Full wwPDB EM Validation Report ⓘ

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 Full wwPDB EM Validation 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 ⓘ symbol.

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

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

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	100% 52% 43% 5%
444	HJ	21	100% 71% 24% 5%
445	HK	21	100% 52% 38% 10%
446	HL	21	100% 81% 10% 10%
447	HM	21	100% 81% 19%
448	HN	21	100% 76% 19% 5%
449	HO	21	100% 62% 33% 5%
450	HP	21	100% 67% 33%
451	HQ	21	100% 57% 29% 14%
452	HR	21	100% 38% 48% 14%
453	HS	21	100% 57% 43%
454	HT	21	100% 62% 33% 5%
455	HU	19	100% 68% 32%

2 Entry composition

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	C	N	O	P	0	0
			715	345	123	213	34		

- Molecule 260 is a DNA chain called STAPLE STRAND.

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

- Molecule 261 is a DNA chain called STAPLE STRAND.

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

- Molecule 262 is a DNA chain called STAPLE STRAND.

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

- Molecule 263 is a DNA chain called STAPLE STRAND.

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

- Molecule 264 is a DNA chain called STAPLE STRAND.

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

- Molecule 265 is a DNA chain called STAPLE STRAND.

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

- 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	C	N	O	P	0	0
			714	344	124	212	34		

- Molecule 274 is a DNA chain called STAPLE STRAND.

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

- Molecule 275 is a DNA chain called STAPLE STRAND.

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

- Molecule 276 is a DNA chain called STAPLE STRAND.

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

- Molecule 277 is a DNA chain called STAPLE STRAND.

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

- Molecule 278 is a DNA chain called STAPLE STRAND.

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

- Molecule 279 is a DNA chain called STAPLE STRAND.

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

- 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	C	N	O	P	0	0
			716	344	127	211	34		

- Molecule 288 is a DNA chain called STAPLE STRAND.

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

- Molecule 289 is a DNA chain called STAPLE STRAND.

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

- Molecule 290 is a DNA chain called STAPLE STRAND.

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

- Molecule 291 is a DNA chain called STAPLE STRAND.

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

- Molecule 292 is a DNA chain called STAPLE STRAND.

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

- Molecule 293 is a DNA chain called STAPLE STRAND.

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

- 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	C	N	O	P	0	0
			713	342	135	202	34		

- Molecule 302 is a DNA chain called STAPLE STRAND.

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

- Molecule 303 is a DNA chain called STAPLE STRAND.

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

- Molecule 304 is a DNA chain called STAPLE STRAND.

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

- Molecule 305 is a DNA chain called STAPLE STRAND.

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

- Molecule 306 is a DNA chain called STAPLE STRAND.

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

- Molecule 307 is a DNA chain called STAPLE STRAND.

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

- Molecule 308 is a DNA chain called STAPLE STRAND.

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

- Molecule 309 is a DNA chain called STAPLE STRAND.

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

- Molecule 310 is a DNA chain called STAPLE STRAND.

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

- Molecule 311 is a DNA chain called STAPLE STRAND.

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

- Molecule 312 is a DNA chain called STAPLE STRAND.

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

- Molecule 313 is a DNA chain called STAPLE STRAND.

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

- Molecule 314 is a DNA chain called STAPLE STRAND.

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

- 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	C	N	O	P	0	0
			720	342	138	206	34		

- Molecule 330 is a DNA chain called STAPLE STRAND.

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

- Molecule 331 is a DNA chain called STAPLE STRAND.

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

- Molecule 332 is a DNA chain called STAPLE STRAND.

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

- Molecule 333 is a DNA chain called STAPLE STRAND.

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

- Molecule 334 is a DNA chain called STAPLE STRAND.

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

- Molecule 335 is a DNA chain called STAPLE STRAND.

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

- 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	C	N	O	P	0	0
			572	275	103	167	27		

- Molecule 358 is a DNA chain called STAPLE STRAND.

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

- Molecule 359 is a DNA chain called STAPLE STRAND.

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

- Molecule 360 is a DNA chain called STAPLE STRAND.

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

- Molecule 361 is a DNA chain called STAPLE STRAND.

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

- Molecule 362 is a DNA chain called STAPLE STRAND.

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

- Molecule 363 is a DNA chain called STAPLE STRAND.

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

- 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	C	N	O	P	0	0
			577	274	116	160	27		

- Molecule 372 is a DNA chain called STAPLE STRAND.

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

- Molecule 373 is a DNA chain called STAPLE STRAND.

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

- Molecule 374 is a DNA chain called STAPLE STRAND.

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

- Molecule 375 is a DNA chain called STAPLE STRAND.

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

- Molecule 376 is a DNA chain called STAPLE STRAND.

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

- Molecule 377 is a DNA chain called STAPLE STRAND.

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

- 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	C	N	O	P	0	0
			560	269	100	164	27		

- Molecule 400 is a DNA chain called STAPLE STRAND.

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

- Molecule 401 is a DNA chain called STAPLE STRAND.

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

- Molecule 402 is a DNA chain called STAPLE STRAND.

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

- Molecule 403 is a DNA chain called STAPLE STRAND.

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

- Molecule 404 is a DNA chain called STAPLE STRAND.

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

- Molecule 405 is a DNA chain called STAPLE STRAND.

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

- 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	C	N	O	P	0	0
			568	278	85	178	27		

- Molecule 428 is a DNA chain called STAPLE STRAND.

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

- Molecule 429 is a DNA chain called STAPLE STRAND.

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

- Molecule 430 is a DNA chain called STAPLE STRAND.

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

- Molecule 431 is a DNA chain called STAPLE STRAND.

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

- Molecule 432 is a DNA chain called STAPLE STRAND.

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

- Molecule 433 is a DNA chain called STAPLE STRAND.

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

- 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.

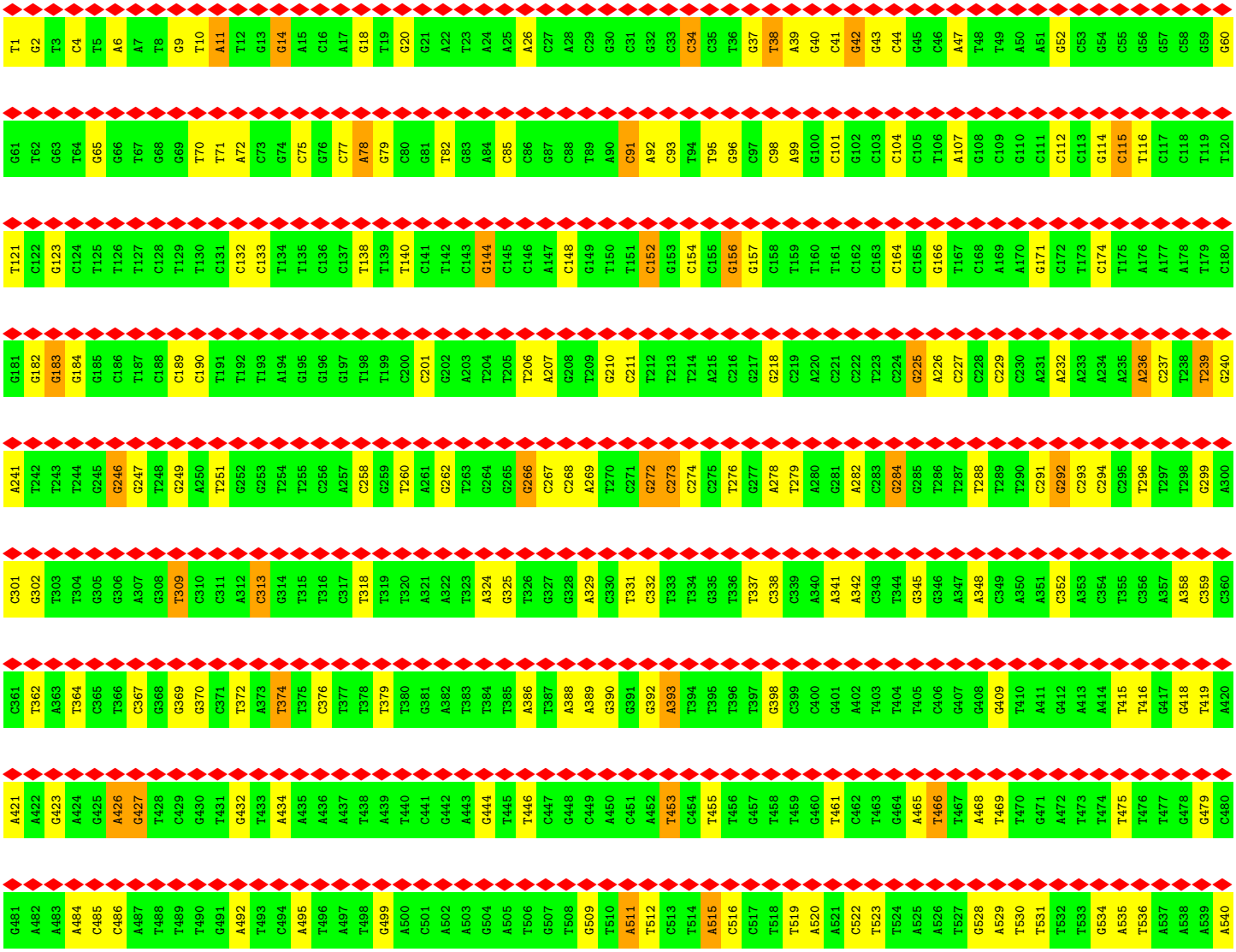
Mol	Chain	Residues	Atoms					AltConf	Trace
455	HU	19	Total	C	N	O	P	0	0
			393	189	69	117	18		

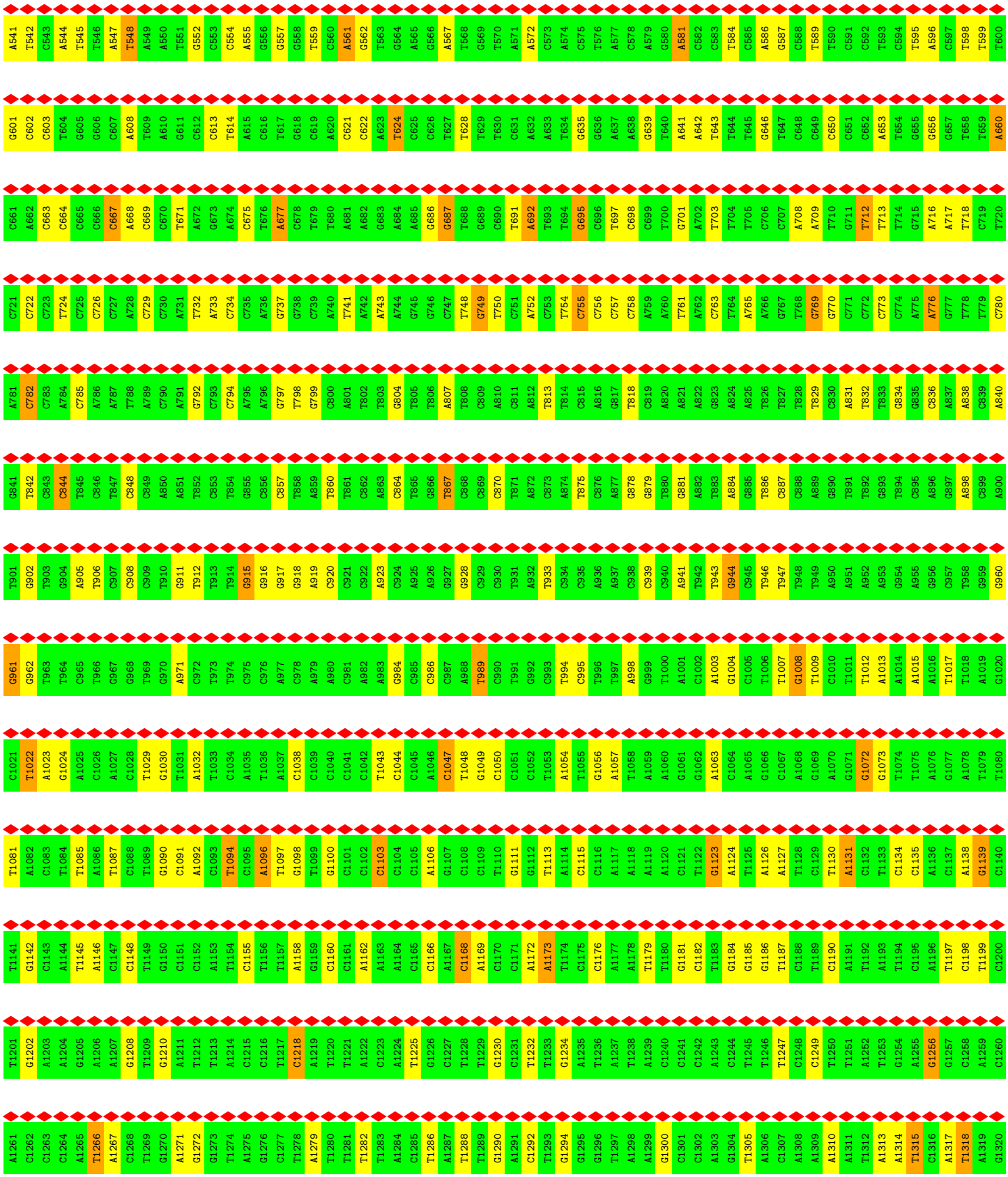
3 Residue-property plots (i)

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:

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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
C721 C722 C723 T724 C725 C726 C727 A728 C729 C730 A731 T732 A733 C734 C735 A736 G737 G738 C739 A740 T741 A742 A743 A744 G745 G746 C747 T748 G749 T750 C751 A752 C753 T754 C755 C756 C757 C758 A759 A760 T761 A762 C763 T764 A765 A766 G767 T768 G769 G770 C771 C772 C773 C774 A775 A776 G777 T778 T779 C780
A781 C782 C783 A784 C785 A786 A787 T788 A789 C790 A791 G792 C793 C794 A795 A796 G797 T798 G799 C800 A801 T802 T803 G804 T805 T806 A807 T808 C809 A810 C811 A812 T813 T814 C815 A816 G817 T818 C819 A820 A821 A822 G823 A824 A825 T826 T827 T828 T829 C830 A831 T832 T833 G834 G835 C836 A837 A838 C839 A840
G841 T842 C843 C844 T845 C846 T847 C848 C849 A850 A851 T852 C853 T854 G855 C856 C857 T858 A859 T860 T861 C862 A863 C864 T865 G866 T867 C868 C869 C870 T871 A872 C873 A874 T875 C876 A877 G878 C879 T880 G881 A882 T883 A884 G885 T886 C887 C888 A889 G890 T891 T892 G893 T894 C895 A896 G897 A898 C899 A900
T901 G902 T903 G904 A905 T906 C907 C908 C909 T910 G911 T912 T913 T914 G915 G916 G917 G918 A919 C920 C921 C922 A923 C924 A925 A926 G927 G928 C929 C930 T931 A932 T933 C934 C935 A936 A937 C938 C939 C940 A941 T942 T943 G944 C945 T946 T947 T948 T949 A950 A951 A952 A953 G954 A955 G956 C957 T958 G959 G960
G961 G962 T963 T964 C965 T966 G967 G968 T969 G970 A971 C972 T973 T974 C975 C976 A977 C978 A979 A980 C981 A982 A983 G984 C985 C986 C987 A988 T989 C990 T991 G992 C993 T994 C995 T996 T997 A998 G999 T1000 A1001 C1002 A1003 G1004 C1005 T1006 T1007 G1008 T1009 C1010 T1011 T1012 A1013 A1014 A1015 A1016 T1017 T1018 A1019 G1020
C1021 T1022 A1023 G1024 A1025 C1026 A1027 C1028 T1029 G1030 T1031 A1032 T1033 C1034 A1035 T1036 A1037 C1038 C1039 C1040 C1041 C1042 T1043 C1044 C1045 A1046 C1047 T1048 G1049 C1050 C1051 C1052 T1053 A1054 T1055 G1056 A1057 T1058 A1059 A1060 G1061 G1062 A1063 C1064 A1065 G1066 C1067 A1068 G1069 A1070 G1071 G1072 G1073 T1074 T1075 A1076 G1077 A1078 T1079 T1080
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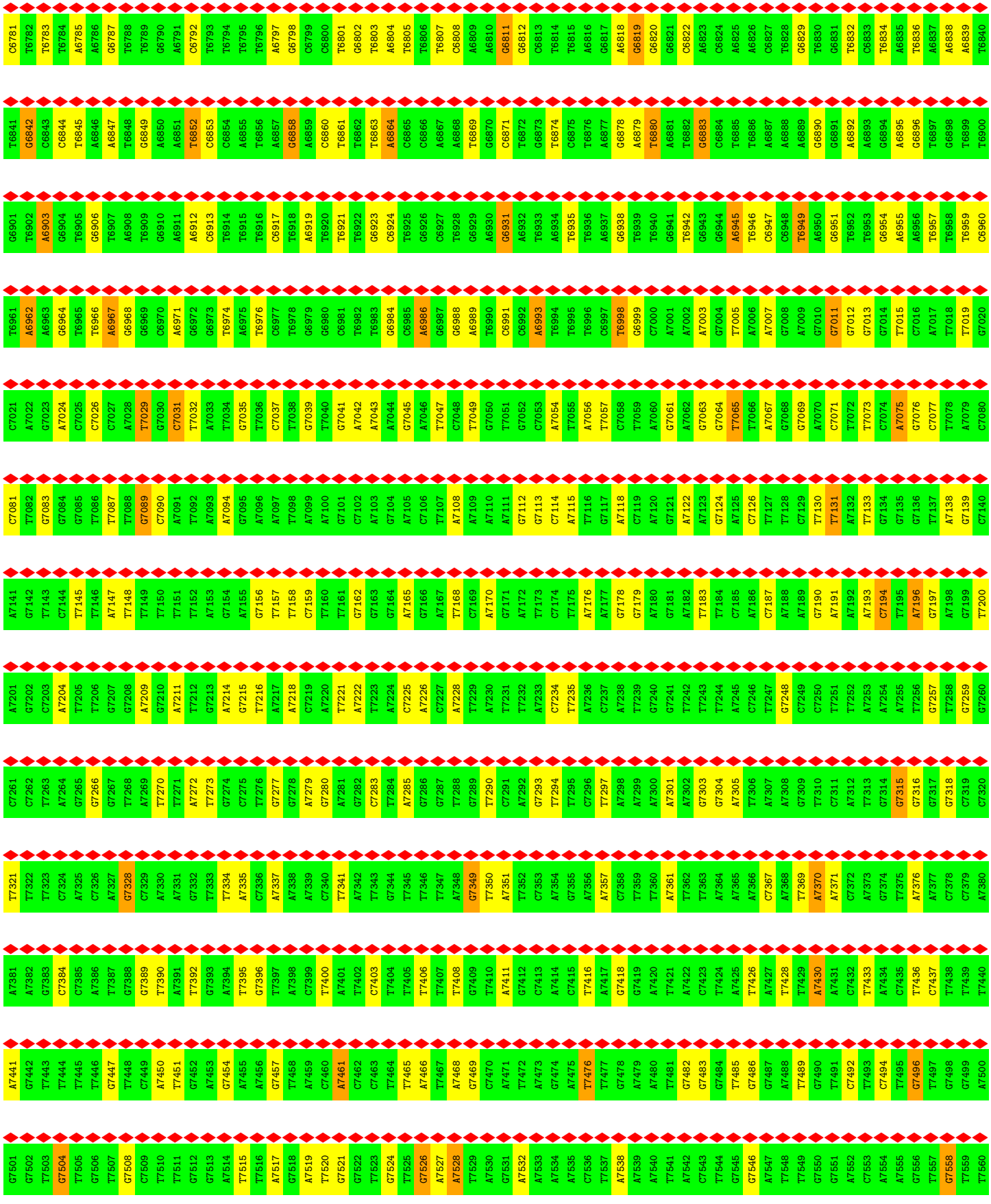
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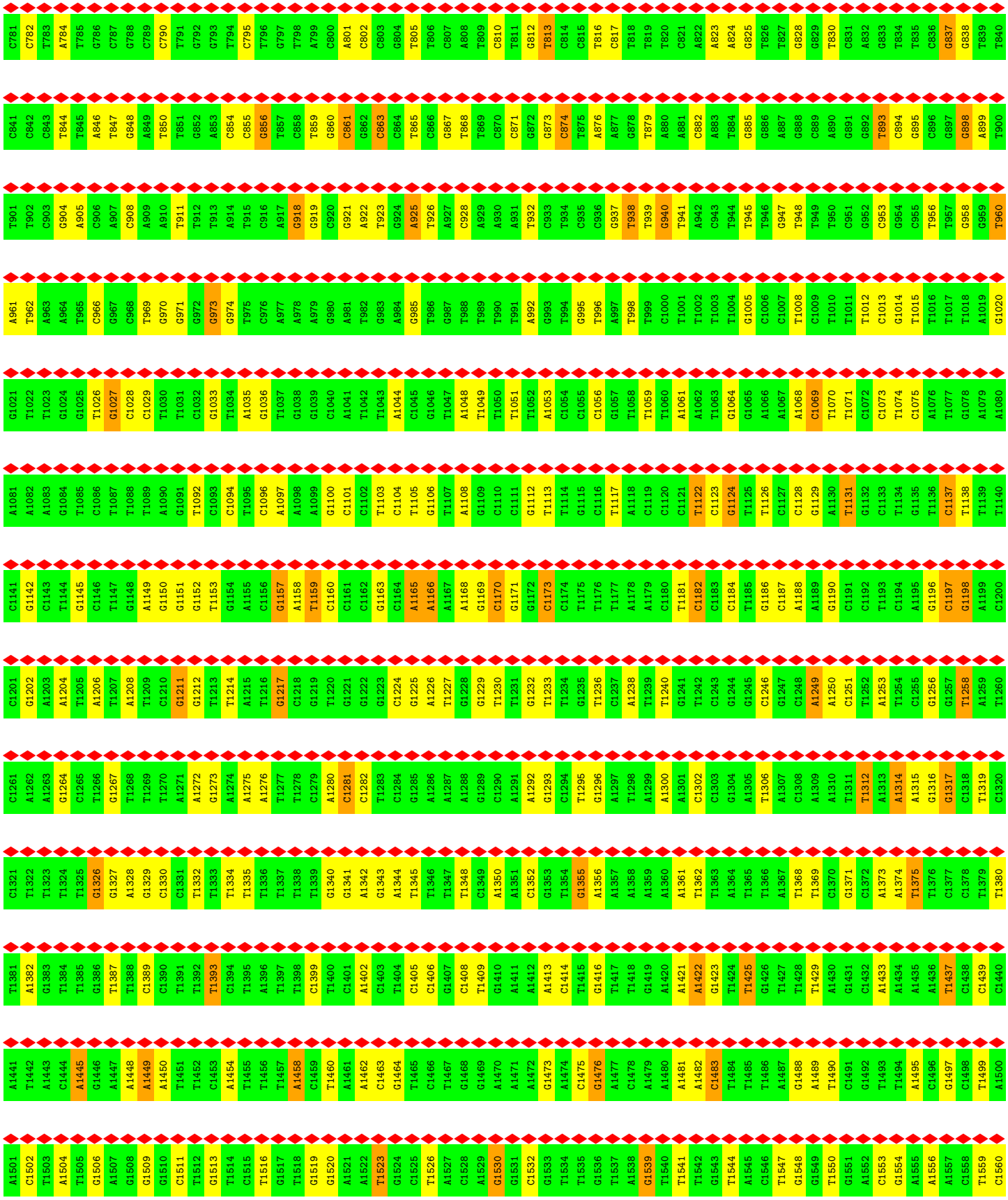
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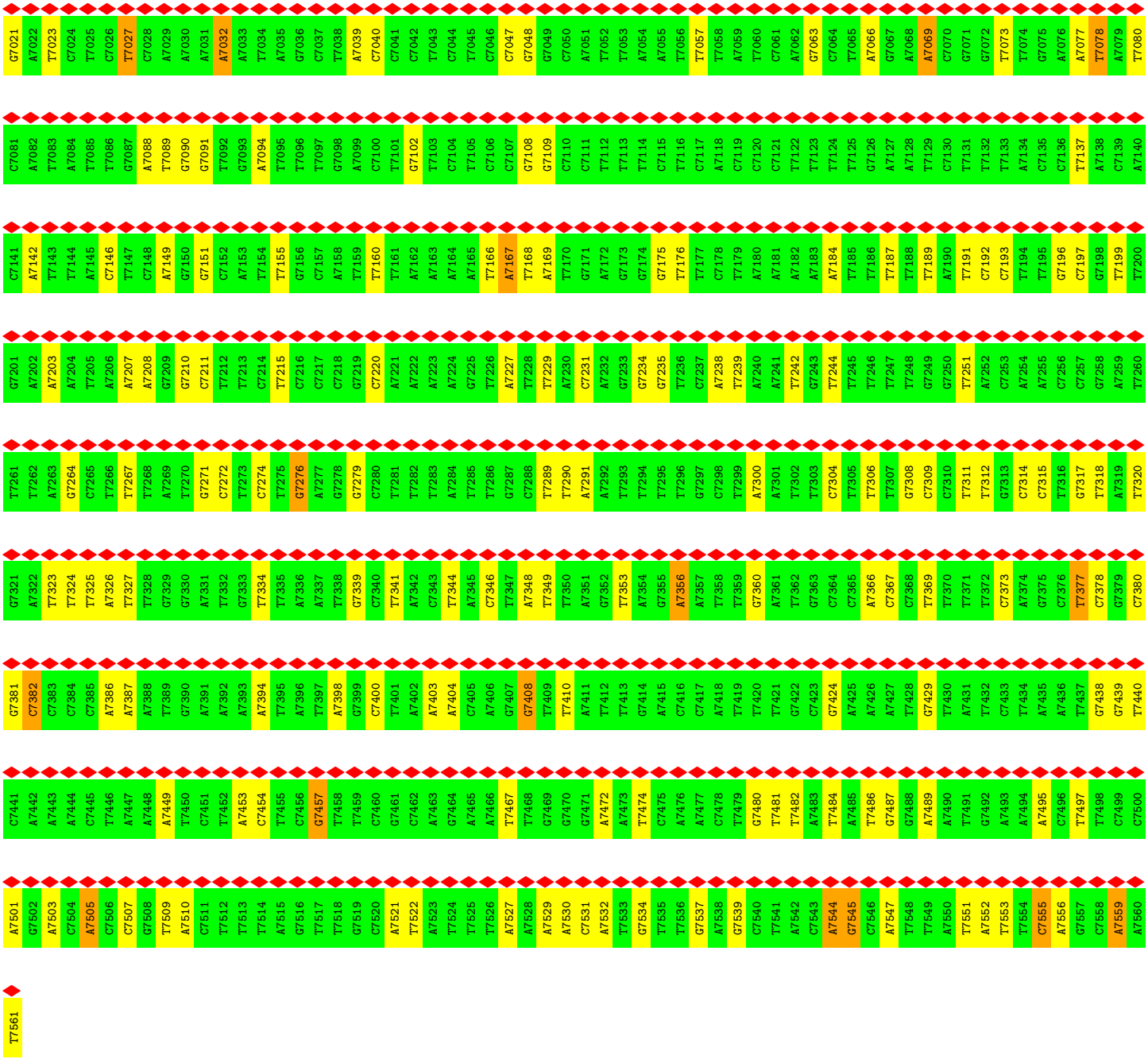

• Molecule 3: STAPLE STRAND

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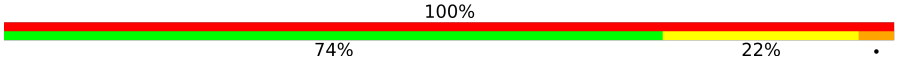
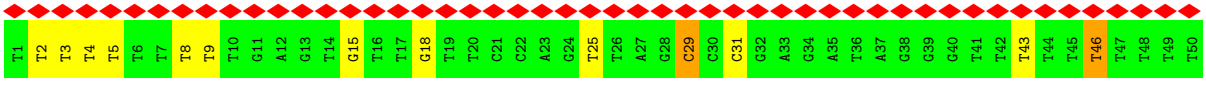
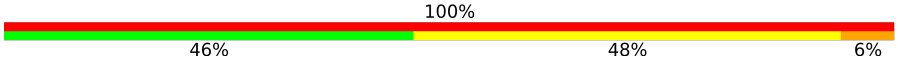
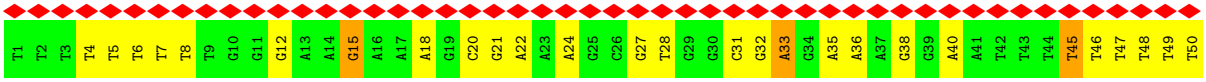




• Molecule 4: STAPLE STRAND

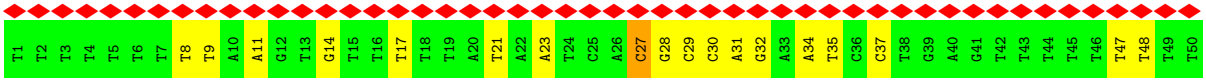
Chain AD:





• Molecule 5: STAPLE STRAND

Chain AE:

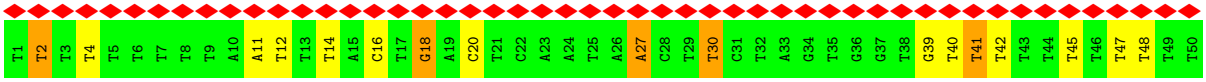


• Molecule 6: STAPLE STRAND

Chain AF:

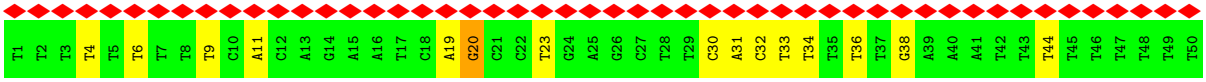
• Molecule 7: STAPLE STRAND

Chain AG:



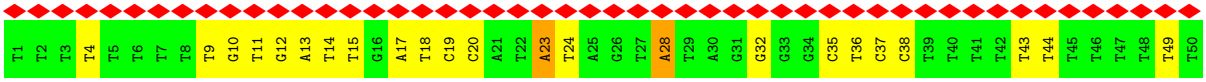
• Molecule 8: STAPLE STRAND

Chain AH:



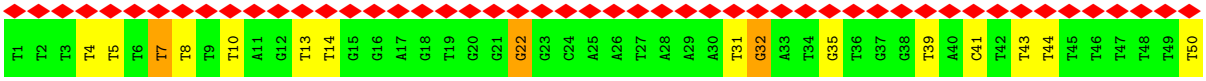
• Molecule 9: STAPLE STRAND

Chain AI:



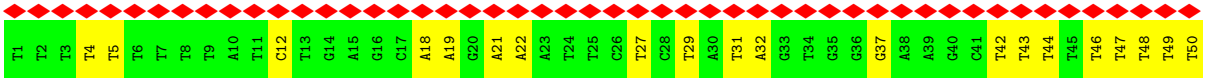
• Molecule 10: STAPLE STRAND

Chain AJ:



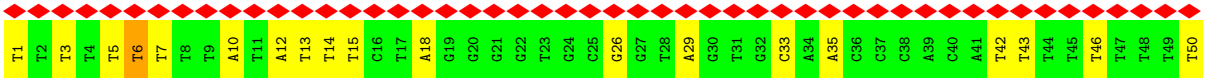
• Molecule 11: STAPLE STRAND

Chain AK:



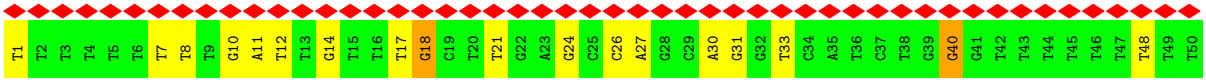
• Molecule 12: STAPLE STRAND

Chain AL:



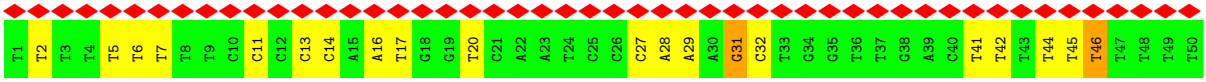
• Molecule 13: STAPLE STRAND

Chain AM:



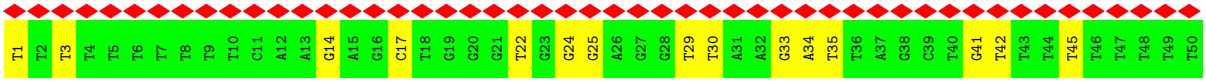
• Molecule 14: STAPLE STRAND

Chain AN:



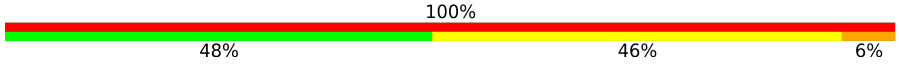
• Molecule 15: STAPLE STRAND

Chain AO:



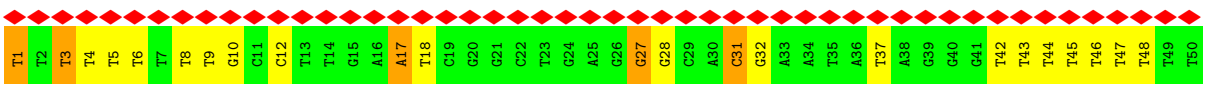
• Molecule 16: STAPLE STRAND

Chain AP:



• Molecule 17: STAPLE STRAND

Chain AQ:

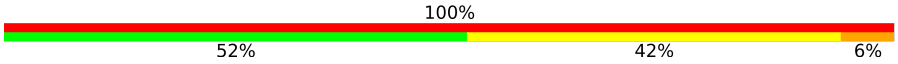


• Molecule 18: STAPLE STRAND

Chain AR:

• Molecule 19: STAPLE STRAND

Chain AS:



• Molecule 20: STAPLE STRAND

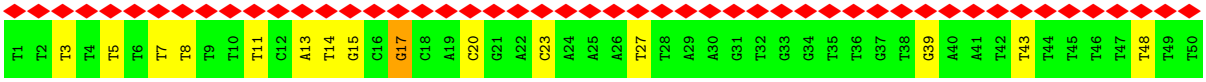
Chain AT:

• Molecule 21: STAPLE STRAND

Chain AU:

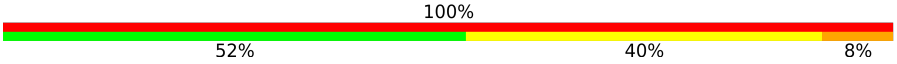
• Molecule 22: STAPLE STRAND

Chain AV:



• Molecule 23: STAPLE STRAND

Chain AW:

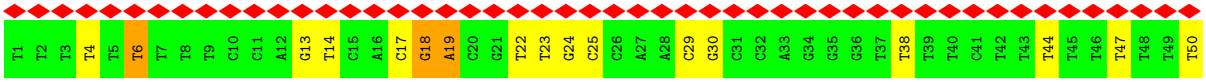


• Molecule 24: STAPLE STRAND

Chain AX:

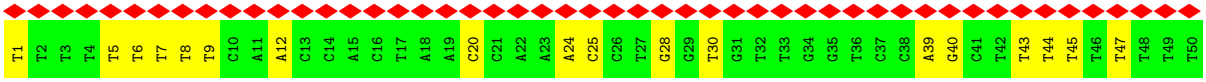
• Molecule 25: STAPLE STRAND

Chain AY:



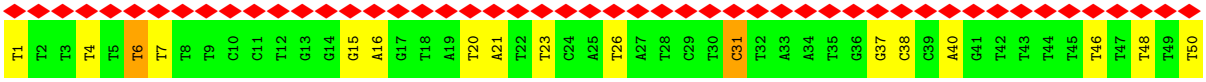
• Molecule 26: STAPLE STRAND

Chain AZ:



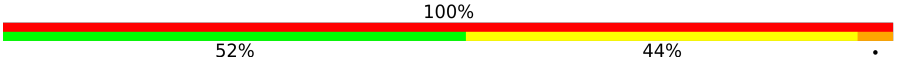
• Molecule 27: STAPLE STRAND

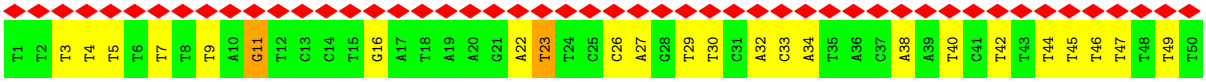
Chain Aa:



• Molecule 28: STAPLE STRAND

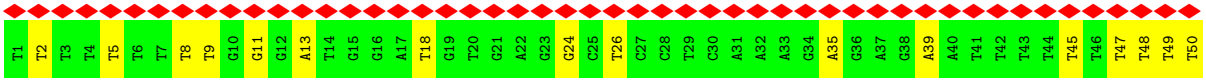
Chain Ab:





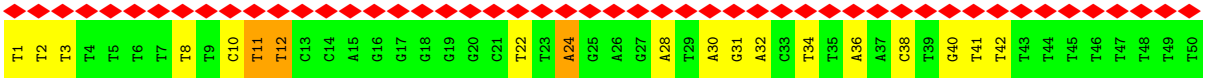
• Molecule 29: STAPLE STRAND

Chain Ac:



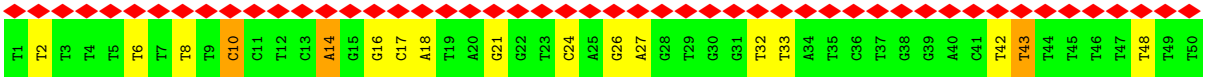
• Molecule 30: STAPLE STRAND

Chain Ad:



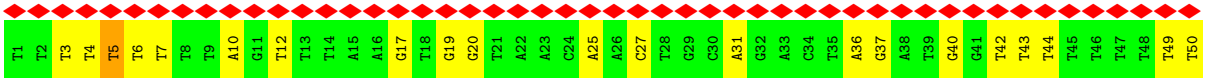
• Molecule 31: STAPLE STRAND

Chain Ae:



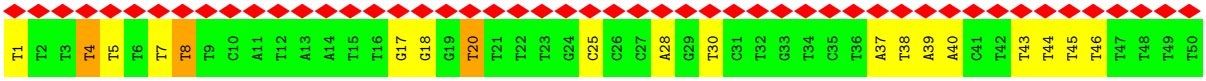
• Molecule 32: STAPLE STRAND

Chain Af:



• Molecule 33: STAPLE STRAND

Chain Ag:

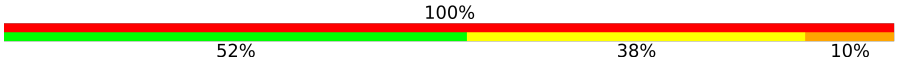


• Molecule 34: STAPLE STRAND

Chain Ah:

• Molecule 35: STAPLE STRAND

Chain Ai:

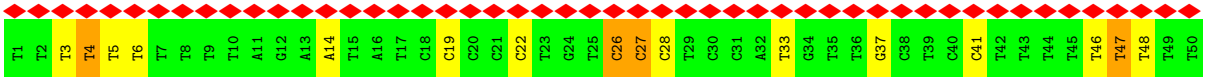


• Molecule 36: STAPLE STRAND

Chain Aj:

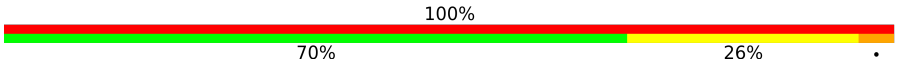
• Molecule 37: STAPLE STRAND

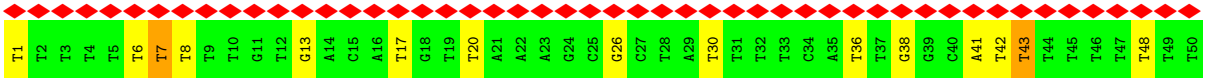
Chain Ak:



• Molecule 38: STAPLE STRAND

Chain Al:



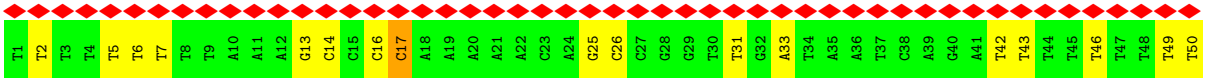


• Molecule 39: STAPLE STRAND

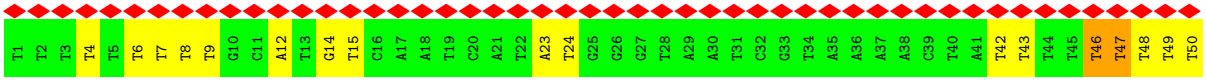
Chain Am:

• Molecule 40: STAPLE STRAND

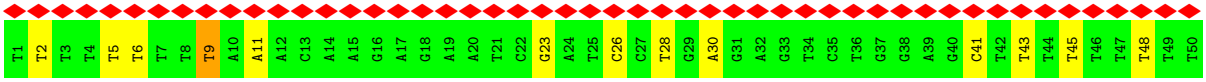
• Molecule 41: STAPLE STRAND



• Molecule 42: STAPLE STRAND

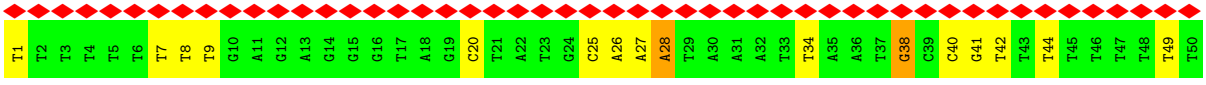


• Molecule 43: STAPLE STRAND

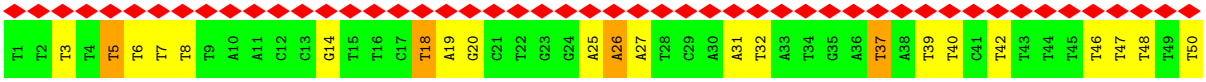


• Molecule 44: STAPLE STRAND

• Molecule 45: STAPLE STRAND

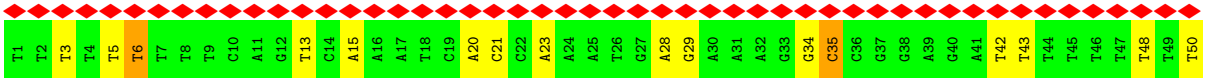


• Molecule 46: STAPLE STRAND



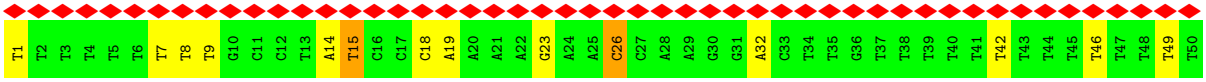
• Molecule 47: STAPLE STRAND

Chain Au:



• Molecule 48: STAPLE STRAND

Chain Av:

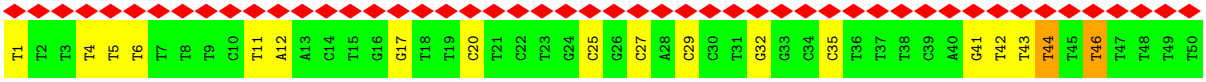


• Molecule 49: STAPLE STRAND

Chain Aw:

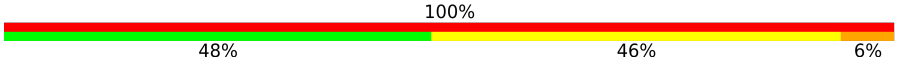
• Molecule 50: STAPLE STRAND

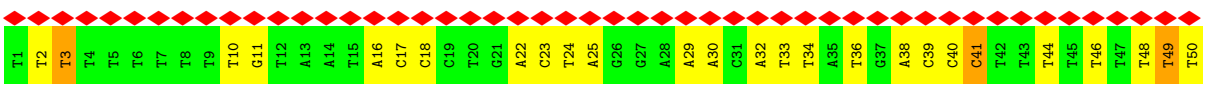
Chain Ax:



• Molecule 51: STAPLE STRAND

Chain Ay:





• Molecule 52: STAPLE STRAND

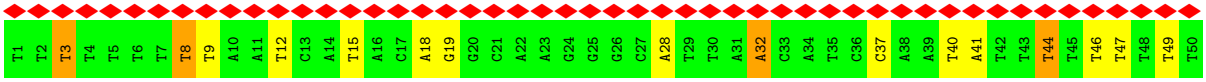
Chain Az:

• Molecule 53: STAPLE STRAND

Chain A0:

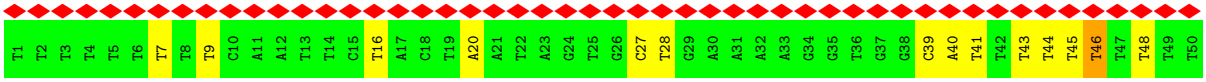
• Molecule 54: STAPLE STRAND

Chain A1:



• Molecule 55: STAPLE STRAND

Chain A2:

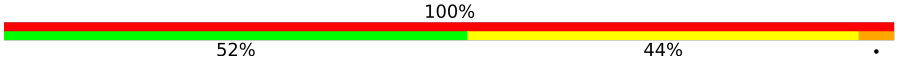


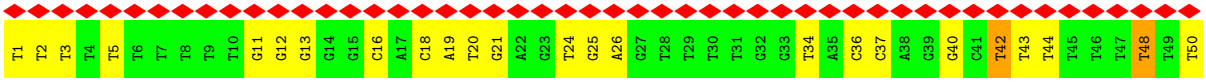
• Molecule 56: STAPLE STRAND

Chain A3:

• Molecule 57: STAPLE STRAND

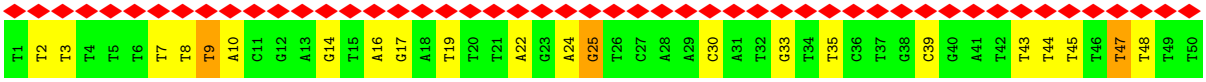
Chain A4:





• Molecule 58: STAPLE STRAND

Chain A5:



• Molecule 59: STAPLE STRAND

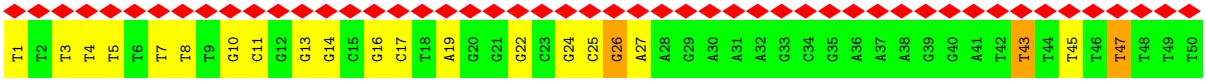
Chain A6:

• Molecule 60: STAPLE STRAND

Chain A7:

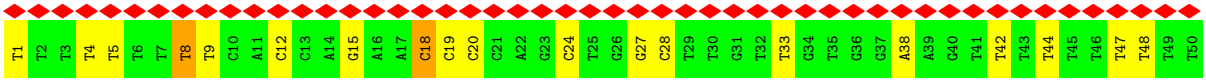
• Molecule 61: STAPLE STRAND

Chain A8:



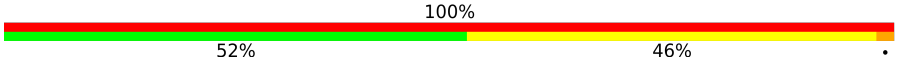
• Molecule 62: STAPLE STRAND

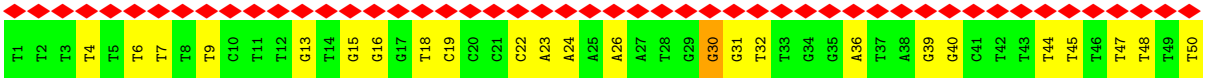
Chain A9:



• Molecule 63: STAPLE STRAND

Chain BA:



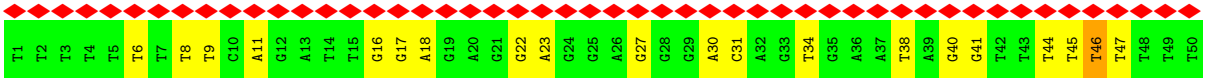


• Molecule 64: STAPLE STRAND

Chain BB:

• Molecule 65: STAPLE STRAND

Chain BC:



• Molecule 66: STAPLE STRAND

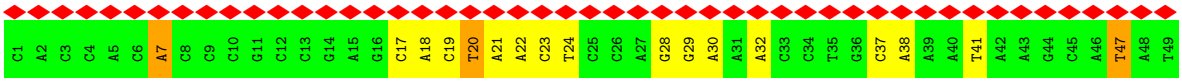
Chain BD:

• Molecule 67: STAPLE STRAND

Chain BE:

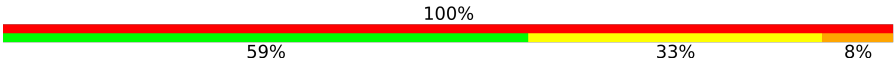
• Molecule 68: STAPLE STRAND

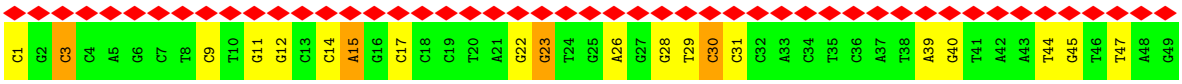
Chain BF:



• Molecule 69: STAPLE STRAND

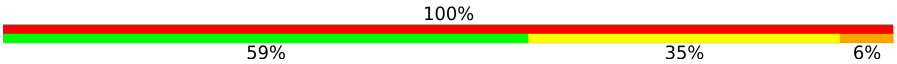
Chain BG:

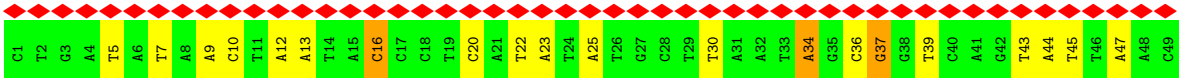




• Molecule 70: STAPLE STRAND

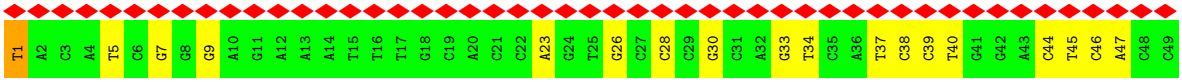
Chain BH:





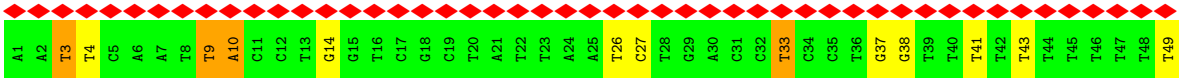
• Molecule 71: STAPLE STRAND

Chain BI:



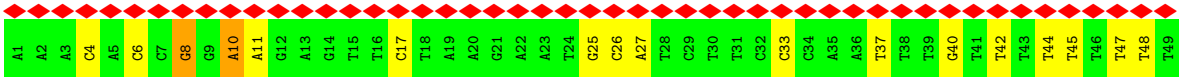
• Molecule 72: STAPLE STRAND

Chain BJ:



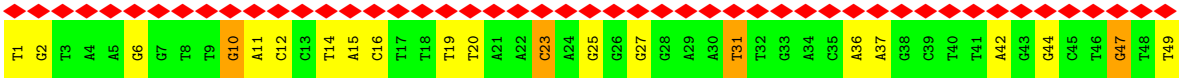
• Molecule 73: STAPLE STRAND

Chain BK:



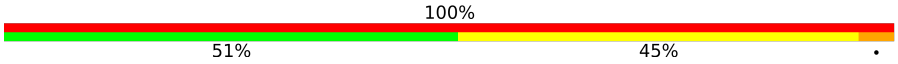
• Molecule 74: STAPLE STRAND

Chain BL:



• Molecule 75: STAPLE STRAND

Chain BM:

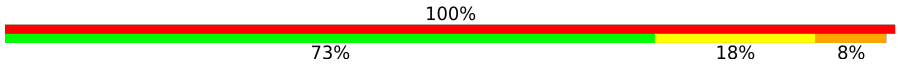


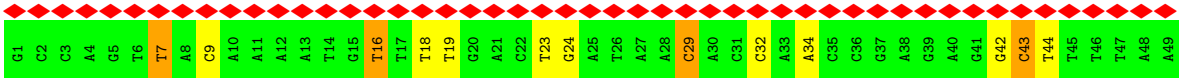
• Molecule 76: STAPLE STRAND

Chain BN:

• Molecule 77: STAPLE STRAND

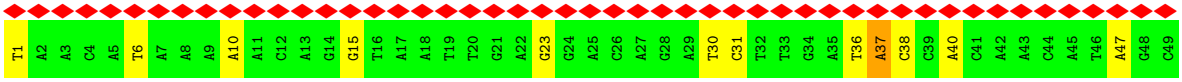
Chain BO:





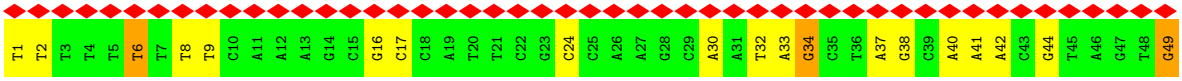
• Molecule 78: STAPLE STRAND

Chain BP:



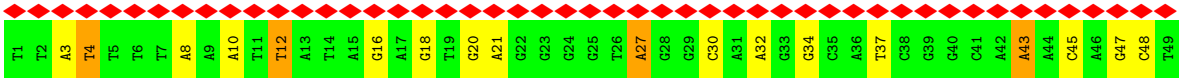
• Molecule 79: STAPLE STRAND

Chain BQ:



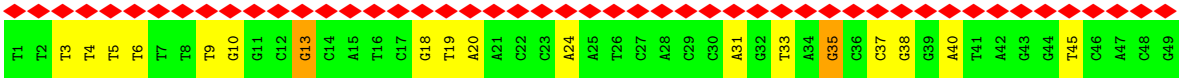
• Molecule 80: STAPLE STRAND

Chain BR:



• Molecule 81: STAPLE STRAND

Chain BS:



• Molecule 82: STAPLE STRAND

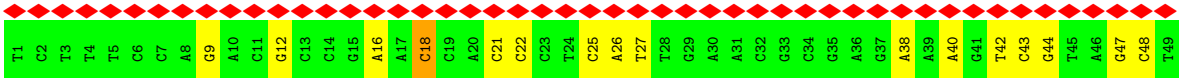
Chain BT:

• Molecule 83: STAPLE STRAND

Chain BU:

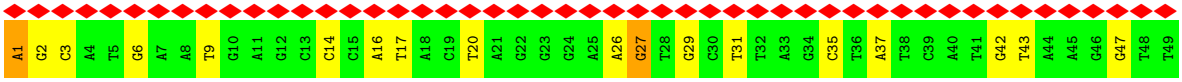
• Molecule 84: STAPLE STRAND

Chain BV:



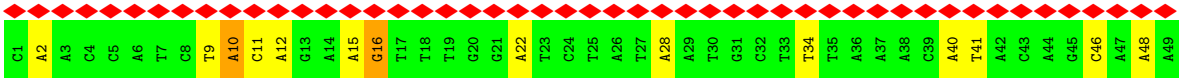
• Molecule 85: STAPLE STRAND

Chain BW:



• Molecule 86: STAPLE STRAND

Chain BX:

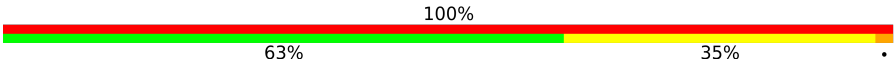


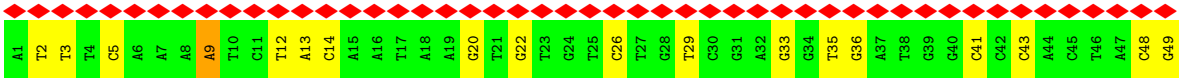
• Molecule 87: STAPLE STRAND

Chain BY:

• Molecule 88: STAPLE STRAND

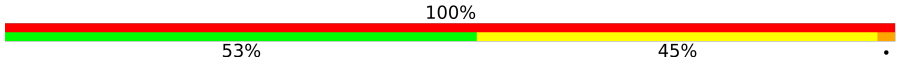
Chain BZ:

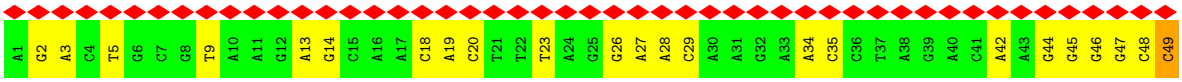




• Molecule 89: STAPLE STRAND

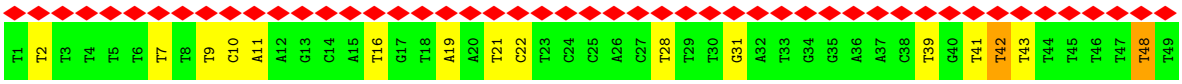
Chain Ba:





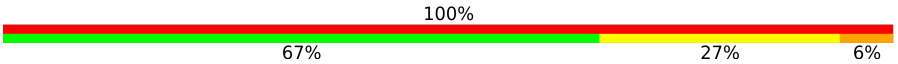
• Molecule 90: STAPLE STRAND

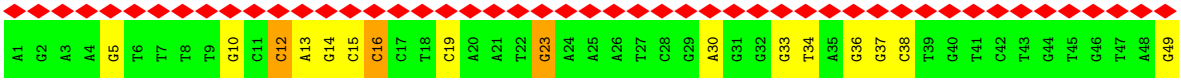
Chain Bb:



• Molecule 91: STAPLE STRAND

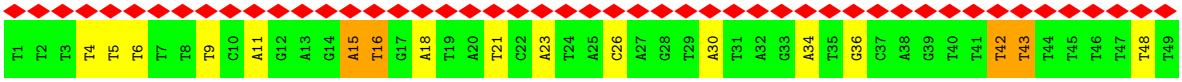
Chain Bc:





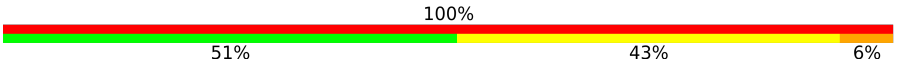
• Molecule 92: STAPLE STRAND

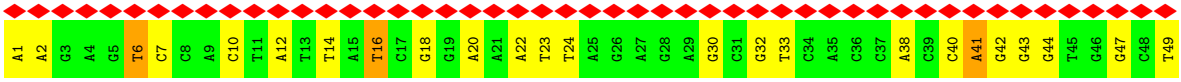
Chain Bd:



• Molecule 93: STAPLE STRAND

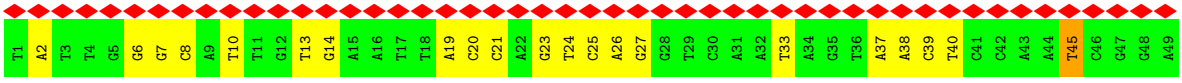
Chain Be:





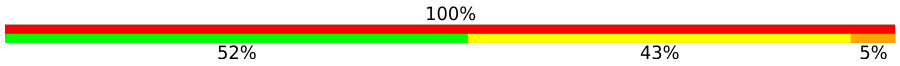
• Molecule 94: STAPLE STRAND

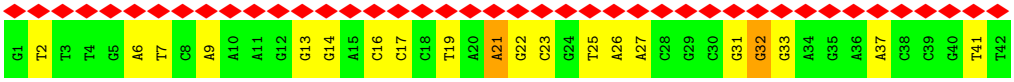
Chain Bf:



• Molecule 95: STAPLE STRAND

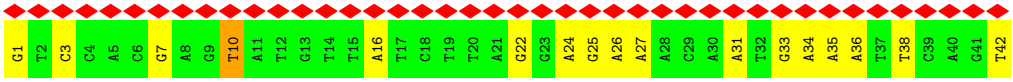
Chain Bg:





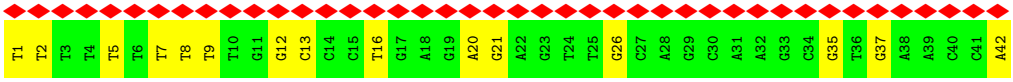
• Molecule 96: STAPLE STRAND

Chain Bh:



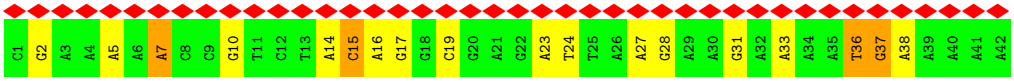
• Molecule 97: STAPLE STRAND

Chain Bi:



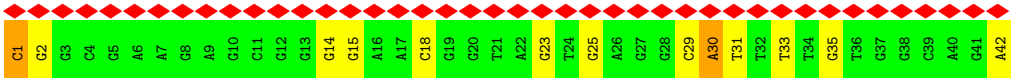
• Molecule 98: STAPLE STRAND

Chain Bj:



• Molecule 99: STAPLE STRAND

Chain Bk:

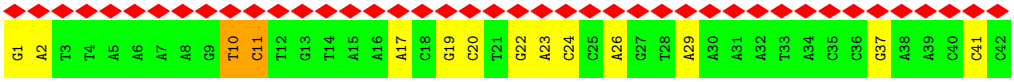


• Molecule 100: STAPLE STRAND

Chain Bl:

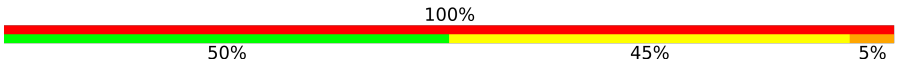
• Molecule 101: STAPLE STRAND

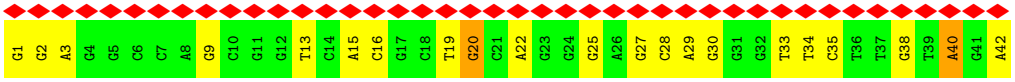
Chain Bm:



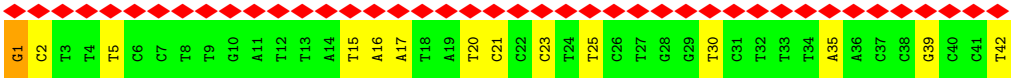
• Molecule 102: STAPLE STRAND

Chain Bn:

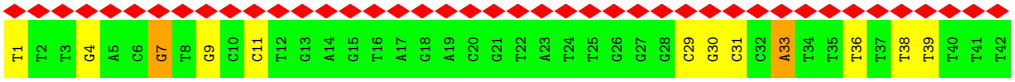




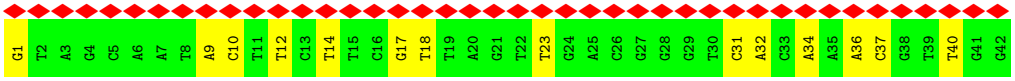
• Molecule 103: STAPLE STRAND



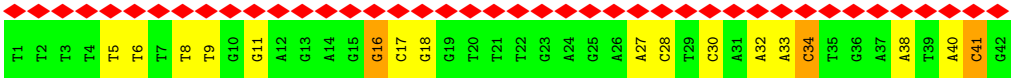
• Molecule 104: STAPLE STRAND



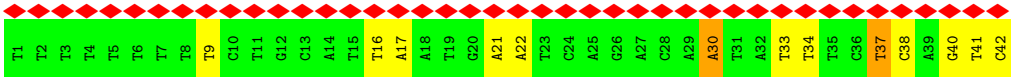
• Molecule 105: STAPLE STRAND



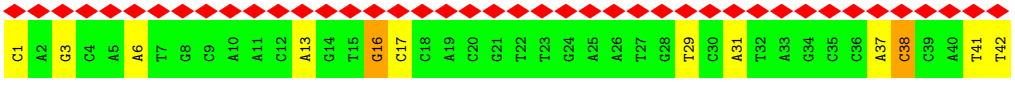
• Molecule 106: STAPLE STRAND



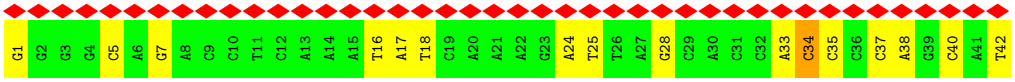
• Molecule 107: STAPLE STRAND



• Molecule 108: STAPLE STRAND

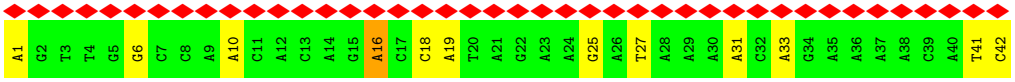


• Molecule 109: STAPLE STRAND



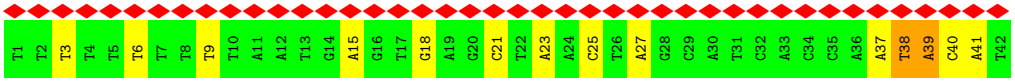
• Molecule 110: STAPLE STRAND

Chain Bv:



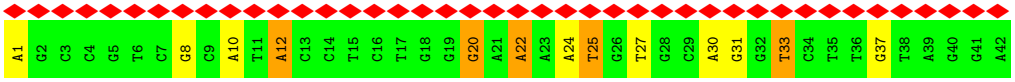
• Molecule 111: STAPLE STRAND

Chain Bw:



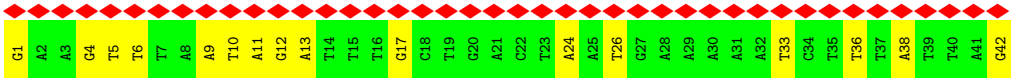
• Molecule 112: STAPLE STRAND

Chain Bx:



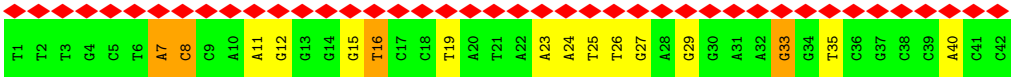
• Molecule 113: STAPLE STRAND

Chain By:



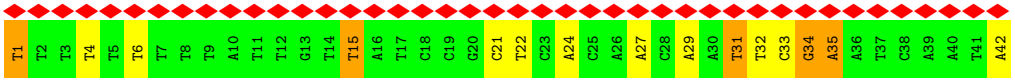
• Molecule 114: STAPLE STRAND

Chain Bz:



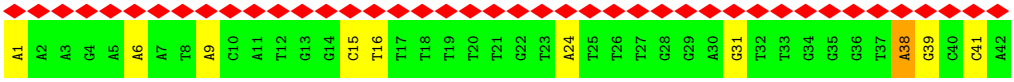
• Molecule 115: STAPLE STRAND

Chain B0:



• Molecule 116: STAPLE STRAND

Chain B1:

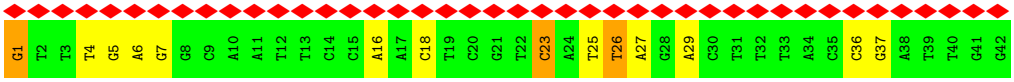


• Molecule 117: STAPLE STRAND

Chain B2:

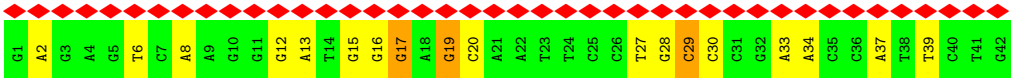
• Molecule 118: STAPLE STRAND

Chain B3:



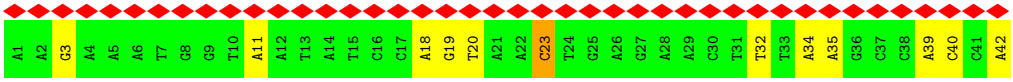
• Molecule 119: STAPLE STRAND

Chain B4:



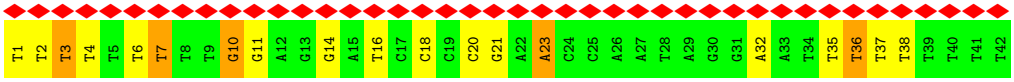
• Molecule 120: STAPLE STRAND

Chain B5:



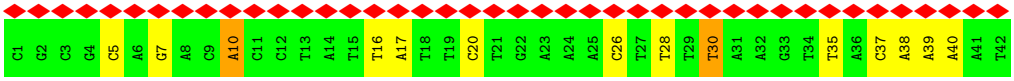
• Molecule 121: STAPLE STRAND

Chain B6:



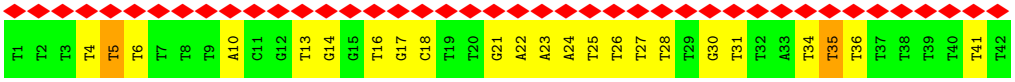
• Molecule 122: STAPLE STRAND

Chain B7:



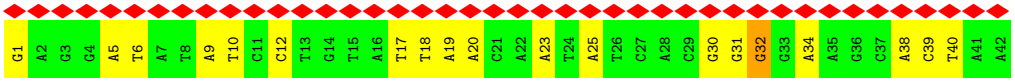
• Molecule 123: STAPLE STRAND

Chain B8:



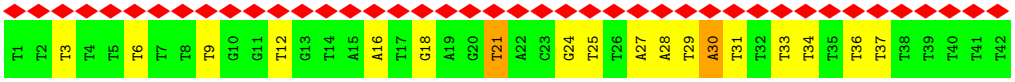
• Molecule 124: STAPLE STRAND

Chain B9:



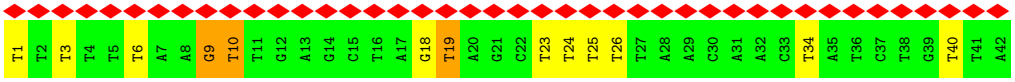
• Molecule 125: STAPLE STRAND

Chain CA:



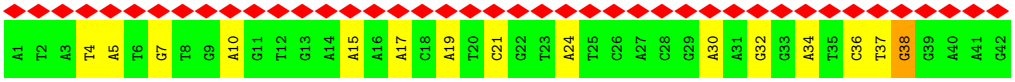
• Molecule 126: STAPLE STRAND

Chain CB:



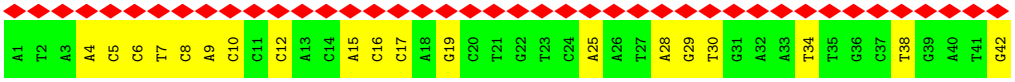
• Molecule 127: STAPLE STRAND

Chain CC:



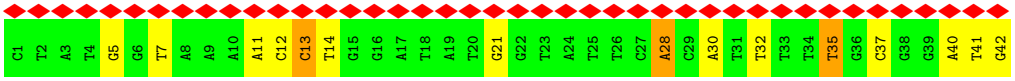
• Molecule 128: STAPLE STRAND

Chain CD:



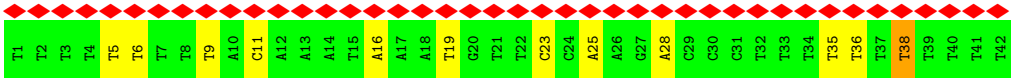
• Molecule 129: STAPLE STRAND

Chain CE:



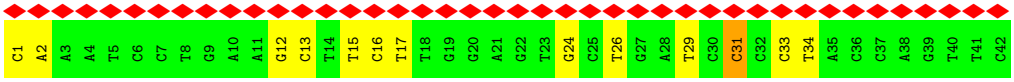
• Molecule 130: STAPLE STRAND

Chain CF:



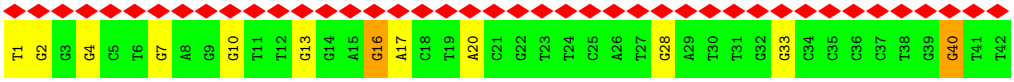
• Molecule 131: STAPLE STRAND

Chain CG:



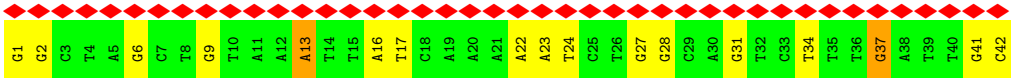
• Molecule 132: STAPLE STRAND

Chain CH:



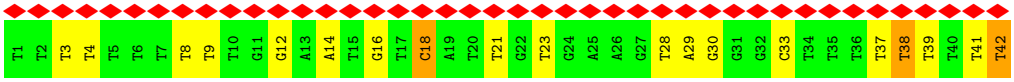
• Molecule 133: STAPLE STRAND

Chain CI:



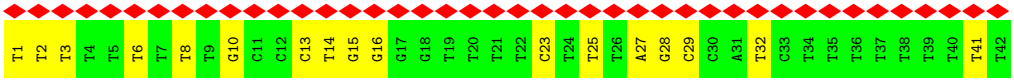
• Molecule 134: STAPLE STRAND

Chain CJ:



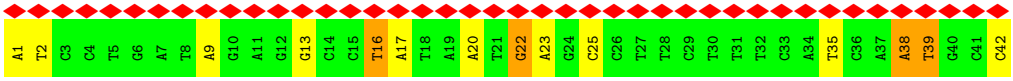
• Molecule 135: STAPLE STRAND

Chain CK:



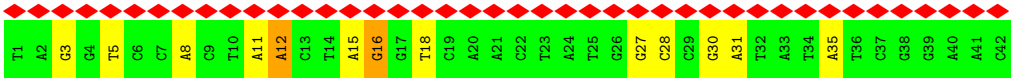
• Molecule 136: STAPLE STRAND

Chain CL:

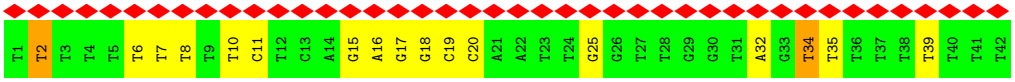


• Molecule 137: STAPLE STRAND

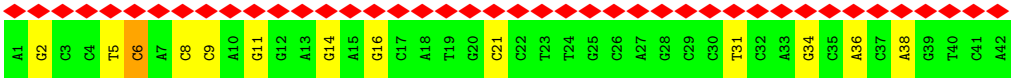
Chain CM:



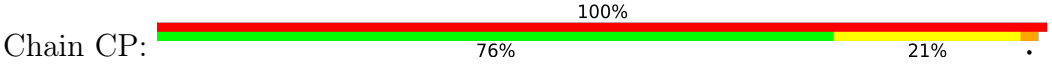
• Molecule 138: STAPLE STRAND

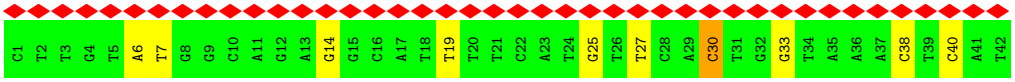


• Molecule 139: STAPLE STRAND

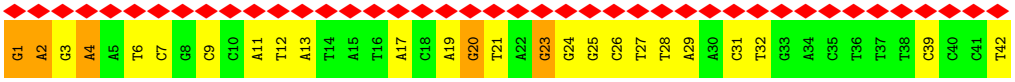


• Molecule 140: STAPLE STRAND

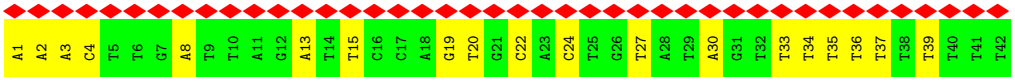




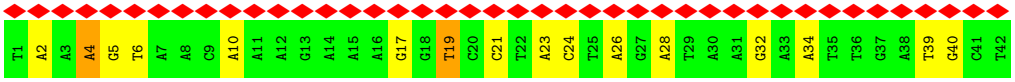
• Molecule 141: STAPLE STRAND



• Molecule 142: STAPLE STRAND



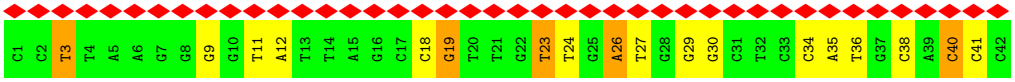
• Molecule 143: STAPLE STRAND



• Molecule 144: STAPLE STRAND

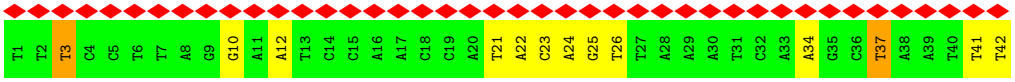
• Molecule 145: STAPLE STRAND

Chain CU:



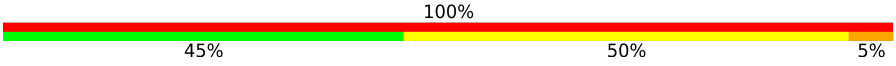
• Molecule 146: STAPLE STRAND

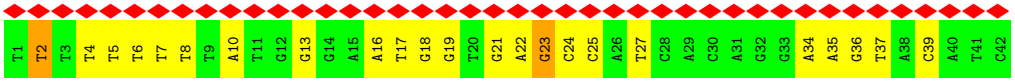
Chain CV:



• Molecule 147: STAPLE STRAND

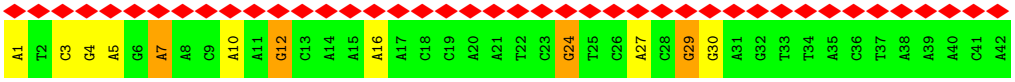
Chain CW:





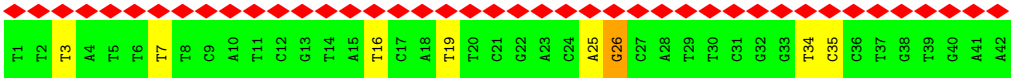
• Molecule 148: STAPLE STRAND

Chain CX:



• Molecule 149: STAPLE STRAND

Chain CY:



• Molecule 150: STAPLE STRAND

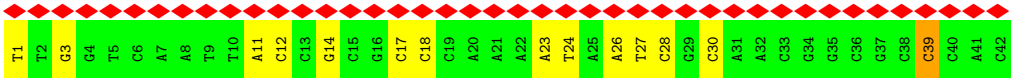
Chain CZ:

• Molecule 151: STAPLE STRAND

Chain Ca:

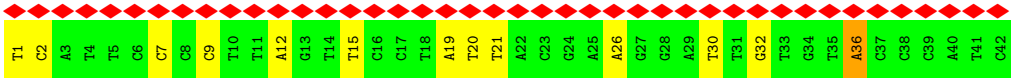
• Molecule 152: STAPLE STRAND

Chain Cb:



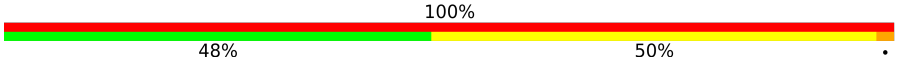
• Molecule 153: STAPLE STRAND

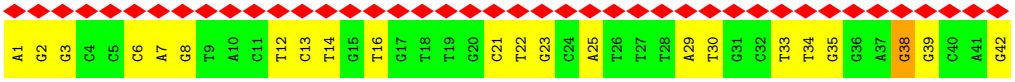
Chain Cc:



• Molecule 154: STAPLE STRAND

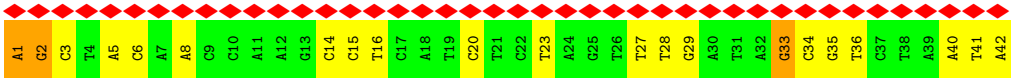
Chain Cd:





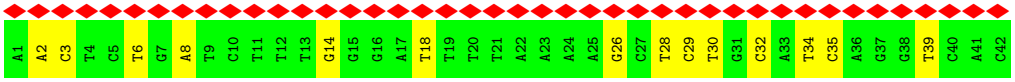
• Molecule 155: STAPLE STRAND

Chain Ce:



• Molecule 156: STAPLE STRAND

Chain Cf:



• Molecule 157: STAPLE STRAND

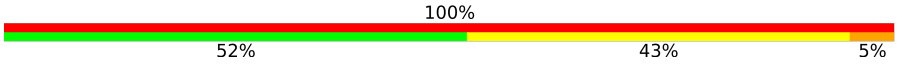
Chain Cg:

• Molecule 158: STAPLE STRAND

Chain Ch:

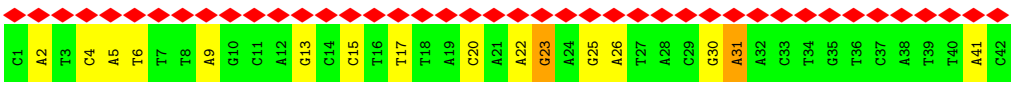
• Molecule 159: STAPLE STRAND

Chain Ci:



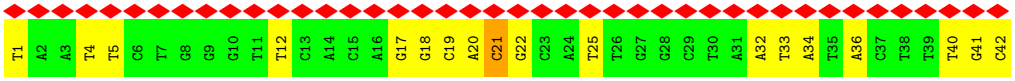
• Molecule 160: STAPLE STRAND

Chain Cj:



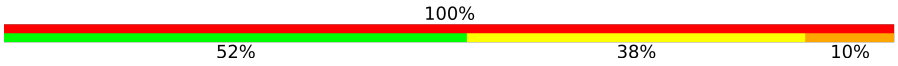
• Molecule 161: STAPLE STRAND

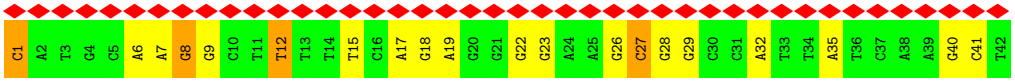
Chain Ck:



• Molecule 162: STAPLE STRAND

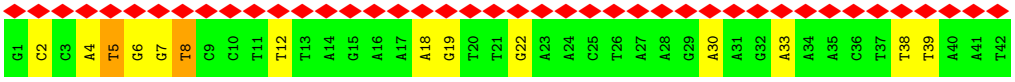
Chain Cl:





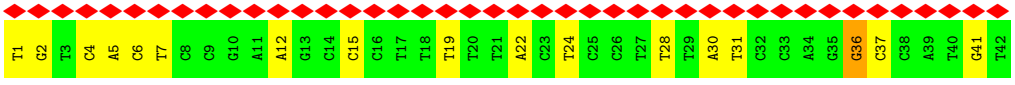
• Molecule 163: STAPLE STRAND

Chain Cm:



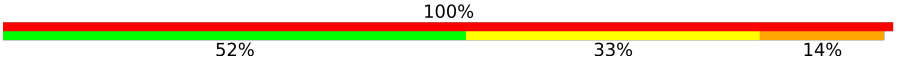
• Molecule 164: STAPLE STRAND

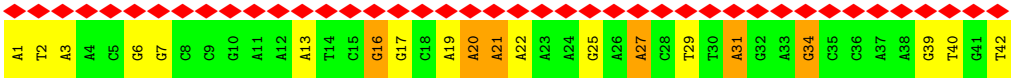
Chain Cn:



• Molecule 165: STAPLE STRAND

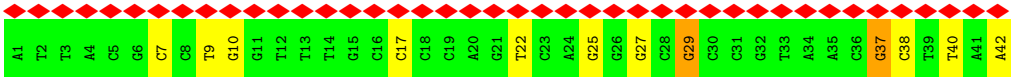
Chain Co:





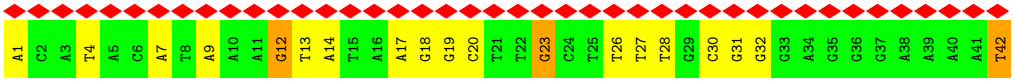
• Molecule 166: STAPLE STRAND

Chain Cp:



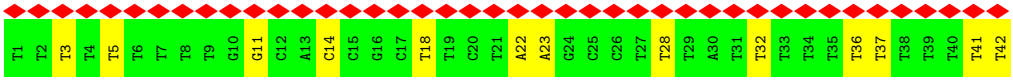
• Molecule 167: STAPLE STRAND

Chain Cq:



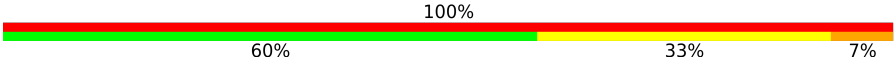
• Molecule 168: STAPLE STRAND

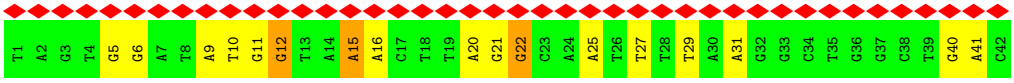
Chain Cr:



• Molecule 169: STAPLE STRAND

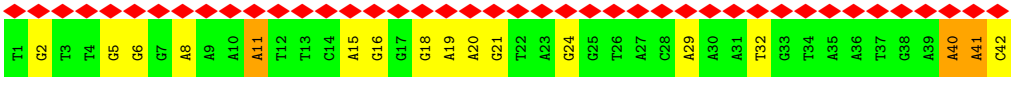
Chain Cs:





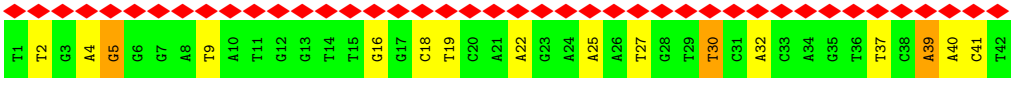
• Molecule 170: STAPLE STRAND

Chain Ct:



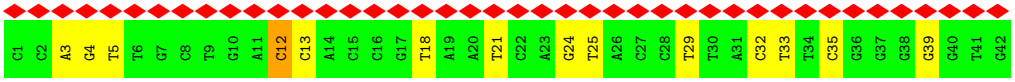
• Molecule 171: STAPLE STRAND

Chain Cu:



• Molecule 172: STAPLE STRAND

Chain Cv:

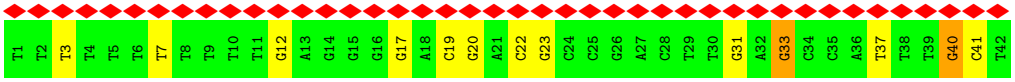


• Molecule 173: STAPLE STRAND

Chain Cw:

• Molecule 174: STAPLE STRAND

Chain Cx:

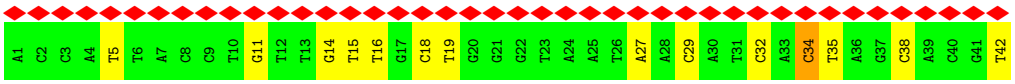


• Molecule 175: STAPLE STRAND

Chain Cy:

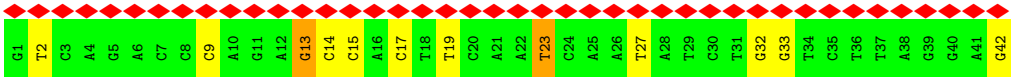
• Molecule 176: STAPLE STRAND

Chain Cz:



• Molecule 177: STAPLE STRAND

Chain C0:

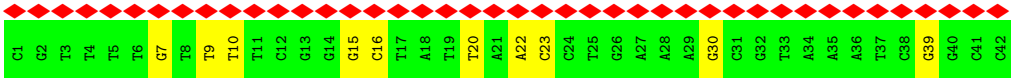


• Molecule 178: STAPLE STRAND

Chain C1:

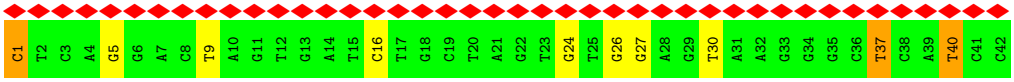
• Molecule 179: STAPLE STRAND

Chain C2:



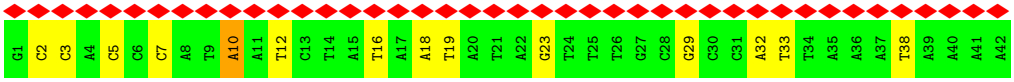
• Molecule 180: STAPLE STRAND

Chain C3:



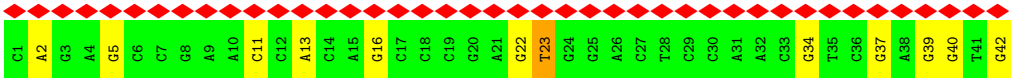
• Molecule 181: STAPLE STRAND

Chain C4:



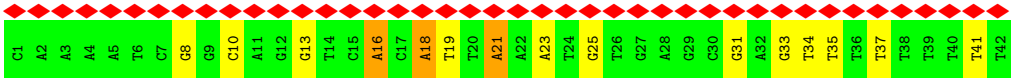
• Molecule 182: STAPLE STRAND

Chain C5:



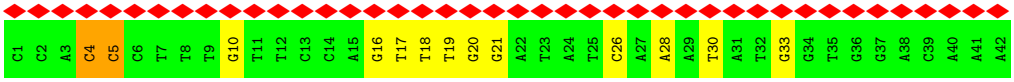
• Molecule 183: STAPLE STRAND

Chain C6:



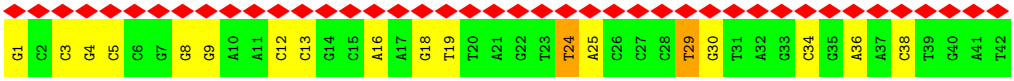
• Molecule 184: STAPLE STRAND

Chain C7:



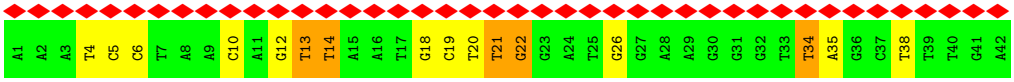
• Molecule 185: STAPLE STRAND

Chain C8:

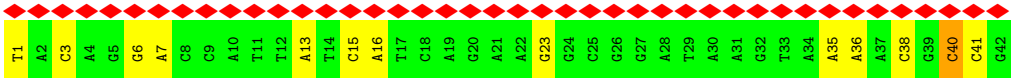


• Molecule 186: STAPLE STRAND

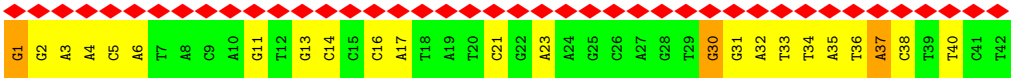
Chain C9:



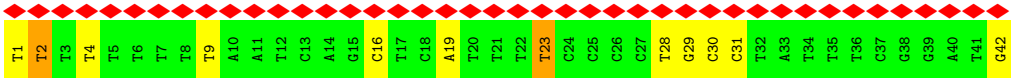
• Molecule 187: STAPLE STRAND



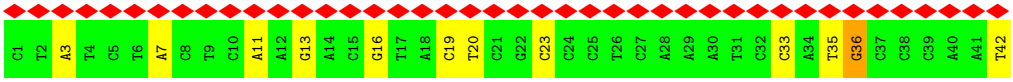
• Molecule 188: STAPLE STRAND



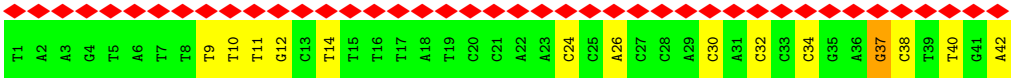
• Molecule 189: STAPLE STRAND



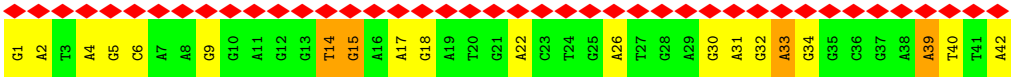
• Molecule 190: STAPLE STRAND



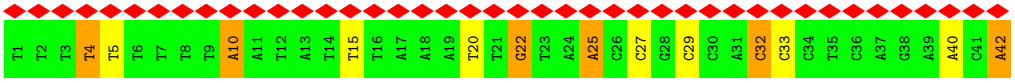
• Molecule 191: STAPLE STRAND



• Molecule 192: STAPLE STRAND

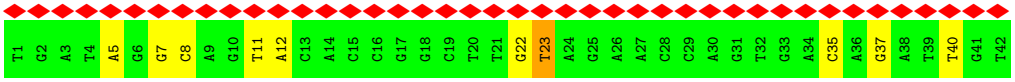


• Molecule 193: STAPLE STRAND



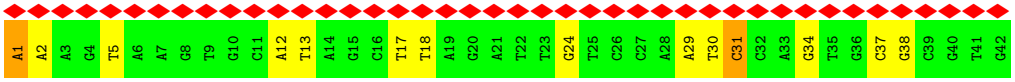
• Molecule 194: STAPLE STRAND

Chain DH:



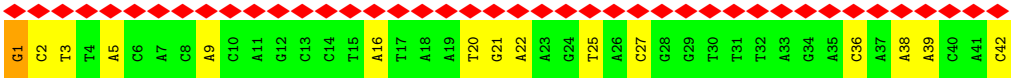
• Molecule 195: STAPLE STRAND

Chain DI:



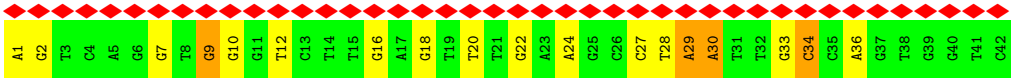
• Molecule 196: STAPLE STRAND

Chain DJ:



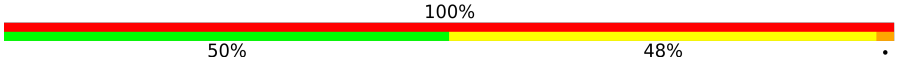
• Molecule 197: STAPLE STRAND

Chain DK:



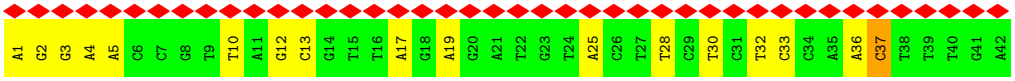
• Molecule 198: STAPLE STRAND

Chain DL:



• Molecule 199: STAPLE STRAND

Chain DM:

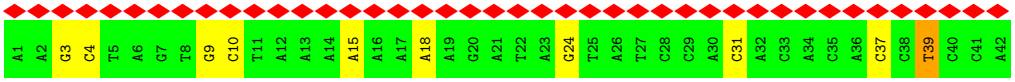


• Molecule 200: STAPLE STRAND

Chain DN:

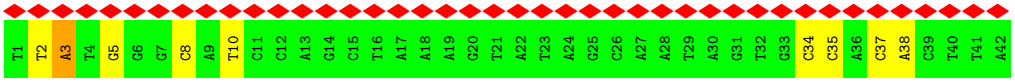
• Molecule 201: STAPLE STRAND

Chain DO:



• Molecule 202: STAPLE STRAND

Chain DP:

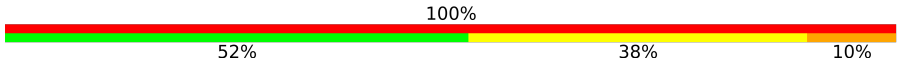


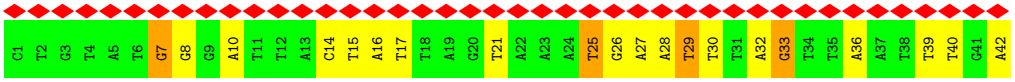
• Molecule 203: STAPLE STRAND

Chain DQ:

• Molecule 204: STAPLE STRAND

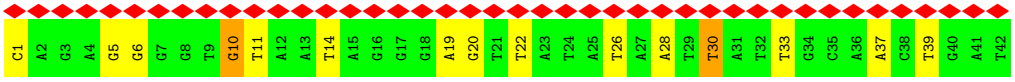
Chain DR:





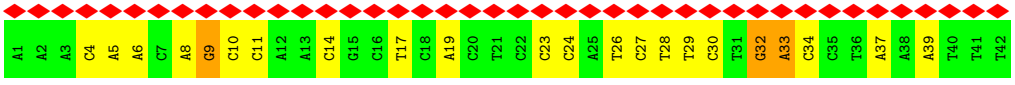
• Molecule 205: STAPLE STRAND

Chain DS:



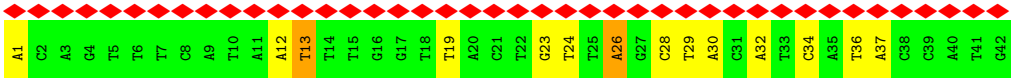
• Molecule 206: STAPLE STRAND

Chain DT:

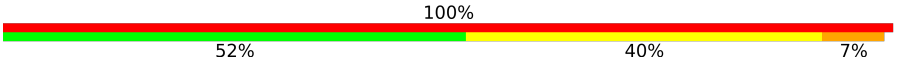


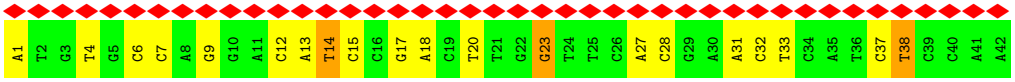
• Molecule 207: STAPLE STRAND

Chain DU:

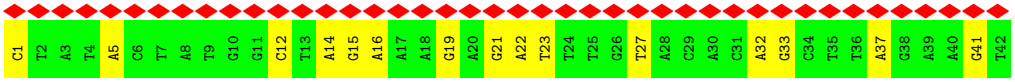


• Molecule 208: STAPLE STRAND



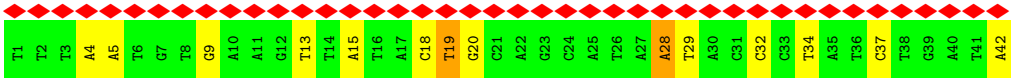


• Molecule 209: STAPLE STRAND

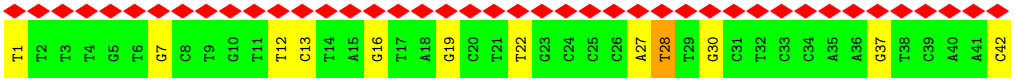


• Molecule 210: STAPLE STRAND

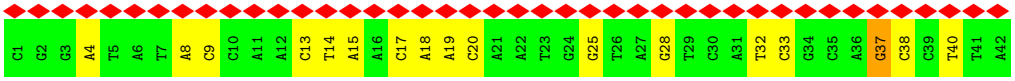
• Molecule 211: STAPLE STRAND



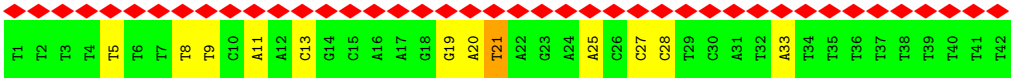
• Molecule 212: STAPLE STRAND



• Molecule 213: STAPLE STRAND

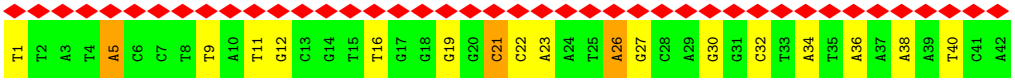


• Molecule 214: STAPLE STRAND



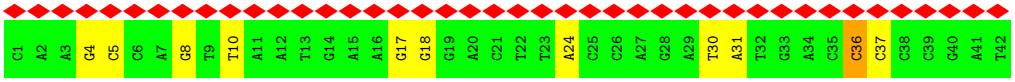
• Molecule 215: STAPLE STRAND

Chain Dc:



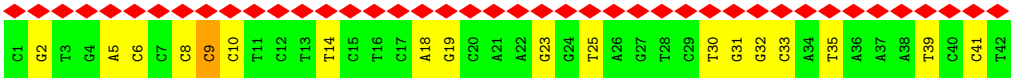
• Molecule 216: STAPLE STRAND

Chain Dd:



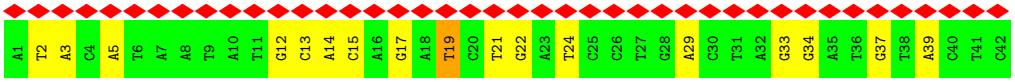
• Molecule 217: STAPLE STRAND

Chain De:



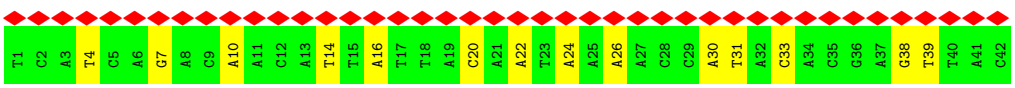
• Molecule 218: STAPLE STRAND

Chain Df:



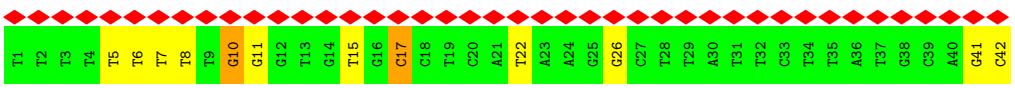
• Molecule 219: STAPLE STRAND

Chain Dg:



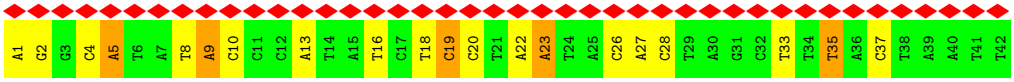
• Molecule 220: STAPLE STRAND

Chain Dh:



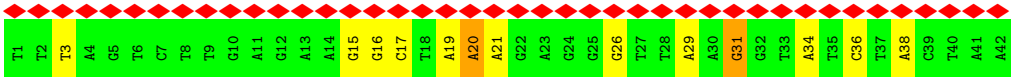
• Molecule 221: STAPLE STRAND

Chain Di:



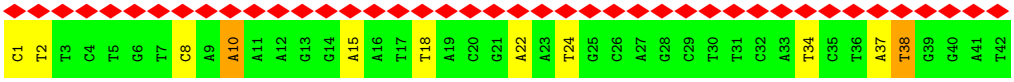
• Molecule 222: STAPLE STRAND

Chain Dj:



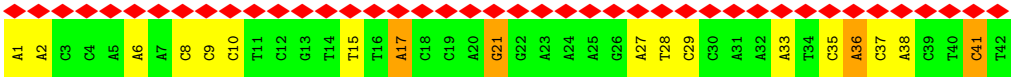
• Molecule 223: STAPLE STRAND

Chain Dk:



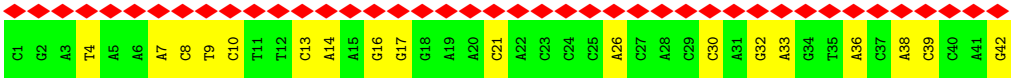
• Molecule 224: STAPLE STRAND

Chain Dl:



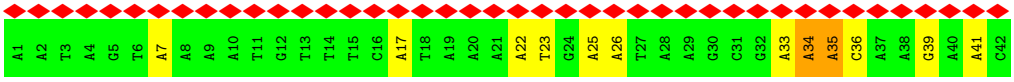
• Molecule 225: STAPLE STRAND

Chain Dm:



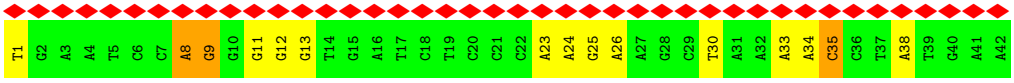
• Molecule 226: STAPLE STRAND

Chain Dn:



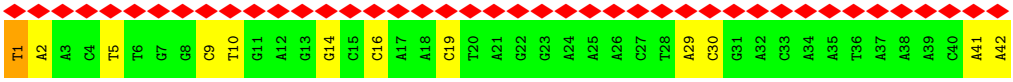
• Molecule 227: STAPLE STRAND

Chain Do:



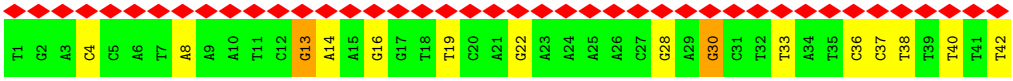
• Molecule 228: STAPLE STRAND

Chain Dp:



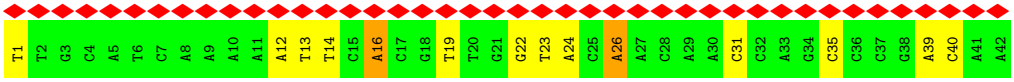
• Molecule 229: STAPLE STRAND

Chain Dq:



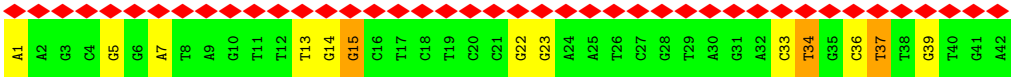
• Molecule 230: STAPLE STRAND

Chain Dr:



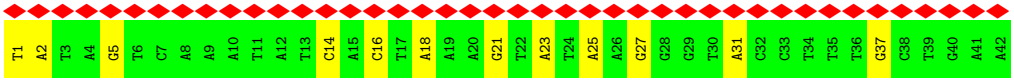
• Molecule 231: STAPLE STRAND

Chain Ds:



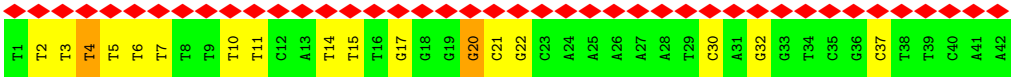
• Molecule 232: STAPLE STRAND

Chain Dt:



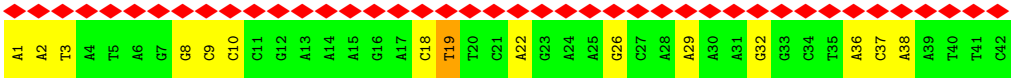
• Molecule 233: STAPLE STRAND

Chain Du:



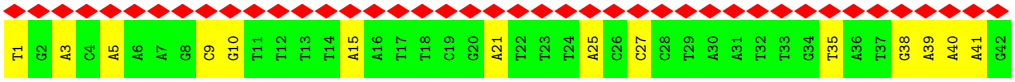
• Molecule 234: STAPLE STRAND

Chain Dv:



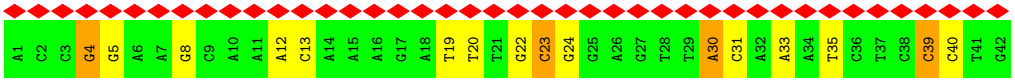
• Molecule 235: STAPLE STRAND

Chain Dw:



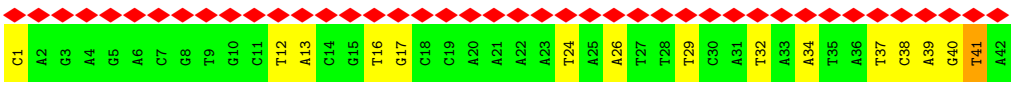
• Molecule 236: STAPLE STRAND

Chain Dx:



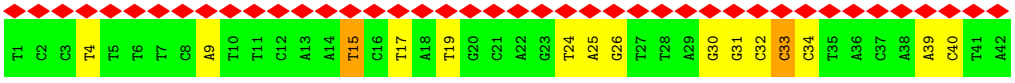
• Molecule 237: STAPLE STRAND

Chain Dy:



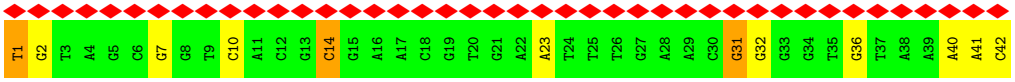
• Molecule 238: STAPLE STRAND

Chain Dz:



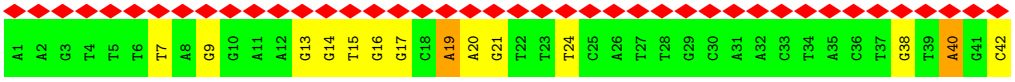
• Molecule 239: STAPLE STRAND

Chain D0:



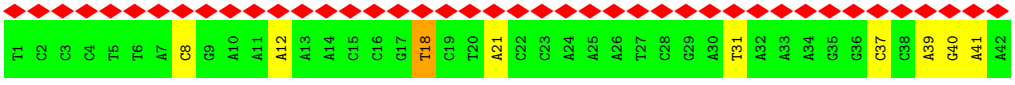
• Molecule 240: STAPLE STRAND

Chain D1:



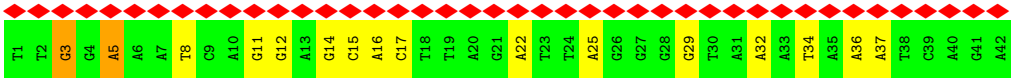
• Molecule 241: STAPLE STRAND

Chain D2:

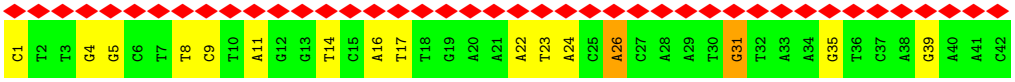


• Molecule 242: STAPLE STRAND

Chain D3:

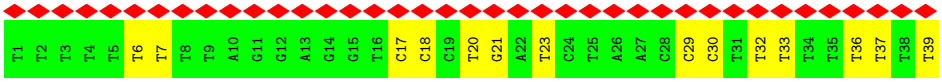


• Molecule 243: STAPLE STRAND

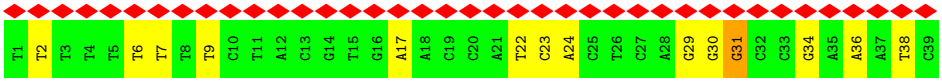


• Molecule 244: STAPLE STRAND

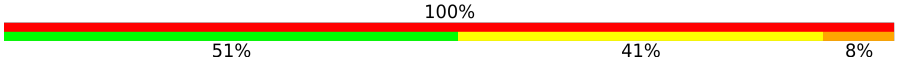
• Molecule 245: STAPLE STRAND

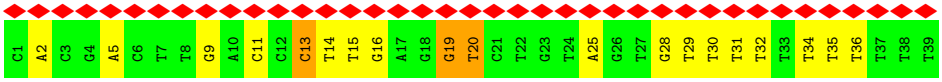


• Molecule 246: STAPLE STRAND

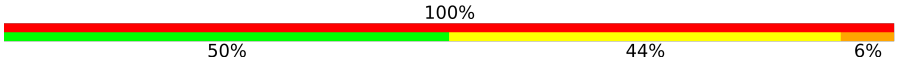


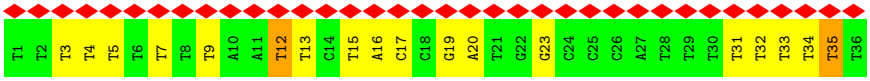
• Molecule 247: STAPLE STRAND



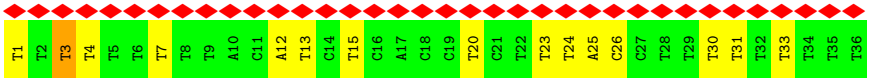


• Molecule 248: STAPLE STRAND



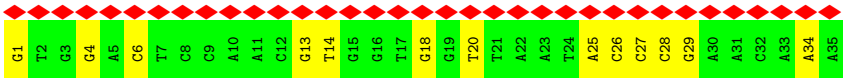


• Molecule 249: STAPLE STRAND



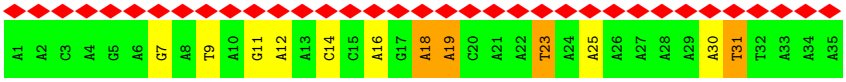
• Molecule 250: STAPLE STRAND

Chain EB:



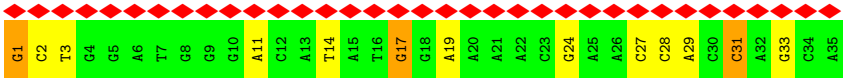
• Molecule 251: STAPLE STRAND

Chain EC:



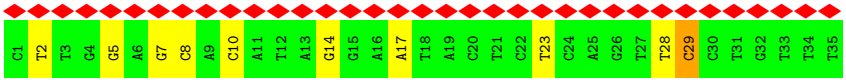
• Molecule 252: STAPLE STRAND

Chain ED:



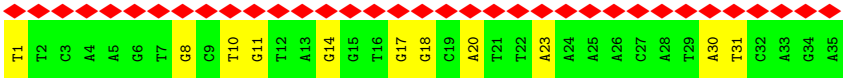
• Molecule 253: STAPLE STRAND

Chain EE:



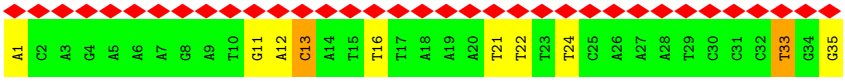
• Molecule 254: STAPLE STRAND

Chain EF:



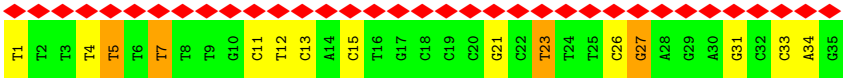
• Molecule 255: STAPLE STRAND

Chain EG:

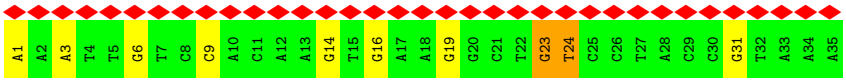


• Molecule 256: STAPLE STRAND

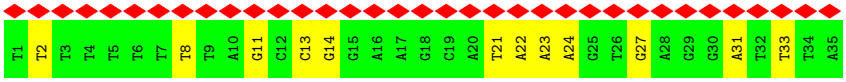
Chain EH:



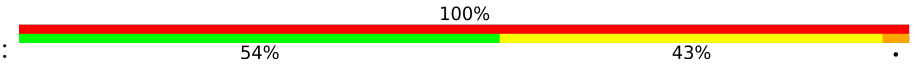
• Molecule 257: STAPLE STRAND

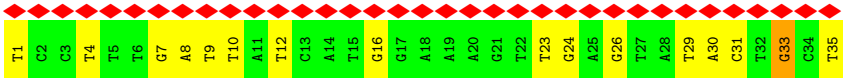


• Molecule 258: STAPLE STRAND

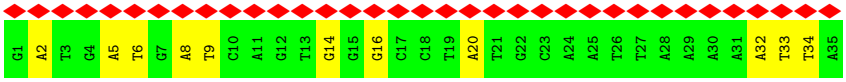


• Molecule 259: STAPLE STRAND

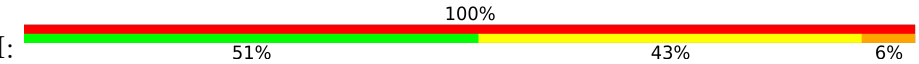


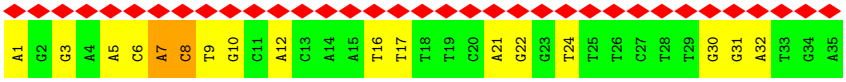


• Molecule 260: STAPLE STRAND

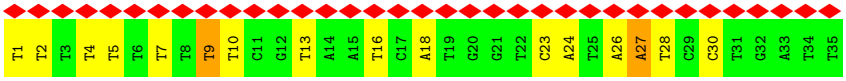


• Molecule 261: STAPLE STRAND

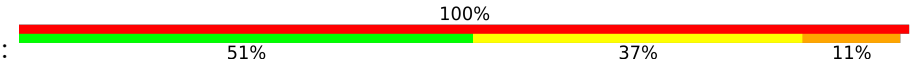


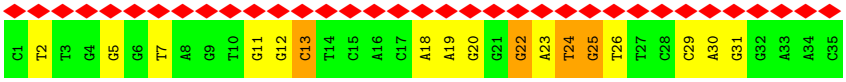


• Molecule 262: STAPLE STRAND



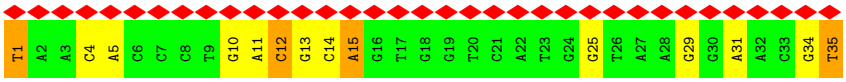
• Molecule 263: STAPLE STRAND





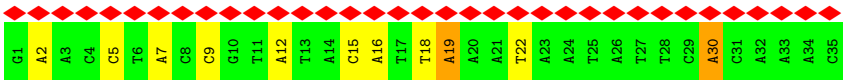
• Molecule 264: STAPLE STRAND

Chain EP:



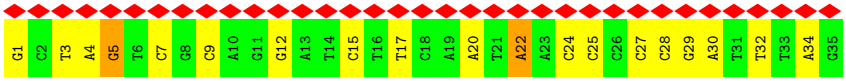
• Molecule 265: STAPLE STRAND

Chain EQ:



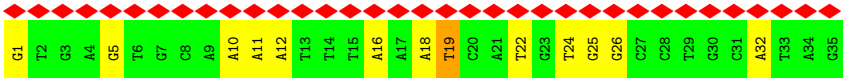
• Molecule 266: STAPLE STRAND

Chain ER:



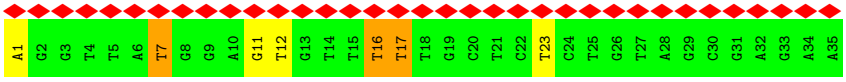
• Molecule 267: STAPLE STRAND

Chain ES:



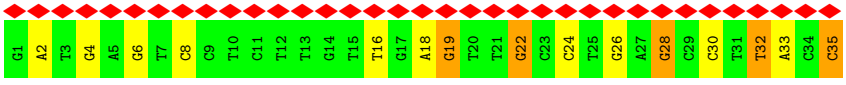
• Molecule 268: STAPLE STRAND

Chain ET:



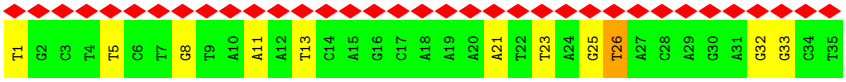
• Molecule 269: STAPLE STRAND

Chain EU:



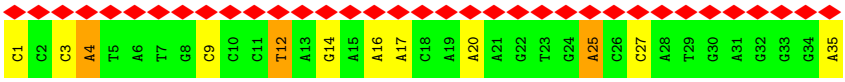
• Molecule 270: STAPLE STRAND

Chain EV:



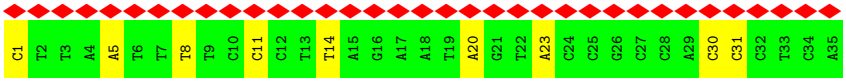
• Molecule 271: STAPLE STRAND

Chain EW:



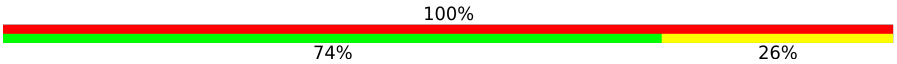
• Molecule 272: STAPLE STRAND

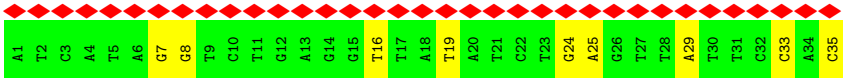
Chain EX:



• Molecule 273: STAPLE STRAND

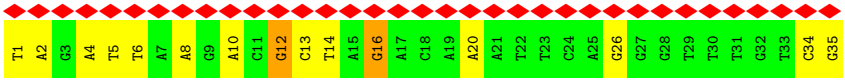
Chain EY:





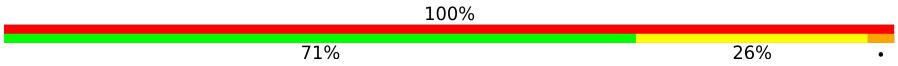
• Molecule 274: STAPLE STRAND

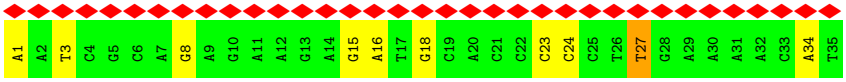
Chain EZ:



• Molecule 275: STAPLE STRAND

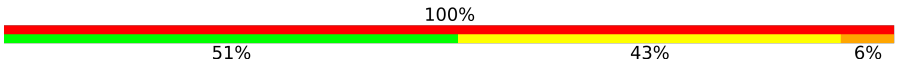
Chain Ea:

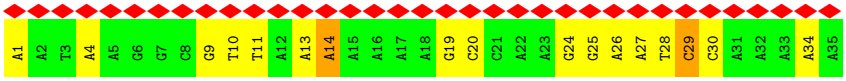




• Molecule 276: STAPLE STRAND

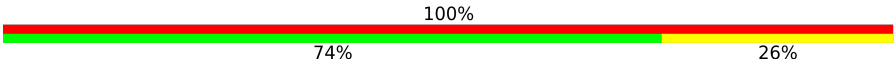
Chain Eb:

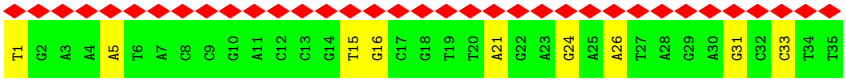




• Molecule 277: STAPLE STRAND

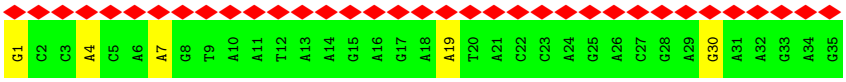
Chain Ec:





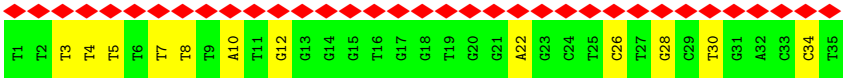
• Molecule 278: STAPLE STRAND

Chain Ed:



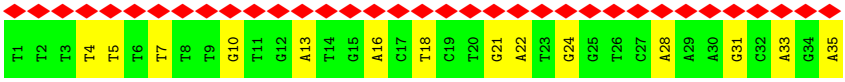
• Molecule 279: STAPLE STRAND

Chain Ee:



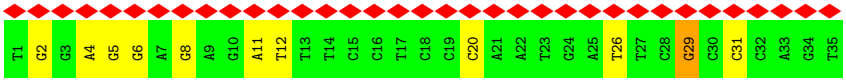
• Molecule 280: STAPLE STRAND

Chain Ef:



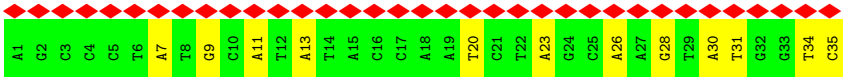
• Molecule 281: STAPLE STRAND

Chain Eg:



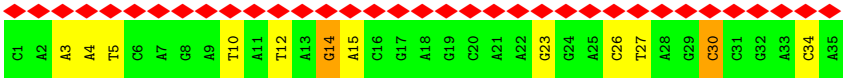
• Molecule 282: STAPLE STRAND

Chain Eh:



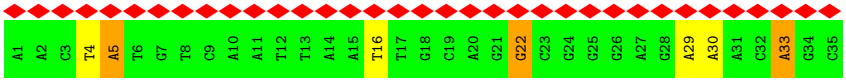
• Molecule 283: STAPLE STRAND

Chain Ei:



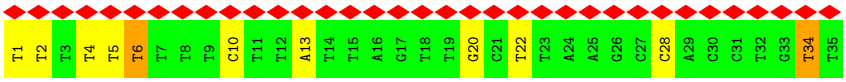
• Molecule 284: STAPLE STRAND

Chain Ej:



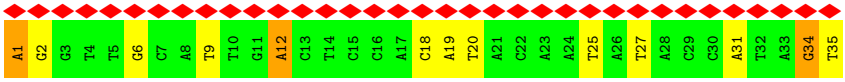
• Molecule 285: STAPLE STRAND

Chain Ek:



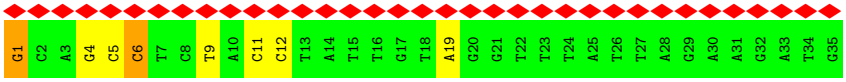
• Molecule 286: STAPLE STRAND

Chain El:



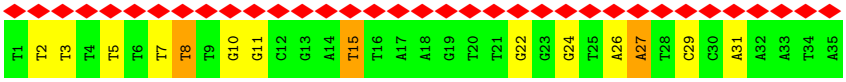
• Molecule 287: STAPLE STRAND

Chain Em:



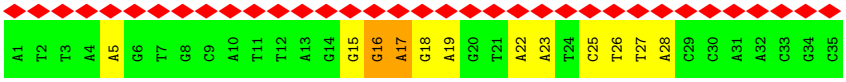
• Molecule 288: STAPLE STRAND

Chain En:



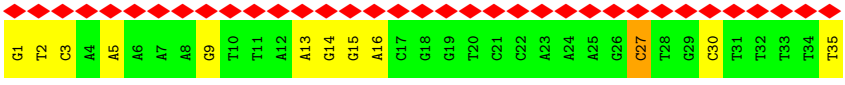
• Molecule 289: STAPLE STRAND

Chain Eo:



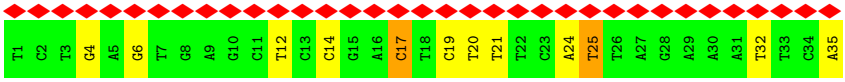
• Molecule 290: STAPLE STRAND

Chain Ep:

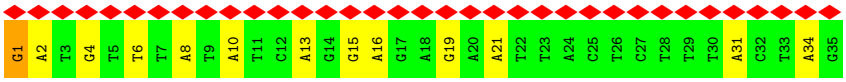


• Molecule 291: STAPLE STRAND

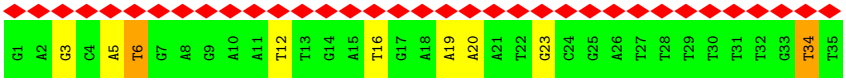
Chain Eq:



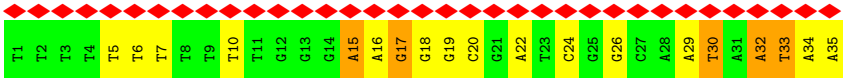
• Molecule 292: STAPLE STRAND



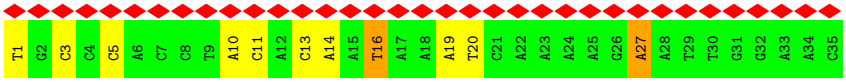
• Molecule 293: STAPLE STRAND



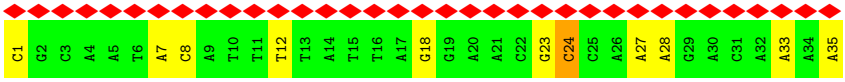
• Molecule 294: STAPLE STRAND



• Molecule 295: STAPLE STRAND

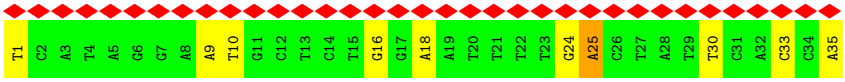


• Molecule 296: STAPLE STRAND



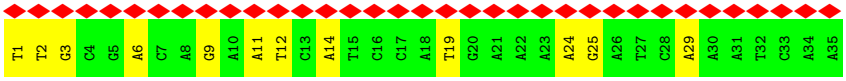
• Molecule 297: STAPLE STRAND

• Molecule 298: STAPLE STRAND



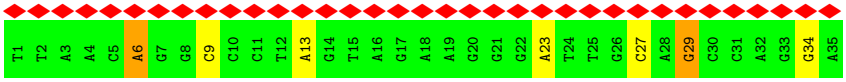
• Molecule 299: STAPLE STRAND

Chain Ey:



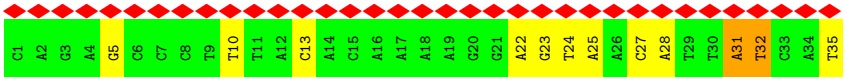
• Molecule 300: STAPLE STRAND

Chain Ez:



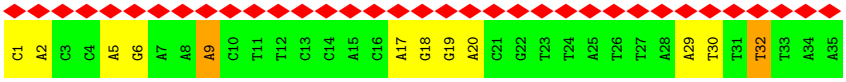
• Molecule 301: STAPLE STRAND

Chain E0:



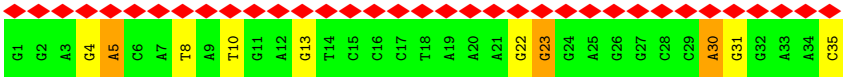
• Molecule 302: STAPLE STRAND

Chain E1:



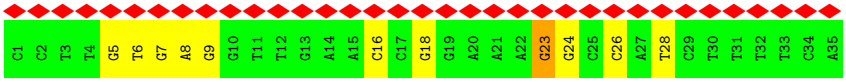
• Molecule 303: STAPLE STRAND

Chain E2:



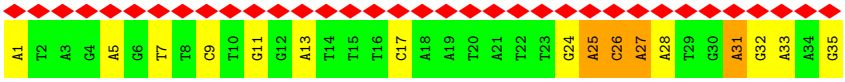
• Molecule 304: STAPLE STRAND

Chain E3:



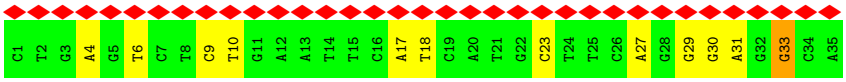
• Molecule 305: STAPLE STRAND

Chain E4:



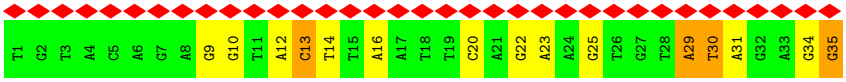
• Molecule 306: STAPLE STRAND

Chain E5:



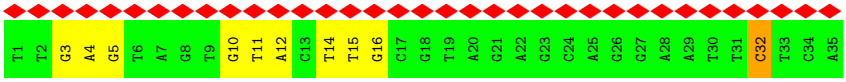
• Molecule 307: STAPLE STRAND

Chain E6:



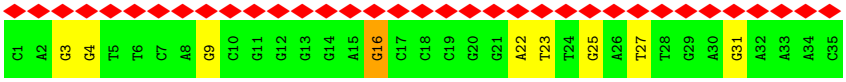
• Molecule 308: STAPLE STRAND

Chain E7:



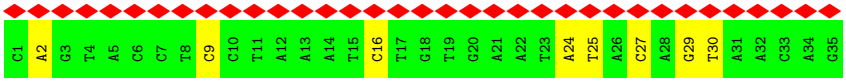
• Molecule 309: STAPLE STRAND

Chain E8:



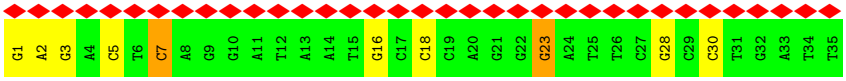
• Molecule 310: STAPLE STRAND

Chain E9:



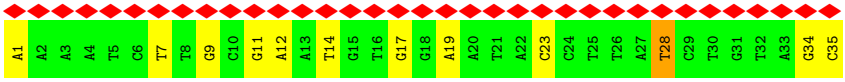
• Molecule 311: STAPLE STRAND

Chain FA:



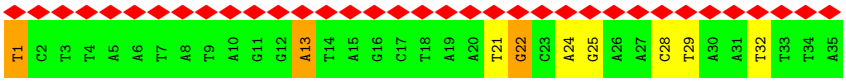
• Molecule 312: STAPLE STRAND

Chain FB:



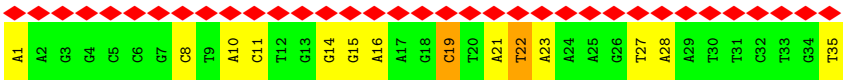
• Molecule 313: STAPLE STRAND

Chain FC:



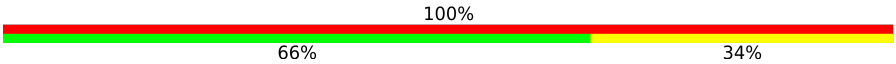
• Molecule 314: STAPLE STRAND

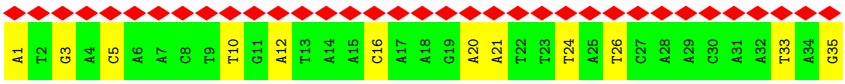
Chain FD:



• Molecule 315: STAPLE STRAND

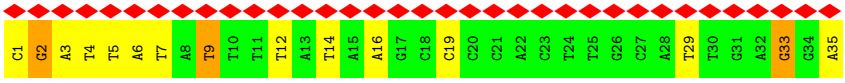
Chain FE:





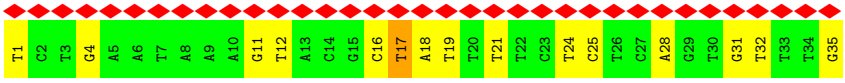
• Molecule 316: STAPLE STRAND

Chain FF:



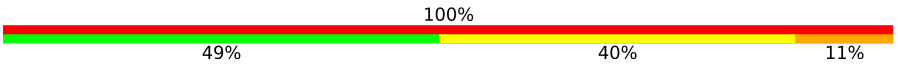
• Molecule 317: STAPLE STRAND

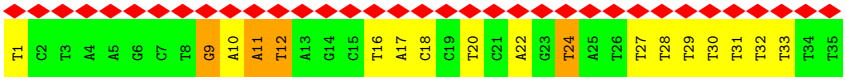
Chain FG:



• Molecule 318: STAPLE STRAND

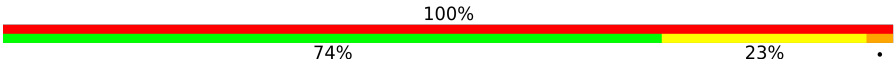
Chain FH:

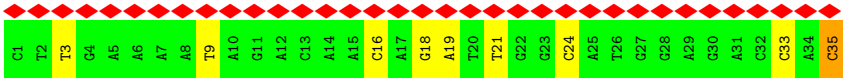




• Molecule 319: STAPLE STRAND

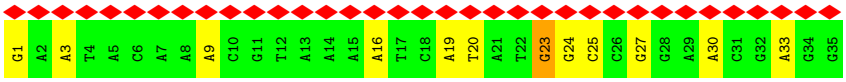
Chain FI:





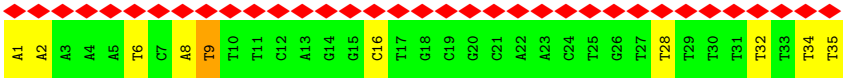
• Molecule 320: STAPLE STRAND

Chain FJ:



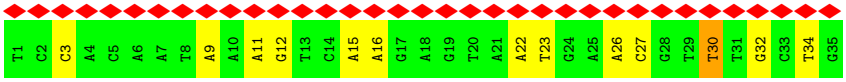
• Molecule 321: STAPLE STRAND

Chain FK:



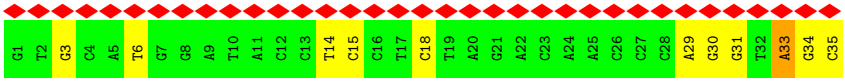
• Molecule 322: STAPLE STRAND

Chain FL:



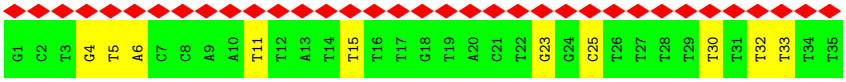
• Molecule 323: STAPLE STRAND

Chain FM:



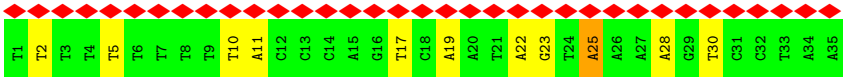
• Molecule 324: STAPLE STRAND

Chain FN:



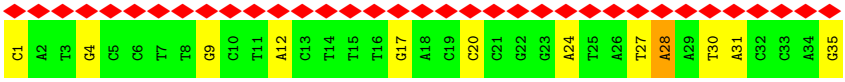
• Molecule 325: STAPLE STRAND

Chain FO:



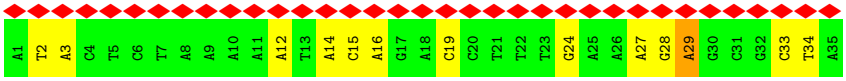
• Molecule 326: STAPLE STRAND

Chain FP:



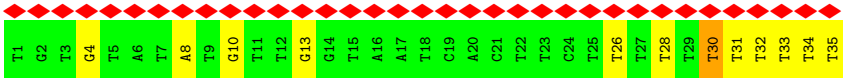
• Molecule 327: STAPLE STRAND

Chain FQ:



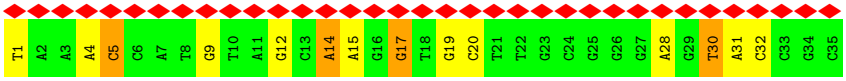
• Molecule 328: STAPLE STRAND

Chain FR:



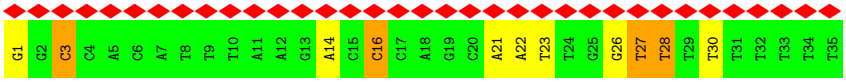
• Molecule 329: STAPLE STRAND

Chain FS:



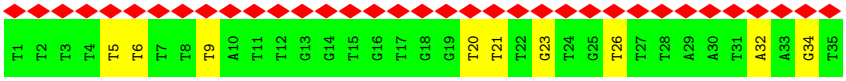
• Molecule 330: STAPLE STRAND

Chain FT:



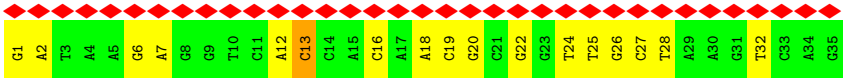
• Molecule 331: STAPLE STRAND

Chain FU:



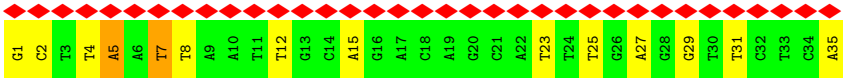
• Molecule 332: STAPLE STRAND

Chain FV:



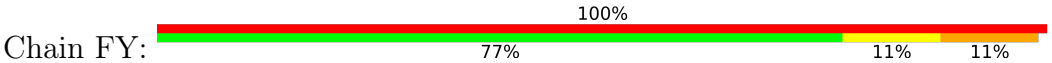
• Molecule 333: STAPLE STRAND

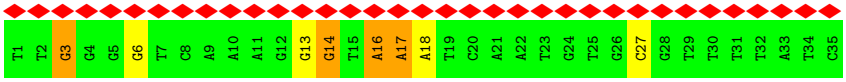
Chain FW:



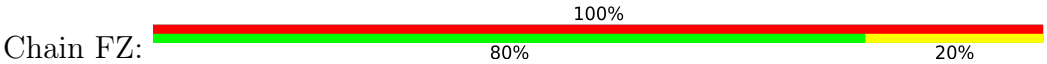
• Molecule 334: STAPLE STRAND

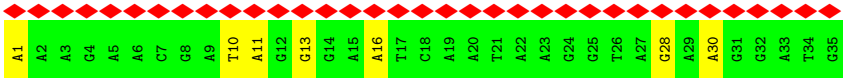
• Molecule 335: STAPLE STRAND



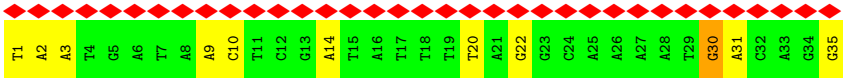


• Molecule 336: STAPLE STRAND



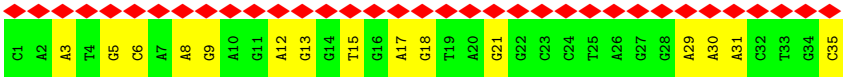


• Molecule 337: STAPLE STRAND

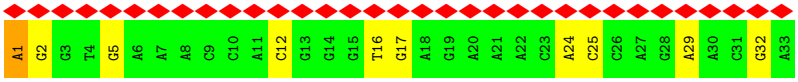


• Molecule 338: STAPLE STRAND

• Molecule 339: STAPLE STRAND

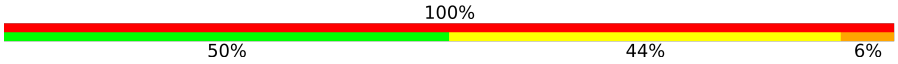


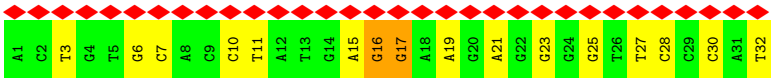
• Molecule 340: STAPLE STRAND



• Molecule 341: STAPLE STRAND

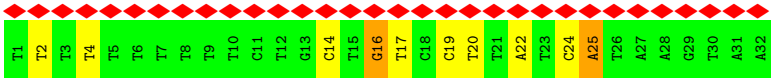
Chain Fe:





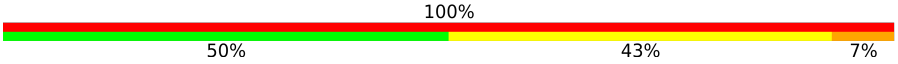
• Molecule 342: STAPLE STRAND

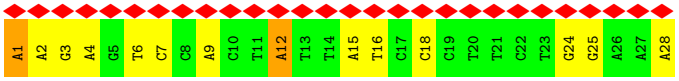
Chain Ff:



• Molecule 343: STAPLE STRAND

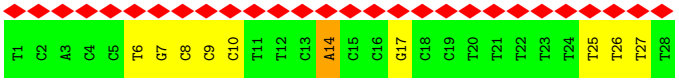
Chain Fg:





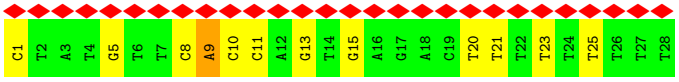
• Molecule 344: STAPLE STRAND

Chain Fh:



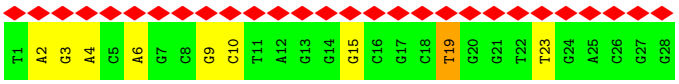
• Molecule 345: STAPLE STRAND

Chain Fi:



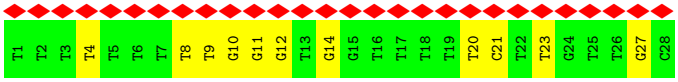
• Molecule 346: STAPLE STRAND

Chain Fj:



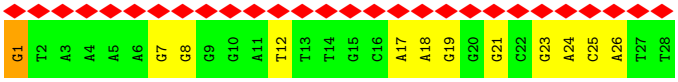
• Molecule 347: STAPLE STRAND

Chain Fk:



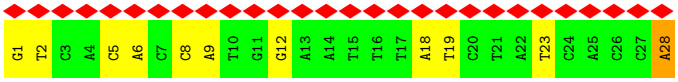
• Molecule 348: STAPLE STRAND

Chain Fl:



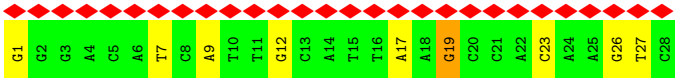
• Molecule 349: STAPLE STRAND

Chain Fm:



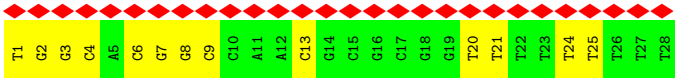
• Molecule 350: STAPLE STRAND

Chain Fn:



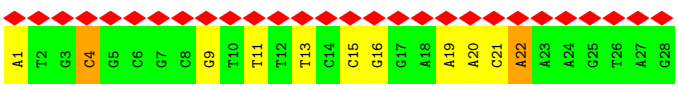
• Molecule 351: STAPLE STRAND

Chain Fo:



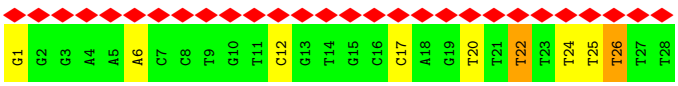
• Molecule 352: STAPLE STRAND

Chain Fp:



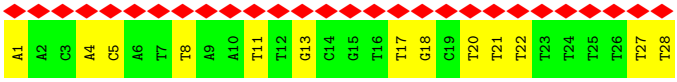
• Molecule 353: STAPLE STRAND

Chain Fq:



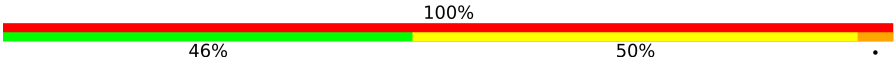
• Molecule 354: STAPLE STRAND

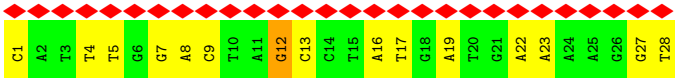
Chain Fr:



• Molecule 355: STAPLE STRAND

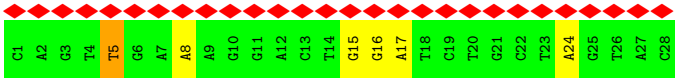
Chain Fs:





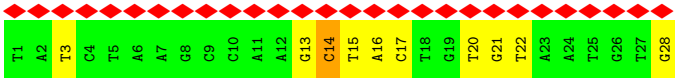
• Molecule 356: STAPLE STRAND

Chain Ft:



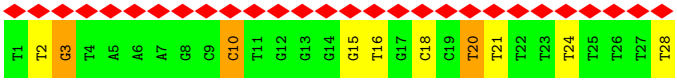
• Molecule 357: STAPLE STRAND

Chain Fu:



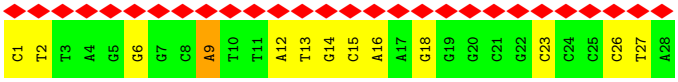
• Molecule 358: STAPLE STRAND

Chain Fv:



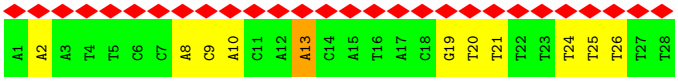
• Molecule 359: STAPLE STRAND

Chain Fw:



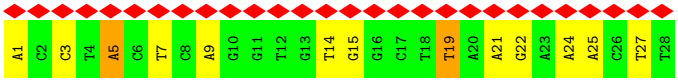
• Molecule 360: STAPLE STRAND

Chain Fx:

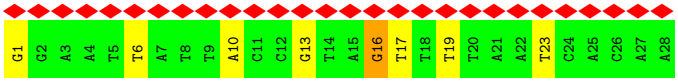


• Molecule 361: STAPLE STRAND

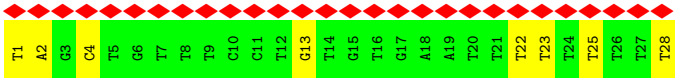
Chain Fy:



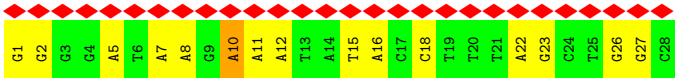
• Molecule 362: STAPLE STRAND



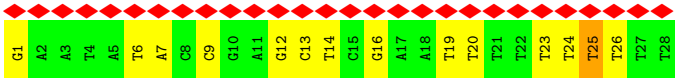
• Molecule 363: STAPLE STRAND



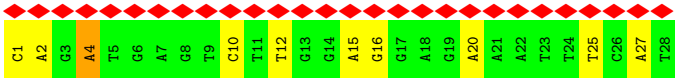
• Molecule 364: STAPLE STRAND



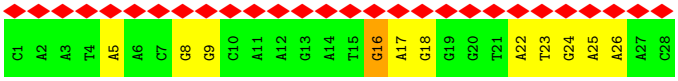
• Molecule 365: STAPLE STRAND



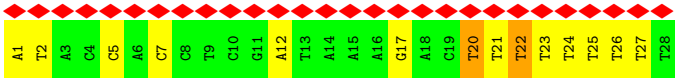
• Molecule 366: STAPLE STRAND



• Molecule 367: STAPLE STRAND

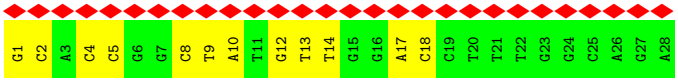


• Molecule 368: STAPLE STRAND



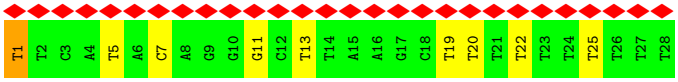
• Molecule 369: STAPLE STRAND

Chain F6:



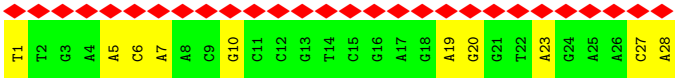
• Molecule 370: STAPLE STRAND

Chain F7:



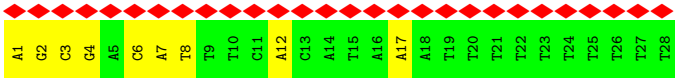
• Molecule 371: STAPLE STRAND

Chain F8:



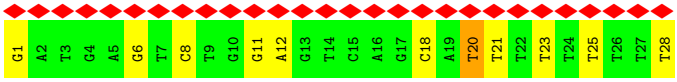
• Molecule 372: STAPLE STRAND

Chain F9:



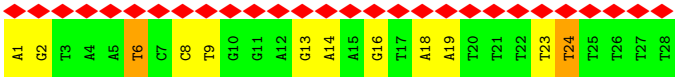
• Molecule 373: STAPLE STRAND

Chain GA:



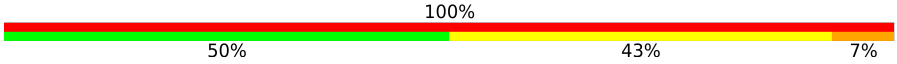
• Molecule 374: STAPLE STRAND

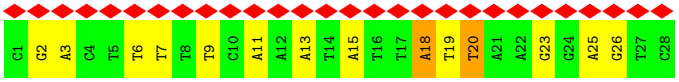
Chain GB:



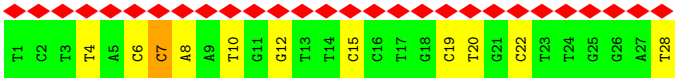
• Molecule 375: STAPLE STRAND

Chain GC:

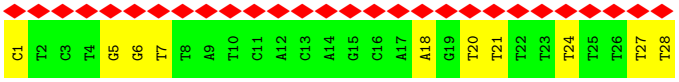




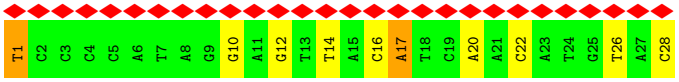
• Molecule 376: STAPLE STRAND



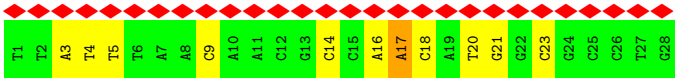
• Molecule 377: STAPLE STRAND



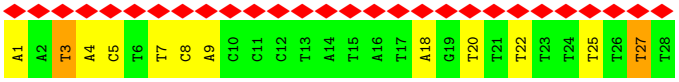
• Molecule 378: STAPLE STRAND



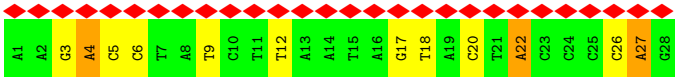
• Molecule 379: STAPLE STRAND



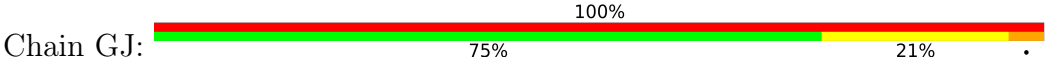
• Molecule 380: STAPLE STRAND

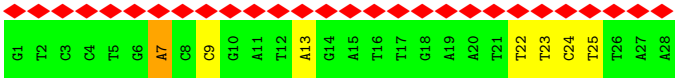


• Molecule 381: STAPLE STRAND

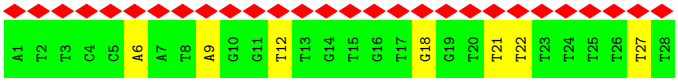


• Molecule 382: STAPLE STRAND

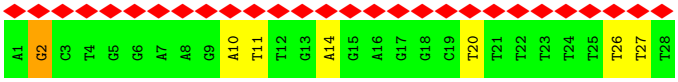




• Molecule 383: STAPLE STRAND

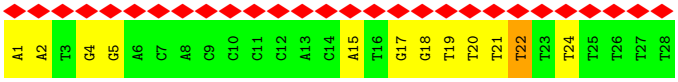


• Molecule 384: STAPLE STRAND

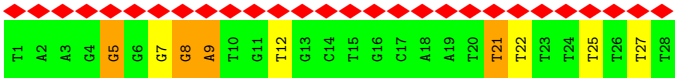


• Molecule 385: STAPLE STRAND

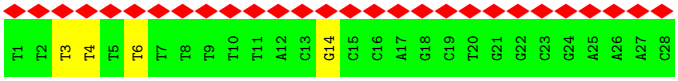
• Molecule 386: STAPLE STRAND



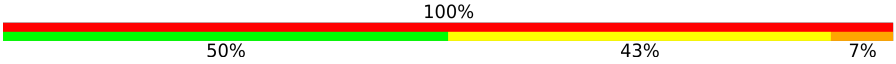
• Molecule 387: STAPLE STRAND

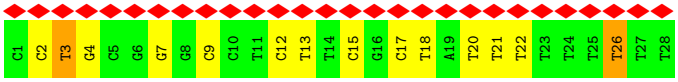


• Molecule 388: STAPLE STRAND



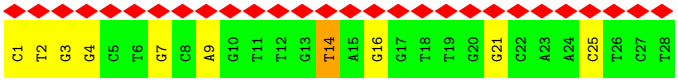
• Molecule 389: STAPLE STRAND





• Molecule 390: STAPLE STRAND

Chain GR:

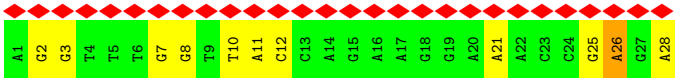


• Molecule 391: STAPLE STRAND

Chain GS:

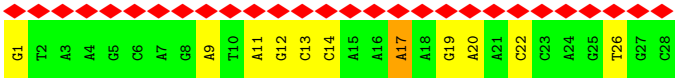
• Molecule 392: STAPLE STRAND

Chain GT:



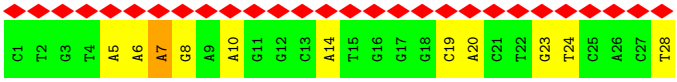
• Molecule 393: STAPLE STRAND

Chain GU:



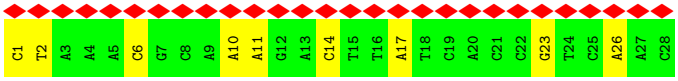
• Molecule 394: STAPLE STRAND

Chain GV:



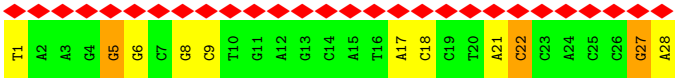
• Molecule 395: STAPLE STRAND

Chain GW:

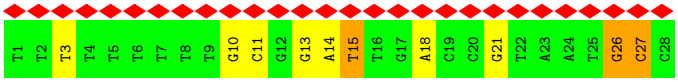


• Molecule 396: STAPLE STRAND

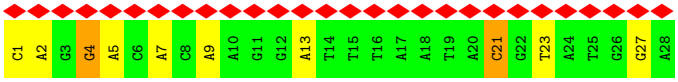
Chain GX:



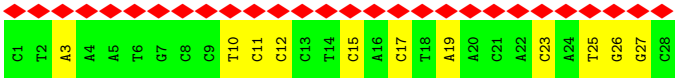
• Molecule 397: STAPLE STRAND



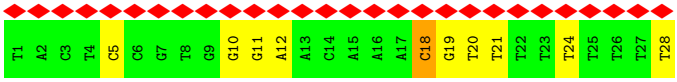
• Molecule 398: STAPLE STRAND



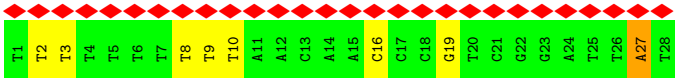
• Molecule 399: STAPLE STRAND



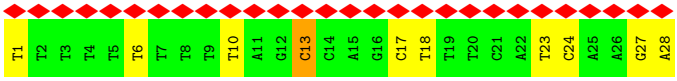
• Molecule 400: STAPLE STRAND



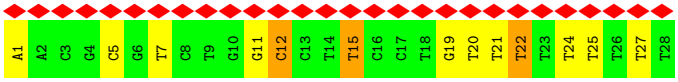
• Molecule 401: STAPLE STRAND



• Molecule 402: STAPLE STRAND

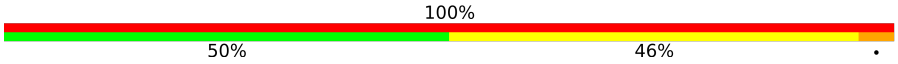


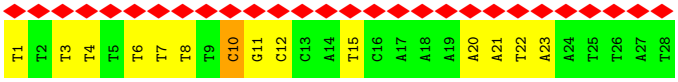
• Molecule 403: STAPLE STRAND



• Molecule 404: STAPLE STRAND

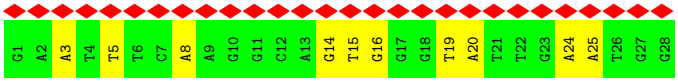
Chain Gf:





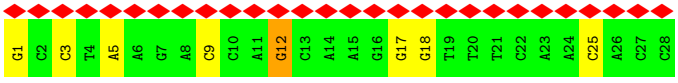
• Molecule 405: STAPLE STRAND

Chain Gg:



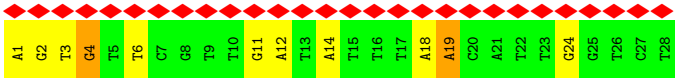
• Molecule 406: STAPLE STRAND

Chain Gh:



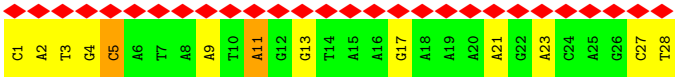
• Molecule 407: STAPLE STRAND

Chain Gi:



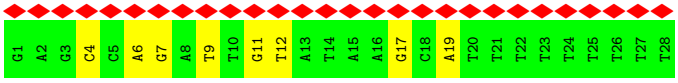
• Molecule 408: STAPLE STRAND

Chain Gj:



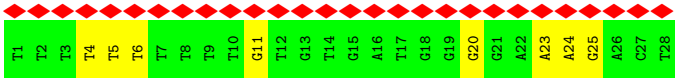
• Molecule 409: STAPLE STRAND

Chain Gk:

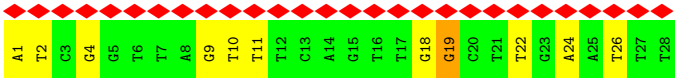


• Molecule 410: STAPLE STRAND

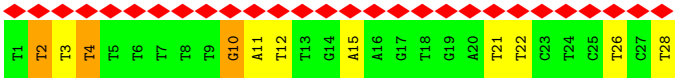
Chain Gl:



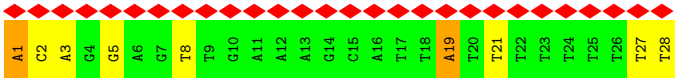
• Molecule 411: STAPLE STRAND



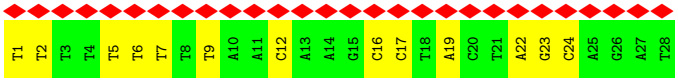
• Molecule 412: STAPLE STRAND



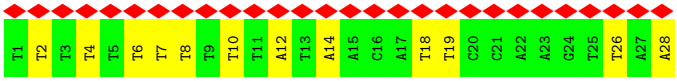
• Molecule 413: STAPLE STRAND



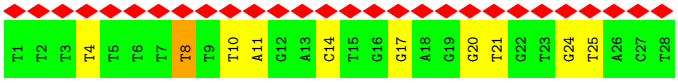
• Molecule 414: STAPLE STRAND



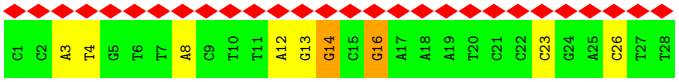
• Molecule 415: STAPLE STRAND



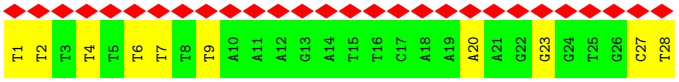
• Molecule 416: STAPLE STRAND



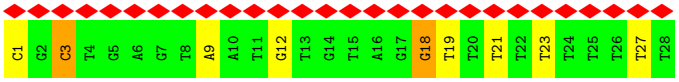
• Molecule 417: STAPLE STRAND



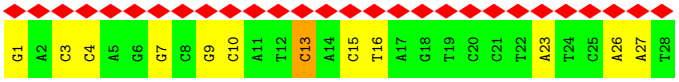
• Molecule 418: STAPLE STRAND



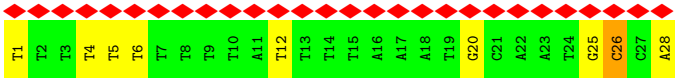
• Molecule 419: STAPLE STRAND



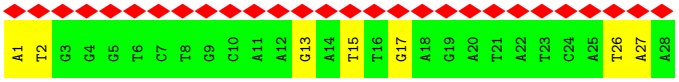
• Molecule 420: STAPLE STRAND



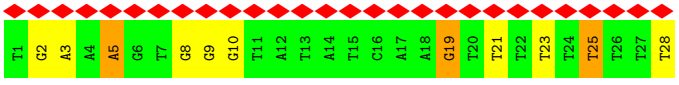
• Molecule 421: STAPLE STRAND



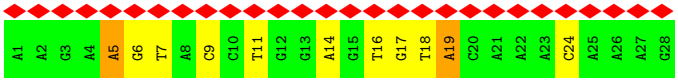
• Molecule 422: STAPLE STRAND



• Molecule 423: STAPLE STRAND

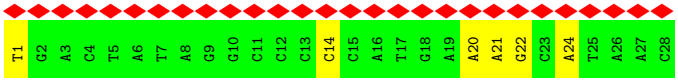


• Molecule 424: STAPLE STRAND



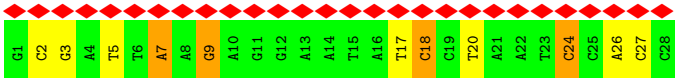
• Molecule 425: STAPLE STRAND

Chain G0:



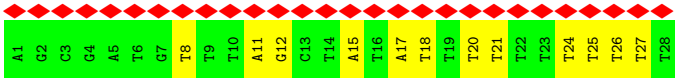
• Molecule 426: STAPLE STRAND

Chain G1:



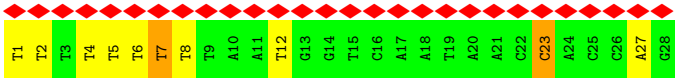
• Molecule 427: STAPLE STRAND

Chain G2:



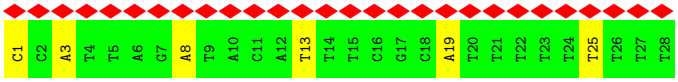
• Molecule 428: STAPLE STRAND

Chain G3:



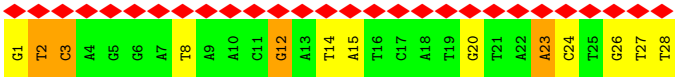
• Molecule 429: STAPLE STRAND

Chain G4:



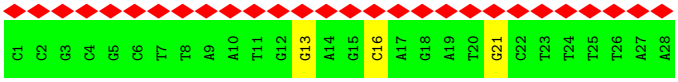
• Molecule 430: STAPLE STRAND

Chain G5:



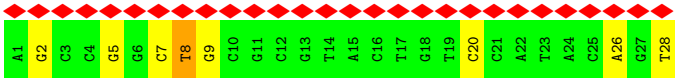
• Molecule 431: STAPLE STRAND

Chain G6:



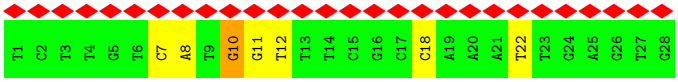
• Molecule 432: STAPLE STRAND

Chain G7:



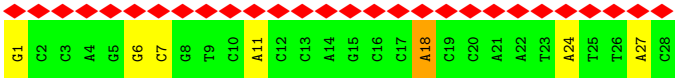
• Molecule 433: STAPLE STRAND

Chain G8:



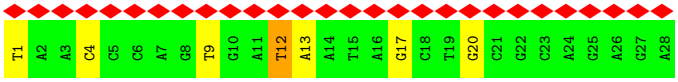
• Molecule 434: STAPLE STRAND

Chain G9:



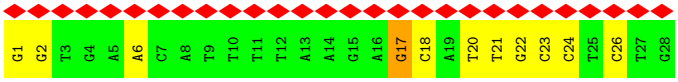
• Molecule 435: STAPLE STRAND

Chain HA:



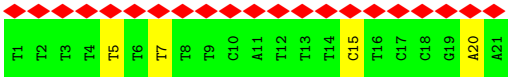
• Molecule 436: STAPLE STRAND

Chain HB:



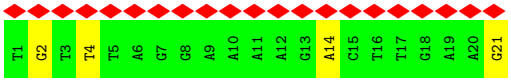
• Molecule 437: STAPLE STRAND

Chain HC:



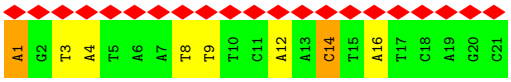
• Molecule 438: STAPLE STRAND

Chain HD:



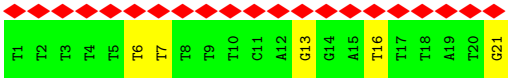
• Molecule 439: STAPLE STRAND

Chain HE:



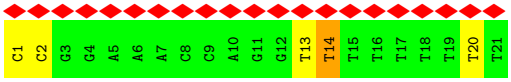
• Molecule 440: STAPLE STRAND

Chain HF:



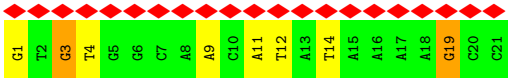
• Molecule 441: STAPLE STRAND

Chain HG:



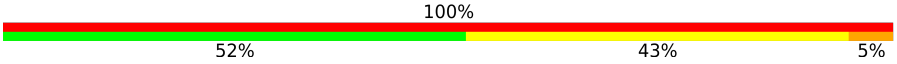
• Molecule 442: STAPLE STRAND

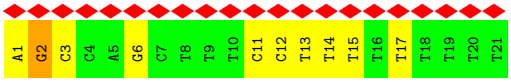
Chain HH:



• Molecule 443: STAPLE STRAND

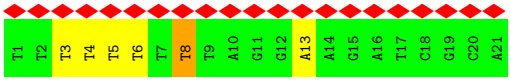
Chain HI:





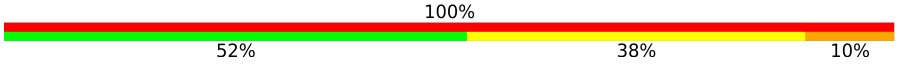
• Molecule 444: STAPLE STRAND

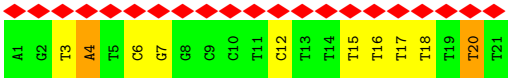
Chain HJ:



• Molecule 445: STAPLE STRAND

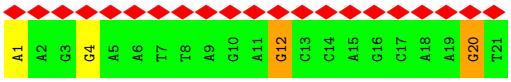
Chain HK:





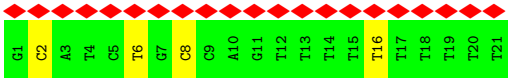
• Molecule 446: STAPLE STRAND

Chain HL:



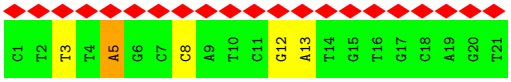
• Molecule 447: STAPLE STRAND

Chain HM:



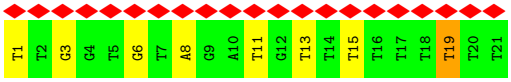
• Molecule 448: STAPLE STRAND

Chain HN:



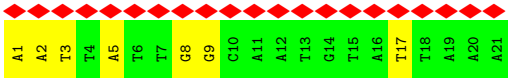
• Molecule 449: STAPLE STRAND

Chain HO:



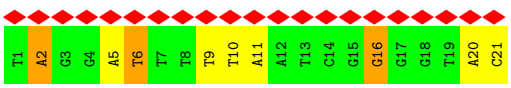
• Molecule 450: STAPLE STRAND

Chain HP:



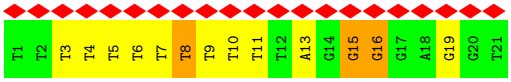
• Molecule 451: STAPLE STRAND

Chain HQ:



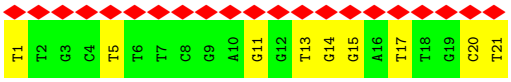
• Molecule 452: STAPLE STRAND

Chain HR:



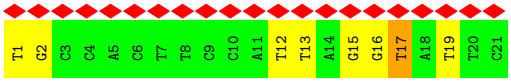
• Molecule 453: STAPLE STRAND

Chain HS:



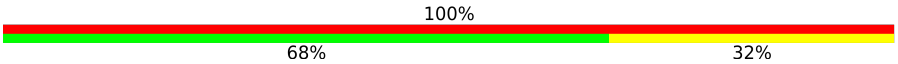
• Molecule 454: STAPLE STRAND

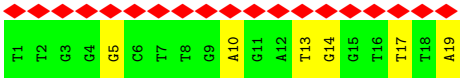
Chain HT:



• 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

5.1 Standard geometry

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

All (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
57	A4	44	DT	C5'-C4'	5.69	1.57	1.51
294	Et	5	DT	C5'-C4'	5.67	1.57	1.51
16	AP	7	DT	C5'-C4'	5.65	1.57	1.51
2	AB	4676	DG	C2-N2	-5.59	1.28	1.34
28	Ab	4	DT	C5'-C4'	5.59	1.57	1.51
1	AA	3132	DA	C5'-C4'	5.54	1.57	1.51
2	AB	5621	DT	O3'-P	-5.54	1.54	1.61
1	AA	4860	DC	C5'-C4'	5.52	1.57	1.51
1	AA	3285	DC	C5'-C4'	5.51	1.57	1.51
2	AB	2746	DT	C5'-C4'	5.51	1.57	1.51
18	AR	7	DT	C5'-C4'	5.48	1.57	1.51
59	A6	6	DT	C5'-C4'	5.48	1.57	1.51
2	AB	3316	DA	C5'-C4'	5.47	1.57	1.51
97	Bi	8	DT	C5'-C4'	5.46	1.57	1.51
440	HF	7	DT	C5'-C4'	5.42	1.57	1.51
40	An	4	DT	C5'-C4'	5.42	1.57	1.51
2	AB	3711	DT	C5'-C4'	5.41	1.57	1.51
418	Gt	7	DT	C5'-C4'	5.40	1.57	1.51
20	AT	4	DT	C5'-C4'	5.39	1.57	1.51
37	Ak	47	DT	C5'-C4'	5.38	1.57	1.51
58	A5	7	DT	C5'-C4'	5.38	1.57	1.51
32	Af	4	DT	C5'-C4'	5.36	1.57	1.51
92	Bd	4	DT	C5'-C4'	5.36	1.57	1.51
64	BB	44	DT	C5'-C4'	5.35	1.57	1.51
100	Bl	5	DT	C5'-C4'	5.35	1.57	1.51
135	CK	3	DT	C5'-C4'	5.34	1.57	1.51
318	FH	27	DT	C5'-C4'	5.34	1.57	1.51
441	HG	13	DT	C5'-C4'	5.34	1.57	1.51
354	Fr	27	DT	C5'-C4'	5.32	1.57	1.51
150	CZ	36	DC	C5'-C4'	5.32	1.57	1.51
342	Ff	4	DT	C5'-C4'	5.32	1.57	1.51
376	GD	6	DC	C5'-C4'	5.31	1.57	1.51
2	AB	2956	DT	C5'-C4'	5.31	1.57	1.51
2	AB	5845	DT	O3'-P	-5.31	1.54	1.61
165	Co	16	DG	C2-N2	-5.31	1.29	1.34
123	B8	4	DT	C5'-C4'	5.30	1.57	1.51
65	BC	44	DT	C5'-C4'	5.30	1.57	1.51
134	CJ	41	DT	C5'-C4'	5.29	1.57	1.51
41	Ao	7	DT	C5'-C4'	5.27	1.57	1.51
36	Aj	9	DT	C5'-C4'	5.26	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	5070	DC	C5'-C4'	5.26	1.57	1.51
52	Az	3	DT	C5'-C4'	5.24	1.57	1.51
385	GM	25	DG	C2-N2	-5.23	1.29	1.34
28	Ab	3	DT	C5'-C4'	5.22	1.57	1.51
20	AT	7	DT	C5'-C4'	5.22	1.57	1.51
148	CX	29	DG	C2-N2	-5.21	1.29	1.34
22	AV	3	DT	C5'-C4'	5.21	1.57	1.51
38	Al	42	DT	C5'-C4'	5.21	1.57	1.51
24	AX	48	DT	C5'-C4'	5.20	1.57	1.51
63	BA	44	DT	C5'-C4'	5.20	1.57	1.51
28	Ab	5	DT	C5'-C4'	5.20	1.57	1.51
1	AA	3295	DG	C2-N2	-5.20	1.29	1.34
104	Bp	36	DT	C5'-C4'	5.18	1.57	1.51
365	F2	20	DT	C5'-C4'	5.18	1.57	1.51
26	AZ	47	DT	C5'-C4'	5.17	1.57	1.51
44	Ar	43	DT	C5'-C4'	5.14	1.57	1.51
62	A9	4	DT	C5'-C4'	5.14	1.57	1.51
28	Ab	45	DT	C5'-C4'	5.14	1.57	1.51
50	Ax	42	DT	C5'-C4'	5.14	1.57	1.51
19	AS	6	DT	C5'-C4'	5.14	1.57	1.51
428	G3	5	DT	C5'-C4'	5.14	1.57	1.51
106	Br	8	DT	C5'-C4'	5.13	1.56	1.51
351	Fo	24	DT	C5'-C4'	5.13	1.56	1.51
6	AF	2	DT	C5'-C4'	5.13	1.56	1.51
331	FU	9	DT	C5'-C4'	5.13	1.56	1.51
147	CW	2	DT	C5'-C4'	5.12	1.56	1.51
14	AN	6	DT	C5'-C4'	5.12	1.56	1.51
60	A7	43	DT	C5'-C4'	5.11	1.56	1.51
108	Bt	16	DG	C2-N2	-5.11	1.29	1.34
248	D9	7	DT	C5'-C4'	5.11	1.56	1.51
401	Gc	3	DT	C5'-C4'	5.10	1.56	1.51
2	AB	5359	DT	C5'-C4'	5.10	1.56	1.51
97	Bi	2	DT	C5'-C4'	5.10	1.56	1.51
23	AW	43	DT	C5'-C4'	5.09	1.56	1.51
2	AB	5498	DG	C2-N2	-5.09	1.29	1.34
10	AJ	5	DT	C5'-C4'	5.09	1.56	1.51
66	BD	43	DT	C5'-C4'	5.09	1.56	1.51
54	A1	8	DT	C5'-C4'	5.09	1.56	1.51
2	AB	500	DA	C4'-C3'	5.09	1.58	1.53
135	CK	41	DT	C5'-C4'	5.09	1.56	1.51
57	A4	3	DT	C5'-C4'	5.08	1.56	1.51
1	AA	3894	DC	C5'-C4'	5.08	1.56	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
452	HR	7	DT	C5'-C4'	5.08	1.56	1.51
2	AB	7367	DC	C5'-C4'	5.08	1.56	1.51
256	EH	4	DT	C5'-C4'	5.08	1.56	1.51
1	AA	416	DT	C5'-C4'	5.08	1.56	1.51
33	Ag	46	DT	C5'-C4'	5.08	1.56	1.51
172	Cv	29	DT	C5'-C4'	5.08	1.56	1.51
82	BT	3	DT	C5'-C4'	5.07	1.56	1.51
1	AA	268	DC	C4'-C3'	5.07	1.58	1.53
53	A0	42	DT	C5'-C4'	5.06	1.56	1.51
256	EH	34	DA	O3'-P	-5.06	1.55	1.61
21	AU	47	DT	C5'-C4'	5.05	1.56	1.51
1	AA	6223	DT	O3'-P	-5.05	1.55	1.61
229	Dq	14	DA	C5'-C4'	5.05	1.56	1.51
12	AL	46	DT	C5'-C4'	5.04	1.56	1.51
2	AB	2696	DG	O3'-P	-5.04	1.55	1.61
106	Br	6	DT	C5'-C4'	5.04	1.56	1.51
1	AA	3307	DC	C5'-C4'	5.04	1.56	1.51
100	Bl	4	DT	C5'-C4'	5.03	1.56	1.51
123	B8	5	DT	C5'-C4'	5.03	1.56	1.51
1	AA	995	DC	C5'-C4'	5.03	1.56	1.51
28	Ab	46	DT	C5'-C4'	5.03	1.56	1.51
46	At	3	DT	C5'-C4'	5.03	1.56	1.51
24	AX	49	DT	C5'-C4'	5.03	1.56	1.51
365	F2	25	DT	C5'-C4'	5.03	1.56	1.51
1	AA	7011	DG	C2-N2	-5.02	1.29	1.34
11	AK	5	DT	C5'-C4'	5.02	1.56	1.51
66	BD	2	DT	C5'-C4'	5.02	1.56	1.51
263	EO	29	DC	C5'-C4'	5.02	1.56	1.51
246	D7	6	DT	C5'-C4'	5.01	1.56	1.51
73	BK	45	DT	C5'-C4'	5.00	1.56	1.51
427	G2	20	DT	C5'-C4'	5.00	1.56	1.51

