Full wwPDB EM Validation Report ⓘ

Nov 17, 2026 – 08:00 PM JST

PDB ID	:	23KL / pdb_000023kl
EMDB ID	:	EMD-69050
Title	:	Cryo-EM structure of PSII-LHCII-LHCP from Mesostigma viride.
Authors	:	Bai, T.Y.; Mao, Z.Y.; Qian, P.; Wang, Y.M.; Tian, L.R.
Deposited on	:	2026-02-09
Resolution	:	2.25 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:

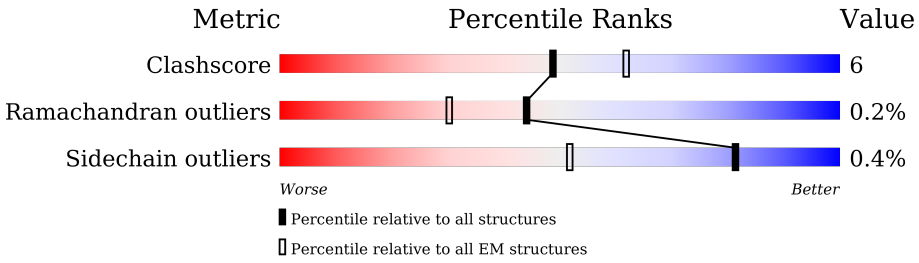
EMDB validation analysis	:	0.0.1.dev133
Mogul	:	1.8.5 (274361), CSD as541be (2020)
MolProbity	:	4-5-2 with Phenix2.2
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics	:	202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.51

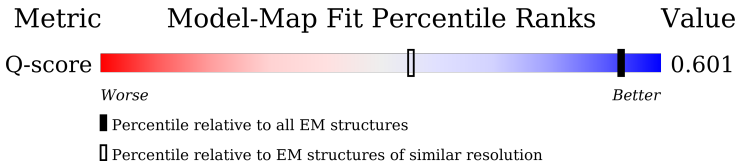
1 Overall quality at a glance

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

The reported resolution of this entry is 2.25 Å.

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





Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	3458 (1.75 - 2.75)

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	0	262	34% 74% 9% 17%
1	1	262	32% 69% 11% 17%
2	A	353	89% 5% 5%
2	a	353	88% 7% 6%

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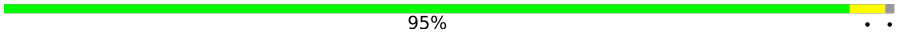
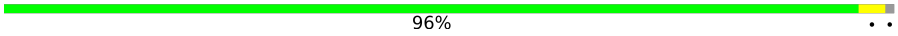
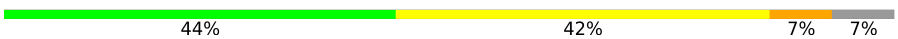
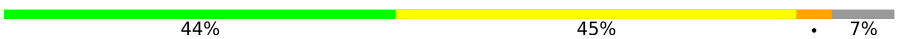
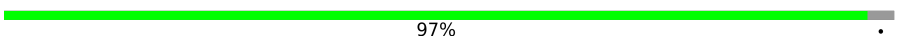
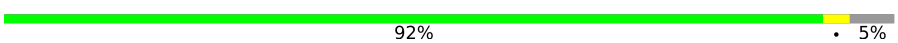
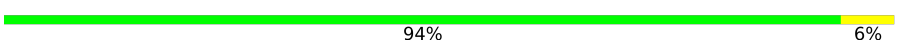
Mol	Chain	Length	Quality of chain
3	B	508	
3	b	508	
4	C	473	
4	c	473	
5	D	354	
5	d	354	
6	E	81	
6	e	81	
7	F	41	
7	f	41	
8	G	280	
8	g	280	
9	H	73	
9	h	73	
10	I	38	
10	i	38	
11	J	42	
11	j	42	
12	K	47	
12	k	47	
13	L	38	
13	l	38	
14	M	31	
14	m	31	
15	N	267	

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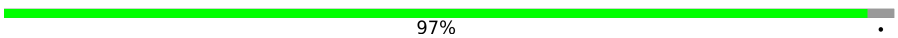
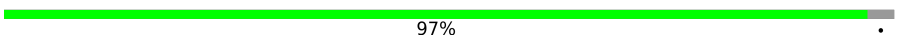
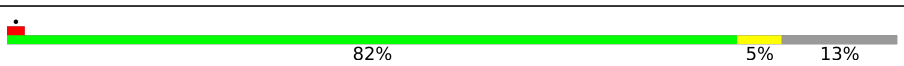
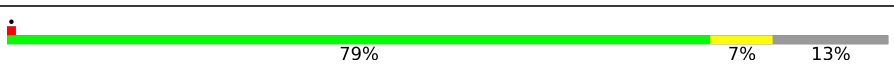
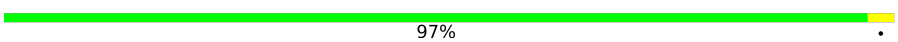
Mol	Chain	Length	Quality of chain
15	S	267	
15	V	267	
15	n	267	
15	s	267	
15	v	267	
16	O	314	
16	o	314	
17	P	260	
17	p	260	
18	Q	209	
18	q	209	
19	R	33	
19	r	33	
20	T	31	
20	t	31	
21	U	306	
21	u	306	
22	W	128	
22	w	128	
23	X	123	
23	x	123	
24	Y	267	
24	y	267	
25	Z	62	
25	z	62	

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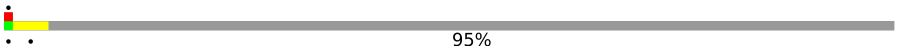
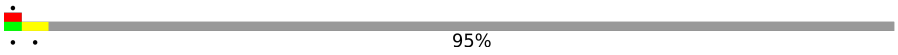
Mol	Chain	Length	Quality of chain
26	2	137	
26	3	137	
27	5	427	
27	6	427	

2 Entry composition (i)

There are 48 unique types of molecules in this entry. The entry contains 92805 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 protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	0	218	Total	C	N	O	S	0	0
			1684	1083	275	316	10		
1	1	218	Total	C	N	O	S	0	0
			1684	1083	275	316	10		

- Molecule 2 is a protein called Photosystem II protein D1.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	A	334	Total	C	N	O	S	0	0
			2607	1703	428	458	18		
2	a	333	Total	C	N	O	S	0	0
			2602	1700	427	457	18		

- Molecule 3 is a protein called Photosystem II CP47 reaction center protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	B	505	Total	C	N	O	S	0	0
			3980	2605	676	686	13		
3	b	505	Total	C	N	O	S	0	0
			3980	2605	676	686	13		

- Molecule 4 is a protein called Photosystem II CP43 reaction center protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	C	451	Total	C	N	O	S	0	0
			3509	2300	584	611	14		
4	c	451	Total	C	N	O	S	0	0
			3509	2300	584	611	14		

- Molecule 5 is a protein called Photosystem II D2 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	D	340	Total	C	N	O	S	0	0
			2695	1779	441	462	13		
5	d	340	Total	C	N	O	S	0	0
			2695	1779	441	462	13		

- Molecule 6 is a protein called Cytochrome b559 subunit alpha.

Mol	Chain	Residues	Atoms				AltConf	Trace
6	E	76	Total	C	N	O	0	0
			635	413	102	120		
6	e	76	Total	C	N	O	0	0
			635	413	102	120		

- Molecule 7 is a protein called Cytochrome b559 subunit beta.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	F	33	Total	C	N	O	S	0	0
			269	183	44	41	1		
7	f	33	Total	C	N	O	S	0	0
			269	183	44	41	1		

- Molecule 8 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	G	226	Total	C	N	O	S	0	0
			1751	1150	280	316	5		
8	g	226	Total	C	N	O	S	0	0
			1751	1150	280	316	5		

- Molecule 9 is a protein called Photosystem II reaction center protein H.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	H	68	Total	C	N	O	S	0	0
			523	349	83	89	2		
9	h	68	Total	C	N	O	S	0	0
			523	349	83	89	2		

- Molecule 10 is a protein called Photosystem II reaction center protein I.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	I	37	Total	C	N	O	S	0	0
			305	208	47	49	1		

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Mol	Chain	Residues	Atoms					AltConf	Trace
10	i	38	Total 315	C 213	N 48	O 53	S 1	0	0

- Molecule 11 is a protein called Photosystem II reaction center protein J.

Mol	Chain	Residues	Atoms				AltConf	Trace
11	J	35	Total 257	C 175	N 39	O 43	0	0
11	j	35	Total 257	C 175	N 39	O 43	0	0

- Molecule 12 is a protein called Photosystem II reaction center protein K.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	K	37	Total 300	C 208	N 43	O 48	S 1	0	0
12	k	37	Total 300	C 208	N 43	O 48	S 1	0	0

- Molecule 13 is a protein called Photosystem II reaction center protein L.

Mol	Chain	Residues	Atoms				AltConf	Trace
13	L	36	Total 302	C 202	N 46	O 54	0	0
13	l	36	Total 302	C 202	N 46	O 54	0	0

- Molecule 14 is a protein called Photosystem II reaction center protein M.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	M	31	Total 242	C 163	N 35	O 42	S 2	0	0
14	m	31	Total 242	C 163	N 35	O 42	S 2	0	0

- Molecule 15 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	N	223	Total 1691	C 1098	N 267	O 319	S 7	0	0
15	S	222	Total 1682	C 1092	N 265	O 318	S 7	0	0

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Mol	Chain	Residues	Atoms					AltConf	Trace
15	V	222	Total	C	N	O	S	0	0
			1682	1092	265	318	7		
15	n	222	Total	C	N	O	S	0	0
			1682	1092	265	318	7		
15	s	222	Total	C	N	O	S	0	0
			1682	1092	265	318	7		
15	v	223	Total	C	N	O	S	0	0
			1691	1098	267	319	7		

- Molecule 16 is a protein called Photosystem II subunit O.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	O	236	Total	C	N	O	S	0	0
			1777	1126	289	357	5		
16	o	236	Total	C	N	O	S	0	0
			1777	1126	289	357	5		

- Molecule 17 is a protein called 23 kDa subunit of oxygen evolving system of photosystem II.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	P	186	Total	C	N	O	S	0	0
			1434	912	241	278	3		
17	p	186	Total	C	N	O	S	0	0
			1434	912	241	278	3		

- Molecule 18 is a protein called Oxygen evolving enhancer protein 3.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	Q	147	Total	C	N	O	S	0	0
			1103	687	202	213	1		
18	q	147	Total	C	N	O	S	0	0
			1103	687	202	213	1		

- Molecule 19 is a protein called Photosystem II reaction center protein Psb30.

Mol	Chain	Residues	Atoms				AltConf	Trace
19	R	32	Total	C	N	O	0	0
			231	152	37	42		
19	r	32	Total	C	N	O	0	0
			231	152	37	42		

- Molecule 20 is a protein called Photosystem II reaction center protein T.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	T	29	Total	C	N	O	S	0	0
			239	167	35	36	1		
20	t	29	Total	C	N	O	S	0	0
			239	167	35	36	1		

- Molecule 21 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	U	241	Total	C	N	O	S	0	0
			1833	1178	303	345	7		
21	u	242	Total	C	N	O	S	0	0
			1843	1183	305	348	7		

- Molecule 22 is a protein called PSII 6.1 kDa protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	W	54	Total	C	N	O	S	0	0
			397	253	59	83	2		
22	w	54	Total	C	N	O	S	0	0
			397	253	59	83	2		

- Molecule 23 is a protein called Photosystem II subunit X.

Mol	Chain	Residues	Atoms				AltConf	Trace
23	X	35	Total	C	N	O	0	0
			242	157	40	45		
23	x	35	Total	C	N	O	0	0
			242	157	40	45		

- Molecule 24 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	Y	233	Total	C	N	O	S	0	0
			1776	1139	295	332	10		
24	y	233	Total	C	N	O	S	0	0
			1776	1139	295	332	10		

- Molecule 25 is a protein called Photosystem II reaction center protein Z.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	Z	62	Total	C	N	O	S	0	0
			471	324	69	76	2		

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Mol	Chain	Residues	Atoms					AltConf	Trace
25	z	62	Total	C	N	O	S	0	0
			471	324	69	76	2		

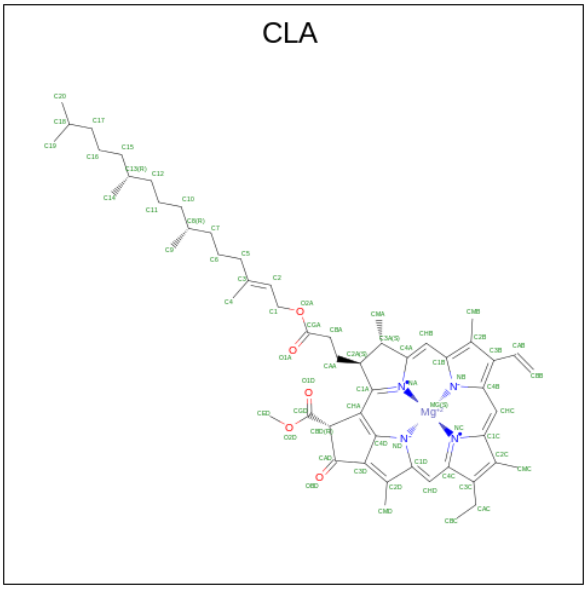
- Molecule 26 is a protein called Photosystem II 10 kDa polypeptide, chloroplastic.

Mol	Chain	Residues	Atoms				AltConf	Trace
26	2	24	Total	C	N	O	0	0
			174	121	25	28		
26	3	24	Total	C	N	O	0	0
			174	121	25	28		

- Molecule 27 is a protein called Photosystem II BY.

Mol	Chain	Residues	Atoms				AltConf	Trace
27	5	23	Total	C	N	O	0	0
			167	114	28	25		
27	6	23	Total	C	N	O	0	0
			167	114	28	25		

- Molecule 28 is CHLOROPHYLL A (CCD ID: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



Mol	Chain	Residues	Atoms					AltConf
28	0	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
28	0	1	Total	C	Mg	N	O	0
			45	35	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
28	0	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
28	0	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
28	0	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
28	0	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
28	0	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
28	0	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
28	0	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	0	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
28	1	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
28	1	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
28	1	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
28	1	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
28	1	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
28	1	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
28	1	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
28	1	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
28	1	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
28	1	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
28	A	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
28	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
28	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			48	38	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	C	1	Total	C	Mg	N	O	0
			55	45	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
28	C	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	C	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	C	1	Total	C	Mg	N	O	0
			63	53	1	4	5	
28	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	D	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	D	1	Total	C	Mg	N	O	0
			63	53	1	4	5	
28	G	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
28	G	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
28	G	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
28	G	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
28	G	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
28	G	1	Total	C	Mg	N	O	0
			63	53	1	4	5	
28	G	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	G	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
28	G	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
28	G	1	Total	C	Mg	N	O	0
			54	44	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
28	N	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
28	N	1	Total	C	Mg	N	O	0
			48	38	1	4	5	
28	N	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
28	N	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	N	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
28	N	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
28	N	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
28	S	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
28	S	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	S	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	S	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	S	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
28	S	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
28	S	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
28	U	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	U	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	U	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	U	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	U	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	U	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	U	1	Total	C	Mg	N	O	0
			62	52	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
28	U	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	U	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
28	U	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	U	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
28	V	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	V	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
28	V	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	V	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	V	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
28	V	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	V	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
28	Y	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	Y	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
28	Y	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
28	Y	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
28	Y	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
28	Y	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
28	Y	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
28	Y	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
28	Y	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
28	Y	1	Total	C	Mg	N	O	0
			43	35	1	4	3	

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Mol	Chain	Residues	Atoms					AltConf
28	Y	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	Y	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
28	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	a	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
28	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	b	1	Total	C	Mg	N	O	0
			51	41	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
28	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	c	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
28	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	c	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	c	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	d	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	d	1	Total	C	Mg	N	O	0
			63	53	1	4	5	
28	g	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
28	g	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	g	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	g	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
28	g	1	Total	C	Mg	N	O	0
			43	35	1	4	3	

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Mol	Chain	Residues	Atoms					AltConf
28	g	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	g	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	g	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	g	1	Total	C	Mg	N	O	0
			62	52	1	4	5	
28	g	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
28	n	1	Total	C	Mg	N	O	0
			62	52	1	4	5	
28	n	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
28	n	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	n	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	n	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	n	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	n	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
28	s	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
28	s	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
28	s	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	s	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
28	s	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
28	s	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	s	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
28	u	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	u	1	Total	C	Mg	N	O	0
			61	51	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
28	u	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
28	u	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	u	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	u	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
28	u	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
28	u	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	u	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	u	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	u	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
28	v	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
28	v	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	v	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	v	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	v	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
28	v	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	v	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
28	y	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
28	y	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
28	y	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
28	y	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
28	y	1	Total	C	Mg	N	O	0
			55	45	1	4	5	

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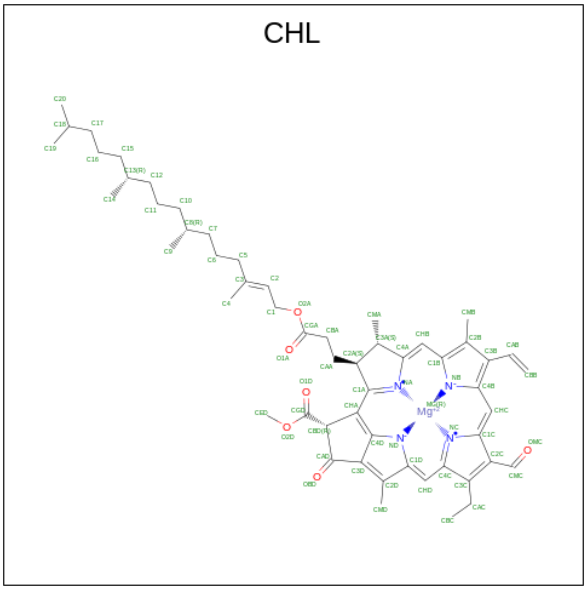
Mol	Chain	Residues	Atoms					AltConf
28	y	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
28	y	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
28	y	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	y	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
28	y	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
28	y	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
28	y	1	Total	C	Mg	N	O	0
			42	34	1	4	3	

- Molecule 29 is CHLOROPHYLL B (CCD ID: CHL) (formula: $C_{55}H_{70}MgN_4O_6$).



Mol	Chain	Residues	Atoms					AltConf
29	0	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
29	1	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
29	G	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
29	G	1	Total	C	Mg	N	O	0
			51	40	1	4	6	

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Mol	Chain	Residues	Atoms					AltConf
29	G	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	N	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	N	1	Total	C	Mg	N	O	0
			63	52	1	4	6	
29	N	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
29	N	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
29	N	1	Total	C	Mg	N	O	0
			62	51	1	4	6	
29	N	1	Total	C	Mg	N	O	0
			64	53	1	4	6	
29	N	1	Total	C	Mg	N	O	0
			61	50	1	4	6	
29	S	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	S	1	Total	C	Mg	N	O	0
			62	51	1	4	6	
29	S	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	S	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	S	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	S	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	U	1	Total	C	Mg	N	O	0
			59	48	1	4	6	
29	U	1	Total	C	Mg	N	O	0
			60	49	1	4	6	
29	U	1	Total	C	Mg	N	O	0
			61	50	1	4	6	
29	V	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	V	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	V	1	Total	C	Mg	N	O	0
			62	51	1	4	6	
29	V	1	Total	C	Mg	N	O	0
			61	50	1	4	6	

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Mol	Chain	Residues	Atoms					AltConf
29	V	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
29	V	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	V	1	Total	C	Mg	N	O	0
			49	38	1	4	6	
29	V	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	Y	1	Total	C	Mg	N	O	0
			56	45	1	4	6	
29	Y	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	g	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	g	1	Total	C	Mg	N	O	0
			51	40	1	4	6	
29	g	1	Total	C	Mg	N	O	0
			56	45	1	4	6	
29	n	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	n	1	Total	C	Mg	N	O	0
			59	48	1	4	6	
29	n	1	Total	C	Mg	N	O	0
			58	47	1	4	6	
29	n	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
29	n	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	n	1	Total	C	Mg	N	O	0
			51	40	1	4	6	
29	n	1	Total	C	Mg	N	O	0
			61	50	1	4	6	
29	s	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	s	1	Total	C	Mg	N	O	0
			64	53	1	4	6	
29	s	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
29	s	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
29	s	1	Total	C	Mg	N	O	0
			60	49	1	4	6	

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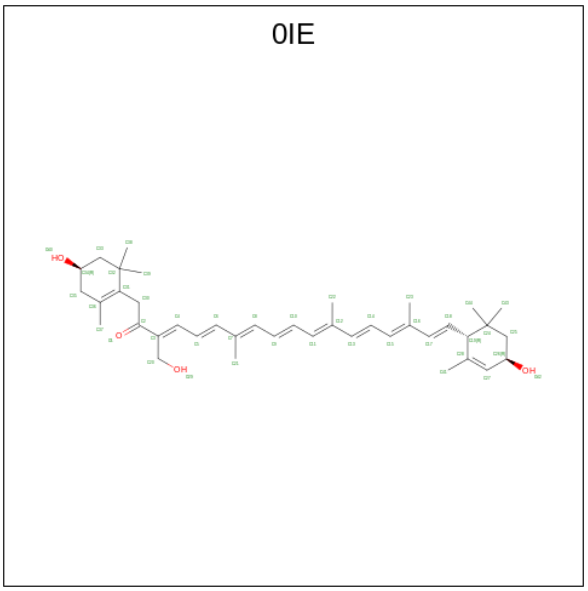
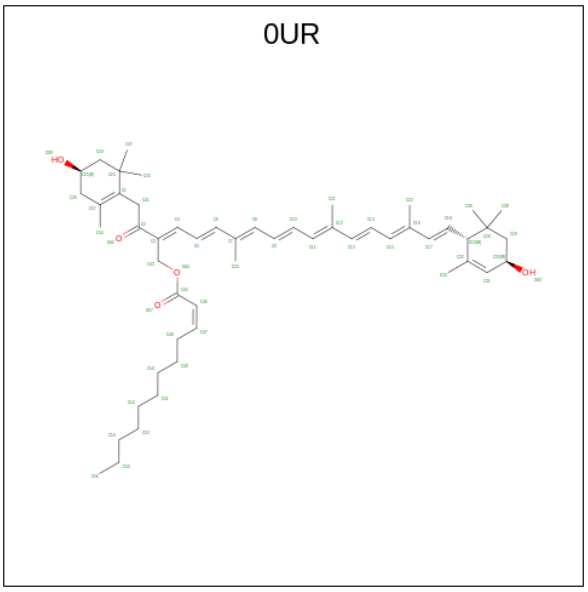
Mol	Chain	Residues	Atoms					AltConf
29	s	1	Total	C	Mg	N	O	0
			51	40	1	4	6	
29	s	1	Total	C	Mg	N	O	0
			61	50	1	4	6	
29	u	1	Total	C	Mg	N	O	0
			59	48	1	4	6	
29	u	1	Total	C	Mg	N	O	0
			58	47	1	4	6	
29	u	1	Total	C	Mg	N	O	0
			61	50	1	4	6	
29	v	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	v	1	Total	C	Mg	N	O	0
			60	49	1	4	6	
29	v	1	Total	C	Mg	N	O	0
			51	40	1	4	6	
29	v	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
29	v	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
29	v	1	Total	C	Mg	N	O	0
			61	50	1	4	6	
29	v	1	Total	C	Mg	N	O	0
			60	49	1	4	6	
29	y	1	Total	C	Mg	N	O	0
			58	47	1	4	6	
29	y	1	Total	C	Mg	N	O	0
			46	35	1	4	6	

- Molecule 30 is Siphonaxanthin (CCD ID: 0IE) (formula: $C_{40}H_{56}O_4$).



Mol	Chain	Residues	Atoms	AltConf
30	0	1	Total C O 44 40 4	0
30	1	1	Total C O 44 40 4	0
30	N	1	Total C O 44 40 4	0
30	S	1	Total C O 44 40 4	0
30	V	1	Total C O 44 40 4	0
30	Y	1	Total C O 44 40 4	0
30	Y	1	Total C O 44 40 4	0
30	n	1	Total C O 44 40 4	0
30	s	1	Total C O 44 40 4	0
30	v	1	Total C O 44 40 4	0
30	y	1	Total C O 44 40 4	0
30	y	1	Total C O 44 40 4	0

- Molecule 31 is Siphonein (CCD ID: 0UR) (formula: $C_{52}H_{76}O_5$).



Mol	Chain	Residues	Atoms	AltConf
31	0	1	Total C O 49 44 5	0
31	0	1	Total C O 49 44 5	0
31	1	1	Total C O 48 43 5	0
31	1	1	Total C O 47 42 5	0
31	1	1	Total C O 50 45 5	0
31	G	1	Total C O 50 45 5	0
31	G	1	Total C O 50 45 5	0
31	N	1	Total C O 50 45 5	0
31	S	1	Total C O 50 45 5	0
31	U	1	Total C O 52 47 5	0
31	V	1	Total C O 52 47 5	0
31	Y	1	Total C O 57 52 5	0
31	Y	1	Total C O 50 45 5	0
31	Y	1	Total C O 57 52 5	0

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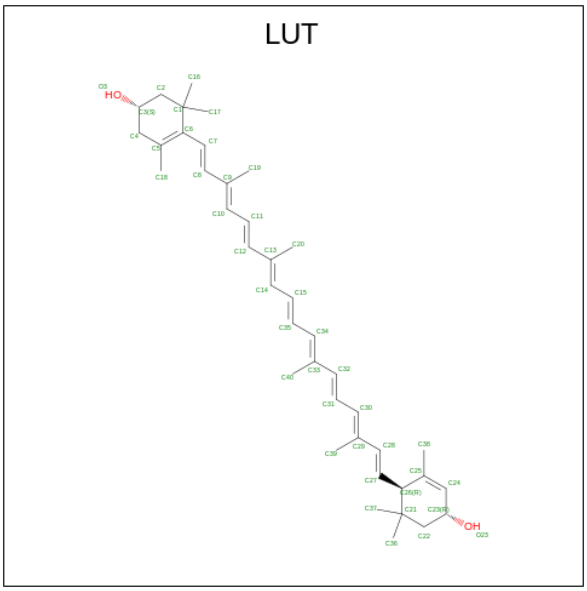
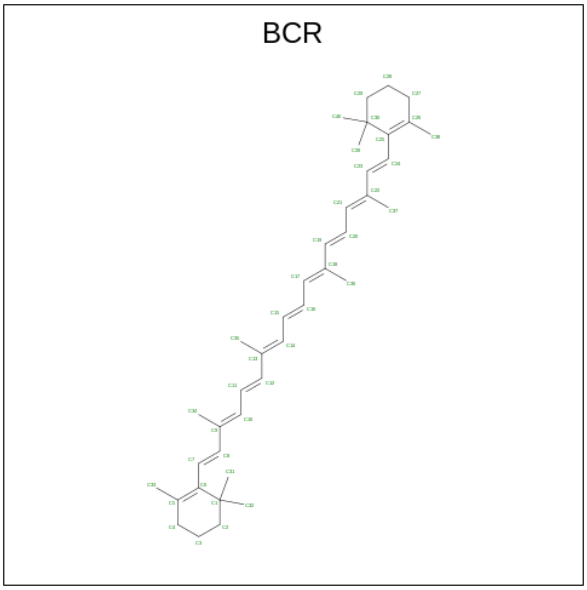
Mol	Chain	Residues	Atoms	AltConf
31	Y	1	Total C O 57 52 5	0
31	g	1	Total C O 50 45 5	0
31	g	1	Total C O 50 45 5	0
31	n	1	Total C O 53 48 5	0
31	s	1	Total C O 49 44 5	0
31	u	1	Total C O 49 44 5	0
31	v	1	Total C O 50 45 5	0
31	y	1	Total C O 49 44 5	0
31	y	1	Total C O 51 46 5	0
31	y	1	Total C O 57 52 5	0
31	y	1	Total C O 57 52 5	0

- Molecule 32 is (3R,3'R,6S)-4,5-DIDEHYDRO-5,6-DIHYDRO-BETA,BETA-CAROTENE-3 ,3'-DIOL (CCD ID: LUT) (formula: $C_{40}H_{56}O_2$).



Mol	Chain	Residues	Atoms	AltConf
32	1	1	Total C O 42 40 2	0
32	U	1	Total C O 42 40 2	0
32	Y	1	Total C O 42 40 2	0
32	u	1	Total C O 42 40 2	0
32	y	1	Total C O 42 40 2	0

- Molecule 33 is BETA-CAROTENE (CCD ID: BCR) (formula: $C_{40}H_{56}$).



Mol	Chain	Residues	Atoms	AltConf
33	A	1	Total C 40 40	0
33	B	1	Total C 40 40	0
33	B	1	Total C 40 40	0
33	B	1	Total C 40 40	0
33	C	1	Total C 40 40	0
33	C	1	Total C 40 40	0
33	D	1	Total C 40 40	0

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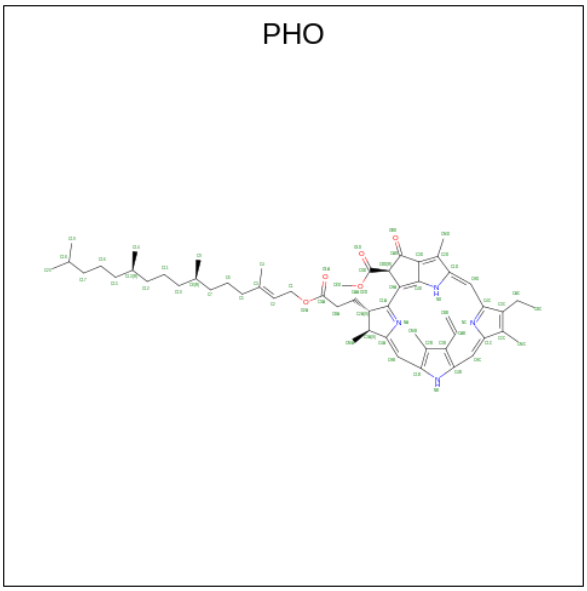
Mol	Chain	Residues	Atoms	AltConf
33	H	1	Total C 40 40	0
33	K	1	Total C 40 40	0
33	K	1	Total C 40 40	0
33	T	1	Total C 40 40	0
33	a	1	Total C 40 40	0
33	b	1	Total C 40 40	0
33	b	1	Total C 40 40	0
33	b	1	Total C 40 40	0
33	c	1	Total C 40 40	0
33	c	1	Total C 40 40	0
33	d	1	Total C 40 40	0
33	h	1	Total C 40 40	0
33	k	1	Total C 40 40	0
33	k	1	Total C 40 40	0
33	t	1	Total C 40 40	0

- Molecule 34 is PHEOPHYTIN A (CCD ID: PHO) (formula: $C_{55}H_{74}N_4O_5$).

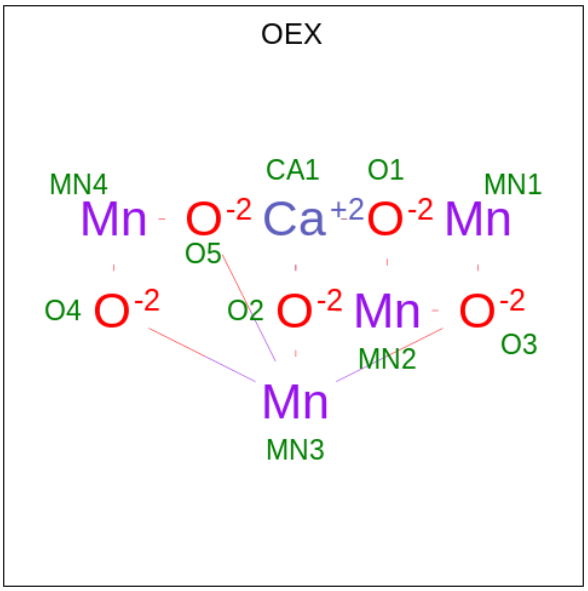


Mol	Chain	Residues	Atoms	AltConf
34	A	1	Total C N O 64 55 4 5	0
34	D	1	Total C N O 64 55 4 5	0
34	a	1	Total C N O 64 55 4 5	0
34	d	1	Total C N O 64 55 4 5	0

- Molecule 35 is CHLORIDE ION (CCD ID: CL) (formula: Cl).

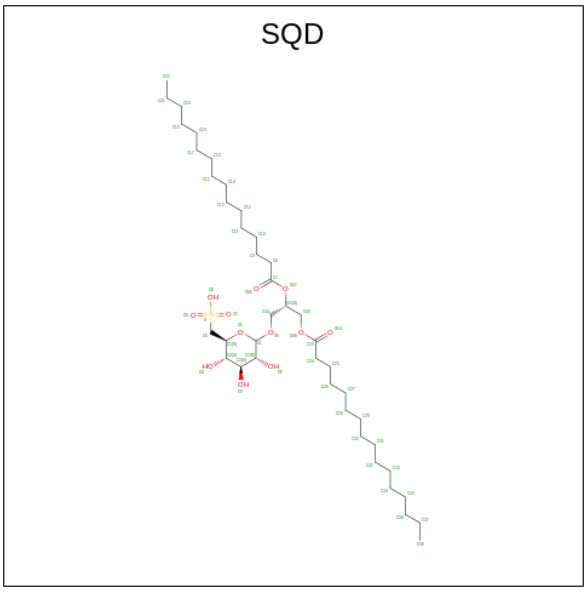
Mol	Chain	Residues	Atoms	AltConf
35	A	2	Total Cl 2 2	0
35	a	2	Total Cl 2 2	0

- Molecule 36 is CA-MN4-O5 CLUSTER (CCD ID: OEX) (formula: $CaMn_4O_5$).



Mol	Chain	Residues	Atoms				AltConf
36	A	1	Total	Ca	Mn	O	0
			10	1	4	5	
36	a	1	Total	Ca	Mn	O	0
			10	1	4	5	

- Molecule 37 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (CCD ID: SQD) (formula: $C_{41}H_{78}O_{12}S$).



Mol	Chain	Residues	Atoms				AltConf
37	A	1	Total	C	O	S	0
			43	30	12	1	

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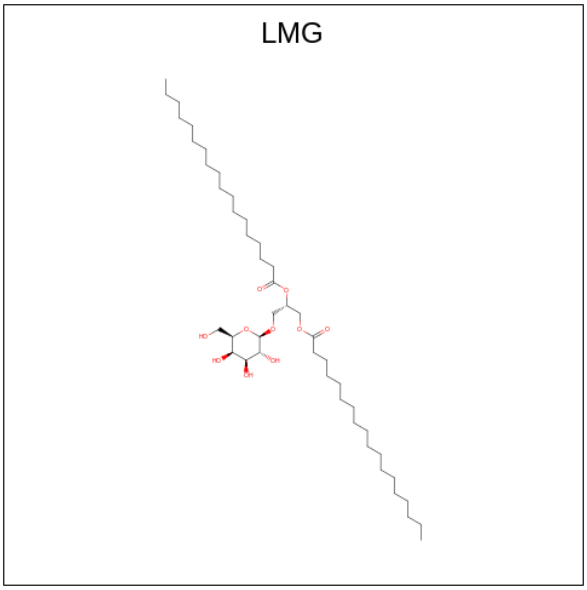
Mol	Chain	Residues	Atoms				AltConf
37	B	1	Total	C	O	S	0
			48	35	12	1	
37	B	1	Total	C	O	S	0
			51	38	12	1	
37	T	1	Total	C	O	S	0
			42	29	12	1	
37	b	1	Total	C	O	S	0
			46	33	12	1	
37	c	1	Total	C	O	S	0
			43	30	12	1	
37	c	1	Total	C	O	S	0
			50	37	12	1	
37	z	1	Total	C	O	S	0
			46	33	12	1	

- Molecule 38 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID: LMG) (formula: $C_{45}H_{86}O_{10}$).



Mol	Chain	Residues	Atoms			AltConf
38	A	1	Total	C	O	0
			31	21	10	
38	A	1	Total	C	O	0
			37	27	10	
38	A	1	Total	C	O	0
			39	29	10	
38	A	1	Total	C	O	0
			45	35	10	

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Mol	Chain	Residues	Atoms	AltConf
38	B	1	Total C O 43 33 10	0
38	C	1	Total C O 27 17 10	0
38	C	1	Total C O 40 30 10	0
38	D	1	Total C O 50 40 10	0
38	D	1	Total C O 39 29 10	0
38	F	1	Total C O 36 26 10	0
38	I	1	Total C O 41 31 10	0
38	J	1	Total C O 39 29 10	0
38	J	1	Total C O 40 30 10	0
38	K	1	Total C O 34 24 10	0
38	K	1	Total C O 47 37 10	0
38	M	1	Total C O 47 37 10	0
38	U	1	Total C O 37 27 10	0
38	U	1	Total C O 30 20 10	0
38	W	1	Total C O 37 27 10	0
38	a	1	Total C O 35 25 10	0
38	a	1	Total C O 46 36 10	0
38	a	1	Total C O 46 36 10	0
38	b	1	Total C O 36 26 10	0
38	b	1	Total C O 33 23 10	0
38	c	1	Total C O 37 27 10	0

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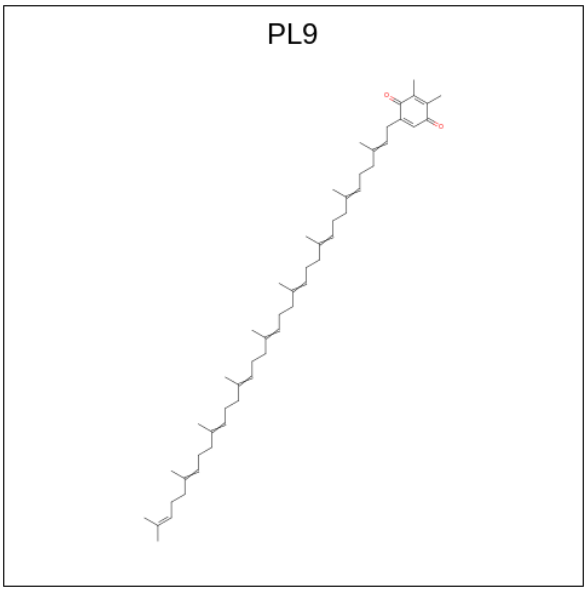
Mol	Chain	Residues	Atoms	AltConf
38	c	1	Total C O 50 40 10	0
38	c	1	Total C O 30 20 10	0
38	d	1	Total C O 49 39 10	0
38	d	1	Total C O 41 31 10	0
38	d	1	Total C O 38 28 10	0
38	i	1	Total C O 35 25 10	0
38	m	1	Total C O 43 33 10	0
38	u	1	Total C O 40 30 10	0
38	u	1	Total C O 32 22 10	0
38	w	1	Total C O 36 26 10	0

- Molecule 39 is 2,3-DIMETHYL-5-(3,7,11,15,19,23,27,31,35-NONAMETHYL-2,6,10,14,18,22,26,30,34-HEXATRIACONTANONAENYL-2,5-CYCLOHEXADIENE-1,4-DIONE-2,3-DIMETHYL-5-SOLANESYL-1,4-BENZOQUINONE (CCD ID: PL9) (formula: $C_{53}H_{80}O_2$).

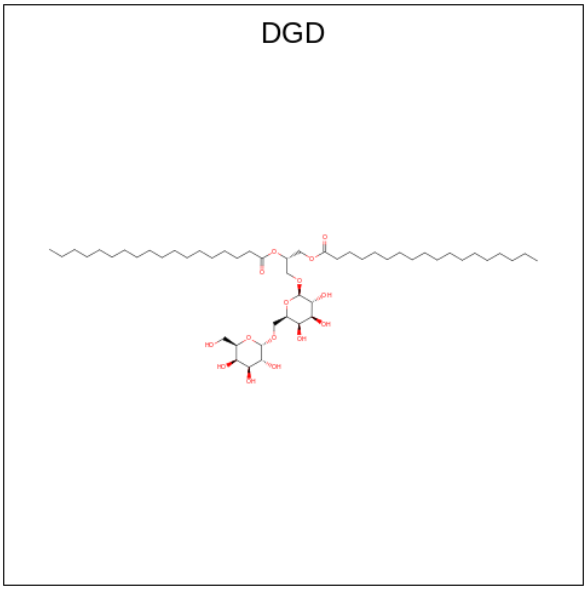


Mol	Chain	Residues	Atoms	AltConf
39	A	1	Total C O 55 53 2	0
39	D	1	Total C O 55 53 2	0
39	a	1	Total C O 55 53 2	0
39	d	1	Total C O 55 53 2	0

- Molecule 40 is FE (II) ION (CCD ID: FE2) (formula: Fe).

Mol	Chain	Residues	Atoms	AltConf
40	A	1	Total Fe 1 1	0
40	d	1	Total Fe 1 1	0

- Molecule 41 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (CCD ID: DGD) (formula: $C_{51}H_{96}O_{15}$).



Mol	Chain	Residues	Atoms	AltConf
41	A	1	Total C O 45 30 15	0
41	C	1	Total C O 52 37 15	0
41	C	1	Total C O 39 24 15	0

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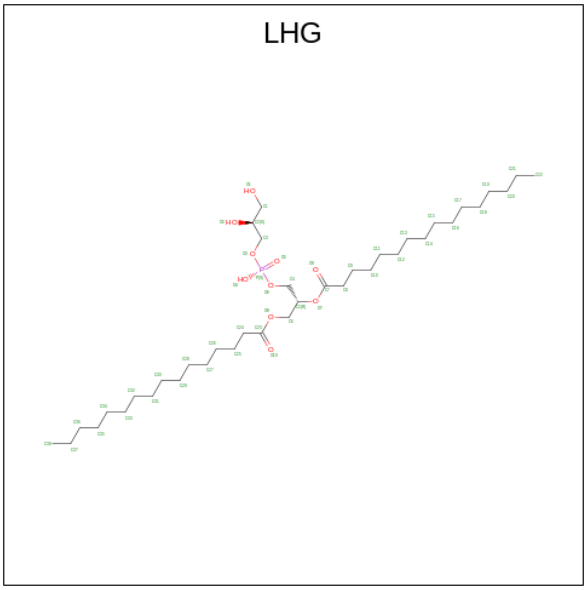
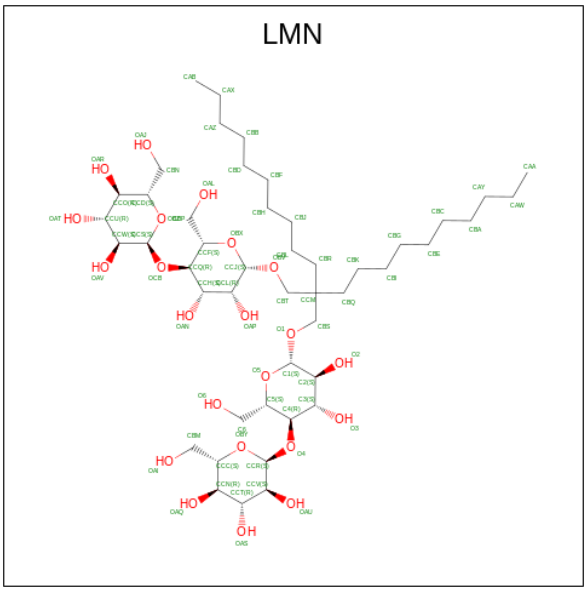
Mol	Chain	Residues	Atoms	AltConf
41	C	1	Total C O 53 38 15	0
41	C	1	Total C O 56 41 15	0
41	G	1	Total C O 38 23 15	0
41	a	1	Total C O 44 29 15	0
41	a	1	Total C O 61 46 15	0
41	b	1	Total C O 61 46 15	0
41	c	1	Total C O 51 36 15	0
41	c	1	Total C O 49 34 15	0
41	c	1	Total C O 41 26 15	0
41	c	1	Total C O 47 32 15	0
41	c	1	Total C O 45 30 15	0
41	g	1	Total C O 48 33 15	0

- Molecule 42 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: $C_{38}H_{75}O_{10}P$).



Mol	Chain	Residues	Atoms				AltConf
42	B	1	Total	C	O	P	0
			35	24	10	1	
42	D	1	Total	C	O	P	0
			45	34	10	1	
42	D	1	Total	C	O	P	0
			49	38	10	1	
42	D	1	Total	C	O	P	0
			40	29	10	1	
42	G	1	Total	C	O	P	0
			42	31	10	1	
42	L	1	Total	C	O	P	0
			44	33	10	1	
42	N	1	Total	C	O	P	0
			40	29	10	1	
42	S	1	Total	C	O	P	0
			44	33	10	1	
42	U	1	Total	C	O	P	0
			27	16	10	1	
42	V	1	Total	C	O	P	0
			49	38	10	1	
42	a	1	Total	C	O	P	0
			43	32	10	1	
42	b	1	Total	C	O	P	0
			49	38	10	1	
42	b	1	Total	C	O	P	0
			41	30	10	1	
42	c	1	Total	C	O	P	0
			30	19	10	1	
42	d	1	Total	C	O	P	0
			49	38	10	1	
42	g	1	Total	C	O	P	0
			37	26	10	1	
42	l	1	Total	C	O	P	0
			44	33	10	1	
42	n	1	Total	C	O	P	0
			43	32	10	1	
42	s	1	Total	C	O	P	0
			42	31	10	1	
42	u	1	Total	C	O	P	0
			27	16	10	1	
42	v	1	Total	C	O	P	0
			49	38	10	1	

- Molecule 43 is Lauryl Maltose Neopentyl Glycol (CCD ID: LMN) (formula: $C_{47}H_{88}O_{22}$).



Mol	Chain	Residues	Atoms	AltConf
43	C	1	Total C O 69 47 22	0
43	C	1	Total C O 58 36 22	0
43	G	1	Total C O 69 47 22	0
43	G	1	Total C O 69 47 22	0
43	N	1	Total C O 69 47 22	0
43	U	1	Total C O 69 47 22	0
43	V	1	Total C O 69 47 22	0
43	V	1	Total C O 69 47 22	0
43	W	1	Total C O 69 47 22	0
43	Y	1	Total C O 65 43 22	0
43	Y	1	Total C O 69 47 22	0
43	c	1	Total C O 69 47 22	0
43	c	1	Total C O 69 47 22	0
43	g	1	Total C O 69 47 22	0

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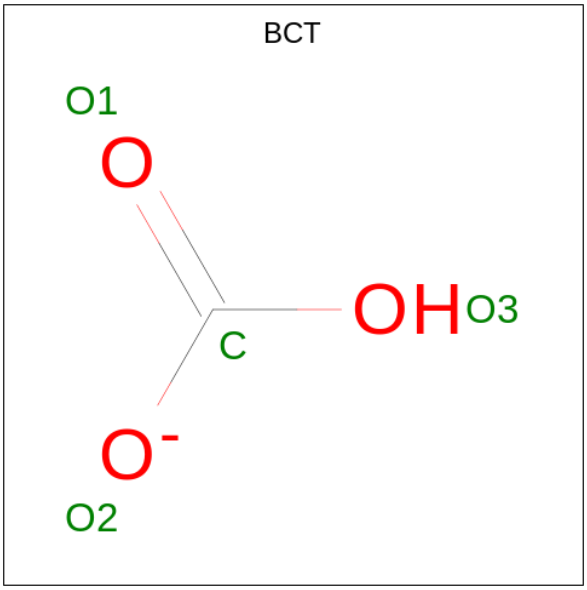
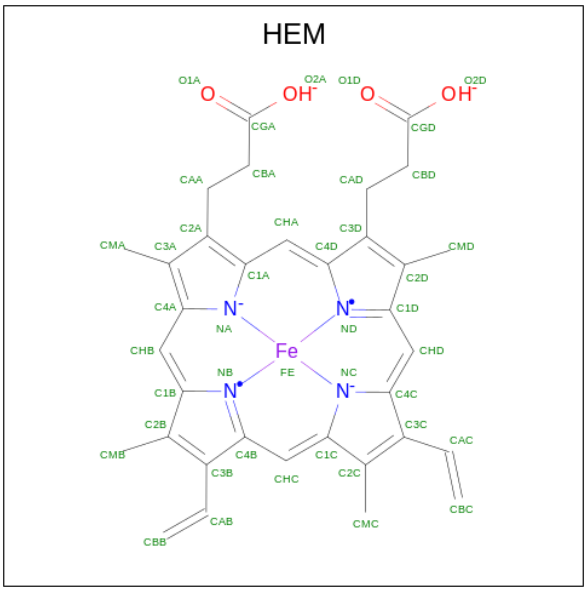
Mol	Chain	Residues	Atoms	AltConf
43	g	1	Total C O 69 47 22	0
43	n	1	Total C O 69 47 22	0
43	n	1	Total C O 69 47 22	0
43	n	1	Total C O 65 43 22	0
43	u	1	Total C O 69 47 22	0
43	v	1	Total C O 69 47 22	0
43	y	1	Total C O 69 47 22	0
43	y	1	Total C O 69 47 22	0

- Molecule 44 is BICARBONATE ION (CCD ID: BCT) (formula: CHO_3).



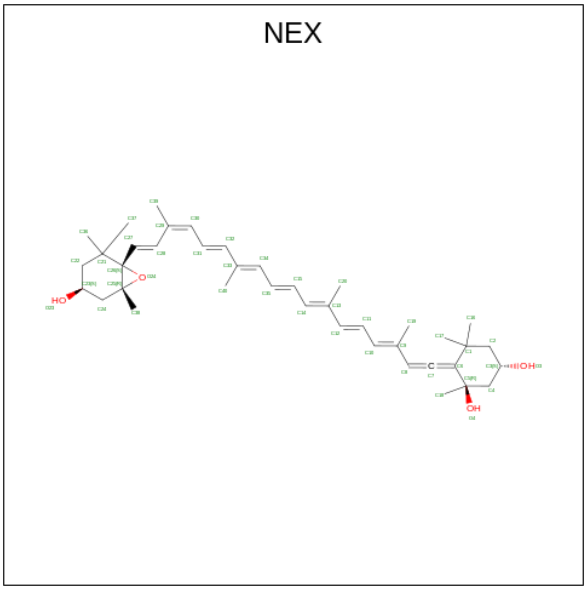
Mol	Chain	Residues	Atoms	AltConf
44	D	1	Total C O 4 1 3	0
44	a	1	Total C O 4 1 3	0

- Molecule 45 is PROTOPORPHYRIN IX CONTAINING FE (CCD ID: HEM) (formula: $C_{34}H_{32}FeN_4O_4$).



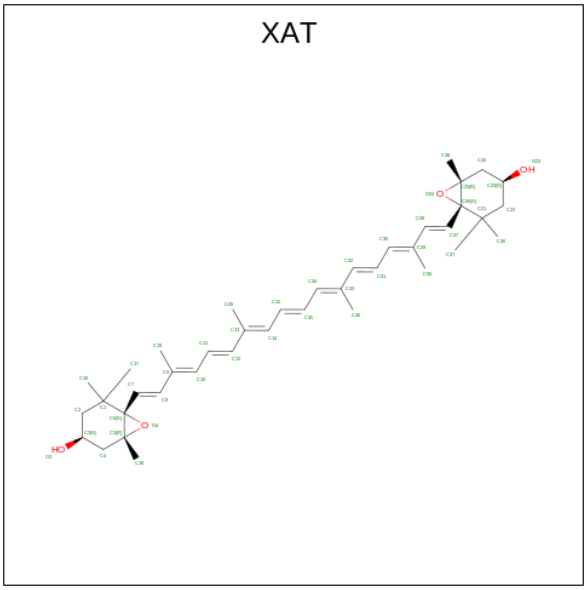
Mol	Chain	Residues	Atoms					AltConf
45	E	1	Total	C	Fe	N	O	0
			43	34	1	4	4	
45	e	1	Total	C	Fe	N	O	0
			43	34	1	4	4	

- Molecule 46 is (1R,3R)-6-{(3E,5E,7E,9E,11E,13E,15E,17E)-18-[(1S,4R,6R)-4-HYDROXY-2,2,6-TRIMETHYL-7-OXABICYCLO[4.1.0]HEPT-1-YL]-3,7,12,16-TETRAMETHYLOCTADECA-1,3,5,7,9,11,13,15,17-NONAENYLIDENE}-1,5,5-TRIMETHYLCYCLOHEXANE-1,3-DIOL (CCD ID: NEX) (formula: $C_{40}H_{56}O_4$).



Mol	Chain	Residues	Atoms			AltConf
46	G	1	Total	C	O	0
			44	40	4	
46	G	1	Total	C	O	0
			44	40	4	
46	N	1	Total	C	O	0
			44	40	4	
46	V	1	Total	C	O	0
			44	40	4	
46	V	1	Total	C	O	0
			44	40	4	
46	g	1	Total	C	O	0
			44	40	4	
46	n	1	Total	C	O	0
			44	40	4	
46	n	1	Total	C	O	0
			44	40	4	
46	s	1	Total	C	O	0
			44	40	4	
46	v	1	Total	C	O	0
			44	40	4	

- Molecule 47 is (3S,5R,6S,3'S,5'R,6'S)-5,6,5',6'-DIEPOXY-5,6,5',6'- TETRAHYDRO-BETA ,BETA-CAROTENE-3,3'-DIOL (CCD ID: XAT) (formula: $C_{40}H_{56}O_4$).



Mol	Chain	Residues	Atoms			AltConf
47	N	1	Total	C	O	0
			44	40	4	

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Mol	Chain	Residues	Atoms	AltConf
47	S	1	Total C O 44 40 4	0
47	V	1	Total C O 44 40 4	0
47	n	1	Total C O 44 40 4	0
47	s	1	Total C O 44 40 4	0
47	v	1	Total C O 44 40 4	0

- Molecule 48 is water.

Mol	Chain	Residues	Atoms	AltConf
48	A	102	Total O 102 102	0
48	B	148	Total O 148 148	0
48	C	138	Total O 138 138	0
48	D	90	Total O 90 90	0
48	E	15	Total O 15 15	0
48	G	7	Total O 7 7	0
48	H	20	Total O 20 20	0
48	I	9	Total O 9 9	0
48	J	4	Total O 4 4	0
48	K	4	Total O 4 4	0
48	L	10	Total O 10 10	0
48	M	1	Total O 1 1	0
48	N	1	Total O 1 1	0
48	O	52	Total O 52 52	0

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Mol	Chain	Residues	Atoms	AltConf
48	P	32	Total O 32 32	0
48	Q	19	Total O 19 19	0
48	R	1	Total O 1 1	0
48	S	2	Total O 2 2	0
48	T	7	Total O 7 7	0
48	U	6	Total O 6 6	0
48	V	1	Total O 1 1	0
48	W	7	Total O 7 7	0
48	X	1	Total O 1 1	0
48	a	98	Total O 98 98	0
48	b	149	Total O 149 149	0
48	c	98	Total O 98 98	0
48	d	71	Total O 71 71	0
48	e	10	Total O 10 10	0
48	f	1	Total O 1 1	0
48	g	3	Total O 3 3	0
48	h	13	Total O 13 13	0
48	i	3	Total O 3 3	0
48	j	4	Total O 4 4	0
48	k	1	Total O 1 1	0
48	l	11	Total O 11 11	0

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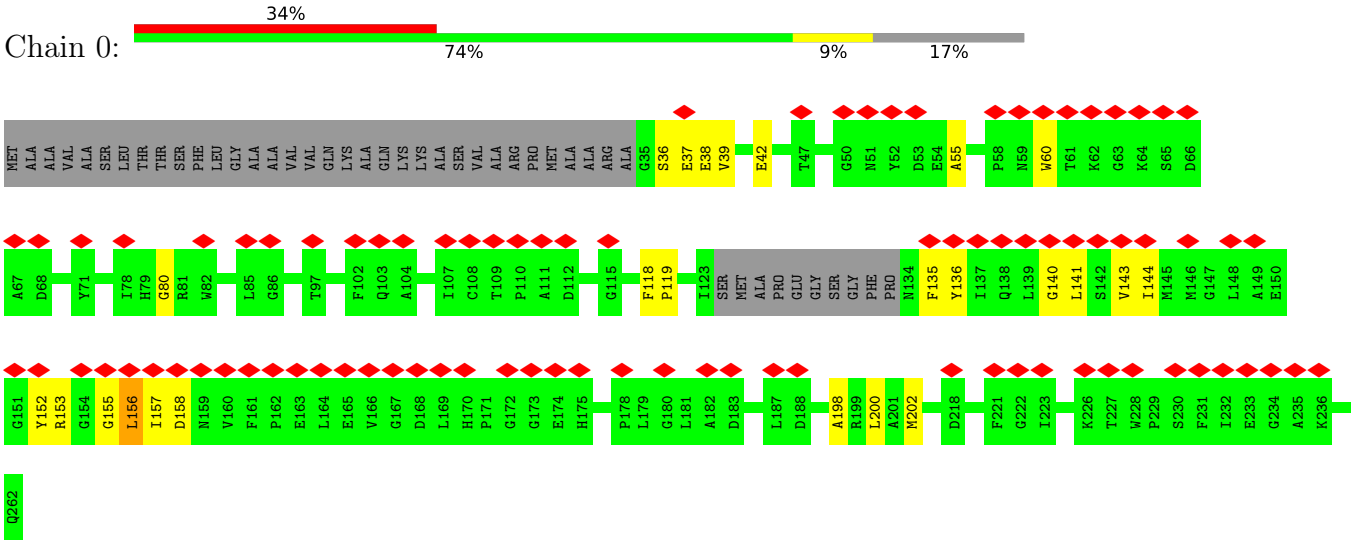
Mol	Chain	Residues	Atoms	AltConf
48	m	3	Total O 3 3	0
48	n	1	Total O 1 1	0
48	o	22	Total O 22 22	0
48	p	19	Total O 19 19	0
48	q	12	Total O 12 12	0
48	t	3	Total O 3 3	0
48	u	17	Total O 17 17	0
48	v	2	Total O 2 2	0
48	w	4	Total O 4 4	0
48	z	1	Total O 1 1	0

3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and 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.

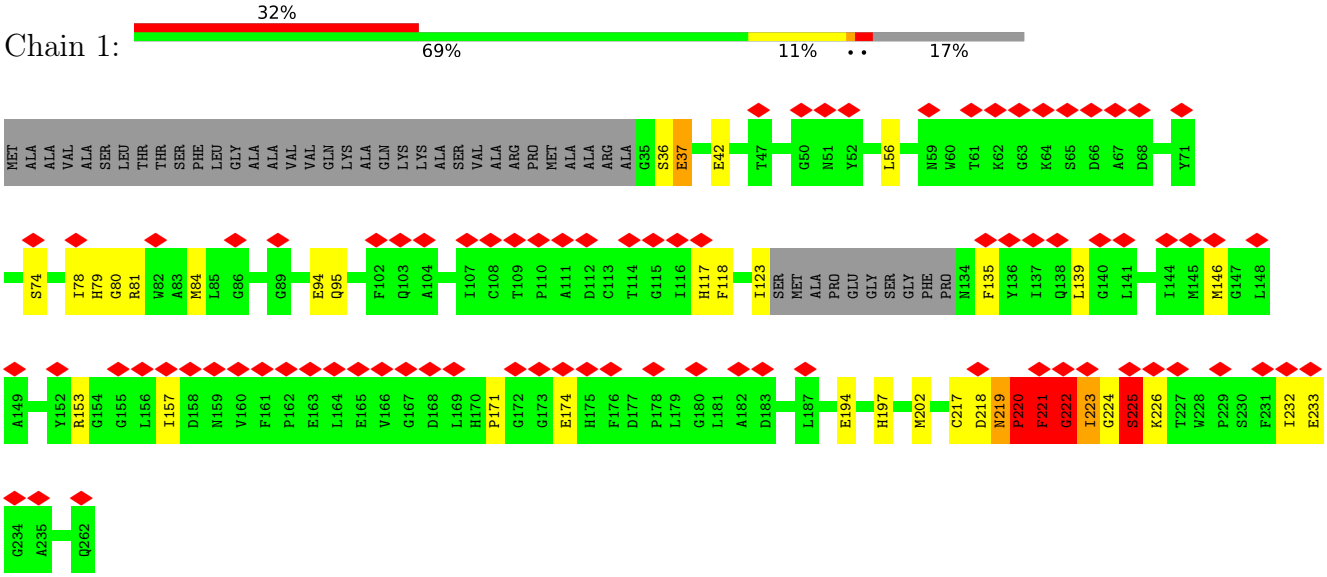
• Molecule 1: Chlorophyll a-b binding protein, chloroplastic

Chain 0:



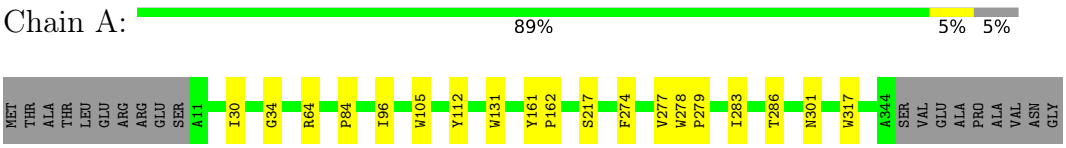
• Molecule 1: Chlorophyll a-b binding protein, chloroplastic

Chain 1:



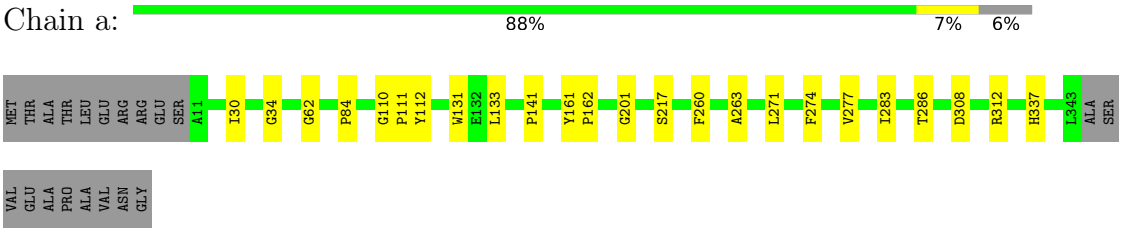
• Molecule 2: Photosystem II protein D1

Chain A:



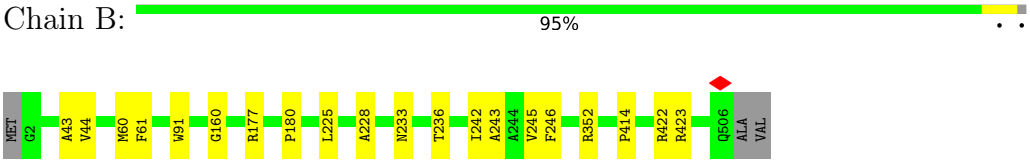
• Molecule 2: Photosystem II protein D1

Chain a:



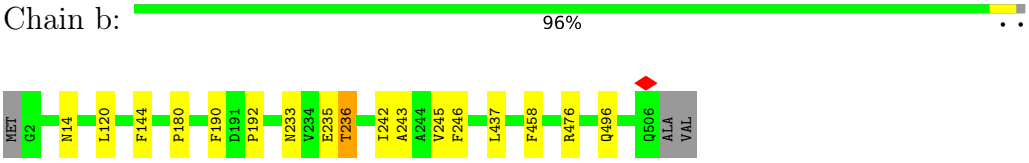
• Molecule 3: Photosystem II CP47 reaction center protein

Chain B:



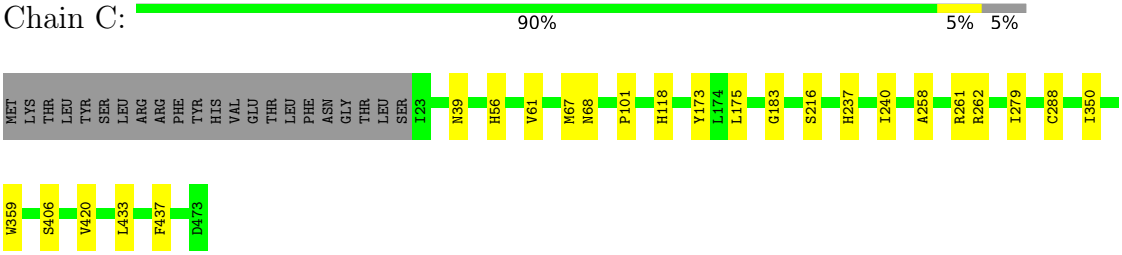
• Molecule 3: Photosystem II CP47 reaction center protein

Chain b:



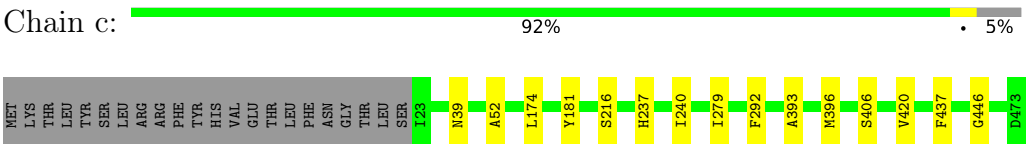
• Molecule 4: Photosystem II CP43 reaction center protein

Chain C:



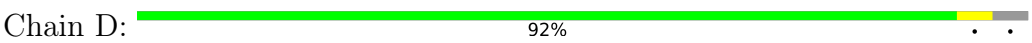
• Molecule 4: Photosystem II CP43 reaction center protein

Chain c:



• Molecule 5: Photosystem II D2 protein

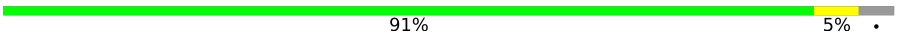
Chain D:





• Molecule 5: Photosystem II D2 protein

Chain d:

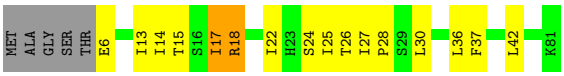




• Molecule 6: Cytochrome b559 subunit alpha

Chain E:

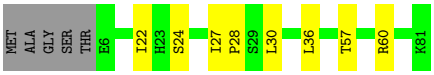




• Molecule 6: Cytochrome b559 subunit alpha

Chain e:

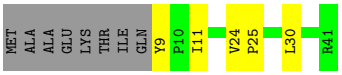




• Molecule 7: Cytochrome b559 subunit beta

Chain F:

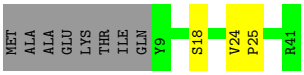




• Molecule 7: Cytochrome b559 subunit beta

Chain f:

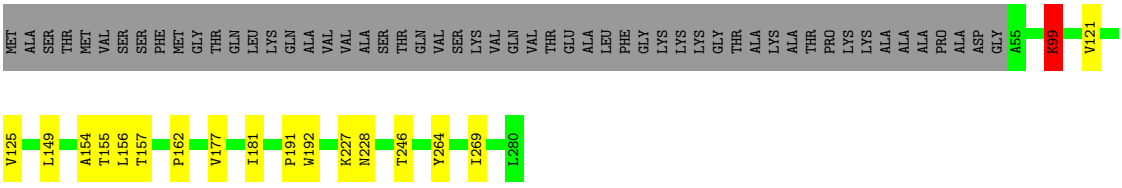




• Molecule 8: Chlorophyll a-b binding protein, chloroplastic

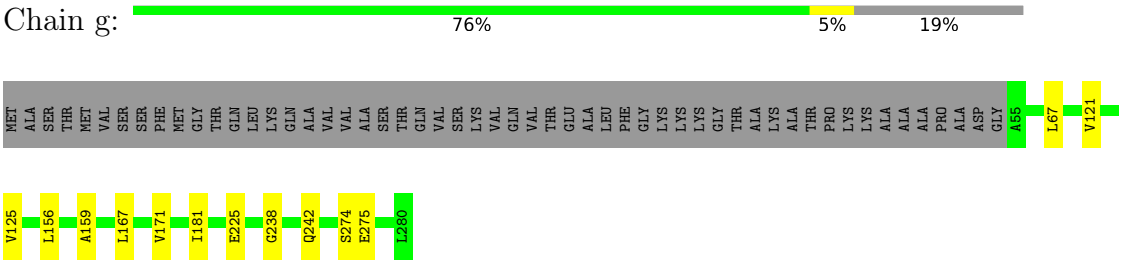
Chain G:





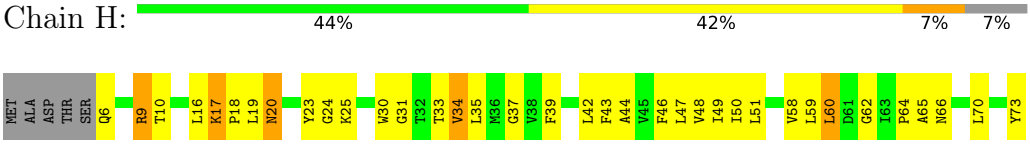
• Molecule 8: Chlorophyll a-b binding protein, chloroplastic

Chain g:



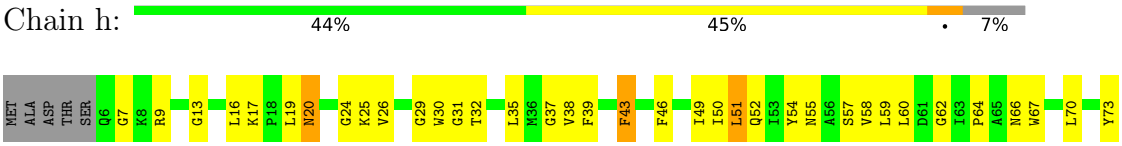
• Molecule 9: Photosystem II reaction center protein H

Chain H:



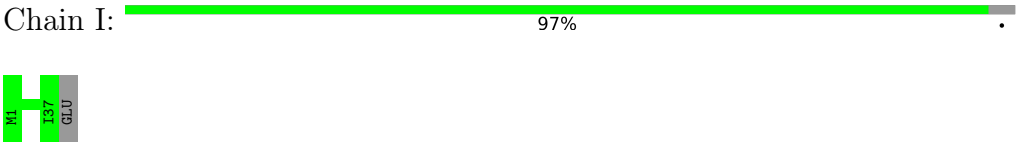
• Molecule 9: Photosystem II reaction center protein H

Chain h:



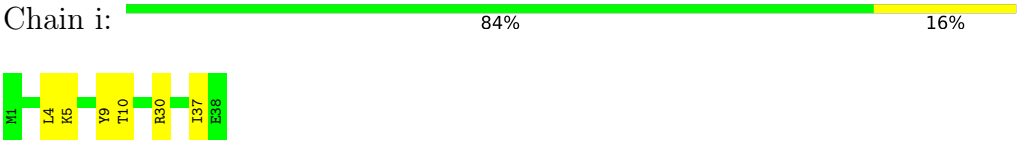
• Molecule 10: Photosystem II reaction center protein I

Chain I:



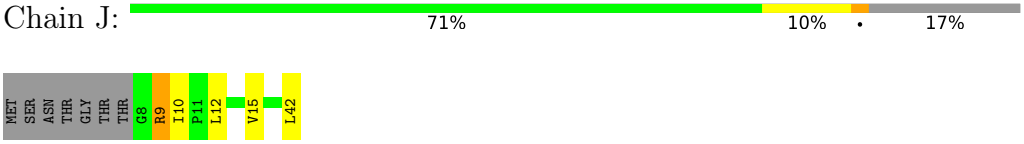
• Molecule 10: Photosystem II reaction center protein I

Chain i:



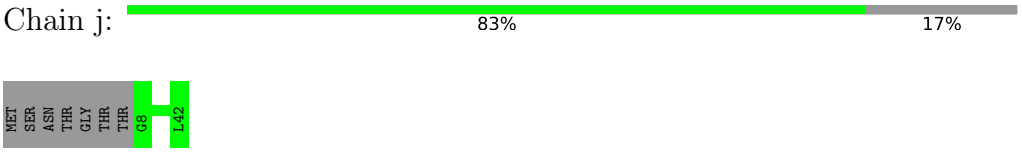
• Molecule 11: Photosystem II reaction center protein J

Chain J:



• Molecule 11: Photosystem II reaction center protein J

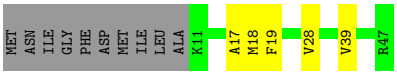
Chain j:



• Molecule 12: Photosystem II reaction center protein K

Chain K:

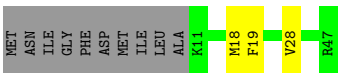




• Molecule 12: Photosystem II reaction center protein K

Chain k:

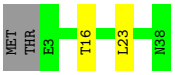




• Molecule 13: Photosystem II reaction center protein L

Chain L:

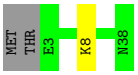




• Molecule 13: Photosystem II reaction center protein L

Chain l:

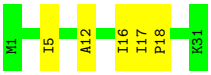




• Molecule 14: Photosystem II reaction center protein M

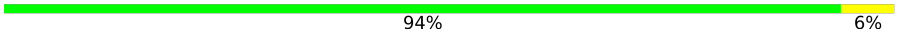
Chain M:

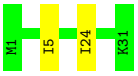




• Molecule 14: Photosystem II reaction center protein M

Chain m:



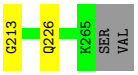


• Molecule 15: Chlorophyll a-b binding protein, chloroplastic

Chain N:





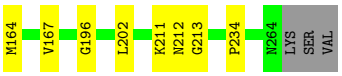


• Molecule 15: Chlorophyll a-b binding protein, chloroplastic

Chain S:







• Molecule 15: Chlorophyll a-b binding protein, chloroplastic

Chain V:







• Molecule 15: Chlorophyll a-b binding protein, chloroplastic

Chain n:







• Molecule 15: Chlorophyll a-b binding protein, chloroplastic

Chain s:





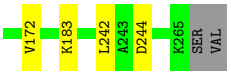


• Molecule 15: Chlorophyll a-b binding protein, chloroplastic

Chain v:



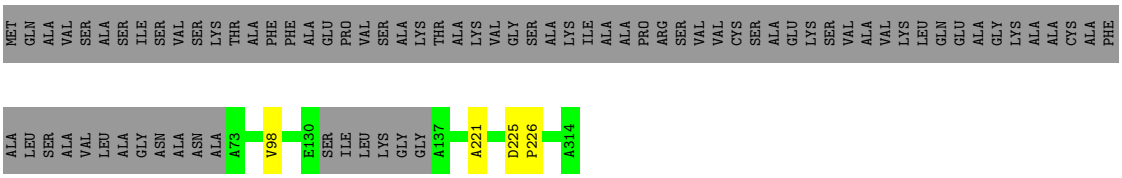




• Molecule 16: Photosystem II subunit O

Chain O:

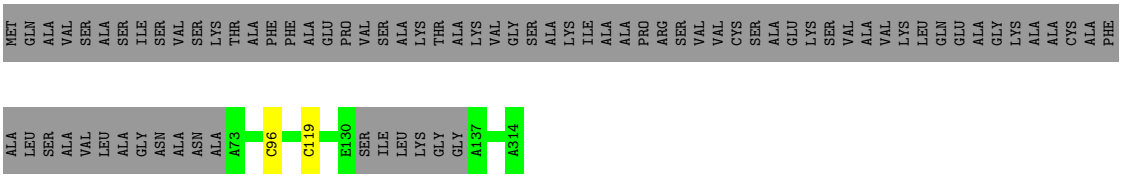




• Molecule 16: Photosystem II subunit O

Chain o:

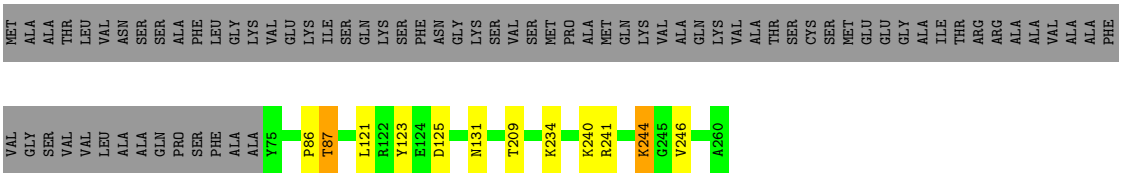




• Molecule 17: 23 kDa subunit of oxygen evolving system of photosystem II

Chain P:

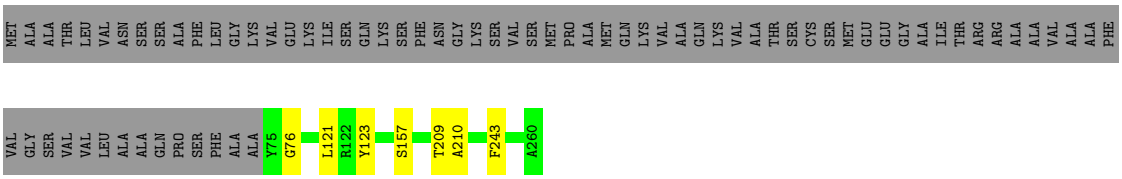




• Molecule 17: 23 kDa subunit of oxygen evolving system of photosystem II

Chain p:

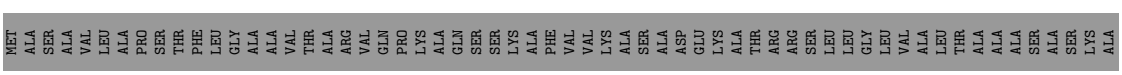




• Molecule 18: Oxygen evolving enhancer protein 3

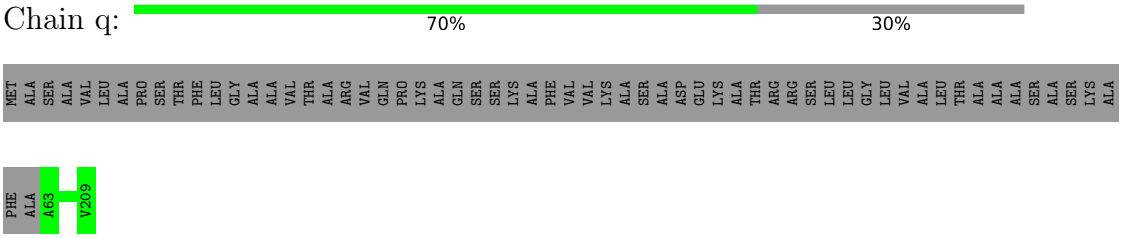
Chain Q:





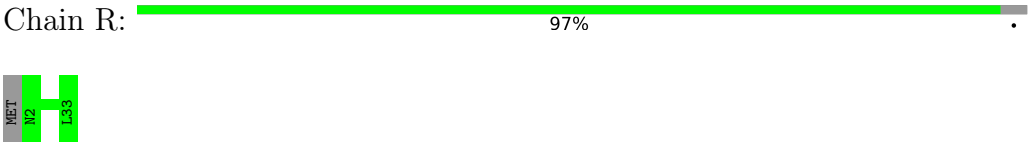
• Molecule 18: Oxygen evolving enhancer protein 3

Chain q:



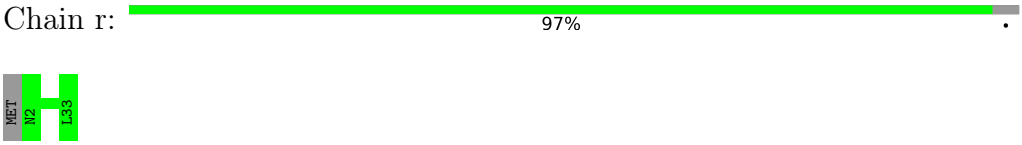
• Molecule 19: Photosystem II reaction center protein Psb30

Chain R:



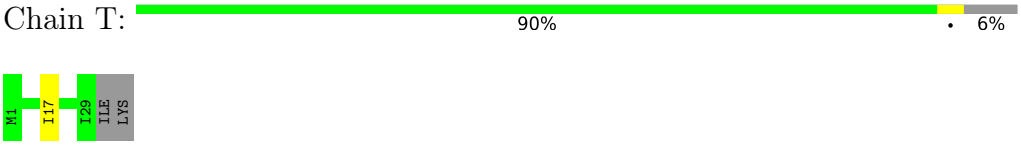
• Molecule 19: Photosystem II reaction center protein Psb30

Chain r:



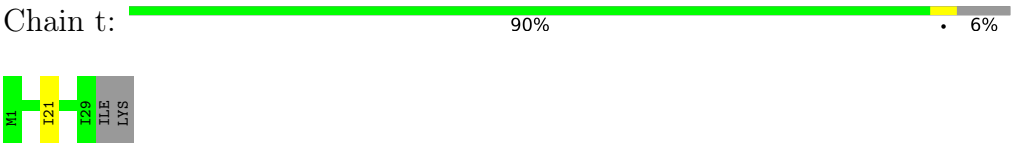
• Molecule 20: Photosystem II reaction center protein T

Chain T:



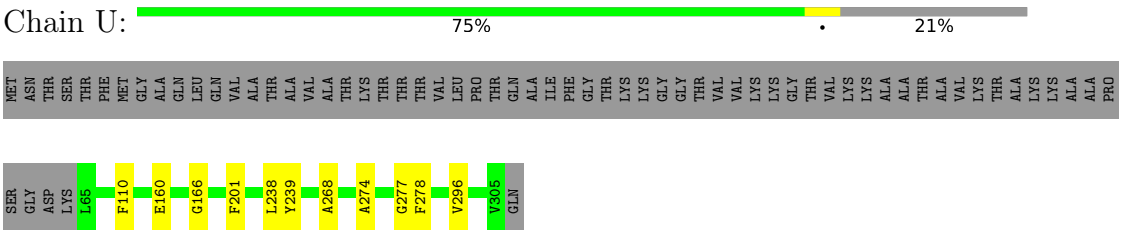
• Molecule 20: Photosystem II reaction center protein T

Chain t:



• Molecule 21: Chlorophyll a-b binding protein, chloroplastic

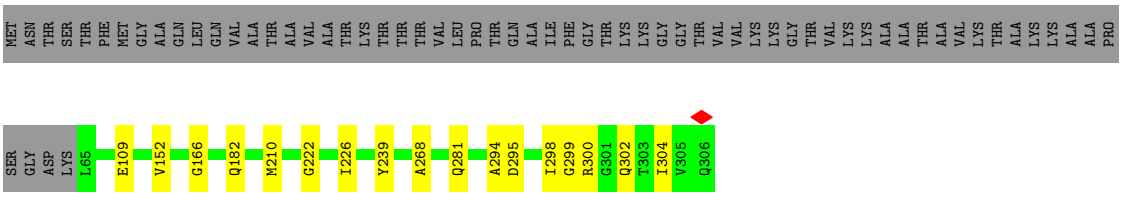
Chain U:



• Molecule 21: Chlorophyll a-b binding protein, chloroplastic

Chain u:

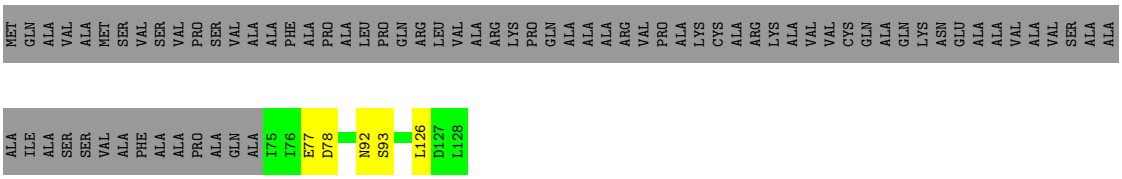




• Molecule 22: PSII 6.1 kDa protein

Chain W:

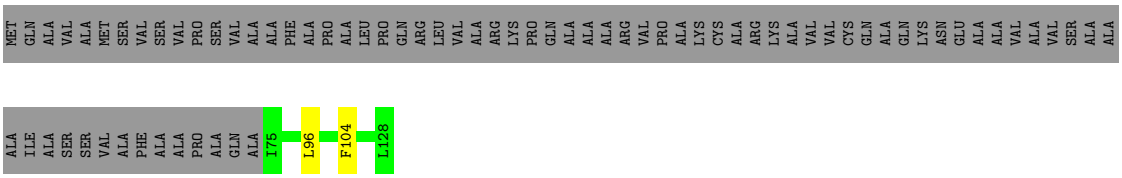




• Molecule 22: PSII 6.1 kDa protein

Chain w:

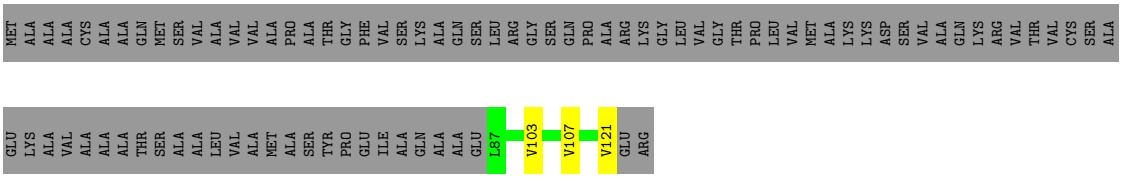




• Molecule 23: Photosystem II subunit X

Chain X:

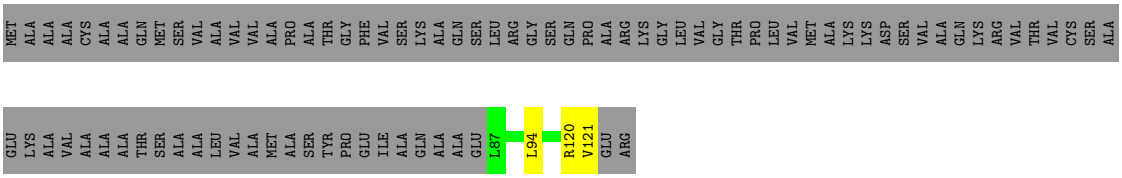




• Molecule 23: Photosystem II subunit X

Chain x:

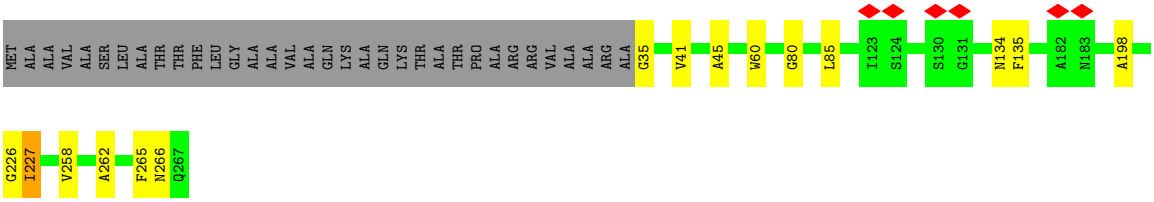




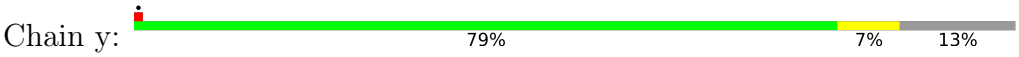
• Molecule 24: Chlorophyll a-b binding protein, chloroplastic

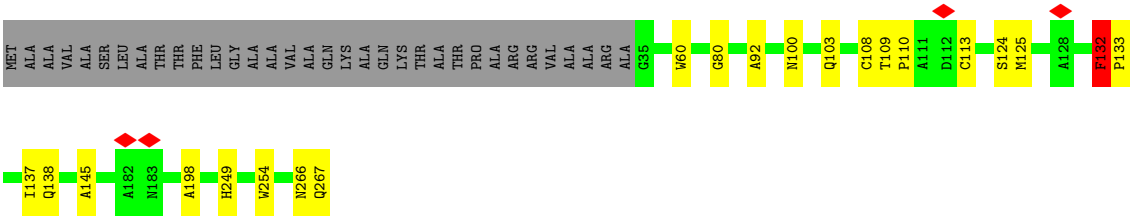
Chain Y:



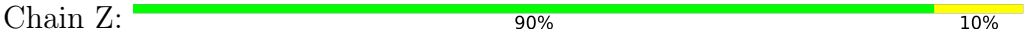


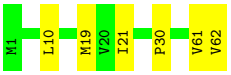
• Molecule 24: Chlorophyll a-b binding protein, chloroplastic





• Molecule 25: Photosystem II reaction center protein Z





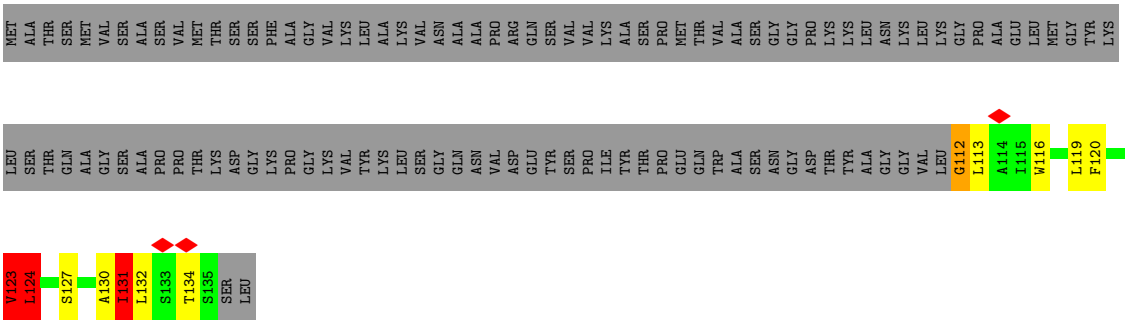
• Molecule 25: Photosystem II reaction center protein Z





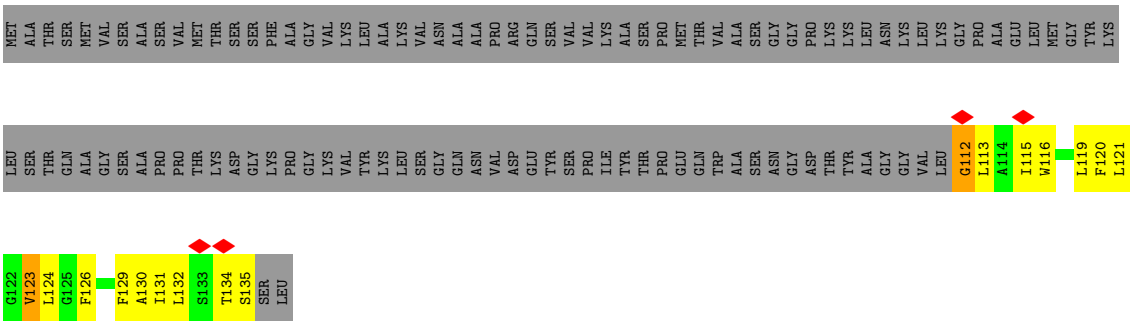
• Molecule 26: Photosystem II 10 kDa polypeptide, chloroplastic





• Molecule 26: Photosystem II 10 kDa polypeptide, chloroplastic





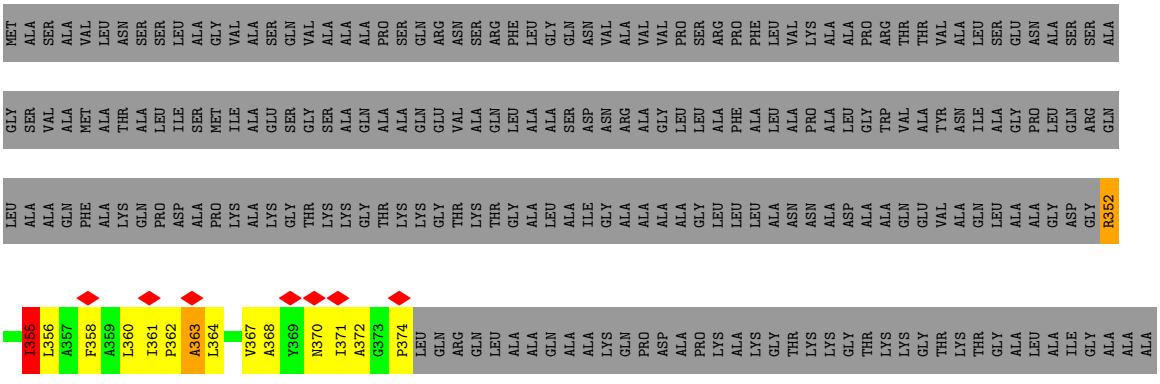
• Molecule 27: Photosystem II BY

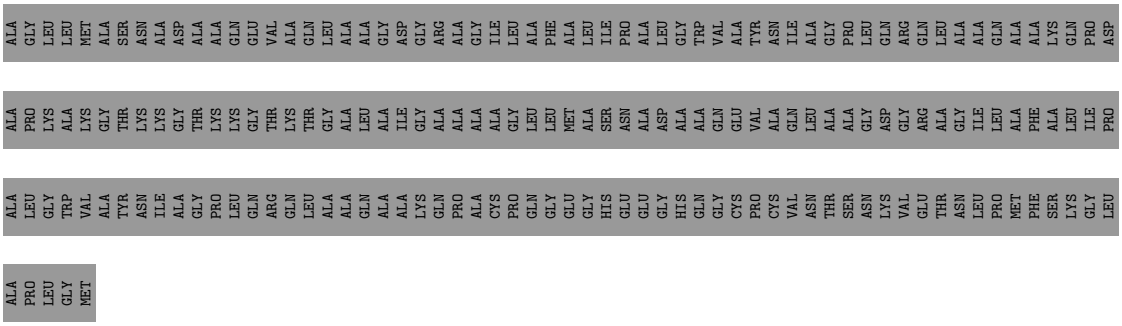
Chain 5: 95%



• Molecule 27: Photosystem II BY

Chain 6: 95%




ALA GLY LEU LEU MET ALA SER ASN ALA ASP ALA ALA GLN GLU VAL ALA GLN LEU ALA ALA GLY ASP GLY ARG ALA GLY ILE LEU ALA PHE ALA LEU ILE PRO ALA LEU GLY TRP VAL ALA TYR ASN ILE ALA GLY PRO LEU GLN ARG GLN LEU GLN ALA ALA LYS GLN PRO
ALA PRO LYS ALA LYS GLY THR LYS LYS GLY THR LYS LYS GLY THR LYS THR GLY ALA LEU ALA ILE GLY ALA ALA ALA ALA GLY LEU MET ALA SER ASN ALA ASP ALA ALA GLN GLU VAL ALA GLN LEU ALA ALA GLY ASP GLY ARG ALA GLY ILE LEU ALA PHE ALA LEU PRO
ALA LEU GLY TRP VAL ALA TYR ASN ILE ALA GLY PRO LEU GLN ARG GLN LEU ALA ALA GLN ALA ALA LYS GLN PRO ALA CYS PRO GLN GLY GLU GLY HIS GLU GLU GLY HIS GLN GLY CYS PRO CYS VAL ASN THR SER ASN LYS VAL GLU THR ASN LEU PRO MET PHE SER LYS GLY LEU
ALA PRO LEU GLY MET

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	299782	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI POLARA 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	60	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	2000	Depositor
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	0.661	Depositor
Minimum map value	-0.241	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.020	Depositor
Recommended contour level	0.07	Depositor
Map size (Å)	419.4304, 419.4304, 419.4304	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.8192, 0.8192, 0.8192	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: XAT, 0IE, LMN, OEX, 0UR, CLA, HEM, PHO, CL, LMG, CHL, BCT, LHG, FE2, BCR, DGD, NEX, PL9, LUT, SQD

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	0	0.40	3/1735 (0.2%)	0.49	2/2362 (0.1%)
1	1	0.66	13/1735 (0.7%)	0.93	18/2362 (0.8%)
2	A	0.23	0/2687	0.33	0/3660
2	a	0.22	0/2682	0.32	0/3653
3	B	0.22	0/4113	0.31	0/5586
3	b	0.28	3/4113 (0.1%)	0.34	0/5586
4	C	0.28	3/3630 (0.1%)	0.33	1/4947 (0.0%)
4	c	0.21	0/3630	0.30	0/4947
5	D	0.22	0/2785	0.30	0/3794
5	d	0.22	0/2785	0.30	0/3794
6	E	0.42	1/654 (0.2%)	0.62	2/892 (0.2%)
6	e	0.23	0/654	0.36	0/892
7	F	0.46	0/278	0.52	0/378
7	f	0.44	0/278	0.64	0/378
8	G	0.64	5/1810 (0.3%)	0.61	4/2472 (0.2%)
8	g	0.37	2/1810 (0.1%)	0.42	3/2472 (0.1%)
9	H	5.26	54/536 (10.1%)	2.37	39/729 (5.3%)
9	h	4.70	51/536 (9.5%)	2.31	35/729 (4.8%)
10	I	0.51	0/312	0.84	0/419
10	i	0.31	0/322	0.45	0/431
11	J	0.60	0/263	0.97	0/356
11	j	0.26	0/263	0.27	0/356
12	K	0.65	1/310 (0.3%)	0.79	0/424
12	k	0.55	0/310	0.77	0/424
13	L	0.42	0/310	0.55	0/421
13	l	0.50	0/310	0.71	1/421 (0.2%)
14	M	0.24	0/245	0.33	0/332
14	m	0.23	0/245	0.33	0/332
15	N	0.20	0/1739	0.33	0/2362
15	S	0.41	2/1730 (0.1%)	0.50	1/2351 (0.0%)
15	V	0.22	0/1730	0.33	0/2351

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
15	n	0.21	0/1730	0.30	0/2351
15	s	0.23	0/1730	0.33	0/2351
15	v	0.35	0/1739	0.53	1/2362 (0.0%)
16	O	0.25	1/1804 (0.1%)	0.31	0/2439
16	o	0.19	0/1804	0.30	0/2439
17	P	0.36	2/1469 (0.1%)	0.37	2/1988 (0.1%)
17	p	0.35	1/1469 (0.1%)	0.40	0/1988
18	Q	0.19	0/1117	0.33	0/1509
18	q	0.18	0/1117	0.30	0/1509
19	R	0.21	0/231	0.26	0/313
19	r	0.21	0/231	0.24	0/313
20	T	0.22	0/246	0.23	0/333
20	t	0.22	0/246	0.24	0/333
21	U	0.19	0/1876	0.30	0/2549
21	u	0.29	0/1886	0.36	0/2561
22	W	0.89	4/403 (1.0%)	1.06	3/544 (0.6%)
22	w	0.33	0/403	0.52	0/544
23	X	0.29	0/243	0.39	0/332
23	x	0.27	0/243	0.34	0/332
24	Y	0.26	0/1832	0.43	3/2498 (0.1%)
24	y	0.31	1/1832 (0.1%)	0.42	1/2498 (0.0%)
25	Z	0.41	1/483 (0.2%)	0.37	0/658
25	z	0.18	0/483	0.24	0/658
26	2	1.84	5/178 (2.8%)	1.80	5/242 (2.1%)
26	3	1.82	4/178 (2.2%)	1.68	6/242 (2.5%)
27	5	1.93	2/172 (1.2%)	1.73	4/236 (1.7%)
27	6	1.86	4/172 (2.3%)	1.64	4/236 (1.7%)
All	All	0.72	163/69857 (0.2%)	0.53	135/94971 (0.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	0	0	1
1	1	0	1
6	E	0	1
6	e	0	1
9	H	0	3
9	h	0	4
10	i	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
11	J	0	1
27	5	0	1
27	6	0	1
All	All	0	15

All (163) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	h	26	VAL	C-O	-29.98	0.93	1.24
9	H	47	LEU	C-O	-29.97	0.87	1.24
9	H	46	PHE	C-O	-29.35	0.89	1.24
9	h	43	PHE	C-O	-28.44	0.86	1.24
9	H	43	PHE	C-O	-27.45	0.88	1.24
9	h	20	ASN	C-O	-27.27	0.96	1.23
9	H	34	VAL	C-O	-27.02	0.92	1.24
9	h	32	THR	C-O	-26.64	0.88	1.24
9	H	35	LEU	C-O	-26.14	0.90	1.24
9	h	59	LEU	C-O	-26.05	0.94	1.24
9	H	59	LEU	C-O	-25.88	0.93	1.24
9	H	20	ASN	C-O	-24.84	0.88	1.23
9	H	49	ILE	C-O	-24.73	0.93	1.23
9	H	16	LEU	C-O	-24.21	0.90	1.24
9	h	67	TRP	C-O	-24.03	0.93	1.24
9	H	48	VAL	C-O	-23.95	0.92	1.24
9	h	38	VAL	C-O	-23.40	0.94	1.24
9	h	51	LEU	C-O	-23.10	0.97	1.24
9	H	19	LEU	C-O	-22.90	0.92	1.24
9	H	17	LYS	C-O	-22.27	0.95	1.24
9	H	60	LEU	C-O	-22.24	0.96	1.24
9	H	10	THR	C-O	-21.96	0.91	1.23
9	h	66	ASN	C-O	-21.18	0.98	1.23
9	h	25	LYS	C-O	-20.45	0.99	1.23
9	H	23	TYR	CA-C	-19.48	1.27	1.52
9	H	46	PHE	CA-C	-19.38	1.27	1.52
9	h	37	GLY	C-O	-19.00	1.01	1.23
9	h	60	LEU	C-O	-18.92	1.00	1.23
9	h	43	PHE	CA-C	-18.34	1.27	1.52
9	h	19	LEU	C-O	-18.30	0.99	1.24
9	H	23	TYR	C-O	-18.09	1.02	1.23
9	H	70	LEU	C-O	-17.91	0.99	1.24
9	H	24	GLY	C-O	-17.85	0.98	1.24
9	H	43	PHE	CA-C	-17.82	1.27	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	H	37	GLY	C-O	-17.46	1.04	1.24
27	5	359	ALA	C-N	16.98	1.57	1.34
9	h	70	LEU	C-O	-16.93	1.00	1.24
9	h	24	GLY	C-O	-16.92	1.00	1.24
9	H	31	GLY	C-O	-15.87	1.02	1.23
9	h	7	GLY	C-O	-15.21	1.07	1.23
9	H	73	TYR	CA-C	-14.31	1.23	1.52
9	h	7	GLY	CA-C	-14.05	1.36	1.52
8	G	154	ALA	C-N	13.76	1.53	1.33
26	3	112	GLY	C-N	13.00	1.50	1.33
9	h	37	GLY	CA-C	-12.90	1.37	1.52
27	6	363	ALA	C-N	12.71	1.50	1.33
9	h	31	GLY	C-O	-12.31	1.07	1.23
27	6	355	ILE	C-N	11.69	1.48	1.33
9	h	32	THR	CA-C	-11.63	1.36	1.52
9	H	17	LYS	CA-C	-11.55	1.38	1.52
9	h	32	THR	N-CA	-11.14	1.33	1.46
9	H	73	TYR	C-O	-11.10	1.01	1.23
26	2	124	LEU	C-N	10.83	1.49	1.33
9	h	37	GLY	C-N	-10.79	1.21	1.33
9	H	47	LEU	CA-C	-10.52	1.39	1.52
9	h	73	TYR	CA-C	-10.51	1.30	1.52
8	G	155	THR	C-N	10.47	1.48	1.33
9	H	31	GLY	CA-C	-10.19	1.37	1.51
26	2	123	VAL	C-N	-10.13	1.21	1.33
9	H	24	GLY	CA-C	-10.09	1.38	1.51
9	h	67	TRP	CA-C	-10.01	1.38	1.52
27	5	360	LEU	C-N	-10.00	1.22	1.33
9	H	10	THR	CA-C	-9.73	1.39	1.53
26	3	131	ILE	C-N	9.73	1.46	1.33
9	h	73	TYR	C-O	-9.48	1.04	1.23
8	G	227	LYS	C-N	-9.32	1.21	1.34
9	H	10	THR	N-CA	-9.11	1.32	1.46
8	G	228	ASN	C-N	8.90	1.44	1.33
9	H	34	VAL	C-N	-8.87	1.21	1.33
9	H	37	GLY	CA-C	-8.78	1.39	1.51
9	H	48	VAL	C-N	-8.74	1.22	1.33
9	H	62	GLY	C-O	-8.73	1.11	1.23
9	h	24	GLY	C-N	-8.67	1.21	1.33
9	H	47	LEU	C-N	-8.62	1.24	1.34
9	h	60	LEU	CA-C	-8.53	1.42	1.52
17	P	86	PRO	C-N	8.44	1.46	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1	94	GLU	C-N	-8.35	1.22	1.33
9	h	66	ASN	CA-C	-8.35	1.42	1.52
1	1	223	ILE	C-O	-8.34	1.15	1.24
27	6	356	LEU	C-N	-8.34	1.23	1.33
9	h	66	ASN	C-N	-8.27	1.22	1.33
9	H	49	ILE	CA-C	-8.20	1.42	1.52
9	h	70	LEU	CA-C	-8.16	1.42	1.52
17	P	87	THR	C-N	8.06	1.44	1.33
9	h	24	GLY	CA-C	-8.05	1.39	1.51
9	H	16	LEU	CA-C	-8.01	1.42	1.52
1	1	95	GLN	C-N	7.94	1.45	1.33
22	W	77	GLU	C-N	7.87	1.44	1.33
9	H	50	ILE	C-N	7.86	1.44	1.33
1	1	225	SER	C-N	7.77	1.44	1.33
15	S	211	LYS	C-N	-7.75	1.23	1.34
26	2	131	ILE	C-N	7.68	1.43	1.33
22	W	78	ASP	C-N	7.62	1.43	1.33
9	h	20	ASN	CA-C	-7.55	1.42	1.53
9	H	19	LEU	CA-C	-7.47	1.42	1.52
26	2	112	GLY	C-N	7.44	1.44	1.33
17	p	157	SER	C-N	-7.41	1.24	1.33
9	h	31	GLY	CA-C	-7.40	1.41	1.51
3	b	235	GLU	C-N	-7.38	1.23	1.33
26	3	132	LEU	C-N	-7.37	1.25	1.33
9	H	46	PHE	C-N	-7.29	1.23	1.33
9	h	26	VAL	CA-C	-7.16	1.43	1.52
4	C	67	MET	C-N	-7.12	1.24	1.33
22	W	92	ASN	C-N	-7.09	1.24	1.33
9	h	62	GLY	C-O	-7.06	1.14	1.24
1	1	219	ASN	C-O	-7.05	1.14	1.24
9	H	60	LEU	CA-C	-6.93	1.44	1.52
1	1	220	PRO	CA-CB	-6.92	1.44	1.53
9	H	49	ILE	N-CA	-6.89	1.37	1.46
8	g	275	GLU	C-N	-6.84	1.23	1.33
15	S	212	ASN	C-N	6.83	1.42	1.33
1	1	221	PHE	CA-C	-6.74	1.43	1.52
9	h	51	LEU	CA-C	-6.71	1.44	1.52
9	h	19	LEU	C-N	-6.68	1.25	1.33
1	0	140	GLY	C-N	-6.65	1.25	1.33
22	W	93	SER	C-N	-6.63	1.25	1.33
8	g	274	SER	C-N	-6.57	1.25	1.33
9	h	59	LEU	C-N	-6.55	1.24	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1	226	LYS	C-N	-6.55	1.24	1.33
9	h	66	ASN	N-CA	-6.52	1.37	1.46
27	6	364	LEU	C-N	-6.49	1.24	1.33
9	H	35	LEU	CA-C	-6.36	1.44	1.52
3	b	236	THR	C-N	6.35	1.42	1.33
6	E	17	ILE	C-N	6.34	1.42	1.33
25	Z	30	PRO	C-N	-6.33	1.25	1.33
8	G	99	LYS	C-N	-6.29	1.24	1.33
16	O	221	ALA	C-N	-6.19	1.25	1.33
9	H	34	VAL	CA-C	-6.18	1.44	1.52
12	K	17	ALA	C-N	6.15	1.42	1.33
9	H	70	LEU	CA-C	-6.12	1.44	1.52
9	H	20	ASN	CA-C	-6.10	1.43	1.52
9	H	59	LEU	CA-C	-6.09	1.45	1.52
9	h	19	LEU	CA-C	-5.98	1.43	1.52
9	h	31	GLY	C-N	-5.98	1.26	1.33
9	H	47	LEU	N-CA	-5.89	1.38	1.46
9	h	67	TRP	N-CA	-5.89	1.38	1.46
9	h	67	TRP	C-N	-5.88	1.24	1.33
9	h	26	VAL	N-CA	-5.86	1.39	1.46
1	0	155	GLY	C-N	-5.86	1.25	1.33
3	b	120	LEU	C-N	5.76	1.41	1.33
9	H	23	TYR	N-CA	-5.74	1.38	1.46
9	H	35	LEU	N-CA	-5.69	1.38	1.46
9	H	19	LEU	N-CA	-5.68	1.38	1.46
1	0	141	LEU	C-N	5.68	1.42	1.33
9	h	25	LYS	N-CA	-5.67	1.39	1.46
4	C	68	ASN	C-N	5.57	1.41	1.33
26	2	132	LEU	C-N	-5.55	1.26	1.33
9	h	25	LYS	CA-C	-5.50	1.45	1.52
9	H	16	LEU	N-CA	-5.49	1.39	1.46
1	1	220	PRO	C-N	-5.44	1.26	1.33
9	h	32	THR	CA-CB	-5.43	1.45	1.53
9	h	26	VAL	CA-CB	-5.40	1.47	1.54
1	1	218	ASP	C-N	5.37	1.41	1.33
9	h	7	GLY	N-CA	-5.34	1.40	1.45
26	3	113	LEU	C-N	-5.32	1.26	1.33
9	h	59	LEU	CA-C	-5.31	1.46	1.52
1	1	223	ILE	CA-C	-5.21	1.47	1.52
1	1	221	PHE	C-O	-5.20	1.17	1.24
9	H	37	GLY	N-CA	-5.17	1.38	1.45
4	C	68	ASN	C-O	-5.14	1.18	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1	222	GLY	C-N	-5.13	1.27	1.33
24	y	137	ILE	C-N	5.08	1.40	1.33
9	H	49	ILE	CB-CG1	-5.07	1.43	1.53

All (135) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	221	PHE	CA-CB-CG	17.86	131.66	113.80
1	1	219	ASN	CB-CA-C	-13.70	91.85	109.65
27	5	359	ALA	O-C-N	11.56	134.38	122.12
9	H	46	PHE	CA-C-O	-11.16	108.72	120.55
9	H	49	ILE	CA-C-O	-10.88	108.38	120.46
27	6	355	ILE	O-C-N	10.61	132.31	121.91
9	h	43	PHE	CA-C-O	-10.41	106.41	119.31
9	H	24	GLY	CA-C-O	-10.37	108.48	119.27
1	1	219	ASN	CA-C-N	10.18	132.56	119.84
1	1	219	ASN	C-N-CA	10.18	132.56	119.84
9	H	47	LEU	CA-C-O	-9.88	109.27	120.24
9	h	66	ASN	CA-CB-CG	9.88	122.48	112.60
9	H	50	ILE	O-C-N	9.85	132.93	121.80
27	6	363	ALA	O-C-N	9.65	132.40	122.08
9	H	59	LEU	CA-C-N	9.64	136.91	122.93
9	H	59	LEU	C-N-CA	9.64	136.91	122.93
8	G	154	ALA	O-C-N	9.50	134.07	123.33
9	h	43	PHE	CA-CB-CG	9.47	123.27	113.80
1	1	220	PRO	CA-N-CD	-9.36	98.89	112.00
9	H	23	TYR	CA-C-N	9.22	135.92	122.46
9	H	23	TYR	C-N-CA	9.22	135.92	122.46
9	H	19	LEU	CA-C-O	-8.94	108.69	119.32
9	H	59	LEU	CA-C-O	-8.90	110.94	120.46
26	2	123	VAL	O-C-N	-8.80	113.14	121.94
9	H	23	TYR	CA-C-O	-8.74	110.95	120.92
1	1	220	PRO	CA-CB-CG	-8.73	87.91	104.50
9	h	25	LYS	CA-C-O	-8.69	110.82	120.81
22	W	93	SER	CA-C-N	8.62	129.48	120.00
22	W	93	SER	C-N-CA	8.62	129.48	120.00
9	H	46	PHE	CA-CB-CG	8.56	122.36	113.80
6	E	17	ILE	O-C-N	8.41	130.03	121.87
9	h	32	THR	CA-CB-OG1	-8.30	97.15	109.60
9	h	20	ASN	CA-C-O	-8.23	112.56	121.78
26	2	120	PHE	CA-CB-CG	8.10	121.90	113.80
9	h	19	LEU	CA-C-O	-7.97	110.23	119.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	h	51	LEU	CA-C-O	-7.93	112.14	120.55
1	1	220	PRO	CA-C-N	-7.89	106.47	121.54
1	1	220	PRO	C-N-CA	-7.89	106.47	121.54
9	h	26	VAL	CA-C-O	-7.89	112.08	120.76
1	1	219	ASN	CA-CB-CG	7.75	120.35	112.60
9	h	70	LEU	N-CA-C	-7.72	102.38	112.41
9	h	25	LYS	CA-C-N	7.71	133.81	122.71
9	h	25	LYS	C-N-CA	7.71	133.81	122.71
1	1	220	PRO	O-C-N	-7.70	112.25	122.64
8	G	227	LYS	O-C-N	-7.58	113.91	122.09
9	h	59	LEU	CA-C-N	7.54	135.00	122.87
9	h	59	LEU	C-N-CA	7.54	135.00	122.87
9	h	20	ASN	CA-CB-CG	7.45	120.05	112.60
9	H	20	ASN	CA-CB-CG	7.35	119.95	112.60
9	H	10	THR	N-CA-C	-7.28	99.20	109.69
27	6	356	LEU	CA-C-N	7.25	129.86	120.44
27	6	356	LEU	C-N-CA	7.25	129.86	120.44
9	h	64	PRO	N-CA-C	-7.21	98.80	110.55
9	H	73	TYR	CA-C-O	7.20	133.04	120.80
1	1	221	PHE	CB-CA-C	-7.06	96.38	110.42
1	1	223	ILE	N-CA-C	-7.04	99.55	108.84
9	h	64	PRO	CA-C-O	-7.03	112.74	120.97
9	H	46	PHE	CA-C-N	6.97	132.51	120.58
9	H	46	PHE	C-N-CA	6.97	132.51	120.58
9	h	73	TYR	N-CA-C	-6.93	91.58	111.00
26	3	131	ILE	O-C-N	6.81	131.09	122.57
9	H	20	ASN	CA-C-O	-6.74	113.50	121.32
26	3	112	GLY	O-C-N	6.72	133.75	123.00
9	h	30	TRP	N-CA-C	-6.65	98.41	109.24
9	H	44	ALA	CA-C-O	-6.59	112.93	120.24
9	H	47	LEU	CA-C-N	6.51	131.73	120.86
9	H	47	LEU	C-N-CA	6.51	131.73	120.86
9	H	73	TYR	N-CA-C	-6.45	92.94	111.00
1	1	222	GLY	CA-C-N	-6.43	111.53	121.18
1	1	222	GLY	C-N-CA	-6.43	111.53	121.18
9	H	48	VAL	O-C-N	-6.33	114.84	122.06
24	Y	265	PHE	CB-CA-C	6.27	122.91	110.42
24	Y	266	ASN	N-CA-C	-6.22	104.28	113.61
9	h	24	GLY	CA-C-O	-6.17	111.99	119.03
8	g	275	GLU	CA-C-N	6.08	130.77	122.19
8	g	275	GLU	C-N-CA	6.08	130.77	122.19
24	Y	265	PHE	CA-CB-CG	-6.08	107.72	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	225	SER	O-C-N	6.02	130.60	122.59
9	H	16	LEU	CA-C-O	-6.01	112.38	119.48
26	2	131	ILE	O-C-N	5.98	130.05	122.57
9	h	7	GLY	CA-C-O	-5.97	118.15	122.45
24	y	137	ILE	O-C-N	5.94	128.05	121.94
9	h	20	ASN	N-CA-C	-5.93	101.57	110.06
17	P	86	PRO	O-C-N	5.92	129.31	123.03
9	h	38	VAL	CA-C-O	-5.86	114.14	120.47
1	0	140	GLY	O-C-N	-5.84	116.58	122.19
9	H	34	VAL	CA-C-O	-5.84	113.48	120.78
9	H	9	ARG	CB-CA-C	5.83	119.36	109.80
9	h	26	VAL	O-C-N	5.83	129.52	123.05
1	1	94	GLU	O-C-N	-5.79	115.15	122.27
9	h	32	THR	CA-C-O	-5.77	112.71	120.15
13	l	8	LYS	N-CA-CB	5.74	118.41	109.97
9	H	35	LEU	CA-C-O	-5.71	113.05	119.79
9	h	66	ASN	N-CA-C	-5.70	100.87	108.74
9	H	43	PHE	N-CA-C	-5.70	105.44	112.90
1	1	221	PHE	N-CA-CB	-5.68	100.89	110.49
9	h	67	TRP	CA-CB-CG	5.68	124.39	113.60
9	h	59	LEU	CA-C-O	-5.65	114.47	120.40
9	h	66	ASN	CA-C-O	-5.54	115.49	121.36
8	g	274	SER	O-C-N	-5.49	116.77	123.30
26	3	113	LEU	CA-C-N	5.47	128.06	120.29
26	3	113	LEU	C-N-CA	5.47	128.06	120.29
9	H	20	ASN	N-CA-C	-5.47	103.88	110.88
9	h	55	ASN	CA-C-O	-5.46	112.67	119.28
9	h	57	SER	N-CA-C	-5.42	106.72	113.38
26	3	132	LEU	CA-C-N	5.41	129.79	121.19
26	3	132	LEU	C-N-CA	5.41	129.79	121.19
15	S	211	LYS	O-C-N	-5.40	116.26	122.09
9	H	58	VAL	N-CA-CB	5.39	119.14	111.82
9	h	50	ILE	CA-C-O	-5.36	115.38	120.95
9	H	48	VAL	CA-C-O	-5.33	113.58	120.03
9	H	34	VAL	O-C-N	-5.32	115.92	122.57
8	G	99	LYS	CA-C-N	5.31	131.83	121.41
8	G	99	LYS	C-N-CA	5.31	131.83	121.41
9	H	10	THR	CA-C-O	-5.30	115.18	121.60
4	C	68	ASN	CA-C-O	-5.28	114.95	120.55
27	5	359	ALA	CA-C-N	-5.21	112.39	120.31
27	5	359	ALA	C-N-CA	-5.21	112.39	120.31
22	W	126	LEU	CA-C-O	-5.21	115.29	120.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	2	124	LEU	CA-C-N	-5.18	111.25	121.41
26	2	124	LEU	C-N-CA	-5.18	111.25	121.41
6	E	17	ILE	CA-C-O	-5.17	115.58	120.95
9	h	26	VAL	CA-CB-CG2	5.17	119.19	110.40
9	h	30	TRP	CA-C-O	-5.15	114.81	120.43
9	H	19	LEU	CA-C-N	5.15	132.86	123.13
9	H	19	LEU	C-N-CA	5.15	132.86	123.13
9	H	49	ILE	N-CA-C	-5.09	106.18	111.58
17	P	87	THR	CA-CB-OG1	-5.07	102.00	109.60
9	H	62	GLY	CA-C-O	-5.05	113.28	119.69
9	H	31	GLY	CA-C-O	-5.05	111.78	120.57
1	1	220	PRO	N-CA-C	5.03	122.84	112.47
27	5	370	ASN	O-C-N	5.03	127.53	122.09
15	v	108	PHE	CA-C-O	-5.02	115.17	120.55
1	0	155	GLY	O-C-N	-5.01	116.18	122.70
9	h	67	TRP	CA-C-O	-5.01	112.54	119.05

There are no chirality outliers.

All (15) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	0	153	ARG	Sidechain
1	1	220	PRO	Mainchain
27	5	352	ARG	Sidechain
27	6	352	ARG	Sidechain
6	E	18	ARG	Sidechain
9	H	20	ASN	Mainchain
9	H	34	VAL	Mainchain
9	H	9	ARG	Sidechain
11	J	9	ARG	Sidechain
6	e	60	ARG	Sidechain
9	h	20	ASN	Mainchain
9	h	29	GLY	Mainchain
9	h	43	PHE	Mainchain
9	h	9	ARG	Sidechain
10	i	30	ARG	Sidechain

5.2 Too-close contacts (i)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen

atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	0	1684	0	1585	17	0
1	1	1684	0	1585	28	0
2	A	2607	0	2521	12	0
2	a	2602	0	2516	16	0
3	B	3980	0	3873	16	0
3	b	3980	0	3873	13	0
4	C	3509	0	3403	17	0
4	c	3509	0	3403	13	0
5	D	2695	0	2599	17	0
5	d	2695	0	2599	16	0
6	E	635	0	609	19	0
6	e	635	0	609	8	0
7	F	269	0	275	3	0
7	f	269	0	275	2	0
8	G	1751	0	1710	15	0
8	g	1751	0	1709	10	0
9	H	523	0	543	7	0
9	h	523	0	543	9	0
10	I	305	0	326	0	0
10	i	315	0	332	4	0
11	J	257	0	271	4	0
11	j	257	0	271	0	0
12	K	300	0	313	5	0
12	k	300	0	313	3	0
13	L	302	0	302	3	0
13	l	302	0	302	0	0
14	M	242	0	267	3	0
14	m	242	0	267	2	0
15	N	1691	0	1626	10	0
15	S	1682	0	1614	10	0
15	V	1682	0	1614	12	0
15	n	1682	0	1614	6	0
15	s	1682	0	1614	14	0
15	v	1691	0	1627	9	0
16	O	1777	0	1789	2	0
16	o	1777	0	1789	0	0
17	P	1434	0	1384	9	0
17	p	1434	0	1384	4	0
18	Q	1103	0	1138	1	0
18	q	1103	0	1138	0	0
19	R	231	0	264	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
19	r	231	0	264	0	0
20	T	239	0	253	1	0
20	t	239	0	253	1	0
21	U	1833	0	1825	9	0
21	u	1843	0	1833	13	0
22	W	397	0	380	0	0
22	w	397	0	380	2	0
23	X	242	0	268	2	0
23	x	242	0	268	6	0
24	Y	1776	0	1669	10	0
24	y	1776	0	1667	16	0
25	Z	471	0	504	2	0
25	z	471	0	504	1	0
26	2	174	0	182	7	0
26	3	174	0	182	16	0
27	5	167	0	174	17	0
27	6	167	0	174	16	0
28	0	452	0	342	23	0
28	1	436	0	326	26	0
28	A	253	0	271	8	0
28	B	1011	0	1086	26	0
28	C	818	0	870	19	0
28	D	128	0	137	4	0
28	G	512	0	439	15	0
28	N	375	0	334	10	0
28	S	368	0	326	9	0
28	U	642	0	619	31	0
28	V	396	0	363	11	0
28	Y	585	0	474	28	0
28	a	249	0	261	3	0
28	b	1016	0	1094	21	0
28	c	819	0	873	24	0
28	d	128	0	137	4	0
28	g	558	0	524	23	0
28	n	419	0	420	8	0
28	s	379	0	345	10	0
28	u	632	0	610	19	0
28	v	382	0	350	13	0
28	y	637	0	570	32	0
29	0	43	0	29	1	0
29	1	43	0	29	1	0
29	G	160	0	136	11	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
29	N	404	0	372	18	0
29	S	372	0	370	12	0
29	U	180	0	166	3	0
29	V	480	0	461	31	0
29	Y	102	0	78	3	0
29	g	153	0	115	7	0
29	n	405	0	369	11	0
29	s	390	0	345	16	0
29	u	178	0	161	5	0
29	v	408	0	377	12	0
29	y	104	0	82	5	0
30	0	44	0	0	0	0
30	1	44	0	0	0	0
30	N	44	0	0	2	0
30	S	44	0	0	0	0
30	V	44	0	0	0	0
30	Y	88	0	0	1	0
30	n	44	0	0	0	0
30	s	44	0	0	0	0
30	v	44	0	0	0	0
30	y	88	0	0	2	0
31	0	98	0	0	0	0
31	1	145	0	0	1	0
31	G	100	0	0	0	0
31	N	50	0	0	0	0
31	S	50	0	0	1	0
31	U	52	0	0	0	0
31	V	52	0	0	0	0
31	Y	221	0	0	0	0
31	g	100	0	0	0	0
31	n	53	0	0	0	0
31	s	49	0	0	1	0
31	u	49	0	0	0	0
31	v	50	0	0	0	0
31	y	214	0	0	4	0
32	1	42	0	56	4	0
32	U	42	0	56	4	0
32	Y	42	0	56	4	0
32	u	42	0	56	4	0
32	y	42	0	56	5	0
33	A	40	0	56	3	0
33	B	120	0	168	14	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
33	C	80	0	112	6	0
33	D	40	0	56	7	0
33	H	40	0	56	5	0
33	K	80	0	112	10	0
33	T	40	0	56	5	0
33	a	40	0	56	3	0
33	b	120	0	168	19	0
33	c	80	0	112	11	0
33	d	40	0	56	7	0
33	h	40	0	56	4	0
33	k	80	0	112	10	0
33	t	40	0	56	7	0
34	A	64	0	74	1	0
34	D	64	0	74	0	0
34	a	64	0	74	1	0
34	d	64	0	74	4	0
35	A	2	0	0	0	0
35	a	2	0	0	0	0
36	A	10	0	0	0	0
36	a	10	0	0	0	0
37	A	43	0	50	2	0
37	B	99	0	132	8	0
37	T	42	0	48	1	0
37	b	46	0	59	2	0
37	c	93	0	117	4	0
37	z	46	0	59	6	0
38	A	152	0	184	7	0
38	B	43	0	56	8	0
38	C	67	0	74	3	0
38	D	89	0	121	7	0
38	F	36	0	42	0	0
38	I	41	0	52	0	0
38	J	79	0	98	4	0
38	K	81	0	105	4	0
38	M	47	0	64	1	0
38	U	67	0	74	4	0
38	W	37	0	44	1	0
38	a	127	0	164	6	0
38	b	69	0	78	1	0
38	c	117	0	144	11	0
38	d	128	0	169	9	0
38	i	35	0	40	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
38	m	43	0	56	0	0
38	u	72	0	84	7	0
38	w	36	0	42	2	0
39	A	55	0	80	0	0
39	D	55	0	80	0	0
39	a	55	0	80	2	0
39	d	55	0	80	0	0
40	A	1	0	0	0	0
40	d	1	0	0	0	0
41	A	45	0	48	1	0
41	C	200	0	232	3	0
41	G	38	0	34	1	0
41	a	105	0	129	1	0
41	b	61	0	83	0	0
41	c	233	0	255	3	0
41	g	48	0	54	0	0
42	B	35	0	40	0	0
42	D	134	0	190	6	0
42	G	42	0	54	0	0
42	L	44	0	58	0	0
42	N	40	0	53	3	0
42	S	44	0	58	3	0
42	U	27	0	24	0	0
42	V	49	0	74	0	0
42	a	43	0	56	0	0
42	b	90	0	129	3	0
42	c	30	0	30	6	0
42	d	49	0	74	0	0
42	g	37	0	47	3	0
42	l	44	0	58	0	0
42	n	43	0	59	2	0
42	s	42	0	57	2	0
42	u	27	0	24	0	0
42	v	49	0	74	1	0
43	C	127	0	148	0	0
43	G	138	0	176	3	0
43	N	69	0	88	2	0
43	U	69	0	88	1	0
43	V	138	0	176	3	0
43	W	69	0	88	1	0
43	Y	134	0	165	3	0
43	c	138	0	176	3	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
43	g	138	0	176	1	0
43	n	203	0	253	8	0
43	u	69	0	88	1	0
43	v	69	0	88	0	0
43	y	138	0	176	5	0
44	D	4	0	0	0	0
44	a	4	0	0	0	0
45	E	43	0	30	7	0
45	e	43	0	30	5	0
46	G	88	0	112	11	0
46	N	44	0	56	4	0
46	V	88	0	112	6	0
46	g	44	0	56	5	0
46	n	88	0	112	0	0
46	s	44	0	56	3	0
46	v	44	0	56	2	0
47	N	44	0	56	2	0
47	S	44	0	56	4	0
47	V	44	0	56	0	0
47	n	44	0	56	1	0
47	s	44	0	56	3	0
47	v	44	0	56	2	0
48	A	102	0	0	0	0
48	B	148	0	0	5	0
48	C	138	0	0	2	0
48	D	90	0	0	3	0
48	E	15	0	0	0	0
48	G	7	0	0	0	0
48	H	20	0	0	0	0
48	I	9	0	0	1	0
48	J	4	0	0	0	0
48	K	4	0	0	0	0
48	L	10	0	0	0	0
48	M	1	0	0	0	0
48	N	1	0	0	0	0
48	O	52	0	0	2	0
48	P	32	0	0	1	0
48	Q	19	0	0	0	0
48	R	1	0	0	0	0
48	S	2	0	0	0	0
48	T	7	0	0	0	0
48	U	6	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
48	V	1	0	0	0	0
48	W	7	0	0	0	0
48	X	1	0	0	0	0
48	a	98	0	0	2	0
48	b	149	0	0	4	0
48	c	98	0	0	1	0
48	d	71	0	0	0	0
48	e	10	0	0	1	0
48	f	1	0	0	0	0
48	g	3	0	0	0	0
48	h	13	0	0	0	0
48	i	3	0	0	1	0
48	j	4	0	0	0	0
48	k	1	0	0	0	0
48	l	11	0	0	0	0
48	m	3	0	0	0	0
48	n	1	0	0	0	0
48	o	22	0	0	0	0
48	p	19	0	0	0	0
48	q	12	0	0	0	0
48	t	3	0	0	0	0
48	u	17	0	0	1	0
48	v	2	0	0	0	0
48	w	4	0	0	0	0
48	z	1	0	0	0	0
All	All	92805	0	89550	1055	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 6.

All (1055) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:G:191:PRO:HG2	29:G:311:CHL:HBB2	1.21	1.12
29:V:310:CHL:CGA	46:V:322:NEX:H403	1.89	1.01
8:G:181:ILE:HD11	46:G:320:NEX:H34	1.47	0.96
46:N:319:NEX:H192	46:N:319:NEX:H171	1.49	0.95
29:g:316:CHL:HBB1	29:g:316:CHL:HMB3	1.52	0.90
1:0:200:LEU:HD21	28:0:308:CLA:CED	2.01	0.90
21:u:182:GLN:NE2	28:u:418:CLA:NA	2.22	0.88
26:3:126:PHE:HA	26:3:129:PHE:CE1	2.10	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:6:358:PHE:HA	27:6:361:ILE:HD12	1.57	0.86
26:3:116:TRP:HA	26:3:119:LEU:HD12	1.55	0.85
8:G:191:PRO:CG	29:G:311:CHL:HBB2	2.07	0.84
1:0:200:LEU:CD2	28:0:308:CLA:HED2	2.08	0.83
1:0:200:LEU:HD21	28:0:308:CLA:HED2	1.60	0.83
27:5:358:PHE:HA	27:5:361:ILE:HD12	1.63	0.81
27:6:367:VAL:HG12	27:6:371:ILE:HD11	1.61	0.81
27:5:371:ILE:HD12	27:5:374:PRO:CG	2.11	0.81
33:H:101:BCR:H321	33:H:101:BCR:HC8	1.64	0.79
29:s:307:CHL:CGA	46:s:319:NEX:H403	2.12	0.79
1:1:79:HIS:NE2	28:1:302:CLA:NB	2.30	0.78
15:v:55:GLY:HA3	29:v:303:CHL:HBB1	1.65	0.78
1:1:220:PRO:O	1:1:222:GLY:N	2.17	0.77
26:3:126:PHE:HD1	26:3:129:PHE:HE1	1.34	0.76
28:U:413:CLA:H161	28:U:414:CLA:HBB1	1.68	0.76
42:v:302:LHG:H241	47:v:319:XAT:H361	1.68	0.75
33:c:509:BCR:H331	33:c:509:BCR:HC8	1.68	0.75
28:Y:303:CLA:HBD	28:Y:303:CLA:HBA1	1.70	0.73
33:T:101:BCR:H382	33:T:101:BCR:H23C	1.70	0.73
15:N:167:VAL:HG11	46:N:319:NEX:H401	1.72	0.72
45:e:101:HEM:HMB3	27:6:367:VAL:HG21	1.71	0.72
9:h:58:VAL:HG21	23:x:94:LEU:HD22	1.69	0.72
2:a:62:GLY:O	48:a:501:HOH:O	2.08	0.71
15:S:109:LEU:HD22	28:S:305:CLA:HAC2	1.73	0.71
24:Y:45:ALA:HB3	28:Y:303:CLA:HED1	1.71	0.71
33:d:403:BCR:H331	33:d:403:BCR:HC8	1.73	0.70
37:B:615:SQD:H81	37:B:615:SQD:O48	1.91	0.69
33:B:603:BCR:H382	33:B:603:BCR:H23C	1.74	0.69
46:G:320:NEX:H183	46:G:320:NEX:H22	1.73	0.69
4:c:39:ASN:ND2	28:c:503:CLA:NC	2.40	0.69
33:c:507:BCR:H382	33:c:507:BCR:H23C	1.75	0.69
33:b:603:BCR:H383	33:b:603:BCR:H23C	1.73	0.69
28:1:303:CLA:HBC3	28:1:303:CLA:HHD	1.74	0.69
33:a:401:BCR:H383	33:a:401:BCR:H23C	1.75	0.68
38:a:414:LMG:HC5	37:c:501:SQD:H4	1.73	0.68
28:1:303:CLA:HHD	28:1:303:CLA:CBC	2.23	0.68
33:D:403:BCR:H331	33:D:403:BCR:C8	2.23	0.68
33:k:102:BCR:H382	33:k:102:BCR:H23C	1.75	0.68
15:v:109:LEU:HD23	28:v:306:CLA:HAC2	1.76	0.67
33:h:101:BCR:H331	33:h:101:BCR:C8	2.25	0.67
32:u:419:LUT:H171	32:u:419:LUT:H8	1.77	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:220:PRO:C	1:1:222:GLY:H	2.03	0.67
33:B:614:BCR:H383	33:B:614:BCR:H23C	1.75	0.66
33:d:403:BCR:H331	33:d:403:BCR:C8	2.23	0.66
1:1:220:PRO:C	1:1:222:GLY:N	2.52	0.66
33:H:101:BCR:H23C	33:H:101:BCR:H382	1.78	0.66
33:D:403:BCR:H331	33:D:403:BCR:HC8	1.77	0.66
23:x:120:ARG:O	23:x:121:VAL:C	2.39	0.65
33:h:101:BCR:H331	33:h:101:BCR:HC8	1.77	0.65
33:b:602:BCR:H331	33:b:602:BCR:C8	2.27	0.65
34:A:402:PHO:HBB1	34:A:402:PHO:HMB3	1.78	0.65
33:k:101:BCR:H331	33:k:101:BCR:C8	2.26	0.65
33:k:101:BCR:H383	33:k:101:BCR:H23C	1.78	0.65
6:E:37:PHE:HB2	27:5:356:LEU:HD21	1.79	0.65
27:5:363:ALA:O	27:5:367:VAL:HG23	1.97	0.65
8:g:159:ALA:HB1	43:g:320:LMN:HBEA	1.79	0.65
28:U:414:CLA:CBC	28:U:414:CLA:HHD	2.27	0.64
24:Y:35:GLY:N	43:Y:301:LMN:HO3	1.95	0.64
41:G:302:DGD:C4B	29:S:306:CHL:H43	2.28	0.64
33:t:101:BCR:H23C	33:t:101:BCR:H382	1.78	0.64
33:B:604:BCR:H23C	33:B:604:BCR:H383	1.78	0.63
16:O:98:VAL:O	48:O:401:HOH:O	2.15	0.63
28:Y:313:CLA:HBC3	28:Y:313:CLA:HHD	1.80	0.63
33:b:602:BCR:H331	33:b:602:BCR:HC8	1.78	0.63
33:b:604:BCR:H382	33:b:604:BCR:H23C	1.79	0.63
15:v:111:GLU:HA	15:v:124:SER:HB2	1.81	0.63
33:K:104:BCR:H382	33:K:104:BCR:H23C	1.80	0.63
33:b:604:BCR:H331	33:b:604:BCR:C8	2.27	0.63
28:U:414:CLA:HBD	28:U:414:CLA:HBA2	1.79	0.63
33:b:602:BCR:H23C	33:b:602:BCR:H382	1.81	0.63
33:d:403:BCR:H382	33:d:403:BCR:H23C	1.81	0.63
8:g:225:GLU:OE2	28:g:312:CLA:MG	1.41	0.63
37:B:615:SQD:H191	37:B:615:SQD:H151	1.81	0.62
8:G:191:PRO:HG2	29:G:311:CHL:CBB	2.13	0.62
28:g:313:CLA:HBD	28:g:313:CLA:HAA1	1.81	0.62
33:B:603:BCR:H331	33:B:603:BCR:C8	2.28	0.62
33:B:604:BCR:H331	33:B:604:BCR:HC8	1.82	0.62
28:b:615:CLA:HBB1	28:b:615:CLA:HMB3	1.80	0.62
42:g:303:LHG:H241	42:g:303:LHG:H131	1.80	0.62
29:s:308:CHL:HBB1	29:s:308:CHL:HMB1	1.82	0.62
38:c:526:LMG:H372	42:g:303:LHG:H251	1.82	0.62
27:6:363:ALA:O	27:6:367:VAL:HG23	2.00	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:K:102:BCR:C8	33:K:102:BCR:H331	2.29	0.62
29:V:311:CHL:H142	29:V:313:CHL:H122	1.80	0.62
33:D:403:BCR:H382	33:D:403:BCR:H23C	1.81	0.61
29:G:317:CHL:HBC3	29:G:317:CHL:HMC	1.81	0.61
33:c:507:BCR:H331	33:c:507:BCR:C8	2.28	0.61
27:6:358:PHE:HA	27:6:361:ILE:CD1	2.30	0.61
1:0:202:MET:HE1	28:0:301:CLA:CBB	2.30	0.61
6:e:24:SER:HB2	26:3:116:TRP:HE1	1.65	0.61
28:y:308:CLA:HAA2	28:y:308:CLA:HBD	1.83	0.61
28:g:314:CLA:HHC	28:g:314:CLA:HBB1	1.83	0.61
27:5:371:ILE:HD12	27:5:374:PRO:HG2	1.80	0.61
33:C:502:BCR:H383	33:C:502:BCR:H23C	1.82	0.61
12:K:18:MET:HE2	12:K:19:PHE:CZ	2.36	0.61
8:g:181:ILE:HD11	46:g:319:NEX:H34	1.82	0.60
1:1:197:HIS:CE1	28:1:308:CLA:NA	2.69	0.60
33:A:401:BCR:H331	33:A:401:BCR:C8	2.31	0.60
33:B:614:BCR:H331	33:B:614:BCR:C8	2.31	0.60
29:N:302:CHL:H42	29:V:313:CHL:C1C	2.31	0.60
33:a:401:BCR:H331	33:a:401:BCR:C8	2.29	0.60
29:S:306:CHL:HBC3	29:S:306:CHL:HMC	1.82	0.60
33:B:604:BCR:H331	33:B:604:BCR:C8	2.31	0.60
28:G:313:CLA:HBB1	28:G:313:CLA:HMB3	1.83	0.60
42:S:301:LHG:HC31	47:S:317:XAT:H22	1.84	0.60
33:T:101:BCR:H331	33:T:101:BCR:C8	2.31	0.60
15:s:148:VAL:HG13	29:s:306:CHL:C1D	2.31	0.60
33:K:102:BCR:H382	33:K:102:BCR:H23C	1.83	0.60
1:1:42:GLU:HB3	31:1:316:0UR:C29	2.32	0.60
38:D:401:LMG:H412	38:D:401:LMG:H453	1.84	0.59
12:k:18:MET:HE2	12:k:19:PHE:CZ	2.37	0.59
38:B:620:LMG:HC91	28:B:621:CLA:HMD2	1.84	0.59
33:b:604:BCR:H331	33:b:604:BCR:HC8	1.84	0.59
8:g:242:GLN:NE2	28:g:315:CLA:NA	2.51	0.59
3:b:144:PHE:CE1	28:u:417:CLA:H42	2.37	0.59
45:e:101:HEM:CMA	27:6:371:ILE:HG12	2.32	0.59
33:h:101:BCR:H383	33:h:101:BCR:H23C	1.83	0.59
8:G:177:VAL:HG11	46:G:320:NEX:C34	2.32	0.59
42:N:301:LHG:H241	47:N:318:XAT:H361	1.85	0.59
33:t:101:BCR:H331	33:t:101:BCR:C8	2.33	0.59
3:B:422:ARG:NH2	48:B:703:HOH:O	2.36	0.59
32:Y:320:LUT:H171	32:Y:320:LUT:H8	1.85	0.59
28:y:306:CLA:HAA2	28:y:306:CLA:HBD	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:s:177:LEU:HD12	15:s:190:PHE:CZ	2.37	0.59
1:1:222:GLY:O	1:1:223:ILE:C	2.42	0.58
14:M:5:ILE:HG22	14:m:5:ILE:HG21	1.85	0.58
33:b:603:BCR:H331	33:b:603:BCR:C8	2.33	0.58
29:G:310:CHL:HBB1	29:G:310:CHL:HMB3	1.85	0.58
33:b:603:BCR:H331	33:b:603:BCR:HC8	1.85	0.58
41:c:517:DGD:HA52	43:n:322:LMN:HBDA	1.86	0.58
28:Y:309:CLA:HBB1	28:Y:309:CLA:HMB3	1.84	0.58
46:s:319:NEX:H171	46:s:319:NEX:H192	1.85	0.58
26:3:120:PHE:O	26:3:124:LEU:HG	2.04	0.58
33:K:102:BCR:H331	33:K:102:BCR:HC8	1.83	0.58
29:N:302:CHL:HMC	47:N:318:XAT:H242	1.85	0.58
27:5:367:VAL:O	27:5:371:ILE:HG22	2.03	0.58
29:G:317:CHL:CMB	29:G:317:CHL:HBB1	2.34	0.58
29:N:302:CHL:HHC	29:N:302:CHL:HBB1	1.85	0.58
33:k:102:BCR:H331	33:k:102:BCR:C8	2.33	0.58
29:g:316:CHL:HBB1	29:g:316:CHL:CMB	2.32	0.58
27:6:361:ILE:HB	27:6:362:PRO:HD3	1.84	0.58
33:K:104:BCR:HC8	33:K:104:BCR:H321	1.85	0.58
28:Y:304:CLA:HBB1	28:Y:304:CLA:HHC	1.86	0.58
28:b:612:CLA:HBB1	28:b:612:CLA:HMB1	1.85	0.58
33:k:101:BCR:H331	33:k:101:BCR:HC8	1.85	0.58
26:3:112:GLY:HA2	26:3:115:ILE:HD12	1.86	0.57
28:A:407:CLA:HBB1	28:A:407:CLA:HMB1	1.85	0.57
28:U:414:CLA:H41	28:U:414:CLA:H72	1.85	0.57
1:1:56:LEU:HG	28:1:301:CLA:HMD3	1.86	0.57
48:D:559:HOH:O	23:X:121:VAL:HG22	2.05	0.57
33:B:614:BCR:H331	33:B:614:BCR:HC8	1.87	0.57
28:g:307:CLA:HBB1	46:g:319:NEX:H27	1.85	0.57
33:t:101:BCR:H331	33:t:101:BCR:HC8	1.86	0.57
38:J:101:LMG:H312	38:J:101:LMG:O9	2.05	0.57
29:V:309:CHL:CMB	29:V:309:CHL:HBB1	2.34	0.57
33:C:507:BCR:C8	33:C:507:BCR:H331	2.35	0.57
29:S:306:CHL:HBD	29:S:306:CHL:HAA2	1.87	0.57
28:V:314:CLA:HMB3	28:V:314:CLA:HBB1	1.87	0.57
21:u:294:ALA:CB	21:u:302:GLN:NE2	2.68	0.57
28:v:306:CLA:O1A	46:v:320:NEX:H241	2.05	0.56
6:E:17:ILE:HD13	11:J:10:ILE:HD11	1.87	0.56
28:y:316:CLA:HED1	32:y:320:LUT:H222	1.86	0.56
28:B:619:CLA:HBB1	28:B:619:CLA:HMB3	1.87	0.56
38:d:402:LMG:H311	9:h:51:LEU:HD11	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:G:308:CLA:C1C	46:G:320:NEX:H222	2.35	0.56
28:b:611:CLA:HMB2	5:d:128:MET:SD	2.46	0.56
48:B:766:HOH:O	17:P:209:THR:HG23	2.05	0.56
15:S:109:LEU:HB3	15:S:110:PRO:HD3	1.88	0.56
29:S:309:CHL:H122	29:V:302:CHL:H142	1.86	0.56
32:u:419:LUT:H171	32:u:419:LUT:C8	2.34	0.56
28:y:308:CLA:CMB	28:y:308:CLA:HBB1	2.35	0.56
28:Y:309:CLA:H3A	32:Y:320:LUT:H10	1.87	0.56
1:0:80:GLY:HA3	1:0:198:ALA:HB1	1.88	0.56
42:N:301:LHG:C3	29:N:302:CHL:HBC1	2.36	0.56
42:S:301:LHG:H251	47:S:317:XAT:H193	1.87	0.56
43:n:322:LMN:CCS	43:n:322:LMN:HOAL	2.19	0.56
28:y:304:CLA:HHC	28:y:304:CLA:HBB1	1.88	0.56
29:v:303:CHL:HMC	47:v:319:XAT:H242	1.87	0.55
9:h:52:GLN:HB3	9:h:58:VAL:HG23	1.88	0.55
33:C:502:BCR:H331	33:C:502:BCR:C8	2.35	0.55
28:U:413:CLA:HHC	28:U:413:CLA:HBB1	1.88	0.55
43:U:420:LMN:HCH	43:U:420:LMN:HCW	1.88	0.55
24:y:80:GLY:HA3	24:y:198:ALA:HB1	1.88	0.55
28:1:307:CLA:HBB1	28:1:307:CLA:HHC	1.89	0.55
38:D:401:LMG:H372	38:D:401:LMG:H331	1.89	0.55
28:g:315:CLA:HBB1	28:g:315:CLA:HHC	1.87	0.55
8:G:181:ILE:CD1	46:G:320:NEX:H34	2.30	0.55
12:K:39:VAL:HG23	33:K:104:BCR:H21C	1.88	0.55
33:c:509:BCR:H331	33:c:509:BCR:C8	2.37	0.55
28:g:307:CLA:C1C	46:g:319:NEX:H222	2.36	0.55
37:b:614:SQD:O6	37:b:614:SQD:O49	2.25	0.55
9:H:60:LEU:HD22	33:H:101:BCR:H333	1.89	0.55
12:K:18:MET:HE2	12:K:19:PHE:CE1	2.41	0.55
38:c:526:LMG:O9	28:g:313:CLA:HMB3	2.07	0.55
28:U:417:CLA:HMB1	28:U:417:CLA:HBB1	1.87	0.55
2:a:271:LEU:HD11	39:a:412:PL9:HC71	1.89	0.55
28:1:305:CLA:HBB1	28:1:305:CLA:HHC	1.89	0.54
28:Y:312:CLA:HHC	28:Y:312:CLA:HBB1	1.89	0.54
9:h:49:ILE:HG12	23:x:94:LEU:HD21	1.88	0.54
28:u:417:CLA:HHC	28:u:417:CLA:HBB1	1.89	0.54
24:y:133:PRO:HA	28:y:306:CLA:HBC3	1.88	0.54
28:B:608:CLA:HBB1	28:B:608:CLA:HMB3	1.89	0.54
5:d:128:MET:HE3	5:d:152:ILE:HD12	1.88	0.54
28:v:315:CLA:HHC	28:v:315:CLA:HBB1	1.89	0.54
26:3:126:PHE:HA	26:3:129:PHE:CD1	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:0:303:CLA:HHC	28:0:303:CLA:HBB1	1.88	0.54
29:S:302:CHL:HHC	29:S:302:CHL:HBB1	1.90	0.54
28:U:407:CLA:HMB1	28:U:407:CLA:HBB1	1.89	0.54
28:Y:308:CLA:HBB1	28:Y:308:CLA:HMB3	1.89	0.54
28:n:314:CLA:HHC	28:n:314:CLA:HBB1	1.90	0.54
28:s:312:CLA:HHC	28:s:312:CLA:HBB1	1.90	0.54
27:5:366:TRP:O	27:5:369:TYR:HB3	2.07	0.54
5:D:194:THR:HG23	28:D:409:CLA:HBC2	1.88	0.54
15:V:259:LEU:HB3	29:V:302:CHL:H12	1.90	0.54
28:Y:310:CLA:HHC	28:Y:310:CLA:HBB1	1.89	0.54
28:s:305:CLA:HHC	28:s:305:CLA:HBB1	1.90	0.54
28:u:414:CLA:HBB1	28:u:414:CLA:HHC	1.90	0.54
28:0:304:CLA:HHC	28:0:304:CLA:HBB1	1.89	0.54
28:b:620:CLA:HHC	28:b:620:CLA:HBB1	1.89	0.54
28:v:312:CLA:HBB1	28:v:312:CLA:HMB1	1.89	0.54
29:N:302:CHL:H42	29:V:313:CHL:CHC	2.38	0.54
28:N:312:CLA:HHC	28:N:312:CLA:HBB1	1.90	0.54
28:N:315:CLA:HHC	28:N:315:CLA:HBB1	1.90	0.54
28:A:410:CLA:HMB1	28:A:410:CLA:HBB1	1.89	0.54
28:G:312:CLA:HHC	28:G:312:CLA:HBB1	1.90	0.54
29:Y:315:CHL:HHC	29:Y:315:CHL:HBB1	1.89	0.54
28:b:610:CLA:HHC	28:b:610:CLA:HBB1	1.89	0.54
33:c:509:BCR:HC8	33:c:509:BCR:C33	2.36	0.54
27:5:361:ILE:HB	27:5:362:PRO:HD3	1.89	0.54
29:1:310:CHL:HHC	29:1:310:CHL:HBB1	1.88	0.54
28:A:411:CLA:HMC3	5:D:184:ILE:HG21	1.90	0.54
29:N:310:CHL:HBB1	29:N:310:CHL:HHC	1.89	0.54
28:U:416:CLA:HHC	28:U:416:CLA:HBB1	1.88	0.54
28:u:413:CLA:HMB1	28:u:413:CLA:HBB1	1.90	0.54
29:y:307:CHL:HBB1	29:y:307:CHL:HMB3	1.89	0.54
28:y:316:CLA:HHC	28:y:316:CLA:HBB1	1.90	0.54
28:1:309:CLA:HHC	28:1:309:CLA:HBB1	1.90	0.54
4:C:173:TYR:CD2	29:G:317:CHL:H191	2.43	0.54
28:N:304:CLA:HBB1	30:N:317:0IE:C10	2.38	0.54
28:S:311:CLA:HHC	28:S:311:CLA:HBB1	1.90	0.54
28:g:311:CLA:HHC	28:g:311:CLA:HBB1	1.90	0.54
28:u:416:CLA:HBB1	28:u:416:CLA:HHC	1.89	0.54
38:B:620:LMG:C28	38:B:620:LMG:O9	2.56	0.54
33:a:401:BCR:H331	33:a:401:BCR:HC8	1.90	0.54
29:n:304:CHL:HHC	29:n:304:CHL:HBB1	1.90	0.54
28:u:408:CLA:HBB1	28:u:408:CLA:HMB1	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:0:302:CLA:HHC	28:0:302:CLA:HBB1	1.89	0.53
28:U:406:CLA:HBB1	28:U:406:CLA:HHC	1.90	0.53
28:b:616:CLA:HHC	28:b:616:CLA:HBB1	1.91	0.53
28:u:412:CLA:HHC	28:u:412:CLA:HBB1	1.90	0.53
27:5:358:PHE:HA	27:5:361:ILE:CD1	2.36	0.53
28:0:311:CLA:HHC	28:0:311:CLA:HBB1	1.90	0.53
28:1:304:CLA:HHC	28:1:304:CLA:HBB1	1.90	0.53
28:B:613:CLA:HHC	28:B:613:CLA:HBB1	1.89	0.53
28:G:314:CLA:HHC	28:G:314:CLA:HBB1	1.90	0.53
28:n:317:CLA:HHC	28:n:317:CLA:HBB1	1.90	0.53
29:v:310:CHL:HHC	29:v:310:CHL:HBB1	1.90	0.53
29:y:315:CHL:HHC	29:y:315:CHL:HBB1	1.90	0.53
1:1:219:ASN:ND2	1:1:223:ILE:O	2.41	0.53
28:b:622:CLA:HBB1	28:b:622:CLA:HMB1	1.90	0.53
34:d:407:PHO:HMB1	34:d:407:PHO:HBB1	1.89	0.53
28:n:306:CLA:HHC	28:n:306:CLA:HBB1	1.90	0.53
28:0:308:CLA:HBB1	28:0:308:CLA:HHC	1.90	0.53
28:0:309:CLA:HHC	28:0:309:CLA:HBB1	1.90	0.53
5:D:75:VAL:HG21	38:J:101:LMG:H352	1.90	0.53
24:Y:80:GLY:HA3	24:Y:198:ALA:HB1	1.89	0.53
33:c:509:BCR:H23C	33:c:509:BCR:H383	1.90	0.53
28:1:308:CLA:HHC	28:1:308:CLA:HBB1	1.91	0.53
42:N:301:LHG:HC31	29:N:302:CHL:HBC1	1.90	0.53
28:V:316:CLA:HHC	28:V:316:CLA:HBB1	1.91	0.53
28:c:504:CLA:HBB1	28:c:504:CLA:HMB3	1.90	0.53
15:s:149:HIS:O	29:s:306:CHL:C4B	2.57	0.53
28:v:306:CLA:HHC	28:v:306:CLA:HBB1	1.91	0.53
26:3:126:PHE:CD1	26:3:129:PHE:HE1	2.21	0.53
28:0:305:CLA:HHC	28:0:305:CLA:HBB1	1.90	0.53
28:B:607:CLA:HHC	28:B:607:CLA:HBB1	1.90	0.53
28:G:316:CLA:HHC	28:G:316:CLA:HBB1	1.90	0.53
34:a:404:PHO:HBB1	34:a:404:PHO:HMB1	1.90	0.53
12:k:18:MET:HE2	12:k:19:PHE:CE1	2.43	0.53
28:1:306:CLA:HHC	28:1:306:CLA:HBB1	1.90	0.53
28:U:414:CLA:HBC1	43:y:302:LMN:HAAA	1.91	0.53
28:u:418:CLA:HHC	28:u:418:CLA:HBB1	1.91	0.53
28:B:622:CLA:HBB1	28:B:622:CLA:HMB1	1.91	0.53
28:C:503:CLA:HBB1	28:C:503:CLA:HMB3	1.91	0.53
28:S:312:CLA:HMB3	28:S:312:CLA:HBB1	1.91	0.53
33:T:101:BCR:H23C	33:T:101:BCR:C38	2.37	0.53
28:U:414:CLA:HHD	28:U:414:CLA:HBC2	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:V:301:LMN:H6	43:V:301:LMN:H2	1.91	0.53
28:b:609:CLA:HHC	28:b:609:CLA:HBB1	1.90	0.53
28:c:506:CLA:HHC	28:c:506:CLA:HBB1	1.91	0.53
6:E:25:ILE:HA	26:2:123:VAL:HG11	1.91	0.53
38:u:404:LMG:O6	38:u:404:LMG:HC8	2.08	0.53
28:y:310:CLA:HHC	28:y:310:CLA:HBB1	1.90	0.53
6:E:13:ILE:HG21	45:E:101:HEM:HAD2	1.90	0.52
6:E:36:LEU:HD22	26:2:134:THR:HG21	1.90	0.52
29:Y:307:CHL:HHC	29:Y:307:CHL:HBB1	1.91	0.52
33:C:507:BCR:H23C	33:C:507:BCR:H392	1.92	0.52
28:D:409:CLA:HBB1	28:D:409:CLA:HMB1	1.89	0.52
3:b:14:ASN:ND2	48:b:703:HOH:O	2.42	0.52
43:c:525:LMN:HBP	42:c:527:LHG:HC2	1.90	0.52
28:g:306:CLA:HHC	28:g:306:CLA:HBB1	1.90	0.52
15:s:94:LEU:HD23	15:s:184:MET:HB2	1.89	0.52
24:y:254:TRP:CZ3	29:y:315:CHL:HMA3	2.44	0.52
1:1:81:ARG:NH2	28:1:306:CLA:HMB3	2.24	0.52
28:S:313:CLA:HHC	28:S:313:CLA:HBB1	1.90	0.52
15:V:259:LEU:CB	29:V:302:CHL:H12	2.39	0.52
28:Y:316:CLA:HHC	28:Y:316:CLA:HBB1	1.89	0.52
29:n:311:CHL:HHC	29:n:311:CHL:HBB1	1.91	0.52
28:s:315:CLA:HHC	28:s:315:CLA:HBB1	1.90	0.52
21:u:239:TYR:HB3	28:u:413:CLA:HED2	1.92	0.52
24:y:92:ALA:HB2	32:y:320:LUT:H373	1.89	0.52
28:1:302:CLA:HHC	28:1:302:CLA:HBB1	1.90	0.52
42:D:406:LHG:O6	42:D:406:LHG:O9	2.27	0.52
28:Y:306:CLA:HHC	28:Y:306:CLA:HBB1	1.89	0.52
28:b:606:CLA:HHC	28:b:606:CLA:HBB1	1.91	0.52
28:u:405:CLA:HHC	28:u:405:CLA:HBB1	1.90	0.52
28:u:407:CLA:HHC	28:u:407:CLA:HBB1	1.91	0.52
28:v:316:CLA:HHC	28:v:316:CLA:HBB1	1.90	0.52
28:B:610:CLA:HHC	28:B:610:CLA:HBB1	1.91	0.52
28:C:517:CLA:HBB1	28:C:517:CLA:HMB1	1.89	0.52
29:N:307:CHL:HHC	29:N:307:CHL:HBB1	1.91	0.52
28:N:313:CLA:HHC	28:N:313:CLA:HBB1	1.90	0.52
5:d:128:MET:HE1	5:d:149:SER:HA	1.92	0.52
28:y:313:CLA:HHC	28:y:313:CLA:HBB1	1.91	0.52
26:3:121:LEU:HD13	26:3:124:LEU:HD12	1.90	0.52
33:b:604:BCR:H23C	33:b:604:BCR:C38	2.40	0.52
38:U:402:LMG:O2	38:U:402:LMG:HC71	2.10	0.52
28:U:410:CLA:HHC	28:U:410:CLA:HBB1	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:u:401:LMN:OBV	43:u:401:LMN:H1	2.09	0.52
28:u:415:CLA:HHC	28:u:415:CLA:HBB1	1.91	0.52
28:D:410:CLA:HHC	28:D:410:CLA:HBB1	1.91	0.52
6:E:15:THR:O	11:J:9:ARG:HA	2.09	0.52
29:n:312:CHL:HBB1	29:n:312:CHL:HMB1	1.91	0.52
24:y:145:ALA:HB1	30:y:319:0IE:C9	2.40	0.52
29:0:310:CHL:HHC	29:0:310:CHL:HBB1	1.90	0.52
4:C:39:ASN:HD22	28:C:513:CLA:CGA	2.23	0.52
28:S:304:CLA:HHC	28:S:304:CLA:HBB1	1.90	0.52
28:s:313:CLA:HBB1	28:s:313:CLA:HMB3	1.92	0.52
4:C:279:ILE:HD11	4:C:437:PHE:CD2	2.45	0.52
28:G:315:CLA:HHC	28:G:315:CLA:HBB1	1.90	0.52
28:N:314:CLA:HHC	28:N:314:CLA:HBB1	1.91	0.52
15:V:208:LYS:HG3	28:V:315:CLA:HED1	1.92	0.52
28:c:510:CLA:HHC	28:c:510:CLA:HBB1	1.91	0.52
29:V:309:CHL:H41	29:V:309:CHL:C7	2.40	0.51
29:V:312:CHL:HBB1	29:V:312:CHL:HMB1	1.91	0.51
28:Y:313:CLA:HHD	28:Y:313:CLA:CBC	2.40	0.51
21:u:294:ALA:HB1	21:u:302:GLN:NE2	2.25	0.51
29:u:410:CHL:HBB1	29:u:410:CHL:HMB3	1.93	0.51
3:B:233:ASN:O	3:B:236:THR:HG22	2.09	0.51
29:V:311:CHL:HAA2	29:V:311:CHL:HBD	1.91	0.51
28:v:313:CLA:HHC	28:v:313:CLA:HBB1	1.91	0.51
28:y:314:CLA:HHC	28:y:314:CLA:HBB1	1.93	0.51
33:k:102:BCR:H331	33:k:102:BCR:HC8	1.93	0.51
28:v:305:CLA:HHC	28:v:305:CLA:HBB1	1.91	0.51
21:U:274:ALA:HA	28:U:415:CLA:HBB1	1.93	0.51
43:W:201:LMN:HBS	43:W:201:LMN:O3	2.11	0.51
3:B:352:ARG:HA	48:B:715:HOH:O	2.11	0.51
8:G:177:VAL:CG1	46:G:320:NEX:C34	2.87	0.51
28:V:317:CLA:HHC	28:V:317:CLA:HBB1	1.92	0.51
38:c:526:LMG:O9	38:c:526:LMG:HC92	2.11	0.51
21:u:166:GLY:HA3	21:u:268:ALA:HB1	1.93	0.51
1:0:118:PHE:CD1	28:0:303:CLA:HBC2	2.46	0.51
28:G:309:CLA:HHC	28:G:309:CLA:HBB1	1.92	0.51
28:c:520:CLA:HHC	28:c:520:CLA:HBB1	1.91	0.51
28:s:304:CLA:HBB1	28:s:304:CLA:HMB3	1.91	0.51
24:y:266:ASN:O	24:y:267:GLN:C	2.53	0.51
38:A:414:LMG:H182	41:C:516:DGD:HA22	1.91	0.51
6:E:6:GLU:HG3	7:F:9:TYR:HE1	1.76	0.51
28:n:313:CLA:HBB1	28:n:313:CLA:HMB1	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:s:149:HIS:HB3	29:s:306:CHL:C1B	2.41	0.51
1:1:224:GLY:O	1:1:225:SER:C	2.54	0.51
37:B:615:SQD:H81	37:B:615:SQD:C46	2.40	0.51
5:D:274:LEU:C	5:D:274:LEU:HD23	2.36	0.51
6:E:26:THR:HG21	45:E:101:HEM:C3B	2.45	0.51
28:N:311:CLA:HBB1	28:N:311:CLA:HMB1	1.92	0.51
17:P:234:LYS:HE3	48:P:302:HOH:O	2.10	0.51
15:S:111:GLU:OE2	15:S:234:PRO:HD2	2.11	0.51
32:U:418:LUT:C8	32:U:418:LUT:H171	2.41	0.51
28:Y:305:CLA:HHC	28:Y:305:CLA:HBB1	1.93	0.51
28:a:402:CLA:HHC	28:a:402:CLA:HBB1	1.92	0.51
28:s:311:CLA:HHC	28:s:311:CLA:HBB1	1.92	0.51
32:y:320:LUT:H161	32:y:320:LUT:C8	2.40	0.51
37:z:101:SQD:H441	37:z:101:SQD:O10	2.11	0.51
28:C:501:CLA:HBB1	28:C:501:CLA:HMB3	1.93	0.50
33:k:102:BCR:H23C	33:k:102:BCR:C38	2.41	0.50
1:1:118:PHE:CD2	28:1:303:CLA:HBC3	2.45	0.50
33:b:603:BCR:H23C	33:b:603:BCR:C38	2.40	0.50
33:c:507:BCR:H331	33:c:507:BCR:HC8	1.90	0.50
45:e:101:HEM:HBC2	45:e:101:HEM:HHD	1.93	0.50
33:B:603:BCR:H23C	33:B:603:BCR:C38	2.41	0.50
33:c:507:BCR:H23C	33:c:507:BCR:C38	2.41	0.50
32:u:419:LUT:H8	32:u:419:LUT:C17	2.41	0.50
27:5:371:ILE:HD12	27:5:374:PRO:HG3	1.90	0.50
28:0:301:CLA:HHC	28:0:301:CLA:HBB1	1.93	0.50
28:S:314:CLA:HMB1	28:S:314:CLA:HBB1	1.93	0.50
21:U:239:TYR:HB3	28:U:412:CLA:HED2	1.93	0.50
28:b:601:CLA:HHC	28:b:601:CLA:HBB1	1.93	0.50
28:b:605:CLA:HMB1	28:b:605:CLA:HBB1	1.94	0.50
45:e:101:HEM:HMB1	45:e:101:HEM:HBB2	1.94	0.50
3:B:228:ALA:HB2	38:D:411:LMG:O9	2.11	0.50
29:G:317:CHL:CBB	29:G:317:CHL:HMB1	2.41	0.50
33:b:602:BCR:H23C	33:b:602:BCR:C38	2.42	0.50
10:i:5:LYS:HG2	22:w:96:LEU:HD21	1.93	0.50
5:D:325:GLU:HG2	48:D:507:HOH:O	2.10	0.50
6:E:18:ARG:HH11	6:E:22:ILE:HD11	1.77	0.50
28:Y:309:CLA:HBA1	32:Y:320:LUT:H10	1.93	0.50
28:c:505:CLA:HBB1	28:c:505:CLA:HMB3	1.92	0.50
5:d:164:LEU:HD22	38:d:402:LMG:O10	2.12	0.50
3:B:225:LEU:HD11	9:H:33:THR:HG23	1.94	0.50
33:T:101:BCR:H331	33:T:101:BCR:HC8	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:g:305:CLA:HHC	28:g:305:CLA:HBB1	1.93	0.50
43:y:302:LMN:CBS	43:y:302:LMN:O2	2.60	0.50
41:C:520:DGD:HE4	11:J:42:LEU:HD21	1.94	0.50
28:G:308:CLA:HAA1	28:G:308:CLA:HBD	1.94	0.50
45:e:101:HEM:HMA1	27:6:371:ILE:HG12	1.92	0.50
15:V:192:PRO:O	46:V:323:NEX:O3	2.24	0.49
9:h:13:GLY:O	9:h:17:LYS:HB2	2.12	0.49
28:G:308:CLA:CHC	46:G:320:NEX:H222	2.42	0.49
11:J:12:LEU:HD12	11:J:15:VAL:HB	1.94	0.49
29:N:303:CHL:HHC	29:N:303:CHL:HBB1	1.94	0.49
5:d:174:SER:HB2	5:d:179:ALA:HB1	1.94	0.49
37:A:405:SQD:H82	38:K:101:LMG:H111	1.94	0.49
3:B:243:ALA:HA	3:B:246:PHE:CE2	2.48	0.49
29:v:304:CHL:H43	28:v:305:CLA:HBA1	1.95	0.49
28:y:308:CLA:CBB	28:y:308:CLA:HMB3	2.43	0.49
28:0:303:CLA:CMC	28:0:303:CLA:HBC3	2.42	0.49
28:1:303:CLA:CBB	28:1:303:CLA:HHC	2.42	0.49
28:1:303:CLA:HHC	28:1:303:CLA:HBB1	1.93	0.49
32:1:313:LUT:H193	32:1:313:LUT:H171	1.94	0.49
29:G:317:CHL:HBB1	29:G:317:CHL:HMB1	1.94	0.49
38:d:408:LMG:H402	38:d:408:LMG:H362	1.94	0.49
21:u:281:GLN:NE2	28:u:416:CLA:NA	2.61	0.49
28:B:608:CLA:H92	9:H:51:LEU:HD22	1.94	0.49
38:M:101:LMG:H111	14:m:24:ILE:HG21	1.94	0.49
3:b:437:LEU:HB2	48:b:749:HOH:O	2.12	0.49
5:d:193:TRP:CE3	5:d:291:LEU:HD11	2.47	0.49
15:s:164:MET:HA	15:s:167:VAL:HG22	1.94	0.49
28:C:511:CLA:HBB1	28:C:511:CLA:HMB3	1.95	0.49
9:H:64:PRO:O	9:H:66:ASN:N	2.45	0.49
33:H:101:BCR:H23C	33:H:101:BCR:C38	2.42	0.49
15:N:226:GLN:NE2	28:N:314:CLA:ND	2.58	0.49
28:U:413:CLA:H161	28:U:414:CLA:CBB	2.39	0.49
28:c:503:CLA:HBB1	28:c:503:CLA:HMB3	1.95	0.49
28:d:404:CLA:HMB1	28:d:404:CLA:HBB1	1.94	0.49
1:0:119:PRO:HD2	28:0:303:CLA:HBC1	1.95	0.49
33:D:403:BCR:H373	7:F:30:LEU:HD21	1.95	0.49
21:U:296:VAL:HG21	28:U:415:CLA:HAA1	1.95	0.49
28:a:416:CLA:HBB1	28:a:416:CLA:HMB1	1.95	0.49
29:n:308:CHL:CMB	29:n:308:CHL:HBB1	2.42	0.49
29:v:307:CHL:HAA2	29:v:307:CHL:HBD	1.95	0.49
31:y:317:0UR:O57	31:y:317:0UR:C48	2.54	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:A:401:BCR:H383	33:A:401:BCR:H23C	1.93	0.49
28:B:616:CLA:HBB1	28:B:616:CLA:HMB3	1.93	0.49
28:C:510:CLA:HHC	28:C:510:CLA:HBB1	1.94	0.49
45:E:101:HEM:HHC	45:E:101:HEM:HBB2	1.94	0.49
28:b:607:CLA:HMB1	28:b:607:CLA:HBB1	1.95	0.49
28:B:605:CLA:H2	37:B:617:SQD:H151	1.94	0.48
38:U:402:LMG:O10	38:U:402:LMG:C32	2.61	0.48
37:c:523:SQD:O10	37:c:523:SQD:H45	2.12	0.48
1:1:232:ILE:HG22	1:1:233:GLU:N	2.28	0.48
38:C:522:LMG:HC2	28:V:315:CLA:HAA2	1.93	0.48
33:b:602:BCR:H391	37:b:614:SQD:H82	1.94	0.48
4:c:279:ILE:HD11	4:c:437:PHE:CD2	2.48	0.48
42:c:527:LHG:H241	29:g:316:CHL:H93	1.95	0.48
29:n:305:CHL:HMB1	29:n:305:CHL:HBB1	1.95	0.48
29:v:309:CHL:HBB1	29:v:309:CHL:HMB3	1.95	0.48
4:c:39:ASN:HD21	28:c:503:CLA:C1C	2.26	0.48
28:c:522:CLA:HMB3	28:c:522:CLA:HBB1	1.95	0.48
15:s:177:LEU:HG	29:s:309:CHL:HAB	1.96	0.48
28:y:308:CLA:CMB	28:y:308:CLA:CBB	2.86	0.48
16:O:225:ASP:HB2	16:O:226:PRO:HD2	1.96	0.48
28:S:305:CLA:HMB1	28:S:305:CLA:HBB1	1.95	0.48
28:b:617:CLA:HHC	28:b:617:CLA:HBB1	1.94	0.48
29:s:303:CHL:HHC	29:s:303:CHL:HBB1	1.94	0.48
33:t:101:BCR:HC8	33:t:101:BCR:C33	2.43	0.48
29:y:307:CHL:H41	29:y:307:CHL:C7	2.43	0.48
3:B:423:ARG:O	48:B:701:HOH:O	2.20	0.48
28:C:506:CLA:HBB1	28:C:506:CLA:HMB1	1.96	0.48
42:b:624:LHG:H112	42:b:624:LHG:C7	2.44	0.48
28:c:512:CLA:HMB3	28:c:512:CLA:HBB1	1.96	0.48
28:c:514:CLA:HMB3	28:c:514:CLA:HBB1	1.95	0.48
28:y:312:CLA:HBB1	28:y:312:CLA:HMB3	1.94	0.48
1:1:221:PHE:O	1:1:223:ILE:N	2.47	0.48
4:C:175:LEU:HD23	4:C:237:HIS:CD2	2.49	0.48
28:C:509:CLA:HBB1	28:C:509:CLA:HMB3	1.95	0.48
33:D:403:BCR:H23C	33:D:403:BCR:C38	2.44	0.48
29:N:309:CHL:HMA1	46:N:319:NEX:H403	1.94	0.48
33:d:403:BCR:HC8	33:d:403:BCR:C33	2.43	0.48
32:1:313:LUT:H181	32:1:313:LUT:H8	1.94	0.48
4:C:258:ALA:HB2	4:C:261:ARG:NH2	2.28	0.48
29:S:307:CHL:HBB1	29:S:307:CHL:HMB1	1.96	0.48
28:g:307:CLA:CHC	46:g:319:NEX:H222	2.43	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:S:164:MET:HA	15:S:167:VAL:HG22	1.96	0.48
15:V:147:LEU:O	15:V:148:VAL:C	2.56	0.48
28:Y:303:CLA:CMB	28:Y:303:CLA:HBB1	2.44	0.48
28:y:311:CLA:HBB1	28:y:311:CLA:HMB1	1.95	0.48
29:n:308:CHL:CMB	29:n:308:CHL:CBB	2.91	0.48
28:u:412:CLA:O1A	28:u:417:CLA:O1A	2.32	0.48
1:1:194:GLU:OE1	28:1:306:CLA:C1B	2.57	0.48
33:D:403:BCR:HC8	33:D:403:BCR:C33	2.43	0.48
29:G:317:CHL:CMB	29:G:317:CHL:CBB	2.92	0.48
15:S:108:PHE:O	15:S:111:GLU:HG2	2.14	0.48
28:a:403:CLA:HMC3	5:d:184:ILE:HG21	1.95	0.48
4:C:288:CYS:HB3	41:C:516:DGD:HG11	1.94	0.47
28:C:513:CLA:HBB1	28:C:513:CLA:HMB3	1.96	0.47
33:D:403:BCR:H372	38:J:101:LMG:H121	1.95	0.47
28:b:606:CLA:H141	28:b:606:CLA:H171	1.95	0.47
5:d:274:LEU:C	5:d:274:LEU:HD23	2.39	0.47
17:p:76:GLY:HA2	27:6:352:ARG:HH22	1.79	0.47
21:u:298:ILE:HD13	21:u:304:ILE:HG13	1.94	0.47
43:y:302:LMN:HBJA	43:y:302:LMN:HBS	1.95	0.47
28:y:305:CLA:HBB1	28:y:305:CLA:HMB1	1.95	0.47
33:A:401:BCR:H331	33:A:401:BCR:HC8	1.96	0.47
3:B:91:TRP:CZ2	38:B:620:LMG:H111	2.49	0.47
38:D:401:LMG:O9	38:D:401:LMG:O8	2.32	0.47
43:G:304:LMN:HBJA	43:G:304:LMN:HBQA	1.95	0.47
15:S:97:ALA:HB1	15:S:213:GLY:HA3	1.95	0.47
29:v:304:CHL:HMB1	29:v:304:CHL:HBB1	1.96	0.47
37:T:102:SQD:O6	37:T:102:SQD:O49	2.32	0.47
15:V:97:ALA:HB1	15:V:213:GLY:HA3	1.96	0.47
29:V:311:CHL:HBA1	29:V:311:CHL:H3A	1.71	0.47
3:b:192:PRO:HG3	9:h:54:TYR:CD1	2.49	0.47
6:e:27:ILE:HB	6:e:28:PRO:HD3	1.94	0.47
9:h:35:LEU:HG	9:h:39:PHE:CE2	2.49	0.47
29:s:307:CHL:HBA1	46:s:319:NEX:C31	2.44	0.47
24:y:108:CYS:HA	24:y:113:CYS:HA	1.97	0.47
43:y:302:LMN:HBHA	28:y:312:CLA:CAB	2.45	0.47
28:y:309:CLA:HMB1	28:y:309:CLA:HBB1	1.96	0.47
1:1:80:GLY:HA2	1:1:202:MET:CG	2.45	0.47
2:A:30:ILE:O	2:A:34:GLY:HA3	2.15	0.47
29:V:309:CHL:CBB	29:V:309:CHL:HMB3	2.44	0.47
2:a:133:LEU:HD23	5:d:258:ILE:HG12	1.97	0.47
29:n:310:CHL:HBB1	29:n:310:CHL:HMB3	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:D:174:SER:HB2	5:D:179:ALA:HB1	1.96	0.47
33:H:101:BCR:H321	33:H:101:BCR:C8	2.38	0.47
38:a:414:LMG:H131	38:c:502:LMG:H161	1.96	0.47
3:b:180:PRO:HD2	48:b:836:HOH:O	2.13	0.47
29:s:307:CHL:HBB1	29:s:307:CHL:HMB1	1.95	0.47
24:y:133:PRO:HA	28:y:306:CLA:CBC	2.44	0.47
6:E:13:ILE:HD13	45:E:101:HEM:HBD1	1.96	0.47
15:V:164:MET:HA	15:V:167:VAL:HG22	1.95	0.47
43:V:301:LMN:HBR	43:V:301:LMN:HBIA	1.97	0.47
24:Y:85:LEU:HB3	28:Y:305:CLA:CBB	2.45	0.47
33:d:403:BCR:H23C	33:d:403:BCR:C38	2.45	0.47
38:d:408:LMG:H321	38:d:408:LMG:C28	2.45	0.47
33:h:101:BCR:H23C	33:h:101:BCR:C38	2.44	0.47
6:E:26:THR:HG21	45:E:101:HEM:C4B	2.50	0.47
29:U:409:CHL:HBB1	29:U:409:CHL:HMB3	1.95	0.47
28:U:411:CLA:HBB1	28:U:411:CLA:HMB3	1.95	0.47
28:Y:311:CLA:H61	28:Y:311:CLA:H41	1.55	0.47
28:c:508:CLA:HMB3	28:c:508:CLA:HBB1	1.97	0.47
15:n:164:MET:HA	15:n:167:VAL:HG22	1.96	0.47
15:s:148:VAL:HG22	29:s:306:CHL:C3D	2.44	0.47
12:K:28:VAL:HG22	12:K:28:VAL:O	2.14	0.47
2:a:84:PRO:HA	2:a:112:TYR:CG	2.50	0.47
28:g:308:CLA:HMB1	28:g:308:CLA:HBB1	1.96	0.47
10:i:9:TYR:O	10:i:10:THR:C	2.58	0.47
5:D:193:TRP:CE3	5:D:291:LEU:HD11	2.50	0.47
28:V:307:CLA:HAB	28:V:307:CLA:HMB1	1.43	0.47
6:e:22:ILE:HG23	27:6:367:VAL:HG22	1.96	0.47
42:g:303:LHG:H112	42:g:303:LHG:HC82	1.63	0.47
38:u:403:LMG:H301	38:u:403:LMG:C9	2.45	0.47
29:v:311:CHL:HBB1	29:v:311:CHL:HMB1	1.96	0.47
1:1:219:ASN:OD1	1:1:220:PRO:HB2	2.14	0.47
38:A:408:LMG:HC8	38:A:408:LMG:O10	2.14	0.47
28:B:602:CLA:HBB1	28:B:602:CLA:HMB1	1.97	0.47
28:C:512:CLA:HMB3	28:C:512:CLA:HBB1	1.96	0.47
8:G:177:VAL:HG13	46:G:320:NEX:H15	1.96	0.47
28:B:611:CLA:HMB3	28:B:611:CLA:HBB1	1.97	0.46
8:G:149:LEU:HD11	8:G:156:LEU:HD12	1.97	0.46
28:Y:314:CLA:HBB1	28:Y:314:CLA:HMB1	1.97	0.46
29:v:304:CHL:H43	28:v:305:CLA:CBA	2.46	0.46
28:B:601:CLA:HMB3	28:B:601:CLA:HBB1	1.97	0.46
8:G:149:LEU:CD1	8:G:156:LEU:HD12	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:N:308:CHL:H93	29:N:308:CHL:H112	1.64	0.46
29:S:309:CHL:HBB1	29:S:309:CHL:HMB1	1.97	0.46
28:U:415:CLA:HMA1	32:U:418:LUT:H23	1.97	0.46
29:V:311:CHL:HBA1	29:V:311:CHL:H11	1.47	0.46
5:d:344:PRO:O	5:d:347:VAL:HG22	2.14	0.46
38:d:408:LMG:C28	38:d:408:LMG:C32	2.93	0.46
6:e:30:LEU:HA	27:6:360:LEU:HD21	1.97	0.46
3:b:246:PHE:CD1	3:b:246:PHE:C	2.93	0.46
17:p:121:LEU:HD11	17:p:123:TYR:CE1	2.51	0.46
37:z:101:SQD:H1	37:z:101:SQD:O49	2.15	0.46
42:D:405:LHG:O7	13:L:16:THR:HG23	2.15	0.46
15:N:97:ALA:HB1	15:N:213:GLY:HA3	1.97	0.46
28:U:412:CLA:HBB1	28:U:412:CLA:HMB1	1.96	0.46
43:V:303:LMN:HBJA	43:V:303:LMN:HBQA	1.96	0.46
29:V:306:CHL:HMB1	29:V:306:CHL:HBB1	1.96	0.46
6:E:30:LEU:HD11	45:E:101:HEM:HBB2	1.97	0.46
29:U:405:CHL:HMB1	29:U:405:CHL:HBB1	1.98	0.46
28:U:415:CLA:H92	28:U:415:CLA:H62	1.68	0.46
28:U:415:CLA:HED2	28:U:415:CLA:HBD	1.74	0.46
29:V:310:CHL:HBB1	29:V:310:CHL:HMB1	1.97	0.46
28:Y:311:CLA:CGA	28:Y:311:CLA:C3A	2.92	0.46
38:c:526:LMG:HC92	38:c:526:LMG:H291	1.60	0.46
4:C:258:ALA:HB3	38:C:522:LMG:O5	2.16	0.46
17:P:121:LEU:HD11	17:P:123:TYR:CE1	2.50	0.46
29:S:303:CHL:HMB1	29:S:303:CHL:HBB1	1.97	0.46
29:V:313:CHL:H143	29:V:313:CHL:H161	1.66	0.46
24:Y:262:ALA:HB1	28:u:418:CLA:HMD2	1.98	0.46
43:Y:301:LMN:CBT	43:Y:301:LMN:H1	2.46	0.46
5:d:123:GLY:HA3	34:d:407:PHO:H43	1.98	0.46
5:d:194:THR:HG23	28:d:404:CLA:HBC2	1.97	0.46
26:3:120:PHE:O	26:3:123:VAL:HG22	2.16	0.46
33:K:104:BCR:H382	33:K:104:BCR:C23	2.44	0.46
29:n:309:CHL:HMB1	29:n:309:CHL:HBB1	1.97	0.46
21:u:295:ASP:HB3	21:u:300:ARG:HD2	1.96	0.46
28:0:307:CLA:HHC	28:0:307:CLA:HBB1	1.97	0.46
38:A:414:LMG:HC72	4:C:216:SER:HB3	1.98	0.46
15:S:111:GLU:HA	15:S:124:SER:HB2	1.97	0.46
21:U:166:GLY:HA3	21:U:268:ALA:HB1	1.98	0.46
29:U:408:CHL:HBB1	29:U:408:CHL:HMB1	1.97	0.46
3:b:476:ARG:HD2	48:b:715:HOH:O	2.15	0.46
15:s:97:ALA:HB1	15:s:213:GLY:HA3	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:u:222:GLY:O	21:u:226:ILE:HG12	2.15	0.46
28:y:306:CLA:HMC1	28:y:306:CLA:HBC2	1.98	0.46
3:B:43:ALA:HA	41:a:409:DGD:HD5	1.98	0.46
5:D:57:VAL:HG21	5:D:112:LEU:CD1	2.46	0.46
14:M:12:ALA:O	14:M:16:ILE:HG12	2.15	0.46
28:S:310:CLA:H72	31:S:315:0UR:C15	2.46	0.46
29:Y:307:CHL:HBA1	29:Y:307:CHL:C2	2.46	0.46
15:v:163:LEU:HB3	46:v:320:NEX:H34	1.97	0.46
29:V:309:CHL:HBB1	29:V:309:CHL:HMB3	1.98	0.46
2:a:337:HIS:HD2	48:a:502:HOH:O	1.99	0.46
28:c:513:CLA:HBB1	28:c:513:CLA:HMB1	1.97	0.46
37:z:101:SQD:H261	37:z:101:SQD:C30	2.46	0.46
1:1:222:GLY:O	1:1:224:GLY:N	2.49	0.45
2:A:84:PRO:HA	2:A:112:TYR:CG	2.51	0.45
14:M:17:ILE:HB	14:M:18:PRO:HD3	1.97	0.45
15:N:149:HIS:HB3	29:N:306:CHL:C1B	2.46	0.45
15:N:164:MET:HA	15:N:167:VAL:HG22	1.97	0.45
29:V:302:CHL:H203	29:V:302:CHL:H161	1.38	0.45
3:b:243:ALA:HA	3:b:246:PHE:CE2	2.51	0.45
28:y:305:CLA:H43	28:y:306:CLA:CMD	2.46	0.45
38:c:528:LMG:O8	38:c:528:LMG:O9	2.33	0.45
7:f:24:VAL:HB	7:f:25:PRO:HD3	1.99	0.45
24:y:249:HIS:CG	28:y:314:CLA:HAA2	2.51	0.45
38:A:414:LMG:H152	38:A:414:LMG:H112	1.98	0.45
28:A:416:CLA:HBB1	28:A:416:CLA:HMB1	1.98	0.45
28:C:512:CLA:H42	28:C:512:CLA:C4C	2.47	0.45
38:U:402:LMG:HC1	38:U:402:LMG:C10	2.46	0.45
29:V:302:CHL:HBA1	29:V:302:CHL:H11	1.31	0.45
28:V:318:CLA:HMB1	28:V:318:CLA:HBB1	1.99	0.45
2:a:110:GLY:N	2:a:111:PRO:CD	2.79	0.45
1:0:36:SER:O	1:0:37:GLU:C	2.59	0.45
28:Y:311:CLA:O1A	28:Y:311:CLA:C4A	2.64	0.45
28:b:616:CLA:H202	9:h:16:LEU:HD11	1.96	0.45
28:g:313:CLA:H61	28:g:313:CLA:H101	1.61	0.45
29:u:409:CHL:HBB1	29:u:409:CHL:HMB1	1.98	0.45
29:v:308:CHL:HMB1	29:v:308:CHL:HBB1	1.98	0.45
32:1:313:LUT:H181	32:1:313:LUT:C8	2.45	0.45
28:B:611:CLA:H141	28:D:410:CLA:H43	1.97	0.45
4:C:237:HIS:HA	4:C:240:ILE:HG22	1.98	0.45
17:P:246:VAL:HG12	17:P:246:VAL:O	2.16	0.45
15:v:164:MET:HA	15:v:167:VAL:HG22	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:3:129:PHE:O	26:3:130:ALA:C	2.59	0.45
27:6:368:ALA:O	27:6:372:ALA:HB2	2.16	0.45
38:U:402:LMG:H132	38:U:402:LMG:O7	2.16	0.45
29:V:311:CHL:HMC	29:V:311:CHL:HAC2	1.64	0.45
15:n:97:ALA:HB1	15:n:213:GLY:HA3	1.98	0.45
32:y:320:LUT:H15	32:y:320:LUT:H201	1.76	0.45
26:3:134:THR:O	26:3:135:SER:C	2.60	0.45
38:A:414:LMG:HC92	38:A:414:LMG:O9	2.17	0.45
28:B:612:CLA:HBB1	28:B:612:CLA:HMB3	1.99	0.45
4:C:61:VAL:HG12	4:C:118:HIS:O	2.17	0.45
5:D:182:ARG:C	5:D:182:ARG:CD	2.89	0.45
38:K:103:LMG:H311	38:K:103:LMG:O10	2.15	0.45
38:a:414:LMG:HC3	37:c:501:SQD:H4	1.99	0.45
3:b:496:GLN:OE1	23:x:121:VAL:HG13	2.16	0.45
4:c:181:TYR:CD1	42:c:527:LHG:HC12	2.52	0.45
4:c:406:SER:HA	4:c:420:VAL:HG23	1.98	0.45
21:u:294:ALA:HB3	21:u:302:GLN:NE2	2.30	0.45
21:u:299:GLY:O	21:u:300:ARG:C	2.60	0.45
28:y:309:CLA:C12	28:y:309:CLA:H91	2.46	0.45
1:0:42:GLU:OE2	28:0:307:CLA:NB	2.50	0.45
3:B:44:VAL:HG23	3:B:60:MET:HE1	1.99	0.45
42:D:405:LHG:HC81	42:D:405:LHG:C6	2.46	0.45
6:E:22:ILE:CG2	27:5:367:VAL:HG13	2.47	0.45
29:V:309:CHL:CMB	29:V:309:CHL:CBB	2.91	0.45
33:b:603:BCR:HC8	33:b:603:BCR:C33	2.47	0.45
28:b:619:CLA:HBB1	28:b:619:CLA:HMB3	1.98	0.45
28:g:314:CLA:H62	28:g:314:CLA:H41	1.45	0.45
28:G:307:CLA:HBB1	28:G:307:CLA:HMB3	1.98	0.45
28:n:306:CLA:H141	28:n:306:CLA:C17	2.47	0.45
43:n:323:LMN:O5	43:n:323:LMN:CBT	2.65	0.45
21:u:152:VAL:HG23	48:u:508:HOH:O	2.15	0.45
28:Y:311:CLA:HMC1	28:Y:311:CLA:HAC1	1.56	0.45
33:b:602:BCR:HC8	33:b:602:BCR:C33	2.44	0.45
24:y:124:SER:O	28:y:306:CLA:HMA3	2.16	0.45
27:5:373:GLY:N	27:5:374:PRO:HD2	2.32	0.45
38:B:620:LMG:H151	38:B:620:LMG:C29	2.47	0.44
28:B:621:CLA:HBB1	28:B:621:CLA:HMB1	1.98	0.44
42:S:301:LHG:O10	47:S:317:XAT:H161	2.17	0.44
21:U:160:GLU:HA	21:U:238:LEU:HD21	1.99	0.44
21:U:277:GLY:O	21:U:278:PHE:C	2.59	0.44
28:d:409:CLA:HMB3	28:d:409:CLA:HBB1	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:i:4:LEU:HD22	38:i:101:LMG:O9	2.17	0.44
9:H:17:LYS:N	9:H:18:PRO:HD2	2.31	0.44
28:S:310:CLA:H3A	28:S:310:CLA:HBA2	1.48	0.44
28:Y:303:CLA:O1D	28:Y:303:CLA:H2A	2.17	0.44
47:s:318:XAT:H31	47:s:318:XAT:H391	1.86	0.44
27:6:367:VAL:O	27:6:371:ILE:HG13	2.17	0.44
3:B:61:PHE:CZ	28:B:622:CLA:HMA1	2.52	0.44
33:b:604:BCR:HC8	33:b:604:BCR:C33	2.47	0.44
29:s:309:CHL:H42	31:s:316:0UR:C32	2.46	0.44
8:G:264:TYR:CE2	28:G:316:CLA:CED	3.01	0.44
15:N:148:VAL:HA	29:N:306:CHL:C4D	2.47	0.44
29:S:308:CHL:O1A	29:S:308:CHL:CHA	2.65	0.44
24:Y:258:VAL:HG23	28:Y:314:CLA:HMD3	1.99	0.44
15:n:255:THR:HG22	29:v:309:CHL:HED3	1.98	0.44
43:y:302:LMN:O2	43:y:302:LMN:HBSA	2.17	0.44
28:1:303:CLA:HBB1	28:1:303:CLA:CHC	2.47	0.44
5:D:57:VAL:HG21	5:D:112:LEU:HD12	1.98	0.44
8:G:121:VAL:O	8:G:125:VAL:HG23	2.18	0.44
15:N:167:VAL:HG11	46:N:319:NEX:C40	2.45	0.44
29:V:302:CHL:HBD	29:V:302:CHL:CAA	2.48	0.44
28:V:308:CLA:HMB1	28:V:308:CLA:HBB1	1.99	0.44
6:E:24:SER:HB2	26:2:116:TRP:HE1	1.83	0.44
28:Y:303:CLA:CMB	28:Y:303:CLA:CBB	2.92	0.44
2:a:30:ILE:O	2:a:34:GLY:HA3	2.17	0.44
38:a:414:LMG:H122	38:c:502:LMG:H142	2.00	0.44
6:e:22:ILE:HG12	27:6:370:ASN:HD22	1.81	0.44
43:n:322:LMN:HBEA	43:n:322:LMN:HBQ	2.00	0.44
1:0:60:TRP:CH2	28:0:301:CLA:HMA2	2.53	0.44
1:1:79:HIS:NE2	28:1:302:CLA:C4B	2.81	0.44
4:C:406:SER:HA	4:C:420:VAL:HG23	2.00	0.44
46:V:323:NEX:H35	38:u:403:LMG:H372	2.00	0.44
38:c:526:LMG:H161	38:c:526:LMG:H121	1.98	0.44
38:d:410:LMG:H291	38:d:410:LMG:H111	2.00	0.44
26:2:130:ALA:O	26:2:131:ILE:C	2.61	0.44
1:0:200:LEU:CD2	28:0:308:CLA:CED	2.75	0.44
28:0:306:CLA:HBB1	28:0:306:CLA:HMB1	1.98	0.44
15:N:153:ILE:O	15:N:157:VAL:HG23	2.18	0.44
38:c:502:LMG:C31	33:k:102:BCR:HC42	2.48	0.44
43:n:301:LMN:HOAR	43:n:301:LMN:HCF	1.82	0.44
28:y:305:CLA:C4	28:y:306:CLA:HMD2	2.48	0.44
1:0:118:PHE:O	1:0:119:PRO:C	2.58	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:1:303:CLA:CBC	28:1:303:CLA:CHD	2.91	0.44
28:A:411:CLA:HMB1	28:A:411:CLA:HBB1	1.99	0.44
33:B:604:BCR:HC8	33:B:604:BCR:C33	2.46	0.44
9:H:39:PHE:HA	9:H:42:LEU:HD12	2.00	0.44
29:N:302:CHL:O1D	29:N:302:CHL:H2A	2.17	0.44
29:N:308:CHL:H111	29:N:308:CHL:H142	1.58	0.44
28:N:311:CLA:H61	28:N:311:CLA:H41	1.75	0.44
28:V:315:CLA:H62	38:W:202:LMG:H291	2.00	0.44
6:e:36:LEU:HD13	27:6:355:ILE:HG22	2.00	0.44
43:n:322:LMN:CCS	43:n:322:LMN:OAL	2.66	0.44
28:1:311:CLA:HBB1	28:1:311:CLA:HMB1	1.99	0.43
15:S:196:GLY:HA3	15:S:202:LEU:HD13	1.99	0.43
15:n:250:GLY:HA2	28:n:316:CLA:OBD	2.18	0.43
28:n:315:CLA:HMB1	28:n:315:CLA:HBB1	2.00	0.43
22:w:104:PHE:CE1	38:w:201:LMG:C17	3.01	0.43
26:3:116:TRP:CA	26:3:119:LEU:HD12	2.37	0.43
48:C:602:HOH:O	17:P:241:ARG:NH1	2.51	0.43
5:D:344:PRO:O	5:D:347:VAL:HG22	2.18	0.43
29:V:311:CHL:H41	29:V:311:CHL:H61	1.43	0.43
29:u:406:CHL:HBB1	29:u:406:CHL:HMB3	1.98	0.43
1:1:81:ARG:HG3	28:1:306:CLA:CBA	2.49	0.43
2:A:64:ARG:HG2	48:O:404:HOH:O	2.17	0.43
17:P:87:THR:HG23	17:P:87:THR:O	2.18	0.43
24:Y:60:TRP:CE3	24:Y:60:TRP:O	2.71	0.43
15:s:151:GLN:HG2	29:s:306:CHL:HAB	2.01	0.43
28:v:315:CLA:CHD	28:v:315:CLA:H42	2.48	0.43
1:1:135:PHE:O	1:1:139:LEU:HB2	2.19	0.43
4:C:433:LEU:HD11	38:K:103:LMG:H452	2.00	0.43
7:F:24:VAL:HB	7:F:25:PRO:HD3	2.01	0.43
2:a:201:GLY:HA3	2:a:286:THR:HB	2.00	0.43
29:n:308:CHL:CBB	29:n:308:CHL:HMB1	2.46	0.43
21:u:210:MET:HB3	38:u:404:LMG:HC92	2.00	0.43
2:A:278:TRP:CZ2	28:A:416:CLA:H43	2.53	0.43
38:B:620:LMG:C9	28:B:621:CLA:HMD2	2.49	0.43
38:D:401:LMG:H331	38:D:401:LMG:C37	2.47	0.43
15:N:53:PHE:O	29:N:302:CHL:ND	2.52	0.43
28:y:309:CLA:HBC3	28:y:309:CLA:HHD	2.00	0.43
2:A:283:ILE:HA	2:A:286:THR:HG22	2.01	0.43
3:B:228:ALA:CB	38:D:411:LMG:O9	2.66	0.43
5:D:182:ARG:C	5:D:182:ARG:HD2	2.44	0.43
23:X:103:VAL:O	23:X:107:VAL:HG23	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:b:606:CLA:H172	28:b:608:CLA:HMC3	2.01	0.43
28:g:314:CLA:H101	28:g:314:CLA:H13	1.59	0.43
24:y:109:THR:OG1	24:y:110:PRO:HD2	2.18	0.43
28:B:618:CLA:HMB3	28:B:618:CLA:HBB1	2.01	0.43
4:C:183:GLY:N	43:G:301:LMN:HCW	2.34	0.43
33:K:102:BCR:HC8	33:K:102:BCR:C33	2.47	0.43
8:g:156:LEU:C	8:g:156:LEU:HD12	2.43	0.43
10:i:37:ILE:CD1	48:i:201:HOH:O	2.66	0.43
28:C:504:CLA:HBA1	28:C:504:CLA:HBD	2.00	0.43
38:C:522:LMG:H292	28:V:315:CLA:H43	2.01	0.43
5:D:321:LEU:O	5:D:325:GLU:HG3	2.18	0.43
29:V:302:CHL:H62	29:V:302:CHL:H92	1.22	0.43
38:b:613:LMG:C28	38:b:613:LMG:O9	2.67	0.43
4:c:52:ALA:HB2	28:c:503:CLA:HMA2	2.01	0.43
29:s:302:CHL:HMB1	29:s:302:CHL:HBB1	2.00	0.43
38:u:403:LMG:O1	38:u:403:LMG:O8	2.37	0.43
24:y:125:MET:O	28:y:306:CLA:NA	2.52	0.43
1:1:36:SER:O	1:1:37:GLU:C	2.61	0.43
28:U:414:CLA:HBA2	28:U:414:CLA:CBD	2.46	0.43
33:c:509:BCR:C38	33:c:509:BCR:C23	2.97	0.43
28:0:303:CLA:HBC3	28:0:303:CLA:HMC1	2.01	0.43
28:0:307:CLA:HBB1	28:u:405:CLA:H62	2.01	0.43
3:B:246:PHE:CD1	3:B:246:PHE:C	2.96	0.43
5:D:325:GLU:CG	48:D:507:HOH:O	2.65	0.43
15:V:77:VAL:HG12	15:V:77:VAL:O	2.19	0.43
28:Y:303:CLA:CBB	28:Y:303:CLA:HMB1	2.49	0.43
2:a:131:TRP:CH2	28:c:513:CLA:HAA2	2.54	0.43
6:e:57:THR:HG22	48:e:209:HOH:O	2.19	0.43
28:v:315:CLA:HBD	28:v:315:CLA:HBA1	2.01	0.43
24:y:60:TRP:O	24:y:60:TRP:CE3	2.72	0.43
12:K:18:MET:HE1	25:Z:10:LEU:HD11	2.01	0.42
15:V:151:GLN:HG3	29:V:309:CHL:CBB	2.49	0.42
28:V:315:CLA:H142	28:V:316:CLA:CHC	2.49	0.42
2:a:217:SER:HA	5:d:274:LEU:HD12	1.99	0.42
38:a:417:LMG:HC71	4:c:216:SER:HB3	2.01	0.42
33:c:509:BCR:H312	28:c:513:CLA:H2	2.01	0.42
33:k:102:BCR:C38	33:k:102:BCR:C23	2.97	0.42
15:v:54:LEU:HA	29:v:303:CHL:NB	2.34	0.42
15:v:172:VAL:HA	15:v:183:LYS:HG2	2.01	0.42
17:P:241:ARG:N	17:P:241:ARG:HD2	2.34	0.42
28:U:413:CLA:O1A	28:U:414:CLA:HMD3	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:V:313:CHL:CMC	29:V:313:CHL:HBC3	2.49	0.42
28:g:313:CLA:HHB	28:g:313:CLA:HMB1	1.70	0.42
29:y:315:CHL:HBC1	31:y:317:0UR:C48	2.49	0.42
28:B:606:CLA:HBB1	28:B:606:CLA:HMB3	2.01	0.42
6:E:27:ILE:HB	6:E:28:PRO:HD3	2.00	0.42
29:S:302:CHL:H121	47:S:317:XAT:H32	2.01	0.42
28:U:404:CLA:HMB1	28:U:404:CLA:HBB1	2.00	0.42
32:Y:320:LUT:H171	32:Y:320:LUT:C8	2.44	0.42
17:p:209:THR:HG22	17:p:210:ALA:N	2.34	0.42
28:s:314:CLA:O1A	28:s:314:CLA:C2	2.67	0.42
24:y:125:MET:O	28:y:306:CLA:ND	2.52	0.42
28:y:305:CLA:H43	28:y:306:CLA:HMD2	2.02	0.42
33:C:502:BCR:H331	33:C:502:BCR:HC8	2.00	0.42
33:b:602:BCR:C38	33:b:602:BCR:C23	2.97	0.42
4:c:292:PHE:HB3	41:c:518:DGD:HD5	2.01	0.42
28:c:521:CLA:CBB	38:c:526:LMG:H111	2.50	0.42
2:A:131:TRP:CH2	28:C:512:CLA:HAA2	2.54	0.42
28:A:411:CLA:H201	20:T:17:ILE:HD13	2.01	0.42
3:B:242:ILE:HA	3:B:245:VAL:HG22	2.01	0.42
28:C:517:CLA:H102	28:C:517:CLA:HBA1	2.02	0.42
8:G:192:TRP:HB2	29:G:311:CHL:HBB1	2.01	0.42
3:b:242:ILE:HA	3:b:245:VAL:HG22	2.02	0.42
42:b:623:LHG:HC62	42:b:623:LHG:H242	1.80	0.42
4:c:279:ILE:HD13	28:c:520:CLA:HED2	2.01	0.42
33:d:403:BCR:H372	38:d:408:LMG:H122	2.02	0.42
8:g:121:VAL:O	8:g:125:VAL:HG23	2.20	0.42
28:s:313:CLA:OBD	28:s:313:CLA:HED3	2.19	0.42
37:B:617:SQD:H441	37:B:617:SQD:H61	2.00	0.42
43:G:304:LMN:HBI	43:G:304:LMN:HBAA	2.02	0.42
2:a:141:PRO:HG3	4:c:446:GLY:O	2.19	0.42
28:b:608:CLA:HMB1	28:b:608:CLA:HBB1	2.02	0.42
33:c:507:BCR:C38	33:c:507:BCR:C23	2.97	0.42
6:e:36:LEU:HD21	26:3:130:ALA:HB1	2.01	0.42
26:2:112:GLY:N	26:2:116:TRP:HB2	2.35	0.42
33:B:614:BCR:C23	33:B:614:BCR:C38	2.97	0.42
38:B:620:LMG:H151	38:B:620:LMG:H291	2.01	0.42
28:C:504:CLA:HMB3	28:C:504:CLA:HBB1	2.02	0.42
42:D:405:LHG:H311	13:L:23:LEU:HD21	2.01	0.42
6:E:22:ILE:HG23	27:5:367:VAL:HG13	2.01	0.42
29:V:302:CHL:HBD	29:V:302:CHL:HAA2	2.01	0.42
24:y:132:PHE:O	28:y:306:CLA:CMC	2.68	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:152:TYR:CE1	1:0:157:ILE:HG21	2.54	0.42
1:0:200:LEU:HD21	28:0:308:CLA:HED3	1.97	0.42
28:G:305:CLA:HBB1	28:G:305:CLA:HMB1	2.01	0.42
15:N:212:ASN:ND2	28:N:313:CLA:NA	2.67	0.42
21:U:201:PHE:CE1	28:U:417:CLA:HMB3	2.55	0.42
2:a:274:PHE:HA	2:a:277:VAL:HG12	2.01	0.42
12:k:28:VAL:HG22	12:k:28:VAL:O	2.20	0.42
15:s:148:VAL:HG13	29:s:306:CHL:CHD	2.49	0.42
1:1:78:ILE:HG23	28:1:305:CLA:HMD1	2.00	0.42
3:B:414:PRO:HG3	48:B:825:HOH:O	2.18	0.42
28:C:505:CLA:HBB1	28:C:505:CLA:HMB3	2.01	0.42
6:E:14:ILE:O	6:E:15:THR:OG1	2.33	0.42
46:V:323:NEX:H371	38:u:403:LMG:C19	2.50	0.42
33:d:403:BCR:C8	33:d:403:BCR:C33	2.97	0.42
29:s:310:CHL:HMB1	29:s:310:CHL:HBB1	2.00	0.42
26:2:124:LEU:O	26:2:127:SER:HB2	2.19	0.42
27:5:357:ALA:O	27:5:361:ILE:HG13	2.20	0.42
1:0:135:PHE:O	1:0:136:TYR:HB2	2.19	0.42
28:B:605:CLA:HBB1	28:B:605:CLA:HMB1	2.02	0.42
28:B:609:CLA:HBB1	28:B:609:CLA:HMB1	2.01	0.42
42:D:405:LHG:HC12	13:L:16:THR:HG21	2.01	0.42
18:Q:179:ASP:O	18:Q:183:ARG:HD3	2.19	0.42
15:V:168:GLU:HG3	29:V:313:CHL:C4B	2.50	0.42
28:Y:309:CLA:HMA1	30:Y:319:0IE:C22	2.50	0.42
3:b:233:ASN:O	3:b:236:THR:HG22	2.20	0.42
28:c:521:CLA:HBB1	28:c:521:CLA:HMB1	2.02	0.42
28:g:304:CLA:H3A	37:z:101:SQD:H241	2.02	0.42
20:t:21:ILE:HD12	33:t:101:BCR:H381	2.02	0.42
38:u:404:LMG:C10	38:u:404:LMG:O10	2.68	0.42
1:1:171:PRO:HD2	28:1:306:CLA:OBD	2.20	0.41
1:1:197:HIS:NE2	28:1:308:CLA:NA	2.68	0.41
1:1:217:CYS:C	1:1:219:ASN:N	2.78	0.41
28:1:301:CLA:HBB1	28:1:301:CLA:HMB3	2.01	0.41
2:A:217:SER:HA	5:D:274:LEU:HD12	2.02	0.41
2:A:278:TRP:HB3	2:A:279:PRO:CD	2.51	0.41
33:B:614:BCR:H23C	33:B:614:BCR:C38	2.45	0.41
28:G:309:CLA:CBA	46:G:320:NEX:H403	2.50	0.41
28:U:404:CLA:H203	28:U:404:CLA:H162	1.97	0.41
32:U:418:LUT:H8	32:U:418:LUT:C17	2.50	0.41
15:V:141:TYR:O	15:V:147:LEU:HD12	2.20	0.41
29:V:309:CHL:H41	29:V:309:CHL:H72	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Y:134:ASN:O	24:Y:135:PHE:HB3	2.20	0.41
4:c:174:LEU:HD21	29:g:316:CHL:H62	2.01	0.41
28:c:522:CLA:H61	28:c:522:CLA:H41	1.80	0.41
42:s:301:LHG:H241	42:s:301:LHG:HC62	1.84	0.41
28:y:303:CLA:HBB1	28:y:303:CLA:HMB1	2.02	0.41
28:y:309:CLA:HMA1	30:y:319:0IE:C22	2.50	0.41
2:A:274:PHE:HA	2:A:277:VAL:HG12	2.01	0.41
33:k:101:BCR:H23C	33:k:101:BCR:C38	2.47	0.41
33:t:101:BCR:H382	33:t:101:BCR:C23	2.49	0.41
28:u:416:CLA:HMA1	32:u:419:LUT:H23	2.02	0.41
33:K:102:BCR:C23	33:K:102:BCR:C38	2.98	0.41
2:a:283:ILE:HA	2:a:286:THR:HG22	2.01	0.41
39:a:412:PL9:H351	7:f:18:SER:HA	2.02	0.41
15:s:250:GLY:HA3	47:s:318:XAT:H193	2.02	0.41
38:w:201:LMG:O9	38:w:201:LMG:H142	2.20	0.41
31:y:323:0UR:O40	31:y:323:0UR:C19	2.57	0.41
26:2:119:LEU:CD2	27:5:366:TRP:CD2	3.03	0.41
26:3:126:PHE:HA	26:3:129:PHE:HE1	1.73	0.41
1:1:74:SER:O	1:1:78:ILE:HG22	2.21	0.41
28:B:613:CLA:HBD	28:B:613:CLA:HBA2	2.03	0.41
28:G:306:CLA:HBB1	28:G:306:CLA:HMB1	2.02	0.41
29:S:302:CHL:HAA2	29:S:302:CHL:HBD	2.03	0.41
25:Z:61:VAL:HG23	25:Z:62:VAL:HG23	2.02	0.41
41:c:524:DGD:HG2	15:n:246:PHE:HZ	1.84	0.41
42:n:303:LHG:HC62	42:n:303:LHG:H242	1.89	0.41
29:n:304:CHL:H3A	29:n:304:CHL:CGA	2.51	0.41
15:s:149:HIS:HB3	29:s:306:CHL:CHB	2.50	0.41
15:v:242:LEU:HD21	28:v:316:CLA:HMC2	2.02	0.41
32:1:313:LUT:H31	32:1:313:LUT:H391	1.86	0.41
28:B:605:CLA:H51	37:B:617:SQD:H261	2.02	0.41
37:B:617:SQD:H91	37:B:617:SQD:H242	2.02	0.41
33:T:101:BCR:C38	33:T:101:BCR:C23	2.99	0.41
3:b:458:PHE:HB3	28:b:617:CLA:HBC2	2.03	0.41
33:B:603:BCR:H332	37:B:617:SQD:H101	2.03	0.41
17:P:240:LYS:O	17:P:244:LYS:HB2	2.20	0.41
42:b:624:LHG:C3	38:d:410:LMG:HC61	2.50	0.41
43:c:525:LMN:HBPA	42:c:527:LHG:HC11	2.03	0.41
5:d:26:ARG:CZ	23:x:121:VAL:HG23	2.51	0.41
1:0:38:GLU:O	1:0:39:VAL:HB	2.21	0.41
38:A:413:LMG:C37	38:K:101:LMG:C32	2.99	0.41
4:C:262:ARG:HD2	48:I:202:HOH:O	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:N:320:LMN:OBY	43:N:320:LMN:H3	2.20	0.41
28:U:410:CLA:H61	28:U:410:CLA:H41	1.97	0.41
2:a:260:PHE:CZ	2:a:263:ALA:HB2	2.55	0.41
28:y:309:CLA:HBA1	32:y:320:LUT:C10	2.51	0.41
37:z:101:SQD:H441	37:z:101:SQD:C23	2.51	0.41
38:B:620:LMG:H142	28:B:621:CLA:NC	2.35	0.41
6:E:36:LEU:HD13	27:5:355:ILE:HG22	2.03	0.41
46:G:320:NEX:H35	46:G:320:NEX:H401	1.92	0.41
29:N:308:CHL:OMC	29:N:308:CHL:HHC	2.20	0.41
32:U:418:LUT:H171	32:U:418:LUT:H8	2.03	0.41
28:Y:311:CLA:CGA	28:Y:311:CLA:C4A	2.99	0.41
38:a:414:LMG:HC3	37:c:501:SQD:C4	2.51	0.41
28:u:405:CLA:HMB2	28:u:405:CLA:H151	2.03	0.41
25:z:58:ASN:O	25:z:62:VAL:HG22	2.21	0.41
1:1:81:ARG:NH2	1:1:84:MET:HG2	2.36	0.41
37:A:405:SQD:H4	38:A:413:LMG:HC2	2.03	0.41
28:B:606:CLA:HBB2	38:B:620:LMG:H201	2.03	0.41
4:C:56:HIS:CE1	28:C:503:CLA:NB	2.89	0.41
4:C:101:PRO:HG3	48:C:621:HOH:O	2.21	0.41
42:D:402:LHG:H341	42:D:402:LHG:H121	2.03	0.41
45:E:101:HEM:HBC2	45:E:101:HEM:HMC2	2.03	0.41
33:K:104:BCR:C23	33:K:104:BCR:C38	2.98	0.41
28:b:606:CLA:H13	28:b:610:CLA:HMA2	2.02	0.41
4:c:237:HIS:HA	4:c:240:ILE:HG22	2.02	0.41
42:c:527:LHG:H241	29:g:316:CHL:C9	2.51	0.41
5:d:211:LEU:C	5:d:211:LEU:HD23	2.46	0.41
34:d:407:PHO:H41	34:d:407:PHO:H71	2.02	0.41
8:g:67:LEU:HD11	37:z:101:SQD:H462	2.03	0.41
28:g:306:CLA:H192	28:g:306:CLA:H152	2.01	0.41
29:g:316:CHL:O2A	29:g:316:CHL:H42	2.20	0.41
42:s:301:LHG:H262	47:s:318:XAT:H361	2.03	0.41
28:s:314:CLA:HMB1	28:s:314:CLA:HBB1	2.02	0.41
31:y:317:0UR:C41	31:y:317:0UR:O44	2.66	0.41
4:C:350:ILE:HG21	4:C:359:TRP:HB2	2.02	0.41
5:D:125:ILE:HD11	38:D:401:LMG:H391	2.02	0.41
28:U:413:CLA:O1A	28:U:414:CLA:OBD	2.39	0.41
15:V:111:GLU:HA	15:V:124:SER:HB2	2.03	0.41
46:V:323:NEX:H403	29:u:409:CHL:HBA1	2.03	0.41
2:a:161:TYR:HB3	2:a:162:PRO:HD3	2.03	0.41
33:b:604:BCR:C8	33:b:604:BCR:C33	2.98	0.41
43:c:525:LMN:HBP	42:c:527:LHG:C2	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:d:404:CLA:H111	34:d:407:PHO:H61	2.02	0.41
46:g:319:NEX:H11	46:g:319:NEX:H191	1.92	0.41
26:3:119:LEU:O	26:3:123:VAL:HG13	2.20	0.41
33:B:603:BCR:C38	33:B:603:BCR:C23	2.99	0.40
6:E:42:LEU:HB2	27:5:352:ARG:HE	1.87	0.40
8:G:246:THR:HG22	8:G:269:ILE:HD13	2.03	0.40
28:G:308:CLA:HAB	28:G:308:CLA:HMB1	1.62	0.40
46:G:320:NEX:H183	46:G:320:NEX:C2	2.47	0.40
29:N:302:CHL:H42	29:V:313:CHL:C4B	2.51	0.40
21:U:296:VAL:HG21	28:U:415:CLA:H2A	2.03	0.40
28:U:404:CLA:H62	28:U:404:CLA:H111	2.02	0.40
28:U:415:CLA:H121	28:U:415:CLA:H8	1.97	0.40
24:Y:226:GLY:O	24:Y:227:ILE:C	2.65	0.40
3:b:190:PHE:CE1	9:h:46:PHE:HE1	2.39	0.40
28:c:522:CLA:H91	28:c:522:CLA:H142	2.02	0.40
43:n:301:LMN:OCB	43:n:301:LMN:OAR	2.35	0.40
27:6:372:ALA:C	27:6:374:PRO:HD2	2.46	0.40
28:A:416:CLA:CMA	38:J:101:LMG:C39	3.00	0.40
28:C:501:CLA:H192	33:C:502:BCR:H17C	2.04	0.40
28:N:304:CLA:CBB	30:N:317:0IE:C10	3.00	0.40
15:S:52:THR:HB	15:S:58:THR:HG21	2.03	0.40
29:S:308:CHL:HBB1	29:S:308:CHL:HMB1	2.03	0.40
24:Y:41:VAL:HG22	43:Y:301:LMN:HBT	2.04	0.40
2:a:308:ASP:OD2	2:a:312:ARG:HB2	2.21	0.40
33:b:603:BCR:C38	33:b:603:BCR:C23	3.00	0.40
38:c:526:LMG:H402	38:c:526:LMG:H362	2.03	0.40
5:d:19:LEU:HD22	23:x:120:ARG:HG3	2.03	0.40
38:d:408:LMG:H362	38:d:408:LMG:C40	2.51	0.40
15:n:172:VAL:HG11	29:n:312:CHL:CMA	2.50	0.40
28:n:307:CLA:HMB1	28:n:307:CLA:HBB1	2.03	0.40
41:A:417:DGD:O5D	41:A:417:DGD:O4D	2.36	0.40
8:G:157:THR:HG22	8:G:162:PRO:HA	2.03	0.40
9:H:25:LYS:HG3	21:U:110:PHE:HB3	2.03	0.40
15:S:112:ALA:O	15:S:115:LYS:N	2.54	0.40
8:g:238:GLY:O	8:g:242:GLN:OE1	2.40	0.40
28:g:312:CLA:H41	28:g:312:CLA:H62	1.73	0.40
42:n:303:LHG:HC81	47:n:320:XAT:H361	2.03	0.40
15:v:77:VAL:HG12	15:v:77:VAL:O	2.22	0.40
2:A:161:TYR:HB3	2:A:162:PRO:HD3	2.03	0.40
28:C:508:CLA:HBB1	28:C:508:CLA:HMB3	2.03	0.40
43:N:320:LMN:HAA	43:N:320:LMN:HBJ	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:b:618:CLA:HBB1	28:b:618:CLA:HMB3	2.04	0.40
4:c:393:ALA:HA	4:c:396:MET:HG2	2.03	0.40
28:c:511:CLA:HBB1	28:c:511:CLA:HMB3	2.02	0.40
28:g:314:CLA:H141	28:g:314:CLA:H161	1.65	0.40
29:g:316:CHL:HMB3	29:g:316:CHL:CBB	2.32	0.40
43:n:322:LMN:OAP	43:n:322:LMN:HBS	2.22	0.40
17:p:243:PHE:CD1	17:p:243:PHE:C	2.99	0.40
15:s:102:LEU:HB3	28:s:305:CLA:CBB	2.51	0.40
24:y:100:ASN:OD1	24:y:103:GLN:HB2	2.22	0.40
1:0:157:ILE:O	1:0:158:ASP:C	2.64	0.40
2:A:96:ILE:HG12	2:A:105:TRP:CE2	2.57	0.40
2:A:317:TRP:CZ3	5:D:182:ARG:HG2	2.56	0.40
3:B:160:GLY:HA3	3:B:180:PRO:HB3	2.04	0.40
17:P:125:ASP:HB2	17:P:131:ASN:HB2	2.03	0.40
46:V:323:NEX:H12	29:u:409:CHL:H93	2.04	0.40
28:Y:303:CLA:HBA1	28:Y:303:CLA:CBD	2.46	0.40
28:c:520:CLA:HAA1	48:c:667:HOH:O	2.22	0.40
28:c:521:CLA:H11	28:c:521:CLA:HBA1	1.91	0.40
8:g:167:LEU:O	8:g:171:VAL:HG23	2.22	0.40
8:g:225:GLU:HB2	28:g:312:CLA:CHB	2.51	0.40
28:g:314:CLA:HMC3	28:g:314:CLA:HAC2	1.93	0.40
33:t:101:BCR:C23	33:t:101:BCR:C38	2.99	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	0	214/262 (82%)	181 (85%)	31 (14%)	2 (1%)	14 12
1	1	214/262 (82%)	189 (88%)	18 (8%)	7 (3%)	3 1
2	A	332/353 (94%)	320 (96%)	12 (4%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	a	331/353 (94%)	320 (97%)	11 (3%)	0	100	100
3	B	503/508 (99%)	496 (99%)	7 (1%)	0	100	100
3	b	503/508 (99%)	490 (97%)	13 (3%)	0	100	100
4	C	449/473 (95%)	440 (98%)	9 (2%)	0	100	100
4	c	449/473 (95%)	438 (98%)	11 (2%)	0	100	100
5	D	338/354 (96%)	330 (98%)	8 (2%)	0	100	100
5	d	338/354 (96%)	332 (98%)	6 (2%)	0	100	100
6	E	74/81 (91%)	71 (96%)	3 (4%)	0	100	100
6	e	74/81 (91%)	73 (99%)	1 (1%)	0	100	100
7	F	31/41 (76%)	31 (100%)	0	0	100	100
7	f	31/41 (76%)	29 (94%)	2 (6%)	0	100	100
8	G	224/280 (80%)	216 (96%)	7 (3%)	1 (0%)	30	31
8	g	224/280 (80%)	221 (99%)	3 (1%)	0	100	100
9	H	66/73 (90%)	58 (88%)	6 (9%)	2 (3%)	3	1
9	h	66/73 (90%)	63 (96%)	3 (4%)	0	100	100
10	I	35/38 (92%)	33 (94%)	2 (6%)	0	100	100
10	i	36/38 (95%)	33 (92%)	3 (8%)	0	100	100
11	J	33/42 (79%)	33 (100%)	0	0	100	100
11	j	33/42 (79%)	33 (100%)	0	0	100	100
12	K	35/47 (74%)	35 (100%)	0	0	100	100
12	k	35/47 (74%)	34 (97%)	1 (3%)	0	100	100
13	L	34/38 (90%)	33 (97%)	1 (3%)	0	100	100
13	l	34/38 (90%)	33 (97%)	1 (3%)	0	100	100
14	M	29/31 (94%)	29 (100%)	0	0	100	100
14	m	29/31 (94%)	28 (97%)	1 (3%)	0	100	100
15	N	221/267 (83%)	211 (96%)	9 (4%)	1 (0%)	24	24
15	S	220/267 (82%)	211 (96%)	9 (4%)	0	100	100
15	V	220/267 (82%)	212 (96%)	7 (3%)	1 (0%)	24	24
15	n	220/267 (82%)	215 (98%)	4 (2%)	1 (0%)	24	24
15	s	220/267 (82%)	212 (96%)	8 (4%)	0	100	100
15	v	221/267 (83%)	211 (96%)	9 (4%)	1 (0%)	24	24

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
16	O	232/314 (74%)	223 (96%)	9 (4%)	0	100	100
16	o	232/314 (74%)	221 (95%)	11 (5%)	0	100	100
17	P	184/260 (71%)	180 (98%)	4 (2%)	0	100	100
17	p	184/260 (71%)	182 (99%)	2 (1%)	0	100	100
18	Q	145/209 (69%)	140 (97%)	5 (3%)	0	100	100
18	q	145/209 (69%)	139 (96%)	6 (4%)	0	100	100
19	R	30/33 (91%)	30 (100%)	0	0	100	100
19	r	30/33 (91%)	30 (100%)	0	0	100	100
20	T	27/31 (87%)	26 (96%)	1 (4%)	0	100	100
20	t	27/31 (87%)	26 (96%)	1 (4%)	0	100	100
21	U	239/306 (78%)	230 (96%)	9 (4%)	0	100	100
21	u	240/306 (78%)	233 (97%)	7 (3%)	0	100	100
22	W	52/128 (41%)	49 (94%)	3 (6%)	0	100	100
22	w	52/128 (41%)	51 (98%)	1 (2%)	0	100	100
23	X	33/123 (27%)	33 (100%)	0	0	100	100
23	x	33/123 (27%)	33 (100%)	0	0	100	100
24	Y	231/267 (86%)	208 (90%)	22 (10%)	1 (0%)	30	31
24	y	231/267 (86%)	216 (94%)	14 (6%)	1 (0%)	30	31
25	Z	60/62 (97%)	60 (100%)	0	0	100	100
25	z	60/62 (97%)	60 (100%)	0	0	100	100
26	2	22/137 (16%)	16 (73%)	4 (18%)	2 (9%)	0	0
26	3	22/137 (16%)	17 (77%)	5 (23%)	0	100	100
27	5	21/427 (5%)	15 (71%)	5 (24%)	1 (5%)	2	0
27	6	21/427 (5%)	18 (86%)	3 (14%)	0	100	100
All	All	8669/11438 (76%)	8330 (96%)	318 (4%)	21 (0%)	44	50

All (21) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	1	220	PRO
9	H	30	TRP
1	0	55	ALA
1	1	37	GLU
1	1	222	GLY

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Mol	Chain	Res	Type
24	Y	227	ILE
1	1	174	GLU
1	1	225	SER
1	1	221	PHE
26	2	113	LEU
1	0	156	LEU
8	G	99	LYS
9	H	65	ALA
1	1	117	HIS
15	v	244	ASP
15	N	148	VAL
24	y	132	PHE
26	2	131	ILE
15	V	148	VAL
15	n	148	VAL
27	5	371	ILE

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	0	170/199 (85%)	167 (98%)	3 (2%)	51 63
1	1	170/199 (85%)	165 (97%)	5 (3%)	37 47
2	A	271/286 (95%)	270 (100%)	1 (0%)	84 89
2	a	271/286 (95%)	271 (100%)	0	100 100
3	B	403/405 (100%)	402 (100%)	1 (0%)	87 92
3	b	403/405 (100%)	403 (100%)	0	100 100
4	C	354/375 (94%)	354 (100%)	0	100 100
4	c	354/375 (94%)	354 (100%)	0	100 100
5	D	273/286 (96%)	272 (100%)	1 (0%)	84 89
5	d	273/286 (96%)	273 (100%)	0	100 100
6	E	71/74 (96%)	71 (100%)	0	100 100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
6	e	71/74 (96%)	71 (100%)	0	100	100
7	F	28/34 (82%)	27 (96%)	1 (4%)	31	39
7	f	28/34 (82%)	28 (100%)	0	100	100
8	G	177/217 (82%)	176 (99%)	1 (1%)	78	84
8	g	177/217 (82%)	177 (100%)	0	100	100
9	H	56/60 (93%)	55 (98%)	1 (2%)	51	63
9	h	56/60 (93%)	56 (100%)	0	100	100
10	I	35/36 (97%)	35 (100%)	0	100	100
10	i	36/36 (100%)	36 (100%)	0	100	100
11	J	26/32 (81%)	26 (100%)	0	100	100
11	j	26/32 (81%)	26 (100%)	0	100	100
12	K	33/41 (80%)	33 (100%)	0	100	100
12	k	33/41 (80%)	33 (100%)	0	100	100
13	L	34/36 (94%)	34 (100%)	0	100	100
13	l	34/36 (94%)	34 (100%)	0	100	100
14	M	26/26 (100%)	26 (100%)	0	100	100
14	m	26/26 (100%)	26 (100%)	0	100	100
15	N	172/204 (84%)	172 (100%)	0	100	100
15	S	171/204 (84%)	170 (99%)	1 (1%)	78	84
15	V	171/204 (84%)	171 (100%)	0	100	100
15	n	171/204 (84%)	171 (100%)	0	100	100
15	s	171/204 (84%)	171 (100%)	0	100	100
15	v	172/204 (84%)	172 (100%)	0	100	100
16	O	192/245 (78%)	192 (100%)	0	100	100
16	o	192/245 (78%)	190 (99%)	2 (1%)	68	77
17	P	149/204 (73%)	148 (99%)	1 (1%)	76	82
17	p	149/204 (73%)	149 (100%)	0	100	100
18	Q	109/151 (72%)	109 (100%)	0	100	100
18	q	109/151 (72%)	109 (100%)	0	100	100
19	R	27/28 (96%)	27 (100%)	0	100	100
19	r	27/28 (96%)	27 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
20	T	25/27 (93%)	25 (100%)	0	100 100
20	t	25/27 (93%)	25 (100%)	0	100 100
21	U	190/238 (80%)	190 (100%)	0	100 100
21	u	191/238 (80%)	190 (100%)	1 (0%)	81 87
22	W	41/89 (46%)	41 (100%)	0	100 100
22	w	41/89 (46%)	41 (100%)	0	100 100
23	X	28/88 (32%)	28 (100%)	0	100 100
23	x	28/88 (32%)	28 (100%)	0	100 100
24	Y	174/194 (90%)	174 (100%)	0	100 100
24	y	174/194 (90%)	172 (99%)	2 (1%)	65 75
25	Z	51/51 (100%)	49 (96%)	2 (4%)	28 35
25	z	51/51 (100%)	51 (100%)	0	100 100
26	2	17/105 (16%)	15 (88%)	2 (12%)	5 3
26	3	17/105 (16%)	16 (94%)	1 (6%)	18 18
27	5	14/271 (5%)	14 (100%)	0	100 100
27	6	14/271 (5%)	13 (93%)	1 (7%)	13 12
All	All	6978/8820 (79%)	6951 (100%)	27 (0%)	81 89

All (27) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	0	143	VAL
1	0	144	ILE
1	0	156	LEU
1	1	123	ILE
1	1	146	MET
1	1	153	ARG
1	1	157	ILE
1	1	220	PRO
2	A	301	ASN
3	B	177	ARG
5	D	182	ARG
7	F	11	ILE
8	G	99	LYS
9	H	6	GLN
17	P	244	LYS

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Mol	Chain	Res	Type
15	S	109	LEU
25	Z	19	MET
25	Z	21	ILE
16	o	96	CYS
16	o	119	CYS
21	u	109	GLU
24	y	132	PHE
24	y	138	GLN
26	2	123	VAL
26	2	124	LEU
26	3	123	VAL
27	6	355	ILE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (42) such sidechains are listed below:

Mol	Chain	Res	Type
1	0	197	HIS
1	1	100	ASN
1	1	175	HIS
2	A	165	GLN
3	B	425	GLN
4	C	39	ASN
4	C	242	ASN
5	D	119	HIS
5	D	188	GLN
8	G	188	GLN
8	G	242	GLN
15	N	151	GLN
15	N	226	GLN
18	Q	101	GLN
18	Q	169	ASN
24	Y	72	ASN
2	a	12	ASN
2	a	315	ASN
2	a	337	HIS
3	b	14	ASN
3	b	343	HIS
3	b	394	GLN
3	b	425	GLN
4	c	44	ASN
4	c	327	ASN
5	d	188	GLN

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Mol	Chain	Res	Type
5	d	352	ASN
6	e	78	GLN
8	g	242	GLN
13	l	7	ASN
17	p	126	ASN
17	p	156	ASN
17	p	227	ASN
19	r	32	ASN
15	s	149	HIS
15	s	151	GLN
21	u	147	GLN
21	u	292	ASN
24	y	183	ASN
24	y	211	GLN
24	y	266	ASN
27	6	370	ASN

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 oligosaccharides in this entry.

