452	HR	1.25	1/480 (0.2%)	1.29	6/742 (0.8%)
453	HS	1.25	0/480	1.40	5/741 (0.7%)
454	HT	1.15	0/469	1.25	2/721 (0.3%)
455	HU	1.15	0/440	1.32	6/680 (0.9%)
All	All	1.21	118/742476 (0.0%)	1.39	10083/1145261 (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	46	1601

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Mol	Chain	#Chirality outliers	#Planarity outliers
2	AB	63	1658
3	AC	16	8
4	AD	16	14
5	AE	16	7
6	AF	16	11
7	AG	16	12
8	AH	17	7
9	AI	17	13
10	AJ	16	6
11	AK	17	9
12	AL	17	9
13	AM	17	10
14	AN	17	8
15	AO	17	6
16	AP	16	19
17	AQ	16	13
18	AR	16	5
19	AS	16	19
20	AT	16	11
21	AU	16	7
22	AV	16	6
23	AW	16	9
24	AX	16	13
25	AY	16	6
26	AZ	16	2
27	Aa	16	14
28	Ab	16	9
29	Ac	16	6
30	Ad	16	14
31	Ae	16	10
32	Af	16	7
33	Ag	16	14
34	Ah	17	15
35	Ai	17	11
36	Aj	17	6
37	Ak	16	10
38	Al	17	8
39	Am	17	4
40	An	17	4
41	Ao	16	9
42	Ap	16	9
43	Aq	16	7

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Mol	Chain	#Chirality outliers	#Planarity outliers
44	Ar	16	12
45	As	16	7
46	At	16	12
47	Au	16	10
48	Av	16	8
49	Aw	16	15
50	Ax	16	7
51	Ay	16	18
52	Az	16	10
53	A0	16	13
54	A1	16	8
55	A2	16	3
56	A3	16	9
57	A4	16	13
58	A5	16	9
59	A6	16	6
60	A7	16	11
61	A8	16	13
62	A9	16	10
63	BA	16	12
64	BB	15	11
65	BC	15	9
66	BD	16	12
67	BE	16	5
68	BF	0	8
69	BG	0	13
70	BH	0	10
71	BI	0	10
72	BJ	8	8
73	BK	8	6
74	BL	0	13
75	BM	0	16
76	BN	0	9
77	BO	0	8
78	BP	0	8
79	BQ	8	10
80	BR	0	8
81	BS	8	7
82	BT	8	5
83	BU	0	9
84	BV	0	9
85	BW	0	8

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Mol	Chain	#Chirality outliers	#Planarity outliers
86	BX	1	8
87	BY	0	13
88	BZ	0	9
89	Ba	0	15
90	Bb	17	7
91	Bc	0	12
92	Bd	17	10
93	Be	0	13
94	Bf	1	14
95	Bg	0	12
96	Bh	0	9
97	Bi	8	5
98	Bj	0	15
99	Bk	0	9
100	Bl	8	9
101	Bm	0	6
102	Bn	0	11
103	Bo	0	11
104	Bp	8	6
105	Bq	0	5
106	Br	8	5
107	Bs	8	9
108	Bt	0	8
109	Bu	0	11
110	Bv	0	8
111	Bw	8	8
112	Bx	0	9
113	By	0	6
114	Bz	0	11
115	B0	8	8
116	B1	0	5
117	B2	0	12
118	B3	0	8
119	B4	0	12
120	B5	0	6
121	B6	16	10
122	B7	1	11
123	B8	16	13
124	B9	0	11
125	CA	16	10
126	CB	0	11
127	CC	0	11

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Mol	Chain	#Chirality outliers	#Planarity outliers
128	CD	0	11
129	CE	0	9
130	CF	16	4
131	CG	0	11
132	CH	0	6
133	CI	0	8
134	CJ	16	10
135	CK	16	10
136	CL	0	11
137	CM	0	10
138	CN	16	6
139	CO	0	7
140	CP	0	5
141	CQ	0	13
142	CR	8	5
143	CS	0	10
144	CT	0	12
145	CU	0	12
146	CV	0	7
147	CW	8	13
148	CX	0	9
149	CY	0	5
150	CZ	0	6
151	Ca	0	7
152	Cb	0	10
153	Cc	0	8
154	Cd	0	12
155	Ce	0	14
156	Cf	0	6
157	Cg	0	13
158	Ch	0	9
159	Ci	0	14
160	Cj	0	9
161	Ck	0	10
162	Cl	0	14
163	Cm	0	12
164	Cn	0	8
165	Co	0	14
166	Cp	0	8
167	Cq	0	15
168	Cr	16	5
169	Cs	0	11

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Mol	Chain	#Chirality outliers	#Planarity outliers
170	Ct	0	10
171	Cu	0	11
172	Cv	0	8
173	Cw	0	3
174	Cx	8	6
175	Cy	0	5
176	Cz	0	10
177	C0	0	8
178	C1	1	11
179	C2	0	5
180	C3	0	7
181	C4	0	6
182	C5	1	8
183	C6	8	11
184	C7	0	8
185	C8	0	12
186	C9	1	11
187	DA	0	7
188	DB	0	15
189	DC	8	7
190	DD	0	7
191	DE	1	8
192	DF	0	12
193	DG	8	10
194	DH	0	6
195	DI	1	11
196	DJ	1	8
197	DK	0	8
198	DL	0	15
199	DM	0	13
200	DN	0	14
201	DO	0	5
202	DP	0	5
203	DQ	0	9
204	DR	0	14
205	DS	0	10
206	DT	0	15
207	DU	0	7
208	DV	0	15
209	DW	0	8
210	DX	0	11
211	DY	0	7

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Mol	Chain	#Chirality outliers	#Planarity outliers
212	DZ	0	4
213	Da	0	15
214	Db	16	4
215	Dc	2	10
216	Dd	0	5
217	De	0	13
218	Df	0	6
219	Dg	1	9
220	Dh	9	7
221	Di	0	17
222	Dj	0	10
223	Dk	0	7
224	Dl	1	13
225	Dm	0	13
226	Dn	0	9
227	Do	0	8
228	Dp	0	9
229	Dq	1	7
230	Dr	0	8
231	Ds	0	9
232	Dt	1	5
233	Du	8	9
234	Dv	0	11
235	Dw	1	7
236	Dx	0	13
237	Dy	0	12
238	Dz	0	11
239	D0	0	8
240	D1	2	10
241	D2	1	4
242	D3	0	7
243	D4	0	9
244	D5	2	15
245	D6	16	6
246	D7	10	5
247	D8	8	13
248	D9	16	11
249	EA	16	10
250	EB	0	6
251	EC	0	5
252	ED	0	9
253	EE	0	4