All (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
1	AA	5959	DA	P-O3'-C3'	15.86	138.73	119.70
2	AB	3244	DC	P-O3'-C3'	15.71	138.56	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
68	BF	23	DC	P-O3'-C3'	15.66	138.50	119.70
285	Ek	34	DT	P-O3'-C3'	15.66	138.50	119.70
453	HS	15	DG	P-O3'-C3'	15.53	138.34	119.70
2	AB	5196	DG	P-O3'-C3'	15.51	138.31	119.70
2	AB	5057	DC	P-O3'-C3'	15.48	138.28	119.70
210	DX	33	DT	P-O3'-C3'	15.46	138.25	119.70
9	AI	24	DT	O4'-C4'-C3'	-15.44	96.73	106.00
1	AA	6658	DG	P-O3'-C3'	15.43	138.22	119.70
1	AA	3503	DC	P-O3'-C3'	15.42	138.20	119.70
2	AB	4021	DG	P-O3'-C3'	15.33	138.10	119.70
2	AB	3170	DG	O4'-C4'-C3'	-15.33	96.80	106.00
2	AB	3501	DG	P-O3'-C3'	15.20	137.94	119.70
2	AB	3760	DC	P-O3'-C3'	15.20	137.94	119.70
63	BA	40	DG	P-O3'-C3'	15.18	137.91	119.70
2	AB	1497	DG	P-O3'-C3'	15.15	137.88	119.70
304	E3	16	DC	P-O3'-C3'	15.13	137.85	119.70
232	Dt	23	DA	P-O3'-C3'	14.99	137.68	119.70
195	DI	37	DC	P-O3'-C3'	14.97	137.66	119.70
186	C9	13	DT	P-O3'-C3'	14.91	137.59	119.70
2	AB	2804	DT	P-O3'-C3'	14.91	137.59	119.70
269	EU	30	DC	P-O3'-C3'	14.90	137.58	119.70
436	HB	24	DC	P-O3'-C3'	14.88	137.55	119.70
1	AA	3067	DC	P-O3'-C3'	14.85	137.52	119.70
44	Ar	19	DT	P-O3'-C3'	14.79	137.44	119.70
1	AA	2802	DC	P-O3'-C3'	14.78	137.44	119.70
361	Fy	21	DA	P-O3'-C3'	14.77	137.42	119.70
1	AA	3985	DA	P-O3'-C3'	14.74	137.39	119.70
1	AA	2846	DC	P-O3'-C3'	14.73	137.38	119.70
48	Av	19	DA	P-O3'-C3'	14.73	137.38	119.70
197	DK	30	DA	P-O3'-C3'	14.67	137.31	119.70
1	AA	246	DG	P-O3'-C3'	14.66	137.29	119.70
1	AA	5256	DC	P-O3'-C3'	14.66	137.29	119.70
1	AA	3615	DC	P-O3'-C3'	14.64	137.27	119.70
1	AA	3423	DC	P-O3'-C3'	14.61	137.24	119.70
50	Ax	27	DC	P-O3'-C3'	14.57	137.19	119.70
1	AA	7349	DG	P-O3'-C3'	14.57	137.18	119.70
2	AB	389	DG	P-O3'-C3'	14.55	137.16	119.70
1	AA	5244	DG	P-O3'-C3'	14.48	137.08	119.70
2	AB	3144	DC	P-O3'-C3'	14.48	137.08	119.70
2	AB	2321	DC	P-O3'-C3'	14.45	137.04	119.70
1	AA	4052	DC	P-O3'-C3'	14.44	137.02	119.70
2	AB	837	DG	P-O3'-C3'	14.43	137.02	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1224	DC	P-O3'-C3'	14.43	137.01	119.70
1	AA	7297	DT	O4'-C4'-C3'	-14.42	97.35	106.00
2	AB	2601	DA	P-O3'-C3'	14.40	136.98	119.70
105	Bq	1	DG	O4'-C4'-C3'	-14.39	97.36	106.00
1	AA	5665	DC	P-O3'-C3'	14.37	136.94	119.70
2	AB	1092	DT	P-O3'-C3'	14.36	136.93	119.70
1	AA	4524	DC	P-O3'-C3'	14.35	136.92	119.70
406	Gh	1	DG	O4'-C4'-C3'	-14.33	97.40	106.00
1	AA	3224	DG	P-O3'-C3'	14.32	136.88	119.70
158	Ch	30	DC	P-O3'-C3'	14.28	136.83	119.70
2	AB	5273	DA	O4'-C4'-C3'	-14.28	97.43	106.00
405	Gg	25	DA	P-O3'-C3'	14.27	136.82	119.70
1	AA	603	DC	P-O3'-C3'	14.25	136.80	119.70
107	Bs	30	DA	P-O3'-C3'	14.24	136.79	119.70
434	G9	1	DG	O4'-C4'-C3'	-14.23	97.46	106.00
1	AA	1964	DT	P-O3'-C3'	14.22	136.77	119.70
2	AB	966	DC	O4'-C4'-C3'	-14.19	97.48	106.00
417	Gs	14	DG	P-O3'-C3'	14.19	136.72	119.70
2	AB	542	DT	P-O3'-C3'	14.18	136.72	119.70
2	AB	4889	DC	P-O3'-C3'	14.18	136.72	119.70
1	AA	3367	DC	P-O3'-C3'	14.17	136.70	119.70
12	AL	29	DA	P-O3'-C3'	14.16	136.69	119.70
2	AB	1669	DA	P-O3'-C3'	14.14	136.67	119.70
2	AB	581	DA	P-O3'-C3'	14.14	136.66	119.70
2	AB	1530	DG	P-O3'-C3'	14.11	136.64	119.70
250	EB	1	DG	O4'-C4'-C3'	-14.12	97.53	106.00
1	AA	78	DA	P-O3'-C3'	14.11	136.63	119.70
1	AA	5903	DC	P-O3'-C3'	14.11	136.63	119.70
2	AB	3295	DA	P-O3'-C3'	14.11	136.63	119.70
2	AB	1414	DC	P-O3'-C3'	14.11	136.63	119.70
1	AA	6652	DG	P-O3'-C3'	14.09	136.61	119.70
2	AB	2257	DC	P-O3'-C3'	14.09	136.60	119.70
1	AA	1729	DT	P-O3'-C3'	14.07	136.59	119.70
2	AB	4063	DA	P-O3'-C3'	14.06	136.57	119.70
2	AB	5737	DC	P-O3'-C3'	14.06	136.57	119.70
160	Cj	23	DG	P-O3'-C3'	14.04	136.55	119.70
1	AA	2651	DC	P-O3'-C3'	14.02	136.53	119.70
1	AA	3549	DC	P-O3'-C3'	14.01	136.51	119.70
74	BL	23	DC	P-O3'-C3'	14.01	136.51	119.70
355	Fs	9	DC	P-O3'-C3'	14.01	136.51	119.70
252	ED	2	DC	P-O3'-C3'	13.99	136.49	119.70
341	Fe	11	DT	P-O3'-C3'	13.98	136.47	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
145	CU	23	DT	P-O3'-C3'	13.97	136.47	119.70
1	AA	7191	DA	P-O3'-C3'	13.96	136.45	119.70
328	FR	26	DT	P-O3'-C3'	13.94	136.43	119.70
77	BO	16	DT	P-O3'-C3'	13.93	136.41	119.70
2	AB	2608	DT	P-O3'-C3'	13.87	136.34	119.70
122	B7	7	DG	O4'-C4'-C3'	-13.87	97.68	106.00
197	DK	7	DG	O4'-C4'-C3'	-13.86	97.68	106.00
2	AB	1720	DC	P-O3'-C3'	13.86	136.33	119.70
179	C2	16	DC	P-O3'-C3'	13.83	136.29	119.70
6	AF	23	DC	P-O3'-C3'	13.82	136.28	119.70
264	EP	31	DA	P-O3'-C3'	13.80	136.26	119.70
296	Ev	1	DC	O4'-C4'-C3'	-13.80	97.72	106.00
2	AB	2139	DG	P-O3'-C3'	13.79	136.25	119.70
76	BN	1	DC	O4'-C4'-C3'	-13.79	97.73	106.00
313	FC	1	DT	O4'-C4'-C3'	-13.78	97.73	106.00
81	BS	37	DC	P-O3'-C3'	13.77	136.23	119.70
118	B3	23	DC	P-O3'-C3'	13.76	136.21	119.70
136	CL	13	DG	P-O3'-C3'	13.76	136.21	119.70
1	AA	669	DC	P-O3'-C3'	13.75	136.20	119.70
162	Cl	29	DG	O4'-C4'-C3'	-13.75	97.75	106.00
251	EC	23	DT	P-O3'-C3'	13.73	136.18	119.70
7	AG	20	DC	P-O3'-C3'	13.73	136.17	119.70
129	CE	13	DC	P-O3'-C3'	13.72	136.16	119.70
1	AA	561	DA	P-O3'-C3'	13.71	136.15	119.70
2	AB	4977	DG	P-O3'-C3'	13.71	136.15	119.70
1	AA	3643	DT	P-O3'-C3'	13.69	136.13	119.70
1	AA	1197	DT	O4'-C4'-C3'	-13.69	97.79	106.00
2	AB	1137	DC	P-O3'-C3'	13.69	136.13	119.70
2	AB	6779	DA	P-O3'-C3'	13.66	136.09	119.70
1	AA	1890	DC	P-O3'-C3'	13.64	136.07	119.70
420	Gv	1	DG	O4'-C4'-C3'	-13.64	97.82	106.00
1	AA	1539	DA	P-O3'-C3'	13.63	136.06	119.70
106	Br	30	DC	P-O3'-C3'	13.63	136.05	119.70
124	B9	1	DG	O4'-C4'-C3'	-13.63	97.82	106.00
2	AB	5464	DC	P-O3'-C3'	13.62	136.05	119.70
329	FS	1	DT	O4'-C4'-C3'	-13.62	97.83	106.00
2	AB	4998	DG	P-O3'-C3'	13.62	136.04	119.70
2	AB	5533	DG	P-O3'-C3'	13.61	136.03	119.70
122	B7	37	DC	P-O3'-C3'	13.60	136.02	119.70
1	AA	1501	DA	P-O3'-C3'	13.60	136.02	119.70
256	EH	33	DC	P-O3'-C3'	13.58	136.00	119.70
1	AA	2572	DC	O4'-C4'-C3'	-13.58	97.85	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	AH	23	DT	P-O3'-C3'	13.58	136.00	119.70
2	AB	2357	DT	P-O3'-C3'	13.55	135.96	119.70
166	Cp	29	DG	O4'-C4'-C3'	-13.55	97.87	106.00
218	Df	34	DG	P-O3'-C3'	13.54	135.95	119.70
159	Ci	9	DA	P-O3'-C3'	13.54	135.95	119.70
1	AA	6216	DT	P-O3'-C3'	13.54	135.94	119.70
114	Bz	27	DG	P-O3'-C3'	13.50	135.90	119.70
2	AB	5635	DG	P-O3'-C3'	13.49	135.89	119.70
2	AB	1852	DC	P-O3'-C3'	13.48	135.88	119.70
90	Bb	22	DC	P-O3'-C3'	13.48	135.87	119.70
2	AB	1532	DC	P-O3'-C3'	13.46	135.85	119.70
17	AQ	28	DG	P-O3'-C3'	13.46	135.85	119.70
186	C9	22	DG	P-O3'-C3'	13.44	135.82	119.70
1	AA	5472	DT	P-O3'-C3'	13.43	135.82	119.70
6	AF	37	DT	P-O3'-C3'	13.43	135.82	119.70
2	AB	1583	DT	P-O3'-C3'	13.43	135.81	119.70
124	B9	34	DA	P-O3'-C3'	13.41	135.79	119.70
98	Bj	36	DT	P-O3'-C3'	13.37	135.74	119.70
2	AB	1267	DG	P-O3'-C3'	13.36	135.73	119.70
1	AA	4637	DA	P-O3'-C3'	13.34	135.71	119.70
35	Ai	22	DA	P-O3'-C3'	13.33	135.70	119.70
1	AA	3006	DC	P-O3'-C3'	13.32	135.69	119.70
1	AA	2808	DG	P-O3'-C3'	13.32	135.68	119.70
2	AB	925	DA	P-O3'-C3'	13.32	135.68	119.70
188	DB	2	DG	O4'-C4'-C3'	-13.31	98.02	106.00
1	AA	5034	DC	P-O3'-C3'	13.29	135.65	119.70
2	AB	7327	DT	P-O3'-C3'	13.29	135.65	119.70
178	C1	1	DT	O4'-C4'-C3'	-13.28	98.03	106.00
2	AB	5535	DC	P-O3'-C3'	13.28	135.64	119.70
310	E9	27	DC	P-O3'-C3'	13.27	135.62	119.70
2	AB	4410	DC	P-O3'-C3'	13.25	135.60	119.70
292	Er	2	DA	O4'-C4'-C3'	-13.25	98.05	106.00
2	AB	4157	DC	P-O3'-C3'	13.23	135.58	119.70
119	B4	37	DA	P-O3'-C3'	13.23	135.58	119.70
5	AE	31	DA	P-O3'-C3'	13.23	135.57	119.70
106	Br	17	DC	P-O3'-C3'	13.22	135.56	119.70
1	AA	7065	DT	P-O3'-C3'	13.19	135.53	119.70
132	CH	10	DG	O4'-C4'-C3'	-13.19	98.09	106.00
2	AB	3239	DC	P-O3'-C3'	13.19	135.52	119.70
216	Dd	8	DG	P-O3'-C3'	13.18	135.52	119.70
46	At	18	DT	P-O3'-C3'	13.18	135.52	119.70
1	AA	6993	DA	P-O3'-C3'	13.18	135.52	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
61	A8	26	DG	P-O3'-C3'	13.17	135.51	119.70
2	AB	318	DA	P-O3'-C3'	13.15	135.49	119.70
2	AB	2307	DG	P-O3'-C3'	13.14	135.47	119.70
379	GG	23	DC	O4'-C4'-C3'	-13.13	98.12	106.00
204	DR	10	DA	O4'-C4'-C3'	-13.13	98.12	106.00
1	AA	5331	DC	P-O3'-C3'	13.13	135.46	119.70
1	AA	4791	DA	P-O3'-C3'	13.12	135.45	119.70
1	AA	4078	DA	O4'-C4'-C3'	-13.12	98.13	106.00
1	AA	6391	DC	P-O3'-C3'	13.12	135.44	119.70
2	AB	2773	DT	P-O3'-C3'	13.12	135.44	119.70
264	EP	15	DA	P-O3'-C3'	13.11	135.44	119.70
2	AB	4861	DA	P-O3'-C3'	13.10	135.42	119.70
2	AB	5126	DC	P-O3'-C3'	13.09	135.40	119.70
1	AA	6458	DG	O4'-C4'-C3'	-13.08	98.15	106.00
202	DP	8	DC	P-O3'-C3'	13.08	135.39	119.70
10	AJ	35	DG	O4'-C4'-C3'	-13.08	98.15	106.00
2	AB	1838	DG	O4'-C4'-C3'	-13.07	98.16	106.00
267	ES	24	DT	P-O3'-C3'	13.06	135.38	119.70
2	AB	3675	DA	P-O3'-C3'	13.06	135.37	119.70
2	AB	5309	DC	P-O3'-C3'	13.06	135.37	119.70
1	AA	3663	DC	P-O3'-C3'	13.05	135.37	119.70
147	CW	35	DA	P-O3'-C3'	13.05	135.36	119.70
1	AA	274	DC	P-O3'-C3'	13.04	135.35	119.70
41	Ao	31	DT	P-O3'-C3'	13.03	135.34	119.70
162	Cl	1	DC	O4'-C4'-C3'	-13.02	98.19	106.00
1	AA	4078	DA	P-O3'-C3'	13.02	135.32	119.70
171	Cu	22	DA	P-O3'-C3'	13.02	135.32	119.70
1	AA	388	DA	P-O3'-C3'	13.01	135.32	119.70
1	AA	3810	DT	P-O3'-C3'	12.98	135.28	119.70
36	Aj	27	DT	P-O3'-C3'	12.98	135.28	119.70
179	C2	15	DG	P-O3'-C3'	12.96	135.26	119.70
436	HB	23	DC	P-O3'-C3'	12.96	135.25	119.70
411	Gm	1	DA	O4'-C4'-C3'	-12.96	98.22	106.00
2	AB	123	DG	O4'-C4'-C3'	-12.95	98.23	106.00
2	AB	16	DT	O4'-C4'-C3'	-12.95	98.23	106.00
2	AB	3276	DG	O4'-C4'-C3'	-12.94	98.24	106.00
261	EM	8	DC	O4'-C4'-C3'	-12.93	98.24	106.00
194	DH	37	DG	P-O3'-C3'	12.93	135.21	119.70
2	AB	985	DG	O4'-C4'-C3'	-12.92	98.25	106.00
1	AA	7126	DC	P-O3'-C3'	12.91	135.19	119.70
200	DN	1	DC	P-O3'-C3'	12.90	135.18	119.70
230	Dr	40	DC	P-O3'-C3'	12.88	135.15	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	3573	DA	P-O3'-C3'	12.87	135.15	119.70
135	CK	13	DC	O4'-C4'-C3'	-12.86	98.28	106.00
1	AA	2534	DC	P-O3'-C3'	12.86	135.13	119.70
106	Br	18	DG	P-O3'-C3'	12.84	135.11	119.70
355	Fs	22	DA	P-O3'-C3'	12.83	135.10	119.70
61	A8	27	DA	P-O3'-C3'	12.83	135.09	119.70
237	Dy	41	DT	P-O3'-C3'	12.83	135.09	119.70
93	Be	12	DA	P-O3'-C3'	12.83	135.09	119.70
154	Cd	14	DT	O4'-C4'-C3'	-12.82	98.31	106.00
1	AA	2405	DT	P-O3'-C3'	12.82	135.09	119.70
46	At	20	DG	O4'-C4'-C3'	-12.82	98.31	106.00
63	BA	24	DA	O4'-C4'-C3'	-12.81	98.31	106.00
426	G1	7	DA	O4'-C4'-C3'	-12.80	98.32	106.00
1	AA	324	DA	P-O3'-C3'	12.79	135.05	119.70
151	Ca	2	DG	O4'-C4'-C3'	-12.78	98.33	106.00
1	AA	5044	DA	P-O3'-C3'	12.78	135.04	119.70
92	Bd	16	DT	O4'-C4'-C3'	-12.78	98.33	106.00
170	Ct	18	DG	P-O3'-C3'	12.77	135.03	119.70
73	BK	33	DC	P-O3'-C3'	12.77	135.02	119.70
1	AA	1098	DG	O4'-C4'-C3'	-12.76	98.34	106.00
92	Bd	26	DC	P-O3'-C3'	12.76	135.01	119.70
2	AB	2738	DG	O4'-C4'-C3'	-12.74	98.36	106.00
25	AY	50	DT	O4'-C4'-C3'	-12.74	98.36	106.00
2	AB	5500	DG	P-O3'-C3'	12.73	134.98	119.70
295	Eu	16	DT	O4'-C4'-C3'	-12.73	98.36	106.00
287	Em	19	DA	O4'-C4'-C3'	-12.72	98.37	106.00
65	BC	31	DC	P-O3'-C3'	12.72	134.96	119.70
454	HT	17	DT	P-O3'-C3'	12.71	134.96	119.70
433	G8	10	DG	P-O3'-C3'	12.71	134.95	119.70
227	Do	23	DA	P-O3'-C3'	12.69	134.93	119.70
2	AB	6093	DC	O4'-C4'-C3'	-12.67	98.40	106.00
2	AB	2075	DT	P-O3'-C3'	12.65	134.88	119.70
2	AB	5427	DT	P-O3'-C3'	12.63	134.86	119.70
361	Fy	9	DA	P-O3'-C3'	12.62	134.85	119.70
410	Gl	23	DA	P-O3'-C3'	12.62	134.84	119.70
1	AA	7162	DG	P-O3'-C3'	12.61	134.84	119.70
1	AA	5296	DG	P-O3'-C3'	12.61	134.83	119.70
348	Fl	17	DA	O4'-C4'-C3'	-12.61	98.44	106.00
85	BW	42	DG	O4'-C4'-C3'	-12.61	98.44	106.00
1	AA	3660	DC	O4'-C4'-C3'	-12.60	98.44	106.00
1	AA	4897	DG	P-O3'-C3'	12.59	134.81	119.70
164	Cn	4	DC	P-O3'-C3'	12.59	134.81	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
385	GM	5	DC	P-O3'-C3'	12.59	134.81	119.70
1	AA	5877	DG	O4'-C4'-C3'	-12.59	98.45	106.00
1	AA	6938	DG	O4'-C4'-C3'	-12.59	98.45	106.00
74	BL	15	DA	O4'-C4'-C3'	-12.59	98.45	106.00
2	AB	5116	DG	P-O3'-C3'	12.58	134.80	119.70
2	AB	4626	DT	P-O3'-C3'	12.58	134.79	119.70
1	AA	6880	DT	P-O3'-C3'	12.57	134.79	119.70
266	ER	1	DG	O4'-C4'-C3'	-12.57	98.46	106.00
2	AB	3438	DG	O4'-C4'-C3'	-12.57	98.46	106.00
350	Fn	1	DG	O4'-C4'-C3'	-12.56	98.46	106.00
1	AA	3197	DG	O4'-C4'-C3'	-12.56	98.47	106.00
2	AB	4852	DG	O4'-C4'-C3'	-12.56	98.47	106.00
289	Eo	16	DG	P-O3'-C3'	12.56	134.77	119.70
195	DI	1	DA	O4'-C4'-C3'	-12.55	98.47	106.00
375	GC	18	DA	P-O3'-C3'	12.55	134.76	119.70
2	AB	2981	DT	P-O3'-C3'	12.54	134.75	119.70
1	AA	2724	DC	P-O3'-C3'	12.54	134.75	119.70
1	AA	6967	DA	P-O3'-C3'	12.54	134.75	119.70
313	FC	28	DC	P-O3'-C3'	12.53	134.74	119.70
95	Bg	41	DT	P-O3'-C3'	12.53	134.74	119.70
175	Cy	1	DA	O4'-C4'-C3'	-12.53	98.48	106.00
204	DR	27	DA	P-O3'-C3'	12.53	134.74	119.70
1	AA	4834	DC	P-O3'-C3'	12.53	134.73	119.70
80	BR	43	DA	P-O3'-C3'	12.52	134.73	119.70
156	Cf	30	DT	P-O3'-C3'	12.52	134.72	119.70
154	Cd	30	DT	P-O3'-C3'	12.51	134.71	119.70
55	A2	41	DT	O4'-C4'-C3'	-12.49	98.51	106.00
228	Dp	16	DC	P-O3'-C3'	12.49	134.69	119.70
395	GW	1	DC	O4'-C4'-C3'	-12.49	98.50	106.00
1	AA	3967	DC	P-O3'-C3'	12.48	134.68	119.70
2	AB	2141	DG	P-O3'-C3'	12.48	134.68	119.70
390	GR	16	DG	P-O3'-C3'	12.48	134.67	119.70
2	AB	6801	DT	O4'-C4'-C3'	-12.45	98.53	106.00
206	DT	10	DC	O4'-C4'-C3'	-12.45	98.53	106.00
2	AB	3983	DA	P-O3'-C3'	12.44	134.63	119.70
155	Ce	14	DC	P-O3'-C3'	12.43	134.62	119.70
177	C0	9	DC	P-O3'-C3'	12.41	134.59	119.70
2	AB	4841	DG	P-O3'-C3'	12.41	134.59	119.70
2	AB	3419	DC	P-O3'-C3'	12.40	134.59	119.70
348	Fl	1	DG	O4'-C4'-C3'	-12.40	98.56	106.00
203	DQ	23	DA	P-O3'-C3'	12.39	134.57	119.70
121	B6	11	DG	O4'-C4'-C3'	-12.39	98.57	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
327	FQ	19	DC	O4'-C4'-C3'	-12.38	98.57	106.00
58	A5	19	DT	O4'-C4'-C3'	-12.38	98.57	106.00
232	Dt	16	DC	P-O3'-C3'	12.37	134.55	119.70
2	AB	5147	DA	P-O3'-C3'	12.37	134.54	119.70
2	AB	5848	DC	P-O3'-C3'	12.37	134.54	119.70
1	AA	4865	DT	P-O3'-C3'	12.37	134.54	119.70
404	Gf	12	DC	O4'-C4'-C3'	-12.36	98.58	106.00
2	AB	5081	DC	P-O3'-C3'	12.36	134.53	119.70
29	Ac	24	DG	P-O3'-C3'	12.36	134.53	119.70
1	AA	4516	DA	P-O3'-C3'	12.35	134.52	119.70
2	AB	5159	DT	O4'-C4'-C3'	-12.35	98.59	106.00
49	Aw	24	DC	P-O3'-C3'	12.35	134.52	119.70
210	DX	15	DG	P-O3'-C3'	12.33	134.49	119.70
2	AB	1224	DC	O4'-C4'-C3'	-12.32	98.61	106.00
62	A9	20	DC	O4'-C4'-C3'	-12.31	98.62	106.00
2	AB	3431	DA	P-O3'-C3'	12.30	134.46	119.70
407	Gi	1	DA	O4'-C4'-C3'	-12.30	98.62	106.00
1	AA	7304	DG	P-O3'-C3'	12.29	134.45	119.70
253	EE	8	DC	O4'-C4'-C3'	-12.29	98.62	106.00
2	AB	5562	DG	P-O3'-C3'	12.28	134.44	119.70
169	Cs	12	DG	P-O3'-C3'	12.28	134.44	119.70
2	AB	1227	DT	P-O3'-C3'	12.28	134.43	119.70
2	AB	6384	DT	O4'-C4'-C3'	-12.27	98.64	106.00
10	AJ	22	DG	P-O3'-C3'	12.27	134.42	119.70
2	AB	7109	DG	O4'-C4'-C3'	-12.26	98.64	106.00
389	GQ	9	DC	O4'-C4'-C3'	-12.24	98.65	106.00
1	AA	1982	DT	O4'-C4'-C3'	-12.24	98.66	106.00
314	FD	1	DA	O4'-C4'-C3'	-12.24	98.66	106.00
2	AB	3889	DA	P-O3'-C3'	12.24	134.38	119.70
1	AA	3617	DC	P-O3'-C3'	12.23	134.38	119.70
63	BA	23	DA	P-O3'-C3'	12.23	134.38	119.70
72	BJ	9	DT	P-O3'-C3'	12.23	134.37	119.70
1	AA	1327	DA	O4'-C4'-C3'	-12.22	98.67	106.00
2	AB	5156	DG	O4'-C4'-C3'	-12.22	98.67	106.00
23	AW	38	DC	P-O3'-C3'	12.20	134.34	119.70
90	Bb	16	DT	O4'-C4'-C3'	-12.19	98.68	106.00
2	AB	3396	DG	O4'-C4'-C3'	-12.19	98.68	106.00
2	AB	817	DC	O4'-C4'-C3'	-12.19	98.69	106.00
23	AW	11	DG	O4'-C4'-C3'	-12.19	98.69	106.00
109	Bu	5	DC	P-O3'-C3'	12.18	134.31	119.70
40	An	25	DG	P-O3'-C3'	12.17	134.30	119.70
48	Av	9	DT	P-O3'-C3'	12.16	134.30	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	7300	DA	O4'-C4'-C3'	-12.16	98.70	106.00
9	AI	23	DA	P-O3'-C3'	12.16	134.29	119.70
133	CI	2	DG	O4'-C4'-C3'	-12.16	98.70	106.00
442	HH	11	DA	P-O3'-C3'	12.15	134.28	119.70
2	AB	5224	DG	P-O3'-C3'	12.15	134.28	119.70
293	Es	16	DT	O4'-C4'-C3'	-12.14	98.72	106.00
297	Ew	34	DG	O4'-C4'-C3'	-12.13	98.72	106.00
2	AB	6565	DG	O4'-C4'-C3'	-12.13	98.72	106.00
2	AB	5774	DT	O4'-C4'-C3'	-12.13	98.72	106.00
2	AB	1314	DA	P-O3'-C3'	12.11	134.24	119.70
1	AA	301	DC	P-O3'-C3'	12.10	134.22	119.70
1	AA	3112	DA	O4'-C4'-C3'	-12.09	98.75	106.00
1	AA	6951	DG	O4'-C4'-C3'	-12.09	98.75	106.00
390	GR	1	DC	O4'-C4'-C3'	-12.08	98.75	106.00
139	CO	9	DC	P-O3'-C3'	12.06	134.18	119.70
1	AA	1663	DC	P-O3'-C3'	12.06	134.17	119.70
29	Ac	24	DG	O4'-C4'-C3'	-12.06	98.77	106.00
231	Ds	1	DA	O4'-C4'-C3'	-12.05	98.77	106.00
162	Cl	19	DA	P-O3'-C3'	12.05	134.16	119.70
2	AB	3222	DC	O4'-C4'-C3'	-12.03	98.78	106.00
208	DV	6	DC	P-O3'-C3'	12.04	134.14	119.70
134	CJ	42	DT	O4'-C4'-C3'	-12.02	98.79	106.00
204	DR	25	DT	O4'-C4'-C3'	-12.02	98.79	106.00
2	AB	616	DC	P-O3'-C3'	12.02	134.12	119.70
2	AB	1173	DC	O4'-C4'-C3'	-12.01	98.79	106.00
416	Gr	24	DG	O4'-C4'-C3'	-12.01	98.79	106.00
393	GU	1	DG	O4'-C4'-C3'	-12.01	98.80	106.00
1	AA	486	DC	O4'-C4'-C3'	-12.00	98.80	106.00
1	AA	2126	DT	O4'-C4'-C3'	-12.00	98.80	106.00
1	AA	5204	DA	P-O3'-C3'	12.00	134.10	119.70
1	AA	5573	DA	O4'-C4'-C3'	-11.99	98.81	106.00
2	AB	2919	DT	O4'-C4'-C3'	-11.98	98.81	106.00
1	AA	911	DG	O4'-C4'-C3'	-11.97	98.82	106.00
2	AB	4500	DT	P-O3'-C3'	11.97	134.06	119.70
264	EP	12	DC	P-O3'-C3'	11.96	134.06	119.70
1	AA	293	DC	O4'-C4'-C3'	-11.96	98.82	106.00
103	Bo	35	DA	O4'-C4'-C3'	-11.96	98.83	106.00
1	AA	1844	DG	P-O3'-C3'	11.94	134.03	119.70
1	AA	3289	DG	P-O3'-C3'	11.94	134.02	119.70
1	AA	884	DA	O4'-C4'-C3'	-11.92	98.85	106.00
93	Be	30	DG	P-O3'-C3'	11.92	134.01	119.70
2	AB	7501	DA	P-O3'-C3'	11.92	134.00	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
191	DE	34	DC	P-O3'-C3'	11.92	134.00	119.70
190	DD	36	DG	O4'-C4'-C3'	-11.91	98.85	106.00
267	ES	1	DG	O4'-C4'-C3'	-11.91	98.85	106.00
2	AB	339	DT	P-O3'-C3'	11.91	133.99	119.70
2	AB	445	DT	P-O3'-C3'	11.90	133.98	119.70
1	AA	374	DT	P-O3'-C3'	11.90	133.98	119.70
2	AB	7356	DA	O4'-C4'-C3'	-11.90	98.86	106.00
2	AB	283	DG	O4'-C4'-C3'	-11.88	98.87	106.00
166	Cp	22	DT	O4'-C4'-C3'	-11.88	98.87	106.00
222	Dj	15	DG	P-O3'-C3'	11.88	133.96	119.70
2	AB	77	DT	O4'-C4'-C3'	-11.88	98.88	106.00
184	C7	18	DT	P-O3'-C3'	11.86	133.94	119.70
2	AB	7534	DG	O4'-C4'-C3'	-11.85	98.89	106.00
228	Dp	1	DT	O4'-C4'-C3'	-11.84	98.89	106.00
71	BI	23	DA	P-O3'-C3'	11.84	133.90	119.70
103	Bo	23	DC	P-O3'-C3'	11.84	133.90	119.70
1	AA	5359	DG	O4'-C4'-C3'	-11.83	98.90	106.00
1	AA	1867	DG	O4'-C4'-C3'	-11.82	98.91	106.00
253	EE	2	DT	O4'-C4'-C3'	-11.82	98.91	106.00
50	Ax	35	DC	O4'-C4'-C3'	-11.81	98.91	106.00
2	AB	4550	DA	P-O3'-C3'	11.81	133.87	119.70
2	AB	5379	DC	P-O3'-C3'	11.80	133.86	119.70
329	FS	28	DA	O4'-C4'-C3'	-11.80	98.92	106.00
128	CD	9	DA	P-O3'-C3'	11.79	133.85	119.70
192	DF	17	DA	P-O3'-C3'	11.79	133.85	119.70
149	CY	35	DC	P-O3'-C3'	11.79	133.85	119.70
375	GC	25	DA	O4'-C4'-C3'	-11.79	98.93	106.00
144	CT	8	DA	O4'-C4'-C3'	-11.78	98.93	106.00
191	DE	24	DC	O4'-C4'-C3'	-11.78	98.93	106.00
2	AB	4045	DT	O4'-C4'-C3'	-11.77	98.94	106.00
1	AA	4488	DG	P-O3'-C3'	11.76	133.81	119.70
1	AA	1012	DT	P-O3'-C3'	11.74	133.79	119.70
2	AB	3149	DT	O4'-C4'-C3'	-11.74	98.95	106.00
77	BO	24	DG	O4'-C4'-C3'	-11.74	98.95	106.00
118	B3	6	DA	P-O3'-C3'	11.71	133.75	119.70
1	AA	3315	DA	O4'-C4'-C3'	-11.71	98.97	106.00
2	AB	4736	DT	O4'-C4'-C3'	-11.71	98.98	106.00
2	AB	6743	DG	O4'-C4'-C3'	-11.70	98.98	106.00
2	AB	39	DA	P-O3'-C3'	11.70	133.74	119.70
2	AB	908	DC	P-O3'-C3'	11.70	133.74	119.70
44	Ar	39	DC	P-O3'-C3'	11.70	133.74	119.70
288	En	24	DG	O4'-C4'-C3'	-11.70	98.98	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	AJ	39	DT	O4'-C4'-C3'	-11.69	98.98	106.00
2	AB	1408	DC	P-O3'-C3'	11.69	133.72	119.70
428	G3	23	DC	P-O3'-C3'	11.67	133.71	119.70
1	AA	3595	DA	P-O3'-C3'	11.66	133.70	119.70
2	AB	2598	DG	O4'-C4'-C3'	-11.66	99.00	106.00
2	AB	6301	DA	O4'-C4'-C3'	-11.66	99.00	106.00
170	Ct	32	DT	O4'-C4'-C3'	-11.66	99.00	106.00
188	DB	30	DG	O4'-C4'-C3'	-11.66	99.00	106.00
1	AA	2440	DG	P-O3'-C3'	11.65	133.68	119.70
1	AA	5653	DG	P-O3'-C3'	11.65	133.69	119.70
2	AB	5449	DA	O4'-C4'-C3'	-11.65	99.01	106.00
1	AA	43	DG	P-O3'-C3'	11.65	133.68	119.70
91	Bc	30	DA	O4'-C4'-C3'	-11.65	99.01	106.00
2	AB	2745	DC	P-O3'-C3'	11.65	133.68	119.70
1	AA	2426	DC	O4'-C4'-C3'	-11.65	99.01	106.00
1	AA	6725	DT	P-O3'-C3'	11.64	133.67	119.70
208	DV	23	DG	P-O3'-C3'	11.63	133.66	119.70
263	EO	19	DA	P-O3'-C3'	11.62	133.64	119.70
2	AB	5845	DT	P-O3'-C3'	11.62	133.64	119.70
442	HH	12	DT	O4'-C4'-C3'	-11.62	99.03	106.00
2	AB	848	DG	O4'-C4'-C3'	-11.62	99.03	106.00
2	AB	5130	DT	O4'-C4'-C3'	-11.61	99.03	106.00
86	BX	46	DC	O4'-C4'-C3'	-11.61	99.03	106.00
57	A4	18	DC	O4'-C4'-C3'	-11.61	99.04	106.00
215	Dc	11	DT	O4'-C4'-C3'	-11.61	99.04	106.00
177	C0	32	DG	P-O3'-C3'	11.60	133.62	119.70
375	GC	23	DG	O4'-C4'-C3'	-11.60	99.04	106.00
1	AA	1057	DA	P-O3'-C3'	11.60	133.62	119.70
1	AA	6011	DG	P-O3'-C3'	11.60	133.62	119.70
154	Cd	13	DC	P-O3'-C3'	11.60	133.62	119.70
2	AB	5916	DC	O4'-C4'-C3'	-11.60	99.04	106.00
1	AA	3214	DA	P-O3'-C3'	11.59	133.61	119.70
82	BT	10	DT	O4'-C4'-C3'	-11.57	99.06	106.00
352	Fp	21	DC	P-O3'-C3'	11.57	133.59	119.70
363	F0	2	DA	O4'-C4'-C3'	-11.55	99.07	106.00
2	AB	7088	DA	P-O3'-C3'	11.55	133.56	119.70
112	Bx	31	DG	O4'-C4'-C3'	-11.55	99.07	106.00
88	BZ	12	DT	P-O3'-C3'	11.55	133.56	119.70
241	D2	37	DC	P-O3'-C3'	11.54	133.55	119.70
123	B8	21	DG	O4'-C4'-C3'	-11.54	99.08	106.00
2	AB	4868	DC	P-O3'-C3'	11.53	133.54	119.70
2	AB	6922	DA	P-O3'-C3'	11.53	133.54	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
341	Fe	7	DC	O4'-C4'-C3'	-11.52	99.09	106.00
1	AA	4513	DC	O4'-C4'-C3'	-11.51	99.09	106.00
2	AB	3877	DG	O4'-C4'-C3'	-11.50	99.10	106.00
219	Dg	33	DC	P-O3'-C3'	11.50	133.50	119.70
1	AA	6505	DA	P-O3'-C3'	11.50	133.50	119.70
244	D5	1	DG	P-O3'-C3'	11.49	133.49	119.70
1	AA	6603	DC	P-O3'-C3'	11.49	133.49	119.70
405	Gg	15	DT	P-O3'-C3'	11.49	133.49	119.70
2	AB	6521	DA	P-O3'-C3'	11.49	133.49	119.70
1	AA	40	DG	P-O3'-C3'	11.49	133.48	119.70
2	AB	5380	DC	O4'-C4'-C3'	-11.49	99.11	106.00
1	AA	4446	DA	O4'-C4'-C3'	-11.48	99.11	106.00
2	AB	500	DA	P-O3'-C3'	11.47	133.47	119.70
2	AB	1350	DA	P-O3'-C3'	11.47	133.47	119.70
7	AG	40	DT	O4'-C4'-C3'	-11.47	99.12	106.00
68	BF	37	DC	P-O3'-C3'	11.47	133.47	119.70
173	Cw	9	DC	P-O3'-C3'	11.47	133.47	119.70
133	CI	41	DG	P-O3'-C3'	11.46	133.46	119.70
247	D8	13	DC	O4'-C4'-C3'	-11.46	99.13	106.00
2	AB	4311	DA	P-O3'-C3'	11.45	133.44	119.70
2	AB	6253	DG	O4'-C4'-C3'	-11.45	99.13	106.00
146	CV	37	DT	P-O3'-C3'	11.45	133.44	119.70
1	AA	818	DT	O4'-C4'-C3'	-11.44	99.13	106.00
1	AA	3286	DC	O4'-C1'-N1	11.44	116.01	108.00
45	As	28	DA	P-O3'-C3'	11.44	133.42	119.70
413	Go	28	DT	O4'-C4'-C3'	-11.44	99.14	106.00
1	AA	6777	DT	P-O3'-C3'	11.43	133.42	119.70
200	DN	40	DG	O4'-C4'-C3'	-11.43	99.14	106.00
2	AB	3036	DC	P-O3'-C3'	11.42	133.41	119.70
2	AB	6514	DC	O4'-C4'-C3'	-11.41	99.15	106.00
1	AA	6328	DA	P-O3'-C3'	11.41	133.39	119.70
173	Cw	5	DG	O4'-C4'-C3'	-11.41	99.15	106.00
6	AF	27	DC	O4'-C4'-C3'	-11.41	99.16	106.00
1	AA	1322	DT	O4'-C4'-C3'	-11.40	99.16	106.00
2	AB	3177	DA	O4'-C4'-C3'	-11.40	99.16	106.00
22	AV	17	DG	P-O3'-C3'	11.40	133.38	119.70
2	AB	970	DG	O4'-C4'-C3'	-11.40	99.16	106.00
49	Aw	22	DG	P-O3'-C3'	11.40	133.38	119.70
224	Dl	36	DA	P-O3'-C3'	11.39	133.37	119.70
2	AB	3991	DC	O4'-C4'-C3'	-11.39	99.17	106.00
449	HO	1	DT	O4'-C4'-C3'	-11.39	99.17	106.00
2	AB	5159	DT	P-O3'-C3'	11.38	133.35	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	6485	DC	P-O3'-C3'	11.37	133.35	119.70
148	CX	5	DA	O4'-C4'-C3'	-11.37	99.18	106.00
2	AB	3095	DC	P-O3'-C3'	11.36	133.34	119.70
127	CC	30	DA	P-O3'-C3'	11.36	133.33	119.70
1	AA	4075	DG	P-O3'-C3'	11.36	133.33	119.70
1	AA	3657	DG	P-O3'-C3'	11.36	133.33	119.70
4	AD	32	DG	P-O3'-C3'	11.36	133.33	119.70
256	EH	11	DC	O4'-C4'-C3'	-11.35	99.19	106.00
1	AA	2194	DA	O4'-C4'-C3'	-11.35	99.19	106.00
348	Fl	7	DG	O4'-C4'-C3'	-11.35	99.19	106.00
236	Dx	23	DC	P-O3'-C3'	11.34	133.31	119.70
426	G1	9	DG	P-O3'-C3'	11.34	133.30	119.70
1	AA	641	DA	O4'-C4'-C3'	-11.32	99.20	106.00
139	CO	5	DT	P-O3'-C3'	11.32	133.29	119.70
2	AB	6695	DT	O4'-C4'-C3'	-11.32	99.21	106.00
367	F4	9	DG	P-O3'-C3'	11.32	133.29	119.70
2	AB	5671	DC	P-O3'-C3'	11.31	133.28	119.70
449	HO	11	DT	O4'-C4'-C3'	-11.31	99.21	106.00
2	AB	6397	DT	O4'-C4'-C3'	-11.31	99.22	106.00
1	AA	6119	DG	P-O3'-C3'	11.30	133.26	119.70
2	AB	6513	DG	P-O3'-C3'	11.29	133.25	119.70
20	AT	38	DC	O4'-C4'-C3'	-11.28	99.23	106.00
1	AA	5305	DA	P-O3'-C3'	11.26	133.21	119.70
2	AB	6902	DT	O4'-C4'-C3'	-11.26	99.25	106.00
1	AA	5865	DT	O4'-C4'-C3'	-11.26	99.25	106.00
309	E8	25	DG	P-O3'-C3'	11.25	133.20	119.70
1	AA	2706	DC	P-O3'-C3'	11.25	133.20	119.70
223	Dk	24	DT	O4'-C4'-C3'	-11.24	99.26	106.00
292	Er	19	DG	O4'-C4'-C3'	-11.24	99.26	106.00
2	AB	4380	DT	O4'-C4'-C3'	-11.23	99.26	106.00
2	AB	6799	DT	P-O3'-C3'	11.23	133.18	119.70
2	AB	3211	DA	O4'-C4'-C3'	-11.23	99.26	106.00
2	AB	7220	DC	P-O3'-C3'	11.22	133.17	119.70
1	AA	18	DG	O4'-C4'-C3'	-11.22	99.27	106.00
2	AB	3046	DT	O4'-C4'-C3'	-11.22	99.27	106.00
218	Df	13	DC	P-O3'-C3'	11.22	133.16	119.70
303	E2	4	DG	O4'-C4'-C3'	-11.22	99.27	106.00
292	Er	15	DG	P-O3'-C3'	11.21	133.15	119.70
222	Dj	20	DA	P-O3'-C3'	11.21	133.15	119.70
9	AI	28	DA	O4'-C4'-C3'	-11.20	99.28	106.00
1	AA	6748	DT	O4'-C4'-C3'	-11.19	99.28	106.00
102	Bn	1	DG	O4'-C4'-C3'	-11.19	99.28	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
44	Ar	12	DA	O4'-C4'-C3'	-11.19	99.29	106.00
2	AB	5415	DG	P-O3'-C3'	11.18	133.12	119.70
1	AA	4570	DT	O4'-C4'-C3'	-11.17	99.30	106.00
392	GT	2	DG	P-O3'-C3'	11.17	133.10	119.70
1	AA	6403	DC	O4'-C4'-C3'	-11.17	99.30	106.00
1	AA	2396	DC	P-O3'-C3'	11.16	133.10	119.70
2	AB	2175	DG	O4'-C4'-C3'	-11.16	99.30	106.00
2	AB	3148	DA	P-O3'-C3'	11.16	133.09	119.70
8	AH	20	DG	O4'-C4'-C3'	-11.15	99.31	106.00
1	AA	3246	DG	P-O3'-C3'	11.14	133.07	119.70
210	DX	14	DA	O4'-C4'-C3'	-11.14	99.32	106.00
404	Gf	10	DC	O4'-C4'-C3'	-11.13	99.32	106.00
1	AA	6829	DG	O4'-C4'-C3'	-11.13	99.32	106.00
1	AA	5678	DC	P-O3'-C3'	11.13	133.06	119.70
64	BB	19	DT	O4'-C4'-C3'	-11.13	99.32	106.00
1	AA	4091	DA	P-O3'-C3'	11.12	133.05	119.70
341	Fe	23	DG	O4'-C4'-C3'	-11.13	99.32	106.00
1	AA	5873	DC	O4'-C4'-C3'	-11.12	99.33	106.00
1	AA	6890	DG	P-O3'-C3'	11.12	133.05	119.70
193	DG	29	DC	P-O3'-C3'	11.12	133.04	119.70
443	HI	3	DC	P-O3'-C3'	11.12	133.04	119.70
439	HE	9	DT	O4'-C4'-C3'	-11.11	99.33	106.00
2	AB	2740	DT	P-O3'-C3'	11.11	133.03	119.70
55	A2	40	DA	P-O3'-C3'	11.11	133.03	119.70
2	AB	2115	DG	O4'-C4'-C3'	-11.10	99.34	106.00
1	AA	5164	DC	P-O3'-C3'	11.10	133.02	119.70
60	A7	41	DG	O4'-C4'-C3'	-11.09	99.34	106.00
53	A0	24	DG	O4'-C4'-C3'	-11.09	99.35	106.00
206	DT	19	DA	O4'-C4'-C3'	-11.09	99.35	106.00
239	D0	2	DG	O4'-C4'-C3'	-11.09	99.35	106.00
1	AA	1489	DG	O4'-C4'-C3'	-11.08	99.35	106.00
2	AB	2864	DT	P-O3'-C3'	11.07	132.98	119.70
1	AA	7029	DT	P-O3'-C3'	11.07	132.98	119.70
46	At	32	DT	O4'-C4'-C3'	-11.07	99.36	106.00
1	AA	3413	DG	P-O3'-C3'	11.06	132.97	119.70
2	AB	4403	DT	O4'-C4'-C3'	-11.05	99.37	106.00
2	AB	6349	DC	O4'-C4'-C3'	-11.05	99.37	106.00
2	AB	3409	DG	O4'-C4'-C3'	-11.05	99.37	106.00
1	AA	1572	DT	O4'-C4'-C3'	-11.04	99.38	106.00
2	AB	7545	DG	P-O3'-C3'	11.04	132.95	119.70
195	DI	31	DC	P-O3'-C3'	11.03	132.94	119.70
1	AA	5717	DG	O4'-C4'-C3'	-11.03	99.38	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	5651	DT	P-O3'-C3'	11.03	132.94	119.70
48	Av	15	DT	O4'-C4'-C3'	-11.03	99.38	106.00
242	D3	29	DG	P-O3'-C3'	11.02	132.93	119.70
1	AA	5142	DG	P-O3'-C3'	11.02	132.93	119.70
31	Ae	24	DC	P-O3'-C3'	11.02	132.93	119.70
1	AA	2071	DC	P-O3'-C3'	11.01	132.91	119.70
2	AB	6968	DT	O4'-C4'-C3'	-11.01	99.40	106.00
79	BQ	1	DT	P-O3'-C3'	11.01	132.91	119.70
151	Ca	13	DT	P-O3'-C3'	11.00	132.90	119.70
1	AA	7061	DG	O4'-C4'-C3'	-11.00	99.40	106.00
1	AA	5243	DG	O4'-C4'-C3'	-10.98	99.41	106.00
2	AB	4325	DA	P-O3'-C3'	10.98	132.88	119.70
75	BM	10	DT	P-O3'-C3'	10.98	132.88	119.70
2	AB	4179	DC	P-O3'-C3'	10.97	132.87	119.70
1	AA	6906	DG	O4'-C4'-C3'	-10.96	99.42	106.00
41	Ao	17	DC	P-O3'-C3'	10.96	132.86	119.70
2	AB	6831	DA	O4'-C4'-C3'	-10.96	99.42	106.00
2	AB	3467	DC	O4'-C4'-C3'	-10.96	99.42	106.00
1	AA	1315	DT	O4'-C4'-C3'	-10.95	99.43	106.00
2	AB	725	DT	O4'-C4'-C3'	-10.96	99.43	106.00
2	AB	947	DG	O4'-C4'-C3'	-10.95	99.43	106.00
2	AB	2979	DT	P-O3'-C3'	10.95	132.84	119.70
389	GQ	3	DT	O4'-C4'-C3'	-10.95	99.43	106.00
2	AB	4179	DC	O4'-C4'-C3'	-10.94	99.44	106.00
21	AU	17	DT	O4'-C4'-C3'	-10.93	99.44	106.00
213	Da	9	DC	P-O3'-C3'	10.93	132.81	119.70
326	FP	28	DA	P-O3'-C3'	10.93	132.81	119.70
1	AA	5688	DT	P-O3'-C3'	10.91	132.80	119.70
2	AB	1157	DG	P-O3'-C3'	10.91	132.79	119.70
2	AB	3392	DA	P-O3'-C3'	10.90	132.78	119.70
397	GY	26	DG	P-O3'-C3'	10.90	132.78	119.70
1	AA	749	DG	O4'-C4'-C3'	-10.90	99.46	106.00
2	AB	4403	DT	P-O3'-C3'	10.89	132.77	119.70
6	AF	39	DT	O4'-C4'-C3'	-10.89	99.46	106.00
2	AB	4242	DG	P-O3'-C3'	10.89	132.77	119.70
419	Gu	1	DC	O4'-C4'-C3'	-10.89	99.47	106.00
58	A5	30	DC	P-O3'-C3'	10.88	132.75	119.70
1	AA	3762	DG	O4'-C4'-C3'	-10.87	99.48	106.00
455	HU	13	DT	O4'-C4'-C3'	-10.86	99.48	106.00
1	AA	6176	DG	O4'-C4'-C3'	-10.86	99.49	106.00
2	AB	6287	DA	O4'-C4'-C3'	-10.85	99.49	106.00
9	AI	24	DT	C4'-C3'-C2'	-10.84	93.34	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
133	CI	13	DA	P-O3'-C3'	10.84	132.70	119.70
431	G6	13	DG	O4'-C4'-C3'	-10.84	99.50	106.00
167	Cq	12	DG	P-O3'-C3'	10.83	132.70	119.70
1	AA	4491	DG	O4'-C4'-C3'	-10.83	99.50	106.00
290	Ep	5	DA	P-O3'-C3'	10.82	132.69	119.70
2	AB	6675	DC	P-O3'-C3'	10.82	132.68	119.70
418	Gt	27	DC	P-O3'-C3'	10.82	132.68	119.70
1	AA	547	DA	P-O3'-C3'	10.81	132.67	119.70
210	DX	28	DA	P-O3'-C3'	10.81	132.67	119.70
1	AA	3268	DA	P-O3'-C3'	10.80	132.66	119.70
370	F7	1	DT	O4'-C4'-C3'	-10.80	99.52	106.00
1	AA	4289	DG	O4'-C4'-C3'	-10.80	99.52	106.00
340	Fd	32	DG	P-O3'-C3'	10.80	132.66	119.70
2	AB	2974	DC	O4'-C4'-C3'	-10.80	99.52	106.00
1	AA	2536	DC	P-O3'-C3'	10.79	132.65	119.70
241	D2	31	DT	O4'-C4'-C3'	-10.79	99.53	106.00
2	AB	5045	DG	P-O3'-C3'	10.79	132.64	119.70
2	AB	1838	DG	P-O3'-C3'	10.78	132.64	119.70
2	AB	2256	DG	O4'-C4'-C3'	-10.77	99.54	106.00
2	AB	2725	DC	P-O3'-C3'	10.77	132.63	119.70
1	AA	1007	DT	P-O3'-C3'	10.77	132.62	119.70
85	BW	29	DG	P-O3'-C3'	10.76	132.61	119.70
1	AA	4981	DC	P-O3'-C3'	10.76	132.61	119.70
1	AA	2256	DA	P-O3'-C3'	10.75	132.60	119.70
48	Av	18	DC	P-O3'-C3'	10.75	132.60	119.70
1	AA	1673	DT	P-O3'-C3'	10.74	132.59	119.70
210	DX	13	DG	P-O3'-C3'	10.74	132.59	119.70
2	AB	802	DC	P-O3'-C3'	10.73	132.58	119.70
295	Eu	16	DT	P-O3'-C3'	10.73	132.58	119.70
1	AA	2387	DG	O4'-C4'-C3'	-10.72	99.56	106.00
53	A0	18	DG	P-O3'-C3'	10.72	132.56	119.70
2	AB	272	DT	O4'-C4'-C3'	-10.71	99.57	106.00
78	BP	15	DG	P-O3'-C3'	10.71	132.56	119.70
364	F1	1	DG	O4'-C4'-C3'	-10.71	99.57	106.00
1	AA	1847	DT	P-O3'-C3'	10.71	132.55	119.70
1	AA	6407	DC	O4'-C4'-C3'	-10.71	99.57	106.00
258	EJ	24	DA	O4'-C4'-C3'	-10.71	99.57	106.00
332	FV	18	DA	P-O3'-C3'	10.70	132.53	119.70
1	AA	3215	DG	P-O3'-C3'	10.69	132.53	119.70
1	AA	4204	DC	P-O3'-C3'	10.69	132.53	119.70
1	AA	6581	DG	O4'-C4'-C3'	-10.68	99.59	106.00
2	AB	5621	DT	P-O3'-C3'	10.68	132.52	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
123	B8	10	DA	P-O3'-C3'	10.68	132.52	119.70
1	AA	4475	DT	P-O3'-C3'	10.68	132.51	119.70
72	BJ	27	DC	P-O3'-C3'	10.68	132.51	119.70
145	CU	18	DC	P-O3'-C3'	10.67	132.50	119.70
1	AA	4262	DT	O4'-C4'-C3'	-10.67	99.60	106.00
126	CB	19	DT	P-O3'-C3'	10.66	132.50	119.70
1	AA	641	DA	P-O3'-C3'	10.66	132.49	119.70
221	Di	5	DA	P-O3'-C3'	10.66	132.49	119.70
357	Fu	16	DA	O4'-C4'-C3'	-10.65	99.61	106.00
102	Bn	38	DG	O4'-C4'-C3'	-10.64	99.61	106.00
396	GX	1	DT	P-O3'-C3'	10.63	132.46	119.70
230	Dr	13	DT	P-O3'-C3'	10.63	132.46	119.70
30	Ad	32	DA	P-O3'-C3'	10.63	132.46	119.70
348	Fl	17	DA	P-O3'-C3'	10.62	132.45	119.70
2	AB	4795	DA	P-O3'-C3'	10.62	132.44	119.70
189	DC	31	DC	P-O3'-C3'	10.61	132.43	119.70
340	Fd	25	DC	P-O3'-C3'	10.60	132.41	119.70
1	AA	5901	DA	P-O3'-C3'	10.59	132.41	119.70
15	AO	25	DG	P-O3'-C3'	10.59	132.41	119.70
119	B4	19	DG	O4'-C4'-C3'	-10.59	99.65	106.00
154	Cd	3	DG	O4'-C4'-C3'	-10.58	99.65	106.00
1	AA	4178	DT	O4'-C4'-C3'	-10.57	99.66	106.00
77	BO	34	DA	P-O3'-C3'	10.57	132.38	119.70
2	AB	3467	DC	P-O3'-C3'	10.57	132.38	119.70
420	Gv	13	DC	P-O3'-C3'	10.57	132.38	119.70
312	FB	17	DG	O4'-C4'-C3'	-10.57	99.66	106.00
1	AA	2474	DC	P-O3'-C3'	10.56	132.38	119.70
2	AB	2736	DT	O4'-C4'-C3'	-10.56	99.66	106.00
1	AA	1663	DC	O4'-C4'-C3'	-10.55	99.67	106.00
1	AA	7031	DC	P-O3'-C3'	10.55	132.36	119.70
154	Cd	2	DG	P-O3'-C3'	10.55	132.36	119.70
1	AA	6136	DG	O4'-C4'-C3'	-10.54	99.67	106.00
133	CI	1	DG	O4'-C4'-C3'	-10.54	99.67	106.00
2	AB	283	DG	P-O3'-C3'	10.54	132.35	119.70
54	A1	41	DA	O4'-C4'-C3'	-10.53	99.68	106.00
247	D8	13	DC	P-O3'-C3'	10.52	132.33	119.70
254	EF	8	DG	O4'-C4'-C3'	-10.51	99.69	106.00
139	CO	6	DC	P-O3'-C3'	10.51	132.31	119.70
1	AA	3389	DC	P-O3'-C3'	10.51	132.31	119.70
1	AA	398	DG	O4'-C4'-C3'	-10.49	99.70	106.00
2	AB	5885	DG	O4'-C4'-C3'	-10.49	99.70	106.00
430	G5	3	DC	P-O3'-C3'	10.48	132.28	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	279	DT	O4'-C4'-C3'	-10.48	99.71	106.00
4	AD	28	DT	O4'-C4'-C3'	-10.47	99.72	106.00
348	Fl	19	DG	O4'-C4'-C3'	-10.47	99.72	106.00
1	AA	5886	DC	P-O3'-C3'	10.46	132.25	119.70
2	AB	2111	DG	O4'-C4'-C3'	-10.46	99.72	106.00
374	GB	16	DG	O4'-C4'-C3'	-10.46	99.72	106.00
1	AA	5416	DC	P-O3'-C3'	10.46	132.25	119.70
1	AA	860	DT	O4'-C4'-C3'	-10.45	99.73	106.00
1	AA	1833	DC	P-O3'-C3'	10.44	132.23	119.70
1	AA	813	DT	O4'-C4'-C3'	-10.44	99.74	106.00
1	AA	3882	DA	O4'-C4'-C3'	-10.43	99.74	106.00
424	Gz	9	DC	P-O3'-C3'	10.43	132.22	119.70
2	AB	291	DC	P-O3'-C3'	10.42	132.21	119.70
2	AB	1646	DC	P-O3'-C3'	10.42	132.21	119.70
68	BF	20	DT	P-O3'-C3'	10.42	132.20	119.70
2	AB	4323	DT	O4'-C4'-C3'	-10.41	99.75	106.00
2	AB	1539	DG	O4'-C4'-C3'	-10.41	99.75	106.00
119	B4	20	DC	P-O3'-C3'	10.41	132.19	119.70
58	A5	30	DC	O4'-C4'-C3'	-10.41	99.75	106.00
1	AA	6667	DT	P-O3'-C3'	10.38	132.16	119.70
1	AA	2079	DC	O4'-C4'-C3'	-10.38	99.77	106.00
1	AA	5277	DC	P-O3'-C3'	10.38	132.15	119.70
162	Cl	27	DC	P-O3'-C3'	10.38	132.15	119.70
210	DX	16	DG	O4'-C4'-C3'	-10.37	99.78	106.00
1	AA	5711	DA	P-O3'-C3'	10.37	132.14	119.70
2	AB	3911	DT	P-O3'-C3'	10.37	132.14	119.70
2	AB	960	DT	P-O3'-C3'	10.36	132.14	119.70
176	Cz	14	DG	O4'-C4'-C3'	-10.36	99.78	106.00
2	AB	2149	DG	O4'-C4'-C3'	-10.36	99.78	106.00
139	CO	11	DG	O4'-C4'-C3'	-10.36	99.79	106.00
254	EF	11	DG	O4'-C4'-C3'	-10.36	99.79	106.00
15	AO	24	DG	O4'-C4'-C3'	-10.35	99.79	106.00
1	AA	2569	DC	O4'-C4'-C3'	-10.35	99.79	106.00
6	AF	27	DC	P-O3'-C3'	10.34	132.11	119.70
1	AA	6000	DT	O4'-C4'-C3'	-10.34	99.80	106.00
154	Cd	16	DT	O4'-C4'-C3'	-10.34	99.80	106.00
2	AB	5193	DC	P-O3'-C3'	10.34	132.10	119.70
54	A1	37	DC	O4'-C4'-C3'	-10.34	99.80	106.00
1	AA	2356	DG	O4'-C4'-C3'	-10.32	99.81	106.00
124	B9	23	DA	O4'-C4'-C3'	-10.32	99.81	106.00
182	C5	2	DA	P-O3'-C3'	10.31	132.08	119.70
1	AA	5238	DC	O4'-C4'-C3'	-10.31	99.81	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	4622	DG	P-O3'-C3'	10.30	132.07	119.70
215	Dc	9	DT	P-O3'-C3'	10.30	132.06	119.70
2	AB	2447	DC	P-O3'-C3'	10.30	132.06	119.70
292	Er	2	DA	P-O3'-C3'	10.29	132.05	119.70
1	AA	6155	DA	P-O3'-C3'	10.29	132.05	119.70
1	AA	884	DA	P-O3'-C3'	10.29	132.04	119.70
1	AA	4655	DG	O4'-C4'-C3'	-10.28	99.83	106.00
324	FN	11	DT	O4'-C4'-C3'	-10.28	99.83	106.00
2	AB	6605	DA	P-O3'-C3'	10.28	132.03	119.70
351	Fo	9	DC	P-O3'-C3'	10.28	132.03	119.70
433	G8	8	DA	P-O3'-C3'	10.27	132.03	119.70
146	CV	34	DA	P-O3'-C3'	10.27	132.02	119.70
241	D2	8	DC	O4'-C1'-C2'	-10.27	97.69	105.90
307	E6	14	DT	O4'-C4'-C3'	-10.27	99.84	106.00
244	D5	5	DG	O4'-C4'-C3'	-10.26	99.85	106.00
2	AB	1699	DC	P-O3'-C3'	10.25	132.00	119.70
84	BV	40	DA	O4'-C4'-C3'	-10.25	99.85	106.00
1	AA	1830	DT	P-O3'-C3'	10.24	131.99	119.70
200	DN	7	DA	O4'-C4'-C3'	-10.24	99.86	106.00
416	Gr	17	DG	P-O3'-C3'	10.24	131.99	119.70
17	AQ	37	DT	P-O3'-C3'	10.23	131.98	119.70
30	Ad	36	DA	O4'-C4'-C3'	-10.23	99.86	106.00
330	FT	23	DT	O4'-C4'-C3'	-10.23	99.86	106.00
2	AB	5278	DC	P-O3'-C3'	10.23	131.97	119.70
2	AB	311	DA	P-O3'-C3'	10.22	131.97	119.70
1	AA	5726	DG	P-O3'-C3'	10.22	131.96	119.70
2	AB	127	DT	O4'-C4'-C3'	-10.21	99.87	106.00
2	AB	6649	DG	O4'-C4'-C3'	-10.21	99.87	106.00
112	Bx	31	DG	P-O3'-C3'	10.21	131.96	119.70
66	BD	27	DG	P-O3'-C3'	10.21	131.95	119.70
219	Dg	33	DC	O4'-C4'-C3'	-10.21	99.88	106.00
416	Gr	24	DG	P-O3'-C3'	10.21	131.95	119.70
1	AA	4630	DC	P-O3'-C3'	10.20	131.94	119.70
2	AB	3222	DC	P-O3'-C3'	10.19	131.93	119.70
2	AB	1382	DA	O4'-C4'-C3'	-10.19	99.89	106.00
415	Gq	8	DT	O4'-C4'-C3'	-10.18	99.89	106.00
2	AB	2139	DG	O4'-C4'-C3'	-10.18	99.89	106.00
2	AB	6400	DT	O4'-C4'-C3'	-10.18	99.89	106.00
211	DY	19	DT	P-O3'-C3'	10.17	131.91	119.70
441	HG	1	DC	O4'-C4'-C3'	-10.17	99.89	106.00
1	AA	6047	DG	O4'-C4'-C3'	-10.17	99.90	106.00
53	A0	26	DG	O4'-C4'-C3'	-10.17	99.90	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
79	BQ	38	DG	P-O3'-C3'	10.16	131.90	119.70
132	CH	2	DG	O4'-C4'-C3'	-10.16	99.91	106.00
147	CW	13	DG	O4'-C4'-C3'	-10.16	99.91	106.00
1	AA	6487	DA	O4'-C4'-C3'	-10.15	99.91	106.00
134	CJ	23	DT	O4'-C4'-C3'	-10.15	99.91	106.00
2	AB	4985	DG	P-O3'-C3'	10.15	131.88	119.70
322	FL	23	DT	O4'-C4'-C3'	-10.15	99.91	106.00
2	AB	6965	DT	O4'-C4'-C3'	-10.15	99.91	106.00
294	Et	30	DT	P-O3'-C3'	10.15	131.88	119.70
173	Cw	1	DG	O4'-C4'-C3'	-10.14	99.91	106.00
2	AB	2818	DT	P-O3'-C3'	10.14	131.86	119.70
257	EI	6	DG	O4'-C4'-C3'	-10.13	99.92	106.00
2	AB	623	DT	P-O3'-C3'	10.12	131.85	119.70
255	EG	16	DT	O4'-C4'-C3'	-10.13	99.92	106.00
2	AB	4235	DT	O4'-C4'-C3'	-10.12	99.92	106.00
174	Cx	37	DT	O4'-C4'-C3'	-10.12	99.93	106.00
369	F6	4	DC	O4'-C4'-C3'	-10.12	99.93	106.00
144	CT	9	DC	P-O3'-C3'	10.12	131.84	119.70
65	BC	31	DC	O4'-C1'-C2'	-10.11	97.81	105.90
1	AA	2534	DC	O4'-C4'-C3'	-10.11	99.94	106.00
1	AA	4155	DT	O4'-C4'-C3'	-10.10	99.94	106.00
383	GK	9	DA	O4'-C4'-C3'	-10.10	99.94	106.00
96	Bh	25	DG	P-O3'-C3'	10.10	131.82	119.70
405	Gg	16	DG	O4'-C4'-C3'	-10.09	99.94	106.00
427	G2	26	DT	O4'-C1'-C2'	-10.09	97.83	105.90
1	AA	2850	DG	O4'-C4'-C3'	-10.09	99.95	106.00
139	CO	5	DT	O4'-C4'-C3'	-10.09	99.95	106.00
88	BZ	12	DT	O4'-C4'-C3'	-10.09	99.95	106.00
92	Bd	16	DT	P-O3'-C3'	10.08	131.80	119.70
1	AA	3575	DC	P-O3'-C3'	10.07	131.79	119.70
1	AA	3882	DA	P-O3'-C3'	10.07	131.78	119.70
269	EU	24	DC	P-O3'-C3'	10.06	131.78	119.70
1	AA	3286	DC	P-O3'-C3'	10.06	131.77	119.70
41	Ao	17	DC	O4'-C1'-C2'	-10.06	97.85	105.90
1	AA	2846	DC	O4'-C1'-C2'	-10.06	97.86	105.90
227	Do	30	DT	P-O3'-C3'	10.05	131.77	119.70
27	Aa	31	DC	P-O3'-C3'	10.04	131.75	119.70
2	AB	3132	DG	O4'-C4'-C3'	-10.04	99.97	106.00
274	EZ	26	DG	O4'-C4'-C3'	-10.04	99.98	106.00
451	HQ	2	DA	O4'-C4'-C3'	-10.04	99.98	106.00
2	AB	3331	DT	O4'-C4'-C3'	-10.03	99.98	106.00
386	GN	1	DA	O4'-C4'-C3'	-10.03	99.98	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	7239	DT	O4'-C4'-C3'	-10.03	99.98	106.00
366	F3	15	DA	P-O3'-C3'	10.02	131.73	119.70
1	AA	3036	DG	O4'-C4'-C3'	-10.02	99.99	106.00
81	BS	13	DG	P-O3'-C3'	10.02	131.73	119.70
347	Fk	11	DG	O4'-C4'-C3'	-10.02	99.99	106.00
2	AB	7327	DT	O4'-C1'-C2'	-10.01	97.89	105.90
2	AB	5864	DA	P-O3'-C3'	10.00	131.70	119.70
1	AA	6820	DG	O4'-C4'-C3'	-9.99	100.00	106.00
1	AA	4570	DT	P-O3'-C3'	9.99	131.69	119.70
21	AU	28	DT	P-O3'-C3'	9.99	131.69	119.70
246	D7	29	DG	P-O3'-C3'	9.98	131.67	119.70
2	AB	6614	DG	P-O3'-C3'	9.97	131.67	119.70
2	AB	2826	DC	P-O3'-C3'	9.96	131.66	119.70
449	HO	1	DT	P-O3'-C3'	9.96	131.65	119.70
2	AB	4546	DC	P-O3'-C3'	9.95	131.63	119.70
181	C4	10	DA	P-O3'-C3'	9.94	131.63	119.70
2	AB	5444	DG	O4'-C4'-C3'	-9.94	100.04	106.00
1	AA	1023	DA	O4'-C4'-C3'	-9.94	100.04	106.00
74	BL	31	DT	O4'-C4'-C3'	-9.93	100.04	106.00
1	AA	5484	DG	O4'-C4'-C3'	-9.93	100.04	106.00
1	AA	5767	DC	O4'-C1'-C2'	-9.93	97.96	105.90
1	AA	1687	DC	O4'-C1'-C2'	-9.93	97.96	105.90
303	E2	4	DG	P-O3'-C3'	9.93	131.62	119.70
2	AB	4217	DT	P-O3'-C3'	9.93	131.61	119.70
205	DS	28	DA	P-O3'-C3'	9.93	131.61	119.70
1	AA	7457	DG	O4'-C4'-C3'	-9.92	100.05	106.00
2	AB	40	DA	P-O3'-C3'	9.92	131.61	119.70
119	B4	30	DC	P-O3'-C3'	9.92	131.60	119.70
1	AA	4109	DC	O4'-C4'-C3'	-9.91	100.06	106.00
2	AB	3841	DC	P-O3'-C3'	9.91	131.59	119.70
240	D1	20	DA	P-O3'-C3'	9.91	131.59	119.70
259	EK	1	DT	O4'-C4'-C3'	-9.91	100.05	106.00
57	A4	36	DC	P-O3'-C3'	9.91	131.59	119.70
288	En	10	DG	O4'-C4'-C3'	-9.91	100.06	106.00
2	AB	7063	DG	O4'-C4'-C3'	-9.90	100.06	106.00
2	AB	6481	DG	P-O3'-C3'	9.90	131.58	119.70
2	AB	7169	DA	O4'-C4'-C3'	-9.90	100.06	106.00
177	C0	13	DG	P-O3'-C3'	9.90	131.58	119.70
310	E9	24	DA	P-O3'-C3'	9.90	131.57	119.70
375	GC	3	DA	N1-C6-N6	-9.89	112.66	118.60
422	Gx	13	DG	O4'-C4'-C3'	-9.89	100.06	106.00
1	AA	1023	DA	P-O3'-C3'	9.89	131.57	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
128	CD	12	DC	P-O3'-C3'	9.89	131.56	119.70
310	E9	29	DG	O4'-C4'-C3'	-9.89	100.07	106.00
434	G9	7	DC	O4'-C4'-C3'	-9.89	100.07	106.00
442	HH	1	DG	O4'-C4'-C3'	-9.89	100.07	106.00
137	CM	11	DA	P-O3'-C3'	9.89	131.56	119.70
365	F2	1	DG	P-O3'-C3'	9.88	131.56	119.70
73	BK	4	DC	P-O3'-C3'	9.87	131.55	119.70
68	BF	7	DA	P-O3'-C3'	9.87	131.54	119.70
225	Dm	10	DC	P-O3'-C3'	9.87	131.54	119.70
49	Aw	33	DC	O4'-C1'-C2'	-9.87	98.01	105.90
417	Gs	3	DA	P-O3'-C3'	9.86	131.54	119.70
27	Aa	38	DC	O4'-C4'-C3'	-9.86	100.08	106.00
435	HA	1	DT	O4'-C4'-C3'	-9.86	100.08	106.00
2	AB	1643	DT	P-O3'-C3'	9.86	131.53	119.70
242	D3	5	DA	P-O3'-C3'	9.86	131.53	119.70
304	E3	7	DG	O4'-C4'-C3'	-9.86	100.08	106.00
2	AB	3443	DT	P-O3'-C3'	9.85	131.52	119.70
2	AB	6581	DG	O4'-C4'-C3'	-9.85	100.09	106.00
111	Bw	39	DA	P-O3'-C3'	9.85	131.52	119.70
205	DS	26	DT	O4'-C4'-C3'	-9.85	100.09	106.00
167	Cq	20	DC	P-O3'-C3'	9.84	131.51	119.70
2	AB	1197	DC	P-O3'-C3'	9.84	131.50	119.70
1	AA	1556	DT	P-O3'-C3'	9.83	131.49	119.70
2	AB	3334	DT	O4'-C4'-C3'	-9.83	100.11	106.00
75	BM	14	DG	O4'-C4'-C3'	-9.83	100.10	106.00
2	AB	2459	DG	P-O3'-C3'	9.82	131.49	119.70
400	Gb	19	DG	O4'-C4'-C3'	-9.82	100.11	106.00
21	AU	2	DT	P-O3'-C3'	9.82	131.49	119.70
370	F7	19	DT	O4'-C4'-C3'	-9.82	100.11	106.00
1	AA	5391	DC	P-O3'-C3'	9.81	131.48	119.70
2	AB	2138	DT	P-O3'-C3'	9.81	131.48	119.70
12	AL	35	DA	P-O3'-C3'	9.81	131.48	119.70
290	Ep	13	DA	P-O3'-C3'	9.81	131.47	119.70
2	AB	3515	DC	P-O3'-C3'	9.81	131.47	119.70
2	AB	1153	DT	P-O3'-C3'	9.80	131.46	119.70
128	CD	7	DT	O4'-C4'-C3'	-9.80	100.12	106.00
2	AB	5160	DA	N1-C6-N6	-9.80	112.72	118.60
79	BQ	32	DT	O4'-C4'-C3'	-9.80	100.12	106.00
23	AW	10	DG	P-O3'-C3'	9.80	131.46	119.70
1	AA	3131	DA	P-O3'-C3'	9.79	131.45	119.70
1	AA	3471	DG	P-O3'-C3'	9.79	131.45	119.70
1	AA	7316	DG	P-O3'-C3'	9.79	131.45	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	3500	DT	P-O3'-C3'	9.79	131.45	119.70
330	FT	26	DG	P-O3'-C3'	9.78	131.44	119.70
13	AM	17	DT	P-O3'-C3'	9.78	131.43	119.70
170	Ct	41	DA	P-O3'-C3'	9.78	131.43	119.70
387	GO	9	DA	O4'-C4'-C3'	-9.78	100.13	106.00
1	AA	4080	DC	O4'-C1'-C2'	-9.77	98.08	105.90
2	AB	3024	DG	P-O3'-C3'	9.77	131.43	119.70
2	AB	2391	DG	O4'-C4'-C3'	-9.77	100.14	106.00
295	Eu	13	DC	P-O3'-C3'	9.77	131.42	119.70
1	AA	331	DT	P-O3'-C3'	9.76	131.42	119.70
2	AB	6532	DG	P-O3'-C3'	9.76	131.42	119.70
1	AA	1854	DG	O4'-C4'-C3'	-9.76	100.15	106.00
451	HQ	6	DT	O4'-C4'-C3'	-9.75	100.15	106.00
326	FP	20	DC	O4'-C4'-C3'	-9.75	100.15	106.00
74	BL	23	DC	O4'-C1'-N1	9.75	114.82	108.00
174	Cx	40	DG	O4'-C4'-C3'	-9.74	100.15	106.00
1	AA	3268	DA	C1'-O4'-C4'	-9.74	100.36	110.10
211	DY	37	DC	P-O3'-C3'	9.74	131.39	119.70
1	AA	5766	DC	O4'-C4'-C3'	-9.74	100.16	106.00
1	AA	7528	DA	P-O3'-C3'	9.74	131.39	119.70
1	AA	844	DC	O4'-C4'-C3'	-9.74	100.16	106.00
198	DL	16	DT	O4'-C4'-C3'	-9.74	100.16	106.00
2	AB	3880	DA	O4'-C4'-C3'	-9.72	100.17	106.00
2	AB	5152	DT	O4'-C4'-C3'	-9.72	100.17	106.00
2	AB	1416	DG	O4'-C4'-C3'	-9.72	100.17	106.00
2	AB	3544	DG	O4'-C4'-C3'	-9.72	100.17	106.00
253	EE	8	DC	P-O3'-C3'	9.72	131.36	119.70
2	AB	4956	DG	P-O3'-C3'	9.71	131.35	119.70
383	GK	18	DG	P-O3'-C3'	9.71	131.35	119.70
1	AA	1292	DC	P-O3'-C3'	9.70	131.34	119.70
252	ED	1	DG	O4'-C1'-C2'	-9.70	98.14	105.90
2	AB	4351	DT	C4'-C3'-C2'	-9.69	94.38	103.10
295	Eu	11	DC	P-O3'-C3'	9.70	131.33	119.70
428	G3	23	DC	C2-N1-C1'	9.69	129.46	118.80
1	AA	547	DA	O4'-C4'-C3'	-9.69	100.19	106.00
1	AA	4512	DT	P-O3'-C3'	9.69	131.32	119.70
445	HK	12	DC	P-O3'-C3'	9.68	131.31	119.70
2	AB	4441	DG	O4'-C4'-C3'	-9.67	100.20	106.00
1	AA	5812	DA	O4'-C4'-C3'	-9.66	100.20	106.00
2	AB	92	DG	P-O3'-C3'	9.66	131.29	119.70
424	Gz	19	DA	P-O3'-C3'	9.66	131.29	119.70
1	AA	2316	DC	O4'-C4'-C3'	-9.66	100.20	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	6729	DG	O4'-C4'-C3'	-9.66	100.20	106.00
5	AE	17	DT	O4'-C4'-C3'	-9.66	100.21	106.00
23	AW	28	DT	P-O3'-C3'	9.65	131.28	119.70
185	C8	25	DA	P-O3'-C3'	9.65	131.28	119.70
2	AB	2652	DC	O4'-C4'-C3'	-9.65	100.21	106.00
114	Bz	15	DG	O4'-C4'-C3'	-9.64	100.21	106.00
2	AB	6106	DG	O4'-C4'-C3'	-9.64	100.22	106.00
286	El	2	DG	O4'-C4'-C3'	-9.64	100.22	106.00
2	AB	5188	DG	O4'-C4'-C3'	-9.63	100.22	106.00
2	AB	855	DC	P-O3'-C3'	9.63	131.25	119.70
1	AA	643	DT	P-O3'-C3'	9.62	131.25	119.70
59	A6	9	DT	P-O3'-C3'	9.62	131.25	119.70
210	DX	14	DA	P-O3'-C3'	9.62	131.24	119.70
2	AB	2518	DG	P-O3'-C3'	9.61	131.24	119.70
190	DD	13	DG	O4'-C4'-C3'	-9.61	100.24	106.00
1	AA	1678	DC	P-O3'-C3'	9.60	131.22	119.70
362	Fz	1	DG	O4'-C4'-C3'	-9.60	100.24	106.00
426	G1	27	DC	O4'-C4'-C3'	-9.60	100.24	106.00
2	AB	681	DC	P-O3'-C3'	9.60	131.22	119.70
268	ET	17	DT	P-O3'-C3'	9.60	131.22	119.70
2	AB	3627	DT	P-O3'-C3'	9.60	131.21	119.70
218	Df	5	DA	P-O3'-C3'	9.60	131.22	119.70
1	AA	2107	DC	O4'-C1'-C2'	-9.59	98.23	105.90
223	Dk	38	DT	P-O3'-C3'	9.59	131.20	119.70
81	BS	9	DT	O4'-C4'-C3'	-9.58	100.25	106.00
1	AA	4300	DC	O4'-C4'-C3'	-9.58	100.25	106.00
2	AB	101	DG	P-O3'-C3'	9.58	131.19	119.70
292	Er	1	DG	O4'-C1'-C2'	-9.58	98.24	105.90
135	CK	13	DC	P-O3'-C3'	9.57	131.18	119.70
285	Ek	34	DT	O4'-C1'-C2'	-9.57	98.24	105.90
2	AB	2909	DG	P-O3'-C3'	9.57	131.18	119.70
2	AB	5309	DC	C2-N1-C1'	9.56	129.32	118.80
184	C7	33	DG	O4'-C4'-C3'	-9.56	100.26	106.00
1	AA	1396	DC	P-O3'-C3'	9.55	131.16	119.70
245	D6	30	DC	O4'-C1'-C2'	-9.56	98.25	105.90
243	D4	26	DA	P-O3'-C3'	9.55	131.16	119.70
141	CQ	12	DT	O4'-C4'-C3'	-9.55	100.27	106.00
106	Br	38	DA	P-O3'-C3'	9.55	131.16	119.70
134	CJ	39	DT	O4'-C4'-C3'	-9.54	100.28	106.00
327	FQ	34	DT	P-O3'-C3'	9.54	131.15	119.70
1	AA	2965	DC	P-O3'-C3'	9.54	131.14	119.70
1	AA	4566	DA	P-O3'-C3'	9.54	131.14	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
253	EE	17	DA	P-O3'-C3'	9.54	131.14	119.70
432	G7	28	DT	C6-C5-C7	-9.52	117.19	122.90
287	Em	6	DC	C6-N1-C2	-9.52	116.49	120.30
72	BJ	38	DG	O4'-C4'-C3'	-9.52	100.29	106.00
1	AA	5767	DC	P-O3'-C3'	9.51	131.12	119.70
1	AA	1081	DT	P-O3'-C3'	9.51	131.11	119.70
10	AJ	32	DG	P-O3'-C3'	9.51	131.11	119.70
288	En	10	DG	P-O3'-C3'	9.51	131.11	119.70
1	AA	2546	DC	P-O3'-C3'	9.51	131.11	119.70
1	AA	2951	DG	P-O3'-C3'	9.51	131.11	119.70
2	AB	2975	DT	P-O3'-C3'	9.51	131.11	119.70
2	AB	3216	DG	O4'-C4'-C3'	-9.51	100.30	106.00
6	AF	1	DT	O4'-C1'-C2'	-9.51	98.30	105.90
1	AA	1022	DT	P-O3'-C3'	9.50	131.10	119.70
35	Ai	16	DC	P-O3'-C3'	9.50	131.10	119.70
1	AA	4539	DC	O4'-C4'-C3'	-9.50	100.30	106.00
371	F8	6	DC	P-O3'-C3'	9.49	131.09	119.70
19	AS	14	DG	O4'-C4'-C3'	-9.49	100.31	106.00
1	AA	7131	DT	O4'-C4'-C3'	-9.49	100.31	106.00
1	AA	6777	DT	O4'-C1'-C2'	-9.49	98.31	105.90
1	AA	6538	DA	O4'-C4'-C3'	-9.48	100.31	106.00
2	AB	3450	DT	P-O3'-C3'	9.48	131.08	119.70
2	AB	3167	DT	P-O3'-C3'	9.47	131.07	119.70
129	CE	28	DA	O4'-C4'-C3'	-9.47	100.32	106.00
2	AB	3012	DA	P-O3'-C3'	9.47	131.06	119.70
366	F3	1	DC	O4'-C4'-C3'	-9.47	100.32	106.00
184	C7	21	DG	O4'-C4'-C3'	-9.46	100.32	106.00
2	AB	5919	DT	P-O3'-C3'	9.46	131.05	119.70
18	AR	23	DC	P-O3'-C3'	9.46	131.05	119.70
430	G5	3	DC	C6-N1-C2	-9.46	116.52	120.30
2	AB	291	DC	O4'-C1'-N1	9.46	114.62	108.00
2	AB	326	DC	P-O3'-C3'	9.45	131.04	119.70
2	AB	6344	DA	P-O3'-C3'	9.45	131.04	119.70
2	AB	1340	DG	P-O3'-C3'	9.44	131.03	119.70
2	AB	5021	DG	P-O3'-C3'	9.44	131.03	119.70
1	AA	2608	DC	O4'-C1'-C2'	-9.43	98.36	105.90
2	AB	4626	DT	O4'-C1'-C2'	-9.43	98.36	105.90
1	AA	236	DA	P-O3'-C3'	9.42	131.00	119.70
1	AA	4913	DG	O4'-C4'-C3'	-9.42	100.35	106.00
1	AA	2608	DC	P-O3'-C3'	9.41	131.00	119.70
1	AA	3289	DG	O4'-C1'-N9	9.41	114.59	108.00
445	HK	17	DT	O4'-C4'-C3'	-9.41	100.35	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	6579	DT	P-O3'-C3'	9.41	130.99	119.70
23	AW	19	DT	P-O3'-C3'	9.41	130.99	119.70
2	AB	7069	DA	P-O3'-C3'	9.41	130.99	119.70
62	A9	1	DT	O4'-C1'-C2'	-9.40	98.38	105.90
154	Cd	16	DT	P-O3'-C3'	9.40	130.98	119.70
1	AA	2844	DG	P-O3'-C3'	9.40	130.98	119.70
2	AB	185	DA	P-O3'-C3'	9.39	130.97	119.70
269	EU	32	DT	O4'-C4'-C3'	-9.39	100.36	106.00
1	AA	7114	DC	P-O3'-C3'	9.39	130.97	119.70
186	C9	34	DT	P-O3'-C3'	9.39	130.97	119.70
1	AA	2403	DA	P-O3'-C3'	9.38	130.96	119.70
66	BD	36	DC	P-O3'-C3'	9.38	130.96	119.70
108	Bt	38	DC	P-O3'-C3'	9.38	130.96	119.70
3	AC	25	DT	P-O3'-C3'	9.38	130.95	119.70
155	Ce	40	DA	P-O3'-C3'	9.37	130.94	119.70
1	AA	1247	DT	O4'-C4'-C3'	-9.36	100.38	106.00
281	Eg	26	DT	P-O3'-C3'	9.36	130.93	119.70
343	Fg	7	DC	P-O3'-C3'	9.36	130.93	119.70
2	AB	1583	DT	O4'-C1'-N1	9.36	114.55	108.00
1	AA	1697	DC	O4'-C1'-C2'	-9.36	98.41	105.90
224	Dl	8	DC	O4'-C1'-C2'	-9.36	98.42	105.90
1	AA	1348	DC	O4'-C1'-C2'	-9.35	98.42	105.90
2	AB	2929	DT	P-O3'-C3'	9.35	130.92	119.70
79	BQ	6	DT	P-O3'-C3'	9.35	130.92	119.70
385	GM	24	DC	O4'-C4'-C3'	-9.35	100.39	106.00
1	AA	6264	DA	O4'-C4'-C3'	-9.35	100.39	106.00
2	AB	2034	DC	P-O3'-C3'	9.35	130.91	119.70
197	DK	27	DC	P-O3'-C3'	9.34	130.91	119.70
1	AA	5043	DG	P-O3'-C3'	9.34	130.91	119.70
405	Gg	15	DT	O4'-C1'-C2'	-9.34	98.43	105.90
1	AA	6798	DG	P-O3'-C3'	9.34	130.90	119.70
2	AB	6278	DA	P-O3'-C3'	9.33	130.90	119.70
165	Co	34	DG	P-O3'-C3'	9.33	130.90	119.70
342	Ff	25	DA	P-O3'-C3'	9.33	130.90	119.70
1	AA	5768	DA	O4'-C4'-C3'	-9.33	100.40	106.00
78	BP	38	DC	P-O3'-C3'	9.33	130.90	119.70
394	GV	28	DT	O4'-C4'-C3'	-9.33	100.40	106.00
1	AA	3289	DG	O4'-C1'-C2'	-9.32	98.44	105.90
1	AA	39	DA	P-O3'-C3'	9.32	130.88	119.70
1	AA	4635	DA	O4'-C4'-C3'	-9.32	100.41	106.00
235	Dw	5	DA	O4'-C4'-C3'	-9.32	100.41	106.00
1	AA	1799	DT	O4'-C1'-C2'	-9.32	98.45	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	5920	DT	O4'-C4'-C3'	-9.32	100.41	106.00
2	AB	7077	DA	P-O3'-C3'	9.32	130.88	119.70
210	DX	27	DA	P-O3'-C3'	9.32	130.88	119.70
314	FD	19	DC	P-O3'-C3'	9.31	130.87	119.70
1	AA	6641	DT	P-O3'-C3'	9.30	130.86	119.70
1	AA	5956	DA	P-O3'-C3'	9.30	130.86	119.70
2	AB	3866	DT	O4'-C4'-C3'	-9.30	100.42	106.00
229	Dq	13	DG	O4'-C4'-C3'	-9.30	100.42	106.00
2	AB	3015	DC	P-O3'-C3'	9.29	130.85	119.70
2	AB	6561	DC	P-O3'-C3'	9.30	130.85	119.70
2	AB	3954	DA	P-O3'-C3'	9.29	130.85	119.70
211	DY	28	DA	P-O3'-C3'	9.29	130.85	119.70
79	BQ	16	DG	P-O3'-C3'	9.29	130.85	119.70
1	AA	2156	DT	P-O3'-C3'	9.29	130.84	119.70
2	AB	2308	DG	P-O3'-C3'	9.29	130.84	119.70
1	AA	5946	DA	P-O3'-C3'	9.28	130.84	119.70
48	Av	9	DT	O4'-C1'-C2'	-9.28	98.48	105.90
83	BU	15	DC	P-O3'-C3'	9.27	130.83	119.70
2	AB	2696	DG	P-O3'-C3'	9.27	130.83	119.70
52	Az	11	DT	O4'-C4'-C3'	-9.26	100.44	106.00
188	DB	38	DC	P-O3'-C3'	9.26	130.81	119.70
109	Bu	1	DG	P-O3'-C3'	9.26	130.81	119.70
316	FF	2	DG	P-O3'-C3'	9.26	130.81	119.70
1	AA	1505	DG	P-O3'-C3'	9.25	130.81	119.70
77	BO	42	DG	O4'-C1'-C2'	-9.25	98.50	105.90
378	GF	22	DC	O4'-C1'-C2'	-9.25	98.50	105.90
17	AQ	10	DG	O4'-C4'-C3'	-9.25	100.45	106.00
407	Gi	19	DA	P-O3'-C3'	9.25	130.80	119.70
1	AA	5921	DA	P-O3'-C3'	9.25	130.80	119.70
80	BR	48	DC	P-O3'-C3'	9.25	130.80	119.70
298	Ex	24	DG	O4'-C1'-C2'	-9.25	98.50	105.90
1	AA	386	DA	O4'-C4'-C3'	-9.25	100.45	106.00
212	DZ	28	DT	P-O3'-C3'	9.24	130.79	119.70
1	AA	947	DT	O4'-C4'-C3'	-9.24	100.46	106.00
318	FH	12	DT	P-O3'-C3'	9.24	130.79	119.70
209	DW	1	DC	O4'-C4'-C3'	-9.23	100.46	106.00
154	Cd	2	DG	O4'-C1'-N9	9.23	114.46	108.00
1	AA	2393	DG	P-O3'-C3'	9.23	130.78	119.70
2	AB	940	DG	O4'-C4'-C3'	-9.23	100.46	106.00
244	D5	11	DA	P-O3'-C3'	9.23	130.77	119.70
251	EC	14	DC	O4'-C4'-C3'	-9.23	100.46	106.00
396	GX	17	DA	P-O3'-C3'	9.22	130.77	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
164	Cn	1	DT	O4'-C4'-C3'	-9.22	100.47	106.00
1	AA	3719	DC	P-O3'-C3'	9.22	130.76	119.70
2	AB	3173	DT	P-O3'-C3'	9.21	130.76	119.70
2	AB	3522	DC	O4'-C1'-C2'	-9.21	98.53	105.90
1	AA	4080	DC	O4'-C4'-C3'	-9.21	100.47	106.00
2	AB	2350	DC	P-O3'-C3'	9.21	130.75	119.70
2	AB	4774	DT	O4'-C4'-C3'	-9.21	100.48	106.00
74	BL	23	DC	O4'-C1'-C2'	-9.21	98.53	105.90
1	AA	3810	DT	O4'-C1'-C2'	-9.20	98.54	105.90
2	AB	4852	DG	P-O3'-C3'	9.20	130.74	119.70
242	D3	5	DA	O4'-C1'-C2'	-9.20	98.54	105.90
1	AA	3008	DG	P-O3'-C3'	9.20	130.74	119.70
1	AA	6119	DG	O4'-C4'-C3'	-9.20	100.48	106.00
328	FR	34	DT	P-O3'-C3'	9.20	130.74	119.70
1	AA	943	DT	O4'-C4'-C3'	-9.19	100.48	106.00
2	AB	7555	DC	P-O3'-C3'	9.19	130.73	119.70
211	DY	20	DG	P-O3'-C3'	9.19	130.73	119.70
2	AB	3511	DA	P-O3'-C3'	9.18	130.72	119.70
173	Cw	38	DT	P-O3'-C3'	9.18	130.72	119.70
1	AA	5688	DT	O4'-C1'-C2'	-9.17	98.56	105.90
2	AB	6961	DC	O4'-C4'-C3'	-9.17	100.50	106.00
238	Dz	32	DC	P-O3'-C3'	9.17	130.71	119.70
1	AA	4059	DT	P-O3'-C3'	9.17	130.70	119.70
1	AA	5129	DG	O4'-C4'-C3'	-9.17	100.50	106.00
29	Ac	9	DT	P-O3'-C3'	9.17	130.71	119.70
154	Cd	30	DT	O4'-C1'-C2'	-9.16	98.57	105.90
196	DJ	1	DG	P-O3'-C3'	9.16	130.69	119.70
432	G7	28	DT	C4-C5-C7	9.16	124.50	119.00
1	AA	3268	DA	O4'-C1'-N9	9.15	114.41	108.00
1	AA	5913	DC	O4'-C4'-C3'	-9.15	100.51	106.00
227	Do	12	DG	O4'-C4'-C3'	-9.15	100.51	106.00
26	AZ	12	DA	O4'-C4'-C3'	-9.15	100.51	106.00
1	AA	6536	DG	P-O3'-C3'	9.14	130.67	119.70
2	AB	5956	DT	O4'-C1'-C2'	-9.14	98.59	105.90
2	AB	5337	DC	P-O3'-C3'	9.13	130.66	119.70
2	AB	6462	DG	P-O3'-C3'	9.13	130.66	119.70
2	AB	2696	DG	O4'-C1'-C2'	-9.13	98.60	105.90
1	AA	6564	DA	P-O3'-C3'	9.13	130.65	119.70
22	AV	27	DT	O4'-C4'-C3'	-9.13	100.52	106.00
40	An	4	DT	O4'-C4'-C3'	-9.12	100.53	106.00
241	D2	18	DT	P-O3'-C3'	9.12	130.65	119.70
2	AB	2485	DG	P-O3'-C3'	9.12	130.64	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	6276	DT	O4'-C4'-C3'	-9.12	100.53	106.00
1	AA	3132	DA	O4'-C4'-C3'	-9.12	100.53	106.00
2	AB	289	DT	P-O3'-C3'	9.11	130.64	119.70
1	AA	1764	DC	O4'-C4'-C3'	-9.11	100.53	106.00
2	AB	6022	DC	O4'-C4'-C3'	-9.11	100.53	106.00
134	CJ	18	DC	P-O3'-C3'	9.11	130.64	119.70
2	AB	3830	DT	P-O3'-C3'	9.11	130.63	119.70
338	Fb	10	DA	P-O3'-C3'	9.11	130.63	119.70
189	DC	1	DT	O4'-C4'-C3'	-9.11	100.54	106.00
1	AA	1833	DC	O4'-C1'-C2'	-9.10	98.62	105.90
1	AA	6223	DT	P-O3'-C3'	9.10	130.62	119.70
2	AB	6608	DG	O4'-C4'-C3'	-9.10	100.54	106.00
170	Ct	5	DG	O4'-C4'-C3'	-9.10	100.54	106.00
436	HB	17	DG	P-O3'-C3'	9.10	130.62	119.70
1	AA	1819	DG	P-O3'-C3'	9.10	130.62	119.70
2	AB	1375	DT	P-O3'-C3'	9.10	130.62	119.70
149	CY	26	DG	P-O3'-C3'	9.09	130.61	119.70
162	Cl	8	DG	P-O3'-C3'	9.09	130.61	119.70
1	AA	2719	DA	P-O3'-C3'	9.09	130.60	119.70
75	BM	26	DG	P-O3'-C3'	9.09	130.60	119.70
1	AA	2474	DC	O4'-C1'-C2'	-9.08	98.64	105.90
262	EN	16	DT	O4'-C4'-C3'	-9.08	100.55	106.00
2	AB	447	DG	O4'-C4'-C3'	-9.08	100.55	106.00
2	AB	7394	DA	O4'-C4'-C3'	-9.08	100.55	106.00
133	CI	1	DG	P-O3'-C3'	9.07	130.59	119.70
1	AA	2583	DC	P-O3'-C3'	9.07	130.58	119.70
148	CX	7	DA	P-O3'-C3'	9.07	130.58	119.70
67	BE	24	DA	O4'-C4'-C3'	-9.06	100.56	106.00
2	AB	1711	DA	O4'-C4'-C3'	-9.05	100.57	106.00
70	BH	7	DT	P-O3'-C3'	9.06	130.57	119.70
2	AB	5339	DC	P-O3'-C3'	9.05	130.56	119.70
227	Do	35	DC	P-O3'-C3'	9.05	130.56	119.70
1	AA	3148	DT	O4'-C4'-C3'	-9.05	100.57	106.00
164	Cn	24	DT	O4'-C4'-C3'	-9.05	100.57	106.00
2	AB	962	DT	P-O3'-C3'	9.04	130.55	119.70
2	AB	1429	DT	P-O3'-C3'	9.04	130.55	119.70
2	AB	7197	DC	P-O3'-C3'	9.04	130.55	119.70
41	Ao	17	DC	O4'-C4'-C3'	-9.04	100.58	106.00
2	AB	6907	DC	P-O3'-C3'	9.04	130.54	119.70
270	EV	26	DT	P-O3'-C3'	9.04	130.54	119.70
1	AA	1044	DC	O4'-C4'-C3'	-9.04	100.58	106.00
9	AI	17	DA	P-O3'-C3'	9.03	130.54	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1513	DC	O4'-C1'-C2'	-9.03	98.68	105.90
2	AB	6639	DG	P-O3'-C3'	9.03	130.53	119.70
2	AB	291	DC	C2-N1-C1'	9.03	128.73	118.80
1	AA	3732	DG	O4'-C1'-C2'	-9.02	98.68	105.90
46	At	40	DT	P-O3'-C3'	9.02	130.53	119.70
2	AB	960	DT	O4'-C1'-C2'	-9.01	98.69	105.90
2	AB	6500	DT	P-O3'-C3'	9.01	130.51	119.70
85	BW	9	DT	O4'-C4'-C3'	-9.01	100.59	106.00
113	By	36	DT	P-O3'-C3'	9.01	130.51	119.70
1	AA	717	DA	O4'-C4'-C3'	-9.01	100.59	106.00
1	AA	1844	DG	O4'-C1'-C2'	-9.01	98.69	105.90
54	A1	3	DT	O4'-C4'-C3'	-9.01	100.59	106.00
231	Ds	34	DT	P-O3'-C3'	9.01	130.51	119.70
56	A3	20	DG	P-O3'-C3'	9.01	130.51	119.70
140	CP	33	DG	P-O3'-C3'	9.01	130.51	119.70
1	AA	3017	DC	O4'-C1'-C2'	-9.00	98.70	105.90
1	AA	7065	DT	O4'-C1'-C2'	-9.00	98.70	105.90
2	AB	3084	DA	P-O3'-C3'	9.00	130.50	119.70
113	By	6	DT	O4'-C4'-C3'	-9.00	100.60	106.00
413	Go	5	DG	O4'-C4'-C3'	-9.00	100.60	106.00
100	Bl	36	DG	O4'-C4'-C3'	-9.00	100.60	106.00
427	G2	25	DT	O4'-C4'-C3'	-9.00	100.60	106.00
1	AA	2790	DG	O4'-C1'-C2'	-9.00	98.70	105.90
2	AB	3445	DC	P-O3'-C3'	9.00	130.50	119.70
125	CA	33	DT	P-O3'-C3'	9.00	130.50	119.70
147	CW	36	DG	O4'-C4'-C3'	-9.00	100.60	106.00
1	AA	7147	DA	P-O3'-C3'	8.99	130.49	119.70
1	AA	5202	DG	P-O3'-C3'	8.99	130.49	119.70
268	ET	1	DA	O4'-C1'-C2'	-8.99	98.70	105.90
1	AA	2071	DC	O4'-C1'-C2'	-8.99	98.71	105.90
1	AA	5182	DT	O4'-C4'-C3'	-8.99	100.61	106.00
2	AB	2968	DA	P-O3'-C3'	8.99	130.49	119.70
2	AB	5614	DT	P-O3'-C3'	8.99	130.49	119.70
1	AA	6777	DT	O4'-C4'-C3'	-8.98	100.61	106.00
1	AA	3873	DA	P-O3'-C3'	8.98	130.48	119.70
2	AB	7078	DT	P-O3'-C3'	8.98	130.48	119.70
92	Bd	16	DT	C1'-O4'-C4'	-8.98	101.12	110.10
323	FM	15	DC	P-O3'-C3'	8.98	130.47	119.70
367	F4	23	DT	O4'-C4'-C3'	-8.98	100.61	106.00
2	AB	75	DG	O4'-C4'-C3'	-8.97	100.62	106.00
2	AB	4622	DG	O4'-C1'-C2'	-8.97	98.72	105.90
42	Ap	42	DT	P-O3'-C3'	8.97	130.46	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	4787	DG	P-O3'-C3'	8.97	130.46	119.70
389	GQ	13	DT	O4'-C4'-C3'	-8.96	100.62	106.00
1	AA	5591	DT	C4'-C3'-C2'	-8.96	95.03	103.10
17	AQ	6	DT	O4'-C4'-C3'	-8.96	100.62	106.00
192	DF	15	DG	O4'-C4'-C3'	-8.96	100.62	106.00
1	AA	3752	DG	P-O3'-C3'	8.95	130.44	119.70
1	AA	6283	DC	O4'-C4'-C3'	-8.95	100.63	106.00
2	AB	3169	DT	O4'-C1'-C2'	-8.95	98.74	105.90
124	B9	38	DA	P-O3'-C3'	8.95	130.44	119.70
2	AB	5309	DC	O4'-C1'-N1	8.94	114.26	108.00
142	CR	3	DA	O4'-C4'-C3'	-8.94	100.64	106.00
2	AB	542	DT	O4'-C1'-C2'	-8.94	98.75	105.90
2	AB	5737	DC	O4'-C1'-C2'	-8.94	98.75	105.90
335	FY	17	DA	P-O3'-C3'	8.94	130.42	119.70
2	AB	573	DC	P-O3'-C3'	8.93	130.42	119.70
2	AB	5362	DC	P-O3'-C3'	8.93	130.42	119.70
1	AA	6949	DT	P-O3'-C3'	8.92	130.41	119.70
272	EX	14	DT	O4'-C4'-C3'	-8.92	100.65	106.00
369	F6	5	DC	O4'-C4'-C3'	-8.92	100.65	106.00
1	AA	3084	DT	O4'-C4'-C3'	-8.92	100.65	106.00
252	ED	31	DC	O4'-C4'-C3'	-8.92	100.65	106.00
1	AA	2532	DG	O4'-C4'-C3'	-8.92	100.65	106.00
1	AA	6852	DT	P-O3'-C3'	8.92	130.40	119.70
408	Gj	13	DG	P-O3'-C3'	8.91	130.40	119.70
1	AA	2957	DA	O4'-C4'-C3'	-8.91	100.65	106.00
34	Ah	26	DG	O4'-C4'-C3'	-8.91	100.65	106.00
196	DJ	39	DA	O4'-C1'-C2'	-8.91	98.77	105.90
422	Gx	1	DA	O4'-C4'-C3'	-8.91	100.65	106.00
1	AA	2079	DC	C2-N1-C1'	8.91	128.60	118.80
1	AA	6497	DA	P-O3'-C3'	8.91	130.39	119.70
1	AA	1981	DG	O4'-C1'-C2'	-8.90	98.78	105.90
2	AB	2815	DC	O4'-C1'-C2'	-8.90	98.78	105.90
2	AB	4768	DC	P-O3'-C3'	8.90	130.38	119.70
163	Cm	8	DT	O4'-C4'-C3'	-8.90	100.66	106.00
2	AB	1789	DC	P-O3'-C3'	8.89	130.37	119.70
57	A4	44	DT	O4'-C4'-C3'	-8.89	100.66	106.00
274	EZ	14	DT	O4'-C1'-C2'	-8.89	98.78	105.90
451	HQ	10	DT	P-O3'-C3'	8.89	130.37	119.70
166	Cp	40	DT	P-O3'-C3'	8.89	130.37	119.70
2	AB	1583	DT	O4'-C1'-C2'	-8.88	98.79	105.90
1	AA	42	DG	O4'-C1'-N9	8.88	114.22	108.00
1	AA	2405	DT	O4'-C1'-C2'	-8.88	98.80	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	3262	DC	O4'-C4'-C3'	-8.88	100.67	106.00
398	GZ	21	DC	P-O3'-C3'	8.88	130.36	119.70
2	AB	1939	DA	P-O3'-C3'	8.88	130.35	119.70
2	AB	2449	DT	O4'-C4'-C3'	-8.88	100.67	106.00
446	HL	12	DG	P-O3'-C3'	8.87	130.35	119.70
2	AB	3419	DC	O4'-C1'-C2'	-8.87	98.80	105.90
2	AB	4781	DC	O4'-C4'-C3'	-8.87	100.68	106.00
1	AA	3233	DG	O4'-C4'-C3'	-8.87	100.68	106.00
414	Gp	24	DC	O4'-C4'-C3'	-8.87	100.68	106.00
2	AB	2421	DA	P-O3'-C3'	8.86	130.33	119.70
2	AB	1988	DT	P-O3'-C3'	8.85	130.32	119.70
297	Ew	24	DG	P-O3'-C3'	8.85	130.32	119.70
369	F6	5	DC	O4'-C1'-C2'	-8.85	98.82	105.90
239	D0	14	DC	P-O3'-C3'	8.85	130.32	119.70
274	EZ	6	DT	O4'-C4'-C3'	-8.85	100.69	106.00
252	ED	27	DC	O4'-C1'-C2'	-8.85	98.82	105.90
1	AA	4931	DT	P-O3'-C3'	8.84	130.31	119.70
1	AA	4133	DT	O4'-C4'-C3'	-8.84	100.69	106.00
2	AB	3932	DG	P-O3'-C3'	8.84	130.31	119.70
4	AD	21	DG	O4'-C4'-C3'	-8.84	100.70	106.00
1	AA	38	DT	P-O3'-C3'	8.82	130.29	119.70
2	AB	5283	DT	P-O3'-C3'	8.82	130.29	119.70
406	Gh	25	DC	P-O3'-C3'	8.82	130.29	119.70
86	BX	28	DA	O4'-C1'-C2'	-8.82	98.84	105.90
287	Em	5	DC	O4'-C1'-C2'	-8.82	98.84	105.90
323	FM	35	DC	O4'-C4'-C3'	-8.82	100.71	106.00
1	AA	6250	DT	P-O3'-C3'	8.82	130.28	119.70
2	AB	2652	DC	P-O3'-C3'	8.82	130.28	119.70
17	AQ	4	DT	O4'-C4'-C3'	-8.82	100.71	106.00
2	AB	4858	DC	P-O3'-C3'	8.81	130.27	119.70
23	AW	27	DA	N1-C6-N6	-8.81	113.31	118.60
54	A1	19	DG	O4'-C1'-C2'	-8.81	98.85	105.90
2	AB	4308	DG	O4'-C4'-C3'	-8.81	100.72	106.00
88	BZ	43	DC	O4'-C1'-C2'	-8.81	98.85	105.90
1	AA	1523	DG	O4'-C4'-C3'	-8.81	100.72	106.00
121	B6	20	DC	O4'-C4'-C3'	-8.81	100.72	106.00
1	AA	2180	DG	P-O3'-C3'	8.80	130.26	119.70
113	By	1	DG	O4'-C1'-C2'	-8.80	98.86	105.90
134	CJ	12	DG	O4'-C4'-C3'	-8.80	100.72	106.00
249	EA	25	DA	C4'-C3'-C2'	-8.80	95.18	103.10
1	AA	6344	DA	O4'-C4'-C3'	-8.80	100.72	106.00
2	AB	922	DA	O4'-C4'-C3'	-8.80	100.72	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1170	DC	P-O3'-C3'	8.80	130.26	119.70
2	AB	1699	DC	O4'-C4'-C3'	-8.80	100.72	106.00
141	CQ	17	DA	P-O3'-C3'	8.79	130.25	119.70
298	Ex	9	DA	O4'-C4'-C3'	-8.79	100.72	106.00
66	BD	27	DG	O4'-C1'-N9	8.79	114.15	108.00
146	CV	12	DA	P-O3'-C3'	8.79	130.25	119.70
1	AA	4204	DC	O4'-C1'-C2'	-8.79	98.87	105.90
2	AB	6699	DT	P-O3'-C3'	8.78	130.24	119.70
175	Cy	1	DA	P-O3'-C3'	8.78	130.24	119.70
2	AB	7017	DT	P-O3'-C3'	8.78	130.23	119.70
35	Ai	28	DG	O4'-C4'-C3'	-8.78	100.73	106.00
446	HL	20	DG	O4'-C1'-C2'	-8.77	98.88	105.90
2	AB	6329	DA	P-O3'-C3'	8.77	130.22	119.70
1	AA	2440	DG	O4'-C1'-C2'	-8.77	98.89	105.90
1	AA	3190	DA	O4'-C4'-C3'	-8.76	100.74	106.00
1	AA	4011	DC	O4'-C1'-C2'	-8.76	98.89	105.90
145	CU	26	DA	P-O3'-C3'	8.76	130.22	119.70
210	DX	33	DT	O4'-C1'-C2'	-8.76	98.89	105.90
234	Dv	19	DT	P-O3'-C3'	8.76	130.22	119.70
2	AB	1550	DT	O4'-C1'-C2'	-8.76	98.89	105.90
2	AB	2445	DT	C4'-C3'-C2'	-8.76	95.22	103.10
2	AB	6965	DT	C4'-C3'-C2'	-8.76	95.22	103.10
245	D6	20	DT	O4'-C4'-C3'	-8.76	100.75	106.00
180	C3	1	DC	O4'-C4'-C3'	-8.76	100.75	106.00
1	AA	5861	DT	P-O3'-C3'	8.76	130.21	119.70
2	AB	39	DA	O4'-C1'-C2'	-8.75	98.90	105.90
227	Do	23	DA	O4'-C1'-C2'	-8.75	98.90	105.90
1	AA	944	DG	P-O3'-C3'	8.75	130.20	119.70
2	AB	190	DA	O4'-C4'-C3'	-8.75	100.75	106.00
1	AA	4157	DA	P-O3'-C3'	8.74	130.19	119.70
1	AA	6216	DT	O4'-C1'-C2'	-8.74	98.91	105.90
180	C3	1	DC	C2-N1-C1'	8.74	128.42	118.80
169	Cs	9	DA	P-O3'-C3'	8.74	130.19	119.70
345	Fi	10	DC	O4'-C1'-C2'	-8.74	98.91	105.90
1	AA	91	DC	O4'-C1'-C2'	-8.74	98.91	105.90
1	AA	4673	DT	P-O3'-C3'	8.74	130.18	119.70
312	FB	23	DC	P-O3'-C3'	8.74	130.18	119.70
97	Bi	13	DC	P-O3'-C3'	8.73	130.18	119.70
2	AB	536	DG	O4'-C4'-C3'	-8.73	100.76	106.00
2	AB	4505	DT	O4'-C4'-C3'	-8.73	100.76	106.00
2	AB	5425	DT	O4'-C4'-C3'	-8.73	100.76	106.00
117	B2	6	DA	O4'-C1'-N9	8.73	114.11	108.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	BS	5	DT	P-O3'-C3'	8.73	130.18	119.70
371	F8	1	DT	O4'-C1'-C2'	-8.73	98.92	105.90
416	Gr	14	DC	O4'-C4'-C3'	-8.73	100.76	106.00
379	GG	14	DC	O4'-C4'-C3'	-8.72	100.77	106.00
1	AA	2622	DA	P-O3'-C3'	8.72	130.16	119.70
1	AA	4764	DA	O4'-C4'-C3'	-8.72	100.77	106.00
179	C2	30	DG	O4'-C1'-C2'	-8.72	98.92	105.90
2	AB	509	DC	P-O3'-C3'	8.72	130.16	119.70
197	DK	1	DA	O4'-C4'-C3'	-8.72	100.77	106.00
262	EN	9	DT	P-O3'-C3'	8.71	130.15	119.70
2	AB	3986	DT	P-O3'-C3'	8.71	130.15	119.70
47	Au	21	DC	O4'-C1'-C2'	-8.70	98.94	105.90
201	DO	18	DA	P-O3'-C3'	8.70	130.14	119.70
1	AA	6221	DG	O4'-C1'-C2'	-8.70	98.94	105.90
30	Ad	11	DT	P-O3'-C3'	8.69	130.12	119.70
1	AA	734	DC	P-O3'-C3'	8.69	130.12	119.70
277	Ec	5	DA	P-O3'-C3'	8.69	130.12	119.70
1	AA	7476	DT	P-O3'-C3'	8.68	130.12	119.70
106	Br	16	DG	P-O3'-C3'	8.68	130.12	119.70
280	Ef	4	DT	O4'-C4'-C3'	-8.68	100.79	106.00
275	Ea	8	DG	P-O3'-C3'	8.68	130.12	119.70
1	AA	7361	DA	O4'-C4'-C3'	-8.68	100.79	106.00
26	AZ	9	DT	P-O3'-C3'	8.67	130.11	119.70
1	AA	555	DA	P-O3'-C3'	8.67	130.10	119.70
81	BS	5	DT	O4'-C4'-C3'	-8.67	100.80	106.00
261	EM	7	DA	P-O3'-C3'	8.66	130.10	119.70
10	AJ	41	DC	O4'-C1'-C2'	-8.66	98.97	105.90
1	AA	4937	DT	O4'-C1'-C2'	-8.65	98.98	105.90
2	AB	4650	DT	O4'-C4'-C3'	-8.65	100.81	106.00
1	AA	3246	DG	O4'-C1'-C2'	-8.65	98.98	105.90
1	AA	2647	DG	O4'-C4'-C3'	-8.65	100.81	106.00
263	EO	25	DG	C5-C6-O6	-8.65	123.41	128.60
2	AB	6027	DG	P-O3'-C3'	8.65	130.07	119.70
102	Bn	1	DG	C1'-O4'-C4'	-8.65	101.45	110.10
1	AA	6559	DA	P-O3'-C3'	8.64	130.07	119.70
97	Bi	35	DG	O4'-C1'-C2'	-8.64	98.99	105.90
52	Az	26	DA	O4'-C4'-C3'	-8.64	100.82	106.00
107	Bs	30	DA	O4'-C1'-N9	8.64	114.05	108.00
224	Dl	28	DT	O4'-C4'-C3'	-8.63	100.82	106.00
249	EA	25	DA	O4'-C4'-C3'	-8.63	100.82	106.00
328	FR	33	DT	O4'-C4'-C3'	-8.63	100.82	106.00
1	AA	2730	DA	O4'-C4'-C3'	-8.63	100.82	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	AN	41	DT	O4'-C4'-C3'	-8.63	100.82	106.00
74	BL	31	DT	C1'-O4'-C4'	-8.63	101.47	110.10
12	AL	1	DT	O4'-C1'-C2'	-8.63	99.00	105.90
378	GF	1	DT	O4'-C4'-C3'	-8.63	100.82	106.00
2	AB	1306	DT	C4'-C3'-C2'	-8.63	95.34	103.10
167	Cq	12	DG	O4'-C1'-C2'	-8.63	99.00	105.90
307	E6	16	DA	O4'-C1'-C2'	-8.63	99.00	105.90
2	AB	3544	DG	O4'-C1'-C2'	-8.63	99.00	105.90
147	CW	18	DG	O4'-C4'-C3'	-8.62	100.83	106.00
348	Fl	24	DA	O4'-C4'-C3'	-8.62	100.83	106.00
1	AA	2726	DC	O4'-C1'-C2'	-8.62	99.00	105.90
206	DT	28	DT	P-O3'-C3'	8.62	130.04	119.70
1	AA	2356	DG	C1'-O4'-C4'	-8.62	101.48	110.10
2	AB	433	DC	P-O3'-C3'	8.62	130.04	119.70
2	AB	854	DC	O4'-C1'-C2'	-8.62	99.01	105.90
346	Fj	19	DT	P-O3'-C3'	8.62	130.04	119.70
16	AP	49	DT	P-O3'-C3'	8.62	130.04	119.70
193	DG	29	DC	O4'-C1'-C2'	-8.62	99.01	105.90
1	AA	5295	DG	O4'-C1'-C2'	-8.61	99.01	105.90
1	AA	6528	DG	O4'-C1'-C2'	-8.61	99.01	105.90
2	AB	894	DC	O4'-C4'-C3'	-8.61	100.83	106.00
2	AB	2445	DT	O4'-C4'-C3'	-8.61	100.83	106.00
2	AB	3061	DA	P-O3'-C3'	8.61	130.03	119.70
301	E0	32	DT	P-O3'-C3'	8.61	130.03	119.70
95	Bg	2	DT	P-O3'-C3'	8.61	130.03	119.70
2	AB	5671	DC	O4'-C1'-C2'	-8.60	99.02	105.90
375	GC	19	DT	O4'-C4'-C3'	-8.60	100.84	106.00
1	AA	2962	DG	P-O3'-C3'	8.60	130.01	119.70
2	AB	3307	DA	O4'-C4'-C3'	-8.60	100.84	106.00
379	GG	18	DC	P-O3'-C3'	8.60	130.02	119.70
366	F3	2	DA	O4'-C1'-C2'	-8.60	99.02	105.90
57	A4	12	DG	O4'-C1'-C2'	-8.59	99.03	105.90
2	AB	6083	DA	O4'-C4'-C3'	-8.59	100.85	106.00
167	Cq	31	DG	O4'-C1'-C2'	-8.59	99.03	105.90
1	AA	313	DC	P-O3'-C3'	8.59	130.00	119.70
1	AA	6274	DG	O4'-C1'-C2'	-8.59	99.03	105.90
410	Gl	5	DT	O4'-C4'-C3'	-8.59	100.85	106.00
1	AA	4914	DA	O4'-C1'-C2'	-8.58	99.03	105.90
1	AA	5472	DT	C1'-O4'-C4'	-8.58	101.52	110.10
195	DI	24	DG	O4'-C4'-C3'	-8.58	100.85	106.00
332	FV	1	DG	P-O3'-C3'	8.58	130.00	119.70
262	EN	24	DA	O4'-C1'-C2'	-8.58	99.03	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2864	DT	O4'-C1'-C2'	-8.58	99.04	105.90
1	AA	5161	DT	O4'-C4'-C3'	-8.58	100.85	106.00
1	AA	6222	DC	P-O3'-C3'	8.58	129.99	119.70
1	AA	4475	DT	O4'-C1'-C2'	-8.57	99.04	105.90
45	As	20	DC	O4'-C4'-C3'	-8.57	100.86	106.00
86	BX	28	DA	P-O3'-C3'	8.57	129.99	119.70
142	CR	37	DT	O4'-C4'-C3'	-8.57	100.86	106.00
1	AA	4387	DG	O4'-C1'-C2'	-8.57	99.05	105.90
1	AA	4865	DT	O4'-C1'-C2'	-8.57	99.05	105.90
358	Fv	3	DG	O4'-C4'-C3'	-8.57	100.86	106.00
2	AB	1425	DT	P-O3'-C3'	8.56	129.97	119.70
1	AA	6176	DG	P-O3'-C3'	8.56	129.97	119.70
2	AB	5651	DT	O4'-C1'-C2'	-8.56	99.05	105.90
286	El	18	DC	O4'-C1'-N1	8.56	113.99	108.00
58	A5	7	DT	O4'-C4'-C3'	-8.55	100.87	106.00
1	AA	393	DA	O4'-C4'-C3'	-8.55	100.87	106.00
193	DG	29	DC	O4'-C4'-C3'	-8.55	100.87	106.00
2	AB	5415	DG	C1'-O4'-C4'	-8.54	101.56	110.10
2	AB	5562	DG	O4'-C1'-C2'	-8.54	99.06	105.90
331	FU	20	DT	O4'-C1'-C2'	-8.54	99.07	105.90
1	AA	3657	DG	O4'-C4'-C3'	-8.54	100.88	106.00
2	AB	908	DC	O4'-C1'-C2'	-8.54	99.07	105.90
1	AA	3290	DA	O4'-C1'-C2'	-8.54	99.07	105.90
2	AB	1157	DG	O4'-C1'-C2'	-8.54	99.07	105.90
2	AB	4589	DT	P-O3'-C3'	8.54	129.94	119.70
1	AA	3886	DC	P-O3'-C3'	8.54	129.94	119.70
445	HK	4	DA	P-O3'-C3'	8.54	129.94	119.70
2	AB	5635	DG	O4'-C1'-C2'	-8.53	99.07	105.90
1	AA	5411	DA	P-O3'-C3'	8.53	129.94	119.70
2	AB	1425	DT	O4'-C4'-C3'	-8.53	100.88	106.00
35	Ai	25	DT	P-O3'-C3'	8.53	129.94	119.70
1	AA	3889	DA	O4'-C1'-C2'	-8.53	99.08	105.90
58	A5	9	DT	P-O3'-C3'	8.53	129.94	119.70
403	Ge	21	DT	O4'-C4'-C3'	-8.53	100.89	106.00
1	AA	3413	DG	O4'-C1'-C2'	-8.52	99.08	105.90
2	AB	606	DA	O4'-C4'-C3'	-8.52	100.89	106.00
436	HB	1	DG	O4'-C1'-C2'	-8.52	99.08	105.90
2	AB	1227	DT	O4'-C1'-C2'	-8.52	99.08	105.90
1	AA	773	DC	P-O3'-C3'	8.52	129.92	119.70
233	Du	11	DT	O4'-C4'-C3'	-8.52	100.89	106.00
50	Ax	17	DG	O4'-C4'-C3'	-8.52	100.89	106.00
1	AA	207	DA	P-O3'-C3'	8.52	129.92	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
284	Ej	5	DA	P-O3'-C3'	8.52	129.92	119.70
363	F0	1	DT	O4'-C4'-C3'	-8.52	100.89	106.00
197	DK	1	DA	O4'-C1'-C2'	-8.51	99.09	105.90
365	F2	6	DT	O4'-C1'-C2'	-8.51	99.09	105.90
1	AA	6726	DT	P-O3'-C3'	8.51	129.91	119.70
22	AV	43	DT	O4'-C4'-C3'	-8.51	100.89	106.00
129	CE	35	DT	P-O3'-C3'	8.51	129.91	119.70
174	Cx	22	DC	O4'-C1'-C2'	-8.51	99.09	105.90
86	BX	9	DT	O4'-C1'-C2'	-8.51	99.09	105.90
1	AA	1447	DG	O4'-C1'-C2'	-8.50	99.10	105.90
318	FH	27	DT	O4'-C4'-C3'	-8.50	100.90	106.00
2	AB	5845	DT	O4'-C1'-C2'	-8.50	99.10	105.90
186	C9	14	DT	P-O3'-C3'	8.50	129.90	119.70
344	Fh	26	DT	O4'-C4'-C3'	-8.50	100.90	106.00
2	AB	4101	DT	O4'-C4'-C3'	-8.50	100.90	106.00
189	DC	31	DC	O4'-C1'-C2'	-8.50	99.10	105.90
283	Ei	23	DG	P-O3'-C3'	8.50	129.90	119.70
1	AA	624	DT	O4'-C4'-C3'	-8.49	100.90	106.00
1	AA	864	DC	O4'-C1'-C2'	-8.49	99.10	105.90
1	AA	2158	DT	P-O3'-C3'	8.49	129.89	119.70
1	AA	4549	DA	O4'-C1'-C2'	-8.49	99.11	105.90
2	AB	2658	DT	P-O3'-C3'	8.49	129.89	119.70
2	AB	4409	DA	P-O3'-C3'	8.49	129.89	119.70
430	G5	20	DG	O4'-C4'-C3'	-8.49	100.91	106.00
1	AA	1673	DT	O4'-C4'-C3'	-8.49	100.91	106.00
1	AA	2520	DG	O4'-C4'-C3'	-8.48	100.91	106.00
21	AU	2	DT	O4'-C4'-C3'	-8.48	100.91	106.00
2	AB	5425	DT	C4'-C3'-C2'	-8.48	95.47	103.10
1	AA	3093	DC	P-O3'-C3'	8.47	129.87	119.70
385	GM	24	DC	C1'-O4'-C4'	-8.47	101.63	110.10
1	AA	2586	DT	P-O3'-C3'	8.47	129.87	119.70
1	AA	475	DT	P-O3'-C3'	8.47	129.86	119.70
2	AB	1101	DC	O4'-C1'-C2'	-8.47	99.13	105.90
23	AW	10	DG	O4'-C4'-C3'	-8.47	100.92	106.00
1	AA	587	DG	O4'-C1'-C2'	-8.46	99.13	105.90
1	AA	2693	DC	O4'-C4'-C3'	-8.46	100.92	106.00
1	AA	5305	DA	O4'-C1'-C2'	-8.46	99.13	105.90
2	AB	7381	DG	O4'-C1'-C2'	-8.46	99.13	105.90
118	B3	26	DT	P-O3'-C3'	8.46	129.86	119.70
97	Bi	1	DT	O4'-C1'-C2'	-8.46	99.13	105.90
357	Fu	14	DC	P-O3'-C3'	8.46	129.85	119.70
169	Cs	15	DA	P-O3'-C3'	8.46	129.85	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1202	DG	O4'-C1'-C2'	-8.46	99.13	105.90
9	AI	49	DT	O4'-C4'-C3'	-8.46	100.93	106.00
70	BH	16	DC	P-O3'-C3'	8.46	129.85	119.70
215	Dc	9	DT	O4'-C4'-C3'	-8.46	100.93	106.00
2	AB	6477	DA	O4'-C1'-C2'	-8.45	99.14	105.90
231	Ds	33	DC	P-O3'-C3'	8.45	129.84	119.70
210	DX	14	DA	O4'-C1'-C2'	-8.45	99.14	105.90
2	AB	2981	DT	O4'-C1'-C2'	-8.45	99.14	105.90
34	Ah	26	DG	P-O3'-C3'	8.45	129.84	119.70
413	Go	1	DA	O4'-C4'-C3'	-8.44	100.93	106.00
2	AB	6205	DG	O4'-C1'-C2'	-8.44	99.15	105.90
146	CV	26	DT	P-O3'-C3'	8.44	129.83	119.70
342	Ff	17	DT	O4'-C4'-C3'	-8.44	100.94	106.00
1	AA	6216	DT	O4'-C4'-C3'	-8.44	100.94	106.00
343	Fg	18	DC	O4'-C4'-C3'	-8.44	100.94	106.00
2	AB	4403	DT	C1'-O4'-C4'	-8.44	101.66	110.10
1	AA	4897	DG	O4'-C1'-C2'	-8.44	99.15	105.90
2	AB	4435	DG	O4'-C4'-C3'	-8.44	100.94	106.00
2	AB	3077	DT	O4'-C4'-C3'	-8.43	100.94	106.00
200	DN	7	DA	C1'-O4'-C4'	-8.43	101.67	110.10
265	EQ	7	DA	O4'-C4'-C3'	-8.43	100.94	106.00
2	AB	1306	DT	O4'-C4'-C3'	-8.43	100.94	106.00
2	AB	3275	DG	P-O3'-C3'	8.43	129.81	119.70
2	AB	4544	DT	O4'-C4'-C3'	-8.43	100.94	106.00
2	AB	5309	DC	C6-N1-C1'	-8.43	110.69	120.80
65	BC	31	DC	O4'-C4'-C3'	-8.43	100.94	106.00
1	AA	5305	DA	O4'-C4'-C3'	-8.43	100.94	106.00
394	GV	23	DG	O4'-C1'-C2'	-8.43	99.16	105.90
408	Gj	5	DC	P-O3'-C3'	8.43	129.81	119.70
13	AM	40	DG	O4'-C1'-C2'	-8.42	99.16	105.90
30	Ad	32	DA	O4'-C4'-C3'	-8.42	100.95	106.00
64	BB	30	DA	O4'-C1'-C2'	-8.42	99.16	105.90
263	EO	22	DG	P-O3'-C3'	8.42	129.81	119.70
386	GN	19	DT	O4'-C4'-C3'	-8.42	100.95	106.00
2	AB	5002	DA	O4'-C4'-C3'	-8.42	100.95	106.00
2	AB	7521	DA	P-O3'-C3'	8.42	129.80	119.70
1	AA	1396	DC	O4'-C4'-C3'	-8.42	100.95	106.00
2	AB	153	DT	P-O3'-C3'	8.41	129.80	119.70
2	AB	5116	DG	O4'-C1'-C2'	-8.41	99.17	105.90
25	AY	30	DG	O4'-C1'-C2'	-8.41	99.17	105.90
141	CQ	39	DC	O4'-C1'-C2'	-8.41	99.17	105.90
412	Gn	21	DT	O4'-C4'-C3'	-8.41	100.95	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
342	Ff	25	DA	O4'-C4'-C3'	-8.41	100.95	106.00
2	AB	3431	DA	O4'-C1'-C2'	-8.41	99.17	105.90
1	AA	1352	DC	O4'-C4'-C3'	-8.41	100.96	106.00
1	AA	6642	DG	O4'-C4'-C3'	-8.40	100.96	106.00
13	AM	18	DG	O4'-C4'-C3'	-8.40	100.96	106.00
290	Ep	5	DA	O4'-C1'-C2'	-8.40	99.18	105.90
294	Et	33	DT	O4'-C1'-C2'	-8.40	99.18	105.90
2	AB	854	DC	O4'-C4'-C3'	-8.40	100.96	106.00
2	AB	4500	DT	O4'-C4'-C3'	-8.40	100.96	106.00
1	AA	6011	DG	O4'-C1'-C2'	-8.40	99.18	105.90
345	Fi	10	DC	O4'-C4'-C3'	-8.40	100.96	106.00
141	CQ	24	DG	O4'-C1'-C2'	-8.39	99.18	105.90
2	AB	3701	DT	O4'-C1'-C2'	-8.39	99.19	105.90
410	Gl	20	DG	O4'-C4'-C3'	-8.39	100.96	106.00
2	AB	4500	DT	O4'-C1'-C2'	-8.39	99.19	105.90
2	AB	2776	DG	O4'-C1'-C2'	-8.38	99.19	105.90
209	DW	23	DT	P-O3'-C3'	8.38	129.76	119.70
234	Dv	9	DC	P-O3'-C3'	8.38	129.76	119.70
104	Bp	7	DG	O4'-C1'-C2'	-8.38	99.20	105.90
402	Gd	24	DC	O4'-C1'-C2'	-8.38	99.19	105.90
439	HE	14	DC	P-O3'-C3'	8.38	129.76	119.70
164	Cn	1	DT	O4'-C1'-C2'	-8.38	99.20	105.90
269	EU	24	DC	O4'-C1'-C2'	-8.38	99.20	105.90
85	BW	1	DA	O4'-C4'-C3'	-8.37	100.98	106.00
90	Bb	48	DT	O4'-C4'-C3'	-8.36	100.98	106.00
371	F8	6	DC	O4'-C4'-C3'	-8.37	100.98	106.00
25	AY	22	DT	O4'-C4'-C3'	-8.36	100.98	106.00
1	AA	776	DA	O4'-C1'-C2'	-8.36	99.21	105.90
1	AA	3657	DG	O4'-C1'-C2'	-8.36	99.21	105.90
2	AB	1945	DA	P-O3'-C3'	8.36	129.73	119.70
364	F1	22	DA	P-O3'-C3'	8.36	129.73	119.70
322	FL	23	DT	P-O3'-C3'	8.36	129.73	119.70
1	AA	1613	DA	O4'-C1'-C2'	-8.36	99.22	105.90
1	AA	5693	DA	P-O3'-C3'	8.36	129.73	119.70
1	AA	6330	DG	O4'-C1'-C2'	-8.36	99.21	105.90
49	Aw	42	DT	O4'-C4'-C3'	-8.36	100.99	106.00
165	Co	27	DA	P-O3'-C3'	8.36	129.73	119.70
1	AA	5934	DG	O4'-C1'-C2'	-8.35	99.22	105.90
2	AB	370	DT	O4'-C4'-C3'	-8.35	100.99	106.00
365	F2	20	DT	O4'-C4'-C3'	-8.35	100.99	106.00
179	C2	30	DG	O4'-C4'-C3'	-8.35	100.99	106.00
1	AA	4071	DG	O4'-C1'-C2'	-8.34	99.22	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	4577	DC	P-O3'-C3'	8.34	129.71	119.70
12	AL	1	DT	O4'-C4'-C3'	-8.34	100.99	106.00
41	Ao	43	DT	O4'-C4'-C3'	-8.34	100.99	106.00
400	Gb	24	DT	O4'-C4'-C3'	-8.34	101.00	106.00
1	AA	1310	DA	O4'-C1'-C2'	-8.34	99.23	105.90
187	DA	41	DC	P-O3'-C3'	8.34	129.71	119.70
2	AB	2627	DA	P-O3'-C3'	8.34	129.70	119.70
1	AA	5834	DA	O4'-C1'-C2'	-8.34	99.23	105.90
285	Ek	20	DG	O4'-C4'-C3'	-8.34	101.00	106.00
1	AA	5767	DC	O4'-C4'-C3'	-8.33	101.00	106.00
121	B6	16	DT	O4'-C1'-C2'	-8.33	99.23	105.90
401	Gc	9	DT	P-O3'-C3'	8.33	129.70	119.70
29	Ac	26	DT	O4'-C1'-C2'	-8.33	99.23	105.90
1	AA	989	DT	O4'-C4'-C3'	-8.33	101.00	106.00
1	AA	1530	DG	O4'-C4'-C3'	-8.33	101.00	106.00
1	AA	4652	DA	P-O3'-C3'	8.33	129.69	119.70
2	AB	2513	DT	P-O3'-C3'	8.33	129.69	119.70
20	AT	43	DT	O4'-C4'-C3'	-8.33	101.00	106.00
2	AB	4622	DG	O4'-C4'-C3'	-8.32	101.01	106.00
113	By	17	DG	O4'-C4'-C3'	-8.32	101.00	106.00
1	AA	3596	DC	O4'-C4'-C3'	-8.32	101.01	106.00
165	Co	29	DT	O4'-C4'-C3'	-8.32	101.01	106.00
294	Et	17	DG	P-O3'-C3'	8.32	129.68	119.70
328	FR	31	DT	O4'-C4'-C3'	-8.32	101.01	106.00
70	BH	30	DT	O4'-C4'-C3'	-8.32	101.01	106.00
134	CJ	41	DT	O4'-C4'-C3'	-8.32	101.01	106.00
405	Gg	16	DG	C1'-O4'-C4'	-8.32	101.78	110.10
2	AB	6155	DA	O4'-C4'-C3'	-8.31	101.01	106.00
1	AA	1123	DG	P-O3'-C3'	8.31	129.68	119.70
198	DL	13	DT	P-O3'-C3'	8.31	129.68	119.70
2	AB	3050	DA	O4'-C1'-C2'	-8.31	99.25	105.90
2	AB	4940	DA	O4'-C4'-C3'	-8.31	101.01	106.00
242	D3	5	DA	O4'-C4'-C3'	-8.31	101.01	106.00
1	AA	534	DG	P-O3'-C3'	8.31	129.67	119.70
2	AB	4774	DT	C4'-C3'-C2'	-8.31	95.62	103.10
189	DC	31	DC	O4'-C4'-C3'	-8.31	101.02	106.00
2	AB	6276	DT	O4'-C1'-C2'	-8.31	99.25	105.90
228	Dp	1	DT	P-O3'-C3'	8.31	129.67	119.70
1	AA	4983	DA	O4'-C4'-C3'	-8.30	101.02	106.00
123	B8	4	DT	O4'-C4'-C3'	-8.30	101.02	106.00
449	HO	19	DT	O4'-C4'-C3'	-8.31	101.02	106.00
1	AA	268	DC	O4'-C1'-C2'	-8.30	99.26	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	5134	DG	O4'-C1'-C2'	-8.30	99.26	105.90
265	EQ	15	DC	P-O3'-C3'	8.30	129.66	119.70
2	AB	6216	DG	O4'-C1'-C2'	-8.30	99.26	105.90
236	Dx	23	DC	O4'-C4'-C3'	-8.29	101.02	106.00
343	Fg	24	DG	O4'-C1'-C2'	-8.29	99.27	105.90
2	AB	3314	DT	O4'-C1'-C2'	-8.29	99.27	105.90
44	Ar	19	DT	O4'-C1'-C2'	-8.29	99.27	105.90
159	Ci	31	DC	O4'-C1'-C2'	-8.29	99.27	105.90
1	AA	42	DG	P-O3'-C3'	8.29	129.64	119.70
1	AA	1057	DA	O4'-C1'-C2'	-8.29	99.27	105.90
1	AA	6768	DG	O4'-C4'-C3'	-8.29	101.03	106.00
1	AA	6658	DG	C1'-O4'-C4'	-8.29	101.81	110.10
1	AA	7029	DT	O4'-C1'-C2'	-8.28	99.27	105.90
138	CN	19	DC	O4'-C1'-C2'	-8.28	99.28	105.90
263	EO	31	DG	O4'-C4'-C3'	-8.28	101.03	106.00
264	EP	12	DC	O4'-C1'-C2'	-8.28	99.27	105.90
1	AA	1853	DA	P-O3'-C3'	8.28	129.63	119.70
1	AA	2290	DG	O4'-C4'-C3'	-8.28	101.03	106.00
1	AA	4475	DT	O4'-C4'-C3'	-8.28	101.03	106.00
2	AB	3480	DC	O4'-C1'-C2'	-8.28	99.28	105.90
2	AB	5793	DC	O4'-C4'-C3'	-8.28	101.03	106.00
197	DK	12	DT	O4'-C1'-C2'	-8.28	99.28	105.90
232	Dt	16	DC	O4'-C1'-C2'	-8.28	99.28	105.90
1	AA	2159	DA	O4'-C4'-C3'	-8.27	101.04	106.00
1	AA	3886	DC	O4'-C1'-C2'	-8.27	99.28	105.90
223	Dk	10	DA	P-O3'-C3'	8.27	129.63	119.70
52	Az	4	DT	O4'-C4'-C3'	-8.27	101.04	106.00
1	AA	2733	DT	P-O3'-C3'	8.27	129.62	119.70
2	AB	3841	DC	O4'-C4'-C3'	-8.27	101.04	106.00
2	AB	4956	DG	O4'-C4'-C3'	-8.27	101.04	106.00
2	AB	1145	DG	O4'-C1'-C2'	-8.27	99.29	105.90
2	AB	3708	DT	O4'-C1'-C2'	-8.27	99.29	105.90
272	EX	11	DC	P-O3'-C3'	8.27	129.62	119.70
320	FJ	1	DG	O4'-C1'-C2'	-8.27	99.29	105.90
1	AA	4606	DG	P-O3'-C3'	8.26	129.62	119.70
118	B3	6	DA	O4'-C4'-C3'	-8.26	101.04	106.00
1	AA	6964	DG	O4'-C1'-C2'	-8.26	99.29	105.90
1	AA	374	DT	O4'-C1'-C2'	-8.26	99.29	105.90
2	AB	4827	DT	O4'-C4'-C3'	-8.25	101.05	106.00
97	Bi	5	DT	O4'-C4'-C3'	-8.25	101.05	106.00
1	AA	5006	DT	P-O3'-C3'	8.25	129.60	119.70
1	AA	4066	DA	O4'-C1'-C2'	-8.25	99.30	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	7273	DT	P-O3'-C3'	8.25	129.60	119.70
294	Et	17	DG	O4'-C1'-C2'	-8.25	99.30	105.90
1	AA	4587	DG	O4'-C4'-C3'	-8.24	101.05	106.00
2	AB	6057	DC	O4'-C1'-C2'	-8.24	99.30	105.90
2	AB	7501	DA	O4'-C4'-C3'	-8.24	101.05	106.00
2	AB	4366	DG	O4'-C1'-C2'	-8.24	99.31	105.90
96	Bh	34	DA	O4'-C4'-C3'	-8.24	101.06	106.00
302	E1	9	DA	P-O3'-C3'	8.24	129.59	119.70
62	A9	12	DC	O4'-C4'-C3'	-8.24	101.06	106.00
286	El	18	DC	O4'-C1'-C2'	-8.24	99.31	105.90
378	GF	28	DC	O4'-C1'-C2'	-8.24	99.31	105.90
1	AA	4914	DA	O4'-C4'-C3'	-8.24	101.06	106.00
5	AE	27	DC	O4'-C1'-C2'	-8.24	99.31	105.90
34	Ah	26	DG	O4'-C1'-C2'	-8.24	99.31	105.90
124	B9	38	DA	O4'-C4'-C3'	-8.24	101.06	106.00
2	AB	3000	DG	O4'-C1'-C2'	-8.23	99.31	105.90
353	Fq	1	DG	O4'-C1'-C2'	-8.23	99.31	105.90
1	AA	4095	DC	O4'-C1'-C2'	-8.23	99.32	105.90
2	AB	5501	DC	O4'-C1'-C2'	-8.23	99.32	105.90
1	AA	7528	DA	O4'-C4'-C3'	-8.23	101.06	106.00
2	AB	6083	DA	P-O3'-C3'	8.23	129.57	119.70
21	AU	12	DC	O4'-C1'-C2'	-8.23	99.32	105.90
99	Bk	23	DG	O4'-C4'-C3'	-8.23	101.06	106.00
10	AJ	7	DT	O4'-C4'-C3'	-8.22	101.07	106.00
51	Ay	41	DC	O4'-C4'-C3'	-8.22	101.06	106.00
208	DV	38	DT	O4'-C4'-C3'	-8.22	101.07	106.00
2	AB	6513	DG	O4'-C1'-C2'	-8.22	99.32	105.90
118	B3	6	DA	O4'-C1'-C2'	-8.22	99.32	105.90
1	AA	5411	DA	O4'-C4'-C3'	-8.22	101.07	106.00
2	AB	2459	DG	O4'-C4'-C3'	-8.22	101.07	106.00
128	CD	12	DC	O4'-C4'-C3'	-8.22	101.07	106.00
383	GK	18	DG	O4'-C1'-C2'	-8.22	99.33	105.90
2	AB	2134	DG	P-O3'-C3'	8.21	129.56	119.70
180	C3	1	DC	C1'-O4'-C4'	-8.22	101.88	110.10
15	AO	24	DG	C1'-O4'-C4'	-8.21	101.89	110.10
2	AB	1936	DA	O4'-C4'-C3'	-8.21	101.08	106.00
419	Gu	3	DC	P-O3'-C3'	8.20	129.54	119.70
1	AA	2761	DT	P-O3'-C3'	8.20	129.54	119.70
192	DF	1	DG	O4'-C4'-C3'	-8.20	101.08	106.00
367	F4	9	DG	O4'-C1'-C2'	-8.20	99.34	105.90
404	Gf	10	DC	O4'-C1'-C2'	-8.20	99.34	105.90
1	AA	1943	DG	O4'-C1'-C2'	-8.20	99.34	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2474	DT	P-O3'-C3'	8.20	129.53	119.70
126	CB	10	DT	P-O3'-C3'	8.20	129.53	119.70
2	AB	2256	DG	O4'-C1'-C2'	-8.19	99.34	105.90
230	Dr	40	DC	O4'-C1'-C2'	-8.20	99.34	105.90
140	CP	7	DT	O4'-C1'-C2'	-8.19	99.35	105.90
2	AB	361	DG	O4'-C4'-C3'	-8.19	101.09	106.00
394	GV	19	DC	P-O3'-C3'	8.19	129.53	119.70
30	Ad	11	DT	O4'-C1'-C2'	-8.18	99.35	105.90
58	A5	16	DA	P-O3'-C3'	8.18	129.52	119.70
162	Cl	1	DC	O4'-C1'-C2'	-8.18	99.35	105.90
101	Bm	26	DA	P-O3'-C3'	8.18	129.52	119.70
255	EG	1	DA	O4'-C1'-C2'	-8.18	99.35	105.90
1	AA	6283	DC	P-O3'-C3'	8.18	129.52	119.70
412	Gn	21	DT	P-O3'-C3'	8.18	129.51	119.70
1	AA	2193	DG	O4'-C1'-C2'	-8.18	99.36	105.90
149	CY	16	DT	O4'-C4'-C3'	-8.17	101.10	106.00
58	A5	19	DT	C1'-O4'-C4'	-8.17	101.93	110.10
187	DA	38	DC	O4'-C1'-C2'	-8.17	99.36	105.90
2	AB	4925	DC	P-O3'-C3'	8.17	129.50	119.70
142	CR	1	DA	O4'-C1'-C2'	-8.17	99.36	105.90
264	EP	15	DA	O4'-C1'-C2'	-8.17	99.36	105.90
2	AB	1249	DA	P-O3'-C3'	8.17	129.50	119.70
2	AB	1352	DC	O4'-C4'-C3'	-8.17	101.10	106.00
2	AB	2762	DG	O4'-C4'-C3'	-8.17	101.10	106.00
2	AB	2154	DG	O4'-C1'-C2'	-8.16	99.37	105.90
2	AB	2745	DC	O4'-C1'-C2'	-8.16	99.37	105.90
29	Ac	49	DT	P-O3'-C3'	8.16	129.49	119.70
434	G9	11	DA	N1-C6-N6	-8.16	113.70	118.60
1	AA	6984	DG	O4'-C4'-C3'	-8.16	101.11	106.00
163	Cm	8	DT	O4'-C1'-C2'	-8.16	99.37	105.90
2	AB	1182	DC	C6-N1-C2	-8.16	117.04	120.30
261	EM	1	DA	O4'-C1'-C2'	-8.16	99.38	105.90
2	AB	1878	DG	O4'-C1'-C2'	-8.15	99.38	105.90
1	AA	1961	DT	O4'-C1'-C2'	-8.15	99.38	105.90
279	Ee	22	DA	O4'-C1'-C2'	-8.15	99.38	105.90
2	AB	5755	DG	P-O3'-C3'	8.15	129.48	119.70
81	BS	4	DT	O4'-C4'-C3'	-8.15	101.11	106.00
109	Bu	35	DC	P-O3'-C3'	8.15	129.48	119.70
2	AB	4839	DG	O4'-C1'-C2'	-8.15	99.38	105.90
80	BR	27	DA	P-O3'-C3'	8.15	129.48	119.70
323	FM	14	DT	P-O3'-C3'	8.15	129.48	119.70
1	AA	1318	DT	O4'-C1'-C2'	-8.14	99.39	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	2608	DC	O4'-C4'-C3'	-8.14	101.11	106.00
1	AA	3204	DA	P-O3'-C3'	8.14	129.47	119.70
5	AE	32	DG	O4'-C1'-C2'	-8.14	99.39	105.90
127	CC	38	DG	P-O3'-C3'	8.14	129.47	119.70
2	AB	5848	DC	O4'-C1'-C2'	-8.14	99.39	105.90
1	AA	6652	DG	C1'-O4'-C4'	-8.14	101.96	110.10
141	CQ	32	DT	O4'-C4'-C3'	-8.14	101.12	106.00
1	AA	4548	DC	P-O3'-C3'	8.13	129.46	119.70
141	CQ	39	DC	P-O3'-C3'	8.13	129.46	119.70
294	Et	17	DG	C1'-O4'-C4'	-8.13	101.97	110.10
2	AB	500	DA	O4'-C1'-C2'	-8.13	99.40	105.90
2	AB	2757	DT	O4'-C1'-C2'	-8.13	99.40	105.90
2	AB	6036	DT	O4'-C1'-C2'	-8.13	99.40	105.90
374	GB	9	DT	O4'-C4'-C3'	-8.13	101.12	106.00
377	GE	27	DT	O4'-C4'-C3'	-8.13	101.12	106.00
1	AA	797	DG	O4'-C1'-C2'	-8.12	99.40	105.90
2	AB	6276	DT	P-O3'-C3'	8.12	129.45	119.70
1	AA	273	DC	C6-N1-C2	-8.12	117.05	120.30
1	AA	4729	DT	P-O3'-C3'	8.12	129.45	119.70
2	AB	3466	DG	O4'-C4'-C3'	-8.12	101.13	106.00
269	EU	35	DC	O4'-C1'-C2'	-8.12	99.40	105.90
394	GV	10	DA	O4'-C1'-C2'	-8.12	99.41	105.90
30	Ad	24	DA	O4'-C4'-C3'	-8.12	101.13	106.00
147	CW	24	DC	O4'-C1'-C2'	-8.12	99.41	105.90
361	Fy	1	DA	N1-C6-N6	-8.12	113.73	118.60
2	AB	1314	DA	O4'-C1'-C2'	-8.12	99.41	105.90
2	AB	2864	DT	O4'-C4'-C3'	-8.12	101.13	106.00
1	AA	4075	DG	O4'-C4'-C3'	-8.11	101.13	106.00
2	AB	4323	DT	P-O3'-C3'	8.11	129.43	119.70
405	Gg	14	DG	P-O3'-C3'	8.11	129.44	119.70
428	G3	23	DC	C6-N1-C1'	-8.11	111.07	120.80
1	AA	6998	DT	C4'-C3'-C2'	-8.11	95.80	103.10
2	AB	7176	DT	O4'-C1'-C2'	-8.11	99.42	105.90
49	Aw	22	DG	O4'-C1'-C2'	-8.11	99.42	105.90
1	AA	1372	DC	O4'-C1'-C2'	-8.10	99.42	105.90
269	EU	24	DC	O4'-C4'-C3'	-8.10	101.14	106.00
1	AA	3286	DC	O4'-C4'-C3'	-8.10	101.14	106.00
2	AB	5817	DT	O4'-C1'-C2'	-8.10	99.42	105.90
106	Br	32	DA	O4'-C1'-C2'	-8.10	99.42	105.90
443	HI	13	DT	O4'-C4'-C3'	-8.10	101.14	106.00
41	Ao	25	DG	O4'-C1'-C2'	-8.10	99.42	105.90
125	CA	30	DA	O4'-C1'-C2'	-8.10	99.42	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
417	Gs	8	DA	O4'-C4'-C3'	-8.10	101.14	106.00
1	AA	5920	DT	C4'-C3'-C2'	-8.10	95.81	103.10
2	AB	3530	DC	O4'-C4'-C3'	-8.09	101.14	106.00
443	HI	13	DT	P-O3'-C3'	8.09	129.41	119.70
1	AA	7113	DG	O4'-C1'-C2'	-8.09	99.43	105.90
1	AA	6119	DG	O4'-C1'-C2'	-8.09	99.43	105.90
2	AB	704	DT	C1'-O4'-C4'	-8.09	102.01	110.10
43	Aq	9	DT	P-O3'-C3'	8.09	129.41	119.70
1	AA	1834	DA	O4'-C1'-C2'	-8.08	99.44	105.90
2	AB	6514	DC	C1'-O4'-C4'	-8.08	102.02	110.10
2	AB	3333	DA	O4'-C1'-C2'	-8.08	99.44	105.90
11	AK	32	DA	O4'-C1'-C2'	-8.08	99.44	105.90
1	AA	7304	DG	O4'-C4'-C3'	-8.08	101.15	106.00
167	Cq	20	DC	O4'-C4'-C3'	-8.08	101.15	106.00
2	AB	3175	DC	P-O3'-C3'	8.07	129.39	119.70
2	AB	3841	DC	O4'-C1'-C2'	-8.07	99.44	105.90
196	DJ	38	DA	P-O3'-C3'	8.07	129.39	119.70
1	AA	2184	DG	O4'-C1'-C2'	-8.07	99.44	105.90
2	AB	542	DT	C1'-O4'-C4'	-8.07	102.03	110.10
2	AB	3070	DC	O4'-C1'-C2'	-8.07	99.44	105.90
57	A4	12	DG	O4'-C4'-C3'	-8.07	101.16	106.00
210	DX	23	DG	P-O3'-C3'	8.07	129.39	119.70
1	AA	1030	DG	O4'-C1'-C2'	-8.06	99.45	105.90
41	Ao	17	DC	C1'-O4'-C4'	-8.06	102.04	110.10
1	AA	5270	DA	C4'-C3'-C2'	-8.06	95.84	103.10
17	AQ	18	DT	O4'-C4'-C3'	-8.06	101.16	106.00
130	CF	38	DT	O4'-C4'-C3'	-8.06	101.16	106.00
265	EQ	19	DA	P-O3'-C3'	8.06	129.37	119.70
271	EW	25	DA	O4'-C4'-C3'	-8.06	101.16	106.00
1	AA	1953	DC	O4'-C4'-C3'	-8.06	101.17	106.00
1	AA	7496	DG	O4'-C4'-C3'	-8.06	101.17	106.00
2	AB	230	DT	O4'-C4'-C3'	-8.05	101.17	106.00
2	AB	5489	DT	O4'-C1'-C2'	-8.05	99.46	105.90
2	AB	6013	DG	O4'-C4'-C3'	-8.05	101.17	106.00
14	AN	42	DT	O4'-C4'-C3'	-8.05	101.17	106.00
124	B9	1	DG	C1'-O4'-C4'	-8.05	102.05	110.10
2	AB	4998	DG	O4'-C1'-C2'	-8.05	99.46	105.90
2	AB	7220	DC	O4'-C1'-C2'	-8.05	99.46	105.90
200	DN	35	DA	N1-C6-N6	-8.05	113.77	118.60
31	Ae	17	DC	O4'-C1'-C2'	-8.05	99.46	105.90
106	Br	41	DC	P-O3'-C3'	8.05	129.35	119.70
136	CL	25	DC	O4'-C1'-C2'	-8.05	99.46	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
186	C9	13	DT	O4'-C1'-C2'	-8.05	99.46	105.90
146	CV	22	DA	P-O3'-C3'	8.04	129.35	119.70
1	AA	239	DT	C4'-C3'-C2'	-8.04	95.87	103.10
2	AB	3700	DC	O4'-C1'-C2'	-8.04	99.47	105.90
79	BQ	24	DC	O4'-C1'-C2'	-8.04	99.47	105.90
163	Cm	5	DT	P-O3'-C3'	8.04	129.34	119.70
154	Cd	13	DC	O4'-C1'-C2'	-8.03	99.47	105.90
202	DP	8	DC	O4'-C1'-C2'	-8.03	99.48	105.90
1	AA	5569	DG	O4'-C1'-N9	8.03	113.62	108.00
35	Ai	44	DT	O4'-C4'-C3'	-8.03	101.19	106.00
1	AA	7114	DC	O4'-C1'-C2'	-8.02	99.48	105.90
2	AB	3316	DA	O4'-C4'-C3'	-8.02	101.19	106.00
117	B2	8	DA	O4'-C1'-C2'	-8.02	99.48	105.90
2	AB	5189	DG	O4'-C1'-C2'	-8.02	99.48	105.90
2	AB	146	DT	O4'-C4'-C3'	-8.02	101.19	106.00
2	AB	6695	DT	C1'-O4'-C4'	-8.01	102.09	110.10
58	A5	48	DT	O4'-C4'-C3'	-8.01	101.19	106.00
171	Cu	2	DT	P-O3'-C3'	8.01	129.31	119.70
2	AB	4008	DT	P-O3'-C3'	8.01	129.31	119.70
76	BN	8	DG	O4'-C1'-C2'	-8.01	99.49	105.90
401	Gc	10	DT	P-O3'-C3'	8.01	129.31	119.70
405	Gg	15	DT	O4'-C4'-C3'	-8.01	101.20	106.00
1	AA	4075	DG	O4'-C1'-C2'	-8.00	99.50	105.90
1	AA	7528	DA	O4'-C1'-C2'	-8.00	99.50	105.90
89	Ba	49	DC	O4'-C1'-C2'	-8.00	99.50	105.90
148	CX	24	DG	O4'-C4'-C3'	-8.00	101.20	106.00
205	DS	5	DG	O4'-C1'-C2'	-8.00	99.50	105.90
1	AA	663	DC	O4'-C1'-C2'	-8.00	99.50	105.90
1	AA	5857	DC	O4'-C4'-C3'	-8.00	101.20	106.00
2	AB	7501	DA	O4'-C1'-C2'	-8.00	99.50	105.90
66	BD	27	DG	O4'-C1'-C2'	-8.00	99.50	105.90
169	Cs	15	DA	O4'-C4'-C3'	-7.99	101.20	106.00
370	F7	1	DT	O4'-C1'-C2'	-7.99	99.50	105.90
1	AA	1063	DA	O4'-C4'-C3'	-7.99	101.21	106.00
2	AB	73	DC	P-O3'-C3'	7.99	129.28	119.70
215	Dc	5	DA	P-O3'-C3'	7.99	129.28	119.70
32	Af	4	DT	O4'-C4'-C3'	-7.99	101.21	106.00
34	Ah	43	DT	O4'-C4'-C3'	-7.99	101.21	106.00
132	CH	1	DT	O4'-C1'-C2'	-7.99	99.51	105.90
217	De	39	DT	C4'-C3'-C2'	-7.99	95.91	103.10
341	Fe	28	DC	O4'-C1'-C2'	-7.98	99.51	105.90
23	AW	38	DC	O4'-C1'-C2'	-7.98	99.51	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
218	Df	22	DG	P-O3'-C3'	7.98	129.28	119.70
295	Eu	5	DC	P-O3'-C3'	7.98	129.28	119.70
2	AB	5651	DT	O4'-C4'-C3'	-7.98	101.21	106.00
342	Ff	17	DT	C4'-C3'-C2'	-7.98	95.92	103.10
150	CZ	14	DT	O4'-C1'-C2'	-7.98	99.52	105.90
156	Cf	30	DT	O4'-C1'-C2'	-7.98	99.52	105.90
288	En	15	DT	O4'-C1'-C2'	-7.97	99.52	105.90
2	AB	4417	DG	O4'-C4'-C3'	-7.97	101.22	106.00
268	ET	1	DA	O4'-C4'-C3'	-7.97	101.22	106.00
268	ET	11	DG	O4'-C1'-C2'	-7.97	99.53	105.90
2	AB	2139	DG	C1'-O4'-C4'	-7.97	102.13	110.10
2	AB	2241	DG	O4'-C4'-C3'	-7.97	101.22	106.00
37	Ak	41	DC	O4'-C1'-C2'	-7.97	99.53	105.90
1	AA	3286	DC	C1'-O4'-C4'	-7.96	102.14	110.10
1	AA	5402	DT	C4'-C3'-C2'	-7.96	95.93	103.10
2	AB	1368	DT	O4'-C1'-C2'	-7.96	99.53	105.90
138	CN	7	DT	O4'-C4'-C3'	-7.96	101.22	106.00
279	Ee	8	DT	P-O3'-C3'	7.96	129.25	119.70
64	BB	25	DG	P-O3'-C3'	7.96	129.25	119.70
2	AB	5379	DC	O4'-C1'-C2'	-7.96	99.53	105.90
96	Bh	34	DA	C4'-C3'-C2'	-7.96	95.94	103.10
14	AN	44	DT	O4'-C4'-C3'	-7.96	101.23	106.00
1	AA	1502	DC	O4'-C1'-C2'	-7.95	99.54	105.90
1	AA	2932	DT	O4'-C1'-C2'	-7.95	99.54	105.90
36	Aj	49	DT	P-O3'-C3'	7.95	129.25	119.70
2	AB	2146	DG	O4'-C1'-C2'	-7.95	99.54	105.90
369	F6	1	DG	O4'-C4'-C3'	-7.95	101.23	106.00
17	AQ	1	DT	O4'-C1'-C2'	-7.95	99.54	105.90
162	Cl	19	DA	O4'-C1'-C2'	-7.95	99.54	105.90
286	El	27	DT	P-O3'-C3'	7.95	129.24	119.70
1	AA	3413	DG	O4'-C4'-C3'	-7.95	101.23	106.00
82	BT	35	DA	O4'-C1'-C2'	-7.95	99.54	105.90
201	DO	37	DC	P-O3'-C3'	7.95	129.24	119.70
1	AA	41	DC	O4'-C1'-C2'	-7.95	99.54	105.90
121	B6	3	DT	O4'-C4'-C3'	-7.94	101.23	106.00
320	FJ	1	DG	O4'-C4'-C3'	-7.94	101.23	106.00
1	AA	4864	DG	O4'-C4'-C3'	-7.94	101.23	106.00
2	AB	6394	DA	P-O3'-C3'	7.94	129.23	119.70
3	AC	29	DC	O4'-C1'-C2'	-7.94	99.55	105.90
263	EO	19	DA	O4'-C1'-C2'	-7.94	99.55	105.90
1	AA	1350	DT	O4'-C4'-C3'	-7.94	101.24	106.00
1	AA	6802	DG	O4'-C4'-C3'	-7.94	101.24	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	2569	DC	C1'-O4'-C4'	-7.94	102.16	110.10
2	AB	2141	DG	O4'-C1'-C2'	-7.94	99.55	105.90
2	AB	4396	DT	O4'-C4'-C3'	-7.94	101.24	106.00
2	AB	121	DA	P-O3'-C3'	7.93	129.22	119.70
286	El	12	DA	P-O3'-C3'	7.93	129.22	119.70
202	DP	3	DA	N1-C6-N6	-7.93	113.84	118.60
1	AA	3290	DA	O4'-C4'-C3'	-7.93	101.24	106.00
150	CZ	2	DC	O4'-C1'-C2'	-7.93	99.56	105.90
2	AB	6412	DC	O4'-C1'-C2'	-7.93	99.56	105.90
410	Gl	23	DA	O4'-C1'-C2'	-7.93	99.56	105.90
1	AA	4141	DG	O4'-C1'-C2'	-7.93	99.56	105.90
1	AA	4707	DG	O4'-C1'-C2'	-7.93	99.56	105.90
61	A8	4	DT	O4'-C4'-C3'	-7.93	101.25	106.00
2	AB	5550	DT	O4'-C4'-C3'	-7.92	101.25	106.00
403	Ge	24	DT	O4'-C4'-C3'	-7.92	101.25	106.00
1	AA	2078	DC	O4'-C1'-C2'	-7.92	99.56	105.90
100	Bl	36	DG	C4'-C3'-C2'	-7.92	95.97	103.10
206	DT	28	DT	O4'-C1'-C2'	-7.92	99.56	105.90
403	Ge	5	DC	O4'-C1'-C2'	-7.92	99.56	105.90
123	B8	16	DT	O4'-C1'-C2'	-7.92	99.56	105.90
249	EA	20	DT	P-O3'-C3'	7.92	129.20	119.70
1	AA	1341	DA	O4'-C4'-C3'	-7.92	101.25	106.00
1	AA	2642	DT	O4'-C1'-C2'	-7.92	99.57	105.90
167	Cq	20	DC	O4'-C1'-C2'	-7.92	99.57	105.90
1	AA	5221	DC	O4'-C4'-C3'	-7.92	101.25	106.00
1	AA	667	DC	O4'-C1'-C2'	-7.91	99.57	105.90
1	AA	1844	DG	O4'-C4'-C3'	-7.91	101.25	106.00
2	AB	370	DT	C4'-C3'-C2'	-7.91	95.98	103.10
2	AB	3669	DC	O4'-C1'-C2'	-7.91	99.57	105.90
148	CX	12	DG	O4'-C1'-C2'	-7.91	99.57	105.90
1	AA	2781	DA	O4'-C1'-C2'	-7.91	99.57	105.90
1	AA	5526	DC	P-O3'-C3'	7.91	129.19	119.70
2	AB	4841	DG	O4'-C4'-C3'	-7.91	101.25	106.00
208	DV	6	DC	O4'-C1'-C2'	-7.91	99.57	105.90
1	AA	1697	DC	C1'-O4'-C4'	-7.91	102.19	110.10
2	AB	1145	DG	C1'-O4'-C4'	-7.91	102.19	110.10
264	EP	31	DA	O4'-C1'-C2'	-7.91	99.57	105.90
2	AB	67	DC	P-O3'-C3'	7.91	129.19	119.70
189	DC	2	DT	O4'-C1'-C2'	-7.91	99.57	105.90
2	AB	5149	DG	O4'-C1'-C2'	-7.91	99.58	105.90
252	ED	14	DT	O4'-C4'-C3'	-7.91	101.26	106.00
361	Fy	9	DA	O4'-C1'-C2'	-7.91	99.58	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
406	Gh	9	DC	O4'-C1'-C2'	-7.91	99.58	105.90
340	Fd	12	DC	P-O3'-C3'	7.90	129.19	119.70
1	AA	6658	DG	O4'-C4'-C3'	-7.90	101.26	106.00
2	AB	333	DC	O4'-C1'-C2'	-7.90	99.58	105.90
427	G2	17	DA	O4'-C4'-C3'	-7.90	101.26	106.00
2	AB	6514	DC	P-O3'-C3'	7.90	129.18	119.70
150	CZ	5	DA	P-O3'-C3'	7.90	129.18	119.70
319	FI	24	DC	O4'-C4'-C3'	-7.90	101.26	106.00
18	AR	26	DC	C2-N1-C1'	7.90	127.49	118.80
65	BC	22	DG	O4'-C1'-C2'	-7.90	99.58	105.90
2	AB	4611	DG	O4'-C1'-C2'	-7.89	99.58	105.90
1	AA	144	DG	P-O3'-C3'	7.89	129.17	119.70
1	AA	5549	DG	O4'-C4'-C3'	-7.89	101.27	106.00
66	BD	27	DG	C1'-O4'-C4'	-7.89	102.21	110.10
280	Ef	7	DT	O4'-C4'-C3'	-7.89	101.27	106.00
2	AB	264	DG	O4'-C1'-C2'	-7.89	99.59	105.90
173	Cw	9	DC	O4'-C1'-C2'	-7.89	99.59	105.90
1	AA	1103	DC	O4'-C1'-C2'	-7.89	99.59	105.90
1	AA	3967	DC	O4'-C1'-C2'	-7.89	99.59	105.90
296	Ev	23	DG	O4'-C1'-N9	7.88	113.52	108.00
1	AA	4122	DA	O4'-C1'-C2'	-7.87	99.60	105.90
2	AB	291	DC	C6-N1-C1'	-7.87	111.35	120.80
2	AB	3675	DA	O4'-C1'-C2'	-7.87	99.60	105.90
1	AA	2290	DG	O4'-C1'-C2'	-7.87	99.60	105.90
177	C0	9	DC	O4'-C1'-C2'	-7.87	99.61	105.90
1	AA	1663	DC	O4'-C1'-C2'	-7.86	99.61	105.90
2	AB	318	DA	O4'-C1'-C2'	-7.86	99.61	105.90
1	AA	3510	DA	P-O3'-C3'	7.86	129.13	119.70
450	HP	9	DG	P-O3'-C3'	7.86	129.13	119.70
2	AB	7032	DA	O4'-C4'-C3'	-7.86	101.28	106.00
2	AB	5691	DC	O4'-C1'-C2'	-7.86	99.61	105.90
86	BX	15	DA	O4'-C1'-C2'	-7.86	99.61	105.90
121	B6	1	DT	O4'-C1'-C2'	-7.86	99.61	105.90
1	AA	7162	DG	O4'-C1'-C2'	-7.86	99.61	105.90
2	AB	2759	DC	P-O3'-C3'	7.86	129.13	119.70
175	Cy	18	DG	O4'-C1'-C2'	-7.86	99.61	105.90
247	D8	16	DG	O4'-C1'-C2'	-7.86	99.62	105.90
1	AA	2840	DG	O4'-C1'-C2'	-7.85	99.62	105.90
2	AB	5156	DG	C1'-O4'-C4'	-7.85	102.25	110.10
2	AB	5752	DC	O4'-C1'-C2'	-7.85	99.62	105.90
141	CQ	24	DG	O4'-C4'-C3'	-7.85	101.29	106.00
268	ET	1	DA	C1'-O4'-C4'	-7.85	102.25	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	5980	DT	O4'-C4'-C3'	-7.85	101.29	106.00
2	AB	1005	DG	O4'-C4'-C3'	-7.85	101.29	106.00
370	F7	19	DT	C4'-C3'-C2'	-7.85	96.04	103.10
2	AB	2696	DG	C1'-O4'-C4'	-7.85	102.25	110.10
2	AB	6459	DC	P-O3'-C3'	7.85	129.12	119.70
1	AA	5213	DG	O4'-C1'-C2'	-7.84	99.62	105.90
2	AB	1092	DT	O4'-C1'-C2'	-7.84	99.62	105.90
2	AB	6779	DA	O4'-C1'-C2'	-7.84	99.62	105.90
4	AD	32	DG	O4'-C4'-C3'	-7.84	101.29	106.00
1	AA	943	DT	C1'-O4'-C4'	-7.84	102.26	110.10
1	AA	1476	DG	O4'-C1'-C2'	-7.84	99.63	105.90
31	Ae	10	DC	C2-N1-C1'	7.84	127.42	118.80
57	A4	13	DG	O4'-C1'-C2'	-7.84	99.63	105.90
28	Ab	7	DT	O4'-C4'-C3'	-7.84	101.30	106.00
96	Bh	7	DG	O4'-C1'-C2'	-7.84	99.63	105.90
1	AA	7277	DG	O4'-C1'-C2'	-7.83	99.63	105.90
1	AA	4771	DA	O4'-C4'-C3'	-7.83	101.30	106.00
1	AA	5323	DT	O4'-C4'-C3'	-7.83	101.30	106.00
2	AB	1249	DA	O4'-C1'-C2'	-7.83	99.63	105.90
2	AB	291	DC	O4'-C1'-C2'	-7.83	99.63	105.90
2	AB	5417	DG	O4'-C1'-C2'	-7.83	99.64	105.90
96	Bh	25	DG	O4'-C4'-C3'	-7.83	101.30	106.00
364	F1	22	DA	O4'-C1'-C2'	-7.83	99.64	105.90
1	AA	6274	DG	P-O3'-C3'	7.83	129.09	119.70
46	At	8	DT	O4'-C4'-C3'	-7.83	101.30	106.00
118	B3	18	DC	O4'-C4'-C3'	-7.83	101.31	106.00
294	Et	17	DG	O4'-C1'-N9	7.83	113.48	108.00
107	Bs	30	DA	O4'-C1'-C2'	-7.82	99.64	105.90
1	AA	2706	DC	O4'-C1'-C2'	-7.82	99.64	105.90
1	AA	1819	DG	O4'-C1'-C2'	-7.82	99.64	105.90
2	AB	4550	DA	O4'-C1'-C2'	-7.82	99.64	105.90
184	C7	4	DC	P-O3'-C3'	7.82	129.08	119.70
294	Et	6	DT	O4'-C4'-C3'	-7.82	101.31	106.00
23	AW	10	DG	O4'-C1'-C2'	-7.82	99.65	105.90
69	BG	17	DC	O4'-C1'-C2'	-7.82	99.65	105.90
239	D0	1	DT	O4'-C1'-C2'	-7.82	99.65	105.90
1	AA	4517	DC	O4'-C1'-C2'	-7.82	99.65	105.90
25	AY	17	DC	O4'-C1'-C2'	-7.82	99.65	105.90
2	AB	7521	DA	O4'-C1'-C2'	-7.81	99.65	105.90
88	BZ	29	DT	O4'-C4'-C3'	-7.81	101.31	106.00
1	AA	2863	DT	P-O3'-C3'	7.81	129.08	119.70
2	AB	817	DC	C2-N1-C1'	7.81	127.39	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	4351	DT	O4'-C4'-C3'	-7.81	101.31	106.00
62	A9	44	DT	O4'-C4'-C3'	-7.81	101.31	106.00
2	AB	2761	DT	O4'-C1'-C2'	-7.81	99.65	105.90
52	Az	25	DA	P-O3'-C3'	7.81	129.07	119.70
1	AA	6890	DG	O4'-C1'-C2'	-7.81	99.65	105.90
166	Cp	37	DG	P-O3'-C3'	7.81	129.07	119.70
298	Ex	24	DG	O4'-C4'-C3'	-7.81	101.32	106.00
1	AA	906	DT	O4'-C1'-C2'	-7.80	99.66	105.90
1	AA	2724	DC	O4'-C1'-C2'	-7.80	99.66	105.90
419	Gu	12	DG	O4'-C1'-C2'	-7.80	99.66	105.90
2	AB	947	DG	O4'-C1'-C2'	-7.80	99.66	105.90
6	AF	3	DT	P-O3'-C3'	7.80	129.06	119.70
138	CN	34	DT	O4'-C4'-C3'	-7.80	101.32	106.00
6	AF	50	DT	O4'-C4'-C3'	-7.80	101.32	106.00
175	Cy	1	DA	C1'-O4'-C4'	-7.80	102.30	110.10
4	AD	5	DT	O4'-C4'-C3'	-7.79	101.32	106.00
128	CD	16	DC	P-O3'-C3'	7.79	129.05	119.70
2	AB	403	DG	O4'-C1'-C2'	-7.79	99.67	105.90
2	AB	5743	DC	O4'-C1'-C2'	-7.79	99.67	105.90
159	Ci	4	DA	O4'-C1'-C2'	-7.79	99.67	105.90
1	AA	5812	DA	C4'-C3'-C2'	-7.79	96.09	103.10
2	AB	4129	DG	O4'-C1'-C2'	-7.79	99.67	105.90
281	Eg	29	DG	C4'-C3'-C2'	-7.79	96.09	103.10
386	GN	5	DG	O4'-C1'-C2'	-7.79	99.67	105.90
1	AA	6797	DA	O4'-C4'-C3'	-7.79	101.33	106.00
12	AL	29	DA	O4'-C1'-C2'	-7.79	99.67	105.90
115	B0	1	DT	O4'-C1'-C2'	-7.78	99.67	105.90
128	CD	28	DA	O4'-C1'-C2'	-7.78	99.67	105.90
403	Ge	27	DT	O4'-C4'-C3'	-7.78	101.33	106.00
29	Ac	26	DT	C1'-O4'-C4'	-7.78	102.32	110.10
59	A6	7	DT	O4'-C4'-C3'	-7.78	101.33	106.00
295	Eu	13	DC	O4'-C1'-C2'	-7.78	99.68	105.90
2	AB	5415	DG	O4'-C4'-C3'	-7.78	101.33	106.00
295	Eu	13	DC	O4'-C4'-C3'	-7.77	101.33	106.00
244	D5	1	DG	O4'-C1'-C2'	-7.77	99.68	105.90
204	DR	40	DT	O4'-C1'-C2'	-7.77	99.68	105.90
1	AA	6652	DG	O4'-C1'-N9	7.77	113.44	108.00
2	AB	4186	DC	C6-N1-C2	-7.77	117.19	120.30
112	Bx	20	DG	O4'-C1'-N9	7.77	113.44	108.00
307	E6	29	DA	C1'-O4'-C4'	-7.77	102.33	110.10
1	AA	4204	DC	O4'-C4'-C3'	-7.76	101.34	106.00
2	AB	6116	DA	O4'-C4'-C3'	-7.76	101.34	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	AJ	22	DG	O4'-C1'-C2'	-7.76	99.69	105.90
1	AA	3052	DA	O4'-C1'-C2'	-7.76	99.69	105.90
2	AB	3236	DG	O4'-C4'-C3'	-7.76	101.35	106.00
220	Dh	10	DG	O4'-C1'-C2'	-7.76	99.69	105.90
375	GC	18	DA	O4'-C1'-C2'	-7.76	99.69	105.90
2	AB	6949	DG	O4'-C1'-C2'	-7.75	99.70	105.90
228	Dp	16	DC	O4'-C1'-C2'	-7.75	99.70	105.90
214	Db	33	DA	O4'-C4'-C3'	-7.75	101.35	106.00
379	GG	21	DG	O4'-C1'-C2'	-7.75	99.70	105.90
1	AA	5256	DC	C1'-O4'-C4'	-7.75	102.35	110.10
1	AA	3148	DT	C4'-C3'-C2'	-7.75	96.13	103.10
2	AB	5148	DG	O4'-C1'-C2'	-7.75	99.70	105.90
2	AB	2832	DA	O4'-C1'-C2'	-7.75	99.70	105.90
246	D7	22	DT	O4'-C1'-C2'	-7.74	99.71	105.90
303	E2	5	DA	N1-C6-N6	-7.74	113.95	118.60
2	AB	7317	DG	O4'-C1'-C2'	-7.74	99.71	105.90
369	F6	5	DC	P-O3'-C3'	7.74	128.99	119.70
1	AA	3657	DG	C1'-O4'-C4'	-7.74	102.36	110.10
2	AB	4972	DG	O4'-C4'-C3'	-7.74	101.36	106.00
2	AB	5959	DG	O4'-C1'-C2'	-7.74	99.71	105.90
178	C1	1	DT	C1'-O4'-C4'	-7.74	102.36	110.10
1	AA	2214	DA	O4'-C4'-C3'	-7.74	101.36	106.00
1	AA	5834	DA	O4'-C4'-C3'	-7.74	101.36	106.00
2	AB	5223	DG	O4'-C1'-C2'	-7.74	99.71	105.90
53	A0	20	DC	P-O3'-C3'	7.73	128.98	119.70
396	GX	17	DA	O4'-C4'-C3'	-7.73	101.36	106.00
1	AA	3421	DG	O4'-C4'-C3'	-7.73	101.36	106.00
1	AA	6487	DA	P-O3'-C3'	7.73	128.97	119.70
2	AB	1350	DA	O4'-C1'-C2'	-7.73	99.72	105.90
17	AQ	43	DT	O4'-C4'-C3'	-7.73	101.36	106.00
419	Gu	18	DG	O4'-C4'-C3'	-7.73	101.36	106.00
1	AA	1181	DG	O4'-C1'-C2'	-7.72	99.72	105.90
1	AA	6603	DC	O4'-C1'-C2'	-7.72	99.72	105.90
1	AA	6703	DC	O4'-C4'-C3'	-7.72	101.37	106.00
2	AB	429	DG	O4'-C4'-C3'	-7.72	101.37	106.00
2	AB	6581	DG	C1'-O4'-C4'	-7.72	102.38	110.10
1	AA	3247	DT	O4'-C1'-C2'	-7.72	99.72	105.90
2	AB	5041	DG	O4'-C1'-C2'	-7.72	99.72	105.90
330	FT	30	DT	O4'-C4'-C3'	-7.72	101.37	106.00
1	AA	267	DC	O4'-C1'-C2'	-7.72	99.72	105.90
360	Fx	9	DC	O4'-C1'-C2'	-7.72	99.73	105.90
105	Bq	9	DA	O4'-C1'-C2'	-7.72	99.73	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
200	DN	3	DC	C4'-C3'-C2'	-7.72	96.16	103.10
405	Gg	25	DA	O4'-C1'-C2'	-7.72	99.73	105.90
2	AB	637	DA	O4'-C1'-C2'	-7.71	99.73	105.90
325	FO	28	DA	P-O3'-C3'	7.71	128.96	119.70
1	AA	6603	DC	O4'-C4'-C3'	-7.71	101.37	106.00
1	AA	1315	DT	P-O3'-C3'	7.71	128.95	119.70
2	AB	3392	DA	O4'-C1'-C2'	-7.71	99.73	105.90
45	As	9	DT	O4'-C4'-C3'	-7.71	101.38	106.00
1	AA	776	DA	C1'-O4'-C4'	-7.71	102.39	110.10
1	AA	1396	DC	O4'-C1'-C2'	-7.71	99.73	105.90
1	AA	2440	DG	O4'-C4'-C3'	-7.71	101.38	106.00
2	AB	4693	DC	O4'-C1'-N1	7.71	113.39	108.00
1	AA	239	DT	O4'-C4'-C3'	-7.71	101.38	106.00
1	AA	4897	DG	O4'-C4'-C3'	-7.71	101.38	106.00
1	AA	1	DT	O4'-C1'-C2'	-7.70	99.74	105.90
151	Ca	28	DT	O4'-C1'-C2'	-7.70	99.74	105.90
1	AA	6543	DT	O4'-C4'-C3'	-7.70	101.38	106.00
296	Ev	18	DG	O4'-C1'-C2'	-7.70	99.74	105.90
321	FK	1	DA	O4'-C1'-C2'	-7.70	99.74	105.90
207	DU	26	DA	C1'-O4'-C4'	-7.70	102.40	110.10
50	Ax	42	DT	O4'-C4'-C3'	-7.70	101.38	106.00
84	BV	40	DA	C4'-C3'-C2'	-7.69	96.17	103.10
2	AB	4841	DG	O4'-C1'-C2'	-7.69	99.75	105.90
2	AB	6224	DA	O4'-C1'-C2'	-7.69	99.75	105.90
45	As	41	DG	O4'-C1'-C2'	-7.69	99.75	105.90
1	AA	6155	DA	O4'-C1'-C2'	-7.69	99.75	105.90
31	Ae	43	DT	O4'-C4'-C3'	-7.69	101.39	106.00
233	Du	3	DT	O4'-C4'-C3'	-7.69	101.39	106.00
73	BK	8	DG	P-O3'-C3'	7.69	128.93	119.70
1	AA	3131	DA	O4'-C4'-C3'	-7.69	101.39	106.00
2	AB	5811	DG	O4'-C1'-C2'	-7.69	99.75	105.90
123	B8	21	DG	P-O3'-C3'	7.69	128.92	119.70
2	AB	704	DT	O4'-C1'-C2'	-7.68	99.75	105.90
2	AB	2852	DT	P-O3'-C3'	7.68	128.92	119.70
354	Fr	20	DT	O4'-C4'-C3'	-7.68	101.39	106.00
2	AB	1934	DG	O4'-C4'-C3'	-7.68	101.39	106.00
21	AU	17	DT	C1'-O4'-C4'	-7.68	102.42	110.10
407	Gi	19	DA	O4'-C4'-C3'	-7.68	101.39	106.00
1	AA	5218	DC	O4'-C4'-C3'	-7.68	101.39	106.00
2	AB	5871	DG	O4'-C4'-C3'	-7.68	101.39	106.00
30	Ad	11	DT	O4'-C1'-N1	7.68	113.37	108.00
119	B4	37	DA	O4'-C1'-C2'	-7.68	99.76	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	2163	DG	P-O3'-C3'	7.67	128.91	119.70
2	AB	1929	DG	O4'-C1'-C2'	-7.67	99.76	105.90
96	Bh	22	DG	O4'-C1'-C2'	-7.67	99.76	105.90
1	AA	386	DA	C4'-C3'-C2'	-7.67	96.20	103.10
1	AA	3843	DT	P-O3'-C3'	7.67	128.91	119.70
2	AB	1971	DG	C4'-C3'-C2'	-7.67	96.20	103.10
2	AB	5126	DC	O4'-C1'-C2'	-7.67	99.76	105.90
76	BN	18	DA	O4'-C1'-C2'	-7.67	99.76	105.90
2	AB	722	DT	C4'-C3'-C2'	-7.67	96.20	103.10
200	DN	33	DG	O4'-C1'-C2'	-7.67	99.76	105.90
2	AB	3877	DG	C1'-O4'-C4'	-7.67	102.43	110.10
203	DQ	32	DG	O4'-C1'-C2'	-7.67	99.77	105.90
123	B8	28	DT	O4'-C4'-C3'	-7.67	101.40	106.00
168	Cr	5	DT	O4'-C4'-C3'	-7.67	101.40	106.00
423	Gy	10	DG	O4'-C4'-C3'	-7.67	101.40	106.00
273	EY	33	DC	O4'-C4'-C3'	-7.67	101.40	106.00
1	AA	5364	DC	O4'-C4'-C3'	-7.66	101.40	106.00
2	AB	3688	DA	O4'-C1'-C2'	-7.66	99.77	105.90
157	Cg	2	DA	O4'-C1'-C2'	-7.66	99.77	105.90
227	Do	1	DT	O4'-C1'-C2'	-7.66	99.77	105.90
2	AB	5691	DC	P-O3'-C3'	7.66	128.89	119.70
26	AZ	12	DA	C4'-C3'-C2'	-7.66	96.21	103.10
41	Ao	7	DT	O4'-C4'-C3'	-7.66	101.40	106.00
1	AA	7328	DG	C4'-C3'-C2'	-7.66	96.21	103.10
21	AU	26	DA	O4'-C1'-C2'	-7.66	99.77	105.90
2	AB	2435	DA	P-O3'-C3'	7.66	128.88	119.70
2	AB	3354	DT	O4'-C1'-C2'	-7.66	99.78	105.90
96	Bh	26	DA	O4'-C1'-C2'	-7.66	99.78	105.90
122	B7	10	DA	O4'-C1'-C2'	-7.66	99.78	105.90
2	AB	277	DA	O4'-C1'-C2'	-7.65	99.78	105.90
36	Aj	20	DC	O4'-C1'-C2'	-7.65	99.78	105.90
2	AB	5807	DC	O4'-C1'-C2'	-7.65	99.78	105.90
269	EU	28	DG	O4'-C1'-C2'	-7.65	99.78	105.90
331	FU	5	DT	O4'-C4'-C3'	-7.65	101.41	106.00
1	AA	6425	DA	O4'-C4'-C3'	-7.65	101.41	106.00
270	EV	21	DA	O4'-C4'-C3'	-7.65	101.41	106.00
400	Gb	20	DT	O4'-C4'-C3'	-7.65	101.41	106.00
172	Cv	32	DC	P-O3'-C3'	7.65	128.88	119.70
1	AA	2736	DT	O4'-C1'-C2'	-7.65	99.78	105.90
2	AB	1556	DA	C4'-C3'-C2'	-7.65	96.22	103.10
23	AW	9	DT	O4'-C4'-C3'	-7.65	101.41	106.00
1	AA	2537	DT	P-O3'-C3'	7.65	128.88	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	4641	DG	P-O3'-C3'	7.65	128.88	119.70
1	AA	6339	DG	O4'-C4'-C3'	-7.64	101.41	106.00
2	AB	4942	DG	O4'-C4'-C3'	-7.64	101.41	106.00
95	Bg	21	DA	O4'-C1'-C2'	-7.64	99.78	105.90
2	AB	6418	DC	O4'-C4'-C3'	-7.64	101.41	106.00
135	CK	1	DT	O4'-C1'-C2'	-7.64	99.79	105.90
229	Dq	14	DA	O4'-C4'-C3'	-7.64	101.42	106.00
422	Gx	17	DG	O4'-C1'-C2'	-7.64	99.79	105.90
25	AY	30	DG	O4'-C4'-C3'	-7.64	101.42	106.00
10	AJ	43	DT	O4'-C4'-C3'	-7.64	101.42	106.00
251	EC	7	DG	O4'-C1'-C2'	-7.64	99.79	105.90
428	G3	7	DT	O4'-C4'-C3'	-7.64	101.42	106.00
1	AA	2846	DC	O4'-C4'-C3'	-7.64	101.42	106.00
2	AB	2234	DT	O4'-C4'-C3'	-7.64	101.42	106.00
1	AA	5952	DA	O4'-C1'-C2'	-7.63	99.79	105.90
208	DV	23	DG	O4'-C1'-N9	7.63	113.34	108.00
387	GO	5	DG	O4'-C1'-C2'	-7.63	99.79	105.90
2	AB	7439	DG	P-O3'-C3'	7.63	128.86	119.70
2	AB	3118	DC	O4'-C1'-C2'	-7.63	99.79	105.90
24	AX	25	DG	P-O3'-C3'	7.63	128.86	119.70
438	HD	14	DA	O4'-C4'-C3'	-7.63	101.42	106.00
241	D2	8	DC	O4'-C4'-C3'	-7.63	101.42	106.00
1	AA	3211	DG	O4'-C1'-C2'	-7.63	99.80	105.90
31	Ae	21	DG	O4'-C1'-C2'	-7.62	99.80	105.90
178	C1	2	DA	P-O3'-C3'	7.62	128.85	119.70
1	AA	902	DG	O4'-C1'-C2'	-7.62	99.80	105.90
2	AB	536	DG	C5-C6-O6	-7.62	124.03	128.60
2	AB	3352	DT	O4'-C4'-C3'	-7.62	101.43	106.00
264	EP	4	DC	O4'-C1'-C2'	-7.62	99.80	105.90
1	AA	3000	DC	P-O3'-C3'	7.62	128.84	119.70
428	G3	23	DC	O4'-C1'-N1	7.62	113.33	108.00
2	AB	5201	DG	O4'-C1'-C2'	-7.62	99.81	105.90
2	AB	6801	DT	C1'-O4'-C4'	-7.62	102.48	110.10
137	CM	16	DG	O4'-C1'-C2'	-7.62	99.81	105.90
400	Gb	21	DT	O4'-C4'-C3'	-7.62	101.43	106.00
124	B9	32	DG	P-O3'-C3'	7.61	128.84	119.70
165	Co	39	DG	O4'-C1'-C2'	-7.61	99.81	105.90
400	Gb	19	DG	C4'-C3'-C2'	-7.61	96.25	103.10
1	AA	6631	DG	O4'-C4'-C3'	-7.61	101.43	106.00
242	D3	15	DC	P-O3'-C3'	7.61	128.83	119.70
256	EH	34	DA	P-O3'-C3'	7.61	128.83	119.70
404	Gf	4	DT	O4'-C4'-C3'	-7.61	101.43	106.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	Ax	5	DT	P-O3'-C3'	7.61	128.83	119.70
246	D7	36	DA	O4'-C1'-C2'	-7.61	99.81	105.90
2	AB	846	DA	O4'-C1'-C2'	-7.61	99.81	105.90
419	Gu	12	DG	O4'-C4'-C3'	-7.61	101.44	106.00
370	F7	5	DT	P-O3'-C3'	7.61	128.83	119.70
248	D9	4	DT	O4'-C4'-C3'	-7.60	101.44	106.00
103	Bo	23	DC	O4'-C1'-C2'	-7.60	99.82	105.90
438	HD	21	DG	O4'-C4'-C3'	-7.60	101.44	106.00
413	Go	19	DA	O4'-C4'-C3'	-7.60	101.44	106.00
2	AB	5116	DG	O4'-C4'-C3'	-7.60	101.44	106.00
455	HU	5	DG	O4'-C4'-C3'	-7.60	101.44	106.00
1	AA	4665	DA	O4'-C4'-C3'	-7.60	101.44	106.00
2	AB	4329	DA	P-O3'-C3'	7.60	128.82	119.70
123	B8	25	DT	O4'-C1'-C2'	-7.60	99.82	105.90
123	B8	35	DT	P-O3'-C3'	7.60	128.82	119.70
305	E4	7	DT	O4'-C4'-C3'	-7.60	101.44	106.00
422	Gx	1	DA	C4'-C3'-C2'	-7.60	96.26	103.10
1	AA	3221	DG	P-O3'-C3'	7.59	128.81	119.70
1	AA	5256	DC	O4'-C1'-C2'	-7.59	99.82	105.90
58	A5	44	DT	P-O3'-C3'	7.59	128.81	119.70
330	FT	3	DC	P-O3'-C3'	7.59	128.81	119.70
350	Fn	1	DG	C1'-O4'-C4'	-7.59	102.50	110.10
1	AA	5395	DG	O4'-C1'-C2'	-7.59	99.83	105.90
1	AA	5602	DG	O4'-C1'-C2'	-7.59	99.83	105.90
1	AA	7065	DT	O4'-C4'-C3'	-7.59	101.44	106.00
1	AA	324	DA	O4'-C1'-C2'	-7.59	99.83	105.90
418	Gt	27	DC	O4'-C4'-C3'	-7.59	101.45	106.00
423	Gy	23	DT	O4'-C4'-C3'	-7.59	101.45	106.00
1	AA	2290	DG	P-O3'-C3'	7.59	128.81	119.70
2	AB	3247	DG	O4'-C1'-C2'	-7.59	99.83	105.90
108	Bt	6	DA	O4'-C1'-C2'	-7.59	99.83	105.90
1	AA	561	DA	O4'-C1'-C2'	-7.58	99.83	105.90
2	AB	3431	DA	O4'-C4'-C3'	-7.58	101.45	106.00
53	A0	42	DT	O4'-C4'-C3'	-7.58	101.45	106.00
1	AA	4120	DT	P-O3'-C3'	7.58	128.80	119.70
402	Gd	13	DC	C6-N1-C2	-7.58	117.27	120.30
1	AA	3204	DA	O4'-C4'-C3'	-7.58	101.45	106.00
2	AB	2804	DT	O4'-C1'-C2'	-7.58	99.84	105.90
108	Bt	37	DA	P-O3'-C3'	7.58	128.79	119.70
119	B4	19	DG	C4'-C3'-C2'	-7.58	96.28	103.10
1	AA	4422	DC	O4'-C1'-C2'	-7.58	99.84	105.90
108	Bt	16	DG	O4'-C1'-C2'	-7.58	99.84	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	3651	DC	P-O3'-C3'	7.58	128.79	119.70
358	Fv	20	DT	O4'-C4'-C3'	-7.58	101.45	106.00
393	GU	1	DG	C1'-O4'-C4'	-7.58	102.52	110.10
1	AA	1677	DT	O4'-C1'-C2'	-7.57	99.84	105.90
13	AM	8	DT	O4'-C4'-C3'	-7.57	101.46	106.00
1	AA	5913	DC	C4'-C3'-C2'	-7.57	96.29	103.10
304	E3	8	DA	O4'-C1'-C2'	-7.57	99.84	105.90
417	Gs	14	DG	O4'-C1'-N9	7.57	113.30	108.00
4	AD	32	DG	O4'-C1'-C2'	-7.57	99.85	105.90
411	Gm	18	DG	O4'-C1'-C2'	-7.57	99.85	105.90
2	AB	928	DC	O4'-C1'-C2'	-7.56	99.85	105.90
45	As	27	DA	O4'-C4'-C3'	-7.56	101.46	106.00
2	AB	2744	DG	O4'-C1'-C2'	-7.56	99.85	105.90
2	AB	5582	DA	N1-C6-N6	-7.56	114.06	118.60
21	AU	6	DT	O4'-C4'-C3'	-7.56	101.46	106.00
2	AB	4513	DG	O4'-C1'-C2'	-7.56	99.85	105.90
29	Ac	8	DT	O4'-C4'-C3'	-7.56	101.47	106.00
151	Ca	30	DG	O4'-C1'-C2'	-7.56	99.85	105.90
1	AA	587	DG	O4'-C4'-C3'	-7.56	101.47	106.00
1	AA	3241	DA	O4'-C1'-C2'	-7.56	99.85	105.90
1	AA	5561	DG	O4'-C1'-C2'	-7.56	99.85	105.90
2	AB	4311	DA	O4'-C1'-C2'	-7.56	99.86	105.90
1	AA	660	DA	O4'-C1'-C2'	-7.55	99.86	105.90
2	AB	6418	DC	O4'-C1'-C2'	-7.55	99.86	105.90
140	CP	40	DC	O4'-C1'-C2'	-7.55	99.86	105.90
313	FC	22	DG	P-O3'-C3'	7.55	128.76	119.70
1	AA	3421	DG	O4'-C1'-C2'	-7.55	99.86	105.90
2	AB	47	DA	N1-C6-N6	-7.55	114.07	118.60
2	AB	1340	DG	O4'-C1'-C2'	-7.55	99.86	105.90
324	FN	15	DT	O4'-C4'-C3'	-7.55	101.47	106.00
1	AA	984	DG	O4'-C1'-C2'	-7.55	99.86	105.90
2	AB	802	DC	O4'-C4'-C3'	-7.55	101.47	106.00
2	AB	2508	DT	O4'-C4'-C3'	-7.55	101.47	106.00
203	DQ	23	DA	O4'-C1'-C2'	-7.55	99.86	105.90
433	G8	8	DA	O4'-C4'-C3'	-7.54	101.47	106.00
1	AA	2912	DC	P-O3'-C3'	7.54	128.75	119.70
1	AA	4917	DG	O4'-C1'-C2'	-7.54	99.87	105.90
64	BB	27	DA	O4'-C1'-C2'	-7.54	99.86	105.90
343	Fg	6	DT	C4'-C3'-C2'	-7.54	96.31	103.10
2	AB	123	DG	C1'-O4'-C4'	-7.54	102.56	110.10
2	AB	2472	DC	P-O3'-C3'	7.54	128.75	119.70
77	BO	43	DC	C6-N1-C2	-7.54	117.28	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	3146	DG	O4'-C1'-C2'	-7.54	99.87	105.90
43	Aq	9	DT	O4'-C4'-C3'	-7.54	101.48	106.00
57	A4	2	DT	O4'-C1'-C2'	-7.54	99.87	105.90
72	BJ	38	DG	C4'-C3'-C2'	-7.54	96.32	103.10
238	Dz	34	DC	P-O3'-C3'	7.54	128.74	119.70
264	EP	29	DG	O4'-C1'-C2'	-7.54	99.87	105.90
1	AA	1995	DG	O4'-C1'-C2'	-7.53	99.87	105.90
2	AB	1184	DC	O4'-C1'-C2'	-7.53	99.87	105.90
280	Ef	21	DG	O4'-C1'-C2'	-7.53	99.87	105.90
1	AA	6543	DT	C4'-C3'-C2'	-7.53	96.32	103.10
319	FI	35	DC	O4'-C4'-C3'	-7.53	101.48	106.00
305	E4	27	DA	O4'-C4'-C3'	-7.53	101.48	106.00
2	AB	5415	DG	O4'-C1'-C2'	-7.53	99.88	105.90
49	Aw	42	DT	O4'-C1'-C2'	-7.53	99.88	105.90
293	Es	5	DA	O4'-C1'-C2'	-7.53	99.88	105.90
1	AA	495	DA	P-O3'-C3'	7.53	128.73	119.70
1	AA	6652	DG	O4'-C1'-C2'	-7.53	99.88	105.90
2	AB	7239	DT	C1'-O4'-C4'	-7.53	102.58	110.10
271	EW	12	DT	O4'-C4'-C3'	-7.53	101.48	106.00
404	Gf	23	DA	O4'-C4'-C3'	-7.53	101.48	106.00
2	AB	7088	DA	O4'-C1'-C2'	-7.52	99.88	105.90
133	CI	2	DG	C1'-O4'-C4'	-7.52	102.58	110.10
401	Gc	27	DA	O4'-C1'-C2'	-7.52	99.88	105.90
23	AW	2	DT	O4'-C1'-C2'	-7.52	99.88	105.90
432	G7	26	DA	O4'-C1'-C2'	-7.52	99.88	105.90
381	GI	3	DG	O4'-C1'-C2'	-7.52	99.89	105.90
2	AB	7312	DT	C4'-C3'-C2'	-7.52	96.34	103.10
24	AX	9	DT	O4'-C4'-C3'	-7.52	101.49	106.00
226	Dn	23	DT	O4'-C4'-C3'	-7.52	101.49	106.00
1	AA	5653	DG	O4'-C1'-C2'	-7.51	99.89	105.90
2	AB	1995	DG	O4'-C1'-C2'	-7.51	99.89	105.90
285	Ek	5	DT	O4'-C4'-C3'	-7.51	101.49	106.00
1	AA	2980	DA	O4'-C4'-C3'	-7.51	101.49	106.00
2	AB	1073	DC	O4'-C1'-C2'	-7.51	99.89	105.90
2	AB	2126	DG	O4'-C1'-C2'	-7.51	99.89	105.90
163	Cm	5	DT	O4'-C1'-C2'	-7.51	99.89	105.90
1	AA	6391	DC	O4'-C1'-C2'	-7.50	99.90	105.90
1	AA	3838	DA	O4'-C1'-C2'	-7.50	99.90	105.90
2	AB	2139	DG	O4'-C1'-C2'	-7.50	99.90	105.90
115	B0	35	DA	O4'-C1'-C2'	-7.50	99.90	105.90
134	CJ	29	DA	N1-C6-N6	-7.50	114.10	118.60
293	Es	19	DA	O4'-C1'-C2'	-7.50	99.90	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
402	Gd	27	DG	O4'-C1'-C2'	-7.50	99.90	105.90
418	Gt	27	DC	O4'-C1'-C2'	-7.50	99.90	105.90
52	Az	25	DA	O4'-C4'-C3'	-7.50	101.50	106.00
23	AW	30	DA	N1-C6-N6	-7.50	114.10	118.60
132	CH	10	DG	C1'-O4'-C4'	-7.50	102.60	110.10
341	Fe	16	DG	O4'-C1'-C2'	-7.50	99.90	105.90
1	AA	961	DG	O4'-C1'-C2'	-7.50	99.90	105.90
2	AB	2531	DC	P-O3'-C3'	7.50	128.70	119.70
406	Gh	1	DG	C1'-O4'-C4'	-7.50	102.61	110.10
1	AA	1057	DA	O4'-C4'-C3'	-7.49	101.50	104.50
1	AA	5068	DG	C1'-O4'-C4'	-7.49	102.61	110.10
43	Aq	43	DT	O4'-C4'-C3'	-7.49	101.50	104.50
229	Dq	30	DG	O4'-C1'-C2'	-7.49	99.91	105.90
2	AB	5121	DC	P-O3'-C3'	7.49	128.69	119.70
102	Bn	2	DG	P-O3'-C3'	7.49	128.69	119.70
155	Ce	28	DT	C4-C5-C7	-7.49	114.51	119.00
2	AB	1904	DC	P-O3'-C3'	7.49	128.68	119.70
174	Cx	22	DC	C1'-O4'-C4'	-7.49	102.61	110.10
2	AB	523	DG	O4'-C4'-C3'	-7.48	101.51	104.50
2	AB	3983	DA	O4'-C1'-C2'	-7.48	99.91	105.90
233	Du	21	DC	O4'-C1'-C2'	-7.48	99.91	105.90
1	AA	3423	DC	O4'-C1'-C2'	-7.48	99.92	105.90
325	FO	19	DA	O4'-C1'-C2'	-7.48	99.91	105.90
426	G1	27	DC	P-O3'-C3'	7.48	128.68	119.70
1	AA	2944	DA	O4'-C1'-C2'	-7.48	99.92	105.90
70	BH	30	DT	C4'-C3'-C2'	-7.48	96.37	103.10
1	AA	5953	DG	O4'-C1'-C2'	-7.48	99.92	105.90
93	Be	12	DA	O4'-C1'-C2'	-7.48	99.92	105.90
1	AA	7176	DA	O4'-C1'-C2'	-7.47	99.92	105.90
1	AA	1665	DA	O4'-C1'-C2'	-7.47	99.92	105.90
1	AA	4917	DG	O4'-C4'-C3'	-7.47	101.51	104.50
1	AA	6368	DG	O4'-C1'-C2'	-7.47	99.92	105.90
269	EU	28	DG	O4'-C1'-N9	7.47	113.23	108.00
258	EJ	27	DG	O4'-C1'-C2'	-7.47	99.92	105.90
52	Az	26	DA	C4'-C3'-C2'	-7.47	96.38	103.10
375	GC	18	DA	C1'-O4'-C4'	-7.47	102.63	110.10
5	AE	35	DT	P-O3'-C3'	7.46	128.66	119.70
55	A2	41	DT	C1'-O4'-C4'	-7.46	102.64	110.10
1	AA	6153	DC	C4'-C3'-C2'	-7.46	96.39	103.10
263	EO	5	DG	O4'-C1'-C2'	-7.46	99.93	105.90
2	AB	2636	DG	C4'-C3'-C2'	-7.46	96.39	103.10
5	AE	8	DT	O4'-C4'-C3'	-7.46	101.52	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1711	DA	C4'-C3'-C2'	-7.46	96.39	103.10
2	AB	1890	DG	O4'-C1'-C2'	-7.46	99.94	105.90
2	AB	3991	DC	C1'-O4'-C4'	-7.46	102.64	110.10
105	Bq	1	DG	C1'-O4'-C4'	-7.46	102.64	110.10
378	GF	1	DT	O4'-C1'-C2'	-7.46	99.94	105.90
1	AA	6136	DG	P-O3'-C3'	7.46	128.65	119.70
2	AB	4496	DG	P-O3'-C3'	7.45	128.64	119.70
55	A2	48	DT	O4'-C4'-C3'	-7.45	101.52	104.50
121	B6	20	DC	C4'-C3'-C2'	-7.45	96.39	103.10
2	AB	3151	DA	P-O3'-C3'	7.45	128.64	119.70
61	A8	16	DG	O4'-C1'-C2'	-7.45	99.94	105.90
1	AA	919	DA	O4'-C1'-C2'	-7.45	99.94	105.90
50	Ax	12	DA	O4'-C1'-C2'	-7.45	99.94	105.90
184	C7	10	DG	O4'-C1'-C2'	-7.45	99.94	105.90
1	AA	6274	DG	C1'-O4'-C4'	-7.45	102.66	110.10
28	Ab	34	DA	O4'-C1'-C2'	-7.45	99.94	105.90
1	AA	6476	DG	O4'-C1'-C2'	-7.44	99.94	105.90
2	AB	2636	DG	O4'-C4'-C3'	-7.44	101.52	104.50
157	Cg	2	DA	P-O3'-C3'	7.44	128.63	119.70
385	GM	1	DA	O4'-C1'-C2'	-7.44	99.95	105.90
1	AA	4352	DT	P-O3'-C3'	7.44	128.63	119.70
164	Cn	1	DT	C1'-O4'-C4'	-7.44	102.66	110.10
2	AB	5273	DA	C1'-O4'-C4'	-7.44	102.66	110.10
49	Aw	33	DC	O4'-C4'-C3'	-7.44	101.53	104.50
1	AA	5334	DG	O4'-C4'-C3'	-7.44	101.53	104.50
1	AA	432	DG	O4'-C1'-C2'	-7.43	99.95	105.90
1	AA	6596	DG	P-O3'-C3'	7.43	128.62	119.70
5	AE	29	DC	O4'-C1'-C2'	-7.43	99.95	105.90
39	Am	1	DT	O4'-C1'-C2'	-7.43	99.95	105.90
97	Bi	7	DT	O4'-C4'-C3'	-7.43	101.53	104.50
169	Cs	22	DG	C4'-C3'-C2'	-7.43	96.41	103.10
285	Ek	28	DC	O4'-C1'-C2'	-7.43	99.95	105.90
1	AA	6951	DG	C1'-O4'-C4'	-7.43	102.67	110.10
299	Ey	25	DG	O4'-C4'-C3'	-7.43	101.53	104.50
273	EY	33	DC	C4'-C3'-C2'	-7.43	96.41	103.10
2	AB	824	DA	O4'-C1'-C2'	-7.43	99.96	105.90
2	AB	3170	DG	C1'-O4'-C4'	-7.43	102.67	110.10
2	AB	4308	DG	C4'-C3'-C2'	-7.43	96.41	103.10
95	Bg	7	DT	O4'-C1'-C2'	-7.43	99.96	105.90
324	FN	15	DT	C4'-C3'-C2'	-7.43	96.41	103.10
174	Cx	12	DG	O4'-C1'-C2'	-7.43	99.96	105.90
1	AA	536	DT	O4'-C4'-C3'	-7.42	101.53	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	5779	DC	P-O3'-C3'	7.42	128.61	119.70
165	Co	21	DA	N1-C6-N6	-7.42	114.15	118.60
1	AA	2587	DG	O4'-C1'-C2'	-7.42	99.96	105.90
31	Ae	42	DT	P-O3'-C3'	7.42	128.61	119.70
1	AA	5458	DG	O4'-C1'-C2'	-7.42	99.96	105.90
2	AB	3449	DA	O4'-C1'-C2'	-7.42	99.96	105.90
1	AA	6368	DG	O4'-C4'-C3'	-7.42	101.53	104.50
298	Ex	9	DA	O4'-C1'-C2'	-7.42	99.97	105.90
12	AL	29	DA	C1'-O4'-C4'	-7.42	102.68	110.10
32	Af	12	DT	O4'-C1'-C2'	-7.42	99.97	105.90
2	AB	5259	DA	O4'-C1'-C2'	-7.42	99.97	105.90
198	DL	24	DG	O4'-C1'-C2'	-7.41	99.97	105.90
2	AB	3376	DG	O4'-C1'-C2'	-7.41	99.97	105.90