5.6 Ligand geometry

Of 459 ligands modelled in this entry, 6 are monoatomic - leaving 453 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
28	CLA	b	611	3	69,73,73	1.18	8 (11%)	83,113,113	0.89	3 (3%)
28	CLA	B	622	3	69,73,73	1.19	7 (10%)	83,113,113	1.08	6 (7%)
29	CHL	v	303	-	70,74,74	3.00	27 (38%)	80,114,114	1.43	9 (11%)
29	CHL	N	303	15	67,71,74	1.14	7 (10%)	76,110,114	1.13	9 (11%)
39	PL9	d	406	-	55,55,55	0.72	1 (1%)	68,69,69	0.62	1 (1%)
29	CHL	U	409	-	65,69,74	1.14	7 (10%)	74,108,114	0.97	3 (4%)
28	CLA	0	305	1	46,50,73	1.41	6 (13%)	55,85,113	1.22	5 (9%)
28	CLA	C	501	4	69,73,73	1.23	8 (11%)	83,113,113	1.22	5 (6%)
38	LMG	c	502	-	37,37,55	1.49	5 (13%)	45,45,63	1.54	7 (15%)
41	DGD	C	514	-	53,53,67	0.93	2 (3%)	67,67,81	0.91	2 (2%)
33	BCR	a	401	-	41,41,41	1.74	8 (19%)	56,56,56	1.40	10 (17%)
31	0UR	G	318	-	48,51,58	0.97	2 (4%)	56,70,77	1.88	13 (23%)
28	CLA	A	411	2	69,73,73	1.15	6 (8%)	83,113,113	0.95	4 (4%)
38	LMG	D	401	-	50,50,55	0.26	0	58,58,63	0.49	0
43	LMN	C	521	-	61,61,72	0.20	0	85,87,98	0.35	0
41	DGD	c	517	-	42,42,67	1.08	2 (4%)	56,56,81	0.99	3 (5%)
29	CHL	Y	315	24	50,54,74	1.32	7 (14%)	56,90,114	1.13	4 (7%)
42	LHG	d	405	-	48,48,48	0.31	0	51,54,54	0.37	0
29	CHL	v	309	-	70,74,74	1.12	7 (10%)	80,114,114	1.13	5 (6%)
28	CLA	s	311	15	64,68,73	1.18	7 (10%)	77,107,113	1.07	6 (7%)
30	0IE	0	312	-	42,45,45	3.84	27 (64%)	49,63,63	2.44	14 (28%)
28	CLA	C	511	4	69,73,73	1.17	7 (10%)	83,113,113	0.95	5 (6%)
28	CLA	g	308	-	47,51,73	1.43	8 (17%)	56,86,113	1.11	4 (7%)
29	CHL	N	309	-	68,72,74	1.15	8 (11%)	77,111,114	0.94	4 (5%)
28	CLA	C	512	4	69,73,73	1.17	8 (11%)	83,113,113	1.00	5 (6%)
28	CLA	g	307	-	54,58,73	1.29	6 (11%)	65,95,113	1.08	4 (6%)
28	CLA	S	305	-	59,63,73	1.26	8 (13%)	71,101,113	1.04	4 (5%)
28	CLA	1	301	1	45,49,73	1.43	7 (15%)	54,84,113	1.11	3 (5%)
28	CLA	g	313	42	64,68,73	3.25	25 (39%)	77,107,113	1.94	16 (20%)
42	LHG	V	304	28	48,48,48	0.29	0	51,54,54	0.44	0
28	CLA	v	312	15	64,68,73	1.17	6 (9%)	77,107,113	0.94	4 (5%)
42	LHG	b	624	-	40,40,48	0.29	0	43,46,54	0.36	0
28	CLA	Y	311	24	57,61,73	5.08	36 (63%)	68,98,113	3.02	25 (36%)
28	CLA	B	613	48	69,73,73	1.15	6 (8%)	83,113,113	0.98	5 (6%)
29	CHL	n	308	-	62,66,74	3.80	28 (45%)	70,104,114	1.77	14 (20%)
28	CLA	N	304	15	58,62,73	3.66	30 (51%)	69,99,113	1.81	16 (23%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
38	LMG	b	613	-	36,36,55	0.28	0	44,44,63	0.48	0
28	CLA	G	314	42	49,53,73	1.39	7 (14%)	59,89,113	1.13	5 (8%)
29	CHL	n	312	15	65,69,74	1.14	7 (10%)	74,108,114	1.03	6 (8%)
39	PL9	D	404	-	55,55,55	0.72	1 (1%)	68,69,69	0.68	1 (1%)
28	CLA	a	402	48	69,73,73	1.15	7 (10%)	83,113,113	1.08	7 (8%)
29	CHL	s	308	-	64,68,74	1.17	8 (12%)	72,106,114	0.97	4 (5%)
33	BCR	k	102	-	41,41,41	1.75	8 (19%)	56,56,56	1.56	11 (19%)
28	CLA	y	314	-	59,63,73	1.32	8 (13%)	71,101,113	1.03	6 (8%)
29	CHL	V	309	15	65,69,74	3.64	32 (49%)	74,108,114	1.46	11 (14%)
28	CLA	1	307	1	45,49,73	1.46	5 (11%)	54,84,113	1.25	5 (9%)
28	CLA	n	306	15	66,70,73	1.19	6 (9%)	79,109,113	1.01	6 (7%)
28	CLA	s	305	46	58,62,73	1.27	7 (12%)	69,99,113	1.10	5 (7%)
33	BCR	C	502	-	41,41,41	1.71	8 (19%)	56,56,56	1.44	9 (16%)
29	CHL	v	310	48	65,69,74	1.17	6 (9%)	74,108,114	1.04	6 (8%)
28	CLA	g	304	8	49,53,73	1.37	7 (14%)	59,89,113	1.11	4 (6%)
28	CLA	0	302	-	49,53,73	1.39	7 (14%)	59,89,113	1.23	6 (10%)
28	CLA	c	513	4	69,73,73	1.18	6 (8%)	83,113,113	0.99	4 (4%)
28	CLA	b	616	3	69,73,73	1.23	7 (10%)	83,113,113	0.99	5 (6%)
33	BCR	h	101	-	41,41,41	1.74	8 (19%)	56,56,56	1.42	8 (14%)
28	CLA	b	601	3	69,73,73	1.17	6 (8%)	83,113,113	0.98	6 (7%)
28	CLA	b	608	3	69,73,73	1.16	7 (10%)	83,113,113	1.03	4 (4%)
28	CLA	1	308	1	49,53,73	1.39	8 (16%)	59,89,113	1.20	6 (10%)
30	0IE	S	316	-	42,45,45	0.85	2 (4%)	49,63,63	1.33	4 (8%)
29	CHL	V	312	-	53,57,74	1.26	7 (13%)	59,93,114	1.06	4 (6%)
28	CLA	b	617	3	69,73,73	1.17	7 (10%)	83,113,113	1.04	6 (7%)
29	CHL	G	310	-	47,51,74	1.36	8 (17%)	52,86,114	1.14	5 (9%)
31	0UR	1	315	-	45,48,58	0.77	2 (4%)	54,67,77	1.97	13 (24%)
33	BCR	K	104	-	41,41,41	1.74	8 (19%)	56,56,56	1.65	12 (21%)
29	CHL	s	303	15	68,72,74	1.09	5 (7%)	77,111,114	1.10	7 (9%)
29	CHL	u	409	-	62,66,74	1.18	5 (8%)	70,104,114	0.97	5 (7%)
33	BCR	k	101	-	41,41,41	1.75	8 (19%)	56,56,56	1.43	9 (16%)
28	CLA	N	314	15	62,66,73	1.16	6 (9%)	74,104,113	1.24	10 (13%)
28	CLA	c	522	4	69,73,73	1.16	7 (10%)	83,113,113	0.99	4 (4%)
28	CLA	g	306	8	69,73,73	1.14	6 (8%)	83,113,113	1.03	5 (6%)
31	0UR	1	316	-	48,51,58	8.05	38 (79%)	56,70,77	3.06	27 (48%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
28	CLA	c	510	4	69,73,73	1.15	6 (8%)	83,113,113	0.98	5 (6%)
29	CHL	V	311	-	70,74,74	3.23	34 (48%)	80,114,114	1.70	16 (20%)
31	0UR	g	317	-	48,51,58	1.17	4 (8%)	56,70,77	1.74	13 (23%)
43	LMN	u	401	-	72,72,72	0.20	0	96,98,98	0.53	1 (1%)
29	CHL	V	310	-	48,52,74	1.35	7 (14%)	53,87,114	1.13	5 (9%)
28	CLA	B	607	3	69,73,73	1.19	6 (8%)	83,113,113	0.99	5 (6%)
43	LMN	y	302	-	72,72,72	0.20	0	96,98,98	0.46	0
28	CLA	G	309	-	46,50,73	1.43	6 (13%)	55,85,113	1.21	5 (9%)
29	CHL	v	304	15	64,68,74	1.16	6 (9%)	72,106,114	1.21	6 (8%)
29	CHL	N	310	15	65,69,74	1.16	6 (9%)	74,108,114	1.08	6 (8%)
31	0UR	V	319	-	50,53,58	8.51	36 (72%)	58,72,77	2.77	22 (37%)
28	CLA	0	309	1	59,63,73	1.22	7 (11%)	71,101,113	1.11	5 (7%)
41	DGD	A	417	-	46,46,67	1.01	2 (4%)	60,60,81	1.11	6 (10%)
47	XAT	n	320	-	39,47,47	1.68	8 (20%)	54,74,74	1.66	10 (18%)
42	LHG	a	415	-	42,42,48	0.31	0	45,48,54	0.39	0
43	LMN	y	301	-	72,72,72	0.18	0	96,98,98	0.39	0
38	LMG	J	102	-	40,40,55	0.94	2 (5%)	48,48,63	1.09	5 (10%)
29	CHL	v	311	15	64,68,74	1.15	6 (9%)	72,106,114	1.01	4 (5%)
41	DGD	b	621	-	62,62,67	0.86	2 (3%)	76,76,81	0.95	3 (3%)
43	LMN	N	320	-	72,72,72	0.54	0	96,98,98	1.24	8 (8%)
29	CHL	s	306	-	48,52,74	2.68	15 (31%)	53,87,114	1.31	6 (11%)
29	CHL	s	310	15	65,69,74	1.14	5 (7%)	74,108,114	0.99	4 (5%)
42	LHG	L	101	-	43,43,48	0.29	0	46,49,54	0.45	0
28	CLA	B	610	3	69,73,73	1.14	6 (8%)	83,113,113	1.03	5 (6%)
28	CLA	u	412	21	69,73,73	1.17	6 (8%)	83,113,113	1.13	7 (8%)
33	BCR	B	604	-	41,41,41	1.70	8 (19%)	56,56,56	1.38	8 (14%)
28	CLA	b	620	48	55,59,73	1.29	6 (10%)	66,96,113	1.09	5 (7%)
28	CLA	N	312	42	64,68,73	1.19	6 (9%)	77,107,113	1.03	5 (6%)
28	CLA	v	315	15	69,73,73	1.14	6 (8%)	83,113,113	1.04	5 (6%)
28	CLA	a	416	48	69,73,73	1.18	6 (8%)	83,113,113	0.96	5 (6%)
28	CLA	N	315	15	47,51,73	1.40	7 (14%)	56,86,113	1.15	5 (8%)
29	CHL	V	305	15	70,74,74	1.09	7 (10%)	80,114,114	0.93	3 (3%)
47	XAT	v	319	-	39,47,47	1.69	8 (20%)	54,74,74	1.72	11 (20%)
29	CHL	v	308	-	48,52,74	1.33	7 (14%)	53,87,114	1.10	4 (7%)
31	0UR	S	315	-	48,51,58	0.84	2 (4%)	56,70,77	1.67	10 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
28	CLA	1	306	1	46,50,73	1.44	7 (15%)	55,85,113	1.13	5 (9%)
29	CHL	u	410	-	65,69,74	1.17	7 (10%)	74,108,114	1.00	4 (5%)
31	0UR	Y	322	-	55,58,58	8.16	41 (74%)	63,77,77	2.63	23 (36%)
28	CLA	V	314	15	64,68,73	1.19	6 (9%)	77,107,113	0.99	4 (5%)
43	LMN	c	519	-	72,72,72	0.18	0	96,98,98	0.41	1 (1%)
28	CLA	y	303	24	69,73,73	1.19	8 (11%)	83,113,113	0.95	5 (6%)
41	DGD	c	518	-	48,48,67	0.97	2 (4%)	62,62,81	1.02	3 (4%)
29	CHL	g	316	8	60,64,74	3.58	28 (46%)	68,102,114	1.59	14 (20%)
37	SQD	B	615	-	47,48,54	0.42	0	56,59,65	1.44	6 (10%)
47	XAT	S	317	-	39,47,47	1.71	8 (20%)	54,74,74	1.74	11 (20%)
31	0UR	v	317	-	48,51,58	0.97	3 (6%)	56,70,77	1.69	11 (19%)
29	CHL	v	307	-	55,59,74	3.37	33 (60%)	62,96,114	1.73	14 (22%)
41	DGD	G	302	-	39,39,67	1.11	2 (5%)	53,53,81	0.98	3 (5%)
28	CLA	a	403	2	69,73,73	1.18	6 (8%)	83,113,113	1.00	4 (4%)
33	BCR	b	603	-	41,41,41	1.74	7 (17%)	56,56,56	1.45	10 (17%)
39	PL9	a	412	-	55,55,55	1.14	5 (9%)	68,69,69	1.40	6 (8%)
28	CLA	g	312	-	59,63,73	2.75	22 (37%)	71,101,113	1.80	13 (18%)
28	CLA	V	308	-	54,58,73	1.33	7 (12%)	65,95,113	1.02	4 (6%)
28	CLA	V	317	15	64,68,73	1.20	7 (10%)	76,106,113	1.09	6 (7%)
28	CLA	D	410	5	67,71,73	1.18	8 (11%)	80,110,113	1.05	6 (7%)
38	LMG	u	403	-	40,40,55	0.25	0	48,48,63	0.65	0
28	CLA	c	503	4	69,73,73	1.23	7 (10%)	83,113,113	0.94	5 (6%)
31	0UR	Y	317	-	55,58,58	6.87	32 (58%)	63,77,77	2.21	20 (31%)
28	CLA	0	307	1	49,53,73	2.62	19 (38%)	59,89,113	2.03	19 (32%)
29	CHL	V	313	15	70,74,74	2.94	30 (42%)	80,114,114	1.55	14 (17%)
28	CLA	G	312	-	67,71,73	1.19	7 (10%)	80,110,113	1.05	7 (8%)
37	SQD	b	614	-	45,46,54	0.42	1 (2%)	54,57,65	0.70	2 (3%)
41	DGD	a	409	-	62,62,67	0.86	2 (3%)	76,76,81	1.15	8 (10%)
28	CLA	b	618	3	64,68,73	1.21	7 (10%)	77,107,113	0.92	3 (3%)
37	SQD	c	523	-	49,50,54	0.39	1 (2%)	58,61,65	0.63	1 (1%)
28	CLA	Y	312	24	46,50,73	1.45	8 (17%)	55,85,113	1.16	4 (7%)
28	CLA	g	315	8	57,61,73	1.29	7 (12%)	68,98,113	1.15	6 (8%)
33	BCR	b	602	-	41,41,41	1.68	8 (19%)	56,56,56	1.41	8 (14%)
46	NEX	V	323	-	38,46,46	1.60	7 (18%)	50,70,70	1.60	10 (20%)
34	PHO	D	407	-	58,69,69	0.83	4 (6%)	56,99,99	1.10	4 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
28	CLA	1	309	1	57,61,73	1.28	7 (12%)	68,98,113	1.06	4 (5%)
28	CLA	b	612	3	69,73,73	1.14	6 (8%)	83,113,113	0.97	5 (6%)
28	CLA	U	411	21	69,73,73	1.18	6 (8%)	83,113,113	0.97	4 (4%)
29	CHL	N	307	-	48,52,74	1.38	7 (14%)	53,87,114	1.19	5 (9%)
28	CLA	n	315	15	69,73,73	1.20	8 (11%)	83,113,113	0.91	3 (3%)
38	LMG	K	101	-	34,34,55	1.17	3 (8%)	42,42,63	1.63	9 (21%)
42	LHG	v	302	28	48,48,48	0.28	0	51,54,54	0.51	0
28	CLA	C	517	4	67,71,73	1.17	7 (10%)	80,110,113	0.96	4 (5%)
31	0UR	N	316	-	48,51,58	0.81	2 (4%)	56,70,77	1.72	13 (23%)
28	CLA	S	310	15	64,68,73	3.83	32 (50%)	77,107,113	1.46	12 (15%)
28	CLA	u	418	21	46,50,73	1.39	7 (15%)	55,85,113	1.19	4 (7%)
46	NEX	v	320	-	38,46,46	1.60	7 (18%)	50,70,70	1.64	10 (20%)
28	CLA	0	304	-	49,53,73	1.38	7 (14%)	59,89,113	1.19	6 (10%)
28	CLA	b	619	3	64,68,73	1.24	8 (12%)	77,107,113	1.09	5 (6%)
32	LUT	1	313	-	42,43,43	1.96	12 (28%)	51,60,60	2.90	17 (33%)
28	CLA	G	306	8	62,66,73	1.19	6 (9%)	74,104,113	1.06	6 (8%)
28	CLA	S	311	42	59,63,73	1.23	7 (11%)	71,101,113	1.12	6 (8%)
30	0IE	Y	321	-	42,45,45	8.41	34 (80%)	49,63,63	2.85	20 (40%)
28	CLA	g	305	8	64,68,73	1.23	6 (9%)	77,107,113	1.04	6 (7%)
28	CLA	u	411	-	59,63,73	1.26	8 (13%)	71,101,113	0.98	3 (4%)
37	SQD	T	102	-	41,42,54	0.41	1 (2%)	50,53,65	0.41	0
29	CHL	G	311	-	55,59,74	1.21	6 (10%)	62,96,114	1.13	4 (6%)
42	LHG	G	303	28	41,41,48	0.29	0	44,47,54	0.38	0
31	0UR	0	313	-	47,50,58	5.63	31 (65%)	55,69,77	2.88	23 (41%)
30	0IE	N	317	-	42,45,45	0.81	1 (2%)	49,63,63	1.32	4 (8%)
31	0UR	y	318	-	49,52,58	13.22	41 (83%)	57,71,77	3.66	29 (50%)
30	0IE	Y	319	-	42,45,45	6.34	31 (73%)	49,63,63	4.76	29 (59%)
28	CLA	b	609	3	69,73,73	1.15	8 (11%)	83,113,113	1.00	4 (4%)
38	LMG	A	414	-	45,45,55	0.24	0	53,53,63	0.62	1 (1%)
28	CLA	a	410	2	58,62,73	1.25	6 (10%)	69,99,113	0.99	4 (5%)
28	CLA	Y	316	-	46,50,73	1.41	7 (15%)	55,85,113	1.17	5 (9%)
28	CLA	u	415	21	69,73,73	1.14	6 (8%)	83,113,113	1.09	6 (7%)
28	CLA	Y	305	-	62,66,73	1.21	7 (11%)	74,104,113	1.08	5 (6%)
38	LMG	I	101	-	41,41,55	0.25	0	49,49,63	0.30	0
42	LHG	u	402	28	26,26,48	0.38	0	29,32,54	0.43	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
30	0IE	y	321	-	42,45,45	10.20	35 (83%)	49,63,63	3.18	23 (46%)
28	CLA	B	618	48	52,56,73	1.36	8 (15%)	62,92,113	1.08	5 (8%)
28	CLA	U	417	21	56,60,73	1.30	6 (10%)	67,97,113	1.01	4 (5%)
28	CLA	c	508	4	58,62,73	1.28	8 (13%)	69,99,113	1.04	4 (5%)
32	LUT	Y	320	-	42,43,43	2.21	12 (28%)	51,60,60	2.13	15 (29%)
33	BCR	A	401	-	41,41,41	1.73	8 (19%)	56,56,56	1.44	10 (17%)
29	CHL	S	303	15	66,70,74	1.14	7 (10%)	75,109,114	0.94	3 (4%)
29	CHL	S	302	15	70,74,74	1.13	8 (11%)	80,114,114	0.99	6 (7%)
28	CLA	0	308	-	46,50,73	1.44	7 (15%)	55,85,113	1.18	5 (9%)
43	LMN	U	420	-	72,72,72	0.98	3 (4%)	96,98,98	1.52	13 (13%)
47	XAT	s	318	-	39,47,47	1.69	8 (20%)	54,74,74	1.71	10 (18%)
29	CHL	n	304	15	70,74,74	1.13	6 (8%)	80,114,114	1.01	6 (7%)
28	CLA	y	304	24	54,58,73	1.31	7 (12%)	65,95,113	1.11	5 (7%)
28	CLA	U	416	21	64,68,73	1.22	7 (10%)	77,107,113	1.07	5 (6%)
42	LHG	s	301	28	41,41,48	0.30	0	44,47,54	0.49	0
28	CLA	s	312	42	62,66,73	1.23	6 (9%)	74,104,113	1.02	4 (5%)
38	LMG	d	408	-	41,41,55	0.26	0	49,49,63	0.52	0
28	CLA	U	410	-	59,63,73	1.27	7 (11%)	71,101,113	1.29	5 (7%)
43	LMN	c	525	-	72,72,72	0.20	0	96,98,98	0.52	0
36	OEX	a	407	2,4	0,14,14	-	-	-		
46	NEX	G	321	-	38,46,46	1.56	7 (18%)	50,70,70	1.52	9 (18%)
38	LMG	C	522	-	27,27,55	0.25	0	35,35,63	0.45	0
28	CLA	Y	313	24	47,51,73	3.91	27 (57%)	56,86,113	2.23	17 (30%)
28	CLA	1	305	1	46,50,73	1.41	8 (17%)	55,85,113	1.15	4 (7%)
38	LMG	D	411	-	39,39,55	0.29	0	47,47,63	0.72	2 (4%)
28	CLA	n	313	15	69,73,73	1.12	7 (10%)	83,113,113	0.94	4 (4%)
28	CLA	G	315	8	62,66,73	1.31	7 (11%)	74,104,113	1.00	5 (6%)
33	BCR	B	603	-	41,41,41	1.71	8 (19%)	56,56,56	1.36	7 (12%)
47	XAT	V	321	-	39,47,47	1.68	8 (20%)	54,74,74	1.67	9 (16%)
34	PHO	A	402	-	58,69,69	0.82	3 (5%)	56,99,99	1.06	3 (5%)
28	CLA	0	311	1	49,53,73	1.38	7 (14%)	59,89,113	1.12	5 (8%)
46	NEX	s	319	28	38,46,46	1.73	11 (28%)	50,70,70	2.17	12 (24%)
45	HEM	E	101	7,6	50,50,50	2.02	17 (34%)	66,82,82	0.96	2 (3%)
38	LMG	i	101	-	35,35,55	0.27	0	43,43,63	0.61	0
28	CLA	A	410	48	69,73,73	1.15	6 (8%)	83,113,113	0.96	4 (4%)
30	0IE	1	314	-	42,45,45	0.70	0	49,63,63	1.52	6 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
28	CLA	c	514	4	64,68,73	1.21	6 (9%)	77,107,113	0.94	4 (5%)
28	CLA	c	520	4	69,73,73	1.16	7 (10%)	83,113,113	1.02	6 (7%)
28	CLA	V	315	42	64,68,73	1.21	6 (9%)	77,107,113	0.91	2 (2%)
30	0IE	y	319	-	42,45,45	9.61	34 (80%)	49,63,63	3.62	25 (51%)
28	CLA	0	301	1	49,53,73	1.31	7 (14%)	59,89,113	1.21	6 (10%)
28	CLA	y	316	-	46,50,73	1.43	7 (15%)	55,85,113	1.16	4 (7%)
30	0IE	V	320	-	42,45,45	0.82	2 (4%)	49,63,63	1.33	2 (4%)
32	LUT	U	418	-	42,43,43	1.67	8 (19%)	51,60,60	1.58	12 (23%)
28	CLA	G	316	8	58,62,73	1.29	7 (12%)	69,99,113	1.13	6 (8%)
33	BCR	c	509	-	41,41,41	1.73	8 (19%)	56,56,56	1.75	14 (25%)
28	CLA	Y	308	-	54,58,73	1.31	6 (11%)	65,95,113	1.06	5 (7%)
28	CLA	u	407	21	65,69,73	1.26	8 (12%)	78,108,113	0.98	4 (5%)
28	CLA	y	311	24	59,63,73	1.20	6 (10%)	71,101,113	1.04	4 (5%)
28	CLA	s	313	-	49,53,73	1.36	7 (14%)	59,89,113	1.14	5 (8%)
42	LHG	B	623	-	34,34,48	0.32	0	37,40,54	0.38	0
43	LMN	W	201	-	72,72,72	0.19	0	96,98,98	0.53	0
29	CHL	1	310	1	47,51,74	1.32	6 (12%)	52,86,114	1.14	4 (7%)
28	CLA	b	606	3	69,73,73	1.19	8 (11%)	83,113,113	0.99	5 (6%)
28	CLA	u	417	21	64,68,73	1.25	7 (10%)	77,107,113	1.33	11 (14%)
28	CLA	v	314	-	49,53,73	1.42	7 (14%)	59,89,113	1.06	4 (6%)
31	0UR	s	316	-	47,50,58	0.76	2 (4%)	55,69,77	1.80	12 (21%)
28	CLA	V	316	15	62,66,73	1.25	6 (9%)	74,104,113	1.00	4 (5%)
37	SQD	A	405	-	42,43,54	0.46	0	51,54,65	1.00	1 (1%)
28	CLA	U	412	21	59,63,73	1.23	6 (10%)	71,101,113	0.99	4 (5%)
28	CLA	u	416	21	59,63,73	1.23	7 (11%)	71,101,113	1.07	5 (7%)
42	LHG	g	303	28	36,36,48	0.32	0	39,42,54	0.39	0
31	0UR	Y	318	-	48,51,58	9.31	36 (75%)	56,70,77	2.94	22 (39%)
31	0UR	n	318	-	51,54,58	0.83	2 (3%)	59,73,77	1.67	10 (16%)
28	CLA	V	307	15	59,63,73	3.65	33 (55%)	71,101,113	2.10	24 (33%)
28	CLA	n	307	48	54,58,73	1.33	8 (14%)	65,95,113	1.04	4 (6%)
28	CLA	v	316	15	47,51,73	1.43	8 (17%)	56,86,113	1.17	5 (8%)
28	CLA	C	510	48	69,73,73	1.20	7 (10%)	83,113,113	1.00	6 (7%)
28	CLA	C	506	4	59,63,73	1.26	7 (11%)	71,101,113	0.99	4 (5%)
31	0UR	G	319	-	48,51,58	0.83	2 (4%)	56,70,77	1.81	13 (23%)
38	LMG	K	103	-	47,47,55	0.22	0	55,55,63	0.57	1 (1%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
43	LMN	n	322	-	72,72,72	1.16	5 (6%)	96,98,98	1.83	24 (25%)
29	CHL	U	408	-	64,68,74	1.15	6 (9%)	72,106,114	0.97	5 (6%)
28	CLA	B	611	3	69,73,73	1.18	8 (11%)	83,113,113	0.97	5 (6%)
38	LMG	A	408	-	37,37,55	0.26	0	45,45,63	0.46	0
38	LMG	a	417	-	46,46,55	0.24	0	54,54,63	0.70	2 (3%)
41	DGD	C	516	-	54,54,67	0.90	2 (3%)	68,68,81	1.08	5 (7%)
37	SQD	B	617	-	50,51,54	0.41	1 (2%)	59,62,65	0.83	3 (5%)
28	CLA	B	608	3	69,73,73	1.17	8 (11%)	83,113,113	0.91	4 (4%)
33	BCR	c	507	-	41,41,41	1.68	8 (19%)	56,56,56	1.39	8 (14%)
42	LHG	n	303	28	42,42,48	0.31	0	45,48,54	0.49	0
28	CLA	C	505	4	59,63,73	1.27	7 (11%)	71,101,113	1.01	4 (5%)
28	CLA	c	521	4	59,63,73	1.26	6 (10%)	71,101,113	1.01	4 (5%)
28	CLA	y	305	-	64,68,73	1.19	7 (10%)	77,107,113	1.08	6 (7%)
31	0UR	1	312	-	46,49,58	0.81	2 (4%)	54,68,77	1.81	12 (22%)
28	CLA	C	519	48	69,73,73	1.17	8 (11%)	83,113,113	0.94	4 (4%)
31	0UR	g	318	-	48,51,58	7.73	32 (66%)	56,70,77	3.00	23 (41%)
28	CLA	C	504	4	69,73,73	1.16	5 (7%)	83,113,113	0.90	3 (3%)
44	BCT	a	406	40	2,3,3	0.98	0	2,3,3	0.32	0
28	CLA	B	602	3	69,73,73	1.19	7 (10%)	83,113,113	0.95	4 (4%)
28	CLA	0	303	-	49,53,73	1.41	8 (16%)	59,89,113	1.18	6 (10%)
29	CHL	g	310	-	55,59,74	2.60	22 (40%)	62,96,114	1.48	9 (14%)
28	CLA	C	503	4	69,73,73	1.12	7 (10%)	83,113,113	0.98	4 (4%)
33	BCR	B	614	-	41,41,41	1.67	8 (19%)	56,56,56	1.37	7 (12%)
29	CHL	S	306	-	70,74,74	2.54	24 (34%)	80,114,114	1.69	15 (18%)
43	LMN	g	301	-	72,72,72	0.20	0	96,98,98	0.37	1 (1%)
28	CLA	B	616	3	69,73,73	1.19	9 (13%)	83,113,113	0.92	5 (6%)
31	0UR	y	317	-	47,50,58	10.82	35 (74%)	55,69,77	3.13	28 (50%)
34	PHO	a	404	-	58,69,69	0.83	4 (6%)	56,99,99	1.02	3 (5%)
43	LMN	C	518	-	72,72,72	0.22	0	96,98,98	0.70	3 (3%)
28	CLA	B	601	3	64,68,73	1.20	7 (10%)	77,107,113	0.94	3 (3%)
42	LHG	c	527	-	29,29,48	0.82	1 (3%)	32,35,54	1.36	6 (18%)
28	CLA	y	313	24	47,51,73	1.40	8 (17%)	56,86,113	1.21	6 (10%)
28	CLA	B	612	3	69,73,73	1.18	8 (11%)	83,113,113	0.97	5 (6%)
31	0UR	U	419	-	50,53,58	10.30	38 (76%)	58,72,77	2.84	29 (50%)
43	LMN	n	301	-	72,72,72	0.22	0	96,98,98	0.59	2 (2%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
28	CLA	d	404	5	69,73,73	1.19	9 (13%)	83,113,113	0.89	4 (4%)
28	CLA	s	304	15	58,62,73	1.26	7 (12%)	69,99,113	1.01	3 (4%)
38	LMG	b	625	-	33,33,55	0.28	0	41,41,63	0.91	3 (7%)
28	CLA	c	512	4	69,73,73	1.17	6 (8%)	83,113,113	0.97	5 (6%)
29	CHL	V	306	15	66,70,74	1.12	6 (9%)	75,109,114	1.00	5 (6%)
29	CHL	V	302	-	70,74,74	3.27	32 (45%)	80,114,114	1.70	16 (20%)
28	CLA	b	622	3	69,73,73	1.17	7 (10%)	83,113,113	0.90	3 (3%)
28	CLA	G	307	8	46,50,73	1.36	4 (8%)	55,85,113	1.07	3 (5%)
33	BCR	d	403	-	41,41,41	1.69	8 (19%)	56,56,56	1.43	9 (16%)
29	CHL	n	305	15	63,67,74	1.16	6 (9%)	71,105,114	0.99	4 (5%)
42	LHG	l	101	-	43,43,48	0.28	0	46,49,54	0.37	0
28	CLA	d	409	5	67,71,73	1.20	6 (8%)	80,110,113	0.97	5 (6%)
28	CLA	B	605	48	69,73,73	1.13	8 (11%)	83,113,113	0.97	5 (6%)
30	0IE	n	319	-	42,45,45	0.79	1 (2%)	49,63,63	1.37	4 (8%)
38	LMG	c	528	-	30,30,55	0.27	0	38,38,63	0.50	0
28	CLA	B	619	3	62,66,73	1.23	7 (11%)	74,104,113	0.98	5 (6%)
44	BCT	D	408	40	2,3,3	0.97	0	2,3,3	0.36	0
28	CLA	1	304	-	47,51,73	1.42	7 (14%)	56,86,113	1.16	6 (10%)
28	CLA	y	308	-	59,63,73	4.37	32 (54%)	71,101,113	1.79	11 (15%)
28	CLA	c	511	48	69,73,73	1.19	8 (11%)	83,113,113	0.91	4 (4%)
31	0UR	0	314	-	47,50,58	7.96	31 (65%)	55,69,77	2.85	20 (36%)
29	CHL	S	309	15	70,74,74	1.11	8 (11%)	80,114,114	1.00	5 (6%)
38	LMG	a	411	-	35,35,55	0.25	0	43,43,63	0.37	0
41	DGD	a	405	-	45,45,67	1.04	2 (4%)	59,59,81	1.03	4 (6%)
28	CLA	B	609	3	69,73,73	1.15	7 (10%)	83,113,113	1.02	6 (7%)
33	BCR	t	101	-	41,41,41	1.72	8 (19%)	56,56,56	1.38	9 (16%)
41	DGD	C	515	-	40,40,67	1.11	2 (5%)	54,54,81	1.08	2 (3%)
43	LMN	Y	301	-	68,68,72	0.25	0	92,94,98	0.48	0
38	LMG	J	101	-	39,39,55	0.27	0	47,47,63	0.62	1 (2%)
28	CLA	g	314	8	66,70,73	3.10	31 (46%)	79,109,113	2.31	21 (26%)
28	CLA	b	607	3	69,73,73	1.15	6 (8%)	83,113,113	0.95	4 (4%)
42	LHG	S	301	28	43,43,48	0.29	0	46,49,54	0.77	1 (2%)
28	CLA	y	306	24	47,51,73	4.25	30 (63%)	56,86,113	2.13	11 (19%)
28	CLA	y	310	24	57,61,73	1.24	6 (10%)	68,98,113	1.11	6 (8%)
28	CLA	C	513	4	64,68,73	1.22	7 (10%)	77,107,113	1.03	5 (6%)
41	DGD	c	516	-	50,50,67	0.99	2 (4%)	64,64,81	1.14	5 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
41	DGD	g	302	-	49,49,67	1.00	2 (4%)	63,63,81	1.05	5 (7%)
28	CLA	u	414	42	60,64,73	1.26	8 (13%)	72,102,113	1.08	5 (6%)
28	CLA	g	311	8	69,73,73	1.17	6 (8%)	83,113,113	1.00	5 (6%)
28	CLA	y	309	-	61,65,73	1.23	6 (9%)	73,103,113	0.94	3 (4%)
28	CLA	U	413	42	66,70,73	1.20	8 (12%)	79,109,113	1.03	4 (5%)
29	CHL	S	308	-	70,74,74	1.12	6 (8%)	80,114,114	1.19	6 (7%)
38	LMG	U	402	-	30,30,55	0.31	0	38,38,63	0.87	1 (2%)
28	CLA	Y	310	24	54,58,73	1.28	7 (12%)	65,95,113	1.12	6 (9%)
43	LMN	G	304	-	72,72,72	0.20	0	96,98,98	0.58	2 (2%)
37	SQD	z	101	-	45,46,54	0.42	1 (2%)	54,57,65	0.78	2 (3%)
41	DGD	c	515	-	52,52,67	0.97	2 (3%)	66,66,81	0.98	3 (4%)
32	LUT	y	320	-	42,43,43	3.13	17 (40%)	51,60,60	2.32	16 (31%)
29	CHL	S	307	-	50,54,74	1.29	6 (12%)	56,90,114	1.08	4 (7%)
46	NEX	G	320	-	38,46,46	1.76	6 (15%)	50,70,70	1.76	10 (20%)
28	CLA	A	416	48	69,73,73	1.17	8 (11%)	83,113,113	0.99	5 (6%)
28	CLA	c	505	48	69,73,73	1.17	8 (11%)	83,113,113	0.90	4 (4%)
29	CHL	N	306	-	48,52,74	2.13	18 (37%)	53,87,114	1.64	10 (18%)
42	LHG	D	406	-	39,39,48	0.32	0	42,45,54	0.42	0
28	CLA	u	405	21	69,73,73	1.20	8 (11%)	83,113,113	0.98	5 (6%)
28	CLA	s	315	15	47,51,73	1.39	6 (12%)	56,86,113	1.14	5 (8%)
38	LMG	w	201	-	36,36,55	0.25	0	44,44,63	0.73	1 (2%)
28	CLA	v	306	-	59,63,73	1.24	7 (11%)	71,101,113	1.14	6 (8%)
42	LHG	b	623	-	48,48,48	0.29	0	51,54,54	0.46	0
29	CHL	y	307	-	62,66,74	1.21	7 (11%)	70,104,114	1.08	5 (7%)
38	LMG	A	406	-	31,31,55	0.32	0	39,39,63	0.72	1 (2%)
29	CHL	s	302	15	70,74,74	1.14	7 (10%)	80,114,114	0.96	5 (6%)
30	0IE	v	318	-	42,45,45	0.80	0	49,63,63	1.31	3 (6%)
31	0UR	y	323	-	55,58,58	9.03	45 (81%)	63,77,77	2.92	21 (33%)
38	LMG	A	413	-	39,39,55	0.65	1 (2%)	47,47,63	0.96	3 (6%)
42	LHG	D	402	-	44,44,48	0.31	0	47,50,54	0.41	0
28	CLA	b	610	48	69,73,73	1.15	6 (8%)	83,113,113	1.00	5 (6%)
28	CLA	U	406	21	64,68,73	1.26	8 (12%)	77,107,113	1.00	4 (5%)
28	CLA	C	508	4	69,73,73	1.16	7 (10%)	83,113,113	0.95	5 (6%)
28	CLA	S	314	15	47,51,73	1.35	7 (14%)	56,86,113	1.17	5 (8%)
28	CLA	Y	304	24	49,53,73	1.39	7 (14%)	59,89,113	1.19	6 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
38	LMG	M	101	-	47,47,55	0.21	0	55,55,63	0.44	0
31	0UR	Y	323	-	55,58,58	0.97	2 (3%)	63,77,77	1.70	14 (22%)
37	SQD	c	501	-	42,43,54	0.45	1 (2%)	51,54,65	0.90	2 (3%)
29	CHL	G	317	8	70,74,74	2.92	25 (35%)	80,114,114	1.60	14 (17%)
28	CLA	N	311	15	63,67,73	1.20	5 (7%)	75,105,113	1.13	6 (8%)
28	CLA	Y	309	-	54,58,73	1.30	6 (11%)	65,95,113	1.03	4 (6%)
28	CLA	B	606	3	69,73,73	1.19	9 (13%)	83,113,113	1.09	5 (6%)
33	BCR	b	604	-	41,41,41	1.71	8 (19%)	56,56,56	1.44	10 (17%)
43	LMN	n	323	-	68,68,72	0.22	0	92,94,98	0.52	0
28	CLA	1	311	1	46,50,73	1.40	7 (15%)	55,85,113	1.18	5 (9%)
28	CLA	s	314	-	69,73,73	1.12	7 (10%)	83,113,113	1.01	6 (7%)
28	CLA	Y	314	24	59,63,73	1.26	9 (15%)	71,101,113	0.99	4 (5%)
43	LMN	g	320	-	72,72,72	0.18	0	96,98,98	0.52	1 (1%)
29	CHL	g	309	-	50,54,74	1.33	8 (16%)	56,90,114	1.14	4 (7%)
28	CLA	S	312	15	47,51,73	1.44	7 (14%)	56,86,113	1.11	4 (7%)
28	CLA	b	605	48	69,73,73	1.17	7 (10%)	83,113,113	0.90	3 (3%)
31	0UR	y	322	-	55,58,58	9.78	41 (74%)	63,77,77	3.13	27 (42%)
28	CLA	S	313	15	62,66,73	1.19	6 (9%)	74,104,113	1.16	5 (6%)
29	CHL	y	315	24	50,54,74	1.37	7 (14%)	56,90,114	1.16	4 (7%)
29	CHL	Y	307	-	60,64,74	1.21	7 (11%)	68,102,114	1.18	6 (8%)
28	CLA	B	621	3	69,73,73	1.21	8 (11%)	83,113,113	0.85	4 (4%)
28	CLA	0	306	-	47,51,73	1.41	7 (14%)	56,86,113	1.17	4 (7%)
28	CLA	G	313	8	59,63,73	1.22	7 (11%)	71,101,113	1.05	4 (5%)
29	CHL	n	309	-	48,52,74	1.31	8 (16%)	53,87,114	1.12	5 (9%)
33	BCR	D	403	-	41,41,41	1.75	8 (19%)	56,56,56	1.37	9 (16%)
28	CLA	U	404	21	69,73,73	1.19	7 (10%)	83,113,113	1.10	6 (7%)
28	CLA	1	302	1	46,50,73	1.40	7 (15%)	55,85,113	1.17	5 (9%)
38	LMG	W	202	-	37,37,55	0.26	0	45,45,63	0.85	2 (4%)
33	BCR	C	507	-	41,41,41	1.73	8 (19%)	56,56,56	1.51	11 (19%)
28	CLA	Y	303	24	59,63,73	4.06	28 (47%)	71,101,113	1.70	11 (15%)
28	CLA	n	314	42	64,68,73	1.23	9 (14%)	77,107,113	1.03	5 (6%)
28	CLA	U	414	21	59,63,73	4.53	35 (59%)	71,101,113	2.40	21 (29%)
46	NEX	n	321	-	38,46,46	1.60	7 (18%)	50,70,70	1.51	10 (20%)
43	LMN	v	301	-	72,72,72	0.19	0	96,98,98	0.51	1 (1%)
36	OEX	A	404	2,4	0,14,14	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
38	LMG	U	401	-	37,37,55	0.23	0	45,45,63	0.59	0
43	LMN	Y	302	-	72,72,72	0.20	0	96,98,98	0.62	2 (2%)
29	CHL	s	307	-	48,52,74	1.36	8 (16%)	53,87,114	1.09	4 (7%)
33	BCR	H	101	-	41,41,41	1.76	8 (19%)	56,56,56	1.52	10 (17%)
38	LMG	u	404	-	32,32,55	0.29	0	40,40,63	0.72	1 (2%)
28	CLA	y	312	24	63,67,73	1.22	6 (9%)	75,105,113	1.01	5 (6%)
42	LHG	N	301	28	39,39,48	0.32	0	42,45,54	0.98	2 (4%)
28	CLA	U	415	21	62,66,73	1.23	6 (9%)	74,104,113	1.07	4 (5%)
28	CLA	u	413	21	60,64,73	1.24	7 (11%)	72,102,113	1.07	4 (5%)
28	CLA	v	305	15	63,67,73	1.20	7 (11%)	75,105,113	1.03	5 (6%)
38	LMG	F	201	-	36,36,55	0.25	0	44,44,63	0.47	1 (2%)
43	LMN	V	301	-	72,72,72	0.22	0	96,98,98	0.53	2 (2%)
32	LUT	u	419	-	42,43,43	1.65	8 (19%)	51,60,60	1.60	10 (19%)
34	PHO	d	407	-	58,69,69	0.81	3 (5%)	56,99,99	1.07	3 (5%)
47	XAT	N	318	-	39,47,47	1.72	8 (20%)	54,74,74	1.68	10 (18%)
29	CHL	s	309	-	55,59,74	1.22	8 (14%)	62,96,114	1.08	5 (8%)
28	CLA	G	305	8	49,53,73	1.38	7 (14%)	59,89,113	1.05	4 (6%)
46	NEX	N	319	-	38,46,46	1.85	12 (31%)	50,70,70	2.18	12 (24%)
28	CLA	D	409	5	69,73,73	1.18	7 (10%)	83,113,113	0.91	4 (4%)
28	CLA	1	303	-	49,53,73	3.99	23 (46%)	59,89,113	2.84	26 (44%)
28	CLA	C	509	4	69,73,73	1.18	7 (10%)	83,113,113	0.97	4 (4%)
29	CHL	n	310	-	70,74,74	1.11	7 (10%)	80,114,114	1.00	5 (6%)
28	CLA	U	407	-	59,63,73	1.25	6 (10%)	71,101,113	0.97	4 (5%)
28	CLA	b	615	3	69,73,73	1.18	7 (10%)	83,113,113	0.92	3 (3%)
31	0UR	u	420	-	47,50,58	0.96	2 (4%)	55,69,77	1.91	12 (21%)
42	LHG	D	405	-	48,48,48	0.29	0	51,54,54	1.04	3 (5%)
41	DGD	C	520	-	57,57,67	0.91	2 (3%)	71,71,81	0.89	4 (5%)
28	CLA	c	506	4	69,73,73	1.18	7 (10%)	83,113,113	1.01	6 (7%)
38	LMG	c	526	-	50,50,55	0.26	0	58,58,63	0.67	0
29	CHL	U	405	21	63,67,74	1.15	7 (11%)	71,105,114	0.97	4 (5%)
45	HEM	e	101	7,6	50,50,50	1.97	16 (32%)	66,82,82	1.03	3 (4%)
28	CLA	v	313	42	59,63,73	1.26	7 (11%)	71,101,113	1.28	7 (9%)
46	NEX	V	322	-	38,46,46	1.61	7 (18%)	50,70,70	1.62	9 (18%)
28	CLA	G	308	-	54,58,73	3.54	27 (50%)	65,95,113	1.76	16 (24%)
33	BCR	K	102	-	41,41,41	1.72	8 (19%)	56,56,56	1.37	8 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
38	LMG	d	410	-	38,38,55	1.08	3 (7%)	46,46,63	2.08	7 (15%)
38	LMG	C	523	-	40,40,55	0.26	0	48,48,63	0.63	0
38	LMG	a	414	-	46,46,55	0.71	0	54,54,63	0.93	3 (5%)
28	CLA	A	407	2	62,66,73	1.22	6 (9%)	74,104,113	0.97	4 (5%)
38	LMG	m	101	-	43,43,55	1.15	6 (13%)	51,51,63	1.60	9 (17%)
28	CLA	n	317	15	56,60,73	1.30	6 (10%)	67,97,113	1.11	5 (7%)
29	CHL	N	302	15	70,74,74	3.03	29 (41%)	80,114,114	1.48	16 (20%)
33	BCR	T	101	-	41,41,41	1.67	8 (19%)	56,56,56	1.39	8 (14%)
29	CHL	0	310	1	47,51,74	1.33	6 (12%)	52,86,114	1.17	5 (9%)
46	NEX	g	319	-	38,46,46	1.66	7 (18%)	50,70,70	1.66	10 (20%)
28	CLA	n	316	15	69,73,73	1.14	6 (8%)	83,113,113	1.05	6 (7%)
46	NEX	n	302	-	38,46,46	1.57	7 (18%)	50,70,70	1.52	9 (18%)
28	CLA	Y	306	24	46,50,73	1.42	6 (13%)	55,85,113	1.21	5 (9%)
29	CHL	N	308	-	66,70,74	3.13	27 (40%)	75,109,114	1.66	15 (20%)
29	CHL	n	311	-	55,59,74	1.27	5 (9%)	62,96,114	1.14	5 (8%)
39	PL9	A	409	-	55,55,55	0.70	1 (1%)	68,69,69	0.74	1 (1%)
42	LHG	U	403	28	26,26,48	0.36	0	29,32,54	0.46	0
38	LMG	d	402	-	49,49,55	0.22	0	57,57,63	0.39	0
30	0IE	s	317	-	42,45,45	0.80	1 (2%)	49,63,63	1.30	3 (6%)
28	CLA	V	318	15	57,61,73	1.28	7 (12%)	68,98,113	1.10	4 (5%)
38	LMG	B	620	-	43,43,55	0.23	0	51,51,63	0.75	1 (1%)
28	CLA	N	313	15	57,61,73	1.31	8 (14%)	68,98,113	1.08	5 (7%)
28	CLA	c	504	4	69,73,73	1.15	8 (11%)	83,113,113	0.95	4 (4%)
41	DGD	c	524	-	46,46,67	1.81	11 (23%)	60,60,81	2.61	28 (46%)
43	LMN	G	301	-	72,72,72	0.18	0	96,98,98	0.51	1 (1%)
28	CLA	u	408	-	56,60,73	1.29	7 (12%)	67,97,113	1.01	4 (5%)
43	LMN	V	303	-	72,72,72	0.19	0	96,98,98	0.45	1 (1%)
28	CLA	S	304	15	58,62,73	1.27	6 (10%)	69,99,113	1.11	6 (8%)
28	CLA	N	305	-	52,56,73	1.31	6 (11%)	62,92,113	1.13	4 (6%)
29	CHL	u	406	21	63,67,74	1.16	7 (11%)	71,105,114	0.99	4 (5%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	CLA	b	611	3	-	1/39/115/115	-
28	CLA	B	622	3	-	8/39/115/115	-
29	CHL	v	303	-	-	20/41/117/117	-
29	CHL	N	303	15	-	10/38/114/117	-
39	PL9	d	406	-	-	5/53/73/73	0/1/1/1
29	CHL	U	409	-	-	9/35/111/117	-
28	CLA	0	305	1	-	3/12/88/115	-
28	CLA	C	501	4	-	2/39/115/115	-
38	LMG	c	502	-	-	15/32/52/70	0/1/1/1
41	DGD	C	514	-	-	14/41/81/95	0/2/2/2
33	BCR	a	401	-	-	3/29/63/63	0/2/2/2
31	0UR	G	318	-	-	10/40/79/86	0/2/2/2
28	CLA	A	411	2	-	2/39/115/115	-
38	LMG	D	401	-	-	4/45/65/70	0/1/1/1
43	LMN	C	521	-	-	11/39/119/130	0/4/4/4
41	DGD	c	517	-	-	8/30/70/95	0/2/2/2
29	CHL	Y	315	24	-	3/17/93/117	-
42	LHG	d	405	-	-	9/53/53/53	-
29	CHL	v	309	-	-	9/41/117/117	-
28	CLA	s	311	15	-	9/33/109/115	-
30	0IE	0	312	-	-	17/33/72/72	0/2/2/2
28	CLA	C	511	4	-	7/39/115/115	-
28	CLA	g	308	-	-	0/13/89/115	-
29	CHL	N	309	-	-	6/39/115/117	-
28	CLA	C	512	4	-	4/39/115/115	-
28	CLA	g	307	-	-	9/21/97/115	-
28	CLA	S	305	-	-	3/27/103/115	-
28	CLA	1	301	1	-	0/10/86/115	-
28	CLA	g	313	42	-	16/33/109/115	-
42	LHG	V	304	28	-	19/53/53/53	-
28	CLA	v	312	15	-	1/33/109/115	-
42	LHG	b	624	-	-	7/45/45/53	-
28	CLA	Y	311	24	-	14/25/101/115	-
28	CLA	B	613	48	-	4/39/115/115	-
29	CHL	n	308	-	-	10/32/108/117	-
28	CLA	N	304	15	-	4/26/102/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
38	LMG	b	613	-	-	2/31/51/70	0/1/1/1
28	CLA	G	314	42	-	0/15/91/115	-
29	CHL	n	312	15	-	7/35/111/117	-
39	PL9	D	404	-	-	8/53/73/73	0/1/1/1
28	CLA	a	402	48	-	6/39/115/115	-
29	CHL	s	308	-	-	8/34/110/117	-
33	BCR	k	102	-	-	6/29/63/63	0/2/2/2
28	CLA	y	314	-	-	1/27/103/115	-
29	CHL	V	309	15	-	13/35/111/117	-
28	CLA	1	307	1	-	4/10/86/115	-
28	CLA	n	306	15	-	4/36/112/115	-
28	CLA	s	305	46	-	4/26/102/115	-
33	BCR	C	502	-	-	6/29/63/63	0/2/2/2
29	CHL	v	310	48	-	1/35/111/117	-
28	CLA	g	304	8	-	2/15/91/115	-
28	CLA	0	302	-	-	4/15/91/115	-
28	CLA	c	513	4	-	5/39/115/115	-
28	CLA	b	616	3	-	7/39/115/115	-
33	BCR	h	101	-	-	4/29/63/63	0/2/2/2
28	CLA	b	601	3	-	2/39/115/115	-
28	CLA	b	608	3	-	5/39/115/115	-
28	CLA	1	308	1	-	2/15/91/115	-
30	0IE	S	316	-	-	6/33/72/72	0/2/2/2
29	CHL	V	312	-	-	2/21/97/117	-
28	CLA	b	617	3	-	9/39/115/115	-
29	CHL	G	310	-	-	3/14/90/117	-
31	0UR	1	315	-	-	9/36/75/86	0/2/2/2
33	BCR	K	104	-	-	2/29/63/63	0/2/2/2
29	CHL	s	303	15	-	6/39/115/117	-
29	CHL	u	409	-	-	1/32/108/117	-
33	BCR	k	101	-	-	6/29/63/63	0/2/2/2
28	CLA	N	314	15	-	3/31/107/115	-
28	CLA	c	522	4	-	11/39/115/115	-
28	CLA	g	306	8	-	6/39/115/115	-
31	0UR	1	316	-	-	13/40/79/86	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	CLA	c	510	4	-	4/39/115/115	-
29	CHL	V	311	-	-	19/41/117/117	-
31	0UR	g	317	-	-	17/40/79/86	0/2/2/2
43	LMN	u	401	-	-	18/50/130/130	0/4/4/4
29	CHL	V	310	-	-	3/15/91/117	-
28	CLA	B	607	3	-	6/39/115/115	-
43	LMN	y	302	-	-	14/50/130/130	0/4/4/4
28	CLA	G	309	-	-	1/12/88/115	-
29	CHL	v	304	15	-	8/34/110/117	-
29	CHL	N	310	15	-	1/35/111/117	-
31	0UR	V	319	-	-	9/42/81/86	0/2/2/2
28	CLA	0	309	1	-	4/27/103/115	-
41	DGD	A	417	-	-	8/34/74/95	0/2/2/2
47	XAT	n	320	-	-	10/31/93/93	0/4/4/4
42	LHG	a	415	-	-	4/47/47/53	-
43	LMN	y	301	-	-	13/50/130/130	0/4/4/4
38	LMG	J	102	-	-	20/35/55/70	0/1/1/1
29	CHL	v	311	15	-	0/34/110/117	-
41	DGD	b	621	-	-	19/50/90/95	0/2/2/2
43	LMN	N	320	-	-	18/50/130/130	0/4/4/4
29	CHL	s	306	-	-	5/15/91/117	-
29	CHL	s	310	15	-	4/35/111/117	-
42	LHG	L	101	-	-	9/48/48/53	-
28	CLA	B	610	3	-	2/39/115/115	-
28	CLA	u	412	21	-	8/39/115/115	-
33	BCR	B	604	-	-	3/29/63/63	0/2/2/2
28	CLA	b	620	48	-	4/23/99/115	-
28	CLA	N	312	42	-	4/33/109/115	-
28	CLA	v	315	15	-	6/39/115/115	-
28	CLA	a	416	48	-	7/39/115/115	-
28	CLA	N	315	15	-	1/13/89/115	-
29	CHL	V	305	15	-	7/41/117/117	-
47	XAT	v	319	-	-	12/31/93/93	0/4/4/4
29	CHL	v	308	-	-	0/15/91/117	-
31	0UR	S	315	-	-	6/40/79/86	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	CLA	1	306	1	-	1/12/88/115	-
29	CHL	u	410	-	-	5/35/111/117	-
31	0UR	Y	322	-	-	17/47/86/86	0/2/2/2
28	CLA	V	314	15	-	3/33/109/115	-
43	LMN	c	519	-	-	13/50/130/130	0/4/4/4
28	CLA	y	303	24	-	2/39/115/115	-
41	DGD	c	518	-	-	13/36/76/95	0/2/2/2
29	CHL	g	316	8	-	12/29/105/117	-
37	SQD	B	615	-	-	6/43/63/69	0/1/1/1
47	XAT	S	317	-	-	14/31/93/93	0/4/4/4
31	0UR	v	317	-	-	12/40/79/86	0/2/2/2
29	CHL	v	307	-	-	8/23/99/117	-
41	DGD	G	302	-	-	1/27/67/95	0/2/2/2
28	CLA	a	403	2	-	6/39/115/115	-
33	BCR	b	603	-	-	4/29/63/63	0/2/2/2
39	PL9	a	412	-	-	29/53/73/73	0/1/1/1
28	CLA	g	312	-	-	10/27/103/115	-
28	CLA	V	308	-	-	1/21/97/115	-
28	CLA	V	317	15	-	4/33/109/115	-
28	CLA	D	410	5	-	3/37/113/115	-
38	LMG	u	403	-	-	2/35/55/70	0/1/1/1
28	CLA	c	503	4	-	1/39/115/115	-
31	0UR	Y	317	-	-	9/47/86/86	0/2/2/2
28	CLA	0	307	1	-	3/15/91/115	-
29	CHL	V	313	15	-	11/41/117/117	-
28	CLA	G	312	-	-	11/37/113/115	-
37	SQD	b	614	-	-	7/41/61/69	0/1/1/1
41	DGD	a	409	-	-	18/50/90/95	0/2/2/2
28	CLA	b	618	3	-	8/33/109/115	-
37	SQD	c	523	-	-	3/45/65/69	0/1/1/1
28	CLA	Y	312	24	-	1/12/88/115	-
28	CLA	g	315	8	-	0/25/101/115	-
33	BCR	b	602	-	-	4/29/63/63	0/2/2/2
46	NEX	V	323	-	-	13/27/83/83	0/3/3/3
34	PHO	D	407	-	-	0/37/103/103	0/5/6/6

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	CLA	1	309	1	-	3/25/101/115	-
28	CLA	b	612	3	-	2/39/115/115	-
28	CLA	U	411	21	-	1/39/115/115	-
29	CHL	N	307	-	-	2/15/91/117	-
28	CLA	n	315	15	-	9/39/115/115	-
38	LMG	K	101	-	-	12/29/49/70	0/1/1/1
42	LHG	v	302	28	-	15/53/53/53	-
28	CLA	C	517	4	-	7/37/113/115	-
31	0UR	N	316	-	-	5/40/79/86	0/2/2/2
28	CLA	S	310	15	-	21/33/109/115	-
28	CLA	u	418	21	-	4/12/88/115	-
46	NEX	v	320	-	-	10/27/83/83	0/3/3/3
28	CLA	0	304	-	-	4/15/91/115	-
28	CLA	b	619	3	-	7/33/109/115	-
32	LUT	1	313	-	-	19/29/67/67	0/2/2/2
28	CLA	G	306	8	-	5/31/107/115	-
28	CLA	S	311	42	-	7/27/103/115	-
30	0IE	Y	321	-	-	3/33/72/72	0/2/2/2
28	CLA	g	305	8	-	8/33/109/115	-
28	CLA	u	411	-	-	1/27/103/115	-
37	SQD	T	102	-	-	1/37/57/69	0/1/1/1
29	CHL	G	311	-	-	10/23/99/117	-
42	LHG	G	303	28	-	11/46/46/53	-
31	0UR	0	313	-	-	17/39/78/86	0/2/2/2
30	0IE	N	317	-	-	8/33/72/72	0/2/2/2
31	0UR	y	318	-	-	8/41/80/86	0/2/2/2
30	0IE	Y	319	-	-	5/33/72/72	0/2/2/2
28	CLA	b	609	3	-	3/39/115/115	-
38	LMG	A	414	-	-	4/40/60/70	0/1/1/1
28	CLA	a	410	2	-	1/26/102/115	-
28	CLA	Y	316	-	-	0/12/88/115	-
28	CLA	u	415	21	-	8/39/115/115	-
28	CLA	Y	305	-	-	1/31/107/115	-
38	LMG	I	101	-	-	19/36/56/70	0/1/1/1
42	LHG	u	402	28	-	6/31/31/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
30	0IE	y	321	-	-	6/33/72/72	0/2/2/2
28	CLA	B	618	48	-	4/19/95/115	-
28	CLA	U	417	21	-	1/24/100/115	-
28	CLA	c	508	4	-	6/26/102/115	-
32	LUT	Y	320	-	-	22/29/67/67	0/2/2/2
33	BCR	A	401	-	-	2/29/63/63	0/2/2/2
29	CHL	S	303	15	-	8/37/113/117	-
29	CHL	S	302	15	-	3/41/117/117	-
28	CLA	0	308	-	-	0/12/88/115	-
43	LMN	U	420	-	-	38/50/130/130	0/4/4/4
47	XAT	s	318	-	-	10/31/93/93	0/4/4/4
29	CHL	n	304	15	-	3/41/117/117	-
28	CLA	y	304	24	-	2/21/97/115	-
28	CLA	U	416	21	-	4/33/109/115	-
42	LHG	s	301	28	-	15/46/46/53	-
28	CLA	s	312	42	-	2/31/107/115	-
38	LMG	d	408	-	-	7/36/56/70	0/1/1/1
28	CLA	U	410	-	-	5/27/103/115	-
43	LMN	c	525	-	-	16/50/130/130	0/4/4/4
46	NEX	G	321	-	-	6/27/83/83	0/3/3/3
38	LMG	C	522	-	-	2/21/41/70	0/1/1/1
28	CLA	Y	313	24	-	9/13/89/115	-
28	CLA	1	305	1	-	0/12/88/115	-
38	LMG	D	411	-	-	5/34/54/70	0/1/1/1
28	CLA	n	313	15	-	3/39/115/115	-
28	CLA	G	315	8	-	5/31/107/115	-
33	BCR	B	603	-	-	4/29/63/63	0/2/2/2
47	XAT	V	321	-	-	8/31/93/93	0/4/4/4
34	PHO	A	402	-	-	5/37/103/103	0/5/6/6
28	CLA	0	311	1	-	1/15/91/115	-
46	NEX	s	319	28	-	16/27/83/83	0/3/3/3
45	HEM	E	101	7,6	-	9/14/54/54	-
38	LMG	i	101	-	-	6/30/50/70	0/1/1/1
28	CLA	A	410	48	-	6/39/115/115	-
30	0IE	1	314	-	-	10/33/72/72	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	CLA	c	514	4	-	2/33/109/115	-
28	CLA	c	520	4	-	10/39/115/115	-
28	CLA	V	315	42	-	14/33/109/115	-
30	0IE	y	319	-	-	10/33/72/72	0/2/2/2
28	CLA	0	301	1	-	3/15/91/115	-
28	CLA	y	316	-	-	1/12/88/115	-
30	0IE	V	320	-	-	5/33/72/72	0/2/2/2
32	LUT	U	418	-	-	2/29/67/67	0/2/2/2
28	CLA	G	316	8	-	7/26/102/115	-
33	BCR	c	509	-	-	4/29/63/63	0/2/2/2
28	CLA	Y	308	-	-	2/21/97/115	-
28	CLA	u	407	21	-	7/35/111/115	-
28	CLA	y	311	24	-	4/27/103/115	-
28	CLA	s	313	-	-	6/15/91/115	-
42	LHG	B	623	-	-	2/39/39/53	-
43	LMN	W	201	-	-	21/50/130/130	0/4/4/4
29	CHL	1	310	1	-	1/14/90/117	-
28	CLA	b	606	3	-	5/39/115/115	-
28	CLA	u	417	21	-	11/33/109/115	-
28	CLA	v	314	-	-	3/15/91/115	-
31	0UR	s	316	-	-	7/39/78/86	0/2/2/2
28	CLA	V	316	15	-	5/31/107/115	-
37	SQD	A	405	-	-	5/38/58/69	0/1/1/1
28	CLA	U	412	21	-	1/27/103/115	-
28	CLA	u	416	21	-	4/27/103/115	-
42	LHG	g	303	28	-	21/41/41/53	-
31	0UR	Y	318	-	-	9/40/79/86	0/2/2/2
31	0UR	n	318	-	-	10/43/82/86	0/2/2/2
28	CLA	V	307	15	-	9/27/103/115	-
28	CLA	n	307	48	-	1/21/97/115	-
28	CLA	v	316	15	-	0/13/89/115	-
28	CLA	C	510	48	-	9/39/115/115	-
28	CLA	C	506	4	-	6/27/103/115	-
31	0UR	G	319	-	-	8/40/79/86	0/2/2/2
38	LMG	K	103	-	-	3/42/62/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
43	LMN	n	322	-	-	27/50/130/130	0/4/4/4
29	CHL	U	408	-	-	5/34/110/117	-
28	CLA	B	611	3	-	6/39/115/115	-
38	LMG	A	408	-	-	6/32/52/70	0/1/1/1
38	LMG	a	417	-	-	0/41/61/70	0/1/1/1
41	DGD	C	516	-	-	23/42/82/95	0/2/2/2
37	SQD	B	617	-	-	1/46/66/69	0/1/1/1
28	CLA	B	608	3	-	5/39/115/115	-
33	BCR	c	507	-	-	4/29/63/63	0/2/2/2
42	LHG	n	303	28	-	6/47/47/53	-
28	CLA	C	505	4	-	2/27/103/115	-
28	CLA	c	521	4	-	6/27/103/115	-
28	CLA	y	305	-	-	9/33/109/115	-
31	0UR	1	312	-	-	10/38/77/86	0/2/2/2
28	CLA	C	519	48	-	5/39/115/115	-
31	0UR	g	318	-	-	5/40/79/86	0/2/2/2
28	CLA	C	504	4	-	10/39/115/115	-
28	CLA	B	602	3	-	2/39/115/115	-
28	CLA	0	303	-	-	6/15/91/115	-
29	CHL	g	310	-	-	13/23/99/117	-
28	CLA	C	503	4	-	4/39/115/115	-
33	BCR	B	614	-	-	5/29/63/63	0/2/2/2
29	CHL	S	306	-	-	26/41/117/117	-
43	LMN	g	301	-	-	13/50/130/130	0/4/4/4
28	CLA	B	616	3	-	8/39/115/115	-
31	0UR	y	317	-	-	10/39/78/86	0/2/2/2
34	PHO	a	404	-	-	2/37/103/103	0/5/6/6
43	LMN	C	518	-	-	18/50/130/130	0/4/4/4
28	CLA	B	601	3	-	6/33/109/115	-
42	LHG	c	527	-	-	12/34/34/53	-
28	CLA	y	313	24	-	3/13/89/115	-
28	CLA	B	612	3	-	5/39/115/115	-
31	0UR	U	419	-	-	11/42/81/86	0/2/2/2
43	LMN	n	301	-	-	19/50/130/130	0/4/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	CLA	d	404	5	-	2/39/115/115	-
28	CLA	s	304	15	-	3/26/102/115	-
38	LMG	b	625	-	-	3/28/48/70	0/1/1/1
28	CLA	c	512	4	-	4/39/115/115	-
29	CHL	V	306	15	-	2/37/113/117	-
29	CHL	V	302	-	-	18/41/117/117	-
28	CLA	b	622	3	-	7/39/115/115	-
28	CLA	G	307	8	-	2/12/88/115	-
33	BCR	d	403	-	-	3/29/63/63	0/2/2/2
29	CHL	n	305	15	-	6/33/109/117	-
42	LHG	l	101	-	-	7/48/48/53	-
28	CLA	d	409	5	-	1/37/113/115	-
28	CLA	B	605	48	-	6/39/115/115	-
30	0IE	n	319	-	-	5/33/72/72	0/2/2/2
38	LMG	c	528	-	-	2/25/45/70	0/1/1/1
28	CLA	B	619	3	-	5/31/107/115	-
28	CLA	1	304	-	-	1/13/89/115	-
28	CLA	y	308	-	-	7/27/103/115	-
28	CLA	c	511	48	-	6/39/115/115	-
31	0UR	0	314	-	-	14/39/78/86	0/2/2/2
29	CHL	S	309	15	-	4/41/117/117	-
38	LMG	a	411	-	-	6/30/50/70	0/1/1/1
41	DGD	a	405	-	-	7/33/73/95	0/2/2/2
28	CLA	B	609	3	-	8/39/115/115	-
33	BCR	t	101	-	-	3/29/63/63	0/2/2/2
41	DGD	C	515	-	-	9/28/68/95	0/2/2/2
43	LMN	Y	301	-	-	18/46/126/130	0/4/4/4
38	LMG	J	101	-	-	2/34/54/70	0/1/1/1
28	CLA	g	314	8	-	18/36/112/115	-
28	CLA	b	607	3	-	8/39/115/115	-
42	LHG	S	301	28	-	7/48/48/53	-
28	CLA	y	306	24	-	4/13/89/115	-
28	CLA	y	310	24	-	3/25/101/115	-
28	CLA	C	513	4	-	2/33/109/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
41	DGD	c	516	-	-	20/38/78/95	0/2/2/2
41	DGD	g	302	-	-	11/37/77/95	0/2/2/2
28	CLA	u	414	42	-	3/29/105/115	-
28	CLA	g	311	8	-	5/39/115/115	-
28	CLA	y	309	-	-	3/30/106/115	-
28	CLA	U	413	42	-	7/36/112/115	-
29	CHL	S	308	-	-	9/41/117/117	-
38	LMG	U	402	-	-	5/25/45/70	0/1/1/1
28	CLA	Y	310	24	-	0/21/97/115	-
43	LMN	G	304	-	-	18/50/130/130	0/4/4/4
37	SQD	z	101	-	-	2/41/61/69	0/1/1/1
41	DGD	c	515	-	-	9/40/80/95	0/2/2/2
32	LUT	y	320	-	-	13/29/67/67	0/2/2/2
29	CHL	S	307	-	-	4/17/93/117	-
46	NEX	G	320	-	-	4/27/83/83	0/3/3/3
28	CLA	A	416	48	-	5/39/115/115	-
28	CLA	c	505	48	-	5/39/115/115	-
29	CHL	N	306	-	-	9/15/91/117	-
42	LHG	D	406	-	-	9/44/44/53	-
28	CLA	u	405	21	-	9/39/115/115	-
28	CLA	s	315	15	-	1/13/89/115	-
38	LMG	w	201	-	-	1/31/51/70	0/1/1/1
28	CLA	v	306	-	-	3/27/103/115	-
42	LHG	b	623	-	-	13/53/53/53	-
29	CHL	y	307	-	-	6/32/108/117	-
38	LMG	A	406	-	-	5/26/46/70	0/1/1/1
29	CHL	s	302	15	-	6/41/117/117	-
30	0IE	v	318	-	-	6/33/72/72	0/2/2/2
31	0UR	y	323	-	-	18/47/86/86	0/2/2/2
38	LMG	A	413	-	-	19/34/54/70	0/1/1/1
42	LHG	D	402	-	-	7/49/49/53	-
28	CLA	b	610	48	-	4/39/115/115	-
28	CLA	U	406	21	-	8/33/109/115	-
28	CLA	C	508	4	-	3/39/115/115	-
28	CLA	S	314	15	-	0/13/89/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	CLA	Y	304	24	-	2/15/91/115	-
38	LMG	M	101	-	-	4/42/62/70	0/1/1/1
31	0UR	Y	323	-	-	13/47/86/86	0/2/2/2
37	SQD	c	501	-	-	4/38/58/69	0/1/1/1
29	CHL	G	317	8	-	17/41/117/117	-
28	CLA	N	311	15	-	6/32/108/115	-
28	CLA	Y	309	-	-	1/21/97/115	-
28	CLA	B	606	3	-	5/39/115/115	-
33	BCR	b	604	-	-	4/29/63/63	0/2/2/2
43	LMN	n	323	-	-	19/46/126/130	0/4/4/4
28	CLA	1	311	1	-	1/12/88/115	-
28	CLA	s	314	-	-	3/39/115/115	-
28	CLA	Y	314	24	-	1/27/103/115	-
43	LMN	g	320	-	-	17/50/130/130	0/4/4/4
29	CHL	g	309	-	-	6/17/93/117	-
28	CLA	S	312	15	-	1/13/89/115	-
28	CLA	b	605	48	-	5/39/115/115	-
31	0UR	y	322	-	-	18/47/86/86	0/2/2/2
28	CLA	S	313	15	-	3/31/107/115	-
29	CHL	y	315	24	-	3/17/93/117	-
29	CHL	Y	307	-	-	7/29/105/117	-
28	CLA	B	621	3	-	4/39/115/115	-
28	CLA	0	306	-	-	1/13/89/115	-
28	CLA	G	313	8	-	0/27/103/115	-
29	CHL	n	309	-	-	0/15/91/117	-
33	BCR	D	403	-	-	3/29/63/63	0/2/2/2
28	CLA	U	404	21	-	11/39/115/115	-
28	CLA	1	302	1	-	0/12/88/115	-
38	LMG	W	202	-	-	3/32/52/70	0/1/1/1
33	BCR	C	507	-	-	2/29/63/63	0/2/2/2
28	CLA	Y	303	24	-	14/27/103/115	-
28	CLA	n	314	42	-	2/33/109/115	-
28	CLA	U	414	21	-	12/27/103/115	-
46	NEX	n	321	-	-	6/27/83/83	0/3/3/3
43	LMN	v	301	-	-	22/50/130/130	0/4/4/4
38	LMG	U	401	-	-	3/32/52/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
43	LMN	Y	302	-	-	17/50/130/130	0/4/4/4
29	CHL	s	307	-	-	0/15/91/117	-
33	BCR	H	101	-	-	5/29/63/63	0/2/2/2
38	LMG	u	404	-	-	1/27/47/70	0/1/1/1
28	CLA	y	312	24	-	2/32/108/115	-
42	LHG	N	301	28	-	13/44/44/53	-
28	CLA	U	415	21	-	20/31/107/115	-
28	CLA	u	413	21	-	6/29/105/115	-
28	CLA	v	305	15	-	2/32/108/115	-
38	LMG	F	201	-	-	0/31/51/70	0/1/1/1
43	LMN	V	301	-	-	13/50/130/130	0/4/4/4
32	LUT	u	419	-	-	2/29/67/67	0/2/2/2
34	PHO	d	407	-	-	9/37/103/103	0/5/6/6
47	XAT	N	318	-	-	10/31/93/93	0/4/4/4
29	CHL	s	309	-	-	12/23/99/117	-
28	CLA	G	305	8	-	2/15/91/115	-
46	NEX	N	319	-	-	20/27/83/83	0/3/3/3
28	CLA	D	409	5	-	4/39/115/115	-
28	CLA	1	303	-	-	11/15/91/115	-
28	CLA	C	509	4	-	7/39/115/115	-
29	CHL	n	310	-	-	4/41/117/117	-
28	CLA	U	407	-	-	4/27/103/115	-
28	CLA	b	615	3	-	3/39/115/115	-
31	0UR	u	420	-	-	7/39/78/86	0/2/2/2
42	LHG	D	405	-	-	12/53/53/53	-
41	DGD	C	520	-	-	16/45/85/95	0/2/2/2
28	CLA	c	506	4	-	1/39/115/115	-
38	LMG	c	526	-	-	4/45/65/70	0/1/1/1
29	CHL	U	405	21	-	1/33/109/117	-
45	HEM	e	101	7,6	-	7/14/54/54	-
28	CLA	v	313	42	-	4/27/103/115	-
46	NEX	V	322	-	-	8/27/83/83	0/3/3/3
28	CLA	G	308	-	-	3/21/97/115	-
33	BCR	K	102	-	-	4/29/63/63	0/2/2/2
38	LMG	d	410	-	-	16/33/53/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
38	LMG	C	523	-	-	4/35/55/70	0/1/1/1
38	LMG	a	414	-	-	23/41/61/70	0/1/1/1
28	CLA	A	407	2	-	0/31/107/115	-
38	LMG	m	101	-	-	16/38/58/70	0/1/1/1
28	CLA	n	317	15	-	3/24/100/115	-
29	CHL	N	302	15	-	13/41/117/117	-
33	BCR	T	101	-	-	4/29/63/63	0/2/2/2
29	CHL	0	310	1	-	1/14/90/117	-
46	NEX	g	319	-	-	8/27/83/83	0/3/3/3
28	CLA	n	316	15	-	2/39/115/115	-
46	NEX	n	302	-	-	6/27/83/83	0/3/3/3
28	CLA	Y	306	24	-	2/12/88/115	-
29	CHL	N	308	-	-	15/37/113/117	-
29	CHL	n	311	-	-	2/23/99/117	-
39	PL9	A	409	-	-	12/53/73/73	0/1/1/1
42	LHG	U	403	28	-	10/31/31/53	-
38	LMG	d	402	-	-	5/44/64/70	0/1/1/1
30	0IE	s	317	-	-	7/33/72/72	0/2/2/2
28	CLA	V	318	15	-	9/25/101/115	-
38	LMG	B	620	-	-	0/38/58/70	0/1/1/1
28	CLA	N	313	15	-	5/25/101/115	-
28	CLA	c	504	4	-	1/39/115/115	-
41	DGD	c	524	-	-	18/34/74/95	0/2/2/2
43	LMN	G	301	-	-	20/50/130/130	0/4/4/4
28	CLA	u	408	-	-	4/24/100/115	-
43	LMN	V	303	-	-	19/50/130/130	0/4/4/4
28	CLA	S	304	15	-	5/26/102/115	-
28	CLA	N	305	-	-	8/19/95/115	-
29	CHL	u	406	21	-	2/33/109/117	-

All (3560) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	y	318	0UR	C43-C3	-39.95	0.96	1.50
31	y	318	0UR	C29-C28	-29.75	1.17	1.54
30	y	319	0IE	C25-C24	-28.15	1.19	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	Y	318	0UR	C43-C3	-27.47	1.13	1.50
31	U	419	0UR	C43-C3	-27.11	1.13	1.50
31	y	322	0UR	C29-C28	-26.49	1.21	1.54
31	U	419	0UR	C29-C28	-26.02	1.22	1.54
31	Y	318	0UR	C29-C28	-24.66	1.23	1.54
31	y	318	0UR	C30-C31	-23.93	1.16	1.50
31	y	317	0UR	C29-C28	-23.92	1.24	1.54
31	0	314	0UR	C29-C28	-23.09	1.25	1.54
30	y	321	0IE	C20-C3	-22.08	1.10	1.51
31	0	313	0UR	C29-C28	-21.93	1.27	1.54
31	y	317	0UR	C43-C3	-21.85	1.20	1.50
31	y	323	0UR	C29-C28	-21.76	1.27	1.54
31	y	318	0UR	C29-C30	-21.72	1.16	1.53
31	1	316	0UR	C29-C28	-21.37	1.27	1.54
31	V	319	0UR	C29-C28	-21.33	1.27	1.54
31	g	318	0UR	C43-C3	-21.31	1.21	1.50
31	Y	322	0UR	C29-C28	-20.80	1.28	1.54
31	y	317	0UR	C37-C23	-20.73	1.13	1.53
30	y	321	0IE	C35-C36	-20.68	1.19	1.51
30	Y	319	0IE	C25-C24	-20.41	1.29	1.54
31	y	318	0UR	C35-C23	-20.25	1.13	1.53
31	Y	322	0UR	C43-C3	-20.08	1.23	1.50
30	y	319	0IE	C26-C27	-20.01	1.21	1.50
31	g	318	0UR	C29-C28	-19.79	1.29	1.54
31	y	322	0UR	C29-C30	-19.42	1.20	1.53
31	y	317	0UR	C24-C25	-19.11	1.24	1.52
31	y	322	0UR	C43-C3	-19.10	1.24	1.50
31	y	317	0UR	C35-C23	-18.99	1.16	1.53
31	y	323	0UR	C33-C32	-18.78	1.15	1.50
31	U	419	0UR	C30-C31	-18.65	1.23	1.50
31	y	318	0UR	C37-C23	-18.62	1.17	1.53
30	y	321	0IE	C38-C32	-18.48	1.17	1.53
31	y	317	0UR	C26-C27	-18.38	1.22	1.51
31	Y	318	0UR	C37-C23	-18.34	1.17	1.53
31	U	419	0UR	C34-C27	-18.34	1.20	1.50
30	Y	321	0IE	C20-C3	-18.33	1.17	1.51
31	U	419	0UR	C29-C30	-17.53	1.23	1.53
31	y	322	0UR	C33-C32	-17.51	1.18	1.50
30	Y	321	0IE	C35-C36	-17.47	1.23	1.51
30	y	319	0IE	C27-C28	-17.32	1.11	1.33
30	y	321	0IE	C21-C7	-17.22	1.15	1.50
31	y	318	0UR	C26-C27	-17.09	1.24	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	y	318	0UR	C36-C28	-16.98	1.16	1.53
31	y	318	0UR	C24-C25	-16.84	1.28	1.52
31	1	316	0UR	C43-C3	-16.74	1.27	1.50
30	y	319	0IE	C41-C28	-16.74	1.19	1.50
31	y	318	0UR	O44-C43	-16.68	1.07	1.44
30	y	319	0IE	C25-C26	-16.62	1.25	1.53
28	U	414	CLA	MG-NB	-16.62	1.72	2.05
31	y	318	0UR	O42-C2	-16.58	0.89	1.23
31	y	318	0UR	O40-C30	-16.50	1.12	1.43
29	V	309	CHL	MG-ND	-16.45	1.73	2.05
29	n	308	CHL	MG-ND	-16.39	1.73	2.05
31	y	323	0UR	C35-C23	-16.33	1.21	1.53
31	y	318	0UR	C38-C28	-16.31	1.18	1.53
31	Y	322	0UR	C29-C30	-16.30	1.25	1.53
30	Y	321	0IE	C25-C24	-16.28	1.34	1.54
31	y	322	0UR	C30-C31	-16.15	1.27	1.50
31	y	318	0UR	C22-C16	-16.12	1.17	1.50
31	y	323	0UR	C31-C32	-16.09	1.13	1.33
31	y	317	0UR	C20-C7	-16.08	1.17	1.50
30	y	321	0IE	C33-C34	-16.04	1.29	1.52
31	y	317	0UR	C34-C27	-15.97	1.24	1.50
28	Y	311	CLA	MG-ND	-15.91	1.74	2.05
30	y	321	0IE	C39-C32	-15.88	1.22	1.53
31	y	322	0UR	C34-C27	-15.81	1.25	1.50
31	y	317	0UR	C29-C30	-15.78	1.26	1.53
31	Y	317	0UR	C24-C25	-15.74	1.29	1.52
28	Y	303	CLA	MG-NB	-15.41	1.75	2.05
31	y	317	0UR	C26-C25	-15.30	1.25	1.52
30	y	321	0IE	C25-C24	-15.29	1.35	1.54
31	y	318	0UR	C20-C7	-15.28	1.19	1.50
31	V	319	0UR	C26-C27	-15.28	1.27	1.51
31	y	323	0UR	C24-C25	-15.26	1.30	1.52
31	Y	317	0UR	C35-C23	-15.24	1.23	1.53
31	y	318	0UR	C33-C32	-15.22	1.22	1.50
31	y	323	0UR	C37-C23	-15.22	1.23	1.53
31	y	317	0UR	C36-C28	-15.20	1.20	1.53
31	y	322	0UR	C26-C25	-15.13	1.25	1.52
31	y	322	0UR	C26-C27	-14.94	1.27	1.51
30	y	319	0IE	C44-C24	-14.94	1.21	1.53
31	Y	317	0UR	C29-C28	-14.92	1.36	1.54
31	U	419	0UR	O44-C43	-14.82	1.11	1.44
31	Y	318	0UR	C23-C1	-14.73	1.21	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	V	319	0UR	C37-C23	-14.66	1.24	1.53
31	y	323	0UR	C22-C16	-14.49	1.20	1.50
31	0	314	0UR	C36-C28	-14.28	1.22	1.53
31	Y	318	0UR	C30-C31	-14.27	1.29	1.50
31	y	323	0UR	C36-C28	-14.27	1.22	1.53
31	V	319	0UR	C30-C31	-14.21	1.30	1.50
31	U	419	0UR	C37-C23	-14.18	1.25	1.53
31	V	319	0UR	C35-C23	-14.13	1.25	1.53
31	y	318	0UR	C21-C12	-14.09	1.21	1.50
31	y	318	0UR	C31-C32	-14.09	1.15	1.33
31	U	419	0UR	O40-C30	-14.00	1.17	1.43
31	Y	322	0UR	C33-C32	-13.89	1.24	1.50
31	Y	318	0UR	C26-C27	-13.79	1.29	1.51
31	g	318	0UR	C37-C23	-13.78	1.26	1.53
31	V	319	0UR	C33-C32	-13.76	1.25	1.50
31	Y	322	0UR	C26-C27	-13.65	1.29	1.51
30	Y	321	0IE	C33-C34	-13.63	1.32	1.52
31	y	322	0UR	C35-C23	-13.62	1.27	1.53
31	y	322	0UR	C37-C23	-13.55	1.27	1.53
31	y	317	0UR	C33-C32	-13.49	1.25	1.50
31	y	317	0UR	O42-C2	-13.48	0.95	1.23
31	U	419	0UR	C36-C28	-13.46	1.24	1.53
31	1	316	0UR	C26-C27	-13.46	1.30	1.51
31	0	314	0UR	C38-C28	-13.45	1.24	1.53
31	U	419	0UR	C38-C28	-13.44	1.24	1.53
30	y	319	0IE	O42-C26	-13.41	1.18	1.43
31	y	322	0UR	C21-C12	-13.38	1.23	1.50
30	y	321	0IE	C35-C34	-13.32	1.28	1.52
31	Y	317	0UR	C37-C23	-13.32	1.27	1.53
31	V	319	0UR	C24-C25	-13.28	1.33	1.52
31	y	322	0UR	C22-C16	-13.28	1.23	1.50
28	N	304	CLA	MG-NB	-13.27	1.79	2.05
31	Y	318	0UR	C29-C30	-13.27	1.30	1.53
31	0	314	0UR	C24-C25	-13.22	1.33	1.52
30	y	321	0IE	C33-C32	-13.20	1.13	1.54
31	y	317	0UR	O44-C43	-13.19	1.14	1.44
30	y	319	0IE	C23-C16	-13.14	1.23	1.50
31	y	322	0UR	C24-C25	-13.14	1.33	1.52
30	y	319	0IE	C22-C12	-13.12	1.23	1.50
31	y	322	0UR	C27-C1	-13.11	1.15	1.34
31	y	322	0UR	C31-C32	-13.10	1.16	1.33
31	y	323	0UR	C43-C3	-13.00	1.32	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	y	323	0UR	C29-C30	-12.99	1.31	1.53
31	y	318	0UR	C23-C1	-12.96	1.25	1.53
31	y	322	0UR	O42-C2	-12.92	0.97	1.23
31	Y	322	0UR	C30-C31	-12.89	1.31	1.50
31	Y	318	0UR	C34-C27	-12.84	1.29	1.50
31	U	419	0UR	C21-C12	-12.83	1.24	1.50
31	U	419	0UR	C31-C32	-12.73	1.17	1.33
31	0	314	0UR	C34-C27	-12.72	1.30	1.50
31	1	316	0UR	C38-C28	-12.70	1.26	1.53
31	1	316	0UR	C23-C1	-12.66	1.26	1.53
31	y	323	0UR	C34-C27	-12.59	1.30	1.50
30	y	321	0IE	O29-C20	-12.57	0.98	1.41
31	V	319	0UR	C34-C27	-12.57	1.30	1.50
29	g	316	CHL	MG-NB	-12.51	1.81	2.05
28	S	310	CLA	MG-NB	-12.44	1.81	2.05
31	Y	322	0UR	C21-C12	-12.41	1.25	1.50
30	y	321	0IE	C26-C27	-12.39	1.32	1.50
31	U	419	0UR	C35-C23	-12.39	1.29	1.53
31	V	319	0UR	C43-C3	-12.37	1.33	1.50
31	y	323	0UR	C26-C27	-12.35	1.31	1.51
31	1	316	0UR	C36-C28	-12.32	1.26	1.53
31	1	316	0UR	C35-C23	-12.31	1.29	1.53
31	U	419	0UR	C24-C25	-12.30	1.34	1.52
31	y	318	0UR	C26-C25	-12.25	1.30	1.52
31	Y	322	0UR	C34-C27	-12.19	1.30	1.50
31	0	314	0UR	C43-C3	-12.16	1.33	1.50
31	U	419	0UR	C22-C16	-12.13	1.25	1.50
31	1	316	0UR	C31-C32	-12.12	1.18	1.33
31	Y	317	0UR	C43-C3	-12.07	1.34	1.50
31	U	419	0UR	C26-C27	-12.06	1.32	1.51
31	Y	317	0UR	C26-C27	-12.00	1.32	1.51
30	y	321	0IE	C37-C36	-11.99	1.31	1.50
31	y	322	0UR	C20-C7	-11.98	1.26	1.50
31	g	318	0UR	C29-C30	-11.98	1.32	1.53
31	0	314	0UR	C37-C23	-11.94	1.30	1.53
31	0	314	0UR	C30-C31	-11.91	1.33	1.50
31	Y	318	0UR	C33-C32	-11.90	1.28	1.50
31	U	419	0UR	O42-C2	-11.89	0.99	1.23
31	V	319	0UR	C38-C28	-11.85	1.27	1.53
31	y	317	0UR	C24-C23	-11.77	1.17	1.54
28	Y	313	CLA	MG-ND	-11.69	1.82	2.05
30	Y	321	0IE	C39-C32	-11.67	1.30	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	Y	317	0UR	C26-C25	-11.65	1.31	1.52
31	0	314	0UR	C26-C27	-11.61	1.33	1.51
30	Y	321	0IE	C21-C7	-11.60	1.26	1.50
28	Y	311	CLA	MG-NC	-11.53	1.78	2.06
31	1	316	0UR	C37-C23	-11.51	1.31	1.53
28	y	308	CLA	MG-ND	-11.49	1.83	2.05
31	y	323	0UR	C21-C12	-11.48	1.27	1.50
31	V	319	0UR	C29-C30	-11.47	1.33	1.53
30	y	321	0IE	C22-C12	-11.46	1.27	1.50
31	Y	317	0UR	O42-C2	-11.43	1.00	1.23
31	Y	318	0UR	O42-C2	-11.42	1.00	1.23
31	y	317	0UR	C21-C12	-11.40	1.27	1.50
30	Y	321	0IE	C38-C32	-11.34	1.31	1.53
30	y	321	0IE	O1-C2	-11.31	1.00	1.23
31	Y	322	0UR	C37-C23	-11.30	1.31	1.53
31	y	323	0UR	C26-C25	-11.30	1.32	1.52
31	g	318	0UR	C35-C23	-11.26	1.31	1.53
30	y	321	0IE	C23-C16	-11.26	1.27	1.50
30	Y	321	0IE	C26-C27	-11.17	1.34	1.50
30	Y	319	0IE	C44-C24	-11.10	1.29	1.53
30	Y	321	0IE	C33-C32	-11.10	1.20	1.54
30	Y	321	0IE	C32-C31	-11.08	1.29	1.53
31	y	317	0UR	C22-C16	-11.07	1.28	1.50
31	y	318	0UR	C34-C27	-11.05	1.32	1.50
31	y	323	0UR	O42-C2	-11.03	1.00	1.23
31	g	318	0UR	C24-C25	-10.87	1.36	1.52
28	y	306	CLA	MG-NB	-10.87	1.84	2.05
28	g	313	CLA	MG-ND	-10.87	1.84	2.05
31	Y	318	0UR	C21-C12	-10.85	1.28	1.50
31	g	318	0UR	C34-C27	-10.82	1.33	1.50
31	U	419	0UR	C11-C12	-10.81	1.21	1.35
31	0	314	0UR	C35-C23	-10.81	1.32	1.53
28	Y	311	CLA	C1D-ND	-10.78	1.24	1.37
31	1	316	0UR	C26-C25	-10.76	1.33	1.52
31	1	316	0UR	C20-C7	-10.76	1.28	1.50
31	Y	322	0UR	C31-C32	-10.72	1.19	1.33
31	0	314	0UR	C27-C1	-10.72	1.19	1.34
31	Y	317	0UR	C23-C1	-10.65	1.30	1.53
31	1	316	0UR	C33-C32	-10.65	1.30	1.50
31	V	319	0UR	O44-C43	-10.64	1.20	1.44
31	U	419	0UR	C20-C7	-10.60	1.29	1.50
31	Y	317	0UR	C29-C30	-10.57	1.35	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	0	314	0UR	C20-C7	-10.56	1.29	1.50
31	Y	318	0UR	C20-C7	-10.55	1.29	1.50
31	y	317	0UR	C30-C31	-10.54	1.35	1.50
31	1	316	0UR	C29-C30	-10.54	1.35	1.53
28	1	303	CLA	C1D-C2D	-10.53	1.24	1.45
31	V	319	0UR	C31-C32	-10.52	1.20	1.33
31	y	322	0UR	C38-C28	-10.52	1.30	1.53
30	Y	319	0IE	C41-C28	-10.48	1.31	1.50
31	y	323	0UR	C27-C1	-10.43	1.19	1.34
31	y	322	0UR	O40-C30	-10.41	1.24	1.43
31	V	319	0UR	C36-C28	-10.39	1.31	1.53
31	0	313	0UR	C26-C27	-10.33	1.35	1.51
30	Y	321	0IE	C37-C36	-10.33	1.34	1.50
31	Y	318	0UR	C31-C32	-10.31	1.20	1.33
30	y	321	0IE	C32-C31	-10.29	1.31	1.53
31	Y	322	0UR	O44-C43	-10.29	1.21	1.44
31	y	323	0UR	C38-C28	-10.28	1.31	1.53
31	y	318	0UR	C24-C23	-10.26	1.22	1.54
29	g	316	CHL	C1B-NB	-10.25	1.25	1.37
31	Y	322	0UR	O40-C30	-10.22	1.24	1.43
28	1	303	CLA	CHD-C1D	-10.21	1.18	1.38
30	Y	319	0IE	C43-C24	-10.17	1.31	1.53
31	V	319	0UR	C26-C25	-10.17	1.34	1.52
30	y	319	0IE	C20-C3	-10.16	1.32	1.51
30	Y	321	0IE	C35-C34	-10.13	1.34	1.52
31	y	322	0UR	O44-C43	-10.13	1.21	1.44
30	y	321	0IE	O40-C34	-10.10	1.13	1.43
28	Y	311	CLA	C1C-C2C	-10.08	1.25	1.44
31	y	322	0UR	C36-C28	-10.03	1.31	1.53
31	0	314	0UR	C29-C30	-10.03	1.36	1.53
28	y	308	CLA	C1C-C2C	-10.02	1.25	1.44
31	y	323	0UR	O40-C30	-10.02	1.24	1.43
31	g	318	0UR	C20-C7	-10.01	1.30	1.50
31	Y	318	0UR	O40-C30	-10.00	1.24	1.43
31	Y	317	0UR	C20-C7	-9.98	1.30	1.50
31	0	313	0UR	C36-C28	-9.94	1.32	1.53
30	Y	321	0IE	C22-C12	-9.93	1.30	1.50
31	1	316	0UR	C24-C25	-9.87	1.38	1.52
28	U	414	CLA	C1B-NB	-9.86	1.25	1.37
30	Y	319	0IE	O42-C26	-9.85	1.25	1.43
31	U	419	0UR	C33-C32	-9.80	1.32	1.50
31	y	318	0UR	C6-C7	-9.80	1.24	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	y	319	0IE	C37-C36	-9.78	1.34	1.50
31	1	316	0UR	C30-C31	-9.73	1.36	1.50
31	g	318	0UR	C26-C27	-9.69	1.36	1.51
30	y	319	0IE	C35-C36	-9.69	1.36	1.51
31	Y	322	0UR	C24-C25	-9.67	1.38	1.52
29	V	302	CHL	C1D-C2D	-9.65	1.26	1.45
31	g	318	0UR	C30-C31	-9.62	1.36	1.50
31	Y	317	0UR	C34-C27	-9.62	1.35	1.50
31	Y	322	0UR	O44-C45	-9.59	1.11	1.34
31	V	319	0UR	O42-C2	-9.59	1.03	1.23
30	Y	319	0IE	C27-C28	-9.54	1.21	1.33
30	y	321	0IE	C44-C24	-9.53	1.32	1.53
30	y	319	0IE	C11-C12	-9.51	1.23	1.35
28	N	304	CLA	MG-NC	-9.51	1.83	2.06
30	Y	319	0IE	C25-C26	-9.48	1.37	1.53
29	v	303	CHL	MG-NA	-9.48	1.83	2.06
31	1	316	0UR	C34-C27	-9.47	1.35	1.50
31	y	323	0UR	C24-C23	-9.46	1.25	1.54
31	y	323	0UR	C20-C7	-9.45	1.31	1.50
29	n	308	CHL	C1D-C2D	-9.38	1.26	1.45
31	Y	318	0UR	C36-C28	-9.37	1.33	1.53
31	y	318	0UR	C27-C1	-9.33	1.21	1.34
28	V	307	CLA	C1B-NB	-9.32	1.26	1.37
31	y	317	0UR	C38-C28	-9.29	1.33	1.53
31	Y	322	0UR	C27-C1	-9.28	1.21	1.34
31	g	318	0UR	C33-C32	-9.24	1.33	1.50
28	S	310	CLA	C1B-NB	-9.22	1.26	1.37
31	Y	322	0UR	C22-C16	-9.22	1.31	1.50
29	N	308	CHL	C1D-C2D	-9.22	1.27	1.45
31	V	319	0UR	C20-C7	-9.18	1.31	1.50
31	g	318	0UR	C38-C28	-9.17	1.33	1.53
31	g	318	0UR	C6-C7	-9.16	1.26	1.45
31	V	319	0UR	O44-C45	-9.13	1.12	1.34
30	y	321	0IE	C27-C28	-9.11	1.21	1.33
31	V	319	0UR	C21-C12	-9.11	1.32	1.50
31	1	316	0UR	O44-C43	-9.09	1.24	1.44
31	Y	322	0UR	C36-C28	-9.08	1.33	1.53
28	y	306	CLA	C4C-C3C	-9.08	1.29	1.45
31	V	319	0UR	C22-C16	-9.07	1.32	1.50
28	Y	311	CLA	C4C-C3C	-9.02	1.29	1.45
31	V	319	0UR	O40-C30	-9.00	1.26	1.43
30	Y	319	0IE	C26-C27	-8.97	1.37	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	y	308	CLA	C1B-NB	-8.96	1.26	1.37
31	y	317	0UR	C31-C32	-8.95	1.21	1.33
31	Y	318	0UR	C38-C28	-8.93	1.34	1.53
31	g	318	0UR	O44-C43	-8.91	1.24	1.44
29	V	302	CHL	C1B-NB	-8.89	1.26	1.37
31	Y	317	0UR	C38-C28	-8.86	1.34	1.53
31	U	419	0UR	C26-C25	-8.83	1.36	1.52
28	y	308	CLA	C4C-C3C	-8.82	1.29	1.45
31	y	322	0UR	O57-C45	-8.80	1.03	1.21
31	y	318	0UR	O44-C45	-8.80	1.13	1.34
31	0	313	0UR	C29-C30	-8.77	1.38	1.53
29	N	302	CHL	C1D-C2D	-8.72	1.28	1.45
31	Y	317	0UR	C24-C23	-8.71	1.27	1.54
30	Y	321	0IE	O1-C2	-8.70	1.05	1.23
29	V	311	CHL	C1D-C2D	-8.65	1.28	1.45
29	V	302	CHL	MG-ND	-8.63	1.88	2.05
28	G	308	CLA	MG-ND	-8.62	1.88	2.05
31	y	323	0UR	C23-C1	-8.60	1.35	1.53
31	y	322	0UR	O44-C45	-8.59	1.14	1.34
31	Y	322	0UR	C46-C45	-8.59	1.28	1.48
30	Y	321	0IE	C36-C31	-8.58	1.22	1.34
31	Y	318	0UR	C6-C7	-8.58	1.27	1.45
31	Y	322	0UR	C38-C28	-8.57	1.35	1.53
28	U	414	CLA	C1D-ND	-8.57	1.27	1.37
31	0	314	0UR	C24-C23	-8.55	1.28	1.54
28	U	414	CLA	C1D-C2D	-8.54	1.28	1.45
31	y	317	0UR	C23-C1	-8.53	1.35	1.53
28	G	308	CLA	C4C-C3C	-8.49	1.30	1.45
31	0	313	0UR	C31-C32	-8.48	1.22	1.33
31	1	316	0UR	C28-C19	-8.48	1.32	1.56
31	0	313	0UR	C30-C31	-8.48	1.38	1.50
31	V	319	0UR	O57-C45	-8.47	1.04	1.21
30	y	321	0IE	C43-C24	-8.45	1.35	1.53
31	g	318	0UR	C22-C16	-8.42	1.33	1.50
30	Y	319	0IE	C32-C31	-8.41	1.35	1.53
29	g	316	CHL	C1D-C2D	-8.41	1.28	1.45
31	Y	322	0UR	C23-C1	-8.40	1.35	1.53
28	Y	311	CLA	C1D-C2D	-8.40	1.28	1.45
30	y	319	0IE	C19-C18	-8.40	1.38	1.50
31	y	317	0UR	O40-C30	-8.34	1.27	1.43
31	Y	317	0UR	O44-C43	-8.32	1.25	1.44
28	Y	313	CLA	C1C-C2C	-8.31	1.28	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	Y	322	0UR	O42-C2	-8.26	1.06	1.23
31	Y	318	0UR	C11-C12	-8.26	1.24	1.35
31	Y	322	0UR	C35-C23	-8.25	1.37	1.53
31	y	323	0UR	C30-C31	-8.25	1.38	1.50
28	Y	311	CLA	C1C-NC	-8.25	1.25	1.37
29	v	303	CHL	MG-NB	-8.25	1.89	2.05
28	Y	303	CLA	C1C-C2C	-8.24	1.28	1.44
31	g	318	0UR	C24-C23	-8.22	1.29	1.54
31	g	318	0UR	C21-C12	-8.20	1.33	1.50
28	y	308	CLA	C1D-C2D	-8.20	1.29	1.45
29	V	311	CHL	C4C-C3C	-8.19	1.30	1.45
28	V	307	CLA	C1C-C2C	-8.18	1.28	1.44
28	Y	303	CLA	C4C-C3C	-8.15	1.31	1.45
28	Y	303	CLA	C1C-NC	-8.15	1.25	1.37
31	g	318	0UR	C36-C28	-8.14	1.36	1.53
29	V	302	CHL	C4C-C3C	-8.11	1.31	1.45
31	0	314	0UR	O44-C43	-8.11	1.26	1.44
29	V	313	CHL	C1B-NB	-8.10	1.27	1.37
31	0	314	0UR	O44-C45	-8.10	1.15	1.34
28	Y	303	CLA	C1B-NB	-8.09	1.27	1.37
28	Y	311	CLA	C1B-NB	-8.09	1.27	1.37
28	S	310	CLA	C1C-C2C	-8.09	1.28	1.44
28	1	303	CLA	MG-ND	-8.08	1.89	2.05
31	y	323	0UR	C46-C45	-8.07	1.29	1.48
29	v	307	CHL	MG-ND	-8.06	1.89	2.05
28	V	307	CLA	C4C-C3C	-8.06	1.31	1.45
30	Y	321	0IE	C44-C24	-8.04	1.36	1.53
28	1	303	CLA	C4D-ND	-8.04	1.26	1.37
31	g	318	0UR	O40-C30	-7.98	1.28	1.43
28	y	306	CLA	C4D-ND	-7.98	1.26	1.37
31	0	313	0UR	C43-C3	-7.97	1.39	1.50
28	U	414	CLA	C1C-C2C	-7.96	1.29	1.44
30	Y	319	0IE	C22-C12	-7.95	1.34	1.50
28	g	313	CLA	C1D-C2D	-7.94	1.29	1.45
29	V	313	CHL	C4C-C3C	-7.93	1.31	1.45
31	V	319	0UR	C24-C23	-7.93	1.30	1.54
31	Y	318	0UR	O44-C43	-7.93	1.26	1.44
28	y	308	CLA	MG-NB	-7.91	1.90	2.05
28	S	310	CLA	C1D-ND	-7.88	1.28	1.37
31	Y	317	0UR	C33-C32	-7.86	1.36	1.50
30	0	312	0IE	C39-C32	-7.83	1.38	1.53
29	G	317	CHL	C1B-NB	-7.82	1.28	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	1	303	CLA	C1D-ND	-7.81	1.28	1.37
31	y	322	0UR	C11-C12	-7.79	1.25	1.35
28	Y	311	CLA	C3D-C4D	-7.76	1.26	1.44
29	V	311	CHL	C3D-C4D	-7.76	1.26	1.44
28	g	313	CLA	C1C-C2C	-7.75	1.29	1.44
28	Y	303	CLA	C1D-C2D	-7.74	1.30	1.45
29	v	307	CHL	C1D-C2D	-7.74	1.30	1.45
29	v	303	CHL	C1D-C2D	-7.72	1.30	1.45
30	Y	321	0IE	C25-C26	-7.70	1.40	1.53
30	y	321	0IE	C41-C28	-7.69	1.36	1.50
31	1	316	0UR	C24-C23	-7.68	1.30	1.54
31	0	314	0UR	C23-C1	-7.68	1.37	1.53
28	S	310	CLA	C4C-C3C	-7.67	1.31	1.45
30	Y	321	0IE	O29-C20	-7.65	1.15	1.41
28	G	308	CLA	C1C-C2C	-7.64	1.29	1.44
29	N	308	CHL	C1B-NB	-7.63	1.28	1.37
28	Y	311	CLA	C4D-ND	-7.62	1.27	1.37
30	y	319	0IE	C38-C32	-7.62	1.38	1.53
31	0	314	0UR	C31-C32	-7.62	1.23	1.33
30	Y	321	0IE	C27-C28	-7.61	1.23	1.33
31	Y	322	0UR	C11-C12	-7.61	1.25	1.35
29	s	306	CHL	MG-NB	-7.61	1.90	2.05
30	y	321	0IE	C36-C31	-7.59	1.23	1.34
28	V	307	CLA	C3D-C4D	-7.58	1.27	1.44
28	g	312	CLA	C1C-C2C	-7.57	1.29	1.44
30	y	319	0IE	C15-C16	-7.56	1.25	1.35
31	y	318	0UR	C41-C2	-7.55	1.21	1.51
31	y	318	0UR	C28-C19	-7.53	1.35	1.56
31	y	317	0UR	C8-C7	-7.53	1.25	1.35
31	U	419	0UR	C24-C23	-7.52	1.31	1.54
28	g	314	CLA	C1C-C2C	-7.51	1.30	1.44
30	y	319	0IE	C43-C24	-7.50	1.37	1.53
31	Y	322	0UR	C26-C25	-7.49	1.39	1.52
29	G	317	CHL	C1D-ND	-7.47	1.28	1.37
31	y	323	0UR	O44-C43	-7.46	1.27	1.44
30	y	319	0IE	C21-C7	-7.46	1.35	1.50
31	U	419	0UR	O57-C45	-7.46	1.06	1.21
28	Y	313	CLA	C1D-ND	-7.44	1.28	1.37
28	y	306	CLA	C1C-C2C	-7.44	1.30	1.44
31	0	314	0UR	C33-C32	-7.44	1.36	1.50
28	S	310	CLA	C1D-C2D	-7.43	1.30	1.45
31	Y	317	0UR	C8-C7	-7.40	1.26	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	N	302	CHL	C4C-C3C	-7.40	1.32	1.45
28	g	314	CLA	C1C-NC	-7.37	1.26	1.37
31	V	319	0UR	C27-C1	-7.37	1.23	1.34
31	Y	317	0UR	C30-C31	-7.37	1.39	1.50
29	g	316	CHL	C4D-ND	-7.36	1.27	1.37
29	g	316	CHL	C3D-C4D	-7.34	1.27	1.44
31	Y	318	0UR	C35-C23	-7.33	1.39	1.53
30	0	312	0IE	C35-C36	-7.32	1.39	1.51
30	y	321	0IE	C8-C7	-7.31	1.26	1.35
31	Y	318	0UR	C28-C19	-7.31	1.36	1.56
28	y	308	CLA	C3D-C4D	-7.30	1.27	1.44
31	0	313	0UR	C26-C25	-7.30	1.39	1.52
31	0	314	0UR	O40-C30	-7.30	1.29	1.43
28	g	314	CLA	C4C-C3C	-7.29	1.32	1.45
30	Y	321	0IE	O40-C34	-7.29	1.21	1.43
31	y	318	0UR	C46-C45	-7.28	1.31	1.48
29	G	317	CHL	C1D-C2D	-7.26	1.31	1.45
29	v	303	CHL	C1B-NB	-7.26	1.28	1.37
30	Y	321	0IE	C41-C28	-7.25	1.37	1.50
29	S	306	CHL	MG-NB	-7.25	1.91	2.05
31	U	419	0UR	C27-C1	-7.25	1.23	1.34
31	y	317	0UR	C27-C1	-7.24	1.23	1.34
28	y	308	CLA	C1C-NC	-7.24	1.27	1.37
29	N	308	CHL	C4C-C3C	-7.23	1.32	1.45
31	g	318	0UR	C27-C1	-7.21	1.24	1.34
29	n	308	CHL	C4D-ND	-7.18	1.27	1.37
29	G	317	CHL	C4C-C3C	-7.18	1.32	1.45
31	y	322	0UR	C15-C16	-7.17	1.26	1.35
31	y	317	0UR	O39-C25	-7.16	1.22	1.43
29	V	313	CHL	C1D-C2D	-7.16	1.31	1.45
28	S	310	CLA	C1C-NC	-7.15	1.27	1.37
31	g	318	0UR	C28-C19	-7.13	1.36	1.56
31	y	323	0UR	O57-C45	-7.13	1.06	1.21
28	y	306	CLA	C1D-C2D	-7.12	1.31	1.45
30	y	319	0IE	C8-C7	-7.12	1.26	1.35
28	U	414	CLA	C4C-C3C	-7.11	1.32	1.45
28	0	307	CLA	C1C-C2C	-7.09	1.30	1.44
28	S	310	CLA	C4D-ND	-7.09	1.28	1.37
28	Y	311	CLA	C3C-C2C	-7.07	1.21	1.36
29	n	308	CHL	C3D-C4D	-7.07	1.28	1.44
29	V	311	CHL	C1D-ND	-7.07	1.29	1.37
31	0	314	0UR	C21-C12	-7.06	1.36	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	V	313	CHL	C3D-C4D	-7.05	1.28	1.44
28	Y	313	CLA	C1D-C2D	-7.03	1.31	1.45
31	V	319	0UR	C46-C45	-7.03	1.31	1.48
31	U	419	0UR	C28-C19	-7.01	1.36	1.56
28	y	308	CLA	C4D-ND	-7.01	1.28	1.37
29	N	308	CHL	C3D-C4D	-7.00	1.28	1.44
29	n	308	CHL	C1D-ND	-7.00	1.29	1.37
28	Y	303	CLA	C3D-C4D	-6.99	1.28	1.44
28	g	313	CLA	C1B-NB	-6.99	1.29	1.37
28	g	312	CLA	C4C-C3C	-6.98	1.33	1.45
28	U	414	CLA	CHD-C1D	-6.97	1.24	1.38
28	V	307	CLA	C1D-C2D	-6.96	1.31	1.45
30	0	312	0IE	C36-C31	-6.95	1.24	1.34
31	y	323	0UR	C15-C16	-6.94	1.26	1.35
28	G	308	CLA	C1B-NB	-6.93	1.29	1.37
31	y	317	0UR	C46-C45	-6.93	1.32	1.48
31	U	419	0UR	O39-C25	-6.93	1.22	1.43
31	Y	317	0UR	C31-C32	-6.92	1.24	1.33
28	Y	303	CLA	C1D-ND	-6.91	1.29	1.37
28	U	414	CLA	C3D-C4D	-6.90	1.28	1.44
29	G	317	CHL	MG-ND	-6.88	1.92	2.05
29	N	302	CHL	C4D-ND	-6.88	1.28	1.37
29	V	309	CHL	C1D-C2D	-6.87	1.31	1.45
28	g	313	CLA	C1B-C2B	-6.87	1.27	1.43
28	V	307	CLA	C1B-C2B	-6.86	1.27	1.43
28	g	313	CLA	C4C-C3C	-6.85	1.33	1.45
29	s	306	CHL	C1D-C2D	-6.85	1.31	1.45
28	1	303	CLA	C1C-NC	-6.84	1.27	1.37
31	1	316	0UR	C21-C12	-6.83	1.36	1.50
29	v	307	CHL	C4C-C3C	-6.82	1.33	1.45
31	Y	322	0UR	C24-C23	-6.81	1.33	1.54
29	V	302	CHL	C3D-C4D	-6.80	1.28	1.44
31	y	322	0UR	C24-C23	-6.79	1.33	1.54
28	N	304	CLA	C1C-C2C	-6.79	1.31	1.44
32	y	320	LUT	C32-C33	-6.76	1.31	1.45
31	0	313	0UR	O42-C2	-6.76	1.09	1.23
31	g	318	0UR	C23-C1	-6.75	1.39	1.53
28	y	308	CLA	C1D-ND	-6.74	1.29	1.37
31	y	318	0UR	C8-C7	-6.74	1.26	1.35
28	U	414	CLA	C4D-ND	-6.73	1.28	1.37
28	1	303	CLA	C1B-NB	-6.72	1.29	1.37
31	Y	318	0UR	C22-C16	-6.71	1.37	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	Y	322	0UR	C13-C12	-6.70	1.31	1.45
29	V	311	CHL	C1B-NB	-6.70	1.29	1.37
30	0	312	0IE	C8-C7	-6.70	1.26	1.35
31	1	316	0UR	O44-C45	-6.70	1.18	1.34
28	y	306	CLA	C1B-NB	-6.70	1.29	1.37
28	1	303	CLA	C4C-C3C	-6.69	1.33	1.45
29	S	306	CHL	C1D-C2D	-6.69	1.32	1.45
31	y	323	0UR	O39-C25	-6.68	1.23	1.43
29	n	308	CHL	C4C-C3C	-6.68	1.33	1.45
30	Y	321	0IE	C8-C7	-6.67	1.26	1.35
29	V	313	CHL	MG-ND	-6.67	1.92	2.05
29	G	317	CHL	C3D-C4D	-6.67	1.29	1.44
30	Y	319	0IE	C23-C16	-6.66	1.37	1.50
31	g	318	0UR	C31-C32	-6.66	1.24	1.33
31	1	316	0UR	C22-C16	-6.65	1.37	1.50
31	y	318	0UR	C11-C12	-6.64	1.27	1.35
28	N	304	CLA	C1D-C2D	-6.62	1.32	1.45
28	y	308	CLA	C1B-C2B	-6.62	1.27	1.43
31	0	313	0UR	C34-C27	-6.62	1.40	1.50
28	g	314	CLA	C1D-C2D	-6.61	1.32	1.45
29	V	309	CHL	C1B-NB	-6.60	1.29	1.37
30	Y	321	0IE	C24-C19	-6.60	1.37	1.56
31	y	318	0UR	O57-C45	-6.59	1.08	1.21
29	N	308	CHL	C4D-ND	-6.57	1.28	1.37
28	V	307	CLA	MG-ND	-6.56	1.92	2.05
28	N	304	CLA	C4C-C3C	-6.56	1.33	1.45
31	y	317	0UR	O57-C45	-6.56	1.08	1.21
31	Y	317	0UR	C27-C1	-6.55	1.24	1.34
28	G	308	CLA	C1D-C2D	-6.55	1.32	1.45
31	0	313	0UR	C37-C23	-6.55	1.40	1.53
29	s	306	CHL	MG-ND	-6.53	1.92	2.05
31	0	313	0UR	C33-C32	-6.53	1.38	1.50
29	G	317	CHL	C4D-ND	-6.48	1.28	1.37
29	N	308	CHL	C1D-ND	-6.48	1.29	1.37
28	y	306	CLA	C1C-NC	-6.47	1.28	1.37
28	Y	311	CLA	C1B-C2B	-6.46	1.28	1.43
28	g	314	CLA	C4D-ND	-6.46	1.28	1.37
30	Y	319	0IE	C38-C32	-6.45	1.41	1.53
31	Y	318	0UR	C24-C25	-6.44	1.43	1.52
28	y	306	CLA	C3D-C4D	-6.44	1.29	1.44
32	y	320	LUT	C8-C9	-6.44	1.32	1.45
29	N	302	CHL	MG-ND	-6.44	1.93	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	y	321	0IE	C24-C19	-6.43	1.38	1.56
30	0	312	0IE	C21-C7	-6.43	1.37	1.50
31	y	322	0UR	C17-C16	-6.42	1.32	1.45
29	V	309	CHL	MG-NC	-6.42	1.91	2.06
28	y	306	CLA	MG-ND	-6.41	1.93	2.05
29	N	308	CHL	MG-NB	-6.41	1.93	2.05
29	v	307	CHL	C3D-C4D	-6.40	1.29	1.44
31	Y	317	0UR	O57-C45	-6.38	1.08	1.21
30	y	319	0IE	C33-C32	-6.37	1.34	1.54
31	y	323	0UR	C19-C18	-6.36	1.41	1.50
30	y	321	0IE	O42-C26	-6.35	1.31	1.43
28	Y	313	CLA	C3D-C4D	-6.35	1.29	1.44
29	g	310	CHL	C4C-C3C	-6.34	1.34	1.45
28	N	304	CLA	C1B-NB	-6.32	1.30	1.37
28	g	314	CLA	C3D-C4D	-6.30	1.30	1.44
29	V	309	CHL	C4D-ND	-6.30	1.29	1.37
29	V	309	CHL	C4C-C3C	-6.28	1.34	1.45
31	0	314	0UR	C22-C16	-6.28	1.37	1.50
28	V	307	CLA	C1C-NC	-6.27	1.28	1.37
32	y	320	LUT	C12-C13	-6.27	1.32	1.45
30	Y	321	0IE	O42-C26	-6.26	1.31	1.43
31	y	322	0UR	C41-C2	-6.23	1.26	1.51
31	0	314	0UR	C26-C25	-6.21	1.41	1.52
31	Y	317	0UR	C22-C16	-6.21	1.38	1.50
31	g	318	0UR	O42-C2	-6.21	1.10	1.23
31	U	419	0UR	C41-C2	-6.20	1.26	1.51
31	g	318	0UR	C26-C25	-6.20	1.41	1.52
30	y	319	0IE	C33-C34	-6.19	1.43	1.52
30	Y	319	0IE	C19-C18	-6.17	1.41	1.50
31	0	314	0UR	O42-C2	-6.17	1.10	1.23
31	1	316	0UR	O42-C2	-6.16	1.10	1.23
28	g	312	CLA	C1D-C2D	-6.16	1.33	1.45
29	N	302	CHL	C1D-ND	-6.14	1.30	1.37
32	y	320	LUT	C19-C9	-6.14	1.38	1.50
28	Y	313	CLA	C4C-C3C	-6.13	1.34	1.45
31	y	323	0UR	C17-C16	-6.12	1.32	1.45
31	Y	322	0UR	O57-C45	-6.11	1.09	1.21
28	1	303	CLA	C1C-C2C	-6.11	1.32	1.44
30	y	321	0IE	C30-C2	-6.10	1.26	1.51
29	g	316	CHL	C4C-C3C	-6.10	1.34	1.45
30	Y	319	0IE	C36-C31	-6.09	1.25	1.34
28	1	303	CLA	CHD-C4C	-6.06	1.25	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	g	314	CLA	MG-NB	-6.06	1.93	2.05
28	0	307	CLA	C4C-C3C	-6.04	1.34	1.45
32	y	320	LUT	C20-C13	-6.03	1.38	1.50
28	g	312	CLA	C1B-NB	-6.02	1.30	1.37
29	g	316	CHL	C1D-ND	-6.00	1.30	1.37
29	S	306	CHL	C4C-C3C	-5.99	1.34	1.45
28	N	304	CLA	C1D-ND	-5.98	1.30	1.37
28	S	310	CLA	MG-ND	-5.98	1.93	2.05
28	g	313	CLA	C3D-C4D	-5.97	1.30	1.44
28	U	414	CLA	C1B-C2B	-5.96	1.29	1.43
31	U	419	0UR	O44-C45	-5.96	1.20	1.34
32	y	320	LUT	C28-C29	-5.95	1.33	1.45
28	g	314	CLA	C1B-C2B	-5.94	1.29	1.43
29	V	311	CHL	MG-NB	-5.93	1.94	2.05
29	N	302	CHL	MG-NA	-5.92	1.92	2.06
31	y	322	0UR	C23-C1	-5.91	1.41	1.53
29	V	311	CHL	C1B-C2B	-5.89	1.29	1.43
29	N	302	CHL	C3D-C4D	-5.87	1.30	1.44
28	S	310	CLA	C3D-C4D	-5.86	1.30	1.44
29	V	309	CHL	C3D-C4D	-5.86	1.30	1.44
31	y	323	0UR	O44-C45	-5.85	1.20	1.34
28	Y	313	CLA	C1C-NC	-5.85	1.29	1.37
28	Y	311	CLA	C3D-C2D	-5.84	1.23	1.39
28	G	308	CLA	C3D-C4D	-5.84	1.31	1.44
29	S	306	CHL	C1B-NB	-5.84	1.30	1.37
28	g	312	CLA	C3D-C4D	-5.83	1.31	1.44
30	y	319	0IE	O1-C2	-5.82	1.11	1.23
30	0	312	0IE	C33-C34	-5.82	1.43	1.52
29	v	307	CHL	MG-NB	-5.81	1.94	2.05
30	Y	319	0IE	C39-C32	-5.80	1.42	1.53
29	V	313	CHL	C1B-C2B	-5.78	1.29	1.43
29	N	302	CHL	C1B-NB	-5.77	1.30	1.37
28	g	313	CLA	C1D-ND	-5.75	1.30	1.37
32	y	320	LUT	C40-C33	-5.74	1.39	1.50
31	Y	322	0UR	C20-C7	-5.74	1.39	1.50
29	V	311	CHL	MG-ND	-5.73	1.94	2.05
29	v	307	CHL	C4D-ND	-5.73	1.29	1.37
28	S	310	CLA	MG-NC	-5.73	1.92	2.06
28	Y	311	CLA	CHD-C1D	-5.72	1.27	1.38
28	G	308	CLA	C4D-ND	-5.70	1.29	1.37
28	y	306	CLA	C3D-C2D	-5.70	1.23	1.39
28	0	307	CLA	MG-ND	-5.70	1.94	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	N	304	CLA	C3D-C4D	-5.69	1.31	1.44
29	N	308	CHL	C1B-C2B	-5.68	1.29	1.43
30	Y	321	0IE	C23-C16	-5.67	1.39	1.50
30	y	319	0IE	C14-C15	-5.63	1.26	1.43
29	v	303	CHL	C3D-C4D	-5.63	1.31	1.44
28	Y	313	CLA	C4D-ND	-5.62	1.30	1.37
31	1	316	0UR	C6-C7	-5.62	1.33	1.45
31	Y	318	0UR	C41-C2	-5.61	1.28	1.51
29	N	306	CHL	C4C-C3C	-5.60	1.35	1.45
28	g	313	CLA	C4D-ND	-5.60	1.30	1.37
31	y	323	0UR	C28-C19	-5.60	1.40	1.56
29	N	308	CHL	CHD-C1D	-5.59	1.27	1.38
31	y	317	0UR	C28-C19	-5.58	1.40	1.56
28	G	308	CLA	MG-NB	-5.58	1.94	2.05
29	g	310	CHL	C3D-C4D	-5.57	1.31	1.44
41	c	524	DGD	O1A-C1A	-5.55	1.06	1.22
29	V	309	CHL	C1D-ND	-5.54	1.31	1.37
31	Y	322	0UR	C17-C16	-5.54	1.34	1.45
30	0	312	0IE	C33-C32	-5.53	1.37	1.54
29	v	307	CHL	CHB-C4A	-5.53	1.24	1.37
29	g	316	CHL	C2C-C1C	-5.52	1.33	1.44
28	Y	311	CLA	O2D-CGD	-5.52	1.19	1.33
29	V	302	CHL	C1B-C2B	-5.51	1.30	1.43
30	Y	321	0IE	C43-C24	-5.50	1.41	1.53
29	n	308	CHL	C1B-C2B	-5.48	1.30	1.43
30	y	321	0IE	C17-C16	-5.48	1.34	1.45
31	Y	317	0UR	O39-C25	-5.48	1.27	1.43
31	0	313	0UR	O40-C30	-5.47	1.33	1.43
31	0	313	0UR	C15-C16	-5.45	1.28	1.35
28	N	304	CLA	C1B-C2B	-5.44	1.30	1.43
28	G	308	CLA	C1B-C2B	-5.42	1.30	1.43
28	g	314	CLA	C1B-NB	-5.41	1.31	1.37
29	v	303	CHL	C4C-C3C	-5.40	1.35	1.45
29	V	309	CHL	C1B-C2B	-5.40	1.30	1.43
28	S	310	CLA	C1B-C2B	-5.39	1.30	1.43
43	n	322	LMN	C3-C2	-5.39	1.38	1.52
28	V	307	CLA	C4D-ND	-5.38	1.30	1.37
28	U	414	CLA	C1C-NC	-5.38	1.29	1.37
28	Y	313	CLA	C1B-C2B	-5.38	1.30	1.43
31	y	322	0UR	C8-C7	-5.37	1.28	1.35
31	Y	318	0UR	C27-C1	-5.36	1.26	1.34
30	Y	319	0IE	C24-C19	-5.36	1.41	1.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	Y	303	CLA	C1B-C2B	-5.35	1.30	1.43
29	V	302	CHL	CHD-C1D	-5.34	1.28	1.38
30	0	312	0IE	C15-C16	-5.32	1.28	1.35
29	G	317	CHL	C1B-C2B	-5.31	1.30	1.43
29	V	302	CHL	C4D-ND	-5.30	1.30	1.37
30	0	312	0IE	C24-C19	5.29	1.71	1.56
28	y	308	CLA	MG-NA	-5.28	1.93	2.06
30	y	319	0IE	C13-C12	-5.27	1.34	1.45
31	U	419	0UR	C13-C12	-5.26	1.34	1.45
29	V	313	CHL	C4D-ND	-5.26	1.30	1.37
31	Y	318	0UR	C26-C25	-5.25	1.43	1.52
28	Y	313	CLA	C1B-NB	-5.24	1.31	1.37
28	Y	313	CLA	MG-NB	-5.24	1.95	2.05
29	N	306	CHL	MG-NB	-5.24	1.95	2.05
31	0	314	0UR	C6-C7	-5.21	1.34	1.45
28	y	308	CLA	O2D-CGD	-5.21	1.20	1.33
32	1	313	LUT	C10-C9	5.20	1.42	1.35
29	g	316	CHL	C1B-C2B	-5.19	1.31	1.43
29	S	306	CHL	CHD-C1D	-5.18	1.28	1.38
29	v	307	CHL	C1D-ND	-5.18	1.31	1.37
29	s	306	CHL	C4D-ND	-5.17	1.30	1.37
31	y	317	0UR	C6-C7	-5.16	1.34	1.45
30	y	321	0IE	C25-C26	-5.13	1.44	1.53
30	Y	319	0IE	C11-C12	-5.12	1.29	1.35
28	g	312	CLA	C4D-ND	-5.12	1.30	1.37
29	g	310	CHL	C1D-ND	-5.11	1.31	1.37
32	1	313	LUT	C34-C33	5.09	1.42	1.35
28	U	414	CLA	O2D-CGD	-5.09	1.20	1.33
29	V	311	CHL	C4D-ND	-5.07	1.30	1.37
28	Y	303	CLA	CHC-C1C	-5.07	1.28	1.38
29	N	302	CHL	CHD-C1D	-5.07	1.28	1.38
31	V	319	0UR	O39-C25	-5.07	1.28	1.43
29	g	310	CHL	C1B-NB	-5.07	1.31	1.37
30	Y	319	0IE	C13-C12	-5.06	1.35	1.45
28	V	307	CLA	O1A-CGA	-5.06	1.07	1.22
29	n	308	CHL	CAB-C3B	-5.06	1.33	1.47
29	S	306	CHL	C3D-C4D	-5.03	1.32	1.44
28	N	304	CLA	CHD-C1D	-5.03	1.28	1.38
30	y	319	0IE	C9-C10	-5.02	1.22	1.36
28	g	312	CLA	C1B-C2B	-5.00	1.31	1.43
29	g	310	CHL	C1D-C2D	-5.00	1.35	1.45
28	Y	303	CLA	MG-NC	-5.00	1.94	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	Y	311	CLA	C3B-C2B	-4.99	1.24	1.41
29	s	306	CHL	C4C-C3C	-4.99	1.36	1.45
30	Y	319	0IE	C30-C2	-4.99	1.31	1.51
28	V	307	CLA	C3B-C2B	-4.98	1.24	1.41
28	y	308	CLA	CHC-C1C	-4.97	1.28	1.38
28	G	308	CLA	MG-NA	-4.96	1.94	2.06
29	v	307	CHL	MG-NA	4.95	2.18	2.06
28	y	306	CLA	C1B-C2B	-4.94	1.31	1.43
29	S	306	CHL	MG-ND	-4.94	1.96	2.05
31	y	322	0UR	C6-C7	-4.93	1.35	1.45
28	y	306	CLA	CHB-C4A	-4.93	1.26	1.37
28	y	308	CLA	CAB-C3B	-4.93	1.34	1.47
29	V	302	CHL	C2C-C1C	-4.92	1.35	1.44
29	n	308	CHL	C2C-C3C	-4.92	1.26	1.36
31	Y	318	0UR	C5-C4	-4.91	1.28	1.43
28	0	307	CLA	C1B-NB	-4.89	1.31	1.37
28	U	414	CLA	MG-NC	-4.89	1.94	2.06
29	v	307	CHL	C1B-C2B	-4.89	1.31	1.43
31	0	313	0UR	C35-C23	-4.89	1.44	1.53
29	g	310	CHL	MG-NB	-4.88	1.96	2.05
29	s	306	CHL	C3D-C4D	-4.88	1.33	1.44
28	N	304	CLA	C4D-ND	-4.88	1.31	1.37
30	Y	321	0IE	C30-C2	-4.87	1.31	1.51
28	g	314	CLA	C1D-ND	-4.87	1.31	1.37
32	y	320	LUT	C39-C29	-4.86	1.40	1.50
29	N	302	CHL	C2C-C1C	-4.83	1.35	1.44
29	N	308	CHL	MG-ND	-4.83	1.96	2.05
31	Y	318	0UR	C8-C7	-4.81	1.29	1.35
31	U	419	0UR	C6-C7	-4.81	1.35	1.45
29	v	303	CHL	C1D-ND	-4.80	1.31	1.37
31	Y	317	0UR	C21-C12	-4.80	1.41	1.50
29	V	313	CHL	C2C-C1C	-4.80	1.35	1.44
30	y	319	0IE	C35-C34	-4.78	1.43	1.52
28	g	313	CLA	CHD-C1D	-4.77	1.29	1.38
28	V	307	CLA	C1D-ND	-4.76	1.31	1.37
29	G	317	CHL	C2C-C1C	-4.76	1.35	1.44
28	b	616	CLA	C4C-C3C	-4.75	1.36	1.45
28	U	414	CLA	C3D-C2D	-4.74	1.26	1.39
28	u	416	CLA	C4C-C3C	-4.74	1.36	1.45
29	V	311	CHL	O2D-CGD	-4.74	1.21	1.33
31	V	319	0UR	C23-C1	-4.72	1.43	1.53
30	y	321	0IE	C13-C12	-4.72	1.35	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	1	306	CLA	C4C-C3C	-4.72	1.36	1.45
28	y	308	CLA	C3C-C2C	-4.72	1.26	1.36
29	V	302	CHL	C2C-C3C	-4.71	1.26	1.36
29	n	308	CHL	C1B-NB	-4.71	1.32	1.37
32	Y	320	LUT	C8-C9	-4.71	1.35	1.45
31	Y	318	0UR	C24-C23	-4.70	1.40	1.54
28	U	414	CLA	C3B-C2B	-4.70	1.25	1.41
29	N	302	CHL	C1B-C2B	-4.70	1.32	1.43
29	g	310	CHL	C4D-ND	-4.70	1.31	1.37
31	V	319	0UR	C13-C12	-4.69	1.35	1.45
28	B	621	CLA	C4C-C3C	-4.69	1.37	1.45
31	Y	322	0UR	C15-C16	-4.69	1.29	1.35
28	C	508	CLA	C4C-C3C	-4.68	1.37	1.45
46	G	320	NEX	C14-C13	4.67	1.42	1.35
28	S	304	CLA	C4C-C3C	-4.66	1.37	1.45
29	v	303	CHL	C4D-ND	-4.66	1.31	1.37
39	d	406	PL9	C3-C4	-4.65	1.41	1.49
28	c	513	CLA	C4C-C3C	-4.65	1.37	1.45
28	B	608	CLA	C4C-C3C	-4.64	1.37	1.45
29	V	311	CHL	C2C-C3C	-4.64	1.27	1.36
30	y	319	0IE	C36-C31	-4.64	1.27	1.34
29	S	306	CHL	C1B-C2B	-4.64	1.32	1.43
32	Y	320	LUT	C12-C13	-4.64	1.36	1.45
29	N	302	CHL	C2C-C3C	-4.63	1.27	1.36
29	v	303	CHL	C1B-C2B	-4.63	1.32	1.43
28	y	308	CLA	C3B-C2B	-4.63	1.25	1.41
28	Y	308	CLA	C4C-C3C	-4.63	1.37	1.45
28	g	312	CLA	MG-NC	-4.63	1.95	2.06
28	S	310	CLA	CAB-C3B	-4.63	1.34	1.47
28	S	310	CLA	CMA-C3A	-4.62	1.43	1.53
46	G	320	NEX	C34-C33	4.62	1.41	1.35
31	g	317	0UR	C29-C28	-4.62	1.48	1.54
28	C	505	CLA	C4C-C3C	-4.62	1.37	1.45
39	D	404	PL9	C3-C4	-4.62	1.41	1.49
28	u	407	CLA	C4C-C3C	-4.61	1.37	1.45
33	H	101	BCR	C10-C9	4.61	1.41	1.35
28	U	414	CLA	CHB-C4A	-4.61	1.26	1.37
31	y	322	0UR	O39-C25	-4.61	1.29	1.43
28	N	304	CLA	MG-ND	-4.61	1.96	2.05
28	Y	312	CLA	C4C-C3C	-4.61	1.37	1.45
31	Y	317	0UR	C36-C28	-4.60	1.43	1.53
28	b	611	CLA	C4C-C3C	-4.60	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	n	308	CHL	CMA-C3A	-4.60	1.43	1.53
28	C	509	CLA	C4C-C3C	-4.60	1.37	1.45
28	0	307	CLA	C3D-C4D	-4.59	1.33	1.44
29	V	309	CHL	C2C-C1C	-4.59	1.35	1.44
29	V	311	CHL	C2C-C1C	-4.58	1.35	1.44
30	y	319	0IE	C6-C7	-4.58	1.36	1.45
28	U	410	CLA	C4C-C3C	-4.58	1.37	1.45
28	B	618	CLA	C1C-C2C	-4.58	1.35	1.44
29	G	317	CHL	O2D-CGD	-4.58	1.22	1.33
28	S	305	CLA	C4C-C3C	-4.58	1.37	1.45
29	v	303	CHL	C2C-C1C	-4.58	1.35	1.44
28	B	602	CLA	C4C-C3C	-4.57	1.37	1.45
28	Y	303	CLA	C4D-ND	-4.57	1.31	1.37
28	g	307	CLA	C4C-C3C	-4.57	1.37	1.45
28	u	413	CLA	C4C-C3C	-4.57	1.37	1.45
28	G	315	CLA	C4C-C3C	-4.57	1.37	1.45
28	N	313	CLA	C4C-C3C	-4.57	1.37	1.45
28	U	411	CLA	C4C-C3C	-4.56	1.37	1.45
28	c	503	CLA	MG-NA	4.56	2.17	2.06
29	v	307	CHL	C2C-C1C	-4.56	1.35	1.44
28	V	307	CLA	MG-NB	-4.56	1.96	2.05
28	V	316	CLA	C4C-C3C	-4.56	1.37	1.45
28	y	303	CLA	C4C-C3C	-4.56	1.37	1.45
28	a	416	CLA	C4C-C3C	-4.56	1.37	1.45
28	C	501	CLA	MG-NA	4.55	2.17	2.06
31	0	313	0UR	C27-C1	-4.55	1.27	1.34
29	V	311	CHL	CHD-C4C	-4.55	1.28	1.39
32	Y	320	LUT	C19-C9	-4.55	1.41	1.50
28	G	316	CLA	C4C-C3C	-4.54	1.37	1.45
28	s	315	CLA	C4C-C3C	-4.54	1.37	1.45
28	y	306	CLA	CHD-C4C	-4.54	1.28	1.39
28	c	521	CLA	C4C-C3C	-4.54	1.37	1.45
28	S	313	CLA	C4C-C3C	-4.54	1.37	1.45
28	A	410	CLA	C4C-C3C	-4.54	1.37	1.45
46	G	320	NEX	C30-C29	4.54	1.41	1.35
28	c	503	CLA	C4C-C3C	-4.54	1.37	1.45
29	N	303	CHL	C4C-C3C	-4.54	1.37	1.45
28	G	313	CLA	C4C-C3C	-4.53	1.37	1.45
28	C	519	CLA	C4C-C3C	-4.53	1.37	1.45
28	b	605	CLA	C4C-C3C	-4.53	1.37	1.45
28	d	404	CLA	C4C-C3C	-4.53	1.37	1.45
28	c	508	CLA	C4C-C3C	-4.53	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	s	304	CLA	C4C-C3C	-4.52	1.37	1.45
28	C	510	CLA	C4C-C3C	-4.52	1.37	1.45
28	c	511	CLA	C4C-C3C	-4.52	1.37	1.45
28	B	609	CLA	C4C-C3C	-4.52	1.37	1.45
28	v	314	CLA	C4C-C3C	-4.52	1.37	1.45
28	1	301	CLA	C4C-C3C	-4.52	1.37	1.45
28	n	313	CLA	C4C-C3C	-4.52	1.37	1.45
28	N	312	CLA	C4C-C3C	-4.52	1.37	1.45
28	c	506	CLA	C4C-C3C	-4.51	1.37	1.45
28	D	409	CLA	C4C-C3C	-4.51	1.37	1.45
28	S	314	CLA	C4C-C3C	-4.51	1.37	1.45
28	n	306	CLA	C4C-C3C	-4.51	1.37	1.45
29	n	308	CHL	C2C-C1C	-4.51	1.35	1.44
28	N	305	CLA	C4C-C3C	-4.51	1.37	1.45
29	g	316	CHL	MG-NA	-4.51	1.95	2.06
30	0	312	0IE	C6-C7	-4.51	1.36	1.45
28	g	305	CLA	C4C-C3C	-4.50	1.37	1.45
28	v	306	CLA	C4C-C3C	-4.50	1.37	1.45
28	C	513	CLA	C4C-C3C	-4.50	1.37	1.45
28	B	607	CLA	C4C-C3C	-4.50	1.37	1.45
31	0	313	0UR	C28-C19	-4.50	1.43	1.56
28	A	407	CLA	C4C-C3C	-4.50	1.37	1.45
28	u	407	CLA	C1C-C2C	-4.50	1.35	1.44
28	u	405	CLA	C4C-C3C	-4.50	1.37	1.45
31	Y	322	0UR	C6-C7	-4.50	1.36	1.45
29	V	309	CHL	MG-NB	-4.50	1.96	2.05
31	Y	317	0UR	O44-C45	-4.50	1.23	1.34
28	U	412	CLA	C4C-C3C	-4.49	1.37	1.45
28	U	404	CLA	C4C-C3C	-4.49	1.37	1.45
45	e	101	HEM	C4D-C3D	-4.49	1.37	1.45
28	b	606	CLA	C4C-C3C	-4.49	1.37	1.45
29	V	313	CHL	C2C-C3C	-4.49	1.27	1.36
28	V	317	CLA	C4C-C3C	-4.49	1.37	1.45
29	s	302	CHL	C4C-C3C	-4.49	1.37	1.45
28	y	313	CLA	C4C-C3C	-4.49	1.37	1.45
28	B	611	CLA	C4C-C3C	-4.48	1.37	1.45
28	V	308	CLA	C1C-C2C	-4.48	1.35	1.44
29	V	302	CHL	C1D-ND	-4.48	1.32	1.37
28	y	304	CLA	C4C-C3C	-4.48	1.37	1.45
28	b	618	CLA	C4C-C3C	-4.48	1.37	1.45
28	C	506	CLA	C4C-C3C	-4.48	1.37	1.45
39	A	409	PL9	C3-C4	-4.48	1.42	1.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	B	616	CLA	C4C-C3C	-4.47	1.37	1.45
28	c	504	CLA	C1C-C2C	-4.47	1.35	1.44
28	u	412	CLA	C4C-C3C	-4.47	1.37	1.45
31	y	323	0UR	C13-C12	-4.47	1.36	1.45
28	n	315	CLA	C4C-C3C	-4.47	1.37	1.45
28	B	601	CLA	C4C-C3C	-4.47	1.37	1.45
28	G	309	CLA	C4C-C3C	-4.47	1.37	1.45
28	g	306	CLA	C4C-C3C	-4.47	1.37	1.45
28	b	616	CLA	C1C-C2C	-4.47	1.35	1.44
28	V	315	CLA	C1C-C2C	-4.47	1.35	1.44
28	c	520	CLA	C4C-C3C	-4.46	1.37	1.45
28	Y	309	CLA	C4C-C3C	-4.46	1.37	1.45
28	a	403	CLA	C1C-C2C	-4.46	1.35	1.44
28	u	415	CLA	C4C-C3C	-4.46	1.37	1.45
31	V	319	0UR	C6-C7	-4.46	1.36	1.45
28	y	306	CLA	CAB-C3B	-4.46	1.35	1.47
29	n	308	CHL	CHD-C1D	-4.46	1.29	1.38
28	v	313	CLA	C4C-C3C	-4.46	1.37	1.45
28	G	312	CLA	C4C-C3C	-4.46	1.37	1.45
28	B	605	CLA	C4C-C3C	-4.45	1.37	1.45
28	G	306	CLA	C4C-C3C	-4.45	1.37	1.45
28	0	307	CLA	C1D-C2D	-4.45	1.36	1.45
29	N	308	CHL	MG-NC	-4.45	1.95	2.06
28	b	601	CLA	C4C-C3C	-4.45	1.37	1.45
28	b	607	CLA	C4C-C3C	-4.45	1.37	1.45
28	b	622	CLA	C4C-C3C	-4.45	1.37	1.45
28	y	312	CLA	C1C-C2C	-4.45	1.35	1.44
29	N	306	CHL	MG-ND	-4.45	1.97	2.05
28	v	316	CLA	C4C-C3C	-4.45	1.37	1.45
29	V	310	CHL	C4C-C3C	-4.45	1.37	1.45
28	0	307	CLA	C1D-ND	-4.45	1.32	1.37
28	u	411	CLA	C4C-C3C	-4.44	1.37	1.45
28	u	418	CLA	C4C-C3C	-4.44	1.37	1.45
28	s	313	CLA	C4C-C3C	-4.44	1.37	1.45
28	0	311	CLA	C4C-C3C	-4.44	1.37	1.45
33	k	101	BCR	C10-C9	4.44	1.41	1.35
28	C	504	CLA	C4C-C3C	-4.44	1.37	1.45
28	0	301	CLA	C4C-C3C	-4.44	1.37	1.45
28	C	501	CLA	C4C-C3C	-4.44	1.37	1.45
28	s	312	CLA	C4C-C3C	-4.44	1.37	1.45
28	1	308	CLA	C4C-C3C	-4.44	1.37	1.45
28	Y	306	CLA	C4C-C3C	-4.44	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	D	410	CLA	C4C-C3C	-4.43	1.37	1.45
28	V	314	CLA	C4C-C3C	-4.43	1.37	1.45
29	y	307	CHL	C4C-C3C	-4.43	1.37	1.45
28	b	608	CLA	C4C-C3C	-4.43	1.37	1.45
28	a	410	CLA	C4C-C3C	-4.43	1.37	1.45
30	0	312	0IE	O29-C20	-4.43	1.26	1.41
28	b	615	CLA	C4C-C3C	-4.43	1.37	1.45
28	V	308	CLA	C4C-C3C	-4.43	1.37	1.45
30	Y	321	0IE	C6-C7	-4.43	1.36	1.45
33	c	509	BCR	C14-C13	4.43	1.41	1.35
28	y	314	CLA	C4C-C3C	-4.43	1.37	1.45
28	C	511	CLA	C4C-C3C	-4.42	1.37	1.45
28	N	315	CLA	C4C-C3C	-4.42	1.37	1.45
41	c	524	DGD	O1G-C1G	-4.42	1.35	1.45
30	0	312	0IE	C23-C16	-4.42	1.41	1.50
28	C	513	CLA	C1C-C2C	-4.42	1.36	1.44
28	g	304	CLA	C4C-C3C	-4.42	1.37	1.45
28	V	314	CLA	C1C-C2C	-4.42	1.36	1.44
28	u	408	CLA	C4C-C3C	-4.42	1.37	1.45
28	g	308	CLA	C4C-C3C	-4.41	1.37	1.45
33	b	603	BCR	C10-C9	4.41	1.41	1.35
28	g	314	CLA	O2D-CGD	-4.41	1.22	1.33
28	b	619	CLA	C4C-C3C	-4.41	1.37	1.45
28	c	512	CLA	C4C-C3C	-4.41	1.37	1.45
28	c	514	CLA	C4C-C3C	-4.41	1.37	1.45
28	n	315	CLA	C1C-C2C	-4.41	1.36	1.44
28	a	403	CLA	C4C-C3C	-4.41	1.37	1.45
28	G	308	CLA	C1C-NC	-4.41	1.31	1.37
28	b	612	CLA	C4C-C3C	-4.41	1.37	1.45
33	h	101	BCR	C14-C13	4.41	1.41	1.35
28	Y	311	CLA	CAB-C3B	-4.41	1.35	1.47
28	V	318	CLA	C4C-C3C	-4.41	1.37	1.45
28	U	406	CLA	C4C-C3C	-4.40	1.37	1.45
29	v	307	CHL	O1A-CGA	-4.40	1.09	1.22
28	U	406	CLA	C1C-C2C	-4.40	1.36	1.44
28	B	602	CLA	C1C-C2C	-4.40	1.36	1.44
28	C	503	CLA	C4C-C3C	-4.40	1.37	1.45
28	g	308	CLA	C1C-C2C	-4.40	1.36	1.44
28	G	307	CLA	C4C-C3C	-4.40	1.37	1.45
28	U	407	CLA	C4C-C3C	-4.40	1.37	1.45
28	U	415	CLA	C4C-C3C	-4.39	1.37	1.45
28	b	609	CLA	C4C-C3C	-4.39	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	y	311	CLA	C4C-C3C	-4.39	1.37	1.45
28	B	612	CLA	C1C-C2C	-4.39	1.36	1.44
28	v	305	CLA	C4C-C3C	-4.39	1.37	1.45
28	c	522	CLA	C4C-C3C	-4.39	1.37	1.45
28	0	302	CLA	C1C-C2C	-4.39	1.36	1.44
28	C	509	CLA	C1C-C2C	-4.39	1.36	1.44
28	d	409	CLA	C4C-C3C	-4.39	1.37	1.45
28	U	415	CLA	C1C-C2C	-4.39	1.36	1.44
33	B	604	BCR	C10-C9	4.38	1.41	1.35
28	G	308	CLA	C1D-ND	-4.38	1.32	1.37
28	c	522	CLA	C1C-C2C	-4.38	1.36	1.44
28	B	613	CLA	C4C-C3C	-4.38	1.37	1.45
28	0	302	CLA	C4C-C3C	-4.38	1.37	1.45
28	B	610	CLA	C4C-C3C	-4.38	1.37	1.45
28	1	304	CLA	C4C-C3C	-4.38	1.37	1.45
28	U	413	CLA	C4C-C3C	-4.38	1.37	1.45
28	Y	316	CLA	C4C-C3C	-4.38	1.37	1.45
28	b	620	CLA	C4C-C3C	-4.38	1.37	1.45
28	u	417	CLA	C4C-C3C	-4.38	1.37	1.45
28	1	303	CLA	C1B-C2B	-4.38	1.33	1.43
28	B	619	CLA	C4C-C3C	-4.38	1.37	1.45
28	C	517	CLA	C4C-C3C	-4.38	1.37	1.45
28	0	306	CLA	C4C-C3C	-4.37	1.37	1.45
28	B	606	CLA	C4C-C3C	-4.37	1.37	1.45
28	v	312	CLA	C4C-C3C	-4.37	1.37	1.45
28	0	305	CLA	C4C-C3C	-4.37	1.37	1.45
28	U	417	CLA	C1C-C2C	-4.37	1.36	1.44
29	y	315	CHL	C4C-C3C	-4.37	1.37	1.45
28	c	510	CLA	C4C-C3C	-4.37	1.37	1.45
28	c	505	CLA	C4C-C3C	-4.37	1.37	1.45
28	A	411	CLA	C1C-C2C	-4.37	1.36	1.44
28	S	311	CLA	C4C-C3C	-4.37	1.37	1.45
28	U	404	CLA	C1C-C2C	-4.37	1.36	1.44
28	A	416	CLA	C4C-C3C	-4.37	1.37	1.45
28	g	304	CLA	C1C-C2C	-4.36	1.36	1.44
31	y	323	0UR	C41-C2	-4.36	1.33	1.51
29	V	306	CHL	C4C-C3C	-4.36	1.37	1.45
28	y	312	CLA	C4C-C3C	-4.36	1.37	1.45
28	0	303	CLA	C4C-C3C	-4.36	1.37	1.45
28	n	317	CLA	C1C-C2C	-4.36	1.36	1.44
28	u	405	CLA	C1C-C2C	-4.36	1.36	1.44
31	Y	322	0UR	C41-C2	-4.36	1.33	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	Y	314	CLA	C4C-C3C	-4.36	1.37	1.45
28	Y	305	CLA	C4C-C3C	-4.36	1.37	1.45
28	A	416	CLA	C1C-C2C	-4.36	1.36	1.44
28	a	402	CLA	C4C-C3C	-4.36	1.37	1.45
29	v	310	CHL	C4C-C3C	-4.36	1.37	1.45
45	E	101	HEM	C1D-C2D	-4.36	1.36	1.44
31	0	314	0UR	C28-C19	-4.36	1.44	1.56
28	Y	303	CLA	MG-ND	-4.36	1.97	2.05
28	c	514	CLA	C1C-C2C	-4.35	1.36	1.44
28	B	622	CLA	C1C-C2C	-4.35	1.36	1.44
28	n	306	CLA	C1C-C2C	-4.35	1.36	1.44
28	B	612	CLA	C4C-C3C	-4.35	1.37	1.45
28	S	312	CLA	C1C-C2C	-4.35	1.36	1.44
28	n	316	CLA	C1C-C2C	-4.35	1.36	1.44
28	u	414	CLA	C4C-C3C	-4.35	1.37	1.45
29	N	307	CHL	C4C-C3C	-4.35	1.37	1.45
28	v	314	CLA	C1C-C2C	-4.35	1.36	1.44
28	s	304	CLA	C1C-C2C	-4.35	1.36	1.44
28	y	305	CLA	C4C-C3C	-4.35	1.37	1.45
29	n	304	CHL	C4C-C3C	-4.35	1.37	1.45
28	U	414	CLA	O1A-CGA	-4.35	1.09	1.22
28	U	407	CLA	C1C-C2C	-4.35	1.36	1.44
29	S	307	CHL	C4C-C3C	-4.34	1.37	1.45
28	1	311	CLA	C4C-C3C	-4.34	1.37	1.45
28	b	618	CLA	C1C-C2C	-4.34	1.36	1.44
28	Y	312	CLA	C1C-C2C	-4.34	1.36	1.44
28	0	308	CLA	C4C-C3C	-4.34	1.37	1.45
28	A	410	CLA	C1C-C2C	-4.34	1.36	1.44
28	V	315	CLA	C4C-C3C	-4.34	1.37	1.45
28	s	305	CLA	C4C-C3C	-4.34	1.37	1.45
28	1	303	CLA	C3D-C2D	-4.34	1.27	1.39
28	U	414	CLA	CAB-C3B	-4.34	1.35	1.47
28	n	316	CLA	C4C-C3C	-4.34	1.37	1.45
28	y	316	CLA	C4C-C3C	-4.34	1.37	1.45
28	n	314	CLA	C4C-C3C	-4.34	1.37	1.45
30	Y	321	0IE	C19-C18	-4.33	1.44	1.50
28	V	318	CLA	C1C-C2C	-4.33	1.36	1.44
28	0	304	CLA	C4C-C3C	-4.33	1.37	1.45
28	G	305	CLA	C4C-C3C	-4.33	1.37	1.45
28	S	304	CLA	C1C-C2C	-4.33	1.36	1.44
28	B	622	CLA	C4C-C3C	-4.33	1.37	1.45
41	C	515	DGD	O2G-C1B	4.32	1.46	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	b	610	CLA	C1C-C2C	-4.32	1.36	1.44
28	y	305	CLA	C1C-C2C	-4.32	1.36	1.44
28	B	609	CLA	C1C-C2C	-4.32	1.36	1.44
33	H	101	BCR	C14-C13	4.32	1.41	1.35
28	d	409	CLA	C1C-C2C	-4.32	1.36	1.44
28	G	305	CLA	C1C-C2C	-4.32	1.36	1.44
28	c	505	CLA	C1C-C2C	-4.32	1.36	1.44
28	n	317	CLA	C4C-C3C	-4.32	1.37	1.45
28	C	504	CLA	C1C-C2C	-4.32	1.36	1.44
28	U	416	CLA	C4C-C3C	-4.31	1.37	1.45
28	c	512	CLA	C1C-C2C	-4.31	1.36	1.44
28	S	312	CLA	C4C-C3C	-4.31	1.37	1.45
28	Y	304	CLA	C4C-C3C	-4.31	1.37	1.45
28	B	619	CLA	C1C-C2C	-4.31	1.36	1.44
28	u	412	CLA	C1C-C2C	-4.31	1.36	1.44
28	u	414	CLA	C1C-C2C	-4.31	1.36	1.44
31	Y	318	0UR	O57-C45	-4.31	1.12	1.21
28	Y	311	CLA	CHD-C4C	-4.31	1.29	1.39
28	b	605	CLA	C1C-C2C	-4.31	1.36	1.44
30	y	319	0IE	C24-C19	-4.31	1.44	1.56
28	Y	313	CLA	CHC-C1C	-4.31	1.29	1.38
28	1	309	CLA	C4C-C3C	-4.31	1.37	1.45
28	b	617	CLA	C4C-C3C	-4.30	1.37	1.45
28	y	303	CLA	C1C-C2C	-4.30	1.36	1.44
28	y	313	CLA	C1C-C2C	-4.30	1.36	1.44
28	C	512	CLA	C4C-C3C	-4.30	1.37	1.45
28	A	411	CLA	C4C-C3C	-4.30	1.37	1.45
46	N	319	NEX	C14-C13	4.30	1.41	1.35
28	G	315	CLA	MG-NA	4.30	2.16	2.06
28	N	311	CLA	C1C-C2C	-4.30	1.36	1.44
28	0	309	CLA	C4C-C3C	-4.30	1.37	1.45
28	a	416	CLA	C1C-C2C	-4.30	1.36	1.44
28	y	309	CLA	C1C-C2C	-4.30	1.36	1.44
28	G	312	CLA	C1C-C2C	-4.29	1.36	1.44
28	B	606	CLA	C1C-C2C	-4.29	1.36	1.44
28	d	404	CLA	C1C-C2C	-4.29	1.36	1.44
28	c	503	CLA	C1C-C2C	-4.29	1.36	1.44
31	0	313	0UR	C22-C16	-4.29	1.42	1.50
28	1	307	CLA	C4C-C3C	-4.29	1.37	1.45
28	a	410	CLA	C1C-C2C	-4.29	1.36	1.44
28	B	610	CLA	C1C-C2C	-4.29	1.36	1.44
28	U	411	CLA	C1C-C2C	-4.29	1.36	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	u	417	CLA	C1C-C2C	-4.29	1.36	1.44
29	V	313	CHL	O2D-CGD	-4.29	1.22	1.33
28	0	307	CLA	C1B-C2B	-4.29	1.33	1.43
28	B	616	CLA	C1C-C2C	-4.29	1.36	1.44
29	N	302	CHL	O2D-CGD	-4.29	1.22	1.33
28	D	409	CLA	C1C-C2C	-4.29	1.36	1.44
28	n	307	CLA	C4C-C3C	-4.28	1.37	1.45
28	B	607	CLA	C1C-C2C	-4.28	1.36	1.44
28	G	315	CLA	C1C-C2C	-4.28	1.36	1.44
29	u	409	CHL	C4C-C3C	-4.28	1.37	1.45
41	g	302	DGD	O1G-C1A	4.28	1.45	1.33
29	v	303	CHL	MG-ND	-4.28	1.97	2.05
28	D	410	CLA	C1C-C2C	-4.28	1.36	1.44
33	C	502	BCR	C10-C9	4.28	1.41	1.35
29	Y	315	CHL	C4C-C3C	-4.28	1.37	1.45
28	g	311	CLA	C1C-C2C	-4.27	1.36	1.44
28	u	411	CLA	C1C-C2C	-4.27	1.36	1.44
28	B	621	CLA	C1C-C2C	-4.27	1.36	1.44
28	b	619	CLA	C1C-C2C	-4.27	1.36	1.44
45	E	101	HEM	C4D-C3D	-4.27	1.37	1.45
28	s	305	CLA	C1C-C2C	-4.27	1.36	1.44
33	c	509	BCR	C10-C9	4.27	1.41	1.35
28	G	307	CLA	C1C-C2C	-4.27	1.36	1.44
28	Y	310	CLA	C4C-C3C	-4.26	1.37	1.45
28	Y	305	CLA	C1C-C2C	-4.26	1.36	1.44
31	0	313	0UR	C41-C2	-4.26	1.34	1.51
28	u	408	CLA	C1C-C2C	-4.26	1.36	1.44
41	G	302	DGD	O1G-C1A	4.26	1.45	1.33
28	b	612	CLA	C1C-C2C	-4.26	1.36	1.44
28	c	508	CLA	C1C-C2C	-4.26	1.36	1.44
28	Y	316	CLA	C1C-C2C	-4.26	1.36	1.44
28	1	302	CLA	C4C-C3C	-4.26	1.37	1.45
28	s	311	CLA	C4C-C3C	-4.26	1.37	1.45
29	S	308	CHL	C4C-C3C	-4.26	1.37	1.45
28	G	314	CLA	C4C-C3C	-4.26	1.37	1.45
28	u	413	CLA	C1C-C2C	-4.26	1.36	1.44
45	e	101	HEM	C1D-C2D	-4.26	1.36	1.44
46	g	319	NEX	C34-C33	4.25	1.41	1.35
30	Y	321	0IE	C13-C12	-4.25	1.36	1.45
28	Y	303	CLA	CAB-C3B	-4.25	1.35	1.47
28	N	311	CLA	C4C-C3C	-4.25	1.37	1.45
28	y	309	CLA	C4C-C3C	-4.25	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	B	611	CLA	C1C-C2C	-4.25	1.36	1.44
28	1	305	CLA	C4C-C3C	-4.25	1.37	1.45
29	N	310	CHL	C4C-C3C	-4.25	1.37	1.45
28	C	511	CLA	C1C-C2C	-4.25	1.36	1.44
41	C	520	DGD	O2G-C1B	4.25	1.46	1.34
29	u	410	CHL	C4C-C3C	-4.25	1.37	1.45
28	S	305	CLA	C1C-C2C	-4.25	1.36	1.44
28	A	407	CLA	C1C-C2C	-4.24	1.36	1.44
28	V	316	CLA	C1C-C2C	-4.24	1.36	1.44
28	g	306	CLA	C1C-C2C	-4.24	1.36	1.44
46	s	319	NEX	C14-C13	4.24	1.41	1.35
28	0	303	CLA	C1C-C2C	-4.24	1.36	1.44
28	0	306	CLA	C1C-C2C	-4.24	1.36	1.44
28	c	504	CLA	C4C-C3C	-4.24	1.37	1.45
28	1	307	CLA	C1C-C2C	-4.24	1.36	1.44
28	v	315	CLA	C4C-C3C	-4.24	1.37	1.45
28	B	601	CLA	C1C-C2C	-4.24	1.36	1.44
32	Y	320	LUT	C40-C33	-4.24	1.42	1.50
28	C	503	CLA	C1C-C2C	-4.24	1.36	1.44
28	U	413	CLA	C1C-C2C	-4.24	1.36	1.44
28	y	316	CLA	C1C-C2C	-4.24	1.36	1.44
41	a	405	DGD	O1G-C1A	4.24	1.45	1.33
28	Y	311	CLA	CMA-C3A	-4.24	1.44	1.53
29	0	310	CHL	C4C-C3C	-4.23	1.37	1.45
28	B	618	CLA	C4C-C3C	-4.23	1.37	1.45
28	s	314	CLA	C4C-C3C	-4.23	1.37	1.45
28	N	305	CLA	C1C-C2C	-4.23	1.36	1.44
28	0	304	CLA	C1C-C2C	-4.23	1.36	1.44
28	b	608	CLA	C1C-C2C	-4.23	1.36	1.44
28	g	315	CLA	C4C-C3C	-4.23	1.37	1.45
28	C	501	CLA	C1C-C2C	-4.23	1.36	1.44
28	c	511	CLA	C1C-C2C	-4.23	1.36	1.44
28	0	301	CLA	C1C-C2C	-4.23	1.36	1.44
29	v	308	CHL	C4C-C3C	-4.23	1.37	1.45
28	v	313	CLA	C1C-C2C	-4.23	1.36	1.44
29	N	306	CHL	C1D-C2D	-4.23	1.37	1.45
41	c	517	DGD	O1G-C1A	4.23	1.45	1.33
28	v	315	CLA	C1C-C2C	-4.22	1.36	1.44
28	G	308	CLA	CMA-C3A	-4.22	1.44	1.53
28	Y	314	CLA	C1C-C2C	-4.22	1.36	1.44
29	N	308	CHL	C2C-C1C	-4.22	1.36	1.44
28	C	512	CLA	C1C-C2C	-4.22	1.36	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
41	a	405	DGD	O2G-C1B	4.22	1.46	1.34
33	b	603	BCR	C14-C13	4.22	1.41	1.35
28	C	505	CLA	C1C-C2C	-4.22	1.36	1.44
28	n	307	CLA	C1C-C2C	-4.22	1.36	1.44
29	g	309	CHL	C4C-C3C	-4.22	1.37	1.45
41	c	515	DGD	O1G-C1A	4.22	1.45	1.33
28	Y	306	CLA	C1C-C2C	-4.22	1.36	1.44
28	g	311	CLA	C4C-C3C	-4.22	1.37	1.45
28	c	506	CLA	C1C-C2C	-4.22	1.36	1.44
47	N	318	XAT	C34-C33	4.22	1.41	1.35
28	Y	309	CLA	C1C-C2C	-4.22	1.36	1.44
28	s	312	CLA	C1C-C2C	-4.22	1.36	1.44
28	b	607	CLA	C1C-C2C	-4.22	1.36	1.44
29	S	306	CHL	C2C-C1C	-4.22	1.36	1.44
28	1	302	CLA	C1C-C2C	-4.22	1.36	1.44
28	v	305	CLA	C1C-C2C	-4.22	1.36	1.44
41	c	516	DGD	O1G-C1A	4.22	1.45	1.33
30	y	319	0IE	O40-C34	-4.21	1.30	1.43
46	g	319	NEX	C14-C13	4.21	1.41	1.35
29	v	304	CHL	C4C-C3C	-4.21	1.37	1.45
28	Y	304	CLA	C1C-C2C	-4.21	1.36	1.44
29	v	309	CHL	C4C-C3C	-4.21	1.37	1.45
28	G	314	CLA	C1C-C2C	-4.21	1.36	1.44
28	U	416	CLA	C1C-C2C	-4.21	1.36	1.44
28	U	417	CLA	C4C-C3C	-4.21	1.37	1.45
41	c	515	DGD	O2G-C1B	4.21	1.46	1.34
28	g	315	CLA	C1C-C2C	-4.21	1.36	1.44
41	A	417	DGD	O1G-C1A	4.20	1.45	1.33
31	0	313	0UR	C21-C12	-4.20	1.42	1.50
28	u	418	CLA	C1C-C2C	-4.20	1.36	1.44
28	C	508	CLA	C1C-C2C	-4.20	1.36	1.44
28	y	314	CLA	C1C-C2C	-4.20	1.36	1.44
30	y	319	0IE	C17-C16	-4.20	1.36	1.45
28	u	416	CLA	C1C-C2C	-4.20	1.36	1.44
29	n	308	CHL	C3D-C2D	-4.20	1.27	1.39
28	g	307	CLA	C1C-C2C	-4.20	1.36	1.44
28	b	606	CLA	C1C-C2C	-4.20	1.36	1.44
28	U	410	CLA	C1C-C2C	-4.20	1.36	1.44
28	N	314	CLA	C4C-C3C	-4.20	1.37	1.45
30	Y	319	0IE	C15-C16	-4.19	1.30	1.35
28	N	315	CLA	C1C-C2C	-4.19	1.36	1.44
29	s	308	CHL	C4C-C3C	-4.19	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	S	302	CHL	C4C-C3C	-4.19	1.37	1.45
29	V	302	CHL	CHD-C4C	-4.19	1.29	1.39
28	c	520	CLA	C1C-C2C	-4.19	1.36	1.44
41	G	302	DGD	O2G-C1B	4.19	1.46	1.34
41	C	514	DGD	O1G-C1A	4.19	1.45	1.33
28	b	610	CLA	C4C-C3C	-4.19	1.37	1.45
28	y	304	CLA	C1C-C2C	-4.19	1.36	1.44
29	g	310	CHL	MG-NC	-4.19	1.96	2.06
28	b	601	CLA	C1C-C2C	-4.19	1.36	1.44
47	s	318	XAT	C30-C29	4.19	1.41	1.35
41	c	518	DGD	O1G-C1A	4.18	1.45	1.33
28	n	314	CLA	C1C-C2C	-4.18	1.36	1.44
28	B	613	CLA	C1C-C2C	-4.18	1.36	1.44
28	b	620	CLA	C1C-C2C	-4.18	1.36	1.44
28	s	313	CLA	C1C-C2C	-4.18	1.36	1.44
28	N	312	CLA	C1C-C2C	-4.18	1.36	1.44
47	S	317	XAT	C14-C13	4.18	1.41	1.35
28	S	310	CLA	C3B-C2B	-4.18	1.26	1.41
29	s	307	CHL	C4C-C3C	-4.18	1.37	1.45
28	b	609	CLA	C1C-C2C	-4.18	1.36	1.44
29	1	310	CHL	C4C-C3C	-4.17	1.37	1.45
29	G	310	CHL	C4C-C3C	-4.17	1.37	1.45
29	Y	307	CHL	C4C-C3C	-4.17	1.37	1.45
28	C	506	CLA	C1C-C2C	-4.17	1.36	1.44
28	y	308	CLA	CAA-C2A	-4.17	1.46	1.54
28	1	308	CLA	C1C-C2C	-4.17	1.36	1.44
28	b	615	CLA	C1C-C2C	-4.17	1.36	1.44
29	n	310	CHL	C4C-C3C	-4.17	1.37	1.45
28	0	308	CLA	C1C-C2C	-4.17	1.36	1.44
28	V	317	CLA	C1C-C2C	-4.17	1.36	1.44
28	v	312	CLA	C1C-C2C	-4.17	1.36	1.44
28	s	314	CLA	C1C-C2C	-4.17	1.36	1.44
28	b	622	CLA	C1C-C2C	-4.17	1.36	1.44
41	b	621	DGD	O2G-C1B	4.16	1.46	1.34
28	c	510	CLA	C1C-C2C	-4.16	1.36	1.44
28	S	313	CLA	C1C-C2C	-4.16	1.36	1.44
41	C	515	DGD	O1G-C1A	4.16	1.45	1.33
28	0	309	CLA	C1C-C2C	-4.16	1.36	1.44
31	y	322	0UR	C13-C12	-4.16	1.37	1.45
28	g	312	CLA	MG-ND	-4.16	1.97	2.05
28	N	313	CLA	C1C-C2C	-4.16	1.36	1.44
28	v	306	CLA	C1C-C2C	-4.15	1.36	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	n	305	CHL	C4C-C3C	-4.15	1.37	1.45
29	g	310	CHL	C2C-C1C	-4.15	1.36	1.44
28	G	308	CLA	CHD-C1D	-4.15	1.30	1.38
28	c	521	CLA	C1C-C2C	-4.15	1.36	1.44
47	S	317	XAT	C10-C9	4.15	1.41	1.35
31	Y	317	0UR	C46-C45	-4.15	1.38	1.48
33	A	401	BCR	C14-C13	4.15	1.41	1.35
29	U	405	CHL	C4C-C3C	-4.15	1.37	1.45
28	U	414	CLA	CAA-C2A	-4.14	1.46	1.54
28	1	304	CLA	C1C-C2C	-4.14	1.36	1.44
28	C	517	CLA	C1C-C2C	-4.14	1.36	1.44
28	u	415	CLA	C1C-C2C	-4.14	1.36	1.44
31	y	317	0UR	C13-C12	-4.14	1.37	1.45
28	y	310	CLA	C4C-C3C	-4.14	1.37	1.45
41	c	517	DGD	O2G-C1B	4.14	1.46	1.34
47	N	318	XAT	C30-C29	4.14	1.41	1.35
28	1	309	CLA	C1C-C2C	-4.14	1.36	1.44
28	U	412	CLA	C1C-C2C	-4.14	1.36	1.44
28	g	313	CLA	CAB-C3B	-4.13	1.36	1.47
28	G	308	CLA	C3B-C2B	-4.13	1.27	1.41
33	b	604	BCR	C10-C9	4.13	1.41	1.35
33	K	104	BCR	C10-C9	4.13	1.41	1.35
28	1	301	CLA	C1C-C2C	-4.13	1.36	1.44
29	S	306	CHL	CHD-C4C	-4.13	1.29	1.39
29	n	309	CHL	C4C-C3C	-4.13	1.37	1.45
28	C	519	CLA	C1C-C2C	-4.13	1.36	1.44
28	N	314	CLA	C1C-C2C	-4.13	1.36	1.44
28	Y	310	CLA	C1C-C2C	-4.13	1.36	1.44
29	U	408	CHL	C4C-C3C	-4.13	1.37	1.45
28	c	513	CLA	C1C-C2C	-4.13	1.36	1.44
28	B	605	CLA	C1C-C2C	-4.13	1.36	1.44
29	v	307	CHL	CHD-C4C	-4.12	1.29	1.39
28	S	311	CLA	C1C-C2C	-4.12	1.36	1.44
28	n	313	CLA	C1C-C2C	-4.12	1.36	1.44
28	0	311	CLA	C1C-C2C	-4.12	1.36	1.44
33	K	102	BCR	C14-C13	4.12	1.41	1.35
47	N	318	XAT	C10-C9	4.12	1.41	1.35
28	y	306	CLA	CHC-C4B	-4.12	1.30	1.39
29	g	310	CHL	MG-ND	-4.12	1.97	2.05
33	a	401	BCR	C14-C13	4.12	1.41	1.35
28	b	611	CLA	C1C-C2C	-4.12	1.36	1.44
29	N	309	CHL	C4C-C3C	-4.12	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	g	318	0UR	O39-C25	-4.12	1.31	1.43
28	y	308	CLA	CHC-C4B	-4.11	1.30	1.39
29	v	303	CHL	CHD-C1D	-4.11	1.30	1.38
46	g	319	NEX	C30-C29	4.11	1.41	1.35
31	y	318	0UR	C19-C18	4.11	1.56	1.50
28	v	316	CLA	C1C-C2C	-4.11	1.36	1.44
33	a	401	BCR	C10-C9	4.11	1.41	1.35
33	k	102	BCR	C21-C22	4.11	1.41	1.35
46	G	320	NEX	C10-C9	4.11	1.41	1.35
41	c	516	DGD	O2G-C1B	4.11	1.45	1.34
46	n	321	NEX	C14-C13	4.11	1.41	1.35
28	G	309	CLA	C1C-C2C	-4.10	1.36	1.44
28	1	305	CLA	C1C-C2C	-4.10	1.36	1.44
29	s	303	CHL	C4C-C3C	-4.10	1.38	1.45
33	k	101	BCR	C14-C13	4.10	1.41	1.35
29	v	303	CHL	O2D-CGD	-4.09	1.23	1.33
33	D	403	BCR	C14-C13	4.09	1.41	1.35
28	V	307	CLA	CAA-C2A	-4.09	1.46	1.54
32	1	313	LUT	C20-C13	-4.09	1.42	1.50
29	n	311	CHL	C4C-C3C	-4.09	1.38	1.45
33	h	101	BCR	C10-C9	4.09	1.41	1.35
28	C	510	CLA	C1C-C2C	-4.08	1.36	1.44
28	Y	311	CLA	CHB-C4A	-4.08	1.28	1.37
47	S	317	XAT	C34-C33	4.08	1.41	1.35
28	y	306	CLA	CHD-C1D	-4.08	1.30	1.38
28	B	608	CLA	C1C-C2C	-4.08	1.36	1.44
41	b	621	DGD	O1G-C1A	4.08	1.45	1.33
28	a	402	CLA	C1C-C2C	-4.08	1.36	1.44
47	N	318	XAT	C14-C13	4.07	1.41	1.35
33	A	401	BCR	C10-C9	4.07	1.41	1.35
33	C	502	BCR	C14-C13	4.07	1.41	1.35
28	U	414	CLA	C3C-C2C	-4.07	1.28	1.36
28	0	305	CLA	C1C-C2C	-4.07	1.36	1.44
28	1	311	CLA	C1C-C2C	-4.07	1.36	1.44
31	y	323	0UR	C50-C49	-4.06	1.28	1.51
28	y	308	CLA	CHD-C1D	-4.06	1.30	1.38
28	y	311	CLA	C1C-C2C	-4.06	1.36	1.44
28	g	312	CLA	C1D-ND	-4.06	1.32	1.37
33	k	102	BCR	C17-C18	4.06	1.41	1.35
28	1	306	CLA	C1C-C2C	-4.06	1.36	1.44
29	V	313	CHL	CMA-C3A	-4.06	1.44	1.53
47	s	318	XAT	C34-C33	4.06	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	Y	319	0IE	C33-C32	-4.05	1.42	1.54
29	S	303	CHL	C4C-C3C	-4.05	1.38	1.45
29	u	406	CHL	C4C-C3C	-4.05	1.38	1.45
30	0	312	0IE	C37-C36	-4.05	1.44	1.50
31	1	316	0UR	C41-C2	-4.05	1.34	1.51
29	s	310	CHL	C4C-C3C	-4.05	1.38	1.45
29	v	307	CHL	C1B-NB	-4.05	1.32	1.37
29	n	308	CHL	CHD-C4C	-4.05	1.30	1.39
31	Y	317	0UR	C28-C19	-4.04	1.45	1.56
28	y	310	CLA	C1C-C2C	-4.04	1.36	1.44
29	s	309	CHL	C4C-C3C	-4.04	1.38	1.45
28	g	305	CLA	C1C-C2C	-4.04	1.36	1.44
28	G	306	CLA	C1C-C2C	-4.04	1.36	1.44
33	B	603	BCR	C10-C9	4.04	1.41	1.35
28	G	316	CLA	C1C-C2C	-4.04	1.36	1.44
28	S	314	CLA	C1C-C2C	-4.04	1.36	1.44
28	s	315	CLA	C1C-C2C	-4.03	1.36	1.44
29	V	305	CHL	C4C-C3C	-4.03	1.38	1.45
41	c	518	DGD	O2G-C1B	4.03	1.45	1.34
41	a	409	DGD	O2G-C1B	4.03	1.45	1.34
33	D	403	BCR	C21-C22	4.03	1.41	1.35
31	1	316	0UR	C27-C1	-4.03	1.28	1.34
29	n	312	CHL	C4C-C3C	-4.02	1.38	1.45
28	b	617	CLA	C1C-C2C	-4.02	1.36	1.44
28	g	314	CLA	CAB-C3B	-4.02	1.36	1.47
33	C	507	BCR	C21-C22	4.02	1.41	1.35
41	a	409	DGD	O1G-C1A	4.02	1.45	1.33
32	Y	320	LUT	C28-C29	-4.02	1.37	1.45
33	D	403	BCR	C10-C9	4.02	1.41	1.35
33	k	102	BCR	C14-C13	4.02	1.41	1.35
41	c	524	DGD	O2G-C1B	4.01	1.45	1.34
28	U	414	CLA	CMA-C3A	-4.01	1.44	1.53
28	g	312	CLA	C1C-NC	-4.01	1.31	1.37
33	c	507	BCR	C14-C13	4.01	1.41	1.35
45	E	101	HEM	C3C-C4C	-4.00	1.39	1.46
47	v	319	XAT	C10-C9	4.00	1.41	1.35
32	Y	320	LUT	C32-C33	-4.00	1.37	1.45
33	B	604	BCR	C14-C13	4.00	1.41	1.35
28	V	307	CLA	O2D-CGD	-4.00	1.23	1.33
28	Y	313	CLA	CHC-C4B	-4.00	1.30	1.39
38	c	502	LMG	C29-C28	-3.99	1.39	1.50
29	y	315	CHL	MG-NA	3.99	2.15	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	G	317	CHL	C2C-C3C	-3.99	1.28	1.36
28	G	313	CLA	C1C-C2C	-3.99	1.36	1.44
45	e	101	HEM	FE-NA	3.99	2.08	1.95
41	A	417	DGD	O2G-C1B	3.99	1.45	1.34
31	1	316	0UR	O57-C45	-3.99	1.13	1.21
32	u	419	LUT	C14-C13	3.98	1.41	1.35
31	0	313	0UR	C38-C28	-3.98	1.45	1.53
29	v	311	CHL	C4C-C3C	-3.98	1.38	1.45
29	V	302	CHL	O2D-CGD	-3.98	1.23	1.33
47	v	319	XAT	C30-C29	3.98	1.41	1.35
28	y	306	CLA	C1D-ND	-3.98	1.32	1.37
33	k	102	BCR	C10-C9	3.98	1.41	1.35
28	Y	311	CLA	C4B-NB	-3.98	1.32	1.37
33	B	603	BCR	C14-C13	3.98	1.41	1.35
29	U	409	CHL	C4C-C3C	-3.97	1.38	1.45
28	V	307	CLA	C3C-C2C	-3.97	1.28	1.36
33	C	507	BCR	C14-C13	3.97	1.41	1.35
33	H	101	BCR	C17-C18	3.97	1.41	1.35
29	V	309	CHL	C2C-C3C	-3.97	1.28	1.36
47	V	321	XAT	C14-C13	3.97	1.41	1.35
33	k	101	BCR	C17-C18	3.97	1.41	1.35
31	V	319	0UR	C11-C12	-3.96	1.30	1.35
28	Y	308	CLA	C1C-C2C	-3.96	1.36	1.44
30	y	321	0IE	C19-C18	-3.96	1.44	1.50
41	C	514	DGD	O2G-C1B	3.96	1.45	1.34
33	T	101	BCR	C14-C13	3.96	1.41	1.35
30	Y	319	0IE	C17-C16	-3.96	1.37	1.45
28	g	314	CLA	CHB-C4A	-3.96	1.28	1.37
41	g	302	DGD	O2G-C1B	3.96	1.45	1.34
47	s	318	XAT	C14-C13	3.96	1.41	1.35
28	s	311	CLA	C1C-C2C	-3.96	1.36	1.44
33	K	104	BCR	C14-C13	3.96	1.41	1.35
47	v	319	XAT	C14-C13	3.96	1.41	1.35
47	S	317	XAT	C30-C29	3.96	1.41	1.35
33	t	101	BCR	C14-C13	3.95	1.41	1.35
29	V	309	CHL	CHB-C4A	-3.95	1.28	1.37
33	A	401	BCR	C21-C22	3.95	1.41	1.35
28	U	414	CLA	CBA-CGA	-3.95	1.39	1.50
43	U	420	LMN	C3-C2	-3.95	1.42	1.52
46	V	322	NEX	C14-C13	3.95	1.41	1.35
31	g	318	0UR	C11-C12	-3.94	1.30	1.35
29	n	311	CHL	MG-NA	3.94	2.15	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	G	310	CHL	MG-NA	3.94	2.15	2.06
33	C	507	BCR	C17-C18	3.93	1.41	1.35
33	d	403	BCR	C10-C9	3.93	1.41	1.35
29	v	307	CHL	CBA-CGA	-3.93	1.39	1.50
46	V	323	NEX	C14-C13	3.93	1.41	1.35
47	n	320	XAT	C34-C33	3.92	1.41	1.35
29	V	309	CHL	CAB-C3B	-3.92	1.36	1.47
33	c	509	BCR	C17-C18	3.92	1.41	1.35
29	N	306	CHL	MG-NC	-3.92	1.97	2.06
33	d	403	BCR	C14-C13	3.91	1.41	1.35
47	v	319	XAT	C34-C33	3.91	1.41	1.35
31	y	323	0UR	C51-C50	-3.91	1.29	1.51
46	n	302	NEX	C30-C29	3.91	1.41	1.35
28	b	619	CLA	MG-NA	3.91	2.15	2.06
28	C	510	CLA	MG-NA	3.91	2.15	2.06
46	v	320	NEX	C14-C13	3.90	1.41	1.35
28	y	308	CLA	C2A-C1A	-3.90	1.43	1.52
28	y	308	CLA	O1A-CGA	-3.90	1.11	1.22
41	C	520	DGD	O1G-C1A	3.89	1.44	1.33
33	a	401	BCR	C17-C18	3.89	1.40	1.35
41	C	516	DGD	O2G-C1B	3.89	1.45	1.34
29	s	307	CHL	MG-NA	3.89	2.15	2.06
33	C	507	BCR	C10-C9	3.88	1.40	1.35
33	K	102	BCR	C10-C9	3.88	1.40	1.35
28	y	308	CLA	CHD-C4C	-3.88	1.30	1.39
28	1	303	CLA	C3D-C4D	-3.88	1.35	1.44
46	V	322	NEX	C34-C33	3.88	1.40	1.35
32	U	418	LUT	C14-C13	3.88	1.40	1.35
28	u	407	CLA	MG-NA	3.87	2.15	2.06
29	N	308	CHL	C2C-C3C	-3.87	1.28	1.36
31	g	318	0UR	C8-C7	-3.87	1.30	1.35
28	g	315	CLA	MG-NA	3.87	2.15	2.06
46	V	323	NEX	C34-C33	3.87	1.40	1.35
32	1	313	LUT	C14-C13	3.87	1.40	1.35
46	V	322	NEX	C30-C29	3.87	1.40	1.35
33	T	101	BCR	C10-C9	3.86	1.40	1.35
33	t	101	BCR	C10-C9	3.86	1.40	1.35
33	b	602	BCR	C14-C13	3.86	1.40	1.35
28	u	417	CLA	MG-NA	3.86	2.15	2.06
47	s	318	XAT	C10-C9	3.86	1.40	1.35
28	0	308	CLA	MG-NA	3.86	2.15	2.06
28	g	305	CLA	MG-NA	3.86	2.15	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
46	V	323	NEX	C30-C29	3.86	1.40	1.35
28	Y	303	CLA	CHD-C1D	-3.85	1.30	1.38
28	V	307	CLA	CMA-C3A	-3.85	1.44	1.53
29	G	311	CHL	C4C-C3C	-3.85	1.38	1.45
41	C	516	DGD	O1G-C1A	3.85	1.44	1.33
29	s	306	CHL	C1B-C2B	-3.85	1.34	1.43
29	g	310	CHL	C1B-C2B	-3.85	1.34	1.43
29	N	306	CHL	C2C-C1C	-3.85	1.37	1.44
29	S	309	CHL	C4C-C3C	-3.85	1.38	1.45
45	E	101	HEM	FE-NB	3.85	2.06	1.94
29	Y	307	CHL	MG-NA	3.85	2.15	2.06
46	n	321	NEX	C34-C33	3.85	1.40	1.35
33	b	603	BCR	C21-C22	3.85	1.40	1.35
28	U	406	CLA	MG-NA	3.84	2.15	2.06
28	0	307	CLA	C4D-ND	-3.84	1.32	1.37
28	1	311	CLA	MG-NA	3.84	2.15	2.06
28	U	414	CLA	CHD-C4C	-3.84	1.30	1.39
29	V	311	CHL	C3D-C2D	-3.84	1.28	1.39
29	V	312	CHL	C4C-C3C	-3.84	1.38	1.45
47	n	320	XAT	C14-C13	3.83	1.40	1.35
28	Y	311	CLA	MG-NA	3.83	2.15	2.06
28	V	307	CLA	MG-NC	-3.83	1.97	2.06
28	U	416	CLA	MG-NA	3.83	2.15	2.06
32	U	418	LUT	C10-C9	3.83	1.40	1.35
28	b	616	CLA	MG-NA	3.83	2.15	2.06
47	V	321	XAT	C10-C9	3.82	1.40	1.35
28	g	308	CLA	MG-NA	3.82	2.15	2.06
31	0	313	0UR	C13-C12	-3.82	1.37	1.45
47	V	321	XAT	C34-C33	3.82	1.40	1.35
28	v	316	CLA	MG-NA	3.82	2.15	2.06
33	B	614	BCR	C10-C9	3.82	1.40	1.35
46	n	321	NEX	C30-C29	3.82	1.40	1.35
29	u	410	CHL	MG-NA	3.82	2.15	2.06
28	B	622	CLA	MG-NA	3.82	2.15	2.06
28	S	310	CLA	CHC-C1C	-3.82	1.30	1.38
29	y	307	CHL	MG-NA	3.82	2.15	2.06
33	a	401	BCR	C21-C22	3.81	1.40	1.35
33	k	101	BCR	C21-C22	3.81	1.40	1.35
29	n	308	CHL	C3B-C2B	-3.81	1.28	1.41
28	U	414	CLA	MG-NA	-3.81	1.97	2.06
33	C	502	BCR	C21-C22	3.81	1.40	1.35
31	Y	322	0UR	O39-C25	-3.81	1.32	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	U	418	LUT	C30-C29	3.81	1.40	1.35
28	g	311	CLA	MG-NA	3.81	2.15	2.06
45	e	101	HEM	C1C-C2C	-3.80	1.37	1.45
30	Y	319	0IE	C35-C36	-3.80	1.45	1.51
45	e	101	HEM	C3C-C4C	-3.80	1.39	1.46
28	G	309	CLA	MG-NA	3.79	2.15	2.06
28	b	615	CLA	MG-NA	3.79	2.15	2.06
28	u	405	CLA	MG-NA	3.79	2.15	2.06
29	s	310	CHL	MG-NA	3.79	2.15	2.06
30	Y	319	0IE	C21-C7	-3.78	1.43	1.50
31	Y	322	0UR	C8-C7	-3.78	1.30	1.35
31	y	323	0UR	C46-C47	-3.78	1.22	1.32
33	h	101	BCR	C17-C18	3.78	1.40	1.35
30	0	312	0IE	C38-C32	-3.78	1.46	1.53
33	C	502	BCR	C17-C18	3.78	1.40	1.35
29	S	308	CHL	MG-NA	3.77	2.15	2.06
33	b	603	BCR	C17-C18	3.77	1.40	1.35
39	a	412	PL9	C3-C4	-3.77	1.43	1.49
46	v	320	NEX	C34-C33	3.77	1.40	1.35
47	n	320	XAT	C30-C29	3.77	1.40	1.35
29	V	302	CHL	CMA-C3A	-3.77	1.45	1.53
29	v	303	CHL	C2C-C3C	-3.77	1.28	1.36
33	K	104	BCR	C21-C22	3.76	1.40	1.35
30	0	312	0IE	O42-C26	-3.76	1.36	1.43
28	c	506	CLA	MG-NA	3.76	2.15	2.06
28	Y	303	CLA	C3B-C2B	-3.76	1.28	1.41
31	g	318	0UR	O57-C45	-3.76	1.13	1.21
29	s	306	CHL	C1B-NB	-3.76	1.33	1.37
28	B	606	CLA	MG-NA	3.76	2.15	2.06
28	0	303	CLA	MG-NA	3.76	2.15	2.06
28	B	621	CLA	MG-NA	3.76	2.15	2.06
29	N	309	CHL	MG-NA	3.75	2.15	2.06
28	B	616	CLA	MG-NA	3.75	2.15	2.06
28	S	312	CLA	MG-NA	3.75	2.15	2.06
28	n	315	CLA	MG-NA	3.75	2.15	2.06
28	1	307	CLA	MG-NA	3.75	2.15	2.06
33	D	403	BCR	C17-C18	3.75	1.40	1.35
47	n	320	XAT	C10-C9	3.74	1.40	1.35
32	Y	320	LUT	C20-C13	-3.74	1.43	1.50
28	b	606	CLA	MG-NA	3.74	2.15	2.06
31	Y	318	0UR	C13-C12	-3.74	1.37	1.45
28	n	307	CLA	MG-NA	3.74	2.15	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	N	304	CLA	CHB-C4A	-3.74	1.28	1.37
28	U	414	CLA	C2A-C1A	-3.74	1.43	1.52
29	V	313	CHL	O1A-CGA	-3.74	1.11	1.22
47	V	321	XAT	C30-C29	3.74	1.40	1.35
33	b	604	BCR	C17-C18	3.74	1.40	1.35
29	N	307	CHL	MG-NA	3.73	2.15	2.06
46	N	319	NEX	C32-C33	-3.73	1.37	1.45
28	y	303	CLA	MG-NA	3.73	2.15	2.06
29	S	306	CHL	C1D-ND	-3.73	1.33	1.37
28	V	308	CLA	MG-NA	3.72	2.15	2.06
28	B	607	CLA	MG-NA	3.72	2.15	2.06
28	y	314	CLA	MG-NA	3.72	2.15	2.06
29	v	308	CHL	MG-NA	3.72	2.15	2.06
33	h	101	BCR	C21-C22	3.72	1.40	1.35
28	y	306	CLA	C3B-C2B	-3.72	1.28	1.41
29	S	302	CHL	MG-NA	3.72	2.15	2.06
31	y	317	0UR	C15-C16	-3.72	1.30	1.35
29	g	310	CHL	C2C-C3C	-3.71	1.29	1.36
28	U	417	CLA	MG-NA	3.71	2.15	2.06
28	c	511	CLA	MG-NA	3.71	2.15	2.06
28	0	305	CLA	MG-NA	3.71	2.15	2.06
28	U	404	CLA	MG-NA	3.71	2.15	2.06
28	0	302	CLA	MG-NA	3.71	2.15	2.06
28	n	314	CLA	MG-NA	3.71	2.15	2.06
29	V	311	CHL	CHB-C4A	-3.71	1.29	1.37
33	c	507	BCR	C10-C9	3.71	1.40	1.35
29	S	309	CHL	MG-NA	3.70	2.15	2.06
33	B	614	BCR	C14-C13	3.70	1.40	1.35
28	y	306	CLA	C3C-C2C	-3.70	1.28	1.36
28	0	306	CLA	MG-NA	3.70	2.15	2.06
28	C	511	CLA	MG-NA	3.70	2.15	2.06
43	U	420	LMN	O5-C5	-3.69	1.35	1.44
29	n	312	CHL	MG-NA	3.69	2.15	2.06
28	0	307	CLA	MG-NC	-3.69	1.97	2.06
45	E	101	HEM	FE-ND	3.69	2.06	1.94
28	v	314	CLA	MG-NA	3.69	2.15	2.06
33	K	104	BCR	C17-C18	3.69	1.40	1.35
29	G	317	CHL	MG-NA	-3.69	1.97	2.06
33	B	604	BCR	C17-C18	3.69	1.40	1.35
33	K	102	BCR	C17-C18	3.69	1.40	1.35
31	0	313	0UR	C19-C18	-3.68	1.44	1.50
33	B	614	BCR	C17-C18	3.68	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	g	313	CLA	C3B-C2B	-3.68	1.28	1.41
29	s	308	CHL	MG-NA	3.68	2.15	2.06
33	b	604	BCR	C14-C13	3.68	1.40	1.35
28	N	313	CLA	MG-NA	3.68	2.15	2.06
29	V	309	CHL	CHD-C1D	-3.67	1.31	1.38
28	g	314	CLA	C3B-C2B	-3.67	1.28	1.41
28	Y	311	CLA	CHC-C4B	-3.67	1.31	1.39
32	U	418	LUT	C34-C33	3.67	1.40	1.35
29	S	303	CHL	MG-NA	3.67	2.15	2.06
28	Y	311	CLA	CHC-C1C	-3.67	1.31	1.38
30	0	312	0IE	C19-C18	-3.66	1.45	1.50
28	Y	308	CLA	MG-NA	3.66	2.15	2.06
29	N	310	CHL	MG-NA	3.66	2.15	2.06
46	v	320	NEX	C30-C29	3.66	1.40	1.35
46	G	321	NEX	C30-C29	3.66	1.40	1.35
29	S	306	CHL	C3B-C2B	-3.65	1.28	1.41
29	N	302	CHL	MG-NB	-3.65	1.98	2.05
29	V	309	CHL	C3B-C2B	-3.65	1.28	1.41
46	G	321	NEX	C14-C13	3.65	1.40	1.35
28	C	505	CLA	MG-NA	3.65	2.14	2.06
28	Y	311	CLA	CAA-C2A	-3.65	1.47	1.54
45	E	101	HEM	C1B-C2B	-3.65	1.37	1.44
29	v	307	CHL	O2D-CGD	-3.65	1.24	1.33
29	V	309	CHL	O1A-CGA	-3.65	1.11	1.22
31	Y	322	0UR	C46-C47	-3.65	1.22	1.32
28	b	617	CLA	MG-NA	3.64	2.14	2.06
28	D	409	CLA	MG-NA	3.64	2.14	2.06
28	G	308	CLA	CHC-C1C	-3.64	1.31	1.38
29	V	312	CHL	MG-NA	3.64	2.14	2.06
28	C	506	CLA	MG-NA	3.64	2.14	2.06
38	c	502	LMG	C7-C8	-3.64	1.39	1.50
28	Y	313	CLA	CHB-C4A	-3.63	1.29	1.37
28	y	306	CLA	CHC-C1C	-3.63	1.31	1.38
28	B	612	CLA	MG-NA	3.63	2.14	2.06
28	1	309	CLA	MG-NA	3.63	2.14	2.06
28	N	311	CLA	MG-NA	3.63	2.14	2.06
28	U	413	CLA	MG-NA	3.63	2.14	2.06
29	v	310	CHL	MG-NA	3.63	2.14	2.06
28	1	305	CLA	MG-NA	3.62	2.14	2.06
28	b	622	CLA	MG-NA	3.62	2.14	2.06
31	V	319	0UR	C46-C47	-3.62	1.22	1.32
29	g	309	CHL	MG-NA	3.62	2.14	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	n	308	CHL	O1A-CGA	-3.62	1.11	1.22
33	c	509	BCR	C21-C22	3.62	1.40	1.35
28	Y	311	CLA	O1A-CGA	-3.62	1.11	1.22
28	1	304	CLA	MG-NA	3.61	2.14	2.06
28	G	312	CLA	MG-NA	3.61	2.14	2.06
32	Y	320	LUT	C30-C29	3.61	1.40	1.35
45	E	101	HEM	C1C-C2C	-3.61	1.38	1.45
28	Y	306	CLA	MG-NA	3.61	2.14	2.06
32	y	320	LUT	C1-C6	-3.61	1.48	1.53
32	u	419	LUT	C10-C9	3.60	1.40	1.35
33	t	101	BCR	C21-C22	3.60	1.40	1.35
29	G	317	CHL	MG-NB	-3.60	1.98	2.05
29	S	306	CHL	CHB-C4A	-3.60	1.29	1.37
29	s	302	CHL	MG-NA	3.60	2.14	2.06
30	0	312	0IE	C9-C10	-3.60	1.26	1.36
28	c	512	CLA	MG-NA	3.60	2.14	2.06
29	N	308	CHL	O2D-CGD	-3.59	1.24	1.33
31	y	323	0UR	C11-C12	-3.59	1.31	1.35
28	G	314	CLA	MG-NA	3.59	2.14	2.06
29	S	307	CHL	MG-NA	3.59	2.14	2.06
28	U	410	CLA	MG-NA	3.59	2.14	2.06
29	g	316	CHL	CHD-C4C	-3.59	1.31	1.39
32	u	419	LUT	C30-C29	3.58	1.40	1.35
28	g	313	CLA	C1C-NC	-3.58	1.32	1.37
28	1	306	CLA	MG-NA	3.58	2.14	2.06
38	m	101	LMG	O9-C10	-3.58	1.11	1.22
28	N	304	CLA	C1C-NC	-3.58	1.32	1.37
28	N	304	CLA	CAB-C3B	-3.57	1.37	1.47
28	Y	311	CLA	C3B-C4B	-3.57	1.34	1.42
46	G	321	NEX	C34-C33	3.57	1.40	1.35
29	S	306	CHL	C4D-ND	-3.57	1.32	1.37
29	s	306	CHL	C2C-C1C	-3.57	1.37	1.44
46	n	321	NEX	C10-C9	3.57	1.40	1.35
28	y	308	CLA	C3B-C4B	-3.57	1.34	1.42
30	Y	319	0IE	C9-C8	3.56	1.54	1.43
31	y	323	0UR	C48-C47	-3.56	1.30	1.50
31	y	318	0UR	C14-C15	-3.56	1.32	1.43
28	g	314	CLA	MG-NC	-3.56	1.97	2.06
28	s	305	CLA	MG-NA	3.56	2.14	2.06
31	y	323	0UR	C52-C51	-3.56	1.31	1.51
28	U	414	CLA	CHC-C4B	-3.56	1.31	1.39
29	N	306	CHL	C3D-C4D	-3.56	1.36	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	G	305	CLA	MG-NA	3.56	2.14	2.06
32	y	320	LUT	C21-C26	-3.56	1.46	1.56
29	n	309	CHL	MG-NA	3.55	2.14	2.06
28	U	407	CLA	MG-NA	3.55	2.14	2.06
29	U	409	CHL	MG-NA	3.55	2.14	2.06
28	n	317	CLA	MG-NA	3.55	2.14	2.06
29	v	304	CHL	MG-NA	3.55	2.14	2.06
28	1	303	CLA	C3C-C2C	-3.55	1.29	1.36
28	b	618	CLA	MG-NA	3.55	2.14	2.06
28	1	303	CLA	CAB-C3B	-3.55	1.37	1.47
28	v	313	CLA	MG-NA	3.54	2.14	2.06
33	K	102	BCR	C21-C22	3.54	1.40	1.35
28	G	316	CLA	MG-NA	3.54	2.14	2.06
28	u	412	CLA	MG-NA	3.54	2.14	2.06
33	b	602	BCR	C10-C9	3.54	1.40	1.35
29	U	408	CHL	MG-NA	3.54	2.14	2.06
32	u	419	LUT	C34-C33	3.54	1.40	1.35
29	u	409	CHL	MG-NA	3.54	2.14	2.06
28	S	305	CLA	MG-NA	3.53	2.14	2.06
46	g	319	NEX	C10-C9	3.53	1.40	1.35
28	c	514	CLA	MG-NA	3.53	2.14	2.06
28	y	309	CLA	MG-NA	3.53	2.14	2.06
31	0	314	0UR	O57-C45	-3.53	1.14	1.21
28	y	308	CLA	CMA-C3A	-3.53	1.45	1.53
28	s	315	CLA	MG-NA	3.53	2.14	2.06
33	c	507	BCR	C17-C18	3.53	1.40	1.35
28	G	308	CLA	CHD-C4C	-3.53	1.31	1.39
28	s	312	CLA	MG-NA	3.53	2.14	2.06
29	Y	315	CHL	MG-NA	3.52	2.14	2.06
29	n	308	CHL	O2D-CGD	-3.52	1.24	1.33
38	c	502	LMG	C30-C29	-3.52	1.39	1.52
33	b	604	BCR	C21-C22	3.52	1.40	1.35
32	Y	320	LUT	C21-C26	-3.52	1.46	1.56
30	0	312	0IE	C27-C28	-3.51	1.28	1.33
29	n	304	CHL	MG-NA	3.51	2.14	2.06
28	B	611	CLA	MG-NA	3.51	2.14	2.06
29	V	310	CHL	MG-NA	3.51	2.14	2.06
28	d	409	CLA	MG-NA	3.51	2.14	2.06
31	n	318	0UR	C29-C28	-3.51	1.50	1.54
28	b	605	CLA	MG-NA	3.50	2.14	2.06
29	s	309	CHL	MG-NA	3.50	2.14	2.06
31	Y	323	0UR	C29-C28	-3.50	1.50	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	u	408	CLA	MG-NA	3.50	2.14	2.06
28	1	302	CLA	MG-NA	3.50	2.14	2.06
28	B	618	CLA	MG-NA	3.50	2.14	2.06
28	U	411	CLA	MG-NA	3.50	2.14	2.06
28	V	316	CLA	MG-NA	3.50	2.14	2.06
28	1	308	CLA	MG-NA	3.50	2.14	2.06
29	V	309	CHL	CMA-C3A	-3.50	1.45	1.53
28	S	310	CLA	CHB-C4A	-3.49	1.29	1.37
29	g	316	CHL	CHC-C4B	-3.49	1.31	1.39
28	Y	313	CLA	CHD-C1D	-3.49	1.31	1.38
29	V	311	CHL	C2A-C1A	-3.49	1.44	1.52
29	N	308	CHL	CHD-C4C	-3.49	1.31	1.39
29	v	311	CHL	MG-NA	3.49	2.14	2.06
29	u	406	CHL	MG-NA	3.48	2.14	2.06
30	y	319	0IE	C17-C18	-3.48	1.24	1.32
32	1	313	LUT	C12-C13	-3.48	1.38	1.45
30	Y	319	0IE	O1-C2	-3.48	1.16	1.23
29	g	316	CHL	CMA-C3A	-3.48	1.45	1.53
31	V	319	0UR	C8-C7	-3.48	1.31	1.35
28	b	611	CLA	MG-NA	3.48	2.14	2.06
28	Y	312	CLA	MG-NA	3.48	2.14	2.06
28	b	601	CLA	MG-NA	3.48	2.14	2.06
29	V	305	CHL	MG-NA	3.48	2.14	2.06
28	Y	313	CLA	C3C-C2C	-3.48	1.29	1.36
28	c	513	CLA	MG-NA	3.48	2.14	2.06
28	Y	303	CLA	C3C-C2C	-3.47	1.29	1.36
28	c	521	CLA	MG-NA	3.47	2.14	2.06
46	n	302	NEX	C34-C33	3.47	1.40	1.35
28	B	602	CLA	MG-NA	3.47	2.14	2.06
28	g	313	CLA	CHB-C4A	-3.47	1.29	1.37
29	n	305	CHL	MG-NA	3.47	2.14	2.06
29	v	309	CHL	MG-NA	3.47	2.14	2.06
28	C	504	CLA	MG-NA	3.46	2.14	2.06
29	N	308	CHL	CHB-C4A	-3.46	1.29	1.37
28	s	304	CLA	MG-NA	3.46	2.14	2.06
33	B	604	BCR	C21-C22	3.46	1.40	1.35
41	c	524	DGD	C2A-C1A	-3.46	1.40	1.50
28	a	416	CLA	MG-NA	3.46	2.14	2.06
28	g	312	CLA	C3B-C2B	-3.46	1.29	1.41
29	V	309	CHL	CAA-C2A	-3.46	1.47	1.54
28	c	508	CLA	MG-NA	3.46	2.14	2.06
29	G	317	CHL	C3D-C2D	-3.46	1.29	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	V	311	CHL	CAA-C2A	-3.45	1.47	1.54
28	u	411	CLA	MG-NA	3.45	2.14	2.06
28	C	519	CLA	MG-NA	3.45	2.14	2.06
28	u	414	CLA	MG-NA	3.45	2.14	2.06
28	Y	304	CLA	MG-NA	3.45	2.14	2.06
45	E	101	HEM	C1A-C2A	-3.45	1.37	1.44
28	S	310	CLA	O2D-CGD	-3.45	1.24	1.33
28	g	313	CLA	O2D-CGD	-3.44	1.24	1.33
45	e	101	HEM	C1A-C2A	-3.44	1.37	1.44
28	S	310	CLA	CHD-C4C	-3.44	1.31	1.39
29	g	316	CHL	C3B-C2B	-3.44	1.29	1.41
28	S	310	CLA	CHD-C1D	-3.43	1.31	1.38
28	G	308	CLA	O2D-CGD	-3.43	1.24	1.33
31	S	315	0UR	C29-C28	-3.43	1.50	1.54
28	y	312	CLA	MG-NA	3.43	2.14	2.06
28	Y	305	CLA	MG-NA	3.42	2.14	2.06
29	V	302	CHL	C3B-C2B	-3.42	1.29	1.41
28	g	313	CLA	CHD-C4C	-3.42	1.31	1.39
29	N	302	CHL	O1A-CGA	-3.42	1.12	1.22
28	C	512	CLA	MG-NA	3.41	2.14	2.06
29	v	303	CHL	CAB-C3B	-3.41	1.38	1.47
33	B	614	BCR	C21-C22	3.41	1.40	1.35
28	B	608	CLA	MG-NA	3.41	2.14	2.06
31	0	313	0UR	C20-C7	-3.41	1.43	1.50
28	Y	313	CLA	CMA-C3A	-3.40	1.45	1.53
29	U	405	CHL	MG-NA	3.40	2.14	2.06
33	A	401	BCR	C17-C18	3.40	1.40	1.35
28	c	522	CLA	MG-NA	3.40	2.14	2.06
28	g	304	CLA	MG-NA	3.39	2.14	2.06
28	B	619	CLA	MG-NA	3.39	2.14	2.06
28	C	513	CLA	MG-NA	3.39	2.14	2.06
28	s	311	CLA	MG-NA	3.39	2.14	2.06
31	N	316	0UR	C29-C28	-3.39	1.50	1.54
33	d	403	BCR	C17-C18	3.39	1.40	1.35
28	Y	303	CLA	C4B-NB	-3.39	1.33	1.37
28	A	416	CLA	MG-NA	3.39	2.14	2.06
28	N	315	CLA	MG-NA	3.39	2.14	2.06
28	U	415	CLA	MG-NA	3.39	2.14	2.06
29	n	310	CHL	MG-NA	3.39	2.14	2.06
28	Y	303	CLA	CHB-C4A	-3.38	1.29	1.37
46	G	321	NEX	C10-C9	3.38	1.40	1.35
45	E	101	HEM	FE-NA	3.38	2.06	1.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	Y	303	CLA	CAA-C2A	-3.38	1.47	1.54
31	V	319	0UR	C28-C19	-3.38	1.46	1.56
28	0	309	CLA	MG-NA	3.38	2.14	2.06
28	g	314	CLA	C3C-C2C	-3.38	1.29	1.36
29	V	302	CHL	C14-C13	-3.38	1.42	1.52
28	C	509	CLA	MG-NA	3.37	2.14	2.06
28	a	403	CLA	MG-NA	3.37	2.14	2.06
28	b	608	CLA	MG-NA	3.37	2.14	2.06
28	b	612	CLA	MG-NA	3.37	2.14	2.06
29	V	313	CHL	CAA-C2A	-3.37	1.47	1.54
46	n	302	NEX	C14-C13	3.37	1.40	1.35
28	S	304	CLA	MG-NA	3.36	2.14	2.06
28	d	404	CLA	MG-NA	3.36	2.14	2.06
28	b	607	CLA	MG-NA	3.36	2.14	2.06
28	y	316	CLA	MG-NA	3.36	2.14	2.06
33	t	101	BCR	C17-C18	3.36	1.40	1.35
28	b	620	CLA	MG-NA	3.36	2.14	2.06
28	y	308	CLA	CHB-C4A	-3.36	1.29	1.37
45	e	101	HEM	FE-NC	3.36	2.06	1.95
28	n	306	CLA	MG-NA	3.36	2.14	2.06
28	Y	313	CLA	C3B-C2B	-3.35	1.29	1.41
28	Y	313	CLA	C4B-NB	-3.35	1.33	1.37
28	B	613	CLA	MG-NA	3.35	2.14	2.06
28	y	306	CLA	C3D-CAD	-3.35	1.33	1.45
28	y	306	CLA	O2D-CGD	-3.35	1.25	1.33
31	U	419	0UR	C46-C45	-3.34	1.40	1.48
33	T	101	BCR	C17-C18	3.34	1.40	1.35
29	g	316	CHL	CHC-C1C	-3.34	1.31	1.38
28	g	314	CLA	C3D-C2D	-3.34	1.30	1.39
28	U	412	CLA	MG-NA	3.34	2.14	2.06
31	G	319	0UR	C29-C28	-3.34	1.50	1.54
29	N	302	CHL	CHD-C4C	-3.33	1.31	1.39
33	b	602	BCR	C8-C9	-3.33	1.38	1.45
28	Y	314	CLA	MG-NA	3.33	2.14	2.06
46	V	322	NEX	C10-C9	3.33	1.40	1.35
28	0	304	CLA	MG-NA	3.33	2.14	2.06
45	e	101	HEM	FE-NB	3.33	2.05	1.94
28	V	315	CLA	MG-NA	3.33	2.14	2.06
28	Y	316	CLA	MG-NA	3.32	2.14	2.06
29	V	311	CHL	CAB-C3B	-3.32	1.38	1.47
29	V	309	CHL	CHC-C1C	-3.32	1.31	1.38
29	v	307	CHL	CAA-C2A	-3.31	1.48	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	0	314	0UR	C41-C2	-3.31	1.37	1.51
29	V	302	CHL	CAB-C3B	-3.31	1.38	1.47
32	y	320	LUT	C22-C21	-3.31	1.50	1.54
33	H	101	BCR	C21-C22	3.30	1.40	1.35
31	0	313	0UR	O44-C45	3.30	1.42	1.34
29	1	310	CHL	MG-NA	3.29	2.14	2.06
28	A	407	CLA	MG-NA	3.29	2.14	2.06
29	N	302	CHL	CHB-C4A	-3.29	1.29	1.37
28	c	510	CLA	MG-NA	3.29	2.14	2.06
33	B	603	BCR	C17-C18	3.29	1.40	1.35
32	U	418	LUT	C8-C9	-3.29	1.38	1.45
28	y	310	CLA	MG-NA	3.29	2.14	2.06
30	0	312	0IE	O40-C34	-3.28	1.33	1.43
28	u	413	CLA	MG-NA	3.28	2.14	2.06
33	b	602	BCR	C17-C18	3.28	1.40	1.35
29	v	307	CHL	C2C-C3C	-3.28	1.29	1.36
28	C	517	CLA	MG-NA	3.28	2.14	2.06
29	V	313	CHL	C1D-ND	-3.28	1.33	1.37
28	c	520	CLA	MG-NA	3.28	2.14	2.06
29	V	313	CHL	C3B-C4B	-3.28	1.35	1.42
28	V	318	CLA	MG-NA	3.28	2.14	2.06
46	N	319	NEX	C39-C29	-3.27	1.44	1.50
28	g	314	CLA	CHD-C1D	-3.27	1.32	1.38
28	c	505	CLA	MG-NA	3.27	2.14	2.06
29	v	303	CHL	CHC-C4B	-3.27	1.32	1.39
28	0	311	CLA	MG-NA	3.26	2.14	2.06
31	y	323	0UR	C54-C53	-3.26	1.33	1.51
29	N	302	CHL	CHC-C1C	-3.26	1.31	1.38
28	v	305	CLA	MG-NA	3.26	2.14	2.06
46	v	320	NEX	C10-C9	3.25	1.40	1.35
33	d	403	BCR	C8-C9	-3.25	1.39	1.45
28	v	306	CLA	MG-NA	3.25	2.14	2.06
28	y	313	CLA	MG-NA	3.25	2.14	2.06
29	S	306	CHL	CAB-C3B	-3.25	1.38	1.47
33	c	507	BCR	C21-C22	3.25	1.40	1.35
28	y	305	CLA	MG-NA	3.25	2.14	2.06
28	1	303	CLA	C3B-C4B	-3.24	1.35	1.42
28	y	304	CLA	MG-NA	3.24	2.14	2.06
28	1	301	CLA	MG-NA	3.24	2.14	2.06
29	n	308	CHL	C3B-C4B	-3.24	1.35	1.42
28	g	307	CLA	MG-NA	3.24	2.14	2.06
29	V	313	CHL	C3B-C2B	-3.24	1.30	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	Y	310	CLA	MG-NA	3.24	2.14	2.06
28	a	402	CLA	MG-NA	3.23	2.13	2.06
33	B	603	BCR	C21-C22	3.23	1.40	1.35
28	a	410	CLA	MG-NA	3.23	2.13	2.06
28	U	414	CLA	C4B-NB	-3.23	1.33	1.37
32	y	320	LUT	C11-C10	-3.23	1.33	1.43
28	A	411	CLA	MG-NA	3.23	2.13	2.06
33	d	403	BCR	C21-C22	3.23	1.40	1.35
29	0	310	CHL	MG-NA	3.22	2.13	2.06
28	b	610	CLA	MG-NA	3.22	2.13	2.06
28	V	307	CLA	CAB-C3B	-3.22	1.38	1.47
28	G	306	CLA	MG-NA	3.21	2.13	2.06
33	T	101	BCR	C21-C22	3.21	1.40	1.35
33	B	603	BCR	C23-C22	-3.21	1.39	1.45
33	t	101	BCR	C8-C9	-3.20	1.39	1.45
28	B	601	CLA	MG-NA	3.20	2.13	2.06
28	V	317	CLA	MG-NA	3.20	2.13	2.06
28	A	410	CLA	MG-NA	3.20	2.13	2.06
31	g	318	0UR	C41-C2	-3.20	1.38	1.51
46	s	319	NEX	C32-C33	-3.20	1.39	1.45
28	B	609	CLA	MG-NA	3.20	2.13	2.06
28	0	307	CLA	C1C-NC	-3.19	1.33	1.37
28	G	313	CLA	MG-NA	3.19	2.13	2.06
33	b	602	BCR	C21-C22	3.19	1.40	1.35
29	V	302	CHL	C2A-C1A	-3.19	1.45	1.52
31	Y	317	0UR	O40-C30	-3.19	1.37	1.43
28	g	313	CLA	CMA-C3A	-3.19	1.46	1.53
29	g	316	CHL	O2D-CGD	-3.18	1.25	1.33
30	y	321	0IE	C4-C3	3.18	1.45	1.36
28	U	414	CLA	C3B-C4B	-3.18	1.35	1.42
29	N	308	CHL	C3D-C2D	-3.18	1.30	1.39
28	u	415	CLA	MG-NA	3.17	2.13	2.06
28	Y	303	CLA	C3D-C2D	-3.17	1.30	1.39
28	D	410	CLA	MG-NA	3.17	2.13	2.06
30	0	312	0IE	C4-C3	-3.17	1.27	1.36
29	V	309	CHL	CHD-C4C	-3.17	1.32	1.39
28	Y	303	CLA	C3B-C4B	-3.17	1.35	1.42
28	N	304	CLA	CAA-C2A	-3.16	1.48	1.54
33	A	401	BCR	C8-C9	-3.16	1.39	1.45
28	v	315	CLA	MG-NA	3.16	2.13	2.06
28	1	303	CLA	C3B-C2B	-3.15	1.30	1.41
29	g	310	CHL	CHC-C4B	-3.15	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	g	310	CHL	CHC-C1C	-3.15	1.32	1.38
28	g	314	CLA	MG-ND	-3.14	1.99	2.05
28	1	303	CLA	MG-NB	-3.14	1.99	2.05
33	a	401	BCR	C8-C9	-3.14	1.39	1.45
32	y	320	LUT	C24-C25	-3.14	1.29	1.33
28	y	306	CLA	C1A-CHA	-3.14	1.30	1.43
32	u	419	LUT	C8-C9	-3.14	1.39	1.45
28	N	312	CLA	MG-NA	3.13	2.13	2.06
28	Y	303	CLA	MG-NA	3.13	2.13	2.06
45	e	101	HEM	C1B-C2B	-3.13	1.38	1.44
28	g	306	CLA	MG-NA	3.13	2.13	2.06
29	v	303	CHL	C3B-C4B	-3.13	1.35	1.42
29	S	306	CHL	O1A-CGA	-3.13	1.13	1.22
46	V	323	NEX	C10-C9	3.12	1.39	1.35
30	Y	319	0IE	C20-C3	-3.12	1.45	1.51
33	c	507	BCR	C8-C9	-3.12	1.39	1.45
28	v	312	CLA	MG-NA	3.12	2.13	2.06
28	V	314	CLA	MG-NA	3.11	2.13	2.06
28	n	313	CLA	MG-NA	3.11	2.13	2.06
28	S	310	CLA	C3B-C4B	-3.11	1.35	1.42
29	V	306	CHL	MG-NA	3.11	2.13	2.06
33	B	603	BCR	C8-C9	-3.11	1.39	1.45
33	K	102	BCR	C23-C22	-3.11	1.39	1.45
28	G	308	CLA	C3D-C2D	-3.11	1.30	1.39
28	c	504	CLA	MG-NA	3.11	2.13	2.06
28	V	307	CLA	C2A-C1A	-3.11	1.45	1.52
30	0	312	0IE	C35-C34	3.10	1.57	1.52
28	y	308	CLA	C3D-C2D	-3.10	1.30	1.39
28	b	609	CLA	MG-NA	3.10	2.13	2.06
29	V	302	CHL	C3B-C4B	-3.09	1.35	1.42
33	h	101	BCR	C8-C9	-3.09	1.39	1.45
28	Y	311	CLA	C2A-C1A	-3.09	1.45	1.52
29	s	306	CHL	CHD-C1D	-3.09	1.32	1.38
29	G	311	CHL	C2C-C1C	-3.09	1.38	1.44
28	N	305	CLA	MG-NA	3.09	2.13	2.06
28	N	304	CLA	C3C-C2C	-3.09	1.30	1.36
29	v	311	CHL	C2C-C1C	-3.09	1.38	1.44
28	s	313	CLA	MG-NA	3.08	2.13	2.06
29	V	309	CHL	C4B-NB	-3.07	1.34	1.37
29	V	311	CHL	C3B-C2B	-3.07	1.30	1.41
28	Y	309	CLA	MG-NA	3.07	2.13	2.06
30	Y	321	0IE	C17-C16	-3.07	1.39	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	y	308	CLA	C1A-CHA	-3.06	1.30	1.43
31	y	318	0UR	C17-C16	-3.06	1.39	1.45
29	s	303	CHL	MG-NA	3.06	2.13	2.06
29	y	307	CHL	C2C-C1C	-3.06	1.38	1.44
28	y	306	CLA	C3B-C4B	-3.06	1.35	1.42
28	G	308	CLA	O1A-CGA	-3.06	1.13	1.22
28	S	314	CLA	MG-NA	3.05	2.13	2.06
45	E	101	HEM	C4A-C3A	-3.05	1.36	1.43
28	N	304	CLA	C3B-C2B	-3.05	1.30	1.41
28	Y	313	CLA	O2D-CGD	-3.05	1.25	1.33
33	b	602	BCR	C23-C22	-3.05	1.39	1.45
29	g	316	CHL	C2C-C3C	-3.05	1.30	1.36
29	N	306	CHL	C1B-NB	-3.05	1.34	1.37
31	y	323	0UR	C53-C52	-3.05	1.34	1.51
28	Y	303	CLA	CMA-C3A	-3.04	1.46	1.53
29	g	316	CHL	C3B-C4B	-3.04	1.35	1.42
29	G	317	CHL	CHD-C1D	-3.04	1.32	1.38
29	V	302	CHL	CAA-C2A	-3.04	1.48	1.54
38	d	410	LMG	C30-C29	-3.04	1.41	1.52
33	c	507	BCR	C23-C22	-3.04	1.39	1.45
31	y	322	0UR	C17-C18	-3.04	1.25	1.32
29	v	303	CHL	C3B-C2B	-3.04	1.30	1.41
28	G	307	CLA	MG-NA	3.04	2.13	2.06
30	0	312	0IE	C20-C3	-3.03	1.45	1.51
46	n	302	NEX	C10-C9	3.03	1.39	1.35
29	v	304	CHL	C2C-C1C	-3.03	1.38	1.44
33	C	507	BCR	C8-C9	-3.03	1.39	1.45
28	G	308	CLA	CAB-C3B	-3.02	1.39	1.47
33	K	102	BCR	C8-C9	-3.02	1.39	1.45
28	C	508	CLA	MG-NA	3.02	2.13	2.06
33	K	104	BCR	C8-C9	-3.01	1.39	1.45
31	y	322	0UR	C10-C11	-3.01	1.34	1.43
29	n	310	CHL	C2C-C1C	-3.01	1.38	1.44
28	Y	311	CLA	C3D-CAD	-3.01	1.34	1.45
29	G	311	CHL	MG-NA	3.01	2.13	2.06
29	S	303	CHL	C2C-C1C	-3.01	1.38	1.44
31	1	316	0UR	C4-C3	-3.01	1.27	1.36
33	b	604	BCR	C23-C22	-3.01	1.39	1.45
29	V	309	CHL	O2D-CGD	-3.01	1.25	1.33
31	V	319	0UR	C48-C47	-3.01	1.33	1.50
33	D	403	BCR	C8-C9	-3.00	1.39	1.45
28	S	311	CLA	MG-NA	3.00	2.13	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	y	322	0UR	C19-C18	-3.00	1.45	1.50
39	a	412	PL9	C11-C12	-3.00	1.43	1.53
28	g	314	CLA	MG-NA	-2.99	1.99	2.06
29	n	308	CHL	CHC-C4B	-2.99	1.32	1.39
29	1	310	CHL	C2C-C1C	-2.99	1.38	1.44
28	y	311	CLA	MG-NA	2.99	2.13	2.06
31	U	419	0UR	C15-C16	-2.99	1.31	1.35
46	N	319	NEX	C40-C33	-2.99	1.44	1.50
38	d	410	LMG	O10-C28	-2.99	1.13	1.22
38	K	101	LMG	C30-C29	-2.99	1.41	1.52
29	V	311	CHL	O1A-CGA	-2.99	1.13	1.22
29	s	309	CHL	C2C-C1C	-2.99	1.38	1.44
28	N	304	CLA	CHC-C4B	-2.98	1.32	1.39
31	1	316	0UR	C17-C16	-2.98	1.39	1.45
29	u	410	CHL	C2C-C1C	-2.98	1.38	1.44
33	B	614	BCR	C23-C22	-2.98	1.39	1.45
28	s	314	CLA	MG-NA	2.97	2.13	2.06
28	Y	313	CLA	MG-NC	-2.97	1.99	2.06
29	V	306	CHL	C2C-C1C	-2.97	1.38	1.44
29	n	305	CHL	C2C-C1C	-2.97	1.38	1.44
33	k	102	BCR	C8-C9	-2.97	1.39	1.45
29	s	308	CHL	C2C-C1C	-2.97	1.38	1.44
33	B	604	BCR	C8-C9	-2.96	1.39	1.45
29	V	302	CHL	CMC-C2C	-2.96	1.38	1.45
29	u	406	CHL	C2C-C1C	-2.96	1.38	1.44
29	V	305	CHL	C2C-C1C	-2.96	1.38	1.44
29	V	302	CHL	CBA-CGA	-2.96	1.42	1.50
33	t	101	BCR	C23-C22	-2.95	1.39	1.45
28	S	310	CLA	O1A-CGA	-2.95	1.13	1.22
28	g	313	CLA	C3B-C4B	-2.95	1.36	1.42
29	V	312	CHL	C2C-C1C	-2.95	1.39	1.44
29	v	310	CHL	C2C-C1C	-2.95	1.39	1.44
28	G	308	CLA	C3B-C4B	-2.95	1.36	1.42
31	Y	322	0UR	C48-C47	-2.94	1.33	1.50
29	n	311	CHL	C2C-C1C	-2.93	1.39	1.44
45	e	101	HEM	C4A-C3A	-2.93	1.36	1.43
29	U	409	CHL	C2C-C1C	-2.93	1.39	1.44
28	V	307	CLA	C3D-C2D	-2.93	1.31	1.39
31	1	312	0UR	C29-C28	-2.93	1.51	1.54
29	N	307	CHL	C2C-C1C	-2.93	1.39	1.44
29	s	302	CHL	C2C-C1C	-2.93	1.39	1.44
29	N	308	CHL	C3B-C4B	-2.92	1.36	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	u	409	CHL	C2C-C1C	-2.92	1.39	1.44
29	N	309	CHL	C2C-C1C	-2.92	1.39	1.44
31	0	314	0UR	O39-C25	-2.92	1.34	1.43
29	S	306	CHL	CMA-C3A	-2.92	1.46	1.53
29	s	310	CHL	C2C-C1C	-2.92	1.39	1.44
33	c	509	BCR	C8-C9	-2.92	1.39	1.45
29	s	306	CHL	CHB-C4A	-2.92	1.30	1.37
31	Y	317	0UR	C41-C2	-2.91	1.39	1.51
33	b	604	BCR	C8-C9	-2.91	1.39	1.45
29	V	310	CHL	C2C-C1C	-2.91	1.39	1.44
29	v	308	CHL	C2C-C1C	-2.91	1.39	1.44
29	n	308	CHL	CHC-C1C	-2.91	1.32	1.38
29	y	315	CHL	C2C-C1C	-2.91	1.39	1.44
29	V	309	CHL	C3B-C4B	-2.91	1.36	1.42
33	D	403	BCR	C23-C22	-2.90	1.39	1.45
30	0	312	0IE	C25-C26	-2.90	1.48	1.53
29	n	309	CHL	C2C-C1C	-2.90	1.39	1.44
28	n	316	CLA	MG-NA	2.90	2.13	2.06
28	1	303	CLA	CHC-C4B	-2.90	1.32	1.39
29	N	303	CHL	C2C-C1C	-2.90	1.39	1.44
28	V	307	CLA	CBA-CGA	-2.90	1.42	1.50
28	S	310	CLA	C3C-C2C	-2.90	1.30	1.36
29	S	302	CHL	C2C-C1C	-2.89	1.39	1.44
30	y	319	0IE	O29-C20	-2.89	1.31	1.41
28	U	414	CLA	O2A-CGA	-2.89	1.24	1.33
29	U	405	CHL	C2C-C1C	-2.89	1.39	1.44
29	n	304	CHL	C2C-C1C	-2.89	1.39	1.44
29	N	310	CHL	C2C-C1C	-2.89	1.39	1.44
39	a	412	PL9	C6-C1	-2.89	1.43	1.48
33	d	403	BCR	C23-C22	-2.89	1.39	1.45
29	U	408	CHL	C2C-C1C	-2.89	1.39	1.44
28	G	308	CLA	CHB-C4A	-2.89	1.30	1.37
29	S	307	CHL	C2C-C1C	-2.88	1.39	1.44
29	v	307	CHL	C3D-C2D	-2.88	1.31	1.39
29	S	308	CHL	C2C-C1C	-2.88	1.39	1.44
28	V	307	CLA	C3B-C4B	-2.88	1.36	1.42
33	T	101	BCR	C8-C9	-2.87	1.39	1.45
29	N	303	CHL	MG-NA	2.87	2.13	2.06
29	n	312	CHL	C2C-C1C	-2.87	1.39	1.44
33	C	502	BCR	C8-C9	-2.87	1.39	1.45
45	E	101	HEM	FE-NC	2.87	2.04	1.95
29	V	311	CHL	C3B-C4B	-2.87	1.36	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	G	317	CHL	CAB-C3B	-2.87	1.39	1.47
31	y	323	0UR	C8-C7	-2.86	1.32	1.35
29	S	309	CHL	C2C-C1C	-2.86	1.39	1.44
31	0	313	0UR	C17-C18	-2.86	1.25	1.32
31	y	318	0UR	C48-C47	-2.86	1.34	1.50
29	Y	307	CHL	C2C-C1C	-2.86	1.39	1.44
29	v	309	CHL	C2C-C1C	-2.86	1.39	1.44
29	Y	315	CHL	C2C-C1C	-2.86	1.39	1.44
29	V	302	CHL	C3D-C2D	-2.85	1.31	1.39
29	V	311	CHL	CHD-C1D	-2.85	1.32	1.38
28	1	303	CLA	MG-NC	-2.85	1.99	2.06
33	K	104	BCR	C23-C22	-2.85	1.39	1.45
28	Y	303	CLA	O1A-CGA	-2.85	1.14	1.22
33	c	509	BCR	C23-C22	-2.85	1.39	1.45
29	g	316	CHL	CMC-C2C	-2.85	1.39	1.45
29	v	307	CHL	C2A-C1A	-2.85	1.45	1.52
29	0	310	CHL	C2C-C1C	-2.85	1.39	1.44
29	N	302	CHL	MG-NC	-2.85	1.99	2.06
28	g	312	CLA	C3D-C2D	-2.84	1.31	1.39
29	s	307	CHL	C2C-C1C	-2.84	1.39	1.44
28	g	312	CLA	CMA-C3A	-2.84	1.47	1.53
29	s	303	CHL	C2C-C1C	-2.84	1.39	1.44
29	V	309	CHL	CHC-C4B	-2.84	1.33	1.39
33	k	101	BCR	C23-C22	-2.84	1.39	1.45
33	k	101	BCR	C8-C9	-2.84	1.39	1.45
28	V	307	CLA	CHB-C4A	-2.84	1.31	1.37
33	b	602	BCR	C12-C13	-2.84	1.39	1.45
31	y	323	0UR	C17-C18	-2.84	1.25	1.32
32	U	418	LUT	C32-C33	-2.84	1.39	1.45
33	H	101	BCR	C23-C22	-2.84	1.39	1.45
46	N	319	NEX	C12-C13	-2.83	1.39	1.45
31	1	316	0UR	O39-C25	-2.83	1.34	1.43
28	U	414	CLA	C1A-CHA	-2.83	1.31	1.43
33	A	401	BCR	C23-C22	-2.83	1.39	1.45
32	u	419	LUT	C12-C13	-2.83	1.39	1.45
29	g	310	CHL	C2A-C1A	-2.83	1.45	1.52
33	B	614	BCR	C8-C9	-2.83	1.39	1.45
29	v	307	CHL	C3B-C2B	-2.82	1.31	1.41
31	Y	322	0UR	C28-C19	-2.82	1.48	1.56
28	G	308	CLA	C2A-C1A	-2.82	1.45	1.52
28	N	304	CLA	C4B-NB	-2.82	1.34	1.37
31	y	318	0UR	O39-C25	-2.82	1.35	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	u	419	LUT	C32-C33	-2.81	1.39	1.45
28	g	314	CLA	CHB-C1B	-2.81	1.33	1.39
34	d	407	PHO	C1B-C2B	2.81	1.42	1.39
29	v	303	CHL	CMA-C3A	-2.81	1.47	1.53
30	0	312	0IE	O1-C2	-2.81	1.17	1.23
29	V	311	CHL	C14-C13	-2.80	1.43	1.52
34	a	404	PHO	C1B-C2B	2.80	1.42	1.39
45	e	101	HEM	C3B-C4B	-2.80	1.39	1.44
29	g	309	CHL	C2C-C1C	-2.80	1.39	1.44
29	G	317	CHL	C3B-C2B	-2.80	1.31	1.41
29	V	309	CHL	C3D-C2D	-2.79	1.31	1.39
29	G	317	CHL	C3B-C4B	-2.79	1.36	1.42
28	V	315	CLA	C3D-C4D	-2.79	1.37	1.44
33	T	101	BCR	C23-C22	-2.79	1.39	1.45
33	C	502	BCR	C23-C22	-2.79	1.40	1.45
38	c	502	LMG	O10-C28	-2.79	1.14	1.22
28	u	418	CLA	MG-NA	2.79	2.12	2.06
33	b	603	BCR	C23-C22	-2.78	1.40	1.45
29	G	310	CHL	C2C-C1C	-2.78	1.39	1.44
29	N	302	CHL	C1-C2	-2.78	1.40	1.49
28	S	312	CLA	MG-NC	2.78	2.12	2.06
32	y	320	LUT	C23-C24	-2.78	1.46	1.50
46	s	319	NEX	C12-C13	-2.77	1.40	1.45
28	Y	303	CLA	CHC-C4B	-2.77	1.33	1.39
28	0	307	CLA	CHC-C1C	-2.77	1.32	1.38
33	d	403	BCR	C12-C13	-2.77	1.40	1.45
28	N	314	CLA	C3D-C4D	-2.77	1.37	1.44
28	S	310	CLA	C2A-C1A	-2.77	1.46	1.52
29	V	313	CHL	CBA-CGA	-2.77	1.42	1.50
29	V	311	CHL	C6-C5	-2.77	1.42	1.52
32	U	418	LUT	C28-C29	-2.76	1.40	1.45
28	Y	311	CLA	O1D-CGD	-2.76	1.14	1.21
29	N	306	CHL	C1B-C2B	-2.76	1.36	1.43
34	A	402	PHO	C1B-C2B	2.76	1.42	1.39
29	V	309	CHL	CBA-CGA	-2.76	1.42	1.50
28	g	312	CLA	O2D-CGD	-2.76	1.26	1.33
29	n	308	CHL	O1D-CGD	-2.76	1.14	1.21
28	b	611	CLA	C3D-C4D	-2.76	1.38	1.44
33	a	401	BCR	C23-C22	-2.75	1.40	1.45
46	N	319	NEX	C28-C29	-2.75	1.40	1.45
29	V	311	CHL	CMA-C3A	-2.75	1.47	1.53
29	N	302	CHL	CHC-C4B	-2.75	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	S	313	CLA	MG-NA	2.75	2.12	2.06
29	S	306	CHL	C2C-C3C	-2.74	1.31	1.36
29	s	306	CHL	CHD-C4C	-2.74	1.33	1.39
29	V	302	CHL	C6-C5	-2.73	1.42	1.52
28	Y	303	CLA	C2A-C1A	-2.73	1.46	1.52
31	V	319	0UR	C49-C48	-2.73	1.41	1.52
28	G	308	CLA	C3C-C2C	-2.73	1.30	1.36
33	k	102	BCR	C23-C22	-2.73	1.40	1.45
28	N	304	CLA	O1A-CGA	-2.73	1.14	1.22
31	y	317	0UR	C48-C47	-2.73	1.38	1.49
28	U	414	CLA	CHC-C1C	-2.73	1.33	1.38
33	b	603	BCR	C8-C9	-2.72	1.40	1.45
28	B	621	CLA	C3D-C4D	-2.72	1.38	1.44
29	V	302	CHL	CHC-C4B	-2.72	1.33	1.39
28	d	409	CLA	C3D-C4D	-2.72	1.38	1.44
28	y	308	CLA	CBA-CGA	-2.72	1.42	1.50
32	1	313	LUT	C39-C29	-2.71	1.45	1.50
28	Y	313	CLA	CAB-C3B	-2.71	1.40	1.47
28	B	610	CLA	MG-NA	2.71	2.12	2.06
32	u	419	LUT	C28-C29	-2.71	1.40	1.45
29	V	313	CHL	CAB-C3B	-2.71	1.40	1.47
31	Y	322	0UR	C17-C18	-2.71	1.26	1.32
29	n	308	CHL	CHB-C4A	-2.71	1.31	1.37
29	v	303	CHL	C9-C8	-2.71	1.44	1.52
29	S	306	CHL	O2D-CGD	-2.71	1.26	1.33
33	B	604	BCR	C23-C22	-2.70	1.40	1.45
31	1	316	0UR	C13-C12	-2.70	1.40	1.45
32	U	418	LUT	C12-C13	-2.70	1.40	1.45
29	v	307	CHL	CAB-C3B	-2.70	1.40	1.47
28	1	307	CLA	C3D-C4D	-2.70	1.38	1.44
28	S	310	CLA	CBA-CGA	-2.70	1.42	1.50
33	C	507	BCR	C23-C22	-2.70	1.40	1.45
28	N	304	CLA	C3B-C4B	-2.70	1.36	1.42
29	V	313	CHL	CHD-C4C	-2.70	1.33	1.39
29	g	310	CHL	CAA-C2A	-2.70	1.49	1.54
29	v	307	CHL	CMA-C3A	-2.70	1.47	1.53
28	V	314	CLA	C3D-C4D	-2.70	1.38	1.44
33	H	101	BCR	C8-C9	-2.69	1.40	1.45
33	h	101	BCR	C12-C13	-2.69	1.40	1.45
29	N	302	CHL	C3B-C2B	-2.69	1.31	1.41
29	g	316	CHL	C4B-NB	-2.69	1.34	1.37
31	G	318	0UR	C29-C28	-2.69	1.51	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	V	313	CHL	C9-C8	-2.69	1.44	1.52
31	U	419	0UR	C8-C7	-2.69	1.32	1.35
28	Y	313	CLA	C3B-C4B	-2.69	1.36	1.42
33	B	603	BCR	C12-C13	-2.69	1.40	1.45
34	D	407	PHO	C4D-CHA	2.68	1.43	1.39
28	S	310	CLA	CAA-C2A	-2.68	1.49	1.54
29	N	308	CHL	CAB-C3B	-2.68	1.40	1.47
29	U	405	CHL	C3D-C4D	-2.68	1.38	1.44
33	T	101	BCR	C12-C13	-2.68	1.40	1.45
28	0	307	CLA	C3B-C2B	-2.68	1.32	1.41
28	C	512	CLA	C3D-C4D	-2.68	1.38	1.44
28	a	402	CLA	C3D-C4D	-2.68	1.38	1.44
38	d	410	LMG	O9-C10	-2.68	1.14	1.22
28	A	416	CLA	C3D-C4D	-2.67	1.38	1.44
45	E	101	HEM	C1B-NB	-2.67	1.35	1.40
28	g	314	CLA	C3B-C4B	-2.66	1.36	1.42
29	v	303	CHL	O1A-CGA	-2.66	1.14	1.22
29	G	317	CHL	CHD-C4C	-2.66	1.33	1.39
29	N	309	CHL	C3D-C4D	-2.66	1.38	1.44
29	V	302	CHL	CHC-C1C	-2.66	1.33	1.38
28	b	620	CLA	C3D-C4D	-2.65	1.38	1.44
28	B	619	CLA	C3D-C4D	-2.65	1.38	1.44
33	c	507	BCR	C12-C13	-2.65	1.40	1.45
28	g	312	CLA	MG-NB	-2.65	2.00	2.05
28	C	510	CLA	C3D-C4D	-2.64	1.38	1.44
29	S	308	CHL	C3D-C4D	-2.64	1.38	1.44
28	B	601	CLA	C3D-C4D	-2.64	1.38	1.44
29	Y	315	CHL	C3D-C4D	-2.64	1.38	1.44
28	1	309	CLA	C3D-C4D	-2.64	1.38	1.44
29	v	307	CHL	CHD-C1D	-2.64	1.33	1.38
28	y	306	CLA	CMA-C3A	-2.64	1.47	1.53
29	V	313	CHL	CMC-C2C	-2.63	1.39	1.45
28	V	316	CLA	C3D-C4D	-2.63	1.38	1.44
29	V	302	CHL	CHB-C4A	-2.63	1.31	1.37
28	u	418	CLA	C3D-C4D	-2.63	1.38	1.44
28	u	416	CLA	MG-NA	2.63	2.12	2.06
31	g	317	0UR	C17-C18	-2.63	1.26	1.32
41	c	524	DGD	O4D-C4D	-2.63	1.36	1.43
28	G	308	CLA	CHC-C4B	-2.63	1.33	1.39
28	c	513	CLA	C3D-C4D	-2.63	1.38	1.44
29	v	303	CHL	C2A-C1A	-2.62	1.46	1.52
33	t	101	BCR	C12-C13	-2.62	1.40	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	y	322	0UR	C28-C19	-2.62	1.49	1.56
30	Y	321	0IE	C15-C16	-2.62	1.32	1.35
29	n	312	CHL	C3D-C4D	-2.62	1.38	1.44
28	U	414	CLA	MG-ND	-2.62	2.00	2.05
33	h	101	BCR	C23-C22	-2.62	1.40	1.45
28	D	409	CLA	C3D-C4D	-2.62	1.38	1.44
28	y	314	CLA	MG-NC	2.62	2.12	2.06
31	v	317	0UR	C43-C3	-2.61	1.46	1.50
28	c	514	CLA	C3D-C4D	-2.61	1.38	1.44
29	u	409	CHL	C3D-C4D	-2.61	1.38	1.44
28	n	307	CLA	C3D-C4D	-2.61	1.38	1.44
28	A	410	CLA	C3D-C4D	-2.61	1.38	1.44
28	S	311	CLA	C3D-C4D	-2.61	1.38	1.44
45	E	101	HEM	C4D-ND	-2.61	1.35	1.40
28	C	519	CLA	C3D-C4D	-2.61	1.38	1.44
29	G	317	CHL	C1A-CHA	-2.61	1.32	1.43
29	G	311	CHL	C3D-C4D	-2.61	1.38	1.44
28	g	314	CLA	C4B-NB	-2.61	1.34	1.37
46	s	319	NEX	C28-C29	-2.61	1.40	1.45
28	B	602	CLA	C3D-C4D	-2.61	1.38	1.44
28	C	505	CLA	C3D-C4D	-2.61	1.38	1.44
28	B	610	CLA	C3D-C4D	-2.60	1.38	1.44
28	U	414	CLA	OBD-CAD	-2.60	1.18	1.22
28	Y	312	CLA	C3D-C4D	-2.60	1.38	1.44
28	u	411	CLA	C3D-C4D	-2.60	1.38	1.44
31	Y	318	0UR	C10-C11	-2.60	1.35	1.43
28	C	501	CLA	C3D-C4D	-2.60	1.38	1.44
29	s	302	CHL	C3D-C4D	-2.60	1.38	1.44
29	v	307	CHL	C1C-NC	-2.60	1.33	1.37
31	y	323	0UR	C49-C48	-2.60	1.41	1.52
28	B	618	CLA	C3D-C4D	-2.60	1.38	1.44
28	y	310	CLA	C3D-C4D	-2.60	1.38	1.44
33	b	604	BCR	C12-C13	-2.60	1.40	1.45
28	B	607	CLA	C3D-C4D	-2.60	1.38	1.44
28	U	407	CLA	C3D-C4D	-2.60	1.38	1.44
28	B	611	CLA	C3D-C4D	-2.59	1.38	1.44
46	N	319	NEX	C10-C9	2.59	1.39	1.35
31	0	314	0UR	C4-C3	-2.59	1.29	1.36
29	S	303	CHL	C3D-C4D	-2.59	1.38	1.44
28	y	308	CLA	O1D-CGD	-2.59	1.14	1.21
31	u	420	0UR	C29-C28	-2.59	1.51	1.54
29	N	308	CHL	CMA-C3A	-2.59	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
41	c	524	DGD	O6D-C5D	-2.59	1.38	1.44
29	g	310	CHL	CHD-C1D	-2.59	1.33	1.38
28	B	605	CLA	MG-NA	2.59	2.12	2.06
29	y	315	CHL	C3D-C4D	-2.59	1.38	1.44
28	Y	309	CLA	C3D-C4D	-2.59	1.38	1.44
28	g	314	CLA	CMA-C3A	-2.59	1.47	1.53
28	D	410	CLA	C3D-C4D	-2.58	1.38	1.44
33	a	401	BCR	C12-C13	-2.58	1.40	1.45
33	C	507	BCR	C12-C13	-2.58	1.40	1.45
29	S	306	CHL	C3B-C4B	-2.58	1.36	1.42
28	s	305	CLA	C3D-C4D	-2.58	1.38	1.44
29	v	311	CHL	C3D-C4D	-2.58	1.38	1.44
28	u	412	CLA	C3D-C4D	-2.58	1.38	1.44
28	N	312	CLA	C3D-C4D	-2.58	1.38	1.44
29	n	308	CHL	C1C-NC	-2.58	1.34	1.37
28	s	313	CLA	C3D-C4D	-2.58	1.38	1.44
28	a	403	CLA	C3D-C4D	-2.57	1.38	1.44
29	N	310	CHL	C3D-C4D	-2.57	1.38	1.44
28	C	503	CLA	C3D-C4D	-2.57	1.38	1.44
29	0	310	CHL	C3D-C4D	-2.57	1.38	1.44
33	D	403	BCR	C12-C13	-2.57	1.40	1.45
29	n	311	CHL	C3D-C4D	-2.57	1.38	1.44
31	y	322	0UR	C14-C15	-2.57	1.35	1.43
29	Y	307	CHL	C3D-C4D	-2.57	1.38	1.44
28	s	311	CLA	C3D-C4D	-2.57	1.38	1.44
33	K	104	BCR	C19-C18	-2.57	1.40	1.45
31	y	317	0UR	C41-C2	-2.57	1.40	1.51
29	N	308	CHL	C3B-C2B	-2.57	1.32	1.41
28	Y	305	CLA	C3D-C4D	-2.57	1.38	1.44
28	b	618	CLA	C3D-C4D	-2.57	1.38	1.44
28	g	307	CLA	C3D-C4D	-2.57	1.38	1.44
28	b	608	CLA	C3D-C4D	-2.57	1.38	1.44
29	N	302	CHL	C3D-C2D	-2.57	1.32	1.39
28	b	601	CLA	C3D-C4D	-2.57	1.38	1.44
28	u	417	CLA	C3D-C4D	-2.57	1.38	1.44
28	B	606	CLA	C3D-C4D	-2.57	1.38	1.44
28	d	404	CLA	C3D-C4D	-2.57	1.38	1.44
33	A	401	BCR	C12-C13	-2.56	1.40	1.45
28	u	415	CLA	C3D-C4D	-2.56	1.38	1.44
28	0	308	CLA	C3D-C4D	-2.56	1.38	1.44
28	V	307	CLA	CHD-C4C	-2.56	1.33	1.39
28	C	517	CLA	C3D-C4D	-2.56	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	Y	310	CLA	C3D-C4D	-2.56	1.38	1.44
28	B	612	CLA	C3D-C4D	-2.56	1.38	1.44
28	C	513	CLA	C3D-C4D	-2.56	1.38	1.44
28	U	411	CLA	C3D-C4D	-2.56	1.38	1.44
29	n	305	CHL	C3D-C4D	-2.56	1.38	1.44
28	0	311	CLA	C3D-C4D	-2.56	1.38	1.44
28	1	304	CLA	C3D-C4D	-2.56	1.38	1.44
28	G	306	CLA	C3D-C4D	-2.56	1.38	1.44
28	C	504	CLA	C3D-C4D	-2.56	1.38	1.44
29	V	305	CHL	C3D-C4D	-2.56	1.38	1.44
28	v	306	CLA	C3D-C4D	-2.56	1.38	1.44
28	G	309	CLA	C3D-C4D	-2.55	1.38	1.44
29	V	310	CHL	C3D-C4D	-2.55	1.38	1.44
28	C	511	CLA	C3D-C4D	-2.55	1.38	1.44
28	g	314	CLA	CHC-C4B	-2.55	1.33	1.39
28	C	508	CLA	C3D-C4D	-2.55	1.38	1.44
29	u	406	CHL	C1D-C2D	-2.55	1.40	1.45
28	y	303	CLA	C3D-C4D	-2.55	1.38	1.44
28	U	412	CLA	C3D-C4D	-2.54	1.38	1.44
28	c	505	CLA	C3D-C4D	-2.54	1.38	1.44
28	1	303	CLA	MG-NA	-2.54	2.00	2.06
28	b	601	CLA	C1B-C2B	-2.54	1.37	1.43
45	E	101	HEM	C3B-C4B	-2.54	1.39	1.44
28	v	305	CLA	C3D-C4D	-2.54	1.38	1.44
29	s	308	CHL	C3D-C4D	-2.54	1.38	1.44
31	1	316	0UR	C48-C47	-2.54	1.39	1.51
28	B	616	CLA	C3D-C4D	-2.54	1.38	1.44
28	U	406	CLA	C3D-C4D	-2.54	1.38	1.44
28	n	315	CLA	MG-NC	2.54	2.12	2.06
28	0	304	CLA	C3D-C4D	-2.54	1.38	1.44
28	u	413	CLA	C3D-C4D	-2.54	1.38	1.44
28	b	606	CLA	C3D-C4D	-2.53	1.38	1.44
28	c	511	CLA	C3D-C4D	-2.53	1.38	1.44
28	y	305	CLA	C3D-C4D	-2.53	1.38	1.44
28	B	613	CLA	C3D-C4D	-2.53	1.38	1.44
28	G	305	CLA	C3D-C4D	-2.53	1.38	1.44
28	c	503	CLA	C3D-C4D	-2.53	1.38	1.44
29	n	308	CHL	C1A-CHA	-2.53	1.32	1.43
28	V	307	CLA	CHC-C4B	-2.53	1.33	1.39
28	g	313	CLA	C4B-NB	-2.53	1.34	1.37
28	Y	304	CLA	C3D-C4D	-2.53	1.38	1.44
28	B	609	CLA	C3D-C4D	-2.53	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	y	321	0IE	C11-C12	-2.53	1.32	1.35
28	B	608	CLA	C3D-C4D	-2.53	1.38	1.44
28	Y	308	CLA	C3D-C4D	-2.53	1.38	1.44
46	G	321	NEX	C32-C33	-2.53	1.40	1.45
28	S	304	CLA	C3D-C4D	-2.53	1.38	1.44
28	b	612	CLA	C3D-C4D	-2.53	1.38	1.44
28	b	610	CLA	C3D-C4D	-2.53	1.38	1.44
28	U	415	CLA	C3D-C4D	-2.53	1.38	1.44
28	y	312	CLA	C3D-C4D	-2.53	1.38	1.44
28	A	411	CLA	C3D-C4D	-2.53	1.38	1.44
28	b	622	CLA	C3D-C4D	-2.53	1.38	1.44
34	d	407	PHO	C4D-CHA	2.53	1.43	1.39
28	y	316	CLA	C3D-C4D	-2.53	1.38	1.44
31	v	317	0UR	C29-C28	-2.52	1.51	1.54
29	v	309	CHL	C3D-C4D	-2.52	1.38	1.44
29	g	310	CHL	C3B-C4B	-2.52	1.37	1.42
28	0	301	CLA	MG-NA	2.52	2.12	2.06
28	c	506	CLA	C3D-C4D	-2.52	1.38	1.44
29	n	310	CHL	C3D-C4D	-2.52	1.38	1.44
28	V	308	CLA	C3D-C4D	-2.52	1.38	1.44
28	v	314	CLA	C3D-C4D	-2.52	1.38	1.44
29	g	316	CHL	CHD-C1D	-2.52	1.33	1.38
28	b	619	CLA	C3D-C4D	-2.52	1.38	1.44
29	N	308	CHL	C4B-NB	-2.52	1.34	1.37
29	v	303	CHL	CHD-C4C	-2.52	1.33	1.39
28	b	609	CLA	C3D-C4D	-2.52	1.38	1.44
30	0	312	0IE	C44-C24	-2.52	1.48	1.53
28	V	317	CLA	C3D-C4D	-2.52	1.38	1.44
29	U	408	CHL	C3D-C4D	-2.52	1.38	1.44
28	A	407	CLA	C3D-C4D	-2.52	1.38	1.44
28	V	317	CLA	C1B-C2B	-2.52	1.37	1.43
29	1	310	CHL	C3D-C4D	-2.52	1.38	1.44
46	N	319	NEX	C34-C33	2.52	1.39	1.35
28	u	407	CLA	C3D-C4D	-2.52	1.38	1.44
29	V	313	CHL	C4B-NB	-2.52	1.34	1.37
28	n	317	CLA	C3D-C4D	-2.51	1.38	1.44
28	N	305	CLA	C3D-C4D	-2.51	1.38	1.44
33	c	509	BCR	C12-C13	-2.51	1.40	1.45
28	y	304	CLA	C3D-C4D	-2.51	1.38	1.44
28	U	416	CLA	C3D-C4D	-2.51	1.38	1.44
28	c	510	CLA	C3D-C4D	-2.51	1.38	1.44
31	Y	318	0UR	C46-C45	-2.51	1.42	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	Y	314	CLA	C3D-C4D	-2.51	1.38	1.44
28	y	313	CLA	C3D-C4D	-2.51	1.38	1.44
45	e	101	HEM	FE-ND	2.51	2.02	1.94
28	d	404	CLA	C1D-C2D	-2.51	1.40	1.45
33	B	614	BCR	C12-C13	-2.51	1.40	1.45
29	s	303	CHL	C1B-C2B	-2.51	1.37	1.43
28	1	301	CLA	C3D-C4D	-2.51	1.38	1.44
29	V	311	CHL	CBA-CGA	-2.51	1.43	1.50
30	0	312	0IE	C26-C27	-2.51	1.46	1.50
28	B	605	CLA	C3D-C4D	-2.51	1.38	1.44
29	v	310	CHL	C3D-C4D	-2.51	1.38	1.44
28	G	315	CLA	MG-NC	2.51	2.12	2.06
29	S	309	CHL	C3D-C4D	-2.51	1.38	1.44
29	S	302	CHL	C3D-C4D	-2.50	1.38	1.44
34	A	402	PHO	C4D-CHA	2.50	1.43	1.39
33	B	603	BCR	C19-C18	-2.50	1.40	1.45
28	N	304	CLA	CMA-C3A	-2.50	1.47	1.53
28	u	405	CLA	C3D-C4D	-2.50	1.38	1.44
28	b	617	CLA	C1B-C2B	-2.50	1.37	1.43
28	b	607	CLA	C3D-C4D	-2.50	1.38	1.44
28	c	521	CLA	C3D-C4D	-2.50	1.38	1.44
29	n	309	CHL	C3D-C4D	-2.50	1.38	1.44
29	v	308	CHL	C3D-C4D	-2.50	1.38	1.44
28	Y	313	CLA	C3D-C2D	-2.50	1.32	1.39
28	U	410	CLA	C3D-C4D	-2.50	1.38	1.44
28	g	304	CLA	C3D-C4D	-2.50	1.38	1.44
29	s	307	CHL	C3D-C4D	-2.50	1.38	1.44
28	G	312	CLA	C3D-C4D	-2.50	1.38	1.44
46	V	323	NEX	C28-C29	-2.50	1.40	1.45
28	b	617	CLA	C3D-C4D	-2.50	1.38	1.44
28	b	605	CLA	C3D-C4D	-2.50	1.38	1.44
31	g	318	0UR	C4-C3	-2.50	1.29	1.36
28	u	405	CLA	C1B-C2B	-2.50	1.37	1.43
28	C	510	CLA	C1B-C2B	-2.49	1.37	1.43
29	u	410	CHL	C3D-C4D	-2.49	1.38	1.44
29	Y	307	CHL	C1B-C2B	-2.49	1.37	1.43
28	b	615	CLA	C3D-C4D	-2.49	1.38	1.44
28	u	408	CLA	C3D-C4D	-2.49	1.38	1.44
31	U	419	0UR	C23-C1	-2.49	1.48	1.53
28	b	616	CLA	C3D-C4D	-2.49	1.38	1.44
38	K	101	LMG	C4-C5	2.49	1.58	1.53
28	1	303	CLA	CHC-C1C	-2.49	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	Y	316	CLA	C3D-C4D	-2.49	1.38	1.44
28	g	305	CLA	C1B-C2B	-2.49	1.37	1.43
28	y	309	CLA	C3D-C4D	-2.49	1.38	1.44
28	c	508	CLA	C3D-C4D	-2.49	1.38	1.44
31	y	318	0UR	C14-C13	-2.49	1.28	1.34
29	N	303	CHL	C3D-C4D	-2.49	1.38	1.44
29	V	313	CHL	CHB-C4A	-2.49	1.31	1.37
29	n	308	CHL	C2A-C1A	-2.48	1.46	1.52
28	v	315	CLA	C3D-C4D	-2.48	1.38	1.44
28	C	509	CLA	C3D-C4D	-2.48	1.38	1.44
28	c	512	CLA	C3D-C4D	-2.48	1.38	1.44
29	V	312	CHL	C3D-C4D	-2.48	1.38	1.44
28	c	504	CLA	C3D-C4D	-2.48	1.38	1.44
28	c	522	CLA	C3D-C4D	-2.48	1.38	1.44
31	0	313	0UR	C8-C7	2.48	1.39	1.35
28	U	417	CLA	C3D-C4D	-2.48	1.38	1.44
29	V	302	CHL	MG-NA	-2.47	2.00	2.06
47	n	320	XAT	C12-C13	-2.47	1.40	1.45
31	1	316	0UR	C17-C18	-2.47	1.26	1.32
46	n	302	NEX	C32-C33	-2.47	1.40	1.45
28	Y	311	CLA	CMC-C2C	-2.47	1.45	1.50
45	e	101	HEM	C1B-NB	-2.47	1.36	1.40
28	v	312	CLA	C3D-C4D	-2.47	1.38	1.44
28	s	314	CLA	C3D-C4D	-2.47	1.38	1.44
29	V	309	CHL	C2A-C1A	-2.47	1.46	1.52
43	n	322	LMN	CCV-CCT	-2.47	1.46	1.52
28	Y	306	CLA	C3D-C4D	-2.47	1.38	1.44
28	N	311	CLA	C3D-C4D	-2.47	1.38	1.44
29	n	304	CHL	C3D-C4D	-2.47	1.38	1.44
47	V	321	XAT	C28-C29	-2.47	1.40	1.45
28	V	307	CLA	C4B-NB	-2.47	1.34	1.37
28	n	316	CLA	C3D-C4D	-2.47	1.38	1.44
28	B	602	CLA	C1D-C2D	-2.47	1.40	1.45
28	1	308	CLA	C3D-C4D	-2.47	1.38	1.44
28	N	315	CLA	C3D-C4D	-2.47	1.38	1.44
28	v	313	CLA	C3D-C4D	-2.47	1.38	1.44
28	G	307	CLA	C3D-C4D	-2.47	1.38	1.44
28	a	416	CLA	C3D-C4D	-2.47	1.38	1.44
29	u	406	CHL	C3D-C4D	-2.47	1.38	1.44
28	V	318	CLA	C3D-C4D	-2.46	1.38	1.44
28	c	520	CLA	C3D-C4D	-2.46	1.38	1.44
28	n	315	CLA	C3D-C4D	-2.46	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	0	303	CLA	C3D-C4D	-2.46	1.38	1.44
28	g	314	CLA	CHC-C1C	-2.46	1.33	1.38
29	V	313	CHL	CHD-C1D	-2.46	1.33	1.38
31	Y	323	0UR	C17-C18	-2.46	1.26	1.32
38	A	413	LMG	C3-C2	-2.46	1.46	1.52
31	Y	322	0UR	C49-C48	-2.46	1.42	1.52
46	V	322	NEX	C28-C29	-2.46	1.40	1.45
31	s	316	0UR	C17-C18	-2.46	1.26	1.32
29	n	308	CHL	CMC-C2C	-2.46	1.40	1.45
46	v	320	NEX	C28-C29	-2.46	1.40	1.45
28	n	314	CLA	C3D-C4D	-2.45	1.38	1.44
28	u	414	CLA	C3D-C4D	-2.45	1.38	1.44
28	y	314	CLA	C3D-C4D	-2.45	1.38	1.44
33	k	101	BCR	C12-C13	-2.45	1.40	1.45
29	G	310	CHL	C3D-C4D	-2.45	1.38	1.44
28	G	314	CLA	C3D-C4D	-2.45	1.38	1.44
33	b	602	BCR	C19-C18	-2.45	1.40	1.45
31	0	313	0UR	C24-C25	-2.45	1.48	1.52
28	G	315	CLA	C3D-C4D	-2.45	1.38	1.44
28	n	313	CLA	C3D-C4D	-2.45	1.38	1.44
28	y	306	CLA	C2A-C1A	-2.45	1.46	1.52
33	t	101	BCR	C19-C18	-2.45	1.40	1.45
28	y	306	CLA	MG-NA	-2.45	2.00	2.06
28	B	613	CLA	C1B-C2B	-2.45	1.37	1.43
28	g	306	CLA	C3D-C4D	-2.44	1.38	1.44
28	B	610	CLA	C1B-C2B	-2.44	1.37	1.43
28	B	619	CLA	C1D-C2D	-2.44	1.40	1.45
29	N	303	CHL	C1B-C2B	-2.44	1.37	1.43
31	y	322	0UR	C46-C45	-2.44	1.42	1.48
29	n	311	CHL	C1B-C2B	-2.44	1.37	1.43
31	y	318	0UR	C13-C12	-2.44	1.40	1.45
28	s	312	CLA	C3D-C4D	-2.44	1.38	1.44
29	V	313	CHL	MG-NB	2.44	2.10	2.05
29	S	307	CHL	C3D-C4D	-2.44	1.38	1.44
28	B	607	CLA	C1B-C2B	-2.44	1.37	1.43
47	n	320	XAT	C8-C9	-2.44	1.40	1.45
28	s	315	CLA	C3D-C4D	-2.44	1.38	1.44
28	b	616	CLA	C1B-C2B	-2.44	1.37	1.43
28	g	315	CLA	C3D-C4D	-2.43	1.38	1.44
28	S	304	CLA	C1B-C2B	-2.43	1.37	1.43
28	0	307	CLA	CMA-C3A	-2.43	1.47	1.53
45	e	101	HEM	C4D-ND	-2.43	1.36	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	1	315	0UR	C17-C18	-2.43	1.26	1.32
28	0	304	CLA	C1B-C2B	-2.43	1.37	1.43
28	y	308	CLA	C4B-NB	-2.43	1.34	1.37
29	V	309	CHL	C1C-NC	-2.43	1.34	1.37
28	g	311	CLA	C3D-C4D	-2.43	1.38	1.44
46	G	321	NEX	C28-C29	-2.43	1.40	1.45
28	N	304	CLA	C1A-CHA	-2.43	1.33	1.43
29	v	310	CHL	C1B-C2B	-2.43	1.37	1.43
28	1	304	CLA	C1B-C2B	-2.43	1.37	1.43
29	v	307	CHL	CHC-C1C	-2.43	1.33	1.38
29	y	307	CHL	C3D-C4D	-2.43	1.38	1.44
29	s	306	CHL	CAB-C3B	-2.43	1.40	1.47
38	J	102	LMG	C12-C11	-2.43	1.43	1.52
47	V	321	XAT	C8-C9	-2.42	1.40	1.45
28	u	416	CLA	C3D-C4D	-2.42	1.38	1.44
28	v	316	CLA	C3D-C4D	-2.42	1.38	1.44
33	d	403	BCR	C19-C18	-2.42	1.40	1.45
28	0	307	CLA	CHC-C4B	-2.42	1.34	1.39
28	B	605	CLA	C1D-C2D	-2.42	1.40	1.45
31	U	419	0UR	C17-C18	-2.42	1.26	1.32
28	0	305	CLA	C3D-C4D	-2.42	1.38	1.44
28	1	306	CLA	C3D-C4D	-2.42	1.38	1.44
28	C	517	CLA	C1D-C2D	-2.42	1.40	1.45
33	B	614	BCR	C19-C18	-2.42	1.40	1.45
30	0	312	0IE	C10-C11	-2.42	1.36	1.43
28	a	410	CLA	C3D-C4D	-2.42	1.38	1.44
33	H	101	BCR	C19-C18	-2.42	1.40	1.45
29	v	307	CHL	O1D-CGD	-2.42	1.15	1.21
47	n	320	XAT	C28-C29	-2.42	1.40	1.45
31	Y	318	0UR	C15-C16	-2.42	1.32	1.35
29	N	306	CHL	CAB-C3B	-2.42	1.40	1.47
33	K	102	BCR	C12-C13	-2.42	1.40	1.45
28	B	622	CLA	C1D-C2D	-2.42	1.40	1.45
28	V	307	CLA	CHC-C1C	-2.42	1.33	1.38
28	Y	312	CLA	C1B-C2B	-2.42	1.37	1.43
28	Y	311	CLA	CHB-C1B	-2.42	1.34	1.39
31	1	316	0UR	C19-C18	-2.42	1.46	1.50
29	v	304	CHL	C3D-C4D	-2.41	1.38	1.44
28	b	610	CLA	C1B-C2B	-2.41	1.37	1.43
28	b	611	CLA	C1D-C2D	-2.41	1.40	1.45
28	c	520	CLA	C1B-C2B	-2.41	1.37	1.43
28	g	305	CLA	C3D-C4D	-2.41	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	n	306	CLA	C3D-C4D	-2.41	1.38	1.44
29	s	310	CHL	C3D-C4D	-2.41	1.38	1.44
28	g	312	CLA	CHD-C1D	-2.41	1.33	1.38
28	S	311	CLA	C1B-C2B	-2.41	1.37	1.43
28	g	314	CLA	CAA-C2A	-2.41	1.49	1.54
31	y	318	0UR	C17-C18	-2.41	1.26	1.32
28	b	606	CLA	C1B-C2B	-2.41	1.37	1.43
29	N	307	CHL	C3D-C4D	-2.41	1.38	1.44
28	u	407	CLA	C1B-C2B	-2.41	1.37	1.43
31	0	314	0UR	C17-C18	-2.41	1.26	1.32
29	U	409	CHL	C3D-C4D	-2.41	1.38	1.44
41	c	524	DGD	C3D-C2D	-2.41	1.46	1.52
28	0	309	CLA	C3D-C4D	-2.41	1.38	1.44
29	s	309	CHL	C3D-C4D	-2.41	1.38	1.44
46	v	320	NEX	C32-C33	-2.41	1.40	1.45
28	S	313	CLA	C1B-C2B	-2.41	1.37	1.43
28	0	307	CLA	C3B-C4B	-2.41	1.37	1.42
28	1	305	CLA	C3D-C4D	-2.40	1.38	1.44
28	C	506	CLA	C3D-C4D	-2.40	1.38	1.44
28	N	313	CLA	C3D-C4D	-2.40	1.38	1.44
28	N	304	CLA	CBA-CGA	-2.40	1.43	1.50
28	B	622	CLA	C3D-C4D	-2.40	1.38	1.44
28	U	404	CLA	C3D-C4D	-2.40	1.38	1.44
28	0	303	CLA	C1D-C2D	-2.40	1.40	1.45
31	g	318	0UR	C17-C18	-2.40	1.26	1.32
47	V	321	XAT	C32-C33	-2.40	1.40	1.45
28	S	313	CLA	C3D-C4D	-2.40	1.38	1.44
46	s	319	NEX	C40-C33	-2.40	1.45	1.50
31	y	317	0UR	C17-C16	-2.40	1.40	1.45
28	0	301	CLA	C3D-C4D	-2.39	1.38	1.44
28	G	309	CLA	C1B-C2B	-2.39	1.37	1.43
28	1	301	CLA	C1D-C2D	-2.39	1.40	1.45
28	Y	303	CLA	CHD-C4C	-2.39	1.33	1.39
28	y	306	CLA	C4B-NB	-2.39	1.34	1.37
31	y	317	0UR	C17-C18	-2.39	1.26	1.32
28	S	310	CLA	CHC-C4B	-2.39	1.34	1.39
29	v	303	CHL	CBA-CGA	-2.39	1.43	1.50
38	K	101	LMG	C3-C2	-2.39	1.46	1.52
33	b	603	BCR	C12-C13	-2.39	1.40	1.45
29	g	309	CHL	C3D-C4D	-2.39	1.38	1.44
46	G	321	NEX	C12-C13	-2.39	1.40	1.45
28	y	311	CLA	C3D-C4D	-2.39	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	b	620	CLA	C1B-C2B	-2.38	1.37	1.43
29	0	310	CHL	C1B-C2B	-2.38	1.37	1.43
29	n	310	CHL	C1D-C2D	-2.38	1.40	1.45
28	B	607	CLA	C1D-C2D	-2.38	1.40	1.45
28	a	416	CLA	C1D-C2D	-2.38	1.40	1.45
29	s	303	CHL	C3D-C4D	-2.38	1.38	1.44
28	c	513	CLA	C1D-C2D	-2.38	1.40	1.45
46	n	302	NEX	C12-C13	-2.38	1.40	1.45
30	y	321	0IE	C6-C7	-2.38	1.40	1.45
29	S	302	CHL	C1B-C2B	-2.38	1.37	1.43
28	b	616	CLA	C1B-NB	-2.38	1.34	1.37
31	u	420	0UR	C17-C18	-2.38	1.26	1.32
29	V	306	CHL	C3D-C4D	-2.38	1.38	1.44
28	b	622	CLA	C1D-C2D	-2.37	1.40	1.45
31	y	318	0UR	C15-C16	-2.37	1.32	1.35
32	1	313	LUT	C11-C12	2.37	1.40	1.34
28	v	314	CLA	C1D-C2D	-2.37	1.40	1.45
28	G	315	CLA	C1B-C2B	-2.37	1.37	1.43
31	G	318	0UR	C17-C18	-2.37	1.26	1.32
46	V	323	NEX	C32-C33	-2.37	1.40	1.45
28	y	310	CLA	C1B-C2B	-2.37	1.37	1.43
33	T	101	BCR	C19-C18	-2.37	1.40	1.45
28	g	313	CLA	C3D-C2D	-2.37	1.32	1.39
28	g	313	CLA	C3C-C2C	-2.37	1.31	1.36
28	S	312	CLA	C3D-C4D	-2.37	1.38	1.44
28	g	312	CLA	C1A-CHA	-2.37	1.33	1.43
31	y	318	0UR	C49-C48	-2.37	1.34	1.51
47	N	318	XAT	C8-C9	-2.37	1.40	1.45
28	N	304	CLA	CHD-C4C	-2.37	1.33	1.39
28	1	308	CLA	C1B-C2B	-2.36	1.37	1.43
28	G	316	CLA	C3D-C4D	-2.36	1.38	1.44
28	S	305	CLA	C3D-C4D	-2.36	1.38	1.44
31	v	317	0UR	C17-C18	-2.36	1.26	1.32
30	Y	319	0IE	O40-C34	-2.36	1.36	1.43
28	y	304	CLA	C1B-C2B	-2.36	1.37	1.43
29	N	306	CHL	C4D-ND	-2.36	1.34	1.37
28	C	503	CLA	MG-NA	2.36	2.11	2.06
28	0	306	CLA	C3D-C4D	-2.36	1.38	1.44
31	n	318	0UR	C17-C18	-2.36	1.26	1.32
28	Y	305	CLA	C1B-C2B	-2.36	1.37	1.43
28	y	314	CLA	MG-NB	2.36	2.10	2.05
33	K	102	BCR	C19-C18	-2.36	1.40	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	y	320	LUT	C31-C30	-2.36	1.36	1.43
28	V	316	CLA	C1B-C2B	-2.36	1.37	1.43
28	B	611	CLA	C1D-C2D	-2.36	1.40	1.45
47	v	319	XAT	C28-C29	-2.36	1.40	1.45
28	Y	304	CLA	C1D-C2D	-2.36	1.40	1.45
29	g	316	CHL	C3D-C2D	-2.36	1.32	1.39
33	k	102	BCR	C12-C13	-2.35	1.40	1.45
28	C	509	CLA	C1B-C2B	-2.35	1.37	1.43
28	u	415	CLA	C1B-C2B	-2.35	1.37	1.43
29	v	307	CHL	C1A-CHA	-2.35	1.33	1.43
46	n	321	NEX	C12-C13	-2.35	1.40	1.45
46	N	319	NEX	C20-C13	-2.35	1.46	1.50
28	U	413	CLA	C3D-C4D	-2.35	1.38	1.44
28	Y	312	CLA	C1D-C2D	-2.35	1.40	1.45
33	b	604	BCR	C19-C18	-2.35	1.40	1.45
32	1	313	LUT	C40-C33	-2.35	1.46	1.50
28	G	313	CLA	C3D-C4D	-2.35	1.38	1.44
28	v	305	CLA	C1B-C2B	-2.35	1.37	1.43
28	Y	313	CLA	MG-NA	-2.35	2.00	2.06
28	G	308	CLA	C1A-CHA	-2.35	1.33	1.43
33	K	104	BCR	C12-C13	-2.35	1.40	1.45
29	N	302	CHL	C1C-NC	-2.35	1.34	1.37
32	1	313	LUT	C30-C29	2.35	1.38	1.35
30	y	321	0IE	C5-C4	2.35	1.50	1.43
28	1	306	CLA	C1B-C2B	-2.35	1.37	1.43
29	g	310	CHL	CMA-C3A	-2.35	1.48	1.53
29	G	317	CHL	C2A-C1A	-2.34	1.46	1.52
28	0	309	CLA	C1B-C2B	-2.34	1.37	1.43
47	n	320	XAT	C32-C33	-2.34	1.40	1.45
28	c	511	CLA	C1D-C2D	-2.34	1.40	1.45
47	V	321	XAT	C12-C13	-2.34	1.40	1.45
29	v	303	CHL	CHB-C4A	-2.34	1.32	1.37
28	v	306	CLA	C1B-C2B	-2.34	1.37	1.43
28	S	305	CLA	C1D-C2D	-2.34	1.40	1.45
28	S	310	CLA	C4B-NB	-2.34	1.34	1.37
46	g	319	NEX	C28-C29	-2.34	1.40	1.45
28	y	316	CLA	C1B-C2B	-2.34	1.37	1.43
28	C	501	CLA	C1D-C2D	-2.34	1.40	1.45
28	g	313	CLA	C2A-C1A	-2.34	1.47	1.52
28	y	306	CLA	CAA-C2A	-2.34	1.49	1.54
28	A	407	CLA	C1D-C2D	-2.34	1.40	1.45
28	C	512	CLA	C1D-C2D	-2.34	1.40	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	1	316	0UR	C15-C16	-2.34	1.32	1.35
29	U	409	CHL	MG-NC	2.33	2.11	2.06
28	N	314	CLA	MG-NA	2.33	2.11	2.06
28	d	409	CLA	C1D-C2D	-2.33	1.40	1.45
28	U	414	CLA	C3D-CAD	-2.33	1.37	1.45
28	V	316	CLA	C1D-C2D	-2.33	1.40	1.45
28	u	418	CLA	C1D-C2D	-2.33	1.40	1.45
29	N	302	CHL	CMC-C2C	-2.33	1.40	1.45
29	n	304	CHL	C1D-C2D	-2.33	1.40	1.45
28	U	413	CLA	C1B-C2B	-2.33	1.37	1.43
29	v	307	CHL	C3B-C4B	-2.33	1.37	1.42
31	Y	317	0UR	C17-C18	-2.33	1.26	1.32
34	D	407	PHO	C1B-C2B	2.33	1.42	1.39
29	n	312	CHL	MG-NC	2.33	2.11	2.06
28	D	409	CLA	C1D-C2D	-2.33	1.40	1.45
28	D	410	CLA	C1B-C2B	-2.33	1.37	1.43
28	g	315	CLA	C1B-C2B	-2.33	1.37	1.43
31	s	316	0UR	C29-C28	-2.32	1.51	1.54
46	s	319	NEX	C19-C9	-2.32	1.46	1.50
28	0	307	CLA	C4B-NB	-2.32	1.34	1.37
28	1	311	CLA	C3D-C4D	-2.32	1.38	1.44
28	b	610	CLA	C1D-C2D	-2.32	1.40	1.45
28	V	308	CLA	C1D-C2D	-2.32	1.40	1.45
28	c	514	CLA	C1D-C2D	-2.32	1.40	1.45
30	y	319	0IE	C39-C32	-2.32	1.49	1.53
28	a	403	CLA	C1D-C2D	-2.32	1.40	1.45
33	c	507	BCR	C19-C18	-2.32	1.41	1.45
28	N	314	CLA	C1B-C2B	-2.32	1.37	1.43
28	u	411	CLA	C1B-C2B	-2.32	1.37	1.43
29	u	410	CHL	C1D-C2D	-2.32	1.40	1.45
28	U	406	CLA	C1D-C2D	-2.32	1.40	1.45
28	c	511	CLA	C1B-NB	-2.32	1.34	1.37
28	0	302	CLA	C3D-C4D	-2.32	1.38	1.44
28	c	503	CLA	C1D-C2D	-2.32	1.40	1.45
28	G	316	CLA	C1B-C2B	-2.32	1.37	1.43
28	Y	308	CLA	C1B-C2B	-2.32	1.37	1.43
47	v	319	XAT	C8-C9	-2.32	1.41	1.45
29	V	302	CHL	C4B-NB	-2.31	1.34	1.37
28	V	307	CLA	O1D-CGD	-2.31	1.15	1.21
31	0	313	0UR	C14-C15	-2.31	1.36	1.43
28	U	413	CLA	C1D-C2D	-2.31	1.40	1.45
28	V	315	CLA	C1D-C2D	-2.31	1.40	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	n	315	CLA	C1D-C2D	-2.31	1.40	1.45
28	V	315	CLA	C1B-C2B	-2.31	1.37	1.43
28	c	510	CLA	C1B-C2B	-2.31	1.37	1.43
29	U	409	CHL	C1D-C2D	-2.31	1.40	1.45
46	v	320	NEX	C12-C13	-2.31	1.41	1.45
31	S	315	0UR	C17-C18	-2.31	1.26	1.32
29	N	307	CHL	C1B-C2B	-2.31	1.37	1.43
28	Y	304	CLA	C1B-C2B	-2.31	1.37	1.43
31	Y	322	0UR	C19-C18	-2.31	1.46	1.50
31	N	316	0UR	C17-C18	-2.31	1.26	1.32
28	D	410	CLA	C1D-C2D	-2.31	1.40	1.45
28	n	317	CLA	C1B-C2B	-2.31	1.37	1.43
46	s	319	NEX	C31-C30	-2.31	1.36	1.43
30	S	316	0IE	C25-C24	-2.31	1.51	1.54
28	y	306	CLA	CHB-C1B	-2.31	1.34	1.39
38	J	102	LMG	O9-C10	-2.31	1.15	1.22
28	u	417	CLA	C1B-C2B	-2.30	1.37	1.43
28	c	521	CLA	C1D-C2D	-2.30	1.40	1.45
28	u	411	CLA	C1D-C2D	-2.30	1.40	1.45
28	v	306	CLA	C1D-C2D	-2.30	1.40	1.45
28	g	311	CLA	C1B-C2B	-2.30	1.37	1.43
28	u	412	CLA	C1B-C2B	-2.30	1.37	1.43
29	V	313	CHL	C2A-C1A	-2.30	1.47	1.52
29	s	302	CHL	C1D-C2D	-2.30	1.40	1.45
28	v	316	CLA	C1B-C2B	-2.30	1.37	1.43
28	b	608	CLA	C1D-C2D	-2.30	1.40	1.45
47	s	318	XAT	C12-C13	-2.30	1.41	1.45
28	g	314	CLA	O1A-CGA	-2.30	1.15	1.22
28	n	306	CLA	C1B-C2B	-2.30	1.37	1.43
33	C	502	BCR	C12-C13	-2.30	1.41	1.45
28	n	306	CLA	C1D-C2D	-2.30	1.40	1.45
28	B	608	CLA	C1D-C2D	-2.30	1.40	1.45
28	U	416	CLA	C1D-C2D	-2.30	1.40	1.45
29	g	316	CHL	CAB-C3B	-2.30	1.41	1.47
46	V	322	NEX	C32-C33	-2.30	1.41	1.45
29	N	310	CHL	C1B-C2B	-2.29	1.37	1.43
46	n	321	NEX	C32-C33	-2.29	1.41	1.45
28	u	418	CLA	C1B-C2B	-2.29	1.37	1.43
28	B	613	CLA	C1D-C2D	-2.29	1.40	1.45
28	U	410	CLA	C1B-C2B	-2.29	1.37	1.43
29	Y	307	CHL	C1D-C2D	-2.29	1.40	1.45
28	S	310	CLA	CHB-C1B	-2.29	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	N	315	CLA	C1B-C2B	-2.29	1.37	1.43
28	B	616	CLA	C1D-C2D	-2.29	1.40	1.45
28	y	314	CLA	C1D-C2D	-2.29	1.40	1.45
28	G	313	CLA	C1B-C2B	-2.29	1.37	1.43
28	C	509	CLA	C1D-C2D	-2.29	1.40	1.45
29	G	317	CHL	CHB-C4A	-2.29	1.32	1.37
47	S	317	XAT	C32-C33	-2.29	1.41	1.45
28	0	303	CLA	C1B-C2B	-2.29	1.37	1.43
28	s	304	CLA	C3D-C4D	-2.29	1.39	1.44
29	N	306	CHL	C2C-C3C	-2.29	1.32	1.36
29	V	309	CHL	C1A-CHA	-2.29	1.33	1.43
28	y	308	CLA	CBD-CGD	-2.29	1.45	1.52
28	G	314	CLA	C1B-C2B	-2.29	1.37	1.43
29	V	311	CHL	CHC-C1C	-2.28	1.33	1.38
28	a	402	CLA	C1B-C2B	-2.28	1.37	1.43
28	0	311	CLA	C1B-C2B	-2.28	1.37	1.43
31	Y	317	0UR	C6-C7	-2.28	1.41	1.45
28	s	305	CLA	C1B-C2B	-2.28	1.37	1.43
29	N	302	CHL	C3B-C4B	-2.28	1.37	1.42
47	s	318	XAT	C8-C9	-2.28	1.41	1.45
33	H	101	BCR	C12-C13	-2.28	1.41	1.45
28	s	312	CLA	C1B-C2B	-2.28	1.37	1.43
28	B	622	CLA	MG-NC	2.28	2.11	2.06
47	S	317	XAT	C28-C29	-2.28	1.41	1.45
28	V	307	CLA	CHB-C1B	-2.28	1.34	1.39
28	b	619	CLA	C1D-C2D	-2.28	1.40	1.45
29	N	308	CHL	CMC-C2C	-2.28	1.40	1.45
28	Y	306	CLA	C1B-C2B	-2.28	1.37	1.43
28	b	609	CLA	C1B-C2B	-2.28	1.37	1.43
46	n	302	NEX	C28-C29	-2.28	1.41	1.45
28	S	310	CLA	C1A-CHA	-2.28	1.33	1.43
28	1	306	CLA	C1D-C2D	-2.28	1.40	1.45
29	s	306	CHL	C3B-C4B	-2.27	1.37	1.42
28	b	607	CLA	C1D-C2D	-2.27	1.40	1.45
29	g	310	CHL	C3B-C2B	-2.27	1.33	1.41
28	Y	316	CLA	C1D-C2D	-2.27	1.40	1.45
28	g	305	CLA	C1D-C2D	-2.27	1.40	1.45
28	y	303	CLA	C1B-C2B	-2.27	1.37	1.43
28	S	314	CLA	C3D-C4D	-2.27	1.39	1.44
28	A	416	CLA	C1D-C2D	-2.27	1.40	1.45
28	B	608	CLA	C1B-C2B	-2.27	1.37	1.43
28	U	415	CLA	C1D-C2D	-2.27	1.40	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	Y	314	CLA	C1D-C2D	-2.27	1.40	1.45
28	U	407	CLA	C1B-C2B	-2.27	1.37	1.43
29	n	304	CHL	C1B-C2B	-2.27	1.37	1.43
28	1	307	CLA	C1B-C2B	-2.27	1.37	1.43
28	G	312	CLA	C1B-C2B	-2.27	1.37	1.43
47	v	319	XAT	C32-C33	-2.27	1.41	1.45
28	v	313	CLA	C1B-C2B	-2.27	1.37	1.43
28	b	611	CLA	C1B-NB	-2.27	1.35	1.37
28	v	314	CLA	MG-NC	2.27	2.11	2.06
28	y	314	CLA	C1B-C2B	-2.26	1.37	1.43
43	U	420	LMN	CBQ-CBK	-2.26	1.44	1.52
28	y	313	CLA	C1B-C2B	-2.26	1.37	1.43
33	B	604	BCR	C12-C13	-2.26	1.41	1.45
28	g	314	CLA	CHD-C4C	-2.26	1.34	1.39
31	G	319	0UR	C17-C18	-2.26	1.27	1.32
46	V	323	NEX	C12-C13	-2.26	1.41	1.45
28	b	617	CLA	C1D-C2D	-2.26	1.40	1.45
28	y	304	CLA	C1D-C2D	-2.26	1.40	1.45
29	V	311	CHL	CMC-C2C	-2.26	1.40	1.45
47	v	319	XAT	C12-C13	-2.26	1.41	1.45
28	B	616	CLA	C1B-NB	-2.26	1.35	1.37
28	u	413	CLA	C1B-C2B	-2.26	1.37	1.43
28	V	307	CLA	CHD-C1D	-2.25	1.34	1.38
47	s	318	XAT	C28-C29	-2.25	1.41	1.45
28	B	601	CLA	C1D-C2D	-2.25	1.40	1.45
28	U	417	CLA	C1D-C2D	-2.25	1.40	1.45
28	c	520	CLA	C1D-C2D	-2.25	1.40	1.45
28	b	611	CLA	C1B-C2B	-2.25	1.38	1.43
28	B	609	CLA	C1D-C2D	-2.25	1.40	1.45
31	1	316	0UR	C11-C12	-2.25	1.32	1.35
28	V	318	CLA	C1D-C2D	-2.25	1.40	1.45
28	C	504	CLA	C1D-C2D	-2.25	1.40	1.45
28	v	315	CLA	C1B-C2B	-2.25	1.38	1.43
29	G	317	CHL	CMA-C3A	-2.25	1.48	1.53
29	v	309	CHL	MG-NC	2.25	2.11	2.06
28	1	305	CLA	C1B-C2B	-2.25	1.38	1.43
28	B	610	CLA	C1D-C2D	-2.25	1.40	1.45
28	g	312	CLA	O1A-CGA	-2.25	1.15	1.22
31	Y	318	0UR	O39-C25	-2.25	1.36	1.43
28	U	406	CLA	C1B-C2B	-2.25	1.38	1.43
28	U	416	CLA	C1B-C2B	-2.25	1.38	1.43
28	u	414	CLA	CHB-C1B	2.25	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	G	306	CLA	C1D-C2D	-2.25	1.40	1.45
28	u	407	CLA	C1D-C2D	-2.25	1.40	1.45
28	C	517	CLA	C1B-C2B	-2.24	1.38	1.43
28	U	415	CLA	C1B-C2B	-2.24	1.38	1.43
28	U	412	CLA	C1D-C2D	-2.24	1.40	1.45
41	c	524	DGD	O3G-C3G	-2.24	1.39	1.43
28	g	315	CLA	C1D-C2D	-2.24	1.40	1.45
28	c	508	CLA	C1D-C2D	-2.24	1.40	1.45
28	1	309	CLA	C1B-C2B	-2.24	1.38	1.43
29	S	307	CHL	C1D-C2D	-2.24	1.40	1.45
29	V	311	CHL	O1D-CGD	-2.24	1.15	1.21
28	a	402	CLA	C1B-NB	-2.24	1.35	1.37
29	N	309	CHL	C1B-C2B	-2.24	1.38	1.43
28	C	501	CLA	C1B-C2B	-2.24	1.38	1.43
42	c	527	LHG	O10-C23	-2.24	1.15	1.22
31	1	312	0UR	C17-C18	-2.24	1.27	1.32
28	G	315	CLA	C1D-C2D	-2.24	1.40	1.45
34	A	402	PHO	C3D-C2D	2.24	1.43	1.39
28	c	512	CLA	C1D-C2D	-2.24	1.40	1.45
29	S	303	CHL	C1B-C2B	-2.24	1.38	1.43
29	S	306	CHL	CMC-C2C	-2.23	1.40	1.45
28	n	316	CLA	C1D-C2D	-2.23	1.40	1.45
28	a	403	CLA	C1B-C2B	-2.23	1.38	1.43
29	V	313	CHL	O1D-CGD	-2.23	1.15	1.21
28	C	501	CLA	C1B-NB	-2.23	1.35	1.37
29	N	308	CHL	CHB-C1B	-2.23	1.34	1.39
28	N	304	CLA	C2A-C1A	-2.23	1.47	1.52
28	B	602	CLA	C1B-C2B	-2.23	1.38	1.43
28	Y	309	CLA	C1D-C2D	-2.23	1.40	1.45
28	V	307	CLA	C1A-CHA	-2.23	1.33	1.43
29	U	408	CHL	C1D-C2D	-2.23	1.40	1.45
31	U	419	0UR	C48-C47	-2.23	1.37	1.50
28	b	618	CLA	C1D-C2D	-2.23	1.40	1.45
29	V	313	CHL	C10-C8	-2.23	1.40	1.52
28	N	304	CLA	CHB-C1B	-2.23	1.34	1.39
28	0	305	CLA	C1D-C2D	-2.23	1.40	1.45
28	y	305	CLA	C1D-C2D	-2.23	1.40	1.45
28	B	609	CLA	C1B-C2B	-2.23	1.38	1.43
28	g	308	CLA	C3D-C4D	-2.23	1.39	1.44
29	g	316	CHL	CHB-C4A	-2.23	1.32	1.37
46	s	319	NEX	C30-C29	2.23	1.38	1.35
29	Y	315	CHL	C1D-C2D	-2.23	1.40	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	u	414	CLA	C1B-C2B	-2.23	1.38	1.43
29	N	302	CHL	CMA-C3A	-2.23	1.48	1.53
28	n	314	CLA	C1B-C2B	-2.23	1.38	1.43
28	S	312	CLA	C1D-C2D	-2.23	1.40	1.45
28	G	316	CLA	C1D-C2D	-2.23	1.40	1.45
33	D	403	BCR	C19-C18	-2.23	1.41	1.45
29	S	306	CHL	CHC-C1C	-2.23	1.34	1.38
28	B	621	CLA	C1D-C2D	-2.23	1.40	1.45
28	s	313	CLA	C1D-C2D	-2.22	1.40	1.45
28	B	611	CLA	C1B-NB	-2.22	1.35	1.37
28	N	304	CLA	C3D-C2D	-2.22	1.33	1.39
28	u	405	CLA	C1D-C2D	-2.22	1.40	1.45
29	V	305	CHL	C1D-C2D	-2.22	1.40	1.45
47	S	317	XAT	C8-C9	-2.22	1.41	1.45
28	B	606	CLA	MG-NC	2.22	2.11	2.06
28	U	417	CLA	MG-NC	2.22	2.11	2.06
29	Y	315	CHL	C1B-C2B	-2.22	1.38	1.43
28	C	513	CLA	C1D-C2D	-2.22	1.40	1.45
28	N	305	CLA	C1D-C2D	-2.22	1.40	1.45
28	s	311	CLA	C1B-C2B	-2.22	1.38	1.43
46	s	319	NEX	C22-C23	-2.22	1.49	1.52
29	V	313	CHL	C3D-CAD	-2.22	1.37	1.45
43	n	322	LMN	CBR-CBL	2.22	1.60	1.52
28	N	312	CLA	C1B-C2B	-2.22	1.38	1.43
28	1	305	CLA	C1D-C2D	-2.22	1.41	1.45
28	C	511	CLA	C1D-C2D	-2.22	1.41	1.45
28	Y	310	CLA	C1B-C2B	-2.22	1.38	1.43
32	1	313	LUT	C31-C30	-2.22	1.36	1.43
47	N	318	XAT	C12-C13	-2.22	1.41	1.45
28	c	505	CLA	CHB-C1B	2.22	1.44	1.39
28	s	314	CLA	CHB-C1B	2.22	1.44	1.39
28	B	606	CLA	C1D-C2D	-2.21	1.41	1.45
30	S	316	0IE	O42-C26	-2.21	1.39	1.43
28	c	514	CLA	C1B-C2B	-2.21	1.38	1.43
45	e	101	HEM	C1C-NC	-2.21	1.35	1.39
28	1	302	CLA	C1B-C2B	-2.21	1.38	1.43
28	b	615	CLA	C1B-C2B	-2.21	1.38	1.43
28	N	313	CLA	C1B-C2B	-2.21	1.38	1.43
28	1	302	CLA	C3D-C4D	-2.21	1.39	1.44
28	u	414	CLA	C1B-NB	-2.21	1.35	1.37
30	Y	321	0IE	C5-C4	-2.21	1.36	1.43
28	0	301	CLA	C1B-C2B	-2.21	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	N	306	CHL	C1A-CHA	-2.21	1.33	1.43
29	n	305	CHL	C1B-C2B	-2.21	1.38	1.43
28	C	503	CLA	C1D-C2D	-2.21	1.41	1.45
38	m	101	LMG	C12-C11	-2.21	1.44	1.52
34	a	404	PHO	C4D-CHA	2.21	1.43	1.39
46	V	322	NEX	C12-C13	-2.21	1.41	1.45
28	U	404	CLA	C1D-C2D	-2.21	1.41	1.45
28	g	314	CLA	C1A-CHA	-2.21	1.34	1.43
29	y	307	CHL	C1D-C2D	-2.21	1.41	1.45
28	b	606	CLA	C1D-C2D	-2.21	1.41	1.45
28	c	520	CLA	C1B-NB	-2.20	1.35	1.37
28	b	615	CLA	C1D-C2D	-2.20	1.41	1.45
28	b	608	CLA	C1B-C2B	-2.20	1.38	1.43
28	b	616	CLA	C1D-C2D	-2.20	1.41	1.45
28	b	612	CLA	C1D-C2D	-2.20	1.41	1.45
28	Y	313	CLA	CAA-C2A	-2.20	1.50	1.54
28	n	314	CLA	C1D-C2D	-2.20	1.41	1.45
31	y	323	0UR	C6-C7	-2.20	1.41	1.45
29	g	310	CHL	CHB-C4A	-2.20	1.32	1.37
29	1	310	CHL	C1B-C2B	-2.20	1.38	1.43
29	V	302	CHL	C1A-CHA	-2.20	1.34	1.43
28	c	506	CLA	C1D-C2D	-2.20	1.41	1.45
29	N	309	CHL	C1B-NB	-2.20	1.35	1.37
28	U	416	CLA	MG-NC	2.20	2.11	2.06
28	b	622	CLA	MG-NC	2.20	2.11	2.06
29	v	304	CHL	C1B-C2B	-2.20	1.38	1.43
28	V	317	CLA	C1D-C2D	-2.19	1.41	1.45
33	k	101	BCR	C19-C18	-2.19	1.41	1.45
28	C	510	CLA	C1D-C2D	-2.19	1.41	1.45
29	v	309	CHL	C1D-C2D	-2.19	1.41	1.45
29	v	307	CHL	MG-NC	-2.19	2.01	2.06
28	u	416	CLA	C1B-C2B	-2.19	1.38	1.43
28	C	519	CLA	C1D-C2D	-2.19	1.41	1.45
28	c	506	CLA	C1B-C2B	-2.19	1.38	1.43
28	v	312	CLA	C1D-C2D	-2.19	1.41	1.45
28	u	408	CLA	C1D-C2D	-2.19	1.41	1.45
29	N	309	CHL	C1D-C2D	-2.19	1.41	1.45
28	V	318	CLA	CHB-C1B	2.19	1.44	1.39
29	v	311	CHL	C1B-C2B	-2.19	1.38	1.43
28	V	307	CLA	C3D-CAD	-2.19	1.37	1.45
29	U	409	CHL	C1B-C2B	-2.19	1.38	1.43
30	Y	321	0IE	C11-C12	-2.19	1.32	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	y	312	CLA	C1D-C2D	-2.19	1.41	1.45
33	B	604	BCR	C19-C18	-2.19	1.41	1.45
28	N	305	CLA	C1B-C2B	-2.19	1.38	1.43
29	V	310	CHL	C1B-C2B	-2.19	1.38	1.43
28	Y	310	CLA	C1D-C2D	-2.19	1.41	1.45
29	g	316	CHL	C1-C2	-2.19	1.42	1.49
28	U	411	CLA	C1D-C2D	-2.19	1.41	1.45
29	y	315	CHL	C1B-C2B	-2.19	1.38	1.43
28	c	522	CLA	C1B-C2B	-2.19	1.38	1.43
32	y	320	LUT	C22-C23	-2.19	1.49	1.53
28	d	404	CLA	MG-NC	2.19	2.11	2.06
28	u	417	CLA	C1D-C2D	-2.19	1.41	1.45
28	n	307	CLA	C1B-NB	-2.18	1.35	1.37
29	N	308	CHL	C2A-C1A	-2.18	1.47	1.52
37	b	614	SQD	O8-S	2.18	1.55	1.47
28	Y	316	CLA	C1B-C2B	-2.18	1.38	1.43
28	c	505	CLA	C1B-NB	-2.18	1.35	1.37
28	N	313	CLA	C1D-C2D	-2.18	1.41	1.45
28	s	315	CLA	C1D-C2D	-2.18	1.41	1.45
28	b	605	CLA	C1D-C2D	-2.18	1.41	1.45
29	n	309	CHL	MG-NC	2.18	2.11	2.06
28	0	305	CLA	C1B-C2B	-2.18	1.38	1.43
46	s	319	NEX	C39-C29	-2.18	1.46	1.50
29	V	310	CHL	MG-NC	2.18	2.11	2.06
29	V	310	CHL	C1D-C2D	-2.18	1.41	1.45
30	n	319	0IE	C25-C24	-2.18	1.52	1.54
46	n	321	NEX	C28-C29	-2.18	1.41	1.45
29	v	304	CHL	C1D-C2D	-2.18	1.41	1.45
28	N	304	CLA	O2D-CGD	-2.18	1.27	1.33
28	u	414	CLA	C1D-C2D	-2.18	1.41	1.45
29	v	309	CHL	C1B-C2B	-2.18	1.38	1.43
29	s	308	CHL	MG-NC	2.18	2.11	2.06
28	C	506	CLA	C1D-C2D	-2.18	1.41	1.45
29	u	410	CHL	MG-NC	2.18	2.11	2.06
28	B	618	CLA	C1D-C2D	-2.18	1.41	1.45
29	s	307	CHL	C1D-C2D	-2.18	1.41	1.45
28	c	505	CLA	C1B-C2B	-2.18	1.38	1.43
28	B	611	CLA	C1B-C2B	-2.18	1.38	1.43
28	s	313	CLA	CHB-C1B	2.18	1.44	1.39
28	G	305	CLA	C1D-C2D	-2.18	1.41	1.45
28	C	513	CLA	C1B-C2B	-2.18	1.38	1.43
28	g	312	CLA	C3C-C2C	-2.18	1.32	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	c	504	CLA	C1D-C2D	-2.17	1.41	1.45
28	S	304	CLA	C1D-C2D	-2.17	1.41	1.45
29	y	315	CHL	C1D-C2D	-2.17	1.41	1.45
29	N	308	CHL	CHC-C4B	-2.17	1.34	1.39
28	A	410	CLA	C1D-C2D	-2.17	1.41	1.45
28	n	307	CLA	C1D-C2D	-2.17	1.41	1.45
28	U	406	CLA	C1B-NB	-2.17	1.35	1.37
28	y	305	CLA	C1B-C2B	-2.17	1.38	1.43
29	V	311	CHL	C1C-NC	-2.17	1.34	1.37
28	a	402	CLA	C1D-C2D	-2.17	1.41	1.45
28	s	315	CLA	C1B-C2B	-2.17	1.38	1.43
28	B	619	CLA	C1B-C2B	-2.17	1.38	1.43
28	V	318	CLA	C1B-C2B	-2.17	1.38	1.43
43	n	322	LMN	OBV-CCJ	-2.17	1.36	1.40
29	U	405	CHL	C1B-C2B	-2.17	1.38	1.43
30	Y	319	0IE	C35-C34	-2.17	1.48	1.52
28	y	303	CLA	C1B-NB	-2.17	1.35	1.37
30	Y	319	0IE	C33-C34	-2.17	1.49	1.52
37	c	523	SQD	O8-S	2.17	1.55	1.47
28	Y	305	CLA	C1D-C2D	-2.17	1.41	1.45
28	d	409	CLA	MG-NC	2.17	2.11	2.06
28	u	413	CLA	C1D-C2D	-2.17	1.41	1.45
43	n	322	LMN	OBZ-CCD	-2.17	1.39	1.44
28	N	313	CLA	C1B-NB	-2.17	1.35	1.37
29	s	302	CHL	C1B-NB	-2.17	1.35	1.37
31	V	319	0UR	C17-C18	-2.17	1.27	1.32
45	E	101	HEM	C1C-NC	-2.17	1.35	1.39
47	N	318	XAT	C28-C29	-2.17	1.41	1.45
31	g	317	0UR	C33-C32	-2.17	1.46	1.50
28	0	302	CLA	C1B-C2B	-2.17	1.38	1.43
29	u	409	CHL	C1B-C2B	-2.16	1.38	1.43
46	N	319	NEX	C19-C9	-2.16	1.46	1.50
28	b	609	CLA	C1D-C2D	-2.16	1.41	1.45
28	c	505	CLA	C1D-C2D	-2.16	1.41	1.45
28	c	506	CLA	C1B-NB	-2.16	1.35	1.37
28	v	305	CLA	C1D-C2D	-2.16	1.41	1.45
29	G	310	CHL	MG-NC	2.16	2.11	2.06
29	V	311	CHL	C1A-CHA	-2.16	1.34	1.43
28	y	303	CLA	C1D-C2D	-2.16	1.41	1.45
28	B	601	CLA	C1B-C2B	-2.16	1.38	1.43
28	y	312	CLA	C1B-C2B	-2.16	1.38	1.43
28	1	302	CLA	C1D-C2D	-2.16	1.41	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	Y	308	CLA	C1D-C2D	-2.16	1.41	1.45
28	n	317	CLA	C1D-C2D	-2.16	1.41	1.45
28	c	510	CLA	C1D-C2D	-2.16	1.41	1.45
29	S	309	CHL	C1D-C2D	-2.16	1.41	1.45
28	D	409	CLA	MG-NC	2.16	2.11	2.06
29	v	303	CHL	CAA-C2A	-2.16	1.50	1.54
28	C	503	CLA	C1B-C2B	-2.16	1.38	1.43
31	g	317	0UR	C36-C28	-2.16	1.49	1.53
28	N	315	CLA	C1D-C2D	-2.16	1.41	1.45
29	N	307	CHL	CHB-C1B	2.16	1.44	1.39
41	c	524	DGD	C4D-C3D	-2.16	1.46	1.52
29	n	312	CHL	C1D-C2D	-2.16	1.41	1.45
29	N	306	CHL	CHC-C4B	-2.16	1.34	1.39
28	b	612	CLA	C1B-C2B	-2.16	1.38	1.43
28	u	416	CLA	CHB-C1B	2.16	1.44	1.39
28	B	605	CLA	C1B-C2B	-2.16	1.38	1.43
28	0	302	CLA	C1D-C2D	-2.16	1.41	1.45
28	U	406	CLA	MG-NC	2.15	2.11	2.06
28	Y	314	CLA	MG-NC	2.15	2.11	2.06
32	y	320	LUT	C35-C34	-2.15	1.36	1.43
28	b	618	CLA	C1B-C2B	-2.15	1.38	1.43
29	S	308	CHL	C1B-C2B	-2.15	1.38	1.43
28	d	404	CLA	CHB-C1B	2.15	1.44	1.39
39	a	412	PL9	O2-C1	-2.15	1.18	1.24
29	s	307	CHL	MG-NC	2.15	2.11	2.06
29	V	312	CHL	C1D-C2D	-2.15	1.41	1.45
28	0	308	CLA	CHB-C1B	2.15	1.44	1.39
28	c	521	CLA	C1B-C2B	-2.15	1.38	1.43
29	n	310	CHL	C1B-C2B	-2.15	1.38	1.43
28	b	619	CLA	C1B-NB	-2.15	1.35	1.37
28	g	308	CLA	CHB-C1B	2.15	1.44	1.39
28	B	605	CLA	C1B-NB	-2.15	1.35	1.37
28	V	314	CLA	C1B-C2B	-2.15	1.38	1.43
28	u	416	CLA	C1D-C2D	-2.15	1.41	1.45
28	U	407	CLA	C1D-C2D	-2.15	1.41	1.45
28	c	513	CLA	C1B-C2B	-2.15	1.38	1.43
28	1	306	CLA	CHB-C1B	2.15	1.44	1.39
33	k	102	BCR	C19-C18	-2.15	1.41	1.45
28	C	505	CLA	C1D-C2D	-2.15	1.41	1.45
29	g	316	CHL	C1A-CHA	-2.15	1.34	1.43
28	U	411	CLA	C1B-C2B	-2.15	1.38	1.43
28	c	511	CLA	MG-NC	2.15	2.11	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	y	315	CHL	MG-NC	2.15	2.11	2.06
28	U	404	CLA	C1B-C2B	-2.15	1.38	1.43
29	g	309	CHL	C1B-C2B	-2.15	1.38	1.43
28	A	416	CLA	C1B-C2B	-2.15	1.38	1.43
28	G	313	CLA	C1D-C2D	-2.15	1.41	1.45
28	B	616	CLA	MG-NC	2.15	2.11	2.06
29	N	302	CHL	C2A-C1A	-2.15	1.47	1.52
34	a	404	PHO	C1D-C2D	2.15	1.42	1.39
28	B	622	CLA	C1B-C2B	-2.15	1.38	1.43
28	n	315	CLA	C1B-C2B	-2.15	1.38	1.43
28	g	306	CLA	C1D-C2D	-2.15	1.41	1.45
28	y	310	CLA	CHB-C1B	2.14	1.44	1.39
41	c	524	DGD	O1B-C1B	-2.14	1.16	1.22
28	s	305	CLA	C1D-C2D	-2.14	1.41	1.45
29	U	408	CHL	C1B-C2B	-2.14	1.38	1.43
29	y	307	CHL	C1B-C2B	-2.14	1.38	1.43
28	B	612	CLA	C1B-NB	-2.14	1.35	1.37
29	N	310	CHL	C1D-C2D	-2.14	1.41	1.45
28	V	314	CLA	C1D-C2D	-2.14	1.41	1.45
28	v	315	CLA	C1D-C2D	-2.14	1.41	1.45
28	C	508	CLA	C1D-C2D	-2.14	1.41	1.45
28	s	304	CLA	CHB-C1B	2.14	1.44	1.39
28	G	305	CLA	C1B-C2B	-2.14	1.38	1.43
46	G	320	NEX	C28-C29	-2.14	1.41	1.45
28	a	416	CLA	C1B-C2B	-2.14	1.38	1.43
29	V	309	CHL	CMC-C2C	-2.14	1.40	1.45
29	G	317	CHL	CAA-C2A	-2.14	1.50	1.54
29	g	309	CHL	CHB-C1B	2.14	1.44	1.39
29	N	306	CHL	C3B-C2B	-2.14	1.33	1.41
46	g	319	NEX	C32-C33	-2.14	1.41	1.45
29	g	309	CHL	MG-NC	2.14	2.11	2.06
28	a	410	CLA	C1B-C2B	-2.14	1.38	1.43
28	c	504	CLA	C1B-C2B	-2.14	1.38	1.43
29	S	302	CHL	C1D-C2D	-2.14	1.41	1.45
28	0	303	CLA	MG-NC	2.14	2.11	2.06
38	m	101	LMG	O10-C28	-2.14	1.16	1.22
32	Y	320	LUT	C24-C25	-2.14	1.30	1.33
29	V	305	CHL	C1B-C2B	-2.13	1.38	1.43
29	S	303	CHL	C1D-C2D	-2.13	1.41	1.45
28	C	505	CLA	CHB-C1B	2.13	1.44	1.39
29	u	406	CHL	C1B-C2B	-2.13	1.38	1.43
28	g	307	CLA	C1D-C2D	-2.13	1.41	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	g	308	CLA	C1D-C2D	-2.13	1.41	1.45
29	N	303	CHL	C1D-C2D	-2.13	1.41	1.45
29	V	302	CHL	O1D-CGD	-2.13	1.15	1.21
28	0	308	CLA	C1B-C2B	-2.13	1.38	1.43
28	u	405	CLA	CHB-C1B	2.13	1.44	1.39
28	u	418	CLA	CHB-C1B	2.13	1.44	1.39
29	v	307	CHL	CMC-C2C	-2.13	1.40	1.45
28	g	313	CLA	C1A-CHA	-2.13	1.34	1.43
28	1	308	CLA	C1D-C2D	-2.13	1.41	1.45
28	s	314	CLA	C1B-C2B	-2.13	1.38	1.43
28	S	305	CLA	C1B-C2B	-2.13	1.38	1.43
28	B	612	CLA	C1D-C2D	-2.13	1.41	1.45
28	0	302	CLA	CHB-C1B	2.13	1.44	1.39
28	1	311	CLA	C1D-C2D	-2.13	1.41	1.45
29	s	308	CHL	C1D-C2D	-2.13	1.41	1.45
28	g	304	CLA	C1B-C2B	-2.13	1.38	1.43
28	c	508	CLA	C1B-NB	-2.13	1.35	1.37
28	0	307	CLA	C2A-C1A	-2.13	1.47	1.52
28	c	508	CLA	C1B-C2B	-2.13	1.38	1.43
29	G	311	CHL	C1B-C2B	-2.13	1.38	1.43
47	s	318	XAT	C32-C33	-2.13	1.41	1.45
28	0	306	CLA	MG-NC	2.13	2.11	2.06
28	U	404	CLA	MG-NC	2.13	2.11	2.06
28	0	311	CLA	C1D-C2D	-2.12	1.41	1.45
29	g	316	CHL	C6-C5	-2.12	1.44	1.52
28	Y	311	CLA	OBD-CAD	-2.12	1.18	1.22
28	Y	306	CLA	C1D-C2D	-2.12	1.41	1.45
33	C	502	BCR	C19-C18	-2.12	1.41	1.45
30	V	320	0IE	C25-C24	-2.12	1.52	1.54
28	y	313	CLA	CHB-C1B	2.12	1.44	1.39
28	s	304	CLA	C1B-C2B	-2.12	1.38	1.43
29	S	307	CHL	C1B-C2B	-2.12	1.38	1.43
28	c	504	CLA	CHB-C1B	2.12	1.44	1.39
28	Y	314	CLA	C1B-C2B	-2.12	1.38	1.43
29	N	309	CHL	MG-NC	2.12	2.11	2.06
31	y	322	0UR	C46-C47	-2.12	1.26	1.32
28	B	606	CLA	C1B-C2B	-2.12	1.38	1.43
28	S	313	CLA	C1D-C2D	-2.12	1.41	1.45
28	B	612	CLA	C1B-C2B	-2.12	1.38	1.43
28	C	519	CLA	C1B-NB	-2.12	1.35	1.37
28	G	314	CLA	C1D-C2D	-2.12	1.41	1.45
28	s	314	CLA	C1D-C2D	-2.12	1.41	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	y	313	CLA	C1D-C2D	-2.12	1.41	1.45
28	A	410	CLA	C1B-C2B	-2.12	1.38	1.43
28	1	305	CLA	CHB-C1B	2.12	1.44	1.39
28	G	309	CLA	C1D-C2D	-2.12	1.41	1.45
28	g	306	CLA	C1B-C2B	-2.12	1.38	1.43
29	N	306	CHL	C3B-C4B	-2.12	1.37	1.42
28	1	304	CLA	CHB-C1B	2.12	1.44	1.39
28	u	413	CLA	CHB-C1B	2.12	1.44	1.39
28	y	316	CLA	C1D-C2D	-2.12	1.41	1.45
29	u	410	CHL	C1B-C2B	-2.12	1.38	1.43
28	B	601	CLA	CHB-C1B	2.11	1.44	1.39
33	A	401	BCR	C19-C18	-2.11	1.41	1.45
28	C	508	CLA	CHB-C1B	2.11	1.44	1.39
28	u	411	CLA	C1B-NB	-2.11	1.35	1.37
29	G	310	CHL	C1B-C2B	-2.11	1.38	1.43
29	U	405	CHL	C1D-C2D	-2.11	1.41	1.45
38	m	101	LMG	C30-C29	-2.11	1.44	1.52
29	V	302	CHL	C3D-CAD	-2.11	1.38	1.45
28	U	410	CLA	C1D-C2D	-2.11	1.41	1.45
29	G	310	CHL	C1D-C2D	-2.11	1.41	1.45
29	S	309	CHL	C1B-C2B	-2.11	1.38	1.43
38	c	502	LMG	O6-C5	-2.11	1.39	1.44
29	y	307	CHL	MG-NC	2.11	2.11	2.06
28	D	410	CLA	CHB-C1B	2.11	1.44	1.39
28	s	311	CLA	CHB-C1B	2.11	1.44	1.39
28	b	620	CLA	C1D-C2D	-2.11	1.41	1.45
29	1	310	CHL	C1D-C2D	-2.11	1.41	1.45
28	0	303	CLA	CHB-C1B	2.11	1.44	1.39
33	a	401	BCR	C19-C18	-2.11	1.41	1.45
29	N	308	CHL	C1A-CHA	-2.11	1.34	1.43
28	N	313	CLA	MG-NC	2.11	2.11	2.06
28	C	506	CLA	C1B-NB	-2.11	1.35	1.37
28	u	415	CLA	C1D-C2D	-2.11	1.41	1.45
29	v	307	CHL	C4B-NB	-2.11	1.35	1.37
28	y	303	CLA	CHB-C1B	2.11	1.44	1.39
28	0	308	CLA	C1D-C2D	-2.11	1.41	1.45
28	g	313	CLA	CHC-C4B	-2.11	1.34	1.39
28	u	412	CLA	C1D-C2D	-2.11	1.41	1.45
28	B	621	CLA	C1B-C2B	-2.11	1.38	1.43
47	N	318	XAT	C32-C33	-2.11	1.41	1.45
28	y	309	CLA	MG-NC	2.11	2.11	2.06
28	g	313	CLA	CHC-C1C	-2.11	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	c	522	CLA	C1D-C2D	-2.10	1.41	1.45
34	a	404	PHO	C3D-C2D	2.10	1.43	1.39
28	S	314	CLA	C1B-C2B	-2.10	1.38	1.43
28	u	408	CLA	C1B-C2B	-2.10	1.38	1.43
28	S	314	CLA	CHB-C1B	2.10	1.44	1.39
34	D	407	PHO	CBD-CGD	-2.10	1.49	1.52
29	V	311	CHL	C3D-CAD	-2.10	1.38	1.45
28	Y	309	CLA	C1B-C2B	-2.10	1.38	1.43
29	n	312	CHL	C1B-C2B	-2.10	1.38	1.43
29	N	306	CHL	CHD-C1D	-2.10	1.34	1.38
28	C	511	CLA	C1B-C2B	-2.10	1.38	1.43
28	y	311	CLA	C1D-C2D	-2.10	1.41	1.45
29	V	312	CHL	CHB-C1B	2.10	1.44	1.39
28	A	407	CLA	C1B-C2B	-2.10	1.38	1.43
28	1	309	CLA	C1B-NB	-2.10	1.35	1.37
28	B	612	CLA	MG-NC	2.10	2.11	2.06
32	1	313	LUT	C32-C33	-2.10	1.41	1.45
28	d	404	CLA	C1B-NB	-2.10	1.35	1.37
29	V	313	CHL	OBD-CAD	-2.10	1.18	1.22
28	C	512	CLA	C1B-C2B	-2.10	1.38	1.43
33	c	509	BCR	C19-C18	-2.10	1.41	1.45
46	N	319	NEX	C22-C23	-2.10	1.49	1.52
28	s	304	CLA	C1D-C2D	-2.10	1.41	1.45
29	n	305	CHL	C1D-C2D	-2.10	1.41	1.45
28	1	303	CLA	C3D-CAD	-2.10	1.38	1.45
28	0	306	CLA	C1B-C2B	-2.09	1.38	1.43
29	s	308	CHL	C1B-C2B	-2.09	1.38	1.43
28	N	311	CLA	C1D-C2D	-2.09	1.41	1.45
29	s	309	CHL	C1D-C2D	-2.09	1.41	1.45
28	C	505	CLA	C1B-C2B	-2.09	1.38	1.43
28	y	316	CLA	CHB-C1B	2.09	1.44	1.39
28	C	503	CLA	CHB-C1B	2.09	1.44	1.39
28	B	621	CLA	CHB-C1B	2.09	1.44	1.39
28	C	511	CLA	C1B-NB	-2.09	1.35	1.37
29	n	310	CHL	C1B-NB	-2.09	1.35	1.37
29	v	303	CHL	CMC-C2C	-2.09	1.40	1.45
31	1	316	0UR	C8-C7	-2.09	1.33	1.35
32	Y	320	LUT	C22-C21	-2.09	1.52	1.54
28	u	407	CLA	MG-NC	2.09	2.11	2.06
28	1	301	CLA	C1B-C2B	-2.09	1.38	1.43
28	b	601	CLA	C1D-C2D	-2.09	1.41	1.45
29	g	309	CHL	C1D-C2D	-2.09	1.41	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	Y	304	CLA	C1B-NB	-2.09	1.35	1.37
28	Y	305	CLA	C1B-NB	-2.09	1.35	1.37
28	G	313	CLA	CHB-C1B	2.09	1.44	1.39
28	g	315	CLA	MG-NC	2.09	2.11	2.06
31	Y	322	0UR	C55-C54	-2.09	1.36	1.51
31	Y	318	0UR	C17-C18	-2.09	1.27	1.32
29	G	317	CHL	CMC-C2C	-2.09	1.40	1.45
28	1	308	CLA	MG-NC	2.09	2.11	2.06
28	s	311	CLA	C1D-C2D	-2.09	1.41	1.45
30	N	317	0IE	O42-C26	-2.09	1.39	1.43
28	B	605	CLA	CHB-C1B	2.09	1.44	1.39
28	B	609	CLA	C1B-NB	-2.09	1.35	1.37
30	y	321	0IE	C9-C8	-2.09	1.37	1.43
28	D	410	CLA	C1B-NB	-2.08	1.35	1.37
28	C	508	CLA	C1B-C2B	-2.08	1.38	1.43
28	C	510	CLA	C1B-NB	-2.08	1.35	1.37
32	Y	320	LUT	C15-C14	-2.08	1.37	1.43
28	g	308	CLA	C1B-C2B	-2.08	1.38	1.43
29	N	307	CHL	C1D-C2D	-2.08	1.41	1.45
34	d	407	PHO	C1D-C2D	2.08	1.41	1.39
28	C	517	CLA	C1B-NB	-2.08	1.35	1.37
29	S	308	CHL	C1D-C2D	-2.08	1.41	1.45
28	v	314	CLA	C1B-C2B	-2.08	1.38	1.43
28	A	411	CLA	C1D-C2D	-2.08	1.41	1.45
29	v	308	CHL	C1D-C2D	-2.08	1.41	1.45
28	C	513	CLA	CHB-C1B	2.08	1.44	1.39
28	S	305	CLA	MG-NC	2.08	2.11	2.06
28	0	301	CLA	C1B-NB	-2.08	1.35	1.37
28	D	409	CLA	C1B-C2B	-2.08	1.38	1.43
28	b	606	CLA	CHB-C1B	2.08	1.44	1.39
28	d	404	CLA	C1B-C2B	-2.08	1.38	1.43
29	V	311	CHL	CHC-C4B	-2.08	1.34	1.39
28	s	312	CLA	C1D-C2D	-2.08	1.41	1.45
28	S	310	CLA	C3D-C2D	-2.08	1.33	1.39
28	v	306	CLA	CHB-C1B	2.08	1.44	1.39
28	b	619	CLA	CHB-C1B	2.07	1.44	1.39
29	S	302	CHL	CHB-C1B	2.07	1.44	1.39
28	0	309	CLA	C1D-C2D	-2.07	1.41	1.45
47	S	317	XAT	C12-C13	-2.07	1.41	1.45
28	C	506	CLA	C1B-C2B	-2.07	1.38	1.43
29	U	405	CHL	CHB-C1B	2.07	1.44	1.39
28	c	504	CLA	C1B-NB	-2.07	1.35	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	U	419	0UR	C14-C13	-2.07	1.29	1.34
28	n	313	CLA	C1D-C2D	-2.07	1.41	1.45
28	U	413	CLA	CHB-C1B	2.07	1.44	1.39
28	b	622	CLA	C1B-C2B	-2.07	1.38	1.43
46	g	319	NEX	C12-C13	-2.07	1.41	1.45
28	u	405	CLA	C1B-NB	-2.07	1.35	1.37
28	0	304	CLA	CHB-C1B	2.07	1.44	1.39
28	Y	311	CLA	CMD-C2D	-2.07	1.46	1.50
28	C	519	CLA	CHB-C1B	2.07	1.44	1.39
30	V	320	0IE	O42-C26	-2.07	1.39	1.43
28	B	618	CLA	C1B-C2B	-2.07	1.38	1.43
28	B	606	CLA	C1B-NB	-2.07	1.35	1.37
28	c	512	CLA	C1B-C2B	-2.07	1.38	1.43
29	V	311	CHL	C3A-C4A	-2.07	1.45	1.51
28	V	308	CLA	C1B-C2B	-2.07	1.38	1.43
37	B	617	SQD	O8-S	2.07	1.55	1.47
28	S	311	CLA	CHB-C1B	2.07	1.44	1.39
28	Y	316	CLA	CHB-C1B	2.07	1.44	1.39
28	1	304	CLA	C1D-C2D	-2.07	1.41	1.45
29	v	310	CHL	C1D-C2D	-2.07	1.41	1.45
28	n	307	CLA	C1B-C2B	-2.07	1.38	1.43
28	B	621	CLA	MG-NC	2.07	2.11	2.06
28	G	306	CLA	C1B-C2B	-2.07	1.38	1.43
28	0	306	CLA	CHB-C1B	2.07	1.44	1.39
28	n	314	CLA	CHB-C1B	2.07	1.44	1.39
46	s	319	NEX	C34-C33	2.07	1.38	1.35
28	u	407	CLA	C1B-NB	-2.07	1.35	1.37
28	y	311	CLA	C1B-C2B	-2.06	1.38	1.43
28	y	305	CLA	CHB-C1B	2.06	1.44	1.39
28	b	619	CLA	C1B-C2B	-2.06	1.38	1.43
37	z	101	SQD	O8-S	2.06	1.55	1.47
28	u	417	CLA	CHB-C1B	2.06	1.44	1.39
29	n	309	CHL	C1B-C2B	-2.06	1.38	1.43
28	g	304	CLA	CHB-C1B	2.06	1.44	1.39
28	G	314	CLA	C1B-NB	-2.06	1.35	1.37
28	A	416	CLA	C1B-NB	-2.06	1.35	1.37
28	v	316	CLA	C1D-C2D	-2.06	1.41	1.45
28	B	616	CLA	C1B-C2B	-2.06	1.38	1.43
46	G	320	NEX	C11-C12	2.06	1.39	1.34
28	Y	314	CLA	C1B-NB	-2.06	1.35	1.37
28	b	609	CLA	CHB-C1B	2.06	1.44	1.39
28	Y	311	CLA	C1A-CHA	-2.06	1.34	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	n	313	CLA	C1B-C2B	-2.06	1.38	1.43
28	v	313	CLA	C1D-C2D	-2.06	1.41	1.45
28	a	410	CLA	C1D-C2D	-2.06	1.41	1.45
29	N	302	CHL	C6-C5	-2.06	1.44	1.52
29	V	306	CHL	C1B-C2B	-2.06	1.38	1.43
28	1	308	CLA	CHB-C1B	2.06	1.44	1.39
28	B	608	CLA	CHB-C1B	2.06	1.44	1.39
28	U	410	CLA	CHB-C1B	2.06	1.44	1.39
34	D	407	PHO	C3D-C2D	2.06	1.43	1.39
28	C	512	CLA	CHB-C1B	2.06	1.44	1.39
30	Y	319	0IE	C5-C4	2.06	1.49	1.43
28	C	512	CLA	C1B-NB	-2.05	1.35	1.37
29	s	308	CHL	CHB-C1B	2.05	1.44	1.39
28	g	311	CLA	C1D-C2D	-2.05	1.41	1.45
29	u	406	CHL	MG-NC	2.05	2.11	2.06
28	1	301	CLA	CHB-C1B	2.05	1.44	1.39
29	V	312	CHL	C1B-C2B	-2.05	1.38	1.43
29	Y	315	CHL	CHB-C1B	2.05	1.44	1.39
28	G	316	CLA	MG-NC	2.05	2.11	2.06
28	s	313	CLA	C1B-C2B	-2.05	1.38	1.43
28	v	313	CLA	CHB-C1B	2.05	1.44	1.39
29	v	308	CHL	MG-NC	2.05	2.11	2.06
28	c	511	CLA	C1B-C2B	-2.05	1.38	1.43
28	S	314	CLA	C1D-C2D	-2.05	1.41	1.45
28	U	414	CLA	C6-C5	-2.05	1.44	1.52
28	S	312	CLA	C1B-C2B	-2.05	1.38	1.43
28	v	305	CLA	CHB-C1B	2.05	1.44	1.39
28	c	522	CLA	MG-NC	2.05	2.11	2.06
28	s	305	CLA	CHB-C1B	2.05	1.44	1.39
28	y	309	CLA	C1B-C2B	-2.05	1.38	1.43
28	A	411	CLA	C1B-C2B	-2.05	1.38	1.43
28	y	304	CLA	CHB-C1B	2.05	1.44	1.39
29	s	309	CHL	MG-NC	2.05	2.11	2.06
28	g	312	CLA	C3B-C4B	-2.05	1.38	1.42
28	1	311	CLA	CHB-C1B	2.05	1.44	1.39
28	G	312	CLA	C1D-C2D	-2.05	1.41	1.45
29	v	308	CHL	C1B-C2B	-2.04	1.38	1.43
28	g	312	CLA	O1D-CGD	-2.04	1.16	1.21
28	u	408	CLA	MG-NC	2.04	2.11	2.06
28	b	606	CLA	C1B-NB	-2.04	1.35	1.37
29	G	310	CHL	CHB-C1B	2.04	1.44	1.39
46	N	319	NEX	C30-C29	2.04	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	v	312	CLA	CHB-C1B	2.04	1.44	1.39
28	g	308	CLA	C1B-NB	-2.04	1.35	1.37
29	V	306	CHL	C1D-C2D	-2.04	1.41	1.45
31	y	322	0UR	C53-C52	-2.04	1.40	1.51
29	S	309	CHL	MG-NC	2.04	2.11	2.06
28	B	606	CLA	CHB-C1B	2.04	1.44	1.39
29	S	302	CHL	MG-NC	2.04	2.11	2.06
28	B	608	CLA	MG-NC	2.04	2.11	2.06
28	g	307	CLA	C1B-C2B	-2.04	1.38	1.43
31	0	313	0UR	C14-C13	-2.04	1.29	1.34
29	V	305	CHL	C1B-NB	-2.04	1.35	1.37
28	b	607	CLA	C1B-C2B	-2.04	1.38	1.43
29	v	307	CHL	CHC-C4B	-2.03	1.34	1.39
29	s	309	CHL	CHB-C1B	2.03	1.44	1.39
29	V	309	CHL	CHB-C1B	-2.03	1.34	1.39
28	v	316	CLA	CHB-C1B	2.03	1.44	1.39
28	0	309	CLA	CHB-C1B	2.03	1.44	1.39
28	B	618	CLA	CHB-C1B	2.03	1.44	1.39
28	Y	310	CLA	CHB-C1B	2.03	1.44	1.39
31	U	419	0UR	C17-C16	-2.03	1.41	1.45
33	C	507	BCR	C19-C18	-2.03	1.41	1.45
28	0	301	CLA	C1D-C2D	-2.03	1.41	1.45
28	1	302	CLA	CHB-C1B	2.03	1.44	1.39
39	a	412	PL9	C36-C37	-2.03	1.46	1.53
38	m	101	LMG	O4-C4	-2.03	1.38	1.43
28	n	307	CLA	CHB-C1B	2.03	1.44	1.39
31	0	313	0UR	C17-C16	-2.03	1.41	1.45
28	U	412	CLA	C1B-C2B	-2.03	1.38	1.43
28	B	602	CLA	C1B-NB	-2.03	1.35	1.37
28	0	311	CLA	CHB-C1B	2.03	1.44	1.39
45	E	101	HEM	C1A-NA	-2.03	1.35	1.39
28	A	416	CLA	CHB-C1B	2.03	1.44	1.39
28	v	316	CLA	MG-NC	2.03	2.11	2.06
29	G	311	CHL	MG-NC	2.03	2.11	2.06
28	b	618	CLA	C1B-NB	-2.03	1.35	1.37
28	b	605	CLA	MG-NC	2.03	2.11	2.06
28	n	313	CLA	CHB-C1B	2.03	1.44	1.39
28	c	503	CLA	MG-NC	2.03	2.11	2.06
37	c	501	SQD	O8-S	2.03	1.54	1.47
28	B	619	CLA	CHB-C1B	2.03	1.44	1.39
28	n	315	CLA	C1B-NB	-2.03	1.35	1.37
28	B	611	CLA	MG-NC	2.02	2.11	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	u	411	CLA	MG-NC	2.02	2.11	2.06
28	Y	312	CLA	CHB-C1B	2.02	1.43	1.39
28	b	617	CLA	C1B-NB	-2.02	1.35	1.37
28	N	315	CLA	CHB-C1B	2.02	1.43	1.39
28	Y	311	CLA	CBD-CGD	-2.02	1.46	1.52
45	e	101	HEM	C1A-NA	-2.02	1.35	1.39
28	B	618	CLA	MG-NC	2.02	2.11	2.06
28	C	501	CLA	MG-NC	2.02	2.11	2.06
28	Y	314	CLA	CHB-C1B	2.02	1.43	1.39
41	c	524	DGD	O6E-C5E	-2.02	1.39	1.44
28	0	304	CLA	C1D-C2D	-2.02	1.41	1.45
29	S	306	CHL	C1A-CHA	-2.02	1.34	1.43
29	n	309	CHL	C1D-C2D	-2.02	1.41	1.45
29	s	307	CHL	C1B-C2B	-2.02	1.38	1.43
29	g	316	CHL	O1D-CGD	-2.02	1.16	1.21
28	S	311	CLA	C1D-C2D	-2.02	1.41	1.45
29	S	306	CHL	O1D-CGD	-2.02	1.16	1.21
28	g	304	CLA	C1D-C2D	-2.02	1.41	1.45
28	c	508	CLA	CHB-C1B	2.02	1.43	1.39
28	1	309	CLA	C1D-C2D	-2.02	1.41	1.45
28	n	314	CLA	MG-NC	2.02	2.11	2.06
28	G	305	CLA	CHB-C1B	2.02	1.43	1.39
32	1	313	LUT	C8-C7	2.02	1.39	1.33
28	N	312	CLA	C1D-C2D	-2.02	1.41	1.45
38	m	101	LMG	C11-C10	-2.02	1.44	1.50
28	S	305	CLA	CHB-C1B	2.02	1.43	1.39
28	n	316	CLA	C1B-C2B	-2.02	1.38	1.43
30	s	317	0IE	C25-C24	-2.01	1.52	1.54
28	b	608	CLA	C1B-NB	-2.01	1.35	1.37
29	Y	307	CHL	MG-NC	2.01	2.11	2.06
28	V	317	CLA	C1B-NB	-2.01	1.35	1.37
28	B	616	CLA	CHB-C1B	2.01	1.43	1.39
33	h	101	BCR	C19-C18	-2.01	1.41	1.45
28	Y	313	CLA	C1A-CHA	-2.01	1.34	1.43
28	1	305	CLA	MG-NC	2.01	2.11	2.06
29	n	308	CHL	C4B-NB	-2.01	1.35	1.37
28	U	413	CLA	MG-NC	2.01	2.11	2.06
29	s	302	CHL	CHB-C1B	2.01	1.43	1.39
28	S	310	CLA	C9-C8	-2.01	1.46	1.52
28	0	307	CLA	MG-NA	2.01	2.11	2.06
31	1	315	0UR	C29-C28	-2.01	1.52	1.54
28	b	611	CLA	CHB-C1B	2.01	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	s	310	CHL	C1B-C2B	-2.01	1.38	1.43
28	1	311	CLA	MG-NC	2.01	2.11	2.06
28	y	313	CLA	C1B-NB	-2.01	1.35	1.37
29	N	303	CHL	C1B-NB	-2.01	1.35	1.37
28	N	314	CLA	C1D-C2D	-2.01	1.41	1.45
29	s	309	CHL	C1B-C2B	-2.01	1.38	1.43
29	N	306	CHL	CMC-C2C	-2.00	1.41	1.45
28	C	519	CLA	C1B-C2B	-2.00	1.38	1.43
28	G	312	CLA	CHB-C1B	2.00	1.43	1.39
29	g	310	CHL	C1A-CHA	-2.00	1.34	1.43
29	S	303	CHL	CHB-C1B	2.00	1.43	1.39
28	b	609	CLA	C1B-NB	-2.00	1.35	1.37
28	g	314	CLA	C2A-C1A	-2.00	1.47	1.52
28	c	503	CLA	C1B-C2B	-2.00	1.38	1.43
29	n	309	CHL	CHB-C1B	2.00	1.43	1.39
28	n	314	CLA	C1B-NB	-2.00	1.35	1.37
45	E	101	HEM	C4A-NA	-2.00	1.35	1.39
28	C	509	CLA	CHB-C1B	2.00	1.43	1.39
31	1	316	0UR	C46-C45	-2.00	1.43	1.48
37	T	102	SQD	O8-S	2.00	1.54	1.47
28	V	308	CLA	MG-NC	2.00	2.11	2.06
28	b	605	CLA	C1B-C2B	-2.00	1.38	1.43
29	v	311	CHL	C1D-C2D	-2.00	1.41	1.45
29	s	306	CHL	C1A-CHA	-2.00	1.34	1.43
29	0	310	CHL	CHB-C1B	2.00	1.43	1.39
29	S	309	CHL	CHB-C1B	2.00	1.43	1.39
28	b	615	CLA	MG-NC	2.00	2.11	2.06
28	Y	312	CLA	C1B-NB	-2.00	1.35	1.37
29	s	307	CHL	CHB-C1B	2.00	1.43	1.39