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Mol	Chain	#Chirality outliers	#Planarity outliers
254	EF	0	6
255	EG	0	7
256	EH	8	9
257	EI	0	5
258	EJ	8	3
259	EK	0	9
260	EL	0	7
261	EM	0	11
262	EN	8	12
263	EO	0	12
264	EP	0	9
265	EQ	0	8
266	ER	0	11
267	ES	0	6
268	ET	0	5
269	EU	0	9
270	EV	0	6
271	EW	0	8
272	EX	0	2
273	EY	0	6
274	EZ	0	11
275	Ea	0	5
276	Eb	0	13
277	Ec	0	5
278	Ed	0	3
279	Ee	8	6
280	Ef	8	8
281	Eg	0	7
282	Eh	0	8
283	Ei	0	8
284	Ej	0	5
285	Ek	8	7
286	El	0	7
287	Em	0	5
288	En	8	8
289	Eo	0	7
290	Ep	0	6
291	Eq	0	6
292	Er	0	7
293	Es	0	5
294	Et	8	11
295	Eu	0	8

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Mol	Chain	#Chirality outliers	#Planarity outliers
296	Ev	0	6
297	Ew	0	6
298	Ex	0	6
299	Ey	0	5
300	Ez	0	5
301	E0	0	10
302	E1	0	9
303	E2	0	7
304	E3	0	3
305	E4	0	11
306	E5	0	7
307	E6	0	9
308	E7	0	6
309	E8	0	5
310	E9	0	3
311	FA	0	8
312	FB	0	8
313	FC	0	6
314	FD	0	11
315	FE	0	9
316	FF	0	9
317	FG	0	7
318	FH	8	9
319	FI	0	3
320	FJ	0	7
321	FK	8	6
322	FL	0	7
323	FM	0	6
324	FN	8	5
325	FO	9	5
326	FP	0	6
327	FQ	0	8
328	FR	8	4
329	FS	0	7
330	FT	8	6
331	FU	9	2
332	FV	0	12
333	FW	1	10
334	FX	0	8
335	FY	2	7
336	FZ	0	5
337	Fa	1	9

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Mol	Chain	#Chirality outliers	#Planarity outliers
338	Fb	0	10
339	Fc	0	6
340	Fd	0	4
341	Fe	0	6
342	Ff	8	5
343	Fg	0	9
344	Fh	8	5
345	Fi	8	7
346	Fj	0	5
347	Fk	8	5
348	Fl	0	6
349	Fm	0	7
350	Fn	0	5
351	Fo	8	4
352	Fp	0	6
353	Fq	8	3
354	Fr	8	7
355	Fs	0	11
356	Ft	0	5
357	Fu	0	5
358	Fv	8	7
359	Fw	0	10
360	Fx	8	5
361	Fy	0	8
362	Fz	0	6
363	F0	8	3
364	F1	0	9
365	F2	8	7
366	F3	0	6
367	F4	0	6
368	F5	8	8
369	F6	0	2
370	F7	8	4
371	F8	0	6
372	F9	8	6
373	GA	8	7
374	GB	8	6
375	GC	0	8
376	GD	0	4
377	GE	8	6
378	GF	0	5
379	GG	0	4

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Mol	Chain	#Chirality outliers	#Planarity outliers
380	GH	8	4
381	GI	0	5
382	GJ	0	5
383	GK	8	3
384	GL	8	4
385	GM	0	4
386	GN	8	6
387	GO	8	7
388	GP	8	2
389	GQ	8	8
390	GR	0	6
391	GS	0	7
392	GT	0	7
393	GU	0	7
394	GV	0	6
395	GW	0	4
396	GX	0	8
397	GY	8	6
398	GZ	0	9
399	Ga	0	6
400	Gb	8	6
401	Gc	8	2
402	Gd	8	5
403	Ge	8	5
404	Gf	8	6
405	Gg	0	4
406	Gh	0	3
407	Gi	0	6
408	Gj	0	6
409	Gk	8	7
410	Gl	8	3
411	Gm	0	5
412	Gn	8	8
413	Go	8	5
414	Gp	8	4
415	Gq	8	6
416	Gr	8	4
417	Gs	0	5
418	Gt	8	5
419	Gu	8	5
420	Gv	0	7
421	Gw	8	5

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Mol	Chain	#Chirality outliers	#Planarity outliers
422	Gx	0	4
423	Gy	8	7
424	Gz	0	9
425	G0	0	4
426	G1	0	7
427	G2	8	2
428	G3	8	6
429	G4	8	3
430	G5	0	11
431	G6	0	2
432	G7	1	2
433	G8	0	5
434	G9	0	4
435	HA	0	6
436	HB	0	5
437	HC	8	1
438	HD	0	1
439	HE	0	3
440	HF	8	1
441	HG	8	2
442	HH	0	5
443	HI	8	6
444	HJ	8	4
445	HK	8	5
446	HL	0	3
447	HM	8	3
448	HN	0	5
449	HO	8	2
450	HP	0	3
451	HQ	0	7
452	HR	8	10
453	HS	0	6
454	HT	0	7
455	HU	0	2
All	All	2137	6843

The worst 5 of 118 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
403	Ge	22	DT	C5'-C4'	6.25	1.58	1.51
4	AD	5	DT	C5'-C4'	5.78	1.57	1.51
2	AB	7505	DA	C4'-C3'	5.77	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
119	B4	15	DG	C5'-C4'	5.75	1.57	1.51
354	Fr	21	DT	C5'-C4'	5.70	1.57	1.51

The worst 5 of 10083 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	5834	DA	P-O3'-C3'	16.77	139.83	119.70
2	AB	3285	DC	P-O3'-C3'	16.23	139.18	119.70
2	AB	190	DA	P-O3'-C3'	16.09	139.01	119.70
2	AB	3443	DT	O4'-C4'-C3'	-15.95	96.43	106.00
1	AA	4011	DC	P-O3'-C3'	15.94	138.83	119.70

5 of 2137 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	AA	115	DC	C3'
1	AA	262	DG	C3'
1	AA	416	DT	C3'
1	AA	570	DT	C3'
1	AA	732	DT	C3'

5 of 6843 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	10	DT	Sidechain
1	AA	11	DA	Sidechain
1	AA	14	DG	Sidechain
1	AA	26	DA	Sidechain
1	AA	9	DG	Sidechain

5.2 Too-close contacts (i)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

There are no protein molecules in this entry.

5.3.2 Protein sidechains

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.