23	AW	6	DT	O4'-C4'-C3'	-7.41	101.53	104.50
392	GT	2	DG	C1'-O4'-C4'	-7.41	102.69	110.10
319	FI	24	DC	C4'-C3'-C2'	-7.41	96.43	103.10
114	Bz	23	DA	O4'-C1'-C2'	-7.41	99.97	105.90
2	AB	6069	DA	O4'-C1'-C2'	-7.41	99.98	105.90
2	AB	7324	DT	O4'-C4'-C3'	-7.41	101.54	104.50
45	As	8	DT	O4'-C4'-C3'	-7.41	101.54	104.50
167	Cq	31	DG	O4'-C4'-C3'	-7.41	101.54	104.50
2	AB	6311	DC	O4'-C1'-C2'	-7.40	99.98	105.90
214	Db	21	DT	P-O3'-C3'	7.40	128.59	119.70
333	FW	15	DA	O4'-C1'-C2'	-7.40	99.98	105.90
1	AA	3233	DG	O4'-C1'-C2'	-7.40	99.98	105.90
1	AA	5857	DC	C4'-C3'-C2'	-7.40	96.44	103.10
224	Dl	21	DG	O4'-C4'-C3'	-7.40	101.54	104.50
297	Ew	29	DG	C4'-C3'-C2'	-7.40	96.44	103.10
1	AA	65	DG	O4'-C1'-C2'	-7.40	99.98	105.90
25	AY	47	DT	P-O3'-C3'	7.40	128.58	119.70
426	G1	24	DC	P-O3'-C3'	7.40	128.58	119.70
1	AA	920	DC	O4'-C1'-C2'	-7.40	99.98	105.90
1	AA	1539	DA	O4'-C1'-C2'	-7.40	99.98	105.90
1	AA	1866	DA	O4'-C1'-C2'	-7.40	99.98	105.90
2	AB	6630	DA	O4'-C1'-C2'	-7.40	99.98	105.90
147	CW	4	DT	O4'-C4'-C3'	-7.40	101.54	104.50
200	DN	16	DC	O4'-C1'-C2'	-7.40	99.98	105.90
154	Cd	2	DG	O4'-C1'-C2'	-7.40	99.98	105.90
2	AB	6725	DT	O4'-C4'-C3'	-7.39	101.54	104.50
220	Dh	5	DT	O4'-C4'-C3'	-7.39	101.54	104.50
1	AA	3286	DC	O4'-C1'-C2'	-7.39	99.99	105.90
2	AB	1317	DG	O4'-C1'-C2'	-7.39	99.99	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1756	DA	O4'-C1'-C2'	-7.39	99.99	105.90
2	AB	5956	DT	O4'-C4'-C3'	-7.39	101.55	104.50
63	BA	6	DT	O4'-C4'-C3'	-7.39	101.55	104.50
2	AB	2817	DC	O4'-C1'-C2'	-7.38	99.99	105.90
221	Di	4	DC	O4'-C4'-C3'	-7.38	101.55	104.50
2	AB	5081	DC	O4'-C1'-C2'	-7.38	100.00	105.90
2	AB	1863	DG	O4'-C1'-C2'	-7.38	100.00	105.90
1	AA	581	DA	N1-C6-N6	-7.38	114.17	118.60
54	A1	47	DT	O4'-C4'-C3'	-7.38	101.55	104.50
364	F1	22	DA	C1'-O4'-C4'	-7.38	102.72	110.10
413	Go	2	DC	O4'-C1'-C2'	-7.38	100.00	105.90
70	BH	9	DA	P-O3'-C3'	7.37	128.55	119.70
1	AA	42	DG	C1'-O4'-C4'	-7.37	102.73	110.10
41	Ao	46	DT	O4'-C4'-C3'	-7.37	101.55	104.50
207	DU	26	DA	O4'-C1'-C2'	-7.37	100.00	105.90
208	DV	17	DG	O4'-C1'-C2'	-7.37	100.00	105.90
231	Ds	23	DG	O4'-C1'-C2'	-7.37	100.00	105.90
423	Gy	25	DT	O4'-C4'-C3'	-7.37	101.55	104.50
2	AB	7378	DC	P-O3'-C3'	7.37	128.54	119.70
396	GX	22	DC	C6-N1-C2	-7.37	117.35	120.30
438	HD	14	DA	C4'-C3'-C2'	-7.37	96.47	103.10
2	AB	3295	DA	O4'-C1'-C2'	-7.37	100.01	105.90
76	BN	10	DC	P-O3'-C3'	7.37	128.54	119.70
80	BR	12	DT	O4'-C4'-C3'	-7.37	101.55	104.50
1	AA	2018	DC	O4'-C4'-C3'	-7.37	101.55	104.50
2	AB	361	DG	C4'-C3'-C2'	-7.37	96.47	103.10
233	Du	20	DG	O4'-C1'-C2'	-7.37	100.01	105.90
276	Eb	14	DA	O4'-C1'-C2'	-7.37	100.01	105.90
1	AA	5277	DC	O4'-C4'-C3'	-7.36	101.56	104.50
2	AB	523	DG	O4'-C1'-C2'	-7.36	100.01	105.90
138	CN	19	DC	O4'-C4'-C3'	-7.36	101.56	104.50
414	Gp	2	DT	O4'-C1'-C2'	-7.36	100.01	105.90
2	AB	5811	DG	O4'-C4'-C3'	-7.36	101.56	104.50
2	AB	3627	DT	O4'-C4'-C3'	-7.36	101.56	104.50
2	AB	6353	DG	O4'-C1'-C2'	-7.36	100.01	105.90
126	CB	9	DG	O4'-C1'-N9	7.36	113.15	108.00
216	Dd	17	DG	O4'-C1'-C2'	-7.36	100.01	105.90
6	AF	11	DA	N1-C6-N6	-7.36	114.19	118.60
106	Br	18	DG	O4'-C1'-C2'	-7.36	100.01	105.90
262	EN	24	DA	C1'-O4'-C4'	-7.36	102.74	110.10
102	Bn	1	DG	O4'-C1'-C2'	-7.36	100.02	105.90
316	FF	4	DT	O4'-C1'-C2'	-7.36	100.02	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	4300	DC	O4'-C1'-C2'	-7.35	100.02	105.90
378	GF	22	DC	C1'-O4'-C4'	-7.35	102.75	110.10
26	AZ	25	DC	O4'-C4'-C3'	-7.35	101.56	104.50
1	AA	6998	DT	O4'-C4'-C3'	-7.35	101.56	104.50
8	AH	6	DT	O4'-C4'-C3'	-7.35	101.56	104.50
289	Eo	19	DA	O4'-C1'-C2'	-7.35	100.02	105.90
84	BV	12	DG	P-O3'-C3'	7.35	128.52	119.70
2	AB	7210	DG	O4'-C1'-C2'	-7.34	100.02	105.90
74	BL	23	DC	C1'-O4'-C4'	-7.34	102.76	110.10
341	Fe	30	DC	O4'-C1'-C2'	-7.34	100.03	105.90
450	HP	8	DG	O4'-C1'-C2'	-7.34	100.03	105.90
1	AA	6631	DG	O4'-C1'-C2'	-7.34	100.03	105.90
2	AB	4582	DC	P-O3'-C3'	7.34	128.51	119.70
17	AQ	27	DG	O4'-C1'-C2'	-7.34	100.03	105.90
390	GR	16	DG	O4'-C1'-C2'	-7.34	100.03	105.90
2	AB	5390	DG	O4'-C1'-N9	7.34	113.14	108.00
2	AB	6172	DC	O4'-C1'-C2'	-7.34	100.03	105.90
2	AB	7457	DG	P-O3'-C3'	7.34	128.51	119.70
288	En	10	DG	O4'-C1'-C2'	-7.34	100.03	105.90
426	G1	17	DT	C4'-C3'-C2'	-7.34	96.49	103.10
1	AA	5959	DA	O4'-C1'-C2'	-7.34	100.03	105.90
101	Bm	41	DC	C4'-C3'-C2'	-7.34	96.50	103.10
183	C6	21	DA	O4'-C1'-C2'	-7.34	100.03	105.90
26	AZ	20	DC	O4'-C1'-C2'	-7.33	100.03	105.90
192	DF	31	DA	P-O3'-C3'	7.33	128.50	119.70
2	AB	4431	DA	O4'-C4'-C3'	-7.33	101.57	104.50
155	Ce	28	DT	C6-C5-C7	7.33	127.30	122.90
9	AI	19	DC	O4'-C1'-C2'	-7.33	100.04	105.90
443	HI	17	DT	O4'-C1'-C2'	-7.33	100.04	105.90
1	AA	6458	DG	C1'-O4'-C4'	-7.33	102.77	110.10
2	AB	3806	DG	O4'-C1'-C2'	-7.33	100.04	105.90
75	BM	10	DT	O4'-C1'-C2'	-7.33	100.04	105.90
262	EN	23	DC	O4'-C1'-C2'	-7.33	100.04	105.90
1	AA	3116	DG	O4'-C4'-C3'	-7.32	101.57	104.50
2	AB	1142	DG	O4'-C4'-C3'	-7.32	101.57	104.50
116	B1	31	DG	O4'-C4'-C3'	-7.32	101.57	104.50
293	Es	3	DG	O4'-C1'-C2'	-7.32	100.04	105.90
1	AA	7408	DT	C4'-C3'-C2'	-7.32	96.51	103.10
1	AA	1096	DA	N1-C6-N6	-7.32	114.21	118.60
251	EC	31	DT	O4'-C4'-C3'	-7.32	101.57	104.50
1	AA	4864	DG	O4'-C1'-C2'	-7.32	100.05	105.90
2	AB	2644	DG	O4'-C1'-C2'	-7.32	100.05	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
397	GY	26	DG	O4'-C1'-C2'	-7.32	100.05	105.90
48	Av	18	DC	O4'-C1'-C2'	-7.31	100.05	105.90
1	AA	6616	DC	P-O3'-C3'	7.31	128.48	119.70
2	AB	403	DG	P-O3'-C3'	7.31	128.47	119.70
2	AB	1994	DG	O4'-C1'-C2'	-7.31	100.05	105.90
2	AB	7537	DG	O4'-C1'-C2'	-7.31	100.05	105.90
130	CF	11	DC	P-O3'-C3'	7.31	128.47	119.70
360	Fx	20	DT	O4'-C4'-C3'	-7.31	101.58	104.50
1	AA	7349	DG	C1'-O4'-C4'	-7.31	102.79	110.10
2	AB	65	DA	O4'-C1'-C2'	-7.31	100.05	105.90
2	AB	3889	DA	O4'-C1'-C2'	-7.31	100.05	105.90
2	AB	471	DA	O4'-C1'-C2'	-7.31	100.05	105.90
263	EO	24	DT	O4'-C1'-C2'	-7.31	100.05	105.90
2	AB	5390	DG	O4'-C1'-C2'	-7.31	100.06	105.90
321	FK	16	DC	P-O3'-C3'	7.31	128.47	119.70
1	AA	4228	DA	O4'-C1'-C2'	-7.30	100.06	105.90
208	DV	23	DG	O4'-C1'-C2'	-7.30	100.06	105.90
360	Fx	24	DT	O4'-C4'-C3'	-7.30	101.58	104.50
1	AA	947	DT	C4'-C3'-C2'	-7.30	96.53	103.10
2	AB	918	DG	O4'-C1'-C2'	-7.30	100.06	105.90
63	BA	44	DT	O4'-C4'-C3'	-7.30	101.58	104.50
141	CQ	24	DG	C1'-O4'-C4'	-7.30	102.80	110.10
1	AA	4546	DA	O4'-C1'-C2'	-7.30	100.06	105.90
2	AB	653	DA	O4'-C1'-C2'	-7.30	100.06	105.90
28	Ab	16	DG	O4'-C4'-C3'	-7.30	101.58	104.50
363	F0	2	DA	C1'-O4'-C4'	-7.30	102.80	110.10
2	AB	3011	DG	O4'-C1'-C2'	-7.30	100.06	105.90
2	AB	5412	DA	O4'-C4'-C3'	-7.30	101.58	104.50
2	AB	5691	DC	O4'-C1'-N1	7.30	113.11	108.00
22	AV	13	DA	O4'-C4'-C3'	-7.30	101.58	104.50
36	Aj	12	DG	O4'-C4'-C3'	-7.30	101.58	104.50
96	Bh	22	DG	O4'-C4'-C3'	-7.30	101.58	104.50
392	GT	8	DG	O4'-C4'-C3'	-7.30	101.58	104.50
1	AA	7349	DG	O4'-C1'-C2'	-7.29	100.06	105.90
2	AB	6418	DC	C1'-O4'-C4'	-7.29	102.81	110.10
6	AF	50	DT	O4'-C1'-C2'	-7.29	100.06	105.90
28	Ab	30	DT	P-O3'-C3'	7.29	128.45	119.70
412	Gn	10	DG	O4'-C1'-C2'	-7.29	100.07	105.90
1	AA	3347	DA	O4'-C1'-C2'	-7.29	100.07	105.90
2	AB	5412	DA	C4'-C3'-C2'	-7.29	96.54	103.10
50	Ax	44	DT	O4'-C4'-C3'	-7.29	101.58	104.50
248	D9	16	DA	O4'-C1'-C2'	-7.29	100.07	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
242	D3	16	DA	N1-C6-N6	-7.29	114.23	118.60
1	AA	2534	DC	O4'-C1'-C2'	-7.29	100.07	105.90
35	Ai	39	DG	O4'-C1'-C2'	-7.29	100.07	105.90
156	Cf	2	DA	N1-C6-N6	-7.29	114.23	118.60
1	AA	7257	DG	O4'-C1'-C2'	-7.29	100.07	105.90
1	AA	7305	DA	O4'-C4'-C3'	-7.29	101.59	104.50
414	Gp	23	DG	O4'-C1'-C2'	-7.28	100.07	105.90
1	AA	962	DG	O4'-C1'-C2'	-7.28	100.08	105.90
1	AA	4845	DA	O4'-C4'-C3'	-7.28	101.59	104.50
2	AB	7048	DG	O4'-C1'-C2'	-7.28	100.08	105.90
348	Fl	8	DG	O4'-C1'-C2'	-7.28	100.08	105.90
1	AA	4026	DG	O4'-C1'-C2'	-7.28	100.08	105.90
1	AA	1729	DT	O4'-C1'-C2'	-7.28	100.08	105.90
1	AA	3268	DA	O4'-C1'-C2'	-7.28	100.08	105.90
1	AA	6577	DC	O4'-C1'-C2'	-7.28	100.08	105.90
2	AB	7234	DG	O4'-C1'-C2'	-7.28	100.08	105.90
14	AN	2	DT	O4'-C4'-C3'	-7.28	101.59	104.50
32	Af	50	DT	O4'-C4'-C3'	-7.28	101.59	104.50
61	A8	3	DT	O4'-C4'-C3'	-7.28	101.59	104.50
286	El	1	DA	O4'-C1'-N9	7.28	113.09	108.00
325	FO	2	DT	O4'-C4'-C3'	-7.28	101.59	104.50
1	AA	4488	DG	O4'-C1'-C2'	-7.28	100.08	105.90
233	Du	4	DT	O4'-C4'-C3'	-7.28	101.59	104.50
1	AA	729	DC	O4'-C1'-C2'	-7.27	100.08	105.90
1	AA	2957	DA	C4'-C3'-C2'	-7.27	96.56	103.10
1	AA	4401	DA	P-O3'-C3'	7.27	128.42	119.70
19	AS	9	DT	O4'-C4'-C3'	-7.27	101.59	104.50
47	Au	43	DT	O4'-C4'-C3'	-7.27	101.59	104.50
127	CC	15	DA	O4'-C1'-C2'	-7.27	100.08	105.90
142	CR	19	DG	O4'-C1'-C2'	-7.27	100.08	105.90
1	AA	5143	DG	O4'-C4'-C3'	-7.27	101.59	104.50
2	AB	3126	DC	P-O3'-C3'	7.27	128.42	119.70
445	HK	17	DT	C1'-O4'-C4'	-7.27	102.83	110.10
1	AA	572	DA	O4'-C1'-C2'	-7.26	100.09	105.90
1	AA	1350	DT	C4'-C3'-C2'	-7.26	96.56	103.10
2	AB	1035	DA	O4'-C1'-C2'	-7.26	100.09	105.90
270	EV	21	DA	C4'-C3'-C2'	-7.26	96.56	103.10
52	Az	19	DA	O4'-C4'-C3'	-7.26	101.60	104.50
1	AA	1230	DG	O4'-C1'-C2'	-7.26	100.09	105.90
1	AA	5569	DG	P-O3'-C3'	7.26	128.41	119.70
10	AJ	50	DT	O4'-C1'-C2'	-7.26	100.09	105.90
18	AR	17	DG	O4'-C1'-C2'	-7.25	100.10	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	Ab	30	DT	O4'-C1'-C2'	-7.25	100.10	105.90
1	AA	2583	DC	O4'-C1'-C2'	-7.25	100.10	105.90
1	AA	7361	DA	C4'-C3'-C2'	-7.25	96.57	103.10
2	AB	6831	DA	C1'-O4'-C4'	-7.25	102.85	110.10
23	AW	38	DC	O4'-C4'-C3'	-7.25	101.60	104.50
363	F0	25	DT	O4'-C4'-C3'	-7.25	101.60	104.50
2	AB	5337	DC	O4'-C1'-C2'	-7.25	100.10	105.90
28	Ab	4	DT	O4'-C4'-C3'	-7.25	101.60	104.50
302	E1	32	DT	O4'-C4'-C3'	-7.25	101.60	104.50
338	Fb	1	DA	O4'-C1'-C2'	-7.25	100.10	105.90
1	AA	1247	DT	O4'-C1'-C2'	-7.25	100.10	105.90
353	Fq	12	DC	P-O3'-C3'	7.24	128.39	119.70
1	AA	2896	DT	O4'-C1'-C2'	-7.24	100.11	105.90
128	CD	9	DA	O4'-C1'-C2'	-7.24	100.11	105.90
1	AA	2540	DC	C6-N1-C2	-7.24	117.40	120.30
2	AB	5165	DT	C4'-C3'-C2'	-7.24	96.58	103.10
77	BO	42	DG	O4'-C4'-C3'	-7.24	101.61	104.50
80	BR	12	DT	C4'-C3'-C2'	-7.24	96.58	103.10
392	GT	2	DG	O4'-C4'-C3'	-7.24	101.61	104.50
1	AA	6195	DC	C4'-C3'-C2'	-7.24	96.59	103.10
2	AB	6131	DT	O4'-C1'-C2'	-7.24	100.11	105.90
154	Cd	30	DT	O4'-C4'-C3'	-7.24	101.61	104.50
1	AA	3889	DA	C1'-O4'-C4'	-7.23	102.87	110.10
1	AA	1335	DC	O4'-C1'-C2'	-7.23	100.11	105.90
74	BL	47	DG	P-O3'-C3'	7.23	128.38	119.70
1	AA	4215	DG	O4'-C1'-C2'	-7.23	100.11	105.90
352	Fp	16	DG	O4'-C1'-C2'	-7.23	100.12	105.90
2	AB	3199	DA	O4'-C1'-C2'	-7.23	100.12	105.90
2	AB	5076	DT	C4'-C3'-C2'	-7.23	96.60	103.10
15	AO	17	DC	O4'-C1'-C2'	-7.23	100.12	105.90
389	GQ	21	DT	O4'-C4'-C3'	-7.23	101.61	104.50
2	AB	7315	DC	O4'-C1'-C2'	-7.23	100.12	105.90
1	AA	4764	DA	C4'-C3'-C2'	-7.22	96.60	103.10
1	AA	6333	DG	O4'-C1'-C2'	-7.22	100.12	105.90
1	AA	6642	DG	C4'-C3'-C2'	-7.22	96.60	103.10
2	AB	3174	DG	O4'-C1'-C2'	-7.22	100.12	105.90
156	Cf	26	DG	O4'-C1'-C2'	-7.22	100.12	105.90
182	C5	2	DA	O4'-C1'-C2'	-7.22	100.12	105.90
206	DT	33	DA	O4'-C1'-C2'	-7.22	100.12	105.90
43	Aq	48	DT	O4'-C4'-C3'	-7.22	101.61	104.50
173	Cw	1	DG	C1'-O4'-C4'	-7.22	102.88	110.10
205	DS	26	DT	C1'-O4'-C4'	-7.22	102.88	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	6286	DA	O4'-C1'-C2'	-7.22	100.12	105.90
1	AA	1489	DG	C1'-O4'-C4'	-7.22	102.88	110.10
1	AA	7303	DG	O4'-C1'-C2'	-7.22	100.12	105.90
2	AB	144	DG	O4'-C1'-C2'	-7.22	100.12	105.90
2	AB	6116	DA	O4'-C1'-C2'	-7.22	100.12	105.90
1	AA	393	DA	C4'-C3'-C2'	-7.21	96.61	103.10
1	AA	1499	DA	O4'-C1'-C2'	-7.21	100.13	105.90
2	AB	3640	DC	P-O3'-C3'	7.21	128.36	119.70
69	BG	30	DC	P-O3'-C3'	7.21	128.36	119.70
381	GI	22	DA	N1-C6-N6	-7.21	114.27	118.60
391	GS	21	DA	O4'-C1'-C2'	-7.21	100.13	105.90
2	AB	6165	DC	O4'-C1'-C2'	-7.21	100.13	105.90
2	AB	5621	DT	O4'-C1'-C2'	-7.21	100.13	105.90
24	AX	28	DG	O4'-C1'-C2'	-7.21	100.13	105.90
29	Ac	11	DG	O4'-C1'-C2'	-7.21	100.13	105.90
113	By	24	DA	O4'-C1'-C2'	-7.21	100.13	105.90
324	FN	23	DG	O4'-C1'-C2'	-7.21	100.13	105.90
289	Eo	17	DA	O4'-C4'-C3'	-7.21	101.62	104.50
2	AB	5380	DC	C1'-O4'-C4'	-7.21	102.89	110.10
8	AH	34	DT	O4'-C1'-C2'	-7.21	100.13	105.90
236	Dx	8	DG	O4'-C1'-C2'	-7.21	100.13	105.90
266	ER	1	DG	C1'-O4'-C4'	-7.21	102.89	110.10
2	AB	4101	DT	C4'-C3'-C2'	-7.21	96.61	103.10
65	BC	31	DC	C1'-O4'-C4'	-7.21	102.89	110.10
367	F4	9	DG	O4'-C4'-C3'	-7.21	101.62	104.50
370	F7	5	DT	O4'-C1'-C2'	-7.21	100.14	105.90
2	AB	2738	DG	C1'-O4'-C4'	-7.20	102.90	110.10
411	Gm	26	DT	O4'-C4'-C3'	-7.20	101.62	104.50
2	AB	4642	DT	O4'-C4'-C3'	-7.20	101.62	104.50
439	HE	1	DA	O4'-C4'-C3'	-7.20	101.62	104.50
1	AA	2539	DA	O4'-C1'-C2'	-7.20	100.14	105.90
2	AB	1488	DG	O4'-C1'-C2'	-7.20	100.14	105.90
115	B0	34	DG	O4'-C1'-C2'	-7.20	100.14	105.90
1	AA	3835	DC	P-O3'-C3'	7.20	128.34	119.70
24	AX	23	DC	O4'-C1'-C2'	-7.20	100.14	105.90
243	D4	39	DG	O4'-C1'-C2'	-7.20	100.14	105.90
1	AA	5277	DC	O4'-C1'-C2'	-7.19	100.14	105.90
2	AB	5621	DT	C1'-O4'-C4'	-7.19	102.91	110.10
2	AB	3962	DA	O4'-C1'-C2'	-7.19	100.15	105.90
203	DQ	23	DA	O4'-C4'-C3'	-7.19	101.62	104.50
1	AA	4493	DA	C4'-C3'-C2'	-7.19	96.63	103.10
1	AA	7114	DC	O4'-C4'-C3'	-7.19	101.62	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	6416	DG	O4'-C1'-C2'	-7.19	100.15	105.90
79	BQ	34	DG	O4'-C1'-C2'	-7.19	100.15	105.90
117	B2	1	DG	O4'-C4'-C3'	-7.19	101.62	104.50
2	AB	4934	DG	O4'-C1'-C2'	-7.19	100.15	105.90
79	BQ	32	DT	C4'-C3'-C2'	-7.19	96.63	103.10
221	Di	19	DC	P-O3'-C3'	7.19	128.33	119.70
1	AA	269	DA	P-O3'-C3'	7.19	128.32	119.70
1	AA	3110	DA	O4'-C1'-C2'	-7.18	100.15	105.90
225	Dm	7	DA	O4'-C1'-C2'	-7.18	100.15	105.90
23	AW	25	DT	P-O3'-C3'	7.18	128.32	119.70
2	AB	7021	DG	O4'-C1'-C2'	-7.18	100.16	105.90
1	AA	7454	DG	O4'-C1'-C2'	-7.18	100.16	105.90
2	AB	37	DC	C4'-C3'-C2'	-7.18	96.64	103.10
2	AB	5776	DG	O4'-C1'-C2'	-7.18	100.16	105.90
325	FO	11	DA	O4'-C1'-C2'	-7.18	100.16	105.90
449	HO	3	DG	P-O3'-C3'	7.18	128.31	119.70
2	AB	5163	DG	C4'-C3'-C2'	-7.17	96.64	103.10
57	A4	48	DT	O4'-C4'-C3'	-7.17	101.63	104.50
1	AA	5674	DG	O4'-C1'-C2'	-7.17	100.16	105.90
1	AA	7315	DG	P-O3'-C3'	7.17	128.31	119.70
2	AB	2356	DG	O4'-C1'-C2'	-7.17	100.16	105.90
15	AO	24	DG	O4'-C1'-C2'	-7.17	100.16	105.90
358	Fv	24	DT	O4'-C4'-C3'	-7.17	101.63	104.50
1	AA	842	DT	O4'-C1'-C2'	-7.17	100.16	105.90
2	AB	6083	DA	O4'-C1'-C2'	-7.17	100.16	105.90
1	AA	6787	DG	O4'-C4'-C3'	-7.17	101.63	104.50
46	At	48	DT	O4'-C4'-C3'	-7.17	101.63	104.50
48	Av	15	DT	C1'-O4'-C4'	-7.17	102.93	110.10
1	AA	1673	DT	O4'-C1'-C2'	-7.17	100.17	105.90
2	AB	5734	DC	O4'-C1'-C2'	-7.17	100.17	105.90
2	AB	6131	DT	P-O3'-C3'	7.17	128.30	119.70
2	AB	7091	DG	O4'-C4'-C3'	-7.17	101.63	104.50
2	AB	7166	DT	O4'-C4'-C3'	-7.17	101.63	104.50
271	EW	9	DC	O4'-C1'-N1	7.17	113.02	108.00
1	AA	4126	DT	C4'-C3'-C2'	-7.16	96.65	103.10
32	Af	37	DG	O4'-C1'-C2'	-7.16	100.17	105.90
385	GM	21	DC	O4'-C1'-C2'	-7.16	100.17	105.90
449	HO	6	DG	O4'-C1'-C2'	-7.16	100.17	105.90
389	GQ	12	DC	P-O3'-C3'	7.16	128.29	119.70
1	AA	2978	DG	O4'-C1'-C2'	-7.16	100.17	105.90
1	AA	5826	DG	O4'-C4'-C3'	-7.16	101.64	104.50
1	AA	7489	DT	O4'-C1'-C2'	-7.16	100.17	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	A2	39	DC	O4'-C1'-C2'	-7.16	100.17	105.90
73	BK	37	DT	P-O3'-C3'	7.16	128.29	119.70
169	Cs	5	DG	O4'-C1'-C2'	-7.16	100.17	105.90
207	DU	19	DT	O4'-C4'-C3'	-7.16	101.64	104.50
1	AA	2472	DG	O4'-C1'-C2'	-7.16	100.17	105.90
1	AA	5418	DA	O4'-C1'-C2'	-7.16	100.17	105.90
1	AA	3471	DG	O4'-C4'-C3'	-7.15	101.64	104.50
2	AB	6419	DG	P-O3'-C3'	7.15	128.28	119.70
2	AB	7510	DA	C4'-C3'-C2'	-7.15	96.66	103.10
91	Bc	14	DG	O4'-C1'-N9	7.15	113.01	108.00
1	AA	4270	DG	P-O3'-C3'	7.15	128.28	119.70
2	AB	447	DG	C4'-C3'-C2'	-7.15	96.66	103.10
2	AB	1553	DC	O4'-C4'-C3'	-7.15	101.64	104.50
2	AB	6432	DA	O4'-C1'-C2'	-7.15	100.18	105.90
2	AB	7066	DA	O4'-C1'-C2'	-7.15	100.18	105.90
1	AA	6274	DG	O4'-C4'-C3'	-7.15	101.64	104.50
8	AH	20	DG	C1'-O4'-C4'	-7.15	102.95	110.10
2	AB	3976	DT	C4'-C3'-C2'	-7.15	96.67	103.10
241	D2	8	DC	P-O3'-C3'	7.15	128.28	119.70
318	FH	29	DT	O4'-C4'-C3'	-7.15	101.64	104.50
2	AB	4781	DC	C4'-C3'-C2'	-7.14	96.67	103.10
20	AT	32	DG	O4'-C1'-C2'	-7.14	100.19	105.90
229	Dq	30	DG	O4'-C1'-N9	7.14	113.00	108.00
329	FS	1	DT	C1'-O4'-C4'	-7.14	102.95	110.10
67	BE	24	DA	C4'-C3'-C2'	-7.14	96.67	103.10
425	G0	1	DT	O4'-C1'-C2'	-7.14	100.19	105.90
2	AB	802	DC	O4'-C1'-C2'	-7.14	100.19	105.90
2	AB	1516	DT	O4'-C4'-C3'	-7.14	101.64	104.50
35	Ai	28	DG	C1'-O4'-C4'	-7.14	102.96	110.10
61	A8	8	DT	O4'-C4'-C3'	-7.14	101.64	104.50
1	AA	6344	DA	C4'-C3'-C2'	-7.14	96.67	103.10
2	AB	4876	DA	O4'-C4'-C3'	-7.14	101.64	104.50
2	AB	7063	DG	C4'-C3'-C2'	-7.14	96.67	103.10
4	AD	32	DG	C1'-O4'-C4'	-7.14	102.96	110.10
68	BF	29	DG	O4'-C1'-C2'	-7.14	100.19	105.90
368	F5	20	DT	O4'-C4'-C3'	-7.14	101.64	104.50
2	AB	7169	DA	C1'-O4'-C4'	-7.14	102.96	110.10
389	GQ	3	DT	C1'-O4'-C4'	-7.14	102.96	110.10
1	AA	4776	DG	O4'-C1'-C2'	-7.14	100.19	105.90
1	AA	6844	DC	O4'-C1'-C2'	-7.14	100.19	105.90
263	EO	26	DT	O4'-C4'-C3'	-7.14	101.64	104.50
252	ED	24	DG	O4'-C4'-C3'	-7.13	101.65	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	4215	DT	C4'-C3'-C2'	-7.13	96.68	103.10
307	E6	30	DT	C6-C5-C7	7.13	127.18	122.90
296	Ev	1	DC	C1'-O4'-C4'	-7.13	102.97	110.10
1	AA	7496	DG	C4'-C3'-C2'	-7.13	96.68	103.10
347	Fk	8	DT	O4'-C4'-C3'	-7.13	101.65	104.50
1	AA	4632	DG	P-O3'-C3'	7.13	128.25	119.70
1	AA	6470	DA	O4'-C1'-C2'	-7.13	100.20	105.90
2	AB	1073	DC	P-O3'-C3'	7.13	128.25	119.70
145	CU	34	DC	O4'-C1'-C2'	-7.13	100.20	105.90
278	Ed	30	DG	O4'-C1'-C2'	-7.13	100.20	105.90
1	AA	5549	DG	C1'-O4'-C4'	-7.12	102.97	110.10
1	AA	4097	DA	O4'-C1'-C2'	-7.12	100.20	105.90
1	AA	5677	DA	O4'-C1'-C2'	-7.12	100.20	105.90
2	AB	7505	DA	O4'-C1'-N9	7.12	112.99	108.00
1	AA	6596	DG	O4'-C1'-C2'	-7.12	100.20	105.90
2	AB	5283	DT	C4'-C3'-C2'	-7.12	96.69	103.10
1	AA	6304	DT	P-O3'-C3'	7.12	128.24	119.70
13	AM	10	DG	C4'-C3'-C2'	-7.12	96.69	103.10
116	B1	38	DA	O4'-C1'-C2'	-7.12	100.20	105.90
145	CU	19	DG	O4'-C1'-C2'	-7.12	100.20	105.90
1	AA	2079	DC	C6-N1-C1'	-7.12	112.26	120.80
1	AA	4038	DA	P-O3'-C3'	7.12	128.24	119.70
2	AB	5189	DG	C1'-O4'-C4'	-7.12	102.98	110.10
2	AB	5130	DT	C1'-O4'-C4'	-7.12	102.98	110.10
1	AA	5481	DC	O4'-C1'-C2'	-7.11	100.21	105.90
88	BZ	43	DC	C1'-O4'-C4'	-7.11	102.99	110.10
303	E2	23	DG	O4'-C1'-C2'	-7.11	100.21	105.90
2	AB	5669	DT	P-O3'-C3'	7.11	128.24	119.70
1	AA	1024	DG	O4'-C4'-C3'	-7.11	101.66	104.50
1	AA	4594	DC	C1'-O4'-C4'	-7.11	102.99	110.10
2	AB	3976	DT	O4'-C4'-C3'	-7.11	101.66	104.50
26	AZ	5	DT	O4'-C4'-C3'	-7.11	101.66	104.50
421	Gw	6	DT	O4'-C4'-C3'	-7.11	101.66	104.50
1	AA	555	DA	O4'-C1'-C2'	-7.11	100.21	105.90
24	AX	18	DG	O4'-C1'-C2'	-7.11	100.21	105.90
1	AA	1819	DG	O4'-C1'-N9	7.11	112.98	108.00
1	AA	2474	DC	C1'-O4'-C4'	-7.11	102.99	110.10
1	AA	2696	DC	O4'-C1'-C2'	-7.11	100.21	105.90
2	AB	4492	DG	O4'-C1'-C2'	-7.11	100.22	105.90
212	DZ	16	DG	O4'-C1'-N9	7.11	112.98	108.00
1	AA	6849	DG	O4'-C1'-C2'	-7.11	100.22	105.90
2	AB	3638	DG	C4'-C3'-C2'	-7.10	96.71	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
73	BK	25	DG	O4'-C1'-C2'	-7.10	100.22	105.90
272	EX	14	DT	C4'-C3'-C2'	-7.10	96.71	103.10
2	AB	3675	DA	O4'-C4'-C3'	-7.10	101.66	104.50
2	AB	4795	DA	C1'-O4'-C4'	-7.10	103.00	110.10
2	AB	4868	DC	O4'-C1'-C2'	-7.10	100.22	105.90
2	AB	5147	DA	O4'-C1'-C2'	-7.10	100.22	105.90
7	AG	45	DT	O4'-C4'-C3'	-7.10	101.66	104.50
48	Av	9	DT	O4'-C4'-C3'	-7.10	101.66	104.50
261	EM	7	DA	O4'-C1'-N9	7.10	112.97	108.00
1	AA	3761	DG	O4'-C1'-C2'	-7.10	100.22	105.90
109	Bu	37	DC	O4'-C1'-C2'	-7.10	100.22	105.90
2	AB	5571	DT	C4'-C3'-C2'	-7.09	96.71	103.10
213	Da	9	DC	O4'-C1'-C2'	-7.09	100.22	105.90
1	AA	621	DC	P-O3'-C3'	7.09	128.21	119.70
80	BR	16	DG	O4'-C1'-C2'	-7.09	100.23	105.90
1	AA	3732	DG	C1'-O4'-C4'	-7.09	103.01	110.10
173	Cw	1	DG	O4'-C1'-C2'	-7.09	100.23	105.90
1	AA	4105	DT	C6-C5-C7	7.09	127.15	122.90
79	BQ	37	DA	O4'-C1'-N9	7.09	112.96	108.00
91	Bc	5	DG	O4'-C4'-C3'	-7.09	101.67	104.50
101	Bm	17	DA	O4'-C4'-C3'	-7.09	101.67	104.50
141	CQ	23	DG	O4'-C1'-C2'	-7.09	100.23	105.90
19	AS	44	DT	O4'-C4'-C3'	-7.08	101.67	104.50
133	CI	1	DG	O4'-C1'-C2'	-7.08	100.23	105.90
2	AB	1267	DG	C1'-O4'-C4'	-7.08	103.02	110.10
14	AN	6	DT	O4'-C4'-C3'	-7.08	101.67	104.50
317	FG	4	DG	O4'-C1'-C2'	-7.08	100.23	105.90
1	AA	1595	DT	O4'-C1'-C2'	-7.08	100.23	105.90
1	AA	6016	DG	O4'-C1'-C2'	-7.08	100.23	105.90
2	AB	567	DT	O4'-C4'-C3'	-7.08	101.67	104.50
207	DU	23	DG	O4'-C1'-C2'	-7.08	100.23	105.90
2	AB	2815	DC	O4'-C1'-N1	7.08	112.96	108.00
141	CQ	1	DG	O4'-C1'-C2'	-7.08	100.24	105.90
1	AA	3197	DG	O4'-C1'-C2'	-7.08	100.24	105.90
1	AA	6550	DC	C4'-C3'-C2'	-7.08	96.73	103.10
2	AB	7057	DT	O4'-C1'-C2'	-7.08	100.24	105.90
21	AU	47	DT	O4'-C4'-C3'	-7.08	101.67	104.50
340	Fd	32	DG	O4'-C1'-C2'	-7.08	100.24	105.90
2	AB	1217	DG	O4'-C1'-N9	7.08	112.95	108.00
392	GT	2	DG	O4'-C1'-C2'	-7.08	100.24	105.90
1	AA	5470	DA	O4'-C1'-C2'	-7.07	100.24	105.90
296	Ev	8	DC	O4'-C4'-C3'	-7.07	101.67	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	5134	DG	C1'-O4'-C4'	-7.07	103.03	110.10
71	BI	23	DA	O4'-C1'-C2'	-7.07	100.24	105.90
246	D7	7	DT	O4'-C4'-C3'	-7.07	101.67	104.50
94	Bf	6	DG	O4'-C1'-C2'	-7.07	100.25	105.90
2	AB	1912	DC	O4'-C4'-C3'	-7.07	101.67	104.50
13	AM	10	DG	O4'-C4'-C3'	-7.07	101.67	104.50
84	BV	27	DT	C1'-O4'-C4'	-7.07	103.03	110.10
248	D9	35	DT	P-O3'-C3'	7.07	128.18	119.70
1	AA	6768	DG	C4'-C3'-C2'	-7.06	96.74	103.10
416	Gr	11	DA	O4'-C1'-C2'	-7.06	100.25	105.90
1	AA	4513	DC	C1'-O4'-C4'	-7.06	103.04	110.10
1	AA	4574	DC	O4'-C1'-C2'	-7.06	100.25	105.90
2	AB	2574	DT	P-O3'-C3'	7.06	128.18	119.70
2	AB	6418	DC	O4'-C1'-N1	7.06	112.94	108.00
113	By	17	DG	C4'-C3'-C2'	-7.06	96.75	103.10
1	AA	6984	DG	C4'-C3'-C2'	-7.06	96.75	103.10
30	Ad	32	DA	O4'-C1'-C2'	-7.06	100.25	105.90
179	C2	15	DG	O4'-C1'-C2'	-7.06	100.25	105.90
2	AB	4417	DG	O4'-C1'-C2'	-7.06	100.25	105.90
1	AA	1160	DC	O4'-C4'-C3'	-7.06	101.68	104.50
344	Fh	8	DC	P-O3'-C3'	7.06	128.17	119.70
2	AB	1224	DC	C1'-O4'-C4'	-7.05	103.05	110.10
378	GF	22	DC	O4'-C4'-C3'	-7.05	101.68	104.50
1	AA	3532	DA	C4'-C3'-C2'	-7.05	96.75	103.10
443	HI	2	DG	O4'-C1'-C2'	-7.05	100.26	105.90
1	AA	1424	DT	O4'-C1'-C2'	-7.05	100.26	105.90
2	AB	4461	DT	O4'-C1'-C2'	-7.05	100.26	105.90
162	Cl	1	DC	C1'-O4'-C4'	-7.05	103.05	110.10
269	EU	28	DG	P-O3'-C3'	7.05	128.16	119.70
1	AA	5678	DC	O4'-C1'-C2'	-7.05	100.26	105.90
260	EL	20	DA	N1-C6-N6	-7.05	114.37	118.60
409	Gk	6	DA	O4'-C1'-C2'	-7.05	100.26	105.90
25	AY	19	DA	O4'-C1'-C2'	-7.05	100.26	105.90
2	AB	1267	DG	O4'-C1'-N9	7.05	112.93	108.00
2	AB	2212	DG	O4'-C1'-C2'	-7.05	100.26	105.90
75	BM	14	DG	C4'-C3'-C2'	-7.05	96.76	103.10
2	AB	6922	DA	O4'-C1'-N9	7.04	112.93	108.00
22	AV	5	DT	O4'-C4'-C3'	-7.04	101.68	104.50
152	Cb	39	DC	O4'-C1'-C2'	-7.04	100.26	105.90
244	D5	32	DG	O4'-C1'-C2'	-7.04	100.26	105.90
2	AB	4198	DC	O4'-C1'-C2'	-7.04	100.27	105.90
1	AA	6326	DA	O4'-C4'-C3'	-7.04	101.68	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
73	BK	33	DC	O4'-C1'-C2'	-7.04	100.27	105.90
191	DE	24	DC	C1'-O4'-C4'	-7.04	103.06	110.10
388	GP	14	DG	O4'-C1'-C2'	-7.04	100.27	105.90
55	A2	9	DT	C4'-C3'-C2'	-7.04	96.76	103.10
48	Av	19	DA	O4'-C1'-C2'	-7.04	100.27	105.90
375	GC	3	DA	O4'-C4'-C3'	-7.04	101.69	104.50
20	AT	28	DC	O4'-C1'-C2'	-7.04	100.27	105.90
1	AA	971	DA	P-O3'-C3'	7.04	128.14	119.70
1	AA	2311	DC	P-O3'-C3'	7.04	128.14	119.70
2	AB	1611	DG	O4'-C1'-N9	7.04	112.92	108.00
2	AB	4999	DG	P-O3'-C3'	7.04	128.14	119.70
180	C3	1	DC	C6-N1-C1'	-7.04	112.36	120.80
1	AA	3656	DG	O4'-C1'-C2'	-7.03	100.27	105.90
1	AA	5068	DG	O4'-C1'-C2'	-7.03	100.27	105.90
2	AB	2395	DG	O4'-C4'-C3'	-7.03	101.69	104.50
2	AB	5637	DT	O4'-C1'-C2'	-7.03	100.27	105.90
2	AB	6581	DG	P-O3'-C3'	7.03	128.14	119.70
2	AB	7486	DT	O4'-C1'-C2'	-7.03	100.27	105.90
271	EW	1	DC	O4'-C1'-C2'	-7.03	100.27	105.90
288	En	11	DG	O4'-C1'-C2'	-7.03	100.27	105.90
451	HQ	10	DT	O4'-C4'-C3'	-7.03	101.69	104.50
1	AA	860	DT	C1'-O4'-C4'	-7.03	103.07	110.10
2	AB	1553	DC	C4'-C3'-C2'	-7.03	96.77	103.10
246	D7	29	DG	O4'-C1'-C2'	-7.03	100.28	105.90
2	AB	283	DG	C1'-O4'-C4'	-7.03	103.07	110.10
2	AB	3350	DC	O4'-C1'-C2'	-7.03	100.28	105.90
2	AB	4223	DG	O4'-C1'-C2'	-7.03	100.28	105.90
164	Cn	24	DT	P-O3'-C3'	7.03	128.14	119.70
351	Fo	13	DC	O4'-C1'-C2'	-7.03	100.28	105.90
380	GH	27	DT	O4'-C4'-C3'	-7.03	101.69	104.50
2	AB	2508	DT	C4'-C3'-C2'	-7.03	96.77	103.10
17	AQ	46	DT	O4'-C4'-C3'	-7.03	101.69	104.50
280	Ef	24	DG	O4'-C1'-C2'	-7.03	100.28	105.90
1	AA	2535	DC	O4'-C1'-N1	7.03	112.92	108.00
2	AB	1159	DT	O4'-C1'-C2'	-7.03	100.28	105.90
2	AB	2650	DT	C4'-C3'-C2'	-7.03	96.78	103.10
233	Du	5	DT	O4'-C4'-C3'	-7.03	101.69	104.50
242	D3	11	DG	O4'-C1'-C2'	-7.03	100.28	105.90
253	EE	8	DC	C1'-O4'-C4'	-7.03	103.07	110.10
1	AA	2426	DC	C1'-O4'-C4'	-7.03	103.08	110.10
1	AA	2555	DA	P-O3'-C3'	7.03	128.13	119.70
272	EX	23	DA	C4'-C3'-C2'	-7.03	96.78	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
312	FB	17	DG	C1'-O4'-C4'	-7.03	103.07	110.10
1	AA	717	DA	C4'-C3'-C2'	-7.02	96.78	103.10
1	AA	844	DC	C1'-O4'-C4'	-7.02	103.08	110.10
2	AB	542	DT	O4'-C4'-C3'	-7.02	101.69	104.50
215	Dc	30	DG	O4'-C1'-C2'	-7.02	100.28	105.90
417	Gs	13	DG	O4'-C1'-C2'	-7.02	100.28	105.90
1	AA	4983	DA	C4'-C3'-C2'	-7.02	96.78	103.10
2	AB	2709	DC	C4'-C3'-C2'	-7.02	96.78	103.10
2	AB	5687	DT	C6-C5-C7	-7.02	118.69	122.90
1	AA	1372	DC	O4'-C1'-N1	7.02	112.92	108.00
208	DV	12	DC	O4'-C4'-C3'	-7.02	101.69	104.50
399	Ga	12	DC	O4'-C4'-C3'	-7.02	101.69	104.50
333	FW	7	DT	O4'-C4'-C3'	-7.02	101.69	104.50
10	AJ	44	DT	O4'-C4'-C3'	-7.02	101.69	104.50
206	DT	28	DT	C1'-O4'-C4'	-7.02	103.08	110.10
1	AA	4581	DT	C4'-C3'-C2'	-7.01	96.79	103.10
2	AB	6922	DA	O4'-C1'-C2'	-7.01	100.29	105.90
189	DC	2	DT	C1'-O4'-C4'	-7.01	103.09	110.10
2	AB	6797	DC	P-O3'-C3'	7.01	128.12	119.70
136	CL	25	DC	O4'-C1'-N1	7.01	112.91	108.00
151	Ca	37	DC	P-O3'-C3'	7.01	128.12	119.70
387	GO	9	DA	C4'-C3'-C2'	-7.01	96.79	103.10
2	AB	3513	DG	O4'-C1'-C2'	-7.01	100.29	105.90
149	CY	16	DT	C4'-C3'-C2'	-7.01	96.79	103.10
1	AA	4965	DA	C4'-C3'-C2'	-7.01	96.79	103.10
1	AA	5910	DG	C4'-C3'-C2'	-7.01	96.79	103.10
2	AB	1583	DT	C1'-O4'-C4'	-7.01	103.09	110.10
391	GS	21	DA	O4'-C4'-C3'	-7.01	101.70	104.50
427	G2	18	DT	O4'-C4'-C3'	-7.01	101.70	104.50
1	AA	2184	DG	C1'-O4'-C4'	-7.01	103.09	110.10
1	AA	6153	DC	O4'-C4'-C3'	-7.01	101.70	104.50
1	AA	309	DT	P-O3'-C3'	7.01	128.11	119.70
1	AA	5350	DA	O4'-C1'-C2'	-7.01	100.30	105.90
89	Ba	2	DG	O4'-C1'-C2'	-7.01	100.30	105.90
1	AA	293	DC	O4'-C1'-C2'	-7.00	100.30	105.90
401	Gc	3	DT	O4'-C4'-C3'	-7.00	101.70	104.50
1	AA	4699	DG	C4'-C3'-C2'	-7.00	96.80	103.10
1	AA	6878	DG	O4'-C1'-C2'	-7.00	100.30	105.90
2	AB	219	DT	C4'-C3'-C2'	-7.00	96.80	103.10
2	AB	5548	DG	O4'-C1'-C2'	-7.00	100.30	105.90
141	CQ	11	DA	O4'-C1'-C2'	-7.00	100.30	105.90
1	AA	4619	DA	O4'-C4'-C3'	-7.00	101.70	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	3675	DA	C1'-O4'-C4'	-7.00	103.10	110.10
242	D3	22	DA	O4'-C1'-C2'	-7.00	100.30	105.90
1	AA	3824	DG	C4'-C3'-C2'	-7.00	96.80	103.10
2	AB	2608	DT	O4'-C1'-C2'	-7.00	100.30	105.90
2	AB	2987	DA	P-O3'-C3'	7.00	128.10	119.70
2	AB	5505	DC	O4'-C1'-C2'	-7.00	100.30	105.90
36	Aj	1	DT	O4'-C1'-C2'	-7.00	100.30	105.90
118	B3	1	DG	O4'-C4'-C3'	-7.00	101.70	104.50
153	Cc	30	DT	O4'-C1'-C2'	-7.00	100.30	105.90
285	Ek	34	DT	O4'-C4'-C3'	-7.00	101.70	104.50
1	AA	5090	DA	P-O3'-C3'	7.00	128.09	119.70
1	AA	6108	DT	P-O3'-C3'	7.00	128.09	119.70
333	FW	5	DA	O4'-C1'-C2'	-7.00	100.30	105.90
2	AB	2495	DA	O4'-C4'-C3'	-6.99	101.70	104.50
2	AB	3528	DA	O4'-C1'-C2'	-6.99	100.31	105.90
2	AB	6228	DC	O4'-C1'-C2'	-6.99	100.31	105.90
52	Az	25	DA	O4'-C1'-C2'	-6.99	100.30	105.90
2	AB	5501	DC	O4'-C1'-N1	6.99	112.89	108.00
19	AS	6	DT	O4'-C4'-C3'	-6.99	101.70	104.50
74	BL	15	DA	C1'-O4'-C4'	-6.99	103.11	110.10
203	DQ	32	DG	P-O3'-C3'	6.99	128.09	119.70
1	AA	3437	DG	P-O3'-C3'	6.99	128.09	119.70
2	AB	20	DC	P-O3'-C3'	6.99	128.09	119.70
2	AB	3480	DC	C1'-O4'-C4'	-6.99	103.11	110.10
303	E2	4	DG	C1'-O4'-C4'	-6.99	103.11	110.10
334	FX	26	DG	O4'-C1'-C2'	-6.99	100.31	105.90
2	AB	2825	DC	O4'-C4'-C3'	-6.99	101.71	104.50
2	AB	4029	DG	O4'-C1'-C2'	-6.99	100.31	105.90
121	B6	11	DG	O4'-C1'-C2'	-6.99	100.31	105.90
318	FH	17	DA	O4'-C1'-C2'	-6.99	100.31	105.90
1	AA	540	DA	O4'-C1'-C2'	-6.98	100.31	105.90
32	Af	3	DT	O4'-C4'-C3'	-6.98	101.71	104.50
299	Ey	11	DA	O4'-C1'-C2'	-6.98	100.31	105.90
1	AA	1819	DG	C1'-O4'-C4'	-6.98	103.12	110.10
84	BV	16	DA	P-O3'-C3'	6.98	128.08	119.70
235	Dw	1	DT	O4'-C4'-C3'	-6.98	101.71	104.50
235	Dw	10	DG	O4'-C1'-C2'	-6.98	100.31	105.90
1	AA	2583	DC	C1'-O4'-C4'	-6.98	103.12	110.10
1	AA	4071	DG	C1'-O4'-C4'	-6.98	103.12	110.10
8	AH	4	DT	O4'-C4'-C3'	-6.98	101.71	104.50
25	AY	4	DT	O4'-C4'-C3'	-6.98	101.71	104.50
84	BV	27	DT	O4'-C1'-C2'	-6.98	100.32	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	5294	DG	O4'-C1'-C2'	-6.98	100.32	105.90
364	F1	26	DG	O4'-C1'-C2'	-6.98	100.32	105.90
2	AB	3480	DC	P-O3'-C3'	6.98	128.07	119.70
382	GJ	7	DA	O4'-C1'-C2'	-6.98	100.32	105.90
1	AA	7558	DG	O4'-C1'-C2'	-6.98	100.32	105.90
109	Bu	37	DC	P-O3'-C3'	6.97	128.07	119.70
1	AA	561	DA	C1'-O4'-C4'	-6.97	103.13	110.10
2	AB	1416	DG	C1'-O4'-C4'	-6.97	103.13	110.10
2	AB	4622	DG	C1'-O4'-C4'	-6.97	103.13	110.10
440	HF	13	DG	O4'-C1'-C2'	-6.97	100.32	105.90
1	AA	7337	DA	P-O3'-C3'	6.97	128.06	119.70
99	Bk	42	DA	O4'-C4'-C3'	-6.97	101.71	104.50
1	AA	1595	DT	P-O3'-C3'	6.97	128.06	119.70
294	Et	16	DA	O4'-C1'-C2'	-6.97	100.33	105.90
2	AB	1784	DG	O4'-C1'-C2'	-6.97	100.33	105.90
2	AB	6931	DC	P-O3'-C3'	6.97	128.06	119.70
37	Ak	3	DT	O4'-C1'-C2'	-6.97	100.33	105.90
2	AB	2940	DT	C4'-C3'-C2'	-6.96	96.83	103.10
206	DT	5	DA	N1-C6-N6	-6.96	114.42	118.60
326	FP	1	DC	C4'-C3'-C2'	-6.96	96.83	103.10
2	AB	1967	DC	P-O3'-C3'	6.96	128.06	119.70
2	AB	6170	DG	O4'-C4'-C3'	-6.96	101.72	104.50
46	At	26	DA	O4'-C1'-C2'	-6.96	100.33	105.90
104	Bp	1	DT	O4'-C4'-C3'	-6.96	101.72	104.50
2	AB	4621	DG	O4'-C4'-C3'	-6.96	101.72	104.50
1	AA	4517	DC	C1'-O4'-C4'	-6.96	103.14	110.10
287	Em	5	DC	O4'-C1'-N1	6.96	112.87	108.00
2	AB	3177	DA	C1'-O4'-C4'	-6.96	103.14	110.10
91	Bc	14	DG	O4'-C1'-C2'	-6.96	100.33	105.90
4	AD	27	DG	P-O3'-C3'	6.96	128.04	119.70
372	F9	1	DA	O4'-C4'-C3'	-6.96	101.72	104.50
276	Eb	29	DC	C6-N1-C2	-6.95	117.52	120.30
368	F5	17	DG	O4'-C1'-C2'	-6.95	100.34	105.90
1	AA	3696	DG	P-O3'-C3'	6.95	128.04	119.70
69	BG	15	DA	O4'-C1'-C2'	-6.95	100.34	105.90
102	Bn	30	DG	O4'-C1'-C2'	-6.95	100.34	105.90
378	GF	26	DT	C4'-C3'-C2'	-6.95	96.84	103.10
2	AB	985	DG	C1'-O4'-C4'	-6.95	103.15	110.10
2	AB	1355	DG	P-O3'-C3'	6.95	128.04	119.70
1	AA	1506	DT	C4'-C3'-C2'	-6.95	96.85	103.10
2	AB	3554	DT	O4'-C1'-C2'	-6.95	100.34	105.90
2	AB	3560	DT	O4'-C1'-C2'	-6.95	100.34	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	4952	DC	O4'-C4'-C3'	-6.95	101.72	104.50
2	AB	7020	DA	O4'-C1'-C2'	-6.95	100.34	105.90
1	AA	1452	DG	P-O3'-C3'	6.94	128.03	119.70
2	AB	725	DT	C1'-O4'-C4'	-6.94	103.16	110.10
341	Fe	23	DG	C1'-O4'-C4'	-6.94	103.16	110.10
1	AA	6829	DG	C1'-O4'-C4'	-6.94	103.16	110.10
2	AB	5428	DA	N1-C6-N6	-6.94	114.44	118.60
1	AA	3247	DT	O4'-C4'-C3'	-6.94	101.72	104.50
2	AB	1497	DG	O4'-C1'-C2'	-6.94	100.35	105.90
2	AB	7090	DG	C4'-C3'-C2'	-6.94	96.86	103.10
14	AN	17	DT	O4'-C1'-C2'	-6.94	100.35	105.90
20	AT	38	DC	C1'-O4'-C4'	-6.94	103.16	110.10
203	DQ	38	DG	O4'-C1'-C2'	-6.94	100.35	105.90
208	DV	14	DT	P-O3'-C3'	6.94	128.02	119.70
2	AB	2717	DA	O4'-C1'-C2'	-6.94	100.35	105.90
2	AB	5400	DG	O4'-C1'-C2'	-6.94	100.35	105.90
161	Ck	36	DA	P-O3'-C3'	6.94	128.02	119.70
1	AA	112	DC	O4'-C1'-C2'	-6.93	100.35	105.90
1	AA	663	DC	O4'-C1'-N1	6.93	112.85	108.00
1	AA	1091	DC	O4'-C1'-C2'	-6.93	100.35	105.90
2	AB	1756	DA	P-O3'-C3'	6.93	128.02	119.70
57	A4	21	DG	O4'-C1'-C2'	-6.93	100.35	105.90
307	E6	30	DT	C4-C5-C7	-6.93	114.84	119.00
428	G3	4	DT	O4'-C4'-C3'	-6.93	101.73	104.50
1	AA	3452	DA	N1-C6-N6	-6.93	114.44	118.60
1	AA	1765	DA	O4'-C1'-C2'	-6.93	100.36	105.90
1	AA	4719	DA	N1-C6-N6	-6.93	114.44	118.60
2	AB	28	DA	P-O3'-C3'	6.93	128.02	119.70
2	AB	567	DT	C4'-C3'-C2'	-6.93	96.86	103.10
2	AB	2349	DG	O4'-C1'-C2'	-6.93	100.36	105.90
2	AB	2832	DA	O4'-C4'-C3'	-6.93	101.73	104.50
60	A7	25	DG	O4'-C1'-C2'	-6.93	100.36	105.90
186	C9	4	DT	O4'-C1'-C2'	-6.93	100.36	105.90
328	FR	10	DG	O4'-C1'-C2'	-6.93	100.36	105.90
1	AA	1126	DA	O4'-C1'-C2'	-6.93	100.36	105.90
1	AA	3510	DA	O4'-C1'-C2'	-6.93	100.36	105.90
2	AB	6433	DT	O4'-C1'-C2'	-6.93	100.36	105.90
192	DF	39	DA	O4'-C1'-C2'	-6.93	100.36	105.90
455	HU	13	DT	C1'-O4'-C4'	-6.93	103.17	110.10
1	AA	5717	DG	O4'-C1'-C2'	-6.92	100.36	105.90
2	AB	2488	DC	O4'-C1'-C2'	-6.92	100.36	105.90
111	Bw	18	DG	O4'-C1'-C2'	-6.92	100.36	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
183	C6	31	DG	O4'-C1'-C2'	-6.92	100.36	105.90
261	EM	30	DG	O4'-C1'-C2'	-6.92	100.36	105.90
420	Gv	9	DG	P-O3'-C3'	6.92	128.01	119.70
1	AA	2307	DT	O4'-C1'-C2'	-6.92	100.36	105.90
13	AM	24	DG	P-O3'-C3'	6.92	128.01	119.70
193	DG	32	DC	O4'-C1'-C2'	-6.92	100.36	105.90
1	AA	5497	DT	O4'-C1'-C2'	-6.92	100.36	105.90
142	CR	33	DT	O4'-C4'-C3'	-6.92	101.73	104.50
378	GF	17	DA	O4'-C4'-C3'	-6.92	101.73	104.50
1	AA	2361	DG	O4'-C1'-N9	6.92	112.84	108.00
1	AA	5329	DA	O4'-C1'-C2'	-6.92	100.36	105.90
1	AA	6216	DT	C1'-O4'-C4'	-6.92	103.18	110.10
2	AB	706	DA	N1-C6-N6	-6.92	114.45	118.60
2	AB	6581	DG	O4'-C1'-C2'	-6.92	100.36	105.90
131	CG	13	DC	O4'-C1'-C2'	-6.92	100.37	105.90
1	AA	7349	DG	O4'-C1'-N9	6.92	112.84	108.00
2	AB	1100	DG	O4'-C1'-C2'	-6.92	100.37	105.90
2	AB	5159	DT	C1'-O4'-C4'	-6.92	103.18	110.10
2	AB	5671	DC	O4'-C4'-C3'	-6.92	101.73	104.50
89	Ba	28	DA	O4'-C1'-C2'	-6.92	100.37	105.90
438	HD	21	DG	O4'-C1'-C2'	-6.92	100.37	105.90
1	AA	236	DA	O4'-C4'-C3'	-6.91	101.73	104.50
1	AA	2683	DT	P-O3'-C3'	6.91	127.99	119.70
2	AB	3211	DA	O4'-C1'-C2'	-6.91	100.37	105.90
378	GF	17	DA	O4'-C1'-C2'	-6.91	100.37	105.90
38	Al	26	DG	O4'-C1'-C2'	-6.91	100.37	105.90
115	B0	33	DC	O4'-C1'-C2'	-6.91	100.37	105.90
261	EM	8	DC	C6-N1-C2	-6.91	117.53	120.30
1	AA	4793	DA	O4'-C4'-C3'	-6.91	101.74	104.50
1	AA	4992	DG	O4'-C1'-C2'	-6.91	100.37	105.90
1	AA	6046	DG	O4'-C1'-C2'	-6.91	100.37	105.90
2	AB	2245	DT	C4'-C3'-C2'	-6.91	96.88	103.10
2	AB	2740	DT	O4'-C4'-C3'	-6.91	101.74	104.50
2	AB	3272	DT	C4'-C3'-C2'	-6.91	96.88	103.10
2	AB	5462	DC	P-O3'-C3'	6.91	127.99	119.70
2	AB	918	DG	C1'-O4'-C4'	-6.91	103.19	110.10
1	AA	5369	DA	P-O3'-C3'	6.91	127.99	119.70
2	AB	3074	DT	O4'-C1'-C2'	-6.91	100.38	105.90
2	AB	5838	DA	N1-C6-N6	-6.91	114.46	118.60
148	CX	30	DG	O4'-C1'-C2'	-6.91	100.38	105.90
197	DK	1	DA	C1'-O4'-C4'	-6.91	103.19	110.10
208	DV	38	DT	C4'-C3'-C2'	-6.91	96.89	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	3381	DG	O4'-C1'-C2'	-6.90	100.38	105.90
2	AB	6278	DA	O4'-C1'-C2'	-6.90	100.38	105.90
309	E8	25	DG	O4'-C1'-C2'	-6.90	100.38	105.90
324	FN	33	DT	O4'-C4'-C3'	-6.90	101.74	104.50
1	AA	5512	DG	O4'-C1'-C2'	-6.90	100.38	105.90
11	AK	42	DT	O4'-C4'-C3'	-6.90	101.74	104.50
119	B4	19	DG	C5-C6-O6	-6.90	124.46	128.60
224	Dl	1	DA	O4'-C1'-C2'	-6.90	100.38	105.90
259	EK	1	DT	O4'-C1'-C2'	-6.90	100.38	105.90
229	Dq	38	DT	O4'-C1'-C2'	-6.90	100.38	105.90
1	AA	515	DA	O4'-C1'-C2'	-6.90	100.38	105.90
1	AA	4669	DG	O4'-C4'-C3'	-6.90	101.74	104.50
351	Fo	21	DT	O4'-C4'-C3'	-6.90	101.74	104.50
2	AB	4876	DA	O4'-C1'-C2'	-6.89	100.39	105.90
2	AB	6756	DG	O4'-C1'-C2'	-6.89	100.39	105.90
340	Fd	32	DG	O4'-C4'-C3'	-6.89	101.74	104.50
2	AB	3443	DT	C1'-O4'-C4'	-6.89	103.21	110.10
1	AA	2340	DA	O4'-C1'-C2'	-6.89	100.39	105.90
2	AB	3941	DT	C4'-C3'-C2'	-6.89	96.90	103.10
18	AR	11	DC	P-O3'-C3'	6.89	127.97	119.70
1	AA	6011	DG	O4'-C4'-C3'	-6.89	101.75	104.50
74	BL	47	DG	O4'-C1'-C2'	-6.89	100.39	105.90
1	AA	332	DC	O4'-C1'-C2'	-6.89	100.39	105.90
1	AA	2697	DC	P-O3'-C3'	6.89	127.96	119.70
2	AB	636	DA	O4'-C1'-C2'	-6.89	100.39	105.90
180	C3	1	DC	O4'-C1'-C2'	-6.89	100.39	105.90
1	AA	4071	DG	O4'-C1'-N9	6.88	112.82	108.00
22	AV	48	DT	O4'-C4'-C3'	-6.88	101.75	104.50
82	BT	38	DC	O4'-C1'-C2'	-6.88	100.39	105.90
162	Cl	17	DA	P-O3'-C3'	6.88	127.96	119.70
236	Dx	5	DG	P-O3'-C3'	6.88	127.96	119.70
370	F7	1	DT	C1'-O4'-C4'	-6.88	103.22	110.10
375	GC	25	DA	C1'-O4'-C4'	-6.88	103.22	110.10
157	Cg	38	DG	C4'-C3'-C2'	-6.88	96.91	103.10
166	Cp	25	DG	O4'-C1'-C2'	-6.88	100.39	105.90
207	DU	13	DT	P-O3'-C3'	6.88	127.96	119.70
358	Fv	3	DG	C1'-O4'-C4'	-6.88	103.22	110.10
2	AB	1906	DA	O4'-C1'-C2'	-6.88	100.40	105.90
351	Fo	3	DG	O4'-C1'-C2'	-6.88	100.40	105.90
1	AA	842	DT	P-O3'-C3'	6.87	127.95	119.70
1	AA	1697	DC	O4'-C1'-N1	6.87	112.81	108.00
2	AB	1157	DG	O4'-C4'-C3'	-6.87	101.75	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2380	DA	P-O3'-C3'	6.87	127.95	119.70
100	Bl	31	DA	O4'-C4'-C3'	-6.87	101.75	104.50
177	C0	13	DG	C4'-C3'-C2'	-6.87	96.92	103.10
210	DX	16	DG	C4'-C3'-C2'	-6.87	96.91	103.10
66	BD	25	DT	O4'-C1'-C2'	-6.87	100.40	105.90
285	Ek	4	DT	O4'-C4'-C3'	-6.87	101.75	104.50
17	AQ	18	DT	C4'-C3'-C2'	-6.87	96.92	103.10
1	AA	4699	DG	O4'-C4'-C3'	-6.87	101.75	104.50
2	AB	5635	DG	O4'-C4'-C3'	-6.87	101.75	104.50
2	AB	6433	DT	C1'-O4'-C4'	-6.87	103.23	110.10
251	EC	16	DA	O4'-C1'-C2'	-6.87	100.41	105.90
1	AA	1506	DT	O4'-C4'-C3'	-6.87	101.75	104.50
1	AA	2405	DT	O4'-C4'-C3'	-6.87	101.75	104.50
1	AA	5901	DA	C4'-C3'-C2'	-6.87	96.92	103.10
1	AA	6658	DG	O4'-C1'-C2'	-6.87	100.41	105.90
2	AB	755	DG	O4'-C1'-C2'	-6.87	100.41	105.90
2	AB	5519	DG	O4'-C1'-C2'	-6.87	100.41	105.90
81	BS	37	DC	O4'-C1'-C2'	-6.87	100.41	105.90
1	AA	3116	DG	C4'-C3'-C2'	-6.86	96.92	103.10
2	AB	5158	DG	C5-C6-O6	-6.86	124.48	128.60
1	AA	1677	DT	C1'-O4'-C4'	-6.86	103.24	110.10
1	AA	5115	DG	O4'-C1'-N9	6.86	112.80	108.00
1	AA	6619	DA	O4'-C1'-C2'	-6.86	100.41	105.90
2	AB	1145	DG	O4'-C4'-C3'	-6.86	101.76	104.50
146	CV	37	DT	O4'-C1'-C2'	-6.86	100.41	105.90
299	Ey	3	DG	O4'-C1'-C2'	-6.86	100.41	105.90
423	Gy	19	DG	O4'-C4'-C3'	-6.86	101.75	104.50
1	AA	4105	DT	C4-C5-C7	-6.86	114.89	119.00
120	B5	3	DG	O4'-C1'-C2'	-6.86	100.41	105.90
268	ET	17	DT	O4'-C4'-C3'	-6.86	101.76	104.50
376	GD	10	DT	O4'-C1'-C2'	-6.86	100.41	105.90
1	AA	2790	DG	C1'-O4'-C4'	-6.86	103.24	110.10
1	AA	4917	DG	C1'-O4'-C4'	-6.86	103.24	110.10
12	AL	46	DT	O4'-C4'-C3'	-6.86	101.76	104.50
307	E6	29	DA	O4'-C1'-C2'	-6.86	100.41	105.90
1	AA	695	DG	O4'-C1'-C2'	-6.86	100.42	105.90
1	AA	3155	DG	O4'-C1'-C2'	-6.86	100.42	105.90
2	AB	2459	DG	O4'-C1'-C2'	-6.86	100.42	105.90
2	AB	3541	DA	P-O3'-C3'	6.86	127.93	119.70
2	AB	6923	DC	O4'-C4'-C3'	-6.86	101.76	104.50
26	AZ	6	DT	O4'-C4'-C3'	-6.86	101.76	104.50
96	Bh	7	DG	O4'-C4'-C3'	-6.86	101.76	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
298	Ex	9	DA	C1'-O4'-C4'	-6.86	103.25	110.10
2	AB	3842	DT	P-O3'-C3'	6.85	127.92	119.70
2	AB	5909	DC	O4'-C1'-C2'	-6.85	100.42	105.90
70	BH	37	DG	O4'-C1'-C2'	-6.85	100.42	105.90
155	Ce	1	DA	O4'-C4'-C3'	-6.85	101.76	104.50
1	AA	2944	DA	N1-C6-N6	-6.85	114.49	118.60
1	AA	5249	DA	C4'-C3'-C2'	-6.85	96.93	103.10
2	AB	335	DC	O4'-C1'-C2'	-6.85	100.42	105.90
2	AB	6374	DG	C5-C6-O6	-6.85	124.49	128.60
1	AA	18	DG	C1'-O4'-C4'	-6.85	103.25	110.10
1	AA	2194	DA	C1'-O4'-C4'	-6.85	103.25	110.10
1	AA	5834	DA	C1'-O4'-C4'	-6.85	103.25	110.10
2	AB	1726	DA	O4'-C4'-C3'	-6.85	101.76	104.50
2	AB	6551	DG	O4'-C1'-C2'	-6.85	100.42	105.90
341	Fe	17	DG	O4'-C1'-C2'	-6.85	100.42	105.90
2	AB	2850	DA	P-O3'-C3'	6.85	127.92	119.70
252	ED	31	DC	C4'-C3'-C2'	-6.85	96.94	103.10
263	EO	25	DG	N1-C6-O6	6.85	124.01	119.90
288	En	27	DA	O4'-C1'-C2'	-6.85	100.42	105.90
293	Es	5	DA	P-O3'-C3'	6.85	127.92	119.70
2	AB	2395	DG	P-O3'-C3'	6.85	127.92	119.70
1	AA	5679	DA	O4'-C1'-C2'	-6.84	100.42	105.90
2	AB	3350	DC	C1'-O4'-C4'	-6.84	103.25	110.10
246	D7	9	DT	O4'-C4'-C3'	-6.84	101.76	104.50
2	AB	7306	DT	O4'-C4'-C3'	-6.84	101.76	104.50
1	AA	4343	DT	O4'-C4'-C3'	-6.84	101.76	104.50
1	AA	4791	DA	O4'-C1'-C2'	-6.84	100.43	105.90
33	Ag	46	DT	O4'-C4'-C3'	-6.84	101.76	104.50
61	A8	19	DA	O4'-C1'-C2'	-6.84	100.43	105.90
236	Dx	12	DA	C4'-C3'-C2'	-6.84	96.94	103.10
1	AA	984	DG	O4'-C4'-C3'	-6.84	101.76	104.50
1	AA	1674	DA	O4'-C4'-C3'	-6.84	101.76	104.50
2	AB	1838	DG	C1'-O4'-C4'	-6.84	103.26	110.10
2	AB	7344	DT	O4'-C1'-C2'	-6.84	100.43	105.90
12	AL	12	DA	P-O3'-C3'	6.84	127.91	119.70
96	Bh	25	DG	C5-C6-O6	-6.84	124.50	128.60
167	Cq	9	DA	O4'-C1'-C2'	-6.84	100.43	105.90
209	DW	37	DA	P-O3'-C3'	6.84	127.91	119.70
267	ES	22	DT	O4'-C4'-C3'	-6.84	101.76	104.50
174	Cx	7	DT	O4'-C4'-C3'	-6.84	101.77	104.50
286	El	2	DG	C1'-O4'-C4'	-6.84	103.26	110.10
1	AA	692	DA	O4'-C4'-C3'	-6.84	101.77	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	5684	DG	O4'-C1'-C2'	-6.84	100.43	105.90
161	Ck	21	DC	P-O3'-C3'	6.84	127.90	119.70
1	AA	943	DT	O4'-C1'-C2'	-6.83	100.43	105.90
1	AA	6089	DT	O4'-C1'-C2'	-6.83	100.43	105.90
2	AB	88	DT	O4'-C4'-C3'	-6.83	101.77	104.50
2	AB	368	DG	O4'-C1'-C2'	-6.83	100.43	105.90
46	At	20	DG	C1'-O4'-C4'	-6.83	103.27	110.10
1	AA	4594	DC	O4'-C1'-N1	6.83	112.78	108.00
1	AA	4846	DT	C4'-C3'-C2'	-6.83	96.95	103.10
1	AA	7035	DG	O4'-C1'-C2'	-6.83	100.43	105.90
2	AB	2073	DG	C4'-C3'-C2'	-6.83	96.95	103.10
231	Ds	37	DT	O4'-C1'-C2'	-6.83	100.44	105.90
440	HF	21	DG	O4'-C1'-C2'	-6.83	100.44	105.90
1	AA	6752	DG	O4'-C1'-C2'	-6.83	100.44	105.90
2	AB	5337	DC	C1'-O4'-C4'	-6.83	103.27	110.10
136	CL	39	DT	C4'-C3'-C2'	-6.83	96.95	103.10
223	Dk	22	DA	O4'-C1'-C2'	-6.83	100.44	105.90
231	Ds	1	DA	O4'-C1'-C2'	-6.83	100.44	105.90
1	AA	2950	DA	O4'-C1'-C2'	-6.83	100.44	105.90
1	AA	3860	DT	O4'-C4'-C3'	-6.83	101.77	104.50
252	ED	24	DG	O4'-C1'-C2'	-6.83	100.44	105.90
353	Fq	17	DC	O4'-C1'-C2'	-6.83	100.44	105.90
1	AA	3610	DG	O4'-C1'-C2'	-6.83	100.44	105.90
2	AB	1464	DG	O4'-C1'-C2'	-6.83	100.44	105.90
93	Be	1	DA	O4'-C4'-C3'	-6.83	101.77	104.50
304	E3	18	DG	O4'-C1'-C2'	-6.83	100.44	105.90
1	AA	1456	DC	O4'-C1'-C2'	-6.82	100.44	105.90
1	AA	2320	DT	C4-C5-C7	6.82	123.09	119.00
1	AA	5873	DC	O4'-C1'-C2'	-6.82	100.44	105.90
1	AA	6487	DA	O4'-C1'-C2'	-6.82	100.44	105.90
2	AB	2421	DA	C1'-O4'-C4'	-6.82	103.28	110.10
2	AB	2622	DT	O4'-C1'-C2'	-6.82	100.44	105.90
2	AB	5779	DC	O4'-C1'-C2'	-6.82	100.44	105.90
2	AB	6596	DG	P-O3'-C3'	6.82	127.89	119.70
67	BE	1	DT	O4'-C4'-C3'	-6.82	101.77	104.50
1	AA	3345	DG	P-O3'-C3'	6.82	127.88	119.70
1	AA	6459	DC	O4'-C1'-C2'	-6.82	100.44	105.90
2	AB	445	DT	O4'-C1'-C2'	-6.82	100.44	105.90
452	HR	15	DG	O4'-C1'-C2'	-6.82	100.44	105.90
1	AA	1867	DG	O4'-C1'-C2'	-6.82	100.44	105.90
2	AB	6630	DA	P-O3'-C3'	6.82	127.88	119.70
1	AA	1352	DC	C4'-C3'-C2'	-6.82	96.96	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2851	DG	O4'-C1'-C2'	-6.82	100.45	105.90
293	Es	34	DT	C6-C5-C7	-6.82	118.81	122.90
1	AA	1833	DC	O4'-C4'-C3'	-6.82	101.77	104.50
2	AB	863	DC	C6-N1-C2	-6.82	117.57	120.30
2	AB	3866	DT	C4'-C3'-C2'	-6.82	96.97	103.10
185	C8	24	DT	C4'-C3'-C2'	-6.82	96.97	103.10
1	AA	3872	DC	O4'-C1'-C2'	-6.81	100.45	105.90
2	AB	3331	DT	C1'-O4'-C4'	-6.81	103.29	110.10
2	AB	5550	DT	C4'-C3'-C2'	-6.81	96.97	103.10
1	AA	3904	DT	C4'-C3'-C2'	-6.81	96.97	103.10
343	Fg	12	DA	O4'-C1'-C2'	-6.81	100.45	105.90
360	Fx	26	DT	O4'-C4'-C3'	-6.81	101.78	104.50
2	AB	940	DG	C1'-O4'-C4'	-6.81	103.29	110.10
1	AA	301	DC	O4'-C1'-C2'	-6.81	100.45	105.90
1	AA	792	DG	O4'-C1'-C2'	-6.81	100.45	105.90
2	AB	3131	DC	P-O3'-C3'	6.81	127.87	119.70
2	AB	3417	DG	C4'-C3'-C2'	-6.81	96.97	103.10
2	AB	928	DC	C1'-O4'-C4'	-6.81	103.29	110.10
16	AP	38	DG	O4'-C1'-C2'	-6.81	100.45	105.90
1	AA	6354	DA	O4'-C1'-C2'	-6.80	100.46	105.90
36	Aj	9	DT	O4'-C4'-C3'	-6.80	101.78	104.50
200	DN	33	DG	O4'-C4'-C3'	-6.80	101.78	104.50
279	Ee	12	DG	O4'-C1'-C2'	-6.80	100.46	105.90
2	AB	2449	DT	C4'-C3'-C2'	-6.80	96.98	103.10
2	AB	4767	DT	O4'-C4'-C3'	-6.80	101.78	104.50
47	Au	3	DT	O4'-C4'-C3'	-6.80	101.78	104.50
2	AB	1611	DG	O4'-C1'-C2'	-6.80	100.46	105.90
46	At	7	DT	O4'-C4'-C3'	-6.80	101.78	104.50
248	D9	33	DT	O4'-C4'-C3'	-6.80	101.78	104.50
341	Fe	7	DC	C1'-O4'-C4'	-6.80	103.30	110.10
1	AA	1317	DA	O4'-C1'-C2'	-6.80	100.46	105.90
93	Be	30	DG	O4'-C1'-C2'	-6.80	100.46	105.90
220	Dh	17	DC	C6-N1-C2	-6.80	117.58	120.30
1	AA	2844	DG	C5-C6-O6	-6.80	124.52	128.60
1	AA	5243	DG	O4'-C1'-C2'	-6.80	100.46	105.90
2	AB	1516	DT	O4'-C1'-C2'	-6.80	100.46	105.90
2	AB	3361	DT	O4'-C1'-C2'	-6.80	100.46	105.90
2	AB	4702	DT	O4'-C1'-C2'	-6.80	100.46	105.90
2	AB	491	DA	O4'-C1'-C2'	-6.79	100.47	105.90
59	A6	6	DT	O4'-C4'-C3'	-6.79	101.78	104.50
335	FY	17	DA	C4'-C3'-C2'	-6.79	96.99	103.10
407	Gi	24	DG	O4'-C1'-C2'	-6.79	100.47	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	107	DA	O4'-C1'-C2'	-6.79	100.47	105.90
1	AA	2545	DC	C4'-C3'-C2'	-6.79	96.99	103.10
2	AB	780	DG	C4'-C3'-C2'	-6.79	96.99	103.10
2	AB	2650	DT	O4'-C4'-C3'	-6.79	101.78	104.50
62	A9	27	DG	C5-C6-O6	-6.79	124.53	128.60
117	B2	25	DG	O4'-C1'-C2'	-6.79	100.47	105.90
142	CR	2	DA	O4'-C1'-C2'	-6.79	100.47	105.90
265	EQ	9	DC	O4'-C1'-C2'	-6.79	100.47	105.90
427	G2	26	DT	O4'-C4'-C3'	-6.79	101.78	104.50
318	FH	28	DT	O4'-C4'-C3'	-6.79	101.78	104.50
130	CF	23	DC	P-O3'-C3'	6.79	127.84	119.70
178	C1	2	DA	O4'-C1'-C2'	-6.79	100.47	105.90
1	AA	5074	DT	O4'-C1'-C2'	-6.79	100.47	105.90
238	Dz	33	DC	P-O5'-C5'	6.79	131.76	120.90
2	AB	925	DA	O4'-C1'-C2'	-6.78	100.47	105.90
2	AB	1576	DG	O4'-C1'-C2'	-6.78	100.47	105.90
184	C7	21	DG	O4'-C1'-C2'	-6.78	100.47	105.90
365	F2	25	DT	O4'-C4'-C3'	-6.78	101.79	104.50
2	AB	6058	DC	O4'-C1'-C2'	-6.78	100.47	105.90
343	Fg	15	DA	N1-C6-N6	-6.78	114.53	118.60
2	AB	1124	DG	O4'-C1'-C2'	-6.78	100.47	105.90
75	BM	39	DG	O4'-C1'-C2'	-6.78	100.48	105.90
181	C4	29	DG	O4'-C1'-C2'	-6.78	100.48	105.90
2	AB	4161	DT	C4'-C3'-C2'	-6.78	97.00	103.10
2	AB	4693	DC	C2-N1-C1'	6.78	126.26	118.80
36	Aj	3	DT	O4'-C4'-C3'	-6.78	101.79	104.50
123	B8	17	DG	C5-C6-O6	-6.78	124.53	128.60
1	AA	1063	DA	C4'-C3'-C2'	-6.78	97.00	103.10
1	AA	4235	DA	O4'-C1'-C2'	-6.78	100.48	105.90
1	AA	4438	DG	O4'-C1'-C2'	-6.78	100.48	105.90
381	GI	27	DA	O4'-C1'-C2'	-6.78	100.48	105.90
433	G8	8	DA	C4'-C3'-C2'	-6.78	97.00	103.10
2	AB	3653	DC	C4'-C3'-C2'	-6.78	97.00	103.10
39	Am	4	DT	O4'-C4'-C3'	-6.78	101.79	104.50
2	AB	998	DT	O4'-C4'-C3'	-6.77	101.79	104.50
2	AB	2058	DG	P-O3'-C3'	6.77	127.83	119.70
2	AB	4581	DC	P-O3'-C3'	6.77	127.83	119.70
140	CP	7	DT	O4'-C4'-C3'	-6.77	101.79	104.50
1	AA	479	DG	P-O3'-C3'	6.77	127.83	119.70
2	AB	7505	DA	C1'-O4'-C4'	-6.77	103.33	110.10
2	AB	4431	DA	C4'-C3'-C2'	-6.77	97.01	103.10
2	AB	5845	DT	C1'-O4'-C4'	-6.77	103.33	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	AR	7	DT	O4'-C4'-C3'	-6.77	101.79	104.50
411	Gm	26	DT	C4'-C3'-C2'	-6.77	97.01	103.10
1	AA	3052	DA	O4'-C4'-C3'	-6.77	101.79	104.50
1	AA	6374	DG	O4'-C1'-C2'	-6.77	100.49	105.90
294	Et	20	DC	O4'-C1'-C2'	-6.77	100.49	105.90
329	FS	31	DA	P-O3'-C3'	6.77	127.82	119.70
353	Fq	22	DT	O4'-C4'-C3'	-6.77	101.79	104.50
1	AA	5166	DT	C4'-C3'-C2'	-6.77	97.01	103.10
2	AB	4509	DA	O4'-C1'-C2'	-6.77	100.49	105.90
1	AA	4594	DC	O4'-C1'-C2'	-6.76	100.49	105.90
2	AB	3688	DA	C1'-O4'-C4'	-6.76	103.34	110.10
65	BC	47	DT	O4'-C4'-C3'	-6.76	101.79	104.50
366	F3	2	DA	C1'-O4'-C4'	-6.76	103.33	110.10
1	AA	6223	DT	O4'-C1'-C2'	-6.76	100.49	105.90
2	AB	4896	DA	C4'-C3'-C2'	-6.76	97.01	103.10
100	Bl	20	DT	O4'-C1'-C2'	-6.76	100.49	105.90
1	AA	6673	DG	O4'-C1'-C2'	-6.76	100.49	105.90
2	AB	960	DT	O4'-C4'-C3'	-6.76	101.80	104.50
110	Bv	16	DA	O4'-C1'-N9	6.76	112.73	108.00
1	AA	3522	DA	O4'-C1'-C2'	-6.76	100.49	105.90
1	AA	5910	DG	O4'-C4'-C3'	-6.76	101.80	104.50
2	AB	1014	DG	O4'-C1'-C2'	-6.76	100.49	105.90
196	DJ	25	DT	P-O3'-C3'	6.76	127.81	119.70
226	Dn	23	DT	C4'-C3'-C2'	-6.76	97.02	103.10
261	EM	9	DT	C4'-C3'-C2'	-6.76	97.02	103.10
269	EU	19	DG	O4'-C1'-C2'	-6.76	100.49	105.90
303	E2	30	DA	O4'-C1'-C2'	-6.76	100.49	105.90
1	AA	2707	DC	O4'-C1'-C2'	-6.76	100.49	105.90
1	AA	5218	DC	C4'-C3'-C2'	-6.76	97.02	103.10
2	AB	4972	DG	O4'-C1'-C2'	-6.76	100.50	105.90
26	AZ	43	DT	O4'-C4'-C3'	-6.76	101.80	104.50
432	G7	7	DC	O4'-C4'-C3'	-6.76	101.80	104.50
2	AB	4217	DT	O4'-C1'-C2'	-6.75	100.50	105.90
194	DH	22	DG	O4'-C1'-C2'	-6.75	100.50	105.90
1	AA	4583	DG	C4'-C3'-C2'	-6.75	97.02	103.10
2	AB	500	DA	C1'-O4'-C4'	-6.75	103.35	110.10
2	AB	2421	DA	O4'-C1'-N9	6.75	112.73	108.00
232	Dt	2	DA	O4'-C4'-C3'	-6.75	101.80	104.50
374	GB	16	DG	C1'-O4'-C4'	-6.75	103.35	110.10
1	AA	5068	DG	O4'-C4'-C3'	-6.75	101.80	104.50
2	AB	1464	DG	P-O3'-C3'	6.75	127.80	119.70
2	AB	5284	DA	O4'-C4'-C3'	-6.75	101.80	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
192	DF	1	DG	C4'-C3'-C2'	-6.75	97.02	103.10
1	AA	4646	DC	O4'-C1'-C2'	-6.75	100.50	105.90
1	AA	5175	DA	P-O3'-C3'	6.75	127.80	119.70
32	Af	44	DT	O4'-C4'-C3'	-6.75	101.80	104.50
76	BN	8	DG	P-O3'-C3'	6.75	127.80	119.70
227	Do	9	DG	O4'-C1'-C2'	-6.75	100.50	105.90
231	Ds	33	DC	O4'-C1'-C2'	-6.75	100.50	105.90
1	AA	3036	DG	O4'-C1'-C2'	-6.75	100.50	105.90
2	AB	4194	DT	O4'-C4'-C3'	-6.75	101.80	104.50
112	Bx	31	DG	C1'-O4'-C4'	-6.75	103.35	110.10
136	CL	39	DT	O4'-C4'-C3'	-6.75	101.80	104.50
1	AA	1815	DA	O4'-C1'-C2'	-6.75	100.50	105.90
38	Al	26	DG	C1'-O4'-C4'	-6.75	103.35	110.10
1	AA	5162	DG	P-O3'-C3'	6.74	127.79	119.70
1	AA	5472	DT	O4'-C1'-C2'	-6.74	100.50	105.90
1	AA	6339	DG	C4'-C3'-C2'	-6.74	97.03	103.10
2	AB	4977	DG	O4'-C1'-N9	6.74	112.72	108.00
58	A5	39	DC	O4'-C1'-C2'	-6.74	100.50	105.90
1	AA	2214	DA	C4'-C3'-C2'	-6.74	97.03	103.10
2	AB	6743	DG	C1'-O4'-C4'	-6.74	103.36	110.10
331	FU	23	DG	O4'-C1'-C2'	-6.74	100.51	105.90
1	AA	840	DA	O4'-C1'-C2'	-6.74	100.51	105.90
2	AB	2696	DG	O4'-C1'-N9	6.74	112.72	108.00
2	AB	3834	DA	O4'-C1'-C2'	-6.74	100.51	105.90
2	AB	4956	DG	O4'-C1'-C2'	-6.74	100.51	105.90
16	AP	28	DC	C6-N1-C2	-6.74	117.60	120.30
35	Ai	28	DG	O4'-C1'-C2'	-6.74	100.51	105.90
1	AA	166	DG	O4'-C1'-C2'	-6.74	100.51	105.90
1	AA	5505	DT	C4'-C3'-C2'	-6.74	97.03	103.10
2	AB	1805	DT	O4'-C1'-C2'	-6.74	100.51	105.90
1	AA	1202	DG	O4'-C4'-C3'	-6.74	101.81	104.50
1	AA	5233	DG	O4'-C1'-C2'	-6.74	100.51	105.90
27	Aa	6	DT	O4'-C4'-C3'	-6.74	101.81	104.50
106	Br	18	DG	C1'-O4'-C4'	-6.74	103.36	110.10
270	EV	8	DG	O4'-C1'-C2'	-6.74	100.51	105.90
1	AA	284	DG	O4'-C1'-C2'	-6.73	100.51	105.90
1	AA	3131	DA	O4'-C1'-C2'	-6.73	100.51	105.90
1	AA	6287	DG	P-O3'-C3'	6.73	127.78	119.70
2	AB	1070	DT	P-O3'-C3'	6.73	127.78	119.70
2	AB	5923	DC	O4'-C1'-C2'	-6.73	100.51	105.90
261	EM	31	DG	O4'-C1'-C2'	-6.73	100.51	105.90
330	FT	3	DC	C6-N1-C2	-6.73	117.61	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1866	DA	O4'-C4'-C3'	-6.73	101.81	104.50
1	AA	6971	DA	O4'-C1'-C2'	-6.73	100.52	105.90
98	Bj	31	DG	O4'-C1'-C2'	-6.73	100.52	105.90
134	CJ	37	DT	O4'-C1'-C2'	-6.73	100.52	105.90
282	Eh	23	DA	O4'-C1'-C2'	-6.73	100.52	105.90
1	AA	1332	DG	O4'-C1'-N9	6.73	112.71	108.00
1	AA	6025	DA	P-O3'-C3'	6.73	127.78	119.70
44	Ar	15	DG	P-O3'-C3'	6.73	127.77	119.70
53	A0	20	DC	O4'-C1'-C2'	-6.73	100.52	105.90
211	DY	42	DA	O4'-C4'-C3'	-6.73	101.81	104.50
228	Dp	1	DT	C1'-O4'-C4'	-6.73	103.37	110.10
2	AB	4184	DA	O4'-C1'-N9	6.72	112.71	108.00
341	Fe	6	DG	O4'-C1'-C2'	-6.72	100.52	105.90
2	AB	4861	DA	O4'-C1'-C2'	-6.72	100.52	105.90
209	DW	1	DC	C2-N1-C1'	6.72	126.19	118.80
103	Bo	1	DG	P-O3'-C3'	6.72	127.77	119.70
210	DX	39	DC	P-O3'-C3'	6.72	127.77	119.70
1	AA	708	DA	O4'-C1'-C2'	-6.72	100.53	105.90
1	AA	2391	DC	O4'-C1'-C2'	-6.72	100.53	105.90
1	AA	2600	DA	P-O3'-C3'	6.72	127.76	119.70
2	AB	4048	DT	P-O3'-C3'	6.72	127.76	119.70
203	DQ	25	DG	O4'-C1'-C2'	-6.72	100.53	105.90
386	GN	1	DA	P-O3'-C3'	-6.72	111.64	119.70
204	DR	7	DG	P-O3'-C3'	6.72	127.76	119.70
245	D6	23	DT	O4'-C1'-C2'	-6.72	100.53	105.90
290	Ep	5	DA	O4'-C1'-N9	6.72	112.70	108.00
1	AA	528	DG	O4'-C1'-N9	6.72	112.70	108.00
1	AA	5015	DG	O4'-C4'-C3'	-6.72	101.81	104.50
181	C4	23	DG	O4'-C1'-C2'	-6.72	100.53	105.90
331	FU	20	DT	O4'-C4'-C3'	-6.72	101.81	104.50
1	AA	5556	DG	O4'-C1'-C2'	-6.71	100.53	105.90
253	EE	29	DC	O4'-C1'-N1	6.71	112.70	108.00
400	Gb	18	DC	O4'-C1'-C2'	-6.71	100.53	105.90
402	Gd	23	DT	O4'-C1'-C2'	-6.71	100.53	105.90
449	HO	1	DT	C1'-O4'-C4'	-6.71	103.39	110.10
1	AA	920	DC	O4'-C4'-C3'	-6.71	101.81	104.50
1	AA	6641	DT	C4'-C3'-C2'	-6.71	97.06	103.10
2	AB	1936	DA	C4'-C3'-C2'	-6.71	97.06	103.10
2	AB	4795	DA	O4'-C1'-C2'	-6.71	100.53	105.90
81	BS	31	DA	O4'-C4'-C3'	-6.71	101.81	104.50
1	AA	3124	DG	O4'-C1'-C2'	-6.71	100.53	105.90
2	AB	2273	DT	C4'-C3'-C2'	-6.71	97.06	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	3350	DC	O4'-C1'-N1	6.71	112.70	108.00
172	Cv	29	DT	O4'-C4'-C3'	-6.71	101.82	104.50
2	AB	3926	DA	O4'-C1'-C2'	-6.71	100.53	105.90
1	AA	3824	DG	O4'-C4'-C3'	-6.71	101.82	104.50
2	AB	2217	DA	O4'-C4'-C3'	-6.71	101.82	104.50
2	AB	3336	DT	C4'-C3'-C2'	-6.71	97.06	103.10
126	CB	34	DT	C4'-C3'-C2'	-6.71	97.06	103.10
294	Et	33	DT	P-O3'-C3'	6.71	127.75	119.70
2	AB	1005	DG	C4'-C3'-C2'	-6.71	97.06	103.10
2	AB	2241	DG	C4'-C3'-C2'	-6.71	97.06	103.10
2	AB	2826	DC	O4'-C1'-C2'	-6.71	100.53	105.90
2	AB	4775	DT	C4'-C3'-C2'	-6.71	97.06	103.10
2	AB	5843	DT	O4'-C4'-C3'	-6.71	101.82	104.50
42	Ap	7	DT	O4'-C4'-C3'	-6.71	101.82	104.50
250	EB	28	DC	C4'-C3'-C2'	-6.71	97.06	103.10
1	AA	6434	DA	O4'-C1'-C2'	-6.71	100.54	105.90
21	AU	31	DA	O4'-C1'-C2'	-6.71	100.54	105.90
160	Cj	13	DG	C4'-C3'-C2'	-6.71	97.07	103.10
2	AB	109	DG	O4'-C1'-C2'	-6.70	100.54	105.90
2	AB	5071	DA	O4'-C1'-C2'	-6.70	100.54	105.90
92	Bd	48	DT	P-O3'-C3'	6.70	127.74	119.70
142	CR	1	DA	O4'-C4'-C3'	-6.70	101.82	104.50
1	AA	5798	DA	O4'-C1'-C2'	-6.70	100.54	105.90
2	AB	6155	DA	C4'-C3'-C2'	-6.70	97.07	103.10
233	Du	20	DG	O4'-C1'-N9	6.70	112.69	108.00
318	FH	9	DG	O4'-C1'-C2'	-6.70	100.54	105.90
1	AA	2398	DC	O4'-C4'-C3'	-6.70	101.82	104.50
2	AB	1092	DT	O4'-C4'-C3'	-6.70	101.82	104.50
65	BC	18	DA	N1-C6-N6	-6.70	114.58	118.60
87	BY	22	DC	C6-N1-C2	-6.70	117.62	120.30
167	Cq	28	DT	C4'-C3'-C2'	-6.70	97.07	103.10
1	AA	1440	DG	O4'-C4'-C3'	-6.70	101.82	104.50
1	AA	2079	DC	C1'-O4'-C4'	-6.70	103.40	110.10
1	AA	5934	DG	O4'-C4'-C3'	-6.70	101.82	104.50
1	AA	6938	DG	C1'-O4'-C4'	-6.70	103.40	110.10
36	Aj	40	DG	O4'-C1'-C2'	-6.70	100.54	105.90
2	AB	6005	DG	P-O3'-C3'	6.70	127.74	119.70
1	AA	1353	DT	O4'-C1'-C2'	-6.70	100.54	105.90
1	AA	6587	DA	P-O3'-C3'	6.70	127.73	119.70
2	AB	1267	DG	O4'-C1'-C2'	-6.70	100.54	105.90
2	AB	3770	DT	O4'-C4'-C3'	-6.70	101.82	104.50
2	AB	3848	DC	C4'-C3'-C2'	-6.70	97.08	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	4664	DG	C4'-C3'-C2'	-6.70	97.07	103.10
2	AB	5913	DA	O4'-C1'-C2'	-6.70	100.54	105.90
2	AB	7220	DC	O4'-C4'-C3'	-6.70	101.82	104.50
2	AB	7394	DA	C4'-C3'-C2'	-6.70	97.08	103.10
75	BM	23	DC	O4'-C1'-C2'	-6.70	100.54	105.90
204	DR	33	DG	C5-C6-O6	-6.70	124.58	128.60
220	Dh	26	DG	O4'-C1'-C2'	-6.70	100.54	105.90
245	D6	20	DT	C4'-C3'-C2'	-6.70	97.08	103.10
390	GR	1	DC	C1'-O4'-C4'	-6.69	103.41	110.10
2	AB	546	DC	O4'-C1'-C2'	-6.69	100.55	105.90
329	FS	4	DA	C4'-C3'-C2'	-6.69	97.08	103.10
2	AB	3585	DA	O4'-C1'-C2'	-6.69	100.55	105.90
1	AA	3289	DG	C4-N9-C1'	6.69	135.20	126.50
1	AA	5115	DG	P-O3'-C3'	6.69	127.73	119.70
50	Ax	17	DG	C4'-C3'-C2'	-6.69	97.08	103.10
2	AB	4729	DT	P-O3'-C3'	6.69	127.72	119.70
2	AB	6384	DT	C1'-O4'-C4'	-6.69	103.41	110.10
316	FF	7	DT	O4'-C1'-C2'	-6.69	100.55	105.90
1	AA	5534	DG	O4'-C1'-C2'	-6.69	100.55	105.90
1	AA	6545	DA	O4'-C1'-C2'	-6.69	100.55	105.90
2	AB	2249	DG	O4'-C1'-C2'	-6.69	100.55	105.90
2	AB	3111	DA	P-O3'-C3'	6.69	127.72	119.70
2	AB	5351	DC	O4'-C1'-C2'	-6.69	100.55	105.90
299	Ey	14	DA	O4'-C1'-C2'	-6.69	100.55	105.90
122	B7	40	DA	O4'-C1'-N9	6.68	112.68	108.00
1	AA	3471	DG	O4'-C1'-C2'	-6.68	100.55	105.90
2	AB	272	DT	C1'-O4'-C4'	-6.68	103.42	110.10
2	AB	5471	DC	O4'-C4'-C3'	-6.68	101.83	104.50
2	AB	7467	DT	O4'-C4'-C3'	-6.68	101.83	104.50
24	AX	36	DA	O4'-C1'-C2'	-6.68	100.55	105.90
1	AA	7390	DT	O4'-C4'-C3'	-6.68	101.83	104.50
121	B6	38	DT	O4'-C4'-C3'	-6.68	101.83	104.50
376	GD	22	DC	O4'-C1'-C2'	-6.68	100.56	105.90
2	AB	6013	DG	C4'-C3'-C2'	-6.68	97.09	103.10
206	DT	33	DA	N1-C6-N6	-6.68	114.59	118.60
1	AA	5001	DA	O4'-C1'-C2'	-6.68	100.56	105.90
1	AA	7075	DA	O4'-C1'-C2'	-6.68	100.56	105.90
319	FI	9	DT	P-O3'-C3'	6.68	127.71	119.70
1	AA	4073	DA	O4'-C1'-C2'	-6.68	100.56	105.90
1	AA	6430	DC	P-O3'-C3'	6.68	127.71	119.70
2	AB	88	DT	C4'-C3'-C2'	-6.68	97.09	103.10
2	AB	2154	DG	C1'-O4'-C4'	-6.67	103.42	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	AY	50	DT	C1'-O4'-C4'	-6.67	103.43	110.10
34	Ah	27	DG	P-O3'-C3'	6.67	127.71	119.70
342	Ff	25	DA	O4'-C1'-C2'	-6.67	100.56	105.90
153	Cc	7	DC	C4'-C3'-C2'	-6.67	97.10	103.10
86	BX	28	DA	O4'-C4'-C3'	-6.67	101.83	104.50
373	GA	18	DC	O4'-C1'-C2'	-6.67	100.56	105.90
1	AA	5495	DT	O4'-C1'-C2'	-6.67	100.57	105.90
1	AA	5569	DG	O4'-C1'-C2'	-6.67	100.56	105.90
2	AB	1677	DG	O4'-C1'-C2'	-6.67	100.56	105.90
2	AB	3893	DT	P-O3'-C3'	6.67	127.70	119.70
155	Ce	34	DC	O4'-C1'-N1	6.67	112.67	108.00
421	Gw	25	DG	P-O3'-C3'	6.67	127.70	119.70
294	Et	33	DT	C1'-O4'-C4'	-6.67	103.44	110.10
2	AB	3791	DG	O4'-C1'-C2'	-6.66	100.57	105.90
2	AB	4323	DT	C4'-C3'-C2'	-6.66	97.10	103.10
2	AB	5500	DG	O4'-C1'-C2'	-6.66	100.57	105.90
89	Ba	18	DC	O4'-C1'-C2'	-6.66	100.57	105.90
433	G8	10	DG	O4'-C1'-C2'	-6.66	100.57	105.90
445	HK	20	DT	P-O3'-C3'	6.66	127.70	119.70
29	Ac	5	DT	O4'-C4'-C3'	-6.66	101.83	104.50
1	AA	1322	DT	C1'-O4'-C4'	-6.66	103.44	110.10
200	DN	23	DT	O4'-C1'-C2'	-6.66	100.57	105.90
1	AA	4219	DG	P-O3'-C3'	6.66	127.69	119.70
13	AM	48	DT	O4'-C4'-C3'	-6.66	101.84	104.50
429	G4	25	DT	O4'-C4'-C3'	-6.66	101.84	104.50
298	Ex	1	DT	O4'-C1'-C2'	-6.66	100.58	105.90
329	FS	9	DG	O4'-C1'-C2'	-6.66	100.57	105.90
1	AA	6797	DA	C4'-C3'-C2'	-6.66	97.11	103.10
2	AB	575	DG	O4'-C1'-C2'	-6.66	100.58	105.90
1	AA	5228	DT	P-O3'-C3'	6.65	127.69	119.70
2	AB	653	DA	P-O3'-C3'	6.65	127.68	119.70
2	AB	1275	DA	P-O3'-C3'	6.65	127.68	119.70
2	AB	5061	DT	O4'-C4'-C3'	-6.65	101.84	104.50
2	AB	5423	DC	P-O5'-C5'	6.65	131.54	120.90
2	AB	7090	DG	O4'-C4'-C3'	-6.65	101.84	104.50
4	AD	33	DA	N1-C6-N6	-6.65	114.61	118.60
1	AA	4721	DG	O4'-C1'-C2'	-6.65	100.58	105.90
1	AA	6993	DA	O4'-C1'-C2'	-6.65	100.58	105.90
2	AB	3236	DG	C4'-C3'-C2'	-6.65	97.11	103.10
2	AB	3434	DT	O4'-C1'-C2'	-6.65	100.58	105.90
157	Cg	15	DG	O4'-C1'-C2'	-6.65	100.58	105.90
334	FX	21	DG	O4'-C1'-C2'	-6.65	100.58	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
248	D9	12	DT	O4'-C1'-C2'	-6.65	100.58	105.90
1	AA	5980	DT	C4'-C3'-C2'	-6.64	97.12	103.10
1	AA	7259	DG	O4'-C1'-C2'	-6.64	100.58	105.90
2	AB	4435	DG	C4'-C3'-C2'	-6.64	97.12	103.10
25	AY	30	DG	C1'-O4'-C4'	-6.64	103.45	110.10
105	Bq	37	DC	O4'-C1'-C2'	-6.64	100.58	105.90
1	AA	3683	DG	C4'-C3'-C2'	-6.64	97.12	103.10
2	AB	1206	DA	P-O3'-C3'	6.64	127.67	119.70
2	AB	3723	DT	O4'-C4'-C3'	-6.64	101.84	104.50
99	Bk	1	DC	C4'-C3'-C2'	-6.64	97.12	103.10
1	AA	266	DG	O4'-C1'-N9	6.64	112.65	108.00
1	AA	3249	DA	P-O3'-C3'	6.64	127.67	119.70
242	D3	16	DA	O4'-C1'-C2'	-6.64	100.59	105.90
354	Fr	8	DT	C4'-C3'-C2'	-6.64	97.12	103.10
1	AA	5720	DC	O4'-C4'-C3'	-6.64	101.84	104.50
193	DG	4	DT	O4'-C4'-C3'	-6.64	101.84	104.50
128	CD	7	DT	P-O3'-C3'	6.64	127.66	119.70
132	CH	16	DG	O4'-C1'-N9	6.64	112.65	108.00
286	El	34	DG	P-O3'-C3'	6.64	127.67	119.70
1	AA	4204	DC	C1'-O4'-C4'	-6.63	103.47	110.10
1	AA	7057	DT	C4'-C3'-C2'	-6.63	97.13	103.10
2	AB	7510	DA	O4'-C4'-C3'	-6.63	101.85	104.50
9	AI	20	DC	O4'-C1'-C2'	-6.63	100.59	105.90
140	CP	14	DG	O4'-C1'-C2'	-6.63	100.59	105.90
305	E4	31	DA	P-O3'-C3'	6.63	127.66	119.70
328	FR	13	DG	O4'-C1'-C2'	-6.63	100.59	105.90
419	Gu	1	DC	C4'-C3'-C2'	-6.63	97.13	103.10
1	AA	4913	DG	O4'-C1'-C2'	-6.63	100.59	105.90
2	AB	873	DG	O4'-C1'-C2'	-6.63	100.59	105.90
2	AB	4194	DT	C4'-C3'-C2'	-6.63	97.13	103.10
1	AA	5378	DT	C4'-C3'-C2'	-6.63	97.13	103.10
2	AB	970	DG	C1'-O4'-C4'	-6.63	103.47	110.10
2	AB	1495	DA	O4'-C1'-C2'	-6.63	100.59	105.90
2	AB	1556	DA	O4'-C4'-C3'	-6.63	101.85	104.50
231	Ds	37	DT	C1'-O4'-C4'	-6.63	103.47	110.10
2	AB	3265	DG	O4'-C1'-C2'	-6.63	100.60	105.90
2	AB	5529	DC	O4'-C1'-C2'	-6.63	100.60	105.90
198	DL	9	DA	C4'-C3'-C2'	-6.63	97.13	103.10
1	AA	6016	DG	P-O3'-C3'	6.63	127.65	119.70
29	Ac	48	DT	O4'-C1'-C2'	-6.63	100.60	105.90
73	BK	27	DA	O4'-C1'-C2'	-6.63	100.60	105.90
132	CH	2	DG	C1'-O4'-C4'	-6.63	103.47	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	3678	DA	O4'-C1'-C2'	-6.63	100.60	105.90
2	AB	940	DG	O4'-C1'-C2'	-6.63	100.60	105.90
2	AB	2357	DT	O4'-C1'-C2'	-6.63	100.60	105.90
2	AB	3857	DG	O4'-C1'-C2'	-6.63	100.60	105.90
36	Aj	27	DT	O4'-C1'-C2'	-6.63	100.60	105.90
38	Al	7	DT	O4'-C4'-C3'	-6.63	101.85	104.50
144	CT	8	DA	P-O3'-C3'	6.63	127.65	119.70
2	AB	333	DC	P-O3'-C3'	6.62	127.65	119.70
102	Bn	9	DG	O4'-C1'-C2'	-6.62	100.60	105.90
1	AA	266	DG	O4'-C1'-C2'	-6.62	100.60	105.90
1	AA	3190	DA	C4'-C3'-C2'	-6.62	97.14	103.10
2	AB	1774	DC	O4'-C4'-C3'	-6.62	101.85	104.50
2	AB	4697	DT	C4'-C3'-C2'	-6.62	97.14	103.10
339	Fc	13	DG	P-O3'-C3'	6.62	127.65	119.70
1	AA	4465	DA	O4'-C1'-C2'	-6.62	100.60	105.90
2	AB	1101	DC	C1'-O4'-C4'	-6.62	103.48	110.10
2	AB	3222	DC	C1'-O4'-C4'	-6.62	103.48	110.10
2	AB	3893	DT	O4'-C1'-C2'	-6.62	100.60	105.90
2	AB	6301	DA	C1'-O4'-C4'	-6.62	103.48	110.10
9	AI	43	DT	O4'-C4'-C3'	-6.62	101.85	104.50
88	BZ	48	DC	O4'-C1'-C2'	-6.62	100.60	105.90
345	Fi	10	DC	C2-N1-C1'	6.62	126.08	118.80
1	AA	1032	DA	O4'-C1'-C2'	-6.62	100.61	105.90
1	AA	3681	DG	O4'-C1'-C2'	-6.62	100.61	105.90
1	AA	5636	DA	O4'-C4'-C3'	-6.62	101.85	104.50
2	AB	2316	DG	O4'-C1'-C2'	-6.62	100.61	105.90
16	AP	24	DT	C4'-C3'-C2'	-6.62	97.14	103.10
122	B7	40	DA	C1'-O4'-C4'	-6.62	103.48	110.10
59	A6	25	DT	O4'-C1'-C2'	-6.62	100.61	105.90
76	BN	8	DG	C1'-O4'-C4'	-6.62	103.48	110.10
278	Ed	30	DG	C1'-O4'-C4'	-6.62	103.48	110.10
1	AA	434	DA	N1-C6-N6	-6.62	114.63	118.60
1	AA	6189	DA	O4'-C1'-C2'	-6.62	100.61	105.90
2	AB	5149	DG	C1'-O4'-C4'	-6.62	103.48	110.10
2	AB	5697	DG	P-O3'-C3'	6.62	127.64	119.70
49	Aw	22	DG	C1'-O4'-C4'	-6.62	103.48	110.10
100	Bl	23	DT	O4'-C1'-C2'	-6.62	100.61	105.90
302	E1	32	DT	C4'-C3'-C2'	-6.62	97.15	103.10
344	Fh	17	DG	O4'-C1'-C2'	-6.62	100.61	105.90
2	AB	768	DG	O4'-C1'-C2'	-6.61	100.61	105.90
2	AB	1978	DA	O4'-C1'-C2'	-6.61	100.61	105.90
44	Ar	38	DT	C4'-C3'-C2'	-6.61	97.15	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
425	G0	1	DT	C1'-O4'-C4'	-6.61	103.49	110.10
131	CG	24	DG	C4'-C3'-C2'	-6.61	97.15	103.10
1	AA	5615	DA	O4'-C1'-C2'	-6.61	100.61	105.90
2	AB	817	DC	O4'-C1'-C2'	-6.61	100.61	105.90
2	AB	837	DG	O4'-C1'-N9	6.61	112.63	108.00
1	AA	4404	DA	N1-C6-N6	-6.61	114.64	118.60
1	AA	6389	DT	C4'-C3'-C2'	-6.61	97.16	103.10
13	AM	31	DG	O4'-C1'-C2'	-6.61	100.61	105.90
326	FP	12	DA	O4'-C4'-C3'	-6.61	101.86	104.50
330	FT	3	DC	O4'-C1'-C2'	-6.61	100.62	105.90
1	AA	6931	DG	O4'-C1'-C2'	-6.60	100.62	105.90
2	AB	2511	DA	C4'-C3'-C2'	-6.60	97.16	103.10
108	Bt	3	DG	O4'-C1'-C2'	-6.60	100.62	105.90
432	G7	26	DA	C1'-O4'-C4'	-6.60	103.50	110.10
1	AA	2089	DA	N1-C6-N6	-6.60	114.64	118.60
2	AB	3199	DA	P-O3'-C3'	6.60	127.62	119.70
58	A5	45	DT	O4'-C4'-C3'	-6.60	101.86	104.50
105	Bq	23	DT	O4'-C1'-C2'	-6.60	100.62	105.90
287	Em	1	DG	O4'-C4'-C3'	-6.60	101.86	104.50
348	Fl	24	DA	C4'-C3'-C2'	-6.60	97.16	103.10
449	HO	8	DA	O4'-C1'-C2'	-6.60	100.62	105.90
363	F0	22	DT	O4'-C4'-C3'	-6.60	101.86	104.50
60	A7	42	DT	O4'-C4'-C3'	-6.60	101.86	104.50
131	CG	24	DG	O4'-C4'-C3'	-6.60	101.86	104.50
160	Cj	25	DG	P-O3'-C3'	6.60	127.62	119.70
288	En	24	DG	C1'-O4'-C4'	-6.60	103.50	110.10
1	AA	3307	DC	C6-N1-C2	-6.60	117.66	120.30
2	AB	230	DT	C4'-C3'-C2'	-6.60	97.16	103.10
47	Au	28	DA	O4'-C1'-C2'	-6.60	100.62	105.90
75	BM	40	DT	C4-C5-C7	-6.60	115.04	119.00
312	FB	35	DC	O4'-C4'-C3'	-6.60	101.86	104.50
429	G4	3	DA	O4'-C1'-C2'	-6.60	100.62	105.90
1	AA	5192	DA	O4'-C1'-C2'	-6.59	100.62	105.90
182	C5	2	DA	O4'-C4'-C3'	-6.59	101.86	104.50
1	AA	4262	DT	C1'-O4'-C4'	-6.59	103.51	110.10
1	AA	3476	DG	O4'-C1'-C2'	-6.59	100.63	105.90
1	AA	5243	DG	C1'-O4'-C4'	-6.59	103.51	110.10
256	EH	7	DT	O4'-C1'-C2'	-6.59	100.63	105.90
1	AA	2706	DC	O4'-C4'-C3'	-6.59	101.86	104.50
1	AA	4637	DA	O4'-C1'-C2'	-6.59	100.63	105.90
1	AA	4931	DT	O4'-C4'-C3'	-6.59	101.86	104.50
168	Cr	11	DG	O4'-C4'-C3'	-6.59	101.86	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
263	EO	31	DG	O4'-C1'-C2'	-6.59	100.63	105.90
286	El	27	DT	O4'-C1'-C2'	-6.59	100.63	105.90
1	AA	6725	DT	O4'-C1'-C2'	-6.59	100.63	105.90
2	AB	5572	DC	P-O3'-C3'	6.59	127.60	119.70
62	A9	28	DC	O4'-C1'-C2'	-6.59	100.63	105.90
123	B8	6	DT	O4'-C4'-C3'	-6.59	101.86	104.50
200	DN	7	DA	N1-C6-N6	-6.59	114.65	118.60
1	AA	2326	DC	P-O3'-C3'	6.58	127.60	119.70
1	AA	5759	DA	O4'-C1'-C2'	-6.58	100.63	105.90
2	AB	3174	DG	O4'-C1'-N9	6.58	112.61	108.00
2	AB	3708	DT	C1'-O4'-C4'	-6.58	103.52	110.10
291	Eq	17	DC	O4'-C4'-C3'	-6.58	101.87	104.50
396	GX	22	DC	O4'-C1'-C2'	-6.58	100.63	105.90
1	AA	1982	DT	C1'-O4'-C4'	-6.58	103.52	110.10
1	AA	6964	DG	C1'-O4'-C4'	-6.58	103.52	110.10
2	AB	2740	DT	C1'-O4'-C4'	-6.58	103.52	110.10
200	DN	3	DC	O4'-C4'-C3'	-6.58	101.87	104.50
231	Ds	15	DG	O4'-C1'-C2'	-6.58	100.63	105.90
306	E5	33	DG	C4'-C3'-C2'	-6.58	97.18	103.10
357	Fu	16	DA	C1'-O4'-C4'	-6.58	103.52	110.10
404	Gf	4	DT	C1'-O4'-C4'	-6.58	103.52	110.10
1	AA	3289	DG	C1'-O4'-C4'	-6.58	103.52	110.10
97	Bi	35	DG	O4'-C4'-C3'	-6.58	101.87	104.50
174	Cx	37	DT	C1'-O4'-C4'	-6.58	103.52	110.10
1	AA	5717	DG	C1'-O4'-C4'	-6.58	103.52	110.10
2	AB	672	DG	O4'-C1'-C2'	-6.58	100.64	105.90
2	AB	7300	DA	C1'-O4'-C4'	-6.58	103.52	110.10
148	CX	5	DA	C1'-O4'-C4'	-6.58	103.52	110.10
1	AA	5270	DA	O4'-C4'-C3'	-6.58	101.87	104.50
94	Bf	37	DA	P-O3'-C3'	6.58	127.59	119.70
1	AA	2034	DT	O4'-C1'-C2'	-6.58	100.64	105.90
161	Ck	19	DC	O4'-C1'-C2'	-6.58	100.64	105.90
343	Fg	1	DA	O4'-C4'-C3'	-6.58	101.87	104.50
381	GI	9	DT	O4'-C4'-C3'	-6.58	101.87	104.50
389	GQ	12	DC	O4'-C1'-C2'	-6.58	100.64	105.90
1	AA	6964	DG	O4'-C4'-C3'	-6.57	101.87	104.50
2	AB	2579	DG	O4'-C1'-C2'	-6.57	100.64	105.90
2	AB	3905	DA	O4'-C1'-C2'	-6.57	100.64	105.90
2	AB	4149	DA	O4'-C1'-C2'	-6.57	100.64	105.90
368	F5	27	DT	O4'-C4'-C3'	-6.57	101.87	104.50
424	Gz	5	DA	O4'-C1'-C2'	-6.57	100.64	105.90
1	AA	1106	DA	O4'-C1'-C2'	-6.57	100.64	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1452	DG	O4'-C1'-C2'	-6.57	100.64	105.90
347	Fk	27	DG	O4'-C4'-C3'	-6.57	101.87	104.50
1	AA	5726	DG	O4'-C1'-C2'	-6.57	100.64	105.90
1	AA	6425	DA	C4'-C3'-C2'	-6.57	97.19	103.10
2	AB	4767	DT	C4'-C3'-C2'	-6.57	97.19	103.10
138	CN	11	DC	O4'-C1'-C2'	-6.57	100.64	105.90
113	By	36	DT	O4'-C4'-C3'	-6.57	101.87	104.50
359	Fw	9	DA	O4'-C1'-C2'	-6.57	100.65	105.90
427	G2	26	DT	C1'-O4'-C4'	-6.57	103.53	110.10
2	AB	7146	DC	P-O3'-C3'	6.57	127.58	119.70
83	BU	44	DG	O4'-C1'-C2'	-6.57	100.65	105.90
206	DT	33	DA	O4'-C1'-N9	6.57	112.59	108.00
273	EY	29	DA	O4'-C1'-C2'	-6.57	100.65	105.90
350	Fn	7	DT	O4'-C1'-C2'	-6.57	100.65	105.90
408	Gj	23	DA	P-O3'-C3'	6.57	127.58	119.70
1	AA	7071	DC	O4'-C1'-C2'	-6.56	100.65	105.90
2	AB	1173	DC	O4'-C1'-N1	6.56	112.59	108.00
2	AB	5165	DT	O4'-C4'-C3'	-6.56	101.87	104.50
5	AE	23	DA	C4'-C3'-C2'	-6.56	97.19	103.10
1	AA	528	DG	P-O3'-C3'	6.56	127.58	119.70
394	GV	7	DA	C4'-C3'-C2'	-6.56	97.19	103.10
305	E4	27	DA	C4'-C3'-C2'	-6.56	97.20	103.10
364	F1	26	DG	P-O3'-C3'	6.56	127.57	119.70
422	Gx	13	DG	C1'-O4'-C4'	-6.56	103.54	110.10
1	AA	3332	DA	O4'-C1'-C2'	-6.56	100.65	105.90
2	AB	2175	DG	O4'-C1'-C2'	-6.56	100.65	105.90
2	AB	7088	DA	O4'-C4'-C3'	-6.56	101.88	104.50
51	Ay	48	DT	O4'-C4'-C3'	-6.56	101.88	104.50
2	AB	918	DG	O4'-C1'-N9	6.56	112.59	108.00
2	AB	6310	DT	O4'-C1'-C2'	-6.56	100.66	105.90
2	AB	7203	DA	O4'-C1'-C2'	-6.56	100.66	105.90
35	Ai	26	DA	C4'-C3'-C2'	-6.56	97.20	103.10
197	DK	18	DG	O4'-C1'-C2'	-6.56	100.66	105.90
1	AA	2000	DA	P-O3'-C3'	6.55	127.56	119.70
90	Bb	7	DT	O4'-C4'-C3'	-6.55	101.88	104.50
2	AB	5811	DG	C1'-O4'-C4'	-6.55	103.55	110.10
27	Aa	38	DC	O4'-C1'-N1	6.55	112.59	108.00
170	Ct	5	DG	C1'-O4'-C4'	-6.55	103.55	110.10
1	AA	2361	DG	P-O3'-C3'	6.55	127.56	119.70
415	Gq	28	DA	O4'-C1'-C2'	-6.55	100.66	105.90
445	HK	15	DT	O4'-C4'-C3'	-6.55	101.88	104.50
453	HS	11	DG	O4'-C1'-C2'	-6.55	100.66	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	2410	DG	O4'-C1'-C2'	-6.55	100.66	105.90
19	AS	19	DT	P-O3'-C3'	6.55	127.56	119.70
119	B4	37	DA	O4'-C4'-C3'	-6.55	101.88	104.50
388	GP	6	DT	O4'-C4'-C3'	-6.55	101.88	104.50
2	AB	318	DA	N1-C6-N6	-6.55	114.67	118.60
129	CE	11	DA	C4'-C3'-C2'	-6.55	97.21	103.10
1	AA	1158	DA	P-O3'-C3'	6.55	127.56	119.70
1	AA	6400	DG	C4'-C3'-C2'	-6.55	97.21	103.10
1	AA	7468	DA	O4'-C1'-C2'	-6.55	100.66	105.90
2	AB	3159	DA	N1-C6-N6	-6.55	114.67	118.60
1	AA	818	DT	C1'-O4'-C4'	-6.54	103.56	110.10
1	AA	273	DC	P-O3'-C3'	6.54	127.55	119.70
1	AA	628	DT	C4'-C3'-C2'	-6.54	97.21	103.10
1	AA	5549	DG	O4'-C1'-C2'	-6.54	100.67	105.90
290	Ep	15	DG	O4'-C1'-C2'	-6.54	100.67	105.90
404	Gf	3	DT	O4'-C4'-C3'	-6.54	101.88	104.50
371	F8	6	DC	C4'-C3'-C2'	-6.54	97.21	103.10
385	GM	24	DC	O4'-C1'-N1	6.54	112.58	108.00
417	Gs	8	DA	C4'-C3'-C2'	-6.54	97.21	103.10
2	AB	6902	DT	C1'-O4'-C4'	-6.54	103.56	110.10
144	CT	23	DA	P-O3'-C3'	6.54	127.55	119.70
1	AA	1098	DG	C1'-O4'-C4'	-6.54	103.56	110.10
2	AB	2601	DA	O4'-C1'-C2'	-6.54	100.67	105.90
2	AB	4650	DT	C1'-O4'-C4'	-6.54	103.56	110.10
431	G6	13	DG	C1'-O4'-C4'	-6.54	103.56	110.10
1	AA	2730	DA	C4'-C3'-C2'	-6.54	97.22	103.10
322	FL	30	DT	P-O3'-C3'	6.54	127.54	119.70
2	AB	5787	DG	O4'-C1'-C2'	-6.54	100.67	105.90
2	AB	6513	DG	O4'-C4'-C3'	-6.54	101.89	104.50
2	AB	1691	DA	O4'-C1'-N9	6.53	112.57	108.00
104	Bp	30	DG	O4'-C1'-C2'	-6.53	100.67	105.90
170	Ct	16	DG	P-O3'-C3'	6.53	127.54	119.70
1	AA	1173	DA	N1-C6-N6	-6.53	114.68	118.60
2	AB	6017	DG	O4'-C1'-C2'	-6.53	100.67	105.90
7	AG	2	DT	C1'-O4'-C4'	-6.53	103.57	110.10
11	AK	4	DT	O4'-C4'-C3'	-6.53	101.89	104.50
156	Cf	30	DT	O4'-C4'-C3'	-6.53	101.89	104.50
1	AA	1186	DG	O4'-C1'-C2'	-6.53	100.68	105.90
1	AA	4610	DC	O4'-C1'-C2'	-6.53	100.68	105.90
2	AB	2196	DG	O4'-C4'-C3'	-6.53	101.89	104.50
1	AA	446	DT	O4'-C4'-C3'	-6.53	101.89	104.50
1	AA	848	DC	O4'-C1'-N1	6.53	112.57	108.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	2789	DA	O4'-C1'-C2'	-6.53	100.68	105.90
2	AB	743	DG	O4'-C1'-N9	6.53	112.57	108.00
2	AB	1150	DG	O4'-C1'-C2'	-6.53	100.68	105.90
2	AB	4550	DA	O4'-C4'-C3'	-6.53	101.89	104.50
2	AB	4905	DT	P-O3'-C3'	6.53	127.53	119.70
2	AB	7521	DA	O4'-C1'-N9	6.53	112.57	108.00
227	Do	23	DA	O4'-C4'-C3'	-6.53	101.89	104.50
329	FS	17	DG	C4'-C3'-C2'	-6.53	97.22	103.10
337	Fa	22	DG	O4'-C1'-C2'	-6.53	100.68	105.90
2	AB	894	DC	C4'-C3'-C2'	-6.53	97.23	103.10
227	Do	23	DA	C1'-O4'-C4'	-6.53	103.58	110.10
1	AA	4865	DT	O4'-C4'-C3'	-6.52	101.89	104.50
330	FT	23	DT	C1'-O4'-C4'	-6.52	103.58	110.10
1	AA	2676	DT	P-O3'-C3'	6.52	127.53	119.70
1	AA	7301	DA	O4'-C1'-C2'	-6.52	100.68	105.90
2	AB	7360	DG	O4'-C4'-C3'	-6.52	101.89	104.50
30	Ad	3	DT	O4'-C4'-C3'	-6.52	101.89	104.50
135	CK	13	DC	C1'-O4'-C4'	-6.52	103.58	110.10
253	EE	23	DT	O4'-C1'-C2'	-6.52	100.68	105.90
407	Gi	4	DG	O4'-C1'-C2'	-6.52	100.68	105.90
423	Gy	19	DG	C4'-C3'-C2'	-6.52	97.23	103.10
2	AB	91	DG	O4'-C1'-C2'	-6.52	100.68	105.90
1	AA	6368	DG	C1'-O4'-C4'	-6.52	103.58	110.10
2	AB	938	DT	C4'-C3'-C2'	-6.52	97.23	103.10
2	AB	1348	DT	C4'-C3'-C2'	-6.52	97.23	103.10
342	Ff	16	DG	P-O3'-C3'	6.52	127.52	119.70
1	AA	5711	DA	O4'-C4'-C3'	-6.52	101.89	104.50
2	AB	1504	DA	O4'-C1'-C2'	-6.52	100.69	105.90
2	AB	3298	DG	P-O3'-C3'	6.52	127.52	119.70
114	Bz	8	DC	C6-N1-C2	-6.52	117.69	120.30
200	DN	12	DC	P-O3'-C3'	6.52	127.52	119.70
259	EK	1	DT	C1'-O4'-C4'	-6.52	103.58	110.10
297	Ew	35	DC	O4'-C4'-C3'	-6.52	101.89	104.50
426	G1	7	DA	C1'-O4'-C4'	-6.52	103.58	110.10
1	AA	628	DT	O4'-C4'-C3'	-6.52	101.89	104.50
2	AB	743	DG	O4'-C1'-C2'	-6.52	100.69	105.90
2	AB	2328	DG	O4'-C1'-C2'	-6.52	100.69	105.90
2	AB	6953	DT	P-O3'-C3'	6.52	127.52	119.70
199	DM	1	DA	O4'-C4'-C3'	-6.52	101.89	104.50
1	AA	2320	DT	C6-C5-C7	-6.51	118.99	122.90
1	AA	3081	DA	O4'-C1'-C2'	-6.51	100.69	105.90
1	AA	4597	DG	O4'-C1'-C2'	-6.51	100.69	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	4718	DA	O4'-C1'-C2'	-6.51	100.69	105.90
2	AB	1253	DA	O4'-C1'-C2'	-6.51	100.69	105.90
2	AB	2574	DT	O4'-C1'-C2'	-6.51	100.69	105.90
2	AB	6203	DT	P-O3'-C3'	6.51	127.52	119.70
2	AB	6225	DG	P-O3'-C3'	6.51	127.52	119.70
94	Bf	23	DG	O4'-C1'-C2'	-6.51	100.69	105.90
104	Bp	31	DC	O4'-C1'-C2'	-6.51	100.69	105.90
321	FK	16	DC	O4'-C1'-C2'	-6.51	100.69	105.90
378	GF	1	DT	C1'-O4'-C4'	-6.51	103.59	110.10
2	AB	1402	DA	O4'-C1'-C2'	-6.51	100.69	105.90
26	AZ	25	DC	C4'-C3'-C2'	-6.51	97.24	103.10
80	BR	37	DT	O4'-C1'-C2'	-6.51	100.69	105.90
147	CW	2	DT	O4'-C4'-C3'	-6.51	101.89	104.50
229	Dq	30	DG	C1'-O4'-C4'	-6.51	103.59	110.10
327	FQ	19	DC	C1'-O4'-C4'	-6.51	103.59	110.10
1	AA	864	DC	C1'-O4'-C4'	-6.51	103.59	110.10
1	AA	3631	DC	P-O3'-C3'	6.51	127.51	119.70
1	AA	4123	DG	O4'-C1'-C2'	-6.51	100.69	105.90
1	AA	6400	DG	O4'-C4'-C3'	-6.51	101.90	104.50
177	C0	42	DG	O4'-C4'-C3'	-6.51	101.90	104.50
284	Ej	30	DA	O4'-C1'-C2'	-6.51	100.69	105.90
354	Fr	17	DT	C4'-C3'-C2'	-6.51	97.24	103.10
416	Gr	14	DC	C4'-C3'-C2'	-6.51	97.24	103.10
442	HH	19	DG	P-O3'-C3'	6.51	127.51	119.70
1	AA	5569	DG	C1'-O4'-C4'	-6.51	103.59	110.10
242	D3	8	DT	O4'-C4'-C3'	-6.51	101.90	104.50
389	GQ	9	DC	C1'-O4'-C4'	-6.51	103.59	110.10
1	AA	1290	DG	O4'-C1'-C2'	-6.51	100.69	105.90
1	AA	2224	DT	P-O3'-C3'	6.51	127.51	119.70
1	AA	4998	DC	P-O3'-C3'	6.51	127.51	119.70
2	AB	3431	DA	C1'-O4'-C4'	-6.51	103.59	110.10
2	AB	5697	DG	N1-C6-O6	6.51	123.80	119.90
253	EE	28	DT	C6-C5-C7	-6.51	119.00	122.90
2	AB	3768	DT	O4'-C1'-C2'	-6.50	100.70	105.90
31	Ae	48	DT	O4'-C4'-C3'	-6.50	101.90	104.50
1	AA	2656	DA	O4'-C4'-C3'	-6.50	101.90	104.50
2	AB	3781	DC	C4'-C3'-C2'	-6.50	97.25	103.10
2	AB	6433	DT	P-O3'-C3'	6.50	127.50	119.70
60	A7	43	DT	O4'-C4'-C3'	-6.50	101.90	104.50
153	Cc	19	DA	P-O3'-C3'	6.50	127.50	119.70
329	FS	30	DT	P-O3'-C3'	6.50	127.50	119.70
1	AA	732	DT	O4'-C1'-C2'	-6.50	100.70	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	2558	DG	O4'-C1'-C2'	-6.50	100.70	105.90
1	AA	6261	DC	P-O3'-C3'	6.50	127.50	119.70
2	AB	6376	DA	N1-C6-N6	-6.50	114.70	118.60
274	EZ	16	DG	P-O3'-C3'	6.50	127.50	119.70
1	AA	5883	DG	O4'-C1'-C2'	-6.50	100.70	105.90
177	C0	42	DG	O4'-C1'-C2'	-6.50	100.70	105.90
229	Dq	19	DT	C4'-C3'-C2'	-6.50	97.25	103.10
451	HQ	2	DA	C1'-O4'-C4'	-6.50	103.60	110.10
1	AA	1315	DT	O4'-C1'-C2'	-6.50	100.70	105.90
2	AB	2919	DT	C1'-O4'-C4'	-6.50	103.60	110.10
2	AB	4463	DC	O4'-C1'-C2'	-6.50	100.70	105.90
221	Di	4	DC	C4'-C3'-C2'	-6.50	97.25	103.10
1	AA	5529	DG	O4'-C1'-C2'	-6.50	100.70	105.90
2	AB	2028	DT	O4'-C1'-C2'	-6.49	100.71	105.90
2	AB	5916	DC	C1'-O4'-C4'	-6.49	103.61	110.10
269	EU	24	DC	C1'-O4'-C4'	-6.49	103.61	110.10
1	AA	6347	DA	O4'-C1'-C2'	-6.49	100.71	105.90
1	AA	6577	DC	P-O3'-C3'	6.49	127.49	119.70
63	BA	24	DA	C1'-O4'-C4'	-6.49	103.61	110.10
249	EA	7	DT	O4'-C4'-C3'	-6.49	101.90	104.50
353	Fq	26	DT	O4'-C4'-C3'	-6.49	101.90	104.50
1	AA	5472	DT	O4'-C1'-N1	6.49	112.54	108.00
2	AB	6725	DT	C4'-C3'-C2'	-6.49	97.26	103.10
106	Br	5	DT	O4'-C4'-C3'	-6.49	101.91	104.50
339	Fc	15	DT	C4'-C3'-C2'	-6.49	97.26	103.10
2	AB	1562	DG	O4'-C1'-C2'	-6.49	100.71	105.90
2	AB	2411	DA	O4'-C1'-C2'	-6.49	100.71	105.90
2	AB	4642	DT	C4'-C3'-C2'	-6.49	97.26	103.10
141	CQ	4	DA	N1-C6-N6	-6.49	114.71	118.60
151	Ca	17	DG	O4'-C1'-C2'	-6.49	100.71	105.90
2	AB	228	DA	C4'-C3'-C2'	-6.49	97.26	103.10
2	AB	4345	DG	O4'-C1'-C2'	-6.49	100.71	105.90
2	AB	6520	DG	P-O3'-C3'	6.49	127.48	119.70
153	Cc	36	DA	O4'-C4'-C3'	-6.49	101.91	104.50
306	E5	9	DC	P-O3'-C3'	6.49	127.48	119.70
370	F7	5	DT	C1'-O4'-C4'	-6.49	103.61	110.10
1	AA	3685	DG	O4'-C1'-C2'	-6.48	100.71	105.90
1	AA	156	DG	O4'-C1'-N9	6.48	112.54	108.00
1	AA	2355	DA	O4'-C1'-C2'	-6.48	100.71	105.90
2	AB	3719	DG	C4'-C3'-C2'	-6.48	97.27	103.10
2	AB	4242	DG	O4'-C4'-C3'	-6.48	101.91	104.50
28	Ab	11	DG	O4'-C1'-C2'	-6.48	100.72	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
248	D9	13	DT	C4'-C3'-C2'	-6.48	97.27	103.10
1	AA	101	DC	O4'-C1'-C2'	-6.48	100.72	105.90
2	AB	3053	DT	O4'-C1'-C2'	-6.48	100.72	105.90
2	AB	3307	DA	C4'-C3'-C2'	-6.48	97.27	103.10
2	AB	3606	DA	O4'-C1'-C2'	-6.48	100.72	105.90
2	AB	5724	DG	O4'-C1'-C2'	-6.48	100.72	105.90
285	Ek	20	DG	C4'-C3'-C2'	-6.48	97.27	103.10
1	AA	2458	DC	O4'-C1'-C2'	-6.48	100.72	105.90
2	AB	2895	DT	C4'-C3'-C2'	-6.48	97.27	103.10
2	AB	6757	DG	C4'-C3'-C2'	-6.48	97.27	103.10
202	DP	37	DC	P-O3'-C3'	6.48	127.47	119.70
235	Dw	38	DG	O4'-C1'-C2'	-6.48	100.72	105.90
345	Fi	25	DT	O4'-C4'-C3'	-6.48	101.91	104.50
1	AA	20	DG	O4'-C1'-C2'	-6.48	100.72	105.90
1	AA	4714	DT	C4'-C3'-C2'	-6.48	97.27	103.10
39	Am	49	DT	O4'-C4'-C3'	-6.48	101.91	104.50
47	Au	21	DC	C1'-O4'-C4'	-6.48	103.62	110.10
58	A5	47	DT	O4'-C4'-C3'	-6.48	101.91	104.50
289	Eo	18	DG	O4'-C1'-C2'	-6.48	100.72	105.90
1	AA	4026	DG	O4'-C4'-C3'	-6.48	101.91	104.50
2	AB	5236	DT	C4'-C3'-C2'	-6.48	97.27	103.10
204	DR	40	DT	O4'-C4'-C3'	-6.48	101.91	104.50
2	AB	1819	DA	O4'-C4'-C3'	-6.47	101.91	104.50
2	AB	6020	DA	O4'-C1'-C2'	-6.47	100.72	105.90
2	AB	7487	DG	O4'-C1'-C2'	-6.47	100.72	105.90
8	AH	23	DT	O4'-C1'-C2'	-6.47	100.72	105.90
57	A4	42	DT	O4'-C4'-C3'	-6.47	101.91	104.50
73	BK	10	DA	P-O3'-C3'	6.47	127.47	119.70
151	Ca	30	DG	C1'-O4'-C4'	-6.47	103.62	110.10
1	AA	3448	DG	N1-C6-O6	6.47	123.78	119.90
234	Dv	32	DG	O4'-C1'-C2'	-6.47	100.72	105.90
1	AA	1613	DA	C1'-O4'-C4'	-6.47	103.63	110.10
1	AA	6054	DA	O4'-C1'-C2'	-6.47	100.72	105.90
2	AB	743	DG	C1'-O4'-C4'	-6.47	103.63	110.10
2	AB	2837	DG	O4'-C1'-C2'	-6.47	100.72	105.90
2	AB	2895	DT	O4'-C4'-C3'	-6.47	101.91	104.50
94	Bf	45	DT	C4'-C3'-C2'	-6.47	97.28	103.10
206	DT	32	DG	O4'-C1'-N9	6.47	112.53	108.00
319	FI	18	DG	O4'-C1'-C2'	-6.47	100.72	105.90
394	GV	5	DA	O4'-C1'-C2'	-6.47	100.72	105.90
1	AA	3289	DG	C8-N9-C1'	-6.47	118.59	127.00
2	AB	998	DT	C4'-C3'-C2'	-6.47	97.28	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	374	DT	O4'-C4'-C3'	-6.47	101.91	104.50
1	AA	1762	DT	C4'-C3'-C2'	-6.47	97.28	103.10
49	Aw	37	DA	O4'-C1'-C2'	-6.47	100.73	105.90
326	FP	31	DA	C4'-C3'-C2'	-6.47	97.28	103.10
2	AB	4981	DG	P-O3'-C3'	6.46	127.46	119.70
167	Cq	42	DT	C4-C5-C7	-6.46	115.12	119.00
1	AA	6056	DC	O4'-C4'-C3'	-6.46	101.92	104.50
184	C7	30	DT	P-O3'-C3'	6.46	127.45	119.70
1	AA	6864	DA	O4'-C1'-C2'	-6.46	100.73	105.90
2	AB	4179	DC	C1'-O4'-C4'	-6.46	103.64	110.10
2	AB	4242	DG	O4'-C1'-C2'	-6.46	100.73	105.90
76	BN	1	DC	O4'-C1'-C2'	-6.46	100.73	105.90
204	DR	16	DA	O4'-C1'-C2'	-6.46	100.73	105.90
1	AA	5339	DA	O4'-C1'-C2'	-6.46	100.73	105.90
444	HJ	4	DT	O4'-C4'-C3'	-6.46	101.92	104.50
1	AA	2359	DG	O4'-C1'-C2'	-6.46	100.73	105.90
1	AA	4833	DA	O4'-C4'-C3'	-6.46	101.92	104.50
1	AA	6015	DT	P-O3'-C3'	6.46	127.45	119.70
2	AB	5309	DC	O4'-C1'-C2'	-6.46	100.73	105.90
229	Dq	16	DG	O4'-C1'-C2'	-6.46	100.73	105.90
313	FC	22	DG	O4'-C4'-C3'	-6.46	101.92	104.50
1	AA	3043	DG	P-O3'-C3'	6.46	127.45	119.70
1	AA	5359	DG	C1'-O4'-C4'	-6.46	103.64	110.10
2	AB	6268	DC	P-O3'-C3'	6.46	127.45	119.70
286	El	18	DC	C1'-O4'-C4'	-6.46	103.64	110.10
404	Gf	12	DC	C1'-O4'-C4'	-6.46	103.64	110.10
1	AA	4895	DA	O4'-C1'-C2'	-6.45	100.74	105.90
2	AB	1157	DG	C1'-O4'-C4'	-6.45	103.65	110.10
2	AB	4554	DC	P-O3'-C3'	6.45	127.44	119.70
32	Af	7	DT	O4'-C4'-C3'	-6.45	101.92	104.50
71	BI	1	DT	C4'-C3'-C2'	-6.45	97.29	103.10
130	CF	11	DC	O4'-C1'-C2'	-6.45	100.74	105.90
240	D1	9	DG	O4'-C1'-C2'	-6.45	100.74	105.90
1	AA	7228	DA	N1-C6-N6	-6.45	114.73	118.60
2	AB	2042	DA	C4'-C3'-C2'	-6.45	97.29	103.10
181	C4	38	DT	C4'-C3'-C2'	-6.45	97.29	103.10
1	AA	3753	DT	P-O3'-C3'	6.45	127.44	119.70
2	AB	2088	DG	O4'-C1'-C2'	-6.45	100.74	105.90
2	AB	4237	DG	P-O3'-C3'	6.45	127.44	119.70
2	AB	4495	DG	O4'-C1'-C2'	-6.45	100.74	105.90
2	AB	4736	DT	C1'-O4'-C4'	-6.45	103.65	110.10
2	AB	5224	DG	O4'-C1'-C2'	-6.45	100.74	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
155	Ce	41	DT	O4'-C1'-C2'	-6.45	100.74	105.90
247	D8	30	DT	O4'-C1'-C2'	-6.45	100.74	105.90
1	AA	3901	DA	O4'-C1'-C2'	-6.45	100.74	105.90
1	AA	6461	DC	P-O3'-C3'	6.45	127.44	119.70
2	AB	5468	DA	O4'-C1'-C2'	-6.45	100.74	105.90
2	AB	6682	DG	O4'-C1'-C2'	-6.45	100.74	105.90
283	Ei	34	DC	O4'-C1'-C2'	-6.45	100.74	105.90
1	AA	1272	DG	O4'-C1'-C2'	-6.45	100.74	105.90
1	AA	5952	DA	O4'-C4'-C3'	-6.45	101.92	104.50
2	AB	3492	DC	C4'-C3'-C2'	-6.45	97.30	103.10
2	AB	6600	DC	O4'-C1'-C2'	-6.45	100.74	105.90
1	AA	2742	DA	N1-C6-N6	-6.45	114.73	118.60
2	AB	6968	DT	C1'-O4'-C4'	-6.45	103.65	110.10
2	AB	7348	DA	O4'-C1'-C2'	-6.45	100.74	105.90
21	AU	26	DA	C1'-O4'-C4'	-6.45	103.65	110.10
259	EK	16	DG	O4'-C1'-C2'	-6.45	100.74	105.90
341	Fe	7	DC	O4'-C1'-N1	6.45	112.51	108.00
2	AB	1971	DG	O4'-C4'-C3'	-6.44	101.92	104.50
2	AB	2202	DG	O4'-C1'-C2'	-6.44	100.75	105.90
2	AB	6368	DA	O4'-C1'-C2'	-6.44	100.75	105.90
70	BH	5	DT	C4'-C3'-C2'	-6.44	97.30	103.10
85	BW	9	DT	C4'-C3'-C2'	-6.44	97.30	103.10
156	Cf	28	DT	C6-C5-C7	-6.44	119.03	122.90
201	DO	39	DT	O4'-C1'-C2'	-6.44	100.75	105.90
208	DV	6	DC	O4'-C4'-C3'	-6.44	101.92	104.50
288	En	7	DT	O4'-C4'-C3'	-6.44	101.92	104.50
2	AB	7552	DA	O4'-C1'-C2'	-6.44	100.75	105.90
2	AB	18	DC	C4'-C3'-C2'	-6.44	97.31	103.10
2	AB	3038	DG	O4'-C1'-C2'	-6.44	100.75	105.90
1	AA	6931	DG	C1'-O4'-C4'	-6.44	103.66	110.10
294	Et	16	DA	O4'-C1'-N9	6.44	112.51	108.00
68	BF	17	DC	C4'-C3'-C2'	-6.44	97.31	103.10
1	AA	6820	DG	O4'-C1'-C2'	-6.43	100.75	105.90
2	AB	5630	DT	O4'-C4'-C3'	-6.43	101.93	104.50
268	ET	7	DT	P-O3'-C3'	6.43	127.42	119.70
1	AA	5032	DC	P-O3'-C3'	6.43	127.42	119.70
1	AA	5553	DG	O4'-C1'-C2'	-6.43	100.75	105.90
2	AB	1530	DG	O4'-C1'-C2'	-6.43	100.75	105.90
74	BL	49	DT	O4'-C1'-C2'	-6.43	100.75	105.90
1	AA	6499	DG	O4'-C1'-C2'	-6.43	100.75	105.90
2	AB	536	DG	C4'-C3'-C2'	-6.43	97.31	103.10
195	DI	1	DA	C1'-O4'-C4'	-6.43	103.67	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
283	Ei	34	DC	P-O3'-C3'	6.43	127.42	119.70
1	AA	1256	DG	O4'-C1'-C2'	-6.43	100.76	105.90
1	AA	2091	DA	O4'-C1'-C2'	-6.43	100.76	105.90
2	AB	4492	DG	P-O3'-C3'	6.43	127.42	119.70
83	BU	19	DG	O4'-C1'-C2'	-6.43	100.76	105.90
194	DH	5	DA	O4'-C1'-C2'	-6.43	100.76	105.90
209	DW	22	DA	P-O3'-C3'	6.43	127.42	119.70
269	EU	30	DC	O4'-C1'-C2'	-6.43	100.76	105.90
1	AA	2297	DA	N1-C6-N6	-6.43	114.74	118.60
2	AB	5141	DC	O4'-C1'-C2'	-6.43	100.76	105.90
127	CC	32	DG	O4'-C1'-C2'	-6.43	100.76	105.90
130	CF	35	DT	O4'-C4'-C3'	-6.43	101.93	104.50
1	AA	6614	DT	P-O3'-C3'	6.43	127.41	119.70
2	AB	4572	DG	P-O3'-C3'	6.43	127.41	119.70
2	AB	4697	DT	O4'-C4'-C3'	-6.43	101.93	104.50
443	HI	1	DA	O4'-C4'-C3'	-6.43	101.93	104.50
1	AA	1332	DG	O4'-C1'-C2'	-6.42	100.76	105.90
1	AA	5389	DT	C4'-C3'-C2'	-6.42	97.32	103.10
2	AB	966	DC	C1'-O4'-C4'	-6.42	103.67	110.10
35	Ai	4	DT	O4'-C4'-C3'	-6.42	101.93	104.50
375	GC	2	DG	P-O3'-C3'	6.42	127.41	119.70
376	GD	7	DC	O4'-C1'-C2'	-6.42	100.76	105.90
1	AA	1345	DC	P-O5'-C5'	6.42	131.18	120.90
1	AA	1822	DA	O4'-C1'-C2'	-6.42	100.76	105.90
88	BZ	22	DG	O4'-C1'-C2'	-6.42	100.76	105.90
106	Br	9	DT	P-O3'-C3'	6.42	127.41	119.70
113	By	36	DT	C4'-C3'-C2'	-6.42	97.32	103.10
229	Dq	8	DA	O4'-C1'-C2'	-6.42	100.76	105.90
2	AB	2466	DT	C4'-C3'-C2'	-6.42	97.32	103.10
117	B2	1	DG	C4'-C3'-C2'	-6.42	97.32	103.10
169	Cs	22	DG	C2-N3-C4	6.42	115.11	111.90
253	EE	28	DT	C4-C5-C7	6.42	122.85	119.00
312	FB	9	DG	O4'-C1'-C2'	-6.42	100.77	105.90
2	AB	953	DC	C4'-C3'-C2'	-6.42	97.32	103.10
21	AU	11	DG	O4'-C1'-C2'	-6.42	100.77	105.90
25	AY	22	DT	O4'-C1'-C2'	-6.42	100.77	105.90
1	AA	3831	DC	C4'-C3'-C2'	-6.42	97.33	103.10
1	AA	4080	DC	C1'-O4'-C4'	-6.42	103.69	110.10
187	DA	35	DA	P-O3'-C3'	6.42	127.40	119.70
271	EW	25	DA	C4'-C3'-C2'	-6.42	97.33	103.10
16	AP	7	DT	O4'-C4'-C3'	-6.41	101.94	104.50
36	Aj	19	DA	O4'-C1'-C2'	-6.41	100.77	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
266	ER	22	DA	O4'-C1'-C2'	-6.41	100.77	105.90
213	Da	18	DA	O4'-C1'-C2'	-6.41	100.77	105.90
373	GA	20	DT	O4'-C4'-C3'	-6.41	101.94	104.50
1	AA	6108	DT	O4'-C1'-C2'	-6.41	100.77	105.90
249	EA	33	DT	O4'-C4'-C3'	-6.41	101.94	104.50
282	Eh	30	DA	O4'-C1'-C2'	-6.41	100.77	105.90
329	FS	12	DG	O4'-C1'-C2'	-6.41	100.77	105.90
1	AA	4162	DG	O4'-C1'-C2'	-6.41	100.77	105.90
173	Cw	5	DG	C1'-O4'-C4'	-6.41	103.69	110.10
248	D9	32	DT	O4'-C4'-C3'	-6.41	101.94	104.50
1	AA	5197	DG	O4'-C1'-C2'	-6.41	100.77	105.90
11	AK	48	DT	O4'-C4'-C3'	-6.41	101.94	104.50
320	FJ	23	DG	O4'-C1'-C2'	-6.41	100.77	105.90
369	F6	9	DT	O4'-C1'-C2'	-6.41	100.77	105.90
4	AD	21	DG	C4'-C3'-C2'	-6.41	97.34	103.10
165	Co	29	DT	C4'-C3'-C2'	-6.41	97.33	103.10
223	Dk	37	DA	O4'-C1'-C2'	-6.41	100.78	105.90
441	HG	13	DT	O4'-C4'-C3'	-6.41	101.94	104.50
2	AB	1160	DC	C2-N1-C1'	6.40	125.84	118.80
2	AB	1373	DA	O4'-C1'-C2'	-6.40	100.78	105.90
42	Ap	23	DA	O4'-C1'-C2'	-6.40	100.78	105.90
1	AA	5507	DC	O4'-C1'-C2'	-6.40	100.78	105.90
2	AB	5871	DG	C4'-C3'-C2'	-6.40	97.34	103.10
204	DR	42	DA	O4'-C1'-C2'	-6.40	100.78	105.90
2	AB	1173	DC	C1'-O4'-C4'	-6.40	103.70	110.10
11	AK	43	DT	O4'-C4'-C3'	-6.40	101.94	104.50
44	Ar	42	DT	O4'-C4'-C3'	-6.40	101.94	104.50
246	D7	31	DG	C4'-C3'-C2'	-6.40	97.34	103.10
141	CQ	3	DG	P-O3'-C3'	6.40	127.38	119.70
1	AA	675	DC	O4'-C1'-C2'	-6.40	100.78	105.90
2	AB	6746	DG	C4'-C3'-C2'	-6.40	97.34	103.10
30	Ad	36	DA	C1'-O4'-C4'	-6.40	103.70	110.10
143	CS	32	DG	O4'-C1'-C2'	-6.40	100.78	105.90
188	DB	32	DA	O4'-C1'-C2'	-6.40	100.78	105.90
1	AA	1160	DC	C4'-C3'-C2'	-6.40	97.34	103.10
1	AA	6966	DT	O4'-C4'-C3'	-6.40	101.94	104.50
14	AN	11	DC	O4'-C1'-C2'	-6.40	100.78	105.90
339	Fc	9	DG	O4'-C1'-C2'	-6.40	100.78	105.90
1	AA	3362	DA	O4'-C1'-C2'	-6.39	100.78	105.90
1	AA	5312	DA	N1-C6-N6	-6.39	114.76	118.60
2	AB	1473	DG	O4'-C1'-C2'	-6.39	100.78	105.90
2	AB	1751	DG	O4'-C4'-C3'	-6.39	101.94	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	6410	DA	P-O3'-C3'	6.39	127.37	119.70
55	A2	45	DT	O4'-C4'-C3'	-6.39	101.94	104.50
64	BB	5	DT	O4'-C4'-C3'	-6.39	101.94	104.50
1	AA	4119	DC	C4'-C3'-C2'	-6.39	97.35	103.10
13	AM	18	DG	C4'-C3'-C2'	-6.39	97.35	103.10
320	FJ	1	DG	C1'-O4'-C4'	-6.39	103.71	110.10
1	AA	1202	DG	P-O3'-C3'	6.39	127.37	119.70
1	AA	3452	DA	O4'-C1'-C2'	-6.39	100.79	105.90
50	Ax	1	DT	O4'-C1'-C2'	-6.39	100.79	105.90
174	Cx	17	DG	O4'-C1'-C2'	-6.39	100.79	105.90
1	AA	844	DC	O4'-C1'-N1	6.39	112.47	108.00
1	AA	2366	DA	N1-C6-N6	-6.39	114.77	118.60
2	AB	1995	DG	O4'-C4'-C3'	-6.39	101.94	104.50
2	AB	1953	DG	O4'-C1'-C2'	-6.39	100.79	105.90
2	AB	3287	DG	O4'-C1'-C2'	-6.39	100.79	105.90
2	AB	4341	DT	O4'-C4'-C3'	-6.39	101.94	104.50
2	AB	5752	DC	C1'-O4'-C4'	-6.39	103.71	110.10
2	AB	6904	DG	O4'-C1'-C2'	-6.39	100.79	105.90
216	Dd	36	DC	O4'-C4'-C3'	-6.39	101.94	104.50
347	Fk	27	DG	C4'-C3'-C2'	-6.39	97.35	103.10
1	AA	2587	DG	O4'-C4'-C3'	-6.38	101.95	104.50
176	Cz	29	DC	O4'-C4'-C3'	-6.38	101.95	104.50
250	EB	18	DG	O4'-C1'-C2'	-6.38	100.79	105.90
402	Gd	17	DC	O4'-C1'-C2'	-6.38	100.79	105.90
2	AB	813	DT	C4'-C3'-C2'	-6.38	97.36	103.10
2	AB	7271	DG	O4'-C1'-C2'	-6.38	100.80	105.90
326	FP	17	DG	O4'-C1'-C2'	-6.38	100.80	105.90
330	FT	1	DG	O4'-C1'-C2'	-6.38	100.80	105.90
1	AA	2726	DC	C1'-O4'-C4'	-6.38	103.72	110.10
2	AB	3841	DC	C1'-O4'-C4'	-6.38	103.72	110.10
192	DF	9	DG	O4'-C1'-C2'	-6.38	100.80	105.90
2	AB	2234	DT	C4'-C3'-C2'	-6.38	97.36	103.10
2	AB	5684	DG	P-O3'-C3'	6.38	127.35	119.70
258	EJ	8	DT	O4'-C4'-C3'	-6.38	101.95	104.50
435	HA	1	DT	C1'-O4'-C4'	-6.38	103.72	110.10
2	AB	4728	DG	P-O3'-C3'	6.38	127.35	119.70
2	AB	5189	DG	P-O3'-C3'	6.38	127.35	119.70
2	AB	5691	DC	C1'-O4'-C4'	-6.38	103.72	110.10
1	AA	2647	DG	C4'-C3'-C2'	-6.37	97.36	103.10
1	AA	3955	DA	O4'-C1'-C2'	-6.37	100.80	105.90
2	AB	6287	DA	C1'-O4'-C4'	-6.37	103.73	110.10
363	F0	1	DT	C4'-C3'-C2'	-6.37	97.36	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
374	GB	2	DG	O4'-C1'-C2'	-6.37	100.80	105.90
1	AA	446	DT	C4'-C3'-C2'	-6.37	97.36	103.10
1	AA	1867	DG	P-O3'-C3'	6.37	127.35	119.70
2	AB	1754	DA	P-O3'-C3'	6.37	127.34	119.70
2	AB	5163	DG	O4'-C4'-C3'	-6.37	101.95	104.50
2	AB	2932	DA	O4'-C1'-C2'	-6.37	100.80	105.90
136	CL	9	DA	P-O3'-C3'	6.37	127.34	119.70
2	AB	1635	DT	P-O3'-C3'	6.37	127.34	119.70
2	AB	4839	DG	O4'-C4'-C3'	-6.37	101.95	104.50
2	AB	5714	DG	O4'-C1'-C2'	-6.37	100.81	105.90
30	Ad	24	DA	C4'-C3'-C2'	-6.37	97.37	103.10
371	F8	1	DT	C1'-O4'-C4'	-6.37	103.73	110.10
2	AB	6964	DT	O4'-C1'-C2'	-6.37	100.81	105.90
41	Ao	5	DT	O4'-C4'-C3'	-6.37	101.95	104.50
89	Ba	18	DC	O4'-C1'-N1	6.37	112.46	108.00
174	Cx	33	DG	O4'-C1'-C2'	-6.37	100.81	105.90
406	Gh	18	DG	O4'-C4'-C3'	-6.37	101.95	104.50
2	AB	2407	DA	C4'-C3'-C2'	-6.37	97.37	103.10
2	AB	3823	DA	O4'-C1'-C2'	-6.37	100.81	105.90
148	CX	24	DG	C4'-C3'-C2'	-6.37	97.37	103.10
318	FH	32	DT	O4'-C4'-C3'	-6.37	101.95	104.50
424	Gz	9	DC	O4'-C1'-C2'	-6.37	100.81	105.90
1	AA	7234	DC	C2-N1-C1'	6.36	125.80	118.80
2	AB	2423	DT	P-O3'-C3'	6.36	127.33	119.70
2	AB	2428	DT	C4'-C3'-C2'	-6.36	97.37	103.10
229	Dq	19	DT	O4'-C4'-C3'	-6.36	101.95	104.50
188	DB	17	DA	C4'-C3'-C2'	-6.36	97.37	103.10
1	AA	4686	DG	C4'-C3'-C2'	-6.36	97.38	103.10
1	AA	5249	DA	O4'-C4'-C3'	-6.36	101.96	104.50
2	AB	2143	DG	O4'-C4'-C3'	-6.36	101.96	104.50
2	AB	4626	DT	O4'-C4'-C3'	-6.36	101.96	104.50
2	AB	7291	DA	O4'-C1'-C2'	-6.36	100.81	105.90
24	AX	2	DT	P-O3'-C3'	6.36	127.33	119.70
111	Bw	38	DT	C4'-C3'-C2'	-6.36	97.38	103.10
218	Df	2	DT	C4'-C3'-C2'	-6.36	97.38	103.10
261	EM	1	DA	C1'-O4'-C4'	-6.36	103.74	110.10
293	Es	34	DT	C4-C5-C7	6.36	122.82	119.00
374	GB	24	DT	O4'-C4'-C3'	-6.36	101.96	104.50
441	HG	1	DC	C1'-O4'-C4'	-6.36	103.74	110.10
164	Cn	30	DA	O4'-C1'-C2'	-6.36	100.81	105.90
245	D6	32	DT	O4'-C4'-C3'	-6.36	101.96	104.50
272	EX	20	DA	O4'-C1'-C2'	-6.36	100.81	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	468	DA	O4'-C1'-C2'	-6.36	100.81	105.90
1	AA	6103	DT	C4'-C3'-C2'	-6.36	97.38	103.10
4	AD	48	DT	O4'-C4'-C3'	-6.36	101.96	104.50
77	BO	16	DT	O4'-C1'-C2'	-6.36	100.81	105.90
259	EK	8	DA	O4'-C1'-C2'	-6.36	100.81	105.90
434	G9	1	DG	C1'-O4'-C4'	-6.36	103.74	110.10
1	AA	2520	DG	O4'-C1'-C2'	-6.36	100.81	105.90
2	AB	1056	DC	O4'-C1'-C2'	-6.36	100.82	105.90
2	AB	1355	DG	O4'-C1'-C2'	-6.36	100.81	105.90
12	AL	6	DT	O4'-C4'-C3'	-6.36	101.96	104.50
2	AB	5170	DT	C4'-C3'-C2'	-6.35	97.38	103.10
137	CM	11	DA	O4'-C1'-C2'	-6.35	100.82	105.90
1	AA	989	DT	C4'-C3'-C2'	-6.35	97.38	103.10
1	AA	1796	DC	P-O3'-C3'	6.35	127.32	119.70
1	AA	2103	DC	O4'-C1'-C2'	-6.35	100.82	105.90
1	AA	7304	DG	O4'-C1'-C2'	-6.35	100.82	105.90
2	AB	1863	DG	C1'-O4'-C4'	-6.35	103.75	110.10
2	AB	4063	DA	O4'-C1'-C2'	-6.35	100.82	105.90
2	AB	6720	DG	O4'-C1'-C2'	-6.35	100.82	105.90
2	AB	7382	DC	C6-N1-C2	-6.35	117.76	120.30
65	BC	45	DT	O4'-C4'-C3'	-6.35	101.96	104.50
131	CG	13	DC	C1'-O4'-C4'	-6.35	103.75	110.10
184	C7	30	DT	O4'-C1'-C2'	-6.35	100.82	105.90
200	DN	34	DG	O4'-C1'-C2'	-6.35	100.82	105.90
2	AB	5002	DA	N1-C6-N6	-6.35	114.79	118.60
162	Cl	28	DG	P-O3'-C3'	6.35	127.32	119.70
2	AB	2058	DG	O4'-C1'-C2'	-6.35	100.82	105.90
4	AD	20	DC	O4'-C1'-N1	6.35	112.44	108.00
13	AM	40	DG	C1'-O4'-C4'	-6.35	103.75	110.10
168	Cr	3	DT	O4'-C4'-C3'	-6.35	101.96	104.50
1	AA	3660	DC	C1'-O4'-C4'	-6.35	103.75	110.10
1	AA	2405	DT	C1'-O4'-C4'	-6.35	103.75	110.10
1	AA	4754	DG	O4'-C4'-C3'	-6.35	101.96	104.50
2	AB	1751	DG	O4'-C1'-C2'	-6.35	100.82	105.90
2	AB	1957	DA	O4'-C1'-C2'	-6.35	100.82	105.90
2	AB	5113	DC	P-O3'-C3'	6.34	127.31	119.70
80	BR	20	DG	O4'-C1'-C2'	-6.34	100.83	105.90
105	Bq	31	DC	C4'-C3'-C2'	-6.34	97.39	103.10
187	DA	6	DG	P-O3'-C3'	6.34	127.31	119.70
269	EU	28	DG	C1'-O4'-C4'	-6.34	103.75	110.10
386	GN	18	DG	P-O3'-C3'	6.34	127.31	119.70
115	B0	32	DT	C6-C5-C7	6.34	126.71	122.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	4409	DA	O4'-C4'-C3'	-6.34	101.96	104.50
274	EZ	34	DC	P-O3'-C3'	6.34	127.31	119.70
315	FE	5	DC	C4'-C3'-C2'	-6.34	97.39	103.10
416	Gr	24	DG	C1'-O4'-C4'	-6.34	103.76	110.10
2	AB	1691	DA	C1'-O4'-C4'	-6.34	103.76	110.10
2	AB	4579	DG	O4'-C1'-C2'	-6.34	100.83	105.90
120	B5	18	DA	O4'-C1'-C2'	-6.34	100.83	105.90
189	DC	42	DG	O4'-C1'-C2'	-6.34	100.83	105.90
232	Dt	2	DA	C4'-C3'-C2'	-6.34	97.39	103.10
1	AA	2159	DA	C4'-C3'-C2'	-6.34	97.39	103.10
2	AB	1530	DG	O4'-C1'-N9	6.34	112.44	108.00
2	AB	3374	DG	O4'-C1'-C2'	-6.34	100.83	105.90
1	AA	667	DC	O4'-C1'-N1	6.34	112.44	108.00
2	AB	478	DA	O4'-C1'-C2'	-6.34	100.83	105.90
2	AB	5044	DA	O4'-C1'-C2'	-6.34	100.83	105.90
2	AB	5471	DC	C4'-C3'-C2'	-6.34	97.40	103.10
2	AB	5483	DG	O4'-C1'-C2'	-6.34	100.83	105.90
204	DR	10	DA	C1'-O4'-C4'	-6.34	103.76	110.10
2	AB	318	DA	C1'-O4'-C4'	-6.33	103.77	110.10
2	AB	4758	DG	O4'-C1'-C2'	-6.33	100.83	105.90
287	Em	19	DA	C1'-O4'-C4'	-6.33	103.77	110.10
2	AB	893	DT	O4'-C1'-C2'	-6.33	100.83	105.90
2	AB	3669	DC	C1'-O4'-C4'	-6.33	103.77	110.10
2	AB	5507	DC	P-O3'-C3'	6.33	127.30	119.70
30	Ad	30	DA	O4'-C1'-C2'	-6.33	100.83	105.90
1	AA	1850	DT	P-O3'-C3'	6.33	127.30	119.70
1	AA	4078	DA	C1'-O4'-C4'	-6.33	103.77	110.10
2	AB	5404	DA	O4'-C1'-C2'	-6.33	100.83	105.90
82	BT	31	DT	C4'-C3'-C2'	-6.33	97.40	103.10
93	Be	6	DT	O4'-C1'-C2'	-6.33	100.83	105.90
405	Gg	19	DT	C4'-C3'-C2'	-6.33	97.40	103.10
4	AD	28	DT	C1'-O4'-C4'	-6.33	103.77	110.10
383	GK	22	DT	O4'-C4'-C3'	-6.33	101.97	104.50
442	HH	1	DG	C1'-O4'-C4'	-6.33	103.77	110.10
1	AA	5934	DG	C1'-O4'-C4'	-6.33	103.77	110.10
245	D6	30	DC	O4'-C1'-N1	6.33	112.43	108.00
1	AA	1396	DC	O4'-C1'-N1	6.33	112.43	108.00
1	AA	3536	DA	O4'-C1'-C2'	-6.33	100.84	105.90
117	B2	16	DA	O4'-C1'-C2'	-6.33	100.84	105.90
143	CS	2	DA	O4'-C1'-C2'	-6.33	100.84	105.90
1	AA	4082	DC	O4'-C1'-N1	6.33	112.43	108.00
1	AA	5642	DA	P-O3'-C3'	6.33	127.29	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	5050	DG	O4'-C1'-C2'	-6.33	100.84	105.90
2	AB	7109	DG	C1'-O4'-C4'	-6.33	103.77	110.10
28	Ab	47	DT	O4'-C4'-C3'	-6.33	101.97	104.50
38	Al	8	DT	O4'-C4'-C3'	-6.33	101.97	104.50
104	Bp	33	DA	C4'-C3'-C2'	-6.33	97.41	103.10
258	EJ	33	DT	O4'-C4'-C3'	-6.33	101.97	104.50
263	EO	19	DA	O4'-C4'-C3'	-6.33	101.97	104.50
331	FU	9	DT	O4'-C4'-C3'	-6.33	101.97	104.50
410	Gl	4	DT	O4'-C4'-C3'	-6.33	101.97	104.50
2	AB	2442	DC	O4'-C4'-C3'	-6.32	101.97	104.50
1	AA	6138	DC	O4'-C1'-C2'	-6.32	100.84	105.90
2	AB	4795	DA	O4'-C1'-N9	6.32	112.42	108.00
146	CV	37	DT	O4'-C4'-C3'	-6.32	101.97	104.50
179	C2	23	DC	P-O3'-C3'	6.32	127.29	119.70
1	AA	7131	DT	C1'-O4'-C4'	-6.32	103.78	110.10
49	Aw	42	DT	C1'-O4'-C4'	-6.32	103.78	110.10
51	Ay	34	DT	C4'-C3'-C2'	-6.32	97.41	103.10
75	BM	11	DG	N1-C6-O6	6.32	123.69	119.90
150	CZ	10	DG	O4'-C1'-C2'	-6.32	100.84	105.90
192	DF	15	DG	O4'-C1'-C2'	-6.32	100.84	105.90
58	A5	2	DT	P-O3'-C3'	6.32	127.28	119.70
256	EH	11	DC	C1'-O4'-C4'	-6.32	103.78	110.10
1	AA	6966	DT	C4'-C3'-C2'	-6.32	97.41	103.10
32	Af	5	DT	O4'-C4'-C3'	-6.32	101.97	104.50
32	Af	49	DT	O4'-C4'-C3'	-6.32	101.97	104.50
345	Fi	10	DC	C1'-O4'-C4'	-6.32	103.78	110.10
1	AA	6365	DT	O4'-C4'-C3'	-6.32	101.97	104.50
2	AB	4021	DG	O4'-C1'-C2'	-6.32	100.85	105.90
2	AB	5541	DA	O4'-C1'-C2'	-6.32	100.85	105.90
397	GY	21	DG	P-O3'-C3'	6.32	127.28	119.70
296	Ev	23	DG	P-O3'-C3'	6.31	127.28	119.70
373	GA	21	DT	O4'-C4'-C3'	-6.31	101.97	104.50
374	GB	19	DA	O4'-C4'-C3'	-6.31	101.97	104.50
1	AA	4518	DA	P-O3'-C3'	6.31	127.28	119.70
1	AA	5038	DG	P-O3'-C3'	6.31	127.28	119.70
55	A2	40	DA	O4'-C1'-C2'	-6.31	100.85	105.90
106	Br	6	DT	O4'-C4'-C3'	-6.31	101.97	104.50
243	D4	23	DT	O4'-C1'-C2'	-6.31	100.85	105.90
291	Eq	14	DC	C2-N1-C1'	6.31	125.74	118.80
343	Fg	15	DA	O4'-C1'-C2'	-6.31	100.85	105.90
45	As	7	DT	O4'-C4'-C3'	-6.31	101.97	104.50
266	ER	25	DC	O4'-C1'-C2'	-6.31	100.85	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1614	DG	O4'-C1'-C2'	-6.31	100.85	105.90
2	AB	66	DT	O4'-C4'-C3'	-6.31	101.98	104.50
2	AB	2518	DG	O4'-C4'-C3'	-6.31	101.98	104.50
2	AB	5697	DG	C5-C6-O6	-6.31	124.81	128.60
2	AB	6400	DT	C1'-O4'-C4'	-6.31	103.79	110.10
368	F5	5	DC	O4'-C1'-C2'	-6.31	100.85	105.90
1	AA	2326	DC	O4'-C1'-C2'	-6.31	100.85	105.90
2	AB	1691	DA	P-O3'-C3'	6.31	127.27	119.70
198	DL	9	DA	O4'-C4'-C3'	-6.31	101.98	104.50
298	Ex	35	DA	O4'-C4'-C3'	-6.31	101.98	104.50
2	AB	5444	DG	C4'-C3'-C2'	-6.31	97.42	103.10
2	AB	5817	DT	C1'-O4'-C4'	-6.31	103.79	110.10
112	Bx	22	DA	O4'-C4'-C3'	-6.31	101.98	104.50
323	FM	3	DG	P-O3'-C3'	6.31	127.27	119.70
1	AA	2632	DG	P-O3'-C3'	6.30	127.27	119.70
2	AB	750	DG	O4'-C1'-C2'	-6.30	100.86	105.90
2	AB	1691	DA	O4'-C1'-C2'	-6.30	100.86	105.90
210	DX	16	DG	N1-C6-O6	6.30	123.68	119.90
413	Go	28	DT	O4'-C1'-C2'	-6.30	100.86	105.90
52	Az	16	DT	C4'-C3'-C2'	-6.30	97.43	103.10
1	AA	2715	DA	P-O3'-C3'	6.30	127.26	119.70
1	AA	3613	DA	N1-C6-N6	-6.30	114.82	118.60
2	AB	2411	DA	N1-C6-N6	-6.30	114.82	118.60
167	Cq	42	DT	C6-C5-C7	6.30	126.68	122.90
382	GJ	9	DC	P-O3'-C3'	6.30	127.26	119.70
1	AA	5133	DA	O4'-C1'-C2'	-6.30	100.86	105.90
2	AB	6800	DA	O4'-C1'-C2'	-6.30	100.86	105.90
47	Au	20	DA	O4'-C1'-C2'	-6.30	100.86	105.90
2	AB	2126	DG	O4'-C4'-C3'	-6.30	101.98	104.50
59	A6	41	DT	O4'-C1'-C2'	-6.30	100.86	105.90
106	Br	8	DT	O4'-C4'-C3'	-6.30	101.98	104.50
125	CA	37	DT	O4'-C4'-C3'	-6.30	101.98	104.50
138	CN	2	DT	O4'-C4'-C3'	-6.30	101.98	104.50
251	EC	31	DT	C4'-C3'-C2'	-6.30	97.43	103.10
360	Fx	13	DA	C4'-C3'-C2'	-6.30	97.43	103.10
68	BF	32	DA	C4'-C3'-C2'	-6.29	97.44	103.10
97	Bi	37	DG	P-O3'-C3'	6.29	127.25	119.70
142	CR	20	DT	O4'-C1'-C2'	-6.29	100.86	105.90
1	AA	379	DT	C4'-C3'-C2'	-6.29	97.44	103.10
1	AA	4571	DA	N1-C6-N6	-6.29	114.82	118.60
2	AB	1735	DA	C4'-C3'-C2'	-6.29	97.44	103.10
2	AB	5935	DG	O4'-C1'-C2'	-6.29	100.87	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	6279	DG	O4'-C1'-C2'	-6.29	100.86	105.90
156	Cf	30	DT	C1'-O4'-C4'	-6.29	103.81	110.10
417	Gs	14	DG	C4-N9-C1'	6.29	134.68	126.50
1	AA	3017	DC	C1'-O4'-C4'	-6.29	103.81	110.10
2	AB	4967	DC	C4'-C3'-C2'	-6.29	97.44	103.10
2	AB	7521	DA	C1'-O4'-C4'	-6.29	103.81	110.10
28	Ab	27	DA	O4'-C1'-C2'	-6.29	100.87	105.90
246	D7	17	DA	C4'-C3'-C2'	-6.29	97.44	103.10
1	AA	5872	DC	P-O3'-C3'	6.29	127.25	119.70
2	AB	5916	DC	O4'-C1'-N1	6.29	112.40	108.00
69	BG	11	DG	O4'-C1'-C2'	-6.29	100.87	105.90
177	C0	17	DC	C4'-C3'-C2'	-6.29	97.44	103.10
1	AA	7029	DT	O4'-C4'-C3'	-6.29	101.98	104.50
2	AB	3177	DA	O4'-C1'-C2'	-6.29	100.87	105.90
57	A4	13	DG	C1'-O4'-C4'	-6.29	103.81	110.10
200	DN	10	DT	C4'-C3'-C2'	-6.29	97.44	103.10
57	A4	18	DC	C1'-O4'-C4'	-6.29	103.81	110.10
73	BK	42	DT	O4'-C4'-C3'	-6.29	101.98	104.50
81	BS	20	DA	O4'-C1'-C2'	-6.29	100.87	105.90
345	Fi	8	DC	C4'-C3'-C2'	-6.29	97.44	103.10
1	AA	1096	DA	C4'-C3'-C2'	-6.29	97.44	103.10
2	AB	3645	DT	C4'-C3'-C2'	-6.29	97.44	103.10
2	AB	4763	DC	C4'-C3'-C2'	-6.29	97.44	103.10
8	AH	34	DT	O4'-C4'-C3'	-6.29	101.99	104.50
157	Cg	1	DT	O4'-C4'-C3'	-6.29	101.99	104.50
214	Db	5	DT	O4'-C4'-C3'	-6.29	101.99	104.50
269	EU	6	DG	O4'-C1'-C2'	-6.29	100.87	105.90
370	F7	20	DT	O4'-C4'-C3'	-6.29	101.99	104.50
380	GH	20	DT	O4'-C4'-C3'	-6.29	101.99	104.50
415	Gq	6	DT	O4'-C4'-C3'	-6.29	101.99	104.50
2	AB	3603	DA	P-O3'-C3'	6.28	127.24	119.70
2	AB	5449	DA	C1'-O4'-C4'	-6.28	103.82	110.10
86	BX	40	DA	O4'-C1'-C2'	-6.28	100.87	105.90
113	By	6	DT	P-O3'-C3'	6.28	127.24	119.70
182	C5	22	DG	O4'-C1'-C2'	-6.28	100.87	105.90
184	C7	18	DT	O4'-C1'-C2'	-6.28	100.87	105.90
296	Ev	8	DC	C4'-C3'-C2'	-6.28	97.45	103.10
2	AB	657	DA	P-O3'-C3'	6.28	127.24	119.70
1	AA	5393	DG	O4'-C1'-C2'	-6.28	100.88	105.90
2	AB	190	DA	O4'-C1'-C2'	-6.28	100.88	105.90
2	AB	715	DG	O4'-C1'-C2'	-6.28	100.88	105.90
2	AB	1735	DA	O4'-C4'-C3'	-6.28	101.99	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
70	BH	7	DT	O4'-C4'-C3'	-6.28	101.99	104.50
257	EI	31	DG	O4'-C1'-C2'	-6.28	100.88	105.90
414	Gp	24	DC	C4'-C3'-C2'	-6.28	97.45	103.10
1	AA	7411	DA	N1-C6-N6	-6.28	114.83	118.60
2	AB	228	DA	O4'-C4'-C3'	-6.28	101.99	104.50
2	AB	817	DC	C6-N1-C1'	-6.28	113.27	120.80
2	AB	947	DG	C1'-O4'-C4'	-6.28	103.82	110.10
75	BM	39	DG	P-O3'-C3'	6.28	127.23	119.70
201	DO	9	DG	O4'-C1'-C2'	-6.28	100.88	105.90
1	AA	2403	DA	O4'-C4'-C3'	-6.28	101.99	104.50
2	AB	1092	DT	C1'-O4'-C4'	-6.28	103.82	110.10
25	AY	29	DC	O4'-C1'-C2'	-6.28	100.88	105.90
84	BV	12	DG	O4'-C1'-C2'	-6.28	100.88	105.90
2	AB	1423	DG	C5-C6-O6	-6.28	124.83	128.60
2	AB	3701	DT	C1'-O4'-C4'	-6.28	103.82	110.10
2	AB	5317	DG	P-O3'-C3'	6.28	127.23	119.70
256	EH	4	DT	O4'-C4'-C3'	-6.28	101.99	104.50
307	E6	29	DA	O4'-C4'-C3'	-6.28	101.99	104.50
1	AA	293	DC	C2-N1-C1'	6.27	125.70	118.80
2	AB	3413	DT	O4'-C4'-C3'	-6.27	101.99	104.50
1	AA	6587	DA	O4'-C1'-C2'	-6.27	100.88	105.90
2	AB	491	DA	C1'-O4'-C4'	-6.27	103.83	110.10
2	AB	1481	DA	O4'-C1'-C2'	-6.27	100.88	105.90
2	AB	4977	DG	O4'-C1'-C2'	-6.27	100.88	105.90
1	AA	6632	DC	O4'-C1'-C2'	-6.27	100.88	105.90
2	AB	1044	DA	O4'-C1'-C2'	-6.27	100.88	105.90
2	AB	3413	DT	C4'-C3'-C2'	-6.27	97.46	103.10
307	E6	25	DG	O4'-C1'-C2'	-6.27	100.88	105.90
451	HQ	20	DA	N1-C6-N6	-6.27	114.84	118.60
1	AA	1978	DA	O4'-C1'-C2'	-6.27	100.88	105.90
2	AB	938	DT	O4'-C4'-C3'	-6.27	101.99	104.50
2	AB	2334	DG	O4'-C1'-C2'	-6.27	100.88	105.90
2	AB	3693	DA	O4'-C1'-C2'	-6.27	100.89	105.90
2	AB	4339	DA	N1-C6-N6	-6.27	114.84	118.60
383	GK	18	DG	O4'-C1'-N9	6.27	112.39	108.00
1	AA	42	DG	O4'-C1'-C2'	-6.27	100.89	105.90
1	AA	183	DG	O4'-C1'-N9	6.27	112.39	108.00
1	AA	624	DT	C4'-C3'-C2'	-6.27	97.46	103.10
1	AA	4961	DC	C6-N1-C2	-6.27	117.79	120.30
2	AB	2557	DT	P-O3'-C3'	6.27	127.22	119.70
2	AB	2944	DT	O4'-C1'-C2'	-6.27	100.89	105.90
2	AB	6030	DC	O4'-C1'-C2'	-6.27	100.89	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	Ac	48	DT	O4'-C4'-C3'	-6.27	101.99	104.50
51	Ay	3	DT	O4'-C4'-C3'	-6.27	101.99	104.50
81	BS	45	DT	O4'-C4'-C3'	-6.27	101.99	104.50
121	B6	7	DT	O4'-C4'-C3'	-6.27	101.99	104.50
205	DS	26	DT	O4'-C1'-C2'	-6.27	100.89	105.90
417	Gs	16	DG	O4'-C1'-C2'	-6.27	100.89	105.90
2	AB	4396	DT	C4'-C3'-C2'	-6.27	97.46	103.10
39	Am	47	DT	O4'-C4'-C3'	-6.27	101.99	104.50
67	BE	6	DT	O4'-C4'-C3'	-6.27	101.99	104.50
444	HJ	8	DT	O4'-C4'-C3'	-6.27	101.99	104.50
1	AA	2218	DA	C4'-C3'-C2'	-6.26	97.46	103.10
133	CI	41	DG	O4'-C1'-C2'	-6.26	100.89	105.90
188	DB	37	DA	N1-C6-N6	-6.26	114.84	118.60
230	Dr	22	DG	O4'-C1'-C2'	-6.26	100.89	105.90
273	EY	16	DT	P-O3'-C3'	6.26	127.22	119.70
366	F3	16	DG	O4'-C1'-C2'	-6.26	100.89	105.90
1	AA	1691	DA	N1-C6-N6	6.26	122.36	118.60
1	AA	11	DA	N1-C6-N6	-6.26	114.84	118.60
1	AA	1379	DC	O4'-C1'-C2'	-6.26	100.89	105.90
1	AA	2798	DG	O4'-C1'-C2'	-6.26	100.89	105.90
1	AA	3580	DG	O4'-C1'-C2'	-6.26	100.89	105.90
1	AA	4669	DG	C4'-C3'-C2'	-6.26	97.47	103.10
1	AA	5825	DT	O4'-C1'-C2'	-6.26	100.89	105.90
1	AA	6412	DG	O4'-C1'-C2'	-6.26	100.89	105.90
2	AB	765	DG	O4'-C1'-C2'	-6.26	100.89	105.90
117	B2	8	DA	C1'-O4'-C4'	-6.26	103.84	110.10
1	AA	2053	DG	C4'-C3'-C2'	-6.26	97.47	103.10
1	AA	3250	DC	P-O3'-C3'	6.26	127.21	119.70
2	AB	2435	DA	O4'-C1'-C2'	-6.26	100.89	105.90
2	AB	4417	DG	C1'-O4'-C4'	-6.26	103.84	110.10
5	AE	35	DT	O4'-C1'-C2'	-6.26	100.89	105.90
25	AY	24	DG	O4'-C1'-C2'	-6.26	100.89	105.90
48	Av	46	DT	O4'-C4'-C3'	-6.26	102.00	104.50
185	C8	18	DG	O4'-C1'-C2'	-6.26	100.89	105.90
2	AB	4883	DG	O4'-C1'-C2'	-6.26	100.89	105.90
439	HE	16	DA	O4'-C1'-C2'	-6.26	100.89	105.90
1	AA	5154	DG	O4'-C1'-C2'	-6.26	100.89	105.90
2	AB	77	DT	C1'-O4'-C4'	-6.26	103.84	110.10
35	Ai	18	DG	O4'-C1'-C2'	-6.26	100.89	105.90
154	Cd	14	DT	O4'-C1'-C2'	-6.26	100.89	105.90
220	Dh	15	DT	C4'-C3'-C2'	-6.26	97.47	103.10
325	FO	28	DA	O4'-C1'-C2'	-6.26	100.89	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	6858	DG	O4'-C1'-C2'	-6.25	100.90	105.90
2	AB	5152	DT	C4'-C3'-C2'	-6.25	97.47	103.10
115	B0	29	DA	O4'-C1'-C2'	-6.25	100.90	105.90
1	AA	1794	DT	O4'-C1'-C2'	-6.25	100.90	105.90
1	AA	3636	DG	O4'-C1'-C2'	-6.25	100.90	105.90
2	AB	2185	DA	O4'-C1'-C2'	-6.25	100.90	105.90
157	Cg	16	DC	C6-N1-C2	-6.25	117.80	120.30
249	EA	30	DT	O4'-C4'-C3'	-6.25	102.00	104.50
402	Gd	24	DC	C1'-O4'-C4'	-6.25	103.85	110.10
417	Gs	14	DG	C8-N9-C1'	-6.25	118.87	127.00
1	AA	4859	DC	O4'-C1'-C2'	-6.25	100.90	105.90
29	Ac	47	DT	O4'-C4'-C3'	-6.25	102.00	104.50
1	AA	561	DA	O4'-C4'-C3'	-6.25	102.00	104.50
2	AB	1425	DT	C4'-C3'-C2'	-6.25	97.47	103.10
2	AB	4454	DA	O4'-C1'-C2'	-6.25	100.90	105.90
382	GJ	9	DC	O4'-C1'-C2'	-6.25	100.90	105.90
1	AA	249	DG	O4'-C1'-C2'	-6.25	100.90	105.90
1	AA	686	DG	O4'-C1'-C2'	-6.25	100.90	105.90
2	AB	3314	DT	O4'-C4'-C3'	-6.25	102.00	104.50
71	BI	7	DG	O4'-C1'-C2'	-6.25	100.90	105.90
182	C5	37	DG	P-O3'-C3'	6.25	127.20	119.70
240	D1	40	DA	P-O3'-C3'	6.25	127.20	119.70
395	GW	1	DC	C1'-O4'-C4'	-6.25	103.85	110.10
1	AA	7408	DT	O4'-C4'-C3'	-6.25	102.00	104.50
2	AB	1352	DC	C4'-C3'-C2'	-6.25	97.48	103.10
2	AB	3645	DT	O4'-C4'-C3'	-6.25	102.00	104.50
268	ET	11	DG	C1'-O4'-C4'	-6.25	103.85	110.10
430	G5	26	DG	O4'-C1'-C2'	-6.25	100.90	105.90
432	G7	9	DG	P-O3'-C3'	6.25	127.19	119.70
46	At	26	DA	P-O3'-C3'	6.25	127.19	119.70
185	C8	16	DA	C1'-O4'-C4'	-6.25	103.86	110.10
239	D0	31	DG	O4'-C1'-C2'	-6.25	100.90	105.90
1	AA	6195	DC	O4'-C4'-C3'	-6.24	102.00	104.50
331	FU	6	DT	O4'-C4'-C3'	-6.24	102.00	104.50
408	Gj	5	DC	C4'-C3'-C2'	-6.24	97.48	103.10
1	AA	7075	DA	C1'-O4'-C4'	-6.24	103.86	110.10
20	AT	8	DT	O4'-C4'-C3'	-6.24	102.00	104.50
145	CU	38	DC	P-O3'-C3'	6.24	127.19	119.70
378	GF	22	DC	O4'-C1'-N1	6.24	112.37	108.00
1	AA	1022	DT	O4'-C1'-C2'	-6.24	100.91	105.90
1	AA	2380	DA	O4'-C4'-C3'	-6.24	102.00	104.50
1	AA	4421	DG	O4'-C1'-C2'	-6.24	100.91	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	5402	DT	O4'-C4'-C3'	-6.24	102.00	104.50
2	AB	75	DG	C1'-O4'-C4'	-6.24	103.86	110.10
2	AB	4934	DG	P-O3'-C3'	6.24	127.19	119.70
2	AB	7339	DG	O4'-C1'-C2'	-6.24	100.91	105.90
87	BY	22	DC	C2-N1-C1'	6.24	125.66	118.80
137	CM	12	DA	O4'-C1'-N9	6.24	112.37	108.00
291	Eq	6	DG	O4'-C1'-C2'	-6.24	100.91	105.90
1	AA	1767	DA	P-O3'-C3'	6.24	127.18	119.70
1	AA	3790	DC	O4'-C1'-C2'	-6.24	100.91	105.90
1	AA	4094	DA	N1-C6-N6	-6.24	114.86	118.60
1	AA	5694	DC	C4'-C3'-C2'	-6.24	97.49	103.10
1	AA	6504	DC	O4'-C1'-C2'	-6.24	100.91	105.90
5	AE	17	DT	C4'-C3'-C2'	-6.24	97.49	103.10
125	CA	27	DA	O4'-C1'-C2'	-6.24	100.91	105.90
254	EF	23	DA	O4'-C1'-C2'	-6.24	100.91	105.90
1	AA	415	DT	O4'-C4'-C3'	-6.24	102.01	104.50
1	AA	6365	DT	C4'-C3'-C2'	-6.24	97.49	103.10
2	AB	4622	DG	O4'-C1'-N9	6.24	112.36	108.00
52	Az	19	DA	C4'-C3'-C2'	-6.24	97.49	103.10
167	Cq	12	DG	C1'-O4'-C4'	-6.24	103.86	110.10
328	FR	30	DT	O4'-C4'-C3'	-6.24	102.01	104.50
1	AA	4058	DC	P-O5'-C5'	6.23	130.87	120.90
1	AA	641	DA	C1'-O4'-C4'	-6.23	103.87	110.10
1	AA	3313	DC	C6-N1-C2	-6.23	117.81	120.30
2	AB	412	DA	O4'-C1'-C2'	-6.23	100.91	105.90
2	AB	1784	DG	O4'-C1'-N9	6.23	112.36	108.00
2	AB	6525	DG	O4'-C1'-C2'	-6.23	100.91	105.90
222	Dj	19	DA	O4'-C1'-C2'	-6.23	100.92	105.90
1	AA	237	DC	P-O3'-C3'	6.23	127.18	119.70
1	AA	536	DT	C4'-C3'-C2'	-6.23	97.49	103.10
1	AA	1714	DA	P-O3'-C3'	6.23	127.18	119.70
2	AB	932	DT	O4'-C4'-C3'	-6.23	102.01	104.50
2	AB	3829	DT	O4'-C4'-C3'	-6.23	102.01	104.50
230	Dr	26	DA	N1-C6-N6	-6.23	114.86	118.60
276	Eb	29	DC	O4'-C1'-C2'	-6.23	100.92	105.90
379	GG	14	DC	C4'-C3'-C2'	-6.23	97.49	103.10
156	Cf	34	DT	C4'-C3'-C2'	-6.23	97.49	103.10
375	GC	3	DA	C4'-C3'-C2'	-6.23	97.49	103.10
1	AA	75	DC	C4'-C3'-C2'	-6.23	97.50	103.10
2	AB	2878	DC	O4'-C1'-C2'	-6.23	100.92	105.90
2	AB	7545	DG	C4'-C3'-C2'	-6.23	97.50	103.10
3	AC	29	DC	C1'-O4'-C4'	-6.23	103.87	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
187	DA	1	DT	O4'-C4'-C3'	-6.23	102.01	104.50
327	FQ	16	DA	O4'-C1'-C2'	-6.23	100.92	105.90
1	AA	3440	DC	P-O3'-C3'	6.23	127.17	119.70
1	AA	3961	DG	C4'-C3'-C2'	-6.23	97.50	103.10
2	AB	4535	DT	O4'-C4'-C3'	-6.23	102.01	104.50
89	Ba	47	DG	C5-C6-O6	-6.23	124.86	128.60
391	GS	24	DC	C4'-C3'-C2'	-6.23	97.50	103.10
1	AA	7538	DA	O4'-C1'-C2'	-6.22	100.92	105.90
2	AB	7155	DT	O4'-C1'-C2'	-6.22	100.92	105.90
359	Fw	13	DT	O4'-C1'-C2'	-6.22	100.92	105.90
1	AA	379	DT	O4'-C4'-C3'	-6.22	102.01	104.50
1	AA	3273	DT	C4'-C3'-C2'	-6.22	97.50	103.10
1	AA	3504	DC	C6-N1-C2	-6.22	117.81	120.30
2	AB	65	DA	C1'-O4'-C4'	-6.22	103.88	110.10
85	BW	27	DG	N1-C6-O6	6.22	123.63	119.90
134	CJ	38	DT	O4'-C4'-C3'	-6.22	102.01	104.50
2	AB	5390	DG	C1'-O4'-C4'	-6.22	103.88	110.10
80	BR	18	DG	O4'-C1'-C2'	-6.22	100.92	105.90
132	CH	28	DG	O4'-C1'-C2'	-6.22	100.92	105.90
417	Gs	16	DG	C1'-O4'-C4'	-6.22	103.88	110.10
1	AA	3612	DC	O4'-C1'-C2'	-6.22	100.92	105.90
1	AA	3812	DA	N1-C6-N6	-6.22	114.87	118.60
2	AB	5055	DT	C4'-C3'-C2'	-6.22	97.50	103.10
30	Ad	36	DA	N1-C6-N6	-6.22	114.87	118.60
294	Et	26	DG	C5-C6-O6	-6.22	124.87	128.60
96	Bh	25	DG	N1-C6-O6	6.22	123.63	119.90
204	DR	25	DT	C1'-O4'-C4'	-6.22	103.88	110.10
1	AA	1184	DG	O4'-C1'-C2'	-6.22	100.93	105.90
1	AA	3838	DA	C1'-O4'-C4'	-6.22	103.88	110.10
1	AA	4134	DG	O4'-C1'-C2'	-6.22	100.93	105.90
2	AB	1198	DG	C5-C6-O6	-6.22	124.87	128.60
14	AN	27	DC	P-O3'-C3'	6.22	127.16	119.70
105	Bq	40	DT	C4'-C3'-C2'	-6.22	97.51	103.10
154	Cd	16	DT	C1'-O4'-C4'	-6.22	103.88	110.10
1	AA	5115	DG	O4'-C1'-C2'	-6.21	100.93	105.90
2	AB	4581	DC	O4'-C1'-C2'	-6.21	100.93	105.90
2	AB	5390	DG	C5-C6-O6	-6.21	124.87	128.60
164	Cn	5	DA	N1-C6-N6	-6.21	114.87	118.60
436	HB	17	DG	O4'-C4'-C3'	-6.21	102.01	104.50
2	AB	1884	DG	O4'-C1'-N9	6.21	112.35	108.00
2	AB	7039	DA	N1-C6-N6	-6.21	114.87	118.60
1	AA	1348	DC	C1'-O4'-C4'	-6.21	103.89	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	817	DC	C1'-O4'-C4'	-6.21	103.89	110.10
2	AB	7534	DG	C1'-O4'-C4'	-6.21	103.89	110.10
243	D4	16	DA	C1'-O4'-C4'	-6.21	103.89	110.10
2	AB	2273	DT	O4'-C4'-C3'	-6.21	102.02	104.50
275	Ea	1	DA	N1-C6-N6	-6.21	114.87	118.60
1	AA	3717	DG	P-O3'-C3'	6.21	127.15	119.70
2	AB	2106	DT	O4'-C1'-C2'	-6.21	100.93	105.90
2	AB	4449	DT	C4'-C3'-C2'	-6.21	97.51	103.10
2	AB	6667	DG	O4'-C1'-C2'	-6.21	100.93	105.90
394	GV	23	DG	O4'-C4'-C3'	-6.21	102.02	104.50
1	AA	2126	DT	C1'-O4'-C4'	-6.21	103.89	110.10
2	AB	1683	DG	O4'-C1'-C2'	-6.21	100.94	105.90
2	AB	5511	DG	O4'-C1'-C2'	-6.21	100.93	105.90
2	AB	6671	DT	C4'-C3'-C2'	-6.21	97.51	103.10
41	Ao	49	DT	O4'-C4'-C3'	-6.21	102.02	104.50
185	C8	30	DG	O4'-C1'-C2'	-6.21	100.93	105.90
240	D1	16	DG	O4'-C1'-C2'	-6.21	100.94	105.90
267	ES	22	DT	C4'-C3'-C2'	-6.21	97.51	103.10
321	FK	9	DT	O4'-C1'-C2'	-6.21	100.94	105.90
452	HR	9	DT	P-O3'-C3'	6.21	127.15	119.70
1	AA	3732	DG	O4'-C1'-N9	6.21	112.34	108.00
137	CM	16	DG	C1'-O4'-C4'	-6.21	103.89	110.10
242	D3	8	DT	C4'-C3'-C2'	-6.21	97.52	103.10
393	GU	19	DG	O4'-C1'-C2'	-6.21	100.94	105.90
1	AA	2693	DC	O4'-C1'-C2'	-6.20	100.94	105.90
2	AB	6458	DG	O4'-C1'-C2'	-6.20	100.94	105.90
3	AC	46	DT	O4'-C4'-C3'	-6.20	102.02	104.50
57	A4	12	DG	C1'-O4'-C4'	-6.20	103.90	110.10
85	BW	42	DG	P-O3'-C3'	6.20	127.14	119.70
178	C1	23	DA	P-O3'-C3'	6.20	127.14	119.70
1	AA	667	DC	C1'-O4'-C4'	-6.20	103.90	110.10
231	Ds	1	DA	C1'-O4'-C4'	-6.20	103.90	110.10
235	Dw	21	DA	O4'-C4'-C3'	-6.20	102.02	104.50
1	AA	2194	DA	P-O3'-C3'	6.20	127.14	119.70
2	AB	4827	DT	C4'-C3'-C2'	-6.20	97.52	103.10
54	A1	18	DA	O4'-C1'-C2'	-6.20	100.94	105.90
178	C1	27	DG	O4'-C1'-C2'	-6.20	100.94	105.90
387	GO	22	DT	O4'-C4'-C3'	-6.20	102.02	104.50
1	AA	7126	DC	O4'-C1'-C2'	-6.20	100.94	105.90
2	AB	777	DC	O4'-C1'-C2'	-6.20	100.94	105.90
2	AB	2070	DG	O4'-C4'-C3'	-6.20	102.02	104.50
60	A7	28	DG	O4'-C1'-C2'	-6.20	100.94	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
133	CI	16	DA	O4'-C1'-C2'	-6.20	100.94	105.90
199	DM	2	DG	O4'-C1'-C2'	-6.20	100.94	105.90
247	D8	16	DG	P-O3'-C3'	6.20	127.14	119.70
441	HG	1	DC	C2-N1-C1'	6.20	125.62	118.80
297	Ew	12	DG	O4'-C1'-C2'	-6.20	100.94	105.90
1	AA	1663	DC	C1'-O4'-C4'	-6.20	103.91	110.10
1	AA	6407	DC	C1'-O4'-C4'	-6.20	103.90	110.10
2	AB	3530	DC	O4'-C1'-N1	6.20	112.34	108.00
4	AD	7	DT	O4'-C4'-C3'	-6.20	102.02	104.50
22	AV	3	DT	O4'-C4'-C3'	-6.20	102.02	104.50
54	A1	12	DT	O4'-C4'-C3'	-6.20	102.02	104.50
150	CZ	21	DC	P-O5'-C5'	6.20	130.81	120.90
221	Di	13	DA	N1-C6-N6	6.20	122.32	118.60
2	AB	75	DG	O4'-C1'-C2'	-6.19	100.94	105.90
2	AB	512	DG	O4'-C1'-C2'	-6.19	100.94	105.90
2	AB	2395	DG	O4'-C1'-C2'	-6.19	100.94	105.90
1	AA	3995	DA	O4'-C4'-C3'	-6.19	102.02	104.50
2	AB	469	DG	O4'-C1'-C2'	-6.19	100.95	105.90
2	AB	7166	DT	C4'-C3'-C2'	-6.19	97.53	103.10
74	BL	31	DT	P-O3'-C3'	6.19	127.13	119.70
243	D4	5	DG	P-O3'-C3'	6.19	127.13	119.70
291	Eq	35	DA	O4'-C1'-C2'	-6.19	100.94	105.90
339	Fc	30	DA	C4'-C3'-C2'	-6.19	97.53	103.10
439	HE	4	DA	O4'-C4'-C3'	-6.19	102.02	104.50
2	AB	3189	DA	O4'-C1'-C2'	-6.19	100.95	105.90
78	BP	23	DG	O4'-C1'-C2'	-6.19	100.95	105.90
101	Bm	17	DA	C4'-C3'-C2'	-6.19	97.53	103.10
252	ED	1	DG	O4'-C4'-C3'	-6.19	102.02	104.50
290	Ep	5	DA	C1'-O4'-C4'	-6.19	103.91	110.10
1	AA	1353	DT	P-O3'-C3'	6.19	127.13	119.70
1	AA	5514	DC	O4'-C1'-C2'	-6.19	100.95	105.90
22	AV	8	DT	O4'-C4'-C3'	-6.19	102.02	104.50
107	Bs	37	DT	O4'-C1'-C2'	-6.19	100.95	105.90
2	AB	3175	DC	O4'-C4'-C3'	-6.19	102.03	104.50
198	DL	20	DG	O4'-C4'-C3'	-6.19	102.03	104.50
1	AA	2736	DT	C1'-O4'-C4'	-6.19	103.91	110.10
1	AA	3692	DT	C4'-C3'-C2'	-6.19	97.53	103.10
1	AA	4021	DC	P-O3'-C3'	6.19	127.12	119.70
1	AA	444	DG	O4'-C1'-C2'	-6.18	100.95	105.90
1	AA	1386	DT	C4'-C3'-C2'	-6.18	97.53	103.10
1	AA	2545	DC	O4'-C4'-C3'	-6.18	102.03	104.50
1	AA	5013	DT	O4'-C1'-C2'	-6.18	100.95	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	AD	12	DG	P-O3'-C3'	6.18	127.12	119.70
7	AG	27	DA	O4'-C1'-C2'	-6.18	100.95	105.90
26	AZ	30	DT	C4'-C3'-C2'	-6.18	97.53	103.10
169	Cs	25	DA	C4'-C3'-C2'	-6.18	97.53	103.10
188	DB	2	DG	C1'-O4'-C4'	-6.18	103.92	110.10
236	Dx	4	DG	C5-C6-O6	-6.18	124.89	128.60
2	AB	893	DT	O4'-C1'-N1	6.18	112.33	108.00
2	AB	2391	DG	C1'-O4'-C4'	-6.18	103.92	110.10
9	AI	15	DT	P-O3'-C3'	6.18	127.12	119.70
453	HS	13	DT	P-O3'-C3'	6.18	127.12	119.70
1	AA	7301	DA	P-O3'-C3'	6.18	127.12	119.70
2	AB	3462	DA	O4'-C1'-C2'	-6.18	100.95	105.90
2	AB	4839	DG	C1'-O4'-C4'	-6.18	103.92	110.10
6	AF	27	DC	C1'-O4'-C4'	-6.18	103.92	110.10
1	AA	1578	DA	O4'-C1'-C2'	-6.18	100.96	105.90
1	AA	3570	DT	C4'-C3'-C2'	-6.18	97.54	103.10
1	AA	5057	DA	O4'-C1'-C2'	-6.18	100.96	105.90
2	AB	4408	DA	O4'-C1'-C2'	-6.18	100.96	105.90
2	AB	6303	DA	N1-C6-N6	6.18	122.31	118.60
40	An	27	DC	O4'-C1'-C2'	-6.18	100.96	105.90
153	Cc	12	DA	O4'-C1'-C2'	-6.18	100.96	105.90
197	DK	28	DT	O4'-C4'-C3'	-6.18	102.03	104.50
142	CR	34	DT	O4'-C4'-C3'	-6.18	102.03	104.50
389	GQ	13	DT	C4'-C3'-C2'	-6.18	97.54	103.10
2	AB	5694	DC	O4'-C1'-C2'	-6.18	100.96	105.90
27	Aa	21	DA	C4'-C3'-C2'	-6.18	97.54	103.10
1	AA	3683	DG	O4'-C4'-C3'	-6.17	102.03	104.50
2	AB	339	DT	O4'-C1'-C2'	-6.17	100.96	105.90
2	AB	1267	DG	O4'-C4'-C3'	-6.17	102.03	104.50
103	Bo	1	DG	O4'-C1'-C2'	-6.17	100.96	105.90
420	Gv	1	DG	C1'-O4'-C4'	-6.17	103.92	110.10
1	AA	1584	DA	O4'-C1'-C2'	-6.17	100.96	105.90
1	AA	4610	DC	P-O3'-C3'	6.17	127.11	119.70
2	AB	703	DA	O4'-C1'-C2'	-6.17	100.96	105.90
92	Bd	15	DA	O4'-C1'-C2'	-6.17	100.96	105.90
1	AA	4931	DT	C4'-C3'-C2'	-6.17	97.55	103.10
1	AA	7138	DA	O4'-C1'-C2'	-6.17	100.96	105.90
2	AB	2421	DA	O4'-C1'-C2'	-6.17	100.96	105.90
2	AB	3627	DT	C4'-C3'-C2'	-6.17	97.55	103.10
2	AB	5892	DA	O4'-C1'-C2'	-6.17	100.96	105.90
2	AB	6729	DC	P-O3'-C3'	6.17	127.11	119.70
197	DK	34	DC	C6-N1-C2	-6.17	117.83	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
271	EW	14	DG	C4-N9-C1'	6.17	134.52	126.50
324	FN	30	DT	O4'-C1'-C2'	-6.17	100.96	105.90
1	AA	3247	DT	P-O3'-C3'	6.17	127.10	119.70
206	DT	19	DA	C1'-O4'-C4'	-6.17	103.93	110.10
235	Dw	1	DT	C4'-C3'-C2'	-6.17	97.55	103.10
1	AA	561	DA	O4'-C1'-N9	6.17	112.32	108.00
1	AA	1162	DA	O4'-C1'-C2'	-6.17	100.97	105.90
1	AA	1852	DT	P-O3'-C3'	6.17	127.10	119.70
1	AA	6264	DA	C1'-O4'-C4'	-6.17	103.93	110.10
2	AB	6349	DC	C1'-O4'-C4'	-6.17	103.93	110.10
165	Co	34	DG	O4'-C4'-C3'	-6.17	102.03	104.50
271	EW	1	DC	C1'-O4'-C4'	-6.17	103.93	110.10
387	GO	5	DG	C1'-O4'-C4'	-6.17	103.93	110.10
405	Gg	16	DG	O4'-C1'-C2'	-6.17	100.97	105.90
2	AB	3276	DG	C1'-O4'-C4'	-6.17	103.94	110.10
62	A9	20	DC	C1'-O4'-C4'	-6.17	103.94	110.10
94	Bf	19	DA	O4'-C1'-C2'	-6.17	100.97	105.90
170	Ct	11	DA	C4'-C3'-C2'	-6.17	97.55	103.10
1	AA	4	DC	O4'-C1'-C2'	-6.16	100.97	105.90
1	AA	2936	DG	O4'-C1'-C2'	-6.16	100.97	105.90
1	AA	6554	DG	O4'-C4'-C3'	-6.16	102.03	104.50
121	B6	1	DT	O4'-C1'-N1	6.16	112.31	108.00
328	FR	26	DT	O4'-C1'-C2'	-6.16	100.97	105.90
2	AB	5223	DG	O4'-C4'-C3'	-6.16	102.03	104.50
36	Aj	48	DT	O4'-C4'-C3'	-6.16	102.03	104.50
100	Bl	31	DA	C4'-C3'-C2'	-6.16	97.55	103.10
361	Fy	1	DA	O4'-C1'-C2'	-6.16	100.97	105.90
1	AA	6027	DC	C2-N1-C1'	6.16	125.58	118.80
2	AB	1423	DG	N1-C6-O6	6.16	123.60	119.90
2	AB	3603	DA	O4'-C1'-C2'	-6.16	100.97	105.90
6	AF	1	DT	O4'-C4'-C3'	-6.16	102.04	104.50
65	BC	18	DA	O4'-C1'-C2'	-6.16	100.97	105.90
138	CN	39	DT	P-O3'-C3'	6.16	127.09	119.70
203	DQ	29	DA	O4'-C4'-C3'	-6.16	102.03	104.50
1	AA	1523	DG	C4'-C3'-C2'	-6.16	97.56	103.10
1	AA	4386	DG	O4'-C1'-N9	6.16	112.31	108.00
1	AA	6945	DA	C4'-C3'-C2'	-6.16	97.56	103.10
64	BB	19	DT	C1'-O4'-C4'	-6.16	103.94	110.10
422	Gx	13	DG	O4'-C1'-C2'	-6.16	100.97	105.90
1	AA	2023	DA	O4'-C1'-C2'	-6.16	100.97	105.90