All (2843) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	Y	319	0IE	C4-C3-C2	-19.02	103.77	120.08
30	Y	319	0IE	C5-C4-C3	15.77	145.96	127.00
31	y	318	0UR	O42-C2-C41	-13.05	101.69	120.58
31	Y	318	0UR	O42-C2-C41	-11.01	104.64	120.58
31	U	419	0UR	O42-C2-C41	-10.86	104.86	120.58
38	d	410	LMG	O7-C10-C11	10.81	134.80	111.50
30	y	319	0IE	C43-C24-C19	10.23	125.05	109.55
28	Y	311	CLA	CHD-C1D-ND	-9.37	115.84	124.45
31	y	317	0UR	O42-C2-C41	-9.14	107.35	120.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	y	323	0UR	C38-C28-C19	8.97	123.13	109.55
31	g	318	0UR	C4-C3-C2	-8.93	112.42	120.08
31	y	322	0UR	C5-C4-C3	8.63	137.38	127.00
28	V	307	CLA	CAA-C2A-C3A	-8.59	89.26	112.78
43	U	420	LMN	CBR-CCM-CBS	-8.57	89.10	109.40
31	y	318	0UR	C5-C4-C3	8.56	137.30	127.00
31	y	323	0UR	O42-C2-C41	-8.34	108.51	120.58
28	g	313	CLA	CHB-C1B-NB	8.29	133.03	124.26
31	1	316	0UR	C28-C19-C18	-8.19	102.35	112.70
31	y	322	0UR	C38-C28-C19	8.18	121.93	109.55
31	y	317	0UR	C43-C3-C4	-8.15	115.17	125.02
39	a	412	PL9	C7-C3-C4	8.15	123.50	116.88
30	y	319	0IE	C44-C24-C43	-8.10	95.95	107.89
28	U	414	CLA	CAC-C3C-C4C	7.99	135.18	124.81
28	g	314	CLA	CGD-CBD-CAD	-7.94	85.01	110.73
28	y	306	CLA	CGD-CBD-CAD	-7.89	85.19	110.73
31	0	313	0UR	C4-C3-C2	-7.86	113.33	120.08
31	y	323	0UR	C36-C28-C38	-7.82	96.37	107.89
31	1	315	0UR	C4-C3-C2	-7.79	113.40	120.08
30	Y	319	0IE	C17-C16-C15	-7.64	107.22	118.94
28	1	303	CLA	C4D-C3D-CAD	-7.52	99.23	108.10
30	y	321	0IE	C5-C4-C3	7.47	135.99	127.00
31	Y	318	0UR	C5-C4-C3	7.43	135.94	127.00
31	y	318	0UR	O44-C43-C3	-7.35	89.45	109.11
31	y	323	0UR	C33-C32-C31	-7.34	107.87	123.56
30	y	321	0IE	O1-C2-C30	-7.28	110.05	120.58
28	y	308	CLA	CGD-CBD-CAD	-7.25	87.26	110.73
30	y	319	0IE	C41-C28-C27	-7.24	108.07	123.56
31	u	420	0UR	C4-C3-C2	-7.22	113.88	120.08
30	y	319	0IE	O42-C26-C27	-7.20	94.24	110.53
30	0	312	0IE	C4-C3-C2	-7.17	113.92	120.08
31	0	314	0UR	C38-C28-C19	7.16	120.39	109.55
31	G	319	0UR	C4-C3-C2	-7.15	113.94	120.08
31	g	318	0UR	O42-C2-C41	-7.13	110.26	120.58
31	y	317	0UR	C38-C28-C19	7.12	120.32	109.55
30	y	321	0IE	O40-C34-C35	-7.07	94.52	109.68
31	0	313	0UR	C38-C28-C19	7.07	120.25	109.55
31	1	316	0UR	C36-C28-C38	-7.05	97.50	107.89
31	Y	322	0UR	C5-C4-C3	7.04	135.46	127.00
28	Y	311	CLA	CAC-C3C-C4C	7.04	133.94	124.81
31	0	314	0UR	O42-C2-C3	-7.00	107.88	120.66
31	G	318	0UR	C4-C3-C2	-6.99	114.08	120.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	Y	321	0IE	C25-C26-C27	-6.99	103.79	111.74
31	y	317	0UR	O39-C25-C26	-6.95	94.77	109.68
28	Y	313	CLA	CAC-C3C-C4C	6.90	133.76	124.81
28	Y	311	CLA	C4D-CHA-C1A	6.88	129.63	121.25
31	Y	317	0UR	C36-C28-C19	6.85	119.93	109.55
30	Y	321	0IE	O40-C34-C33	-6.84	96.22	109.80
31	1	316	0UR	C34-C27-C26	-6.83	101.70	114.36
37	B	615	SQD	O47-C7-C8	6.79	126.14	111.50
31	Y	322	0UR	C38-C28-C19	6.75	119.78	109.55
30	Y	319	0IE	C14-C15-C16	6.75	136.94	127.31
41	c	524	DGD	O4D-C4D-C3D	-6.74	94.77	110.35
32	1	313	LUT	C12-C13-C14	6.72	129.26	118.94
28	0	307	CLA	CHD-C1D-ND	-6.72	118.28	124.45
30	y	319	0IE	C17-C16-C15	-6.71	108.64	118.94
31	V	319	0UR	O42-C2-C41	-6.70	110.89	120.58
28	Y	303	CLA	CAA-C2A-C3A	-6.69	94.46	112.78
31	V	319	0UR	C38-C28-C19	6.68	119.67	109.55
30	1	314	0IE	C4-C3-C2	-6.65	114.38	120.08
29	v	307	CHL	CGD-CBD-CAD	-6.64	89.22	110.73
31	y	322	0UR	O42-C2-C41	-6.62	111.00	120.58
32	1	313	LUT	C8-C9-C10	6.58	129.04	118.94
31	Y	318	0UR	C38-C28-C19	6.56	119.48	109.55
28	Y	311	CLA	CGD-CBD-CAD	-6.55	89.51	110.73
28	U	414	CLA	CGD-CBD-CAD	-6.54	89.54	110.73
43	U	420	LMN	O2-C2-C3	-6.54	95.22	110.35
32	y	320	LUT	C1-C6-C5	-6.49	113.47	122.61
30	Y	321	0IE	C38-C32-C31	6.41	118.86	109.71
28	y	306	CLA	C4D-CHA-C1A	6.40	129.04	121.25
31	1	312	0UR	C4-C3-C2	-6.37	114.61	120.08
29	V	302	CHL	CAA-CBA-CGA	-6.35	94.70	113.25
30	Y	319	0IE	C10-C11-C12	-6.33	118.28	127.31
31	s	316	0UR	C4-C3-C2	-6.32	114.65	120.08
28	g	314	CLA	C4D-CHA-C1A	6.30	128.92	121.25
28	g	314	CLA	CHD-C1D-ND	-6.30	118.66	124.45
31	n	318	0UR	C4-C3-C2	-6.29	114.68	120.08
43	n	322	LMN	CBR-CCM-CBT	6.26	124.22	109.40
41	c	524	DGD	C2G-O2G-C1B	6.23	133.12	117.79
31	0	314	0UR	C29-C30-C31	-6.21	104.67	111.74
31	0	313	0UR	C28-C19-C18	-6.21	104.86	112.70
28	Y	311	CLA	CMD-C2D-C1D	6.20	135.64	124.71
30	y	321	0IE	C38-C32-C31	6.20	118.57	109.71
29	S	308	CHL	C1-O2A-CGA	6.19	132.69	116.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	1	316	0UR	C24-C25-C26	-6.19	101.83	110.30
28	U	414	CLA	C4D-CHA-C1A	6.16	128.75	121.25
31	V	319	0UR	C33-C32-C31	-6.14	110.43	123.56
31	y	318	0UR	C34-C27-C26	-6.11	103.04	114.36
31	V	319	0UR	C43-C3-C4	-6.11	117.64	125.02
31	y	322	0UR	C4-C3-C2	-6.09	114.85	120.08
32	1	313	LUT	C28-C29-C30	6.09	128.28	118.94
30	Y	321	0IE	O29-C20-C3	-6.09	95.14	111.03
31	g	318	0UR	C36-C28-C29	-6.06	97.96	109.44
30	y	321	0IE	C43-C24-C19	6.05	118.71	109.55
31	U	419	0UR	C38-C28-C19	6.04	118.70	109.55
33	c	509	BCR	C1-C6-C5	-6.03	114.11	122.61
29	n	308	CHL	C1-O2A-CGA	6.02	132.23	116.44
31	y	318	0UR	C38-C28-C19	6.00	118.64	109.55
30	Y	321	0IE	O1-C2-C30	-5.97	111.93	120.58
31	Y	322	0UR	O42-C2-C41	-5.97	111.94	120.58
31	S	315	0UR	C4-C3-C2	-5.96	114.96	120.08
28	U	410	CLA	C1-O2A-CGA	5.95	132.07	116.44
30	y	321	0IE	O40-C34-C33	-5.93	98.02	109.80
31	y	323	0UR	C36-C28-C29	-5.92	98.22	109.44
31	g	318	0UR	C5-C4-C3	5.92	134.12	127.00
31	g	318	0UR	O39-C25-C26	-5.90	97.02	109.68
31	y	317	0UR	O42-C2-C3	-5.89	109.89	120.66
28	Y	311	CLA	C1-O2A-CGA	5.88	131.87	116.44
46	s	319	NEX	C28-C29-C30	5.88	127.96	118.94
31	v	317	0UR	C4-C3-C2	-5.87	115.04	120.08
31	V	319	0UR	O39-C25-C26	-5.84	97.15	109.68
31	0	313	0UR	C24-C25-C26	-5.83	102.33	110.30
42	D	405	LHG	O7-C7-C8	5.81	124.02	111.50
30	Y	319	0IE	C25-C26-C27	-5.79	105.15	111.74
31	g	317	0UR	C28-C19-C18	-5.79	105.38	112.70
28	C	501	CLA	C1-O2A-CGA	5.78	131.60	116.44
29	S	306	CHL	C5-C3-C2	5.75	132.76	121.12
31	y	318	0UR	C43-C3-C4	-5.71	118.12	125.02
28	1	303	CLA	CAC-C3C-C4C	5.71	132.22	124.81
41	c	524	DGD	O1G-C1A-C2A	5.71	129.82	111.91
30	y	319	0IE	C14-C15-C16	5.70	135.44	127.31
32	1	313	LUT	C35-C15-C14	5.69	135.14	123.47
46	s	319	NEX	C39-C29-C30	-5.69	114.95	122.92
30	y	321	0IE	O42-C26-C27	-5.69	97.67	110.53
28	Y	313	CLA	C4D-CHA-C1A	5.67	128.14	121.25
31	1	316	0UR	O42-C2-C3	-5.66	110.32	120.66

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	Y	319	0IE	C33-C34-C35	-5.66	102.56	110.30
31	G	318	0UR	C28-C19-C18	-5.63	105.58	112.70
28	g	313	CLA	C4D-CHA-C1A	5.63	128.10	121.25
31	0	313	0UR	O42-C2-C3	-5.62	110.38	120.66
31	1	315	0UR	C28-C19-C18	-5.61	105.60	112.70
32	1	313	LUT	C39-C29-C30	-5.61	115.06	122.92
31	1	316	0UR	C36-C28-C29	-5.60	98.82	109.44
32	Y	320	LUT	C8-C9-C10	5.60	127.54	118.94
28	1	303	CLA	C2D-C1D-ND	5.60	114.23	110.10
31	Y	322	0UR	O44-C43-C3	-5.60	94.12	109.11
38	m	101	LMG	O7-C10-C11	5.60	123.57	111.50
28	1	303	CLA	CGD-CBD-CAD	-5.60	92.61	110.73
31	N	316	0UR	C4-C3-C2	-5.58	115.29	120.08
31	y	322	0UR	C22-C16-C15	5.54	130.69	122.92
28	Y	311	CLA	CAA-CBA-CGA	-5.53	97.10	113.25
38	K	101	LMG	O6-C1-O1	-5.51	96.94	109.97
30	y	319	0IE	C10-C11-C12	-5.50	119.46	127.31
28	Y	303	CLA	C3B-C4B-NB	-5.49	105.43	110.52
28	y	308	CLA	C4D-CHA-C1A	5.47	127.91	121.25
43	N	320	LMN	O4-C4-C3	5.47	121.83	107.28
32	1	313	LUT	C32-C33-C34	5.47	127.33	118.94
31	Y	322	0UR	C36-C28-C29	-5.45	99.11	109.44
29	S	306	CHL	C4-C3-C2	-5.43	109.74	123.68
28	1	303	CLA	C2B-C1B-NB	-5.43	106.59	110.23
31	y	323	0UR	O40-C30-C29	-5.43	97.02	110.74
31	y	322	0UR	O40-C30-C29	-5.42	97.04	110.74
28	v	313	CLA	C1-O2A-CGA	5.41	130.65	116.44
31	Y	322	0UR	O40-C30-C29	-5.41	97.05	110.74
28	g	312	CLA	CHC-C4B-NB	-5.39	118.55	124.26
31	y	322	0UR	C24-C25-C26	-5.38	102.94	110.30
31	V	319	0UR	C36-C28-C38	-5.36	99.99	107.89
31	U	419	0UR	C5-C4-C3	5.33	133.41	127.00
28	g	314	CLA	CHB-C1B-NB	5.33	129.90	124.26
30	y	319	0IE	C39-C32-C31	5.33	117.32	109.71
31	0	314	0UR	C34-C27-C1	-5.32	117.50	124.49
32	Y	320	LUT	C19-C9-C10	-5.31	115.48	122.92
29	G	317	CHL	C4D-CHA-C1A	5.31	127.71	121.25
28	N	304	CLA	CHD-C1D-ND	-5.30	119.58	124.45
28	U	414	CLA	C1C-C2C-C3C	5.30	112.53	106.96
34	D	407	PHO	C4D-CHA-CBD	-5.30	106.12	108.52
43	n	322	LMN	CCR-O4-C4	-5.30	104.85	117.96
29	N	306	CHL	C1C-C2C-C3C	5.29	111.31	107.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	U	414	CLA	CAA-C2A-C3A	-5.28	98.32	112.78
31	Y	318	0UR	C34-C27-C26	-5.28	104.58	114.36
31	g	318	0UR	O40-C30-C29	-5.27	97.43	110.74
31	1	316	0UR	C38-C28-C19	5.26	117.51	109.55
41	c	524	DGD	O2G-C1B-C2B	5.24	122.80	111.50
32	1	313	LUT	C19-C9-C10	-5.23	115.60	122.92
29	N	302	CHL	C1C-C2C-C3C	5.23	111.27	107.11
31	Y	323	0UR	C28-C19-C18	-5.23	106.09	112.70
31	y	322	0UR	O42-C2-C3	-5.21	111.14	120.66
31	1	312	0UR	C28-C19-C18	-5.20	106.12	112.70
31	y	323	0UR	O39-C25-C26	-5.19	98.54	109.68
31	y	322	0UR	C36-C28-C29	-5.17	99.65	109.44
29	v	304	CHL	C1-O2A-CGA	5.15	129.96	116.44
30	n	319	0IE	C4-C3-C2	-5.14	115.67	120.08
31	y	318	0UR	C9-C8-C7	5.12	134.62	127.31
31	v	317	0UR	C28-C19-C18	-5.12	106.23	112.70
29	g	310	CHL	CHD-C1D-ND	-5.11	119.76	124.45
28	1	303	CLA	CHB-C1B-NB	-5.11	118.85	124.26
31	y	318	0UR	O40-C30-C29	-5.10	97.85	110.74
30	y	321	0IE	O29-C20-C3	-5.09	97.74	111.03
30	V	320	0IE	C4-C3-C2	-5.08	115.72	120.08
31	y	318	0UR	C33-C32-C31	-5.05	112.75	123.56
30	Y	321	0IE	C43-C24-C19	5.05	117.20	109.55
29	v	303	CHL	C4D-CHA-C1A	5.05	127.39	121.25
32	u	419	LUT	C39-C29-C28	5.04	126.02	118.08
31	0	314	0UR	C24-C25-C26	-5.03	103.42	110.30
29	N	308	CHL	C4D-CHA-C1A	5.02	127.36	121.25
38	c	502	LMG	O7-C10-C11	5.01	122.31	111.50
28	y	308	CLA	CAA-C2A-C3A	-5.01	99.05	112.78
32	1	313	LUT	C15-C35-C34	5.00	133.72	123.47
28	g	314	CLA	CAC-C3C-C4C	5.00	131.30	124.81
32	1	313	LUT	C20-C13-C14	-5.00	115.92	122.92
30	Y	319	0IE	C23-C16-C15	4.99	129.92	122.92
30	0	312	0IE	C20-C3-C4	-4.98	118.42	124.83
30	0	312	0IE	C41-C28-C27	-4.97	112.92	123.56
46	N	319	NEX	C39-C29-C30	-4.97	115.96	122.92
31	0	314	0UR	O42-C2-C41	-4.97	113.39	120.58
28	N	304	CLA	C4D-CHA-C1A	4.97	127.30	121.25
28	g	312	CLA	C4D-CHA-C1A	4.93	127.25	121.25
32	U	418	LUT	C39-C29-C28	4.93	125.84	118.08
31	G	319	0UR	C28-C19-C18	-4.92	106.48	112.70
31	U	419	0UR	O39-C25-C26	-4.91	99.15	109.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	y	318	0UR	C14-C15-C16	4.91	134.31	127.31
42	N	301	LHG	O7-C7-C8	4.90	122.07	111.50
31	0	314	0UR	C4-C3-C2	4.89	124.28	120.08
31	Y	323	0UR	C4-C3-C2	-4.89	115.89	120.08
31	u	420	0UR	C28-C19-C18	-4.89	106.52	112.70
46	n	302	NEX	C35-C15-C14	4.89	133.48	123.47
28	g	312	CLA	CHD-C1D-ND	-4.88	119.97	124.45
31	y	318	0UR	C4-C3-C2	4.87	124.25	120.08
31	y	317	0UR	C34-C27-C26	-4.86	105.35	114.36
28	S	310	CLA	CAA-CBA-CGA	-4.86	99.06	113.25
31	y	322	0UR	C33-C32-C31	-4.84	113.20	123.56
46	N	319	NEX	C15-C35-C34	4.84	133.38	123.47
28	g	312	CLA	CGD-CBD-CAD	-4.83	95.08	110.73
31	0	314	0UR	C36-C28-C29	-4.83	100.30	109.44
31	y	318	0UR	C37-C23-C1	4.82	116.59	109.71
30	0	312	0IE	C25-C26-C27	-4.81	106.27	111.74
28	Y	311	CLA	O2A-C1-C2	4.81	121.27	108.64
30	y	319	0IE	C37-C36-C31	-4.81	118.18	124.49
28	Y	311	CLA	C5-C3-C2	4.79	130.82	121.12
30	0	312	0IE	C10-C9-C8	-4.79	113.67	123.47
28	U	414	CLA	C3B-C4B-NB	-4.78	106.08	110.52
29	V	302	CHL	C1D-CHD-C4C	-4.78	115.75	126.06
30	Y	319	0IE	C10-C9-C8	-4.78	113.69	123.47
28	1	303	CLA	C4D-CHA-C1A	4.77	127.05	121.25
28	U	414	CLA	C1D-ND-C4D	-4.77	102.95	106.33
31	0	313	0UR	C17-C16-C15	-4.75	111.65	118.94
30	S	316	0IE	C4-C3-C2	-4.75	116.01	120.08
41	c	524	DGD	O3D-C3D-C2D	-4.75	99.38	110.35
31	Y	317	0UR	O39-C25-C26	-4.73	99.53	109.68
31	g	318	0UR	C28-C19-C18	-4.73	106.72	112.70
28	Y	313	CLA	C1C-C2C-C3C	4.73	111.92	106.96
46	N	319	NEX	C32-C33-C34	4.73	126.19	118.94
31	Y	322	0UR	C4-C3-C2	-4.72	116.03	120.08
30	v	318	0IE	C4-C3-C2	-4.72	116.03	120.08
29	N	306	CHL	C4D-CHA-C1A	4.71	126.98	121.25
28	V	307	CLA	C4D-CHA-C1A	4.71	126.98	121.25
28	Y	311	CLA	CMD-C2D-C3D	-4.70	116.80	127.61
46	N	319	NEX	C36-C21-C22	-4.70	100.82	108.98
31	y	317	0UR	C36-C28-C29	-4.70	100.54	109.44
28	Y	311	CLA	CHD-C1D-C2D	4.69	135.32	125.48
29	v	309	CHL	C1-O2A-CGA	4.69	128.75	116.44
29	s	306	CHL	C4D-CHA-C1A	4.68	126.95	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	1	303	CLA	C3B-C2B-C1B	4.68	112.82	107.16
31	U	419	0UR	C36-C28-C29	-4.66	100.61	109.44
34	A	402	PHO	C4D-CHA-CBD	-4.66	106.41	108.52
31	g	318	0UR	C24-C25-C26	-4.66	103.93	110.30
33	C	507	BCR	C37-C22-C21	-4.66	116.40	122.92
31	s	316	0UR	C38-C28-C19	4.65	116.59	109.55
32	y	320	LUT	C35-C15-C14	4.64	132.98	123.47
30	0	312	0IE	C43-C24-C19	4.63	116.56	109.55
28	n	316	CLA	C4D-CHA-C1A	4.63	126.88	121.25
31	Y	322	0UR	C24-C25-C26	-4.60	104.01	110.30
30	0	312	0IE	O40-C34-C33	-4.58	100.69	109.80
28	1	303	CLA	C4A-NA-C1A	4.58	108.77	106.71
29	N	302	CHL	C4D-CHA-C1A	4.58	126.82	121.25
37	c	501	SQD	O47-C7-C8	4.57	121.35	111.50
31	U	419	0UR	O40-C30-C29	-4.57	99.18	110.74
30	y	319	0IE	C33-C34-C35	-4.57	104.05	110.30
30	Y	319	0IE	C6-C7-C8	4.57	125.95	118.94
29	V	313	CHL	C4D-CHA-C1A	4.57	126.81	121.25
31	0	314	0UR	O39-C25-C24	-4.56	100.73	109.80
31	0	313	0UR	C35-C23-C1	4.56	116.23	109.71
33	b	602	BCR	C37-C22-C21	-4.56	116.53	122.92
31	n	318	0UR	C38-C28-C19	4.56	116.45	109.55
32	Y	320	LUT	C15-C35-C34	4.56	132.81	123.47
43	n	322	LMN	OAP-CCL-CCJ	-4.55	98.99	110.05
28	u	415	CLA	C1-O2A-CGA	4.54	128.36	116.44
28	y	306	CLA	CMD-C2D-C1D	4.54	132.71	124.71
29	G	317	CHL	CGD-CBD-CAD	-4.53	96.06	110.73
31	y	318	0UR	O40-C30-C31	-4.52	100.30	110.53
31	U	419	0UR	C33-C32-C31	-4.52	113.89	123.56
31	Y	318	0UR	C35-C23-C1	4.52	116.16	109.71
29	g	316	CHL	C4D-CHA-C1A	4.52	126.75	121.25
29	V	311	CHL	C1C-C2C-C3C	4.51	110.69	107.11
46	G	320	NEX	C35-C15-C14	4.51	132.71	123.47
41	c	516	DGD	O2G-C1B-C2B	4.51	121.21	111.50
29	G	311	CHL	CHD-C1D-ND	-4.50	120.31	124.45
31	N	316	0UR	C38-C28-C19	4.49	116.34	109.55
31	1	316	0UR	O39-C25-C26	-4.47	100.09	109.68
29	v	307	CHL	CHB-C1B-NB	4.47	128.99	124.26
46	s	319	NEX	C36-C21-C22	-4.46	101.23	108.98
31	Y	318	0UR	O44-C43-C3	-4.46	97.18	109.11
30	Y	319	0IE	C43-C24-C19	4.45	116.28	109.55
31	0	313	0UR	O39-C25-C26	-4.44	100.15	109.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	s	319	NEX	C40-C33-C34	-4.44	116.71	122.92
29	S	306	CHL	C1C-C2C-C3C	4.42	110.63	107.11
30	N	317	0IE	C4-C3-C2	-4.42	116.28	120.08
32	y	320	LUT	C11-C10-C9	4.42	133.62	127.31
31	0	314	0UR	C36-C28-C38	-4.41	101.39	107.89
30	Y	321	0IE	O40-C34-C35	-4.41	100.23	109.68
31	1	316	0UR	C36-C28-C19	4.41	116.22	109.55
38	c	502	LMG	O1-C7-C8	-4.41	100.26	110.90
31	S	315	0UR	C38-C28-C19	4.41	116.22	109.55
33	k	101	BCR	C37-C22-C21	-4.39	116.78	122.92
46	n	321	NEX	C35-C15-C14	4.38	132.46	123.47
33	h	101	BCR	C37-C22-C21	-4.38	116.79	122.92
28	Y	311	CLA	C1C-C2C-C3C	4.38	111.56	106.96
38	m	101	LMG	O6-C1-C2	4.37	119.60	110.35
31	Y	317	0UR	O39-C25-C24	-4.37	101.12	109.80
28	u	412	CLA	C1-O2A-CGA	4.36	127.89	116.44
28	N	304	CLA	CGD-CBD-CAD	-4.36	96.60	110.73
46	n	302	NEX	C39-C29-C30	-4.36	116.82	122.92
31	Y	317	0UR	C24-C25-C26	-4.35	104.34	110.30
28	G	308	CLA	C3B-C2B-C1B	4.35	112.41	107.16
47	V	321	XAT	C39-C29-C30	-4.35	116.83	122.92
33	A	401	BCR	C37-C22-C21	-4.35	116.83	122.92
28	0	307	CLA	C3C-C4C-NC	-4.34	105.70	110.57
32	y	320	LUT	C12-C13-C14	4.34	125.60	118.94
33	k	102	BCR	C15-C16-C17	4.34	132.36	123.47
28	g	314	CLA	CAA-C2A-C3A	-4.33	100.91	112.78
28	0	307	CLA	CHD-C4C-C3C	4.33	131.21	124.84
30	Y	321	0IE	C34-C35-C36	-4.33	103.23	111.85
47	v	319	XAT	C39-C29-C30	-4.33	116.86	122.92
28	Y	303	CLA	CHC-C4B-NB	4.32	128.83	124.26
41	c	524	DGD	O6D-C1D-C2D	-4.31	101.22	110.35
47	N	318	XAT	C39-C29-C30	-4.31	116.88	122.92
32	Y	320	LUT	C11-C10-C9	4.31	133.46	127.31
28	N	305	CLA	CHD-C1D-ND	-4.31	120.50	124.45
32	y	320	LUT	C20-C13-C14	-4.31	116.89	122.92
31	V	319	0UR	C34-C27-C26	-4.30	106.38	114.36
33	k	102	BCR	C37-C22-C21	-4.30	116.90	122.92
30	s	317	0IE	C4-C3-C2	-4.30	116.39	120.08
41	c	524	DGD	C1G-O1G-C1A	4.29	133.02	117.12
31	0	314	0UR	C9-C8-C7	4.29	133.44	127.31
34	d	407	PHO	C4D-CHA-CBD	-4.28	106.58	108.52
33	K	104	BCR	C37-C22-C23	4.28	124.82	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
41	C	515	DGD	O2G-C1B-C2B	4.28	120.73	111.50
28	G	313	CLA	CHD-C1D-ND	-4.28	120.52	124.45
31	Y	322	0UR	O39-C25-C24	-4.28	101.31	109.80
41	b	621	DGD	O2G-C1B-C2B	4.27	120.71	111.50
29	V	309	CHL	CGD-CBD-CAD	-4.27	96.89	110.73
46	N	319	NEX	C40-C33-C34	-4.27	116.94	122.92
47	n	320	XAT	C39-C29-C30	-4.26	116.95	122.92
28	1	308	CLA	C4D-CHA-C1A	4.25	126.43	121.25
29	N	308	CHL	C1D-CHD-C4C	-4.25	116.89	126.06
28	G	308	CLA	CGD-CBD-CAD	-4.25	96.97	110.73
33	d	403	BCR	C37-C22-C21	-4.25	116.97	122.92
32	y	320	LUT	C8-C9-C10	4.25	125.46	118.94
28	b	619	CLA	C1-O2A-CGA	4.25	127.58	116.44
31	Y	318	0UR	O42-C2-C3	-4.24	112.91	120.66
47	s	318	XAT	C39-C29-C30	-4.24	116.98	122.92
31	g	318	0UR	O39-C25-C24	-4.24	101.38	109.80
33	b	603	BCR	C37-C22-C21	-4.24	116.98	122.92
31	y	322	0UR	C23-C1-C27	-4.23	107.81	119.35
33	B	604	BCR	C37-C22-C21	-4.23	117.00	122.92
30	y	321	0IE	C41-C28-C27	-4.22	114.53	123.56
33	C	502	BCR	C37-C22-C21	-4.22	117.01	122.92
29	g	316	CHL	CHC-C1C-NC	4.22	130.60	124.20
31	0	313	0UR	O40-C30-C29	-4.21	100.09	110.74
31	y	322	0UR	O39-C25-C24	-4.21	101.44	109.80
33	B	603	BCR	C37-C22-C21	-4.19	117.05	122.92
29	v	303	CHL	C1-O2A-CGA	4.19	127.44	116.44
32	1	313	LUT	C40-C33-C34	-4.19	117.06	122.92
46	n	321	NEX	C39-C29-C30	-4.19	117.06	122.92
31	0	314	0UR	C28-C19-C18	4.19	118.00	112.70
29	V	313	CHL	C5-C3-C2	4.18	129.57	121.12
31	0	313	0UR	C36-C28-C29	-4.17	101.53	109.44
47	s	318	XAT	C19-C9-C10	-4.17	117.08	122.92
32	1	313	LUT	C22-C23-C24	-4.17	106.99	111.74
47	S	317	XAT	C39-C29-C30	-4.17	117.08	122.92
29	V	311	CHL	CAA-CBA-CGA	-4.17	101.07	113.25
28	V	307	CLA	C3B-C4B-NB	-4.17	106.65	110.52
28	g	313	CLA	CHB-C1B-C2B	-4.17	115.46	127.24
28	0	306	CLA	C4D-CHA-C1A	4.17	126.32	121.25
28	0	301	CLA	CHD-C1D-ND	-4.17	120.62	124.45
31	y	318	0UR	C24-C25-C26	-4.16	104.61	110.30
47	n	320	XAT	C19-C9-C10	-4.15	117.11	122.92
30	y	319	0IE	C23-C16-C15	4.15	128.74	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	1	316	0UR	O40-C30-C29	-4.15	100.25	110.74
31	Y	317	0UR	C22-C16-C15	4.14	128.73	122.92
33	c	509	BCR	C37-C22-C21	-4.14	117.12	122.92
46	v	320	NEX	C39-C29-C30	-4.13	117.13	122.92
46	G	320	NEX	C39-C29-C30	-4.13	117.13	122.92
28	a	402	CLA	CHD-C1D-ND	-4.13	120.66	124.45
29	n	308	CHL	CGD-CBD-CAD	-4.13	97.36	110.73
31	n	318	0UR	C28-C19-C18	-4.13	107.48	112.70
47	S	317	XAT	C19-C9-C10	-4.13	117.14	122.92
28	g	315	CLA	C4D-CHA-C1A	4.12	126.27	121.25
31	y	322	0UR	O39-C25-C26	-4.12	100.85	109.68
43	n	322	LMN	CBR-CCM-CBS	-4.12	99.65	109.40
28	1	303	CLA	C3D-C4D-ND	-4.12	103.58	110.24
46	N	319	NEX	C28-C29-C30	4.11	125.25	118.94
29	S	306	CHL	CGD-CBD-CAD	-4.11	97.44	110.73
28	N	314	CLA	CHD-C1D-ND	-4.10	120.68	124.45
46	G	321	NEX	C39-C29-C30	-4.10	117.18	122.92
29	v	303	CHL	CAA-C2A-C1A	-4.10	98.54	111.97
29	V	310	CHL	C4D-CHA-C1A	4.10	126.24	121.25
28	S	310	CLA	C4D-CHA-C1A	4.10	126.23	121.25
46	N	319	NEX	C12-C13-C14	4.09	125.22	118.94
31	y	318	0UR	C34-C27-C1	4.09	129.87	124.49
41	a	405	DGD	O2G-C1B-C2B	4.09	120.31	111.50
33	B	614	BCR	C37-C22-C21	-4.08	117.20	122.92
30	y	319	0IE	C22-C12-C11	-4.08	117.21	122.92
31	V	319	0UR	C37-C23-C1	4.08	115.53	109.71
29	n	310	CHL	C1-O2A-CGA	4.08	127.14	116.44
46	G	321	NEX	C35-C15-C14	4.08	131.82	123.47
46	V	322	NEX	C39-C29-C30	-4.07	117.22	122.92
28	c	522	CLA	C4D-CHA-C1A	4.07	126.20	121.25
31	g	317	0UR	C38-C28-C19	4.07	115.71	109.55
28	y	306	CLA	CHD-C1D-ND	-4.07	120.72	124.45
47	v	319	XAT	C19-C9-C10	-4.06	117.23	122.92
29	s	308	CHL	C4D-CHA-C1A	4.06	126.19	121.25
28	g	314	CLA	C3B-C4B-NB	-4.06	106.75	110.52
31	Y	318	0UR	C36-C28-C29	-4.05	101.76	109.44
46	N	319	NEX	C35-C15-C14	4.05	131.78	123.47
41	c	518	DGD	O2G-C1B-C2B	4.05	120.23	111.50
46	g	319	NEX	C35-C15-C14	4.05	131.77	123.47
31	0	313	0UR	O42-C2-C41	-4.04	114.72	120.58
33	H	101	BCR	C37-C22-C21	-4.04	117.26	122.92
33	a	401	BCR	C37-C22-C21	-4.04	117.26	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	d	410	LMG	O9-C10-C11	-4.04	107.98	123.73
28	U	415	CLA	CHD-C1D-ND	-4.03	120.75	124.45
31	1	316	0UR	O42-C2-C41	-4.03	114.74	120.58
28	S	313	CLA	CHD-C1D-ND	-4.03	120.75	124.45
28	G	308	CLA	C4D-CHA-C1A	4.03	126.15	121.25
29	g	309	CHL	C4D-CHA-C1A	4.03	126.15	121.25
28	g	304	CLA	CHD-C1D-ND	-4.03	120.75	124.45
46	G	320	NEX	C15-C35-C34	4.03	131.73	123.47
46	g	319	NEX	C39-C29-C30	-4.03	117.28	122.92
47	V	321	XAT	C19-C9-C10	-4.02	117.29	122.92
30	Y	319	0IE	O42-C26-C27	-4.02	101.44	110.53
46	V	323	NEX	C39-C29-C30	-4.01	117.30	122.92
41	c	515	DGD	O2G-C1B-C2B	4.01	120.15	111.50
31	V	319	0UR	C36-C28-C19	4.01	115.62	109.55
41	a	409	DGD	O2G-C1B-C2B	4.01	120.14	111.50
28	N	304	CLA	CAA-C2A-C3A	-4.01	101.80	112.78
32	Y	320	LUT	C40-C33-C34	-4.01	117.31	122.92
28	d	409	CLA	C4D-CHA-C1A	4.01	126.12	121.25
29	n	309	CHL	C4D-CHA-C1A	4.00	126.12	121.25
31	g	317	0UR	C4-C3-C2	-4.00	116.64	120.08
28	g	313	CLA	C7-C6-C5	-4.00	102.49	113.36
28	0	306	CLA	CHD-C1D-ND	-4.00	120.78	124.45
31	1	316	0UR	C9-C8-C7	3.99	133.00	127.31
28	S	311	CLA	CHD-C1D-ND	-3.99	120.79	124.45
31	1	312	0UR	C38-C28-C19	3.99	115.59	109.55
42	S	301	LHG	O7-C7-C8	3.99	120.09	111.50
29	g	310	CHL	C2C-C3C-C4C	3.98	109.33	106.49
31	Y	317	0UR	C37-C23-C1	3.98	115.40	109.71
31	y	323	0UR	C24-C25-C26	-3.98	104.85	110.30
28	Y	304	CLA	C4D-CHA-C1A	3.98	126.10	121.25
34	A	402	PHO	C2B-C1B-NB	-3.98	106.78	109.53
28	y	311	CLA	CHD-C1D-ND	-3.98	120.80	124.45
28	Y	308	CLA	C4D-CHA-C1A	3.98	126.09	121.25
28	B	606	CLA	C1-O2A-CGA	3.98	126.88	116.44
28	u	416	CLA	CHD-C1D-ND	-3.97	120.80	124.45
47	N	318	XAT	C35-C15-C14	3.97	131.61	123.47
28	B	609	CLA	CHD-C1D-ND	-3.97	120.80	124.45
28	v	312	CLA	CHD-C1D-ND	-3.97	120.80	124.45
28	y	313	CLA	C4D-CHA-C1A	3.97	126.08	121.25
29	n	311	CHL	CHD-C1D-ND	-3.97	120.81	124.45
33	b	604	BCR	C37-C22-C21	-3.97	117.36	122.92
29	n	308	CHL	C4D-CHA-C1A	3.97	126.08	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	s	319	NEX	C32-C33-C34	3.97	125.03	118.94
30	Y	319	0IE	C24-C19-C18	-3.96	107.69	112.70
41	g	302	DGD	O2G-C1B-C2B	3.96	120.04	111.50
28	c	506	CLA	C4D-CHA-C1A	3.96	126.07	121.25
31	S	315	0UR	C28-C19-C18	-3.96	107.70	112.70
33	K	102	BCR	C37-C22-C21	-3.95	117.38	122.92
28	g	307	CLA	CHD-C1D-ND	-3.95	120.82	124.45
28	Y	313	CLA	C1D-ND-C4D	3.95	109.14	106.33
29	v	309	CHL	C4D-CHA-C1A	3.95	126.05	121.25
28	g	308	CLA	C4D-CHA-C1A	3.95	126.05	121.25
28	y	306	CLA	C1D-CHD-C4C	-3.94	117.55	126.06
34	a	404	PHO	C2B-C1B-NB	-3.94	106.80	109.53
28	N	304	CLA	CHA-C1A-NA	-3.94	117.37	126.40
28	u	411	CLA	C4D-CHA-C1A	3.94	126.05	121.25
28	S	314	CLA	C4D-CHA-C1A	3.94	126.05	121.25
28	y	304	CLA	CHD-C1D-ND	-3.94	120.83	124.45
28	U	410	CLA	C4D-CHA-C1A	3.94	126.04	121.25
29	S	303	CHL	C4D-CHA-C1A	3.94	126.04	121.25
28	A	410	CLA	CHD-C1D-ND	-3.94	120.84	124.45
30	0	312	0IE	C10-C11-C12	-3.94	121.69	127.31
28	C	503	CLA	CHD-C1D-ND	-3.94	120.84	124.45
29	V	311	CHL	C2D-C1D-ND	-3.94	107.20	110.10
28	U	414	CLA	CAC-C3C-C2C	-3.93	120.80	127.53
31	Y	317	0UR	C36-C28-C38	-3.93	102.10	107.89
28	C	511	CLA	C4D-CHA-C1A	3.93	126.03	121.25
28	A	407	CLA	CHD-C1D-ND	-3.93	120.84	124.45
41	c	517	DGD	O2G-C1B-C2B	3.93	119.97	111.50
28	v	316	CLA	C4D-CHA-C1A	3.93	126.03	121.25
31	y	318	0UR	C25-C26-C27	-3.93	104.03	111.85
46	s	319	NEX	C19-C9-C10	-3.92	117.43	122.92
28	Y	311	CLA	CAC-C3C-C2C	-3.92	120.83	127.53
29	U	405	CHL	C4D-CHA-C1A	3.91	126.01	121.25
28	U	411	CLA	CHD-C1D-ND	-3.91	120.86	124.45
28	S	312	CLA	C4D-CHA-C1A	3.91	126.01	121.25
33	b	603	BCR	C15-C16-C17	3.91	131.48	123.47
28	B	606	CLA	C4D-CHA-C1A	3.91	126.01	121.25
28	1	301	CLA	C4D-CHA-C1A	3.91	126.00	121.25
28	U	404	CLA	C4D-CHA-C1A	3.90	126.00	121.25
28	G	316	CLA	CHD-C1D-ND	-3.90	120.87	124.45
31	y	322	0UR	O44-C43-C3	-3.90	98.67	109.11
28	g	314	CLA	C1D-CHD-C4C	-3.90	117.65	126.06
37	B	615	SQD	O47-C45-C46	3.90	122.52	108.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	U	408	CHL	C4D-CHA-C1A	3.89	125.99	121.25
31	s	316	0UR	C28-C19-C18	-3.89	107.78	112.70
28	a	416	CLA	CHD-C1D-ND	-3.89	120.88	124.45
29	Y	307	CHL	C1-O2A-CGA	3.89	126.65	116.44
31	Y	318	0UR	O40-C30-C29	-3.89	100.90	110.74
28	u	418	CLA	C4D-CHA-C1A	3.89	125.98	121.25
29	Y	315	CHL	C4D-CHA-C1A	3.88	125.98	121.25
29	G	310	CHL	C4D-CHA-C1A	3.88	125.97	121.25
33	H	101	BCR	C16-C15-C14	3.88	131.42	123.47
46	g	319	NEX	C15-C35-C34	3.88	131.42	123.47
31	N	316	0UR	C28-C19-C18	-3.88	107.80	112.70
29	u	406	CHL	C4D-CHA-C1A	3.88	125.97	121.25
28	u	412	CLA	CHD-C1D-ND	-3.88	120.89	124.45
31	y	318	0UR	C10-C11-C12	3.88	132.84	127.31
29	N	310	CHL	CHD-C1D-ND	-3.88	120.89	124.45
29	v	310	CHL	C4D-CHA-C1A	3.88	125.97	121.25
28	0	311	CLA	CHD-C1D-ND	-3.88	120.89	124.45
28	U	416	CLA	C4D-CHA-C1A	3.87	125.96	121.25
28	C	503	CLA	C4D-CHA-C1A	3.87	125.96	121.25
31	y	322	0UR	C21-C12-C13	-3.87	111.98	118.08
34	a	404	PHO	C4D-CHA-CBD	-3.87	106.77	108.52
28	s	304	CLA	C4D-CHA-C1A	3.87	125.96	121.25
29	V	302	CHL	CHD-C4C-C3C	-3.87	119.15	124.84
30	Y	319	0IE	C39-C32-C31	3.87	115.24	109.71
28	N	304	CLA	C2B-C1B-NB	3.87	112.83	110.23
30	y	321	0IE	C34-C35-C36	-3.87	104.15	111.85
28	b	612	CLA	C4D-CHA-C1A	3.86	125.95	121.25
31	G	319	0UR	C38-C28-C19	3.86	115.39	109.55
28	Y	311	CLA	CHA-C1A-NA	-3.86	117.56	126.40
28	c	504	CLA	C4D-CHA-C1A	3.86	125.94	121.25
29	V	309	CHL	C4D-CHA-C1A	3.86	125.94	121.25
46	N	319	NEX	C19-C9-C10	-3.86	117.52	122.92
28	B	618	CLA	C4D-CHA-C1A	3.86	125.94	121.25
28	C	508	CLA	C4D-CHA-C1A	3.86	125.94	121.25
28	n	315	CLA	C4D-CHA-C1A	3.86	125.94	121.25
28	U	415	CLA	C4D-CHA-C1A	3.85	125.94	121.25
33	T	101	BCR	C37-C22-C21	-3.85	117.53	122.92
29	N	308	CHL	C5-C3-C2	3.85	128.91	121.12
28	y	303	CLA	C4D-CHA-C1A	3.85	125.94	121.25
47	N	318	XAT	C19-C9-C10	-3.85	117.53	122.92
29	u	409	CHL	C4D-CHA-C1A	3.85	125.93	121.25
28	Y	312	CLA	C4D-CHA-C1A	3.85	125.93	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	V	314	CLA	CHD-C1D-ND	-3.85	120.92	124.45
29	V	309	CHL	CAA-C2A-C3A	-3.84	102.25	112.78
29	N	307	CHL	C4D-CHA-C1A	3.84	125.92	121.25
28	g	305	CLA	C4D-CHA-C1A	3.84	125.92	121.25
29	v	311	CHL	CHD-C1D-ND	-3.84	120.93	124.45
28	S	305	CLA	CHD-C1D-ND	-3.84	120.93	124.45
47	v	319	XAT	C15-C35-C34	3.84	131.33	123.47
29	y	315	CHL	C4D-CHA-C1A	3.84	125.92	121.25
28	B	610	CLA	C4D-CHA-C1A	3.83	125.92	121.25
28	V	308	CLA	C4D-CHA-C1A	3.83	125.92	121.25
30	y	319	0IE	C25-C26-C27	-3.83	107.38	111.74
28	u	408	CLA	C4D-CHA-C1A	3.83	125.92	121.25
30	Y	321	0IE	C4-C3-C2	-3.83	116.79	120.08
28	G	306	CLA	CHD-C1D-ND	-3.83	120.93	124.45
28	v	314	CLA	C4D-CHA-C1A	3.83	125.91	121.25
28	c	514	CLA	C4D-CHA-C1A	3.83	125.91	121.25
28	d	409	CLA	CHD-C1D-ND	-3.83	120.93	124.45
33	T	101	BCR	C37-C22-C23	3.83	124.11	118.08
28	C	509	CLA	C4D-CHA-C1A	3.83	125.91	121.25
28	g	314	CLA	CAA-CBA-CGA	-3.83	102.06	113.25
47	S	317	XAT	C15-C35-C34	3.83	131.32	123.47
28	g	313	CLA	C3B-C4B-NB	-3.83	106.96	110.52
28	u	417	CLA	C4D-CHA-C1A	3.83	125.91	121.25
28	1	303	CLA	C4B-CHC-C1C	3.83	135.41	126.34
29	v	308	CHL	C4D-CHA-C1A	3.83	125.90	121.25
31	V	319	0UR	C9-C8-C7	3.82	132.77	127.31
33	k	102	BCR	C36-C18-C17	-3.82	117.57	122.92
46	s	319	NEX	C15-C35-C34	3.82	131.30	123.47
28	u	417	CLA	C5-C3-C2	3.82	128.85	121.12
31	V	319	0UR	C36-C28-C29	-3.82	102.20	109.44
28	u	413	CLA	CHD-C1D-ND	-3.82	120.94	124.45
28	S	305	CLA	C4D-CHA-C1A	3.82	125.90	121.25
31	u	420	0UR	C38-C28-C19	3.82	115.33	109.55
31	U	419	0UR	O40-C30-C31	-3.82	101.90	110.53
28	B	619	CLA	C4D-CHA-C1A	3.82	125.89	121.25
31	Y	318	0UR	C22-C16-C15	3.81	128.27	122.92
28	Y	309	CLA	C4D-CHA-C1A	3.81	125.89	121.25
28	U	412	CLA	CHD-C1D-ND	-3.81	120.95	124.45
28	V	317	CLA	CHD-C1D-ND	-3.81	120.95	124.45
28	C	513	CLA	CHD-C1D-ND	-3.81	120.95	124.45
28	y	306	CLA	C4A-NA-C1A	-3.81	104.99	106.71
28	N	311	CLA	CHD-C1D-ND	-3.81	120.95	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	g	306	CLA	CHD-C1D-ND	-3.81	120.95	124.45
29	V	312	CHL	CHD-C1D-ND	-3.81	120.96	124.45
29	g	316	CHL	C3B-C2B-C1B	3.81	111.76	107.16
28	y	308	CLA	C3B-C4B-NB	-3.80	106.99	110.52
28	D	410	CLA	C4D-CHA-C1A	3.80	125.88	121.25
29	S	302	CHL	C4D-CHA-C1A	3.80	125.87	121.25
31	Y	323	0UR	C22-C16-C15	3.80	128.25	122.92
28	G	308	CLA	CHD-C4C-NC	3.80	130.19	124.20
28	b	620	CLA	CHD-C1D-ND	-3.80	120.96	124.45
46	v	320	NEX	C35-C15-C14	3.80	131.25	123.47
31	g	318	0UR	C38-C28-C19	3.80	115.30	109.55
28	0	307	CLA	CHD-C1D-C2D	3.80	133.44	125.48
46	s	319	NEX	C35-C15-C14	3.79	131.25	123.47
28	b	609	CLA	C4D-CHA-C1A	3.79	125.87	121.25
37	A	405	SQD	O47-C7-C8	3.79	119.68	111.50
28	G	313	CLA	C4D-CHA-C1A	3.79	125.86	121.25
28	Y	310	CLA	C4D-CHA-C1A	3.79	125.86	121.25
31	y	323	0UR	C28-C19-C18	-3.79	107.91	112.70
31	Y	318	0UR	C33-C32-C31	-3.79	115.45	123.56
31	g	318	0UR	C29-C30-C31	-3.79	107.43	111.74
28	U	411	CLA	C4D-CHA-C1A	3.79	125.86	121.25
28	0	304	CLA	CHD-C1D-ND	-3.79	120.97	124.45
28	y	312	CLA	C4D-CHA-C1A	3.79	125.86	121.25
28	y	310	CLA	CHD-C1D-ND	-3.79	120.97	124.45
28	C	519	CLA	C4D-CHA-C1A	3.79	125.86	121.25
41	c	524	DGD	O2D-C2D-C3D	-3.79	101.60	110.35
28	A	410	CLA	C4D-CHA-C1A	3.78	125.86	121.25
28	y	310	CLA	C4D-CHA-C1A	3.78	125.86	121.25
29	N	310	CHL	C4D-CHA-C1A	3.78	125.86	121.25
28	C	512	CLA	CHD-C1D-ND	-3.78	120.98	124.45
28	Y	311	CLA	CMC-C2C-C1C	3.78	130.80	125.04
28	Y	305	CLA	CHD-C1D-ND	-3.78	120.98	124.45
28	C	519	CLA	CHD-C1D-ND	-3.78	120.98	124.45
28	s	314	CLA	CHD-C1D-ND	-3.78	120.98	124.45
28	Y	311	CLA	C3B-C4B-NB	-3.78	107.01	110.52
28	v	305	CLA	CHD-C1D-ND	-3.78	120.98	124.45
31	Y	322	0UR	C33-C32-C31	-3.78	115.47	123.56
28	1	304	CLA	C4D-CHA-C1A	3.78	125.84	121.25
28	c	512	CLA	C4D-CHA-C1A	3.78	125.84	121.25
29	S	307	CHL	C4D-CHA-C1A	3.78	125.84	121.25
28	N	313	CLA	C4D-CHA-C1A	3.77	125.84	121.25
28	b	619	CLA	C4D-CHA-C1A	3.77	125.84	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	N	320	LMN	CCW-CCU-CCO	3.77	117.41	110.82
29	n	308	CHL	C3B-C4B-NB	-3.77	107.02	110.52
29	s	303	CHL	CHD-C1D-ND	-3.77	120.99	124.45
31	y	318	0UR	C36-C28-C29	-3.77	102.29	109.44
46	V	322	NEX	C15-C35-C34	3.77	131.20	123.47
29	1	310	CHL	C4D-CHA-C1A	3.77	125.84	121.25
28	a	402	CLA	C4D-CHA-C1A	3.77	125.84	121.25
30	y	319	0IE	C6-C7-C8	3.77	124.72	118.94
32	Y	320	LUT	C12-C13-C14	3.77	124.72	118.94
31	1	316	0UR	C33-C32-C31	-3.77	115.50	123.56
29	n	312	CHL	C4D-CHA-C1A	3.77	125.83	121.25
28	y	309	CLA	C4D-CHA-C1A	3.77	125.83	121.25
28	V	307	CLA	C3B-C2B-C1B	3.77	111.71	107.16
28	g	306	CLA	C4D-CHA-C1A	3.77	125.83	121.25
31	Y	318	0UR	C4-C3-C2	-3.76	116.85	120.08
29	V	311	CHL	O2D-CGD-O1D	-3.76	116.49	123.84
28	0	308	CLA	C4D-CHA-C1A	3.75	125.82	121.25
28	a	416	CLA	C4D-CHA-C1A	3.75	125.82	121.25
33	c	507	BCR	C37-C22-C21	-3.75	117.67	122.92
28	g	307	CLA	C4D-CHA-C1A	3.75	125.81	121.25
28	u	413	CLA	C4D-CHA-C1A	3.75	125.81	121.25
28	c	504	CLA	CHD-C1D-ND	-3.75	121.01	124.45
33	t	101	BCR	C37-C22-C21	-3.75	117.67	122.92
31	Y	323	0UR	C38-C28-C19	3.75	115.22	109.55
28	1	311	CLA	C4D-CHA-C1A	3.75	125.81	121.25
29	V	312	CHL	C4D-CHA-C1A	3.75	125.81	121.25
41	C	520	DGD	O2G-C1B-C2B	3.74	119.57	111.50
28	C	505	CLA	C4D-CHA-C1A	3.74	125.81	121.25
29	U	408	CHL	CHD-C1D-ND	-3.74	121.01	124.45
28	B	602	CLA	C4D-CHA-C1A	3.74	125.80	121.25
28	b	616	CLA	C4D-CHA-C1A	3.74	125.80	121.25
42	c	527	LHG	O7-C7-C8	3.74	121.23	110.80
28	B	619	CLA	CHD-C1D-ND	-3.74	121.02	124.45
31	Y	322	0UR	C36-C28-C38	-3.74	102.38	107.89
46	V	322	NEX	C35-C15-C14	3.74	131.14	123.47
29	s	310	CHL	C4D-CHA-C1A	3.74	125.80	121.25
28	u	405	CLA	C4D-CHA-C1A	3.74	125.80	121.25
29	N	306	CHL	CAC-C3C-C4C	3.73	129.66	124.81
28	b	610	CLA	CHD-C1D-ND	-3.73	121.02	124.45
28	1	305	CLA	C4D-CHA-C1A	3.73	125.79	121.25
28	G	309	CLA	C4D-CHA-C1A	3.73	125.79	121.25
39	D	404	PL9	C7-C3-C4	3.73	119.91	116.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	d	404	CLA	CHD-C1D-ND	-3.73	121.03	124.45
28	u	417	CLA	O2A-C1-C2	3.73	118.43	108.64
28	Y	309	CLA	CHD-C1D-ND	-3.72	121.03	124.45
47	s	318	XAT	C35-C15-C14	3.72	131.10	123.47
28	1	303	CLA	C1D-CHD-C4C	-3.72	118.02	126.06
28	v	315	CLA	CHD-C1D-ND	-3.72	121.03	124.45
32	y	320	LUT	C15-C35-C34	3.72	131.10	123.47
28	G	315	CLA	C4D-CHA-C1A	3.72	125.78	121.25
28	B	607	CLA	C4D-CHA-C1A	3.72	125.78	121.25
28	b	607	CLA	CHD-C1D-ND	-3.72	121.03	124.45
28	G	307	CLA	C4D-CHA-C1A	3.72	125.78	121.25
28	c	505	CLA	C4D-CHA-C1A	3.72	125.78	121.25
28	b	616	CLA	CHD-C1D-ND	-3.72	121.04	124.45
28	b	611	CLA	C4D-CHA-C1A	3.72	125.78	121.25
28	A	411	CLA	CHD-C1D-ND	-3.72	121.04	124.45
38	K	101	LMG	O2-C2-C3	-3.72	101.75	110.35
28	g	314	CLA	C1C-C2C-C3C	3.72	110.86	106.96
28	c	514	CLA	CHD-C1D-ND	-3.71	121.04	124.45
28	n	306	CLA	C4D-CHA-C1A	3.71	125.77	121.25
30	0	312	0IE	C38-C32-C31	3.71	115.02	109.71
30	Y	319	0IE	O42-C26-C25	-3.71	101.36	110.74
28	s	311	CLA	CHD-C1D-ND	-3.71	121.04	124.45
28	G	312	CLA	C4D-CHA-C1A	3.71	125.77	121.25
28	B	612	CLA	C4D-CHA-C1A	3.71	125.77	121.25
29	V	309	CHL	CAC-C3C-C4C	3.71	129.62	124.81
28	N	305	CLA	C4D-CHA-C1A	3.71	125.76	121.25
47	n	320	XAT	C15-C35-C34	3.71	131.07	123.47
28	n	313	CLA	CHD-C1D-ND	-3.71	121.05	124.45
46	V	323	NEX	C35-C15-C14	3.71	131.07	123.47
31	Y	317	0UR	O42-C2-C41	-3.71	115.21	120.58
28	S	304	CLA	C4D-CHA-C1A	3.71	125.76	121.25
28	y	304	CLA	C4D-CHA-C1A	3.71	125.76	121.25
29	S	308	CHL	C4D-CHA-C1A	3.71	125.76	121.25
31	y	317	0UR	C29-C30-C31	-3.71	107.52	111.74
28	C	512	CLA	C4D-CHA-C1A	3.70	125.76	121.25
28	1	309	CLA	C4D-CHA-C1A	3.70	125.75	121.25
29	v	311	CHL	C4D-CHA-C1A	3.70	125.75	121.25
46	V	323	NEX	C15-C35-C34	3.70	131.05	123.47
28	B	610	CLA	CHD-C1D-ND	-3.70	121.06	124.45
28	g	312	CLA	CHB-C1B-NB	3.70	128.17	124.26
28	C	510	CLA	C4D-CHA-C1A	3.70	125.75	121.25
31	G	318	0UR	C24-C25-C26	-3.70	105.24	110.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	v	305	CLA	C4D-CHA-C1A	3.70	125.75	121.25
29	s	307	CHL	C4D-CHA-C1A	3.70	125.75	121.25
29	u	410	CHL	C4D-CHA-C1A	3.70	125.75	121.25
41	A	417	DGD	O2G-C1B-C2B	3.69	119.46	111.50
34	d	407	PHO	C2B-C1B-NB	-3.69	106.98	109.53
32	y	320	LUT	C31-C30-C29	3.69	132.58	127.31
28	C	513	CLA	C4D-CHA-C1A	3.69	125.74	121.25
28	c	513	CLA	CHD-C1D-ND	-3.69	121.06	124.45
28	c	503	CLA	C4D-CHA-C1A	3.69	125.73	121.25
28	A	416	CLA	CHD-C1D-ND	-3.68	121.07	124.45
29	U	409	CHL	C4D-CHA-C1A	3.68	125.73	121.25
28	0	309	CLA	CHD-C1D-ND	-3.68	121.07	124.45
28	Y	316	CLA	C4D-CHA-C1A	3.68	125.73	121.25
28	y	311	CLA	C4D-CHA-C1A	3.68	125.73	121.25
29	y	307	CHL	C4D-CHA-C1A	3.68	125.73	121.25
28	c	506	CLA	CHD-C1D-ND	-3.68	121.08	124.45
38	d	410	LMG	O1-C1-C2	3.68	114.04	108.30
28	s	312	CLA	C4D-CHA-C1A	3.68	125.72	121.25
29	v	304	CHL	C4D-CHA-C1A	3.68	125.72	121.25
28	0	311	CLA	C4D-CHA-C1A	3.67	125.72	121.25
28	D	410	CLA	CHD-C1D-ND	-3.67	121.08	124.45
33	C	507	BCR	C15-C16-C17	3.67	131.00	123.47
28	U	407	CLA	C4D-CHA-C1A	3.67	125.72	121.25
34	D	407	PHO	C2B-C1B-NB	-3.67	106.99	109.53
28	y	305	CLA	CHD-C1D-ND	-3.67	121.08	124.45
29	V	310	CHL	CHD-C1D-ND	-3.67	121.08	124.45
28	B	622	CLA	C4D-CHA-C1A	3.67	125.72	121.25
28	s	305	CLA	CHD-C1D-ND	-3.67	121.08	124.45
28	G	316	CLA	C4D-CHA-C1A	3.67	125.71	121.25
46	G	320	NEX	C20-C13-C14	-3.67	117.78	122.92
41	G	302	DGD	O2G-C1B-C2B	3.67	119.40	111.50
47	s	318	XAT	C15-C35-C34	3.67	130.98	123.47
28	b	612	CLA	CHD-C1D-ND	-3.67	121.08	124.45
28	C	517	CLA	C4D-CHA-C1A	3.67	125.71	121.25
28	n	306	CLA	CHD-C1D-ND	-3.66	121.09	124.45
28	U	417	CLA	C4D-CHA-C1A	3.66	125.71	121.25
47	V	321	XAT	C35-C15-C14	3.66	130.98	123.47
28	Y	310	CLA	CHD-C1D-ND	-3.66	121.09	124.45
31	V	319	0UR	C34-C27-C1	3.66	129.30	124.49
28	b	607	CLA	C4D-CHA-C1A	3.66	125.70	121.25
28	b	617	CLA	CHD-C1D-ND	-3.66	121.09	124.45
28	c	520	CLA	C4D-CHA-C1A	3.66	125.70	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	1	311	CLA	CHD-C1D-ND	-3.66	121.09	124.45
28	n	307	CLA	C4D-CHA-C1A	3.66	125.70	121.25
31	V	319	0UR	O40-C30-C29	-3.66	101.50	110.74
28	n	317	CLA	C4D-CHA-C1A	3.65	125.70	121.25
31	0	313	0UR	C25-C26-C27	-3.65	104.58	111.85
32	u	419	LUT	C31-C30-C29	3.65	132.52	127.31
28	s	313	CLA	C4D-CHA-C1A	3.65	125.69	121.25
43	U	420	LMN	CBR-CCM-CBT	3.65	118.04	109.40
28	A	416	CLA	C4D-CHA-C1A	3.65	125.69	121.25
28	Y	304	CLA	CHD-C1D-ND	-3.65	121.10	124.45
28	b	608	CLA	CHD-C1D-ND	-3.65	121.10	124.45
28	g	313	CLA	O2A-C1-C2	3.65	118.22	108.64
29	0	310	CHL	C4D-CHA-C1A	3.65	125.69	121.25
28	n	307	CLA	CHD-C1D-ND	-3.65	121.10	124.45
29	n	311	CHL	C4D-CHA-C1A	3.64	125.68	121.25
43	N	320	LMN	CCR-O4-C4	3.64	126.98	117.96
31	y	323	0UR	O39-C25-C24	-3.64	102.56	109.80
33	h	101	BCR	C15-C16-C17	3.64	130.93	123.47
28	C	510	CLA	CHD-C1D-ND	-3.64	121.11	124.45
28	c	508	CLA	C4D-CHA-C1A	3.64	125.68	121.25
29	N	309	CHL	C4D-CHA-C1A	3.64	125.68	121.25
43	n	301	LMN	CBR-CCM-CBT	-3.63	100.80	109.40
28	a	403	CLA	CHD-C1D-ND	-3.63	121.11	124.45
41	a	409	DGD	C1E-O6E-C5E	3.63	120.82	113.69
29	v	310	CHL	CHD-C1D-ND	-3.63	121.12	124.45
28	B	608	CLA	CHD-C1D-ND	-3.63	121.12	124.45
28	v	316	CLA	CHD-C1D-ND	-3.63	121.12	124.45
28	S	314	CLA	CHD-C1D-ND	-3.63	121.12	124.45
28	1	303	CLA	C2A-C1A-CHA	3.63	130.20	123.86
29	U	405	CHL	CHD-C1D-ND	-3.63	121.12	124.45
30	Y	321	0IE	C41-C28-C27	-3.62	115.81	123.56
28	b	606	CLA	C4D-CHA-C1A	3.62	125.66	121.25
28	s	304	CLA	CHD-C1D-ND	-3.62	121.12	124.45
28	U	404	CLA	C1-O2A-CGA	3.62	125.95	116.44
28	U	414	CLA	CHD-C1D-ND	-3.62	121.13	124.45
38	J	102	LMG	O1-C7-C8	-3.62	102.16	110.90
39	a	412	PL9	C7-C3-C2	-3.62	118.54	123.30
33	D	403	BCR	C37-C22-C21	-3.62	117.86	122.92
28	1	308	CLA	CHD-C1D-ND	-3.61	121.13	124.45
29	n	304	CHL	CHD-C1D-ND	-3.61	121.13	124.45
31	y	317	0UR	C10-C11-C12	3.61	132.47	127.31
28	b	617	CLA	C4D-CHA-C1A	3.61	125.64	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	G	314	CLA	C4D-CHA-C1A	3.61	125.64	121.25
28	b	601	CLA	C4D-CHA-C1A	3.61	125.64	121.25
28	C	501	CLA	CHD-C1D-ND	-3.61	121.14	124.45
28	0	304	CLA	C4D-CHA-C1A	3.61	125.64	121.25
31	Y	317	0UR	C34-C27-C26	-3.61	107.68	114.36
28	u	414	CLA	C4D-CHA-C1A	3.60	125.64	121.25
29	s	310	CHL	CHD-C1D-ND	-3.60	121.14	124.45
47	N	318	XAT	C15-C35-C34	3.60	130.85	123.47
28	C	517	CLA	CHD-C1D-ND	-3.60	121.15	124.45
28	g	308	CLA	CHD-C1D-ND	-3.60	121.15	124.45
28	V	316	CLA	C4D-CHA-C1A	3.60	125.63	121.25
28	n	316	CLA	CHD-C1D-ND	-3.60	121.15	124.45
28	s	305	CLA	C4D-CHA-C1A	3.60	125.62	121.25
28	B	612	CLA	CHD-C1D-ND	-3.59	121.15	124.45
29	s	307	CHL	CHD-C1D-ND	-3.59	121.15	124.45
43	C	518	LMN	OCB-CCQ-CCH	3.59	116.83	107.28
28	c	511	CLA	C4D-CHA-C1A	3.59	125.62	121.25
31	s	316	0UR	C22-C16-C15	3.59	127.95	122.92
28	C	508	CLA	CHD-C1D-ND	-3.59	121.16	124.45
28	N	313	CLA	CHD-C1D-ND	-3.59	121.16	124.45
29	g	310	CHL	CAA-C2A-C1A	-3.59	100.22	111.97
28	1	304	CLA	CHD-C1D-ND	-3.59	121.16	124.45
28	B	618	CLA	CHD-C1D-ND	-3.59	121.16	124.45
29	n	310	CHL	C4D-CHA-C1A	3.58	125.61	121.25
29	N	303	CHL	CHD-C1D-ND	-3.58	121.16	124.45
29	v	304	CHL	CHD-C1D-ND	-3.58	121.16	124.45
29	n	312	CHL	CHD-C1D-ND	-3.58	121.16	124.45
28	B	608	CLA	C4D-CHA-C1A	3.58	125.61	121.25
28	c	522	CLA	CHD-C1D-ND	-3.58	121.16	124.45
29	s	302	CHL	C4D-CHA-C1A	3.58	125.60	121.25
47	v	319	XAT	C35-C15-C14	3.57	130.80	123.47
33	B	604	BCR	C16-C15-C14	3.57	130.79	123.47
28	a	410	CLA	CHD-C1D-ND	-3.57	121.17	124.45
28	b	620	CLA	C4D-CHA-C1A	3.57	125.60	121.25
28	N	315	CLA	CHD-C1D-ND	-3.57	121.17	124.45
29	n	309	CHL	CHD-C1D-ND	-3.57	121.17	124.45
28	D	409	CLA	C4D-CHA-C1A	3.57	125.59	121.25
28	V	307	CLA	O2D-CGD-CBD	3.57	117.61	111.27
31	g	318	0UR	C14-C15-C16	3.57	132.41	127.31
47	S	317	XAT	C35-C15-C14	3.57	130.79	123.47
28	c	521	CLA	CHD-C1D-ND	-3.57	121.17	124.45
46	v	320	NEX	C15-C35-C34	3.57	130.78	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	d	404	CLA	C4D-CHA-C1A	3.57	125.59	121.25
29	Y	307	CHL	CHD-C1D-ND	-3.57	121.18	124.45
28	g	314	CLA	O2A-C1-C2	3.56	118.00	108.64
29	s	309	CHL	CHD-C1D-ND	-3.56	121.18	124.45
28	N	311	CLA	C4D-CHA-C1A	3.56	125.58	121.25
28	U	416	CLA	CHD-C1D-ND	-3.56	121.18	124.45
28	u	415	CLA	CHD-C1D-ND	-3.56	121.18	124.45
28	g	313	CLA	CHC-C1C-NC	3.56	129.61	124.20
31	y	322	0UR	C37-C23-C1	3.56	114.80	109.71
31	g	318	0UR	C22-C16-C15	3.56	127.91	122.92
28	B	611	CLA	C4D-CHA-C1A	3.56	125.58	121.25
28	s	311	CLA	C4D-CHA-C1A	3.56	125.58	121.25
28	A	407	CLA	C4D-CHA-C1A	3.56	125.58	121.25
28	G	308	CLA	O2A-C1-C2	3.56	117.98	108.64
28	U	404	CLA	CHD-C1D-ND	-3.56	121.19	124.45
29	0	310	CHL	CHD-C1D-ND	-3.56	121.19	124.45
28	g	304	CLA	C4D-CHA-C1A	3.55	125.57	121.25
30	Y	319	0IE	C5-C6-C7	-3.55	116.44	126.42
29	S	306	CHL	CAC-C3C-C4C	3.55	129.42	124.81
31	y	322	0UR	O40-C30-C31	-3.55	102.50	110.53
32	1	313	LUT	C10-C11-C12	3.55	134.30	123.22
28	b	622	CLA	C4D-CHA-C1A	3.55	125.57	121.25
28	C	509	CLA	CHD-C1D-ND	-3.55	121.19	124.45
32	U	418	LUT	C31-C30-C29	3.55	132.37	127.31
28	c	513	CLA	C4D-CHA-C1A	3.55	125.56	121.25
31	y	318	0UR	C22-C16-C15	3.55	127.89	122.92
29	Y	315	CHL	CHD-C1D-ND	-3.54	121.20	124.45
28	1	302	CLA	C4D-CHA-C1A	3.54	125.56	121.25
28	C	501	CLA	C4D-CHA-C1A	3.54	125.56	121.25
28	c	521	CLA	C4D-CHA-C1A	3.54	125.56	121.25
29	V	305	CHL	C4D-CHA-C1A	3.54	125.56	121.25
31	y	322	0UR	C36-C28-C38	-3.54	102.67	107.89
28	1	303	CLA	OBD-CAD-C3D	3.54	137.04	128.52
28	b	610	CLA	C4D-CHA-C1A	3.54	125.56	121.25
28	G	305	CLA	C4D-CHA-C1A	3.54	125.55	121.25
28	g	311	CLA	CHD-C1D-ND	-3.54	121.20	124.45
28	s	313	CLA	CHD-C1D-ND	-3.54	121.20	124.45
28	1	303	CLA	CMB-C2B-C3B	-3.53	118.03	126.59
28	Y	313	CLA	C4A-NA-C1A	-3.53	105.12	106.71
28	S	304	CLA	CHD-C1D-ND	-3.53	121.21	124.45
28	V	308	CLA	CHD-C1D-ND	-3.53	121.21	124.45
30	y	319	0IE	O42-C26-C25	-3.53	101.81	110.74

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	G	320	NEX	C12-C13-C14	3.53	124.36	118.94
28	c	508	CLA	CHD-C1D-ND	-3.53	121.21	124.45
28	s	315	CLA	C4D-CHA-C1A	3.53	125.55	121.25
33	b	604	BCR	C37-C22-C23	3.53	123.64	118.08
28	g	313	CLA	CAA-CBA-CGA	-3.53	102.94	113.25
28	1	307	CLA	C4D-CHA-C1A	3.53	125.55	121.25
38	A	413	LMG	O6-C5-C4	3.53	116.10	109.69
46	g	319	NEX	C20-C13-C14	-3.53	117.98	122.92
28	c	505	CLA	CHD-C1D-ND	-3.53	121.21	124.45
31	1	316	0UR	C22-C16-C15	3.53	127.86	122.92
41	c	524	DGD	C1E-O6E-C5E	3.52	120.61	113.69
29	S	307	CHL	CHD-C1D-ND	-3.52	121.22	124.45
28	0	307	CLA	C4A-NA-C1A	-3.52	105.12	106.71
28	g	312	CLA	CHA-C1A-NA	-3.52	118.33	126.40
28	u	407	CLA	C4D-CHA-C1A	3.52	125.53	121.25
28	B	607	CLA	CHD-C1D-ND	-3.52	121.22	124.45
28	b	601	CLA	CHD-C1D-ND	-3.52	121.22	124.45
28	u	418	CLA	CHD-C1D-ND	-3.52	121.22	124.45
29	n	304	CHL	C4D-CHA-C1A	3.52	125.53	121.25
29	G	317	CHL	CAC-C3C-C4C	3.52	129.38	124.81
46	N	319	NEX	C20-C13-C14	-3.52	117.99	122.92
28	G	305	CLA	CHD-C1D-ND	-3.52	121.22	124.45
29	V	311	CHL	C7-C6-C5	-3.52	103.81	113.36
28	B	613	CLA	CHD-C1D-ND	-3.52	121.22	124.45
28	b	606	CLA	CHD-C1D-ND	-3.52	121.22	124.45
28	u	412	CLA	C4D-CHA-C1A	3.52	125.53	121.25
29	v	303	CHL	CAC-C3C-C4C	3.52	129.37	124.81
28	b	608	CLA	C4D-CHA-C1A	3.52	125.53	121.25
38	m	101	LMG	O4-C4-C3	-3.51	102.23	110.35
28	U	413	CLA	C4D-CHA-C1A	3.51	125.52	121.25
29	Y	307	CHL	C4D-CHA-C1A	3.51	125.52	121.25
28	b	619	CLA	CHD-C1D-ND	-3.51	121.23	124.45
28	b	622	CLA	CHD-C1D-ND	-3.51	121.23	124.45
29	G	317	CHL	CHA-C1A-NA	-3.51	118.37	126.40
28	y	313	CLA	CHD-C1D-ND	-3.51	121.23	124.45
46	v	320	NEX	C20-C13-C14	-3.50	118.01	122.92
31	1	316	0UR	C48-C47-C46	3.50	129.81	125.84
47	V	321	XAT	C15-C35-C34	3.50	130.65	123.47
31	y	317	0UR	C33-C32-C31	-3.50	116.07	123.56
41	c	524	DGD	C3G-C2G-C1G	-3.50	103.51	111.79
28	Y	312	CLA	CHD-C1D-ND	-3.50	121.24	124.45
28	Y	316	CLA	CHD-C1D-ND	-3.50	121.24	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	S	310	CLA	CGD-CBD-CAD	-3.50	99.40	110.73
32	1	313	LUT	C2-C3-C4	-3.50	105.52	110.30
29	s	309	CHL	C4D-CHA-C1A	3.50	125.50	121.25
28	N	312	CLA	CHD-C1D-ND	-3.49	121.24	124.45
28	Y	306	CLA	C4D-CHA-C1A	3.49	125.50	121.25
31	u	420	0UR	C17-C16-C15	-3.49	113.58	118.94
28	C	505	CLA	CHD-C1D-ND	-3.49	121.25	124.45
46	V	322	NEX	C20-C13-C14	-3.49	118.03	122.92
28	g	315	CLA	CHD-C1D-ND	-3.49	121.25	124.45
28	b	605	CLA	C4D-CHA-C1A	3.49	125.50	121.25
29	S	302	CHL	CHD-C1D-ND	-3.49	121.25	124.45
28	0	309	CLA	C4D-CHA-C1A	3.49	125.49	121.25
28	1	302	CLA	CHD-C1D-ND	-3.49	121.25	124.45
29	S	306	CHL	CHA-C1A-NA	-3.49	118.41	126.40
47	v	319	XAT	C40-C33-C34	-3.49	118.04	122.92
46	g	319	NEX	C40-C33-C34	-3.48	118.04	122.92
28	G	306	CLA	C4D-CHA-C1A	3.48	125.49	121.25
28	Y	313	CLA	CHA-C1A-NA	-3.48	118.43	126.40
28	v	312	CLA	C4D-CHA-C1A	3.48	125.48	121.25
33	k	102	BCR	C23-C22-C21	3.48	124.28	118.94
43	g	320	LMN	CBQ-CCM-CBS	-3.48	101.17	109.40
29	G	317	CHL	C3B-C4B-NB	-3.48	107.29	110.52
46	G	320	NEX	C40-C33-C34	-3.48	118.05	122.92
28	C	506	CLA	CHD-C1D-ND	-3.47	121.26	124.45
29	n	308	CHL	CHA-C1A-NA	-3.47	118.45	126.40
28	B	605	CLA	CHD-C1D-ND	-3.47	121.27	124.45
28	g	305	CLA	CHD-C1D-ND	-3.47	121.27	124.45
28	u	405	CLA	CHD-C1D-ND	-3.47	121.27	124.45
29	N	307	CHL	CHD-C1D-ND	-3.47	121.27	124.45
31	y	317	0UR	O40-C30-C29	-3.47	101.97	110.74
29	S	309	CHL	C4D-CHA-C1A	3.47	125.47	121.25
28	v	313	CLA	CHD-C1D-ND	-3.47	121.27	124.45
46	s	319	NEX	C12-C13-C14	3.47	124.26	118.94
47	S	317	XAT	C20-C13-C14	-3.46	118.07	122.92
28	Y	305	CLA	C4D-CHA-C1A	3.46	125.47	121.25
28	s	312	CLA	CHD-C1D-ND	-3.46	121.27	124.45
28	v	306	CLA	CHD-C1D-ND	-3.46	121.27	124.45
31	1	315	0UR	C38-C28-C19	3.46	114.79	109.55
28	U	406	CLA	C4D-CHA-C1A	3.46	125.46	121.25
28	C	506	CLA	C4D-CHA-C1A	3.46	125.46	121.25
28	u	417	CLA	CHD-C1D-ND	-3.46	121.27	124.45
47	s	318	XAT	C40-C33-C34	-3.46	118.08	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	u	415	CLA	C4D-CHA-C1A	3.46	125.46	121.25
30	0	312	0IE	C39-C32-C31	3.46	114.65	109.71
28	u	414	CLA	CHD-C1D-ND	-3.46	121.28	124.45
31	y	322	0UR	C13-C12-C11	3.46	124.25	118.94
28	b	611	CLA	CHD-C1D-ND	-3.46	121.28	124.45
43	n	322	LMN	OBX-CCJ-OBV	-3.46	101.79	109.97
38	B	620	LMG	O7-C10-C11	3.46	118.95	111.50
29	V	311	CHL	CAC-C3C-C4C	3.45	129.29	124.81
28	1	306	CLA	C4D-CHA-C1A	3.45	125.45	121.25
29	V	302	CHL	CAA-C2A-C1A	-3.45	100.67	111.97
33	c	509	BCR	C36-C18-C17	-3.45	118.09	122.92
28	Y	303	CLA	O2A-C1-C2	3.45	117.70	108.64
30	Y	319	0IE	C34-C35-C36	-3.45	104.98	111.85
29	s	302	CHL	CHD-C1D-ND	-3.45	121.28	124.45
46	V	323	NEX	C20-C13-C14	-3.45	118.09	122.92
29	G	317	CHL	C1C-C2C-C3C	3.45	109.85	107.11
28	V	316	CLA	CHD-C1D-ND	-3.45	121.28	124.45
28	y	316	CLA	C4D-CHA-C1A	3.45	125.44	121.25
28	0	302	CLA	C4D-CHA-C1A	3.45	125.44	121.25
46	V	322	NEX	C40-C33-C34	-3.45	118.10	122.92
28	A	411	CLA	C4D-CHA-C1A	3.44	125.44	121.25
28	S	310	CLA	O2A-C1-C2	3.44	117.68	108.64
37	B	615	SQD	C45-O47-C7	3.44	126.26	117.79
28	N	315	CLA	C4D-CHA-C1A	3.44	125.43	121.25
28	V	318	CLA	C4D-CHA-C1A	3.44	125.43	121.25
33	B	603	BCR	C16-C15-C14	3.44	130.52	123.47
47	N	318	XAT	C20-C13-C14	-3.44	118.11	122.92
30	y	321	0IE	C44-C24-C43	-3.43	102.83	107.89
31	V	319	0UR	C10-C11-C12	3.43	132.21	127.31
28	Y	306	CLA	CHD-C1D-ND	-3.43	121.30	124.45
31	u	420	0UR	C22-C16-C15	3.43	127.73	122.92
29	N	302	CHL	CHC-C1C-NC	3.43	129.41	124.20
28	c	512	CLA	CHD-C1D-ND	-3.43	121.30	124.45
28	v	313	CLA	C4D-CHA-C1A	3.43	125.42	121.25
28	y	314	CLA	C4D-CHA-C1A	3.43	125.42	121.25
28	G	312	CLA	CHD-C1D-ND	-3.43	121.30	124.45
31	y	318	0UR	C22-C16-C17	-3.43	112.67	118.08
29	v	309	CHL	CHD-C1D-ND	-3.43	121.30	124.45
31	s	316	0UR	C17-C16-C15	-3.43	113.68	118.94
28	u	408	CLA	CHD-C1D-ND	-3.43	121.31	124.45
31	N	316	0UR	C17-C16-C15	-3.43	113.68	118.94
28	S	311	CLA	C4D-CHA-C1A	3.43	125.42	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	B	609	CLA	C4D-CHA-C1A	3.42	125.42	121.25
33	C	507	BCR	C36-C18-C17	-3.42	118.13	122.92
28	0	305	CLA	C4D-CHA-C1A	3.42	125.42	121.25
28	a	410	CLA	C4D-CHA-C1A	3.42	125.41	121.25
31	g	318	0UR	C33-C32-C31	-3.42	116.25	123.56
28	0	301	CLA	C4D-CHA-C1A	3.42	125.41	121.25
39	d	406	PL9	C7-C3-C4	3.42	119.65	116.88
31	y	318	0UR	C36-C28-C38	-3.42	102.86	107.89
41	C	514	DGD	O2G-C1B-C2B	3.41	118.86	111.50
29	V	306	CHL	C4D-CHA-C1A	3.41	125.40	121.25
28	y	314	CLA	CHD-C1D-ND	-3.41	121.32	124.45
28	0	308	CLA	CHD-C1D-ND	-3.41	121.32	124.45
28	V	314	CLA	C4D-CHA-C1A	3.41	125.39	121.25
41	C	516	DGD	O2G-C1B-C2B	3.41	118.84	111.50
29	N	308	CHL	C2B-C1B-NB	3.40	112.51	110.23
28	g	311	CLA	C4D-CHA-C1A	3.40	125.39	121.25
28	N	304	CLA	CHC-C4B-NB	-3.40	120.66	124.26
28	Y	314	CLA	CHD-C1D-ND	-3.40	121.33	124.45
33	C	502	BCR	C15-C16-C17	3.40	130.44	123.47
38	W	202	LMG	O7-C10-C11	3.40	118.83	111.50
30	y	319	0IE	C37-C36-C35	-3.40	108.06	114.36
28	C	504	CLA	CHD-C1D-ND	-3.40	121.33	124.45
28	b	605	CLA	CHD-C1D-ND	-3.40	121.33	124.45
28	u	411	CLA	CHD-C1D-ND	-3.40	121.33	124.45
29	G	317	CHL	CHD-C1D-ND	-3.40	121.33	124.45
31	G	318	0UR	C38-C28-C19	3.40	114.69	109.55
28	c	510	CLA	CHD-C1D-ND	-3.40	121.33	124.45
29	G	311	CHL	C4D-CHA-C1A	3.40	125.38	121.25
28	N	312	CLA	C4D-CHA-C1A	3.40	125.38	121.25
30	y	321	0IE	C24-C19-C28	-3.39	105.33	111.42
28	0	305	CLA	CHD-C1D-ND	-3.39	121.33	124.45
28	n	314	CLA	CHD-C1D-ND	-3.39	121.34	124.45
28	N	304	CLA	CHB-C1B-NB	3.39	127.85	124.26
28	B	616	CLA	CHD-C1D-ND	-3.39	121.34	124.45
43	Y	302	LMN	CBR-CCM-CBQ	3.39	116.32	109.97
47	v	319	XAT	C20-C13-C14	-3.39	118.18	122.92
28	B	611	CLA	CHD-C1D-ND	-3.39	121.34	124.45
41	c	524	DGD	C3E-C4E-C5E	-3.39	104.20	110.24
29	1	310	CHL	CHD-C1D-ND	-3.39	121.34	124.45
32	y	320	LUT	C32-C33-C34	3.38	124.14	118.94
33	b	603	BCR	C36-C18-C17	-3.38	118.18	122.92
28	y	316	CLA	CHD-C1D-ND	-3.38	121.34	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	V	323	NEX	C40-C33-C34	-3.38	118.18	122.92
28	c	503	CLA	CHD-C1D-ND	-3.38	121.34	124.45
31	Y	317	0UR	O40-C30-C29	-3.38	102.19	110.74
29	N	308	CHL	CHB-C1B-NB	3.38	127.83	124.26
31	Y	317	0UR	C29-C30-C31	-3.38	107.90	111.74
33	k	101	BCR	C16-C15-C14	3.38	130.39	123.47
28	B	622	CLA	CHD-C1D-ND	-3.38	121.35	124.45
28	n	317	CLA	CHD-C1D-ND	-3.38	121.35	124.45
28	y	305	CLA	C4D-CHA-C1A	3.38	125.36	121.25
33	a	401	BCR	C16-C15-C14	3.38	130.39	123.47
31	g	318	0UR	O42-C2-C3	-3.38	114.49	120.66
33	A	401	BCR	C16-C15-C14	3.38	130.39	123.47
28	D	409	CLA	CHD-C1D-ND	-3.38	121.35	124.45
31	v	317	0UR	C38-C28-C19	3.38	114.66	109.55
28	Y	308	CLA	CHD-C1D-ND	-3.37	121.35	124.45
29	u	406	CHL	CHD-C1D-ND	-3.37	121.35	124.45
28	n	313	CLA	C4D-CHA-C1A	3.37	125.35	121.25
28	u	407	CLA	CHD-C1D-ND	-3.37	121.36	124.45
28	B	601	CLA	C4D-CHA-C1A	3.37	125.35	121.25
43	U	420	LMN	O3-C3-C2	-3.37	102.56	110.35
43	n	322	LMN	CBR-CCM-CBQ	3.37	116.28	109.97
29	V	311	CHL	C3B-C4B-NB	-3.37	107.39	110.52
28	s	315	CLA	CHD-C1D-ND	-3.37	121.36	124.45
28	G	309	CLA	CHD-C1D-ND	-3.37	121.36	124.45
28	G	308	CLA	CHD-C4C-C3C	-3.37	119.89	124.84
30	y	321	0IE	C37-C36-C35	-3.37	108.12	114.36
33	K	104	BCR	C37-C22-C21	-3.37	118.21	122.92
47	s	318	XAT	C20-C13-C14	-3.36	118.21	122.92
28	U	413	CLA	CHD-C1D-ND	-3.36	121.37	124.45
47	V	321	XAT	C40-C33-C34	-3.36	118.22	122.92
28	V	307	CLA	CGD-CBD-CAD	-3.36	99.86	110.73
29	V	306	CHL	CHD-C1D-ND	-3.36	121.37	124.45
28	B	616	CLA	C4D-CHA-C1A	3.35	125.33	121.25
31	U	419	0UR	C35-C23-C1	3.35	114.50	109.71
47	S	317	XAT	C40-C33-C34	-3.35	118.23	122.92
31	0	313	0UR	C36-C28-C38	-3.35	102.95	107.89
47	N	318	XAT	C40-C33-C34	-3.35	118.23	122.92
47	V	321	XAT	C20-C13-C14	-3.35	118.23	122.92
31	Y	322	0UR	C22-C16-C15	3.35	127.61	122.92
28	U	407	CLA	CHD-C1D-ND	-3.35	121.38	124.45
28	u	416	CLA	C4D-CHA-C1A	3.35	125.32	121.25
28	C	504	CLA	C4D-CHA-C1A	3.34	125.32	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	Y	311	CLA	CMC-C2C-C3C	-3.34	117.04	126.12
28	1	309	CLA	CHD-C1D-ND	-3.34	121.38	124.45
28	C	511	CLA	CHD-C1D-ND	-3.34	121.38	124.45
33	K	102	BCR	C15-C16-C17	3.34	130.31	123.47
28	V	318	CLA	CHD-C1D-ND	-3.34	121.39	124.45
47	n	320	XAT	C40-C33-C34	-3.34	118.25	122.92
38	w	201	LMG	O7-C10-C11	-3.33	104.31	111.50
28	B	606	CLA	CHD-C1D-ND	-3.33	121.39	124.45
28	Y	313	CLA	CAA-C2A-C3A	-3.33	103.65	112.78
28	v	314	CLA	CHD-C1D-ND	-3.33	121.39	124.45
38	c	502	LMG	C3-C4-C5	3.33	116.18	110.24
31	0	314	0UR	C37-C23-C1	3.33	114.47	109.71
31	Y	322	0UR	C37-C23-C1	3.33	114.46	109.71
43	n	322	LMN	O3-C3-C2	-3.33	102.66	110.35
28	n	314	CLA	C4D-CHA-C1A	3.32	125.30	121.25
32	u	419	LUT	C35-C15-C14	3.32	130.28	123.47
33	k	101	BCR	C15-C16-C17	3.32	130.28	123.47
28	G	314	CLA	CHD-C1D-ND	-3.32	121.40	124.45
29	n	305	CHL	C4D-CHA-C1A	3.32	125.29	121.25
33	h	101	BCR	C36-C18-C17	-3.32	118.27	122.92
46	G	320	NEX	C32-C33-C34	3.32	124.04	118.94
29	N	308	CHL	CGD-CBD-CAD	-3.32	99.98	110.73
29	V	311	CHL	C20-C18-C17	-3.32	91.03	111.54
28	G	308	CLA	CHD-C1D-ND	-3.32	121.40	124.45
28	Y	313	CLA	CHD-C1D-ND	-3.32	121.41	124.45
43	n	322	LMN	OBZ-CCS-CCW	3.32	117.37	110.35
29	n	308	CHL	CAC-C3C-C4C	3.32	129.11	124.81
29	S	308	CHL	CHD-C1D-ND	-3.32	121.41	124.45
29	V	313	CHL	C1-O2A-CGA	3.32	125.14	116.44
29	g	309	CHL	CHD-C1D-ND	-3.31	121.41	124.45
28	b	618	CLA	C4D-CHA-C1A	3.31	125.28	121.25
39	A	409	PL9	C7-C3-C4	3.31	119.57	116.88
31	0	313	0UR	C28-C19-C32	3.31	117.35	111.42
29	N	309	CHL	CHD-C1D-ND	-3.31	121.41	124.45
31	1	315	0UR	C28-C19-C32	3.31	117.35	111.42
29	G	310	CHL	CHD-C1D-ND	-3.31	121.41	124.45
47	n	320	XAT	C35-C15-C14	3.31	130.26	123.47
46	v	320	NEX	C40-C33-C34	-3.31	118.29	122.92
31	N	316	0UR	C22-C16-C15	3.31	127.56	122.92
28	y	312	CLA	CHD-C1D-ND	-3.31	121.41	124.45
31	0	314	0UR	C6-C7-C8	3.31	124.02	118.94
28	B	613	CLA	C4D-CHA-C1A	3.31	125.27	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	B	603	BCR	C37-C22-C23	3.31	123.29	118.08
29	u	409	CHL	CHD-C1D-ND	-3.31	121.42	124.45
31	g	317	0UR	C36-C28-C29	-3.31	103.17	109.44
29	V	313	CHL	C4-C3-C2	-3.31	115.20	123.68
33	a	401	BCR	C15-C16-C17	3.30	130.24	123.47
33	c	509	BCR	C15-C16-C17	3.30	130.24	123.47
28	U	406	CLA	CHD-C1D-ND	-3.30	121.42	124.45
46	g	319	NEX	C12-C13-C14	3.30	124.01	118.94
28	U	412	CLA	C4D-CHA-C1A	3.29	125.26	121.25
28	V	307	CLA	CAA-CBA-CGA	-3.29	103.63	113.25
33	c	507	BCR	C37-C22-C23	3.29	123.27	118.08
28	Y	311	CLA	CHC-C1C-NC	3.29	129.20	124.20
43	n	322	LMN	CCJ-OBX-CCF	3.29	120.15	113.69
32	U	418	LUT	C35-C15-C14	3.29	130.21	123.47
28	B	621	CLA	C4D-CHA-C1A	3.29	125.25	121.25
33	k	101	BCR	C36-C18-C17	-3.29	118.32	122.92
43	n	322	LMN	C3-C4-C5	3.28	118.45	110.93
29	g	316	CHL	CHA-C1A-NA	-3.28	118.88	126.40
28	1	303	CLA	O1D-CGD-CBD	-3.28	117.77	124.48
29	v	308	CHL	CHD-C1D-ND	-3.28	121.44	124.45
28	c	520	CLA	CHD-C1D-ND	-3.28	121.44	124.45
47	n	320	XAT	C20-C13-C14	-3.28	118.33	122.92
28	B	602	CLA	CHD-C1D-ND	-3.28	121.44	124.45
28	G	307	CLA	CHD-C1D-ND	-3.28	121.44	124.45
28	B	605	CLA	C4D-CHA-C1A	3.28	125.24	121.25
28	v	306	CLA	C4D-CHA-C1A	3.28	125.24	121.25
32	y	320	LUT	C19-C9-C10	-3.28	118.33	122.92
33	d	403	BCR	C34-C9-C10	-3.28	118.33	122.92
28	U	414	CLA	CHA-C1A-NA	-3.27	118.90	126.40
31	g	318	0UR	C43-C3-C2	3.27	124.35	116.66
31	y	317	0UR	C20-C7-C8	-3.27	118.34	122.92
28	1	305	CLA	CHD-C1D-ND	-3.27	121.45	124.45
28	c	510	CLA	C4D-CHA-C1A	3.27	125.23	121.25
28	0	302	CLA	CHD-C1D-ND	-3.27	121.45	124.45
28	B	601	CLA	CHD-C1D-ND	-3.27	121.45	124.45
31	y	317	0UR	C36-C28-C38	-3.26	103.08	107.89
28	Y	303	CLA	CHA-C1A-NA	-3.26	118.93	126.40
28	U	410	CLA	CHD-C1D-ND	-3.26	121.46	124.45
28	g	314	CLA	CHB-C1B-C2B	-3.26	118.03	127.24
31	y	323	0UR	C36-C28-C19	3.25	114.47	109.55
33	A	401	BCR	C36-C18-C17	-3.25	118.36	122.92
28	n	315	CLA	CHD-C1D-ND	-3.25	121.46	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	s	303	CHL	C4D-CHA-C1A	3.25	125.21	121.25
28	b	615	CLA	CHD-C1D-ND	-3.25	121.47	124.45
30	y	319	0IE	C13-C12-C11	3.24	123.92	118.94
28	g	313	CLA	CGD-CBD-CAD	-3.24	100.23	110.73
28	b	615	CLA	C4D-CHA-C1A	3.24	125.19	121.25
33	t	101	BCR	C37-C22-C23	3.24	123.19	118.08
46	g	319	NEX	C32-C33-C34	3.24	123.91	118.94
29	S	303	CHL	CHD-C1D-ND	-3.24	121.48	124.45
46	s	319	NEX	C20-C13-C14	-3.24	118.39	122.92
33	C	502	BCR	C36-C18-C17	-3.24	118.39	122.92
31	U	419	0UR	C25-C26-C27	-3.23	105.42	111.85
33	c	509	BCR	C34-C9-C10	-3.23	118.40	122.92
33	b	604	BCR	C15-C16-C17	3.23	130.09	123.47
28	G	315	CLA	CHD-C1D-ND	-3.23	121.49	124.45
31	Y	318	0UR	O40-C30-C31	-3.23	103.23	110.53
28	b	609	CLA	CHD-C1D-ND	-3.23	121.49	124.45
29	N	302	CHL	CHA-C1A-NA	-3.23	119.01	126.40
33	C	502	BCR	C16-C15-C14	3.23	130.08	123.47
33	k	102	BCR	C34-C9-C10	-3.22	118.41	122.92
28	Y	313	CLA	CAC-C3C-C2C	-3.22	122.03	127.53
28	y	308	CLA	CHC-C4B-NB	3.22	127.66	124.26
33	B	614	BCR	C37-C22-C23	3.22	123.15	118.08
46	V	322	NEX	C32-C33-C34	3.22	123.88	118.94
28	1	306	CLA	CHD-C1D-ND	-3.22	121.50	124.45
32	Y	320	LUT	C39-C29-C30	-3.22	118.42	122.92
47	N	318	XAT	C12-C13-C14	3.21	123.87	118.94
28	0	303	CLA	C4D-CHA-C1A	3.21	125.16	121.25
29	V	313	CHL	O2A-C1-C2	3.21	117.07	108.64
31	U	419	0UR	C24-C25-C26	-3.21	105.91	110.30
28	y	303	CLA	CHD-C1D-ND	-3.21	121.50	124.45
33	A	401	BCR	C15-C16-C17	3.21	130.05	123.47
38	A	406	LMG	O7-C8-C7	3.21	120.01	108.40
33	a	401	BCR	C36-C18-C17	-3.21	118.43	122.92
28	V	307	CLA	CHC-C4B-NB	-3.20	120.87	124.26
28	g	314	CLA	CHC-C4B-NB	-3.20	120.87	124.26
28	Y	311	CLA	CHB-C1B-NB	3.20	127.64	124.26
29	n	305	CHL	CHD-C1D-ND	-3.20	121.52	124.45
33	K	104	BCR	C16-C15-C14	3.20	130.02	123.47
31	U	419	0UR	C34-C27-C26	-3.20	108.43	114.36
31	y	318	0UR	O39-C25-C24	-3.20	103.45	109.80
38	K	101	LMG	O1-C1-C2	3.19	113.29	108.30
29	V	313	CHL	C2C-C3C-C4C	3.19	108.77	106.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
47	v	319	XAT	C32-C33-C34	3.19	123.84	118.94
30	y	321	0IE	C23-C16-C17	-3.19	113.05	118.08
33	H	101	BCR	C34-C9-C10	-3.19	118.46	122.92
33	c	509	BCR	C16-C15-C14	3.19	130.01	123.47
28	B	621	CLA	CHD-C1D-ND	-3.19	121.52	124.45
46	v	320	NEX	C12-C13-C14	3.19	123.83	118.94
31	0	313	0UR	C33-C32-C31	-3.19	116.74	123.56
29	n	308	CHL	C1C-C2C-C3C	3.18	109.64	107.11
28	g	313	CLA	CHC-C4B-NB	-3.18	120.89	124.26
28	1	301	CLA	CHD-C1D-ND	-3.18	121.53	124.45
31	y	317	0UR	C22-C16-C15	3.18	127.38	122.92
28	g	312	CLA	C3B-C2B-C1B	3.18	111.00	107.16
30	y	319	0IE	C21-C7-C6	-3.18	113.07	118.08
33	c	507	BCR	C15-C16-C17	3.18	129.98	123.47
31	g	318	0UR	C36-C28-C19	3.17	114.35	109.55
33	b	602	BCR	C36-C18-C17	-3.17	118.48	122.92
29	G	317	CHL	CMD-C2D-C1D	3.17	130.30	124.71
28	s	314	CLA	C4D-CHA-C1A	3.17	125.11	121.25
31	0	313	0UR	C43-C3-C4	3.17	128.85	125.02
31	v	317	0UR	C22-C16-C15	3.16	127.36	122.92
30	y	319	0IE	C34-C35-C36	-3.16	105.55	111.85
29	N	308	CHL	C1-O2A-CGA	3.16	124.75	116.44
28	y	308	CLA	CHA-C1A-NA	-3.16	119.16	126.40
28	S	313	CLA	C4D-CHA-C1A	3.16	125.10	121.25
33	B	614	BCR	C16-C15-C14	3.16	129.95	123.47
43	n	322	LMN	CCT-CCN-CCC	-3.16	104.60	110.24
33	K	104	BCR	C15-C16-C17	3.16	129.95	123.47
29	n	308	CHL	C5-C3-C2	3.16	127.51	121.12
31	1	315	0UR	C17-C16-C15	-3.16	114.09	118.94
31	Y	323	0UR	C17-C16-C15	-3.16	114.09	118.94
28	0	307	CLA	C3D-C4D-ND	3.16	115.35	110.24
30	y	319	0IE	C32-C33-C34	-3.16	106.51	113.64
32	Y	320	LUT	C32-C33-C34	3.15	123.78	118.94
33	d	403	BCR	C36-C18-C17	-3.15	118.50	122.92
28	V	317	CLA	C4D-CHA-C1A	3.15	125.09	121.25
29	S	309	CHL	CHD-C1D-ND	-3.15	121.56	124.45
46	g	319	NEX	C19-C9-C10	-3.15	118.51	122.92
33	T	101	BCR	C16-C15-C14	3.15	129.93	123.47
46	V	323	NEX	C19-C9-C10	-3.15	118.51	122.92
31	y	322	0UR	C9-C8-C7	3.15	131.80	127.31
28	0	307	CLA	CAA-C2A-C1A	-3.15	101.66	111.97
29	u	410	CHL	CHD-C1D-ND	-3.14	121.56	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	b	603	BCR	C34-C9-C10	-3.14	118.52	122.92
28	U	417	CLA	CHD-C1D-ND	-3.14	121.57	124.45
31	y	317	0UR	C34-C27-C1	3.14	128.62	124.49
31	y	323	0UR	C22-C16-C17	-3.14	113.13	118.08
33	D	403	BCR	C15-C16-C17	3.14	129.90	123.47
43	N	320	LMN	O4-C4-C5	-3.13	100.86	109.45
31	G	318	0UR	C22-C16-C15	3.13	127.31	122.92
33	B	603	BCR	C34-C9-C10	-3.13	118.54	122.92
28	y	309	CLA	CHD-C1D-ND	-3.13	121.58	124.45
29	V	302	CHL	CHA-C1A-NA	-3.13	119.23	126.40
28	U	414	CLA	CHB-C1B-NB	3.13	127.57	124.26
31	n	318	0UR	C22-C16-C15	3.13	127.31	122.92
33	B	604	BCR	C34-C9-C10	-3.13	118.54	122.92
31	y	323	0UR	C48-C47-C46	3.13	132.55	125.85
31	y	317	0UR	C37-C23-C1	3.12	114.17	109.71
33	H	101	BCR	C37-C22-C23	3.12	123.00	118.08
28	a	403	CLA	C4D-CHA-C1A	3.12	125.05	121.25
30	Y	321	0IE	C24-C19-C28	-3.12	105.83	111.42
46	V	323	NEX	C12-C13-C14	3.12	123.72	118.94
29	V	305	CHL	CHD-C1D-ND	-3.12	121.59	124.45
47	S	317	XAT	C12-C13-C14	3.12	123.72	118.94
33	D	403	BCR	C16-C15-C14	3.12	129.86	123.47
29	n	310	CHL	CHD-C1D-ND	-3.12	121.59	124.45
29	N	303	CHL	C4D-CHA-C1A	3.11	125.04	121.25
37	B	615	SQD	O47-C7-O49	-3.11	116.18	123.70
28	c	511	CLA	CHD-C1D-ND	-3.11	121.59	124.45
33	h	101	BCR	C34-C9-C10	-3.11	118.57	122.92
46	n	321	NEX	C40-C33-C34	-3.11	118.57	122.92
29	s	308	CHL	CHD-C1D-ND	-3.11	121.60	124.45
46	V	322	NEX	C12-C13-C14	3.11	123.71	118.94
47	s	318	XAT	C12-C13-C14	3.11	123.71	118.94
46	v	320	NEX	C19-C9-C10	-3.11	118.57	122.92
42	c	527	LHG	O4-P-O5	3.11	127.60	112.24
29	V	313	CHL	C3D-C4D-CHA	3.10	119.83	112.72
46	V	323	NEX	C32-C33-C34	3.10	123.70	118.94
33	K	102	BCR	C37-C22-C23	3.10	122.96	118.08
33	b	602	BCR	C34-C9-C10	-3.10	118.58	122.92
43	N	320	LMN	CCS-CCW-CCU	3.10	116.45	110.00
31	S	315	0UR	C22-C16-C15	3.10	127.26	122.92
28	g	314	CLA	CHC-C1C-NC	3.10	128.90	124.20
30	y	321	0IE	C20-C3-C4	3.10	128.81	124.83
32	Y	320	LUT	C20-C13-C14	-3.10	118.59	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	K	104	BCR	C34-C9-C8	3.09	122.95	118.08
31	Y	322	0UR	C34-C27-C26	-3.09	108.62	114.36
33	k	101	BCR	C34-C9-C10	-3.09	118.59	122.92
29	S	306	CHL	C7-C6-C5	3.09	121.75	113.36
47	s	318	XAT	C32-C33-C34	3.09	123.68	118.94
31	0	314	0UR	C36-C28-C19	3.09	114.22	109.55
33	K	102	BCR	C36-C18-C17	-3.09	118.60	122.92
29	N	308	CHL	CHD-C4C-C3C	-3.09	120.30	124.84
41	C	515	DGD	O1G-C1A-C2A	3.08	119.47	111.38
31	1	315	0UR	C22-C16-C15	3.08	127.24	122.92
29	v	307	CHL	C4D-CHA-C1A	3.08	125.00	121.25
28	v	315	CLA	C4D-CHA-C1A	3.08	125.00	121.25
33	t	101	BCR	C36-C18-C17	-3.08	118.61	122.92
28	1	311	CLA	C4A-NA-C1A	3.08	108.09	106.71
29	y	315	CHL	CHD-C1D-ND	-3.08	121.62	124.45
47	V	321	XAT	C12-C13-C14	3.08	123.66	118.94
31	s	316	0UR	C28-C19-C32	3.08	116.93	111.42
41	g	302	DGD	O6D-C5D-C6D	3.08	112.88	106.67
29	V	311	CHL	CGD-CBD-CAD	-3.07	100.77	110.73
32	y	320	LUT	O3-C3-C2	-3.07	103.69	109.80
33	T	101	BCR	C34-C9-C10	-3.07	118.62	122.92
29	V	302	CHL	C4D-CHA-C1A	3.07	124.99	121.25
28	S	312	CLA	CHD-C1D-ND	-3.07	121.63	124.45
31	y	322	0UR	C35-C23-C1	3.07	114.09	109.71
47	v	319	XAT	C12-C13-C14	3.07	123.65	118.94
31	U	419	0UR	C37-C23-C1	3.07	114.09	109.71
29	g	316	CHL	CAC-C3C-C4C	3.07	128.79	124.81
28	0	307	CLA	C3D-C2D-C1D	3.06	110.01	105.83
38	u	404	LMG	O7-C10-C11	3.06	118.11	111.50
28	b	618	CLA	CHD-C1D-ND	-3.06	121.64	124.45
38	K	101	LMG	O1-C7-C8	-3.06	103.51	110.90
46	G	321	NEX	C20-C13-C14	-3.06	118.64	122.92
46	n	302	NEX	C20-C13-C14	-3.06	118.64	122.92
32	1	313	LUT	C37-C21-C26	-3.06	104.91	109.55
29	V	311	CHL	C17-C16-C15	-3.05	99.20	113.24
31	g	318	0UR	C25-C26-C27	-3.05	105.77	111.85
29	N	302	CHL	C3B-C2B-C1B	3.05	110.85	107.16
46	G	320	NEX	C19-C9-C10	-3.05	118.65	122.92
31	y	322	0UR	C17-C16-C15	-3.05	114.26	118.94
47	S	317	XAT	C32-C33-C34	3.05	123.62	118.94
41	C	516	DGD	O1G-C1A-C2A	3.05	121.48	111.91
28	V	307	CLA	CHD-C1D-ND	-3.05	121.65	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	D	403	BCR	C34-C9-C10	-3.04	118.66	122.92
31	G	319	0UR	C17-C16-C15	-3.04	114.28	118.94
28	1	303	CLA	CMC-C2C-C1C	3.04	129.66	125.04
33	a	401	BCR	C34-C9-C10	-3.03	118.67	122.92
28	Y	313	CLA	C2D-C1D-ND	-3.03	107.87	110.10
31	S	315	0UR	C17-C16-C15	-3.03	114.29	118.94
47	V	321	XAT	C32-C33-C34	3.03	123.59	118.94
28	G	308	CLA	CMB-C2B-C3B	-3.03	119.25	126.59
31	Y	323	0UR	C36-C28-C19	3.03	114.13	109.55
47	N	318	XAT	C32-C33-C34	3.03	123.59	118.94
33	t	101	BCR	C15-C16-C17	3.03	129.67	123.47
33	K	104	BCR	C34-C9-C10	-3.03	118.69	122.92
33	b	604	BCR	C16-C15-C14	3.03	129.67	123.47
33	b	604	BCR	C34-C9-C10	-3.02	118.69	122.92
43	n	322	LMN	OBY-CCC-CCN	-3.02	104.21	109.69
29	V	302	CHL	CHD-C4C-NC	3.02	128.96	124.20
28	V	307	CLA	C2D-C1D-ND	-3.02	107.88	110.10
43	G	304	LMN	CBQ-CCM-CBT	3.02	116.55	109.40
31	y	317	0UR	C35-C23-C1	3.01	114.02	109.71
33	A	401	BCR	C34-C9-C10	-3.01	118.70	122.92
29	V	302	CHL	CGD-CBD-CAD	-3.01	100.98	110.73
33	c	507	BCR	C34-C9-C10	-3.01	118.70	122.92
46	V	322	NEX	C19-C9-C10	-3.01	118.70	122.92
33	d	403	BCR	C16-C15-C14	3.01	129.64	123.47
33	K	102	BCR	C16-C15-C14	3.01	129.64	123.47
28	V	307	CLA	CHA-C1A-NA	-3.01	119.51	126.40
47	v	319	XAT	C28-C29-C30	3.01	123.56	118.94
38	b	625	LMG	O7-C8-C7	3.01	119.29	108.40
30	Y	319	0IE	C21-C7-C8	-3.01	118.71	122.92
32	y	320	LUT	C39-C29-C30	-3.01	118.71	122.92
28	S	310	CLA	CHA-C1A-NA	-3.00	119.52	126.40
32	y	320	LUT	C40-C33-C34	-3.00	118.72	122.92
33	D	403	BCR	C36-C18-C17	-3.00	118.72	122.92
41	C	516	DGD	C3G-O3G-C1D	-3.00	107.88	113.74
32	U	418	LUT	C19-C9-C10	-3.00	118.72	122.92
33	d	403	BCR	C15-C16-C17	3.00	129.61	123.47
46	n	321	NEX	C20-C13-C14	-3.00	118.73	122.92
41	g	302	DGD	O1G-C1A-C2A	3.00	121.31	111.91
31	0	314	0UR	C20-C7-C6	-2.99	113.36	118.08
31	0	313	0UR	C5-C4-C3	2.99	130.60	127.00
33	B	614	BCR	C36-C18-C17	-2.99	118.73	122.92
46	n	302	NEX	C40-C33-C34	-2.99	118.73	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	C	502	BCR	C34-C9-C10	-2.99	118.73	122.92
46	v	320	NEX	C28-C29-C30	2.99	123.53	118.94
47	n	320	XAT	C32-C33-C34	2.99	123.53	118.94
32	Y	320	LUT	C1-C6-C5	-2.99	118.41	122.61
28	N	314	CLA	C4D-CHA-C1A	2.99	124.88	121.25
29	y	307	CHL	CHD-C1D-ND	-2.99	121.71	124.45
31	1	316	0UR	C43-C3-C4	-2.98	121.41	125.02
33	B	604	BCR	C37-C22-C23	2.98	122.78	118.08
41	c	524	DGD	O3G-C1D-C2D	-2.98	103.65	108.30
28	g	312	CLA	CHD-C4C-NC	2.98	128.90	124.20
41	c	524	DGD	O6E-C5E-C4E	-2.98	104.29	109.69
33	C	507	BCR	C16-C15-C14	2.98	129.57	123.47
31	1	316	0UR	O39-C25-C24	-2.98	103.89	109.80
29	N	308	CHL	C3B-C4B-NB	-2.98	107.75	110.52
33	c	507	BCR	C16-C15-C14	2.97	129.57	123.47
46	v	320	NEX	C32-C33-C34	2.97	123.50	118.94
31	U	419	0UR	C10-C11-C12	2.97	131.55	127.31
28	1	303	CLA	CHA-C1A-NA	-2.97	119.60	126.40
31	y	323	0UR	C9-C8-C7	2.97	131.55	127.31
47	N	318	XAT	C28-C29-C30	2.97	123.50	118.94
29	V	313	CHL	CAA-C2A-C3A	-2.97	104.65	112.78
47	V	321	XAT	C28-C29-C30	2.97	123.49	118.94
28	u	417	CLA	C4-C3-C2	-2.96	116.07	123.68
31	Y	317	0UR	O42-C2-C3	-2.96	115.24	120.66
29	V	313	CHL	CAA-CBA-CGA	-2.96	104.60	113.25
31	U	419	0UR	C22-C16-C17	-2.96	113.41	118.08
31	V	319	0UR	O42-C2-C3	-2.96	115.25	120.66
31	1	312	0UR	C22-C16-C15	2.96	127.07	122.92
28	g	313	CLA	CHA-C1A-NA	-2.96	119.62	126.40
33	K	104	BCR	C24-C23-C22	2.96	130.70	126.23
33	c	507	BCR	C36-C18-C17	-2.95	118.79	122.92
33	c	509	BCR	C23-C22-C21	2.95	123.47	118.94
30	y	321	0IE	C10-C11-C12	2.95	131.52	127.31
29	N	308	CHL	CHA-C1A-NA	-2.95	119.65	126.40
31	G	319	0UR	C22-C16-C15	2.95	127.05	122.92
28	U	414	CLA	C2C-C1C-NC	-2.95	107.21	109.97
33	b	604	BCR	C36-C18-C17	-2.95	118.80	122.92
31	V	319	0UR	C43-C3-C2	2.94	123.57	116.66
28	0	307	CLA	CHC-C4B-NB	-2.94	121.14	124.26
33	K	102	BCR	C34-C9-C10	-2.94	118.80	122.92
31	u	420	0UR	C36-C28-C29	-2.94	103.87	109.44
28	y	308	CLA	CAA-C2A-C1A	-2.94	102.34	111.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	y	321	0IE	C21-C7-C8	-2.94	118.81	122.92
30	Y	319	0IE	C41-C28-C27	-2.94	117.28	123.56
38	m	101	LMG	O7-C10-O9	-2.94	116.61	123.70
28	Y	303	CLA	C4D-CHA-C1A	2.94	124.82	121.25
29	v	307	CHL	CAA-C2A-C3A	-2.93	104.74	112.78
47	n	320	XAT	C12-C13-C14	2.93	123.44	118.94
38	m	101	LMG	C1-C2-C3	2.93	116.10	110.00
31	y	322	0UR	C43-C3-C4	2.93	128.56	125.02
30	Y	319	0IE	O40-C34-C35	-2.93	103.40	109.68
31	U	419	0UR	C22-C16-C15	2.92	127.01	122.92
43	n	322	LMN	O5-C5-C4	2.92	115.91	109.75
33	b	602	BCR	C15-C16-C17	2.92	129.45	123.47
31	y	317	0UR	C4-C3-C2	2.92	122.58	120.08
38	U	402	LMG	O7-C8-C7	2.91	118.95	108.40
33	K	104	BCR	C36-C18-C17	-2.91	118.85	122.92
31	v	317	0UR	C36-C28-C19	2.91	113.95	109.55
38	K	101	LMG	C1-O6-C5	2.91	119.39	113.69
31	Y	317	0UR	C20-C7-C8	-2.91	118.85	122.92
31	g	317	0UR	C22-C16-C15	2.91	126.99	122.92
32	Y	320	LUT	C35-C15-C14	2.91	129.43	123.47
31	Y	317	0UR	C28-C19-C18	-2.90	109.03	112.70
37	B	617	SQD	O47-C7-C8	-2.90	105.25	111.50
33	B	614	BCR	C34-C9-C10	-2.90	118.86	122.92
28	U	414	CLA	CAA-CBA-CGA	-2.90	104.78	113.25
32	1	313	LUT	O3-C3-C2	2.90	115.56	109.80
33	B	604	BCR	C36-C18-C17	-2.90	118.87	122.92
28	0	302	CLA	C4A-NA-C1A	2.90	108.01	106.71
28	1	307	CLA	CHD-C1D-ND	-2.89	121.79	124.45
41	c	524	DGD	C3G-O3G-C1D	2.89	119.39	113.74
28	0	307	CLA	C4D-CHA-C1A	2.89	124.77	121.25
33	H	101	BCR	C36-C18-C17	-2.89	118.87	122.92
31	Y	322	0UR	C22-C16-C17	-2.89	113.53	118.08
32	Y	320	LUT	C21-C26-C27	-2.89	109.05	112.70
28	1	303	CLA	O2D-CGD-CBD	2.88	116.39	111.27
31	y	322	0UR	C25-C26-C27	-2.88	106.11	111.85
28	g	314	CLA	CHA-C1A-NA	-2.88	119.80	126.40
31	Y	318	0UR	C23-C1-C27	-2.88	111.50	119.35
33	K	104	BCR	C11-C10-C9	2.88	131.42	127.31
29	v	303	CHL	CGD-CBD-CAD	-2.87	101.42	110.73
30	Y	319	0IE	C13-C12-C11	2.87	123.35	118.94
33	t	101	BCR	C34-C9-C8	2.87	122.61	118.08
28	Y	314	CLA	C4D-CHA-C1A	2.87	124.75	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	v	303	CHL	CAA-CBA-CGA	-2.87	104.87	113.25
33	t	101	BCR	C34-C9-C10	-2.87	118.91	122.92
30	Y	319	0IE	C23-C16-C17	2.86	122.59	118.08
28	y	308	CLA	CAA-CBA-CGA	-2.86	104.88	113.25
41	c	524	DGD	O1A-C1A-C2A	-2.86	112.57	123.73
28	N	311	CLA	O2A-C1-C2	2.86	116.15	108.64
28	y	306	CLA	CHA-C1A-NA	-2.86	119.86	126.40
33	b	602	BCR	C16-C15-C14	2.86	129.32	123.47
29	g	316	CHL	CHD-C4C-C3C	2.86	129.04	124.84
31	1	312	0UR	C36-C28-C19	2.86	113.87	109.55
31	1	316	0UR	C25-C26-C27	-2.86	106.17	111.85
33	h	101	BCR	C16-C15-C14	2.85	129.32	123.47
33	B	603	BCR	C36-C18-C17	-2.85	118.92	122.92
46	n	302	NEX	C28-C29-C30	2.85	123.32	118.94
33	B	614	BCR	C15-C16-C17	2.85	129.32	123.47
29	V	306	CHL	CAA-C2A-C1A	-2.85	102.62	111.97
30	Y	321	0IE	C37-C36-C35	-2.85	109.07	114.36
37	B	615	SQD	O6-C44-C45	-2.85	104.02	110.90
41	c	515	DGD	O1G-C1A-C2A	2.85	120.86	111.91
28	V	315	CLA	CHD-C1D-ND	-2.85	121.83	124.45
30	Y	319	0IE	C32-C33-C34	-2.85	107.21	113.64
31	1	316	0UR	C5-C4-C3	-2.85	123.58	127.00
28	U	414	CLA	CMC-C2C-C3C	-2.85	118.38	126.12
28	U	414	CLA	C3B-C2B-C1B	2.85	110.60	107.16
29	U	409	CHL	CHD-C1D-ND	-2.85	121.84	124.45
28	Y	311	CLA	C2C-C1C-NC	-2.85	107.31	109.97
39	a	412	PL9	C27-C26-C24	2.84	122.33	112.98
31	G	318	0UR	C28-C19-C32	2.84	116.51	111.42
33	C	507	BCR	C34-C9-C10	-2.84	118.94	122.92
29	v	307	CHL	C4A-NA-C1A	-2.84	105.43	106.71
31	v	317	0UR	C24-C25-C26	-2.84	106.42	110.30
29	v	307	CHL	CHB-C1B-C2B	-2.84	119.22	127.24
28	B	609	CLA	O2A-C1-C2	2.84	116.09	108.64
31	Y	322	0UR	C25-C26-C27	-2.84	106.21	111.85
28	S	310	CLA	C5-C3-C2	2.83	126.85	121.12
30	Y	319	0IE	C44-C24-C43	-2.83	103.72	107.89
33	t	101	BCR	C16-C15-C14	2.83	129.27	123.47
32	u	419	LUT	C19-C9-C10	-2.83	118.96	122.92
31	u	420	0UR	C28-C19-C32	2.83	116.49	111.42
31	y	323	0UR	C38-C28-C29	2.83	114.79	109.44
29	y	315	CHL	CHA-C1A-NA	-2.83	119.92	126.40
28	Y	313	CLA	CGD-CBD-CAD	-2.83	101.57	110.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	g	317	0UR	C36-C28-C19	2.83	113.83	109.55
47	s	318	XAT	C28-C29-C30	2.83	123.28	118.94
29	v	307	CHL	C1C-C2C-C3C	2.83	109.36	107.11
28	0	303	CLA	C4A-NA-C1A	2.82	107.98	106.71
31	0	314	0UR	O40-C30-C29	-2.82	103.61	110.74
28	V	307	CLA	C1C-C2C-C3C	2.82	109.92	106.96
31	U	419	0UR	O44-C43-C3	-2.82	101.56	109.11
46	G	321	NEX	C40-C33-C34	-2.82	118.97	122.92
28	Y	304	CLA	C4A-NA-C1A	2.82	107.97	106.71
31	1	315	0UR	C36-C28-C38	-2.82	103.74	107.89
30	y	319	0IE	C23-C16-C17	2.82	122.51	118.08
29	V	309	CHL	CHA-C1A-NA	-2.81	119.95	126.40
47	S	317	XAT	C8-C9-C10	2.81	123.26	118.94
33	k	102	BCR	C19-C18-C17	2.81	123.25	118.94
29	N	308	CHL	C4-C3-C2	-2.81	116.47	123.68
43	G	301	LMN	CBQ-CCM-CBT	2.81	116.05	109.40
31	n	318	0UR	C17-C16-C15	-2.81	114.63	118.94
31	y	322	0UR	C20-C7-C6	-2.81	113.66	118.08
29	N	308	CHL	CHD-C4C-NC	2.80	128.62	124.20
28	G	308	CLA	C3B-C4B-NB	-2.80	107.92	110.52
38	A	413	LMG	C3-C4-C5	2.80	115.24	110.24
28	N	304	CLA	CHB-C1B-C2B	-2.80	119.33	127.24
28	0	309	CLA	CHC-C4B-NB	-2.80	121.29	124.26
31	y	317	0UR	C23-C1-C27	-2.80	111.72	119.35
31	Y	318	0UR	C24-C25-C26	-2.80	106.47	110.30
31	Y	317	0UR	C33-C32-C31	-2.80	117.57	123.56
29	s	306	CHL	CHA-C1A-NA	-2.80	119.99	126.40
29	V	311	CHL	C6-C5-C3	-2.79	106.13	113.45
28	N	311	CLA	CHA-C1A-NA	-2.79	120.00	126.40
33	K	104	BCR	C20-C21-C22	2.79	131.29	127.31
31	u	420	0UR	C24-C25-C26	-2.79	106.48	110.30
31	Y	323	0UR	C29-C30-C31	2.79	114.92	111.74
28	1	308	CLA	CHA-C1A-NA	-2.79	120.01	126.40
29	g	310	CHL	CHA-C1A-NA	-2.79	120.01	126.40
28	0	307	CLA	CGD-CBD-CAD	2.79	119.76	110.73
29	n	308	CHL	O2D-CGD-CBD	2.79	116.22	111.27
38	D	411	LMG	O1-C1-C2	2.79	112.65	108.30
29	n	308	CHL	C7-C6-C5	2.78	120.92	113.36
41	a	405	DGD	O1G-C1A-C2A	2.78	120.63	111.91
29	u	410	CHL	CHA-C1A-NA	-2.78	120.03	126.40
31	y	323	0UR	C10-C11-C12	2.78	131.27	127.31
31	U	419	0UR	C20-C7-C6	-2.77	113.70	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	n	318	0UR	C28-C19-C32	2.77	116.39	111.42
28	N	304	CLA	O2A-C1-C2	2.77	115.93	108.64
28	B	602	CLA	C4A-NA-C1A	2.77	107.95	106.71
28	S	310	CLA	C3B-C4B-NB	-2.77	107.94	110.52
31	g	317	0UR	C17-C16-C15	-2.77	114.69	118.94
47	S	317	XAT	C16-C1-C2	-2.77	104.17	108.98
38	K	101	LMG	O6-C5-C4	2.77	114.72	109.69
33	A	401	BCR	C37-C22-C23	2.77	122.44	118.08
33	T	101	BCR	C36-C18-C17	-2.77	119.05	122.92
31	n	318	0UR	C36-C28-C19	2.76	113.73	109.55
29	S	306	CHL	C6-C5-C3	2.76	120.70	113.45
28	g	313	CLA	C1-O2A-CGA	2.76	123.69	116.44
31	U	419	0UR	O39-C25-C24	-2.76	104.31	109.80
46	G	321	NEX	C15-C35-C34	2.76	129.13	123.47
28	U	404	CLA	CHA-C1A-NA	-2.76	120.08	126.40
28	b	611	CLA	CHA-C1A-NA	-2.76	120.08	126.40
31	1	316	0UR	C47-C46-C45	2.76	129.95	122.92
31	g	317	0UR	C37-C23-C1	2.76	113.65	109.71
38	a	414	LMG	C1-O6-C5	-2.76	108.28	113.69
28	B	613	CLA	CHA-C1A-NA	-2.75	120.09	126.40
28	S	312	CLA	CHA-C1A-NA	-2.75	120.10	126.40
30	y	321	0IE	C44-C24-C25	-2.75	104.23	109.44
28	c	520	CLA	CHA-C1A-NA	-2.75	120.10	126.40
33	K	104	BCR	C35-C13-C14	-2.75	119.08	122.92
28	V	307	CLA	CMB-C2B-C3B	-2.75	119.93	126.59
29	s	306	CHL	CAC-C3C-C4C	2.75	128.37	124.81
41	c	524	DGD	O2G-C2G-C3G	2.74	118.34	108.40
31	s	316	0UR	C36-C28-C38	-2.74	103.85	107.89
28	G	316	CLA	CHA-C1A-NA	-2.74	120.12	126.40
28	Y	311	CLA	C4-C3-C2	-2.74	116.64	123.68
28	g	315	CLA	C4A-NA-C1A	2.74	107.94	106.71
31	0	314	0UR	C23-C24-C25	-2.74	107.46	113.64
29	V	305	CHL	CHA-C1A-NA	-2.74	120.13	126.40
28	G	312	CLA	CHA-C1A-NA	-2.74	120.13	126.40
33	b	603	BCR	C37-C22-C23	2.73	122.38	118.08
28	G	309	CLA	CHA-C1A-NA	-2.73	120.14	126.40
31	1	312	0UR	C36-C28-C38	-2.73	103.87	107.89
46	n	302	NEX	C11-C10-C9	2.73	131.21	127.31
46	V	322	NEX	C28-C29-C30	2.73	123.13	118.94
30	0	312	0IE	C44-C24-C25	-2.73	104.27	109.44
31	y	318	0UR	C28-C19-C32	-2.73	106.53	111.42
28	b	609	CLA	CHA-C1A-NA	-2.73	120.15	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
47	n	320	XAT	C28-C29-C30	2.73	123.12	118.94
41	A	417	DGD	C1E-O6E-C5E	2.73	119.04	113.69
29	g	310	CHL	CAA-C2A-C3A	-2.72	105.32	112.78
31	y	323	0UR	C34-C27-C26	-2.72	109.31	114.36
31	g	318	0UR	C35-C23-C1	2.72	113.60	109.71
29	U	409	CHL	CHA-C1A-NA	-2.72	120.16	126.40
31	Y	323	0UR	O40-C30-C29	-2.72	103.86	110.74
28	g	314	CLA	C2B-C1B-NB	2.72	112.06	110.23
28	g	308	CLA	CHA-C1A-NA	-2.72	120.16	126.40
29	S	309	CHL	O2D-CGD-CBD	2.72	116.11	111.27
29	V	313	CHL	CHA-C1A-NA	-2.72	120.17	126.40
28	G	308	CLA	CHA-C1A-NA	-2.72	120.17	126.40
31	N	316	0UR	C28-C19-C32	2.72	116.29	111.42
31	1	316	0UR	C6-C7-C8	2.72	123.11	118.94
38	K	103	LMG	O1-C7-C8	-2.72	104.34	110.90
28	0	302	CLA	CHA-C1A-NA	-2.72	120.18	126.40
32	u	419	LUT	C39-C29-C30	-2.72	119.12	122.92
28	y	311	CLA	CHA-C1A-NA	-2.71	120.18	126.40
28	b	616	CLA	CHA-C1A-NA	-2.71	120.18	126.40
38	A	414	LMG	O7-C10-C11	2.71	117.35	111.50
33	B	604	BCR	C15-C16-C17	2.71	129.03	123.47
33	H	101	BCR	C35-C13-C14	-2.71	119.12	122.92
28	y	305	CLA	CAA-C2A-C3A	2.71	120.19	112.78
28	b	615	CLA	CHA-C1A-NA	-2.71	120.19	126.40
28	B	622	CLA	CHA-C1A-NA	-2.71	120.20	126.40
28	c	512	CLA	CHA-C1A-NA	-2.71	120.20	126.40
28	n	317	CLA	CHA-C1A-NA	-2.71	120.20	126.40
31	G	318	0UR	C36-C28-C19	2.71	113.64	109.55
28	0	305	CLA	CHA-C1A-NA	-2.70	120.20	126.40
32	u	419	LUT	C19-C9-C8	2.70	122.34	118.08
29	V	302	CHL	C3B-C4B-NB	-2.70	108.01	110.52
28	G	308	CLA	CMD-C2D-C1D	2.70	129.48	124.71
28	0	303	CLA	CHA-C1A-NA	-2.70	120.21	126.40
38	b	625	LMG	O7-C8-C9	-2.70	98.62	108.40
28	B	616	CLA	CHA-C1A-NA	-2.70	120.21	126.40
38	a	414	LMG	C7-O1-C1	2.70	119.01	113.74
30	Y	319	0IE	C4-C5-C6	2.70	131.64	123.22
28	U	413	CLA	CHA-C1A-NA	-2.70	120.23	126.40
28	U	417	CLA	CHA-C1A-NA	-2.70	120.23	126.40
28	1	305	CLA	CHA-C1A-NA	-2.69	120.23	126.40
29	V	309	CHL	CAA-CBA-CGA	-2.69	105.38	113.25
28	s	311	CLA	CHA-C1A-NA	-2.69	120.23	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	G	318	0UR	C36-C28-C38	-2.69	103.93	107.89
28	U	406	CLA	CHA-C1A-NA	-2.69	120.24	126.40
38	d	410	LMG	O7-C10-O9	-2.69	117.20	123.70
46	G	320	NEX	C28-C29-C30	2.69	123.07	118.94
28	u	405	CLA	CHA-C1A-NA	-2.69	120.24	126.40
29	V	311	CHL	C3D-C2D-C1D	2.69	109.50	105.83
28	u	417	CLA	CHA-C1A-NA	-2.69	120.25	126.40
28	v	306	CLA	CHA-C1A-NA	-2.69	120.25	126.40
28	g	314	CLA	CHD-C4C-NC	2.69	128.44	124.20
28	v	306	CLA	CAA-C2A-C3A	-2.68	105.43	112.78
28	S	314	CLA	CHA-C1A-NA	-2.68	120.25	126.40
29	N	308	CHL	CHB-C1B-C2B	-2.68	119.66	127.24
29	V	309	CHL	C1C-C2C-C3C	2.68	109.25	107.11
28	b	617	CLA	CHA-C1A-NA	-2.68	120.25	126.40
28	V	317	CLA	CHC-C4B-NB	-2.68	121.42	124.26
28	g	314	CLA	CMD-C2D-C1D	2.68	129.44	124.71
31	Y	322	0UR	C35-C23-C1	2.68	113.54	109.71
31	0	313	0UR	C22-C16-C15	2.68	126.68	122.92
28	C	511	CLA	C4A-NA-C1A	2.68	107.91	106.71
29	S	302	CHL	CHA-C1A-NA	-2.68	120.27	126.40
28	V	308	CLA	CHA-C1A-NA	-2.68	120.27	126.40
28	y	306	CLA	C1D-ND-C4D	-2.68	104.43	106.33
41	c	516	DGD	O1G-C1A-C2A	2.68	120.30	111.91
30	Y	319	0IE	C15-C14-C13	-2.67	114.87	123.22
31	1	312	0UR	C17-C16-C15	-2.67	114.84	118.94
31	Y	318	0UR	C28-C19-C18	-2.67	109.32	112.70
28	y	312	CLA	CHA-C1A-NA	-2.67	120.28	126.40
28	c	506	CLA	CHA-C1A-NA	-2.67	120.28	126.40
29	G	310	CHL	CHA-C1A-NA	-2.67	120.28	126.40
31	1	315	0UR	C24-C25-C26	-2.67	106.65	110.30
28	B	611	CLA	CHA-C1A-NA	-2.67	120.29	126.40
29	v	303	CHL	CHA-C1A-NA	-2.67	120.29	126.40
28	b	619	CLA	CHA-C1A-NA	-2.67	120.29	126.40
43	U	420	LMN	C1-O5-C5	-2.67	108.45	113.69
28	G	314	CLA	CHA-C1A-NA	-2.67	120.29	126.40
28	n	316	CLA	CHA-C1A-NA	-2.67	120.29	126.40
28	y	313	CLA	CHA-C1A-NA	-2.67	120.29	126.40
29	y	307	CHL	CHA-C1A-NA	-2.66	120.30	126.40
31	S	315	0UR	C28-C19-C32	2.66	116.19	111.42
28	v	316	CLA	CHA-C1A-NA	-2.66	120.30	126.40
32	u	419	LUT	C28-C29-C30	-2.66	114.86	118.94
33	a	401	BCR	C37-C22-C23	2.66	122.27	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	u	418	CLA	CHA-C1A-NA	-2.66	120.31	126.40
28	g	307	CLA	CHA-C1A-NA	-2.66	120.31	126.40
28	u	415	CLA	CHA-C1A-NA	-2.66	120.31	126.40
29	N	309	CHL	CHA-C1A-NA	-2.66	120.31	126.40
31	V	319	0UR	O40-C30-C31	-2.66	104.52	110.53
28	G	305	CLA	CHA-C1A-NA	-2.66	120.31	126.40
28	u	411	CLA	CHA-C1A-NA	-2.66	120.31	126.40
46	n	321	NEX	C12-C13-C14	2.66	123.02	118.94
42	c	527	LHG	O7-C5-C6	2.66	118.02	108.40
29	Y	315	CHL	CHA-C1A-NA	-2.66	120.31	126.40
32	U	418	LUT	C39-C29-C30	-2.66	119.20	122.92
28	C	509	CLA	CHA-C1A-NA	-2.66	120.32	126.40
46	n	321	NEX	C15-C35-C34	2.65	128.91	123.47
29	s	306	CHL	CHC-C4B-NB	2.65	127.07	124.26
28	B	607	CLA	CHA-C1A-NA	-2.65	120.32	126.40
28	u	413	CLA	CHA-C1A-NA	-2.65	120.32	126.40
31	Y	323	0UR	C24-C25-C26	-2.65	106.67	110.30
28	1	307	CLA	CHA-C1A-NA	-2.65	120.32	126.40
28	b	610	CLA	CHA-C1A-NA	-2.65	120.32	126.40
28	y	305	CLA	CAA-C2A-C1A	-2.65	103.28	111.97
28	V	307	CLA	CAC-C3C-C4C	2.65	128.25	124.81
31	g	318	0UR	O40-C30-C31	-2.65	104.53	110.53
29	V	313	CHL	C3B-C2B-C1B	2.65	110.36	107.16
41	a	409	DGD	O6E-C1E-C2E	2.65	115.96	110.35
28	N	305	CLA	CHA-C1A-NA	-2.65	120.33	126.40
29	v	303	CHL	CHD-C1D-ND	-2.65	122.02	124.45
28	c	511	CLA	C4A-NA-C1A	2.65	107.90	106.71
28	C	506	CLA	CHA-C1A-NA	-2.65	120.33	126.40
29	s	309	CHL	CHA-C1A-NA	-2.65	120.33	126.40
31	G	318	0UR	C17-C16-C15	-2.65	114.88	118.94
28	0	308	CLA	CHA-C1A-NA	-2.65	120.33	126.40
28	U	416	CLA	CHA-C1A-NA	-2.65	120.33	126.40
29	n	310	CHL	CHA-C1A-NA	-2.65	120.34	126.40
28	v	314	CLA	CHA-C1A-NA	-2.65	120.34	126.40
29	v	307	CHL	CHA-C1A-NA	-2.65	120.34	126.40
28	B	610	CLA	CHA-C1A-NA	-2.65	120.34	126.40
28	d	409	CLA	CHA-C1A-NA	-2.65	120.34	126.40
28	G	315	CLA	CHA-C1A-NA	-2.64	120.34	126.40
28	g	315	CLA	CHA-C1A-NA	-2.64	120.34	126.40
29	U	405	CHL	CHA-C1A-NA	-2.64	120.35	126.40
31	G	318	0UR	C36-C28-C29	-2.64	104.43	109.44
41	C	514	DGD	O1G-C1A-C2A	2.64	120.20	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	G	307	CLA	CHA-C1A-NA	-2.64	120.35	126.40
31	g	318	0UR	C20-C7-C6	-2.64	113.92	118.08
29	s	302	CHL	C4A-NA-C1A	2.64	107.89	106.71
28	C	517	CLA	CHA-C1A-NA	-2.64	120.35	126.40
28	D	410	CLA	CHA-C1A-NA	-2.64	120.35	126.40
28	u	414	CLA	CHA-C1A-NA	-2.64	120.35	126.40
28	U	410	CLA	CHA-C1A-NA	-2.64	120.36	126.40
30	y	319	0IE	O1-C2-C3	-2.64	115.84	120.66
31	Y	317	0UR	C22-C16-C17	-2.64	113.92	118.08
28	c	503	CLA	CHA-C1A-NA	-2.64	120.36	126.40
46	G	321	NEX	C12-C13-C14	2.64	122.99	118.94
28	1	309	CLA	CHA-C1A-NA	-2.64	120.36	126.40
29	S	303	CHL	CHA-C1A-NA	-2.63	120.36	126.40
28	s	313	CLA	CHA-C1A-NA	-2.63	120.37	126.40
29	N	302	CHL	C4A-NA-C1A	2.63	107.89	106.71
28	s	315	CLA	CHA-C1A-NA	-2.63	120.37	126.40
28	V	318	CLA	CHA-C1A-NA	-2.63	120.37	126.40
31	n	318	0UR	C36-C28-C29	-2.63	104.45	109.44
28	b	620	CLA	CHA-C1A-NA	-2.63	120.38	126.40
28	g	305	CLA	CHA-C1A-NA	-2.63	120.38	126.40
29	N	306	CHL	CMD-C2D-C1D	2.63	129.34	124.71
28	c	508	CLA	CHA-C1A-NA	-2.63	120.39	126.40
28	U	414	CLA	CMC-C2C-C1C	2.62	129.03	125.04
28	C	504	CLA	CHA-C1A-NA	-2.62	120.39	126.40
28	Y	303	CLA	CAA-CBA-CGA	-2.62	105.59	113.25
28	a	403	CLA	CHA-C1A-NA	-2.62	120.39	126.40
28	Y	316	CLA	CHA-C1A-NA	-2.62	120.40	126.40
28	u	417	CLA	C1-O2A-CGA	2.62	123.32	116.44
41	c	524	DGD	C1D-O6D-C5D	-2.62	108.54	113.69
31	1	312	0UR	C33-C32-C31	-2.62	117.96	123.56
28	a	402	CLA	CHC-C4B-NB	-2.62	121.49	124.26
28	b	601	CLA	CHA-C1A-NA	-2.62	120.40	126.40
29	s	302	CHL	CHA-C1A-NA	-2.62	120.40	126.40
28	G	308	CLA	C1D-CHD-C4C	-2.62	120.41	126.06
28	y	316	CLA	CHA-C1A-NA	-2.62	120.41	126.40
28	c	506	CLA	C4A-NA-C1A	2.62	107.88	106.71
28	C	501	CLA	C5-C3-C2	2.62	126.41	121.12
28	1	301	CLA	CHA-C1A-NA	-2.61	120.41	126.40
28	b	618	CLA	CHA-C1A-NA	-2.61	120.41	126.40
29	S	307	CHL	CHA-C1A-NA	-2.61	120.41	126.40
28	C	510	CLA	CHA-C1A-NA	-2.61	120.41	126.40
28	Y	308	CLA	CHA-C1A-NA	-2.61	120.41	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	G	313	CLA	CHA-C1A-NA	-2.61	120.42	126.40
31	N	316	0UR	C36-C28-C19	2.61	113.50	109.55
28	Y	308	CLA	C4A-NA-C1A	2.61	107.88	106.71
28	U	412	CLA	CHA-C1A-NA	-2.61	120.42	126.40
29	Y	307	CHL	CHA-C1A-NA	-2.61	120.42	126.40
28	a	402	CLA	CAA-C2A-C3A	2.61	119.92	112.78
28	g	314	CLA	CHD-C1D-C2D	2.61	130.96	125.48
28	Y	312	CLA	CHA-C1A-NA	-2.61	120.42	126.40
29	V	309	CHL	C2B-C1B-NB	2.61	111.98	110.23
31	Y	323	0UR	C36-C28-C38	-2.61	104.05	107.89
32	1	313	LUT	C1-C6-C7	2.61	123.16	115.78
28	s	311	CLA	O2A-C1-C2	2.61	115.49	108.64
28	V	317	CLA	CHA-C1A-NA	-2.61	120.43	126.40
28	A	416	CLA	CHA-C1A-NA	-2.61	120.43	126.40
28	c	510	CLA	CHA-C1A-NA	-2.61	120.43	126.40
28	b	605	CLA	CHA-C1A-NA	-2.61	120.43	126.40
29	n	304	CHL	CHA-C1A-NA	-2.61	120.43	126.40
41	c	524	DGD	C4A-C3A-C2A	-2.61	103.82	113.19
31	n	318	0UR	C36-C28-C38	-2.61	104.05	107.89
29	g	310	CHL	C4B-CHC-C1C	-2.61	120.16	126.34
28	N	313	CLA	CHA-C1A-NA	-2.61	120.43	126.40
38	d	410	LMG	C1-O6-C5	-2.60	108.58	113.69
31	Y	322	0UR	C34-C27-C1	-2.60	121.08	124.49
38	D	411	LMG	C7-O1-C1	2.60	118.82	113.74
28	0	307	CLA	C2D-C1D-ND	-2.60	108.19	110.10
28	c	511	CLA	CHA-C1A-NA	-2.60	120.44	126.40
29	S	308	CHL	CHA-C1A-NA	-2.60	120.44	126.40
31	u	420	0UR	C36-C28-C38	-2.60	104.06	107.89
30	1	314	0IE	C14-C15-C16	-2.60	123.60	127.31
28	B	606	CLA	CHA-C1A-NA	-2.60	120.45	126.40
28	Y	313	CLA	CHD-C4C-C3C	2.60	128.66	124.84
28	a	410	CLA	CHA-C1A-NA	-2.60	120.45	126.40
31	V	319	0UR	C35-C23-C1	2.60	113.42	109.71
32	U	418	LUT	C28-C29-C30	-2.60	114.95	118.94
29	N	307	CHL	CHA-C1A-NA	-2.60	120.45	126.40
28	u	407	CLA	CHA-C1A-NA	-2.60	120.45	126.40
28	0	301	CLA	CHA-C1A-NA	-2.60	120.45	126.40
31	y	317	0UR	O44-C45-C46	2.60	118.45	111.55
28	s	304	CLA	CHA-C1A-NA	-2.59	120.46	126.40
31	y	323	0UR	C47-C46-C45	2.59	129.53	122.92
28	c	522	CLA	CHA-C1A-NA	-2.59	120.46	126.40
28	S	305	CLA	CHA-C1A-NA	-2.59	120.46	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	v	309	CHL	CHA-C1A-NA	-2.59	120.46	126.40
28	S	304	CLA	CHC-C4B-NB	-2.59	121.51	124.26
31	S	315	0UR	C36-C28-C19	2.59	113.47	109.55
29	V	310	CHL	CHA-C1A-NA	-2.59	120.46	126.40
28	1	303	CLA	CHB-C1B-C2B	2.59	134.56	127.24
28	s	312	CLA	CHA-C1A-NA	-2.59	120.46	126.40
38	m	101	LMG	O6-C1-O1	-2.59	103.84	109.97
31	v	317	0UR	C36-C28-C38	-2.59	104.08	107.89
28	C	505	CLA	CHA-C1A-NA	-2.59	120.47	126.40
28	Y	304	CLA	CHA-C1A-NA	-2.59	120.47	126.40
28	n	306	CLA	CHA-C1A-NA	-2.59	120.47	126.40
29	N	306	CHL	CHA-C1A-NA	-2.59	120.47	126.40
28	d	404	CLA	CHA-C1A-NA	-2.59	120.47	126.40
28	y	303	CLA	CHA-C1A-NA	-2.59	120.47	126.40
28	B	622	CLA	O2A-C1-C2	2.59	115.44	108.64
28	a	416	CLA	CHA-C1A-NA	-2.59	120.47	126.40
28	B	608	CLA	CHA-C1A-NA	-2.59	120.48	126.40
28	C	501	CLA	CHA-C1A-NA	-2.59	120.48	126.40
28	u	412	CLA	CHA-C1A-NA	-2.59	120.48	126.40
28	v	305	CLA	CHA-C1A-NA	-2.59	120.48	126.40
29	s	308	CHL	CHA-C1A-NA	-2.59	120.48	126.40
31	s	316	0UR	C36-C28-C29	-2.59	104.54	109.44
41	c	518	DGD	O1G-C1A-C2A	2.58	120.02	111.91
28	b	622	CLA	CHA-C1A-NA	-2.58	120.48	126.40
31	y	318	0UR	C37-C23-C24	-2.58	97.45	109.05
29	S	306	CHL	C2C-C3C-C4C	-2.58	104.65	106.49
28	g	314	CLA	C6-C5-C3	-2.58	106.69	113.45
28	Y	305	CLA	CHA-C1A-NA	-2.58	120.49	126.40
28	V	307	CLA	O2D-CGD-O1D	-2.58	118.79	123.84
28	g	313	CLA	C12-C11-C10	2.58	125.10	113.24
28	B	622	CLA	C4A-NA-C1A	2.58	107.87	106.71
33	H	101	BCR	C12-C13-C14	2.58	122.90	118.94
28	b	607	CLA	CHA-C1A-NA	-2.58	120.49	126.40
29	g	309	CHL	CHA-C1A-NA	-2.58	120.49	126.40
33	b	603	BCR	C16-C15-C14	2.58	128.75	123.47
28	n	314	CLA	CHA-C1A-NA	-2.58	120.50	126.40
28	1	306	CLA	CHA-C1A-NA	-2.58	120.50	126.40
28	c	504	CLA	CHA-C1A-NA	-2.58	120.50	126.40
28	n	315	CLA	CHA-C1A-NA	-2.58	120.50	126.40
31	Y	322	0UR	O42-C2-C3	-2.58	115.95	120.66
31	Y	317	0UR	C10-C11-C12	2.58	130.99	127.31
29	N	308	CHL	OMC-CMC-C2C	-2.57	119.87	125.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	A	411	CLA	CHA-C1A-NA	-2.57	120.50	126.40
28	C	513	CLA	CHA-C1A-NA	-2.57	120.50	126.40
42	c	527	LHG	O6-P-O5	-2.57	99.01	109.07
28	C	511	CLA	CHA-C1A-NA	-2.57	120.51	126.40
31	g	317	0UR	C28-C19-C32	2.57	116.03	111.42
29	n	309	CHL	CHA-C1A-NA	-2.57	120.51	126.40
30	y	319	0IE	O29-C20-C3	-2.57	104.32	111.03
28	V	316	CLA	CHA-C1A-NA	-2.57	120.51	126.40
28	y	308	CLA	CAC-C3C-C4C	2.57	128.15	124.81
28	B	601	CLA	CHA-C1A-NA	-2.57	120.51	126.40
38	a	417	LMG	O7-C10-C11	2.57	117.04	111.50
31	V	319	0UR	O39-C25-C24	-2.57	104.70	109.80
29	V	302	CHL	O2A-C1-C2	2.57	115.39	108.64
28	B	606	CLA	O2A-C1-C2	2.57	115.39	108.64
28	u	408	CLA	CHA-C1A-NA	-2.57	120.52	126.40
45	e	101	HEM	CHD-C4C-NC	-2.57	121.66	124.44
29	S	302	CHL	C4A-NA-C1A	2.57	107.86	106.71
28	S	310	CLA	CHB-C1B-NB	2.57	126.97	124.26
31	v	317	0UR	C36-C28-C29	-2.57	104.58	109.44
31	U	419	0UR	C14-C15-C16	2.57	130.97	127.31
28	b	608	CLA	CHA-C1A-NA	-2.56	120.53	126.40
33	H	101	BCR	C15-C16-C17	2.56	128.72	123.47
28	0	309	CLA	CHA-C1A-NA	-2.56	120.53	126.40
30	Y	321	0IE	C44-C24-C25	-2.56	104.59	109.44
28	1	311	CLA	CHA-C1A-NA	-2.56	120.53	126.40
28	S	304	CLA	CHA-C1A-NA	-2.56	120.54	126.40
28	1	302	CLA	CHA-C1A-NA	-2.56	120.54	126.40
28	0	304	CLA	CHA-C1A-NA	-2.56	120.55	126.40
29	u	406	CHL	CHA-C1A-NA	-2.56	120.55	126.40
28	S	314	CLA	C4A-NA-C1A	2.56	107.86	106.71
41	G	302	DGD	O6D-C5D-C6D	2.56	111.82	106.67
31	U	419	0UR	O42-C2-C3	-2.56	115.99	120.66
28	1	304	CLA	CHA-C1A-NA	-2.55	120.55	126.40
28	c	505	CLA	CHA-C1A-NA	-2.55	120.55	126.40
28	y	310	CLA	CHA-C1A-NA	-2.55	120.55	126.40
28	Y	310	CLA	CHA-C1A-NA	-2.55	120.55	126.40
28	S	313	CLA	CHA-C1A-NA	-2.55	120.56	126.40
30	1	314	0IE	C10-C9-C8	-2.55	118.25	123.47
31	u	420	0UR	O40-C30-C29	-2.55	104.29	110.74
29	v	310	CHL	CHA-C1A-NA	-2.55	120.56	126.40
28	D	410	CLA	CHC-C4B-NB	-2.55	121.56	124.26
31	v	317	0UR	C17-C16-C15	-2.55	115.03	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	v	315	CLA	CHA-C1A-NA	-2.55	120.56	126.40
28	n	316	CLA	C4A-NA-C1A	2.55	107.85	106.71
28	B	618	CLA	CHA-C1A-NA	-2.55	120.57	126.40
28	U	411	CLA	CHA-C1A-NA	-2.55	120.57	126.40
29	G	311	CHL	CHA-C1A-NA	-2.55	120.57	126.40
29	v	308	CHL	CHA-C1A-NA	-2.55	120.57	126.40
28	v	312	CLA	CHA-C1A-NA	-2.54	120.57	126.40
28	U	407	CLA	CHA-C1A-NA	-2.54	120.57	126.40
28	V	315	CLA	CHA-C1A-NA	-2.54	120.57	126.40
31	V	319	0UR	C28-C19-C18	-2.54	109.49	112.70
28	n	307	CLA	CHA-C1A-NA	-2.54	120.58	126.40
29	v	307	CHL	CAC-C3C-C4C	2.54	128.11	124.81
28	0	306	CLA	CHA-C1A-NA	-2.54	120.58	126.40
32	U	418	LUT	C35-C34-C33	2.54	130.94	127.31
29	V	312	CHL	CHA-C1A-NA	-2.54	120.58	126.40
28	N	312	CLA	CHA-C1A-NA	-2.54	120.58	126.40
28	Y	306	CLA	CHA-C1A-NA	-2.54	120.58	126.40
31	Y	322	0UR	O39-C25-C26	-2.54	104.23	109.68
28	0	311	CLA	CHA-C1A-NA	-2.54	120.59	126.40
46	s	319	NEX	C31-C30-C29	2.54	130.93	127.31
28	C	503	CLA	CHA-C1A-NA	-2.54	120.59	126.40
29	S	308	CHL	C4A-NA-C1A	2.54	107.85	106.71
38	A	413	LMG	C1-O6-C5	2.54	118.67	113.69
29	s	307	CHL	CHA-C1A-NA	-2.53	120.59	126.40
29	n	312	CHL	CHA-C1A-NA	-2.53	120.59	126.40
28	y	304	CLA	CHA-C1A-NA	-2.53	120.60	126.40
31	1	316	0UR	C20-C7-C6	-2.53	114.09	118.08
28	c	513	CLA	CHA-C1A-NA	-2.53	120.60	126.40
28	C	510	CLA	C4A-NA-C1A	2.53	107.84	106.71
28	D	409	CLA	CHA-C1A-NA	-2.53	120.60	126.40
28	V	314	CLA	CHA-C1A-NA	-2.53	120.60	126.40
31	V	319	0UR	C14-C15-C16	2.53	130.92	127.31
28	C	508	CLA	CHA-C1A-NA	-2.53	120.60	126.40
28	A	407	CLA	CHA-C1A-NA	-2.53	120.61	126.40
29	G	317	CHL	CHC-C1C-NC	2.53	128.04	124.20
46	v	320	NEX	C27-C28-C29	-2.53	121.61	125.53
29	N	310	CHL	CHA-C1A-NA	-2.53	120.61	126.40
28	y	309	CLA	CHA-C1A-NA	-2.53	120.61	126.40
28	y	314	CLA	CHA-C1A-NA	-2.53	120.61	126.40
29	N	303	CHL	CHA-C1A-NA	-2.53	120.61	126.40
41	c	524	DGD	O4E-C4E-C3E	-2.53	104.51	110.35
29	g	316	CHL	C7-C6-C5	2.53	120.22	113.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	C	519	CLA	CHA-C1A-NA	-2.52	120.62	126.40
41	a	409	DGD	O1G-C1A-C2A	2.52	119.83	111.91
28	b	606	CLA	CHA-C1A-NA	-2.52	120.62	126.40
31	y	317	0UR	O57-C45-C46	-2.52	114.75	123.58
43	C	518	LMN	CCS-OCB-CCQ	2.52	124.21	117.96
31	S	315	0UR	C36-C28-C38	-2.52	104.17	107.89
31	1	316	0UR	C4-C3-C2	2.52	122.24	120.08
41	c	524	DGD	O6E-C1E-C2E	2.52	115.68	110.35
28	N	313	CLA	CHC-C4B-NB	-2.52	121.59	124.26
29	u	409	CHL	CHA-C1A-NA	-2.52	120.63	126.40
28	B	612	CLA	CHA-C1A-NA	-2.52	120.63	126.40
29	n	311	CHL	CHA-C1A-NA	-2.52	120.63	126.40
29	v	307	CHL	C3B-C4B-NB	-2.52	108.18	110.52
28	y	313	CLA	C4A-NA-C1A	2.52	107.84	106.71
28	g	311	CLA	CHA-C1A-NA	-2.52	120.63	126.40
29	s	310	CHL	CHA-C1A-NA	-2.52	120.64	126.40
28	C	512	CLA	CHA-C1A-NA	-2.52	120.64	126.40
33	T	101	BCR	C15-C16-C17	2.52	128.63	123.47
28	y	305	CLA	CHA-C1A-NA	-2.51	120.64	126.40
28	Y	314	CLA	CHA-C1A-NA	-2.51	120.64	126.40
28	N	315	CLA	CHA-C1A-NA	-2.51	120.64	126.40
28	v	313	CLA	CHA-C1A-NA	-2.51	120.64	126.40
28	G	308	CLA	CAA-CBA-CGA	-2.51	105.91	113.25
28	g	304	CLA	CHA-C1A-NA	-2.51	120.64	126.40
38	J	102	LMG	O7-C10-C11	2.51	116.91	111.50
29	G	317	CHL	C5-C3-C2	2.51	126.20	121.12
31	Y	322	0UR	C9-C8-C7	2.51	130.89	127.31
28	n	313	CLA	CHA-C1A-NA	-2.51	120.65	126.40
28	y	312	CLA	C4A-NA-C1A	2.51	107.83	106.71
28	A	410	CLA	CHA-C1A-NA	-2.51	120.65	126.40
28	s	305	CLA	CHA-C1A-NA	-2.51	120.65	126.40
47	S	317	XAT	C28-C29-C30	2.51	122.79	118.94
29	n	305	CHL	CHA-C1A-NA	-2.51	120.66	126.40
31	u	420	0UR	C36-C28-C19	2.51	113.34	109.55
28	N	314	CLA	C5-C3-C2	2.51	126.19	121.12
28	b	616	CLA	CHC-C4B-NB	-2.51	121.60	124.26
31	0	313	0UR	O39-C25-C24	2.50	114.78	109.80
28	v	313	CLA	C4A-NA-C1A	2.50	107.83	106.71
28	a	402	CLA	CHA-C1A-NA	-2.50	120.67	126.40
28	g	306	CLA	CHA-C1A-NA	-2.50	120.67	126.40
38	m	101	LMG	O1-C7-C8	-2.50	104.86	110.90
28	0	307	CLA	CHA-C1A-NA	-2.50	120.67	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	s	303	CHL	CHC-C4B-NB	-2.50	121.61	124.26
29	g	310	CHL	CMD-C2D-C1D	2.50	129.12	124.71
28	c	514	CLA	CHA-C1A-NA	-2.50	120.68	126.40
28	B	602	CLA	CHA-C1A-NA	-2.50	120.68	126.40
28	G	315	CLA	C4A-NA-C1A	2.50	107.83	106.71
29	0	310	CHL	CHA-C1A-NA	-2.50	120.68	126.40
29	U	408	CHL	CHA-C1A-NA	-2.50	120.68	126.40
29	1	310	CHL	CHA-C1A-NA	-2.50	120.68	126.40
29	s	303	CHL	CHA-C1A-NA	-2.50	120.68	126.40
43	u	401	LMN	CBR-CCM-CBT	-2.49	103.50	109.40
41	c	524	DGD	O6D-C1D-O3G	2.49	115.88	109.97
42	D	405	LHG	O7-C7-O9	-2.49	117.68	123.70
33	c	509	BCR	C4-C5-C6	-2.49	119.11	122.73
28	B	609	CLA	CHA-C1A-NA	-2.49	120.69	126.40
38	c	502	LMG	O4-C4-C3	-2.49	104.59	110.35
31	G	319	0UR	C36-C28-C19	2.49	113.31	109.55
28	N	304	CLA	CHD-C4C-NC	2.49	128.12	124.20
46	G	321	NEX	C39-C29-C28	2.49	122.00	118.08
28	1	303	CLA	CMB-C2B-C1B	2.49	129.16	125.37
28	B	619	CLA	CHA-C1A-NA	-2.49	120.70	126.40
28	g	306	CLA	CHC-C4B-NB	-2.49	121.62	124.26
31	y	317	0UR	O39-C25-C24	-2.49	104.86	109.80
30	0	312	0IE	C33-C34-C35	2.49	113.71	110.30
37	c	523	SQD	O6-C44-C45	-2.48	104.90	110.90
29	V	311	CHL	CAA-C2A-C1A	-2.48	103.83	111.97
31	Y	318	0UR	C9-C8-C7	2.48	130.85	127.31
28	S	311	CLA	CHA-C1A-NA	-2.48	120.71	126.40
46	n	302	NEX	C12-C13-C14	2.48	122.75	118.94
28	Y	309	CLA	CHA-C1A-NA	-2.48	120.71	126.40
41	c	517	DGD	O1G-C1A-C2A	2.48	119.70	111.91
28	c	506	CLA	CHC-C4B-NB	-2.48	121.63	124.26
43	G	304	LMN	CBQ-CCM-CBS	-2.48	103.53	109.40
28	B	621	CLA	CHA-C1A-NA	-2.48	120.72	126.40
29	N	306	CHL	OMC-CMC-C2C	-2.48	120.08	125.69
29	n	308	CHL	CHD-C4C-NC	-2.48	120.31	124.20
45	E	101	HEM	CHC-C4B-NB	-2.47	121.73	124.42
33	k	102	BCR	C11-C10-C9	2.47	130.84	127.31
28	B	605	CLA	CHA-C1A-NA	-2.47	120.73	126.40
30	1	314	0IE	C6-C7-C8	-2.47	115.15	118.94
28	N	314	CLA	CHC-C4B-NB	-2.47	121.64	124.26
43	Y	302	LMN	CBR-CCM-CBT	-2.47	103.55	109.40
43	n	322	LMN	OBX-CCF-CCQ	2.47	114.95	109.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	U	415	CLA	CHA-C1A-NA	-2.47	120.75	126.40
28	u	416	CLA	CHA-C1A-NA	-2.47	120.75	126.40
41	A	417	DGD	C2G-O2G-C1B	-2.46	111.72	117.79
28	U	414	CLA	CMB-C2B-C3B	-2.46	120.62	126.59
29	G	311	CHL	CHD-C1D-C2D	2.46	130.65	125.48
28	Y	311	CLA	C3B-C2B-C1B	2.46	110.14	107.16
41	g	302	DGD	C2G-O2G-C1B	-2.46	111.73	117.79
46	V	323	NEX	C28-C29-C30	2.46	122.72	118.94
28	s	314	CLA	CHA-C1A-NA	-2.46	120.76	126.40
29	v	307	CHL	CBA-CAA-C2A	-2.46	106.60	113.86
28	V	316	CLA	CHC-C4B-NB	-2.46	121.65	124.26
33	b	602	BCR	C37-C22-C23	2.46	121.95	118.08
28	G	308	CLA	C1-O2A-CGA	2.46	122.90	116.44
29	N	302	CHL	C1D-CHD-C4C	-2.46	120.75	126.06
28	b	612	CLA	CHA-C1A-NA	-2.46	120.77	126.40
28	g	312	CLA	CHC-C1C-NC	2.46	127.93	124.20
31	v	317	0UR	C28-C19-C32	2.46	115.82	111.42
46	g	319	NEX	C28-C29-C30	2.46	122.71	118.94
31	0	314	0UR	C43-C3-C4	-2.45	122.05	125.02
28	U	416	CLA	C4A-NA-C1A	2.45	107.81	106.71
28	C	513	CLA	C5-C3-C2	2.45	126.08	121.12
28	Y	313	CLA	CHD-C1D-C2D	2.45	130.62	125.48
41	C	516	DGD	C2G-O2G-C1B	-2.45	111.76	117.79
28	b	601	CLA	CHC-C4B-NB	-2.45	121.66	124.26
33	d	403	BCR	C34-C9-C8	2.45	121.94	118.08
29	V	306	CHL	CHA-C1A-NA	-2.45	120.79	126.40
38	c	502	LMG	O6-C5-C4	2.45	114.14	109.69
28	0	301	CLA	CHC-C4B-NB	-2.45	121.67	124.26
33	k	102	BCR	C15-C14-C13	2.45	130.80	127.31
31	G	318	0UR	O40-C30-C29	-2.45	104.56	110.74
28	N	314	CLA	CHA-C1A-NA	-2.45	120.80	126.40
28	1	306	CLA	CHC-C4B-NB	-2.45	121.67	124.26
31	Y	317	0UR	C20-C7-C6	2.44	121.93	118.08
43	n	322	LMN	CBQ-CCM-CBT	-2.44	103.61	109.40
28	Y	305	CLA	CHC-C4B-NB	-2.44	121.67	124.26
31	Y	318	0UR	C14-C15-C16	2.44	130.80	127.31
32	u	419	LUT	C35-C34-C33	2.44	130.79	127.31
33	C	502	BCR	C35-C13-C14	-2.44	119.50	122.92
29	V	311	CHL	CHA-C1A-NA	-2.44	120.81	126.40
29	n	308	CHL	CMD-C2D-C1D	2.44	129.01	124.71
41	c	524	DGD	O1G-C1A-O1A	-2.44	117.44	123.59
43	n	322	LMN	CCS-CCW-CCU	2.44	115.07	110.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	N	307	CHL	C4A-NA-C1A	2.44	107.80	106.71
33	C	507	BCR	C37-C22-C23	2.44	121.91	118.08
28	B	622	CLA	C1-O2A-CGA	2.43	122.83	116.44
38	a	417	LMG	O1-C7-C8	-2.43	105.03	110.90
28	U	414	CLA	OBD-CAD-C3D	2.43	134.37	128.52
46	G	321	NEX	C32-C33-C34	2.43	122.67	118.94
29	s	303	CHL	O2A-C1-C2	2.43	115.02	108.64
28	b	610	CLA	CHC-C4B-NB	-2.43	121.69	124.26
30	y	319	0IE	O40-C34-C33	-2.43	104.98	109.80
41	c	524	DGD	O3E-C3E-C4E	-2.42	104.74	110.35
31	Y	323	0UR	C36-C28-C29	-2.42	104.85	109.44
28	v	305	CLA	CHC-C4B-NB	-2.42	121.69	124.26
38	K	101	LMG	C7-O1-C1	2.42	118.47	113.74
28	b	617	CLA	CHC-C4B-NB	-2.42	121.69	124.26
38	c	502	LMG	O9-C10-C11	-2.42	114.29	123.73
29	S	309	CHL	CHA-C1A-NA	-2.42	120.86	126.40
29	v	311	CHL	CHA-C1A-NA	-2.42	120.86	126.40
31	y	318	0UR	C13-C12-C11	2.42	122.65	118.94
29	N	303	CHL	CAA-C2A-C1A	-2.42	104.05	111.97
43	n	322	LMN	OCB-CCQ-CCF	-2.42	102.83	109.45
33	K	104	BCR	C2-C1-C6	2.41	114.20	110.48
28	0	301	CLA	CHD-C1D-C2D	2.41	130.54	125.48
31	u	420	0UR	C29-C30-C31	2.41	114.49	111.74
28	G	313	CLA	CHD-C1D-C2D	2.41	130.53	125.48
30	y	319	0IE	C15-C14-C13	-2.41	115.71	123.22
31	G	319	0UR	C36-C28-C38	-2.41	104.35	107.89
28	U	414	CLA	CMD-C2D-C1D	2.40	128.95	124.71
28	B	612	CLA	C4A-NA-C1A	2.40	107.79	106.71
28	u	418	CLA	C4A-NA-C1A	2.40	107.79	106.71
46	s	319	NEX	C30-C31-C32	2.40	130.71	123.22
46	g	319	NEX	C5-C4-C3	2.40	114.59	111.75
28	B	605	CLA	C4A-NA-C1A	2.40	107.78	106.71
29	Y	307	CHL	C4A-NA-C1A	2.40	107.78	106.71
28	c	510	CLA	CHC-C4B-NB	-2.40	121.72	124.26
28	G	308	CLA	CHB-C1B-NB	2.40	126.79	124.26
28	c	521	CLA	CHA-C1A-NA	-2.40	120.91	126.40
29	v	304	CHL	CHA-C1A-NA	-2.40	120.91	126.40
29	v	303	CHL	CHC-C1C-NC	2.39	127.84	124.20
29	S	306	CHL	C3B-C4B-NB	-2.39	108.29	110.52
31	Y	318	0UR	O39-C25-C24	-2.39	105.05	109.80
28	S	310	CLA	C4-C3-C5	-2.39	111.25	115.27
33	c	509	BCR	C35-C13-C14	-2.39	119.57	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	N	316	0UR	C36-C28-C38	-2.39	104.37	107.89
33	T	101	BCR	C35-C13-C14	-2.39	119.58	122.92
37	z	101	SQD	O6-C44-C45	2.39	116.66	110.90
43	n	322	LMN	CCU-CCO-CCD	-2.39	105.98	110.24
28	G	306	CLA	CHA-C1A-NA	-2.39	120.93	126.40
43	v	301	LMN	CBR-CCM-CBT	-2.39	103.75	109.40
28	G	306	CLA	CAA-C2A-C1A	-2.39	104.16	111.97
29	s	302	CHL	C2C-C3C-C4C	2.38	108.19	106.49
31	U	419	0UR	C23-C1-C27	-2.38	112.85	119.35
33	D	403	BCR	C11-C10-C9	2.38	130.71	127.31
38	K	101	LMG	O2-C2-C1	2.38	115.83	110.05
33	B	603	BCR	C15-C16-C17	2.38	128.35	123.47
29	V	311	CHL	C4D-CHA-C1A	2.38	124.14	121.25
28	G	309	CLA	CHC-C4B-NB	-2.38	121.74	124.26
33	b	604	BCR	C11-C10-C9	2.38	130.70	127.31
38	d	410	LMG	C8-O7-C10	2.38	123.64	117.79
38	a	414	LMG	O1-C7-C8	2.38	116.63	110.90
28	b	608	CLA	C4-C3-C2	-2.38	117.58	123.68
33	k	101	BCR	C35-C13-C14	-2.37	119.60	122.92
33	C	507	BCR	C11-C10-C9	2.37	130.69	127.31
28	S	304	CLA	C4A-NA-C1A	2.37	107.77	106.71
28	0	303	CLA	CHD-C1D-ND	-2.37	122.28	124.45
29	N	302	CHL	CHC-C4B-NB	-2.37	121.75	124.26
28	1	303	CLA	CAA-CBA-CGA	-2.37	106.23	112.51
31	Y	322	0UR	O40-C30-C31	-2.37	105.18	110.53
30	n	319	0IE	C41-C28-C27	-2.37	118.50	123.56
43	n	322	LMN	OCB-CCS-OBZ	-2.36	104.07	110.67
33	A	401	BCR	C35-C13-C14	-2.36	119.61	122.92
31	Y	323	0UR	C43-C3-C4	-2.36	122.16	125.02
28	u	415	CLA	CHC-C4B-NB	-2.36	121.76	124.26
33	C	507	BCR	C19-C18-C17	2.36	122.56	118.94
45	e	101	HEM	CAC-C3C-C4C	2.36	130.60	124.90
28	1	308	CLA	CHC-C4B-NB	-2.36	121.76	124.26
29	Y	307	CHL	CHC-C4B-NB	-2.36	121.76	124.26
33	k	102	BCR	C16-C15-C14	2.36	128.30	123.47
43	N	320	LMN	C1-O5-C5	2.36	118.32	113.69
46	n	321	NEX	C32-C33-C34	2.36	122.56	118.94
28	n	306	CLA	CHC-C4B-NB	-2.36	121.76	124.26
41	c	524	DGD	O4E-C4E-C5E	2.36	115.15	109.30
28	N	304	CLA	C3B-C4B-NB	-2.36	108.33	110.52
28	v	306	CLA	CHC-C4B-NB	-2.36	121.76	124.26
33	c	509	BCR	C33-C5-C6	2.36	127.17	124.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	N	314	CLA	CHD-C1D-C2D	2.36	130.42	125.48
29	g	316	CHL	CAA-CBA-CGA	2.35	120.13	113.25
29	v	304	CHL	C5-C3-C2	2.35	125.88	121.12
28	B	610	CLA	CHC-C4B-NB	-2.35	121.77	124.26
29	N	303	CHL	CHC-C4B-NB	-2.35	121.77	124.26
28	0	311	CLA	CHC-C4B-NB	-2.35	121.77	124.26
46	n	321	NEX	C19-C9-C10	-2.35	119.63	122.92
30	Y	321	0IE	C5-C4-C3	2.35	129.83	127.00
28	g	313	CLA	CHC-C1C-C2C	-2.35	120.20	126.73
28	B	607	CLA	CHC-C4B-NB	-2.35	121.77	124.26
29	u	410	CHL	C4A-NA-C1A	2.35	107.76	106.71
28	n	314	CLA	CHC-C4B-NB	-2.35	121.77	124.26
28	g	313	CLA	CAA-C2A-C3A	-2.35	106.35	112.78
31	s	316	0UR	C24-C25-C26	-2.34	107.09	110.30
28	u	412	CLA	CHC-C4B-NB	-2.34	121.78	124.26
32	U	418	LUT	C15-C35-C34	2.34	128.27	123.47
31	y	318	0UR	C29-C30-C31	-2.34	109.08	111.74
31	y	322	0UR	C22-C16-C17	-2.34	114.39	118.08
28	0	304	CLA	CHC-C4B-NB	-2.34	121.78	124.26
41	c	515	DGD	O6D-C5D-C6D	2.34	111.39	106.67
41	a	409	DGD	O6E-C5E-C4E	2.34	113.94	109.69
41	C	516	DGD	O6D-C5D-C6D	2.34	111.39	106.67
33	k	102	BCR	C35-C13-C14	-2.34	119.65	122.92
28	N	305	CLA	CHD-C1D-C2D	2.34	130.38	125.48
31	y	317	0UR	C43-C3-C2	2.34	122.15	116.66
31	1	312	0UR	O40-C30-C29	-2.34	104.83	110.74
31	U	419	0UR	C10-C9-C8	2.33	128.26	123.47
47	v	319	XAT	C36-C21-C22	-2.33	104.93	108.98
28	Y	310	CLA	CHC-C4B-NB	-2.33	121.79	124.26
28	s	312	CLA	CHC-C4B-NB	-2.33	121.79	124.26
43	V	303	LMN	CBR-CCM-CBQ	2.33	114.33	109.97
28	v	315	CLA	CHC-C4B-NB	-2.33	121.79	124.26
29	N	303	CHL	O2A-C1-C2	2.33	114.76	108.64
29	v	310	CHL	CHC-C4B-NB	-2.33	121.79	124.26
28	y	308	CLA	CHD-C1D-ND	-2.33	122.31	124.45
31	s	316	0UR	O40-C30-C29	-2.33	104.85	110.74
38	c	502	LMG	O6-C1-O1	-2.33	104.46	109.97
28	g	305	CLA	CHC-C4B-NB	-2.33	121.79	124.26
29	N	307	CHL	CHC-C4B-NB	-2.33	121.79	124.26
31	1	315	0UR	C36-C28-C29	-2.33	105.03	109.44
31	S	315	0UR	C36-C28-C29	-2.33	105.03	109.44
31	G	319	0UR	O40-C30-C29	-2.33	104.86	110.74

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	n	311	CHL	CHC-C4B-NB	-2.33	121.79	124.26
29	V	309	CHL	C3B-C4B-NB	-2.33	108.36	110.52
38	d	410	LMG	O6-C1-C2	-2.33	105.42	110.35
29	n	311	CHL	CHD-C1D-C2D	2.33	130.36	125.48
31	N	316	0UR	O40-C30-C29	-2.32	104.87	110.74
28	y	310	CLA	C4A-NA-C1A	2.32	107.75	106.71
28	s	315	CLA	CHC-C4B-NB	-2.32	121.80	124.26
29	n	304	CHL	C2C-C3C-C4C	2.32	108.14	106.49
28	0	307	CLA	CAC-C3C-C2C	-2.32	123.56	127.53
31	v	317	0UR	O40-C30-C29	-2.32	104.87	110.74
30	Y	321	0IE	C44-C24-C43	-2.32	104.47	107.89
33	b	604	BCR	C35-C13-C14	-2.32	119.67	122.92
28	B	613	CLA	CHC-C4B-NB	-2.32	121.80	124.26
28	s	314	CLA	C1-O2A-CGA	2.32	122.53	116.44
32	u	419	LUT	C11-C10-C9	2.32	130.62	127.31
41	a	409	DGD	O3G-C1D-C2D	2.32	111.92	108.30
28	G	306	CLA	O2A-C1-C2	2.32	114.72	108.64
31	g	317	0UR	O40-C30-C29	-2.32	104.89	110.74
28	Y	313	CLA	CMD-C2D-C1D	2.31	128.79	124.71
28	0	303	CLA	O2D-CGD-CBD	2.31	115.38	111.27
28	1	302	CLA	CHC-C4B-NB	-2.31	121.81	124.26
28	1	302	CLA	C4A-NA-C1A	2.31	107.75	106.71
29	n	304	CHL	C4A-NA-C1A	2.31	107.75	106.71
28	1	303	CLA	CHD-C1D-ND	-2.31	122.33	124.45
29	v	309	CHL	O2D-CGD-CBD	2.31	115.37	111.27
28	a	402	CLA	CHD-C1D-C2D	2.31	130.32	125.48
31	s	316	0UR	C29-C30-C31	2.31	114.37	111.74
31	1	315	0UR	O40-C30-C29	-2.31	104.91	110.74
28	S	311	CLA	CHD-C1D-C2D	2.31	130.32	125.48
29	V	302	CHL	C7-C6-C5	-2.31	107.10	113.36
29	N	302	CHL	OMC-CMC-C2C	-2.31	120.47	125.69
33	C	502	BCR	C12-C13-C14	2.30	122.48	118.94
29	N	302	CHL	CHD-C4C-C3C	-2.30	121.45	124.84
28	G	314	CLA	CHC-C4B-NB	-2.30	121.82	124.26
28	Y	310	CLA	C4A-NA-C1A	2.30	107.74	106.71
28	S	310	CLA	CAA-C2A-C1A	-2.30	104.42	111.97
31	N	316	0UR	C24-C25-C26	-2.30	107.15	110.30
47	N	318	XAT	C8-C9-C10	2.30	122.47	118.94
28	y	310	CLA	CHC-C4B-NB	-2.30	121.82	124.26
29	S	306	CHL	C1-O2A-CGA	2.30	122.48	116.44
41	a	405	DGD	O6D-C5D-C6D	2.30	111.31	106.67
28	C	503	CLA	CHD-C1D-C2D	2.30	130.31	125.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	b	612	CLA	C4A-NA-C1A	2.30	107.74	106.71
31	U	419	0UR	C9-C8-C7	2.30	130.59	127.31
33	d	403	BCR	C11-C10-C9	2.30	130.59	127.31
46	G	321	NEX	C19-C9-C10	-2.30	119.70	122.92
28	S	310	CLA	C7-C6-C5	-2.30	107.12	113.36
28	Y	303	CLA	CHB-C1B-NB	2.30	126.69	124.26
28	c	520	CLA	CHC-C4B-NB	-2.30	121.83	124.26
28	V	307	CLA	CHD-C1D-C2D	2.30	130.29	125.48
28	N	314	CLA	CAA-C2A-C3A	-2.29	106.49	112.78
28	Y	316	CLA	CHC-C4B-NB	-2.29	121.83	124.26
46	G	320	NEX	C5-C4-C3	2.29	114.46	111.75
30	n	319	0IE	C37-C36-C35	-2.29	110.11	114.36
29	V	302	CHL	C3D-C4D-ND	-2.29	106.53	110.24
34	A	402	PHO	C1C-C2C-C3C	-2.29	106.70	108.61
28	1	303	CLA	CHA-C4D-ND	2.29	137.29	132.50
28	g	304	CLA	CHD-C1D-C2D	2.29	130.28	125.48
33	C	507	BCR	C15-C14-C13	2.29	130.58	127.31
31	G	319	0UR	C28-C19-C32	2.29	115.52	111.42
33	b	603	BCR	C19-C18-C17	2.29	122.45	118.94
28	0	305	CLA	CHC-C4B-NB	-2.29	121.83	124.26
33	K	102	BCR	C35-C13-C14	-2.29	119.72	122.92
31	Y	317	0UR	C48-C47-C46	2.29	130.75	125.85
33	B	604	BCR	C35-C13-C14	-2.29	119.72	122.92
45	E	101	HEM	C3B-C2B-C1B	2.29	108.18	106.49
28	g	312	CLA	CHD-C1D-C2D	2.29	130.28	125.48
33	h	101	BCR	C37-C22-C23	2.29	121.68	118.08
41	c	516	DGD	C1E-C2E-C3E	2.29	114.75	110.00
31	S	315	0UR	O40-C30-C29	-2.28	104.97	110.74
28	G	312	CLA	C4A-NA-C1A	2.28	107.73	106.71
29	y	315	CHL	C4A-NA-C1A	2.28	107.73	106.71
31	y	318	0UR	C48-C47-C46	2.28	130.74	125.85
28	1	309	CLA	CHC-C4B-NB	-2.28	121.84	124.26
28	C	505	CLA	C4A-NA-C1A	2.28	107.73	106.71
31	y	318	0UR	O39-C25-C26	-2.28	104.78	109.68
43	U	420	LMN	OAR-CCO-CCU	-2.28	105.07	110.35
28	0	308	CLA	CHC-C4B-NB	-2.28	121.84	124.26
47	s	318	XAT	C8-C9-C10	2.28	122.44	118.94
28	N	311	CLA	C1-O2A-CGA	-2.28	110.46	116.44
28	S	313	CLA	CHC-C4B-NB	-2.28	121.84	124.26
33	t	101	BCR	C11-C10-C9	2.28	130.56	127.31
41	C	520	DGD	O6D-C5D-C6D	2.28	111.27	106.67
28	s	313	CLA	O2D-CGD-CBD	2.28	115.31	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	V	309	CHL	O2D-CGD-CBD	2.28	115.31	111.27
30	V	320	0IE	O40-C34-C35	-2.28	104.80	109.68
32	U	418	LUT	C19-C9-C8	2.28	121.66	118.08
28	u	417	CLA	C1-C2-C3	2.28	129.98	126.04
41	b	621	DGD	O1G-C1A-C2A	2.27	119.05	111.91
43	n	322	LMN	CCL-CCH-CCQ	-2.27	104.49	109.68
29	v	307	CHL	O2D-CGD-CBD	2.27	115.30	111.27
28	G	312	CLA	CAA-C2A-C3A	2.27	118.99	112.78
43	U	420	LMN	O4-C4-C5	-2.27	103.23	109.45
28	1	303	CLA	C3D-C2D-C1D	-2.27	102.73	105.83
28	G	312	CLA	CHC-C4B-NB	-2.27	121.86	124.26
28	v	313	CLA	CHC-C4B-NB	-2.27	121.86	124.26
28	Y	313	CLA	CMC-C2C-C3C	-2.27	119.96	126.12
34	a	404	PHO	C1C-C2C-C3C	-2.27	106.72	108.61
28	s	311	CLA	CHC-C4B-NB	-2.27	121.86	124.26
31	1	312	0UR	C24-C25-C26	-2.27	107.20	110.30
42	c	527	LHG	O7-C5-C4	-2.27	100.20	108.40
28	V	317	CLA	CHD-C1D-C2D	2.27	130.23	125.48
28	g	311	CLA	CHC-C4B-NB	-2.27	121.86	124.26
31	G	319	0UR	C43-C3-C2	2.26	121.98	116.66
28	U	410	CLA	C4A-NA-C1A	2.26	107.72	106.71
30	Y	321	0IE	C33-C34-C35	-2.26	107.21	110.30
28	U	415	CLA	CHD-C1D-C2D	2.26	130.22	125.48
29	y	307	CHL	C2C-C3C-C4C	2.26	108.10	106.49
30	1	314	0IE	C38-C32-C31	2.26	112.94	109.71
37	B	617	SQD	O47-C45-C46	-2.26	100.22	108.40
31	0	313	0UR	C22-C16-C17	2.26	121.63	118.08
28	u	405	CLA	CHC-C4B-NB	-2.26	121.87	124.26
28	y	304	CLA	CHD-C1D-C2D	2.26	130.21	125.48
41	c	524	DGD	O2D-C2D-C1D	-2.26	104.57	110.05
31	y	322	0UR	C6-C7-C8	2.25	122.40	118.94
33	c	509	BCR	C19-C18-C17	2.25	122.40	118.94
43	V	301	LMN	CBR-CCM-CBQ	2.25	114.19	109.97
28	u	407	CLA	CHC-C4B-NB	-2.25	121.87	124.26
32	U	418	LUT	C11-C10-C9	2.25	130.52	127.31
28	u	417	CLA	C4A-NA-C1A	2.25	107.72	106.71
31	n	318	0UR	O40-C30-C29	-2.25	105.05	110.74
37	B	615	SQD	O47-C45-C44	-2.25	100.25	108.40
29	N	302	CHL	CAC-C3C-C4C	2.25	127.73	124.81
28	y	306	CLA	CHC-C4B-NB	2.25	126.64	124.26
31	U	419	0UR	C47-C46-C45	2.25	128.65	122.92
28	G	308	CLA	C2B-C1B-NB	-2.25	108.72	110.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
41	c	518	DGD	O6D-C5D-C6D	2.25	111.20	106.67
33	C	502	BCR	C15-C14-C13	2.25	130.52	127.31
31	Y	323	0UR	C43-C3-C2	2.25	121.94	116.66
28	U	404	CLA	C5-C3-C2	2.24	125.66	121.12
28	y	303	CLA	C5-C3-C2	2.24	125.66	121.12
28	A	410	CLA	CHD-C1D-C2D	2.24	130.19	125.48
29	s	309	CHL	CAC-C3C-C4C	2.24	127.72	124.81
33	h	101	BCR	C19-C18-C17	2.24	122.38	118.94
28	b	620	CLA	CHC-C4B-NB	-2.24	121.89	124.26
30	0	312	0IE	C4-C5-C6	-2.24	116.23	123.22
31	N	316	0UR	C36-C28-C29	-2.24	105.20	109.44
28	v	315	CLA	CHD-C1D-C2D	2.24	130.17	125.48
41	G	302	DGD	O1G-C1A-C2A	2.23	118.92	111.91
28	Y	313	CLA	C2B-C1B-NB	2.23	111.73	110.23
32	y	320	LUT	C35-C34-C33	2.23	130.50	127.31
29	g	310	CHL	CHD-C1D-C2D	2.23	130.16	125.48
29	s	303	CHL	CAA-C2A-C1A	-2.23	104.66	111.97
38	J	102	LMG	O6-C1-C2	2.23	115.07	110.35
28	1	304	CLA	CHC-C4B-NB	-2.23	121.89	124.26
30	Y	319	0IE	C20-C3-C4	2.23	127.69	124.83
31	Y	318	0UR	C36-C28-C38	-2.23	104.61	107.89
31	y	323	0UR	O42-C2-C3	-2.23	116.58	120.66
29	V	311	CHL	O2D-CGD-CBD	2.23	115.23	111.27
41	c	517	DGD	O6D-C5D-C6D	2.23	111.17	106.67
43	n	322	LMN	CBP-CCF-CCQ	-2.23	106.84	113.33
29	n	309	CHL	C2C-C3C-C4C	2.23	108.08	106.49
28	G	315	CLA	CHC-C4B-NB	-2.23	121.90	124.26
28	N	312	CLA	CHC-C4B-NB	-2.23	121.90	124.26
28	C	508	CLA	C4A-NA-C1A	2.23	107.71	106.71
29	V	310	CHL	C2C-C3C-C4C	2.23	108.08	106.49
28	n	307	CLA	CHD-C1D-C2D	2.23	130.15	125.48
42	N	301	LHG	O7-C7-O9	-2.22	118.33	123.70
28	c	503	CLA	C4A-NA-C1A	2.22	107.71	106.71
33	A	401	BCR	C11-C10-C9	2.22	130.48	127.31
28	S	313	CLA	CHD-C1D-C2D	2.22	130.14	125.48
28	y	306	CLA	CBC-CAC-C3C	-2.22	106.31	112.43
31	y	317	0UR	C22-C16-C17	-2.22	114.58	118.08
29	V	302	CHL	C15-C13-C12	-2.22	100.45	112.13
28	B	618	CLA	C4A-NA-C1A	2.22	107.70	106.71
33	a	401	BCR	C11-C10-C9	2.22	130.48	127.31
28	1	307	CLA	CHC-C4B-NB	-2.22	121.91	124.26
28	s	313	CLA	C4A-NA-C1A	2.22	107.70	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	N	317	0IE	C41-C28-C27	-2.22	118.81	123.56
28	1	307	CLA	O2D-CGD-CBD	2.22	115.21	111.27
29	g	309	CHL	C4A-NA-C1A	2.22	107.70	106.71
33	a	401	BCR	C35-C13-C14	-2.22	119.82	122.92
29	s	306	CHL	C4A-NA-C1A	-2.21	105.71	106.71
29	N	303	CHL	C3B-C4B-NB	-2.21	108.46	110.52
28	Y	305	CLA	CHD-C1D-C2D	2.21	130.12	125.48
41	a	405	DGD	C2G-O2G-C1B	-2.21	112.35	117.79
33	b	603	BCR	C35-C13-C14	-2.21	119.83	122.92
30	y	321	0IE	C39-C32-C38	-2.21	101.74	108.53
28	G	316	CLA	CHC-C4B-NB	-2.21	121.92	124.26
28	S	311	CLA	CHC-C4B-NB	-2.21	121.92	124.26
29	v	307	CHL	C2B-C1B-NB	2.21	111.71	110.23
46	n	321	NEX	C11-C10-C9	2.21	130.46	127.31
28	b	609	CLA	CHC-C4B-NB	-2.21	121.92	124.26
28	u	416	CLA	CHD-C1D-C2D	2.21	130.11	125.48
28	N	315	CLA	CHC-C4B-NB	-2.21	121.92	124.26
28	S	312	CLA	C4A-NA-C1A	2.21	107.70	106.71
28	B	610	CLA	CHD-C1D-C2D	2.20	130.10	125.48
29	V	312	CHL	CHD-C1D-C2D	2.20	130.10	125.48
38	m	101	LMG	O7-C8-C7	-2.20	100.43	108.40
28	c	520	CLA	C3B-C4B-NB	-2.20	108.47	110.52
28	g	307	CLA	CHD-C1D-C2D	2.20	130.10	125.48
47	v	319	XAT	C8-C9-C10	2.20	122.32	118.94
31	g	317	0UR	C33-C32-C31	-2.20	118.85	123.56
28	0	303	CLA	CHC-C4B-NB	-2.20	121.93	124.26
30	Y	321	0IE	O42-C26-C27	-2.20	105.56	110.53
29	v	311	CHL	CHD-C1D-C2D	2.20	130.09	125.48
28	1	303	CLA	CAC-C3C-C2C	-2.20	123.77	127.53
43	U	420	LMN	CBT-OBV-CCJ	2.20	119.07	113.36
28	u	405	CLA	C4A-NA-C1A	2.20	107.69	106.71
28	y	314	CLA	CHC-C4B-NB	-2.20	121.93	124.26
43	U	420	LMN	O1-C1-C2	2.20	111.73	108.30
29	g	316	CHL	C1C-C2C-C3C	2.19	108.86	107.11
28	y	308	CLA	C3B-C2B-C1B	2.19	109.81	107.16
28	y	311	CLA	CHD-C1D-C2D	2.19	130.08	125.48
41	b	621	DGD	O3G-C1D-C2D	2.19	111.72	108.30
29	v	308	CHL	C2C-C3C-C4C	2.19	108.05	106.49
28	y	304	CLA	CHC-C4B-NB	-2.19	121.94	124.26
29	N	306	CHL	CHC-C1C-NC	2.19	127.52	124.20
28	g	314	CLA	C1D-ND-C4D	-2.19	104.78	106.33
29	N	302	CHL	CAA-C2A-C3A	-2.19	106.78	112.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	N	306	CHL	CMB-C2B-C1B	2.19	128.70	125.37
28	A	416	CLA	CHD-C1D-C2D	2.19	130.07	125.48
28	y	313	CLA	CHC-C4B-NB	-2.19	121.94	124.26
29	s	308	CHL	C4A-NA-C1A	2.19	107.69	106.71
33	b	603	BCR	C15-C14-C13	2.19	130.43	127.31
30	v	318	0IE	O40-C34-C35	-2.19	104.99	109.68
28	y	316	CLA	CHC-C4B-NB	-2.18	121.94	124.26
30	0	312	0IE	C44-C24-C43	-2.18	104.67	107.89
28	b	617	CLA	C4A-NA-C1A	2.18	107.69	106.71
28	y	303	CLA	C4A-NA-C1A	2.18	107.69	106.71
28	N	311	CLA	CHD-C1D-C2D	2.18	130.06	125.48
31	g	317	0UR	C36-C28-C38	-2.18	104.68	107.89
28	Y	311	CLA	CHA-C4D-ND	2.18	137.06	132.50
29	V	310	CHL	CHD-C1D-C2D	2.18	130.06	125.48
31	G	319	0UR	C33-C32-C31	-2.18	118.89	123.56
28	U	414	CLA	CMB-C2B-C1B	2.18	128.69	125.37
29	S	306	CHL	C3B-C2B-C1B	2.18	109.80	107.16
28	V	314	CLA	CHD-C1D-C2D	2.18	130.06	125.48
30	n	319	0IE	O40-C34-C35	-2.18	105.00	109.68
28	Y	312	CLA	CHC-C4B-NB	-2.18	121.95	124.26
33	B	604	BCR	C12-C13-C14	2.18	122.29	118.94
29	G	317	CHL	C1-O2A-CGA	2.18	122.16	116.44
33	a	401	BCR	C12-C13-C14	2.18	122.28	118.94
33	k	101	BCR	C12-C13-C14	2.18	122.28	118.94
30	1	314	0IE	O40-C34-C35	-2.18	105.00	109.68
31	U	419	0UR	O44-C45-C46	2.18	117.35	111.55
29	n	305	CHL	CAA-C2A-C3A	2.18	118.74	112.78
28	A	407	CLA	CHD-C1D-C2D	2.18	130.05	125.48
28	g	315	CLA	CHC-C4B-NB	-2.18	121.95	124.26
28	g	312	CLA	C3C-C4C-NC	-2.17	108.13	110.57
28	V	307	CLA	C2C-C1C-NC	-2.17	107.94	109.97
28	s	311	CLA	CHD-C1D-C2D	2.17	130.04	125.48
29	N	308	CHL	C2C-C3C-C4C	2.17	108.04	106.49
28	V	307	CLA	C3C-C4C-NC	-2.17	108.14	110.57
41	c	524	DGD	O6E-C1E-O5D	-2.17	104.83	109.97
28	g	305	CLA	C3B-C4B-NB	-2.17	108.50	110.52
29	G	310	CHL	C2C-C3C-C4C	2.17	108.04	106.49
28	n	313	CLA	CHD-C1D-C2D	2.17	130.03	125.48
30	S	316	0IE	O40-C34-C35	-2.17	105.02	109.68
37	z	101	SQD	O8-S-C6	-2.17	102.28	105.74
28	b	606	CLA	CHC-C4B-NB	-2.17	121.96	124.26
33	c	507	BCR	C35-C13-C14	-2.17	119.88	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	c	509	BCR	C12-C13-C14	2.17	122.27	118.94
28	N	304	CLA	C4A-NA-C1A	-2.17	105.73	106.71
28	y	310	CLA	CHD-C1D-C2D	2.17	130.03	125.48
28	S	310	CLA	C3B-C2B-C1B	2.17	109.78	107.16
28	G	306	CLA	CHD-C1D-C2D	2.17	130.03	125.48
28	U	411	CLA	CHD-C1D-C2D	2.17	130.03	125.48
31	U	419	0UR	C6-C7-C8	2.17	122.27	118.94
30	v	318	0IE	C41-C28-C27	-2.17	118.92	123.56
28	U	404	CLA	C4A-NA-C1A	2.16	107.68	106.71
33	H	101	BCR	C1-C6-C7	2.16	121.90	115.78
28	u	414	CLA	CHC-C4B-NB	-2.16	121.97	124.26
29	n	308	CHL	CHC-C4B-NB	2.16	126.55	124.26
43	c	519	LMN	CBQ-CCM-CBT	2.16	114.52	109.40
33	D	403	BCR	C35-C13-C14	-2.16	119.89	122.92
33	h	101	BCR	C35-C13-C14	-2.16	119.89	122.92
29	0	310	CHL	CHC-C4B-NB	-2.16	121.97	124.26
28	a	416	CLA	CHD-C1D-C2D	2.16	130.01	125.48
28	c	504	CLA	CHD-C1D-C2D	2.16	130.01	125.48
28	0	307	CLA	C3B-C2B-C1B	2.16	109.77	107.16
41	c	524	DGD	C1E-C2E-C3E	2.16	114.50	110.00
29	u	406	CHL	C4A-NA-C1A	2.16	107.68	106.71
39	a	412	PL9	C53-C6-C1	2.16	119.41	114.99
28	s	305	CLA	CHC-C4B-NB	-2.16	121.97	124.26
28	v	312	CLA	CHD-C1D-C2D	2.16	130.01	125.48
28	B	612	CLA	CHD-C1D-C2D	2.16	130.01	125.48
28	N	304	CLA	CHD-C1D-C2D	2.16	130.01	125.48
28	B	609	CLA	CAA-C2A-C3A	2.16	118.69	112.78
31	1	315	0UR	C43-C3-C2	2.16	121.73	116.66
28	a	403	CLA	CHD-C1D-C2D	2.16	130.00	125.48
31	1	312	0UR	C36-C28-C29	-2.16	105.35	109.44
33	B	603	BCR	C35-C13-C14	-2.16	119.90	122.92
31	g	318	0UR	C37-C23-C1	2.16	112.79	109.71
28	C	519	CLA	CHD-C1D-C2D	2.16	130.00	125.48
31	0	314	0UR	C37-C23-C24	-2.16	99.37	109.05
28	C	513	CLA	CHD-C1D-C2D	2.16	130.00	125.48
33	c	509	BCR	C1-C6-C7	2.16	121.88	115.78
28	Y	303	CLA	C7-C6-C5	2.16	119.21	113.36
28	n	317	CLA	CHC-C4B-NB	-2.15	121.98	124.26
28	V	307	CLA	CMC-C2C-C1C	2.15	128.32	125.04
29	N	302	CHL	CHD-C1D-ND	-2.15	122.47	124.45
28	n	317	CLA	O2A-C1-C2	2.15	114.29	108.64
33	C	507	BCR	C35-C13-C14	-2.15	119.91	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	0	306	CLA	CHD-C1D-C2D	2.15	130.00	125.48
31	V	319	0UR	C35-C23-C37	-2.15	101.92	108.53
28	b	620	CLA	CHD-C1D-C2D	2.15	129.99	125.48
28	u	412	CLA	CHD-C1D-C2D	2.15	129.99	125.48
38	b	625	LMG	O1-C7-C8	-2.15	105.71	110.90
46	n	302	NEX	C15-C35-C34	2.15	127.88	123.47
30	y	321	0IE	C22-C12-C11	2.15	125.94	122.92
28	d	409	CLA	C4A-NA-C1A	2.15	107.67	106.71
28	C	506	CLA	O2A-C1-C2	2.15	114.29	108.64
30	y	321	0IE	C17-C16-C15	2.15	122.24	118.94
28	C	512	CLA	CHD-C1D-C2D	2.15	129.99	125.48
28	U	412	CLA	CHD-C1D-C2D	2.15	129.99	125.48
28	s	314	CLA	CHD-C1D-C2D	2.15	129.99	125.48
29	g	316	CHL	O2D-CGD-CBD	2.15	115.09	111.27
46	N	319	NEX	C10-C11-C12	2.15	129.93	123.22
28	g	305	CLA	C4A-NA-C1A	2.15	107.67	106.71
28	n	306	CLA	C4A-NA-C1A	2.15	107.67	106.71
28	B	616	CLA	C4A-NA-C1A	2.15	107.67	106.71
28	0	311	CLA	CHD-C1D-C2D	2.15	129.98	125.48
28	y	305	CLA	CHD-C1D-C2D	2.14	129.98	125.48
28	0	309	CLA	CHD-C1D-C2D	2.14	129.97	125.48
28	G	316	CLA	CHD-C1D-C2D	2.14	129.97	125.48
33	H	101	BCR	C8-C9-C10	2.14	122.23	118.94
28	B	609	CLA	CHD-C1D-C2D	2.14	129.97	125.48
28	u	413	CLA	CHD-C1D-C2D	2.14	129.97	125.48
43	U	420	LMN	O5-C1-O1	-2.14	104.91	109.97
29	N	302	CHL	C2A-C1A-CHA	2.14	127.60	123.86
43	C	518	LMN	CBR-CCM-CBQ	2.14	113.97	109.97
28	d	409	CLA	CHD-C1D-C2D	2.14	129.96	125.48
30	Y	321	0IE	C4-C5-C6	-2.14	116.55	123.22
29	n	304	CHL	CHC-C4B-NB	-2.14	122.00	124.26
29	S	302	CHL	C2C-C3C-C4C	2.14	108.01	106.49
29	g	310	CHL	CGD-CBD-CAD	-2.14	103.81	110.73
28	A	416	CLA	C4A-NA-C1A	2.14	107.67	106.71
38	J	102	LMG	O7-C8-C9	2.14	116.13	108.40
28	N	304	CLA	C1-O2A-CGA	2.13	122.04	116.44
29	N	310	CHL	C5-C3-C2	2.13	125.44	121.12
29	N	310	CHL	C2C-C3C-C4C	2.13	108.01	106.49
41	C	520	DGD	O1G-C1A-C2A	2.13	118.60	111.91
28	c	510	CLA	C4A-NA-C1A	2.13	107.67	106.71
29	s	303	CHL	CHD-C1D-C2D	2.13	129.95	125.48
29	0	310	CHL	CHD-C1D-C2D	2.13	129.95	125.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	b	602	BCR	C35-C13-C14	-2.13	119.94	122.92
28	U	417	CLA	C4A-NA-C1A	2.13	107.66	106.71
28	y	314	CLA	C4A-NA-C1A	2.13	107.66	106.71
31	y	323	0UR	O44-C45-O57	2.13	127.61	122.93
31	Y	317	0UR	C23-C1-C27	-2.13	113.54	119.35
28	0	307	CLA	CAD-C3D-C2D	2.13	151.07	140.80
28	u	417	CLA	CHC-C4B-NB	-2.13	122.00	124.26
31	Y	322	0UR	C20-C7-C8	2.13	125.91	122.92
28	1	304	CLA	C4A-NA-C1A	2.13	107.66	106.71
28	g	312	CLA	C1D-CHD-C4C	-2.13	121.47	126.06
29	N	306	CHL	C1D-CHD-C4C	-2.13	121.47	126.06
28	a	410	CLA	CHD-C1D-C2D	2.13	129.94	125.48
29	n	308	CHL	C3C-C4C-NC	2.13	112.96	110.57
30	N	317	0IE	O40-C34-C35	-2.13	105.12	109.68
28	C	510	CLA	CHC-C4B-NB	-2.13	122.01	124.26
29	V	309	CHL	CMD-C2D-C1D	2.12	128.46	124.71
29	n	310	CHL	C4A-NA-C1A	2.12	107.66	106.71
31	G	318	0UR	C5-C4-C3	2.12	129.56	127.00
31	1	316	0UR	C37-C23-C1	2.12	112.74	109.71
28	Y	304	CLA	CHC-C4B-NB	-2.12	122.01	124.26
33	t	101	BCR	C35-C13-C14	-2.12	119.95	122.92
28	g	308	CLA	CHD-C1D-C2D	2.12	129.93	125.48
28	V	307	CLA	CHB-C1B-NB	2.12	126.50	124.26
28	V	307	CLA	C1D-ND-C4D	2.12	107.84	106.33
30	Y	321	0IE	C24-C19-C18	-2.12	110.02	112.70
38	W	202	LMG	O1-C7-C8	-2.12	105.79	110.90
31	y	317	0UR	C9-C8-C7	2.12	130.33	127.31
28	u	416	CLA	CHC-C4B-NB	-2.12	122.02	124.26
28	N	314	CLA	O2A-C1-C2	2.12	114.20	108.64
31	1	312	0UR	C43-C3-C2	2.12	121.63	116.66
28	s	305	CLA	CHD-C1D-C2D	2.12	129.92	125.48
39	a	412	PL9	C26-C27-C28	2.12	118.83	111.88
28	Y	306	CLA	O2D-CGD-CBD	2.12	115.03	111.27
29	G	317	CHL	CAA-C2A-C1A	-2.12	105.04	111.97
28	v	314	CLA	C4A-NA-C1A	2.12	107.66	106.71
31	1	315	0UR	C6-C7-C8	-2.11	115.70	118.94
28	y	306	CLA	CHB-C1B-NB	2.11	126.50	124.26
28	N	314	CLA	C3B-C4B-NB	-2.11	108.55	110.52
29	N	302	CHL	CMB-C2B-C3B	-2.11	121.47	126.59
28	b	606	CLA	C4A-NA-C1A	2.11	107.66	106.71
28	c	512	CLA	C4A-NA-C1A	2.11	107.66	106.71
29	n	312	CHL	C2C-C3C-C4C	2.11	108.00	106.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	U	406	CLA	CHC-C4B-NB	-2.11	122.02	124.26
28	g	306	CLA	CHD-C1D-C2D	2.11	129.91	125.48
31	g	317	0UR	C24-C25-C26	-2.11	107.42	110.30
32	y	320	LUT	C1-C6-C7	2.11	121.75	115.78
28	b	607	CLA	CHD-C1D-C2D	2.11	129.91	125.48
31	y	317	0UR	C14-C15-C16	2.11	130.32	127.31
29	s	310	CHL	CHD-C1D-C2D	2.11	129.91	125.48
38	J	101	LMG	O7-C8-C7	-2.11	100.76	108.40
29	N	310	CHL	CHD-C1D-C2D	2.11	129.90	125.48
31	y	317	0UR	C48-C47-C46	2.11	129.49	125.34
33	k	102	BCR	C34-C9-C8	2.11	121.40	118.08
28	0	304	CLA	CHD-C1D-C2D	2.11	129.90	125.48
37	b	614	SQD	O47-C45-C44	2.11	116.03	108.40
32	Y	320	LUT	C22-C23-C24	2.11	114.14	111.74
34	d	407	PHO	C1C-C2C-C3C	-2.11	106.86	108.61
28	S	311	CLA	CAA-C2A-C1A	-2.11	105.07	111.97
30	S	316	0IE	C41-C28-C27	-2.11	119.05	123.56
29	G	317	CHL	CMD-C2D-C3D	-2.10	122.77	127.61
31	N	316	0UR	C33-C32-C31	-2.10	119.06	123.56
28	B	621	CLA	C4A-NA-C1A	2.10	107.65	106.71
28	V	318	CLA	C2A-C1A-CHA	2.10	127.54	123.86
43	U	420	LMN	OCB-CCQ-CCH	2.10	112.88	107.28
33	K	102	BCR	C15-C14-C13	2.10	130.31	127.31
28	Y	310	CLA	CHD-C1D-C2D	2.10	129.89	125.48
41	g	302	DGD	O1G-C1A-O1A	-2.10	118.28	123.59
31	s	316	0UR	C36-C28-C19	2.10	112.73	109.55
47	n	320	XAT	C8-C9-C10	2.10	122.17	118.94
29	S	306	CHL	O2D-CGD-O1D	-2.10	119.73	123.84
28	B	611	CLA	CHD-C1D-C2D	2.10	129.88	125.48
29	S	302	CHL	CHC-C4B-NB	-2.10	122.03	124.26
28	u	412	CLA	C4A-NA-C1A	2.10	107.65	106.71
33	c	507	BCR	C11-C10-C9	2.10	130.31	127.31
29	S	306	CHL	O2D-CGD-CBD	2.10	115.00	111.27
28	B	618	CLA	CHD-C1D-C2D	2.10	129.88	125.48
42	c	527	LHG	O4-P-O6	-2.10	98.00	107.75
28	V	307	CLA	C3D-C4D-CHA	2.10	117.52	112.72
28	Y	314	CLA	CAA-C2A-C3A	-2.10	107.04	112.78
30	s	317	0IE	O40-C34-C35	-2.10	105.18	109.68
31	G	318	0UR	C23-C24-C25	-2.10	108.91	113.64
29	G	310	CHL	C4A-NA-C1A	2.10	107.65	106.71
33	A	401	BCR	C19-C18-C17	2.09	122.16	118.94
33	b	604	BCR	C12-C13-C14	2.09	122.16	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	D	403	BCR	C15-C14-C13	2.09	130.30	127.31
37	B	617	SQD	O47-C45-C44	2.09	115.98	108.40
32	1	313	LUT	C20-C13-C12	-2.09	114.78	118.08
31	1	316	0UR	O44-C43-C3	-2.09	103.50	109.11
28	G	316	CLA	CAA-C2A-C3A	-2.09	107.05	112.78
28	1	306	CLA	C4A-NA-C1A	2.09	107.65	106.71
28	0	304	CLA	O2D-CGD-CBD	2.09	114.99	111.27
28	0	307	CLA	O2D-CGD-CBD	2.09	114.99	111.27
28	v	305	CLA	CHD-C1D-C2D	2.09	129.87	125.48
28	N	304	CLA	CMD-C2D-C1D	2.09	128.40	124.71
33	B	614	BCR	C35-C13-C14	-2.09	119.99	122.92
28	a	402	CLA	C4A-NA-C1A	2.09	107.65	106.71
29	s	306	CHL	CGD-CBD-CAD	-2.09	103.96	110.73
28	B	619	CLA	CHD-C1D-C2D	2.09	129.86	125.48
28	v	316	CLA	CHC-C4B-NB	-2.09	122.05	124.26
29	N	306	CHL	CHD-C1D-ND	-2.09	122.53	124.45
28	0	307	CLA	CAA-C2A-C3A	2.09	118.50	112.78
28	c	513	CLA	C5-C3-C2	2.09	125.34	121.12
33	a	401	BCR	C15-C14-C13	2.09	130.29	127.31
28	1	311	CLA	CHD-C1D-C2D	2.09	129.86	125.48
28	c	508	CLA	CHD-C1D-C2D	2.09	129.86	125.48
43	n	322	LMN	OBZ-CCD-CCO	-2.09	105.91	109.69
28	0	305	CLA	C4A-NA-C1A	2.09	107.64	106.71
42	D	405	LHG	C5-O7-C7	2.09	122.93	117.79
32	u	419	LUT	C15-C35-C34	2.09	127.75	123.47
28	c	514	CLA	CHD-C1D-C2D	2.09	129.85	125.48
33	k	101	BCR	C15-C14-C13	2.08	130.28	127.31
38	m	101	LMG	C1-O6-C5	2.08	117.78	113.69
28	1	308	CLA	C4A-NA-C1A	2.08	107.64	106.71
28	V	307	CLA	CMD-C2D-C1D	2.08	128.39	124.71
31	1	316	0UR	C23-C24-C25	-2.08	108.94	113.64
28	a	416	CLA	C4A-NA-C1A	2.08	107.64	106.71
28	b	612	CLA	CHD-C1D-C2D	2.08	129.84	125.48
28	c	522	CLA	CHD-C1D-C2D	2.08	129.84	125.48
46	N	319	NEX	C5-C6-C1	-2.08	117.63	119.70
28	c	520	CLA	CHD-C1D-C2D	2.08	129.84	125.48
38	K	101	LMG	C8-O7-C10	2.08	122.91	117.79
38	F	201	LMG	O1-C7-C8	-2.08	105.89	110.90
28	V	307	CLA	CHD-C4C-NC	2.08	127.48	124.20
28	N	312	CLA	CHD-C1D-C2D	2.08	129.84	125.48
33	b	603	BCR	C11-C10-C9	2.08	130.28	127.31
28	b	619	CLA	C4A-NA-C1A	2.08	107.64	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	Y	319	0IE	C21-C7-C6	-2.08	114.81	118.08
28	A	411	CLA	CHD-C1D-C2D	2.08	129.84	125.48
30	y	321	0IE	C22-C12-C13	-2.08	114.81	118.08
31	0	313	0UR	C21-C12-C13	-2.08	114.81	118.08
33	b	604	BCR	C34-C9-C8	2.08	121.35	118.08
28	b	616	CLA	CHD-C1D-C2D	2.08	129.83	125.48
29	n	309	CHL	CHD-C1D-C2D	2.08	129.83	125.48
43	U	420	LMN	CBR-CCM-CBQ	2.08	113.85	109.97
30	Y	321	0IE	O42-C26-C25	-2.07	105.50	110.74
28	Y	311	CLA	CAA-C2A-C1A	-2.07	105.18	111.97
33	d	403	BCR	C35-C13-C14	-2.07	120.02	122.92
28	u	415	CLA	CHD-C1D-C2D	2.07	129.83	125.48
31	Y	318	0UR	C48-C47-C46	2.07	128.19	125.84
41	A	417	DGD	O6D-C5D-C6D	2.07	110.85	106.67
28	S	314	CLA	CHD-C1D-C2D	2.07	129.83	125.48
29	V	313	CHL	C4D-C3D-CAD	-2.07	105.66	108.10
28	s	314	CLA	O2A-C1-C2	2.07	114.08	108.64
28	S	305	CLA	CHD-C1D-C2D	2.07	129.82	125.48
32	Y	320	LUT	C39-C29-C28	2.07	121.34	118.08
46	n	302	NEX	C19-C9-C10	-2.07	120.03	122.92
38	J	102	LMG	C9-C8-C7	-2.07	106.90	111.79
29	U	408	CHL	C2C-C3C-C4C	2.07	107.96	106.49
28	d	404	CLA	CHD-C1D-C2D	2.07	129.82	125.48
33	k	101	BCR	C19-C18-C17	2.07	122.11	118.94
28	Y	308	CLA	CHD-C1D-C2D	2.07	129.81	125.48
29	U	408	CHL	CHD-C1D-C2D	2.07	129.81	125.48
28	B	619	CLA	C4A-NA-C1A	2.07	107.64	106.71
29	y	307	CHL	C4A-NA-C1A	2.07	107.64	106.71
28	N	314	CLA	C2A-C1A-CHA	2.07	127.47	123.86
39	a	412	PL9	C30-C29-C31	-2.07	111.80	115.27
28	C	512	CLA	O2A-C1-C2	2.07	114.06	108.64
28	Y	311	CLA	C2A-C1A-CHA	2.07	127.47	123.86
29	V	313	CHL	C1D-ND-C4D	2.07	107.80	106.33
29	N	302	CHL	C3D-C4D-CHA	2.06	117.45	112.72
33	D	403	BCR	C34-C9-C8	2.06	121.33	118.08
28	g	311	CLA	CHD-C1D-C2D	2.06	129.81	125.48
28	c	512	CLA	CHD-C1D-C2D	2.06	129.81	125.48
31	1	315	0UR	C10-C9-C8	-2.06	119.25	123.47
41	c	524	DGD	C6D-C5D-C4D	2.06	116.40	112.09
32	U	418	LUT	C20-C13-C14	-2.06	120.03	122.92
28	g	312	CLA	CMD-C2D-C1D	2.06	128.34	124.71
29	S	308	CHL	C2C-C3C-C4C	2.06	107.96	106.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	v	306	CLA	CHD-C1D-C2D	2.06	129.80	125.48
29	v	307	CHL	C1-O2A-CGA	2.06	121.85	116.44
32	U	418	LUT	C15-C14-C13	2.06	130.25	127.31
28	U	414	CLA	CHC-C1C-NC	2.06	127.33	124.20
41	A	417	DGD	O6E-C1E-C2E	2.06	114.71	110.35
28	b	601	CLA	C4A-NA-C1A	2.06	107.63	106.71
28	c	505	CLA	CHD-C1D-C2D	2.06	129.80	125.48
46	n	321	NEX	C39-C29-C28	2.06	121.32	118.08
33	b	602	BCR	C11-C10-C9	2.06	130.25	127.31
29	G	317	CHL	CHD-C1D-C2D	2.06	129.80	125.48
41	C	520	DGD	C2G-O2G-C1B	-2.06	112.72	117.79
43	n	322	LMN	CBR-CBL-CBJ	2.06	119.32	113.19
28	B	611	CLA	C4A-NA-C1A	2.06	107.63	106.71
28	v	316	CLA	CHD-C1D-C2D	2.06	129.79	125.48
29	n	312	CHL	CHD-C1D-C2D	2.06	129.79	125.48
43	V	301	LMN	OCB-CCQ-CCH	2.06	112.75	107.28
29	s	307	CHL	C2C-C3C-C4C	2.06	107.95	106.49
29	S	307	CHL	CHD-C1D-C2D	2.06	129.79	125.48
29	n	312	CHL	C5-C3-C2	2.06	125.28	121.12
33	C	502	BCR	C19-C18-C17	2.06	122.10	118.94
28	1	304	CLA	CHD-C1D-C2D	2.06	129.79	125.48
31	G	319	0UR	C36-C28-C29	-2.06	105.54	109.44
28	C	509	CLA	CHD-C1D-C2D	2.06	129.79	125.48
34	D	407	PHO	CMB-C2B-C3B	2.06	128.52	124.68
37	b	614	SQD	O8-S-C6	-2.05	102.47	105.74
28	c	503	CLA	CHD-C1D-C2D	2.05	129.79	125.48
28	u	414	CLA	CHD-C1D-C2D	2.05	129.79	125.48
29	N	309	CHL	C2C-C3C-C4C	2.05	107.95	106.49
28	1	305	CLA	CHC-C4B-NB	-2.05	122.08	124.26
30	y	321	0IE	C5-C6-C7	2.05	132.18	126.42
29	N	303	CHL	CHD-C1D-C2D	2.05	129.79	125.48
28	0	302	CLA	O2D-CGD-CBD	2.05	114.92	111.27
28	V	317	CLA	CAA-C2A-C3A	-2.05	107.16	112.78
29	g	316	CHL	C1D-ND-C4D	2.05	107.79	106.33
41	a	409	DGD	C2G-O2G-C1B	-2.05	112.74	117.79
28	N	315	CLA	CHD-C1D-C2D	2.05	129.78	125.48
43	U	420	LMN	O2-C2-C1	2.05	115.03	110.05
34	D	407	PHO	C1C-C2C-C3C	-2.05	106.91	108.61
28	1	308	CLA	CHD-C1D-C2D	2.05	129.78	125.48
41	c	516	DGD	C2G-O2G-C1B	-2.05	112.75	117.79
29	V	302	CHL	CHA-C4D-ND	2.05	136.79	132.50
41	c	516	DGD	O3G-C1D-C2D	2.05	111.50	108.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	b	610	CLA	CHD-C1D-C2D	2.05	129.78	125.48
28	c	521	CLA	CHD-C1D-C2D	2.05	129.78	125.48
28	G	309	CLA	C4A-NA-C1A	2.05	107.63	106.71
28	u	417	CLA	CHD-C1D-C2D	2.05	129.78	125.48
31	g	318	0UR	C17-C16-C15	-2.05	115.80	118.94
28	n	316	CLA	C1D-ND-C4D	2.05	107.79	106.33
29	v	310	CHL	C2C-C3C-C4C	2.05	107.95	106.49
43	N	320	LMN	OBZ-CCS-CCW	2.05	114.68	110.35
31	U	419	0UR	C43-C3-C4	-2.05	122.54	125.02
29	V	302	CHL	C6-C7-C8	-2.05	109.30	115.92
29	v	304	CHL	CHD-C1D-C2D	2.05	129.77	125.48
32	y	320	LUT	C7-C8-C9	-2.05	123.14	126.23
29	N	303	CHL	C2C-C3C-C4C	2.05	107.95	106.49
28	B	613	CLA	CHD-C1D-C2D	2.05	129.77	125.48
37	c	501	SQD	O47-C7-O49	-2.05	118.76	123.70
28	B	607	CLA	C4A-NA-C1A	2.04	107.62	106.71
28	D	409	CLA	C4A-NA-C1A	2.04	107.62	106.71
28	0	308	CLA	CHD-C1D-C2D	2.04	129.77	125.48
28	v	313	CLA	CHD-C1D-C2D	2.04	129.76	125.48
28	Y	303	CLA	C3C-C4C-NC	-2.04	108.28	110.57
31	0	313	0UR	C9-C8-C7	2.04	130.22	127.31
28	c	506	CLA	CHD-C1D-C2D	2.04	129.76	125.48
32	Y	320	LUT	C3-C4-C5	-2.04	107.79	111.85
28	N	313	CLA	C4A-NA-C1A	2.04	107.62	106.71
28	g	315	CLA	CHD-C1D-C2D	2.04	129.76	125.48
28	U	413	CLA	CHD-C1D-C2D	2.04	129.76	125.48
28	b	617	CLA	CHD-C1D-C2D	2.04	129.75	125.48
30	s	317	0IE	C41-C28-C27	-2.04	119.20	123.56
28	Y	309	CLA	CHD-C1D-C2D	2.04	129.75	125.48
43	n	301	LMN	CBR-CCM-CBS	2.04	114.22	109.40
29	V	313	CHL	C10-C8-C7	-2.04	101.42	112.13
28	U	416	CLA	CHD-C1D-C2D	2.03	129.75	125.48
28	n	316	CLA	CHD-C1D-C2D	2.03	129.74	125.48
28	B	616	CLA	CHD-C1D-C2D	2.03	129.74	125.48
33	c	509	BCR	C11-C10-C9	2.03	130.21	127.31
28	Y	303	CLA	CHD-C1D-ND	-2.03	122.59	124.45
28	0	307	CLA	C4C-C3C-C2C	2.03	109.86	106.90
30	N	317	0IE	C37-C36-C35	-2.03	110.59	114.36
28	C	510	CLA	CHD-C1D-C2D	2.03	129.74	125.48
28	S	304	CLA	CHD-C1D-C2D	2.03	129.74	125.48
30	S	316	0IE	C37-C36-C35	-2.03	110.59	114.36
28	G	314	CLA	CHD-C1D-C2D	2.03	129.74	125.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	B	608	CLA	CHD-C1D-C2D	2.03	129.73	125.48
28	y	313	CLA	CHD-C1D-C2D	2.03	129.73	125.48
46	V	323	NEX	C2-C1-C6	2.03	111.18	109.21
43	g	301	LMN	CBR-CCM-CBQ	2.03	113.77	109.97
31	U	419	0UR	C36-C28-C38	-2.03	104.91	107.89
28	U	407	CLA	CHD-C1D-C2D	2.02	129.73	125.48
28	B	605	CLA	CHD-C1D-C2D	2.02	129.73	125.48
28	y	312	CLA	CHD-C1D-C2D	2.02	129.73	125.48
29	u	409	CHL	C2C-C3C-C4C	2.02	107.93	106.49
31	G	319	0UR	C37-C23-C1	2.02	112.60	109.71
28	b	601	CLA	CHD-C1D-C2D	2.02	129.72	125.48
31	1	316	0UR	C35-C23-C37	-2.02	102.32	108.53
41	a	409	DGD	O2G-C1B-O1B	-2.02	118.81	123.70
33	C	507	BCR	C34-C9-C8	2.02	121.26	118.08
28	D	410	CLA	CHD-C1D-C2D	2.02	129.72	125.48
29	V	302	CHL	C4A-NA-C1A	2.02	107.61	106.71
28	s	315	CLA	CHD-C1D-C2D	2.02	129.72	125.48
31	0	313	0UR	C34-C27-C1	2.02	127.15	124.49
28	G	312	CLA	CHD-C1D-C2D	2.02	129.72	125.48
28	Y	304	CLA	CHD-C1D-C2D	2.02	129.72	125.48
29	v	310	CHL	CHD-C1D-C2D	2.02	129.72	125.48
29	s	309	CHL	CHD-C1D-C2D	2.02	129.71	125.48
28	g	313	CLA	C3B-C2B-C1B	2.02	109.60	107.16
28	u	408	CLA	CHD-C1D-C2D	2.02	129.71	125.48
28	y	314	CLA	CHD-C1D-C2D	2.02	129.71	125.48
45	e	101	HEM	CHD-C4C-C3C	2.02	128.71	125.26
28	C	511	CLA	CHD-C1D-C2D	2.02	129.71	125.48
28	Y	316	CLA	CHD-C1D-C2D	2.02	129.71	125.48
28	Y	313	CLA	CMC-C2C-C1C	2.02	128.11	125.04
31	y	323	0UR	C35-C23-C1	2.02	112.59	109.71
28	0	301	CLA	C3B-C4B-NB	-2.02	108.64	110.52
41	A	417	DGD	O1G-C1A-C2A	2.02	118.23	111.91
33	A	401	BCR	C12-C13-C14	2.02	122.03	118.94
29	S	309	CHL	CED-O2D-CGD	2.02	120.50	115.94
31	N	316	0UR	C29-C30-C31	2.02	114.03	111.74
29	g	316	CHL	CMB-C2B-C3B	-2.02	121.70	126.59
28	0	302	CLA	CHC-C4B-NB	-2.01	122.12	124.26
28	Y	306	CLA	CHC-C4B-NB	-2.01	122.12	124.26
28	n	314	CLA	C1-O2A-CGA	2.01	121.72	116.44
29	Y	315	CHL	CHD-C1D-C2D	2.01	129.70	125.48
28	G	305	CLA	CHD-C1D-C2D	2.01	129.70	125.48
31	y	318	0UR	O42-C2-C3	-2.01	116.98	120.66

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	D	410	CLA	C4A-NA-C1A	2.01	107.61	106.71
28	C	517	CLA	CHD-C1D-C2D	2.01	129.70	125.48
28	V	308	CLA	CHD-C1D-C2D	2.01	129.69	125.48
31	y	317	0UR	C35-C23-C37	-2.01	102.36	108.53
29	U	405	CHL	CHD-C1D-C2D	2.01	129.69	125.48
28	C	508	CLA	CHD-C1D-C2D	2.01	129.69	125.48
31	Y	318	0UR	O44-C45-C46	2.01	116.89	111.55
29	g	316	CHL	C2D-C1D-ND	-2.01	108.62	110.10
33	d	403	BCR	C2-C1-C6	2.01	113.57	110.48
29	1	310	CHL	CHC-C4B-NB	-2.01	122.13	124.26
31	Y	323	0UR	C20-C7-C6	2.01	121.24	118.08
43	n	322	LMN	C6-C5-C4	-2.01	107.49	113.33
29	S	306	CHL	C4D-CHA-C1A	2.00	123.69	121.25
30	Y	319	0IE	C32-C31-C36	-2.00	113.89	119.35
28	n	306	CLA	CHD-C1D-C2D	2.00	129.68	125.48
33	T	101	BCR	C11-C10-C9	2.00	130.17	127.31
29	V	306	CHL	CHD-C1D-C2D	2.00	129.68	125.48
29	u	409	CHL	CHD-C1D-C2D	2.00	129.68	125.48
29	g	316	CHL	C3D-C4D-CHA	2.00	117.30	112.72
43	N	320	LMN	OBZ-CCD-CCO	-2.00	106.06	109.69

There are no chirality outliers.