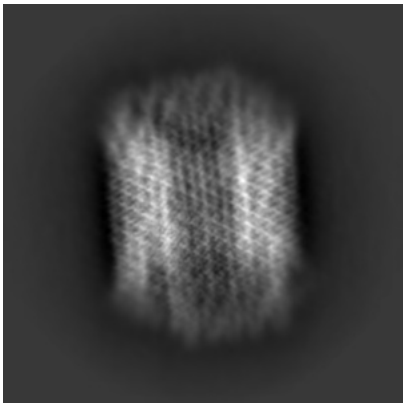
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-11170. These allow visual inspection of the internal detail of the map and identification of artifacts.

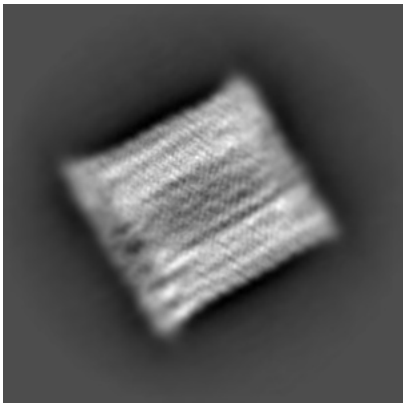
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

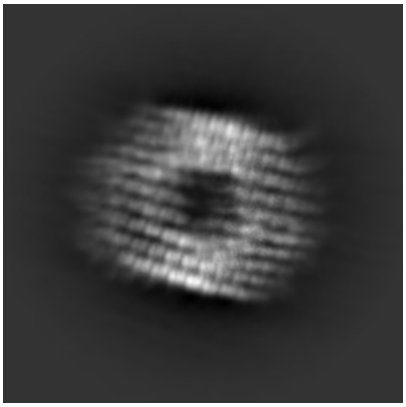
6.1.1 Primary map



X



Y

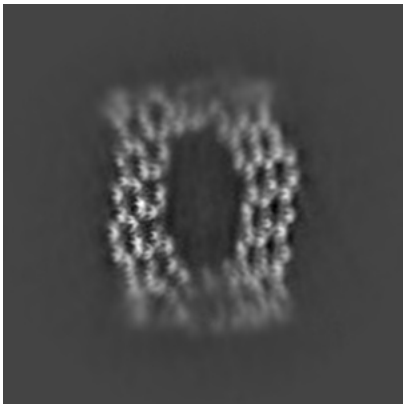


Z

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

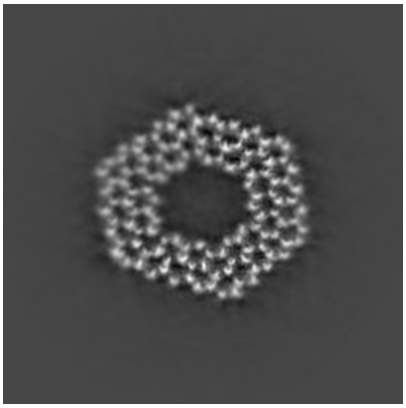
6.2 Central slices

6.2.1 Primary map



X Index: 150

Y Index: 150

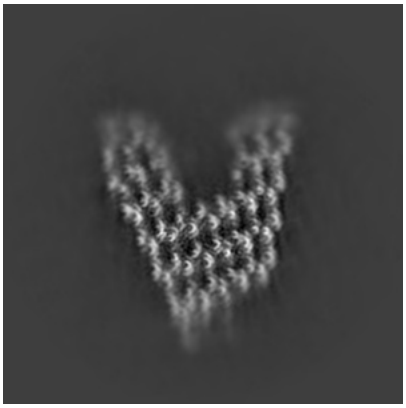


Z Index: 150

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

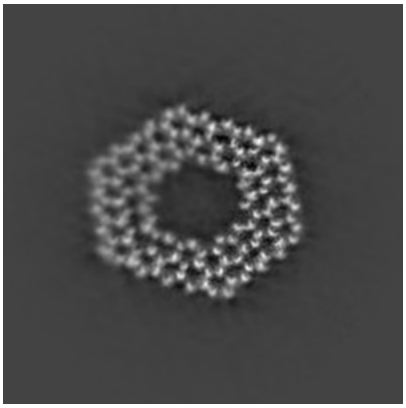
6.3 Largest variance slices (i)

6.3.1 Primary map



X Index: 183

Y Index: 104

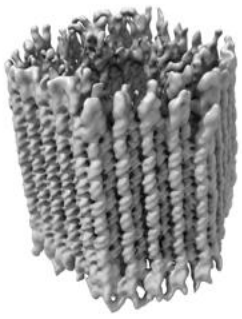


Z Index: 141

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

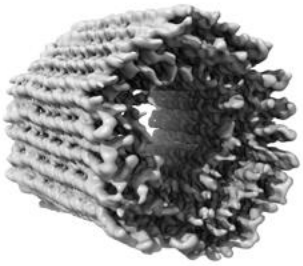
6.4 Orthogonal surface views (i)

6.4.1 Primary map



X

Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.08. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