1	AA	2520	DG	C1'-O4'-C4'	-6.16	103.94	110.10
1	AA	5182	DT	C4'-C3'-C2'	-6.16	97.56	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
260	EL	9	DT	O4'-C1'-C2'	-6.16	100.97	105.90
1	AA	4351	DA	C4'-C3'-C2'	-6.16	97.56	103.10
2	AB	2942	DG	O4'-C1'-C2'	-6.16	100.98	105.90
33	Ag	45	DT	O4'-C4'-C3'	-6.16	102.04	104.50
1	AA	3813	DC	C4'-C3'-C2'	-6.15	97.56	103.10
2	AB	1064	DG	O4'-C1'-C2'	-6.15	100.98	105.90
2	AB	5002	DA	C4'-C3'-C2'	-6.15	97.56	103.10
90	Bb	31	DG	O4'-C1'-C2'	-6.15	100.98	105.90
244	D5	23	DG	O4'-C1'-N9	6.15	112.31	108.00
1	AA	544	DA	N1-C6-N6	-6.15	114.91	118.60
1	AA	2886	DT	O4'-C1'-C2'	-6.15	100.98	105.90
1	AA	5529	DG	O4'-C1'-N9	6.15	112.31	108.00
1	AA	6804	DA	O4'-C1'-C2'	-6.15	100.98	105.90
2	AB	2826	DC	C6-N1-C2	-6.15	117.84	120.30
215	Dc	9	DT	O4'-C1'-C2'	-6.15	100.98	105.90
1	AA	3946	DT	P-O3'-C3'	6.15	127.08	119.70
1	AA	5256	DC	O4'-C1'-N1	6.15	112.31	108.00
2	AB	1166	DA	N1-C6-N6	-6.15	114.91	118.60
2	AB	1857	DT	P-O3'-C3'	6.15	127.08	119.70
100	Bl	5	DT	O4'-C4'-C3'	-6.15	102.04	104.50
276	Eb	27	DA	O4'-C1'-C2'	-6.15	100.98	105.90
1	AA	5100	DA	O4'-C1'-C2'	-6.15	100.98	105.90
2	AB	911	DT	O4'-C4'-C3'	-6.15	102.04	104.50
2	AB	5780	DC	P-O3'-C3'	6.15	127.08	119.70
1	AA	2971	DT	C4'-C3'-C2'	-6.15	97.57	103.10
107	Bs	16	DT	C4'-C3'-C2'	-6.15	97.57	103.10
121	B6	1	DT	C2-N1-C1'	6.15	128.03	118.20
260	EL	9	DT	P-O3'-C3'	6.15	127.08	119.70
2	AB	5257	DA	P-O3'-C3'	6.15	127.08	119.70
180	C3	5	DG	O4'-C1'-C2'	-6.15	100.98	105.90
198	DL	5	DC	P-O3'-C3'	6.15	127.08	119.70
212	DZ	16	DG	O4'-C1'-C2'	-6.15	100.98	105.90
384	GL	20	DT	O4'-C4'-C3'	-6.15	102.04	104.50
1	AA	3542	DC	O4'-C1'-C2'	-6.14	100.98	105.90
2	AB	2709	DC	O4'-C4'-C3'	-6.14	102.04	104.50
22	AV	39	DG	O4'-C1'-C2'	-6.14	100.98	105.90
66	BD	7	DT	O4'-C4'-C3'	-6.14	102.04	104.50
122	B7	40	DA	O4'-C1'-C2'	-6.14	100.98	105.90
200	DN	6	DA	O4'-C1'-C2'	-6.14	100.98	105.90
200	DN	37	DA	O4'-C1'-C2'	-6.14	100.98	105.90
204	DR	36	DA	P-O3'-C3'	6.14	127.07	119.70
283	Ei	14	DG	C5-C6-O6	-6.14	124.91	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
369	F6	12	DG	O4'-C1'-C2'	-6.14	100.98	105.90
1	AA	6811	DG	O4'-C1'-C2'	-6.14	100.98	105.90
2	AB	973	DG	O4'-C1'-C2'	-6.14	100.99	105.90
2	AB	2931	DA	O4'-C1'-C2'	-6.14	100.99	105.90
2	AB	7505	DA	O4'-C1'-C2'	-6.14	100.99	105.90
55	A2	44	DT	O4'-C4'-C3'	-6.14	102.04	104.50
67	BE	4	DT	O4'-C4'-C3'	-6.14	102.04	104.50
125	CA	33	DT	C4'-C3'-C2'	-6.14	97.57	103.10
232	Dt	25	DA	O4'-C1'-C2'	-6.14	100.98	105.90
340	Fd	2	DG	O4'-C1'-C2'	-6.14	100.99	105.90
405	Gg	15	DT	O4'-C1'-N1	6.14	112.30	108.00
2	AB	4311	DA	O4'-C4'-C3'	-6.14	102.04	104.50
1	AA	4250	DT	C4'-C3'-C2'	-6.14	97.57	103.10
1	AA	4283	DC	C4'-C3'-C2'	-6.14	97.58	103.10
2	AB	898	DG	C4'-C3'-C2'	-6.14	97.58	103.10
2	AB	4142	DC	P-O3'-C3'	6.14	127.07	119.70
69	BG	9	DC	O4'-C1'-C2'	-6.14	100.99	105.90
398	GZ	4	DG	O4'-C1'-N9	6.14	112.30	108.00
406	Gh	18	DG	C4'-C3'-C2'	-6.14	97.58	103.10
156	Cf	29	DC	O4'-C1'-N1	6.14	112.30	108.00
295	Eu	16	DT	C1'-O4'-C4'	-6.14	103.96	110.10
1	AA	3835	DC	O4'-C1'-C2'	-6.14	100.99	105.90
2	AB	4505	DT	C4'-C3'-C2'	-6.14	97.58	103.10
113	By	9	DA	C4'-C3'-C2'	-6.14	97.58	103.10
2	AB	6824	DA	P-O3'-C3'	6.13	127.06	119.70
307	E6	35	DG	C5-C6-O6	-6.13	124.92	128.60
348	Fl	1	DG	C1'-O4'-C4'	-6.13	103.97	110.10
1	AA	4564	DC	O4'-C1'-C2'	-6.13	100.99	105.90
2	AB	6324	DT	O4'-C4'-C3'	-6.13	102.05	104.50
2	AB	7011	DA	O4'-C1'-C2'	-6.13	100.99	105.90
6	AF	1	DT	C1'-O4'-C4'	-6.13	103.97	110.10
36	Aj	5	DT	O4'-C4'-C3'	-6.13	102.05	104.50
1	AA	4895	DA	P-O3'-C3'	6.13	127.06	119.70
1	AA	6221	DG	P-O3'-C3'	6.13	127.06	119.70
93	Be	44	DG	C5-C6-O6	-6.13	124.92	128.60
170	Ct	2	DG	O4'-C1'-C2'	-6.13	101.00	105.90
317	FG	11	DG	O4'-C1'-C2'	-6.13	101.00	105.90
380	GH	9	DA	P-O3'-C3'	6.13	127.06	119.70
434	G9	11	DA	C5-C6-N6	6.13	128.60	123.70
1	AA	4409	DC	P-O3'-C3'	6.13	127.06	119.70
1	AA	5414	DT	C4'-C3'-C2'	-6.13	97.58	103.10
1	AA	5653	DG	O4'-C4'-C3'	-6.13	102.05	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	5694	DC	O4'-C4'-C3'	-6.13	102.05	104.50
1	AA	5785	DA	O4'-C1'-C2'	-6.13	101.00	105.90
1	AA	6931	DG	O4'-C1'-N9	6.13	112.29	108.00
2	AB	4100	DC	P-O3'-C3'	6.13	127.05	119.70
24	AX	14	DC	C2-N1-C1'	6.13	125.54	118.80
197	DK	33	DG	C4'-C3'-C2'	-6.13	97.58	103.10
233	Du	37	DC	O4'-C1'-C2'	-6.13	101.00	105.90
281	Eg	26	DT	C4'-C3'-C2'	-6.13	97.58	103.10
1	AA	709	DA	C4'-C3'-C2'	-6.13	97.59	103.10
1	AA	3610	DG	P-O3'-C3'	6.13	127.05	119.70
1	AA	4652	DA	C4'-C3'-C2'	-6.13	97.59	103.10
2	AB	3030	DA	O4'-C1'-C2'	-6.13	101.00	105.90
17	AQ	1	DT	O4'-C4'-C3'	-6.13	102.05	104.50
74	BL	10	DG	O4'-C1'-C2'	-6.13	101.00	105.90
136	CL	22	DG	P-O3'-C3'	6.13	127.05	119.70
152	Cb	39	DC	O4'-C1'-N1	6.13	112.29	108.00
279	Ee	26	DC	O4'-C1'-C2'	-6.13	101.00	105.90
64	BB	3	DT	O4'-C4'-C3'	-6.12	102.05	104.50
123	B8	28	DT	C4'-C3'-C2'	-6.12	97.59	103.10
2	AB	1187	DC	P-O3'-C3'	6.12	127.05	119.70
2	AB	4998	DG	C1'-O4'-C4'	-6.12	103.98	110.10
2	AB	7480	DG	C4'-C3'-C2'	-6.12	97.59	103.10
166	Cp	22	DT	C1'-O4'-C4'	-6.12	103.98	110.10
201	DO	31	DC	C4'-C3'-C2'	-6.12	97.59	103.10
2	AB	4341	DT	C4'-C3'-C2'	-6.12	97.59	103.10
161	Ck	34	DA	O4'-C1'-C2'	-6.12	101.00	105.90
258	EJ	23	DA	O4'-C4'-C3'	-6.12	102.05	104.50
361	Fy	5	DA	N1-C6-N6	-6.12	114.93	118.60
420	Gv	1	DG	C4-N9-C1'	6.12	134.46	126.50
1	AA	2725	DA	O4'-C1'-C2'	-6.12	101.00	105.90
1	AA	4965	DA	O4'-C4'-C3'	-6.12	102.05	104.50
2	AB	2478	DG	O4'-C1'-C2'	-6.12	101.00	105.90
200	DN	23	DT	P-O3'-C3'	6.12	127.04	119.70
2	AB	1416	DG	O4'-C1'-C2'	-6.12	101.01	105.90
2	AB	2403	DG	O4'-C1'-C2'	-6.12	101.01	105.90
103	Bo	23	DC	O4'-C4'-C3'	-6.12	102.05	104.50
1	AA	5573	DA	C1'-O4'-C4'	-6.12	103.98	110.10
1	AA	5994	DT	C4'-C3'-C2'	-6.12	97.60	103.10
2	AB	3579	DT	C4'-C3'-C2'	-6.12	97.59	103.10
119	B4	29	DC	C6-N1-C2	-6.12	117.85	120.30
212	DZ	7	DG	O4'-C1'-C2'	-6.12	101.01	105.90
252	ED	27	DC	C1'-O4'-C4'	-6.12	103.98	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1341	DA	C4'-C3'-C2'	-6.11	97.60	103.10
2	AB	132	DG	O4'-C1'-C2'	-6.11	101.01	105.90
2	AB	4303	DG	O4'-C1'-C2'	-6.11	101.01	105.90
2	AB	4544	DT	C4'-C3'-C2'	-6.11	97.60	103.10
178	C1	31	DA	P-O3'-C3'	6.11	127.04	119.70
339	Fc	6	DC	O4'-C1'-C2'	-6.11	101.01	105.90
408	Gj	9	DA	O4'-C1'-C2'	-6.11	101.01	105.90
445	HK	16	DT	O4'-C4'-C3'	-6.11	102.05	104.50
190	DD	13	DG	O4'-C1'-C2'	-6.11	101.01	105.90
1	AA	3069	DT	P-O3'-C3'	6.11	127.03	119.70
175	Cy	18	DG	C1'-O4'-C4'	-6.11	103.99	110.10
241	D2	37	DC	O4'-C1'-C2'	-6.11	101.01	105.90
401	Gc	19	DG	O4'-C1'-C2'	-6.11	101.01	105.90
1	AA	6268	DA	C4'-C3'-C2'	-6.11	97.60	103.10
362	Fz	1	DG	C1'-O4'-C4'	-6.11	103.99	110.10
1	AA	3727	DA	C4'-C3'-C2'	-6.11	97.60	103.10
1	AA	5473	DC	P-O3'-C3'	6.11	127.03	119.70
2	AB	123	DG	P-O3'-C3'	6.11	127.03	119.70
73	BK	44	DT	O4'-C4'-C3'	-6.11	102.06	104.50
376	GD	19	DC	O4'-C1'-C2'	-6.11	101.01	105.90
1	AA	4155	DT	C1'-O4'-C4'	-6.11	103.99	110.10
2	AB	304	DG	C5-C6-O6	-6.11	124.94	128.60
2	AB	2598	DG	C1'-O4'-C4'	-6.11	104.00	110.10
2	AB	4098	DA	O4'-C1'-C2'	-6.11	101.02	105.90
36	Aj	20	DC	C1'-O4'-C4'	-6.11	104.00	110.10
309	E8	25	DG	O4'-C4'-C3'	-6.11	102.06	104.50
1	AA	5668	DG	O4'-C1'-C2'	-6.10	101.02	105.90
391	GS	22	DC	O4'-C1'-C2'	-6.10	101.02	105.90
2	AB	4523	DC	O4'-C4'-C3'	-6.10	102.06	104.50
2	AB	5610	DC	P-O5'-C5'	6.10	130.66	120.90
129	CE	13	DC	O4'-C1'-C2'	-6.10	101.02	105.90
177	C0	32	DG	O4'-C1'-C2'	-6.10	101.02	105.90
226	Dn	39	DG	P-O3'-C3'	6.10	127.02	119.70
361	Fy	24	DA	C4'-C3'-C2'	-6.10	97.61	103.10
427	G2	11	DA	O4'-C1'-C2'	-6.10	101.02	105.90
231	Ds	15	DG	O4'-C1'-N9	6.10	112.27	108.00
264	EP	10	DG	P-O3'-C3'	6.10	127.02	119.70
1	AA	5780	DG	O4'-C1'-C2'	-6.10	101.02	105.90
52	Az	22	DA	O4'-C1'-C2'	-6.10	101.02	105.90
166	Cp	37	DG	O4'-C1'-N9	6.10	112.27	108.00
377	GE	5	DG	O4'-C1'-C2'	-6.10	101.02	105.90
393	GU	22	DC	P-O3'-C3'	6.10	127.02	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	2548	DG	P-O3'-C3'	6.10	127.02	119.70
1	AA	5805	DG	O4'-C1'-C2'	-6.10	101.02	105.90
1	AA	6077	DG	O4'-C1'-N9	6.10	112.27	108.00
2	AB	5843	DT	C4'-C3'-C2'	-6.10	97.61	103.10
165	Co	3	DA	N1-C6-N6	-6.10	114.94	118.60
2	AB	2696	DG	O4'-C4'-C3'	-6.10	102.06	104.50
111	Bw	23	DA	O4'-C1'-C2'	-6.10	101.02	105.90
119	B4	19	DG	N1-C6-O6	6.10	123.56	119.90
1	AA	785	DC	O4'-C1'-C2'	-6.09	101.02	105.90
1	AA	1232	DT	P-O3'-C3'	6.09	127.01	119.70
1	AA	5391	DC	O4'-C4'-C3'	-6.09	102.06	104.50
1	AA	6484	DT	C4'-C3'-C2'	-6.09	97.61	103.10
1	AA	6842	DG	O4'-C1'-C2'	-6.09	101.03	105.90
2	AB	7251	DT	C4'-C3'-C2'	-6.09	97.61	103.10
264	EP	31	DA	O4'-C4'-C3'	-6.09	102.06	104.50
436	HB	26	DC	O4'-C1'-C2'	-6.09	101.02	105.90
1	AA	1318	DT	O4'-C4'-C3'	-6.09	102.06	104.50
1	AA	3036	DG	C1'-O4'-C4'	-6.09	104.01	110.10
210	DX	16	DG	C5-C6-O6	-6.09	124.94	128.60
1	AA	367	DC	P-O3'-C3'	6.09	127.01	119.70
12	AL	42	DT	O4'-C4'-C3'	-6.09	102.06	104.50
266	ER	3	DT	O4'-C1'-C2'	-6.09	101.03	105.90
1	AA	7297	DT	C1'-O4'-C4'	-6.09	104.01	110.10
2	AB	6477	DA	C1'-O4'-C4'	-6.09	104.01	110.10
2	AB	7544	DA	C1'-O4'-C4'	-6.09	104.01	110.10
23	AW	10	DG	C1'-O4'-C4'	-6.09	104.01	110.10
368	F5	23	DT	O4'-C4'-C3'	-6.09	102.06	104.50
348	Fl	7	DG	P-O3'-C3'	6.09	127.00	119.70
1	AA	2638	DC	O4'-C1'-C2'	-6.09	101.03	105.90
1	AA	3660	DC	O4'-C1'-N1	6.09	112.26	108.00
1	AA	5580	DA	O4'-C1'-C2'	-6.09	101.03	105.90
1	AA	6896	DG	O4'-C1'-C2'	-6.09	101.03	105.90
11	AK	31	DT	C4'-C3'-C2'	-6.09	97.62	103.10
26	AZ	45	DT	O4'-C4'-C3'	-6.09	102.06	104.50
49	Aw	33	DC	P-O3'-C3'	6.09	127.00	119.70
78	BP	15	DG	O4'-C1'-C2'	-6.09	101.03	105.90
124	B9	30	DG	O4'-C1'-C2'	-6.09	101.03	105.90
201	DO	24	DG	O4'-C1'-C2'	-6.09	101.03	105.90
210	DX	14	DA	C1'-O4'-C4'	-6.09	104.01	110.10
352	Fp	16	DG	P-O3'-C3'	6.09	127.00	119.70
1	AA	3228	DT	O4'-C1'-C2'	-6.08	101.03	105.90
2	AB	6671	DT	O4'-C4'-C3'	-6.08	102.07	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	528	DG	O4'-C1'-C2'	-6.08	101.03	105.90
2	AB	1770	DA	O4'-C1'-C2'	-6.08	101.03	105.90
2	AB	5158	DG	N1-C6-O6	6.08	123.55	119.90
53	A0	23	DA	O4'-C1'-C2'	-6.08	101.03	105.90
70	BH	43	DT	O4'-C4'-C3'	-6.08	102.07	104.50
289	Eo	5	DA	C4'-C3'-C2'	-6.08	97.62	103.10
349	Fm	18	DA	N1-C6-N6	-6.08	114.95	118.60
351	Fo	7	DG	O4'-C1'-C2'	-6.08	101.03	105.90
1	AA	844	DC	O4'-C1'-C2'	-6.08	101.03	105.90
1	AA	3762	DG	C1'-O4'-C4'	-6.08	104.02	110.10
2	AB	1326	DG	O4'-C1'-C2'	-6.08	101.03	105.90
2	AB	4653	DC	O4'-C1'-N1	6.08	112.26	108.00
2	AB	7544	DA	O4'-C1'-N9	6.08	112.26	108.00
121	B6	16	DT	C1'-O4'-C4'	-6.08	104.02	110.10
130	CF	16	DA	O4'-C1'-C2'	-6.08	101.03	105.90
200	DN	19	DT	P-O3'-C3'	6.08	127.00	119.70
204	DR	29	DT	O4'-C1'-C2'	-6.08	101.03	105.90
1	AA	3376	DC	P-O3'-C3'	6.08	127.00	119.70
1	AA	5720	DC	C4'-C3'-C2'	-6.08	97.63	103.10
125	CA	34	DT	O4'-C4'-C3'	-6.08	102.07	104.50
1	AA	3500	DT	C4'-C3'-C2'	-6.08	97.63	103.10
13	AM	40	DG	O4'-C4'-C3'	-6.08	102.07	104.50
181	C4	19	DT	C4'-C3'-C2'	-6.08	97.63	103.10
327	FQ	19	DC	O4'-C1'-N1	6.08	112.25	108.00
2	AB	1764	DA	O4'-C1'-C2'	-6.08	101.04	105.90
2	AB	2307	DG	O4'-C1'-C2'	-6.08	101.04	105.90
196	DJ	1	DG	C4'-C3'-C2'	-6.08	97.63	103.10
247	D8	9	DG	O4'-C1'-C2'	-6.08	101.04	105.90
447	HM	2	DC	O4'-C1'-C2'	-6.08	101.04	105.90
1	AA	3389	DC	O4'-C1'-C2'	-6.08	101.04	105.90
1	AA	6802	DG	O4'-C1'-C2'	-6.08	101.04	105.90
2	AB	4274	DA	N1-C6-N6	-6.08	114.95	118.60
2	AB	7438	DG	O4'-C1'-C2'	-6.08	101.04	105.90
31	Ae	8	DT	O4'-C4'-C3'	-6.08	102.07	104.50
75	BM	11	DG	C5-C6-O6	-6.08	124.95	128.60
252	ED	24	DG	C1'-O4'-C4'	-6.08	104.03	110.10
1	AA	4297	DA	O4'-C1'-C2'	-6.07	101.04	105.90
1	AA	5921	DA	O4'-C4'-C3'	-6.07	102.07	104.50
1	AA	6223	DT	C1'-O4'-C4'	-6.07	104.03	110.10
2	AB	4528	DG	O4'-C1'-C2'	-6.07	101.04	105.90
14	AN	29	DA	O4'-C1'-C2'	-6.07	101.04	105.90
18	AR	8	DT	O4'-C4'-C3'	-6.07	102.07	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
137	CM	30	DG	O4'-C1'-C2'	-6.07	101.04	105.90
178	C1	4	DA	O4'-C1'-C2'	-6.07	101.04	105.90
216	Dd	24	DA	O4'-C1'-C2'	-6.07	101.04	105.90
326	FP	1	DC	O4'-C4'-C3'	-6.07	102.07	104.50
1	AA	5946	DA	C4'-C3'-C2'	-6.07	97.64	103.10
2	AB	3367	DA	O4'-C1'-C2'	-6.07	101.04	105.90
69	BG	17	DC	P-O3'-C3'	6.07	126.99	119.70
1	AA	2914	DA	O4'-C1'-C2'	-6.07	101.04	105.90
1	AA	5484	DG	C1'-O4'-C4'	-6.07	104.03	110.10
1	AA	6077	DG	O4'-C1'-C2'	-6.07	101.04	105.90
2	AB	1566	DT	C4'-C3'-C2'	-6.07	97.64	103.10
2	AB	3444	DA	C4'-C3'-C2'	-6.07	97.64	103.10
203	DQ	23	DA	C1'-O4'-C4'	-6.07	104.03	110.10
1	AA	3285	DC	C5-C4-N4	-6.07	115.95	120.20
1	AA	3689	DG	O4'-C1'-C2'	-6.07	101.05	105.90
1	AA	6460	DA	N1-C6-N6	-6.07	114.96	118.60
34	Ah	9	DT	O4'-C4'-C3'	-6.07	102.07	104.50
80	BR	30	DC	O4'-C1'-C2'	-6.07	101.05	105.90
136	CL	16	DT	O4'-C1'-C2'	-6.07	101.05	105.90
162	Cl	41	DC	O4'-C1'-N1	6.07	112.25	108.00
214	Db	25	DA	O4'-C1'-C2'	-6.07	101.05	105.90
1	AA	5458	DG	C1'-O4'-C4'	-6.07	104.03	110.10
2	AB	573	DC	O4'-C1'-C2'	-6.07	101.05	105.90
111	Bw	40	DC	P-O3'-C3'	6.07	126.98	119.70
206	DT	28	DT	O4'-C1'-N1	6.07	112.25	108.00
229	Dq	13	DG	C4'-C3'-C2'	-6.07	97.64	103.10
368	F5	25	DT	O4'-C4'-C3'	-6.07	102.07	104.50
33	Ag	25	DC	C2-N1-C1'	6.06	125.47	118.80
119	B4	17	DG	O4'-C1'-C2'	-6.06	101.05	105.90
2	AB	3557	DT	O4'-C1'-C2'	-6.06	101.05	105.90
6	AF	23	DC	O4'-C1'-C2'	-6.06	101.05	105.90
32	Af	19	DG	O4'-C1'-C2'	-6.06	101.05	105.90
64	BB	16	DC	O4'-C1'-C2'	-6.06	101.05	105.90
218	Df	37	DG	O4'-C1'-C2'	-6.06	101.05	105.90
330	FT	28	DT	O4'-C4'-C3'	-6.06	102.08	104.50
446	HL	20	DG	C5-C6-O6	-6.06	124.96	128.60
1	AA	1353	DT	C1'-O4'-C4'	-6.06	104.04	110.10
112	Bx	37	DG	O4'-C1'-C2'	-6.06	101.05	105.90
1	AA	5642	DA	O4'-C1'-C2'	-6.06	101.05	105.90
1	AA	5832	DG	O4'-C1'-C2'	-6.06	101.05	105.90
2	AB	2845	DT	P-O3'-C3'	6.06	126.97	119.70
76	BN	10	DC	O4'-C1'-C2'	-6.06	101.05	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
123	B8	36	DT	O4'-C4'-C3'	-6.06	102.08	104.50
375	GC	23	DG	C4'-C3'-C2'	-6.06	97.65	103.10
410	Gl	20	DG	C4'-C3'-C2'	-6.06	97.65	103.10
1	AA	2866	DC	O4'-C1'-C2'	-6.06	101.06	105.90
1	AA	3043	DG	O4'-C1'-C2'	-6.06	101.05	105.90
1	AA	4760	DA	O4'-C1'-C2'	-6.06	101.06	105.90
2	AB	1355	DG	O4'-C1'-N9	6.06	112.24	108.00
2	AB	5488	DT	C4'-C3'-C2'	-6.06	97.65	103.10
2	AB	6608	DG	O4'-C1'-C2'	-6.06	101.05	105.90
107	Bs	30	DA	C1'-O4'-C4'	-6.06	104.04	110.10
166	Cp	9	DT	O4'-C1'-C2'	-6.06	101.05	105.90
167	Cq	23	DG	C4'-C3'-C2'	-6.06	97.65	103.10
428	G3	8	DT	P-O3'-C3'	6.06	126.97	119.70
66	BD	5	DT	O4'-C4'-C3'	-6.06	102.08	104.50
404	Gf	12	DC	O4'-C1'-N1	6.06	112.24	108.00
1	AA	6210	DG	O4'-C1'-C2'	-6.05	101.06	105.90
2	AB	393	DG	O4'-C1'-C2'	-6.05	101.06	105.90
103	Bo	1	DG	O4'-C1'-N9	6.05	112.24	108.00
407	Gi	2	DG	O4'-C4'-C3'	-6.05	102.08	104.50
1	AA	1024	DG	C4'-C3'-C2'	-6.05	97.65	103.10
2	AB	7308	DG	O4'-C1'-C2'	-6.05	101.06	105.90
174	Cx	19	DC	O4'-C1'-C2'	-6.05	101.06	105.90
1	AA	1389	DC	C4'-C3'-C2'	-6.05	97.65	103.10
2	AB	1502	DC	C4'-C3'-C2'	-6.05	97.65	103.10
2	AB	1869	DG	O4'-C1'-C2'	-6.05	101.06	105.90
10	AJ	4	DT	O4'-C4'-C3'	-6.05	102.08	104.50
28	Ab	23	DT	C4'-C3'-C2'	-6.05	97.65	103.10
81	BS	5	DT	C1'-O4'-C4'	-6.05	104.05	110.10
296	Ev	33	DA	P-O3'-C3'	6.05	126.96	119.70
1	AA	3305	DA	N1-C6-N6	-6.05	114.97	118.60
1	AA	6763	DG	O4'-C1'-C2'	-6.05	101.06	105.90
1	AA	7094	DA	P-O3'-C3'	6.05	126.96	119.70
2	AB	3503	DT	C4'-C3'-C2'	-6.05	97.66	103.10
2	AB	4572	DG	O4'-C1'-C2'	-6.05	101.06	105.90
2	AB	5020	DA	O4'-C1'-C2'	-6.05	101.06	105.90
165	Co	1	DA	O4'-C1'-C2'	-6.05	101.06	105.90
2	AB	6495	DG	O4'-C1'-C2'	-6.05	101.06	105.90
65	BC	46	DT	O4'-C4'-C3'	-6.05	102.08	104.50
297	Ew	16	DG	C4'-C3'-C2'	-6.05	97.66	103.10
1	AA	3215	DG	O4'-C1'-C2'	-6.05	101.06	105.90
1	AA	5533	DA	O4'-C1'-C2'	-6.05	101.06	105.90
2	AB	4201	DA	C1'-O4'-C4'	-6.05	104.05	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
40	An	41	DC	C4'-C3'-C2'	-6.05	97.66	103.10
66	BD	28	DC	P-O3'-C3'	6.05	126.96	119.70
177	C0	17	DC	O4'-C4'-C3'	-6.05	102.08	104.50
215	Dc	38	DA	O4'-C1'-C2'	-6.05	101.06	105.90
242	D3	16	DA	P-O3'-C3'	6.05	126.96	119.70
1	AA	3720	DA	P-O3'-C3'	6.04	126.95	119.70
1	AA	5221	DC	C4'-C3'-C2'	-6.04	97.66	103.10
2	AB	5288	DG	O4'-C1'-C2'	-6.04	101.06	105.90
1	AA	2846	DC	C1'-O4'-C4'	-6.04	104.06	110.10
1	AA	3129	DG	O4'-C1'-C2'	-6.04	101.06	105.90
1	AA	3528	DA	O4'-C1'-C2'	-6.04	101.06	105.90
2	AB	3285	DC	O4'-C1'-C2'	-6.04	101.07	105.90
2	AB	3936	DG	O4'-C1'-C2'	-6.04	101.07	105.90
2	AB	5264	DG	O4'-C1'-C2'	-6.04	101.06	105.90
13	AM	7	DT	O4'-C4'-C3'	-6.04	102.08	104.50
218	Df	21	DT	O4'-C4'-C3'	-6.04	102.08	104.50
1	AA	6732	DT	O4'-C4'-C3'	-6.04	102.08	104.50
2	AB	1895	DA	C4'-C3'-C2'	-6.04	97.66	103.10
2	AB	2411	DA	P-O3'-C3'	6.04	126.95	119.70
2	AB	4201	DA	O4'-C1'-N9	6.04	112.23	108.00
2	AB	7032	DA	C4'-C3'-C2'	-6.04	97.66	103.10
69	BG	23	DG	O4'-C1'-C2'	-6.04	101.07	105.90
293	Es	19	DA	C1'-O4'-C4'	-6.04	104.06	110.10
2	AB	729	DG	P-O3'-C3'	6.04	126.95	119.70
2	AB	2174	DT	P-O3'-C3'	6.04	126.95	119.70
135	CK	25	DT	C4'-C3'-C2'	-6.04	97.66	103.10
144	CT	30	DG	O4'-C1'-C2'	-6.04	101.07	105.90
21	AU	12	DC	C1'-O4'-C4'	-6.04	104.06	110.10
113	By	6	DT	C4'-C3'-C2'	-6.04	97.67	103.10
246	D7	34	DG	O4'-C1'-C2'	-6.04	101.07	105.90
1	AA	5312	DA	O4'-C1'-C2'	-6.04	101.07	105.90
61	A8	1	DT	O4'-C1'-C2'	-6.04	101.07	105.90
2	AB	3102	DC	O4'-C1'-C2'	-6.04	101.07	105.90
18	AR	26	DC	C6-N1-C1'	-6.04	113.56	120.80
134	CJ	29	DA	O4'-C1'-C2'	-6.04	101.07	105.90
213	Da	18	DA	P-O3'-C3'	6.04	126.94	119.70
297	Ew	20	DA	C4'-C3'-C2'	-6.04	97.67	103.10
375	GC	20	DT	C4'-C3'-C2'	-6.04	97.67	103.10
446	HL	20	DG	O4'-C4'-C3'	-6.04	102.09	104.50
1	AA	2751	DG	O4'-C1'-C2'	-6.03	101.07	105.90
1	AA	3365	DC	O4'-C1'-N1	6.03	112.22	108.00
1	AA	6016	DG	C1'-O4'-C4'	-6.03	104.07	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2672	DG	O4'-C1'-C2'	-6.03	101.07	105.90
2	AB	7505	DA	P-O3'-C3'	6.03	126.94	119.70
168	Cr	41	DT	P-O3'-C3'	6.03	126.94	119.70
445	HK	4	DA	O4'-C1'-C2'	-6.03	101.07	105.90
1	AA	4362	DA	P-O3'-C3'	6.03	126.94	119.70
1	AA	7087	DT	O4'-C4'-C3'	-6.03	102.09	104.50
2	AB	2974	DC	C1'-O4'-C4'	-6.03	104.07	110.10
62	A9	18	DC	P-O3'-C3'	6.03	126.94	119.70
73	BK	8	DG	O4'-C1'-C2'	-6.03	101.08	105.90
91	Bc	37	DG	O4'-C1'-C2'	-6.03	101.08	105.90
108	Bt	13	DA	O4'-C1'-C2'	-6.03	101.08	105.90
138	CN	15	DG	O4'-C1'-C2'	-6.03	101.08	105.90
157	Cg	2	DA	C1'-O4'-C4'	-6.03	104.07	110.10
1	AA	7305	DA	C4'-C3'-C2'	-6.03	97.67	103.10
129	CE	28	DA	C4'-C3'-C2'	-6.03	97.67	103.10
346	Fj	9	DG	O4'-C1'-N9	6.03	112.22	108.00
1	AA	2944	DA	C1'-O4'-C4'	-6.03	104.07	110.10
1	AA	4497	DT	O4'-C1'-C2'	-6.03	101.08	105.90
1	AA	7418	DG	O4'-C1'-C2'	-6.03	101.08	105.90
2	AB	932	DT	C4'-C3'-C2'	-6.03	97.68	103.10
12	AL	26	DG	P-O3'-C3'	6.03	126.93	119.70
419	Gu	18	DG	C5-C6-O6	-6.03	124.98	128.60
1	AA	4936	DG	O4'-C1'-C2'	-6.03	101.08	105.90
2	AB	4250	DC	C4'-C3'-C2'	-6.03	97.68	103.10
2	AB	5188	DG	C1'-O4'-C4'	-6.03	104.08	110.10
26	AZ	1	DT	O4'-C4'-C3'	-6.03	102.09	104.50
63	BA	9	DT	P-O3'-C3'	6.03	126.93	119.70
145	CU	30	DG	O4'-C1'-C2'	-6.03	101.08	105.90
380	GH	25	DT	O4'-C4'-C3'	-6.03	102.09	104.50
386	GN	1	DA	C4'-C3'-C2'	-6.03	97.68	103.10
396	GX	5	DG	P-O3'-C3'	6.03	126.93	119.70
1	AA	2704	DA	O4'-C1'-C2'	-6.02	101.08	105.90
1	AA	4241	DG	P-O3'-C3'	6.02	126.93	119.70
157	Cg	40	DC	O4'-C1'-C2'	-6.02	101.08	105.90
1	AA	2297	DA	O4'-C1'-C2'	-6.02	101.08	105.90
1	AA	3103	DG	O4'-C1'-N9	6.02	112.22	108.00
2	AB	4702	DT	P-O3'-C3'	6.02	126.93	119.70
63	BA	26	DA	N1-C6-N6	-6.02	114.99	118.60
80	BR	37	DT	C1'-O4'-C4'	-6.02	104.08	110.10
1	AA	1837	DC	P-O3'-C3'	6.02	126.92	119.70
2	AB	206	DA	O4'-C4'-C3'	-6.02	102.09	104.50
2	AB	5442	DG	O4'-C1'-C2'	-6.02	101.08	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
69	BG	39	DA	O4'-C1'-C2'	-6.02	101.08	105.90
1	AA	4366	DC	P-O5'-C5'	6.02	130.53	120.90
2	AB	1117	DT	C4'-C3'-C2'	-6.02	97.68	103.10
178	C1	23	DA	O4'-C1'-C2'	-6.02	101.08	105.90
187	DA	16	DA	O4'-C1'-C2'	-6.02	101.08	105.90
356	Ft	24	DA	O4'-C1'-C2'	-6.02	101.08	105.90
1	AA	4723	DG	C4'-C3'-C2'	-6.02	97.69	103.10
1	AA	4825	DA	O4'-C1'-C2'	-6.02	101.09	105.90
2	AB	1718	DC	C4'-C3'-C2'	-6.02	97.68	103.10
2	AB	4362	DC	P-O5'-C5'	6.02	130.53	120.90
2	AB	6035	DG	O4'-C1'-C2'	-6.02	101.08	105.90
154	Cd	2	DG	C4-N9-C1'	6.02	134.32	126.50
207	DU	26	DA	O4'-C4'-C3'	-6.02	102.09	104.50
258	EJ	24	DA	C1'-O4'-C4'	-6.02	104.08	110.10
333	FW	5	DA	C1'-O4'-C4'	-6.02	104.08	110.10
28	Ab	46	DT	O4'-C4'-C3'	-6.02	102.09	104.50
1	AA	2123	DC	C4'-C3'-C2'	-6.01	97.69	103.10
1	AA	2572	DC	C1'-O4'-C4'	-6.01	104.08	110.10
1	AA	2644	DG	O4'-C4'-C3'	-6.01	102.09	104.50
1	AA	3107	DT	O4'-C1'-C2'	-6.01	101.09	105.90
1	AA	4255	DT	C4'-C3'-C2'	-6.01	97.69	103.10
35	Ai	8	DT	O4'-C4'-C3'	-6.01	102.09	104.50
169	Cs	40	DG	P-O3'-C3'	6.01	126.92	119.70
408	Gj	17	DG	O4'-C1'-C2'	-6.01	101.09	105.90
2	AB	2843	DG	P-O3'-C3'	6.01	126.92	119.70
128	CD	12	DC	O4'-C1'-C2'	-6.01	101.09	105.90
216	Dd	10	DT	C4'-C3'-C2'	-6.01	97.69	103.10
316	FF	19	DC	C4'-C3'-C2'	-6.01	97.69	103.10
1	AA	6610	DC	O4'-C1'-C2'	-6.01	101.09	105.90
97	Bi	1	DT	C1'-O4'-C4'	-6.01	104.09	110.10
98	Bj	37	DG	C5-C6-O6	-6.01	124.99	128.60
191	DE	30	DC	P-O3'-C3'	6.01	126.91	119.70
1	AA	660	DA	O4'-C1'-N9	6.01	112.21	108.00
1	AA	4583	DG	O4'-C4'-C3'	-6.01	102.10	104.50
2	AB	1328	DA	O4'-C1'-C2'	-6.01	101.09	105.90
2	AB	6251	DG	P-O3'-C3'	6.01	126.91	119.70
192	DF	22	DA	P-O3'-C3'	6.01	126.91	119.70
207	DU	29	DT	O4'-C1'-C2'	-6.01	101.09	105.90
341	Fe	19	DA	O4'-C1'-C2'	-6.01	101.09	105.90
392	GT	26	DA	P-O3'-C3'	6.01	126.91	119.70
403	Ge	12	DC	P-O3'-C3'	6.01	126.91	119.70
7	AG	47	DT	O4'-C4'-C3'	-6.01	102.10	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
197	DK	22	DG	O4'-C1'-C2'	-6.01	101.09	105.90
207	DU	29	DT	C1'-O4'-C4'	-6.01	104.09	110.10
333	FW	23	DT	C4'-C3'-C2'	-6.01	97.69	103.10
2	AB	2380	DA	O4'-C1'-C2'	-6.01	101.09	105.90
2	AB	3710	DT	C4'-C3'-C2'	-6.01	97.69	103.10
2	AB	3764	DT	C4'-C3'-C2'	-6.01	97.69	103.10
41	Ao	31	DT	O4'-C1'-C2'	-6.01	101.09	105.90
141	CQ	23	DG	O4'-C1'-N9	6.01	112.20	108.00
154	Cd	2	DG	C8-N9-C1'	-6.01	119.19	127.00
233	Du	37	DC	P-O3'-C3'	6.01	126.91	119.70
1	AA	3055	DC	O4'-C1'-C2'	-6.00	101.10	105.90
2	AB	874	DC	O4'-C1'-N1	-6.00	103.80	108.00
2	AB	7320	DT	O4'-C1'-C2'	-6.00	101.10	105.90
1	AA	3112	DA	C1'-O4'-C4'	-6.00	104.10	110.10
1	AA	7158	DT	O4'-C1'-C2'	-6.00	101.10	105.90
2	AB	606	DA	C1'-O4'-C4'	-6.00	104.10	110.10
2	AB	735	DG	O4'-C1'-C2'	-6.00	101.10	105.90
2	AB	5173	DA	O4'-C1'-N9	6.00	112.20	108.00
23	AW	5	DT	O4'-C4'-C3'	-6.00	102.10	104.50
428	G3	8	DT	C4'-C3'-C2'	-6.00	97.70	103.10
1	AA	164	DC	P-O5'-C5'	6.00	130.50	120.90
1	AA	660	DA	C1'-O4'-C4'	-6.00	104.10	110.10
1	AA	4362	DA	O4'-C1'-C2'	-6.00	101.10	105.90
2	AB	1707	DA	P-O3'-C3'	6.00	126.90	119.70
91	Bc	12	DC	C6-N1-C2	-6.00	117.90	120.30
187	DA	38	DC	O4'-C4'-C3'	-6.00	102.10	104.50
249	EA	20	DT	O4'-C1'-C2'	-6.00	101.10	105.90
263	EO	5	DG	C1'-O4'-C4'	-6.00	104.10	110.10
453	HS	15	DG	O4'-C1'-N9	6.00	112.20	108.00
2	AB	2533	DT	C4'-C3'-C2'	-6.00	97.70	103.10
320	FJ	9	DA	O4'-C1'-C2'	-6.00	101.10	105.90
2	AB	2442	DC	C4'-C3'-C2'	-6.00	97.70	103.10
2	AB	7264	DG	P-O3'-C3'	6.00	126.90	119.70
65	BC	17	DG	O4'-C1'-C2'	-6.00	101.10	105.90
85	BW	3	DC	O4'-C1'-C2'	-6.00	101.10	105.90
1	AA	60	DG	C4'-C3'-C2'	-6.00	97.70	103.10
1	AA	2522	DC	O4'-C1'-N1	6.00	112.20	108.00
1	AA	4250	DT	O4'-C4'-C3'	-6.00	102.10	104.50
1	AA	5563	DA	O4'-C1'-C2'	-6.00	101.10	105.90
1	AA	7083	DG	P-O3'-C3'	6.00	126.89	119.70
1	AA	7351	DA	O4'-C1'-C2'	-6.00	101.10	105.90
28	Ab	34	DA	C1'-O4'-C4'	-6.00	104.10	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
68	BF	47	DT	C4'-C3'-C2'	-6.00	97.70	103.10
81	BS	6	DT	P-O5'-C5'	6.00	130.49	120.90
106	Br	18	DG	O4'-C4'-C3'	-6.00	102.10	104.50
128	CD	28	DA	N1-C6-N6	-6.00	115.00	118.60
257	EI	16	DG	O4'-C1'-C2'	-6.00	101.10	105.90
1	AA	1234	DG	O4'-C1'-C2'	-6.00	101.10	105.90
1	AA	148	DC	C4'-C3'-C2'	-5.99	97.71	103.10
1	AA	755	DC	C4'-C3'-C2'	-5.99	97.70	103.10
1	AA	755	DC	O4'-C1'-N1	5.99	112.20	108.00
1	AA	5561	DG	C1'-O4'-C4'	-5.99	104.11	110.10
2	AB	2435	DA	O4'-C1'-N9	5.99	112.19	108.00
115	B0	32	DT	C4-C5-C7	-5.99	115.40	119.00
142	CR	22	DC	O4'-C1'-C2'	-5.99	101.11	105.90
161	Ck	41	DG	C4'-C3'-C2'	-5.99	97.71	103.10
1	AA	4833	DA	C4'-C3'-C2'	-5.99	97.71	103.10
1	AA	831	DA	O4'-C4'-C3'	-5.99	102.10	104.50
17	AQ	3	DT	O4'-C1'-C2'	-5.99	101.11	105.90
84	BV	44	DG	O4'-C1'-C2'	-5.99	101.11	105.90
245	D6	30	DC	C1'-O4'-C4'	-5.99	104.11	110.10
261	EM	8	DC	O4'-C1'-C2'	-5.99	101.11	105.90
269	EU	22	DG	C5-C6-O6	-5.99	125.01	128.60
420	Gv	23	DA	O4'-C1'-C2'	-5.99	101.11	105.90
1	AA	225	DG	O4'-C1'-C2'	-5.99	101.11	105.90
1	AA	961	DG	C1'-O4'-C4'	-5.99	104.11	110.10
1	AA	2767	DG	O4'-C1'-C2'	-5.99	101.11	105.90
1	AA	2892	DA	O4'-C1'-C2'	-5.99	101.11	105.90
1	AA	4343	DT	C4'-C3'-C2'	-5.99	97.71	103.10
1	AA	4535	DG	O4'-C1'-C2'	-5.99	101.11	105.90
1	AA	4768	DT	C4'-C3'-C2'	-5.99	97.71	103.10
2	AB	893	DT	C1'-O4'-C4'	-5.99	104.11	110.10
50	Ax	27	DC	O4'-C1'-C2'	-5.99	101.11	105.90
69	BG	14	DC	C2-N1-C1'	5.99	125.39	118.80
315	FE	5	DC	O4'-C4'-C3'	-5.99	102.11	104.50
410	Gl	23	DA	O4'-C4'-C3'	-5.99	102.11	104.50
107	Bs	37	DT	C1'-O4'-C4'	-5.99	104.11	110.10
309	E8	3	DG	O4'-C1'-C2'	-5.99	101.11	105.90
1	AA	3792	DT	C4-C5-C7	-5.99	115.41	119.00
1	AA	5400	DC	P-O5'-C5'	5.99	130.48	120.90
1	AA	5656	DG	O4'-C1'-C2'	-5.99	101.11	105.90
1	AA	6946	DT	C4'-C3'-C2'	-5.99	97.71	103.10
2	AB	1539	DG	O4'-C1'-C2'	-5.99	101.11	105.90
2	AB	4324	DC	C6-N1-C2	-5.99	117.91	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	AZ	20	DC	C1'-O4'-C4'	-5.99	104.11	110.10
73	BK	37	DT	O4'-C1'-C2'	-5.99	101.11	105.90
286	El	6	DG	O4'-C1'-C2'	-5.99	101.11	105.90
1	AA	2901	DT	C4'-C3'-C2'	-5.98	97.71	103.10
2	AB	4947	DT	C4'-C3'-C2'	-5.98	97.72	103.10
1	AA	7486	DG	O4'-C1'-C2'	-5.98	101.11	105.90
2	AB	1777	DC	C4'-C3'-C2'	-5.98	97.72	103.10
97	Bi	35	DG	C1'-O4'-C4'	-5.98	104.12	110.10
243	D4	8	DT	C4'-C3'-C2'	-5.98	97.72	103.10
270	EV	8	DG	O4'-C4'-C3'	-5.98	102.11	104.50
1	AA	4615	DA	O4'-C1'-C2'	-5.98	101.12	105.90
2	AB	402	DG	O4'-C1'-C2'	-5.98	101.12	105.90
2	AB	1458	DA	O4'-C1'-C2'	-5.98	101.12	105.90
2	AB	5379	DC	O4'-C4'-C3'	-5.98	102.11	104.50
193	DG	22	DG	O4'-C1'-C2'	-5.98	101.11	105.90
214	Db	13	DC	O4'-C1'-C2'	-5.98	101.12	105.90
325	FO	25	DA	O4'-C1'-C2'	-5.98	101.11	105.90
1	AA	133	DC	P-O3'-C3'	5.98	126.88	119.70
2	AB	2068	DC	O4'-C1'-C2'	-5.98	101.12	105.90
2	AB	5086	DA	O4'-C1'-C2'	-5.98	101.12	105.90
1	AA	5500	DG	O4'-C1'-C2'	-5.98	101.12	105.90
2	AB	6762	DA	P-O3'-C3'	5.98	126.87	119.70
9	AI	28	DA	C1'-O4'-C4'	-5.98	104.12	110.10
37	Ak	37	DG	O4'-C1'-C2'	-5.98	101.12	105.90
273	EY	29	DA	C1'-O4'-C4'	-5.98	104.12	110.10
344	Fh	6	DT	O4'-C1'-C2'	-5.98	101.12	105.90
402	Gd	24	DC	P-O3'-C3'	5.98	126.87	119.70
115	B0	24	DA	O4'-C1'-C2'	-5.98	101.12	105.90
184	C7	4	DC	O4'-C1'-N1	5.98	112.18	108.00
1	AA	1282	DT	P-O3'-C3'	5.97	126.87	119.70
1	AA	2361	DG	O4'-C1'-C2'	-5.97	101.12	105.90
1	AA	4094	DA	O4'-C1'-C2'	-5.97	101.12	105.90
1	AA	5923	DG	O4'-C1'-N9	5.97	112.18	108.00
1	AA	6287	DG	O4'-C1'-C2'	-5.97	101.12	105.90
2	AB	7530	DA	P-O3'-C3'	5.97	126.87	119.70
175	Cy	2	DG	O4'-C1'-C2'	-5.97	101.12	105.90
394	GV	23	DG	C1'-O4'-C4'	-5.97	104.13	110.10
1	AA	3687	DA	P-O3'-C3'	5.97	126.87	119.70
10	AJ	31	DT	C6-C5-C7	-5.97	119.32	122.90
133	CI	16	DA	O4'-C1'-N9	5.97	112.18	108.00
259	EK	23	DT	O4'-C1'-C2'	-5.97	101.12	105.90
268	ET	11	DG	O4'-C4'-C3'	-5.97	102.11	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	5173	DA	O4'-C1'-C2'	-5.97	101.12	105.90
154	Cd	14	DT	O4'-C1'-N1	5.97	112.18	108.00
205	DS	33	DT	C4'-C3'-C2'	-5.97	97.73	103.10
391	GS	10	DG	O4'-C1'-C2'	-5.97	101.12	105.90
2	AB	2353	DC	P-O5'-C5'	5.97	130.45	120.90
42	Ap	12	DA	O4'-C1'-C2'	-5.97	101.13	105.90
1	AA	3021	DA	N1-C6-N6	-5.97	115.02	118.60
1	AA	5847	DC	O4'-C1'-C2'	-5.97	101.13	105.90
2	AB	2064	DG	O4'-C1'-N9	5.97	112.18	108.00
333	FW	31	DT	O4'-C1'-C2'	-5.97	101.13	105.90
2	AB	1159	DT	P-O3'-C3'	5.96	126.86	119.70
2	AB	3829	DT	C4'-C3'-C2'	-5.96	97.73	103.10
58	A5	25	DG	O4'-C4'-C3'	-5.96	102.11	104.50
207	DU	12	DA	C4'-C3'-C2'	-5.96	97.73	103.10
1	AA	7465	DT	C4'-C3'-C2'	-5.96	97.73	103.10
10	AJ	35	DG	C1'-O4'-C4'	-5.96	104.14	110.10
105	Bq	12	DT	C4'-C3'-C2'	-5.96	97.73	103.10
102	Bn	13	DT	C4'-C3'-C2'	-5.96	97.73	103.10
318	FH	30	DT	O4'-C4'-C3'	-5.96	102.11	104.50
1	AA	2	DG	O4'-C1'-C2'	-5.96	101.13	105.90
1	AA	1358	DA	O4'-C1'-C2'	-5.96	101.13	105.90
1	AA	7147	DA	O4'-C1'-C2'	-5.96	101.13	105.90
1	AA	695	DG	O4'-C1'-N9	5.96	112.17	108.00
1	AA	887	DC	O4'-C1'-C2'	-5.96	101.13	105.90
2	AB	484	DA	O4'-C1'-C2'	-5.96	101.13	105.90
2	AB	1240	DT	C4'-C3'-C2'	-5.96	97.74	103.10
2	AB	5229	DC	O4'-C1'-C2'	-5.96	101.13	105.90
307	E6	29	DA	O4'-C1'-N9	5.96	112.17	108.00
455	HU	19	DA	N1-C6-N6	-5.96	115.03	118.60
1	AA	3701	DA	O4'-C1'-C2'	-5.96	101.14	105.90
2	AB	3979	DA	C4'-C3'-C2'	-5.96	97.74	103.10
403	Ge	19	DG	O4'-C4'-C3'	-5.96	102.12	104.50
411	Gm	2	DT	O4'-C1'-C2'	-5.96	101.13	105.90
31	Ae	10	DC	C6-N1-C1'	-5.96	113.65	120.80
44	Ar	43	DT	O4'-C4'-C3'	-5.96	102.12	104.50
287	Em	6	DC	O4'-C1'-C2'	-5.96	101.14	105.90
308	E7	10	DG	O4'-C1'-C2'	-5.96	101.14	105.90
2	AB	1317	DG	C1'-O4'-C4'	-5.95	104.15	110.10
2	AB	1944	DT	O4'-C1'-C2'	-5.95	101.14	105.90
2	AB	2776	DG	C1'-O4'-C4'	-5.95	104.15	110.10
93	Be	10	DC	O4'-C4'-C3'	-5.95	102.12	104.50
297	Ew	16	DG	O4'-C4'-C3'	-5.95	102.12	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
64	BB	47	DT	O4'-C4'-C3'	-5.95	102.12	104.50
160	Cj	5	DA	O4'-C1'-C2'	-5.95	101.14	105.90
1	AA	2676	DT	O4'-C4'-C3'	-5.95	102.12	104.50
1	AA	3329	DC	C2-N1-C1'	5.95	125.35	118.80
2	AB	1756	DA	C1'-O4'-C4'	-5.95	104.15	110.10
2	AB	6705	DC	O4'-C1'-C2'	-5.95	101.14	105.90
70	BH	37	DG	C1'-O4'-C4'	-5.95	104.15	110.10
82	BT	34	DT	P-O3'-C3'	5.95	126.84	119.70
102	Bn	20	DG	O4'-C1'-C2'	-5.95	101.14	105.90
245	D6	21	DG	P-O3'-C3'	5.95	126.84	119.70
1	AA	3416	DG	O4'-C4'-C3'	-5.95	102.12	104.50
2	AB	3050	DA	C1'-O4'-C4'	-5.95	104.15	110.10
160	Cj	25	DG	O4'-C1'-C2'	-5.95	101.14	105.90
190	DD	33	DC	C4'-C3'-C2'	-5.95	97.75	103.10
225	Dm	16	DG	O4'-C1'-C2'	-5.95	101.14	105.90
314	FD	22	DT	P-O3'-C3'	5.95	126.84	119.70
316	FF	1	DC	O4'-C1'-C2'	-5.95	101.14	105.90
329	FS	15	DA	O4'-C1'-C2'	-5.95	101.14	105.90
1	AA	6301	DG	O4'-C1'-C2'	-5.95	101.14	105.90
7	AG	27	DA	P-O3'-C3'	5.95	126.84	119.70
404	Gf	6	DT	O4'-C4'-C3'	-5.95	102.12	104.50
1	AA	210	DG	C1'-O4'-C4'	-5.95	104.16	110.10
1	AA	267	DC	O4'-C1'-N1	5.95	112.16	108.00
1	AA	4793	DA	C4'-C3'-C2'	-5.95	97.75	103.10
1	AA	5424	DT	O4'-C1'-C2'	-5.95	101.14	105.90
1	AA	7526	DG	P-O3'-C3'	5.95	126.83	119.70
2	AB	6277	DA	O4'-C1'-C2'	-5.95	101.14	105.90
4	AD	4	DT	O4'-C4'-C3'	-5.95	102.12	104.50
206	DT	32	DG	O4'-C1'-C2'	-5.95	101.14	105.90
1	AA	3448	DG	C5-C6-O6	-5.94	125.03	128.60
107	Bs	21	DA	O4'-C1'-C2'	-5.94	101.14	105.90
1	AA	5364	DC	C4'-C3'-C2'	-5.94	97.75	103.10
1	AA	7124	DG	C4'-C3'-C2'	-5.94	97.75	103.10
35	Ai	5	DT	O4'-C4'-C3'	-5.94	102.12	104.50
262	EN	26	DA	O4'-C1'-C2'	-5.94	101.15	105.90
264	EP	1	DT	O4'-C1'-C2'	-5.94	101.15	105.90
415	Gq	18	DT	O4'-C4'-C3'	-5.94	102.12	104.50
1	AA	3860	DT	C4'-C3'-C2'	-5.94	97.75	103.10
2	AB	149	DC	C4'-C3'-C2'	-5.94	97.75	103.10
2	AB	4533	DT	C4'-C3'-C2'	-5.94	97.75	103.10
118	B3	4	DT	O4'-C1'-C2'	-5.94	101.15	105.90
308	E7	5	DG	O4'-C1'-C2'	-5.94	101.15	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	548	DT	C4'-C3'-C2'	-5.94	97.75	103.10
147	CW	17	DT	O4'-C1'-C2'	-5.94	101.15	105.90
1	AA	5105	DG	O4'-C1'-C2'	-5.94	101.15	105.90
2	AB	259	DG	O4'-C1'-C2'	-5.94	101.15	105.90
2	AB	1819	DA	C4'-C3'-C2'	-5.94	97.76	103.10
2	AB	2756	DT	C6-C5-C7	-5.94	119.34	122.90
52	Az	25	DA	C1'-O4'-C4'	-5.94	104.16	110.10
164	Cn	12	DA	P-O3'-C3'	5.94	126.83	119.70
397	GY	21	DG	O4'-C1'-C2'	-5.94	101.15	105.90
1	AA	3379	DG	O4'-C4'-C3'	-5.94	102.13	104.50
1	AA	4701	DA	O4'-C1'-C2'	-5.94	101.15	105.90
1	AA	6733	DG	P-O3'-C3'	5.94	126.82	119.70
2	AB	5882	DA	O4'-C1'-C2'	-5.94	101.15	105.90
54	A1	12	DT	C4'-C3'-C2'	-5.94	97.76	103.10
197	DK	9	DG	O4'-C1'-C2'	-5.94	101.15	105.90
274	EZ	16	DG	O4'-C1'-N9	5.94	112.16	108.00
1	AA	782	DC	P-O3'-C3'	5.93	126.82	119.70
2	AB	3169	DT	O4'-C4'-C3'	-5.93	102.13	104.50
2	AB	6072	DC	O4'-C1'-N1	5.93	112.16	108.00
73	BK	45	DT	O4'-C4'-C3'	-5.93	102.13	104.50
144	CT	5	DC	O4'-C1'-C2'	-5.93	101.15	105.90
159	Ci	8	DC	C4'-C3'-C2'	-5.93	97.76	103.10
293	Es	5	DA	C1'-O4'-C4'	-5.93	104.17	110.10
1	AA	2650	DA	O4'-C1'-C2'	-5.93	101.15	105.90
1	AA	3049	DT	O4'-C1'-C2'	-5.93	101.15	105.90
2	AB	2729	DG	P-O3'-C3'	5.93	126.82	119.70
4	AD	24	DA	P-O3'-C3'	5.93	126.82	119.70
206	DT	34	DC	O4'-C1'-N1	5.93	112.15	108.00
250	EB	1	DG	C1'-O4'-C4'	-5.93	104.17	110.10
322	FL	16	DA	O4'-C1'-C2'	-5.93	101.15	105.90
2	AB	190	DA	C1'-O4'-C4'	-5.93	104.17	110.10
2	AB	5273	DA	N1-C6-N6	-5.93	115.04	118.60
22	AV	27	DT	C4'-C3'-C2'	-5.93	97.76	103.10
63	BA	7	DT	O4'-C4'-C3'	-5.93	102.13	104.50
217	De	31	DG	O4'-C1'-C2'	-5.93	101.16	105.90
1	AA	210	DG	P-O3'-C3'	5.93	126.82	119.70
1	AA	2071	DC	O4'-C4'-C3'	-5.93	102.13	104.50
1	AA	5060	DA	O4'-C1'-C2'	-5.93	101.16	105.90
1	AA	5367	DT	C4'-C3'-C2'	-5.93	97.76	103.10
1	AA	6600	DA	N1-C6-N6	-5.93	115.04	118.60
2	AB	2502	DG	O4'-C1'-C2'	-5.93	101.16	105.90
2	AB	4542	DC	C4'-C3'-C2'	-5.93	97.76	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
172	Cv	39	DG	O4'-C4'-C3'	-5.93	102.13	104.50
1	AA	272	DG	O4'-C1'-C2'	-5.93	101.16	105.90
2	AB	6394	DA	O4'-C1'-C2'	-5.93	101.16	105.90
110	Bv	27	DT	C4'-C3'-C2'	-5.93	97.77	103.10
154	Cd	30	DT	C1'-O4'-C4'	-5.93	104.17	110.10
164	Cn	41	DG	O4'-C1'-C2'	-5.93	101.16	105.90
305	E4	11	DG	P-O3'-C3'	5.93	126.81	119.70
1	AA	2971	DT	O4'-C4'-C3'	-5.93	102.13	104.50
1	AA	6396	DG	O4'-C1'-C2'	-5.93	101.16	105.90
11	AK	19	DA	O4'-C1'-C2'	-5.93	101.16	105.90
56	A3	32	DG	O4'-C1'-C2'	-5.93	101.16	105.90
297	Ew	18	DG	O4'-C1'-C2'	-5.93	101.16	105.90
374	GB	9	DT	C4'-C3'-C2'	-5.93	97.77	103.10
450	HP	8	DG	C1'-O4'-C4'	-5.93	104.17	110.10
1	AA	6330	DG	O4'-C4'-C3'	-5.92	102.13	104.50
2	AB	4179	DC	O4'-C1'-C2'	-5.92	101.16	105.90
2	AB	4231	DA	O4'-C1'-C2'	-5.92	101.16	105.90
142	CR	3	DA	C4'-C3'-C2'	-5.92	97.77	103.10
325	FO	11	DA	P-O3'-C3'	5.92	126.81	119.70
412	Gn	3	DT	O4'-C4'-C3'	-5.92	102.13	104.50
60	A7	36	DG	O4'-C1'-C2'	-5.92	101.16	105.90
99	Bk	42	DA	C4'-C3'-C2'	-5.92	97.77	103.10
346	Fj	15	DG	O4'-C4'-C3'	-5.92	102.13	104.50
1	AA	2644	DG	C4'-C3'-C2'	-5.92	97.77	103.10
1	AA	2845	DT	O4'-C4'-C3'	-5.92	102.13	104.50
1	AA	4446	DA	C1'-O4'-C4'	-5.92	104.18	110.10
1	AA	4846	DT	O4'-C4'-C3'	-5.92	102.13	104.50
1	AA	7007	DA	O4'-C1'-C2'	-5.92	101.16	105.90
2	AB	7227	DA	O4'-C1'-C2'	-5.92	101.16	105.90
50	Ax	4	DT	O4'-C4'-C3'	-5.92	102.13	104.50
218	Df	19	DT	O4'-C1'-C2'	-5.92	101.16	105.90
267	ES	5	DG	O4'-C1'-C2'	-5.92	101.16	105.90
2	AB	3991	DC	O4'-C1'-N1	5.92	112.14	108.00
2	AB	5873	DA	O4'-C1'-C2'	-5.92	101.16	105.90
87	BY	22	DC	O4'-C1'-C2'	-5.92	101.16	105.90
121	B6	18	DC	C2-N1-C1'	5.92	125.31	118.80
155	Ce	2	DG	O4'-C1'-C2'	-5.92	101.16	105.90
237	Dy	1	DC	P-O3'-C3'	5.92	126.80	119.70
2	AB	2762	DG	C4'-C3'-C2'	-5.92	97.77	103.10
2	AB	4700	DC	C4'-C3'-C2'	-5.92	97.77	103.10
2	AB	4998	DG	O4'-C1'-N9	5.92	112.14	108.00
2	AB	5761	DA	O4'-C1'-C2'	-5.92	101.17	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
49	Aw	22	DG	O4'-C4'-C3'	-5.92	102.13	104.50
2	AB	725	DT	O4'-C1'-C2'	-5.92	101.17	105.90
2	AB	1766	DT	O4'-C1'-C2'	-5.92	101.17	105.90
2	AB	2292	DG	O4'-C1'-C2'	-5.92	101.17	105.90
12	AL	18	DA	O4'-C1'-C2'	-5.92	101.17	105.90
1	AA	1935	DC	C4'-C3'-C2'	-5.92	97.78	103.10
1	AA	5688	DT	O4'-C4'-C3'	-5.92	102.13	104.50
2	AB	4705	DG	O4'-C1'-C2'	-5.92	101.17	105.90
89	Ba	47	DG	N1-C6-O6	5.92	123.45	119.90
1	AA	5256	DC	O4'-C4'-C3'	-5.91	102.14	104.50
2	AB	895	DG	C5-C6-O6	-5.91	125.05	128.60
2	AB	7527	DA	O4'-C1'-C2'	-5.91	101.17	105.90
70	BH	25	DA	O4'-C1'-C2'	-5.91	101.17	105.90
121	B6	1	DT	C6-N1-C1'	-5.91	111.53	120.40
305	E4	7	DT	O4'-C1'-C2'	-5.91	101.17	105.90
2	AB	6022	DC	C4'-C3'-C2'	-5.91	97.78	103.10
1	AA	4066	DA	N1-C6-N6	-5.91	115.05	118.60
1	AA	6776	DG	O4'-C1'-C2'	-5.91	101.17	105.90
160	Cj	4	DC	O4'-C1'-C2'	-5.91	101.17	105.90
243	D4	35	DG	O4'-C1'-C2'	-5.91	101.17	105.90
249	EA	3	DT	O4'-C4'-C3'	-5.91	102.14	104.50
304	E3	28	DT	O4'-C1'-C2'	-5.91	101.17	105.90
1	AA	2980	DA	C4'-C3'-C2'	-5.91	97.78	103.10
2	AB	335	DC	C1'-O4'-C4'	-5.91	104.19	110.10
2	AB	4492	DG	C1'-O4'-C4'	-5.91	104.19	110.10
2	AB	4700	DC	O4'-C4'-C3'	-5.91	102.14	104.50
2	AB	5404	DA	C1'-O4'-C4'	-5.91	104.19	110.10
117	B2	37	DA	O4'-C1'-C2'	-5.91	101.17	105.90
168	Cr	32	DT	P-O3'-C3'	5.91	126.79	119.70
197	DK	24	DA	O4'-C1'-C2'	-5.91	101.17	105.90
1	AA	2696	DC	C6-N1-C2	-5.91	117.94	120.30
2	AB	4650	DT	O4'-C1'-C2'	-5.91	101.17	105.90
430	G5	20	DG	O4'-C1'-C2'	-5.91	101.17	105.90
1	AA	3590	DA	N1-C6-N6	-5.91	115.06	118.60
1	AA	3877	DT	C4'-C3'-C2'	-5.91	97.78	103.10
1	AA	3919	DT	C4'-C3'-C2'	-5.91	97.79	103.10
2	AB	1829	DC	P-O3'-C3'	5.91	126.79	119.70
100	Bl	4	DT	O4'-C4'-C3'	-5.91	102.14	104.50
185	C8	16	DA	O4'-C1'-C2'	-5.91	101.17	105.90
1	AA	4754	DG	C4'-C3'-C2'	-5.90	97.79	103.10
1	AA	6057	DT	O4'-C1'-C2'	-5.90	101.18	105.90
1	AA	6176	DG	C1'-O4'-C4'	-5.90	104.20	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	495	DA	O4'-C1'-C2'	-5.90	101.18	105.90
1	AA	4978	DC	P-O3'-C3'	5.90	126.78	119.70
9	AI	12	DG	P-O3'-C3'	5.90	126.78	119.70
116	B1	15	DC	O4'-C1'-C2'	-5.90	101.18	105.90
147	CW	36	DG	C4'-C3'-C2'	-5.90	97.79	103.10
206	DT	32	DG	C1'-O4'-C4'	-5.90	104.20	110.10
1	AA	6852	DT	O4'-C1'-C2'	-5.90	101.18	105.90
2	AB	606	DA	O4'-C1'-C2'	-5.90	101.18	105.90
2	AB	1784	DG	C1'-O4'-C4'	-5.90	104.20	110.10
2	AB	5422	DC	P-O5'-C5'	5.90	130.34	120.90
3	AC	4	DT	O4'-C4'-C3'	-5.90	102.14	104.50
68	BF	22	DA	N1-C6-N6	-5.90	115.06	118.60
307	E6	12	DA	P-O3'-C3'	5.90	126.78	119.70
315	FE	10	DT	O4'-C4'-C3'	-5.90	102.14	104.50
375	GC	3	DA	C5-C6-N6	5.90	128.42	123.70
375	GC	11	DA	P-O3'-C3'	5.90	126.78	119.70
1	AA	7519	DA	O4'-C1'-C2'	-5.90	101.18	105.90
2	AB	5479	DG	P-O3'-C3'	-5.90	112.62	119.70
1	AA	3827	DT	C4'-C3'-C2'	-5.90	97.79	103.10
2	AB	2157	DG	O4'-C1'-C2'	-5.90	101.18	105.90
2	AB	2438	DT	C4'-C3'-C2'	-5.90	97.79	103.10
2	AB	4201	DA	O4'-C1'-C2'	-5.90	101.18	105.90
17	AQ	27	DG	C1'-O4'-C4'	-5.90	104.20	110.10
183	C6	13	DG	O4'-C4'-C3'	-5.90	102.14	104.50
256	EH	21	DG	O4'-C1'-C2'	-5.90	101.18	105.90
264	EP	34	DG	C4'-C3'-C2'	-5.90	97.79	103.10
288	En	10	DG	C1'-O4'-C4'	-5.90	104.20	110.10
2	AB	7102	DG	C5-C6-O6	-5.90	125.06	128.60
202	DP	5	DG	O4'-C1'-C2'	-5.90	101.18	105.90
2	AB	6677	DA	O4'-C1'-C2'	-5.89	101.19	105.90
2	AB	7304	DC	C4'-C3'-C2'	-5.89	97.80	103.10
145	CU	9	DG	O4'-C1'-C2'	-5.89	101.19	105.90
160	Cj	30	DG	O4'-C1'-C2'	-5.89	101.19	105.90
263	EO	22	DG	C5-C6-O6	-5.89	125.06	128.60
1	AA	6595	DA	N1-C6-N6	-5.89	115.06	118.60
27	Aa	38	DC	C1'-O4'-C4'	-5.89	104.21	110.10
174	Cx	22	DC	O4'-C1'-N1	5.89	112.12	108.00
279	Ee	22	DA	C1'-O4'-C4'	-5.89	104.21	110.10
1	AA	1674	DA	C4'-C3'-C2'	-5.89	97.80	103.10
1	AA	6871	DC	C4'-C3'-C2'	-5.89	97.80	103.10
1	AA	6890	DG	O4'-C4'-C3'	-5.89	102.14	104.50
2	AB	1910	DC	C4'-C3'-C2'	-5.89	97.80	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	AL	1	DT	C1'-O4'-C4'	-5.89	104.21	110.10
1	AA	1325	DA	N1-C6-N6	-5.89	115.07	118.60
1	AA	4549	DA	C1'-O4'-C4'	-5.89	104.21	110.10
1	AA	6954	DG	O4'-C1'-C2'	-5.89	101.19	105.90
2	AB	6498	DC	O4'-C1'-C2'	-5.89	101.19	105.90
44	Ar	12	DA	C1'-O4'-C4'	-5.89	104.21	110.10
49	Aw	27	DT	O4'-C1'-C2'	-5.89	101.19	105.90
91	Bc	37	DG	P-O3'-C3'	5.89	126.77	119.70
240	D1	38	DG	O4'-C1'-C2'	-5.89	101.19	105.90
270	EV	25	DG	O4'-C1'-C2'	-5.89	101.19	105.90
307	E6	13	DC	C4'-C3'-C2'	-5.89	97.80	103.10
384	GL	2	DG	N1-C6-O6	5.89	123.43	119.90
414	Gp	12	DC	O4'-C1'-C2'	-5.89	101.19	105.90
1	AA	3653	DC	C4'-C3'-C2'	-5.89	97.80	103.10
1	AA	5906	DT	C4'-C3'-C2'	-5.89	97.80	103.10
188	DB	1	DG	C4'-C3'-C2'	-5.89	97.80	103.10
239	D0	40	DA	N1-C6-N6	-5.89	115.07	118.60
1	AA	797	DG	O4'-C4'-C3'	-5.89	102.15	104.50
1	AA	4783	DA	O4'-C1'-C2'	-5.89	101.19	105.90
2	AB	446	DG	O4'-C1'-C2'	-5.89	101.19	105.90
2	AB	2945	DT	C4'-C3'-C2'	-5.89	97.80	103.10
60	A7	25	DG	C1'-O4'-C4'	-5.89	104.21	110.10
66	BD	48	DT	O4'-C4'-C3'	-5.89	102.14	104.50
93	Be	18	DG	O4'-C1'-C2'	-5.89	101.19	105.90
136	CL	25	DC	C1'-O4'-C4'	-5.89	104.21	110.10
158	Ch	18	DA	N1-C6-N6	-5.89	115.07	118.60
196	DJ	9	DA	O4'-C1'-C2'	-5.89	101.19	105.90
215	Dc	36	DA	O4'-C1'-C2'	-5.89	101.19	105.90
309	E8	16	DG	O4'-C1'-N9	5.89	112.12	108.00
339	Fc	6	DC	P-O3'-C3'	5.89	126.76	119.70
1	AA	663	DC	C1'-O4'-C4'	-5.88	104.22	110.10
2	AB	1772	DT	O4'-C1'-C2'	-5.88	101.19	105.90
2	AB	4209	DT	C4'-C3'-C2'	-5.88	97.80	103.10
272	EX	5	DA	C4'-C3'-C2'	-5.88	97.80	103.10
414	Gp	9	DT	C4'-C3'-C2'	-5.88	97.80	103.10
1	AA	1391	DA	O4'-C1'-C2'	-5.88	101.19	105.90
1	AA	3486	DC	C4'-C3'-C2'	-5.88	97.81	103.10
1	AA	5129	DG	O4'-C1'-C2'	-5.88	101.19	105.90
297	Ew	24	DG	O4'-C1'-C2'	-5.88	101.19	105.90
440	HF	7	DT	O4'-C4'-C3'	-5.88	102.15	104.50
1	AA	4358	DT	O4'-C1'-C2'	-5.88	101.19	105.90
2	AB	153	DT	C4'-C3'-C2'	-5.88	97.81	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2256	DG	C1'-O4'-C4'	-5.88	104.22	110.10
2	AB	6978	DT	C4'-C3'-C2'	-5.88	97.81	103.10
63	BA	23	DA	O4'-C1'-C2'	-5.88	101.19	105.90
394	GV	10	DA	C1'-O4'-C4'	-5.88	104.22	110.10
398	GZ	4	DG	O4'-C1'-C2'	-5.88	101.19	105.90
1	AA	7108	DA	O4'-C1'-C2'	-5.88	101.20	105.90
1	AA	65	DG	C1'-O4'-C4'	-5.88	104.22	110.10
1	AA	4078	DA	N1-C6-N6	-5.88	115.07	118.60
1	AA	6103	DT	O4'-C4'-C3'	-5.88	102.15	104.50
2	AB	2411	DA	C1'-O4'-C4'	-5.88	104.22	110.10
207	DU	1	DA	N1-C6-N6	-5.88	115.07	118.60
2	AB	6116	DA	C1'-O4'-C4'	-5.88	104.22	110.10
91	Bc	5	DG	C4'-C3'-C2'	-5.88	97.81	103.10
141	CQ	19	DA	N1-C6-N6	-5.88	115.07	118.60
1	AA	210	DG	O4'-C1'-C2'	-5.88	101.20	105.90
1	AA	3574	DG	P-O3'-C3'	5.88	126.75	119.70
2	AB	4509	DA	O4'-C4'-C3'	-5.88	102.15	104.50
176	Cz	27	DA	P-O3'-C3'	5.88	126.75	119.70
2	AB	6602	DG	O4'-C1'-C2'	-5.87	101.20	105.90
152	Cb	30	DC	O4'-C1'-C2'	-5.87	101.20	105.90
238	Dz	15	DT	O4'-C1'-C2'	-5.87	101.20	105.90
361	Fy	15	DG	O4'-C1'-C2'	-5.87	101.20	105.90
393	GU	11	DA	N1-C6-N6	-5.87	115.08	118.60
394	GV	28	DT	C4'-C3'-C2'	-5.87	97.81	103.10
2	AB	4761	DA	O4'-C1'-C2'	-5.87	101.20	105.90
31	Ae	21	DG	C1'-O4'-C4'	-5.87	104.23	110.10
49	Aw	17	DA	O4'-C1'-C2'	-5.87	101.20	105.90
50	Ax	6	DT	O4'-C4'-C3'	-5.87	102.15	104.50
315	FE	21	DA	O4'-C1'-C2'	-5.87	101.20	105.90
436	HB	21	DT	P-O3'-C3'	5.87	126.75	119.70
2	AB	544	DA	O4'-C4'-C3'	-5.87	102.15	104.50
5	AE	48	DT	O4'-C4'-C3'	-5.87	102.15	104.50
82	BT	10	DT	C1'-O4'-C4'	-5.87	104.23	110.10
206	DT	33	DA	C1'-O4'-C4'	-5.87	104.23	110.10
1	AA	5983	DT	C4'-C3'-C2'	-5.87	97.82	103.10
2	AB	1863	DG	O4'-C1'-N9	5.87	112.11	108.00
33	Ag	4	DT	O4'-C4'-C3'	-5.87	102.15	104.50
53	A0	46	DT	O4'-C4'-C3'	-5.87	102.15	104.50
58	A5	35	DT	O4'-C1'-C2'	-5.87	101.21	105.90
357	Fu	16	DA	O4'-C1'-C2'	-5.87	101.20	105.90
2	AB	536	DG	N1-C6-O6	5.87	123.42	119.90
2	AB	1784	DG	P-O3'-C3'	5.87	126.74	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2036	DG	P-O3'-C3'	5.87	126.74	119.70
2	AB	5179	DC	P-O3'-C3'	5.87	126.74	119.70
334	FX	20	DG	O4'-C1'-C2'	-5.87	101.21	105.90
60	A7	23	DA	O4'-C1'-C2'	-5.87	101.21	105.90
170	Ct	41	DA	C4'-C3'-C2'	-5.87	97.82	103.10
267	ES	11	DA	O4'-C1'-C2'	-5.87	101.21	105.90
1	AA	466	DT	O4'-C1'-C2'	-5.86	101.21	105.90
1	AA	724	DT	O4'-C4'-C3'	-5.86	102.15	104.50
2	AB	1449	DA	O4'-C1'-C2'	-5.86	101.21	105.90
42	Ap	6	DT	O4'-C4'-C3'	-5.86	102.15	104.50
44	Ar	45	DT	O4'-C4'-C3'	-5.86	102.15	104.50
290	Ep	35	DT	O4'-C1'-C2'	-5.86	101.21	105.90
1	AA	6064	DC	C4'-C3'-C2'	-5.86	97.82	103.10
21	AU	2	DT	C1'-O4'-C4'	-5.86	104.24	110.10
1	AA	3817	DA	N1-C6-N6	-5.86	115.08	118.60
2	AB	4785	DT	O4'-C4'-C3'	-5.86	102.16	104.50
38	Al	43	DT	O4'-C4'-C3'	-5.86	102.16	104.50
71	BI	33	DG	O4'-C1'-C2'	-5.86	101.21	105.90
144	CT	24	DT	C4-C5-C7	-5.86	115.48	119.00
187	DA	40	DC	C2-N1-C1'	5.86	125.25	118.80
359	Fw	13	DT	C1'-O4'-C4'	-5.86	104.24	110.10
1	AA	671	DT	C4'-C3'-C2'	-5.86	97.83	103.10
2	AB	1048	DA	O4'-C1'-C2'	-5.86	101.21	105.90
2	AB	2843	DG	O4'-C1'-N9	5.86	112.10	108.00
2	AB	5927	DA	O4'-C1'-C2'	-5.86	101.21	105.90
1	AA	1305	DT	O4'-C1'-C2'	-5.86	101.21	105.90
1	AA	7524	DG	O4'-C1'-C2'	-5.86	101.22	105.90
2	AB	5113	DC	O4'-C1'-C2'	-5.86	101.21	105.90
2	AB	5755	DG	C4'-C3'-C2'	-5.86	97.83	103.10
170	Ct	32	DT	C1'-O4'-C4'	-5.86	104.24	110.10
193	DG	10	DA	P-O3'-C3'	5.86	126.73	119.70
206	DT	37	DA	N1-C6-N6	-5.86	115.09	118.60
247	D8	35	DT	O4'-C4'-C3'	-5.86	102.16	104.50
286	El	2	DG	O4'-C1'-C2'	-5.86	101.21	105.90
331	FU	20	DT	C1'-O4'-C4'	-5.86	104.24	110.10
373	GA	6	DG	O4'-C1'-C2'	-5.86	101.21	105.90
1	AA	2530	DG	O4'-C1'-C2'	-5.86	101.22	105.90
1	AA	5629	DT	O4'-C1'-C2'	-5.86	101.22	105.90
2	AB	530	DT	P-O3'-C3'	5.86	126.73	119.70
2	AB	5061	DT	C4'-C3'-C2'	-5.86	97.83	103.10
161	Ck	41	DG	O4'-C4'-C3'	-5.86	102.16	104.50
322	FL	11	DA	O4'-C1'-C2'	-5.86	101.22	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	465	DA	O4'-C1'-C2'	-5.85	101.22	105.90
2	AB	6687	DA	O4'-C1'-C2'	-5.85	101.22	105.90
367	F4	16	DG	O4'-C1'-C2'	-5.85	101.22	105.90
1	AA	7061	DG	C1'-O4'-C4'	-5.85	104.25	110.10
2	AB	1105	DT	C4'-C3'-C2'	-5.85	97.83	103.10
2	AB	2591	DT	P-O3'-C3'	5.85	126.72	119.70
2	AB	7472	DA	O4'-C4'-C3'	-5.85	102.16	104.50
43	Aq	6	DT	O4'-C4'-C3'	-5.85	102.16	104.50
81	BS	31	DA	C4'-C3'-C2'	-5.85	97.83	103.10
1	AA	2540	DC	O4'-C1'-C2'	-5.85	101.22	105.90
2	AB	641	DA	C4'-C3'-C2'	-5.85	97.83	103.10
2	AB	1249	DA	C1'-O4'-C4'	-5.85	104.25	110.10
2	AB	3530	DC	C4'-C3'-C2'	-5.85	97.83	103.10
1	AA	6645	DA	O4'-C1'-C2'	-5.85	101.22	105.90
2	AB	4401	DA	O4'-C1'-C2'	-5.85	101.22	105.90
2	AB	6125	DG	O4'-C1'-C2'	-5.85	101.22	105.90
79	BQ	42	DA	C4'-C3'-C2'	-5.85	97.84	103.10
154	Cd	2	DG	O4'-C4'-C3'	-5.85	102.16	104.50
192	DF	5	DG	C4'-C3'-C2'	-5.85	97.83	103.10
242	D3	25	DA	O4'-C1'-C2'	-5.85	101.22	105.90
1	AA	5053	DA	O4'-C1'-C2'	-5.85	101.22	105.90
2	AB	1730	DC	P-O3'-C3'	5.85	126.72	119.70
243	D4	16	DA	O4'-C1'-C2'	-5.85	101.22	105.90
303	E2	22	DG	O4'-C1'-C2'	-5.85	101.22	105.90
2	AB	6928	DG	O4'-C4'-C3'	-5.85	102.16	104.50
14	AN	41	DT	C4'-C3'-C2'	-5.85	97.84	103.10
28	Ab	45	DT	O4'-C4'-C3'	-5.85	102.16	104.50
311	FA	7	DC	P-O3'-C3'	5.85	126.72	119.70
1	AA	1300	DG	N1-C6-O6	5.84	123.41	119.90
1	AA	2569	DC	O4'-C1'-N1	5.84	112.09	108.00
1	AA	2918	DA	O4'-C1'-C2'	-5.84	101.22	105.90
1	AA	6326	DA	C4'-C3'-C2'	-5.84	97.84	103.10
2	AB	757	DT	C4'-C3'-C2'	-5.84	97.84	103.10
2	AB	2804	DT	C1'-O4'-C4'	-5.84	104.25	110.10
2	AB	4446	DG	O4'-C1'-C2'	-5.84	101.22	105.90
2	AB	5774	DT	C1'-O4'-C4'	-5.84	104.26	110.10
58	A5	33	DG	C4'-C3'-C2'	-5.84	97.84	103.10
75	BM	32	DA	C4'-C3'-C2'	-5.84	97.84	103.10
185	C8	16	DA	P-O3'-C3'	5.84	126.71	119.70
211	DY	18	DC	O4'-C1'-C2'	-5.84	101.22	105.90
358	Fv	15	DG	O4'-C4'-C3'	-5.84	102.16	104.50
395	GW	14	DC	O4'-C1'-C2'	-5.84	101.22	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
397	GY	26	DG	C1'-O4'-C4'	-5.84	104.26	110.10
1	AA	1995	DG	P-O3'-C3'	5.84	126.71	119.70
1	AA	4568	DG	O4'-C1'-C2'	-5.84	101.23	105.90
1	AA	6822	DC	P-O3'-C3'	5.84	126.71	119.70
2	AB	18	DC	O4'-C4'-C3'	-5.84	102.16	104.50
28	Ab	3	DT	O4'-C4'-C3'	-5.84	102.16	104.50
1	AA	1130	DT	C4'-C3'-C2'	-5.84	97.84	103.10
1	AA	4576	DC	P-O3'-C3'	5.84	126.71	119.70
209	DW	23	DT	O4'-C1'-C2'	-5.84	101.23	105.90
443	HI	17	DT	C1'-O4'-C4'	-5.84	104.26	110.10
1	AA	7376	DA	O4'-C4'-C3'	-5.84	102.16	104.50
2	AB	1774	DC	C4'-C3'-C2'	-5.84	97.84	103.10
2	AB	7306	DT	C4'-C3'-C2'	-5.84	97.84	103.10
33	Ag	39	DA	O4'-C1'-C2'	-5.84	101.23	105.90
45	As	38	DG	P-O3'-C3'	5.84	126.71	119.70
106	Br	32	DA	C1'-O4'-C4'	-5.84	104.26	110.10
244	D5	5	DG	C1'-O4'-C4'	-5.84	104.26	110.10
269	EU	18	DA	N1-C6-N6	-5.84	115.10	118.60
288	En	8	DT	O4'-C4'-C3'	-5.84	102.16	104.50
350	Fn	9	DA	O4'-C1'-C2'	-5.84	101.23	105.90
42	Ap	46	DT	O4'-C4'-C3'	-5.84	102.17	104.50
1	AA	2157	DG	O4'-C4'-C3'	-5.84	102.17	104.50
1	AA	4910	DC	O4'-C1'-N1	-5.84	103.92	108.00
2	AB	291	DC	O4'-C4'-C3'	-5.84	102.17	104.50
206	DT	9	DG	C4-N9-C1'	5.84	134.09	126.50
209	DW	41	DG	O4'-C1'-C2'	-5.84	101.23	105.90
251	EC	30	DA	O4'-C1'-C2'	-5.84	101.23	105.90
271	EW	4	DA	C4'-C3'-C2'	-5.84	97.85	103.10
282	Eh	26	DA	O4'-C1'-C2'	-5.84	101.23	105.90
291	Eq	21	DT	C4'-C3'-C2'	-5.84	97.85	103.10
338	Fb	10	DA	C4'-C3'-C2'	-5.84	97.85	103.10
2	AB	2511	DA	O4'-C4'-C3'	-5.83	102.17	104.50
2	AB	3021	DA	O4'-C1'-C2'	-5.83	101.23	105.90
2	AB	5201	DG	C1'-O4'-C4'	-5.83	104.27	110.10
5	AE	37	DC	O4'-C4'-C3'	-5.83	102.17	104.50
99	Bk	30	DA	O4'-C1'-C2'	-5.83	101.23	105.90
413	Go	28	DT	C1'-O4'-C4'	-5.83	104.27	110.10
421	Gw	20	DG	O4'-C1'-C2'	-5.83	101.23	105.90
1	AA	4517	DC	O4'-C1'-N1	5.83	112.08	108.00
1	AA	4526	DG	O4'-C1'-C2'	-5.83	101.23	105.90
1	AA	5477	DG	O4'-C1'-C2'	-5.83	101.23	105.90
2	AB	5267	DC	C6-N1-C2	-5.83	117.97	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	5533	DG	O4'-C1'-N9	5.83	112.08	108.00
2	AB	7559	DA	O4'-C1'-C2'	-5.83	101.23	105.90
114	Bz	15	DG	O4'-C1'-C2'	-5.83	101.23	105.90
163	Cm	8	DT	C2-N1-C1'	5.83	127.53	118.20
365	F2	12	DG	O4'-C1'-C2'	-5.83	101.23	105.90
1	AA	4117	DG	O4'-C1'-C2'	-5.83	101.23	105.90
1	AA	5369	DA	O4'-C1'-C2'	-5.83	101.23	105.90
2	AB	1530	DG	C1'-O4'-C4'	-5.83	104.27	110.10
2	AB	5027	DG	C4'-C3'-C2'	-5.83	97.85	103.10
2	AB	5400	DG	C1'-O4'-C4'	-5.83	104.27	110.10
2	AB	5991	DA	P-O3'-C3'	5.83	126.70	119.70
2	AB	6399	DG	O4'-C1'-C2'	-5.83	101.23	105.90
40	An	9	DT	O4'-C4'-C3'	-5.83	102.17	104.50
94	Bf	14	DG	O4'-C1'-C2'	-5.83	101.23	105.90
417	Gs	23	DC	O4'-C1'-C2'	-5.83	101.23	105.90
215	Dc	5	DA	O4'-C1'-C2'	-5.83	101.24	105.90
1	AA	284	DG	C1'-O4'-C4'	-5.83	104.27	110.10
1	AA	3290	DA	C1'-O4'-C4'	-5.83	104.27	110.10
1	AA	3456	DC	O4'-C1'-C2'	-5.83	101.24	105.90
2	AB	2004	DG	O4'-C1'-C2'	-5.83	101.24	105.90
358	Fv	3	DG	O4'-C1'-C2'	-5.83	101.24	105.90
381	GI	5	DC	C4'-C3'-C2'	-5.83	97.85	103.10
1	AA	3668	DG	C4'-C3'-C2'	-5.83	97.86	103.10
26	AZ	20	DC	O4'-C4'-C3'	-5.83	102.17	104.50
79	BQ	37	DA	O4'-C1'-C2'	-5.83	101.24	105.90
93	Be	24	DT	O4'-C4'-C3'	-5.83	102.17	104.50
190	DD	13	DG	C1'-O4'-C4'	-5.83	104.27	110.10
233	Du	20	DG	C1'-O4'-C4'	-5.83	104.27	110.10
1	AA	4831	DG	O4'-C1'-C2'	-5.83	101.24	105.90
2	AB	6046	DG	O4'-C1'-C2'	-5.83	101.24	105.90
34	Ah	7	DT	O4'-C4'-C3'	-5.83	102.17	104.50
1	AA	1732	DT	O4'-C1'-C2'	-5.82	101.24	105.90
1	AA	3037	DT	P-O3'-C3'	5.82	126.69	119.70
1	AA	3453	DG	C4'-C3'-C2'	-5.82	97.86	103.10
1	AA	6448	DA	O4'-C4'-C3'	-5.82	102.17	104.50
2	AB	3724	DC	P-O5'-C5'	5.82	130.22	120.90
40	An	24	DG	O4'-C1'-C2'	-5.82	101.24	105.90
121	B6	36	DT	O4'-C4'-C3'	-5.82	102.17	104.50
126	CB	9	DG	C1'-O4'-C4'	-5.82	104.28	110.10
156	Cf	35	DC	C2-N1-C1'	5.82	125.21	118.80
1	AA	5321	DG	O4'-C1'-C2'	-5.82	101.24	105.90
1	AA	6472	DG	P-O3'-C3'	5.82	126.69	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2166	DG	O4'-C1'-C2'	-5.82	101.24	105.90
2	AB	3046	DT	C1'-O4'-C4'	-5.82	104.28	110.10
2	AB	3478	DC	C6-N1-C2	-5.82	117.97	120.30
274	EZ	12	DG	O4'-C1'-C2'	-5.82	101.24	105.90
318	FH	1	DT	O4'-C1'-C2'	-5.82	101.24	105.90
1	AA	773	DC	O4'-C4'-C3'	-5.82	102.17	104.50
1	AA	2482	DA	O4'-C1'-C2'	-5.82	101.24	105.90
2	AB	856	DG	C5-C6-O6	-5.82	125.11	128.60
2	AB	1985	DC	O4'-C1'-C2'	-5.82	101.24	105.90
2	AB	5480	DG	P-O3'-C3'	5.82	126.69	119.70
51	Ay	23	DC	C4'-C3'-C2'	-5.82	97.86	103.10
450	HP	5	DA	O4'-C1'-C2'	-5.82	101.24	105.90
1	AA	1421	DA	P-O3'-C3'	5.82	126.68	119.70
1	AA	4293	DT	C4'-C3'-C2'	-5.82	97.86	103.10
1	AA	2456	DT	O4'-C1'-C2'	-5.82	101.25	105.90
1	AA	4539	DC	C4'-C3'-C2'	-5.82	97.86	103.10
1	AA	6852	DT	O4'-C1'-N1	5.82	112.07	108.00
2	AB	895	DG	N1-C6-O6	5.82	123.39	119.90
2	AB	3467	DC	C1'-O4'-C4'	-5.82	104.28	110.10
2	AB	6859	DA	O4'-C1'-C2'	-5.82	101.25	105.90
218	Df	39	DA	O4'-C1'-C2'	-5.82	101.25	105.90
275	Ea	3	DT	O4'-C1'-C2'	-5.82	101.25	105.90
286	El	31	DA	O4'-C1'-C2'	-5.82	101.25	105.90
1	AA	4888	DA	C4'-C3'-C2'	-5.82	97.86	103.10
1	AA	4976	DT	O4'-C1'-C2'	-5.82	101.25	105.90
2	AB	4680	DT	P-O3'-C3'	5.82	126.68	119.70
2	AB	5309	DC	C1'-O4'-C4'	-5.82	104.28	110.10
311	FA	23	DG	O4'-C1'-N9	5.82	112.07	108.00
1	AA	1476	DG	O4'-C4'-C3'	-5.81	102.17	104.50
1	AA	6658	DG	O4'-C1'-N9	5.81	112.07	108.00
2	AB	127	DT	O4'-C1'-C2'	-5.81	101.25	105.90
292	Er	1	DG	O4'-C4'-C3'	-5.81	102.17	104.50
374	GB	2	DG	P-O3'-C3'	5.81	126.68	119.70
1	AA	1432	DA	O4'-C4'-C3'	-5.81	102.17	104.50
1	AA	5334	DG	O4'-C1'-C2'	-5.81	101.25	105.90
2	AB	1572	DA	O4'-C1'-C2'	-5.81	101.25	105.90
39	Am	31	DC	P-O3'-C3'	5.81	126.67	119.70
293	Es	16	DT	C1'-O4'-C4'	-5.81	104.29	110.10
307	E6	30	DT	O4'-C1'-C2'	-5.81	101.25	105.90
313	FC	1	DT	C1'-O4'-C4'	-5.81	104.29	110.10
2	AB	429	DG	C4'-C3'-C2'	-5.81	97.87	103.10
2	AB	3274	DA	O4'-C1'-C2'	-5.81	101.25	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	6634	DG	O4'-C1'-C2'	-5.81	101.25	105.90
18	AR	24	DG	N1-C6-O6	5.81	123.39	119.90
65	BC	6	DT	O4'-C4'-C3'	-5.81	102.17	104.50
1	AA	995	DC	O4'-C4'-C3'	-5.81	102.18	104.50
1	AA	2532	DG	O4'-C1'-C2'	-5.81	101.25	105.90
1	AA	4516	DA	O4'-C1'-C2'	-5.81	101.25	105.90
2	AB	4749	DT	C4'-C3'-C2'	-5.81	97.87	103.10
47	Au	6	DT	O4'-C4'-C3'	-5.81	102.18	104.50
88	BZ	36	DG	N1-C6-O6	5.81	123.39	119.90
203	DQ	16	DC	O4'-C1'-C2'	-5.81	101.25	105.90
386	GN	24	DT	O4'-C4'-C3'	-5.81	102.18	104.50
430	G5	12	DG	O4'-C1'-C2'	-5.81	101.25	105.90
1	AA	3574	DG	O4'-C1'-C2'	-5.81	101.25	105.90
1	AA	5115	DG	C1'-O4'-C4'	-5.81	104.29	110.10
2	AB	1375	DT	O4'-C1'-C2'	-5.81	101.25	105.90
2	AB	1382	DA	C1'-O4'-C4'	-5.81	104.29	110.10
2	AB	3653	DC	O4'-C4'-C3'	-5.81	102.18	104.50
2	AB	4998	DG	O4'-C4'-C3'	-5.81	102.18	104.50
2	AB	6466	DG	P-O3'-C3'	5.81	126.67	119.70
1	AA	3720	DA	O4'-C1'-C2'	-5.81	101.25	105.90
1	AA	1764	DC	C4'-C3'-C2'	-5.80	97.88	103.10
2	AB	1342	DA	O4'-C1'-C2'	-5.80	101.26	105.90
2	AB	2058	DG	C1'-O4'-C4'	-5.80	104.30	110.10
2	AB	3932	DG	C4'-C3'-C2'	-5.80	97.88	103.10
2	AB	5687	DT	C4-C5-C7	5.80	122.48	119.00
25	AY	13	DG	O4'-C1'-C2'	-5.80	101.26	105.90
73	BK	17	DC	P-O5'-C5'	5.80	130.19	120.90
188	DB	21	DC	C2-N1-C1'	5.80	125.18	118.80
244	D5	5	DG	O4'-C1'-C2'	-5.80	101.26	105.90
438	HD	2	DG	O4'-C1'-C2'	-5.80	101.26	105.90
1	AA	528	DG	O4'-C1'-C2'	-5.80	101.26	105.90
1	AA	1047	DC	C4'-C3'-C2'	-5.80	97.88	103.10
413	Go	5	DG	O4'-C1'-C2'	-5.80	101.26	105.90
415	Gq	7	DT	O4'-C4'-C3'	-5.80	102.18	104.50
1	AA	37	DG	O4'-C4'-C3'	-5.80	102.18	104.50
1	AA	362	DT	C4'-C3'-C2'	-5.80	97.88	103.10
1	AA	4783	DA	N1-C6-N6	-5.80	115.12	118.60
2	AB	1841	DG	O4'-C1'-C2'	-5.80	101.26	105.90
105	Bq	17	DG	O4'-C1'-C2'	-5.80	101.26	105.90
112	Bx	25	DT	C4'-C3'-C2'	-5.80	97.88	103.10
1	AA	1522	DA	O4'-C1'-C2'	-5.80	101.26	105.90
1	AA	7482	DG	O4'-C1'-C2'	-5.80	101.26	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1421	DA	O4'-C1'-C2'	-5.80	101.26	105.90
2	AB	2070	DG	C4'-C3'-C2'	-5.80	97.88	103.10
18	AR	15	DA	O4'-C1'-C2'	-5.80	101.26	105.90
57	A4	43	DT	O4'-C4'-C3'	-5.80	102.18	104.50
167	Cq	28	DT	O4'-C4'-C3'	-5.80	102.18	104.50
1	AA	1560	DA	P-O3'-C3'	5.80	126.66	119.70
1	AA	2939	DG	O4'-C1'-C2'	-5.80	101.26	105.90
1	AA	3092	DG	O4'-C1'-N9	5.80	112.06	108.00
358	Fv	10	DC	O4'-C1'-C2'	-5.80	101.26	105.90
426	G1	18	DC	C6-N1-C2	-5.80	117.98	120.30
1	AA	2729	DC	C4'-C3'-C2'	-5.80	97.88	103.10
1	AA	5294	DA	O4'-C1'-C2'	-5.80	101.26	105.90
2	AB	149	DC	O4'-C4'-C3'	-5.80	102.18	104.50
13	AM	27	DA	O4'-C1'-C2'	-5.80	101.26	105.90
1	AA	6890	DG	C1'-O4'-C4'	-5.79	104.31	110.10
2	AB	5294	DG	C1'-O4'-C4'	-5.79	104.31	110.10
286	El	25	DT	P-O3'-C3'	5.79	126.65	119.70
320	FJ	25	DC	C4'-C3'-C2'	-5.79	97.88	103.10
381	GI	12	DT	C4'-C3'-C2'	-5.79	97.89	103.10
1	AA	621	DC	O4'-C1'-C2'	-5.79	101.27	105.90
1	AA	5826	DG	O4'-C1'-C2'	-5.79	101.27	105.90
2	AB	2262	DG	O4'-C1'-C2'	-5.79	101.27	105.90
2	AB	7167	DA	P-O3'-C3'	5.79	126.65	119.70
43	Aq	45	DT	O4'-C4'-C3'	-5.79	102.18	104.50
81	BS	6	DT	O4'-C4'-C3'	-5.79	102.18	104.50
340	Fd	5	DG	O4'-C1'-C2'	-5.79	101.27	105.90
396	GX	1	DT	C4'-C3'-C2'	-5.79	97.89	103.10
2	AB	2047	DC	O4'-C1'-C2'	-5.79	101.27	105.90
2	AB	4908	DA	P-O3'-C3'	5.79	126.65	119.70
6	AF	50	DT	C1'-O4'-C4'	-5.79	104.31	110.10
101	Bm	23	DA	O4'-C1'-C2'	-5.79	101.27	105.90
4	AD	20	DC	O4'-C1'-C2'	-5.79	101.27	105.90
156	Cf	28	DT	C4-C5-C7	5.79	122.47	119.00
261	EM	7	DA	O4'-C1'-C2'	-5.79	101.27	105.90
1	AA	2688	DA	N1-C6-N6	-5.79	115.13	118.60
1	AA	3868	DG	O4'-C1'-C2'	-5.79	101.27	105.90
1	AA	3938	DC	C4'-C3'-C2'	-5.79	97.89	103.10
2	AB	3174	DG	C1'-O4'-C4'	-5.79	104.31	110.10
2	AB	3876	DC	O4'-C1'-C2'	-5.79	101.27	105.90
2	AB	6636	DA	P-O3'-C3'	5.79	126.65	119.70
2	AB	7102	DG	N1-C6-O6	5.79	123.37	119.90
2	AB	7408	DG	O4'-C1'-C2'	-5.79	101.27	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	Ad	11	DT	C1'-O4'-C4'	-5.79	104.31	110.10
375	GC	18	DA	O4'-C1'-N9	5.79	112.05	108.00
408	Gj	27	DC	P-O3'-C3'	5.79	126.65	119.70
1	AA	3287	DC	O4'-C1'-C2'	-5.79	101.27	105.90
2	AB	1334	DT	C4'-C3'-C2'	-5.79	97.89	103.10
64	BB	21	DA	O4'-C1'-C2'	-5.79	101.27	105.90
2	AB	4254	DC	P-O5'-C5'	5.79	130.16	120.90
1	AA	2693	DC	C1'-O4'-C4'	-5.78	104.32	110.10
2	AB	1165	DA	O4'-C1'-C2'	-5.78	101.27	105.90
30	Ad	12	DT	C4'-C3'-C2'	-5.78	97.90	103.10
144	CT	8	DA	C1'-O4'-C4'	-5.78	104.32	110.10
173	Cw	37	DT	C4'-C3'-C2'	-5.78	97.89	103.10
220	Dh	17	DC	O4'-C1'-C2'	-5.78	101.27	105.90
317	FG	24	DT	C4'-C3'-C2'	-5.78	97.89	103.10
397	GY	13	DG	O4'-C1'-C2'	-5.78	101.27	105.90
1	AA	1762	DT	O4'-C4'-C3'	-5.78	102.19	104.50
1	AA	5399	DA	C4'-C3'-C2'	-5.78	97.90	103.10
14	AN	17	DT	C1'-O4'-C4'	-5.78	104.32	110.10
84	BV	44	DG	C5-C6-O6	-5.78	125.13	128.60
197	DK	28	DT	C4'-C3'-C2'	-5.78	97.90	103.10
341	Fe	16	DG	C1'-O4'-C4'	-5.78	104.32	110.10
396	GX	27	DG	P-O3'-C3'	5.78	126.64	119.70
1	AA	6	DA	C4'-C3'-C2'	-5.78	97.90	103.10
2	AB	493	DC	O4'-C4'-C3'	-5.78	102.19	104.50
228	Dp	9	DC	P-O3'-C3'	5.78	126.64	119.70
317	FG	17	DT	C4'-C3'-C2'	-5.78	97.90	103.10
1	AA	14	DG	P-O3'-C3'	5.78	126.63	119.70
1	AA	3678	DA	C1'-O4'-C4'	-5.78	104.32	110.10
2	AB	5189	DG	O4'-C1'-N9	5.78	112.05	108.00
2	AB	5348	DG	O4'-C1'-C2'	-5.78	101.28	105.90
65	BC	22	DG	C1'-O4'-C4'	-5.78	104.32	110.10
125	CA	18	DG	O4'-C1'-C2'	-5.78	101.28	105.90
283	Ei	26	DC	O4'-C1'-C2'	-5.78	101.28	105.90
367	F4	26	DA	O4'-C1'-C2'	-5.78	101.28	105.90
1	AA	1529	DA	O4'-C1'-C2'	-5.78	101.28	105.90
1	AA	2975	DG	O4'-C1'-C2'	-5.78	101.28	105.90
2	AB	5173	DA	C1'-O4'-C4'	-5.78	104.33	110.10
61	A8	24	DG	O4'-C1'-C2'	-5.78	101.28	105.90
117	B2	8	DA	O4'-C4'-C3'	-5.78	102.19	104.50
419	Gu	18	DG	C4'-C3'-C2'	-5.78	97.90	103.10
1	AA	3407	DA	O4'-C1'-N9	-5.77	103.96	108.00
1	AA	5282	DA	N1-C6-N6	-5.77	115.14	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	285	DC	P-O3'-C3'	5.77	126.63	119.70
1	AA	1687	DC	O4'-C4'-C3'	-5.77	102.19	104.50
1	AA	6723	DT	C4'-C3'-C2'	-5.77	97.91	103.10
2	AB	2221	DC	O4'-C1'-C2'	-5.77	101.28	105.90
2	AB	3691	DT	C4'-C3'-C2'	-5.77	97.90	103.10
236	Dx	8	DG	O4'-C4'-C3'	-5.77	102.19	104.50
284	Ej	33	DA	O4'-C1'-C2'	-5.77	101.28	105.90
335	FY	18	DA	C4'-C3'-C2'	-5.77	97.91	103.10
1	AA	123	DG	O4'-C1'-C2'	-5.77	101.28	105.90
1	AA	7061	DG	O4'-C1'-C2'	-5.77	101.28	105.90
2	AB	2776	DG	P-O3'-C3'	5.77	126.62	119.70
2	AB	6852	DA	P-O3'-C3'	5.77	126.62	119.70
90	Bb	42	DT	O4'-C4'-C3'	-5.77	102.19	104.50
1	AA	557	DG	N3-C2-N2	-5.77	115.86	119.90
1	AA	4386	DG	O4'-C1'-C2'	-5.77	101.28	105.90
1	AA	4570	DT	C1'-O4'-C4'	-5.77	104.33	110.10
2	AB	795	DC	P-O5'-C5'	5.77	130.13	120.90
62	A9	27	DG	N1-C6-O6	5.77	123.36	119.90
200	DN	39	DG	O4'-C1'-C2'	-5.77	101.28	105.90
259	EK	24	DG	O4'-C1'-C2'	-5.77	101.28	105.90
397	GY	26	DG	O4'-C1'-N9	5.77	112.04	108.00
1	AA	2856	DC	P-O5'-C5'	5.77	130.13	120.90
1	AA	3711	DA	O4'-C1'-C2'	-5.77	101.29	105.90
2	AB	2008	DG	O4'-C1'-C2'	-5.77	101.28	105.90
2	AB	2356	DG	C1'-O4'-C4'	-5.77	104.33	110.10
132	CH	1	DT	O4'-C4'-C3'	-5.77	102.19	104.50
134	CJ	18	DC	P-O5'-C5'	5.77	130.13	120.90
306	E5	30	DG	P-O3'-C3'	5.77	126.62	119.70
1	AA	3029	DG	O4'-C1'-C2'	-5.77	101.29	105.90
2	AB	2043	DC	C6-N1-C2	-5.77	117.99	120.30
2	AB	3522	DC	O4'-C4'-C3'	-5.77	102.19	104.50
2	AB	4693	DC	C6-N1-C1'	-5.77	113.88	120.80
112	Bx	12	DA	P-O3'-C3'	5.77	126.62	119.70
1	AA	911	DG	C1'-O4'-C4'	-5.76	104.33	110.10
1	AA	1300	DG	C5-C6-O6	-5.76	125.14	128.60
1	AA	3506	DG	P-O3'-C3'	5.76	126.62	119.70
1	AA	4166	DT	O4'-C1'-C2'	-5.76	101.29	105.90
1	AA	6054	DA	P-O3'-C3'	5.76	126.62	119.70
2	AB	1944	DT	P-O3'-C3'	5.76	126.62	119.70
37	Ak	14	DA	O4'-C1'-C2'	-5.76	101.29	105.90
141	CQ	39	DC	C1'-O4'-C4'	-5.76	104.34	110.10
415	Gq	14	DA	O4'-C1'-C2'	-5.76	101.29	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	329	DA	C4'-C3'-C2'	-5.76	97.91	103.10
152	Cb	1	DT	C4'-C3'-C2'	-5.76	97.91	103.10
1	AA	3226	DA	O4'-C1'-C2'	-5.76	101.29	105.90
2	AB	389	DG	O4'-C1'-C2'	-5.76	101.29	105.90
2	AB	6946	DC	O4'-C4'-C3'	-5.76	102.19	104.50
65	BC	11	DA	N1-C6-N6	-5.76	115.14	118.60
74	BL	1	DT	C6-C5-C7	-5.76	119.44	122.90
102	Bn	40	DA	O4'-C1'-C2'	-5.76	101.29	105.90
104	Bp	33	DA	O4'-C4'-C3'	-5.76	102.19	104.50
136	CL	38	DA	P-O3'-C3'	5.76	126.61	119.70
146	CV	37	DT	C1'-O4'-C4'	-5.76	104.34	110.10
267	ES	18	DA	O4'-C1'-C2'	-5.76	101.29	105.90
404	Gf	10	DC	C1'-O4'-C4'	-5.76	104.34	110.10
1	AA	1801	DA	P-O3'-C3'	5.76	126.61	119.70
1	AA	3426	DA	O4'-C1'-C2'	-5.76	101.29	105.90
1	AA	3493	DC	C4'-C3'-C2'	-5.76	97.92	103.10
1	AA	6124	DC	P-O3'-C3'	5.76	126.61	119.70
2	AB	1625	DG	O4'-C1'-C2'	-5.76	101.29	105.90
2	AB	6039	DT	C4'-C3'-C2'	-5.76	97.92	103.10
47	Au	48	DT	O4'-C4'-C3'	-5.76	102.20	104.50
48	Av	9	DT	C1'-O4'-C4'	-5.76	104.34	110.10
70	BH	12	DA	O4'-C1'-C2'	-5.76	101.29	105.90
136	CL	16	DT	C1'-O4'-C4'	-5.76	104.34	110.10
331	FU	32	DA	P-O3'-C3'	5.76	126.61	119.70
417	Gs	16	DG	O4'-C1'-N9	5.76	112.03	108.00
1	AA	1225	DT	O4'-C1'-C2'	-5.76	101.29	105.90
2	AB	704	DT	O4'-C4'-C3'	-5.76	102.20	104.50
52	Az	13	DG	O4'-C1'-C2'	-5.76	101.29	105.90
58	A5	22	DA	O4'-C1'-C2'	-5.76	101.29	105.90
129	CE	30	DA	O4'-C1'-C2'	-5.76	101.29	105.90
179	C2	23	DC	O4'-C1'-C2'	-5.76	101.29	105.90
432	G7	26	DA	O4'-C1'-N9	5.76	112.03	108.00
1	AA	2224	DT	O4'-C1'-C2'	-5.76	101.29	105.90
1	AA	5048	DG	P-O3'-C3'	5.76	126.61	119.70
1	AA	6917	DC	C4'-C3'-C2'	-5.76	97.92	103.10
48	Av	19	DA	C1'-O4'-C4'	-5.76	104.34	110.10
117	B2	23	DA	O4'-C1'-C2'	-5.76	101.30	105.90
182	C5	37	DG	O4'-C1'-C2'	-5.76	101.29	105.90
425	G0	24	DA	N1-C6-N6	-5.76	115.15	118.60
2	AB	5500	DG	C1'-O4'-C4'	-5.75	104.34	110.10
2	AB	6425	DC	P-O3'-C3'	5.75	126.61	119.70
308	E7	3	DG	O4'-C1'-C2'	-5.75	101.30	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	2793	DT	C4'-C3'-C2'	-5.75	97.92	103.10
1	AA	4111	DG	C4'-C3'-C2'	-5.75	97.92	103.10
1	AA	4641	DG	O4'-C1'-C2'	-5.75	101.30	105.90
1	AA	5284	DA	O4'-C1'-C2'	-5.75	101.30	105.90
2	AB	1157	DG	O4'-C1'-N9	5.75	112.03	108.00
2	AB	1342	DA	P-O3'-C3'	5.75	126.60	119.70
2	AB	1884	DG	O4'-C1'-C2'	-5.75	101.30	105.90
2	AB	5257	DA	O4'-C1'-C2'	-5.75	101.30	105.90
263	EO	13	DC	O4'-C1'-N1	5.75	112.03	108.00
286	El	25	DT	O4'-C1'-C2'	-5.75	101.30	105.90
347	Fk	23	DT	O4'-C1'-C2'	-5.75	101.30	105.90
352	Fp	9	DG	O4'-C1'-C2'	-5.75	101.30	105.90
452	HR	16	DG	O4'-C4'-C3'	-5.75	102.20	104.50
2	AB	6378	DT	O4'-C4'-C3'	-5.75	102.20	104.50
42	Ap	12	DA	P-O3'-C3'	5.75	126.60	119.70
49	Aw	20	DA	P-O3'-C3'	5.75	126.60	119.70
151	Ca	23	DA	O4'-C1'-C2'	-5.75	101.30	105.90
171	Cu	39	DA	O4'-C1'-C2'	-5.75	101.30	105.90
1	AA	1056	DG	O4'-C1'-C2'	-5.75	101.30	105.90
1	AA	3074	DC	C4'-C3'-C2'	-5.75	97.93	103.10
1	AA	3935	DC	O4'-C1'-C2'	-5.75	101.30	105.90
2	AB	5562	DG	O4'-C4'-C3'	-5.75	102.20	104.50
62	A9	12	DC	C4'-C3'-C2'	-5.75	97.93	103.10
264	EP	1	DT	C1'-O4'-C4'	-5.75	104.35	110.10
300	Ez	6	DA	O4'-C1'-C2'	-5.75	101.30	105.90
374	GB	6	DT	P-O3'-C3'	5.75	126.60	119.70
1	AA	799	DG	O4'-C4'-C3'	-5.75	102.20	104.50
1	AA	2844	DG	N1-C6-O6	5.75	123.35	119.90
1	AA	4742	DT	O4'-C4'-C3'	-5.75	102.20	104.50
2	AB	4393	DA	P-O3'-C3'	5.75	126.59	119.70
2	AB	6922	DA	O4'-C4'-C3'	-5.75	102.20	104.50
81	BS	35	DG	O4'-C1'-C2'	-5.75	101.30	105.90
193	DG	42	DA	N1-C6-N6	-5.75	115.15	118.60
196	DJ	39	DA	C1'-O4'-C4'	-5.75	104.35	110.10
2	AB	5033	DC	O4'-C1'-C2'	-5.75	101.30	105.90
2	AB	5562	DG	O4'-C1'-N9	5.75	112.02	108.00
2	AB	5582	DA	C5-C6-N6	5.75	128.30	123.70
143	CS	19	DT	C4'-C3'-C2'	-5.75	97.93	103.10
218	Df	17	DG	O4'-C1'-C2'	-5.75	101.30	105.90
348	Fl	17	DA	C1'-O4'-C4'	-5.75	104.36	110.10
1	AA	3570	DT	O4'-C4'-C3'	-5.74	102.20	104.50
1	AA	3812	DA	O4'-C1'-C2'	-5.74	101.31	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	313	DT	C4'-C3'-C2'	-5.74	97.93	103.10
2	AB	648	DG	O4'-C4'-C3'	-5.74	102.20	104.50
150	CZ	13	DA	P-O3'-C3'	5.74	126.59	119.70
232	Dt	18	DA	O4'-C1'-C2'	-5.74	101.31	105.90
233	Du	6	DT	O4'-C4'-C3'	-5.74	102.20	104.50
2	AB	5241	DG	O4'-C1'-C2'	-5.74	101.31	105.90
2	AB	6417	DG	O4'-C1'-C2'	-5.74	101.31	105.90
92	Bd	23	DA	O4'-C1'-C2'	-5.74	101.31	105.90
101	Bm	26	DA	O4'-C1'-C2'	-5.74	101.31	105.90
113	By	4	DG	O4'-C1'-C2'	-5.74	101.31	105.90
210	DX	28	DA	O4'-C4'-C3'	-5.74	102.20	104.50
233	Du	32	DG	O4'-C1'-C2'	-5.74	101.31	105.90
420	Gv	15	DC	C4'-C3'-C2'	-5.74	97.93	103.10
1	AA	1208	DG	O4'-C1'-C2'	-5.74	101.31	105.90
1	AA	6333	DG	C1'-O4'-C4'	-5.74	104.36	110.10
1	AA	6906	DG	C1'-O4'-C4'	-5.74	104.36	110.10
2	AB	3534	DA	N1-C6-N6	-5.74	115.16	118.60
2	AB	5501	DC	C1'-O4'-C4'	-5.74	104.36	110.10
2	AB	6297	DA	N1-C6-N6	-5.74	115.16	118.60
53	A0	40	DA	P-O3'-C3'	5.74	126.59	119.70
101	Bm	11	DC	P-O3'-C3'	5.74	126.58	119.70
258	EJ	33	DT	C4'-C3'-C2'	-5.74	97.94	103.10
420	Gv	1	DG	C8-N9-C1'	-5.74	119.54	127.00
1	AA	4528	DT	C6-C5-C7	-5.74	119.46	122.90
2	AB	2538	DC	P-O3'-C3'	5.74	126.58	119.70
414	Gp	16	DC	C4'-C3'-C2'	-5.74	97.94	103.10
1	AA	3792	DT	C6-C5-C7	5.74	126.34	122.90
1	AA	5726	DG	O4'-C4'-C3'	-5.74	102.21	104.50
2	AB	2557	DT	O4'-C1'-C2'	-5.74	101.31	105.90
2	AB	6632	DA	C4'-C3'-C2'	-5.74	97.94	103.10
100	Bl	27	DA	C4'-C3'-C2'	-5.74	97.94	103.10
216	Dd	18	DG	P-O3'-C3'	5.74	126.58	119.70
2	AB	2577	DA	O4'-C1'-C2'	-5.73	101.31	105.90
144	CT	24	DT	C6-C5-C7	5.73	126.34	122.90
445	HK	17	DT	P-O3'-C3'	5.73	126.58	119.70
1	AA	2018	DC	C4'-C3'-C2'	-5.73	97.94	103.10
1	AA	6114	DT	O4'-C1'-C2'	-5.73	101.31	105.90
2	AB	6779	DA	O4'-C4'-C3'	-5.73	102.21	104.50
36	Aj	30	DG	C4'-C3'-C2'	-5.73	97.94	103.10
224	Dl	17	DA	O4'-C1'-C2'	-5.73	101.31	105.90
229	Dq	28	DG	O4'-C1'-C2'	-5.73	101.31	105.90
238	Dz	39	DA	N1-C6-N6	-5.73	115.16	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1704	DG	O4'-C1'-C2'	-5.73	101.32	105.90
2	AB	5837	DG	O4'-C1'-C2'	-5.73	101.31	105.90
2	AB	7474	DT	O4'-C1'-C2'	-5.73	101.31	105.90
130	CF	9	DT	O4'-C4'-C3'	-5.73	102.21	104.50
236	Dx	4	DG	N1-C6-O6	5.73	123.34	119.90
313	FC	24	DA	N1-C6-N6	-5.73	115.16	118.60
2	AB	3969	DG	O4'-C1'-C2'	-5.73	101.32	105.90
2	AB	4045	DT	C1'-O4'-C4'	-5.73	104.37	110.10
423	Gy	2	DG	O4'-C1'-C2'	-5.73	101.32	105.90
1	AA	1581	DG	C4'-C3'-C2'	-5.73	97.95	103.10
1	AA	5959	DA	C1'-O4'-C4'	-5.73	104.37	110.10
2	AB	4632	DA	O4'-C1'-C2'	-5.73	101.32	105.90
40	An	27	DC	P-O3'-C3'	5.73	126.57	119.70
321	FK	2	DA	O4'-C4'-C3'	-5.73	102.21	104.50
387	GO	12	DT	P-O3'-C3'	5.73	126.57	119.70
411	Gm	19	DG	C5-C6-O6	-5.73	125.16	128.60
1	AA	3661	DC	C4'-C3'-C2'	-5.73	97.95	103.10
2	AB	1204	DA	C4'-C3'-C2'	-5.73	97.95	103.10
2	AB	1232	DG	O4'-C1'-C2'	-5.73	101.32	105.90
83	BU	37	DC	P-O3'-C3'	5.73	126.57	119.70
246	D7	6	DT	O4'-C4'-C3'	-5.73	102.21	104.50
379	GG	4	DT	O4'-C1'-C2'	-5.73	101.32	105.90
1	AA	4619	DA	C4'-C3'-C2'	-5.72	97.95	103.10
1	AA	6619	DA	P-O3'-C3'	5.72	126.57	119.70
1	AA	6770	DT	C4'-C3'-C2'	-5.72	97.95	103.10
2	AB	941	DT	P-O3'-C3'	5.72	126.57	119.70
2	AB	1168	DA	O4'-C1'-C2'	-5.72	101.32	105.90
2	AB	1198	DG	N1-C6-O6	5.72	123.33	119.90
2	AB	4956	DG	C1'-O4'-C4'	-5.72	104.38	110.10
2	AB	5878	DA	N1-C6-N6	-5.72	115.17	118.60
224	Dl	1	DA	C1'-O4'-C4'	-5.72	104.38	110.10
371	F8	20	DG	O4'-C1'-C2'	-5.72	101.32	105.90
1	AA	520	DA	O4'-C1'-C2'	-5.72	101.32	105.90
1	AA	1315	DT	C1'-O4'-C4'	-5.72	104.38	110.10
1	AA	1353	DT	O4'-C1'-N1	5.72	112.01	108.00
1	AA	2548	DG	O4'-C1'-C2'	-5.72	101.32	105.90
2	AB	2740	DT	O4'-C1'-C2'	-5.72	101.32	105.90
2	AB	5849	DG	P-O3'-C3'	5.72	126.57	119.70
2	AB	7424	DG	O4'-C1'-C2'	-5.72	101.32	105.90
20	AT	32	DG	C1'-O4'-C4'	-5.72	104.38	110.10
36	Aj	7	DT	O4'-C4'-C3'	-5.72	102.21	104.50
41	Ao	25	DG	O4'-C4'-C3'	-5.72	102.21	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
181	C4	10	DA	O4'-C4'-C3'	-5.72	102.21	104.50
1	AA	2105	DA	N1-C6-N6	-5.72	115.17	118.60
1	AA	2180	DG	O4'-C4'-C3'	-5.72	102.21	104.50
1	AA	6166	DG	O4'-C1'-C2'	-5.72	101.32	105.90
37	Ak	46	DT	O4'-C4'-C3'	-5.72	102.21	104.50
53	A0	20	DC	C1'-O4'-C4'	-5.72	104.38	110.10
75	BM	16	DC	P-O3'-C3'	5.72	126.56	119.70
98	Bj	16	DA	C4'-C3'-C2'	-5.72	97.95	103.10
379	GG	9	DC	P-O3'-C3'	5.72	126.56	119.70
1	AA	2078	DC	C1'-O4'-C4'	-5.72	104.38	110.10
2	AB	3167	DT	C4'-C3'-C2'	-5.72	97.95	103.10
9	AI	23	DA	O4'-C1'-C2'	-5.72	101.32	105.90
133	CI	23	DA	O4'-C1'-C2'	-5.72	101.33	105.90
238	Dz	9	DA	O4'-C1'-C2'	-5.72	101.33	105.90
1	AA	7005	DT	C4'-C3'-C2'	-5.72	97.95	103.10
2	AB	3529	DG	C5-C6-O6	-5.72	125.17	128.60
2	AB	5869	DG	O4'-C1'-C2'	-5.72	101.33	105.90
93	Be	24	DT	C4'-C3'-C2'	-5.72	97.95	103.10
1	AA	4340	DC	P-O3'-C3'	5.72	126.56	119.70
1	AA	4913	DG	C1'-O4'-C4'	-5.72	104.38	110.10
1	AA	6962	DA	O4'-C1'-C2'	-5.72	101.33	105.90
2	AB	185	DA	O4'-C1'-C2'	-5.72	101.33	105.90
2	AB	2283	DA	O4'-C1'-C2'	-5.72	101.33	105.90
421	Gw	1	DT	O4'-C1'-C2'	-5.72	101.33	105.90
1	AA	3326	DG	O4'-C1'-C2'	-5.71	101.33	105.90
2	AB	674	DT	C4'-C3'-C2'	-5.71	97.96	103.10
2	AB	2058	DG	O4'-C1'-N9	5.71	112.00	108.00
2	AB	2202	DG	C1'-O4'-C4'	-5.71	104.39	110.10
5	AE	11	DA	P-O3'-C3'	5.71	126.56	119.70
17	AQ	3	DT	C1'-O4'-C4'	-5.71	104.39	110.10
34	Ah	40	DG	O4'-C1'-C2'	-5.71	101.33	105.90
118	B3	1	DG	C4'-C3'-C2'	-5.71	97.96	103.10
135	CK	27	DA	O4'-C1'-C2'	-5.71	101.33	105.90
146	CV	22	DA	O4'-C4'-C3'	-5.71	102.21	104.50
211	DY	9	DG	O4'-C1'-C2'	-5.71	101.33	105.90
342	Ff	2	DT	O4'-C4'-C3'	-5.71	102.22	104.50
345	Fi	9	DA	N1-C6-N6	-5.71	115.17	118.60
1	AA	1688	DC	O4'-C1'-C2'	-5.71	101.33	105.90
1	AA	1783	DC	O4'-C1'-C2'	-5.71	101.33	105.90
102	Bn	19	DT	O4'-C1'-N1	-5.71	104.00	108.00
242	D3	29	DG	O4'-C1'-C2'	-5.71	101.33	105.90
1	AA	4979	DA	C4'-C3'-C2'	-5.71	97.96	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2048	DT	C4'-C3'-C2'	-5.71	97.96	103.10
2	AB	3983	DA	C1'-O4'-C4'	-5.71	104.39	110.10
2	AB	6887	DC	P-O3'-C3'	5.71	126.55	119.70
27	Aa	31	DC	P-O5'-C5'	5.71	130.04	120.90
168	Cr	37	DT	O4'-C4'-C3'	-5.71	102.22	104.50
235	Dw	15	DA	O4'-C1'-C2'	-5.71	101.33	105.90
340	Fd	24	DA	O4'-C1'-C2'	-5.71	101.33	105.90
362	Fz	16	DG	O4'-C1'-C2'	-5.71	101.33	105.90
397	GY	27	DC	C6-N1-C2	-5.71	118.02	120.30
1	AA	6072	DT	P-O3'-C3'	5.71	126.55	119.70
292	Er	19	DG	C1'-O4'-C4'	-5.71	104.39	110.10
439	HE	16	DA	P-O3'-C3'	5.71	126.55	119.70
1	AA	2474	DC	O4'-C1'-N1	5.71	112.00	108.00
1	AA	3103	DG	P-O3'-C3'	5.71	126.55	119.70
1	AA	4096	DA	O4'-C1'-C2'	-5.71	101.33	105.90
1	AA	4219	DG	O4'-C1'-C2'	-5.71	101.33	105.90
1	AA	6101	DT	O4'-C1'-C2'	-5.71	101.33	105.90
1	AA	6160	DT	C4'-C3'-C2'	-5.71	97.96	103.10
1	AA	6535	DA	O4'-C1'-C2'	-5.71	101.33	105.90
2	AB	450	DT	C4'-C3'-C2'	-5.71	97.96	103.10
2	AB	1899	DT	O4'-C4'-C3'	-5.71	102.22	104.50
95	Bg	21	DA	O4'-C4'-C3'	-5.71	102.22	104.50
118	B3	36	DC	O4'-C1'-C2'	-5.71	101.33	105.90
130	CF	36	DT	O4'-C4'-C3'	-5.71	102.22	104.50
156	Cf	6	DT	C6-C5-C7	-5.71	119.47	122.90
173	Cw	18	DA	P-O3'-C3'	5.71	126.55	119.70
217	De	39	DT	O4'-C4'-C3'	-5.71	102.22	104.50
361	Fy	19	DT	C4'-C3'-C2'	-5.71	97.96	103.10
1	AA	3785	DA	O4'-C1'-C2'	-5.71	101.33	105.90
1	AA	6852	DT	C1'-O4'-C4'	-5.71	104.39	110.10
8	AH	30	DC	O4'-C1'-C2'	-5.71	101.33	105.90
154	Cd	22	DT	O4'-C1'-C2'	-5.71	101.33	105.90
100	Bl	19	DC	P-O3'-C3'	5.71	126.55	119.70
139	CO	38	DA	O4'-C1'-C2'	-5.71	101.34	105.90
310	E9	29	DG	C1'-O4'-C4'	-5.71	104.39	110.10
1	AA	6182	DA	O4'-C1'-C2'	-5.70	101.34	105.90
2	AB	2314	DT	C4'-C3'-C2'	-5.70	97.97	103.10
2	AB	6253	DG	C1'-O4'-C4'	-5.70	104.40	110.10
71	BI	44	DC	O4'-C1'-C2'	-5.70	101.34	105.90
242	D3	16	DA	C1'-O4'-C4'	-5.70	104.40	110.10
419	Gu	18	DG	N1-C6-O6	5.70	123.32	119.90
1	AA	2415	DA	O4'-C1'-C2'	-5.70	101.34	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	4567	DG	O4'-C1'-C2'	-5.70	101.34	105.90
2	AB	6039	DT	O4'-C4'-C3'	-5.70	102.22	104.50
79	BQ	49	DG	C5-C6-O6	-5.70	125.18	128.60
1	AA	5644	DA	O4'-C1'-N9	5.70	111.99	108.00
2	AB	1523	DT	P-O3'-C3'	5.70	126.54	119.70
2	AB	2171	DC	C4'-C3'-C2'	-5.70	97.97	103.10
2	AB	5433	DT	C4'-C3'-C2'	-5.70	97.97	103.10
170	Ct	24	DG	O4'-C1'-C2'	-5.70	101.34	105.90
212	DZ	13	DC	P-O5'-C5'	5.70	130.02	120.90
326	FP	12	DA	C4'-C3'-C2'	-5.70	97.97	103.10
361	Fy	9	DA	O4'-C4'-C3'	-5.70	102.22	104.50
1	AA	1953	DC	C4'-C3'-C2'	-5.70	97.97	103.10
1	AA	7228	DA	C4'-C3'-C2'	-5.70	97.97	103.10
2	AB	3639	DC	P-O3'-C3'	5.70	126.54	119.70
2	AB	6551	DG	O4'-C4'-C3'	-5.70	102.22	104.50
53	A0	26	DG	C1'-O4'-C4'	-5.70	104.40	110.10
73	BK	40	DG	C5-C6-O6	-5.70	125.18	128.60
196	DJ	21	DG	O4'-C4'-C3'	-5.70	102.22	104.50
315	FE	10	DT	C4'-C3'-C2'	-5.70	97.97	103.10
1	AA	5213	DG	C1'-O4'-C4'	-5.70	104.40	110.10
390	GR	4	DG	C5-C6-O6	-5.70	125.18	128.60
1	AA	2539	DA	C1'-O4'-C4'	-5.70	104.40	110.10
1	AA	5374	DC	O4'-C4'-C3'	-5.70	102.22	104.50
1	AA	6192	DC	P-O5'-C5'	5.70	130.01	120.90
1	AA	6374	DG	O4'-C4'-C3'	-5.70	102.22	104.50
2	AB	1844	DG	P-O3'-C3'	5.70	126.53	119.70
181	C4	5	DC	O4'-C4'-C3'	-5.70	102.22	104.50
318	FH	22	DA	O4'-C1'-C2'	-5.70	101.34	105.90
327	FQ	14	DA	O4'-C1'-C2'	-5.70	101.34	105.90
2	AB	637	DA	C1'-O4'-C4'	-5.69	104.41	110.10
23	AW	42	DT	P-O3'-C3'	5.69	126.53	119.70
92	Bd	11	DA	O4'-C1'-C2'	-5.69	101.34	105.90
226	Dn	35	DA	P-O3'-C3'	5.69	126.53	119.70
262	EN	27	DA	O4'-C1'-N9	5.69	111.99	108.00
1	AA	1503	DA	O4'-C1'-C2'	-5.69	101.35	105.90
1	AA	4401	DA	O4'-C1'-N9	5.69	111.98	108.00
1	AA	4605	DT	O4'-C1'-C2'	-5.69	101.35	105.90
1	AA	6383	DG	O4'-C1'-C2'	-5.69	101.35	105.90
2	AB	1680	DT	C4'-C3'-C2'	-5.69	97.98	103.10
2	AB	7529	DA	O4'-C4'-C3'	-5.69	102.22	104.50
61	A8	19	DA	P-O3'-C3'	5.69	126.53	119.70
147	CW	24	DC	C1'-O4'-C4'	-5.69	104.41	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
181	C4	5	DC	C4'-C3'-C2'	-5.69	97.98	103.10
211	DY	32	DC	C6-N1-C2	-5.69	118.02	120.30
292	Er	4	DG	P-O3'-C3'	5.69	126.53	119.70
421	Gw	26	DC	C6-N1-C2	-5.69	118.02	120.30
1	AA	91	DC	C1'-O4'-C4'	-5.69	104.41	110.10
1	AA	6921	DT	C4'-C3'-C2'	-5.69	97.98	103.10
2	AB	4547	DC	C6-N1-C2	-5.69	118.02	120.30
290	Ep	35	DT	O4'-C4'-C3'	-5.69	102.22	104.50
1	AA	2184	DG	O4'-C1'-N9	5.69	111.98	108.00
23	AW	2	DT	O4'-C4'-C3'	-5.69	102.22	104.50
115	B0	21	DC	P-O3'-C3'	5.69	126.53	119.70
167	Cq	31	DG	C1'-O4'-C4'	-5.69	104.41	110.10
1	AA	5861	DT	O4'-C1'-C2'	-5.69	101.35	105.90
2	AB	2212	DG	P-O3'-C3'	5.69	126.53	119.70
85	BW	43	DT	C6-C5-C7	-5.69	119.49	122.90
289	Eo	17	DA	C4'-C3'-C2'	-5.69	97.98	103.10
294	Et	15	DA	O4'-C1'-C2'	-5.69	101.35	105.90
395	GW	6	DC	C4'-C3'-C2'	-5.69	97.98	103.10
1	AA	415	DT	C4'-C3'-C2'	-5.69	97.98	103.10
134	CJ	12	DG	C1'-O4'-C4'	-5.69	104.41	110.10
386	GN	22	DT	O4'-C4'-C3'	-5.69	102.22	104.50
1	AA	1008	DG	O4'-C4'-C3'	-5.68	102.23	104.50
327	FQ	29	DA	N1-C6-N6	-5.68	115.19	118.60
401	Gc	8	DT	O4'-C4'-C3'	-5.68	102.23	104.50
1	AA	267	DC	C1'-O4'-C4'	-5.68	104.42	110.10
1	AA	1396	DC	C1'-O4'-C4'	-5.68	104.42	110.10
1	AA	2440	DG	C1'-O4'-C4'	-5.68	104.42	110.10
1	AA	3176	DG	O4'-C1'-C2'	-5.68	101.36	105.90
2	AB	5641	DG	O4'-C1'-C2'	-5.68	101.35	105.90
2	AB	6113	DG	P-O3'-C3'	5.68	126.52	119.70
39	Am	28	DC	O4'-C1'-C2'	-5.68	101.35	105.90
70	BH	43	DT	C4'-C3'-C2'	-5.68	97.99	103.10
88	BZ	29	DT	C4'-C3'-C2'	-5.68	97.99	103.10
154	Cd	8	DG	N1-C6-O6	5.68	123.31	119.90
201	DO	37	DC	O4'-C1'-C2'	-5.68	101.35	105.90
384	GL	2	DG	C5-C6-O6	-5.68	125.19	128.60
1	AA	5350	DA	C1'-O4'-C4'	-5.68	104.42	110.10
1	AA	6430	DC	C6-N1-C2	-5.68	118.03	120.30
2	AB	7215	DT	C4'-C3'-C2'	-5.68	97.99	103.10
83	BU	29	DA	O4'-C1'-C2'	-5.68	101.36	105.90
399	Ga	26	DG	O4'-C1'-C2'	-5.68	101.36	105.90
1	AA	4241	DG	O4'-C1'-C2'	-5.68	101.36	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	5636	DA	C4'-C3'-C2'	-5.68	97.99	103.10
2	AB	2047	DC	P-O3'-C3'	5.68	126.52	119.70
38	Al	26	DG	P-O3'-C3'	5.68	126.52	119.70
50	Ax	29	DC	O4'-C1'-C2'	-5.68	101.36	105.90
76	BN	1	DC	C2-N1-C1'	5.68	125.05	118.80
82	BT	14	DA	N1-C6-N6	-5.68	115.19	118.60
269	EU	8	DC	P-O5'-C5'	5.68	129.99	120.90
296	Ev	23	DG	C1'-O4'-C4'	-5.68	104.42	110.10
346	Fj	2	DA	O4'-C1'-C2'	-5.68	101.36	105.90
445	HK	18	DT	O4'-C4'-C3'	-5.68	102.23	104.50
1	AA	2316	DC	C4'-C3'-C2'	-5.68	97.99	103.10
1	AA	2612	DG	P-O3'-C3'	5.68	126.51	119.70
1	AA	2667	DG	C5-C6-O6	-5.68	125.19	128.60
1	AA	7447	DG	C4'-C3'-C2'	-5.68	97.99	103.10
2	AB	6316	DG	O4'-C1'-C2'	-5.68	101.36	105.90
25	AY	44	DT	O4'-C4'-C3'	-5.68	102.23	104.50
25	AY	47	DT	O4'-C4'-C3'	-5.68	102.23	104.50
247	D8	19	DG	O4'-C1'-C2'	-5.68	101.36	105.90
1	AA	807	DA	O4'-C4'-C3'	-5.68	102.23	104.50
2	AB	2060	DC	O4'-C1'-C2'	-5.68	101.36	105.90
2	AB	3723	DT	C4'-C3'-C2'	-5.68	97.99	103.10
2	AB	4004	DT	C6-C5-C7	-5.68	119.49	122.90
141	CQ	23	DG	C1'-O4'-C4'	-5.68	104.42	110.10
201	DO	39	DT	P-O3'-C3'	5.68	126.51	119.70
265	EQ	30	DA	C4'-C3'-C2'	-5.68	97.99	103.10
362	Fz	13	DG	O4'-C1'-C2'	-5.68	101.36	105.90
1	AA	3510	DA	C1'-O4'-C4'	-5.67	104.43	110.10
2	AB	1908	DT	P-O3'-C3'	5.67	126.51	119.70
2	AB	2870	DG	O4'-C1'-C2'	-5.67	101.36	105.90
18	AR	24	DG	C5-C6-O6	-5.67	125.19	128.60
359	Fw	23	DC	C4'-C3'-C2'	-5.67	97.99	103.10
439	HE	8	DT	P-O3'-C3'	5.67	126.51	119.70
245	D6	23	DT	C1'-O4'-C4'	-5.67	104.43	110.10
2	AB	1258	DT	O4'-C1'-C2'	-5.67	101.36	105.90
2	AB	3443	DT	O4'-C1'-C2'	-5.67	101.36	105.90
2	AB	4940	DA	C1'-O4'-C4'	-5.67	104.43	110.10
77	BO	24	DG	C1'-O4'-C4'	-5.67	104.43	110.10
323	FM	33	DA	O4'-C1'-C2'	-5.67	101.36	105.90
373	GA	8	DC	P-O5'-C5'	5.67	129.97	120.90
1	AA	750	DT	C4'-C3'-C2'	-5.67	98.00	103.10
1	AA	1044	DC	C4'-C3'-C2'	-5.67	98.00	103.10
1	AA	3828	DC	P-O5'-C5'	5.67	129.97	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	4174	DT	C4'-C3'-C2'	-5.67	98.00	103.10
1	AA	3829	DT	P-O3'-C3'	5.67	126.50	119.70
1	AA	4150	DA	N1-C6-N6	5.67	122.00	118.60
1	AA	5615	DA	P-O3'-C3'	5.67	126.50	119.70
2	AB	2463	DG	O4'-C1'-C2'	-5.67	101.36	105.90
2	AB	3770	DT	C4'-C3'-C2'	-5.67	98.00	103.10
2	AB	5380	DC	O4'-C1'-N1	5.67	111.97	108.00
2	AB	5838	DA	C4'-C3'-C2'	-5.67	98.00	103.10
23	AW	26	DA	N1-C6-N6	-5.67	115.20	118.60
30	Ad	40	DG	O4'-C4'-C3'	-5.67	102.23	104.50
140	CP	25	DG	O4'-C1'-C2'	-5.67	101.36	105.90
205	DS	5	DG	P-O3'-C3'	5.67	126.50	119.70
248	D9	7	DT	O4'-C4'-C3'	-5.67	102.23	104.50
276	Eb	19	DG	O4'-C1'-C2'	-5.67	101.37	105.90
316	FF	12	DT	C4'-C3'-C2'	-5.67	98.00	103.10
1	AA	1799	DT	O4'-C4'-C3'	-5.67	102.23	104.50
1	AA	4688	DA	P-O3'-C3'	5.67	126.50	119.70
20	AT	32	DG	O4'-C4'-C3'	-5.67	102.23	104.50
49	Aw	48	DT	O4'-C4'-C3'	-5.67	102.23	104.50
55	A2	20	DA	O4'-C1'-C2'	-5.67	101.37	105.90
88	BZ	33	DG	O4'-C1'-C2'	-5.67	101.37	105.90
147	CW	13	DG	C1'-O4'-C4'	-5.67	104.43	110.10
224	Dl	41	DC	P-O5'-C5'	5.67	129.97	120.90
1	AA	1697	DC	O4'-C4'-C3'	-5.67	102.23	104.50
2	AB	4366	DG	C1'-O4'-C4'	-5.67	104.44	110.10
1	AA	5644	DA	O4'-C1'-C2'	-5.66	101.37	105.90
2	AB	39	DA	O4'-C4'-C3'	-5.66	102.23	104.50
2	AB	3239	DC	O4'-C1'-C2'	-5.66	101.37	105.90
2	AB	4285	DA	N1-C6-N6	-5.66	115.20	118.60
188	DB	3	DA	P-O3'-C3'	5.66	126.50	119.70
281	Eg	8	DG	O4'-C1'-C2'	-5.66	101.37	105.90
398	GZ	4	DG	P-O3'-C3'	5.66	126.50	119.70
1	AA	1938	DT	C4'-C3'-C2'	-5.66	98.00	103.10
1	AA	3260	DT	C4-C5-C7	5.66	122.40	119.00
1	AA	4972	DG	O4'-C1'-C2'	-5.66	101.37	105.90
2	AB	5071	DA	P-O3'-C3'	5.66	126.49	119.70
2	AB	5845	DT	O4'-C4'-C3'	-5.66	102.23	104.50
1	AA	769	DG	O4'-C1'-C2'	-5.66	101.37	105.90
1	AA	2044	DT	O4'-C1'-C2'	-5.66	101.37	105.90
2	AB	44	DA	P-O3'-C3'	5.66	126.49	119.70
2	AB	4135	DG	O4'-C1'-C2'	-5.66	101.37	105.90
2	AB	7544	DA	O4'-C1'-C2'	-5.66	101.37	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	AD	38	DG	O4'-C1'-C2'	-5.66	101.37	105.90
15	AO	14	DG	O4'-C1'-C2'	-5.66	101.37	105.90
43	Aq	23	DG	O4'-C1'-C2'	-5.66	101.37	105.90
81	BS	18	DG	C5-C6-O6	-5.66	125.20	128.60
86	BX	12	DA	O4'-C1'-C2'	-5.66	101.37	105.90
93	Be	41	DA	N1-C6-N6	-5.66	115.20	118.60
111	Bw	37	DA	O4'-C1'-C2'	-5.66	101.37	105.90
185	C8	25	DA	O4'-C4'-C3'	-5.66	102.24	104.50
204	DR	33	DG	N1-C6-O6	5.66	123.30	119.90
1	AA	7450	DA	O4'-C1'-C2'	-5.66	101.37	105.90
2	AB	3503	DT	O4'-C4'-C3'	-5.66	102.24	104.50
2	AB	5155	DG	O4'-C1'-C2'	-5.66	101.37	105.90
248	D9	34	DT	O4'-C4'-C3'	-5.66	102.24	104.50
271	EW	14	DG	C8-N9-C1'	-5.66	119.64	127.00
1	AA	6155	DA	O4'-C4'-C3'	-5.66	102.24	104.50
1	AA	7071	DC	C1'-O4'-C4'	-5.66	104.44	110.10
2	AB	2418	DA	C4'-C3'-C2'	-5.66	98.01	103.10
290	Ep	27	DC	O4'-C1'-N1	5.66	111.96	108.00
1	AA	6330	DG	C1'-O4'-C4'	-5.66	104.44	110.10
1	AA	6652	DG	O4'-C4'-C3'	-5.66	102.24	104.50
2	AB	6525	DG	P-O3'-C3'	5.66	126.49	119.70
6	AF	21	DT	P-O3'-C3'	5.66	126.49	119.70
150	CZ	2	DC	O4'-C4'-C3'	-5.66	102.24	104.50
1	AA	6257	DA	O4'-C1'-C2'	-5.65	101.38	105.90
2	AB	309	DC	P-O5'-C5'	5.65	129.95	120.90
212	DZ	27	DA	O4'-C1'-C2'	-5.65	101.38	105.90
353	Fq	6	DA	O4'-C1'-C2'	-5.65	101.38	105.90
361	Fy	9	DA	C1'-O4'-C4'	-5.65	104.45	110.10
407	Gi	11	DG	O4'-C1'-C2'	-5.65	101.38	105.90
1	AA	1130	DT	O4'-C4'-C3'	-5.65	102.24	104.50
1	AA	2845	DT	C4'-C3'-C2'	-5.65	98.01	103.10
1	AA	5181	DA	O4'-C1'-C2'	-5.65	101.38	105.90
2	AB	1895	DA	O4'-C4'-C3'	-5.65	102.24	104.50
2	AB	3015	DC	O4'-C4'-C3'	-5.65	102.24	104.50
2	AB	5635	DG	C1'-O4'-C4'	-5.65	104.45	110.10
130	CF	6	DT	O4'-C4'-C3'	-5.65	102.24	104.50
176	Cz	27	DA	N1-C6-N6	-5.65	115.21	118.60
424	Gz	24	DC	C4'-C3'-C2'	-5.65	98.01	103.10
1	AA	1546	DA	O4'-C1'-C2'	-5.65	101.38	105.90
1	AA	3985	DA	O4'-C1'-N9	5.65	111.95	108.00
1	AA	5518	DC	P-O5'-C5'	5.65	129.94	120.90
2	AB	264	DG	C1'-O4'-C4'	-5.65	104.45	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	6064	DG	O4'-C1'-C2'	-5.65	101.38	105.90
5	AE	27	DC	O4'-C4'-C3'	-5.65	102.24	104.50
153	Cc	36	DA	C4'-C3'-C2'	-5.65	98.01	103.10
244	D5	13	DC	P-O5'-C5'	5.65	129.94	120.90
256	EH	26	DC	O4'-C1'-C2'	-5.65	101.38	105.90
267	ES	16	DA	O4'-C1'-C2'	-5.65	101.38	105.90
398	GZ	9	DA	O4'-C1'-C2'	-5.65	101.38	105.90
1	AA	2656	DA	C4'-C3'-C2'	-5.65	98.02	103.10
2	AB	2746	DT	C6-C5-C7	-5.65	119.51	122.90
179	C2	9	DT	O4'-C1'-C2'	-5.65	101.38	105.90
266	ER	22	DA	O4'-C1'-N9	5.65	111.95	108.00
1	AA	276	DT	O4'-C1'-C2'	-5.65	101.38	105.90
1	AA	3156	DG	O4'-C4'-C3'	-5.65	102.24	104.50
2	AB	318	DA	O4'-C4'-C3'	-5.65	102.24	104.50
2	AB	3344	DT	C4'-C3'-C2'	-5.65	98.02	103.10
2	AB	4763	DC	O4'-C4'-C3'	-5.65	102.24	104.50
2	AB	5410	DA	P-O3'-C3'	5.65	126.48	119.70
1	AA	6725	DT	O4'-C1'-N1	5.65	111.95	108.00
2	AB	1669	DA	O4'-C1'-C2'	-5.65	101.38	105.90
74	BL	6	DG	O4'-C1'-C2'	-5.65	101.38	105.90
1	AA	1176	DC	O4'-C1'-C2'	-5.64	101.38	105.90
1	AA	2255	DC	C4'-C3'-C2'	-5.64	98.02	103.10
1	AA	3268	DA	O4'-C4'-C3'	-5.64	102.24	104.50
1	AA	3678	DA	O4'-C1'-N9	5.64	111.95	108.00
1	AA	4066	DA	C1'-O4'-C4'	-5.64	104.45	110.10
1	AA	4972	DG	O4'-C1'-N9	5.64	111.95	108.00
1	AA	5571	DA	O4'-C1'-C2'	-5.64	101.39	105.90
1	AA	6986	DA	P-O3'-C3'	5.64	126.47	119.70
2	AB	623	DT	O4'-C4'-C3'	-5.64	102.24	104.50
2	AB	4693	DC	O4'-C1'-C2'	-5.64	101.39	105.90
2	AB	6604	DT	O4'-C1'-C2'	-5.64	101.38	105.90
136	CL	16	DT	C6-C5-C7	-5.64	119.51	122.90
292	Er	2	DA	C1'-O4'-C4'	-5.64	104.46	110.10
317	FG	28	DA	O4'-C1'-C2'	-5.64	101.39	105.90
426	G1	5	DT	O4'-C4'-C3'	-5.64	102.24	104.50
2	AB	1296	DG	O4'-C1'-C2'	-5.64	101.39	105.90
157	Cg	15	DG	C1'-O4'-C4'	-5.64	104.46	110.10
2	AB	2774	DG	O4'-C4'-C3'	-5.64	102.24	104.50
174	Cx	37	DT	O4'-C1'-C2'	-5.64	101.39	105.90
192	DF	18	DG	O4'-C1'-C2'	-5.64	101.39	105.90
1	AA	1448	DG	O4'-C1'-C2'	-5.64	101.39	105.90
1	AA	5794	DT	C4'-C3'-C2'	-5.64	98.03	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	4313	DC	C4'-C3'-C2'	-5.64	98.03	103.10
2	AB	5116	DG	C1'-O4'-C4'	-5.64	104.46	110.10
2	AB	5489	DT	C1'-O4'-C4'	-5.64	104.46	110.10
46	At	37	DT	O4'-C1'-C2'	-5.64	101.39	105.90
96	Bh	25	DG	O4'-C1'-C2'	-5.64	101.39	105.90
126	CB	9	DG	O4'-C1'-C2'	-5.64	101.39	105.90
287	Em	5	DC	C1'-O4'-C4'	-5.64	104.46	110.10
120	B5	23	DC	O4'-C1'-C2'	-5.64	101.39	105.90
131	CG	13	DC	O4'-C1'-N1	5.64	111.95	108.00
219	Dg	30	DA	O4'-C1'-C2'	-5.64	101.39	105.90
326	FP	9	DG	O4'-C1'-C2'	-5.64	101.39	105.90
413	Go	1	DA	C4'-C3'-C2'	-5.64	98.03	103.10
1	AA	1314	DA	P-O3'-C3'	5.64	126.46	119.70
1	AA	3413	DG	C1'-O4'-C4'	-5.64	104.46	110.10
1	AA	4270	DG	C4'-C3'-C2'	-5.64	98.03	103.10
1	AA	6127	DG	O4'-C1'-C2'	-5.64	101.39	105.90
2	AB	1101	DC	O4'-C4'-C3'	-5.64	102.25	104.50
2	AB	3146	DG	C1'-O4'-C4'	-5.64	104.46	110.10
2	AB	4015	DA	O4'-C1'-C2'	-5.64	101.39	105.90
154	Cd	7	DA	O4'-C1'-C2'	-5.64	101.39	105.90
194	DH	37	DG	O4'-C1'-C2'	-5.64	101.39	105.90
234	Dv	37	DC	O4'-C1'-C2'	-5.64	101.39	105.90
271	EW	9	DC	O4'-C1'-C2'	-5.64	101.39	105.90
366	F3	2	DA	O4'-C4'-C3'	-5.64	102.25	104.50
1	AA	5792	DG	O4'-C1'-C2'	-5.63	101.39	105.90
2	AB	2176	DA	P-O3'-C3'	5.63	126.46	119.70
210	DX	16	DG	P-O3'-C3'	-5.63	112.94	119.70
1	AA	3951	DT	O4'-C1'-C2'	-5.63	101.39	105.90
1	AA	5015	DG	C4'-C3'-C2'	-5.63	98.03	103.10
2	AB	1256	DG	P-O3'-C3'	5.63	126.46	119.70
2	AB	2981	DT	O4'-C4'-C3'	-5.63	102.25	104.50
52	Az	27	DC	P-O3'-C3'	5.63	126.46	119.70
1	AA	3751	DA	C4'-C3'-C2'	-5.63	98.03	103.10
1	AA	4932	DC	P-O3'-C3'	-5.63	112.94	119.70
2	AB	1393	DT	C4'-C3'-C2'	-5.63	98.03	103.10
2	AB	3894	DT	C4'-C3'-C2'	-5.63	98.03	103.10
2	AB	5417	DG	C1'-O4'-C4'	-5.63	104.47	110.10
84	BV	18	DC	P-O5'-C5'	5.63	129.91	120.90
2	AB	759	DA	N1-C6-N6	-5.63	115.22	118.60
336	FZ	16	DA	P-O3'-C3'	5.63	126.46	119.70
369	F6	5	DC	C1'-O4'-C4'	-5.63	104.47	110.10
2	AB	2212	DG	C1'-O4'-C4'	-5.63	104.47	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2991	DG	O4'-C1'-C2'	-5.63	101.40	105.90
2	AB	4206	DC	P-O5'-C5'	5.63	129.90	120.90
2	AB	4720	DG	C5-C6-O6	-5.63	125.22	128.60
7	AG	18	DG	O4'-C1'-C2'	-5.63	101.40	105.90
9	AI	12	DG	C5-C6-O6	-5.63	125.22	128.60
55	A2	7	DT	O4'-C4'-C3'	-5.63	102.25	104.50
237	Dy	24	DT	C4'-C3'-C2'	-5.63	98.03	103.10
308	E7	32	DC	P-O5'-C5'	5.63	129.91	120.90
1	AA	734	DC	O4'-C1'-C2'	-5.63	101.40	105.90
1	AA	2573	DA	O4'-C1'-C2'	-5.63	101.40	105.90
1	AA	3596	DC	C4'-C3'-C2'	-5.63	98.04	103.10
2	AB	578	DA	O4'-C1'-C2'	-5.63	101.40	105.90
2	AB	4438	DG	O4'-C1'-C2'	-5.63	101.40	105.90
2	AB	5284	DA	C4'-C3'-C2'	-5.63	98.04	103.10
44	Ar	37	DA	P-O3'-C3'	5.63	126.45	119.70
72	BJ	10	DA	N1-C6-N6	-5.63	115.22	118.60
141	CQ	39	DC	O4'-C1'-N1	5.63	111.94	108.00
148	CX	30	DG	C5-C6-O6	-5.63	125.22	128.60
314	FD	16	DA	P-O3'-C3'	5.63	126.45	119.70
372	F9	2	DG	O4'-C1'-C2'	-5.63	101.40	105.90
414	Gp	16	DC	O4'-C1'-N1	5.63	111.94	108.00
1	AA	2356	DG	O4'-C1'-N9	5.62	111.94	108.00
2	AB	217	DG	O4'-C1'-C2'	-5.62	101.40	105.90
2	AB	2746	DT	C4-C5-C7	5.62	122.38	119.00
2	AB	4320	DT	C4'-C3'-C2'	-5.62	98.04	103.10
40	An	41	DC	P-O3'-C3'	5.62	126.45	119.70
216	Dd	4	DG	O4'-C1'-C2'	-5.62	101.40	105.90
367	F4	18	DG	O4'-C1'-C2'	-5.62	101.40	105.90
393	GU	17	DA	C4'-C3'-C2'	-5.62	98.04	103.10
1	AA	2610	DC	O4'-C1'-N1	5.62	111.94	108.00
2	AB	6706	DG	O4'-C1'-C2'	-5.62	101.40	105.90
2	AB	6928	DG	C4'-C3'-C2'	-5.62	98.04	103.10
6	AF	6	DT	O4'-C4'-C3'	-5.62	102.25	104.50
51	Ay	25	DA	C4'-C3'-C2'	-5.62	98.04	103.10
77	BO	32	DC	C2-N1-C1'	5.62	124.99	118.80
418	Gt	27	DC	C1'-O4'-C4'	-5.62	104.48	110.10
443	HI	17	DT	O4'-C4'-C3'	-5.62	102.25	104.50
450	HP	8	DG	O4'-C4'-C3'	-5.62	102.25	104.50
2	AB	5505	DC	C1'-O4'-C4'	-5.62	104.48	110.10
2	AB	7151	DG	P-O3'-C3'	5.62	126.45	119.70
92	Bd	30	DA	O4'-C1'-C2'	-5.62	101.40	105.90
303	E2	5	DA	C4'-C3'-C2'	-5.62	98.04	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
370	F7	7	DC	O4'-C1'-C2'	-5.62	101.40	105.90
1	AA	4334	DG	O4'-C1'-C2'	-5.62	101.40	105.90
1	AA	5137	DG	C4'-C3'-C2'	-5.62	98.04	103.10
2	AB	4523	DC	C4'-C3'-C2'	-5.62	98.04	103.10
2	AB	6175	DG	C5-C6-O6	-5.62	125.23	128.60
2	AB	6608	DG	C5-C6-O6	-5.62	125.23	128.60
404	Gf	10	DC	C6-N1-C2	-5.62	118.05	120.30
1	AA	1401	DG	O4'-C1'-C2'	-5.62	101.41	105.90
1	AA	4524	DC	O4'-C1'-C2'	-5.62	101.41	105.90
2	AB	656	DT	O4'-C4'-C3'	-5.62	102.25	104.50
2	AB	6694	DG	O4'-C1'-C2'	-5.62	101.41	105.90
63	BA	47	DT	O4'-C4'-C3'	-5.62	102.25	104.50
418	Gt	2	DT	O4'-C4'-C3'	-5.62	102.25	104.50
1	AA	7266	DG	O4'-C1'-C2'	-5.62	101.41	105.90
32	Af	17	DG	O4'-C1'-C2'	-5.62	101.41	105.90
99	Bk	23	DG	C4'-C3'-C2'	-5.62	98.05	103.10
147	CW	39	DC	O4'-C1'-C2'	-5.62	101.41	105.90
372	F9	1	DA	N1-C6-N6	-5.62	115.23	118.60
1	AA	3312	DC	O4'-C1'-N1	5.61	111.93	108.00
1	AA	4997	DA	O4'-C1'-C2'	-5.61	101.41	105.90
42	Ap	14	DG	O4'-C1'-C2'	-5.61	101.41	105.90
117	B2	6	DA	O4'-C1'-C2'	-5.61	101.41	105.90
312	FB	28	DT	O4'-C1'-C2'	-5.61	101.41	105.90
318	FH	24	DT	O4'-C1'-C2'	-5.61	101.41	105.90
322	FL	26	DA	O4'-C1'-C2'	-5.61	101.41	105.90
378	GF	16	DC	O4'-C1'-C2'	-5.61	101.41	105.90
1	AA	3360	DC	C4'-C3'-C2'	-5.61	98.05	103.10
2	AB	6149	DG	P-O3'-C3'	5.61	126.44	119.70
138	CN	19	DC	O4'-C1'-N1	5.61	111.93	108.00
170	Ct	41	DA	O4'-C4'-C3'	-5.61	102.25	104.50
208	DV	12	DC	C4'-C3'-C2'	-5.61	98.05	103.10
1	AA	47	DA	O4'-C1'-C2'	-5.61	101.41	105.90
1	AA	656	DG	P-O3'-C3'	5.61	126.43	119.70
1	AA	2729	DC	O4'-C4'-C3'	-5.61	102.25	104.50
1	AA	3925	DC	C4'-C3'-C2'	-5.61	98.05	103.10
2	AB	2819	DC	C6-N1-C2	-5.61	118.06	120.30
2	AB	5475	DA	C4'-C3'-C2'	-5.61	98.05	103.10
1	AA	1318	DT	C1'-O4'-C4'	-5.61	104.49	110.10
2	AB	622	DT	O4'-C1'-C2'	-5.61	101.41	105.90
306	E5	9	DC	O4'-C1'-C2'	-5.61	101.41	105.90
360	Fx	10	DA	C4'-C3'-C2'	-5.61	98.05	103.10
2	AB	291	DC	C1'-O4'-C4'	-5.61	104.49	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2817	DC	C1'-O4'-C4'	-5.61	104.49	110.10
2	AB	3257	DC	O4'-C1'-C2'	-5.61	101.42	105.90
2	AB	3560	DT	O4'-C1'-N1	5.61	111.92	108.00
2	AB	6311	DC	P-O3'-C3'	5.61	126.43	119.70
74	BL	31	DT	O4'-C1'-N1	5.61	111.92	108.00
163	Cm	18	DA	O4'-C1'-C2'	-5.61	101.41	105.90
245	D6	7	DT	O4'-C4'-C3'	-5.61	102.26	104.50
1	AA	279	DT	C1'-O4'-C4'	-5.61	104.50	110.10
1	AA	2193	DG	C1'-O4'-C4'	-5.61	104.49	110.10
1	AA	2387	DG	C1'-O4'-C4'	-5.61	104.49	110.10
1	AA	3562	DA	O4'-C1'-C2'	-5.61	101.42	105.90
1	AA	3886	DC	C6-N1-C2	-5.61	118.06	120.30
1	AA	7492	DC	P-O5'-C5'	5.61	129.87	120.90
2	AB	1569	DG	O4'-C1'-C2'	-5.61	101.42	105.90
2	AB	3231	DG	N1-C6-O6	5.61	123.26	119.90
2	AB	7386	DA	N1-C6-N6	-5.61	115.24	118.60
102	Bn	28	DC	P-O3'-C3'	-5.61	112.97	119.70
163	Cm	8	DT	C1'-O4'-C4'	-5.61	104.49	110.10
196	DJ	16	DA	O4'-C1'-C2'	-5.61	101.42	105.90
427	G2	18	DT	C4'-C3'-C2'	-5.61	98.06	103.10
1	AA	3738	DT	O4'-C1'-C2'	-5.60	101.42	105.90
1	AA	4084	DT	C4'-C3'-C2'	-5.60	98.06	103.10
1	AA	4734	DC	C2-N1-C1'	5.60	124.97	118.80
97	Bi	26	DG	O4'-C1'-C2'	-5.60	101.42	105.90
307	E6	35	DG	N1-C6-O6	5.60	123.26	119.90
321	FK	9	DT	C4-C5-C7	-5.60	115.64	119.00
1	AA	258	DC	C4'-C3'-C2'	-5.60	98.06	103.10
1	AA	4324	DC	P-O3'-C3'	5.60	126.42	119.70
1	AA	5117	DT	O4'-C1'-C2'	-5.60	101.42	105.90
2	AB	5772	DC	O4'-C1'-C2'	-5.60	101.42	105.90
5	AE	29	DC	C1'-O4'-C4'	-5.60	104.50	110.10
45	As	40	DC	P-O3'-C3'	5.60	126.42	119.70
130	CF	9	DT	C4'-C3'-C2'	-5.60	98.06	103.10
160	Cj	31	DA	C4'-C3'-C2'	-5.60	98.06	103.10
192	DF	2	DA	O4'-C1'-C2'	-5.60	101.42	105.90
354	Fr	8	DT	O4'-C4'-C3'	-5.60	102.26	104.50
436	HB	17	DG	C4'-C3'-C2'	-5.60	98.06	103.10
1	AA	1249	DC	O4'-C1'-C2'	-5.60	101.42	105.90
1	AA	1729	DT	O4'-C4'-C3'	-5.60	102.26	104.50
1	AA	6677	DT	C4'-C3'-C2'	-5.60	98.06	103.10
208	DV	7	DC	P-O5'-C5'	5.60	129.86	120.90
353	Fq	25	DT	O4'-C4'-C3'	-5.60	102.26	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	2950	DA	C1'-O4'-C4'	-5.60	104.50	110.10
2	AB	2418	DA	O4'-C4'-C3'	-5.60	102.26	104.50
241	D2	39	DA	O4'-C1'-C2'	-5.60	101.42	105.90
250	EB	6	DC	O4'-C1'-C2'	-5.60	101.42	105.90
338	Fb	30	DA	O4'-C1'-C2'	-5.60	101.42	105.90
395	GW	10	DA	O4'-C1'-C2'	-5.60	101.42	105.90
397	GY	11	DC	O4'-C1'-C2'	-5.60	101.42	105.90
1	AA	6559	DA	O4'-C1'-C2'	-5.60	101.42	105.90
1	AA	7047	DT	C4'-C3'-C2'	-5.60	98.06	103.10
35	Ai	29	DT	O4'-C1'-C2'	-5.60	101.42	105.90
59	A6	12	DC	O4'-C1'-C2'	-5.60	101.42	105.90
98	Bj	7	DA	C4'-C3'-C2'	-5.60	98.06	103.10
107	Bs	22	DA	C4'-C3'-C2'	-5.60	98.06	103.10
394	GV	7	DA	O4'-C4'-C3'	-5.60	102.26	104.50
2	AB	1906	DA	P-O3'-C3'	5.60	126.42	119.70
2	AB	4873	DA	O4'-C1'-C2'	-5.60	101.42	105.90
2	AB	6514	DC	O4'-C1'-C2'	-5.60	101.42	105.90
2	AB	7077	DA	C4'-C3'-C2'	-5.60	98.06	103.10
1	AA	4326	DC	P-O5'-C5'	5.59	129.85	120.90
1	AA	7392	DT	C4'-C3'-C2'	-5.59	98.06	103.10
2	AB	2574	DT	C1'-O4'-C4'	-5.59	104.50	110.10
2	AB	6922	DA	C1'-O4'-C4'	-5.59	104.51	110.10
23	AW	7	DT	O4'-C4'-C3'	-5.59	102.26	104.50
42	Ap	49	DT	O4'-C4'-C3'	-5.59	102.26	104.50
159	Ci	9	DA	O4'-C1'-C2'	-5.59	101.42	105.90
224	Dl	33	DA	C4'-C3'-C2'	-5.59	98.06	103.10
344	Fh	14	DA	P-O3'-C3'	5.59	126.41	119.70
377	GE	18	DA	O4'-C1'-C2'	-5.59	101.42	105.90
398	GZ	4	DG	C1'-O4'-C4'	-5.59	104.51	110.10
371	F8	23	DA	O4'-C1'-C2'	-5.59	101.43	105.90
1	AA	3844	DC	C6-N1-C2	-5.59	118.06	120.30
2	AB	2094	DG	O4'-C1'-C2'	-5.59	101.43	105.90
2	AB	3149	DT	O4'-C1'-C2'	-5.59	101.43	105.90
207	DU	19	DT	C4'-C3'-C2'	-5.59	98.07	103.10
296	Ev	18	DG	C1'-O4'-C4'	-5.59	104.51	110.10
330	FT	14	DA	C4'-C3'-C2'	-5.59	98.07	103.10
339	Fc	29	DA	O4'-C1'-C2'	-5.59	101.43	105.90
1	AA	499	DG	O4'-C1'-C2'	-5.59	101.43	105.90
1	AA	908	DC	O4'-C1'-N1	5.59	111.91	108.00
1	AA	3312	DC	O4'-C1'-C2'	-5.59	101.43	105.90
1	AA	4976	DT	C1'-O4'-C4'	-5.59	104.51	110.10
2	AB	5855	DA	O4'-C1'-C2'	-5.59	101.43	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	AJ	8	DT	O4'-C4'-C3'	-5.59	102.26	104.50
1	AA	5899	DA	O4'-C1'-C2'	-5.59	101.43	105.90
2	AB	5650	DA	N1-C6-N6	-5.59	115.25	118.60
49	Aw	24	DC	C4'-C3'-C2'	-5.59	98.07	103.10
216	Dd	36	DC	C4'-C3'-C2'	-5.59	98.07	103.10
1	AA	1247	DT	C1'-O4'-C4'	-5.59	104.51	110.10
1	AA	5501	DC	P-O3'-C3'	5.59	126.40	119.70
1	AA	6903	DA	O4'-C1'-C2'	-5.59	101.43	105.90
2	AB	6417	DG	O4'-C1'-N9	5.59	111.91	108.00
34	Ah	12	DG	O4'-C1'-C2'	-5.59	101.43	105.90
123	B8	17	DG	N1-C6-O6	5.59	123.25	119.90
141	CQ	9	DC	C4'-C3'-C2'	-5.59	98.07	103.10
180	C3	24	DG	O4'-C4'-C3'	-5.59	102.27	104.50
258	EJ	14	DG	O4'-C1'-C2'	-5.59	101.43	105.90
354	Fr	17	DT	O4'-C4'-C3'	-5.59	102.27	104.50
1	AA	5399	DA	O4'-C4'-C3'	-5.58	102.27	104.50
2	AB	5686	DG	O4'-C1'-C2'	-5.58	101.43	105.90
1	AA	133	DC	O4'-C1'-C2'	-5.58	101.43	105.90
1	AA	804	DG	O4'-C1'-C2'	-5.58	101.43	105.90
2	AB	2219	DG	P-O3'-C3'	5.58	126.40	119.70
2	AB	3386	DA	O4'-C1'-C2'	-5.58	101.43	105.90
2	AB	5857	DA	O4'-C1'-C2'	-5.58	101.43	105.90
95	Bg	22	DG	N1-C6-O6	5.58	123.25	119.90
114	Bz	33	DG	O4'-C1'-C2'	-5.58	101.43	105.90
214	Db	20	DA	P-O3'-C3'	5.58	126.40	119.70
310	E9	16	DC	O4'-C1'-C2'	-5.58	101.43	105.90
1	AA	3810	DT	O4'-C4'-C3'	-5.58	102.27	104.50
2	AB	3132	DG	C1'-O4'-C4'	-5.58	104.52	110.10
36	Aj	27	DT	C1'-O4'-C4'	-5.58	104.52	110.10
52	Az	11	DT	C1'-O4'-C4'	-5.58	104.52	110.10
262	EN	24	DA	P-O3'-C3'	5.58	126.40	119.70
265	EQ	7	DA	C4'-C3'-C2'	-5.58	98.08	103.10
277	Ec	24	DG	O4'-C1'-C2'	-5.58	101.44	105.90
367	F4	16	DG	O4'-C1'-N9	5.58	111.91	108.00
370	F7	1	DT	C2-N1-C1'	5.58	127.13	118.20
1	AA	6458	DG	O4'-C1'-N9	5.58	111.91	108.00
2	AB	911	DT	C4'-C3'-C2'	-5.58	98.08	103.10
2	AB	1122	DT	P-O3'-C3'	5.58	126.39	119.70
2	AB	1929	DG	O4'-C1'-N9	5.58	111.91	108.00
74	BL	23	DC	O4'-C4'-C3'	-5.58	102.27	104.50
84	BV	25	DC	C4'-C3'-C2'	-5.58	98.08	103.10
106	Br	28	DC	O4'-C1'-N1	5.58	111.91	108.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
256	EH	27	DG	P-O3'-C3'	5.58	126.39	119.70
2	AB	2688	DC	P-O5'-C5'	5.58	129.82	120.90
1	AA	2436	DT	O4'-C1'-C2'	-5.58	101.44	105.90
1	AA	2696	DC	C2-N1-C1'	5.58	124.93	118.80
1	AA	6536	DG	O4'-C4'-C3'	-5.58	102.27	104.50
2	AB	523	DG	C1'-O4'-C4'	-5.58	104.53	110.10
2	AB	4170	DT	C4'-C3'-C2'	-5.58	98.08	103.10
2	AB	5581	DA	P-O3'-C3'	5.58	126.39	119.70
17	AQ	5	DT	O4'-C4'-C3'	-5.58	102.27	104.50
85	BW	37	DA	O4'-C1'-C2'	-5.58	101.44	105.90
138	CN	32	DA	O4'-C1'-C2'	-5.58	101.44	105.90
1	AA	1294	DG	O4'-C1'-C2'	-5.57	101.44	105.90
1	AA	4206	DA	C4'-C3'-C2'	-5.57	98.08	103.10
2	AB	5362	DC	P-O5'-C5'	5.57	129.82	120.90
2	AB	5490	DC	C2-N1-C1'	5.57	124.93	118.80
1	AA	5877	DG	C1'-O4'-C4'	-5.57	104.53	110.10
2	AB	2407	DA	O4'-C4'-C3'	-5.57	102.27	104.50
244	D5	36	DC	P-O3'-C3'	5.57	126.39	119.70
1	AA	1459	DC	C4'-C3'-C2'	-5.57	98.09	103.10
1	AA	3096	DA	O4'-C1'-C2'	-5.57	101.44	105.90
1	AA	5644	DA	P-O3'-C3'	5.57	126.38	119.70
79	BQ	16	DG	C4'-C3'-C2'	-5.57	98.09	103.10
90	Bb	9	DT	O4'-C4'-C3'	-5.57	102.27	104.50
299	Ey	25	DG	O4'-C1'-C2'	-5.57	101.44	105.90
403	Ge	11	DG	O4'-C1'-C2'	-5.57	101.44	105.90
1	AA	4306	DA	O4'-C1'-C2'	-5.57	101.44	105.90
1	AA	4387	DG	O4'-C4'-C3'	-5.57	102.27	104.50
1	AA	7430	DA	O4'-C1'-C2'	-5.57	101.44	105.90
2	AB	7220	DC	C1'-O4'-C4'	-5.57	104.53	110.10
5	AE	23	DA	O4'-C4'-C3'	-5.57	102.27	104.50
81	BS	9	DT	C4'-C3'-C2'	-5.57	98.09	103.10
1	AA	3379	DG	C4'-C3'-C2'	-5.57	98.09	103.10
1	AA	5923	DG	O4'-C1'-C2'	-5.57	101.45	105.90
2	AB	1963	DG	O4'-C1'-C2'	-5.57	101.45	105.90
2	AB	5947	DG	O4'-C1'-C2'	-5.57	101.45	105.90
169	Cs	22	DG	O4'-C4'-C3'	-5.57	102.27	104.50
200	DN	16	DC	C1'-O4'-C4'	-5.57	104.53	110.10
240	D1	19	DA	O4'-C1'-C2'	-5.57	101.45	105.90
1	AA	3843	DT	O4'-C1'-C2'	-5.57	101.45	105.90
1	AA	6528	DG	C1'-O4'-C4'	-5.57	104.53	110.10
2	AB	2900	DG	O4'-C1'-N9	5.57	111.89	108.00
2	AB	3060	DA	O4'-C1'-C2'	-5.57	101.45	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	4036	DG	O4'-C1'-C2'	-5.57	101.45	105.90
2	AB	6961	DC	C4'-C3'-C2'	-5.57	98.09	103.10
70	BH	36	DC	O4'-C1'-N1	5.57	111.90	108.00
84	BV	21	DC	O4'-C1'-C2'	-5.57	101.45	105.90
400	Gb	19	DG	O4'-C1'-N9	5.57	111.90	108.00
412	Gn	2	DT	O4'-C4'-C3'	-5.57	102.27	104.50
1	AA	390	DG	O4'-C1'-C2'	-5.56	101.45	105.90
1	AA	2560	DT	C4'-C3'-C2'	-5.56	98.09	103.10
1	AA	3103	DG	P-O5'-C5'	5.56	129.80	120.90
1	AA	4789	DA	P-O3'-C3'	5.56	126.38	119.70
2	AB	1159	DT	C1'-O4'-C4'	-5.56	104.54	110.10
2	AB	1878	DG	C1'-O4'-C4'	-5.56	104.54	110.10
2	AB	2130	DG	O4'-C1'-C2'	-5.56	101.45	105.90
2	AB	3053	DT	P-O3'-C3'	5.56	126.38	119.70
20	AT	46	DT	O4'-C4'-C3'	-5.56	102.27	104.50
154	Cd	14	DT	C1'-O4'-C4'	-5.56	104.54	110.10
346	Fj	15	DG	C4'-C3'-C2'	-5.56	98.09	103.10
435	HA	12	DT	C4'-C3'-C2'	-5.56	98.09	103.10
1	AA	3961	DG	O4'-C4'-C3'	-5.56	102.28	104.50
1	AA	5334	DG	C1'-O4'-C4'	-5.56	104.54	110.10
2	AB	4799	DT	C4'-C3'-C2'	-5.56	98.09	103.10
2	AB	4859	DA	N1-C6-N6	-5.56	115.26	118.60
2	AB	4901	DC	O4'-C1'-N1	5.56	111.89	108.00
80	BR	45	DC	C4'-C3'-C2'	-5.56	98.09	103.10
98	Bj	38	DA	N1-C6-N6	5.56	121.94	118.60
184	C7	4	DC	O4'-C1'-C2'	-5.56	101.45	105.90
248	D9	12	DT	C1'-O4'-C4'	-5.56	104.54	110.10
275	Ea	23	DC	O4'-C1'-C2'	-5.56	101.45	105.90
372	F9	1	DA	C4'-C3'-C2'	-5.56	98.09	103.10
1	AA	2071	DC	C1'-O4'-C4'	-5.56	104.54	110.10
1	AA	5959	DA	O4'-C1'-N9	5.56	111.89	108.00
81	BS	10	DG	O4'-C1'-C2'	-5.56	101.45	105.90
180	C3	40	DT	P-O3'-C3'	5.56	126.37	119.70
206	DT	32	DG	C3'-C2'-C1'	-5.56	95.83	102.50
338	Fb	1	DA	C1'-O4'-C4'	-5.56	104.54	110.10
1	AA	884	DA	C1'-O4'-C4'	-5.56	104.54	110.10
1	AA	3260	DT	C6-C5-C7	-5.56	119.56	122.90
1	AA	7218	DA	O4'-C1'-C2'	-5.56	101.45	105.90
2	AB	948	DT	P-O3'-C3'	5.56	126.37	119.70
2	AB	4059	DG	O4'-C1'-C2'	-5.56	101.45	105.90
2	AB	6271	DT	O4'-C1'-C2'	-5.56	101.45	105.90
2	AB	6611	DG	O4'-C1'-C2'	-5.56	101.45	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
124	B9	23	DA	C1'-O4'-C4'	-5.56	104.54	110.10
141	CQ	2	DA	O4'-C1'-N9	-5.56	104.11	108.00
209	DW	1	DC	C6-N1-C1'	-5.56	114.13	120.80
288	En	2	DT	O4'-C4'-C3'	-5.56	102.28	104.50
288	En	3	DT	O4'-C4'-C3'	-5.56	102.28	104.50
410	Gl	24	DA	O4'-C1'-C2'	-5.56	101.45	105.90
1	AA	7193	DA	O4'-C4'-C3'	-5.56	102.28	104.50
1	AA	7272	DA	O4'-C4'-C3'	-5.56	102.28	104.50
2	AB	1850	DA	P-O3'-C3'	5.56	126.37	119.70
2	AB	2745	DC	O4'-C4'-C3'	-5.56	102.28	104.50
169	Cs	9	DA	C4'-C3'-C2'	-5.56	98.10	103.10
200	DN	7	DA	O4'-C1'-N9	5.56	111.89	108.00
338	Fb	34	DG	P-O3'-C3'	5.56	126.37	119.70
1	AA	341	DA	O4'-C1'-C2'	-5.56	101.45	105.90
2	AB	200	DG	P-O3'-C3'	5.56	126.37	119.70
2	AB	3732	DC	P-O5'-C5'	5.56	129.79	120.90
381	GI	9	DT	C4'-C3'-C2'	-5.56	98.10	103.10
1	AA	1513	DC	C1'-O4'-C4'	-5.55	104.55	110.10
1	AA	2132	DC	P-O5'-C5'	5.55	129.79	120.90
1	AA	6182	DA	P-O3'-C3'	5.55	126.36	119.70
1	AA	6748	DT	O4'-C1'-C2'	-5.55	101.46	105.90
2	AB	885	DG	O4'-C1'-C2'	-5.55	101.46	105.90
2	AB	4522	DC	C2-N1-C1'	5.55	124.91	118.80
188	DB	30	DG	C1'-O4'-C4'	-5.55	104.55	110.10
1	AA	3305	DA	P-O3'-C3'	5.55	126.36	119.70
2	AB	3316	DA	O4'-C1'-C2'	-5.55	101.46	105.90
1	AA	4637	DA	O4'-C4'-C3'	-5.55	102.28	104.50
2	AB	3529	DG	N1-C6-O6	5.55	123.23	119.90
17	AQ	31	DC	C4'-C3'-C2'	-5.55	98.10	103.10
51	Ay	29	DA	O4'-C1'-C2'	-5.55	101.46	105.90
104	Bp	7	DG	C1'-O4'-C4'	-5.55	104.55	110.10
173	Cw	18	DA	O4'-C1'-C2'	-5.55	101.46	105.90
261	EM	9	DT	O4'-C4'-C3'	-5.55	102.28	104.50
277	Ec	15	DT	O4'-C1'-C2'	-5.55	101.46	105.90
309	E8	27	DT	C4'-C3'-C2'	-5.55	98.10	103.10
330	FT	16	DC	C6-N1-C2	-5.55	118.08	120.30
335	FY	14	DG	O4'-C4'-C3'	-5.55	102.28	104.50
427	G2	21	DT	O4'-C4'-C3'	-5.55	102.28	104.50
1	AA	3092	DG	O4'-C1'-C2'	-5.55	101.46	105.90
2	AB	2259	DA	O4'-C1'-C2'	-5.55	101.46	105.90
2	AB	4439	DT	C4'-C3'-C2'	-5.55	98.11	103.10
2	AB	5817	DT	O4'-C4'-C3'	-5.55	102.28	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	7229	DT	C4'-C3'-C2'	-5.55	98.11	103.10
142	CR	1	DA	C1'-O4'-C4'	-5.55	104.55	110.10
304	E3	8	DA	P-O3'-C3'	5.55	126.36	119.70
9	AI	32	DG	P-O3'-C3'	5.55	126.36	119.70
46	At	32	DT	C1'-O4'-C4'	-5.55	104.55	110.10
400	Gb	20	DT	P-O3'-C3'	-5.55	113.04	119.70
1	AA	453	DT	O4'-C1'-C2'	-5.55	101.46	105.90
1	AA	7029	DT	C1'-O4'-C4'	-5.55	104.55	110.10
2	AB	2300	DT	O4'-C4'-C3'	-5.55	102.28	104.50
34	Ah	15	DA	O4'-C1'-C2'	-5.55	101.46	105.90
38	Al	13	DG	O4'-C1'-C2'	-5.55	101.46	105.90
110	Bv	16	DA	P-O3'-C3'	5.55	126.36	119.70
113	By	1	DG	C1'-O4'-C4'	-5.55	104.55	110.10
131	CG	31	DC	C6-N1-C2	-5.55	118.08	120.30
147	CW	23	DG	O4'-C1'-C2'	-5.55	101.46	105.90
287	Em	1	DG	C4'-C3'-C2'	-5.55	98.11	103.10
2	AB	2900	DG	O4'-C1'-C2'	-5.54	101.46	105.90
2	AB	6805	DT	C4'-C3'-C2'	-5.54	98.11	103.10
168	Cr	14	DC	C4'-C3'-C2'	-5.54	98.11	103.10
305	E4	25	DA	P-O3'-C3'	5.54	126.35	119.70
1	AA	7437	DC	O4'-C1'-N1	5.54	111.88	108.00
2	AB	1190	DG	C4'-C3'-C2'	-5.54	98.11	103.10
2	AB	1513	DG	O4'-C4'-C3'	-5.54	102.28	104.50
2	AB	2253	DG	C4'-C3'-C2'	-5.54	98.11	103.10
1	AA	7077	DC	P-O3'-C3'	5.54	126.35	119.70
2	AB	3357	DA	O4'-C1'-C2'	-5.54	101.47	105.90
2	AB	5134	DA	O4'-C1'-C2'	-5.54	101.47	105.90
2	AB	7027	DT	C4'-C3'-C2'	-5.54	98.11	103.10
62	A9	19	DC	O4'-C1'-C2'	-5.54	101.47	105.90
95	Bg	9	DA	P-O3'-C3'	5.54	126.35	119.70
138	CN	17	DG	O4'-C1'-C2'	-5.54	101.47	105.90
172	Cv	39	DG	C4'-C3'-C2'	-5.54	98.11	103.10
317	FG	25	DC	P-O5'-C5'	5.54	129.77	120.90
375	GC	18	DA	N1-C6-N6	-5.54	115.28	118.60
376	GD	15	DC	O4'-C1'-N1	5.54	111.88	108.00
387	GO	8	DG	O4'-C1'-C2'	-5.54	101.47	105.90
31	Ae	6	DT	O4'-C4'-C3'	-5.54	102.28	104.50
37	Ak	41	DC	C1'-O4'-C4'	-5.54	104.56	110.10
360	Fx	10	DA	O4'-C4'-C3'	-5.54	102.28	104.50
1	AA	1869	DC	O4'-C1'-C2'	-5.54	101.47	105.90
1	AA	7011	DG	O4'-C1'-C2'	-5.54	101.47	105.90
2	AB	588	DA	O4'-C1'-C2'	-5.54	101.47	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1798	DT	C4'-C3'-C2'	-5.54	98.11	103.10
2	AB	2424	DA	O4'-C1'-C2'	-5.54	101.47	105.90
2	AB	2865	DC	P-O5'-C5'	5.54	129.76	120.90
163	Cm	8	DT	C6-N1-C1'	-5.54	112.09	120.40
218	Df	33	DG	O4'-C1'-C2'	-5.54	101.47	105.90
227	Do	25	DG	P-O3'-C3'	5.54	126.35	119.70
255	EG	1	DA	O4'-C4'-C3'	-5.54	102.28	104.50
259	EK	33	DG	O4'-C1'-C2'	-5.54	101.47	105.90
171	Cu	25	DA	O4'-C1'-C2'	-5.54	101.47	105.90
385	GM	1	DA	C1'-O4'-C4'	-5.54	104.56	110.10
1	AA	96	DG	C4'-C3'-C2'	-5.54	98.12	103.10
1	AA	1687	DC	O4'-C1'-N1	5.54	111.88	108.00
2	AB	1317	DG	O4'-C1'-N9	5.54	111.88	108.00
2	AB	4120	DG	O4'-C1'-C2'	-5.54	101.47	105.90
2	AB	6885	DT	P-O3'-C3'	5.54	126.34	119.70
267	ES	16	DA	P-O3'-C3'	5.54	126.34	119.70
281	Eg	2	DG	O4'-C1'-C2'	-5.54	101.47	105.90
286	El	1	DA	O4'-C1'-C2'	-5.54	101.47	105.90
89	Ba	42	DA	P-O3'-C3'	5.53	126.34	119.70
104	Bp	31	DC	C1'-O4'-C4'	-5.53	104.57	110.10
125	CA	36	DT	O4'-C4'-C3'	-5.53	102.29	104.50
155	Ce	16	DT	O4'-C1'-C2'	-5.53	101.47	105.90
294	Et	26	DG	N1-C6-O6	5.53	123.22	119.90
1	AA	2301	DT	O4'-C1'-C2'	-5.53	101.47	105.90
1	AA	4541	DG	P-O3'-C3'	5.53	126.34	119.70
2	AB	5860	DG	O4'-C1'-C2'	-5.53	101.47	105.90
35	Ai	26	DA	O4'-C4'-C3'	-5.53	102.29	104.50
37	Ak	4	DT	O4'-C4'-C3'	-5.53	102.29	104.50
101	Bm	41	DC	O4'-C1'-N1	5.53	111.87	108.00
183	C6	13	DG	C4'-C3'-C2'	-5.53	98.12	103.10
190	DD	23	DC	P-O3'-C3'	5.53	126.34	119.70
285	Ek	6	DT	O4'-C4'-C3'	-5.53	102.29	104.50
2	AB	1674	DC	P-O5'-C5'	5.53	129.75	120.90
2	AB	6205	DG	C1'-O4'-C4'	-5.53	104.57	110.10
2	AB	6565	DG	C1'-O4'-C4'	-5.53	104.57	110.10
115	B0	31	DT	C4'-C3'-C2'	-5.53	98.12	103.10
141	CQ	32	DT	C4'-C3'-C2'	-5.53	98.12	103.10
365	F2	23	DT	O4'-C4'-C3'	-5.53	102.29	104.50
1	AA	2561	DA	N1-C6-N6	-5.53	115.28	118.60
1	AA	7390	DT	C4'-C3'-C2'	-5.53	98.12	103.10
37	Ak	22	DC	C4'-C3'-C2'	-5.53	98.12	103.10
53	A0	47	DT	O4'-C4'-C3'	-5.53	102.29	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	3893	DG	O4'-C1'-C2'	-5.53	101.48	105.90
1	AA	5462	DT	C4'-C3'-C2'	-5.53	98.12	103.10
1	AA	6818	DA	O4'-C1'-C2'	-5.53	101.48	105.90
23	AW	17	DG	O4'-C1'-C2'	-5.53	101.48	105.90
283	Ei	14	DG	N1-C6-O6	5.53	123.22	119.90
297	Ew	26	DC	O4'-C1'-C2'	-5.53	101.48	105.90
432	G7	5	DG	O4'-C1'-C2'	-5.53	101.48	105.90
1	AA	1955	DA	P-O3'-C3'	5.53	126.33	119.70
1	AA	3184	DC	P-O3'-C3'	5.53	126.33	119.70
1	AA	7461	DA	O4'-C1'-C2'	-5.53	101.48	105.90
2	AB	491	DA	P-O3'-C3'	5.53	126.33	119.70
2	AB	771	DG	O4'-C1'-C2'	-5.53	101.48	105.90
2	AB	4380	DT	C1'-O4'-C4'	-5.53	104.58	110.10
89	Ba	49	DC	O4'-C4'-C3'	-5.53	102.29	104.50
118	B3	18	DC	C4'-C3'-C2'	-5.53	98.13	103.10
171	Cu	2	DT	C4'-C3'-C2'	-5.53	98.13	103.10
181	C4	32	DA	O4'-C1'-C2'	-5.53	101.48	105.90
277	Ec	21	DA	C4'-C3'-C2'	-5.53	98.13	103.10
297	Ew	35	DC	C4'-C3'-C2'	-5.53	98.13	103.10
408	Gj	11	DA	O4'-C1'-C2'	-5.53	101.48	105.90
1	AA	663	DC	O4'-C4'-C3'	-5.52	102.29	104.50
1	AA	4901	DT	O4'-C1'-C2'	-5.52	101.48	105.90
1	AA	5406	DT	C4'-C3'-C2'	-5.52	98.13	103.10
146	CV	12	DA	C4'-C3'-C2'	-5.52	98.13	103.10
1	AA	34	DC	C6-N1-C2	-5.52	118.09	120.30
1	AA	1694	DT	C4'-C3'-C2'	-5.52	98.13	103.10
1	AA	2620	DA	O4'-C1'-C2'	-5.52	101.48	105.90
1	AA	3315	DA	C1'-O4'-C4'	-5.52	104.58	110.10
2	AB	6175	DG	N1-C6-O6	5.52	123.21	119.90
21	AU	6	DT	O4'-C1'-N1	5.52	111.87	108.00
58	A5	30	DC	O4'-C1'-C2'	-5.52	101.48	105.90
232	Dt	37	DG	O4'-C1'-C2'	-5.52	101.48	105.90
1	AA	258	DC	O4'-C4'-C3'	-5.52	102.29	104.50
1	AA	1501	DA	O4'-C1'-C2'	-5.52	101.48	105.90
2	AB	7373	DC	P-O3'-C3'	5.52	126.33	119.70
190	DD	23	DC	O4'-C1'-C2'	-5.52	101.48	105.90
217	De	2	DG	O4'-C1'-C2'	-5.52	101.48	105.90
363	F0	13	DG	O4'-C1'-C2'	-5.52	101.48	105.90
413	Go	5	DG	C1'-O4'-C4'	-5.52	104.58	110.10
1	AA	1677	DT	P-O3'-C3'	5.52	126.32	119.70
1	AA	2193	DG	O4'-C4'-C3'	-5.52	102.29	104.50
2	AB	6308	DA	O4'-C1'-C2'	-5.52	101.48	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
165	Co	31	DA	O4'-C1'-C2'	-5.52	101.48	105.90
347	Fk	9	DT	P-O3'-C3'	5.52	126.32	119.70
412	Gn	21	DT	C4'-C3'-C2'	-5.52	98.13	103.10
450	HP	2	DA	O4'-C1'-C2'	-5.52	101.48	105.90
1	AA	3773	DC	P-O3'-C3'	5.52	126.32	119.70
1	AA	5608	DG	O4'-C1'-C2'	-5.52	101.49	105.90
2	AB	4279	DC	C2-N1-C1'	5.52	124.87	118.80
2	AB	5519	DG	C1'-O4'-C4'	-5.52	104.58	110.10
14	AN	31	DG	C5-C6-O6	-5.52	125.29	128.60
18	AR	2	DT	O4'-C4'-C3'	-5.52	102.29	104.50
160	Cj	9	DA	P-O3'-C3'	5.52	126.32	119.70
1	AA	3356	DC	P-O3'-C3'	5.51	126.32	119.70
1	AA	4504	DG	O4'-C1'-C2'	-5.51	101.49	105.90
1	AA	7504	DG	O4'-C1'-C2'	-5.51	101.49	105.90
4	AD	27	DG	O4'-C1'-C2'	-5.51	101.49	105.90
15	AO	42	DT	O4'-C4'-C3'	-5.51	102.29	104.50
96	Bh	3	DC	P-O3'-C3'	5.51	126.32	119.70
232	Dt	23	DA	O4'-C1'-C2'	-5.51	101.49	105.90
1	AA	797	DG	C1'-O4'-C4'	-5.51	104.59	110.10
2	AB	4146	DT	C4'-C3'-C2'	-5.51	98.14	103.10
33	Ag	43	DT	O4'-C4'-C3'	-5.51	102.30	104.50
236	Dx	23	DC	O4'-C1'-N1	-5.51	104.14	108.00
1	AA	3560	DC	P-O5'-C5'	5.51	129.72	120.90
1	AA	5445	DG	O4'-C1'-C2'	-5.51	101.49	105.90
2	AB	802	DC	C1'-O4'-C4'	-5.51	104.59	110.10
142	CR	3	DA	N1-C6-N6	-5.51	115.29	118.60
1	AA	2426	DC	O4'-C1'-N1	5.51	111.86	108.00
1	AA	7521	DG	N3-C2-N2	5.51	123.76	119.90
2	AB	2515	DA	C4'-C3'-C2'	-5.51	98.14	103.10
2	AB	4389	DT	P-O3'-C3'	5.51	126.31	119.70
2	AB	5991	DA	O4'-C1'-C2'	-5.51	101.49	105.90
28	Ab	16	DG	C4'-C3'-C2'	-5.51	98.14	103.10
31	Ae	14	DA	N1-C6-N6	-5.51	115.29	118.60
1	AA	2053	DG	O4'-C4'-C3'	-5.51	102.30	104.50
103	Bo	23	DC	C1'-O4'-C4'	-5.51	104.59	110.10
154	Cd	16	DT	O4'-C1'-C2'	-5.51	101.49	105.90
205	DS	10	DG	C4'-C3'-C2'	-5.51	98.14	103.10
267	ES	1	DG	C1'-O4'-C4'	-5.51	104.59	110.10
1	AA	906	DT	C1'-O4'-C4'	-5.51	104.59	110.10
143	CS	4	DA	O4'-C1'-C2'	-5.51	101.50	105.90
143	CS	17	DG	O4'-C1'-C2'	-5.51	101.49	105.90
294	Et	24	DC	O4'-C1'-C2'	-5.51	101.49	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1572	DT	C1'-O4'-C4'	-5.50	104.59	110.10
2	AB	5316	DT	C4'-C3'-C2'	-5.50	98.14	103.10
69	BG	3	DC	C6-N1-C2	-5.50	118.10	120.30
1	AA	2105	DA	O4'-C1'-C2'	-5.50	101.50	105.90
1	AA	4347	DG	O4'-C1'-C2'	-5.50	101.50	105.90
1	AA	5861	DT	C1'-O4'-C4'	-5.50	104.60	110.10
1	AA	6025	DA	O4'-C1'-C2'	-5.50	101.50	105.90
2	AB	1059	DT	O4'-C4'-C3'	-5.50	102.30	104.50
2	AB	1448	DA	P-O3'-C3'	5.50	126.30	119.70
2	AB	3522	DC	P-O3'-C3'	5.50	126.30	119.70
2	AB	4081	DC	O4'-C1'-C2'	-5.50	101.50	105.90
2	AB	4962	DT	C4'-C3'-C2'	-5.50	98.15	103.10
29	Ac	45	DT	O4'-C4'-C3'	-5.50	102.30	104.50
74	BL	12	DC	C4'-C3'-C2'	-5.50	98.15	103.10
279	Ee	4	DT	O4'-C4'-C3'	-5.50	102.30	104.50
1	AA	345	DG	O4'-C1'-C2'	-5.50	101.50	105.90
1	AA	1131	DA	P-O3'-C3'	5.50	126.30	119.70
1	AA	1732	DT	C1'-O4'-C4'	-5.50	104.60	110.10
1	AA	7039	DG	C4'-C3'-C2'	-5.50	98.15	103.10
2	AB	706	DA	O4'-C4'-C3'	-5.50	102.30	104.50
2	AB	2644	DG	C1'-O4'-C4'	-5.50	104.60	110.10
176	Cz	29	DC	C4'-C3'-C2'	-5.50	98.15	103.10
185	C8	9	DG	O4'-C1'-C2'	-5.50	101.50	105.90
256	EH	5	DT	O4'-C4'-C3'	-5.50	102.30	104.50
1	AA	1023	DA	O4'-C1'-C2'	-5.50	101.50	105.90
1	AA	5134	DG	O4'-C4'-C3'	-5.50	102.30	104.50
2	AB	2357	DT	O4'-C4'-C3'	-5.50	102.30	104.50
2	AB	6743	DG	P-O3'-C3'	5.50	126.30	119.70
96	Bh	26	DA	N1-C6-N6	-5.50	115.30	118.60
147	CW	8	DT	O4'-C4'-C3'	-5.50	102.30	104.50
165	Co	20	DA	O4'-C1'-N9	-5.50	104.15	108.00
194	DH	23	DT	P-O3'-C3'	5.50	126.30	119.70
221	Di	35	DT	O4'-C1'-C2'	-5.50	101.50	105.90
1	AA	986	DC	O4'-C1'-C2'	-5.50	101.50	105.90
1	AA	3197	DG	C4-N9-C1'	5.50	133.65	126.50
2	AB	42	DG	P-O3'-C3'	5.50	126.30	119.70
2	AB	1476	DG	O4'-C1'-C2'	-5.50	101.50	105.90
2	AB	2698	DC	O4'-C1'-C2'	-5.50	101.50	105.90
2	AB	4903	DA	O4'-C1'-C2'	-5.50	101.50	105.90
2	AB	4934	DG	C1'-O4'-C4'	-5.50	104.60	110.10
2	AB	5684	DG	C1'-O4'-C4'	-5.50	104.60	110.10
98	Bj	15	DC	C6-N1-C2	-5.50	118.10	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
119	B4	37	DA	C1'-O4'-C4'	-5.50	104.60	110.10
157	Cg	1	DT	C4'-C3'-C2'	-5.50	98.15	103.10
245	D6	36	DT	O4'-C4'-C3'	-5.50	102.30	104.50
343	Fg	7	DC	C6-N1-C2	-5.50	118.10	120.30
1	AA	3353	DT	C4'-C3'-C2'	-5.50	98.15	103.10
1	AA	7457	DG	O4'-C1'-C2'	-5.50	101.50	105.90
2	AB	1829	DC	O4'-C1'-C2'	-5.50	101.50	105.90
2	AB	4669	DG	O4'-C1'-C2'	-5.50	101.50	105.90
2	AB	6311	DC	C1'-O4'-C4'	-5.50	104.61	110.10
16	AP	24	DT	O4'-C4'-C3'	-5.50	102.30	104.50
276	Eb	4	DA	O4'-C1'-C2'	-5.50	101.50	105.90
1	AA	3985	DA	O4'-C1'-C2'	-5.49	101.50	105.90
1	AA	4254	DA	O4'-C1'-C2'	-5.49	101.51	105.90
1	AA	6919	DA	O4'-C1'-C2'	-5.49	101.50	105.90
2	AB	1865	DC	P-O3'-C3'	5.49	126.29	119.70
3	AC	8	DT	O4'-C4'-C3'	-5.49	102.30	104.50
355	Fs	12	DG	P-O3'-C3'	5.49	126.29	119.70
1	AA	6306	DC	O4'-C1'-C2'	-5.49	101.51	105.90
1	AA	6464	DA	O4'-C1'-C2'	-5.49	101.51	105.90
1	AA	7226	DA	O4'-C1'-C2'	-5.49	101.51	105.90
85	BW	26	DA	O4'-C1'-C2'	-5.49	101.51	105.90
293	Es	6	DT	C4-C5-C7	-5.49	115.70	119.00
12	AL	29	DA	O4'-C1'-N9	5.49	111.84	108.00
95	Bg	26	DA	O4'-C1'-C2'	-5.49	101.51	105.90
110	Bv	42	DC	O4'-C1'-N1	-5.49	104.16	108.00
170	Ct	40	DA	O4'-C1'-C2'	-5.49	101.51	105.90
352	Fp	11	DT	C4'-C3'-C2'	-5.49	98.16	103.10
436	HB	2	DG	P-O3'-C3'	5.49	126.29	119.70
1	AA	3917	DG	O4'-C1'-C2'	-5.49	101.51	105.90
1	AA	6903	DA	P-O3'-C3'	5.49	126.29	119.70
2	AB	509	DC	C6-N1-C2	-5.49	118.11	120.30
2	AB	3606	DA	C1'-O4'-C4'	-5.49	104.61	110.10
83	BU	22	DG	O4'-C1'-C2'	-5.49	101.51	105.90
197	DK	30	DA	C1'-O4'-C4'	-5.49	104.61	110.10
320	FJ	23	DG	P-O3'-C3'	5.49	126.29	119.70
360	Fx	25	DT	O4'-C4'-C3'	-5.49	102.31	104.50
1	AA	227	DC	O4'-C1'-C2'	-5.49	101.51	105.90
1	AA	765	DA	P-O3'-C3'	5.49	126.28	119.70
2	AB	1355	DG	C1'-O4'-C4'	-5.49	104.61	110.10
110	Bv	41	DT	P-O3'-C3'	5.49	126.28	119.70
329	FS	12	DG	C1'-O4'-C4'	-5.49	104.61	110.10
1	AA	898	DA	N1-C6-N6	5.49	121.89	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	3971	DC	P-O5'-C5'	5.49	129.68	120.90
1	AA	5036	DT	C4'-C3'-C2'	-5.49	98.16	103.10
7	AG	41	DT	P-O3'-C3'	5.49	126.28	119.70
54	A1	8	DT	O4'-C4'-C3'	-5.49	102.31	104.50
59	A6	27	DC	O4'-C1'-C2'	-5.49	101.51	105.90
256	EH	11	DC	O4'-C1'-C2'	-5.49	101.51	105.90
264	EP	34	DG	O4'-C4'-C3'	-5.49	102.31	104.50
349	Fm	18	DA	O4'-C1'-C2'	-5.49	101.51	105.90
1	AA	1111	DG	O4'-C1'-C2'	-5.48	101.51	105.90
91	Bc	23	DG	O4'-C1'-C2'	-5.48	101.51	105.90
115	B0	15	DT	C4'-C3'-C2'	-5.48	98.17	103.10
121	B6	1	DT	O4'-C4'-C3'	-5.48	102.31	104.50
188	DB	1	DG	O4'-C4'-C3'	-5.48	102.31	104.50
243	D4	11	DA	O4'-C1'-C2'	-5.48	101.51	105.90
408	Gj	23	DA	O4'-C1'-C2'	-5.48	101.51	105.90
435	HA	1	DT	O4'-C1'-C2'	-5.48	101.51	105.90
438	HD	21	DG	C1'-O4'-C4'	-5.48	104.62	110.10
1	AA	773	DC	C4'-C3'-C2'	-5.48	98.17	103.10
1	AA	1402	DG	P-O3'-C3'	5.48	126.28	119.70
1	AA	1911	DA	C4'-C3'-C2'	-5.48	98.17	103.10
1	AA	6727	DA	N1-C6-N6	-5.48	115.31	118.60
2	AB	1035	DA	C1'-O4'-C4'	-5.48	104.62	110.10
2	AB	2190	DA	O4'-C1'-C2'	-5.48	101.51	105.90
2	AB	2792	DG	O4'-C1'-C2'	-5.48	101.51	105.90
2	AB	5173	DA	P-O3'-C3'	5.48	126.28	119.70
2	AB	7408	DG	O4'-C1'-N9	5.48	111.84	108.00
46	At	5	DT	O4'-C4'-C3'	-5.48	102.31	104.50
155	Ce	34	DC	O4'-C1'-C2'	-5.48	101.51	105.90
223	Dk	10	DA	O4'-C1'-C2'	-5.48	101.51	105.90
260	EL	14	DG	O4'-C1'-C2'	-5.48	101.51	105.90
424	Gz	5	DA	C1'-O4'-C4'	-5.48	104.62	110.10
1	AA	3416	DG	C4'-C3'-C2'	-5.48	98.17	103.10
1	AA	4494	DG	P-O3'-C3'	5.48	126.28	119.70
1	AA	4564	DC	C1'-O4'-C4'	-5.48	104.62	110.10
1	AA	4843	DC	C4'-C3'-C2'	-5.48	98.17	103.10
2	AB	7210	DG	C1'-O4'-C4'	-5.48	104.62	110.10
115	B0	6	DT	O4'-C4'-C3'	-5.48	102.31	104.50
206	DT	9	DG	C8-N9-C1'	-5.48	119.88	127.00
257	EI	23	DG	O4'-C1'-N9	5.48	111.84	108.00
263	EO	31	DG	C1'-O4'-C4'	-5.48	104.62	110.10
341	Fe	27	DT	O4'-C1'-C2'	-5.48	101.52	105.90
404	Gf	8	DT	O4'-C4'-C3'	-5.48	102.31	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	2000	DA	O4'-C1'-C2'	-5.48	101.52	105.90
1	AA	2642	DT	C1'-O4'-C4'	-5.48	104.62	110.10
1	AA	4628	DG	P-O3'-C3'	5.48	126.28	119.70
1	AA	6500	DA	N1-C6-N6	-5.48	115.31	118.60
2	AB	506	DC	C4'-C3'-C2'	-5.48	98.17	103.10
2	AB	3109	DG	O4'-C1'-C2'	-5.48	101.52	105.90
169	Cs	11	DG	O4'-C1'-C2'	-5.48	101.52	105.90
322	FL	9	DA	O4'-C1'-C2'	-5.48	101.52	105.90
378	GF	17	DA	C1'-O4'-C4'	-5.48	104.62	110.10
1	AA	586	DA	N1-C6-N6	-5.48	115.31	118.60
1	AA	1669	DA	O4'-C1'-C2'	-5.48	101.52	105.90
2	AB	5024	DT	C4'-C3'-C2'	-5.48	98.17	103.10
38	Al	38	DG	O4'-C1'-C2'	-5.48	101.52	105.90
143	CS	5	DG	C4'-C3'-C2'	-5.48	98.17	103.10
2	AB	2650	DT	P-O3'-C3'	-5.48	113.13	119.70
2	AB	6399	DG	C5-C6-O6	-5.48	125.31	128.60
110	Bv	41	DT	O4'-C1'-C2'	-5.48	101.52	105.90
143	CS	26	DA	O4'-C1'-C2'	-5.48	101.52	105.90
165	Co	22	DA	N1-C6-N6	5.48	121.89	118.60
252	ED	1	DG	C1'-O4'-C4'	-5.48	104.62	110.10
304	E3	9	DG	O4'-C1'-C2'	-5.48	101.52	105.90
338	Fb	24	DT	C4'-C3'-C2'	-5.48	98.17	103.10
1	AA	115	DC	O4'-C4'-C3'	-5.47	102.31	104.50
1	AA	427	DG	C4'-C3'-C2'	-5.47	98.17	103.10
1	AA	1085	DT	C4'-C3'-C2'	-5.47	98.17	103.10
2	AB	1450	DA	C4'-C3'-C2'	-5.47	98.17	103.10
2	AB	3290	DT	C4'-C3'-C2'	-5.47	98.17	103.10
2	AB	4606	DT	O4'-C1'-C2'	-5.47	101.52	105.90
26	AZ	39	DA	N1-C6-N6	-5.47	115.31	118.60
94	Bf	21	DC	C2-N1-C1'	5.47	124.82	118.80
127	CC	4	DT	C4'-C3'-C2'	-5.47	98.17	103.10
136	CL	9	DA	O4'-C1'-C2'	-5.47	101.52	105.90
325	FO	23	DG	O4'-C1'-C2'	-5.47	101.52	105.90
420	Gv	26	DA	P-O3'-C3'	5.47	126.27	119.70
1	AA	6554	DG	C4'-C3'-C2'	-5.47	98.17	103.10
68	BF	18	DA	N1-C6-N6	-5.47	115.32	118.60