All (3140) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
28	0	301	CLA	CHA-CBD-CGD-O1D
28	0	301	CLA	CHA-CBD-CGD-O2D
28	0	302	CLA	CBD-CGD-O2D-CED
28	0	302	CLA	O1D-CGD-O2D-CED
28	0	303	CLA	CBD-CGD-O2D-CED
28	0	303	CLA	O1D-CGD-O2D-CED
28	0	304	CLA	CBD-CGD-O2D-CED
28	0	304	CLA	O1D-CGD-O2D-CED
28	0	305	CLA	C1A-C2A-CAA-CBA
28	0	305	CLA	C3A-C2A-CAA-CBA
28	0	309	CLA	O2A-C1-C2-C3
28	1	303	CLA	C1A-C2A-CAA-CBA
28	1	303	CLA	C3A-C2A-CAA-CBA
28	1	303	CLA	C2C-C3C-CAC-CBC
28	1	303	CLA	C4C-C3C-CAC-CBC
28	1	306	CLA	C1A-C2A-CAA-CBA
28	1	307	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
28	1	307	CLA	O1D-CGD-O2D-CED
28	1	309	CLA	O2A-C1-C2-C3
28	A	410	CLA	CHA-CBD-CGD-O1D
28	A	410	CLA	CHA-CBD-CGD-O2D
28	A	416	CLA	CHA-CBD-CGD-O1D
28	A	416	CLA	CHA-CBD-CGD-O2D
28	B	601	CLA	CHA-CBD-CGD-O1D
28	B	601	CLA	CHA-CBD-CGD-O2D
28	B	601	CLA	CAD-CBD-CGD-O1D
28	B	601	CLA	CAD-CBD-CGD-O2D
28	B	601	CLA	C2-C3-C5-C6
28	B	601	CLA	C4-C3-C5-C6
28	B	609	CLA	C3A-C2A-CAA-CBA
28	B	611	CLA	C1A-C2A-CAA-CBA
28	B	613	CLA	C1A-C2A-CAA-CBA
28	C	501	CLA	CBA-CGA-O2A-C1
28	C	501	CLA	O1A-CGA-O2A-C1
28	C	506	CLA	C3A-C2A-CAA-CBA
28	C	509	CLA	C1A-C2A-CAA-CBA
28	C	509	CLA	O2A-C1-C2-C3
28	C	510	CLA	C1A-C2A-CAA-CBA
28	C	510	CLA	C3A-C2A-CAA-CBA
28	C	510	CLA	C14-C13-C15-C16
28	C	513	CLA	CHA-CBD-CGD-O1D
28	C	517	CLA	C1A-C2A-CAA-CBA
28	C	517	CLA	C3A-C2A-CAA-CBA
28	G	312	CLA	C1A-C2A-CAA-CBA
28	G	312	CLA	C3A-C2A-CAA-CBA
28	N	304	CLA	C1-C2-C3-C4
28	N	305	CLA	C2B-C3B-CAB-CBB
28	N	305	CLA	C4B-C3B-CAB-CBB
28	N	311	CLA	C1A-C2A-CAA-CBA
28	N	313	CLA	C1A-C2A-CAA-CBA
28	N	313	CLA	C3A-C2A-CAA-CBA
28	S	305	CLA	C2-C3-C5-C6
28	S	305	CLA	C4-C3-C5-C6
28	S	310	CLA	C3A-C2A-CAA-CBA
28	S	310	CLA	C1-C2-C3-C4
28	S	310	CLA	C2-C3-C5-C6
28	S	310	CLA	C4-C3-C5-C6
28	S	310	CLA	C11-C10-C8-C9
28	S	311	CLA	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
28	S	311	CLA	C4-C3-C5-C6
28	U	404	CLA	CBA-CGA-O2A-C1
28	U	404	CLA	O1A-CGA-O2A-C1
28	U	410	CLA	CBA-CGA-O2A-C1
28	U	410	CLA	O1A-CGA-O2A-C1
28	U	410	CLA	C2-C3-C5-C6
28	U	410	CLA	C4-C3-C5-C6
28	U	413	CLA	C4-C3-C5-C6
28	U	414	CLA	C1A-C2A-CAA-CBA
28	U	414	CLA	C2C-C3C-CAC-CBC
28	U	414	CLA	C4C-C3C-CAC-CBC
28	U	415	CLA	C4B-C3B-CAB-CBB
28	U	415	CLA	CBD-CGD-O2D-CED
28	U	415	CLA	C1-C2-C3-C4
28	U	415	CLA	C1-C2-C3-C5
28	U	416	CLA	CHA-CBD-CGD-O1D
28	U	416	CLA	CHA-CBD-CGD-O2D
28	V	307	CLA	C3A-C2A-CAA-CBA
28	V	307	CLA	C1-C2-C3-C4
28	V	307	CLA	C1-C2-C3-C5
28	V	315	CLA	CBD-CGD-O2D-CED
28	V	315	CLA	C1-C2-C3-C4
28	V	315	CLA	C1-C2-C3-C5
28	V	318	CLA	C1A-C2A-CAA-CBA
28	V	318	CLA	CHA-CBD-CGD-O1D
28	V	318	CLA	CHA-CBD-CGD-O2D
28	Y	303	CLA	C1-C2-C3-C4
28	Y	303	CLA	C1-C2-C3-C5
28	Y	306	CLA	CBD-CGD-O2D-CED
28	Y	306	CLA	O1D-CGD-O2D-CED
28	Y	311	CLA	C3A-C2A-CAA-CBA
28	Y	313	CLA	C1A-C2A-CAA-CBA
28	Y	313	CLA	C2C-C3C-CAC-CBC
28	Y	313	CLA	C4C-C3C-CAC-CBC
28	Y	313	CLA	CHA-CBD-CGD-O1D
28	Y	313	CLA	CHA-CBD-CGD-O2D
28	a	402	CLA	C1A-C2A-CAA-CBA
28	a	402	CLA	C3A-C2A-CAA-CBA
28	a	402	CLA	CHA-CBD-CGD-O1D
28	a	402	CLA	CHA-CBD-CGD-O2D
28	a	402	CLA	O2A-C1-C2-C3
28	a	403	CLA	C1A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
28	a	403	CLA	O2A-C1-C2-C3
28	a	416	CLA	CHA-CBD-CGD-O1D
28	a	416	CLA	CHA-CBD-CGD-O2D
28	b	606	CLA	C2-C3-C5-C6
28	b	606	CLA	C4-C3-C5-C6
28	b	608	CLA	C1A-C2A-CAA-CBA
28	b	608	CLA	C3A-C2A-CAA-CBA
28	b	610	CLA	C1A-C2A-CAA-CBA
28	b	615	CLA	C1A-C2A-CAA-CBA
28	b	615	CLA	C3A-C2A-CAA-CBA
28	b	618	CLA	CHA-CBD-CGD-O1D
28	b	618	CLA	CHA-CBD-CGD-O2D
28	b	618	CLA	CAD-CBD-CGD-O1D
28	b	618	CLA	CAD-CBD-CGD-O2D
28	b	619	CLA	CBA-CGA-O2A-C1
28	b	619	CLA	O1A-CGA-O2A-C1
28	b	619	CLA	O2A-C1-C2-C3
28	b	620	CLA	CHA-CBD-CGD-O1D
28	b	620	CLA	CHA-CBD-CGD-O2D
28	c	510	CLA	CAD-CBD-CGD-O1D
28	c	510	CLA	CAD-CBD-CGD-O2D
28	c	511	CLA	C1A-C2A-CAA-CBA
28	c	511	CLA	C3A-C2A-CAA-CBA
28	c	520	CLA	C1A-C2A-CAA-CBA
28	c	521	CLA	CBA-CGA-O2A-C1
28	c	521	CLA	O1A-CGA-O2A-C1
28	c	522	CLA	C1A-C2A-CAA-CBA
28	g	307	CLA	C2B-C3B-CAB-CBB
28	g	307	CLA	C4B-C3B-CAB-CBB
28	g	307	CLA	C1-C2-C3-C4
28	g	307	CLA	C1-C2-C3-C5
28	g	311	CLA	C2-C3-C5-C6
28	g	311	CLA	C4-C3-C5-C6
28	g	312	CLA	CBD-CGD-O2D-CED
28	g	313	CLA	C1-C2-C3-C4
28	g	313	CLA	C1-C2-C3-C5
28	g	314	CLA	C1-C2-C3-C4
28	s	304	CLA	C1A-C2A-CAA-CBA
28	s	304	CLA	C3A-C2A-CAA-CBA
28	s	311	CLA	C1A-C2A-CAA-CBA
28	s	313	CLA	CBD-CGD-O2D-CED
28	s	313	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
28	u	412	CLA	CBA-CGA-O2A-C1
28	u	412	CLA	O1A-CGA-O2A-C1
28	u	413	CLA	C1A-C2A-CAA-CBA
28	u	413	CLA	C3A-C2A-CAA-CBA
28	u	415	CLA	CBA-CGA-O2A-C1
28	u	415	CLA	O1A-CGA-O2A-C1
28	u	417	CLA	CBA-CGA-O2A-C1
28	u	417	CLA	O1A-CGA-O2A-C1
28	u	417	CLA	O2A-C1-C2-C3
28	u	417	CLA	C2-C3-C5-C6
28	u	417	CLA	C4-C3-C5-C6
28	v	313	CLA	CBA-CGA-O2A-C1
28	v	313	CLA	O1A-CGA-O2A-C1
28	v	313	CLA	C2-C3-C5-C6
28	v	313	CLA	C4-C3-C5-C6
28	y	305	CLA	C3A-C2A-CAA-CBA
28	y	305	CLA	CHA-CBD-CGD-O1D
28	y	305	CLA	CHA-CBD-CGD-O2D
28	y	306	CLA	C2B-C3B-CAB-CBB
28	y	306	CLA	C4B-C3B-CAB-CBB
28	y	308	CLA	C1-C2-C3-C4
28	y	308	CLA	C1-C2-C3-C5
28	y	312	CLA	C2-C3-C5-C6
28	y	312	CLA	C4-C3-C5-C6
29	G	311	CHL	C1C-C2C-CMC-OMC
29	G	311	CHL	C3C-C2C-CMC-OMC
29	G	311	CHL	CBD-CGD-O2D-CED
29	G	311	CHL	C1-C2-C3-C4
29	G	311	CHL	C1-C2-C3-C5
29	G	317	CHL	C1C-C2C-CMC-OMC
29	G	317	CHL	C3C-C2C-CMC-OMC
29	G	317	CHL	C1-C2-C3-C4
29	N	302	CHL	C1C-C2C-CMC-OMC
29	N	302	CHL	C3C-C2C-CMC-OMC
29	N	302	CHL	CHA-CBD-CGD-O1D
29	N	302	CHL	CHA-CBD-CGD-O2D
29	N	302	CHL	CAD-CBD-CGD-O1D
29	N	302	CHL	CAD-CBD-CGD-O2D
29	N	306	CHL	C1C-C2C-CMC-OMC
29	N	306	CHL	C3C-C2C-CMC-OMC
29	N	307	CHL	CHA-CBD-CGD-O1D
29	N	307	CHL	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
29	N	308	CHL	CBD-CGD-O2D-CED
29	N	308	CHL	C11-C10-C8-C9
29	S	306	CHL	C1C-C2C-CMC-OMC
29	S	306	CHL	C3C-C2C-CMC-OMC
29	S	306	CHL	C1-C2-C3-C4
29	S	306	CHL	C1-C2-C3-C5
29	S	306	CHL	C14-C13-C15-C16
29	S	308	CHL	CBA-CGA-O2A-C1
29	S	308	CHL	O1A-CGA-O2A-C1
29	S	309	CHL	CBD-CGD-O2D-CED
29	S	309	CHL	O1D-CGD-O2D-CED
29	U	409	CHL	C2-C3-C5-C6
29	U	409	CHL	C4-C3-C5-C6
29	V	302	CHL	C1A-C2A-CAA-CBA
29	V	302	CHL	C3A-C2A-CAA-CBA
29	V	302	CHL	CBA-CGA-O2A-C1
29	V	302	CHL	O1A-CGA-O2A-C1
29	V	302	CHL	C1-C2-C3-C4
29	V	302	CHL	C1-C2-C3-C5
29	V	311	CHL	CBA-CGA-O2A-C1
29	V	311	CHL	O1A-CGA-O2A-C1
29	V	311	CHL	C1-C2-C3-C4
29	V	311	CHL	C1-C2-C3-C5
29	V	311	CHL	C2-C3-C5-C6
29	V	311	CHL	C4-C3-C5-C6
29	V	313	CHL	C14-C13-C15-C16
29	Y	307	CHL	CBA-CGA-O2A-C1
29	Y	307	CHL	O1A-CGA-O2A-C1
29	Y	307	CHL	CHA-CBD-CGD-O1D
29	Y	307	CHL	CHA-CBD-CGD-O2D
29	g	309	CHL	C1C-C2C-CMC-OMC
29	g	309	CHL	C3C-C2C-CMC-OMC
29	g	309	CHL	CBD-CGD-O2D-CED
29	g	310	CHL	C3A-C2A-CAA-CBA
29	g	310	CHL	C1C-C2C-CMC-OMC
29	g	310	CHL	C3C-C2C-CMC-OMC
29	g	310	CHL	CBD-CGD-O2D-CED
29	g	310	CHL	O2A-C1-C2-C3
29	g	310	CHL	C1-C2-C3-C4
29	g	310	CHL	C1-C2-C3-C5
29	g	316	CHL	C1C-C2C-CMC-OMC
29	g	316	CHL	C3C-C2C-CMC-OMC

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Mol	Chain	Res	Type	Atoms
29	g	316	CHL	O2A-C1-C2-C3
29	g	316	CHL	C1-C2-C3-C4
29	n	305	CHL	C1A-C2A-CAA-CBA
29	n	305	CHL	C3A-C2A-CAA-CBA
29	n	308	CHL	C1A-C2A-CAA-CBA
29	n	308	CHL	C2-C3-C5-C6
29	n	310	CHL	CBA-CGA-O2A-C1
29	n	310	CHL	O1A-CGA-O2A-C1
29	s	306	CHL	C1C-C2C-CMC-OMC
29	s	306	CHL	C3C-C2C-CMC-OMC
29	s	308	CHL	C1A-C2A-CAA-CBA
29	s	309	CHL	C1C-C2C-CMC-OMC
29	s	309	CHL	C3C-C2C-CMC-OMC
29	u	406	CHL	C1A-C2A-CAA-CBA
29	u	406	CHL	C3A-C2A-CAA-CBA
29	v	303	CHL	C1C-C2C-CMC-OMC
29	v	303	CHL	C3C-C2C-CMC-OMC
29	v	303	CHL	C1-C2-C3-C4
29	v	304	CHL	C1A-C2A-CAA-CBA
29	v	304	CHL	CBA-CGA-O2A-C1
29	v	304	CHL	O1A-CGA-O2A-C1
29	v	304	CHL	CHA-CBD-CGD-O2D
29	v	307	CHL	C1-C2-C3-C4
29	v	307	CHL	C1-C2-C3-C5
29	v	309	CHL	CBA-CGA-O2A-C1
29	v	309	CHL	O1A-CGA-O2A-C1
29	v	309	CHL	CBD-CGD-O2D-CED
29	v	309	CHL	O1D-CGD-O2D-CED
29	v	309	CHL	C2-C3-C5-C6
29	v	309	CHL	C4-C3-C5-C6
29	y	307	CHL	O2A-C1-C2-C3
29	y	307	CHL	C2-C3-C5-C6
29	y	307	CHL	C4-C3-C5-C6
30	0	312	0IE	C5-C6-C7-C21
30	0	312	0IE	O1-C2-C3-C20
30	0	312	0IE	O29-C20-C3-C4
30	0	312	0IE	O29-C20-C3-C2
30	0	312	0IE	C11-C12-C13-C14
30	0	312	0IE	C22-C12-C13-C14
30	0	312	0IE	C15-C16-C17-C18
30	0	312	0IE	C23-C16-C17-C18
30	0	312	0IE	C17-C18-C19-C24

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Mol	Chain	Res	Type	Atoms
30	0	312	0IE	C17-C18-C19-C28
30	0	312	0IE	C7-C8-C9-C10
30	1	314	0IE	O1-C2-C3-C20
30	N	317	0IE	O1-C2-C3-C20
30	S	316	0IE	O1-C2-C3-C20
30	V	320	0IE	O1-C2-C3-C20
30	Y	319	0IE	C3-C4-C5-C6
30	Y	319	0IE	O1-C2-C3-C20
30	Y	319	0IE	C2-C30-C31-C36
30	Y	321	0IE	O1-C2-C3-C20
30	n	319	0IE	O1-C2-C3-C20
30	s	317	0IE	O1-C2-C3-C4
30	v	318	0IE	O1-C2-C3-C20
30	y	319	0IE	C5-C6-C7-C21
30	y	319	0IE	O1-C2-C3-C20
30	y	319	0IE	O29-C20-C3-C4
30	y	319	0IE	O29-C20-C3-C2
30	y	319	0IE	C2-C30-C31-C36
30	y	319	0IE	C7-C8-C9-C10
30	y	321	0IE	C5-C6-C7-C21
30	y	321	0IE	C5-C6-C7-C8
30	y	321	0IE	C23-C16-C17-C18
31	0	313	0UR	C2-C3-C43-O44
31	0	313	0UR	C4-C3-C43-O44
31	0	313	0UR	C27-C1-C41-C2
31	0	313	0UR	C3-C4-C5-C6
31	0	313	0UR	C13-C14-C15-C16
31	0	313	0UR	O57-C45-O44-C43
31	0	313	0UR	C7-C8-C9-C10
31	0	314	0UR	C2-C3-C43-O44
31	0	314	0UR	C4-C3-C43-O44
31	0	314	0UR	C5-C6-C7-C20
31	0	314	0UR	C17-C18-C19-C28
31	0	314	0UR	C17-C18-C19-C32
31	1	312	0UR	O44-C45-C46-C47
31	1	315	0UR	O42-C2-C3-C43
31	1	315	0UR	C5-C6-C7-C20
31	1	315	0UR	C5-C6-C7-C8
31	1	315	0UR	C11-C12-C13-C14
31	1	315	0UR	C21-C12-C13-C14
31	1	315	0UR	C15-C16-C17-C18
31	1	315	0UR	C22-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
31	1	316	0UR	O42-C2-C3-C43
31	1	316	0UR	C3-C4-C5-C6
31	1	316	0UR	C5-C6-C7-C20
31	1	316	0UR	C5-C6-C7-C8
31	G	318	0UR	O42-C2-C3-C43
31	G	318	0UR	C15-C16-C17-C18
31	G	318	0UR	C22-C16-C17-C18
31	G	318	0UR	C46-C45-O44-C43
31	G	318	0UR	O57-C45-O44-C43
31	G	318	0UR	C46-C47-C48-C49
31	G	319	0UR	C46-C47-C48-C49
31	S	315	0UR	C22-C16-C17-C18
31	V	319	0UR	C2-C3-C43-O44
31	V	319	0UR	C4-C3-C43-O44
31	V	319	0UR	C46-C45-O44-C43
31	V	319	0UR	O57-C45-O44-C43
31	Y	318	0UR	C27-C1-C41-C2
31	Y	318	0UR	O42-C2-C3-C43
31	Y	322	0UR	C2-C3-C43-O44
31	Y	322	0UR	C4-C3-C43-O44
31	Y	322	0UR	O42-C2-C3-C43
31	Y	322	0UR	C21-C12-C13-C14
31	Y	322	0UR	C22-C16-C17-C18
31	Y	322	0UR	C46-C45-O44-C43
31	Y	323	0UR	C2-C3-C43-O44
31	Y	323	0UR	C4-C3-C43-O44
31	Y	323	0UR	C11-C12-C13-C14
31	Y	323	0UR	C21-C12-C13-C14
31	Y	323	0UR	C15-C16-C17-C18
31	Y	323	0UR	C22-C16-C17-C18
31	g	317	0UR	O42-C2-C3-C43
31	g	317	0UR	C9-C10-C11-C12
31	g	317	0UR	C11-C12-C13-C14
31	g	317	0UR	C21-C12-C13-C14
31	g	317	0UR	C15-C16-C17-C18
31	g	317	0UR	C22-C16-C17-C18
31	g	317	0UR	C46-C45-O44-C43
31	g	318	0UR	C46-C47-C48-C49
31	s	316	0UR	C22-C16-C17-C18
31	v	317	0UR	O42-C2-C3-C43
31	v	317	0UR	C46-C47-C48-C49
31	y	317	0UR	C2-C3-C43-O44

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Mol	Chain	Res	Type	Atoms
31	y	317	0UR	C4-C3-C43-O44
31	y	317	0UR	O42-C2-C3-C43
31	y	317	0UR	C46-C45-O44-C43
31	y	318	0UR	O42-C2-C3-C43
31	y	322	0UR	C2-C3-C43-O44
31	y	322	0UR	C4-C3-C43-O44
31	y	322	0UR	O42-C2-C3-C43
31	y	322	0UR	O42-C2-C3-C4
31	y	322	0UR	C22-C16-C17-C18
31	y	322	0UR	C17-C18-C19-C28
31	y	323	0UR	O42-C2-C3-C43
31	y	323	0UR	C5-C6-C7-C20
31	y	323	0UR	C5-C6-C7-C8
31	y	323	0UR	C11-C12-C13-C14
31	y	323	0UR	C21-C12-C13-C14
32	1	313	LUT	C6-C7-C8-C9
32	1	313	LUT	C10-C11-C12-C13
32	1	313	LUT	C11-C12-C13-C14
32	1	313	LUT	C11-C12-C13-C20
32	1	313	LUT	C26-C27-C28-C29
32	1	313	LUT	C27-C28-C29-C30
32	1	313	LUT	C27-C28-C29-C39
32	1	313	LUT	C32-C33-C34-C35
32	1	313	LUT	C40-C33-C34-C35
32	U	418	LUT	C1-C6-C7-C8
32	U	418	LUT	C5-C6-C7-C8
32	Y	320	LUT	C6-C7-C8-C9
32	Y	320	LUT	C7-C8-C9-C10
32	Y	320	LUT	C7-C8-C9-C19
32	Y	320	LUT	C11-C10-C9-C8
32	Y	320	LUT	C11-C10-C9-C19
32	Y	320	LUT	C10-C11-C12-C13
32	Y	320	LUT	C11-C12-C13-C14
32	Y	320	LUT	C11-C12-C13-C20
32	Y	320	LUT	C14-C15-C35-C34
32	Y	320	LUT	C26-C27-C28-C29
32	Y	320	LUT	C27-C28-C29-C30
32	Y	320	LUT	C27-C28-C29-C39
32	Y	320	LUT	C28-C29-C30-C31
32	Y	320	LUT	C39-C29-C30-C31
32	Y	320	LUT	C32-C33-C34-C35
32	Y	320	LUT	C40-C33-C34-C35

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Mol	Chain	Res	Type	Atoms
32	u	419	LUT	C5-C6-C7-C8
32	y	320	LUT	C1-C6-C7-C8
32	y	320	LUT	C5-C6-C7-C8
32	y	320	LUT	C11-C12-C13-C14
32	y	320	LUT	C11-C12-C13-C20
32	y	320	LUT	C28-C29-C30-C31
32	y	320	LUT	C39-C29-C30-C31
32	y	320	LUT	C30-C31-C32-C33
32	y	320	LUT	C32-C33-C34-C35
32	y	320	LUT	C40-C33-C34-C35
33	B	603	BCR	C7-C8-C9-C34
33	C	502	BCR	C7-C8-C9-C10
33	C	502	BCR	C7-C8-C9-C34
33	C	502	BCR	C37-C22-C23-C24
33	C	507	BCR	C7-C8-C9-C10
33	C	507	BCR	C7-C8-C9-C34
33	H	101	BCR	C7-C8-C9-C34
33	c	509	BCR	C1-C6-C7-C8
33	c	509	BCR	C5-C6-C7-C8
33	k	102	BCR	C21-C22-C23-C24
37	A	405	SQD	O49-C7-O47-C45
37	A	405	SQD	C8-C7-O47-C45
37	A	405	SQD	O10-C23-O48-C46
37	A	405	SQD	C24-C23-O48-C46
37	B	615	SQD	C2-C1-O6-C44
37	B	615	SQD	O5-C1-O6-C44
37	B	615	SQD	O49-C7-O47-C45
37	B	615	SQD	C8-C7-O47-C45
37	b	614	SQD	O5-C1-O6-C44
37	c	501	SQD	O49-C7-O47-C45
37	c	501	SQD	C8-C7-O47-C45
37	c	501	SQD	O10-C23-O48-C46
37	c	501	SQD	C24-C23-O48-C46
37	z	101	SQD	C45-C44-O6-C1
38	A	406	LMG	O6-C1-O1-C7
38	A	406	LMG	O10-C28-O8-C9
38	A	406	LMG	C29-C28-O8-C9
38	A	413	LMG	C2-C1-O1-C7
38	A	413	LMG	O6-C1-O1-C7
38	A	414	LMG	O10-C28-O8-C9
38	A	414	LMG	C29-C28-O8-C9
38	I	101	LMG	C2-C1-O1-C7

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Mol	Chain	Res	Type	Atoms
38	I	101	LMG	O6-C1-O1-C7
38	J	102	LMG	O6-C1-O1-C7
38	K	101	LMG	O6-C1-O1-C7
38	U	402	LMG	O6-C1-O1-C7
38	U	402	LMG	O10-C28-O8-C9
38	U	402	LMG	C29-C28-O8-C9
38	a	414	LMG	O6-C1-O1-C7
38	a	414	LMG	O9-C10-O7-C8
38	c	526	LMG	O10-C28-O8-C9
38	c	526	LMG	C29-C28-O8-C9
38	d	402	LMG	O10-C28-O8-C9
38	d	402	LMG	C29-C28-O8-C9
38	d	408	LMG	O10-C28-O8-C9
38	d	408	LMG	C29-C28-O8-C9
38	d	410	LMG	O9-C10-O7-C8
38	d	410	LMG	C11-C10-O7-C8
38	i	101	LMG	O6-C1-O1-C7
38	u	403	LMG	O10-C28-O8-C9
38	u	403	LMG	C29-C28-O8-C9
39	A	409	PL9	C18-C19-C21-C22
39	A	409	PL9	C20-C19-C21-C22
39	A	409	PL9	C40-C39-C41-C42
39	a	412	PL9	C2-C3-C7-C8
39	a	412	PL9	C4-C3-C7-C8
39	a	412	PL9	C7-C8-C9-C10
39	a	412	PL9	C7-C8-C9-C11
39	a	412	PL9	C12-C13-C14-C15
39	a	412	PL9	C12-C13-C14-C16
39	a	412	PL9	C17-C18-C19-C20
39	a	412	PL9	C17-C18-C19-C21
39	a	412	PL9	C32-C33-C34-C35
39	a	412	PL9	C32-C33-C34-C36
39	a	412	PL9	C42-C43-C44-C46
41	C	514	DGD	O1G-C1G-C2G-O2G
41	C	514	DGD	C2E-C1E-O5D-C6D
41	C	514	DGD	O6E-C1E-O5D-C6D
41	C	515	DGD	O6D-C1D-O3G-C3G
41	C	516	DGD	O1G-C1G-C2G-O2G
41	C	520	DGD	O2G-C2G-C3G-O3G
41	a	405	DGD	C2A-C1A-O1G-C1G
41	a	405	DGD	O1A-C1A-O1G-C1G
41	a	409	DGD	C2E-C1E-O5D-C6D

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Mol	Chain	Res	Type	Atoms
41	a	409	DGD	O6E-C1E-O5D-C6D
41	b	621	DGD	C4D-C5D-C6D-O5D
41	c	524	DGD	O2G-C2G-C3G-O3G
41	c	524	DGD	O6D-C1D-O3G-C3G
41	c	524	DGD	C2E-C1E-O5D-C6D
41	c	524	DGD	O6E-C1E-O5D-C6D
42	D	405	LHG	O9-C7-O7-C5
42	D	405	LHG	C8-C7-O7-C5
42	G	303	LHG	C2-C3-O3-P
42	G	303	LHG	C3-O3-P-O5
42	G	303	LHG	C3-O3-P-O6
42	N	301	LHG	C2-C3-O3-P
42	N	301	LHG	C3-O3-P-O4
42	N	301	LHG	O9-C7-O7-C5
42	N	301	LHG	C8-C7-O7-C5
42	S	301	LHG	O9-C7-O7-C5
42	S	301	LHG	C8-C7-O7-C5
42	U	403	LHG	C2-C3-O3-P
42	U	403	LHG	C3-O3-P-O4
42	U	403	LHG	C4-O6-P-O4
42	U	403	LHG	C4-O6-P-O5
42	V	304	LHG	O10-C23-O8-C6
42	V	304	LHG	C24-C23-O8-C6
42	b	623	LHG	O10-C23-O8-C6
42	b	623	LHG	C24-C23-O8-C6
42	c	527	LHG	C3-O3-P-O4
42	c	527	LHG	C4-O6-P-O3
42	c	527	LHG	C4-O6-P-O5
42	c	527	LHG	O9-C7-O7-C5
42	c	527	LHG	C8-C7-O7-C5
42	d	405	LHG	C3-O3-P-O5
42	g	303	LHG	C3-O3-P-O4
42	n	303	LHG	O10-C23-O8-C6
42	n	303	LHG	C24-C23-O8-C6
42	s	301	LHG	O10-C23-O8-C6
42	s	301	LHG	C24-C23-O8-C6
42	v	302	LHG	C2-C3-O3-P
42	v	302	LHG	C4-O6-P-O5
42	v	302	LHG	O10-C23-O8-C6
42	v	302	LHG	C24-C23-O8-C6
43	C	518	LMN	OBY-CCR-O4-C4
43	C	521	LMN	O1-CBS-CCM-CBQ

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Mol	Chain	Res	Type	Atoms
43	C	521	LMN	O1-CBS-CCM-CBR
43	G	301	LMN	CBK-CBQ-CCM-CBR
43	G	301	LMN	CBK-CBQ-CCM-CBS
43	G	301	LMN	CBK-CBQ-CCM-CBT
43	G	301	LMN	OBV-CBT-CCM-CBQ
43	G	301	LMN	OBV-CBT-CCM-CBR
43	G	304	LMN	OBV-CBT-CCM-CBQ
43	G	304	LMN	OBV-CBT-CCM-CBR
43	G	304	LMN	OBX-CCJ-OBV-CBT
43	G	304	LMN	CCL-CCJ-OBV-CBT
43	N	320	LMN	C2-C1-O1-CBS
43	N	320	LMN	O5-C1-O1-CBS
43	N	320	LMN	OBY-CCR-O4-C4
43	N	320	LMN	OBX-CCJ-OBV-CBT
43	N	320	LMN	CCL-CCJ-OBV-CBT
43	U	420	LMN	C2-C1-O1-CBS
43	U	420	LMN	O5-C1-O1-CBS
43	U	420	LMN	CBK-CBQ-CCM-CBS
43	U	420	LMN	CBL-CBR-CCM-CBQ
43	U	420	LMN	O1-CBS-CCM-CBR
43	U	420	LMN	OBX-CCJ-OBV-CBT
43	V	301	LMN	OBV-CBT-CCM-CBR
43	V	303	LMN	O5-C1-O1-CBS
43	V	303	LMN	OBX-CCJ-OBV-CBT
43	W	201	LMN	O1-CBS-CCM-CBQ
43	W	201	LMN	O1-CBS-CCM-CBR
43	W	201	LMN	OBX-CCJ-OBV-CBT
43	W	201	LMN	CCL-CCJ-OBV-CBT
43	Y	301	LMN	O1-CBS-CCM-CBQ
43	Y	301	LMN	OBV-CBT-CCM-CBQ
43	Y	301	LMN	OBV-CBT-CCM-CBR
43	Y	301	LMN	OBX-CCJ-OBV-CBT
43	Y	301	LMN	CCL-CCJ-OBV-CBT
43	Y	302	LMN	CBK-CBQ-CCM-CBR
43	Y	302	LMN	CBK-CBQ-CCM-CBS
43	Y	302	LMN	CBL-CBR-CCM-CBQ
43	Y	302	LMN	CBL-CBR-CCM-CBS
43	Y	302	LMN	CBL-CBR-CCM-CBT
43	Y	302	LMN	O1-CBS-CCM-CBQ
43	Y	302	LMN	O1-CBS-CCM-CBR
43	c	519	LMN	C2-C1-O1-CBS
43	c	519	LMN	O5-C1-O1-CBS

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Mol	Chain	Res	Type	Atoms
43	c	519	LMN	CBK-CBQ-CCM-CBR
43	c	519	LMN	CBK-CBQ-CCM-CBS
43	c	519	LMN	CBK-CBQ-CCM-CBT
43	c	519	LMN	CBL-CBR-CCM-CBT
43	c	519	LMN	OBX-CCJ-OBV-CBT
43	c	525	LMN	C2-C1-O1-CBS
43	g	301	LMN	C2-C1-O1-CBS
43	g	301	LMN	O5-C1-O1-CBS
43	g	320	LMN	CBK-CBQ-CCM-CBR
43	g	320	LMN	CBK-CBQ-CCM-CBS
43	g	320	LMN	CBK-CBQ-CCM-CBT
43	g	320	LMN	OBV-CBT-CCM-CBQ
43	g	320	LMN	OBV-CBT-CCM-CBR
43	n	301	LMN	CBL-CBR-CCM-CBQ
43	n	301	LMN	CBL-CBR-CCM-CBS
43	n	301	LMN	CBL-CBR-CCM-CBT
43	n	322	LMN	CBK-CBQ-CCM-CBR
43	n	322	LMN	CBK-CBQ-CCM-CBS
43	n	322	LMN	OBX-CCJ-OBV-CBT
43	n	323	LMN	O1-CBS-CCM-CBQ
43	n	323	LMN	OBV-CBT-CCM-CBQ
43	n	323	LMN	OBV-CBT-CCM-CBR
43	u	401	LMN	O5-C1-O1-CBS
43	u	401	LMN	O1-CBS-CCM-CBQ
43	u	401	LMN	O1-CBS-CCM-CBR
43	u	401	LMN	OBX-CCJ-OBV-CBT
43	v	301	LMN	CBK-CBQ-CCM-CBR
43	v	301	LMN	CBK-CBQ-CCM-CBS
43	v	301	LMN	CBK-CBQ-CCM-CBT
43	v	301	LMN	CBL-CBR-CCM-CBQ
43	v	301	LMN	CBL-CBR-CCM-CBT
43	v	301	LMN	O1-CBS-CCM-CBQ
43	v	301	LMN	O1-CBS-CCM-CBR
43	v	301	LMN	OBX-CCJ-OBV-CBT
43	v	301	LMN	CCL-CCJ-OBV-CBT
43	y	301	LMN	CBK-CBQ-CCM-CBR
43	y	301	LMN	O1-CBS-CCM-CBQ
43	y	302	LMN	O5-C1-O1-CBS
43	y	302	LMN	CBL-CBR-CCM-CBQ
43	y	302	LMN	CBL-CBR-CCM-CBS
43	y	302	LMN	CBL-CBR-CCM-CBT
46	G	320	NEX	C28-C29-C30-C31

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Mol	Chain	Res	Type	Atoms
46	G	320	NEX	C39-C29-C30-C31
46	G	320	NEX	C30-C31-C32-C33
46	G	321	NEX	C12-C13-C14-C15
46	G	321	NEX	C20-C13-C14-C15
46	G	321	NEX	C28-C29-C30-C31
46	G	321	NEX	C39-C29-C30-C31
46	N	319	NEX	C7-C8-C9-C10
46	N	319	NEX	C7-C8-C9-C19
46	N	319	NEX	C11-C10-C9-C8
46	N	319	NEX	C11-C10-C9-C19
46	N	319	NEX	C10-C11-C12-C13
46	N	319	NEX	C11-C12-C13-C14
46	N	319	NEX	C11-C12-C13-C20
46	N	319	NEX	C12-C13-C14-C15
46	N	319	NEX	C20-C13-C14-C15
46	N	319	NEX	C14-C15-C35-C34
46	N	319	NEX	C27-C28-C29-C30
46	N	319	NEX	C27-C28-C29-C39
46	N	319	NEX	C28-C29-C30-C31
46	N	319	NEX	C39-C29-C30-C31
46	N	319	NEX	C30-C31-C32-C33
46	N	319	NEX	C32-C33-C34-C35
46	N	319	NEX	C40-C33-C34-C35
46	V	322	NEX	C11-C10-C9-C8
46	V	322	NEX	C11-C10-C9-C19
46	V	322	NEX	C28-C29-C30-C31
46	V	322	NEX	C39-C29-C30-C31
46	V	322	NEX	C30-C31-C32-C33
46	V	323	NEX	C30-C31-C32-C33
46	g	319	NEX	C28-C29-C30-C31
46	g	319	NEX	C39-C29-C30-C31
46	g	319	NEX	C30-C31-C32-C33
46	n	302	NEX	C12-C13-C14-C15
46	n	302	NEX	C20-C13-C14-C15
46	n	302	NEX	C32-C33-C34-C35
46	n	302	NEX	C40-C33-C34-C35
46	n	321	NEX	C20-C13-C14-C15
46	n	321	NEX	C28-C29-C30-C31
46	n	321	NEX	C39-C29-C30-C31
46	s	319	NEX	C11-C10-C9-C8
46	s	319	NEX	C11-C10-C9-C19
46	s	319	NEX	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
46	s	319	NEX	C11-C12-C13-C14
46	s	319	NEX	C14-C15-C35-C34
46	s	319	NEX	C29-C30-C31-C32
46	s	319	NEX	C31-C32-C33-C34
46	s	319	NEX	C31-C32-C33-C40
46	s	319	NEX	C40-C33-C34-C35
46	v	320	NEX	C10-C11-C12-C13
46	v	320	NEX	C11-C12-C13-C14
46	v	320	NEX	C11-C12-C13-C20
46	v	320	NEX	C33-C34-C35-C15
47	N	318	XAT	C7-C8-C9-C10
47	N	318	XAT	C7-C8-C9-C19
47	N	318	XAT	C26-C27-C28-C29
47	S	317	XAT	C28-C29-C30-C31
47	S	317	XAT	C39-C29-C30-C31
47	S	317	XAT	C30-C31-C32-C33
47	S	317	XAT	C31-C32-C33-C34
47	S	317	XAT	C31-C32-C33-C40
47	V	321	XAT	C11-C10-C9-C8
47	V	321	XAT	C11-C10-C9-C19
47	V	321	XAT	C14-C15-C35-C34
47	V	321	XAT	C32-C33-C34-C35
47	V	321	XAT	C40-C33-C34-C35
47	n	320	XAT	C11-C10-C9-C8
47	n	320	XAT	C11-C10-C9-C19
47	n	320	XAT	C31-C32-C33-C34
47	n	320	XAT	C31-C32-C33-C40
47	n	320	XAT	C32-C33-C34-C35
47	n	320	XAT	C40-C33-C34-C35
47	s	318	XAT	C7-C8-C9-C10
47	s	318	XAT	C7-C8-C9-C19
47	s	318	XAT	C14-C15-C35-C34
47	s	318	XAT	C26-C27-C28-C29
47	s	318	XAT	C30-C31-C32-C33
47	s	318	XAT	C32-C33-C34-C35
47	s	318	XAT	C40-C33-C34-C35
47	v	319	XAT	C10-C11-C12-C13
47	v	319	XAT	C11-C12-C13-C14
47	v	319	XAT	C11-C12-C13-C20
47	v	319	XAT	C12-C13-C14-C15
47	v	319	XAT	C20-C13-C14-C15
47	v	319	XAT	C14-C15-C35-C34

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Mol	Chain	Res	Type	Atoms
47	v	319	XAT	C31-C32-C33-C34
47	v	319	XAT	C31-C32-C33-C40
28	U	415	CLA	O1D-CGD-O2D-CED
43	V	303	LMN	OBY-CCR-O4-C4
43	c	525	LMN	OBZ-CCS-OCB-CCQ
43	n	301	LMN	OBY-CCR-O4-C4
43	C	518	LMN	CCH-CCQ-OCB-CCS
43	N	320	LMN	C3-C4-O4-CCR
29	G	311	CHL	O1D-CGD-O2D-CED
28	N	305	CLA	CBD-CGD-O2D-CED
28	Y	313	CLA	CBD-CGD-O2D-CED
28	g	307	CLA	CBD-CGD-O2D-CED
29	V	302	CHL	CBD-CGD-O2D-CED
29	s	309	CHL	CBD-CGD-O2D-CED
38	d	410	LMG	O10-C28-O8-C9
43	G	301	LMN	OBZ-CCS-OCB-CCQ
43	W	201	LMN	OBZ-CCS-OCB-CCQ
43	v	301	LMN	OBZ-CCS-OCB-CCQ
43	V	301	LMN	CCH-CCQ-OCB-CCS
28	g	307	CLA	O1D-CGD-O2D-CED
28	g	314	CLA	C10-C11-C12-C13
43	V	303	LMN	OBZ-CCS-OCB-CCQ
28	N	305	CLA	O1D-CGD-O2D-CED
28	g	312	CLA	O1D-CGD-O2D-CED
29	g	309	CHL	O1D-CGD-O2D-CED
38	d	410	LMG	C29-C28-O8-C9
28	g	313	CLA	CBD-CGD-O2D-CED
28	V	315	CLA	O1D-CGD-O2D-CED
29	g	310	CHL	O1D-CGD-O2D-CED
43	g	320	LMN	OBV-CBT-CCM-CBS
41	C	515	DGD	O6E-C5E-C6E-O5E
29	N	308	CHL	O1D-CGD-O2D-CED
43	G	304	LMN	OBY-CCR-O4-C4
43	Y	302	LMN	OBY-CCR-O4-C4
43	g	301	LMN	OBZ-CCS-OCB-CCQ
43	c	525	LMN	CCW-CCS-OCB-CCQ
43	v	301	LMN	CCW-CCS-OCB-CCQ
41	C	514	DGD	O6D-C5D-C6D-O5D
43	g	320	LMN	OBZ-CCS-OCB-CCQ
43	Y	302	LMN	CCV-CCR-O4-C4
31	Y	322	0UR	O57-C45-O44-C43
31	y	317	0UR	O57-C45-O44-C43

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Mol	Chain	Res	Type	Atoms
28	G	315	CLA	C3-C5-C6-C7
28	S	304	CLA	C3-C5-C6-C7
28	V	315	CLA	C3-C5-C6-C7
28	n	313	CLA	C3-C5-C6-C7
28	u	415	CLA	C3-C5-C6-C7
29	N	310	CHL	C3-C5-C6-C7
29	V	302	CHL	C3-C5-C6-C7
29	g	316	CHL	C3-C5-C6-C7
34	a	404	PHO	C3-C5-C6-C7
28	y	308	CLA	CBA-CGA-O2A-C1
31	0	313	0UR	C46-C45-O44-C43
31	U	419	0UR	C46-C45-O44-C43
38	a	414	LMG	C11-C10-O7-C8
43	G	301	LMN	OBY-CCR-O4-C4
43	W	201	LMN	OBY-CCR-O4-C4
28	Y	313	CLA	O1D-CGD-O2D-CED
28	V	307	CLA	CBD-CGD-O2D-CED
28	0	303	CLA	C2C-C3C-CAC-CBC
38	d	410	LMG	O6-C5-C6-O5
41	c	524	DGD	O6E-C5E-C6E-O5E
41	C	514	DGD	C4D-C5D-C6D-O5D
43	g	301	LMN	CCW-CCS-OCB-CCQ
43	G	304	LMN	OBV-CBT-CCM-CBS
43	n	322	LMN	OAI-CBM-CCC-OBY
28	u	407	CLA	C4-C3-C5-C6
29	Y	307	CHL	C4-C3-C5-C6
29	n	308	CHL	C4-C3-C5-C6
28	N	313	CLA	C2-C3-C5-C6
28	U	413	CLA	C2-C3-C5-C6
39	A	409	PL9	C38-C39-C41-C42
28	1	303	CLA	C2A-CAA-CBA-CGA
28	A	416	CLA	C2A-CAA-CBA-CGA
28	U	413	CLA	C2A-CAA-CBA-CGA
28	b	620	CLA	C2A-CAA-CBA-CGA
28	b	622	CLA	C2A-CAA-CBA-CGA
28	v	306	CLA	C2A-CAA-CBA-CGA
29	N	303	CHL	C2A-CAA-CBA-CGA
29	N	309	CHL	C2A-CAA-CBA-CGA
29	n	312	CHL	C2A-CAA-CBA-CGA
29	u	410	CHL	C2A-CAA-CBA-CGA
41	C	516	DGD	C2A-C3A-C4A-C5A
41	C	516	DGD	C4A-C5A-C6A-C7A

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Mol	Chain	Res	Type	Atoms
28	b	622	CLA	C3-C5-C6-C7
38	I	101	LMG	C29-C28-O8-C9
41	C	520	DGD	C2A-C1A-O1G-C1G
41	c	518	DGD	C1B-C2B-C3B-C4B
43	W	201	LMN	CCV-CCR-O4-C4
43	g	320	LMN	CCW-CCS-OCB-CCQ
28	S	310	CLA	C1-C2-C3-C5
29	G	317	CHL	C1-C2-C3-C5
29	g	316	CHL	C1-C2-C3-C5
39	a	412	PL9	C42-C43-C44-C45
29	s	309	CHL	O1D-CGD-O2D-CED
28	y	308	CLA	O1A-CGA-O2A-C1
29	g	310	CHL	O1A-CGA-O2A-C1
38	I	101	LMG	O10-C28-O8-C9
41	A	417	DGD	O1A-C1A-O1G-C1G
37	b	614	SQD	C45-C46-O48-C23
30	y	319	0IE	C9-C10-C11-C12
31	0	314	0UR	C3-C4-C5-C6
46	N	319	NEX	C13-C14-C15-C35
43	G	301	LMN	CCV-CCR-O4-C4
43	c	525	LMN	OAL-CBP-CCF-OBX
43	n	323	LMN	C5-C4-O4-CCR
29	N	306	CHL	CBD-CGD-O2D-CED
31	U	419	0UR	O57-C45-O44-C43
31	g	317	0UR	O57-C45-O44-C43
31	v	317	0UR	O57-C45-O44-C43
42	b	623	LHG	O2-C2-C3-O3
28	C	504	CLA	C3-C5-C6-C7
28	N	304	CLA	C3-C5-C6-C7
29	V	311	CHL	C3-C5-C6-C7
29	u	410	CHL	C3-C5-C6-C7
34	A	402	PHO	C3-C5-C6-C7
29	g	310	CHL	CBA-CGA-O2A-C1
41	A	417	DGD	C2A-C1A-O1G-C1G
42	g	303	LHG	C24-C23-O8-C6
43	c	525	LMN	C3-C4-O4-CCR
43	n	323	LMN	CCH-CCQ-OCB-CCS
31	Y	323	0UR	C46-C45-O44-C43
31	v	317	0UR	C46-C45-O44-C43
43	c	519	LMN	OBY-CCR-O4-C4
43	n	323	LMN	OBV-CBT-CCM-CBS
43	u	401	LMN	O1-CBS-CCM-CBT

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Mol	Chain	Res	Type	Atoms
28	S	310	CLA	CBD-CGD-O2D-CED
43	n	322	LMN	OAI-CBM-CCC-CCN
43	u	401	LMN	OBY-CCR-O4-C4
31	0	313	0UR	O44-C45-C46-C47
31	U	419	0UR	O44-C45-C46-C47
31	v	317	0UR	O44-C45-C46-C47
42	g	303	LHG	C11-C12-C13-C14
41	b	621	DGD	O6D-C5D-C6D-O5D
32	y	320	LUT	C14-C15-C35-C34
43	U	420	LMN	C3-C4-O4-CCR
28	U	414	CLA	CBD-CGD-O2D-CED
28	Y	311	CLA	C3-C5-C6-C7
28	b	618	CLA	C3-C5-C6-C7
28	g	306	CLA	C3-C5-C6-C7
43	Y	302	LMN	O1-CBS-CCM-CBT
38	J	102	LMG	O6-C5-C6-O5
38	d	410	LMG	C4-C5-C6-O5
41	C	515	DGD	C4E-C5E-C6E-O5E
41	c	524	DGD	C4E-C5E-C6E-O5E
43	n	323	LMN	C4-C5-C6-O6
45	E	101	HEM	C2A-CAA-CBA-CGA
28	B	618	CLA	O2A-C1-C2-C3
43	n	322	LMN	OAJ-CBN-CCD-OBZ
28	B	606	CLA	C4-C3-C5-C6
28	B	622	CLA	C4-C3-C5-C6
28	N	311	CLA	C4-C3-C5-C6
28	N	313	CLA	C4-C3-C5-C6
28	b	608	CLA	C4-C3-C5-C6
28	b	617	CLA	C4-C3-C5-C6
28	c	508	CLA	C4-C3-C5-C6
28	c	522	CLA	C4-C3-C5-C6
28	g	313	CLA	C4-C3-C5-C6
28	n	314	CLA	C4-C3-C5-C6
28	s	305	CLA	C4-C3-C5-C6
28	u	413	CLA	C4-C3-C5-C6
29	S	306	CHL	C4-C3-C5-C6
39	A	409	PL9	C35-C34-C36-C37
39	a	412	PL9	C40-C39-C41-C42
28	B	606	CLA	C2-C3-C5-C6
28	B	622	CLA	C2-C3-C5-C6
28	N	311	CLA	C2-C3-C5-C6
28	b	608	CLA	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
28	b	617	CLA	C2-C3-C5-C6
28	c	508	CLA	C2-C3-C5-C6
28	c	522	CLA	C2-C3-C5-C6
28	g	313	CLA	C2-C3-C5-C6
28	n	314	CLA	C2-C3-C5-C6
28	s	305	CLA	C2-C3-C5-C6
28	u	413	CLA	C2-C3-C5-C6
29	S	306	CHL	C2-C3-C5-C6
39	A	409	PL9	C33-C34-C36-C37
39	a	412	PL9	C38-C39-C41-C42
28	B	621	CLA	C2A-CAA-CBA-CGA
28	U	417	CLA	C2A-CAA-CBA-CGA
28	Y	303	CLA	C2A-CAA-CBA-CGA
29	s	303	CHL	C2A-CAA-CBA-CGA
43	G	301	LMN	OBV-CBT-CCM-CBS
43	Y	301	LMN	OBV-CBT-CCM-CBS
43	G	304	LMN	OAL-CBP-CCF-OBX
43	U	420	LMN	OAJ-CBN-CCD-OBZ
29	S	306	CHL	O1A-CGA-O2A-C1
41	C	520	DGD	O1A-C1A-O1G-C1G
42	g	303	LHG	O10-C23-O8-C6
37	z	101	SQD	O5-C1-O6-C44
38	M	101	LMG	O6-C1-O1-C7
41	C	516	DGD	O6D-C1D-O3G-C3G
41	a	405	DGD	O6D-C1D-O3G-C3G
41	c	516	DGD	O6D-C1D-O3G-C3G
43	C	521	LMN	O5-C1-O1-CBS
43	c	525	LMN	O5-C1-O1-CBS
43	v	301	LMN	O5-C1-O1-CBS
39	A	409	PL9	C9-C11-C12-C13
39	A	409	PL9	C14-C16-C17-C18
39	a	412	PL9	C24-C26-C27-C28
39	a	412	PL9	C34-C36-C37-C38
39	a	412	PL9	C44-C46-C47-C48
43	y	301	LMN	OBY-CCR-O4-C4
38	m	101	LMG	C29-C28-O8-C9
38	c	502	LMG	O6-C5-C6-O5
43	n	323	LMN	O5-C5-C6-O6
41	g	302	DGD	C4E-C5E-C6E-O5E
31	y	322	0UR	O44-C45-C46-C47
43	G	301	LMN	CCW-CCS-OCB-CCQ
28	u	417	CLA	C1-C2-C3-C5

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Mol	Chain	Res	Type	Atoms
28	0	303	CLA	C4C-C3C-CAC-CBC
29	V	302	CHL	O1D-CGD-O2D-CED
29	V	309	CHL	CBD-CGD-O2D-CED
42	b	623	LHG	C1-C2-C3-O3
42	g	303	LHG	C1-C2-C3-O3
29	N	303	CHL	C3-C5-C6-C7
28	N	305	CLA	CBA-CGA-O2A-C1
28	Y	311	CLA	CBA-CGA-O2A-C1
28	g	307	CLA	CBA-CGA-O2A-C1
29	S	306	CHL	CBA-CGA-O2A-C1
29	g	316	CHL	CBA-CGA-O2A-C1
29	v	303	CHL	CBA-CGA-O2A-C1
41	g	302	DGD	C2A-C1A-O1G-C1G
30	1	314	0IE	C13-C14-C15-C16
32	1	313	LUT	C9-C10-C11-C12
28	C	519	CLA	C15-C16-C17-C18
29	V	302	CHL	C5-C6-C7-C8
43	c	519	LMN	CCV-CCR-O4-C4
41	A	417	DGD	O6E-C5E-C6E-O5E
28	A	416	CLA	C8-C10-C11-C12
28	V	316	CLA	C5-C6-C7-C8
31	Y	323	0UR	O57-C45-O44-C43
41	C	515	DGD	C4D-C5D-C6D-O5D
41	c	518	DGD	C1A-C2A-C3A-C4A
37	b	614	SQD	C2-C1-O6-C44
38	A	408	LMG	C2-C1-O1-C7
38	J	102	LMG	C2-C1-O1-C7
38	U	402	LMG	C2-C1-O1-C7
38	a	411	LMG	C2-C1-O1-C7
38	c	528	LMG	C2-C1-O1-C7
41	c	516	DGD	C2D-C1D-O3G-C3G
43	V	303	LMN	C2-C1-O1-CBS
43	V	303	LMN	CCL-CCJ-OBV-CBT
43	c	519	LMN	CCL-CCJ-OBV-CBT
43	n	322	LMN	CCL-CCJ-OBV-CBT
41	c	518	DGD	O2G-C2G-C3G-O3G
43	C	518	LMN	O5-C5-C6-O6
28	g	312	CLA	C4-C3-C5-C6
28	u	407	CLA	C2-C3-C5-C6
29	G	317	CHL	C2-C3-C5-C6
31	G	319	0UR	C46-C45-O44-C43
28	N	312	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
28	N	314	CLA	C6-C7-C8-C9
28	U	415	CLA	C6-C7-C8-C9
28	a	416	CLA	C14-C13-C15-C16
28	c	522	CLA	C11-C12-C13-C14
28	g	313	CLA	C11-C10-C8-C9
28	u	415	CLA	C14-C13-C15-C16
28	v	315	CLA	C11-C10-C8-C9
29	G	317	CHL	C11-C10-C8-C9
29	G	317	CHL	C11-C12-C13-C14
29	N	308	CHL	C11-C12-C13-C14
29	S	306	CHL	C11-C10-C8-C9
29	S	308	CHL	C11-C12-C13-C14
29	V	302	CHL	C6-C7-C8-C9
29	n	308	CHL	C11-C10-C8-C9
29	s	310	CHL	C6-C7-C8-C9
29	v	309	CHL	C14-C13-C15-C16
28	1	303	CLA	CBD-CGD-O2D-CED
28	S	310	CLA	C4C-C3C-CAC-CBC
30	1	314	0IE	C5-C6-C7-C21
30	1	314	0IE	C23-C16-C17-C18
31	0	313	0UR	C21-C12-C13-C14
31	0	313	0UR	C22-C16-C17-C18
31	1	312	0UR	C5-C6-C7-C20
31	1	316	0UR	C22-C16-C17-C18
31	N	316	0UR	C22-C16-C17-C18
31	U	419	0UR	C21-C12-C13-C14
31	Y	318	0UR	C5-C6-C7-C20
31	g	317	0UR	C5-C6-C7-C20
31	s	316	0UR	C5-C6-C7-C20
31	v	317	0UR	C22-C16-C17-C18
31	y	317	0UR	C5-C6-C7-C20
31	y	322	0UR	C21-C12-C13-C14
32	y	320	LUT	C7-C8-C9-C19
33	K	102	BCR	C37-C22-C23-C24
33	c	509	BCR	C37-C22-C23-C24
33	k	101	BCR	C37-C22-C23-C24
33	k	102	BCR	C37-C22-C23-C24
46	V	323	NEX	C11-C12-C13-C20
46	V	323	NEX	C31-C32-C33-C40
46	g	319	NEX	C27-C28-C29-C39
46	s	319	NEX	C11-C12-C13-C20
47	S	317	XAT	C27-C28-C29-C39

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Mol	Chain	Res	Type	Atoms
43	y	301	LMN	CCV-CCR-O4-C4
30	1	314	0IE	C15-C16-C17-C18
31	0	313	0UR	C11-C12-C13-C14
31	0	313	0UR	C15-C16-C17-C18
31	0	314	0UR	C5-C6-C7-C8
33	c	509	BCR	C21-C22-C23-C24
47	S	317	XAT	C27-C28-C29-C30
43	U	420	LMN	O5-C5-C6-O6
43	n	322	LMN	OAJ-CBN-CCD-CCO
42	L	101	LHG	C23-C24-C25-C26
43	N	320	LMN	CBI-CBK-CBQ-CCM
43	U	420	LMN	CBI-CBK-CBQ-CCM
43	n	301	LMN	CBI-CBK-CBQ-CCM
29	v	303	CHL	O1A-CGA-O2A-C1
38	m	101	LMG	O10-C28-O8-C9
28	y	308	CLA	C5-C6-C7-C8
43	W	201	LMN	O1-CBS-CCM-CBT
43	n	301	LMN	C4-C5-C6-O6
28	B	611	CLA	C13-C15-C16-C17
28	S	311	CLA	C5-C6-C7-C8
28	a	416	CLA	C8-C10-C11-C12
28	b	616	CLA	C15-C16-C17-C18
29	V	311	CHL	C5-C6-C7-C8
29	y	307	CHL	C5-C6-C7-C8
41	A	417	DGD	C4E-C5E-C6E-O5E
43	U	420	LMN	OAJ-CBN-CCD-CCO
28	S	310	CLA	C2C-C3C-CAC-CBC
43	g	320	LMN	C5-C4-O4-CCR
47	n	320	XAT	C14-C15-C35-C34
28	U	411	CLA	C8-C10-C11-C12
28	U	415	CLA	C5-C6-C7-C8
28	c	505	CLA	C10-C11-C12-C13
28	g	313	CLA	C10-C11-C12-C13
28	g	314	CLA	C5-C6-C7-C8
28	u	412	CLA	C8-C10-C11-C12
28	v	315	CLA	C15-C16-C17-C18
29	V	313	CHL	C15-C16-C17-C18
29	g	316	CHL	C5-C6-C7-C8
43	v	301	LMN	OBY-CCR-O4-C4
28	V	307	CLA	O1D-CGD-O2D-CED
41	c	516	DGD	C1A-C2A-C3A-C4A
42	D	402	LHG	C7-C8-C9-C10

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Mol	Chain	Res	Type	Atoms
42	D	406	LHG	C23-C24-C25-C26
28	B	611	CLA	C15-C16-C17-C18
28	U	404	CLA	C15-C16-C17-C18
28	c	522	CLA	C10-C11-C12-C13
29	V	309	CHL	C10-C11-C12-C13
29	V	313	CHL	C13-C15-C16-C17
29	v	303	CHL	C8-C10-C11-C12
34	a	404	PHO	C5-C6-C7-C8
28	B	616	CLA	C3-C5-C6-C7
43	V	303	LMN	CBI-CBK-CBQ-CCM
43	W	201	LMN	CBI-CBK-CBQ-CCM
43	c	525	LMN	CBJ-CBL-CBR-CCM
43	n	322	LMN	CBI-CBK-CBQ-CCM
43	n	322	LMN	CBJ-CBL-CBR-CCM
43	u	401	LMN	CBJ-CBL-CBR-CCM
45	e	101	HEM	C1A-C2A-CAA-CBA
43	C	521	LMN	OBY-CCR-O4-C4
43	g	320	LMN	OBY-CCR-O4-C4
28	A	416	CLA	C2-C1-O2A-CGA
28	B	606	CLA	C2-C1-O2A-CGA
28	B	622	CLA	C2-C1-O2A-CGA
28	s	314	CLA	C2-C1-O2A-CGA
31	1	312	0UR	C46-C45-O44-C43
31	n	318	0UR	C46-C45-O44-C43
31	y	318	0UR	C46-C45-O44-C43
28	n	315	CLA	C10-C11-C12-C13
41	A	417	DGD	C1A-C2A-C3A-C4A
41	c	524	DGD	C1B-C2B-C3B-C4B
28	g	314	CLA	C13-C15-C16-C17
28	y	306	CLA	C2A-CAA-CBA-CGA
31	u	420	0UR	O44-C45-C46-C47
28	g	313	CLA	C6-C7-C8-C10
28	U	414	CLA	C3-C5-C6-C7
28	b	610	CLA	C3-C5-C6-C7
29	s	308	CHL	C3-C5-C6-C7
30	0	312	0IE	C13-C14-C15-C16
30	Y	321	0IE	C3-C4-C5-C6
31	0	313	0UR	C9-C10-C11-C12
42	V	304	LHG	C23-C24-C25-C26
28	N	313	CLA	C2A-CAA-CBA-CGA
28	g	313	CLA	O1D-CGD-O2D-CED
28	B	619	CLA	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
28	B	622	CLA	C13-C15-C16-C17
28	D	410	CLA	C10-C11-C12-C13
28	U	413	CLA	C5-C6-C7-C8
28	c	522	CLA	C5-C6-C7-C8
28	g	305	CLA	C5-C6-C7-C8
29	N	302	CHL	C5-C6-C7-C8
29	V	311	CHL	C15-C16-C17-C18
43	C	521	LMN	CCV-CCR-O4-C4
41	g	302	DGD	O6E-C5E-C6E-O5E
28	N	305	CLA	O1A-CGA-O2A-C1
28	Y	311	CLA	O1A-CGA-O2A-C1
28	g	307	CLA	O1A-CGA-O2A-C1
41	g	302	DGD	O1A-C1A-O1G-C1G
31	0	313	0UR	O57-C45-C46-C47
31	U	419	0UR	O57-C45-C46-C47
31	v	317	0UR	O57-C45-C46-C47
43	c	525	LMN	OAL-CBP-CCF-CCQ
38	a	411	LMG	O6-C1-O1-C7
29	V	302	CHL	C8-C10-C11-C12
39	A	409	PL9	C44-C46-C47-C48
39	a	412	PL9	C9-C11-C12-C13
39	a	412	PL9	C14-C16-C17-C18
39	a	412	PL9	C19-C21-C22-C23
42	v	302	LHG	C7-C8-C9-C10
32	1	313	LUT	C30-C31-C32-C33
32	Y	320	LUT	C30-C31-C32-C33
32	y	320	LUT	C10-C11-C12-C13
46	g	319	NEX	C10-C11-C12-C13
46	s	319	NEX	C30-C31-C32-C33
47	S	317	XAT	C10-C11-C12-C13
47	V	321	XAT	C10-C11-C12-C13
47	n	320	XAT	C10-C11-C12-C13
38	I	101	LMG	O6-C5-C6-O5
42	U	403	LHG	O2-C2-C3-O3
28	B	607	CLA	C3-C5-C6-C7
28	B	613	CLA	C13-C15-C16-C17
28	C	510	CLA	C10-C11-C12-C13
29	S	306	CHL	C13-C15-C16-C17
31	y	322	0UR	C46-C45-O44-C43
31	0	314	0UR	O44-C45-C46-C47
28	b	618	CLA	C8-C10-C11-C12
28	b	622	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
29	V	309	CHL	C5-C6-C7-C8
29	u	410	CHL	C8-C10-C11-C12
34	d	407	PHO	C8-C10-C11-C12
42	v	302	LHG	C14-C15-C16-C17
38	I	101	LMG	C4-C5-C6-O5
29	g	316	CHL	O1A-CGA-O2A-C1
41	c	517	DGD	C4D-C5D-C6D-O5D
28	B	607	CLA	C5-C6-C7-C8
28	B	609	CLA	C5-C6-C7-C8
28	V	315	CLA	C8-C10-C11-C12
42	L	101	LHG	C3-O3-P-O6
42	N	301	LHG	C3-O3-P-O6
42	U	403	LHG	C3-O3-P-O6
42	U	403	LHG	C4-O6-P-O3
42	b	624	LHG	C4-O6-P-O3
42	c	527	LHG	C3-O3-P-O6
42	g	303	LHG	C3-O3-P-O6
42	s	301	LHG	C3-O3-P-O6
43	V	301	LMN	CBJ-CBL-CBR-CCM
43	g	320	LMN	CBI-CBK-CBQ-CCM
41	C	516	DGD	O6E-C5E-C6E-O5E
29	S	306	CHL	C15-C16-C17-C18
29	V	302	CHL	C10-C11-C12-C13
42	U	403	LHG	C1-C2-C3-O3
28	Y	311	CLA	C4-C3-C5-C6
28	V	315	CLA	C10-C11-C12-C13
29	N	302	CHL	CBD-CGD-O2D-CED
31	G	319	0UR	O57-C45-O44-C43
31	y	322	0UR	O57-C45-O44-C43
41	C	516	DGD	C2B-C3B-C4B-C5B
28	c	508	CLA	C2A-CAA-CBA-CGA
29	v	309	CHL	C2A-CAA-CBA-CGA
28	Y	305	CLA	C3-C5-C6-C7
28	S	310	CLA	C8-C10-C11-C12
28	B	606	CLA	C8-C10-C11-C12
43	u	401	LMN	C5-C4-O4-CCR
31	1	312	0UR	C3-C4-C5-C6
31	U	419	0UR	C3-C4-C5-C6
46	N	319	NEX	C33-C34-C35-C15
38	J	102	LMG	C4-C5-C6-O5
43	V	301	LMN	CAZ-CBB-CBD-CBF
38	A	413	LMG	C11-C10-O7-C8

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Mol	Chain	Res	Type	Atoms
42	g	303	LHG	C8-C7-O7-C5
32	1	313	LUT	C11-C10-C9-C19
32	1	313	LUT	C20-C13-C14-C15
32	Y	320	LUT	C20-C13-C14-C15
43	g	301	LMN	OAL-CBP-CCF-OBX
46	G	321	NEX	C40-C33-C34-C35
46	V	323	NEX	C11-C10-C9-C19
46	V	323	NEX	C40-C33-C34-C35
46	n	321	NEX	C40-C33-C34-C35
46	s	319	NEX	C39-C29-C30-C31
46	v	320	NEX	C39-C29-C30-C31
47	N	318	XAT	C39-C29-C30-C31
47	v	319	XAT	C11-C10-C9-C19
47	v	319	XAT	C39-C29-C30-C31
38	I	101	LMG	C34-C35-C36-C37
38	a	414	LMG	C36-C37-C38-C39
42	G	303	LHG	C15-C16-C17-C18
42	s	301	LHG	C31-C32-C33-C34
43	g	301	LMN	CBH-CBJ-CBL-CBR
28	Y	303	CLA	C6-C7-C8-C10
28	g	313	CLA	C11-C12-C13-C14
39	a	412	PL9	C47-C48-C49-C50
38	A	413	LMG	C31-C32-C33-C34
38	a	414	LMG	C13-C14-C15-C16
43	N	320	LMN	CBF-CBH-CBJ-CBL
43	n	323	LMN	CBH-CBJ-CBL-CBR
43	y	302	LMN	CCF-CCQ-OCB-CCS
38	A	413	LMG	O9-C10-O7-C8
42	g	303	LHG	O9-C7-O7-C5
29	s	309	CHL	C1-C2-C3-C5
41	C	520	DGD	C1B-C2B-C3B-C4B
43	y	301	LMN	OBZ-CCS-OCB-CCQ
41	c	524	DGD	C2A-C3A-C4A-C5A
31	G	318	0UR	O44-C45-C46-C47
31	Y	322	0UR	O44-C45-C46-C47
42	B	623	LHG	C2-C3-O3-P
31	Y	322	0UR	C48-C49-C50-C51
38	I	101	LMG	C38-C39-C40-C41
42	G	303	LHG	C24-C25-C26-C27
43	n	322	LMN	CAW-CAY-CBA-CBC
43	n	322	LMN	CBA-CBC-CBE-CBG
41	C	515	DGD	O6D-C5D-C6D-O5D

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Mol	Chain	Res	Type	Atoms
43	c	519	LMN	CBJ-CBL-CBR-CCM
43	y	301	LMN	CBJ-CBL-CBR-CCM
42	c	527	LHG	O2-C2-C3-O3
42	g	303	LHG	O2-C2-C3-O3
42	S	301	LHG	C31-C32-C33-C34
43	W	201	LMN	CBA-CBC-CBE-CBG
32	1	313	LUT	C11-C10-C9-C8
32	1	313	LUT	C12-C13-C14-C15
32	Y	320	LUT	C12-C13-C14-C15
41	c	524	DGD	C2D-C1D-O3G-C3G
43	u	401	LMN	C2-C1-O1-CBS
46	G	321	NEX	C32-C33-C34-C35
46	V	323	NEX	C11-C10-C9-C8
46	V	323	NEX	C32-C33-C34-C35
46	n	321	NEX	C12-C13-C14-C15
46	n	321	NEX	C32-C33-C34-C35
46	s	319	NEX	C28-C29-C30-C31
46	s	319	NEX	C32-C33-C34-C35
46	v	320	NEX	C28-C29-C30-C31
47	N	318	XAT	C28-C29-C30-C31
47	v	319	XAT	C11-C10-C9-C8
47	v	319	XAT	C28-C29-C30-C31
41	c	515	DGD	O2G-C2G-C3G-O3G
38	J	102	LMG	C29-C28-O8-C9
38	c	502	LMG	C29-C28-O8-C9
41	b	621	DGD	C4A-C5A-C6A-C7A
41	g	302	DGD	C8B-C9B-CAB-CBB
43	Y	302	LMN	CBE-CBG-CBI-CBK
28	U	406	CLA	C10-C11-C12-C13
42	D	406	LHG	C11-C12-C13-C14
31	1	316	0UR	C46-C45-O44-C43
28	B	616	CLA	C11-C12-C13-C14
29	G	317	CHL	C6-C7-C8-C9
31	y	322	0UR	C51-C52-C53-C54
41	a	409	DGD	C6B-C7B-C8B-C9B
42	v	302	LHG	C25-C26-C27-C28
43	U	420	LMN	CBE-CBG-CBI-CBK
43	n	301	LMN	O5-C5-C6-O6
28	U	404	CLA	C2A-CAA-CBA-CGA
28	Y	308	CLA	C2A-CAA-CBA-CGA
28	y	305	CLA	C2A-CAA-CBA-CGA
29	S	306	CHL	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
29	U	409	CHL	C2A-CAA-CBA-CGA
30	N	317	0IE	C5-C6-C7-C21
31	y	323	0UR	C22-C16-C17-C18
46	v	320	NEX	C31-C32-C33-C40
43	y	301	LMN	CCW-CCS-OCB-CCQ
43	u	401	LMN	CBG-CBI-CBK-CBQ
31	Y	322	0UR	O57-C45-C46-C47
31	y	322	0UR	O57-C45-C46-C47
31	1	316	0UR	C11-C12-C13-C14
31	s	316	0UR	C15-C16-C17-C18
31	y	323	0UR	C15-C16-C17-C18
32	y	320	LUT	C7-C8-C9-C10
28	U	406	CLA	C3-C5-C6-C7
34	d	407	PHO	C3-C5-C6-C7
28	s	311	CLA	C5-C6-C7-C8
41	a	409	DGD	C2B-C1B-O2G-C2G
38	m	101	LMG	C15-C16-C17-C18
41	c	516	DGD	CAB-CBB-CCB-CDB
38	c	502	LMG	C10-C11-C12-C13
41	C	516	DGD	C1A-C2A-C3A-C4A
42	v	302	LHG	C23-C24-C25-C26
28	S	310	CLA	O1D-CGD-O2D-CED
39	a	412	PL9	C47-C48-C49-C51
38	I	101	LMG	C39-C40-C41-C42
38	a	414	LMG	C34-C35-C36-C37
38	c	502	LMG	C29-C30-C31-C32
38	d	410	LMG	C11-C12-C13-C14
38	d	410	LMG	C12-C13-C14-C15
41	b	621	DGD	CCA-CDA-CEA-CFA
41	b	621	DGD	C5B-C6B-C7B-C8B
42	L	101	LHG	C9-C10-C11-C12
43	C	518	LMN	CBB-CBD-CBF-CBH
43	G	301	LMN	CAX-CAZ-CBB-CBD
43	U	420	LMN	CAX-CAZ-CBB-CBD
43	g	320	LMN	C3-C4-O4-CCR
43	n	322	LMN	CBH-CBJ-CBL-CBR
28	Y	311	CLA	C4B-C3B-CAB-CBB
29	N	306	CHL	C4B-C3B-CAB-CBB
29	s	306	CHL	C4B-C3B-CAB-CBB
29	v	303	CHL	C4B-C3B-CAB-CBB
28	U	407	CLA	C6-C7-C8-C10
28	Y	303	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
38	A	413	LMG	C30-C31-C32-C33
38	J	102	LMG	C17-C18-C19-C20
38	J	102	LMG	C29-C30-C31-C32
43	C	518	LMN	CBF-CBH-CBJ-CBL
43	U	420	LMN	CAY-CBA-CBC-CBE
43	U	420	LMN	CAZ-CBB-CBD-CBF
28	U	414	CLA	O1D-CGD-O2D-CED
28	g	313	CLA	C2C-C3C-CAC-CBC
38	J	102	LMG	C32-C33-C34-C35
38	c	502	LMG	C30-C31-C32-C33
43	U	420	LMN	CCF-CCQ-OCB-CCS
31	1	312	0UR	O57-C45-O44-C43
31	1	316	0UR	O57-C45-O44-C43
31	n	318	0UR	O57-C45-O44-C43
31	y	318	0UR	O57-C45-O44-C43
29	s	303	CHL	C10-C11-C12-C13
43	Y	302	LMN	O5-C5-C6-O6
41	c	517	DGD	O6D-C5D-C6D-O5D
38	A	413	LMG	C33-C34-C35-C36
38	m	101	LMG	C35-C36-C37-C38
28	0	307	CLA	C3A-C2A-CAA-CBA
28	C	509	CLA	C3A-C2A-CAA-CBA
28	N	311	CLA	C3A-C2A-CAA-CBA
28	N	312	CLA	C3A-C2A-CAA-CBA
28	S	311	CLA	C3A-C2A-CAA-CBA
28	U	406	CLA	C3A-C2A-CAA-CBA
28	Y	313	CLA	C3A-C2A-CAA-CBA
28	c	520	CLA	C3A-C2A-CAA-CBA
28	s	313	CLA	C3A-C2A-CAA-CBA
28	u	416	CLA	C3A-C2A-CAA-CBA
29	N	308	CHL	C3A-C2A-CAA-CBA
29	S	307	CHL	C3A-C2A-CAA-CBA
29	V	310	CHL	C3A-C2A-CAA-CBA
29	s	308	CHL	C3A-C2A-CAA-CBA
29	v	304	CHL	C3A-C2A-CAA-CBA
29	n	312	CHL	C5-C6-C7-C8
31	Y	317	0UR	C48-C49-C50-C51
31	y	323	0UR	C51-C52-C53-C54
38	A	413	LMG	C32-C33-C34-C35
38	c	502	LMG	C14-C15-C16-C17
38	d	410	LMG	C15-C16-C17-C18
41	C	514	DGD	C3B-C4B-C5B-C6B

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Mol	Chain	Res	Type	Atoms
43	y	301	LMN	CBF-CBH-CBJ-CBL
28	1	307	CLA	C2C-C3C-CAC-CBC
41	g	302	DGD	C7B-C8B-C9B-CAB
38	a	414	LMG	C7-C8-C9-O8
29	G	317	CHL	CBD-CGD-O2D-CED
43	n	323	LMN	O1-CBS-CCM-CBT
28	C	517	CLA	O2A-C1-C2-C3
28	n	317	CLA	O2A-C1-C2-C3
32	1	313	LUT	C14-C15-C35-C34
46	V	322	NEX	C14-C15-C35-C34
47	N	318	XAT	C14-C15-C35-C34
47	S	317	XAT	C14-C15-C35-C34
28	B	608	CLA	C3-C5-C6-C7
28	y	311	CLA	C3-C5-C6-C7
31	0	314	0UR	O57-C45-C46-C47
31	G	318	0UR	O57-C45-C46-C47
42	V	304	LHG	C7-C8-C9-C10
28	g	314	CLA	C2C-C3C-CAC-CBC
28	C	503	CLA	C4-C3-C5-C6
28	G	306	CLA	C4-C3-C5-C6
28	S	313	CLA	C4-C3-C5-C6
28	b	607	CLA	C4-C3-C5-C6
28	b	609	CLA	C4-C3-C5-C6
29	s	302	CHL	C4-C3-C5-C6
28	S	313	CLA	C2-C3-C5-C6
28	b	609	CLA	C2-C3-C5-C6
28	u	412	CLA	C2-C3-C5-C6
29	s	302	CHL	C2-C3-C5-C6
41	C	516	DGD	C2B-C1B-O2G-C2G
41	C	520	DGD	C2B-C1B-O2G-C2G
41	a	405	DGD	C2B-C1B-O2G-C2G
37	c	523	SQD	C45-C46-O48-C23
28	g	314	CLA	C1-C2-C3-C5
29	v	303	CHL	C1-C2-C3-C5
28	s	304	CLA	C2A-CAA-CBA-CGA
38	a	414	LMG	C30-C31-C32-C33
41	c	518	DGD	C6A-C7A-C8A-C9A
43	N	320	LMN	CBE-CBG-CBI-CBK
43	Y	302	LMN	CBD-CBF-CBH-CBJ
43	n	322	LMN	CBE-CBG-CBI-CBK
28	B	612	CLA	C16-C17-C18-C20
41	C	514	DGD	C3A-C4A-C5A-C6A

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Mol	Chain	Res	Type	Atoms
41	C	520	DGD	C6B-C7B-C8B-C9B
28	U	415	CLA	C2B-C3B-CAB-CBB
28	Y	311	CLA	C2B-C3B-CAB-CBB
28	g	312	CLA	C2B-C3B-CAB-CBB
29	N	306	CHL	C2B-C3B-CAB-CBB
29	s	306	CHL	C2B-C3B-CAB-CBB
42	D	402	LHG	C28-C29-C30-C31
42	g	303	LHG	C11-C10-C9-C8
31	Y	322	0UR	C49-C50-C51-C52
41	b	621	DGD	C4B-C5B-C6B-C7B
42	s	301	LHG	C24-C25-C26-C27
41	C	516	DGD	O1B-C1B-O2G-C2G
41	C	520	DGD	O1B-C1B-O2G-C2G
41	a	405	DGD	O1B-C1B-O2G-C2G
41	a	409	DGD	O1B-C1B-O2G-C2G
28	g	313	CLA	C4C-C3C-CAC-CBC
41	a	409	DGD	CBB-CCB-CDB-CEB
43	C	518	LMN	CAW-CAY-CBA-CBC
29	n	308	CHL	C5-C6-C7-C8
38	J	102	LMG	O10-C28-O8-C9
32	Y	320	LUT	C1-C6-C7-C8
32	Y	320	LUT	C5-C6-C7-C8
32	u	419	LUT	C1-C6-C7-C8
33	B	603	BCR	C23-C24-C25-C26
33	B	604	BCR	C1-C6-C7-C8
33	B	604	BCR	C5-C6-C7-C8
33	B	604	BCR	C23-C24-C25-C26
33	B	614	BCR	C23-C24-C25-C26
33	C	502	BCR	C23-C24-C25-C26
33	D	403	BCR	C1-C6-C7-C8
33	D	403	BCR	C5-C6-C7-C8
33	D	403	BCR	C23-C24-C25-C26
33	H	101	BCR	C5-C6-C7-C8
33	H	101	BCR	C23-C24-C25-C26
33	K	102	BCR	C1-C6-C7-C8
33	K	102	BCR	C5-C6-C7-C8
33	K	104	BCR	C23-C24-C25-C26
33	T	101	BCR	C23-C24-C25-C26
33	a	401	BCR	C23-C24-C25-C26
33	b	602	BCR	C1-C6-C7-C8
33	b	602	BCR	C5-C6-C7-C8
33	b	602	BCR	C23-C24-C25-C26

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Mol	Chain	Res	Type	Atoms
33	b	603	BCR	C1-C6-C7-C8
33	b	603	BCR	C5-C6-C7-C8
33	b	603	BCR	C23-C24-C25-C26
33	b	603	BCR	C23-C24-C25-C30
33	b	604	BCR	C1-C6-C7-C8
33	b	604	BCR	C5-C6-C7-C8
33	b	604	BCR	C23-C24-C25-C26
33	c	507	BCR	C23-C24-C25-C26
33	d	403	BCR	C1-C6-C7-C8
33	d	403	BCR	C5-C6-C7-C8
33	d	403	BCR	C23-C24-C25-C26
33	h	101	BCR	C5-C6-C7-C8
33	h	101	BCR	C23-C24-C25-C26
33	k	101	BCR	C23-C24-C25-C26
33	k	102	BCR	C23-C24-C25-C26
33	k	102	BCR	C23-C24-C25-C30
33	t	101	BCR	C1-C6-C7-C8
33	t	101	BCR	C5-C6-C7-C8
43	U	420	LMN	CBF-CBH-CBJ-CBL
31	u	420	0UR	O57-C45-C46-C47
28	U	414	CLA	CBA-CGA-O2A-C1
28	c	520	CLA	C10-C11-C12-C13
29	s	308	CHL	C8-C10-C11-C12
43	U	420	LMN	OAL-CBP-CCF-CCQ
42	g	303	LHG	C9-C10-C11-C12
43	n	301	LMN	CBB-CBD-CBF-CBH
43	W	201	LMN	CBB-CBD-CBF-CBH
31	G	319	0UR	O44-C45-C46-C47
31	y	323	0UR	C48-C49-C50-C51
42	V	304	LHG	C15-C16-C17-C18
28	U	406	CLA	C4-C3-C5-C6
28	b	612	CLA	C4-C3-C5-C6
28	u	414	CLA	C4-C3-C5-C6
28	B	608	CLA	C11-C12-C13-C15
28	B	609	CLA	C11-C12-C13-C15
28	B	612	CLA	C2-C3-C5-C6
28	C	503	CLA	C2-C3-C5-C6
28	C	508	CLA	C12-C13-C15-C16
28	C	510	CLA	C11-C12-C13-C15
28	U	404	CLA	C11-C10-C8-C7
28	U	406	CLA	C2-C3-C5-C6
28	V	315	CLA	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
28	b	606	CLA	C11-C12-C13-C15
28	b	607	CLA	C2-C3-C5-C6
28	b	607	CLA	C12-C13-C15-C16
28	b	612	CLA	C2-C3-C5-C6
28	n	315	CLA	C12-C13-C15-C16
29	S	308	CHL	C11-C12-C13-C15
29	U	408	CHL	C6-C7-C8-C10
29	V	309	CHL	C11-C10-C8-C7
28	U	414	CLA	O1A-CGA-O2A-C1
31	n	318	0UR	C49-C50-C51-C52
38	A	413	LMG	C14-C15-C16-C17
42	b	623	LHG	C10-C11-C12-C13
43	U	420	LMN	CCH-CCQ-OCB-CCS
43	u	401	LMN	C3-C4-O4-CCR
30	0	312	0IE	C9-C10-C11-C12
31	G	319	0UR	C3-C4-C5-C6
46	V	323	NEX	C29-C30-C31-C32
31	y	323	0UR	O57-C45-C46-C47
43	y	302	LMN	CCH-CCQ-OCB-CCS
28	0	309	CLA	C2A-CAA-CBA-CGA
28	G	306	CLA	C2A-CAA-CBA-CGA
28	g	314	CLA	C2A-CAA-CBA-CGA
28	n	316	CLA	C2A-CAA-CBA-CGA
28	u	405	CLA	C2A-CAA-CBA-CGA
29	G	317	CHL	C2A-CAA-CBA-CGA
29	N	302	CHL	C2A-CAA-CBA-CGA
29	g	316	CHL	C2A-CAA-CBA-CGA
29	s	309	CHL	C2A-CAA-CBA-CGA
28	B	608	CLA	C8-C10-C11-C12
43	v	301	LMN	O1-CBS-CCM-CBT
28	y	306	CLA	O1D-CGD-O2D-CED
29	N	306	CHL	O1D-CGD-O2D-CED
29	G	317	CHL	C13-C15-C16-C17
42	D	405	LHG	C30-C31-C32-C33
43	G	304	LMN	CBF-CBH-CBJ-CBL
38	a	414	LMG	C29-C28-O8-C9
31	G	319	0UR	O57-C45-C46-C47
28	G	312	CLA	C13-C15-C16-C17
31	g	317	0UR	O44-C45-C46-C47
41	A	417	DGD	C1B-C2B-C3B-C4B
41	g	302	DGD	C1A-C2A-C3A-C4A
38	m	101	LMG	C11-C10-O7-C8

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Mol	Chain	Res	Type	Atoms
38	d	410	LMG	C13-C14-C15-C16
41	b	621	DGD	C8A-C9A-CAA-CBA
42	b	623	LHG	C33-C34-C35-C36
43	g	320	LMN	CBB-CBD-CBF-CBH
43	V	301	LMN	CBH-CBJ-CBL-CBR
29	G	317	CHL	O1D-CGD-O2D-CED
38	m	101	LMG	O9-C10-O7-C8
43	n	322	LMN	CBF-CBH-CBJ-CBL
38	D	411	LMG	C2-C1-O1-C7
38	K	101	LMG	C2-C1-O1-C7
38	a	414	LMG	C2-C1-O1-C7
43	y	302	LMN	C2-C1-O1-CBS
38	C	523	LMG	O6-C5-C6-O5
38	J	101	LMG	O6-C5-C6-O5
38	K	103	LMG	O6-C5-C6-O5
38	U	401	LMG	O6-C5-C6-O5
38	a	411	LMG	O6-C5-C6-O5
38	b	613	LMG	O6-C5-C6-O5
38	d	408	LMG	O6-C5-C6-O5
43	W	201	LMN	O5-C5-C6-O6
43	n	301	LMN	OAL-CBP-CCF-OBX
28	Y	303	CLA	CBA-CGA-O2A-C1
42	c	527	LHG	C26-C27-C28-C29
38	c	502	LMG	O10-C28-O8-C9
43	Y	301	LMN	O1-CBS-CCM-CBT
38	b	625	LMG	O6-C5-C6-O5
41	C	514	DGD	O6E-C5E-C6E-O5E
43	y	302	LMN	OAJ-CBN-CCD-OBZ
28	g	311	CLA	C13-C15-C16-C17
43	u	401	LMN	CBI-CBK-CBQ-CCM
28	B	605	CLA	C4-C3-C5-C6
28	B	612	CLA	C4-C3-C5-C6
28	B	619	CLA	C4-C3-C5-C6
28	u	412	CLA	C4-C3-C5-C6
29	G	317	CHL	C4-C3-C5-C6
28	B	605	CLA	C2-C3-C5-C6
28	g	312	CLA	C2-C3-C5-C6
28	y	311	CLA	C2-C3-C5-C6
38	a	414	LMG	C12-C13-C14-C15
28	B	608	CLA	C11-C12-C13-C14
28	B	609	CLA	C11-C12-C13-C14
28	C	510	CLA	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
28	U	404	CLA	C11-C10-C8-C9
28	b	606	CLA	C11-C12-C13-C14
28	b	607	CLA	C14-C13-C15-C16
28	c	520	CLA	C11-C10-C8-C9
28	n	315	CLA	C14-C13-C15-C16
29	S	306	CHL	C11-C12-C13-C14
29	U	408	CHL	C6-C7-C8-C9
29	V	309	CHL	C11-C10-C8-C9
29	V	311	CHL	C6-C7-C8-C9
43	Y	301	LMN	OAJ-CBN-CCD-OBZ
29	V	309	CHL	C3-C5-C6-C7
28	g	312	CLA	C2A-CAA-CBA-CGA
41	C	516	DGD	C8A-C9A-CAA-CBA
43	U	420	LMN	C5-C4-O4-CCR
43	n	322	LMN	CBB-CBD-CBF-CBH
38	C	522	LMG	O6-C5-C6-O5
38	M	101	LMG	O6-C5-C6-O5
41	c	518	DGD	O6E-C5E-C6E-O5E
43	N	320	LMN	OAL-CBP-CCF-OBX
43	Y	301	LMN	OAL-CBP-CCF-OBX
43	c	525	LMN	O5-C5-C6-O6
33	B	614	BCR	C7-C8-C9-C34
41	c	516	DGD	C9B-CAB-CBB-CCB
31	y	317	0UR	C5-C6-C7-C8
28	0	307	CLA	C1A-C2A-CAA-CBA
28	B	609	CLA	C1A-C2A-CAA-CBA
28	C	506	CLA	C1A-C2A-CAA-CBA
28	N	305	CLA	C1A-C2A-CAA-CBA
28	N	312	CLA	C1A-C2A-CAA-CBA
28	S	310	CLA	C1A-C2A-CAA-CBA
28	S	311	CLA	C1A-C2A-CAA-CBA
28	U	406	CLA	C1A-C2A-CAA-CBA
28	V	307	CLA	C1A-C2A-CAA-CBA
28	V	315	CLA	C1A-C2A-CAA-CBA
28	Y	311	CLA	C1A-C2A-CAA-CBA
28	s	313	CLA	C1A-C2A-CAA-CBA
28	u	416	CLA	C1A-C2A-CAA-CBA
28	y	305	CLA	C1A-C2A-CAA-CBA
29	N	306	CHL	C1A-C2A-CAA-CBA
29	S	307	CHL	C1A-C2A-CAA-CBA
29	V	310	CHL	C1A-C2A-CAA-CBA
29	V	313	CHL	C1A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
29	g	310	CHL	C1A-C2A-CAA-CBA
29	v	303	CHL	C1A-C2A-CAA-CBA
43	y	301	LMN	OAJ-CBN-CCD-OBZ
28	B	612	CLA	C16-C17-C18-C19
28	U	407	CLA	C6-C7-C8-C9
31	g	318	0UR	C3-C4-C5-C6
47	N	318	XAT	C29-C30-C31-C32
47	n	320	XAT	C29-C30-C31-C32
28	b	622	CLA	C15-C16-C17-C18
28	n	315	CLA	C5-C6-C7-C8
28	u	405	CLA	C5-C6-C7-C8
42	D	406	LHG	C3-O3-P-O6
42	l	101	LHG	C4-O6-P-O3
31	y	322	0UR	C48-C49-C50-C51
41	c	516	DGD	C6B-C7B-C8B-C9B
42	b	623	LHG	C34-C35-C36-C37
43	C	521	LMN	OAL-CBP-CCF-OBX
43	V	301	LMN	OAL-CBP-CCF-OBX
43	n	323	LMN	OAL-CBP-CCF-OBX
28	u	405	CLA	C3-C5-C6-C7
42	V	304	LHG	C5-C4-O6-P
28	c	520	CLA	C13-C15-C16-C17
29	V	309	CHL	CBA-CGA-O2A-C1
41	G	302	DGD	O6E-C5E-C6E-O5E
43	n	301	LMN	OBZ-CCS-OCB-CCQ
38	A	413	LMG	C34-C35-C36-C37
31	g	317	0UR	O57-C45-C46-C47
29	G	311	CHL	C2C-C3C-CAC-CBC
38	I	101	LMG	C33-C34-C35-C36
28	c	503	CLA	C13-C15-C16-C17
43	C	518	LMN	CAX-CAZ-CBB-CBD
43	n	322	LMN	CAZ-CBB-CBD-CBF
29	V	309	CHL	O1D-CGD-O2D-CED
29	S	309	CHL	C4-C3-C5-C6
38	A	413	LMG	C11-C12-C13-C14
41	A	417	DGD	C6B-C7B-C8B-C9B
41	C	520	DGD	C2A-C3A-C4A-C5A
43	C	518	LMN	CBJ-CBL-CBR-CCM
43	G	301	LMN	CBJ-CBL-CBR-CCM
43	Y	302	LMN	CBJ-CBL-CBR-CCM
29	v	303	CHL	CBD-CGD-O2D-CED
42	D	402	LHG	C27-C28-C29-C30

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Mol	Chain	Res	Type	Atoms
43	Y	302	LMN	CBK-CBQ-CCM-CBT
43	v	301	LMN	CBL-CBR-CCM-CBS
41	b	621	DGD	O1G-C1G-C2G-C3G
41	c	515	DGD	C1G-C2G-C3G-O3G
41	c	517	DGD	O1G-C1G-C2G-C3G
41	c	518	DGD	C1G-C2G-C3G-O3G
41	c	524	DGD	C1G-C2G-C3G-O3G
42	N	301	LHG	C4-C5-C6-O8
45	E	101	HEM	C4D-C3D-CAD-CBD
29	V	309	CHL	O1A-CGA-O2A-C1
38	C	523	LMG	C8-C7-O1-C1
38	D	411	LMG	C8-C7-O1-C1
38	U	402	LMG	C8-C7-O1-C1
38	a	414	LMG	C8-C7-O1-C1
41	A	417	DGD	C5D-C6D-O5D-C1E
41	C	514	DGD	C5D-C6D-O5D-C1E
31	V	319	0UR	C48-C49-C50-C51
38	d	410	LMG	C19-C20-C21-C22
43	N	320	LMN	CAB-CAX-CAZ-CBB
43	W	201	LMN	CCF-CCQ-OCB-CCS
28	G	316	CLA	CAA-CBA-CGA-O2A
37	c	523	SQD	O48-C23-C24-C25
43	V	303	LMN	OAI-CBM-CCC-OBY
43	V	303	LMN	OAJ-CBN-CCD-OBZ
43	n	322	LMN	OAL-CBP-CCF-OBX
28	c	508	CLA	C6-C7-C8-C10
31	Y	323	0UR	C53-C54-C55-C56
31	1	312	0UR	O57-C45-C46-C47
43	Y	302	LMN	OBX-CCJ-OBV-CBT
43	G	304	LMN	CBG-CBI-CBK-CBQ
43	C	518	LMN	OAL-CBP-CCF-OBX
43	V	301	LMN	O5-C5-C6-O6
38	A	408	LMG	C8-C9-O8-C28
31	U	419	0UR	C47-C48-C49-C50
31	Y	323	0UR	C47-C48-C49-C50
28	u	407	CLA	C5-C6-C7-C8
29	v	303	CHL	C10-C11-C12-C13
43	W	201	LMN	OAL-CBP-CCF-OBX
42	b	623	LHG	C35-C36-C37-C38
43	C	518	LMN	CAA-CAW-CAY-CBA
43	G	301	LMN	CBF-CBH-CBJ-CBL
28	b	616	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
28	g	311	CLA	C8-C10-C11-C12
43	U	420	LMN	OAI-CBM-CCC-OBY
43	v	301	LMN	OAI-CBM-CCC-OBY
46	V	323	NEX	C39-C29-C30-C31
29	s	308	CHL	C4-C3-C5-C6
31	Y	317	0UR	C53-C54-C55-C56
28	U	415	CLA	CBA-CGA-O2A-C1
43	C	518	LMN	CBI-CBK-CBQ-CCM
28	C	508	CLA	C15-C16-C17-C18
28	b	606	CLA	C13-C15-C16-C17
43	c	525	LMN	C5-C4-O4-CCR
29	V	305	CHL	C2A-CAA-CBA-CGA
43	n	301	LMN	O1-CBS-CCM-CBT
28	V	307	CLA	C5-C6-C7-C8
28	U	413	CLA	C2-C1-O2A-CGA
28	V	318	CLA	C2-C1-O2A-CGA
29	n	312	CHL	C2-C1-O2A-CGA
29	s	309	CHL	C1-C2-C3-C4
38	m	101	LMG	C36-C37-C38-C39
41	b	621	DGD	C2A-C3A-C4A-C5A
41	a	409	DGD	O6E-C5E-C6E-O5E
28	A	410	CLA	C3-C5-C6-C7
41	C	514	DGD	C2B-C3B-C4B-C5B
43	N	320	LMN	CBA-CBC-CBE-CBG
41	C	514	DGD	CCB-CDB-CEB-CFB
28	S	310	CLA	C11-C12-C13-C14
38	m	101	LMG	C17-C18-C19-C20
28	b	601	CLA	C13-C15-C16-C17
28	b	617	CLA	C13-C15-C16-C17
43	G	304	LMN	CBJ-CBL-CBR-CCM
43	V	303	LMN	CBJ-CBL-CBR-CCM
43	g	301	LMN	CBI-CBK-CBQ-CCM
43	n	323	LMN	CBJ-CBL-CBR-CCM
38	i	101	LMG	C2-C1-O1-C7
43	W	201	LMN	C2-C1-O1-CBS
43	n	322	LMN	C2-C1-O1-CBS
43	n	323	LMN	C2-C1-O1-CBS
43	u	401	LMN	CCL-CCJ-OBV-CBT
38	J	102	LMG	C33-C34-C35-C36
43	N	320	LMN	CAA-CAW-CAY-CBA
43	n	323	LMN	CCF-CCQ-OCB-CCS
42	l	101	LHG	O8-C23-C24-C25

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Mol	Chain	Res	Type	Atoms
38	c	502	LMG	O1-C7-C8-O7
41	c	516	DGD	O1G-C1G-C2G-O2G
41	c	517	DGD	O2G-C2G-C3G-O3G
42	g	303	LHG	O7-C5-C6-O8
31	Y	317	0UR	C50-C51-C52-C53
41	C	516	DGD	C4B-C5B-C6B-C7B
41	c	516	DGD	C2B-C3B-C4B-C5B
42	L	101	LHG	C11-C10-C9-C8
41	C	520	DGD	O6D-C5D-C6D-O5D
28	B	605	CLA	C8-C10-C11-C12
38	a	414	LMG	C11-C12-C13-C14
42	L	101	LHG	C26-C27-C28-C29
28	b	616	CLA	C4-C3-C5-C6
41	a	409	DGD	C2B-C3B-C4B-C5B
28	B	609	CLA	C12-C13-C15-C16
28	C	510	CLA	C12-C13-C15-C16
28	g	313	CLA	C11-C10-C8-C7
28	u	414	CLA	C2-C3-C5-C6
29	G	317	CHL	C11-C10-C8-C7
29	N	308	CHL	C11-C10-C8-C7
29	S	306	CHL	C11-C12-C13-C15
29	S	309	CHL	C2-C3-C5-C6
29	U	409	CHL	C11-C10-C8-C7
29	V	311	CHL	C6-C7-C8-C10
29	s	308	CHL	C2-C3-C5-C6
29	s	310	CHL	C6-C7-C8-C10
28	S	310	CLA	C3-C5-C6-C7
29	S	303	CHL	C3-C5-C6-C7
29	n	308	CHL	C3-C5-C6-C7
29	n	312	CHL	C3-C5-C6-C7
43	W	201	LMN	CCH-CCQ-OCB-CCS
28	B	607	CLA	C14-C13-C15-C16
28	b	616	CLA	C14-C13-C15-C16
28	g	313	CLA	C6-C7-C8-C9
29	U	409	CHL	C11-C10-C8-C9
29	V	311	CHL	C11-C12-C13-C14
29	V	311	CHL	C14-C13-C15-C16
29	v	303	CHL	C11-C12-C13-C14
46	g	319	NEX	C14-C15-C35-C34
43	V	301	LMN	CBI-CBK-CBQ-CCM
42	L	101	LHG	C28-C29-C30-C31
43	V	303	LMN	CBE-CBG-CBI-CBK

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Mol	Chain	Res	Type	Atoms
43	n	323	LMN	C3-C4-O4-CCR
29	n	305	CHL	C2A-CAA-CBA-CGA
29	n	308	CHL	O1A-CGA-O2A-C1
31	0	314	0UR	C15-C16-C17-C18
31	S	315	0UR	C15-C16-C17-C18
31	g	317	0UR	C5-C6-C7-C8
46	V	323	NEX	C31-C32-C33-C34
46	g	319	NEX	C27-C28-C29-C30
38	a	414	LMG	C18-C19-C20-C21
42	c	527	LHG	C1-C2-C3-O3
34	A	402	PHO	C10-C11-C12-C13
43	N	320	LMN	CBG-CBI-CBK-CBQ
43	n	301	LMN	CAA-CAW-CAY-CBA
28	Y	303	CLA	O1A-CGA-O2A-C1
31	y	323	0UR	O44-C45-C46-C47
28	b	617	CLA	C15-C16-C17-C18
28	y	309	CLA	C5-C6-C7-C8
29	n	304	CHL	C10-C11-C12-C13
42	G	303	LHG	C11-C12-C13-C14
38	W	202	LMG	O8-C28-C29-C30
43	Y	301	LMN	CBI-CBK-CBQ-CCM
43	G	304	LMN	CBC-CBE-CBG-CBI
28	g	312	CLA	C4B-C3B-CAB-CBB
42	v	302	LHG	O6-C4-C5-C6
39	A	409	PL9	C24-C26-C27-C28
47	V	321	XAT	C6-C7-C8-C9
29	N	308	CHL	C4C-C3C-CAC-CBC
28	B	616	CLA	C10-C11-C12-C13
28	g	313	CLA	C8-C10-C11-C12
28	s	312	CLA	C8-C10-C11-C12
29	n	310	CHL	C13-C15-C16-C17
28	U	415	CLA	C4-C3-C5-C6
28	g	314	CLA	C4-C3-C5-C6
28	B	616	CLA	C2-C3-C5-C6
28	b	616	CLA	C2-C3-C5-C6
29	S	308	CHL	C2-C3-C5-C6
38	A	413	LMG	C10-C11-C12-C13
38	m	101	LMG	C11-C12-C13-C14
38	a	414	LMG	O10-C28-O8-C9
41	C	520	DGD	C3A-C4A-C5A-C6A
43	v	301	LMN	CBI-CBK-CBQ-CCM
43	y	302	LMN	CBJ-CBL-CBR-CCM

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Mol	Chain	Res	Type	Atoms
43	Y	301	LMN	CCF-CCQ-OCB-CCS
41	c	516	DGD	C2B-C1B-O2G-C2G
43	C	518	LMN	C4-C5-C6-O6
29	n	308	CHL	CBA-CGA-O2A-C1
41	C	516	DGD	C2A-C1A-O1G-C1G
43	V	303	LMN	CCF-CCQ-OCB-CCS
42	b	624	LHG	C2-C3-O3-P
42	s	301	LHG	C2-C3-O3-P
43	U	420	LMN	OAL-CBP-CCF-OBX
28	B	611	CLA	C3A-C2A-CAA-CBA
28	a	403	CLA	C3A-C2A-CAA-CBA
28	b	610	CLA	C3A-C2A-CAA-CBA
28	c	522	CLA	C3A-C2A-CAA-CBA
28	s	311	CLA	C3A-C2A-CAA-CBA
29	V	305	CHL	C3A-C2A-CAA-CBA
41	b	621	DGD	CAA-CBA-CCA-CDA
42	D	402	LHG	C9-C10-C11-C12
41	g	302	DGD	C2A-C3A-C4A-C5A
43	C	521	LMN	O1-CBS-CCM-CBT
43	U	420	LMN	C4-C5-C6-O6
28	U	415	CLA	C8-C10-C11-C12
31	Y	322	0UR	C51-C52-C53-C54
38	d	410	LMG	C16-C17-C18-C19
41	c	515	DGD	C3A-C4A-C5A-C6A
43	g	301	LMN	CBC-CBE-CBG-CBI
28	g	312	CLA	C6-C7-C8-C10
38	A	413	LMG	C29-C28-O8-C9
38	c	502	LMG	O1-C7-C8-C9
41	C	520	DGD	C1G-C2G-C3G-O3G
42	a	415	LHG	C4-C5-C6-O8
42	g	303	LHG	C4-C5-C6-O8
43	V	303	LMN	CBL-CBR-CCM-CBQ
43	g	301	LMN	CBK-CBQ-CCM-CBR
41	b	621	DGD	CFA-CGA-CHA-CIA
41	b	621	DGD	C1A-C2A-C3A-C4A
43	C	521	LMN	CBI-CBK-CBQ-CCM
31	y	323	0UR	C49-C50-C51-C52
42	V	304	LHG	C35-C36-C37-C38
42	v	302	LHG	C12-C13-C14-C15
43	V	303	LMN	CCH-CCQ-OCB-CCS
38	J	102	LMG	C13-C14-C15-C16
38	K	103	LMG	C32-C33-C34-C35

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Mol	Chain	Res	Type	Atoms
41	C	516	DGD	CCA-CDA-CEA-CFA
41	C	520	DGD	C2B-C3B-C4B-C5B
28	c	522	CLA	C3-C5-C6-C7
41	c	515	DGD	C2B-C3B-C4B-C5B
43	U	420	LMN	CAA-CAW-CAY-CBA
39	a	412	PL9	C45-C44-C46-C47
28	g	313	CLA	C11-C12-C13-C15
28	U	415	CLA	C2-C3-C5-C6
42	g	303	LHG	C14-C15-C16-C17
28	1	307	CLA	C4C-C3C-CAC-CBC
31	U	419	0UR	C48-C49-C50-C51
43	G	304	LMN	OAL-CBP-CCF-CCQ
29	v	307	CHL	C3C-C2C-CMC-OMC
42	v	302	LHG	C4-O6-P-O3
38	m	101	LMG	C13-C14-C15-C16
42	S	301	LHG	O6-C4-C5-O7
28	U	415	CLA	O1A-CGA-O2A-C1
28	S	310	CLA	C11-C12-C13-C15
28	U	404	CLA	C16-C17-C18-C20
28	u	412	CLA	C16-C17-C18-C20
38	a	414	LMG	C39-C40-C41-C42
42	g	303	LHG	C19-C20-C21-C22
28	s	311	CLA	C10-C11-C12-C13
38	I	101	LMG	O7-C8-C9-O8
42	D	405	LHG	O7-C5-C6-O8
42	a	415	LHG	O7-C5-C6-O8
31	n	318	0UR	O44-C45-C46-C47
43	U	420	LMN	CAB-CAX-CAZ-CBB
28	C	511	CLA	C16-C17-C18-C19
42	V	304	LHG	C30-C31-C32-C33
43	Y	301	LMN	CCH-CCQ-OCB-CCS
28	b	619	CLA	C5-C6-C7-C8
34	A	402	PHO	C5-C6-C7-C8
41	a	409	DGD	CEB-CFB-CGB-CHB
28	C	509	CLA	C2-C1-O2A-CGA
28	Y	309	CLA	C2-C1-O2A-CGA
28	v	305	CLA	C2-C1-O2A-CGA
42	G	303	LHG	C25-C26-C27-C28
43	n	322	LMN	CCW-CCS-OCB-CCQ
28	C	504	CLA	C6-C7-C8-C9
28	S	310	CLA	C6-C7-C8-C9
28	b	622	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
29	s	302	CHL	C14-C13-C15-C16
41	a	409	DGD	C3A-C4A-C5A-C6A
43	G	304	LMN	CCF-CCQ-OCB-CCS
28	A	410	CLA	C10-C11-C12-C13
42	a	415	LHG	C2-C3-O3-P
28	y	309	CLA	C2C-C3C-CAC-CBC
38	m	101	LMG	C31-C32-C33-C34
28	U	414	CLA	C2A-CAA-CBA-CGA
28	g	312	CLA	C6-C7-C8-C9
33	B	603	BCR	C23-C24-C25-C30
33	B	614	BCR	C1-C6-C7-C8
33	T	101	BCR	C23-C24-C25-C30
33	a	401	BCR	C1-C6-C7-C8
33	a	401	BCR	C23-C24-C25-C30
33	b	604	BCR	C23-C24-C25-C30
33	h	101	BCR	C1-C6-C7-C8
33	k	101	BCR	C1-C6-C7-C8
33	k	102	BCR	C1-C6-C7-C8
33	t	101	BCR	C23-C24-C25-C26
38	J	102	LMG	C15-C16-C17-C18
38	D	411	LMG	O8-C28-C29-C30
31	1	316	0UR	C21-C12-C13-C14
30	1	314	0IE	C5-C6-C7-C8
30	y	321	0IE	C15-C16-C17-C18
31	1	312	0UR	C5-C6-C7-C8
31	1	316	0UR	C15-C16-C17-C18
31	Y	318	0UR	C5-C6-C7-C8
31	s	316	0UR	C5-C6-C7-C8
31	v	317	0UR	C15-C16-C17-C18
31	y	322	0UR	C15-C16-C17-C18
33	B	603	BCR	C7-C8-C9-C10
33	H	101	BCR	C7-C8-C9-C10
46	V	323	NEX	C11-C12-C13-C14
28	G	312	CLA	C10-C11-C12-C13
28	c	522	CLA	C15-C16-C17-C18
29	S	306	CHL	C4C-C3C-CAC-CBC
41	c	517	DGD	C2B-C1B-O2G-C2G
42	N	301	LHG	C26-C27-C28-C29
42	s	301	LHG	C10-C11-C12-C13
43	G	304	LMN	CAW-CAY-CBA-CBC
43	n	322	LMN	CAY-CBA-CBC-CBE
29	N	308	CHL	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
41	C	516	DGD	C1B-C2B-C3B-C4B
42	g	303	LHG	C7-C8-C9-C10
38	c	502	LMG	C4-C5-C6-O5
41	b	621	DGD	C9A-CAA-CBA-CCA
31	N	316	0UR	C46-C47-C48-C49
31	Y	318	0UR	C46-C47-C48-C49
31	g	317	0UR	C46-C47-C48-C49
43	n	301	LMN	CBG-CBI-CBK-CBQ
42	G	303	LHG	O6-C4-C5-C6
42	V	304	LHG	O6-C4-C5-C6
42	u	402	LHG	O6-C4-C5-C6
42	D	405	LHG	O8-C23-C24-C25
39	d	406	PL9	C15-C14-C16-C17
28	B	621	CLA	C12-C13-C15-C16
28	S	310	CLA	C6-C7-C8-C10
28	S	310	CLA	C11-C10-C8-C7
28	b	616	CLA	C12-C13-C15-C16
28	g	305	CLA	C11-C10-C8-C7
28	g	314	CLA	C11-C12-C13-C15
29	S	306	CHL	C6-C7-C8-C10
29	S	306	CHL	C11-C10-C8-C7
29	S	306	CHL	C12-C13-C15-C16
29	V	311	CHL	C11-C12-C13-C15
29	V	313	CHL	C12-C13-C15-C16
29	s	310	CHL	C11-C10-C8-C7
41	C	516	DGD	C5A-C6A-C7A-C8A
29	N	302	CHL	C1-C2-C3-C4
29	s	308	CHL	C5-C6-C7-C8
31	1	315	0UR	C3-C4-C5-C6
31	Y	318	0UR	C9-C10-C11-C12
31	Y	323	0UR	C9-C10-C11-C12
32	1	313	LUT	C33-C34-C35-C15
47	S	317	XAT	C9-C10-C11-C12
42	b	624	LHG	C10-C11-C12-C13
38	c	502	LMG	C11-C12-C13-C14
43	n	322	LMN	CAA-CAW-CAY-CBA
38	A	413	LMG	O10-C28-O8-C9
31	Y	317	0UR	C49-C50-C51-C52
41	C	520	DGD	C5B-C6B-C7B-C8B
30	0	312	0IE	O1-C2-C3-C4
30	1	314	0IE	O1-C2-C3-C4
30	S	316	0IE	O1-C2-C3-C4

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Mol	Chain	Res	Type	Atoms
30	Y	319	0IE	C20-C3-C4-C5
30	n	319	0IE	O1-C2-C3-C4
30	y	319	0IE	O1-C2-C3-C4
30	y	321	0IE	O1-C2-C3-C4
31	0	313	0UR	O42-C2-C3-C4
31	0	313	0UR	C45-C46-C47-C48
31	0	314	0UR	O42-C2-C3-C4
31	1	312	0UR	O42-C2-C3-C4
31	1	316	0UR	O42-C2-C3-C4
31	G	318	0UR	O42-C2-C3-C4
31	G	319	0UR	O42-C2-C3-C4
31	N	316	0UR	O42-C2-C3-C4
31	S	315	0UR	O42-C2-C3-C4
31	U	419	0UR	O42-C2-C3-C4
31	V	319	0UR	O42-C2-C3-C4
31	Y	317	0UR	O42-C2-C3-C4
31	Y	323	0UR	O42-C2-C3-C4
31	g	317	0UR	O42-C2-C3-C4
31	g	318	0UR	O42-C2-C3-C4
31	n	318	0UR	O42-C2-C3-C4
31	s	316	0UR	O42-C2-C3-C4
31	s	316	0UR	C45-C46-C47-C48
31	u	420	0UR	O42-C2-C3-C4
31	u	420	0UR	C45-C46-C47-C48
31	v	317	0UR	O42-C2-C3-C4
31	y	317	0UR	O42-C2-C3-C4
31	y	317	0UR	C45-C46-C47-C48
31	y	318	0UR	O42-C2-C3-C4
42	n	303	LHG	C12-C13-C14-C15
46	v	320	NEX	C20-C13-C14-C15
47	N	318	XAT	C11-C10-C9-C19
47	S	317	XAT	C11-C10-C9-C19
47	S	317	XAT	C40-C33-C34-C35
41	c	515	DGD	O6D-C5D-C6D-O5D
29	N	302	CHL	C3-C5-C6-C7
28	V	318	CLA	C5-C6-C7-C8
43	c	525	LMN	CAY-CBA-CBC-CBE
29	N	308	CHL	C12-C13-C15-C16
28	A	410	CLA	C5-C6-C7-C8
28	U	404	CLA	C10-C11-C12-C13
28	A	411	CLA	CAD-CBD-CGD-O2D
28	C	503	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
28	C	504	CLA	CAD-CBD-CGD-O2D
28	C	505	CLA	CAD-CBD-CGD-O2D
28	C	506	CLA	CAD-CBD-CGD-O2D
28	C	510	CLA	CAD-CBD-CGD-O2D
28	C	517	CLA	CAD-CBD-CGD-O2D
28	N	305	CLA	CAD-CBD-CGD-O2D
28	S	304	CLA	CAD-CBD-CGD-O2D
28	U	406	CLA	CAD-CBD-CGD-O2D
28	V	308	CLA	CAD-CBD-CGD-O2D
28	Y	308	CLA	CAD-CBD-CGD-O2D
28	Y	312	CLA	CAD-CBD-CGD-O2D
28	b	608	CLA	CAD-CBD-CGD-O2D
28	b	610	CLA	CAD-CBD-CGD-O2D
28	b	615	CLA	CAD-CBD-CGD-O2D
28	c	504	CLA	CAD-CBD-CGD-O2D
28	c	506	CLA	CAD-CBD-CGD-O2D
28	c	508	CLA	CAD-CBD-CGD-O2D
28	c	521	CLA	CAD-CBD-CGD-O2D
28	g	307	CLA	CAD-CBD-CGD-O2D
28	n	307	CLA	CAD-CBD-CGD-O2D
28	y	310	CLA	CAD-CBD-CGD-O2D
29	1	310	CHL	CAD-CBD-CGD-O2D
29	V	310	CHL	CAD-CBD-CGD-O2D
29	Y	315	CHL	CAD-CBD-CGD-O2D
29	s	306	CHL	CAD-CBD-CGD-O2D
29	s	308	CHL	CAD-CBD-CGD-O2D
29	y	315	CHL	CAD-CBD-CGD-O2D
34	A	402	PHO	CAD-CBD-CGD-O2D
38	U	401	LMG	C7-C8-O7-C10
28	u	413	CLA	C5-C6-C7-C8
28	u	408	CLA	C4-C3-C5-C6
28	y	310	CLA	C4-C3-C5-C6
41	C	520	DGD	CBB-CCB-CDB-CEB
43	n	323	LMN	OBX-CCJ-OBV-CBT
43	y	302	LMN	OBX-CCJ-OBV-CBT
42	n	303	LHG	C23-C24-C25-C26
41	c	517	DGD	C1G-C2G-C3G-O3G
42	D	405	LHG	C4-C5-C6-O8
43	G	304	LMN	CCH-CCQ-OCB-CCS
42	u	402	LHG	O6-C4-C5-O7
28	B	607	CLA	C10-C11-C12-C13
29	n	312	CHL	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
28	y	304	CLA	CAA-CBA-CGA-O2A
28	a	410	CLA	C6-C7-C8-C10
42	s	301	LHG	C26-C27-C28-C29
45	E	101	HEM	C4B-C3B-CAB-CBB
45	e	101	HEM	C4C-C3C-CAC-CBC
31	Y	317	0UR	C52-C53-C54-C55
41	c	516	DGD	O1B-C1B-O2G-C2G
28	1	303	CLA	CHA-CBD-CGD-O1D
28	B	605	CLA	CHA-CBD-CGD-O1D
28	B	605	CLA	CHA-CBD-CGD-O2D
28	B	618	CLA	CHA-CBD-CGD-O1D
28	B	619	CLA	CHA-CBD-CGD-O1D
28	B	619	CLA	CHA-CBD-CGD-O2D
28	B	622	CLA	CHA-CBD-CGD-O1D
28	C	506	CLA	CHA-CBD-CGD-O1D
28	C	512	CLA	CHA-CBD-CGD-O1D
28	C	513	CLA	CHA-CBD-CGD-O2D
28	C	519	CLA	CHA-CBD-CGD-O1D
28	G	315	CLA	CHA-CBD-CGD-O1D
28	G	315	CLA	CHA-CBD-CGD-O2D
28	V	316	CLA	CHA-CBD-CGD-O1D
28	b	605	CLA	CHA-CBD-CGD-O1D
28	b	617	CLA	CHA-CBD-CGD-O1D
28	b	617	CLA	CHA-CBD-CGD-O2D
28	b	619	CLA	CHA-CBD-CGD-O1D
28	b	619	CLA	CHA-CBD-CGD-O2D
28	c	505	CLA	CHA-CBD-CGD-O1D
28	c	510	CLA	CHA-CBD-CGD-O1D
28	c	511	CLA	CHA-CBD-CGD-O1D
28	c	511	CLA	CHA-CBD-CGD-O2D
28	c	513	CLA	CHA-CBD-CGD-O1D
28	c	514	CLA	CHA-CBD-CGD-O1D
28	c	514	CLA	CHA-CBD-CGD-O2D
28	c	521	CLA	CHA-CBD-CGD-O1D
28	g	306	CLA	CHA-CBD-CGD-O1D
28	g	306	CLA	CHA-CBD-CGD-O2D
28	g	314	CLA	CHA-CBD-CGD-O1D
28	g	314	CLA	CHA-CBD-CGD-O2D
28	u	418	CLA	CHA-CBD-CGD-O1D
28	y	313	CLA	CHA-CBD-CGD-O1D
28	y	313	CLA	CHA-CBD-CGD-O2D
29	S	303	CHL	CHA-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
29	S	303	CHL	CHA-CBD-CGD-O2D
29	n	305	CHL	CHA-CBD-CGD-O1D
29	n	305	CHL	CHA-CBD-CGD-O2D
29	v	304	CHL	CHA-CBD-CGD-O1D
28	d	409	CLA	C10-C11-C12-C13
41	c	524	DGD	O1A-C1A-O1G-C1G
29	N	302	CHL	O1D-CGD-O2D-CED
46	V	323	NEX	C28-C29-C30-C31
47	N	318	XAT	C11-C10-C9-C8
41	a	409	DGD	C5A-C6A-C7A-C8A
38	A	413	LMG	O1-C7-C8-O7
38	a	414	LMG	O1-C7-C8-O7
38	d	410	LMG	O7-C8-C9-O8
41	b	621	DGD	O1G-C1G-C2G-O2G
41	g	302	DGD	O1G-C1G-C2G-O2G
42	V	304	LHG	O7-C5-C6-O8
42	d	405	LHG	O7-C5-C6-O8
28	C	504	CLA	C8-C10-C11-C12
29	v	303	CHL	C15-C16-C17-C18
38	c	502	LMG	C16-C17-C18-C19
28	a	416	CLA	C16-C17-C18-C19
43	N	320	LMN	OBV-CBT-CCM-CBQ
43	U	420	LMN	O1-CBS-CCM-CBT
43	V	301	LMN	O1-CBS-CCM-CBQ
43	W	201	LMN	OBV-CBT-CCM-CBR
43	Y	301	LMN	O1-CBS-CCM-CBR
43	n	301	LMN	O1-CBS-CCM-CBQ
43	n	301	LMN	O1-CBS-CCM-CBR
43	n	322	LMN	OBV-CBT-CCM-CBQ
43	n	323	LMN	O1-CBS-CCM-CBR
43	u	401	LMN	OBV-CBT-CCM-CBQ
43	u	401	LMN	OBV-CBT-CCM-CBR
43	y	301	LMN	O1-CBS-CCM-CBR
28	Y	311	CLA	O1D-CGD-O2D-CED
29	N	308	CHL	C2C-C3C-CAC-CBC
29	S	306	CHL	C2C-C3C-CAC-CBC
29	U	408	CHL	C3-C5-C6-C7
28	C	509	CLA	C4-C3-C5-C6
29	S	308	CHL	C4-C3-C5-C6
29	G	311	CHL	C4C-C3C-CAC-CBC
41	C	516	DGD	O1A-C1A-O1G-C1G
43	y	302	LMN	OBZ-CCS-OCB-CCQ

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Mol	Chain	Res	Type	Atoms
38	J	102	LMG	O9-C10-O7-C8
41	c	517	DGD	O1B-C1B-O2G-C2G
28	g	305	CLA	C11-C10-C8-C9
42	d	405	LHG	C5-C6-O8-C23
38	m	101	LMG	C14-C15-C16-C17
41	C	520	DGD	C7B-C8B-C9B-CAB
42	N	301	LHG	C35-C36-C37-C38
30	N	317	0IE	O29-C20-C3-C4
28	U	404	CLA	C16-C17-C18-C19
43	U	420	LMN	CBD-CBF-CBH-CBJ
28	S	310	CLA	C2A-CAA-CBA-CGA
28	U	415	CLA	C2A-CAA-CBA-CGA
43	V	303	LMN	CBA-CBC-CBE-CBG
30	s	317	0IE	C5-C6-C7-C21
30	v	318	0IE	C5-C6-C7-C21
46	V	322	NEX	C11-C12-C13-C20
47	s	318	XAT	C31-C32-C33-C40
43	n	322	LMN	OBZ-CCS-OCB-CCQ
28	u	407	CLA	C8-C10-C11-C12
38	a	414	LMG	C14-C15-C16-C17
42	V	304	LHG	C25-C26-C27-C28
42	n	303	LHG	C26-C27-C28-C29
43	N	320	LMN	CBD-CBF-CBH-CBJ
30	N	317	0IE	C5-C6-C7-C8
31	N	316	0UR	C15-C16-C17-C18
31	Y	322	0UR	C15-C16-C17-C18
33	C	502	BCR	C21-C22-C23-C24
46	v	320	NEX	C31-C32-C33-C34
28	G	306	CLA	C1A-C2A-CAA-CBA
28	g	312	CLA	C1A-C2A-CAA-CBA
29	N	303	CHL	C1A-C2A-CAA-CBA
29	N	308	CHL	C1A-C2A-CAA-CBA
28	C	511	CLA	C16-C17-C18-C20
28	u	412	CLA	C16-C17-C18-C19
28	N	312	CLA	C8-C10-C11-C12
28	y	311	CLA	C5-C6-C7-C8
29	N	309	CHL	C13-C15-C16-C17
28	u	405	CLA	C2-C1-O2A-CGA
28	v	315	CLA	C2-C1-O2A-CGA
29	n	311	CHL	C2-C1-O2A-CGA
31	G	318	0UR	C13-C14-C15-C16
31	v	317	0UR	C13-C14-C15-C16

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Mol	Chain	Res	Type	Atoms
31	y	318	0UR	C9-C10-C11-C12
32	1	313	LUT	C13-C14-C15-C35
38	A	413	LMG	C29-C30-C31-C32
41	a	405	DGD	C4A-C5A-C6A-C7A
28	y	311	CLA	C4-C3-C5-C6
42	D	402	LHG	C2-C3-O3-P
28	G	306	CLA	C2-C3-C5-C6
29	u	410	CHL	C2-C3-C5-C6
39	d	406	PL9	C13-C14-C16-C17
43	g	320	LMN	CBG-CBI-CBK-CBQ
29	G	311	CHL	C4B-C3B-CAB-CBB
29	S	306	CHL	C4B-C3B-CAB-CBB
42	L	101	LHG	C3-O3-P-O5
42	b	624	LHG	C4-O6-P-O5
42	c	527	LHG	C3-O3-P-O5
42	s	301	LHG	C3-O3-P-O5
42	u	402	LHG	C3-O3-P-O5
38	c	528	LMG	O6-C1-O1-C7
43	C	521	LMN	OBX-CCJ-OBV-CBT
42	S	301	LHG	O6-C4-C5-C6
42	g	303	LHG	O6-C4-C5-C6
41	c	516	DGD	CBB-CCB-CDB-CEB
43	n	322	LMN	CAX-CAZ-CBB-CBD
29	S	306	CHL	C3-C5-C6-C7
28	b	611	CLA	C8-C10-C11-C12
28	Y	311	CLA	C5-C6-C7-C8
42	V	304	LHG	C11-C12-C13-C14
39	a	412	PL9	C16-C17-C18-C19
29	V	302	CHL	C16-C17-C18-C20
28	0	305	CLA	CAD-CBD-CGD-O1D
28	B	605	CLA	CAD-CBD-CGD-O1D
28	B	618	CLA	CAD-CBD-CGD-O1D
28	B	622	CLA	CAD-CBD-CGD-O1D
28	C	508	CLA	CAD-CBD-CGD-O1D
28	C	512	CLA	CAD-CBD-CGD-O1D
28	C	519	CLA	CAD-CBD-CGD-O1D
28	V	318	CLA	CAD-CBD-CGD-O1D
28	b	605	CLA	CAD-CBD-CGD-O1D
28	b	617	CLA	CAD-CBD-CGD-O1D
28	c	505	CLA	CAD-CBD-CGD-O1D
28	c	513	CLA	CAD-CBD-CGD-O1D
28	s	305	CLA	CAD-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
28	u	418	CLA	CAD-CBD-CGD-O1D
28	v	315	CLA	CAA-CBA-CGA-O2A
41	a	409	DGD	C9B-CAB-CBB-CCB
43	N	320	LMN	CAY-CBA-CBC-CBE
29	N	306	CHL	C2A-CAA-CBA-CGA
38	m	101	LMG	C29-C30-C31-C32
29	V	302	CHL	C16-C17-C18-C19
28	D	409	CLA	C4-C3-C5-C6
28	B	613	CLA	C3A-C2A-CAA-CBA
28	C	517	CLA	C12-C13-C15-C16
28	G	312	CLA	C6-C7-C8-C10
28	V	314	CLA	C6-C7-C8-C10
28	c	522	CLA	C11-C12-C13-C15
28	g	314	CLA	C6-C7-C8-C10
28	u	415	CLA	C12-C13-C15-C16
28	u	417	CLA	C6-C7-C8-C10
29	G	317	CHL	C11-C12-C13-C15
29	S	303	CHL	C11-C12-C13-C15
29	S	308	CHL	C6-C7-C8-C10
29	V	302	CHL	C6-C7-C8-C10
29	V	309	CHL	C6-C7-C8-C10
29	Y	307	CHL	C2-C3-C5-C6
30	Y	321	0IE	C17-C18-C19-C28
30	s	317	0IE	O1-C2-C3-C20
30	y	321	0IE	O1-C2-C3-C20
31	U	419	0UR	O42-C2-C3-C43
31	g	317	0UR	C17-C18-C19-C32
31	y	322	0UR	C17-C18-C19-C32
42	G	303	LHG	O6-C4-C5-O7
42	v	302	LHG	O6-C4-C5-O7
28	S	311	CLA	C3-C5-C6-C7
43	v	301	LMN	C3-C4-O4-CCR
43	v	301	LMN	C5-C4-O4-CCR
42	c	527	LHG	O7-C7-C8-C9
30	0	312	0IE	C3-C4-C5-C6
41	g	302	DGD	CAB-CBB-CCB-CDB
42	D	405	LHG	C23-C24-C25-C26
28	Y	303	CLA	O1D-CGD-O2D-CED
42	D	406	LHG	C10-C11-C12-C13
43	W	201	LMN	CAZ-CBB-CBD-CBF
29	v	303	CHL	O1D-CGD-O2D-CED
42	S	301	LHG	C11-C10-C9-C8

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Mol	Chain	Res	Type	Atoms
29	v	304	CHL	C2A-CAA-CBA-CGA
31	n	318	0UR	O57-C45-C46-C47
29	v	307	CHL	C1C-C2C-CMC-OMC
31	y	322	0UR	C27-C1-C41-C2
38	a	414	LMG	O1-C7-C8-C9
41	C	514	DGD	O1G-C1G-C2G-C3G
41	C	516	DGD	O1G-C1G-C2G-C3G
41	c	516	DGD	O1G-C1G-C2G-C3G
42	V	304	LHG	C4-C5-C6-O8
43	U	420	LMN	CCM-CBT-OBV-CCJ
43	Y	301	LMN	CCM-CBS-O1-C1
43	g	320	LMN	CCM-CBT-OBV-CCJ
43	n	323	LMN	CCM-CBS-O1-C1
43	u	401	LMN	CCM-CBS-O1-C1
43	v	301	LMN	CCM-CBS-O1-C1
38	J	102	LMG	O1-C7-C8-O7
38	a	414	LMG	O7-C8-C9-O8
41	b	621	DGD	O2G-C2G-C3G-O3G
41	c	517	DGD	O1G-C1G-C2G-O2G
42	N	301	LHG	O7-C5-C6-O8
41	a	409	DGD	CAB-CBB-CCB-CDB
38	K	101	LMG	C8-C7-O1-C1
38	i	101	LMG	C8-C7-O1-C1
38	u	404	LMG	C8-C7-O1-C1
43	Y	301	LMN	CBG-CBI-CBK-CBQ
28	U	413	CLA	C13-C15-C16-C17
28	B	616	CLA	C4-C3-C5-C6
43	y	302	LMN	CCW-CCS-OCB-CCQ
42	g	303	LHG	C13-C14-C15-C16
28	u	408	CLA	C2-C3-C5-C6
28	B	621	CLA	C14-C13-C15-C16
28	G	312	CLA	C6-C7-C8-C9
28	V	314	CLA	C6-C7-C8-C9
28	b	607	CLA	C11-C10-C8-C9
28	u	417	CLA	C6-C7-C8-C9
29	N	303	CHL	C14-C13-C15-C16
29	S	306	CHL	C6-C7-C8-C9
38	D	401	LMG	C15-C16-C17-C18
28	y	305	CLA	C5-C6-C7-C8
29	n	310	CHL	C2A-CAA-CBA-CGA
30	V	320	0IE	C5-C6-C7-C21
33	c	507	BCR	C7-C8-C9-C34

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Mol	Chain	Res	Type	Atoms
38	K	101	LMG	C16-C17-C18-C19
30	S	316	0IE	C30-C2-C3-C4
30	n	319	0IE	C30-C2-C3-C4
31	0	314	0UR	C41-C2-C3-C4
31	Y	318	0UR	C41-C2-C3-C4
31	g	317	0UR	C41-C2-C3-C4
31	v	317	0UR	C41-C2-C3-C4
31	Y	322	0UR	C11-C12-C13-C14
28	S	310	CLA	C2B-C3B-CAB-CBB
29	S	306	CHL	C2B-C3B-CAB-CBB
29	v	303	CHL	C2B-C3B-CAB-CBB
29	s	302	CHL	C10-C11-C12-C13
38	K	101	LMG	O7-C10-C11-C12
38	c	502	LMG	O7-C10-C11-C12
43	G	301	LMN	CBC-CBE-CBG-CBI
43	G	304	LMN	C3-C4-O4-CCR
28	Y	311	CLA	C2-C3-C5-C6
42	D	402	LHG	C34-C35-C36-C37
37	B	615	SQD	C46-C45-O47-C7
37	b	614	SQD	C44-C45-O47-C7
38	A	414	LMG	C7-C8-O7-C10
38	C	523	LMG	C9-C8-O7-C10
38	D	411	LMG	C9-C8-O7-C10
38	J	101	LMG	C9-C8-O7-C10
38	M	101	LMG	C9-C8-O7-C10
38	d	402	LMG	C7-C8-O7-C10
38	w	201	LMG	C9-C8-O7-C10
42	D	406	LHG	C4-C5-O7-C7
28	V	317	CLA	C2A-CAA-CBA-CGA
28	y	303	CLA	C2A-CAA-CBA-CGA
34	d	407	PHO	C2A-CAA-CBA-CGA
28	A	411	CLA	C2-C1-O2A-CGA
28	B	616	CLA	C2-C1-O2A-CGA
28	G	308	CLA	C1-C2-C3-C4
28	U	414	CLA	C2-C1-O2A-CGA
28	V	307	CLA	C2-C1-O2A-CGA
28	s	311	CLA	C2-C1-O2A-CGA
28	u	416	CLA	C2-C1-O2A-CGA
28	y	305	CLA	C2-C1-O2A-CGA
29	S	308	CHL	C2-C1-O2A-CGA
29	V	312	CHL	C2-C1-O2A-CGA
38	J	102	LMG	C12-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
43	U	420	LMN	CCW-CCS-OCB-CCQ
39	d	406	PL9	C2-C3-C7-C8
42	g	303	LHG	C5-C4-O6-P
43	G	304	LMN	C5-C4-O4-CCR
33	B	614	BCR	C23-C24-C25-C30
33	c	507	BCR	C1-C6-C7-C8
39	a	412	PL9	C43-C44-C46-C47
28	a	416	CLA	C16-C17-C18-C20
38	J	102	LMG	C11-C10-O7-C8
41	a	409	DGD	C4D-C5D-C6D-O5D
38	A	408	LMG	O6-C1-O1-C7
28	B	606	CLA	C2A-CAA-CBA-CGA
43	U	420	LMN	CCL-CCJ-OBV-CBT
28	g	314	CLA	C4C-C3C-CAC-CBC
41	b	621	DGD	C9B-CAB-CBB-CCB
28	V	317	CLA	CAA-CBA-CGA-O2A
41	C	515	DGD	O2G-C2G-C3G-O3G
41	b	621	DGD	C2A-C1A-O1G-C1G
28	N	304	CLA	C1-C2-C3-C5
42	B	623	LHG	C4-O6-P-O3
42	D	405	LHG	C3-O3-P-O6
42	D	406	LHG	C4-O6-P-O3
42	N	301	LHG	C4-O6-P-O3
42	S	301	LHG	C4-O6-P-O3
42	V	304	LHG	C4-O6-P-O3
42	a	415	LHG	C4-O6-P-O3
42	b	624	LHG	C3-O3-P-O6
42	d	405	LHG	C3-O3-P-O6
42	l	101	LHG	C3-O3-P-O6
42	s	301	LHG	C4-O6-P-O3
42	u	402	LHG	C3-O3-P-O6
31	S	315	0UR	C46-C47-C48-C49
34	d	407	PHO	CHA-CBD-CGD-O1D
34	d	407	PHO	CHA-CBD-CGD-O2D
43	y	301	LMN	O1-CBS-CCM-CBT
43	V	303	LMN	C3-C4-O4-CCR
43	y	302	LMN	CBH-CBJ-CBL-CBR
43	U	420	LMN	OBY-CCR-O4-C4
42	d	405	LHG	C4-C5-C6-O8
39	d	406	PL9	C45-C44-C46-C47
28	B	616	CLA	C11-C12-C13-C15
28	D	410	CLA	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
28	U	415	CLA	C6-C7-C8-C10
28	c	520	CLA	C11-C10-C8-C7
28	u	405	CLA	C6-C7-C8-C10
29	G	317	CHL	C6-C7-C8-C10
29	V	313	CHL	C11-C12-C13-C15
43	U	420	LMN	OBZ-CCS-OCB-CCQ
42	s	301	LHG	C9-C10-C11-C12
29	y	307	CHL	CAA-CBA-CGA-O2A
31	Y	317	0UR	C51-C52-C53-C54
28	B	609	CLA	C14-C13-C15-C16
28	V	315	CLA	C11-C10-C8-C9
28	g	314	CLA	C11-C12-C13-C14
29	s	310	CHL	C11-C10-C8-C9
30	s	317	0IE	C3-C4-C5-C6
46	V	323	NEX	C13-C14-C15-C35
45	E	101	HEM	C1A-C2A-CAA-CBA
31	V	319	0UR	C47-C48-C49-C50
38	d	408	LMG	C29-C30-C31-C32
38	a	414	LMG	C32-C33-C34-C35
43	v	301	LMN	CAZ-CBB-CBD-CBF
42	l	101	LHG	O10-C23-C24-C25
28	G	315	CLA	C5-C6-C7-C8
31	0	314	0UR	C22-C16-C17-C18
29	G	317	CHL	C8-C10-C11-C12
29	V	311	CHL	C16-C17-C18-C20
29	V	313	CHL	C16-C17-C18-C20
42	g	303	LHG	C15-C16-C17-C18
28	0	307	CLA	C2C-C3C-CAC-CBC
43	U	420	LMN	CBG-CBI-CBK-CBQ
31	y	318	0UR	C46-C47-C48-C49
46	s	319	NEX	C27-C28-C29-C30
43	C	518	LMN	C3-C4-O4-CCR
28	B	602	CLA	C4-C3-C5-C6
28	s	311	CLA	C4-C3-C5-C6
29	U	408	CHL	C4-C3-C5-C6
39	a	412	PL9	C46-C47-C48-C49
45	E	101	HEM	C2D-C3D-CAD-CBD
29	n	308	CHL	CBD-CGD-O2D-CED
28	C	509	CLA	C2-C3-C5-C6
29	N	308	CHL	C2-C3-C5-C6
28	u	415	CLA	C16-C17-C18-C19
41	c	516	DGD	C2A-C1A-O1G-C1G

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Mol	Chain	Res	Type	Atoms
28	u	405	CLA	C15-C16-C17-C18
41	a	405	DGD	C3A-C4A-C5A-C6A
31	y	323	0UR	C47-C48-C49-C50
41	c	516	DGD	O1A-C1A-O1G-C1G
42	U	403	LHG	C7-C8-C9-C10
45	E	101	HEM	CAA-CBA-CGA-O1A
41	b	621	DGD	O1A-C1A-O1G-C1G
43	n	322	LMN	CAB-CAX-CAZ-CBB
28	Y	313	CLA	C4B-C3B-CAB-CBB
43	C	518	LMN	OBX-CCJ-OBV-CBT
28	v	315	CLA	C10-C11-C12-C13
30	1	314	0IE	C9-C10-C11-C12
30	N	317	0IE	C3-C4-C5-C6
30	S	316	0IE	C13-C14-C15-C16
30	n	319	0IE	C13-C14-C15-C16
30	v	318	0IE	C9-C10-C11-C12
32	Y	320	LUT	C9-C10-C11-C12
47	V	321	XAT	C13-C14-C15-C35
47	s	318	XAT	C9-C10-C11-C12
42	D	405	LHG	O6-C4-C5-C6
39	D	404	PL9	C29-C31-C32-C33
43	Y	301	LMN	CBE-CBG-CBI-CBK
43	g	320	LMN	CBF-CBH-CBJ-CBL
28	0	302	CLA	CAA-CBA-CGA-O2A
42	D	405	LHG	O6-C4-C5-O7
28	G	316	CLA	CAA-CBA-CGA-O1A
28	C	504	CLA	C4-C3-C5-C6
28	G	316	CLA	C4-C3-C5-C6
28	Y	303	CLA	C4-C3-C5-C6
28	b	605	CLA	C4-C3-C5-C6
28	U	407	CLA	C5-C6-C7-C8
29	N	308	CHL	C10-C11-C12-C13
29	v	303	CHL	C13-C15-C16-C17
42	N	301	LHG	C30-C31-C32-C33
43	C	521	LMN	CBC-CBE-CBG-CBI
28	U	410	CLA	C2-C1-O2A-CGA
28	y	314	CLA	C2-C1-O2A-CGA
43	u	401	LMN	CAZ-CBB-CBD-CBF
43	V	303	LMN	C5-C4-O4-CCR
41	C	515	DGD	C2D-C1D-O3G-C3G
28	S	304	CLA	C5-C6-C7-C8
28	B	609	CLA	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
28	Y	311	CLA	C2A-CAA-CBA-CGA
34	A	402	PHO	C2A-CAA-CBA-CGA
38	J	102	LMG	O7-C8-C9-O8
38	K	101	LMG	O1-C7-C8-O7
42	c	527	LHG	O9-C7-C8-C9
31	Y	322	0UR	C52-C53-C54-C55
43	W	201	LMN	CAB-CAX-CAZ-CBB
28	G	306	CLA	C3A-C2A-CAA-CBA
28	U	414	CLA	C3A-C2A-CAA-CBA
28	U	415	CLA	C3A-C2A-CAA-CBA
28	V	318	CLA	C3A-C2A-CAA-CBA
28	s	314	CLA	C3A-C2A-CAA-CBA
28	v	306	CLA	C3A-C2A-CAA-CBA
29	N	303	CHL	C3A-C2A-CAA-CBA
29	g	316	CHL	C3A-C2A-CAA-CBA
29	v	303	CHL	C3A-C2A-CAA-CBA
28	1	308	CLA	CAA-CBA-CGA-O1A
34	d	407	PHO	C16-C17-C18-C20
38	d	410	LMG	C10-C11-C12-C13
47	N	318	XAT	C9-C10-C11-C12
28	n	306	CLA	C8-C10-C11-C12
45	E	101	HEM	CAD-CBD-CGD-O1D
28	b	618	CLA	C4-C3-C5-C6
43	n	323	LMN	CBG-CBI-CBK-CBQ
43	U	420	LMN	CCV-CCR-O4-C4
39	A	409	PL9	C4-C3-C7-C8
42	n	303	LHG	C24-C25-C26-C27
28	B	610	CLA	C6-C7-C8-C9
28	c	513	CLA	C11-C12-C13-C14
28	s	311	CLA	C11-C10-C8-C9
28	u	415	CLA	C11-C12-C13-C14
45	e	101	HEM	C3A-C2A-CAA-CBA
37	B	617	SQD	C15-C16-C17-C18
28	0	302	CLA	CAA-CBA-CGA-O1A
28	Y	304	CLA	CAA-CBA-CGA-O1A
42	d	405	LHG	C27-C28-C29-C30
38	A	413	LMG	O1-C7-C8-C9
38	J	102	LMG	C7-C8-C9-O8
41	C	515	DGD	C1G-C2G-C3G-O3G
41	b	621	DGD	C1G-C2G-C3G-O3G
42	u	402	LHG	C4-C5-C6-O8
46	n	302	NEX	C39-C29-C30-C31

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Mol	Chain	Res	Type	Atoms
41	a	409	DGD	O6D-C5D-C6D-O5D
43	c	519	LMN	CBG-CBI-CBK-CBQ
28	B	608	CLA	O2A-C1-C2-C3
29	U	409	CHL	O2A-C1-C2-C3
41	c	524	DGD	C2A-C1A-O1G-C1G
28	0	303	CLA	CAA-CBA-CGA-O1A
33	A	401	BCR	C7-C8-C9-C34
33	T	101	BCR	C7-C8-C9-C34
43	C	521	LMN	CBE-CBG-CBI-CBK
41	c	516	DGD	C4B-C5B-C6B-C7B
28	0	304	CLA	CAA-CBA-CGA-O2A
37	b	614	SQD	C46-C45-O47-C7
38	A	406	LMG	C7-C8-O7-C10
38	A	413	LMG	C7-C8-O7-C10
38	A	414	LMG	C9-C8-O7-C10
38	C	523	LMG	C7-C8-O7-C10
38	K	101	LMG	C7-C8-O7-C10
38	K	101	LMG	C9-C8-O7-C10
38	c	526	LMG	C7-C8-O7-C10
38	c	526	LMG	C9-C8-O7-C10
38	d	402	LMG	C9-C8-O7-C10
38	i	101	LMG	C9-C8-O7-C10
42	D	406	LHG	C6-C5-O7-C7
42	V	304	LHG	C6-C5-O7-C7
42	d	405	LHG	C4-C5-O7-C7
42	l	101	LHG	C6-C5-O7-C7
42	v	302	LHG	C4-C5-O7-C7
42	v	302	LHG	C6-C5-O7-C7
28	0	301	CLA	C1A-C2A-CAA-CBA
28	N	314	CLA	C1A-C2A-CAA-CBA
28	U	415	CLA	C1A-C2A-CAA-CBA
29	V	305	CHL	C1A-C2A-CAA-CBA
29	V	311	CHL	C1A-C2A-CAA-CBA
29	g	316	CHL	C1A-C2A-CAA-CBA
29	v	307	CHL	C1A-C2A-CAA-CBA
28	D	409	CLA	C2C-C3C-CAC-CBC
28	S	311	CLA	CAA-CBA-CGA-O2A
28	C	511	CLA	C11-C10-C8-C7
28	G	312	CLA	C11-C12-C13-C15
28	c	512	CLA	C11-C12-C13-C15
28	n	313	CLA	C6-C7-C8-C10
28	s	314	CLA	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
29	S	303	CHL	C6-C7-C8-C10
34	d	407	PHO	C11-C12-C13-C15
28	1	303	CLA	CAA-CBA-CGA-O1A
45	E	101	HEM	CAA-CBA-CGA-O2A
45	e	101	HEM	CAD-CBD-CGD-O1D
31	u	420	0UR	C3-C4-C5-C6
43	V	301	LMN	CBF-CBH-CBJ-CBL
41	C	514	DGD	C8B-C9B-CAB-CBB
43	C	518	LMN	C5-C4-O4-CCR
28	C	517	CLA	C2A-CAA-CBA-CGA
28	G	316	CLA	C2A-CAA-CBA-CGA
41	C	516	DGD	O6D-C5D-C6D-O5D
29	v	303	CHL	C5-C6-C7-C8
42	V	304	LHG	O6-C4-C5-O7
28	0	304	CLA	CAA-CBA-CGA-O1A
41	C	516	DGD	C4D-C5D-C6D-O5D
41	c	524	DGD	C4D-C5D-C6D-O5D
43	g	320	LMN	CBA-CBC-CBE-CBG
43	G	301	LMN	CCF-CCQ-OCB-CCS
28	1	308	CLA	CAA-CBA-CGA-O2A
45	E	101	HEM	CAD-CBD-CGD-O2D
29	N	309	CHL	C2-C3-C5-C6
29	G	311	CHL	C2B-C3B-CAB-CBB
43	C	518	LMN	CAZ-CBB-CBD-CBF
28	C	511	CLA	C3-C5-C6-C7
46	n	302	NEX	C28-C29-C30-C31
46	v	320	NEX	C12-C13-C14-C15
42	b	623	LHG	C32-C33-C34-C35
42	g	303	LHG	C12-C13-C14-C15
30	N	317	0IE	C9-C10-C11-C12
30	s	317	0IE	C9-C10-C11-C12
31	1	312	0UR	C9-C10-C11-C12
31	y	323	0UR	C7-C8-C9-C10
32	1	313	LUT	C29-C30-C31-C32
46	s	319	NEX	C13-C14-C15-C35
43	n	301	LMN	CBD-CBF-CBH-CBJ
43	C	518	LMN	CBC-CBE-CBG-CBI
43	Y	302	LMN	O5-C1-O1-CBS
42	b	623	LHG	C9-C10-C11-C12
28	g	304	CLA	CAA-CBA-CGA-O2A
39	D	404	PL9	C35-C34-C36-C37
29	s	303	CHL	C2-C1-O2A-CGA

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Mol	Chain	Res	Type	Atoms
28	B	602	CLA	C2-C3-C5-C6
28	b	605	CLA	C2-C3-C5-C6
29	Y	315	CHL	CAA-CBA-CGA-O2A
45	e	101	HEM	CAA-CBA-CGA-O2A
45	e	101	HEM	CAD-CBD-CGD-O2D
28	n	315	CLA	C11-C12-C13-C14
28	b	620	CLA	C4-C3-C5-C6
38	A	406	LMG	C11-C10-O7-C8
43	G	304	LMN	CBK-CBQ-CCM-CBT
43	U	420	LMN	CBL-CBR-CCM-CBS
43	U	420	LMN	CBL-CBR-CCM-CBT
43	V	303	LMN	CBL-CBR-CCM-CBT
43	c	519	LMN	CBL-CBR-CCM-CBS
43	g	301	LMN	CBK-CBQ-CCM-CBT
43	n	322	LMN	CBK-CBQ-CCM-CBT
43	y	301	LMN	CBK-CBQ-CCM-CBS
43	y	301	LMN	CBK-CBQ-CCM-CBT
28	0	303	CLA	CAA-CBA-CGA-O2A
38	c	502	LMG	C31-C32-C33-C34
33	H	101	BCR	C1-C6-C7-C8
33	K	104	BCR	C23-C24-C25-C30
33	T	101	BCR	C1-C6-C7-C8
33	b	602	BCR	C23-C24-C25-C30
33	c	507	BCR	C23-C24-C25-C30
33	h	101	BCR	C23-C24-C25-C30
33	k	101	BCR	C5-C6-C7-C8
33	k	101	BCR	C23-C24-C25-C30
28	g	305	CLA	C10-C11-C12-C13
41	a	409	DGD	C7A-C8A-C9A-CAA
41	g	302	DGD	O1G-C1G-C2G-C3G
28	a	403	CLA	C15-C16-C17-C18
29	U	409	CHL	C8-C10-C11-C12
38	K	101	LMG	C29-C30-C31-C32
30	S	316	0IE	C9-C10-C11-C12
30	n	319	0IE	C9-C10-C11-C12
30	v	318	0IE	C13-C14-C15-C16
31	1	315	0UR	C13-C14-C15-C16
31	S	315	0UR	C9-C10-C11-C12
46	g	319	NEX	C29-C30-C31-C32
43	G	301	LMN	CCH-CCQ-OCB-CCS
28	c	512	CLA	C4-C3-C5-C6
28	g	306	CLA	C4-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
28	u	405	CLA	C4-C3-C5-C6
28	y	308	CLA	C4-C3-C5-C6
29	N	308	CHL	C4-C3-C5-C6
29	N	309	CHL	C4-C3-C5-C6
39	D	404	PL9	C25-C24-C26-C27
30	V	320	0IE	C5-C6-C7-C8
30	v	318	0IE	C5-C6-C7-C8
47	s	318	XAT	C31-C32-C33-C34
28	D	409	CLA	C2-C3-C5-C6
28	G	316	CLA	C2-C3-C5-C6
28	y	310	CLA	C2-C3-C5-C6
39	d	406	PL9	C43-C44-C46-C47
29	y	315	CHL	CAA-CBA-CGA-O2A
41	c	516	DGD	C5D-C6D-O5D-C1E
28	g	304	CLA	CAA-CBA-CGA-O1A
28	n	306	CLA	C13-C15-C16-C17
29	v	303	CHL	C3-C5-C6-C7
31	V	319	0UR	C46-C47-C48-C49
28	B	612	CLA	C8-C10-C11-C12
28	c	512	CLA	C2A-CAA-CBA-CGA
43	V	301	LMN	O1-CBS-CCM-CBT
28	B	621	CLA	C13-C15-C16-C17
45	e	101	HEM	CAA-CBA-CGA-O1A
28	S	310	CLA	C4B-C3B-CAB-CBB
28	g	305	CLA	C8-C10-C11-C12
29	S	303	CHL	C4-C3-C5-C6
39	a	412	PL9	C41-C42-C43-C44
28	N	311	CLA	C11-C12-C13-C14
42	N	301	LHG	C24-C25-C26-C27
43	G	301	LMN	CBH-CBJ-CBL-CBR
28	B	607	CLA	C12-C13-C15-C16
28	C	504	CLA	C6-C7-C8-C10
28	b	622	CLA	C6-C7-C8-C10
28	c	513	CLA	C11-C12-C13-C15
28	g	306	CLA	C2-C3-C5-C6
28	u	405	CLA	C2-C3-C5-C6
29	N	303	CHL	C12-C13-C15-C16
28	1	303	CLA	CAA-CBA-CGA-O2A
28	v	314	CLA	CAA-CBA-CGA-O2A
28	Y	311	CLA	C1-C2-C3-C4
29	n	308	CHL	C1-C2-C3-C4
30	s	317	0IE	C13-C14-C15-C16

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Mol	Chain	Res	Type	Atoms
43	G	301	LMN	CAZ-CBB-CBD-CBF
38	K	101	LMG	O7-C8-C9-O8
28	y	309	CLA	C8-C10-C11-C12
41	c	518	DGD	C2B-C1B-O2G-C2G
30	V	320	0IE	O1-C2-C3-C4
30	Y	319	0IE	O1-C2-C30-C31
30	v	318	0IE	O1-C2-C3-C4
31	y	323	0UR	O42-C2-C3-C4
43	n	301	LMN	CCH-CCQ-OCB-CCS
28	G	312	CLA	CAA-CBA-CGA-O2A
28	Y	303	CLA	CAA-CBA-CGA-O2A
42	s	301	LHG	O7-C7-C8-C9
29	V	309	CHL	C4-C3-C5-C6
28	u	412	CLA	C13-C15-C16-C17
28	b	618	CLA	C2-C3-C5-C6
28	g	314	CLA	C2-C3-C5-C6
39	D	404	PL9	C23-C24-C26-C27
39	a	412	PL9	C23-C24-C26-C27
29	s	309	CHL	C2C-C3C-CAC-CBC
42	b	623	LHG	C17-C18-C19-C20
38	d	410	LMG	C18-C19-C20-C21
28	C	517	CLA	C14-C13-C15-C16
28	D	409	CLA	C6-C7-C8-C9
28	b	617	CLA	C14-C13-C15-C16
28	g	314	CLA	C14-C13-C15-C16
29	S	303	CHL	C11-C12-C13-C14
29	V	302	CHL	C14-C13-C15-C16
29	V	309	CHL	C6-C7-C8-C9
29	V	313	CHL	C11-C12-C13-C14
42	L	101	LHG	C12-C13-C14-C15
29	U	409	CHL	C3A-C2A-CAA-CBA
29	V	311	CHL	C3A-C2A-CAA-CBA
29	v	307	CHL	C3A-C2A-CAA-CBA
31	Y	322	0UR	C46-C47-C48-C49
29	Y	315	CHL	CAA-CBA-CGA-O1A
28	0	306	CLA	CAD-CBD-CGD-O2D
28	1	303	CLA	CAD-CBD-CGD-O2D
28	1	304	CLA	CAD-CBD-CGD-O2D
28	B	613	CLA	CAD-CBD-CGD-O2D
28	B	616	CLA	CAD-CBD-CGD-O2D
28	G	309	CLA	CAD-CBD-CGD-O2D
28	G	312	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
28	S	312	CLA	CAD-CBD-CGD-O2D
28	U	407	CLA	CAD-CBD-CGD-O2D
28	U	412	CLA	CAD-CBD-CGD-O2D
28	V	316	CLA	CAD-CBD-CGD-O2D
28	V	318	CLA	CAD-CBD-CGD-O2D
28	Y	303	CLA	CAD-CBD-CGD-O2D
28	a	403	CLA	CAD-CBD-CGD-O2D
28	c	520	CLA	CAD-CBD-CGD-O2D
28	v	305	CLA	CAD-CBD-CGD-O2D
28	v	306	CLA	CAD-CBD-CGD-O2D
28	v	314	CLA	CAD-CBD-CGD-O2D
28	y	303	CLA	CAD-CBD-CGD-O2D
28	y	316	CLA	CAD-CBD-CGD-O2D
29	0	310	CHL	CAD-CBD-CGD-O2D
29	N	308	CHL	CAD-CBD-CGD-O2D
29	S	302	CHL	CAD-CBD-CGD-O2D
29	u	409	CHL	CAD-CBD-CGD-O2D
38	C	522	LMG	C7-C8-O7-C10
38	M	101	LMG	C7-C8-O7-C10
38	d	408	LMG	C9-C8-O7-C10
41	c	524	DGD	C3G-C2G-O2G-C1B
42	D	405	LHG	C6-C5-O7-C7
43	n	301	LMN	CCW-CCS-OCB-CCQ
43	n	301	LMN	CCF-CCQ-OCB-CCS
29	N	309	CHL	C3-C5-C6-C7
41	c	518	DGD	O1B-C1B-O2G-C2G
41	c	524	DGD	C2B-C3B-C4B-C5B
43	u	401	LMN	CBF-CBH-CBJ-CBL
28	u	413	CLA	C2-C1-O2A-CGA
28	Y	304	CLA	CAA-CBA-CGA-O2A
29	g	309	CHL	CAA-CBA-CGA-O2A
42	s	301	LHG	O8-C23-C24-C25
41	c	518	DGD	C7A-C8A-C9A-CAA
28	V	315	CLA	C4-C3-C5-C6
28	v	314	CLA	CAA-CBA-CGA-O1A
29	y	315	CHL	CAA-CBA-CGA-O1A
29	V	313	CHL	C4C-C3C-CAC-CBC
43	c	525	LMN	OBX-CCJ-OBV-CBT
28	y	305	CLA	CAA-CBA-CGA-O2A
29	S	306	CHL	CAA-CBA-CGA-O2A
41	c	515	DGD	O1G-C1A-C2A-C3A
41	c	518	DGD	O1G-C1A-C2A-C3A

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Mol	Chain	Res	Type	Atoms
42	V	304	LHG	C29-C30-C31-C32
43	U	420	LMN	CAW-CAY-CBA-CBC
30	0	312	0IE	C5-C6-C7-C8
30	S	316	0IE	C5-C6-C7-C8
30	y	319	0IE	C5-C6-C7-C8
31	U	419	0UR	C11-C12-C13-C14
31	Y	317	0UR	C5-C6-C7-C8
31	Y	318	0UR	C11-C12-C13-C14
33	k	101	BCR	C21-C22-C23-C24
46	V	322	NEX	C11-C12-C13-C14
28	N	311	CLA	C10-C11-C12-C13
38	I	101	LMG	C7-C8-C9-O8
38	d	410	LMG	C7-C8-C9-O8
28	B	607	CLA	C13-C15-C16-C17
43	c	525	LMN	CAW-CAY-CBA-CBC
43	v	301	LMN	CBG-CBI-CBK-CBQ
29	v	304	CHL	C11-C12-C13-C14
28	U	404	CLA	O2A-C1-C2-C3
28	n	316	CLA	O2A-C1-C2-C3
28	s	312	CLA	O2A-C1-C2-C3
28	u	405	CLA	O2A-C1-C2-C3
29	N	309	CHL	O2A-C1-C2-C3
29	s	309	CHL	O2A-C1-C2-C3
29	v	310	CHL	O2A-C1-C2-C3
28	N	304	CLA	C6-C7-C8-C9
41	c	516	DGD	C5B-C6B-C7B-C8B
29	Y	307	CHL	C2A-CAA-CBA-CGA
43	Y	301	LMN	C3-C4-O4-CCR
28	s	313	CLA	CAA-CBA-CGA-O2A
29	g	309	CHL	CAA-CBA-CGA-O1A
38	m	101	LMG	C32-C33-C34-C35
41	a	409	DGD	C5B-C6B-C7B-C8B
29	v	307	CHL	O1D-CGD-O2D-CED
28	0	309	CLA	CHA-CBD-CGD-O1D
28	0	309	CLA	CHA-CBD-CGD-O2D
28	1	303	CLA	CHA-CBD-CGD-O2D
28	1	309	CLA	CHA-CBD-CGD-O1D
28	1	309	CLA	CHA-CBD-CGD-O2D
28	1	311	CLA	CHA-CBD-CGD-O2D
28	B	618	CLA	CHA-CBD-CGD-O2D
28	B	622	CLA	CHA-CBD-CGD-O2D
28	C	512	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
28	C	519	CLA	CHA-CBD-CGD-O2D
28	G	307	CLA	CHA-CBD-CGD-O1D
28	G	307	CLA	CHA-CBD-CGD-O2D
28	G	308	CLA	CHA-CBD-CGD-O1D
28	G	308	CLA	CHA-CBD-CGD-O2D
28	S	304	CLA	CHA-CBD-CGD-O1D
28	S	305	CLA	CHA-CBD-CGD-O2D
28	U	415	CLA	CHA-CBD-CGD-O1D
28	U	415	CLA	CHA-CBD-CGD-O2D
28	V	307	CLA	CHA-CBD-CGD-O1D
28	b	605	CLA	CHA-CBD-CGD-O2D
28	c	505	CLA	CHA-CBD-CGD-O2D
28	c	510	CLA	CHA-CBD-CGD-O2D
28	c	513	CLA	CHA-CBD-CGD-O2D
28	g	305	CLA	CHA-CBD-CGD-O1D
28	g	305	CLA	CHA-CBD-CGD-O2D
28	n	306	CLA	CHA-CBD-CGD-O1D
28	n	306	CLA	CHA-CBD-CGD-O2D
28	s	305	CLA	CHA-CBD-CGD-O1D
28	s	311	CLA	CHA-CBD-CGD-O1D
28	s	311	CLA	CHA-CBD-CGD-O2D
28	u	407	CLA	CHA-CBD-CGD-O2D
28	u	408	CLA	CHA-CBD-CGD-O1D
28	u	408	CLA	CHA-CBD-CGD-O2D
28	u	417	CLA	CHA-CBD-CGD-O1D
28	u	417	CLA	CHA-CBD-CGD-O2D
28	u	418	CLA	CHA-CBD-CGD-O2D
29	G	310	CHL	CHA-CBD-CGD-O1D
29	G	310	CHL	CHA-CBD-CGD-O2D
29	N	303	CHL	CHA-CBD-CGD-O1D
29	N	303	CHL	CHA-CBD-CGD-O2D
29	V	305	CHL	CHA-CBD-CGD-O1D
29	V	305	CHL	CHA-CBD-CGD-O2D
29	V	306	CHL	CHA-CBD-CGD-O1D
29	V	306	CHL	CHA-CBD-CGD-O2D
29	V	311	CHL	CHA-CBD-CGD-O1D
29	n	304	CHL	CHA-CBD-CGD-O1D
29	n	304	CHL	CHA-CBD-CGD-O2D
29	s	302	CHL	CHA-CBD-CGD-O1D
29	s	302	CHL	CHA-CBD-CGD-O2D
29	s	303	CHL	CHA-CBD-CGD-O1D
29	s	303	CHL	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
29	v	303	CHL	CHA-CBD-CGD-O2D
31	g	317	0UR	C7-C8-C9-C10
46	N	319	NEX	C29-C30-C31-C32
28	u	407	CLA	CAA-CBA-CGA-O2A
38	I	101	LMG	O7-C10-C11-C12
41	C	515	DGD	C2B-C3B-C4B-C5B
43	g	301	LMN	OAL-CBP-CCF-CCQ
47	S	317	XAT	C11-C10-C9-C8
29	g	310	CHL	CAA-CBA-CGA-O2A
29	s	309	CHL	CAA-CBA-CGA-O2A
38	K	101	LMG	O8-C28-C29-C30
38	b	625	LMG	O7-C8-C9-O8
41	C	516	DGD	O2G-C2G-C3G-O3G
29	V	302	CHL	C15-C16-C17-C18
31	y	323	0UR	C46-C47-C48-C49
28	b	622	CLA	C10-C11-C12-C13
28	c	520	CLA	CAA-CBA-CGA-O2A
41	C	516	DGD	O2G-C1B-C2B-C3B
42	D	406	LHG	C5-C6-O8-C23
28	g	306	CLA	C16-C17-C18-C20
42	G	303	LHG	O1-C1-C2-O2
43	C	518	LMN	O1-CBS-CCM-CBR
43	N	320	LMN	OBV-CBT-CCM-CBR
43	U	420	LMN	O1-CBS-CCM-CBQ
43	V	301	LMN	O1-CBS-CCM-CBR
43	V	301	LMN	OBV-CBT-CCM-CBQ
43	W	201	LMN	OBV-CBT-CCM-CBQ
41	c	524	DGD	O2G-C1B-C2B-C3B
42	b	623	LHG	O8-C23-C24-C25
28	A	410	CLA	C4-C3-C5-C6
28	a	416	CLA	C12-C13-C15-C16
42	v	302	LHG	C24-C25-C26-C27
38	D	401	LMG	O7-C10-C11-C12
38	m	101	LMG	O8-C28-C29-C30
41	c	516	DGD	O2G-C1B-C2B-C3B
42	L	101	LHG	O8-C23-C24-C25
28	c	521	CLA	C3-C5-C6-C7
28	C	511	CLA	C11-C10-C8-C9
28	D	410	CLA	C11-C12-C13-C14
28	U	415	CLA	C11-C10-C8-C9
28	b	607	CLA	C6-C7-C8-C9
28	g	314	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
41	a	409	DGD	C1B-C2B-C3B-C4B
38	W	202	LMG	O10-C28-C29-C30
39	a	412	PL9	C29-C31-C32-C33
30	N	317	0IE	C13-C14-C15-C16
30	V	320	0IE	C3-C4-C5-C6
28	C	519	CLA	C2B-C3B-CAB-CBB
28	V	314	CLA	C2B-C3B-CAB-CBB
28	a	403	CLA	C2B-C3B-CAB-CBB
28	c	505	CLA	C2B-C3B-CAB-CBB
28	n	315	CLA	C2B-C3B-CAB-CBB
28	u	411	CLA	C2B-C3B-CAB-CBB
38	W	202	LMG	C29-C30-C31-C32
29	S	307	CHL	CAA-CBA-CGA-O2A
41	C	514	DGD	C9B-CAB-CBB-CCB
28	V	316	CLA	CAA-CBA-CGA-O2A
30	1	314	0IE	O29-C20-C3-C4
37	B	615	SQD	C4-C5-C6-S
37	T	102	SQD	C4-C5-C6-S
28	U	414	CLA	C6-C7-C8-C9
29	V	313	CHL	C16-C17-C18-C19
34	d	407	PHO	C16-C17-C18-C19
38	I	101	LMG	C40-C41-C42-C43
29	N	302	CHL	C1-C2-C3-C5
38	I	101	LMG	C41-C42-C43-C44
28	b	616	CLA	C2A-CAA-CBA-CGA
39	A	409	PL9	C26-C27-C28-C29
42	s	301	LHG	O9-C7-C8-C9
43	g	301	LMN	CAY-CBA-CBC-CBE
28	Y	303	CLA	CAA-CBA-CGA-O1A
38	d	408	LMG	C32-C33-C34-C35
29	U	405	CHL	C10-C11-C12-C13
42	D	402	LHG	C25-C26-C27-C28
38	a	414	LMG	C28-C29-C30-C31
28	G	305	CLA	CAA-CBA-CGA-O2A
41	c	515	DGD	O1A-C1A-C2A-C3A
30	s	317	0IE	C5-C6-C7-C8
31	y	317	0UR	C11-C12-C13-C14
31	y	318	0UR	C15-C16-C17-C18
33	K	102	BCR	C21-C22-C23-C24
31	n	318	0UR	C48-C49-C50-C51
28	V	315	CLA	CBA-CGA-O2A-C1
28	C	504	CLA	C1A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
28	G	316	CLA	C1A-C2A-CAA-CBA
28	V	317	CLA	C1A-C2A-CAA-CBA
28	Y	303	CLA	C1A-C2A-CAA-CBA
28	b	619	CLA	C1A-C2A-CAA-CBA
28	u	417	CLA	C1A-C2A-CAA-CBA
29	U	409	CHL	C1A-C2A-CAA-CBA
29	s	303	CHL	C1A-C2A-CAA-CBA
29	S	306	CHL	CAA-CBA-CGA-O1A
41	c	518	DGD	O1A-C1A-C2A-C3A
38	I	101	LMG	C35-C36-C37-C38
28	V	315	CLA	O1A-CGA-O2A-C1
28	d	404	CLA	C2-C1-O2A-CGA
28	g	311	CLA	C2-C1-O2A-CGA
38	I	101	LMG	O9-C10-C11-C12
42	s	301	LHG	O10-C23-C24-C25
28	s	313	CLA	CAA-CBA-CGA-O1A
38	J	102	LMG	O1-C7-C8-C9
42	d	405	LHG	C9-C10-C11-C12
43	W	201	LMN	CBD-CBF-CBH-CBJ
43	c	525	LMN	CBG-CBI-CBK-CBQ
29	u	410	CHL	C4-C3-C5-C6
39	D	404	PL9	C45-C44-C46-C47
29	y	307	CHL	C3-C5-C6-C7
43	Y	301	LMN	C5-C4-O4-CCR
28	G	312	CLA	CAA-CBA-CGA-O1A
28	c	520	CLA	CAA-CBA-CGA-O1A
28	N	315	CLA	C4B-C3B-CAB-CBB
28	U	406	CLA	C4B-C3B-CAB-CBB
28	U	416	CLA	C4B-C3B-CAB-CBB
28	a	402	CLA	C4B-C3B-CAB-CBB
28	u	418	CLA	C4B-C3B-CAB-CBB
28	y	313	CLA	C4B-C3B-CAB-CBB
29	n	311	CHL	C4B-C3B-CAB-CBB
42	D	405	LHG	C3-O3-P-O5
42	D	406	LHG	C3-O3-P-O5
42	b	624	LHG	C3-O3-P-O5
42	l	101	LHG	C4-O6-P-O5
29	s	309	CHL	CAA-CBA-CGA-O1A
38	U	401	LMG	O8-C28-C29-C30
38	a	411	LMG	O8-C28-C29-C30
28	c	521	CLA	C5-C6-C7-C8
38	A	413	LMG	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
28	B	622	CLA	C3-C5-C6-C7
33	A	401	BCR	C1-C6-C7-C8
33	C	502	BCR	C1-C6-C7-C8
39	D	404	PL9	C39-C41-C42-C43
28	U	404	CLA	C5-C6-C7-C8
28	y	305	CLA	CAA-CBA-CGA-O1A
41	c	524	DGD	O1B-C1B-C2B-C3B
42	b	623	LHG	O10-C23-C24-C25
28	b	601	CLA	CAA-CBA-CGA-O2A
43	c	525	LMN	CCH-CCQ-OCB-CCS
38	I	101	LMG	O9-C10-O7-C8
43	G	301	LMN	CAY-CBA-CBC-CBE
28	B	611	CLA	C2A-CAA-CBA-CGA
28	u	407	CLA	CAA-CBA-CGA-O1A
37	c	523	SQD	O10-C23-C24-C25
41	c	516	DGD	O1B-C1B-C2B-C3B
29	S	303	CHL	C10-C11-C12-C13
29	v	309	CHL	C15-C16-C17-C18
38	a	411	LMG	C30-C31-C32-C33
42	u	402	LHG	O8-C23-C24-C25
41	c	515	DGD	C1B-C2B-C3B-C4B
28	n	315	CLA	C4-C3-C5-C6
29	U	408	CHL	C2-C3-C5-C6
28	C	512	CLA	C15-C16-C17-C18
29	S	307	CHL	CAA-CBA-CGA-O1A
28	B	610	CLA	CAD-CBD-CGD-O1D
28	B	611	CLA	CAD-CBD-CGD-O1D
28	C	509	CLA	CAD-CBD-CGD-O1D
28	C	511	CLA	CAD-CBD-CGD-O1D
28	V	315	CLA	CAD-CBD-CGD-O1D
28	Y	311	CLA	CAD-CBD-CGD-O1D
28	c	512	CLA	CAD-CBD-CGD-O1D
28	c	522	CLA	CAD-CBD-CGD-O1D
28	g	305	CLA	CAD-CBD-CGD-O1D
28	n	317	CLA	CAD-CBD-CGD-O1D
28	s	315	CLA	CAD-CBD-CGD-O1D
28	y	308	CLA	CAD-CBD-CGD-O1D
29	G	310	CHL	CAD-CBD-CGD-O1D
29	N	306	CHL	CAD-CBD-CGD-O1D
30	y	319	0IE	C2-C30-C31-C32
31	1	316	0UR	C23-C1-C41-C2
31	Y	318	0UR	C23-C1-C41-C2

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Mol	Chain	Res	Type	Atoms
31	y	323	0UR	C23-C1-C41-C2
38	K	103	LMG	C9-C8-O7-C10
38	a	411	LMG	C9-C8-O7-C10
38	d	408	LMG	C7-C8-O7-C10
38	A	408	LMG	C10-C11-C12-C13
29	g	310	CHL	CAA-CBA-CGA-O1A
38	K	101	LMG	O10-C28-C29-C30
38	D	401	LMG	C33-C34-C35-C36
41	C	520	DGD	C4D-C5D-C6D-O5D
28	C	506	CLA	CAA-CBA-CGA-O2A
31	g	318	0UR	O44-C45-C46-C47
28	b	607	CLA	C5-C6-C7-C8
28	n	315	CLA	C13-C15-C16-C17
28	G	312	CLA	C11-C12-C13-C14
29	S	308	CHL	C6-C7-C8-C9
34	d	407	PHO	C11-C10-C8-C9
43	y	302	LMN	CBF-CBH-CBJ-CBL
42	V	304	LHG	C12-C13-C14-C15
28	u	414	CLA	C11-C10-C8-C9
28	C	504	CLA	C10-C11-C12-C13
41	C	516	DGD	O1B-C1B-C2B-C3B
28	S	304	CLA	CAA-CBA-CGA-O2A
28	c	511	CLA	CAA-CBA-CGA-O2A
28	n	315	CLA	CAA-CBA-CGA-O2A
29	V	305	CHL	CAA-CBA-CGA-O2A
29	v	307	CHL	CAA-CBA-CGA-O2A
28	d	404	CLA	C2C-C3C-CAC-CBC
28	b	609	CLA	C15-C16-C17-C18
29	N	303	CHL	C10-C11-C12-C13
29	s	309	CHL	C4C-C3C-CAC-CBC
41	c	515	DGD	C8B-C9B-CAB-CBB
28	C	510	CLA	CAA-CBA-CGA-O2A
28	n	317	CLA	CAA-CBA-CGA-O2A
29	n	312	CHL	CAA-CBA-CGA-O2A
38	d	402	LMG	O7-C10-C11-C12
39	D	404	PL9	C16-C17-C18-C19
28	C	503	CLA	C8-C10-C11-C12
28	b	607	CLA	C13-C15-C16-C17
28	n	313	CLA	C4-C3-C5-C6
28	u	416	CLA	C4-C3-C5-C6
29	n	305	CHL	C4-C3-C5-C6
33	k	102	BCR	C7-C8-C9-C34

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Mol	Chain	Res	Type	Atoms
28	B	619	CLA	C2-C3-C5-C6
28	C	504	CLA	C3A-C2A-CAA-CBA
28	C	504	CLA	C2-C3-C5-C6
28	C	511	CLA	C11-C12-C13-C15
28	G	316	CLA	C3A-C2A-CAA-CBA
28	N	314	CLA	C3A-C2A-CAA-CBA
28	S	313	CLA	C6-C7-C8-C10
28	U	413	CLA	C11-C10-C8-C7
28	V	317	CLA	C3A-C2A-CAA-CBA
28	Y	303	CLA	C3A-C2A-CAA-CBA
28	Y	314	CLA	C3A-C2A-CAA-CBA
28	b	617	CLA	C12-C13-C15-C16
28	c	520	CLA	C12-C13-C15-C16
28	g	314	CLA	C11-C10-C8-C7
28	v	312	CLA	C6-C7-C8-C10
28	v	315	CLA	C3A-C2A-CAA-CBA
29	S	302	CHL	C6-C7-C8-C10
29	V	309	CHL	C2-C3-C5-C6
29	V	311	CHL	C12-C13-C15-C16
30	0	312	0IE	C3-C2-C30-C31
30	1	314	0IE	O29-C20-C3-C2
30	N	317	0IE	O29-C20-C3-C2
31	0	314	0UR	C3-C2-C41-C1
31	1	312	0UR	O42-C2-C3-C43
31	1	316	0UR	C3-C2-C41-C1
31	G	319	0UR	O42-C2-C3-C43
31	N	316	0UR	O42-C2-C3-C43
31	S	315	0UR	O42-C2-C3-C43
31	V	319	0UR	O42-C2-C3-C43
31	Y	317	0UR	O42-C2-C3-C43
31	Y	322	0UR	C3-C2-C41-C1
31	Y	323	0UR	O42-C2-C3-C43
31	g	318	0UR	O42-C2-C3-C43
31	n	318	0UR	O42-C2-C3-C43
31	s	316	0UR	O42-C2-C3-C43
31	u	420	0UR	O42-C2-C3-C43
31	u	420	0UR	C3-C2-C41-C1
31	v	317	0UR	C3-C2-C41-C1
31	y	318	0UR	C3-C2-C41-C1
31	y	322	0UR	C3-C2-C41-C1
29	n	312	CHL	CAA-CBA-CGA-O1A
38	D	401	LMG	O9-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
28	G	305	CLA	CAA-CBA-CGA-O1A
41	c	524	DGD	C4A-C5A-C6A-C7A
28	G	315	CLA	CAA-CBA-CGA-O2A
28	V	318	CLA	CAA-CBA-CGA-O2A
29	V	312	CHL	CAA-CBA-CGA-O2A
37	b	614	SQD	O48-C23-C24-C25
38	a	414	LMG	O8-C28-C29-C30
41	c	518	DGD	O2G-C1B-C2B-C3B
42	V	304	LHG	O8-C23-C24-C25
31	n	318	0UR	C15-C16-C17-C18
31	y	322	0UR	C11-C12-C13-C14
33	B	614	BCR	C7-C8-C9-C10
37	b	614	SQD	O10-C23-C24-C25
38	A	408	LMG	O9-C10-C11-C12
41	c	518	DGD	O1B-C1B-C2B-C3B
31	y	323	0UR	C13-C14-C15-C16
46	G	320	NEX	C29-C30-C31-C32
47	S	317	XAT	C13-C14-C15-C35
47	n	320	XAT	C13-C14-C15-C35
29	N	303	CHL	CAA-CBA-CGA-O2A
37	A	405	SQD	O48-C23-C24-C25
38	A	408	LMG	O7-C10-C11-C12
38	I	101	LMG	O8-C28-C29-C30
38	J	102	LMG	O7-C10-C11-C12
38	i	101	LMG	O7-C10-C11-C12
41	C	516	DGD	O1G-C1A-C2A-C3A
42	N	301	LHG	O7-C7-C8-C9
42	d	405	LHG	O8-C23-C24-C25
43	g	301	LMN	OBX-CCJ-OBV-CBT
28	u	415	CLA	C8-C10-C11-C12
41	c	516	DGD	C3B-C4B-C5B-C6B
28	V	316	CLA	CAA-CBA-CGA-O1A
28	y	304	CLA	CAA-CBA-CGA-O1A
29	V	305	CHL	CAA-CBA-CGA-O1A
39	D	404	PL9	C44-C46-C47-C48
43	G	301	LMN	CBL-CBR-CCM-CBT
43	V	303	LMN	CBL-CBR-CCM-CBS
28	c	508	CLA	CAA-CBA-CGA-O2A
38	i	101	LMG	O8-C28-C29-C30
42	U	403	LHG	O7-C7-C8-C9
42	b	624	LHG	O8-C23-C24-C25
42	l	101	LHG	O7-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
29	V	313	CHL	C2C-C3C-CAC-CBC
38	c	502	LMG	C28-C29-C30-C31
28	c	511	CLA	CAA-CBA-CGA-O1A
38	m	101	LMG	C12-C13-C14-C15
31	n	318	0UR	C46-C47-C48-C49
29	S	302	CHL	C5-C6-C7-C8
28	C	506	CLA	CAA-CBA-CGA-O1A
38	D	411	LMG	O10-C28-C29-C30
42	G	303	LHG	C9-C10-C11-C12
43	c	525	LMN	CCF-CCQ-OCB-CCS
28	C	505	CLA	CAA-CBA-CGA-O2A
28	U	416	CLA	CAA-CBA-CGA-O2A
38	b	613	LMG	O8-C28-C29-C30
38	b	625	LMG	O8-C28-C29-C30
28	0	311	CLA	CAA-CBA-CGA-O2A

There are no ring outliers.

372 monomers are involved in 789 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
28	b	611	CLA	1	0
28	B	622	CLA	2	0
29	v	303	CHL	3	0
29	N	303	CHL	1	0
29	U	409	CHL	1	0
28	0	305	CLA	1	0
28	C	501	CLA	2	0
38	c	502	LMG	3	0
33	a	401	BCR	3	0
28	A	411	CLA	3	0
38	D	401	LMG	5	0
41	c	517	DGD	1	0
29	Y	315	CHL	1	0
29	v	309	CHL	2	0
28	s	311	CLA	1	0
28	C	511	CLA	1	0
28	g	308	CLA	1	0
29	N	309	CHL	1	0
28	C	512	CLA	3	0
28	g	307	CLA	3	0
28	S	305	CLA	2	0
28	1	301	CLA	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
28	g	313	CLA	4	0
28	v	312	CLA	1	0
42	b	624	LHG	2	0
28	Y	311	CLA	5	0
28	B	613	CLA	2	0
29	n	308	CHL	3	0
28	N	304	CLA	2	0
38	b	613	LMG	1	0
28	G	314	CLA	1	0
29	n	312	CHL	2	0
28	a	402	CLA	1	0
29	s	308	CHL	1	0
33	k	102	BCR	6	0
28	y	314	CLA	2	0
29	V	309	CHL	7	0
28	1	307	CLA	1	0
28	n	306	CLA	2	0
28	s	305	CLA	2	0
33	C	502	BCR	4	0
29	v	310	CHL	1	0
28	g	304	CLA	1	0
28	0	302	CLA	1	0
28	c	513	CLA	3	0
28	b	616	CLA	2	0
33	h	101	BCR	4	0
28	b	601	CLA	1	0
28	b	608	CLA	2	0
28	1	308	CLA	3	0
29	V	312	CHL	1	0
28	b	617	CLA	2	0
29	G	310	CHL	1	0
33	K	104	BCR	5	0
29	s	303	CHL	1	0
29	u	409	CHL	3	0
33	k	101	BCR	4	0
28	N	314	CLA	2	0
28	c	522	CLA	3	0
28	g	306	CLA	2	0
31	1	316	0UR	1	0
28	c	510	CLA	1	0
29	V	311	CHL	6	0
43	u	401	LMN	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
29	V	310	CHL	2	0
28	B	607	CLA	1	0
43	y	302	LMN	5	0
28	G	309	CLA	2	0
29	v	304	CHL	3	0
29	N	310	CHL	1	0
28	0	309	CLA	1	0
41	A	417	DGD	1	0
47	n	320	XAT	1	0
29	v	311	CHL	1	0
43	N	320	LMN	2	0
29	s	306	CHL	7	0
29	s	310	CHL	1	0
28	B	610	CLA	1	0
28	u	412	CLA	2	0
33	B	604	BCR	4	0
28	b	620	CLA	1	0
28	N	312	CLA	1	0
28	v	315	CLA	3	0
28	a	416	CLA	1	0
28	N	315	CLA	1	0
47	v	319	XAT	2	0
29	v	308	CHL	1	0
31	S	315	0UR	1	0
28	1	306	CLA	5	0
29	u	410	CHL	1	0
28	V	314	CLA	1	0
28	y	303	CLA	1	0
41	c	518	DGD	1	0
29	g	316	CHL	7	0
37	B	615	SQD	3	0
47	S	317	XAT	4	0
29	v	307	CHL	1	0
41	G	302	DGD	1	0
28	a	403	CLA	1	0
33	b	603	BCR	6	0
39	a	412	PL9	2	0
28	g	312	CLA	3	0
28	V	308	CLA	1	0
28	V	317	CLA	1	0
28	D	410	CLA	2	0
38	u	403	LMG	4	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
28	c	503	CLA	4	0
28	0	307	CLA	3	0
29	V	313	CHL	7	0
28	G	312	CLA	1	0
37	b	614	SQD	2	0
41	a	409	DGD	1	0
28	b	618	CLA	1	0
37	c	523	SQD	1	0
28	Y	312	CLA	1	0
28	g	315	CLA	2	0
33	b	602	BCR	7	0
46	V	323	NEX	5	0
28	1	309	CLA	1	0
28	b	612	CLA	1	0
28	U	411	CLA	1	0
29	N	307	CHL	1	0
28	n	315	CLA	1	0
38	K	101	LMG	2	0
42	v	302	LHG	1	0
28	C	517	CLA	2	0
28	S	310	CLA	2	0
28	u	418	CLA	3	0
46	v	320	NEX	2	0
28	0	304	CLA	1	0
28	b	619	CLA	1	0
32	1	313	LUT	4	0
28	G	306	CLA	1	0
28	S	311	CLA	1	0
28	g	305	CLA	1	0
37	T	102	SQD	1	0
29	G	311	CHL	4	0
30	N	317	0IE	2	0
30	Y	319	0IE	1	0
28	b	609	CLA	1	0
38	A	414	LMG	4	0
28	Y	316	CLA	1	0
28	u	415	CLA	1	0
28	Y	305	CLA	2	0
28	B	618	CLA	1	0
28	U	417	CLA	2	0
28	c	508	CLA	1	0
32	Y	320	LUT	4	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
33	A	401	BCR	3	0
29	S	303	CHL	1	0
29	S	302	CHL	3	0
28	0	308	CLA	6	0
43	U	420	LMN	1	0
47	s	318	XAT	3	0
29	n	304	CHL	2	0
28	y	304	CLA	1	0
28	U	416	CLA	1	0
42	s	301	LHG	2	0
28	s	312	CLA	1	0
38	d	408	LMG	5	0
28	U	410	CLA	2	0
43	c	525	LMN	3	0
38	C	522	LMG	3	0
28	Y	313	CLA	2	0
28	1	305	CLA	2	0
38	D	411	LMG	2	0
28	n	313	CLA	1	0
28	G	315	CLA	1	0
33	B	603	BCR	5	0
34	A	402	PHO	1	0
28	0	311	CLA	1	0
46	s	319	NEX	3	0
45	E	101	HEM	7	0
38	i	101	LMG	1	0
28	A	410	CLA	1	0
28	c	514	CLA	1	0
28	c	520	CLA	3	0
28	V	315	CLA	5	0
30	y	319	0IE	2	0
28	0	301	CLA	3	0
28	y	316	CLA	2	0
32	U	418	LUT	4	0
28	G	316	CLA	2	0
33	c	509	BCR	6	0
28	Y	308	CLA	1	0
28	u	407	CLA	1	0
28	y	311	CLA	1	0
28	s	313	CLA	2	0
43	W	201	LMN	1	0
29	1	310	CHL	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
28	b	606	CLA	4	0
28	u	417	CLA	3	0
31	s	316	0UR	1	0
28	V	316	CLA	2	0
37	A	405	SQD	2	0
28	U	412	CLA	2	0
28	u	416	CLA	3	0
42	g	303	LHG	3	0
28	V	307	CLA	1	0
28	n	307	CLA	1	0
28	v	316	CLA	2	0
28	C	510	CLA	1	0
28	C	506	CLA	1	0
38	K	103	LMG	2	0
43	n	322	LMN	5	0
29	U	408	CHL	1	0
28	B	611	CLA	2	0
38	A	408	LMG	1	0
38	a	417	LMG	1	0
41	C	516	DGD	2	0
37	B	617	SQD	5	0
28	B	608	CLA	2	0
33	c	507	BCR	5	0
42	n	303	LHG	2	0
28	C	505	CLA	1	0
28	c	521	CLA	3	0
28	y	305	CLA	4	0
28	C	504	CLA	2	0
28	B	602	CLA	1	0
28	0	303	CLA	5	0
28	C	503	CLA	2	0
33	B	614	BCR	5	0
29	S	306	CHL	3	0
28	B	616	CLA	1	0
31	y	317	0UR	3	0
34	a	404	PHO	1	0
28	B	601	CLA	1	0
42	c	527	LHG	6	0
28	y	313	CLA	1	0
28	B	612	CLA	1	0
43	n	301	LMN	2	0
28	d	404	CLA	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
28	s	304	CLA	1	0
28	c	512	CLA	1	0
29	V	306	CHL	1	0
29	V	302	CHL	8	0
28	b	622	CLA	1	0
28	G	307	CLA	1	0
33	d	403	BCR	7	0
29	n	305	CHL	1	0
28	d	409	CLA	1	0
28	B	605	CLA	3	0
38	c	528	LMG	1	0
28	B	619	CLA	1	0
28	1	304	CLA	1	0
28	y	308	CLA	4	0
28	c	511	CLA	1	0
29	S	309	CHL	2	0
28	B	609	CLA	1	0
33	t	101	BCR	7	0
43	Y	301	LMN	3	0
38	J	101	LMG	4	0
28	g	314	CLA	5	0
28	b	607	CLA	1	0
42	S	301	LHG	3	0
28	y	306	CLA	11	0
28	y	310	CLA	1	0
28	C	513	CLA	2	0
28	u	414	CLA	1	0
28	g	311	CLA	1	0
28	y	309	CLA	5	0
28	U	413	CLA	5	0
29	S	308	CHL	2	0
38	U	402	LMG	4	0
28	Y	310	CLA	1	0
43	G	304	LMN	2	0
37	z	101	SQD	6	0
32	y	320	LUT	5	0
29	S	307	CHL	1	0
46	G	320	NEX	11	0
28	A	416	CLA	3	0
28	c	505	CLA	1	0
29	N	306	CHL	2	0
42	D	406	LHG	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
28	u	405	CLA	3	0
28	s	315	CLA	1	0
38	w	201	LMG	2	0
28	v	306	CLA	3	0
42	b	623	LHG	1	0
29	y	307	CHL	2	0
29	s	302	CHL	1	0
31	y	323	0UR	1	0
38	A	413	LMG	2	0
42	D	402	LHG	1	0
28	b	610	CLA	2	0
28	U	406	CLA	1	0
28	C	508	CLA	1	0
28	S	314	CLA	1	0
28	Y	304	CLA	1	0
38	M	101	LMG	1	0
37	c	501	SQD	3	0
29	G	317	CHL	6	0
28	N	311	CLA	2	0
28	Y	309	CLA	4	0
28	B	606	CLA	2	0
33	b	604	BCR	6	0
43	n	323	LMN	1	0
28	1	311	CLA	1	0
28	s	314	CLA	2	0
28	Y	314	CLA	2	0
43	g	320	LMN	1	0
28	S	312	CLA	1	0
28	b	605	CLA	1	0
28	S	313	CLA	1	0
29	y	315	CHL	3	0
29	Y	307	CHL	2	0
28	B	621	CLA	4	0
28	0	306	CLA	1	0
28	G	313	CLA	1	0
29	n	309	CHL	1	0
33	D	403	BCR	7	0
28	U	404	CLA	3	0
28	1	302	CLA	3	0
38	W	202	LMG	1	0
33	C	507	BCR	2	0
28	Y	303	CLA	7	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
28	n	314	CLA	1	0
28	U	414	CLA	10	0
29	s	307	CHL	3	0
33	H	101	BCR	5	0
38	u	404	LMG	3	0
28	y	312	CLA	2	0
42	N	301	LHG	3	0
28	U	415	CLA	7	0
28	u	413	CLA	2	0
28	v	305	CLA	3	0
43	V	301	LMN	2	0
32	u	419	LUT	4	0
34	d	407	PHO	4	0
47	N	318	XAT	2	0
29	s	309	CHL	2	0
28	G	305	CLA	1	0
46	N	319	NEX	4	0
28	D	409	CLA	2	0
28	1	303	CLA	7	0
28	C	509	CLA	1	0
29	n	310	CHL	1	0
28	U	407	CLA	1	0
28	b	615	CLA	1	0
42	D	405	LHG	4	0
41	C	520	DGD	1	0
28	c	506	CLA	1	0
38	c	526	LMG	7	0
29	U	405	CHL	1	0
45	e	101	HEM	5	0
28	v	313	CLA	1	0
46	V	322	NEX	1	0
28	G	308	CLA	4	0
33	K	102	BCR	5	0
38	d	410	LMG	2	0
38	a	414	LMG	5	0
28	A	407	CLA	1	0
28	n	317	CLA	1	0
29	N	302	CHL	9	0
33	T	101	BCR	5	0
29	0	310	CHL	1	0
46	g	319	NEX	5	0
28	n	316	CLA	1	0

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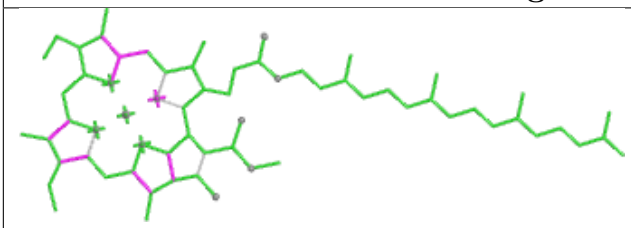
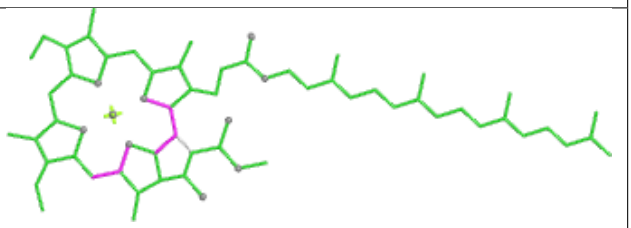
Mol	Chain	Res	Type	Clashes	Symm-Clashes
28	Y	306	CLA	1	0
29	N	308	CHL	3	0
29	n	311	CHL	1	0
38	d	402	LMG	2	0
28	V	318	CLA	1	0
38	B	620	LMG	8	0
28	N	313	CLA	2	0
28	c	504	CLA	1	0
41	c	524	DGD	1	0
43	G	301	LMN	1	0
28	u	408	CLA	1	0
43	V	303	LMN	1	0
28	S	304	CLA	1	0
29	u	406	CHL	1	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

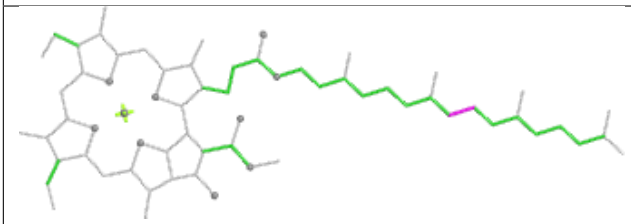
Ligand CLA b 611



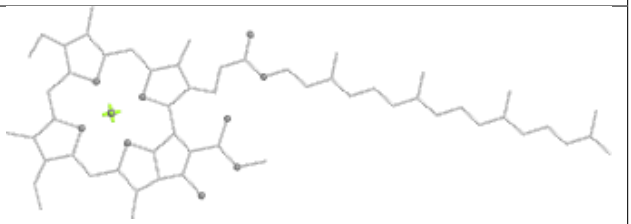
Bond lengths



Bond angles

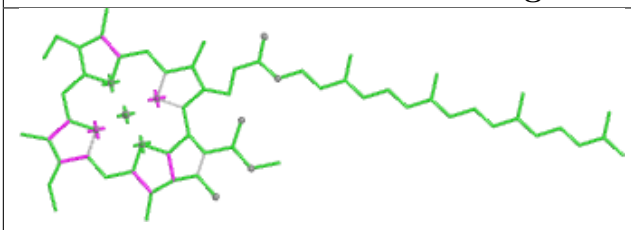


Torsions

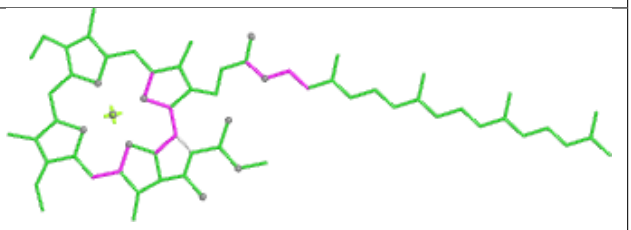


Rings

Ligand CLA B 622



Bond lengths



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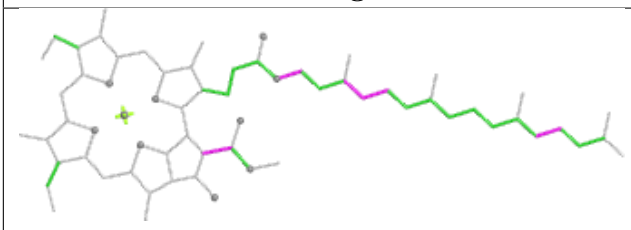

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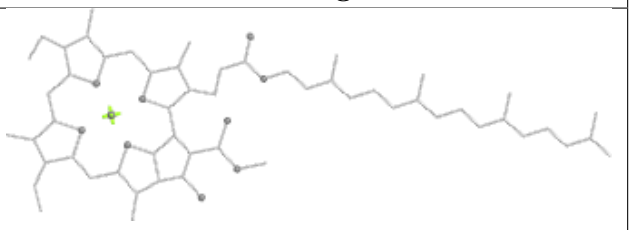
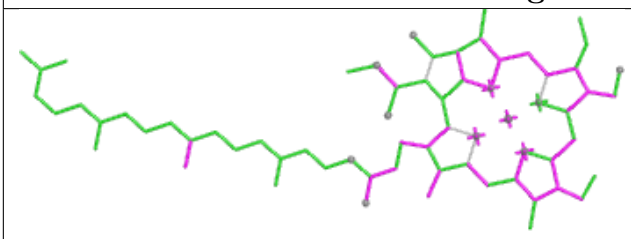


Rings

Ligand CHL v 303



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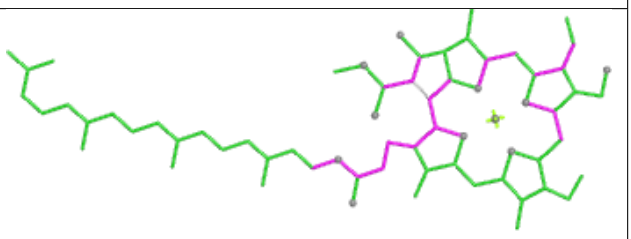

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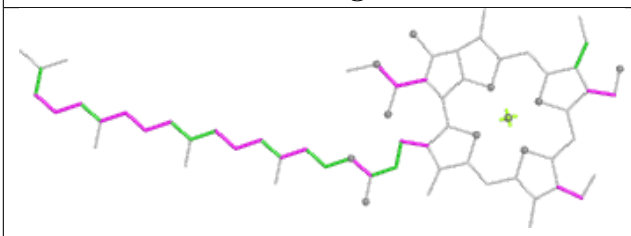

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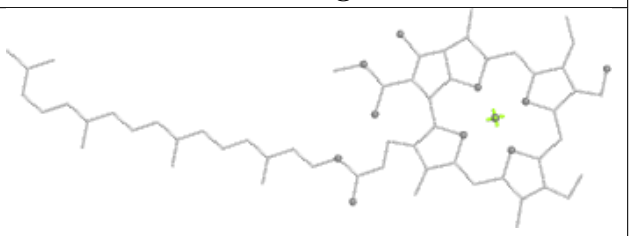
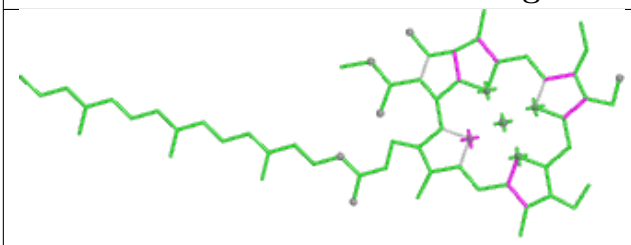


Rings

Ligand CHL N 303



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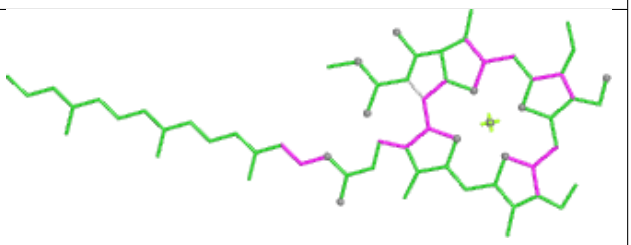

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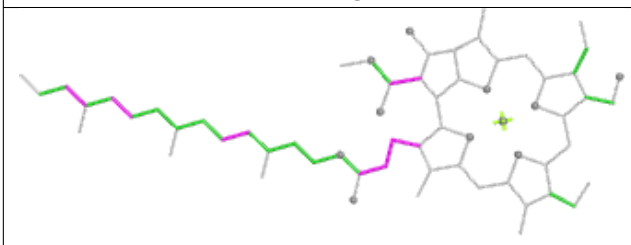

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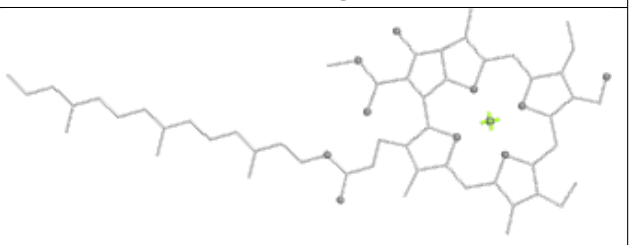
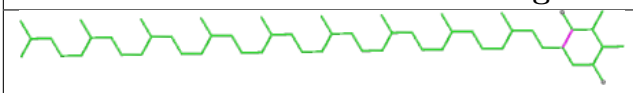


Rings

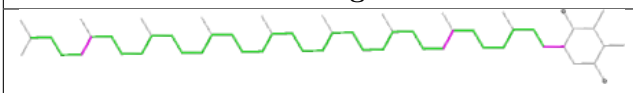
Ligand PL9 d 406



Bond lengths



Bond angles



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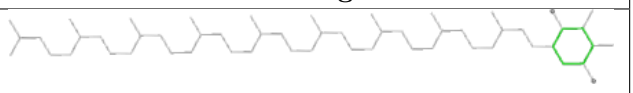
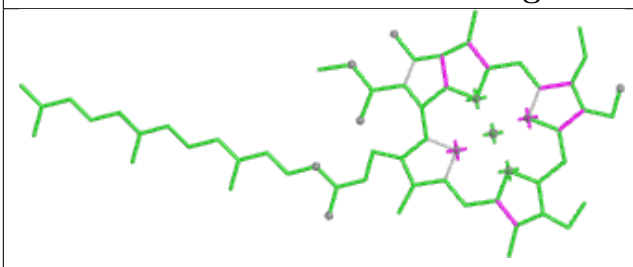


Rings

Ligand CHL U 409



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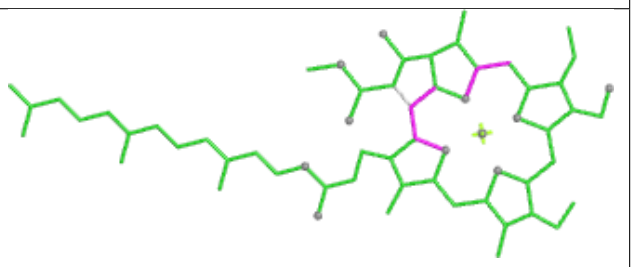
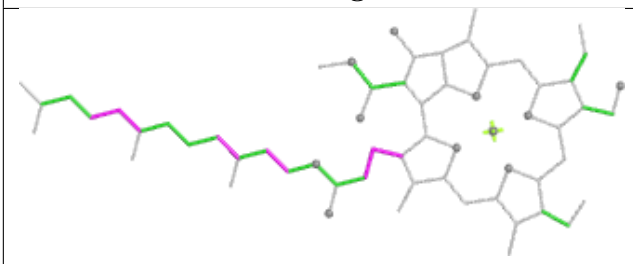


Bond angles



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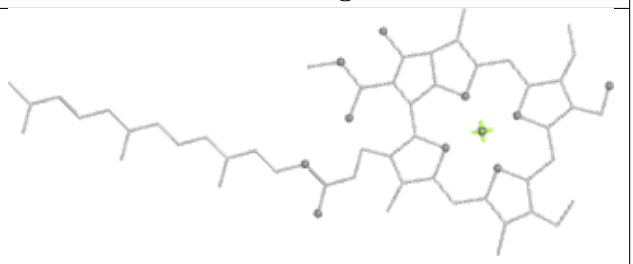
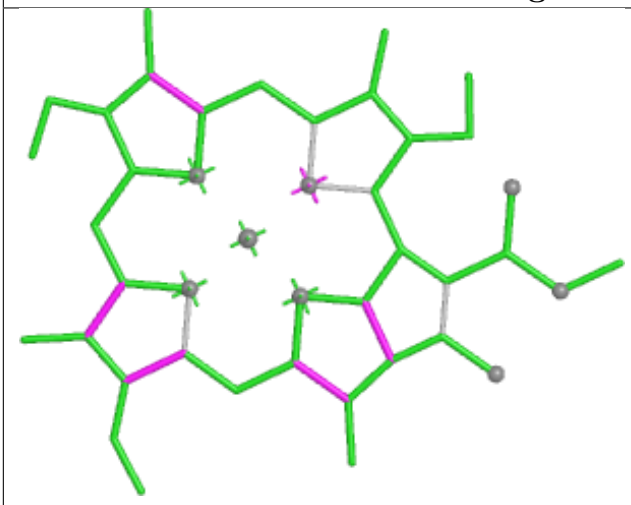


Rings

Ligand CLA 0 305



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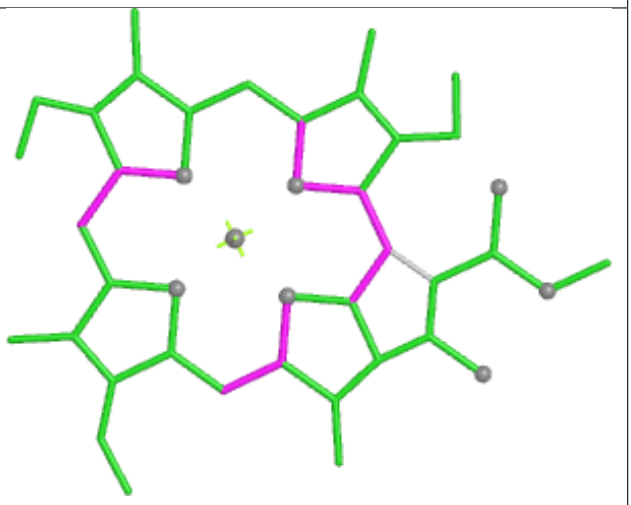
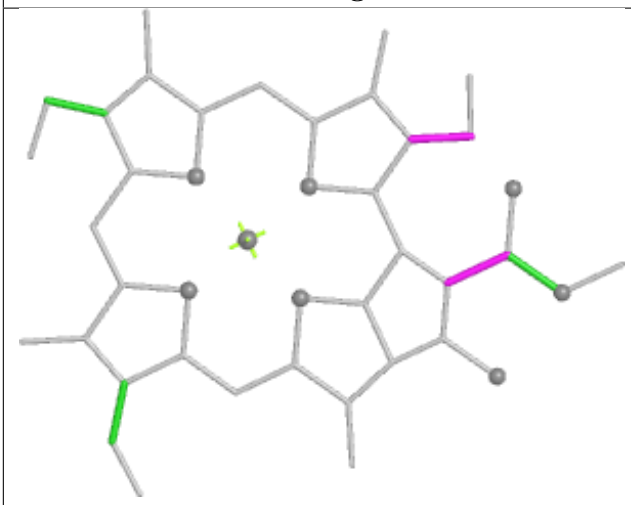


Bond angles

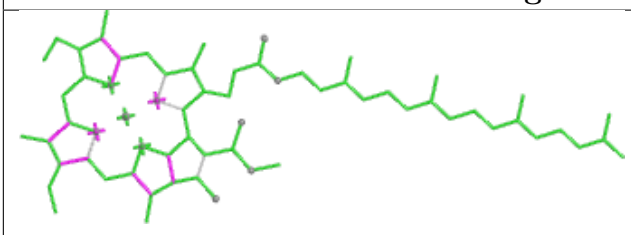


Torsions



Rings

Ligand CLA C 501



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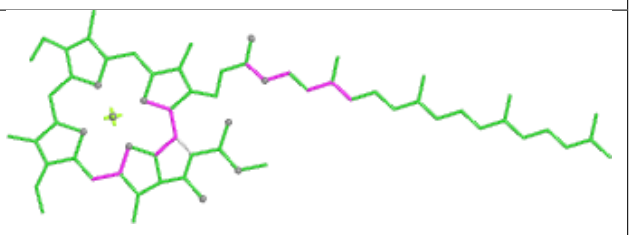
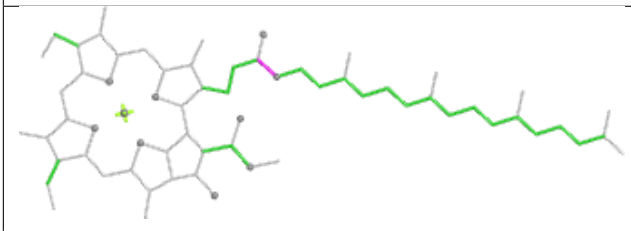


Bond angles



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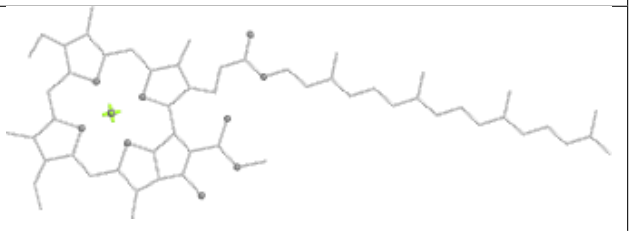
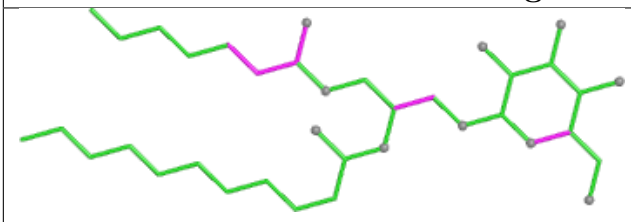


Rings

Ligand LMG c 502



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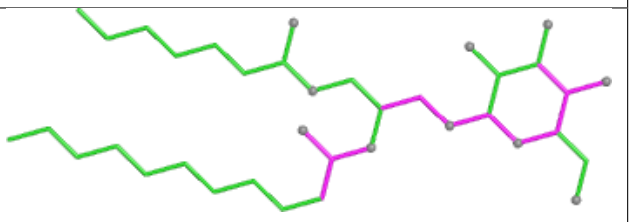
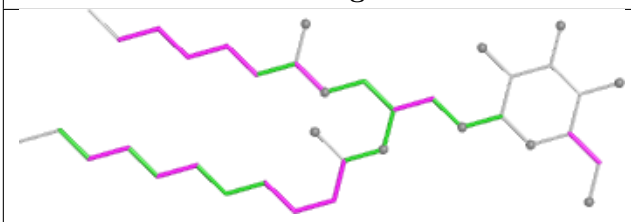


Bond angles



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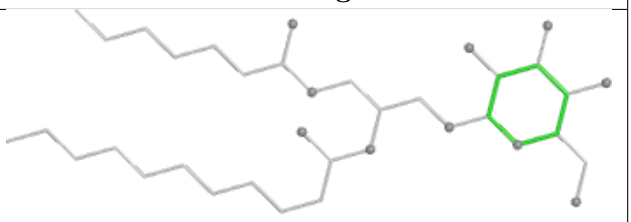
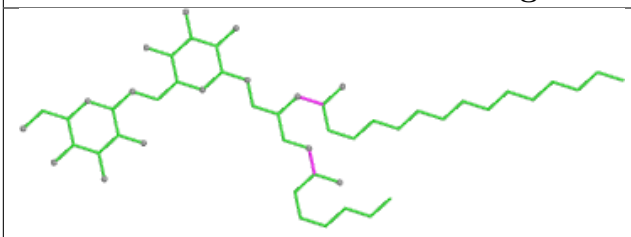


Rings

Ligand DGD C 514



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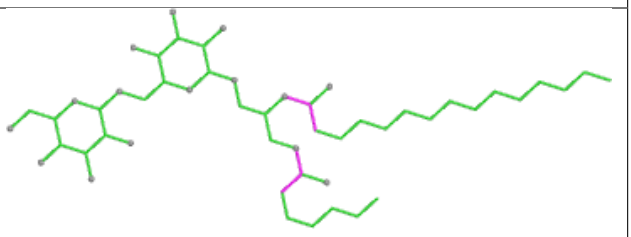
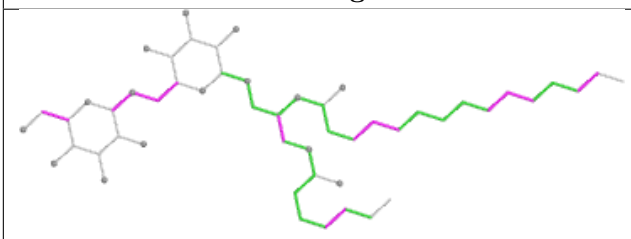


Bond angles



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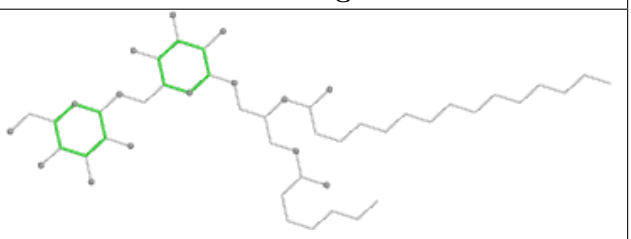
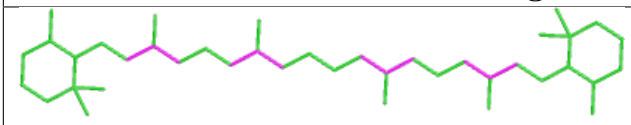


Rings

Ligand BCR a 401



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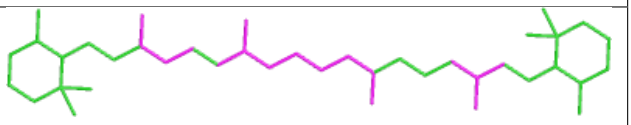
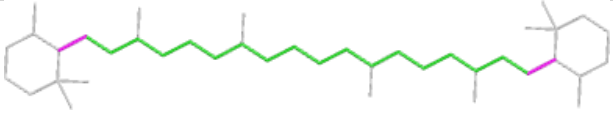


Bond angles



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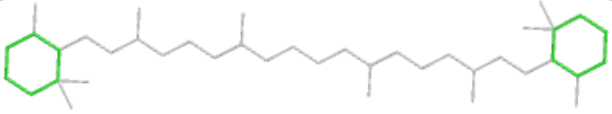
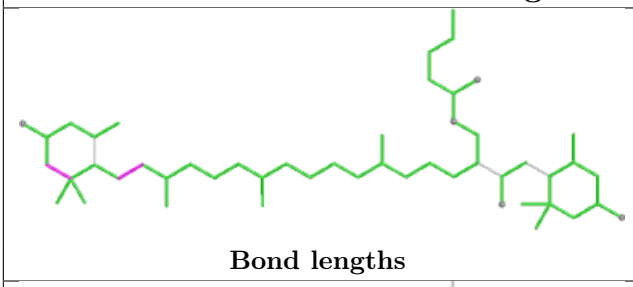


Rings

Ligand 0UR G 318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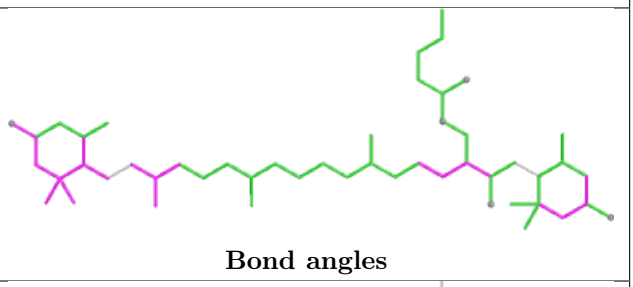
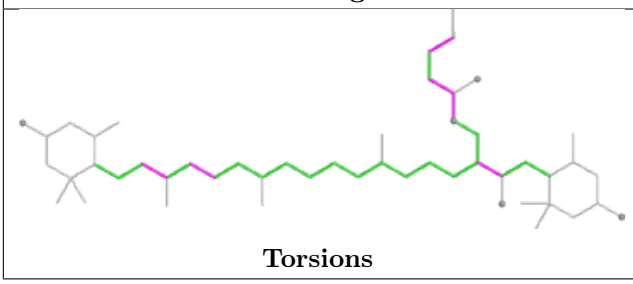

Bond angles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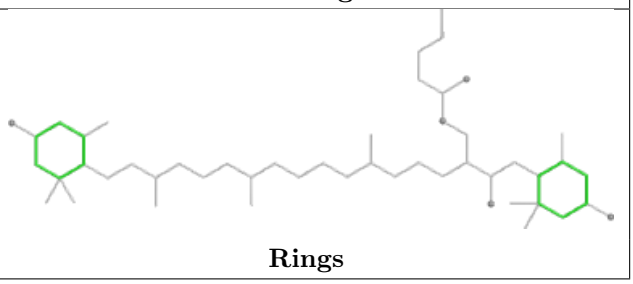
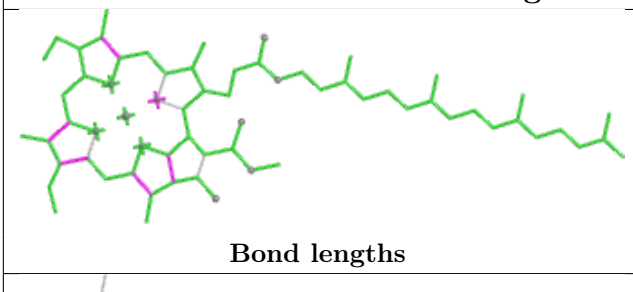

Rings

Ligand CLA A 411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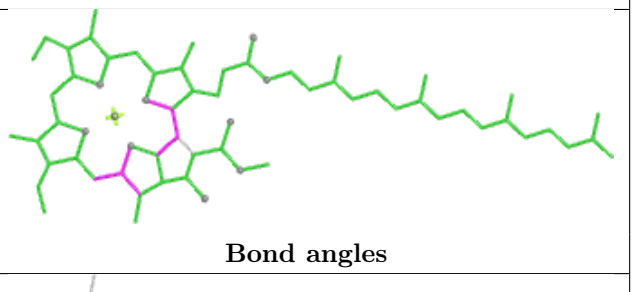
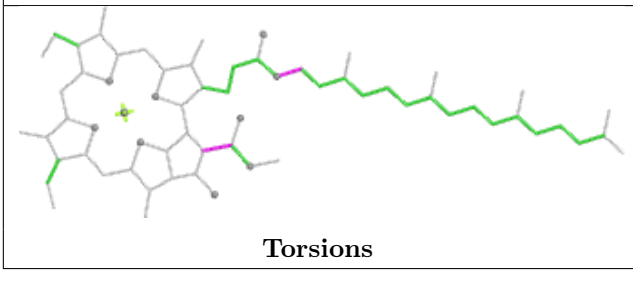

Bond angles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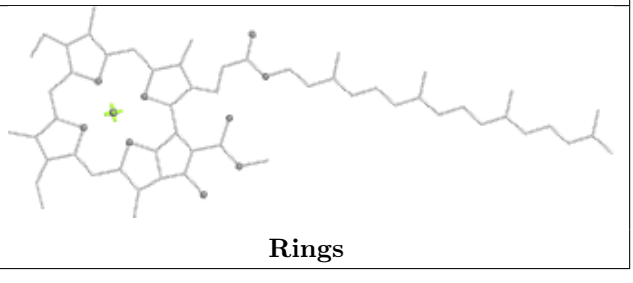
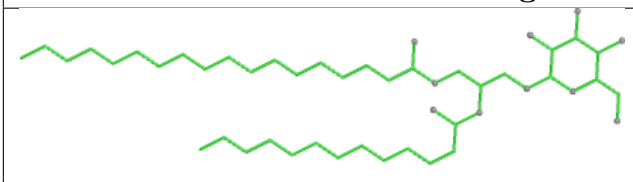

Rings

Ligand LMG D 401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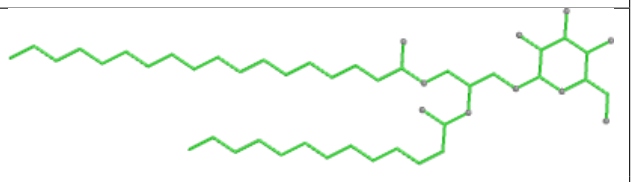
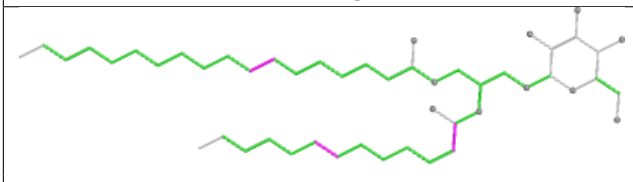

Bond angles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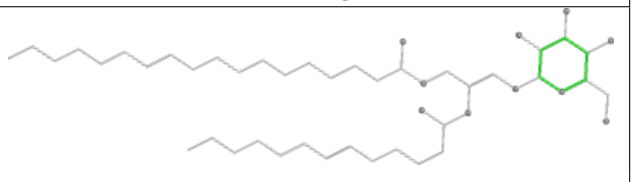
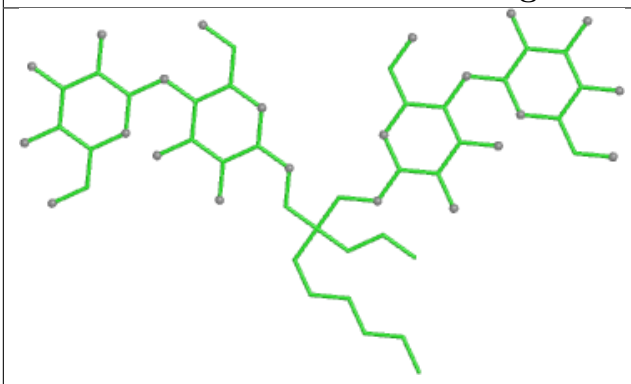

Rings

Ligand LMN C 521



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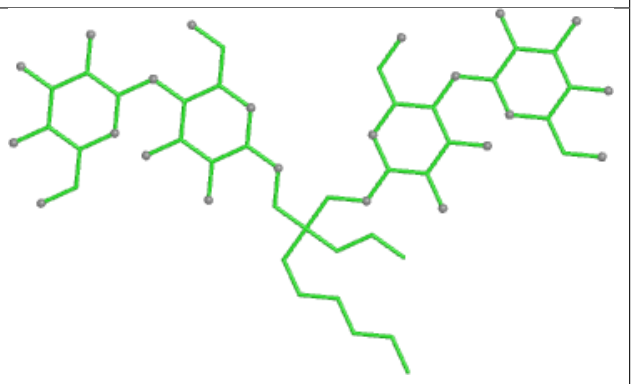
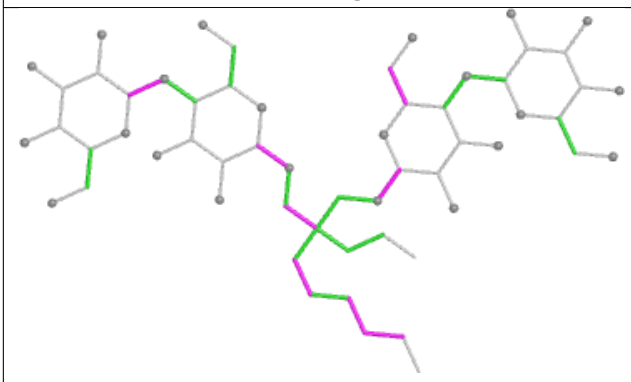


Bond angles



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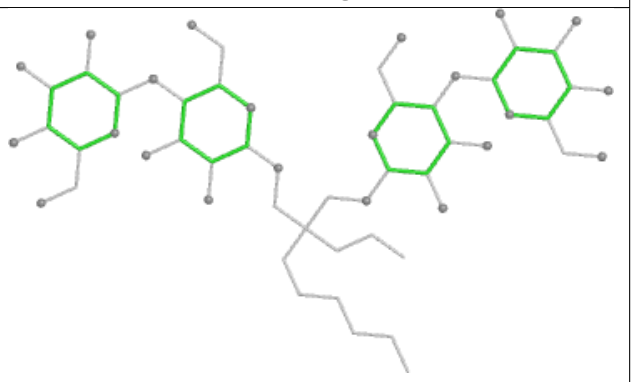
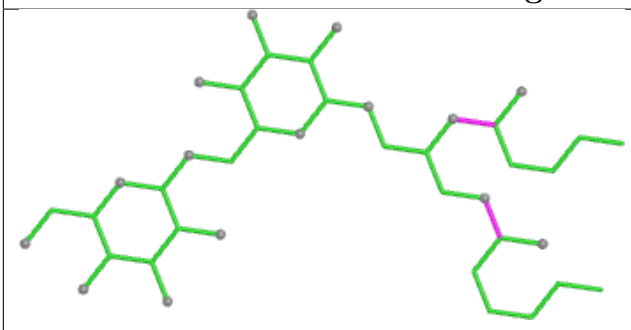


Rings

Ligand DGD c 517



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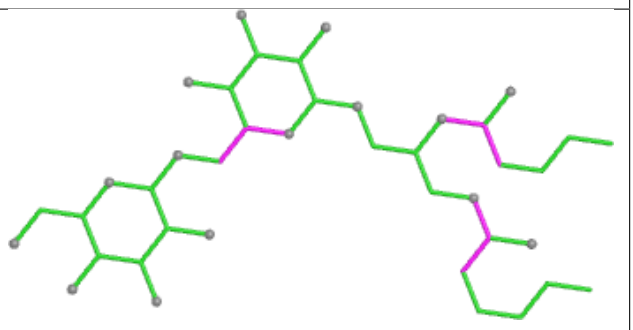
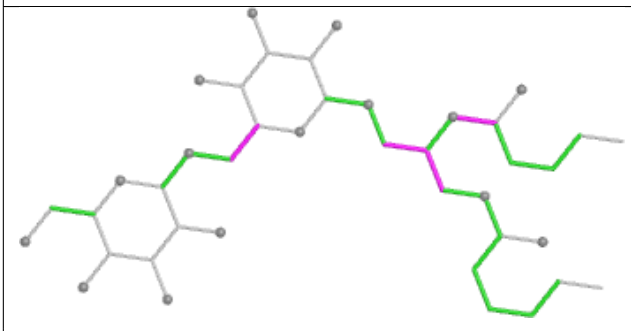
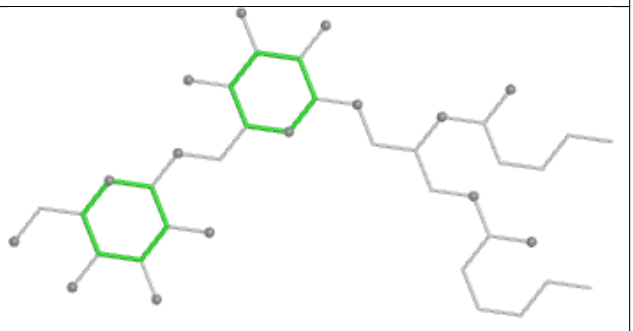


Bond angles

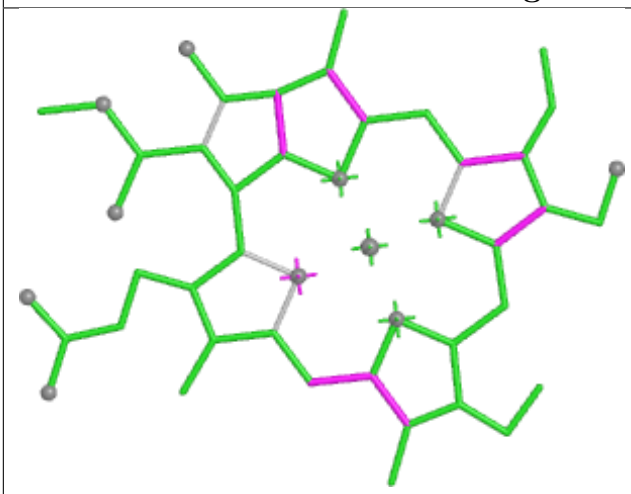


Torsions



Rings

Ligand CHL Y 315



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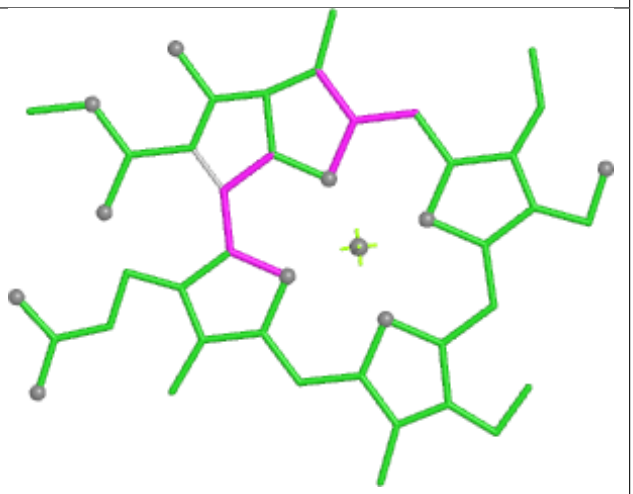

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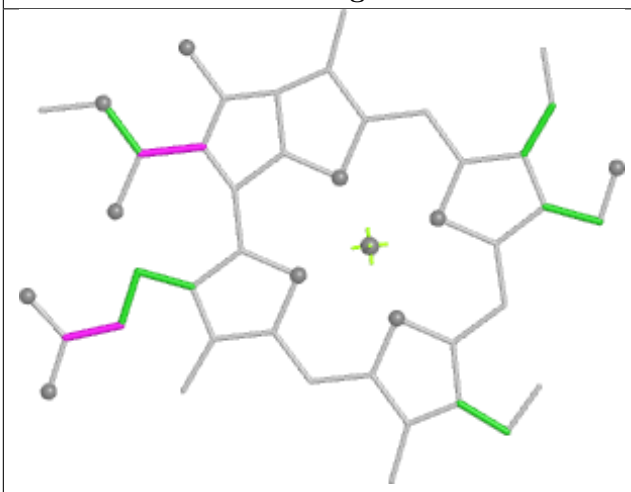

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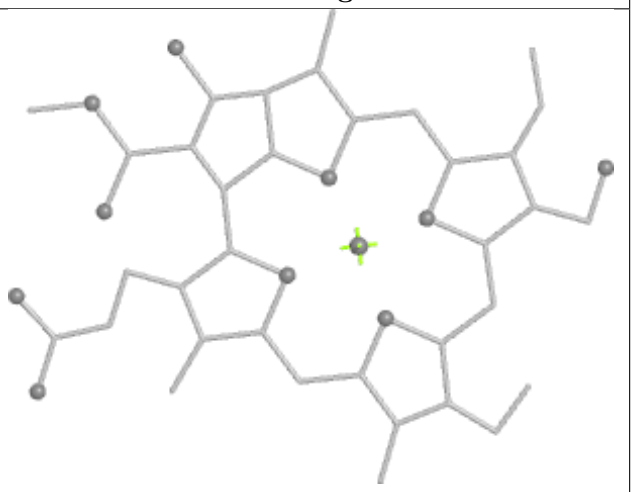
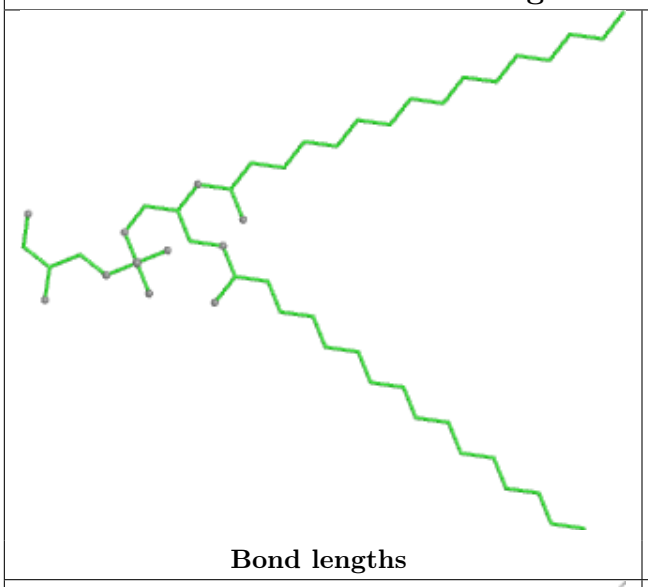


Rings

Ligand LHG d 405



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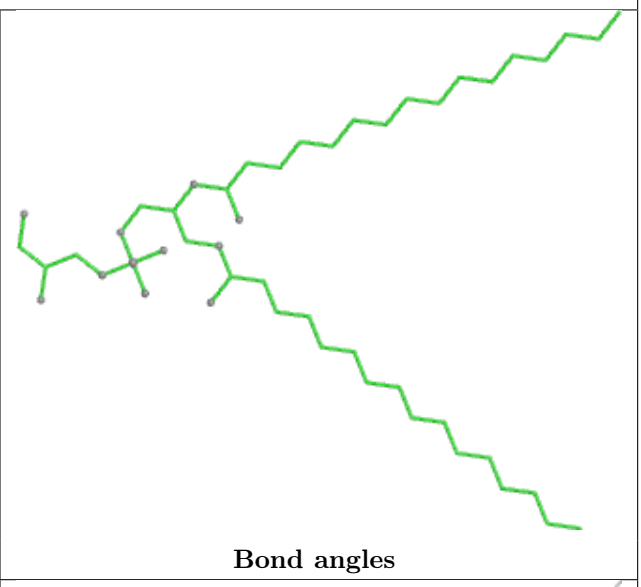

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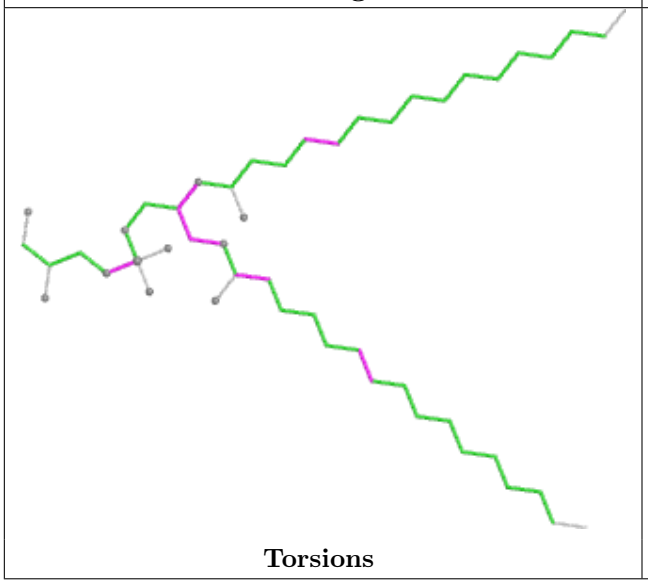

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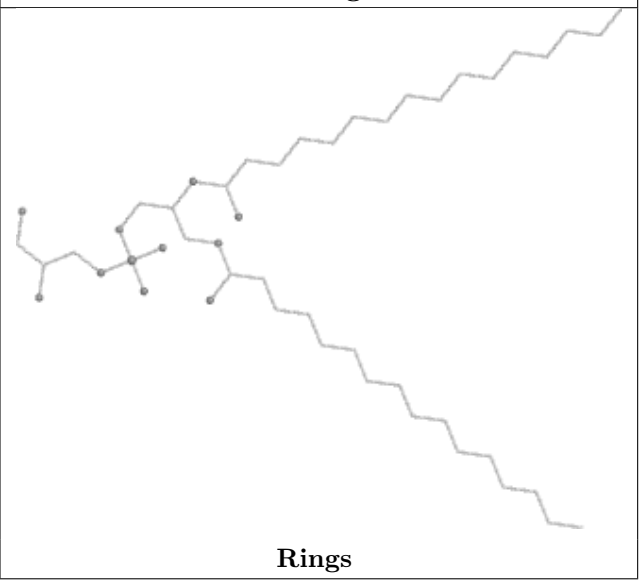
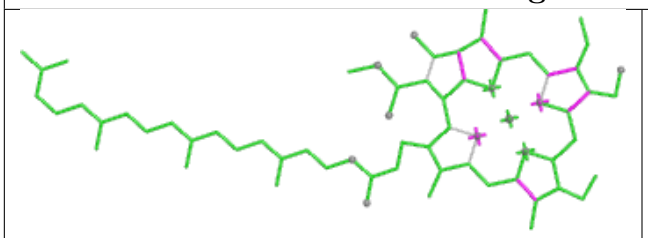


Rings

Ligand CHL v 309



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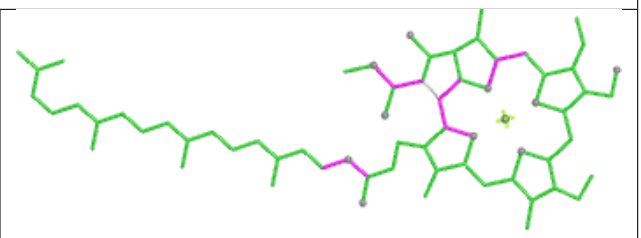

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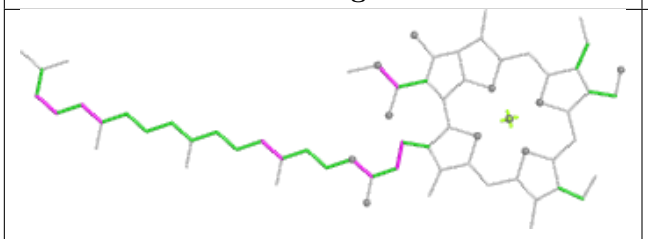

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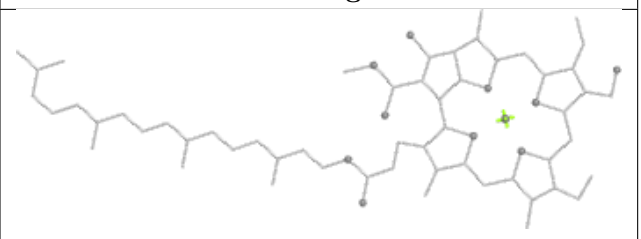
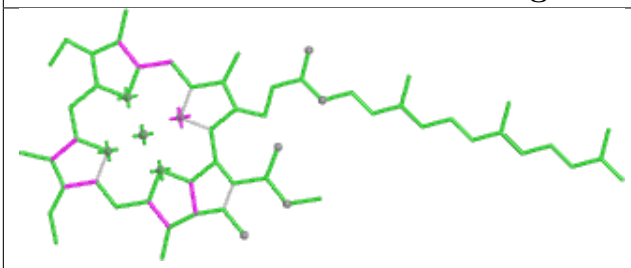


Rings

Ligand CLA s 311



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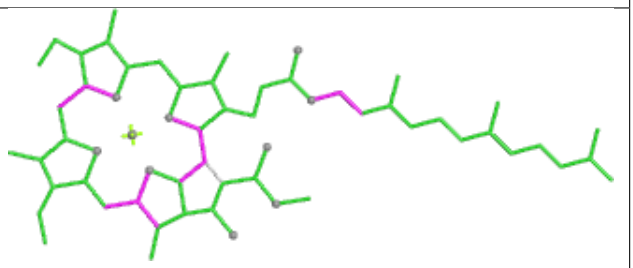

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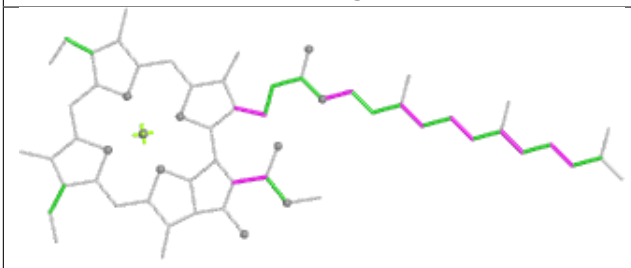

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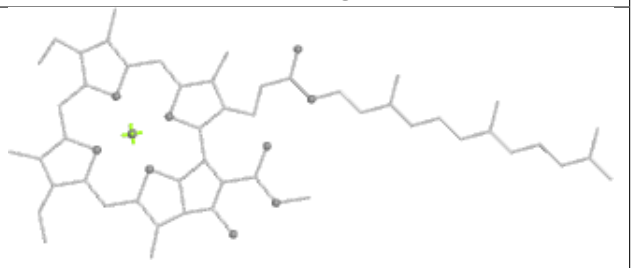
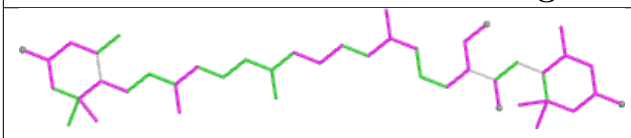


Rings

Ligand 0IE 0 312



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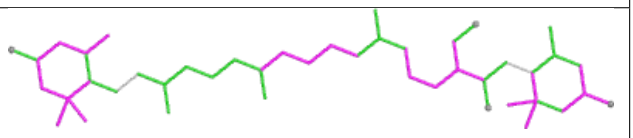

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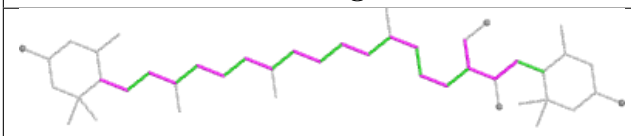

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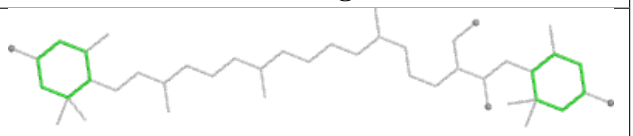
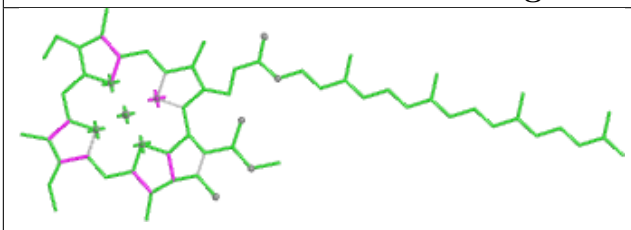


Rings

Ligand CLA C 511



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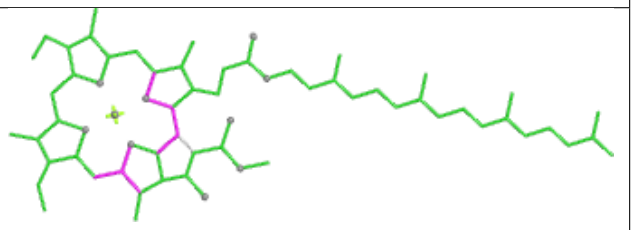
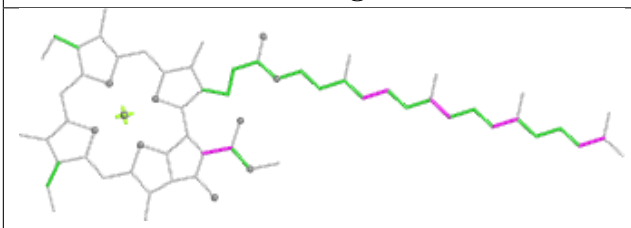


Bond angles



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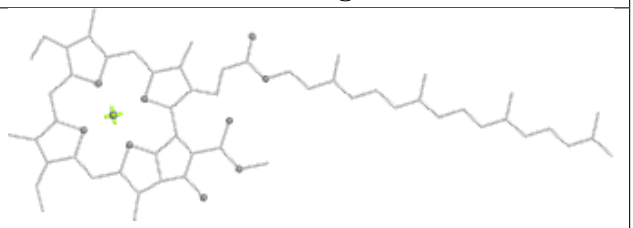
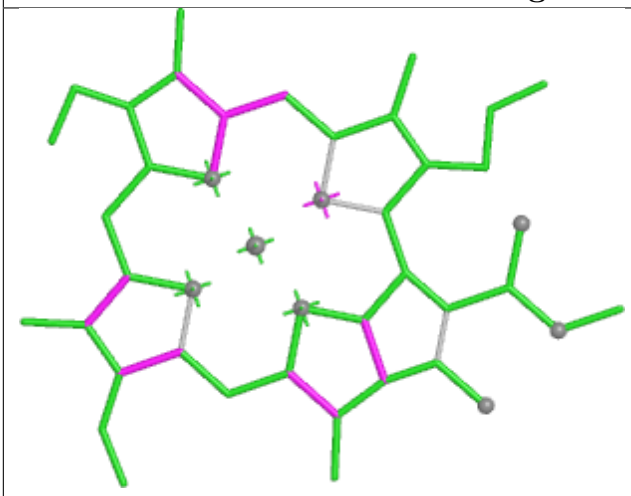


Rings

Ligand CLA g 308



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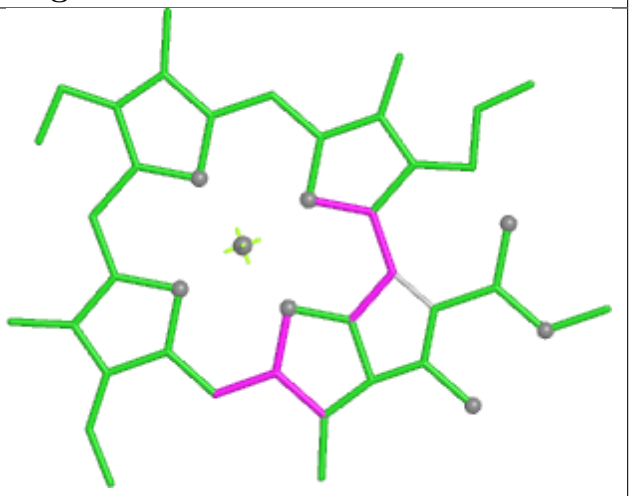

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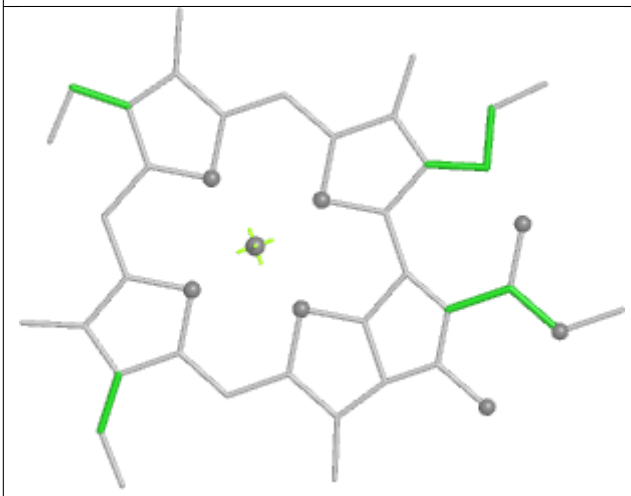

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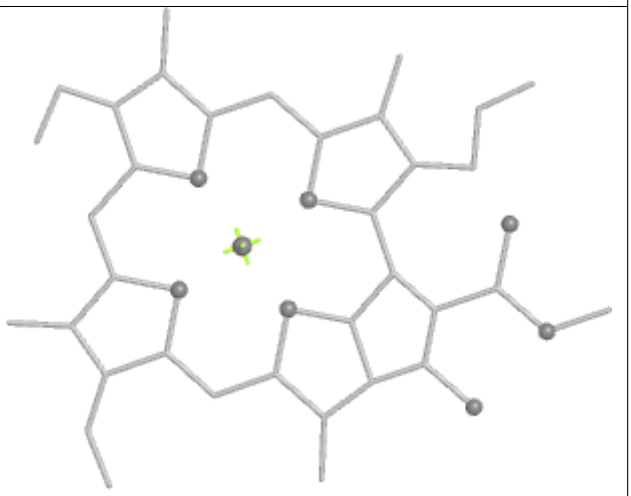
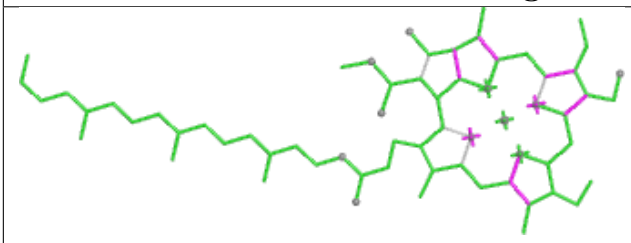


Rings

Ligand CHL N 309



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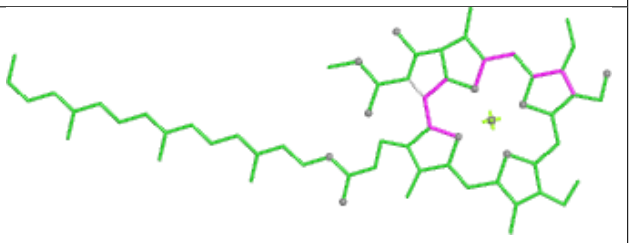
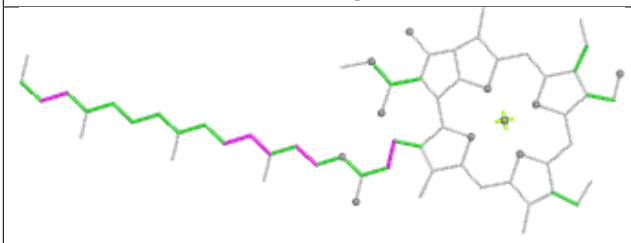


Bond angles



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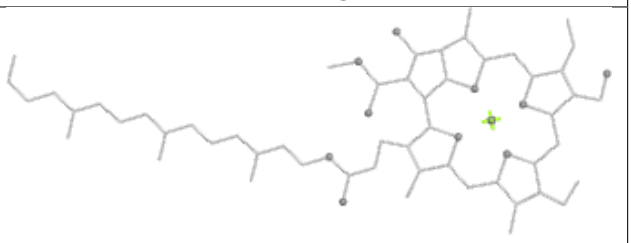
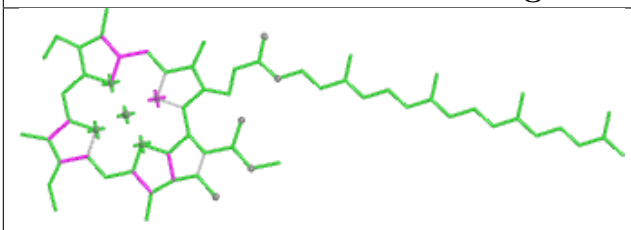


Rings

Ligand CLA C 512



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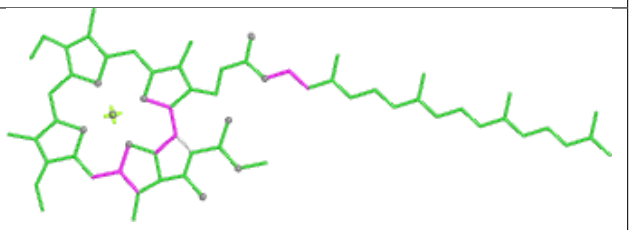
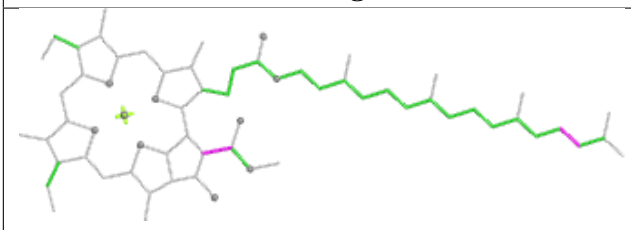


Bond angles



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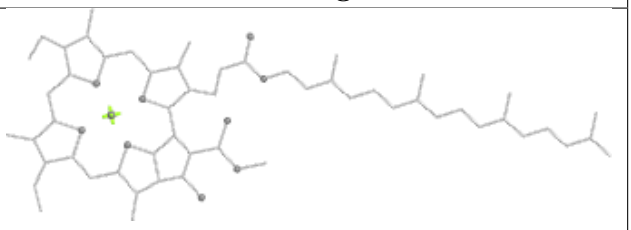
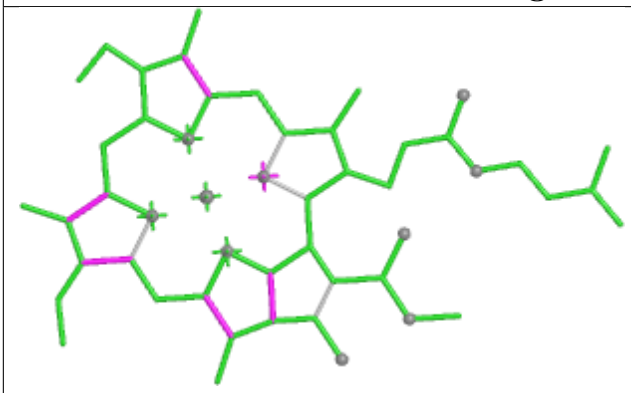


Rings

Ligand CLA g 307



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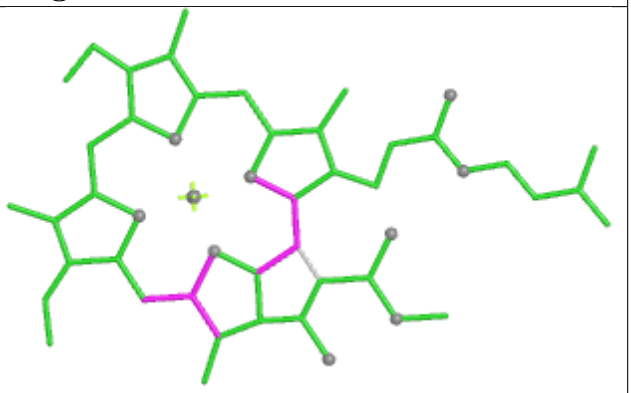
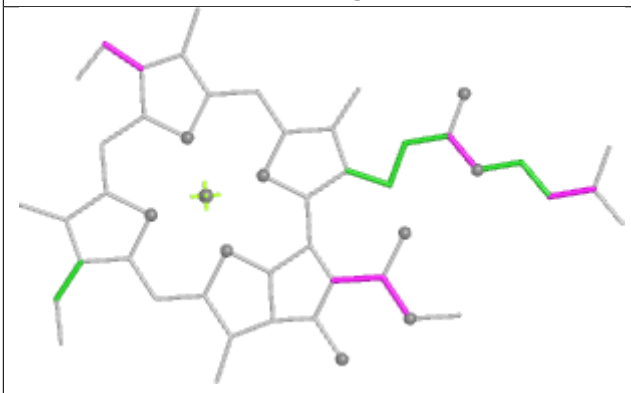


Bond angles



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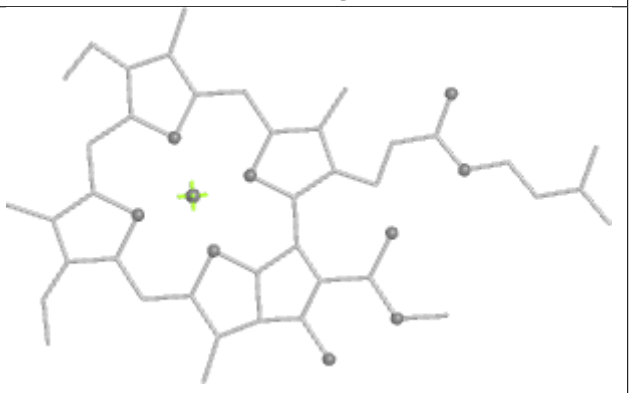
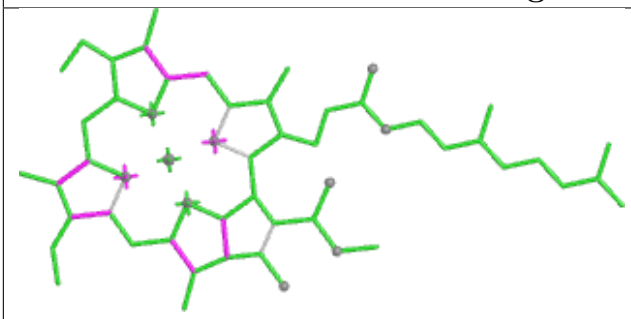


Rings

Ligand CLA S 305



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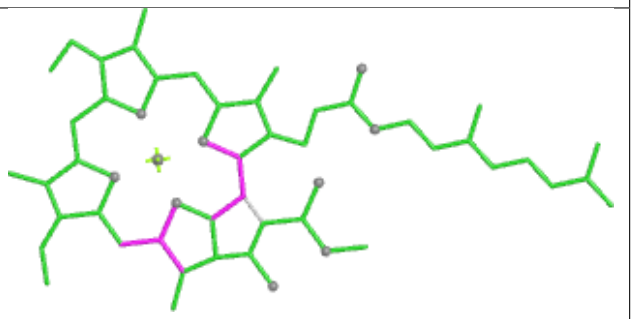
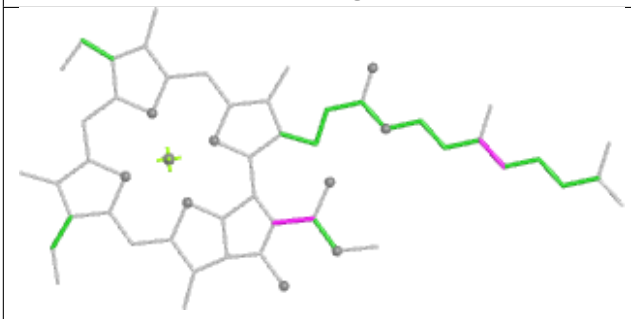


Bond angles



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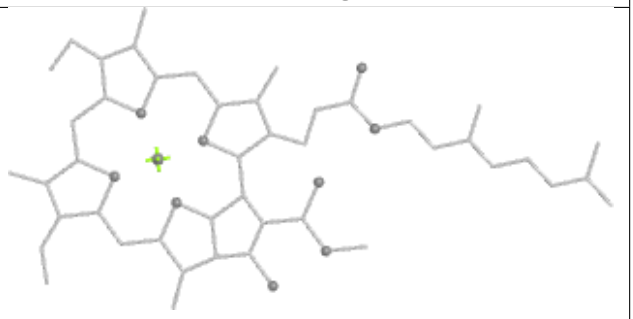
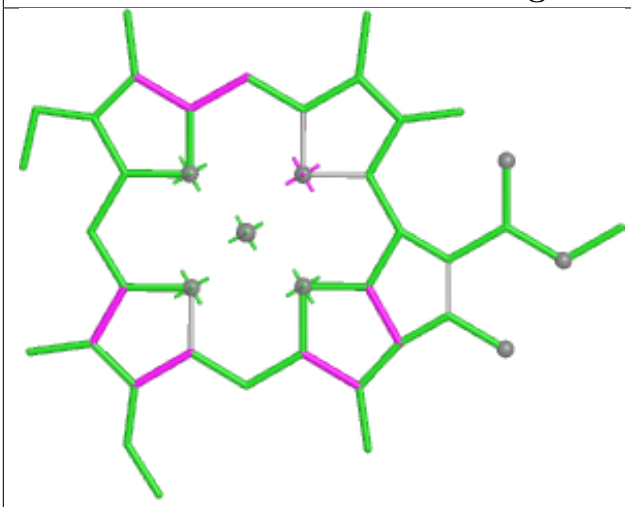


Rings

Ligand CLA 1 301



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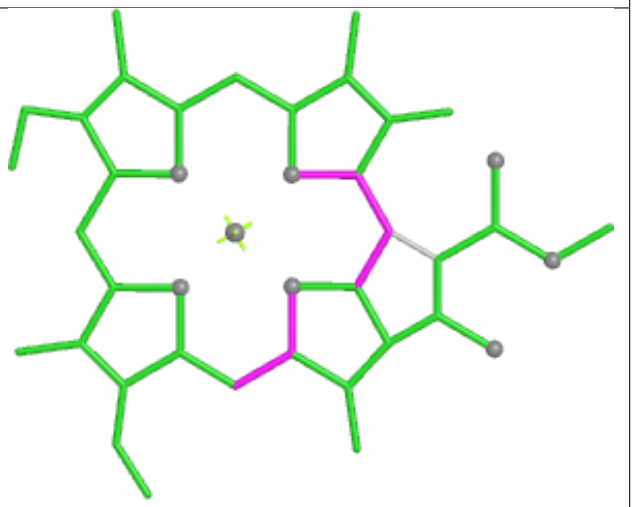
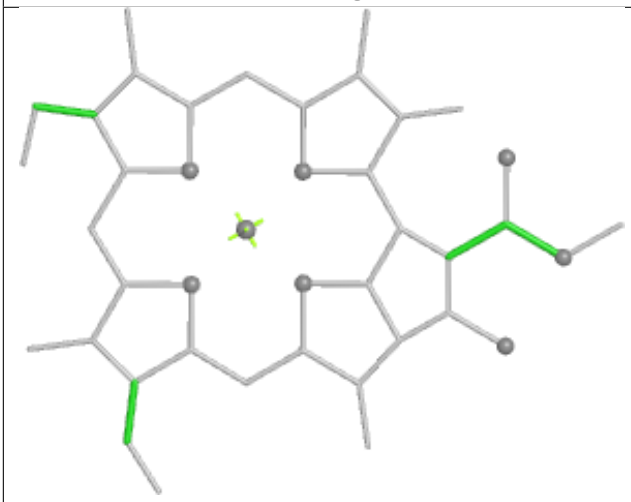


Bond angles



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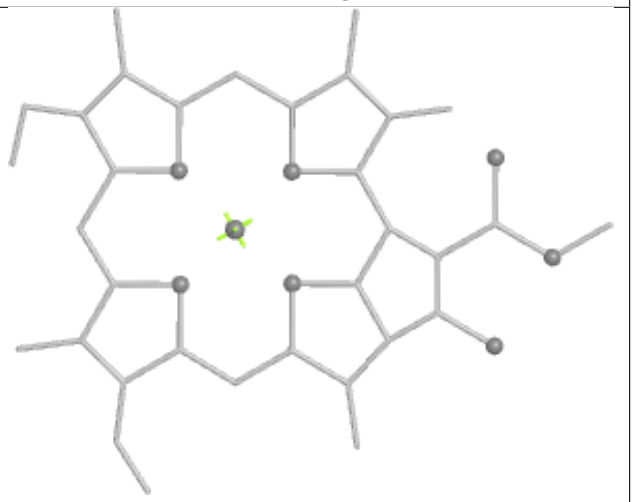
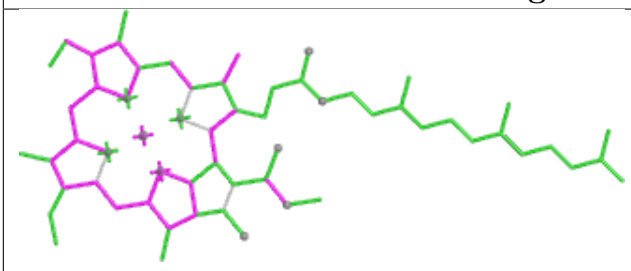


Rings

Ligand CLA g 313



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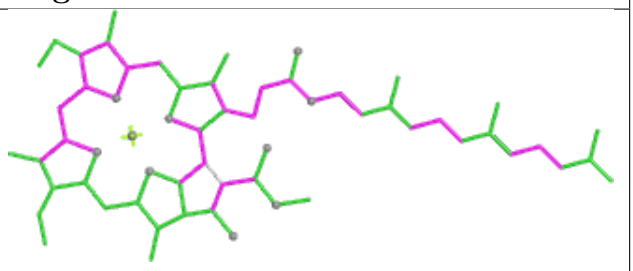
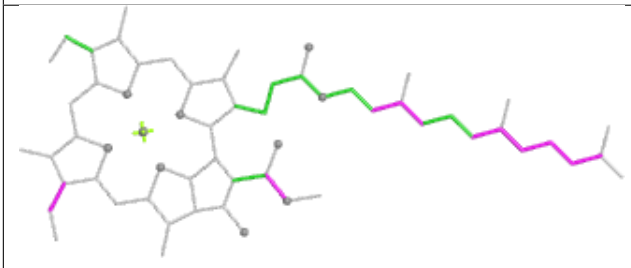


Bond angles



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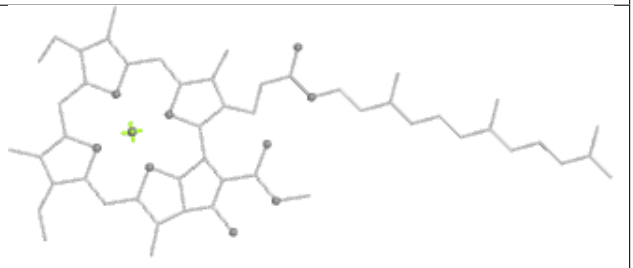
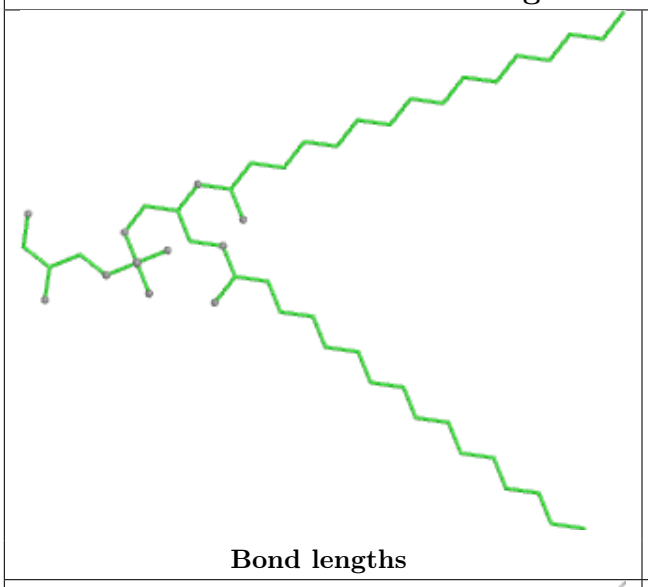
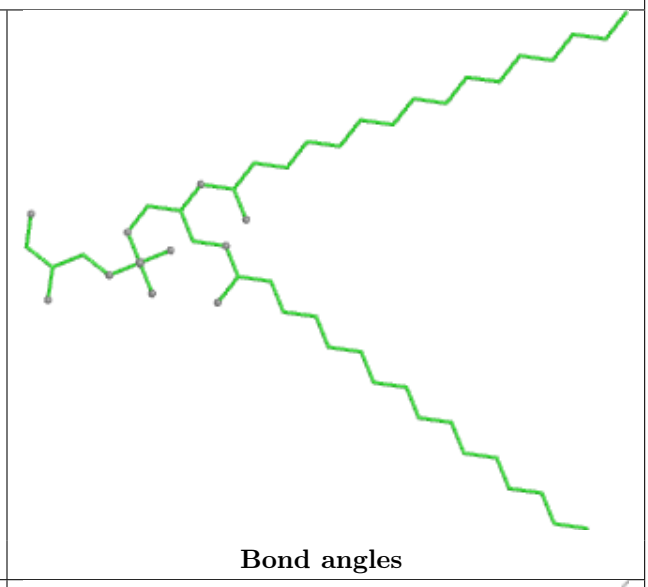


Rings

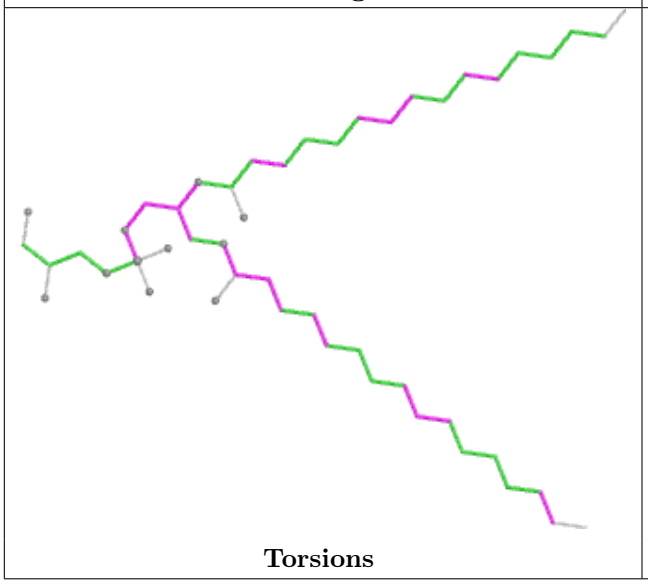
Ligand LHG V 304



Bond lengths



Bond angles



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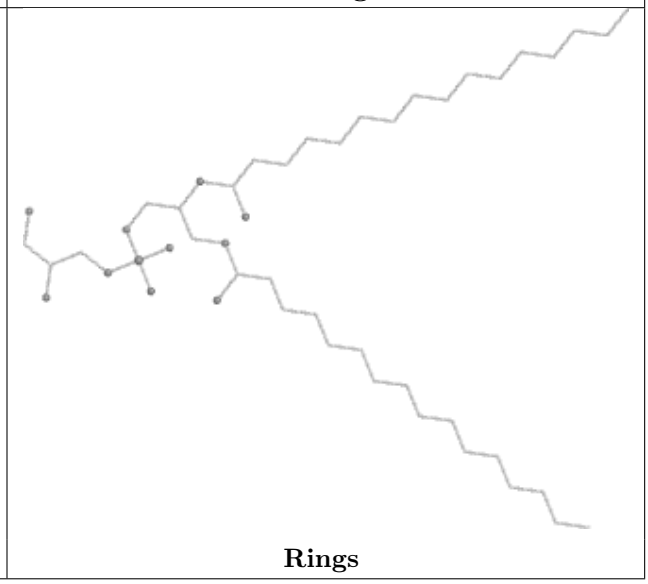
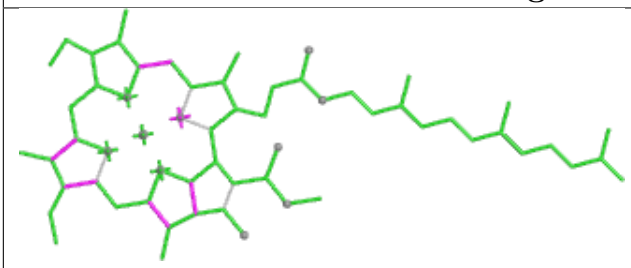
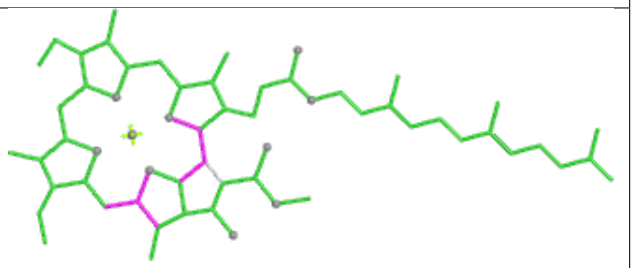


Rings

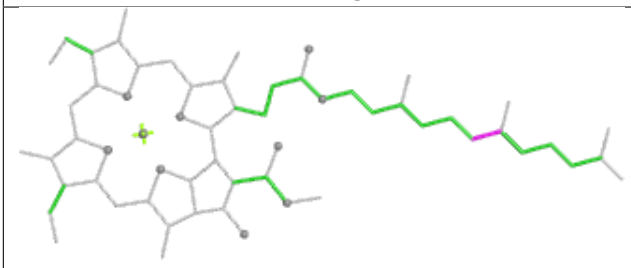
Ligand CLA v 312



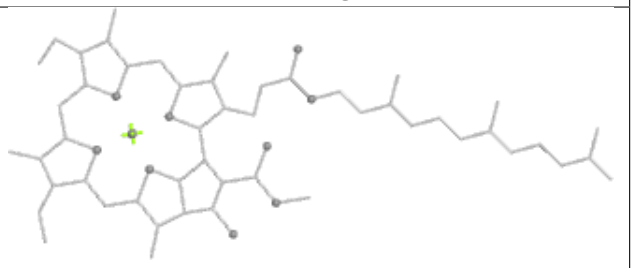
Bond lengths



Bond angles

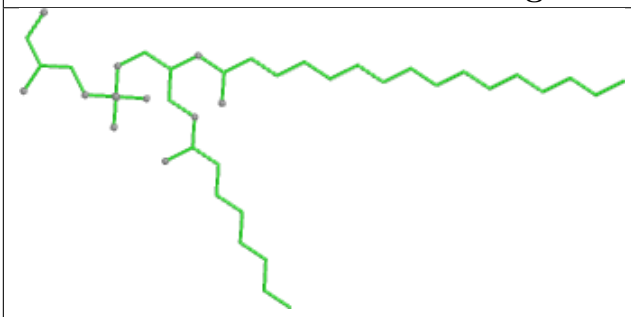


Torsions



Rings

Ligand LHG b 624



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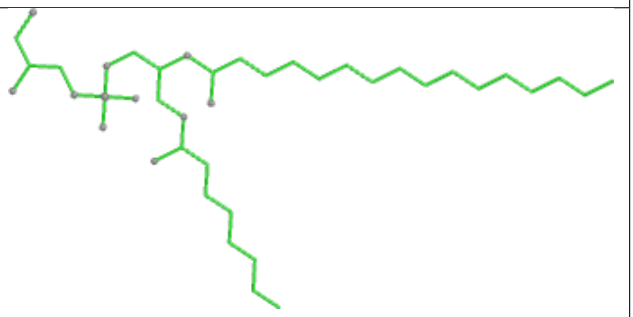
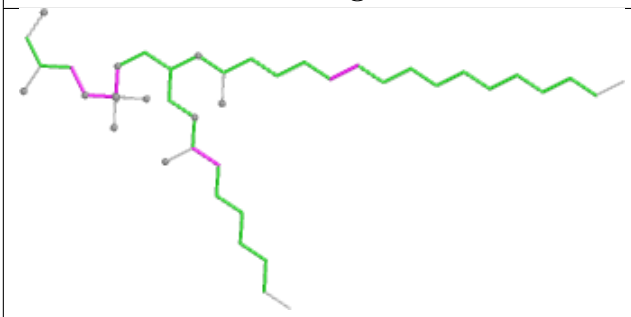