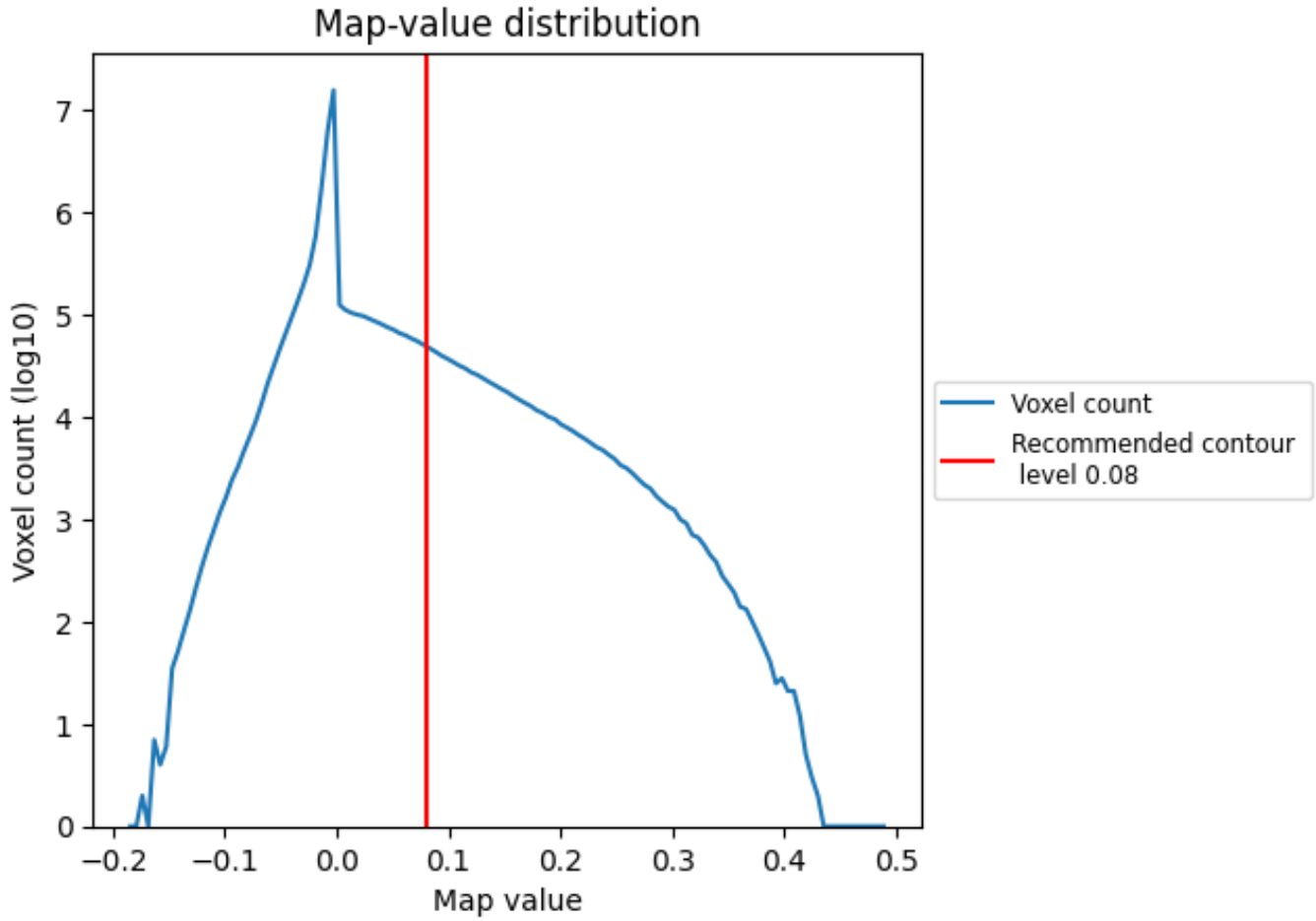
6.5 Mask visualisation (i)

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

7 Map analysis

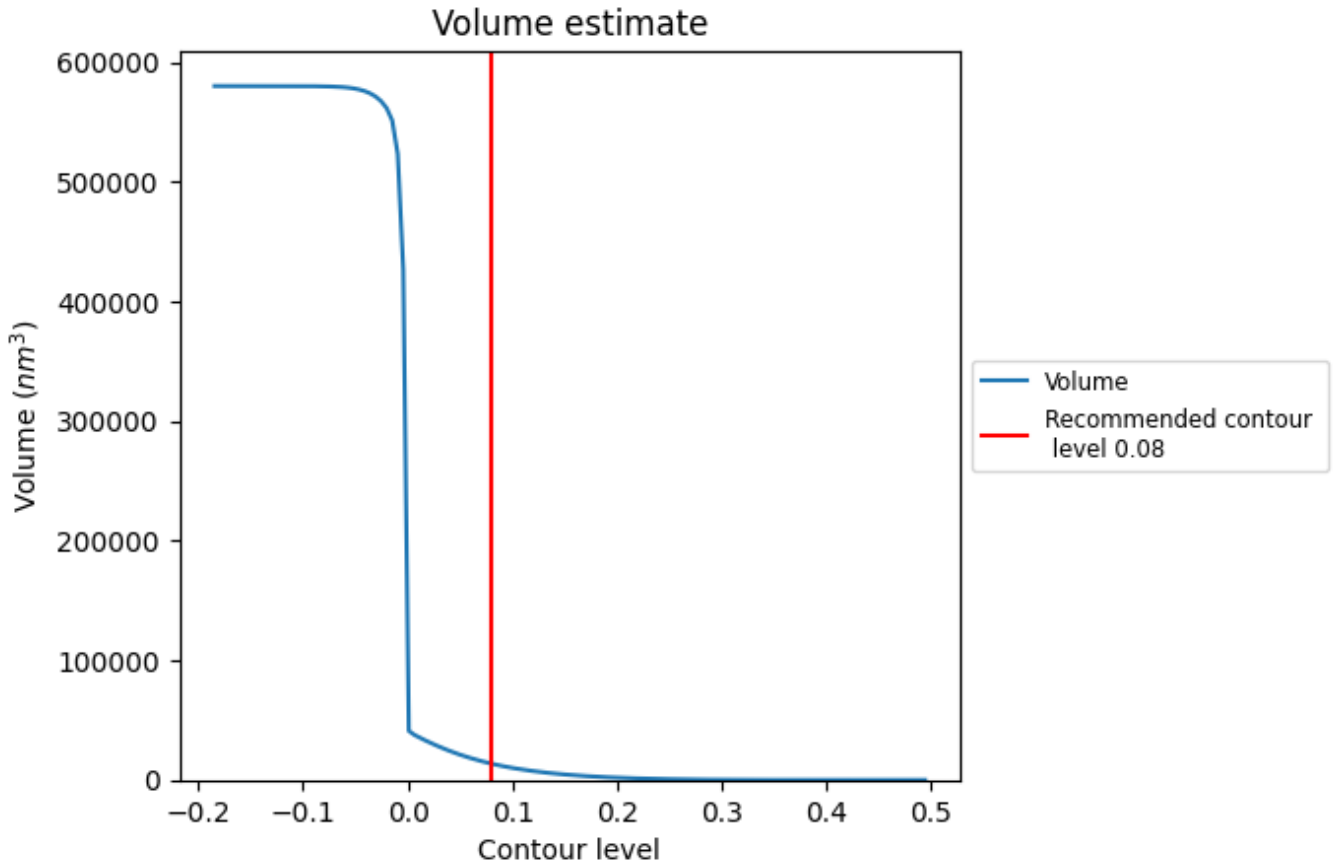
This section contains the results of statistical analysis of the map.

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.