87	BY	9	DA	O4'-C1'-C2'	-5.47	101.52	105.90
90	Bb	10	DC	O4'-C1'-N1	5.47	111.83	108.00
126	CB	34	DT	O4'-C4'-C3'	-5.47	102.31	104.50
130	CF	23	DC	O4'-C1'-C2'	-5.47	101.52	105.90
230	Dr	31	DC	O4'-C1'-C2'	-5.47	101.52	105.90
297	Ew	29	DG	O4'-C4'-C3'	-5.47	102.31	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
318	FH	31	DT	O4'-C4'-C3'	-5.47	102.31	104.50
385	GM	23	DA	O4'-C1'-C2'	-5.47	101.52	105.90
2	AB	3262	DC	C4'-C3'-C2'	-5.47	98.18	103.10
2	AB	5005	DA	O4'-C1'-C2'	-5.47	101.52	105.90
188	DB	38	DC	C4'-C3'-C2'	-5.47	98.18	103.10
1	AA	622	DC	C2-N1-C1'	5.47	124.82	118.80
1	AA	3846	DT	P-O5'-C5'	5.47	129.65	120.90
1	AA	6632	DC	P-O3'-C3'	5.47	126.26	119.70
34	Ah	26	DG	C1'-O4'-C4'	-5.47	104.63	110.10
126	CB	23	DT	O4'-C1'-C2'	-5.47	101.52	105.90
128	CD	42	DG	O4'-C1'-C2'	-5.47	101.53	105.90
141	CQ	29	DA	O4'-C4'-C3'	-5.47	102.31	104.50
150	CZ	22	DC	P-O5'-C5'	5.47	129.65	120.90
1	AA	2632	DG	O4'-C1'-C2'	-5.47	101.53	105.90
2	AB	3658	DG	O4'-C1'-C2'	-5.47	101.53	105.90
2	AB	4104	DG	O4'-C1'-C2'	-5.47	101.53	105.90
2	AB	6540	DC	O4'-C1'-N1	5.47	111.83	108.00
103	Bo	35	DA	C1'-O4'-C4'	-5.47	104.63	110.10
1	AA	1869	DC	P-O3'-C3'	5.47	126.26	119.70
1	AA	1930	DA	O4'-C1'-C2'	-5.47	101.53	105.90
1	AA	3285	DC	N3-C4-N4	5.47	121.83	118.00
1	AA	6587	DA	C1'-O4'-C4'	-5.47	104.63	110.10
2	AB	3202	DA	N1-C6-N6	-5.47	115.32	118.60
2	AB	5625	DG	O4'-C1'-C2'	-5.47	101.53	105.90
2	AB	6424	DC	C2-N1-C1'	5.47	124.81	118.80
23	AW	27	DA	C5-C6-N6	5.47	128.07	123.70
40	An	48	DT	O4'-C4'-C3'	-5.47	102.31	104.50
76	BN	40	DA	O4'-C1'-N9	-5.47	104.17	108.00
210	DX	28	DA	C4'-C3'-C2'	-5.47	98.18	103.10
1	AA	2219	DC	P-O3'-C3'	5.46	126.26	119.70
1	AA	2418	DA	P-O3'-C3'	5.46	126.26	119.70
1	AA	4692	DG	O4'-C1'-C2'	-5.46	101.53	105.90
1	AA	4881	DA	C1'-O4'-C4'	-5.46	104.64	110.10
2	AB	2776	DG	O4'-C1'-N9	5.46	111.83	108.00
2	AB	7381	DG	O4'-C4'-C3'	-5.46	102.31	104.50
24	AX	29	DT	C4-C5-C7	-5.46	115.72	119.00
48	Av	26	DC	O4'-C1'-N1	5.46	111.83	108.00
53	A0	24	DG	C4'-C3'-C2'	-5.46	98.18	103.10
93	Be	2	DA	C1'-O4'-C4'	-5.46	104.64	110.10
132	CH	1	DT	P-O3'-C3'	5.46	126.26	119.70
188	DB	11	DG	O4'-C1'-C2'	-5.46	101.53	105.90
357	Fu	3	DT	C4'-C3'-C2'	-5.46	98.18	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
403	Ge	15	DT	C4'-C3'-C2'	-5.46	98.18	103.10
1	AA	906	DT	O4'-C4'-C3'	-5.46	102.31	104.50
1	AA	1015	DA	C4'-C3'-C2'	-5.46	98.18	103.10
116	B1	38	DA	C1'-O4'-C4'	-5.46	104.64	110.10
150	CZ	17	DA	O4'-C1'-C2'	-5.46	101.53	105.90
399	Ga	3	DA	O4'-C1'-C2'	-5.46	101.53	105.90
426	G1	3	DG	O4'-C1'-C2'	-5.46	101.53	105.90
1	AA	3328	DT	O4'-C1'-C2'	-5.46	101.53	105.90
1	AA	4257	DT	C4'-C3'-C2'	-5.46	98.19	103.10
1	AA	6258	DG	P-O3'-C3'	5.46	126.25	119.70
2	AB	1097	DA	P-O3'-C3'	5.46	126.25	119.70
2	AB	6169	DC	P-O3'-C3'	5.46	126.25	119.70
21	AU	4	DT	O4'-C4'-C3'	-5.46	102.31	104.50
80	BR	47	DG	O4'-C1'-C2'	-5.46	101.53	105.90
246	D7	31	DG	O4'-C4'-C3'	-5.46	102.31	104.50
1	AA	2763	DG	O4'-C1'-C2'	-5.46	101.53	105.90
2	AB	2591	DT	O4'-C1'-C2'	-5.46	101.53	105.90
92	Bd	43	DT	O4'-C4'-C3'	-5.46	102.32	104.50
144	CT	16	DG	O4'-C1'-C2'	-5.46	101.53	105.90
262	EN	16	DT	C4'-C3'-C2'	-5.46	98.19	103.10
454	HT	13	DT	C4'-C3'-C2'	-5.46	98.19	103.10
2	AB	1211	DG	P-O3'-C3'	5.46	126.25	119.70
2	AB	6431	DA	O4'-C1'-C2'	-5.46	101.53	105.90
32	Af	42	DT	O4'-C1'-C2'	-5.46	101.53	105.90
79	BQ	34	DG	P-O3'-C3'	5.46	126.25	119.70
114	Bz	12	DG	O4'-C1'-C2'	-5.46	101.53	105.90
199	DM	37	DC	C4'-C3'-C2'	-5.46	98.19	103.10
206	DT	9	DG	C5-C6-O6	-5.46	125.32	128.60
256	EH	23	DT	P-O3'-C3'	5.46	126.25	119.70
380	GH	1	DA	O4'-C1'-C2'	-5.46	101.53	105.90
1	AA	1371	DG	O4'-C4'-C3'	-5.46	102.32	104.50
1	AA	4523	DA	P-O3'-C3'	5.46	126.25	119.70
1	AA	4986	DA	O4'-C1'-C2'	-5.46	101.53	105.90
2	AB	1696	DT	C4'-C3'-C2'	-5.46	98.19	103.10
2	AB	1929	DG	C1'-O4'-C4'	-5.46	104.64	110.10
2	AB	3708	DT	O4'-C1'-N1	5.46	111.82	108.00
2	AB	6782	DA	O4'-C1'-C2'	-5.46	101.53	105.90
67	BE	19	DA	C4'-C3'-C2'	-5.46	98.19	103.10
171	Cu	22	DA	O4'-C1'-C2'	-5.46	101.53	105.90
322	FL	30	DT	O4'-C1'-C2'	-5.46	101.53	105.90
1	AA	3962	DC	P-O5'-C5'	5.46	129.63	120.90
210	DX	33	DT	C1'-O4'-C4'	-5.46	104.64	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
224	Dl	8	DC	O4'-C1'-N1	5.46	111.82	108.00
331	FU	32	DA	O4'-C1'-C2'	-5.46	101.54	105.90
380	GH	3	DT	O4'-C1'-C2'	-5.46	101.54	105.90
1	AA	1327	DA	C1'-O4'-C4'	-5.45	104.65	110.10
1	AA	2346	DA	O4'-C1'-C2'	-5.45	101.54	105.90
1	AA	4783	DA	C1'-O4'-C4'	-5.45	104.65	110.10
1	AA	6037	DA	C4'-C3'-C2'	-5.45	98.19	103.10
95	Bg	32	DG	O4'-C1'-C2'	-5.45	101.54	105.90
227	Do	33	DA	P-O3'-C3'	5.45	126.24	119.70
228	Dp	2	DA	O4'-C1'-C2'	-5.45	101.54	105.90
383	GK	18	DG	C4-N9-C1'	5.45	133.59	126.50
430	G5	23	DA	O4'-C1'-C2'	-5.45	101.54	105.90
1	AA	1134	DC	P-O3'-C3'	5.45	126.24	119.70
36	Aj	15	DG	C5-C6-O6	-5.45	125.33	128.60
70	BH	23	DA	O4'-C1'-C2'	-5.45	101.54	105.90
124	B9	19	DA	O4'-C1'-C2'	-5.45	101.54	105.90
155	Ce	1	DA	C4'-C3'-C2'	-5.45	98.19	103.10
1	AA	1054	DA	P-O3'-C3'	5.45	126.24	119.70
1	AA	2054	DT	C4'-C3'-C2'	-5.45	98.19	103.10
1	AA	4997	DA	O4'-C1'-N9	5.45	111.81	108.00
2	AB	2827	DC	O4'-C1'-N1	5.45	111.81	108.00
2	AB	5379	DC	C1'-O4'-C4'	-5.45	104.65	110.10
121	B6	14	DG	O4'-C1'-C2'	-5.45	101.54	105.90
151	Ca	28	DT	C1'-O4'-C4'	-5.45	104.65	110.10
301	E0	13	DC	O4'-C1'-N1	-5.45	104.19	108.00
1	AA	6145	DC	C2-N1-C1'	5.45	124.79	118.80
1	AA	7187	DC	C4'-C3'-C2'	-5.45	98.20	103.10
2	AB	7480	DG	O4'-C4'-C3'	-5.45	102.32	104.50
165	Co	16	DG	O4'-C1'-C2'	-5.45	101.54	105.90
211	DY	37	DC	P-O5'-C5'	5.45	129.62	120.90
216	Dd	17	DG	O4'-C4'-C3'	-5.45	102.32	104.50
2	AB	6120	DT	O4'-C4'-C3'	-5.45	102.32	104.50
16	AP	32	DA	O4'-C1'-C2'	-5.45	101.54	105.90
56	A3	5	DT	O4'-C4'-C3'	-5.45	102.32	104.50
140	CP	30	DC	O4'-C1'-C2'	-5.45	101.54	105.90
1	AA	1560	DA	O4'-C1'-C2'	-5.45	101.54	105.90
2	AB	4013	DT	C4'-C3'-C2'	-5.45	98.20	103.10
2	AB	4164	DT	P-O3'-C3'	5.45	126.23	119.70
56	A3	20	DG	C4'-C3'-C2'	-5.45	98.20	103.10
66	BD	8	DT	O4'-C4'-C3'	-5.45	102.32	104.50
89	Ba	45	DG	C5-C6-O6	-5.45	125.33	128.60
138	CN	16	DA	P-O3'-C3'	5.45	126.23	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
266	ER	17	DT	C4'-C3'-C2'	-5.45	98.20	103.10
281	Eg	5	DG	O4'-C1'-C2'	-5.45	101.54	105.90
318	FH	12	DT	C4'-C3'-C2'	-5.45	98.20	103.10
1	AA	1404	DC	C4'-C3'-C2'	-5.44	98.20	103.10
2	AB	65	DA	O4'-C1'-N9	5.44	111.81	108.00
423	Gy	10	DG	C4'-C3'-C2'	-5.44	98.20	103.10
1	AA	3732	DG	O4'-C4'-C3'	-5.44	102.32	104.50
2	AB	860	DG	O4'-C4'-C3'	-5.44	102.32	104.50
2	AB	1033	DG	O4'-C1'-C2'	-5.44	101.55	105.90
2	AB	6600	DC	O4'-C1'-N1	5.44	111.81	108.00
36	Aj	22	DG	C4'-C3'-C2'	-5.44	98.20	103.10
142	CR	30	DA	O4'-C1'-C2'	-5.44	101.55	105.90
187	DA	16	DA	C1'-O4'-C4'	-5.44	104.66	110.10
307	E6	13	DC	O4'-C4'-C3'	-5.44	102.32	104.50
414	Gp	17	DC	P-O5'-C5'	5.44	129.61	120.90
446	HL	1	DA	O4'-C1'-C2'	-5.44	101.55	105.90
1	AA	1995	DG	O4'-C1'-N9	5.44	111.81	108.00
1	AA	3176	DG	O4'-C1'-N9	5.44	111.81	108.00
1	AA	4978	DC	O4'-C1'-C2'	-5.44	101.55	105.90
2	AB	2644	DG	C5-C6-O6	-5.44	125.34	128.60
2	AB	3074	DT	C1'-O4'-C4'	-5.44	104.66	110.10
2	AB	6170	DG	C4'-C3'-C2'	-5.44	98.20	103.10
359	Fw	16	DA	C1'-O4'-C4'	-5.44	104.66	110.10
1	AA	3316	DT	P-O3'-C3'	5.44	126.23	119.70
1	AA	4863	DT	P-O3'-C3'	5.44	126.23	119.70
407	Gi	1	DA	C1'-O4'-C4'	-5.44	104.66	110.10
1	AA	4495	DC	P-O3'-C3'	5.44	126.22	119.70
1	AA	4997	DA	C1'-O4'-C4'	-5.44	104.66	110.10
296	Ev	24	DC	C6-N1-C2	-5.44	118.12	120.30
355	Fs	27	DG	C4'-C3'-C2'	-5.44	98.21	103.10
384	GL	27	DT	O4'-C4'-C3'	-5.44	102.33	104.50
54	A1	3	DT	C4'-C3'-C2'	-5.44	98.21	103.10
66	BD	35	DG	O4'-C1'-C2'	-5.44	101.55	105.90
92	Bd	6	DT	O4'-C4'-C3'	-5.44	102.33	104.50
1	AA	2961	DA	O4'-C4'-C3'	-5.43	102.33	104.50
1	AA	3224	DG	O4'-C1'-N9	5.43	111.80	108.00
1	AA	3998	DA	N1-C6-N6	-5.43	115.34	118.60
1	AA	4360	DG	O4'-C1'-C2'	-5.43	101.55	105.90
2	AB	3320	DA	O4'-C1'-C2'	-5.43	101.55	105.90
2	AB	4262	DT	P-O3'-C3'	-5.43	113.18	119.70
2	AB	5529	DC	C1'-O4'-C4'	-5.43	104.67	110.10
138	CN	35	DT	O4'-C4'-C3'	-5.43	102.33	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
158	Ch	29	DG	P-O3'-C3'	5.43	126.22	119.70
209	DW	15	DG	O4'-C1'-C2'	-5.43	101.55	105.90
329	FS	5	DC	O4'-C1'-N1	5.43	111.80	108.00
427	G2	15	DA	O4'-C4'-C3'	-5.43	102.33	104.50
1	AA	4865	DT	C1'-O4'-C4'	-5.43	104.67	110.10
2	AB	261	DG	C5-C6-O6	-5.43	125.34	128.60
2	AB	2451	DC	C4'-C3'-C2'	-5.43	98.21	103.10
2	AB	4952	DC	C4'-C3'-C2'	-5.43	98.21	103.10
46	At	18	DT	O4'-C1'-C2'	-5.43	101.55	105.90
141	CQ	20	DG	N1-C6-O6	5.43	123.16	119.90
205	DS	19	DA	O4'-C1'-C2'	-5.43	101.56	105.90
1	AA	294	DC	C2-N1-C1'	5.43	124.77	118.80
1	AA	1951	DA	C4'-C3'-C2'	-5.43	98.21	103.10
1	AA	2598	DC	P-O5'-C5'	5.43	129.59	120.90
2	AB	232	DT	P-O3'-C3'	5.43	126.22	119.70
40	An	7	DT	O4'-C4'-C3'	-5.43	102.33	104.50
101	Bm	1	DG	P-O3'-C3'	5.43	126.22	119.70
149	CY	25	DA	O4'-C1'-C2'	-5.43	101.56	105.90
212	DZ	19	DG	C4'-C3'-C2'	-5.43	98.21	103.10
221	Di	2	DG	O4'-C1'-C2'	-5.43	101.56	105.90
299	Ey	6	DA	C4'-C3'-C2'	-5.43	98.21	103.10
302	E1	1	DC	O4'-C4'-C3'	-5.43	102.33	104.50
443	HI	2	DG	C1'-O4'-C4'	-5.43	104.67	110.10
1	AA	5267	DT	C4'-C3'-C2'	-5.43	98.21	103.10
2	AB	2435	DA	C1'-O4'-C4'	-5.43	104.67	110.10
2	AB	5204	DC	O4'-C4'-C3'	-5.43	102.33	104.50
2	AB	7547	DA	O4'-C1'-C2'	-5.43	101.56	105.90
120	B5	35	DA	N1-C6-N6	-5.43	115.34	118.60
147	CW	24	DC	P-O3'-C3'	5.43	126.22	119.70
222	Dj	34	DA	O4'-C1'-C2'	-5.43	101.56	105.90
258	EJ	23	DA	C4'-C3'-C2'	-5.43	98.21	103.10
449	HO	3	DG	O4'-C1'-C2'	-5.43	101.56	105.90
1	AA	4422	DC	C1'-O4'-C4'	-5.43	104.67	110.10
2	AB	867	DG	C5-C6-O6	-5.43	125.34	128.60
2	AB	6101	DT	C4'-C3'-C2'	-5.43	98.22	103.10
65	BC	38	DT	P-O3'-C3'	5.43	126.21	119.70
86	BX	15	DA	O4'-C1'-N9	5.43	111.80	108.00
95	Bg	37	DA	P-O3'-C3'	5.43	126.21	119.70
236	Dx	30	DA	O4'-C1'-C2'	-5.43	101.56	105.90
241	D2	21	DA	O4'-C4'-C3'	-5.43	102.33	104.50
1	AA	6403	DC	C4'-C3'-C2'	-5.43	98.22	103.10
2	AB	1112	DG	O4'-C1'-C2'	-5.43	101.56	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1393	DT	O4'-C4'-C3'	-5.43	102.33	104.50
2	AB	2066	DC	C4'-C3'-C2'	-5.43	98.22	103.10
37	Ak	27	DC	P-O3'-C3'	5.43	126.21	119.70
112	Bx	20	DG	C1'-O4'-C4'	-5.43	104.67	110.10
159	Ci	41	DA	O4'-C1'-C2'	-5.43	101.56	105.90
339	Fc	6	DC	C1'-O4'-C4'	-5.43	104.67	110.10
1	AA	3763	DT	C4'-C3'-C2'	-5.42	98.22	103.10
1	AA	6729	DG	C4'-C3'-C2'	-5.42	98.22	103.10
2	AB	4519	DG	O4'-C1'-C2'	-5.42	101.56	105.90
36	Aj	28	DG	O4'-C1'-C2'	-5.42	101.56	105.90
109	Bu	7	DG	O4'-C1'-C2'	-5.42	101.56	105.90
290	Ep	5	DA	O4'-C4'-C3'	-5.42	102.33	104.50
304	E3	26	DC	P-O3'-C3'	5.42	126.21	119.70
311	FA	5	DC	O4'-C1'-C2'	-5.42	101.56	105.90
2	AB	327	DT	C4'-C3'-C2'	-5.42	98.22	103.10
2	AB	1380	DT	C4'-C3'-C2'	-5.42	98.22	103.10
2	AB	2143	DG	C4'-C3'-C2'	-5.42	98.22	103.10
2	AB	3015	DC	P-O5'-C5'	5.42	129.58	120.90
2	AB	6412	DC	P-O3'-C3'	5.42	126.21	119.70
449	HO	15	DT	O4'-C4'-C3'	-5.42	102.33	104.50
1	AA	2775	DG	O4'-C1'-C2'	-5.42	101.56	105.90
1	AA	4507	DG	P-O3'-C3'	5.42	126.21	119.70
1	AA	6687	DT	C4'-C3'-C2'	-5.42	98.22	103.10
2	AB	2722	DG	P-O3'-C3'	5.42	126.21	119.70
2	AB	4357	DG	O4'-C1'-C2'	-5.42	101.56	105.90
41	Ao	17	DC	O4'-C1'-N1	5.42	111.80	108.00
72	BJ	14	DG	O4'-C1'-C2'	-5.42	101.56	105.90
145	CU	40	DC	C4'-C3'-C2'	-5.42	98.22	103.10
184	C7	21	DG	C1'-O4'-C4'	-5.42	104.68	110.10
202	DP	37	DC	O4'-C1'-C2'	-5.42	101.56	105.90
232	Dt	31	DA	C4'-C3'-C2'	-5.42	98.22	103.10
250	EB	6	DC	P-O3'-C3'	5.42	126.21	119.70
327	FQ	16	DA	C1'-O4'-C4'	-5.42	104.68	110.10
359	Fw	13	DT	P-O3'-C3'	5.42	126.20	119.70
455	HU	17	DT	C4'-C3'-C2'	-5.42	98.22	103.10
1	AA	2123	DC	O4'-C4'-C3'	-5.42	102.33	104.50
1	AA	2748	DA	P-O3'-C3'	5.42	126.20	119.70
243	D4	31	DG	O4'-C4'-C3'	-5.42	102.33	104.50
271	EW	12	DT	C4'-C3'-C2'	-5.42	98.22	103.10
1	AA	241	DA	P-O3'-C3'	5.42	126.20	119.70
1	AA	3345	DG	O4'-C1'-C2'	-5.42	101.56	105.90
1	AA	6323	DT	O4'-C1'-C2'	-5.42	101.57	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1743	DG	O4'-C1'-C2'	-5.42	101.57	105.90
2	AB	3786	DC	C4'-C3'-C2'	-5.42	98.22	103.10
2	AB	4237	DG	O4'-C1'-N9	5.42	111.79	108.00
2	AB	7242	DT	C4'-C3'-C2'	-5.42	98.22	103.10
8	AH	19	DA	O4'-C1'-C2'	-5.42	101.56	105.90
112	Bx	27	DT	C4'-C3'-C2'	-5.42	98.22	103.10
279	Ee	34	DC	C2-N1-C1'	5.42	124.76	118.80
285	Ek	34	DT	C1'-O4'-C4'	-5.42	104.68	110.10
1	AA	4951	DC	P-O3'-C3'	5.42	126.20	119.70
2	AB	144	DG	O4'-C1'-N9	5.42	111.79	108.00
2	AB	620	DG	O4'-C1'-C2'	-5.42	101.57	105.90
2	AB	3921	DG	O4'-C1'-C2'	-5.42	101.57	105.90
2	AB	5348	DG	O4'-C1'-N9	5.42	111.79	108.00
111	Bw	6	DT	O4'-C4'-C3'	-5.42	102.33	104.50
183	C6	16	DA	P-O3'-C3'	5.42	126.20	119.70
188	DB	17	DA	O4'-C4'-C3'	-5.42	102.33	104.50
2	AB	127	DT	C1'-O4'-C4'	-5.42	104.69	110.10
2	AB	2843	DG	O4'-C1'-C2'	-5.42	101.57	105.90
76	BN	38	DA	O4'-C1'-C2'	-5.42	101.57	105.90
94	Bf	37	DA	O4'-C1'-N9	5.42	111.79	108.00
405	Gg	3	DA	C4'-C3'-C2'	-5.42	98.23	103.10
1	AA	986	DC	O4'-C1'-N1	5.41	111.79	108.00
2	AB	234	DG	O4'-C1'-C2'	-5.41	101.57	105.90
74	BL	15	DA	O4'-C1'-C2'	-5.41	101.57	105.90
439	HE	9	DT	C1'-O4'-C4'	-5.41	104.69	110.10
1	AA	2820	DA	O4'-C1'-C2'	-5.41	101.57	105.90
258	EJ	21	DT	O4'-C1'-C2'	-5.41	101.57	105.90
314	FD	10	DA	O4'-C1'-C2'	-5.41	101.57	105.90
1	AA	268	DC	P-O3'-C3'	5.41	126.19	119.70
1	AA	4336	DT	P-O3'-C3'	5.41	126.19	119.70
1	AA	6660	DA	C4'-C3'-C2'	-5.41	98.23	103.10
2	AB	3414	DC	P-O5'-C5'	5.41	129.56	120.90
2	AB	7440	DT	C4'-C3'-C2'	-5.41	98.23	103.10
121	B6	10	DG	O4'-C1'-N9	5.41	111.79	108.00
124	B9	6	DT	C4'-C3'-C2'	-5.41	98.23	103.10
146	CV	24	DA	N1-C6-N6	-5.41	115.35	118.60
159	Ci	6	DT	P-O3'-C3'	5.41	126.19	119.70
193	DG	25	DA	O4'-C1'-C2'	-5.41	101.57	105.90
250	EB	13	DG	O4'-C1'-C2'	-5.41	101.57	105.90
306	E5	10	DT	C4'-C3'-C2'	-5.41	98.23	103.10
1	AA	352	DC	P-O3'-C3'	5.41	126.19	119.70
1	AA	1646	DC	O4'-C1'-N1	5.41	111.79	108.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	5169	DG	O4'-C1'-C2'	-5.41	101.57	105.90
1	AA	7057	DT	O4'-C4'-C3'	-5.41	102.34	104.50
2	AB	359	DA	O4'-C1'-C2'	-5.41	101.57	105.90
2	AB	2605	DT	O4'-C1'-C2'	-5.41	101.57	105.90
2	AB	2940	DT	O4'-C4'-C3'	-5.41	102.34	104.50
2	AB	2942	DG	O4'-C1'-N9	5.41	111.79	108.00
2	AB	4611	DG	C1'-O4'-C4'	-5.41	104.69	110.10
45	As	20	DC	C4'-C3'-C2'	-5.41	98.23	103.10
124	B9	9	DA	O4'-C1'-C2'	-5.41	101.57	105.90
233	Du	7	DT	O4'-C4'-C3'	-5.41	102.34	104.50
258	EJ	2	DT	O4'-C4'-C3'	-5.41	102.34	104.50
339	Fc	18	DG	O4'-C1'-C2'	-5.41	101.57	105.90
410	Gl	5	DT	C4'-C3'-C2'	-5.41	98.23	103.10
1	AA	646	DG	O4'-C1'-C2'	-5.41	101.57	105.90
1	AA	5003	DG	C4'-C3'-C2'	-5.41	98.23	103.10
2	AB	1739	DG	O4'-C1'-C2'	-5.41	101.58	105.90
2	AB	2154	DG	O4'-C4'-C3'	-5.41	102.34	104.50
2	AB	6456	DT	C4'-C3'-C2'	-5.41	98.23	103.10
44	Ar	19	DT	C1'-O4'-C4'	-5.41	104.69	110.10
189	DC	29	DG	N1-C6-O6	5.41	123.14	119.90
369	F6	2	DC	C4'-C3'-C2'	-5.41	98.23	103.10
391	GS	21	DA	C1'-O4'-C4'	-5.41	104.69	110.10
1	AA	776	DA	O4'-C1'-N9	5.41	111.78	108.00
1	AA	3419	DA	P-O5'-C5'	5.41	129.55	120.90
1	AA	4215	DG	O4'-C1'-N9	5.41	111.78	108.00
1	AA	6455	DA	O4'-C4'-C3'	-5.41	102.34	104.50
2	AB	4357	DG	C1'-O4'-C4'	-5.41	104.69	110.10
2	AB	4573	DC	O4'-C1'-N1	5.41	111.78	108.00
2	AB	5103	DG	O4'-C1'-N9	5.41	111.78	108.00
26	AZ	28	DG	O4'-C1'-C2'	-5.41	101.58	105.90
106	Br	34	DC	C4'-C3'-C2'	-5.41	98.23	103.10
183	C6	18	DA	N1-C6-N6	-5.41	115.36	118.60
229	Dq	30	DG	P-O3'-C3'	5.41	126.19	119.70
2	AB	469	DG	P-O3'-C3'	5.40	126.18	119.70
116	B1	9	DA	O4'-C1'-C2'	-5.40	101.58	105.90
193	DG	29	DC	C1'-O4'-C4'	-5.40	104.70	110.10
252	ED	27	DC	O4'-C4'-C3'	-5.40	102.34	104.50
1	AA	4895	DA	C1'-O4'-C4'	-5.40	104.70	110.10
2	AB	3760	DC	O4'-C1'-N1	5.40	111.78	108.00
2	AB	6205	DG	O4'-C4'-C3'	-5.40	102.34	104.50
2	AB	7215	DT	O4'-C4'-C3'	-5.40	102.34	104.50
26	AZ	47	DT	O4'-C4'-C3'	-5.40	102.34	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
59	A6	42	DT	O4'-C4'-C3'	-5.40	102.34	104.50
100	Bl	12	DG	C5-C6-O6	-5.40	125.36	128.60
121	B6	11	DG	C1'-O4'-C4'	-5.40	104.70	110.10
324	FN	30	DT	C1'-O4'-C4'	-5.40	104.70	110.10
1	AA	1502	DC	C1'-O4'-C4'	-5.40	104.70	110.10
1	AA	5615	DA	C1'-O4'-C4'	-5.40	104.70	110.10
1	AA	7447	DG	O4'-C4'-C3'	-5.40	102.34	104.50
2	AB	333	DC	O4'-C4'-C3'	-5.40	102.34	104.50
2	AB	2349	DG	O4'-C1'-N9	5.40	111.78	108.00
7	AG	40	DT	C1'-O4'-C4'	-5.40	104.70	110.10
141	CQ	12	DT	C4'-C3'-C2'	-5.40	98.24	103.10
235	Dw	40	DA	O4'-C1'-C2'	-5.40	101.58	105.90
1	AA	1727	DC	C4'-C3'-C2'	-5.40	98.24	103.10
1	AA	4919	DG	O4'-C1'-C2'	-5.40	101.58	105.90
2	AB	5569	DG	O4'-C1'-C2'	-5.40	101.58	105.90
2	AB	6540	DC	C6-N1-C2	-5.40	118.14	120.30
5	AE	11	DA	O4'-C1'-C2'	-5.40	101.58	105.90
172	Cv	3	DA	O4'-C1'-C2'	-5.40	101.58	105.90
175	Cy	9	DT	O4'-C1'-C2'	-5.40	101.58	105.90
382	GJ	13	DA	O4'-C1'-C2'	-5.40	101.58	105.90
1	AA	3707	DT	C4'-C3'-C2'	-5.40	98.24	103.10
1	AA	6414	DT	C6-C5-C7	-5.40	119.66	122.90
1	AA	6763	DG	O4'-C1'-N9	5.40	111.78	108.00
2	AB	2391	DG	O4'-C1'-C2'	-5.40	101.58	105.90
2	AB	4266	DT	P-O3'-C3'	5.40	126.18	119.70
36	Aj	15	DG	N1-C6-O6	5.40	123.14	119.90
341	Fe	17	DG	C1'-O4'-C4'	-5.40	104.70	110.10
374	GB	1	DA	O4'-C4'-C3'	-5.40	102.34	104.50
1	AA	6592	DA	C4'-C3'-C2'	-5.40	98.24	103.10
81	BS	24	DA	O4'-C1'-C2'	-5.40	101.58	105.90
129	CE	5	DG	O4'-C1'-C2'	-5.40	101.58	105.90
1	AA	4672	DG	C4'-C3'-C2'	-5.39	98.25	103.10
1	AA	5561	DG	O4'-C4'-C3'	-5.39	102.34	104.50
1	AA	6732	DT	C4'-C3'-C2'	-5.39	98.24	103.10
1	AA	6792	DC	C4'-C3'-C2'	-5.39	98.25	103.10
7	AG	16	DC	P-O3'-C3'	5.39	126.17	119.70
106	Br	27	DA	C4'-C3'-C2'	-5.39	98.25	103.10
124	B9	19	DA	P-O3'-C3'	5.39	126.17	119.70
159	Ci	8	DC	O4'-C4'-C3'	-5.39	102.34	104.50
273	EY	29	DA	N1-C6-N6	-5.39	115.36	118.60
302	E1	20	DA	N1-C6-N6	-5.39	115.36	118.60
348	Fl	25	DC	P-O5'-C5'	5.39	129.53	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
375	GC	18	DA	O4'-C4'-C3'	-5.39	102.34	104.50
1	AA	1124	DA	C4'-C3'-C2'	-5.39	98.25	103.10
1	AA	4546	DA	C1'-O4'-C4'	-5.39	104.71	110.10
1	AA	6610	DC	P-O3'-C3'	5.39	126.17	119.70
2	AB	2175	DG	C1'-O4'-C4'	-5.39	104.71	110.10
67	BE	30	DG	C4'-C3'-C2'	-5.39	98.25	103.10
157	Cg	35	DG	C5-C6-O6	-5.39	125.36	128.60
177	C0	23	DT	O4'-C1'-C2'	-5.39	101.59	105.90
271	EW	16	DA	O4'-C1'-C2'	-5.39	101.59	105.90
337	Fa	9	DA	O4'-C1'-C2'	-5.39	101.59	105.90
1	AA	6398	DA	P-O3'-C3'	5.39	126.17	119.70
2	AB	3125	DG	O4'-C1'-N9	5.39	111.77	108.00
1	AA	7019	DT	C4'-C3'-C2'	-5.39	98.25	103.10
1	AA	7248	DG	O4'-C1'-C2'	-5.39	101.59	105.90
93	Be	30	DG	O4'-C4'-C3'	-5.39	102.34	104.50
180	C3	37	DT	O4'-C1'-C2'	-5.39	101.59	105.90
1	AA	3156	DG	C4'-C3'-C2'	-5.39	98.25	103.10
1	AA	6056	DC	C4'-C3'-C2'	-5.39	98.25	103.10
2	AB	4870	DT	C4'-C3'-C2'	-5.39	98.25	103.10
82	BT	40	DA	N1-C6-N6	5.39	121.83	118.60
115	B0	34	DG	C1'-O4'-C4'	-5.39	104.71	110.10
313	FC	1	DT	O4'-C1'-N1	-5.39	104.23	108.00
319	FI	33	DC	P-O3'-C3'	5.39	126.17	119.70
1	AA	1867	DG	C1'-O4'-C4'	-5.39	104.71	110.10
2	AB	5266	DG	O4'-C1'-C2'	-5.39	101.59	105.90
51	Ay	49	DT	O4'-C1'-N1	5.39	111.77	108.00
223	Dk	8	DC	P-O3'-C3'	5.39	126.16	119.70
420	Gv	23	DA	P-O3'-C3'	5.39	126.16	119.70
439	HE	1	DA	C4'-C3'-C2'	-5.39	98.25	103.10
1	AA	1685	DA	C4'-C3'-C2'	-5.38	98.25	103.10
2	AB	1595	DT	C4'-C3'-C2'	-5.38	98.25	103.10
2	AB	1824	DA	O4'-C1'-C2'	-5.38	101.59	105.90
2	AB	3975	DA	N1-C6-N6	-5.38	115.37	118.60
44	Ar	40	DT	O4'-C1'-C2'	-5.38	101.59	105.90
45	As	44	DT	O4'-C4'-C3'	-5.38	102.35	104.50
57	A4	11	DG	O4'-C1'-C2'	-5.38	101.59	105.90
102	Bn	38	DG	C1'-O4'-C4'	-5.38	104.72	110.10
239	D0	23	DA	P-O3'-C3'	5.38	126.16	119.70
1	AA	3929	DT	C4'-C3'-C2'	-5.38	98.25	103.10
1	AA	4743	DC	P-O5'-C5'	5.38	129.51	120.90
2	AB	2522	DC	O4'-C1'-C2'	-5.38	101.59	105.90
151	Ca	33	DC	O4'-C1'-C2'	-5.38	101.59	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
169	Cs	40	DG	O4'-C1'-C2'	-5.38	101.59	105.90
184	C7	33	DG	C1'-O4'-C4'	-5.38	104.72	110.10
191	DE	32	DC	C4'-C3'-C2'	-5.38	98.25	103.10
283	Ei	30	DC	P-O3'-C3'	5.38	126.16	119.70
284	Ej	4	DT	C4'-C3'-C2'	-5.38	98.25	103.10
320	FJ	19	DA	O4'-C1'-C2'	-5.38	101.59	105.90
334	FX	30	DT	O4'-C1'-C2'	-5.38	101.59	105.90
1	AA	2968	DA	C4'-C3'-C2'	-5.38	98.26	103.10
2	AB	709	DA	O4'-C1'-C2'	-5.38	101.59	105.90
2	AB	1953	DG	C1'-O4'-C4'	-5.38	104.72	110.10
2	AB	1965	DG	O4'-C1'-C2'	-5.38	101.59	105.90
46	At	39	DT	O4'-C4'-C3'	-5.38	102.35	104.50
150	CZ	2	DC	O4'-C1'-N1	5.38	111.77	108.00
154	Cd	38	DG	O4'-C1'-C2'	-5.38	101.59	105.90
169	Cs	11	DG	P-O3'-C3'	5.38	126.16	119.70
306	E5	4	DA	N1-C6-N6	-5.38	115.37	118.60
402	Gd	6	DT	O4'-C4'-C3'	-5.38	102.35	104.50
1	AA	5490	DC	C6-N1-C2	-5.38	118.15	120.30
37	Ak	26	DC	C6-N1-C2	-5.38	118.15	120.30
289	Eo	19	DA	C1'-O4'-C4'	-5.38	104.72	110.10
1	AA	3725	DC	C2-N1-C1'	5.38	124.72	118.80
1	AA	6287	DG	O4'-C1'-N9	5.38	111.77	108.00
1	AA	7285	DA	O4'-C1'-C2'	-5.38	101.60	105.90
2	AB	567	DT	P-O3'-C3'	-5.38	113.25	119.70
2	AB	3897	DA	O4'-C1'-C2'	-5.38	101.60	105.90
2	AB	4657	DC	O4'-C4'-C3'	-5.38	102.35	104.50
2	AB	6862	DT	C4'-C3'-C2'	-5.38	98.26	103.10
1	AA	5391	DC	O4'-C1'-C2'	-5.38	101.60	105.90
104	Bp	36	DT	O4'-C4'-C3'	-5.38	102.35	104.50
224	Dl	28	DT	C4'-C3'-C2'	-5.38	98.26	103.10
241	D2	18	DT	C4'-C3'-C2'	-5.38	98.26	103.10
244	D5	21	DC	O4'-C4'-C3'	-5.38	102.35	104.50
1	AA	3951	DT	C1'-O4'-C4'	-5.38	104.72	110.10
307	E6	34	DG	P-O3'-C3'	5.38	126.15	119.70
342	Ff	19	DC	P-O5'-C5'	5.38	129.50	120.90
1	AA	1199	DT	C6-C5-C7	-5.37	119.67	122.90
1	AA	1488	DG	O4'-C1'-C2'	-5.37	101.60	105.90
1	AA	3610	DG	C1'-O4'-C4'	-5.37	104.73	110.10
1	AA	5771	DT	C4'-C3'-C2'	-5.37	98.26	103.10
2	AB	601	DG	P-O3'-C3'	5.37	126.15	119.70
2	AB	1499	DT	C4'-C3'-C2'	-5.37	98.26	103.10
2	AB	4710	DA	O4'-C1'-C2'	-5.37	101.60	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	7091	DG	C4'-C3'-C2'	-5.37	98.26	103.10
35	Ai	2	DT	O4'-C1'-C2'	-5.37	101.60	105.90
334	FX	23	DG	C5-C6-O6	-5.37	125.38	128.60
376	GD	7	DC	O4'-C1'-N1	5.37	111.76	108.00
1	AA	4026	DG	C1'-O4'-C4'	-5.37	104.73	110.10
1	AA	4300	DC	C1'-O4'-C4'	-5.37	104.73	110.10
2	AB	1281	DC	O4'-C1'-N1	5.37	111.76	108.00
2	AB	4544	DT	P-O3'-C3'	-5.37	113.25	119.70
2	AB	4788	DC	C4'-C3'-C2'	-5.37	98.27	103.10
2	AB	7467	DT	C4'-C3'-C2'	-5.37	98.27	103.10
44	Ar	24	DT	O4'-C4'-C3'	-5.37	102.35	104.50
48	Av	23	DG	O4'-C1'-C2'	-5.37	101.60	105.90
52	Az	31	DC	C4'-C3'-C2'	-5.37	98.27	103.10
54	A1	19	DG	C1'-O4'-C4'	-5.37	104.73	110.10
63	BA	13	DG	C5-C6-O6	-5.37	125.38	128.60
265	EQ	19	DA	C4'-C3'-C2'	-5.37	98.27	103.10
350	Fn	23	DC	O4'-C1'-C2'	-5.37	101.60	105.90
1	AA	1597	DA	O4'-C1'-C2'	-5.37	101.60	105.90
1	AA	1701	DG	O4'-C1'-C2'	-5.37	101.60	105.90
1	AA	3155	DG	C1'-O4'-C4'	-5.37	104.73	110.10
2	AB	694	DA	C4'-C3'-C2'	-5.37	98.27	103.10
2	AB	4278	DT	P-O3'-C3'	5.37	126.14	119.70
59	A6	46	DT	O4'-C4'-C3'	-5.37	102.35	104.50
137	CM	15	DA	O4'-C1'-C2'	-5.37	101.60	105.90
167	Cq	12	DG	O4'-C1'-N9	5.37	111.76	108.00
262	EN	27	DA	O4'-C1'-C2'	-5.37	101.60	105.90
293	Es	16	DT	O4'-C1'-C2'	-5.37	101.60	105.90
369	F6	8	DC	P-O3'-C3'	5.37	126.14	119.70
1	AA	1995	DG	C1'-O4'-C4'	-5.37	104.73	110.10
1	AA	6703	DC	C4'-C3'-C2'	-5.37	98.27	103.10
2	AB	4387	DA	O4'-C1'-C2'	-5.37	101.61	105.90
2	AB	5330	DG	C4'-C3'-C2'	-5.37	98.27	103.10
85	BW	16	DA	O4'-C1'-C2'	-5.37	101.61	105.90
199	DM	5	DA	N1-C6-N6	-5.37	115.38	118.60
215	Dc	11	DT	C1'-O4'-C4'	-5.37	104.73	110.10
229	Dq	4	DC	C2-N1-C1'	5.37	124.70	118.80
299	Ey	19	DT	C4'-C3'-C2'	-5.37	98.27	103.10
318	FH	11	DA	P-O3'-C3'	5.37	126.14	119.70
343	Fg	18	DC	C4'-C3'-C2'	-5.37	98.27	103.10
1	AA	1636	DA	O4'-C1'-C2'	-5.37	101.61	105.90
2	AB	51	DA	O4'-C1'-C2'	-5.37	101.61	105.90
2	AB	7078	DT	C4'-C3'-C2'	-5.37	98.27	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
237	Dy	12	DT	P-O3'-C3'	5.37	126.14	119.70
1	AA	42	DG	C3'-C2'-C1'	-5.37	96.06	102.50
2	AB	856	DG	N1-C6-O6	5.37	123.12	119.90
2	AB	2465	DA	O4'-C1'-C2'	-5.37	101.61	105.90
2	AB	3376	DG	C5-C6-O6	-5.37	125.38	128.60
2	AB	3954	DA	C4'-C3'-C2'	-5.37	98.27	103.10
2	AB	4215	DT	O4'-C4'-C3'	-5.37	102.35	104.50
169	Cs	20	DA	O4'-C1'-C2'	-5.37	101.61	105.90
195	DI	1	DA	O4'-C1'-C2'	-5.37	101.61	105.90
411	Gm	22	DT	O4'-C4'-C3'	-5.37	102.35	104.50
1	AA	4876	DT	P-O3'-C3'	5.36	126.14	119.70
1	AA	5742	DA	O4'-C1'-C2'	-5.36	101.61	105.90
2	AB	2349	DG	C1'-O4'-C4'	-5.36	104.74	110.10
2	AB	2981	DT	C1'-O4'-C4'	-5.36	104.74	110.10
2	AB	6397	DT	C1'-O4'-C4'	-5.36	104.74	110.10
52	Az	37	DG	O4'-C1'-C2'	-5.36	101.61	105.90
54	A1	41	DA	C1'-O4'-C4'	-5.36	104.74	110.10
55	A2	46	DT	O4'-C4'-C3'	-5.36	102.36	104.50
165	Co	7	DG	P-O3'-C3'	5.36	126.14	119.70
186	C9	35	DA	N1-C6-N6	-5.36	115.38	118.60
299	Ey	24	DA	O4'-C1'-C2'	-5.36	101.61	105.90
1	AA	4382	DA	O4'-C1'-C2'	-5.36	101.61	105.90
2	AB	2486	DC	P-O3'-C3'	5.36	126.14	119.70
2	AB	5966	DT	O4'-C4'-C3'	-5.36	102.36	104.50
93	Be	2	DA	O4'-C1'-C2'	-5.36	101.61	105.90
437	HC	5	DT	O4'-C4'-C3'	-5.36	102.36	104.50
1	AA	5276	DG	O4'-C1'-C2'	-5.36	101.61	105.90
1	AA	6379	DT	C4'-C3'-C2'	-5.36	98.28	103.10
2	AB	2804	DT	O4'-C1'-N1	5.36	111.75	108.00
2	AB	4146	DT	O4'-C4'-C3'	-5.36	102.36	104.50
2	AB	6582	DA	N1-C6-N6	-5.36	115.38	118.60
21	AU	27	DT	C4'-C3'-C2'	-5.36	98.28	103.10
230	Dr	24	DA	C4'-C3'-C2'	-5.36	98.28	103.10
264	EP	35	DT	C4-C5-C7	-5.36	115.78	119.00
377	GE	24	DT	O4'-C4'-C3'	-5.36	102.36	104.50
429	G4	19	DA	O4'-C1'-C2'	-5.36	101.61	105.90
1	AA	152	DC	C4'-C3'-C2'	-5.36	98.28	103.10
1	AA	6820	DG	C1'-O4'-C4'	-5.36	104.74	110.10
2	AB	2978	DT	C4'-C3'-C2'	-5.36	98.28	103.10
216	Dd	17	DG	C1'-O4'-C4'	-5.36	104.74	110.10
1	AA	7194	DC	P-O5'-C5'	5.36	129.47	120.90
2	AB	3549	DC	C2-N1-C1'	5.36	124.69	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	7398	DA	O4'-C1'-C2'	-5.36	101.61	105.90
4	AD	18	DA	O4'-C1'-C2'	-5.36	101.61	105.90
33	Ag	8	DT	O4'-C4'-C3'	-5.36	102.36	104.50
82	BT	20	DC	P-O3'-C3'	5.36	126.13	119.70
127	CC	15	DA	C1'-O4'-C4'	-5.36	104.74	110.10
182	C5	2	DA	C1'-O4'-C4'	-5.36	104.74	110.10
210	DX	23	DG	O4'-C1'-C2'	-5.36	101.61	105.90
296	Ev	1	DC	O4'-C1'-C2'	-5.36	101.61	105.90
300	Ez	29	DG	O4'-C1'-C2'	-5.36	101.61	105.90
316	FF	16	DA	O4'-C1'-C2'	-5.36	101.61	105.90
1	AA	4587	DG	C4'-C3'-C2'	-5.36	98.28	103.10
1	AA	5095	DG	O4'-C1'-C2'	-5.36	101.62	105.90
1	AA	5337	DA	O4'-C1'-C2'	-5.36	101.61	105.90
1	AA	7476	DT	C4'-C3'-C2'	-5.36	98.28	103.10
2	AB	54	DG	O4'-C1'-C2'	-5.36	101.61	105.90
2	AB	3274	DA	P-O3'-C3'	5.36	126.13	119.70
2	AB	5694	DC	C1'-O4'-C4'	-5.36	104.74	110.10
8	AH	38	DG	O4'-C1'-C2'	-5.36	101.62	105.90
74	BL	27	DG	O4'-C1'-C2'	-5.36	101.61	105.90
134	CJ	3	DT	O4'-C4'-C3'	-5.36	102.36	104.50
179	C2	30	DG	C1'-O4'-C4'	-5.36	104.74	110.10
204	DR	7	DG	O4'-C1'-C2'	-5.36	101.62	105.90
325	FO	22	DA	O4'-C1'-C2'	-5.36	101.62	105.90
341	Fe	17	DG	O4'-C1'-N9	5.36	111.75	108.00
349	Fm	28	DA	O4'-C1'-N9	-5.36	104.25	108.00
406	Gh	12	DG	O4'-C1'-C2'	-5.36	101.62	105.90
1	AA	6807	DT	C4'-C3'-C2'	-5.35	98.28	103.10
18	AR	28	DG	C5-C6-O6	-5.35	125.39	128.60
196	DJ	36	DC	P-O3'-C3'	5.35	126.12	119.70
255	EG	33	DT	C4'-C3'-C2'	-5.35	98.28	103.10
1	AA	7043	DA	O4'-C1'-C2'	-5.35	101.62	105.90
2	AB	2956	DT	O4'-C4'-C3'	-5.35	102.36	104.50
2	AB	5236	DT	O4'-C4'-C3'	-5.35	102.36	104.50
26	AZ	7	DT	O4'-C4'-C3'	-5.35	102.36	104.50
141	CQ	13	DA	N1-C6-N6	-5.35	115.39	118.60
203	DQ	32	DG	C1'-O4'-C4'	-5.35	104.75	110.10
389	GQ	15	DC	C4'-C3'-C2'	-5.35	98.28	103.10
1	AA	5350	DA	O4'-C1'-N9	5.35	111.75	108.00
2	AB	2530	DA	P-O3'-C3'	5.35	126.12	119.70
2	AB	3438	DG	C1'-O4'-C4'	-5.35	104.75	110.10
2	AB	6816	DG	P-O3'-C3'	5.35	126.12	119.70
142	CR	39	DT	O4'-C4'-C3'	-5.35	102.36	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
219	Dg	16	DA	C4'-C3'-C2'	-5.35	98.28	103.10
294	Et	29	DA	P-O3'-C3'	5.35	126.12	119.70
303	E2	30	DA	C1'-O4'-C4'	-5.35	104.75	110.10
1	AA	2012	DA	N1-C6-N6	-5.35	115.39	118.60
1	AA	4927	DT	C4'-C3'-C2'	-5.35	98.29	103.10
52	Az	47	DT	O4'-C4'-C3'	-5.35	102.36	104.50
103	Bo	25	DT	C4'-C3'-C2'	-5.35	98.29	103.10
105	Bq	23	DT	O4'-C4'-C3'	-5.35	102.36	104.50
128	CD	17	DC	C2-N1-C1'	5.35	124.69	118.80
173	Cw	18	DA	N1-C6-N6	-5.35	115.39	118.60
368	F5	22	DT	O4'-C4'-C3'	-5.35	102.36	104.50
396	GX	21	DA	P-O3'-C3'	5.35	126.12	119.70
406	Gh	3	DC	C4'-C3'-C2'	-5.35	98.29	103.10
1	AA	44	DC	P-O3'-C3'	5.35	126.12	119.70
1	AA	6743	DG	C4'-C3'-C2'	-5.35	98.29	103.10
2	AB	867	DG	N1-C6-O6	5.35	123.11	119.90
9	AI	23	DA	N1-C6-N6	-5.35	115.39	118.60
88	BZ	22	DG	O4'-C4'-C3'	-5.35	102.36	104.50
262	EN	24	DA	O4'-C1'-N9	5.35	111.74	108.00
339	Fc	21	DG	P-O3'-C3'	5.35	126.12	119.70
352	Fp	15	DC	P-O3'-C3'	5.35	126.12	119.70
313	FC	13	DA	N1-C6-N6	-5.35	115.39	118.60
2	AB	457	DT	O4'-C1'-C2'	-5.34	101.62	105.90
2	AB	2524	DA	O4'-C1'-N9	-5.34	104.26	108.00
2	AB	2745	DC	O4'-C1'-N1	5.34	111.74	108.00
2	AB	5807	DC	O4'-C1'-N1	5.34	111.74	108.00
48	Av	7	DT	O4'-C4'-C3'	-5.34	102.36	104.50
89	Ba	14	DG	O4'-C4'-C3'	-5.34	102.36	104.50
108	Bt	37	DA	O4'-C1'-C2'	-5.34	101.62	105.90
143	CS	40	DG	O4'-C1'-C2'	-5.34	101.62	105.90
159	Ci	4	DA	C1'-O4'-C4'	-5.34	104.76	110.10
217	De	9	DC	C4'-C3'-C2'	-5.34	98.29	103.10
231	Ds	39	DG	O4'-C1'-C2'	-5.34	101.62	105.90
389	GQ	9	DC	O4'-C1'-N1	5.34	111.74	108.00
408	Gj	3	DT	O4'-C1'-C2'	-5.34	101.62	105.90
419	Gu	9	DA	O4'-C1'-C2'	-5.34	101.62	105.90
1	AA	581	DA	C4'-C3'-C2'	-5.34	98.29	103.10
1	AA	864	DC	O4'-C4'-C3'	-5.34	102.36	104.50
1	AA	4065	DG	C5-C6-O6	-5.34	125.39	128.60
2	AB	246	DG	O4'-C1'-C2'	-5.34	101.63	105.90
2	AB	2601	DA	N1-C6-N6	-5.34	115.39	118.60
2	AB	2777	DC	C6-N1-C2	-5.34	118.16	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
229	Dq	16	DG	C1'-O4'-C4'	-5.34	104.76	110.10
251	EC	16	DA	C1'-O4'-C4'	-5.34	104.76	110.10
260	EL	20	DA	O4'-C1'-C2'	-5.34	101.62	105.90
1	AA	6314	DC	P-O5'-C5'	5.34	129.45	120.90
63	BA	30	DG	O4'-C1'-C2'	-5.34	101.63	105.90
251	EC	25	DA	O4'-C1'-C2'	-5.34	101.63	105.90
341	Fe	25	DG	O4'-C1'-C2'	-5.34	101.63	105.90
1	AA	544	DA	O4'-C1'-C2'	-5.34	101.63	105.90
1	AA	695	DG	C1'-O4'-C4'	-5.34	104.76	110.10
1	AA	5069	DT	O4'-C1'-C2'	-5.34	101.63	105.90
57	A4	16	DC	O4'-C1'-C2'	-5.34	101.63	105.90
84	BV	21	DC	P-O3'-C3'	5.34	126.11	119.70
135	CK	1	DT	C1'-O4'-C4'	-5.34	104.76	110.10
184	C7	33	DG	O4'-C1'-C2'	-5.34	101.63	105.90
75	BM	40	DT	C6-C5-C7	5.34	126.10	122.90
152	Cb	18	DC	P-O3'-C3'	5.34	126.11	119.70
1	AA	225	DG	O4'-C1'-N9	5.34	111.73	108.00
1	AA	5361	DT	C4'-C3'-C2'	-5.34	98.30	103.10
2	AB	7346	DC	P-O3'-C3'	5.34	126.11	119.70
95	Bg	19	DT	C4'-C3'-C2'	-5.34	98.30	103.10
172	Cv	35	DC	C2-N1-C1'	5.34	124.67	118.80
271	EW	14	DG	P-O3'-C3'	5.34	126.10	119.70
321	FK	2	DA	C4'-C3'-C2'	-5.34	98.30	103.10
380	GH	22	DT	C6-C5-C7	-5.34	119.70	122.90
2	AB	5124	DC	C4'-C3'-C2'	-5.33	98.30	103.10
59	A6	39	DG	O4'-C1'-C2'	-5.33	101.63	105.90
221	Di	23	DA	O4'-C1'-C2'	-5.33	101.63	105.90
1	AA	6931	DG	P-O3'-C3'	5.33	126.10	119.70
2	AB	4054	DG	O4'-C1'-N9	5.33	111.73	108.00
2	AB	5093	DG	O4'-C1'-C2'	-5.33	101.63	105.90
2	AB	7373	DC	O4'-C1'-C2'	-5.33	101.63	105.90
2	AB	7377	DT	P-O3'-C3'	5.33	126.10	119.70
215	Dc	22	DC	O4'-C1'-N1	5.33	111.73	108.00
370	F7	1	DT	C6-N1-C1'	-5.33	112.40	120.40
403	Ge	20	DT	O4'-C4'-C3'	-5.33	102.37	104.50
406	Gh	9	DC	C1'-O4'-C4'	-5.33	104.77	110.10
1	AA	1989	DC	P-O3'-C3'	5.33	126.10	119.70
1	AA	2080	DC	C4'-C3'-C2'	-5.33	98.30	103.10
1	AA	2359	DG	C1'-O4'-C4'	-5.33	104.77	110.10
1	AA	4637	DA	O4'-C1'-N9	5.33	111.73	108.00
2	AB	1169	DG	C4'-C3'-C2'	-5.33	98.30	103.10
2	AB	1989	DA	C4'-C3'-C2'	-5.33	98.30	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	Af	6	DT	O4'-C4'-C3'	-5.33	102.37	104.50
112	Bx	22	DA	C4'-C3'-C2'	-5.33	98.30	103.10
168	Cr	11	DG	C4'-C3'-C2'	-5.33	98.30	103.10
172	Cv	4	DG	O4'-C1'-C2'	-5.33	101.64	105.90
212	DZ	42	DC	O4'-C1'-C2'	-5.33	101.63	105.90
294	Et	32	DA	O4'-C1'-C2'	-5.33	101.64	105.90
451	HQ	10	DT	C4'-C3'-C2'	-5.33	98.30	103.10
1	AA	232	DA	O4'-C1'-C2'	-5.33	101.64	105.90
1	AA	5192	DA	C1'-O4'-C4'	-5.33	104.77	110.10
1	AA	5438	DA	C4'-C3'-C2'	-5.33	98.30	103.10
2	AB	3259	DG	O4'-C1'-C2'	-5.33	101.64	105.90
2	AB	7276	DG	P-O3'-C3'	5.33	126.10	119.70
1	AA	6195	DC	O4'-C1'-N1	5.33	111.73	108.00
2	AB	3585	DA	C1'-O4'-C4'	-5.33	104.77	110.10
2	AB	4359	DT	O4'-C1'-C2'	-5.33	101.64	105.90
2	AB	5363	DT	P-O3'-C3'	5.33	126.09	119.70
25	AY	29	DC	P-O3'-C3'	5.33	126.09	119.70
93	Be	10	DC	C4'-C3'-C2'	-5.33	98.30	103.10
193	DG	33	DC	P-O3'-C3'	5.33	126.09	119.70
252	ED	14	DT	C4'-C3'-C2'	-5.33	98.30	103.10
254	EF	17	DG	O4'-C1'-C2'	-5.33	101.64	105.90
441	HG	20	DT	O4'-C4'-C3'	-5.33	102.37	104.50
72	BJ	3	DT	O4'-C1'-C2'	-5.33	101.64	105.90
132	CH	1	DT	C1'-O4'-C4'	-5.33	104.77	110.10
257	EI	23	DG	O4'-C1'-C2'	-5.33	101.64	105.90
391	GS	16	DA	O4'-C1'-C2'	-5.33	101.64	105.90
1	AA	1008	DG	C4'-C3'-C2'	-5.33	98.31	103.10
1	AA	1505	DG	C4'-C3'-C2'	-5.33	98.31	103.10
1	AA	1862	DA	N1-C6-N6	-5.33	115.41	118.60
1	AA	6358	DA	C4'-C3'-C2'	-5.33	98.31	103.10
2	AB	4879	DG	O4'-C1'-N9	5.33	111.73	108.00
2	AB	6691	DG	P-O3'-C3'	5.33	126.09	119.70
138	CN	25	DG	O4'-C1'-C2'	-5.33	101.64	105.90
189	DC	23	DT	P-O3'-C3'	5.33	126.09	119.70
203	DQ	20	DT	O4'-C1'-N1	-5.33	104.27	108.00
332	FV	26	DG	O4'-C1'-C2'	-5.33	101.64	105.90
413	Go	19	DA	C4'-C3'-C2'	-5.33	98.31	103.10
1	AA	4844	DC	C6-N1-C2	-5.32	118.17	120.30
1	AA	5542	DG	O4'-C1'-C2'	-5.32	101.64	105.90
2	AB	491	DA	O4'-C1'-N9	5.32	111.73	108.00
2	AB	4590	DG	P-O3'-C3'	5.32	126.09	119.70
2	AB	5057	DC	O4'-C1'-C2'	-5.32	101.64	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	6859	DA	C1'-O4'-C4'	-5.32	104.78	110.10
50	Ax	41	DG	O4'-C4'-C3'	-5.32	102.37	104.50
120	B5	11	DA	P-O3'-C3'	5.32	126.09	119.70
197	DK	30	DA	O4'-C1'-C2'	-5.32	101.64	105.90
313	FC	1	DT	C6-N1-C1'	-5.32	112.42	120.40
250	EB	13	DG	C5-C6-O6	-5.32	125.41	128.60
423	Gy	3	DA	O4'-C1'-C2'	-5.32	101.64	105.90
2	AB	1182	DC	O4'-C1'-C2'	-5.32	101.64	105.90
2	AB	3006	DG	O4'-C1'-C2'	-5.32	101.64	105.90
2	AB	4252	DA	O4'-C1'-C2'	-5.32	101.64	105.90
2	AB	5875	DC	O4'-C1'-C2'	-5.32	101.64	105.90
30	Ad	36	DA	O4'-C1'-C2'	-5.32	101.64	105.90
446	HL	20	DG	C1'-O4'-C4'	-5.32	104.78	110.10
2	AB	6241	DA	N1-C6-N6	-5.32	115.41	118.60
26	AZ	44	DT	P-O3'-C3'	5.32	126.08	119.70
32	Af	27	DC	O4'-C1'-C2'	-5.32	101.65	105.90
104	Bp	38	DT	O4'-C4'-C3'	-5.32	102.37	104.50
242	D3	3	DG	O4'-C1'-C2'	-5.32	101.65	105.90
251	EC	18	DA	O4'-C1'-C2'	-5.32	101.65	105.90
322	FL	23	DT	C1'-O4'-C4'	-5.32	104.78	110.10
354	Fr	5	DC	C4'-C3'-C2'	-5.32	98.31	103.10
1	AA	1830	DT	C4'-C3'-C2'	-5.32	98.31	103.10
1	AA	2913	DT	O4'-C1'-N1	-5.32	104.28	108.00
1	AA	3901	DA	C1'-O4'-C4'	-5.32	104.78	110.10
1	AA	5295	DG	C1'-O4'-C4'	-5.32	104.78	110.10
1	AA	7032	DT	O4'-C1'-C2'	-5.32	101.65	105.90
2	AB	1405	DC	C4'-C3'-C2'	-5.32	98.31	103.10
2	AB	3955	DT	C4'-C3'-C2'	-5.32	98.32	103.10
2	AB	5663	DT	C4'-C3'-C2'	-5.32	98.32	103.10
30	Ad	32	DA	C1'-O4'-C4'	-5.32	104.78	110.10
46	At	47	DT	O4'-C4'-C3'	-5.32	102.37	104.50
61	A8	43	DT	O4'-C4'-C3'	-5.32	102.37	104.50
99	Bk	1	DC	O4'-C1'-C2'	-5.32	101.65	105.90
115	B0	1	DT	C1'-O4'-C4'	-5.32	104.78	110.10
1	AA	1971	DC	P-O3'-C3'	5.31	126.08	119.70
1	AA	3817	DA	P-O3'-C3'	5.31	126.08	119.70
280	Ef	28	DA	P-O3'-C3'	5.31	126.08	119.70
312	FB	23	DC	O4'-C1'-C2'	-5.31	101.65	105.90
357	Fu	20	DT	C4'-C3'-C2'	-5.31	98.32	103.10
1	AA	3542	DC	P-O3'-C3'	5.31	126.08	119.70
1	AA	5450	DC	O4'-C1'-N1	5.31	111.72	108.00
2	AB	592	DC	C4'-C3'-C2'	-5.31	98.32	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2645	DG	O4'-C1'-C2'	-5.31	101.65	105.90
2	AB	3209	DT	C4'-C3'-C2'	-5.31	98.32	103.10
2	AB	4940	DA	O4'-C1'-C2'	-5.31	101.65	105.90
85	BW	27	DG	C5-C6-O6	-5.31	125.41	128.60
102	Bn	9	DG	P-O3'-C3'	5.31	126.08	119.70
212	DZ	16	DG	C1'-O4'-C4'	-5.31	104.79	110.10
271	EW	25	DA	P-O3'-C3'	-5.31	113.33	119.70
1	AA	3171	DT	C4'-C3'-C2'	-5.31	98.32	103.10
2	AB	1758	DC	C4'-C3'-C2'	-5.31	98.32	103.10
2	AB	2835	DT	O4'-C4'-C3'	-5.31	102.38	104.50
35	Ai	23	DT	P-O3'-C3'	5.31	126.07	119.70
164	Cn	36	DG	C4-N9-C1'	5.31	133.40	126.50
2	AB	992	DA	O4'-C1'-C2'	-5.31	101.65	105.90
16	AP	17	DC	C4'-C3'-C2'	-5.31	98.32	103.10
27	Aa	21	DA	O4'-C4'-C3'	-5.31	102.38	104.50
311	FA	28	DG	O4'-C1'-C2'	-5.31	101.65	105.90
1	AA	1072	DG	O4'-C1'-C2'	-5.31	101.65	105.90
1	AA	2802	DC	O4'-C1'-C2'	-5.31	101.66	105.90
1	AA	4065	DG	O4'-C1'-N9	5.31	111.72	108.00
2	AB	747	DC	C4'-C3'-C2'	-5.31	98.32	103.10
2	AB	1149	DA	N1-C6-N6	-5.31	115.42	118.60
2	AB	1211	DG	O4'-C1'-C2'	-5.31	101.65	105.90
2	AB	2185	DA	C1'-O4'-C4'	-5.31	104.79	110.10
2	AB	2839	DT	C4'-C3'-C2'	-5.31	98.32	103.10
2	AB	3731	DT	C4'-C3'-C2'	-5.31	98.32	103.10
2	AB	5319	DC	O4'-C4'-C3'	-5.31	102.38	104.50
9	AI	24	DT	P-O3'-C3'	-5.31	113.33	119.70
86	BX	10	DA	P-O3'-C3'	5.31	126.07	119.70
234	Dv	29	DA	O4'-C1'-C2'	-5.31	101.66	105.90
247	D8	20	DT	C4'-C3'-C2'	-5.31	98.32	103.10
330	FT	27	DT	O4'-C4'-C3'	-5.31	102.38	104.50
416	Gr	20	DG	P-O3'-C3'	5.31	126.07	119.70
1	AA	867	DT	O4'-C4'-C3'	-5.31	102.38	104.50
1	AA	1184	DG	O4'-C1'-N9	5.31	111.71	108.00
1	AA	1465	DC	O4'-C1'-C2'	-5.31	101.66	105.90
1	AA	5586	DT	O4'-C1'-C2'	-5.31	101.66	105.90
2	AB	255	DA	O4'-C1'-C2'	-5.31	101.66	105.90
2	AB	4414	DC	P-O5'-C5'	5.31	129.39	120.90
85	BW	2	DG	C4'-C3'-C2'	-5.31	98.33	103.10
1	AA	1310	DA	C1'-O4'-C4'	-5.30	104.80	110.10
1	AA	2781	DA	C1'-O4'-C4'	-5.30	104.80	110.10
1	AA	3354	DG	O4'-C1'-N9	5.30	111.71	108.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	6587	DA	O4'-C1'-N9	5.30	111.71	108.00
2	AB	1929	DG	P-O3'-C3'	5.30	126.06	119.70
2	AB	2835	DT	C4'-C3'-C2'	-5.30	98.33	103.10
7	AG	18	DG	P-O3'-C3'	5.30	126.07	119.70
28	Ab	9	DT	P-O3'-C3'	5.30	126.06	119.70
31	Ae	48	DT	C4'-C3'-C2'	-5.30	98.33	103.10
122	B7	7	DG	C1'-O4'-C4'	-5.30	104.80	110.10
178	C1	21	DT	C6-C5-C7	-5.30	119.72	122.90
221	Di	9	DA	P-O3'-C3'	5.30	126.06	119.70
1	AA	3485	DA	O4'-C1'-N9	5.30	111.71	108.00
1	AA	7384	DC	O4'-C1'-C2'	-5.30	101.66	105.90
64	BB	44	DT	O4'-C4'-C3'	-5.30	102.38	104.50
121	B6	23	DA	O4'-C1'-C2'	-5.30	101.66	105.90
353	Fq	24	DT	O4'-C4'-C3'	-5.30	102.38	104.50
390	GR	9	DA	O4'-C1'-C2'	-5.30	101.66	105.90
441	HG	14	DT	O4'-C4'-C3'	-5.30	102.38	104.50
1	AA	1348	DC	P-O3'-C3'	5.30	126.06	119.70
1	AA	4771	DA	C4'-C3'-C2'	-5.30	98.33	103.10
1	AA	5473	DC	C6-N1-C2	-5.30	118.18	120.30
1	AA	6288	DC	O4'-C1'-N1	5.30	111.71	108.00
1	AA	7145	DT	C4'-C3'-C2'	-5.30	98.33	103.10
2	AB	2356	DG	O4'-C4'-C3'	-5.30	102.38	104.50
2	AB	4500	DT	C1'-O4'-C4'	-5.30	104.80	110.10
49	Aw	6	DT	O4'-C4'-C3'	-5.30	102.38	104.50
77	BO	7	DT	P-O3'-C3'	5.30	126.06	119.70
102	Bn	27	DG	C4'-C3'-C2'	-5.30	98.33	103.10
246	D7	23	DC	P-O3'-C3'	5.30	126.06	119.70
369	F6	17	DA	O4'-C1'-N9	5.30	111.71	108.00
1	AA	5449	DC	O4'-C1'-N1	5.30	111.71	108.00
1	AA	6492	DA	P-O3'-C3'	5.30	126.06	119.70
1	AA	6508	DT	C4'-C3'-C2'	-5.30	98.33	103.10
2	AB	298	DT	C4'-C3'-C2'	-5.30	98.33	103.10
2	AB	1902	DT	C4'-C3'-C2'	-5.30	98.33	103.10
2	AB	2149	DG	C1'-O4'-C4'	-5.30	104.80	110.10
165	Co	39	DG	C1'-O4'-C4'	-5.30	104.80	110.10
404	Gf	20	DA	P-O3'-C3'	5.30	126.06	119.70
419	Gu	12	DG	C1'-O4'-C4'	-5.30	104.80	110.10
58	A5	19	DT	O4'-C1'-N1	5.30	111.71	108.00
215	Dc	21	DC	O4'-C4'-C3'	-5.30	102.38	104.50
289	Eo	28	DA	O4'-C1'-C2'	-5.30	101.66	105.90
300	Ez	13	DA	O4'-C1'-C2'	-5.30	101.66	105.90
1	AA	5584	DT	C4'-C3'-C2'	-5.30	98.33	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	6637	DA	O4'-C1'-N9	-5.30	104.29	108.00
1	AA	7272	DA	C4'-C3'-C2'	-5.30	98.33	103.10
2	AB	3876	DC	P-O3'-C3'	5.30	126.06	119.70
2	AB	6885	DT	O4'-C1'-C2'	-5.30	101.66	105.90
21	AU	43	DT	O4'-C4'-C3'	-5.30	102.38	104.50
88	BZ	36	DG	C5-C6-O6	-5.30	125.42	128.60
432	G7	2	DG	O4'-C1'-C2'	-5.30	101.66	105.90
1	AA	1402	DG	O4'-C1'-N9	5.29	111.71	108.00
2	AB	4495	DG	C1'-O4'-C4'	-5.29	104.81	110.10
2	AB	4689	DT	O4'-C1'-N1	-5.29	104.29	108.00
11	AK	46	DT	O4'-C4'-C3'	-5.29	102.38	104.50
70	BH	44	DA	N1-C6-N6	-5.29	115.42	118.60
380	GH	18	DA	O4'-C1'-C2'	-5.29	101.66	105.90
1	AA	210	DG	O4'-C1'-N9	5.29	111.70	108.00
1	AA	749	DG	C1'-O4'-C4'	-5.29	104.81	110.10
1	AA	5200	DA	O4'-C1'-C2'	-5.29	101.67	105.90
1	AA	6785	DA	O4'-C1'-C2'	-5.29	101.67	105.90
1	AA	6947	DC	C6-N1-C2	-5.29	118.18	120.30
2	AB	1745	DT	C4'-C3'-C2'	-5.29	98.33	103.10
2	AB	4471	DT	O4'-C1'-C2'	-5.29	101.67	105.90
2	AB	7176	DT	O4'-C4'-C3'	-5.29	102.38	104.50
114	Bz	16	DT	P-O3'-C3'	5.29	126.05	119.70
294	Et	19	DG	C4'-C3'-C2'	-5.29	98.33	103.10
1	AA	1409	DT	P-O3'-C3'	5.29	126.05	119.70
1	AA	1685	DA	O4'-C4'-C3'	-5.29	102.38	104.50
1	AA	4929	DC	P-O3'-C3'	5.29	126.05	119.70
1	AA	7087	DT	O4'-C1'-C2'	-5.29	101.67	105.90
2	AB	5743	DC	C1'-O4'-C4'	-5.29	104.81	110.10
86	BX	16	DG	O4'-C4'-C3'	-5.29	102.38	104.50
96	Bh	33	DG	C5-C6-O6	-5.29	125.42	128.60
200	DN	11	DT	O4'-C4'-C3'	-5.29	102.38	104.50
275	Ea	27	DT	O4'-C1'-C2'	-5.29	101.67	105.90
292	Er	34	DA	O4'-C1'-C2'	-5.29	101.67	105.90
317	FG	16	DC	P-O3'-C3'	5.29	126.05	119.70
381	GI	20	DC	C4'-C3'-C2'	-5.29	98.34	103.10
1	AA	668	DA	N1-C6-N6	-5.29	115.43	118.60
1	AA	2992	DC	O4'-C1'-N1	5.29	111.70	108.00
1	AA	5734	DG	O4'-C1'-C2'	-5.29	101.67	105.90
119	B4	33	DA	N1-C6-N6	-5.29	115.43	118.60
224	Dl	6	DA	C4'-C3'-C2'	-5.29	98.34	103.10
321	FK	9	DT	C6-C5-C7	5.29	126.07	122.90
1	AA	183	DG	O4'-C1'-C2'	-5.29	101.67	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1445	DA	O4'-C1'-C2'	-5.29	101.67	105.90
1	AA	3606	DC	C4'-C3'-C2'	-5.29	98.34	103.10
2	AB	1027	DG	O4'-C1'-C2'	-5.29	101.67	105.90
133	CI	27	DG	O4'-C1'-C2'	-5.29	101.67	105.90
161	Ck	34	DA	N1-C6-N6	-5.29	115.43	118.60
205	DS	30	DT	O4'-C1'-C2'	-5.29	101.67	105.90
217	De	14	DT	P-O3'-C3'	-5.29	113.35	119.70
241	D2	8	DC	C2-N1-C1'	5.29	124.62	118.80
349	Fm	8	DC	P-O5'-C5'	5.29	129.36	120.90
369	F6	1	DG	P-O3'-C3'	-5.29	113.35	119.70
1	AA	1833	DC	C1'-O4'-C4'	-5.29	104.81	110.10
63	BA	39	DG	O4'-C1'-C2'	-5.29	101.67	105.90
113	By	12	DG	O4'-C1'-C2'	-5.29	101.67	105.90
366	F3	4	DA	C4'-C3'-C2'	-5.29	98.34	103.10
405	Gg	19	DT	O4'-C4'-C3'	-5.29	102.39	104.50
1	AA	3215	DG	O4'-C1'-N9	5.29	111.70	108.00
2	AB	407	DA	O4'-C1'-C2'	-5.29	101.67	105.90
2	AB	1326	DG	C1'-O4'-C4'	-5.29	104.81	110.10
2	AB	1350	DA	O4'-C4'-C3'	-5.29	102.39	104.50
2	AB	1643	DT	C4'-C3'-C2'	-5.29	98.34	103.10
2	AB	6380	DG	P-O3'-C3'	5.29	126.04	119.70
2	AB	6551	DG	C1'-O4'-C4'	-5.29	104.81	110.10
34	Ah	40	DG	P-O3'-C3'	5.29	126.04	119.70
141	CQ	19	DA	O4'-C1'-C2'	-5.29	101.67	105.90
202	DP	3	DA	C5-C6-N6	5.29	127.93	123.70
1	AA	2790	DG	P-O3'-C3'	5.28	126.04	119.70
1	AA	5835	DC	C2-N1-C1'	5.28	124.61	118.80
2	AB	2271	DG	O4'-C1'-C2'	-5.28	101.67	105.90
2	AB	4841	DG	C1'-O4'-C4'	-5.28	104.82	110.10
59	A6	20	DA	N1-C6-N6	-5.28	115.43	118.60
1	AA	266	DG	C1'-O4'-C4'	-5.28	104.82	110.10
1	AA	534	DG	O4'-C1'-C2'	-5.28	101.67	105.90
1	AA	2359	DG	O4'-C1'-N9	5.28	111.70	108.00
2	AB	2459	DG	C1'-O4'-C4'	-5.28	104.82	110.10
14	AN	28	DA	N1-C6-N6	-5.28	115.43	118.60
234	Dv	9	DC	O4'-C1'-C2'	-5.28	101.67	105.90
275	Ea	24	DC	O4'-C1'-N1	5.28	111.70	108.00
355	Fs	16	DA	O4'-C1'-C2'	-5.28	101.67	105.90
375	GC	25	DA	O4'-C1'-C2'	-5.28	101.67	105.90
1	AA	1760	DG	O4'-C1'-C2'	-5.28	101.68	105.90
1	AA	2780	DA	N1-C6-N6	-5.28	115.43	118.60
1	AA	5420	DA	C4'-C3'-C2'	-5.28	98.35	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	5854	DG	N1-C6-O6	5.28	123.07	119.90
46	At	19	DA	O4'-C1'-C2'	-5.28	101.68	105.90
73	BK	47	DT	O4'-C4'-C3'	-5.28	102.39	104.50
150	CZ	19	DC	P-O5'-C5'	5.28	129.35	120.90
152	Cb	28	DC	C2-N1-C1'	5.28	124.61	118.80
304	E3	23	DG	O4'-C1'-C2'	-5.28	101.68	105.90
127	CC	32	DG	P-O3'-C3'	5.28	126.03	119.70
452	HR	16	DG	C4'-C3'-C2'	-5.28	98.35	103.10
1	AA	246	DG	O4'-C1'-C2'	-5.28	101.68	105.90
1	AA	4740	DC	P-O3'-C3'	5.28	126.03	119.70
1	AA	6520	DG	O4'-C1'-C2'	-5.28	101.68	105.90
2	AB	2095	DA	O4'-C1'-N9	-5.28	104.31	108.00
2	AB	3599	DT	C4'-C3'-C2'	-5.28	98.35	103.10
80	BR	4	DT	C4'-C3'-C2'	-5.28	98.35	103.10
97	Bi	1	DT	O4'-C4'-C3'	-5.28	102.39	104.50
135	CK	25	DT	O4'-C4'-C3'	-5.28	102.39	104.50
207	DU	37	DA	C4'-C3'-C2'	-5.28	98.35	103.10
264	EP	35	DT	C6-C5-C7	5.28	126.07	122.90
301	E0	35	DT	O4'-C1'-C2'	-5.28	101.68	105.90
1	AA	1691	DA	C5-C6-N6	-5.28	119.48	123.70
1	AA	2361	DG	C1'-O4'-C4'	-5.28	104.83	110.10
1	AA	2793	DT	O4'-C4'-C3'	-5.28	102.39	104.50
1	AA	5784	DG	O4'-C1'-C2'	-5.28	101.68	105.90
1	AA	5832	DG	O4'-C1'-N9	5.28	111.69	108.00
2	AB	1129	DG	O4'-C1'-C2'	-5.28	101.68	105.90
2	AB	2471	DC	O4'-C1'-C2'	-5.28	101.68	105.90
2	AB	6999	DC	C2-N1-C1'	5.28	124.60	118.80
28	Ab	38	DA	O4'-C1'-C2'	-5.28	101.68	105.90
101	Bm	37	DG	O4'-C1'-C2'	-5.28	101.68	105.90
200	DN	33	DG	C1'-O4'-C4'	-5.28	104.83	110.10
304	E3	8	DA	C1'-O4'-C4'	-5.28	104.83	110.10
1	AA	3375	DT	O4'-C1'-C2'	-5.27	101.68	105.90
2	AB	1208	DA	O4'-C1'-C2'	-5.27	101.68	105.90
2	AB	4743	DT	C4'-C3'-C2'	-5.27	98.35	103.10
6	AF	46	DT	O4'-C4'-C3'	-5.27	102.39	104.50
107	Bs	37	DT	O4'-C1'-N1	5.27	111.69	108.00
108	Bt	16	DG	C1'-O4'-C4'	-5.27	104.83	110.10
1	AA	915	DG	O4'-C1'-C2'	-5.27	101.68	105.90
2	AB	5160	DA	C5-C6-N6	5.27	127.92	123.70
2	AB	6777	DG	O4'-C1'-C2'	-5.27	101.68	105.90
9	AI	24	DT	O4'-C1'-C2'	-5.27	101.68	105.90
50	Ax	35	DC	C1'-O4'-C4'	-5.27	104.83	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
142	CR	27	DT	C4'-C3'-C2'	-5.27	98.36	103.10
154	Cd	8	DG	C5-C6-O6	-5.27	125.44	128.60
183	C6	41	DT	O4'-C4'-C3'	-5.27	102.39	104.50
208	DV	23	DG	O4'-C4'-C3'	-5.27	102.39	104.50
215	Dc	23	DA	O4'-C1'-C2'	-5.27	101.68	105.90
266	ER	4	DA	N1-C6-N6	-5.27	115.44	118.60
291	Eq	4	DG	P-O3'-C3'	5.27	126.03	119.70
353	Fq	1	DG	C1'-O4'-C4'	-5.27	104.83	110.10
371	F8	1	DT	O4'-C4'-C3'	-5.27	102.39	104.50
403	Ge	7	DT	P-O3'-C3'	5.27	126.03	119.70
1	AA	4198	DC	C6-N1-C2	-5.27	118.19	120.30
2	AB	2411	DA	O4'-C1'-N9	5.27	111.69	108.00
130	CF	19	DT	C4'-C3'-C2'	-5.27	98.36	103.10
1	AA	91	DC	O4'-C4'-C3'	-5.27	102.39	104.50
1	AA	3165	DT	C4'-C3'-C2'	-5.27	98.36	103.10
1	AA	3289	DG	O4'-C4'-C3'	-5.27	102.39	104.50
1	AA	4178	DT	C1'-O4'-C4'	-5.27	104.83	110.10
1	AA	4274	DA	O4'-C1'-C2'	-5.27	101.68	105.90
2	AB	1100	DG	C1'-O4'-C4'	-5.27	104.83	110.10
2	AB	2724	DG	O4'-C1'-C2'	-5.27	101.68	105.90
2	AB	3399	DG	O4'-C4'-C3'	-5.27	102.39	104.50
2	AB	4789	DC	P-O3'-C3'	5.27	126.03	119.70
64	BB	30	DA	C1'-O4'-C4'	-5.27	104.83	110.10
71	BI	26	DG	O4'-C1'-C2'	-5.27	101.69	105.90
79	BQ	17	DC	C4'-C3'-C2'	-5.27	98.36	103.10
351	Fo	6	DC	O4'-C1'-C2'	-5.27	101.68	105.90
1	AA	4810	DA	O4'-C1'-C2'	-5.27	101.69	105.90
1	AA	6130	DC	P-O5'-C5'	5.27	129.33	120.90
2	AB	7366	DA	O4'-C1'-C2'	-5.27	101.69	105.90
22	AV	20	DC	O4'-C1'-C2'	-5.27	101.69	105.90
44	Ar	42	DT	C4'-C3'-C2'	-5.27	98.36	103.10
117	B2	10	DG	O4'-C1'-C2'	-5.27	101.69	105.90
135	CK	15	DG	C5-C6-O6	-5.27	125.44	128.60
194	DH	40	DT	C4'-C3'-C2'	-5.27	98.36	103.10
259	EK	9	DT	C4'-C3'-C2'	-5.27	98.36	103.10
284	Ej	22	DG	O4'-C4'-C3'	-5.27	102.39	104.50
444	HJ	5	DT	O4'-C4'-C3'	-5.27	102.39	104.50
1	AA	156	DG	O4'-C1'-C2'	-5.27	101.69	105.90
1	AA	1820	DC	O4'-C1'-N1	5.27	111.69	108.00
1	AA	4340	DC	O4'-C1'-C2'	-5.27	101.69	105.90
1	AA	5525	DT	C4'-C3'-C2'	-5.27	98.36	103.10
2	AB	2020	DG	P-O3'-C3'	5.27	126.02	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	6219	DA	P-O3'-C3'	5.27	126.02	119.70
128	CD	16	DC	O4'-C1'-C2'	-5.27	101.69	105.90
148	CX	27	DA	C4'-C3'-C2'	-5.27	98.36	103.10
226	Dn	34	DA	O4'-C1'-N9	-5.27	104.31	108.00
1	AA	4054	DG	O4'-C1'-C2'	-5.26	101.69	105.90
2	AB	3575	DC	C4'-C3'-C2'	-5.26	98.36	103.10
2	AB	4542	DC	O4'-C4'-C3'	-5.26	102.39	104.50
95	Bg	37	DA	O4'-C1'-C2'	-5.26	101.69	105.90
210	DX	38	DT	C4'-C3'-C2'	-5.26	98.36	103.10
359	Fw	16	DA	O4'-C1'-C2'	-5.26	101.69	105.90
369	F6	14	DT	C6-C5-C7	-5.26	119.74	122.90
1	AA	486	DC	C1'-O4'-C4'	-5.26	104.84	110.10
1	AA	3017	DC	O4'-C4'-C3'	-5.26	102.39	104.50
2	AB	1890	DG	C1'-O4'-C4'	-5.26	104.84	110.10
2	AB	4852	DG	C1'-O4'-C4'	-5.26	104.84	110.10
217	De	33	DC	P-O3'-C3'	5.26	126.02	119.70
303	E2	13	DG	O4'-C1'-C2'	-5.26	101.69	105.90
1	AA	376	DC	C2-N1-C1'	5.26	124.59	118.80
2	AB	2281	DC	C4'-C3'-C2'	-5.26	98.36	103.10
2	AB	4680	DT	O4'-C1'-C2'	-5.26	101.69	105.90
2	AB	4912	DA	O4'-C1'-C2'	-5.26	101.69	105.90
2	AB	5552	DT	C4'-C3'-C2'	-5.26	98.36	103.10
2	AB	5737	DC	O4'-C4'-C3'	-5.26	102.39	104.50
318	FH	9	DG	C1'-O4'-C4'	-5.26	104.84	110.10
1	AA	7075	DA	P-O3'-C3'	5.26	126.01	119.70
2	AB	1073	DC	C1'-O4'-C4'	-5.26	104.84	110.10
2	AB	2196	DG	C4'-C3'-C2'	-5.26	98.37	103.10
2	AB	2321	DC	O4'-C1'-C2'	-5.26	101.69	105.90
2	AB	4002	DG	O4'-C1'-C2'	-5.26	101.69	105.90
2	AB	5887	DG	P-O3'-C3'	-5.26	113.39	119.70
93	Be	30	DG	C1'-O4'-C4'	-5.26	104.84	110.10
129	CE	42	DG	O4'-C1'-C2'	-5.26	101.69	105.90
142	CR	37	DT	C1'-O4'-C4'	-5.26	104.84	110.10
319	FI	16	DC	O4'-C1'-C2'	-5.26	101.69	105.90
346	Fj	9	DG	O4'-C1'-C2'	-5.26	101.69	105.90
351	Fo	8	DG	C4'-C3'-C2'	-5.26	98.37	103.10
1	AA	836	DC	O4'-C1'-C2'	-5.26	101.69	105.90
1	AA	5053	DA	P-O3'-C3'	5.26	126.01	119.70
2	AB	246	DG	O4'-C1'-N9	5.26	111.68	108.00
2	AB	850	DT	C4'-C3'-C2'	-5.26	98.37	103.10
2	AB	2680	DT	C4'-C3'-C2'	-5.26	98.37	103.10
2	AB	3226	DT	C4'-C3'-C2'	-5.26	98.37	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	3444	DA	O4'-C4'-C3'	-5.26	102.40	104.50
125	CA	28	DA	N1-C6-N6	-5.26	115.44	118.60
1	AA	1054	DA	O4'-C1'-C2'	-5.26	101.69	105.90
1	AA	1979	DT	C4'-C3'-C2'	-5.26	98.37	103.10
1	AA	2896	DT	C1'-O4'-C4'	-5.26	104.84	110.10
1	AA	6442	DG	O4'-C1'-N9	5.26	111.68	108.00
2	AB	608	DG	O4'-C4'-C3'	-5.26	102.40	104.50
2	AB	854	DC	C1'-O4'-C4'	-5.26	104.84	110.10
2	AB	1600	DC	O4'-C1'-C2'	-5.26	101.69	105.90
2	AB	1983	DG	O4'-C1'-N9	5.26	111.68	108.00
2	AB	4785	DT	C4'-C3'-C2'	-5.26	98.37	103.10
2	AB	5454	DA	O4'-C1'-C2'	-5.26	101.69	105.90
2	AB	7400	DC	O4'-C1'-C2'	-5.26	101.69	105.90
134	CJ	4	DT	O4'-C4'-C3'	-5.26	102.40	104.50
155	Ce	33	DG	C4'-C3'-C2'	-5.26	98.37	103.10
375	GC	19	DT	C4'-C3'-C2'	-5.26	98.37	103.10
434	G9	11	DA	O4'-C1'-C2'	-5.26	101.69	105.90
1	AA	416	DT	O4'-C4'-C3'	-5.25	102.40	104.50
2	AB	5774	DT	O4'-C1'-C2'	-5.25	101.70	105.90
2	AB	6147	DA	N1-C6-N6	-5.25	115.45	118.60
2	AB	6303	DA	C5-C6-N6	-5.25	119.50	123.70
15	AO	1	DT	O4'-C4'-C3'	-5.25	102.40	104.50
114	Bz	8	DC	O4'-C1'-C2'	-5.25	101.70	105.90
154	Cd	22	DT	P-O3'-C3'	5.25	126.01	119.70
437	HC	20	DA	P-O3'-C3'	5.25	126.01	119.70
1	AA	1628	DT	C4'-C3'-C2'	-5.25	98.37	103.10
1	AA	4141	DG	P-O3'-C3'	5.25	126.00	119.70
2	AB	5807	DC	C1'-O4'-C4'	-5.25	104.85	110.10
2	AB	6057	DC	C1'-O4'-C4'	-5.25	104.85	110.10
182	C5	34	DG	O4'-C1'-C2'	-5.25	101.70	105.90
218	Df	15	DC	O4'-C1'-C2'	-5.25	101.70	105.90
225	Dm	30	DC	O4'-C1'-C2'	-5.25	101.70	105.90
374	GB	1	DA	N1-C6-N6	-5.25	115.45	118.60
1	AA	1599	DT	O4'-C1'-C2'	-5.25	101.70	105.90
1	AA	2901	DT	O4'-C4'-C3'	-5.25	102.40	104.50
1	AA	6119	DG	C1'-O4'-C4'	-5.25	104.85	110.10
2	AB	4887	DG	P-O3'-C3'	5.25	126.00	119.70
61	A8	16	DG	C1'-O4'-C4'	-5.25	104.85	110.10
96	Bh	25	DG	C1'-O4'-C4'	-5.25	104.85	110.10
189	DC	28	DT	P-O5'-C5'	5.25	129.30	120.90
262	EN	23	DC	C1'-O4'-C4'	-5.25	104.85	110.10
329	FS	14	DA	N1-C6-N6	-5.25	115.45	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1399	DC	P-O5'-C5'	5.25	129.30	120.90
2	AB	3621	DG	O4'-C1'-C2'	-5.25	101.70	105.90
2	AB	5717	DA	P-O3'-C3'	5.25	126.00	119.70
151	Ca	2	DG	C4'-C3'-C2'	-5.25	98.38	103.10
162	Cl	35	DA	P-O3'-C3'	5.25	126.00	119.70
171	Cu	30	DT	O4'-C1'-C2'	-5.25	101.70	105.90
223	Dk	24	DT	C1'-O4'-C4'	-5.25	104.85	110.10
234	Dv	19	DT	C4'-C3'-C2'	-5.25	98.38	103.10
419	Gu	23	DT	O4'-C4'-C3'	-5.25	102.40	104.50
1	AA	2681	DC	P-O5'-C5'	5.25	129.30	120.90
2	AB	520	DG	C4'-C3'-C2'	-5.25	98.38	103.10
2	AB	2092	DC	P-O5'-C5'	5.25	129.30	120.90
2	AB	2893	DT	C4'-C3'-C2'	-5.25	98.38	103.10
2	AB	3146	DG	O4'-C1'-N9	5.25	111.67	108.00
70	BH	9	DA	O4'-C1'-C2'	-5.25	101.70	105.90
80	BR	20	DG	C1'-O4'-C4'	-5.25	104.85	110.10
308	E7	16	DG	O4'-C1'-C2'	-5.25	101.70	105.90
332	FV	24	DT	P-O3'-C3'	5.25	126.00	119.70
378	GF	20	DA	N1-C6-N6	-5.25	115.45	118.60
1	AA	2811	DA	O4'-C1'-C2'	-5.25	101.70	105.90
1	AA	4881	DA	O4'-C1'-C2'	-5.25	101.70	105.90
1	AA	7403	DC	C2-N1-C1'	5.25	124.57	118.80
2	AB	2461	DT	C4'-C3'-C2'	-5.25	98.38	103.10
11	AK	21	DA	P-O3'-C3'	5.25	126.00	119.70
144	CT	38	DT	C4'-C3'-C2'	-5.25	98.38	103.10
172	Cv	29	DT	C4'-C3'-C2'	-5.25	98.38	103.10
376	GD	28	DT	O4'-C1'-N1	5.25	111.67	108.00
390	GR	16	DG	O4'-C4'-C3'	-5.25	102.40	104.50
407	Gi	18	DA	O4'-C1'-C2'	-5.25	101.70	105.90
1	AA	5716	DG	O4'-C1'-C2'	-5.25	101.70	105.90
301	E0	31	DA	C4'-C3'-C2'	-5.25	98.38	103.10
1	AA	848	DC	O4'-C1'-C2'	-5.24	101.70	105.90
1	AA	7318	DG	C4'-C3'-C2'	-5.24	98.38	103.10
2	AB	2363	DT	C4'-C3'-C2'	-5.24	98.38	103.10
2	AB	2652	DC	O4'-C1'-C2'	-5.24	101.71	105.90
2	AB	3949	DC	P-O3'-C3'	5.24	125.99	119.70
2	AB	4204	DT	C4'-C3'-C2'	-5.24	98.38	103.10
2	AB	4466	DC	O4'-C1'-N1	5.24	111.67	108.00
2	AB	5652	DC	P-O5'-C5'	5.24	129.29	120.90
29	Ac	26	DT	O4'-C1'-N1	5.24	111.67	108.00
157	Cg	35	DG	O4'-C1'-C2'	-5.24	101.71	105.90
328	FR	28	DT	O4'-C4'-C3'	-5.24	102.40	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
356	Ft	5	DT	C4'-C3'-C2'	-5.24	98.38	103.10
387	GO	21	DT	O4'-C4'-C3'	-5.24	102.40	104.50
1	AA	712	DT	O4'-C1'-C2'	-5.24	101.71	105.90
1	AA	1530	DG	C4'-C3'-C2'	-5.24	98.38	103.10
1	AA	6495	DA	O4'-C1'-C2'	-5.24	101.71	105.90
101	Bm	41	DC	O4'-C4'-C3'	-5.24	102.40	104.50
245	D6	18	DC	O4'-C1'-N1	5.24	111.67	108.00
1	AA	2817	DT	C4'-C3'-C2'	-5.24	98.38	103.10
2	AB	173	DG	O4'-C1'-C2'	-5.24	101.71	105.90
2	AB	749	DT	O4'-C1'-C2'	-5.24	101.71	105.90
2	AB	1008	DT	C4'-C3'-C2'	-5.24	98.38	103.10
97	Bi	8	DT	O4'-C4'-C3'	-5.24	102.40	104.50
106	Br	11	DG	O4'-C1'-C2'	-5.24	101.71	105.90
213	Da	37	DG	P-O3'-C3'	5.24	125.99	119.70
291	Eq	14	DC	C6-N1-C1'	-5.24	114.51	120.80
327	FQ	24	DG	O4'-C1'-C2'	-5.24	101.71	105.90
436	HB	1	DG	O4'-C4'-C3'	-5.24	102.40	104.50
1	AA	4923	DT	C4'-C3'-C2'	-5.24	98.39	103.10
2	AB	31	DT	O4'-C4'-C3'	-5.24	102.41	104.50
2	AB	1064	DG	P-O3'-C3'	5.24	125.99	119.70
29	Ac	24	DG	C1'-O4'-C4'	-5.24	104.86	110.10
36	Aj	12	DG	C4'-C3'-C2'	-5.24	98.39	103.10
101	Bm	10	DT	P-O5'-C5'	5.24	129.28	120.90
121	B6	4	DT	O4'-C4'-C3'	-5.24	102.41	104.50
196	DJ	36	DC	O4'-C1'-C2'	-5.24	101.71	105.90
219	Dg	16	DA	O4'-C4'-C3'	-5.24	102.40	104.50
263	EO	19	DA	C1'-O4'-C4'	-5.24	104.86	110.10
269	EU	22	DG	N1-C6-O6	5.24	123.04	119.90
348	Fl	8	DG	C1'-O4'-C4'	-5.24	104.86	110.10
2	AB	861	DC	O4'-C1'-C2'	-5.24	101.71	105.90
1	AA	1038	DC	P-O3'-C3'	5.24	125.98	119.70
1	AA	4750	DA	C4'-C3'-C2'	-5.24	98.39	103.10
2	AB	47	DA	C5-C6-N6	5.24	127.89	123.70
2	AB	178	DG	P-O3'-C3'	5.24	125.98	119.70
2	AB	5152	DT	C6-C5-C7	-5.24	119.76	122.90
50	Ax	46	DT	O4'-C4'-C3'	-5.24	102.41	104.50
116	B1	24	DA	O4'-C1'-C2'	-5.24	101.71	105.90
206	DT	24	DC	O4'-C1'-C2'	-5.24	101.71	105.90
246	D7	22	DT	C1'-O4'-C4'	-5.24	104.86	110.10
408	Gj	9	DA	P-O3'-C3'	5.24	125.98	119.70
455	HU	5	DG	C4'-C3'-C2'	-5.24	98.39	103.10
1	AA	831	DA	C4'-C3'-C2'	-5.23	98.39	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2717	DA	C1'-O4'-C4'	-5.23	104.87	110.10
178	C1	1	DT	C6-N1-C1'	-5.23	112.55	120.40
372	F9	6	DC	C4'-C3'-C2'	-5.23	98.39	103.10
441	HG	1	DC	C6-N1-C1'	-5.23	114.52	120.80
1	AA	6487	DA	C1'-O4'-C4'	-5.23	104.87	110.10
2	AB	32	DC	P-O5'-C5'	5.23	129.27	120.90
2	AB	4031	DT	O4'-C1'-C2'	-5.23	101.71	105.90
2	AB	4281	DA	O4'-C1'-C2'	-5.23	101.72	105.90
2	AB	5846	DC	C6-N1-C2	-5.23	118.21	120.30
2	AB	5854	DG	C5-C6-O6	-5.23	125.46	128.60
2	AB	6009	DT	C4'-C3'-C2'	-5.23	98.39	103.10
206	DT	10	DC	O4'-C1'-C2'	-5.23	101.71	105.90
260	EL	33	DT	C4'-C3'-C2'	-5.23	98.39	103.10
282	Eh	13	DA	O4'-C1'-C2'	-5.23	101.71	105.90
364	F1	11	DA	O4'-C1'-C2'	-5.23	101.71	105.90
1	AA	5566	DC	O4'-C1'-C2'	-5.23	101.72	105.90
1	AA	5774	DT	C4'-C3'-C2'	-5.23	98.39	103.10
2	AB	1699	DC	O4'-C1'-C2'	-5.23	101.72	105.90
207	DU	23	DG	O4'-C4'-C3'	-5.23	102.41	104.50
338	Fb	27	DA	O4'-C1'-C2'	-5.23	101.72	105.90
1	AA	939	DC	C4'-C3'-C2'	-5.23	98.39	103.10
1	AA	3427	DC	P-O3'-C3'	5.23	125.97	119.70
2	AB	3791	DG	O4'-C4'-C3'	-5.23	102.41	104.50
17	AQ	47	DT	O4'-C4'-C3'	-5.23	102.41	104.50
1	AA	5102	DA	O4'-C1'-C2'	-5.23	101.72	105.90
2	AB	1884	DG	C1'-O4'-C4'	-5.23	104.87	110.10
2	AB	2768	DA	C4'-C3'-C2'	-5.23	98.40	103.10
2	AB	6965	DT	O4'-C1'-N1	5.23	111.66	108.00
85	BW	35	DC	O4'-C1'-N1	5.23	111.66	108.00
133	CI	9	DG	O4'-C1'-C2'	-5.23	101.72	105.90
142	CR	36	DT	O4'-C4'-C3'	-5.23	102.41	104.50
250	EB	29	DG	N1-C6-O6	5.23	123.04	119.90
321	FK	1	DA	C1'-O4'-C4'	-5.23	104.87	110.10
1	AA	1404	DC	O4'-C4'-C3'	-5.23	102.41	104.50
114	Bz	25	DT	O4'-C1'-C2'	-5.23	101.72	105.90
316	FF	9	DT	O4'-C1'-C2'	-5.23	101.72	105.90
1	AA	547	DA	C4'-C3'-C2'	-5.22	98.40	103.10
1	AA	1707	DA	O4'-C1'-C2'	-5.22	101.72	105.90
1	AA	5522	DG	O4'-C4'-C3'	-5.22	102.41	104.50
1	AA	6492	DA	O4'-C1'-C2'	-5.22	101.72	105.90
1	AA	7162	DG	O4'-C4'-C3'	-5.22	102.41	104.50
2	AB	5397	DC	P-O5'-C5'	5.22	129.26	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
92	Bd	42	DT	O4'-C4'-C3'	-5.22	102.41	104.50
102	Bn	15	DA	O4'-C1'-C2'	-5.22	101.72	105.90
230	Dr	16	DA	P-O3'-C3'	5.22	125.97	119.70
254	EF	11	DG	C1'-O4'-C4'	-5.22	104.88	110.10
357	Fu	13	DG	O4'-C1'-C2'	-5.22	101.72	105.90
401	Gc	27	DA	N1-C6-N6	-5.22	115.47	118.60
1	AA	4395	DT	C4'-C3'-C2'	-5.22	98.40	103.10
2	AB	2126	DG	C1'-O4'-C4'	-5.22	104.88	110.10
2	AB	3057	DT	P-O3'-C3'	5.22	125.97	119.70
2	AB	3544	DG	C1'-O4'-C4'	-5.22	104.88	110.10
2	AB	5259	DA	O4'-C4'-C3'	-5.22	102.41	104.50
2	AB	6578	DC	C4'-C3'-C2'	-5.22	98.40	103.10
19	AS	4	DT	O4'-C4'-C3'	-5.22	102.41	104.50
91	Bc	14	DG	C4-N9-C1'	5.22	133.29	126.50
211	DY	4	DA	N1-C6-N6	-5.22	115.47	118.60
295	Eu	27	DA	P-O3'-C3'	5.22	125.97	119.70
406	Gh	9	DC	O4'-C1'-N1	5.22	111.66	108.00
1	AA	1139	DG	C5-C6-O6	-5.22	125.47	128.60
2	AB	4021	DG	O4'-C1'-N9	5.22	111.66	108.00
22	AV	43	DT	C3'-C2'-C1'	-5.22	96.23	102.50
345	Fi	10	DC	C6-N1-C1'	-5.22	114.53	120.80
1	AA	1857	DG	C4'-C3'-C2'	-5.22	98.40	103.10
1	AA	3754	DC	O4'-C1'-N1	5.22	111.65	108.00
1	AA	6698	DG	O4'-C1'-C2'	-5.22	101.72	105.90
2	AB	4324	DC	C2-N1-C1'	5.22	124.54	118.80
20	AT	4	DT	O4'-C4'-C3'	-5.22	102.41	104.50
253	EE	2	DT	C1'-O4'-C4'	-5.22	104.88	110.10
255	EG	22	DT	C4'-C3'-C2'	-5.22	98.40	103.10
332	FV	1	DG	C4'-C3'-C2'	-5.22	98.40	103.10
346	Fj	23	DT	O4'-C1'-C2'	-5.22	101.72	105.90
404	Gf	4	DT	O4'-C1'-C2'	-5.22	101.72	105.90
1	AA	1218	DC	P-O3'-C3'	5.22	125.96	119.70
1	AA	6631	DG	C1'-O4'-C4'	-5.22	104.88	110.10
2	AB	5223	DG	C1'-O4'-C4'	-5.22	104.88	110.10
214	Db	33	DA	C4'-C3'-C2'	-5.22	98.40	103.10
1	AA	3265	DA	O4'-C1'-C2'	-5.22	101.73	105.90
1	AA	7131	DT	O4'-C1'-C2'	-5.22	101.73	105.90
1	AA	7196	DA	P-O3'-C3'	5.22	125.96	119.70
2	AB	2785	DA	O4'-C1'-C2'	-5.22	101.73	105.90
2	AB	2875	DT	C4'-C3'-C2'	-5.22	98.40	103.10
2	AB	6346	DC	P-O3'-C3'	5.22	125.96	119.70
16	AP	3	DT	C6-C5-C7	-5.22	119.77	122.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
89	Ba	45	DG	N1-C6-O6	5.22	123.03	119.90
184	C7	30	DT	C1'-O4'-C4'	-5.22	104.88	110.10
257	EI	9	DC	O4'-C1'-C2'	-5.22	101.73	105.90
292	Er	31	DA	P-O3'-C3'	5.22	125.96	119.70
395	GW	23	DG	C4'-C3'-C2'	-5.22	98.41	103.10
1	AA	432	DG	O4'-C4'-C3'	-5.21	102.41	104.50
1	AA	6832	DT	C4'-C3'-C2'	-5.21	98.41	103.10
2	AB	2146	DG	O4'-C4'-C3'	-5.21	102.41	104.50
2	AB	4936	DC	O4'-C1'-C2'	-5.21	101.73	105.90
2	AB	5027	DG	O4'-C4'-C3'	-5.21	102.41	104.50
55	A2	16	DT	C4'-C3'-C2'	-5.21	98.41	103.10
88	BZ	9	DA	O4'-C1'-C2'	-5.21	101.73	105.90
269	EU	35	DC	O4'-C4'-C3'	-5.21	102.41	104.50
291	Eq	24	DA	O4'-C1'-C2'	-5.21	101.73	105.90
351	Fo	20	DT	O4'-C4'-C3'	-5.21	102.41	104.50
351	Fo	24	DT	O4'-C4'-C3'	-5.21	102.42	104.50
1	AA	5053	DA	C1'-O4'-C4'	-5.21	104.89	110.10
1	AA	6117	DA	P-O3'-C3'	5.21	125.96	119.70
71	BI	37	DT	P-O3'-C3'	5.21	125.96	119.70
138	CN	8	DT	O4'-C4'-C3'	-5.21	102.42	104.50
183	C6	33	DG	O4'-C1'-C2'	-5.21	101.73	105.90
1	AA	1371	DG	C4'-C3'-C2'	-5.21	98.41	103.10
1	AA	1959	DA	O4'-C1'-C2'	-5.21	101.73	105.90
1	AA	6974	DT	C4'-C3'-C2'	-5.21	98.41	103.10
2	AB	66	DT	C4'-C3'-C2'	-5.21	98.41	103.10
2	AB	2412	DC	O4'-C1'-N1	5.21	111.65	108.00
2	AB	4546	DC	P-O5'-C5'	5.21	129.24	120.90
2	AB	4669	DG	P-O3'-C3'	5.21	125.95	119.70
2	AB	5628	DT	C4'-C3'-C2'	-5.21	98.41	103.10
68	BF	19	DC	O4'-C1'-C2'	-5.21	101.73	105.90
132	CH	13	DG	O4'-C1'-C2'	-5.21	101.73	105.90
165	Co	27	DA	C4'-C3'-C2'	-5.21	98.41	103.10
427	G2	15	DA	C4'-C3'-C2'	-5.21	98.41	103.10
1	AA	961	DG	O4'-C1'-N9	5.21	111.65	108.00
1	AA	2583	DC	O4'-C1'-N1	5.21	111.65	108.00
1	AA	6811	DG	C1'-O4'-C4'	-5.21	104.89	110.10
2	AB	4982	DG	C5-C6-O6	-5.21	125.47	128.60
69	BG	23	DG	C1'-O4'-C4'	-5.21	104.89	110.10
184	C7	5	DC	O4'-C1'-N1	5.21	111.65	108.00
340	Fd	1	DA	O4'-C1'-C2'	-5.21	101.73	105.90
389	GQ	22	DT	O4'-C4'-C3'	-5.21	102.42	104.50
1	AA	1513	DC	O4'-C4'-C3'	-5.21	102.42	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	5833	DC	O4'-C1'-N1	5.21	111.65	108.00
2	AB	313	DT	O4'-C4'-C3'	-5.21	102.42	104.50
2	AB	4211	DT	O4'-C1'-C2'	-5.21	101.73	105.90
2	AB	5219	DA	C4'-C3'-C2'	-5.21	98.41	103.10
7	AG	30	DT	C4'-C3'-C2'	-5.21	98.41	103.10
199	DM	32	DT	P-O3'-C3'	5.21	125.95	119.70
305	E4	26	DC	C2-N1-C1'	5.21	124.53	118.80
338	Fb	8	DT	C4'-C3'-C2'	-5.21	98.41	103.10
1	AA	4071	DG	P-O3'-C3'	5.21	125.95	119.70
2	AB	3138	DA	O4'-C1'-C2'	-5.21	101.73	105.90
2	AB	4942	DG	C4'-C3'-C2'	-5.21	98.41	103.10
2	AB	5416	DG	C5-C6-O6	-5.21	125.48	128.60
2	AB	6022	DC	P-O3'-C3'	-5.21	113.45	119.70
5	AE	32	DG	O4'-C4'-C3'	-5.21	102.42	104.50
35	Ai	3	DT	O4'-C4'-C3'	-5.21	102.42	104.50
39	Am	1	DT	C1'-O4'-C4'	-5.21	104.89	110.10
161	Ck	22	DG	C5-C6-O6	-5.21	125.48	128.60
207	DU	32	DA	N1-C6-N6	-5.21	115.48	118.60
265	EQ	9	DC	P-O3'-C3'	5.21	125.95	119.70
267	ES	19	DT	C4'-C3'-C2'	-5.21	98.41	103.10
350	Fn	19	DG	C4'-C3'-C2'	-5.21	98.41	103.10
1	AA	6761	DA	O4'-C1'-C2'	-5.21	101.74	105.90
2	AB	1865	DC	O4'-C1'-C2'	-5.21	101.74	105.90
1	AA	3686	DT	C4'-C3'-C2'	-5.20	98.42	103.10
1	AA	4681	DT	C4'-C3'-C2'	-5.20	98.42	103.10
1	AA	5207	DT	C4'-C3'-C2'	-5.20	98.42	103.10
2	AB	893	DT	P-O3'-C3'	5.20	125.94	119.70
2	AB	3054	DG	P-O3'-C3'	5.20	125.94	119.70
2	AB	4242	DG	C1'-O4'-C4'	-5.20	104.90	110.10
3	AC	5	DT	O4'-C4'-C3'	-5.20	102.42	104.50
15	AO	45	DT	O4'-C4'-C3'	-5.20	102.42	104.50
84	BV	44	DG	N1-C6-O6	5.20	123.02	119.90
108	Bt	37	DA	C1'-O4'-C4'	-5.20	104.90	110.10
122	B7	30	DT	O4'-C1'-C2'	-5.20	101.74	105.90
208	DV	27	DA	N1-C6-N6	-5.20	115.48	118.60
228	Dp	9	DC	O4'-C1'-C2'	-5.20	101.74	105.90
365	F2	26	DT	O4'-C4'-C3'	-5.20	102.42	104.50
2	AB	2193	DA	C4'-C3'-C2'	-5.20	98.42	103.10
2	AB	2695	DC	O4'-C1'-C2'	-5.20	101.74	105.90
2	AB	3276	DG	O4'-C1'-C2'	-5.20	101.74	105.90
111	Bw	27	DA	O4'-C1'-C2'	-5.20	101.74	105.90
1	AA	4814	DC	C4'-C3'-C2'	-5.20	98.42	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	5050	DG	C4'-C3'-C2'	-5.20	98.42	103.10
1	AA	5927	DG	O4'-C1'-C2'	-5.20	101.74	105.90
2	AB	1499	DT	O4'-C4'-C3'	-5.20	102.42	104.50
2	AB	1726	DA	C4'-C3'-C2'	-5.20	98.42	103.10
2	AB	2228	DT	O4'-C1'-C2'	-5.20	101.74	105.90
2	AB	2677	DC	O4'-C4'-C3'	-5.20	102.42	104.50
2	AB	4490	DT	O4'-C1'-C2'	-5.20	101.74	105.90
98	Bj	38	DA	C5-C6-N6	-5.20	119.54	123.70
164	Cn	6	DC	C4'-C3'-C2'	-5.20	98.42	103.10
180	C3	1	DC	O4'-C1'-N1	5.20	111.64	108.00
255	EG	13	DC	C6-N1-C2	-5.20	118.22	120.30
1	AA	2731	DT	O4'-C1'-C2'	-5.20	101.74	105.90
1	AA	2954	DT	C4'-C3'-C2'	-5.20	98.42	103.10
1	AA	3084	DT	C4'-C3'-C2'	-5.20	98.42	103.10
1	AA	5294	DA	O4'-C1'-N9	5.20	111.64	108.00
1	AA	7395	DT	C4'-C3'-C2'	-5.20	98.42	103.10
10	AJ	7	DT	C4'-C3'-C2'	-5.20	98.42	103.10
25	AY	6	DT	O4'-C4'-C3'	-5.20	102.42	104.50
44	Ar	38	DT	O4'-C4'-C3'	-5.20	102.42	104.50
53	A0	40	DA	O4'-C1'-C2'	-5.20	101.74	105.90
63	BA	48	DT	O4'-C4'-C3'	-5.20	102.42	104.50
154	Cd	2	DG	C1'-O4'-C4'	-5.20	104.90	110.10
181	C4	2	DC	O4'-C1'-N1	5.20	111.64	108.00
191	DE	37	DG	O4'-C1'-C2'	-5.20	101.74	105.90
242	D3	32	DA	O4'-C1'-C2'	-5.20	101.74	105.90
283	Ei	10	DT	C4'-C3'-C2'	-5.20	98.42	103.10
361	Fy	21	DA	O4'-C1'-C2'	-5.20	101.74	105.90
1	AA	4303	DT	C4'-C3'-C2'	-5.20	98.42	103.10
2	AB	4452	DA	P-O3'-C3'	5.20	125.94	119.70
20	AT	31	DT	O4'-C1'-C2'	-5.20	101.74	105.90
389	GQ	26	DT	O4'-C4'-C3'	-5.20	102.42	104.50
1	AA	2978	DG	C1'-O4'-C4'	-5.20	104.90	110.10
1	AA	3198	DC	P-O3'-C3'	5.20	125.94	119.70
1	AA	5509	DA	O4'-C1'-C2'	-5.20	101.74	105.90
1	AA	6413	DG	O4'-C1'-N9	5.20	111.64	108.00
6	AF	5	DT	O4'-C4'-C3'	-5.20	102.42	104.50
59	A6	20	DA	O4'-C1'-C2'	-5.20	101.74	105.90
112	Bx	30	DA	O4'-C1'-C2'	-5.20	101.74	105.90
133	CI	31	DG	C4'-C3'-C2'	-5.20	98.42	103.10
1	AA	4237	DC	C4'-C3'-C2'	-5.19	98.42	103.10
1	AA	5888	DT	C4'-C3'-C2'	-5.19	98.43	103.10
2	AB	3593	DG	O4'-C1'-C2'	-5.19	101.74	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	5299	DG	O4'-C1'-C2'	-5.19	101.75	105.90
2	AB	5814	DC	P-O3'-C3'	5.19	125.93	119.70
91	Bc	37	DG	C1'-O4'-C4'	-5.19	104.91	110.10
150	CZ	15	DC	C6-N1-C2	-5.19	118.22	120.30
1	AA	613	DC	C2-N1-C1'	5.19	124.51	118.80
1	AA	4655	DG	C1'-O4'-C4'	-5.19	104.91	110.10
32	Af	50	DT	O4'-C1'-C2'	-5.19	101.75	105.90
41	Ao	14	DC	O4'-C1'-N1	5.19	111.64	108.00
55	A2	43	DT	P-O3'-C3'	-5.19	113.47	119.70
174	Cx	31	DG	P-O3'-C3'	5.19	125.93	119.70
210	DX	23	DG	O4'-C1'-N9	5.19	111.63	108.00
241	D2	31	DT	C1'-O4'-C4'	-5.19	104.91	110.10
304	E3	5	DG	O4'-C1'-C2'	-5.19	101.75	105.90
1	AA	6268	DA	O4'-C4'-C3'	-5.19	102.42	104.50
2	AB	3940	DA	O4'-C1'-C2'	-5.19	101.75	105.90
2	AB	5177	DT	C4'-C3'-C2'	-5.19	98.43	103.10
2	AB	6831	DA	O4'-C1'-C2'	-5.19	101.75	105.90
15	AO	30	DT	C4'-C3'-C2'	-5.19	98.43	103.10
16	AP	29	DC	P-O3'-C3'	5.19	125.93	119.70
85	BW	42	DG	C1'-O4'-C4'	-5.19	104.91	110.10
87	BY	24	DT	C4'-C3'-C2'	-5.19	98.43	103.10
332	FV	16	DC	O4'-C1'-C2'	-5.19	101.75	105.90
370	F7	22	DT	O4'-C4'-C3'	-5.19	102.42	104.50
1	AA	635	DG	O4'-C1'-C2'	-5.19	101.75	105.90
1	AA	5962	DG	O4'-C1'-C2'	-5.19	101.75	105.90
2	AB	3834	DA	C1'-O4'-C4'	-5.19	104.91	110.10
2	AB	7102	DG	O4'-C4'-C3'	-5.19	102.42	104.50
2	AB	7327	DT	O4'-C4'-C3'	-5.19	102.42	104.50
37	Ak	3	DT	O4'-C4'-C3'	-5.19	102.42	104.50
234	Dv	9	DC	C3'-C2'-C1'	-5.19	96.27	102.50
1	AA	511	DA	P-O3'-C3'	5.19	125.92	119.70
1	AA	1844	DG	C1'-O4'-C4'	-5.19	104.91	110.10
1	AA	4365	DT	C4'-C3'-C2'	-5.19	98.43	103.10
1	AA	5107	DC	O4'-C1'-C2'	-5.19	101.75	105.90
1	AA	5228	DT	O4'-C1'-C2'	-5.19	101.75	105.90
1	AA	6923	DG	O4'-C1'-C2'	-5.19	101.75	105.90
2	AB	146	DT	C4'-C3'-C2'	-5.19	98.43	103.10
2	AB	6148	DG	O4'-C1'-C2'	-5.19	101.75	105.90
10	AJ	39	DT	O4'-C1'-C2'	-5.19	101.75	105.90
52	Az	29	DA	P-O3'-C3'	5.19	125.93	119.70
101	Bm	24	DC	O4'-C1'-C2'	-5.19	101.75	105.90
129	CE	40	DA	C4'-C3'-C2'	-5.19	98.43	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
198	DL	24	DG	C1'-O4'-C4'	-5.19	104.91	110.10
223	Dk	22	DA	C1'-O4'-C4'	-5.19	104.91	110.10
263	EO	13	DC	O4'-C1'-C2'	-5.19	101.75	105.90
296	Ev	23	DG	C3'-C2'-C1'	-5.19	96.28	102.50
339	Fc	29	DA	C1'-O4'-C4'	-5.19	104.91	110.10
345	Fi	5	DG	C4'-C3'-C2'	-5.19	98.43	103.10
1	AA	5125	DG	O4'-C1'-C2'	-5.19	101.75	105.90
2	AB	1422	DA	O4'-C1'-C2'	-5.19	101.75	105.90
2	AB	6374	DG	N1-C6-O6	5.19	123.01	119.90
120	B5	11	DA	O4'-C1'-C2'	-5.19	101.75	105.90
176	Cz	38	DC	C4'-C3'-C2'	-5.19	98.43	103.10
251	EC	11	DG	O4'-C1'-C2'	-5.19	101.75	105.90
357	Fu	17	DC	O4'-C1'-N1	-5.19	104.37	108.00
1	AA	2992	DC	C4'-C3'-C2'	-5.18	98.43	103.10
2	AB	1073	DC	O4'-C1'-N1	5.18	111.63	108.00
2	AB	1142	DG	C4'-C3'-C2'	-5.18	98.44	103.10
2	AB	5329	DT	O4'-C1'-C2'	-5.18	101.75	105.90
2	AB	6216	DG	C1'-O4'-C4'	-5.18	104.92	110.10
67	BE	49	DT	O4'-C4'-C3'	-5.18	102.43	104.50
177	C0	42	DG	C1'-O4'-C4'	-5.18	104.92	110.10
212	DZ	30	DG	O4'-C1'-C2'	-5.18	101.75	105.90
1	AA	2802	DC	O4'-C1'-N1	5.18	111.63	108.00
2	AB	1483	DC	P-O3'-C3'	5.18	125.92	119.70
2	AB	2927	DG	O4'-C1'-C2'	-5.18	101.75	105.90
1	AA	4016	DG	P-O3'-C3'	5.18	125.92	119.70
2	AB	1273	DG	C4'-C3'-C2'	-5.18	98.44	103.10
2	AB	2704	DG	O4'-C1'-C2'	-5.18	101.76	105.90
2	AB	3778	DT	C4'-C3'-C2'	-5.18	98.44	103.10
35	Ai	46	DT	O4'-C4'-C3'	-5.18	102.43	104.50
141	CQ	13	DA	P-O3'-C3'	-5.18	113.48	119.70
161	Ck	12	DT	C4'-C3'-C2'	-5.18	98.44	103.10
200	DN	3	DC	O4'-C1'-N1	5.18	111.63	108.00
1	AA	37	DG	C4'-C3'-C2'	-5.18	98.44	103.10
1	AA	3052	DA	C1'-O4'-C4'	-5.18	104.92	110.10
2	AB	1805	DT	P-O3'-C3'	5.18	125.92	119.70
102	Bn	1	DG	O4'-C1'-N9	5.18	111.63	108.00
117	B2	38	DT	C4'-C3'-C2'	-5.18	98.44	103.10
154	Cd	14	DT	C6-N1-C1'	-5.18	112.63	120.40
367	F4	16	DG	C1'-O4'-C4'	-5.18	104.92	110.10
380	GH	7	DT	P-O3'-C3'	5.18	125.92	119.70
411	Gm	22	DT	C4'-C3'-C2'	-5.18	98.44	103.10
414	Gp	19	DA	P-O3'-C3'	5.18	125.92	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	3530	DT	O4'-C1'-C2'	-5.18	101.76	105.90
2	AB	5555	DA	O4'-C1'-C2'	-5.18	101.76	105.90
90	Bb	39	DT	O4'-C1'-C2'	-5.18	101.76	105.90
96	Bh	33	DG	P-O3'-C3'	5.18	125.91	119.70
143	CS	26	DA	P-O3'-C3'	5.18	125.91	119.70
182	C5	23	DT	P-O3'-C3'	5.18	125.91	119.70
186	C9	21	DT	O4'-C4'-C3'	-5.18	102.43	104.50
191	DE	9	DT	O4'-C1'-C2'	-5.18	101.76	105.90
352	Fp	16	DG	C1'-O4'-C4'	-5.18	104.92	110.10
2	AB	144	DG	C1'-O4'-C4'	-5.18	104.92	110.10
153	Cc	15	DT	C4'-C3'-C2'	-5.18	98.44	103.10
164	Cn	6	DC	O4'-C4'-C3'	-5.18	102.43	104.50
250	EB	25	DA	O4'-C1'-C2'	-5.18	101.76	105.90
1	AA	741	DT	C4'-C3'-C2'	-5.17	98.44	103.10
1	AA	3970	DT	C4'-C3'-C2'	-5.17	98.44	103.10
1	AA	6949	DT	C4'-C3'-C2'	-5.17	98.44	103.10
2	AB	846	DA	C1'-O4'-C4'	-5.17	104.93	110.10
2	AB	1772	DT	P-O3'-C3'	5.17	125.91	119.70
2	AB	4868	DC	O4'-C1'-N1	-5.17	104.38	108.00
2	AB	5632	DG	O4'-C1'-N9	5.17	111.62	108.00
25	AY	17	DC	C1'-O4'-C4'	-5.17	104.92	110.10
142	CR	15	DT	C4'-C3'-C2'	-5.17	98.44	103.10
160	Cj	4	DC	C1'-O4'-C4'	-5.17	104.92	110.10
206	DT	9	DG	N3-C4-N9	5.17	129.10	126.00
246	D7	29	DG	O4'-C4'-C3'	-5.17	102.43	104.50
324	FN	11	DT	C1'-O4'-C4'	-5.17	104.92	110.10
408	Gj	5	DC	O4'-C4'-C3'	-5.17	102.43	104.50
1	AA	2220	DA	N1-C6-N6	-5.17	115.50	118.60
1	AA	3328	DT	P-O3'-C3'	5.17	125.91	119.70
2	AB	4569	DT	C4'-C3'-C2'	-5.17	98.44	103.10
23	AW	47	DT	O4'-C4'-C3'	-5.17	102.43	104.50
141	CQ	13	DA	C4'-C3'-C2'	-5.17	98.44	103.10
1	AA	6298	DA	O4'-C1'-C2'	-5.17	101.76	105.90
2	AB	706	DA	C4'-C3'-C2'	-5.17	98.44	103.10
2	AB	1312	DT	P-O3'-C3'	5.17	125.91	119.70
2	AB	2197	DC	C2-N1-C1'	5.17	124.49	118.80
2	AB	4354	DG	O4'-C1'-C2'	-5.17	101.76	105.90
2	AB	5416	DG	N1-C6-O6	5.17	123.00	119.90
2	AB	6814	DG	O4'-C1'-C2'	-5.17	101.76	105.90
25	AY	25	DC	O4'-C1'-C2'	-5.17	101.76	105.90
118	B3	5	DG	O4'-C1'-C2'	-5.17	101.76	105.90
146	CV	25	DG	C4'-C3'-C2'	-5.17	98.45	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
200	DN	7	DA	O4'-C1'-C2'	-5.17	101.76	105.90
244	D5	28	DA	N1-C6-N6	-5.17	115.50	118.60
293	Es	6	DT	C6-C5-C7	5.17	126.00	122.90
325	FO	11	DA	C1'-O4'-C4'	-5.17	104.93	110.10
399	Ga	19	DA	O4'-C1'-C2'	-5.17	101.76	105.90
2	AB	1983	DG	P-O3'-C3'	5.17	125.90	119.70
2	AB	4898	DC	P-O3'-C3'	5.17	125.90	119.70
210	DX	33	DT	O4'-C4'-C3'	-5.17	102.43	104.50
1	AA	4778	DA	N1-C6-N6	-5.17	115.50	118.60
2	AB	3774	DT	C4'-C3'-C2'	-5.17	98.45	103.10
2	AB	7381	DG	C1'-O4'-C4'	-5.17	104.93	110.10
54	A1	40	DT	O4'-C1'-C2'	-5.17	101.76	105.90
62	A9	33	DT	C4'-C3'-C2'	-5.17	98.45	103.10
203	DQ	38	DG	C1'-O4'-C4'	-5.17	104.93	110.10
214	Db	19	DG	C5-C6-O6	-5.17	125.50	128.60
229	Dq	33	DT	C4'-C3'-C2'	-5.17	98.45	103.10
369	F6	9	DT	C1'-O4'-C4'	-5.17	104.93	110.10
1	AA	5674	DG	C1'-O4'-C4'	-5.17	104.93	110.10
1	AA	7089	DG	O4'-C1'-C2'	-5.17	101.77	105.90
2	AB	2780	DA	P-O5'-C5'	5.17	129.17	120.90
2	AB	3219	DT	C4'-C3'-C2'	-5.17	98.45	103.10
36	Aj	41	DG	O4'-C1'-C2'	-5.17	101.77	105.90
69	BG	1	DC	O4'-C4'-C3'	-5.17	102.43	104.50
96	Bh	7	DG	C1'-O4'-C4'	-5.17	104.93	110.10
96	Bh	10	DT	C4'-C3'-C2'	-5.17	98.45	103.10
120	B5	32	DT	C4'-C3'-C2'	-5.17	98.45	103.10
154	Cd	6	DC	P-O3'-C3'	5.17	125.90	119.70
207	DU	23	DG	C1'-O4'-C4'	-5.17	104.93	110.10
258	EJ	22	DA	O4'-C1'-C2'	-5.17	101.77	105.90
264	EP	15	DA	C1'-O4'-C4'	-5.17	104.93	110.10
313	FC	1	DT	C2-N1-C1'	5.17	126.47	118.20
349	Fm	5	DC	O4'-C1'-C2'	-5.17	101.77	105.90
355	Fs	22	DA	N1-C6-N6	-5.17	115.50	118.60
367	F4	5	DA	N1-C6-N6	-5.17	115.50	118.60
384	GL	26	DT	O4'-C4'-C3'	-5.17	102.43	104.50
1	AA	697	DT	C4'-C3'-C2'	-5.17	98.45	103.10
1	AA	1398	DC	P-O3'-C3'	5.17	125.90	119.70
1	AA	6100	DG	O4'-C1'-C2'	-5.17	101.77	105.90
2	AB	747	DC	O4'-C4'-C3'	-5.17	102.43	104.50
2	AB	2066	DC	O4'-C1'-N1	5.17	111.62	108.00
2	AB	3083	DA	O4'-C1'-C2'	-5.17	101.77	105.90
60	A7	45	DT	O4'-C4'-C3'	-5.17	102.43	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
193	DG	5	DT	O4'-C4'-C3'	-5.17	102.43	104.50
1	AA	6819	DG	O4'-C1'-C2'	-5.16	101.77	105.90
2	AB	1317	DG	P-O3'-C3'	5.16	125.90	119.70
2	AB	3347	DG	O4'-C1'-C2'	-5.16	101.77	105.90
2	AB	4265	DT	C4'-C3'-C2'	-5.16	98.45	103.10
2	AB	5784	DT	C4'-C3'-C2'	-5.16	98.45	103.10
2	AB	5988	DG	O4'-C1'-C2'	-5.16	101.77	105.90
2	AB	6448	DT	C4'-C3'-C2'	-5.16	98.45	103.10
86	BX	15	DA	C1'-O4'-C4'	-5.16	104.94	110.10
159	Ci	14	DA	O4'-C1'-C2'	-5.16	101.77	105.90
192	DF	31	DA	O4'-C1'-C2'	-5.16	101.77	105.90
123	B8	14	DG	O4'-C1'-C2'	-5.16	101.77	105.90
181	C4	12	DT	C4'-C3'-C2'	-5.16	98.45	103.10
266	ER	34	DA	O4'-C1'-C2'	-5.16	101.77	105.90
412	Gn	4	DT	O4'-C4'-C3'	-5.16	102.44	104.50
1	AA	2454	DA	P-O3'-C3'	5.16	125.89	119.70
1	AA	3132	DA	C4'-C3'-C2'	-5.16	98.45	103.10
1	AA	3354	DG	P-O3'-C3'	5.16	125.89	119.70
1	AA	6410	DG	C5-C6-O6	-5.16	125.50	128.60
2	AB	2959	DG	O4'-C1'-C2'	-5.16	101.77	105.90
2	AB	3211	DA	C1'-O4'-C4'	-5.16	104.94	110.10
2	AB	4495	DG	O4'-C1'-N9	5.16	111.61	108.00
2	AB	5646	DC	C4'-C3'-C2'	-5.16	98.45	103.10
2	AB	5910	DC	P-O3'-C3'	5.16	125.89	119.70
226	Dn	7	DA	O4'-C1'-C2'	-5.16	101.77	105.90
300	Ez	34	DG	P-O3'-C3'	5.16	125.89	119.70
1	AA	7003	DA	O4'-C1'-C2'	-5.16	101.77	105.90
2	AB	1069	DC	P-O5'-C5'	-5.16	112.65	120.90
2	AB	1968	DT	C4'-C3'-C2'	-5.16	98.46	103.10
34	Ah	48	DT	O4'-C4'-C3'	-5.16	102.44	104.50
72	BJ	26	DT	C4'-C3'-C2'	-5.16	98.46	103.10
134	CJ	39	DT	P-O3'-C3'	-5.16	113.51	119.70
147	CW	25	DC	O4'-C1'-C2'	-5.16	101.77	105.90
178	C1	27	DG	P-O3'-C3'	5.16	125.89	119.70
184	C7	4	DC	C3'-C2'-C1'	-5.16	96.31	102.50
329	FS	28	DA	C1'-O4'-C4'	-5.16	104.94	110.10
392	GT	10	DT	C4'-C3'-C2'	-5.16	98.46	103.10
1	AA	1369	DA	P-O3'-C3'	5.16	125.89	119.70
49	Aw	33	DC	C1'-O4'-C4'	-5.16	104.94	110.10
1	AA	614	DT	O4'-C1'-C2'	-5.16	101.78	105.90
1	AA	2932	DT	C1'-O4'-C4'	-5.16	104.94	110.10
1	AA	4528	DT	O4'-C1'-C2'	-5.16	101.78	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	4798	DG	P-O3'-C3'	5.16	125.89	119.70
8	AH	36	DT	P-O5'-C5'	5.16	129.15	120.90
154	Cd	14	DT	C2-N1-C1'	5.16	126.45	118.20
155	Ce	27	DT	C4'-C3'-C2'	-5.16	98.46	103.10
171	Cu	16	DG	O4'-C1'-C2'	-5.16	101.78	105.90
290	Ep	3	DC	P-O5'-C5'	5.16	129.15	120.90
305	E4	17	DC	C4'-C3'-C2'	-5.16	98.46	103.10
405	Gg	14	DG	C4-N9-C1'	5.16	133.20	126.50
452	HR	10	DT	O4'-C1'-C2'	-5.16	101.78	105.90
1	AA	1944	DA	N1-C6-N6	-5.15	115.51	118.60
1	AA	6260	DT	O4'-C1'-C2'	-5.15	101.78	105.90
2	AB	1314	DA	O4'-C4'-C3'	-5.15	102.44	104.50
2	AB	6286	DA	C1'-O4'-C4'	-5.15	104.95	110.10
14	AN	46	DT	O4'-C4'-C3'	-5.15	102.44	104.50
270	EV	23	DT	P-O3'-C3'	5.15	125.88	119.70
337	Fa	30	DG	O4'-C1'-C2'	-5.15	101.78	105.90
385	GM	15	DC	C4'-C3'-C2'	-5.15	98.46	103.10
1	AA	1094	DT	P-O3'-C3'	5.15	125.88	119.70
1	AA	3006	DC	O4'-C1'-C2'	-5.15	101.78	105.90
1	AA	3912	DC	O4'-C1'-C2'	-5.15	101.78	105.90
1	AA	5219	DC	P-O5'-C5'	5.15	129.15	120.90
2	AB	2845	DT	O4'-C1'-C2'	-5.15	101.78	105.90
2	AB	3927	DC	O4'-C1'-C2'	-5.15	101.78	105.90
2	AB	7474	DT	C4-C5-C7	-5.15	115.91	119.00
132	CH	40	DG	O4'-C1'-C2'	-5.15	101.78	105.90
339	Fc	15	DT	O4'-C4'-C3'	-5.15	102.44	104.50
345	Fi	13	DG	C5-C6-O6	-5.15	125.51	128.60
379	GG	17	DA	C4'-C3'-C2'	-5.15	98.46	103.10
414	Gp	22	DA	O4'-C1'-C2'	-5.15	101.78	105.90
1	AA	2932	DT	P-O3'-C3'	5.15	125.88	119.70
1	AA	2996	DA	N1-C6-N6	-5.15	115.51	118.60
1	AA	3496	DC	C4'-C3'-C2'	-5.15	98.46	103.10
1	AA	5956	DA	C4'-C3'-C2'	-5.15	98.47	103.10
1	AA	6739	DG	O4'-C1'-C2'	-5.15	101.78	105.90
1	AA	6883	DG	P-O5'-C5'	5.15	129.14	120.90
2	AB	155	DA	P-O3'-C3'	5.15	125.88	119.70
2	AB	3642	DT	C4'-C3'-C2'	-5.15	98.47	103.10
2	AB	4042	DT	O4'-C1'-C2'	-5.15	101.78	105.90
2	AB	4357	DG	P-O3'-C3'	5.15	125.88	119.70
2	AB	7382	DC	O4'-C1'-N1	5.15	111.61	108.00
4	AD	45	DT	O4'-C1'-C2'	-5.15	101.78	105.90
107	Bs	42	DC	O4'-C1'-C2'	-5.15	101.78	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
158	Ch	19	DG	N1-C6-O6	5.15	122.99	119.90
270	EV	32	DG	O4'-C1'-C2'	-5.15	101.78	105.90
407	Gi	2	DG	C4'-C3'-C2'	-5.15	98.46	103.10
1	AA	2086	DA	P-O3'-C3'	5.15	125.88	119.70
71	BI	30	DG	O4'-C1'-C2'	-5.15	101.78	105.90
204	DR	25	DT	O4'-C1'-C2'	-5.15	101.78	105.90
309	E8	23	DT	O4'-C1'-C2'	-5.15	101.78	105.90
368	F5	7	DC	O4'-C1'-C2'	-5.15	101.78	105.90
1	AA	2545	DC	P-O3'-C3'	-5.15	113.52	119.70
1	AA	4141	DG	C1'-O4'-C4'	-5.15	104.95	110.10
1	AA	6294	DG	O4'-C1'-C2'	-5.15	101.78	105.90
1	AA	7209	DA	O4'-C1'-C2'	-5.15	101.78	105.90
2	AB	1547	DT	C4'-C3'-C2'	-5.15	98.47	103.10
2	AB	3399	DG	C4'-C3'-C2'	-5.15	98.47	103.10
2	AB	6923	DC	O4'-C1'-N1	5.15	111.60	108.00
25	AY	18	DG	P-O3'-C3'	5.15	125.88	119.70
71	BI	5	DT	C4'-C3'-C2'	-5.15	98.47	103.10
244	D5	32	DG	C1'-O4'-C4'	-5.15	104.95	110.10
276	Eb	20	DC	O4'-C1'-N1	5.15	111.60	108.00
319	FI	3	DT	C4'-C3'-C2'	-5.15	98.47	103.10
349	Fm	9	DA	O4'-C1'-C2'	-5.15	101.78	105.90
374	GB	18	DA	O4'-C1'-C2'	-5.15	101.78	105.90
424	Gz	5	DA	P-O3'-C3'	5.15	125.88	119.70
434	G9	18	DA	P-O3'-C3'	5.15	125.88	119.70
1	AA	587	DG	C1'-O4'-C4'	-5.15	104.95	110.10
1	AA	3754	DC	C6-N1-C2	-5.15	118.24	120.30
2	AB	4366	DG	O4'-C4'-C3'	-5.15	102.44	104.50
2	AB	6422	DA	O4'-C1'-C2'	-5.15	101.78	105.90
78	BP	37	DA	O4'-C1'-C2'	-5.15	101.78	105.90
243	D4	23	DT	C1'-O4'-C4'	-5.15	104.95	110.10
1	AA	919	DA	O4'-C4'-C3'	-5.14	102.44	104.50
1	AA	5676	DA	P-O3'-C3'	5.14	125.87	119.70
2	AB	801	DA	N1-C6-N6	-5.14	115.51	118.60
2	AB	4326	DG	O4'-C1'-C2'	-5.14	101.78	105.90
2	AB	7149	DA	P-O3'-C3'	5.14	125.87	119.70
7	AG	2	DT	O4'-C4'-C3'	-5.14	102.44	104.50
9	AI	20	DC	C1'-O4'-C4'	-5.14	104.95	110.10
27	Aa	46	DT	O4'-C4'-C3'	-5.14	102.44	104.50
34	Ah	25	DC	O4'-C1'-C2'	-5.14	101.78	105.90
80	BR	3	DA	N1-C6-N6	-5.14	115.51	118.60
335	FY	16	DA	O4'-C1'-C2'	-5.14	101.78	105.90
416	Gr	8	DT	O4'-C4'-C3'	-5.14	102.44	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1503	DA	N1-C6-N6	-5.14	115.52	118.60
1	AA	1730	DC	P-O5'-C5'	5.14	129.13	120.90
1	AA	4307	DG	C4'-C3'-C2'	-5.14	98.47	103.10
2	AB	1583	DT	C6-N1-C1'	-5.14	112.69	120.40
2	AB	5065	DA	O4'-C1'-C2'	-5.14	101.79	105.90
252	ED	27	DC	P-O3'-C3'	5.14	125.87	119.70
1	AA	232	DA	C1'-O4'-C4'	-5.14	104.96	110.10
1	AA	4899	DA	O4'-C1'-C2'	-5.14	101.79	105.90
2	AB	6275	DA	O4'-C1'-C2'	-5.14	101.79	105.90
39	Am	29	DA	O4'-C1'-C2'	-5.14	101.79	105.90
1	AA	3155	DG	O4'-C1'-N9	5.14	111.60	108.00
1	AA	3345	DG	O4'-C1'-N9	5.14	111.60	108.00
2	AB	1105	DT	O4'-C4'-C3'	-5.14	102.44	104.50
2	AB	3217	DG	N1-C6-O6	5.14	122.98	119.90
2	AB	4768	DC	P-O5'-C5'	5.14	129.12	120.90
2	AB	5779	DC	O4'-C1'-N1	5.14	111.60	108.00
2	AB	6452	DC	C4'-C3'-C2'	-5.14	98.47	103.10
35	Ai	14	DT	C4'-C3'-C2'	-5.14	98.47	103.10
70	BH	34	DA	O4'-C1'-C2'	-5.14	101.79	105.90
309	E8	16	DG	O4'-C1'-C2'	-5.14	101.79	105.90
342	Ff	22	DA	C4'-C3'-C2'	-5.14	98.47	103.10
368	F5	5	DC	C1'-O4'-C4'	-5.14	104.96	110.10
1	AA	4265	DG	O4'-C1'-C2'	-5.14	101.79	105.90
2	AB	2203	DC	O4'-C1'-N1	5.14	111.60	108.00
49	Aw	4	DT	O4'-C4'-C3'	-5.14	102.44	104.50
86	BX	28	DA	C1'-O4'-C4'	-5.14	104.96	110.10
117	B2	23	DA	C1'-O4'-C4'	-5.14	104.96	110.10
148	CX	12	DG	C1'-O4'-C4'	-5.14	104.96	110.10
452	HR	8	DT	C5'-C4'-C3'	5.14	123.35	114.10
1	AA	3459	DG	O4'-C1'-C2'	-5.14	101.79	105.90
1	AA	3847	DC	C6-N1-C2	-5.14	118.25	120.30
1	AA	5894	DG	C4'-C3'-C2'	-5.14	98.48	103.10
2	AB	1217	DG	O4'-C1'-C2'	-5.14	101.79	105.90
31	Ae	17	DC	O4'-C4'-C3'	-5.14	102.44	104.50
364	F1	7	DA	N1-C6-N6	-5.14	115.52	118.60
1	AA	1168	DC	C4'-C3'-C2'	-5.13	98.48	103.10
1	AA	1210	DG	O4'-C1'-C2'	-5.13	101.79	105.90
1	AA	1266	DT	C4'-C3'-C2'	-5.13	98.48	103.10
1	AA	3805	DC	P-O3'-C3'	5.13	125.86	119.70
1	AA	5419	DG	O4'-C1'-C2'	-5.13	101.79	105.90
2	AB	3354	DT	C1'-O4'-C4'	-5.13	104.97	110.10
2	AB	6383	DG	O4'-C1'-C2'	-5.13	101.79	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	AX	39	DG	O4'-C1'-C2'	-5.13	101.79	105.90
117	B2	2	DG	C5-C6-O6	-5.13	125.52	128.60
434	G9	1	DG	O4'-C1'-C2'	-5.13	101.79	105.90
1	AA	6413	DG	O4'-C1'-C2'	-5.13	101.79	105.90
2	AB	759	DA	O4'-C1'-C2'	-5.13	101.79	105.90
2	AB	2262	DG	C1'-O4'-C4'	-5.13	104.97	110.10
1	AA	47	DA	P-O3'-C3'	5.13	125.86	119.70
1	AA	2910	DG	O4'-C1'-C2'	-5.13	101.80	105.90
2	AB	4855	DG	O4'-C1'-N9	5.13	111.59	108.00
2	AB	6630	DA	N1-C6-N6	-5.13	115.52	118.60
14	AN	32	DC	O4'-C1'-N1	-5.13	104.41	108.00
21	AU	26	DA	O4'-C1'-N9	5.13	111.59	108.00
64	BB	25	DG	O4'-C1'-C2'	-5.13	101.80	105.90
65	BC	31	DC	O4'-C1'-N1	5.13	111.59	108.00
109	Bu	34	DC	O4'-C1'-N1	-5.13	104.41	108.00
218	Df	22	DG	O4'-C1'-C2'	-5.13	101.80	105.90
245	D6	30	DC	O4'-C4'-C3'	-5.13	102.45	104.50
331	FU	34	DG	O4'-C1'-C2'	-5.13	101.80	105.90
428	G3	27	DA	O4'-C1'-C2'	-5.13	101.79	105.90
1	AA	2071	DC	O4'-C1'-N1	5.13	111.59	108.00
2	AB	824	DA	C1'-O4'-C4'	-5.13	104.97	110.10
60	A7	5	DT	O4'-C4'-C3'	-5.13	102.45	104.50
78	BP	30	DT	O4'-C1'-C2'	-5.13	101.80	105.90
139	CO	16	DG	P-O3'-C3'	5.13	125.86	119.70
268	ET	16	DT	O4'-C1'-C2'	-5.13	101.80	105.90
1	AA	1	DT	C1'-O4'-C4'	-5.13	104.97	110.10
1	AA	572	DA	C1'-O4'-C4'	-5.13	104.97	110.10
1	AA	6853	DC	C2-N1-C1'	5.13	124.44	118.80
2	AB	2386	DC	C4'-C3'-C2'	-5.13	98.48	103.10
2	AB	2761	DT	C1'-O4'-C4'	-5.13	104.97	110.10
2	AB	7449	DA	O4'-C1'-C2'	-5.13	101.80	105.90
369	F6	18	DC	P-O3'-C3'	5.13	125.86	119.70
381	GI	4	DA	P-O3'-C3'	5.13	125.85	119.70
1	AA	1030	DG	O4'-C4'-C3'	-5.13	102.45	104.50
1	AA	5626	DT	C4'-C3'-C2'	-5.13	98.49	103.10
7	AG	20	DC	O4'-C1'-C2'	-5.13	101.80	105.90
272	EX	31	DC	C4'-C3'-C2'	-5.13	98.49	103.10
292	Er	1	DG	C1'-O4'-C4'	-5.13	104.97	110.10
1	AA	4092	DA	N1-C6-N6	-5.12	115.53	118.60
2	AB	4604	DT	P-O3'-C3'	5.12	125.85	119.70
399	Ga	10	DT	O4'-C1'-N1	-5.12	104.41	108.00
1	AA	3522	DA	O4'-C4'-C3'	-5.12	102.45	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	3360	DG	O4'-C1'-C2'	-5.12	101.80	105.90
2	AB	4274	DA	C4'-C3'-C2'	-5.12	98.49	103.10
14	AN	16	DA	O4'-C1'-C2'	-5.12	101.80	105.90
45	As	38	DG	O4'-C1'-C2'	-5.12	101.80	105.90
67	BE	34	DC	C2-N1-C1'	5.12	124.44	118.80
82	BT	38	DC	C1'-O4'-C4'	-5.12	104.98	110.10
134	CJ	33	DC	O4'-C4'-C3'	-5.12	102.45	104.50
156	Cf	6	DT	C4-C5-C7	5.12	122.07	119.00
161	Ck	4	DT	C4'-C3'-C2'	-5.12	98.49	103.10
243	D4	26	DA	O4'-C4'-C3'	-5.12	102.45	104.50
414	Gp	9	DT	O4'-C4'-C3'	-5.12	102.45	104.50
1	AA	3312	DC	P-O3'-C3'	5.12	125.85	119.70
1	AA	5522	DG	C4'-C3'-C2'	-5.12	98.49	103.10
2	AB	2121	DT	C4'-C3'-C2'	-5.12	98.49	103.10
2	AB	2266	DA	C4'-C3'-C2'	-5.12	98.49	103.10
2	AB	3447	DT	C4'-C3'-C2'	-5.12	98.49	103.10
2	AB	3893	DT	C1'-O4'-C4'	-5.12	104.98	110.10
2	AB	5795	DC	O4'-C1'-C2'	-5.12	101.80	105.90
218	Df	21	DT	C4'-C3'-C2'	-5.12	98.49	103.10
404	Gf	23	DA	C4'-C3'-C2'	-5.12	98.49	103.10
112	Bx	33	DT	C4'-C3'-C2'	-5.12	98.49	103.10
270	EV	23	DT	O4'-C1'-C2'	-5.12	101.80	105.90
381	GI	6	DC	P-O5'-C5'	5.12	129.09	120.90
1	AA	5006	DT	C1'-O4'-C4'	-5.12	104.98	110.10
1	AA	7370	DA	O4'-C1'-C2'	-5.12	101.81	105.90
23	AW	5	DT	C4'-C3'-C2'	-5.12	98.49	103.10
75	BM	17	DC	P-O3'-C3'	5.12	125.84	119.70
114	Bz	7	DA	O4'-C1'-N9	5.12	111.58	108.00
131	CG	13	DC	P-O3'-C3'	5.12	125.84	119.70
157	Cg	14	DG	O4'-C1'-C2'	-5.12	101.81	105.90
173	Cw	23	DG	C4'-C3'-C2'	-5.12	98.49	103.10
322	FL	32	DG	O4'-C1'-C2'	-5.12	101.81	105.90
408	Gj	4	DG	O4'-C1'-C2'	-5.12	101.81	105.90
1	AA	1648	DC	P-O5'-C5'	5.12	129.09	120.90
1	AA	6037	DA	N1-C6-N6	-5.12	115.53	118.60
2	AB	5245	DG	O4'-C1'-N9	5.12	111.58	108.00
3	AC	9	DT	P-O3'-C3'	5.12	125.84	119.70
53	A0	45	DT	O4'-C4'-C3'	-5.12	102.45	104.50
140	CP	14	DG	C1'-O4'-C4'	-5.12	104.98	110.10
191	DE	26	DA	P-O3'-C3'	5.12	125.84	119.70
236	Dx	39	DC	N3-C4-C5	-5.12	119.85	121.90
242	D3	11	DG	C1'-O4'-C4'	-5.12	104.98	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	2572	DC	O4'-C1'-N1	5.12	111.58	108.00
1	AA	5622	DT	O4'-C1'-C2'	-5.12	101.81	105.90
1	AA	6528	DG	P-O3'-C3'	5.12	125.84	119.70
1	AA	6808	DC	P-O5'-C5'	5.12	129.09	120.90
2	AB	1523	DT	O4'-C1'-C2'	-5.12	101.81	105.90
2	AB	5798	DC	P-O5'-C5'	5.12	129.09	120.90
5	AE	35	DT	C1'-O4'-C4'	-5.12	104.98	110.10
9	AI	28	DA	O4'-C1'-C2'	-5.12	101.81	105.90
244	D5	9	DC	C6-N1-C2	-5.12	118.25	120.30
423	Gy	5	DA	N1-C6-N6	-5.12	115.53	118.60
427	G2	27	DT	O4'-C4'-C3'	-5.12	102.45	104.50
1	AA	698	DC	P-O5'-C5'	5.11	129.08	120.90
1	AA	2131	DT	C4'-C3'-C2'	-5.11	98.50	103.10
1	AA	6577	DC	C1'-O4'-C4'	-5.11	104.99	110.10
2	AB	2688	DC	O4'-C1'-N1	5.11	111.58	108.00
2	AB	2759	DC	C4'-C3'-C2'	-5.11	98.50	103.10
2	AB	3432	DC	C2-N1-C1'	5.11	124.42	118.80
2	AB	4024	DT	C4'-C3'-C2'	-5.11	98.50	103.10
2	AB	4038	DT	C4'-C3'-C2'	-5.11	98.50	103.10
93	Be	16	DT	O4'-C1'-C2'	-5.11	101.81	105.90
158	Ch	4	DC	C2-N1-C1'	5.11	124.42	118.80
451	HQ	16	DG	P-O3'-C3'	5.11	125.84	119.70
24	AX	14	DC	C6-N1-C1'	-5.11	114.67	120.80
134	CJ	37	DT	C1'-O4'-C4'	-5.11	104.99	110.10
138	CN	19	DC	C1'-O4'-C4'	-5.11	104.99	110.10
1	AA	268	DC	C1'-O4'-C4'	-5.11	104.99	110.10
1	AA	3356	DC	O4'-C1'-C2'	-5.11	101.81	105.90
1	AA	4992	DG	C1'-O4'-C4'	-5.11	104.99	110.10
1	AA	5230	DG	O4'-C1'-C2'	-5.11	101.81	105.90
2	AB	5657	DA	N1-C6-N6	-5.11	115.53	118.60
122	B7	10	DA	C1'-O4'-C4'	-5.11	104.99	110.10
170	Ct	5	DG	O4'-C1'-C2'	-5.11	101.81	105.90
195	DI	24	DG	C4'-C3'-C2'	-5.11	98.50	103.10
199	DM	2	DG	C1'-O4'-C4'	-5.11	104.99	110.10
280	Ef	33	DA	O4'-C1'-C2'	-5.11	101.81	105.90
291	Eq	25	DT	C4'-C3'-C2'	-5.11	98.50	103.10
383	GK	22	DT	C1'-O4'-C4'	-5.11	104.99	110.10
426	G1	7	DA	O4'-C1'-C2'	-5.11	101.81	105.90
2	AB	267	DT	C4'-C3'-C2'	-5.11	98.50	103.10
2	AB	1967	DC	O4'-C1'-C2'	-5.11	101.81	105.90
2	AB	3701	DT	O4'-C4'-C3'	-5.11	102.46	104.50
2	AB	6923	DC	C4'-C3'-C2'	-5.11	98.50	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	Al	17	DT	C4'-C3'-C2'	-5.11	98.50	103.10
141	CQ	26	DC	O4'-C1'-N1	5.11	111.58	108.00
264	EP	15	DA	O4'-C4'-C3'	-5.11	102.46	104.50
1	AA	2840	DG	C1'-O4'-C4'	-5.11	104.99	110.10
1	AA	4228	DA	P-O3'-C3'	5.11	125.83	119.70
1	AA	5682	DG	O4'-C1'-C2'	-5.11	101.81	105.90
2	AB	2045	DT	C4'-C3'-C2'	-5.11	98.50	103.10
2	AB	2127	DG	O4'-C1'-C2'	-5.11	101.81	105.90
2	AB	2175	DG	C5-C6-O6	-5.11	125.54	128.60
2	AB	3789	DA	O4'-C1'-C2'	-5.11	101.81	105.90
2	AB	5207	DG	O4'-C1'-C2'	-5.11	101.81	105.90
133	CI	37	DG	O4'-C1'-C2'	-5.11	101.81	105.90
307	E6	14	DT	C1'-O4'-C4'	-5.11	104.99	110.10
310	E9	29	DG	O4'-C1'-C2'	-5.11	101.81	105.90
1	AA	47	DA	N1-C6-N6	-5.11	115.54	118.60
1	AA	3773	DC	O4'-C1'-C2'	-5.11	101.81	105.90
1	AA	5393	DG	C1'-O4'-C4'	-5.11	105.00	110.10
2	AB	1464	DG	C1'-O4'-C4'	-5.11	105.00	110.10
2	AB	1948	DG	P-O3'-C3'	5.11	125.83	119.70
2	AB	2318	DT	C4'-C3'-C2'	-5.11	98.50	103.10
6	AF	47	DT	P-O3'-C3'	5.11	125.83	119.70
7	AG	2	DT	O4'-C1'-C2'	-5.11	101.82	105.90
145	CU	3	DT	C4'-C3'-C2'	-5.11	98.50	103.10
173	Cw	20	DG	O4'-C1'-C2'	-5.11	101.81	105.90
361	Fy	1	DA	C5-C6-N6	5.11	127.78	123.70
1	AA	4727	DG	C4'-C3'-C2'	-5.10	98.51	103.10
2	AB	5745	DC	O4'-C1'-C2'	-5.10	101.82	105.90
42	Ap	8	DT	O4'-C4'-C3'	-5.10	102.46	104.50
66	BD	33	DA	O4'-C1'-C2'	-5.10	101.82	105.90
81	BS	45	DT	C4'-C3'-C2'	-5.10	98.51	103.10
225	Dm	39	DC	O4'-C1'-N1	5.10	111.57	108.00
240	D1	40	DA	O4'-C1'-C2'	-5.10	101.82	105.90
301	E0	32	DT	O4'-C4'-C3'	-5.10	102.46	104.50
1	AA	3643	DT	O4'-C1'-N1	5.10	111.57	108.00
2	AB	1936	DA	N1-C6-N6	-5.10	115.54	118.60
2	AB	2736	DT	C1'-O4'-C4'	-5.10	105.00	110.10
2	AB	3396	DG	C1'-O4'-C4'	-5.10	105.00	110.10
2	AB	3560	DT	C1'-O4'-C4'	-5.10	105.00	110.10
2	AB	7440	DT	O4'-C4'-C3'	-5.10	102.46	104.50
252	ED	17	DG	O4'-C1'-C2'	-5.10	101.82	105.90
283	Ei	23	DG	O4'-C1'-C2'	-5.10	101.82	105.90
320	FJ	25	DC	P-O3'-C3'	5.10	125.82	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
178	C1	21	DT	C4-C5-C7	5.10	122.06	119.00
332	FV	13	DC	C6-N1-C2	-5.10	118.26	120.30
1	AA	3615	DC	O4'-C1'-N1	5.10	111.57	108.00
1	AA	5470	DA	C1'-O4'-C4'	-5.10	105.00	110.10
1	AA	7168	DT	C4'-C3'-C2'	-5.10	98.51	103.10
2	AB	4573	DC	C6-N1-C2	-5.10	118.26	120.30
77	BO	9	DC	P-O3'-C3'	5.10	125.82	119.70
78	BP	37	DA	O4'-C1'-N9	5.10	111.57	108.00
164	Cn	6	DC	O4'-C1'-N1	5.10	111.57	108.00
185	C8	16	DA	C3'-C2'-C1'	-5.10	96.38	102.50
261	EM	21	DA	P-O3'-C3'	5.10	125.82	119.70
266	ER	27	DC	O4'-C1'-N1	5.10	111.57	108.00
386	GN	17	DG	O4'-C1'-C2'	-5.10	101.82	105.90
436	HB	1	DG	C1'-O4'-C4'	-5.10	105.00	110.10
1	AA	3246	DG	O4'-C4'-C3'	-5.10	102.46	104.50
1	AA	6179	DC	C4'-C3'-C2'	-5.10	98.51	103.10
2	AB	1029	DC	P-O3'-C3'	5.10	125.82	119.70
2	AB	1368	DT	C4-C5-C7	-5.10	115.94	119.00
2	AB	1623	DG	P-O3'-C3'	5.10	125.82	119.70
2	AB	2848	DT	C4'-C3'-C2'	-5.10	98.51	103.10
2	AB	5344	DG	O4'-C1'-C2'	-5.10	101.82	105.90
42	Ap	47	DT	O4'-C4'-C3'	-5.10	102.46	104.50
51	Ay	38	DA	C4'-C3'-C2'	-5.10	98.51	103.10
51	Ay	39	DC	O4'-C1'-N1	5.10	111.57	108.00
90	Bb	19	DA	N1-C6-N6	-5.10	115.54	118.60
171	Cu	9	DT	O4'-C1'-C2'	-5.10	101.82	105.90
190	DD	16	DG	O4'-C1'-C2'	-5.10	101.82	105.90
214	Db	25	DA	P-O3'-C3'	5.10	125.82	119.70
309	E8	16	DG	P-O3'-C3'	5.10	125.82	119.70
323	FM	33	DA	P-O3'-C3'	5.10	125.82	119.70
365	F2	20	DT	C4'-C3'-C2'	-5.10	98.51	103.10
1	AA	1484	DT	O4'-C1'-C2'	-5.10	101.82	105.90
2	AB	995	DG	O4'-C1'-C2'	-5.10	101.82	105.90
2	AB	1214	DT	C4'-C3'-C2'	-5.10	98.51	103.10
80	BR	32	DA	O4'-C1'-C2'	-5.10	101.82	105.90
119	B4	34	DA	P-O3'-C3'	5.10	125.81	119.70
287	Em	9	DT	C4'-C3'-C2'	-5.10	98.51	103.10
302	E1	9	DA	O4'-C1'-N9	5.10	111.57	108.00
341	Fe	28	DC	C1'-O4'-C4'	-5.10	105.00	110.10
433	G8	7	DC	O4'-C4'-C3'	-5.10	102.46	104.50
1	AA	1103	DC	C1'-O4'-C4'	-5.09	105.01	110.10
1	AA	1334	DA	C4'-C3'-C2'	-5.09	98.52	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	4662	DT	C4'-C3'-C2'	-5.09	98.51	103.10
2	AB	3409	DG	C1'-O4'-C4'	-5.09	105.00	110.10
2	AB	4810	DC	O4'-C1'-C2'	-5.09	101.82	105.90
22	AV	13	DA	C4'-C3'-C2'	-5.09	98.51	103.10
89	Ba	26	DG	P-O3'-C3'	5.09	125.81	119.70
150	CZ	25	DA	N1-C6-N6	-5.09	115.54	118.60
168	Cr	36	DT	O4'-C4'-C3'	-5.09	102.46	104.50
284	Ej	22	DG	C4'-C3'-C2'	-5.09	98.52	103.10
309	E8	25	DG	C1'-O4'-C4'	-5.09	105.00	110.10
333	FW	35	DA	N1-C6-N6	-5.09	115.54	118.60
1	AA	6962	DA	C1'-O4'-C4'	-5.09	105.01	110.10
2	AB	693	DT	P-O3'-C3'	5.09	125.81	119.70
2	AB	5327	DC	O4'-C1'-N1	5.09	111.56	108.00
1	AA	687	DG	O4'-C1'-C2'	-5.09	101.83	105.90
1	AA	6871	DC	O4'-C1'-N1	5.09	111.56	108.00
1	AA	7293	DG	P-O3'-C3'	5.09	125.81	119.70
2	AB	923	DT	C4'-C3'-C2'	-5.09	98.52	103.10
2	AB	2768	DA	O4'-C4'-C3'	-5.09	102.46	104.50
2	AB	4905	DT	O4'-C1'-C2'	-5.09	101.83	105.90
58	A5	33	DG	O4'-C4'-C3'	-5.09	102.46	104.50
173	Cw	21	DT	C4'-C3'-C2'	-5.09	98.52	103.10
190	DD	33	DC	O4'-C4'-C3'	-5.09	102.46	104.50
219	Dg	24	DA	P-O3'-C3'	5.09	125.81	119.70
298	Ex	25	DA	O4'-C1'-C2'	-5.09	101.83	105.90
344	Fh	26	DT	O4'-C1'-N1	5.09	111.56	108.00
379	GG	21	DG	C1'-O4'-C4'	-5.09	105.01	110.10
1	AA	1199	DT	C4-C5-C7	5.09	122.05	119.00
1	AA	2218	DA	N1-C6-N6	-5.09	115.55	118.60
1	AA	2791	DC	C6-N1-C2	-5.09	118.26	120.30
1	AA	3540	DG	C4'-C3'-C2'	-5.09	98.52	103.10
1	AA	5798	DA	C1'-O4'-C4'	-5.09	105.01	110.10
1	AA	6195	DC	P-O3'-C3'	-5.09	113.59	119.70
1	AA	6883	DG	O4'-C1'-N9	5.09	111.56	108.00
2	AB	319	DC	P-O5'-C5'	5.09	129.04	120.90
2	AB	762	DC	P-O5'-C5'	5.09	129.04	120.90
2	AB	1124	DG	C1'-O4'-C4'	-5.09	105.01	110.10
2	AB	6600	DC	C1'-O4'-C4'	-5.09	105.01	110.10
5	AE	34	DA	O4'-C1'-C2'	-5.09	101.83	105.90
28	Ab	34	DA	P-O3'-C3'	5.09	125.81	119.70
57	A4	42	DT	C6-C5-C7	-5.09	119.85	122.90
115	B0	24	DA	P-O3'-C3'	5.09	125.81	119.70
212	DZ	37	DG	O4'-C1'-C2'	-5.09	101.83	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	39	DA	C4'-C3'-C2'	-5.09	98.52	103.10
1	AA	5952	DA	C1'-O4'-C4'	-5.09	105.01	110.10
117	B2	8	DA	O4'-C1'-N9	5.09	111.56	108.00
1	AA	792	DG	O4'-C4'-C3'	-5.09	102.47	104.50
1	AA	4597	DG	C1'-O4'-C4'	-5.09	105.01	110.10
1	AA	5826	DG	C1'-O4'-C4'	-5.09	105.01	110.10
2	AB	184	DG	C5-C6-O6	-5.09	125.55	128.60
2	AB	2111	DG	C1'-O4'-C4'	-5.09	105.01	110.10
113	By	33	DT	C4'-C3'-C2'	-5.09	98.52	103.10
264	EP	4	DC	C1'-O4'-C4'	-5.09	105.01	110.10
442	HH	3	DG	O4'-C1'-C2'	-5.09	101.83	105.90
1	AA	2380	DA	C4'-C3'-C2'	-5.08	98.52	103.10
93	Be	40	DC	O4'-C1'-C2'	-5.08	101.83	105.90
95	Bg	7	DT	O4'-C1'-N1	5.08	111.56	108.00
99	Bk	18	DC	C4'-C3'-C2'	-5.08	98.52	103.10
144	CT	32	DG	O4'-C1'-C2'	-5.08	101.83	105.90
302	E1	5	DA	O4'-C1'-C2'	-5.08	101.83	105.90
307	E6	16	DA	C1'-O4'-C4'	-5.08	105.02	110.10
1	AA	2840	DG	O4'-C4'-C3'	-5.08	102.47	104.50
2	AB	1445	DA	N1-C6-N6	-5.08	115.55	118.60
2	AB	1490	DT	C4'-C3'-C2'	-5.08	98.53	103.10
2	AB	5044	DA	P-O3'-C3'	5.08	125.80	119.70
99	Bk	25	DG	O4'-C1'-C2'	-5.08	101.83	105.90
148	CX	30	DG	N1-C6-O6	5.08	122.95	119.90
185	C8	29	DT	P-O3'-C3'	5.08	125.80	119.70
376	GD	8	DA	O4'-C1'-C2'	-5.08	101.83	105.90
1	AA	2758	DC	C6-N1-C2	-5.08	118.27	120.30
1	AA	3423	DC	C1'-O4'-C4'	-5.08	105.02	110.10
1	AA	5039	DC	C6-N1-C2	-5.08	118.27	120.30
2	AB	974	DG	C4'-C3'-C2'	-5.08	98.53	103.10
2	AB	1405	DC	O4'-C4'-C3'	-5.08	102.47	104.50
2	AB	2017	DA	P-O3'-C3'	5.08	125.80	119.70
2	AB	2504	DA	C4'-C3'-C2'	-5.08	98.53	103.10
2	AB	4092	DT	C4'-C3'-C2'	-5.08	98.53	103.10
2	AB	4602	DG	O4'-C1'-C2'	-5.08	101.83	105.90
2	AB	5924	DT	O4'-C1'-C2'	-5.08	101.83	105.90
2	AB	6093	DC	C1'-O4'-C4'	-5.08	105.02	110.10
73	BK	40	DG	N1-C6-O6	5.08	122.95	119.90
132	CH	4	DG	O4'-C4'-C3'	-5.08	102.47	104.50
139	CO	6	DC	O4'-C1'-N1	-5.08	104.44	108.00
186	C9	4	DT	C1'-O4'-C4'	-5.08	105.02	110.10
200	DN	20	DC	C2-N1-C1'	5.08	124.39	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
216	Dd	24	DA	C1'-O4'-C4'	-5.08	105.02	110.10
269	EU	4	DG	O4'-C1'-C2'	-5.08	101.83	105.90
334	FX	31	DG	C4'-C3'-C2'	-5.08	98.53	103.10
1	AA	737	DG	O4'-C1'-C2'	-5.08	101.84	105.90
2	AB	3688	DA	P-O3'-C3'	5.08	125.80	119.70
2	AB	7503	DA	N1-C6-N6	-5.08	115.55	118.60
78	BP	38	DC	O4'-C4'-C3'	-5.08	102.47	104.50
123	B8	16	DT	C1'-O4'-C4'	-5.08	105.02	110.10
190	DD	11	DA	P-O3'-C3'	5.08	125.80	119.70
227	Do	1	DT	O4'-C4'-C3'	-5.08	102.47	104.50
1	AA	5514	DC	P-O3'-C3'	5.08	125.79	119.70
1	AA	5977	DC	O4'-C1'-N1	5.08	111.56	108.00
1	AA	6921	DT	O4'-C4'-C3'	-5.08	102.47	104.50
1	AA	7138	DA	C1'-O4'-C4'	-5.08	105.02	110.10
2	AB	773	DT	O4'-C1'-C2'	-5.08	101.84	105.90
2	AB	3990	DT	P-O3'-C3'	5.08	125.80	119.70
2	AB	4779	DG	C5-C6-O6	-5.08	125.55	128.60
2	AB	4787	DG	C4'-C3'-C2'	-5.08	98.53	103.10
5	AE	32	DG	C1'-O4'-C4'	-5.08	105.02	110.10
54	A1	44	DT	O4'-C4'-C3'	-5.08	102.47	104.50
125	CA	12	DT	O4'-C1'-C2'	-5.08	101.84	105.90
321	FK	32	DT	O4'-C4'-C3'	-5.08	102.47	104.50
380	GH	4	DA	C4'-C3'-C2'	-5.08	98.53	103.10
437	HC	7	DT	P-O3'-C3'	5.08	125.79	119.70
2	AB	1720	DC	O4'-C1'-C2'	-5.08	101.84	105.90
305	E4	9	DC	C4'-C3'-C2'	-5.08	98.53	103.10
310	E9	2	DA	O4'-C1'-C2'	-5.08	101.84	105.90
1	AA	4235	DA	C1'-O4'-C4'	-5.08	105.03	110.10
2	AB	1437	DT	P-O3'-C3'	5.08	125.79	119.70
2	AB	4572	DG	O4'-C1'-N9	5.08	111.55	108.00
2	AB	6134	DG	O4'-C1'-C2'	-5.08	101.84	105.90
186	C9	5	DC	O4'-C1'-C2'	-5.08	101.84	105.90
218	Df	39	DA	C1'-O4'-C4'	-5.08	105.03	110.10
1	AA	2587	DG	C1'-O4'-C4'	-5.07	105.03	110.10
1	AA	5233	DG	C1'-O4'-C4'	-5.07	105.03	110.10
2	AB	1942	DC	C4'-C3'-C2'	-5.07	98.53	103.10
2	AB	5026	DA	P-O3'-C3'	5.07	125.79	119.70
11	AK	47	DT	O4'-C4'-C3'	-5.07	102.47	104.50
75	BM	39	DG	C1'-O4'-C4'	-5.07	105.03	110.10
118	B3	23	DC	O4'-C1'-N1	5.07	111.55	108.00
159	Ci	10	DT	C4'-C3'-C2'	-5.07	98.53	103.10
230	Dr	12	DA	C4'-C3'-C2'	-5.07	98.53	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
275	Ea	23	DC	O4'-C1'-N1	5.07	111.55	108.00
291	Eq	17	DC	C4'-C3'-C2'	-5.07	98.53	103.10
381	GI	26	DC	O4'-C1'-C2'	-5.07	101.84	105.90
1	AA	418	DG	P-O3'-C3'	5.07	125.79	119.70
1	AA	2157	DG	C4'-C3'-C2'	-5.07	98.53	103.10
1	AA	3162	DT	P-O3'-C3'	5.07	125.79	119.70
1	AA	3724	DT	O4'-C1'-C2'	-5.07	101.84	105.90
2	AB	4195	DC	P-O5'-C5'	5.07	129.01	120.90
156	Cf	29	DC	C6-N1-C2	-5.07	118.27	120.30
1	AA	4866	DG	C5-C6-O6	-5.07	125.56	128.60
1	AA	6355	DG	O4'-C4'-C3'	-5.07	102.47	104.50
2	AB	4034	DT	C4'-C3'-C2'	-5.07	98.54	103.10
150	CZ	1	DT	C4'-C3'-C2'	-5.07	98.54	103.10
170	Ct	20	DA	O4'-C1'-C2'	-5.07	101.84	105.90
200	DN	40	DG	C1'-O4'-C4'	-5.07	105.03	110.10
222	Dj	31	DG	O4'-C1'-C2'	-5.07	101.84	105.90
288	En	15	DT	C1'-O4'-C4'	-5.07	105.03	110.10
430	G5	2	DT	O4'-C1'-C2'	-5.07	101.84	105.90
1	AA	418	DG	O4'-C1'-C2'	-5.07	101.84	105.90
1	AA	1436	DG	C4'-C3'-C2'	-5.07	98.54	103.10
1	AA	5598	DG	O4'-C1'-C2'	-5.07	101.84	105.90
2	AB	904	DG	O4'-C1'-C2'	-5.07	101.84	105.90
2	AB	1939	DA	C4'-C3'-C2'	-5.07	98.54	103.10
2	AB	3719	DG	O4'-C4'-C3'	-5.07	102.47	104.50
2	AB	4868	DC	O4'-C4'-C3'	-5.07	102.47	104.50
2	AB	6477	DA	O4'-C1'-N9	5.07	111.55	108.00
49	Aw	20	DA	N1-C6-N6	-5.07	115.56	118.60
54	A1	32	DA	P-O3'-C3'	5.07	125.78	119.70
84	BV	16	DA	O4'-C1'-C2'	-5.07	101.84	105.90
1	AA	3501	DG	C5-C6-O6	-5.07	125.56	128.60
2	AB	717	DT	C4'-C3'-C2'	-5.07	98.54	103.10
2	AB	1906	DA	C1'-O4'-C4'	-5.07	105.03	110.10
2	AB	5241	DG	P-O3'-C3'	5.07	125.78	119.70
2	AB	6241	DA	O4'-C1'-C2'	-5.07	101.85	105.90
68	BF	28	DG	O4'-C1'-C2'	-5.07	101.85	105.90
197	DK	12	DT	C1'-O4'-C4'	-5.07	105.03	110.10
418	Gt	20	DA	N1-C6-N6	-5.07	115.56	118.60
1	AA	761	DT	O4'-C1'-C2'	-5.07	101.85	105.90
1	AA	1313	DA	N1-C6-N6	-5.07	115.56	118.60
1	AA	1988	DA	N1-C6-N6	-5.07	115.56	118.60
1	AA	2209	DG	C4'-C3'-C2'	-5.07	98.54	103.10
1	AA	2875	DA	O4'-C1'-C2'	-5.07	101.85	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	354	DT	C4'-C3'-C2'	-5.07	98.54	103.10
2	AB	4482	DA	C4'-C3'-C2'	-5.07	98.54	103.10
2	AB	4718	DC	O4'-C1'-N1	5.07	111.55	108.00
2	AB	6446	DC	P-O3'-C3'	5.07	125.78	119.70
96	Bh	16	DA	O4'-C1'-C2'	-5.07	101.85	105.90
145	CU	27	DT	C4'-C3'-C2'	-5.07	98.54	103.10
365	F2	16	DG	O4'-C1'-C2'	-5.07	101.85	105.90
397	GY	15	DT	C4'-C3'-C2'	-5.07	98.54	103.10
1	AA	2534	DC	C1'-O4'-C4'	-5.06	105.04	110.10
1	AA	6646	DC	O4'-C1'-N1	5.06	111.55	108.00
2	AB	4401	DA	C1'-O4'-C4'	-5.06	105.04	110.10
12	AL	29	DA	O4'-C4'-C3'	-5.06	102.47	104.50
93	Be	22	DA	O4'-C4'-C3'	-5.06	102.47	104.50
172	Cv	12	DC	O4'-C1'-C2'	-5.06	101.85	105.90
412	Gn	26	DT	O4'-C1'-C2'	-5.06	101.85	105.90
1	AA	93	DC	O4'-C1'-N1	5.06	111.54	108.00
1	AA	4088	DG	P-O3'-C3'	5.06	125.78	119.70
2	AB	3027	DG	O4'-C1'-C2'	-5.06	101.85	105.90
2	AB	4184	DA	O4'-C1'-C2'	-5.06	101.85	105.90
24	AX	32	DA	P-O3'-C3'	5.06	125.77	119.70
59	A6	36	DG	O4'-C1'-C2'	-5.06	101.85	105.90
91	Bc	14	DG	C8-N9-C1'	-5.06	120.42	127.00
163	Cm	30	DA	O4'-C1'-C2'	-5.06	101.85	105.90
176	Cz	34	DC	O4'-C1'-N1	-5.06	104.46	108.00
202	DP	8	DC	O4'-C4'-C3'	-5.06	102.47	104.50
220	Dh	6	DT	O4'-C4'-C3'	-5.06	102.47	104.50
242	D3	16	DA	C5-C6-N6	5.06	127.75	123.70
282	Eh	23	DA	C1'-O4'-C4'	-5.06	105.04	110.10
304	E3	18	DG	P-O3'-C3'	5.06	125.78	119.70
383	GK	27	DT	O4'-C4'-C3'	-5.06	102.47	104.50
1	AA	2706	DC	C1'-O4'-C4'	-5.06	105.04	110.10
1	AA	3385	DG	C4'-C3'-C2'	-5.06	98.55	103.10
23	AW	18	DT	C4'-C3'-C2'	-5.06	98.55	103.10
185	C8	3	DC	P-O3'-C3'	5.06	125.77	119.70
247	D8	13	DC	C1'-O4'-C4'	-5.06	105.04	110.10
289	Eo	22	DA	O4'-C1'-C2'	-5.06	101.85	105.90
416	Gr	21	DT	O4'-C1'-C2'	-5.06	101.85	105.90
1	AA	154	DC	O4'-C1'-C2'	-5.06	101.85	105.90
1	AA	5358	DG	N3-C2-N2	5.06	123.44	119.90
2	AB	3675	DA	O4'-C1'-N9	5.06	111.54	108.00
24	AX	38	DG	O4'-C1'-C2'	-5.06	101.85	105.90
110	Bv	25	DG	O4'-C1'-C2'	-5.06	101.85	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
186	C9	10	DC	O4'-C1'-C2'	-5.06	101.85	105.90
235	Dw	5	DA	C4'-C3'-C2'	-5.06	98.55	103.10
378	GF	1	DT	O4'-C1'-N1	5.06	111.54	108.00
1	AA	528	DG	C1'-O4'-C4'	-5.06	105.04	110.10
1	AA	6221	DG	O4'-C4'-C3'	-5.06	102.48	104.50
2	AB	1956	DA	O4'-C1'-N9	-5.06	104.46	108.00
2	AB	2141	DG	O4'-C4'-C3'	-5.06	102.48	104.50
2	AB	7501	DA	C1'-O4'-C4'	-5.06	105.04	110.10
38	Al	26	DG	O4'-C1'-N9	5.06	111.54	108.00
72	BJ	41	DT	O4'-C4'-C3'	-5.06	102.48	104.50
88	BZ	35	DT	C4'-C3'-C2'	-5.06	98.55	103.10
93	Be	23	DT	P-O5'-C5'	5.06	128.99	120.90
104	Bp	31	DC	O4'-C4'-C3'	-5.06	102.48	104.50
129	CE	32	DT	C4'-C3'-C2'	-5.06	98.55	103.10
151	Ca	35	DG	O4'-C1'-C2'	-5.06	101.85	105.90
243	D4	8	DT	O4'-C1'-C2'	-5.06	101.85	105.90
338	Fb	13	DA	O4'-C1'-C2'	-5.06	101.86	105.90
447	HM	2	DC	C1'-O4'-C4'	-5.06	105.04	110.10
1	AA	104	DC	C2-N1-C1'	5.06	124.36	118.80
1	AA	879	DG	C4'-C3'-C2'	-5.06	98.55	103.10
1	AA	1115	DC	C2-N1-C1'	5.06	124.36	118.80
1	AA	2872	DA	N1-C6-N6	-5.06	115.57	118.60
2	AB	2371	DC	P-O5'-C5'	5.06	128.99	120.90
2	AB	6687	DA	P-O3'-C3'	5.06	125.77	119.70
178	C1	8	DA	N1-C6-N6	-5.06	115.57	118.60
239	D0	41	DA	P-O3'-C3'	5.06	125.77	119.70
397	GY	18	DA	C4'-C3'-C2'	-5.06	98.55	103.10
411	Gm	4	DG	O4'-C1'-C2'	-5.06	101.86	105.90
1	AA	756	DC	C6-N1-C2	-5.05	118.28	120.30
1	AA	1139	DG	N1-C6-O6	5.05	122.93	119.90
1	AA	4095	DC	P-O3'-C3'	5.05	125.77	119.70
1	AA	4488	DG	C1'-O4'-C4'	-5.05	105.05	110.10
1	AA	4527	DT	C4'-C3'-C2'	-5.05	98.55	103.10
2	AB	844	DT	C4'-C3'-C2'	-5.05	98.55	103.10
2	AB	1912	DC	C4'-C3'-C2'	-5.05	98.55	103.10
2	AB	2300	DT	C4'-C3'-C2'	-5.05	98.55	103.10
2	AB	2610	DC	O4'-C1'-C2'	-5.05	101.86	105.90
2	AB	4749	DT	O4'-C4'-C3'	-5.05	102.48	104.50
2	AB	5429	DG	O4'-C1'-C2'	-5.05	101.86	105.90
12	AL	10	DA	O4'-C1'-C2'	-5.05	101.86	105.90
65	BC	40	DG	O4'-C1'-C2'	-5.05	101.86	105.90
67	BE	5	DT	O4'-C4'-C3'	-5.05	102.48	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
118	B3	16	DA	O4'-C1'-C2'	-5.05	101.86	105.90
133	CI	17	DT	C4'-C3'-C2'	-5.05	98.55	103.10
186	C9	6	DC	O4'-C1'-N1	5.05	111.54	108.00
251	EC	19	DA	N1-C6-N6	-5.05	115.57	118.60
253	EE	28	DT	P-O3'-C3'	5.05	125.76	119.70
2	AB	3390	DG	P-O3'-C3'	5.05	125.76	119.70
2	AB	7235	DG	C4'-C3'-C2'	-5.05	98.55	103.10
19	AS	42	DT	O4'-C4'-C3'	-5.05	102.48	104.50
1	AA	107	DA	P-O3'-C3'	5.05	125.76	119.70
1	AA	5490	DC	O4'-C1'-N1	5.05	111.54	108.00
1	AA	6072	DT	O4'-C1'-C2'	-5.05	101.86	105.90
1	AA	7178	DG	O4'-C1'-C2'	-5.05	101.86	105.90
2	AB	4456	DT	C4'-C3'-C2'	-5.05	98.55	103.10
2	AB	4515	DT	O4'-C4'-C3'	-5.05	102.48	104.50
2	AB	4907	DT	C4'-C3'-C2'	-5.05	98.55	103.10
74	BL	20	DT	C4'-C3'-C2'	-5.05	98.55	103.10
99	Bk	23	DG	C5-C6-O6	-5.05	125.57	128.60
116	B1	38	DA	O4'-C1'-N9	5.05	111.54	108.00
121	B6	32	DA	P-O3'-C3'	5.05	125.76	119.70
142	CR	33	DT	C4'-C3'-C2'	-5.05	98.55	103.10
178	C1	27	DG	O4'-C1'-N9	5.05	111.54	108.00
259	EK	30	DA	O4'-C1'-C2'	-5.05	101.86	105.90
390	GR	14	DT	O4'-C1'-N1	-5.05	104.47	108.00
448	HN	5	DA	O4'-C1'-C2'	-5.05	101.86	105.90
1	AA	1984	DA	N1-C6-N6	-5.05	115.57	118.60
1	AA	3791	DT	C4'-C3'-C2'	-5.05	98.56	103.10
1	AA	4637	DA	C1'-O4'-C4'	-5.05	105.05	110.10
2	AB	1560	DC	O4'-C1'-N1	5.05	111.53	108.00
39	Am	27	DG	O4'-C1'-C2'	-5.05	101.86	105.90
125	CA	21	DT	C4'-C3'-C2'	-5.05	98.56	103.10
139	CO	21	DC	C2-N1-C1'	5.05	124.35	118.80
162	Cl	19	DA	O4'-C4'-C3'	-5.05	102.48	104.50
242	D3	37	DA	O4'-C1'-C2'	-5.05	101.86	105.90
328	FR	32	DT	O4'-C4'-C3'	-5.05	102.48	104.50
329	FS	15	DA	C1'-O4'-C4'	-5.05	105.05	110.10
1	AA	4040	DT	O4'-C1'-C2'	-5.05	101.86	105.90
1	AA	6000	DT	C1'-O4'-C4'	-5.05	105.05	110.10
2	AB	193	DA	O4'-C1'-C2'	-5.05	101.86	105.90
100	Bl	12	DG	N1-C6-O6	5.05	122.93	119.90
137	CM	12	DA	O4'-C1'-C2'	-5.05	101.86	105.90
219	Dg	33	DC	O4'-C1'-C2'	-5.05	101.86	105.90
285	Ek	28	DC	C1'-O4'-C4'	-5.05	105.05	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	3656	DG	C1'-O4'-C4'	-5.05	105.05	110.10
1	AA	5602	DG	C1'-O4'-C4'	-5.05	105.05	110.10
2	AB	246	DG	P-O3'-C3'	5.05	125.76	119.70
2	AB	1923	DT	P-O3'-C3'	5.05	125.76	119.70
2	AB	7244	DT	C4'-C3'-C2'	-5.05	98.56	103.10
12	AL	12	DA	O4'-C1'-C2'	-5.05	101.86	105.90
77	BO	42	DG	C1'-O4'-C4'	-5.05	105.05	110.10
162	Cl	12	DT	C4'-C3'-C2'	-5.05	98.56	103.10
197	DK	16	DG	O4'-C1'-C2'	-5.05	101.86	105.90
307	E6	31	DA	P-O3'-C3'	5.05	125.76	119.70
335	FY	3	DG	O4'-C1'-C2'	-5.05	101.86	105.90
341	Fe	10	DC	O4'-C1'-C2'	-5.05	101.86	105.90
347	Fk	4	DT	O4'-C4'-C3'	-5.05	102.48	104.50
401	Gc	16	DC	C4'-C3'-C2'	-5.05	98.56	103.10
1	AA	2107	DC	C1'-O4'-C4'	-5.04	105.06	110.10
1	AA	2784	DA	P-O3'-C3'	5.04	125.75	119.70
2	AB	1131	DT	C4'-C3'-C2'	-5.04	98.56	103.10
2	AB	2031	DG	O4'-C1'-C2'	-5.04	101.86	105.90
253	EE	5	DG	O4'-C1'-C2'	-5.04	101.86	105.90
439	HE	12	DA	O4'-C1'-C2'	-5.04	101.86	105.90
1	AA	5616	DT	C4-C5-C7	-5.04	115.97	119.00
2	AB	1059	DT	C4'-C3'-C2'	-5.04	98.56	103.10
2	AB	2223	DG	O4'-C1'-C2'	-5.04	101.87	105.90
2	AB	2335	DC	O4'-C1'-N1	5.04	111.53	108.00
2	AB	2915	DT	C4'-C3'-C2'	-5.04	98.56	103.10
2	AB	4017	DT	C4'-C3'-C2'	-5.04	98.56	103.10
2	AB	4422	DG	P-O3'-C3'	5.04	125.75	119.70
45	As	34	DT	O4'-C1'-C2'	-5.04	101.86	105.90
227	Do	11	DG	C4'-C3'-C2'	-5.04	98.56	103.10
404	Gf	11	DG	O4'-C1'-C2'	-5.04	101.86	105.90
1	AA	426	DA	O4'-C1'-C2'	-5.04	101.87	105.90
1	AA	1358	DA	O4'-C1'-N9	5.04	111.53	108.00
1	AA	5007	DC	C6-N1-C2	-5.04	118.28	120.30
1	AA	5145	DG	O4'-C1'-C2'	-5.04	101.87	105.90
1	AA	6787	DG	C4'-C3'-C2'	-5.04	98.56	103.10
2	AB	1519	DG	O4'-C1'-C2'	-5.04	101.87	105.90
2	AB	1717	DA	O4'-C1'-C2'	-5.04	101.87	105.90
2	AB	2518	DG	C4'-C3'-C2'	-5.04	98.56	103.10
2	AB	2815	DC	C2-N1-C1'	5.04	124.35	118.80
2	AB	4513	DG	C1'-O4'-C4'	-5.04	105.06	110.10
2	AB	5420	DC	O4'-C1'-N1	5.04	111.53	108.00
2	AB	5731	DA	O4'-C1'-C2'	-5.04	101.87	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	6276	DT	C1'-O4'-C4'	-5.04	105.06	110.10
2	AB	6487	DC	O4'-C1'-C2'	-5.04	101.87	105.90
3	AC	29	DC	O4'-C1'-N1	5.04	111.53	108.00
9	AI	24	DT	O4'-C1'-N1	5.04	111.53	108.00
17	AQ	17	DA	P-O3'-C3'	5.04	125.75	119.70
32	Af	43	DT	O4'-C4'-C3'	-5.04	102.48	104.50
33	Ag	20	DT	C4'-C3'-C2'	-5.04	98.56	103.10
51	Ay	36	DT	P-O3'-C3'	5.04	125.75	119.70
54	A1	37	DC	C1'-O4'-C4'	-5.04	105.06	110.10
56	A3	49	DT	O4'-C4'-C3'	-5.04	102.48	104.50
58	A5	8	DT	O4'-C4'-C3'	-5.04	102.48	104.50
105	Bq	32	DA	N1-C6-N6	-5.04	115.58	118.60
113	By	26	DT	O4'-C1'-C2'	-5.04	101.87	105.90
227	Do	8	DA	N1-C6-N6	-5.04	115.58	118.60
244	D5	9	DC	C4'-C3'-C2'	-5.04	98.56	103.10
252	ED	2	DC	O4'-C1'-N1	-5.04	104.47	108.00
1	AA	6581	DG	C1'-O4'-C4'	-5.04	105.06	110.10
2	AB	4928	DT	C4'-C3'-C2'	-5.04	98.56	103.10
69	BG	31	DC	C6-N1-C2	-5.04	118.28	120.30
1	AA	3995	DA	C4'-C3'-C2'	-5.04	98.56	103.10
2	AB	4502	DA	C4'-C3'-C2'	-5.04	98.57	103.10
68	BF	17	DC	O4'-C1'-N1	5.04	111.53	108.00
74	BL	16	DC	P-O5'-C5'	-5.04	112.84	120.90
88	BZ	5	DC	C4'-C3'-C2'	-5.04	98.56	103.10
256	EH	7	DT	C1'-O4'-C4'	-5.04	105.06	110.10
305	E4	35	DG	O4'-C1'-C2'	-5.04	101.87	105.90
1	AA	189	DC	C6-N1-C2	-5.04	118.28	120.30
1	AA	2577	DA	P-O3'-C3'	5.04	125.75	119.70
1	AA	2848	DA	O4'-C1'-C2'	-5.04	101.87	105.90
1	AA	2992	DC	P-O3'-C3'	5.04	125.74	119.70
2	AB	101	DG	C4'-C3'-C2'	-5.04	98.57	103.10
2	AB	2785	DA	N1-C6-N6	-5.04	115.58	118.60
2	AB	6221	DT	C4'-C3'-C2'	-5.04	98.57	103.10
11	AK	32	DA	C1'-O4'-C4'	-5.04	105.06	110.10
90	Bb	11	DA	N1-C6-N6	-5.04	115.58	118.60
106	Br	18	DG	O4'-C1'-N9	5.04	111.53	108.00
1	AA	98	DC	O4'-C1'-C2'	-5.04	101.87	105.90
1	AA	5774	DT	O4'-C4'-C3'	-5.04	102.49	104.50
2	AB	2632	DG	P-O3'-C3'	5.04	125.74	119.70
2	AB	3331	DT	O4'-C1'-C2'	-5.04	101.87	105.90
2	AB	4719	DT	P-O3'-C3'	5.04	125.74	119.70
19	AS	40	DT	C4'-C3'-C2'	-5.04	98.57	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
77	BO	29	DC	P-O3'-C3'	5.04	125.74	119.70
247	D8	11	DC	O4'-C1'-N1	5.04	111.53	108.00
1	AA	4066	DA	O4'-C4'-C3'	-5.03	102.49	104.50
1	AA	6595	DA	O4'-C1'-C2'	-5.03	101.87	105.90
2	AB	3314	DT	C1'-O4'-C4'	-5.03	105.07	110.10
2	AB	4652	DG	O4'-C1'-C2'	-5.03	101.87	105.90
160	Cj	41	DA	C4'-C3'-C2'	-5.03	98.57	103.10
164	Cn	22	DA	O4'-C1'-C2'	-5.03	101.87	105.90
209	DW	19	DG	O4'-C1'-C2'	-5.03	101.87	105.90
251	EC	9	DT	P-O3'-C3'	5.03	125.74	119.70
392	GT	25	DG	O4'-C1'-C2'	-5.03	101.87	105.90
405	Gg	15	DT	C1'-O4'-C4'	-5.03	105.07	110.10
413	Go	27	DT	O4'-C4'-C3'	-5.03	102.49	104.50
2	AB	2627	DA	C4'-C3'-C2'	-5.03	98.57	103.10
2	AB	4990	DA	O4'-C1'-C2'	-5.03	101.87	105.90
116	B1	16	DT	O4'-C1'-C2'	-5.03	101.87	105.90
197	DK	29	DA	P-O3'-C3'	5.03	125.74	119.70
257	EI	19	DG	O4'-C1'-C2'	-5.03	101.88	105.90
343	Fg	6	DT	O4'-C4'-C3'	-5.03	102.49	104.50
385	GM	24	DC	O4'-C1'-C2'	-5.03	101.88	105.90
447	HM	2	DC	P-O3'-C3'	5.03	125.74	119.70
1	AA	2951	DG	O4'-C4'-C3'	-5.03	102.49	104.50
2	AB	4313	DC	O4'-C4'-C3'	-5.03	102.49	104.50
2	AB	4515	DT	C4'-C3'-C2'	-5.03	98.57	103.10
2	AB	6486	DG	C8-N9-C1'	-5.03	120.46	127.00
7	AG	40	DT	O4'-C1'-C2'	-5.03	101.88	105.90
158	Ch	19	DG	C5-C6-O6	-5.03	125.58	128.60
187	DA	40	DC	C6-N1-C1'	-5.03	114.76	120.80
250	EB	13	DG	N1-C6-O6	5.03	122.92	119.90
290	Ep	9	DG	P-O3'-C3'	5.03	125.74	119.70
302	E1	20	DA	P-O3'-C3'	-5.03	113.66	119.70
1	AA	5785	DA	C1'-O4'-C4'	-5.03	105.07	110.10
1	AA	5878	DT	C4'-C3'-C2'	-5.03	98.57	103.10
1	AA	7157	DT	O4'-C1'-C2'	-5.03	101.88	105.90
2	AB	3522	DC	C1'-O4'-C4'	-5.03	105.07	110.10
104	Bp	1	DT	C4'-C3'-C2'	-5.03	98.57	103.10
339	Fc	31	DA	P-O3'-C3'	5.03	125.73	119.70
1	AA	755	DC	O4'-C4'-C3'	-5.03	102.49	104.50
1	AA	2478	DA	O4'-C1'-C2'	-5.03	101.88	105.90
1	AA	7065	DT	C1'-O4'-C4'	-5.03	105.07	110.10
2	AB	206	DA	C4'-C3'-C2'	-5.03	98.57	103.10
2	AB	1137	DC	O4'-C1'-C2'	-5.03	101.88	105.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	4449	DT	O4'-C4'-C3'	-5.03	102.49	104.50
26	AZ	40	DG	O4'-C1'-C2'	-5.03	101.88	105.90
55	A2	41	DT	O4'-C1'-C2'	-5.03	101.88	105.90
58	A5	48	DT	C4'-C3'-C2'	-5.03	98.58	103.10
80	BR	18	DG	P-O3'-C3'	5.03	125.73	119.70
104	Bp	9	DG	O4'-C1'-C2'	-5.03	101.88	105.90
316	FF	33	DG	C5-C6-O6	-5.03	125.58	128.60
317	FG	35	DG	O4'-C1'-C2'	-5.03	101.88	105.90
367	F4	23	DT	C1'-O4'-C4'	-5.03	105.07	110.10
1	AA	677	DA	O4'-C1'-C2'	-5.03	101.88	105.90
1	AA	758	DC	O4'-C1'-C2'	-5.03	101.88	105.90
1	AA	1300	DG	P-O3'-C3'	5.03	125.73	119.70
2	AB	2115	DG	C1'-O4'-C4'	-5.03	105.07	110.10
2	AB	6757	DG	O4'-C4'-C3'	-5.03	102.49	104.50
28	Ab	26	DC	O4'-C1'-C2'	-5.03	101.88	105.90
188	DB	40	DT	C4'-C3'-C2'	-5.03	98.58	103.10
215	Dc	16	DT	O4'-C1'-C2'	-5.03	101.88	105.90
242	D3	5	DA	C1'-O4'-C4'	-5.03	105.08	110.10
247	D8	36	DT	O4'-C4'-C3'	-5.03	102.49	104.50
364	F1	10	DA	O4'-C1'-N9	-5.03	104.48	108.00
379	GG	20	DT	P-O3'-C3'	5.03	125.73	119.70
1	AA	4882	DC	P-O5'-C5'	5.02	128.94	120.90
2	AB	3382	DC	O4'-C1'-C2'	-5.02	101.88	105.90
55	A2	9	DT	O4'-C4'-C3'	-5.02	102.49	104.50
61	A8	47	DT	O4'-C4'-C3'	-5.02	102.49	104.50
79	BQ	8	DT	O4'-C4'-C3'	-5.02	102.49	104.50
196	DJ	39	DA	O4'-C4'-C3'	-5.02	102.49	104.50
214	Db	8	DT	O4'-C4'-C3'	-5.02	102.49	104.50
313	FC	21	DT	O4'-C1'-C2'	-5.02	101.88	105.90
352	Fp	4	DC	C4'-C3'-C2'	-5.02	98.58	103.10
1	AA	3007	DA	N1-C6-N6	-5.02	115.59	118.60
1	AA	3081	DA	C1'-O4'-C4'	-5.02	105.08	110.10
2	AB	6621	DC	O4'-C1'-C2'	-5.02	101.88	105.90
2	AB	6630	DA	C1'-O4'-C4'	-5.02	105.08	110.10
427	G2	24	DT	O4'-C4'-C3'	-5.02	102.49	104.50
440	HF	6	DT	O4'-C4'-C3'	-5.02	102.49	104.50
453	HS	15	DG	O4'-C1'-C2'	-5.02	101.88	105.90
2	AB	5519	DG	O4'-C1'-N9	5.02	111.52	108.00
174	Cx	12	DG	C1'-O4'-C4'	-5.02	105.08	110.10
192	DF	33	DA	N1-C6-N6	-5.02	115.59	118.60
305	E4	31	DA	O4'-C1'-N9	-5.02	104.48	108.00
1	AA	756	DC	O4'-C1'-N1	5.02	111.51	108.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1793	DA	N1-C6-N6	-5.02	115.59	118.60
1	AA	3285	DC	C2-N1-C1'	5.02	124.32	118.80
1	AA	4981	DC	O4'-C1'-C2'	-5.02	101.88	105.90
1	AA	6500	DA	O4'-C1'-C2'	-5.02	101.88	105.90
1	AA	6540	DC	C4'-C3'-C2'	-5.02	98.58	103.10
15	AO	17	DC	C1'-O4'-C4'	-5.02	105.08	110.10
16	AP	6	DT	O4'-C4'-C3'	-5.02	102.49	104.50
21	AU	44	DT	O4'-C4'-C3'	-5.02	102.49	104.50
28	Ab	44	DT	O4'-C4'-C3'	-5.02	102.49	104.50
35	Ai	42	DT	O4'-C4'-C3'	-5.02	102.49	104.50
142	CR	19	DG	C1'-O4'-C4'	-5.02	105.08	110.10
146	CV	3	DT	C4'-C3'-C2'	-5.02	98.58	103.10
198	DL	3	DG	O4'-C1'-C2'	-5.02	101.89	105.90
239	D0	2	DG	C1'-O4'-C4'	-5.02	105.08	110.10
266	ER	9	DC	O4'-C1'-C2'	-5.02	101.88	105.90
317	FG	31	DG	O4'-C1'-C2'	-5.02	101.89	105.90
320	FJ	16	DA	P-O3'-C3'	5.02	125.72	119.70
432	G7	8	DT	O4'-C1'-N1	-5.02	104.49	108.00
1	AA	292	DG	O4'-C1'-C2'	-5.02	101.89	105.90
2	AB	2658	DT	C4'-C3'-C2'	-5.02	98.58	103.10
12	AL	7	DT	O4'-C4'-C3'	-5.02	102.49	104.50
128	CD	25	DA	N1-C6-N6	-5.02	115.59	118.60
195	DI	2	DA	O4'-C1'-C2'	-5.02	101.89	105.90
219	Dg	38	DG	C4'-C3'-C2'	-5.02	98.58	103.10
220	Dh	7	DT	O4'-C4'-C3'	-5.02	102.49	104.50
278	Ed	4	DA	O4'-C1'-C2'	-5.02	101.89	105.90
352	Fp	22	DA	N1-C6-N6	-5.02	115.59	118.60
364	F1	23	DG	N1-C6-O6	5.02	122.91	119.90
1	AA	2961	DA	C4'-C3'-C2'	-5.02	98.58	103.10
1	AA	7215	DG	P-O5'-C5'	5.02	128.93	120.90
2	AB	1872	DA	N1-C6-N6	-5.02	115.59	118.60
257	EI	24	DT	C4'-C3'-C2'	-5.02	98.59	103.10
1	AA	1482	DA	O4'-C1'-C2'	-5.01	101.89	105.90
1	AA	1912	DC	O4'-C1'-N1	5.01	111.51	108.00
1	AA	3693	DC	P-O5'-C5'	5.01	128.92	120.90
1	AA	5616	DT	C6-C5-C7	5.01	125.91	122.90
1	AA	7235	DT	O4'-C1'-C2'	-5.01	101.89	105.90
2	AB	685	DG	O4'-C1'-N9	5.01	111.51	108.00
2	AB	5148	DG	C1'-O4'-C4'	-5.01	105.08	110.10
2	AB	5548	DG	C1'-O4'-C4'	-5.01	105.09	110.10
19	AS	4	DT	P-O3'-C3'	-5.01	113.68	119.70
47	Au	35	DC	C4'-C3'-C2'	-5.01	98.59	103.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
158	Ch	23	DA	C4'-C3'-C2'	-5.01	98.59	103.10
161	Ck	1	DT	C4'-C3'-C2'	-5.01	98.59	103.10
266	ER	5	DG	O4'-C4'-C3'	-5.01	102.50	104.50
274	EZ	12	DG	O4'-C1'-N9	5.01	111.51	108.00
306	E5	17	DA	O4'-C1'-C2'	-5.01	101.89	105.90
389	GQ	12	DC	C1'-O4'-C4'	-5.01	105.08	110.10
171	Cu	5	DG	O4'-C1'-C2'	-5.01	101.89	105.90
261	EM	10	DG	C5-C6-O6	-5.01	125.59	128.60
323	FM	18	DC	C4'-C3'-C2'	-5.01	98.59	103.10
1	AA	515	DA	P-O3'-C3'	5.01	125.72	119.70
1	AA	6176	DG	O4'-C1'-C2'	-5.01	101.89	105.90
2	AB	653	DA	C1'-O4'-C4'	-5.01	105.09	110.10
2	AB	908	DC	O4'-C4'-C3'	-5.01	102.50	104.50
2	AB	4132	DA	O4'-C1'-C2'	-5.01	101.89	105.90
2	AB	4276	DA	O4'-C1'-C2'	-5.01	101.89	105.90
54	A1	15	DT	O4'-C1'-C2'	-5.01	101.89	105.90
62	A9	8	DT	O4'-C4'-C3'	-5.01	102.50	104.50
202	DP	10	DT	C4'-C3'-C2'	-5.01	98.59	103.10
210	DX	10	DG	O4'-C1'-C2'	-5.01	101.89	105.90
1	AA	534	DG	C1'-O4'-C4'	-5.01	105.09	110.10
1	AA	2492	DG	O4'-C1'-C2'	-5.01	101.89	105.90
2	AB	588	DA	P-O3'-C3'	5.01	125.71	119.70
2	AB	3850	DC	O4'-C1'-C2'	-5.01	101.89	105.90
2	AB	3964	DG	O4'-C1'-C2'	-5.01	101.89	105.90
90	Bb	16	DT	C1'-O4'-C4'	-5.01	105.09	110.10
91	Bc	16	DC	P-O3'-C3'	5.01	125.71	119.70
128	CD	28	DA	C1'-O4'-C4'	-5.01	105.09	110.10
141	CQ	1	DG	C1'-O4'-C4'	-5.01	105.09	110.10
176	Cz	14	DG	C1'-O4'-C4'	-5.01	105.09	110.10
254	EF	30	DA	O4'-C1'-C2'	-5.01	101.89	105.90
320	FJ	16	DA	O4'-C1'-C2'	-5.01	101.89	105.90
336	FZ	30	DA	O4'-C1'-C2'	-5.01	101.89	105.90
358	Fv	18	DC	O4'-C1'-C2'	-5.01	101.89	105.90
1	AA	1372	DC	C1'-O4'-C4'	-5.01	105.09	110.10
2	AB	1867	DC	C4'-C3'-C2'	-5.01	98.59	103.10
2	AB	5956	DT	C1'-O4'-C4'	-5.01	105.09	110.10
94	Bf	8	DC	O4'-C1'-C2'	-5.01	101.89	105.90
1	AA	4468	DT	C4'-C3'-C2'	-5.01	98.59	103.10
1	AA	4512	DT	C4'-C3'-C2'	-5.01	98.59	103.10
1	AA	6459	DC	P-O3'-C3'	5.01	125.71	119.70
2	AB	1160	DC	C6-N1-C1'	-5.01	114.79	120.80
2	AB	2305	DA	N1-C6-N6	-5.01	115.60	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2794	DG	O4'-C1'-C2'	-5.01	101.89	105.90
9	AI	9	DT	O4'-C4'-C3'	-5.01	102.50	104.50
72	BJ	33	DT	C4'-C3'-C2'	-5.01	98.59	103.10
97	Bi	21	DG	O4'-C1'-C2'	-5.01	101.89	105.90
101	Bm	19	DG	O4'-C1'-C2'	-5.01	101.89	105.90
115	B0	22	DT	O4'-C1'-C2'	-5.01	101.89	105.90
180	C3	9	DT	O4'-C1'-C2'	-5.01	101.89	105.90
192	DF	14	DT	P-O3'-C3'	5.01	125.71	119.70
1	AA	1057	DA	C1'-O4'-C4'	-5.00	105.09	110.10
2	AB	7369	DT	C4'-C3'-C2'	-5.00	98.59	103.10
15	AO	41	DG	C5-C6-O6	-5.00	125.60	128.60
133	CI	16	DA	C1'-O4'-C4'	-5.00	105.09	110.10
221	Di	9	DA	O4'-C1'-C2'	-5.00	101.90	105.90
1	AA	1856	DA	O4'-C1'-C2'	-5.00	101.90	105.90
1	AA	5500	DG	O4'-C1'-N9	5.00	111.50	108.00
2	AB	623	DT	C4'-C3'-C2'	-5.00	98.60	103.10
2	AB	3050	DA	O4'-C4'-C3'	-5.00	102.50	104.50
2	AB	4482	DA	O4'-C4'-C3'	-5.00	102.50	104.50
2	AB	5245	DG	O4'-C1'-C2'	-5.00	101.90	105.90
2	AB	6278	DA	C1'-O4'-C4'	-5.00	105.10	110.10
38	Al	6	DT	O4'-C4'-C3'	-5.00	102.50	104.50
43	Aq	11	DA	O4'-C1'-C2'	-5.00	101.90	105.90
98	Bj	37	DG	N3-C2-N2	5.00	123.40	119.90
111	Bw	37	DA	P-O3'-C3'	5.00	125.70	119.70
120	B5	42	DA	O4'-C1'-N9	-5.00	104.50	108.00
145	CU	19	DG	C1'-O4'-C4'	-5.00	105.10	110.10
215	Dc	26	DA	O4'-C1'-C2'	-5.00	101.90	105.90
272	EX	30	DC	P-O3'-C3'	5.00	125.70	119.70
1	AA	3215	DG	C1'-O4'-C4'	-5.00	105.10	110.10
1	AA	4639	DA	O4'-C1'-C2'	-5.00	101.90	105.90
2	AB	1292	DA	C4'-C3'-C2'	-5.00	98.60	103.10
2	AB	4818	DT	O4'-C1'-C2'	-5.00	101.90	105.90
2	AB	4934	DG	O4'-C1'-N9	5.00	111.50	108.00
4	AD	15	DG	N1-C6-O6	5.00	122.90	119.90
214	Db	11	DA	O4'-C1'-C2'	-5.00	101.90	105.90
326	FP	20	DC	C1'-O4'-C4'	-5.00	105.10	110.10
344	Fh	25	DT	O4'-C4'-C3'	-5.00	102.50	104.50
418	Gt	4	DT	O4'-C4'-C3'	-5.00	102.50	104.50