Bond angles



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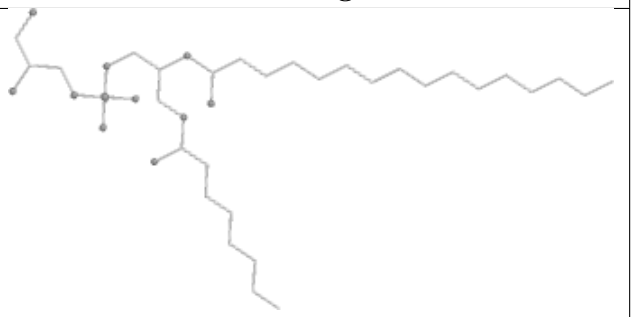
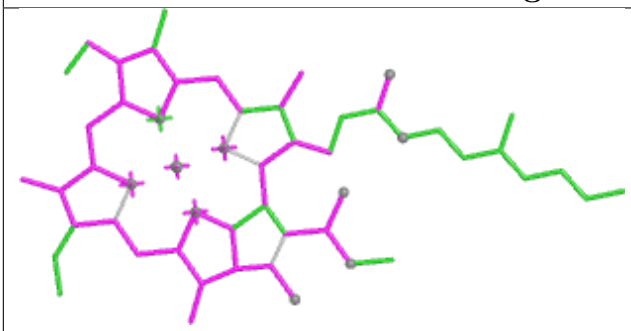


Rings

Ligand CLA Y 311



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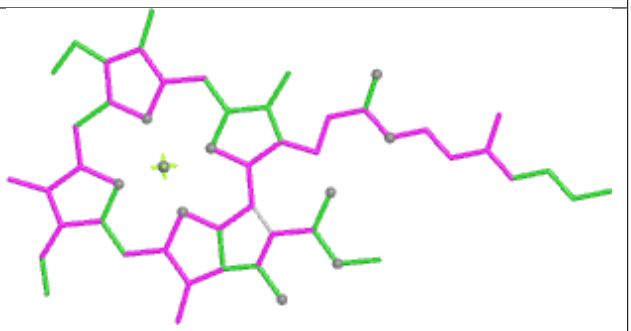

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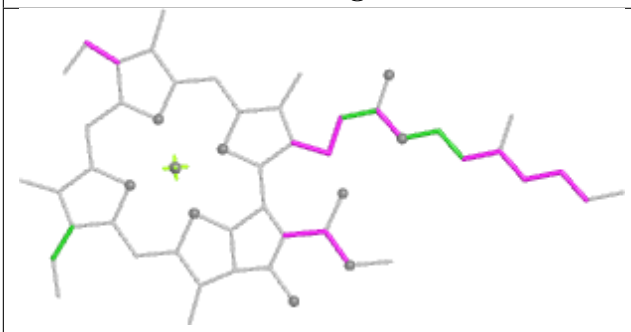

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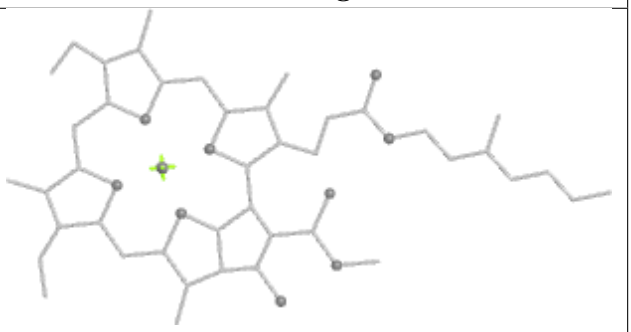
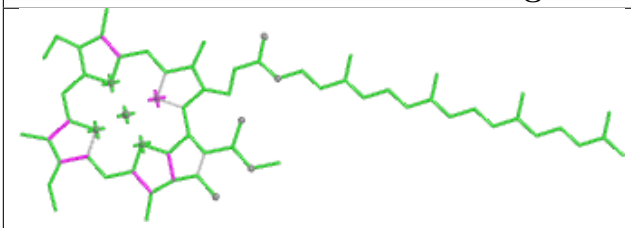


Rings

Ligand CLA B 613



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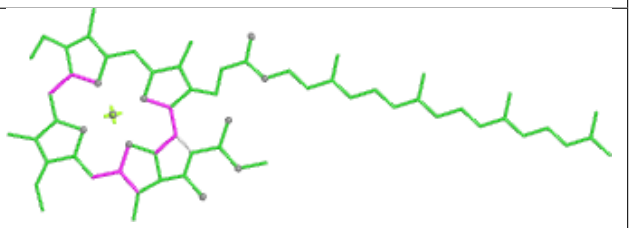
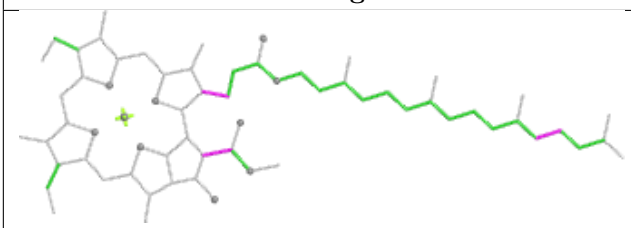


Bond angles



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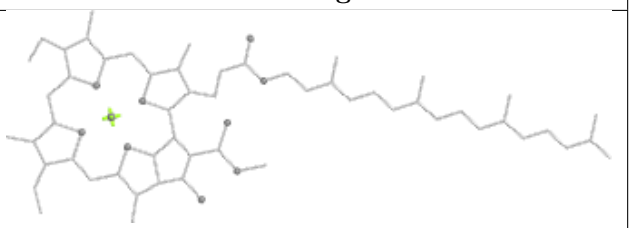
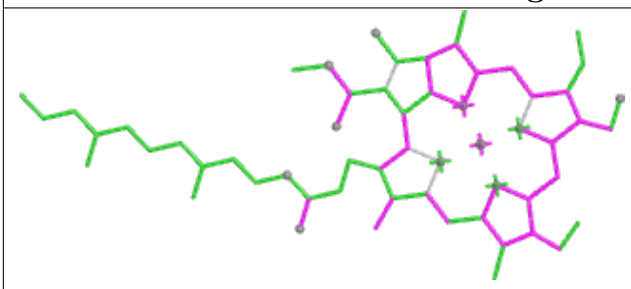


Rings

Ligand CHL n 308



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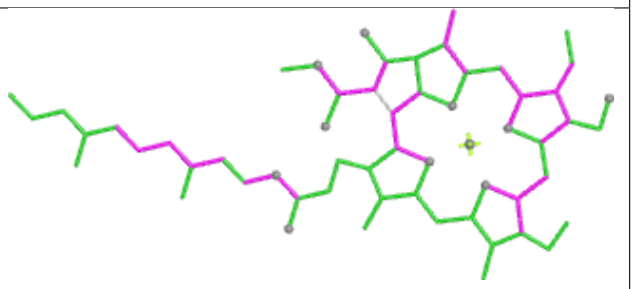
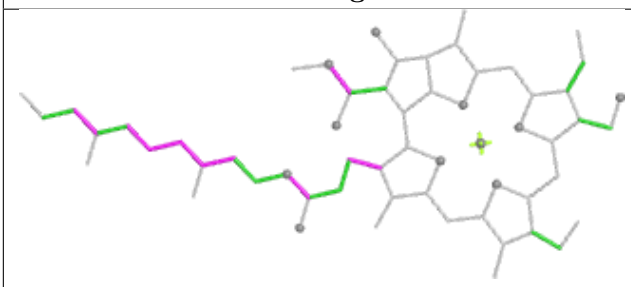


Bond angles



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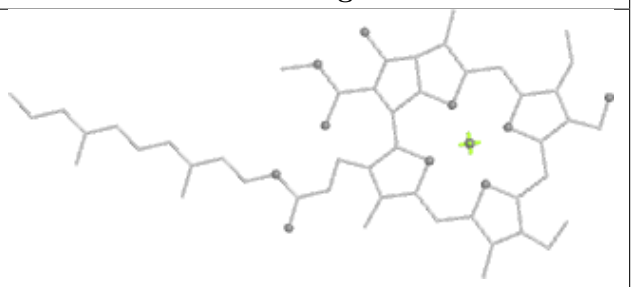
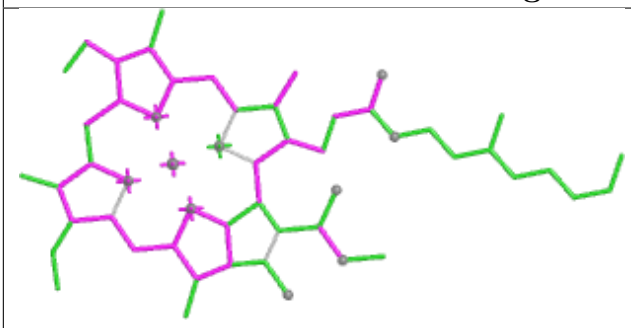


Rings

Ligand CLA N 304



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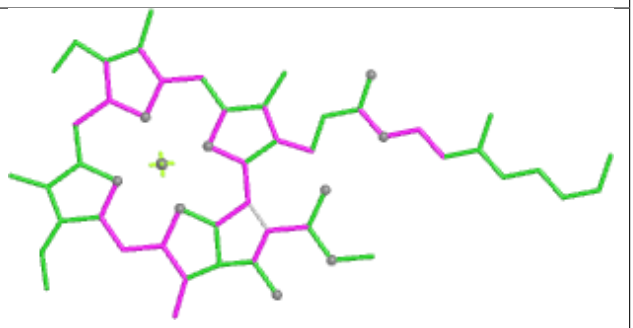

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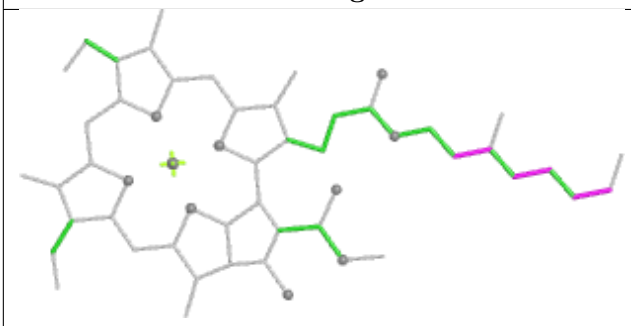

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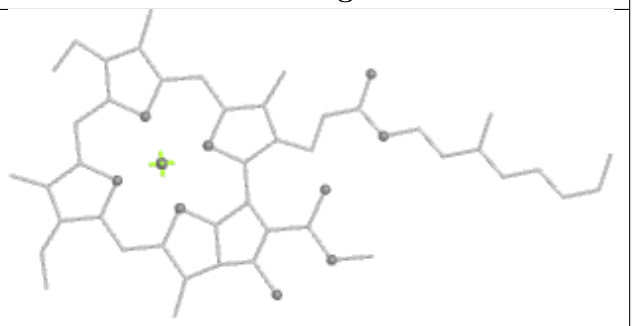
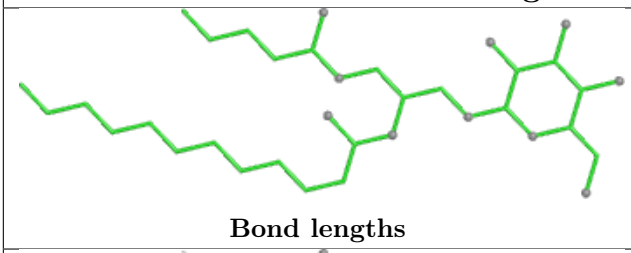


Rings

Ligand LMG b 613



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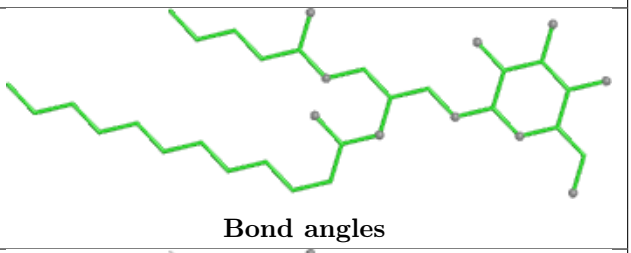
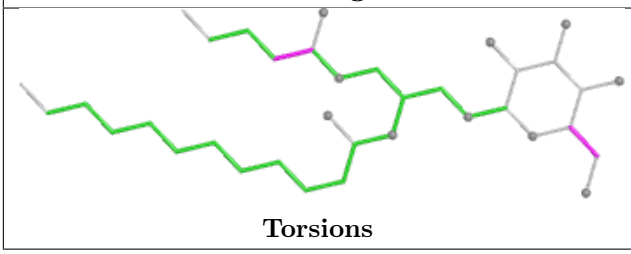


Bond angles



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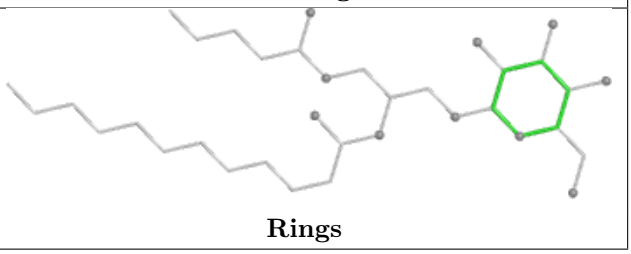
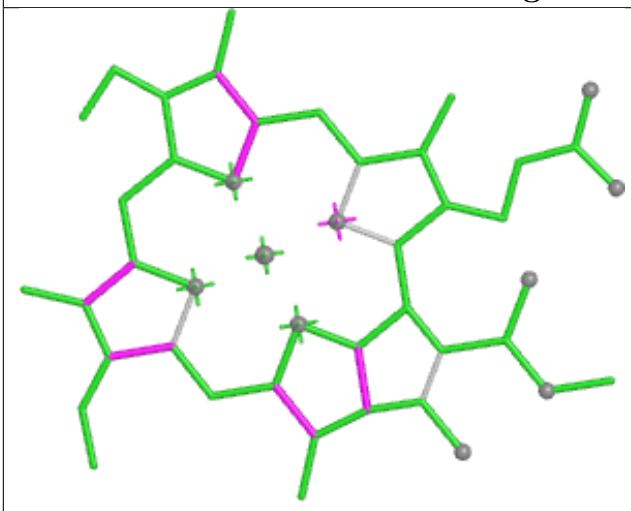


Rings

Ligand CLA G 314



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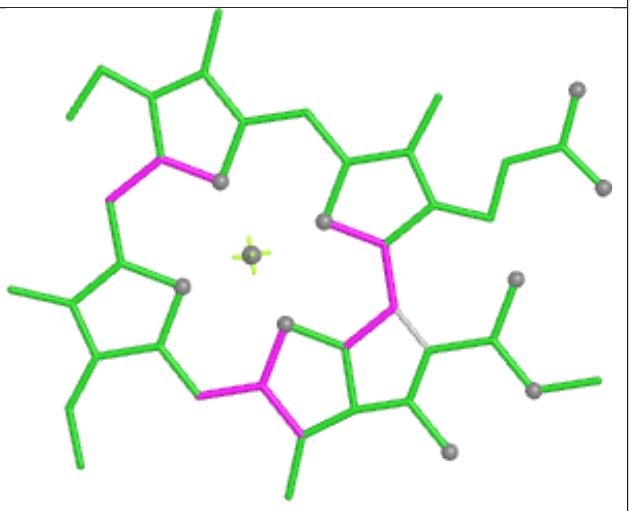

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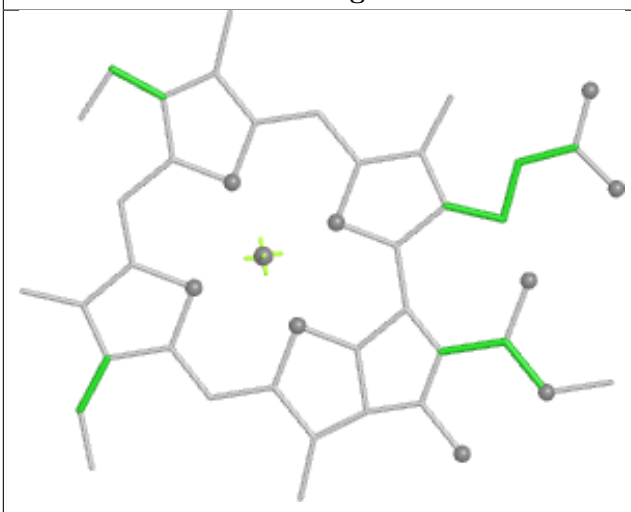

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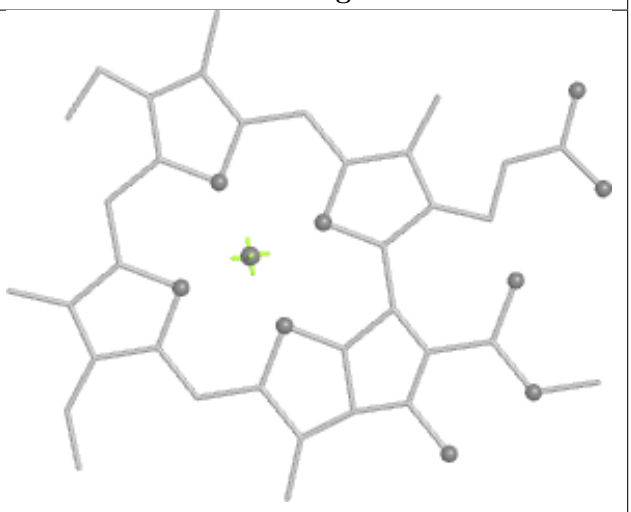
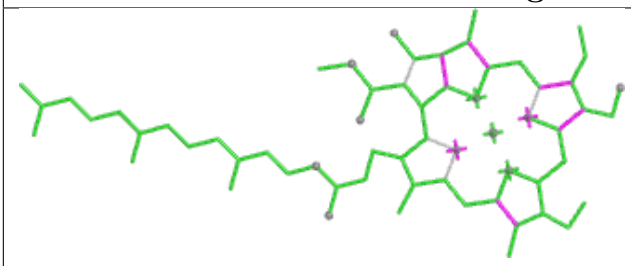


Rings

Ligand CHL n 312



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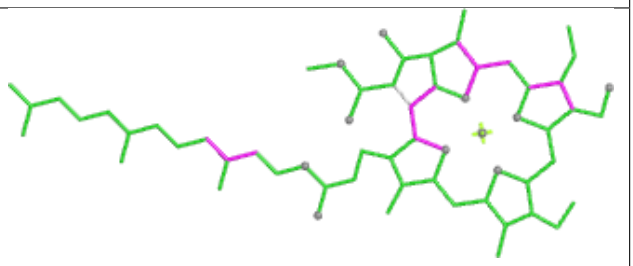
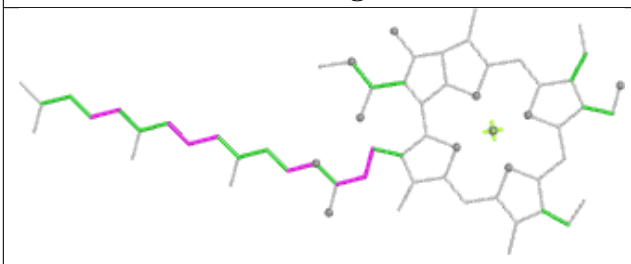


Bond angles



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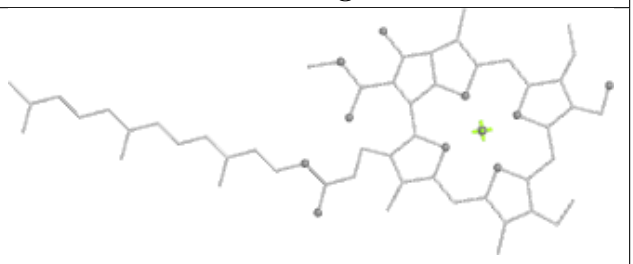
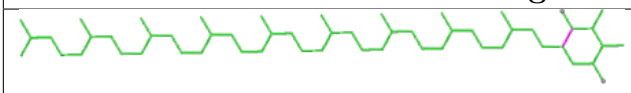


Rings

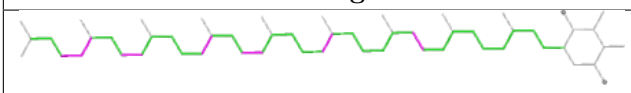
Ligand PL9 D 404



Bond lengths



Bond angles



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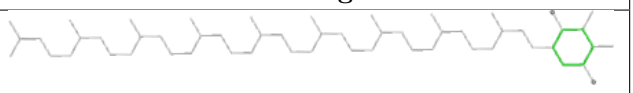
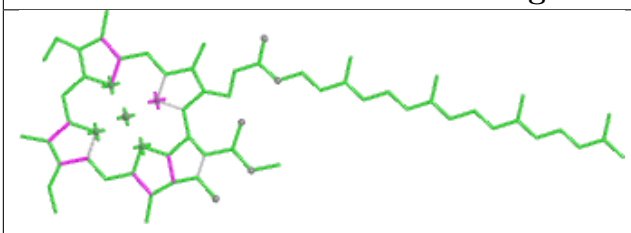


Rings

Ligand CLA a 402



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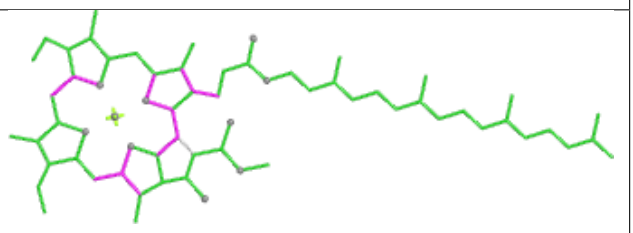
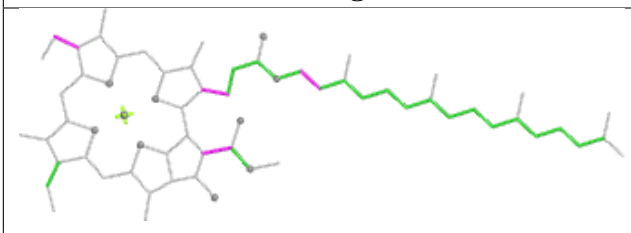


Bond angles



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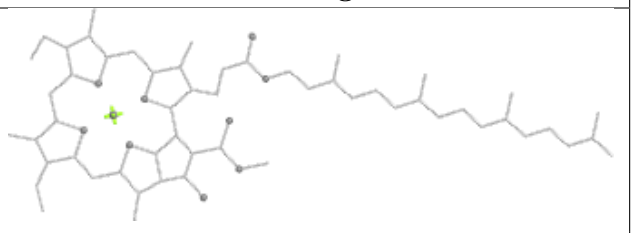
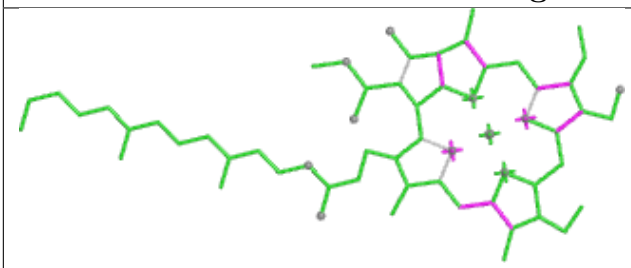


Rings

Ligand CHL s 308



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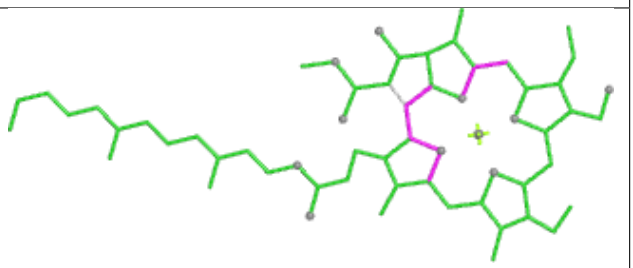
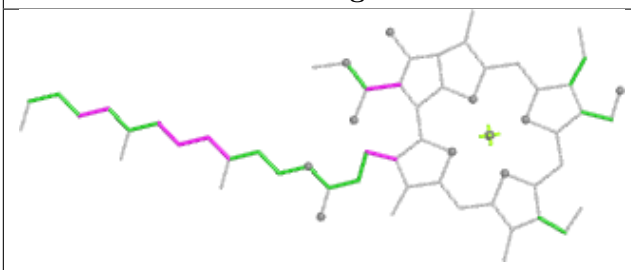


Bond angles



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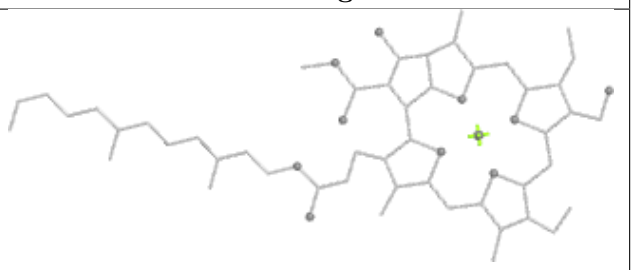
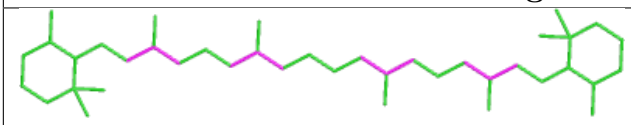


Rings

Ligand BCR k 102



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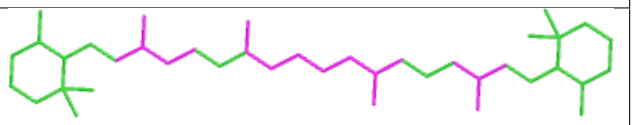
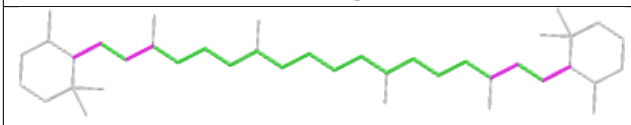


Bond angles



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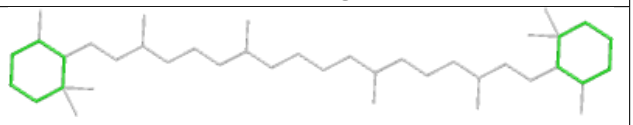
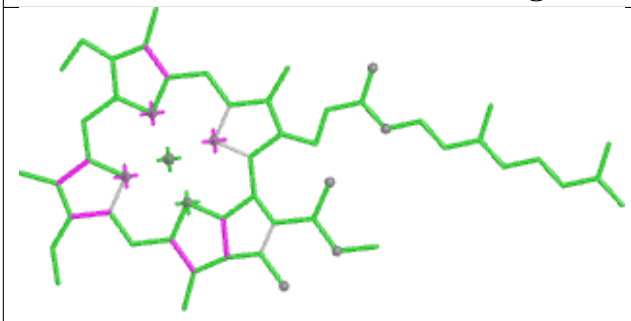


Rings

Ligand CLA y 314



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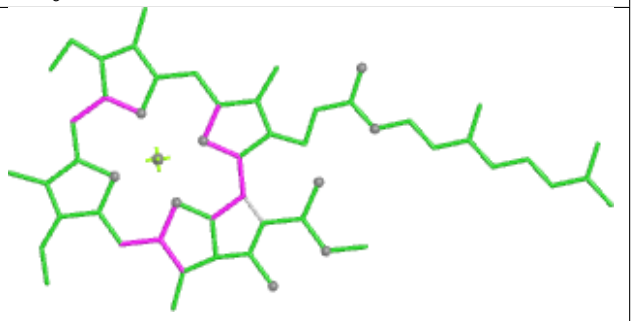
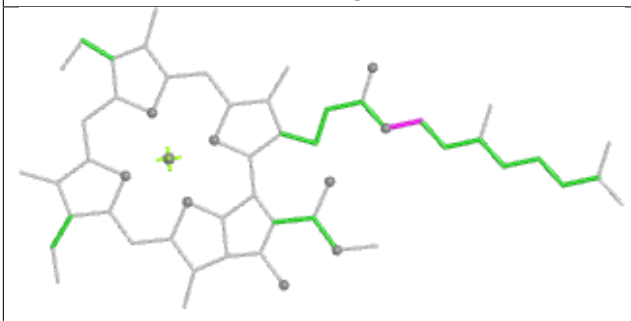


Bond angles



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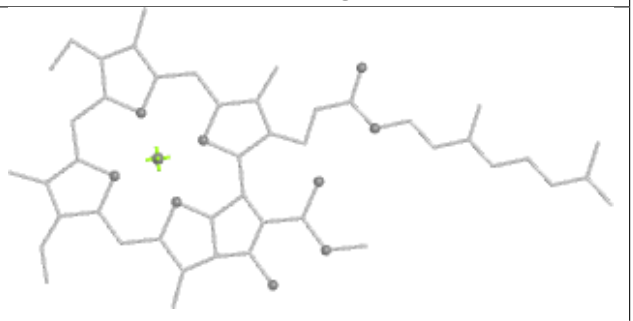
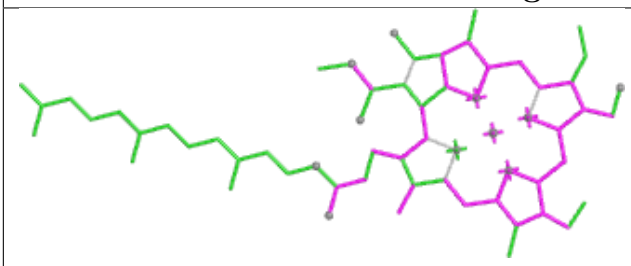


Rings

Ligand CHL V 309



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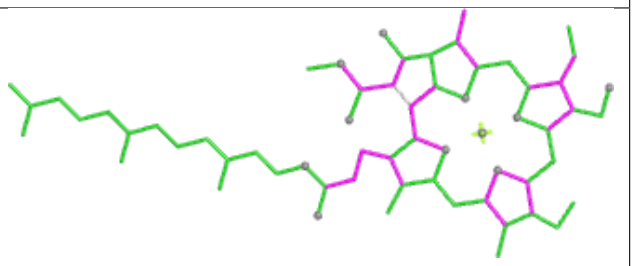
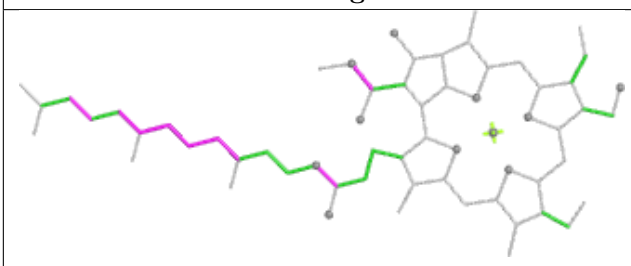


Bond angles



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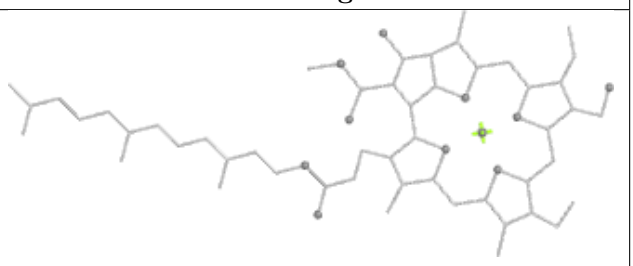
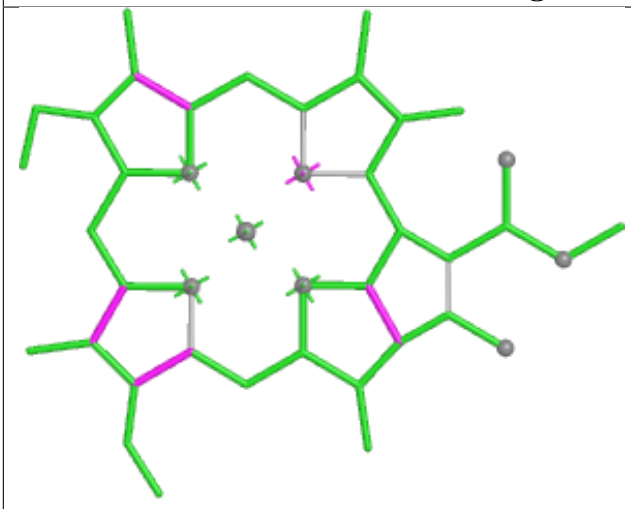


Rings

Ligand CLA 1 307



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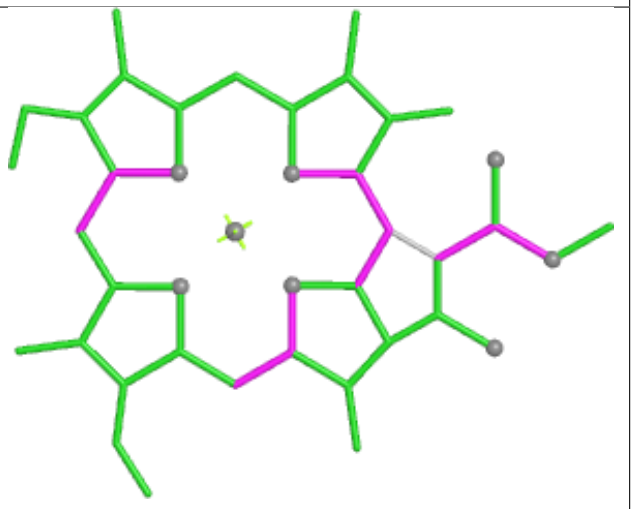
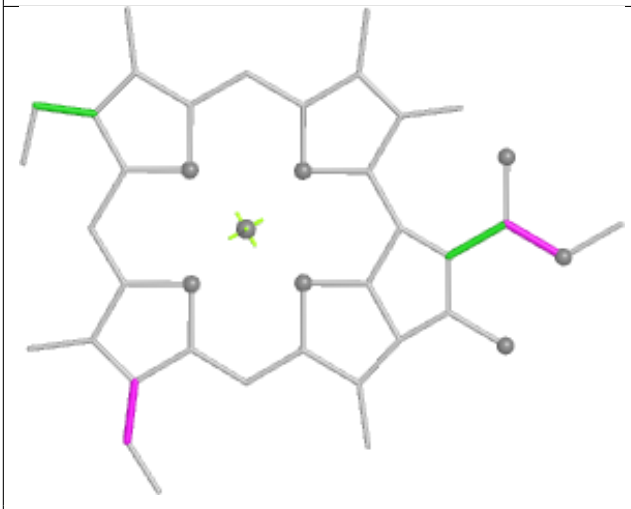
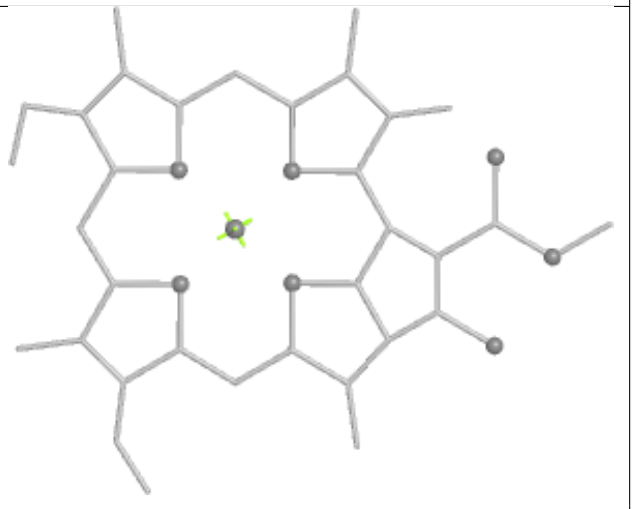


Bond angles

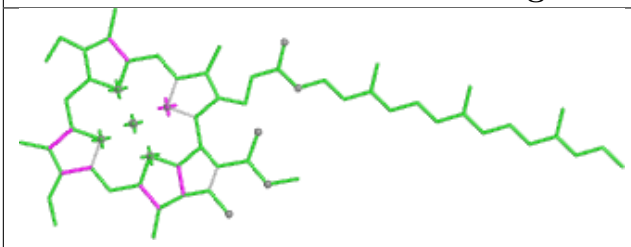


Torsions



Rings

Ligand CLA n 306



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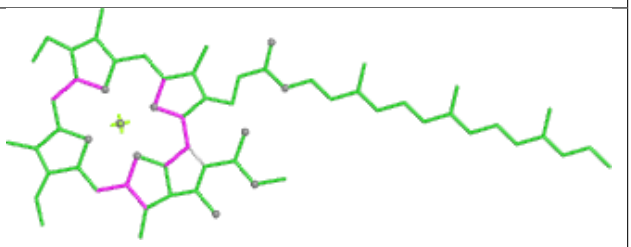

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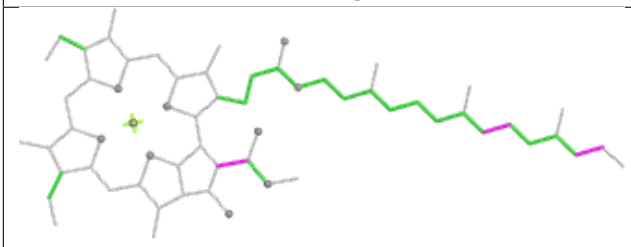

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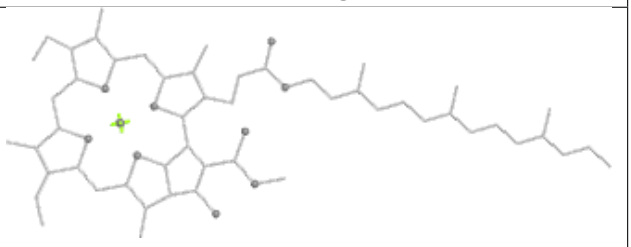
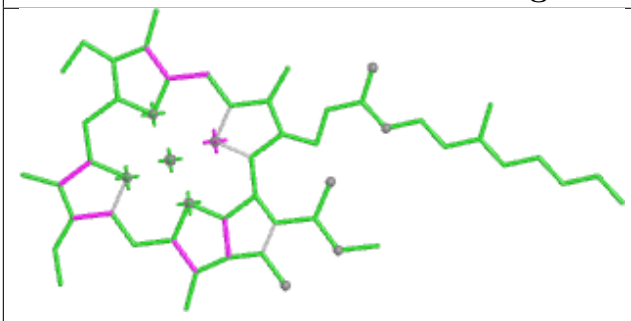


Rings

Ligand CLA s 305



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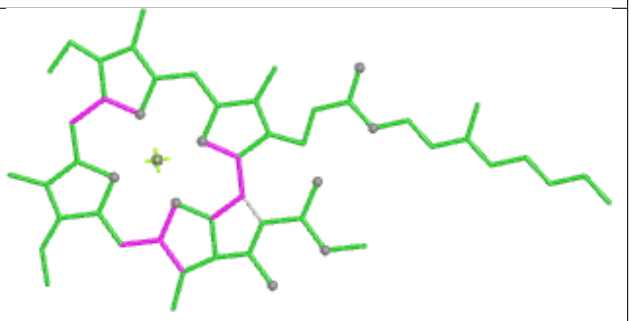

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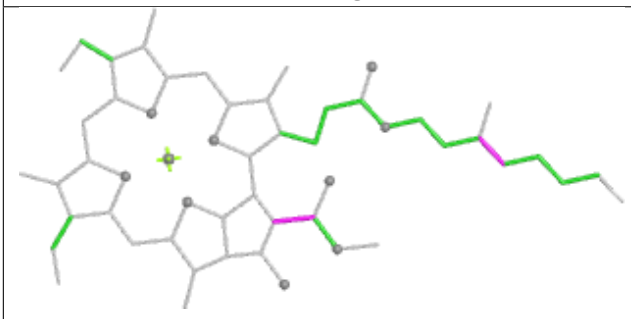

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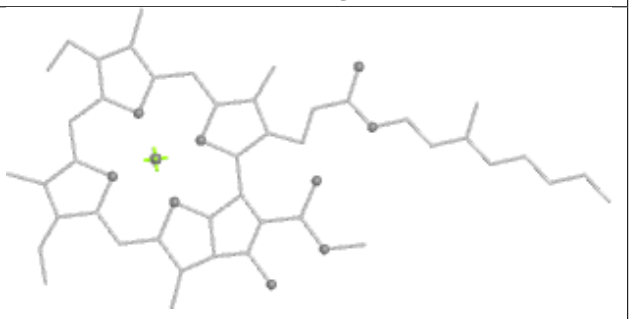
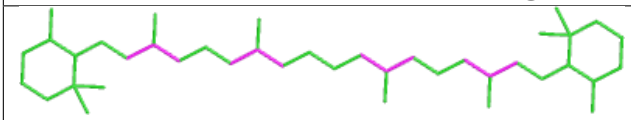


Rings

Ligand BCR C 502



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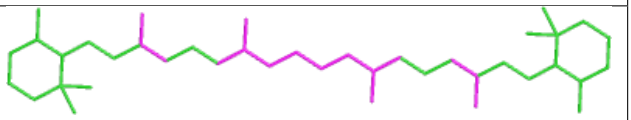

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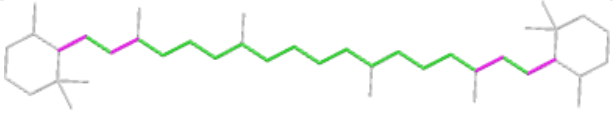

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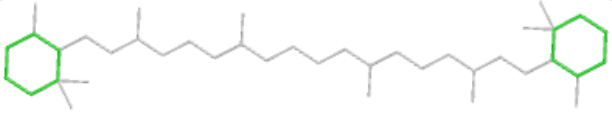
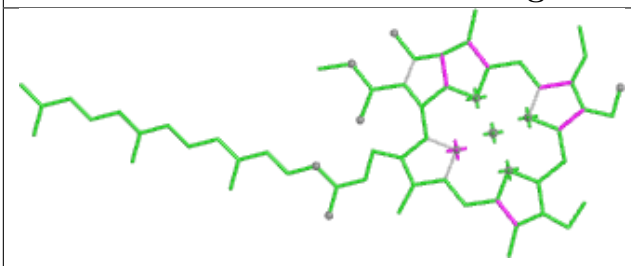


Rings

Ligand CHL v 310



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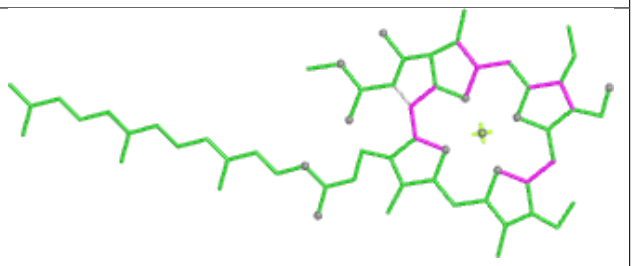

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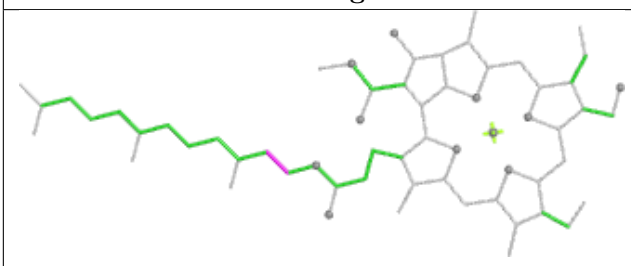

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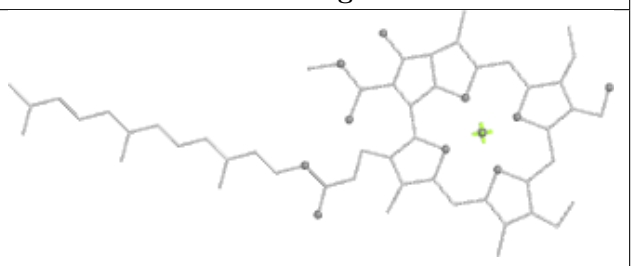
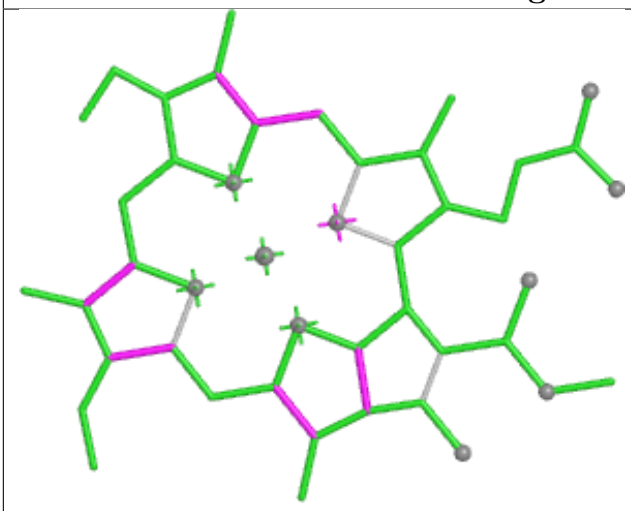


Rings

Ligand CLA g 304



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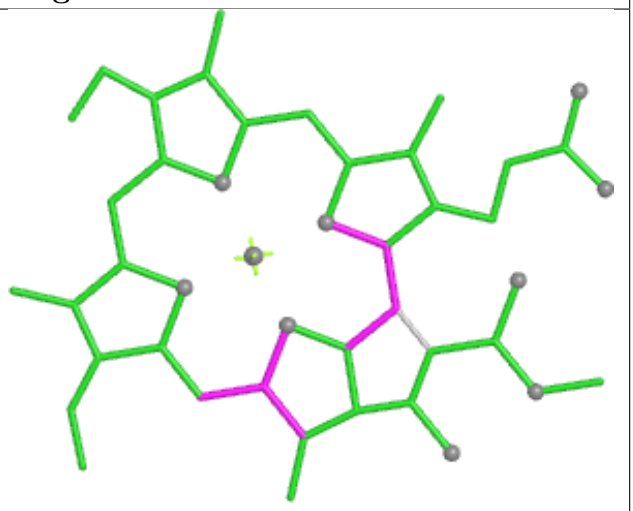

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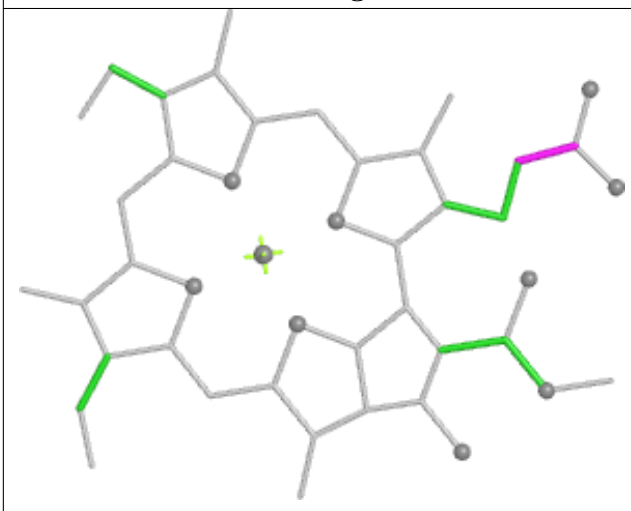

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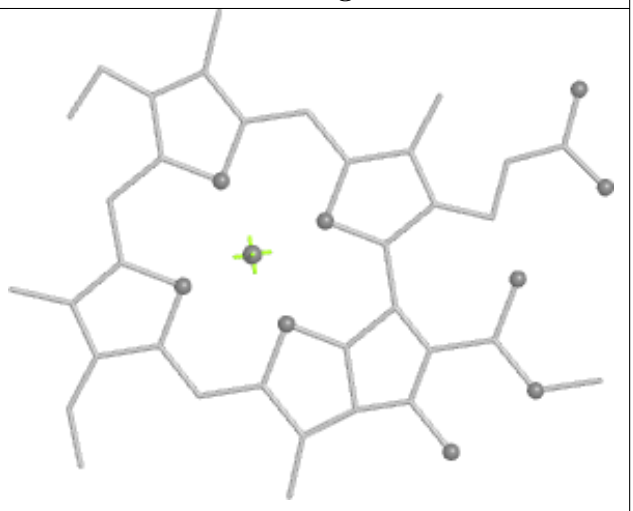
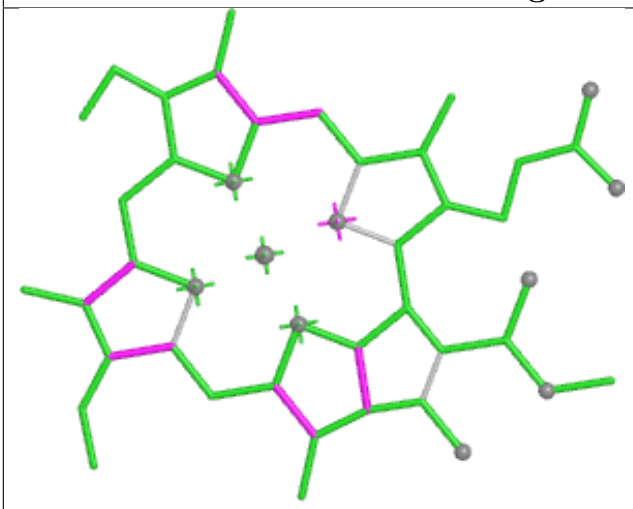


Rings

Ligand CLA 0 302



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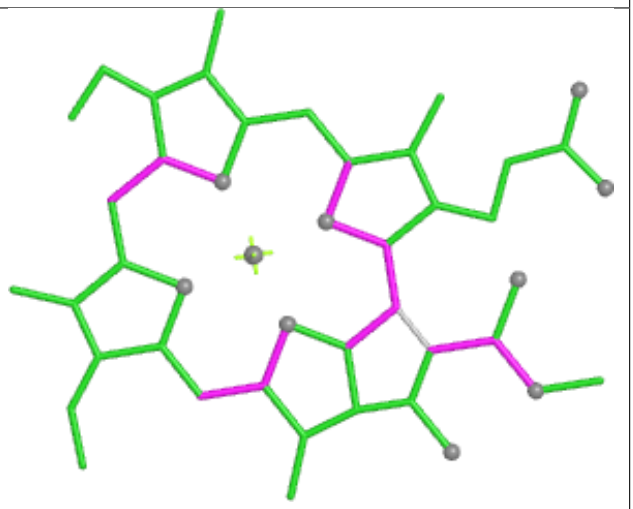
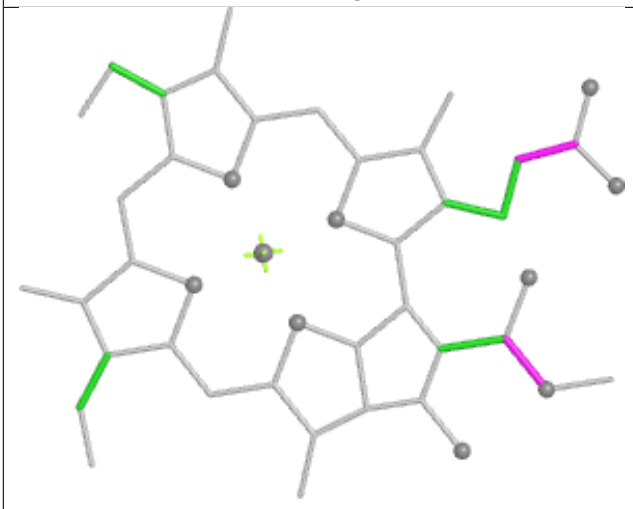


Bond angles

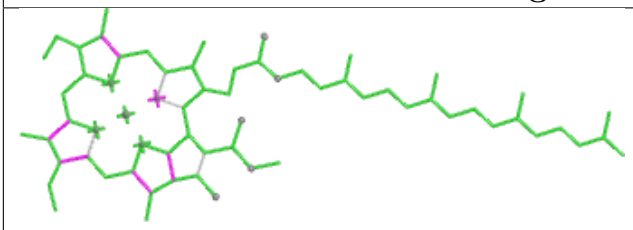


Torsions



Rings

Ligand CLA c 513



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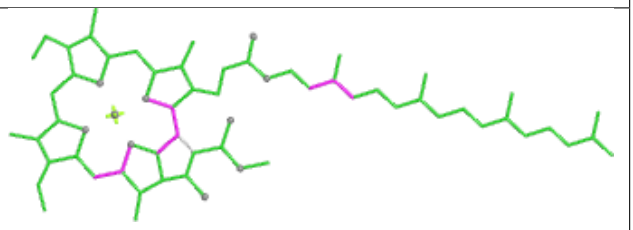

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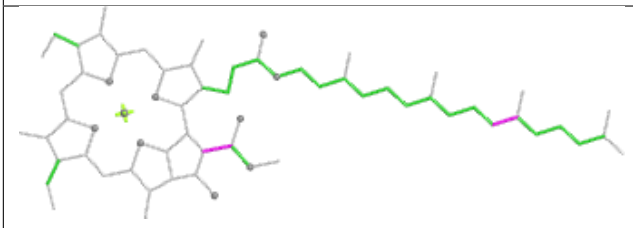

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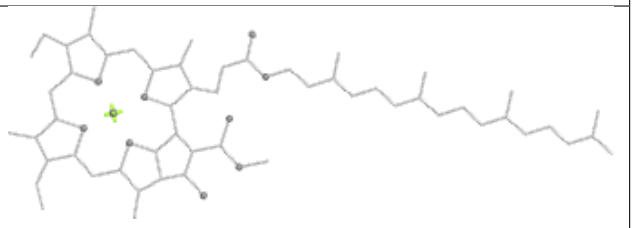
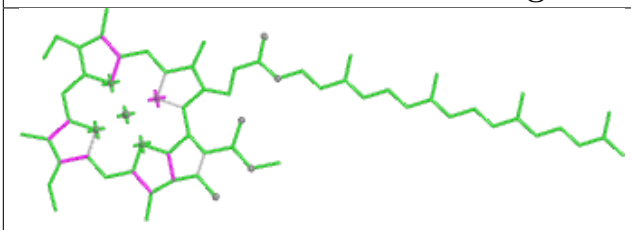


Rings

Ligand CLA b 616



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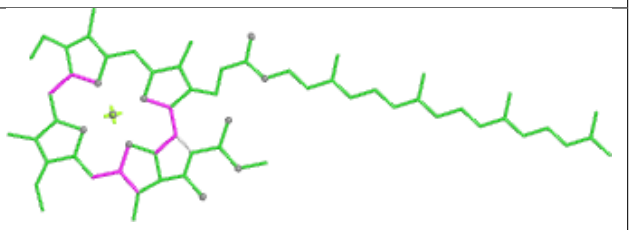
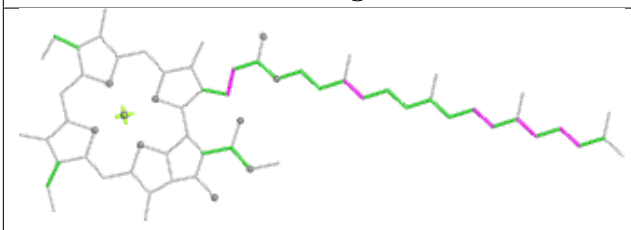


Bond angles



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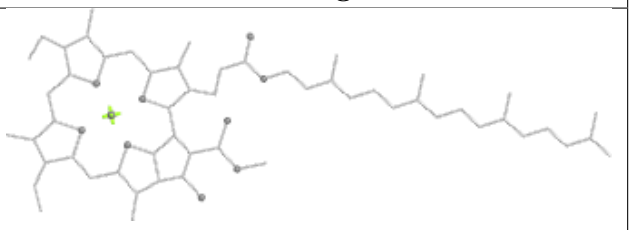
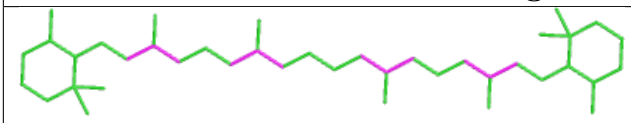


Rings

Ligand BCR h 101



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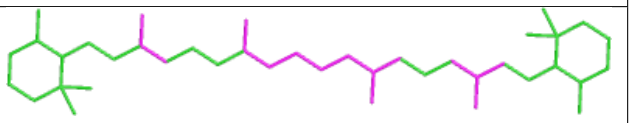
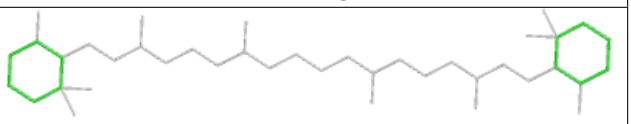


Bond angles



Torsions



Rings

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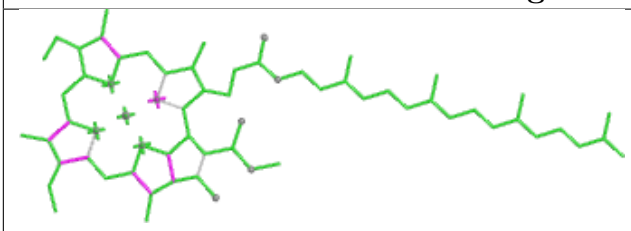

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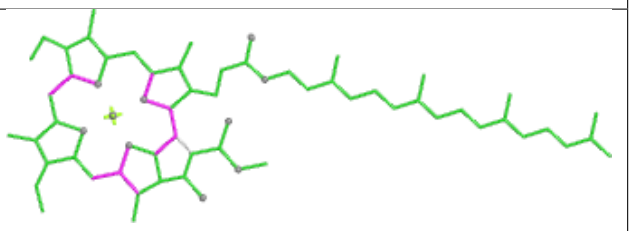

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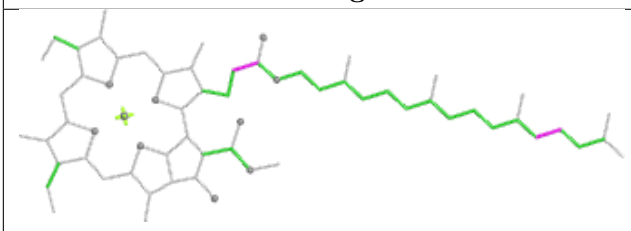

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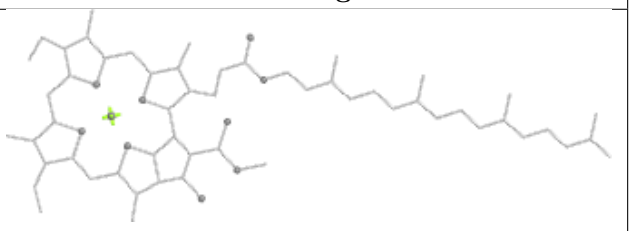
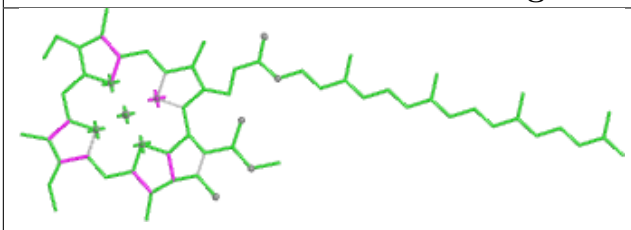


Rings

Ligand CLA b 608



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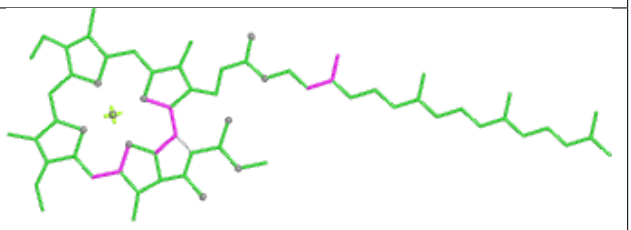

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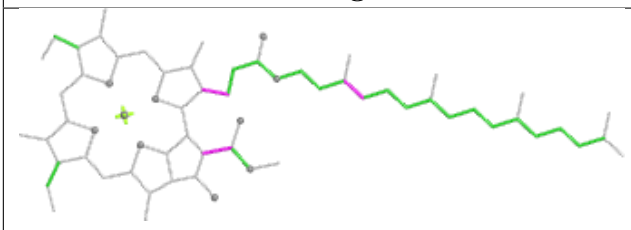

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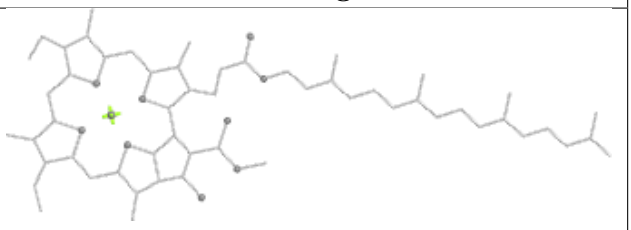
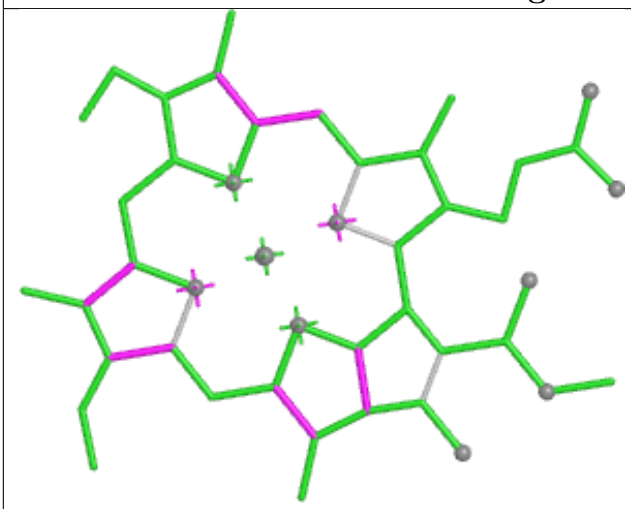


Rings

Ligand CLA 1 308



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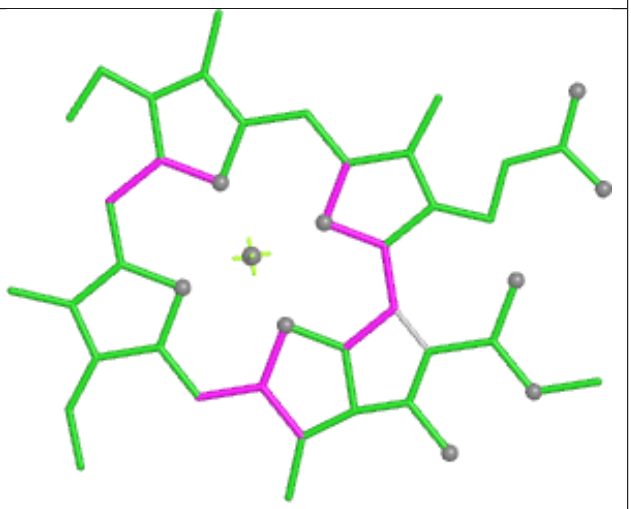
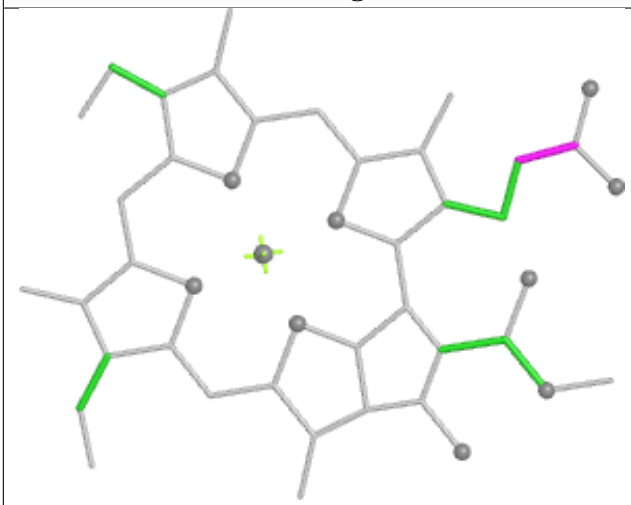


Bond angles



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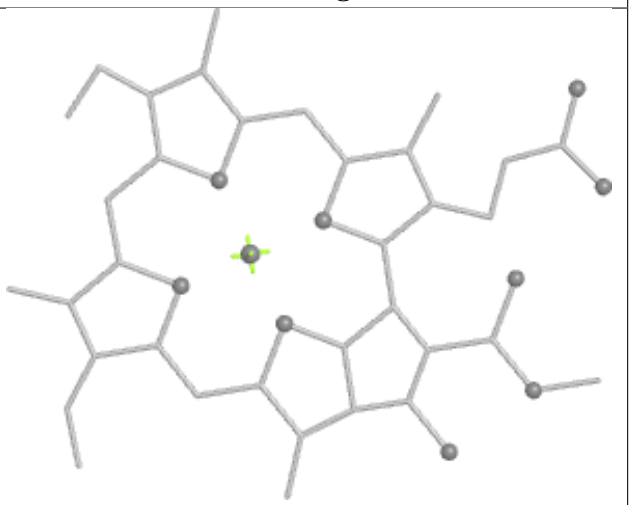
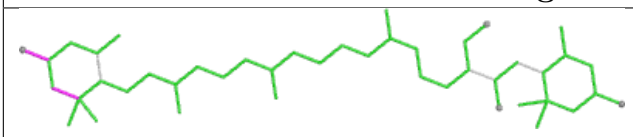


Rings

Ligand 0IE S 316



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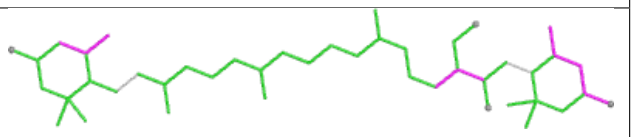
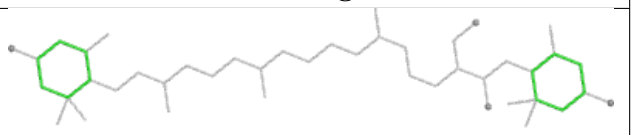


Bond angles

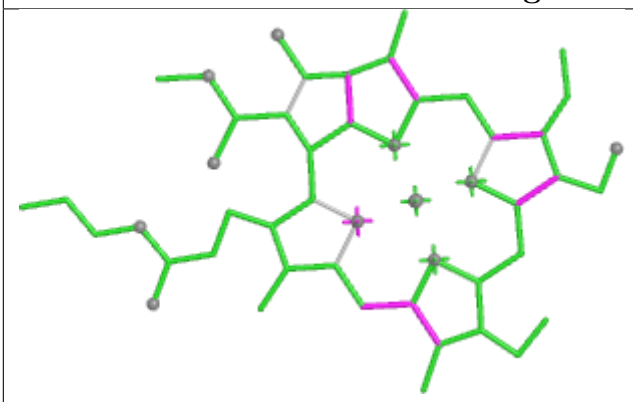


Torsions



Rings

Ligand CHL V 312



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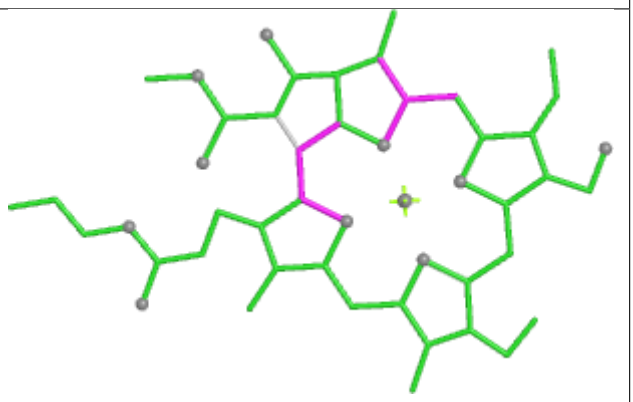
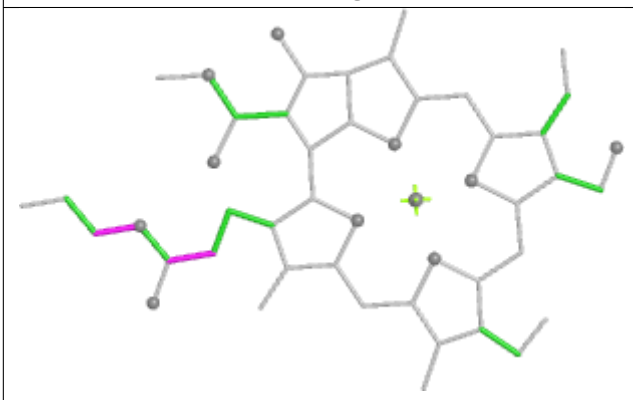


Bond angles



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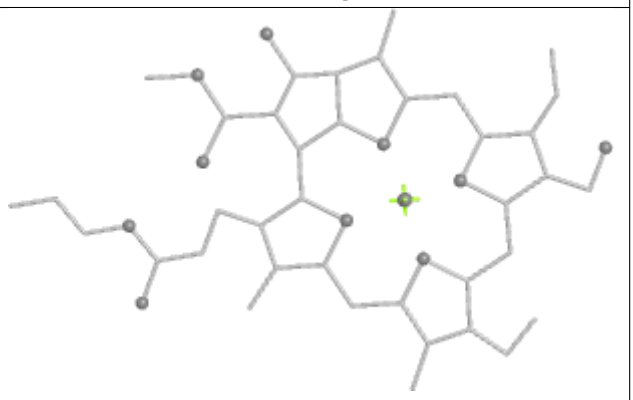
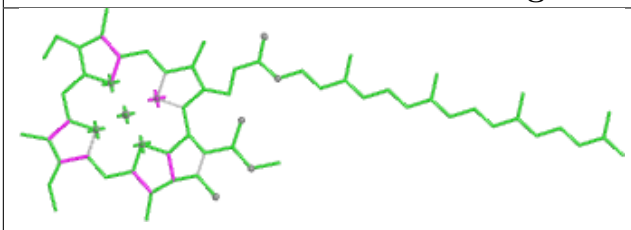


Rings

Ligand CLA b 617



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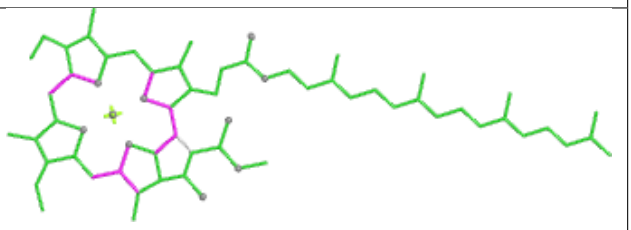
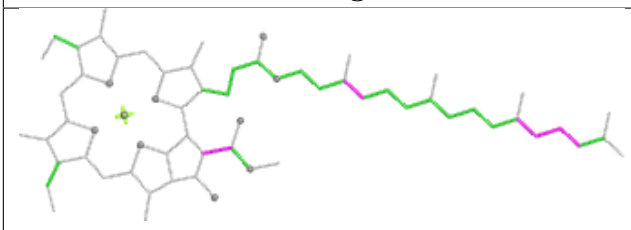
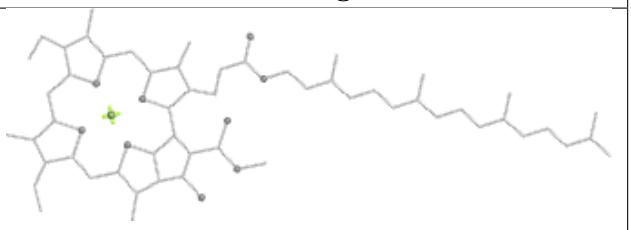


Bond angles

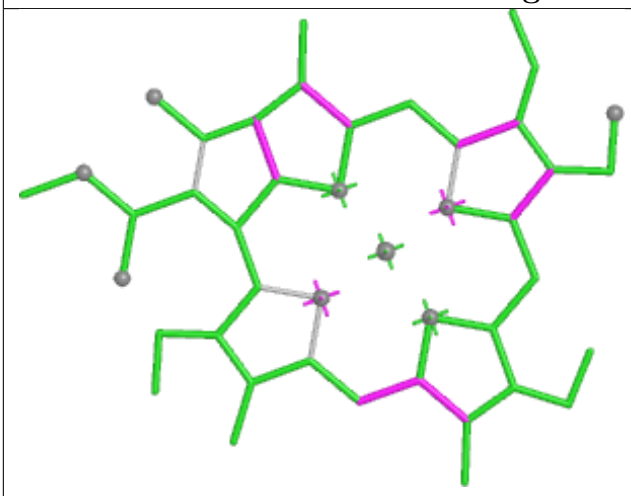


Torsions



Rings

Ligand CHL G 310



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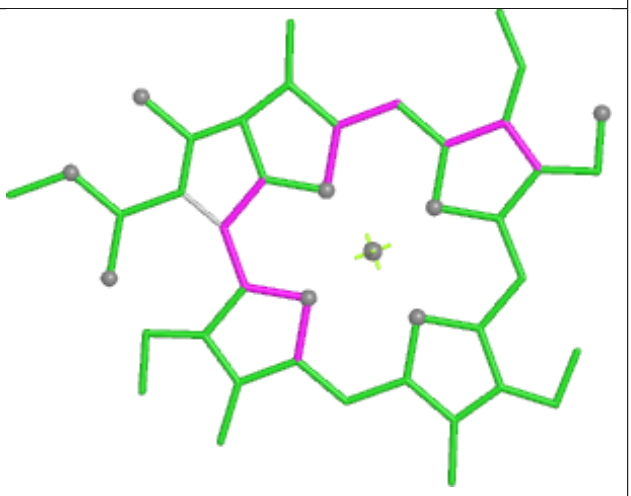

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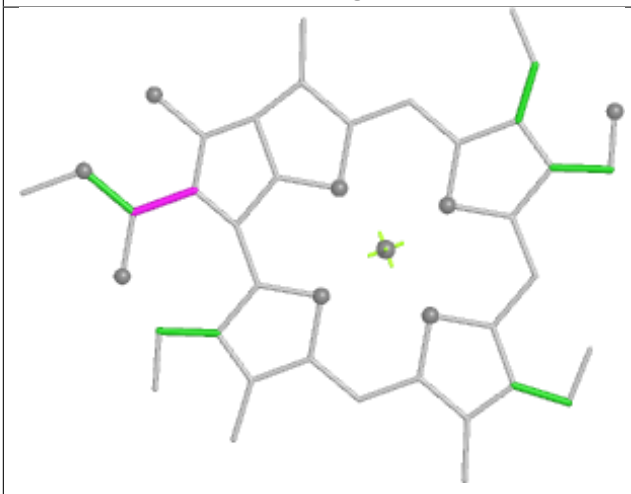
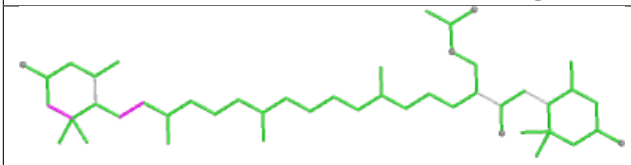


Torsions



Rings

Ligand 0UR 1 315



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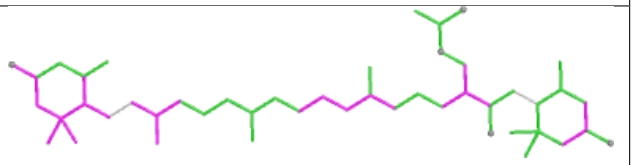
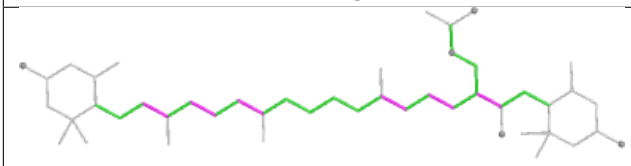


Bond angles



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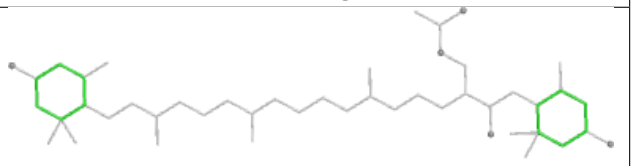
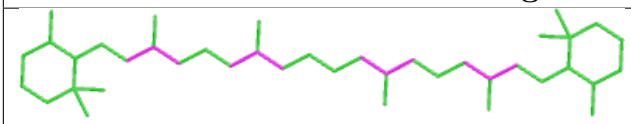


Rings

Ligand BCR K 104



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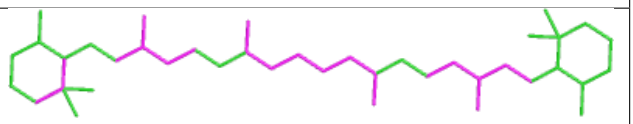

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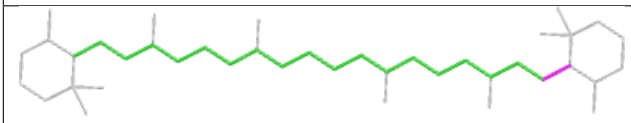

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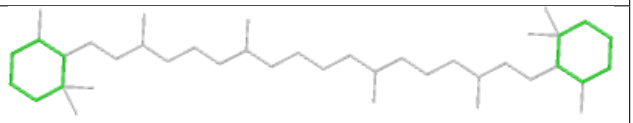
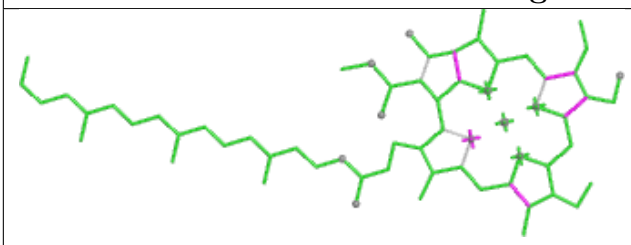


Rings

Ligand CHL s 303



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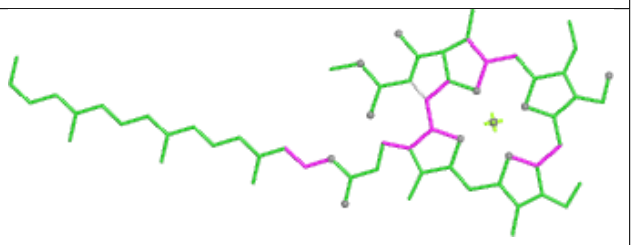
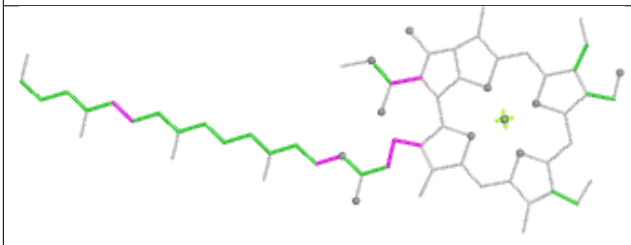


Bond angles



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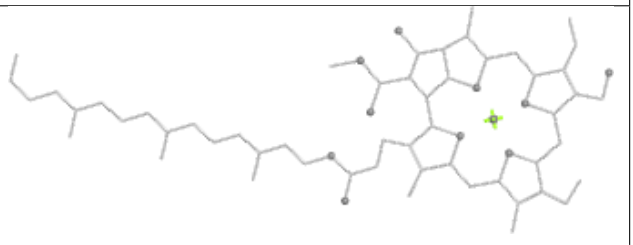
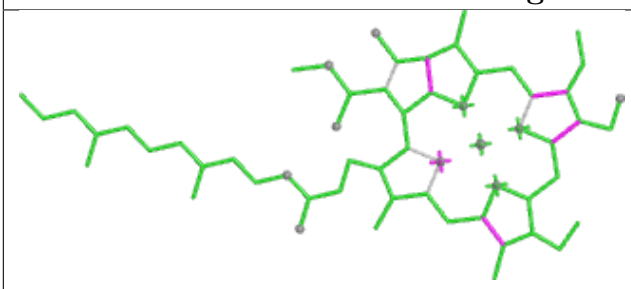


Rings

Ligand CHL u 409



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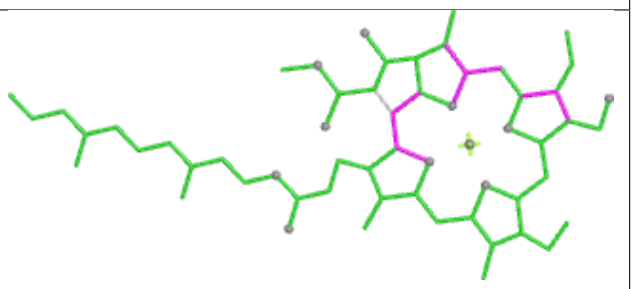
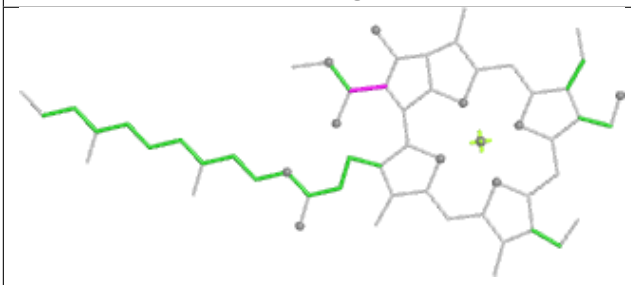


Bond angles



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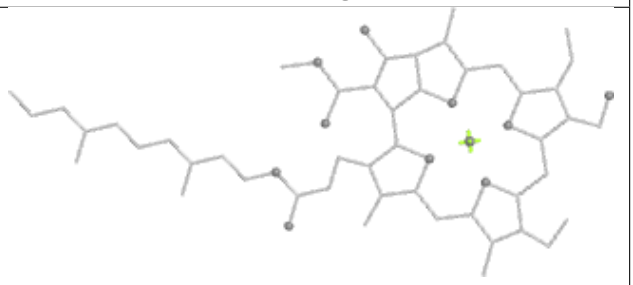
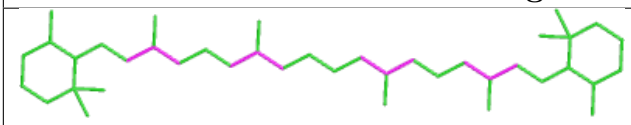


Rings

Ligand BCR k 101



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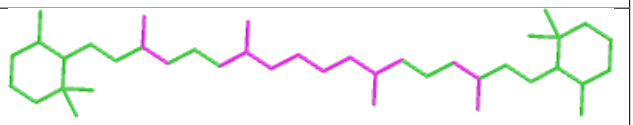
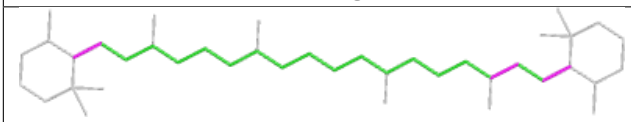


Bond angles



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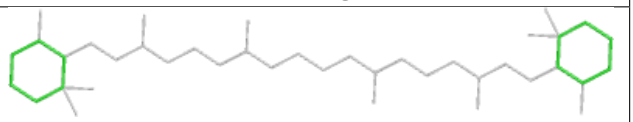
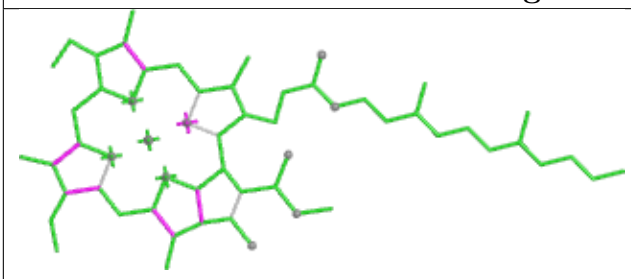


Rings

Ligand CLA N 314



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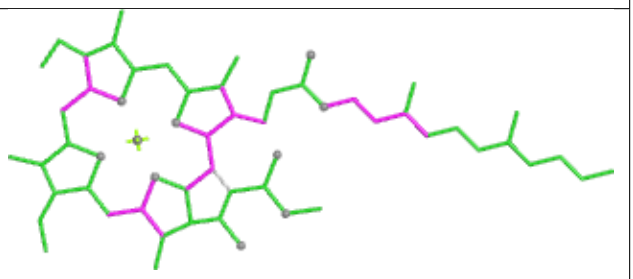
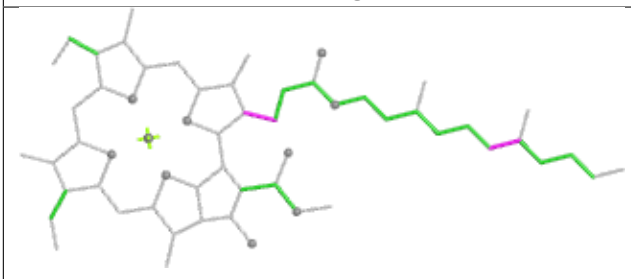


Bond angles



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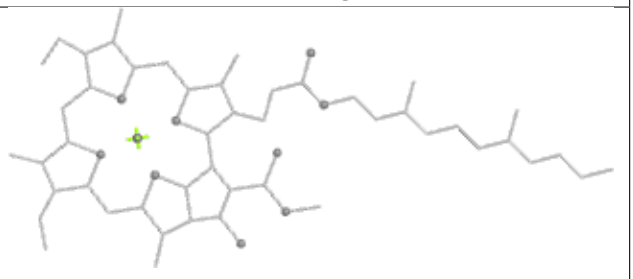
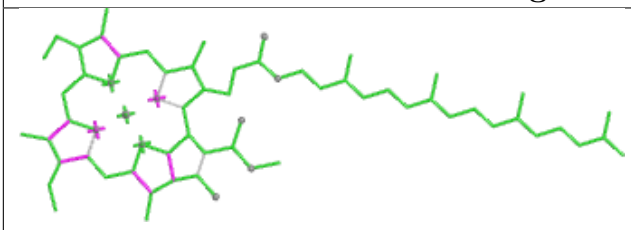


Rings

Ligand CLA c 522



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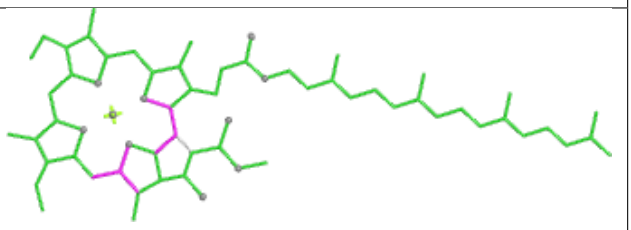
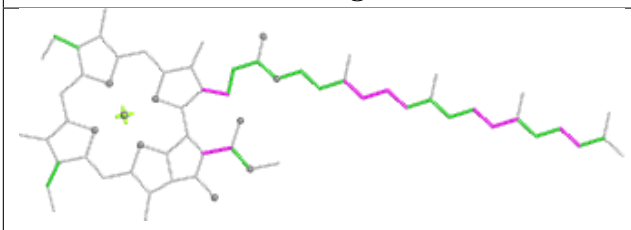


Bond angles



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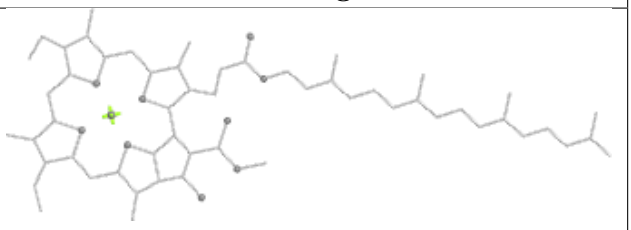
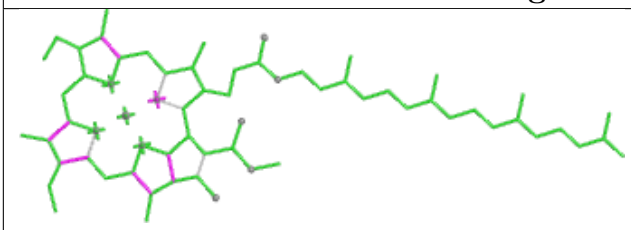


Rings

Ligand CLA g 306



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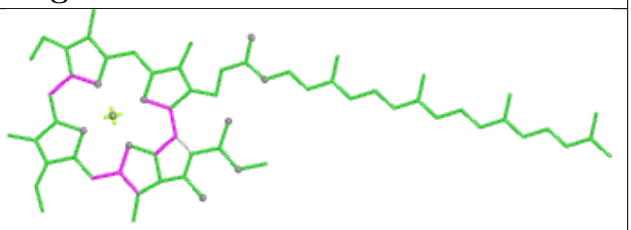
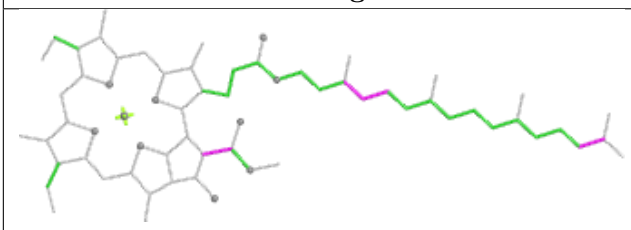


Bond angles



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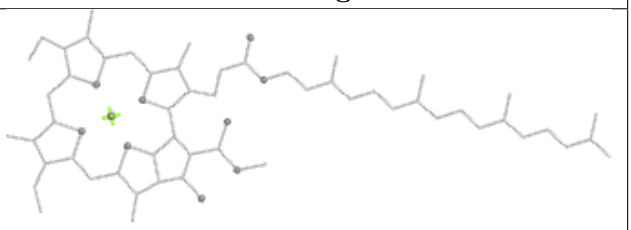
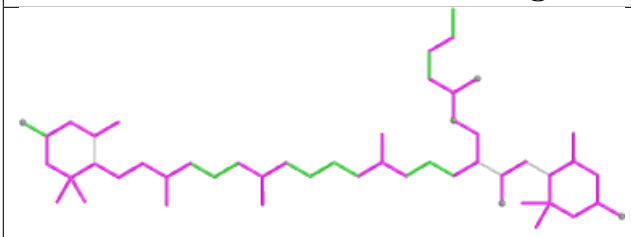


Rings

Ligand 0UR 1 316



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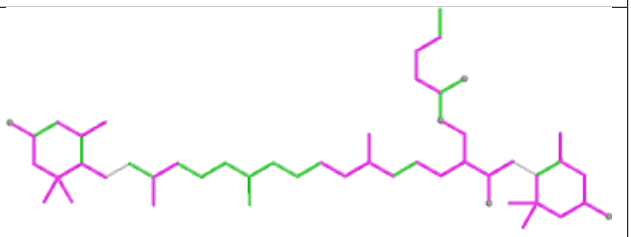
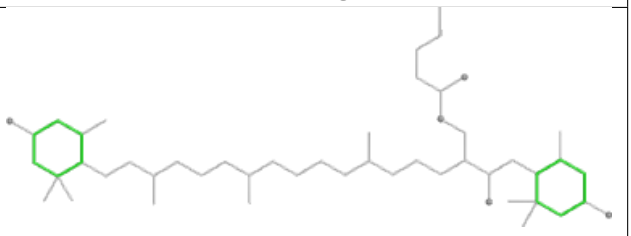


Bond angles

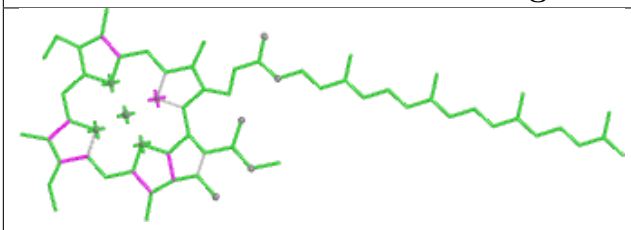


Torsions



Rings

Ligand CLA c 510



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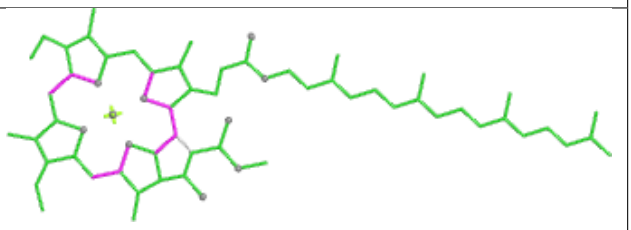
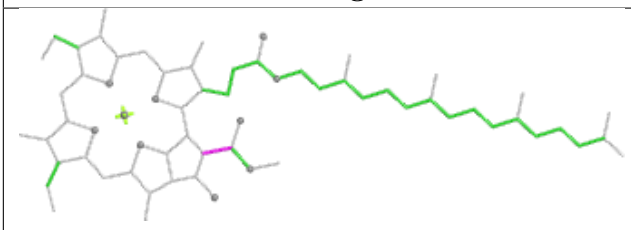


Bond angles



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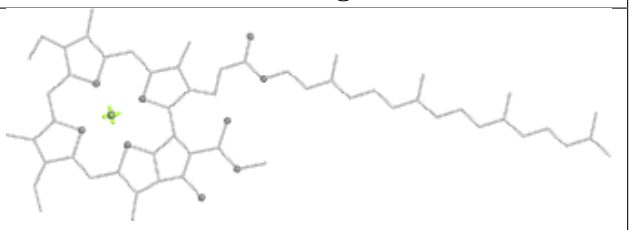
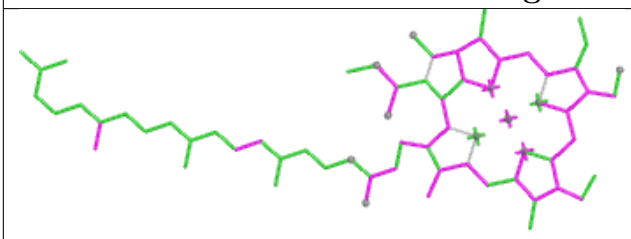


Rings

Ligand CHL V 311



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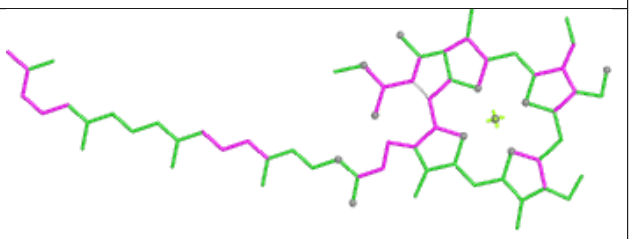
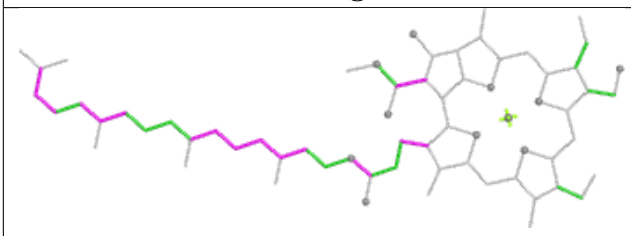


Bond angles



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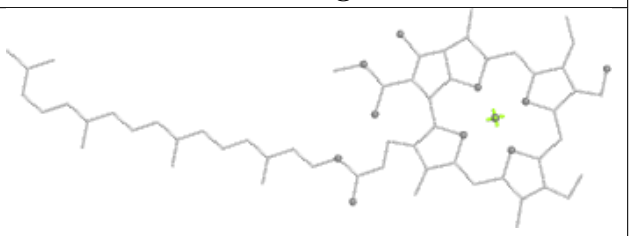
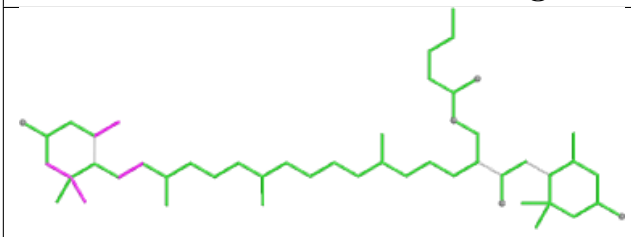


Rings

Ligand 0UR g 317



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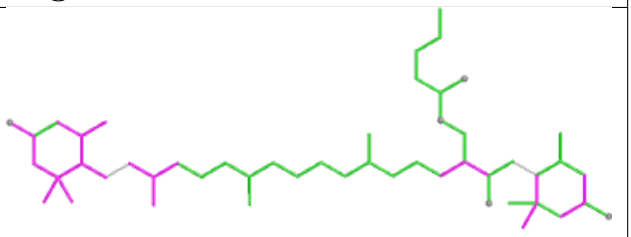
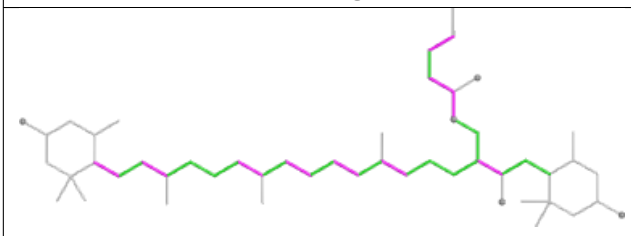


Bond angles



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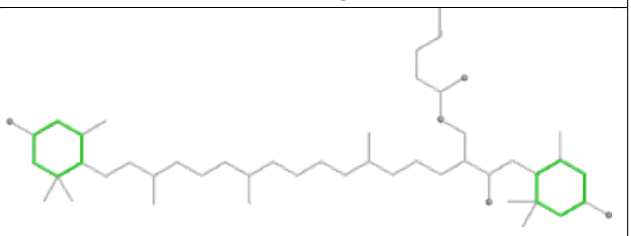
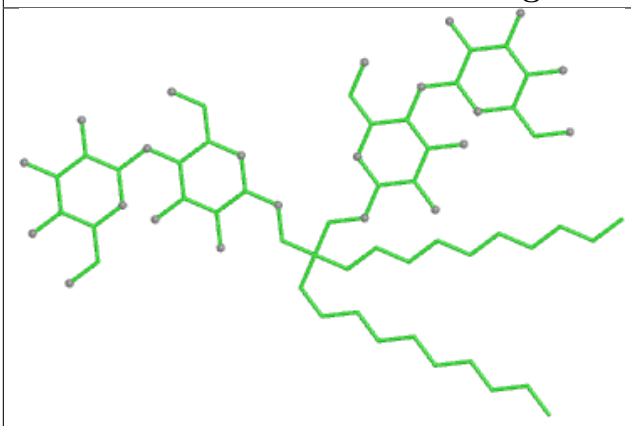


Rings

Ligand LMN u 401



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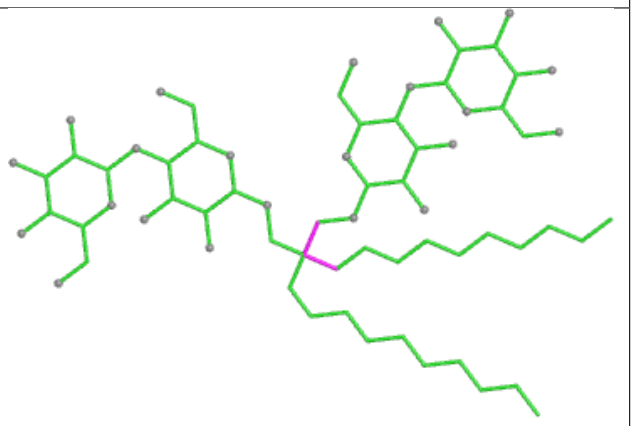
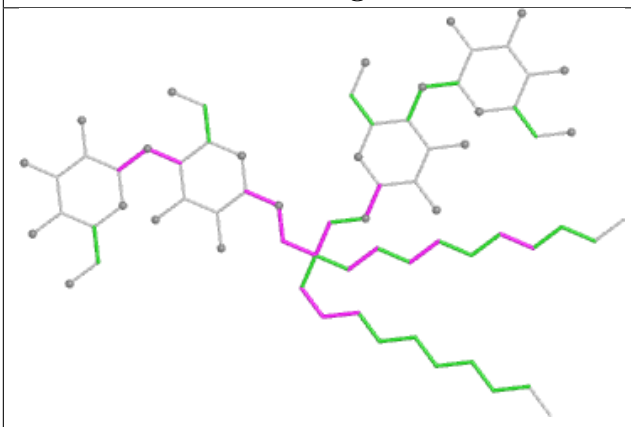


Bond angles



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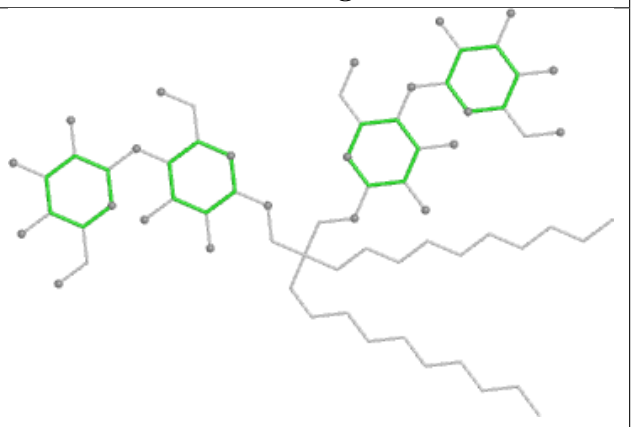
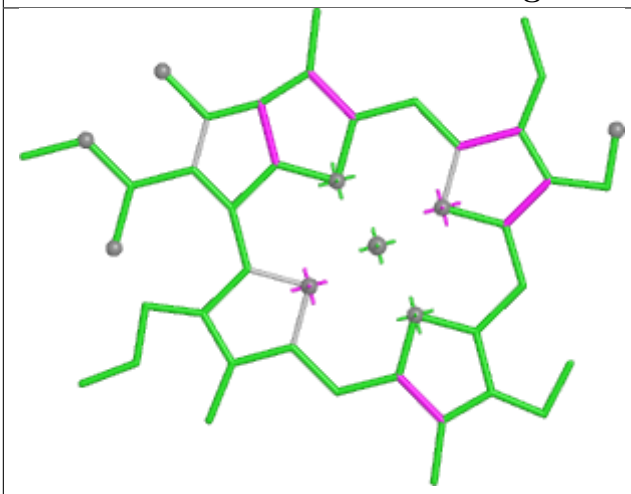


Rings

Ligand CHL V 310



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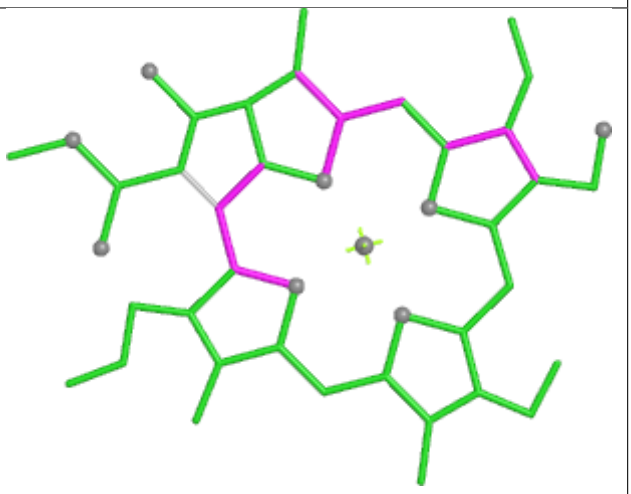
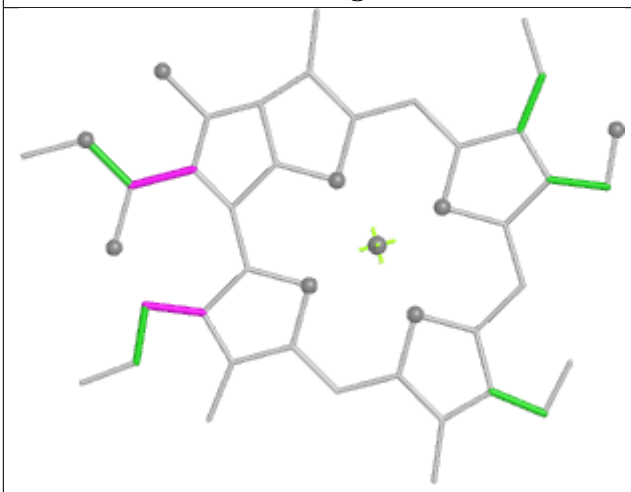
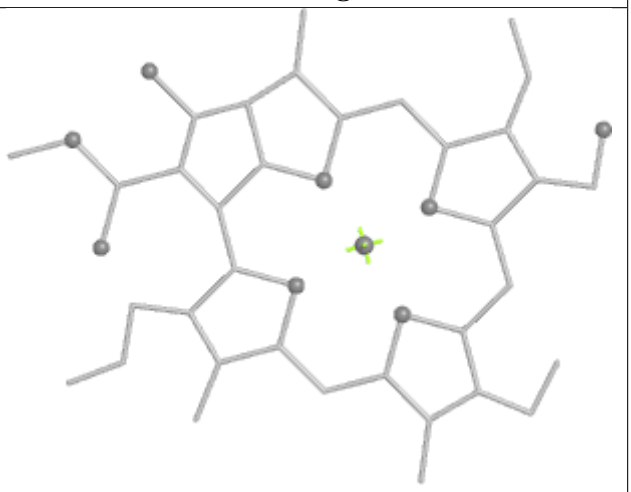


Bond angles

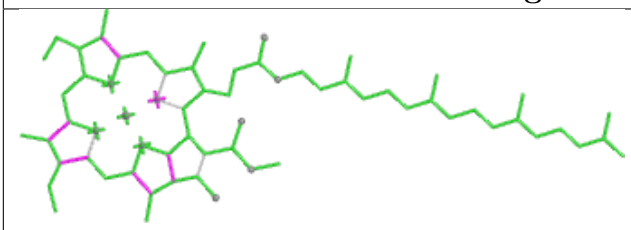


Torsions

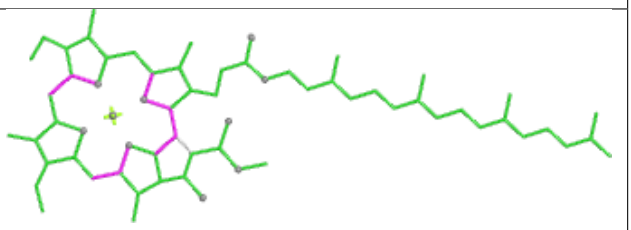


Rings

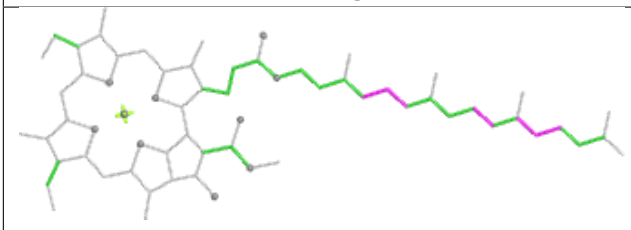
Ligand CLA B 607



Bond lengths



Bond angles



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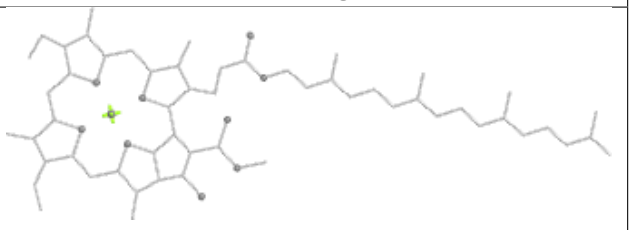
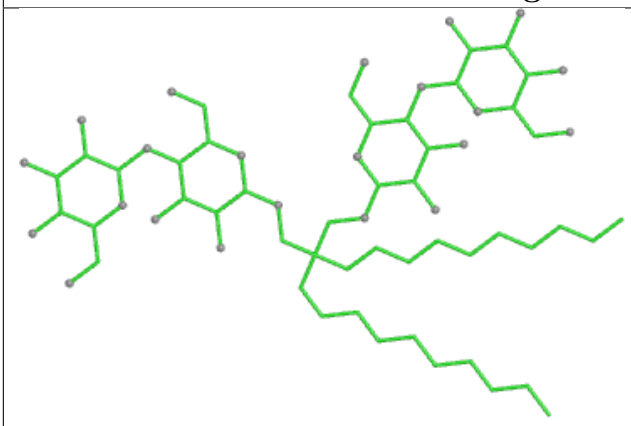


Rings

Ligand LMN y 302



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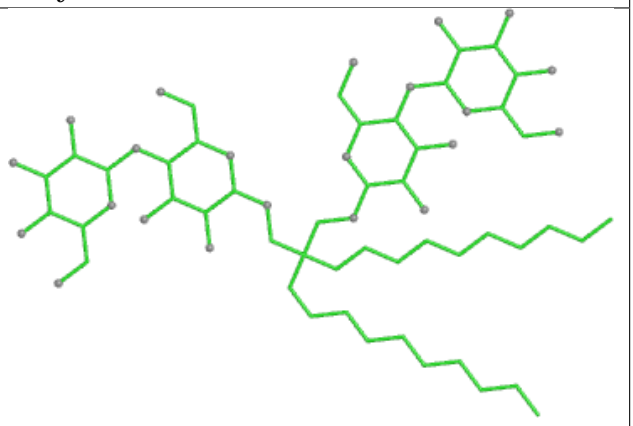

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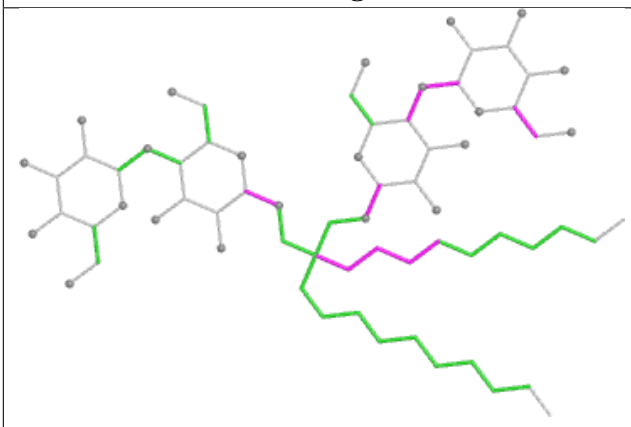

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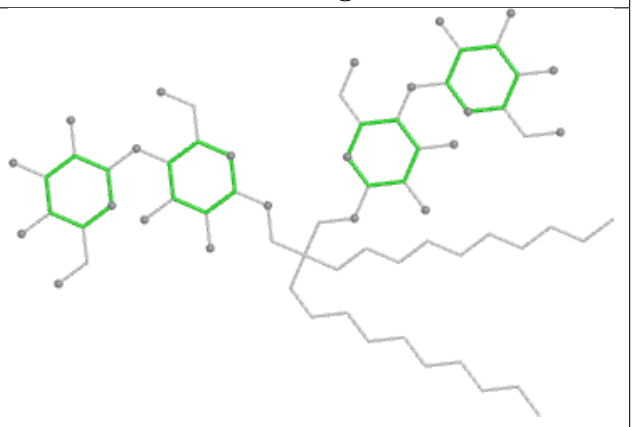
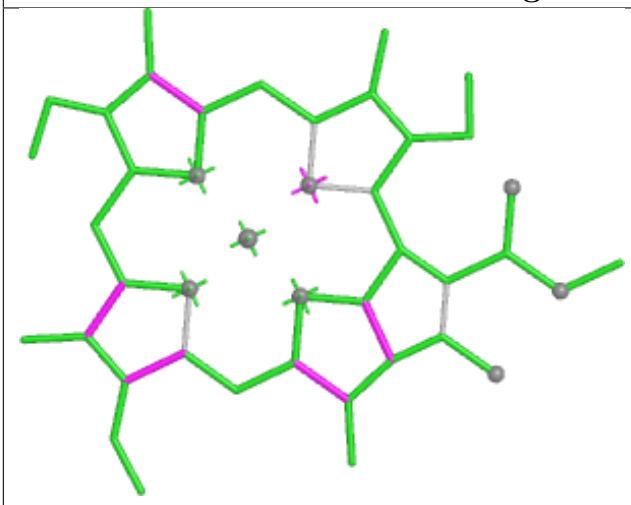


Rings

Ligand CLA G 309



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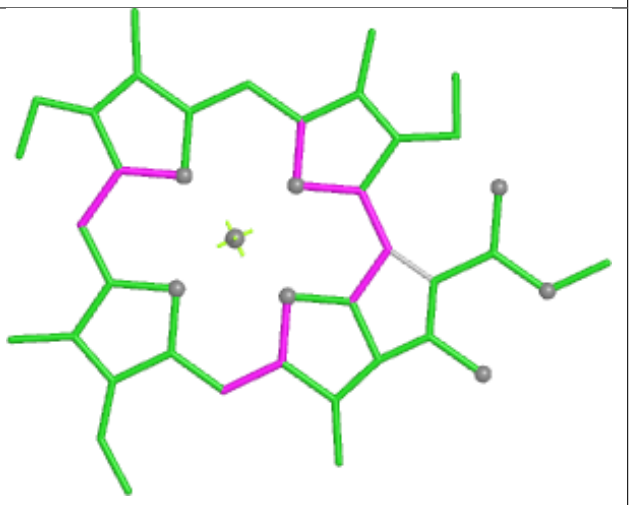

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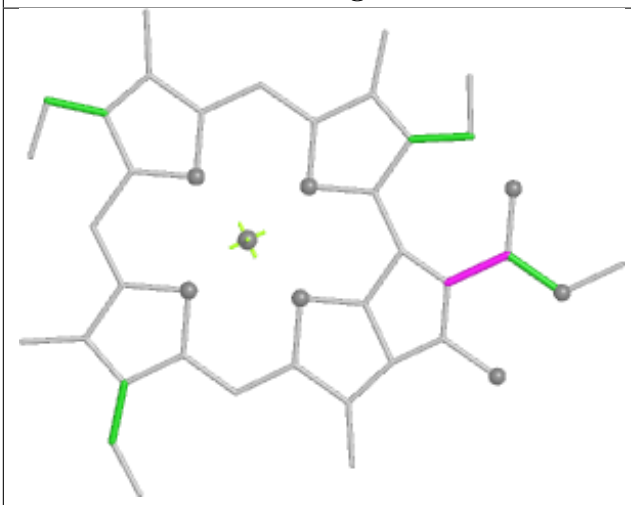
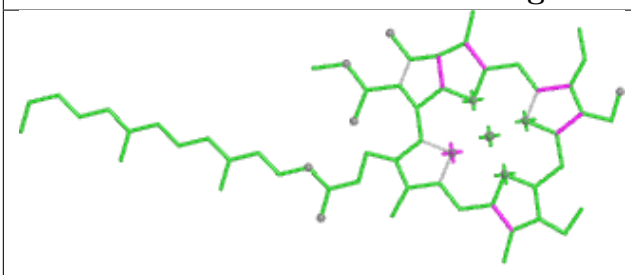


Torsions



Rings

Ligand CHL v 304



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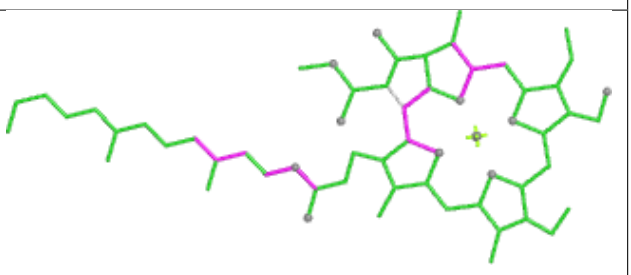
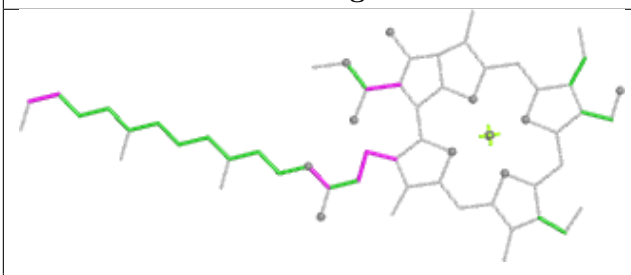


Bond angles



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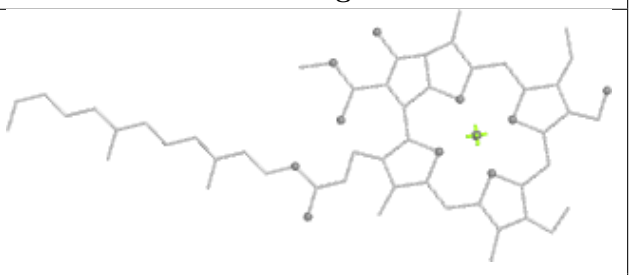
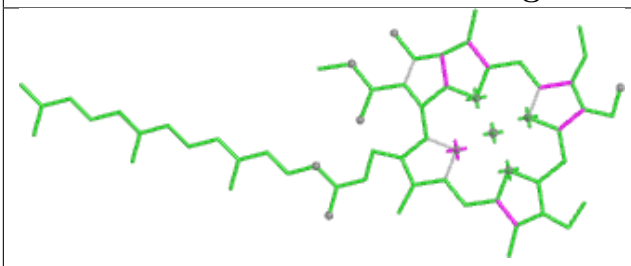


Rings

Ligand CHL N 310



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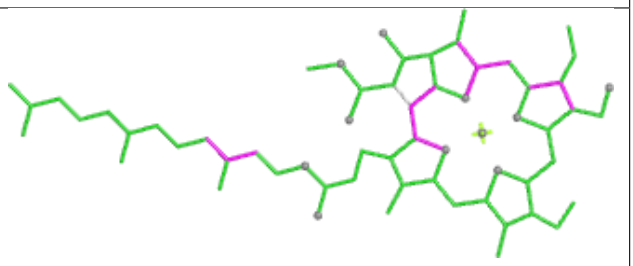
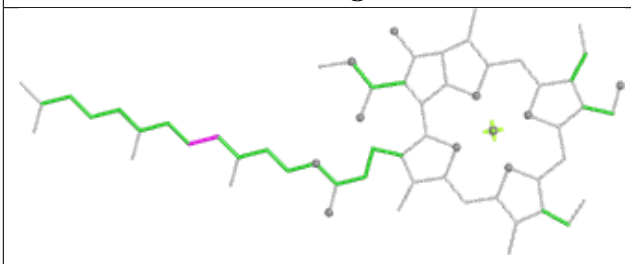


Bond angles



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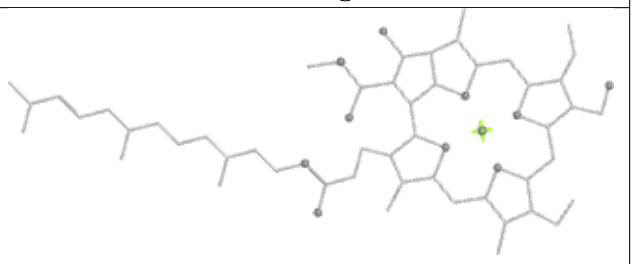
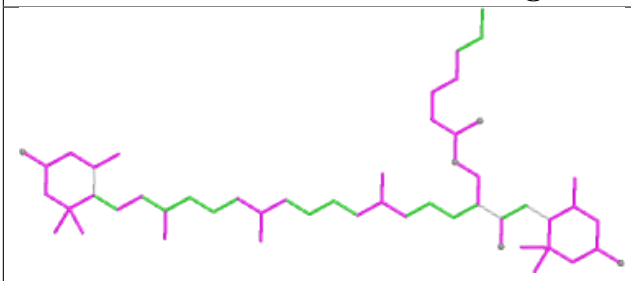


Rings

Ligand 0UR V 319



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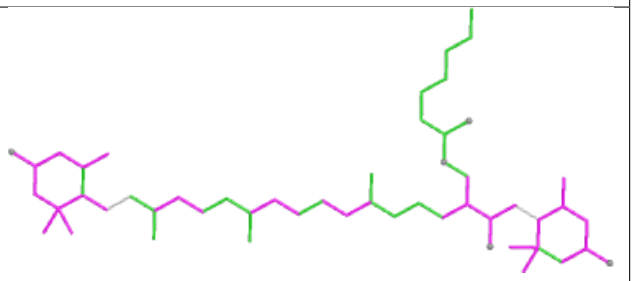
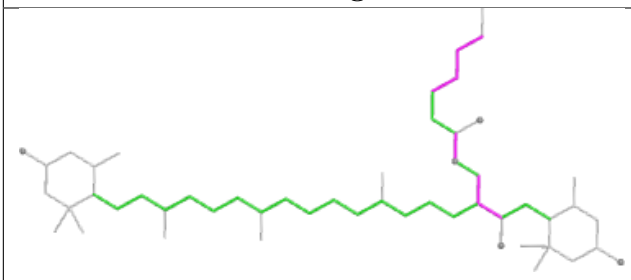


Bond angles



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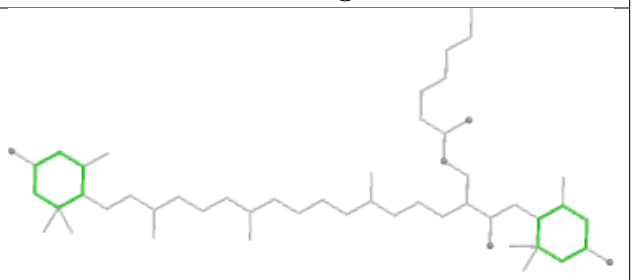
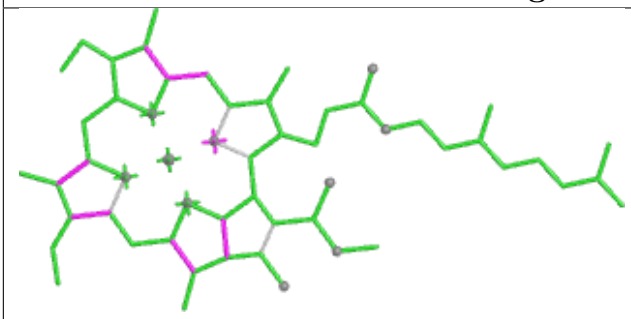


Rings

Ligand CLA 0 309



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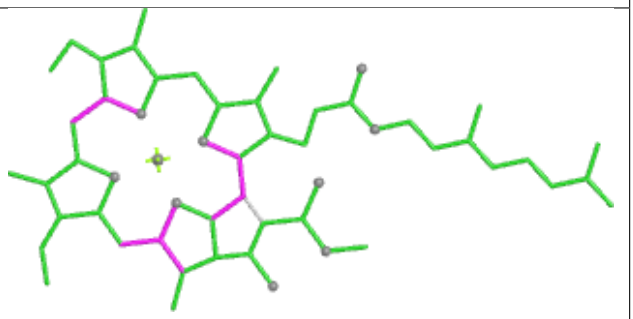
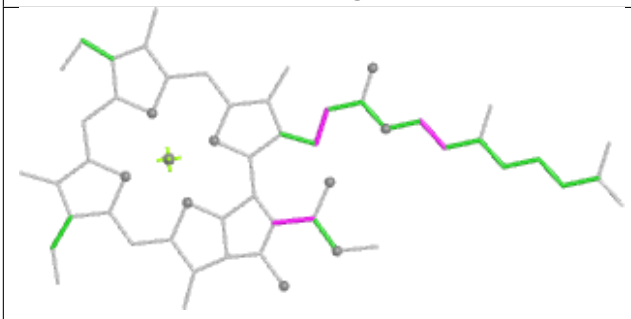


Bond angles



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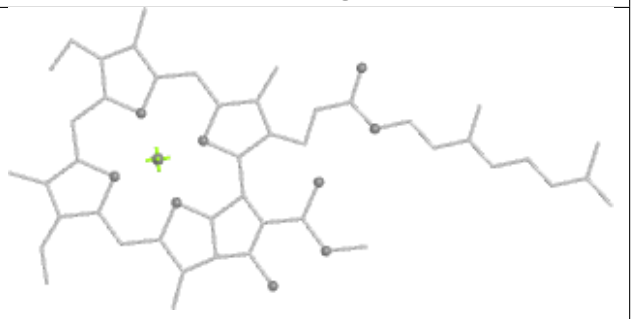
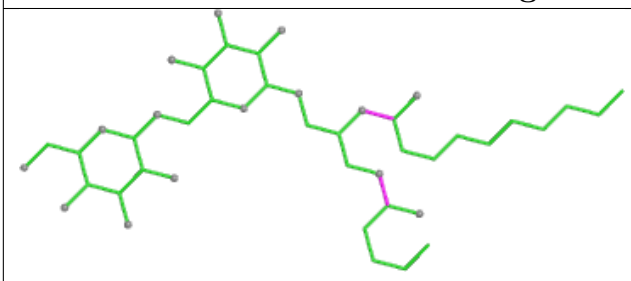


Rings

Ligand DGD A 417



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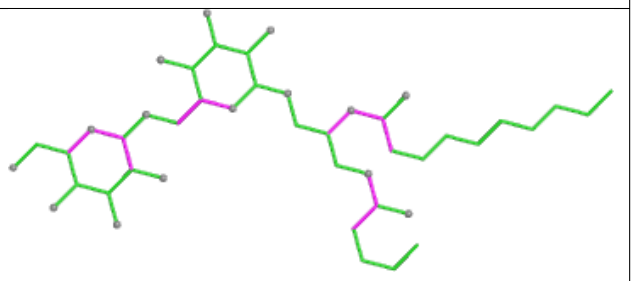
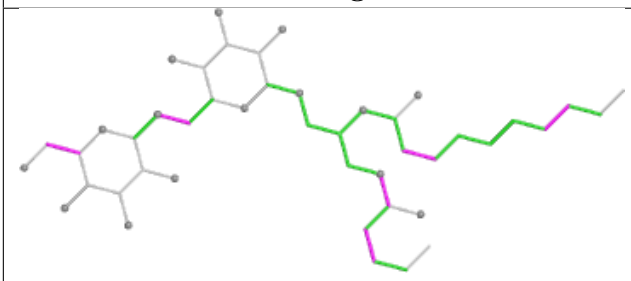


Bond angles



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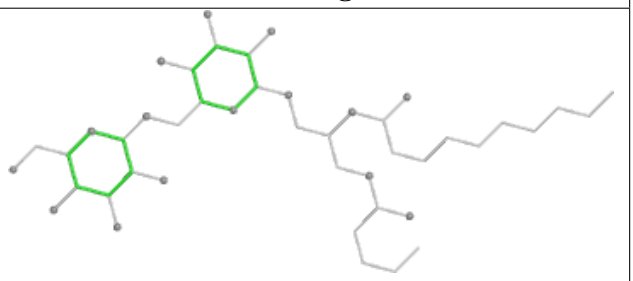
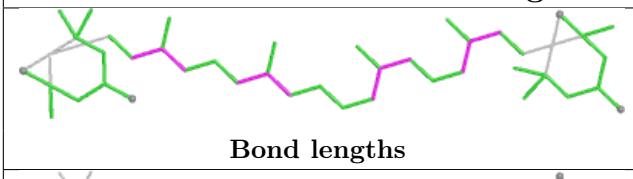


Rings

Ligand XAT n 320



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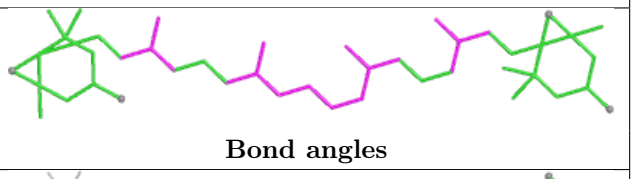
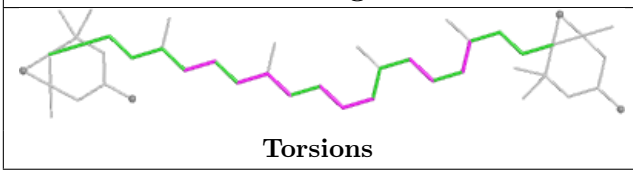


Bond angles



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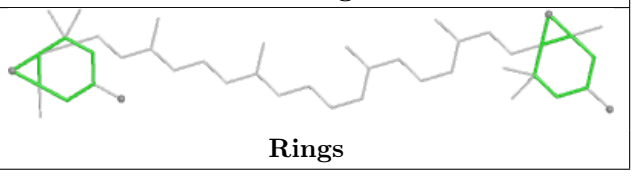
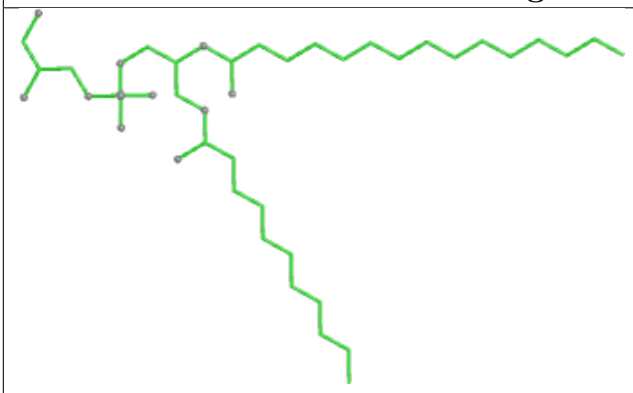


Rings

Ligand LHG a 415



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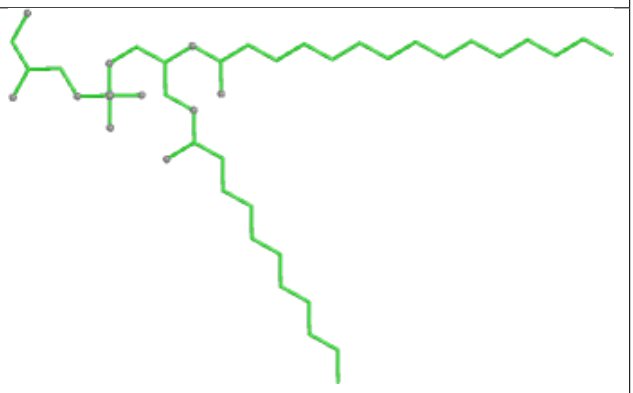
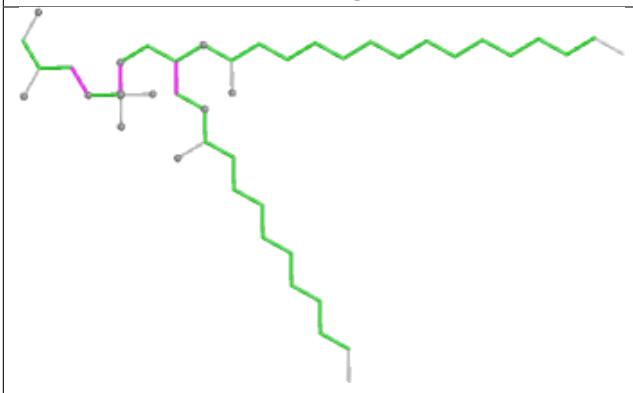


Bond angles



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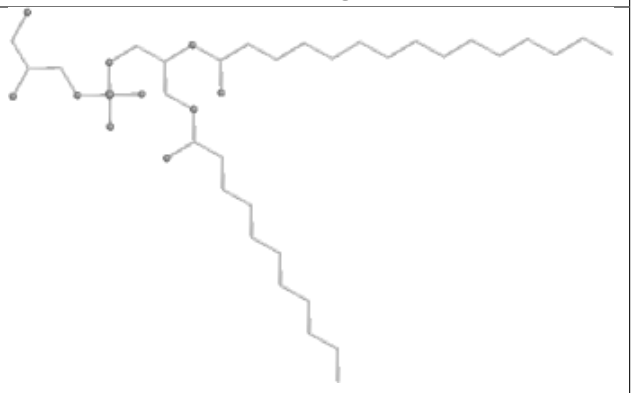
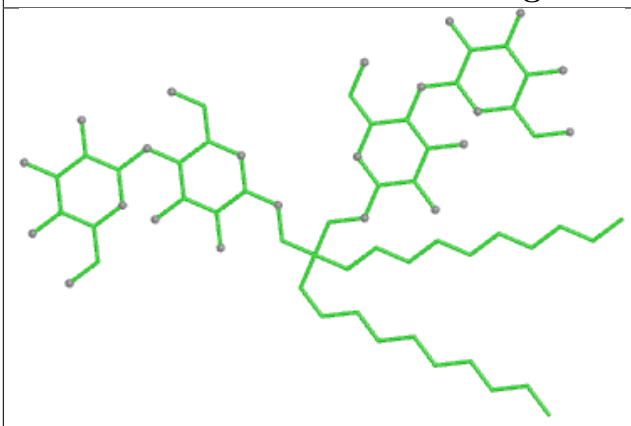


Rings

Ligand LMN y 301



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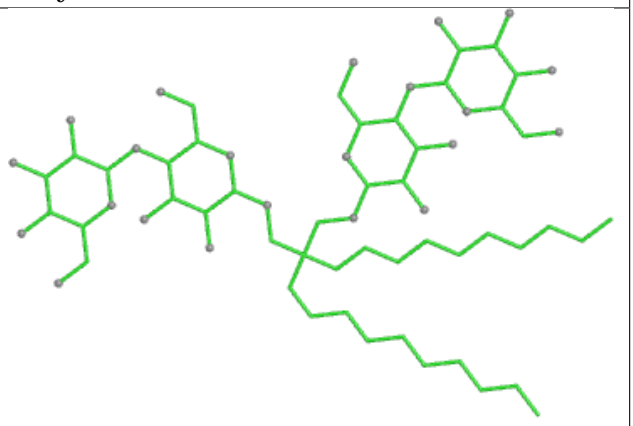

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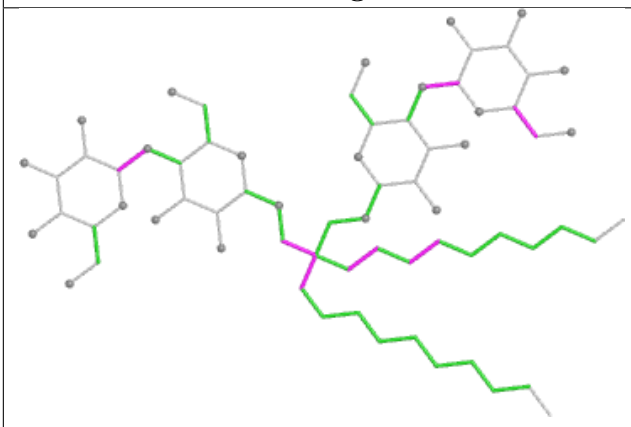

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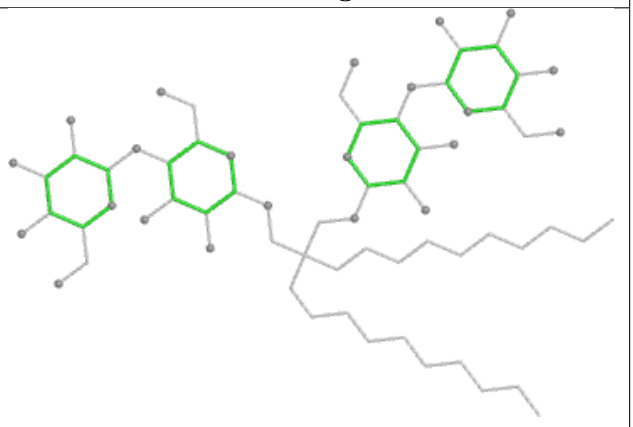
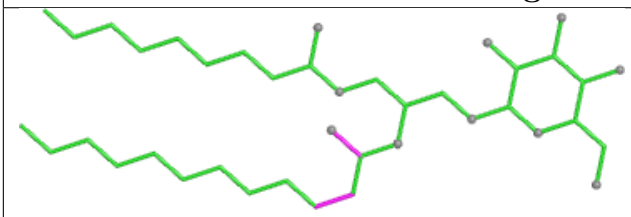


Rings

Ligand LMG J 102



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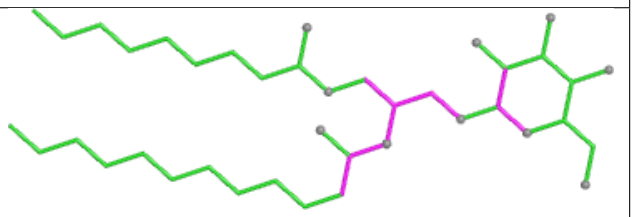
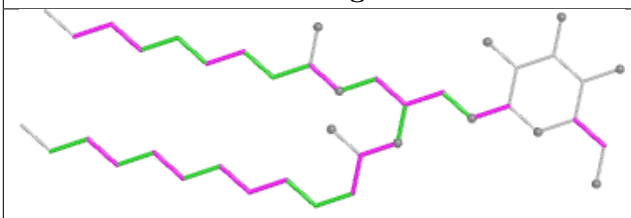


Bond angles



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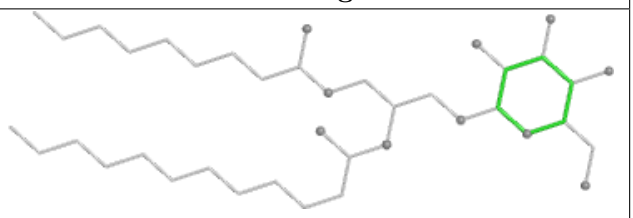
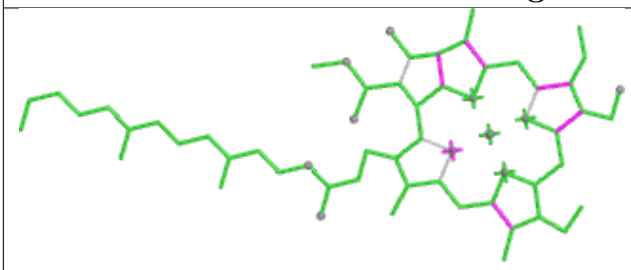


Rings

Ligand CHL v 311



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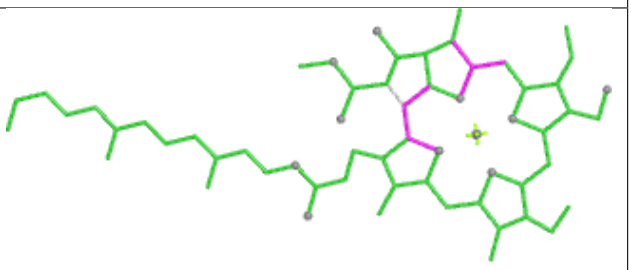
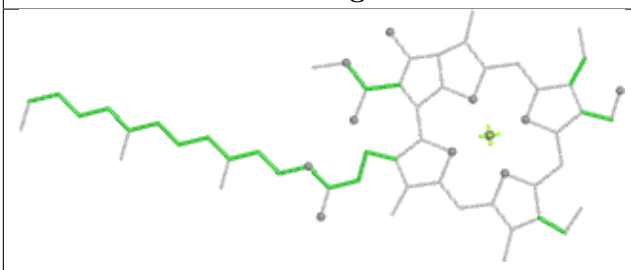


Bond angles



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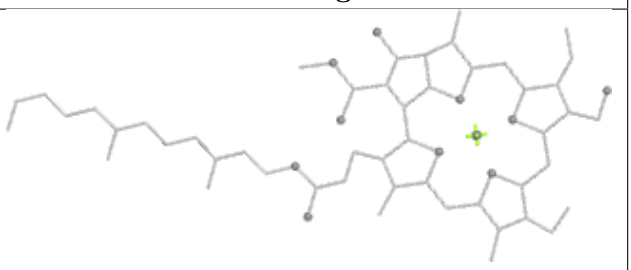
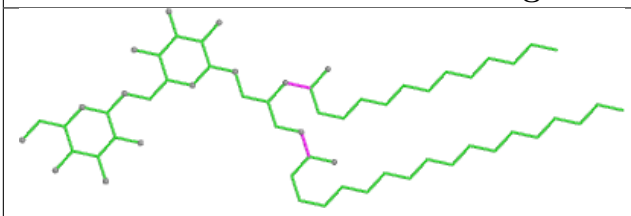
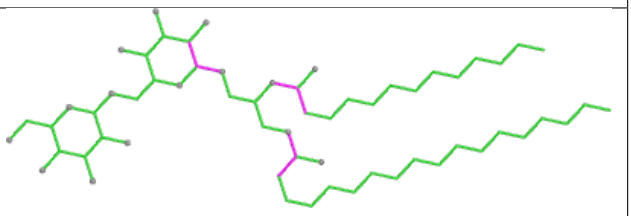


Rings

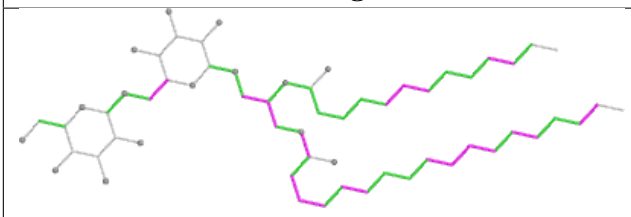
Ligand DGD b 621



Bond lengths



Bond angles



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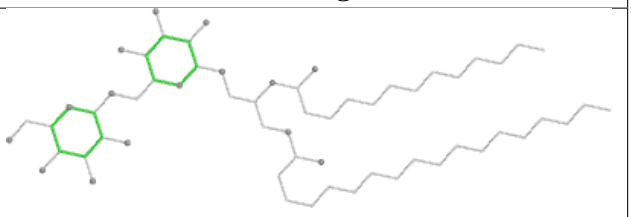
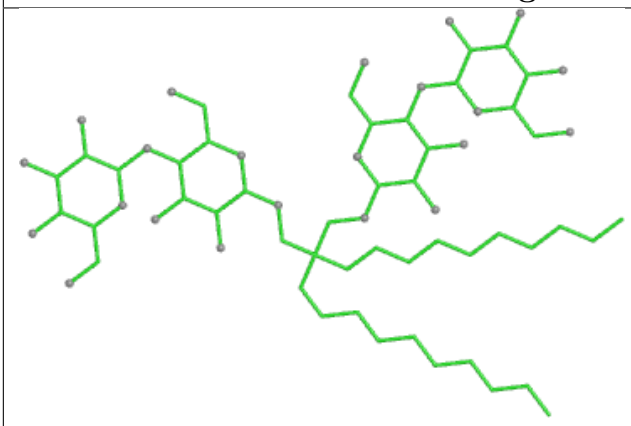
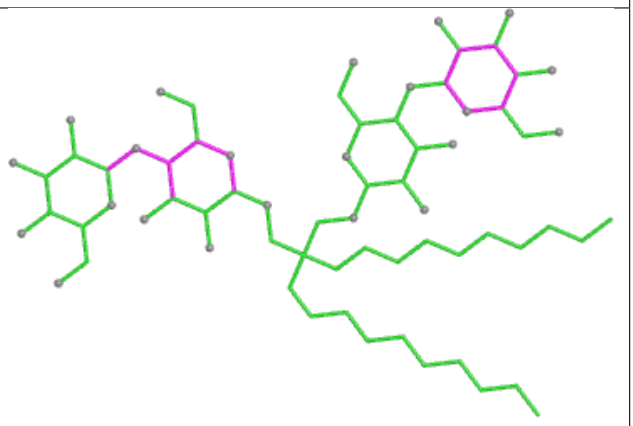


Rings

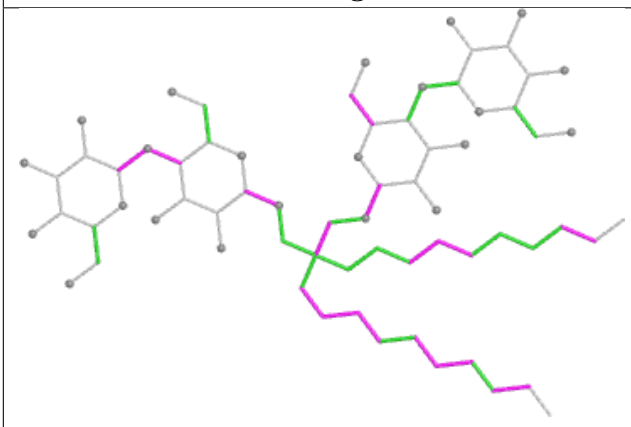
Ligand LMN N 320



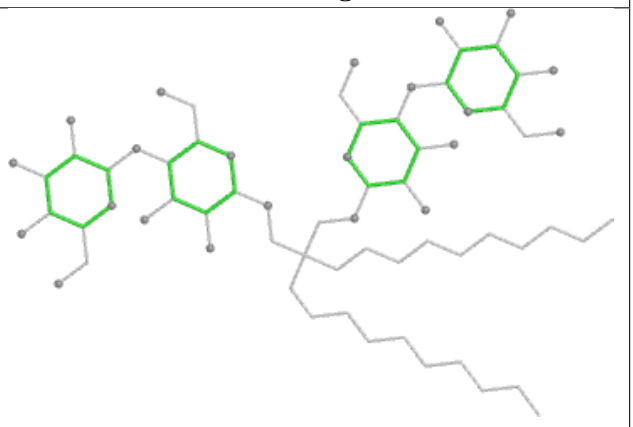
Bond lengths



Bond angles

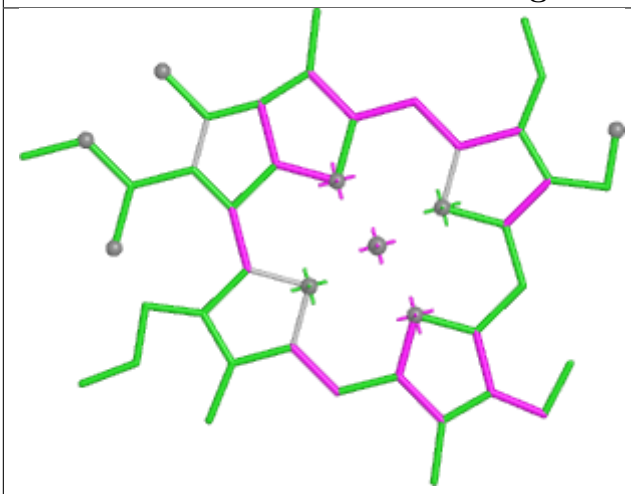


Torsions

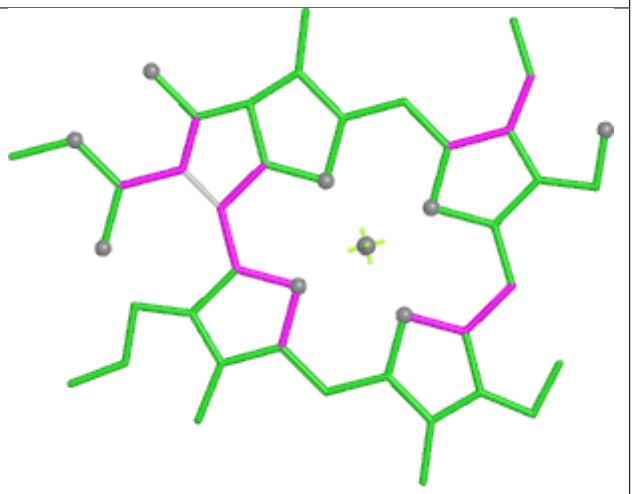


Rings

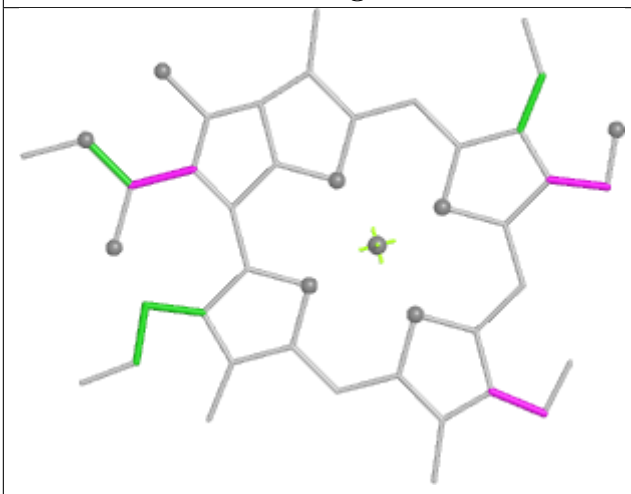
Ligand CHL s 306



Bond lengths



Bond angles



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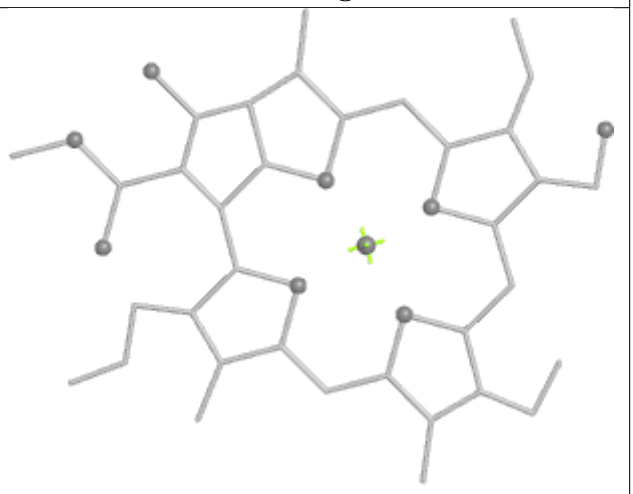
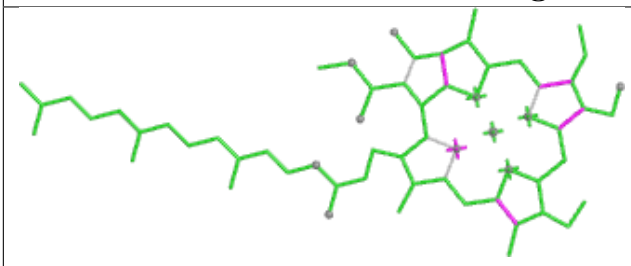


Rings

Ligand CHL s 310



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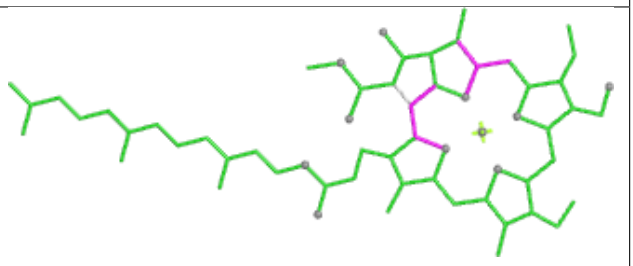
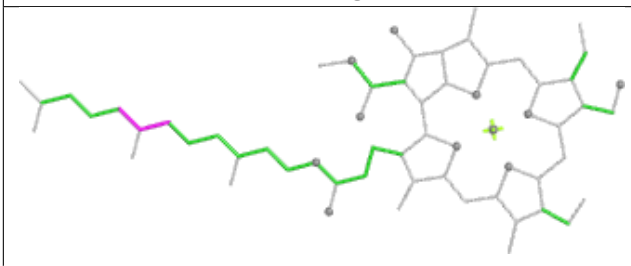


Bond angles



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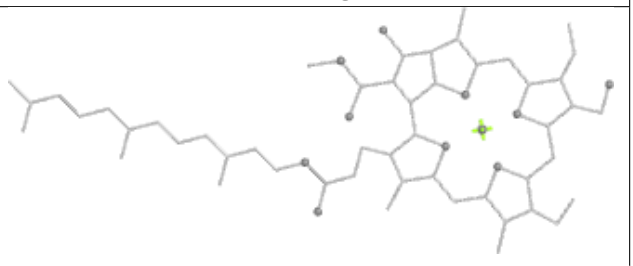
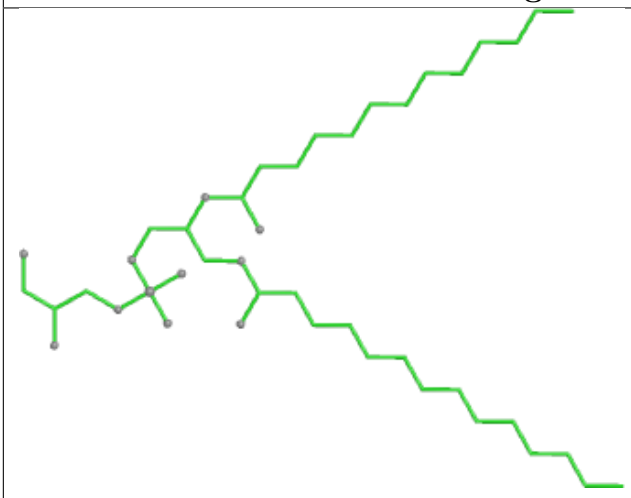
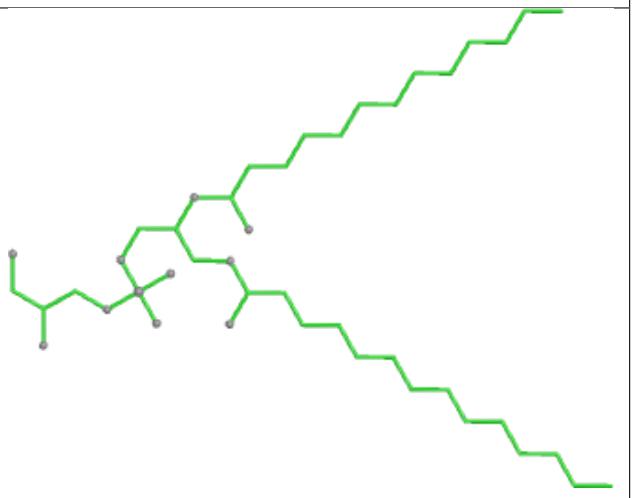


Rings

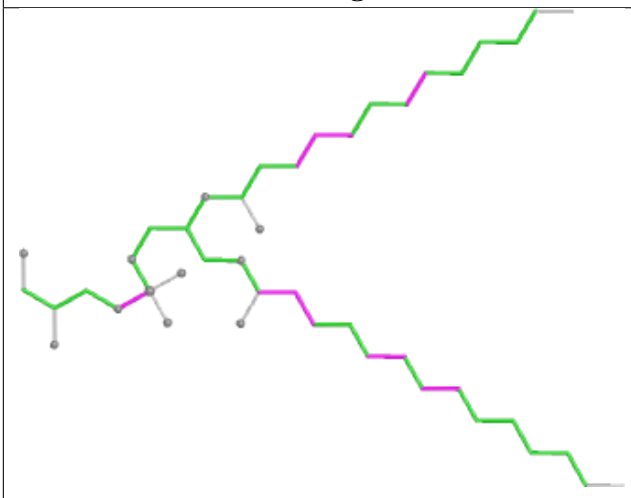
Ligand LHG L 101



Bond lengths



Bond angles



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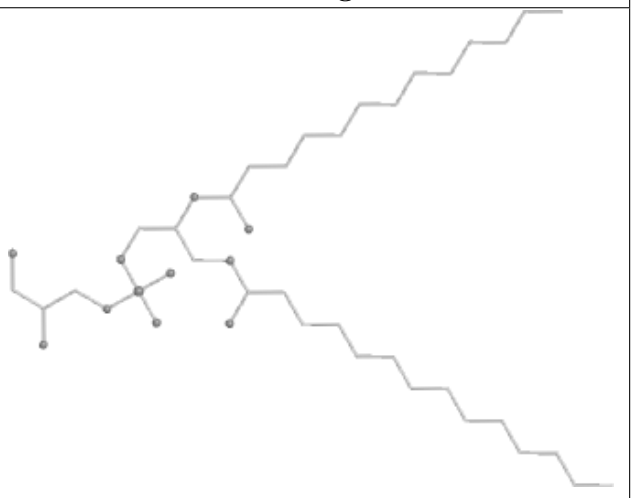
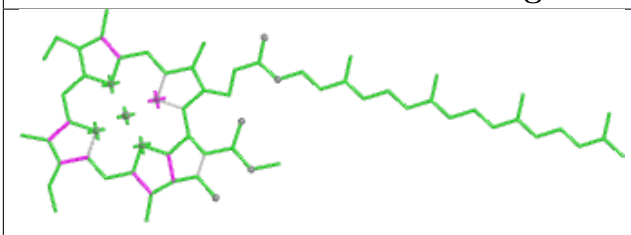
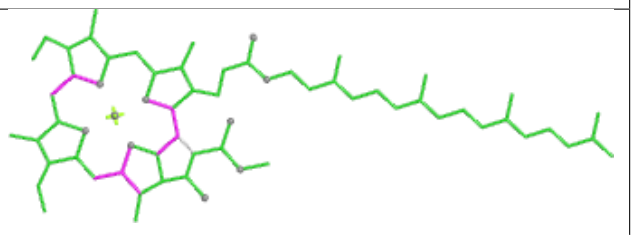


Rings

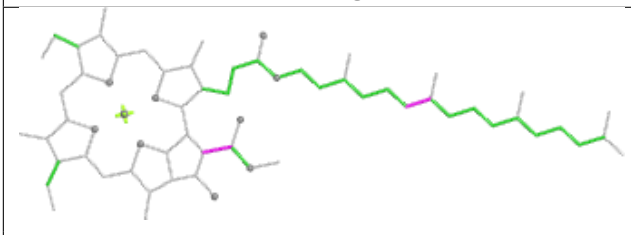
Ligand CLA B 610



Bond lengths



Bond angles



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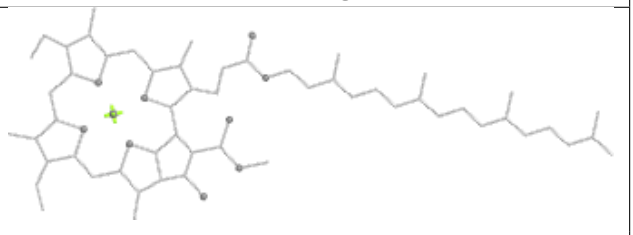
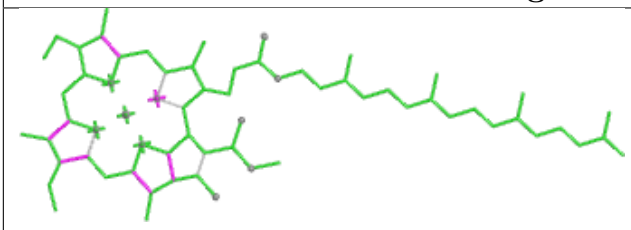
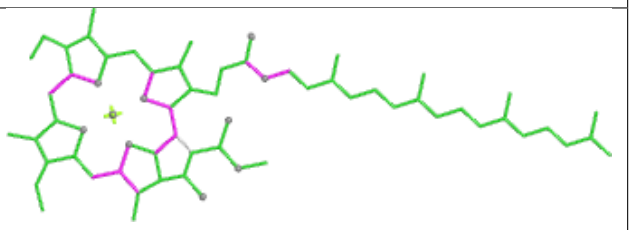
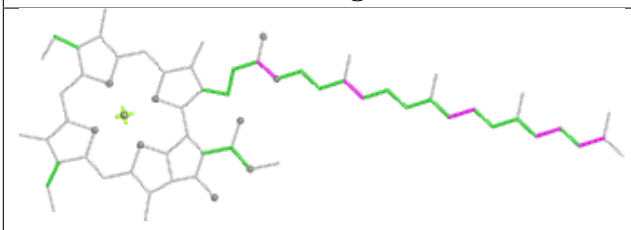
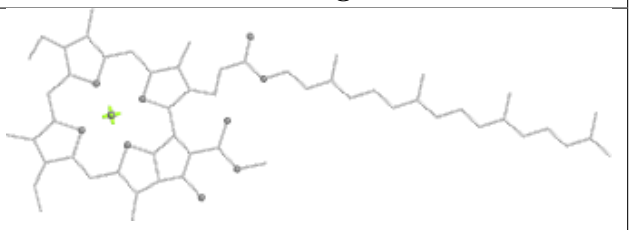
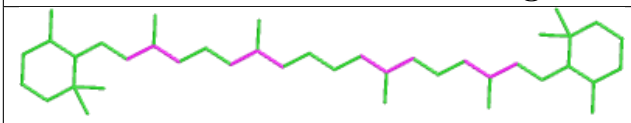
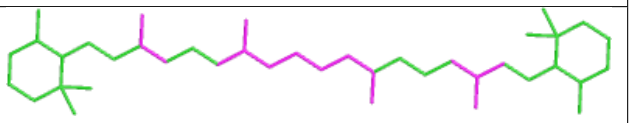
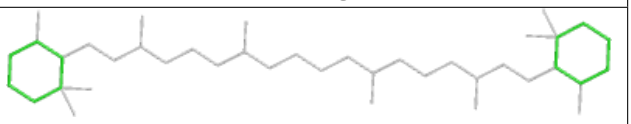
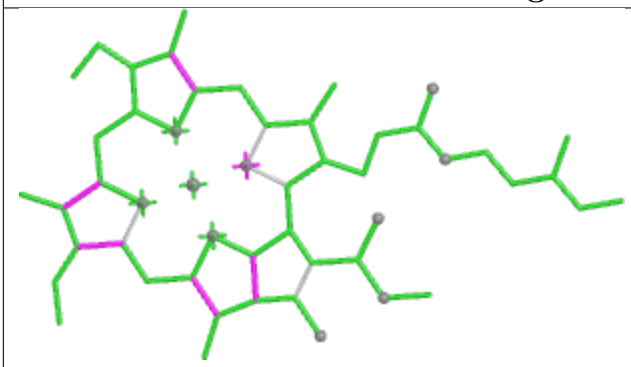
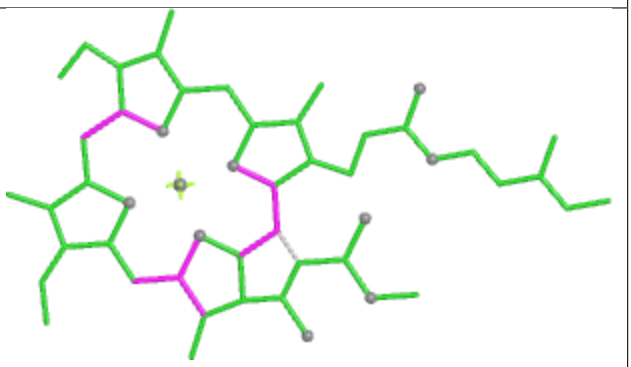
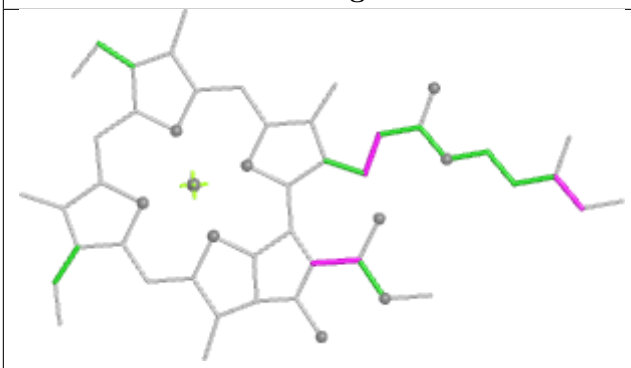
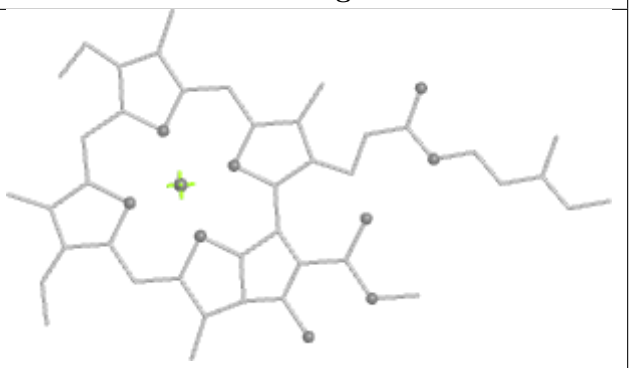
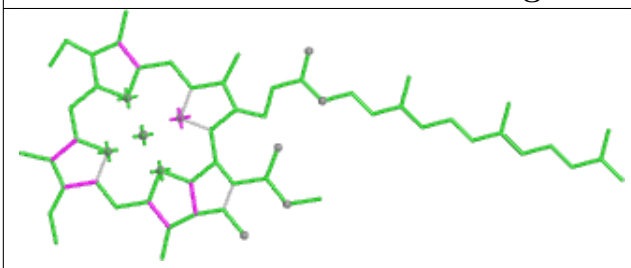
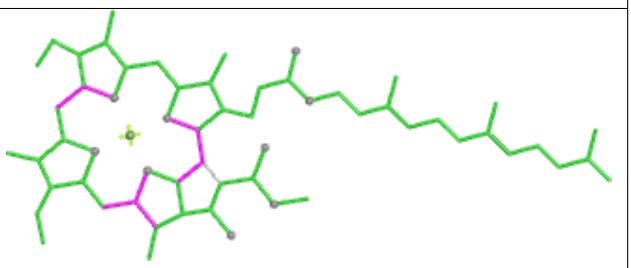
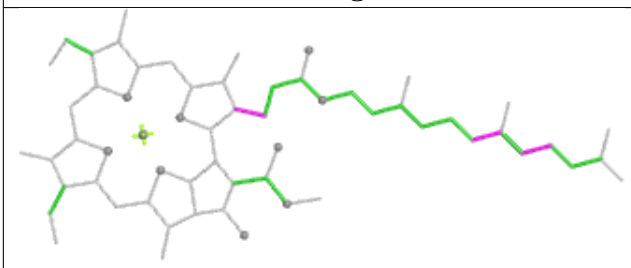
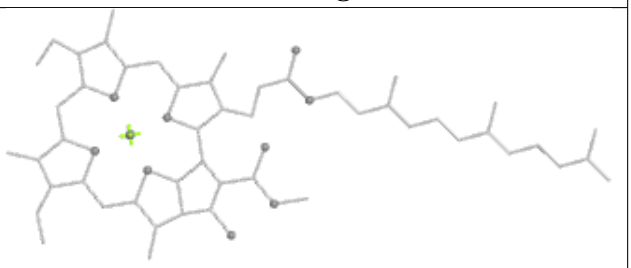


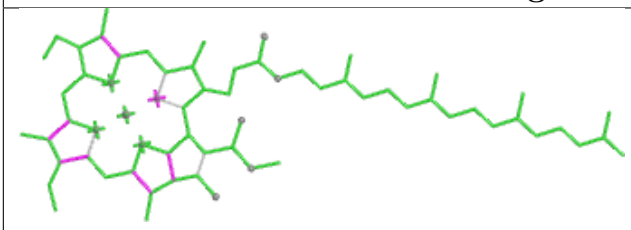
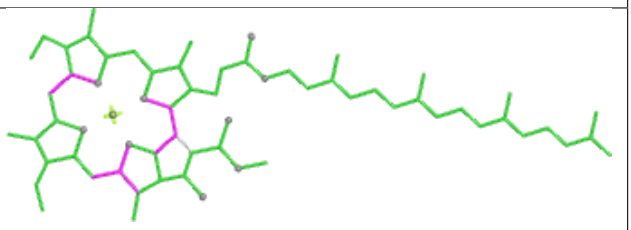
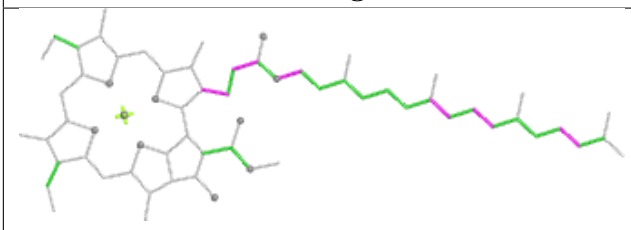
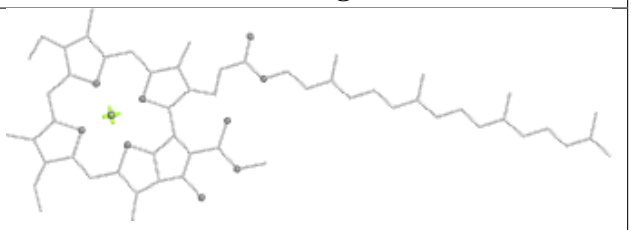
Rings

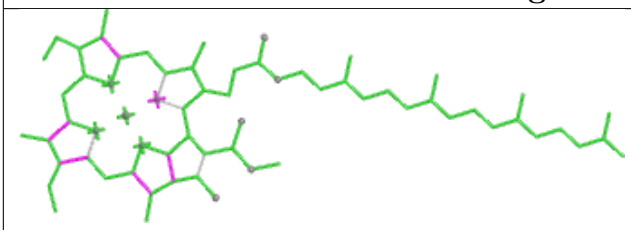
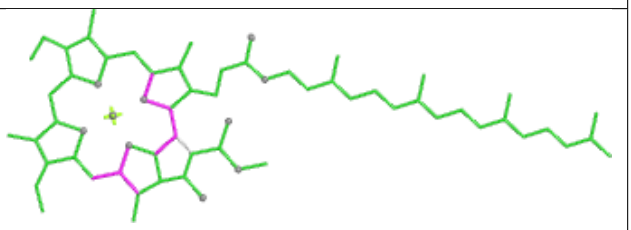
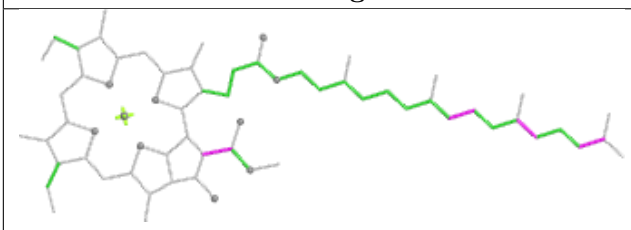
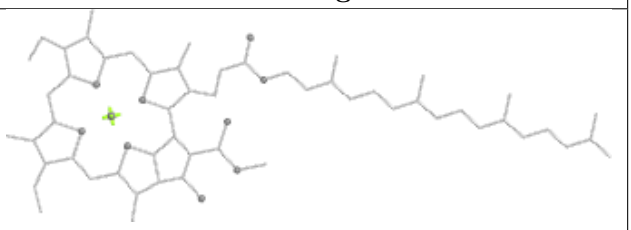
Ligand CLA u 412	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR B 604	
	
Bond lengths	Bond angles
	
Torsions	Rings

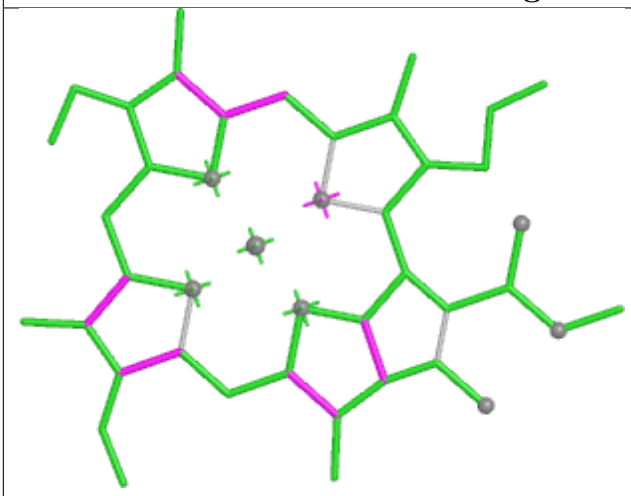
Ligand CLA b 620	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA N 312	
 Bond lengths	 Bond angles
 Torsions	 Rings

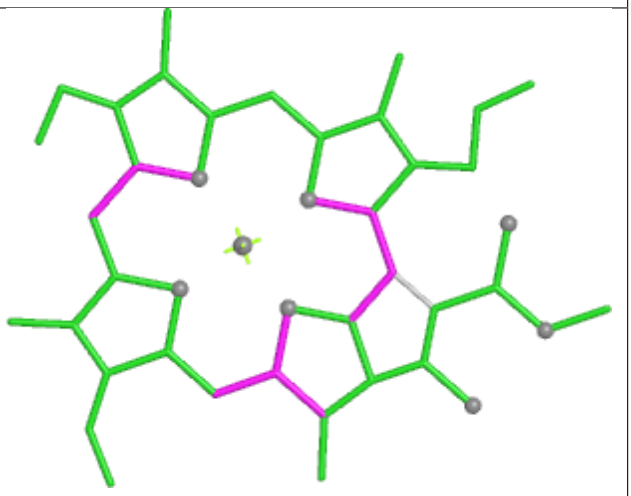
Ligand CLA v 315	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

Ligand CLA a 416	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

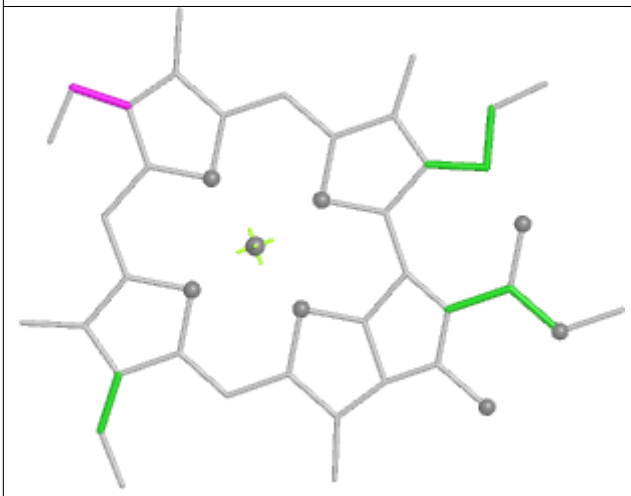
Ligand CLA N 315



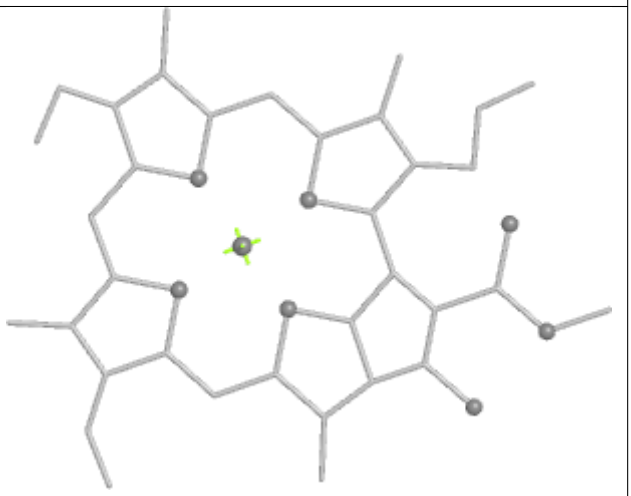
Bond lengths



Bond angles

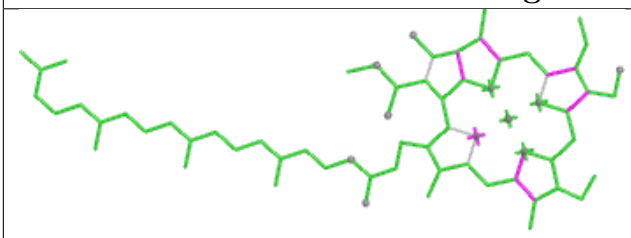


Torsions

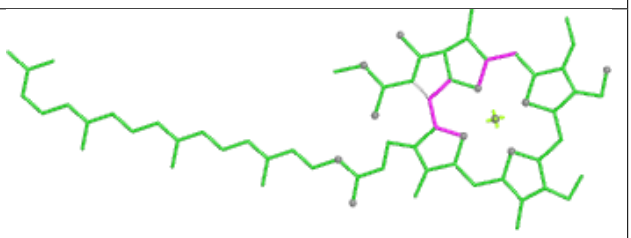


Rings

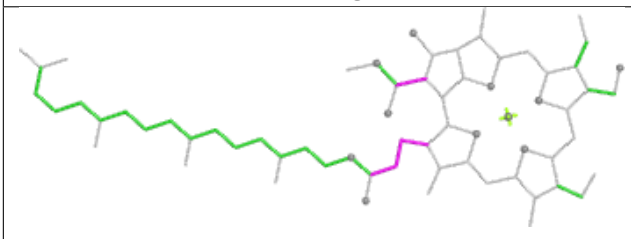
Ligand CHL V 305



Bond lengths



Bond angles



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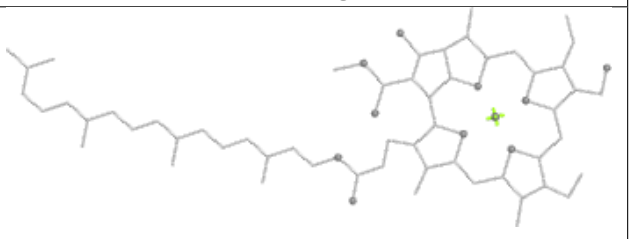
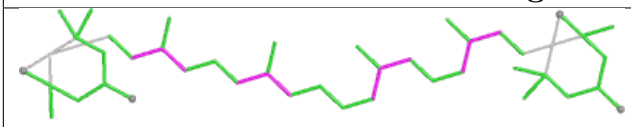
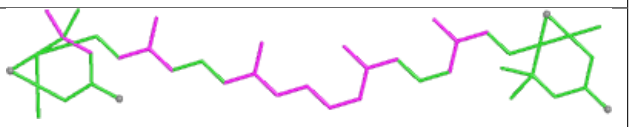
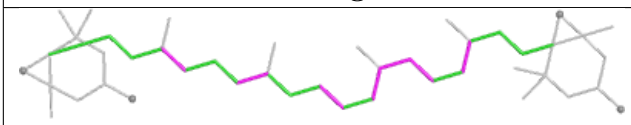
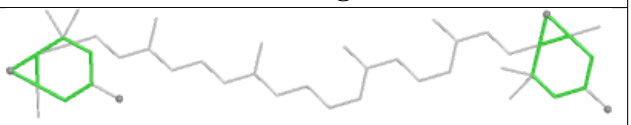
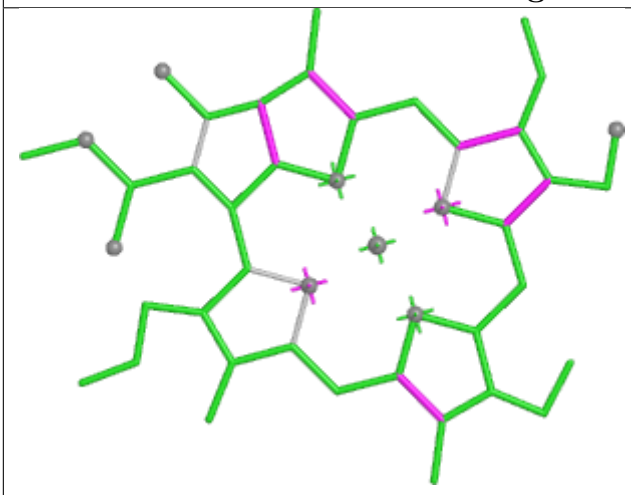
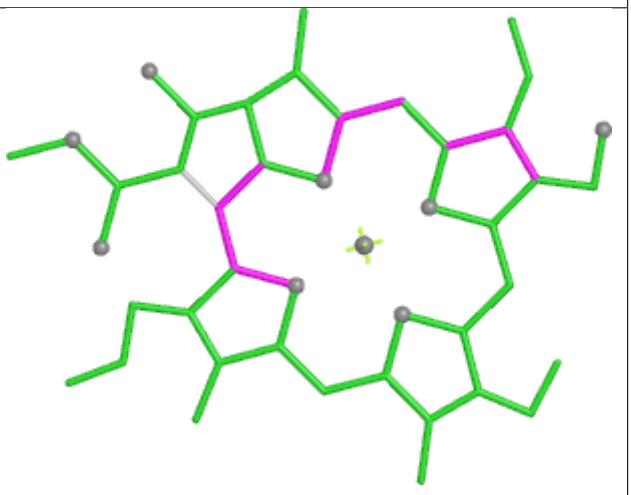
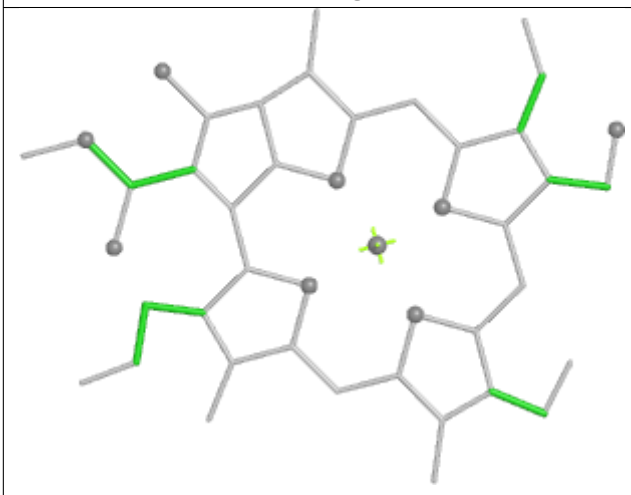
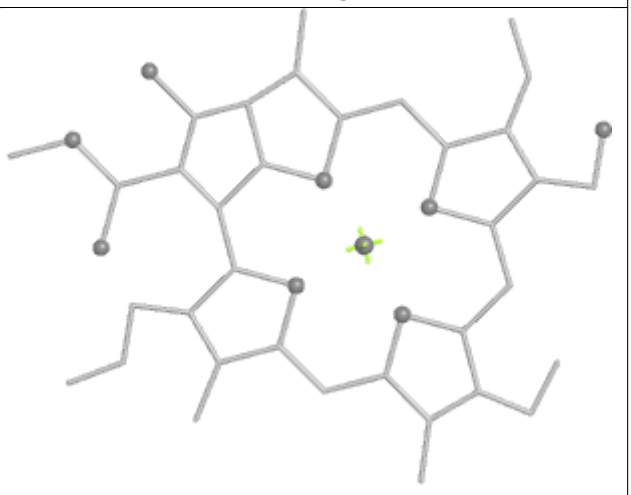
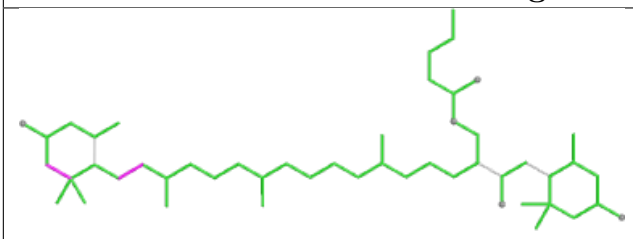


Rings

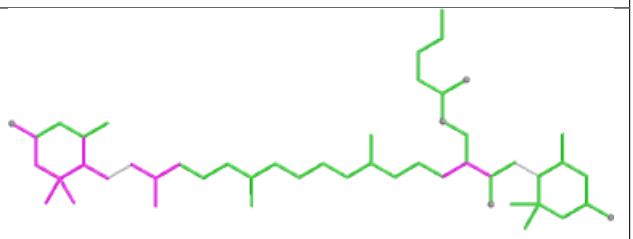
Ligand XAT v 319	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CHL v 308	
 Bond lengths	 Bond angles
 Torsions	 Rings

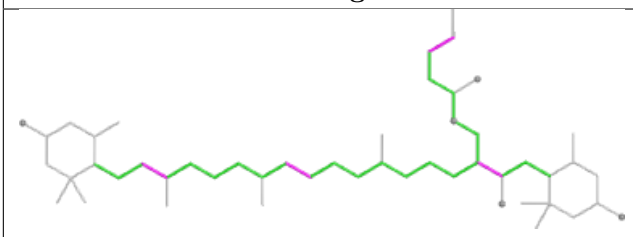
Ligand 0UR S 315



Bond lengths



Bond angles



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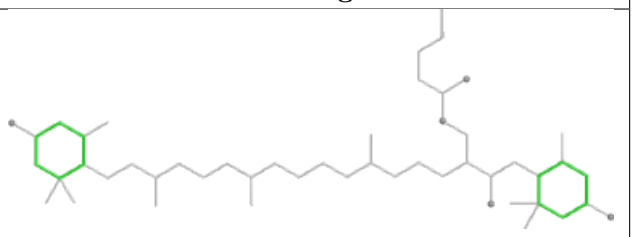
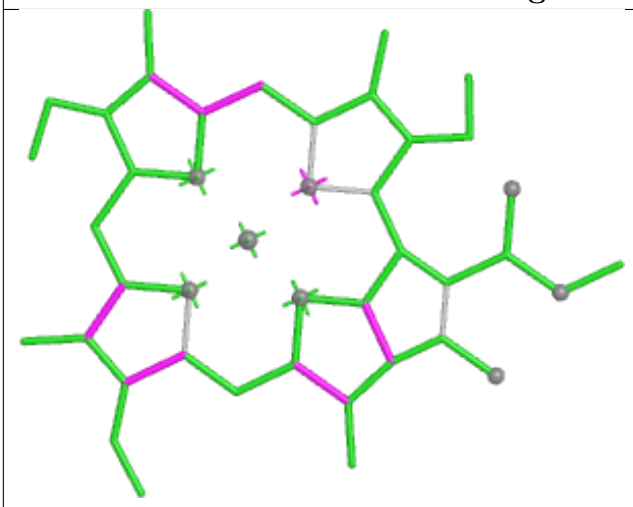


Rings

Ligand CLA 1 306



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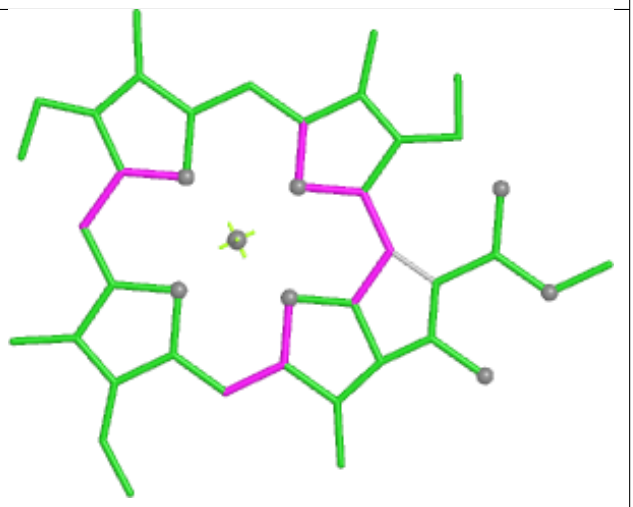
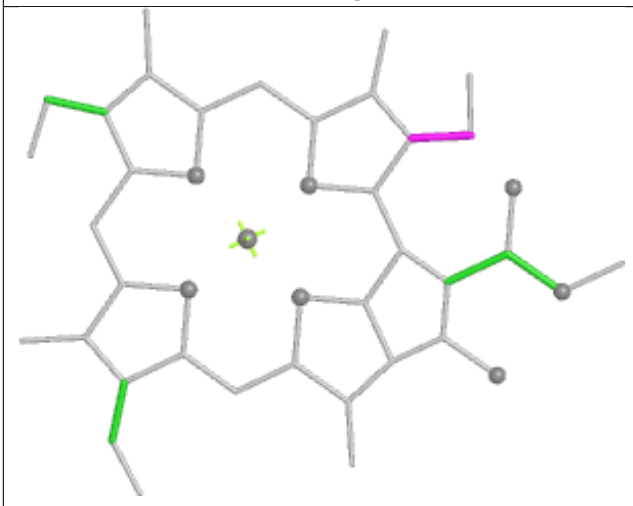


Bond angles



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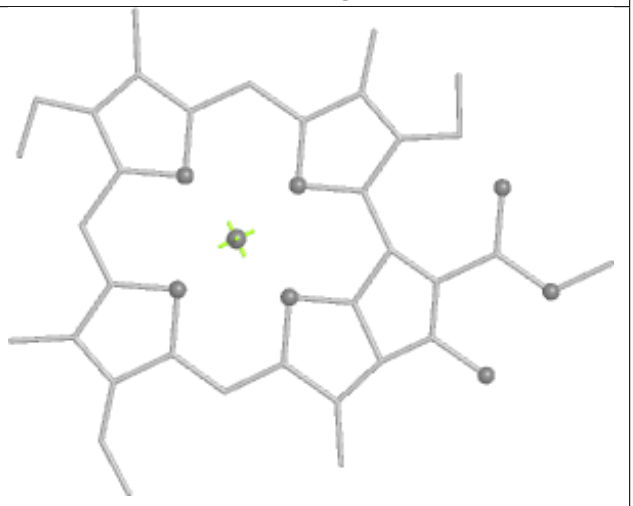
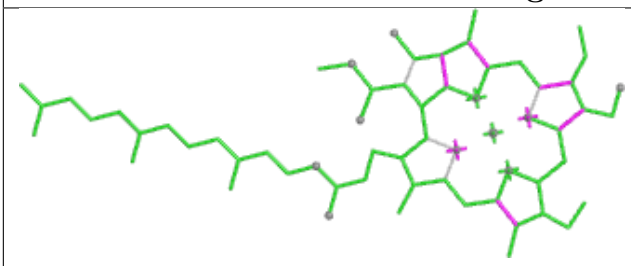


Rings

Ligand CHL u 410



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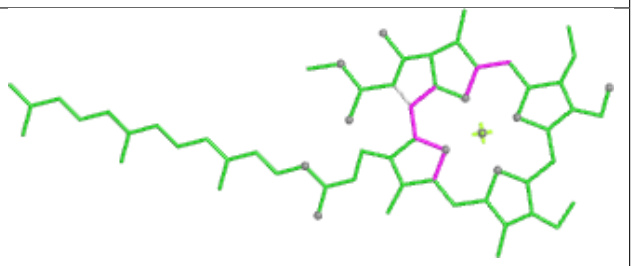

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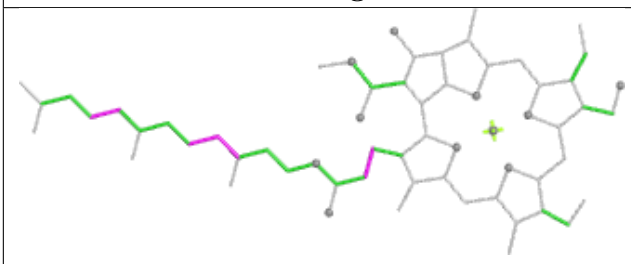

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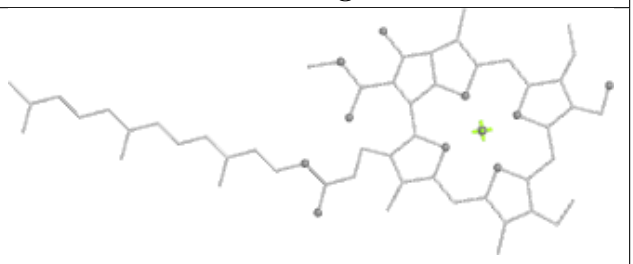
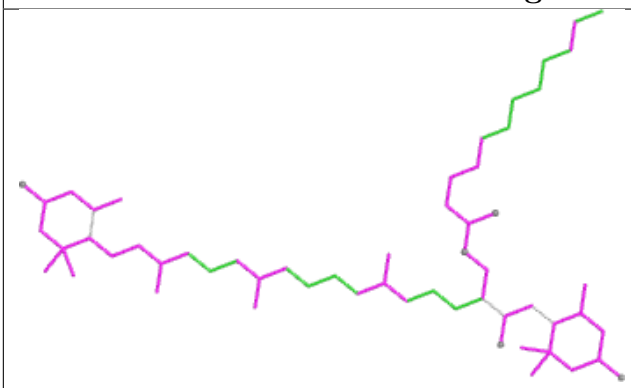


Rings

Ligand 0UR Y 322



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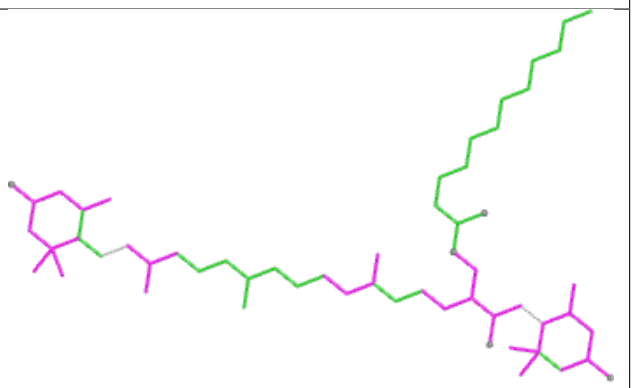

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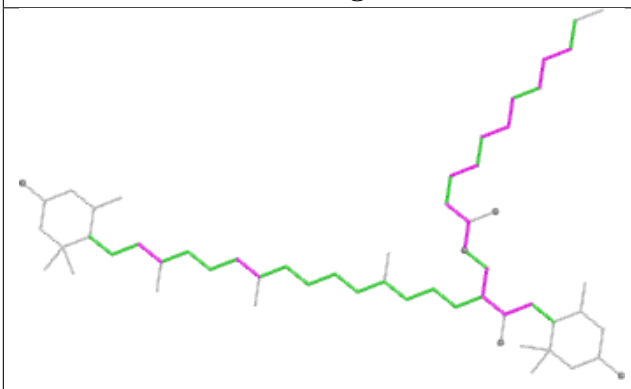

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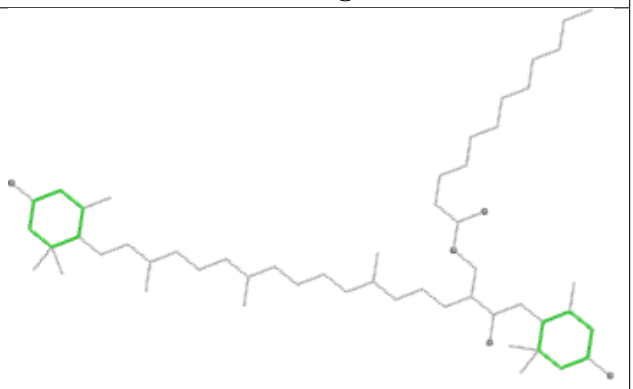
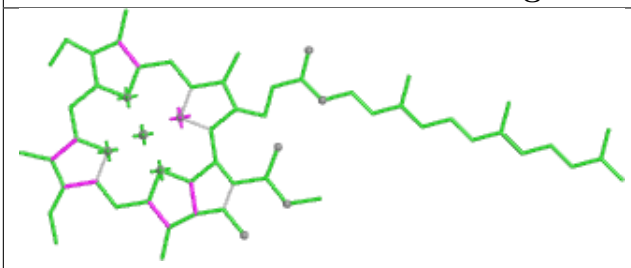


Rings

Ligand CLA V 314



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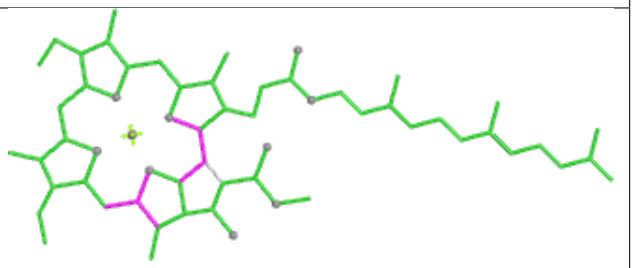

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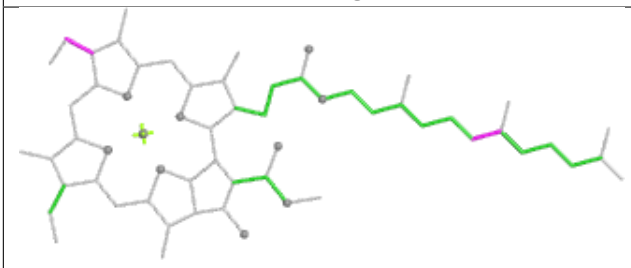

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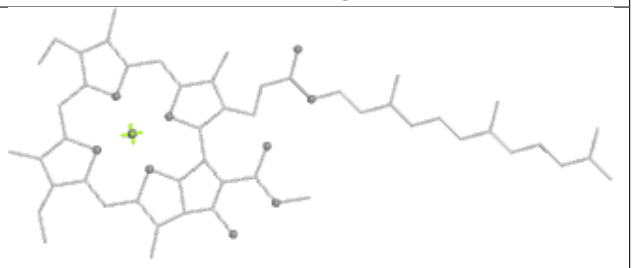
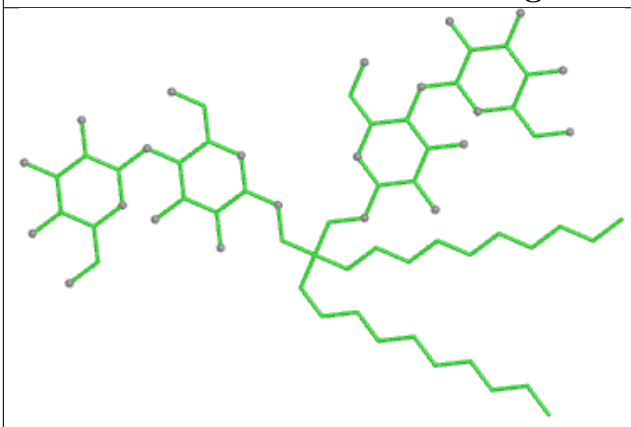


Rings

Ligand LMN c 519



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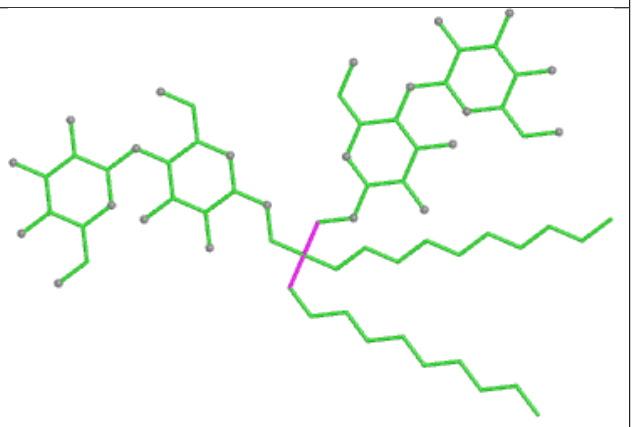

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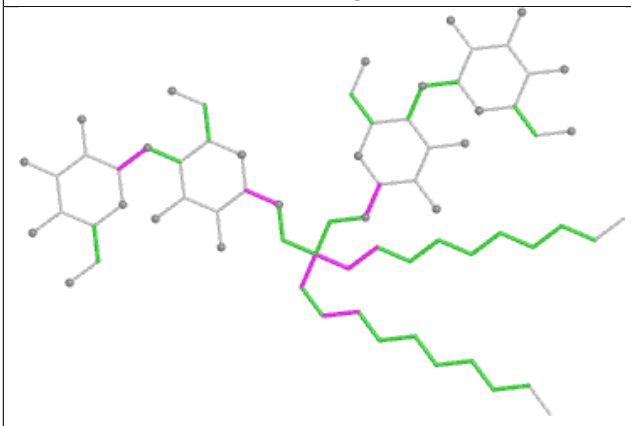

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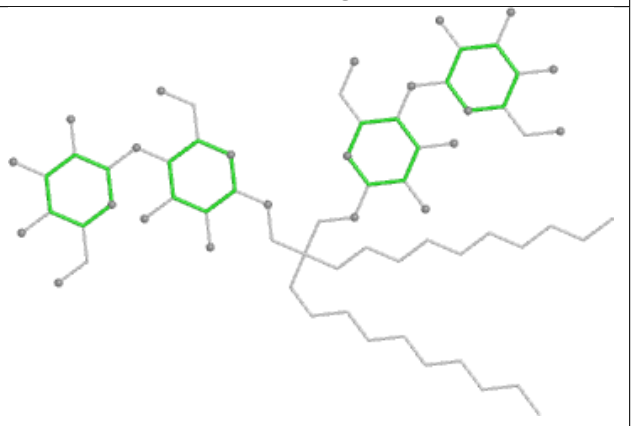
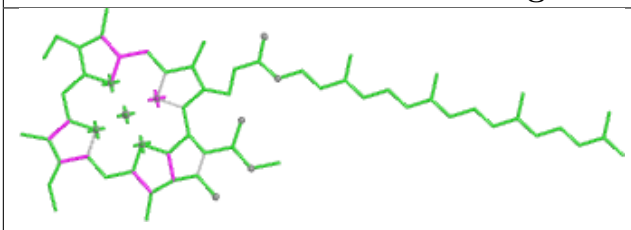


Rings

Ligand CLA y 303



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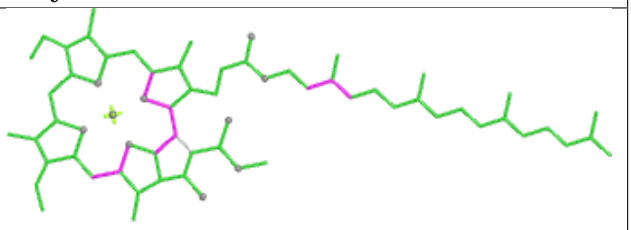
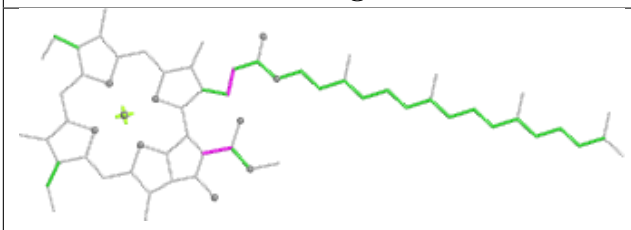


Bond angles



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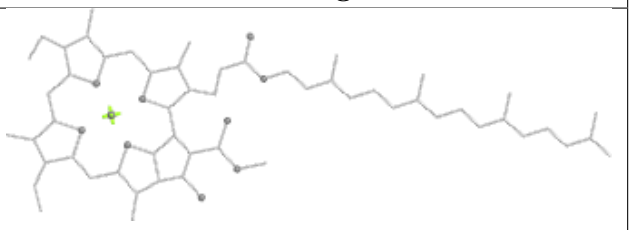
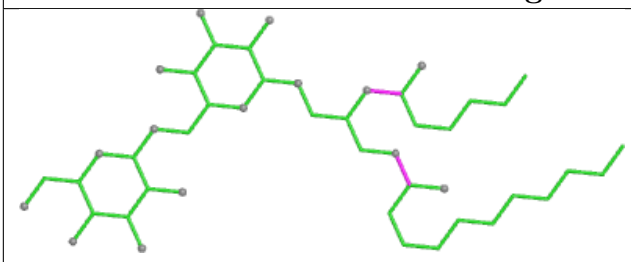


Rings

Ligand DGD c 518



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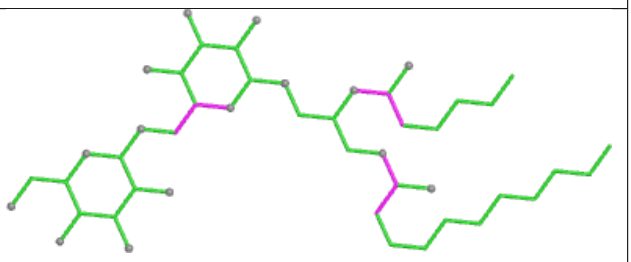

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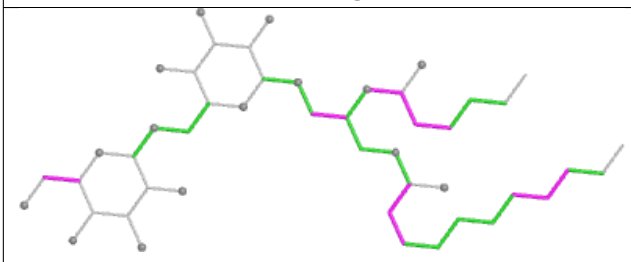

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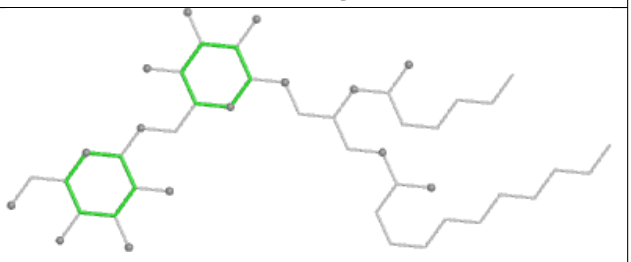
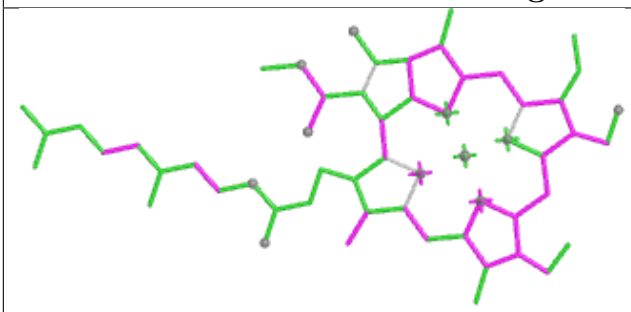


Rings

Ligand CHL g 316



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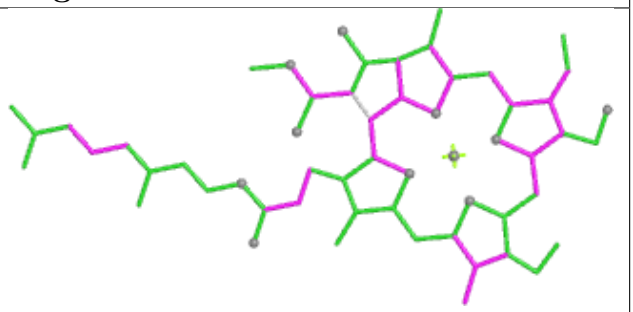

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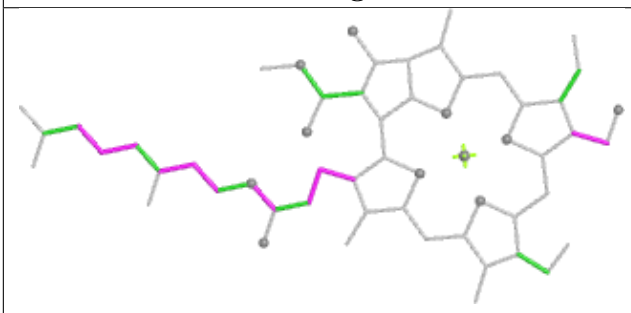

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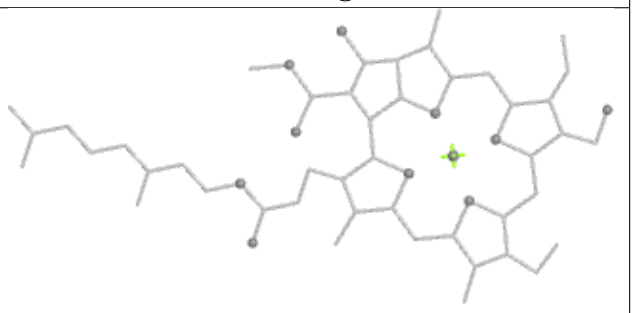
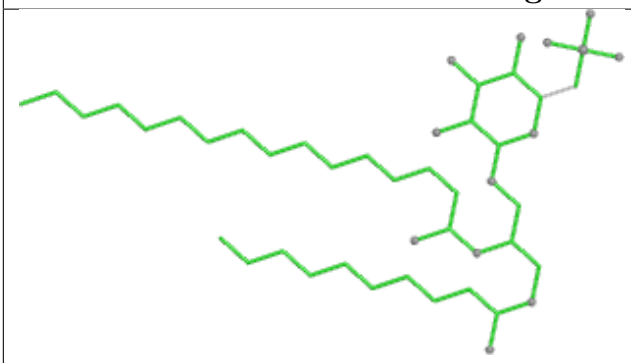


Rings

Ligand SQD B 615



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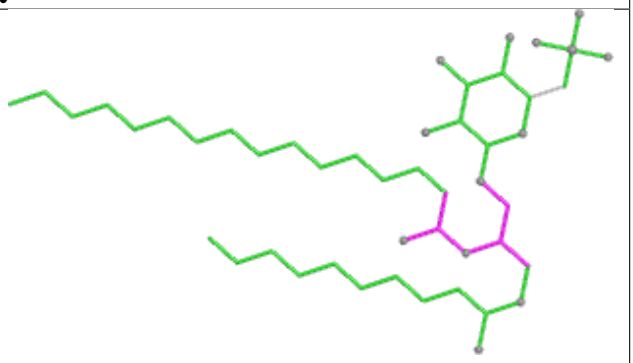
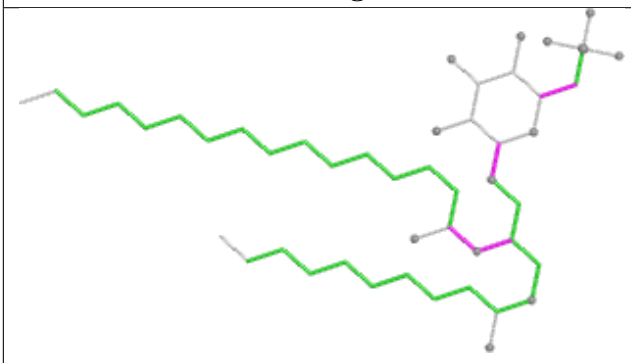


Bond angles



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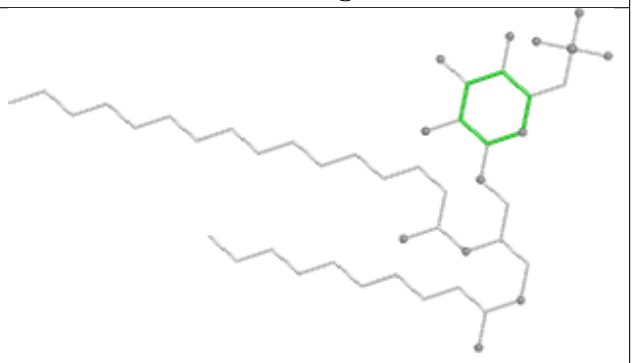
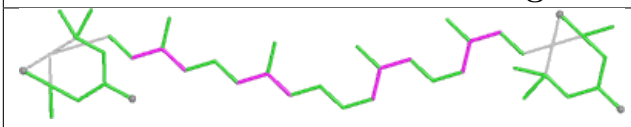
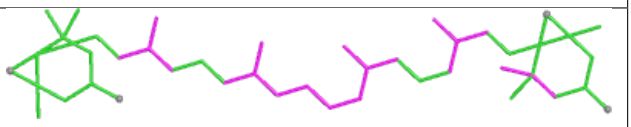
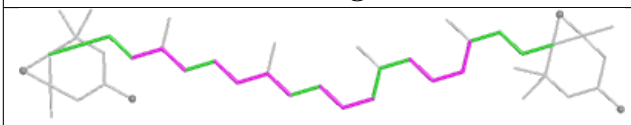
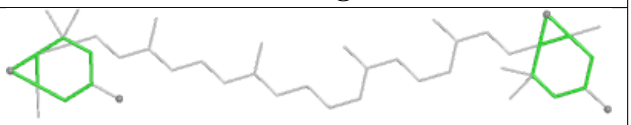


Rings

Ligand XAT S 317	
 Bond lengths	 Bond angles
 Torsions	 Rings

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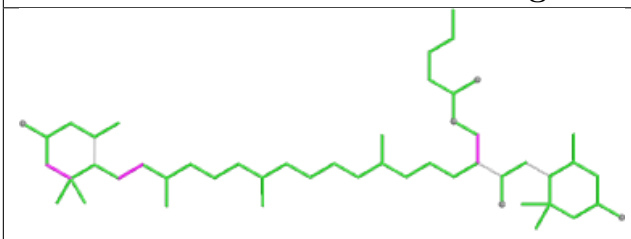
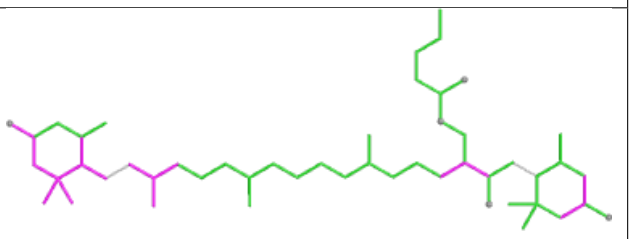
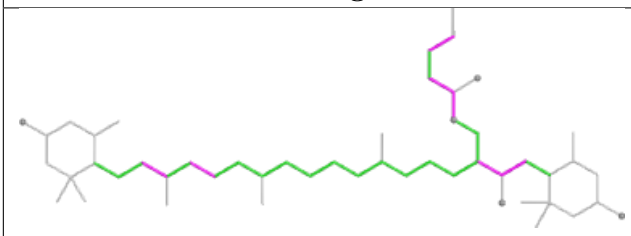
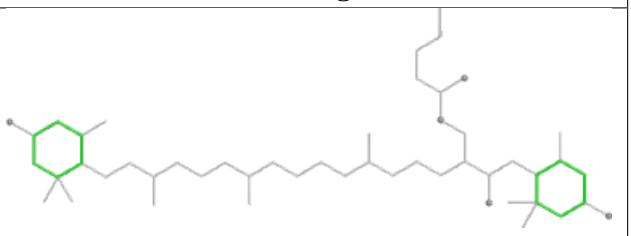
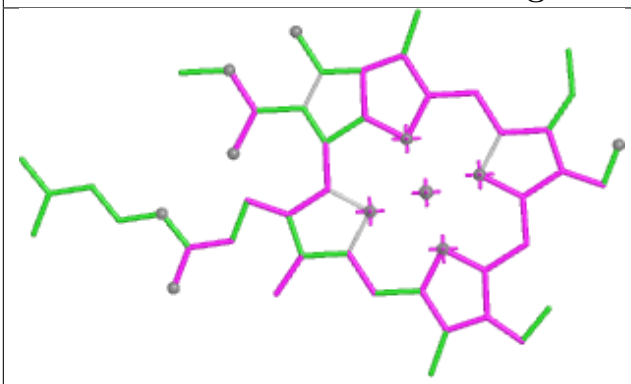
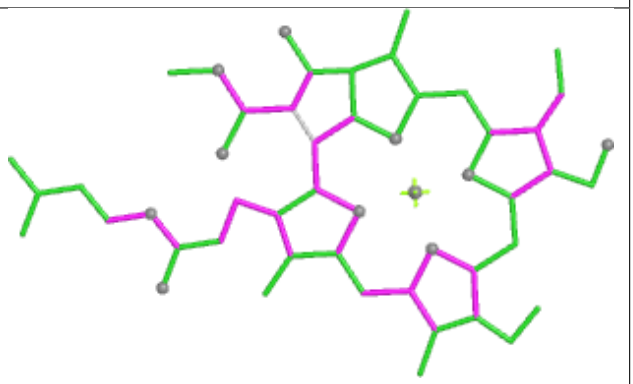
 Bond lengths	 Bond angles
 Torsions	 Rings

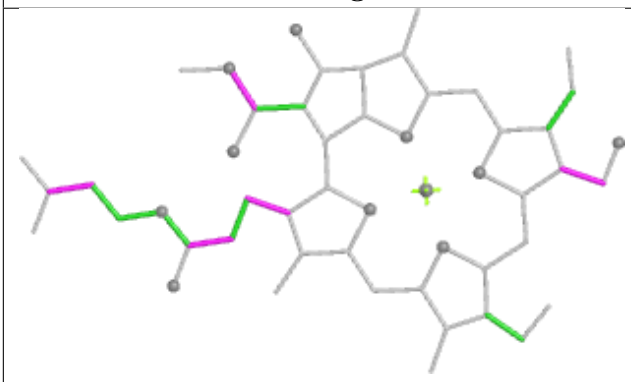
Ligand CHL v 307



Bond lengths



Bond angles



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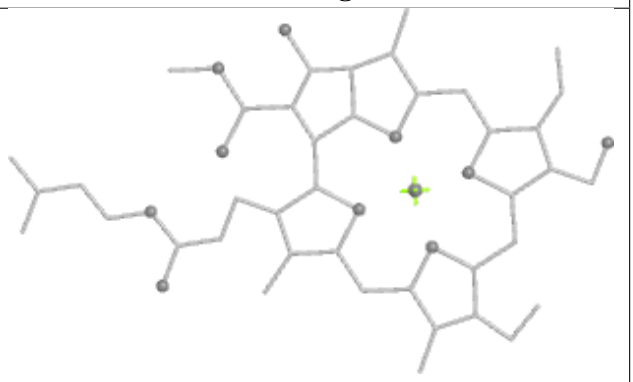
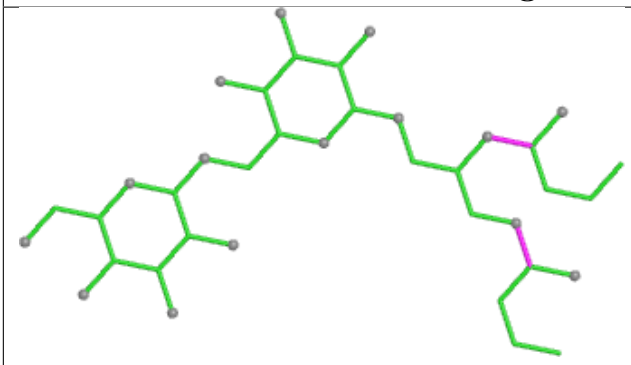


Rings

Ligand DGD G 302



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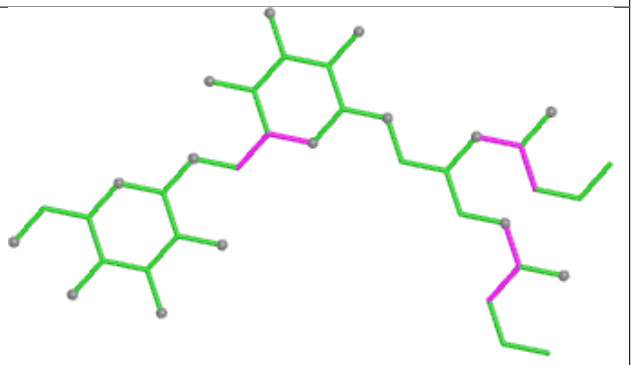
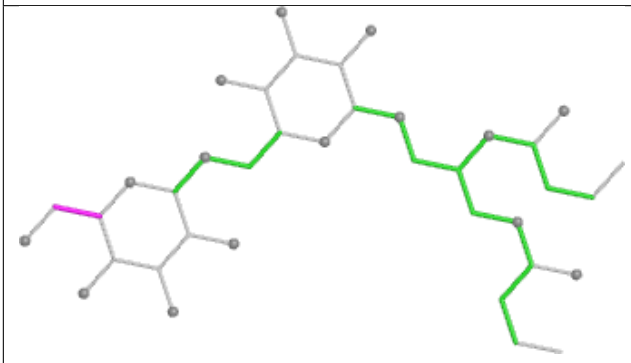


Bond angles



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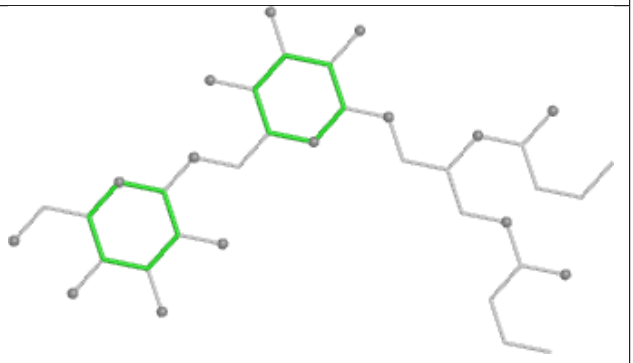
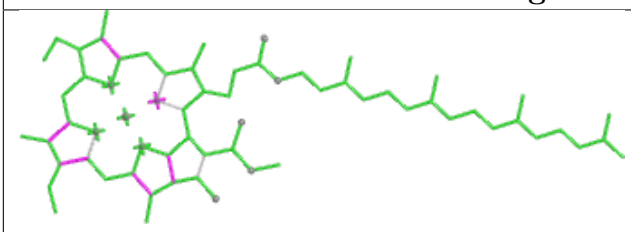


Rings

Ligand CLA a 403



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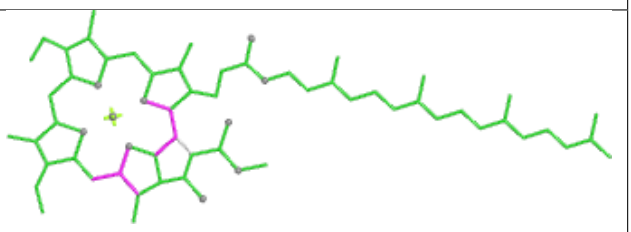
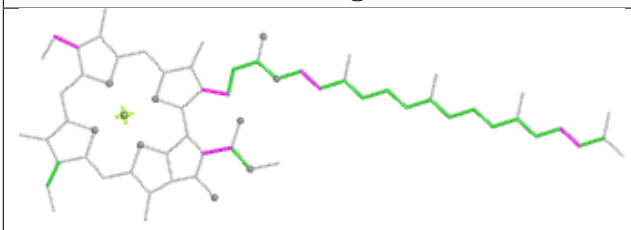


Bond angles



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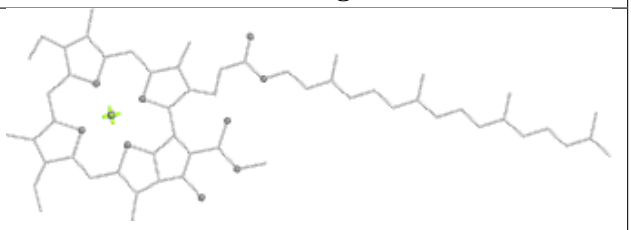
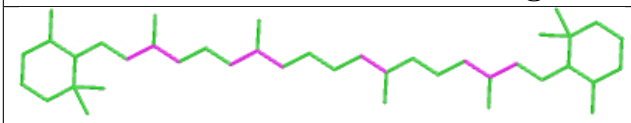
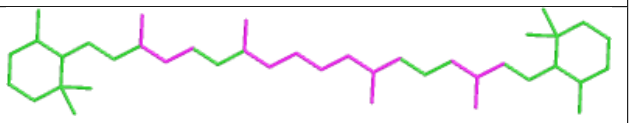


Rings

Ligand BCR b 603



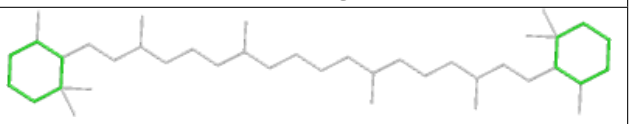
Bond lengths



Bond angles



Torsions

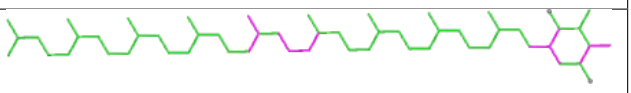


Rings

Ligand PL9 a 412



Bond lengths



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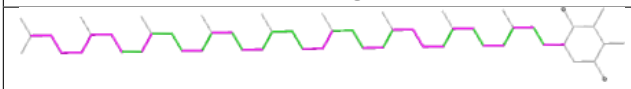

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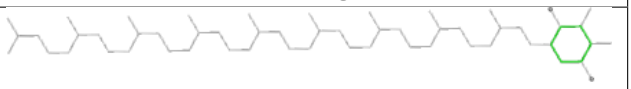
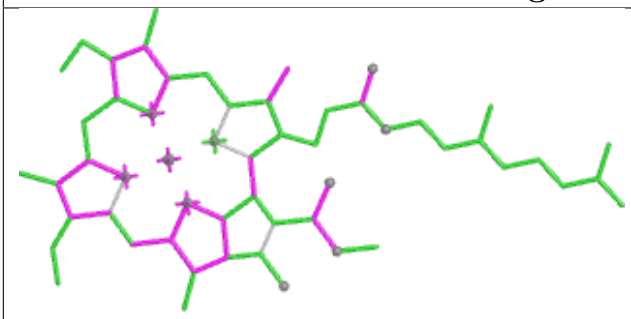


Rings

Ligand CLA g 312



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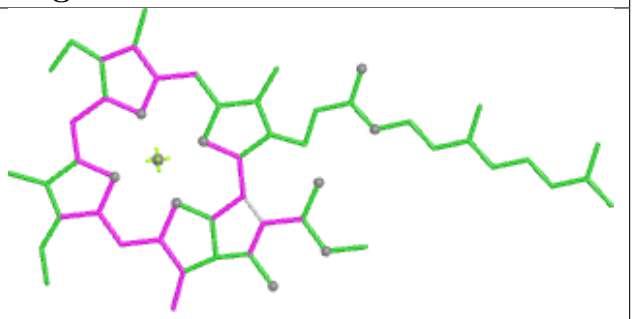
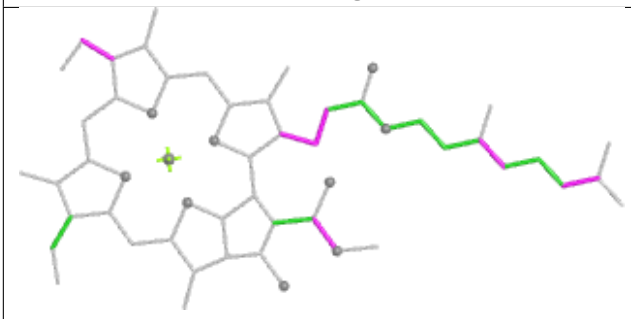


Bond angles



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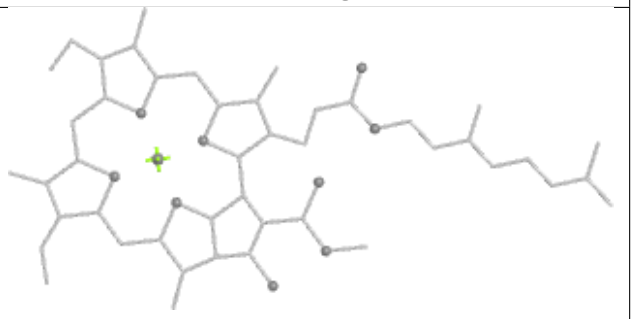
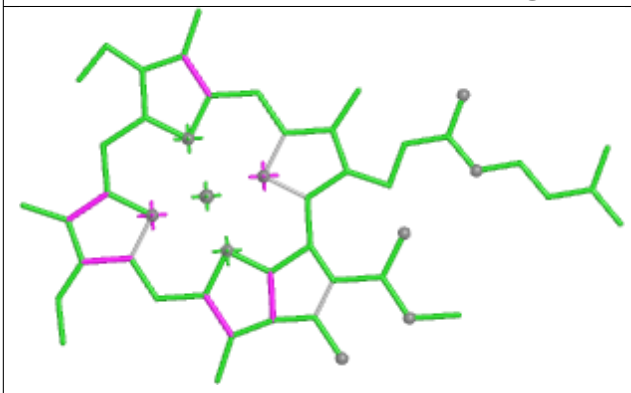


Rings

Ligand CLA V 308



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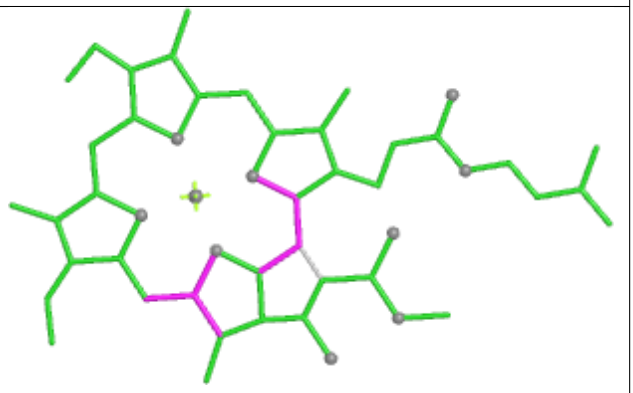

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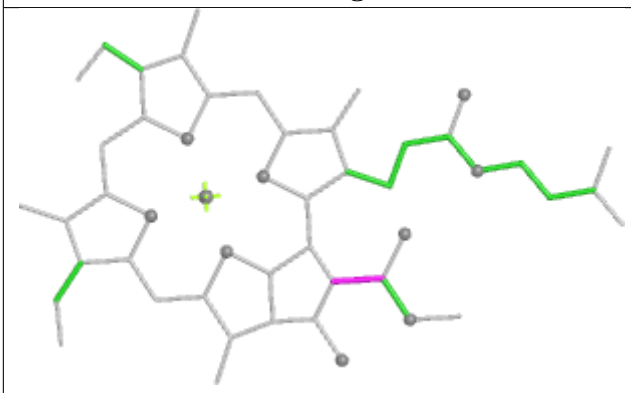

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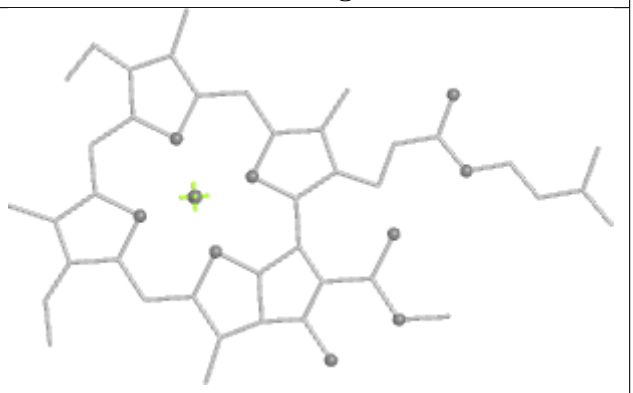
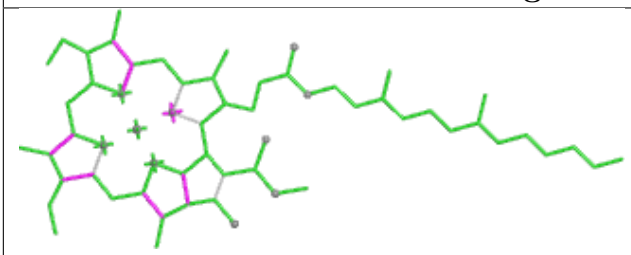


Rings

Ligand CLA V 317



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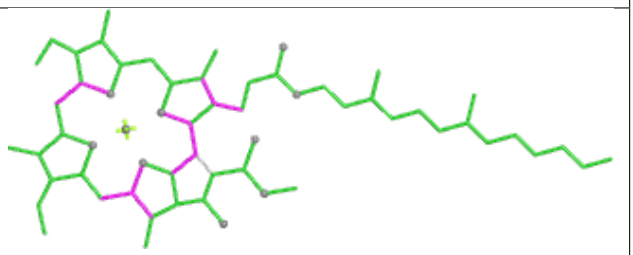

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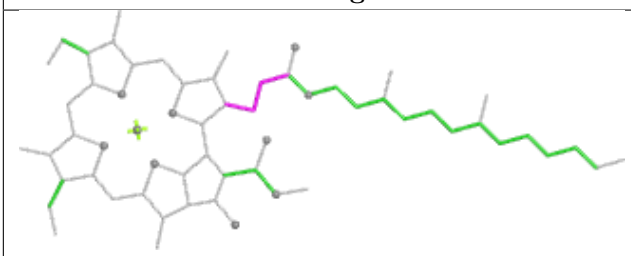

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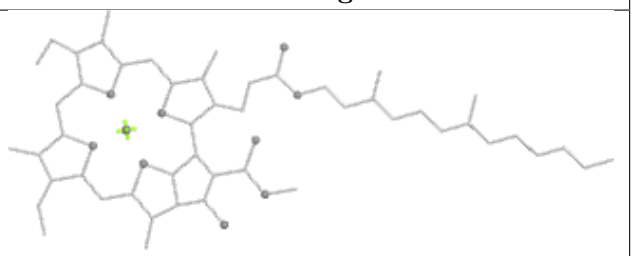
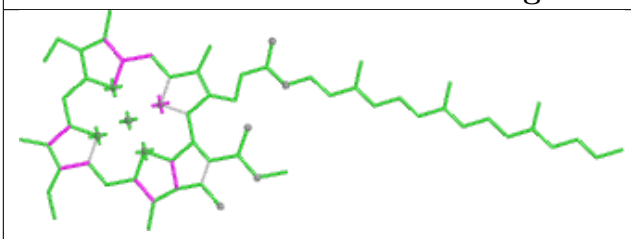


Rings

Ligand CLA D 410



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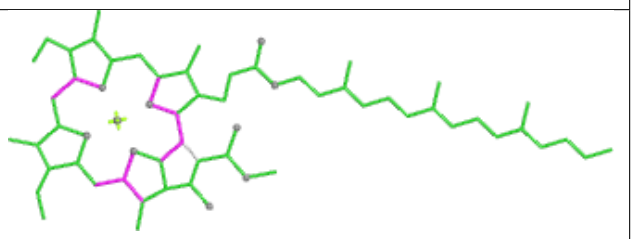

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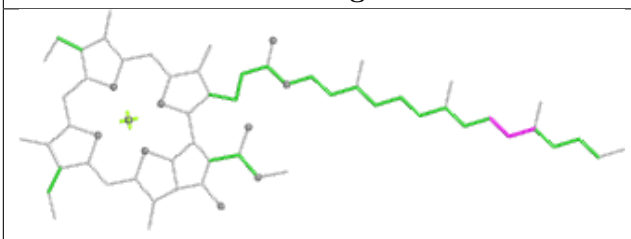

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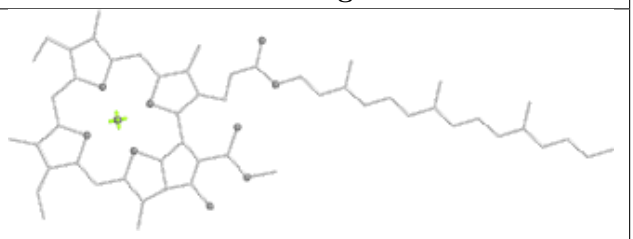
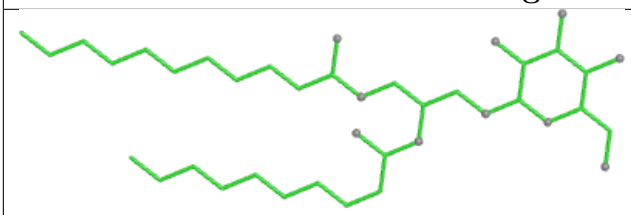


Rings

Ligand LMG u 403



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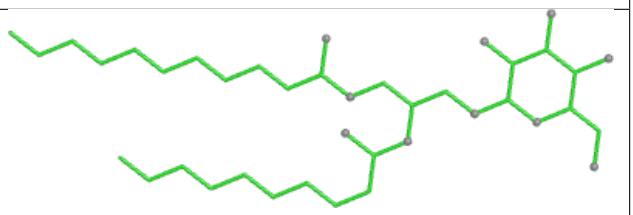

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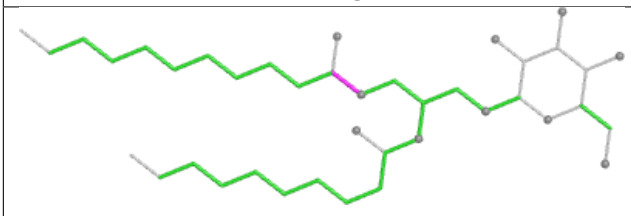

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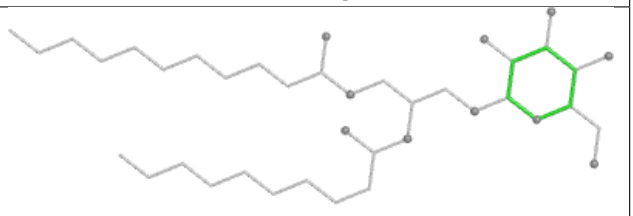
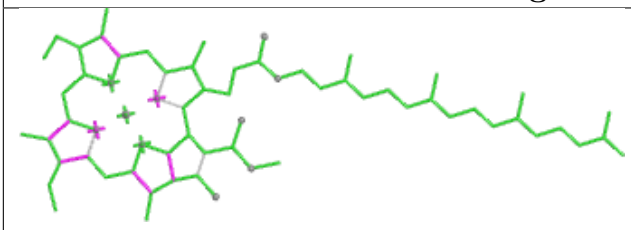


Rings

Ligand CLA c 503



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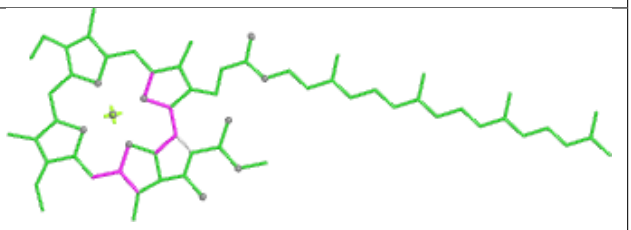

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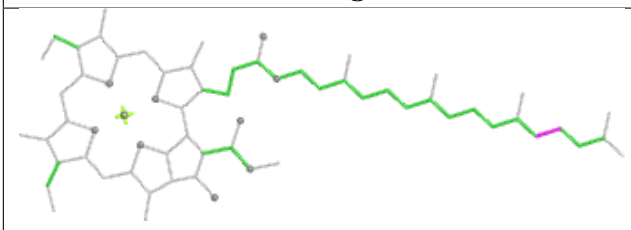

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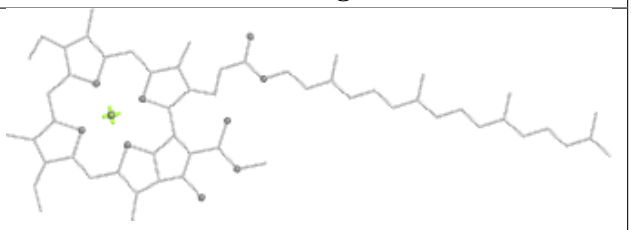
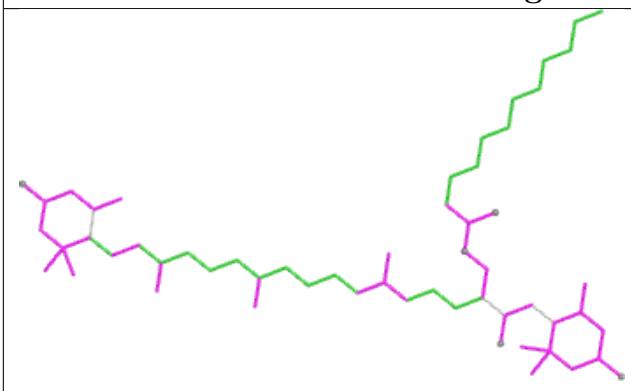


Rings

Ligand 0UR Y 317



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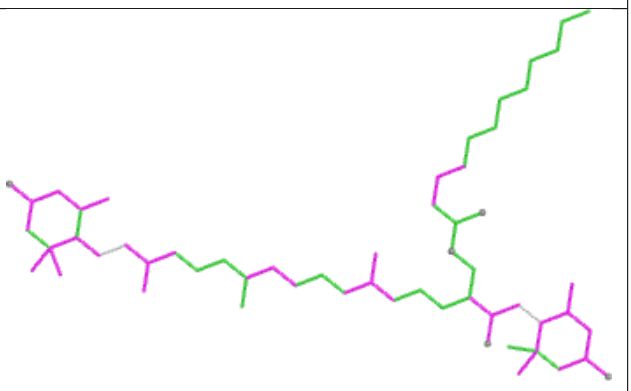

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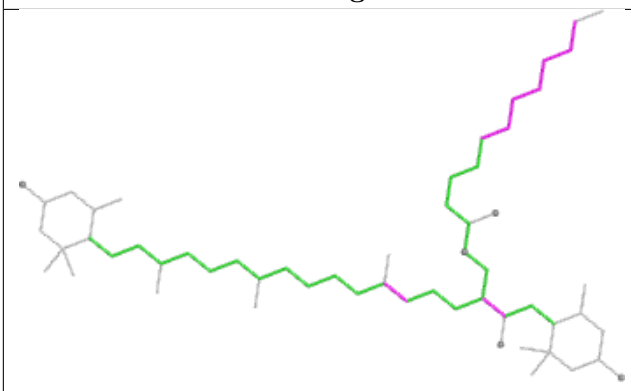

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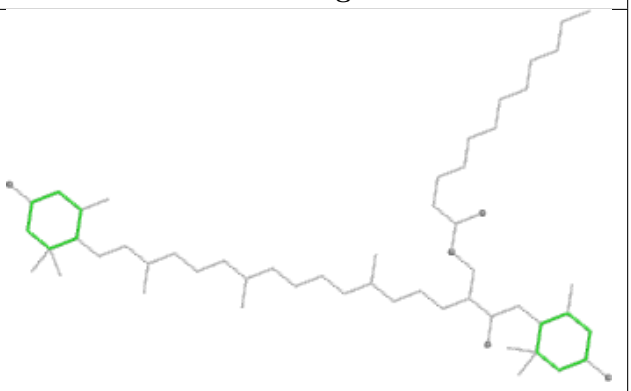

Rings

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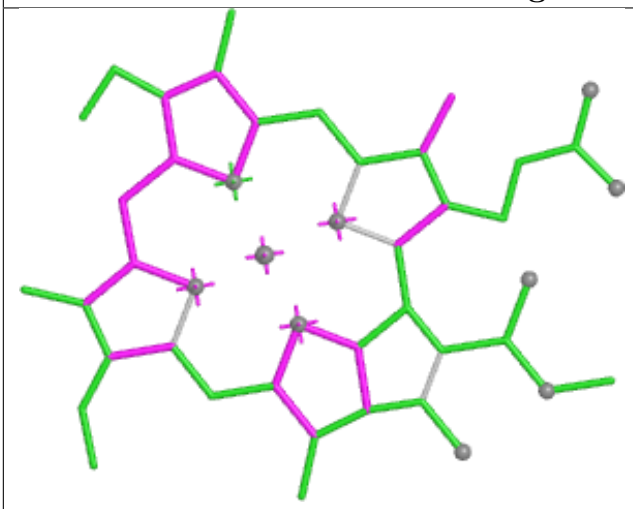

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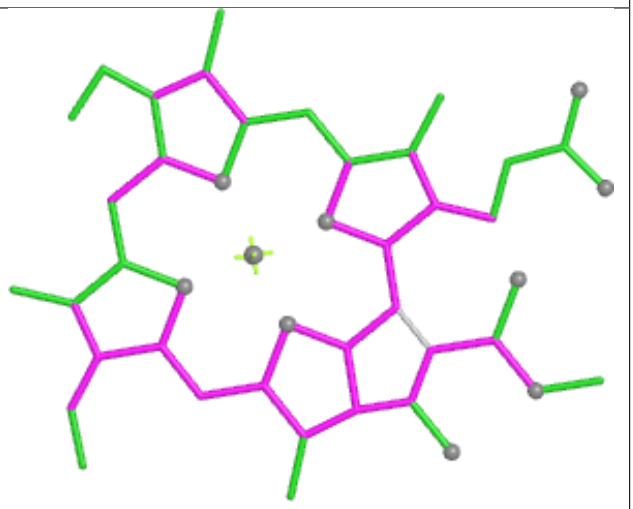
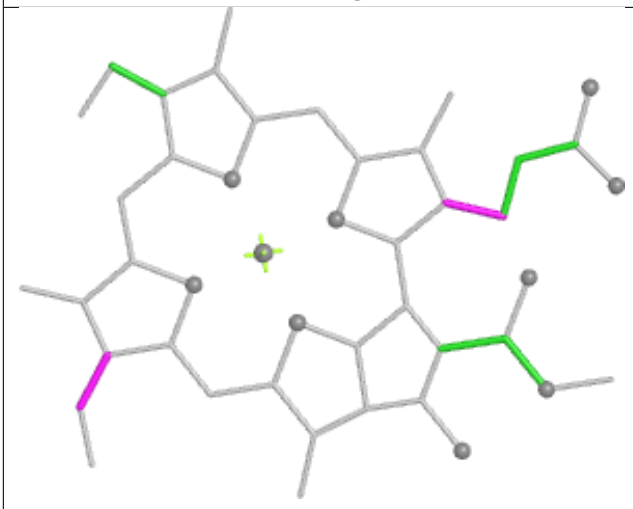


Bond angles

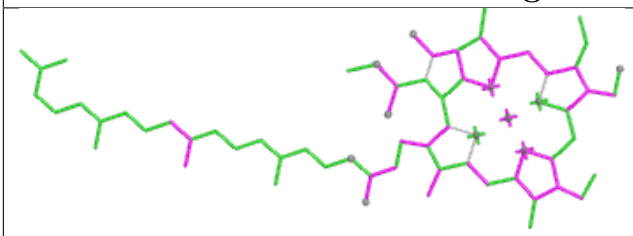


Torsions



Rings

Ligand CHL V 313



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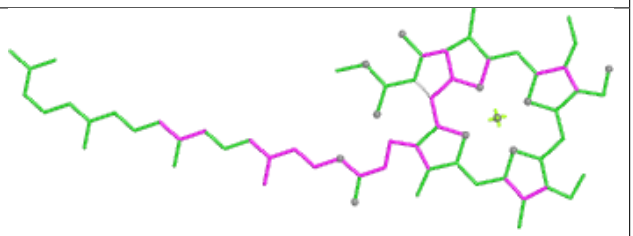

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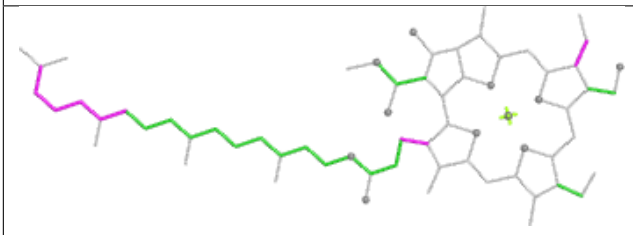

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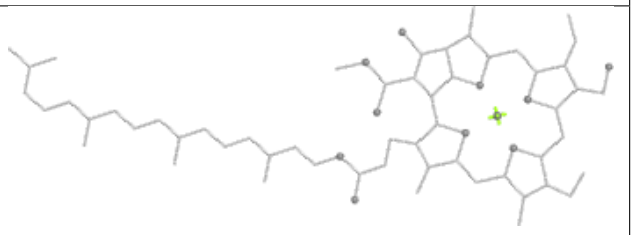
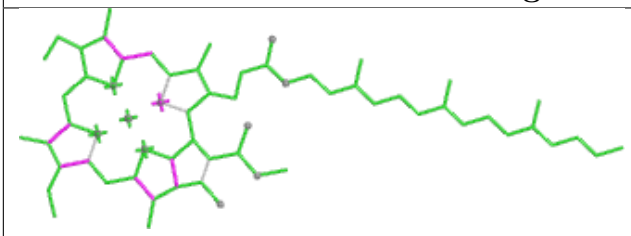


Rings

Ligand CLA G 312



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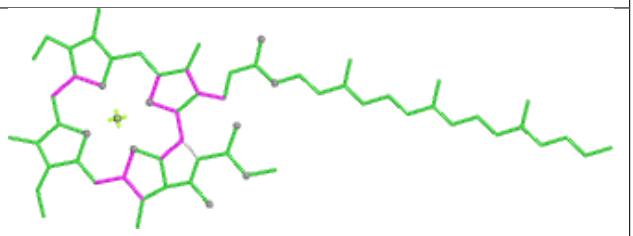
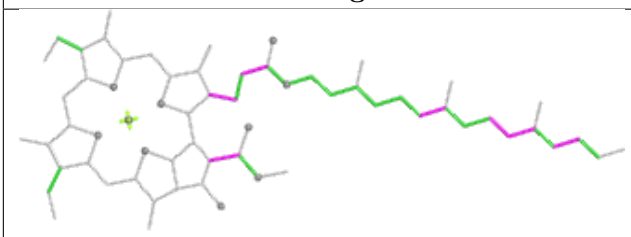


Bond angles



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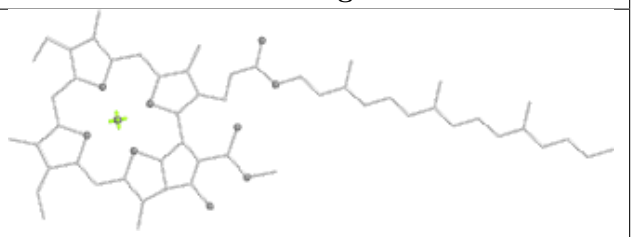
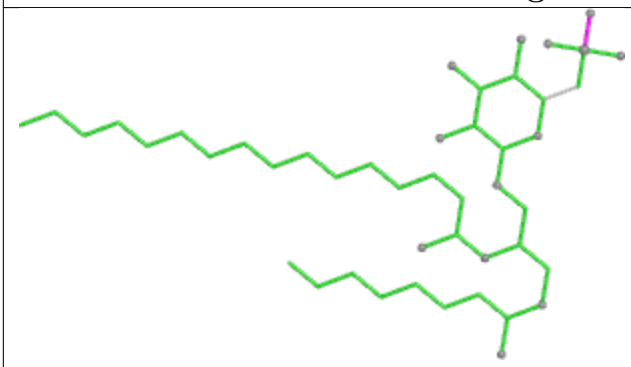


Rings

Ligand SQD b 614



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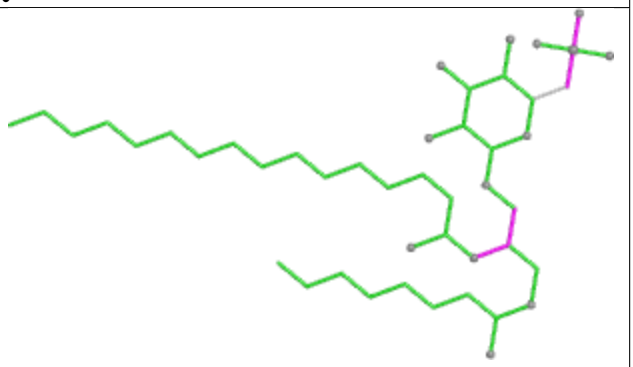
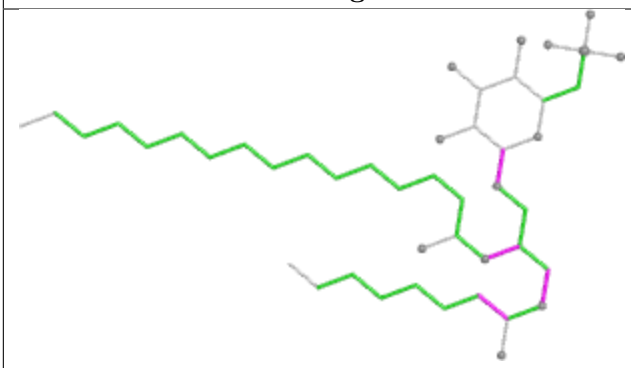


Bond angles



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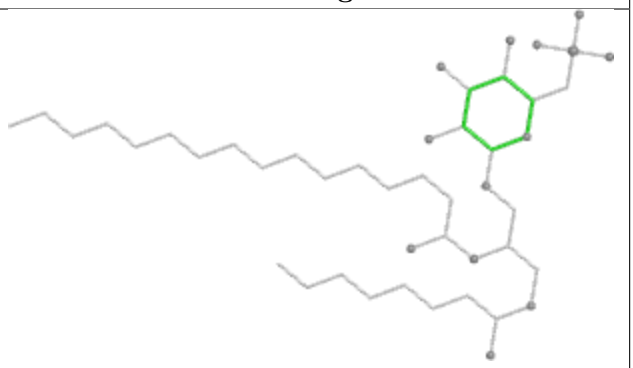
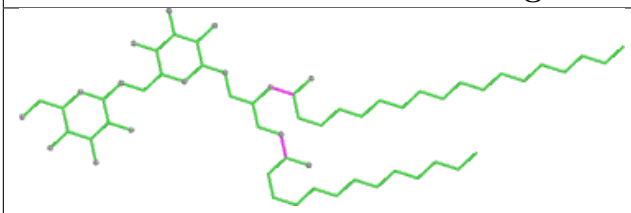
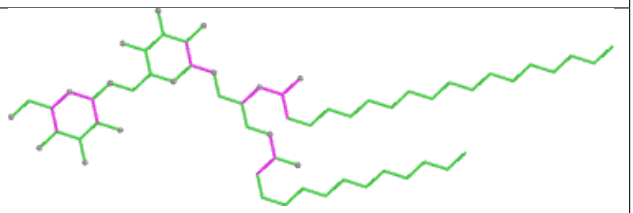
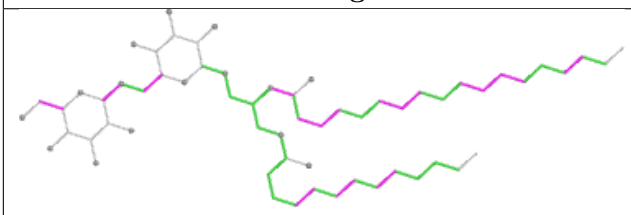
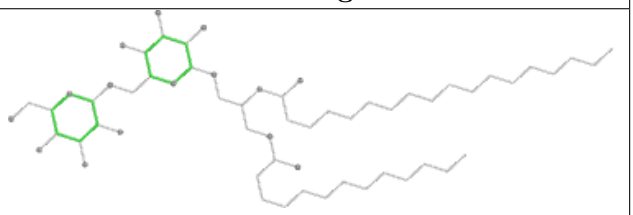
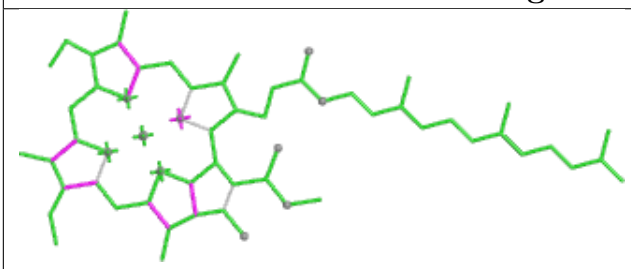
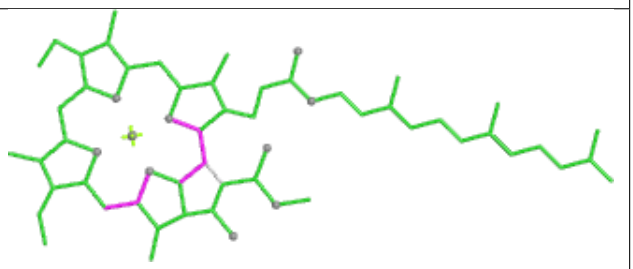
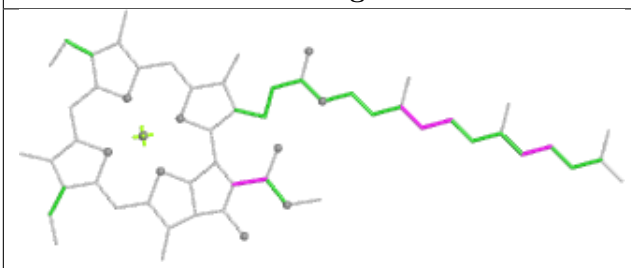
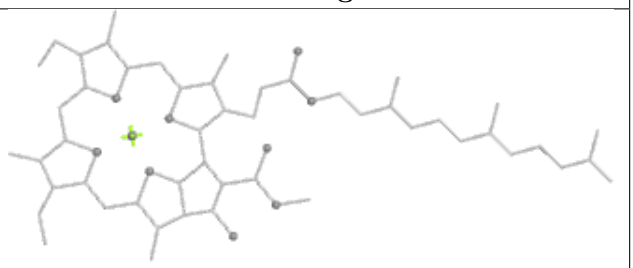
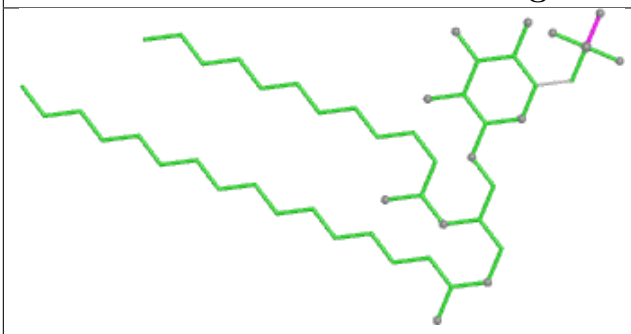


Rings

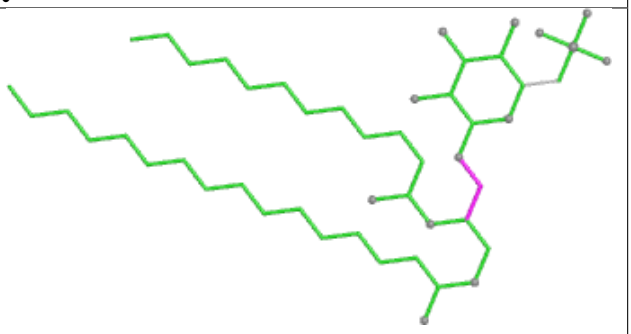
Ligand DGD a 409	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA b 618	
 Bond lengths	 Bond angles
 Torsions	 Rings

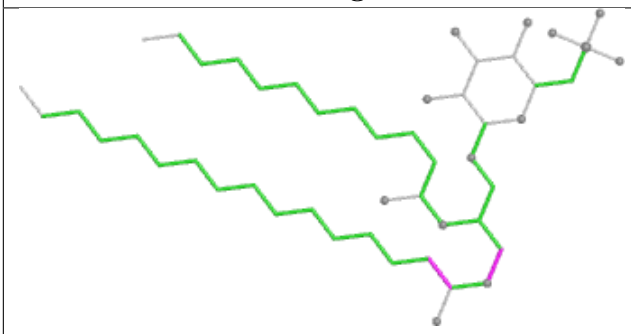
Ligand SQD c 523



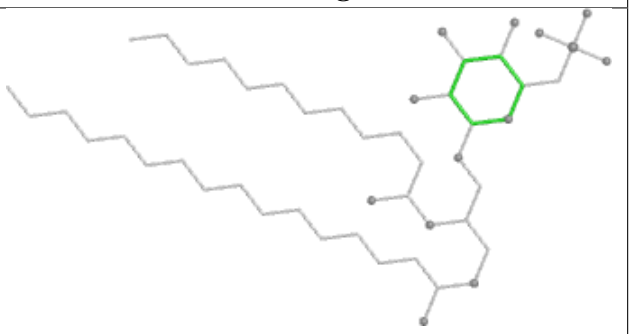
Bond lengths



Bond angles

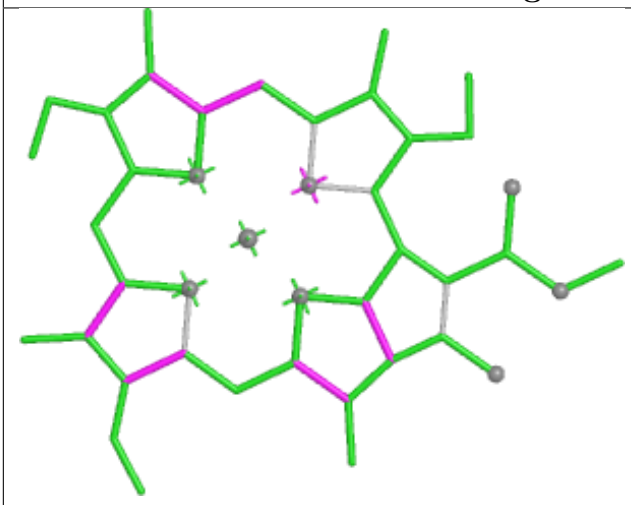


Torsions



Rings

Ligand CLA Y 312



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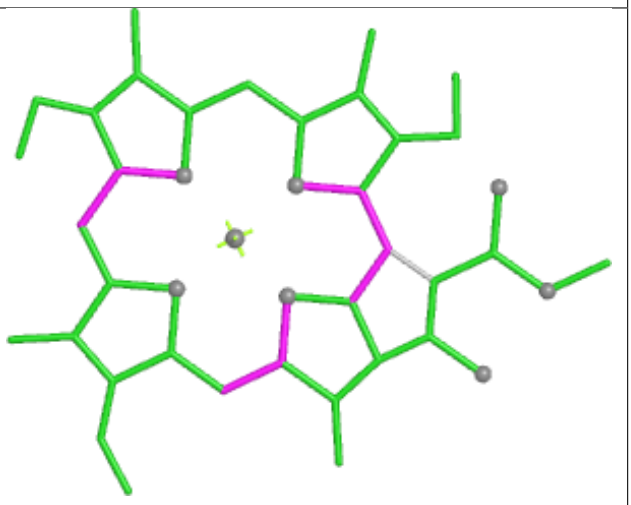

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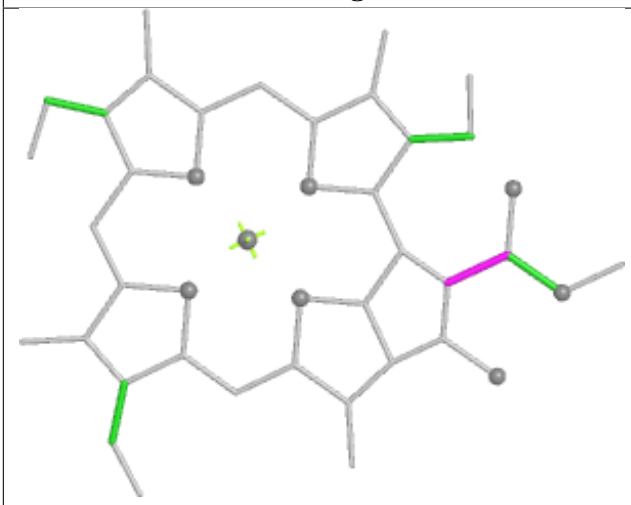
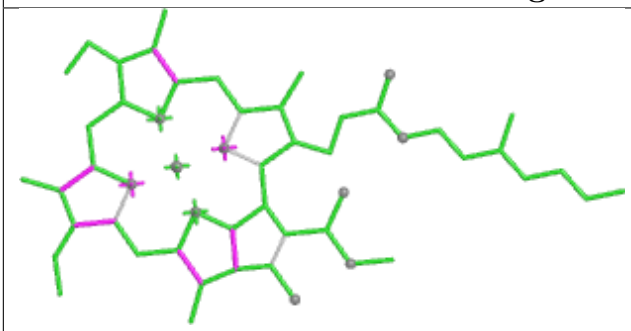


Torsions



Rings

Ligand CLA g 315



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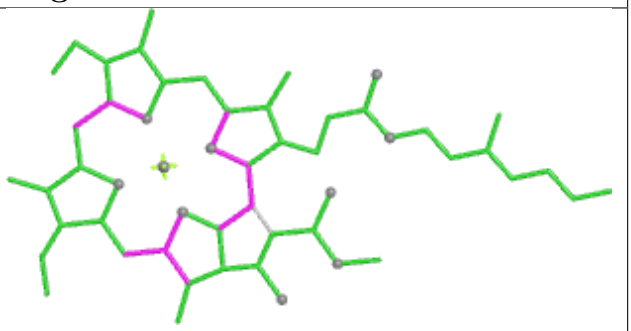
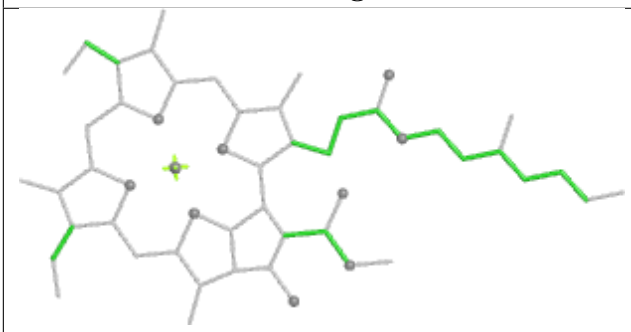


Bond angles



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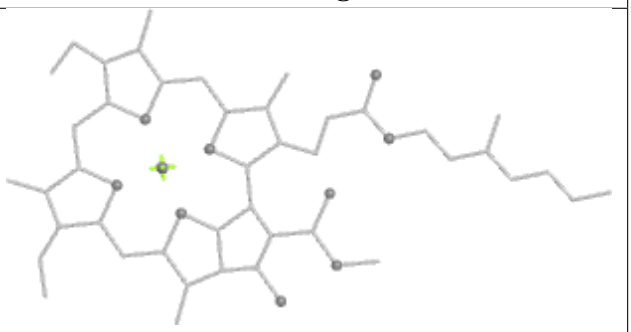
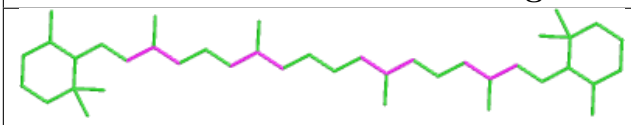


Rings

Ligand BCR b 602



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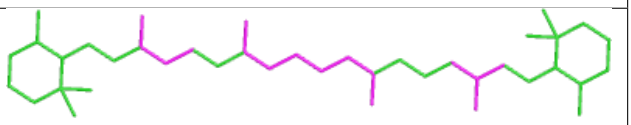
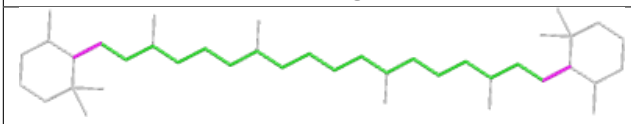


Bond angles



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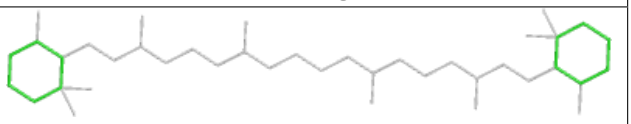
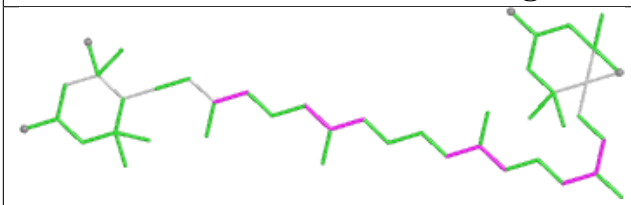


Rings

Ligand NEX V 323



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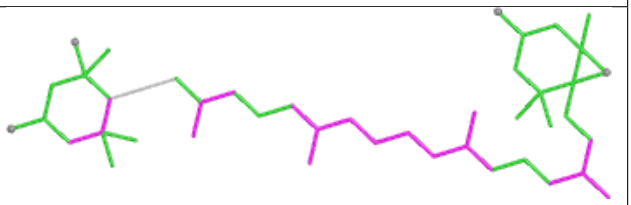

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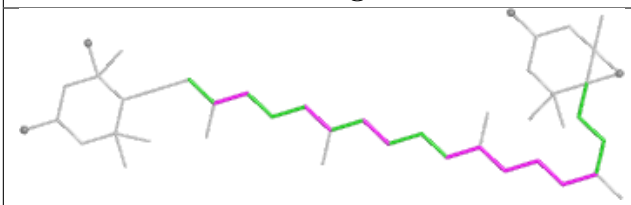