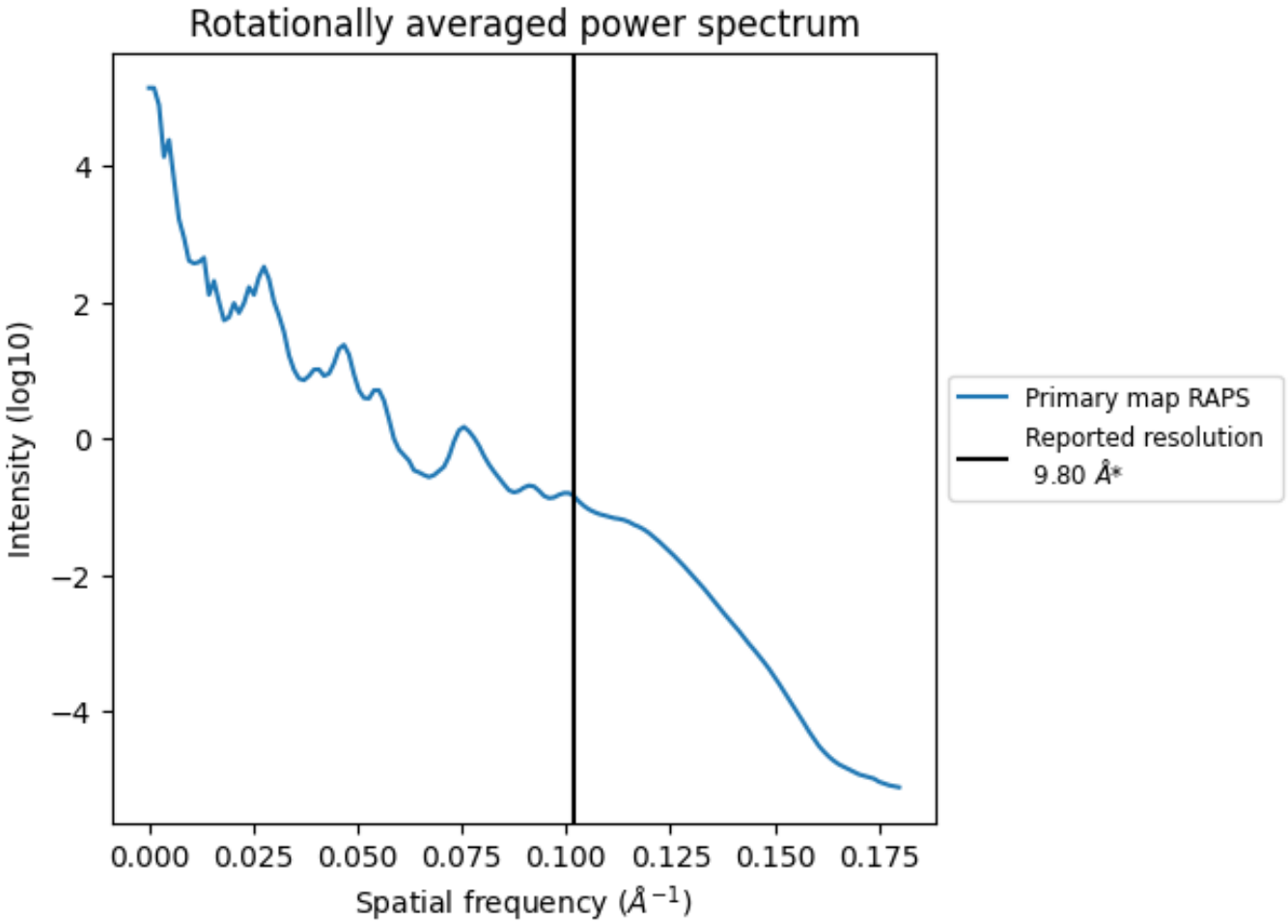
7.2 Volume estimate



The volume at the recommended contour level is 13625 nm^3; this corresponds to an approximate mass of 12307 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)