All (2137) chirality outliers are listed below:

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Mol	Chain	Res	Type	Atom

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’
1	AA	873	DC	C3’
1	AA	909	DC	C3’
1	AA	945	DC	C3’
1	AA	995	DC	C3’
1	AA	1045	DC	C3’
1	AA	1088	DC	C3’
1	AA	1330	DC	C3’
1	AA	1331	DT	C3’
1	AA	1332	DG	C3’
1	AA	1333	DG	C3’
1	AA	1334	DA	C3’
1	AA	1440	DG	C3’
1	AA	1468	DG	C3’
1	AA	1496	DC	C3’
1	AA	1980	DG	C3’
1	AA	2016	DT	C3’
1	AA	2052	DG	C3’
1	AA	2088	DG	C3’
1	AA	2124	DC	C3’
1	AA	2152	DT	C3’
1	AA	2180	DG	C3’
1	AA	2208	DG	C3’
1	AA	2818	DT	C3’
1	AA	2934	DT	C3’
1	AA	3132	DA	C3’
1	AA	3330	DT	C3’
1	AA	3512	DT	C3’
1	AA	3694	DT	C3’
1	AA	4635	DA	C3’
1	AA	4833	DA	C3’
1	AA	5023	DA	C3’
1	AA	5205	DG	C3’
1	AA	5380	DA	C3’
1	AA	5578	DA	C3’
1	AA	5768	DA	C3’
1	AA	5950	DG	C3’

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Mol	Chain	Res	Type	Atom
1	AA	6703	DC	C3'
1	AA	6901	DG	C3'
1	AA	7382	DA	C3'
1	AA	7452	DG	C3'
1	AA	7522	DG	C3'
2	AB	74	DT	C3'
2	AB	388	DC	C3'
2	AB	508	DA	C3'
2	AB	544	DA	C3'
2	AB	654	DT	C3'
2	AB	655	DT	C3'
2	AB	656	DT	C3'
2	AB	658	DC	C3'
2	AB	659	DT	C3'
2	AB	660	DA	C3'
2	AB	661	DC	C3'
2	AB	685	DG	C3'
2	AB	706	DA	C3'
2	AB	860	DG	C3'
2	AB	888	DG	C3'
2	AB	1050	DT	C3'
2	AB	1086	DC	C3'
2	AB	1248	DC	C3'
2	AB	2001	DT	C3'
2	AB	2029	DC	C3'
2	AB	2183	DT	C3'
2	AB	2211	DG	C3'
2	AB	2746	DT	C3'
2	AB	2774	DG	C3'
2	AB	2928	DT	C3'
2	AB	2956	DT	C3'
2	AB	3118	DC	C3'
2	AB	3154	DC	C3'
2	AB	3316	DA	C3'
2	AB	3352	DT	C3'
2	AB	4293	DT	C3'
2	AB	4447	DT	C3'
2	AB	4475	DC	C3'
2	AB	4629	DT	C3'
2	AB	4657	DC	C3'
2	AB	4919	DT	C3'
2	AB	5143	DT	C3'

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Mol	Chain	Res	Type	Atom
2	AB	5367	DC	C3'
2	AB	5591	DA	C3'
2	AB	6150	DC	C3'
2	AB	6186	DA	C3'
2	AB	6222	DC	C3'
2	AB	6258	DT	C3'
2	AB	6294	DA	C3'
2	AB	6322	DA	C3'
2	AB	6350	DC	C3'
2	AB	6378	DT	C3'
2	AB	6406	DG	C3'
2	AB	6910	DT	C3'
2	AB	6946	DC	C3'
2	AB	6982	DT	C3'
2	AB	7018	DG	C3'
2	AB	7046	DC	C3'
2	AB	7074	DT	C3'
2	AB	7102	DG	C3'
2	AB	7232	DA	C3'
2	AB	7260	DT	C3'
2	AB	7288	DC	C3'
2	AB	7324	DT	C3'
2	AB	7360	DG	C3'
2	AB	7458	DT	C3'
2	AB	7472	DA	C3'
2	AB	7529	DA	C3'
3	AC	1	DT	C3'
3	AC	2	DT	C3'
3	AC	3	DT	C3'
3	AC	4	DT	C3'
3	AC	5	DT	C3'
3	AC	6	DT	C3'
3	AC	7	DT	C3'
3	AC	8	DT	C3'
3	AC	42	DT	C3'
3	AC	43	DT	C3'
3	AC	44	DT	C3'
3	AC	45	DT	C3'
3	AC	46	DT	C3'
3	AC	47	DT	C3'
3	AC	48	DT	C3'
3	AC	49	DT	C3'

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Mol	Chain	Res	Type	Atom
4	AD	1	DT	C3'
4	AD	2	DT	C3'
4	AD	3	DT	C3'
4	AD	4	DT	C3'
4	AD	5	DT	C3'
4	AD	6	DT	C3'
4	AD	7	DT	C3'
4	AD	8	DT	C3'
4	AD	42	DT	C3'
4	AD	43	DT	C3'
4	AD	44	DT	C3'
4	AD	45	DT	C3'
4	AD	46	DT	C3'
4	AD	47	DT	C3'
4	AD	48	DT	C3'
4	AD	49	DT	C3'
5	AE	1	DT	C3'
5	AE	2	DT	C3'
5	AE	3	DT	C3'
5	AE	4	DT	C3'
5	AE	5	DT	C3'
5	AE	6	DT	C3'
5	AE	7	DT	C3'
5	AE	8	DT	C3'
5	AE	42	DT	C3'
5	AE	43	DT	C3'
5	AE	44	DT	C3'
5	AE	45	DT	C3'
5	AE	46	DT	C3'
5	AE	47	DT	C3'
5	AE	48	DT	C3'
5	AE	49	DT	C3'
6	AF	1	DT	C3'
6	AF	2	DT	C3'
6	AF	3	DT	C3'
6	AF	4	DT	C3'
6	AF	5	DT	C3'
6	AF	6	DT	C3'
6	AF	7	DT	C3'
6	AF	8	DT	C3'
6	AF	42	DT	C3'
6	AF	43	DT	C3'

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Mol	Chain	Res	Type	Atom
6	AF	44	DT	C3'
6	AF	45	DT	C3'
6	AF	46	DT	C3'
6	AF	47	DT	C3'
6	AF	48	DT	C3'
6	AF	49	DT	C3'
7	AG	1	DT	C3'
7	AG	2	DT	C3'
7	AG	3	DT	C3'
7	AG	4	DT	C3'
7	AG	5	DT	C3'
7	AG	6	DT	C3'
7	AG	7	DT	C3'
7	AG	8	DT	C3'
7	AG	42	DT	C3'
7	AG	43	DT	C3'
7	AG	44	DT	C3'
7	AG	45	DT	C3'
7	AG	46	DT	C3'
7	AG	47	DT	C3'
7	AG	48	DT	C3'
7	AG	49	DT	C3'
8	AH	1	DT	C3'
8	AH	2	DT	C3'
8	AH	3	DT	C3'
8	AH	4	DT	C3'
8	AH	5	DT	C3'
8	AH	6	DT	C3'
8	AH	7	DT	C3'
8	AH	8	DT	C3'
8	AH	9	DT	C3'
8	AH	42	DT	C3'
8	AH	43	DT	C3'
8	AH	44	DT	C3'
8	AH	45	DT	C3'
8	AH	46	DT	C3'
8	AH	47	DT	C3'
8	AH	48	DT	C3'
8	AH	49	DT	C3'
9	AI	1	DT	C3'
9	AI	2	DT	C3'
9	AI	3	DT	C3'

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Mol	Chain	Res	Type	Atom
9	AI	4	DT	C3'
9	AI	5	DT	C3'
9	AI	6	DT	C3'
9	AI	7	DT	C3'
9	AI	8	DT	C3'
9	AI	9	DT	C3'
9	AI	42	DT	C3'
9	AI	43	DT	C3'
9	AI	44	DT	C3'
9	AI	45	DT	C3'
9	AI	46	DT	C3'
9	AI	47	DT	C3'
9	AI	48	DT	C3'
9	AI	49	DT	C3'
10	AJ	1	DT	C3'
10	AJ	2	DT	C3'
10	AJ	3	DT	C3'
10	AJ	4	DT	C3'
10	AJ	5	DT	C3'
10	AJ	6	DT	C3'
10	AJ	7	DT	C3'
10	AJ	8	DT	C3'
10	AJ	9	DT	C3'
10	AJ	43	DT	C3'
10	AJ	44	DT	C3'
10	AJ	45	DT	C3'
10	AJ	46	DT	C3'
10	AJ	47	DT	C3'
10	AJ	48	DT	C3'
10	AJ	49	DT	C3'
11	AK	1	DT	C3'
11	AK	2	DT	C3'
11	AK	3	DT	C3'
11	AK	4	DT	C3'
11	AK	5	DT	C3'
11	AK	6	DT	C3'
11	AK	7	DT	C3'
11	AK	8	DT	C3'
11	AK	9	DT	C3'
11	AK	42	DT	C3'
11	AK	43	DT	C3'
11	AK	44	DT	C3'

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Mol	Chain	Res	Type	Atom
11	AK	45	DT	C3'
11	AK	46	DT	C3'
11	AK	47	DT	C3'
11	AK	48	DT	C3'
11	AK	49	DT	C3'
12	AL	1	DT	C3'
12	AL	2	DT	C3'
12	AL	3	DT	C3'
12	AL	4	DT	C3'
12	AL	5	DT	C3'
12	AL	6	DT	C3'
12	AL	7	DT	C3'
12	AL	8	DT	C3'
12	AL	9	DT	C3'
12	AL	42	DT	C3'
12	AL	43	DT	C3'
12	AL	44	DT	C3'
12	AL	45	DT	C3'
12	AL	46	DT	C3'
12	AL	47	DT	C3'
12	AL	48	DT	C3'
12	AL	49	DT	C3'
13	AM	1	DT	C3'
13	AM	2	DT	C3'
13	AM	3	DT	C3'
13	AM	4	DT	C3'
13	AM	5	DT	C3'
13	AM	6	DT	C3'
13	AM	7	DT	C3'
13	AM	8	DT	C3'
13	AM	9	DT	C3'
13	AM	42	DT	C3'
13	AM	43	DT	C3'
13	AM	44	DT	C3'
13	AM	45	DT	C3'
13	AM	46	DT	C3'
13	AM	47	DT	C3'
13	AM	48	DT	C3'
13	AM	49	DT	C3'
14	AN	1	DT	C3'
14	AN	2	DT	C3'
14	AN	3	DT	C3'

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Mol	Chain	Res	Type	Atom
14	AN	4	DT	C3'
14	AN	5	DT	C3'
14	AN	6	DT	C3'
14	AN	7	DT	C3'
14	AN	8	DT	C3'
14	AN	9	DT	C3'
14	AN	42	DT	C3'
14	AN	43	DT	C3'
14	AN	44	DT	C3'
14	AN	45	DT	C3'
14	AN	46	DT	C3'
14	AN	47	DT	C3'
14	AN	48	DT	C3'
14	AN	49	DT	C3'
15	AO	1	DT	C3'
15	AO	2	DT	C3'
15	AO	3	DT	C3'
15	AO	4	DT	C3'
15	AO	5	DT	C3'
15	AO	6	DT	C3'
15	AO	7	DT	C3'
15	AO	8	DT	C3'
15	AO	9	DT	C3'
15	AO	42	DT	C3'
15	AO	43	DT	C3'
15	AO	44	DT	C3'
15	AO	45	DT	C3'
15	AO	46	DT	C3'
15	AO	47	DT	C3'
15	AO	48	DT	C3'
15	AO	49	DT	C3'
16	AP	1	DT	C3'
16	AP	2	DT	C3'
16	AP	3	DT	C3'
16	AP	4	DT	C3'
16	AP	5	DT	C3'
16	AP	6	DT	C3'
16	AP	7	DT	C3'
16	AP	8	DT	C3'
16	AP	9	DT	C3'
16	AP	43	DT	C3'
16	AP	44	DT	C3'

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Mol	Chain	Res	Type	Atom
16	AP	45	DT	C3'
16	AP	46	DT	C3'
16	AP	47	DT	C3'
16	AP	48	DT	C3'
16	AP	49	DT	C3'
17	AQ	1	DT	C3'
17	AQ	2	DT	C3'
17	AQ	3	DT	C3'
17	AQ	4	DT	C3'
17	AQ	5	DT	C3'
17	AQ	6	DT	C3'
17	AQ	7	DT	C3'
17	AQ	8	DT	C3'
17	AQ	9	DT	C3'
17	AQ	43	DT	C3'
17	AQ	44	DT	C3'
17	AQ	45	DT	C3'
17	AQ	46	DT	C3'
17	AQ	47	DT	C3'
17	AQ	48	DT	C3'
17	AQ	49	DT	C3'
18	AR	1	DT	C3'
18	AR	2	DT	C3'
18	AR	3	DT	C3'
18	AR	4	DT	C3'
18	AR	5	DT	C3'
18	AR	6	DT	C3'
18	AR	7	DT	C3'
18	AR	8	DT	C3'
18	AR	9	DT	C3'
18	AR	43	DT	C3'
18	AR	44	DT	C3'
18	AR	45	DT	C3'
18	AR	46	DT	C3'
18	AR	47	DT	C3'
18	AR	48	DT	C3'
18	AR	49	DT	C3'
19	AS	1	DT	C3'
19	AS	2	DT	C3'
19	AS	3	DT	C3'
19	AS	4	DT	C3'
19	AS	5	DT	C3'

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Mol	Chain	Res	Type	Atom
19	AS	6	DT	C3'
19	AS	7	DT	C3'
19	AS	8	DT	C3'
19	AS	9	DT	C3'
19	AS	43	DT	C3'
19	AS	44	DT	C3'
19	AS	45	DT	C3'
19	AS	46	DT	C3'
19	AS	47	DT	C3'
19	AS	48	DT	C3'
19	AS	49	DT	C3'
20	AT	1	DT	C3'
20	AT	2	DT	C3'
20	AT	3	DT	C3'
20	AT	4	DT	C3'
20	AT	5	DT	C3'
20	AT	6	DT	C3'
20	AT	7	DT	C3'
20	AT	8	DT	C3'
20	AT	9	DT	C3'
20	AT	43	DT	C3'
20	AT	44	DT	C3'
20	AT	45	DT	C3'
20	AT	46	DT	C3'
20	AT	47	DT	C3'
20	AT	48	DT	C3'
20	AT	49	DT	C3'
21	AU	1	DT	C3'
21	AU	2	DT	C3'
21	AU	3	DT	C3'
21	AU	4	DT	C3'
21	AU	5	DT	C3'
21	AU	6	DT	C3'
21	AU	7	DT	C3'
21	AU	8	DT	C3'
21	AU	9	DT	C3'
21	AU	43	DT	C3'
21	AU	44	DT	C3'
21	AU	45	DT	C3'
21	AU	46	DT	C3'
21	AU	47	DT	C3'
21	AU	48	DT	C3'

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Mol	Chain	Res	Type	Atom
21	AU	49	DT	C3'
22	AV	1	DT	C3'
22	AV	2	DT	C3'
22	AV	3	DT	C3'
22	AV	4	DT	C3'
22	AV	5	DT	C3'
22	AV	6	DT	C3'
22	AV	7	DT	C3'
22	AV	8	DT	C3'
22	AV	9	DT	C3'
22	AV	43	DT	C3'
22	AV	44	DT	C3'
22	AV	45	DT	C3'
22	AV	46	DT	C3'
22	AV	47	DT	C3'
22	AV	48	DT	C3'
22	AV	49	DT	C3'
23	AW	1	DT	C3'
23	AW	2	DT	C3'
23	AW	3	DT	C3'
23	AW	4	DT	C3'
23	AW	5	DT	C3'
23	AW	6	DT	C3'
23	AW	7	DT	C3'
23	AW	8	DT	C3'
23	AW	9	DT	C3'
23	AW	43	DT	C3'
23	AW	44	DT	C3'
23	AW	45	DT	C3'
23	AW	46	DT	C3'
23	AW	47	DT	C3'
23	AW	48	DT	C3'
23	AW	49	DT	C3'
24	AX	1	DT	C3'
24	AX	2	DT	C3'
24	AX	3	DT	C3'
24	AX	4	DT	C3'
24	AX	5	DT	C3'
24	AX	6	DT	C3'
24	AX	7	DT	C3'
24	AX	8	DT	C3'
24	AX	9	DT	C3'

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Mol	Chain	Res	Type	Atom
24	AX	43	DT	C3’
24	AX	44	DT	C3’
24	AX	45	DT	C3’
24	AX	46	DT	C3’
24	AX	47	DT	C3’
24	AX	48	DT	C3’
24	AX	49	DT	C3’
25	AY	1	DT	C3’
25	AY	2	DT	C3’
25	AY	3	DT	C3’
25	AY	4	DT	C3’
25	AY	5	DT	C3’
25	AY	6	DT	C3’
25	AY	7	DT	C3’
25	AY	8	DT	C3’
25	AY	9	DT	C3’
25	AY	43	DT	C3’
25	AY	44	DT	C3’
25	AY	45	DT	C3’
25	AY	46	DT	C3’
25	AY	47	DT	C3’
25	AY	48	DT	C3’
25	AY	49	DT	C3’
26	AZ	1	DT	C3’
26	AZ	2	DT	C3’
26	AZ	3	DT	C3’
26	AZ	4	DT	C3’
26	AZ	5	DT	C3’
26	AZ	6	DT	C3’
26	AZ	7	DT	C3’
26	AZ	8	DT	C3’
26	AZ	42	DT	C3’
26	AZ	43	DT	C3’
26	AZ	44	DT	C3’
26	AZ	45	DT	C3’
26	AZ	46	DT	C3’
26	AZ	47	DT	C3’
26	AZ	48	DT	C3’
26	AZ	49	DT	C3’
27	Aa	1	DT	C3’
27	Aa	2	DT	C3’
27	Aa	3	DT	C3’

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Mol	Chain	Res	Type	Atom
27	Aa	4	DT	C3'
27	Aa	5	DT	C3'
27	Aa	6	DT	C3'
27	Aa	7	DT	C3'
27	Aa	8	DT	C3'
27	Aa	42	DT	C3'
27	Aa	43	DT	C3'
27	Aa	44	DT	C3'
27	Aa	45	DT	C3'
27	Aa	46	DT	C3'
27	Aa	47	DT	C3'
27	Aa	48	DT	C3'
27	Aa	49	DT	C3'
28	Ab	1	DT	C3'
28	Ab	2	DT	C3'
28	Ab	3	DT	C3'
28	Ab	4	DT	C3'
28	Ab	5	DT	C3'
28	Ab	6	DT	C3'
28	Ab	7	DT	C3'
28	Ab	8	DT	C3'
28	Ab	42	DT	C3'
28	Ab	43	DT	C3'
28	Ab	44	DT	C3'
28	Ab	45	DT	C3'
28	Ab	46	DT	C3'
28	Ab	47	DT	C3'
28	Ab	48	DT	C3'
28	Ab	49	DT	C3'
29	Ac	1	DT	C3'
29	Ac	2	DT	C3'
29	Ac	3	DT	C3'
29	Ac	4	DT	C3'
29	Ac	5	DT	C3'
29	Ac	6	DT	C3'
29	Ac	7	DT	C3'
29	Ac	8	DT	C3'
29	Ac	42	DT	C3'
29	Ac	43	DT	C3'
29	Ac	44	DT	C3'
29	Ac	45	DT	C3'
29	Ac	46	DT	C3'

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Mol	Chain	Res	Type	Atom
29	Ac	47	DT	C3'
29	Ac	48	DT	C3'
29	Ac	49	DT	C3'
30	Ad	1	DT	C3'
30	Ad	2	DT	C3'
30	Ad	3	DT	C3'
30	Ad	4	DT	C3'
30	Ad	5	DT	C3'
30	Ad	6	DT	C3'
30	Ad	7	DT	C3'
30	Ad	8	DT	C3'
30	Ad	42	DT	C3'
30	Ad	43	DT	C3'
30	Ad	44	DT	C3'
30	Ad	45	DT	C3'
30	Ad	46	DT	C3'
30	Ad	47	DT	C3'
30	Ad	48	DT	C3'
30	Ad	49	DT	C3'
31	Ae	1	DT	C3'
31	Ae	2	DT	C3'
31	Ae	3	DT	C3'
31	Ae	4	DT	C3'
31	Ae	5	DT	C3'
31	Ae	6	DT	C3'
31	Ae	7	DT	C3'
31	Ae	8	DT	C3'
31	Ae	42	DT	C3'
31	Ae	43	DT	C3'
31	Ae	44	DT	C3'
31	Ae	45	DT	C3'
31	Ae	46	DT	C3'
31	Ae	47	DT	C3'
31	Ae	48	DT	C3'
31	Ae	49	DT	C3'
32	Af	1	DT	C3'
32	Af	2	DT	C3'
32	Af	3	DT	C3'
32	Af	4	DT	C3'
32	Af	5	DT	C3'
32	Af	6	DT	C3'
32	Af	7	DT	C3'

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Mol	Chain	Res	Type	Atom
32	Af	8	DT	C3'
32	Af	42	DT	C3'
32	Af	43	DT	C3'
32	Af	44	DT	C3'
32	Af	45	DT	C3'
32	Af	46	DT	C3'
32	Af	47	DT	C3'
32	Af	48	DT	C3'
32	Af	49	DT	C3'
33	Ag	1	DT	C3'
33	Ag	2	DT	C3'
33	Ag	3	DT	C3'
33	Ag	4	DT	C3'
33	Ag	5	DT	C3'
33	Ag	6	DT	C3'
33	Ag	7	DT	C3'
33	Ag	8	DT	C3'
33	Ag	42	DT	C3'
33	Ag	43	DT	C3'
33	Ag	44	DT	C3'
33	Ag	45	DT	C3'
33	Ag	46	DT	C3'
33	Ag	47	DT	C3'
33	Ag	48	DT	C3'
33	Ag	49	DT	C3'
34	Ah	1	DT	C3'
34	Ah	2	DT	C3'
34	Ah	3	DT	C3'
34	Ah	4	DT	C3'
34	Ah	5	DT	C3'
34	Ah	6	DT	C3'
34	Ah	7	DT	C3'
34	Ah	8	DT	C3'
34	Ah	9	DT	C3'
34	Ah	42	DT	C3'
34	Ah	43	DT	C3'
34	Ah	44	DT	C3'
34	Ah	45	DT	C3'
34	Ah	46	DT	C3'
34	Ah	47	DT	C3'
34	Ah	48	DT	C3'
34	Ah	49	DT	C3'

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Mol	Chain	Res	Type	Atom
35	Ai	1	DT	C3'
35	Ai	2	DT	C3'
35	Ai	3	DT	C3'
35	Ai	4	DT	C3'
35	Ai	5	DT	C3'
35	Ai	6	DT	C3'
35	Ai	7	DT	C3'
35	Ai	8	DT	C3'
35	Ai	9	DT	C3'
35	Ai	42	DT	C3'
35	Ai	43	DT	C3'
35	Ai	44	DT	C3'
35	Ai	45	DT	C3'
35	Ai	46	DT	C3'
35	Ai	47	DT	C3'
35	Ai	48	DT	C3'
35	Ai	49	DT	C3'
36	Aj	1	DT	C3'
36	Aj	2	DT	C3'
36	Aj	3	DT	C3'
36	Aj	4	DT	C3'
36	Aj	5	DT	C3'
36	Aj	6	DT	C3'
36	Aj	7	DT	C3'
36	Aj	8	DT	C3'
36	Aj	9	DT	C3'
36	Aj	42	DT	C3'
36	Aj	43	DT	C3'
36	Aj	44	DT	C3'
36	Aj	45	DT	C3'
36	Aj	46	DT	C3'
36	Aj	47	DT	C3'
36	Aj	48	DT	C3'
36	Aj	49	DT	C3'
37	Ak	1	DT	C3'
37	Ak	2	DT	C3'
37	Ak	3	DT	C3'
37	Ak	4	DT	C3'
37	Ak	5	DT	C3'
37	Ak	6	DT	C3'
37	Ak	7	DT	C3'
37	Ak	8	DT	C3'

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Mol	Chain	Res	Type	Atom
37	Ak	9	DT	C3’
37	Ak	43	DT	C3’
37	Ak	44	DT	C3’
37	Ak	45	DT	C3’
37	Ak	46	DT	C3’
37	Ak	47	DT	C3’
37	Ak	48	DT	C3’
37	Ak	49	DT	C3’
38	Al	1	DT	C3’
38	Al	2	DT	C3’
38	Al	3	DT	C3’
38	Al	4	DT	C3’
38	Al	5	DT	C3’
38	Al	6	DT	C3’
38	Al	7	DT	C3’
38	Al	8	DT	C3’
38	Al	9	DT	C3’
38	Al	42	DT	C3’
38	Al	43	DT	C3’
38	Al	44	DT	C3’
38	Al	45	DT	C3’
38	Al	46	DT	C3’
38	Al	47	DT	C3’
38	Al	48	DT	C3’
38	Al	49	DT	C3’
39	Am	1	DT	C3’
39	Am	2	DT	C3’
39	Am	3	DT	C3’
39	Am	4	DT	C3’
39	Am	5	DT	C3’
39	Am	6	DT	C3’
39	Am	7	DT	C3’
39	Am	8	DT	C3’
39	Am	9	DT	C3’
39	Am	42	DT	C3’
39	Am	43	DT	C3’
39	Am	44	DT	C3’
39	Am	45	DT	C3’
39	Am	46	DT	C3’
39	Am	47	DT	C3’
39	Am	48	DT	C3’
39	Am	49	DT	C3’

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Mol	Chain	Res	Type	Atom
40	An	1	DT	C3’
40	An	2	DT	C3’
40	An	3	DT	C3’
40	An	4	DT	C3’
40	An	5	DT	C3’
40	An	6	DT	C3’
40	An	7	DT	C3’
40	An	8	DT	C3’
40	An	9	DT	C3’
40	An	42	DT	C3’
40	An	43	DT	C3’
40	An	44	DT	C3’
40	An	45	DT	C3’
40	An	46	DT	C3’
40	An	47	DT	C3’
40	An	48	DT	C3’
40	An	49	DT	C3’
41	Ao	1	DT	C3’
41	Ao	2	DT	C3’
41	Ao	3	DT	C3’
41	Ao	4	DT	C3’
41	Ao	5	DT	C3’
41	Ao	6	DT	C3’
41	Ao	7	DT	C3’
41	Ao	8	DT	C3’
41	Ao	9	DT	C3’
41	Ao	43	DT	C3’
41	Ao	44	DT	C3’
41	Ao	45	DT	C3’
41	Ao	46	DT	C3’
41	Ao	47	DT	C3’
41	Ao	48	DT	C3’
41	Ao	49	DT	C3’
42	Ap	1	DT	C3’
42	Ap	2	DT	C3’
42	Ap	3	DT	C3’
42	Ap	4	DT	C3’
42	Ap	5	DT	C3’
42	Ap	6	DT	C3’
42	Ap	7	DT	C3’
42	Ap	8	DT	C3’
42	Ap	9	DT	C3’

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Mol	Chain	Res	Type	Atom
42	Ap	43	DT	C3'
42	Ap	44	DT	C3'
42	Ap	45	DT	C3'
42	Ap	46	DT	C3'
42	Ap	47	DT	C3'
42	Ap	48	DT	C3'
42	Ap	49	DT	C3'
43	Aq	1	DT	C3'
43	Aq	2	DT	C3'
43	Aq	3	DT	C3'
43	Aq	4	DT	C3'
43	Aq	5	DT	C3'
43	Aq	6	DT	C3'
43	Aq	7	DT	C3'
43	Aq	8	DT	C3'
43	Aq	9	DT	C3'
43	Aq	43	DT	C3'
43	Aq	44	DT	C3'
43	Aq	45	DT	C3'
43	Aq	46	DT	C3'
43	Aq	47	DT	C3'
43	Aq	48	DT	C3'
43	Aq	49	DT	C3'
44	Ar	1	DT	C3'
44	Ar	2	DT	C3'
44	Ar	3	DT	C3'
44	Ar	4	DT	C3'
44	Ar	5	DT	C3'
44	Ar	6	DT	C3'
44	Ar	7	DT	C3'
44	Ar	8	DT	C3'
44	Ar	9	DT	C3'
44	Ar	43	DT	C3'
44	Ar	44	DT	C3'
44	Ar	45	DT	C3'
44	Ar	46	DT	C3'
44	Ar	47	DT	C3'
44	Ar	48	DT	C3'
44	Ar	49	DT	C3'
45	As	1	DT	C3'
45	As	2	DT	C3'
45	As	3	DT	C3'

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Mol	Chain	Res	Type	Atom
45	As	4	DT	C3'
45	As	5	DT	C3'
45	As	6	DT	C3'
45	As	7	DT	C3'
45	As	8	DT	C3'
45	As	9	DT	C3'
45	As	43	DT	C3'
45	As	44	DT	C3'
45	As	45	DT	C3'
45	As	46	DT	C3'
45	As	47	DT	C3'
45	As	48	DT	C3'
45	As	49	DT	C3'
46	At	1	DT	C3'
46	At	2	DT	C3'
46	At	3	DT	C3'
46	At	4	DT	C3'
46	At	5	DT	C3'
46	At	6	DT	C3'
46	At	7	DT	C3'
46	At	8	DT	C3'
46	At	9	DT	C3'
46	At	43	DT	C3'
46	At	44	DT	C3'
46	At	45	DT	C3'
46	At	46	DT	C3'
46	At	47	DT	C3'
46	At	48	DT	C3'
46	At	49	DT	C3'
47	Au	1	DT	C3'
47	Au	2	DT	C3'
47	Au	3	DT	C3'
47	Au	4	DT	C3'
47	Au	5	DT	C3'
47	Au	6	DT	C3'
47	Au	7	DT	C3'
47	Au	8	DT	C3'
47	Au	9	DT	C3'
47	Au	43	DT	C3'
47	Au	44	DT	C3'
47	Au	45	DT	C3'
47	Au	46	DT	C3'

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Mol	Chain	Res	Type	Atom
47	Au	47	DT	C3’
47	Au	48	DT	C3’
47	Au	49	DT	C3’
48	Av	1	DT	C3’
48	Av	2	DT	C3’
48	Av	3	DT	C3’
48	Av	4	DT	C3’
48	Av	5	DT	C3’
48	Av	6	DT	C3’
48	Av	7	DT	C3’
48	Av	8	DT	C3’
48	Av	42	DT	C3’
48	Av	43	DT	C3’
48	Av	44	DT	C3’
48	Av	45	DT	C3’
48	Av	46	DT	C3’
48	Av	47	DT	C3’
48	Av	48	DT	C3’
48	Av	49	DT	C3’
49	Aw	1	DT	C3’
49	Aw	2	DT	C3’
49	Aw	3	DT	C3’
49	Aw	4	DT	C3’
49	Aw	5	DT	C3’
49	Aw	6	DT	C3’
49	Aw	7	DT	C3’
49	Aw	8	DT	C3’
49	Aw	42	DT	C3’
49	Aw	43	DT	C3’
49	Aw	44	DT	C3’
49	Aw	45	DT	C3’
49	Aw	46	DT	C3’
49	Aw	47	DT	C3’
49	Aw	48	DT	C3’
49	Aw	49	DT	C3’
50	Ax	1	DT	C3’
50	Ax	2	DT	C3’
50	Ax	3	DT	C3’
50	Ax	4	DT	C3’
50	Ax	5	DT	C3’
50	Ax	6	DT	C3’
50	Ax	7	DT	C3’