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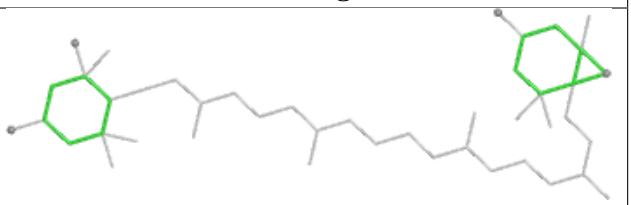
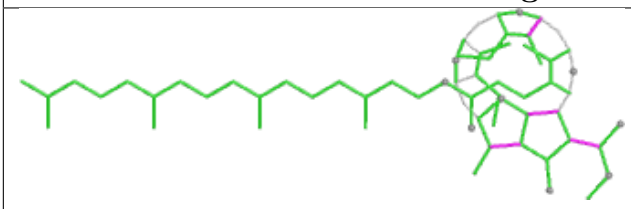


Rings

Ligand PHO D 407



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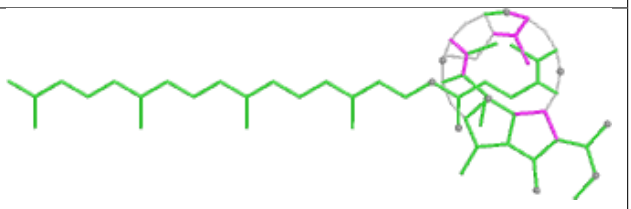

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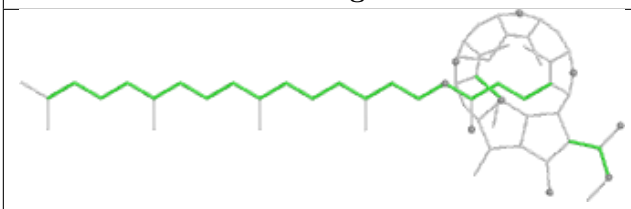

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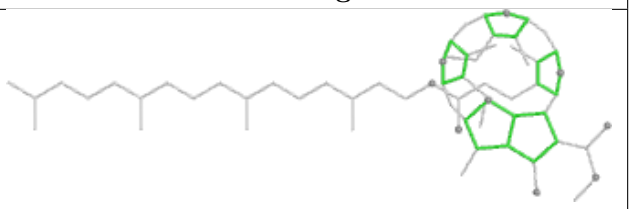
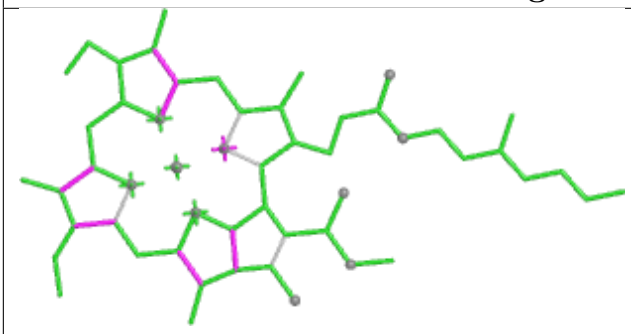


Rings

Ligand CLA 1 309



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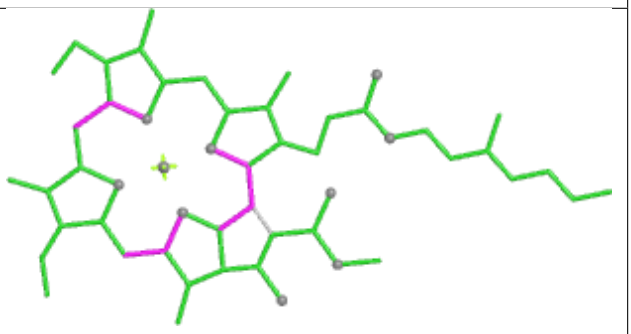
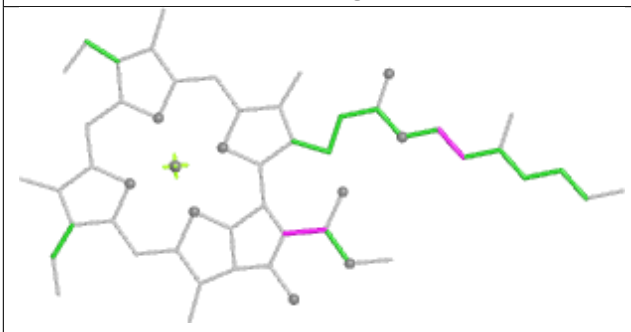


Bond angles



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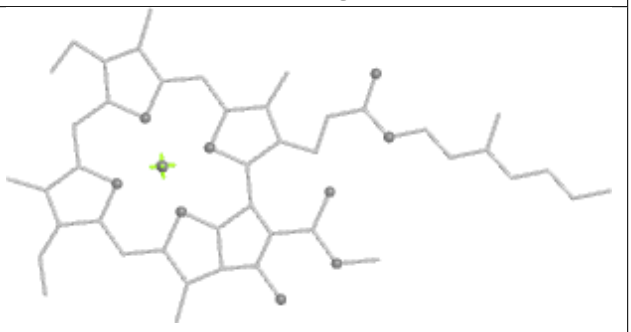
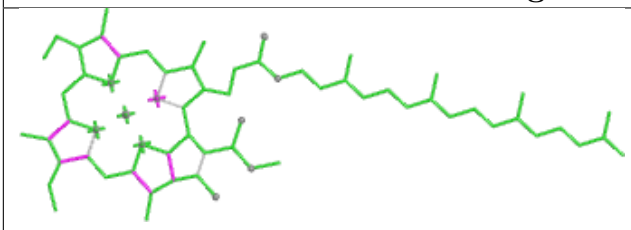
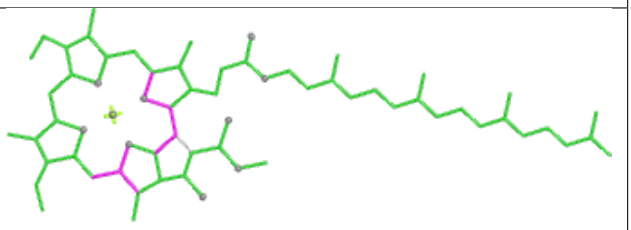
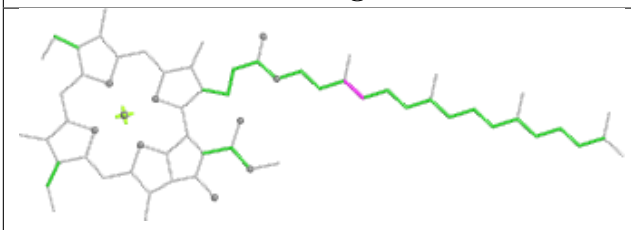
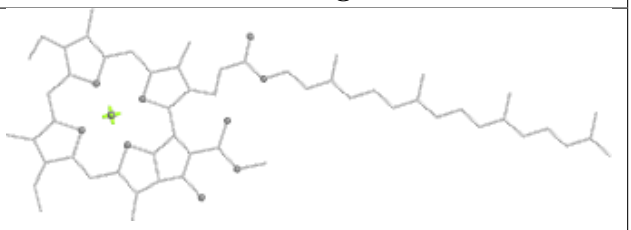


Rings

Ligand CLA b 612	
	
Bond lengths	Bond angles
	
Torsions	Rings

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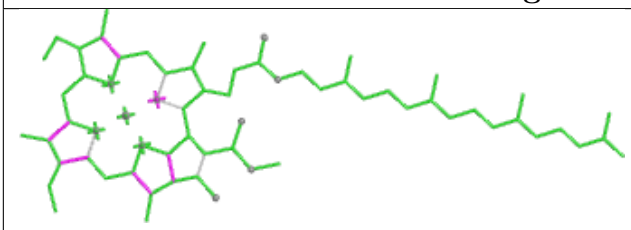	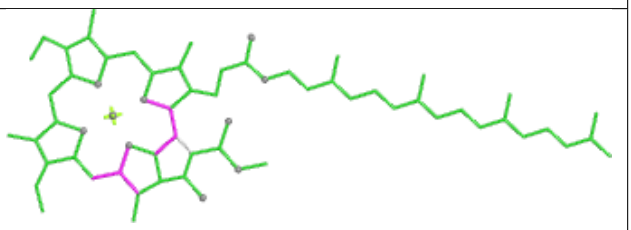
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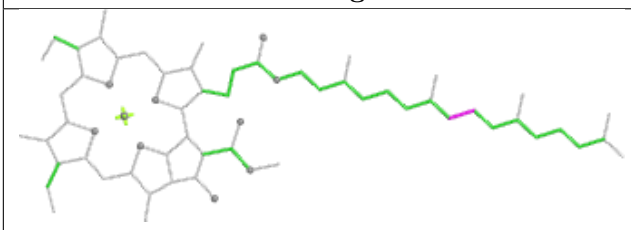
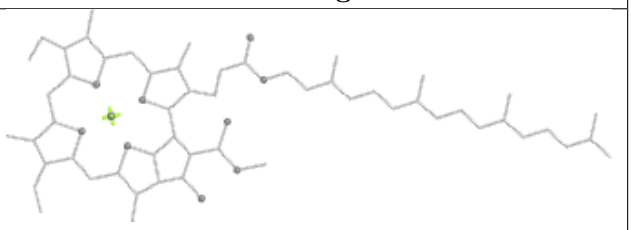
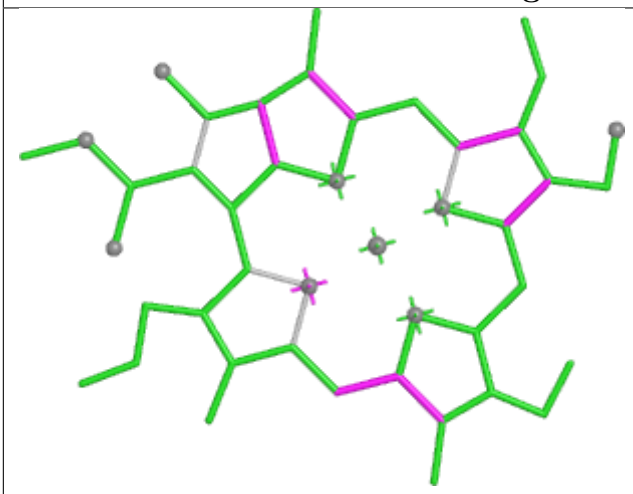
	
Torsions	Rings

Ligand CHL N 307



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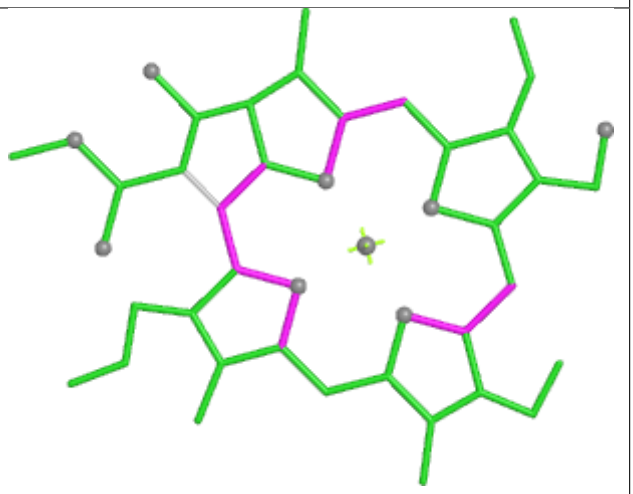
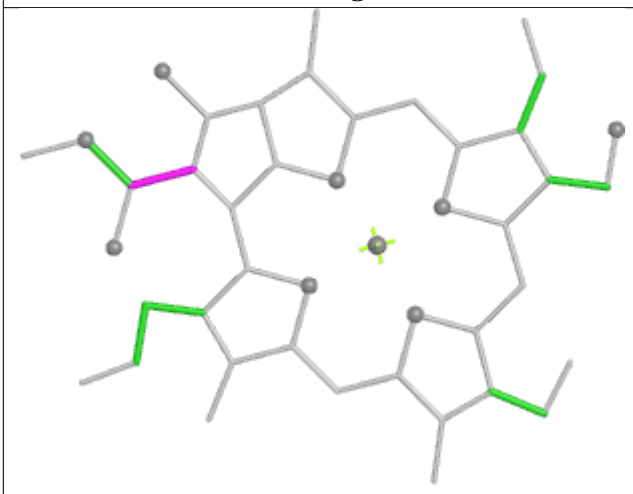


Bond angles



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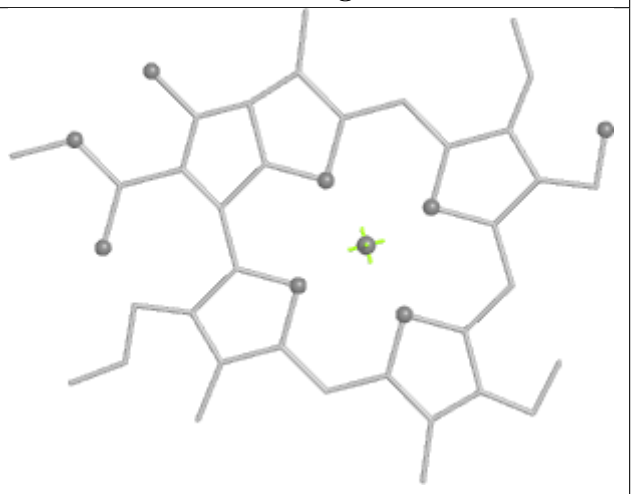
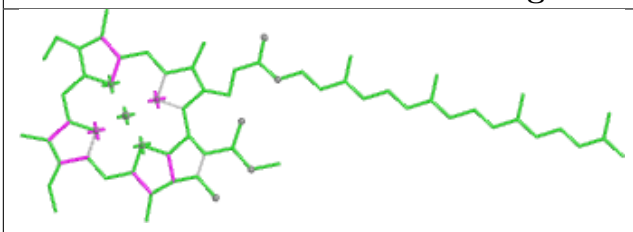


Rings

Ligand CLA n 315



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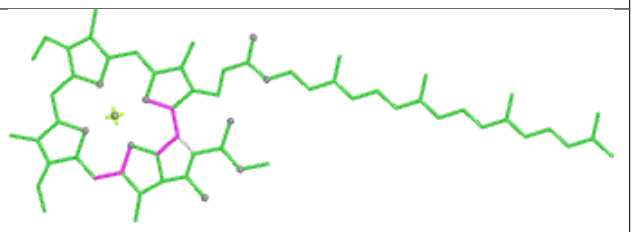

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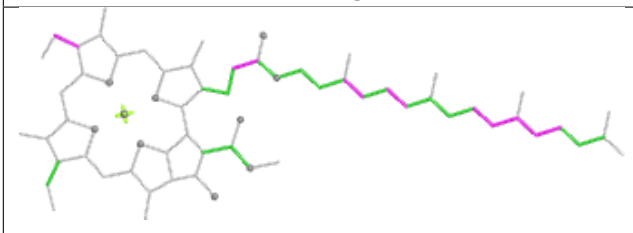

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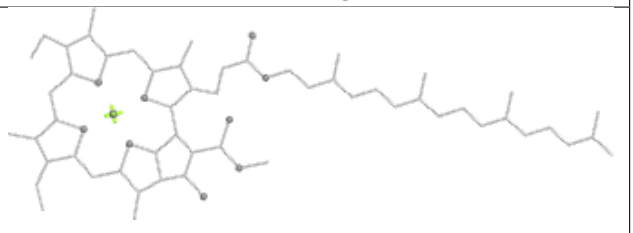
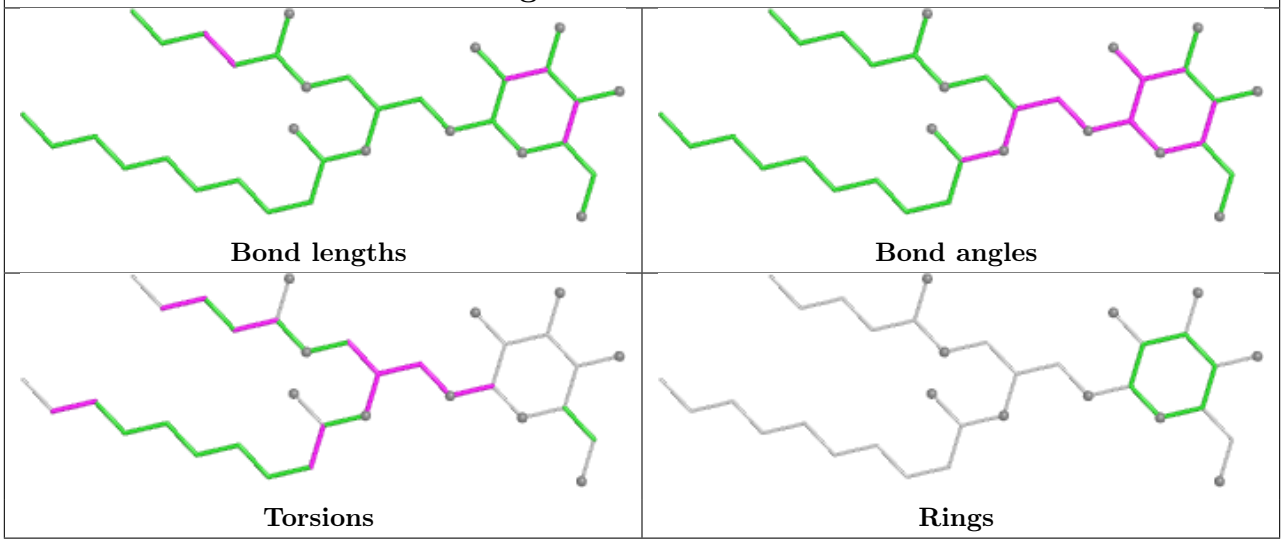
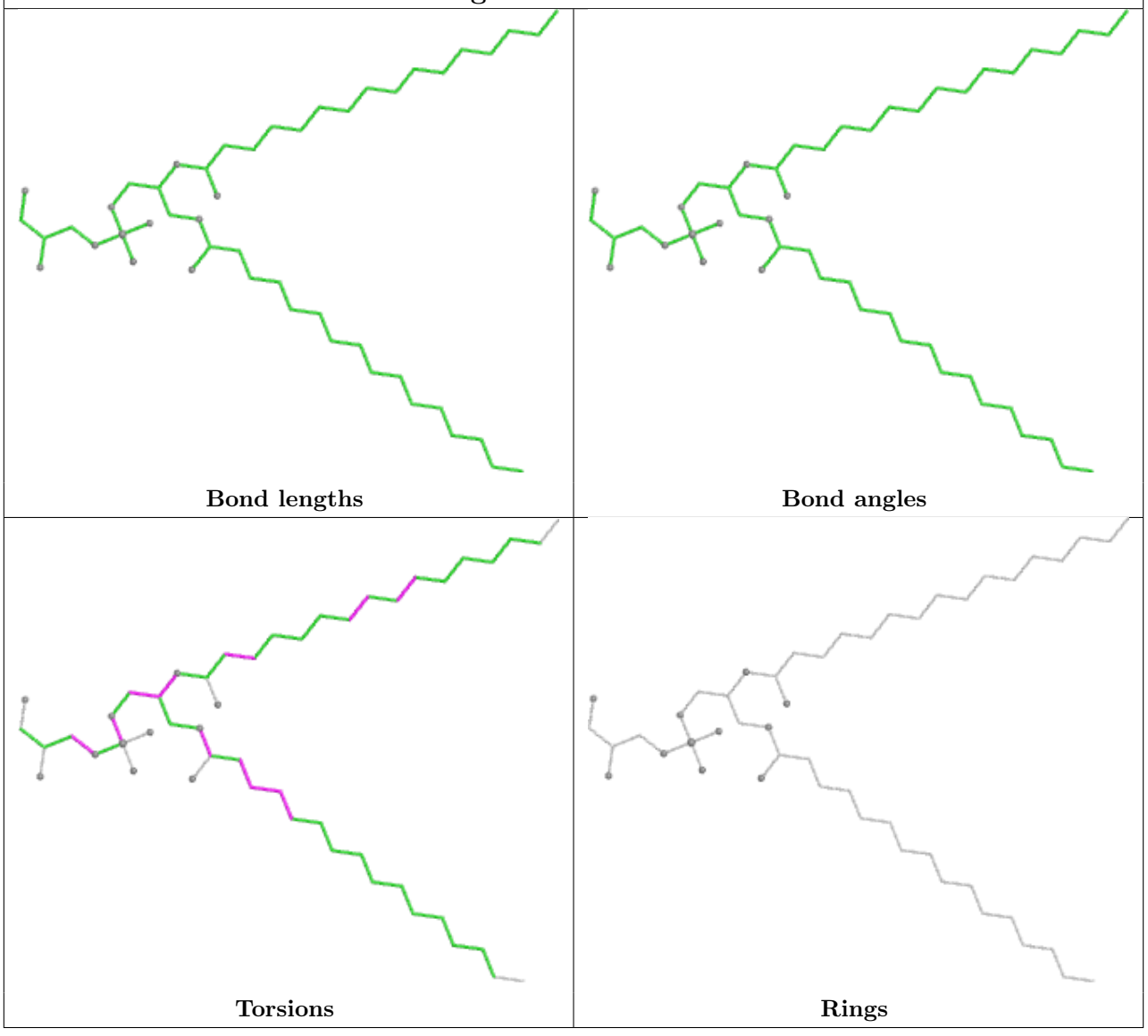


Rings

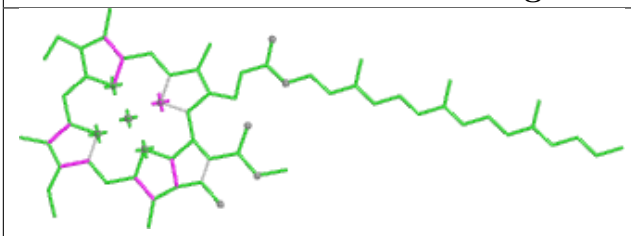
Ligand LMG K 101



Ligand LHG v 302



Ligand CLA C 517



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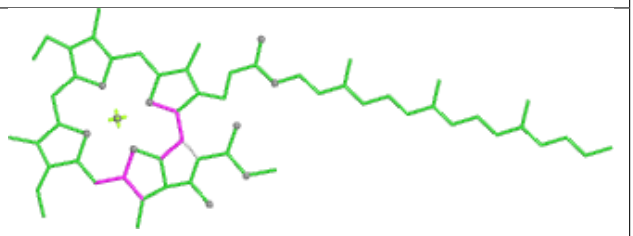
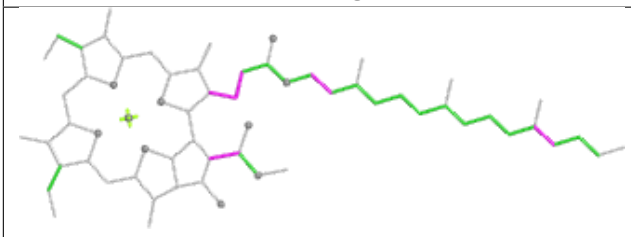


Bond angles



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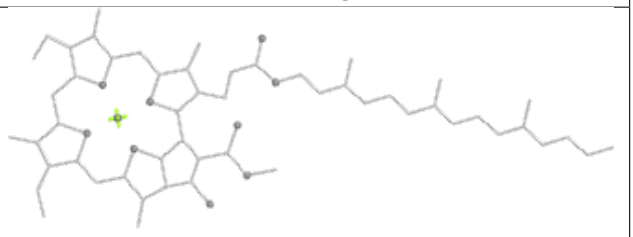
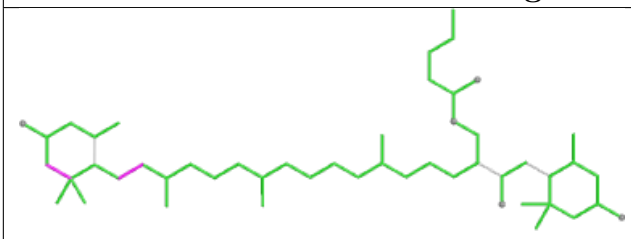


Rings

Ligand 0UR N 316



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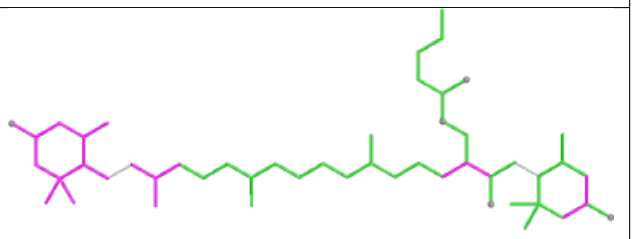
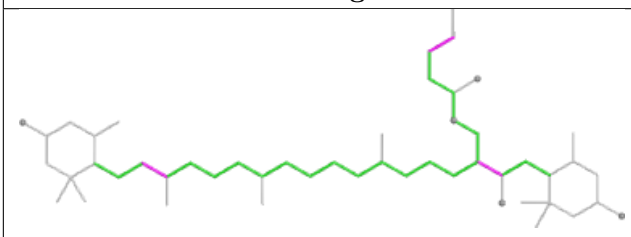


Bond angles



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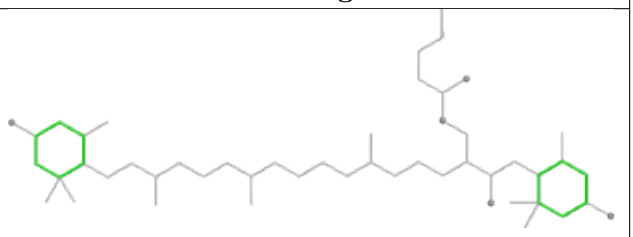
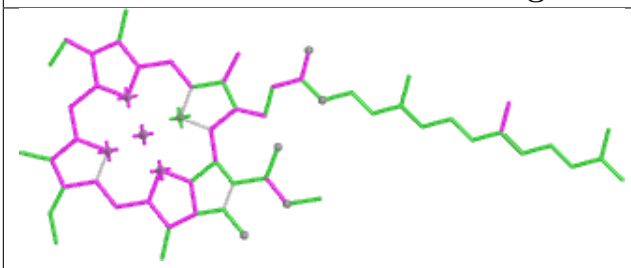


Rings

Ligand CLA S 310



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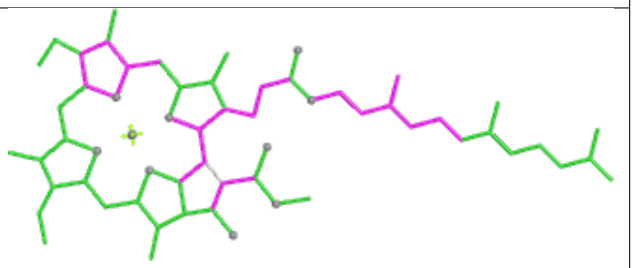
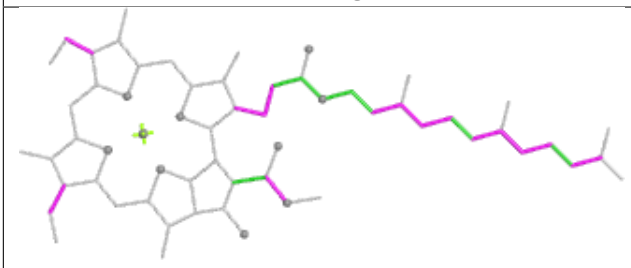


Bond angles



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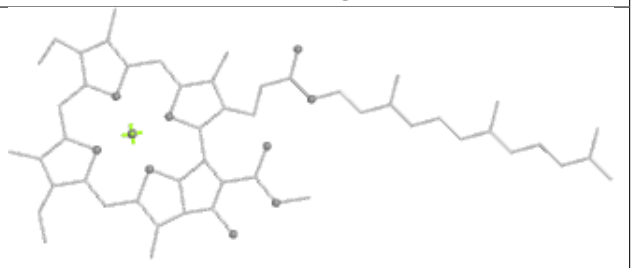
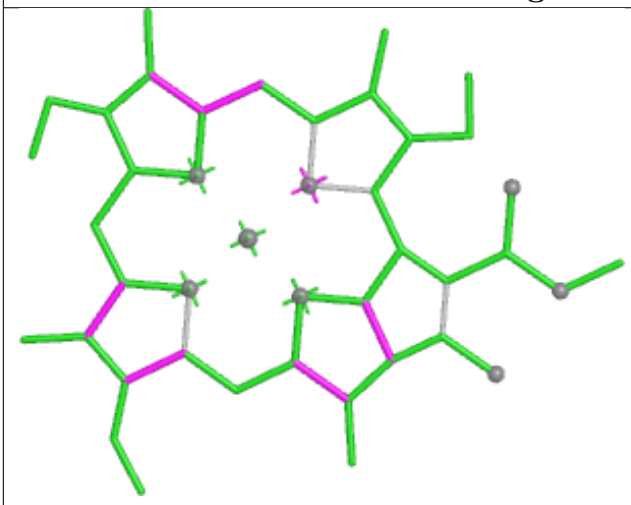


Rings

Ligand CLA u 418



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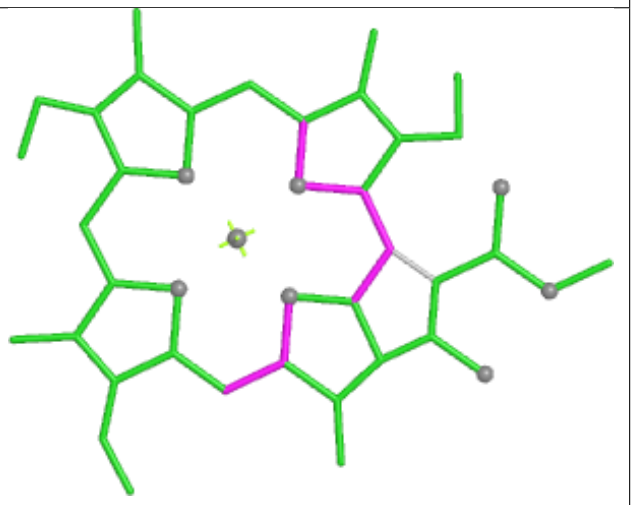
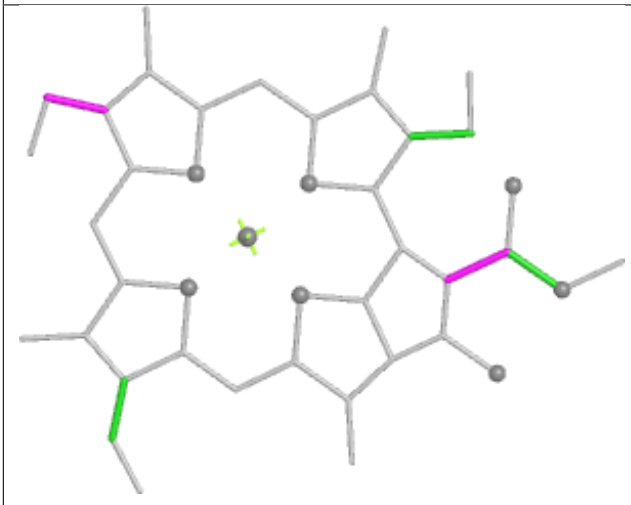
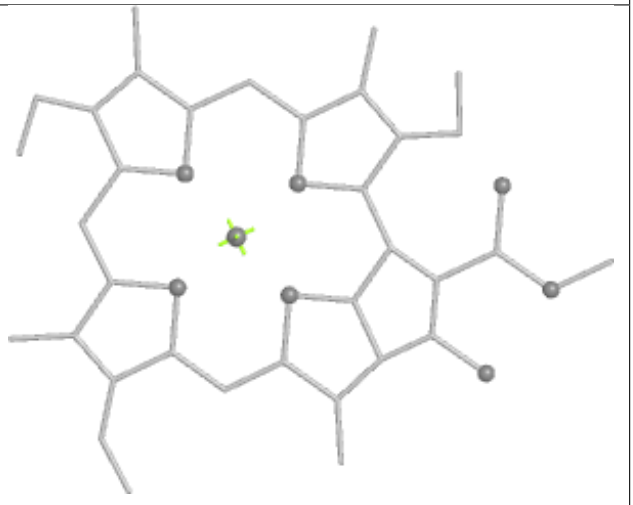


Bond angles

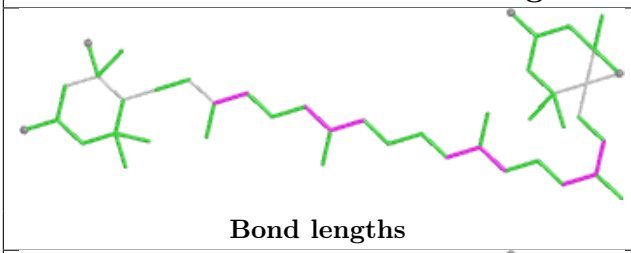


Torsions



Rings

Ligand NEX v 320



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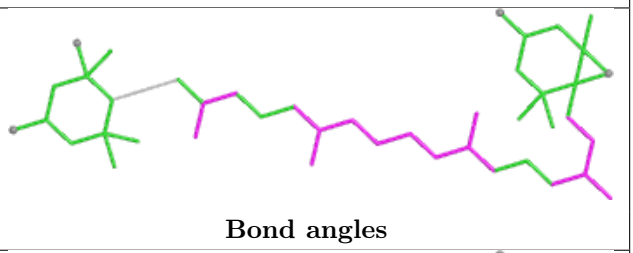
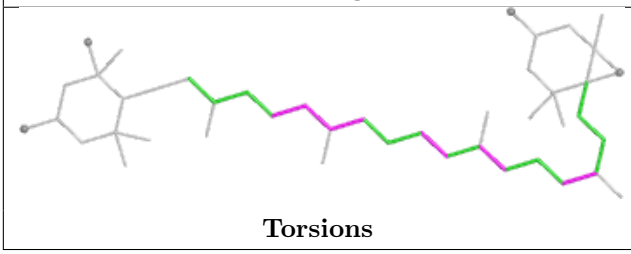


Bond angles



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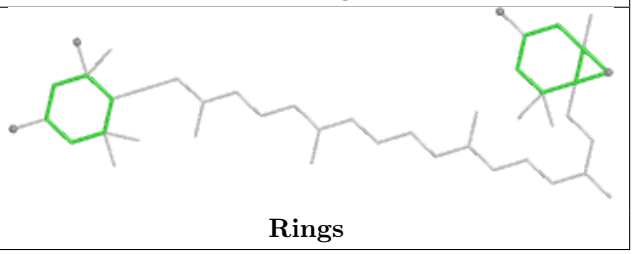
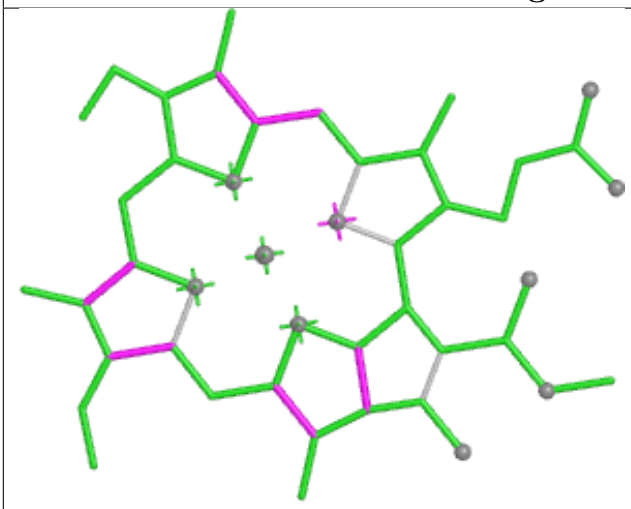


Rings

Ligand CLA 0 304



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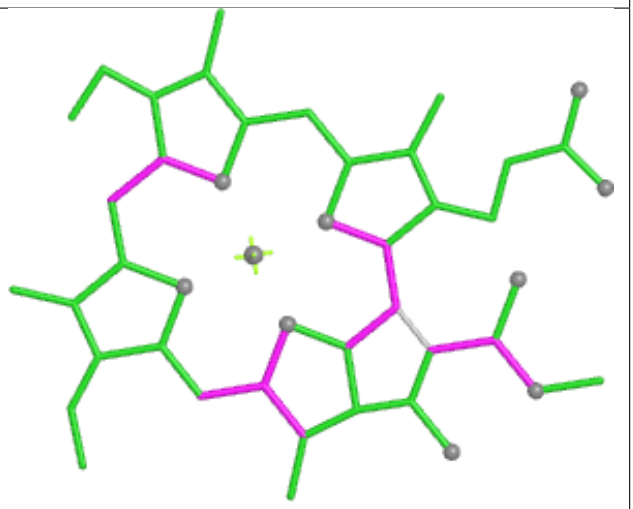

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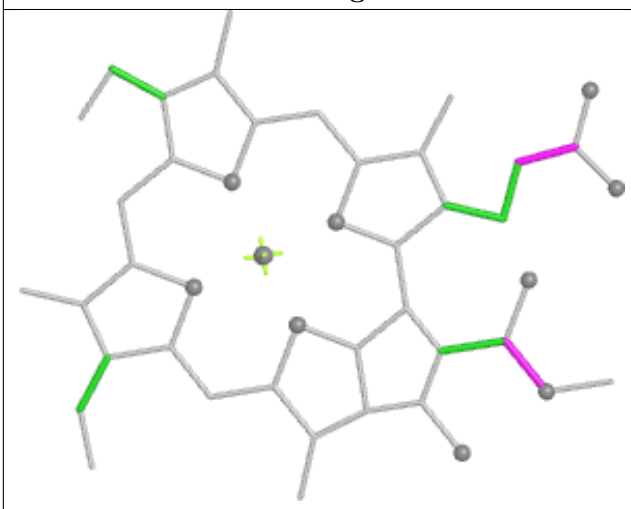

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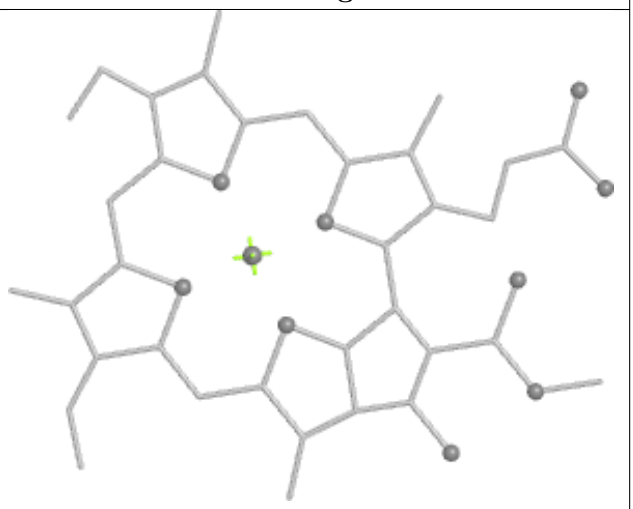
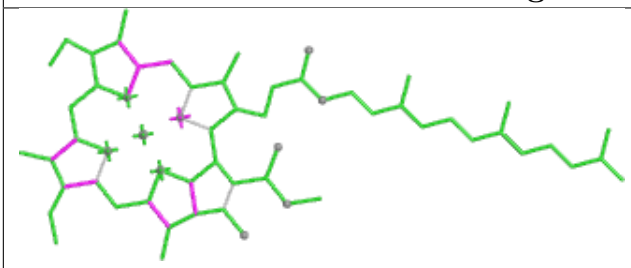


Rings

Ligand CLA b 619



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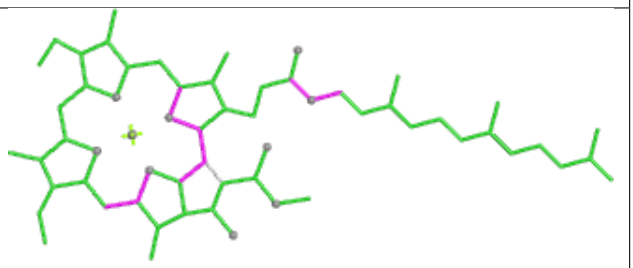

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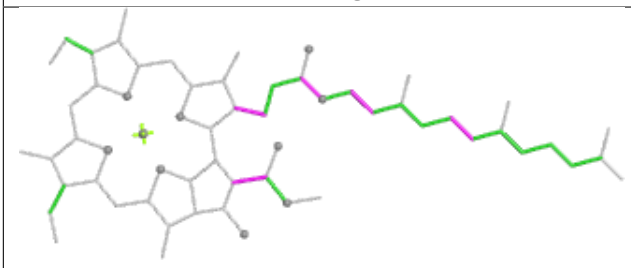

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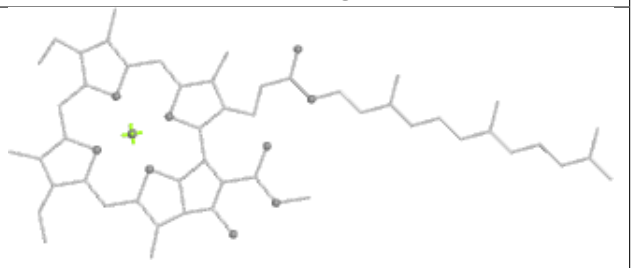
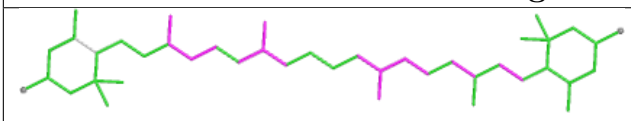


Rings

Ligand LUT 1 313



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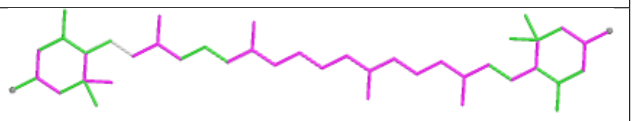

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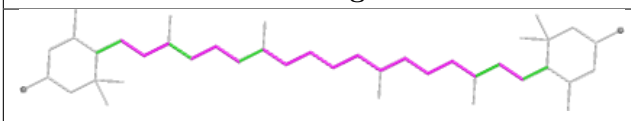

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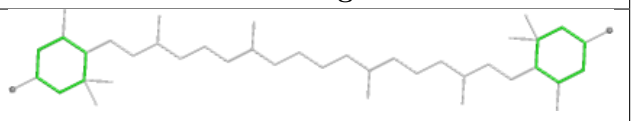
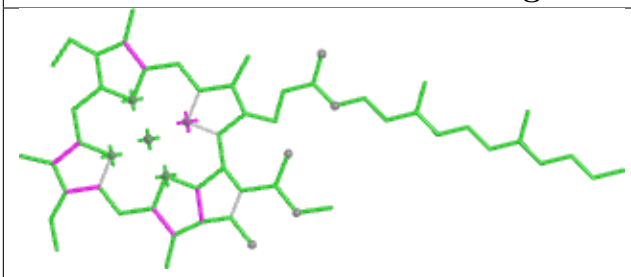


Rings

Ligand CLA G 306



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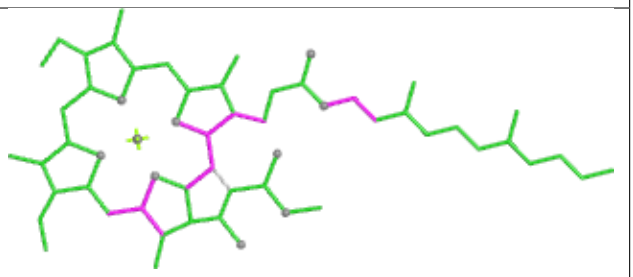

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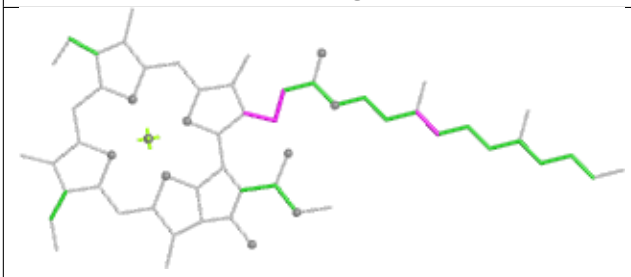

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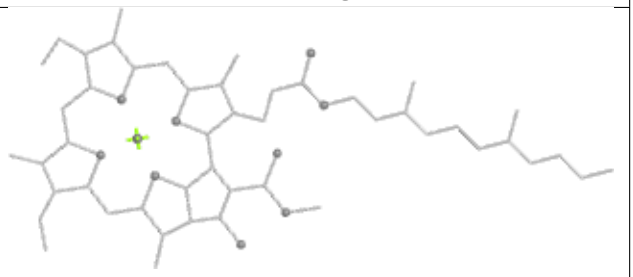
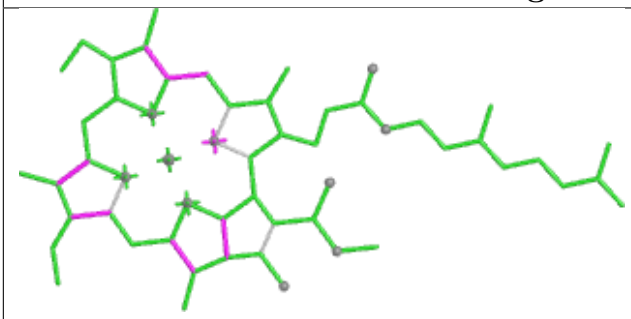


Rings

Ligand CLA S 311



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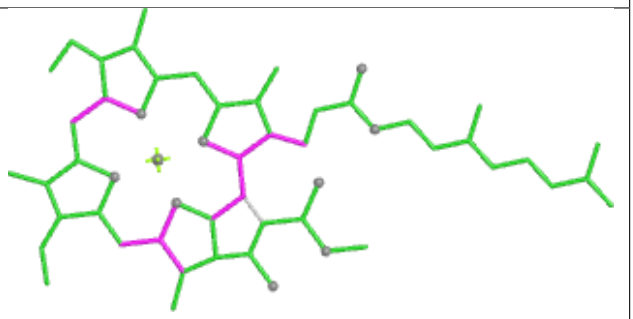

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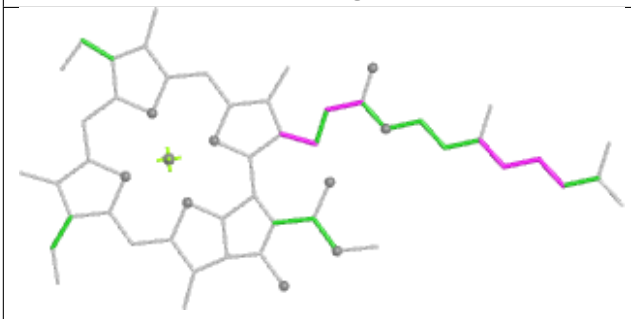

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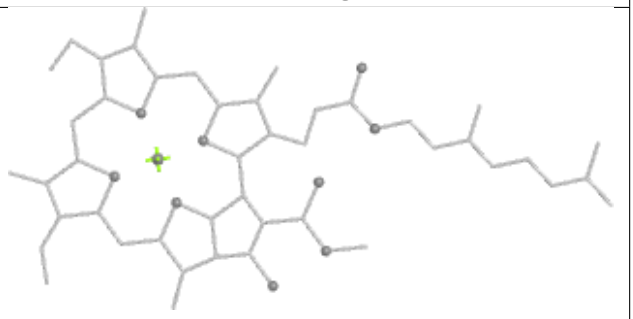
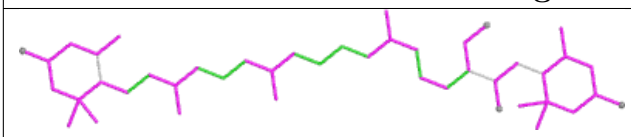


Rings

Ligand 0IE Y 321



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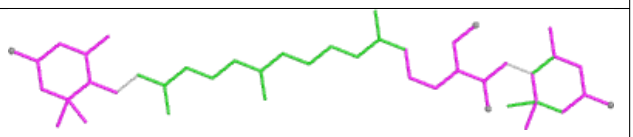
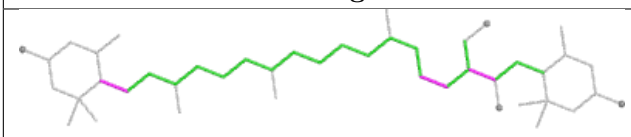


Bond angles



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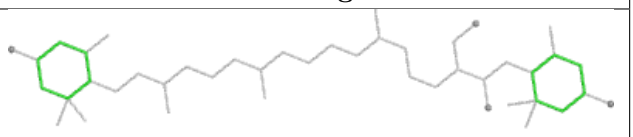
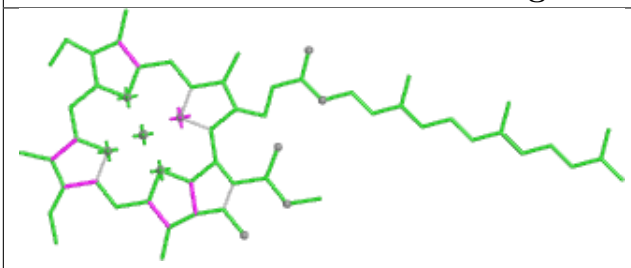
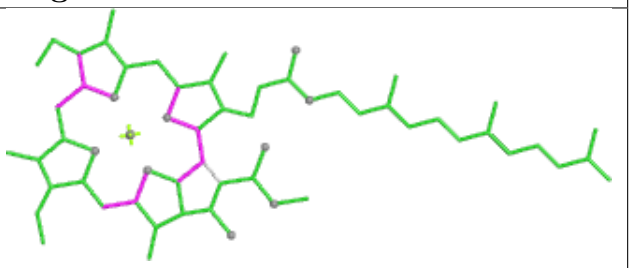


Rings

Ligand CLA g 305	
	
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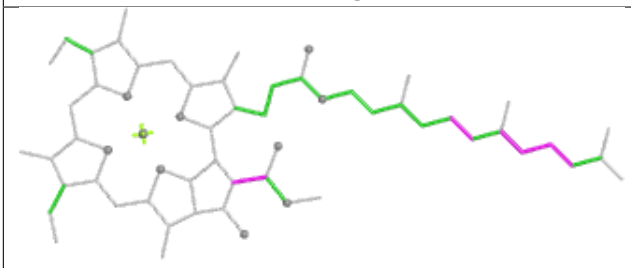	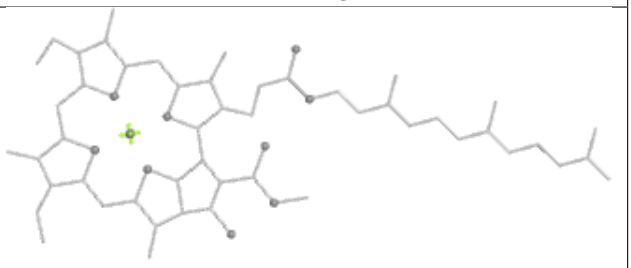
Torsions	Rings

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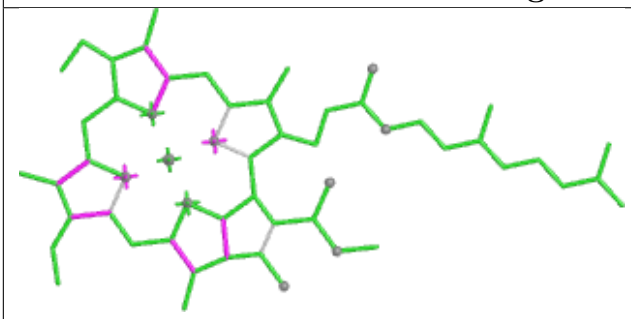	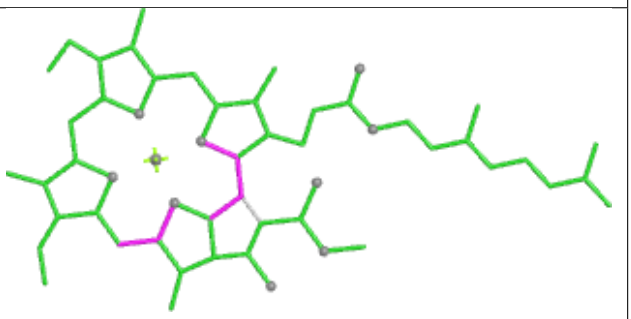
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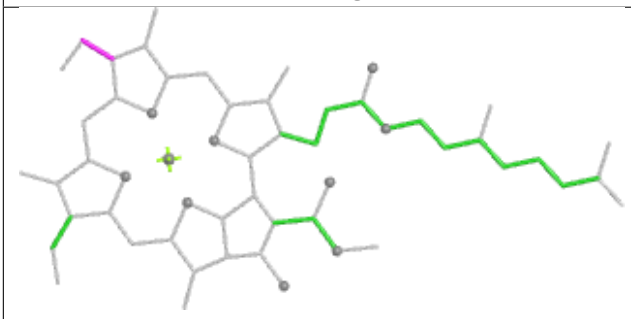
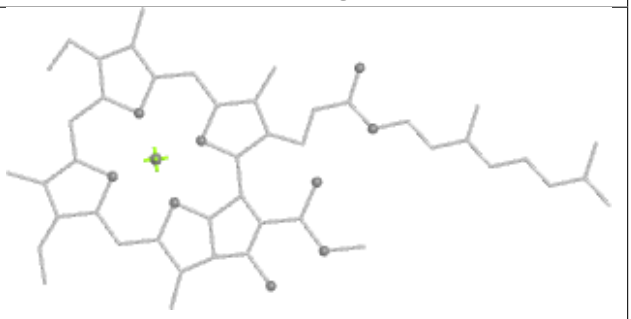
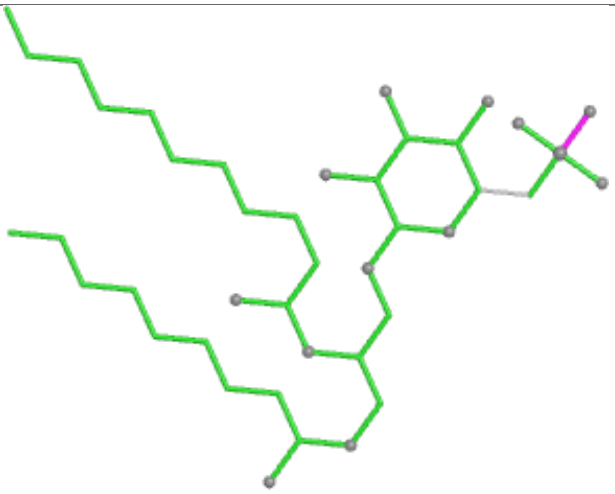
	
Torsions	Rings

Ligand SQD T 102



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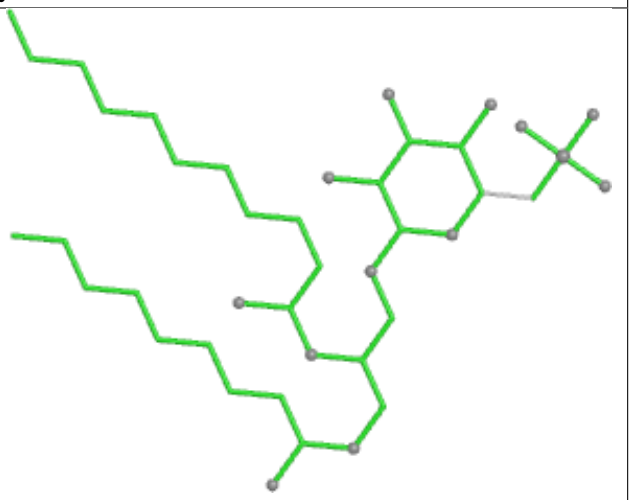
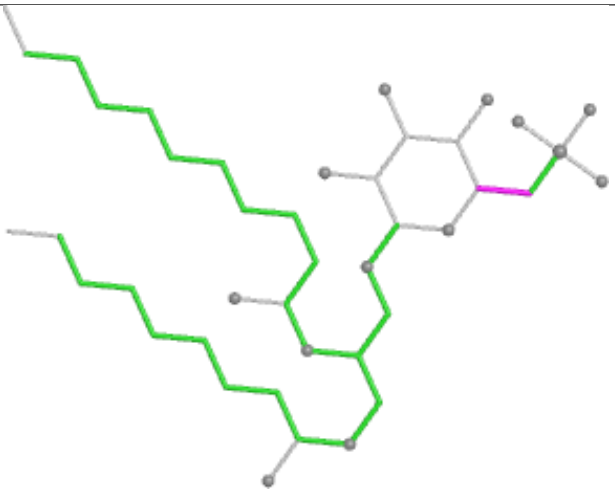


Bond angles



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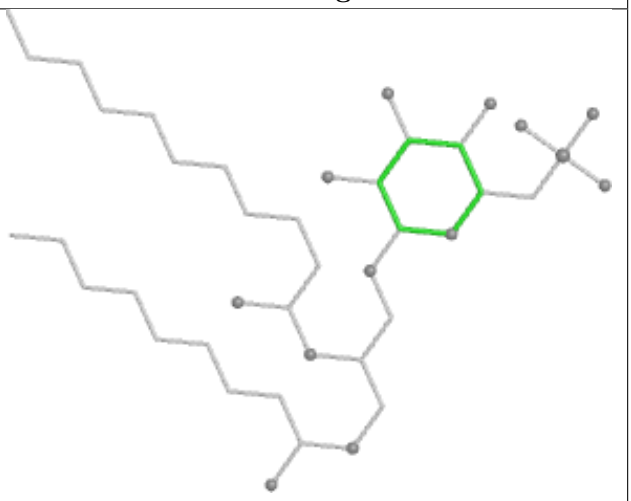
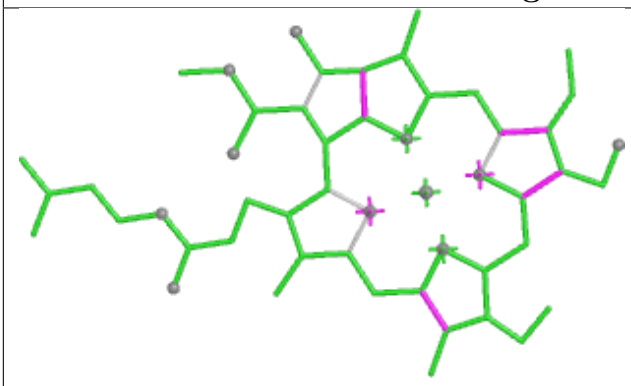


Rings

Ligand CHL G 311



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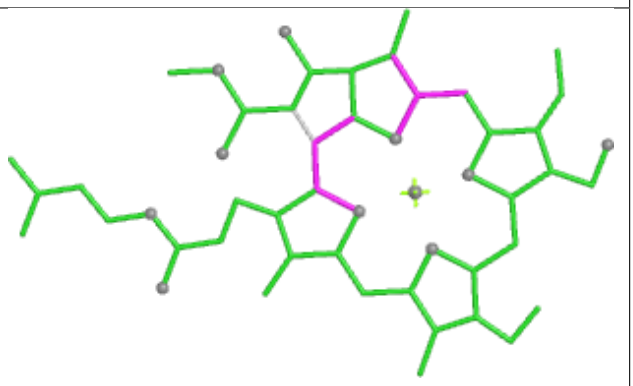
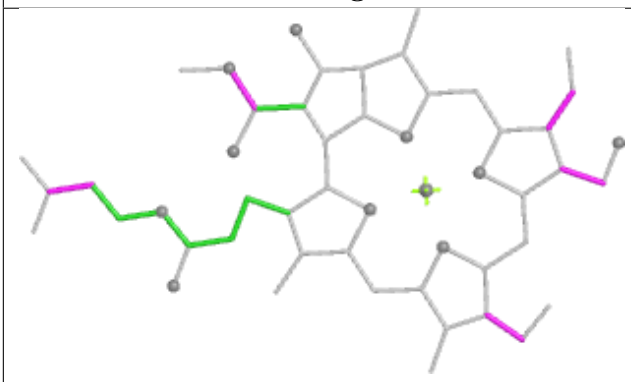


Bond angles



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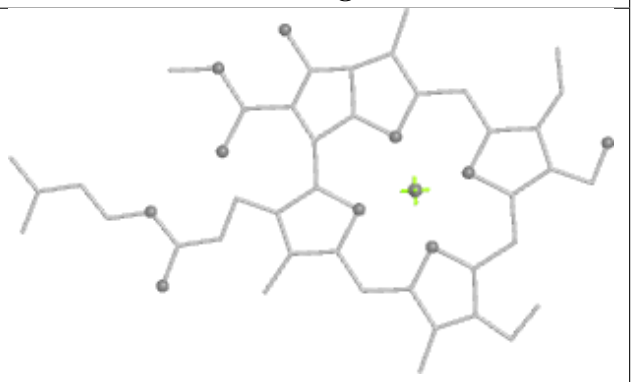
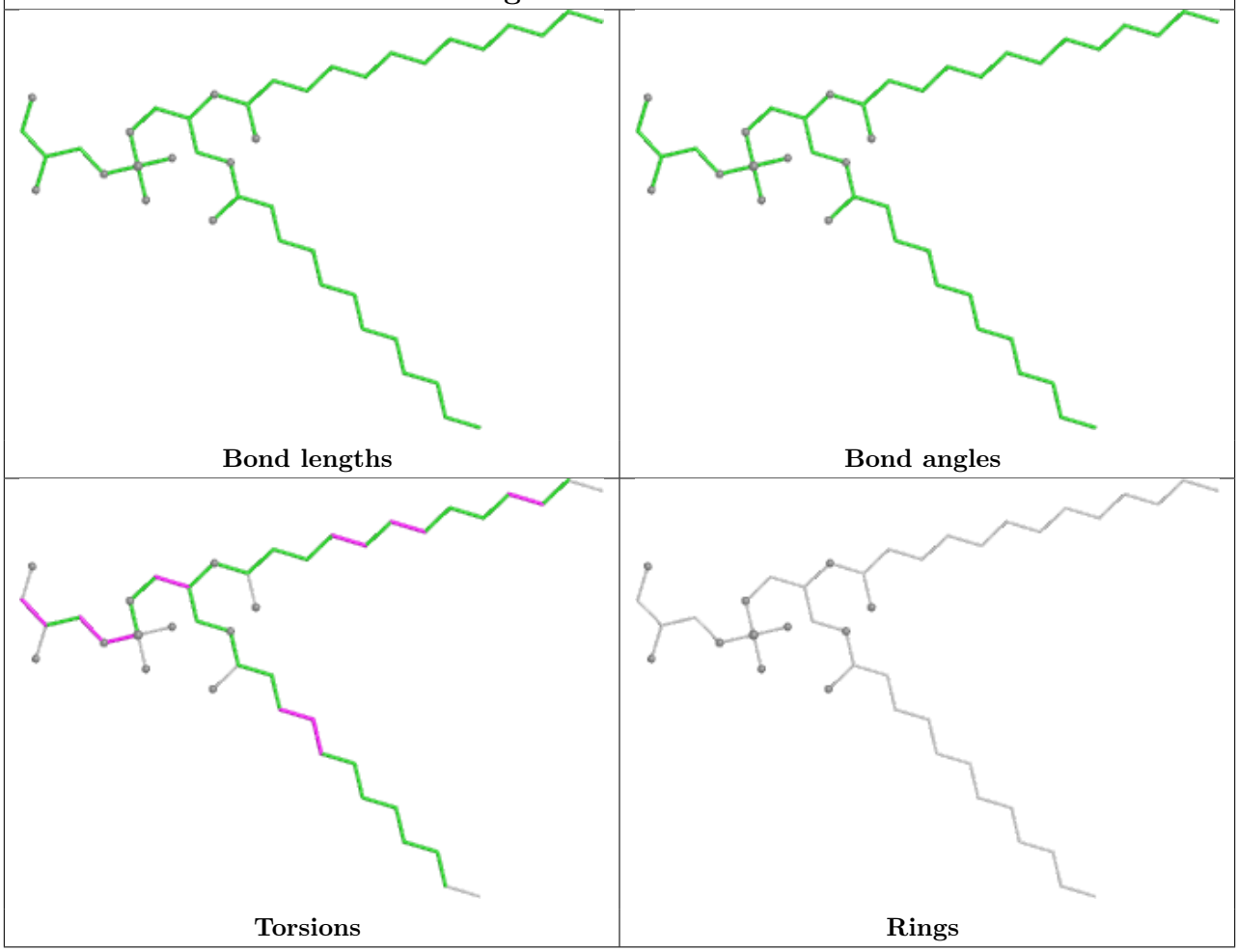
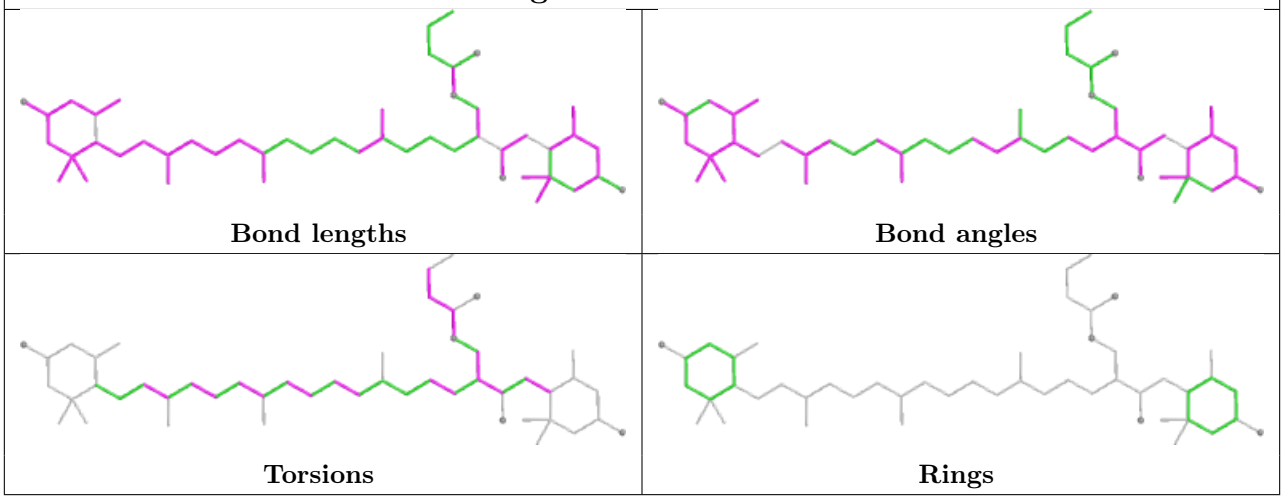


Rings

Ligand LHG G 303



Ligand 0UR 0 313



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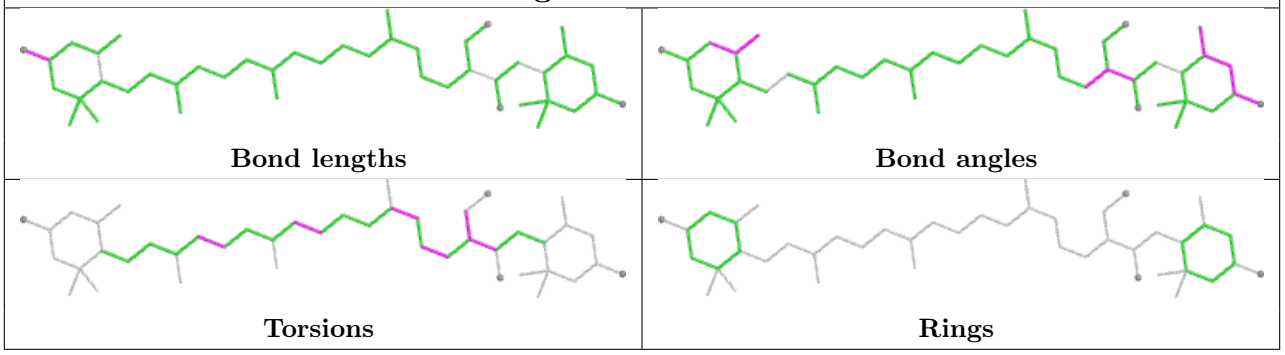

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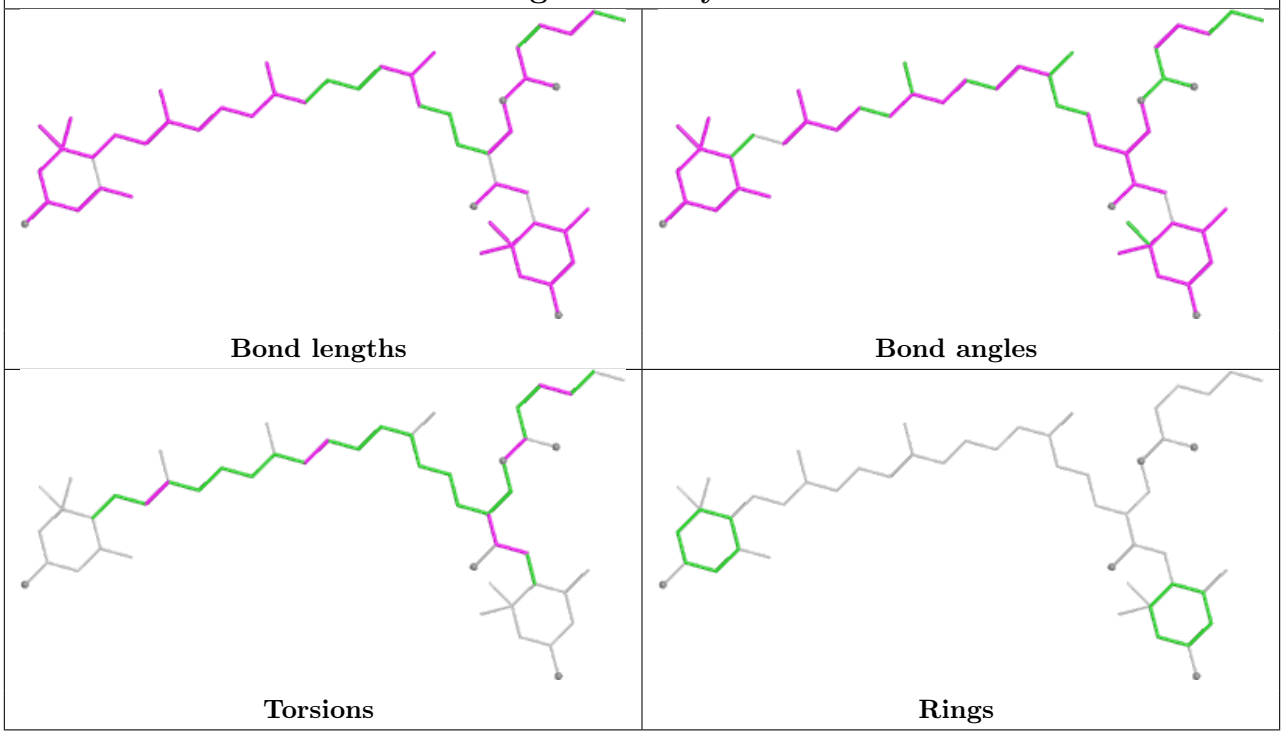

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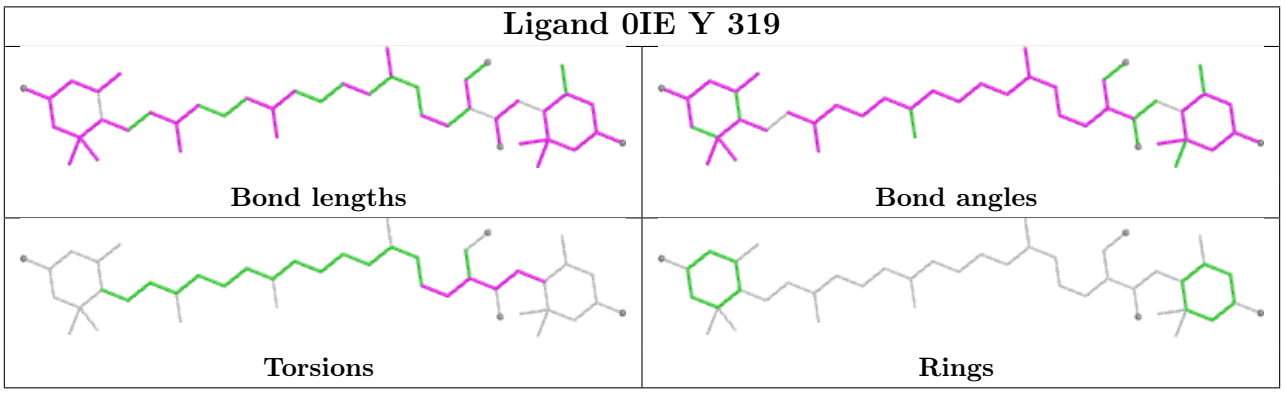
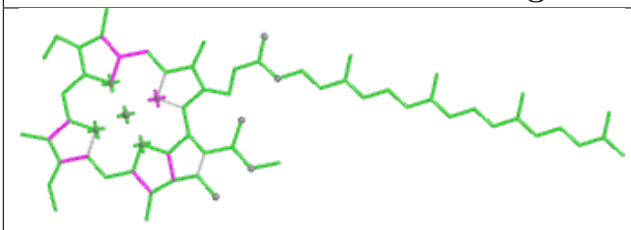
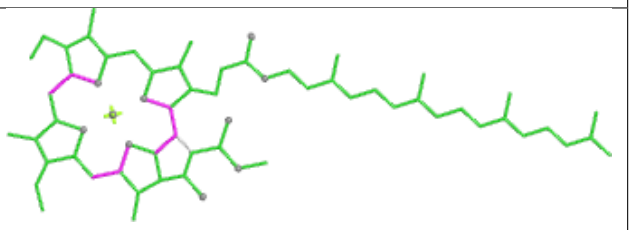


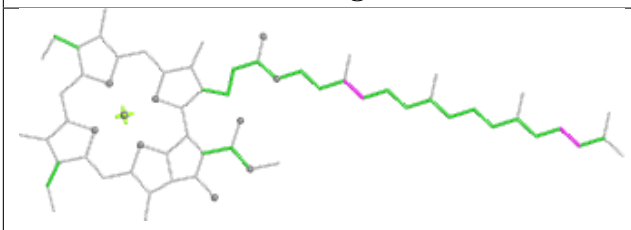
Ligand CLA b 609



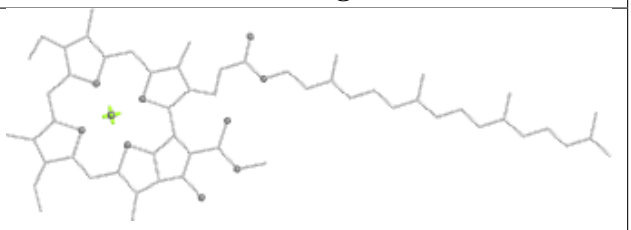
Bond lengths



Bond angles

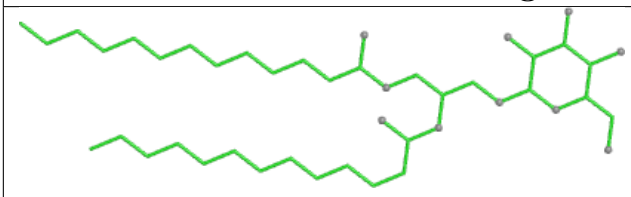


Torsions



Rings

Ligand LMG A 414



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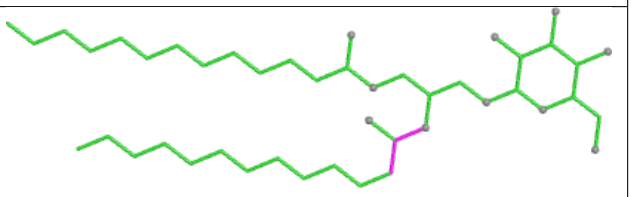
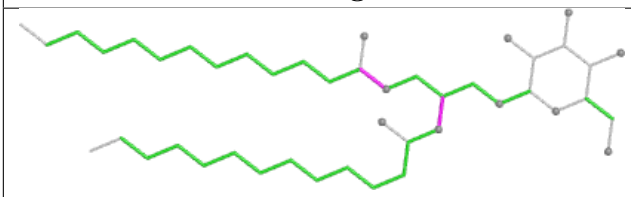


Bond angles



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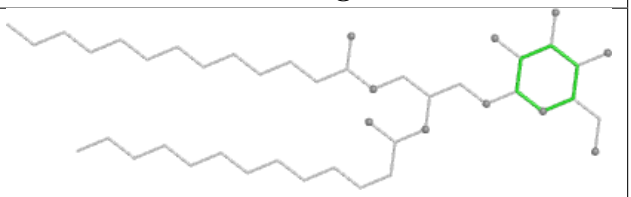
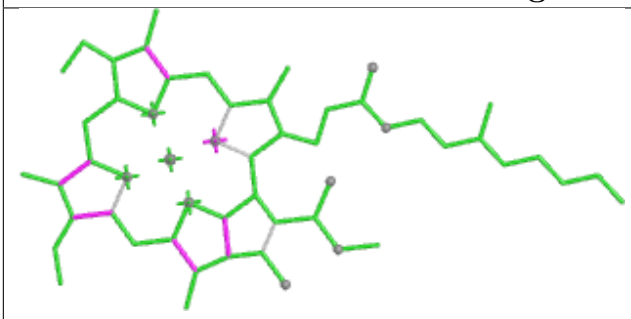
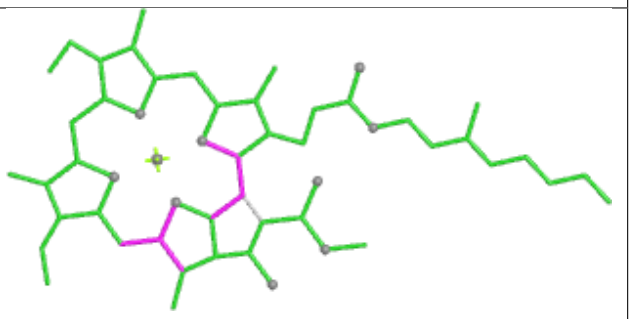


Rings

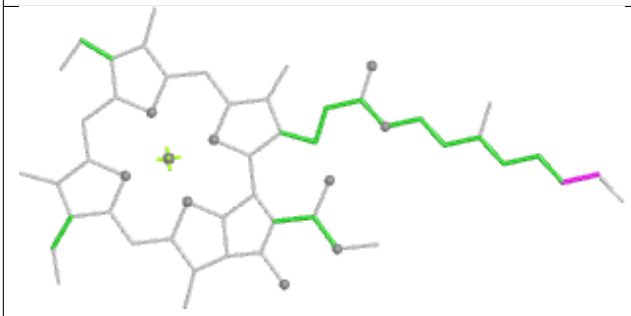
Ligand CLA a 410



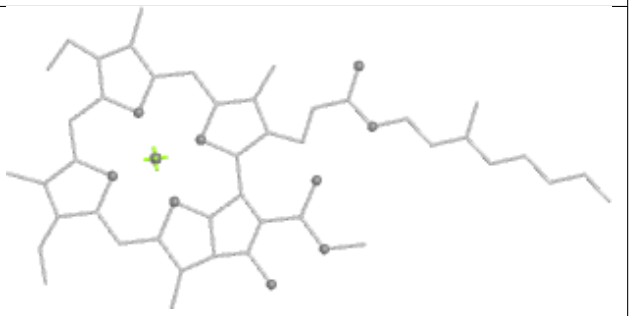
Bond lengths



Bond angles

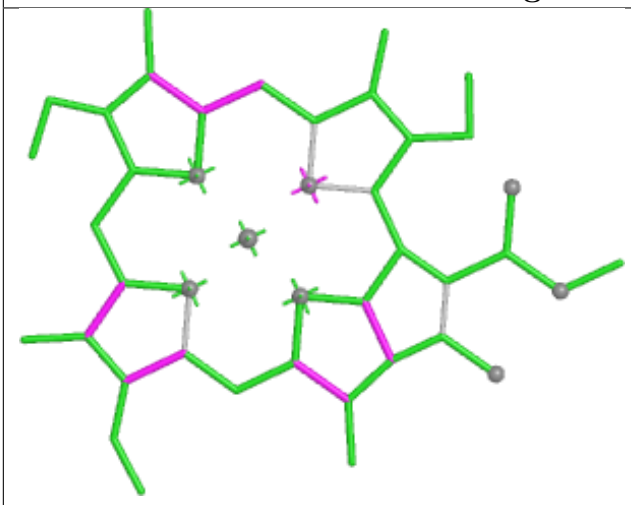


Torsions



Rings

Ligand CLA Y 316



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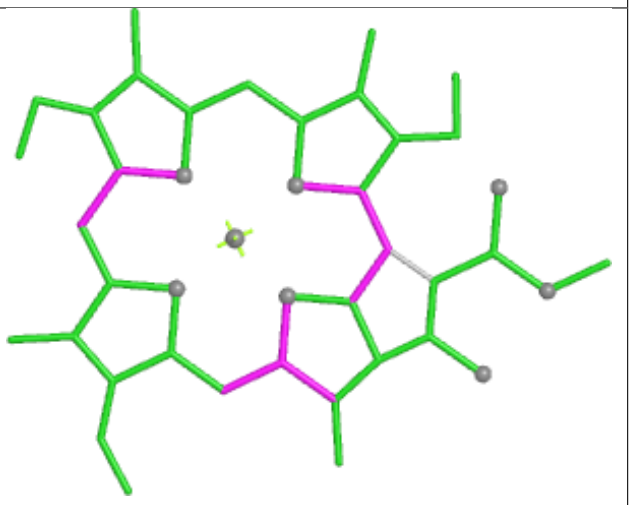

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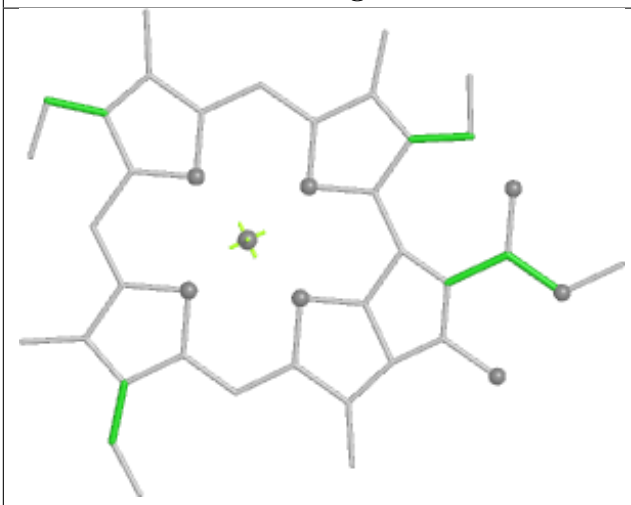
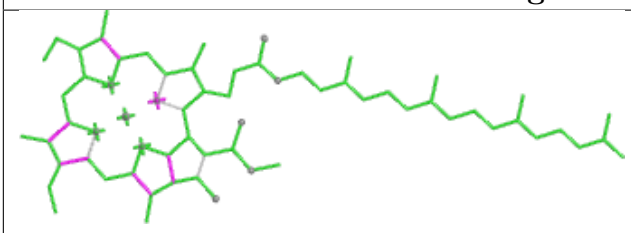


Torsions



Rings

Ligand CLA u 415



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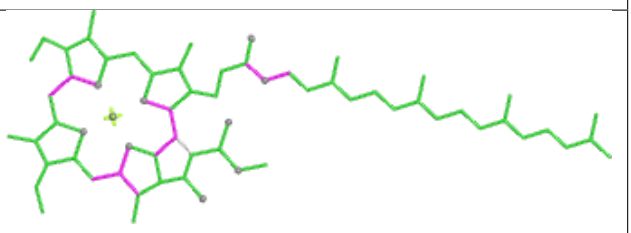

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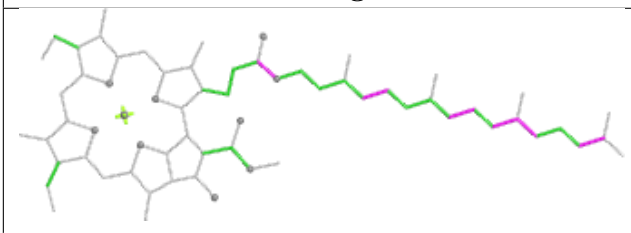

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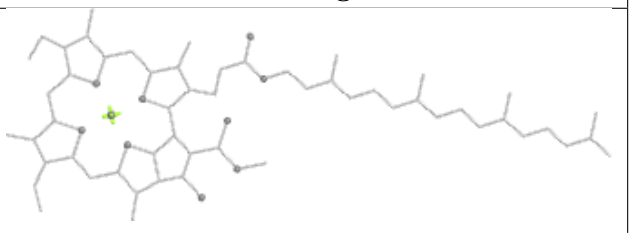
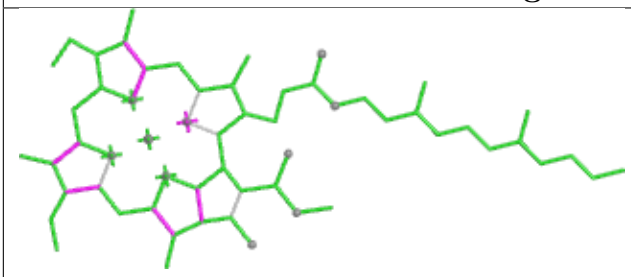


Rings

Ligand CLA Y 305



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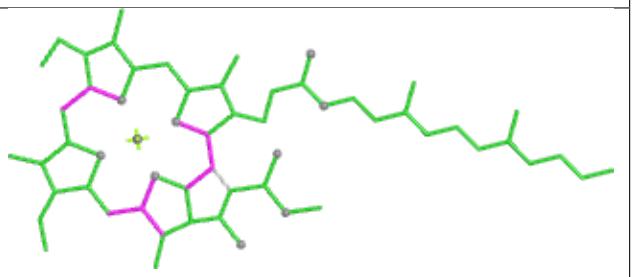
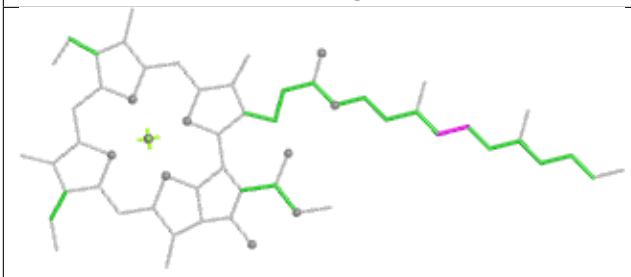


Bond angles



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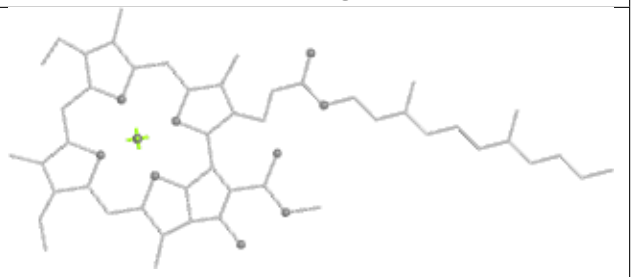
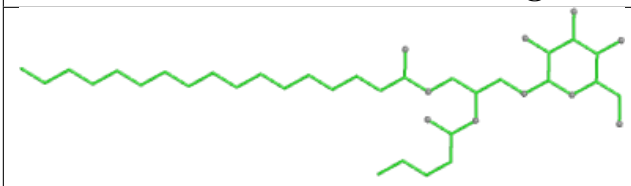


Rings

Ligand LMG I 101



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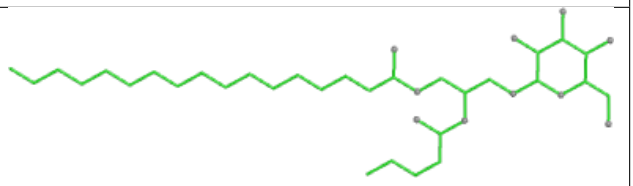
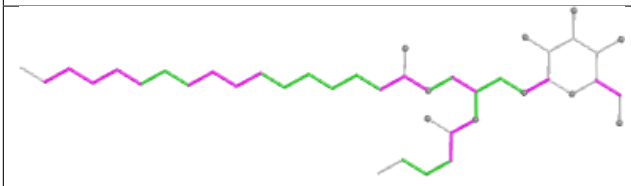


Bond angles



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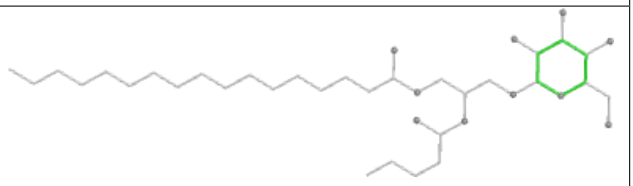
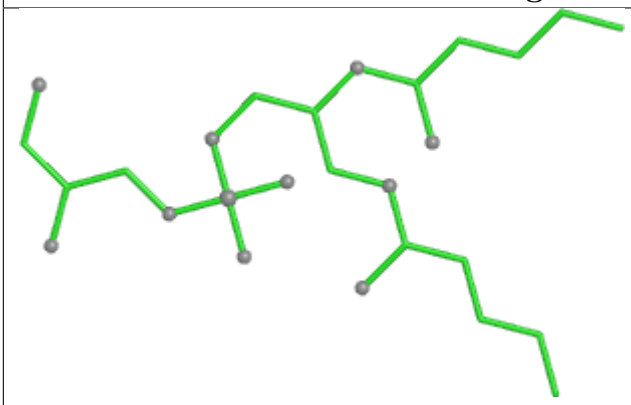


Rings

Ligand LHG u 402



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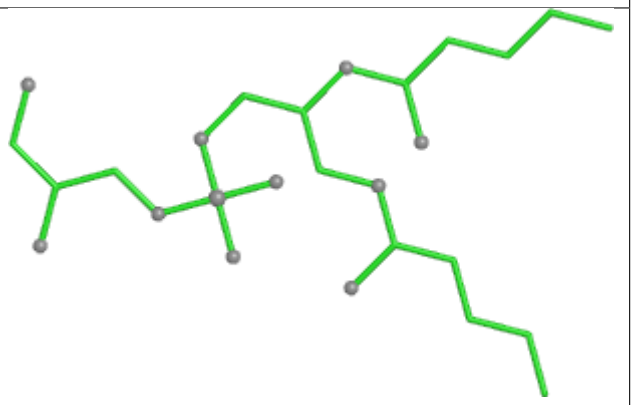
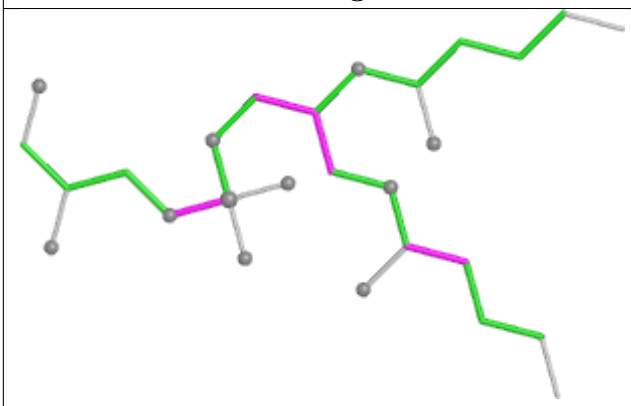


Bond angles



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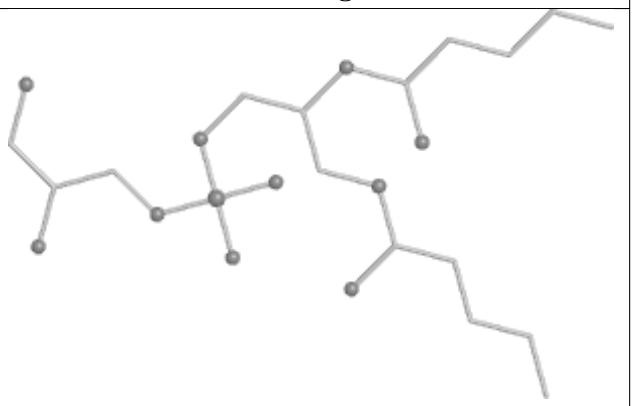
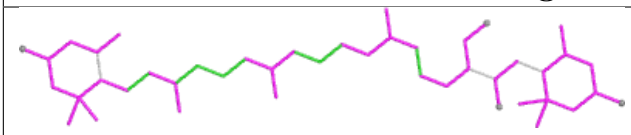


Rings

Ligand 0IE y 321



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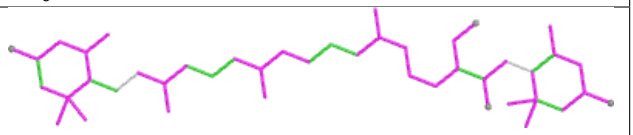
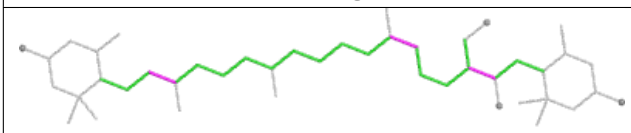


Bond angles



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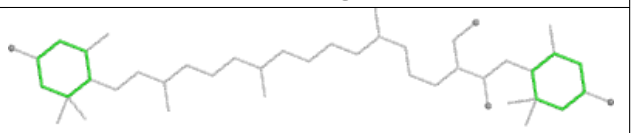
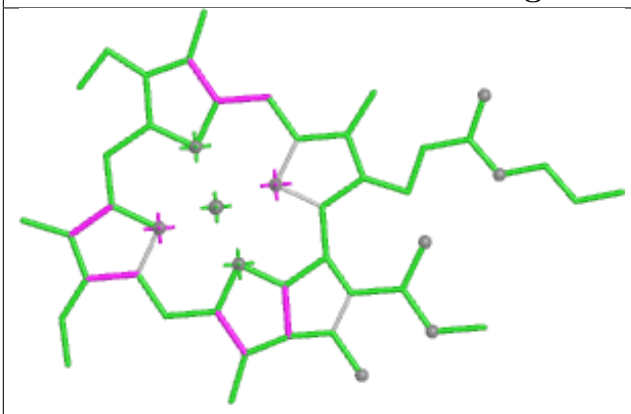


Rings

Ligand CLA B 618



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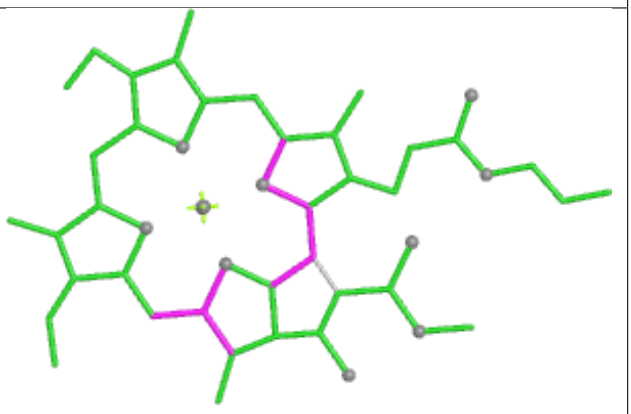
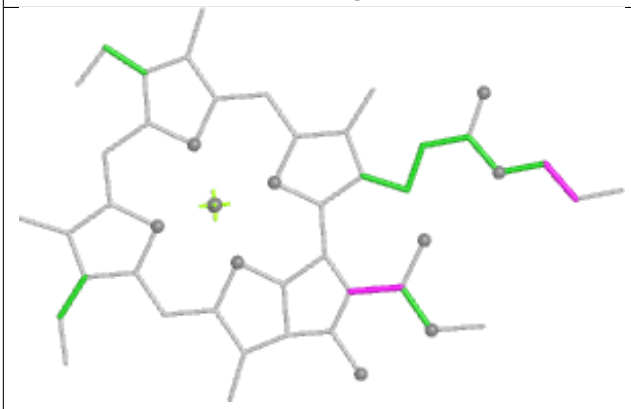


Bond angles



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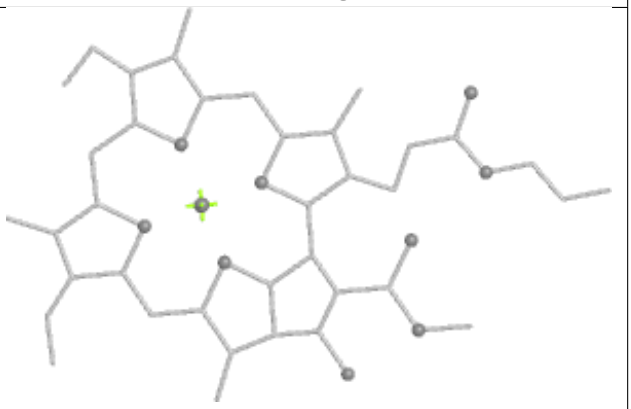
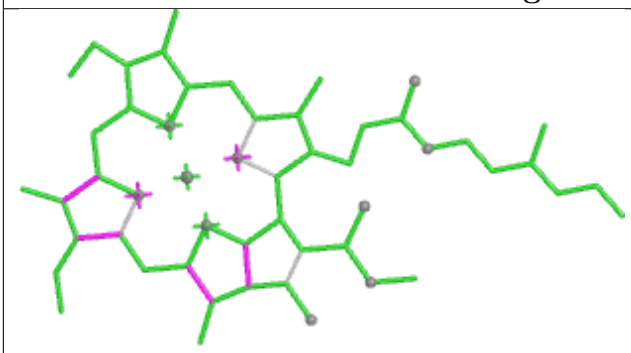


Rings

Ligand CLA U 417



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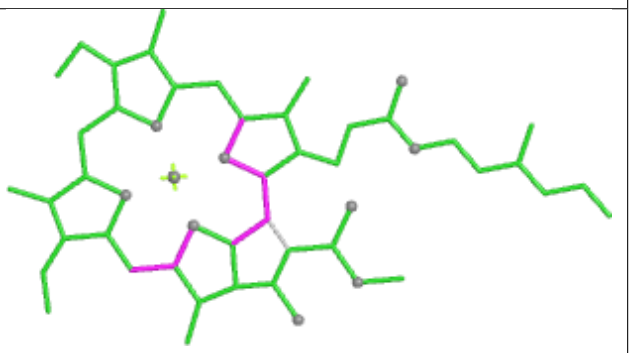
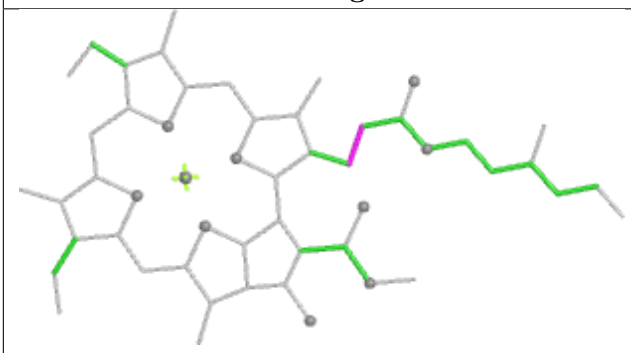


Bond angles



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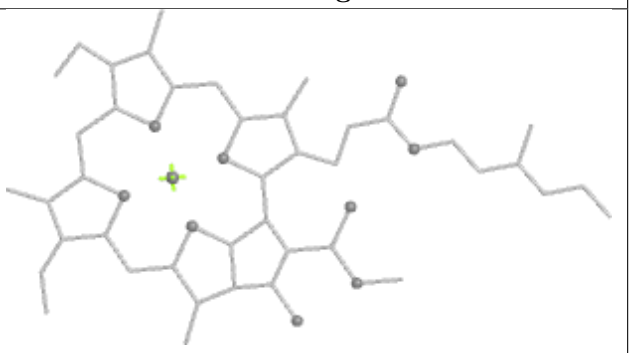
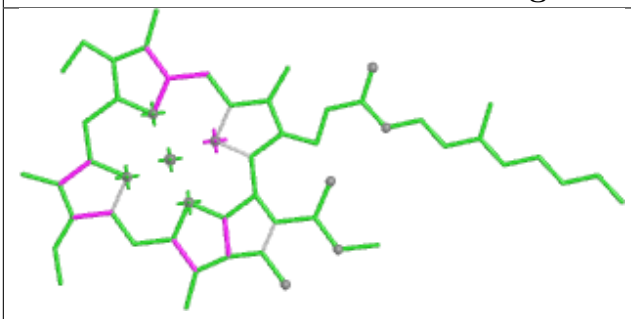


Rings

Ligand CLA c 508



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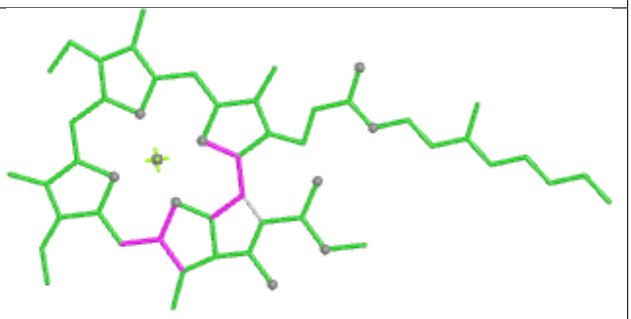
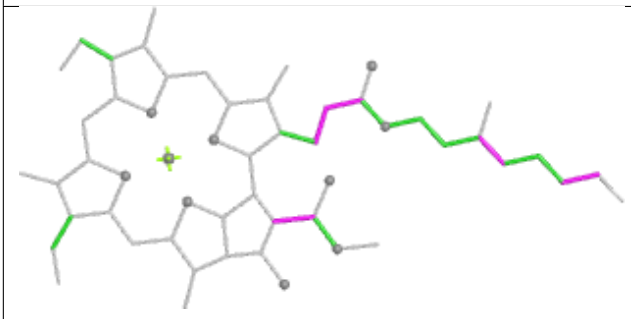


Bond angles



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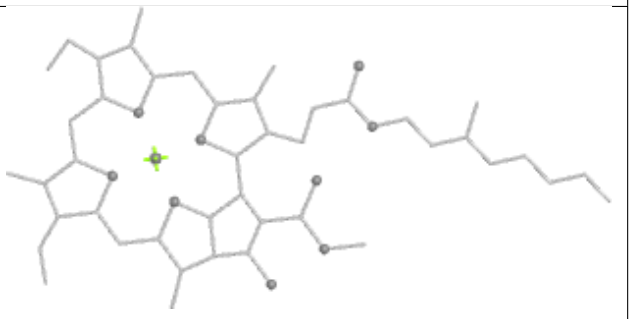
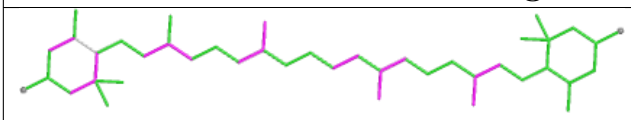


Rings

Ligand LUT Y 320



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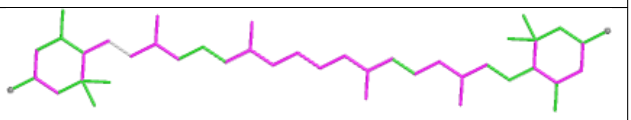
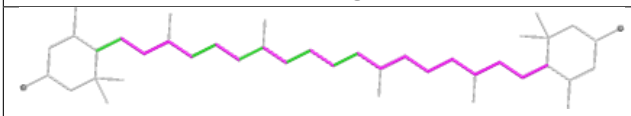


Bond angles



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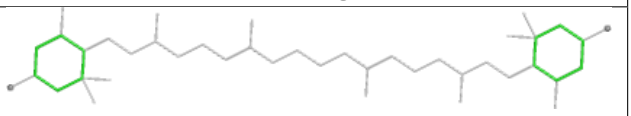
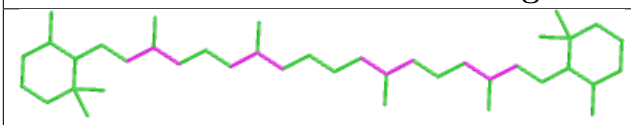


Rings

Ligand BCR A 401



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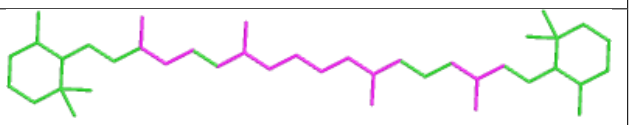
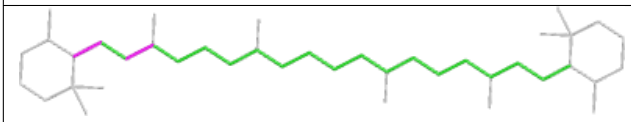


Bond angles



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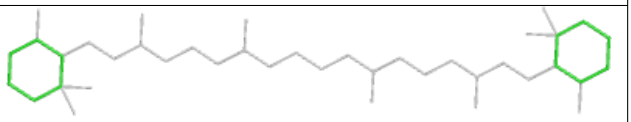
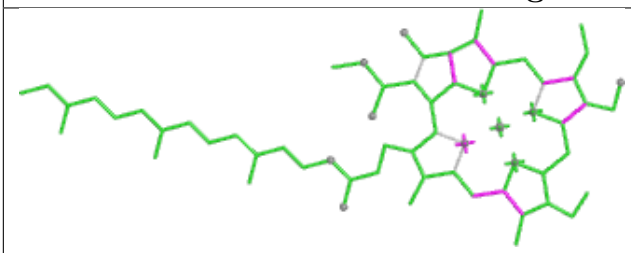


Rings

Ligand CHL S 303



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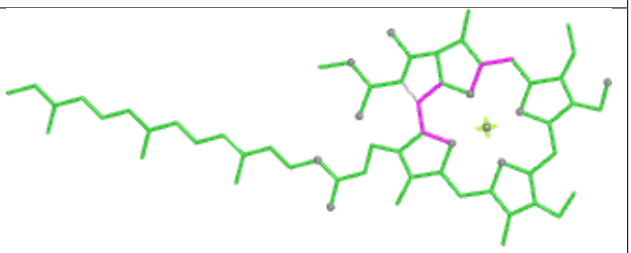
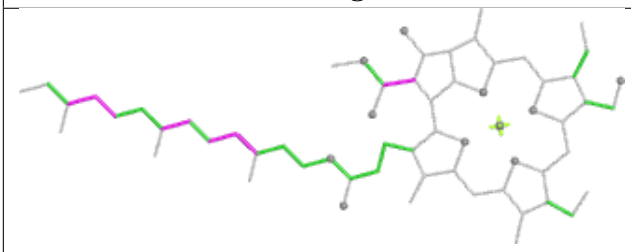


Bond angles



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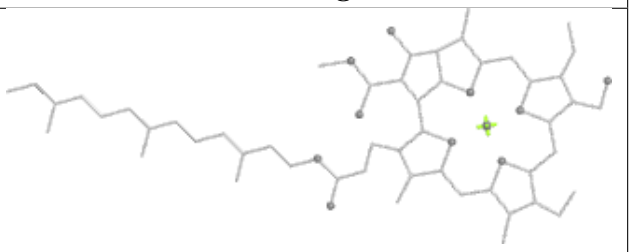
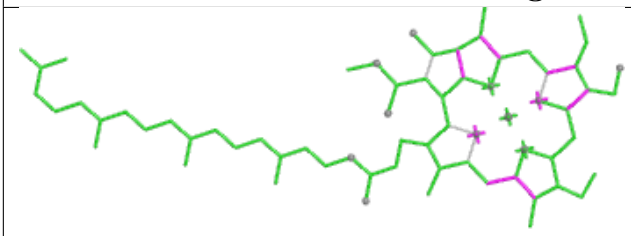
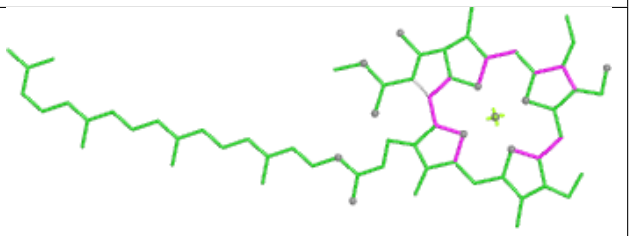


Rings

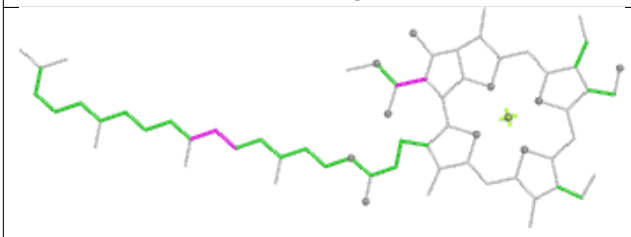
Ligand CHL S 302



Bond lengths



Bond angles



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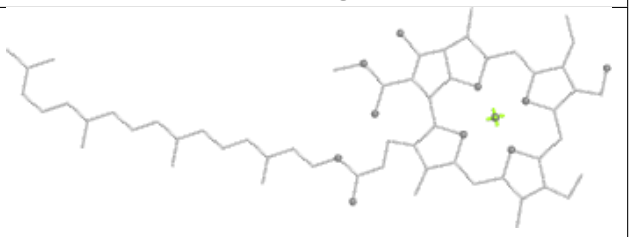
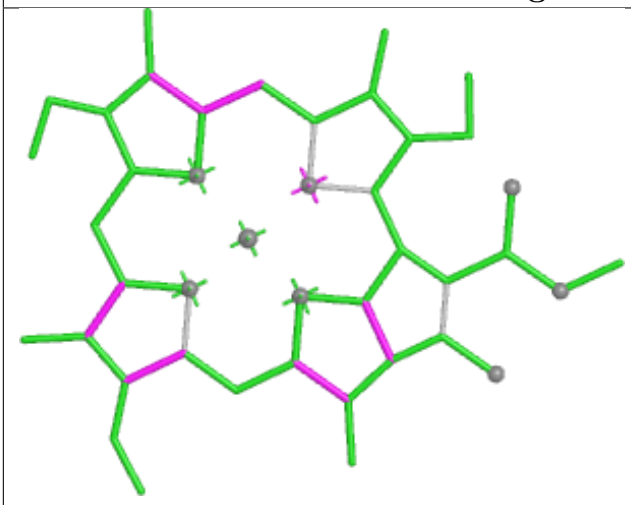


Rings

Ligand CLA 0 308



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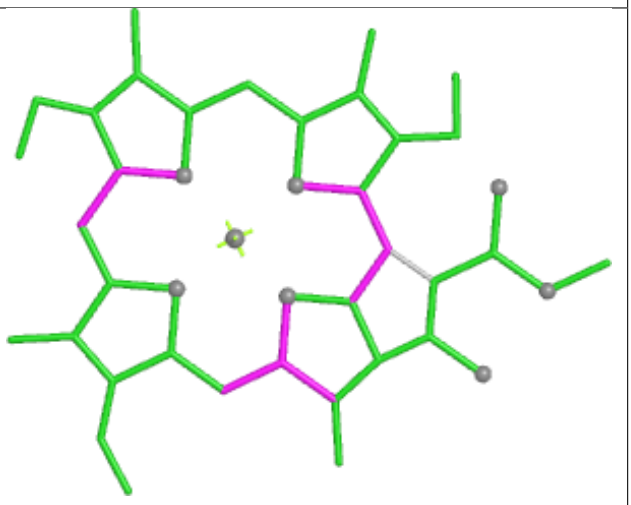
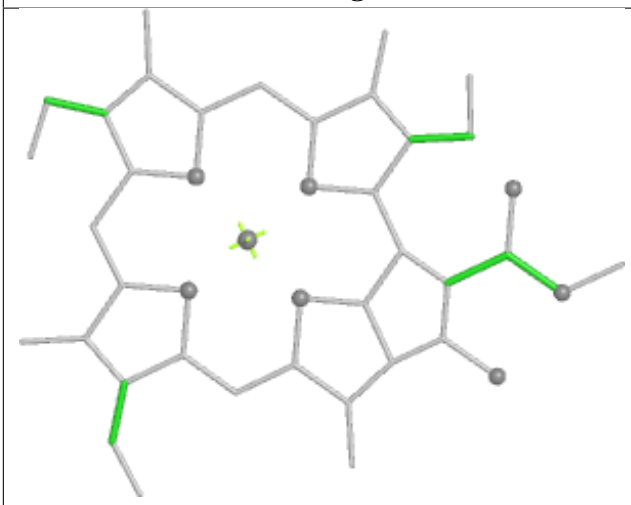


Bond angles

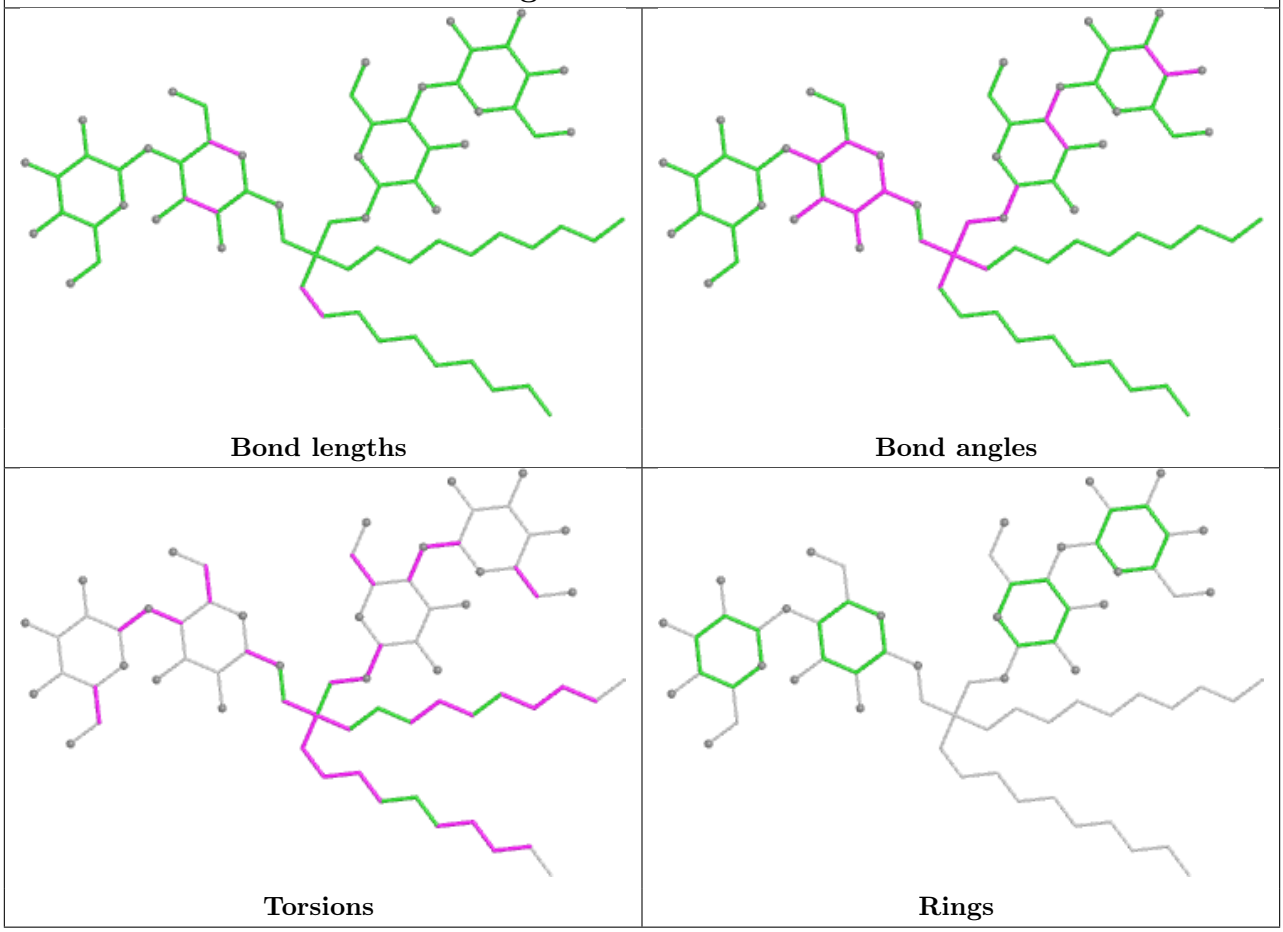


Torsions

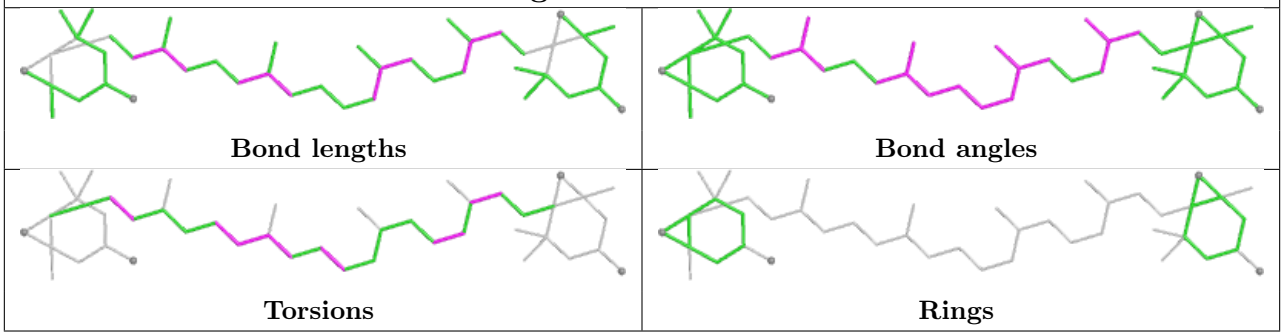


Rings

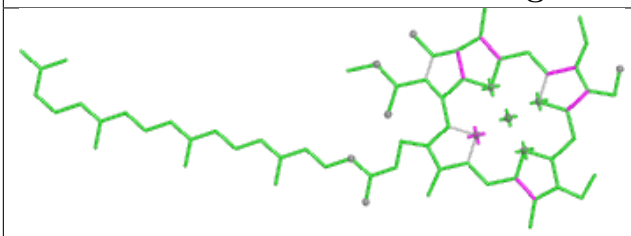
Ligand LMN U 420



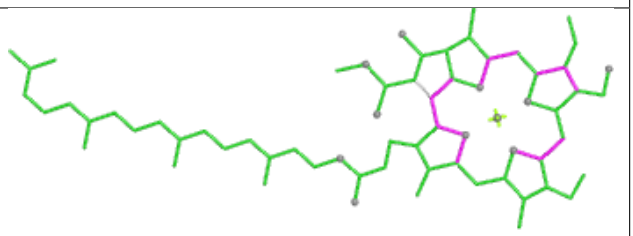
Ligand XAT s 318



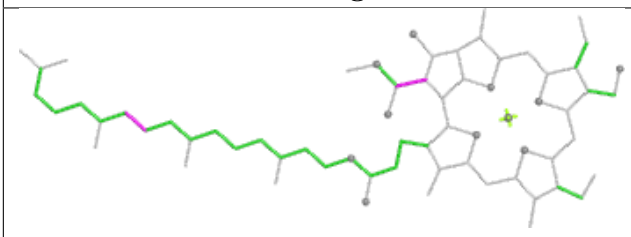
Ligand CHL n 304



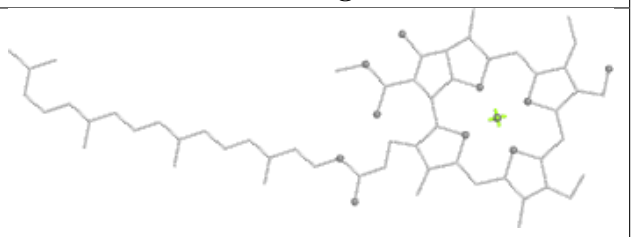
Bond lengths



Bond angles

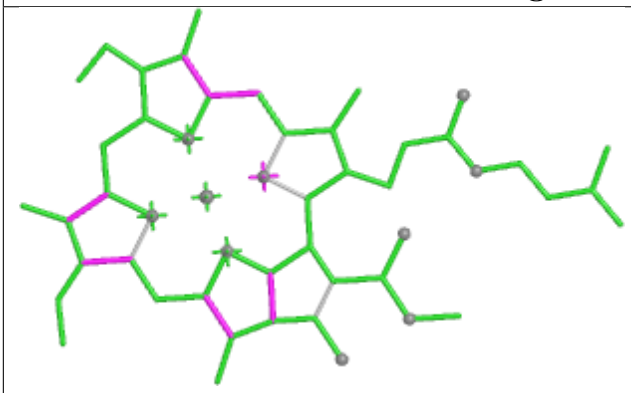


Torsions



Rings

Ligand CLA y 304



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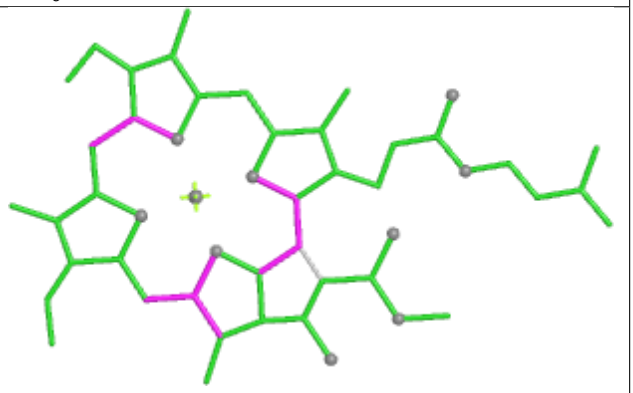
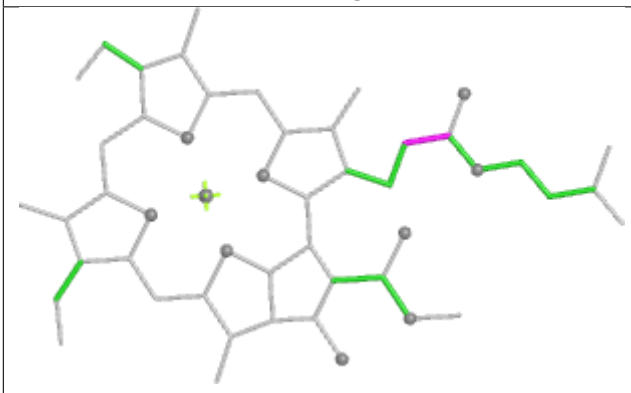


Bond angles



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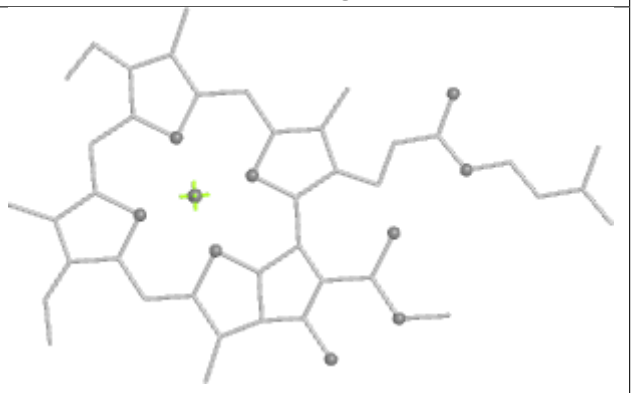
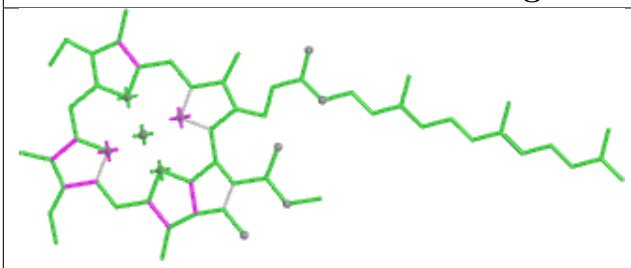


Rings

Ligand CLA U 416



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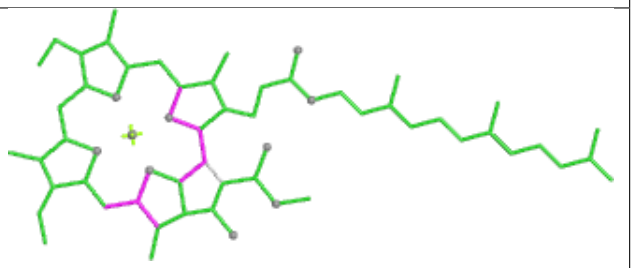
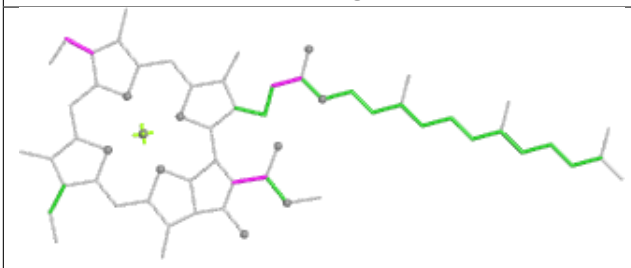


Bond angles



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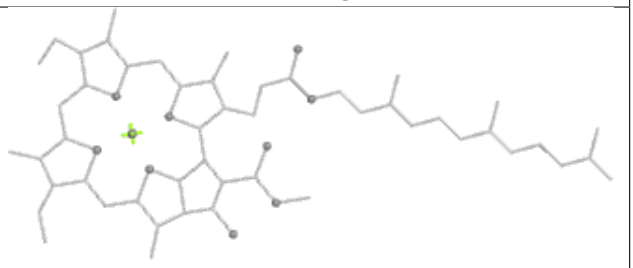
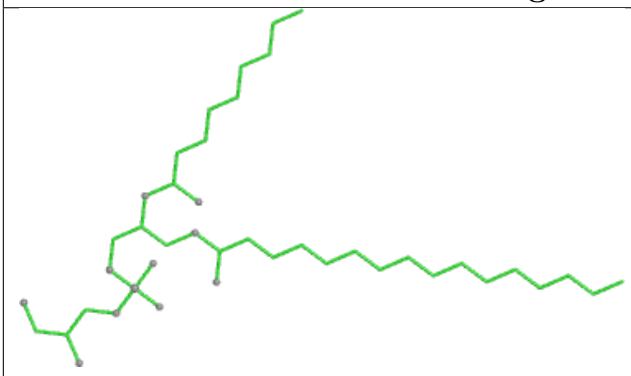


Rings

Ligand LHG s 301



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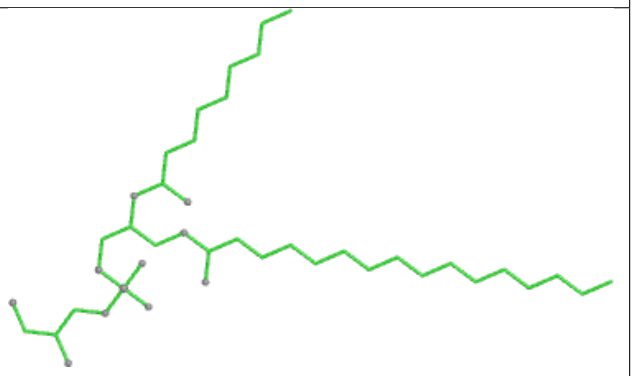
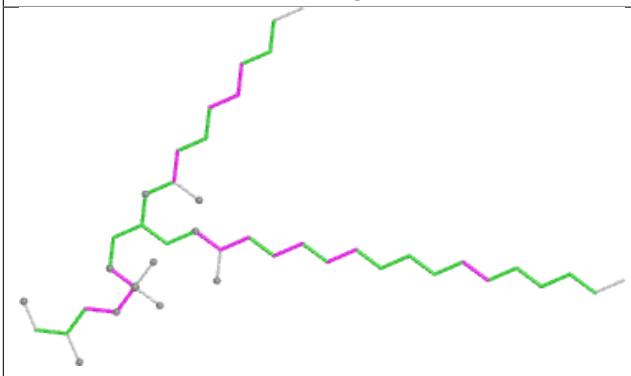


Bond angles



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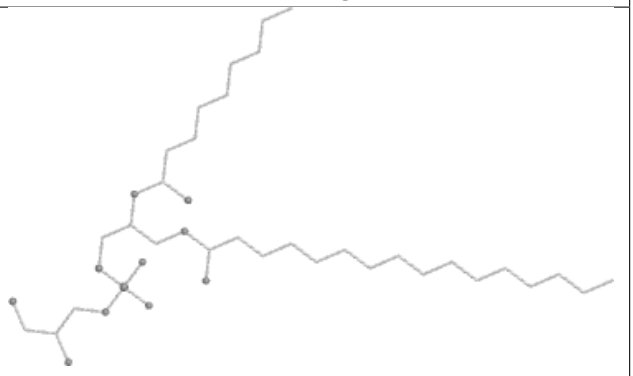
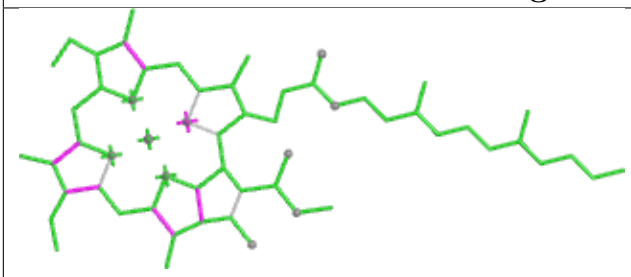


Rings

Ligand CLA s 312



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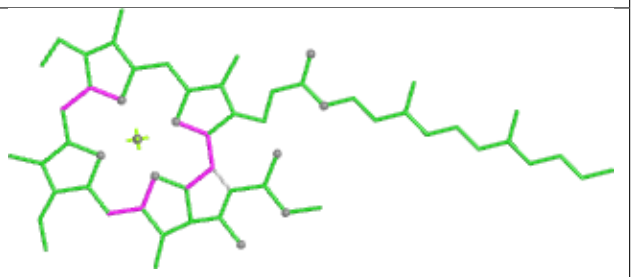
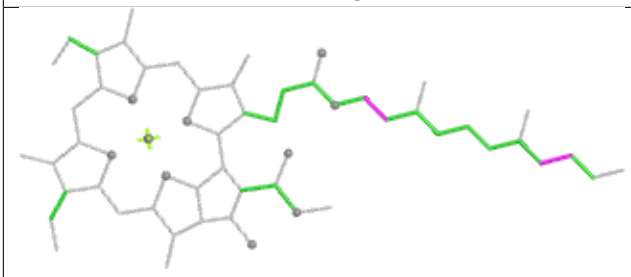


Bond angles



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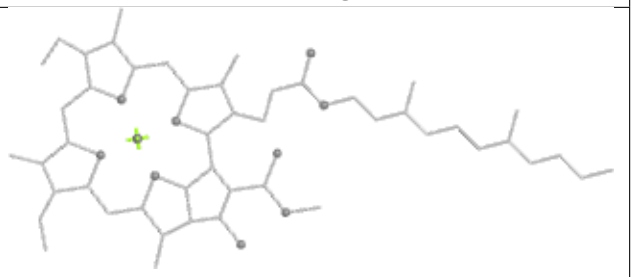
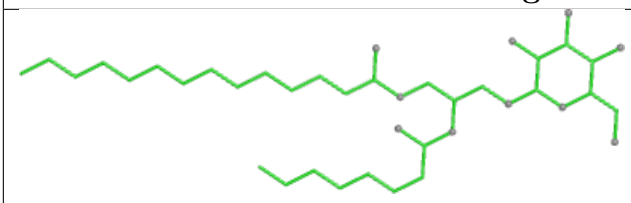


Rings

Ligand LMG d 408



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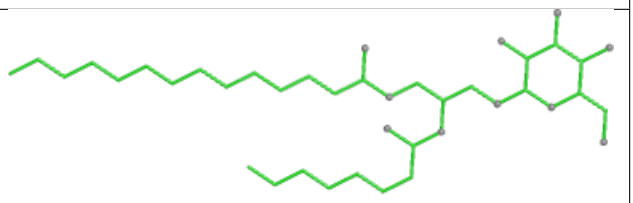
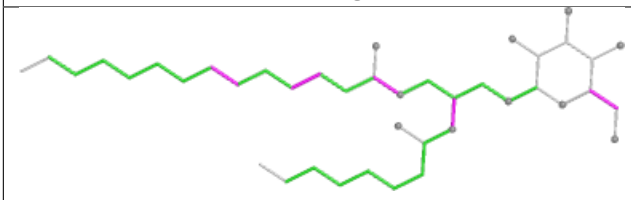


Bond angles



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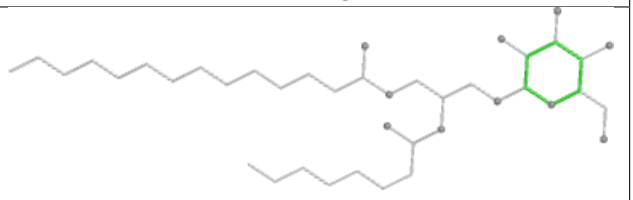
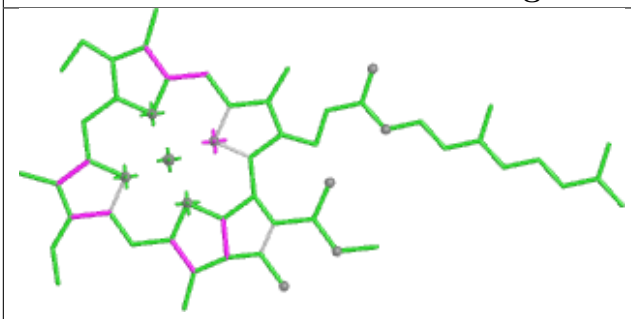


Rings

Ligand CLA U 410



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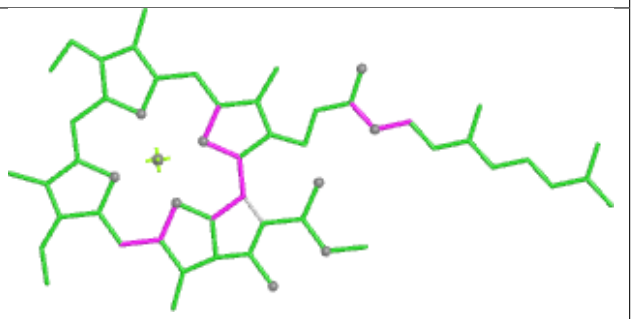
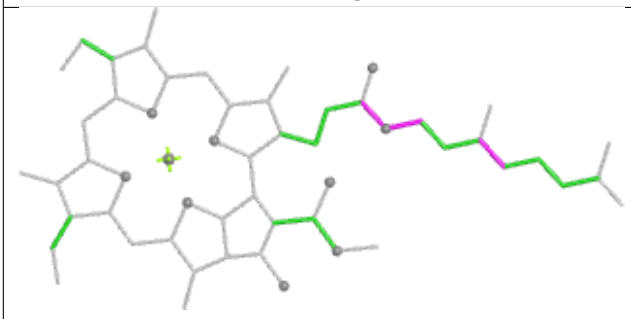


Bond angles



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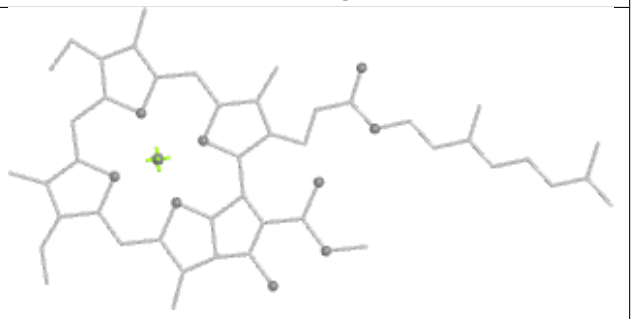
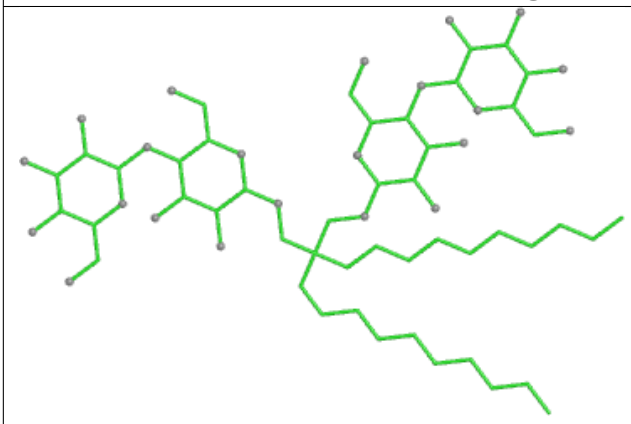


Rings

Ligand LMN c 525



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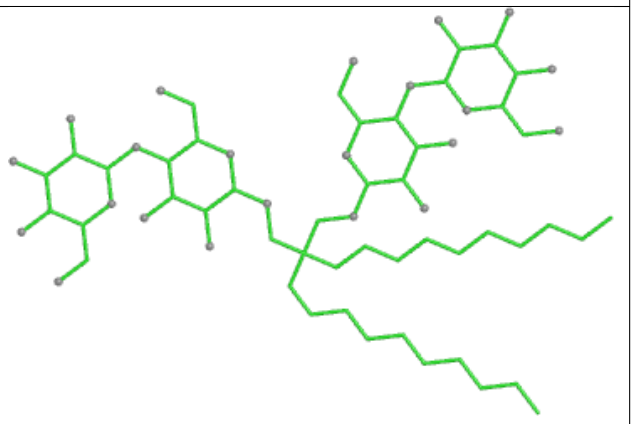
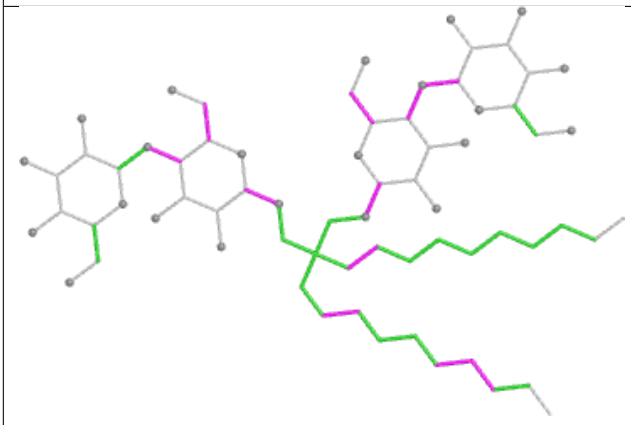


Bond angles



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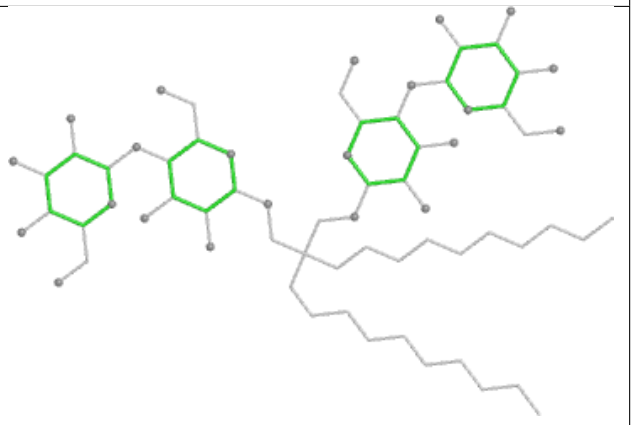
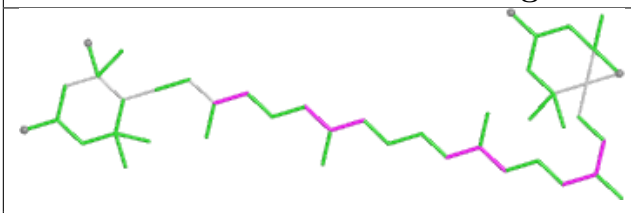


Rings

Ligand NEX G 321



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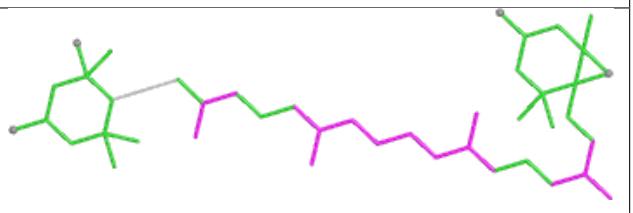
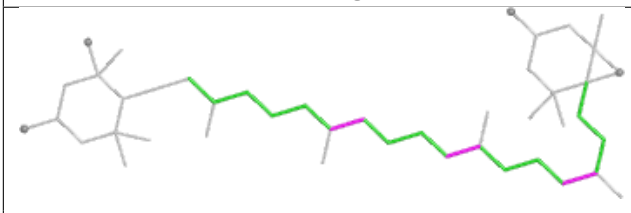


Bond angles



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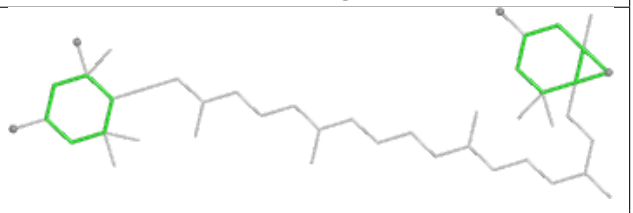
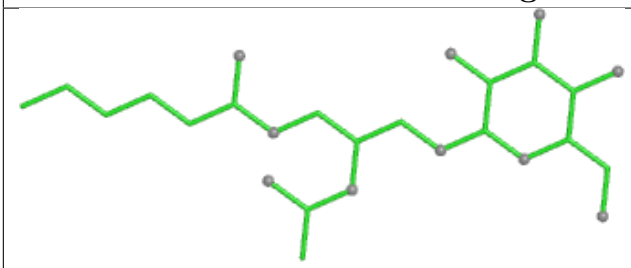


Rings

Ligand LMG C 522



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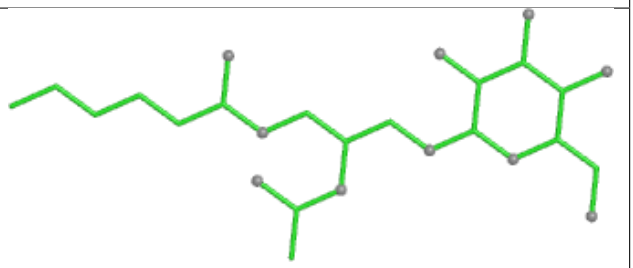
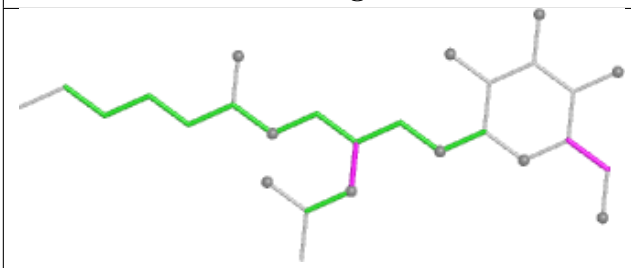


Bond angles



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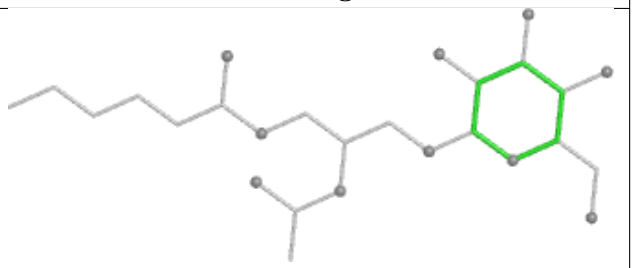
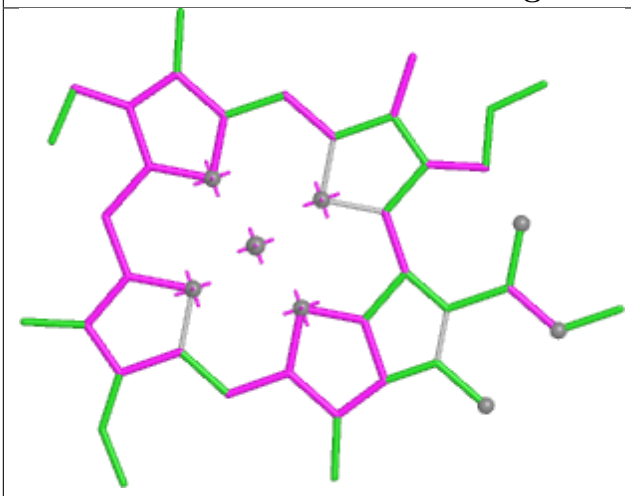


Rings

Ligand CLA Y 313



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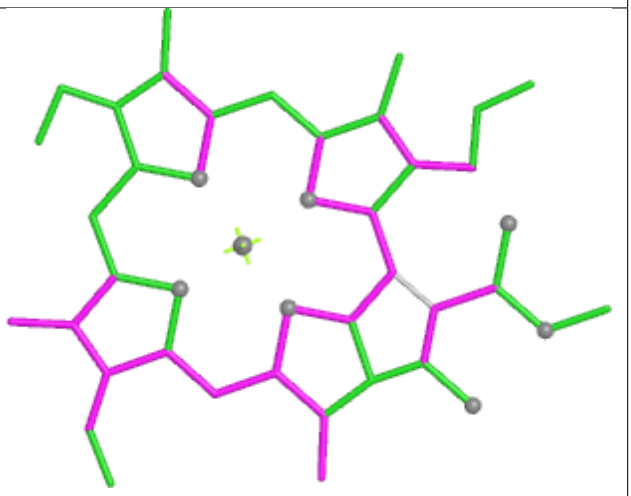

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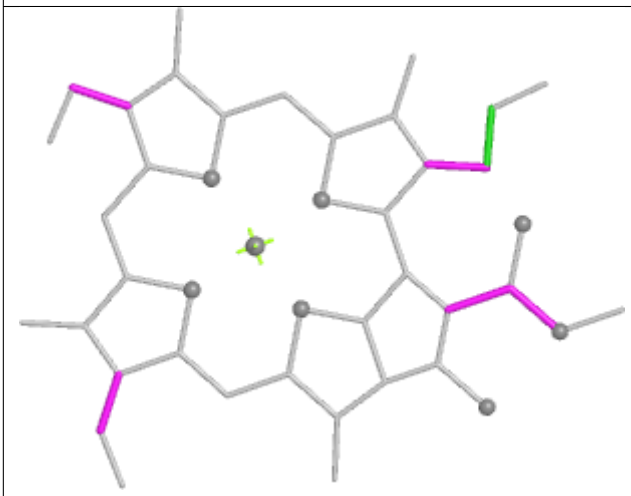

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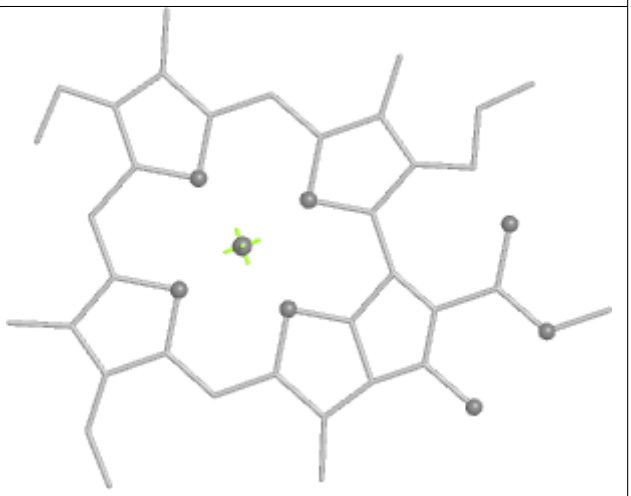
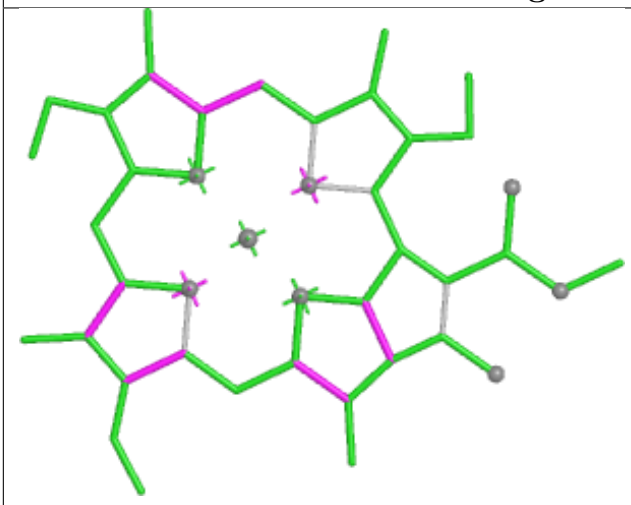


Rings

Ligand CLA 1 305



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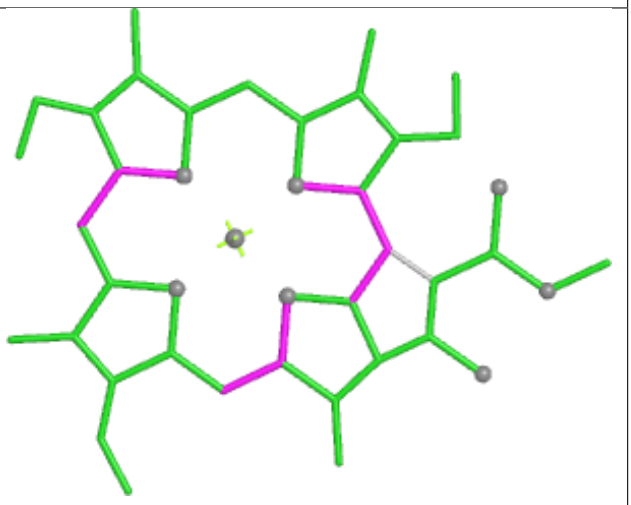
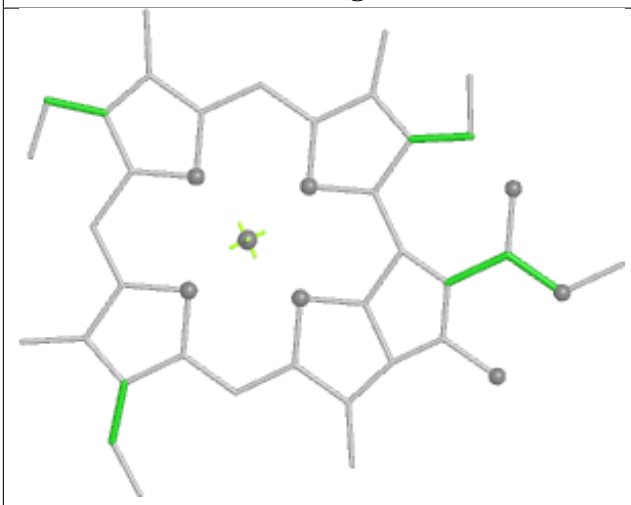


Bond angles

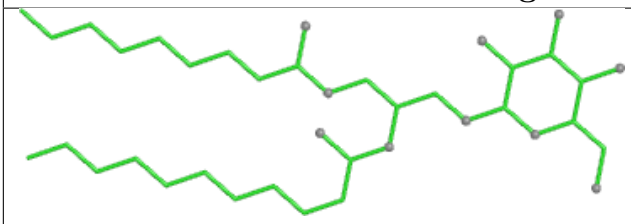


Torsions



Rings

Ligand LMG D 411



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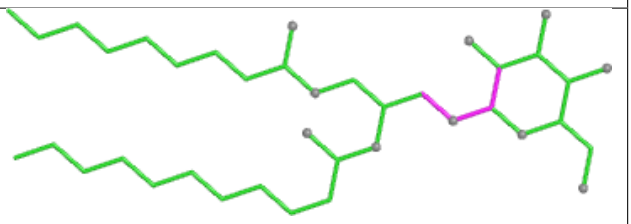
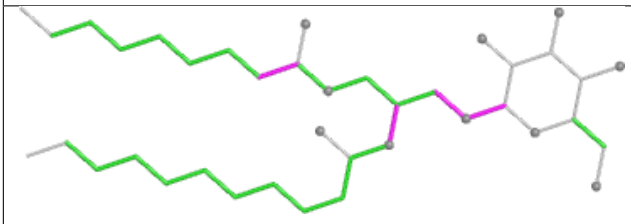


Bond angles



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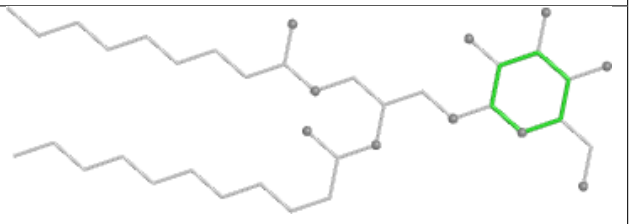
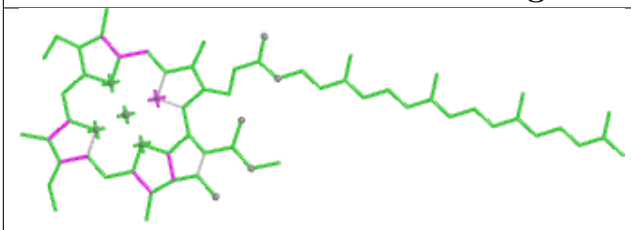


Rings

Ligand CLA n 313



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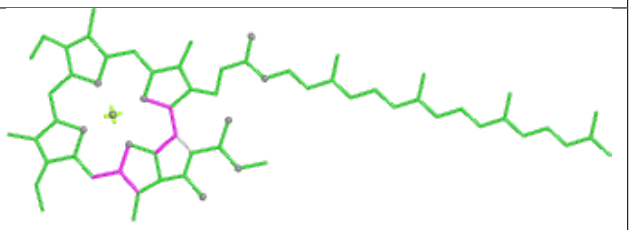
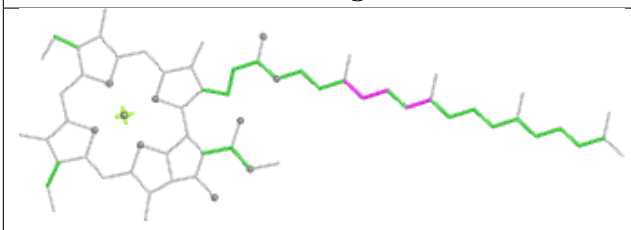


Bond angles



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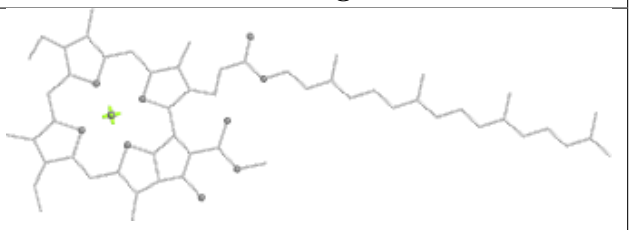
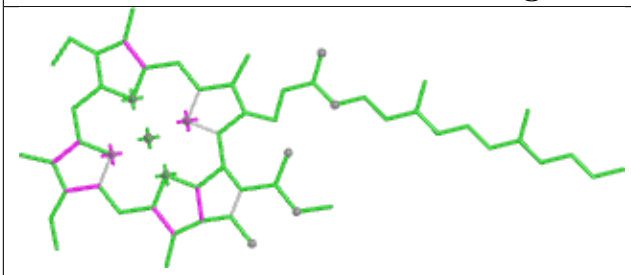


Rings

Ligand CLA G 315



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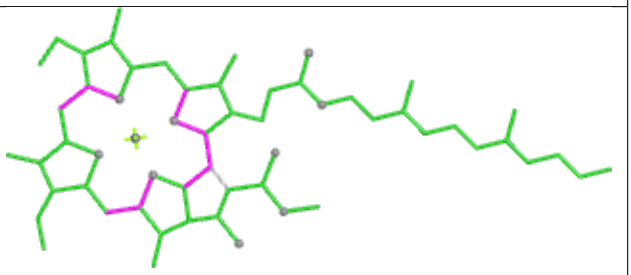
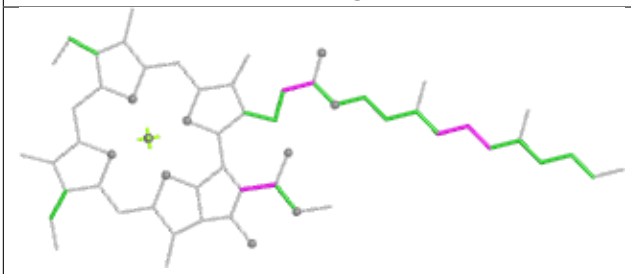
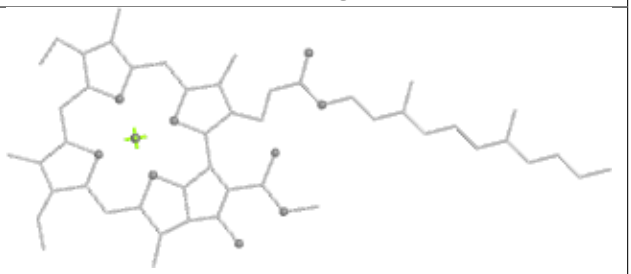


Bond angles

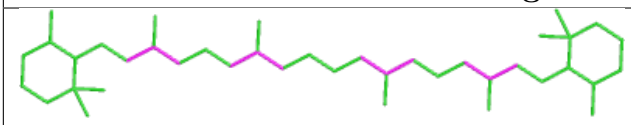


Torsions



Rings

Ligand BCR B 603



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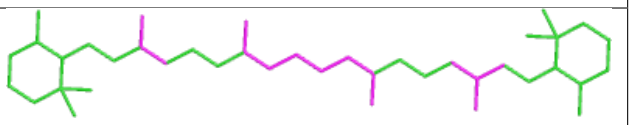

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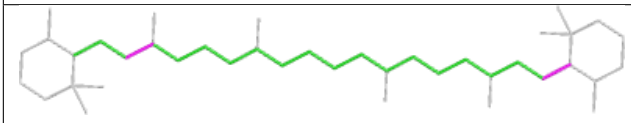

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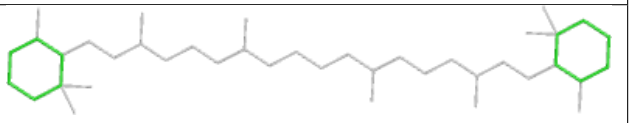

Rings

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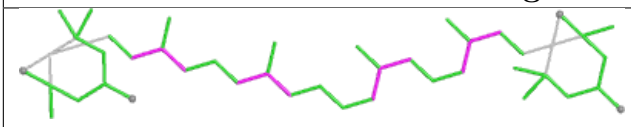	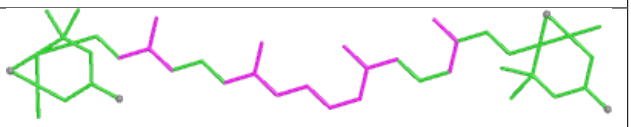
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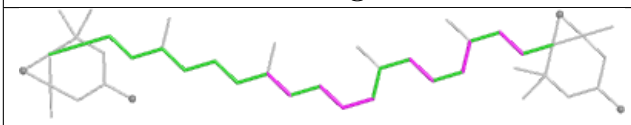
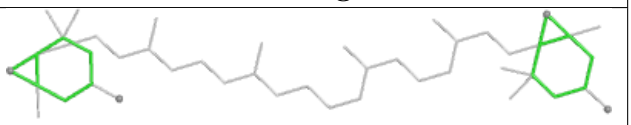
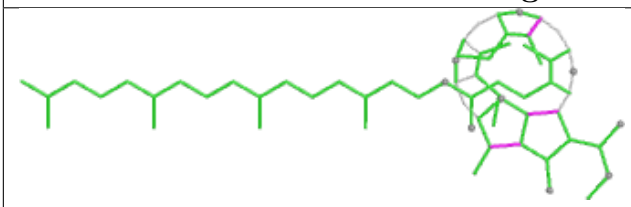
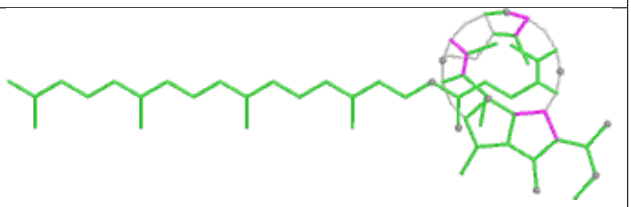
	
Torsions	**Rings**

Ligand PHO A 402	
	
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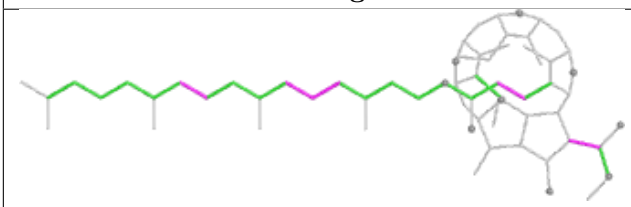
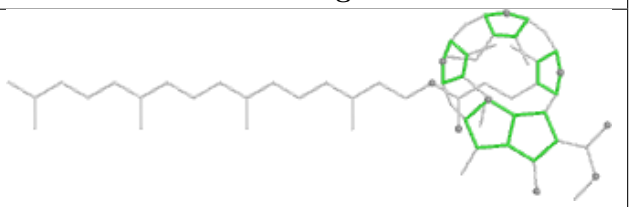
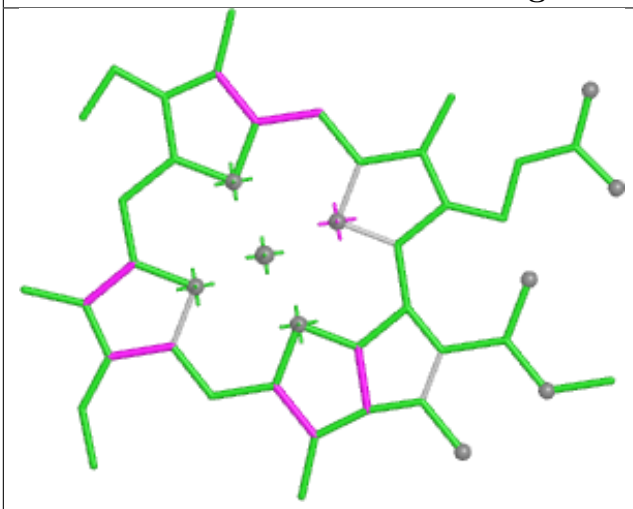
	
Torsions	**Rings**

Ligand CLA 0 311



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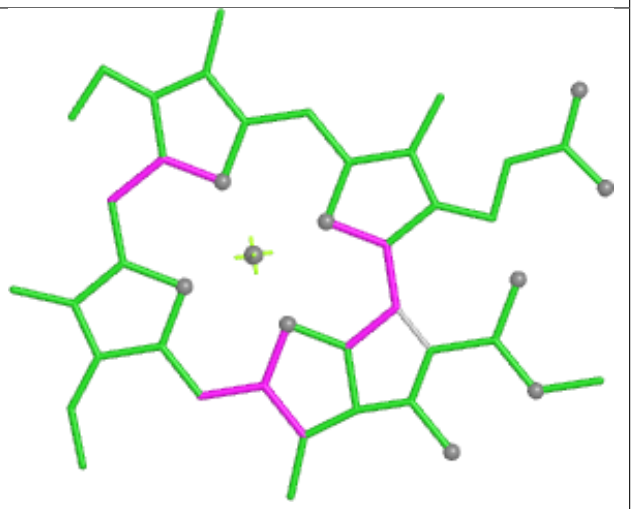
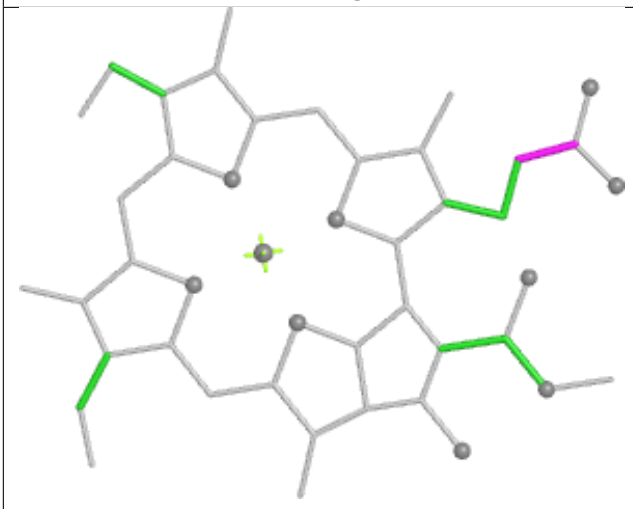


Bond angles

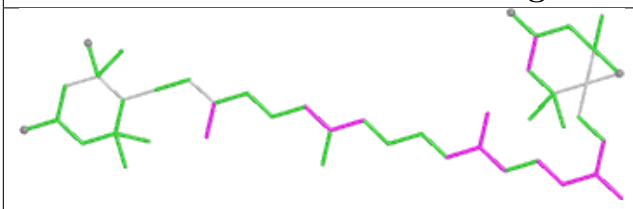


Torsions



Rings

Ligand NEX s 319



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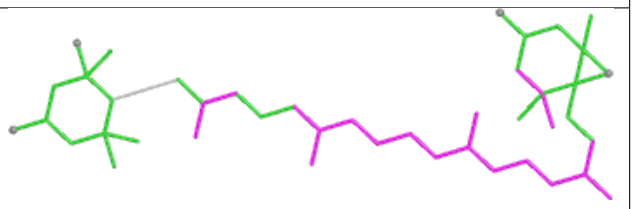

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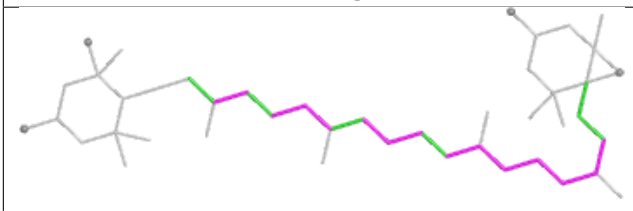
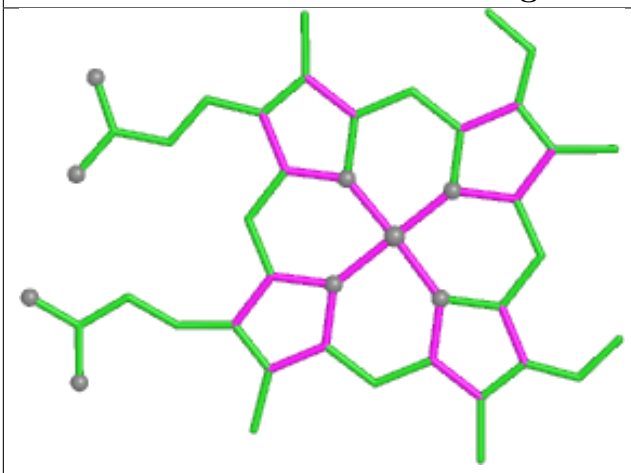


Torsions



Rings

Ligand HEM E 101



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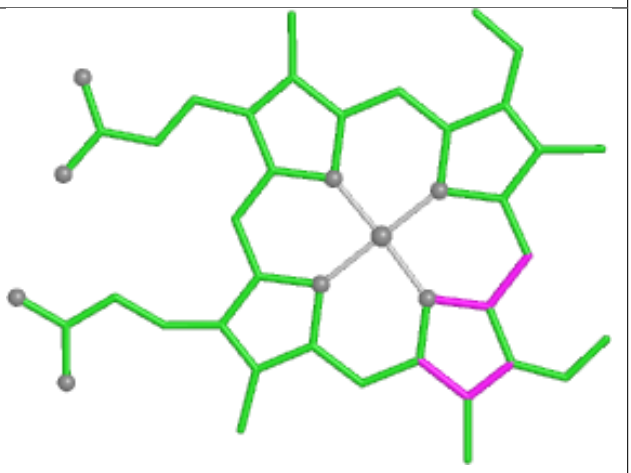
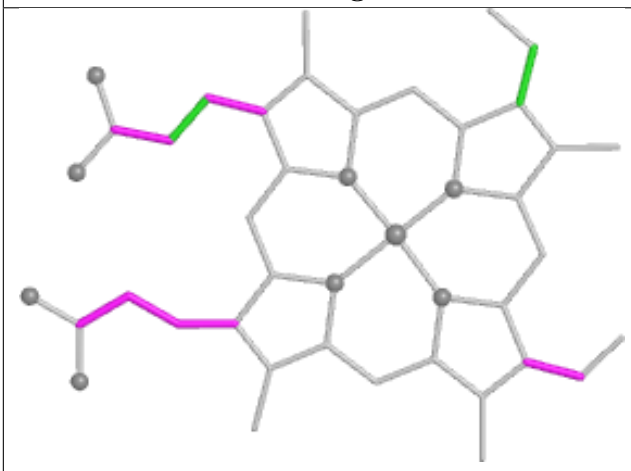


Bond angles



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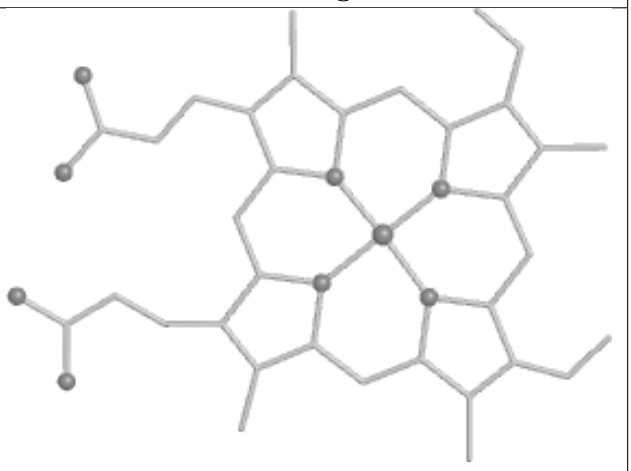
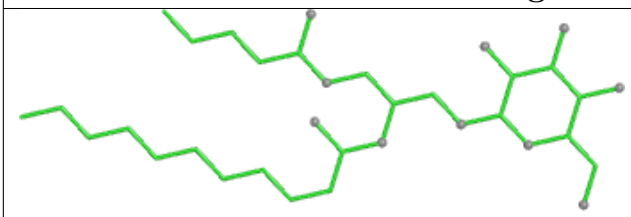


Rings

Ligand LMG i 101



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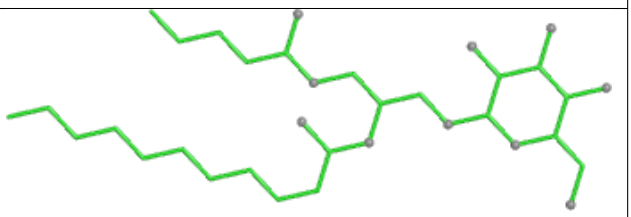
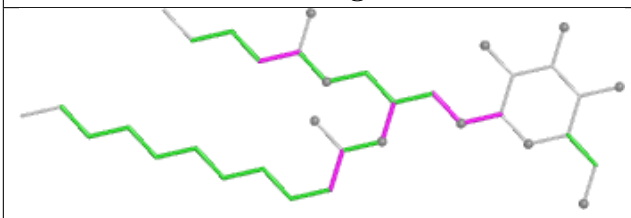


Bond angles



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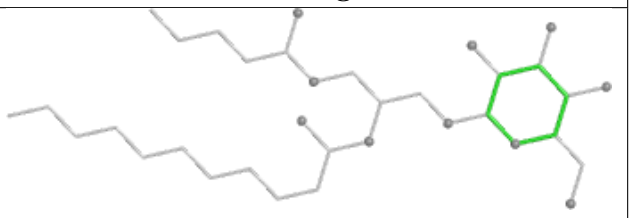
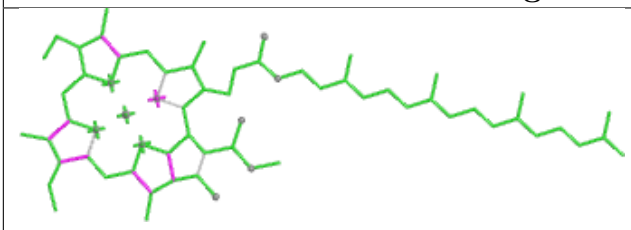


Rings

Ligand CLA A 410



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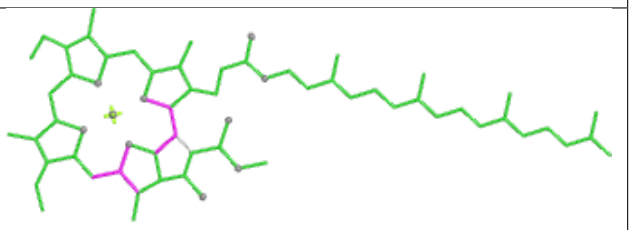

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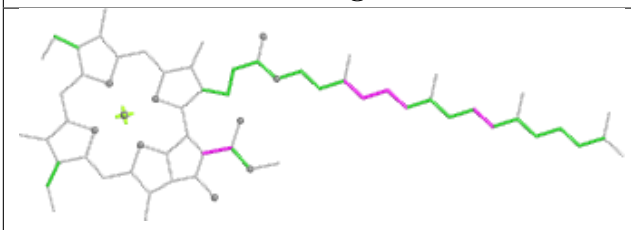

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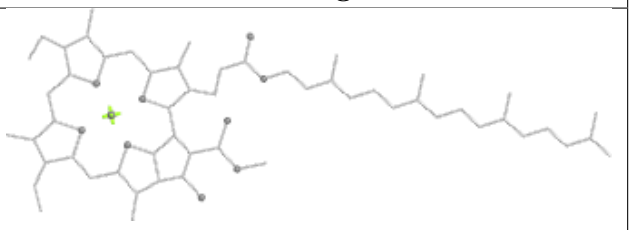
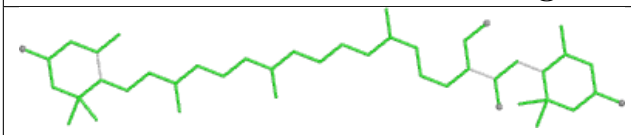


Rings

Ligand 0IE 1 314



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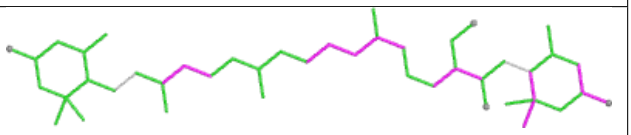

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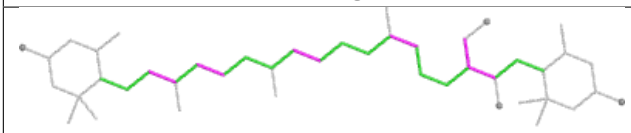

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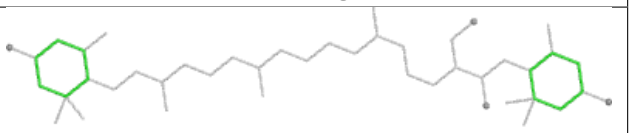
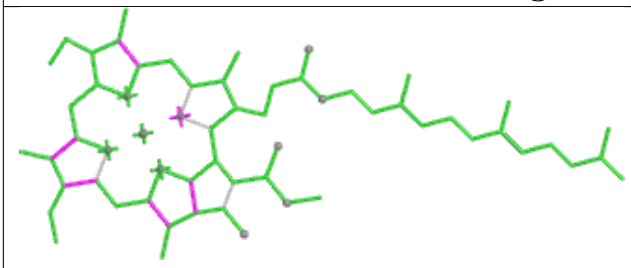


Rings

Ligand CLA c 514



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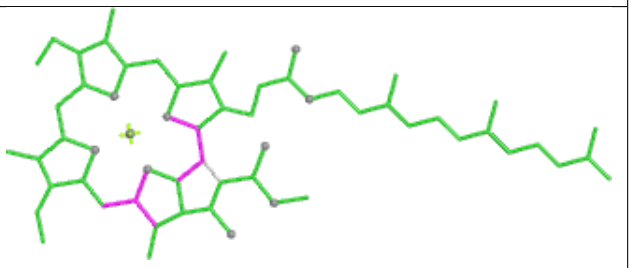
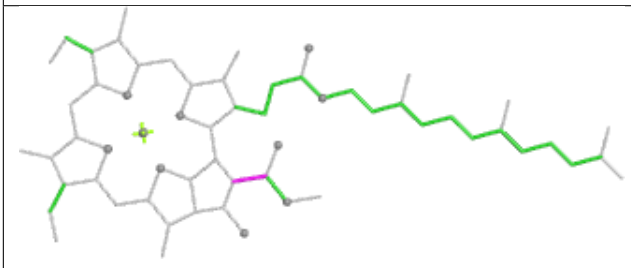


Bond angles



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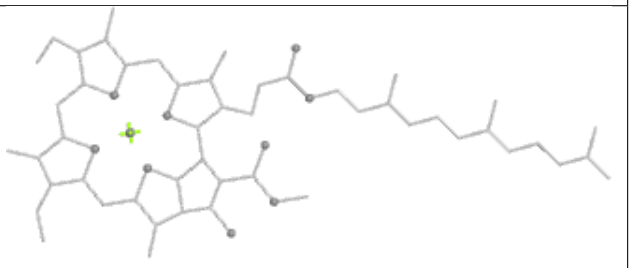

Rings

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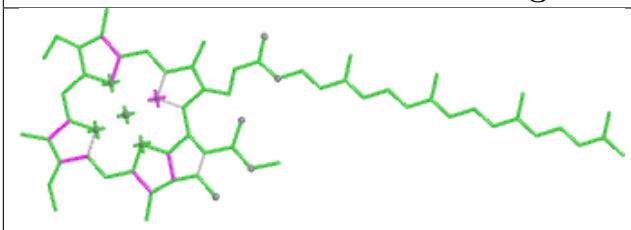

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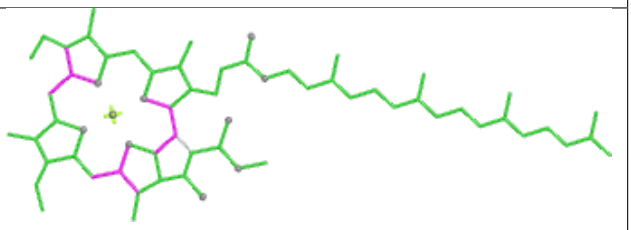
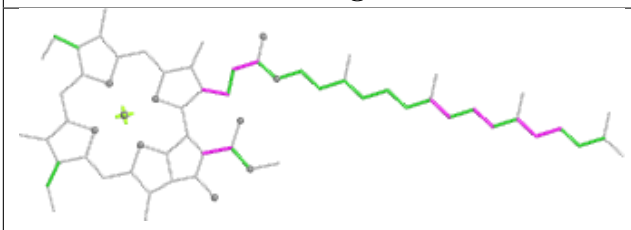


Bond angles



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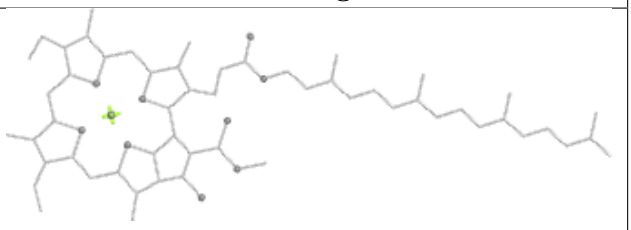
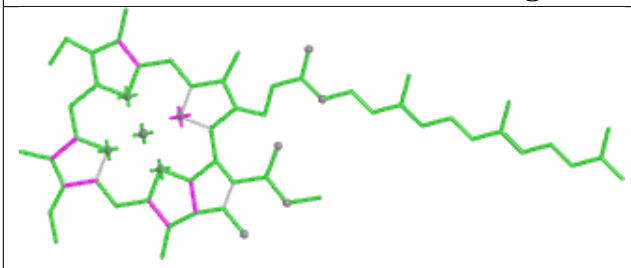


Rings

Ligand CLA V 315



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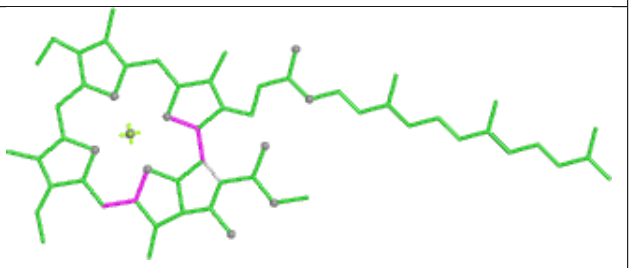
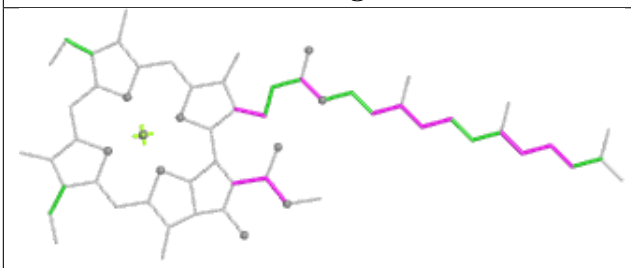


Bond angles



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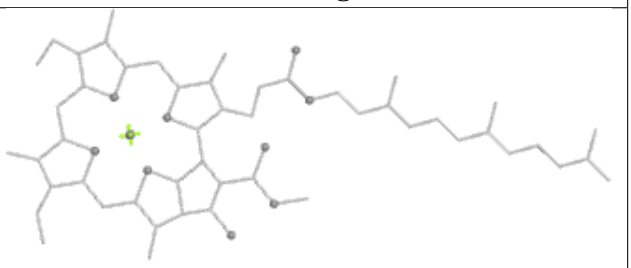
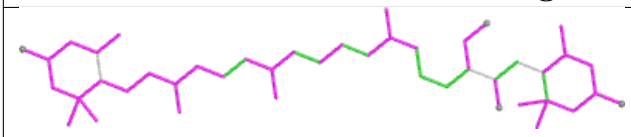


Rings

Ligand 0IE y 319



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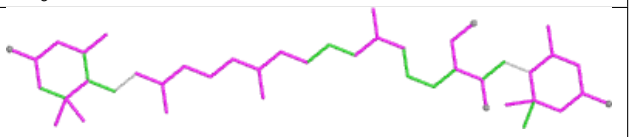
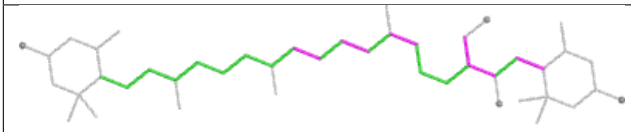


Bond angles



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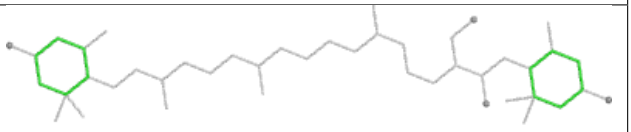
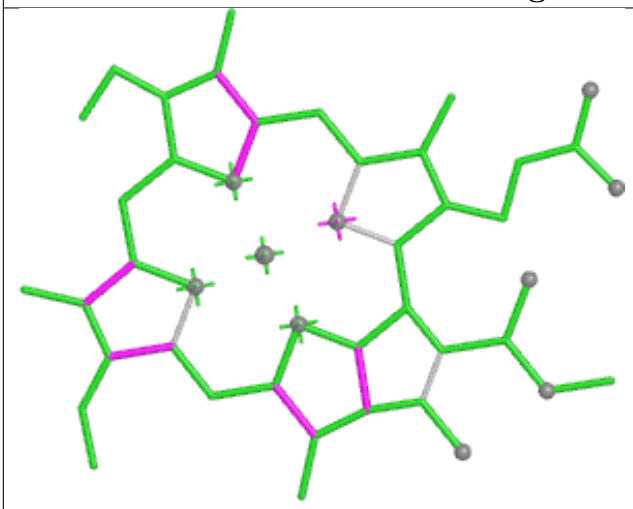


Rings

Ligand CLA 0 301



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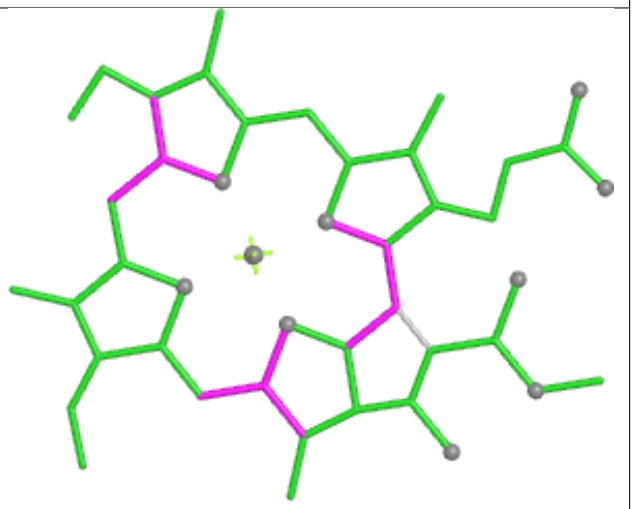
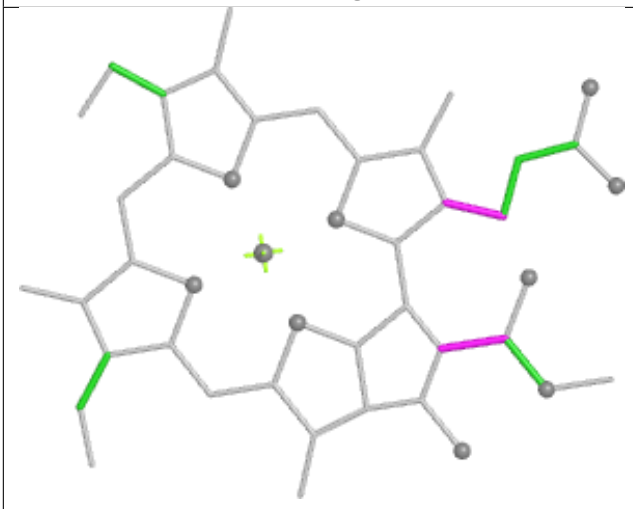


Bond angles

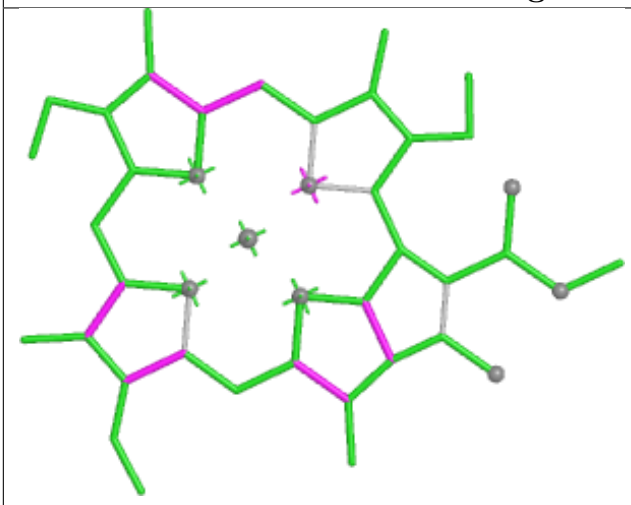


Torsions



Rings

Ligand CLA y 316



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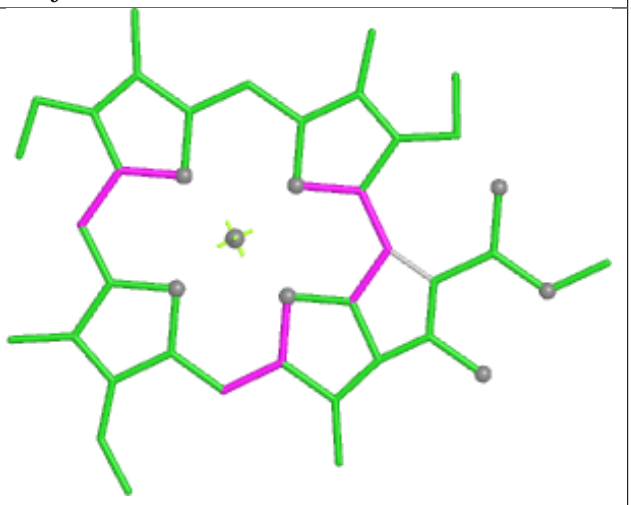
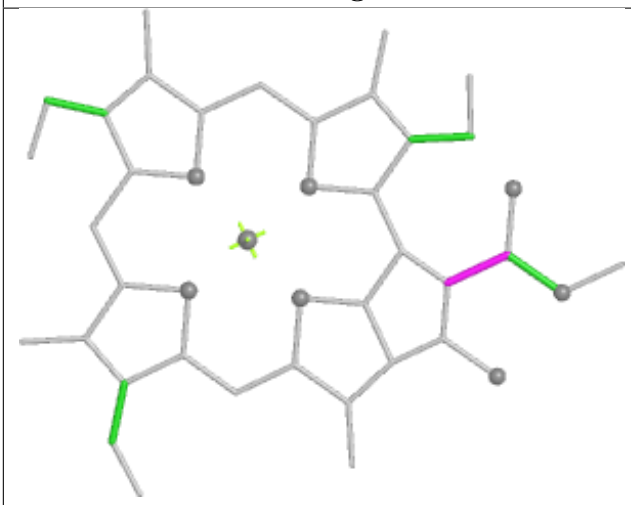


Bond angles



Torsions

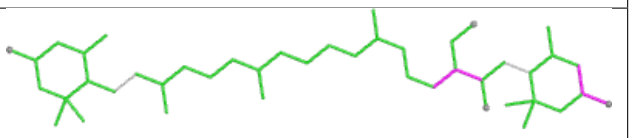


Rings

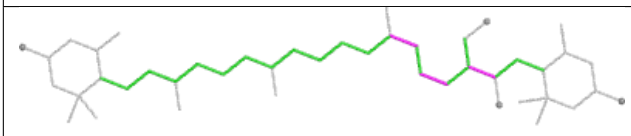
Ligand 0IE V 320



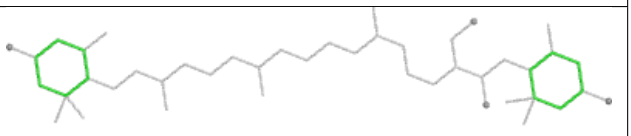
Bond lengths



Bond angles

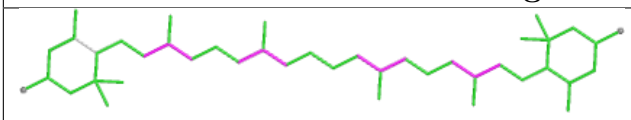


Torsions



Rings

Ligand LUT U 418



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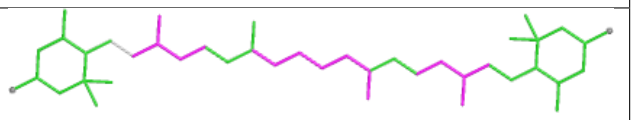

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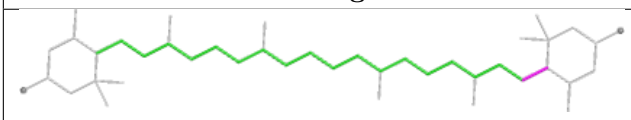

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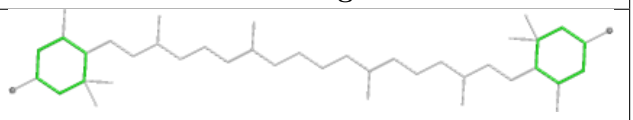
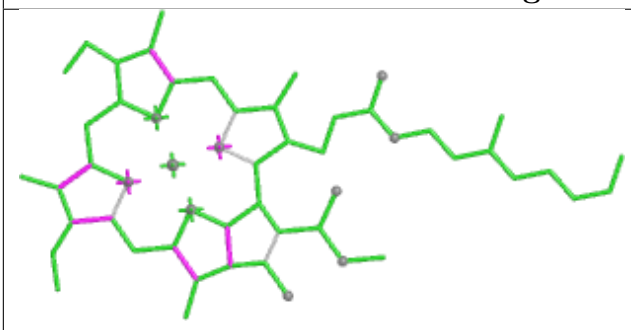


Rings

Ligand CLA G 316



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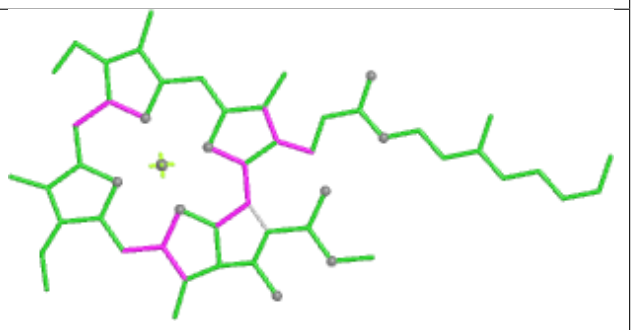

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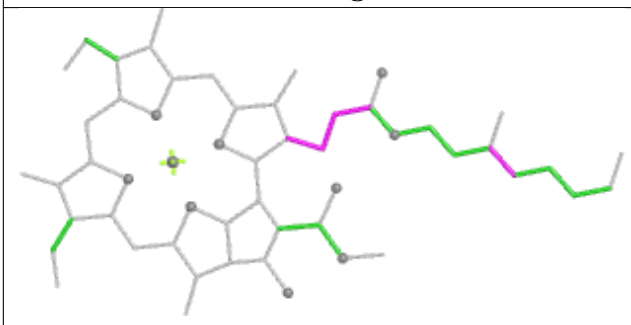

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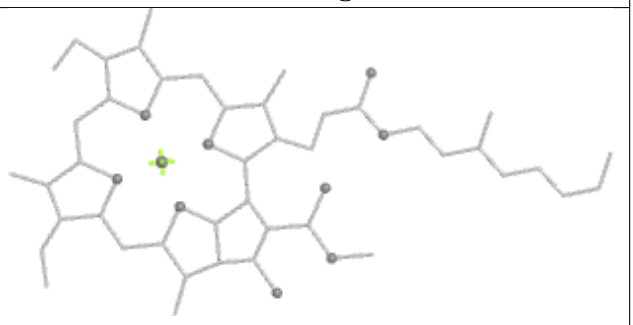
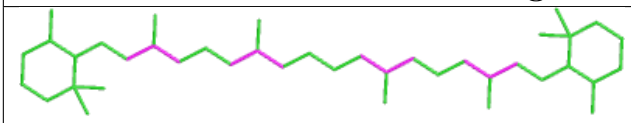


Rings

Ligand BCR c 509



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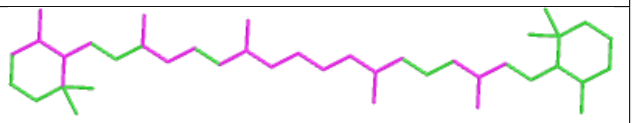
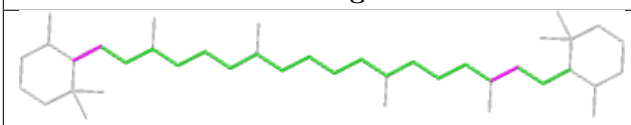


Bond angles



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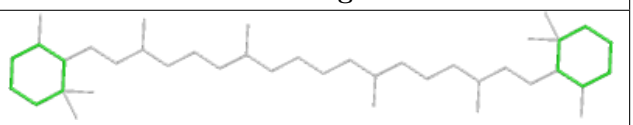
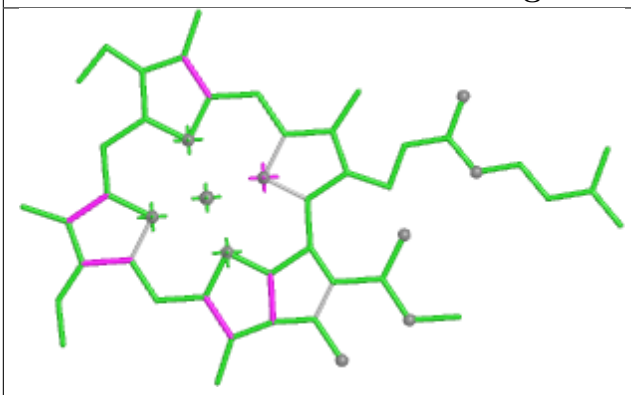


Rings

Ligand CLA Y 308



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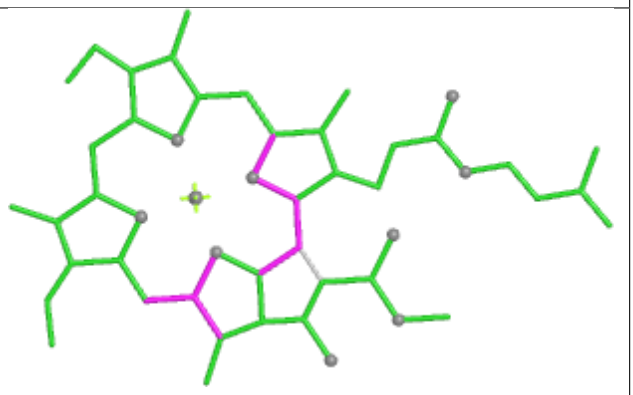
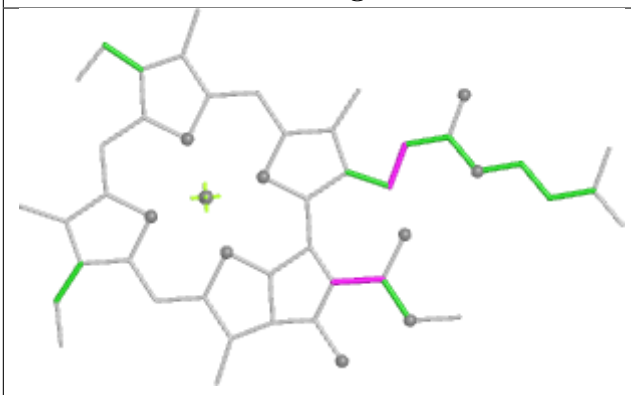


Bond angles



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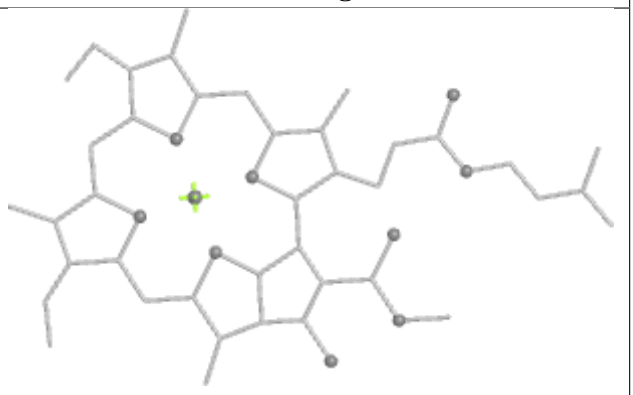
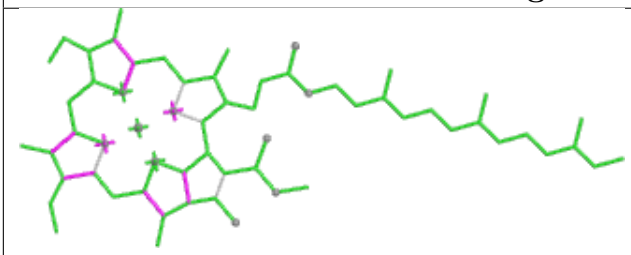


Rings

Ligand CLA u 407



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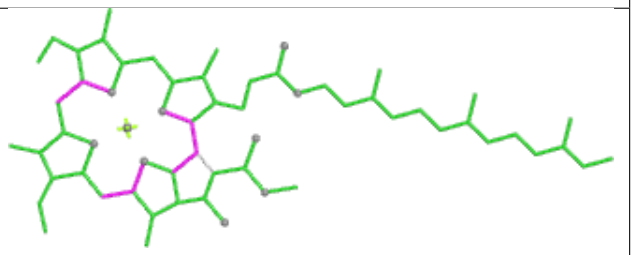

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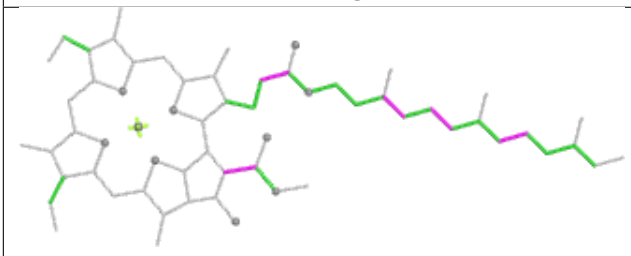

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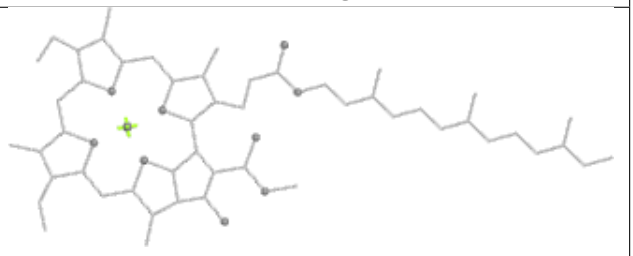
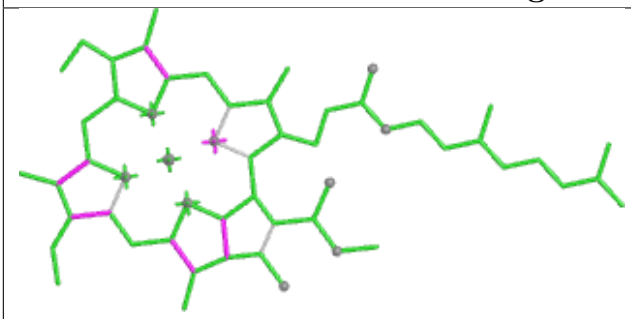


Rings

Ligand CLA y 311



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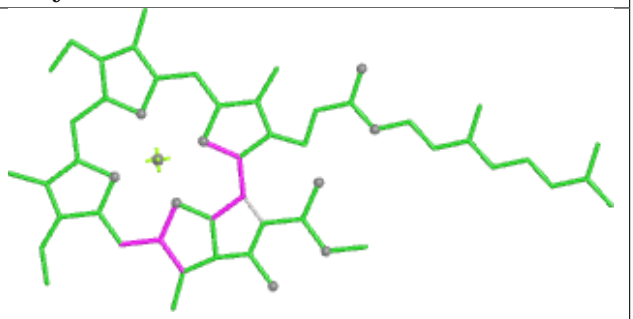

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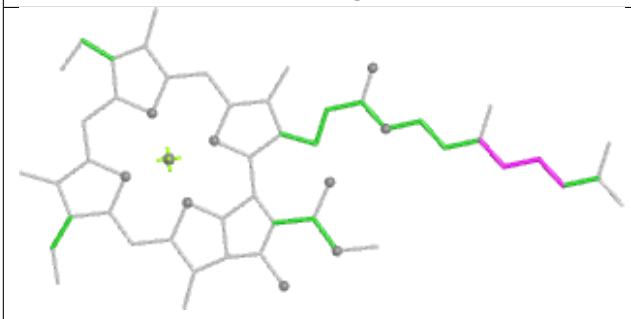

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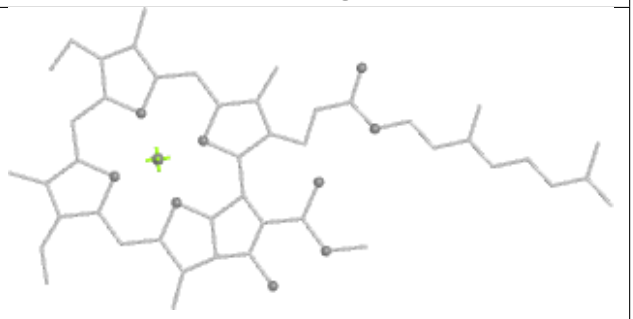
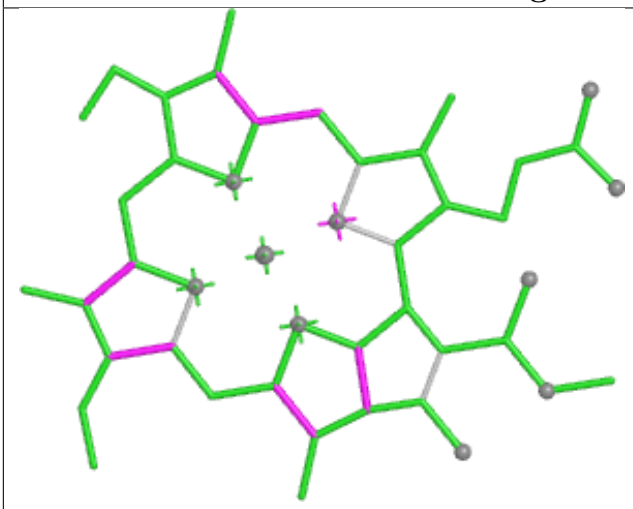


Rings

Ligand CLA s 313



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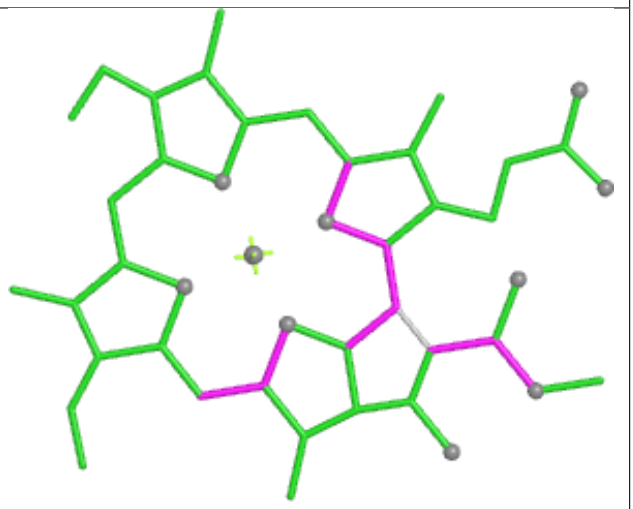

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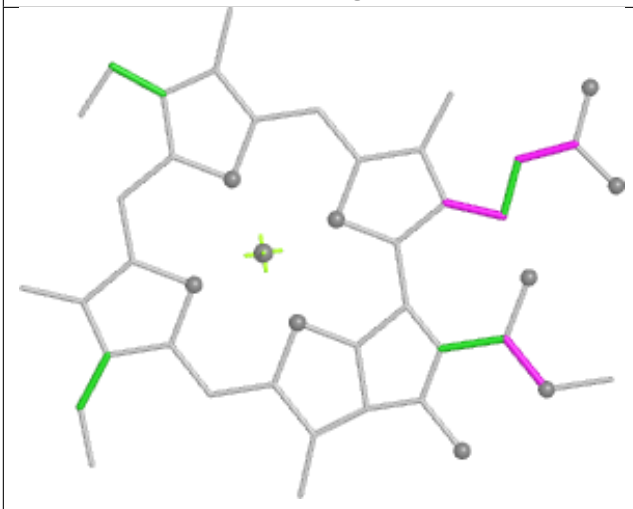
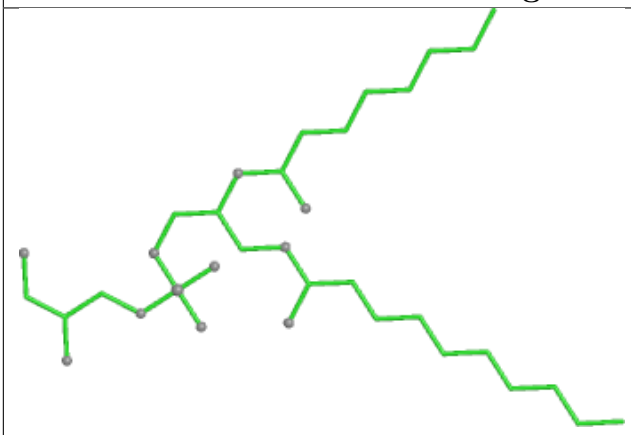


Torsions



Rings

Ligand LHG B 623



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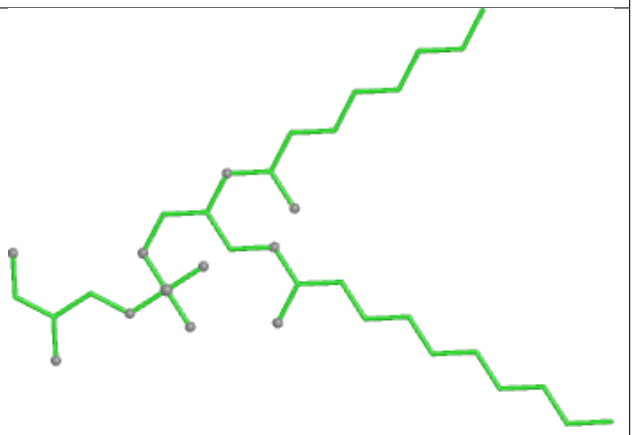

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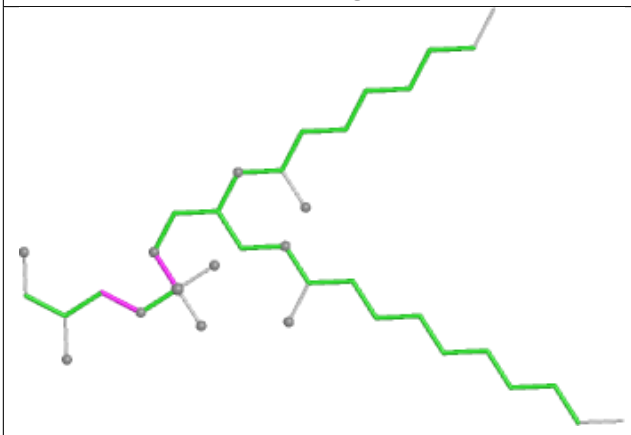

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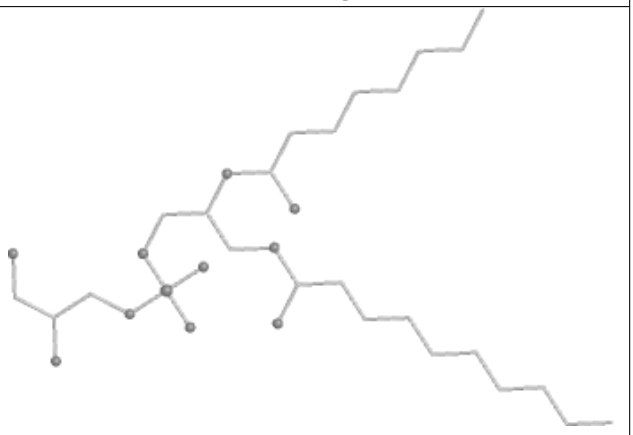
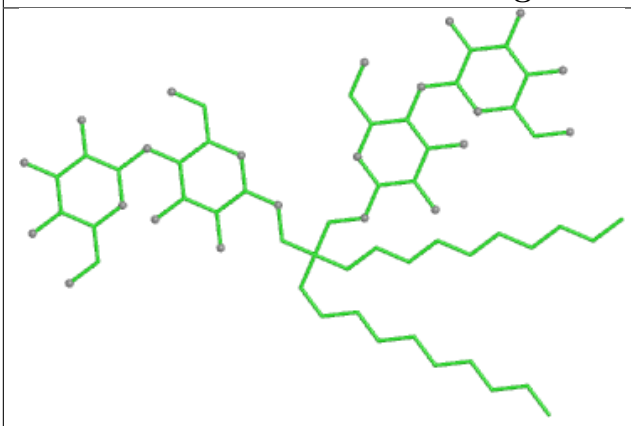


Rings

Ligand LMN W 201



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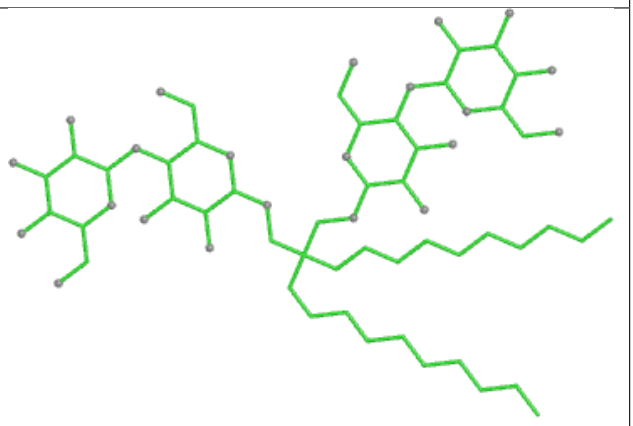
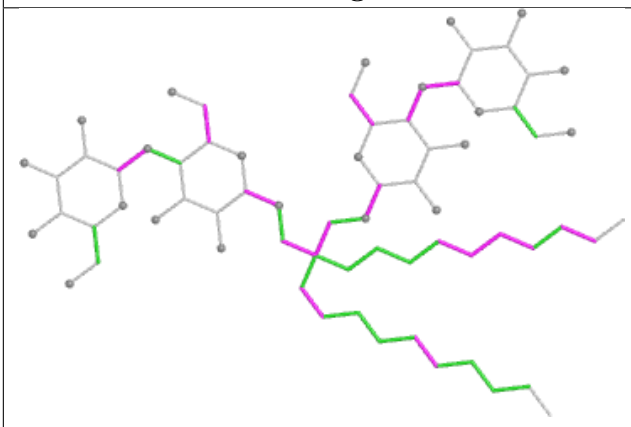


Bond angles



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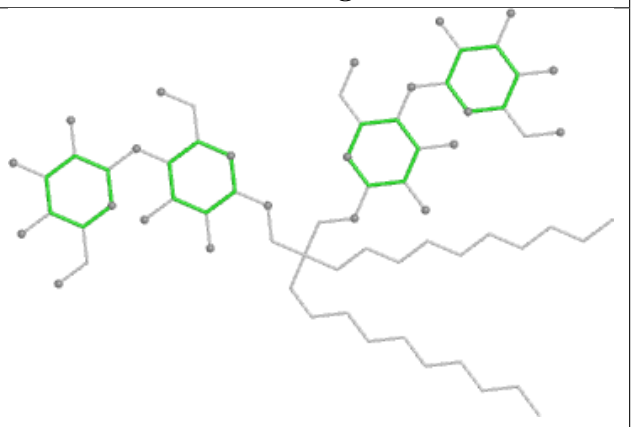
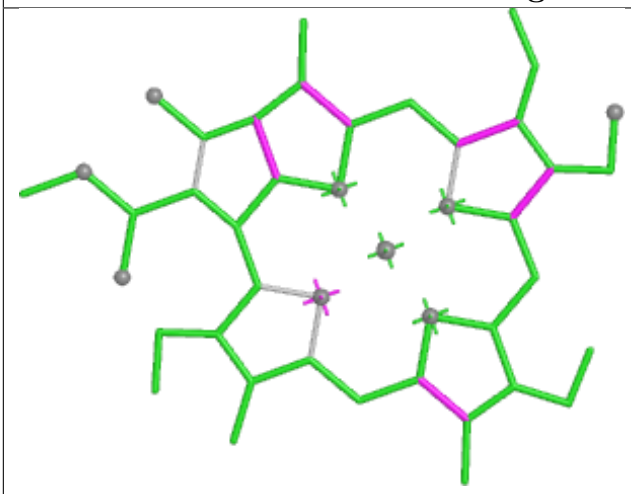


Rings

Ligand CHL 1 310



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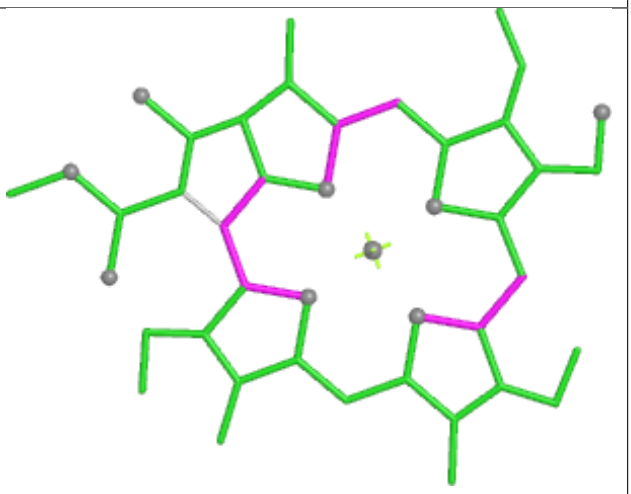

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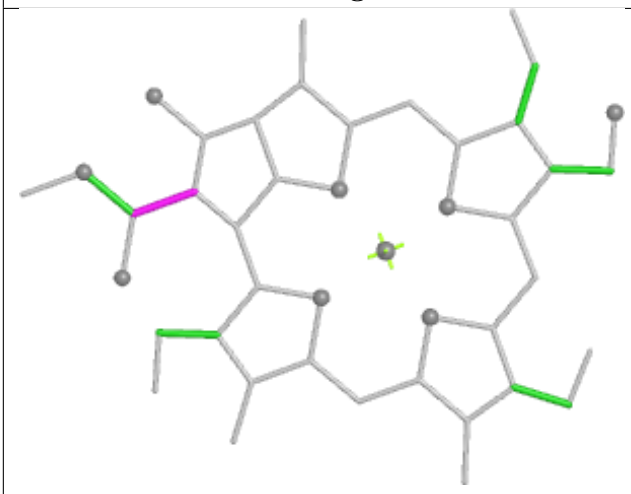
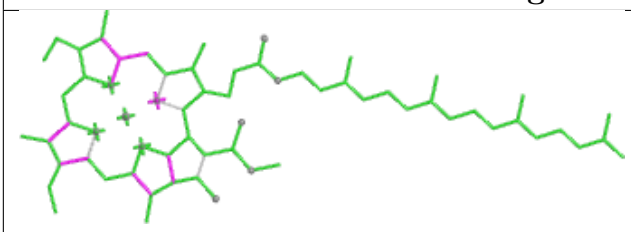


Torsions



Rings

Ligand CLA b 606



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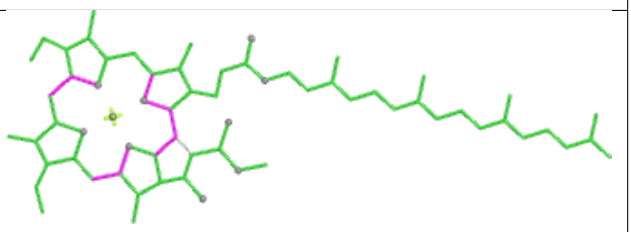

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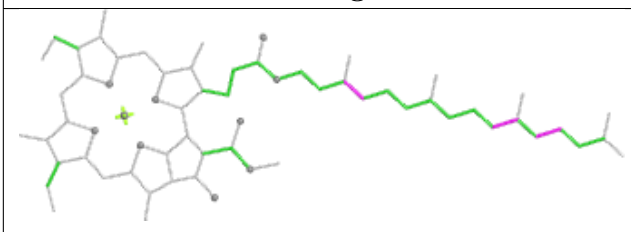

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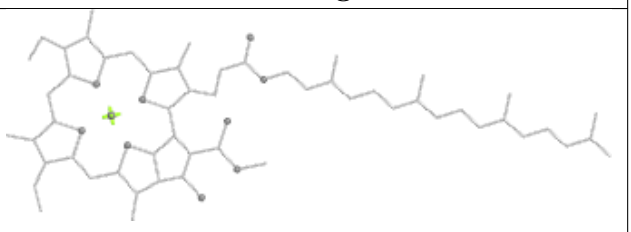
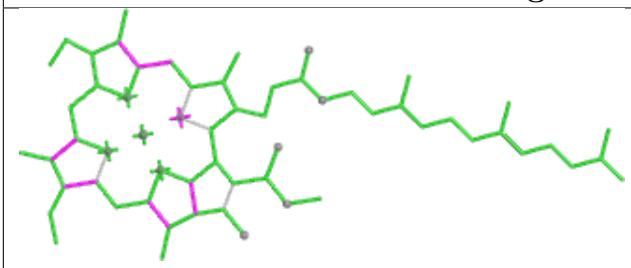


Rings

Ligand CLA u 417



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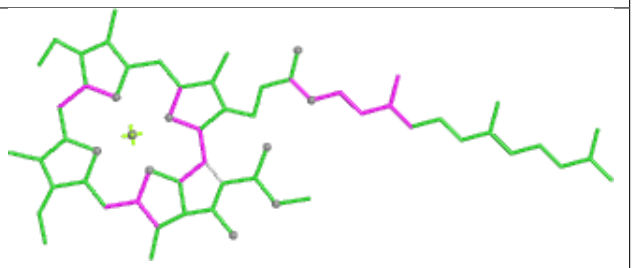
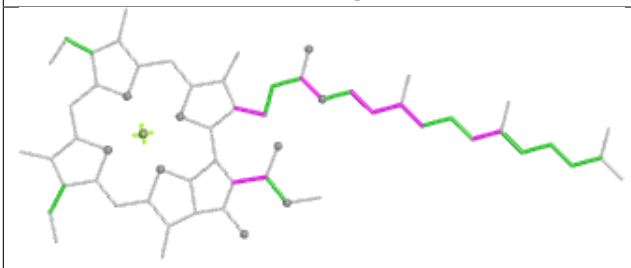


Bond angles



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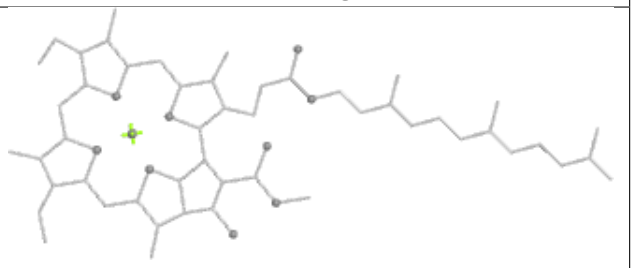
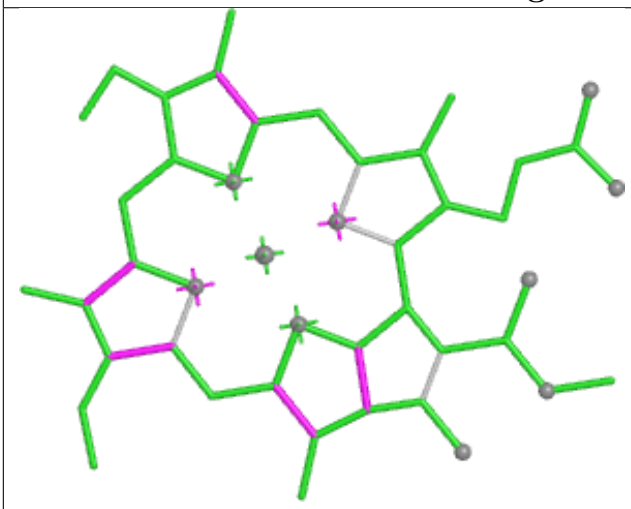


Rings

Ligand CLA v 314



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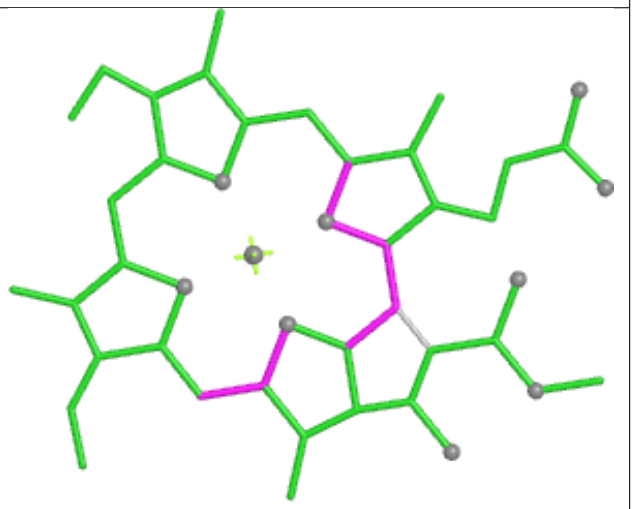
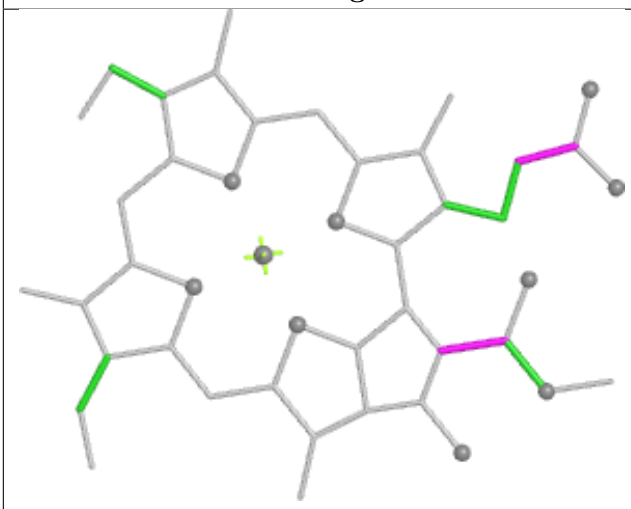


Bond angles



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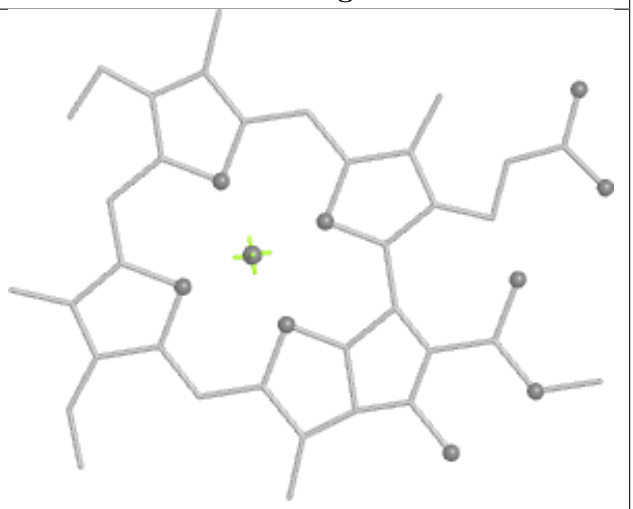
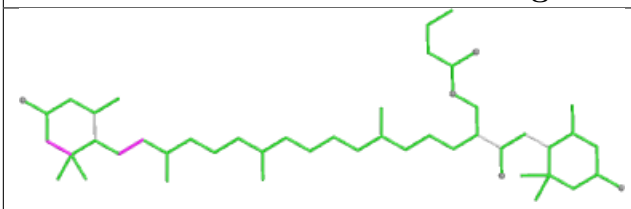


Rings

Ligand 0UR s 316



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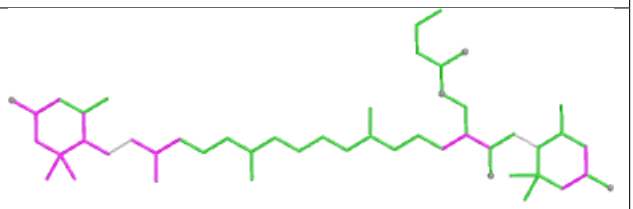
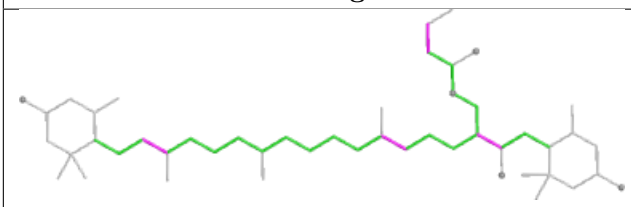


Bond angles



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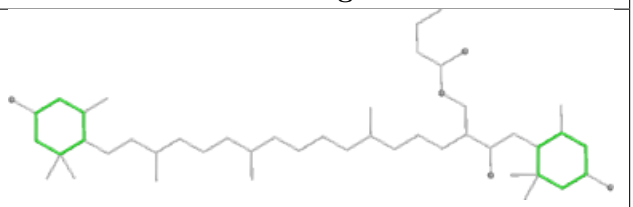
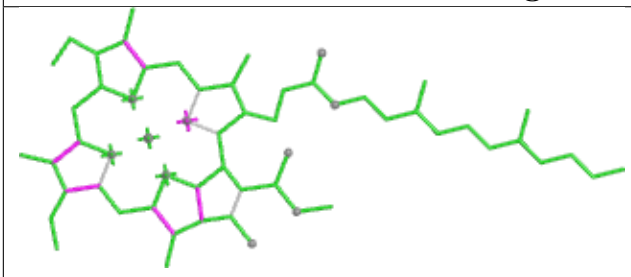


Rings

Ligand CLA V 316



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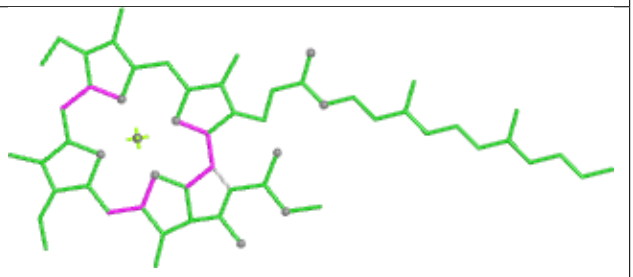
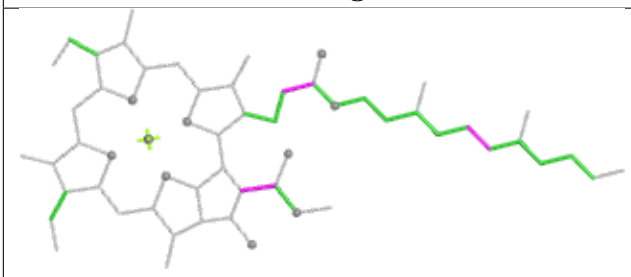
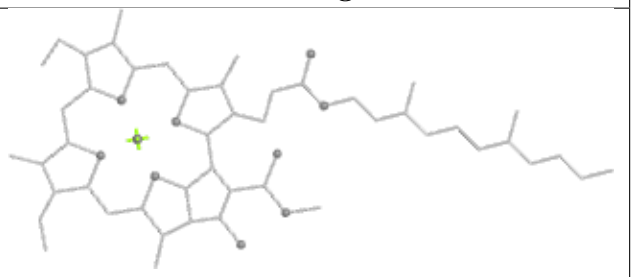


Bond angles

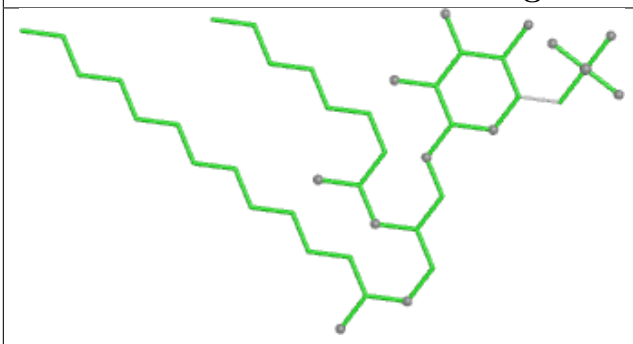


Torsions

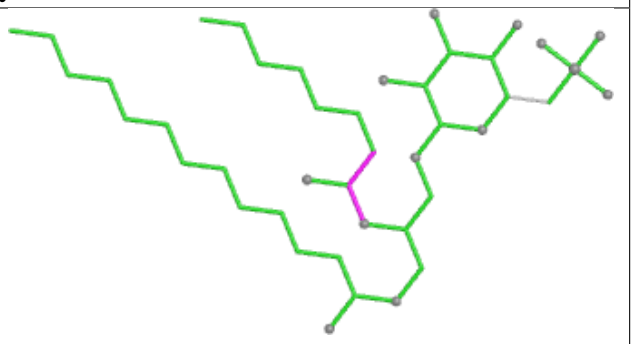


Rings

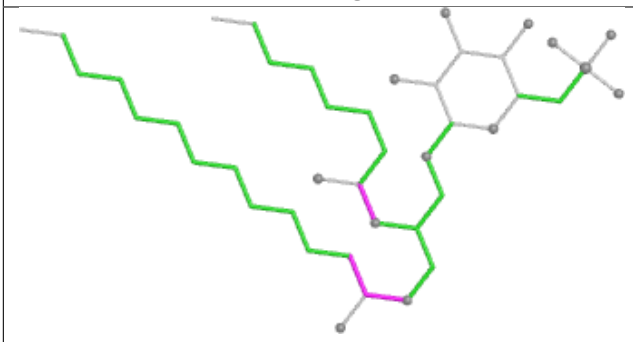
Ligand SQD A 405



Bond lengths



Bond angles



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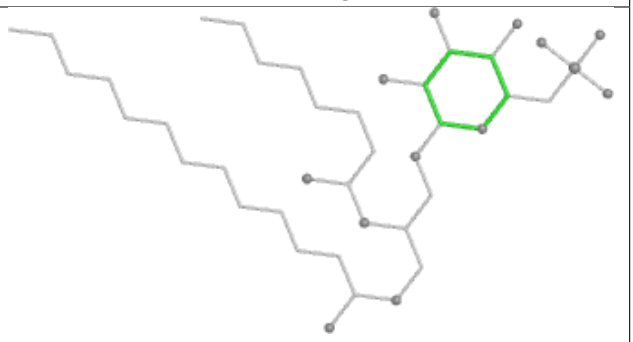
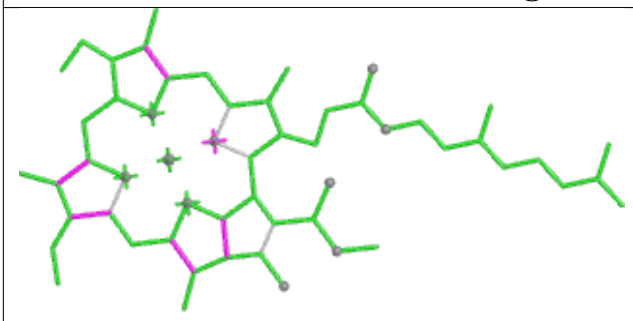


Rings

Ligand CLA U 412



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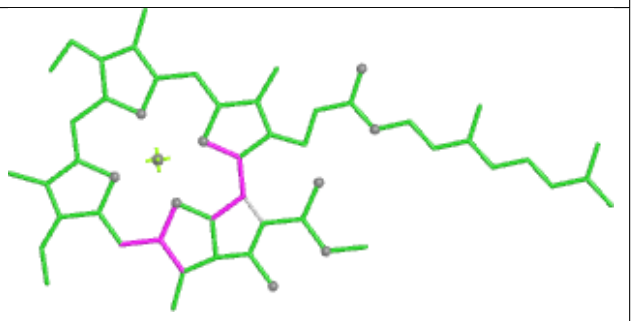
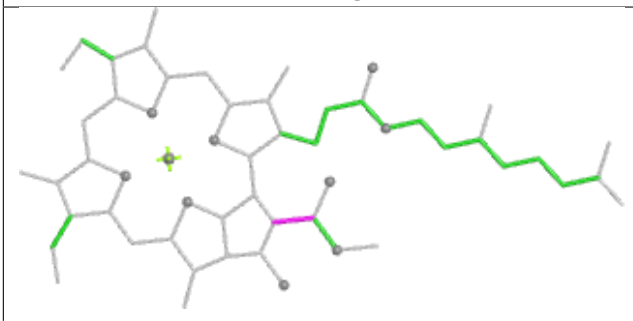


Bond angles



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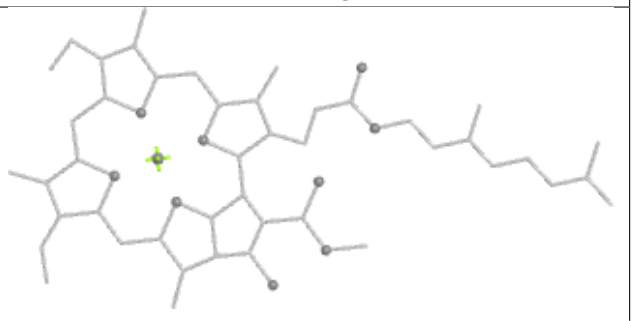
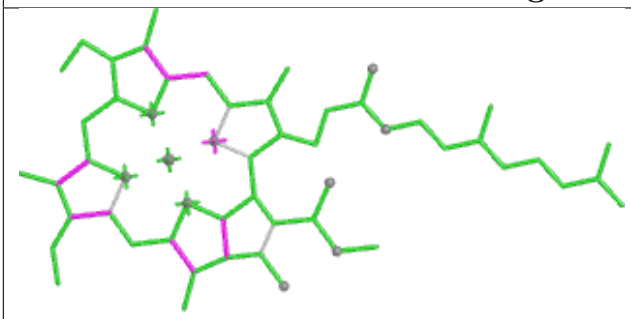


Rings

Ligand CLA u 416



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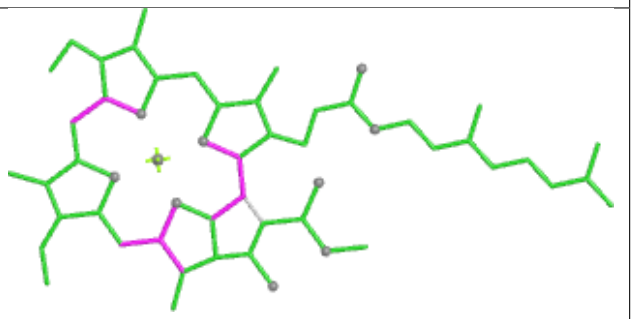
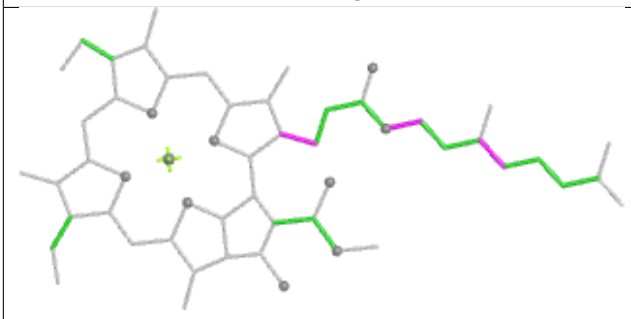


Bond angles



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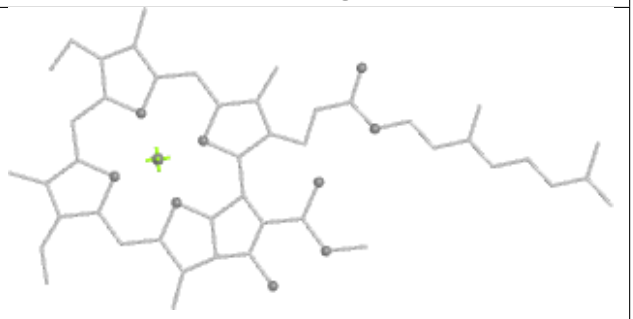
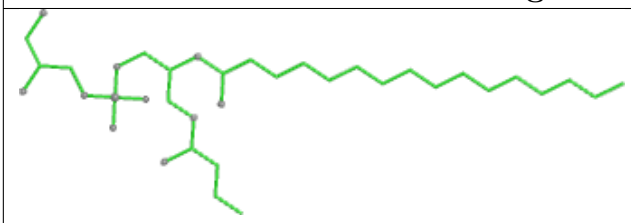


Rings

Ligand LHG g 303



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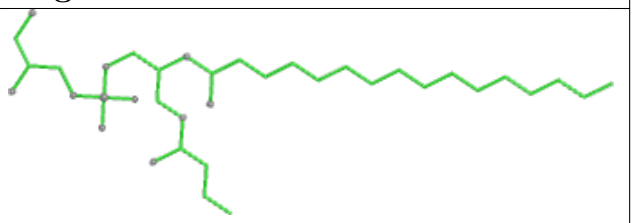
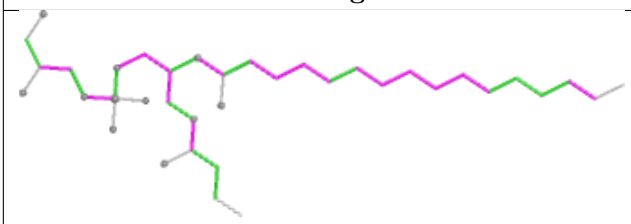


Bond angles



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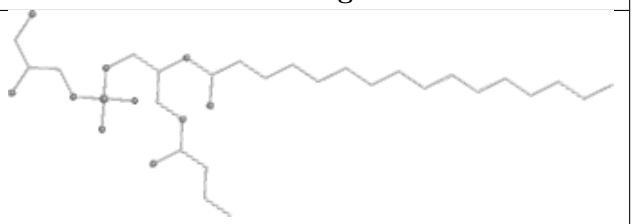
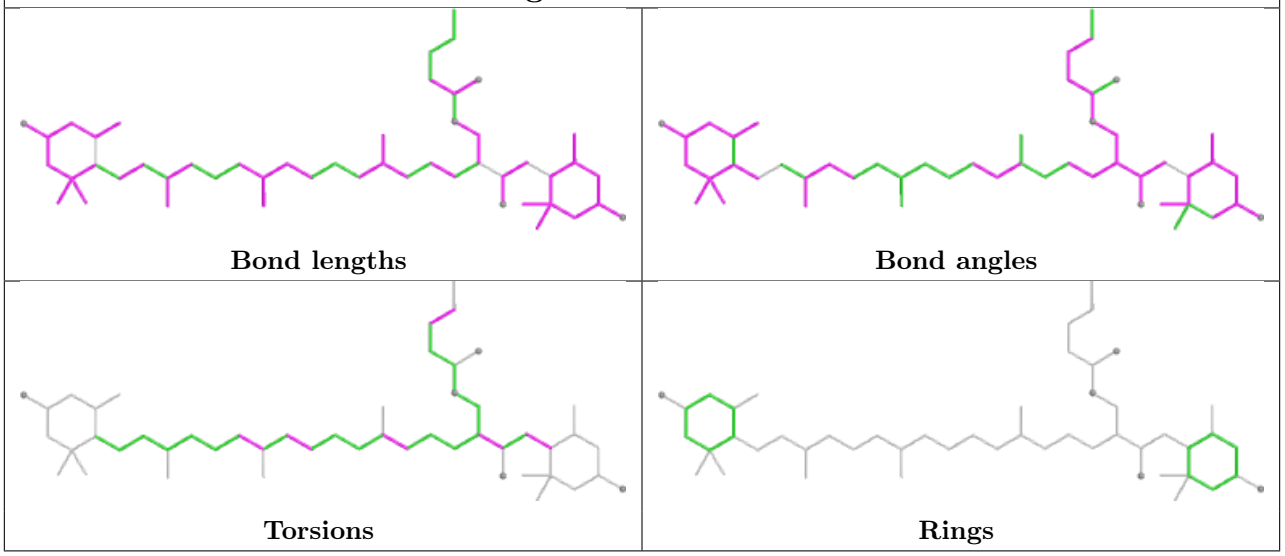
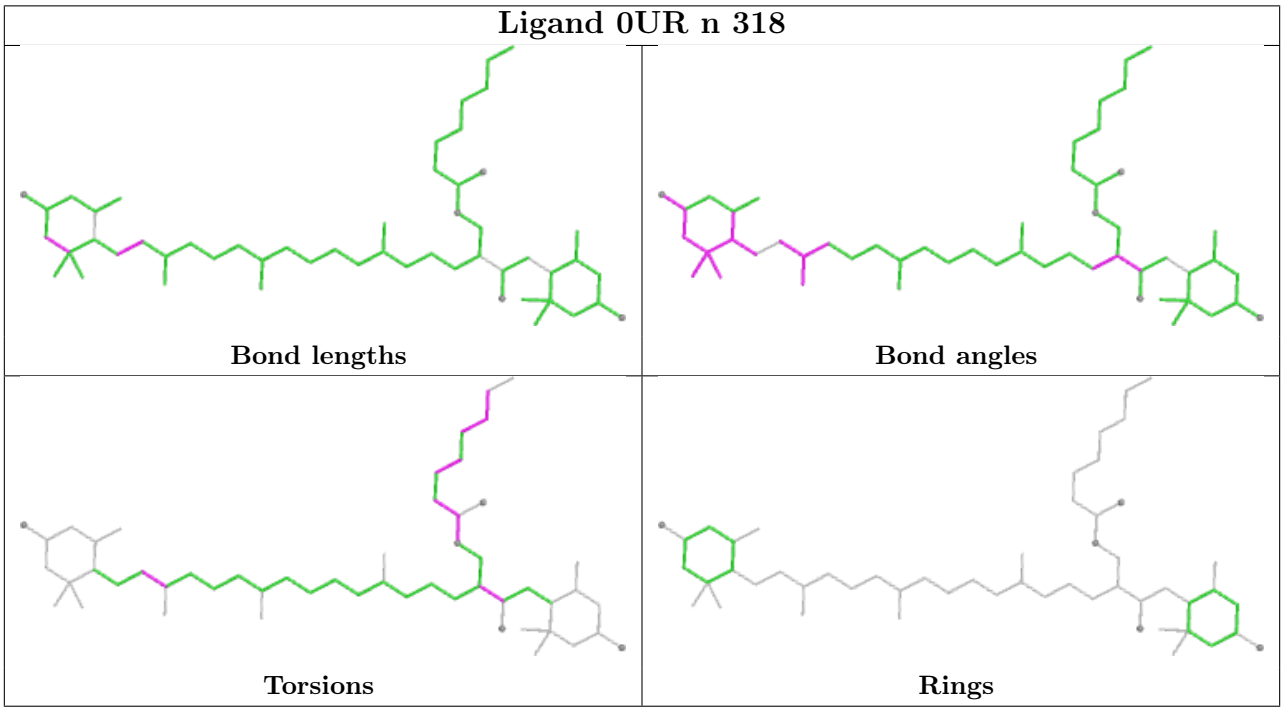


Rings

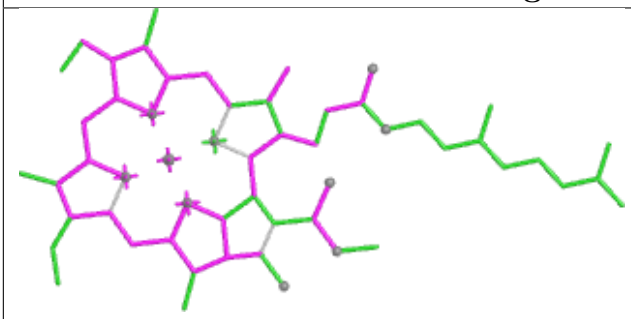
Ligand 0UR Y 318



Ligand 0UR n 318



Ligand CLA V 307



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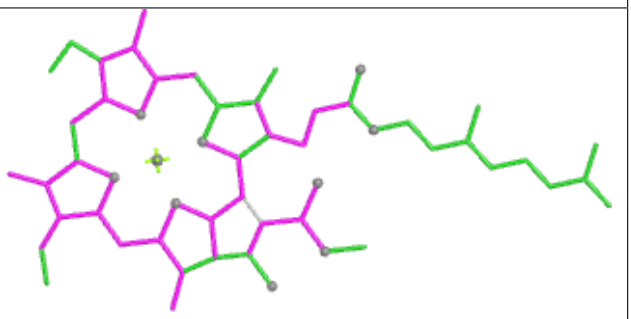
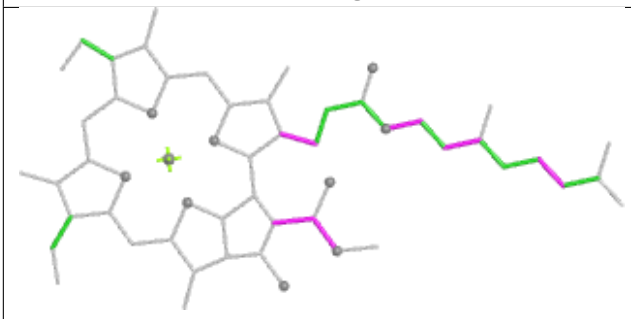


Bond angles



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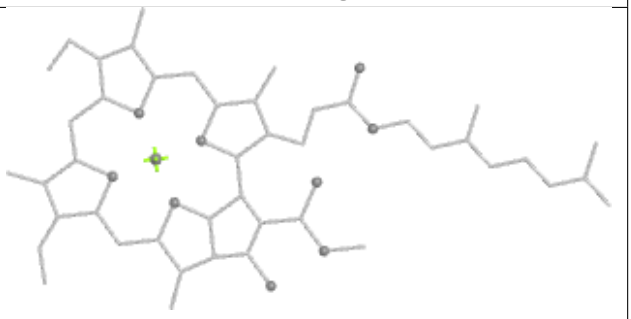
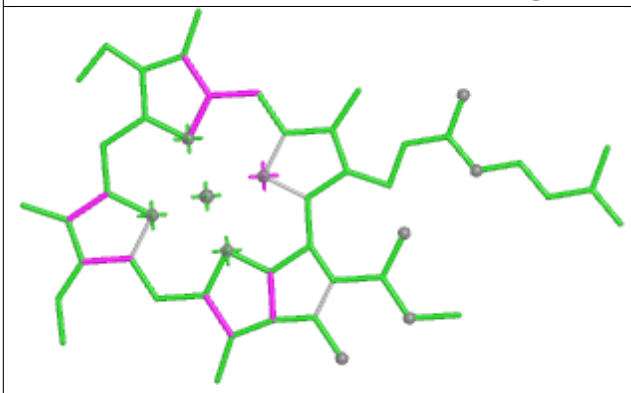


Rings

Ligand CLA n 307



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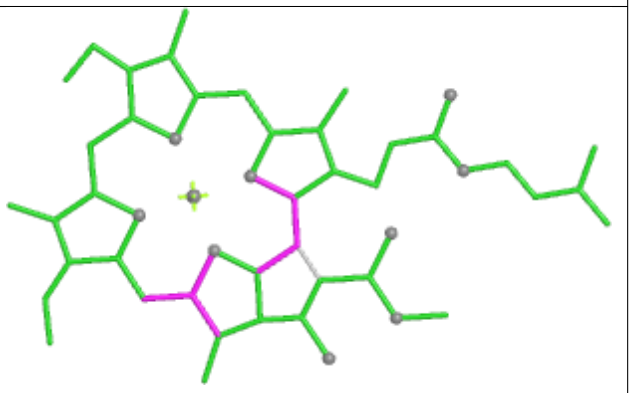

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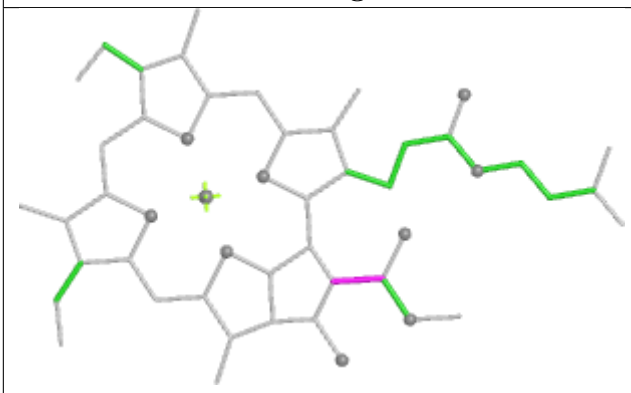

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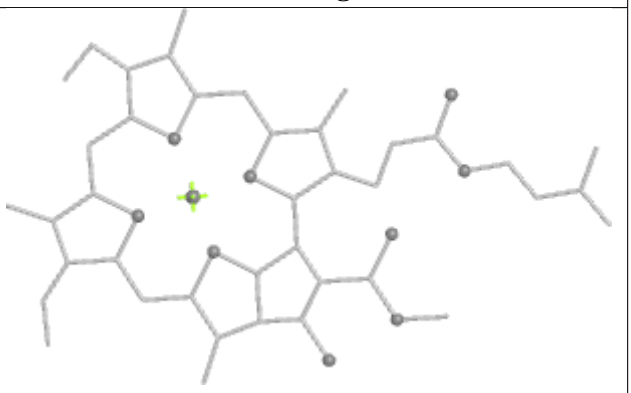
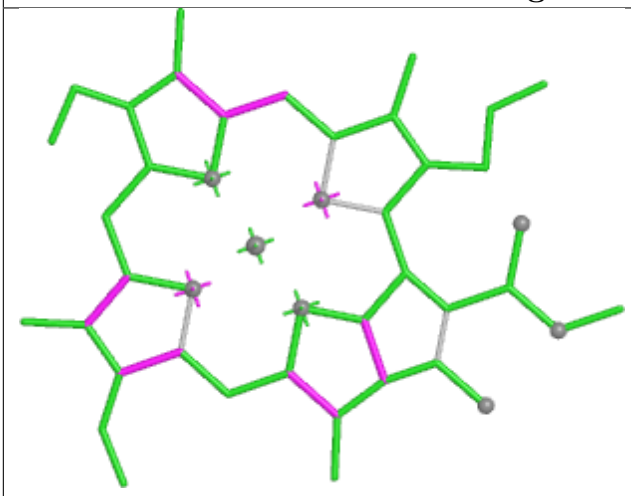


Rings

Ligand CLA v 316



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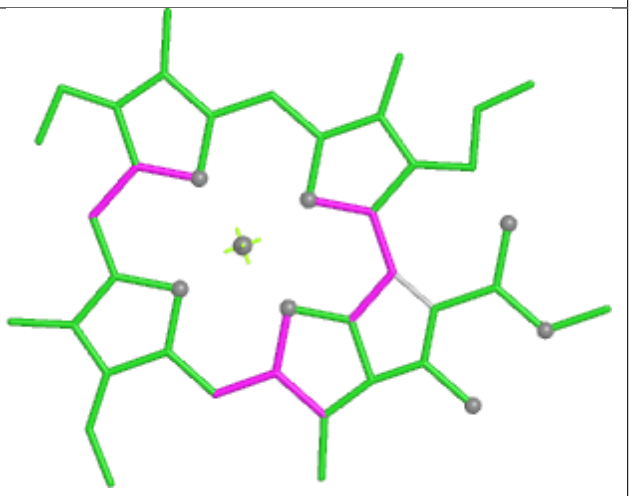
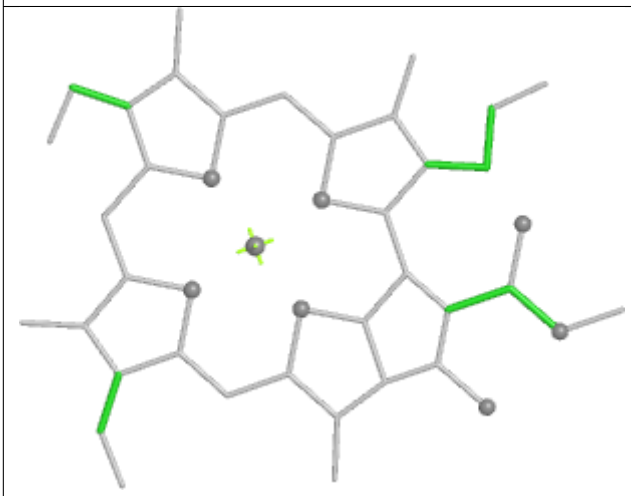


Bond angles



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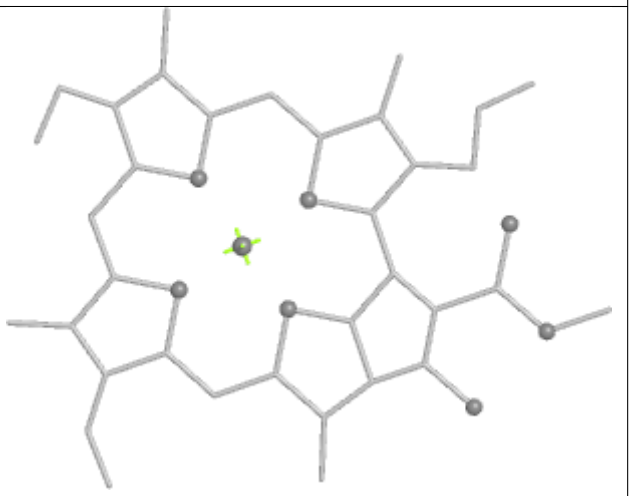
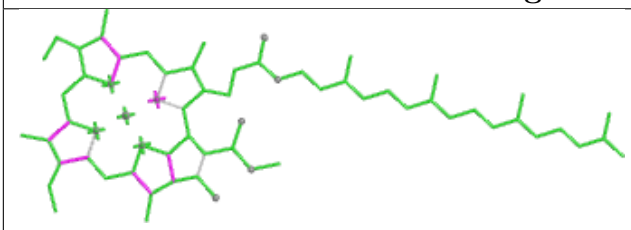


Rings

Ligand CLA C 510



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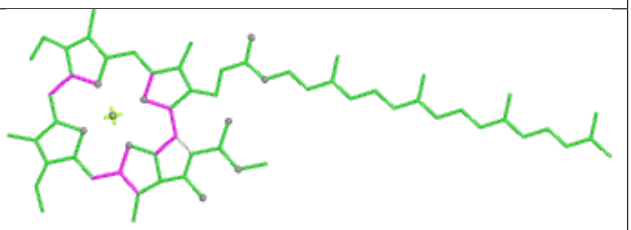
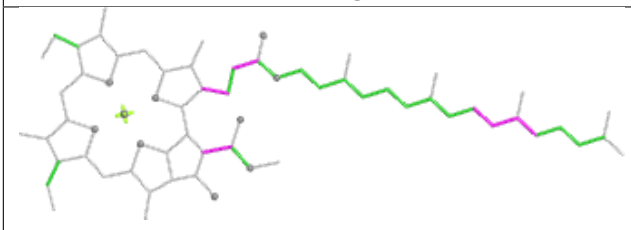


Bond angles



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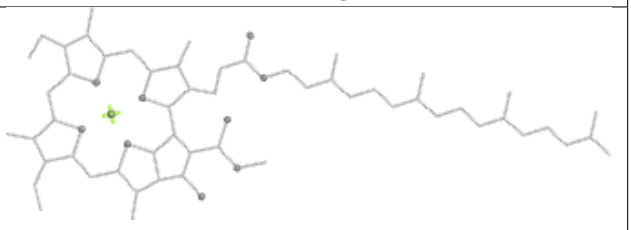
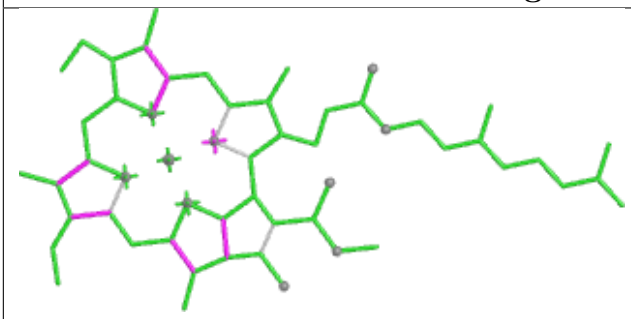


Rings

Ligand CLA C 506



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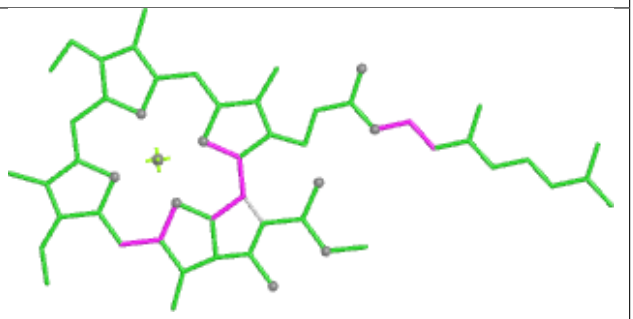
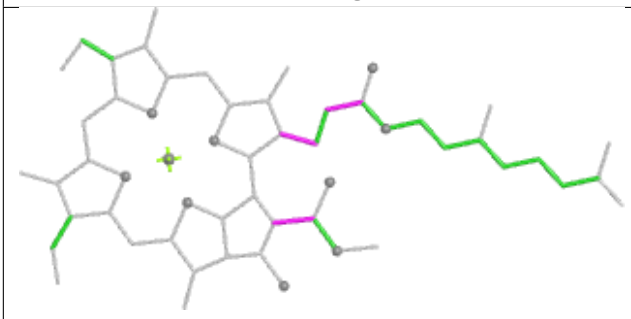


Bond angles



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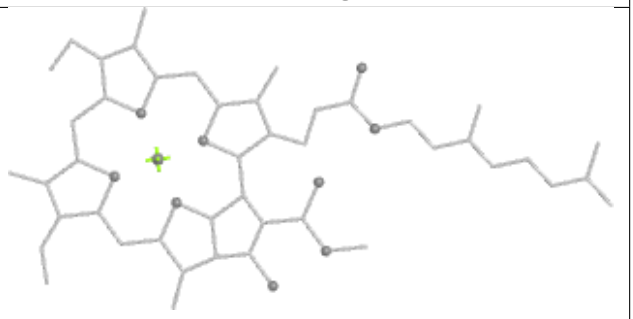
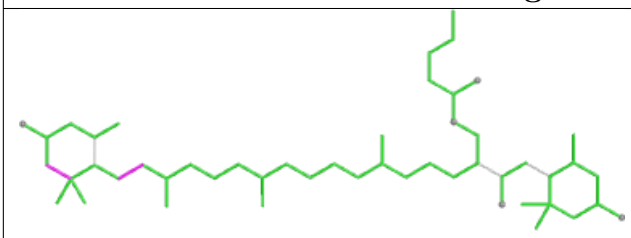


Rings

Ligand 0UR G 319



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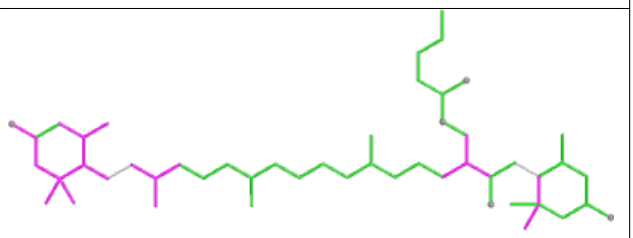
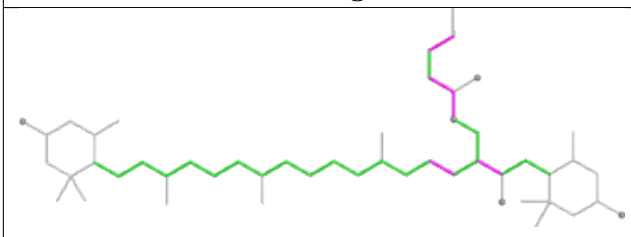


Bond angles



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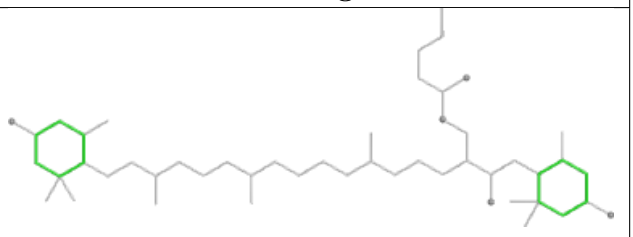
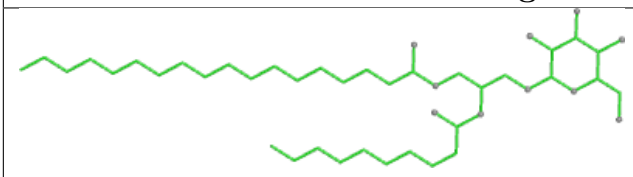


Rings

Ligand LMG K 103



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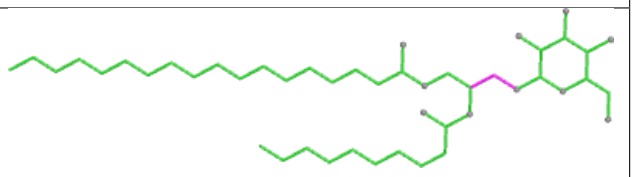
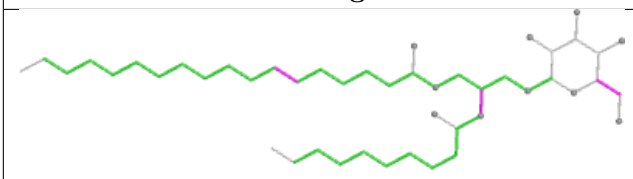


Bond angles



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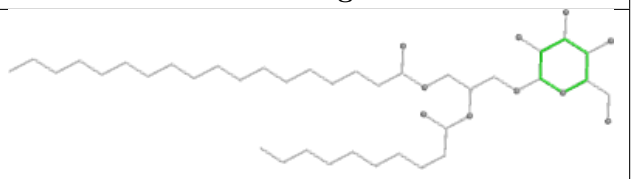
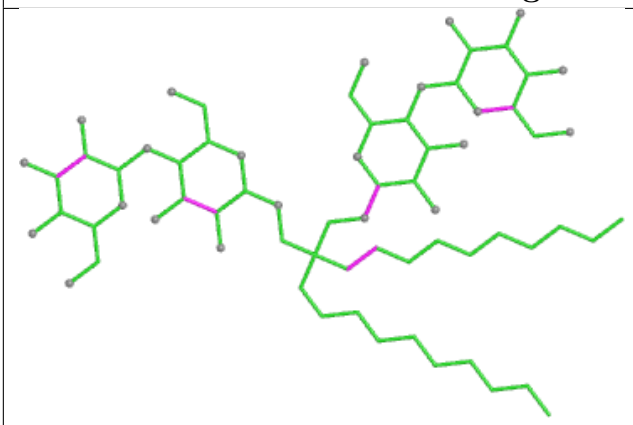
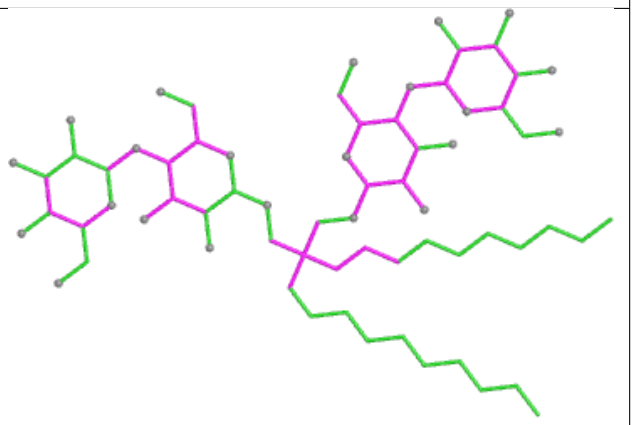