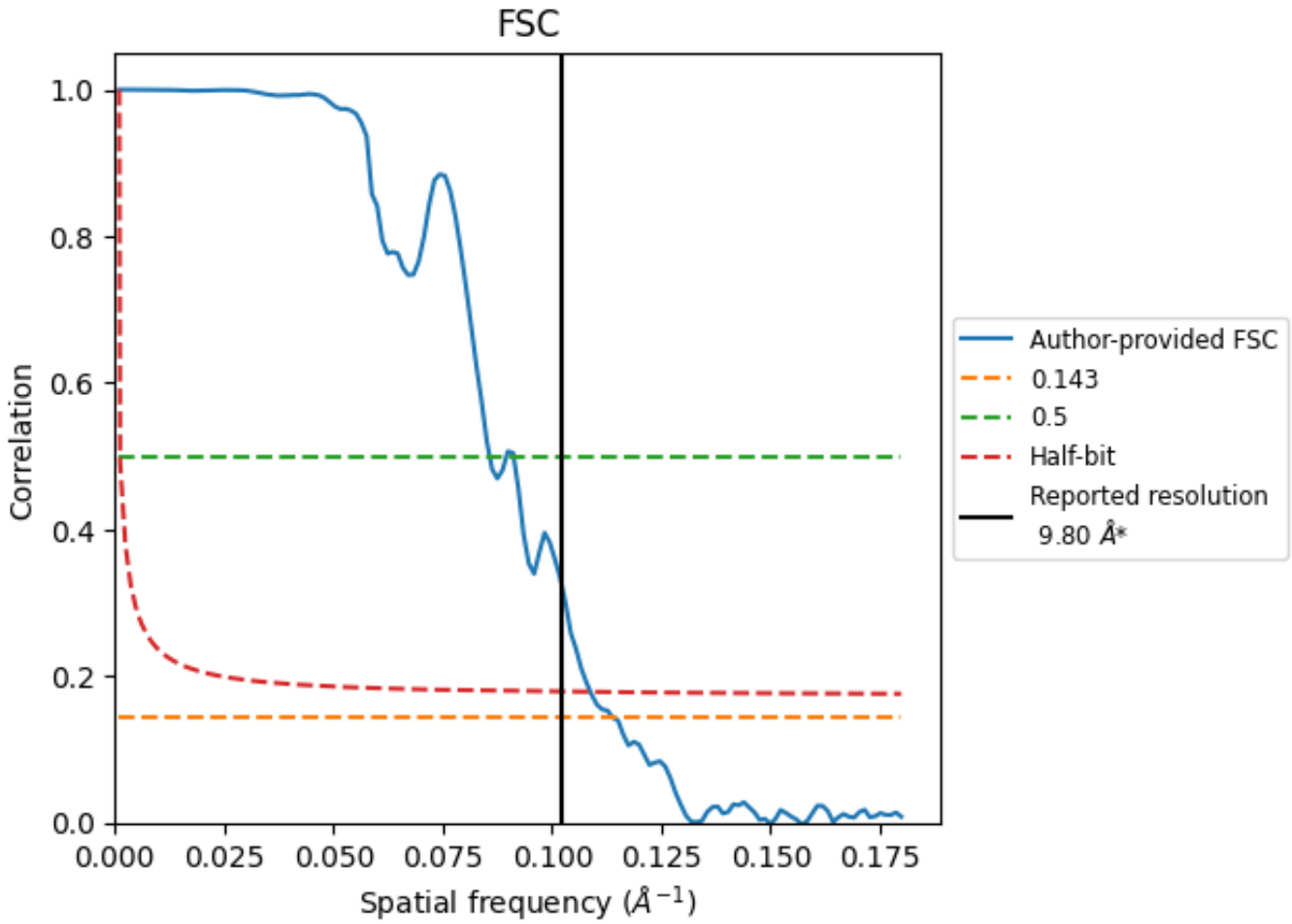


*Reported resolution corresponds to spatial frequency of 0.102 Å^{-1}

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 0.102 Å^{-1}

8.2 Resolution estimates (i)

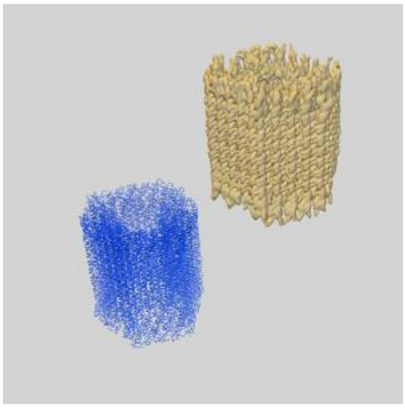
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	9.80	-	-
Author-provided FSC curve	8.78	11.66	9.19
Unmasked-calculated*	-	-	-

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from author-provided FSC intersecting FSC 0.143 CUT-OFF 8.78 differs from the reported value 9.8 by more than 10 %

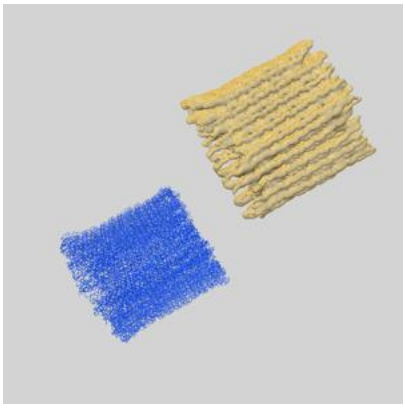
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-11170 and PDB model 7AS5. Per-residue inclusion information can be found in section 3 on page 87.

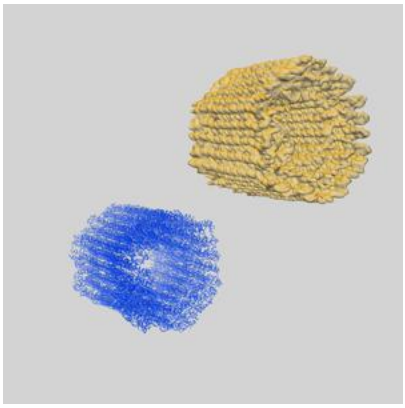
9.1 Map-model overlay



X



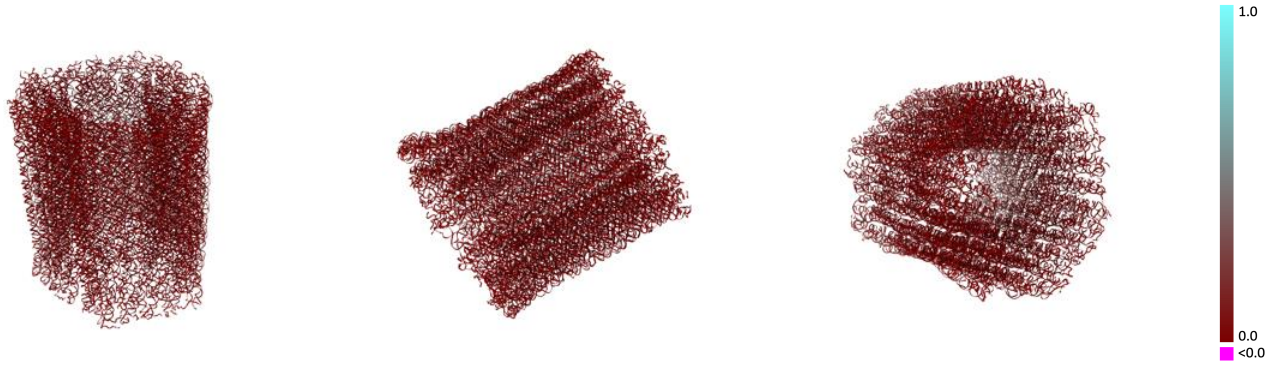
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.08 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.

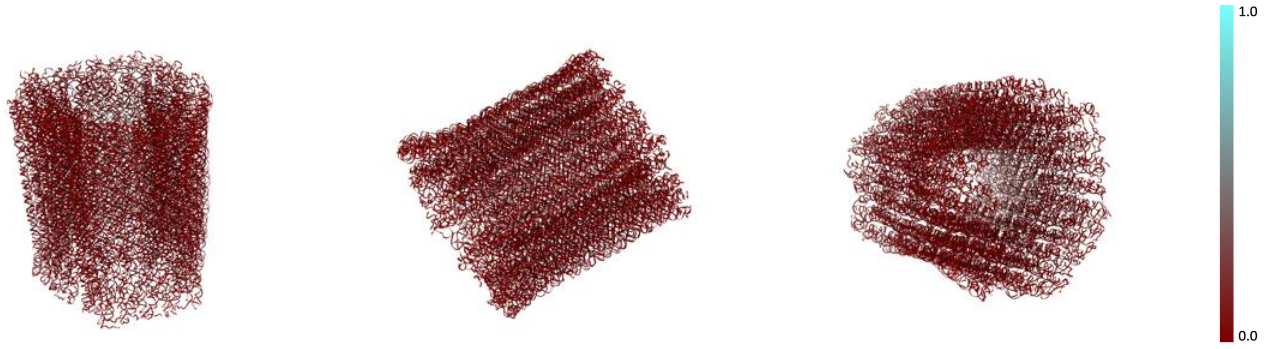
9.2 Q-score mapped to coordinate model (i)



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.