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Mol	Chain	Res	Type	Atom
50	Ax	8	DT	C3'
50	Ax	42	DT	C3'
50	Ax	43	DT	C3'
50	Ax	44	DT	C3'
50	Ax	45	DT	C3'
50	Ax	46	DT	C3'
50	Ax	47	DT	C3'
50	Ax	48	DT	C3'
50	Ax	49	DT	C3'
51	Ay	1	DT	C3'
51	Ay	2	DT	C3'
51	Ay	3	DT	C3'
51	Ay	4	DT	C3'
51	Ay	5	DT	C3'
51	Ay	6	DT	C3'
51	Ay	7	DT	C3'
51	Ay	8	DT	C3'
51	Ay	42	DT	C3'
51	Ay	43	DT	C3'
51	Ay	44	DT	C3'
51	Ay	45	DT	C3'
51	Ay	46	DT	C3'
51	Ay	47	DT	C3'
51	Ay	48	DT	C3'
51	Ay	49	DT	C3'
52	Az	1	DT	C3'
52	Az	2	DT	C3'
52	Az	3	DT	C3'
52	Az	4	DT	C3'
52	Az	5	DT	C3'
52	Az	6	DT	C3'
52	Az	7	DT	C3'
52	Az	8	DT	C3'
52	Az	42	DT	C3'
52	Az	43	DT	C3'
52	Az	44	DT	C3'
52	Az	45	DT	C3'
52	Az	46	DT	C3'
52	Az	47	DT	C3'
52	Az	48	DT	C3'
52	Az	49	DT	C3'
53	A0	1	DT	C3'

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Mol	Chain	Res	Type	Atom
53	A0	2	DT	C3’
53	A0	3	DT	C3’
53	A0	4	DT	C3’
53	A0	5	DT	C3’
53	A0	6	DT	C3’
53	A0	7	DT	C3’
53	A0	8	DT	C3’
53	A0	42	DT	C3’
53	A0	43	DT	C3’
53	A0	44	DT	C3’
53	A0	45	DT	C3’
53	A0	46	DT	C3’
53	A0	47	DT	C3’
53	A0	48	DT	C3’
53	A0	49	DT	C3’
54	A1	1	DT	C3’
54	A1	2	DT	C3’
54	A1	3	DT	C3’
54	A1	4	DT	C3’
54	A1	5	DT	C3’
54	A1	6	DT	C3’
54	A1	7	DT	C3’
54	A1	8	DT	C3’
54	A1	42	DT	C3’
54	A1	43	DT	C3’
54	A1	44	DT	C3’
54	A1	45	DT	C3’
54	A1	46	DT	C3’
54	A1	47	DT	C3’
54	A1	48	DT	C3’
54	A1	49	DT	C3’
55	A2	1	DT	C3’
55	A2	2	DT	C3’
55	A2	3	DT	C3’
55	A2	4	DT	C3’
55	A2	5	DT	C3’
55	A2	6	DT	C3’
55	A2	7	DT	C3’
55	A2	8	DT	C3’
55	A2	42	DT	C3’
55	A2	43	DT	C3’
55	A2	44	DT	C3’

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Mol	Chain	Res	Type	Atom
55	A2	45	DT	C3’
55	A2	46	DT	C3’
55	A2	47	DT	C3’
55	A2	48	DT	C3’
55	A2	49	DT	C3’
56	A3	1	DT	C3’
56	A3	2	DT	C3’
56	A3	3	DT	C3’
56	A3	4	DT	C3’
56	A3	5	DT	C3’
56	A3	6	DT	C3’
56	A3	7	DT	C3’
56	A3	8	DT	C3’
56	A3	42	DT	C3’
56	A3	43	DT	C3’
56	A3	44	DT	C3’
56	A3	45	DT	C3’
56	A3	46	DT	C3’
56	A3	47	DT	C3’
56	A3	48	DT	C3’
56	A3	49	DT	C3’
57	A4	1	DT	C3’
57	A4	2	DT	C3’
57	A4	3	DT	C3’
57	A4	4	DT	C3’
57	A4	5	DT	C3’
57	A4	6	DT	C3’
57	A4	7	DT	C3’
57	A4	8	DT	C3’
57	A4	42	DT	C3’
57	A4	43	DT	C3’
57	A4	44	DT	C3’
57	A4	45	DT	C3’
57	A4	46	DT	C3’
57	A4	47	DT	C3’
57	A4	48	DT	C3’
57	A4	49	DT	C3’
58	A5	1	DT	C3’
58	A5	2	DT	C3’
58	A5	3	DT	C3’
58	A5	4	DT	C3’
58	A5	5	DT	C3’

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Mol	Chain	Res	Type	Atom
58	A5	6	DT	C3’
58	A5	7	DT	C3’
58	A5	8	DT	C3’
58	A5	42	DT	C3’
58	A5	43	DT	C3’
58	A5	44	DT	C3’
58	A5	45	DT	C3’
58	A5	46	DT	C3’
58	A5	47	DT	C3’
58	A5	48	DT	C3’
58	A5	49	DT	C3’
59	A6	1	DT	C3’
59	A6	2	DT	C3’
59	A6	3	DT	C3’
59	A6	4	DT	C3’
59	A6	5	DT	C3’
59	A6	6	DT	C3’
59	A6	7	DT	C3’
59	A6	8	DT	C3’
59	A6	42	DT	C3’
59	A6	43	DT	C3’
59	A6	44	DT	C3’
59	A6	45	DT	C3’
59	A6	46	DT	C3’
59	A6	47	DT	C3’
59	A6	48	DT	C3’
59	A6	49	DT	C3’
60	A7	1	DT	C3’
60	A7	2	DT	C3’
60	A7	3	DT	C3’
60	A7	4	DT	C3’
60	A7	5	DT	C3’
60	A7	6	DT	C3’
60	A7	7	DT	C3’
60	A7	8	DT	C3’
60	A7	42	DT	C3’
60	A7	43	DT	C3’
60	A7	44	DT	C3’
60	A7	45	DT	C3’
60	A7	46	DT	C3’
60	A7	47	DT	C3’
60	A7	48	DT	C3’

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Mol	Chain	Res	Type	Atom
60	A7	49	DT	C3’
61	A8	1	DT	C3’
61	A8	2	DT	C3’
61	A8	3	DT	C3’
61	A8	4	DT	C3’
61	A8	5	DT	C3’
61	A8	6	DT	C3’
61	A8	7	DT	C3’
61	A8	8	DT	C3’
61	A8	42	DT	C3’
61	A8	43	DT	C3’
61	A8	44	DT	C3’
61	A8	45	DT	C3’
61	A8	46	DT	C3’
61	A8	47	DT	C3’
61	A8	48	DT	C3’
61	A8	49	DT	C3’
62	A9	1	DT	C3’
62	A9	2	DT	C3’
62	A9	3	DT	C3’
62	A9	4	DT	C3’
62	A9	5	DT	C3’
62	A9	6	DT	C3’
62	A9	7	DT	C3’
62	A9	8	DT	C3’
62	A9	42	DT	C3’
62	A9	43	DT	C3’
62	A9	44	DT	C3’
62	A9	45	DT	C3’
62	A9	46	DT	C3’
62	A9	47	DT	C3’
62	A9	48	DT	C3’
62	A9	49	DT	C3’
63	BA	1	DT	C3’
63	BA	2	DT	C3’
63	BA	3	DT	C3’
63	BA	4	DT	C3’
63	BA	5	DT	C3’
63	BA	6	DT	C3’
63	BA	7	DT	C3’
63	BA	8	DT	C3’
63	BA	42	DT	C3’

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Mol	Chain	Res	Type	Atom
63	BA	43	DT	C3'
63	BA	44	DT	C3'
63	BA	45	DT	C3'
63	BA	46	DT	C3'
63	BA	47	DT	C3'
63	BA	48	DT	C3'
63	BA	49	DT	C3'
64	BB	1	DT	C3'
64	BB	2	DT	C3'
64	BB	3	DT	C3'
64	BB	4	DT	C3'
64	BB	5	DT	C3'
64	BB	6	DT	C3'
64	BB	7	DT	C3'
64	BB	8	DT	C3'
64	BB	42	DT	C3'
64	BB	44	DT	C3'
64	BB	45	DT	C3'
64	BB	46	DT	C3'
64	BB	47	DT	C3'
64	BB	48	DT	C3'
64	BB	49	DT	C3'
65	BC	1	DT	C3'
65	BC	2	DT	C3'
65	BC	3	DT	C3'
65	BC	4	DT	C3'
65	BC	5	DT	C3'
65	BC	6	DT	C3'
65	BC	7	DT	C3'
65	BC	8	DT	C3'
65	BC	42	DT	C3'
65	BC	44	DT	C3'
65	BC	45	DT	C3'
65	BC	46	DT	C3'
65	BC	47	DT	C3'
65	BC	48	DT	C3'
65	BC	49	DT	C3'
66	BD	1	DT	C3'
66	BD	2	DT	C3'
66	BD	3	DT	C3'
66	BD	4	DT	C3'
66	BD	5	DT	C3'

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Mol	Chain	Res	Type	Atom
66	BD	6	DT	C3'
66	BD	7	DT	C3'
66	BD	8	DT	C3'
66	BD	9	DT	C3'
66	BD	43	DT	C3'
66	BD	44	DT	C3'
66	BD	45	DT	C3'
66	BD	46	DT	C3'
66	BD	47	DT	C3'
66	BD	48	DT	C3'
66	BD	49	DT	C3'
67	BE	1	DT	C3'
67	BE	2	DT	C3'
67	BE	3	DT	C3'
67	BE	4	DT	C3'
67	BE	5	DT	C3'
67	BE	6	DT	C3'
67	BE	7	DT	C3'
67	BE	8	DT	C3'
67	BE	42	DT	C3'
67	BE	43	DT	C3'
67	BE	44	DT	C3'
67	BE	45	DT	C3'
67	BE	46	DT	C3'
67	BE	47	DT	C3'
67	BE	48	DT	C3'
67	BE	49	DT	C3'
72	BJ	41	DT	C3'
72	BJ	42	DT	C3'
72	BJ	43	DT	C3'
72	BJ	44	DT	C3'
72	BJ	45	DT	C3'
72	BJ	46	DT	C3'
72	BJ	47	DT	C3'
72	BJ	48	DT	C3'
73	BK	41	DT	C3'
73	BK	42	DT	C3'
73	BK	43	DT	C3'
73	BK	44	DT	C3'
73	BK	45	DT	C3'
73	BK	46	DT	C3'
73	BK	47	DT	C3'

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Mol	Chain	Res	Type	Atom
73	BK	48	DT	C3'
79	BQ	1	DT	C3'
79	BQ	2	DT	C3'
79	BQ	3	DT	C3'
79	BQ	4	DT	C3'
79	BQ	5	DT	C3'
79	BQ	6	DT	C3'
79	BQ	7	DT	C3'
79	BQ	8	DT	C3'
81	BS	1	DT	C3'
81	BS	2	DT	C3'
81	BS	3	DT	C3'
81	BS	4	DT	C3'
81	BS	5	DT	C3'
81	BS	6	DT	C3'
81	BS	7	DT	C3'
81	BS	8	DT	C3'
82	BT	1	DT	C3'
82	BT	2	DT	C3'
82	BT	3	DT	C3'
82	BT	4	DT	C3'
82	BT	5	DT	C3'
82	BT	6	DT	C3'
82	BT	7	DT	C3'
82	BT	8	DT	C3'
86	BX	42	DA	C3'
90	Bb	1	DT	C3'
90	Bb	2	DT	C3'
90	Bb	3	DT	C3'
90	Bb	4	DT	C3'
90	Bb	5	DT	C3'
90	Bb	6	DT	C3'
90	Bb	7	DT	C3'
90	Bb	8	DT	C3'
90	Bb	9	DT	C3'
90	Bb	41	DT	C3'
90	Bb	42	DT	C3'
90	Bb	43	DT	C3'
90	Bb	44	DT	C3'
90	Bb	45	DT	C3'
90	Bb	46	DT	C3'
90	Bb	47	DT	C3'

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Mol	Chain	Res	Type	Atom
90	Bb	48	DT	C3'
92	Bd	1	DT	C3'
92	Bd	2	DT	C3'
92	Bd	3	DT	C3'
92	Bd	4	DT	C3'
92	Bd	5	DT	C3'
92	Bd	6	DT	C3'
92	Bd	7	DT	C3'
92	Bd	8	DT	C3'
92	Bd	9	DT	C3'
92	Bd	41	DT	C3'
92	Bd	42	DT	C3'
92	Bd	43	DT	C3'
92	Bd	44	DT	C3'
92	Bd	45	DT	C3'
92	Bd	46	DT	C3'
92	Bd	47	DT	C3'
92	Bd	48	DT	C3'
94	Bf	7	DG	C3'
97	Bi	1	DT	C3'
97	Bi	2	DT	C3'
97	Bi	3	DT	C3'
97	Bi	4	DT	C3'
97	Bi	5	DT	C3'
97	Bi	6	DT	C3'
97	Bi	7	DT	C3'
97	Bi	8	DT	C3'
100	Bl	1	DT	C3'
100	Bl	2	DT	C3'
100	Bl	3	DT	C3'
100	Bl	4	DT	C3'
100	Bl	5	DT	C3'
100	Bl	6	DT	C3'
100	Bl	7	DT	C3'
100	Bl	8	DT	C3'
104	Bp	34	DT	C3'
104	Bp	35	DT	C3'
104	Bp	36	DT	C3'
104	Bp	37	DT	C3'
104	Bp	38	DT	C3'
104	Bp	39	DT	C3'
104	Bp	40	DT	C3'

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Mol	Chain	Res	Type	Atom
104	Bp	41	DT	C3'
106	Br	1	DT	C3'
106	Br	2	DT	C3'
106	Br	3	DT	C3'
106	Br	4	DT	C3'
106	Br	5	DT	C3'
106	Br	6	DT	C3'
106	Br	7	DT	C3'
106	Br	8	DT	C3'
107	Bs	1	DT	C3'
107	Bs	2	DT	C3'
107	Bs	3	DT	C3'
107	Bs	4	DT	C3'
107	Bs	5	DT	C3'
107	Bs	6	DT	C3'
107	Bs	7	DT	C3'
107	Bs	8	DT	C3'
111	Bw	1	DT	C3'
111	Bw	2	DT	C3'
111	Bw	3	DT	C3'
111	Bw	4	DT	C3'
111	Bw	5	DT	C3'
111	Bw	6	DT	C3'
111	Bw	7	DT	C3'
111	Bw	8	DT	C3'
115	B0	1	DT	C3'
115	B0	2	DT	C3'
115	B0	3	DT	C3'
115	B0	4	DT	C3'
115	B0	5	DT	C3'
115	B0	6	DT	C3'
115	B0	7	DT	C3'
115	B0	8	DT	C3'
121	B6	1	DT	C3'
121	B6	2	DT	C3'
121	B6	3	DT	C3'
121	B6	4	DT	C3'
121	B6	5	DT	C3'
121	B6	6	DT	C3'
121	B6	7	DT	C3'
121	B6	8	DT	C3'
121	B6	34	DT	C3'

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Mol	Chain	Res	Type	Atom
121	B6	35	DT	C3'
121	B6	36	DT	C3'
121	B6	37	DT	C3'
121	B6	38	DT	C3'
121	B6	39	DT	C3'
121	B6	40	DT	C3'
121	B6	41	DT	C3'
122	B7	28	DT	C3'
123	B8	1	DT	C3'
123	B8	2	DT	C3'
123	B8	3	DT	C3'
123	B8	4	DT	C3'
123	B8	5	DT	C3'
123	B8	6	DT	C3'
123	B8	7	DT	C3'
123	B8	8	DT	C3'
123	B8	34	DT	C3'
123	B8	35	DT	C3'
123	B8	36	DT	C3'
123	B8	37	DT	C3'
123	B8	38	DT	C3'
123	B8	39	DT	C3'
123	B8	40	DT	C3'
123	B8	41	DT	C3'
125	CA	1	DT	C3'
125	CA	2	DT	C3'
125	CA	3	DT	C3'
125	CA	4	DT	C3'
125	CA	5	DT	C3'
125	CA	6	DT	C3'
125	CA	7	DT	C3'
125	CA	8	DT	C3'
125	CA	34	DT	C3'
125	CA	35	DT	C3'
125	CA	36	DT	C3'
125	CA	37	DT	C3'
125	CA	38	DT	C3'
125	CA	39	DT	C3'
125	CA	40	DT	C3'
125	CA	41	DT	C3'
130	CF	1	DT	C3'
130	CF	2	DT	C3'

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Mol	Chain	Res	Type	Atom
130	CF	3	DT	C3'
130	CF	4	DT	C3'
130	CF	5	DT	C3'
130	CF	6	DT	C3'
130	CF	7	DT	C3'
130	CF	8	DT	C3'
130	CF	34	DT	C3'
130	CF	35	DT	C3'
130	CF	36	DT	C3'
130	CF	37	DT	C3'
130	CF	38	DT	C3'
130	CF	39	DT	C3'
130	CF	40	DT	C3'
130	CF	41	DT	C3'
134	CJ	1	DT	C3'
134	CJ	2	DT	C3'
134	CJ	3	DT	C3'
134	CJ	4	DT	C3'
134	CJ	5	DT	C3'
134	CJ	6	DT	C3'
134	CJ	7	DT	C3'
134	CJ	8	DT	C3'
134	CJ	34	DT	C3'
134	CJ	35	DT	C3'
134	CJ	36	DT	C3'
134	CJ	37	DT	C3'
134	CJ	38	DT	C3'
134	CJ	39	DT	C3'
134	CJ	40	DT	C3'
134	CJ	41	DT	C3'
135	CK	1	DT	C3'
135	CK	2	DT	C3'
135	CK	3	DT	C3'
135	CK	4	DT	C3'
135	CK	5	DT	C3'
135	CK	6	DT	C3'
135	CK	7	DT	C3'
135	CK	8	DT	C3'
135	CK	34	DT	C3'
135	CK	35	DT	C3'
135	CK	36	DT	C3'
135	CK	37	DT	C3'

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Mol	Chain	Res	Type	Atom
135	CK	38	DT	C3'
135	CK	39	DT	C3'
135	CK	40	DT	C3'
135	CK	41	DT	C3'
138	CN	1	DT	C3'
138	CN	2	DT	C3'
138	CN	3	DT	C3'
138	CN	4	DT	C3'
138	CN	5	DT	C3'
138	CN	6	DT	C3'
138	CN	7	DT	C3'
138	CN	8	DT	C3'
138	CN	34	DT	C3'
138	CN	35	DT	C3'
138	CN	36	DT	C3'
138	CN	37	DT	C3'
138	CN	38	DT	C3'
138	CN	39	DT	C3'
138	CN	40	DT	C3'
138	CN	41	DT	C3'
142	CR	34	DT	C3'
142	CR	35	DT	C3'
142	CR	36	DT	C3'
142	CR	37	DT	C3'
142	CR	38	DT	C3'
142	CR	39	DT	C3'
142	CR	40	DT	C3'
142	CR	41	DT	C3'
147	CW	1	DT	C3'
147	CW	2	DT	C3'
147	CW	3	DT	C3'
147	CW	4	DT	C3'
147	CW	5	DT	C3'
147	CW	6	DT	C3'
147	CW	7	DT	C3'
147	CW	8	DT	C3'
168	Cr	1	DT	C3'
168	Cr	2	DT	C3'
168	Cr	3	DT	C3'
168	Cr	4	DT	C3'
168	Cr	5	DT	C3'
168	Cr	6	DT	C3'

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Mol	Chain	Res	Type	Atom
168	Cr	7	DT	C3'
168	Cr	8	DT	C3'
168	Cr	34	DT	C3'
168	Cr	35	DT	C3'
168	Cr	36	DT	C3'
168	Cr	37	DT	C3'
168	Cr	38	DT	C3'
168	Cr	39	DT	C3'
168	Cr	40	DT	C3'
168	Cr	41	DT	C3'
174	Cx	1	DT	C3'
174	Cx	2	DT	C3'
174	Cx	3	DT	C3'
174	Cx	4	DT	C3'
174	Cx	5	DT	C3'
174	Cx	6	DT	C3'
174	Cx	7	DT	C3'
174	Cx	8	DT	C3'
178	C1	35	DG	C3'
182	C5	35	DT	C3'
183	C6	34	DT	C3'
183	C6	35	DT	C3'
183	C6	36	DT	C3'
183	C6	37	DT	C3'
183	C6	38	DT	C3'
183	C6	39	DT	C3'
183	C6	40	DT	C3'
183	C6	41	DT	C3'
186	C9	21	DT	C3'
189	DC	1	DT	C3'
189	DC	2	DT	C3'
189	DC	3	DT	C3'
189	DC	4	DT	C3'
189	DC	5	DT	C3'
189	DC	6	DT	C3'
189	DC	7	DT	C3'
189	DC	8	DT	C3'
191	DE	21	DC	C3'
193	DG	1	DT	C3'
193	DG	2	DT	C3'
193	DG	3	DT	C3'
193	DG	4	DT	C3'

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Mol	Chain	Res	Type	Atom
193	DG	5	DT	C3'
193	DG	6	DT	C3'
193	DG	7	DT	C3'
193	DG	8	DT	C3'
195	DI	21	DA	C3'
196	DJ	21	DG	C3'
214	Db	1	DT	C3'
214	Db	2	DT	C3'
214	Db	3	DT	C3'
214	Db	4	DT	C3'
214	Db	5	DT	C3'
214	Db	6	DT	C3'
214	Db	7	DT	C3'
214	Db	8	DT	C3'
214	Db	34	DT	C3'
214	Db	35	DT	C3'
214	Db	36	DT	C3'
214	Db	37	DT	C3'
214	Db	38	DT	C3'
214	Db	39	DT	C3'
214	Db	40	DT	C3'
214	Db	41	DT	C3'
215	Dc	21	DC	C3'
215	Dc	35	DT	C3'
219	Dg	21	DA	C3'
220	Dh	1	DT	C3'
220	Dh	2	DT	C3'
220	Dh	3	DT	C3'
220	Dh	4	DT	C3'
220	Dh	5	DT	C3'
220	Dh	6	DT	C3'
220	Dh	7	DT	C3'
220	Dh	8	DT	C3'
220	Dh	9	DT	C3'
224	Dl	21	DG	C3'
229	Dq	14	DA	C3'
232	Dt	28	DG	C3'
233	Du	1	DT	C3'
233	Du	2	DT	C3'
233	Du	3	DT	C3'
233	Du	4	DT	C3'
233	Du	5	DT	C3'

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Mol	Chain	Res	Type	Atom
233	Du	6	DT	C3'
233	Du	7	DT	C3'
233	Du	8	DT	C3'
235	Dw	21	DA	C3'
240	D1	14	DG	C3'
240	D1	28	DT	C3'
241	D2	21	DA	C3'
244	D5	7	DC	C3'
244	D5	21	DC	C3'
245	D6	1	DT	C3'
245	D6	2	DT	C3'
245	D6	3	DT	C3'
245	D6	4	DT	C3'
245	D6	5	DT	C3'
245	D6	6	DT	C3'
245	D6	7	DT	C3'
245	D6	8	DT	C3'
245	D6	31	DT	C3'
245	D6	32	DT	C3'
245	D6	33	DT	C3'
245	D6	34	DT	C3'
245	D6	35	DT	C3'
245	D6	36	DT	C3'
245	D6	37	DT	C3'
245	D6	38	DT	C3'
246	D7	1	DT	C3'
246	D7	2	DT	C3'
246	D7	3	DT	C3'
246	D7	4	DT	C3'
246	D7	5	DT	C3'
246	D7	6	DT	C3'
246	D7	7	DT	C3'
246	D7	8	DT	C3'
246	D7	9	DT	C3'
246	D7	32	DC	C3'
247	D8	7	DT	C3'
247	D8	32	DT	C3'
247	D8	33	DT	C3'
247	D8	34	DT	C3'
247	D8	35	DT	C3'
247	D8	36	DT	C3'
247	D8	37	DT	C3'

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Mol	Chain	Res	Type	Atom
247	D8	38	DT	C3'
248	D9	1	DT	C3'
248	D9	2	DT	C3'
248	D9	3	DT	C3'
248	D9	4	DT	C3'
248	D9	5	DT	C3'
248	D9	6	DT	C3'
248	D9	7	DT	C3'
248	D9	8	DT	C3'
248	D9	9	DT	C3'
248	D9	29	DT	C3'
248	D9	30	DT	C3'
248	D9	31	DT	C3'
248	D9	32	DT	C3'
248	D9	33	DT	C3'
248	D9	34	DT	C3'
248	D9	35	DT	C3'
249	EA	1	DT	C3'
249	EA	2	DT	C3'
249	EA	3	DT	C3'
249	EA	4	DT	C3'
249	EA	5	DT	C3'
249	EA	6	DT	C3'
249	EA	7	DT	C3'
249	EA	8	DT	C3'
249	EA	9	DT	C3'
249	EA	29	DT	C3'
249	EA	30	DT	C3'
249	EA	31	DT	C3'
249	EA	32	DT	C3'
249	EA	33	DT	C3'
249	EA	34	DT	C3'
249	EA	35	DT	C3'
256	EH	1	DT	C3'
256	EH	2	DT	C3'
256	EH	3	DT	C3'
256	EH	4	DT	C3'
256	EH	5	DT	C3'
256	EH	6	DT	C3'
256	EH	7	DT	C3'
256	EH	8	DT	C3'
258	EJ	1	DT	C3'

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Mol	Chain	Res	Type	Atom
258	EJ	2	DT	C3'
258	EJ	3	DT	C3'
258	EJ	4	DT	C3'
258	EJ	5	DT	C3'
258	EJ	6	DT	C3'
258	EJ	7	DT	C3'
258	EJ	8	DT	C3'
262	EN	1	DT	C3'
262	EN	2	DT	C3'
262	EN	3	DT	C3'
262	EN	4	DT	C3'
262	EN	5	DT	C3'
262	EN	6	DT	C3'
262	EN	7	DT	C3'
262	EN	8	DT	C3'
279	Ee	1	DT	C3'
279	Ee	2	DT	C3'
279	Ee	3	DT	C3'
279	Ee	4	DT	C3'
279	Ee	5	DT	C3'
279	Ee	6	DT	C3'
279	Ee	7	DT	C3'
279	Ee	8	DT	C3'
280	Ef	1	DT	C3'
280	Ef	2	DT	C3'
280	Ef	3	DT	C3'
280	Ef	4	DT	C3'
280	Ef	5	DT	C3'
280	Ef	6	DT	C3'
280	Ef	7	DT	C3'
280	Ef	8	DT	C3'
285	Ek	1	DT	C3'
285	Ek	2	DT	C3'
285	Ek	3	DT	C3'
285	Ek	4	DT	C3'
285	Ek	5	DT	C3'
285	Ek	6	DT	C3'
285	Ek	7	DT	C3'
285	Ek	8	DT	C3'
288	En	1	DT	C3'
288	En	2	DT	C3'
288	En	3	DT	C3'

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Mol	Chain	Res	Type	Atom
288	En	4	DT	C3'
288	En	5	DT	C3'
288	En	6	DT	C3'
288	En	7	DT	C3'
288	En	8	DT	C3'
294	Et	1	DT	C3'
294	Et	2	DT	C3'
294	Et	3	DT	C3'
294	Et	4	DT	C3'
294	Et	5	DT	C3'
294	Et	6	DT	C3'
294	Et	7	DT	C3'
294	Et	8	DT	C3'
318	FH	27	DT	C3'
318	FH	28	DT	C3'
318	FH	29	DT	C3'
318	FH	30	DT	C3'
318	FH	31	DT	C3'
318	FH	32	DT	C3'
318	FH	33	DT	C3'
318	FH	34	DT	C3'
321	FK	27	DT	C3'
321	FK	28	DT	C3'
321	FK	29	DT	C3'
321	FK	30	DT	C3'
321	FK	31	DT	C3'
321	FK	32	DT	C3'
321	FK	33	DT	C3'
321	FK	34	DT	C3'
324	FN	27	DT	C3'
324	FN	28	DT	C3'
324	FN	29	DT	C3'
324	FN	30	DT	C3'
324	FN	31	DT	C3'
324	FN	32	DT	C3'
324	FN	33	DT	C3'
324	FN	34	DT	C3'
325	FO	1	DT	C3'
325	FO	2	DT	C3'
325	FO	3	DT	C3'
325	FO	4	DT	C3'
325	FO	5	DT	C3'

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Mol	Chain	Res	Type	Atom
325	FO	6	DT	C3'
325	FO	7	DT	C3'
325	FO	8	DT	C3'
325	FO	9	DT	C3'
328	FR	27	DT	C3'
328	FR	28	DT	C3'
328	FR	29	DT	C3'
328	FR	30	DT	C3'
328	FR	31	DT	C3'
328	FR	32	DT	C3'
328	FR	33	DT	C3'
328	FR	34	DT	C3'
330	FT	27	DT	C3'
330	FT	28	DT	C3'
330	FT	29	DT	C3'
330	FT	30	DT	C3'
330	FT	31	DT	C3'
330	FT	32	DT	C3'
330	FT	33	DT	C3'
330	FT	34	DT	C3'
331	FU	1	DT	C3'
331	FU	2	DT	C3'
331	FU	3	DT	C3'
331	FU	4	DT	C3'
331	FU	5	DT	C3'
331	FU	6	DT	C3'
331	FU	7	DT	C3'
331	FU	8	DT	C3'
331	FU	9	DT	C3'
333	FW	7	DT	C3'
335	FY	14	DG	C3'
335	FY	28	DG	C3'
337	Fa	21	DA	C3'
342	Ff	1	DT	C3'
342	Ff	2	DT	C3'
342	Ff	3	DT	C3'
342	Ff	4	DT	C3'
342	Ff	5	DT	C3'
342	Ff	6	DT	C3'
342	Ff	7	DT	C3'
342	Ff	8	DT	C3'
344	Fh	20	DT	C3'

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Mol	Chain	Res	Type	Atom
344	Fh	21	DT	C3'
344	Fh	22	DT	C3'
344	Fh	23	DT	C3'
344	Fh	24	DT	C3'
344	Fh	25	DT	C3'
344	Fh	26	DT	C3'
344	Fh	27	DT	C3'
345	Fi	20	DT	C3'
345	Fi	21	DT	C3'
345	Fi	22	DT	C3'
345	Fi	23	DT	C3'
345	Fi	24	DT	C3'
345	Fi	25	DT	C3'
345	Fi	26	DT	C3'
345	Fi	27	DT	C3'
347	Fk	1	DT	C3'
347	Fk	2	DT	C3'
347	Fk	3	DT	C3'
347	Fk	4	DT	C3'
347	Fk	5	DT	C3'
347	Fk	6	DT	C3'
347	Fk	7	DT	C3'
347	Fk	8	DT	C3'
351	Fo	20	DT	C3'
351	Fo	21	DT	C3'
351	Fo	22	DT	C3'
351	Fo	23	DT	C3'
351	Fo	24	DT	C3'
351	Fo	25	DT	C3'
351	Fo	26	DT	C3'
351	Fo	27	DT	C3'
353	Fq	20	DT	C3'
353	Fq	21	DT	C3'
353	Fq	22	DT	C3'
353	Fq	23	DT	C3'
353	Fq	24	DT	C3'
353	Fq	25	DT	C3'
353	Fq	26	DT	C3'
353	Fq	27	DT	C3'
354	Fr	20	DT	C3'
354	Fr	21	DT	C3'
354	Fr	22	DT	C3'

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Mol	Chain	Res	Type	Atom
354	Fr	23	DT	C3'
354	Fr	24	DT	C3'
354	Fr	25	DT	C3'
354	Fr	26	DT	C3'
354	Fr	27	DT	C3'
358	Fv	20	DT	C3'
358	Fv	21	DT	C3'
358	Fv	22	DT	C3'
358	Fv	23	DT	C3'
358	Fv	24	DT	C3'
358	Fv	25	DT	C3'
358	Fv	26	DT	C3'
358	Fv	27	DT	C3'
360	Fx	20	DT	C3'
360	Fx	21	DT	C3'
360	Fx	22	DT	C3'
360	Fx	23	DT	C3'
360	Fx	24	DT	C3'
360	Fx	25	DT	C3'
360	Fx	26	DT	C3'
360	Fx	27	DT	C3'
363	F0	20	DT	C3'
363	F0	21	DT	C3'
363	F0	22	DT	C3'
363	F0	23	DT	C3'
363	F0	24	DT	C3'
363	F0	25	DT	C3'
363	F0	26	DT	C3'
363	F0	27	DT	C3'
365	F2	20	DT	C3'
365	F2	21	DT	C3'
365	F2	22	DT	C3'
365	F2	23	DT	C3'
365	F2	24	DT	C3'
365	F2	25	DT	C3'
365	F2	26	DT	C3'
365	F2	27	DT	C3'
368	F5	20	DT	C3'
368	F5	21	DT	C3'
368	F5	22	DT	C3'
368	F5	23	DT	C3'
368	F5	24	DT	C3'

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Mol	Chain	Res	Type	Atom
368	F5	25	DT	C3'
368	F5	26	DT	C3'
368	F5	27	DT	C3'
370	F7	20	DT	C3'
370	F7	21	DT	C3'
370	F7	22	DT	C3'
370	F7	23	DT	C3'
370	F7	24	DT	C3'
370	F7	25	DT	C3'
370	F7	26	DT	C3'
370	F7	27	DT	C3'
372	F9	20	DT	C3'
372	F9	21	DT	C3'
372	F9	22	DT	C3'
372	F9	23	DT	C3'
372	F9	24	DT	C3'
372	F9	25	DT	C3'
372	F9	26	DT	C3'
372	F9	27	DT	C3'
373	GA	20	DT	C3'
373	GA	21	DT	C3'
373	GA	22	DT	C3'
373	GA	23	DT	C3'
373	GA	24	DT	C3'
373	GA	25	DT	C3'
373	GA	26	DT	C3'
373	GA	27	DT	C3'
374	GB	20	DT	C3'
374	GB	21	DT	C3'
374	GB	22	DT	C3'
374	GB	23	DT	C3'
374	GB	24	DT	C3'
374	GB	25	DT	C3'
374	GB	26	DT	C3'
374	GB	27	DT	C3'
377	GE	20	DT	C3'
377	GE	21	DT	C3'
377	GE	22	DT	C3'
377	GE	23	DT	C3'
377	GE	24	DT	C3'
377	GE	25	DT	C3'
377	GE	26	DT	C3'

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Mol	Chain	Res	Type	Atom
377	GE	27	DT	C3'
380	GH	20	DT	C3'
380	GH	21	DT	C3'
380	GH	22	DT	C3'
380	GH	23	DT	C3'
380	GH	24	DT	C3'
380	GH	25	DT	C3'
380	GH	26	DT	C3'
380	GH	27	DT	C3'
383	GK	20	DT	C3'
383	GK	21	DT	C3'
383	GK	22	DT	C3'
383	GK	23	DT	C3'
383	GK	24	DT	C3'
383	GK	25	DT	C3'
383	GK	26	DT	C3'
383	GK	27	DT	C3'
384	GL	20	DT	C3'
384	GL	21	DT	C3'
384	GL	22	DT	C3'
384	GL	23	DT	C3'
384	GL	24	DT	C3'
384	GL	25	DT	C3'
384	GL	26	DT	C3'
384	GL	27	DT	C3'
386	GN	20	DT	C3'
386	GN	21	DT	C3'
386	GN	22	DT	C3'
386	GN	23	DT	C3'
386	GN	24	DT	C3'
386	GN	25	DT	C3'
386	GN	26	DT	C3'
386	GN	27	DT	C3'
387	GO	20	DT	C3'
387	GO	21	DT	C3'
387	GO	22	DT	C3'
387	GO	23	DT	C3'
387	GO	24	DT	C3'
387	GO	25	DT	C3'
387	GO	26	DT	C3'
387	GO	27	DT	C3'
388	GP	1	DT	C3'

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Mol	Chain	Res	Type	Atom
388	GP	2	DT	C3'
388	GP	3	DT	C3'
388	GP	4	DT	C3'
388	GP	5	DT	C3'
388	GP	6	DT	C3'
388	GP	7	DT	C3'
388	GP	8	DT	C3'
389	GQ	20	DT	C3'
389	GQ	21	DT	C3'
389	GQ	22	DT	C3'
389	GQ	23	DT	C3'
389	GQ	24	DT	C3'
389	GQ	25	DT	C3'
389	GQ	26	DT	C3'
389	GQ	27	DT	C3'
397	GY	1	DT	C3'
397	GY	2	DT	C3'
397	GY	3	DT	C3'
397	GY	4	DT	C3'
397	GY	5	DT	C3'
397	GY	6	DT	C3'
397	GY	7	DT	C3'
397	GY	8	DT	C3'
400	Gb	20	DT	C3'
400	Gb	21	DT	C3'
400	Gb	22	DT	C3'
400	Gb	23	DT	C3'
400	Gb	24	DT	C3'
400	Gb	25	DT	C3'
400	Gb	26	DT	C3'
400	Gb	27	DT	C3'
401	Gc	1	DT	C3'
401	Gc	2	DT	C3'
401	Gc	3	DT	C3'
401	Gc	4	DT	C3'
401	Gc	5	DT	C3'
401	Gc	6	DT	C3'
401	Gc	7	DT	C3'
401	Gc	8	DT	C3'
402	Gd	1	DT	C3'
402	Gd	2	DT	C3'
402	Gd	3	DT	C3'

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Mol	Chain	Res	Type	Atom
402	Gd	4	DT	C3'
402	Gd	5	DT	C3'
402	Gd	6	DT	C3'
402	Gd	7	DT	C3'
402	Gd	8	DT	C3'
403	Ge	20	DT	C3'
403	Ge	21	DT	C3'
403	Ge	22	DT	C3'
403	Ge	23	DT	C3'
403	Ge	24	DT	C3'
403	Ge	25	DT	C3'
403	Ge	26	DT	C3'
403	Ge	27	DT	C3'
404	Gf	1	DT	C3'
404	Gf	2	DT	C3'
404	Gf	3	DT	C3'
404	Gf	4	DT	C3'
404	Gf	5	DT	C3'
404	Gf	6	DT	C3'
404	Gf	7	DT	C3'
404	Gf	8	DT	C3'
409	Gk	20	DT	C3'
409	Gk	21	DT	C3'
409	Gk	22	DT	C3'
409	Gk	23	DT	C3'
409	Gk	24	DT	C3'
409	Gk	25	DT	C3'
409	Gk	26	DT	C3'
409	Gk	27	DT	C3'
410	Gl	1	DT	C3'
410	Gl	2	DT	C3'
410	Gl	3	DT	C3'
410	Gl	4	DT	C3'
410	Gl	5	DT	C3'
410	Gl	6	DT	C3'
410	Gl	7	DT	C3'
410	Gl	8	DT	C3'
412	Gn	1	DT	C3'
412	Gn	2	DT	C3'
412	Gn	3	DT	C3'
412	Gn	4	DT	C3'
412	Gn	5	DT	C3'

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Mol	Chain	Res	Type	Atom
412	Gn	6	DT	C3'
412	Gn	7	DT	C3'
412	Gn	8	DT	C3'
413	Go	20	DT	C3'
413	Go	21	DT	C3'
413	Go	22	DT	C3'
413	Go	23	DT	C3'
413	Go	24	DT	C3'
413	Go	25	DT	C3'
413	Go	26	DT	C3'
413	Go	27	DT	C3'
414	Gp	1	DT	C3'
414	Gp	2	DT	C3'
414	Gp	3	DT	C3'
414	Gp	4	DT	C3'
414	Gp	5	DT	C3'
414	Gp	6	DT	C3'
414	Gp	7	DT	C3'
414	Gp	8	DT	C3'
415	Gq	1	DT	C3'
415	Gq	2	DT	C3'
415	Gq	3	DT	C3'
415	Gq	4	DT	C3'
415	Gq	5	DT	C3'
415	Gq	6	DT	C3'
415	Gq	7	DT	C3'
415	Gq	8	DT	C3'
416	Gr	1	DT	C3'
416	Gr	2	DT	C3'
416	Gr	3	DT	C3'
416	Gr	4	DT	C3'
416	Gr	5	DT	C3'
416	Gr	6	DT	C3'
416	Gr	7	DT	C3'
416	Gr	8	DT	C3'
418	Gt	1	DT	C3'
418	Gt	2	DT	C3'
418	Gt	3	DT	C3'
418	Gt	4	DT	C3'
418	Gt	5	DT	C3'
418	Gt	6	DT	C3'
418	Gt	7	DT	C3'

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Mol	Chain	Res	Type	Atom
418	Gt	8	DT	C3'
419	Gu	20	DT	C3'
419	Gu	21	DT	C3'
419	Gu	22	DT	C3'
419	Gu	23	DT	C3'
419	Gu	24	DT	C3'
419	Gu	25	DT	C3'
419	Gu	26	DT	C3'
419	Gu	27	DT	C3'
421	Gw	1	DT	C3'
421	Gw	2	DT	C3'
421	Gw	3	DT	C3'
421	Gw	4	DT	C3'
421	Gw	5	DT	C3'
421	Gw	6	DT	C3'
421	Gw	7	DT	C3'
421	Gw	8	DT	C3'
423	Gy	20	DT	C3'
423	Gy	21	DT	C3'
423	Gy	22	DT	C3'
423	Gy	23	DT	C3'
423	Gy	24	DT	C3'
423	Gy	25	DT	C3'
423	Gy	26	DT	C3'
423	Gy	27	DT	C3'
427	G2	20	DT	C3'
427	G2	21	DT	C3'
427	G2	22	DT	C3'
427	G2	23	DT	C3'
427	G2	24	DT	C3'
427	G2	25	DT	C3'
427	G2	26	DT	C3'
427	G2	27	DT	C3'
428	G3	1	DT	C3'
428	G3	2	DT	C3'
428	G3	3	DT	C3'
428	G3	4	DT	C3'
428	G3	5	DT	C3'
428	G3	6	DT	C3'
428	G3	7	DT	C3'
428	G3	8	DT	C3'
429	G4	20	DT	C3'

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Mol	Chain	Res	Type	Atom
429	G4	21	DT	C3'
429	G4	22	DT	C3'
429	G4	23	DT	C3'
429	G4	24	DT	C3'
429	G4	25	DT	C3'
429	G4	26	DT	C3'
429	G4	27	DT	C3'
432	G7	7	DC	C3'
437	HC	1	DT	C3'
437	HC	2	DT	C3'
437	HC	3	DT	C3'
437	HC	4	DT	C3'
437	HC	5	DT	C3'
437	HC	6	DT	C3'
437	HC	7	DT	C3'
437	HC	8	DT	C3'
440	HF	1	DT	C3'
440	HF	2	DT	C3'
440	HF	3	DT	C3'
440	HF	4	DT	C3'
440	HF	5	DT	C3'
440	HF	6	DT	C3'
440	HF	7	DT	C3'
440	HF	8	DT	C3'
441	HG	13	DT	C3'
441	HG	14	DT	C3'
441	HG	15	DT	C3'
441	HG	16	DT	C3'
441	HG	17	DT	C3'
441	HG	18	DT	C3'
441	HG	19	DT	C3'
441	HG	20	DT	C3'
443	HI	13	DT	C3'
443	HI	14	DT	C3'
443	HI	15	DT	C3'
443	HI	16	DT	C3'
443	HI	17	DT	C3'
443	HI	18	DT	C3'
443	HI	19	DT	C3'
443	HI	20	DT	C3'
444	HJ	1	DT	C3'
444	HJ	2	DT	C3'

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Mol	Chain	Res	Type	Atom
444	HJ	3	DT	C3'
444	HJ	4	DT	C3'
444	HJ	5	DT	C3'
444	HJ	6	DT	C3'
444	HJ	7	DT	C3'
444	HJ	8	DT	C3'
445	HK	13	DT	C3'
445	HK	14	DT	C3'
445	HK	15	DT	C3'
445	HK	16	DT	C3'
445	HK	17	DT	C3'
445	HK	18	DT	C3'
445	HK	19	DT	C3'
445	HK	20	DT	C3'
447	HM	13	DT	C3'
447	HM	14	DT	C3'
447	HM	15	DT	C3'
447	HM	16	DT	C3'
447	HM	17	DT	C3'
447	HM	18	DT	C3'
447	HM	19	DT	C3'
447	HM	20	DT	C3'
449	HO	13	DT	C3'
449	HO	14	DT	C3'
449	HO	15	DT	C3'
449	HO	16	DT	C3'
449	HO	17	DT	C3'
449	HO	18	DT	C3'
449	HO	19	DT	C3'
449	HO	20	DT	C3'
452	HR	1	DT	C3'
452	HR	2	DT	C3'
452	HR	3	DT	C3'
452	HR	4	DT	C3'
452	HR	5	DT	C3'
452	HR	6	DT	C3'
452	HR	7	DT	C3'
452	HR	8	DT	C3'

All (6843) planarity outliers are listed below:

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Mol	Chain	Res	Type	Group

Mol	Chain	Res	Type	Group
53	A0	10	DG	Sidechain
53	A0	14	DT	Sidechain
53	A0	18	DG	Sidechain
53	A0	23	DA	Sidechain
53	A0	27	DA	Sidechain
53	A0	28	DA	Sidechain
53	A0	29	DT	Sidechain
53	A0	3	DT	Sidechain
53	A0	4	DT	Sidechain
53	A0	40	DA	Sidechain
53	A0	42	DT	Sidechain
53	A0	49	DT	Sidechain
53	A0	7	DT	Sidechain
54	A1	28	DA	Sidechain
54	A1	3	DT	Sidechain
54	A1	32	DA	Sidechain
54	A1	44	DT	Sidechain
54	A1	46	DT	Sidechain
54	A1	49	DT	Sidechain
54	A1	8	DT	Sidechain
54	A1	9	DT	Sidechain
55	A2	27	DC	Sidechain
55	A2	28	DT	Sidechain
55	A2	46	DT	Sidechain
56	A3	16	DT	Sidechain
56	A3	19	DA	Sidechain
56	A3	23	DG	Sidechain
56	A3	25	DT	Sidechain
56	A3	27	DA	Sidechain
56	A3	28	DA	Sidechain
56	A3	4	DT	Sidechain
56	A3	46	DT	Sidechain
56	A3	49	DT	Sidechain
57	A4	1	DT	Sidechain
57	A4	19	DA	Sidechain
57	A4	20	DT	Sidechain
57	A4	24	DT	Sidechain
57	A4	25	DG	Sidechain
57	A4	26	DA	Sidechain
57	A4	34	DT	Sidechain
57	A4	37	DC	Sidechain

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Mol	Chain	Res	Type	Group
57	A4	40	DG	Sidechain
57	A4	42	DT	Sidechain
57	A4	48	DT	Sidechain
57	A4	5	DT	Sidechain
57	A4	50	DT	Sidechain
58	A5	10	DA	Sidechain
58	A5	14	DG	Sidechain
58	A5	17	DG	Sidechain
58	A5	24	DA	Sidechain
58	A5	25	DG	Sidechain
58	A5	3	DT	Sidechain
58	A5	43	DT	Sidechain
58	A5	47	DT	Sidechain
58	A5	9	DT	Sidechain
59	A6	12	DC	Sidechain
59	A6	28	DA	Sidechain
59	A6	34	DC	Sidechain
59	A6	7	DT	Sidechain
59	A6	8	DT	Sidechain
59	A6	9	DT	Sidechain
60	A7	20	DG	Sidechain
60	A7	25	DG	Sidechain
60	A7	26	DA	Sidechain
60	A7	27	DT	Sidechain
60	A7	30	DT	Sidechain
60	A7	32	DC	Sidechain
60	A7	40	DA	Sidechain
60	A7	42	DT	Sidechain
60	A7	48	DT	Sidechain
60	A7	49	DT	Sidechain
60	A7	8	DT	Sidechain
61	A8	10	DG	Sidechain
61	A8	11	DC	Sidechain
61	A8	13	DG	Sidechain
61	A8	14	DG	Sidechain
61	A8	17	DC	Sidechain
61	A8	22	DG	Sidechain
61	A8	25	DC	Sidechain
61	A8	26	DG	Sidechain
61	A8	43	DT	Sidechain
61	A8	45	DT	Sidechain
61	A8	47	DT	Sidechain

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Mol	Chain	Res	Type	Group
61	A8	5	DT	Sidechain
61	A8	7	DT	Sidechain
62	A9	15	DG	Sidechain
62	A9	18	DC	Sidechain
62	A9	24	DC	Sidechain
62	A9	38	DA	Sidechain
62	A9	42	DT	Sidechain
62	A9	47	DT	Sidechain
62	A9	48	DT	Sidechain
62	A9	5	DT	Sidechain
62	A9	8	DT	Sidechain
62	A9	9	DT	Sidechain
1	AA	10	DT	Sidechain
1	AA	1003	DA	Sidechain
1	AA	1004	DG	Sidechain
1	AA	1008	DG	Sidechain
1	AA	1009	DT	Sidechain
1	AA	1013	DA	Sidechain
1	AA	1017	DT	Sidechain
1	AA	1022	DT	Sidechain
1	AA	1029	DT	Sidechain
1	AA	1043	DT	Sidechain
1	AA	1047	DC	Sidechain
1	AA	1048	DT	Sidechain
1	AA	1049	DG	Sidechain
1	AA	1050	DC	Sidechain
1	AA	1072	DG	Sidechain
1	AA	1073	DG	Sidechain
1	AA	1087	DT	Sidechain
1	AA	1090	DG	Sidechain
1	AA	1092	DA	Sidechain
1	AA	1094	DT	Sidechain
1	AA	1096	DA	Sidechain
1	AA	1097	DT	Sidechain
1	AA	11	DA	Sidechain
1	AA	1100	DG	Sidechain
1	AA	1103	DC	Sidechain
1	AA	1113	DT	Sidechain
1	AA	1123	DG	Sidechain
1	AA	1127	DA	Sidechain
1	AA	1131	DA	Sidechain
1	AA	1135	DC	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	1138	DA	Sidechain
1	AA	1139	DG	Sidechain
1	AA	114	DG	Sidechain
1	AA	1142	DG	Sidechain
1	AA	1145	DT	Sidechain
1	AA	1146	DA	Sidechain
1	AA	1148	DC	Sidechain
1	AA	115	DC	Sidechain
1	AA	1155	DC	Sidechain
1	AA	116	DT	Sidechain
1	AA	1166	DC	Sidechain
1	AA	1168	DC	Sidechain
1	AA	1169	DA	Sidechain
1	AA	1172	DA	Sidechain
1	AA	1173	DA	Sidechain
1	AA	1179	DT	Sidechain
1	AA	1182	DC	Sidechain
1	AA	1185	DG	Sidechain
1	AA	1187	DT	Sidechain
1	AA	1190	DC	Sidechain
1	AA	1198	DC	Sidechain
1	AA	121	DT	Sidechain
1	AA	1218	DC	Sidechain
1	AA	1256	DG	Sidechain
1	AA	1266	DT	Sidechain
1	AA	1267	DA	Sidechain
1	AA	1271	DA	Sidechain
1	AA	1279	DA	Sidechain
1	AA	1286	DT	Sidechain
1	AA	1288	DT	Sidechain
1	AA	1315	DT	Sidechain
1	AA	1318	DT	Sidechain
1	AA	132	DC	Sidechain
1	AA	1325	DA	Sidechain
1	AA	1326	DC	Sidechain
1	AA	1332	DG	Sidechain
1	AA	1334	DA	Sidechain
1	AA	1335	DC	Sidechain
1	AA	1346	DC	Sidechain
1	AA	1347	DT	Sidechain
1	AA	1349	DT	Sidechain
1	AA	1352	DC	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	1353	DT	Sidechain
1	AA	1358	DA	Sidechain
1	AA	1363	DT	Sidechain
1	AA	1371	DG	Sidechain
1	AA	1372	DC	Sidechain
1	AA	1373	DA	Sidechain
1	AA	1377	DC	Sidechain
1	AA	138	DT	Sidechain
1	AA	1382	DT	Sidechain
1	AA	1384	DA	Sidechain
1	AA	1392	DT	Sidechain
1	AA	14	DG	Sidechain
1	AA	140	DT	Sidechain
1	AA	1401	DG	Sidechain
1	AA	1402	DG	Sidechain
1	AA	1405	DT	Sidechain
1	AA	1409	DT	Sidechain
1	AA	1413	DA	Sidechain
1	AA	1421	DA	Sidechain
1	AA	1425	DG	Sidechain
1	AA	1430	DG	Sidechain
1	AA	1431	DA	Sidechain
1	AA	1436	DG	Sidechain
1	AA	1437	DT	Sidechain
1	AA	144	DG	Sidechain
1	AA	1446	DA	Sidechain
1	AA	1448	DG	Sidechain
1	AA	1451	DA	Sidechain
1	AA	1460	DT	Sidechain
1	AA	1463	DA	Sidechain
1	AA	1464	DT	Sidechain
1	AA	1469	DG	Sidechain
1	AA	1476	DG	Sidechain
1	AA	1478	DG	Sidechain
1	AA	1481	DA	Sidechain
1	AA	1487	DT	Sidechain
1	AA	1506	DT	Sidechain
1	AA	1508	DC	Sidechain
1	AA	1511	DT	Sidechain
1	AA	1512	DA	Sidechain
1	AA	152	DC	Sidechain
1	AA	1544	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	1545	DA	Sidechain
1	AA	1548	DT	Sidechain
1	AA	1556	DT	Sidechain
1	AA	156	DG	Sidechain
1	AA	1568	DT	Sidechain
1	AA	157	DG	Sidechain
1	AA	1571	DA	Sidechain
1	AA	1574	DC	Sidechain
1	AA	1578	DA	Sidechain
1	AA	1580	DT	Sidechain
1	AA	1595	DT	Sidechain
1	AA	1601	DC	Sidechain
1	AA	1613	DA	Sidechain
1	AA	1617	DA	Sidechain
1	AA	1619	DT	Sidechain
1	AA	1630	DC	Sidechain
1	AA	1641	DT	Sidechain
1	AA	1651	DT	Sidechain
1	AA	1652	DC	Sidechain
1	AA	1658	DG	Sidechain
1	AA	1668	DG	Sidechain
1	AA	1670	DC	Sidechain
1	AA	1672	DC	Sidechain
1	AA	1673	DT	Sidechain
1	AA	1680	DC	Sidechain
1	AA	1683	DA	Sidechain
1	AA	1684	DA	Sidechain
1	AA	1706	DG	Sidechain
1	AA	1707	DA	Sidechain
1	AA	171	DG	Sidechain
1	AA	1714	DA	Sidechain
1	AA	1718	DG	Sidechain
1	AA	1728	DC	Sidechain
1	AA	1732	DT	Sidechain
1	AA	1733	DC	Sidechain
1	AA	174	DC	Sidechain
1	AA	1740	DT	Sidechain
1	AA	1742	DC	Sidechain
1	AA	1756	DT	Sidechain
1	AA	1765	DA	Sidechain
1	AA	1774	DT	Sidechain
1	AA	1792	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	1796	DC	Sidechain
1	AA	1800	DT	Sidechain
1	AA	1801	DA	Sidechain
1	AA	1816	DC	Sidechain
1	AA	1819	DG	Sidechain
1	AA	182	DG	Sidechain
1	AA	1821	DC	Sidechain
1	AA	1829	DA	Sidechain
1	AA	183	DG	Sidechain
1	AA	1834	DA	Sidechain
1	AA	1835	DG	Sidechain
1	AA	1836	DC	Sidechain
1	AA	1837	DC	Sidechain
1	AA	184	DG	Sidechain
1	AA	1842	DG	Sidechain
1	AA	1844	DG	Sidechain
1	AA	1865	DG	Sidechain
1	AA	1866	DA	Sidechain
1	AA	1867	DG	Sidechain
1	AA	1878	DA	Sidechain
1	AA	1881	DA	Sidechain
1	AA	1897	DT	Sidechain
1	AA	1899	DC	Sidechain
1	AA	190	DC	Sidechain
1	AA	1904	DC	Sidechain
1	AA	1909	DA	Sidechain
1	AA	1917	DT	Sidechain
1	AA	1931	DT	Sidechain
1	AA	1937	DT	Sidechain
1	AA	1938	DT	Sidechain
1	AA	1945	DT	Sidechain
1	AA	1953	DC	Sidechain
1	AA	1954	DA	Sidechain
1	AA	1956	DC	Sidechain
1	AA	1959	DA	Sidechain
1	AA	1961	DT	Sidechain
1	AA	1964	DT	Sidechain
1	AA	1965	DG	Sidechain
1	AA	1975	DA	Sidechain
1	AA	2001	DT	Sidechain
1	AA	2002	DG	Sidechain
1	AA	2005	DA	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	201	DC	Sidechain
1	AA	2017	DC	Sidechain
1	AA	2029	DC	Sidechain
1	AA	2031	DG	Sidechain
1	AA	2033	DG	Sidechain
1	AA	2035	DT	Sidechain
1	AA	2036	DC	Sidechain
1	AA	2037	DT	Sidechain
1	AA	2045	DG	Sidechain
1	AA	2059	DA	Sidechain
1	AA	206	DT	Sidechain
1	AA	2071	DC	Sidechain
1	AA	2072	DA	Sidechain
1	AA	2074	DT	Sidechain
1	AA	2078	DC	Sidechain
1	AA	2094	DT	Sidechain
1	AA	2098	DT	Sidechain
1	AA	2102	DT	Sidechain
1	AA	2104	DT	Sidechain
1	AA	211	DC	Sidechain
1	AA	2115	DC	Sidechain
1	AA	2134	DT	Sidechain
1	AA	2141	DC	Sidechain
1	AA	2150	DA	Sidechain
1	AA	2155	DT	Sidechain
1	AA	2165	DA	Sidechain
1	AA	2167	DA	Sidechain
1	AA	2171	DT	Sidechain
1	AA	2174	DT	Sidechain
1	AA	218	DG	Sidechain
1	AA	2186	DC	Sidechain
1	AA	2192	DA	Sidechain
1	AA	2194	DA	Sidechain
1	AA	2197	DG	Sidechain
1	AA	2200	DT	Sidechain
1	AA	2212	DG	Sidechain
1	AA	2218	DA	Sidechain
1	AA	2222	DC	Sidechain
1	AA	2228	DG	Sidechain
1	AA	2232	DC	Sidechain
1	AA	2238	DA	Sidechain
1	AA	225	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	2250	DG	Sidechain
1	AA	2253	DT	Sidechain
1	AA	2254	DC	Sidechain
1	AA	2255	DC	Sidechain
1	AA	226	DA	Sidechain
1	AA	2274	DG	Sidechain
1	AA	2278	DC	Sidechain
1	AA	2281	DA	Sidechain
1	AA	2283	DT	Sidechain
1	AA	2285	DT	Sidechain
1	AA	229	DC	Sidechain
1	AA	2290	DG	Sidechain
1	AA	2292	DG	Sidechain
1	AA	2293	DG	Sidechain
1	AA	2294	DC	Sidechain
1	AA	2298	DC	Sidechain
1	AA	2299	DC	Sidechain
1	AA	2301	DT	Sidechain
1	AA	2312	DA	Sidechain
1	AA	2320	DT	Sidechain
1	AA	2321	DT	Sidechain
1	AA	2323	DG	Sidechain
1	AA	2324	DA	Sidechain
1	AA	2325	DA	Sidechain
1	AA	2333	DA	Sidechain
1	AA	2340	DA	Sidechain
1	AA	2344	DA	Sidechain
1	AA	2355	DA	Sidechain
1	AA	236	DA	Sidechain
1	AA	2385	DG	Sidechain
1	AA	2389	DA	Sidechain
1	AA	239	DT	Sidechain
1	AA	2396	DC	Sidechain
1	AA	240	DG	Sidechain
1	AA	2403	DA	Sidechain
1	AA	2405	DT	Sidechain
1	AA	2414	DT	Sidechain
1	AA	2416	DA	Sidechain
1	AA	2421	DA	Sidechain
1	AA	2424	DC	Sidechain
1	AA	2425	DC	Sidechain
1	AA	2438	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	2439	DG	Sidechain
1	AA	2449	DA	Sidechain
1	AA	2450	DT	Sidechain
1	AA	2454	DA	Sidechain
1	AA	246	DG	Sidechain
1	AA	2462	DA	Sidechain
1	AA	247	DG	Sidechain
1	AA	2471	DG	Sidechain
1	AA	2488	DT	Sidechain
1	AA	2489	DG	Sidechain
1	AA	2508	DA	Sidechain
1	AA	251	DT	Sidechain
1	AA	2515	DT	Sidechain
1	AA	2516	DT	Sidechain
1	AA	2519	DA	Sidechain
1	AA	2521	DG	Sidechain
1	AA	2525	DC	Sidechain
1	AA	2531	DG	Sidechain
1	AA	2536	DC	Sidechain
1	AA	2540	DC	Sidechain
1	AA	2549	DC	Sidechain
1	AA	2560	DT	Sidechain
1	AA	2563	DT	Sidechain
1	AA	2573	DA	Sidechain
1	AA	2594	DT	Sidechain
1	AA	2599	DC	Sidechain
1	AA	26	DA	Sidechain
1	AA	260	DT	Sidechain
1	AA	2602	DC	Sidechain
1	AA	2606	DG	Sidechain
1	AA	2610	DC	Sidechain
1	AA	2611	DT	Sidechain
1	AA	2612	DG	Sidechain
1	AA	262	DG	Sidechain
1	AA	2621	DA	Sidechain
1	AA	2622	DA	Sidechain
1	AA	2624	DA	Sidechain
1	AA	2634	DT	Sidechain
1	AA	2637	DC	Sidechain
1	AA	2640	DG	Sidechain
1	AA	2643	DG	Sidechain
1	AA	2644	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	2646	DA	Sidechain
1	AA	266	DG	Sidechain
1	AA	2662	DA	Sidechain
1	AA	2665	DG	Sidechain
1	AA	2672	DG	Sidechain
1	AA	2675	DC	Sidechain
1	AA	2678	DT	Sidechain
1	AA	2680	DT	Sidechain
1	AA	2690	DA	Sidechain
1	AA	2696	DC	Sidechain
1	AA	2705	DG	Sidechain
1	AA	2712	DT	Sidechain
1	AA	2719	DA	Sidechain
1	AA	272	DG	Sidechain
1	AA	2721	DT	Sidechain
1	AA	273	DC	Sidechain
1	AA	2730	DA	Sidechain
1	AA	2731	DT	Sidechain
1	AA	2732	DT	Sidechain
1	AA	2744	DT	Sidechain
1	AA	2748	DA	Sidechain
1	AA	2758	DC	Sidechain
1	AA	2761	DT	Sidechain
1	AA	2762	DA	Sidechain
1	AA	2765	DC	Sidechain
1	AA	2766	DT	Sidechain
1	AA	2768	DA	Sidechain
1	AA	2770	DT	Sidechain
1	AA	2772	DT	Sidechain
1	AA	278	DA	Sidechain
1	AA	2783	DA	Sidechain
1	AA	2785	DG	Sidechain
1	AA	2802	DC	Sidechain
1	AA	2803	DA	Sidechain
1	AA	2808	DG	Sidechain
1	AA	2809	DT	Sidechain
1	AA	2817	DT	Sidechain
1	AA	2818	DT	Sidechain
1	AA	282	DA	Sidechain
1	AA	2820	DA	Sidechain
1	AA	2824	DC	Sidechain
1	AA	2826	DC	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	2830	DA	Sidechain
1	AA	2833	DT	Sidechain
1	AA	2834	DT	Sidechain
1	AA	2836	DT	Sidechain
1	AA	284	DG	Sidechain
1	AA	2841	DC	Sidechain
1	AA	2844	DG	Sidechain
1	AA	2847	DA	Sidechain
1	AA	2859	DT	Sidechain
1	AA	2863	DT	Sidechain
1	AA	2869	DG	Sidechain
1	AA	2873	DC	Sidechain
1	AA	2877	DC	Sidechain
1	AA	288	DT	Sidechain
1	AA	2882	DG	Sidechain
1	AA	2890	DA	Sidechain
1	AA	2891	DT	Sidechain
1	AA	2892	DA	Sidechain
1	AA	2895	DG	Sidechain
1	AA	2896	DT	Sidechain
1	AA	2909	DG	Sidechain
1	AA	291	DC	Sidechain
1	AA	2911	DA	Sidechain
1	AA	2915	DT	Sidechain
1	AA	2916	DT	Sidechain
1	AA	2919	DT	Sidechain
1	AA	292	DG	Sidechain
1	AA	2920	DG	Sidechain
1	AA	2924	DT	Sidechain
1	AA	2932	DT	Sidechain
1	AA	2937	DC	Sidechain
1	AA	2950	DA	Sidechain
1	AA	2951	DG	Sidechain
1	AA	2958	DT	Sidechain
1	AA	2959	DG	Sidechain
1	AA	296	DT	Sidechain
1	AA	2964	DG	Sidechain
1	AA	2965	DC	Sidechain
1	AA	2966	DT	Sidechain
1	AA	2968	DA	Sidechain
1	AA	2984	DT	Sidechain
1	AA	2985	DT	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	2987	DT	Sidechain
1	AA	2988	DG	Sidechain
1	AA	299	DG	Sidechain
1	AA	2990	DC	Sidechain
1	AA	2992	DC	Sidechain
1	AA	2996	DA	Sidechain
1	AA	2998	DC	Sidechain
1	AA	3000	DC	Sidechain
1	AA	3001	DC	Sidechain
1	AA	3003	DT	Sidechain
1	AA	3004	DT	Sidechain
1	AA	3009	DT	Sidechain
1	AA	3010	DA	Sidechain
1	AA	3015	DC	Sidechain
1	AA	302	DG	Sidechain
1	AA	3025	DG	Sidechain
1	AA	3030	DA	Sidechain
1	AA	3035	DT	Sidechain
1	AA	3038	DA	Sidechain
1	AA	3043	DG	Sidechain
1	AA	3045	DC	Sidechain
1	AA	3047	DA	Sidechain
1	AA	3048	DG	Sidechain
1	AA	3049	DT	Sidechain
1	AA	3050	DT	Sidechain
1	AA	3052	DA	Sidechain
1	AA	3056	DC	Sidechain
1	AA	3061	DT	Sidechain
1	AA	3065	DT	Sidechain
1	AA	3082	DG	Sidechain
1	AA	309	DT	Sidechain
1	AA	3092	DG	Sidechain
1	AA	3094	DT	Sidechain
1	AA	3097	DC	Sidechain
1	AA	3099	DA	Sidechain
1	AA	3102	DT	Sidechain
1	AA	3103	DG	Sidechain
1	AA	3104	DC	Sidechain
1	AA	3106	DA	Sidechain
1	AA	3107	DT	Sidechain
1	AA	3112	DA	Sidechain
1	AA	3117	DT	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	3120	DC	Sidechain
1	AA	3124	DG	Sidechain
1	AA	3125	DG	Sidechain
1	AA	3126	DT	Sidechain
1	AA	3127	DA	Sidechain
1	AA	313	DC	Sidechain
1	AA	3130	DC	Sidechain
1	AA	3131	DA	Sidechain
1	AA	3134	DA	Sidechain
1	AA	3138	DT	Sidechain
1	AA	3139	DG	Sidechain
1	AA	3140	DC	Sidechain
1	AA	3146	DT	Sidechain
1	AA	3155	DG	Sidechain
1	AA	3156	DG	Sidechain
1	AA	3157	DT	Sidechain
1	AA	3160	DT	Sidechain
1	AA	3162	DT	Sidechain
1	AA	3171	DT	Sidechain
1	AA	3176	DG	Sidechain
1	AA	3177	DC	Sidechain
1	AA	3178	DC	Sidechain
1	AA	318	DT	Sidechain
1	AA	3182	DT	Sidechain
1	AA	3185	DA	Sidechain
1	AA	3188	DT	Sidechain
1	AA	3189	DT	Sidechain
1	AA	3194	DT	Sidechain
1	AA	3197	DG	Sidechain
1	AA	3200	DT	Sidechain
1	AA	3204	DA	Sidechain
1	AA	3212	DT	Sidechain
1	AA	3215	DG	Sidechain
1	AA	3216	DT	Sidechain
1	AA	3218	DC	Sidechain
1	AA	3223	DT	Sidechain
1	AA	3224	DG	Sidechain
1	AA	3230	DT	Sidechain
1	AA	3239	DA	Sidechain
1	AA	3242	DG	Sidechain
1	AA	3245	DG	Sidechain
1	AA	3246	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	325	DG	Sidechain
1	AA	3255	DC	Sidechain
1	AA	3259	DT	Sidechain
1	AA	3261	DG	Sidechain
1	AA	3266	DG	Sidechain
1	AA	3267	DA	Sidechain
1	AA	3268	DA	Sidechain
1	AA	3272	DC	Sidechain
1	AA	3273	DT	Sidechain
1	AA	3277	DC	Sidechain
1	AA	3279	DT	Sidechain
1	AA	3281	DG	Sidechain
1	AA	3282	DC	Sidechain
1	AA	3283	DC	Sidechain
1	AA	3286	DC	Sidechain
1	AA	3295	DG	Sidechain
1	AA	3298	DT	Sidechain
1	AA	3301	DC	Sidechain
1	AA	3302	DT	Sidechain
1	AA	3303	DG	Sidechain
1	AA	3307	DC	Sidechain
1	AA	3308	DT	Sidechain
1	AA	3309	DG	Sidechain
1	AA	3310	DC	Sidechain
1	AA	3313	DC	Sidechain
1	AA	3319	DG	Sidechain
1	AA	3320	DC	Sidechain
1	AA	3323	DA	Sidechain
1	AA	3324	DC	Sidechain
1	AA	3329	DC	Sidechain
1	AA	3333	DC	Sidechain
1	AA	3334	DT	Sidechain
1	AA	3336	DC	Sidechain
1	AA	3345	DG	Sidechain
1	AA	3354	DG	Sidechain
1	AA	3359	DT	Sidechain
1	AA	3361	DT	Sidechain
1	AA	3363	DT	Sidechain
1	AA	3366	DC	Sidechain
1	AA	337	DT	Sidechain
1	AA	3372	DA	Sidechain
1	AA	338	DC	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	3385	DG	Sidechain
1	AA	3387	DA	Sidechain
1	AA	3388	DG	Sidechain
1	AA	3390	DC	Sidechain
1	AA	3395	DG	Sidechain
1	AA	3396	DA	Sidechain
1	AA	3397	DG	Sidechain
1	AA	34	DC	Sidechain
1	AA	3405	DC	Sidechain
1	AA	3407	DA	Sidechain
1	AA	3413	DG	Sidechain
1	AA	3418	DT	Sidechain
1	AA	3419	DA	Sidechain
1	AA	342	DA	Sidechain
1	AA	3428	DC	Sidechain
1	AA	3429	DA	Sidechain
1	AA	3436	DG	Sidechain
1	AA	3439	DG	Sidechain
1	AA	3440	DC	Sidechain
1	AA	3442	DC	Sidechain
1	AA	3443	DT	Sidechain
1	AA	3446	DA	Sidechain
1	AA	3448	DG	Sidechain
1	AA	3449	DA	Sidechain
1	AA	3455	DC	Sidechain
1	AA	3456	DC	Sidechain
1	AA	3460	DA	Sidechain
1	AA	3461	DC	Sidechain
1	AA	3464	DA	Sidechain
1	AA	3468	DA	Sidechain
1	AA	3477	DC	Sidechain
1	AA	348	DA	Sidechain
1	AA	3481	DC	Sidechain
1	AA	3483	DG	Sidechain
1	AA	3485	DA	Sidechain
1	AA	3494	DT	Sidechain
1	AA	3497	DT	Sidechain
1	AA	3504	DC	Sidechain
1	AA	3506	DG	Sidechain
1	AA	3510	DA	Sidechain
1	AA	3513	DC	Sidechain
1	AA	3533	DC	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	3540	DG	Sidechain
1	AA	3542	DC	Sidechain
1	AA	3543	DC	Sidechain
1	AA	3547	DC	Sidechain
1	AA	3551	DA	Sidechain
1	AA	3552	DT	Sidechain
1	AA	3558	DG	Sidechain
1	AA	3563	DA	Sidechain
1	AA	3565	DT	Sidechain
1	AA	3567	DT	Sidechain
1	AA	3569	DC	Sidechain
1	AA	358	DA	Sidechain
1	AA	3580	DG	Sidechain
1	AA	3588	DA	Sidechain
1	AA	3589	DT	Sidechain
1	AA	359	DC	Sidechain
1	AA	3590	DA	Sidechain
1	AA	3596	DC	Sidechain
1	AA	3600	DT	Sidechain
1	AA	3602	DT	Sidechain
1	AA	3616	DT	Sidechain
1	AA	3620	DG	Sidechain
1	AA	3623	DA	Sidechain
1	AA	3624	DT	Sidechain
1	AA	3626	DT	Sidechain
1	AA	3630	DA	Sidechain
1	AA	364	DT	Sidechain
1	AA	3643	DT	Sidechain
1	AA	3647	DA	Sidechain
1	AA	3651	DA	Sidechain
1	AA	3656	DG	Sidechain
1	AA	3657	DG	Sidechain
1	AA	3658	DG	Sidechain
1	AA	3661	DC	Sidechain
1	AA	3665	DT	Sidechain
1	AA	3667	DA	Sidechain
1	AA	3668	DG	Sidechain
1	AA	3678	DA	Sidechain
1	AA	3680	DT	Sidechain
1	AA	3682	DG	Sidechain
1	AA	369	DG	Sidechain
1	AA	370	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	3702	DT	Sidechain
1	AA	3716	DT	Sidechain
1	AA	3718	DC	Sidechain
1	AA	372	DT	Sidechain
1	AA	3733	DG	Sidechain
1	AA	3735	DC	Sidechain
1	AA	3738	DT	Sidechain
1	AA	374	DT	Sidechain
1	AA	3746	DC	Sidechain
1	AA	3748	DA	Sidechain
1	AA	3753	DT	Sidechain
1	AA	3757	DT	Sidechain
1	AA	3761	DG	Sidechain
1	AA	3762	DG	Sidechain
1	AA	3765	DA	Sidechain
1	AA	3766	DC	Sidechain
1	AA	3771	DT	Sidechain
1	AA	3772	DT	Sidechain
1	AA	3775	DT	Sidechain
1	AA	3776	DC	Sidechain
1	AA	3783	DA	Sidechain
1	AA	3788	DT	Sidechain
1	AA	3789	DG	Sidechain
1	AA	3798	DT	Sidechain
1	AA	38	DT	Sidechain
1	AA	3808	DA	Sidechain
1	AA	3817	DA	Sidechain
1	AA	3829	DT	Sidechain
1	AA	3830	DA	Sidechain
1	AA	3834	DG	Sidechain
1	AA	3840	DG	Sidechain
1	AA	3843	DT	Sidechain
1	AA	3846	DT	Sidechain
1	AA	3847	DC	Sidechain
1	AA	3852	DG	Sidechain
1	AA	3869	DC	Sidechain
1	AA	3871	DT	Sidechain
1	AA	3877	DT	Sidechain
1	AA	3879	DC	Sidechain
1	AA	3883	DA	Sidechain
1	AA	3884	DT	Sidechain
1	AA	3886	DC	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	3889	DA	Sidechain
1	AA	389	DA	Sidechain
1	AA	3890	DG	Sidechain
1	AA	3893	DG	Sidechain
1	AA	3896	DG	Sidechain
1	AA	3897	DG	Sidechain
1	AA	3902	DG	Sidechain
1	AA	3913	DA	Sidechain
1	AA	392	DG	Sidechain
1	AA	3921	DA	Sidechain
1	AA	3926	DT	Sidechain
1	AA	393	DA	Sidechain
1	AA	3932	DT	Sidechain
1	AA	3933	DA	Sidechain
1	AA	3937	DT	Sidechain
1	AA	3941	DT	Sidechain
1	AA	3943	DA	Sidechain
1	AA	3951	DT	Sidechain
1	AA	3953	DT	Sidechain
1	AA	3956	DT	Sidechain
1	AA	3963	DT	Sidechain
1	AA	3970	DT	Sidechain
1	AA	3978	DC	Sidechain
1	AA	3981	DT	Sidechain
1	AA	3983	DA	Sidechain
1	AA	3985	DA	Sidechain
1	AA	3998	DA	Sidechain
1	AA	4004	DG	Sidechain
1	AA	4005	DA	Sidechain
1	AA	4010	DC	Sidechain
1	AA	4012	DT	Sidechain
1	AA	4017	DA	Sidechain
1	AA	4018	DT	Sidechain
1	AA	4022	DT	Sidechain
1	AA	4027	DG	Sidechain
1	AA	4031	DT	Sidechain
1	AA	4032	DT	Sidechain
1	AA	4040	DT	Sidechain
1	AA	4043	DT	Sidechain
1	AA	4047	DT	Sidechain
1	AA	4053	DA	Sidechain
1	AA	4064	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	4065	DG	Sidechain
1	AA	4066	DA	Sidechain
1	AA	4067	DG	Sidechain
1	AA	4069	DG	Sidechain
1	AA	4072	DA	Sidechain
1	AA	4073	DA	Sidechain
1	AA	4074	DA	Sidechain
1	AA	4080	DC	Sidechain
1	AA	4081	DT	Sidechain
1	AA	4086	DT	Sidechain
1	AA	409	DG	Sidechain
1	AA	4090	DG	Sidechain
1	AA	4094	DA	Sidechain
1	AA	4096	DA	Sidechain
1	AA	4104	DG	Sidechain
1	AA	4105	DT	Sidechain
1	AA	4110	DA	Sidechain
1	AA	4113	DT	Sidechain
1	AA	4120	DT	Sidechain
1	AA	4121	DG	Sidechain
1	AA	4122	DA	Sidechain
1	AA	4123	DG	Sidechain
1	AA	4127	DT	Sidechain
1	AA	4132	DG	Sidechain
1	AA	4138	DG	Sidechain
1	AA	4141	DG	Sidechain
1	AA	4142	DC	Sidechain
1	AA	4144	DT	Sidechain
1	AA	4158	DT	Sidechain
1	AA	4159	DT	Sidechain
1	AA	4160	DC	Sidechain
1	AA	4164	DA	Sidechain
1	AA	4174	DA	Sidechain
1	AA	4187	DA	Sidechain
1	AA	419	DT	Sidechain
1	AA	4197	DC	Sidechain
1	AA	4198	DC	Sidechain
1	AA	4199	DC	Sidechain
1	AA	42	DG	Sidechain
1	AA	4202	DG	Sidechain
1	AA	4203	DT	Sidechain
1	AA	4209	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	421	DA	Sidechain
1	AA	4210	DC	Sidechain
1	AA	4214	DT	Sidechain
1	AA	4218	DA	Sidechain
1	AA	423	DG	Sidechain
1	AA	4241	DG	Sidechain
1	AA	4242	DT	Sidechain
1	AA	4243	DA	Sidechain
1	AA	4248	DT	Sidechain
1	AA	4250	DT	Sidechain
1	AA	4254	DA	Sidechain
1	AA	4257	DT	Sidechain
1	AA	426	DA	Sidechain
1	AA	4261	DA	Sidechain
1	AA	4267	DC	Sidechain
1	AA	4268	DA	Sidechain
1	AA	427	DG	Sidechain
1	AA	4273	DT	Sidechain
1	AA	4282	DA	Sidechain
1	AA	4298	DG	Sidechain
1	AA	4299	DC	Sidechain
1	AA	4301	DT	Sidechain
1	AA	4302	DT	Sidechain
1	AA	4306	DA	Sidechain
1	AA	4325	DT	Sidechain
1	AA	4337	DC	Sidechain
1	AA	4338	DT	Sidechain
1	AA	4339	DG	Sidechain
1	AA	4341	DT	Sidechain
1	AA	4346	DT	Sidechain
1	AA	4355	DC	Sidechain
1	AA	4357	DC	Sidechain
1	AA	4373	DC	Sidechain
1	AA	4375	DG	Sidechain
1	AA	4381	DC	Sidechain
1	AA	4383	DG	Sidechain
1	AA	4386	DG	Sidechain
1	AA	4388	DA	Sidechain
1	AA	4398	DC	Sidechain
1	AA	4401	DA	Sidechain
1	AA	4407	DA	Sidechain
1	AA	4413	DT	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	4416	DT	Sidechain
1	AA	4421	DG	Sidechain
1	AA	4427	DG	Sidechain
1	AA	4428	DT	Sidechain
1	AA	4431	DT	Sidechain
1	AA	4432	DG	Sidechain
1	AA	4440	DA	Sidechain
1	AA	4443	DG	Sidechain
1	AA	4445	DG	Sidechain
1	AA	4448	DC	Sidechain
1	AA	4450	DG	Sidechain
1	AA	4451	DC	Sidechain
1	AA	4457	DA	Sidechain
1	AA	4468	DT	Sidechain
1	AA	4471	DA	Sidechain
1	AA	4478	DA	Sidechain
1	AA	4483	DT	Sidechain
1	AA	4495	DC	Sidechain
1	AA	4500	DA	Sidechain
1	AA	4504	DG	Sidechain
1	AA	4505	DG	Sidechain
1	AA	4520	DA	Sidechain
1	AA	4523	DA	Sidechain
1	AA	4526	DG	Sidechain
1	AA	4527	DT	Sidechain
1	AA	4529	DT	Sidechain
1	AA	453	DT	Sidechain
1	AA	4531	DC	Sidechain
1	AA	4535	DG	Sidechain
1	AA	4537	DA	Sidechain
1	AA	4545	DT	Sidechain
1	AA	455	DT	Sidechain
1	AA	4553	DG	Sidechain
1	AA	4560	DA	Sidechain
1	AA	4566	DA	Sidechain
1	AA	4571	DA	Sidechain
1	AA	4573	DT	Sidechain
1	AA	4576	DC	Sidechain
1	AA	4582	DG	Sidechain
1	AA	4583	DG	Sidechain
1	AA	4584	DC	Sidechain
1	AA	4592	DA	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	4593	DG	Sidechain
1	AA	4605	DT	Sidechain
1	AA	4606	DG	Sidechain
1	AA	461	DT	Sidechain
1	AA	4612	DT	Sidechain
1	AA	4624	DT	Sidechain
1	AA	4628	DG	Sidechain
1	AA	4633	DC	Sidechain
1	AA	4634	DC	Sidechain
1	AA	4637	DA	Sidechain
1	AA	4641	DG	Sidechain
1	AA	4648	DA	Sidechain
1	AA	465	DA	Sidechain
1	AA	4659	DA	Sidechain
1	AA	466	DT	Sidechain
1	AA	4662	DT	Sidechain
1	AA	4667	DA	Sidechain
1	AA	4668	DT	Sidechain
1	AA	4671	DG	Sidechain
1	AA	4681	DT	Sidechain
1	AA	4682	DC	Sidechain
1	AA	4686	DG	Sidechain
1	AA	469	DT	Sidechain
1	AA	4690	DA	Sidechain
1	AA	4692	DG	Sidechain
1	AA	4693	DG	Sidechain
1	AA	4697	DA	Sidechain
1	AA	4699	DG	Sidechain
1	AA	4707	DG	Sidechain
1	AA	4708	DA	Sidechain
1	AA	4711	DT	Sidechain
1	AA	4715	DG	Sidechain
1	AA	4722	DG	Sidechain
1	AA	4724	DC	Sidechain
1	AA	4730	DA	Sidechain
1	AA	4737	DA	Sidechain
1	AA	4738	DA	Sidechain
1	AA	4746	DG	Sidechain
1	AA	4754	DG	Sidechain
1	AA	4762	DA	Sidechain
1	AA	4772	DC	Sidechain
1	AA	4778	DA	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	4780	DC	Sidechain
1	AA	4783	DA	Sidechain
1	AA	4790	DA	Sidechain
1	AA	4791	DA	Sidechain
1	AA	4794	DG	Sidechain
1	AA	4804	DA	Sidechain
1	AA	4808	DT	Sidechain
1	AA	4810	DA	Sidechain
1	AA	4815	DA	Sidechain
1	AA	4819	DT	Sidechain
1	AA	4821	DG	Sidechain
1	AA	4833	DA	Sidechain
1	AA	4835	DC	Sidechain
1	AA	4836	DA	Sidechain
1	AA	4837	DG	Sidechain
1	AA	4838	DT	Sidechain
1	AA	4839	DG	Sidechain
1	AA	484	DA	Sidechain
1	AA	4841	DC	Sidechain
1	AA	4844	DC	Sidechain
1	AA	485	DC	Sidechain
1	AA	4850	DT	Sidechain
1	AA	4853	DT	Sidechain
1	AA	4857	DG	Sidechain
1	AA	4865	DT	Sidechain
1	AA	4869	DT	Sidechain
1	AA	4870	DG	Sidechain
1	AA	4876	DT	Sidechain
1	AA	4881	DA	Sidechain
1	AA	4883	DC	Sidechain
1	AA	4884	DT	Sidechain
1	AA	4885	DA	Sidechain
1	AA	4888	DA	Sidechain
1	AA	4890	DT	Sidechain
1	AA	4896	DG	Sidechain
1	AA	4910	DC	Sidechain
1	AA	4914	DA	Sidechain
1	AA	4917	DG	Sidechain
1	AA	492	DA	Sidechain
1	AA	4921	DT	Sidechain
1	AA	4938	DG	Sidechain
1	AA	4939	DT	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	4945	DG	Sidechain
1	AA	4946	DG	Sidechain
1	AA	4950	DT	Sidechain
1	AA	4960	DA	Sidechain
1	AA	4961	DC	Sidechain
1	AA	4962	DC	Sidechain
1	AA	4963	DA	Sidechain
1	AA	4964	DT	Sidechain
1	AA	4965	DA	Sidechain
1	AA	4969	DA	Sidechain
1	AA	4972	DG	Sidechain
1	AA	4973	DG	Sidechain
1	AA	4974	DA	Sidechain
1	AA	4976	DT	Sidechain
1	AA	4980	DT	Sidechain
1	AA	4983	DA	Sidechain
1	AA	4996	DT	Sidechain
1	AA	4997	DA	Sidechain
1	AA	5005	DT	Sidechain
1	AA	5006	DT	Sidechain
1	AA	5012	DA	Sidechain
1	AA	5013	DT	Sidechain
1	AA	5018	DA	Sidechain
1	AA	5024	DA	Sidechain
1	AA	5027	DA	Sidechain
1	AA	5029	DA	Sidechain
1	AA	5030	DC	Sidechain
1	AA	5037	DG	Sidechain
1	AA	5039	DC	Sidechain
1	AA	5043	DG	Sidechain
1	AA	5047	DG	Sidechain
1	AA	5048	DG	Sidechain
1	AA	5050	DG	Sidechain
1	AA	5053	DA	Sidechain
1	AA	5054	DC	Sidechain
1	AA	5055	DC	Sidechain
1	AA	5063	DA	Sidechain
1	AA	5067	DT	Sidechain
1	AA	5070	DC	Sidechain
1	AA	5075	DT	Sidechain
1	AA	5085	DA	Sidechain
1	AA	5088	DA	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	509	DG	Sidechain
1	AA	5090	DA	Sidechain
1	AA	5091	DG	Sidechain
1	AA	5092	DT	Sidechain
1	AA	5098	DA	Sidechain
1	AA	5100	DA	Sidechain
1	AA	511	DA	Sidechain
1	AA	5110	DT	Sidechain
1	AA	5111	DT	Sidechain
1	AA	5113	DT	Sidechain
1	AA	5114	DT	Sidechain
1	AA	5115	DG	Sidechain
1	AA	5119	DT	Sidechain
1	AA	512	DT	Sidechain
1	AA	5126	DC	Sidechain
1	AA	5131	DC	Sidechain
1	AA	5138	DC	Sidechain
1	AA	5142	DG	Sidechain
1	AA	5143	DG	Sidechain
1	AA	5145	DG	Sidechain
1	AA	5146	DA	Sidechain
1	AA	5147	DT	Sidechain
1	AA	515	DA	Sidechain
1	AA	5151	DC	Sidechain
1	AA	5153	DG	Sidechain
1	AA	5155	DC	Sidechain
1	AA	5156	DT	Sidechain
1	AA	516	DC	Sidechain
1	AA	5175	DA	Sidechain
1	AA	5188	DT	Sidechain
1	AA	5189	DT	Sidechain
1	AA	519	DT	Sidechain
1	AA	5192	DA	Sidechain
1	AA	5196	DT	Sidechain
1	AA	5199	DC	Sidechain
1	AA	52	DG	Sidechain
1	AA	5201	DT	Sidechain
1	AA	5205	DG	Sidechain
1	AA	5207	DT	Sidechain
1	AA	5209	DA	Sidechain
1	AA	5211	DC	Sidechain
1	AA	5213	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	5214	DG	Sidechain
1	AA	522	DC	Sidechain
1	AA	5221	DC	Sidechain
1	AA	5222	DT	Sidechain
1	AA	5226	DT	Sidechain
1	AA	5228	DT	Sidechain
1	AA	5229	DT	Sidechain
1	AA	523	DT	Sidechain
1	AA	5230	DG	Sidechain
1	AA	5233	DG	Sidechain
1	AA	5234	DG	Sidechain
1	AA	5235	DC	Sidechain
1	AA	5238	DC	Sidechain
1	AA	5243	DG	Sidechain
1	AA	5251	DT	Sidechain
1	AA	5256	DC	Sidechain
1	AA	5258	DG	Sidechain
1	AA	5260	DT	Sidechain
1	AA	5271	DG	Sidechain
1	AA	5272	DC	Sidechain
1	AA	5275	DA	Sidechain
1	AA	5279	DG	Sidechain
1	AA	5281	DG	Sidechain
1	AA	5282	DA	Sidechain
1	AA	5283	DT	Sidechain
1	AA	529	DA	Sidechain
1	AA	5294	DA	Sidechain
1	AA	5296	DG	Sidechain
1	AA	530	DT	Sidechain
1	AA	5304	DC	Sidechain
1	AA	531	DT	Sidechain
1	AA	5313	DC	Sidechain
1	AA	5315	DC	Sidechain
1	AA	5322	DA	Sidechain
1	AA	5324	DG	Sidechain
1	AA	5330	DT	Sidechain
1	AA	5336	DA	Sidechain
1	AA	5338	DT	Sidechain
1	AA	5340	DT	Sidechain
1	AA	535	DA	Sidechain
1	AA	5350	DA	Sidechain
1	AA	5351	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	5353	DT	Sidechain
1	AA	5364	DC	Sidechain
1	AA	5365	DT	Sidechain
1	AA	5370	DA	Sidechain
1	AA	5385	DC	Sidechain
1	AA	5388	DT	Sidechain
1	AA	541	DA	Sidechain
1	AA	5413	DA	Sidechain
1	AA	5414	DT	Sidechain
1	AA	5416	DC	Sidechain
1	AA	542	DT	Sidechain
1	AA	5420	DA	Sidechain
1	AA	5421	DT	Sidechain
1	AA	5427	DT	Sidechain
1	AA	5435	DG	Sidechain
1	AA	5437	DT	Sidechain
1	AA	5441	DA	Sidechain
1	AA	5443	DT	Sidechain
1	AA	545	DT	Sidechain
1	AA	5467	DC	Sidechain
1	AA	5471	DA	Sidechain
1	AA	5474	DC	Sidechain
1	AA	5478	DT	Sidechain
1	AA	5479	DC	Sidechain
1	AA	548	DT	Sidechain
1	AA	5482	DC	Sidechain
1	AA	5486	DT	Sidechain
1	AA	5487	DA	Sidechain
1	AA	5489	DA	Sidechain
1	AA	5490	DC	Sidechain
1	AA	5493	DT	Sidechain
1	AA	5497	DT	Sidechain
1	AA	5502	DC	Sidechain
1	AA	5504	DT	Sidechain
1	AA	5510	DG	Sidechain
1	AA	5512	DG	Sidechain
1	AA	5515	DC	Sidechain
1	AA	552	DG	Sidechain
1	AA	5524	DC	Sidechain
1	AA	5528	DT	Sidechain
1	AA	5530	DT	Sidechain
1	AA	5535	DT	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	554	DC	Sidechain
1	AA	5548	DA	Sidechain
1	AA	5550	DG	Sidechain
1	AA	5569	DG	Sidechain
1	AA	5571	DA	Sidechain
1	AA	5575	DT	Sidechain
1	AA	5579	DT	Sidechain
1	AA	5581	DC	Sidechain
1	AA	5584	DT	Sidechain
1	AA	5588	DT	Sidechain
1	AA	559	DT	Sidechain
1	AA	5590	DC	Sidechain
1	AA	5603	DA	Sidechain
1	AA	5604	DC	Sidechain
1	AA	5607	DA	Sidechain
1	AA	561	DA	Sidechain
1	AA	5616	DT	Sidechain
1	AA	562	DG	Sidechain
1	AA	5622	DT	Sidechain
1	AA	5623	DC	Sidechain
1	AA	5626	DT	Sidechain
1	AA	5627	DA	Sidechain
1	AA	5629	DT	Sidechain
1	AA	5630	DA	Sidechain
1	AA	5633	DC	Sidechain
1	AA	5635	DT	Sidechain
1	AA	5640	DA	Sidechain
1	AA	5642	DA	Sidechain
1	AA	5644	DA	Sidechain
1	AA	5645	DC	Sidechain
1	AA	5646	DT	Sidechain
1	AA	5650	DT	Sidechain
1	AA	5651	DT	Sidechain
1	AA	5653	DG	Sidechain
1	AA	5656	DG	Sidechain
1	AA	5658	DT	Sidechain
1	AA	5662	DA	Sidechain
1	AA	567	DA	Sidechain
1	AA	5671	DC	Sidechain
1	AA	5673	DA	Sidechain
1	AA	5678	DC	Sidechain
1	AA	5683	DT	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	5685	DT	Sidechain
1	AA	5693	DA	Sidechain
1	AA	5711	DA	Sidechain
1	AA	5718	DT	Sidechain
1	AA	5738	DT	Sidechain
1	AA	5746	DT	Sidechain
1	AA	5749	DA	Sidechain
1	AA	5752	DG	Sidechain
1	AA	5763	DT	Sidechain
1	AA	5777	DT	Sidechain
1	AA	5781	DA	Sidechain
1	AA	5782	DT	Sidechain
1	AA	5797	DA	Sidechain
1	AA	5799	DG	Sidechain
1	AA	5803	DC	Sidechain
1	AA	5809	DA	Sidechain
1	AA	581	DA	Sidechain
1	AA	5813	DT	Sidechain
1	AA	5825	DT	Sidechain
1	AA	5827	DA	Sidechain
1	AA	5828	DT	Sidechain
1	AA	5832	DG	Sidechain
1	AA	5834	DA	Sidechain
1	AA	5836	DA	Sidechain
1	AA	584	DT	Sidechain
1	AA	5841	DT	Sidechain
1	AA	5844	DA	Sidechain
1	AA	5845	DT	Sidechain
1	AA	5855	DT	Sidechain
1	AA	5859	DT	Sidechain
1	AA	5860	DG	Sidechain
1	AA	5861	DT	Sidechain
1	AA	5863	DC	Sidechain
1	AA	5881	DT	Sidechain
1	AA	5885	DC	Sidechain
1	AA	589	DT	Sidechain
1	AA	5896	DT	Sidechain
1	AA	5897	DC	Sidechain
1	AA	5901	DA	Sidechain
1	AA	5902	DA	Sidechain
1	AA	5903	DC	Sidechain
1	AA	5904	DA	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	5910	DG	Sidechain
1	AA	5916	DT	Sidechain
1	AA	5921	DA	Sidechain
1	AA	5923	DG	Sidechain
1	AA	5927	DG	Sidechain
1	AA	5928	DG	Sidechain
1	AA	5943	DG	Sidechain
1	AA	5944	DC	Sidechain
1	AA	595	DT	Sidechain
1	AA	5952	DA	Sidechain
1	AA	5958	DT	Sidechain
1	AA	596	DA	Sidechain
1	AA	5962	DG	Sidechain
1	AA	5963	DG	Sidechain
1	AA	5970	DA	Sidechain
1	AA	5971	DA	Sidechain
1	AA	5972	DG	Sidechain
1	AA	598	DT	Sidechain
1	AA	5980	DT	Sidechain
1	AA	5984	DT	Sidechain
1	AA	5986	DT	Sidechain
1	AA	5989	DT	Sidechain
1	AA	599	DT	Sidechain
1	AA	5992	DT	Sidechain
1	AA	5993	DT	Sidechain
1	AA	5998	DT	Sidechain
1	AA	6001	DA	Sidechain
1	AA	6005	DA	Sidechain
1	AA	601	DG	Sidechain
1	AA	6010	DG	Sidechain
1	AA	6013	DT	Sidechain
1	AA	6015	DT	Sidechain
1	AA	6016	DG	Sidechain
1	AA	6017	DG	Sidechain
1	AA	6018	DT	Sidechain
1	AA	602	DC	Sidechain
1	AA	6021	DT	Sidechain
1	AA	6027	DC	Sidechain
1	AA	6028	DT	Sidechain
1	AA	6030	DA	Sidechain
1	AA	6039	DT	Sidechain
1	AA	6041	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	6045	DA	Sidechain
1	AA	6056	DC	Sidechain
1	AA	6067	DT	Sidechain
1	AA	6070	DT	Sidechain
1	AA	6075	DT	Sidechain
1	AA	608	DA	Sidechain
1	AA	6081	DA	Sidechain
1	AA	6082	DG	Sidechain
1	AA	6085	DA	Sidechain
1	AA	6088	DA	Sidechain
1	AA	6089	DT	Sidechain
1	AA	6092	DG	Sidechain
1	AA	6106	DA	Sidechain
1	AA	6108	DT	Sidechain
1	AA	6114	DT	Sidechain
1	AA	6119	DG	Sidechain
1	AA	6120	DG	Sidechain
1	AA	6123	DA	Sidechain
1	AA	6130	DC	Sidechain
1	AA	6144	DT	Sidechain
1	AA	6149	DC	Sidechain
1	AA	6155	DA	Sidechain
1	AA	6161	DG	Sidechain
1	AA	6168	DG	Sidechain
1	AA	6177	DG	Sidechain
1	AA	6187	DC	Sidechain
1	AA	6193	DC	Sidechain
1	AA	6196	DT	Sidechain
1	AA	6198	DG	Sidechain
1	AA	6199	DG	Sidechain
1	AA	6206	DA	Sidechain
1	AA	6209	DA	Sidechain
1	AA	6211	DG	Sidechain
1	AA	6221	DG	Sidechain
1	AA	6223	DT	Sidechain
1	AA	6224	DC	Sidechain
1	AA	6227	DA	Sidechain
1	AA	6232	DT	Sidechain
1	AA	6233	DT	Sidechain
1	AA	6238	DT	Sidechain
1	AA	624	DT	Sidechain
1	AA	6247	DC	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	6249	DG	Sidechain
1	AA	6261	DC	Sidechain
1	AA	6267	DA	Sidechain
1	AA	6268	DA	Sidechain
1	AA	6275	DG	Sidechain
1	AA	6276	DT	Sidechain
1	AA	6279	DT	Sidechain
1	AA	6284	DT	Sidechain
1	AA	6286	DG	Sidechain
1	AA	6287	DG	Sidechain
1	AA	6293	DT	Sidechain
1	AA	6296	DG	Sidechain
1	AA	6299	DT	Sidechain
1	AA	6303	DT	Sidechain
1	AA	6308	DA	Sidechain
1	AA	6309	DC	Sidechain
1	AA	6318	DT	Sidechain
1	AA	6328	DA	Sidechain
1	AA	6331	DT	Sidechain
1	AA	6335	DT	Sidechain
1	AA	6345	DC	Sidechain
1	AA	6356	DC	Sidechain
1	AA	6358	DA	Sidechain
1	AA	6359	DT	Sidechain
1	AA	6375	DG	Sidechain
1	AA	6376	DG	Sidechain
1	AA	6379	DT	Sidechain
1	AA	639	DG	Sidechain
1	AA	6393	DG	Sidechain
1	AA	6394	DT	Sidechain
1	AA	6396	DG	Sidechain
1	AA	6398	DA	Sidechain
1	AA	6400	DG	Sidechain
1	AA	6403	DC	Sidechain
1	AA	6404	DC	Sidechain
1	AA	6411	DA	Sidechain
1	AA	6419	DT	Sidechain
1	AA	642	DA	Sidechain
1	AA	6423	DT	Sidechain
1	AA	6428	DA	Sidechain
1	AA	6430	DC	Sidechain
1	AA	6431	DC	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	6433	DA	Sidechain
1	AA	6437	DT	Sidechain
1	AA	6442	DG	Sidechain
1	AA	6443	DC	Sidechain
1	AA	6446	DG	Sidechain
1	AA	6451	DG	Sidechain
1	AA	6454	DC	Sidechain
1	AA	6456	DT	Sidechain
1	AA	6458	DG	Sidechain
1	AA	6461	DC	Sidechain
1	AA	6465	DA	Sidechain
1	AA	6471	DT	Sidechain
1	AA	6477	DT	Sidechain
1	AA	6478	DT	Sidechain
1	AA	6481	DT	Sidechain
1	AA	6490	DT	Sidechain
1	AA	6494	DT	Sidechain
1	AA	6497	DA	Sidechain
1	AA	650	DC	Sidechain
1	AA	6501	DT	Sidechain
1	AA	6524	DC	Sidechain
1	AA	6529	DG	Sidechain
1	AA	653	DA	Sidechain
1	AA	6530	DT	Sidechain
1	AA	6535	DA	Sidechain
1	AA	6536	DG	Sidechain
1	AA	6539	DG	Sidechain
1	AA	6545	DA	Sidechain
1	AA	6549	DT	Sidechain
1	AA	6552	DA	Sidechain
1	AA	6556	DT	Sidechain
1	AA	6559	DA	Sidechain
1	AA	6560	DA	Sidechain
1	AA	6564	DA	Sidechain
1	AA	6576	DT	Sidechain
1	AA	6588	DA	Sidechain
1	AA	6599	DG	Sidechain
1	AA	660	DA	Sidechain
1	AA	6600	DA	Sidechain
1	AA	6604	DA	Sidechain
1	AA	6607	DT	Sidechain
1	AA	6613	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	6615	DA	Sidechain
1	AA	6622	DG	Sidechain
1	AA	6623	DG	Sidechain
1	AA	6626	DA	Sidechain
1	AA	6637	DA	Sidechain
1	AA	664	DC	Sidechain
1	AA	6641	DT	Sidechain
1	AA	6645	DA	Sidechain
1	AA	6647	DT	Sidechain
1	AA	6651	DA	Sidechain
1	AA	6652	DG	Sidechain
1	AA	6653	DA	Sidechain
1	AA	6654	DA	Sidechain
1	AA	6658	DG	Sidechain
1	AA	6659	DG	Sidechain
1	AA	6660	DA	Sidechain
1	AA	6667	DT	Sidechain
1	AA	6668	DA	Sidechain
1	AA	667	DC	Sidechain
1	AA	6670	DA	Sidechain
1	AA	6671	DT	Sidechain
1	AA	6673	DG	Sidechain
1	AA	6675	DG	Sidechain
1	AA	6678	DG	Sidechain
1	AA	6683	DA	Sidechain
1	AA	6693	DA	Sidechain
1	AA	6697	DT	Sidechain
1	AA	6701	DT	Sidechain
1	AA	6703	DC	Sidechain
1	AA	6706	DT	Sidechain
1	AA	6724	DG	Sidechain
1	AA	6725	DT	Sidechain
1	AA	6733	DG	Sidechain
1	AA	6736	DT	Sidechain
1	AA	6739	DG	Sidechain
1	AA	6740	DG	Sidechain
1	AA	6744	DC	Sidechain
1	AA	6748	DT	Sidechain
1	AA	6761	DA	Sidechain
1	AA	6763	DG	Sidechain
1	AA	6764	DA	Sidechain
1	AA	6767	DA	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	677	DA	Sidechain
1	AA	6778	DG	Sidechain
1	AA	6781	DC	Sidechain
1	AA	6783	DT	Sidechain
1	AA	6801	DT	Sidechain
1	AA	6803	DT	Sidechain
1	AA	6805	DT	Sidechain
1	AA	6811	DG	Sidechain
1	AA	6812	DG	Sidechain
1	AA	6819	DG	Sidechain
1	AA	6834	DT	Sidechain
1	AA	6836	DT	Sidechain
1	AA	6838	DA	Sidechain
1	AA	6839	DA	Sidechain
1	AA	6842	DG	Sidechain
1	AA	6845	DT	Sidechain
1	AA	6847	DA	Sidechain
1	AA	6852	DT	Sidechain
1	AA	6858	DG	Sidechain
1	AA	6860	DC	Sidechain
1	AA	6861	DT	Sidechain
1	AA	6863	DT	Sidechain
1	AA	6864	DA	Sidechain
1	AA	6869	DT	Sidechain
1	AA	687	DG	Sidechain
1	AA	6874	DT	Sidechain
1	AA	6879	DA	Sidechain
1	AA	6880	DT	Sidechain
1	AA	6883	DG	Sidechain
1	AA	6892	DA	Sidechain
1	AA	6895	DA	Sidechain
1	AA	6903	DA	Sidechain
1	AA	691	DT	Sidechain
1	AA	6912	DA	Sidechain
1	AA	6913	DC	Sidechain
1	AA	692	DA	Sidechain
1	AA	6924	DC	Sidechain
1	AA	6931	DG	Sidechain
1	AA	6935	DT	Sidechain
1	AA	6942	DT	Sidechain
1	AA	6945	DA	Sidechain
1	AA	6949	DT	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	695	DG	Sidechain
1	AA	6955	DA	Sidechain
1	AA	6957	DT	Sidechain
1	AA	6959	DT	Sidechain
1	AA	6960	DC	Sidechain
1	AA	6962	DA	Sidechain
1	AA	6967	DA	Sidechain
1	AA	6968	DG	Sidechain
1	AA	6976	DT	Sidechain
1	AA	6986	DA	Sidechain
1	AA	6988	DG	Sidechain
1	AA	6989	DA	Sidechain
1	AA	6991	DC	Sidechain
1	AA	6993	DA	Sidechain
1	AA	6998	DT	Sidechain
1	AA	6999	DG	Sidechain
1	AA	70	DT	Sidechain
1	AA	701	DG	Sidechain
1	AA	7011	DG	Sidechain
1	AA	7012	DG	Sidechain
1	AA	7013	DG	Sidechain
1	AA	7015	DT	Sidechain
1	AA	7024	DA	Sidechain
1	AA	7026	DC	Sidechain
1	AA	7029	DT	Sidechain
1	AA	703	DT	Sidechain
1	AA	7031	DC	Sidechain
1	AA	7037	DC	Sidechain
1	AA	7041	DG	Sidechain
1	AA	7042	DA	Sidechain
1	AA	7045	DG	Sidechain
1	AA	7049	DT	Sidechain
1	AA	7054	DA	Sidechain
1	AA	7056	DA	Sidechain
1	AA	7063	DG	Sidechain
1	AA	7064	DG	Sidechain
1	AA	7065	DT	Sidechain
1	AA	7067	DA	Sidechain
1	AA	7069	DG	Sidechain
1	AA	7073	DT	Sidechain
1	AA	7075	DA	Sidechain
1	AA	7076	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	7081	DC	Sidechain
1	AA	7089	DG	Sidechain
1	AA	7090	DC	Sidechain
1	AA	71	DT	Sidechain
1	AA	7112	DG	Sidechain
1	AA	7115	DA	Sidechain
1	AA	7118	DA	Sidechain
1	AA	712	DT	Sidechain
1	AA	7122	DA	Sidechain
1	AA	713	DT	Sidechain
1	AA	7130	DT	Sidechain
1	AA	7131	DT	Sidechain
1	AA	7133	DT	Sidechain
1	AA	7139	DG	Sidechain
1	AA	7148	DT	Sidechain
1	AA	7156	DG	Sidechain
1	AA	7159	DC	Sidechain
1	AA	716	DA	Sidechain
1	AA	7165	DA	Sidechain
1	AA	7170	DA	Sidechain
1	AA	7179	DG	Sidechain
1	AA	718	DT	Sidechain
1	AA	7183	DT	Sidechain
1	AA	7190	DG	Sidechain
1	AA	7194	DC	Sidechain
1	AA	7196	DA	Sidechain
1	AA	7197	DG	Sidechain
1	AA	72	DA	Sidechain
1	AA	7200	DT	Sidechain
1	AA	7204	DA	Sidechain
1	AA	7211	DA	Sidechain
1	AA	7214	DA	Sidechain
1	AA	7216	DT	Sidechain
1	AA	722	DC	Sidechain
1	AA	7221	DT	Sidechain
1	AA	7222	DA	Sidechain
1	AA	7225	DC	Sidechain
1	AA	726	DC	Sidechain
1	AA	7270	DT	Sidechain
1	AA	7279	DA	Sidechain
1	AA	7280	DG	Sidechain
1	AA	7283	DC	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	7290	DT	Sidechain
1	AA	7294	DT	Sidechain
1	AA	7315	DG	Sidechain
1	AA	7321	DT	Sidechain
1	AA	7328	DG	Sidechain
1	AA	733	DA	Sidechain
1	AA	7334	DT	Sidechain
1	AA	7335	DA	Sidechain
1	AA	7341	DT	Sidechain
1	AA	7349	DG	Sidechain
1	AA	7350	DT	Sidechain
1	AA	7357	DA	Sidechain
1	AA	7367	DC	Sidechain
1	AA	7369	DT	Sidechain
1	AA	7370	DA	Sidechain
1	AA	7371	DA	Sidechain
1	AA	7389	DG	Sidechain
1	AA	7396	DG	Sidechain
1	AA	7400	DT	Sidechain
1	AA	7406	DT	Sidechain
1	AA	7416	DT	Sidechain
1	AA	7426	DT	Sidechain
1	AA	7428	DT	Sidechain
1	AA	743	DA	Sidechain
1	AA	7430	DA	Sidechain
1	AA	7433	DT	Sidechain
1	AA	7436	DT	Sidechain
1	AA	7441	DA	Sidechain
1	AA	7451	DT	Sidechain
1	AA	7461	DA	Sidechain
1	AA	7466	DA	Sidechain
1	AA	7469	DG	Sidechain
1	AA	7476	DT	Sidechain
1	AA	748	DT	Sidechain
1	AA	7483	DG	Sidechain
1	AA	7485	DT	Sidechain
1	AA	749	DG	Sidechain
1	AA	7494	DC	Sidechain
1	AA	7496	DG	Sidechain
1	AA	7504	DG	Sidechain
1	AA	7508	DG	Sidechain
1	AA	7515	DT	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	7517	DA	Sidechain
1	AA	752	DA	Sidechain
1	AA	7520	DT	Sidechain
1	AA	7526	DG	Sidechain
1	AA	7527	DA	Sidechain
1	AA	7528	DA	Sidechain
1	AA	7532	DA	Sidechain
1	AA	754	DT	Sidechain
1	AA	7546	DG	Sidechain
1	AA	755	DC	Sidechain
1	AA	7558	DG	Sidechain
1	AA	757	DC	Sidechain
1	AA	763	DC	Sidechain
1	AA	769	DG	Sidechain
1	AA	77	DC	Sidechain
1	AA	770	DG	Sidechain
1	AA	776	DA	Sidechain
1	AA	78	DA	Sidechain
1	AA	780	DC	Sidechain
1	AA	782	DC	Sidechain
1	AA	79	DG	Sidechain
1	AA	794	DC	Sidechain
1	AA	798	DT	Sidechain
1	AA	82	DT	Sidechain
1	AA	829	DT	Sidechain
1	AA	832	DT	Sidechain
1	AA	834	DG	Sidechain
1	AA	838	DA	Sidechain
1	AA	844	DC	Sidechain
1	AA	85	DC	Sidechain
1	AA	857	DC	Sidechain
1	AA	867	DT	Sidechain
1	AA	870	DC	Sidechain
1	AA	875	DT	Sidechain
1	AA	878	DG	Sidechain
1	AA	881	DG	Sidechain
1	AA	886	DT	Sidechain
1	AA	9	DG	Sidechain
1	AA	905	DA	Sidechain
1	AA	91	DC	Sidechain
1	AA	912	DT	Sidechain
1	AA	915	DG	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	916	DG	Sidechain
1	AA	917	DG	Sidechain
1	AA	918	DG	Sidechain
1	AA	92	DA	Sidechain
1	AA	923	DA	Sidechain
1	AA	928	DG	Sidechain
1	AA	933	DT	Sidechain
1	AA	941	DA	Sidechain
1	AA	944	DG	Sidechain
1	AA	946	DT	Sidechain
1	AA	95	DT	Sidechain
1	AA	960	DG	Sidechain
1	AA	961	DG	Sidechain
1	AA	989	DT	Sidechain
1	AA	99	DA	Sidechain
1	AA	994	DT	Sidechain
1	AA	998	DA	Sidechain
2	AB	1012	DT	Sidechain
2	AB	1013	DC	Sidechain
2	AB	1015	DT	Sidechain
2	AB	1020	DG	Sidechain
2	AB	1026	DT	Sidechain
2	AB	1027	DG	Sidechain
2	AB	1028	DC	Sidechain
2	AB	1036	DG	Sidechain
2	AB	1049	DT	Sidechain
2	AB	1051	DT	Sidechain
2	AB	1053	DA	Sidechain
2	AB	1061	DA	Sidechain
2	AB	1068	DA	Sidechain
2	AB	1069	DC	Sidechain
2	AB	1071	DT	Sidechain
2	AB	1074	DT	Sidechain
2	AB	1075	DC	Sidechain
2	AB	1094	DC	Sidechain
2	AB	1096	DC	Sidechain
2	AB	1103	DT	Sidechain
2	AB	1104	DC	Sidechain
2	AB	1106	DG	Sidechain
2	AB	1108	DA	Sidechain
2	AB	1113	DT	Sidechain
2	AB	1122	DT	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1123	DC	Sidechain
2	AB	1124	DG	Sidechain
2	AB	1126	DT	Sidechain
2	AB	1128	DC	Sidechain
2	AB	1131	DT	Sidechain
2	AB	1137	DC	Sidechain
2	AB	1138	DT	Sidechain
2	AB	114	DA	Sidechain
2	AB	1151	DG	Sidechain
2	AB	1152	DG	Sidechain
2	AB	1157	DG	Sidechain
2	AB	1158	DA	Sidechain
2	AB	1159	DT	Sidechain
2	AB	116	DT	Sidechain
2	AB	1163	DG	Sidechain
2	AB	1165	DA	Sidechain
2	AB	1166	DA	Sidechain
2	AB	117	DT	Sidechain
2	AB	1170	DC	Sidechain
2	AB	1171	DG	Sidechain
2	AB	1173	DC	Sidechain
2	AB	1181	DT	Sidechain
2	AB	1182	DC	Sidechain
2	AB	1186	DG	Sidechain
2	AB	1188	DA	Sidechain
2	AB	1196	DG	Sidechain
2	AB	1197	DC	Sidechain
2	AB	1198	DG	Sidechain
2	AB	1202	DG	Sidechain
2	AB	1211	DG	Sidechain
2	AB	1212	DG	Sidechain
2	AB	1217	DG	Sidechain
2	AB	1225	DG	Sidechain
2	AB	1226	DA	Sidechain
2	AB	1229	DG	Sidechain
2	AB	123	DG	Sidechain
2	AB	1230	DT	Sidechain
2	AB	1233	DT	Sidechain
2	AB	1236	DT	Sidechain
2	AB	1238	DA	Sidechain
2	AB	1246	DC	Sidechain
2	AB	1249	DA	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	125	DG	Sidechain
2	AB	1250	DA	Sidechain
2	AB	1251	DC	Sidechain
2	AB	1258	DT	Sidechain
2	AB	1264	DG	Sidechain
2	AB	1272	DA	Sidechain
2	AB	1276	DA	Sidechain
2	AB	1280	DA	Sidechain
2	AB	1281	DC	Sidechain
2	AB	1282	DC	Sidechain
2	AB	129	DT	Sidechain
2	AB	1293	DG	Sidechain
2	AB	1295	DT	Sidechain
2	AB	130	DT	Sidechain
2	AB	1300	DA	Sidechain
2	AB	1302	DC	Sidechain
2	AB	1312	DT	Sidechain
2	AB	1314	DA	Sidechain
2	AB	1315	DA	Sidechain
2	AB	1316	DG	Sidechain
2	AB	1317	DG	Sidechain
2	AB	1319	DT	Sidechain
2	AB	1326	DG	Sidechain
2	AB	1327	DG	Sidechain
2	AB	1329	DG	Sidechain
2	AB	1330	DC	Sidechain
2	AB	1332	DT	Sidechain
2	AB	1335	DT	Sidechain
2	AB	1341	DG	Sidechain
2	AB	1343	DG	Sidechain
2	AB	1344	DA	Sidechain
2	AB	1345	DT	Sidechain
2	AB	135	DG	Sidechain
2	AB	1355	DG	Sidechain
2	AB	1356	DA	Sidechain
2	AB	136	DT	Sidechain
2	AB	1361	DA	Sidechain
2	AB	1362	DT	Sidechain
2	AB	1369	DT	Sidechain
2	AB	137	DC	Sidechain
2	AB	1371	DG	Sidechain
2	AB	1374	DA	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1375	DT	Sidechain
2	AB	138	DT	Sidechain
2	AB	1387	DT	Sidechain
2	AB	1389	DC	Sidechain
2	AB	1393	DT	Sidechain
2	AB	1406	DC	Sidechain
2	AB	1409	DT	Sidechain
2	AB	1413	DA	Sidechain
2	AB	1422	DA	Sidechain
2	AB	1425	DT	Sidechain
2	AB	1433	DA	Sidechain
2	AB	1437	DT	Sidechain
2	AB	1439	DC	Sidechain
2	AB	144	DG	Sidechain
2	AB	1445	DA	Sidechain
2	AB	1449	DA	Sidechain
2	AB	1454	DA	Sidechain
2	AB	1458	DA	Sidechain
2	AB	1460	DT	Sidechain
2	AB	1462	DA	Sidechain
2	AB	1463	DC	Sidechain
2	AB	1475	DC	Sidechain
2	AB	1476	DG	Sidechain
2	AB	148	DC	Sidechain
2	AB	1482	DA	Sidechain
2	AB	1483	DC	Sidechain
2	AB	1489	DA	Sidechain
2	AB	1506	DG	Sidechain
2	AB	1509	DG	Sidechain
2	AB	1511	DC	Sidechain
2	AB	1520	DG	Sidechain
2	AB	1523	DT	Sidechain
2	AB	1526	DT	Sidechain
2	AB	1530	DG	Sidechain
2	AB	1539	DG	Sidechain
2	AB	1541	DT	Sidechain
2	AB	1544	DT	Sidechain
2	AB	1548	DG	Sidechain
2	AB	1554	DG	Sidechain
2	AB	1559	DT	Sidechain
2	AB	1566	DT	Sidechain
2	AB	1570	DG	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1572	DA	Sidechain
2	AB	158	DT	Sidechain
2	AB	1582	DC	Sidechain
2	AB	1583	DT	Sidechain
2	AB	159	DT	Sidechain
2	AB	1590	DC	Sidechain
2	AB	1595	DT	Sidechain
2	AB	1597	DT	Sidechain
2	AB	1601	DT	Sidechain
2	AB	161	DT	Sidechain
2	AB	1610	DG	Sidechain
2	AB	1611	DG	Sidechain
2	AB	1615	DG	Sidechain
2	AB	1616	DT	Sidechain
2	AB	1627	DG	Sidechain
2	AB	1632	DG	Sidechain
2	AB	1633	DG	Sidechain
2	AB	164	DA	Sidechain
2	AB	1643	DT	Sidechain
2	AB	1656	DG	Sidechain
2	AB	1669	DA	Sidechain
2	AB	1676	DT	Sidechain
2	AB	1678	DA	Sidechain
2	AB	168	DA	Sidechain
2	AB	1686	DG	Sidechain
2	AB	1687	DA	Sidechain
2	AB	1691	DA	Sidechain
2	AB	1692	DC	Sidechain
2	AB	1702	DG	Sidechain
2	AB	1706	DT	Sidechain
2	AB	1707	DA	Sidechain
2	AB	1710	DT	Sidechain
2	AB	1717	DA	Sidechain
2	AB	1726	DA	Sidechain
2	AB	1728	DG	Sidechain
2	AB	1729	DG	Sidechain
2	AB	1733	DT	Sidechain
2	AB	1734	DT	Sidechain
2	AB	1740	DC	Sidechain
2	AB	1744	DG	Sidechain
2	AB	175	DT	Sidechain
2	AB	1756	DA	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1761	DG	Sidechain
2	AB	1766	DT	Sidechain
2	AB	1770	DA	Sidechain
2	AB	1779	DC	Sidechain
2	AB	1783	DA	Sidechain
2	AB	1785	DG	Sidechain
2	AB	1793	DG	Sidechain
2	AB	1795	DC	Sidechain
2	AB	1798	DT	Sidechain
2	AB	180	DT	Sidechain
2	AB	1802	DT	Sidechain
2	AB	1804	DC	Sidechain
2	AB	1807	DT	Sidechain
2	AB	183	DT	Sidechain
2	AB	1830	DC	Sidechain
2	AB	1839	DC	Sidechain
2	AB	1844	DG	Sidechain
2	AB	1845	DG	Sidechain
2	AB	1850	DA	Sidechain
2	AB	1851	DA	Sidechain
2	AB	1855	DT	Sidechain
2	AB	1859	DT	Sidechain
2	AB	186	DC	Sidechain
2	AB	1863	DG	Sidechain
2	AB	1864	DG	Sidechain
2	AB	1869	DG	Sidechain
2	AB	1874	DT	Sidechain
2	AB	1879	DG	Sidechain
2	AB	1884	DG	Sidechain
2	AB	1885	DA	Sidechain
2	AB	1886	DC	Sidechain
2	AB	1888	DC	Sidechain
2	AB	1890	DG	Sidechain
2	AB	1895	DA	Sidechain
2	AB	1897	DC	Sidechain
2	AB	1898	DT	Sidechain
2	AB	19	DG	Sidechain
2	AB	190	DA	Sidechain
2	AB	1905	DC	Sidechain
2	AB	1906	DA	Sidechain
2	AB	1907	DG	Sidechain
2	AB	1908	DT	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1917	DG	Sidechain
2	AB	192	DT	Sidechain
2	AB	1923	DT	Sidechain
2	AB	1939	DA	Sidechain
2	AB	1944	DT	Sidechain
2	AB	1945	DA	Sidechain
2	AB	1948	DG	Sidechain
2	AB	1949	DG	Sidechain
2	AB	195	DT	Sidechain
2	AB	1954	DG	Sidechain
2	AB	1955	DT	Sidechain
2	AB	1956	DA	Sidechain
2	AB	1958	DA	Sidechain
2	AB	1959	DT	Sidechain
2	AB	1966	DA	Sidechain
2	AB	1983	DG	Sidechain
2	AB	1986	DT	Sidechain
2	AB	1987	DT	Sidechain
2	AB	199	DG	Sidechain
2	AB	1992	DG	Sidechain
2	AB	1993	DA	Sidechain
2	AB	1994	DG	Sidechain
2	AB	1996	DA	Sidechain
2	AB	1997	DT	Sidechain
2	AB	1999	DT	Sidechain
2	AB	2000	DA	Sidechain
2	AB	2001	DT	Sidechain
2	AB	2012	DA	Sidechain
2	AB	2021	DC	Sidechain
2	AB	2027	DG	Sidechain
2	AB	2029	DC	Sidechain
2	AB	2031	DG	Sidechain
2	AB	2043	DC	Sidechain
2	AB	2045	DT	Sidechain
2	AB	2050	DT	Sidechain
2	AB	2051	DC	Sidechain
2	AB	2053	DA	Sidechain
2	AB	2054	DT	Sidechain
2	AB	2058	DG	Sidechain
2	AB	2061	DG	Sidechain
2	AB	2064	DG	Sidechain
2	AB	2065	DG	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2072	DT	Sidechain
2	AB	2073	DG	Sidechain
2	AB	2074	DG	Sidechain
2	AB	2075	DT	Sidechain
2	AB	2078	DT	Sidechain
2	AB	2081	DT	Sidechain
2	AB	2089	DG	Sidechain
2	AB	2099	DT	Sidechain
2	AB	2102	DT	Sidechain
2	AB	2105	DC	Sidechain
2	AB	211	DA	Sidechain
2	AB	2112	DG	Sidechain
2	AB	2113	DG	Sidechain
2	AB	2119	DG	Sidechain
2	AB	212	DT	Sidechain
2	AB	2120	DT	Sidechain
2	AB	2126	DG	Sidechain
2	AB	2128	DG	Sidechain
2	AB	2134	DG	Sidechain
2	AB	2138	DT	Sidechain
2	AB	2139	DG	Sidechain
2	AB	2140	DA	Sidechain
2	AB	2141	DG	Sidechain
2	AB	2150	DT	Sidechain
2	AB	2153	DC	Sidechain
2	AB	2155	DG	Sidechain
2	AB	2157	DG	Sidechain
2	AB	216	DT	Sidechain
2	AB	2161	DG	Sidechain
2	AB	2172	DG	Sidechain
2	AB	2174	DT	Sidechain
2	AB	218	DA	Sidechain
2	AB	2183	DT	Sidechain
2	AB	2186	DT	Sidechain
2	AB	2193	DA	Sidechain
2	AB	2194	DT	Sidechain
2	AB	2198	DA	Sidechain
2	AB	2204	DT	Sidechain
2	AB	2212	DG	Sidechain
2	AB	2214	DG	Sidechain
2	AB	2219	DG	Sidechain
2	AB	2230	DC	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2231	DC	Sidechain
2	AB	2233	DA	Sidechain
2	AB	2237	DA	Sidechain
2	AB	2242	DC	Sidechain
2	AB	2248	DA	Sidechain
2	AB	2250	DT	Sidechain
2	AB	2252	DT	Sidechain
2	AB	2253	DG	Sidechain
2	AB	2256	DG	Sidechain
2	AB	2257	DC	Sidechain
2	AB	2260	DA	Sidechain
2	AB	2262	DG	Sidechain
2	AB	2280	DG	Sidechain
2	AB	2285	DT	Sidechain
2	AB	229	DT	Sidechain
2	AB	2293	DG	Sidechain
2	AB	2295	DG	Sidechain
2	AB	2297	DT	Sidechain
2	AB	230	DT	Sidechain
2	AB	2306	DT	Sidechain
2	AB	2307	DG	Sidechain
2	AB	2308	DG	Sidechain
2	AB	231	DC	Sidechain
2	AB	2321	DC	Sidechain
2	AB	2329	DG	Sidechain
2	AB	2331	DC	Sidechain
2	AB	2339	DT	Sidechain
2	AB	2340	DG	Sidechain
2	AB	2349	DG	Sidechain
2	AB	2355	DG	Sidechain
2	AB	2357	DT	Sidechain
2	AB	2358	DG	Sidechain
2	AB	2359	DA	Sidechain
2	AB	236	DT	Sidechain
2	AB	2378	DC	Sidechain
2	AB	2382	DA	Sidechain
2	AB	2395	DG	Sidechain
2	AB	2396	DT	Sidechain
2	AB	240	DT	Sidechain
2	AB	2412	DC	Sidechain
2	AB	2413	DC	Sidechain
2	AB	2414	DT	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2419	DT	Sidechain
2	AB	2421	DA	Sidechain
2	AB	2427	DT	Sidechain
2	AB	243	DA	Sidechain
2	AB	2431	DG	Sidechain
2	AB	2434	DA	Sidechain
2	AB	2435	DA	Sidechain
2	AB	2444	DT	Sidechain
2	AB	2449	DT	Sidechain
2	AB	2451	DC	Sidechain
2	AB	2453	DT	Sidechain
2	AB	2455	DA	Sidechain
2	AB	246	DG	Sidechain
2	AB	2464	DA	Sidechain
2	AB	2468	DT	Sidechain
2	AB	2472	DC	Sidechain
2	AB	2474	DT	Sidechain
2	AB	2481	DT	Sidechain
2	AB	2487	DG	Sidechain
2	AB	2490	DG	Sidechain
2	AB	2495	DA	Sidechain
2	AB	2499	DT	Sidechain
2	AB	2501	DT	Sidechain
2	AB	2509	DC	Sidechain
2	AB	2515	DA	Sidechain
2	AB	2516	DT	Sidechain
2	AB	2518	DG	Sidechain
2	AB	2519	DT	Sidechain
2	AB	2530	DA	Sidechain
2	AB	2544	DG	Sidechain
2	AB	2545	DT	Sidechain
2	AB	2553	DT	Sidechain
2	AB	2555	DT	Sidechain
2	AB	2556	DC	Sidechain
2	AB	256	DT	Sidechain
2	AB	2560	DT	Sidechain
2	AB	2561	DA	Sidechain
2	AB	2567	DT	Sidechain
2	AB	2568	DG	Sidechain
2	AB	2569	DC	Sidechain
2	AB	257	DT	Sidechain
2	AB	2576	DT	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2580	DT	Sidechain
2	AB	2591	DT	Sidechain
2	AB	2592	DA	Sidechain
2	AB	2594	DG	Sidechain
2	AB	2600	DT	Sidechain
2	AB	2601	DA	Sidechain
2	AB	2602	DA	Sidechain
2	AB	2608	DT	Sidechain
2	AB	2615	DT	Sidechain
2	AB	2617	DA	Sidechain
2	AB	2619	DG	Sidechain
2	AB	2621	DG	Sidechain
2	AB	2622	DT	Sidechain
2	AB	2627	DA	Sidechain
2	AB	2630	DA	Sidechain
2	AB	2636	DG	Sidechain
2	AB	2639	DC	Sidechain
2	AB	264	DG	Sidechain
2	AB	2643	DT	Sidechain
2	AB	2645	DG	Sidechain
2	AB	2649	DT	Sidechain
2	AB	2660	DT	Sidechain
2	AB	2662	DG	Sidechain
2	AB	2666	DT	Sidechain
2	AB	2674	DT	Sidechain
2	AB	2688	DC	Sidechain
2	AB	2689	DT	Sidechain
2	AB	2691	DT	Sidechain
2	AB	2692	DG	Sidechain
2	AB	2693	DT	Sidechain
2	AB	2699	DT	Sidechain
2	AB	2701	DT	Sidechain
2	AB	2707	DT	Sidechain
2	AB	2710	DT	Sidechain
2	AB	2712	DT	Sidechain
2	AB	2714	DC	Sidechain
2	AB	2715	DT	Sidechain
2	AB	2717	DA	Sidechain
2	AB	2718	DA	Sidechain
2	AB	2746	DT	Sidechain
2	AB	2748	DT	Sidechain
2	AB	2758	DT	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2766	DT	Sidechain
2	AB	2767	DT	Sidechain
2	AB	2769	DT	Sidechain
2	AB	2770	DT	Sidechain
2	AB	2771	DA	Sidechain
2	AB	2774	DG	Sidechain
2	AB	2776	DG	Sidechain
2	AB	278	DT	Sidechain
2	AB	2783	DT	Sidechain
2	AB	2790	DT	Sidechain
2	AB	2791	DT	Sidechain
2	AB	2800	DT	Sidechain
2	AB	2802	DT	Sidechain
2	AB	2804	DT	Sidechain
2	AB	2805	DC	Sidechain
2	AB	2813	DA	Sidechain
2	AB	2814	DG	Sidechain
2	AB	2816	DG	Sidechain
2	AB	2817	DC	Sidechain
2	AB	2818	DT	Sidechain
2	AB	2819	DC	Sidechain
2	AB	2820	DA	Sidechain
2	AB	2821	DA	Sidechain
2	AB	2822	DT	Sidechain
2	AB	2823	DT	Sidechain
2	AB	2824	DA	Sidechain
2	AB	2826	DC	Sidechain
2	AB	2830	DT	Sidechain
2	AB	2831	DG	Sidechain
2	AB	2832	DA	Sidechain
2	AB	2834	DT	Sidechain
2	AB	2836	DT	Sidechain
2	AB	2843	DG	Sidechain
2	AB	2844	DG	Sidechain
2	AB	2845	DT	Sidechain
2	AB	2856	DT	Sidechain
2	AB	2863	DG	Sidechain
2	AB	2871	DC	Sidechain
2	AB	2872	DG	Sidechain
2	AB	2873	DC	Sidechain
2	AB	2879	DT	Sidechain
2	AB	2881	DT	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2882	DT	Sidechain
2	AB	2883	DT	Sidechain
2	AB	2885	DT	Sidechain
2	AB	2892	DT	Sidechain
2	AB	2899	DT	Sidechain
2	AB	29	DC	Sidechain
2	AB	290	DC	Sidechain
2	AB	2901	DT	Sidechain
2	AB	2902	DA	Sidechain
2	AB	2905	DG	Sidechain
2	AB	2906	DG	Sidechain
2	AB	291	DC	Sidechain
2	AB	292	DG	Sidechain
2	AB	2920	DT	Sidechain
2	AB	2924	DG	Sidechain
2	AB	2925	DA	Sidechain
2	AB	293	DC	Sidechain
2	AB	2932	DA	Sidechain
2	AB	2939	DA	Sidechain
2	AB	2943	DT	Sidechain
2	AB	2944	DT	Sidechain
2	AB	2949	DA	Sidechain
2	AB	2953	DG	Sidechain
2	AB	2954	DG	Sidechain
2	AB	2959	DG	Sidechain
2	AB	2961	DA	Sidechain
2	AB	2965	DA	Sidechain
2	AB	2968	DA	Sidechain
2	AB	297	DA	Sidechain
2	AB	2970	DA	Sidechain
2	AB	2972	DG	Sidechain
2	AB	2974	DC	Sidechain
2	AB	2975	DT	Sidechain
2	AB	2976	DG	Sidechain
2	AB	2982	DT	Sidechain
2	AB	2985	DG	Sidechain
2	AB	2987	DA	Sidechain
2	AB	2989	DC	Sidechain
2	AB	299	DT	Sidechain
2	AB	2991	DG	Sidechain
2	AB	2995	DA	Sidechain
2	AB	2998	DT	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2999	DA	Sidechain
2	AB	3	DA	Sidechain
2	AB	300	DG	Sidechain
2	AB	3004	DC	Sidechain
2	AB	3006	DG	Sidechain
2	AB	3008	DA	Sidechain
2	AB	3012	DA	Sidechain
2	AB	3013	DC	Sidechain
2	AB	3016	DT	Sidechain
2	AB	3024	DG	Sidechain
2	AB	3025	DT	Sidechain
2	AB	3027	DG	Sidechain
2	AB	3037	DA	Sidechain
2	AB	3038	DG	Sidechain
2	AB	3039	DG	Sidechain
2	AB	3041	DT	Sidechain
2	AB	3047	DT	Sidechain
2	AB	3053	DT	Sidechain
2	AB	3054	DG	Sidechain
2	AB	3055	DG	Sidechain
2	AB	3065	DA	Sidechain
2	AB	307	DA	Sidechain
2	AB	3070	DC	Sidechain
2	AB	3074	DT	Sidechain
2	AB	3079	DA	Sidechain
2	AB	3091	DA	Sidechain
2	AB	3096	DC	Sidechain
2	AB	3109	DG	Sidechain
2	AB	3110	DG	Sidechain
2	AB	3111	DA	Sidechain
2	AB	3112	DG	Sidechain
2	AB	3113	DG	Sidechain
2	AB	3119	DT	Sidechain
2	AB	3121	DA	Sidechain
2	AB	3123	DA	Sidechain
2	AB	3128	DT	Sidechain
2	AB	313	DT	Sidechain
2	AB	3147	DG	Sidechain
2	AB	3148	DA	Sidechain
2	AB	3152	DG	Sidechain
2	AB	3153	DC	Sidechain
2	AB	3158	DT	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	316	DA	Sidechain
2	AB	3163	DC	Sidechain
2	AB	3167	DT	Sidechain
2	AB	3169	DT	Sidechain
2	AB	3170	DG	Sidechain
2	AB	3173	DT	Sidechain
2	AB	3174	DG	Sidechain
2	AB	3176	DT	Sidechain
2	AB	3177	DA	Sidechain
2	AB	3184	DG	Sidechain
2	AB	319	DC	Sidechain
2	AB	3191	DT	Sidechain
2	AB	3213	DA	Sidechain
2	AB	3215	DC	Sidechain
2	AB	3217	DG	Sidechain
2	AB	3221	DG	Sidechain
2	AB	3223	DT	Sidechain
2	AB	323	DT	Sidechain
2	AB	3230	DC	Sidechain
2	AB	3233	DT	Sidechain
2	AB	3235	DA	Sidechain
2	AB	3239	DC	Sidechain
2	AB	3242	DT	Sidechain
2	AB	3249	DT	Sidechain
2	AB	3251	DT	Sidechain
2	AB	3255	DA	Sidechain
2	AB	3259	DG	Sidechain
2	AB	3267	DA	Sidechain
2	AB	3268	DA	Sidechain
2	AB	3272	DT	Sidechain
2	AB	3274	DA	Sidechain
2	AB	3284	DG	Sidechain
2	AB	3286	DC	Sidechain
2	AB	3288	DA	Sidechain
2	AB	3292	DT	Sidechain
2	AB	3298	DG	Sidechain
2	AB	3300	DT	Sidechain
2	AB	3301	DT	Sidechain
2	AB	3303	DC	Sidechain
2	AB	3311	DT	Sidechain
2	AB	3313	DG	Sidechain
2	AB	3316	DA	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	3318	DT	Sidechain
2	AB	3323	DA	Sidechain
2	AB	3324	DT	Sidechain
2	AB	3329	DT	Sidechain
2	AB	3331	DT	Sidechain
2	AB	3334	DT	Sidechain
2	AB	334	DC	Sidechain
2	AB	3340	DT	Sidechain
2	AB	3354	DT	Sidechain
2	AB	3359	DT	Sidechain
2	AB	3360	DG	Sidechain
2	AB	3365	DT	Sidechain
2	AB	3374	DG	Sidechain
2	AB	3377	DT	Sidechain
2	AB	3386	DA	Sidechain
2	AB	339	DT	Sidechain
2	AB	3391	DA	Sidechain
2	AB	3392	DA	Sidechain
2	AB	3393	DC	Sidechain
2	AB	3394	DA	Sidechain
2	AB	3407	DT	Sidechain
2	AB	341	DG	Sidechain
2	AB	3412	DG	Sidechain
2	AB	3415	DT	Sidechain
2	AB	3419	DC	Sidechain
2	AB	3425	DT	Sidechain
2	AB	3431	DA	Sidechain
2	AB	3436	DT	Sidechain
2	AB	3444	DA	Sidechain
2	AB	3450	DT	Sidechain
2	AB	3456	DC	Sidechain
2	AB	3458	DT	Sidechain
2	AB	3465	DG	Sidechain
2	AB	3474	DA	Sidechain
2	AB	3476	DG	Sidechain
2	AB	3478	DC	Sidechain
2	AB	3480	DC	Sidechain
2	AB	3489	DT	Sidechain
2	AB	3492	DC	Sidechain
2	AB	3499	DG	Sidechain
2	AB	3500	DC	Sidechain
2	AB	3501	DG	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	3513	DG	Sidechain
2	AB	3514	DG	Sidechain
2	AB	3515	DC	Sidechain
2	AB	3517	DA	Sidechain
2	AB	3519	DT	Sidechain
2	AB	352	DT	Sidechain
2	AB	3521	DT	Sidechain
2	AB	3524	DA	Sidechain
2	AB	3526	DT	Sidechain
2	AB	3530	DC	Sidechain
2	AB	3532	DC	Sidechain
2	AB	3533	DT	Sidechain
2	AB	3536	DT	Sidechain
2	AB	354	DT	Sidechain
2	AB	3540	DG	Sidechain
2	AB	3544	DG	Sidechain
2	AB	3548	DG	Sidechain
2	AB	3549	DC	Sidechain
2	AB	3551	DT	Sidechain
2	AB	3552	DT	Sidechain
2	AB	3554	DT	Sidechain
2	AB	3555	DA	Sidechain
2	AB	3557	DT	Sidechain
2	AB	3564	DA	Sidechain
2	AB	3567	DT	Sidechain
2	AB	3572	DT	Sidechain
2	AB	3583	DA	Sidechain
2	AB	3586	DC	Sidechain
2	AB	3594	DG	Sidechain
2	AB	3595	DC	Sidechain
2	AB	3596	DT	Sidechain
2	AB	3598	DT	Sidechain
2	AB	3599	DT	Sidechain
2	AB	3600	DT	Sidechain
2	AB	3601	DC	Sidechain
2	AB	3608	DT	Sidechain
2	AB	361	DG	Sidechain
2	AB	3619	DG	Sidechain
2	AB	3624	DT	Sidechain
2	AB	3626	DT	Sidechain
2	AB	3627	DT	Sidechain
2	AB	3634	DT	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	3635	DA	Sidechain
2	AB	3636	DA	Sidechain
2	AB	3637	DC	Sidechain
2	AB	3646	DT	Sidechain
2	AB	3652	DA	Sidechain
2	AB	3654	DG	Sidechain
2	AB	3660	DT	Sidechain
2	AB	3661	DA	Sidechain
2	AB	3663	DT	Sidechain
2	AB	3668	DA	Sidechain
2	AB	3674	DA	Sidechain
2	AB	3676	DA	Sidechain
2	AB	3678	DT	Sidechain
2	AB	3686	DG	Sidechain
2	AB	3687	DA	Sidechain
2	AB	3689	DG	Sidechain
2	AB	3690	DA	Sidechain
2	AB	3693	DA	Sidechain
2	AB	3695	DA	Sidechain
2	AB	3696	DT	Sidechain
2	AB	3697	DT	Sidechain
2	AB	370	DT	Sidechain
2	AB	3701	DT	Sidechain
2	AB	3708	DT	Sidechain
2	AB	3709	DA	Sidechain
2	AB	3723	DT	Sidechain
2	AB	374	DT	Sidechain
2	AB	3740	DT	Sidechain
2	AB	3746	DT	Sidechain
2	AB	3751	DT	Sidechain
2	AB	3753	DG	Sidechain
2	AB	3756	DT	Sidechain
2	AB	3758	DA	Sidechain
2	AB	3760	DC	Sidechain
2	AB	3764	DT	Sidechain
2	AB	3774	DT	Sidechain
2	AB	3785	DA	Sidechain
2	AB	3788	DT	Sidechain
2	AB	3795	DG	Sidechain
2	AB	3802	DA	Sidechain
2	AB	3808	DT	Sidechain
2	AB	3809	DA	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	3818	DG	Sidechain
2	AB	382	DT	Sidechain
2	AB	3820	DC	Sidechain
2	AB	3821	DC	Sidechain
2	AB	3822	DT	Sidechain
2	AB	3824	DT	Sidechain
2	AB	3831	DG	Sidechain
2	AB	3838	DT	Sidechain
2	AB	3839	DC	Sidechain
2	AB	3843	DA	Sidechain
2	AB	3849	DT	Sidechain
2	AB	3851	DT	Sidechain
2	AB	3852	DT	Sidechain
2	AB	3856	DA	Sidechain
2	AB	3857	DG	Sidechain
2	AB	3858	DC	Sidechain
2	AB	3861	DC	Sidechain
2	AB	3866	DT	Sidechain
2	AB	3867	DC	Sidechain
2	AB	387	DT	Sidechain
2	AB	3872	DC	Sidechain
2	AB	3874	DA	Sidechain
2	AB	3875	DT	Sidechain
2	AB	3880	DA	Sidechain
2	AB	3883	DT	Sidechain
2	AB	3888	DA	Sidechain
2	AB	3890	DG	Sidechain
2	AB	3896	DT	Sidechain
2	AB	39	DA	Sidechain
2	AB	3901	DG	Sidechain
2	AB	3904	DA	Sidechain
2	AB	3908	DA	Sidechain
2	AB	3913	DA	Sidechain
2	AB	3929	DG	Sidechain
2	AB	3930	DA	Sidechain
2	AB	3932	DG	Sidechain
2	AB	3934	DA	Sidechain
2	AB	3935	DA	Sidechain
2	AB	3942	DT	Sidechain
2	AB	3946	DT	Sidechain
2	AB	3947	DC	Sidechain
2	AB	3950	DA	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	3951	DT	Sidechain
2	AB	3957	DG	Sidechain
2	AB	3965	DT	Sidechain
2	AB	3968	DT	Sidechain
2	AB	3970	DT	Sidechain
2	AB	3971	DT	Sidechain
2	AB	3995	DT	Sidechain
2	AB	4000	DT	Sidechain
2	AB	401	DA	Sidechain
2	AB	4010	DT	Sidechain
2	AB	4021	DG	Sidechain
2	AB	4023	DT	Sidechain
2	AB	4031	DT	Sidechain
2	AB	4032	DG	Sidechain
2	AB	4042	DT	Sidechain
2	AB	4043	DC	Sidechain
2	AB	4047	DT	Sidechain
2	AB	4048	DT	Sidechain
2	AB	405	DT	Sidechain
2	AB	4054	DG	Sidechain
2	AB	4055	DC	Sidechain
2	AB	4056	DT	Sidechain
2	AB	406	DT	Sidechain
2	AB	4063	DA	Sidechain
2	AB	4066	DG	Sidechain
2	AB	4067	DA	Sidechain
2	AB	4072	DA	Sidechain
2	AB	4079	DC	Sidechain
2	AB	408	DT	Sidechain
2	AB	4083	DT	Sidechain
2	AB	4092	DT	Sidechain
2	AB	4098	DA	Sidechain
2	AB	4100	DC	Sidechain
2	AB	4105	DT	Sidechain
2	AB	4119	DA	Sidechain
2	AB	4129	DG	Sidechain
2	AB	4130	DT	Sidechain
2	AB	4133	DT	Sidechain
2	AB	4134	DT	Sidechain
2	AB	4136	DT	Sidechain
2	AB	4140	DT	Sidechain
2	AB	4142	DC	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	4144	DG	Sidechain
2	AB	4145	DA	Sidechain
2	AB	4164	DT	Sidechain
2	AB	4166	DT	Sidechain
2	AB	4167	DA	Sidechain
2	AB	4170	DT	Sidechain
2	AB	4171	DT	Sidechain
2	AB	4177	DG	Sidechain
2	AB	4180	DG	Sidechain
2	AB	4184	DA	Sidechain
2	AB	4186	DC	Sidechain
2	AB	4188	DT	Sidechain
2	AB	419	DC	Sidechain
2	AB	4198	DC	Sidechain
2	AB	4201	DA	Sidechain
2	AB	4202	DA	Sidechain
2	AB	4203	DT	Sidechain
2	AB	421	DC	Sidechain
2	AB	4212	DT	Sidechain
2	AB	4218	DT	Sidechain
2	AB	4226	DC	Sidechain
2	AB	4233	DT	Sidechain
2	AB	4237	DG	Sidechain
2	AB	4238	DA	Sidechain
2	AB	4239	DT	Sidechain
2	AB	4242	DG	Sidechain
2	AB	4243	DG	Sidechain
2	AB	4247	DG	Sidechain
2	AB	4265	DT	Sidechain
2	AB	4268	DA	Sidechain
2	AB	4273	DT	Sidechain
2	AB	4274	DA	Sidechain
2	AB	4277	DA	Sidechain
2	AB	4278	DT	Sidechain
2	AB	4279	DC	Sidechain
2	AB	428	DT	Sidechain
2	AB	4284	DC	Sidechain
2	AB	4285	DA	Sidechain
2	AB	4296	DT	Sidechain
2	AB	4317	DT	Sidechain
2	AB	4323	DT	Sidechain
2	AB	4324	DC	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	4327	DG	Sidechain
2	AB	4329	DA	Sidechain
2	AB	4334	DA	Sidechain
2	AB	434	DG	Sidechain
2	AB	4347	DT	Sidechain
2	AB	4351	DT	Sidechain
2	AB	4352	DC	Sidechain
2	AB	4357	DG	Sidechain
2	AB	436	DA	Sidechain
2	AB	4360	DT	Sidechain
2	AB	4367	DT	Sidechain
2	AB	4370	DC	Sidechain
2	AB	4385	DT	Sidechain
2	AB	4387	DA	Sidechain
2	AB	4388	DC	Sidechain
2	AB	4389	DT	Sidechain
2	AB	4394	DC	Sidechain
2	AB	4398	DT	Sidechain
2	AB	4402	DA	Sidechain
2	AB	4404	DT	Sidechain
2	AB	4413	DT	Sidechain
2	AB	4415	DG	Sidechain
2	AB	4416	DG	Sidechain
2	AB	4424	DA	Sidechain
2	AB	4425	DT	Sidechain
2	AB	4426	DT	Sidechain
2	AB	443	DT	Sidechain
2	AB	4441	DG	Sidechain
2	AB	4442	DA	Sidechain
2	AB	4449	DT	Sidechain
2	AB	4451	DT	Sidechain
2	AB	4456	DT	Sidechain
2	AB	4458	DT	Sidechain
2	AB	448	DC	Sidechain
2	AB	4483	DT	Sidechain
2	AB	4484	DT	Sidechain
2	AB	4490	DT	Sidechain
2	AB	4491	DT	Sidechain
2	AB	4493	DA	Sidechain
2	AB	4495	DG	Sidechain
2	AB	4498	DT	Sidechain
2	AB	450	DT	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	4507	DT	Sidechain
2	AB	452	DA	Sidechain
2	AB	4520	DC	Sidechain
2	AB	4529	DA	Sidechain
2	AB	4531	DA	Sidechain
2	AB	4538	DA	Sidechain
2	AB	4542	DC	Sidechain
2	AB	4544	DT	Sidechain
2	AB	4546	DC	Sidechain
2	AB	4547	DC	Sidechain
2	AB	4548	DT	Sidechain
2	AB	455	DT	Sidechain
2	AB	4551	DA	Sidechain
2	AB	4553	DT	Sidechain
2	AB	4554	DC	Sidechain
2	AB	4569	DT	Sidechain
2	AB	4571	DT	Sidechain
2	AB	4573	DC	Sidechain
2	AB	4577	DC	Sidechain
2	AB	4583	DA	Sidechain
2	AB	4584	DG	Sidechain
2	AB	4592	DT	Sidechain
2	AB	4593	DT	Sidechain
2	AB	4596	DG	Sidechain
2	AB	4597	DG	Sidechain
2	AB	460	DG	Sidechain
2	AB	4600	DT	Sidechain
2	AB	4603	DA	Sidechain
2	AB	4604	DT	Sidechain
2	AB	4607	DT	Sidechain
2	AB	461	DC	Sidechain
2	AB	4613	DT	Sidechain
2	AB	4614	DT	Sidechain
2	AB	4620	DA	Sidechain
2	AB	4625	DA	Sidechain
2	AB	4631	DT	Sidechain
2	AB	4633	DG	Sidechain
2	AB	4634	DA	Sidechain
2	AB	4635	DT	Sidechain
2	AB	4637	DT	Sidechain
2	AB	4643	DT	Sidechain
2	AB	4646	DC	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	4647	DT	Sidechain
2	AB	4651	DG	Sidechain
2	AB	4652	DG	Sidechain
2	AB	4653	DC	Sidechain
2	AB	4654	DT	Sidechain
2	AB	4659	DG	Sidechain
2	AB	4664	DG	Sidechain
2	AB	467	DT	Sidechain
2	AB	4678	DG	Sidechain
2	AB	4680	DT	Sidechain
2	AB	4681	DG	Sidechain
2	AB	469	DG	Sidechain
2	AB	4696	DC	Sidechain
2	AB	4699	DA	Sidechain
2	AB	470	DA	Sidechain
2	AB	4702	DT	Sidechain
2	AB	4706	DT	Sidechain
2	AB	4708	DT	Sidechain
2	AB	4709	DT	Sidechain
2	AB	4716	DT	Sidechain
2	AB	4718	DC	Sidechain
2	AB	472	DT	Sidechain
2	AB	4725	DT	Sidechain
2	AB	4727	DC	Sidechain
2	AB	4732	DG	Sidechain
2	AB	4737	DT	Sidechain
2	AB	4741	DA	Sidechain
2	AB	4744	DG	Sidechain
2	AB	4752	DT	Sidechain
2	AB	4756	DG	Sidechain
2	AB	4757	DG	Sidechain
2	AB	4787	DG	Sidechain
2	AB	4797	DA	Sidechain
2	AB	4798	DA	Sidechain
2	AB	4800	DA	Sidechain
2	AB	4802	DT	Sidechain
2	AB	4806	DT	Sidechain
2	AB	4814	DG	Sidechain
2	AB	4815	DT	Sidechain
2	AB	4819	DC	Sidechain
2	AB	4821	DT	Sidechain
2	AB	4825	DC	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	4826	DT	Sidechain
2	AB	4827	DT	Sidechain
2	AB	4845	DT	Sidechain
2	AB	4847	DT	Sidechain
2	AB	4851	DT	Sidechain
2	AB	4853	DT	Sidechain
2	AB	4855	DG	Sidechain
2	AB	4858	DC	Sidechain
2	AB	4859	DA	Sidechain
2	AB	4862	DA	Sidechain
2	AB	4864	DG	Sidechain
2	AB	4867	DC	Sidechain
2	AB	4868	DC	Sidechain
2	AB	4869	DT	Sidechain
2	AB	487	DT	Sidechain
2	AB	4872	DT	Sidechain
2	AB	4877	DC	Sidechain
2	AB	4879	DG	Sidechain
2	AB	4881	DT	Sidechain
2	AB	4888	DA	Sidechain
2	AB	4890	DT	Sidechain
2	AB	4896	DA	Sidechain
2	AB	4897	DT	Sidechain
2	AB	4900	DG	Sidechain
2	AB	4906	DG	Sidechain
2	AB	491	DA	Sidechain
2	AB	4914	DT	Sidechain
2	AB	4915	DC	Sidechain
2	AB	4919	DT	Sidechain
2	AB	4924	DA	Sidechain
2	AB	4928	DT	Sidechain
2	AB	4930	DG	Sidechain
2	AB	4931	DA	Sidechain
2	AB	4935	DT	Sidechain
2	AB	4946	DG	Sidechain
2	AB	4947	DT	Sidechain
2	AB	4949	DT	Sidechain
2	AB	4969	DG	Sidechain
2	AB	4973	DC	Sidechain
2	AB	4977	DG	Sidechain
2	AB	498	DG	Sidechain
2	AB	4984	DG	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	4985	DG	Sidechain
2	AB	4986	DT	Sidechain
2	AB	499	DA	Sidechain
2	AB	4997	DT	Sidechain
2	AB	4998	DG	Sidechain
2	AB	4999	DG	Sidechain
2	AB	5002	DA	Sidechain
2	AB	5006	DC	Sidechain
2	AB	501	DT	Sidechain
2	AB	5011	DA	Sidechain
2	AB	5021	DG	Sidechain
2	AB	5026	DA	Sidechain
2	AB	5031	DT	Sidechain
2	AB	5034	DT	Sidechain
2	AB	5035	DA	Sidechain
2	AB	5040	DG	Sidechain
2	AB	5048	DA	Sidechain
2	AB	505	DT	Sidechain
2	AB	5050	DG	Sidechain
2	AB	5051	DT	Sidechain
2	AB	5055	DT	Sidechain
2	AB	5068	DA	Sidechain
2	AB	5069	DG	Sidechain
2	AB	5073	DT	Sidechain
2	AB	5074	DG	Sidechain
2	AB	5080	DA	Sidechain
2	AB	5087	DA	Sidechain
2	AB	5088	DT	Sidechain
2	AB	5089	DT	Sidechain
2	AB	5091	DG	Sidechain
2	AB	5092	DC	Sidechain
2	AB	5094	DT	Sidechain
2	AB	5096	DA	Sidechain
2	AB	5099	DG	Sidechain
2	AB	5103	DG	Sidechain
2	AB	5105	DC	Sidechain
2	AB	5106	DT	Sidechain
2	AB	5108	DT	Sidechain
2	AB	511	DT	Sidechain
2	AB	5115	DC	Sidechain
2	AB	513	DT	Sidechain
2	AB	5130	DT	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	5133	DT	Sidechain
2	AB	5135	DA	Sidechain
2	AB	5142	DT	Sidechain
2	AB	5148	DG	Sidechain
2	AB	5152	DT	Sidechain
2	AB	5153	DC	Sidechain
2	AB	5154	DT	Sidechain
2	AB	5158	DG	Sidechain
2	AB	5160	DA	Sidechain
2	AB	5173	DA	Sidechain
2	AB	5177	DT	Sidechain
2	AB	5184	DA	Sidechain
2	AB	5187	DC	Sidechain
2	AB	5189	DG	Sidechain
2	AB	5192	DT	Sidechain
2	AB	5198	DT	Sidechain
2	AB	5201	DG	Sidechain
2	AB	5207	DG	Sidechain
2	AB	5208	DC	Sidechain
2	AB	521	DT	Sidechain
2	AB	5215	DT	Sidechain
2	AB	5217	DT	Sidechain
2	AB	5220	DC	Sidechain
2	AB	5221	DG	Sidechain
2	AB	5223	DG	Sidechain
2	AB	5226	DA	Sidechain
2	AB	5263	DC	Sidechain
2	AB	527	DC	Sidechain
2	AB	5272	DT	Sidechain
2	AB	5273	DA	Sidechain
2	AB	5274	DG	Sidechain
2	AB	5277	DG	Sidechain
2	AB	5282	DT	Sidechain
2	AB	5283	DT	Sidechain
2	AB	5286	DG	Sidechain
2	AB	5293	DG	Sidechain
2	AB	5294	DG	Sidechain
2	AB	5299	DG	Sidechain
2	AB	5302	DG	Sidechain
2	AB	5303	DG	Sidechain
2	AB	5305	DT	Sidechain
2	AB	5309	DC	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	5310	DG	Sidechain
2	AB	5315	DG	Sidechain
2	AB	5317	DG	Sidechain
2	AB	5319	DC	Sidechain
2	AB	5321	DG	Sidechain
2	AB	5322	DC	Sidechain
2	AB	5323	DT	Sidechain
2	AB	5324	DA	Sidechain
2	AB	5328	DT	Sidechain
2	AB	5329	DT	Sidechain
2	AB	5330	DG	Sidechain
2	AB	5333	DA	Sidechain
2	AB	5335	DC	Sidechain
2	AB	5344	DG	Sidechain
2	AB	5348	DG	Sidechain
2	AB	5354	DT	Sidechain
2	AB	5355	DT	Sidechain
2	AB	5356	DC	Sidechain
2	AB	5357	DG	Sidechain
2	AB	5361	DT	Sidechain
2	AB	5369	DT	Sidechain
2	AB	5370	DC	Sidechain
2	AB	5371	DC	Sidechain
2	AB	5372	DT	Sidechain
2	AB	5374	DT	Sidechain
2	AB	5377	DC	Sidechain
2	AB	5387	DG	Sidechain
2	AB	5390	DG	Sidechain
2	AB	5391	DG	Sidechain
2	AB	5392	DC	Sidechain
2	AB	5395	DT	Sidechain
2	AB	5397	DC	Sidechain
2	AB	5399	DC	Sidechain
2	AB	54	DG	Sidechain
2	AB	5404	DA	Sidechain
2	AB	5409	DT	Sidechain
2	AB	5411	DA	Sidechain
2	AB	5414	DC	Sidechain
2	AB	5415	DG	Sidechain
2	AB	5417	DG	Sidechain
2	AB	5419	DG	Sidechain
2	AB	5420	DC	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	5423	DC	Sidechain
2	AB	5427	DT	Sidechain
2	AB	543	DT	Sidechain
2	AB	5432	DT	Sidechain
2	AB	5438	DT	Sidechain
2	AB	5440	DT	Sidechain
2	AB	5443	DT	Sidechain
2	AB	5444	DG	Sidechain
2	AB	5446	DT	Sidechain
2	AB	545	DA	Sidechain
2	AB	5454	DA	Sidechain
2	AB	5455	DC	Sidechain
2	AB	5459	DG	Sidechain
2	AB	5469	DA	Sidechain
2	AB	5475	DA	Sidechain
2	AB	5488	DT	Sidechain
2	AB	5489	DT	Sidechain
2	AB	5495	DA	Sidechain
2	AB	5496	DG	Sidechain
2	AB	550	DG	Sidechain
2	AB	5508	DC	Sidechain
2	AB	5510	DT	Sidechain
2	AB	5513	DT	Sidechain
2	AB	5518	DG	Sidechain
2	AB	5519	DG	Sidechain
2	AB	5523	DT	Sidechain
2	AB	5525	DC	Sidechain
2	AB	5526	DG	Sidechain
2	AB	5527	DC	Sidechain
2	AB	5528	DC	Sidechain
2	AB	5530	DT	Sidechain
2	AB	5533	DG	Sidechain
2	AB	5534	DA	Sidechain
2	AB	554	DT	Sidechain
2	AB	5540	DG	Sidechain
2	AB	5542	DG	Sidechain
2	AB	5543	DT	Sidechain
2	AB	5545	DC	Sidechain
2	AB	5552	DT	Sidechain
2	AB	5559	DG	Sidechain
2	AB	5563	DA	Sidechain
2	AB	5564	DC	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	5566	DC	Sidechain
2	AB	5571	DT	Sidechain
2	AB	5576	DA	Sidechain
2	AB	5581	DA	Sidechain
2	AB	5584	DA	Sidechain
2	AB	5589	DT	Sidechain
2	AB	559	DT	Sidechain
2	AB	5596	DT	Sidechain
2	AB	5603	DG	Sidechain
2	AB	5608	DT	Sidechain
2	AB	5611	DT	Sidechain
2	AB	5615	DG	Sidechain
2	AB	5622	DA	Sidechain
2	AB	5623	DA	Sidechain
2	AB	5625	DG	Sidechain
2	AB	5626	DG	Sidechain
2	AB	5628	DT	Sidechain
2	AB	5632	DG	Sidechain
2	AB	5636	DA	Sidechain
2	AB	5637	DT	Sidechain
2	AB	5638	DT	Sidechain
2	AB	5643	DA	Sidechain
2	AB	5645	DC	Sidechain
2	AB	5649	DC	Sidechain
2	AB	565	DC	Sidechain
2	AB	5650	DA	Sidechain
2	AB	5652	DC	Sidechain
2	AB	5658	DG	Sidechain
2	AB	5660	DA	Sidechain
2	AB	5668	DC	Sidechain
2	AB	5669	DT	Sidechain
2	AB	567	DT	Sidechain
2	AB	5670	DG	Sidechain
2	AB	5684	DG	Sidechain
2	AB	5691	DC	Sidechain
2	AB	5693	DG	Sidechain
2	AB	5696	DT	Sidechain
2	AB	570	DT	Sidechain
2	AB	5704	DC	Sidechain
2	AB	5706	DC	Sidechain
2	AB	571	DG	Sidechain
2	AB	5731	DA	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	5733	DT	Sidechain
2	AB	575	DG	Sidechain
2	AB	5754	DG	Sidechain
2	AB	5757	DG	Sidechain
2	AB	5763	DA	Sidechain
2	AB	5775	DG	Sidechain
2	AB	5776	DG	Sidechain
2	AB	5777	DC	Sidechain
2	AB	5780	DC	Sidechain
2	AB	5781	DC	Sidechain
2	AB	5787	DG	Sidechain
2	AB	579	DT	Sidechain
2	AB	5791	DA	Sidechain
2	AB	5795	DC	Sidechain
2	AB	5796	DC	Sidechain
2	AB	5797	DT	Sidechain
2	AB	5799	DT	Sidechain
2	AB	5802	DC	Sidechain
2	AB	5805	DC	Sidechain
2	AB	581	DA	Sidechain
2	AB	5815	DG	Sidechain
2	AB	5817	DT	Sidechain
2	AB	582	DT	Sidechain
2	AB	5838	DA	Sidechain
2	AB	5841	DG	Sidechain
2	AB	5850	DA	Sidechain
2	AB	5854	DG	Sidechain
2	AB	5858	DG	Sidechain
2	AB	586	DC	Sidechain
2	AB	5874	DA	Sidechain
2	AB	589	DG	Sidechain
2	AB	5894	DC	Sidechain
2	AB	5898	DC	Sidechain
2	AB	5899	DT	Sidechain
2	AB	5909	DC	Sidechain
2	AB	5910	DC	Sidechain
2	AB	5914	DG	Sidechain
2	AB	5915	DG	Sidechain
2	AB	5918	DT	Sidechain
2	AB	5926	DT	Sidechain
2	AB	5928	DT	Sidechain
2	AB	5929	DG	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	5930	DC	Sidechain
2	AB	5935	DG	Sidechain
2	AB	5939	DC	Sidechain
2	AB	594	DT	Sidechain
2	AB	5953	DA	Sidechain
2	AB	5954	DA	Sidechain
2	AB	597	DA	Sidechain
2	AB	5973	DT	Sidechain
2	AB	5979	DC	Sidechain
2	AB	5985	DA	Sidechain
2	AB	599	DT	Sidechain
2	AB	5995	DC	Sidechain
2	AB	6008	DT	Sidechain
2	AB	6011	DG	Sidechain
2	AB	6012	DA	Sidechain
2	AB	6018	DG	Sidechain
2	AB	6020	DA	Sidechain
2	AB	6026	DG	Sidechain
2	AB	6028	DA	Sidechain
2	AB	603	DA	Sidechain
2	AB	6035	DG	Sidechain
2	AB	6036	DT	Sidechain
2	AB	6038	DT	Sidechain
2	AB	6054	DG	Sidechain
2	AB	6062	DT	Sidechain
2	AB	6081	DT	Sidechain
2	AB	6090	DC	Sidechain
2	AB	6098	DA	Sidechain
2	AB	61	DT	Sidechain
2	AB	6108	DT	Sidechain
2	AB	6114	DA	Sidechain
2	AB	6119	DA	Sidechain
2	AB	612	DT	Sidechain
2	AB	6124	DT	Sidechain
2	AB	6132	DG	Sidechain
2	AB	6134	DG	Sidechain
2	AB	6135	DT	Sidechain
2	AB	6139	DC	Sidechain
2	AB	6143	DT	Sidechain
2	AB	6158	DT	Sidechain
2	AB	6163	DG	Sidechain
2	AB	6169	DC	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	617	DA	Sidechain
2	AB	6171	DA	Sidechain
2	AB	6175	DG	Sidechain
2	AB	6189	DG	Sidechain
2	AB	6195	DC	Sidechain
2	AB	620	DG	Sidechain
2	AB	6200	DC	Sidechain
2	AB	6201	DT	Sidechain
2	AB	6204	DC	Sidechain
2	AB	6205	DG	Sidechain
2	AB	6209	DT	Sidechain
2	AB	621	DA	Sidechain
2	AB	6210	DC	Sidechain
2	AB	6213	DA	Sidechain
2	AB	6217	DT	Sidechain
2	AB	622	DT	Sidechain
2	AB	6220	DC	Sidechain
2	AB	6225	DG	Sidechain
2	AB	6227	DG	Sidechain
2	AB	6230	DA	Sidechain
2	AB	6231	DG	Sidechain
2	AB	6234	DT	Sidechain
2	AB	6245	DG	Sidechain
2	AB	6246	DA	Sidechain
2	AB	6255	DT	Sidechain
2	AB	627	DG	Sidechain
2	AB	6273	DT	Sidechain
2	AB	6274	DC	Sidechain
2	AB	6278	DA	Sidechain
2	AB	6279	DG	Sidechain
2	AB	6280	DG	Sidechain
2	AB	6282	DT	Sidechain
2	AB	6288	DT	Sidechain
2	AB	6308	DA	Sidechain
2	AB	6309	DG	Sidechain
2	AB	6322	DA	Sidechain
2	AB	6329	DA	Sidechain
2	AB	633	DA	Sidechain
2	AB	6348	DA	Sidechain
2	AB	6362	DT	Sidechain
2	AB	6364	DA	Sidechain
2	AB	6373	DG	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	6374	DG	Sidechain
2	AB	6377	DC	Sidechain
2	AB	6380	DG	Sidechain
2	AB	6381	DC	Sidechain
2	AB	6383	DG	Sidechain
2	AB	6389	DT	Sidechain
2	AB	6391	DA	Sidechain
2	AB	6394	DA	Sidechain
2	AB	6402	DA	Sidechain
2	AB	6409	DA	Sidechain
2	AB	6410	DA	Sidechain
2	AB	6417	DG	Sidechain
2	AB	6448	DT	Sidechain
2	AB	6454	DT	Sidechain
2	AB	6458	DG	Sidechain
2	AB	6466	DG	Sidechain
2	AB	6478	DA	Sidechain
2	AB	6480	DA	Sidechain
2	AB	6493	DT	Sidechain
2	AB	6505	DA	Sidechain
2	AB	6509	DT	Sidechain
2	AB	6516	DG	Sidechain
2	AB	6519	DT	Sidechain
2	AB	652	DA	Sidechain
2	AB	6520	DG	Sidechain
2	AB	6521	DA	Sidechain
2	AB	6522	DA	Sidechain
2	AB	6523	DT	Sidechain
2	AB	653	DA	Sidechain
2	AB	6531	DG	Sidechain
2	AB	6553	DA	Sidechain
2	AB	6554	DC	Sidechain
2	AB	6555	DC	Sidechain
2	AB	6556	DA	Sidechain
2	AB	6559	DA	Sidechain
2	AB	6561	DC	Sidechain
2	AB	6563	DG	Sidechain
2	AB	6574	DC	Sidechain
2	AB	6576	DG	Sidechain
2	AB	6582	DA	Sidechain
2	AB	6588	DA	Sidechain
2	AB	6597	DA	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	6598	DG	Sidechain
2	AB	6599	DG	Sidechain
2	AB	66	DT	Sidechain
2	AB	6600	DC	Sidechain
2	AB	6604	DT	Sidechain
2	AB	6608	DG	Sidechain
2	AB	6609	DT	Sidechain
2	AB	6627	DG	Sidechain
2	AB	6629	DC	Sidechain
2	AB	6631	DG	Sidechain
2	AB	6632	DA	Sidechain
2	AB	6638	DG	Sidechain
2	AB	6641	DT	Sidechain
2	AB	6645	DA	Sidechain
2	AB	6654	DT	Sidechain
2	AB	6656	DT	Sidechain
2	AB	6659	DA	Sidechain
2	AB	666	DT	Sidechain
2	AB	6661	DC	Sidechain
2	AB	6666	DT	Sidechain
2	AB	6671	DT	Sidechain
2	AB	6673	DT	Sidechain
2	AB	6675	DC	Sidechain
2	AB	6678	DT	Sidechain
2	AB	6684	DT	Sidechain
2	AB	670	DG	Sidechain
2	AB	6701	DC	Sidechain
2	AB	6719	DG	Sidechain
2	AB	6725	DT	Sidechain
2	AB	6727	DC	Sidechain
2	AB	6728	DT	Sidechain
2	AB	6737	DT	Sidechain
2	AB	674	DT	Sidechain
2	AB	6750	DA	Sidechain
2	AB	6751	DA	Sidechain
2	AB	6756	DG	Sidechain
2	AB	6757	DG	Sidechain
2	AB	6759	DT	Sidechain
2	AB	6765	DA	Sidechain
2	AB	6768	DG	Sidechain
2	AB	677	DT	Sidechain
2	AB	6773	DA	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	6777	DG	Sidechain
2	AB	6781	DT	Sidechain
2	AB	6783	DT	Sidechain
2	AB	680	DT	Sidechain
2	AB	6800	DA	Sidechain
2	AB	681	DC	Sidechain
2	AB	6821	DT	Sidechain
2	AB	6822	DT	Sidechain
2	AB	6829	DA	Sidechain
2	AB	683	DG	Sidechain
2	AB	6834	DT	Sidechain
2	AB	684	DG	Sidechain
2	AB	6842	DA	Sidechain
2	AB	6845	DT	Sidechain
2	AB	6854	DT	Sidechain
2	AB	6855	DA	Sidechain
2	AB	687	DA	Sidechain
2	AB	6874	DA	Sidechain
2	AB	6880	DG	Sidechain
2	AB	6881	DC	Sidechain
2	AB	6882	DT	Sidechain
2	AB	6899	DT	Sidechain
2	AB	6901	DT	Sidechain
2	AB	6909	DT	Sidechain
2	AB	6915	DA	Sidechain
2	AB	6919	DT	Sidechain
2	AB	6922	DA	Sidechain
2	AB	6928	DG	Sidechain
2	AB	6932	DA	Sidechain
2	AB	6937	DA	Sidechain
2	AB	694	DA	Sidechain
2	AB	6945	DG	Sidechain
2	AB	6957	DA	Sidechain
2	AB	6958	DT	Sidechain
2	AB	6965	DT	Sidechain
2	AB	6967	DA	Sidechain
2	AB	697	DC	Sidechain
2	AB	6971	DA	Sidechain
2	AB	6972	DT	Sidechain
2	AB	6982	DT	Sidechain
2	AB	6983	DG	Sidechain
2	AB	6985	DT	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	699	DC	Sidechain
2	AB	6994	DT	Sidechain
2	AB	6999	DC	Sidechain
2	AB	7012	DG	Sidechain
2	AB	702	DA	Sidechain
2	AB	7023	DT	Sidechain
2	AB	7027	DT	Sidechain
2	AB	7032	DA	Sidechain
2	AB	7040	DC	Sidechain
2	AB	7047	DC	Sidechain
2	AB	7069	DA	Sidechain
2	AB	707	DG	Sidechain
2	AB	7073	DT	Sidechain
2	AB	7078	DT	Sidechain
2	AB	7080	DT	Sidechain
2	AB	7089	DT	Sidechain
2	AB	7094	DA	Sidechain
2	AB	71	DA	Sidechain
2	AB	710	DG	Sidechain
2	AB	7108	DG	Sidechain
2	AB	7137	DT	Sidechain
2	AB	7142	DA	Sidechain
2	AB	7160	DT	Sidechain
2	AB	7167	DA	Sidechain
2	AB	7168	DT	Sidechain
2	AB	717	DT	Sidechain
2	AB	7175	DG	Sidechain
2	AB	7184	DA	Sidechain
2	AB	7187	DT	Sidechain
2	AB	7189	DT	Sidechain
2	AB	7191	DT	Sidechain
2	AB	7192	DC	Sidechain
2	AB	7193	DC	Sidechain
2	AB	7196	DG	Sidechain
2	AB	7199	DT	Sidechain
2	AB	720	DG	Sidechain
2	AB	7207	DA	Sidechain
2	AB	7208	DA	Sidechain
2	AB	721	DT	Sidechain
2	AB	7211	DC	Sidechain
2	AB	7231	DC	Sidechain
2	AB	7238	DA	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	726	DT	Sidechain
2	AB	7267	DT	Sidechain
2	AB	7272	DC	Sidechain
2	AB	7274	DC	Sidechain
2	AB	7276	DG	Sidechain
2	AB	7279	DG	Sidechain
2	AB	7289	DT	Sidechain
2	AB	7290	DT	Sidechain
2	AB	730	DG	Sidechain
2	AB	7309	DC	Sidechain
2	AB	731	DT	Sidechain
2	AB	7311	DT	Sidechain
2	AB	7314	DC	Sidechain
2	AB	7318	DT	Sidechain
2	AB	7323	DT	Sidechain
2	AB	7325	DT	Sidechain
2	AB	7326	DA	Sidechain
2	AB	7334	DT	Sidechain
2	AB	7341	DT	Sidechain
2	AB	7349	DT	Sidechain
2	AB	735	DG	Sidechain
2	AB	7353	DT	Sidechain
2	AB	7356	DA	Sidechain
2	AB	737	DA	Sidechain
2	AB	7377	DT	Sidechain
2	AB	7380	DC	Sidechain
2	AB	7382	DC	Sidechain
2	AB	7387	DA	Sidechain
2	AB	7403	DA	Sidechain
2	AB	7404	DA	Sidechain
2	AB	7408	DG	Sidechain
2	AB	741	DC	Sidechain
2	AB	7410	DT	Sidechain
2	AB	742	DC	Sidechain
2	AB	7429	DG	Sidechain
2	AB	743	DG	Sidechain
2	AB	744	DG	Sidechain
2	AB	7453	DA	Sidechain
2	AB	7454	DC	Sidechain
2	AB	7457	DG	Sidechain
2	AB	746	DT	Sidechain
2	AB	7481	DT	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	7482	DT	Sidechain
2	AB	7484	DT	Sidechain
2	AB	7489	DA	Sidechain
2	AB	7495	DA	Sidechain
2	AB	7497	DT	Sidechain
2	AB	7505	DA	Sidechain
2	AB	7507	DC	Sidechain
2	AB	7509	DT	Sidechain
2	AB	751	DT	Sidechain
2	AB	752	DC	Sidechain
2	AB	7522	DT	Sidechain
2	AB	7531	DC	Sidechain
2	AB	7532	DA	Sidechain
2	AB	7539	DG	Sidechain
2	AB	7544	DA	Sidechain
2	AB	7545	DG	Sidechain
2	AB	7551	DT	Sidechain
2	AB	7553	DT	Sidechain
2	AB	7555	DC	Sidechain
2	AB	7556	DA	Sidechain
2	AB	7559	DA	Sidechain
2	AB	7561	DT	Sidechain
2	AB	763	DT	Sidechain
2	AB	774	DC	Sidechain
2	AB	778	DC	Sidechain
2	AB	782	DC	Sidechain
2	AB	784	DA	Sidechain
2	AB	79	DG	Sidechain
2	AB	790	DC	Sidechain
2	AB	80	DA	Sidechain
2	AB	805	DT	Sidechain
2	AB	810	DC	Sidechain
2	AB	812	DG	Sidechain
2	AB	813	DT	Sidechain
2	AB	816	DT	Sidechain
2	AB	823	DA	Sidechain
2	AB	825	DG	Sidechain
2	AB	828	DG	Sidechain
2	AB	830	DT	Sidechain
2	AB	837	DG	Sidechain
2	AB	838	DG	Sidechain
2	AB	847	DT	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	85	DG	Sidechain
2	AB	856	DG	Sidechain
2	AB	859	DT	Sidechain
2	AB	861	DC	Sidechain
2	AB	863	DC	Sidechain
2	AB	865	DT	Sidechain
2	AB	868	DT	Sidechain
2	AB	871	DC	Sidechain
2	AB	874	DC	Sidechain
2	AB	876	DA	Sidechain
2	AB	879	DT	Sidechain
2	AB	88	DT	Sidechain
2	AB	882	DC	Sidechain
2	AB	893	DT	Sidechain
2	AB	898	DG	Sidechain
2	AB	899	DA	Sidechain
2	AB	905	DA	Sidechain
2	AB	918	DG	Sidechain
2	AB	919	DG	Sidechain
2	AB	921	DG	Sidechain
2	AB	925	DA	Sidechain
2	AB	926	DT	Sidechain
2	AB	937	DG	Sidechain
2	AB	938	DT	Sidechain
2	AB	939	DT	Sidechain
2	AB	940	DG	Sidechain
2	AB	945	DT	Sidechain
2	AB	956	DT	Sidechain
2	AB	958	DG	Sidechain
2	AB	960	DT	Sidechain
2	AB	961	DA	Sidechain
2	AB	969	DT	Sidechain
2	AB	97	DG	Sidechain
2	AB	971	DG	Sidechain
2	AB	973	DG	Sidechain
2	AB	98	DT	Sidechain
2	AB	996	DT	Sidechain
3	AC	15	DG	Sidechain
3	AC	18	DG	Sidechain
3	AC	2	DT	Sidechain
3	AC	29	DC	Sidechain
3	AC	3	DT	Sidechain