Rings

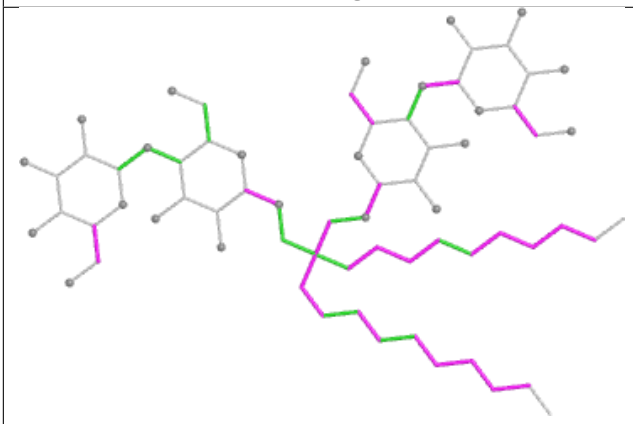
Ligand LMN n 322



Bond lengths



Bond angles



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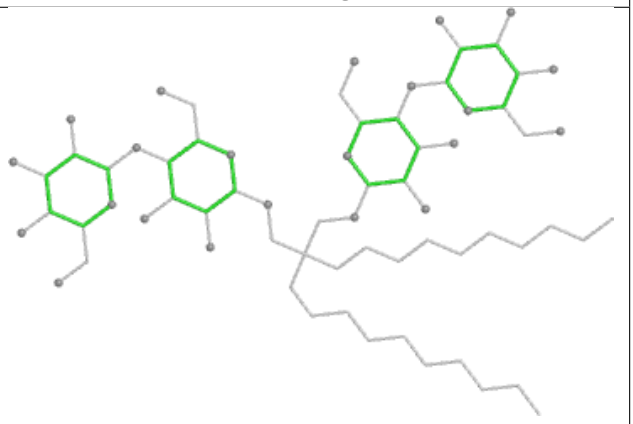
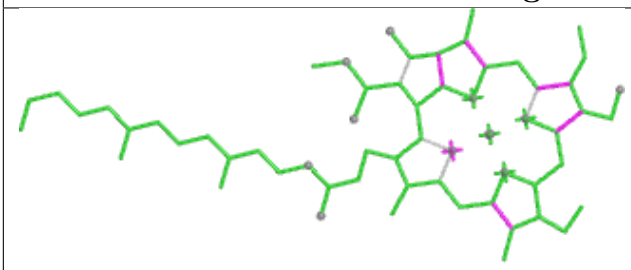
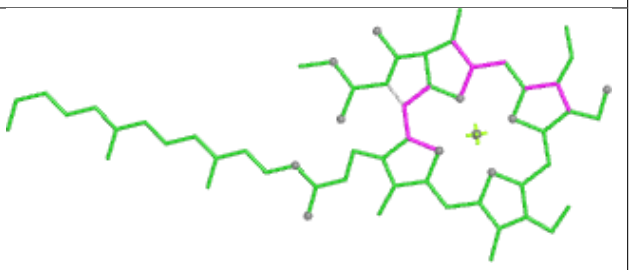
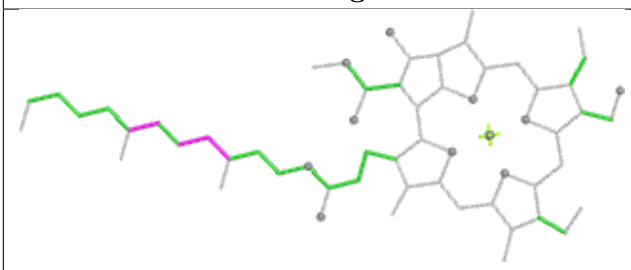
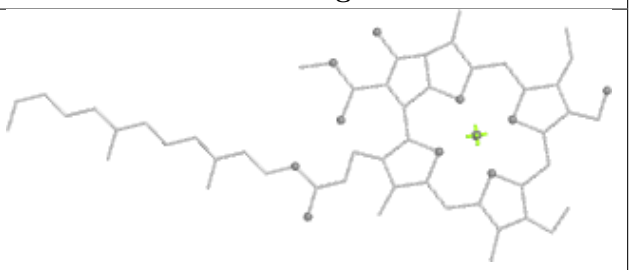


Rings

Ligand CHL U 408	
 Bond lengths	 Bond angles
 Torsions	 Rings

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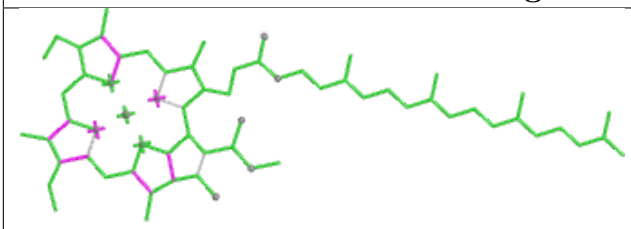
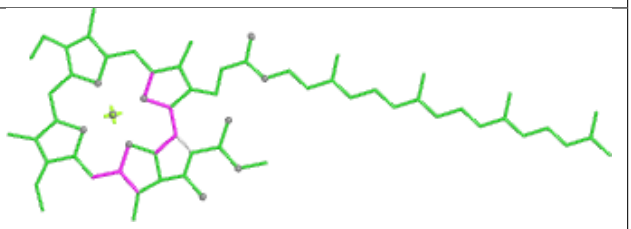
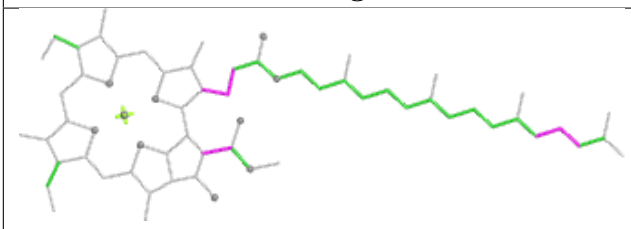
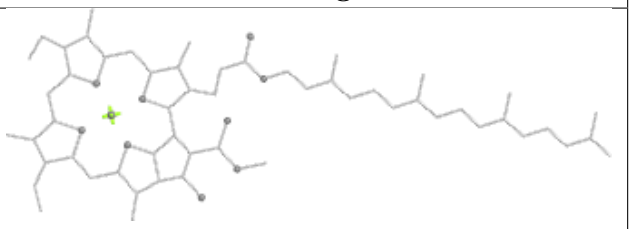
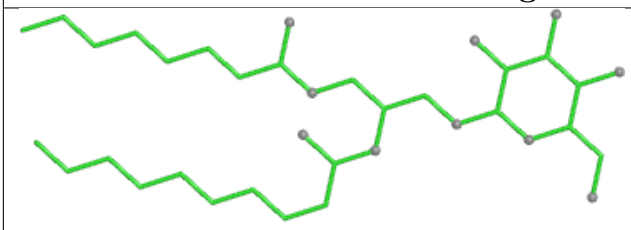
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMG A 408



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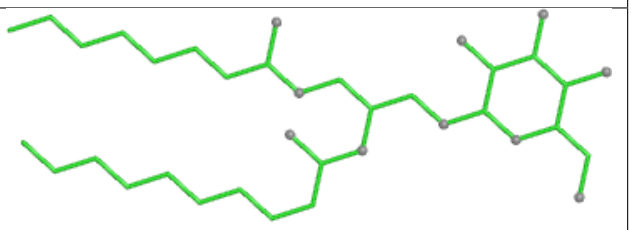

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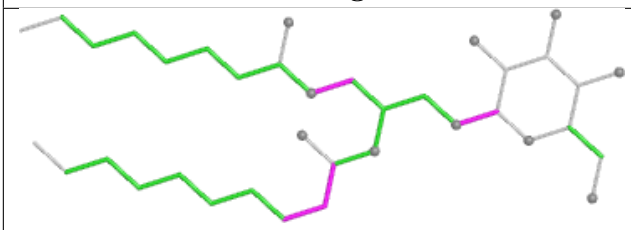

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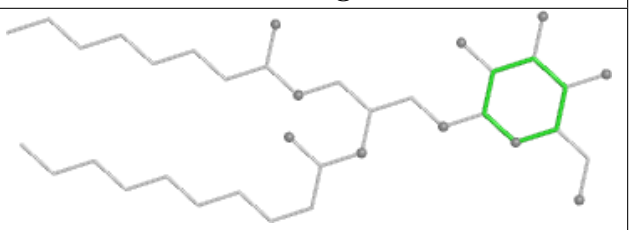
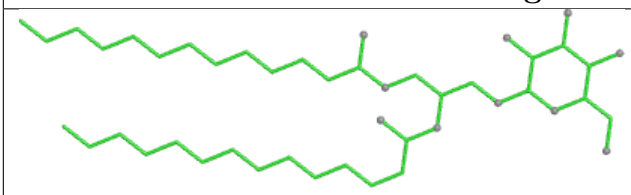


Rings

Ligand LMG a 417



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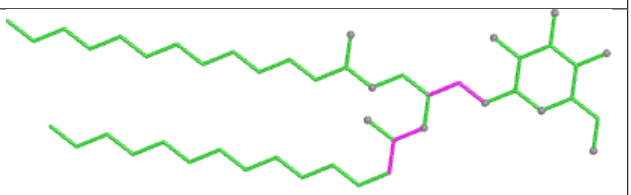

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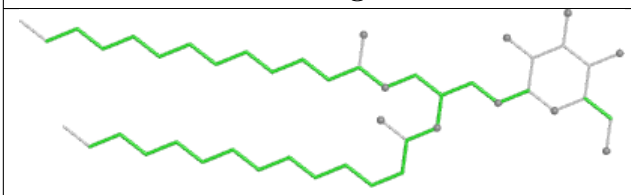

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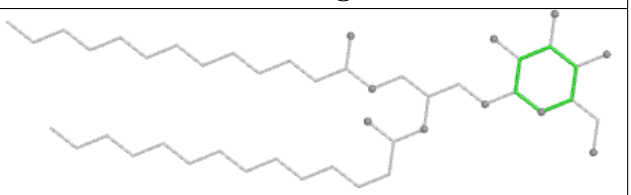
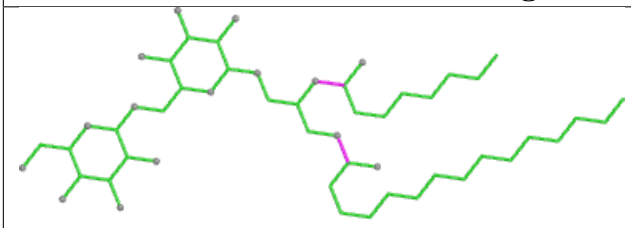


Rings

Ligand DGD C 516



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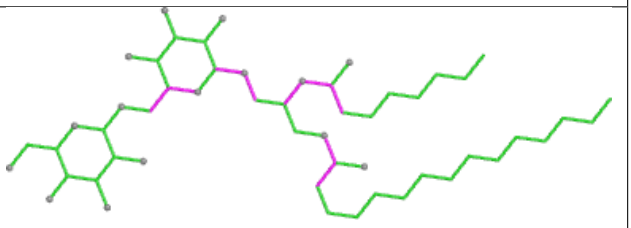

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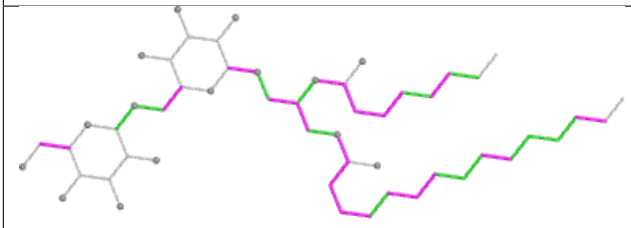

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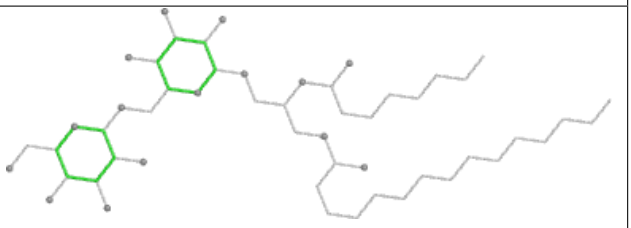
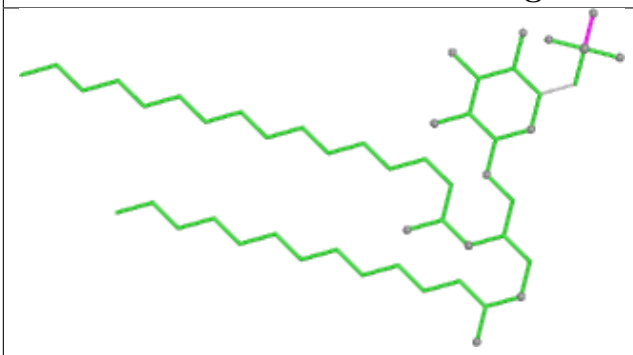


Rings

Ligand SQD B 617



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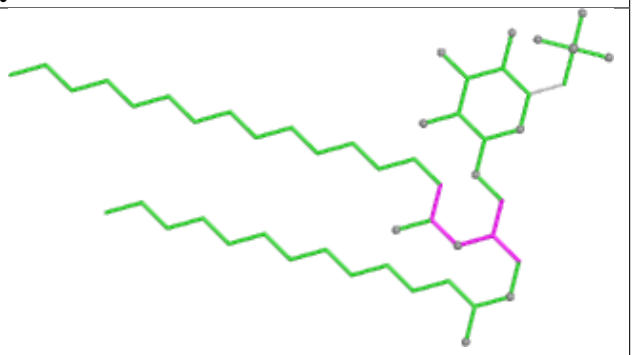

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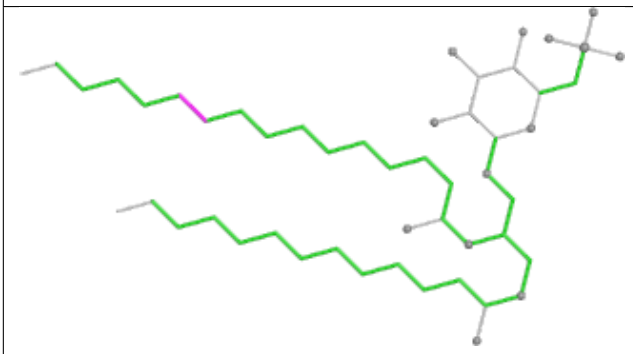

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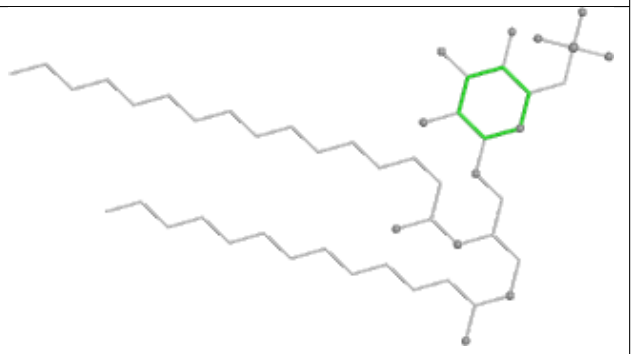
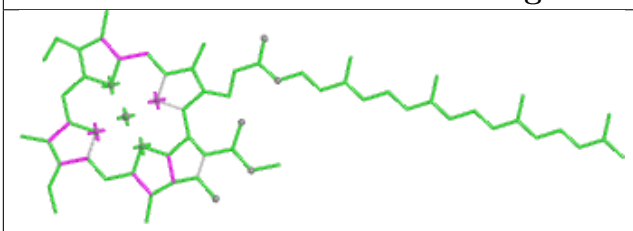


Rings

Ligand CLA B 608



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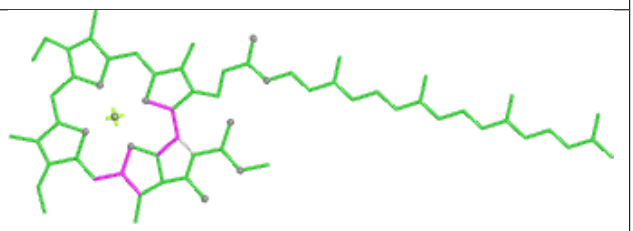

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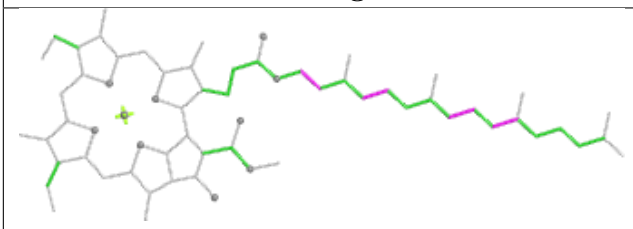

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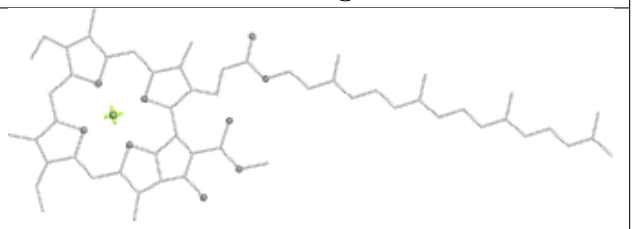


Rings

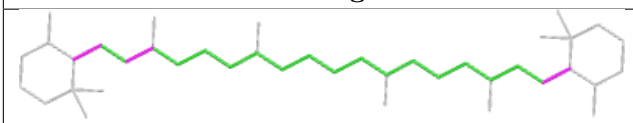
Ligand BCR c 507



Bond lengths



Bond angles



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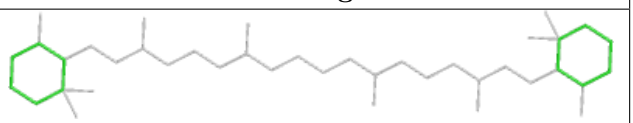
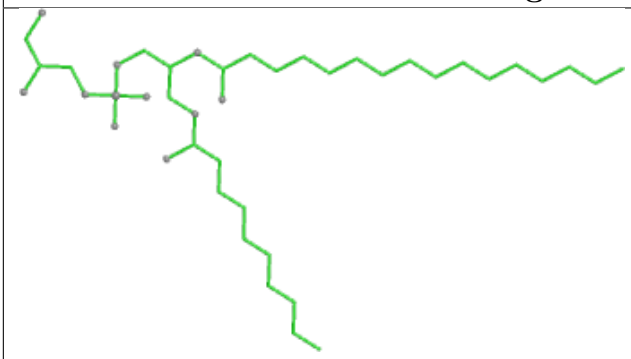


Rings

Ligand LHG n 303



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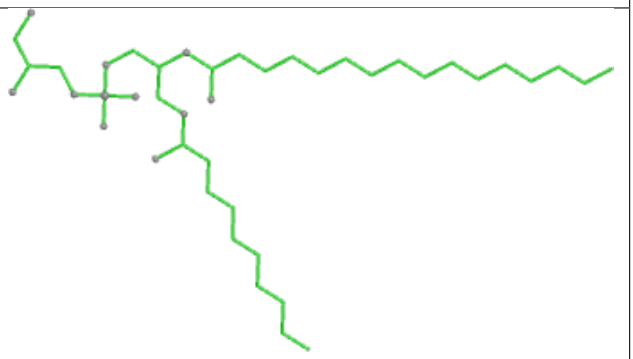

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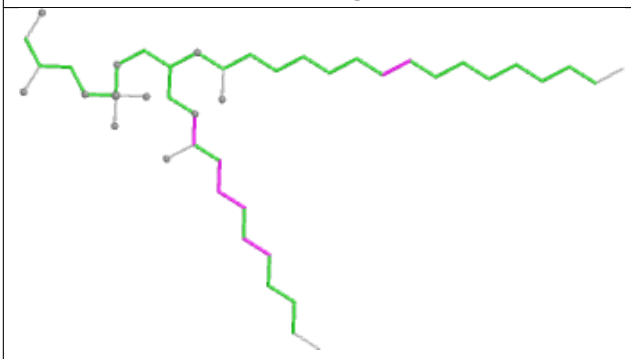

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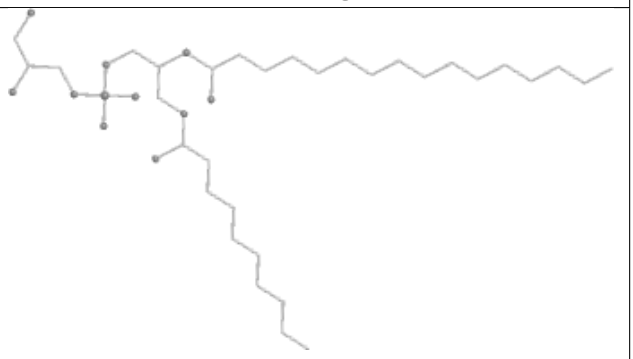
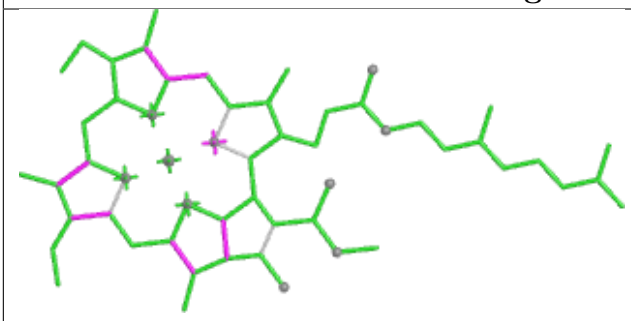


Rings

Ligand CLA C 505



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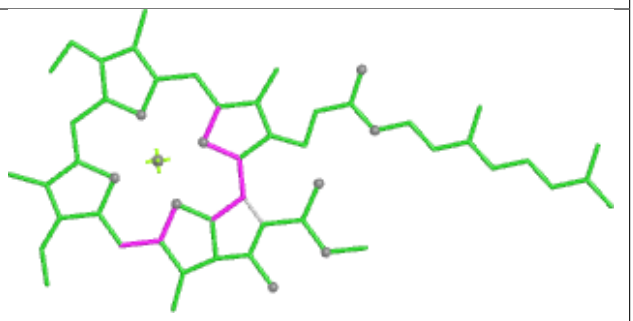

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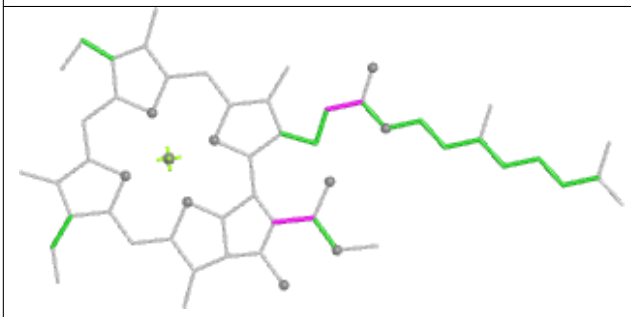

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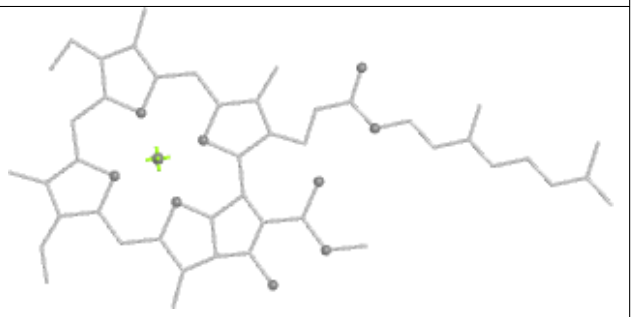
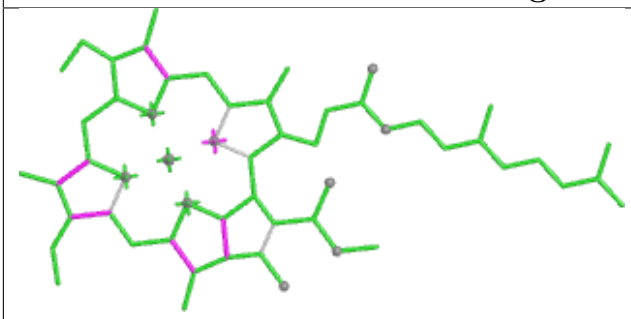
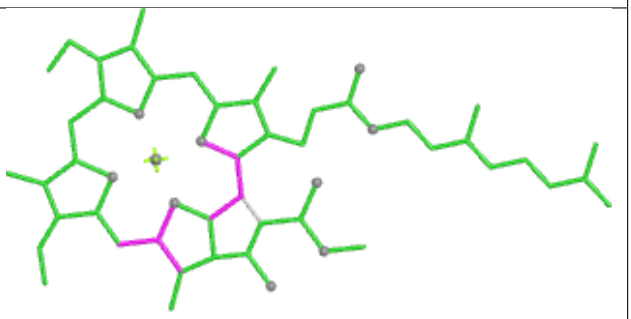
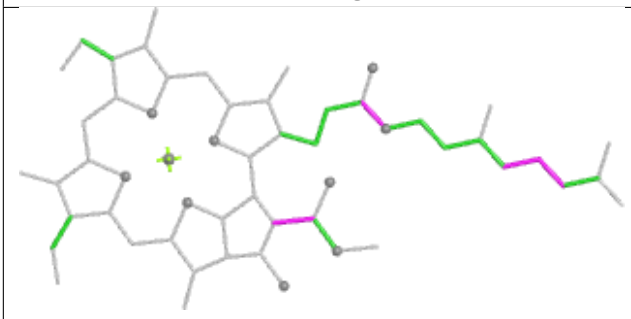
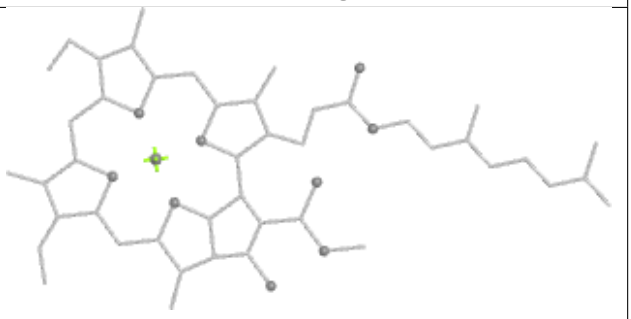


Rings

Ligand CLA c 521	
	
Bond lengths	Bond angles
	
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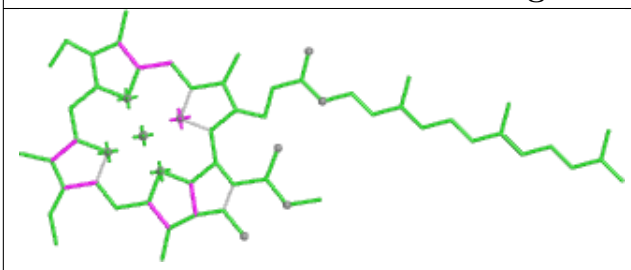	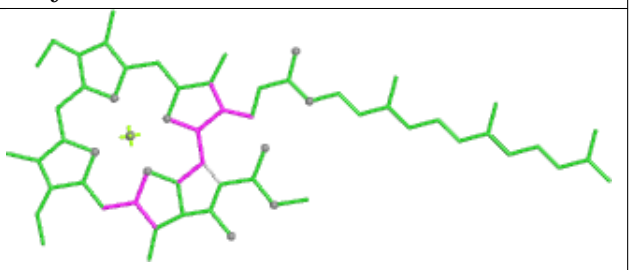
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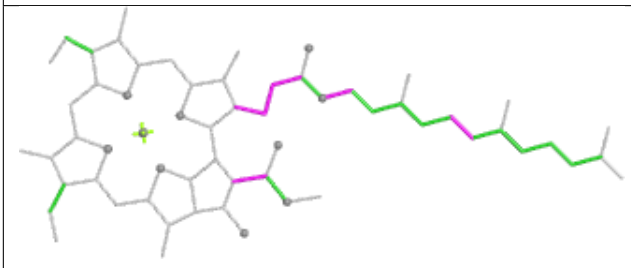	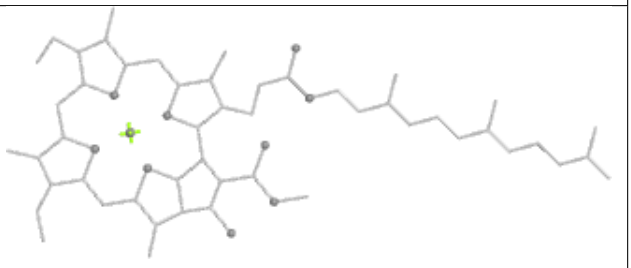
Torsions	Rings

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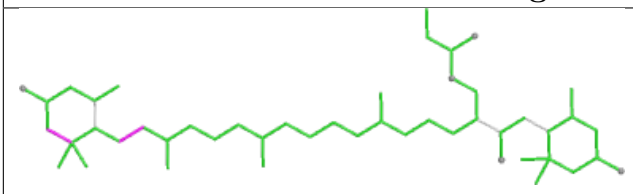

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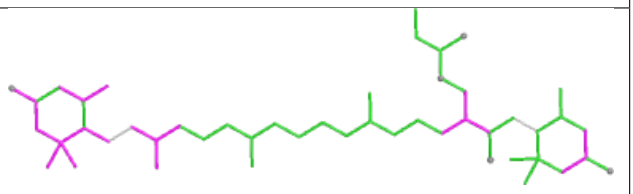

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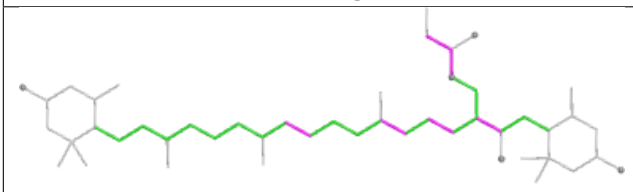

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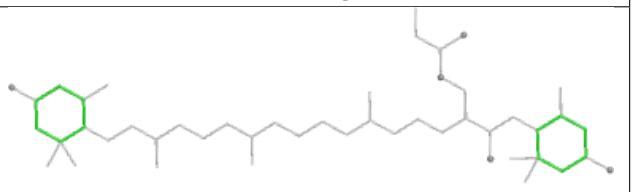
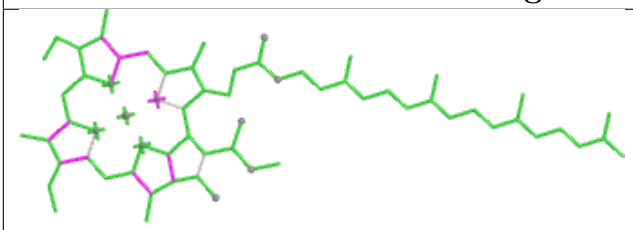


Rings

Ligand CLA C 519



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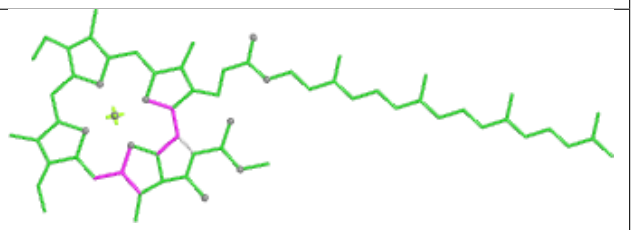

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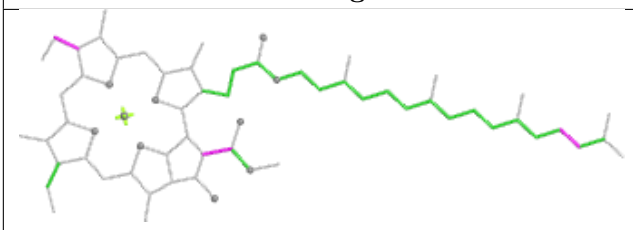

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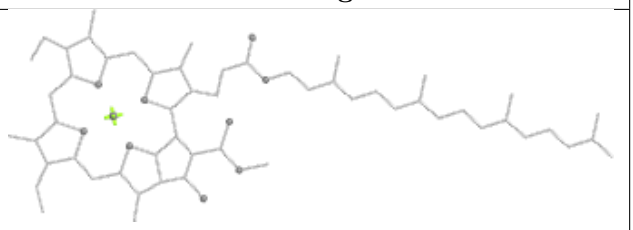
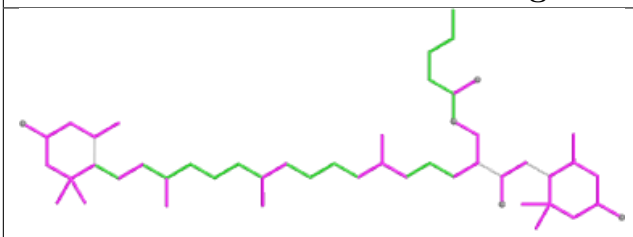


Rings

Ligand 0UR g 318



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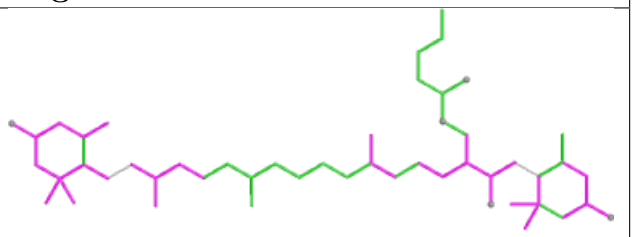
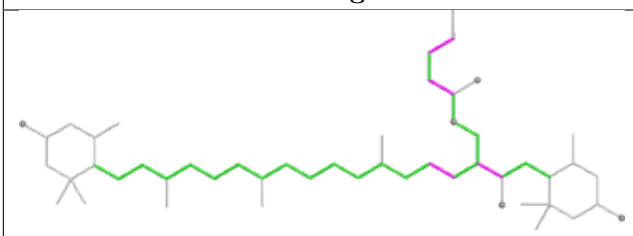


Bond angles



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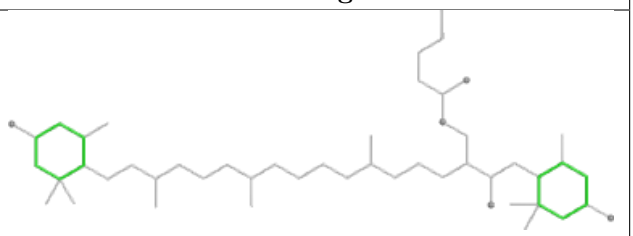
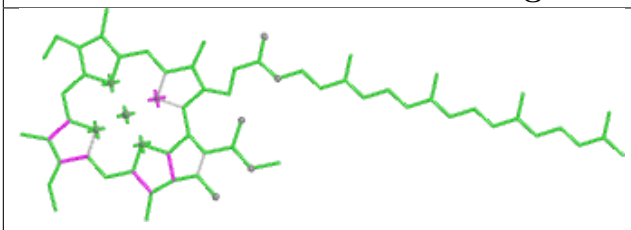


Rings

Ligand CLA C 504



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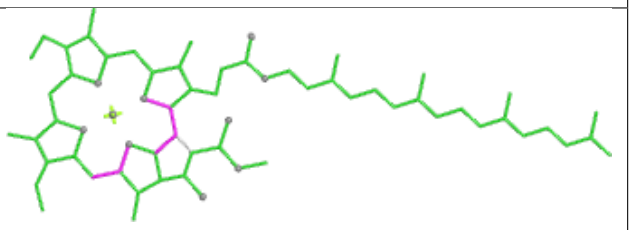
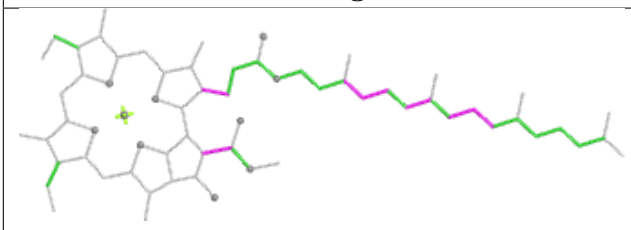


Bond angles



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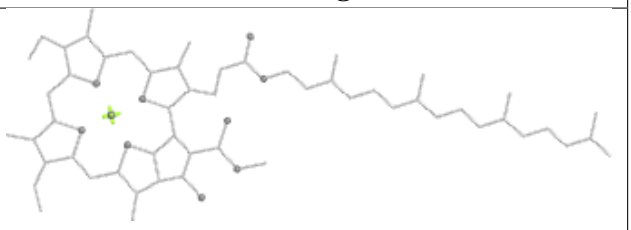
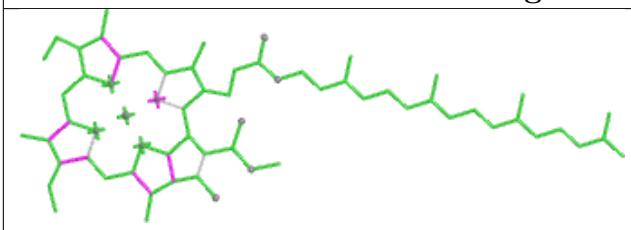
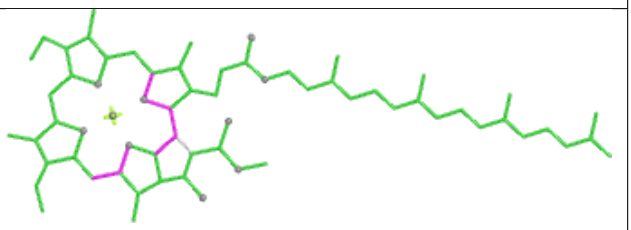


Rings

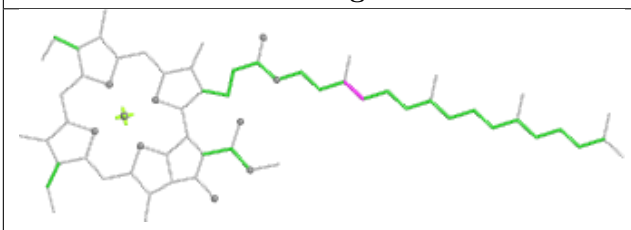
Ligand CLA B 602



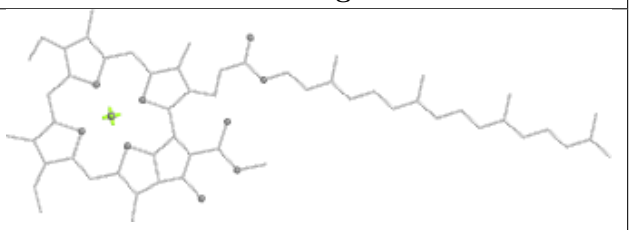
Bond lengths



Bond angles

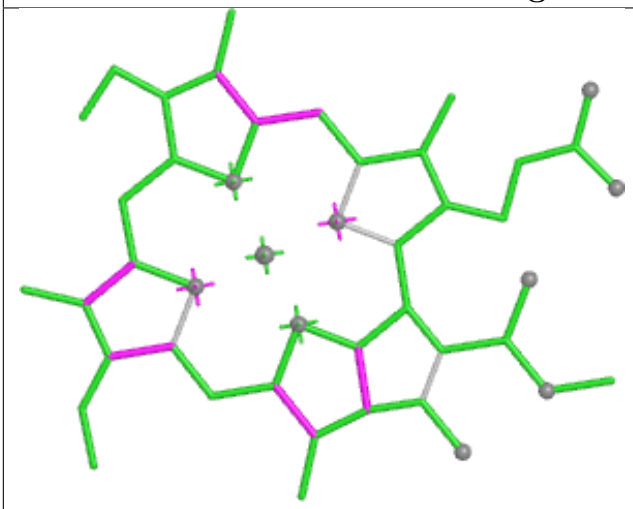


Torsions



Rings

Ligand CLA 0 303



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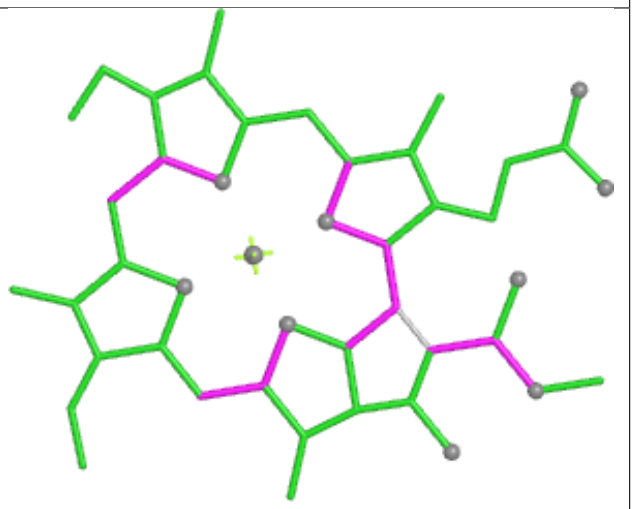
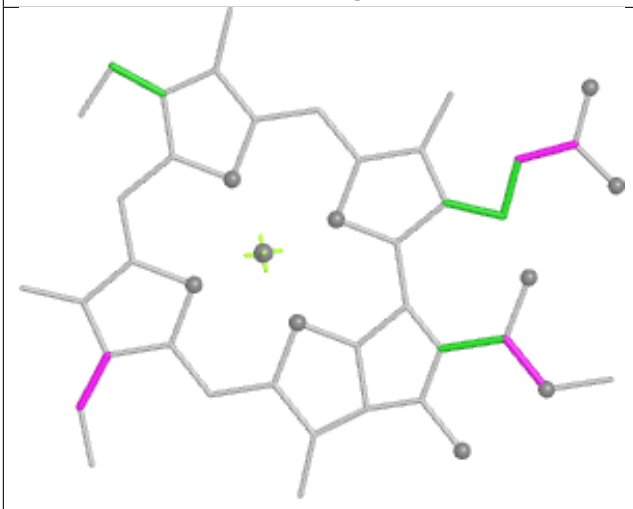


Bond angles

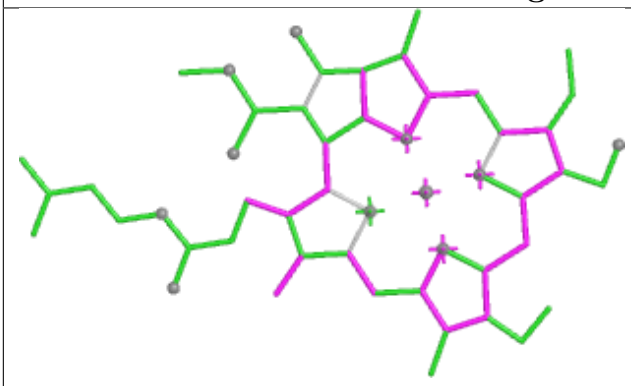


Torsions



Rings

Ligand CHL g 310



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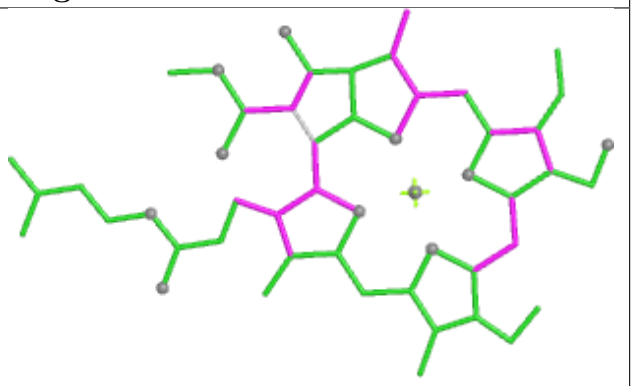
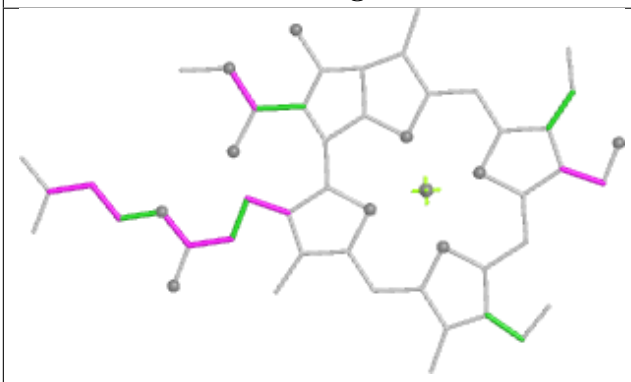


Bond angles



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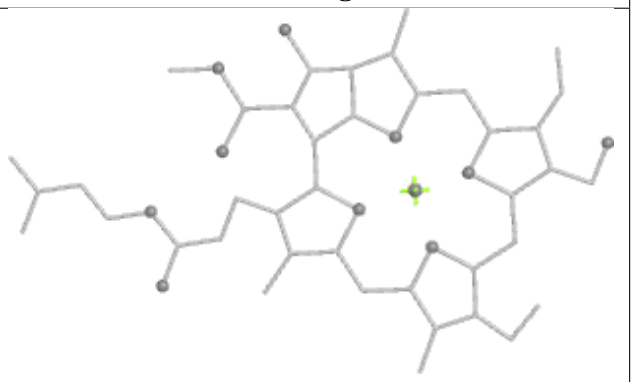
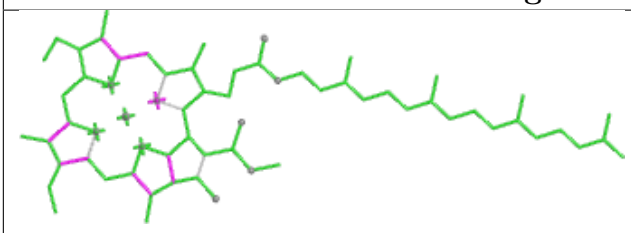


Rings

Ligand CLA C 503



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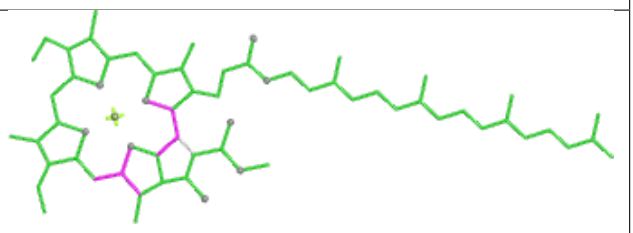
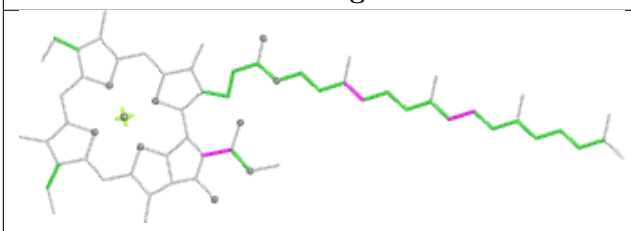


Bond angles



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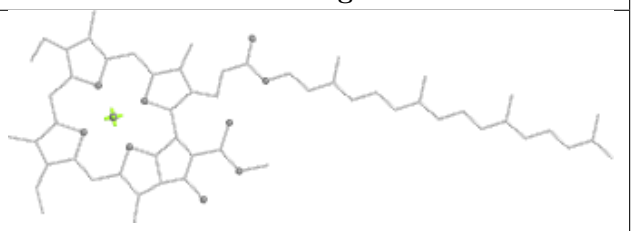
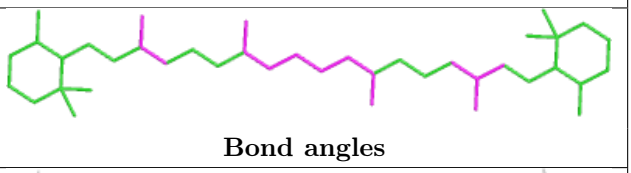


Rings

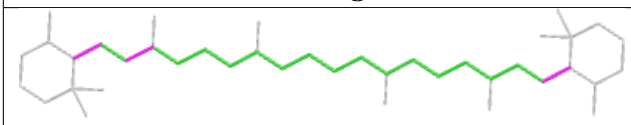
Ligand BCR B 614



Bond lengths



Bond angles



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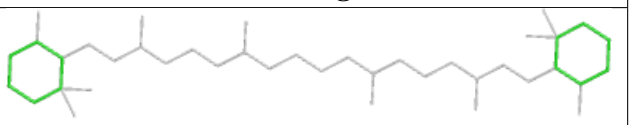
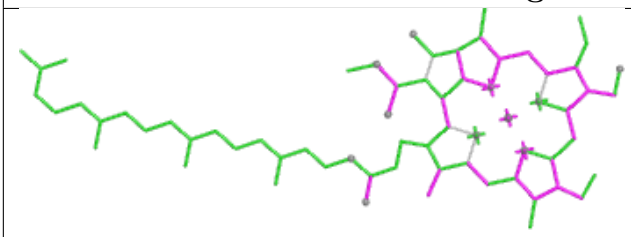


Rings

Ligand CHL S 306



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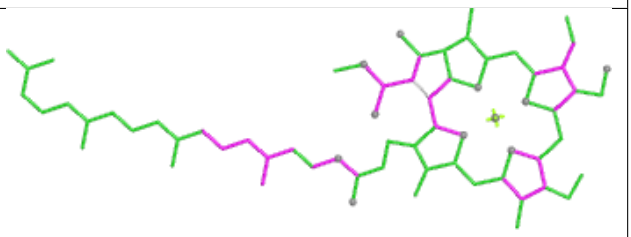
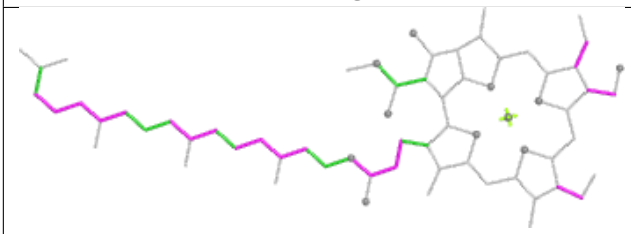


Bond angles



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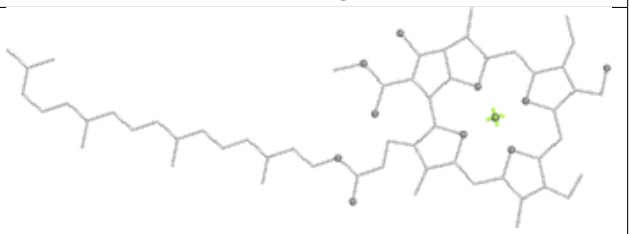
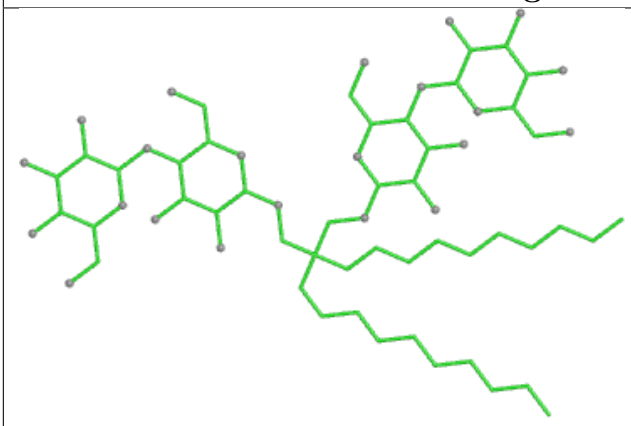


Rings

Ligand LMN g 301



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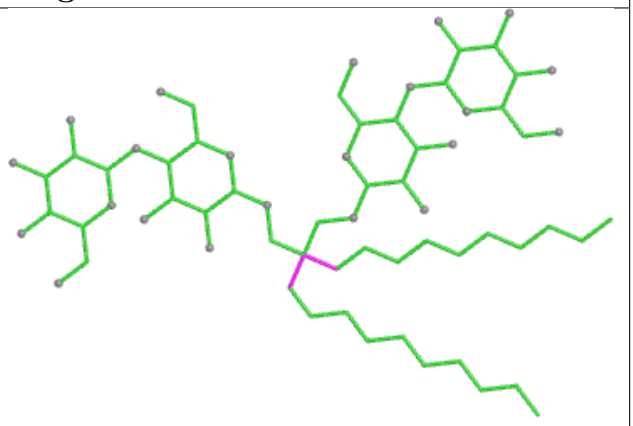
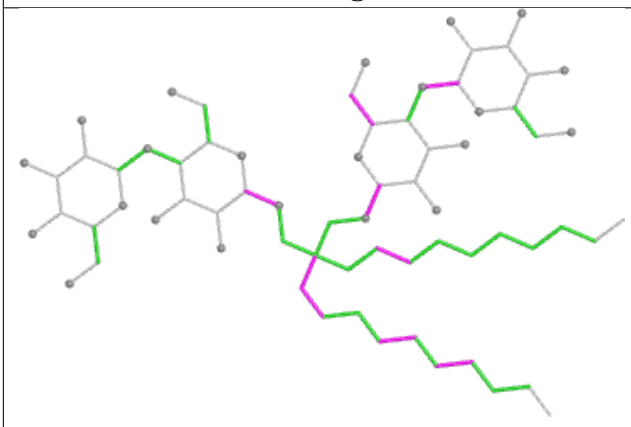


Bond angles



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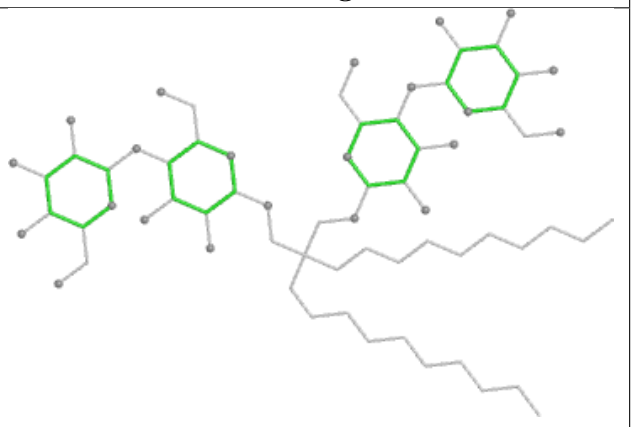
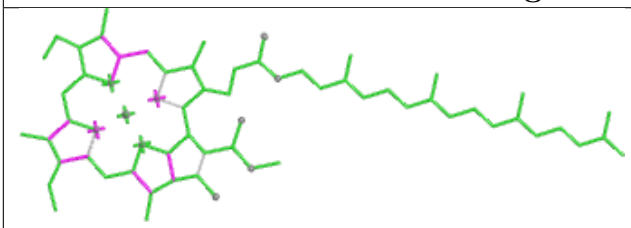


Rings

Ligand CLA B 616



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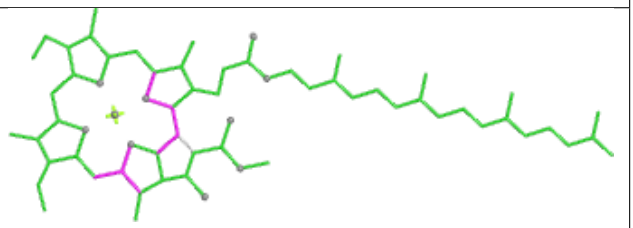
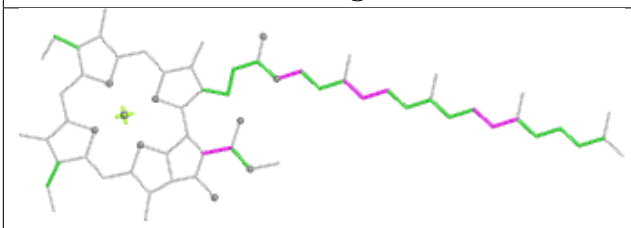


Bond angles



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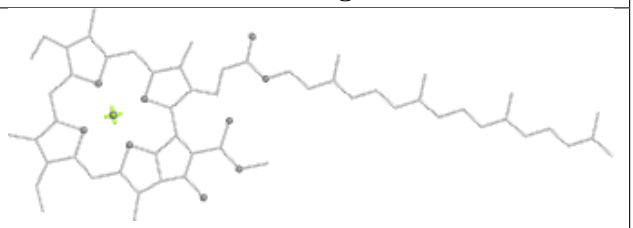
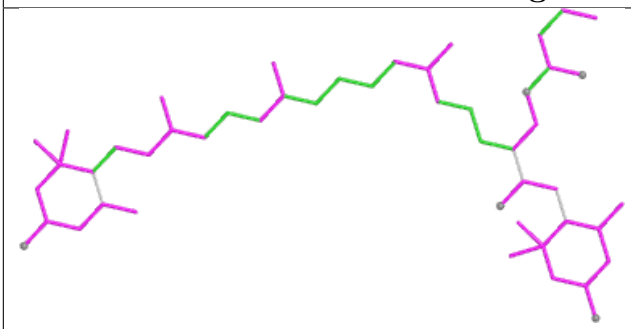


Rings

Ligand 0UR y 317



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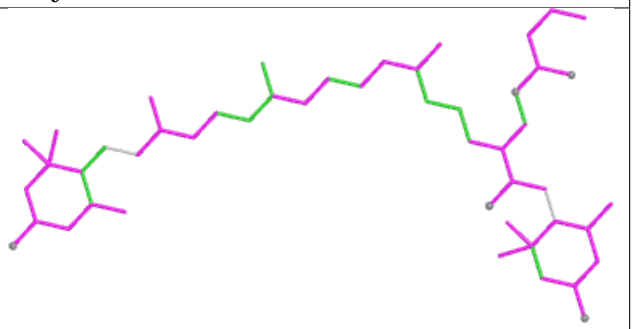
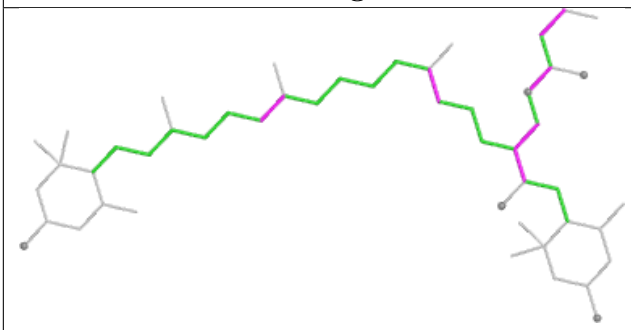


Bond angles



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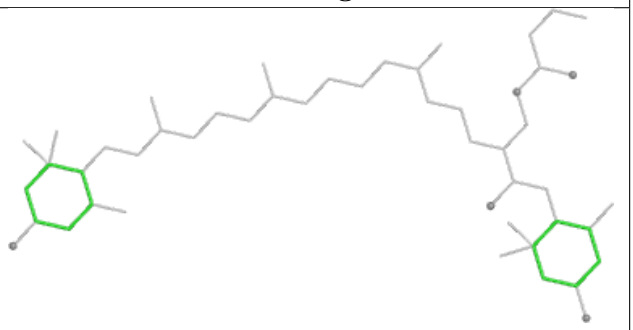
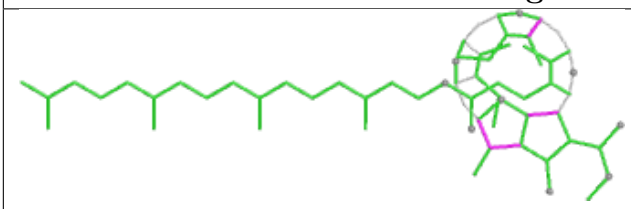


Rings

Ligand PHO a 404



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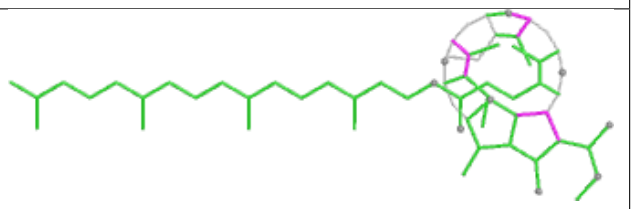
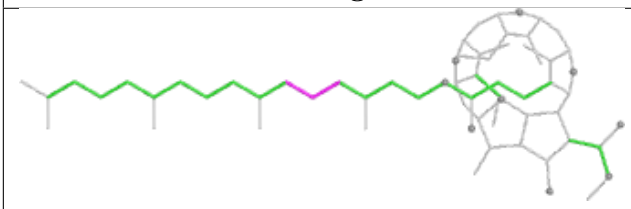


Bond angles



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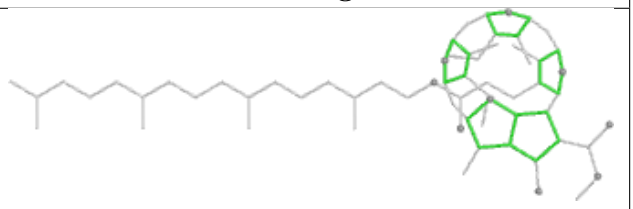
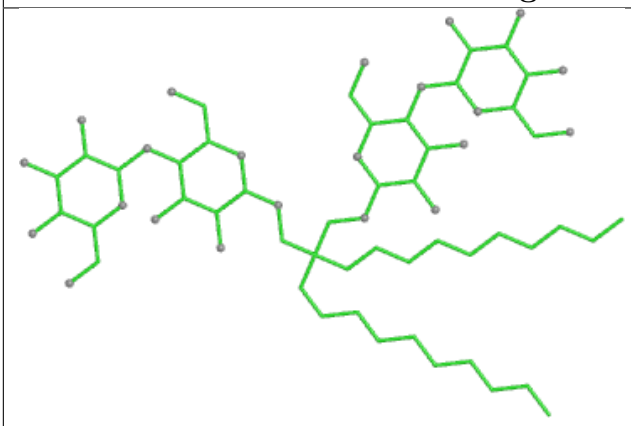


Rings

Ligand LMN C 518



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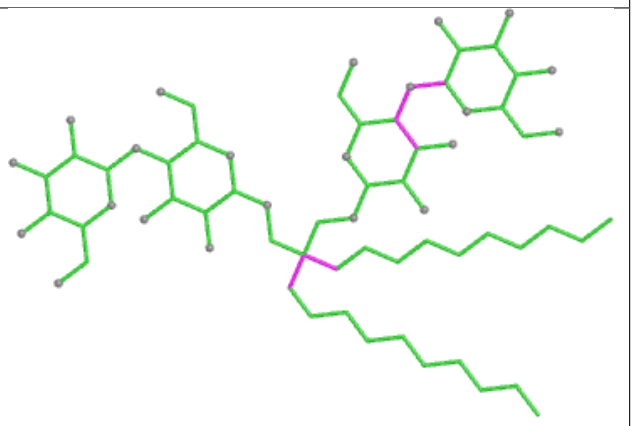
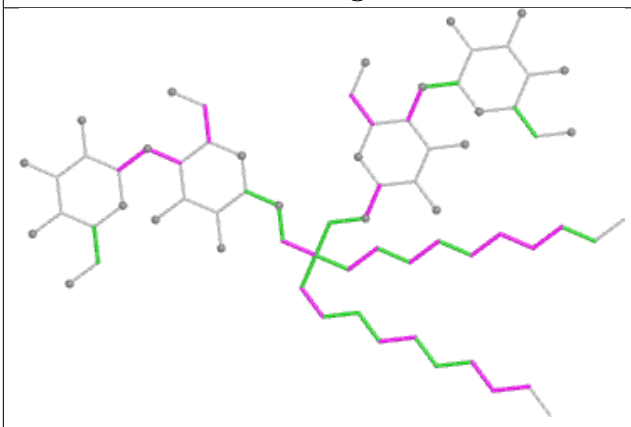


Bond angles



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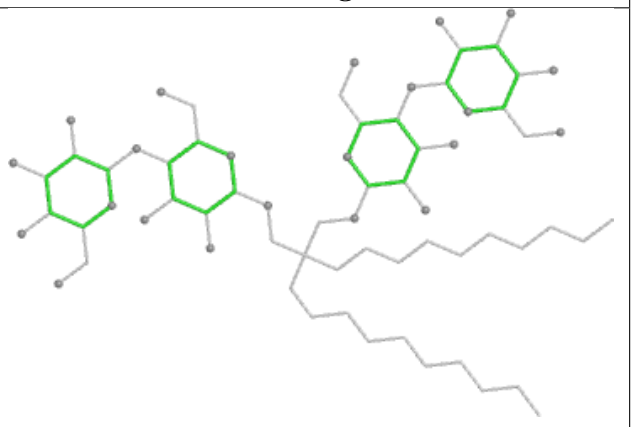
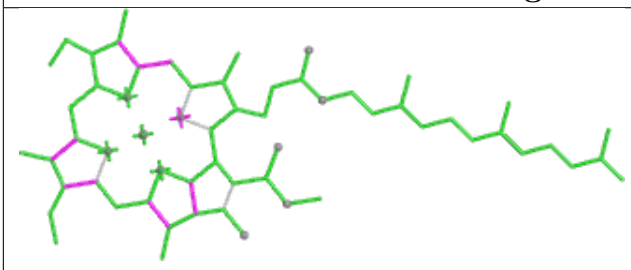


Rings

Ligand CLA B 601



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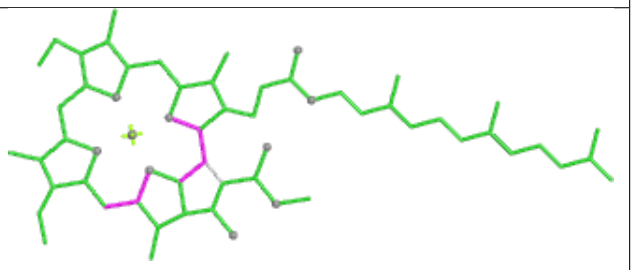
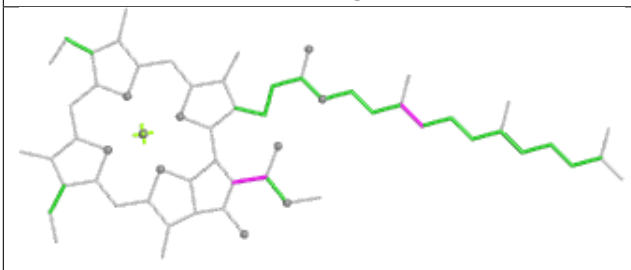


Bond angles



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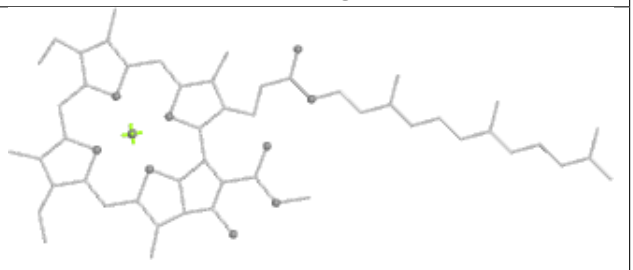
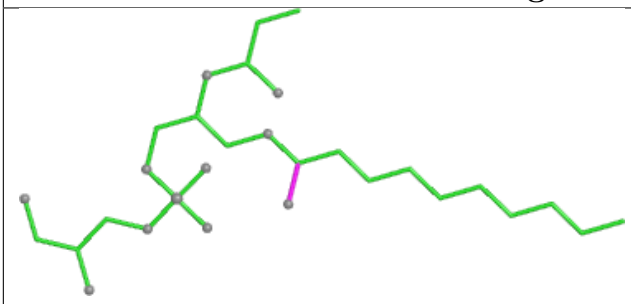


Rings

Ligand LHG c 527



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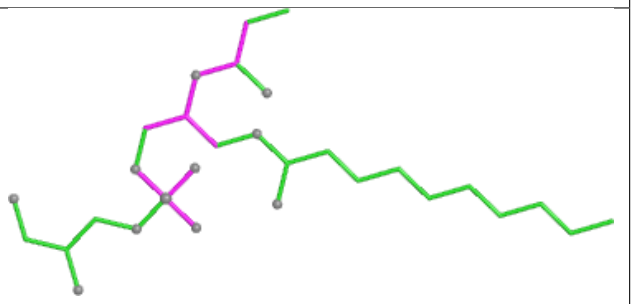
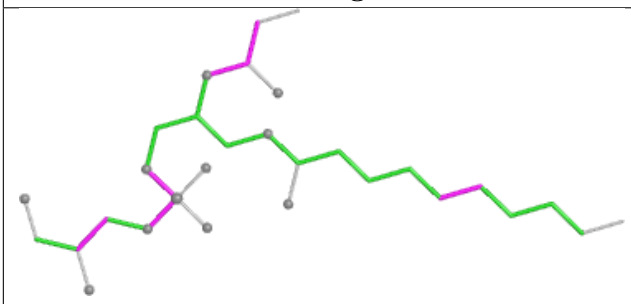


Bond angles



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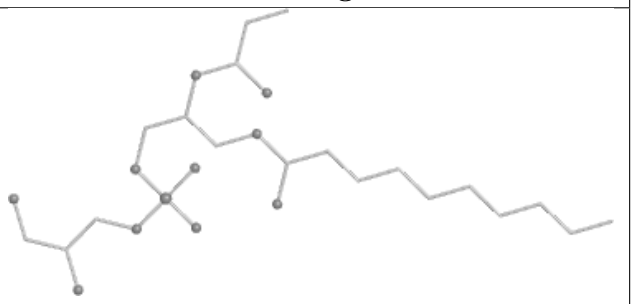
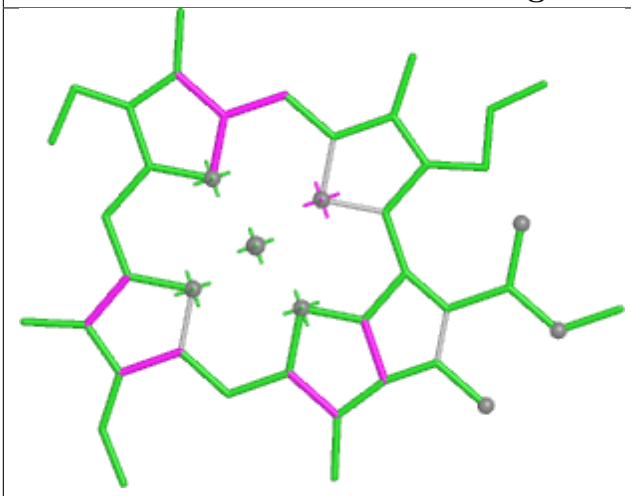


Rings

Ligand CLA y 313



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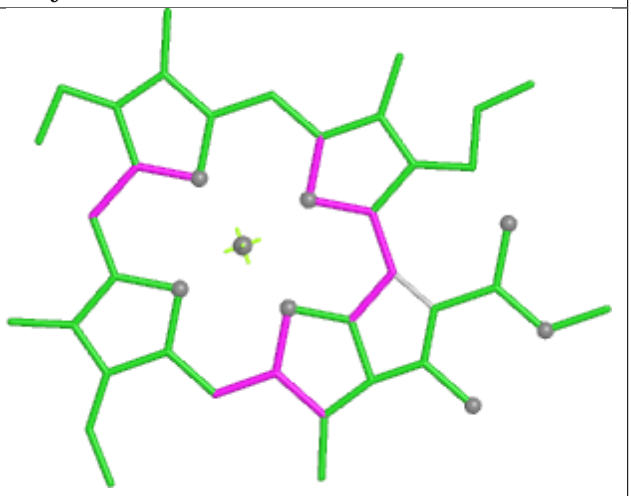
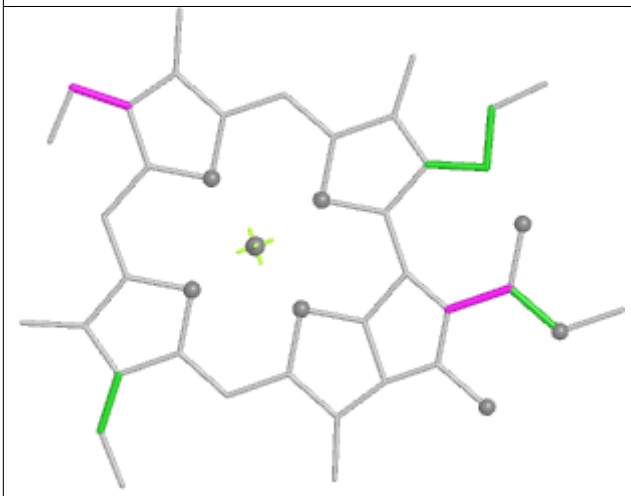


Bond angles



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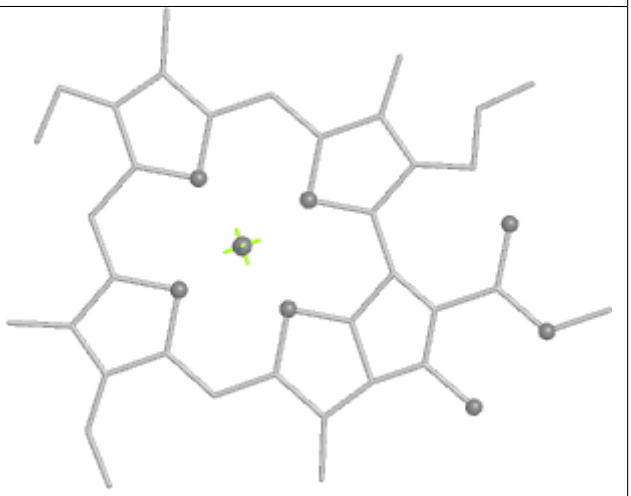
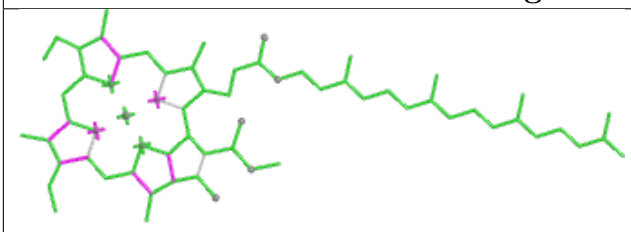
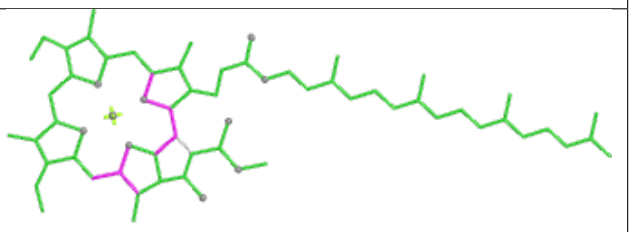


Rings

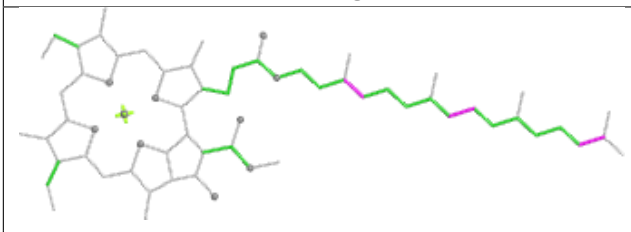
Ligand CLA B 612



Bond lengths



Bond angles



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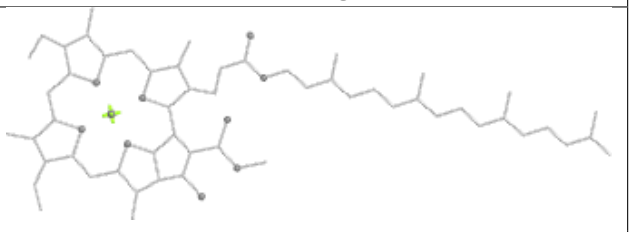
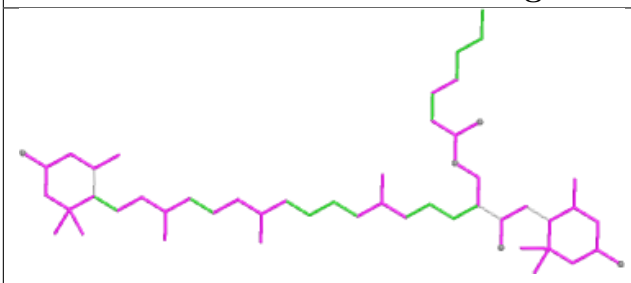
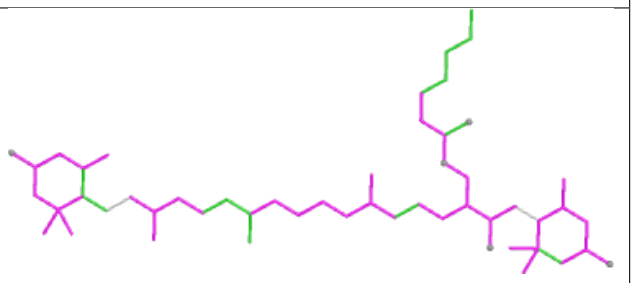


Rings

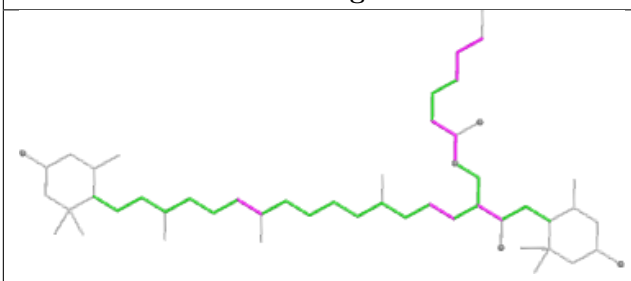
Ligand 0UR U 419



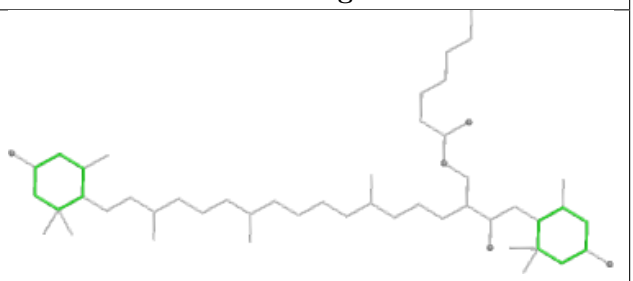
Bond lengths



Bond angles

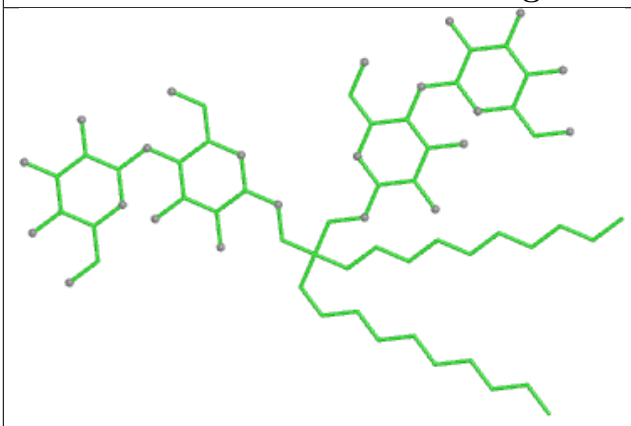


Torsions



Rings

Ligand LMN n 301



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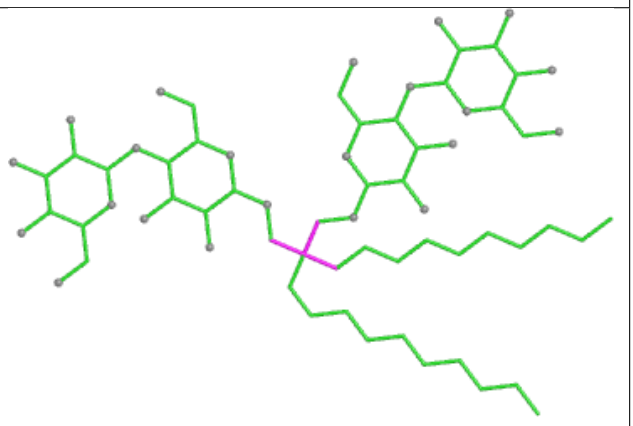
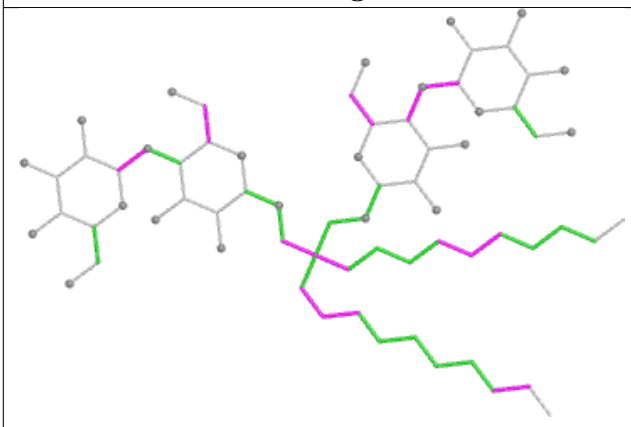


Bond angles



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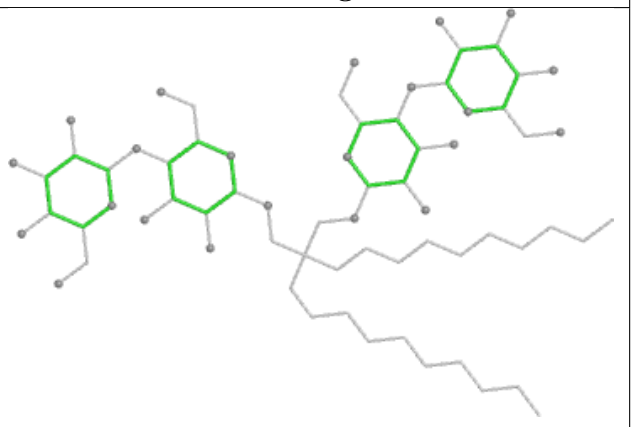
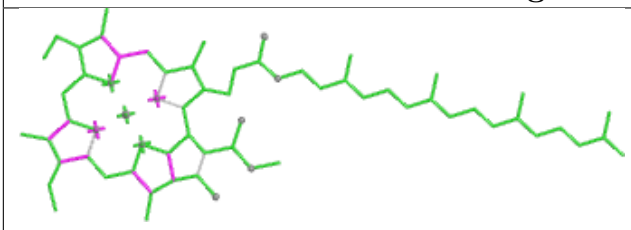
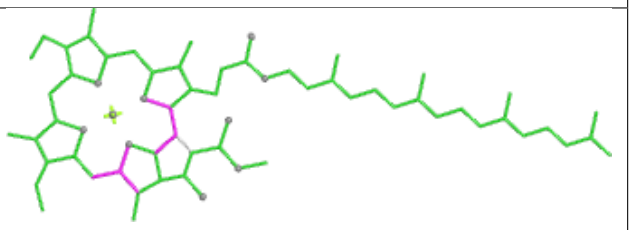
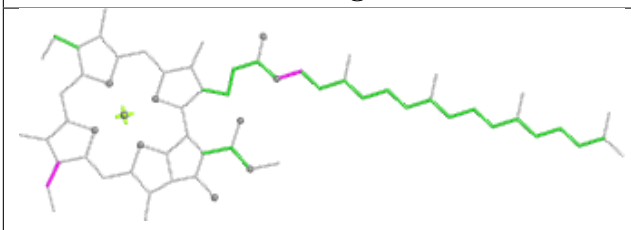
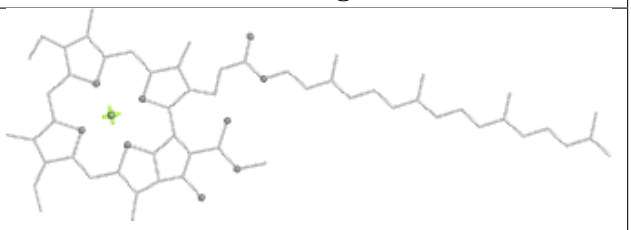
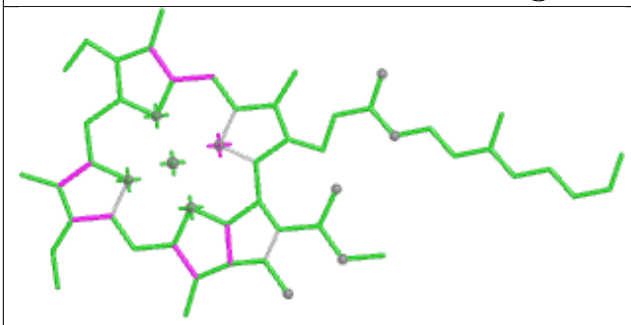
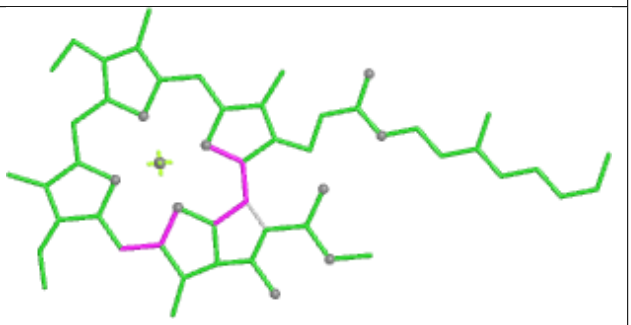
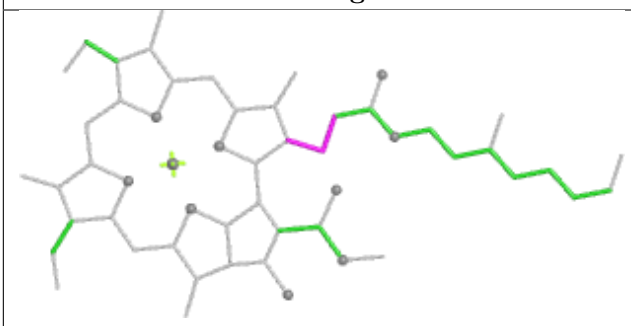
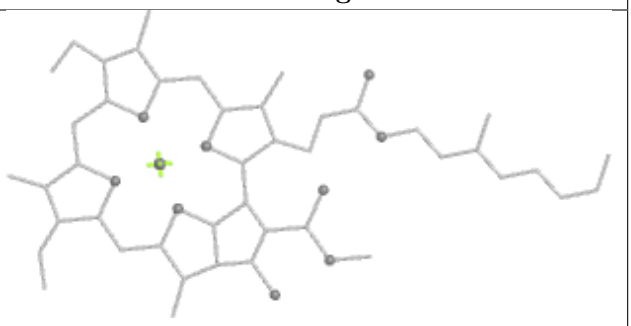
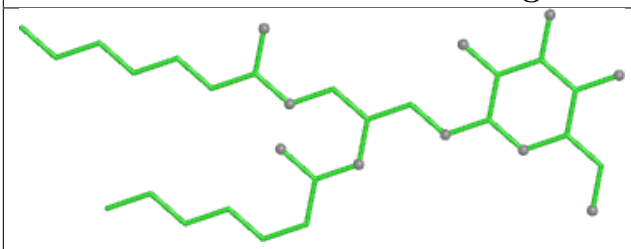


Rings

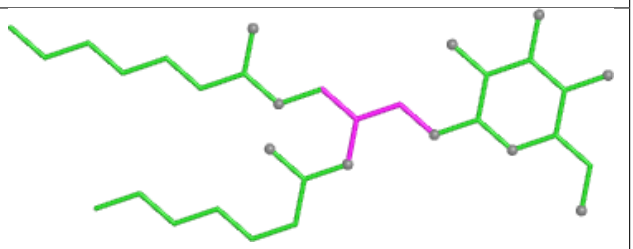
Ligand CLA d 404	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA s 304	
	
Bond lengths	Bond angles
	
Torsions	Rings

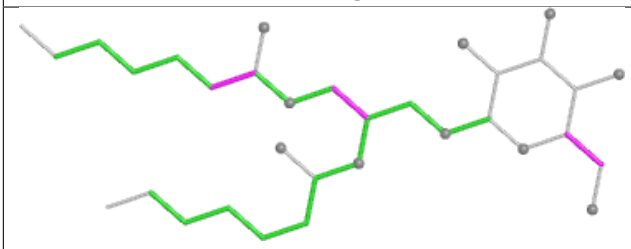
Ligand LMG b 625



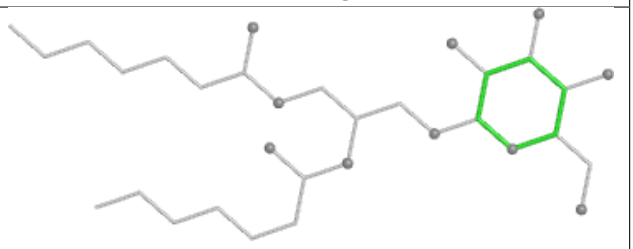
Bond lengths



Bond angles

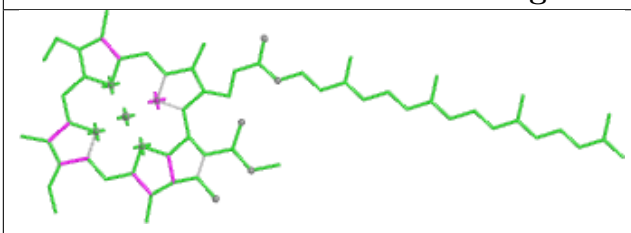


Torsions



Rings

Ligand CLA c 512



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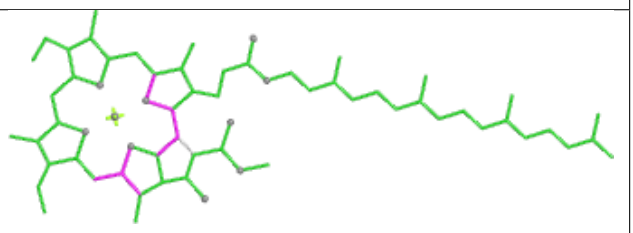
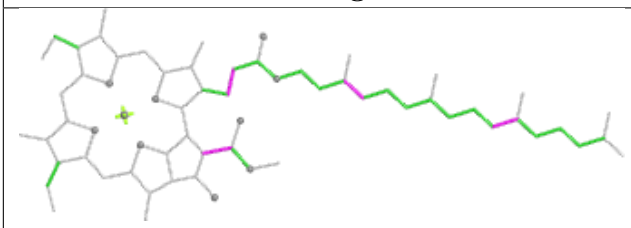


Bond angles



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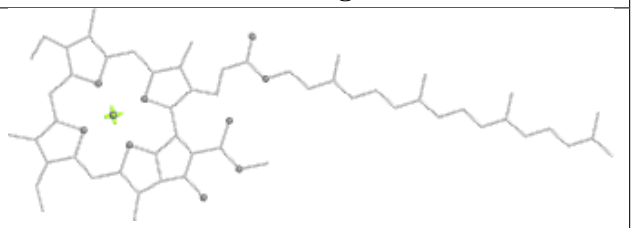
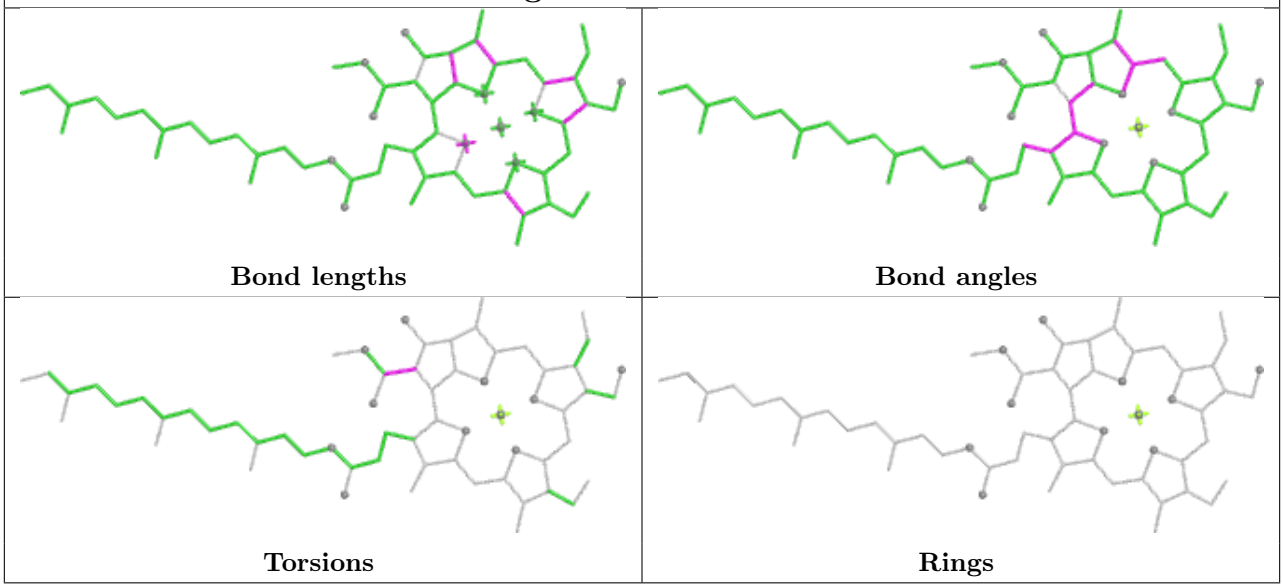


Rings

Ligand CHL V 306



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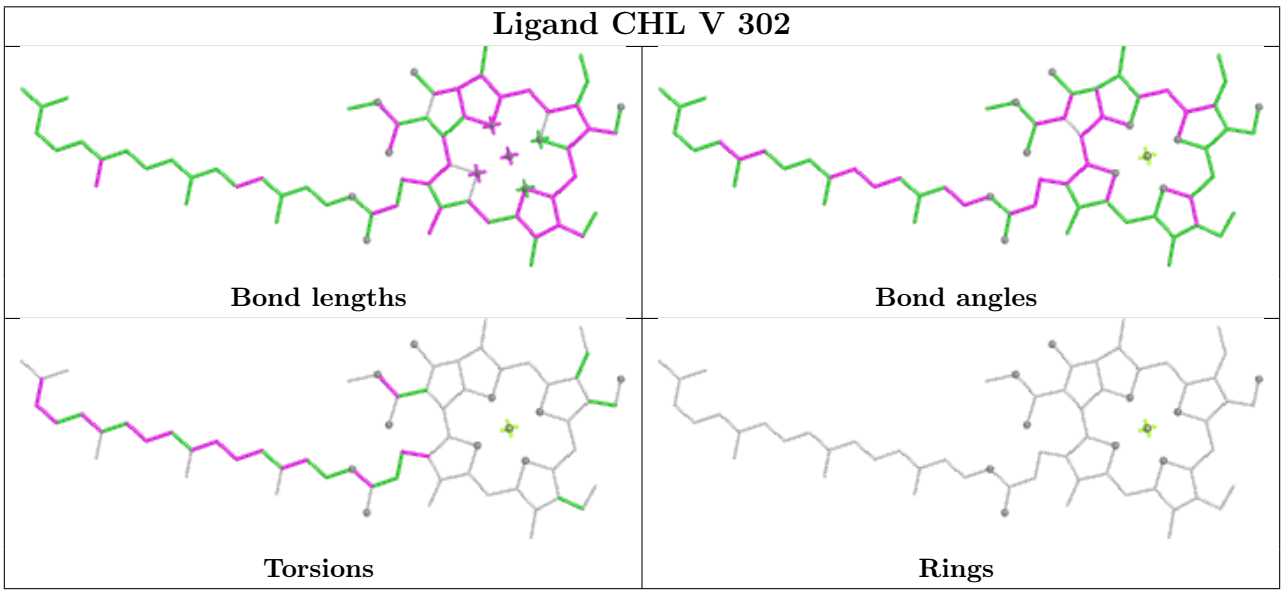
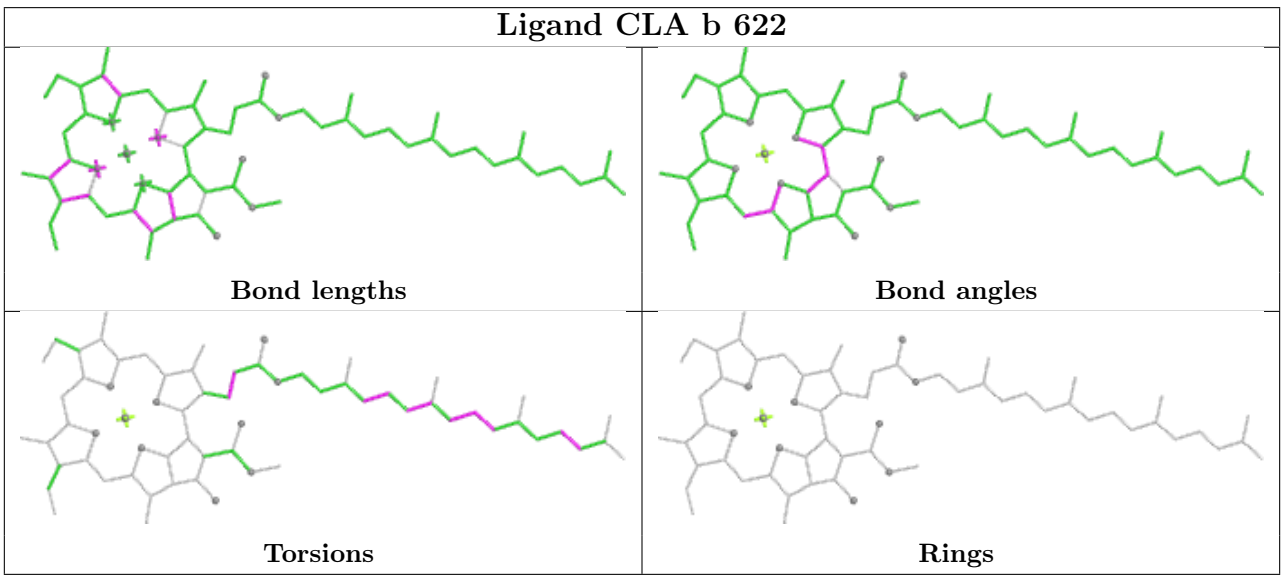


Ligand CLA b 622



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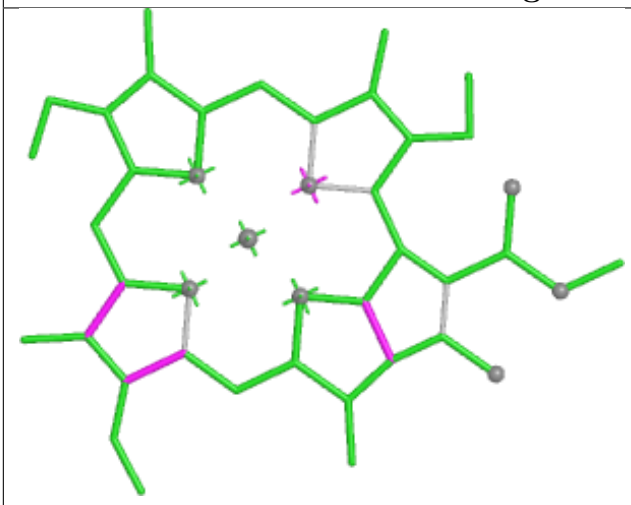
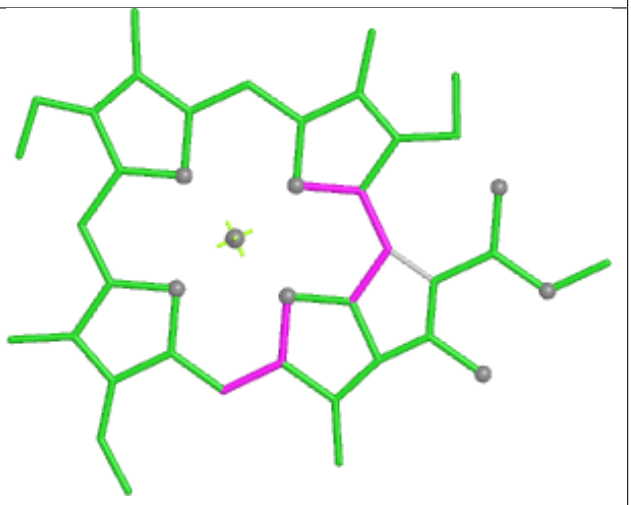
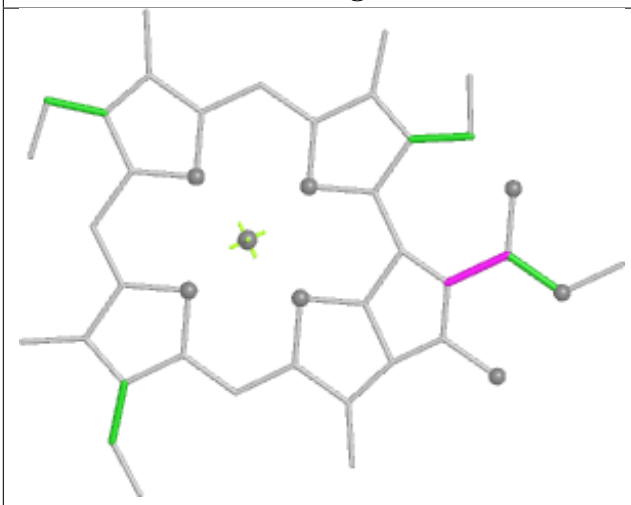


Bond lengths



Bond angles

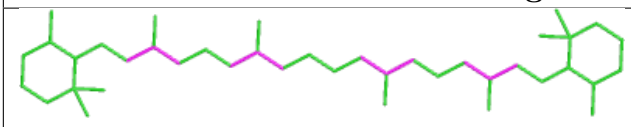


Torsions



Rings

Ligand BCR d 403



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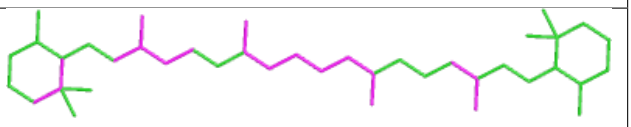
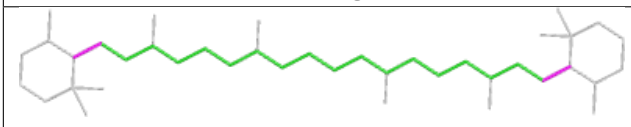


Bond angles



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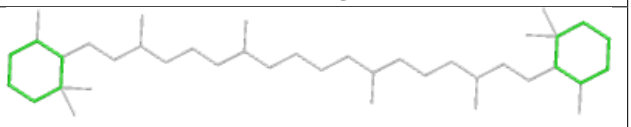
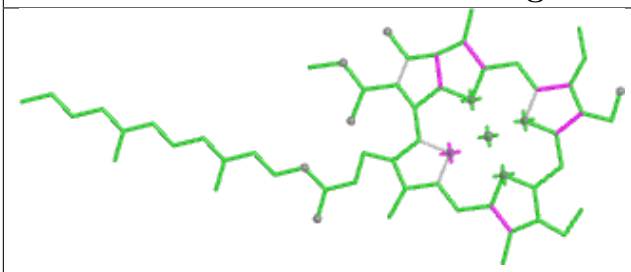


Rings

Ligand CHL n 305



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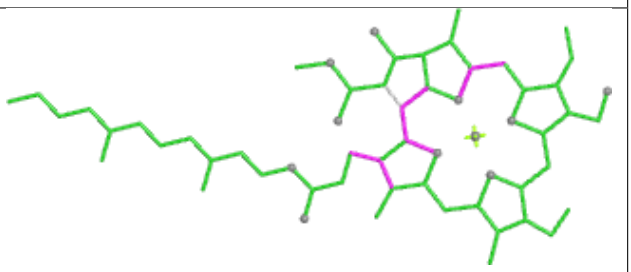
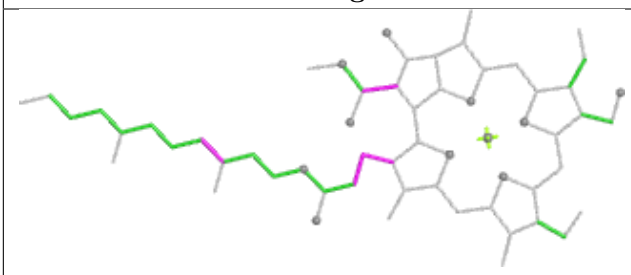


Bond angles



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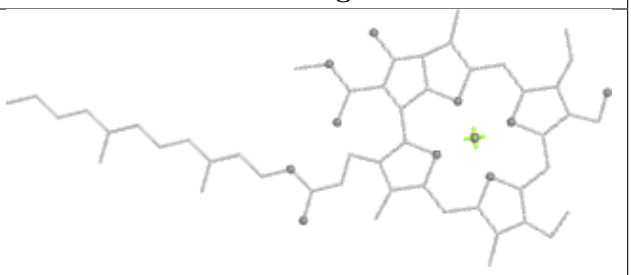
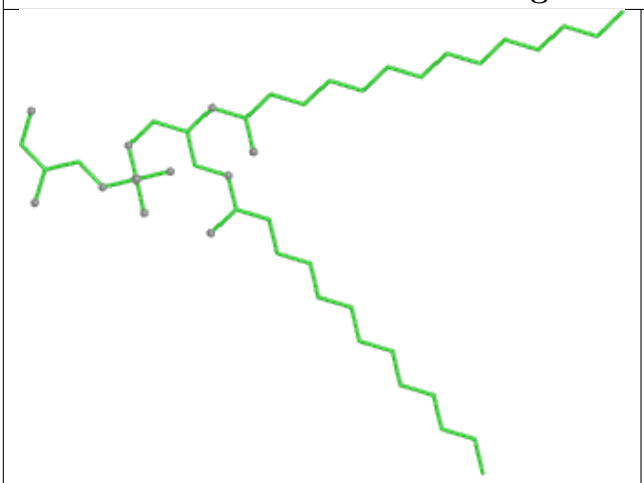


Rings

Ligand LHG l 101



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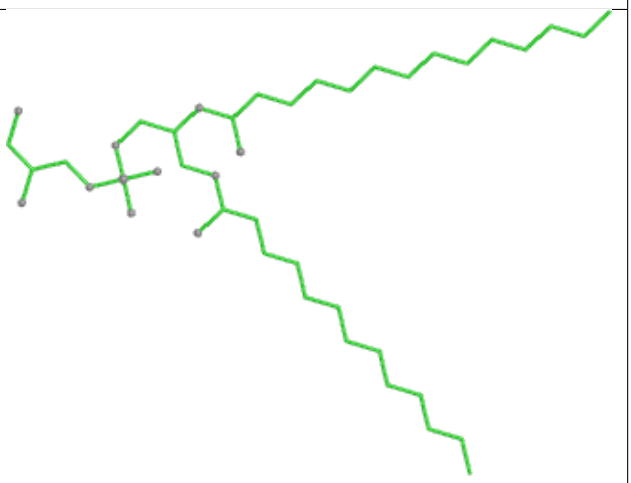
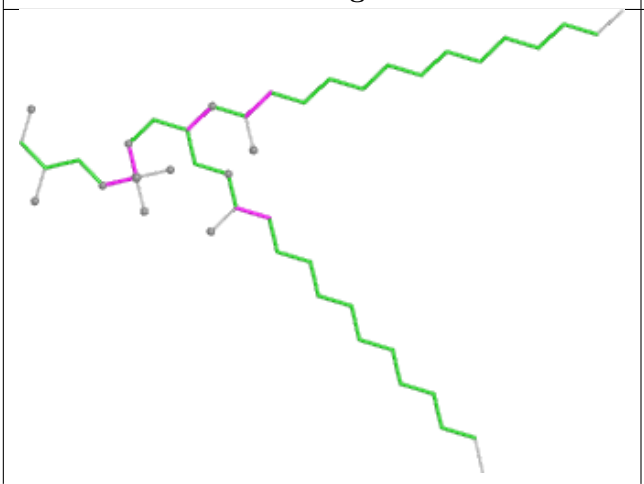


Bond angles



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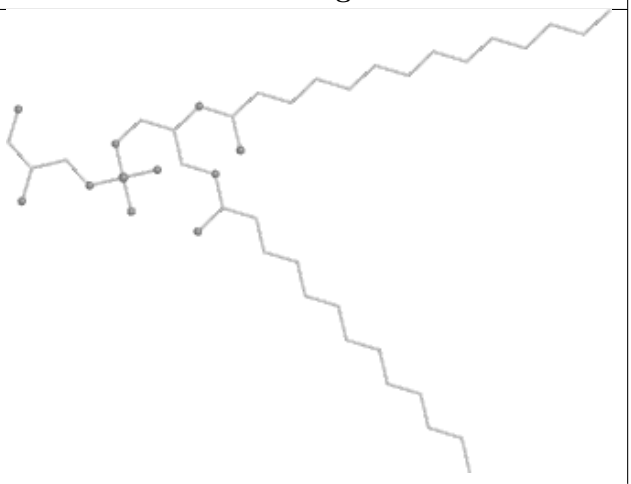
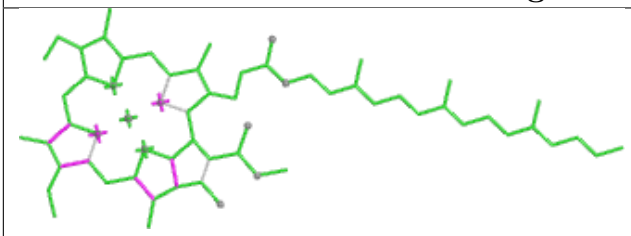


Rings

Ligand CLA d 409



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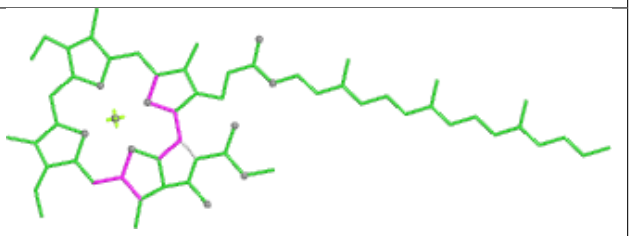
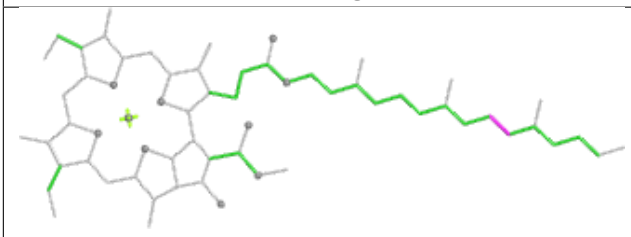


Bond angles



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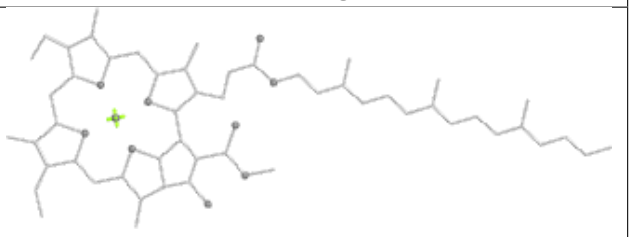
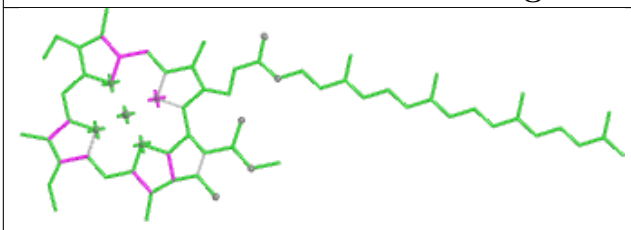
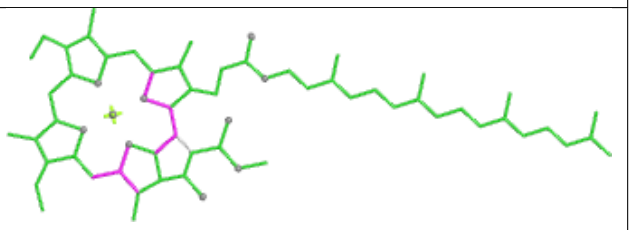


Rings

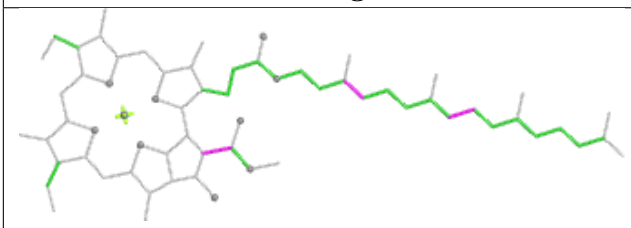
Ligand CLA B 605



Bond lengths



Bond angles



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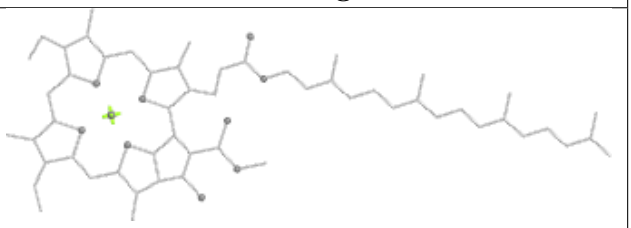


Rings

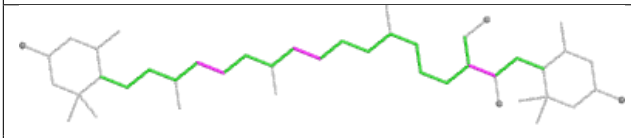
Ligand 0IE n 319



Bond lengths



Bond angles



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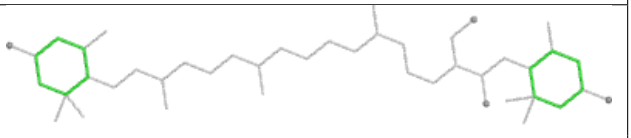
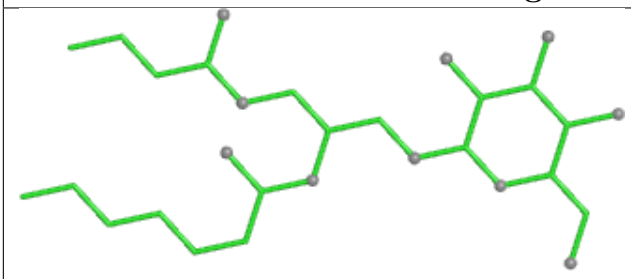
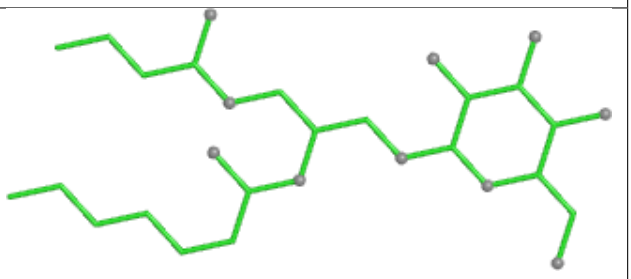


Rings

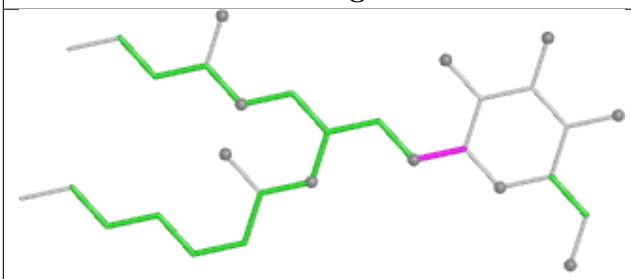
Ligand LMG c 528



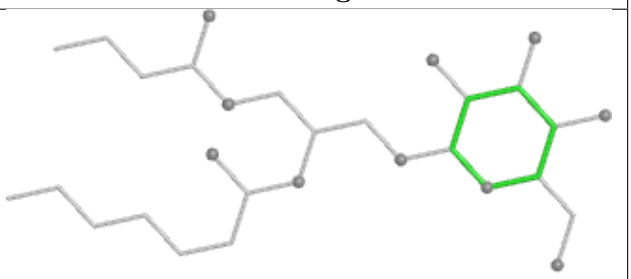
Bond lengths



Bond angles

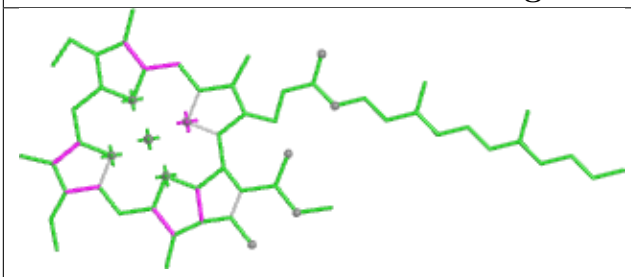


Torsions

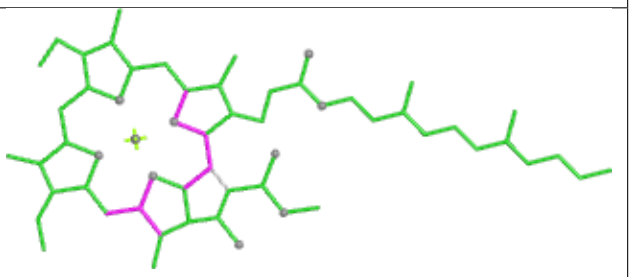


Rings

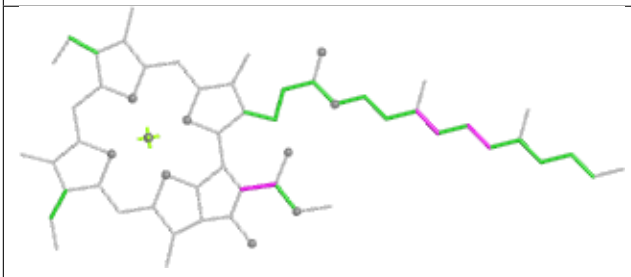
Ligand CLA B 619



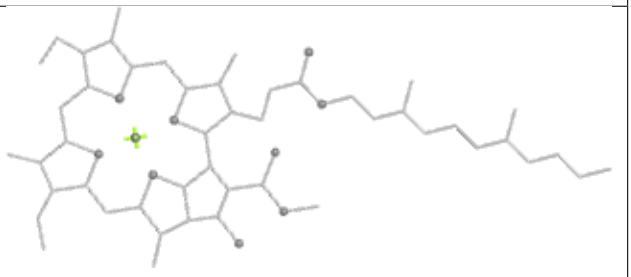
Bond lengths



Bond angles

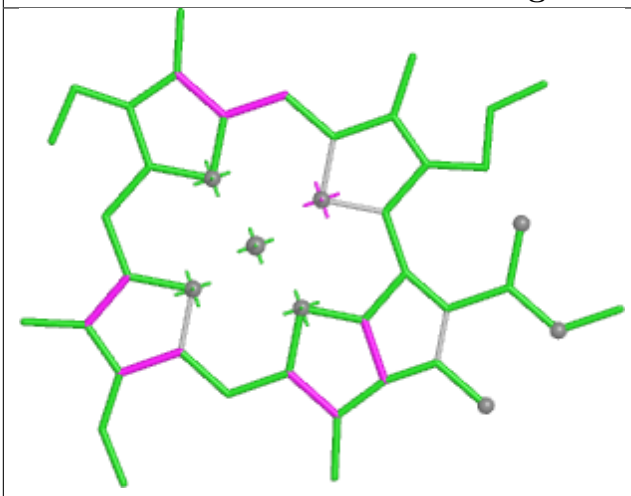


Torsions

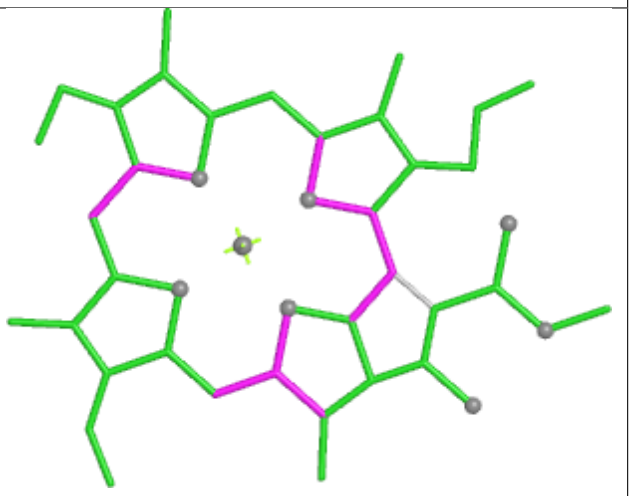


Rings

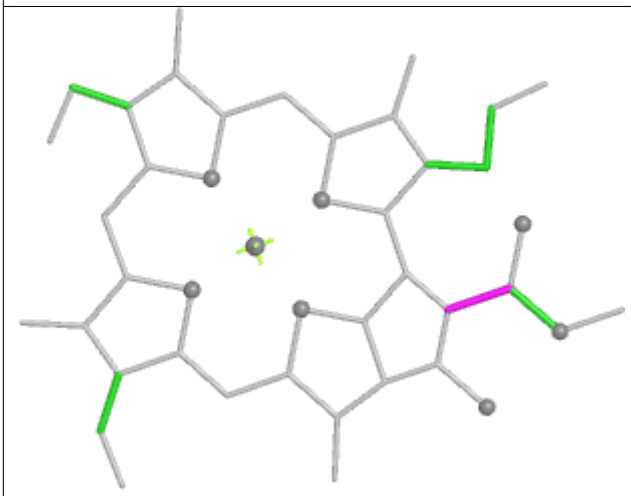
Ligand CLA 1 304



Bond lengths



Bond angles



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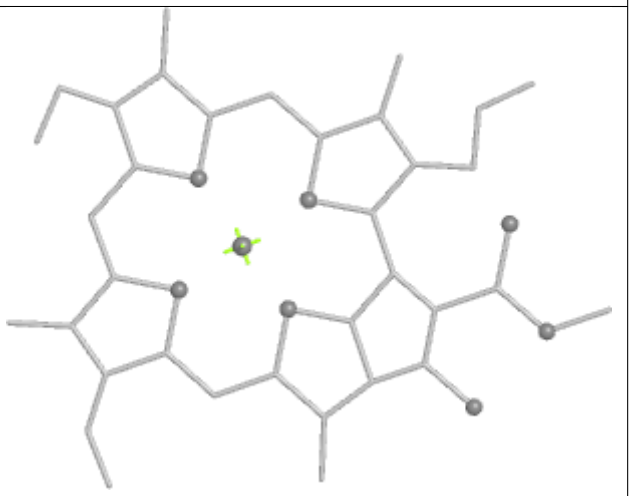

Rings

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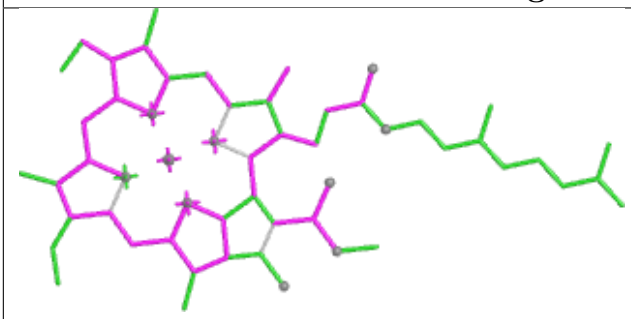
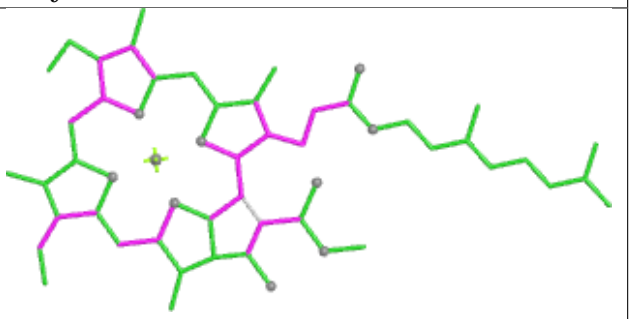
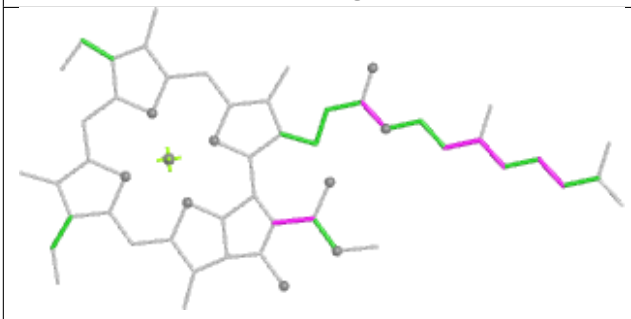
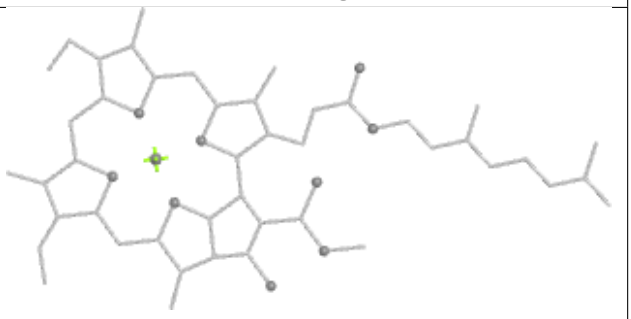
	
Bond lengths	Bond angles
	
Torsions	Rings

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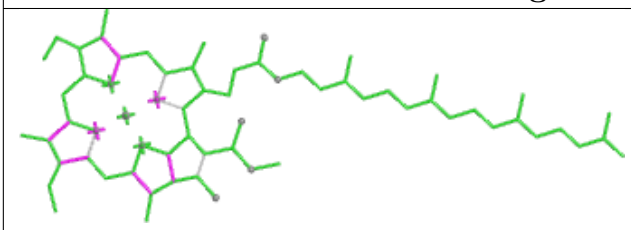	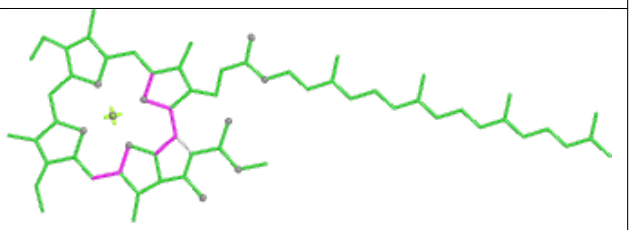
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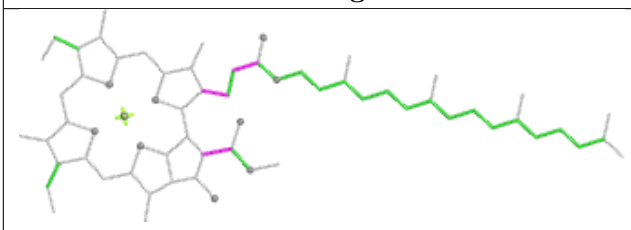
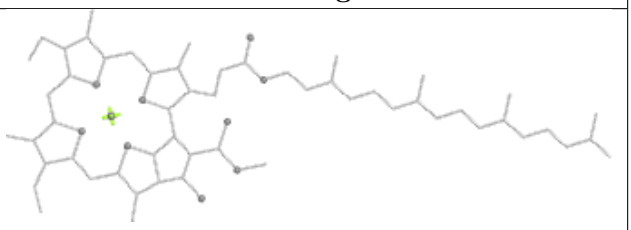
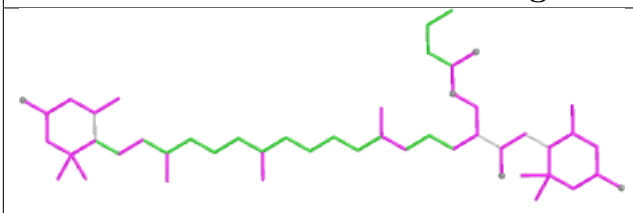
	
Torsions	Rings

Ligand 0UR 0 314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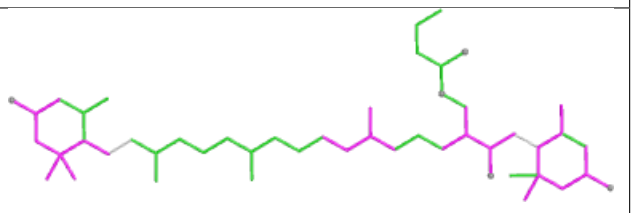
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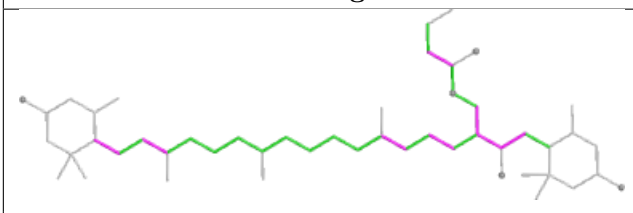
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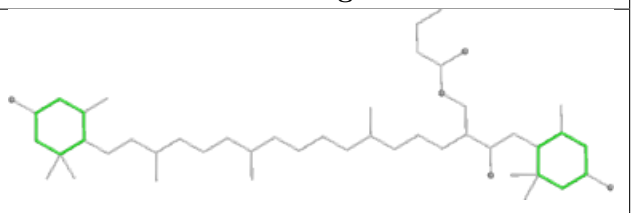
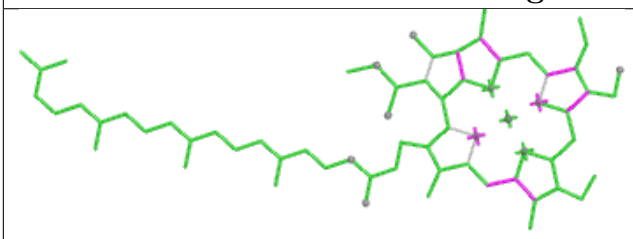

Rings

Ligand CHL S 309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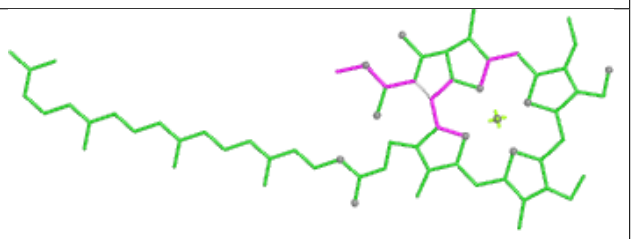
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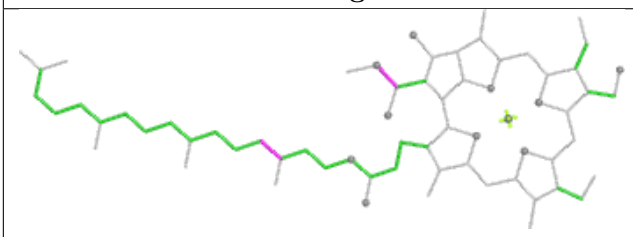
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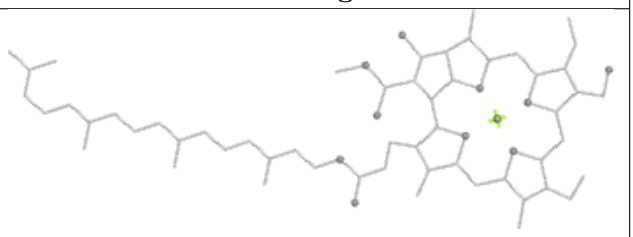
Rings

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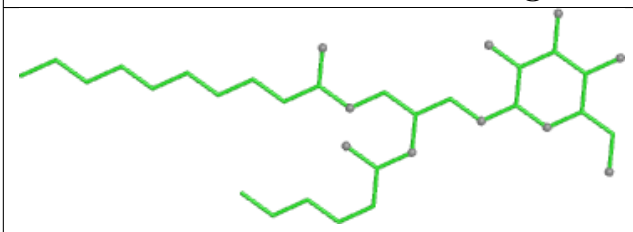
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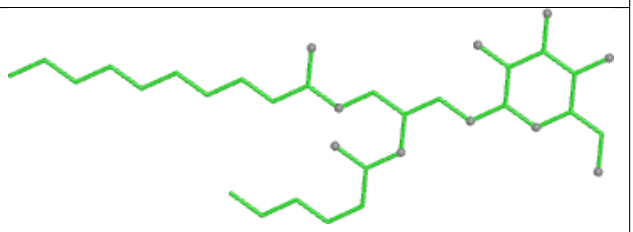
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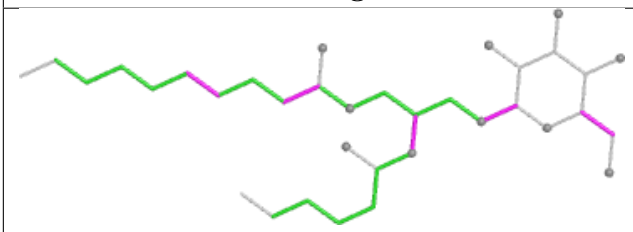
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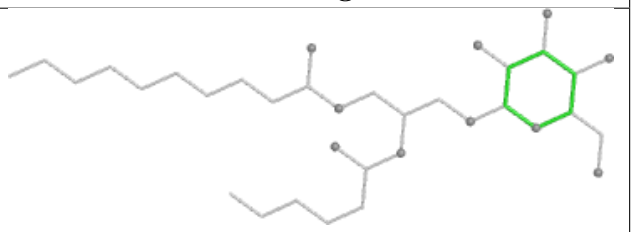
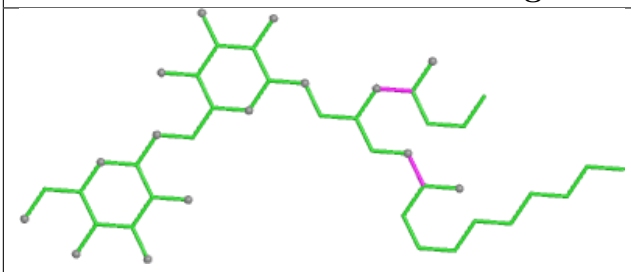

Rings

Ligand DGD a 405



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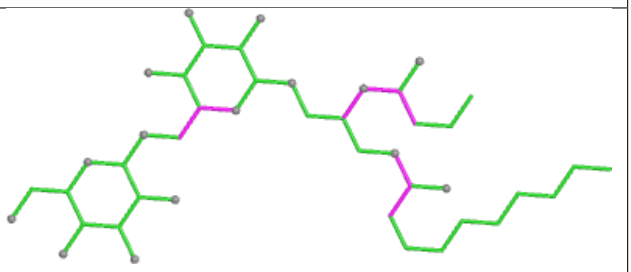

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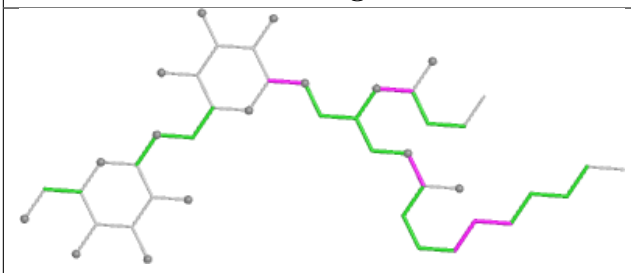

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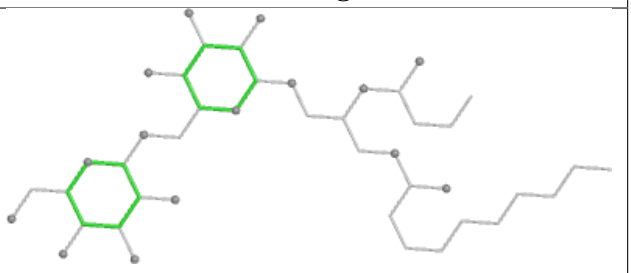
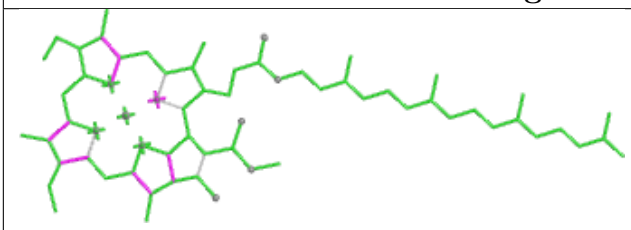


Rings

Ligand CLA B 609



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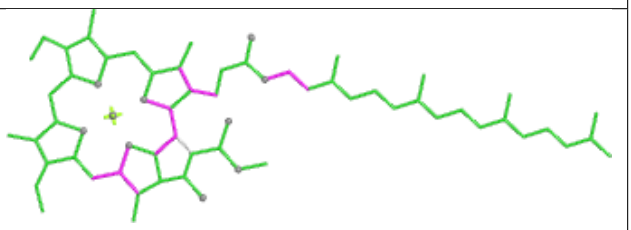

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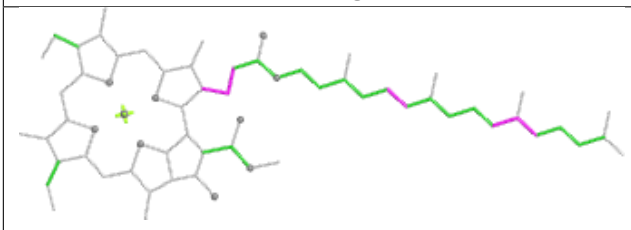

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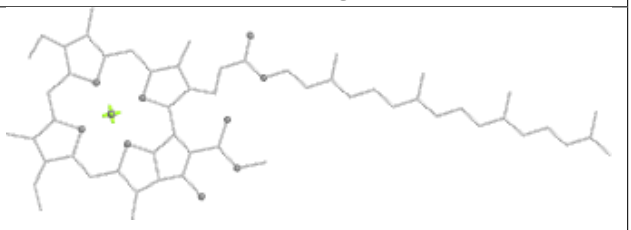
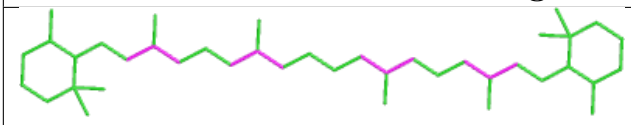


Rings

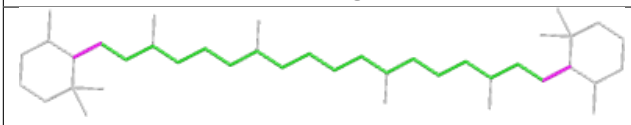
Ligand BCR t 101



Bond lengths



Bond angles



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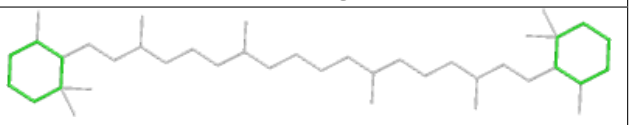
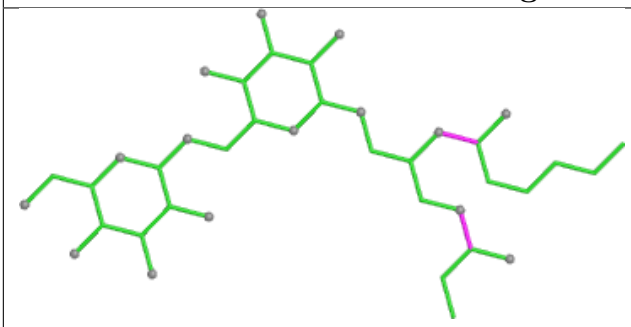


Rings

Ligand DGD C 515



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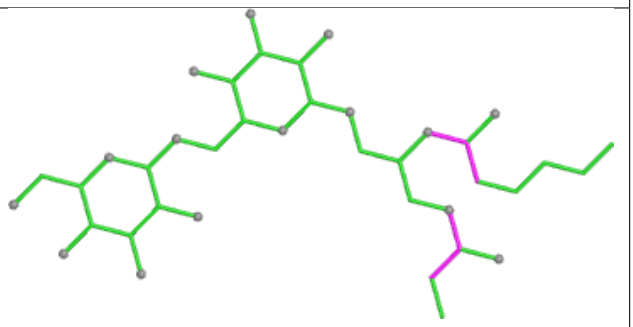
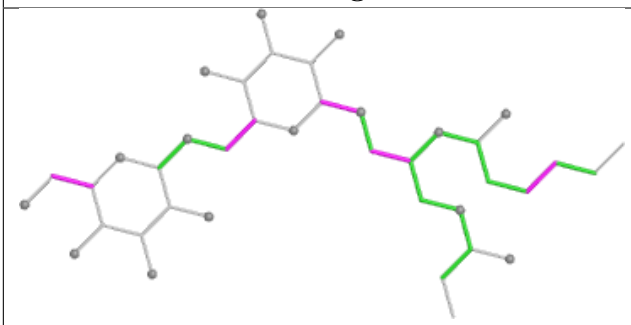


Bond angles



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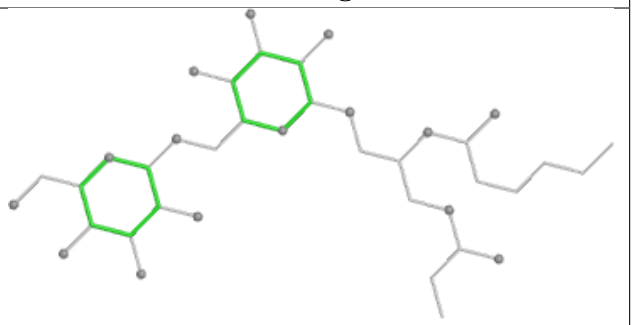
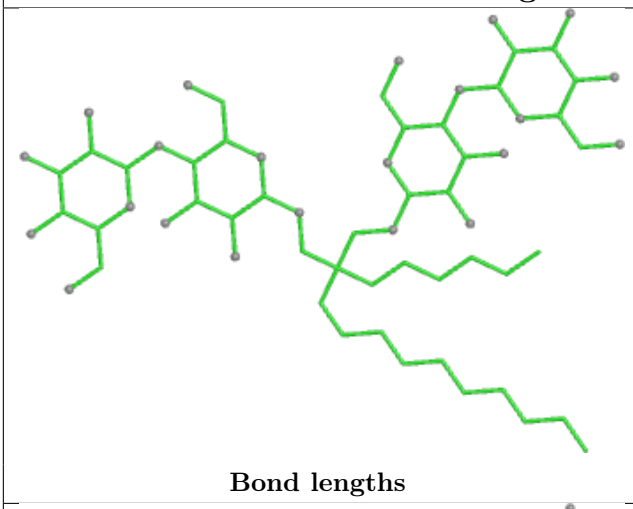


Rings

Ligand LMN Y 301



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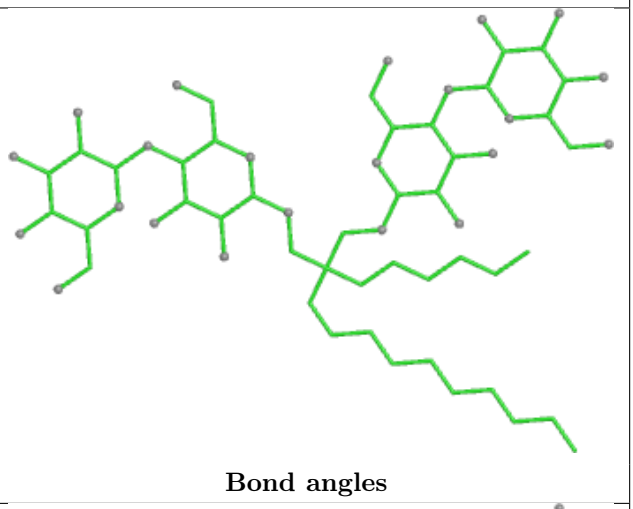
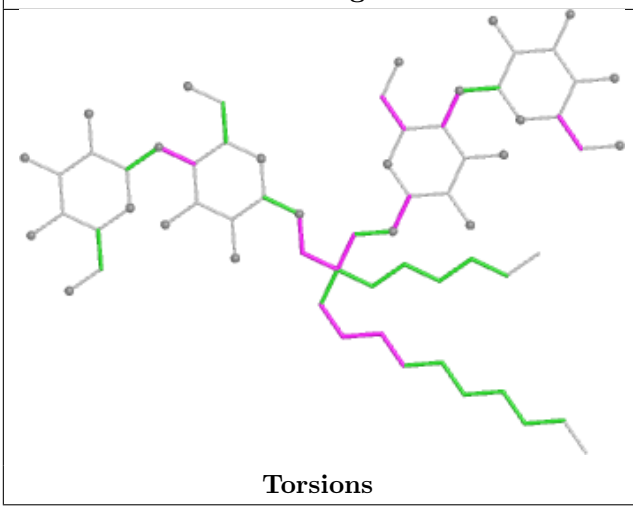


Bond angles



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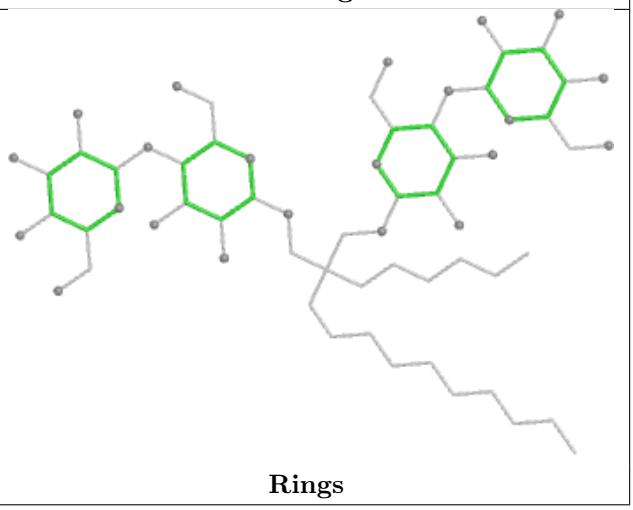
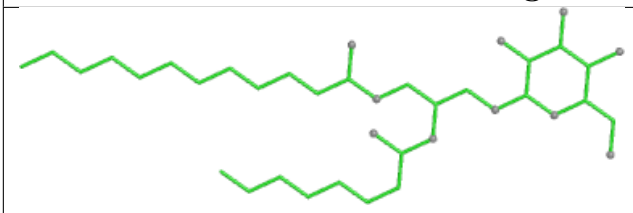


Rings

Ligand LMG J 101



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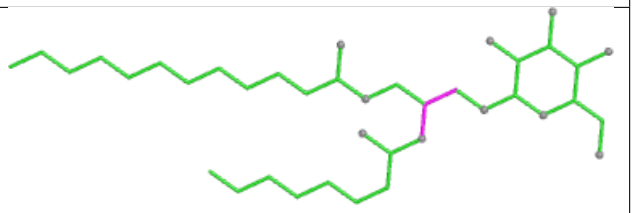
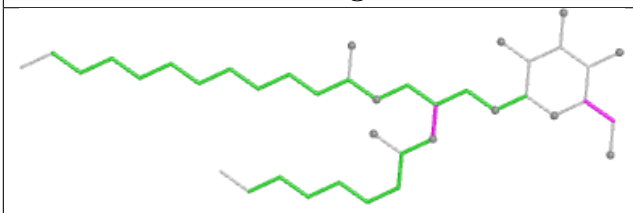


Bond angles



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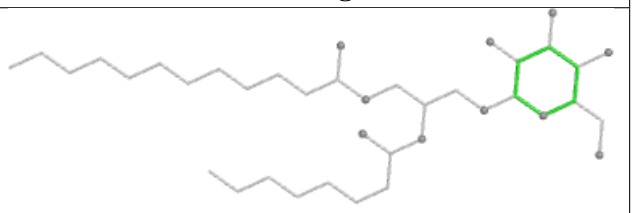
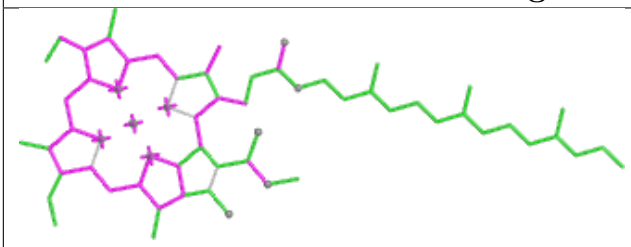


Rings

Ligand CLA g 314



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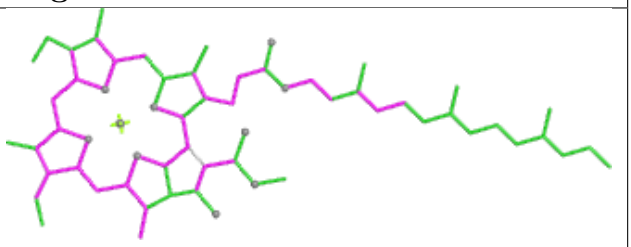
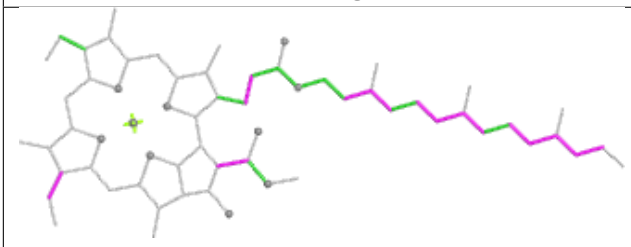


Bond angles



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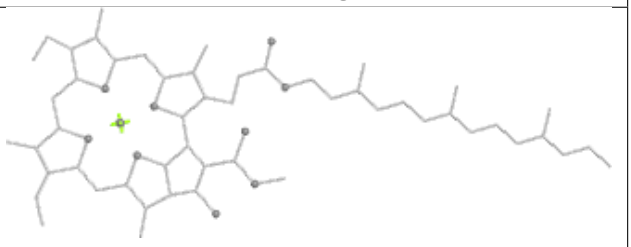
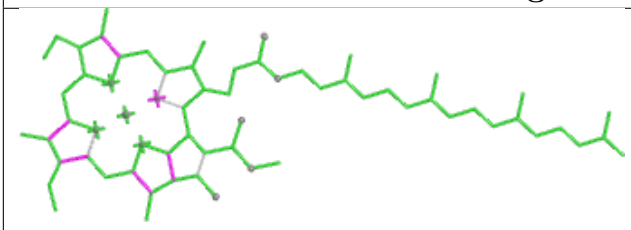


Rings

Ligand CLA b 607



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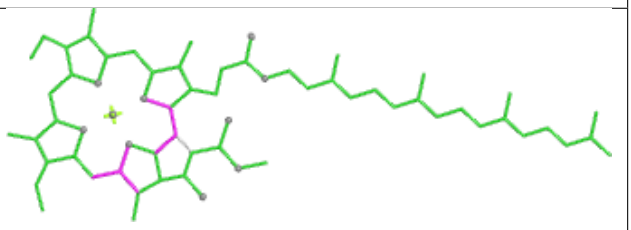
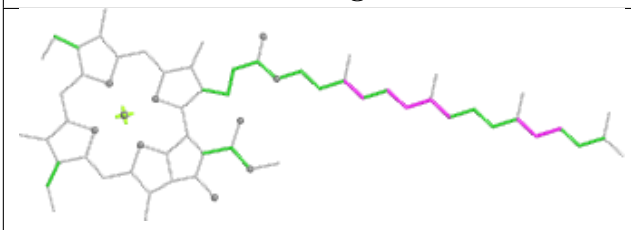


Bond angles



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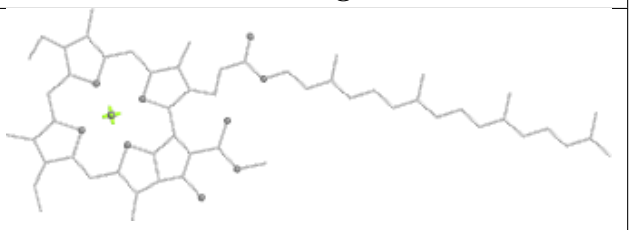
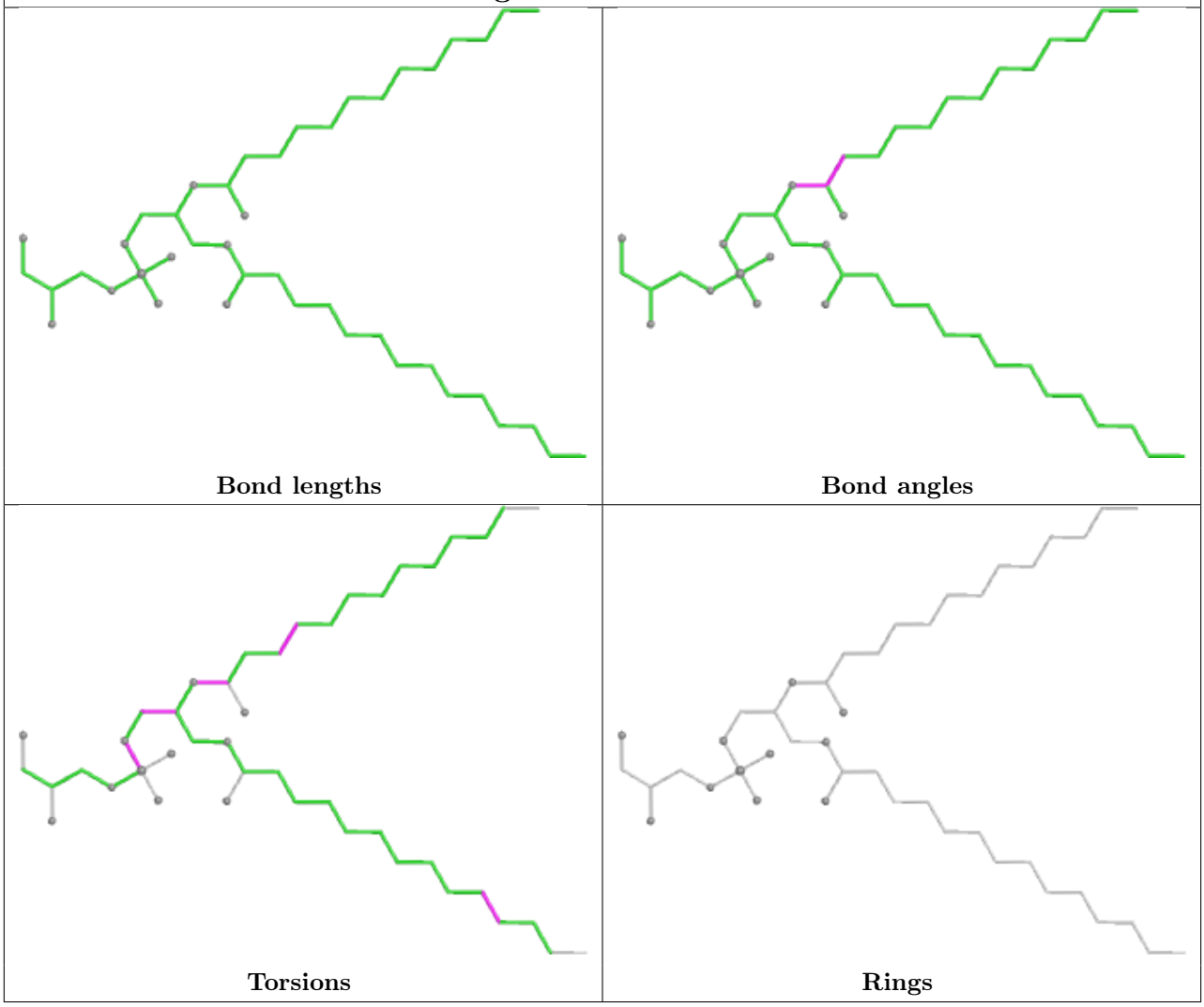


Rings

Ligand LHG S 301



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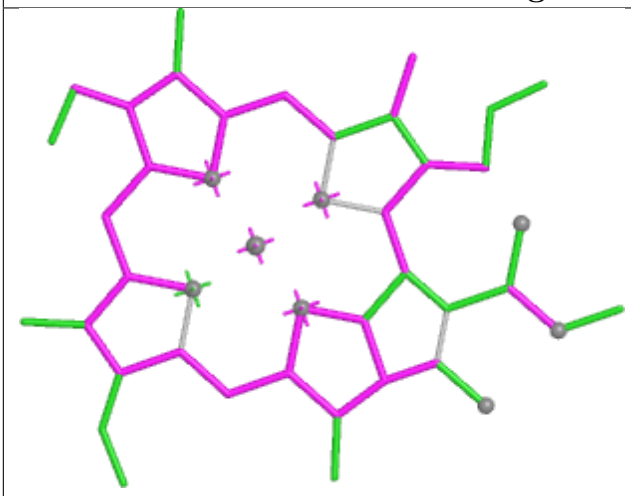
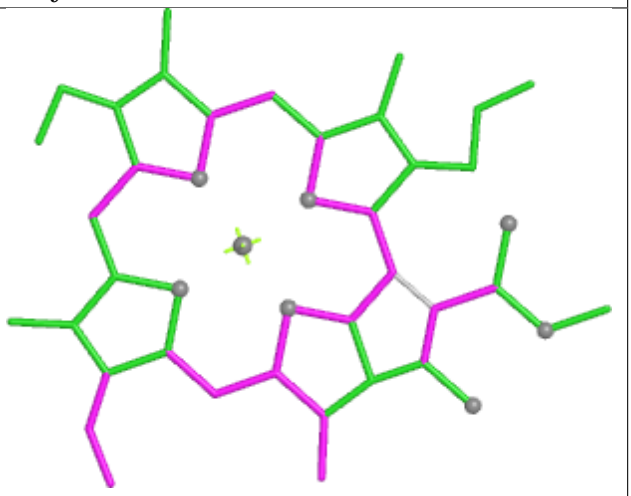
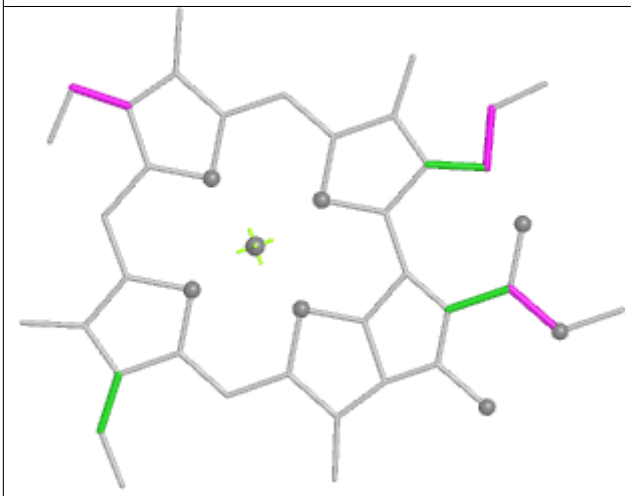


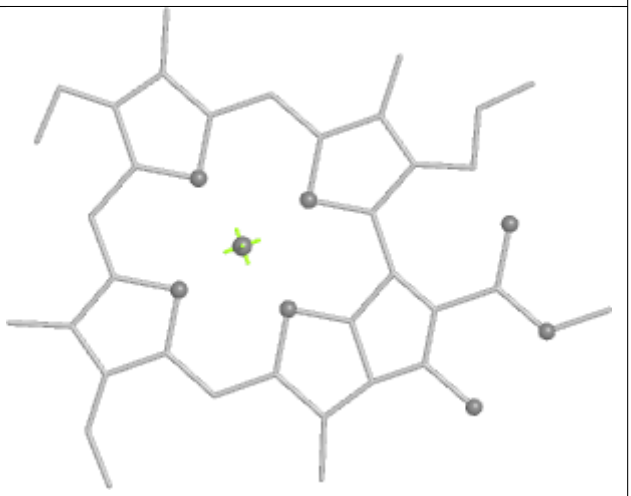
Bond lengths



Bond angles

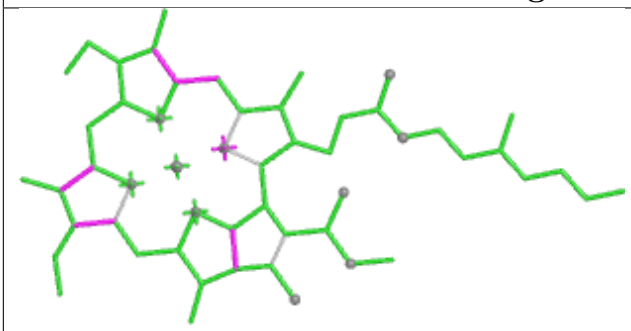


Torsions



Rings

Ligand CLA y 310



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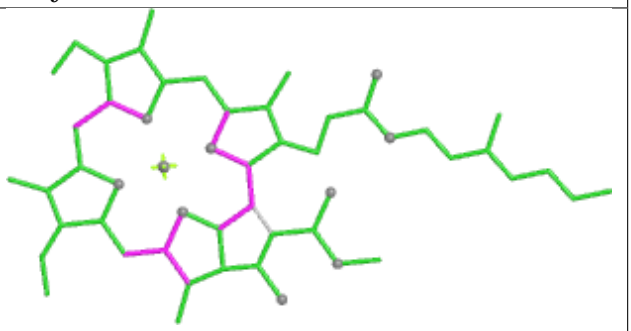
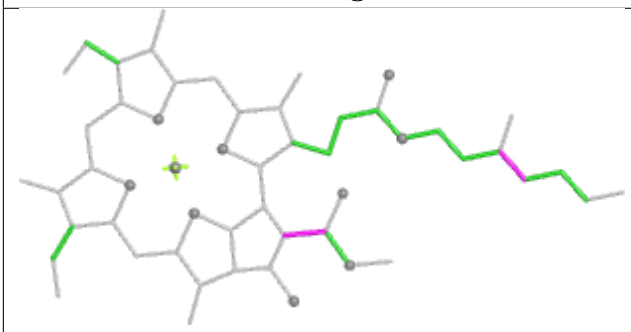


Bond angles



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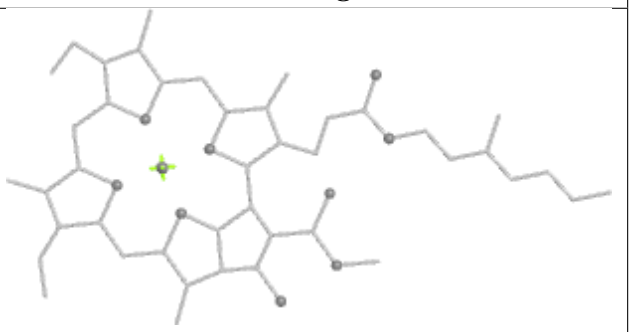
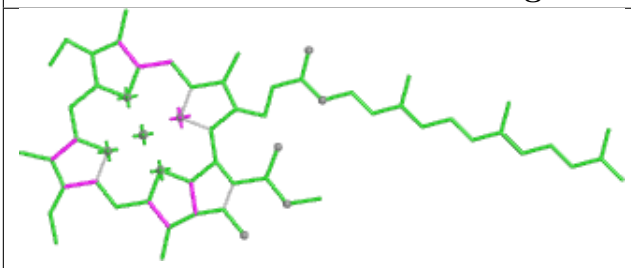


Rings

Ligand CLA C 513



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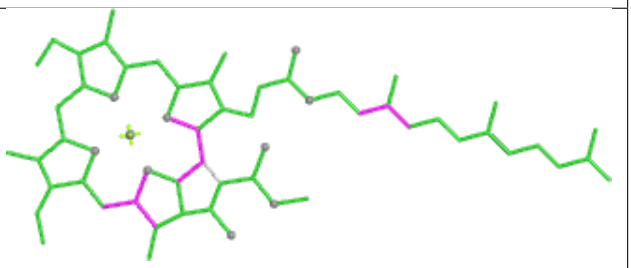

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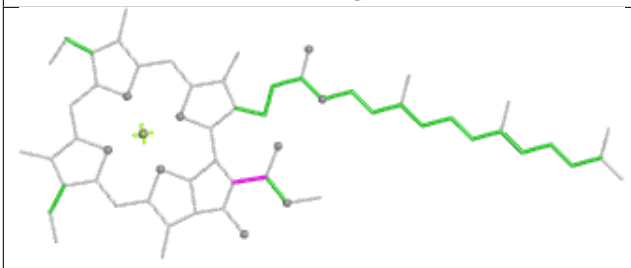

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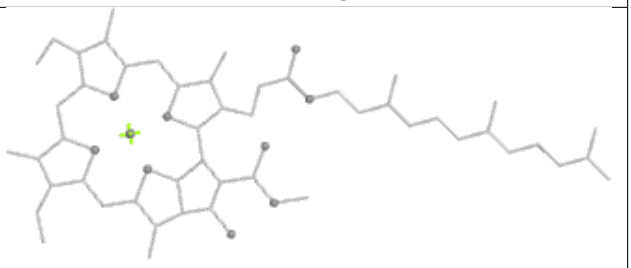
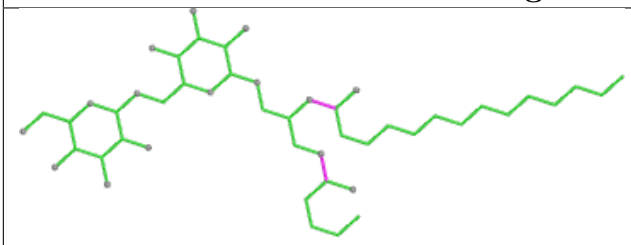


Rings

Ligand DGD c 516



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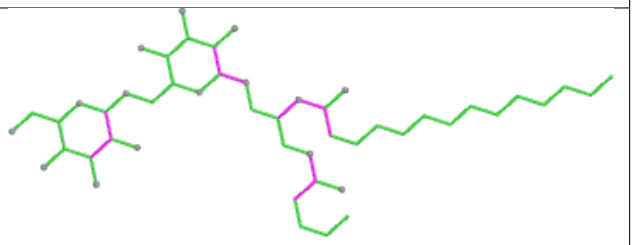
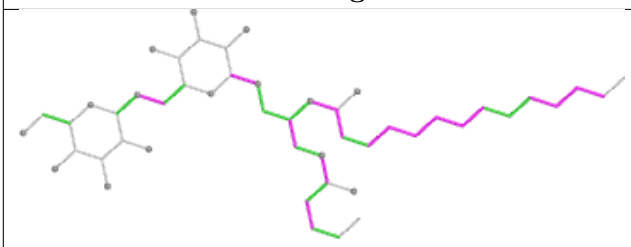


Bond angles



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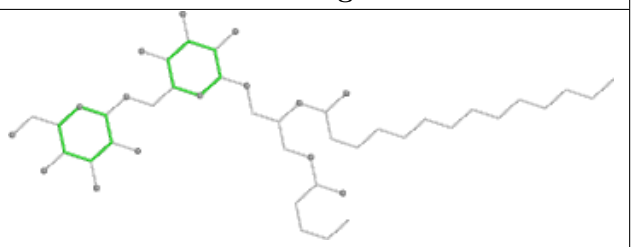
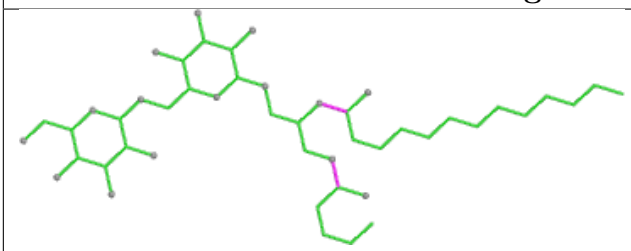


Rings

Ligand DGD g 302



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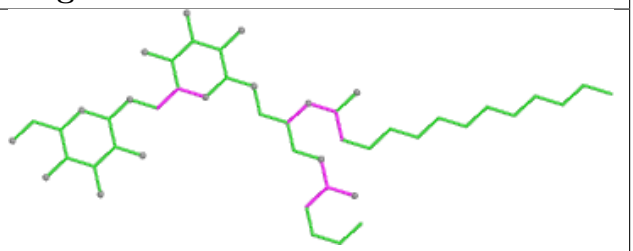
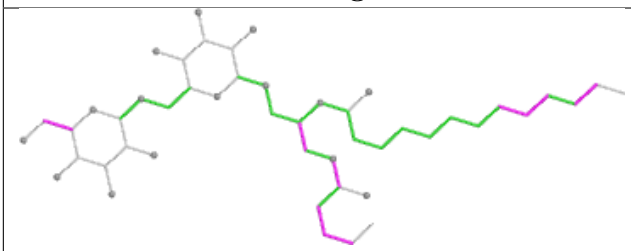


Bond angles



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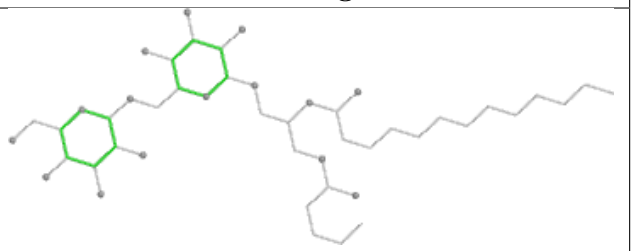
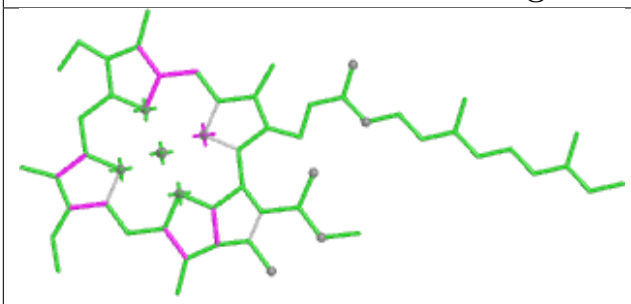
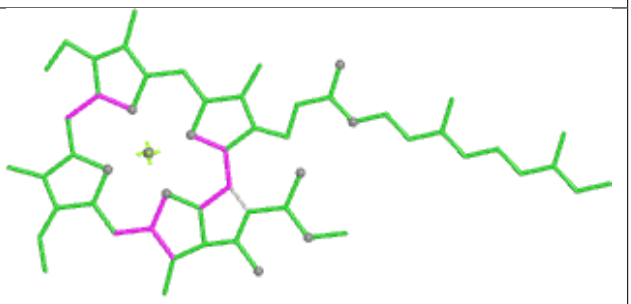
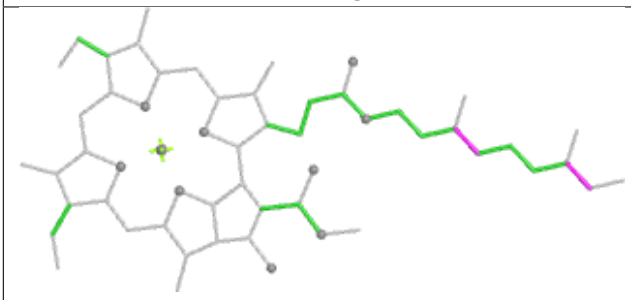
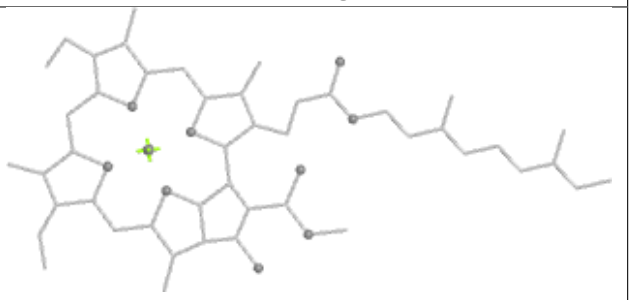
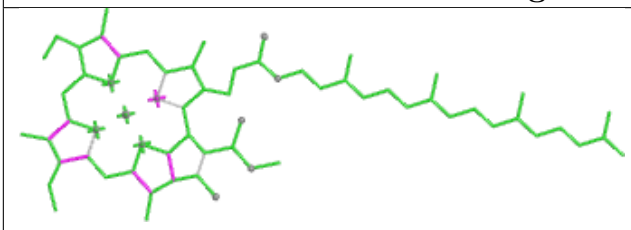
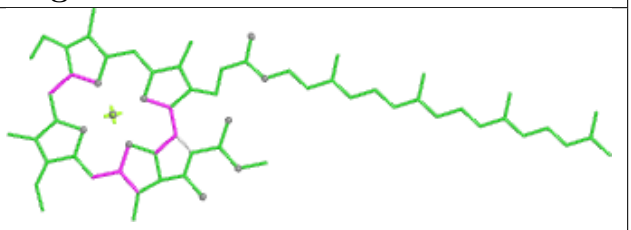


Rings

Ligand CLA u 414	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA g 311	
	
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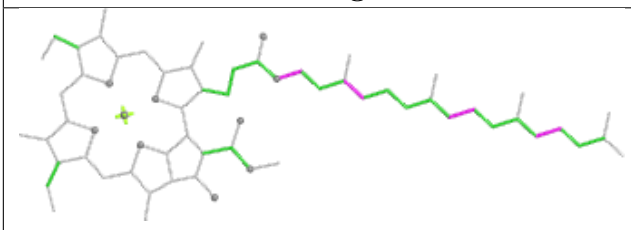
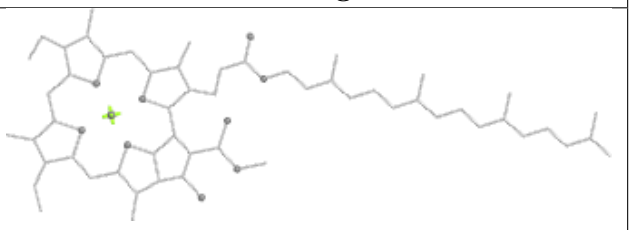
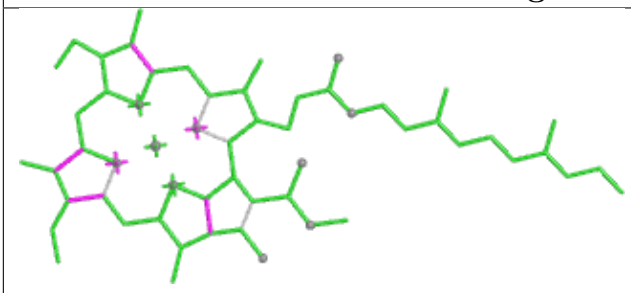
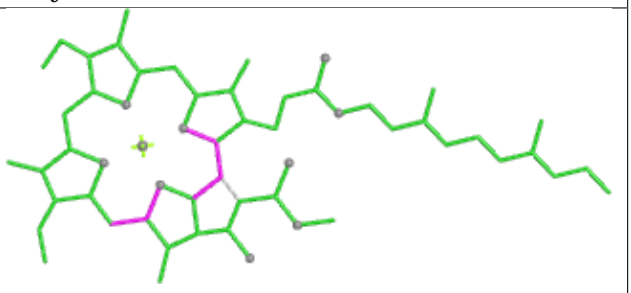
	
Torsions	Rings

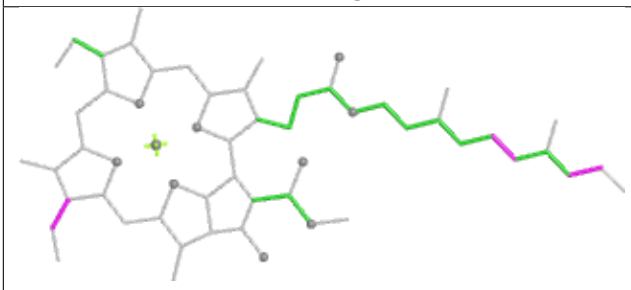
Ligand CLA y 309



Bond lengths



Bond angles



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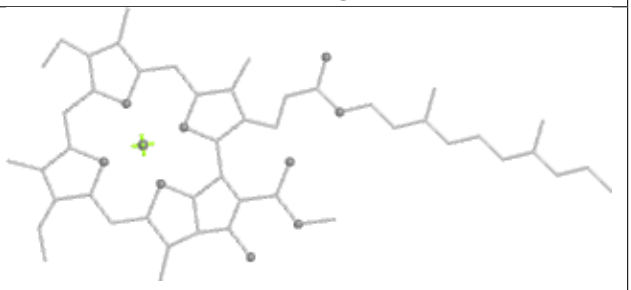
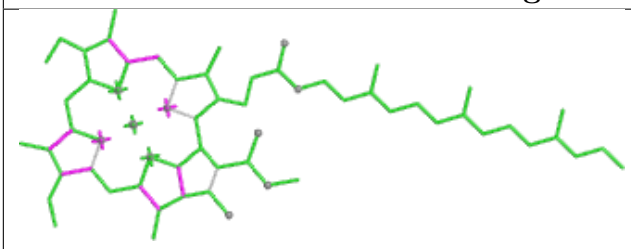


Rings

Ligand CLA U 413



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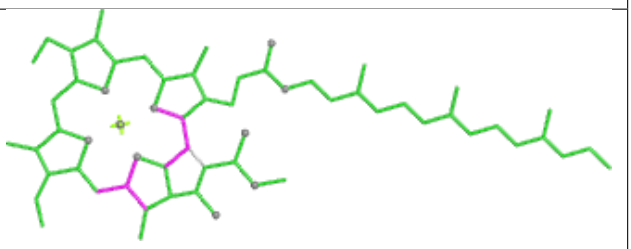
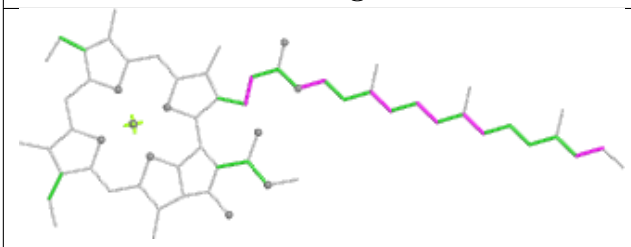


Bond angles



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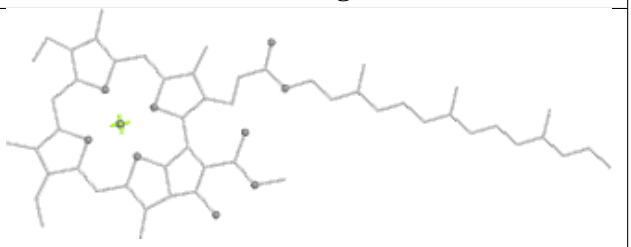
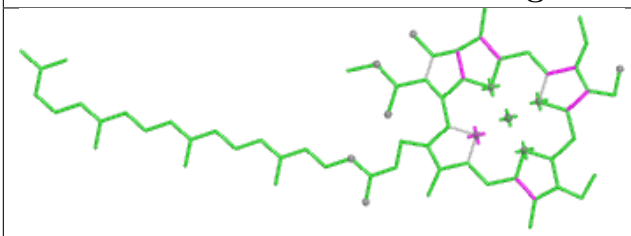
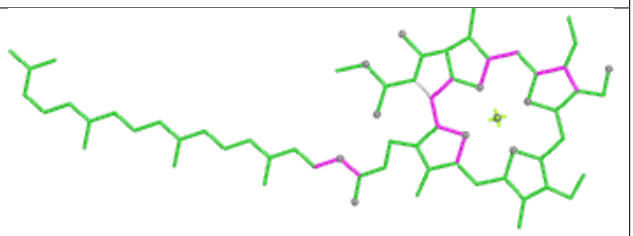
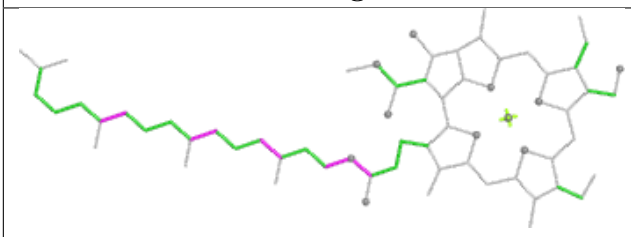
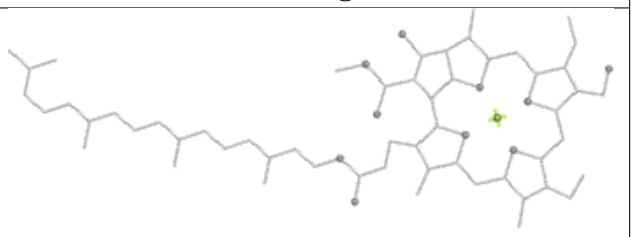


Rings

Ligand CHL S 308	
 Bond lengths	 Bond angles
 Torsions	 Rings

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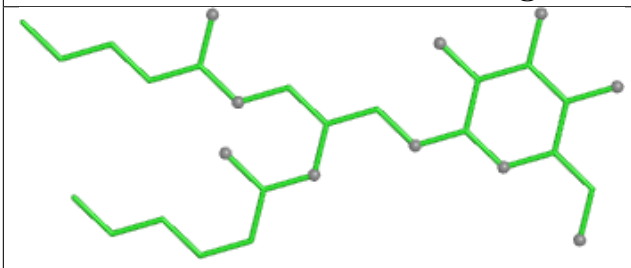
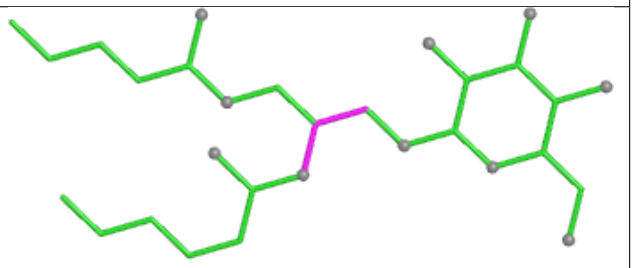
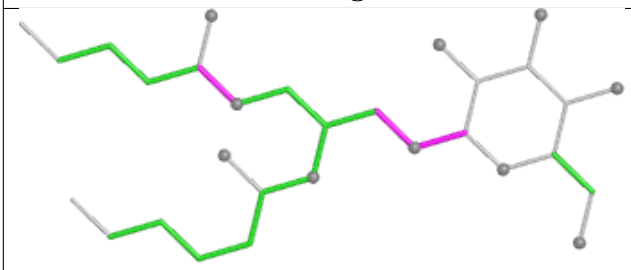
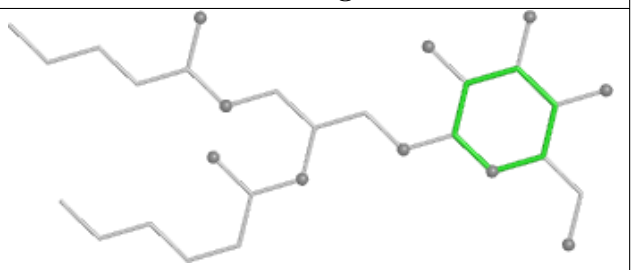
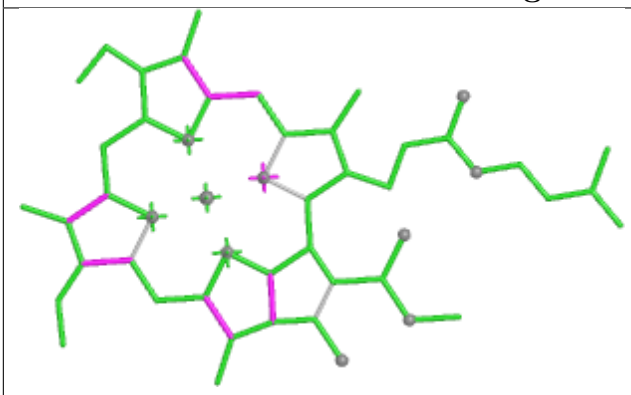
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA Y 310



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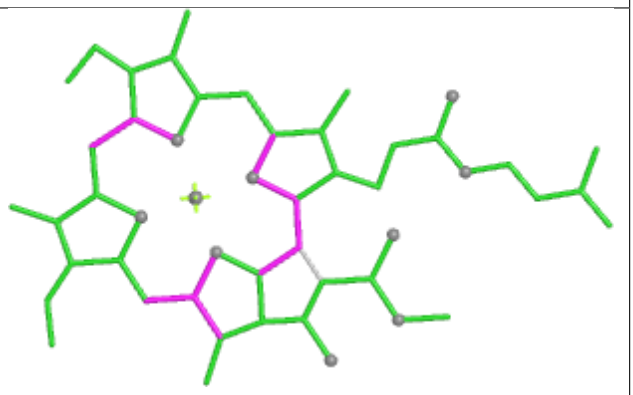
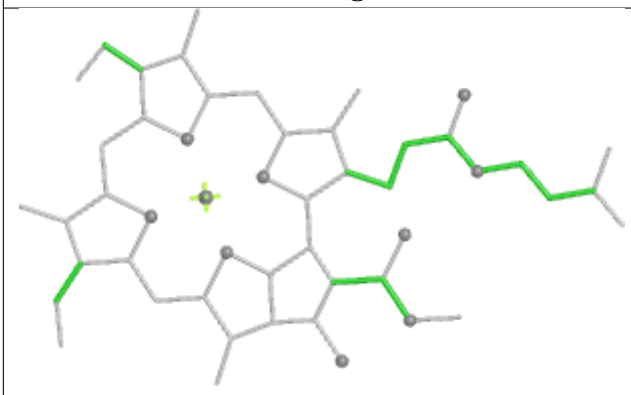


Bond angles



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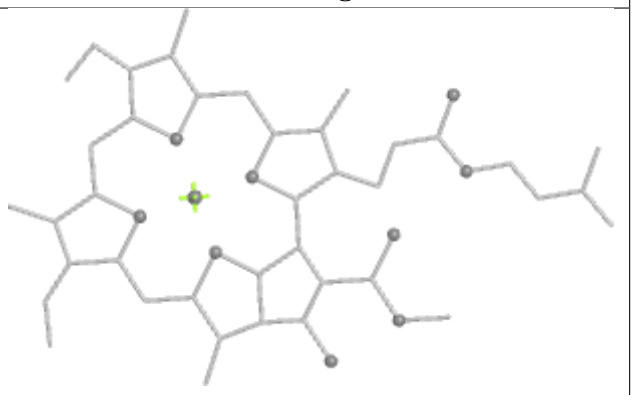
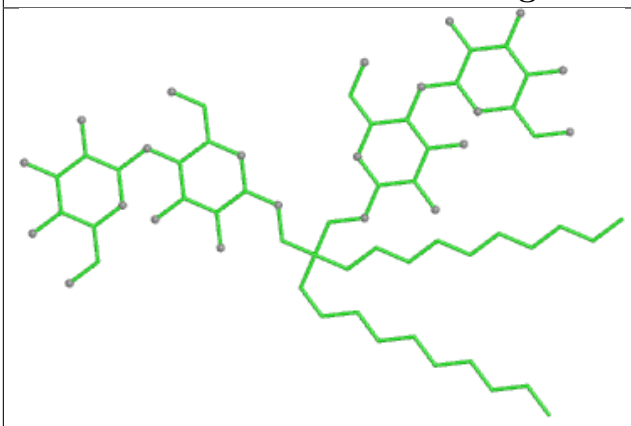


Rings

Ligand LMN G 304



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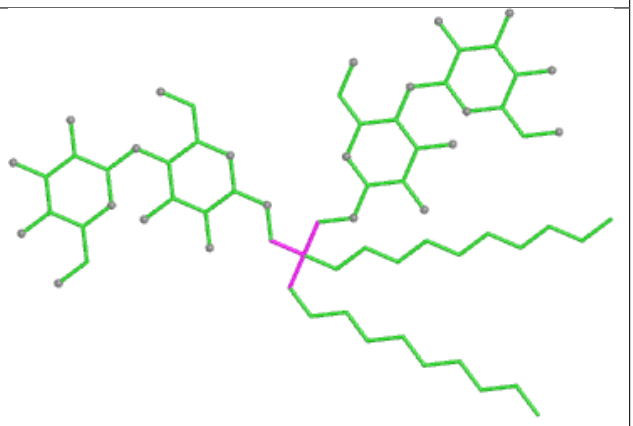
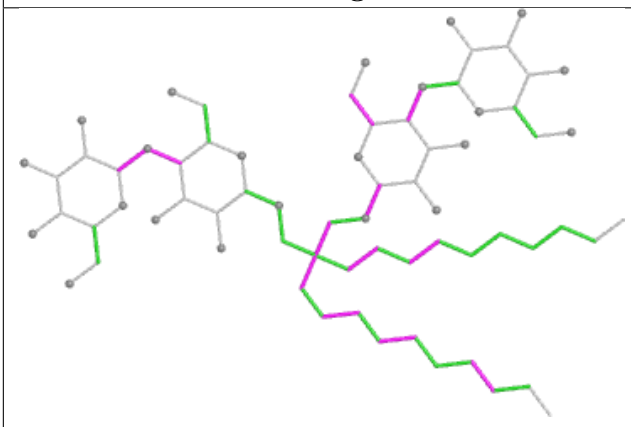


Bond angles



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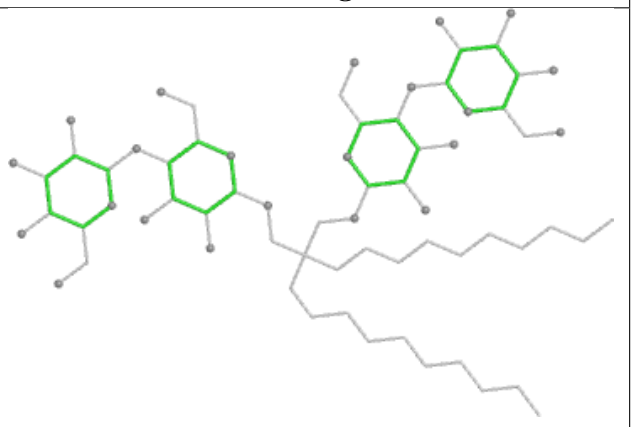
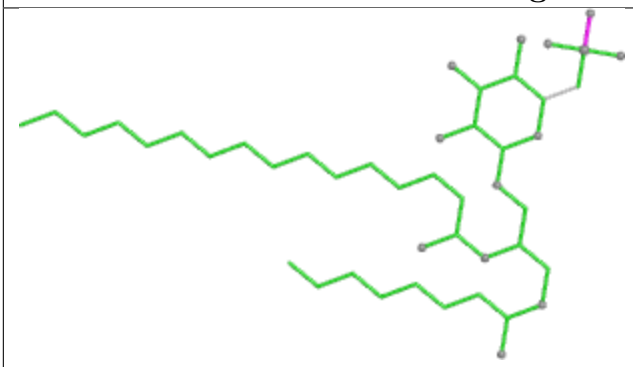
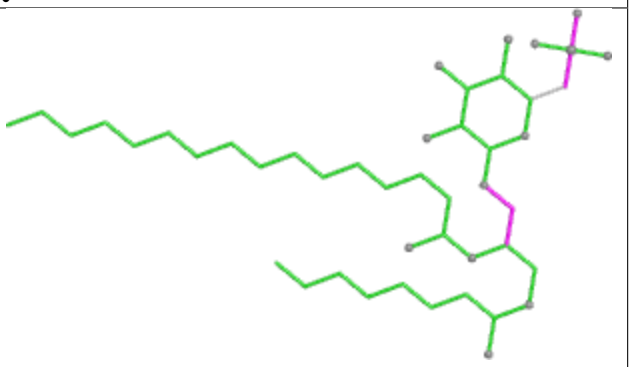


Rings

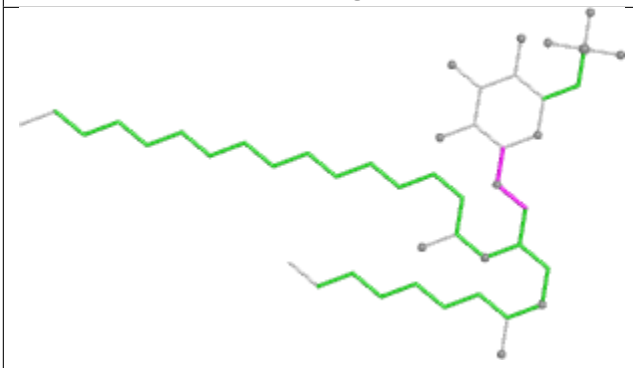
Ligand SQD z 101



Bond lengths



Bond angles



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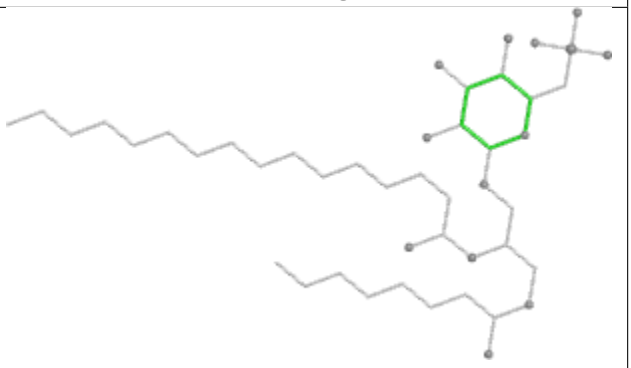
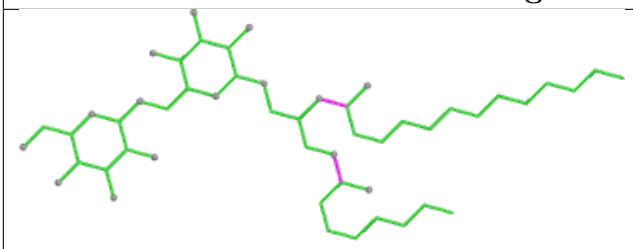
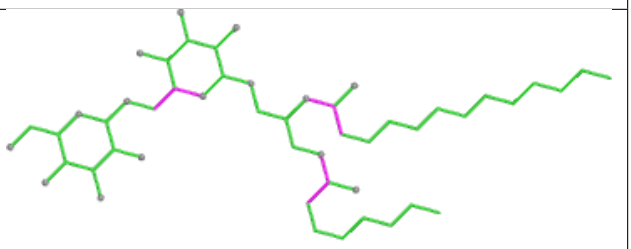


Rings

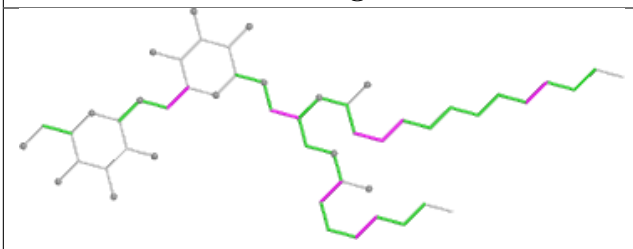
Ligand DGD c 515



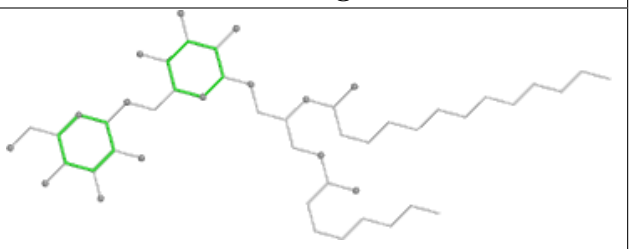
Bond lengths



Bond angles

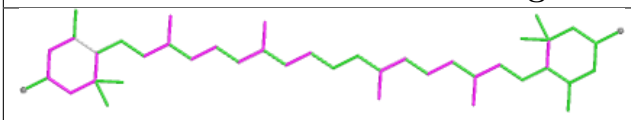


Torsions



Rings

Ligand LUT y 320



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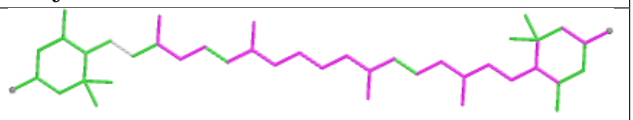

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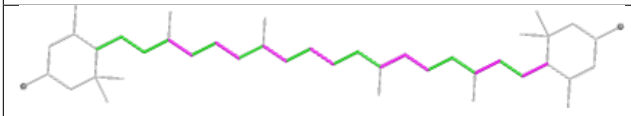
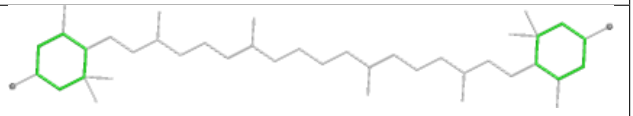
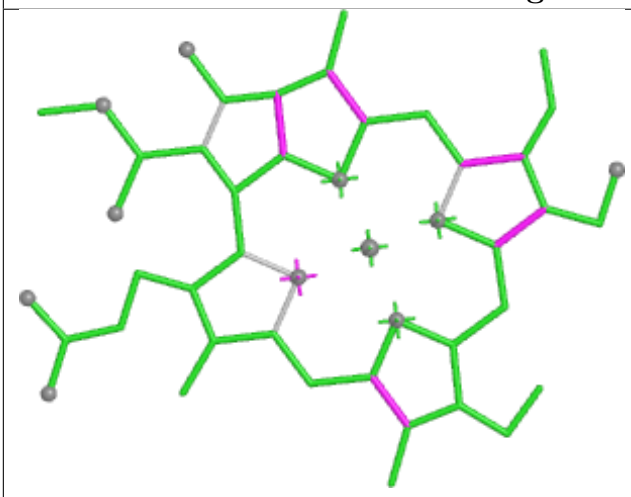


Torsions



Rings

Ligand CHL S 307



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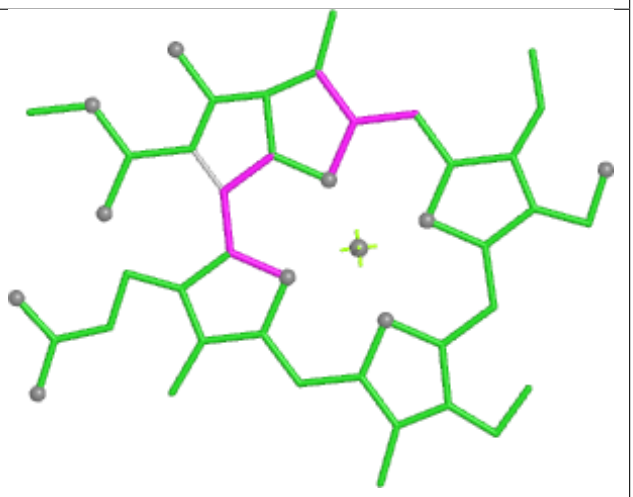

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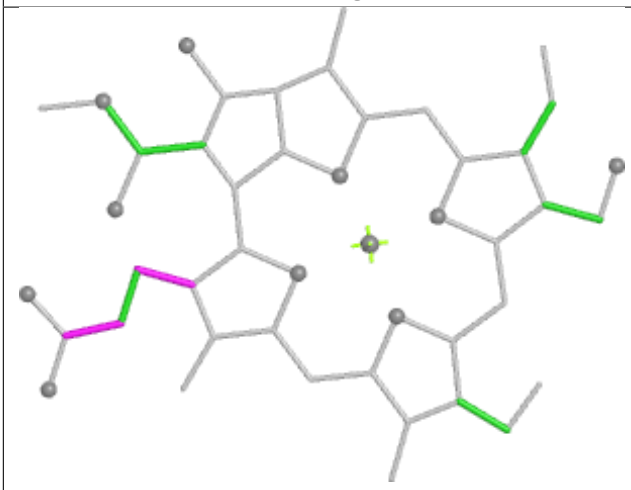

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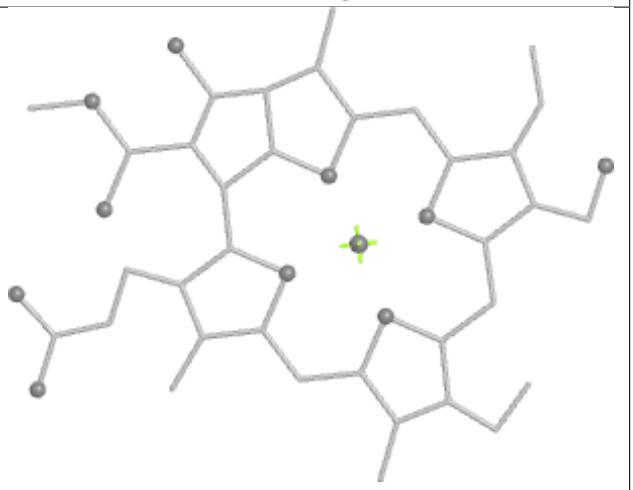
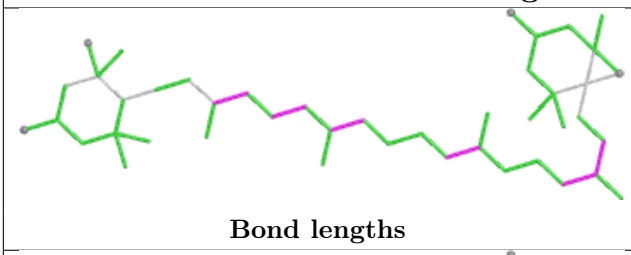


Rings

Ligand NEX G 320



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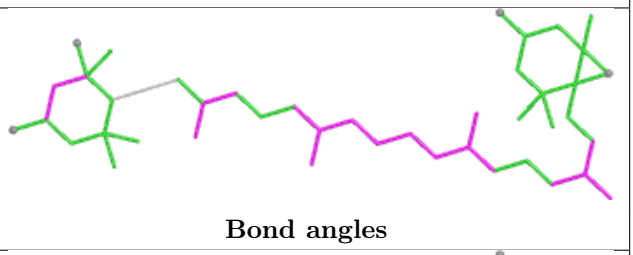

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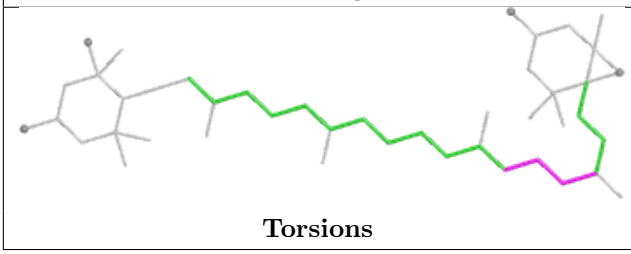

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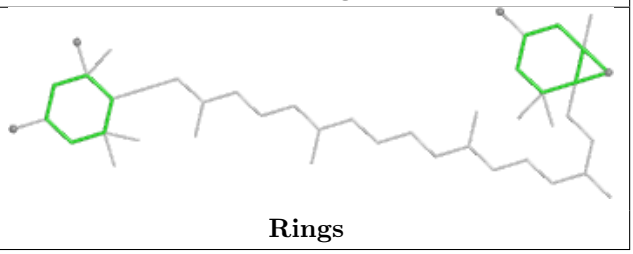
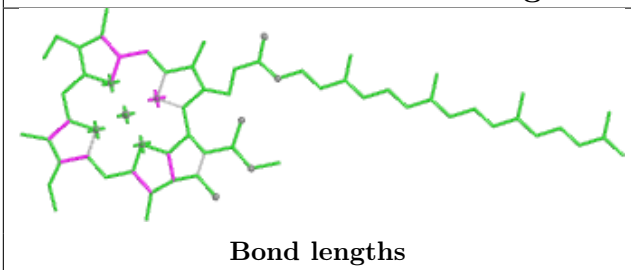


Rings

Ligand CLA A 416



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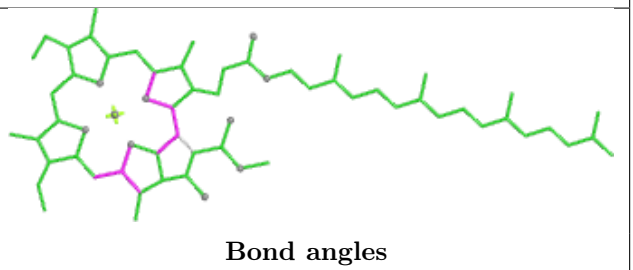

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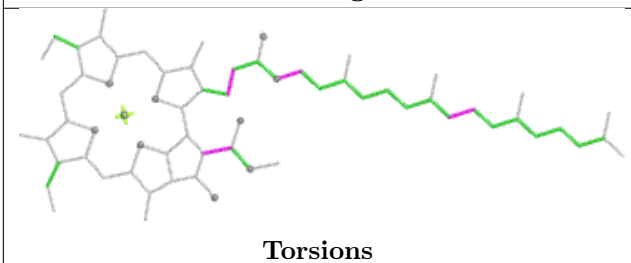

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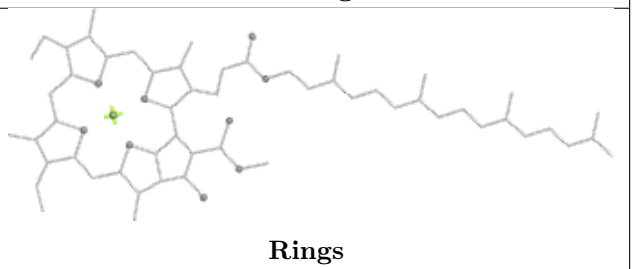
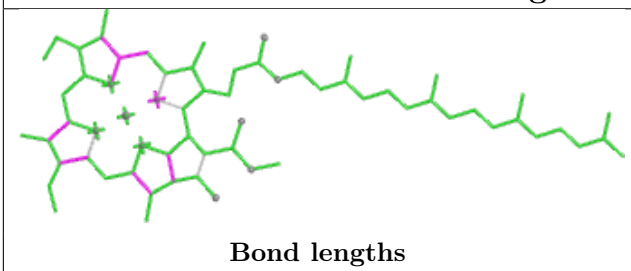


Rings

Ligand CLA c 505



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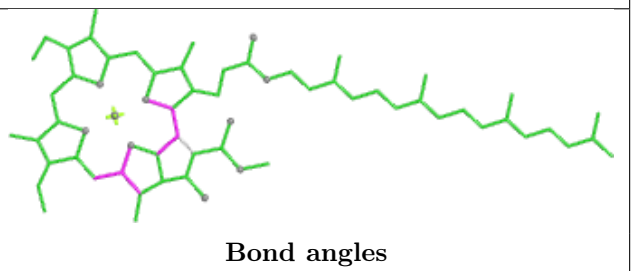

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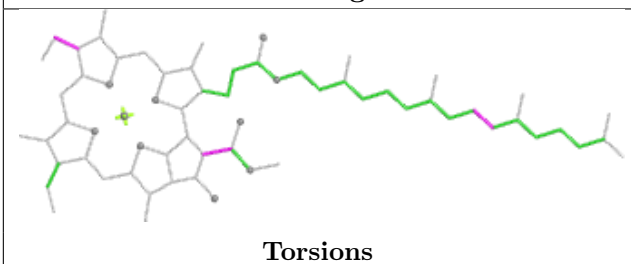

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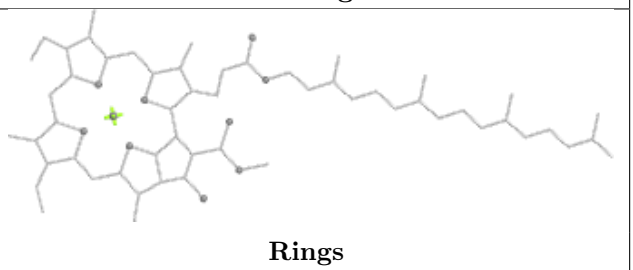
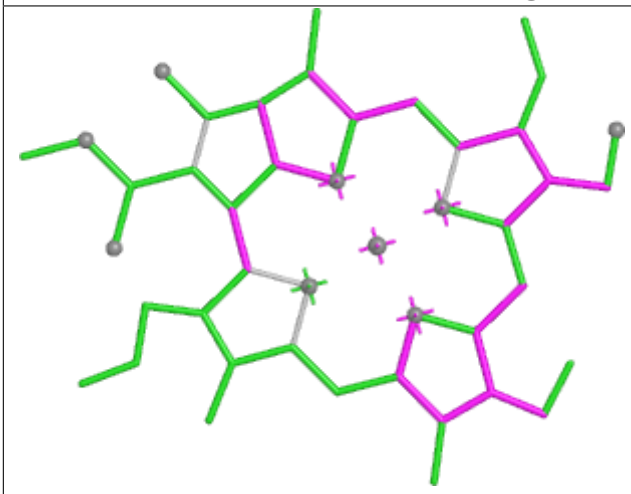


Rings

Ligand CHL N 306



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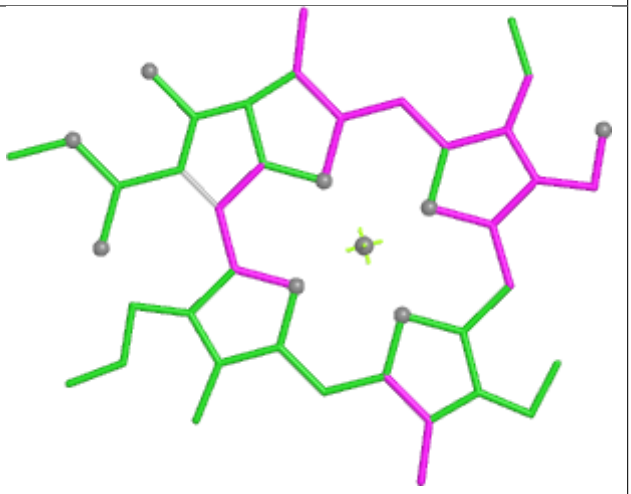

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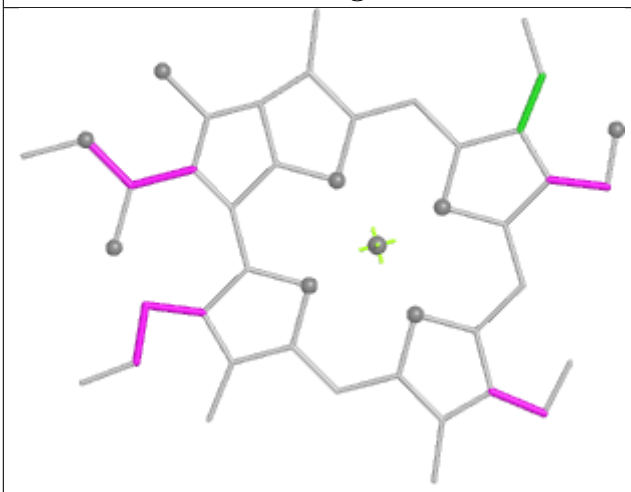

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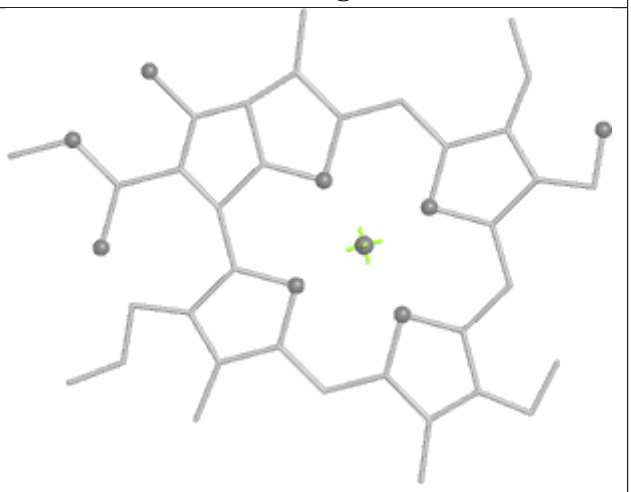
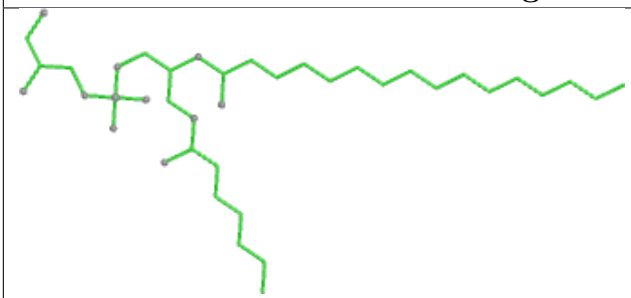


Rings

Ligand LHG D 406



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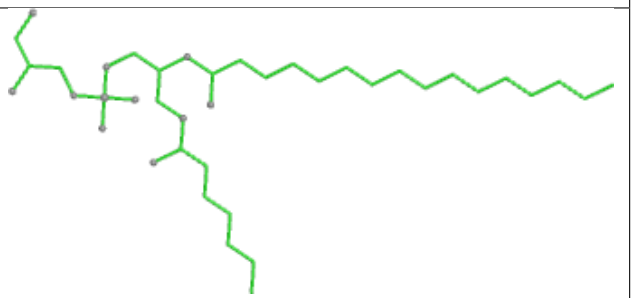

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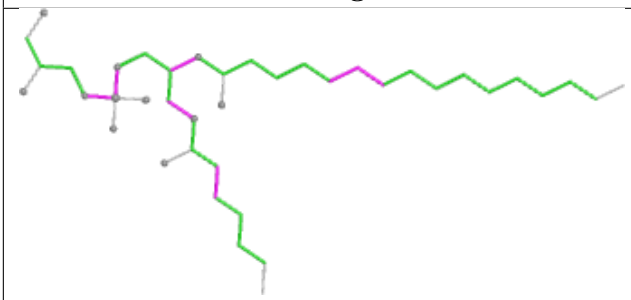

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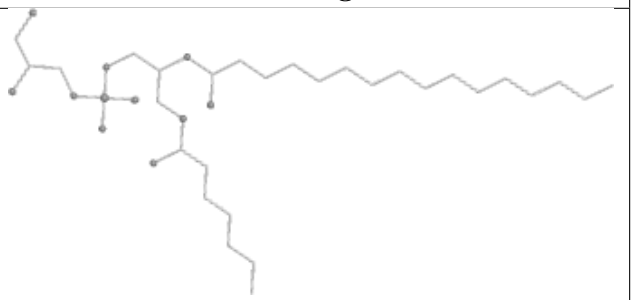
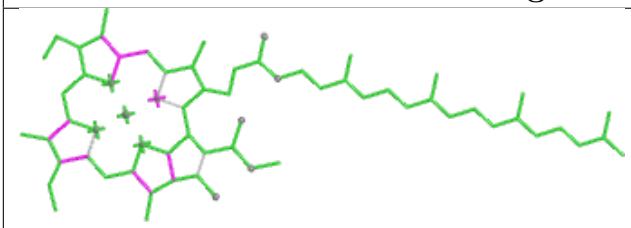


Rings

Ligand CLA u 405



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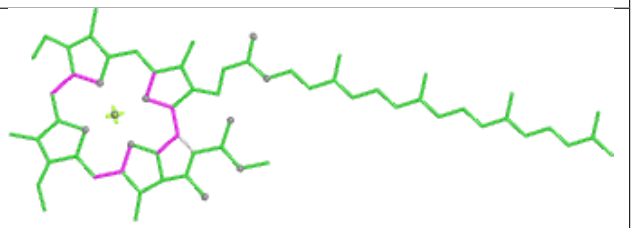

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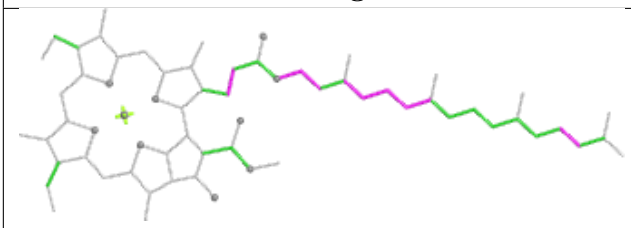

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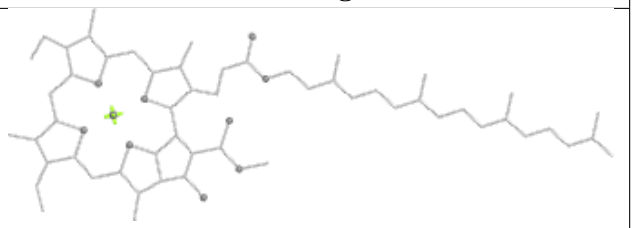
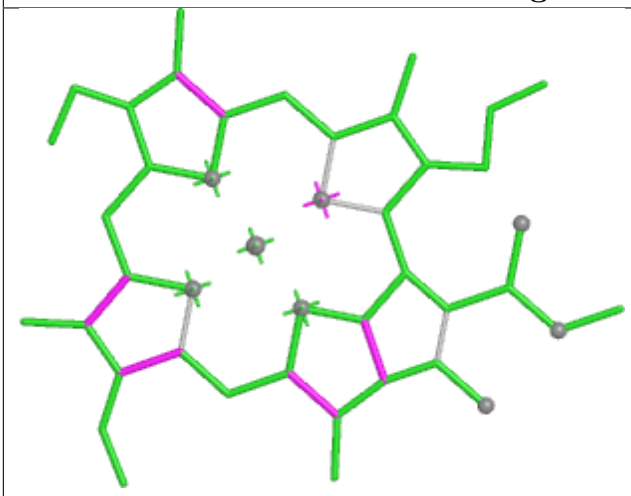


Rings

Ligand CLA s 315



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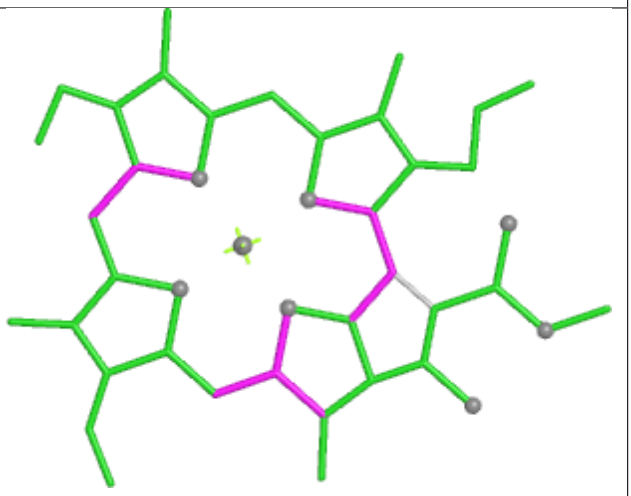
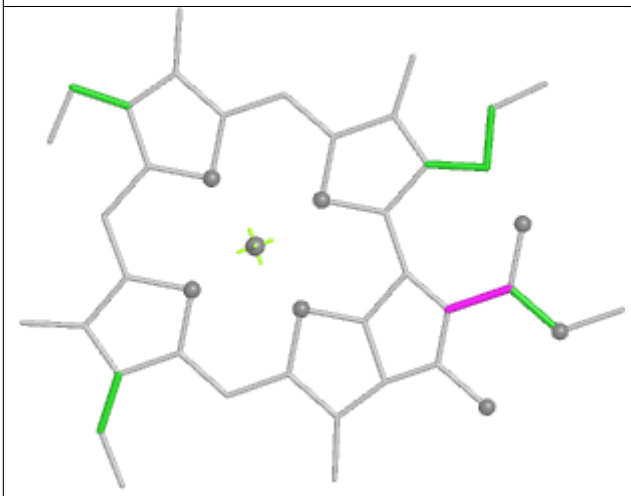


Bond angles



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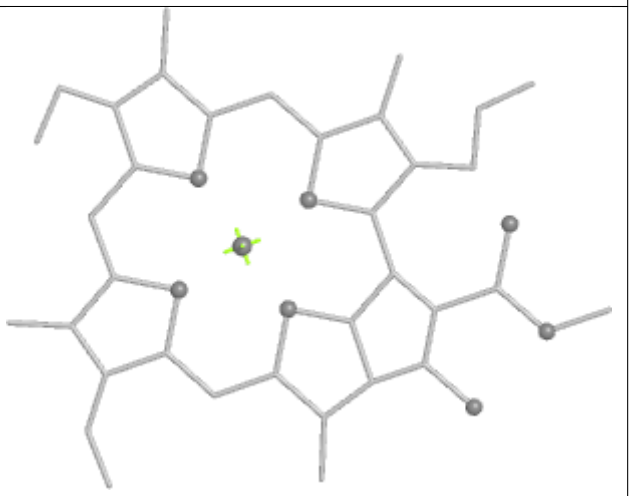
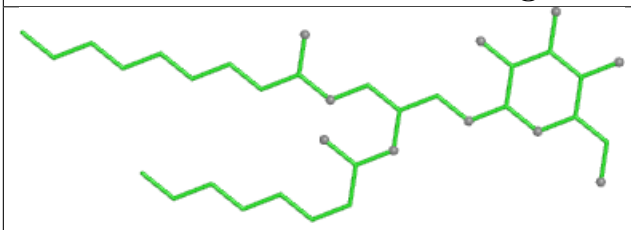


Rings

Ligand LMG w 201



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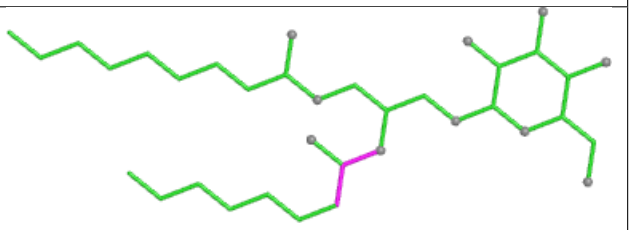

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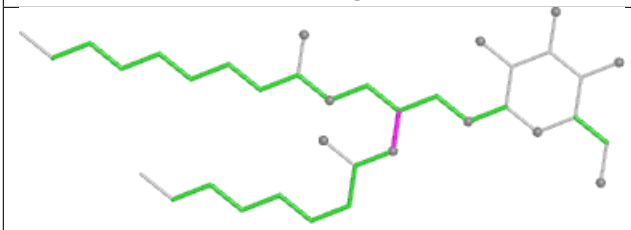

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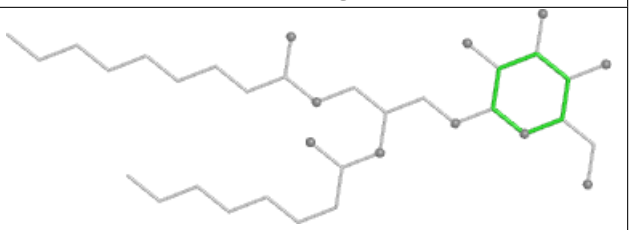
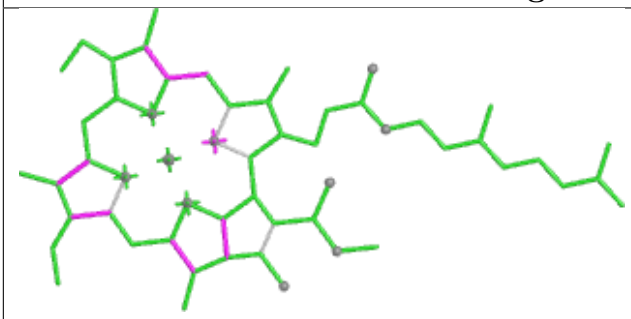


Rings

Ligand CLA v 306



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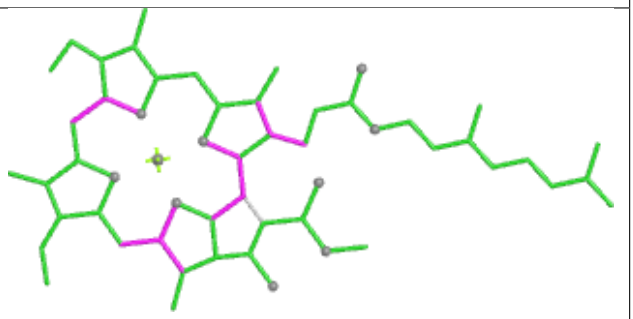

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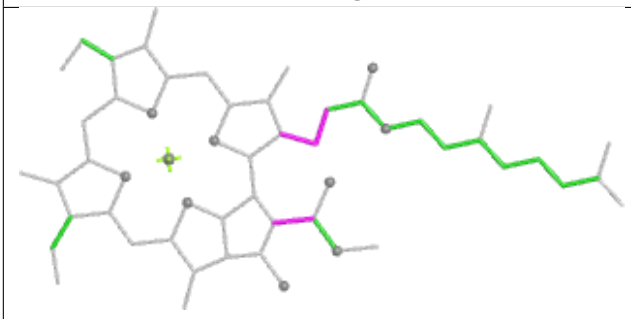

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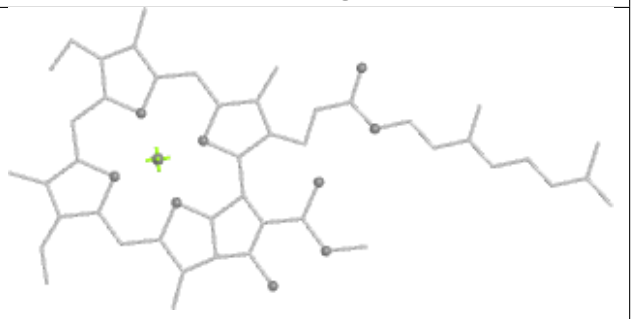
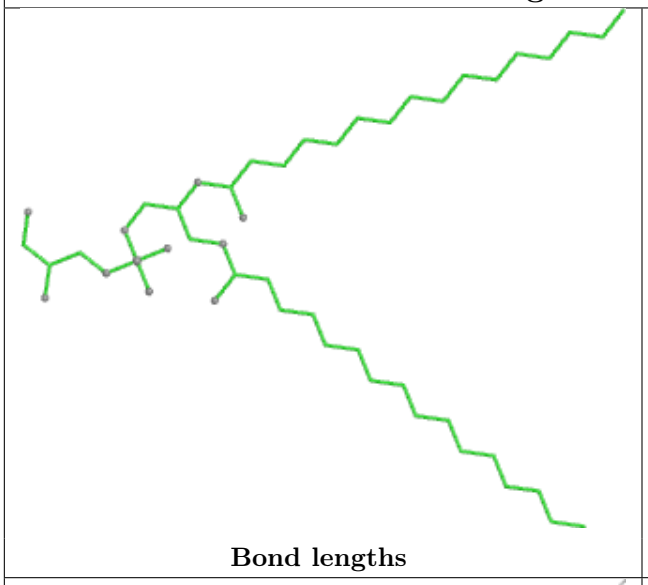


Rings

Ligand LHG b 623



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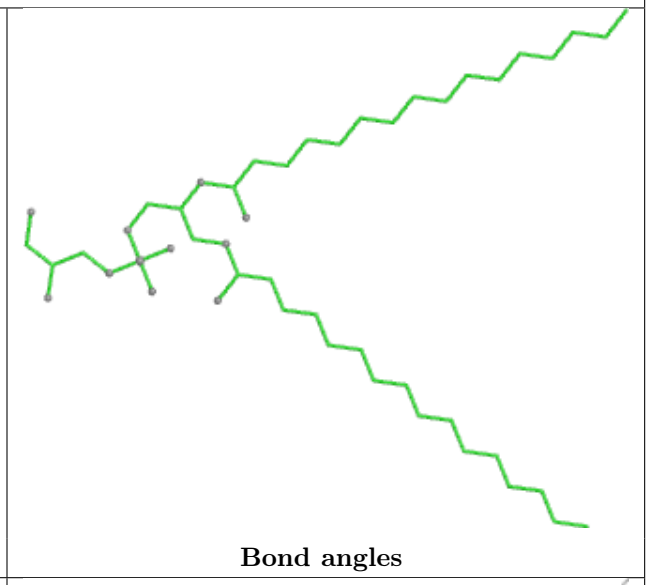

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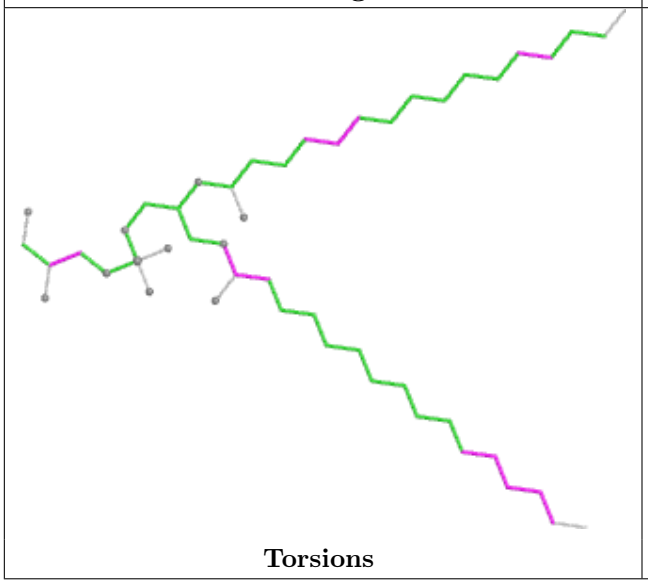

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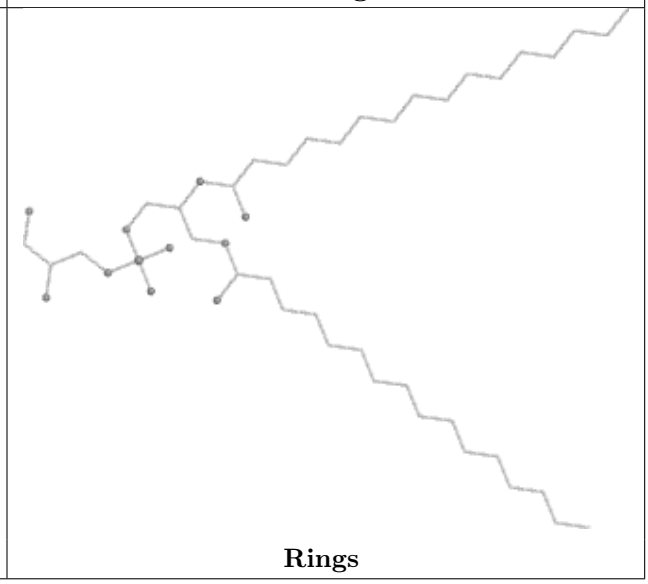
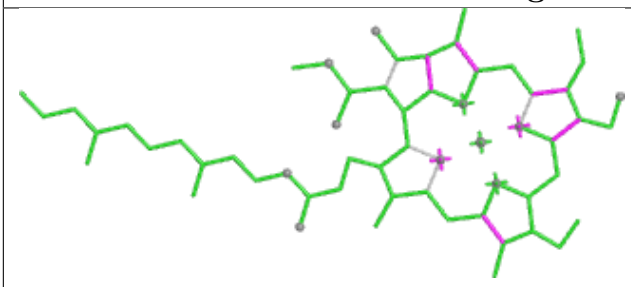


Rings

Ligand CHL y 307



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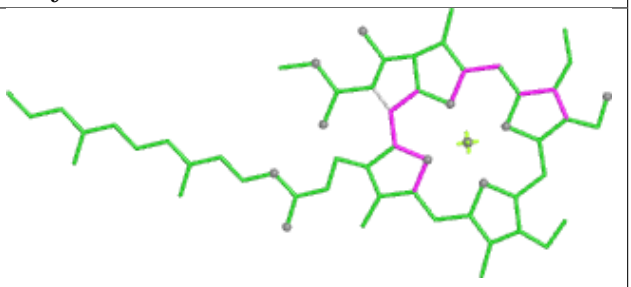
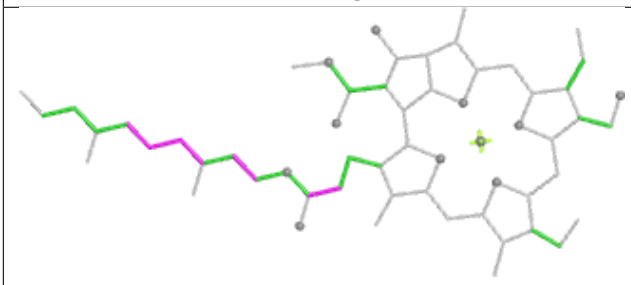


Bond angles



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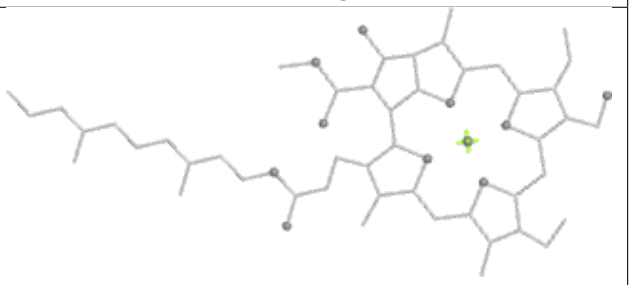
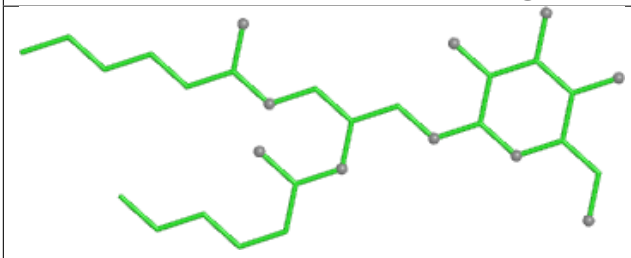


Rings

Ligand LMG A 406



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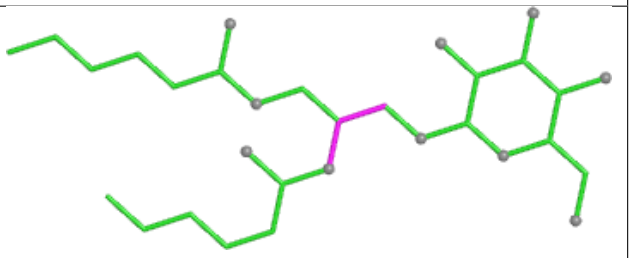
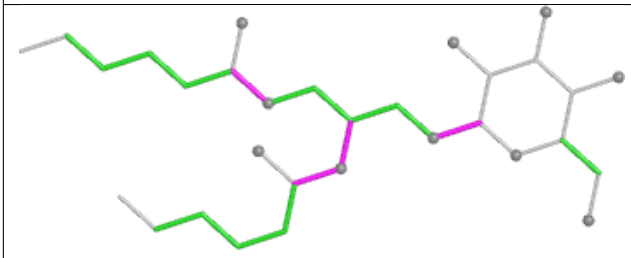


Bond angles



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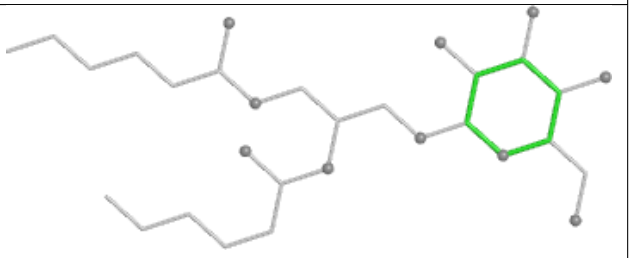
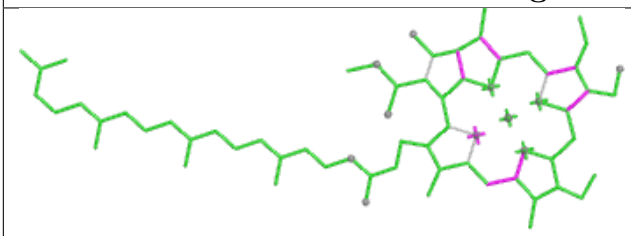
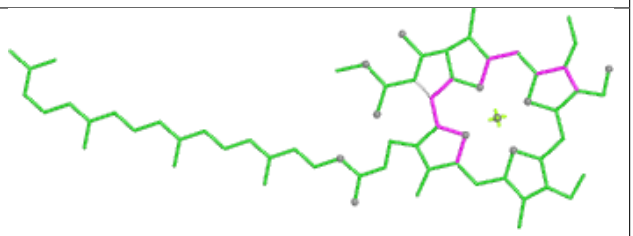


Rings

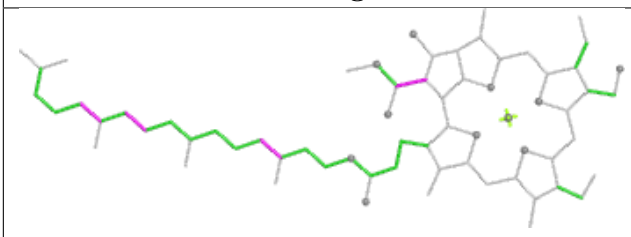
Ligand CHL s 302



Bond lengths



Bond angles



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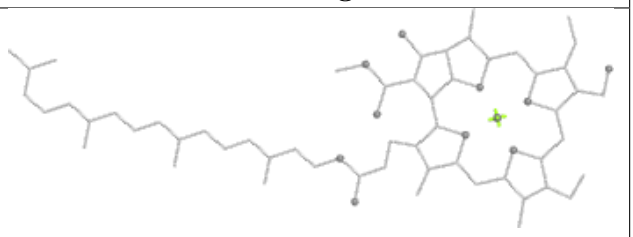
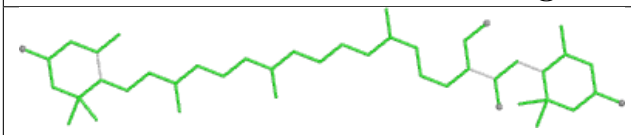


Rings

Ligand 0IE v 318



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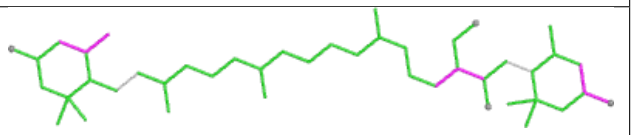
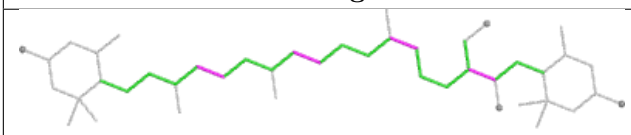


Bond angles



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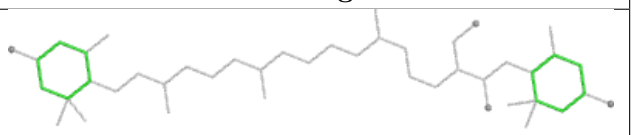
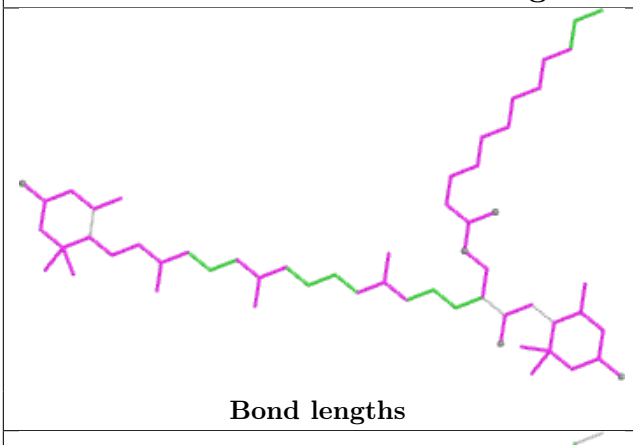


Rings

Ligand 0UR y 323



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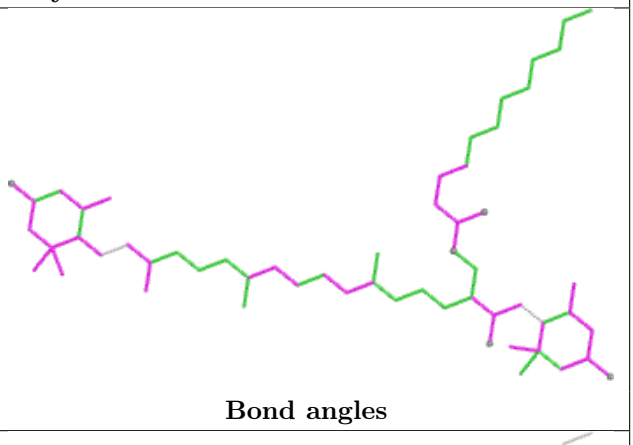

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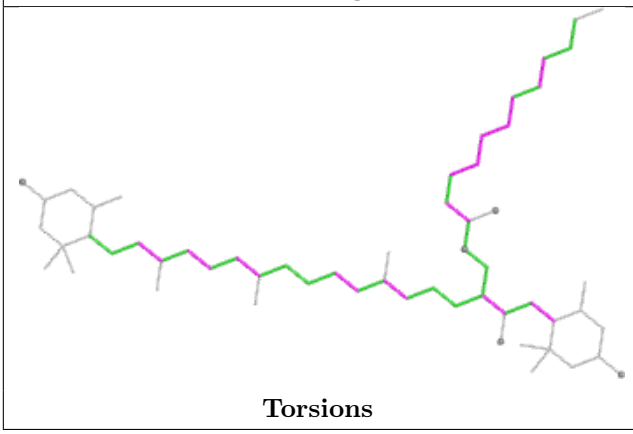

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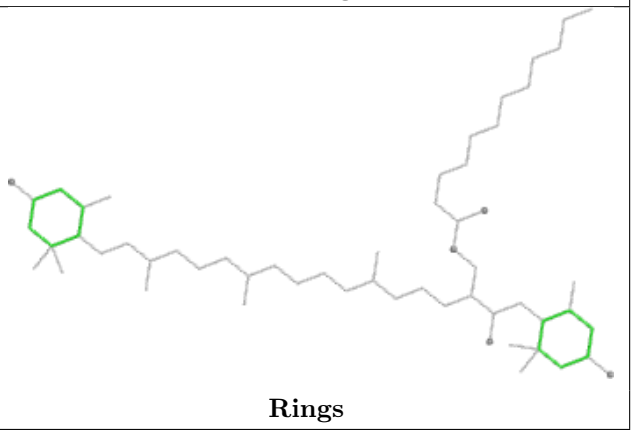
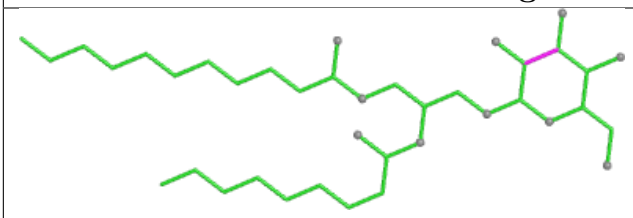


Rings

Ligand LMG A 413



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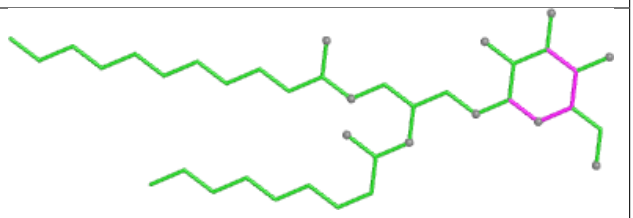

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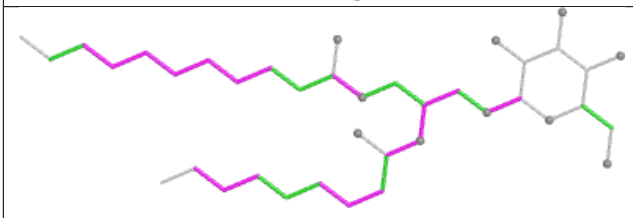

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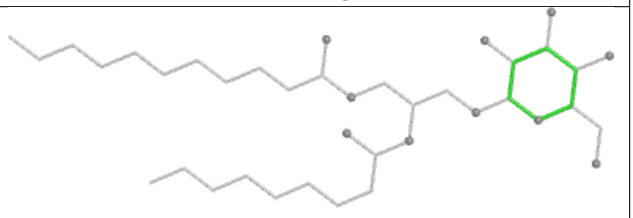
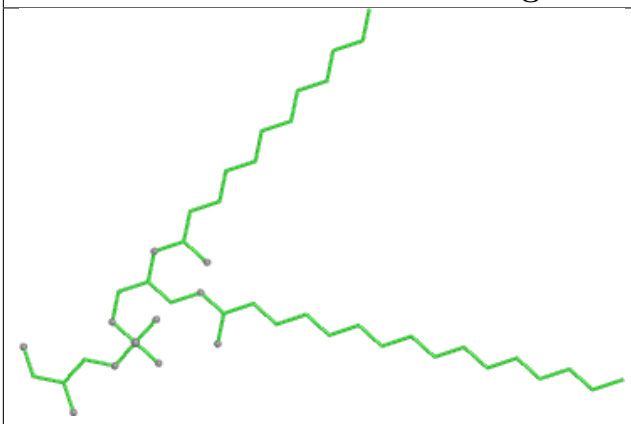


Rings

Ligand LHG D 402



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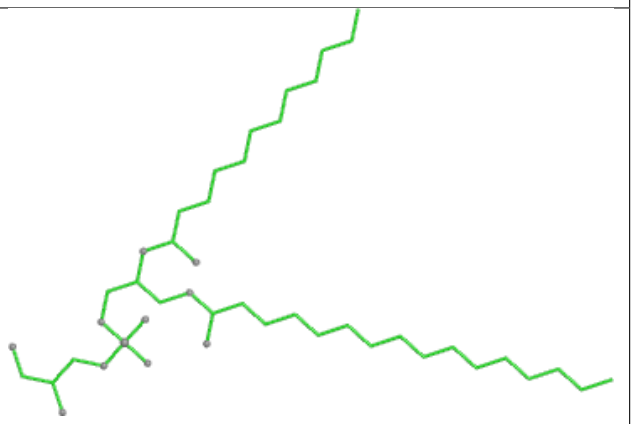
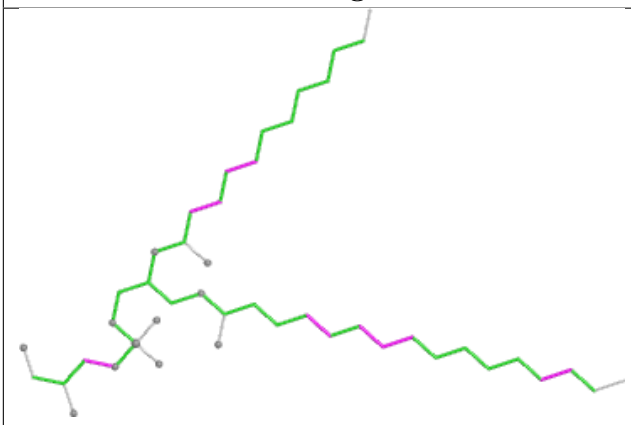


Bond angles



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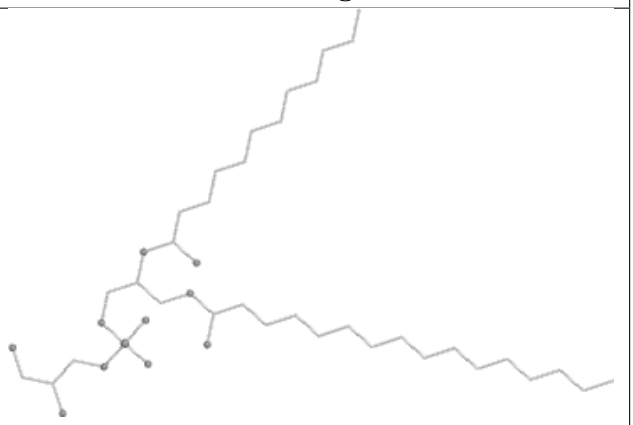
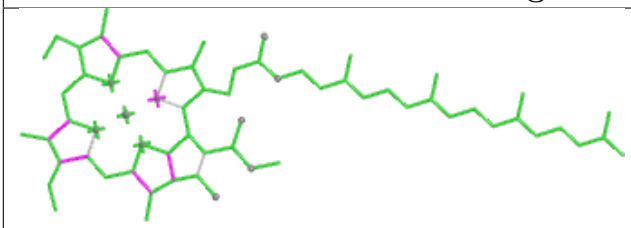


Rings

Ligand CLA b 610



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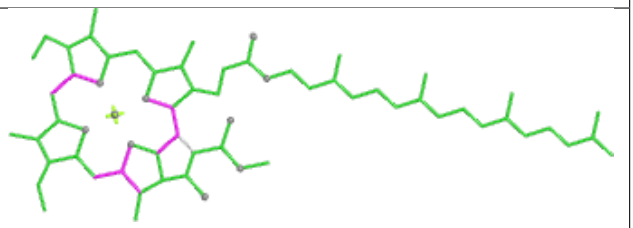
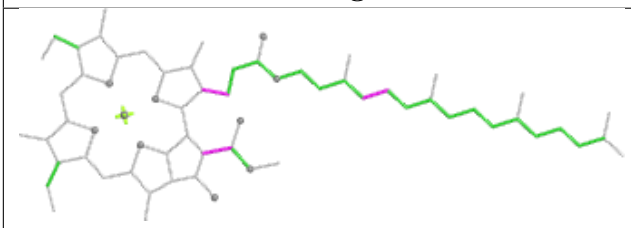


Bond angles



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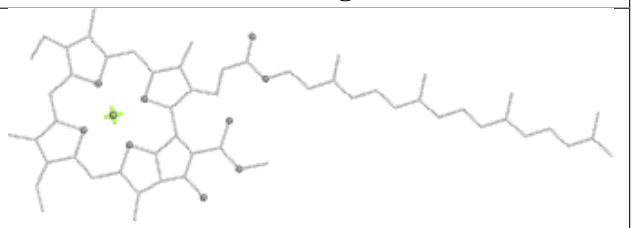

Rings

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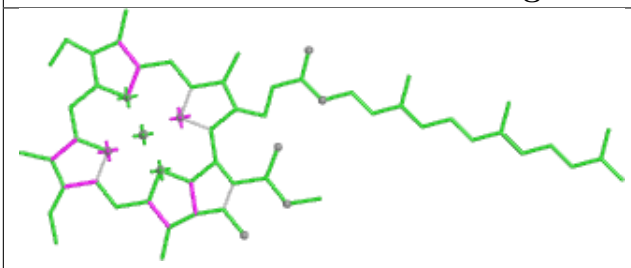
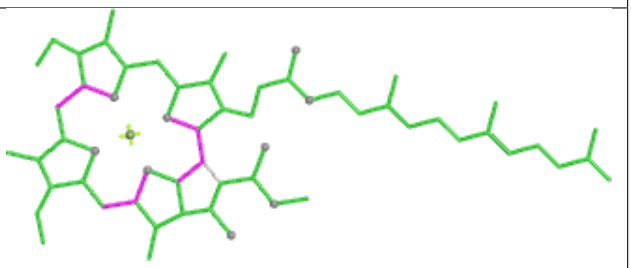
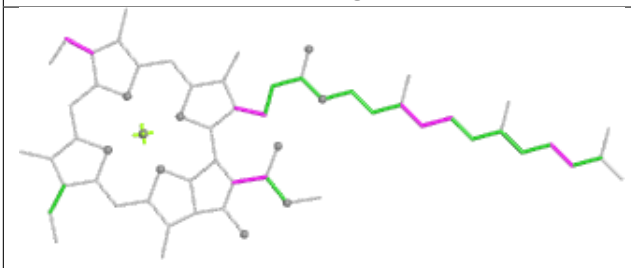
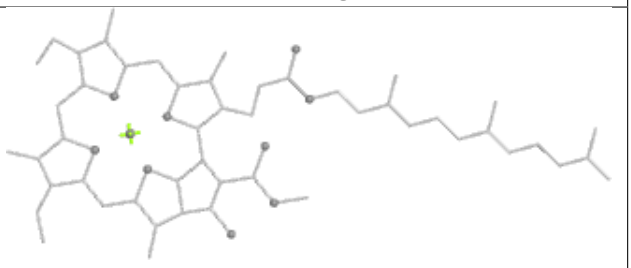
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

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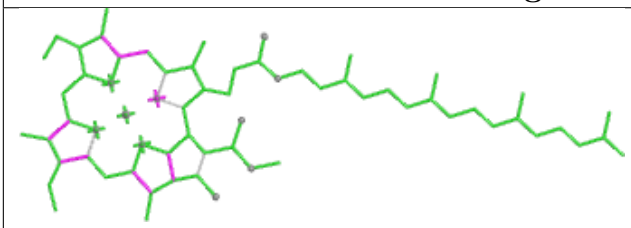	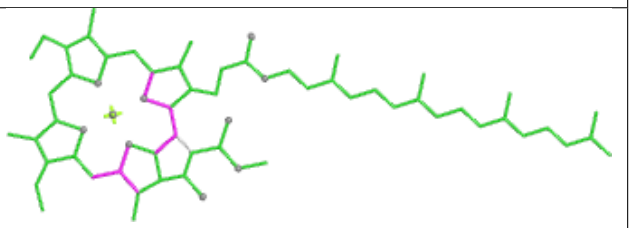
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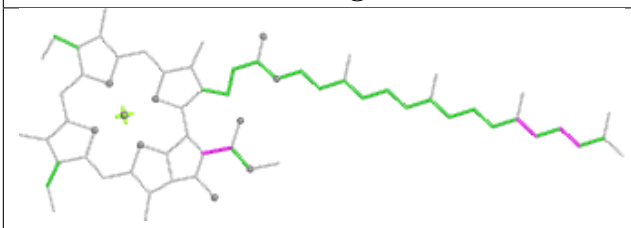
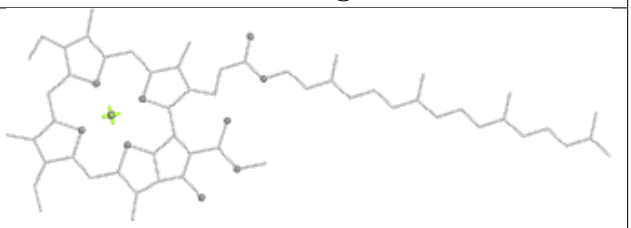
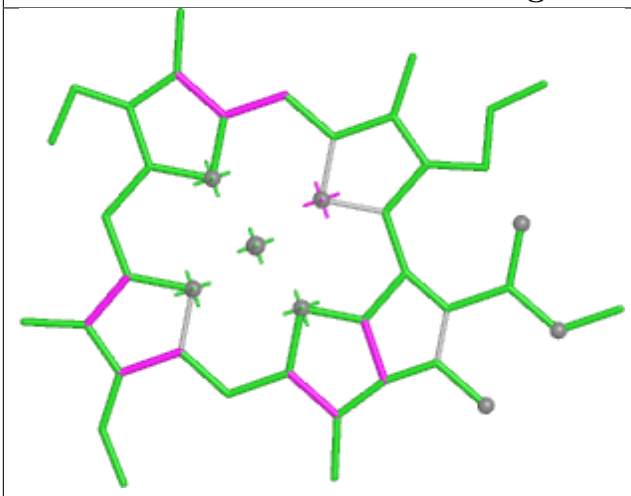
	
Torsions	**Rings**

Ligand CLA S 314



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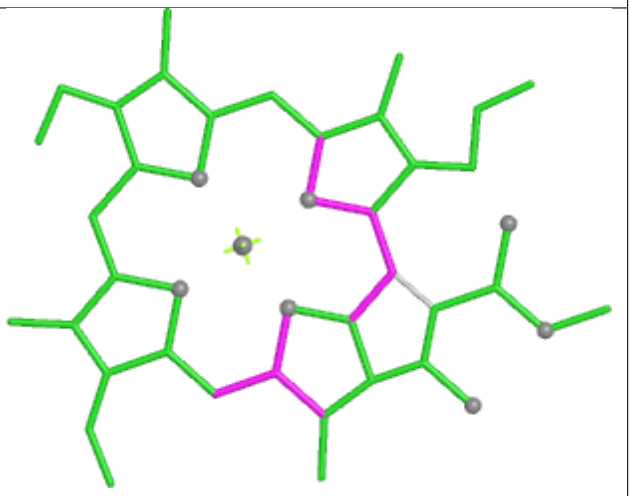
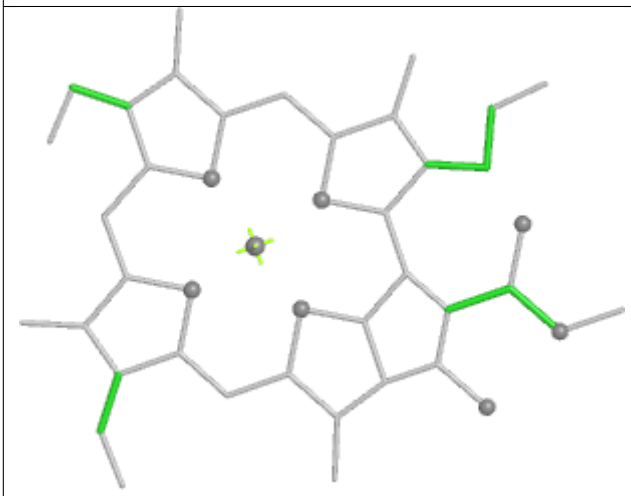


Bond angles



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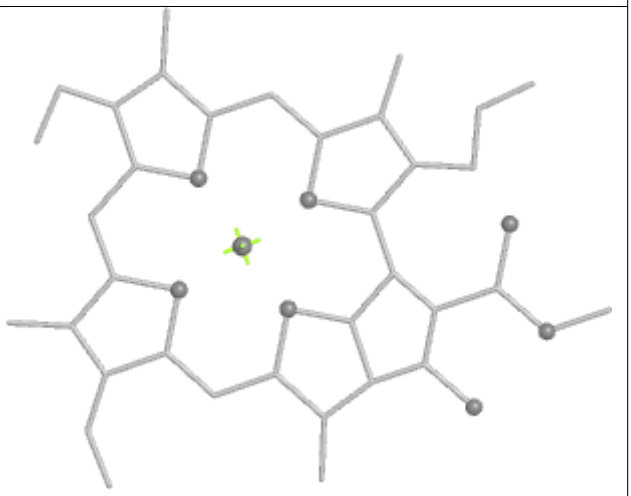
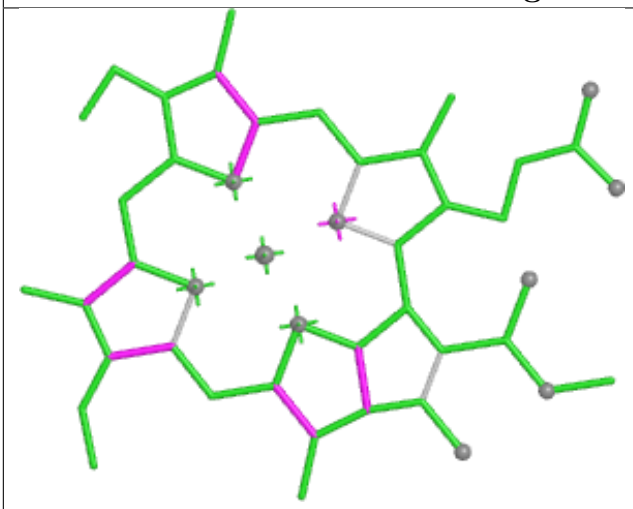


Rings

Ligand CLA Y 304



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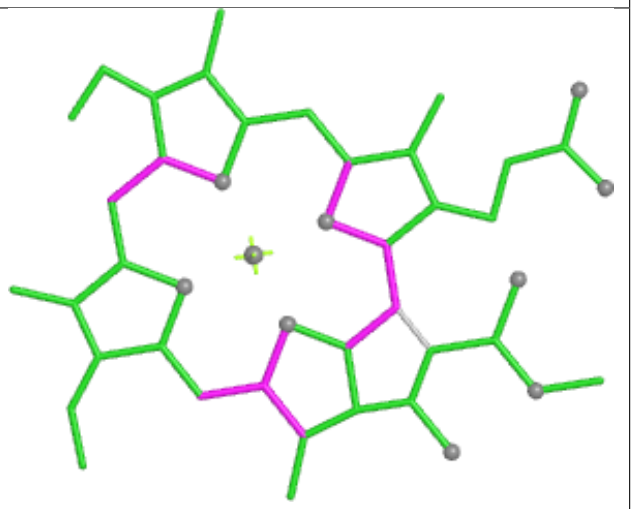
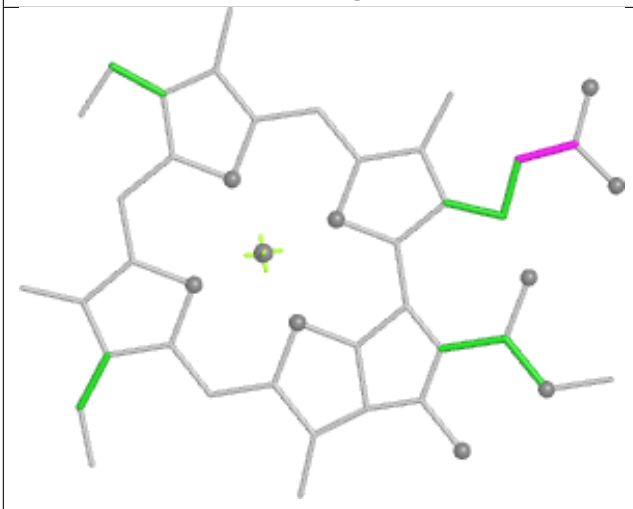


Bond angles

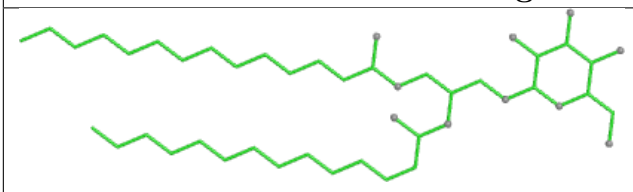


Torsions



Rings

Ligand LMG M 101



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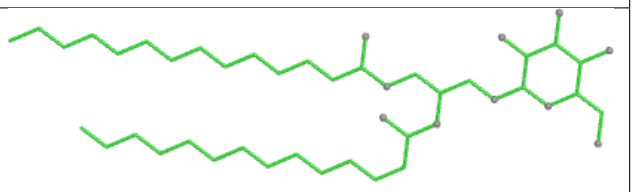

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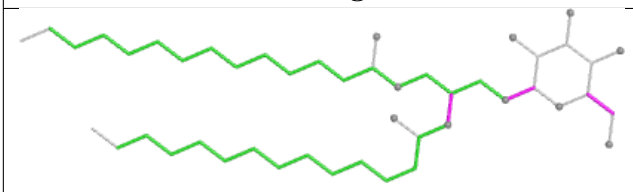

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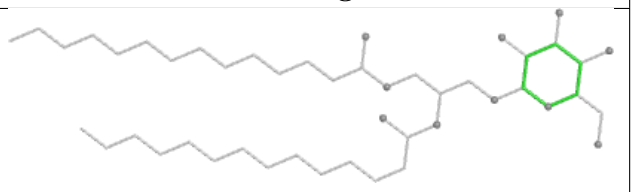
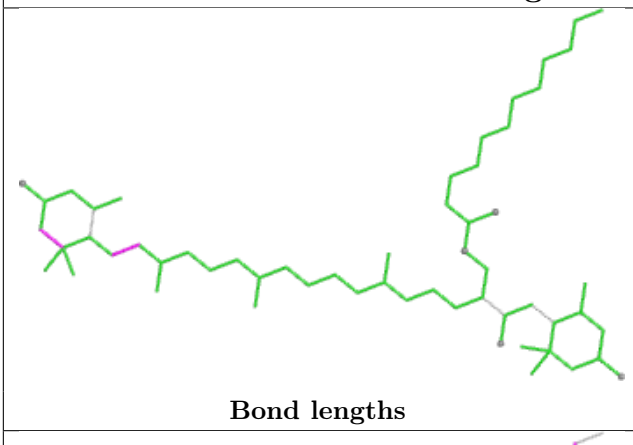


Rings

Ligand 0UR Y 323



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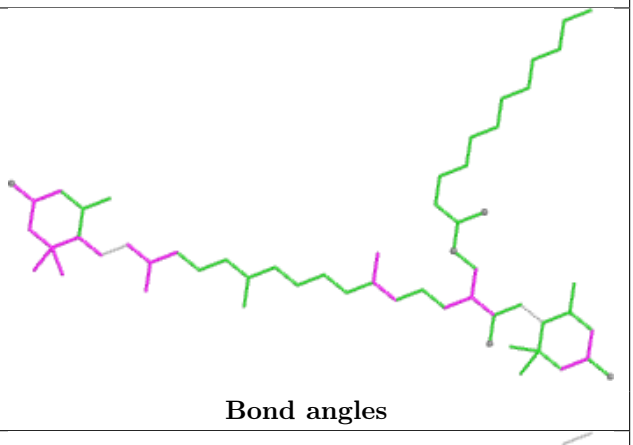
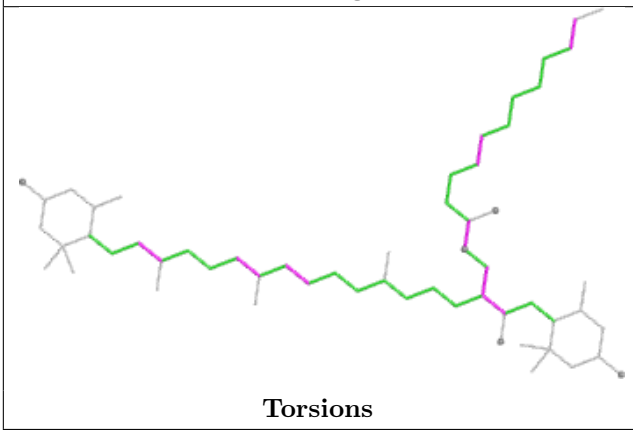


Bond angles



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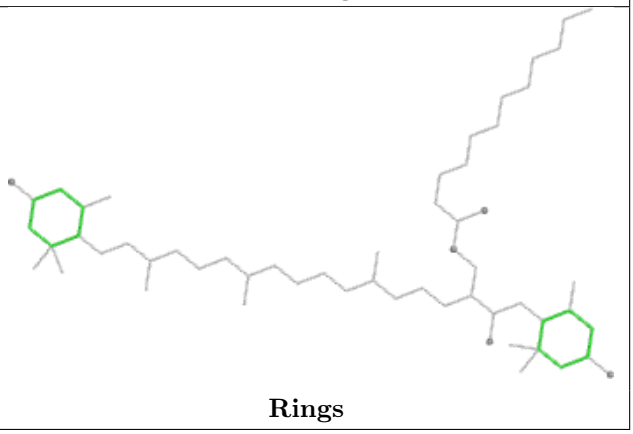
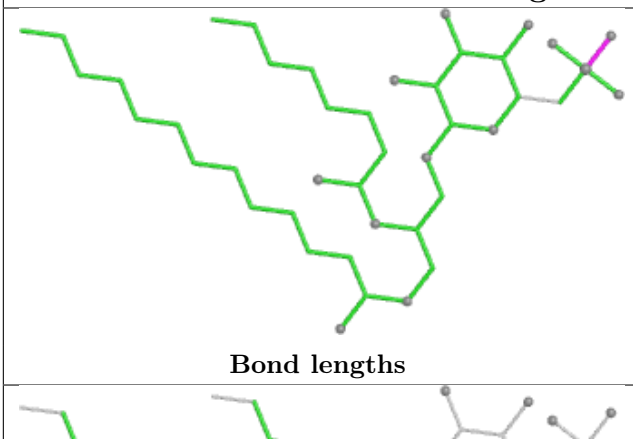


Rings

Ligand SQD c 501



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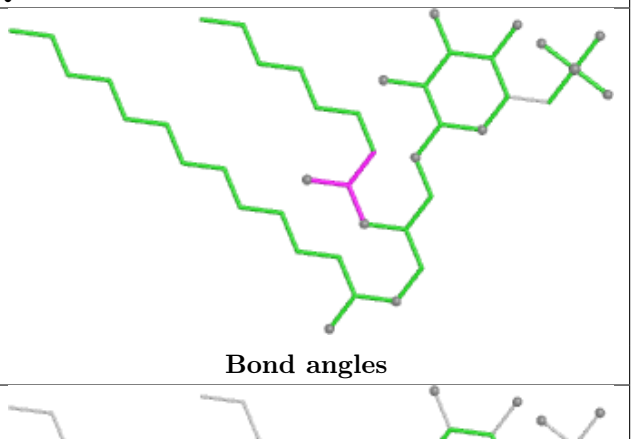
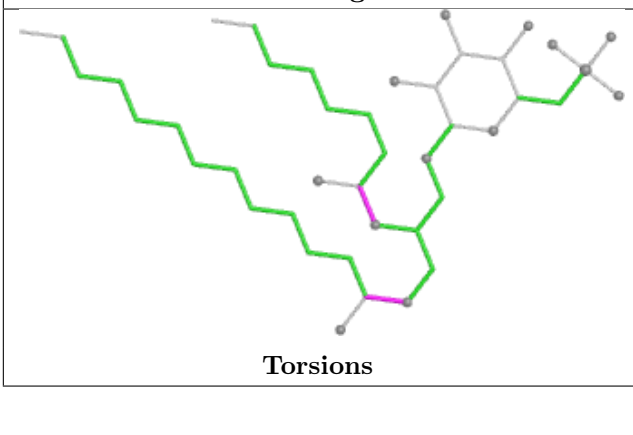