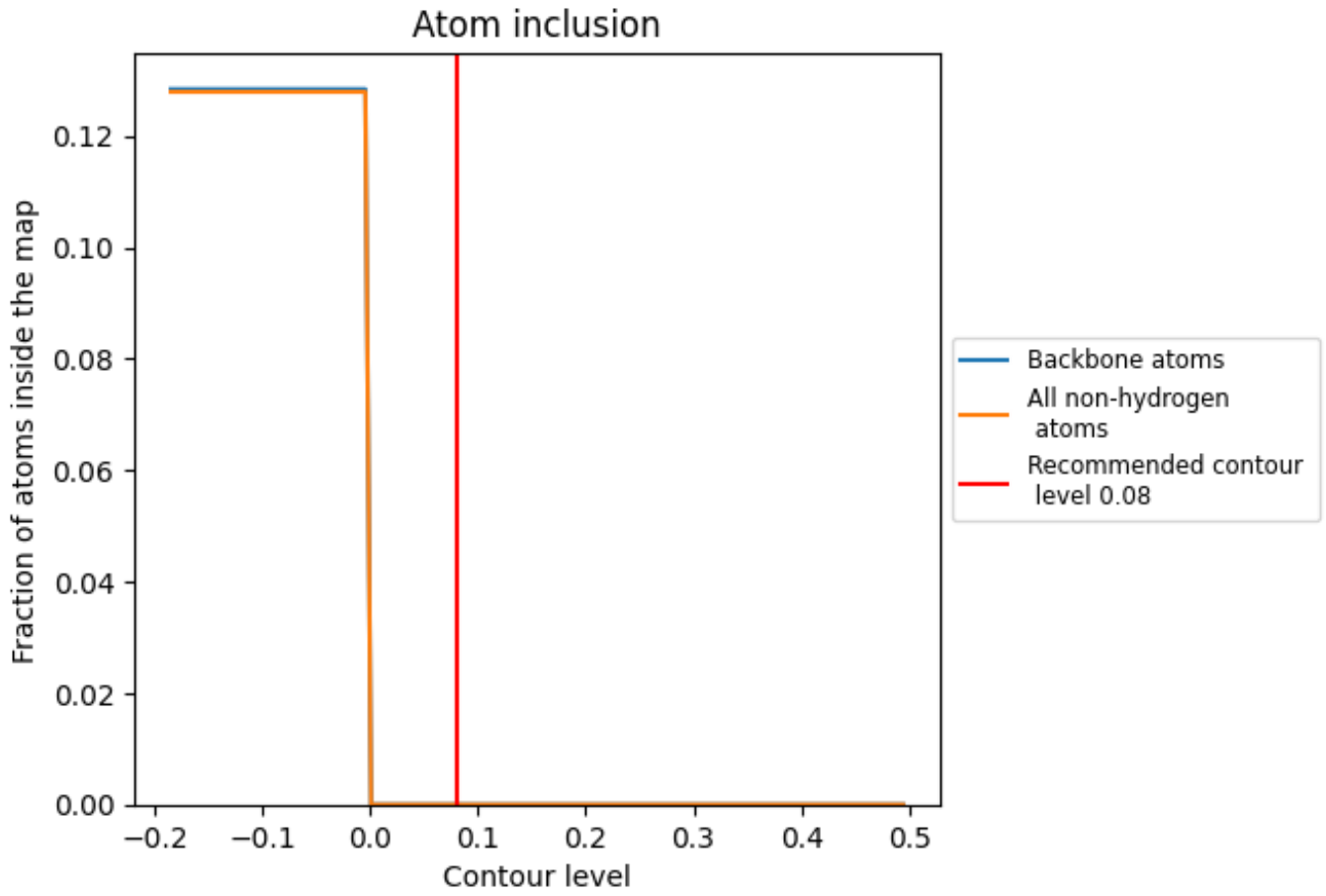
9.3 Atom inclusion mapped to coordinate model (i)



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 (0.08).

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 (i)

The table lists the average atom inclusion at the recommended contour level (0.08) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.0000	0.0000
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	0.0000
A8	0.0000	0.0000
A9	0.0000	0.0000
AA	0.0000	0.0000
AB	0.0000	0.0000
AC	0.0000	0.0000
AD	0.0000	0.0000
AE	0.0000	0.0000
AF	0.0000	0.0000
AG	0.0000	0.0000
AH	0.0000	0.0000
AI	0.0000	0.0000
AJ	0.0000	0.0000
AK	0.0000	0.0000
AL	0.0000	0.0000
AM	0.0000	0.0000
AN	0.0000	0.0000
AO	0.0000	0.0000
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	0.0000
AV	0.0000	0.0000
AW	0.0000	0.0000
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	0.0000
Ab	0.0000	0.0000
Ac	0.0000	0.0000
Ad	0.0000	0.0000
Ae	0.0000	0.0000
Af	0.0000	0.0000
Ag	0.0000	0.0000
Ah	0.0000	0.0000
Ai	0.0000	0.0000
Aj	0.0000	0.0000
Ak	0.0000	0.0000
Al	0.0000	0.0000
Am	0.0000	0.0000
An	0.0000	0.0000
Ao	0.0000	0.0000
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	0.0000
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	0.0000
B4	0.0000	0.0000
B5	0.0000	0.0000
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	0.0000
BC	0.0000	0.0000
BD	0.0000	0.0000

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Chain	Atom inclusion	Q-score
BE	0.0000	0.0000
BF	0.0000	0.0000
BG	0.0000	0.0000
BH	0.0000	0.0000
BI	0.0000	0.0000
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	0.0000
BQ	0.0000	0.0000
BR	0.0000	0.0000
BS	0.0000	0.0000
BT	0.0000	0.0000
BU	0.0000	0.0000
BV	0.0000	0.0000
BW	0.0000	0.0000
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	0.0000
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	0.0000
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	0.0000
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	0.0000
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

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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
D0	0.0000	0.0000
D1	0.0000	0.0000
D2	0.0000	0.0000
D3	0.0000	0.0000
D4	0.0000	0.0000
D5	0.0000	0.0000
D6	0.0000	0.0000
D7	0.0000	0.0000
D8	0.0000	0.0000
D9	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

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Chain	Atom inclusion	Q-score
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
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
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
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

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Chain	Atom inclusion	Q-score
Dw	0.0000	0.0000
Dx	0.0000	0.0000
Dy	0.0000	0.0000
Dz	0.0000	0.0000
E0	0.0000	0.0000
E1	0.0000	0.0000
E2	0.0000	0.0000
E3	0.0000	0.0000
E4	0.0000	0.0000
E5	0.0000	0.0000
E6	0.0000	0.0000
E7	0.0000	0.0000
E8	0.0000	0.0000
E9	0.0000	0.0000
EA	0.0000	0.0000
EB	0.0000	0.0000
EC	0.0000	0.0000
ED	0.0000	0.0000
EE	0.0000	0.0000
EF	0.0000	0.0000
EG	0.0000	0.0000
EH	0.0000	0.0000
EI	0.0000	0.0000
EJ	0.0000	0.0000
EK	0.0000	0.0000
EL	0.0000	0.0000
EM	0.0000	0.0000
EN	0.0000	0.0000
EO	0.0000	0.0000
EP	0.0000	0.0000
EQ	0.0000	0.0000
ER	0.0000	0.0000
ES	0.0000	0.0000
ET	0.0000	0.0000
EU	0.0000	0.0000
EV	0.0000	0.0000
EW	0.0000	0.0000
EX	0.0000	0.0000
EY	0.0000	0.0000
EZ	0.0000	0.0000
Ea	0.0000	0.0000
Eb	0.0000	0.0000