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Mol	Chain	Res	Type	Group
3	AC	31	DC	Sidechain
3	AC	43	DT	Sidechain
3	AC	46	DT	Sidechain
4	AD	15	DG	Sidechain
4	AD	22	DA	Sidechain
4	AD	31	DC	Sidechain
4	AD	33	DA	Sidechain
4	AD	35	DA	Sidechain
4	AD	36	DA	Sidechain
4	AD	40	DA	Sidechain
4	AD	45	DT	Sidechain
4	AD	46	DT	Sidechain
4	AD	47	DT	Sidechain
4	AD	49	DT	Sidechain
4	AD	50	DT	Sidechain
4	AD	6	DT	Sidechain
4	AD	8	DT	Sidechain
5	AE	14	DG	Sidechain
5	AE	21	DT	Sidechain
5	AE	27	DC	Sidechain
5	AE	28	DG	Sidechain
5	AE	30	DC	Sidechain
5	AE	47	DT	Sidechain
5	AE	9	DT	Sidechain
6	AF	18	DA	Sidechain
6	AF	21	DT	Sidechain
6	AF	22	DA	Sidechain
6	AF	24	DA	Sidechain
6	AF	26	DA	Sidechain
6	AF	29	DC	Sidechain
6	AF	3	DT	Sidechain
6	AF	31	DC	Sidechain
6	AF	36	DG	Sidechain
6	AF	41	DA	Sidechain
6	AF	5	DT	Sidechain
7	AG	11	DA	Sidechain
7	AG	12	DT	Sidechain
7	AG	14	DT	Sidechain
7	AG	18	DG	Sidechain
7	AG	2	DT	Sidechain
7	AG	27	DA	Sidechain
7	AG	30	DT	Sidechain

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Mol	Chain	Res	Type	Group
7	AG	39	DG	Sidechain
7	AG	4	DT	Sidechain
7	AG	41	DT	Sidechain
7	AG	42	DT	Sidechain
7	AG	48	DT	Sidechain
8	AH	11	DA	Sidechain
8	AH	20	DG	Sidechain
8	AH	31	DA	Sidechain
8	AH	32	DC	Sidechain
8	AH	33	DT	Sidechain
8	AH	44	DT	Sidechain
8	AH	9	DT	Sidechain
9	AI	10	DG	Sidechain
9	AI	11	DT	Sidechain
9	AI	13	DA	Sidechain
9	AI	14	DT	Sidechain
9	AI	18	DT	Sidechain
9	AI	23	DA	Sidechain
9	AI	28	DA	Sidechain
9	AI	35	DC	Sidechain
9	AI	36	DT	Sidechain
9	AI	37	DC	Sidechain
9	AI	38	DC	Sidechain
9	AI	4	DT	Sidechain
9	AI	44	DT	Sidechain
10	AJ	10	DT	Sidechain
10	AJ	13	DT	Sidechain
10	AJ	14	DT	Sidechain
10	AJ	22	DG	Sidechain
10	AJ	32	DG	Sidechain
10	AJ	7	DT	Sidechain
11	AK	12	DC	Sidechain
11	AK	18	DA	Sidechain
11	AK	22	DA	Sidechain
11	AK	27	DT	Sidechain
11	AK	29	DT	Sidechain
11	AK	37	DG	Sidechain
11	AK	44	DT	Sidechain
11	AK	49	DT	Sidechain
11	AK	50	DT	Sidechain
12	AL	13	DT	Sidechain
12	AL	14	DT	Sidechain

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Mol	Chain	Res	Type	Group
12	AL	15	DT	Sidechain
12	AL	3	DT	Sidechain
12	AL	33	DC	Sidechain
12	AL	43	DT	Sidechain
12	AL	5	DT	Sidechain
12	AL	50	DT	Sidechain
12	AL	6	DT	Sidechain
13	AM	1	DT	Sidechain
13	AM	11	DA	Sidechain
13	AM	12	DT	Sidechain
13	AM	14	DG	Sidechain
13	AM	18	DG	Sidechain
13	AM	21	DT	Sidechain
13	AM	26	DC	Sidechain
13	AM	30	DA	Sidechain
13	AM	33	DT	Sidechain
13	AM	40	DG	Sidechain
14	AN	13	DC	Sidechain
14	AN	14	DC	Sidechain
14	AN	20	DT	Sidechain
14	AN	31	DG	Sidechain
14	AN	45	DT	Sidechain
14	AN	46	DT	Sidechain
14	AN	5	DT	Sidechain
14	AN	7	DT	Sidechain
15	AO	22	DT	Sidechain
15	AO	29	DT	Sidechain
15	AO	3	DT	Sidechain
15	AO	33	DG	Sidechain
15	AO	34	DA	Sidechain
15	AO	35	DT	Sidechain
16	AP	11	DC	Sidechain
16	AP	15	DT	Sidechain
16	AP	20	DC	Sidechain
16	AP	21	DT	Sidechain
16	AP	24	DT	Sidechain
16	AP	25	DT	Sidechain
16	AP	26	DG	Sidechain
16	AP	28	DC	Sidechain
16	AP	30	DC	Sidechain
16	AP	31	DC	Sidechain
16	AP	33	DA	Sidechain

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Mol	Chain	Res	Type	Group
16	AP	4	DT	Sidechain
16	AP	43	DT	Sidechain
16	AP	45	DT	Sidechain
16	AP	47	DT	Sidechain
16	AP	48	DT	Sidechain
16	AP	49	DT	Sidechain
16	AP	5	DT	Sidechain
16	AP	9	DT	Sidechain
17	AQ	1	DT	Sidechain
17	AQ	12	DC	Sidechain
17	AQ	17	DA	Sidechain
17	AQ	27	DG	Sidechain
17	AQ	3	DT	Sidechain
17	AQ	31	DC	Sidechain
17	AQ	32	DG	Sidechain
17	AQ	42	DT	Sidechain
17	AQ	44	DT	Sidechain
17	AQ	45	DT	Sidechain
17	AQ	48	DT	Sidechain
17	AQ	8	DT	Sidechain
17	AQ	9	DT	Sidechain
18	AR	1	DT	Sidechain
18	AR	20	DA	Sidechain
18	AR	27	DA	Sidechain
18	AR	3	DT	Sidechain
18	AR	46	DT	Sidechain
19	AS	10	DG	Sidechain
19	AS	13	DT	Sidechain
19	AS	17	DT	Sidechain
19	AS	18	DC	Sidechain
19	AS	20	DA	Sidechain
19	AS	21	DT	Sidechain
19	AS	23	DA	Sidechain
19	AS	26	DA	Sidechain
19	AS	27	DT	Sidechain
19	AS	33	DC	Sidechain
19	AS	40	DT	Sidechain
19	AS	41	DG	Sidechain
19	AS	43	DT	Sidechain
19	AS	44	DT	Sidechain
19	AS	45	DT	Sidechain
19	AS	48	DT	Sidechain

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Mol	Chain	Res	Type	Group
19	AS	49	DT	Sidechain
19	AS	6	DT	Sidechain
19	AS	7	DT	Sidechain
20	AT	20	DC	Sidechain
20	AT	24	DT	Sidechain
20	AT	26	DG	Sidechain
20	AT	27	DA	Sidechain
20	AT	3	DT	Sidechain
20	AT	34	DC	Sidechain
20	AT	40	DA	Sidechain
20	AT	41	DA	Sidechain
20	AT	43	DT	Sidechain
20	AT	7	DT	Sidechain
20	AT	8	DT	Sidechain
21	AU	19	DG	Sidechain
21	AU	2	DT	Sidechain
21	AU	23	DA	Sidechain
21	AU	24	DC	Sidechain
21	AU	25	DC	Sidechain
21	AU	32	DG	Sidechain
21	AU	8	DT	Sidechain
22	AV	11	DT	Sidechain
22	AV	14	DT	Sidechain
22	AV	15	DG	Sidechain
22	AV	17	DG	Sidechain
22	AV	23	DC	Sidechain
22	AV	7	DT	Sidechain
23	AW	15	DA	Sidechain
23	AW	18	DT	Sidechain
23	AW	19	DT	Sidechain
23	AW	2	DT	Sidechain
23	AW	23	DC	Sidechain
23	AW	33	DA	Sidechain
23	AW	36	DA	Sidechain
23	AW	43	DT	Sidechain
23	AW	44	DT	Sidechain
24	AX	21	DT	Sidechain
24	AX	25	DG	Sidechain
24	AX	27	DA	Sidechain
24	AX	29	DT	Sidechain
24	AX	31	DA	Sidechain
24	AX	32	DA	Sidechain

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Mol	Chain	Res	Type	Group
24	AX	33	DA	Sidechain
24	AX	34	DC	Sidechain
24	AX	43	DT	Sidechain
24	AX	49	DT	Sidechain
24	AX	5	DT	Sidechain
24	AX	6	DT	Sidechain
24	AX	7	DT	Sidechain
25	AY	14	DT	Sidechain
25	AY	18	DG	Sidechain
25	AY	19	DA	Sidechain
25	AY	23	DT	Sidechain
25	AY	38	DT	Sidechain
25	AY	6	DT	Sidechain
26	AZ	24	DA	Sidechain
26	AZ	8	DT	Sidechain
27	Aa	1	DT	Sidechain
27	Aa	15	DG	Sidechain
27	Aa	16	DA	Sidechain
27	Aa	20	DT	Sidechain
27	Aa	23	DT	Sidechain
27	Aa	26	DT	Sidechain
27	Aa	31	DC	Sidechain
27	Aa	37	DG	Sidechain
27	Aa	4	DT	Sidechain
27	Aa	40	DA	Sidechain
27	Aa	48	DT	Sidechain
27	Aa	50	DT	Sidechain
27	Aa	6	DT	Sidechain
27	Aa	7	DT	Sidechain
28	Ab	11	DG	Sidechain
28	Ab	22	DA	Sidechain
28	Ab	23	DT	Sidechain
28	Ab	29	DT	Sidechain
28	Ab	32	DA	Sidechain
28	Ab	33	DC	Sidechain
28	Ab	40	DT	Sidechain
28	Ab	42	DT	Sidechain
28	Ab	49	DT	Sidechain
29	Ac	13	DA	Sidechain
29	Ac	18	DT	Sidechain
29	Ac	2	DT	Sidechain
29	Ac	35	DA	Sidechain

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Mol	Chain	Res	Type	Group
29	Ac	39	DA	Sidechain
29	Ac	50	DT	Sidechain
30	Ad	1	DT	Sidechain
30	Ad	10	DC	Sidechain
30	Ad	11	DT	Sidechain
30	Ad	12	DT	Sidechain
30	Ad	2	DT	Sidechain
30	Ad	22	DT	Sidechain
30	Ad	24	DA	Sidechain
30	Ad	28	DA	Sidechain
30	Ad	31	DG	Sidechain
30	Ad	34	DT	Sidechain
30	Ad	38	DC	Sidechain
30	Ad	41	DT	Sidechain
30	Ad	42	DT	Sidechain
30	Ad	8	DT	Sidechain
31	Ae	10	DC	Sidechain
31	Ae	14	DA	Sidechain
31	Ae	16	DG	Sidechain
31	Ae	18	DA	Sidechain
31	Ae	2	DT	Sidechain
31	Ae	26	DG	Sidechain
31	Ae	27	DA	Sidechain
31	Ae	32	DT	Sidechain
31	Ae	33	DT	Sidechain
31	Ae	43	DT	Sidechain
32	Af	10	DA	Sidechain
32	Af	20	DG	Sidechain
32	Af	25	DA	Sidechain
32	Af	31	DA	Sidechain
32	Af	36	DA	Sidechain
32	Af	40	DG	Sidechain
32	Af	5	DT	Sidechain
33	Ag	1	DT	Sidechain
33	Ag	17	DG	Sidechain
33	Ag	18	DG	Sidechain
33	Ag	20	DT	Sidechain
33	Ag	28	DA	Sidechain
33	Ag	30	DT	Sidechain
33	Ag	37	DA	Sidechain
33	Ag	38	DT	Sidechain
33	Ag	4	DT	Sidechain

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Mol	Chain	Res	Type	Group
33	Ag	40	DA	Sidechain
33	Ag	44	DT	Sidechain
33	Ag	5	DT	Sidechain
33	Ag	7	DT	Sidechain
33	Ag	8	DT	Sidechain
34	Ah	1	DT	Sidechain
34	Ah	10	DA	Sidechain
34	Ah	12	DG	Sidechain
34	Ah	17	DT	Sidechain
34	Ah	22	DG	Sidechain
34	Ah	23	DG	Sidechain
34	Ah	27	DG	Sidechain
34	Ah	28	DT	Sidechain
34	Ah	32	DT	Sidechain
34	Ah	37	DA	Sidechain
34	Ah	42	DT	Sidechain
34	Ah	46	DT	Sidechain
34	Ah	48	DT	Sidechain
34	Ah	49	DT	Sidechain
34	Ah	5	DT	Sidechain
35	Ai	10	DT	Sidechain
35	Ai	11	DT	Sidechain
35	Ai	16	DC	Sidechain
35	Ai	2	DT	Sidechain
35	Ai	23	DT	Sidechain
35	Ai	27	DA	Sidechain
35	Ai	28	DG	Sidechain
35	Ai	30	DC	Sidechain
35	Ai	33	DG	Sidechain
35	Ai	43	DT	Sidechain
35	Ai	44	DT	Sidechain
36	Aj	23	DT	Sidechain
36	Aj	3	DT	Sidechain
36	Aj	37	DG	Sidechain
36	Aj	44	DT	Sidechain
36	Aj	50	DT	Sidechain
36	Aj	9	DT	Sidechain
37	Ak	19	DC	Sidechain
37	Ak	26	DC	Sidechain
37	Ak	27	DC	Sidechain
37	Ak	28	DC	Sidechain
37	Ak	33	DT	Sidechain

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Mol	Chain	Res	Type	Group
37	Ak	4	DT	Sidechain
37	Ak	47	DT	Sidechain
37	Ak	48	DT	Sidechain
37	Ak	5	DT	Sidechain
37	Ak	6	DT	Sidechain
38	Al	1	DT	Sidechain
38	Al	20	DT	Sidechain
38	Al	30	DT	Sidechain
38	Al	36	DT	Sidechain
38	Al	41	DA	Sidechain
38	Al	43	DT	Sidechain
38	Al	48	DT	Sidechain
38	Al	7	DT	Sidechain
39	Am	12	DC	Sidechain
39	Am	2	DT	Sidechain
39	Am	24	DT	Sidechain
39	Am	39	DG	Sidechain
40	An	16	DA	Sidechain
40	An	24	DG	Sidechain
40	An	4	DT	Sidechain
40	An	50	DT	Sidechain
41	Ao	13	DG	Sidechain
41	Ao	16	DC	Sidechain
41	Ao	17	DC	Sidechain
41	Ao	2	DT	Sidechain
41	Ao	26	DC	Sidechain
41	Ao	33	DA	Sidechain
41	Ao	42	DT	Sidechain
41	Ao	50	DT	Sidechain
41	Ao	6	DT	Sidechain
42	Ap	15	DT	Sidechain
42	Ap	24	DT	Sidechain
42	Ap	4	DT	Sidechain
42	Ap	43	DT	Sidechain
42	Ap	46	DT	Sidechain
42	Ap	47	DT	Sidechain
42	Ap	48	DT	Sidechain
42	Ap	50	DT	Sidechain
42	Ap	9	DT	Sidechain
43	Aq	2	DT	Sidechain
43	Aq	26	DC	Sidechain
43	Aq	28	DT	Sidechain

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Mol	Chain	Res	Type	Group
43	Aq	30	DA	Sidechain
43	Aq	41	DC	Sidechain
43	Aq	5	DT	Sidechain
43	Aq	9	DT	Sidechain
44	Ar	11	DA	Sidechain
44	Ar	20	DC	Sidechain
44	Ar	21	DA	Sidechain
44	Ar	24	DT	Sidechain
44	Ar	26	DT	Sidechain
44	Ar	28	DT	Sidechain
44	Ar	37	DA	Sidechain
44	Ar	4	DT	Sidechain
44	Ar	44	DT	Sidechain
44	Ar	46	DT	Sidechain
44	Ar	49	DT	Sidechain
44	Ar	50	DT	Sidechain
45	As	1	DT	Sidechain
45	As	25	DC	Sidechain
45	As	26	DA	Sidechain
45	As	28	DA	Sidechain
45	As	38	DG	Sidechain
45	As	42	DT	Sidechain
45	As	49	DT	Sidechain
46	At	14	DG	Sidechain
46	At	18	DT	Sidechain
46	At	25	DA	Sidechain
46	At	26	DA	Sidechain
46	At	27	DA	Sidechain
46	At	31	DA	Sidechain
46	At	37	DT	Sidechain
46	At	42	DT	Sidechain
46	At	46	DT	Sidechain
46	At	5	DT	Sidechain
46	At	50	DT	Sidechain
46	At	6	DT	Sidechain
47	Au	13	DT	Sidechain
47	Au	15	DA	Sidechain
47	Au	23	DA	Sidechain
47	Au	29	DG	Sidechain
47	Au	34	DG	Sidechain
47	Au	35	DC	Sidechain
47	Au	42	DT	Sidechain

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Mol	Chain	Res	Type	Group
47	Au	5	DT	Sidechain
47	Au	50	DT	Sidechain
47	Au	6	DT	Sidechain
48	Av	1	DT	Sidechain
48	Av	14	DA	Sidechain
48	Av	15	DT	Sidechain
48	Av	26	DC	Sidechain
48	Av	32	DA	Sidechain
48	Av	42	DT	Sidechain
48	Av	49	DT	Sidechain
48	Av	8	DT	Sidechain
49	Aw	1	DT	Sidechain
49	Aw	14	DA	Sidechain
49	Aw	19	DG	Sidechain
49	Aw	20	DA	Sidechain
49	Aw	22	DG	Sidechain
49	Aw	23	DA	Sidechain
49	Aw	28	DT	Sidechain
49	Aw	30	DT	Sidechain
49	Aw	32	DC	Sidechain
49	Aw	33	DC	Sidechain
49	Aw	35	DT	Sidechain
49	Aw	38	DG	Sidechain
49	Aw	41	DC	Sidechain
49	Aw	42	DT	Sidechain
49	Aw	43	DT	Sidechain
50	Ax	11	DT	Sidechain
50	Ax	20	DC	Sidechain
50	Ax	25	DC	Sidechain
50	Ax	32	DG	Sidechain
50	Ax	43	DT	Sidechain
50	Ax	44	DT	Sidechain
50	Ax	46	DT	Sidechain
51	Ay	10	DT	Sidechain
51	Ay	11	DG	Sidechain
51	Ay	16	DA	Sidechain
51	Ay	17	DC	Sidechain
51	Ay	18	DC	Sidechain
51	Ay	2	DT	Sidechain
51	Ay	22	DA	Sidechain
51	Ay	24	DT	Sidechain
51	Ay	3	DT	Sidechain

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Mol	Chain	Res	Type	Group
51	Ay	30	DA	Sidechain
51	Ay	32	DA	Sidechain
51	Ay	33	DT	Sidechain
51	Ay	40	DC	Sidechain
51	Ay	41	DC	Sidechain
51	Ay	44	DT	Sidechain
51	Ay	46	DT	Sidechain
51	Ay	49	DT	Sidechain
51	Ay	50	DT	Sidechain
52	Az	14	DG	Sidechain
52	Az	18	DT	Sidechain
52	Az	20	DC	Sidechain
52	Az	29	DA	Sidechain
52	Az	30	DG	Sidechain
52	Az	33	DT	Sidechain
52	Az	41	DA	Sidechain
52	Az	44	DT	Sidechain
52	Az	6	DT	Sidechain
52	Az	7	DT	Sidechain
115	B0	1	DT	Sidechain
115	B0	15	DT	Sidechain
115	B0	27	DA	Sidechain
115	B0	31	DT	Sidechain
115	B0	34	DG	Sidechain
115	B0	35	DA	Sidechain
115	B0	4	DT	Sidechain
115	B0	42	DA	Sidechain
116	B1	1	DA	Sidechain
116	B1	38	DA	Sidechain
116	B1	39	DG	Sidechain
116	B1	41	DC	Sidechain
116	B1	6	DA	Sidechain
117	B2	17	DG	Sidechain
117	B2	19	DT	Sidechain
117	B2	2	DG	Sidechain
117	B2	21	DG	Sidechain
117	B2	22	DC	Sidechain
117	B2	3	DG	Sidechain
117	B2	33	DA	Sidechain
117	B2	34	DT	Sidechain
117	B2	38	DT	Sidechain
117	B2	42	DT	Sidechain

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Mol	Chain	Res	Type	Group
117	B2	7	DG	Sidechain
117	B2	8	DA	Sidechain
118	B3	1	DG	Sidechain
118	B3	23	DC	Sidechain
118	B3	25	DT	Sidechain
118	B3	26	DT	Sidechain
118	B3	27	DA	Sidechain
118	B3	29	DA	Sidechain
118	B3	37	DG	Sidechain
118	B3	7	DG	Sidechain
119	B4	12	DG	Sidechain
119	B4	13	DA	Sidechain
119	B4	16	DG	Sidechain
119	B4	17	DG	Sidechain
119	B4	19	DG	Sidechain
119	B4	2	DA	Sidechain
119	B4	27	DT	Sidechain
119	B4	28	DG	Sidechain
119	B4	29	DC	Sidechain
119	B4	39	DT	Sidechain
119	B4	6	DT	Sidechain
119	B4	8	DA	Sidechain
120	B5	19	DG	Sidechain
120	B5	20	DT	Sidechain
120	B5	23	DC	Sidechain
120	B5	34	DA	Sidechain
120	B5	39	DA	Sidechain
120	B5	40	DC	Sidechain
121	B6	10	DG	Sidechain
121	B6	2	DT	Sidechain
121	B6	21	DG	Sidechain
121	B6	23	DA	Sidechain
121	B6	3	DT	Sidechain
121	B6	35	DT	Sidechain
121	B6	36	DT	Sidechain
121	B6	37	DT	Sidechain
121	B6	6	DT	Sidechain
121	B6	7	DT	Sidechain
122	B7	10	DA	Sidechain
122	B7	16	DT	Sidechain
122	B7	17	DA	Sidechain
122	B7	20	DC	Sidechain

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Mol	Chain	Res	Type	Group
122	B7	26	DC	Sidechain
122	B7	28	DT	Sidechain
122	B7	30	DT	Sidechain
122	B7	35	DT	Sidechain
122	B7	38	DA	Sidechain
122	B7	39	DA	Sidechain
122	B7	5	DC	Sidechain
123	B8	13	DT	Sidechain
123	B8	18	DC	Sidechain
123	B8	22	DA	Sidechain
123	B8	23	DA	Sidechain
123	B8	24	DA	Sidechain
123	B8	26	DT	Sidechain
123	B8	27	DT	Sidechain
123	B8	30	DG	Sidechain
123	B8	31	DT	Sidechain
123	B8	34	DT	Sidechain
123	B8	35	DT	Sidechain
123	B8	41	DT	Sidechain
123	B8	5	DT	Sidechain
124	B9	10	DT	Sidechain
124	B9	12	DC	Sidechain
124	B9	17	DT	Sidechain
124	B9	18	DT	Sidechain
124	B9	20	DA	Sidechain
124	B9	25	DA	Sidechain
124	B9	31	DG	Sidechain
124	B9	32	DG	Sidechain
124	B9	39	DC	Sidechain
124	B9	40	DT	Sidechain
124	B9	5	DA	Sidechain
63	BA	15	DG	Sidechain
63	BA	16	DG	Sidechain
63	BA	18	DT	Sidechain
63	BA	19	DC	Sidechain
63	BA	22	DC	Sidechain
63	BA	30	DG	Sidechain
63	BA	31	DG	Sidechain
63	BA	32	DT	Sidechain
63	BA	36	DA	Sidechain
63	BA	4	DT	Sidechain
63	BA	45	DT	Sidechain

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Mol	Chain	Res	Type	Group
63	BA	50	DT	Sidechain
64	BB	18	DA	Sidechain
64	BB	19	DT	Sidechain
64	BB	20	DC	Sidechain
64	BB	22	DC	Sidechain
64	BB	26	DG	Sidechain
64	BB	28	DT	Sidechain
64	BB	3	DT	Sidechain
64	BB	39	DA	Sidechain
64	BB	47	DT	Sidechain
64	BB	49	DT	Sidechain
64	BB	7	DT	Sidechain
65	BC	16	DG	Sidechain
65	BC	23	DA	Sidechain
65	BC	27	DG	Sidechain
65	BC	30	DA	Sidechain
65	BC	34	DT	Sidechain
65	BC	41	DG	Sidechain
65	BC	46	DT	Sidechain
65	BC	8	DT	Sidechain
65	BC	9	DT	Sidechain
66	BD	10	DA	Sidechain
66	BD	12	DG	Sidechain
66	BD	15	DG	Sidechain
66	BD	2	DT	Sidechain
66	BD	22	DA	Sidechain
66	BD	25	DT	Sidechain
66	BD	28	DC	Sidechain
66	BD	32	DT	Sidechain
66	BD	4	DT	Sidechain
66	BD	41	DT	Sidechain
66	BD	42	DT	Sidechain
66	BD	43	DT	Sidechain
67	BE	1	DT	Sidechain
67	BE	15	DT	Sidechain
67	BE	30	DG	Sidechain
67	BE	46	DT	Sidechain
67	BE	7	DT	Sidechain
68	BF	20	DT	Sidechain
68	BF	21	DA	Sidechain
68	BF	24	DT	Sidechain
68	BF	30	DA	Sidechain

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Mol	Chain	Res	Type	Group
68	BF	38	DA	Sidechain
68	BF	41	DT	Sidechain
68	BF	47	DT	Sidechain
68	BF	7	DA	Sidechain
69	BG	12	DG	Sidechain
69	BG	15	DA	Sidechain
69	BG	22	DG	Sidechain
69	BG	23	DG	Sidechain
69	BG	26	DA	Sidechain
69	BG	28	DG	Sidechain
69	BG	29	DT	Sidechain
69	BG	3	DC	Sidechain
69	BG	30	DC	Sidechain
69	BG	40	DG	Sidechain
69	BG	44	DT	Sidechain
69	BG	45	DG	Sidechain
69	BG	47	DT	Sidechain
70	BH	10	DC	Sidechain
70	BH	13	DA	Sidechain
70	BH	16	DC	Sidechain
70	BH	20	DC	Sidechain
70	BH	22	DT	Sidechain
70	BH	34	DA	Sidechain
70	BH	37	DG	Sidechain
70	BH	39	DT	Sidechain
70	BH	45	DT	Sidechain
70	BH	47	DA	Sidechain
71	BI	1	DT	Sidechain
71	BI	28	DC	Sidechain
71	BI	34	DT	Sidechain
71	BI	38	DC	Sidechain
71	BI	39	DC	Sidechain
71	BI	40	DT	Sidechain
71	BI	45	DT	Sidechain
71	BI	46	DC	Sidechain
71	BI	47	DA	Sidechain
71	BI	9	DG	Sidechain
72	BJ	10	DA	Sidechain
72	BJ	3	DT	Sidechain
72	BJ	33	DT	Sidechain
72	BJ	37	DG	Sidechain
72	BJ	4	DT	Sidechain

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Mol	Chain	Res	Type	Group
72	BJ	43	DT	Sidechain
72	BJ	49	DT	Sidechain
72	BJ	9	DT	Sidechain
73	BK	10	DA	Sidechain
73	BK	11	DA	Sidechain
73	BK	26	DC	Sidechain
73	BK	48	DT	Sidechain
73	BK	6	DC	Sidechain
73	BK	8	DG	Sidechain
74	BL	10	DG	Sidechain
74	BL	11	DA	Sidechain
74	BL	14	DT	Sidechain
74	BL	19	DT	Sidechain
74	BL	2	DG	Sidechain
74	BL	23	DC	Sidechain
74	BL	25	DG	Sidechain
74	BL	31	DT	Sidechain
74	BL	36	DA	Sidechain
74	BL	37	DA	Sidechain
74	BL	42	DA	Sidechain
74	BL	44	DG	Sidechain
74	BL	47	DG	Sidechain
75	BM	11	DG	Sidechain
75	BM	12	DC	Sidechain
75	BM	13	DT	Sidechain
75	BM	15	DT	Sidechain
75	BM	2	DG	Sidechain
75	BM	22	DA	Sidechain
75	BM	27	DC	Sidechain
75	BM	28	DT	Sidechain
75	BM	36	DT	Sidechain
75	BM	40	DT	Sidechain
75	BM	41	DC	Sidechain
75	BM	45	DG	Sidechain
75	BM	47	DT	Sidechain
75	BM	49	DT	Sidechain
75	BM	6	DA	Sidechain
75	BM	7	DT	Sidechain
76	BN	10	DC	Sidechain
76	BN	12	DC	Sidechain
76	BN	17	DA	Sidechain
76	BN	26	DT	Sidechain

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Mol	Chain	Res	Type	Group
76	BN	40	DA	Sidechain
76	BN	47	DG	Sidechain
76	BN	48	DG	Sidechain
76	BN	8	DG	Sidechain
76	BN	9	DG	Sidechain
77	BO	16	DT	Sidechain
77	BO	18	DT	Sidechain
77	BO	19	DT	Sidechain
77	BO	23	DT	Sidechain
77	BO	29	DC	Sidechain
77	BO	43	DC	Sidechain
77	BO	44	DT	Sidechain
77	BO	7	DT	Sidechain
78	BP	1	DT	Sidechain
78	BP	10	DA	Sidechain
78	BP	31	DC	Sidechain
78	BP	36	DT	Sidechain
78	BP	37	DA	Sidechain
78	BP	40	DA	Sidechain
78	BP	47	DA	Sidechain
78	BP	6	DT	Sidechain
79	BQ	2	DT	Sidechain
79	BQ	30	DA	Sidechain
79	BQ	33	DA	Sidechain
79	BQ	34	DG	Sidechain
79	BQ	40	DA	Sidechain
79	BQ	41	DA	Sidechain
79	BQ	44	DG	Sidechain
79	BQ	49	DG	Sidechain
79	BQ	6	DT	Sidechain
79	BQ	9	DT	Sidechain
80	BR	10	DA	Sidechain
80	BR	12	DT	Sidechain
80	BR	21	DA	Sidechain
80	BR	27	DA	Sidechain
80	BR	34	DG	Sidechain
80	BR	4	DT	Sidechain
80	BR	43	DA	Sidechain
80	BR	8	DA	Sidechain
81	BS	13	DG	Sidechain
81	BS	19	DT	Sidechain
81	BS	3	DT	Sidechain

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Mol	Chain	Res	Type	Group
81	BS	33	DT	Sidechain
81	BS	35	DG	Sidechain
81	BS	38	DG	Sidechain
81	BS	40	DA	Sidechain
82	BT	12	DT	Sidechain
82	BT	24	DA	Sidechain
82	BT	34	DT	Sidechain
82	BT	41	DC	Sidechain
82	BT	9	DT	Sidechain
83	BU	10	DC	Sidechain
83	BU	23	DG	Sidechain
83	BU	24	DA	Sidechain
83	BU	25	DT	Sidechain
83	BU	28	DC	Sidechain
83	BU	33	DG	Sidechain
83	BU	36	DA	Sidechain
83	BU	38	DA	Sidechain
83	BU	49	DT	Sidechain
84	BV	18	DC	Sidechain
84	BV	22	DC	Sidechain
84	BV	26	DA	Sidechain
84	BV	38	DA	Sidechain
84	BV	42	DT	Sidechain
84	BV	43	DC	Sidechain
84	BV	47	DG	Sidechain
84	BV	48	DC	Sidechain
84	BV	9	DG	Sidechain
85	BW	1	DA	Sidechain
85	BW	14	DC	Sidechain
85	BW	17	DT	Sidechain
85	BW	20	DT	Sidechain
85	BW	27	DG	Sidechain
85	BW	31	DT	Sidechain
85	BW	47	DG	Sidechain
85	BW	6	DG	Sidechain
86	BX	10	DA	Sidechain
86	BX	11	DC	Sidechain
86	BX	16	DG	Sidechain
86	BX	2	DA	Sidechain
86	BX	22	DA	Sidechain
86	BX	34	DT	Sidechain
86	BX	41	DT	Sidechain

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Mol	Chain	Res	Type	Group
86	BX	48	DA	Sidechain
87	BY	12	DA	Sidechain
87	BY	20	DA	Sidechain
87	BY	22	DC	Sidechain
87	BY	23	DC	Sidechain
87	BY	26	DT	Sidechain
87	BY	27	DT	Sidechain
87	BY	32	DG	Sidechain
87	BY	33	DG	Sidechain
87	BY	34	DA	Sidechain
87	BY	36	DC	Sidechain
87	BY	38	DT	Sidechain
87	BY	4	DG	Sidechain
87	BY	45	DG	Sidechain
88	BZ	13	DA	Sidechain
88	BZ	14	DC	Sidechain
88	BZ	2	DT	Sidechain
88	BZ	20	DG	Sidechain
88	BZ	26	DC	Sidechain
88	BZ	3	DT	Sidechain
88	BZ	41	DC	Sidechain
88	BZ	49	DG	Sidechain
88	BZ	9	DA	Sidechain
89	Ba	13	DA	Sidechain
89	Ba	19	DA	Sidechain
89	Ba	20	DC	Sidechain
89	Ba	23	DT	Sidechain
89	Ba	27	DA	Sidechain
89	Ba	29	DC	Sidechain
89	Ba	3	DA	Sidechain
89	Ba	34	DA	Sidechain
89	Ba	35	DC	Sidechain
89	Ba	44	DG	Sidechain
89	Ba	46	DG	Sidechain
89	Ba	48	DC	Sidechain
89	Ba	49	DC	Sidechain
89	Ba	5	DT	Sidechain
89	Ba	9	DT	Sidechain
90	Bb	2	DT	Sidechain
90	Bb	21	DT	Sidechain
90	Bb	28	DT	Sidechain
90	Bb	41	DT	Sidechain

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Mol	Chain	Res	Type	Group
90	Bb	42	DT	Sidechain
90	Bb	43	DT	Sidechain
90	Bb	48	DT	Sidechain
91	Bc	10	DG	Sidechain
91	Bc	12	DC	Sidechain
91	Bc	13	DA	Sidechain
91	Bc	15	DC	Sidechain
91	Bc	16	DC	Sidechain
91	Bc	19	DC	Sidechain
91	Bc	23	DG	Sidechain
91	Bc	33	DG	Sidechain
91	Bc	34	DT	Sidechain
91	Bc	36	DG	Sidechain
91	Bc	38	DC	Sidechain
91	Bc	49	DG	Sidechain
92	Bd	15	DA	Sidechain
92	Bd	16	DT	Sidechain
92	Bd	18	DA	Sidechain
92	Bd	21	DT	Sidechain
92	Bd	34	DA	Sidechain
92	Bd	36	DG	Sidechain
92	Bd	42	DT	Sidechain
92	Bd	43	DT	Sidechain
92	Bd	5	DT	Sidechain
92	Bd	9	DT	Sidechain
93	Be	14	DT	Sidechain
93	Be	16	DT	Sidechain
93	Be	20	DA	Sidechain
93	Be	32	DG	Sidechain
93	Be	33	DT	Sidechain
93	Be	38	DA	Sidechain
93	Be	41	DA	Sidechain
93	Be	42	DG	Sidechain
93	Be	43	DG	Sidechain
93	Be	47	DG	Sidechain
93	Be	49	DT	Sidechain
93	Be	6	DT	Sidechain
93	Be	7	DC	Sidechain
94	Bf	10	DT	Sidechain
94	Bf	13	DT	Sidechain
94	Bf	2	DA	Sidechain
94	Bf	20	DC	Sidechain

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Mol	Chain	Res	Type	Group
94	Bf	24	DT	Sidechain
94	Bf	25	DC	Sidechain
94	Bf	26	DA	Sidechain
94	Bf	27	DG	Sidechain
94	Bf	33	DT	Sidechain
94	Bf	38	DA	Sidechain
94	Bf	39	DC	Sidechain
94	Bf	40	DT	Sidechain
94	Bf	45	DT	Sidechain
94	Bf	7	DG	Sidechain
95	Bg	13	DG	Sidechain
95	Bg	14	DG	Sidechain
95	Bg	16	DC	Sidechain
95	Bg	17	DC	Sidechain
95	Bg	21	DA	Sidechain
95	Bg	23	DC	Sidechain
95	Bg	25	DT	Sidechain
95	Bg	27	DA	Sidechain
95	Bg	31	DG	Sidechain
95	Bg	32	DG	Sidechain
95	Bg	33	DG	Sidechain
95	Bg	6	DA	Sidechain
96	Bh	1	DG	Sidechain
96	Bh	10	DT	Sidechain
96	Bh	24	DA	Sidechain
96	Bh	27	DA	Sidechain
96	Bh	31	DA	Sidechain
96	Bh	35	DA	Sidechain
96	Bh	36	DA	Sidechain
96	Bh	38	DT	Sidechain
96	Bh	42	DT	Sidechain
97	Bi	12	DG	Sidechain
97	Bi	16	DT	Sidechain
97	Bi	20	DA	Sidechain
97	Bi	42	DA	Sidechain
97	Bi	9	DT	Sidechain
98	Bj	10	DG	Sidechain
98	Bj	14	DA	Sidechain
98	Bj	15	DC	Sidechain
98	Bj	17	DG	Sidechain
98	Bj	19	DC	Sidechain
98	Bj	2	DG	Sidechain

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Mol	Chain	Res	Type	Group
98	Bj	23	DA	Sidechain
98	Bj	24	DT	Sidechain
98	Bj	27	DA	Sidechain
98	Bj	28	DG	Sidechain
98	Bj	33	DA	Sidechain
98	Bj	36	DT	Sidechain
98	Bj	37	DG	Sidechain
98	Bj	5	DA	Sidechain
98	Bj	7	DA	Sidechain
99	Bk	1	DC	Sidechain
99	Bk	14	DG	Sidechain
99	Bk	15	DG	Sidechain
99	Bk	2	DG	Sidechain
99	Bk	29	DC	Sidechain
99	Bk	30	DA	Sidechain
99	Bk	31	DT	Sidechain
99	Bk	33	DT	Sidechain
99	Bk	35	DG	Sidechain
100	Bl	11	DG	Sidechain
100	Bl	17	DA	Sidechain
100	Bl	24	DC	Sidechain
100	Bl	36	DG	Sidechain
100	Bl	37	DC	Sidechain
100	Bl	40	DG	Sidechain
100	Bl	42	DA	Sidechain
100	Bl	7	DT	Sidechain
100	Bl	9	DT	Sidechain
101	Bm	10	DT	Sidechain
101	Bm	11	DC	Sidechain
101	Bm	2	DA	Sidechain
101	Bm	20	DC	Sidechain
101	Bm	22	DG	Sidechain
101	Bm	29	DA	Sidechain
102	Bn	16	DC	Sidechain
102	Bn	20	DG	Sidechain
102	Bn	22	DA	Sidechain
102	Bn	25	DG	Sidechain
102	Bn	29	DA	Sidechain
102	Bn	3	DA	Sidechain
102	Bn	33	DT	Sidechain
102	Bn	34	DT	Sidechain
102	Bn	35	DC	Sidechain

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Mol	Chain	Res	Type	Group
102	Bn	40	DA	Sidechain
102	Bn	42	DA	Sidechain
103	Bo	1	DG	Sidechain
103	Bo	15	DT	Sidechain
103	Bo	16	DA	Sidechain
103	Bo	17	DA	Sidechain
103	Bo	2	DC	Sidechain
103	Bo	20	DT	Sidechain
103	Bo	21	DC	Sidechain
103	Bo	30	DT	Sidechain
103	Bo	39	DG	Sidechain
103	Bo	42	DT	Sidechain
103	Bo	5	DT	Sidechain
104	Bp	11	DC	Sidechain
104	Bp	29	DC	Sidechain
104	Bp	33	DA	Sidechain
104	Bp	39	DT	Sidechain
104	Bp	4	DG	Sidechain
104	Bp	7	DG	Sidechain
105	Bq	10	DC	Sidechain
105	Bq	14	DT	Sidechain
105	Bq	18	DT	Sidechain
105	Bq	34	DA	Sidechain
105	Bq	36	DA	Sidechain
106	Br	16	DG	Sidechain
106	Br	33	DA	Sidechain
106	Br	34	DC	Sidechain
106	Br	40	DA	Sidechain
106	Br	41	DC	Sidechain
107	Bs	17	DA	Sidechain
107	Bs	30	DA	Sidechain
107	Bs	33	DT	Sidechain
107	Bs	34	DT	Sidechain
107	Bs	37	DT	Sidechain
107	Bs	38	DC	Sidechain
107	Bs	40	DG	Sidechain
107	Bs	41	DT	Sidechain
107	Bs	9	DT	Sidechain
108	Bt	1	DC	Sidechain
108	Bt	16	DG	Sidechain
108	Bt	17	DC	Sidechain
108	Bt	29	DT	Sidechain

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Mol	Chain	Res	Type	Group
108	Bt	31	DA	Sidechain
108	Bt	38	DC	Sidechain
108	Bt	41	DT	Sidechain
108	Bt	42	DT	Sidechain
109	Bu	16	DT	Sidechain
109	Bu	17	DA	Sidechain
109	Bu	18	DT	Sidechain
109	Bu	24	DA	Sidechain
109	Bu	25	DT	Sidechain
109	Bu	28	DG	Sidechain
109	Bu	33	DA	Sidechain
109	Bu	34	DC	Sidechain
109	Bu	38	DA	Sidechain
109	Bu	40	DC	Sidechain
109	Bu	42	DT	Sidechain
110	Bv	1	DA	Sidechain
110	Bv	10	DA	Sidechain
110	Bv	16	DA	Sidechain
110	Bv	18	DC	Sidechain
110	Bv	19	DA	Sidechain
110	Bv	31	DA	Sidechain
110	Bv	33	DA	Sidechain
110	Bv	6	DG	Sidechain
111	Bw	15	DA	Sidechain
111	Bw	21	DC	Sidechain
111	Bw	25	DC	Sidechain
111	Bw	3	DT	Sidechain
111	Bw	38	DT	Sidechain
111	Bw	39	DA	Sidechain
111	Bw	41	DA	Sidechain
111	Bw	9	DT	Sidechain
112	Bx	1	DA	Sidechain
112	Bx	10	DA	Sidechain
112	Bx	12	DA	Sidechain
112	Bx	20	DG	Sidechain
112	Bx	22	DA	Sidechain
112	Bx	24	DA	Sidechain
112	Bx	25	DT	Sidechain
112	Bx	33	DT	Sidechain
112	Bx	8	DG	Sidechain
113	By	10	DT	Sidechain
113	By	11	DA	Sidechain

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Mol	Chain	Res	Type	Group
113	By	13	DA	Sidechain
113	By	38	DA	Sidechain
113	By	42	DG	Sidechain
113	By	5	DT	Sidechain
114	Bz	11	DA	Sidechain
114	Bz	16	DT	Sidechain
114	Bz	19	DT	Sidechain
114	Bz	24	DA	Sidechain
114	Bz	26	DT	Sidechain
114	Bz	29	DG	Sidechain
114	Bz	33	DG	Sidechain
114	Bz	35	DT	Sidechain
114	Bz	40	DA	Sidechain
114	Bz	7	DA	Sidechain
114	Bz	8	DC	Sidechain
177	C0	13	DG	Sidechain
177	C0	14	DC	Sidechain
177	C0	15	DC	Sidechain
177	C0	19	DT	Sidechain
177	C0	2	DT	Sidechain
177	C0	23	DT	Sidechain
177	C0	27	DT	Sidechain
177	C0	33	DG	Sidechain
178	C1	14	DT	Sidechain
178	C1	15	DT	Sidechain
178	C1	2	DA	Sidechain
178	C1	22	DA	Sidechain
178	C1	24	DT	Sidechain
178	C1	28	DA	Sidechain
178	C1	30	DA	Sidechain
178	C1	32	DC	Sidechain
178	C1	34	DA	Sidechain
178	C1	36	DA	Sidechain
178	C1	41	DA	Sidechain
179	C2	10	DT	Sidechain
179	C2	20	DT	Sidechain
179	C2	22	DA	Sidechain
179	C2	39	DG	Sidechain
179	C2	7	DG	Sidechain
180	C3	1	DC	Sidechain
180	C3	16	DC	Sidechain
180	C3	26	DG	Sidechain

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Mol	Chain	Res	Type	Group
180	C3	27	DG	Sidechain
180	C3	30	DT	Sidechain
180	C3	37	DT	Sidechain
180	C3	40	DT	Sidechain
181	C4	10	DA	Sidechain
181	C4	16	DT	Sidechain
181	C4	18	DA	Sidechain
181	C4	3	DC	Sidechain
181	C4	33	DT	Sidechain
181	C4	7	DC	Sidechain
182	C5	11	DC	Sidechain
182	C5	13	DA	Sidechain
182	C5	16	DG	Sidechain
182	C5	23	DT	Sidechain
182	C5	39	DG	Sidechain
182	C5	40	DG	Sidechain
182	C5	42	DG	Sidechain
182	C5	5	DG	Sidechain
183	C6	10	DC	Sidechain
183	C6	16	DA	Sidechain
183	C6	18	DA	Sidechain
183	C6	19	DT	Sidechain
183	C6	21	DA	Sidechain
183	C6	23	DA	Sidechain
183	C6	25	DG	Sidechain
183	C6	34	DT	Sidechain
183	C6	35	DT	Sidechain
183	C6	37	DT	Sidechain
183	C6	8	DG	Sidechain
184	C7	16	DG	Sidechain
184	C7	17	DT	Sidechain
184	C7	19	DT	Sidechain
184	C7	20	DG	Sidechain
184	C7	26	DC	Sidechain
184	C7	28	DA	Sidechain
184	C7	4	DC	Sidechain
184	C7	5	DC	Sidechain
185	C8	1	DG	Sidechain
185	C8	12	DC	Sidechain
185	C8	13	DC	Sidechain
185	C8	19	DT	Sidechain
185	C8	24	DT	Sidechain

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Mol	Chain	Res	Type	Group
185	C8	29	DT	Sidechain
185	C8	34	DC	Sidechain
185	C8	36	DA	Sidechain
185	C8	38	DC	Sidechain
185	C8	4	DG	Sidechain
185	C8	5	DC	Sidechain
185	C8	8	DG	Sidechain
186	C9	12	DG	Sidechain
186	C9	13	DT	Sidechain
186	C9	14	DT	Sidechain
186	C9	18	DG	Sidechain
186	C9	19	DC	Sidechain
186	C9	20	DT	Sidechain
186	C9	21	DT	Sidechain
186	C9	22	DG	Sidechain
186	C9	26	DG	Sidechain
186	C9	34	DT	Sidechain
186	C9	38	DT	Sidechain
125	CA	16	DA	Sidechain
125	CA	21	DT	Sidechain
125	CA	24	DG	Sidechain
125	CA	25	DT	Sidechain
125	CA	29	DT	Sidechain
125	CA	3	DT	Sidechain
125	CA	30	DA	Sidechain
125	CA	31	DT	Sidechain
125	CA	6	DT	Sidechain
125	CA	9	DT	Sidechain
126	CB	1	DT	Sidechain
126	CB	10	DT	Sidechain
126	CB	18	DG	Sidechain
126	CB	19	DT	Sidechain
126	CB	24	DT	Sidechain
126	CB	25	DT	Sidechain
126	CB	26	DT	Sidechain
126	CB	3	DT	Sidechain
126	CB	40	DT	Sidechain
126	CB	6	DT	Sidechain
126	CB	9	DG	Sidechain
127	CC	10	DA	Sidechain
127	CC	17	DA	Sidechain
127	CC	19	DA	Sidechain

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Mol	Chain	Res	Type	Group
127	CC	21	DC	Sidechain
127	CC	24	DA	Sidechain
127	CC	34	DA	Sidechain
127	CC	36	DC	Sidechain
127	CC	37	DT	Sidechain
127	CC	38	DG	Sidechain
127	CC	5	DA	Sidechain
127	CC	7	DG	Sidechain
128	CD	10	DC	Sidechain
128	CD	15	DA	Sidechain
128	CD	19	DG	Sidechain
128	CD	29	DG	Sidechain
128	CD	30	DT	Sidechain
128	CD	34	DT	Sidechain
128	CD	38	DT	Sidechain
128	CD	4	DA	Sidechain
128	CD	5	DC	Sidechain
128	CD	6	DC	Sidechain
128	CD	8	DC	Sidechain
129	CE	12	DC	Sidechain
129	CE	13	DC	Sidechain
129	CE	14	DT	Sidechain
129	CE	21	DG	Sidechain
129	CE	28	DA	Sidechain
129	CE	35	DT	Sidechain
129	CE	37	DC	Sidechain
129	CE	41	DT	Sidechain
129	CE	7	DT	Sidechain
130	CF	25	DA	Sidechain
130	CF	28	DA	Sidechain
130	CF	38	DT	Sidechain
130	CF	5	DT	Sidechain
131	CG	1	DC	Sidechain
131	CG	12	DG	Sidechain
131	CG	15	DT	Sidechain
131	CG	16	DC	Sidechain
131	CG	17	DT	Sidechain
131	CG	2	DA	Sidechain
131	CG	26	DT	Sidechain
131	CG	29	DT	Sidechain
131	CG	31	DC	Sidechain
131	CG	33	DC	Sidechain

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Mol	Chain	Res	Type	Group
131	CG	34	DT	Sidechain
132	CH	16	DG	Sidechain
132	CH	17	DA	Sidechain
132	CH	20	DA	Sidechain
132	CH	33	DG	Sidechain
132	CH	40	DG	Sidechain
132	CH	7	DG	Sidechain
133	CI	13	DA	Sidechain
133	CI	22	DA	Sidechain
133	CI	24	DT	Sidechain
133	CI	28	DG	Sidechain
133	CI	34	DT	Sidechain
133	CI	37	DG	Sidechain
133	CI	42	DC	Sidechain
133	CI	6	DG	Sidechain
134	CJ	14	DA	Sidechain
134	CJ	16	DG	Sidechain
134	CJ	18	DC	Sidechain
134	CJ	21	DT	Sidechain
134	CJ	28	DT	Sidechain
134	CJ	30	DG	Sidechain
134	CJ	38	DT	Sidechain
134	CJ	42	DT	Sidechain
134	CJ	8	DT	Sidechain
134	CJ	9	DT	Sidechain
135	CK	10	DG	Sidechain
135	CK	14	DT	Sidechain
135	CK	16	DG	Sidechain
135	CK	2	DT	Sidechain
135	CK	23	DC	Sidechain
135	CK	28	DG	Sidechain
135	CK	29	DC	Sidechain
135	CK	32	DT	Sidechain
135	CK	6	DT	Sidechain
135	CK	8	DT	Sidechain
136	CL	1	DA	Sidechain
136	CL	16	DT	Sidechain
136	CL	17	DA	Sidechain
136	CL	2	DT	Sidechain
136	CL	20	DA	Sidechain
136	CL	22	DG	Sidechain
136	CL	23	DA	Sidechain

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Mol	Chain	Res	Type	Group
136	CL	35	DT	Sidechain
136	CL	38	DA	Sidechain
136	CL	39	DT	Sidechain
136	CL	42	DC	Sidechain
137	CM	12	DA	Sidechain
137	CM	16	DG	Sidechain
137	CM	18	DT	Sidechain
137	CM	27	DG	Sidechain
137	CM	28	DC	Sidechain
137	CM	3	DG	Sidechain
137	CM	31	DA	Sidechain
137	CM	35	DA	Sidechain
137	CM	5	DT	Sidechain
137	CM	8	DA	Sidechain
138	CN	10	DT	Sidechain
138	CN	18	DG	Sidechain
138	CN	2	DT	Sidechain
138	CN	20	DC	Sidechain
138	CN	34	DT	Sidechain
138	CN	6	DT	Sidechain
139	CO	14	DG	Sidechain
139	CO	2	DG	Sidechain
139	CO	31	DT	Sidechain
139	CO	34	DG	Sidechain
139	CO	36	DA	Sidechain
139	CO	6	DC	Sidechain
139	CO	8	DC	Sidechain
140	CP	19	DT	Sidechain
140	CP	27	DT	Sidechain
140	CP	30	DC	Sidechain
140	CP	38	DC	Sidechain
140	CP	6	DA	Sidechain
141	CQ	1	DG	Sidechain
141	CQ	2	DA	Sidechain
141	CQ	20	DG	Sidechain
141	CQ	21	DT	Sidechain
141	CQ	23	DG	Sidechain
141	CQ	25	DG	Sidechain
141	CQ	27	DT	Sidechain
141	CQ	28	DT	Sidechain
141	CQ	31	DC	Sidechain
141	CQ	4	DA	Sidechain

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Mol	Chain	Res	Type	Group
141	CQ	42	DT	Sidechain
141	CQ	6	DT	Sidechain
141	CQ	7	DC	Sidechain
142	CR	13	DA	Sidechain
142	CR	24	DC	Sidechain
142	CR	35	DT	Sidechain
142	CR	4	DC	Sidechain
142	CR	8	DA	Sidechain
143	CS	10	DA	Sidechain
143	CS	19	DT	Sidechain
143	CS	21	DC	Sidechain
143	CS	23	DA	Sidechain
143	CS	24	DC	Sidechain
143	CS	28	DA	Sidechain
143	CS	34	DA	Sidechain
143	CS	39	DT	Sidechain
143	CS	4	DA	Sidechain
143	CS	6	DT	Sidechain
144	CT	11	DG	Sidechain
144	CT	13	DA	Sidechain
144	CT	14	DG	Sidechain
144	CT	19	DC	Sidechain
144	CT	20	DT	Sidechain
144	CT	24	DT	Sidechain
144	CT	30	DG	Sidechain
144	CT	33	DA	Sidechain
144	CT	34	DT	Sidechain
144	CT	38	DT	Sidechain
144	CT	4	DG	Sidechain
144	CT	40	DT	Sidechain
145	CU	11	DT	Sidechain
145	CU	12	DA	Sidechain
145	CU	19	DG	Sidechain
145	CU	23	DT	Sidechain
145	CU	24	DT	Sidechain
145	CU	26	DA	Sidechain
145	CU	29	DG	Sidechain
145	CU	3	DT	Sidechain
145	CU	35	DA	Sidechain
145	CU	36	DT	Sidechain
145	CU	40	DC	Sidechain
145	CU	41	DC	Sidechain

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Mol	Chain	Res	Type	Group
146	CV	10	DG	Sidechain
146	CV	21	DT	Sidechain
146	CV	23	DC	Sidechain
146	CV	3	DT	Sidechain
146	CV	37	DT	Sidechain
146	CV	41	DT	Sidechain
146	CV	42	DT	Sidechain
147	CW	10	DA	Sidechain
147	CW	16	DA	Sidechain
147	CW	19	DG	Sidechain
147	CW	2	DT	Sidechain
147	CW	21	DG	Sidechain
147	CW	22	DA	Sidechain
147	CW	23	DG	Sidechain
147	CW	27	DT	Sidechain
147	CW	34	DA	Sidechain
147	CW	37	DT	Sidechain
147	CW	5	DT	Sidechain
147	CW	6	DT	Sidechain
147	CW	7	DT	Sidechain
148	CX	1	DA	Sidechain
148	CX	10	DA	Sidechain
148	CX	12	DG	Sidechain
148	CX	16	DA	Sidechain
148	CX	24	DG	Sidechain
148	CX	29	DG	Sidechain
148	CX	3	DC	Sidechain
148	CX	4	DG	Sidechain
148	CX	7	DA	Sidechain
149	CY	19	DT	Sidechain
149	CY	26	DG	Sidechain
149	CY	3	DT	Sidechain
149	CY	34	DT	Sidechain
149	CY	7	DT	Sidechain
150	CZ	1	DT	Sidechain
150	CZ	24	DC	Sidechain
150	CZ	29	DT	Sidechain
150	CZ	3	DC	Sidechain
150	CZ	4	DA	Sidechain
150	CZ	6	DC	Sidechain
151	Ca	1	DT	Sidechain
151	Ca	11	DC	Sidechain

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Mol	Chain	Res	Type	Group
151	Ca	17	DG	Sidechain
151	Ca	20	DA	Sidechain
151	Ca	40	DC	Sidechain
151	Ca	5	DT	Sidechain
151	Ca	7	DT	Sidechain
152	Cb	11	DA	Sidechain
152	Cb	12	DC	Sidechain
152	Cb	14	DG	Sidechain
152	Cb	17	DC	Sidechain
152	Cb	23	DA	Sidechain
152	Cb	24	DT	Sidechain
152	Cb	26	DA	Sidechain
152	Cb	27	DT	Sidechain
152	Cb	3	DG	Sidechain
152	Cb	39	DC	Sidechain
153	Cc	1	DT	Sidechain
153	Cc	2	DC	Sidechain
153	Cc	20	DT	Sidechain
153	Cc	21	DT	Sidechain
153	Cc	26	DA	Sidechain
153	Cc	32	DG	Sidechain
153	Cc	36	DA	Sidechain
153	Cc	9	DC	Sidechain
154	Cd	1	DA	Sidechain
154	Cd	12	DT	Sidechain
154	Cd	21	DC	Sidechain
154	Cd	23	DG	Sidechain
154	Cd	25	DA	Sidechain
154	Cd	29	DA	Sidechain
154	Cd	33	DT	Sidechain
154	Cd	34	DT	Sidechain
154	Cd	35	DG	Sidechain
154	Cd	38	DG	Sidechain
154	Cd	39	DG	Sidechain
154	Cd	42	DG	Sidechain
155	Ce	1	DA	Sidechain
155	Ce	15	DC	Sidechain
155	Ce	2	DG	Sidechain
155	Ce	20	DC	Sidechain
155	Ce	23	DT	Sidechain
155	Ce	29	DG	Sidechain
155	Ce	3	DC	Sidechain

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Mol	Chain	Res	Type	Group
155	Ce	33	DG	Sidechain
155	Ce	35	DG	Sidechain
155	Ce	36	DT	Sidechain
155	Ce	42	DA	Sidechain
155	Ce	5	DA	Sidechain
155	Ce	6	DC	Sidechain
155	Ce	8	DA	Sidechain
156	Cf	14	DG	Sidechain
156	Cf	18	DT	Sidechain
156	Cf	3	DC	Sidechain
156	Cf	32	DC	Sidechain
156	Cf	39	DT	Sidechain
156	Cf	8	DA	Sidechain
157	Cg	1	DT	Sidechain
157	Cg	13	DT	Sidechain
157	Cg	16	DC	Sidechain
157	Cg	18	DA	Sidechain
157	Cg	25	DT	Sidechain
157	Cg	26	DT	Sidechain
157	Cg	29	DC	Sidechain
157	Cg	3	DA	Sidechain
157	Cg	30	DT	Sidechain
157	Cg	36	DT	Sidechain
157	Cg	37	DT	Sidechain
157	Cg	38	DG	Sidechain
157	Cg	41	DT	Sidechain
158	Ch	1	DC	Sidechain
158	Ch	18	DA	Sidechain
158	Ch	20	DT	Sidechain
158	Ch	27	DA	Sidechain
158	Ch	28	DG	Sidechain
158	Ch	29	DG	Sidechain
158	Ch	33	DA	Sidechain
158	Ch	37	DA	Sidechain
158	Ch	5	DT	Sidechain
159	Ci	1	DA	Sidechain
159	Ci	12	DT	Sidechain
159	Ci	2	DG	Sidechain
159	Ci	21	DC	Sidechain
159	Ci	22	DG	Sidechain
159	Ci	23	DA	Sidechain
159	Ci	25	DC	Sidechain

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Mol	Chain	Res	Type	Group
159	Ci	27	DT	Sidechain
159	Ci	33	DA	Sidechain
159	Ci	34	DC	Sidechain
159	Ci	36	DT	Sidechain
159	Ci	37	DA	Sidechain
159	Ci	4	DA	Sidechain
159	Ci	8	DC	Sidechain
160	Cj	15	DC	Sidechain
160	Cj	17	DT	Sidechain
160	Cj	2	DA	Sidechain
160	Cj	20	DC	Sidechain
160	Cj	22	DA	Sidechain
160	Cj	23	DG	Sidechain
160	Cj	26	DA	Sidechain
160	Cj	31	DA	Sidechain
160	Cj	6	DT	Sidechain
161	Ck	17	DG	Sidechain
161	Ck	18	DG	Sidechain
161	Ck	20	DA	Sidechain
161	Ck	21	DC	Sidechain
161	Ck	25	DT	Sidechain
161	Ck	32	DA	Sidechain
161	Ck	33	DT	Sidechain
161	Ck	40	DT	Sidechain
161	Ck	42	DC	Sidechain
161	Ck	5	DT	Sidechain
162	Cl	1	DC	Sidechain
162	Cl	12	DT	Sidechain
162	Cl	15	DT	Sidechain
162	Cl	18	DG	Sidechain
162	Cl	22	DG	Sidechain
162	Cl	23	DG	Sidechain
162	Cl	26	DG	Sidechain
162	Cl	27	DC	Sidechain
162	Cl	32	DA	Sidechain
162	Cl	40	DG	Sidechain
162	Cl	6	DA	Sidechain
162	Cl	7	DA	Sidechain
162	Cl	8	DG	Sidechain
162	Cl	9	DG	Sidechain
163	Cm	12	DT	Sidechain
163	Cm	19	DG	Sidechain

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Mol	Chain	Res	Type	Group
163	Cm	2	DC	Sidechain
163	Cm	22	DG	Sidechain
163	Cm	33	DA	Sidechain
163	Cm	38	DT	Sidechain
163	Cm	39	DT	Sidechain
163	Cm	4	DA	Sidechain
163	Cm	5	DT	Sidechain
163	Cm	6	DG	Sidechain
163	Cm	7	DG	Sidechain
163	Cm	8	DT	Sidechain
164	Cn	15	DC	Sidechain
164	Cn	19	DT	Sidechain
164	Cn	2	DG	Sidechain
164	Cn	28	DT	Sidechain
164	Cn	31	DT	Sidechain
164	Cn	36	DG	Sidechain
164	Cn	37	DC	Sidechain
164	Cn	7	DT	Sidechain
165	Co	13	DA	Sidechain
165	Co	16	DG	Sidechain
165	Co	17	DG	Sidechain
165	Co	19	DA	Sidechain
165	Co	2	DT	Sidechain
165	Co	20	DA	Sidechain
165	Co	21	DA	Sidechain
165	Co	25	DG	Sidechain
165	Co	27	DA	Sidechain
165	Co	31	DA	Sidechain
165	Co	34	DG	Sidechain
165	Co	40	DT	Sidechain
165	Co	42	DT	Sidechain
165	Co	6	DG	Sidechain
166	Cp	10	DG	Sidechain
166	Cp	17	DC	Sidechain
166	Cp	27	DG	Sidechain
166	Cp	29	DG	Sidechain
166	Cp	37	DG	Sidechain
166	Cp	38	DC	Sidechain
166	Cp	42	DA	Sidechain
166	Cp	7	DC	Sidechain
167	Cq	1	DA	Sidechain
167	Cq	12	DG	Sidechain

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Mol	Chain	Res	Type	Group
167	Cq	13	DT	Sidechain
167	Cq	14	DA	Sidechain
167	Cq	17	DA	Sidechain
167	Cq	18	DG	Sidechain
167	Cq	19	DG	Sidechain
167	Cq	23	DG	Sidechain
167	Cq	26	DT	Sidechain
167	Cq	27	DT	Sidechain
167	Cq	30	DC	Sidechain
167	Cq	32	DG	Sidechain
167	Cq	4	DT	Sidechain
167	Cq	42	DT	Sidechain
167	Cq	7	DA	Sidechain
168	Cr	18	DT	Sidechain
168	Cr	22	DA	Sidechain
168	Cr	23	DA	Sidechain
168	Cr	28	DT	Sidechain
168	Cr	42	DT	Sidechain
169	Cs	10	DT	Sidechain
169	Cs	12	DG	Sidechain
169	Cs	15	DA	Sidechain
169	Cs	16	DA	Sidechain
169	Cs	21	DG	Sidechain
169	Cs	22	DG	Sidechain
169	Cs	27	DT	Sidechain
169	Cs	29	DT	Sidechain
169	Cs	31	DA	Sidechain
169	Cs	41	DA	Sidechain
169	Cs	6	DG	Sidechain
170	Ct	11	DA	Sidechain
170	Ct	15	DA	Sidechain
170	Ct	19	DA	Sidechain
170	Ct	21	DG	Sidechain
170	Ct	29	DA	Sidechain
170	Ct	40	DA	Sidechain
170	Ct	41	DA	Sidechain
170	Ct	42	DC	Sidechain
170	Ct	6	DG	Sidechain
170	Ct	8	DA	Sidechain
171	Cu	18	DC	Sidechain
171	Cu	19	DT	Sidechain
171	Cu	27	DT	Sidechain

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Mol	Chain	Res	Type	Group
171	Cu	30	DT	Sidechain
171	Cu	32	DA	Sidechain
171	Cu	37	DT	Sidechain
171	Cu	39	DA	Sidechain
171	Cu	4	DA	Sidechain
171	Cu	40	DA	Sidechain
171	Cu	41	DC	Sidechain
171	Cu	5	DG	Sidechain
172	Cv	12	DC	Sidechain
172	Cv	13	DC	Sidechain
172	Cv	18	DT	Sidechain
172	Cv	21	DT	Sidechain
172	Cv	24	DG	Sidechain
172	Cv	25	DT	Sidechain
172	Cv	33	DT	Sidechain
172	Cv	5	DT	Sidechain
173	Cw	2	DC	Sidechain
173	Cw	22	DT	Sidechain
173	Cw	40	DG	Sidechain
174	Cx	20	DG	Sidechain
174	Cx	23	DG	Sidechain
174	Cx	3	DT	Sidechain
174	Cx	33	DG	Sidechain
174	Cx	40	DG	Sidechain
174	Cx	41	DC	Sidechain
175	Cy	26	DC	Sidechain
175	Cy	27	DA	Sidechain
175	Cy	34	DT	Sidechain
175	Cy	4	DA	Sidechain
175	Cy	8	DG	Sidechain
176	Cz	11	DG	Sidechain
176	Cz	15	DT	Sidechain
176	Cz	16	DT	Sidechain
176	Cz	18	DC	Sidechain
176	Cz	19	DT	Sidechain
176	Cz	32	DC	Sidechain
176	Cz	34	DC	Sidechain
176	Cz	35	DT	Sidechain
176	Cz	42	DT	Sidechain
176	Cz	5	DT	Sidechain
239	D0	1	DT	Sidechain
239	D0	10	DC	Sidechain

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Mol	Chain	Res	Type	Group
239	D0	14	DC	Sidechain
239	D0	31	DG	Sidechain
239	D0	32	DG	Sidechain
239	D0	36	DG	Sidechain
239	D0	42	DC	Sidechain
239	D0	7	DG	Sidechain
240	D1	13	DG	Sidechain
240	D1	14	DG	Sidechain
240	D1	15	DT	Sidechain
240	D1	17	DG	Sidechain
240	D1	19	DA	Sidechain
240	D1	21	DG	Sidechain
240	D1	24	DT	Sidechain
240	D1	40	DA	Sidechain
240	D1	42	DC	Sidechain
240	D1	7	DT	Sidechain
241	D2	12	DA	Sidechain
241	D2	18	DT	Sidechain
241	D2	40	DG	Sidechain
241	D2	41	DA	Sidechain
242	D3	12	DG	Sidechain
242	D3	14	DG	Sidechain
242	D3	17	DC	Sidechain
242	D3	3	DG	Sidechain
242	D3	34	DT	Sidechain
242	D3	36	DA	Sidechain
242	D3	5	DA	Sidechain
243	D4	1	DC	Sidechain
243	D4	14	DT	Sidechain
243	D4	17	DT	Sidechain
243	D4	22	DA	Sidechain
243	D4	24	DA	Sidechain
243	D4	26	DA	Sidechain
243	D4	31	DG	Sidechain
243	D4	4	DG	Sidechain
243	D4	9	DC	Sidechain
244	D5	1	DG	Sidechain
244	D5	11	DA	Sidechain
244	D5	15	DA	Sidechain
244	D5	2	DA	Sidechain
244	D5	20	DG	Sidechain
244	D5	22	DG	Sidechain

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Mol	Chain	Res	Type	Group
244	D5	23	DG	Sidechain
244	D5	24	DC	Sidechain
244	D5	25	DA	Sidechain
244	D5	27	DT	Sidechain
244	D5	33	DG	Sidechain
244	D5	37	DC	Sidechain
244	D5	41	DG	Sidechain
244	D5	7	DC	Sidechain
244	D5	9	DC	Sidechain
245	D6	17	DC	Sidechain
245	D6	29	DC	Sidechain
245	D6	33	DT	Sidechain
245	D6	37	DT	Sidechain
245	D6	39	DT	Sidechain
245	D6	6	DT	Sidechain
246	D7	2	DT	Sidechain
246	D7	24	DA	Sidechain
246	D7	30	DG	Sidechain
246	D7	31	DG	Sidechain
246	D7	38	DT	Sidechain
247	D8	13	DC	Sidechain
247	D8	14	DT	Sidechain
247	D8	15	DT	Sidechain
247	D8	19	DG	Sidechain
247	D8	2	DA	Sidechain
247	D8	20	DT	Sidechain
247	D8	25	DA	Sidechain
247	D8	28	DG	Sidechain
247	D8	29	DT	Sidechain
247	D8	31	DT	Sidechain
247	D8	32	DT	Sidechain
247	D8	34	DT	Sidechain
247	D8	5	DA	Sidechain
248	D9	12	DT	Sidechain
248	D9	15	DT	Sidechain
248	D9	17	DC	Sidechain
248	D9	19	DG	Sidechain
248	D9	20	DA	Sidechain
248	D9	23	DG	Sidechain
248	D9	3	DT	Sidechain
248	D9	31	DT	Sidechain
248	D9	35	DT	Sidechain

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Mol	Chain	Res	Type	Group
248	D9	5	DT	Sidechain
248	D9	9	DT	Sidechain
187	DA	13	DA	Sidechain
187	DA	15	DC	Sidechain
187	DA	23	DG	Sidechain
187	DA	3	DC	Sidechain
187	DA	36	DA	Sidechain
187	DA	40	DC	Sidechain
187	DA	7	DA	Sidechain
188	DB	1	DG	Sidechain
188	DB	13	DG	Sidechain
188	DB	14	DC	Sidechain
188	DB	16	DC	Sidechain
188	DB	23	DA	Sidechain
188	DB	30	DG	Sidechain
188	DB	31	DG	Sidechain
188	DB	33	DT	Sidechain
188	DB	34	DT	Sidechain
188	DB	35	DA	Sidechain
188	DB	36	DT	Sidechain
188	DB	37	DA	Sidechain
188	DB	4	DA	Sidechain
188	DB	5	DC	Sidechain
188	DB	6	DA	Sidechain
189	DC	16	DC	Sidechain
189	DC	19	DA	Sidechain
189	DC	2	DT	Sidechain
189	DC	23	DT	Sidechain
189	DC	30	DC	Sidechain
189	DC	4	DT	Sidechain
189	DC	9	DT	Sidechain
190	DD	19	DC	Sidechain
190	DD	20	DT	Sidechain
190	DD	3	DA	Sidechain
190	DD	35	DT	Sidechain
190	DD	36	DG	Sidechain
190	DD	42	DT	Sidechain
190	DD	7	DA	Sidechain
191	DE	10	DT	Sidechain
191	DE	11	DT	Sidechain
191	DE	12	DG	Sidechain
191	DE	14	DT	Sidechain

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Mol	Chain	Res	Type	Group
191	DE	37	DG	Sidechain
191	DE	38	DC	Sidechain
191	DE	40	DT	Sidechain
191	DE	42	DA	Sidechain
192	DF	14	DT	Sidechain
192	DF	15	DG	Sidechain
192	DF	26	DA	Sidechain
192	DF	30	DG	Sidechain
192	DF	32	DG	Sidechain
192	DF	33	DA	Sidechain
192	DF	34	DG	Sidechain
192	DF	39	DA	Sidechain
192	DF	4	DA	Sidechain
192	DF	40	DT	Sidechain
192	DF	42	DA	Sidechain
192	DF	6	DC	Sidechain
193	DG	10	DA	Sidechain
193	DG	15	DT	Sidechain
193	DG	20	DT	Sidechain
193	DG	22	DG	Sidechain
193	DG	25	DA	Sidechain
193	DG	27	DC	Sidechain
193	DG	32	DC	Sidechain
193	DG	4	DT	Sidechain
193	DG	40	DA	Sidechain
193	DG	42	DA	Sidechain
194	DH	11	DT	Sidechain
194	DH	12	DA	Sidechain
194	DH	23	DT	Sidechain
194	DH	35	DC	Sidechain
194	DH	7	DG	Sidechain
194	DH	8	DC	Sidechain
195	DI	1	DA	Sidechain
195	DI	12	DA	Sidechain
195	DI	13	DT	Sidechain
195	DI	17	DT	Sidechain
195	DI	18	DT	Sidechain
195	DI	29	DA	Sidechain
195	DI	30	DT	Sidechain
195	DI	31	DC	Sidechain
195	DI	34	DG	Sidechain
195	DI	38	DG	Sidechain

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Mol	Chain	Res	Type	Group
195	DI	5	DT	Sidechain
196	DJ	1	DG	Sidechain
196	DJ	2	DC	Sidechain
196	DJ	20	DT	Sidechain
196	DJ	22	DA	Sidechain
196	DJ	27	DC	Sidechain
196	DJ	3	DT	Sidechain
196	DJ	42	DC	Sidechain
196	DJ	5	DA	Sidechain
197	DK	10	DG	Sidechain
197	DK	2	DG	Sidechain
197	DK	20	DT	Sidechain
197	DK	29	DA	Sidechain
197	DK	30	DA	Sidechain
197	DK	34	DC	Sidechain
197	DK	36	DA	Sidechain
197	DK	9	DG	Sidechain
198	DL	12	DC	Sidechain
198	DL	13	DT	Sidechain
198	DL	17	DA	Sidechain
198	DL	18	DT	Sidechain
198	DL	23	DT	Sidechain
198	DL	25	DG	Sidechain
198	DL	30	DA	Sidechain
198	DL	32	DT	Sidechain
198	DL	34	DC	Sidechain
198	DL	38	DT	Sidechain
198	DL	39	DT	Sidechain
198	DL	4	DT	Sidechain
198	DL	40	DA	Sidechain
198	DL	6	DA	Sidechain
198	DL	8	DT	Sidechain
199	DM	10	DT	Sidechain
199	DM	12	DG	Sidechain
199	DM	13	DC	Sidechain
199	DM	17	DA	Sidechain
199	DM	19	DA	Sidechain
199	DM	25	DA	Sidechain
199	DM	28	DT	Sidechain
199	DM	3	DG	Sidechain
199	DM	30	DT	Sidechain
199	DM	33	DC	Sidechain

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Mol	Chain	Res	Type	Group
199	DM	36	DA	Sidechain
199	DM	37	DC	Sidechain
199	DM	4	DA	Sidechain
200	DN	14	DC	Sidechain
200	DN	15	DA	Sidechain
200	DN	16	DC	Sidechain
200	DN	18	DC	Sidechain
200	DN	21	DT	Sidechain
200	DN	22	DA	Sidechain
200	DN	28	DT	Sidechain
200	DN	29	DC	Sidechain
200	DN	35	DA	Sidechain
200	DN	38	DG	Sidechain
200	DN	39	DG	Sidechain
200	DN	5	DT	Sidechain
200	DN	8	DG	Sidechain
200	DN	9	DT	Sidechain
201	DO	10	DC	Sidechain
201	DO	15	DA	Sidechain
201	DO	3	DG	Sidechain
201	DO	39	DT	Sidechain
201	DO	4	DC	Sidechain
202	DP	2	DT	Sidechain
202	DP	3	DA	Sidechain
202	DP	34	DC	Sidechain
202	DP	35	DC	Sidechain
202	DP	38	DA	Sidechain
203	DQ	1	DT	Sidechain
203	DQ	12	DT	Sidechain
203	DQ	13	DT	Sidechain
203	DQ	17	DT	Sidechain
203	DQ	19	DA	Sidechain
203	DQ	33	DC	Sidechain
203	DQ	39	DC	Sidechain
203	DQ	40	DT	Sidechain
203	DQ	8	DG	Sidechain
204	DR	14	DC	Sidechain
204	DR	15	DT	Sidechain
204	DR	17	DT	Sidechain
204	DR	21	DT	Sidechain
204	DR	25	DT	Sidechain
204	DR	26	DG	Sidechain

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Mol	Chain	Res	Type	Group
204	DR	28	DA	Sidechain
204	DR	29	DT	Sidechain
204	DR	30	DT	Sidechain
204	DR	32	DA	Sidechain
204	DR	33	DG	Sidechain
204	DR	39	DT	Sidechain
204	DR	7	DG	Sidechain
204	DR	8	DG	Sidechain
205	DS	1	DC	Sidechain
205	DS	10	DG	Sidechain
205	DS	11	DT	Sidechain
205	DS	14	DT	Sidechain
205	DS	20	DG	Sidechain
205	DS	22	DT	Sidechain
205	DS	30	DT	Sidechain
205	DS	37	DA	Sidechain
205	DS	39	DT	Sidechain
205	DS	6	DG	Sidechain
206	DT	11	DC	Sidechain
206	DT	14	DC	Sidechain
206	DT	17	DT	Sidechain
206	DT	23	DC	Sidechain
206	DT	26	DT	Sidechain
206	DT	27	DC	Sidechain
206	DT	29	DT	Sidechain
206	DT	30	DC	Sidechain
206	DT	32	DG	Sidechain
206	DT	33	DA	Sidechain
206	DT	39	DA	Sidechain
206	DT	4	DC	Sidechain
206	DT	6	DA	Sidechain
206	DT	8	DA	Sidechain
206	DT	9	DG	Sidechain
207	DU	13	DT	Sidechain
207	DU	24	DT	Sidechain
207	DU	26	DA	Sidechain
207	DU	28	DC	Sidechain
207	DU	30	DA	Sidechain
207	DU	34	DC	Sidechain
207	DU	36	DT	Sidechain
208	DV	1	DA	Sidechain
208	DV	13	DA	Sidechain

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Mol	Chain	Res	Type	Group
208	DV	14	DT	Sidechain
208	DV	15	DC	Sidechain
208	DV	18	DA	Sidechain
208	DV	20	DT	Sidechain
208	DV	23	DG	Sidechain
208	DV	28	DC	Sidechain
208	DV	31	DA	Sidechain
208	DV	32	DC	Sidechain
208	DV	33	DT	Sidechain
208	DV	37	DC	Sidechain
208	DV	38	DT	Sidechain
208	DV	4	DT	Sidechain
208	DV	9	DG	Sidechain
209	DW	12	DC	Sidechain
209	DW	14	DA	Sidechain
209	DW	16	DA	Sidechain
209	DW	21	DG	Sidechain
209	DW	27	DT	Sidechain
209	DW	32	DA	Sidechain
209	DW	33	DG	Sidechain
209	DW	5	DA	Sidechain
210	DX	13	DG	Sidechain
210	DX	15	DG	Sidechain
210	DX	16	DG	Sidechain
210	DX	17	DC	Sidechain
210	DX	18	DT	Sidechain
210	DX	19	DT	Sidechain
210	DX	20	DT	Sidechain
210	DX	27	DA	Sidechain
210	DX	31	DT	Sidechain
210	DX	38	DT	Sidechain
210	DX	42	DA	Sidechain
211	DY	13	DT	Sidechain
211	DY	15	DA	Sidechain
211	DY	19	DT	Sidechain
211	DY	28	DA	Sidechain
211	DY	29	DT	Sidechain
211	DY	34	DT	Sidechain
211	DY	5	DA	Sidechain
212	DZ	1	DT	Sidechain
212	DZ	12	DT	Sidechain
212	DZ	22	DT	Sidechain

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Mol	Chain	Res	Type	Group
212	DZ	28	DT	Sidechain
213	Da	13	DC	Sidechain
213	Da	14	DT	Sidechain
213	Da	15	DA	Sidechain
213	Da	17	DC	Sidechain
213	Da	19	DA	Sidechain
213	Da	20	DC	Sidechain
213	Da	25	DG	Sidechain
213	Da	28	DG	Sidechain
213	Da	32	DT	Sidechain
213	Da	33	DC	Sidechain
213	Da	37	DG	Sidechain
213	Da	38	DC	Sidechain
213	Da	4	DA	Sidechain
213	Da	40	DT	Sidechain
213	Da	8	DA	Sidechain
214	Db	21	DT	Sidechain
214	Db	27	DC	Sidechain
214	Db	28	DC	Sidechain
214	Db	9	DT	Sidechain
215	Dc	1	DT	Sidechain
215	Dc	12	DG	Sidechain
215	Dc	19	DG	Sidechain
215	Dc	21	DC	Sidechain
215	Dc	26	DA	Sidechain
215	Dc	27	DG	Sidechain
215	Dc	32	DC	Sidechain
215	Dc	34	DA	Sidechain
215	Dc	40	DT	Sidechain
215	Dc	5	DA	Sidechain
216	Dd	30	DT	Sidechain
216	Dd	31	DA	Sidechain
216	Dd	36	DC	Sidechain
216	Dd	37	DC	Sidechain
216	Dd	5	DC	Sidechain
217	De	10	DC	Sidechain
217	De	18	DA	Sidechain
217	De	19	DG	Sidechain
217	De	23	DG	Sidechain
217	De	25	DT	Sidechain
217	De	30	DT	Sidechain
217	De	32	DG	Sidechain

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Mol	Chain	Res	Type	Group
217	De	35	DT	Sidechain
217	De	41	DC	Sidechain
217	De	5	DA	Sidechain
217	De	6	DC	Sidechain
217	De	8	DC	Sidechain
217	De	9	DC	Sidechain
218	Df	12	DG	Sidechain
218	Df	14	DA	Sidechain
218	Df	19	DT	Sidechain
218	Df	24	DT	Sidechain
218	Df	29	DA	Sidechain
218	Df	3	DA	Sidechain
219	Dg	10	DA	Sidechain
219	Dg	14	DT	Sidechain
219	Dg	20	DC	Sidechain
219	Dg	22	DA	Sidechain
219	Dg	26	DA	Sidechain
219	Dg	31	DT	Sidechain
219	Dg	39	DT	Sidechain
219	Dg	4	DT	Sidechain
219	Dg	7	DG	Sidechain
220	Dh	10	DG	Sidechain
220	Dh	11	DG	Sidechain
220	Dh	17	DC	Sidechain
220	Dh	22	DT	Sidechain
220	Dh	41	DG	Sidechain
220	Dh	42	DC	Sidechain
220	Dh	8	DT	Sidechain
221	Di	1	DA	Sidechain
221	Di	10	DC	Sidechain
221	Di	16	DT	Sidechain
221	Di	18	DT	Sidechain
221	Di	19	DC	Sidechain
221	Di	20	DC	Sidechain
221	Di	22	DA	Sidechain
221	Di	23	DA	Sidechain
221	Di	26	DC	Sidechain
221	Di	27	DA	Sidechain
221	Di	28	DC	Sidechain
221	Di	33	DT	Sidechain
221	Di	35	DT	Sidechain
221	Di	37	DC	Sidechain

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Mol	Chain	Res	Type	Group
221	Di	5	DA	Sidechain
221	Di	8	DT	Sidechain
221	Di	9	DA	Sidechain
222	Dj	16	DG	Sidechain
222	Dj	17	DC	Sidechain
222	Dj	20	DA	Sidechain
222	Dj	21	DA	Sidechain
222	Dj	26	DG	Sidechain
222	Dj	29	DA	Sidechain
222	Dj	3	DT	Sidechain
222	Dj	31	DG	Sidechain
222	Dj	36	DC	Sidechain
222	Dj	38	DA	Sidechain
223	Dk	1	DC	Sidechain
223	Dk	10	DA	Sidechain
223	Dk	15	DA	Sidechain
223	Dk	18	DT	Sidechain
223	Dk	2	DT	Sidechain
223	Dk	34	DT	Sidechain
223	Dk	38	DT	Sidechain
224	Dl	10	DC	Sidechain
224	Dl	15	DT	Sidechain
224	Dl	17	DA	Sidechain
224	Dl	2	DA	Sidechain
224	Dl	21	DG	Sidechain
224	Dl	27	DA	Sidechain
224	Dl	29	DC	Sidechain
224	Dl	35	DC	Sidechain
224	Dl	36	DA	Sidechain
224	Dl	37	DC	Sidechain
224	Dl	38	DA	Sidechain
224	Dl	41	DC	Sidechain
224	Dl	9	DC	Sidechain
225	Dm	13	DC	Sidechain
225	Dm	14	DA	Sidechain
225	Dm	17	DG	Sidechain
225	Dm	21	DC	Sidechain
225	Dm	26	DA	Sidechain
225	Dm	32	DG	Sidechain
225	Dm	33	DA	Sidechain
225	Dm	36	DA	Sidechain
225	Dm	38	DA	Sidechain

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Mol	Chain	Res	Type	Group
225	Dm	4	DT	Sidechain
225	Dm	42	DG	Sidechain
225	Dm	8	DC	Sidechain
225	Dm	9	DT	Sidechain
226	Dn	17	DA	Sidechain
226	Dn	22	DA	Sidechain
226	Dn	25	DA	Sidechain
226	Dn	26	DA	Sidechain
226	Dn	33	DA	Sidechain
226	Dn	34	DA	Sidechain
226	Dn	35	DA	Sidechain
226	Dn	36	DC	Sidechain
226	Dn	41	DA	Sidechain
227	Do	13	DG	Sidechain
227	Do	24	DA	Sidechain
227	Do	26	DA	Sidechain
227	Do	34	DA	Sidechain
227	Do	35	DC	Sidechain
227	Do	38	DA	Sidechain
227	Do	8	DA	Sidechain
227	Do	9	DG	Sidechain
228	Dp	1	DT	Sidechain
228	Dp	10	DT	Sidechain
228	Dp	14	DG	Sidechain
228	Dp	19	DC	Sidechain
228	Dp	29	DA	Sidechain
228	Dp	30	DC	Sidechain
228	Dp	41	DA	Sidechain
228	Dp	42	DA	Sidechain
228	Dp	5	DT	Sidechain
229	Dq	13	DG	Sidechain
229	Dq	22	DG	Sidechain
229	Dq	30	DG	Sidechain
229	Dq	36	DC	Sidechain
229	Dq	37	DC	Sidechain
229	Dq	40	DT	Sidechain
229	Dq	42	DT	Sidechain
230	Dr	1	DT	Sidechain
230	Dr	14	DT	Sidechain
230	Dr	16	DA	Sidechain
230	Dr	19	DT	Sidechain
230	Dr	23	DT	Sidechain

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Mol	Chain	Res	Type	Group
230	Dr	26	DA	Sidechain
230	Dr	35	DC	Sidechain
230	Dr	39	DA	Sidechain
231	Ds	13	DT	Sidechain
231	Ds	14	DG	Sidechain
231	Ds	15	DG	Sidechain
231	Ds	22	DG	Sidechain
231	Ds	34	DT	Sidechain
231	Ds	36	DC	Sidechain
231	Ds	37	DT	Sidechain
231	Ds	5	DG	Sidechain
231	Ds	7	DA	Sidechain
232	Dt	1	DT	Sidechain
232	Dt	14	DC	Sidechain
232	Dt	21	DG	Sidechain
232	Dt	27	DG	Sidechain
232	Dt	5	DG	Sidechain
233	Du	10	DT	Sidechain
233	Du	14	DT	Sidechain
233	Du	15	DT	Sidechain
233	Du	17	DG	Sidechain
233	Du	2	DT	Sidechain
233	Du	20	DG	Sidechain
233	Du	22	DG	Sidechain
233	Du	30	DC	Sidechain
233	Du	4	DT	Sidechain
234	Dv	1	DA	Sidechain
234	Dv	10	DC	Sidechain
234	Dv	18	DC	Sidechain
234	Dv	19	DT	Sidechain
234	Dv	2	DA	Sidechain
234	Dv	22	DA	Sidechain
234	Dv	26	DG	Sidechain
234	Dv	3	DT	Sidechain
234	Dv	36	DA	Sidechain
234	Dv	38	DA	Sidechain
234	Dv	8	DG	Sidechain
235	Dw	25	DA	Sidechain
235	Dw	27	DC	Sidechain
235	Dw	3	DA	Sidechain
235	Dw	35	DT	Sidechain
235	Dw	39	DA	Sidechain

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Mol	Chain	Res	Type	Group
235	Dw	41	DA	Sidechain
235	Dw	9	DC	Sidechain
236	Dx	13	DC	Sidechain
236	Dx	19	DT	Sidechain
236	Dx	20	DT	Sidechain
236	Dx	22	DG	Sidechain
236	Dx	23	DC	Sidechain
236	Dx	24	DG	Sidechain
236	Dx	30	DA	Sidechain
236	Dx	31	DC	Sidechain
236	Dx	33	DA	Sidechain
236	Dx	35	DT	Sidechain
236	Dx	39	DC	Sidechain
236	Dx	4	DG	Sidechain
236	Dx	40	DC	Sidechain
237	Dy	13	DA	Sidechain
237	Dy	16	DT	Sidechain
237	Dy	17	DG	Sidechain
237	Dy	26	DA	Sidechain
237	Dy	29	DT	Sidechain
237	Dy	32	DT	Sidechain
237	Dy	34	DA	Sidechain
237	Dy	37	DT	Sidechain
237	Dy	38	DC	Sidechain
237	Dy	39	DA	Sidechain
237	Dy	40	DG	Sidechain
237	Dy	41	DT	Sidechain
238	Dz	15	DT	Sidechain
238	Dz	17	DT	Sidechain
238	Dz	19	DT	Sidechain
238	Dz	24	DT	Sidechain
238	Dz	25	DA	Sidechain
238	Dz	26	DG	Sidechain
238	Dz	30	DG	Sidechain
238	Dz	31	DG	Sidechain
238	Dz	33	DC	Sidechain
238	Dz	4	DT	Sidechain
238	Dz	40	DC	Sidechain
301	E0	10	DT	Sidechain
301	E0	22	DA	Sidechain
301	E0	23	DG	Sidechain
301	E0	24	DT	Sidechain

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Mol	Chain	Res	Type	Group
301	E0	25	DA	Sidechain
301	E0	27	DC	Sidechain
301	E0	28	DA	Sidechain
301	E0	31	DA	Sidechain
301	E0	32	DT	Sidechain
301	E0	5	DG	Sidechain
302	E1	17	DA	Sidechain
302	E1	18	DG	Sidechain
302	E1	19	DG	Sidechain
302	E1	2	DA	Sidechain
302	E1	29	DA	Sidechain
302	E1	30	DT	Sidechain
302	E1	32	DT	Sidechain
302	E1	6	DG	Sidechain
302	E1	9	DA	Sidechain
303	E2	10	DT	Sidechain
303	E2	23	DG	Sidechain
303	E2	30	DA	Sidechain
303	E2	31	DG	Sidechain
303	E2	35	DC	Sidechain
303	E2	5	DA	Sidechain
303	E2	8	DT	Sidechain
304	E3	23	DG	Sidechain
304	E3	24	DG	Sidechain
304	E3	6	DT	Sidechain
305	E4	1	DA	Sidechain
305	E4	13	DA	Sidechain
305	E4	24	DG	Sidechain
305	E4	25	DA	Sidechain
305	E4	26	DC	Sidechain
305	E4	27	DA	Sidechain
305	E4	28	DA	Sidechain
305	E4	31	DA	Sidechain
305	E4	32	DG	Sidechain
305	E4	33	DA	Sidechain
305	E4	5	DA	Sidechain
306	E5	18	DT	Sidechain
306	E5	23	DC	Sidechain
306	E5	27	DA	Sidechain
306	E5	29	DG	Sidechain
306	E5	31	DA	Sidechain
306	E5	33	DG	Sidechain

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Mol	Chain	Res	Type	Group
306	E5	6	DT	Sidechain
307	E6	10	DG	Sidechain
307	E6	13	DC	Sidechain
307	E6	20	DC	Sidechain
307	E6	22	DG	Sidechain
307	E6	23	DA	Sidechain
307	E6	29	DA	Sidechain
307	E6	30	DT	Sidechain
307	E6	35	DG	Sidechain
307	E6	9	DG	Sidechain
308	E7	11	DT	Sidechain
308	E7	12	DA	Sidechain
308	E7	14	DT	Sidechain
308	E7	15	DT	Sidechain
308	E7	32	DC	Sidechain
308	E7	4	DA	Sidechain
309	E8	16	DG	Sidechain
309	E8	22	DA	Sidechain
309	E8	31	DG	Sidechain
309	E8	4	DG	Sidechain
309	E8	9	DG	Sidechain
310	E9	25	DT	Sidechain
310	E9	30	DT	Sidechain
310	E9	9	DC	Sidechain
249	EA	1	DT	Sidechain
249	EA	12	DA	Sidechain
249	EA	13	DT	Sidechain
249	EA	15	DT	Sidechain
249	EA	23	DT	Sidechain
249	EA	24	DT	Sidechain
249	EA	26	DC	Sidechain
249	EA	3	DT	Sidechain
249	EA	31	DT	Sidechain
249	EA	4	DT	Sidechain
250	EB	14	DT	Sidechain
250	EB	20	DT	Sidechain
250	EB	26	DC	Sidechain
250	EB	27	DC	Sidechain
250	EB	34	DA	Sidechain
250	EB	4	DG	Sidechain
251	EC	12	DA	Sidechain
251	EC	18	DA	Sidechain

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Mol	Chain	Res	Type	Group
251	EC	19	DA	Sidechain
251	EC	23	DT	Sidechain
251	EC	31	DT	Sidechain
252	ED	1	DG	Sidechain
252	ED	11	DA	Sidechain
252	ED	17	DG	Sidechain
252	ED	19	DA	Sidechain
252	ED	28	DC	Sidechain
252	ED	29	DA	Sidechain
252	ED	3	DT	Sidechain
252	ED	31	DC	Sidechain
252	ED	33	DG	Sidechain
253	EE	10	DC	Sidechain
253	EE	14	DG	Sidechain
253	EE	29	DC	Sidechain
253	EE	7	DG	Sidechain
254	EF	1	DT	Sidechain
254	EF	10	DT	Sidechain
254	EF	14	DG	Sidechain
254	EF	18	DG	Sidechain
254	EF	20	DA	Sidechain
254	EF	31	DT	Sidechain
255	EG	11	DG	Sidechain
255	EG	12	DA	Sidechain
255	EG	13	DC	Sidechain
255	EG	21	DT	Sidechain
255	EG	24	DT	Sidechain
255	EG	33	DT	Sidechain
255	EG	35	DG	Sidechain
256	EH	1	DT	Sidechain
256	EH	12	DT	Sidechain
256	EH	13	DC	Sidechain
256	EH	15	DC	Sidechain
256	EH	23	DT	Sidechain
256	EH	27	DG	Sidechain
256	EH	31	DG	Sidechain
256	EH	5	DT	Sidechain
256	EH	7	DT	Sidechain
257	EI	1	DA	Sidechain
257	EI	14	DG	Sidechain
257	EI	23	DG	Sidechain
257	EI	24	DT	Sidechain

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Mol	Chain	Res	Type	Group
257	EI	3	DA	Sidechain
258	EJ	11	DG	Sidechain
258	EJ	13	DC	Sidechain
258	EJ	31	DA	Sidechain
259	EK	10	DT	Sidechain
259	EK	12	DT	Sidechain
259	EK	26	DG	Sidechain
259	EK	29	DT	Sidechain
259	EK	31	DC	Sidechain
259	EK	33	DG	Sidechain
259	EK	35	DT	Sidechain
259	EK	4	DT	Sidechain
259	EK	7	DG	Sidechain
260	EL	16	DG	Sidechain
260	EL	2	DA	Sidechain
260	EL	32	DA	Sidechain
260	EL	34	DT	Sidechain
260	EL	5	DA	Sidechain
260	EL	6	DT	Sidechain
260	EL	8	DA	Sidechain
261	EM	12	DA	Sidechain
261	EM	16	DT	Sidechain
261	EM	17	DT	Sidechain
261	EM	22	DG	Sidechain
261	EM	24	DT	Sidechain
261	EM	3	DG	Sidechain
261	EM	32	DA	Sidechain
261	EM	5	DA	Sidechain
261	EM	6	DC	Sidechain
261	EM	7	DA	Sidechain
261	EM	8	DC	Sidechain
262	EN	1	DT	Sidechain
262	EN	10	DT	Sidechain
262	EN	13	DT	Sidechain
262	EN	18	DA	Sidechain
262	EN	2	DT	Sidechain
262	EN	27	DA	Sidechain
262	EN	28	DT	Sidechain
262	EN	30	DC	Sidechain
262	EN	4	DT	Sidechain
262	EN	5	DT	Sidechain
262	EN	7	DT	Sidechain

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Mol	Chain	Res	Type	Group
262	EN	9	DT	Sidechain
263	EO	11	DG	Sidechain
263	EO	12	DG	Sidechain
263	EO	13	DC	Sidechain
263	EO	18	DA	Sidechain
263	EO	2	DT	Sidechain
263	EO	20	DG	Sidechain
263	EO	22	DG	Sidechain
263	EO	23	DA	Sidechain
263	EO	24	DT	Sidechain
263	EO	25	DG	Sidechain
263	EO	30	DA	Sidechain
263	EO	7	DT	Sidechain
264	EP	1	DT	Sidechain
264	EP	11	DA	Sidechain
264	EP	12	DC	Sidechain
264	EP	13	DG	Sidechain
264	EP	14	DC	Sidechain
264	EP	15	DA	Sidechain
264	EP	25	DG	Sidechain
264	EP	35	DT	Sidechain
264	EP	5	DA	Sidechain
265	EQ	12	DA	Sidechain
265	EQ	16	DA	Sidechain
265	EQ	18	DT	Sidechain
265	EQ	19	DA	Sidechain
265	EQ	2	DA	Sidechain
265	EQ	22	DT	Sidechain
265	EQ	30	DA	Sidechain
265	EQ	5	DC	Sidechain
266	ER	12	DG	Sidechain
266	ER	15	DC	Sidechain
266	ER	20	DA	Sidechain
266	ER	22	DA	Sidechain
266	ER	24	DC	Sidechain
266	ER	28	DC	Sidechain
266	ER	29	DG	Sidechain
266	ER	30	DA	Sidechain
266	ER	32	DT	Sidechain
266	ER	5	DG	Sidechain
266	ER	7	DC	Sidechain
267	ES	10	DA	Sidechain

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Mol	Chain	Res	Type	Group
267	ES	12	DA	Sidechain
267	ES	19	DT	Sidechain
267	ES	25	DG	Sidechain
267	ES	26	DG	Sidechain
267	ES	32	DA	Sidechain
268	ET	12	DT	Sidechain
268	ET	16	DT	Sidechain
268	ET	17	DT	Sidechain
268	ET	23	DT	Sidechain
268	ET	7	DT	Sidechain
269	EU	16	DT	Sidechain
269	EU	19	DG	Sidechain
269	EU	2	DA	Sidechain
269	EU	22	DG	Sidechain
269	EU	26	DG	Sidechain
269	EU	28	DG	Sidechain
269	EU	32	DT	Sidechain
269	EU	33	DA	Sidechain
269	EU	35	DC	Sidechain
270	EV	1	DT	Sidechain
270	EV	11	DA	Sidechain
270	EV	13	DT	Sidechain
270	EV	26	DT	Sidechain
270	EV	33	DG	Sidechain
270	EV	5	DT	Sidechain
271	EW	12	DT	Sidechain
271	EW	17	DA	Sidechain
271	EW	20	DA	Sidechain
271	EW	25	DA	Sidechain
271	EW	27	DC	Sidechain
271	EW	3	DC	Sidechain
271	EW	35	DA	Sidechain
271	EW	4	DA	Sidechain
272	EX	1	DC	Sidechain
272	EX	8	DT	Sidechain
273	EY	19	DT	Sidechain
273	EY	24	DG	Sidechain
273	EY	25	DA	Sidechain
273	EY	35	DC	Sidechain
273	EY	7	DG	Sidechain
273	EY	8	DG	Sidechain
274	EZ	1	DT	Sidechain

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Mol	Chain	Res	Type	Group
274	EZ	10	DA	Sidechain
274	EZ	12	DG	Sidechain
274	EZ	13	DC	Sidechain
274	EZ	16	DG	Sidechain
274	EZ	2	DA	Sidechain
274	EZ	20	DA	Sidechain
274	EZ	35	DG	Sidechain
274	EZ	4	DA	Sidechain
274	EZ	5	DT	Sidechain
274	EZ	8	DA	Sidechain
275	Ea	15	DG	Sidechain
275	Ea	16	DA	Sidechain
275	Ea	18	DG	Sidechain
275	Ea	27	DT	Sidechain
275	Ea	34	DA	Sidechain
276	Eb	1	DA	Sidechain
276	Eb	10	DT	Sidechain
276	Eb	11	DT	Sidechain
276	Eb	13	DA	Sidechain
276	Eb	14	DA	Sidechain
276	Eb	24	DG	Sidechain
276	Eb	25	DG	Sidechain
276	Eb	26	DA	Sidechain
276	Eb	28	DT	Sidechain
276	Eb	29	DC	Sidechain
276	Eb	30	DC	Sidechain
276	Eb	34	DA	Sidechain
276	Eb	9	DG	Sidechain
277	Ec	1	DT	Sidechain
277	Ec	16	DG	Sidechain
277	Ec	26	DA	Sidechain
277	Ec	31	DG	Sidechain
277	Ec	33	DC	Sidechain
278	Ed	1	DG	Sidechain
278	Ed	19	DA	Sidechain
278	Ed	7	DA	Sidechain
279	Ee	10	DA	Sidechain
279	Ee	28	DG	Sidechain
279	Ee	3	DT	Sidechain
279	Ee	30	DT	Sidechain
279	Ee	5	DT	Sidechain
279	Ee	7	DT	Sidechain

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Mol	Chain	Res	Type	Group
280	Ef	10	DG	Sidechain
280	Ef	13	DA	Sidechain
280	Ef	16	DA	Sidechain
280	Ef	18	DT	Sidechain
280	Ef	22	DA	Sidechain
280	Ef	31	DG	Sidechain
280	Ef	35	DA	Sidechain
280	Ef	5	DT	Sidechain
281	Eg	11	DA	Sidechain
281	Eg	12	DT	Sidechain
281	Eg	20	DC	Sidechain
281	Eg	29	DG	Sidechain
281	Eg	31	DC	Sidechain
281	Eg	4	DA	Sidechain
281	Eg	6	DG	Sidechain
282	Eh	11	DA	Sidechain
282	Eh	20	DT	Sidechain
282	Eh	28	DG	Sidechain
282	Eh	31	DT	Sidechain
282	Eh	34	DT	Sidechain
282	Eh	35	DC	Sidechain
282	Eh	7	DA	Sidechain
282	Eh	9	DG	Sidechain
283	Ei	12	DT	Sidechain
283	Ei	14	DG	Sidechain
283	Ei	15	DA	Sidechain
283	Ei	27	DT	Sidechain
283	Ei	3	DA	Sidechain
283	Ei	30	DC	Sidechain
283	Ei	4	DA	Sidechain
283	Ei	5	DT	Sidechain
284	Ej	16	DT	Sidechain
284	Ej	22	DG	Sidechain
284	Ej	29	DA	Sidechain
284	Ej	33	DA	Sidechain
284	Ej	5	DA	Sidechain
285	Ek	1	DT	Sidechain
285	Ek	10	DC	Sidechain
285	Ek	13	DA	Sidechain
285	Ek	2	DT	Sidechain
285	Ek	22	DT	Sidechain
285	Ek	34	DT	Sidechain

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Mol	Chain	Res	Type	Group
285	Ek	6	DT	Sidechain
286	El	1	DA	Sidechain
286	El	12	DA	Sidechain
286	El	19	DA	Sidechain
286	El	20	DT	Sidechain
286	El	34	DG	Sidechain
286	El	35	DT	Sidechain
286	El	9	DT	Sidechain
287	Em	1	DG	Sidechain
287	Em	11	DC	Sidechain
287	Em	12	DC	Sidechain
287	Em	4	DG	Sidechain
287	Em	6	DC	Sidechain
288	En	15	DT	Sidechain
288	En	22	DG	Sidechain
288	En	26	DA	Sidechain
288	En	27	DA	Sidechain
288	En	29	DC	Sidechain
288	En	31	DA	Sidechain
288	En	5	DT	Sidechain
288	En	8	DT	Sidechain
289	Eo	15	DG	Sidechain
289	Eo	16	DG	Sidechain
289	Eo	17	DA	Sidechain
289	Eo	23	DA	Sidechain
289	Eo	25	DC	Sidechain
289	Eo	26	DT	Sidechain
289	Eo	27	DT	Sidechain
290	Ep	1	DG	Sidechain
290	Ep	14	DG	Sidechain
290	Ep	16	DA	Sidechain
290	Ep	2	DT	Sidechain
290	Ep	27	DC	Sidechain
290	Ep	30	DC	Sidechain
291	Eq	12	DT	Sidechain
291	Eq	17	DC	Sidechain
291	Eq	19	DC	Sidechain
291	Eq	20	DT	Sidechain
291	Eq	25	DT	Sidechain
291	Eq	32	DT	Sidechain
292	Er	1	DG	Sidechain
292	Er	10	DA	Sidechain

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Mol	Chain	Res	Type	Group
292	Er	13	DA	Sidechain
292	Er	16	DA	Sidechain
292	Er	21	DA	Sidechain
292	Er	6	DT	Sidechain
292	Er	8	DA	Sidechain
293	Es	12	DT	Sidechain
293	Es	20	DA	Sidechain
293	Es	23	DG	Sidechain
293	Es	34	DT	Sidechain
293	Es	6	DT	Sidechain
294	Et	10	DT	Sidechain
294	Et	15	DA	Sidechain
294	Et	17	DG	Sidechain
294	Et	18	DG	Sidechain
294	Et	22	DA	Sidechain
294	Et	30	DT	Sidechain
294	Et	32	DA	Sidechain
294	Et	33	DT	Sidechain
294	Et	34	DA	Sidechain
294	Et	35	DA	Sidechain
294	Et	7	DT	Sidechain
295	Eu	1	DT	Sidechain
295	Eu	10	DA	Sidechain
295	Eu	14	DA	Sidechain
295	Eu	16	DT	Sidechain
295	Eu	19	DA	Sidechain
295	Eu	20	DT	Sidechain
295	Eu	27	DA	Sidechain
295	Eu	3	DC	Sidechain
296	Ev	12	DT	Sidechain
296	Ev	24	DC	Sidechain
296	Ev	27	DA	Sidechain
296	Ev	28	DA	Sidechain
296	Ev	35	DA	Sidechain
296	Ev	7	DA	Sidechain
297	Ew	13	DA	Sidechain
297	Ew	15	DT	Sidechain
297	Ew	17	DT	Sidechain
297	Ew	27	DT	Sidechain
297	Ew	30	DG	Sidechain
297	Ew	9	DA	Sidechain
298	Ex	10	DT	Sidechain

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Mol	Chain	Res	Type	Group
298	Ex	16	DG	Sidechain
298	Ex	18	DA	Sidechain
298	Ex	25	DA	Sidechain
298	Ex	30	DT	Sidechain
298	Ex	33	DC	Sidechain
299	Ey	1	DT	Sidechain
299	Ey	12	DT	Sidechain
299	Ey	2	DT	Sidechain
299	Ey	29	DA	Sidechain
299	Ey	9	DG	Sidechain
300	Ez	23	DA	Sidechain
300	Ez	27	DC	Sidechain
300	Ez	29	DG	Sidechain
300	Ez	6	DA	Sidechain
300	Ez	9	DC	Sidechain
363	F0	23	DT	Sidechain
363	F0	28	DT	Sidechain
363	F0	4	DC	Sidechain
364	F1	10	DA	Sidechain
364	F1	12	DA	Sidechain
364	F1	15	DT	Sidechain
364	F1	16	DA	Sidechain
364	F1	18	DC	Sidechain
364	F1	2	DG	Sidechain
364	F1	27	DG	Sidechain
364	F1	5	DA	Sidechain
364	F1	8	DA	Sidechain
365	F2	13	DC	Sidechain
365	F2	14	DT	Sidechain
365	F2	19	DT	Sidechain
365	F2	24	DT	Sidechain
365	F2	25	DT	Sidechain
365	F2	7	DA	Sidechain
365	F2	9	DC	Sidechain
366	F3	10	DC	Sidechain
366	F3	12	DT	Sidechain
366	F3	20	DA	Sidechain
366	F3	25	DT	Sidechain
366	F3	27	DA	Sidechain
366	F3	4	DA	Sidechain
367	F4	16	DG	Sidechain
367	F4	17	DA	Sidechain

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Mol	Chain	Res	Type	Group
367	F4	22	DA	Sidechain
367	F4	24	DG	Sidechain
367	F4	25	DA	Sidechain
367	F4	8	DG	Sidechain
368	F5	1	DA	Sidechain
368	F5	12	DA	Sidechain
368	F5	2	DT	Sidechain
368	F5	20	DT	Sidechain
368	F5	21	DT	Sidechain
368	F5	22	DT	Sidechain
368	F5	24	DT	Sidechain
368	F5	26	DT	Sidechain
369	F6	10	DA	Sidechain
369	F6	13	DT	Sidechain
370	F7	1	DT	Sidechain
370	F7	11	DG	Sidechain
370	F7	13	DT	Sidechain
370	F7	25	DT	Sidechain
371	F8	10	DG	Sidechain
371	F8	19	DA	Sidechain
371	F8	27	DC	Sidechain
371	F8	28	DA	Sidechain
371	F8	5	DA	Sidechain
371	F8	7	DA	Sidechain
372	F9	12	DA	Sidechain
372	F9	17	DA	Sidechain
372	F9	3	DC	Sidechain
372	F9	4	DG	Sidechain
372	F9	7	DA	Sidechain
372	F9	8	DT	Sidechain
311	FA	1	DG	Sidechain
311	FA	16	DG	Sidechain
311	FA	18	DC	Sidechain
311	FA	2	DA	Sidechain
311	FA	23	DG	Sidechain
311	FA	3	DG	Sidechain
311	FA	30	DC	Sidechain
311	FA	7	DC	Sidechain
312	FB	1	DA	Sidechain
312	FB	11	DG	Sidechain
312	FB	12	DA	Sidechain
312	FB	14	DT	Sidechain

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Mol	Chain	Res	Type	Group
312	FB	19	DA	Sidechain
312	FB	28	DT	Sidechain
312	FB	34	DG	Sidechain
312	FB	7	DT	Sidechain
313	FC	1	DT	Sidechain
313	FC	13	DA	Sidechain
313	FC	22	DG	Sidechain
313	FC	25	DG	Sidechain
313	FC	29	DT	Sidechain
313	FC	32	DT	Sidechain
314	FD	11	DC	Sidechain
314	FD	14	DG	Sidechain
314	FD	15	DG	Sidechain
314	FD	19	DC	Sidechain
314	FD	21	DA	Sidechain
314	FD	22	DT	Sidechain
314	FD	23	DA	Sidechain
314	FD	27	DT	Sidechain
314	FD	28	DA	Sidechain
314	FD	35	DT	Sidechain
314	FD	8	DC	Sidechain
315	FE	1	DA	Sidechain
315	FE	12	DA	Sidechain
315	FE	16	DC	Sidechain
315	FE	20	DA	Sidechain
315	FE	24	DT	Sidechain
315	FE	26	DT	Sidechain
315	FE	3	DG	Sidechain
315	FE	33	DT	Sidechain
315	FE	35	DG	Sidechain
316	FF	14	DT	Sidechain
316	FF	2	DG	Sidechain
316	FF	29	DT	Sidechain
316	FF	3	DA	Sidechain
316	FF	33	DG	Sidechain
316	FF	35	DA	Sidechain
316	FF	5	DT	Sidechain
316	FF	6	DA	Sidechain
316	FF	9	DT	Sidechain
317	FG	1	DT	Sidechain
317	FG	12	DT	Sidechain
317	FG	17	DT	Sidechain

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Mol	Chain	Res	Type	Group
317	FG	18	DA	Sidechain
317	FG	19	DT	Sidechain
317	FG	21	DT	Sidechain
317	FG	32	DT	Sidechain
318	FH	10	DA	Sidechain
318	FH	11	DA	Sidechain
318	FH	12	DT	Sidechain
318	FH	16	DT	Sidechain
318	FH	18	DC	Sidechain
318	FH	20	DT	Sidechain
318	FH	24	DT	Sidechain
318	FH	33	DT	Sidechain
318	FH	9	DG	Sidechain
319	FI	19	DA	Sidechain
319	FI	21	DT	Sidechain
319	FI	35	DC	Sidechain
320	FJ	20	DT	Sidechain
320	FJ	23	DG	Sidechain
320	FJ	24	DG	Sidechain
320	FJ	27	DG	Sidechain
320	FJ	3	DA	Sidechain
320	FJ	30	DA	Sidechain
320	FJ	33	DA	Sidechain
321	FK	28	DT	Sidechain
321	FK	34	DT	Sidechain
321	FK	35	DT	Sidechain
321	FK	6	DT	Sidechain
321	FK	8	DA	Sidechain
321	FK	9	DT	Sidechain
322	FL	12	DG	Sidechain
322	FL	15	DA	Sidechain
322	FL	22	DA	Sidechain
322	FL	27	DC	Sidechain
322	FL	3	DC	Sidechain
322	FL	30	DT	Sidechain
322	FL	34	DT	Sidechain
323	FM	29	DA	Sidechain
323	FM	30	DG	Sidechain
323	FM	31	DG	Sidechain
323	FM	33	DA	Sidechain
323	FM	34	DG	Sidechain
323	FM	6	DT	Sidechain

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Mol	Chain	Res	Type	Group
324	FN	25	DC	Sidechain
324	FN	32	DT	Sidechain
324	FN	4	DG	Sidechain
324	FN	5	DT	Sidechain
324	FN	6	DA	Sidechain
325	FO	10	DT	Sidechain
325	FO	17	DT	Sidechain
325	FO	25	DA	Sidechain
325	FO	30	DT	Sidechain
325	FO	5	DT	Sidechain
326	FP	24	DA	Sidechain
326	FP	27	DT	Sidechain
326	FP	28	DA	Sidechain
326	FP	30	DT	Sidechain
326	FP	35	DG	Sidechain
326	FP	4	DG	Sidechain
327	FQ	12	DA	Sidechain
327	FQ	15	DC	Sidechain
327	FQ	2	DT	Sidechain
327	FQ	27	DA	Sidechain
327	FQ	28	DG	Sidechain
327	FQ	29	DA	Sidechain
327	FQ	3	DA	Sidechain
327	FQ	33	DC	Sidechain
328	FR	30	DT	Sidechain
328	FR	35	DT	Sidechain
328	FR	4	DG	Sidechain
328	FR	8	DA	Sidechain
329	FS	14	DA	Sidechain
329	FS	17	DG	Sidechain
329	FS	19	DG	Sidechain
329	FS	20	DC	Sidechain
329	FS	30	DT	Sidechain
329	FS	32	DC	Sidechain
329	FS	5	DC	Sidechain
330	FT	16	DC	Sidechain
330	FT	21	DA	Sidechain
330	FT	22	DA	Sidechain
330	FT	27	DT	Sidechain
330	FT	28	DT	Sidechain
330	FT	3	DC	Sidechain
331	FU	21	DT	Sidechain

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Mol	Chain	Res	Type	Group
331	FU	26	DT	Sidechain
332	FV	12	DA	Sidechain
332	FV	13	DC	Sidechain
332	FV	19	DC	Sidechain
332	FV	2	DA	Sidechain
332	FV	20	DG	Sidechain
332	FV	22	DG	Sidechain
332	FV	25	DT	Sidechain
332	FV	27	DC	Sidechain
332	FV	28	DT	Sidechain
332	FV	32	DT	Sidechain
332	FV	6	DG	Sidechain
332	FV	7	DA	Sidechain
333	FW	1	DG	Sidechain
333	FW	12	DT	Sidechain
333	FW	2	DC	Sidechain
333	FW	25	DT	Sidechain
333	FW	27	DA	Sidechain
333	FW	29	DG	Sidechain
333	FW	4	DT	Sidechain
333	FW	5	DA	Sidechain
333	FW	7	DT	Sidechain
333	FW	8	DT	Sidechain
334	FX	1	DC	Sidechain
334	FX	10	DT	Sidechain
334	FX	16	DT	Sidechain
334	FX	23	DG	Sidechain
334	FX	24	DG	Sidechain
334	FX	27	DG	Sidechain
334	FX	28	DT	Sidechain
334	FX	8	DA	Sidechain
335	FY	13	DG	Sidechain
335	FY	14	DG	Sidechain
335	FY	16	DA	Sidechain
335	FY	17	DA	Sidechain
335	FY	27	DC	Sidechain
335	FY	3	DG	Sidechain
335	FY	6	DG	Sidechain
336	FZ	1	DA	Sidechain
336	FZ	10	DT	Sidechain
336	FZ	11	DA	Sidechain
336	FZ	13	DG	Sidechain

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Mol	Chain	Res	Type	Group
336	FZ	28	DG	Sidechain
337	Fa	1	DT	Sidechain
337	Fa	10	DC	Sidechain
337	Fa	14	DA	Sidechain
337	Fa	2	DA	Sidechain
337	Fa	20	DT	Sidechain
337	Fa	3	DA	Sidechain
337	Fa	30	DG	Sidechain
337	Fa	31	DA	Sidechain
337	Fa	35	DG	Sidechain
338	Fb	12	DT	Sidechain
338	Fb	16	DT	Sidechain
338	Fb	18	DT	Sidechain
338	Fb	2	DC	Sidechain
338	Fb	24	DT	Sidechain
338	Fb	31	DA	Sidechain
338	Fb	35	DA	Sidechain
338	Fb	5	DT	Sidechain
338	Fb	8	DT	Sidechain
338	Fb	9	DA	Sidechain
339	Fc	12	DA	Sidechain
339	Fc	17	DA	Sidechain
339	Fc	3	DA	Sidechain
339	Fc	35	DC	Sidechain
339	Fc	5	DG	Sidechain
339	Fc	8	DA	Sidechain
340	Fd	1	DA	Sidechain
340	Fd	16	DT	Sidechain
340	Fd	17	DG	Sidechain
340	Fd	29	DA	Sidechain
341	Fe	15	DA	Sidechain
341	Fe	16	DG	Sidechain
341	Fe	17	DG	Sidechain
341	Fe	21	DA	Sidechain
341	Fe	3	DT	Sidechain
341	Fe	32	DT	Sidechain
342	Ff	14	DC	Sidechain
342	Ff	16	DG	Sidechain
342	Ff	20	DT	Sidechain
342	Ff	24	DC	Sidechain
342	Ff	25	DA	Sidechain
343	Fg	1	DA	Sidechain

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Mol	Chain	Res	Type	Group
343	Fg	12	DA	Sidechain
343	Fg	16	DT	Sidechain
343	Fg	2	DA	Sidechain
343	Fg	25	DG	Sidechain
343	Fg	28	DA	Sidechain
343	Fg	3	DG	Sidechain
343	Fg	4	DA	Sidechain
343	Fg	9	DA	Sidechain
344	Fh	10	DC	Sidechain
344	Fh	14	DA	Sidechain
344	Fh	27	DT	Sidechain
344	Fh	7	DG	Sidechain
344	Fh	9	DC	Sidechain
345	Fi	1	DC	Sidechain
345	Fi	11	DC	Sidechain
345	Fi	15	DG	Sidechain
345	Fi	20	DT	Sidechain
345	Fi	21	DT	Sidechain
345	Fi	23	DT	Sidechain
345	Fi	9	DA	Sidechain
346	Fj	10	DC	Sidechain
346	Fj	19	DT	Sidechain
346	Fj	3	DG	Sidechain
346	Fj	4	DA	Sidechain
346	Fj	6	DA	Sidechain
347	Fk	10	DG	Sidechain
347	Fk	12	DG	Sidechain
347	Fk	14	DG	Sidechain
347	Fk	20	DT	Sidechain
347	Fk	21	DC	Sidechain
348	Fl	1	DG	Sidechain
348	Fl	12	DT	Sidechain
348	Fl	18	DA	Sidechain
348	Fl	21	DG	Sidechain
348	Fl	23	DG	Sidechain
348	Fl	26	DA	Sidechain
349	Fm	1	DG	Sidechain
349	Fm	12	DG	Sidechain
349	Fm	19	DT	Sidechain
349	Fm	2	DT	Sidechain
349	Fm	23	DT	Sidechain
349	Fm	28	DA	Sidechain

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Mol	Chain	Res	Type	Group
349	Fm	6	DA	Sidechain
350	Fn	12	DG	Sidechain
350	Fn	17	DA	Sidechain
350	Fn	19	DG	Sidechain
350	Fn	26	DG	Sidechain
350	Fn	27	DT	Sidechain
351	Fo	1	DT	Sidechain
351	Fo	2	DG	Sidechain
351	Fo	25	DT	Sidechain
351	Fo	4	DC	Sidechain
352	Fp	1	DA	Sidechain
352	Fp	13	DT	Sidechain
352	Fp	19	DA	Sidechain
352	Fp	20	DA	Sidechain
352	Fp	22	DA	Sidechain
352	Fp	4	DC	Sidechain
353	Fq	20	DT	Sidechain
353	Fq	22	DT	Sidechain
353	Fq	26	DT	Sidechain
354	Fr	1	DA	Sidechain
354	Fr	11	DT	Sidechain
354	Fr	13	DG	Sidechain
354	Fr	18	DG	Sidechain
354	Fr	22	DT	Sidechain
354	Fr	28	DT	Sidechain
354	Fr	4	DA	Sidechain
355	Fs	1	DC	Sidechain
355	Fs	12	DG	Sidechain
355	Fs	13	DC	Sidechain
355	Fs	17	DT	Sidechain
355	Fs	19	DA	Sidechain
355	Fs	23	DA	Sidechain
355	Fs	28	DT	Sidechain
355	Fs	4	DT	Sidechain
355	Fs	5	DT	Sidechain
355	Fs	7	DG	Sidechain
355	Fs	8	DA	Sidechain
356	Ft	15	DG	Sidechain
356	Ft	16	DG	Sidechain
356	Ft	17	DA	Sidechain
356	Ft	5	DT	Sidechain
356	Ft	8	DA	Sidechain

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Mol	Chain	Res	Type	Group
357	Fu	14	DC	Sidechain
357	Fu	15	DT	Sidechain
357	Fu	21	DG	Sidechain
357	Fu	22	DT	Sidechain
357	Fu	28	DG	Sidechain
358	Fv	10	DC	Sidechain
358	Fv	16	DT	Sidechain
358	Fv	2	DT	Sidechain
358	Fv	20	DT	Sidechain
358	Fv	21	DT	Sidechain
358	Fv	28	DT	Sidechain
358	Fv	3	DG	Sidechain
359	Fw	1	DC	Sidechain
359	Fw	12	DA	Sidechain
359	Fw	14	DG	Sidechain
359	Fw	15	DC	Sidechain
359	Fw	18	DG	Sidechain
359	Fw	2	DT	Sidechain
359	Fw	26	DC	Sidechain
359	Fw	27	DT	Sidechain
359	Fw	6	DG	Sidechain
359	Fw	9	DA	Sidechain
360	Fx	13	DA	Sidechain
360	Fx	19	DG	Sidechain
360	Fx	2	DA	Sidechain
360	Fx	21	DT	Sidechain
360	Fx	8	DA	Sidechain
361	Fy	14	DT	Sidechain
361	Fy	19	DT	Sidechain
361	Fy	22	DG	Sidechain
361	Fy	25	DA	Sidechain
361	Fy	27	DT	Sidechain
361	Fy	3	DC	Sidechain
361	Fy	5	DA	Sidechain
361	Fy	7	DT	Sidechain
362	Fz	10	DA	Sidechain
362	Fz	16	DG	Sidechain
362	Fz	17	DT	Sidechain
362	Fz	19	DT	Sidechain
362	Fz	23	DT	Sidechain
362	Fz	6	DT	Sidechain
425	G0	14	DC	Sidechain

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Mol	Chain	Res	Type	Group
425	G0	20	DA	Sidechain
425	G0	21	DA	Sidechain
425	G0	22	DG	Sidechain
426	G1	18	DC	Sidechain
426	G1	2	DC	Sidechain
426	G1	20	DT	Sidechain
426	G1	24	DC	Sidechain
426	G1	26	DA	Sidechain
426	G1	7	DA	Sidechain
426	G1	9	DG	Sidechain
427	G2	12	DG	Sidechain
427	G2	8	DT	Sidechain
428	G3	1	DT	Sidechain
428	G3	12	DT	Sidechain
428	G3	2	DT	Sidechain
428	G3	23	DC	Sidechain
428	G3	6	DT	Sidechain
428	G3	7	DT	Sidechain
429	G4	1	DC	Sidechain
429	G4	13	DT	Sidechain
429	G4	8	DA	Sidechain
430	G5	1	DG	Sidechain
430	G5	12	DG	Sidechain
430	G5	14	DT	Sidechain
430	G5	15	DA	Sidechain
430	G5	2	DT	Sidechain
430	G5	23	DA	Sidechain
430	G5	24	DC	Sidechain
430	G5	27	DT	Sidechain
430	G5	28	DT	Sidechain
430	G5	3	DC	Sidechain
430	G5	8	DT	Sidechain
431	G6	16	DC	Sidechain
431	G6	21	DG	Sidechain
432	G7	20	DC	Sidechain
432	G7	8	DT	Sidechain
433	G8	10	DG	Sidechain
433	G8	11	DG	Sidechain
433	G8	12	DT	Sidechain
433	G8	18	DC	Sidechain
433	G8	22	DT	Sidechain
434	G9	18	DA	Sidechain

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Mol	Chain	Res	Type	Group
434	G9	24	DA	Sidechain
434	G9	27	DA	Sidechain
434	G9	6	DG	Sidechain
373	GA	1	DG	Sidechain
373	GA	11	DG	Sidechain
373	GA	12	DA	Sidechain
373	GA	20	DT	Sidechain
373	GA	23	DT	Sidechain
373	GA	25	DT	Sidechain
373	GA	28	DT	Sidechain
374	GB	13	DG	Sidechain
374	GB	14	DA	Sidechain
374	GB	23	DT	Sidechain
374	GB	24	DT	Sidechain
374	GB	6	DT	Sidechain
374	GB	8	DC	Sidechain
375	GC	13	DA	Sidechain
375	GC	15	DA	Sidechain
375	GC	18	DA	Sidechain
375	GC	20	DT	Sidechain
375	GC	26	DG	Sidechain
375	GC	6	DT	Sidechain
375	GC	7	DT	Sidechain
375	GC	9	DT	Sidechain
376	GD	12	DG	Sidechain
376	GD	20	DT	Sidechain
376	GD	4	DT	Sidechain
376	GD	7	DC	Sidechain
377	GE	1	DC	Sidechain
377	GE	20	DT	Sidechain
377	GE	21	DT	Sidechain
377	GE	28	DT	Sidechain
377	GE	6	DG	Sidechain
377	GE	7	DT	Sidechain
378	GF	1	DT	Sidechain
378	GF	10	DG	Sidechain
378	GF	12	DG	Sidechain
378	GF	14	DT	Sidechain
378	GF	17	DA	Sidechain
379	GG	16	DA	Sidechain
379	GG	17	DA	Sidechain
379	GG	3	DA	Sidechain

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Mol	Chain	Res	Type	Group
379	GG	5	DT	Sidechain
380	GH	27	DT	Sidechain
380	GH	3	DT	Sidechain
380	GH	5	DC	Sidechain
380	GH	8	DC	Sidechain
381	GI	17	DG	Sidechain
381	GI	18	DT	Sidechain
381	GI	22	DA	Sidechain
381	GI	27	DA	Sidechain
381	GI	4	DA	Sidechain
382	GJ	22	DT	Sidechain
382	GJ	23	DT	Sidechain
382	GJ	24	DC	Sidechain
382	GJ	25	DT	Sidechain
382	GJ	7	DA	Sidechain
383	GK	12	DT	Sidechain
383	GK	21	DT	Sidechain
383	GK	6	DA	Sidechain
384	GL	10	DA	Sidechain
384	GL	11	DT	Sidechain
384	GL	14	DA	Sidechain
384	GL	2	DG	Sidechain
385	GM	14	DT	Sidechain
385	GM	2	DA	Sidechain
385	GM	28	DT	Sidechain
385	GM	7	DA	Sidechain
386	GN	15	DA	Sidechain
386	GN	2	DA	Sidechain
386	GN	20	DT	Sidechain
386	GN	21	DT	Sidechain
386	GN	22	DT	Sidechain
386	GN	4	DG	Sidechain
387	GO	21	DT	Sidechain
387	GO	25	DT	Sidechain
387	GO	27	DT	Sidechain
387	GO	5	DG	Sidechain
387	GO	7	DG	Sidechain
387	GO	8	DG	Sidechain
387	GO	9	DA	Sidechain
388	GP	3	DT	Sidechain
388	GP	4	DT	Sidechain
389	GQ	17	DC	Sidechain

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Mol	Chain	Res	Type	Group
389	GQ	18	DT	Sidechain
389	GQ	2	DC	Sidechain
389	GQ	20	DT	Sidechain
389	GQ	26	DT	Sidechain
389	GQ	3	DT	Sidechain
389	GQ	4	DG	Sidechain
389	GQ	7	DG	Sidechain
390	GR	14	DT	Sidechain
390	GR	2	DT	Sidechain
390	GR	21	DG	Sidechain
390	GR	25	DC	Sidechain
390	GR	3	DG	Sidechain
390	GR	7	DG	Sidechain
391	GS	11	DG	Sidechain
391	GS	14	DG	Sidechain
391	GS	15	DT	Sidechain
391	GS	16	DA	Sidechain
391	GS	17	DC	Sidechain
391	GS	20	DA	Sidechain
391	GS	23	DA	Sidechain
392	GT	11	DA	Sidechain
392	GT	12	DC	Sidechain
392	GT	21	DA	Sidechain
392	GT	26	DA	Sidechain
392	GT	28	DA	Sidechain
392	GT	3	DG	Sidechain
392	GT	7	DG	Sidechain
393	GU	12	DG	Sidechain
393	GU	13	DC	Sidechain
393	GU	14	DC	Sidechain
393	GU	17	DA	Sidechain
393	GU	20	DA	Sidechain
393	GU	26	DT	Sidechain
393	GU	9	DA	Sidechain
394	GV	14	DA	Sidechain
394	GV	20	DA	Sidechain
394	GV	24	DT	Sidechain
394	GV	6	DA	Sidechain
394	GV	7	DA	Sidechain
394	GV	8	DG	Sidechain
395	GW	11	DA	Sidechain
395	GW	17	DA	Sidechain

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Mol	Chain	Res	Type	Group
395	GW	2	DT	Sidechain
395	GW	26	DA	Sidechain
396	GX	18	DC	Sidechain
396	GX	22	DC	Sidechain
396	GX	27	DG	Sidechain
396	GX	28	DA	Sidechain
396	GX	5	DG	Sidechain
396	GX	6	DG	Sidechain
396	GX	8	DG	Sidechain
396	GX	9	DC	Sidechain
397	GY	10	DG	Sidechain
397	GY	14	DA	Sidechain
397	GY	15	DT	Sidechain
397	GY	26	DG	Sidechain
397	GY	27	DC	Sidechain
397	GY	3	DT	Sidechain
398	GZ	1	DC	Sidechain
398	GZ	13	DA	Sidechain
398	GZ	2	DA	Sidechain
398	GZ	21	DC	Sidechain
398	GZ	23	DT	Sidechain
398	GZ	27	DG	Sidechain
398	GZ	4	DG	Sidechain
398	GZ	5	DA	Sidechain
398	GZ	7	DA	Sidechain
399	Ga	11	DC	Sidechain
399	Ga	15	DC	Sidechain
399	Ga	17	DC	Sidechain
399	Ga	23	DC	Sidechain
399	Ga	25	DT	Sidechain
399	Ga	27	DG	Sidechain
400	Gb	10	DG	Sidechain
400	Gb	11	DG	Sidechain
400	Gb	12	DA	Sidechain
400	Gb	18	DC	Sidechain
400	Gb	28	DT	Sidechain
400	Gb	5	DC	Sidechain
401	Gc	2	DT	Sidechain
401	Gc	27	DA	Sidechain
402	Gd	1	DT	Sidechain
402	Gd	10	DT	Sidechain
402	Gd	13	DC	Sidechain

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Mol	Chain	Res	Type	Group
402	Gd	18	DT	Sidechain
402	Gd	28	DA	Sidechain
403	Ge	1	DA	Sidechain
403	Ge	12	DC	Sidechain
403	Ge	15	DT	Sidechain
403	Ge	22	DT	Sidechain
403	Ge	25	DT	Sidechain
404	Gf	1	DT	Sidechain
404	Gf	10	DC	Sidechain
404	Gf	15	DT	Sidechain
404	Gf	21	DA	Sidechain
404	Gf	22	DT	Sidechain
404	Gf	7	DT	Sidechain
405	Gg	20	DA	Sidechain
405	Gg	24	DA	Sidechain
405	Gg	5	DT	Sidechain
405	Gg	8	DA	Sidechain
406	Gh	12	DG	Sidechain
406	Gh	17	DG	Sidechain
406	Gh	5	DA	Sidechain
407	Gi	12	DA	Sidechain
407	Gi	14	DA	Sidechain
407	Gi	19	DA	Sidechain
407	Gi	3	DT	Sidechain
407	Gi	4	DG	Sidechain
407	Gi	6	DT	Sidechain
408	Gj	1	DC	Sidechain
408	Gj	11	DA	Sidechain
408	Gj	2	DA	Sidechain
408	Gj	21	DA	Sidechain
408	Gj	28	DT	Sidechain
408	Gj	5	DC	Sidechain
409	Gk	11	DG	Sidechain
409	Gk	12	DT	Sidechain
409	Gk	17	DG	Sidechain
409	Gk	19	DA	Sidechain
409	Gk	4	DC	Sidechain
409	Gk	7	DG	Sidechain
409	Gk	9	DT	Sidechain
410	Gl	11	DG	Sidechain
410	Gl	25	DG	Sidechain
410	Gl	6	DT	Sidechain

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Mol	Chain	Res	Type	Group
411	Gm	10	DT	Sidechain
411	Gm	11	DT	Sidechain
411	Gm	19	DG	Sidechain
411	Gm	24	DA	Sidechain
411	Gm	9	DG	Sidechain
412	Gn	10	DG	Sidechain
412	Gn	11	DA	Sidechain
412	Gn	12	DT	Sidechain
412	Gn	15	DA	Sidechain
412	Gn	2	DT	Sidechain
412	Gn	22	DT	Sidechain
412	Gn	28	DT	Sidechain
412	Gn	4	DT	Sidechain
413	Go	1	DA	Sidechain
413	Go	19	DA	Sidechain
413	Go	21	DT	Sidechain
413	Go	3	DA	Sidechain
413	Go	8	DT	Sidechain
414	Gp	1	DT	Sidechain
414	Gp	5	DT	Sidechain
414	Gp	6	DT	Sidechain
414	Gp	7	DT	Sidechain
415	Gq	10	DT	Sidechain
415	Gq	12	DA	Sidechain
415	Gq	19	DT	Sidechain
415	Gq	2	DT	Sidechain
415	Gq	26	DT	Sidechain
415	Gq	4	DT	Sidechain
416	Gr	10	DT	Sidechain
416	Gr	25	DT	Sidechain
416	Gr	4	DT	Sidechain
416	Gr	8	DT	Sidechain
417	Gs	12	DA	Sidechain
417	Gs	14	DG	Sidechain
417	Gs	16	DG	Sidechain
417	Gs	26	DC	Sidechain
417	Gs	4	DT	Sidechain
418	Gt	1	DT	Sidechain
418	Gt	23	DG	Sidechain
418	Gt	28	DT	Sidechain
418	Gt	6	DT	Sidechain
418	Gt	9	DT	Sidechain

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Mol	Chain	Res	Type	Group
419	Gu	18	DG	Sidechain
419	Gu	19	DT	Sidechain
419	Gu	21	DT	Sidechain
419	Gu	27	DT	Sidechain
419	Gu	3	DC	Sidechain
420	Gv	10	DC	Sidechain
420	Gv	13	DC	Sidechain
420	Gv	16	DT	Sidechain
420	Gv	27	DA	Sidechain
420	Gv	3	DC	Sidechain
420	Gv	4	DC	Sidechain
420	Gv	7	DG	Sidechain
421	Gw	12	DT	Sidechain
421	Gw	26	DC	Sidechain
421	Gw	28	DA	Sidechain
421	Gw	4	DT	Sidechain
421	Gw	5	DT	Sidechain
422	Gx	15	DT	Sidechain
422	Gx	2	DT	Sidechain
422	Gx	26	DT	Sidechain
422	Gx	27	DA	Sidechain
423	Gy	19	DG	Sidechain
423	Gy	21	DT	Sidechain
423	Gy	25	DT	Sidechain
423	Gy	28	DT	Sidechain
423	Gy	5	DA	Sidechain
423	Gy	8	DG	Sidechain
423	Gy	9	DG	Sidechain
424	Gz	11	DT	Sidechain
424	Gz	14	DA	Sidechain
424	Gz	16	DT	Sidechain
424	Gz	17	DG	Sidechain
424	Gz	18	DT	Sidechain
424	Gz	19	DA	Sidechain
424	Gz	5	DA	Sidechain
424	Gz	6	DG	Sidechain
424	Gz	7	DT	Sidechain
435	HA	12	DT	Sidechain
435	HA	13	DA	Sidechain
435	HA	17	DG	Sidechain
435	HA	20	DG	Sidechain
435	HA	4	DC	Sidechain

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Mol	Chain	Res	Type	Group
435	HA	9	DT	Sidechain
436	HB	17	DG	Sidechain
436	HB	18	DC	Sidechain
436	HB	20	DT	Sidechain
436	HB	22	DG	Sidechain
436	HB	6	DA	Sidechain
437	HC	15	DC	Sidechain
438	HD	4	DT	Sidechain
439	HE	1	DA	Sidechain
439	HE	14	DC	Sidechain
439	HE	3	DT	Sidechain
440	HF	16	DT	Sidechain
441	HG	14	DT	Sidechain
441	HG	2	DC	Sidechain
442	HH	14	DT	Sidechain
442	HH	19	DG	Sidechain
442	HH	3	DG	Sidechain
442	HH	4	DT	Sidechain
442	HH	9	DA	Sidechain
443	HI	11	DC	Sidechain
443	HI	12	DC	Sidechain
443	HI	14	DT	Sidechain
443	HI	15	DT	Sidechain
443	HI	2	DG	Sidechain
443	HI	6	DG	Sidechain
444	HJ	13	DA	Sidechain
444	HJ	3	DT	Sidechain
444	HJ	6	DT	Sidechain
444	HJ	8	DT	Sidechain
445	HK	20	DT	Sidechain
445	HK	3	DT	Sidechain
445	HK	4	DA	Sidechain
445	HK	6	DC	Sidechain
445	HK	7	DG	Sidechain
446	HL	12	DG	Sidechain
446	HL	20	DG	Sidechain
446	HL	4	DG	Sidechain
447	HM	16	DT	Sidechain
447	HM	6	DT	Sidechain
447	HM	8	DC	Sidechain
448	HN	12	DG	Sidechain
448	HN	13	DA	Sidechain

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Mol	Chain	Res	Type	Group
448	HN	3	DT	Sidechain
448	HN	5	DA	Sidechain
448	HN	8	DC	Sidechain
449	HO	13	DT	Sidechain
449	HO	19	DT	Sidechain
450	HP	1	DA	Sidechain
450	HP	17	DT	Sidechain
450	HP	3	DT	Sidechain
451	HQ	11	DA	Sidechain
451	HQ	16	DG	Sidechain
451	HQ	2	DA	Sidechain
451	HQ	21	DC	Sidechain
451	HQ	5	DA	Sidechain
451	HQ	6	DT	Sidechain
451	HQ	9	DT	Sidechain
452	HR	11	DT	Sidechain
452	HR	13	DA	Sidechain
452	HR	15	DG	Sidechain
452	HR	16	DG	Sidechain
452	HR	19	DG	Sidechain
452	HR	3	DT	Sidechain
452	HR	4	DT	Sidechain
452	HR	5	DT	Sidechain
452	HR	6	DT	Sidechain
452	HR	8	DT	Sidechain
453	HS	1	DT	Sidechain
453	HS	14	DG	Sidechain
453	HS	17	DT	Sidechain
453	HS	20	DC	Sidechain
453	HS	21	DT	Sidechain
453	HS	5	DT	Sidechain
454	HT	1	DT	Sidechain
454	HT	12	DT	Sidechain
454	HT	15	DG	Sidechain
454	HT	16	DG	Sidechain
454	HT	17	DT	Sidechain
454	HT	19	DT	Sidechain
454	HT	2	DG	Sidechain
455	HU	10	DA	Sidechain
455	HU	14	DG	Sidechain

5.2 Too-close contacts

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

5.3 Torsion angles

5.3.1 Protein backbone

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.

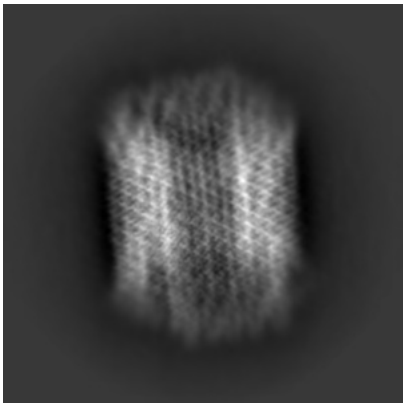
6 Map visualisation

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.

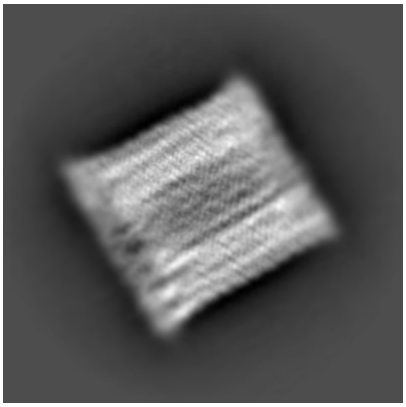
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

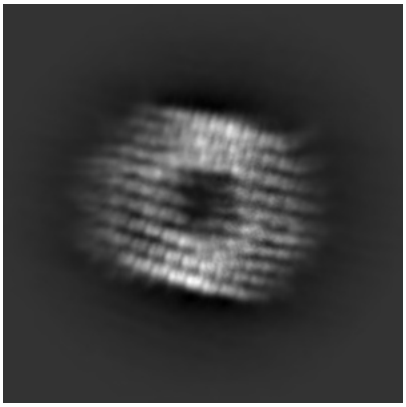
6.1.1 Primary map



X



Y

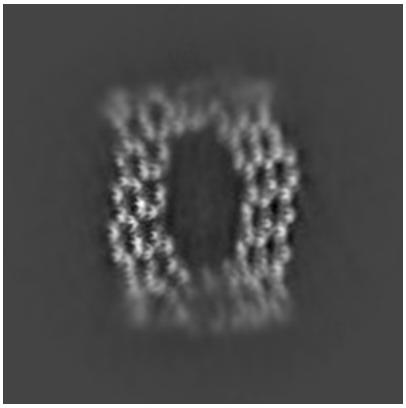


Z

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

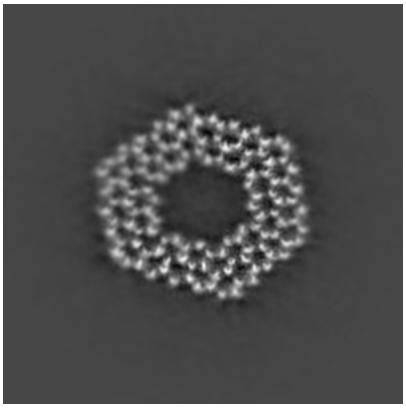
6.2 Central slices

6.2.1 Primary map



X Index: 150

Y Index: 150

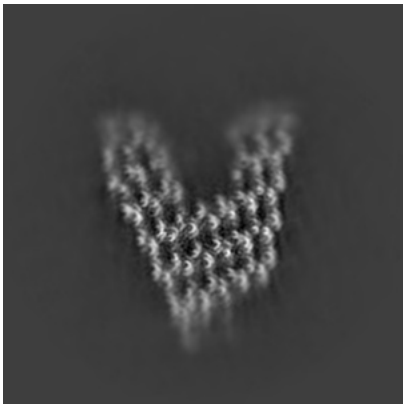


Z Index: 150

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

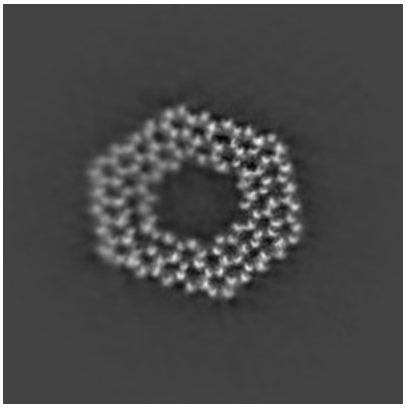
6.3 Largest variance slices (i)

6.3.1 Primary map



X Index: 183

Y Index: 104

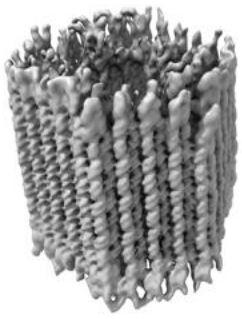


Z Index: 141

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

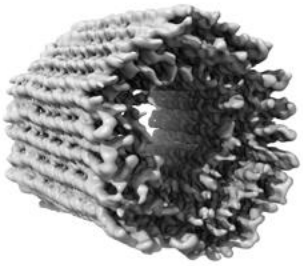
6.4 Orthogonal surface views (i)

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.

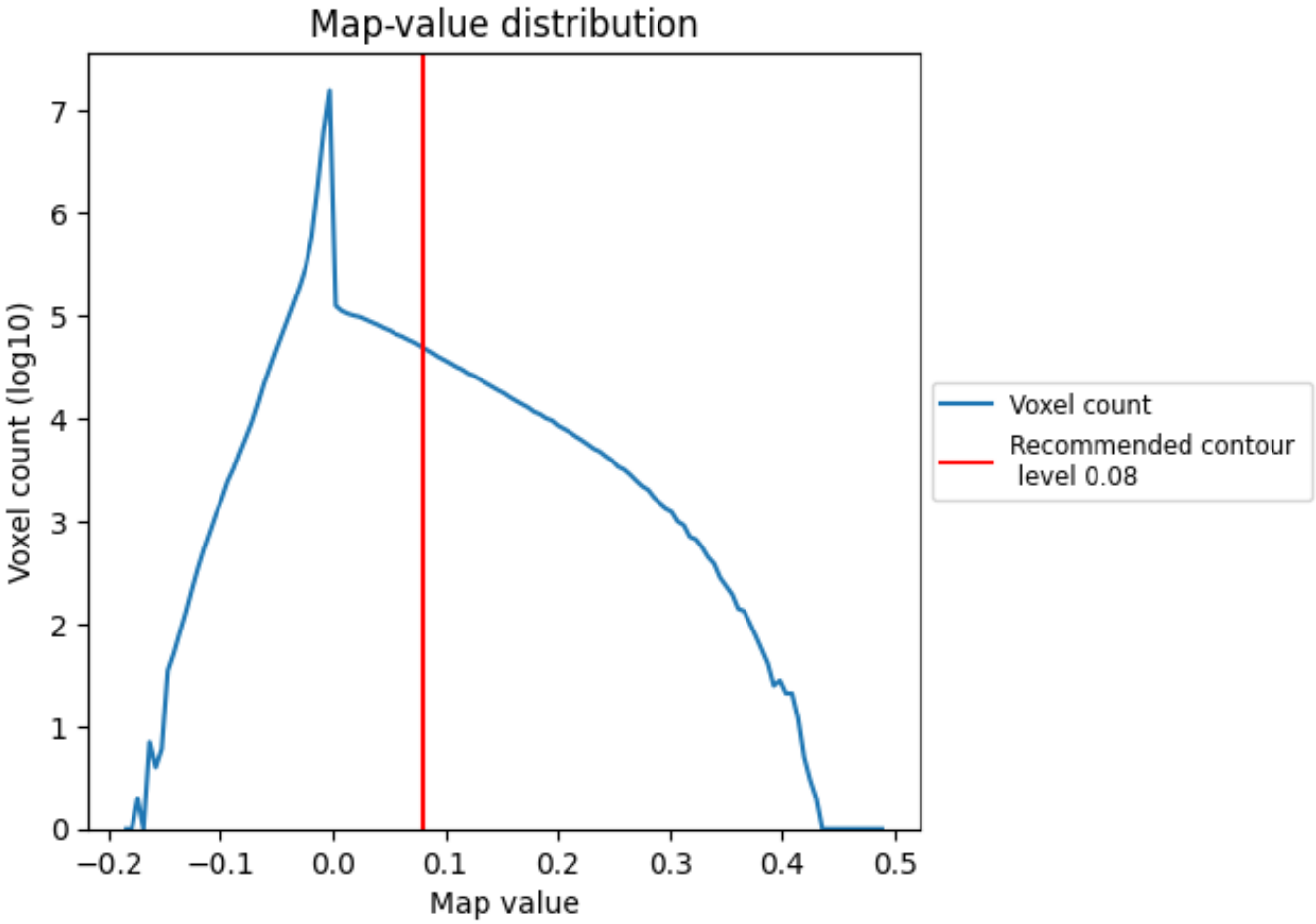
6.5 Mask visualisation (i)

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

7 Map analysis

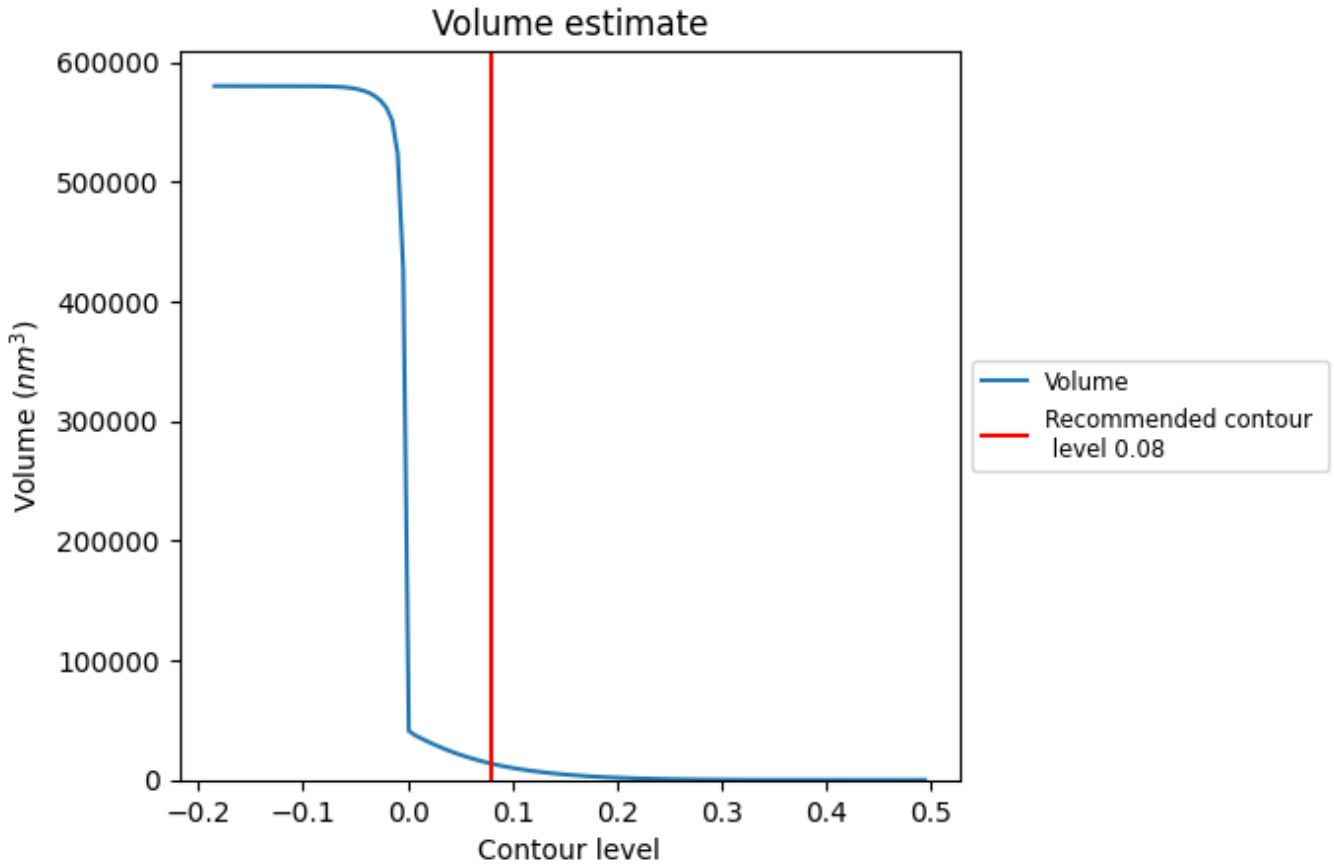
This section contains the results of statistical analysis of the map.

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.

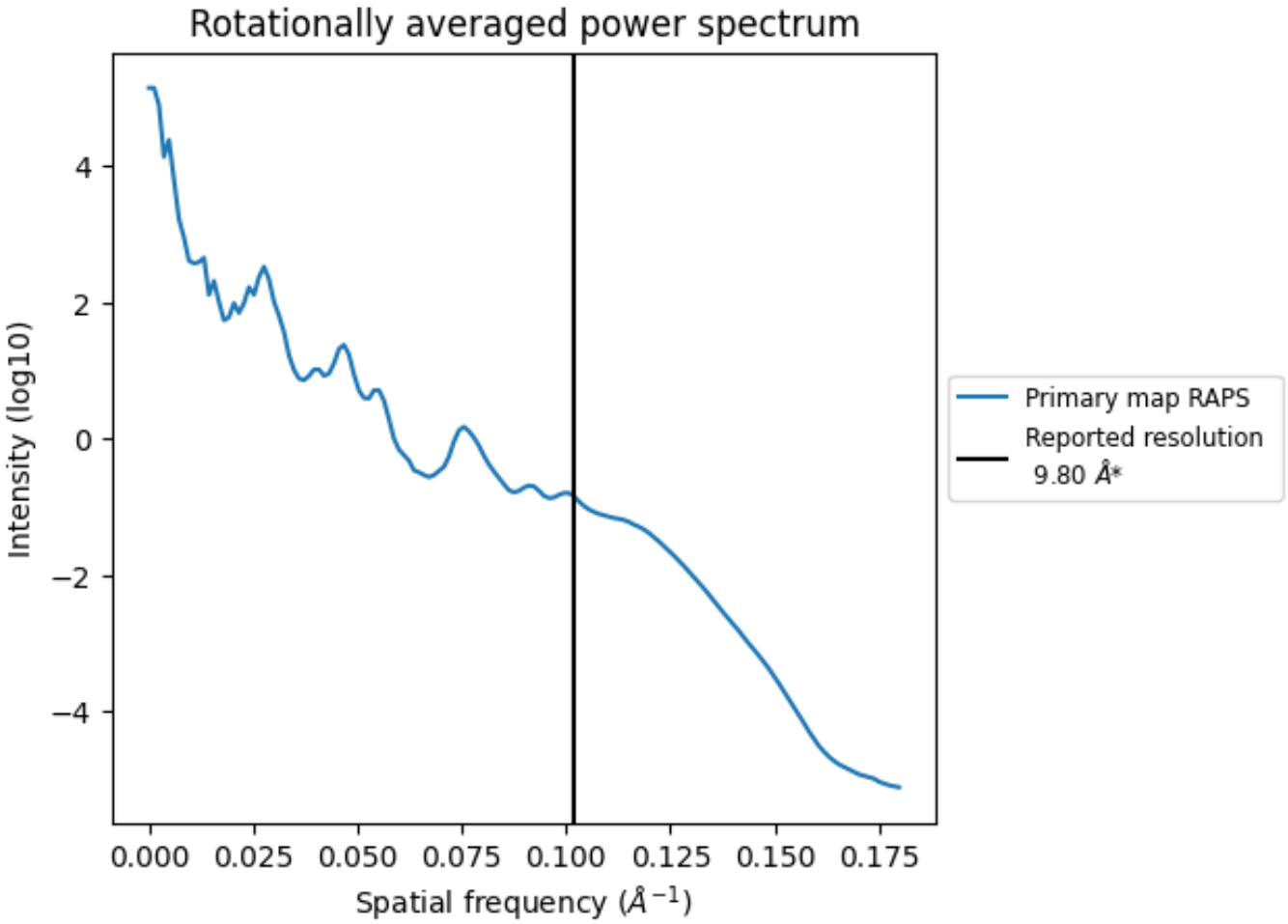
7.2 Volume estimate



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)

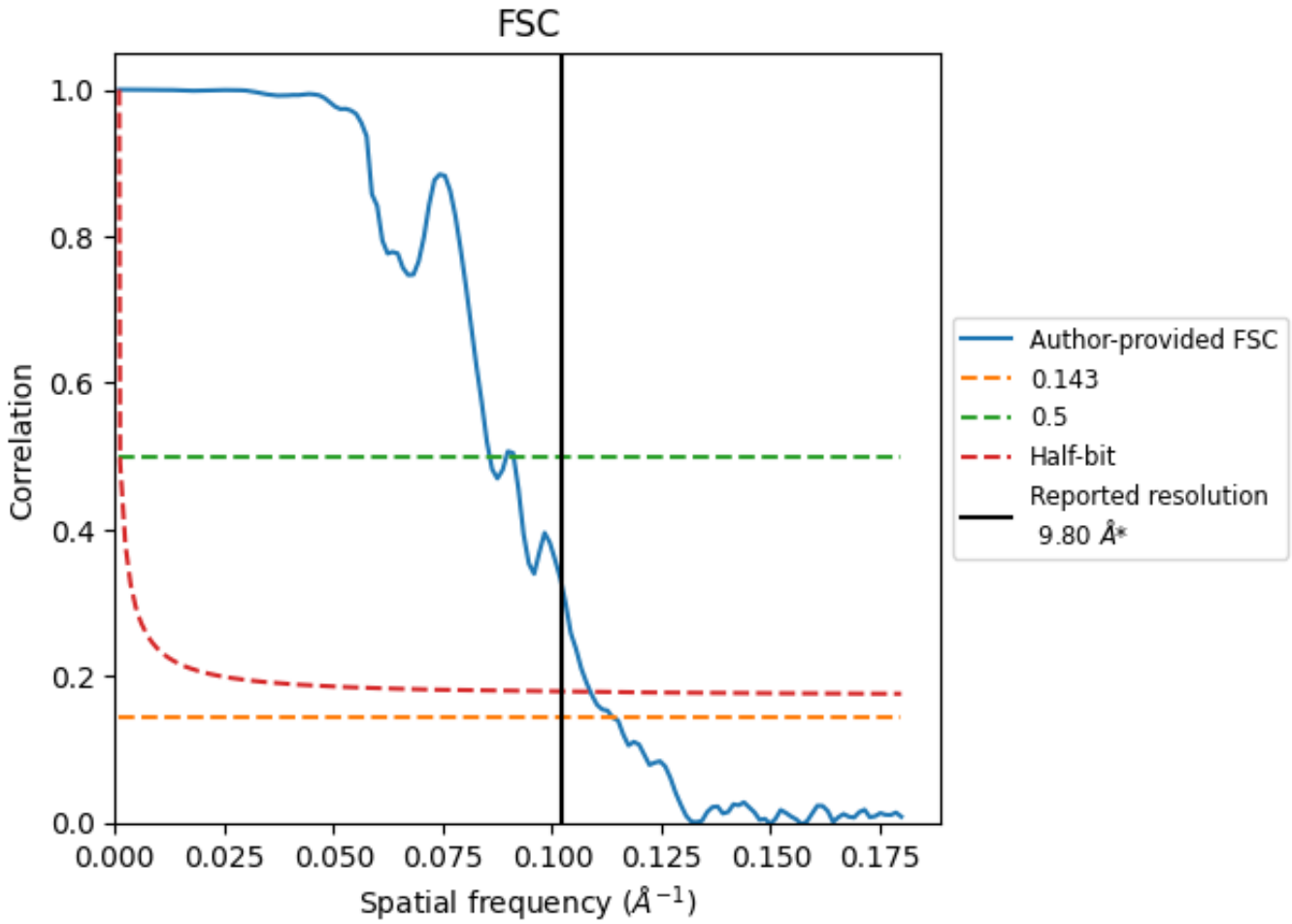


*Reported resolution corresponds to spatial frequency of 0.102 Å^{-1}

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)

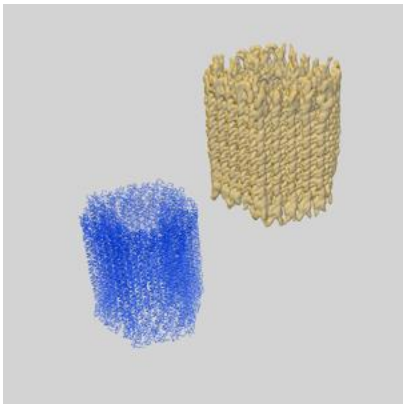
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	9.80	-	-
Author-provided FSC curve	8.78	11.66	9.19
Unmasked-calculated*	-	-	-

*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 %

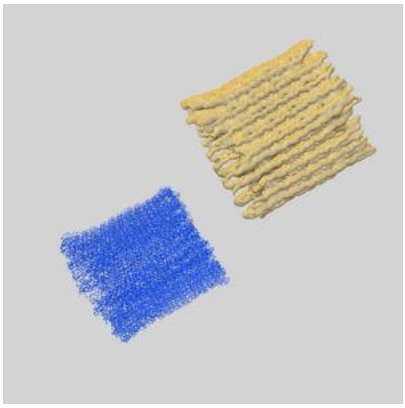
9 Map-model fit

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.

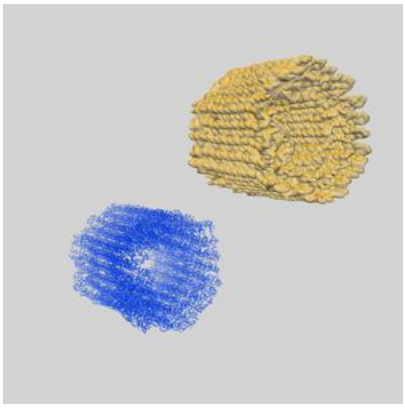
9.1 Map-model overlay



X



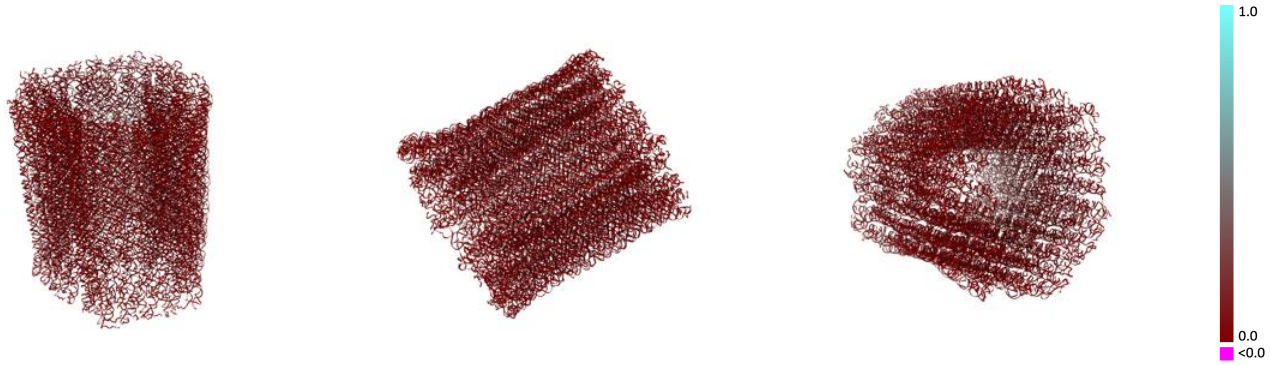
Y



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.

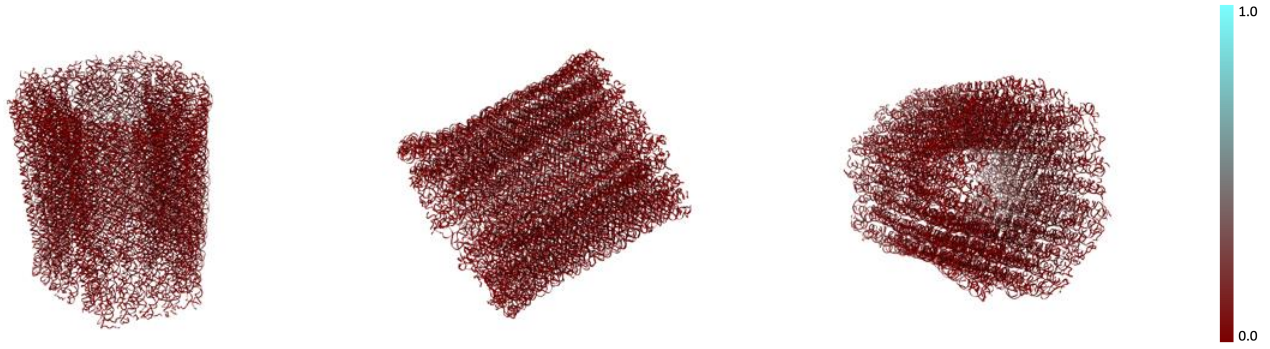
9.2 Q-score mapped to coordinate model (i)



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.

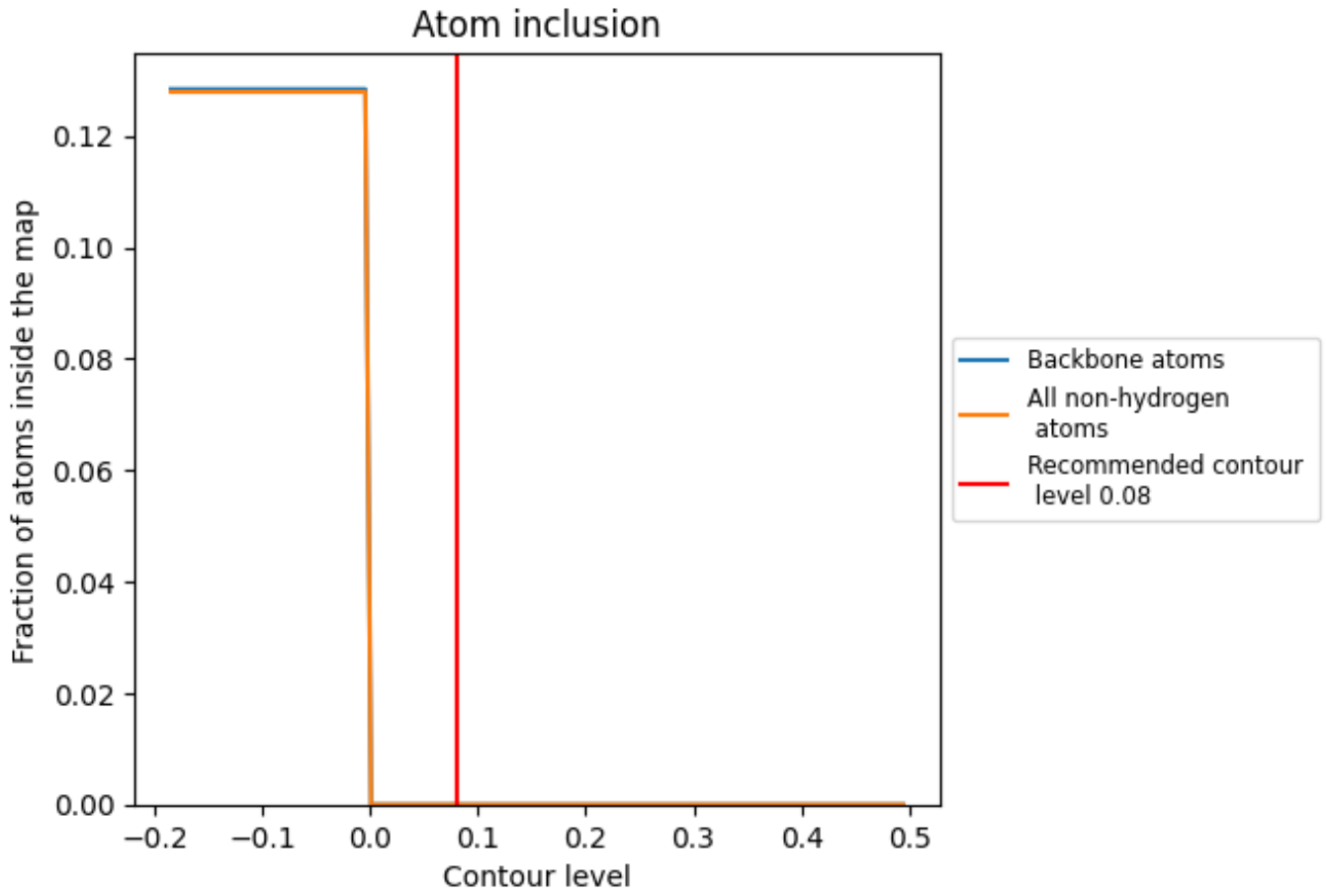
9.3 Atom inclusion mapped to coordinate model (i)



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

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