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Chain	Atom inclusion	Q-score
Ec	0.0000	0.0000
Ed	0.0000	0.0000
Ee	0.0000	0.0000
Ef	0.0000	0.0000
Eg	0.0000	0.0000
Eh	0.0000	0.0000
Ei	0.0000	0.0000
Ej	0.0000	0.0000
Ek	0.0000	0.0000
El	0.0000	0.0000
Em	0.0000	0.0000
En	0.0000	0.0000
Eo	0.0000	0.0000
Ep	0.0000	0.0000
Eq	0.0000	0.0000
Er	0.0000	0.0000
Es	0.0000	0.0000
Et	0.0000	0.0000
Eu	0.0000	0.0000
Ev	0.0000	0.0000
Ew	0.0000	0.0000
Ex	0.0000	0.0000
Ey	0.0000	0.0000
Ez	0.0000	0.0000
F0	0.0000	0.0000
F1	0.0000	0.0000
F2	0.0000	0.0000
F3	0.0000	0.0000
F4	0.0000	0.0000
F5	0.0000	0.0000
F6	0.0000	0.0000
F7	0.0000	0.0000
F8	0.0000	0.0000
F9	0.0000	0.0000
FA	0.0000	0.0000
FB	0.0000	0.0000
FC	0.0000	0.0000
FD	0.0000	0.0000
FE	0.0000	0.0000
FF	0.0000	0.0000
FG	0.0000	0.0000
FH	0.0000	0.0000

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Chain	Atom inclusion	Q-score
FI	0.0000	0.0000
FJ	0.0000	0.0000
FK	0.0000	0.0000
FL	0.0000	0.0000
FM	0.0000	0.0000
FN	0.0000	0.0000
FO	0.0000	0.0000
FP	0.0000	0.0000
FQ	0.0000	0.0000
FR	0.0000	0.0000
FS	0.0000	0.0000
FT	0.0000	0.0000
FU	0.0000	0.0000
FV	0.0000	0.0000
FW	0.0000	0.0000
FX	0.0000	0.0000
FY	0.0000	0.0000
FZ	0.0000	0.0000
Fa	0.0000	0.0000
Fb	0.0000	0.0000
Fc	0.0000	0.0000
Fd	0.0000	0.0000
Fe	0.0000	0.0000
Ff	0.0000	0.0000
Fg	0.0000	0.0000
Fh	0.0000	0.0000
Fi	0.0000	0.0000
Fj	0.0000	0.0000
Fk	0.0000	0.0000
Fl	0.0000	0.0000
Fm	0.0000	0.0000
Fn	0.0000	0.0000
Fo	0.0000	0.0000
Fp	0.0000	0.0000
Fq	0.0000	0.0000
Fr	0.0000	0.0000
Fs	0.0000	0.0000
Ft	0.0000	0.0000
Fu	0.0000	0.0000
Fv	0.0000	0.0000
Fw	0.0000	0.0000
Fx	0.0000	0.0000

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Chain	Atom inclusion	Q-score
Fy	0.0000	0.0000
Fz	0.0000	0.0000
G0	0.0000	0.0000
G1	0.0000	0.0000
G2	0.0000	0.0000
G3	0.0000	0.0000
G4	0.0000	0.0000
G5	0.0000	0.0000
G6	0.0000	0.0000
G7	0.0000	0.0000
G8	0.0000	0.0000
G9	0.0000	0.0000
GA	0.0000	0.0000
GB	0.0000	0.0000
GC	0.0000	0.0000
GD	0.0000	0.0000
GE	0.0000	0.0000
GF	0.0000	0.0000
GG	0.0000	0.0000
GH	0.0000	0.0000
GI	0.0000	0.0000
GJ	0.0000	0.0000
GK	0.0000	0.0000
GL	0.0000	0.0000
GM	0.0000	0.0000
GN	0.0000	0.0000
GO	0.0000	0.0000
GP	0.0000	0.0000
GQ	0.0000	0.0000
GR	0.0000	0.0000
GS	0.0000	0.0000
GT	0.0000	0.0000
GU	0.0000	0.0000
GV	0.0000	0.0000
GW	0.0000	0.0000
GX	0.0000	0.0000
GY	0.0000	0.0000
GZ	0.0000	0.0000
Ga	0.0000	0.0000
Gb	0.0000	0.0000
Gc	0.0000	0.0000
Gd	0.0000	0.0000

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Chain	Atom inclusion	Q-score
Ge	0.0000	0.0000
Gf	0.0000	0.0000
Gg	0.0000	0.0000
Gh	0.0000	0.0000
Gi	0.0000	0.0000
Gj	0.0000	0.0000
Gk	0.0000	0.0000
Gl	0.0000	0.0000
Gm	0.0000	0.0000
Gn	0.0000	0.0000
Go	0.0000	0.0000
Gp	0.0000	0.0000
Gq	0.0000	0.0000
Gr	0.0000	0.0000
Gs	0.0000	0.0000
Gt	0.0000	0.0000
Gu	0.0000	0.0000
Gv	0.0000	0.0000
Gw	0.0000	0.0000
Gx	0.0000	0.0000
Gy	0.0000	0.0000
Gz	0.0000	0.0000
HA	0.0000	0.0000
HB	0.0000	0.0000
HC	0.0000	0.0000
HD	0.0000	0.0000
HE	0.0000	0.0000
HF	0.0000	0.0000
HG	0.0000	0.0000
HH	0.0000	0.0000
HI	0.0000	0.0000
HJ	0.0000	0.0000
HK	0.0000	0.0000
HL	0.0000	0.0000
HM	0.0000	0.0000
HN	0.0000	0.0000
HO	0.0000	0.0000
HP	0.0000	0.0000
HQ	0.0000	0.0000
HR	0.0000	0.0000
HS	0.0000	0.0000
HT	0.0000	0.0000

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Chain	Atom inclusion	Q-score
HU	0.0000	0.0000