Bond angles



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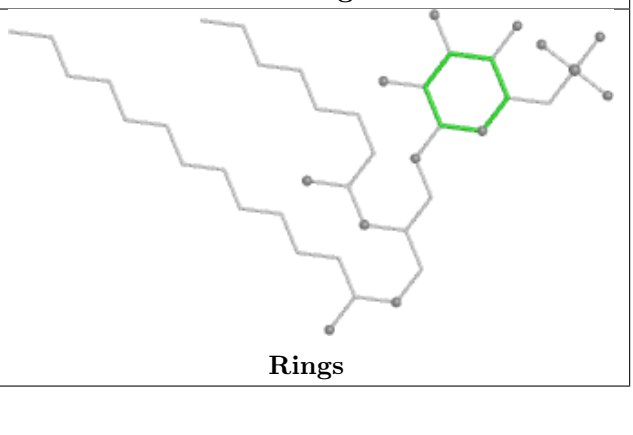
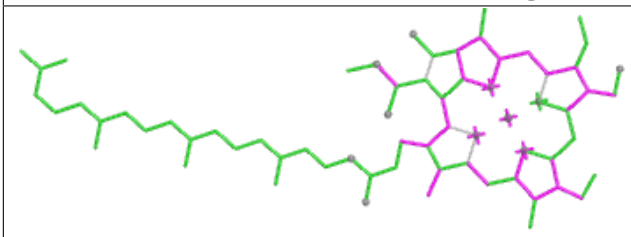
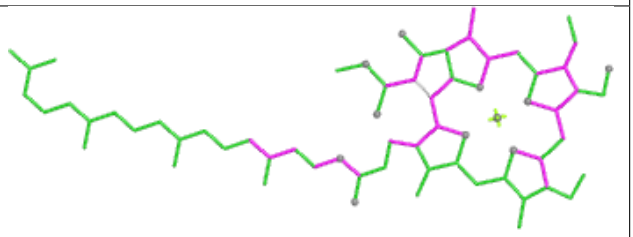
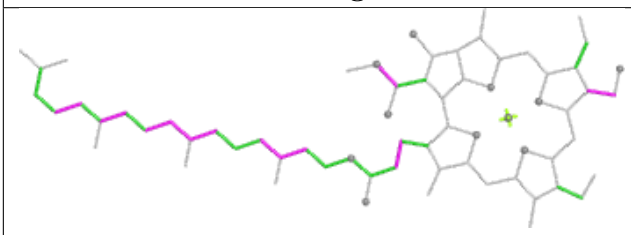
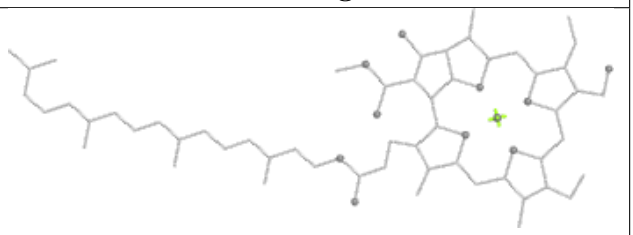
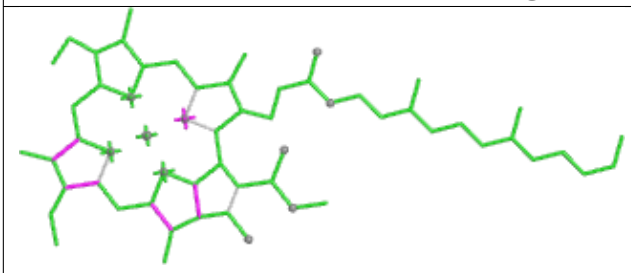
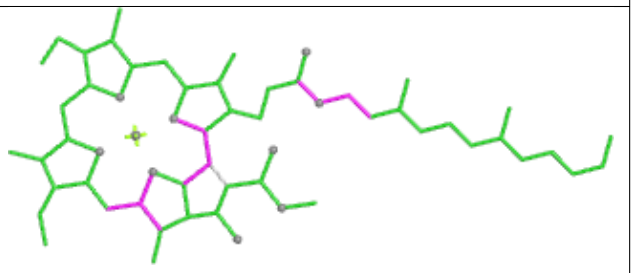
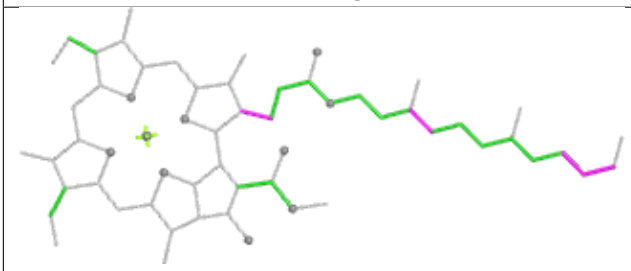
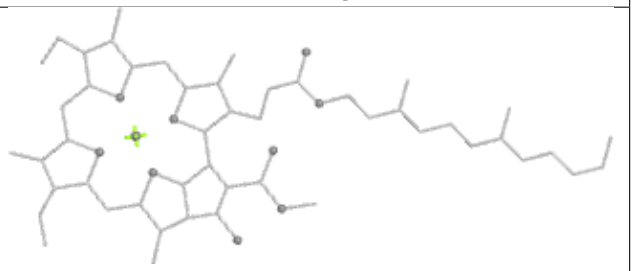
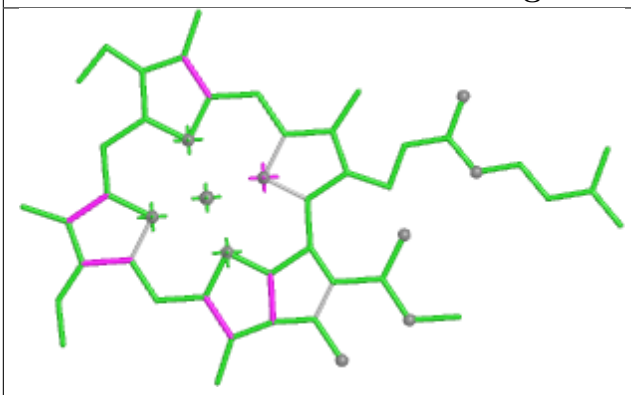


Rings

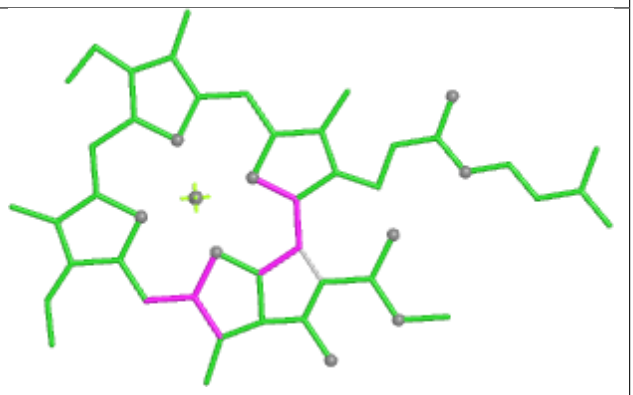
Ligand CHL G 317	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA N 311	
 Bond lengths	 Bond angles
 Torsions	 Rings

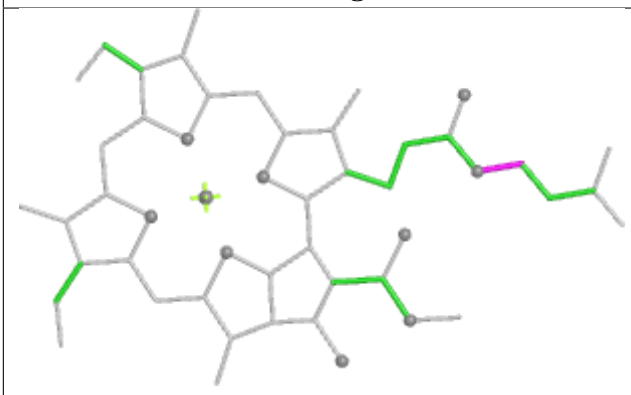
Ligand CLA Y 309



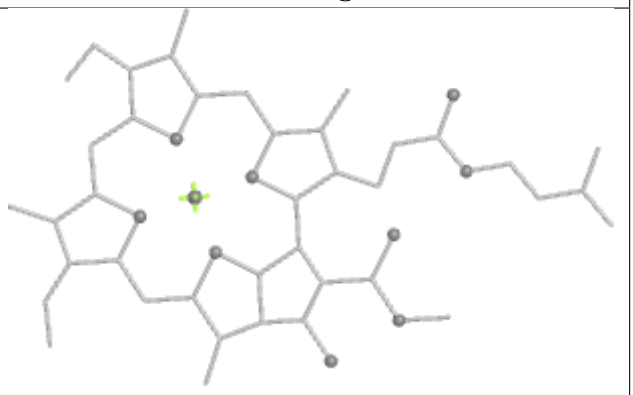
Bond lengths



Bond angles

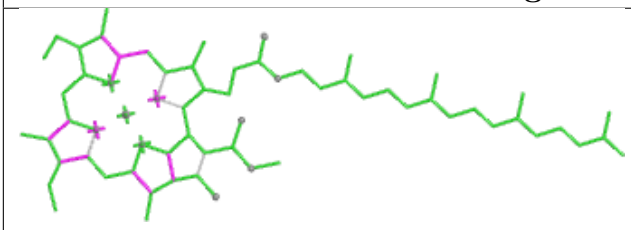


Torsions

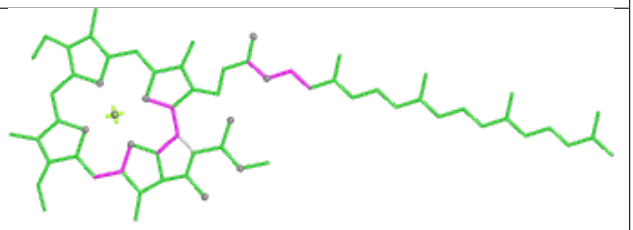


Rings

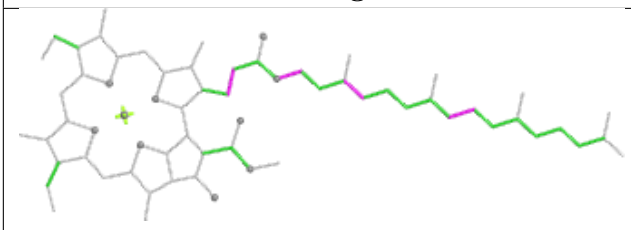
Ligand CLA B 606



Bond lengths



Bond angles



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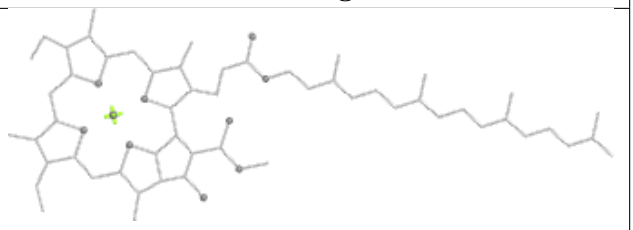
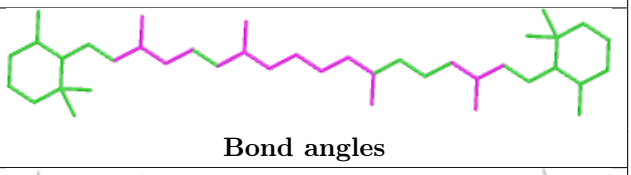


Rings

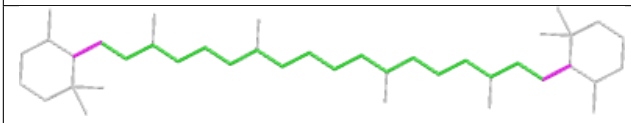
Ligand BCR b 604



Bond lengths



Bond angles



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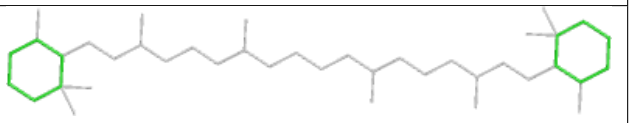
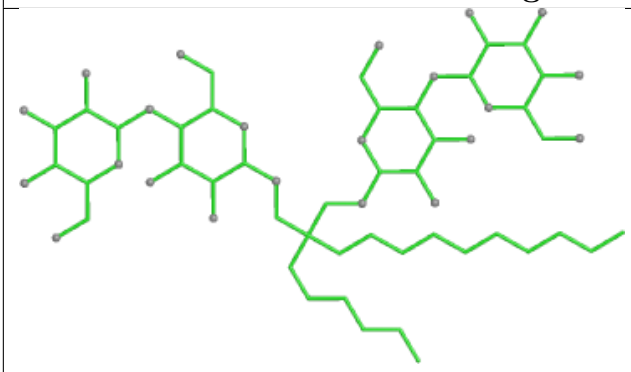


Rings

Ligand LMN n 323



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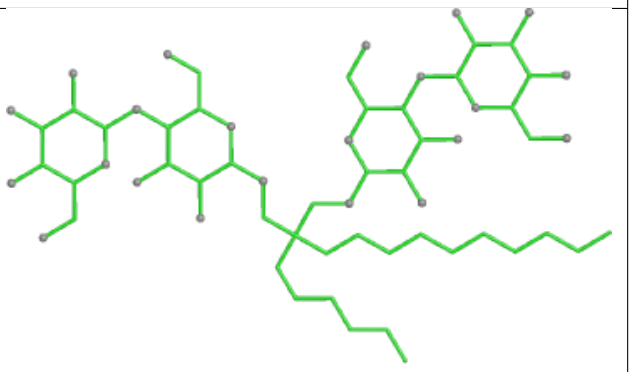
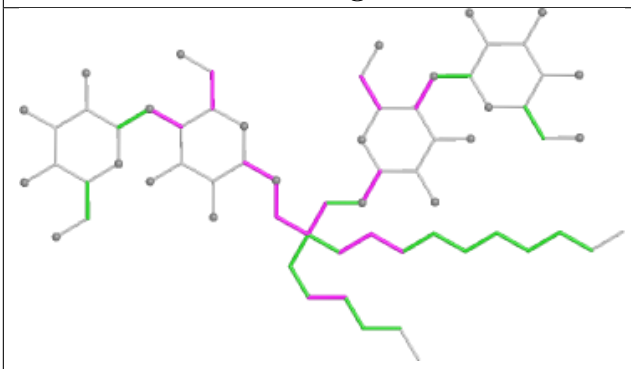


Bond angles



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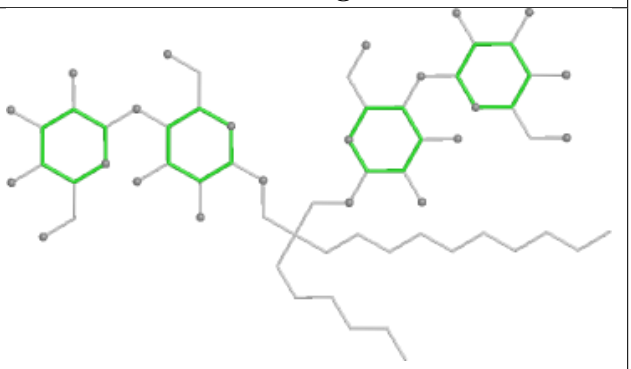
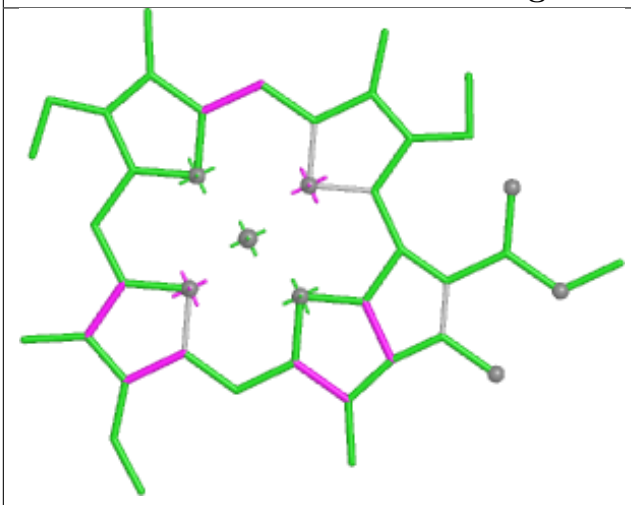


Rings

Ligand CLA 1 311



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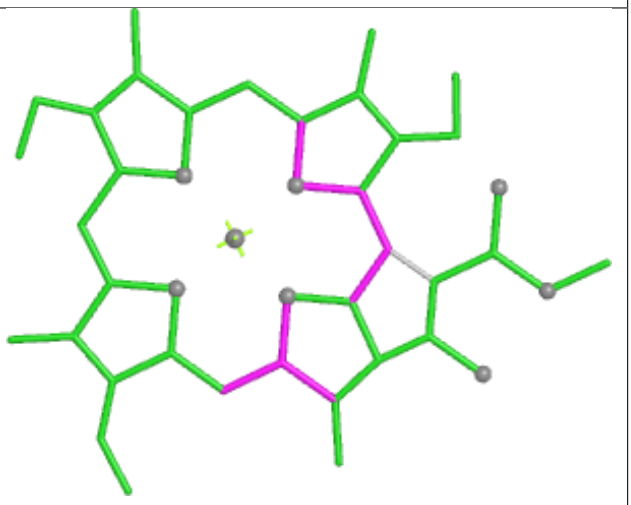
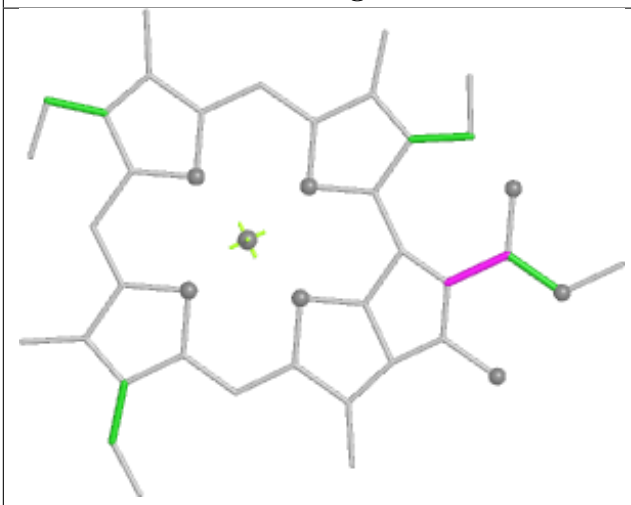


Bond angles

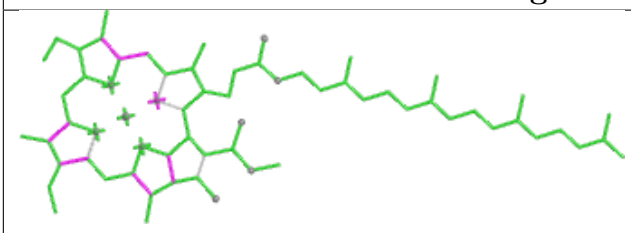


Torsions



Rings

Ligand CLA s 314



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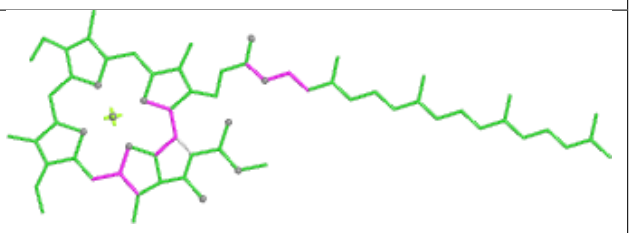

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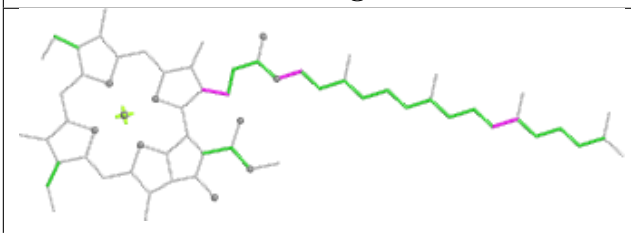

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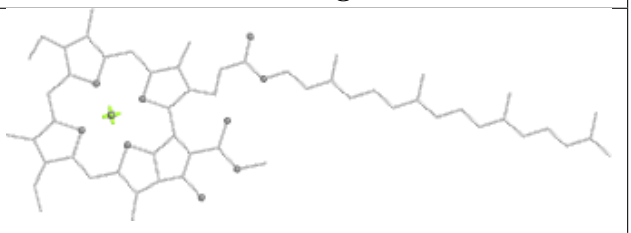
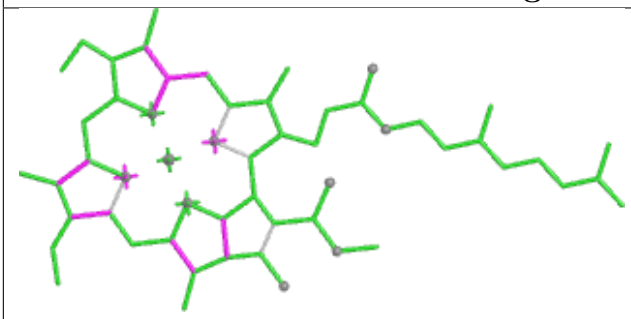


Rings

Ligand CLA Y 314



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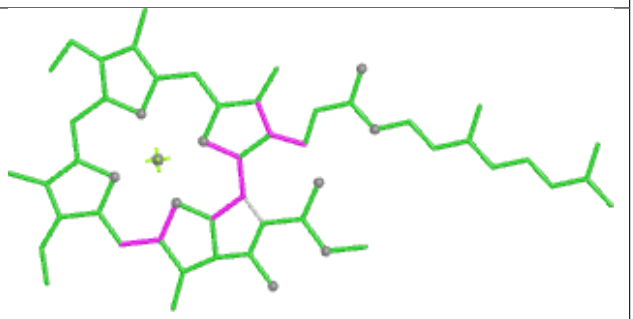

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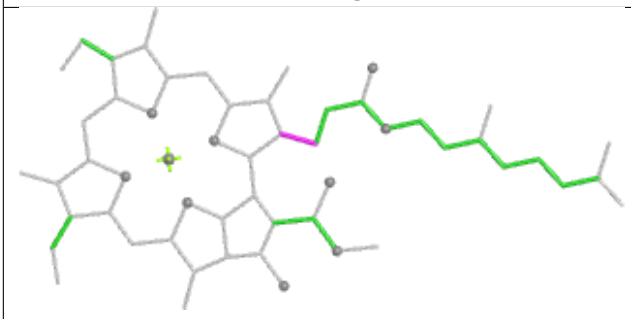

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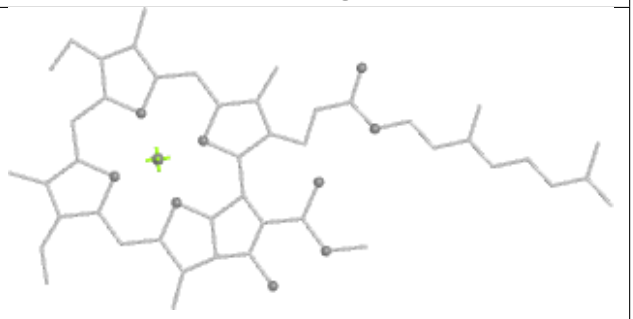
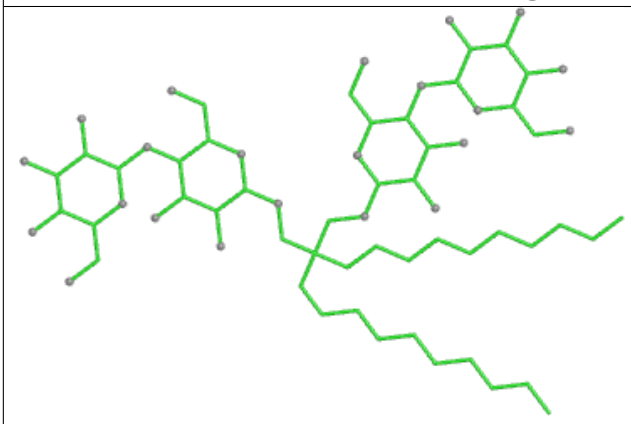


Rings

Ligand LMN g 320



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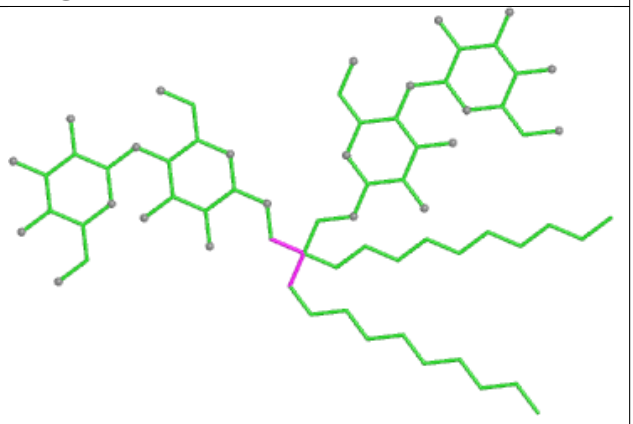
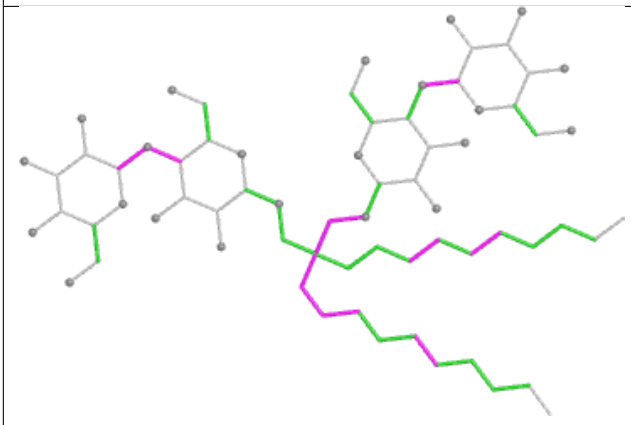


Bond angles



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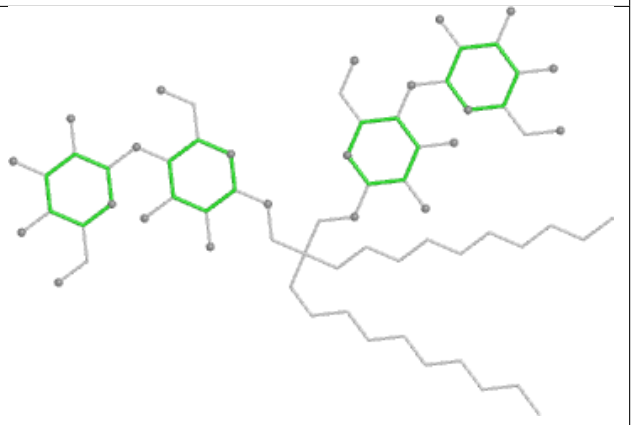
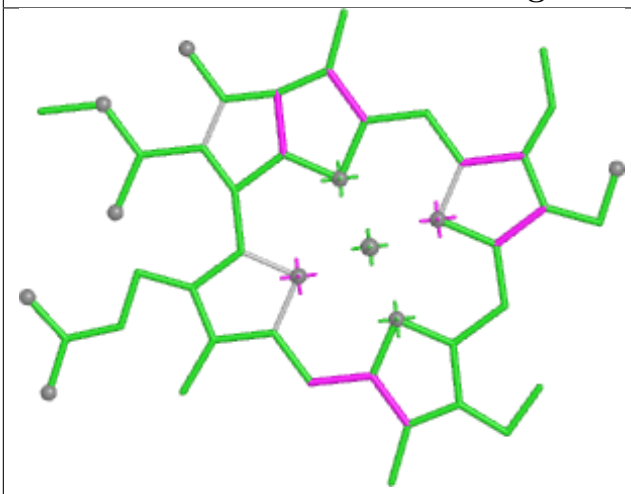


Rings

Ligand CHL g 309



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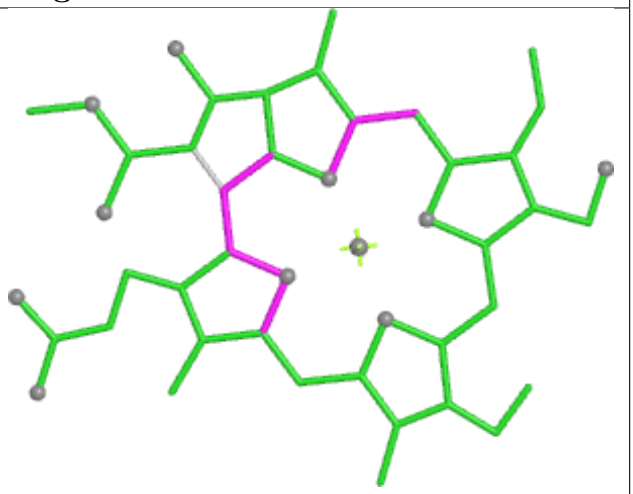
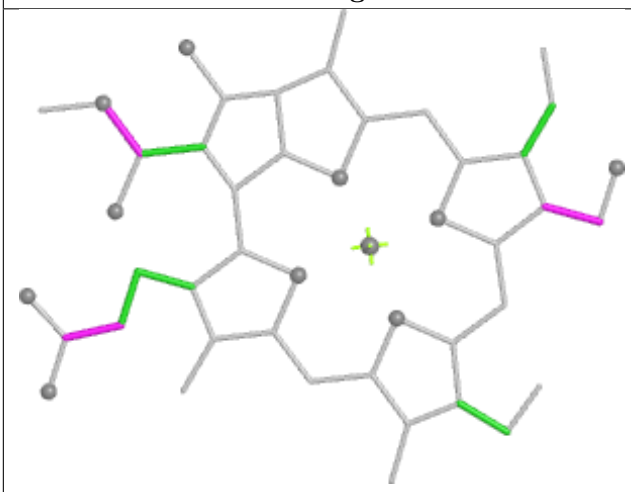


Bond angles



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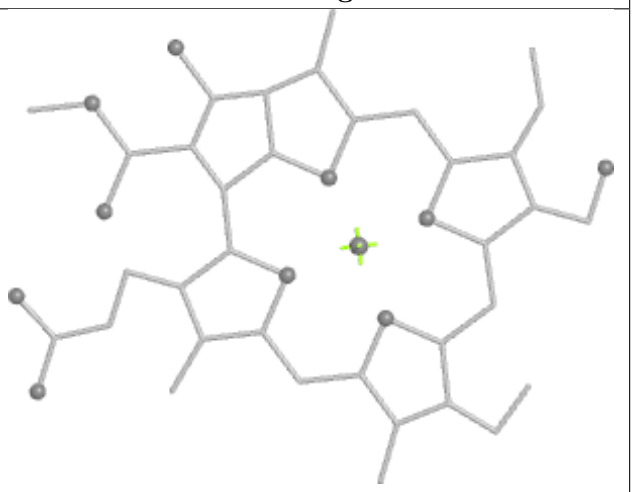
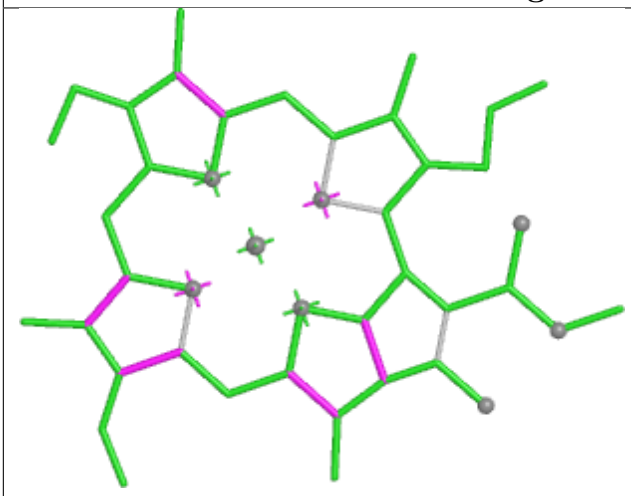


Rings

Ligand CLA S 312



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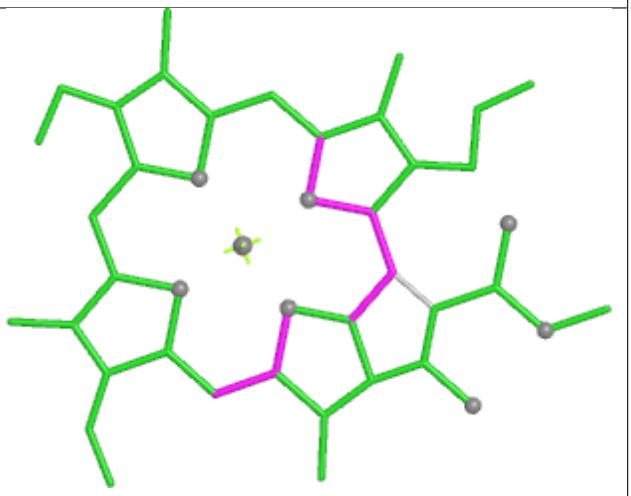
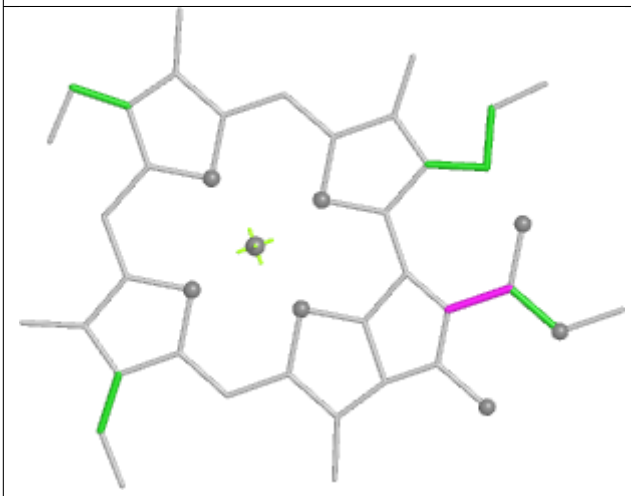


Bond angles



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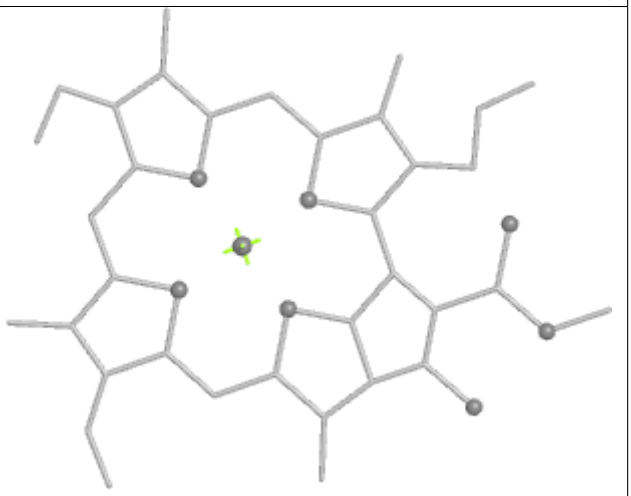
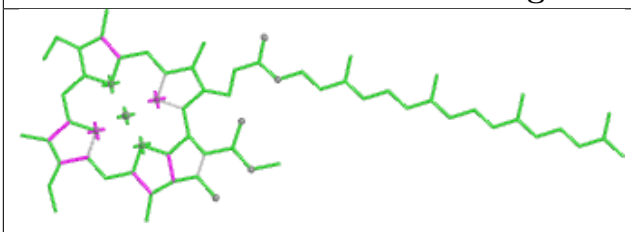


Rings

Ligand CLA b 605



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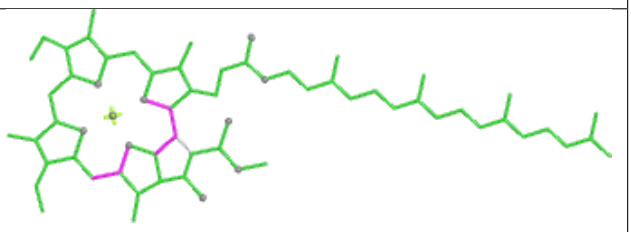
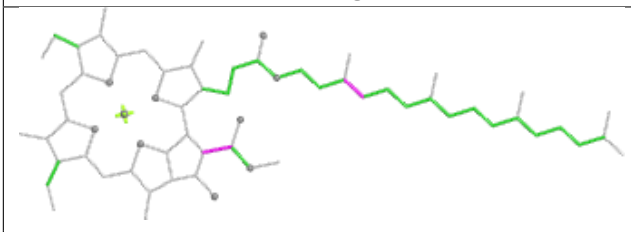


Bond angles



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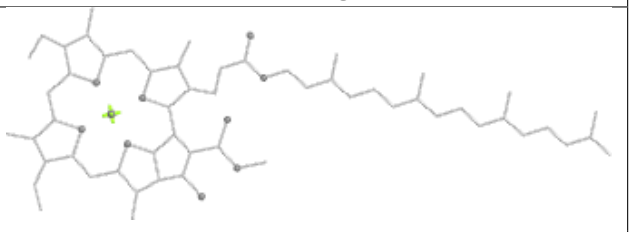
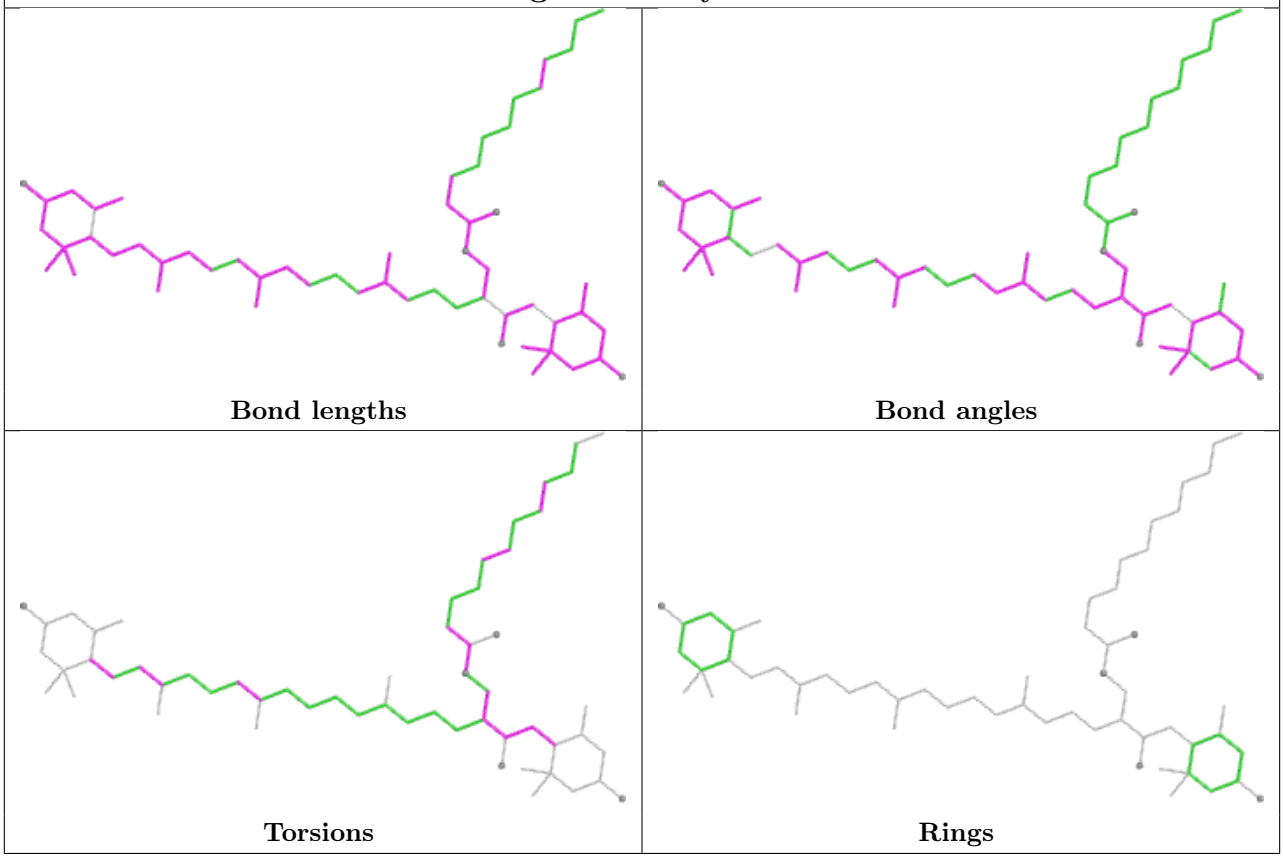
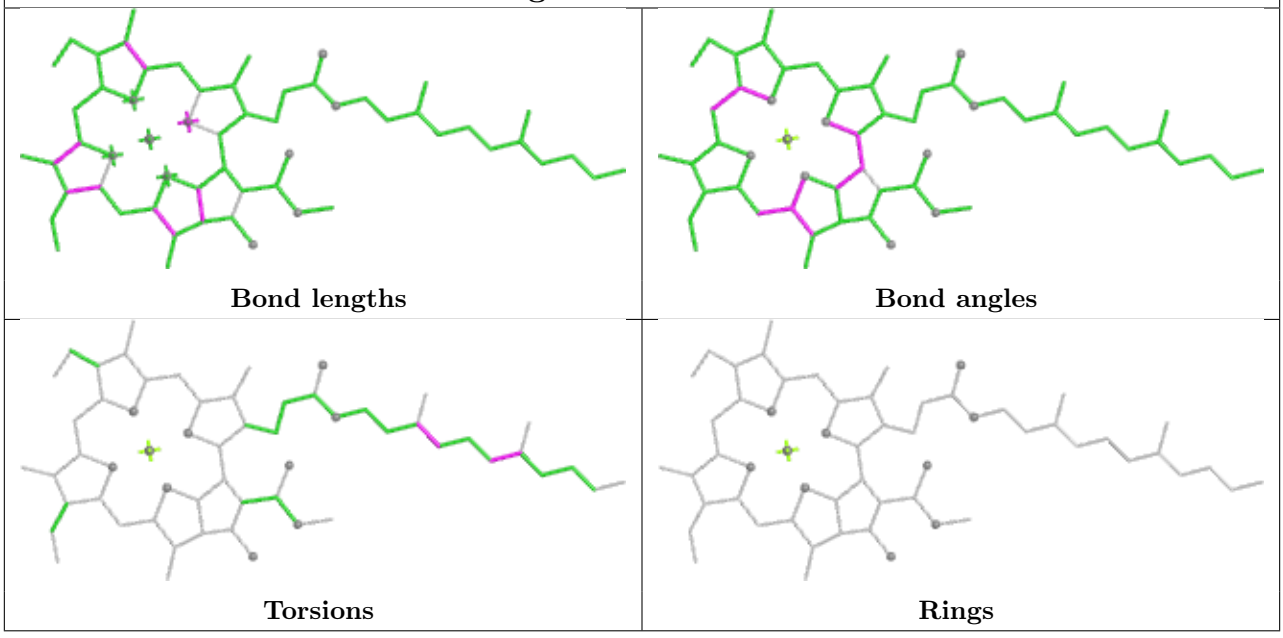


Rings

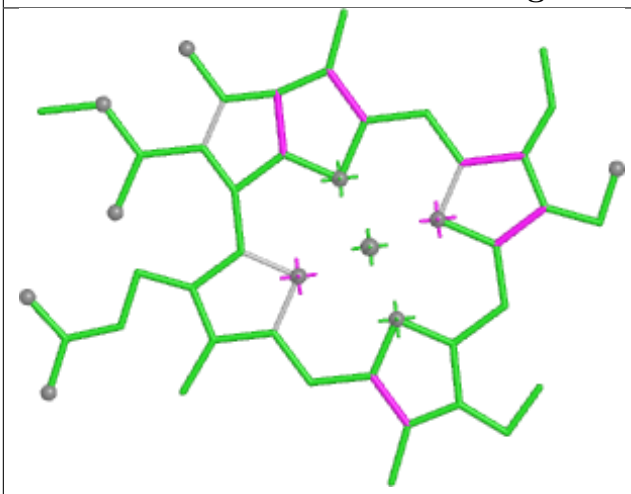
Ligand 0UR y 322



Ligand CLA S 313



Ligand CHL y 315



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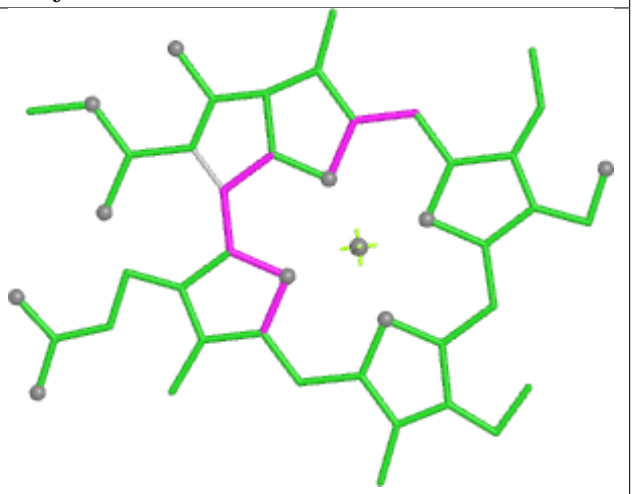
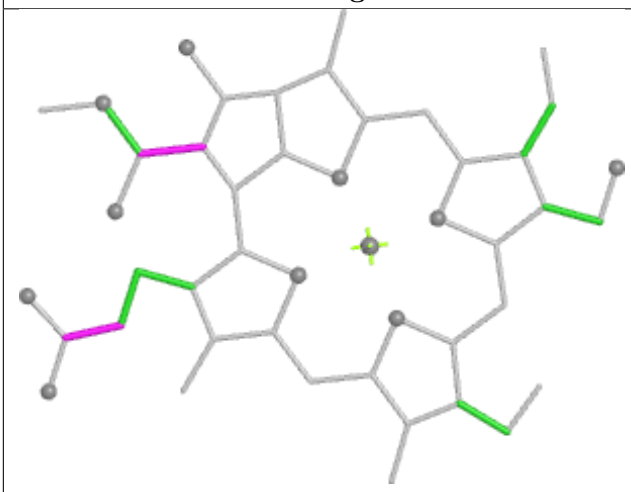


Bond angles



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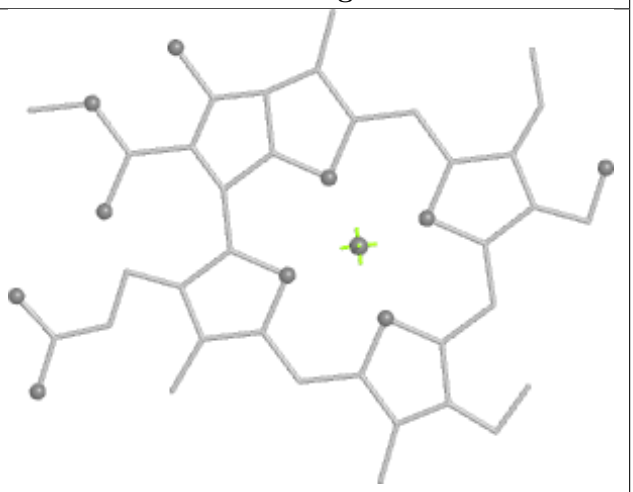

Rings

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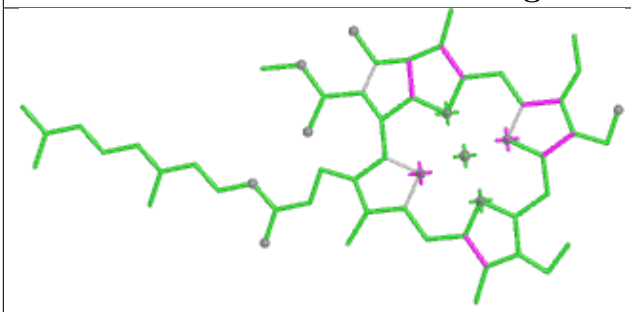
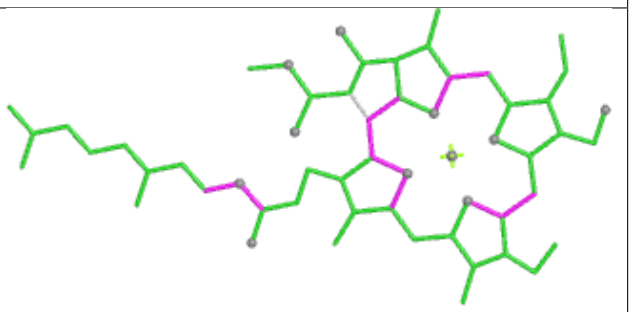
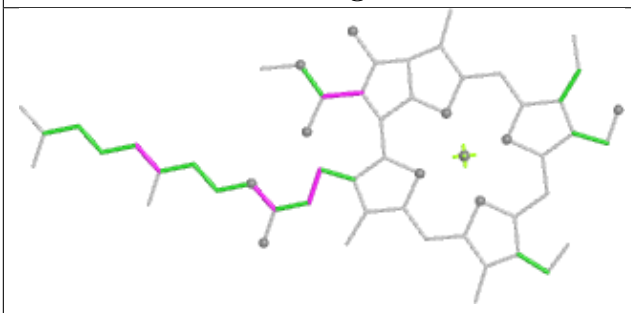
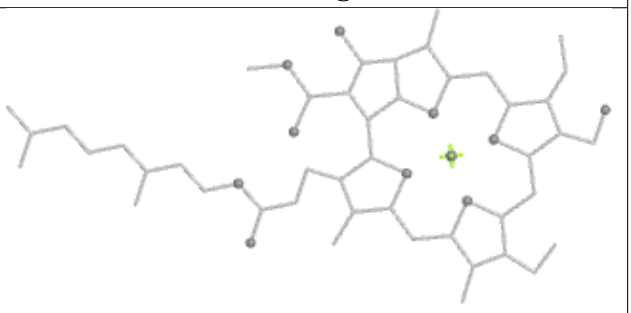
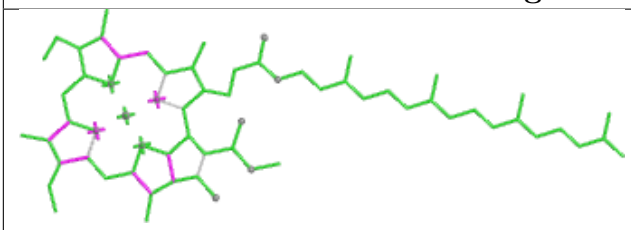
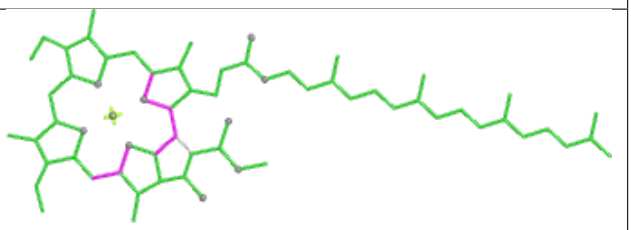
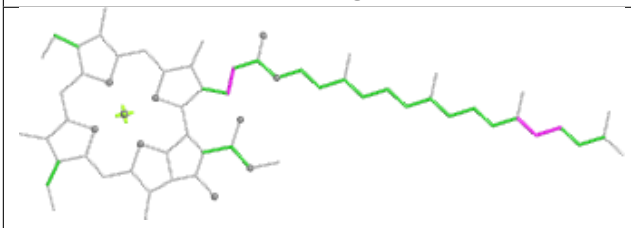
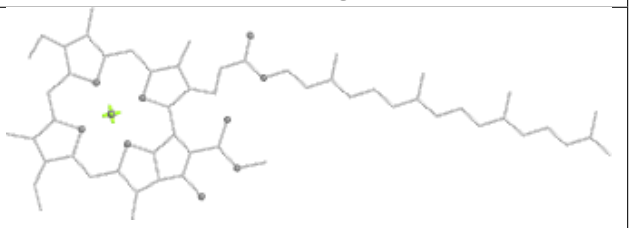
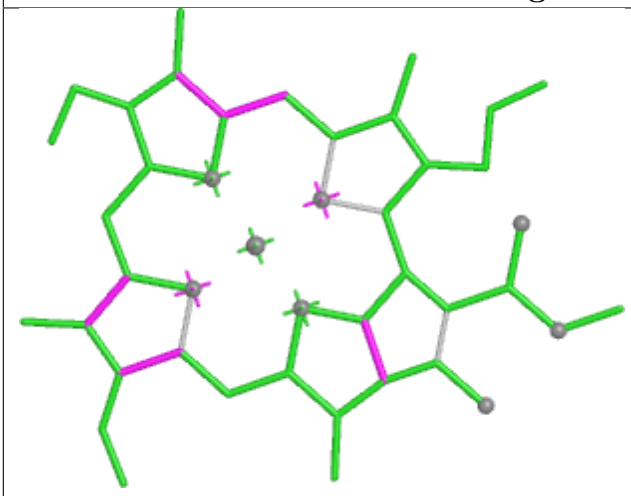
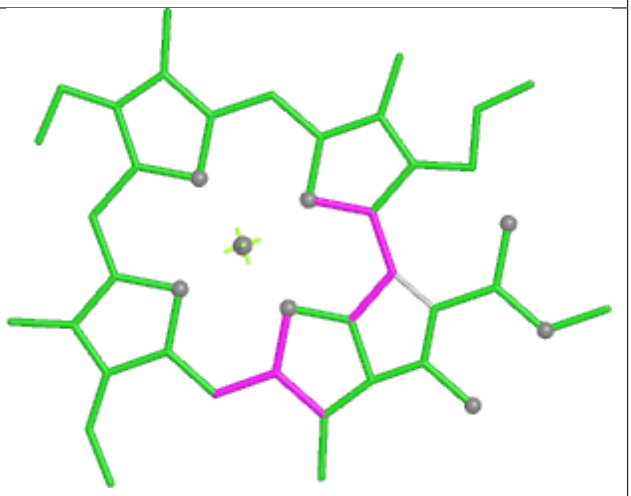
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 621	
 Bond lengths	 Bond angles
 Torsions	 Rings

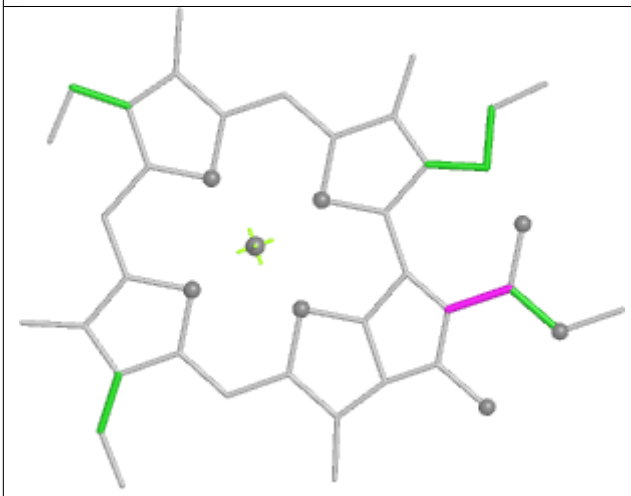
Ligand CLA 0 306



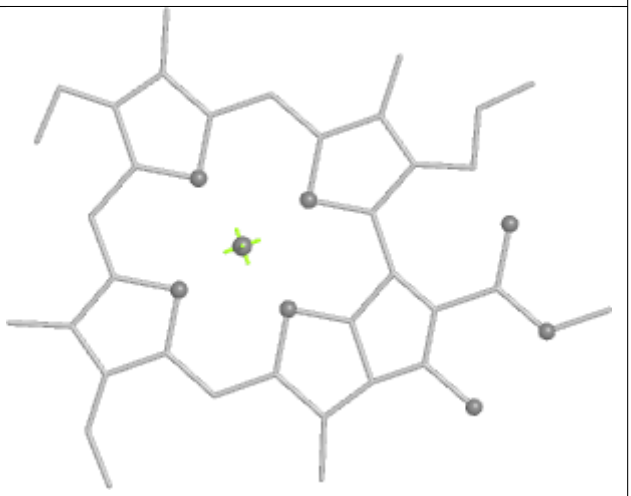
Bond lengths



Bond angles

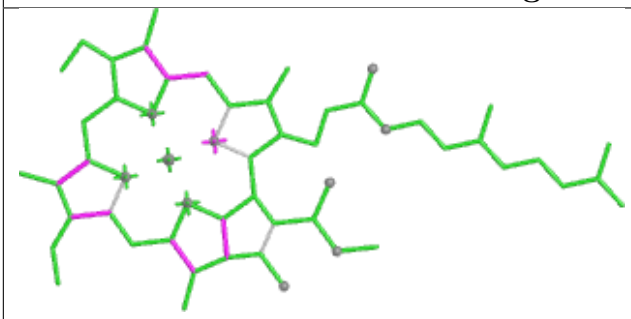


Torsions

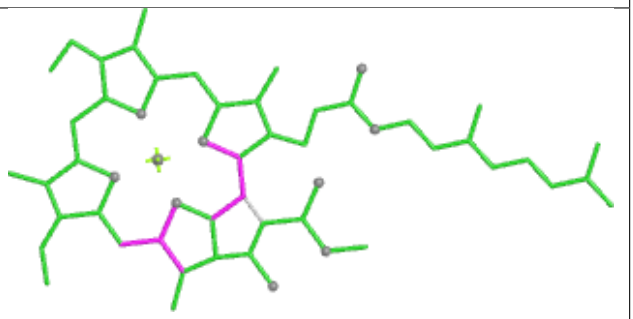


Rings

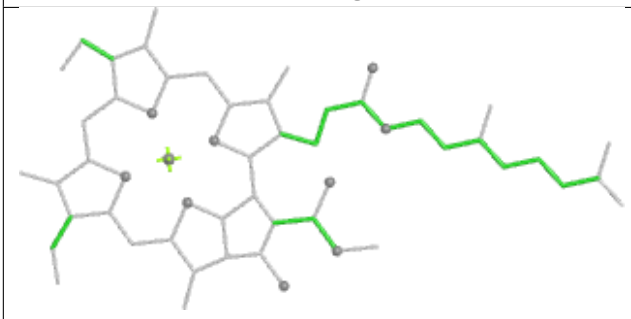
Ligand CLA G 313



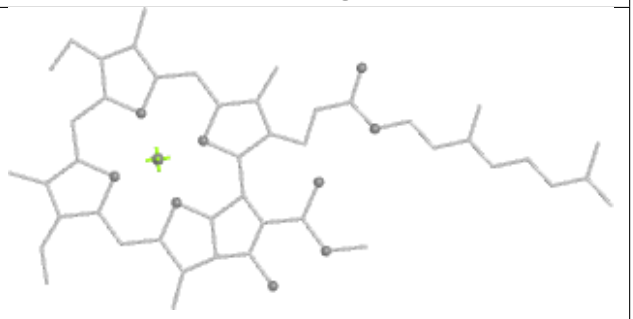
Bond lengths



Bond angles

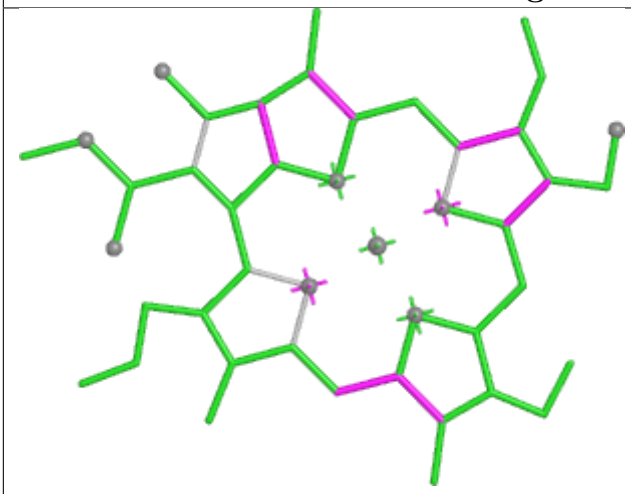


Torsions



Rings

Ligand CHL n 309



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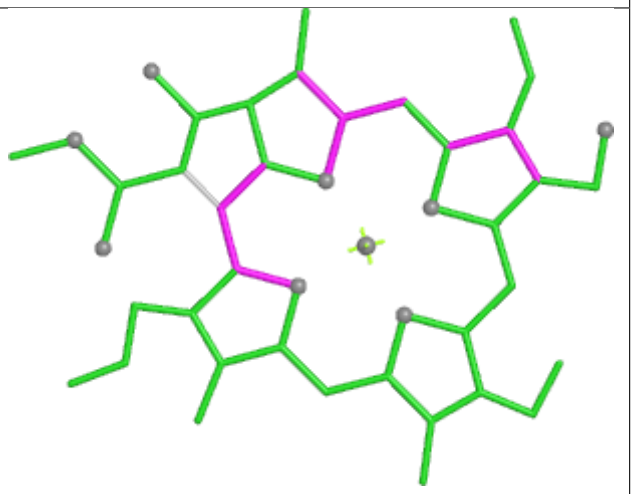
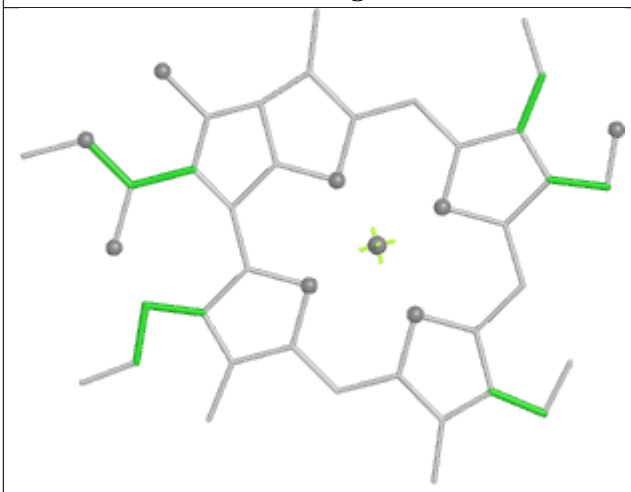


Bond angles



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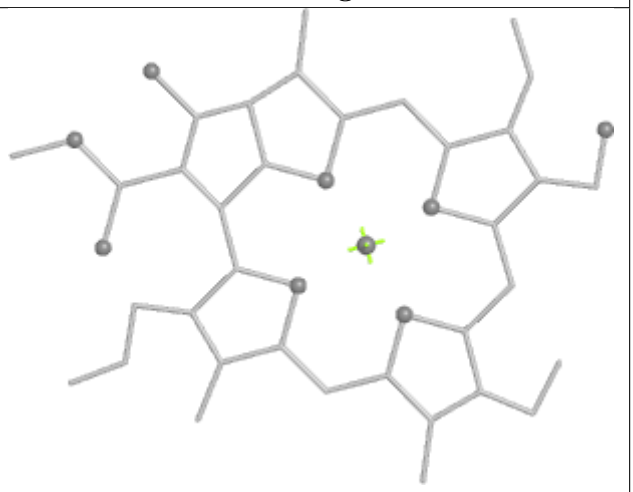
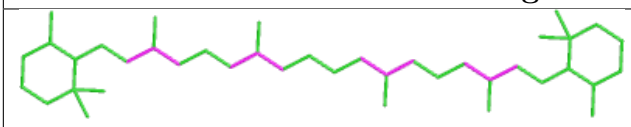


Rings

Ligand BCR D 403



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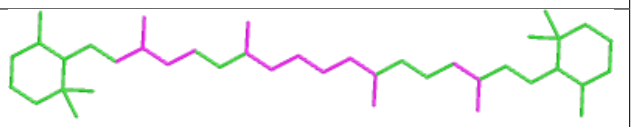
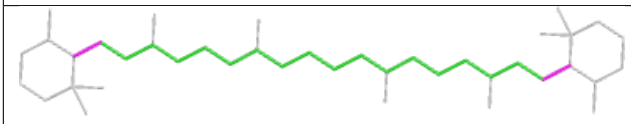


Bond angles



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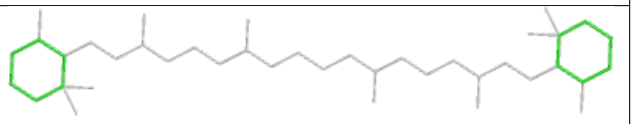
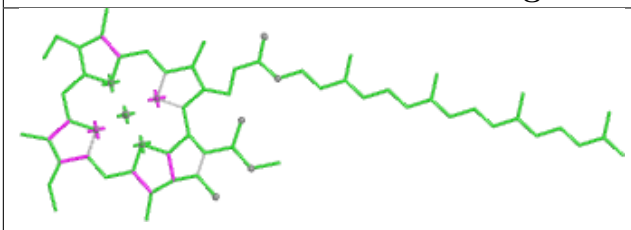


Rings

Ligand CLA U 404



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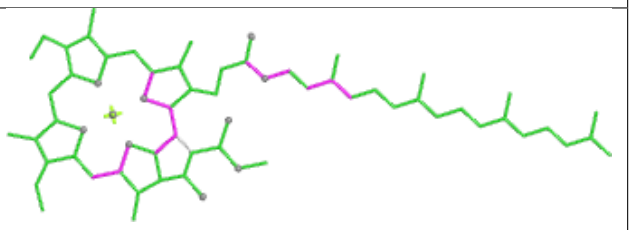
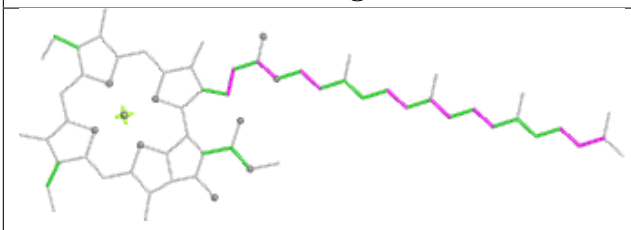


Bond angles



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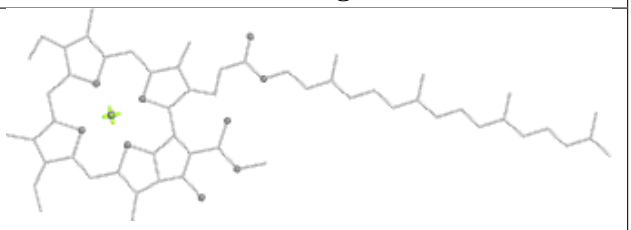
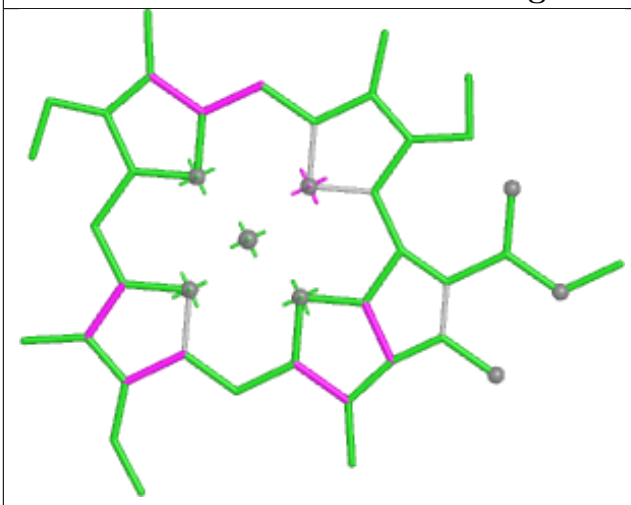


Rings

Ligand CLA 1 302



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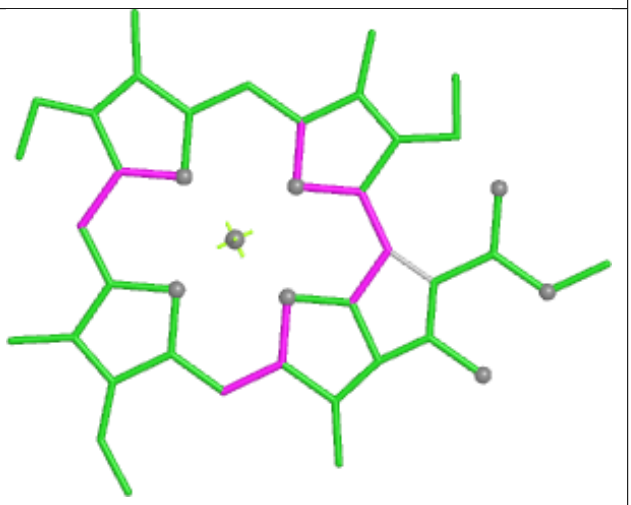
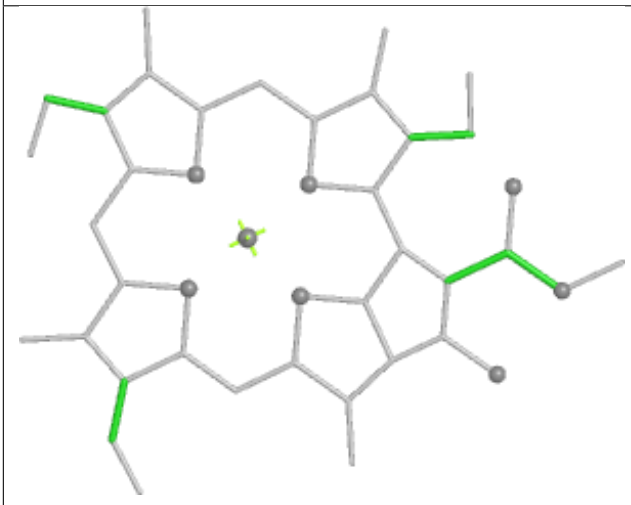


Bond angles



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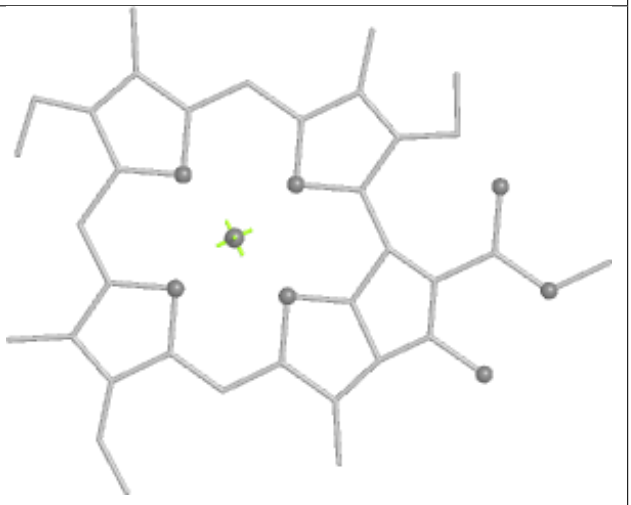
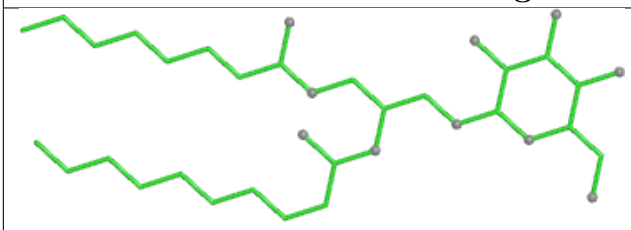


Rings

Ligand LMG W 202



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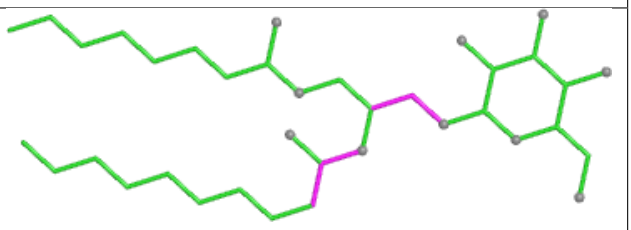
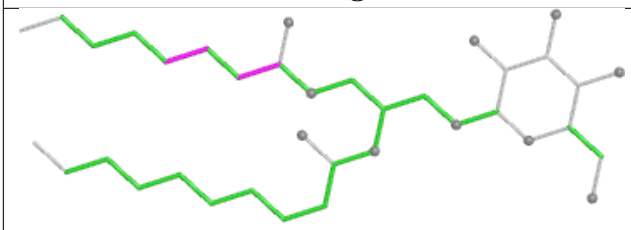


Bond angles



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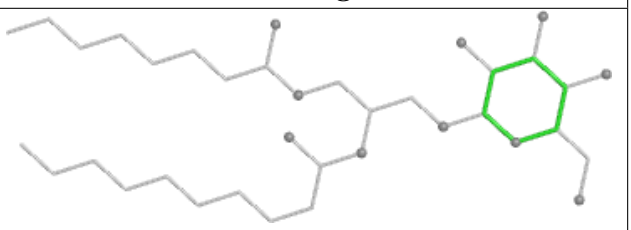
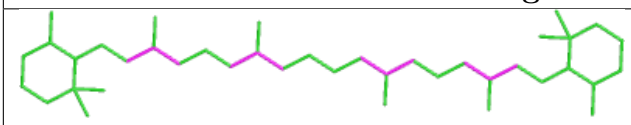


Rings

Ligand BCR C 507



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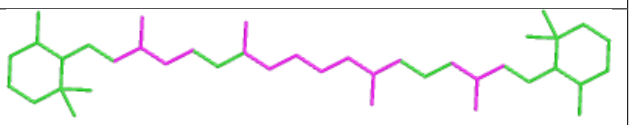
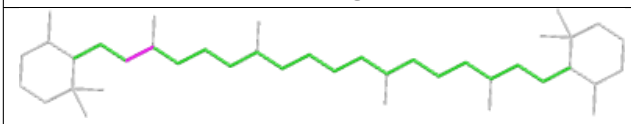


Bond angles



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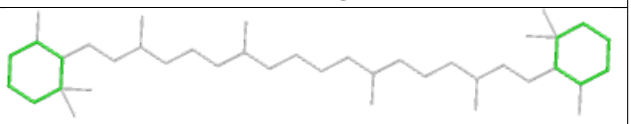
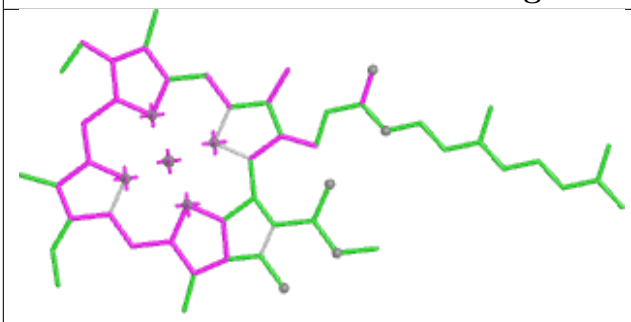


Rings

Ligand CLA Y 303



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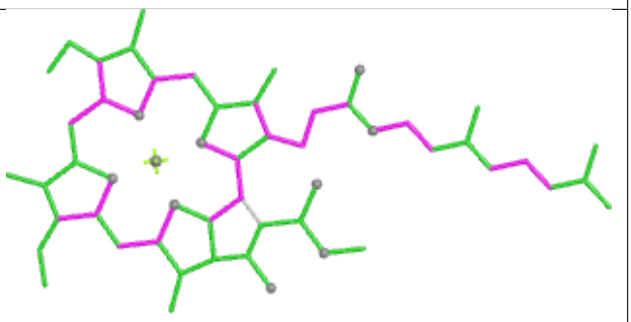
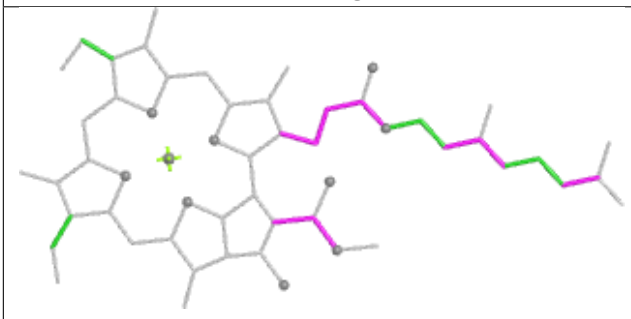


Bond angles



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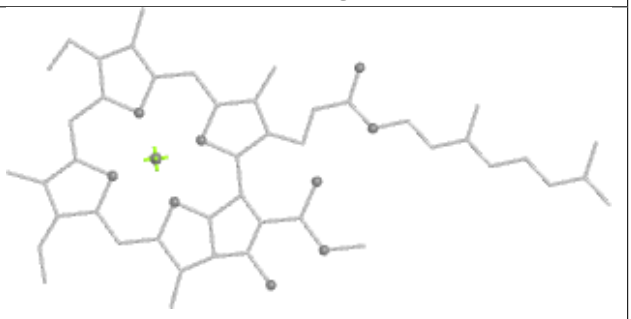
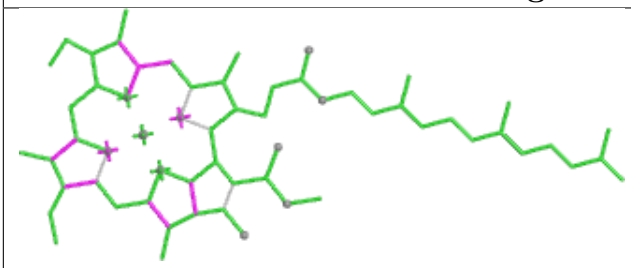
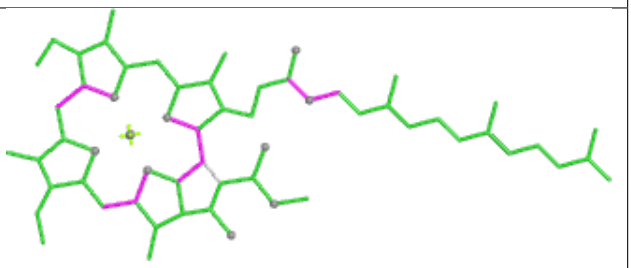
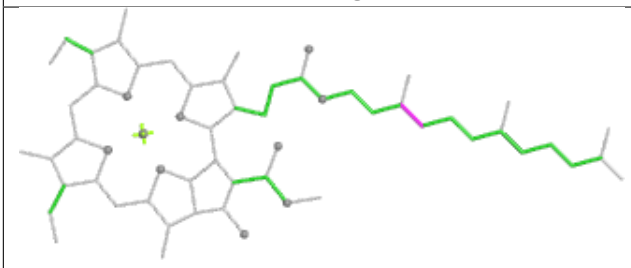
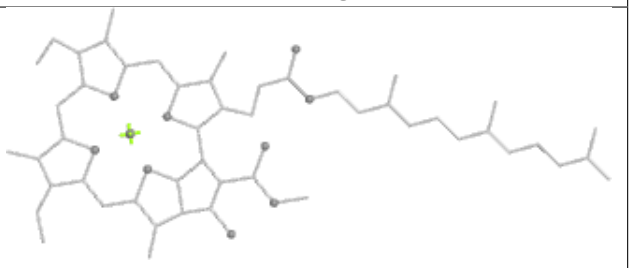
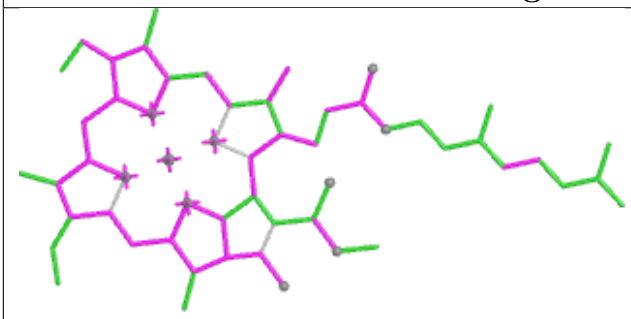
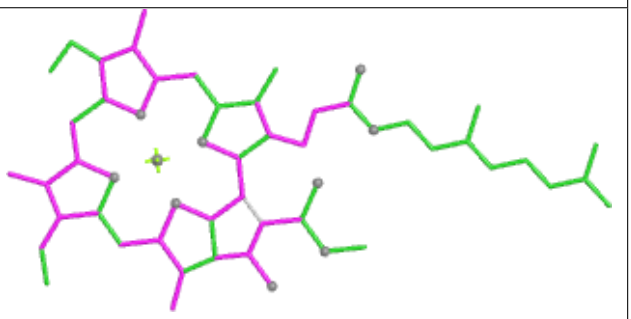
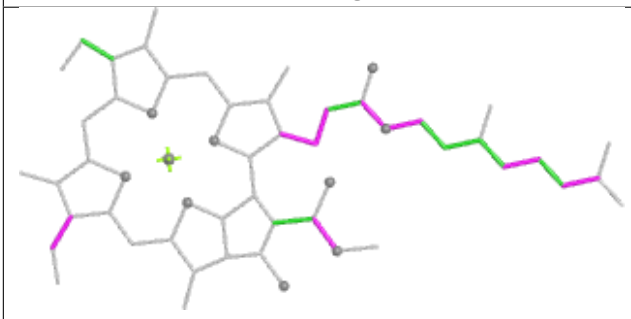
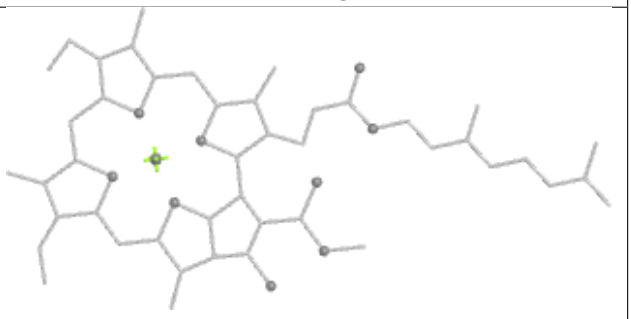
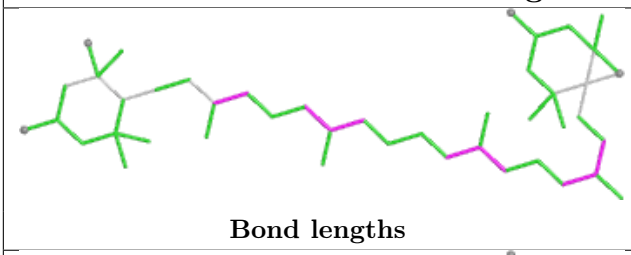


Rings

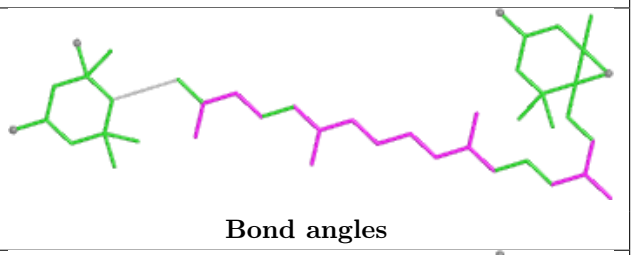
Ligand CLA n 314	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA U 414	
	
Bond lengths	Bond angles
	
Torsions	Rings

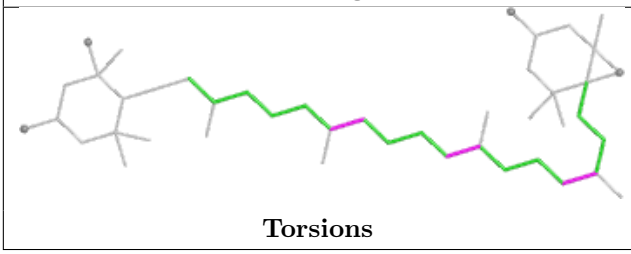
Ligand NEX n 321



Bond lengths



Bond angles



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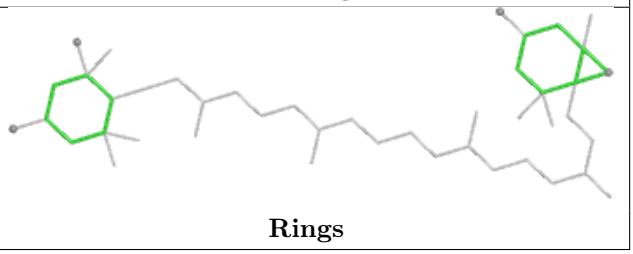
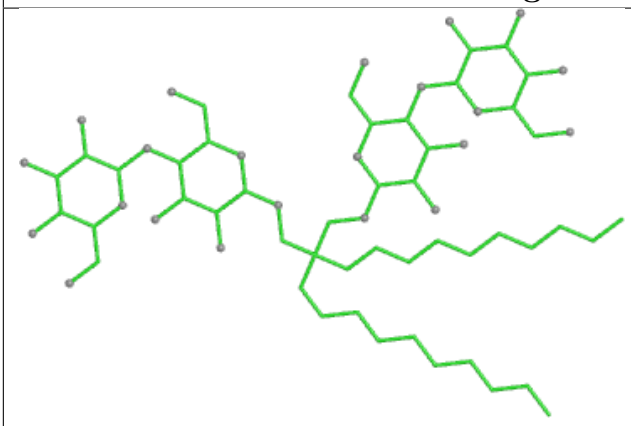


Rings

Ligand LMN v 301



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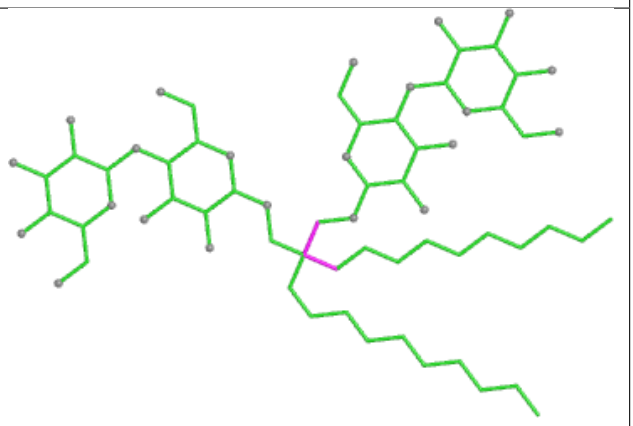
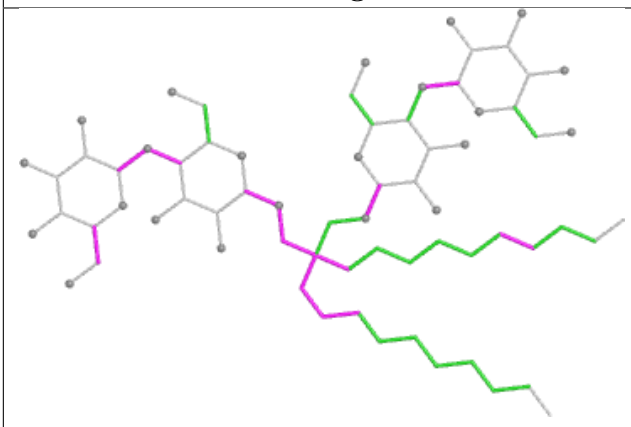


Bond angles



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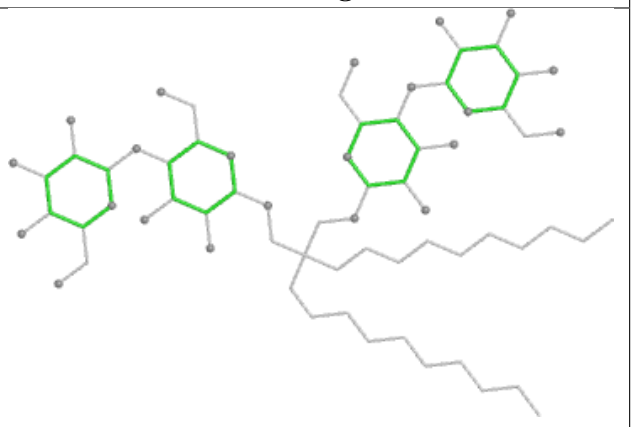
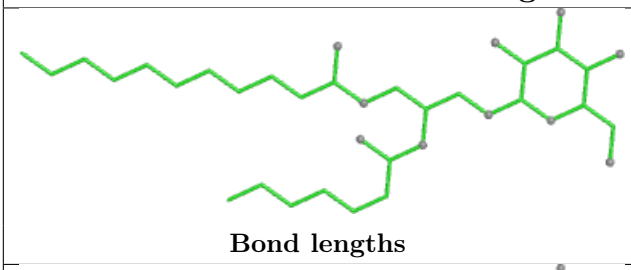


Rings

Ligand LMG U 401



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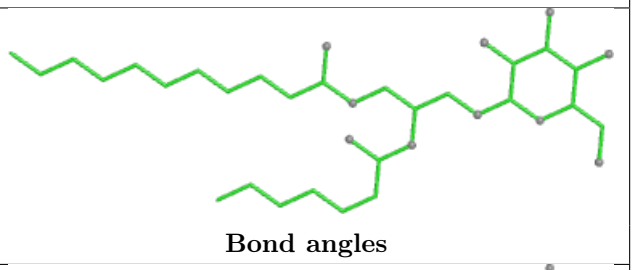
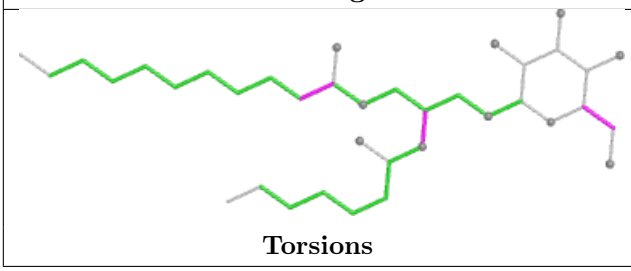


Bond angles



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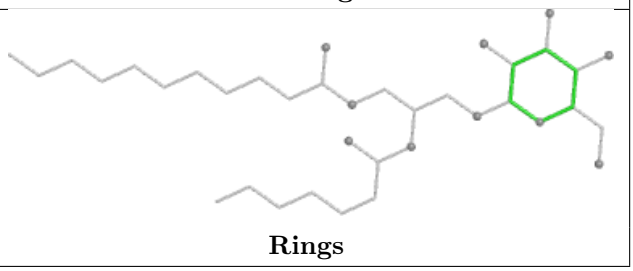
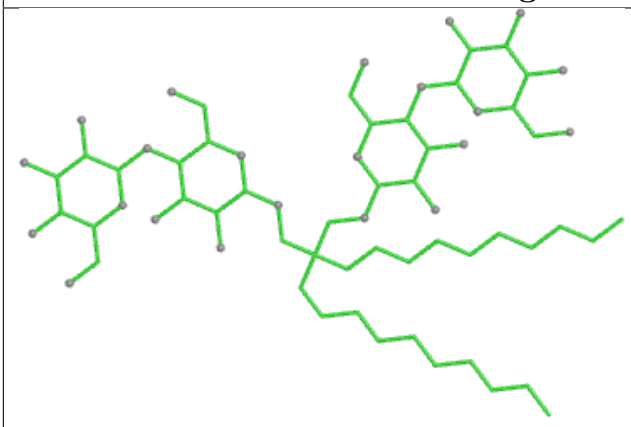


Rings

Ligand LMN Y 302



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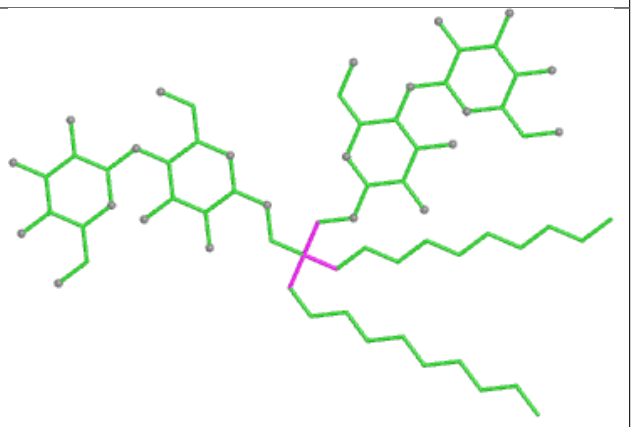
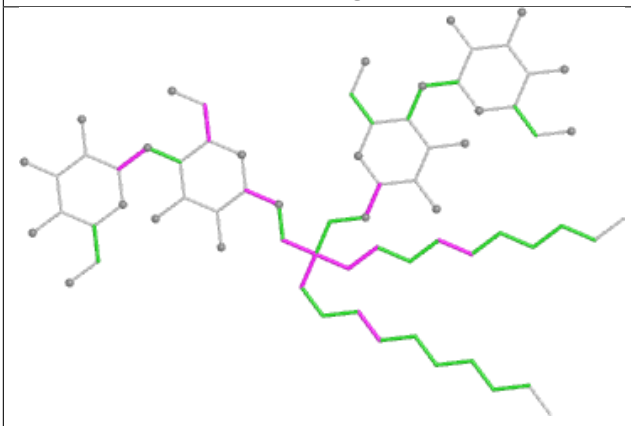


Bond angles



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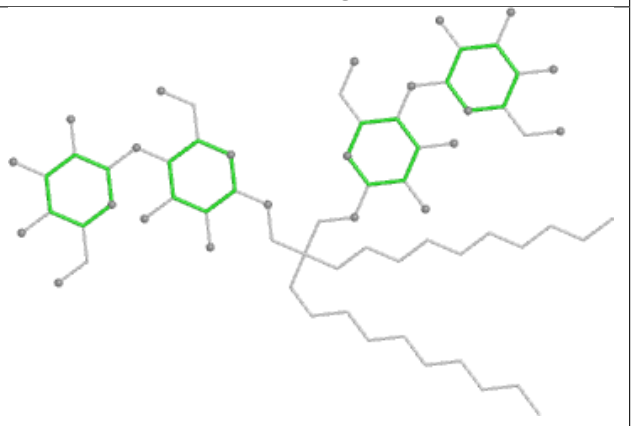
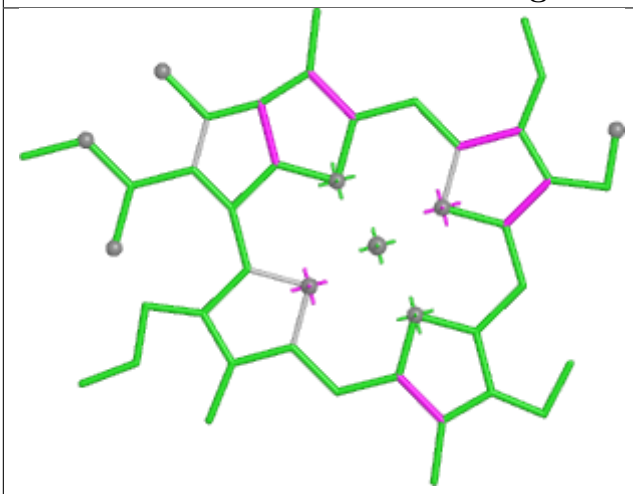
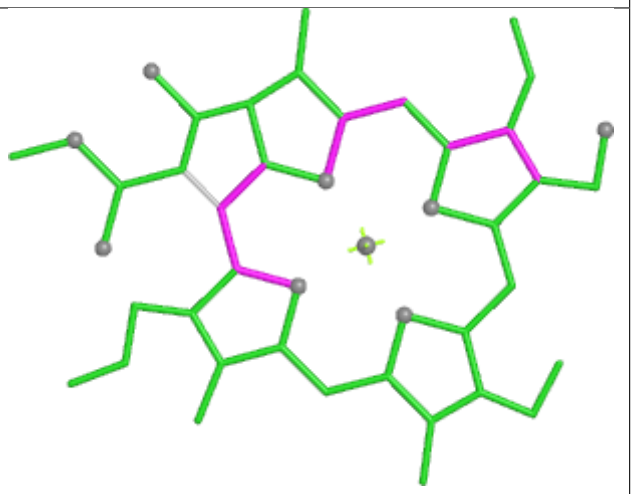


Rings

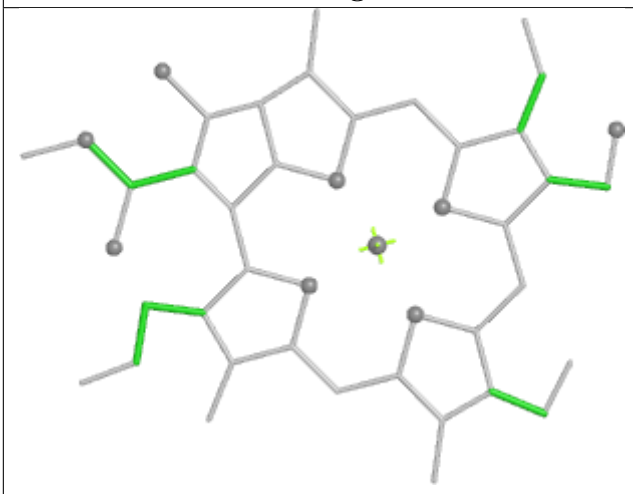
Ligand CHL s 307



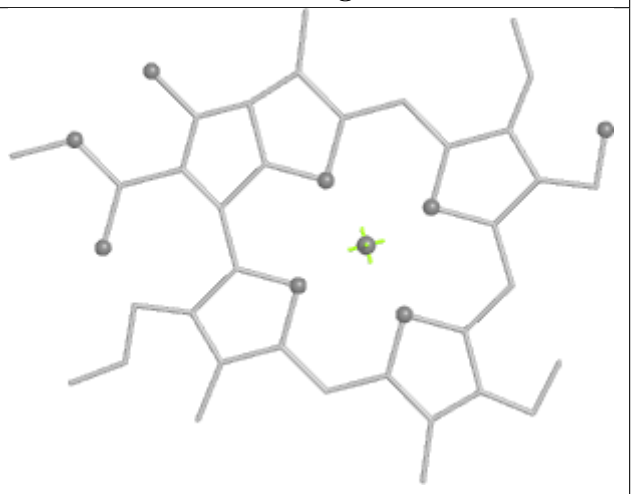
Bond lengths



Bond angles

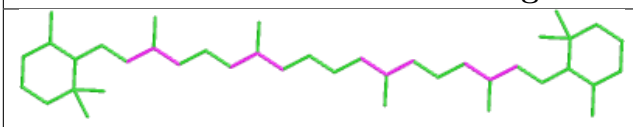


Torsions

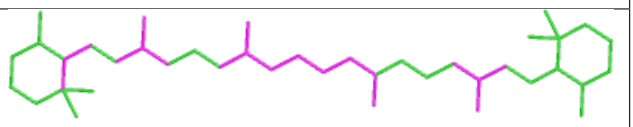


Rings

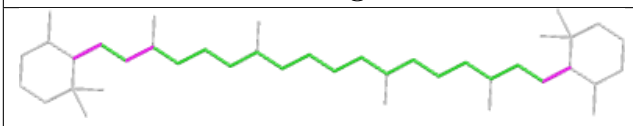
Ligand BCR H 101



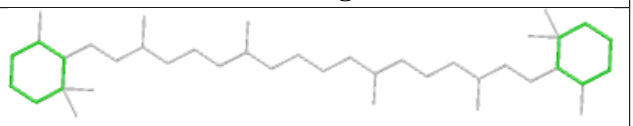
Bond lengths



Bond angles

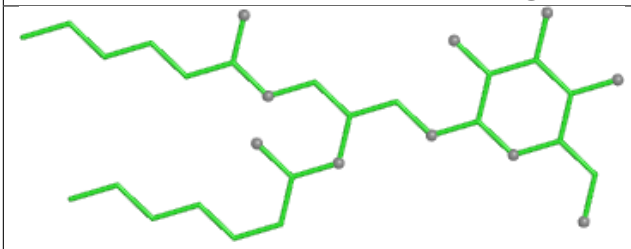


Torsions



Rings

Ligand LMG u 404



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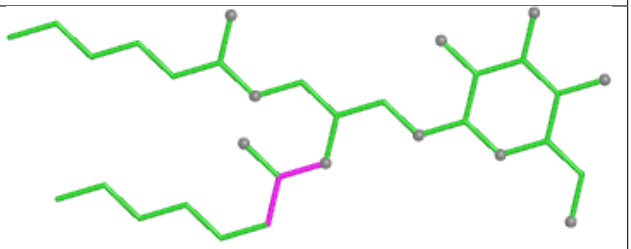
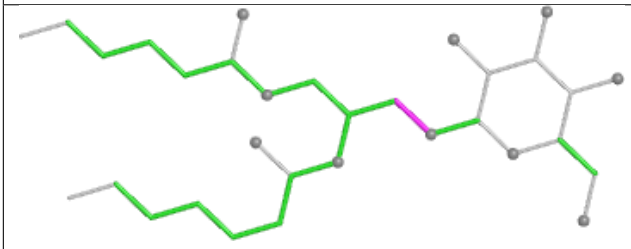


Bond angles



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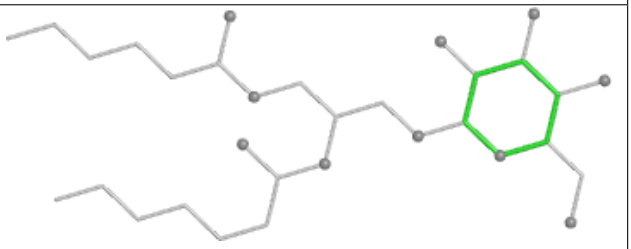
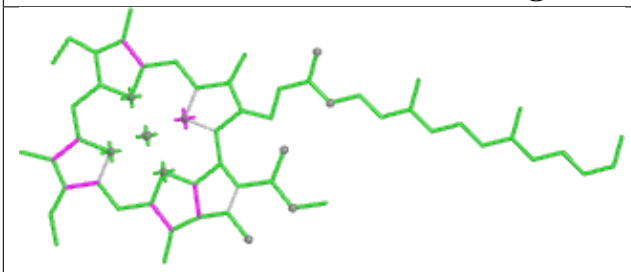


Rings

Ligand CLA y 312



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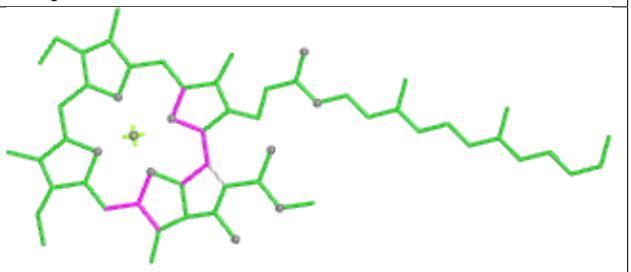
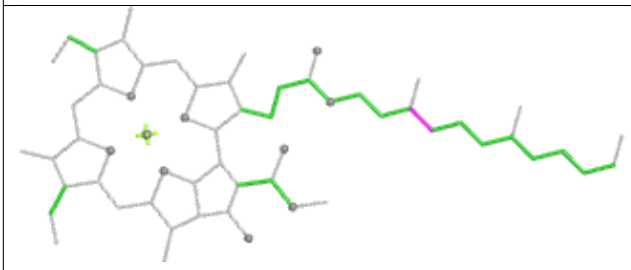


Bond angles



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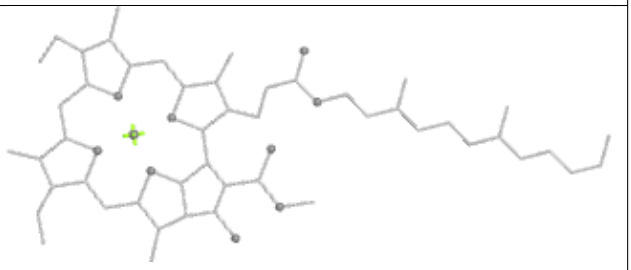
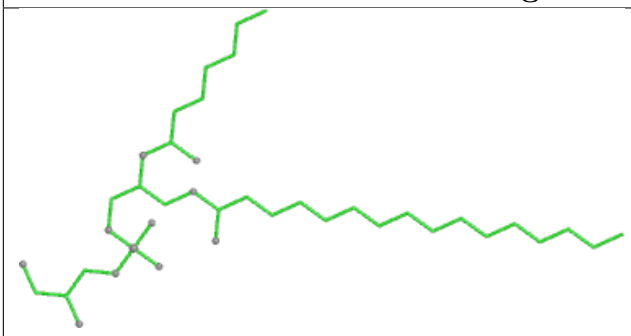


Rings

Ligand LHG N 301



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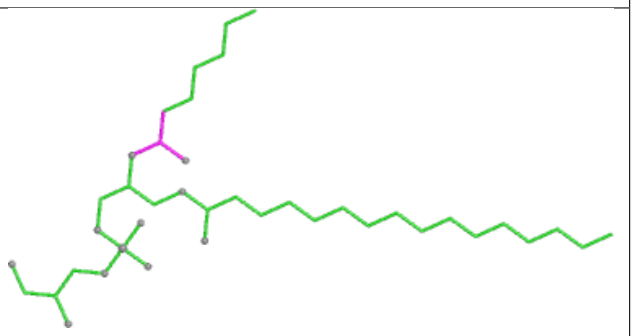
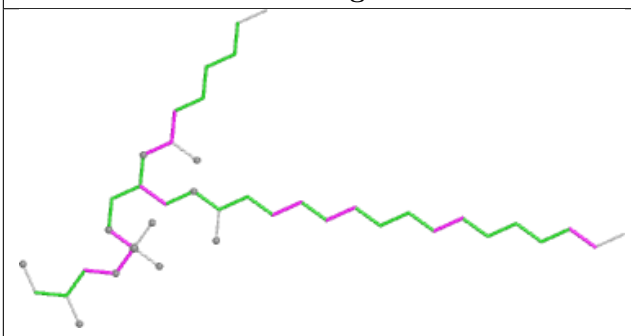


Bond angles



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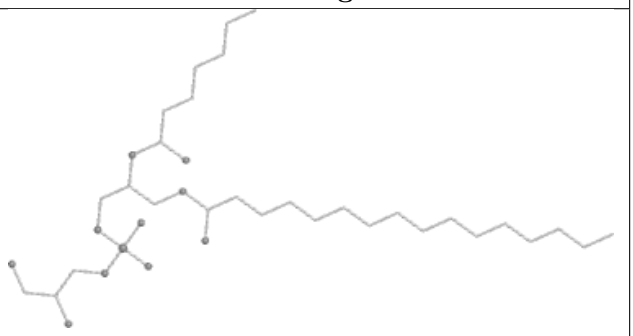
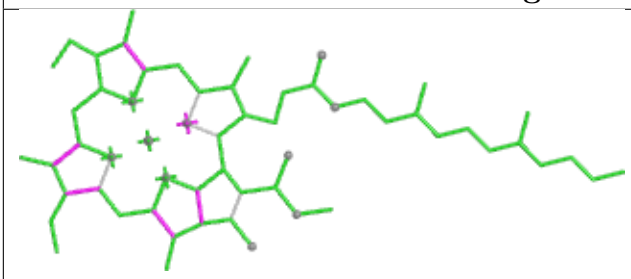


Rings

Ligand CLA U 415



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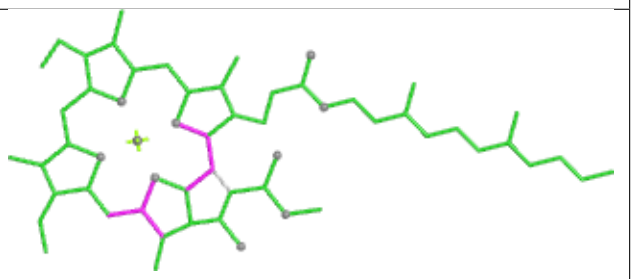
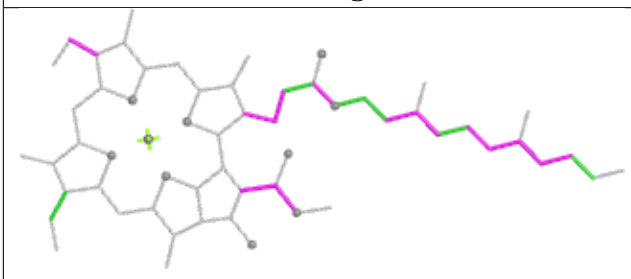


Bond angles



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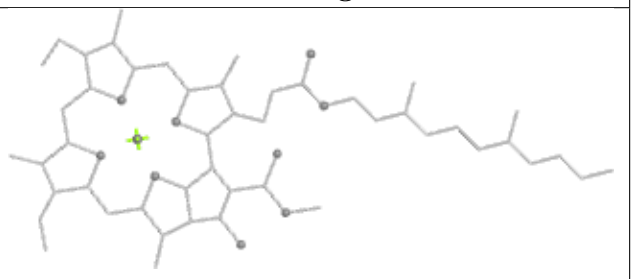
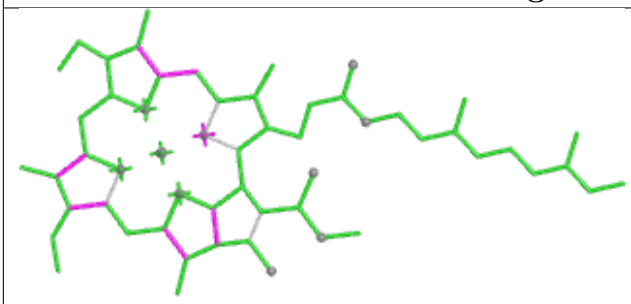
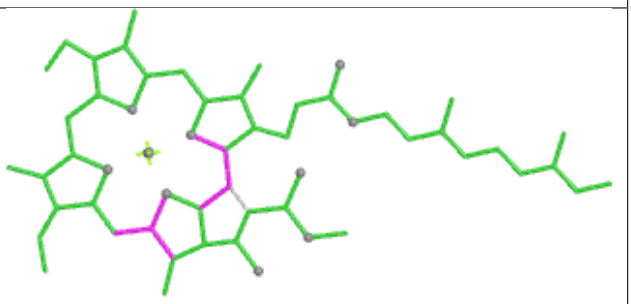
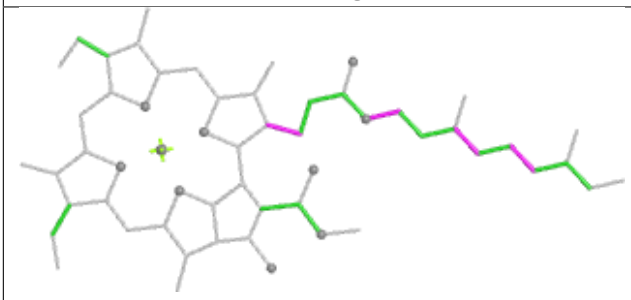
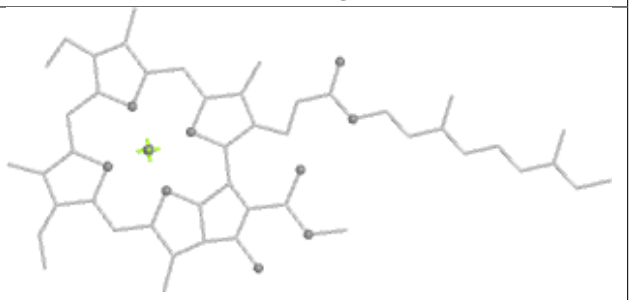
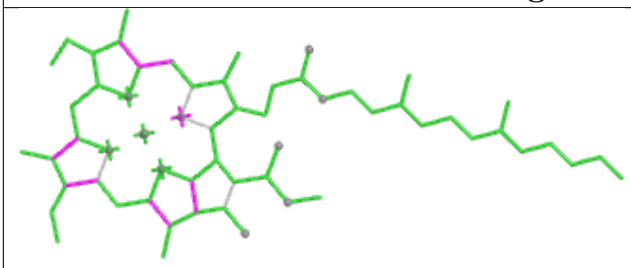
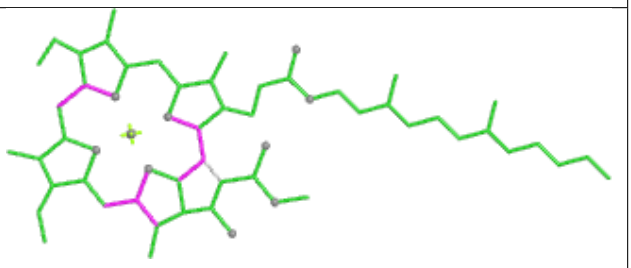
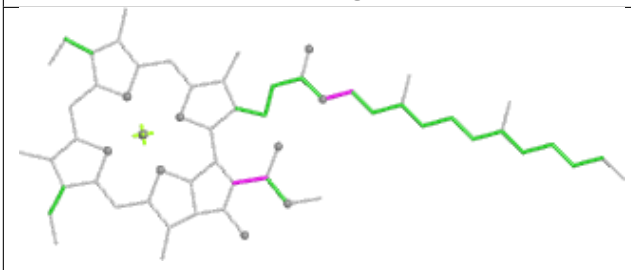
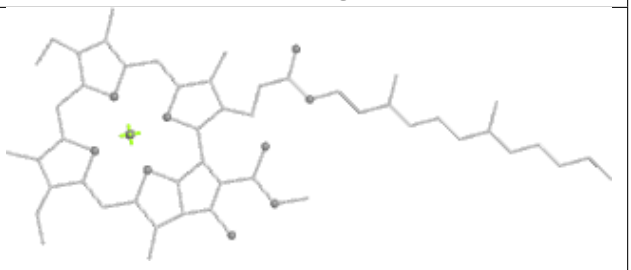
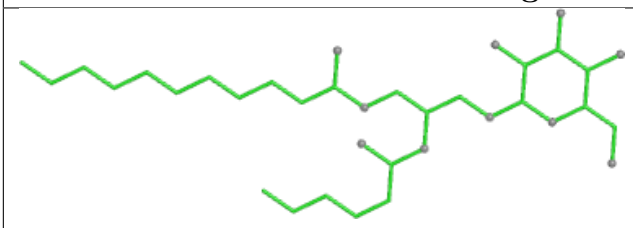


Rings

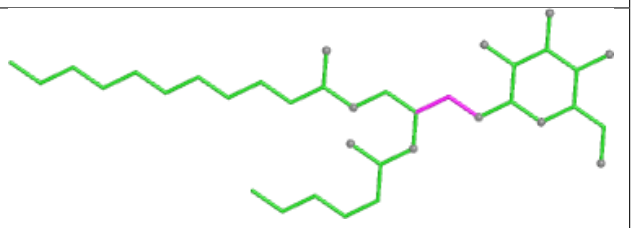
Ligand CLA u 413	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA v 305	
	
Bond lengths	Bond angles
	
Torsions	Rings

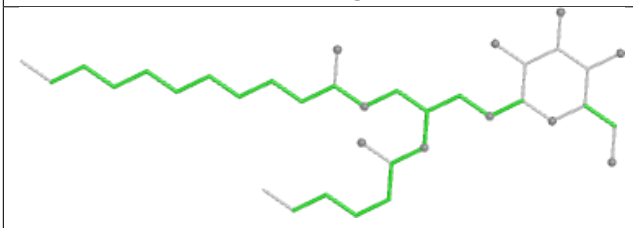
Ligand LMG F 201



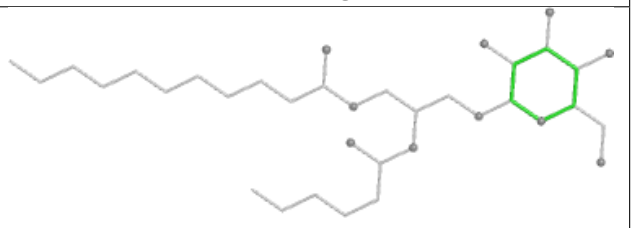
Bond lengths



Bond angles

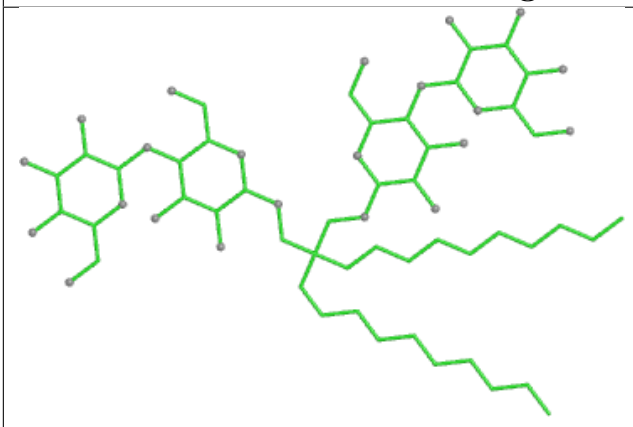


Torsions



Rings

Ligand LMN V 301



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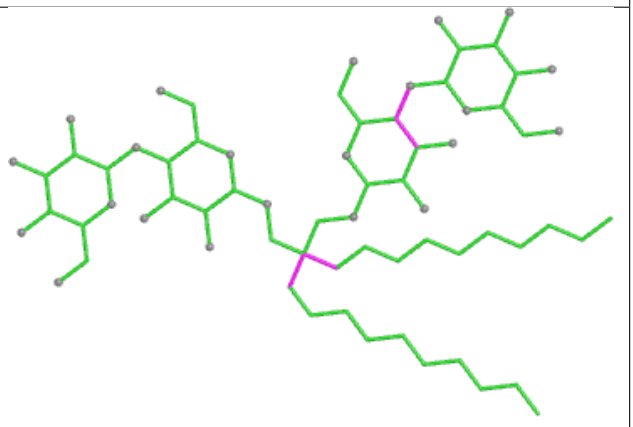
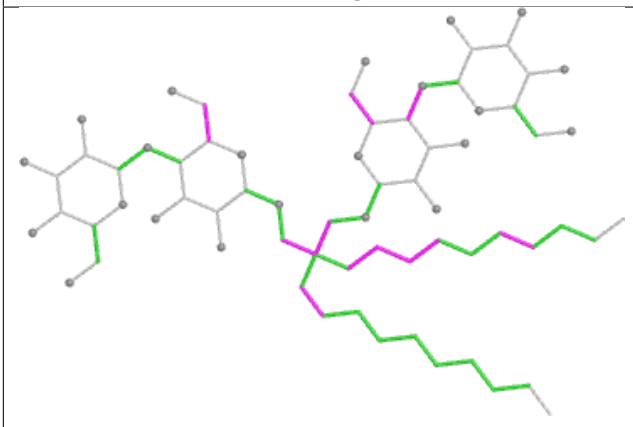


Bond angles



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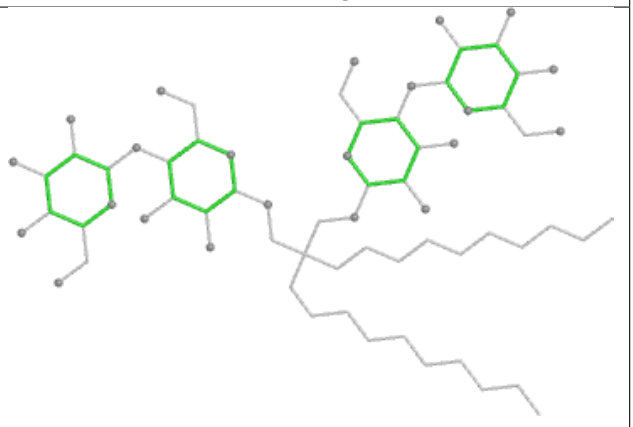
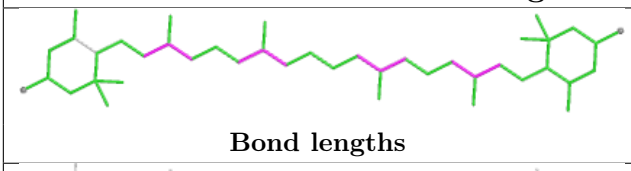
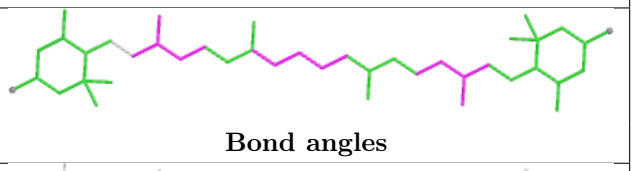


Rings

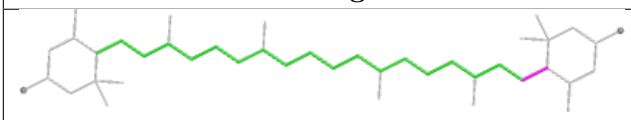
Ligand LUT u 419



Bond lengths



Bond angles



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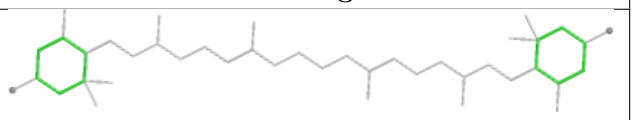
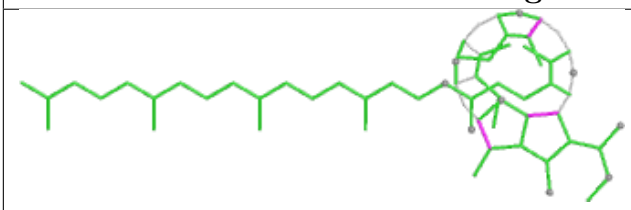


Rings

Ligand PHO d 407



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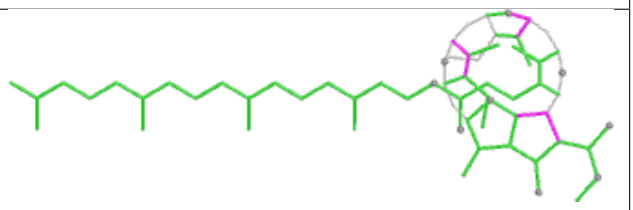
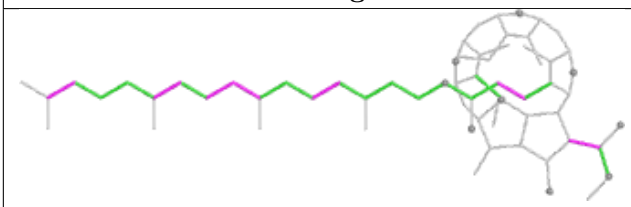


Bond angles



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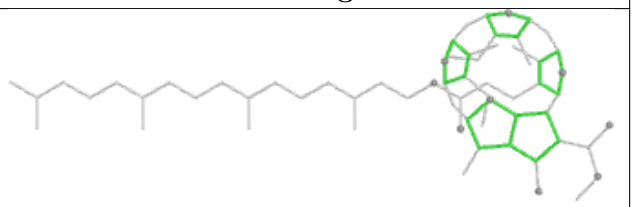
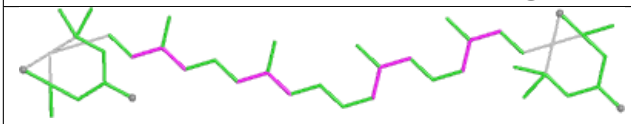


Rings

Ligand XAT N 318



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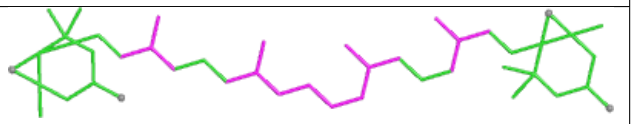
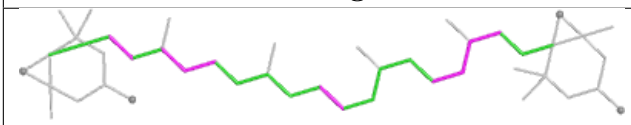


Bond angles



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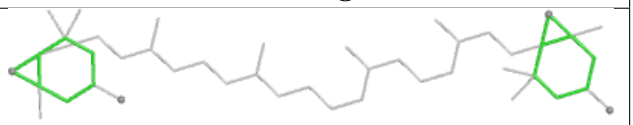
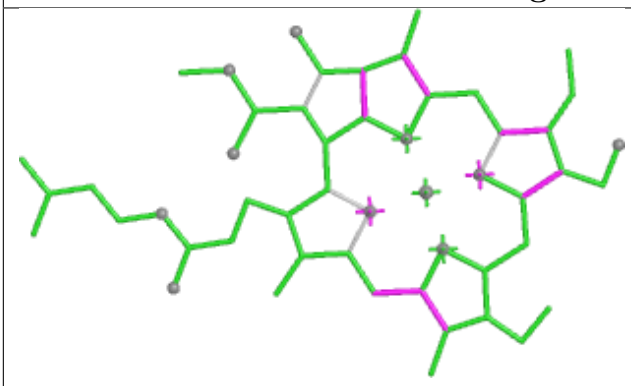


Rings

Ligand CHL s 309



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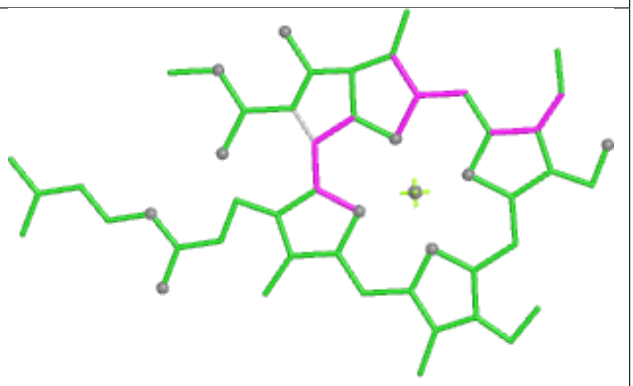
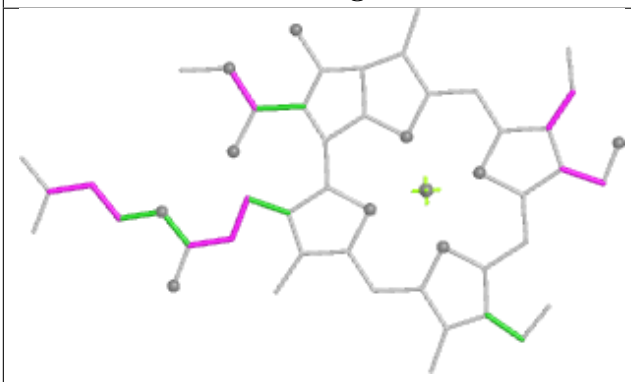


Bond angles



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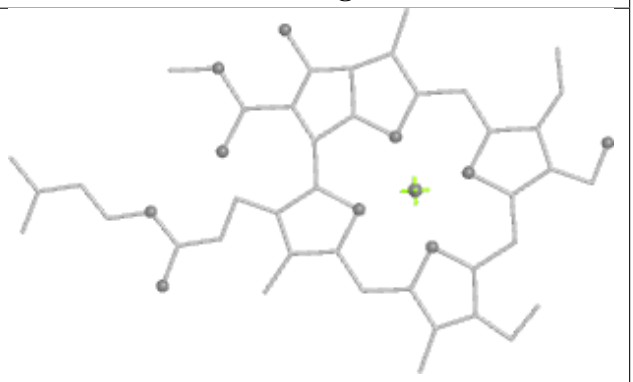
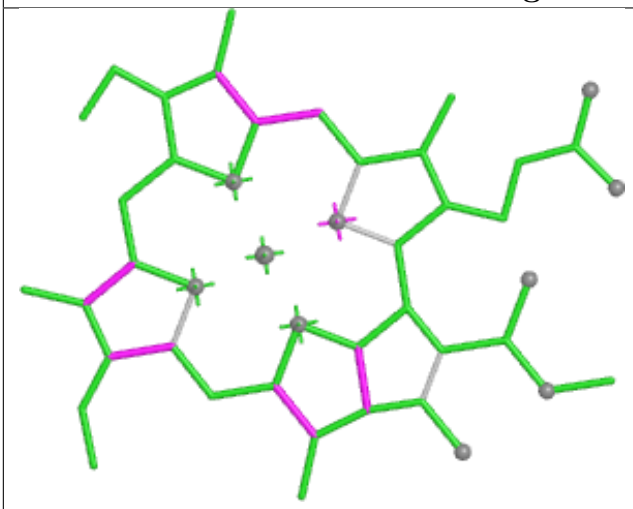


Rings

Ligand CLA G 305



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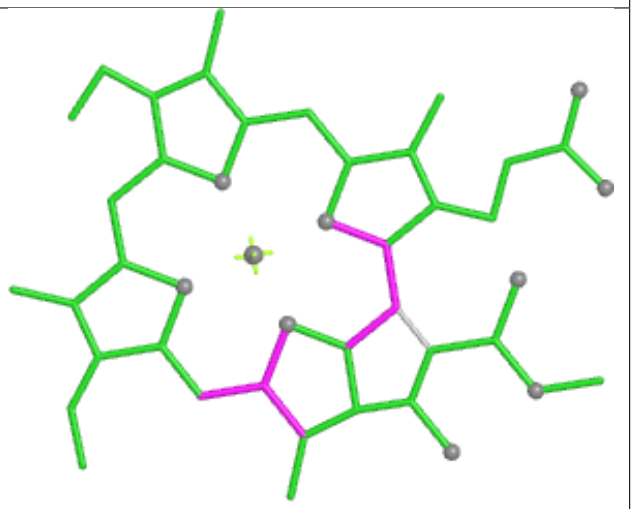
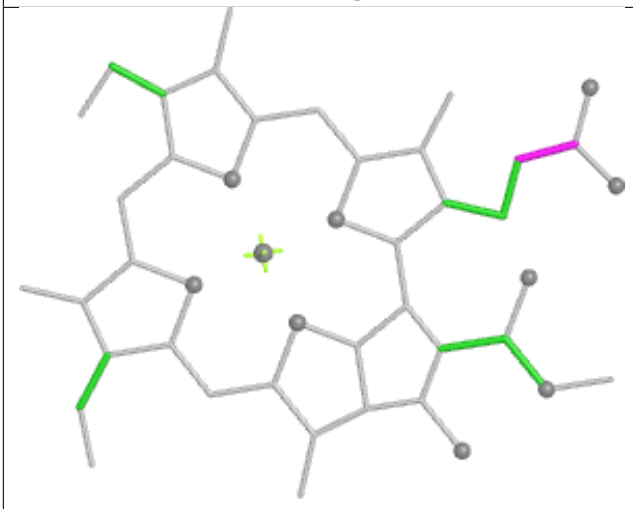


Bond angles

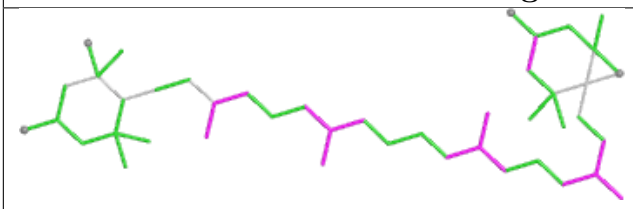


Torsions



Rings

Ligand NEX N 319



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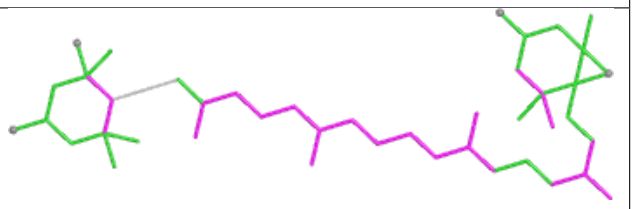
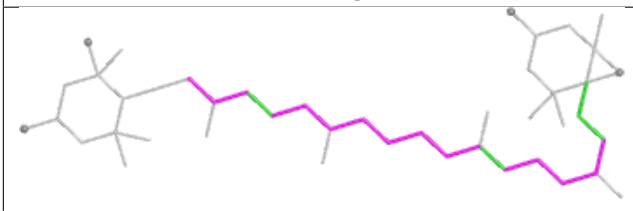


Bond angles

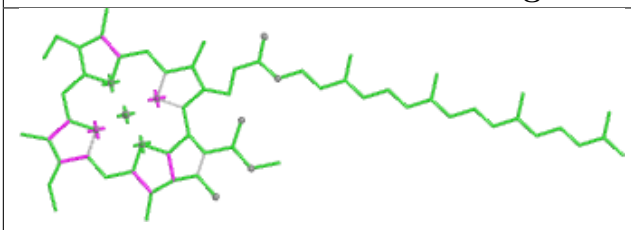


Torsions

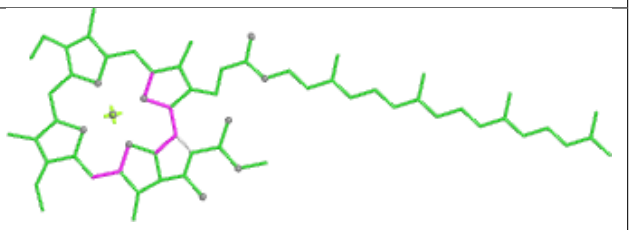


Rings

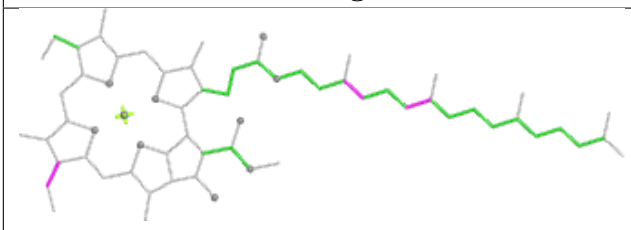
Ligand CLA D 409



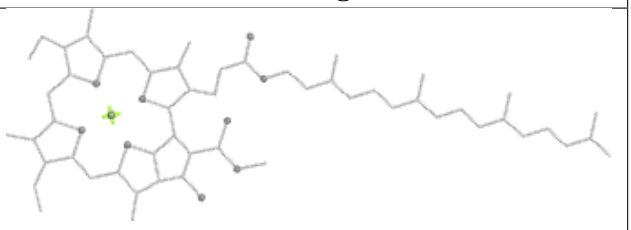
Bond lengths



Bond angles

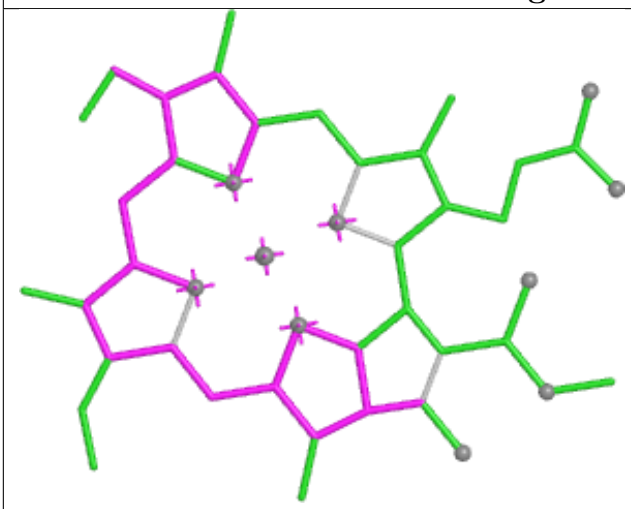


Torsions



Rings

Ligand CLA 1 303



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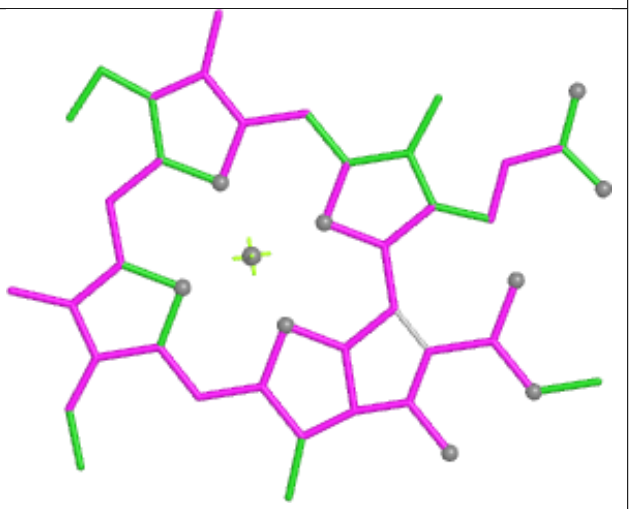

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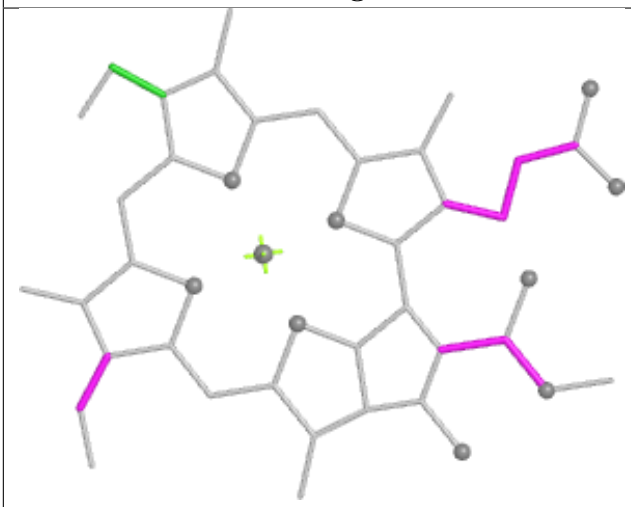

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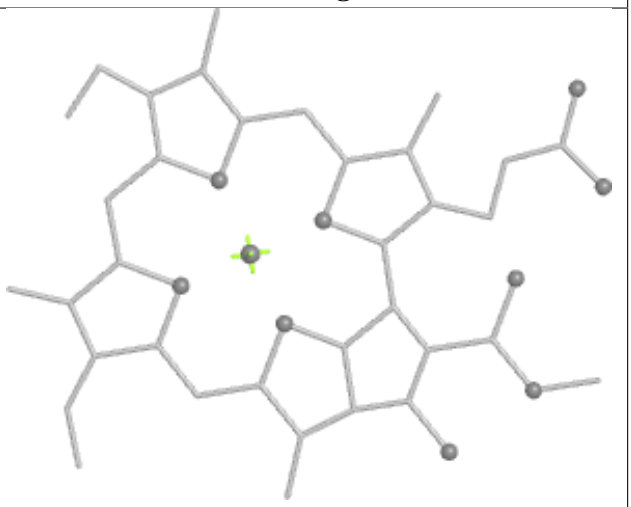
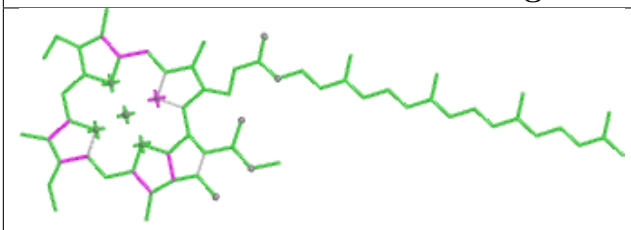
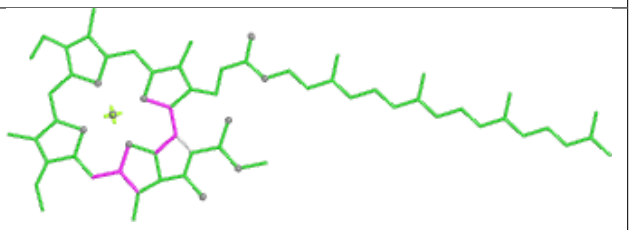
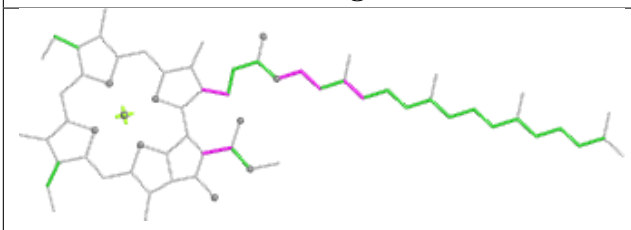
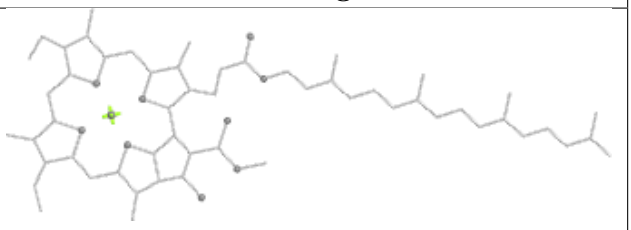
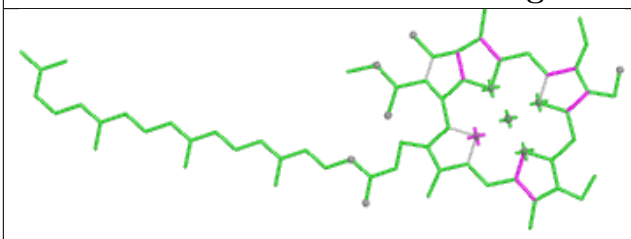
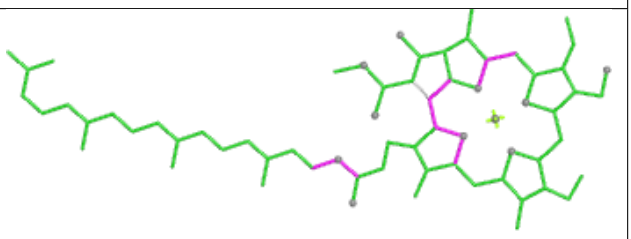
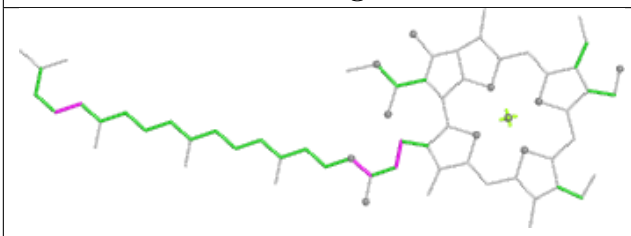
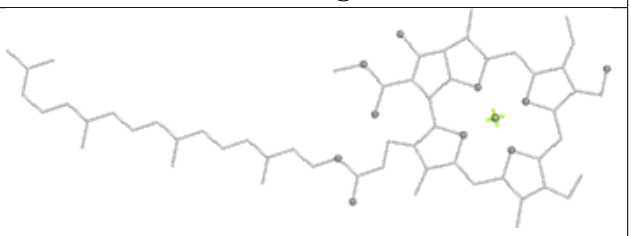
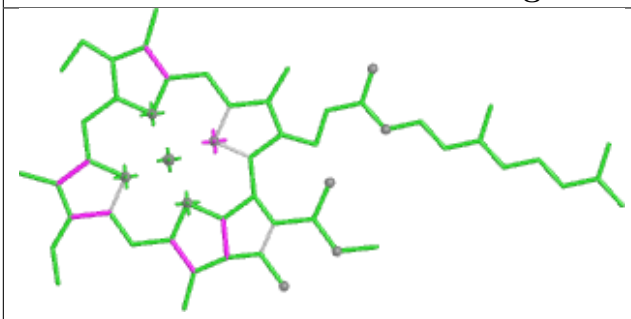
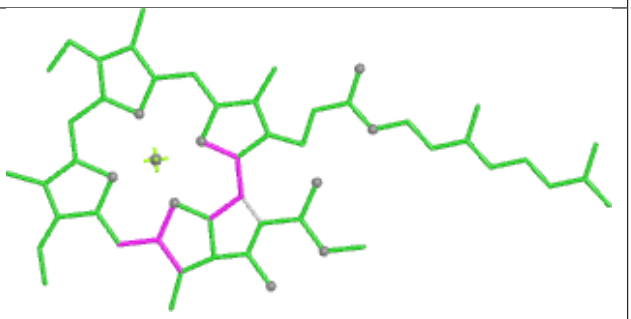
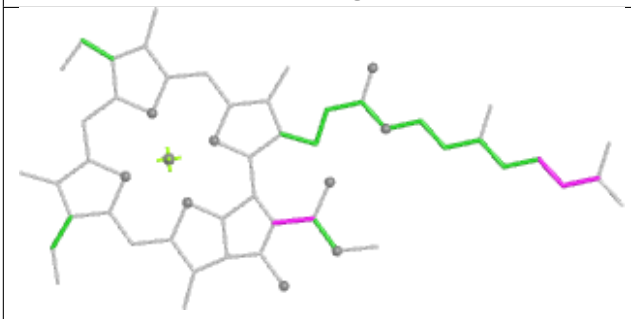
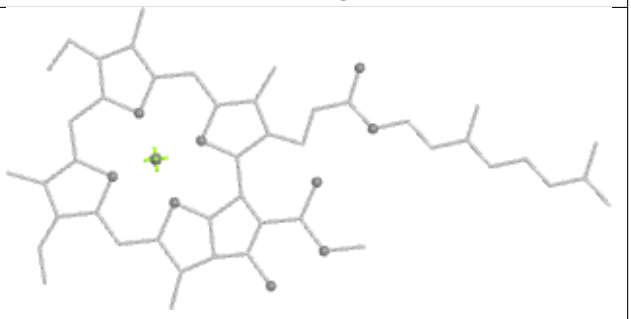
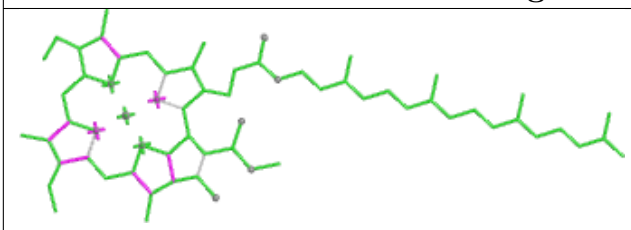
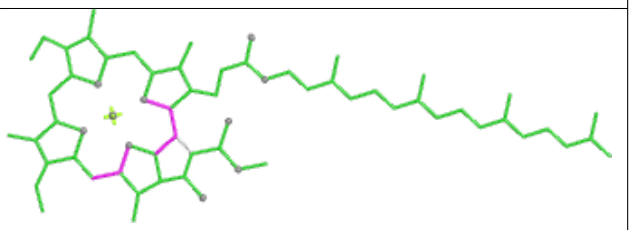
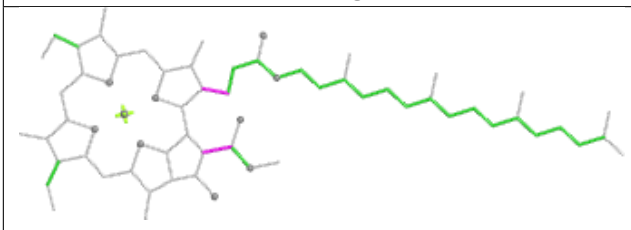
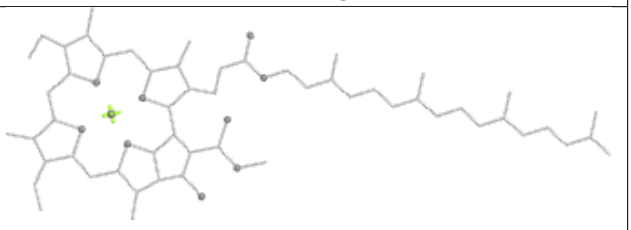


Rings

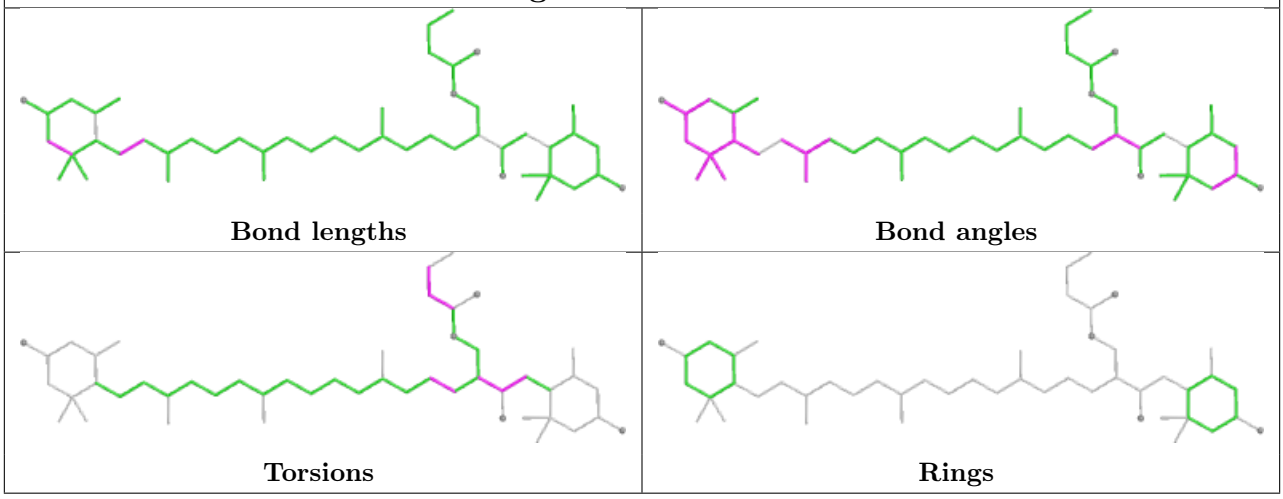
Ligand CLA C 509	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CHL n 310	
	
Bond lengths	Bond angles
	
Torsions	Rings

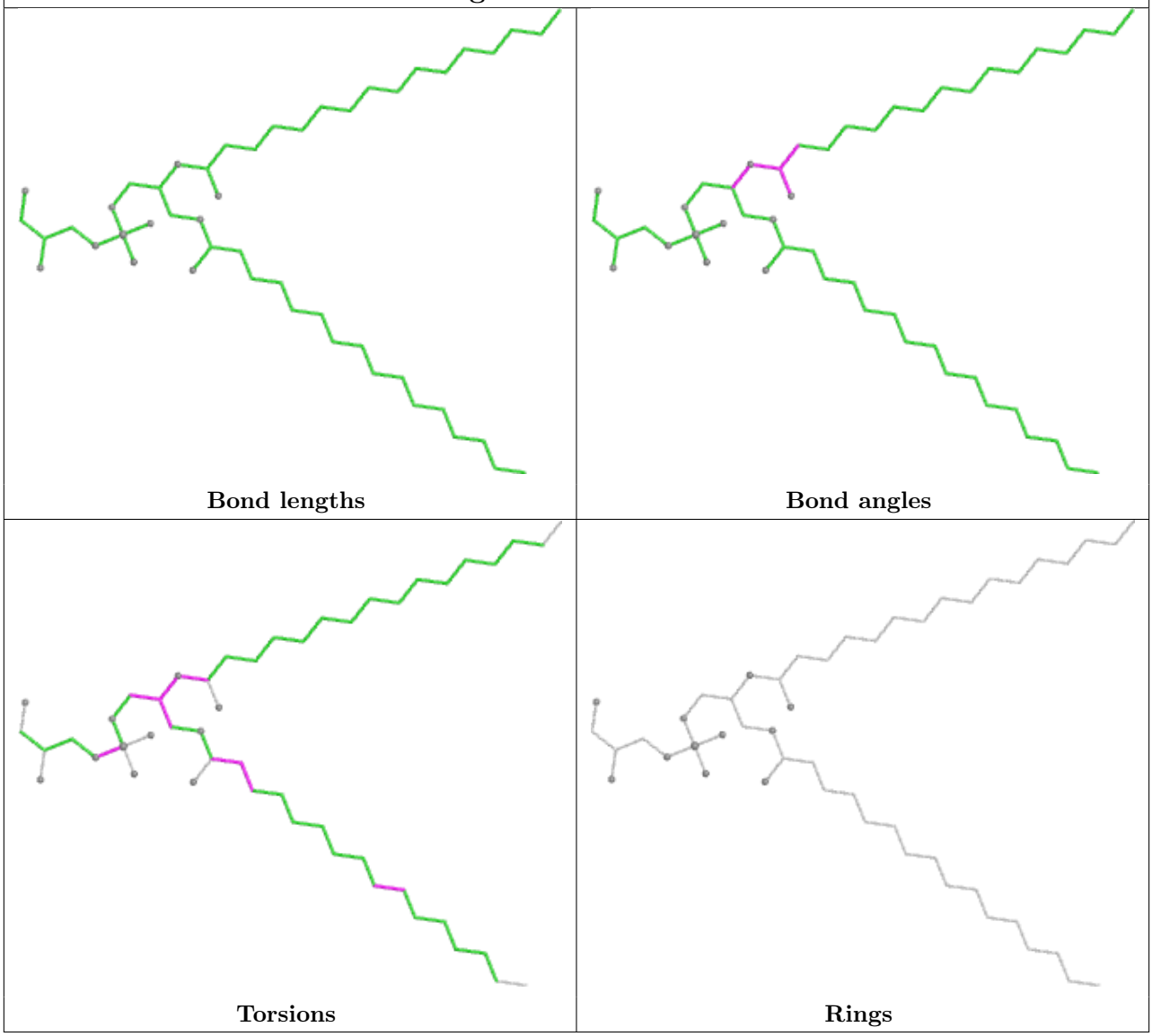
Ligand CLA U 407	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA b 615	
 Bond lengths	 Bond angles
 Torsions	 Rings

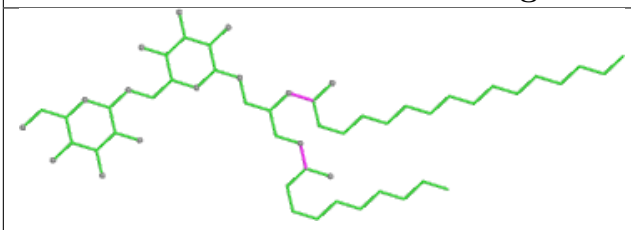
Ligand 0UR u 420



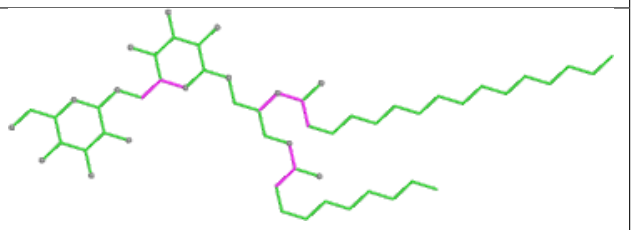
Ligand LHG D 405



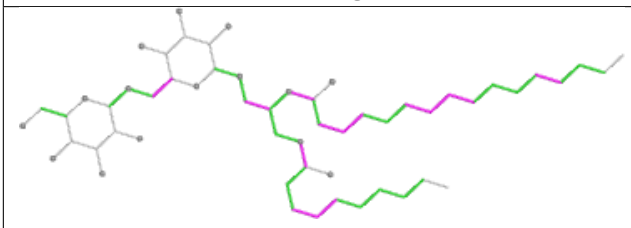
Ligand DGD C 520



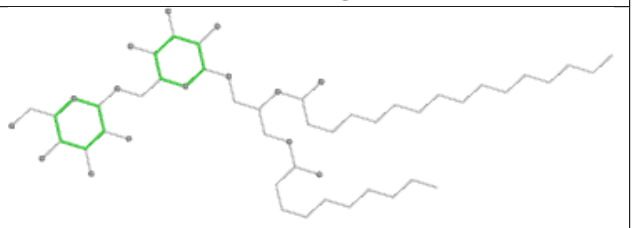
Bond lengths



Bond angles

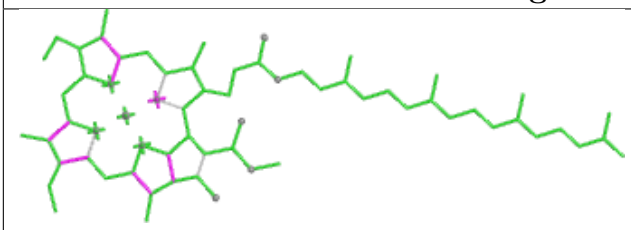


Torsions



Rings

Ligand CLA c 506



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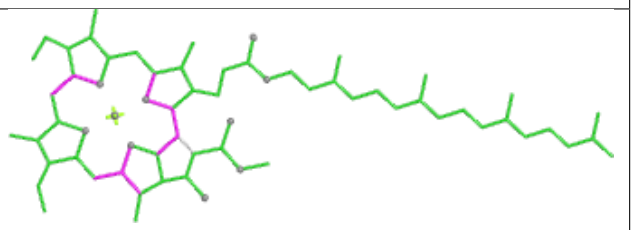
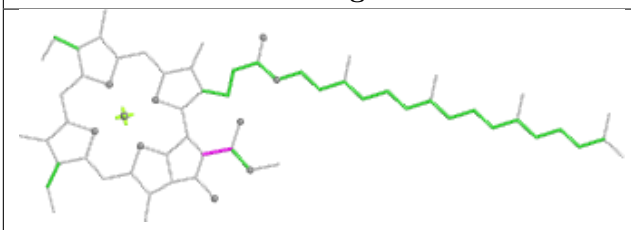


Bond angles



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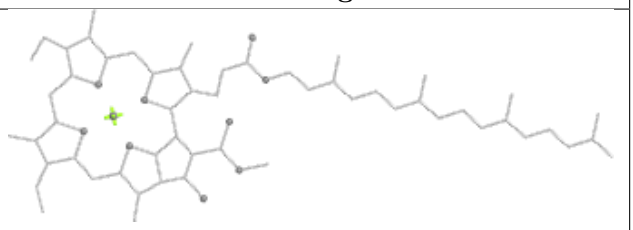
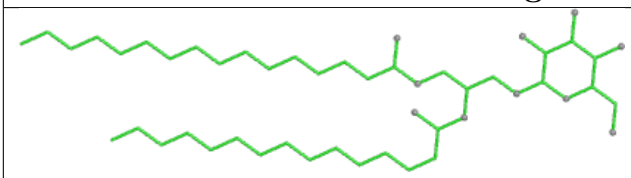
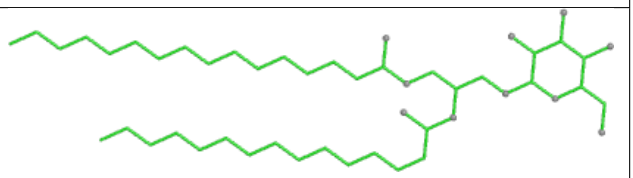


Rings

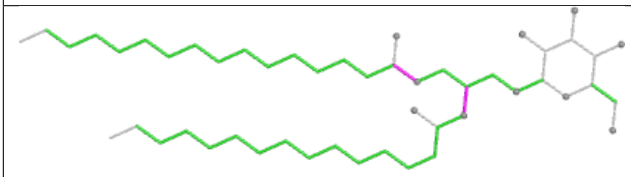
Ligand LMG c 526



Bond lengths



Bond angles



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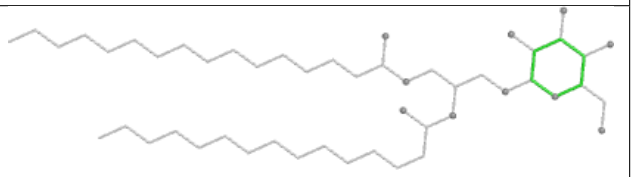
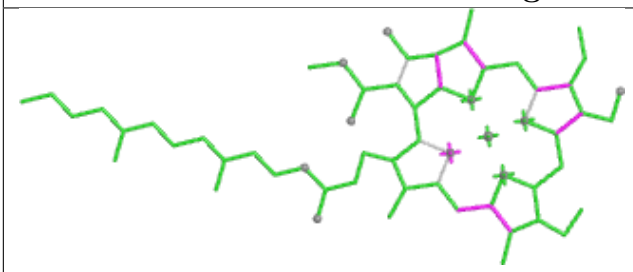


Rings

Ligand CHL U 405



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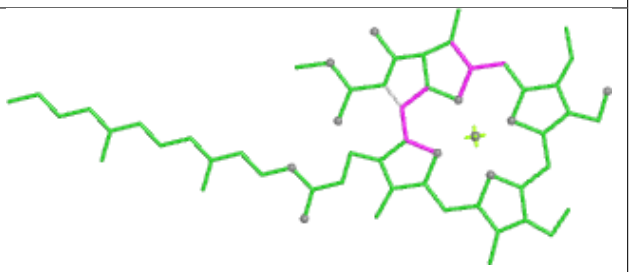
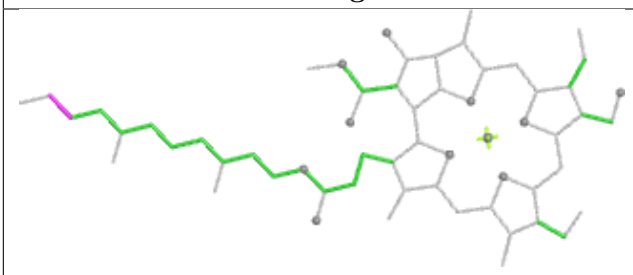


Bond angles



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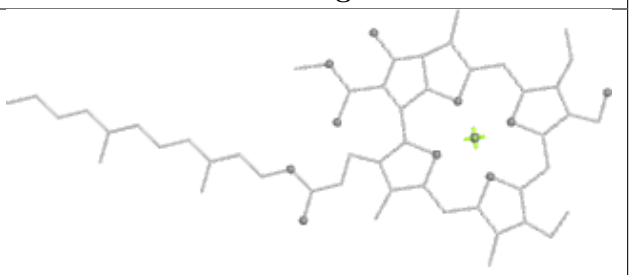
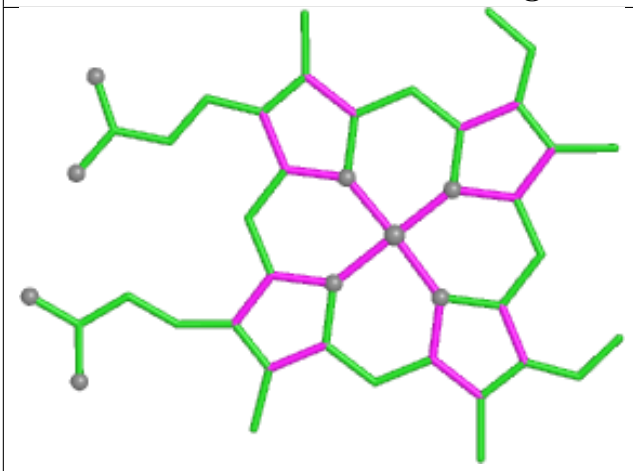


Rings

Ligand HEM e 101



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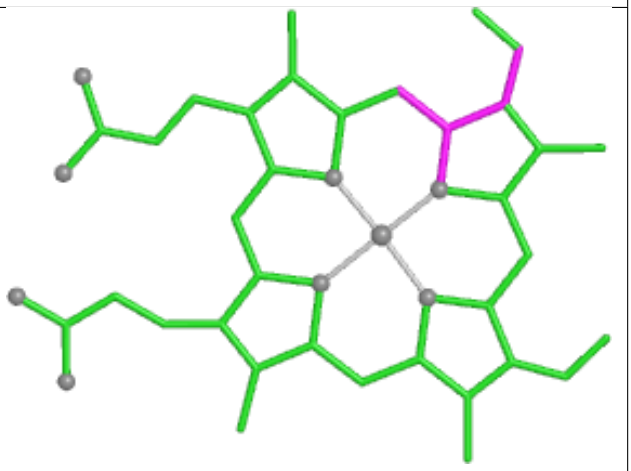
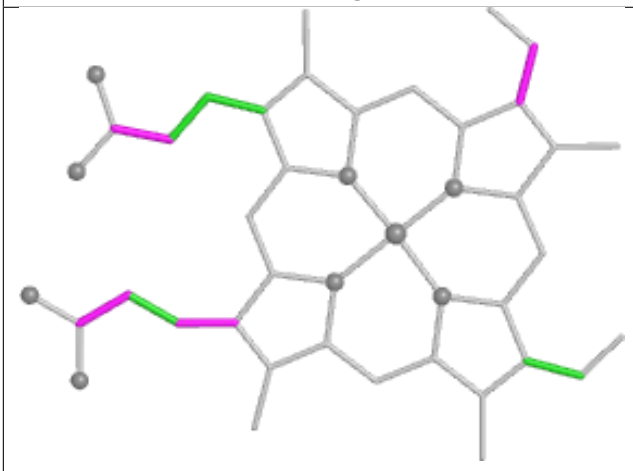


Bond angles



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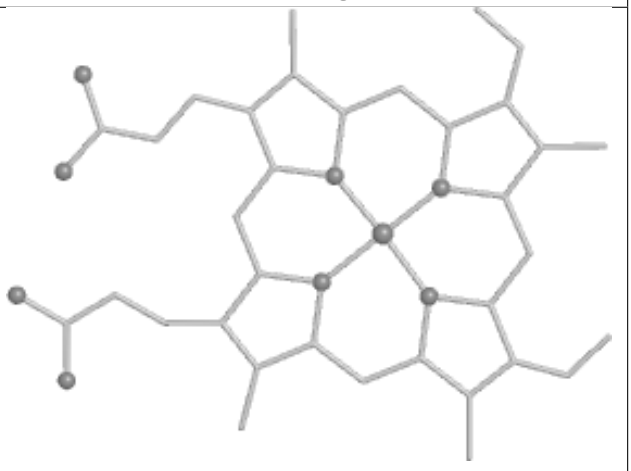
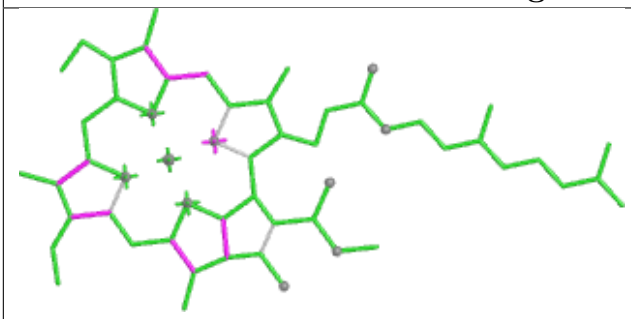


Rings

Ligand CLA v 313



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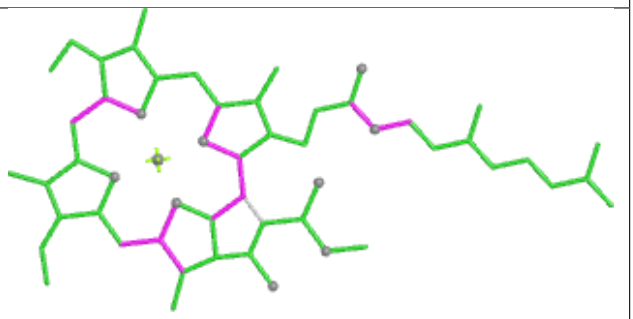
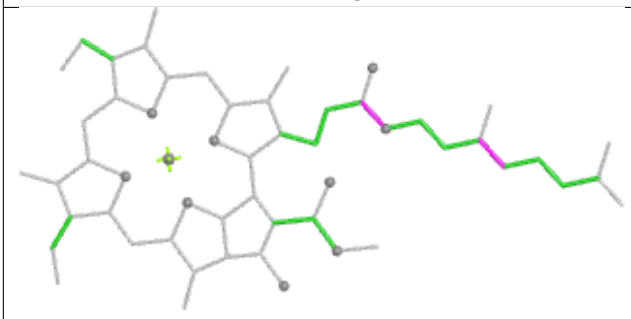


Bond angles



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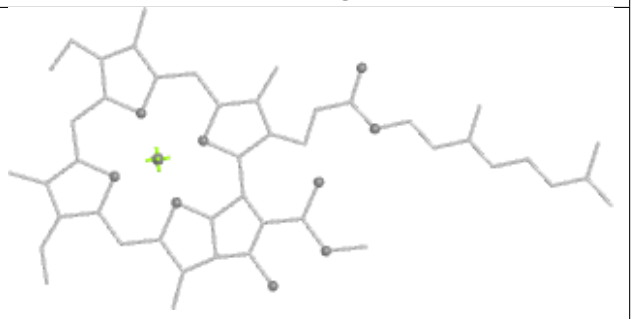
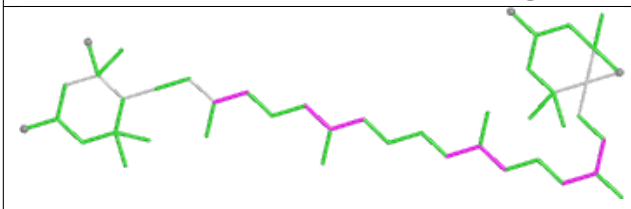


Rings

Ligand NEX V 322



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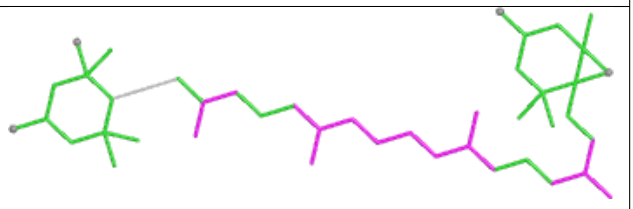
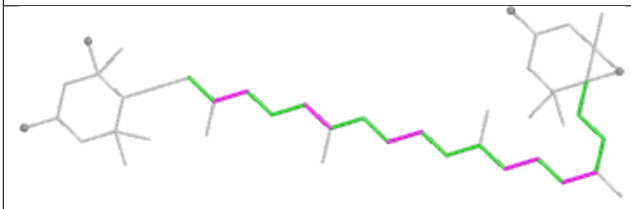


Bond angles



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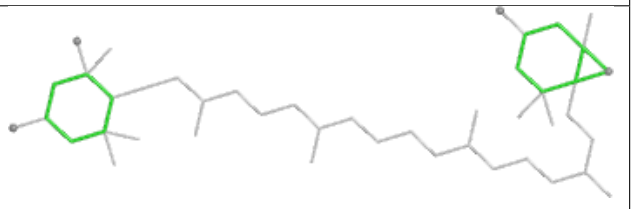
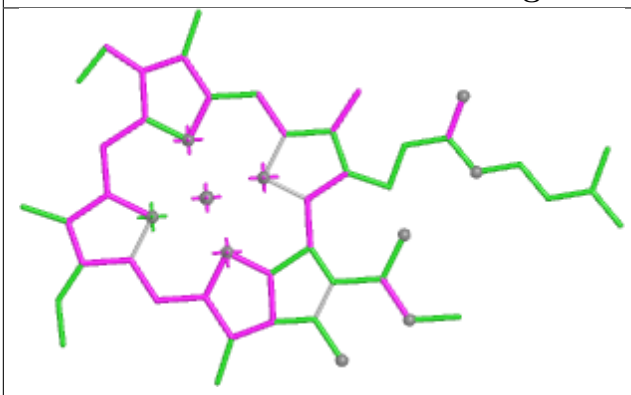
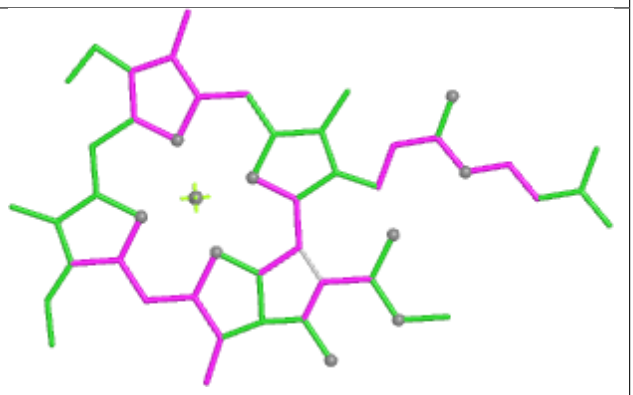


Rings

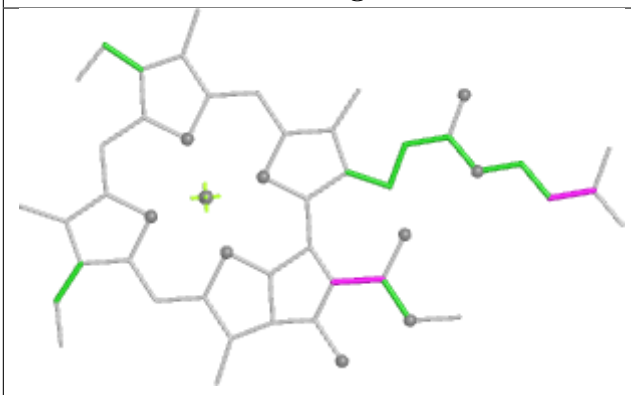
Ligand CLA G 308



Bond lengths



Bond angles



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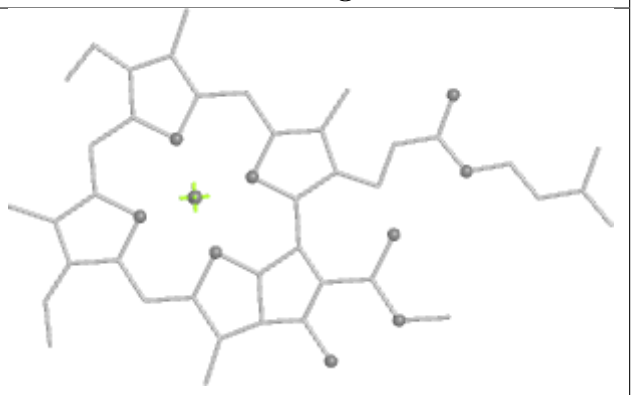
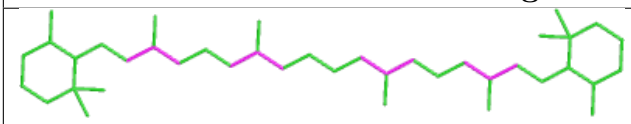


Rings

Ligand BCR K 102



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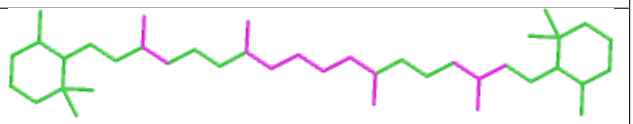
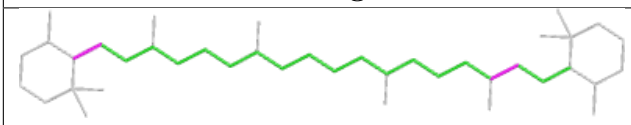
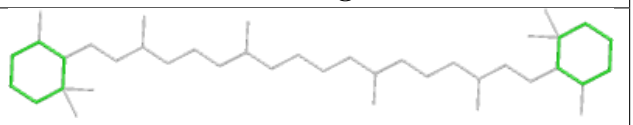


Bond angles

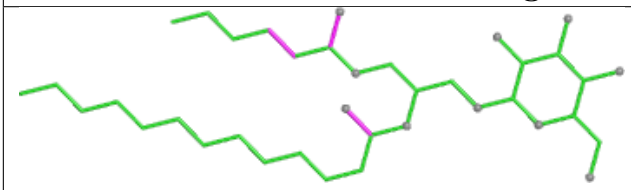


Torsions

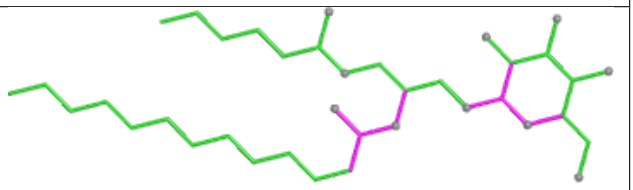


Rings

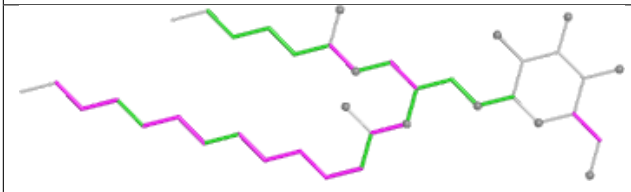
Ligand LMG d 410



Bond lengths



Bond angles

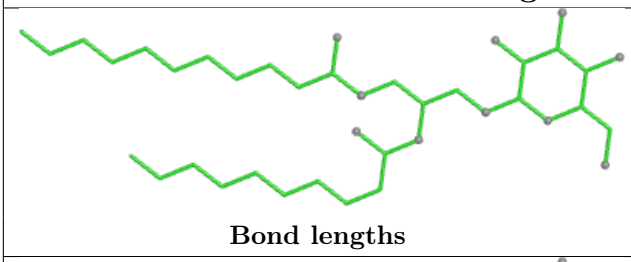


Torsions



Rings

Ligand LMG C 523



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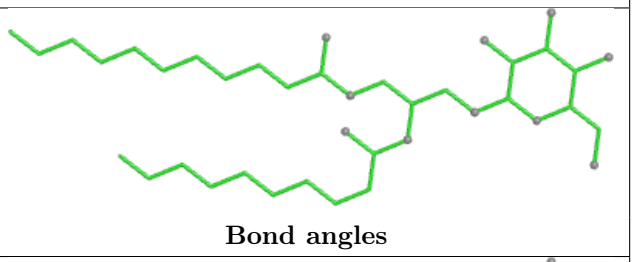
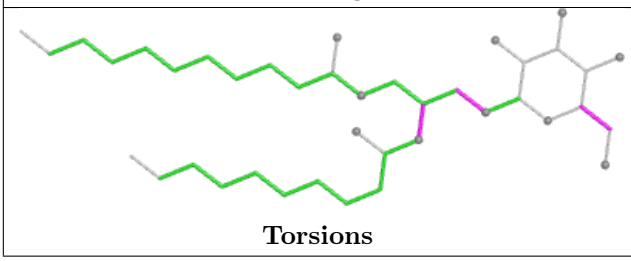


Bond angles



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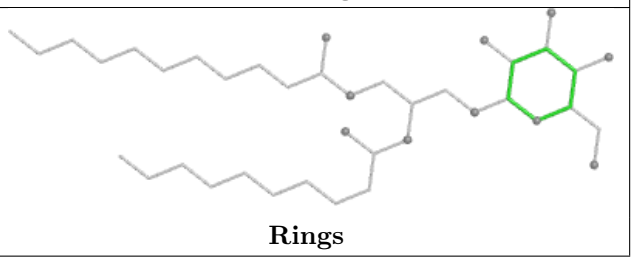
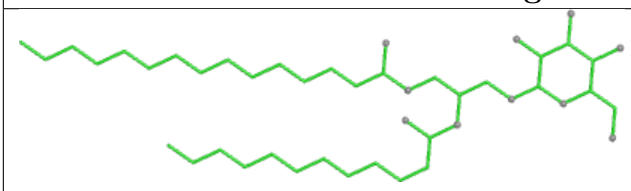


Rings

Ligand LMG a 414



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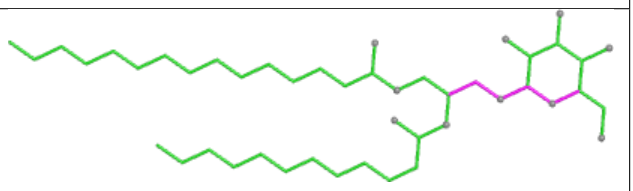
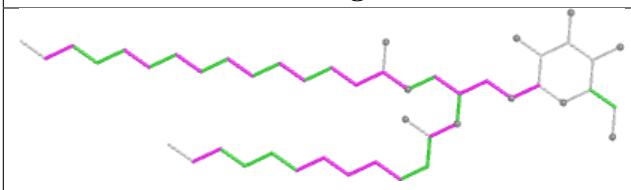


Bond angles



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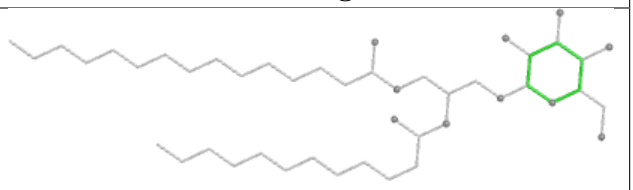
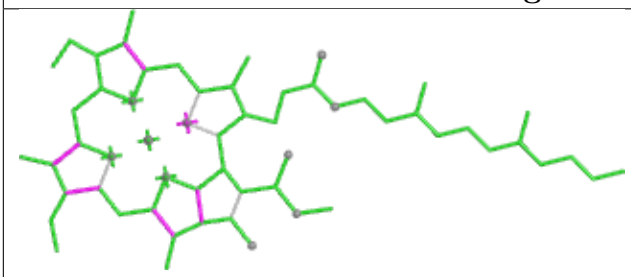


Rings

Ligand CLA A 407



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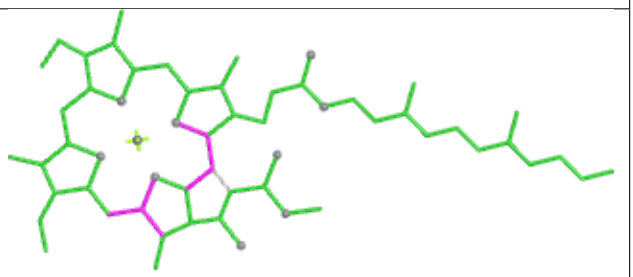
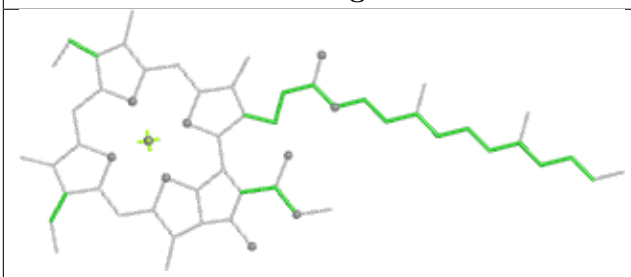


Bond angles



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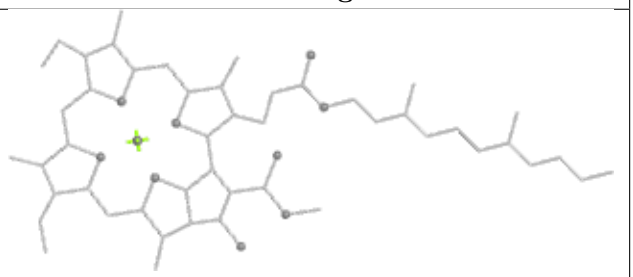
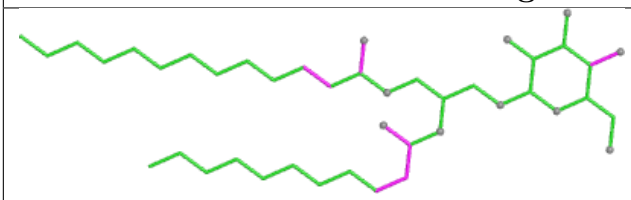
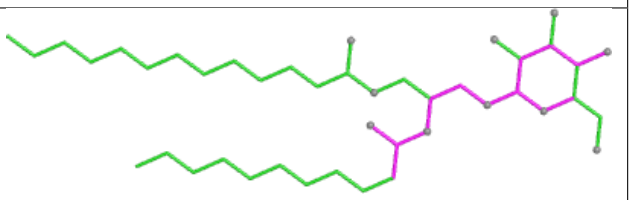
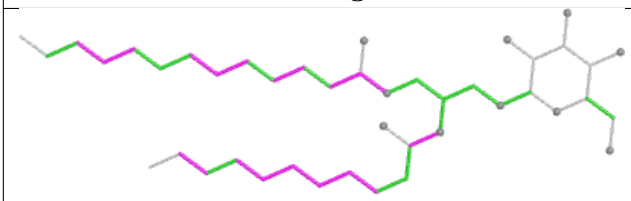
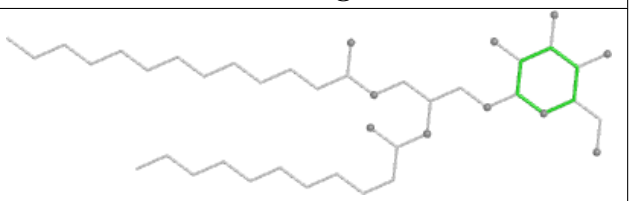
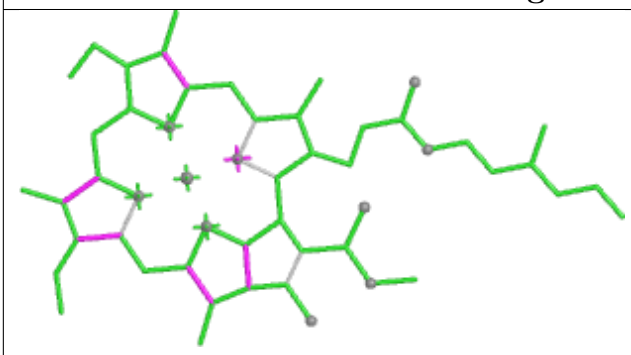
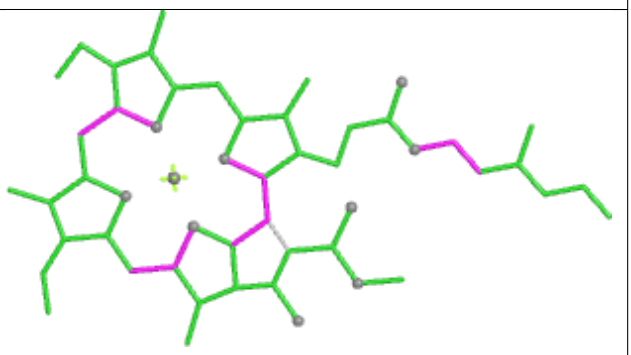
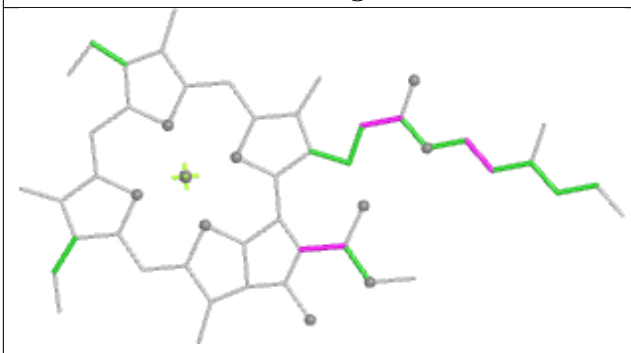
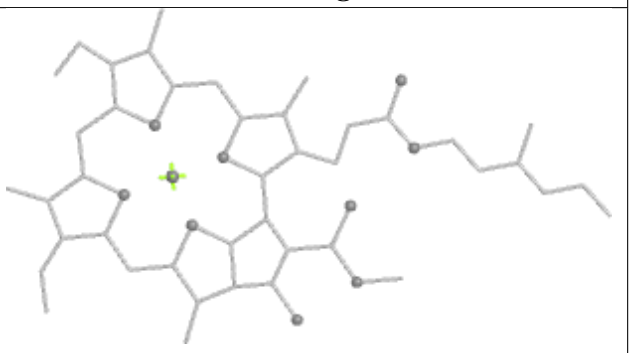
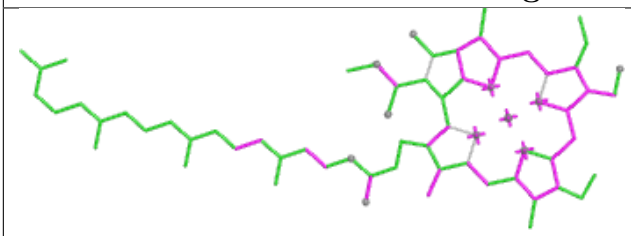
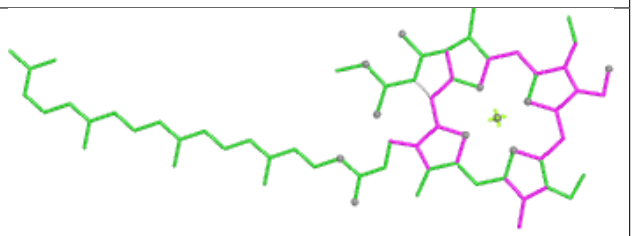
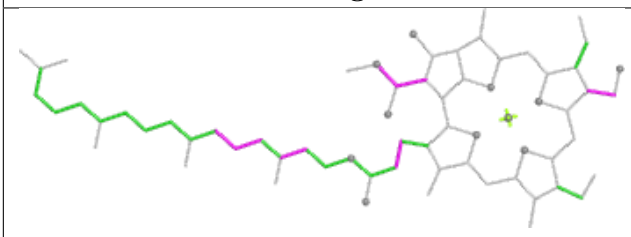
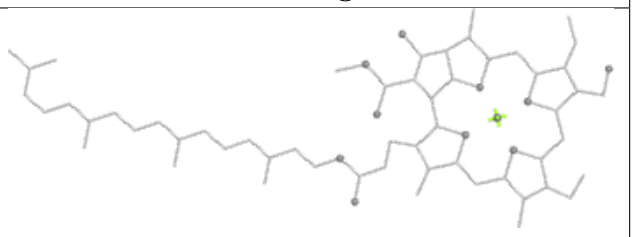
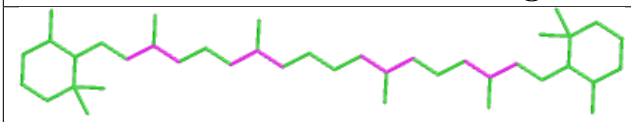
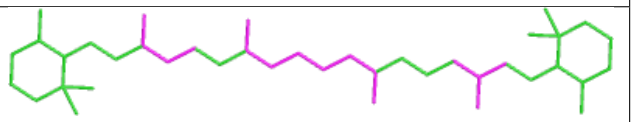
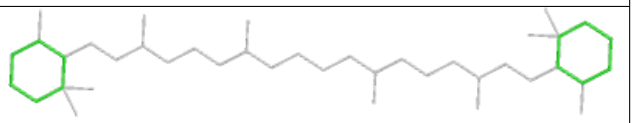


Rings

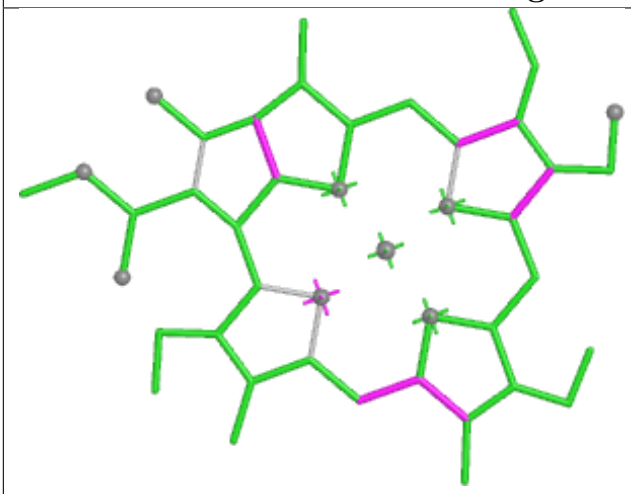
Ligand LMG m 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA n 317	
 Bond lengths	 Bond angles
 Torsions	 Rings

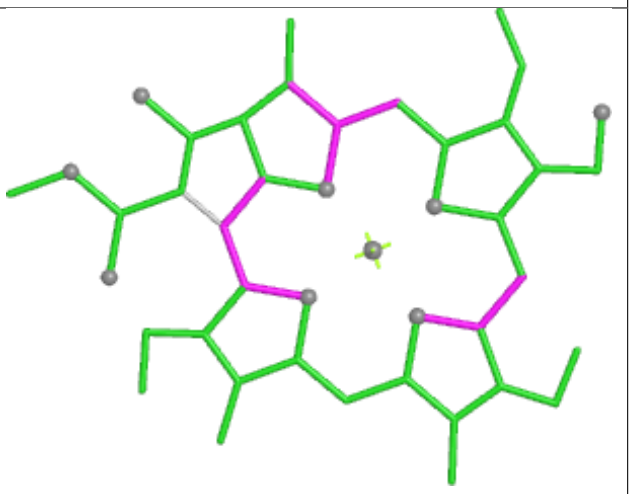
Ligand CHL N 302	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCR T 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

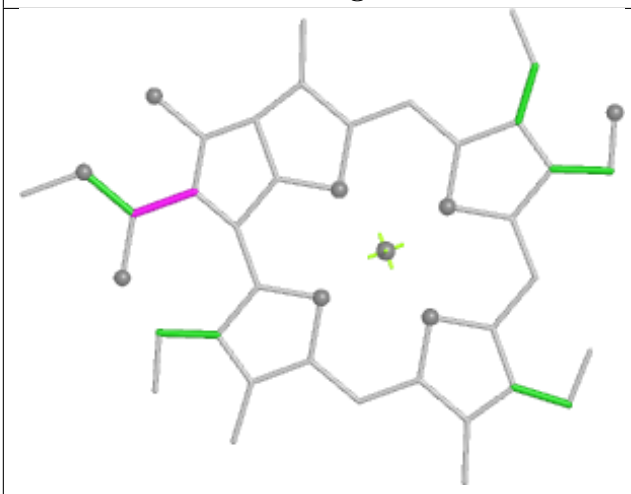
Ligand CHL 0 310



Bond lengths



Bond angles



Torsions

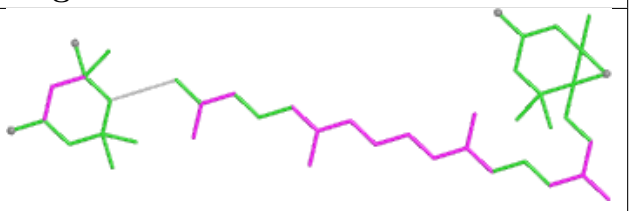


Rings

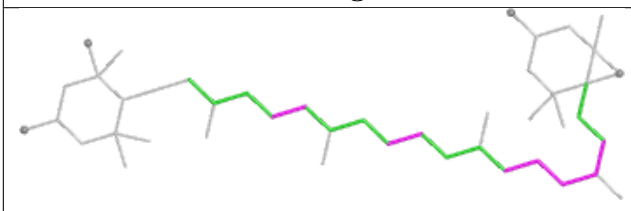
Ligand NEX g 319



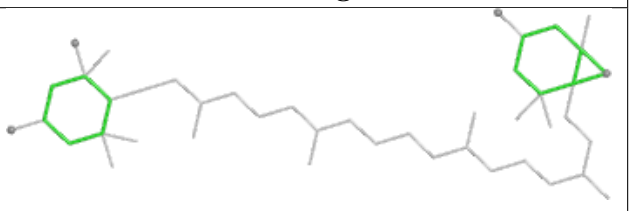
Bond lengths



Bond angles

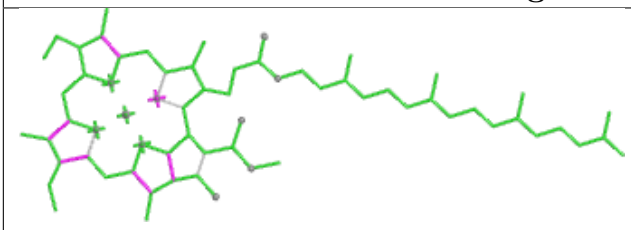


Torsions



Rings

Ligand CLA n 316



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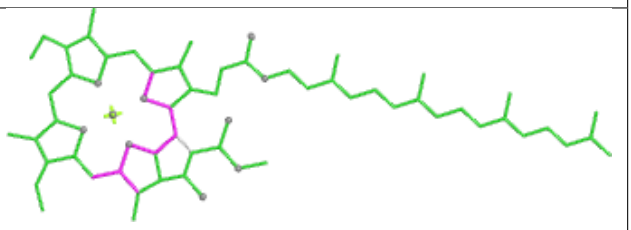
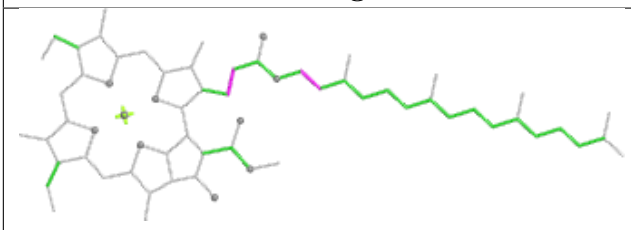
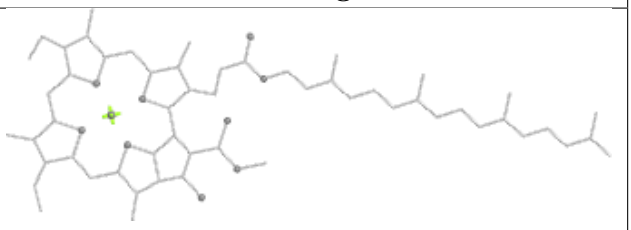


Bond angles

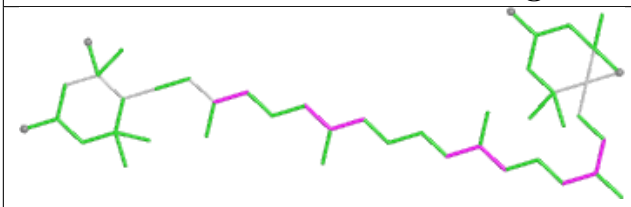


Torsions



Rings

Ligand NEX n 302



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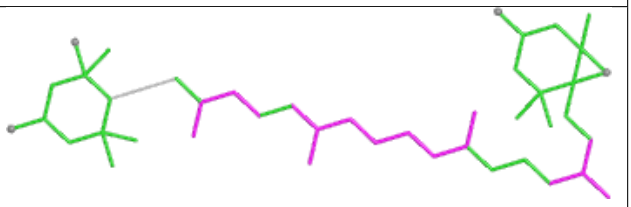
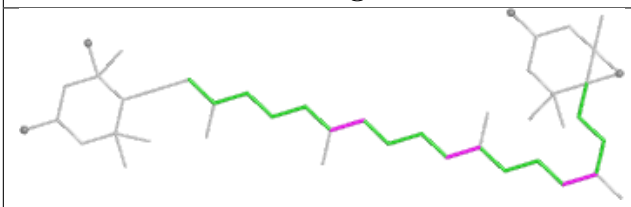


Bond angles



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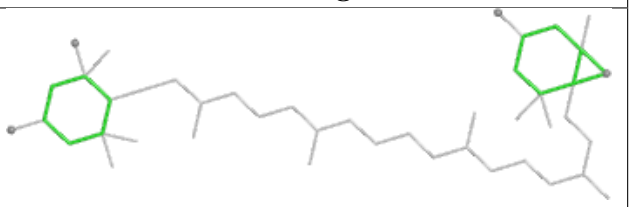
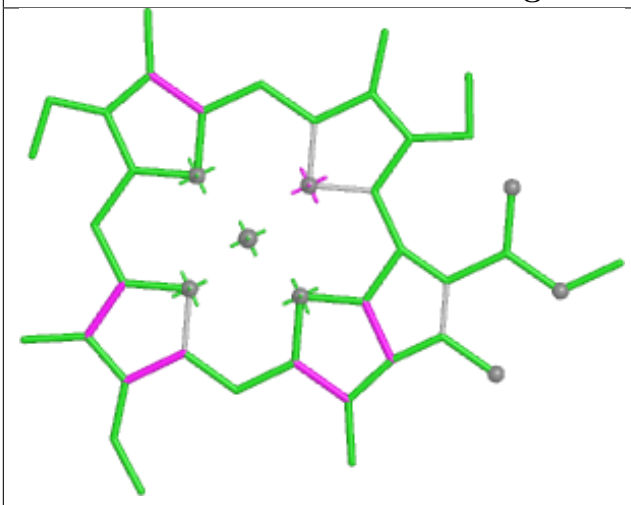
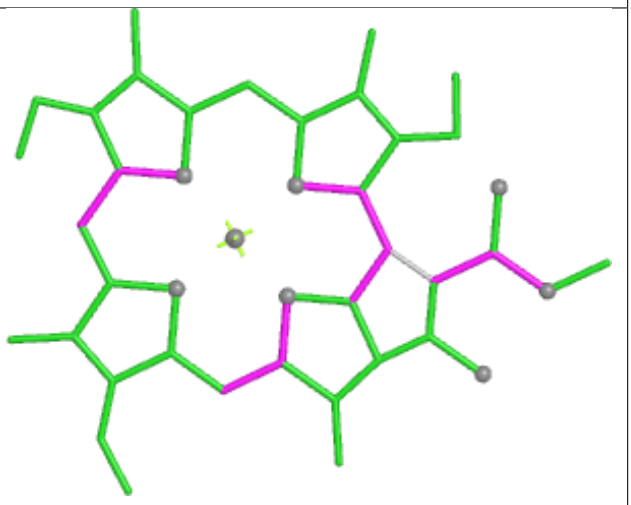


Rings

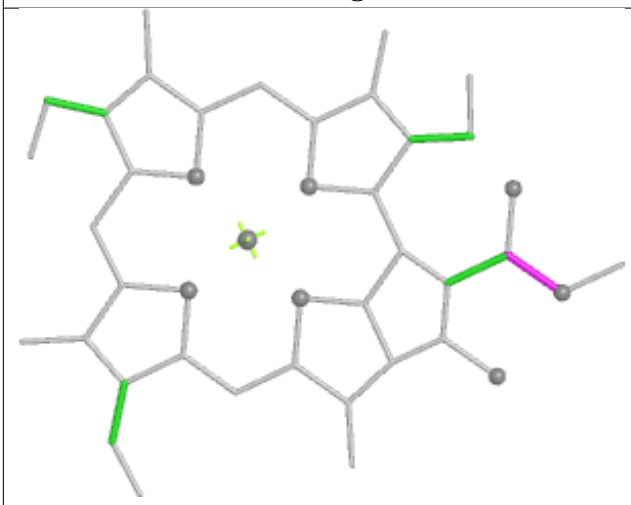
Ligand CLA Y 306



Bond lengths



Bond angles

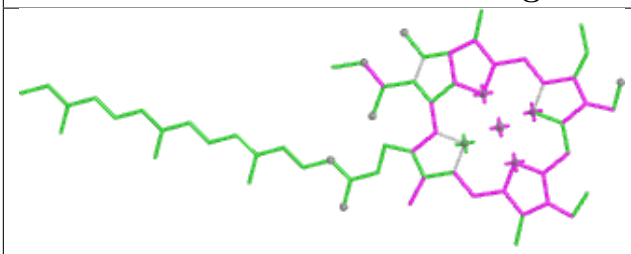


Torsions

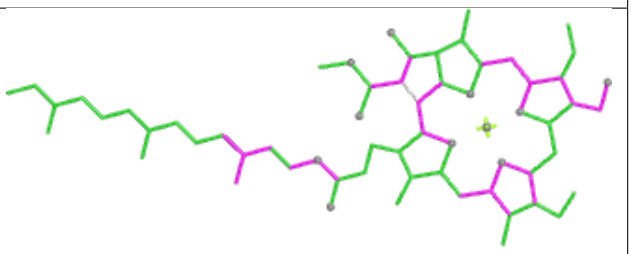


Rings

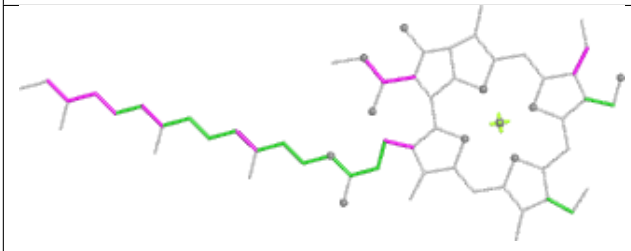
Ligand CHL N 308



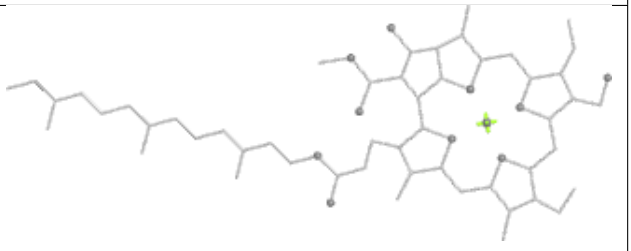
Bond lengths



Bond angles

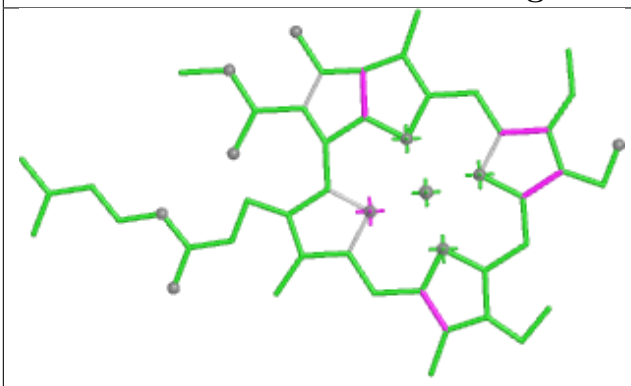


Torsions

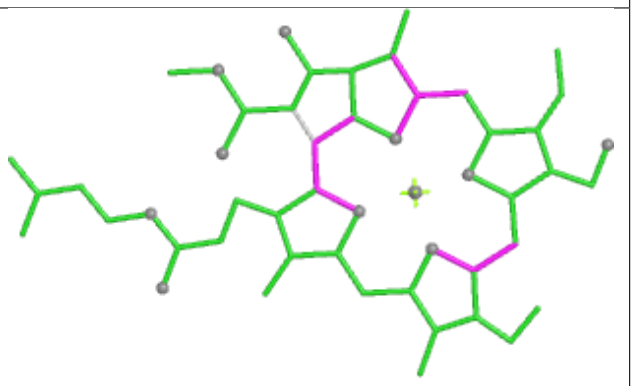


Rings

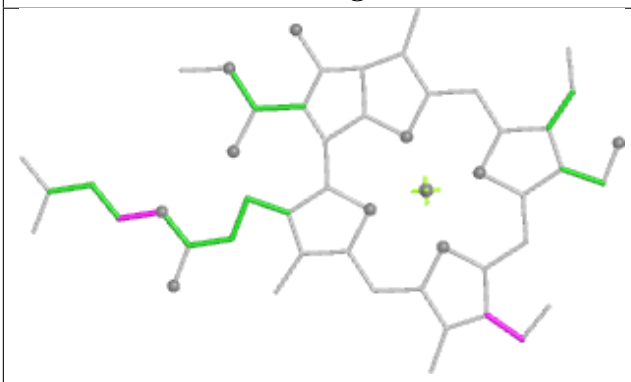
Ligand CHL n 311



Bond lengths



Bond angles



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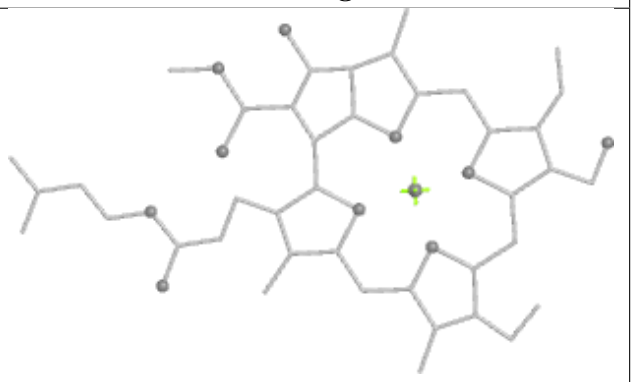
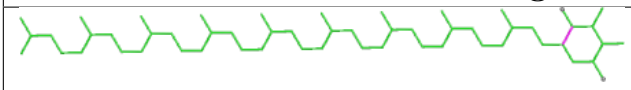


Rings

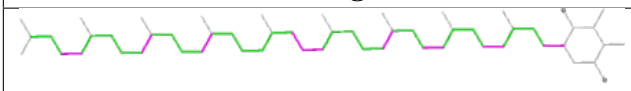
Ligand PL9 A 409



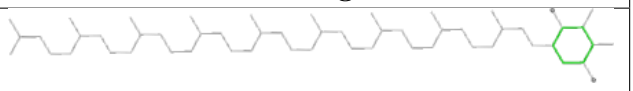
Bond lengths



Bond angles

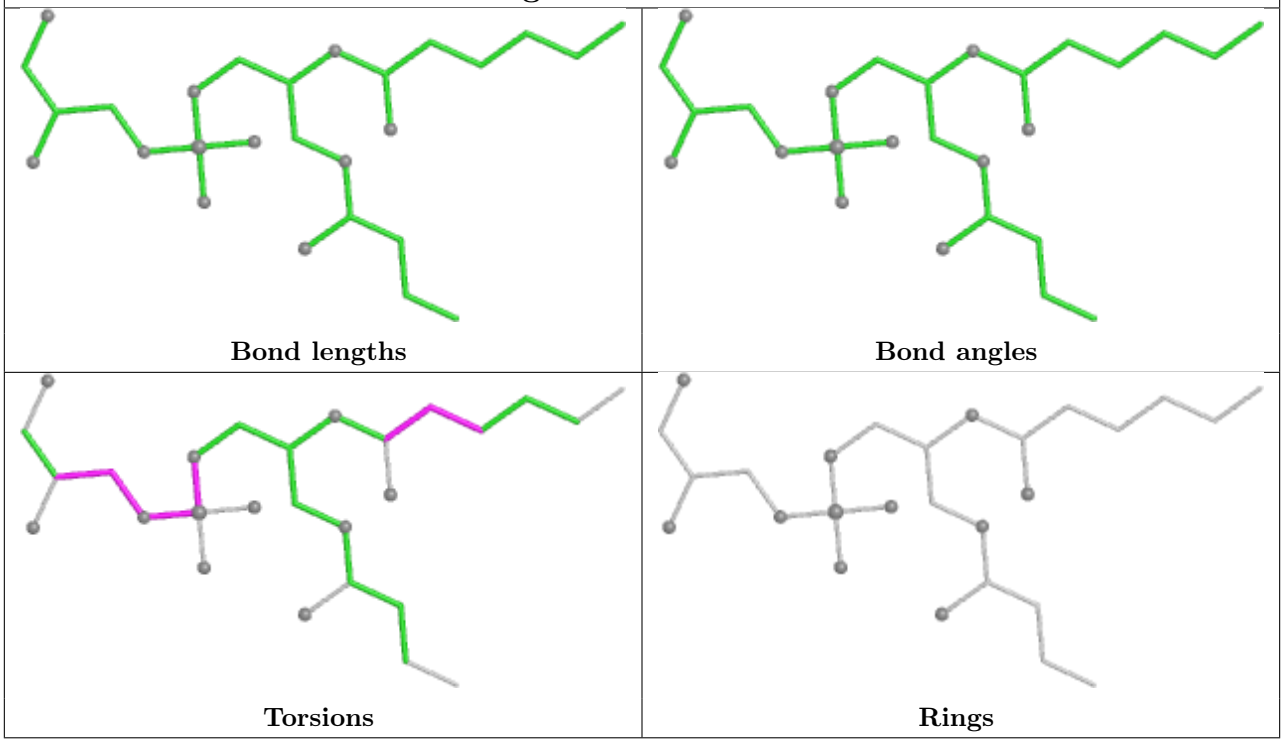


Torsions

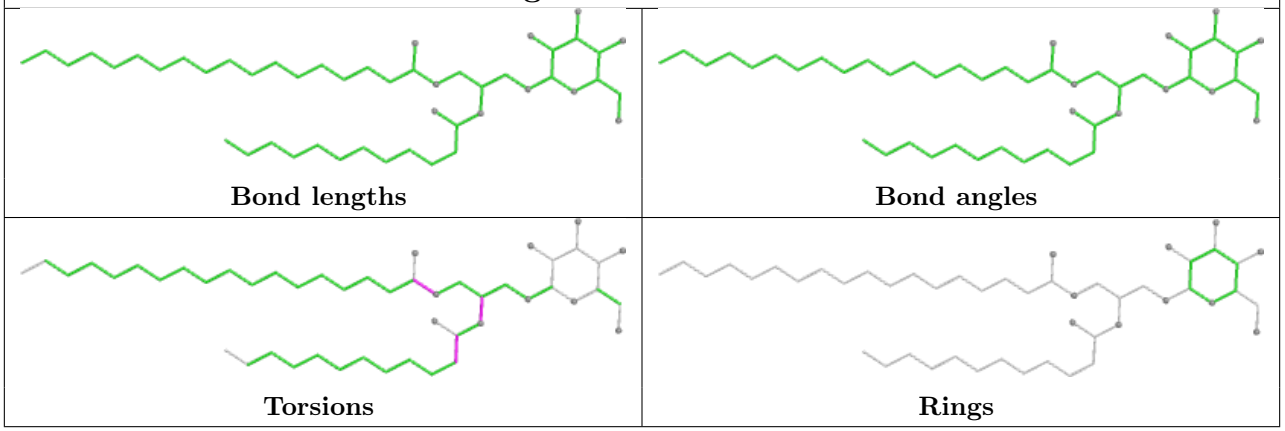


Rings

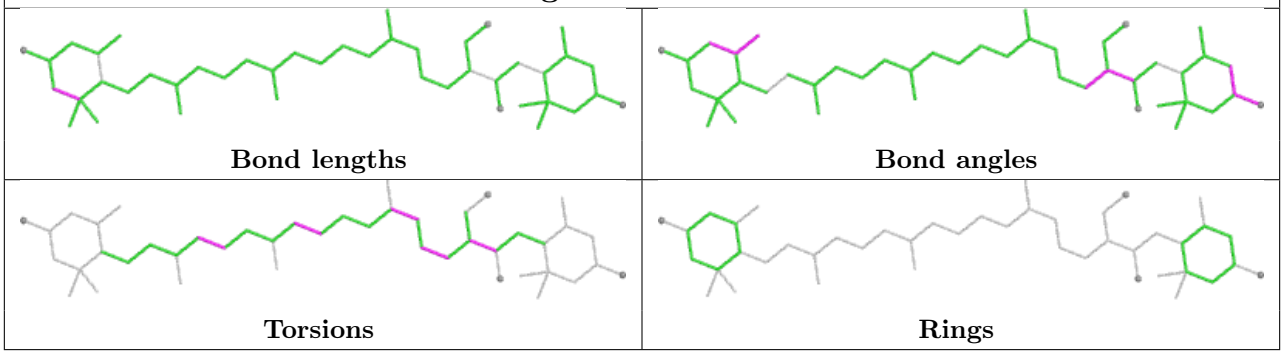
Ligand LHG U 403



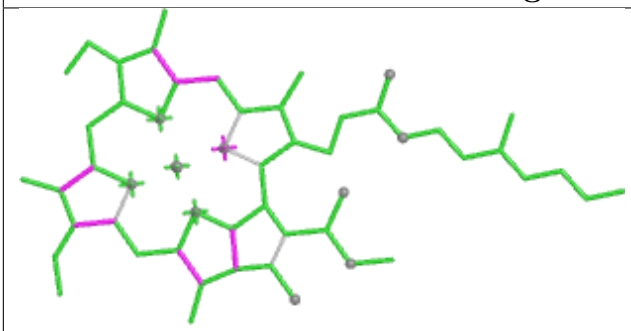
Ligand LMG d 402



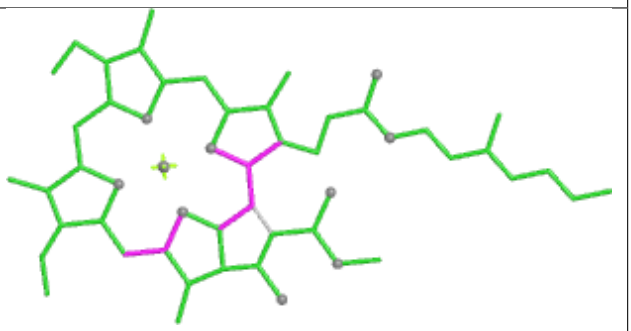
Ligand 0IE s 317



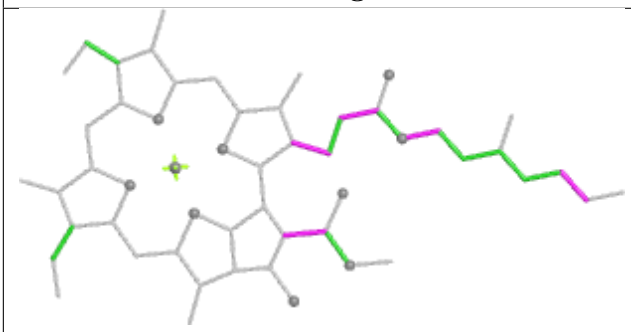
Ligand CLA V 318



Bond lengths



Bond angles



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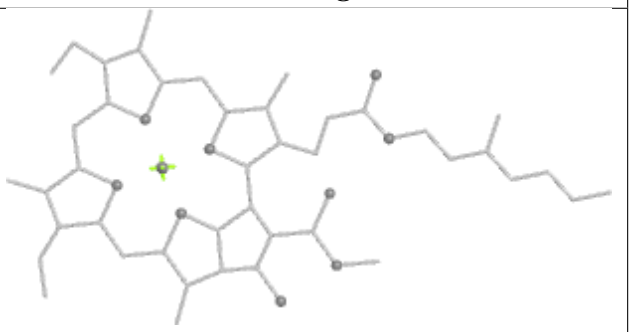
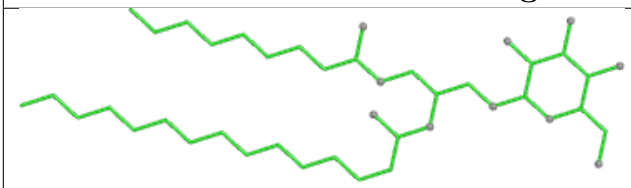
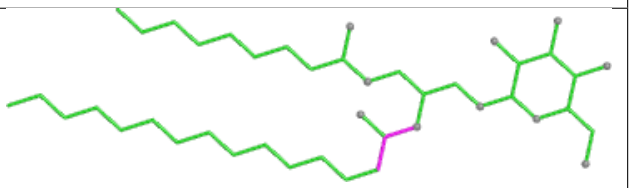


Rings

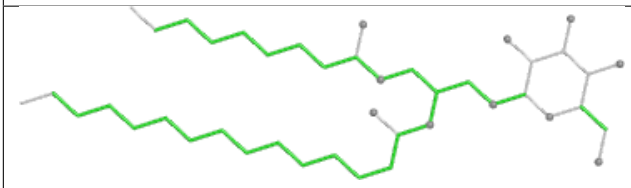
Ligand LMG B 620



Bond lengths



Bond angles



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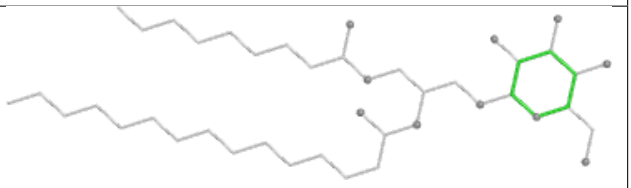
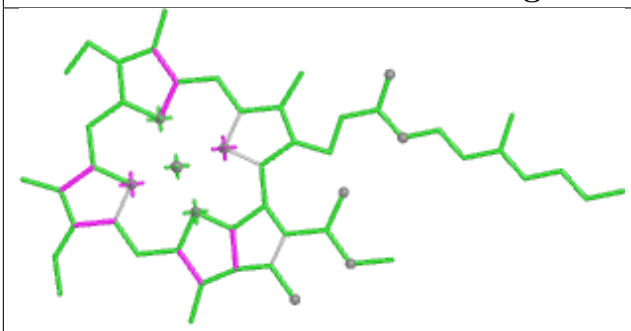


Rings

Ligand CLA N 313



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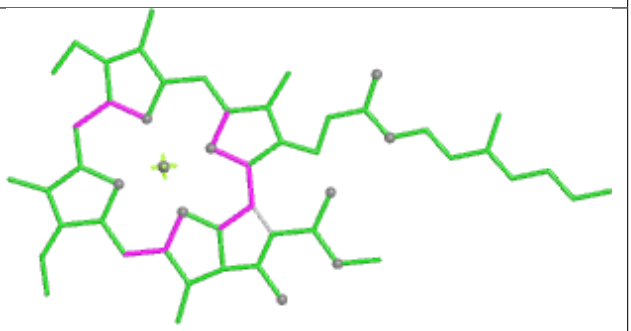
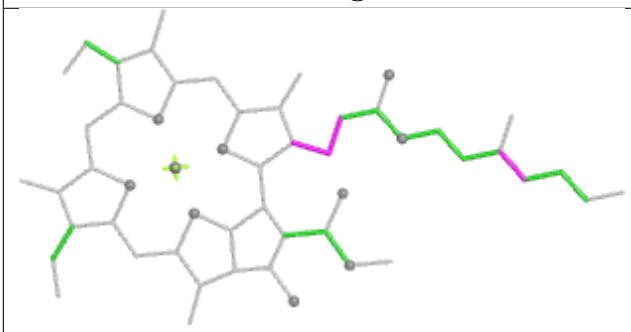
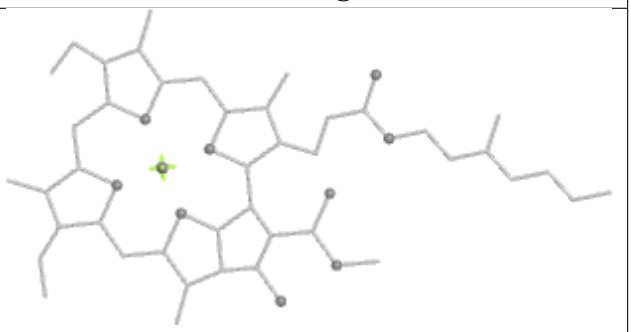


Bond angles

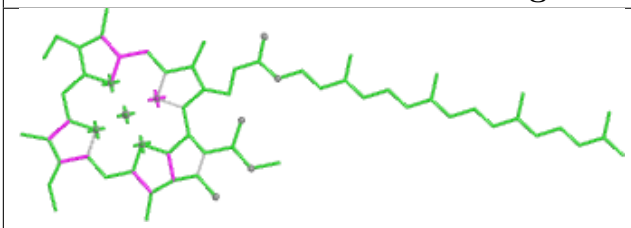


Torsions

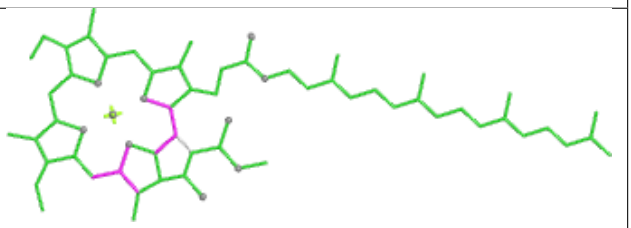


Rings

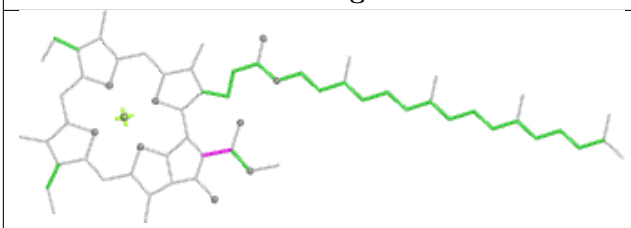
Ligand CLA c 504



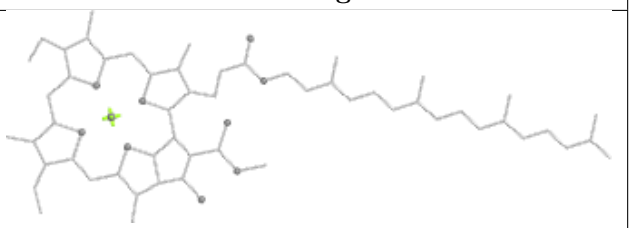
Bond lengths



Bond angles

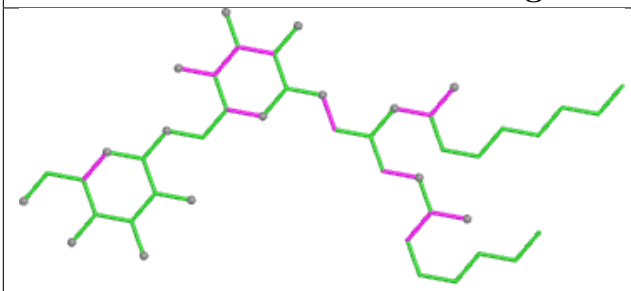


Torsions

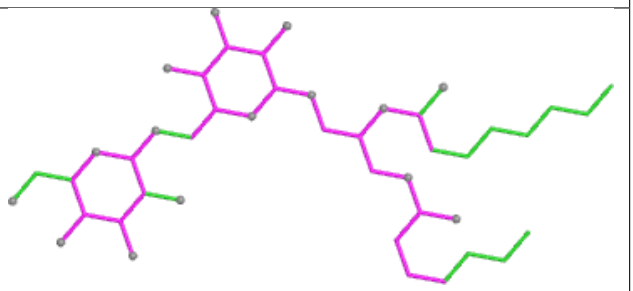


Rings

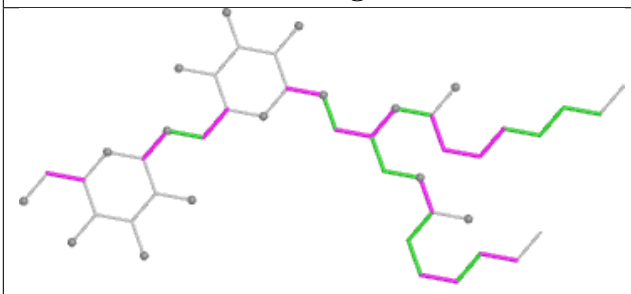
Ligand DGD c 524



Bond lengths



Bond angles



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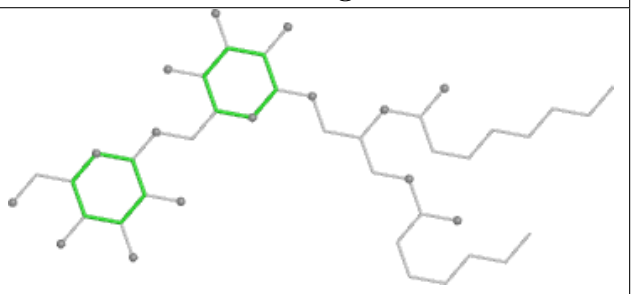
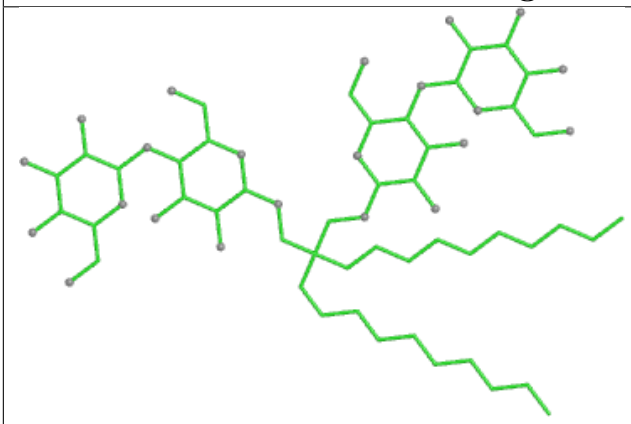


Rings

Ligand LMN G 301



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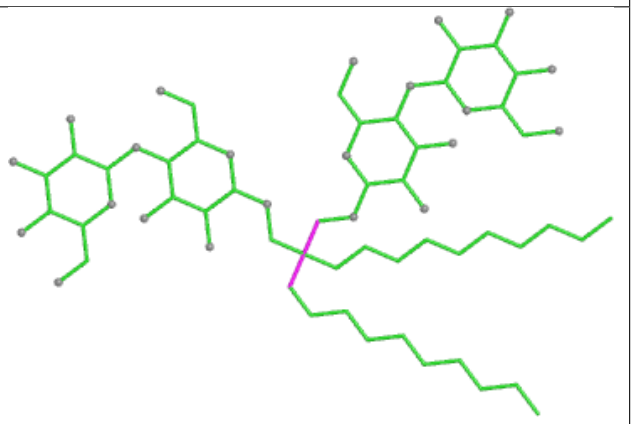
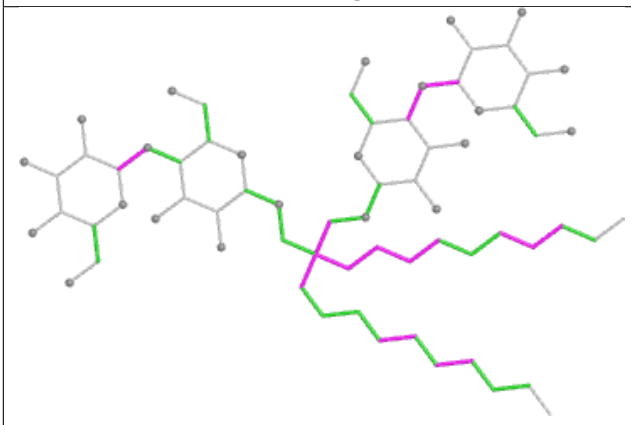
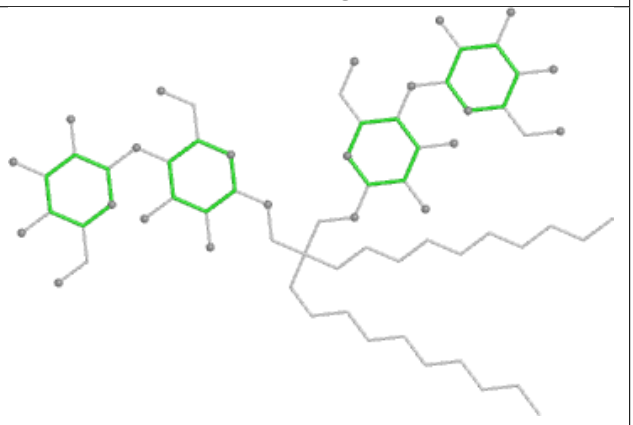


Bond angles

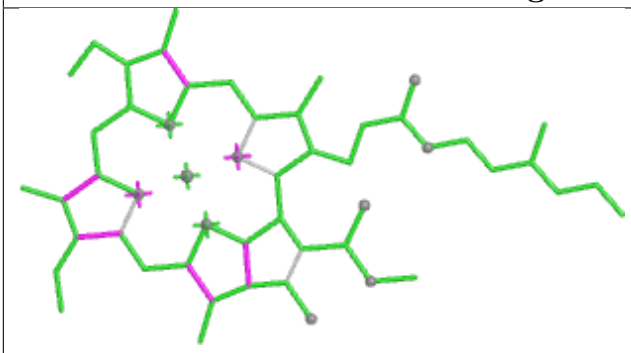


Torsions



Rings

Ligand CLA u 408



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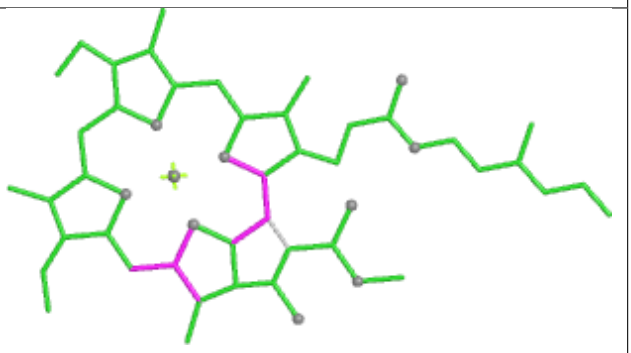
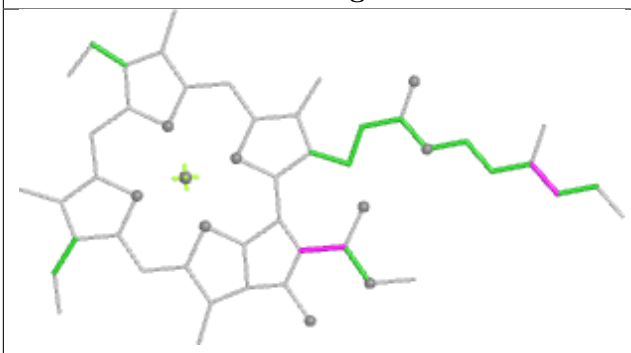


Bond angles



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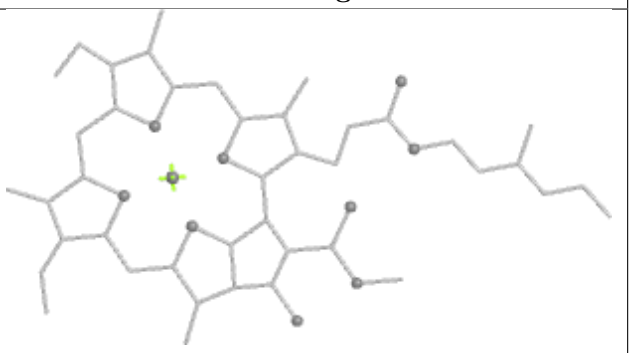
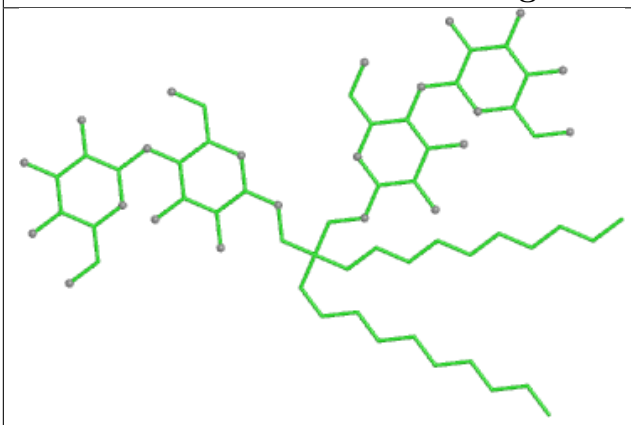


Rings

Ligand LMN V 303



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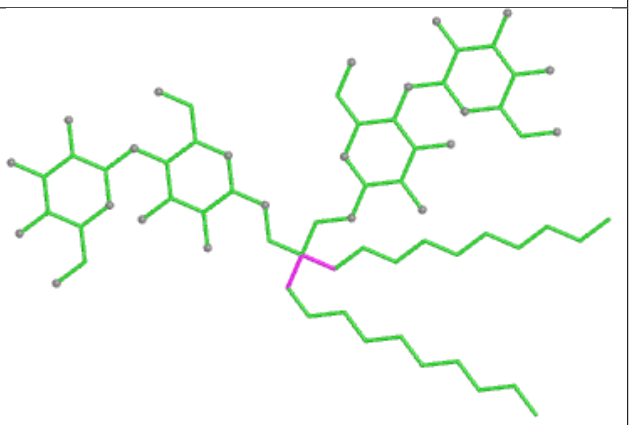
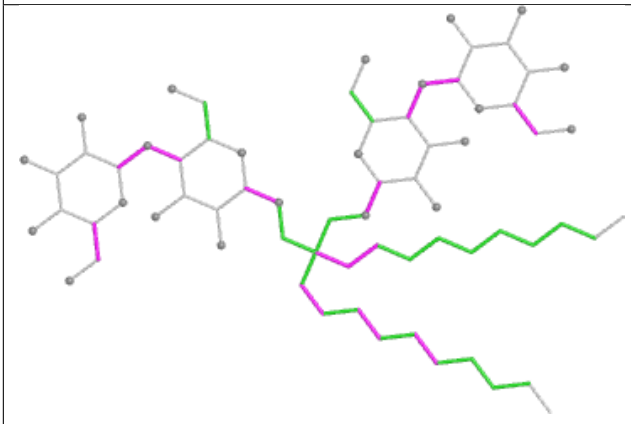
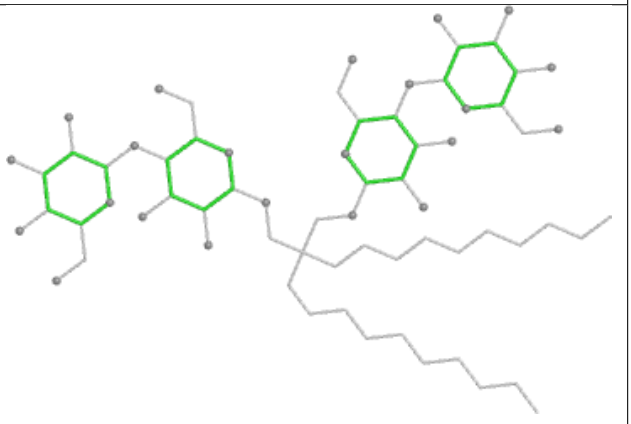


Bond angles

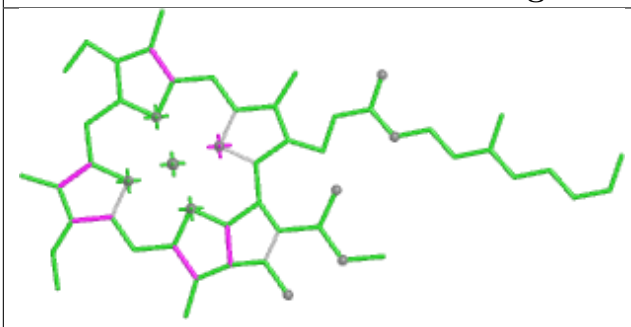


Torsions



Rings

Ligand CLA S 304



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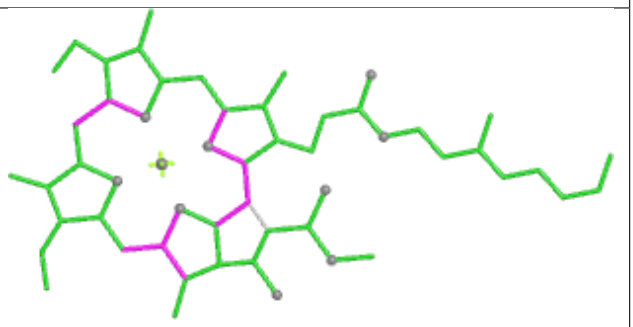
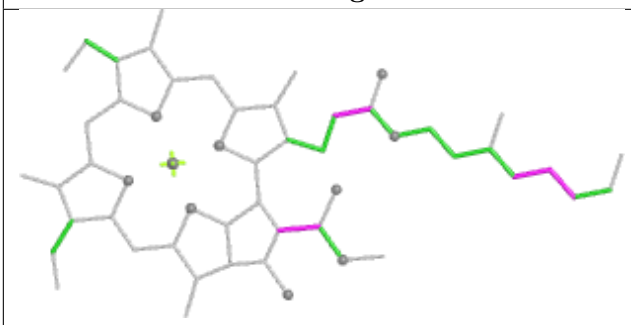
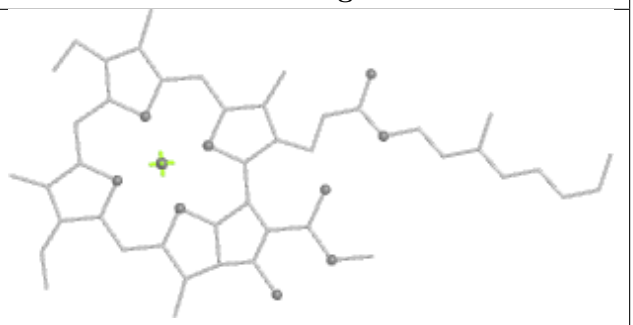


Bond angles

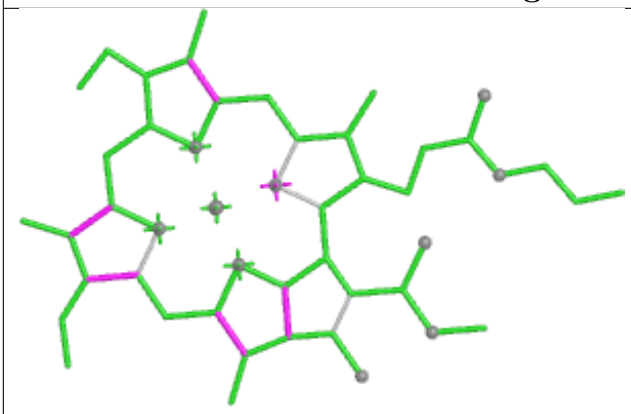


Torsions

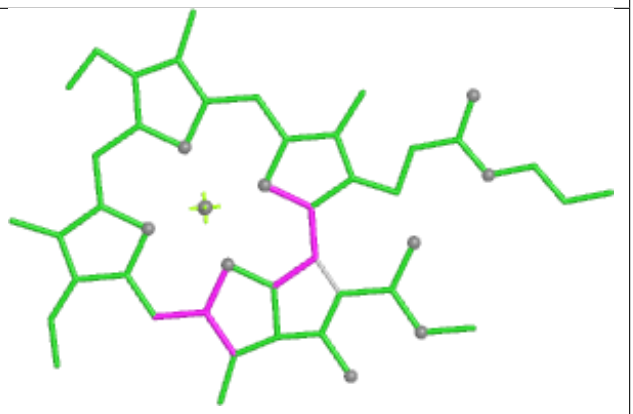


Rings

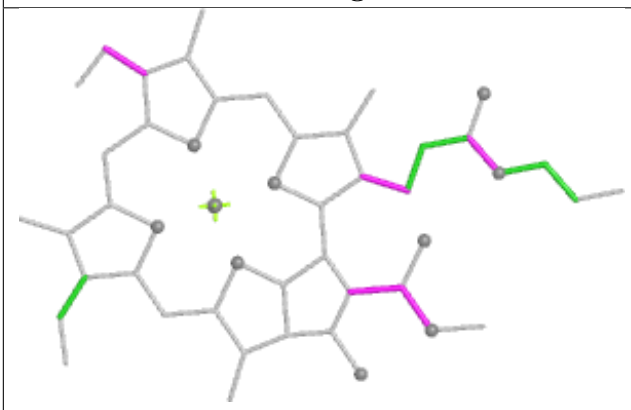
Ligand CLA N 305



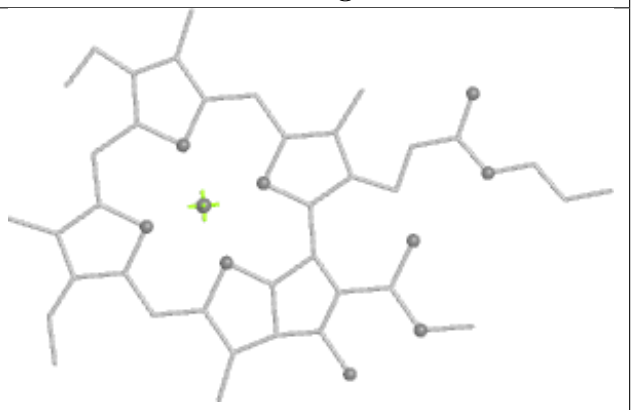
Bond lengths



Bond angles

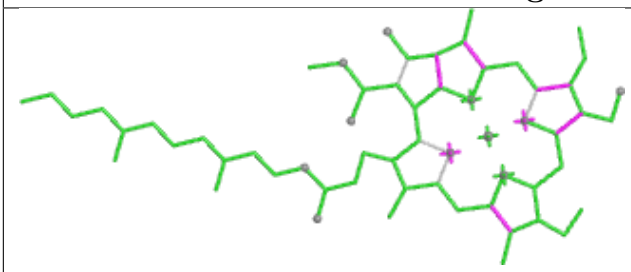


Torsions

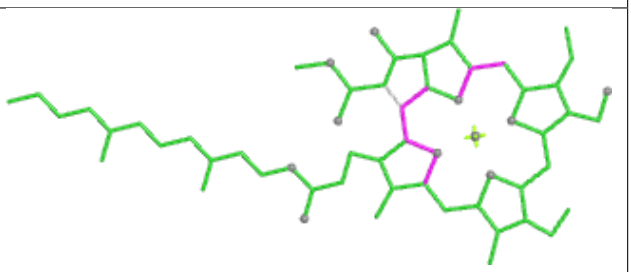


Rings

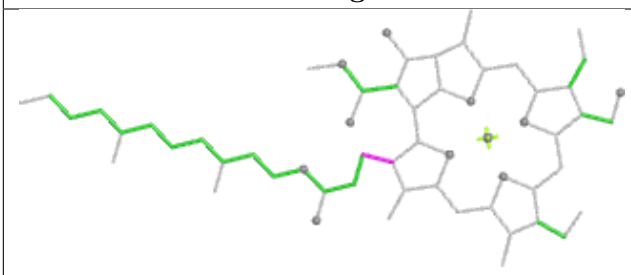
Ligand CHL u 406



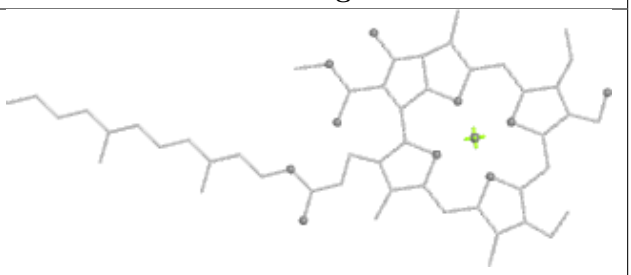
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

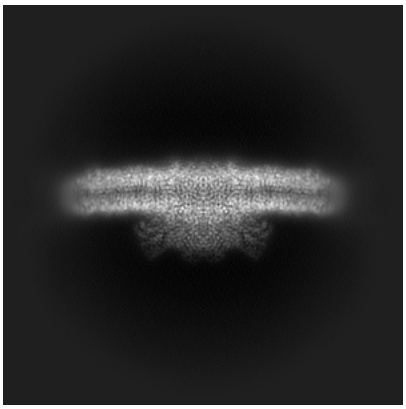
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-69050. These allow visual inspection of the internal detail of the map and identification of artifacts.

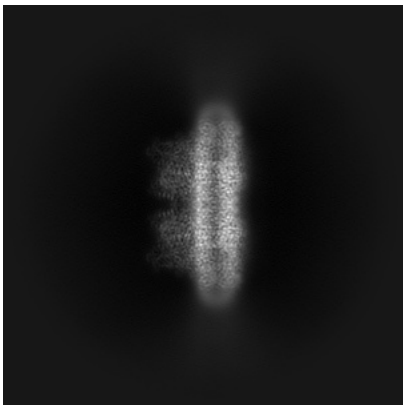
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

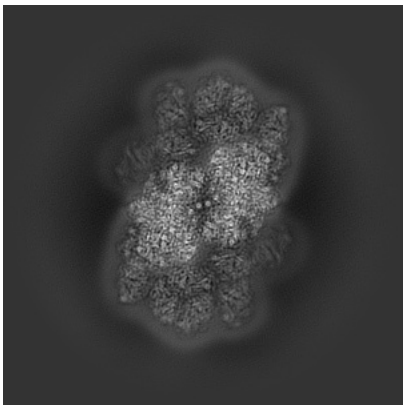
6.1.1 Primary map



X

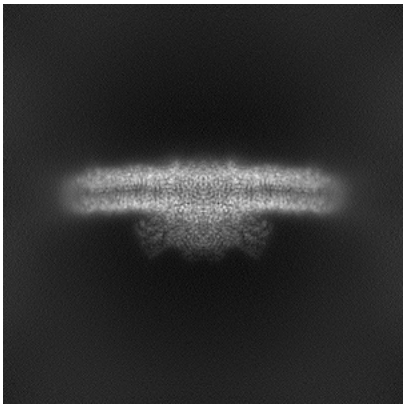


Y

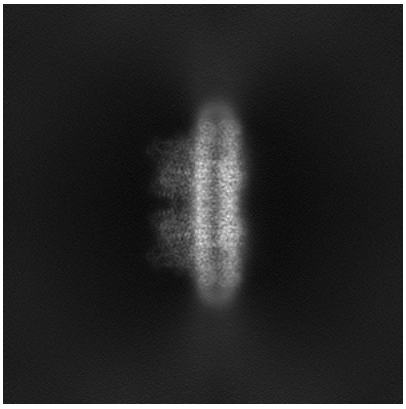


Z

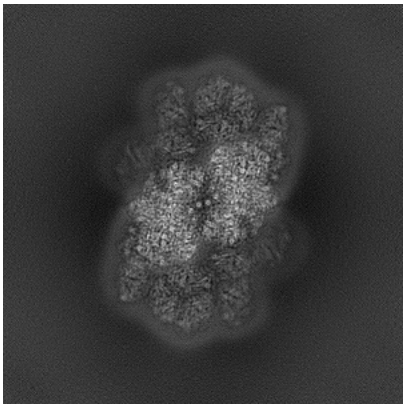
6.1.2 Raw map



X



Y

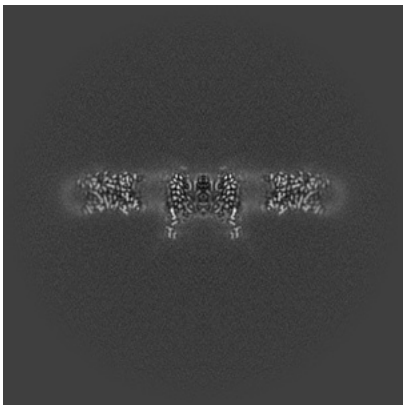


Z

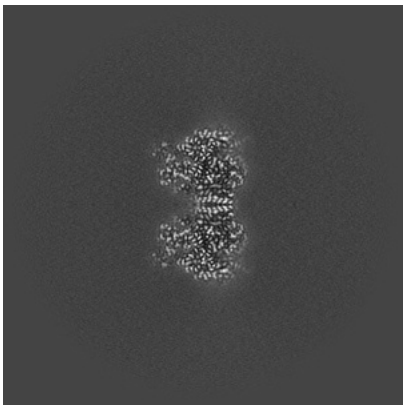
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

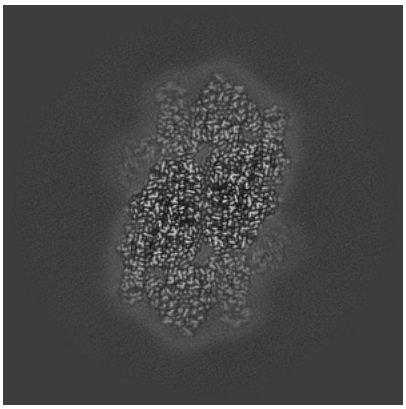
6.2.1 Primary map



X Index: 256

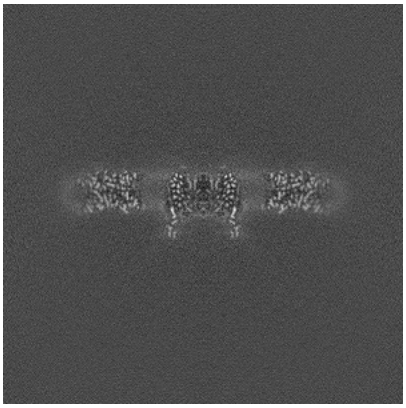


Y Index: 256

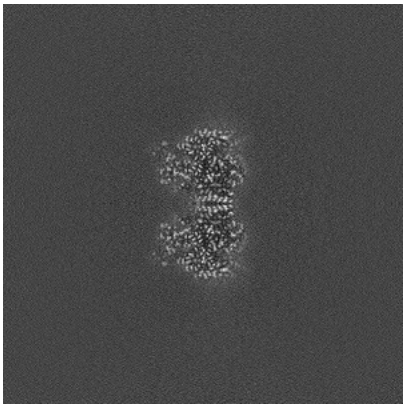


Z Index: 256

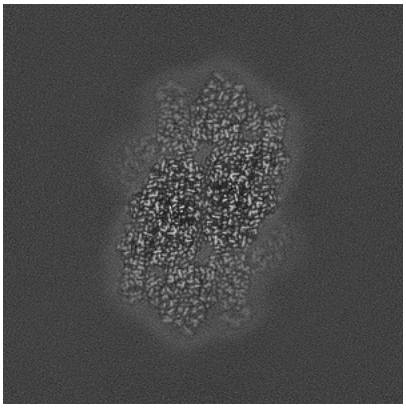
6.2.2 Raw map



X Index: 256



Y Index: 256

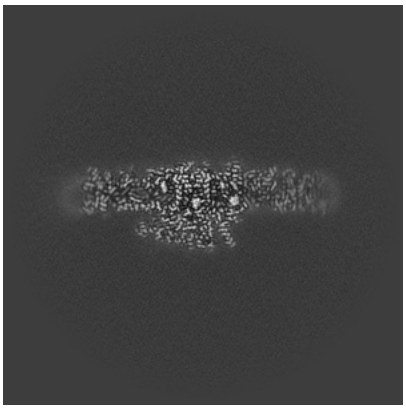


Z Index: 256

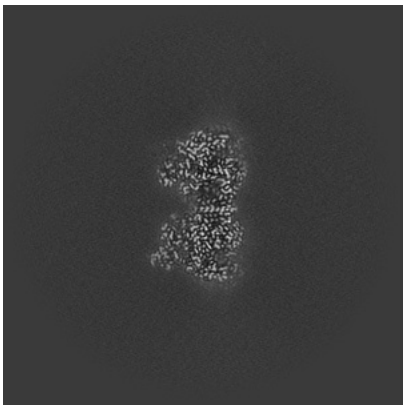
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

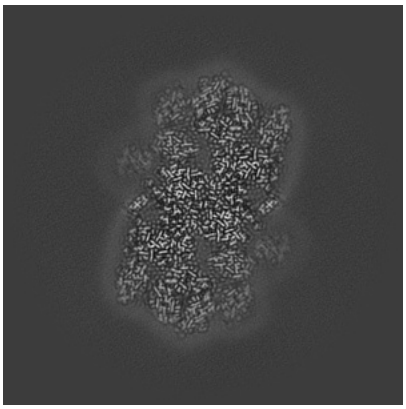
6.3.1 Primary map



X Index: 215

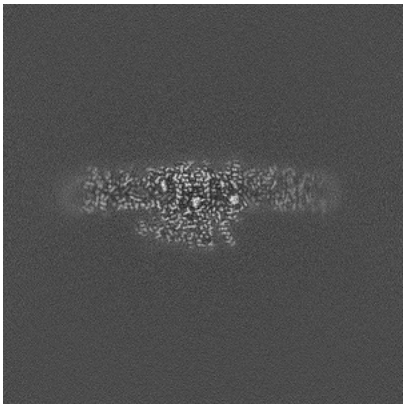


Y Index: 253

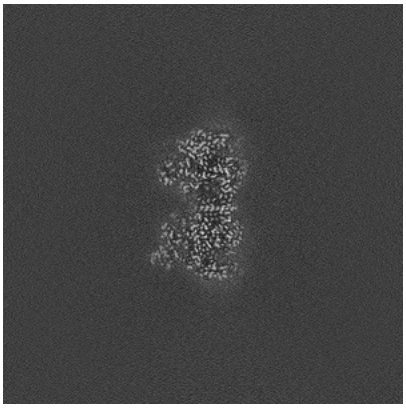


Z Index: 283

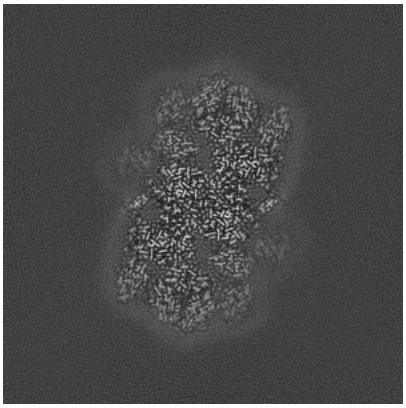
6.3.2 Raw map



X Index: 215



Y Index: 253

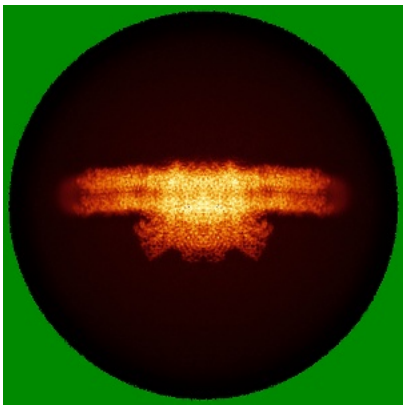


Z Index: 283

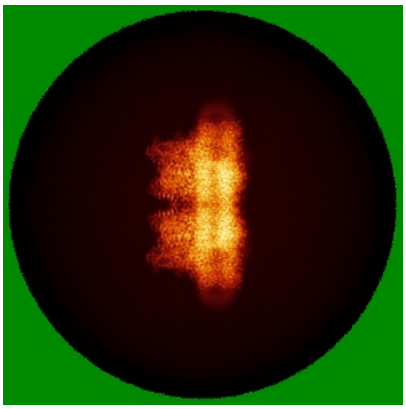
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

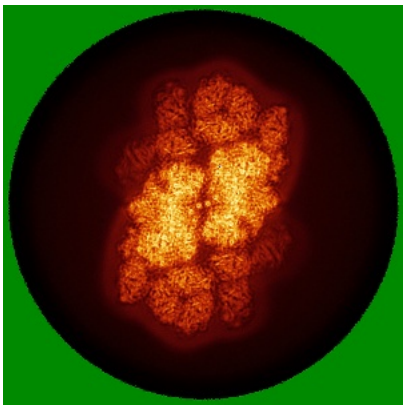
6.4.1 Primary map



X

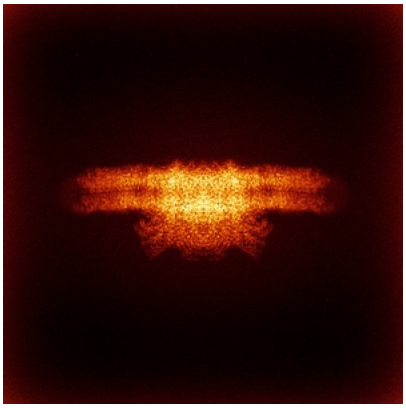


Y

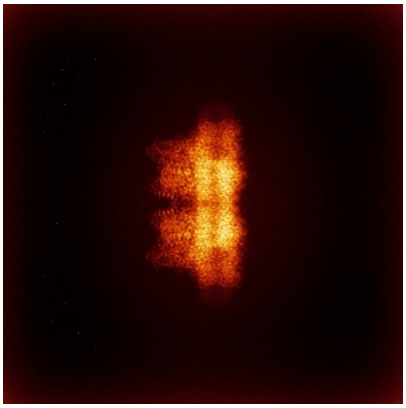


Z

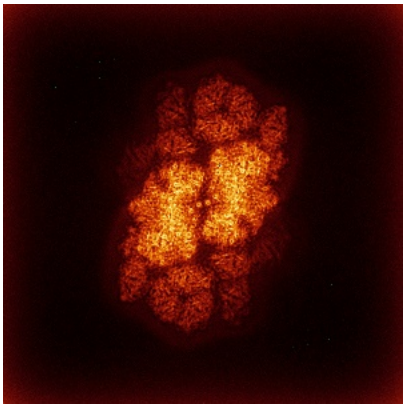
6.4.2 Raw map



X



Y

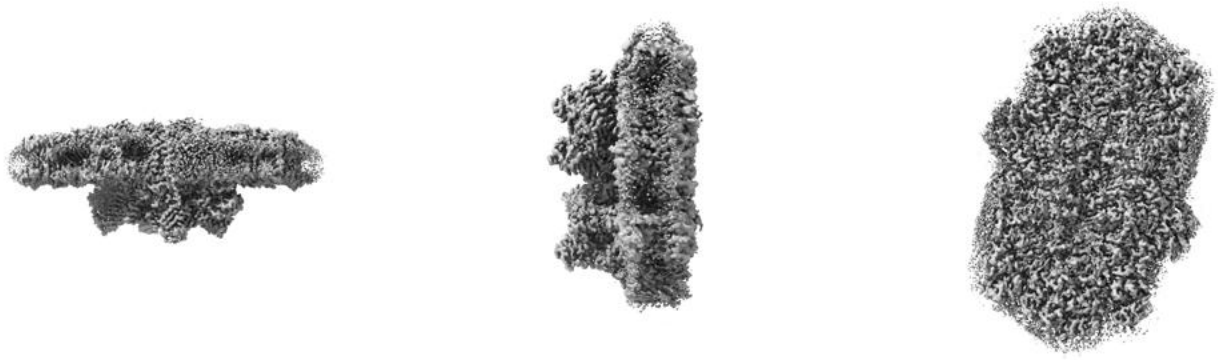


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views (i)

6.5.1 Primary map



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.07. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



X Y Z

These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

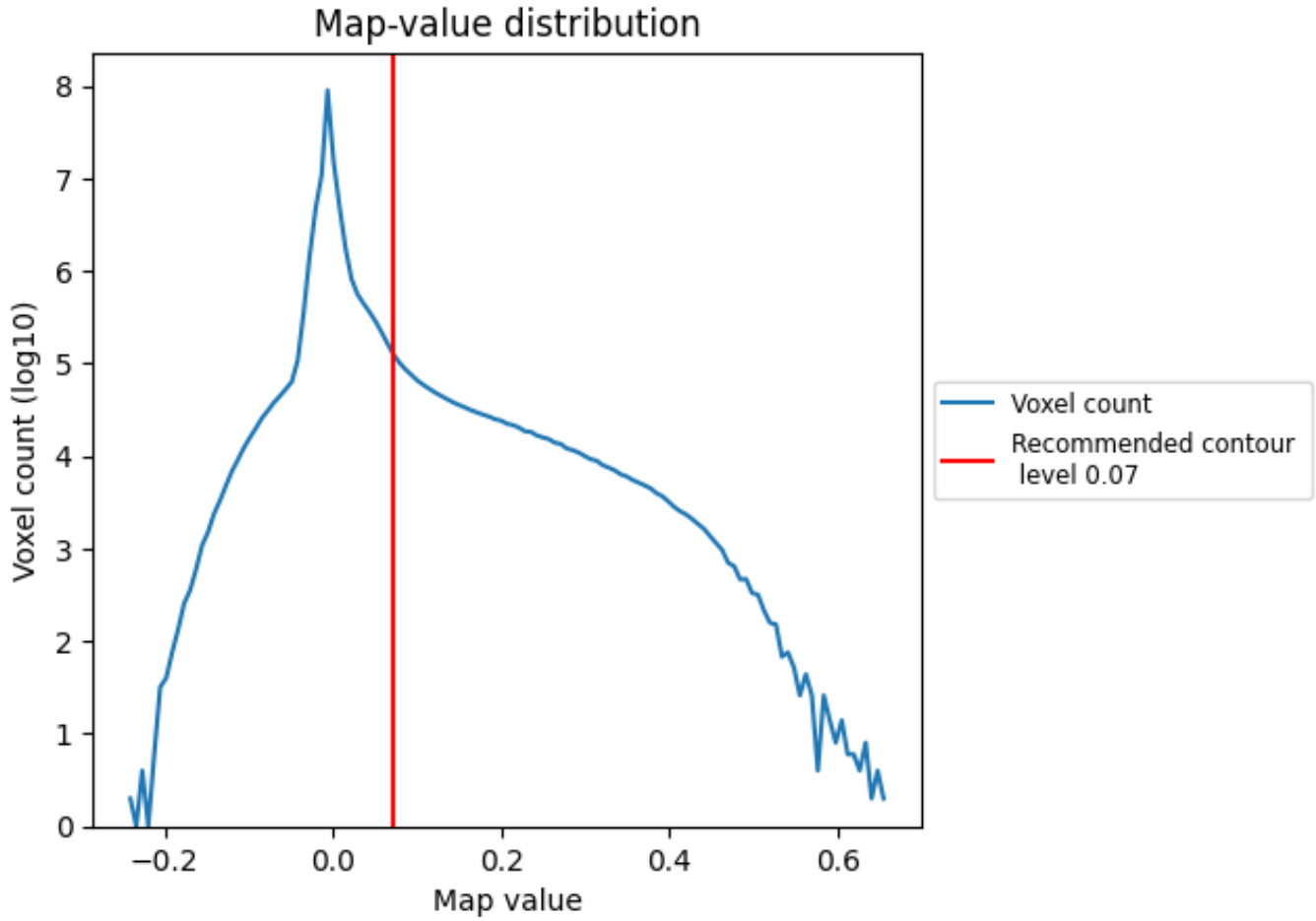
6.6 Mask visualisation (i)

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

7 Map analysis

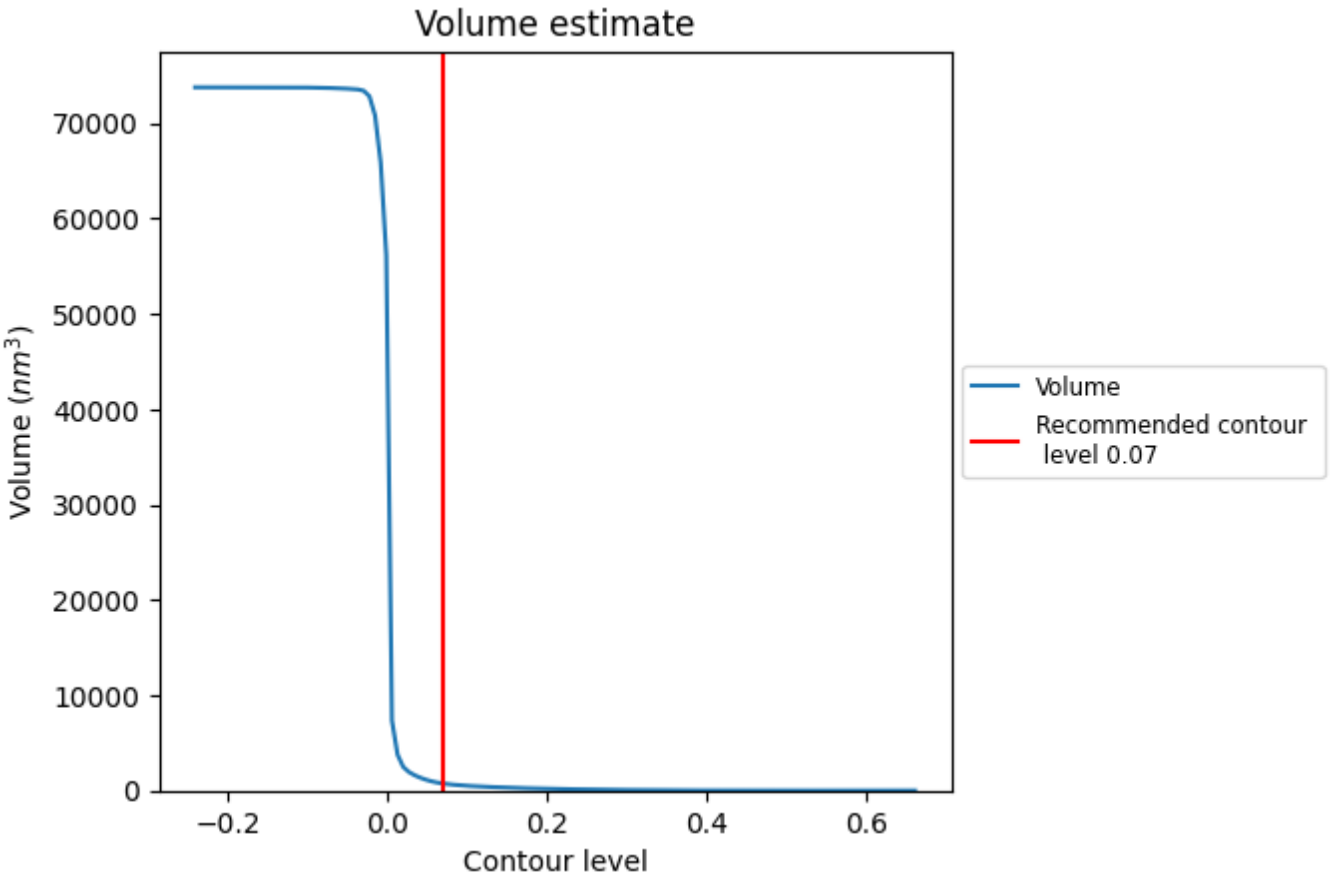
This section contains the results of statistical analysis of the map.

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.

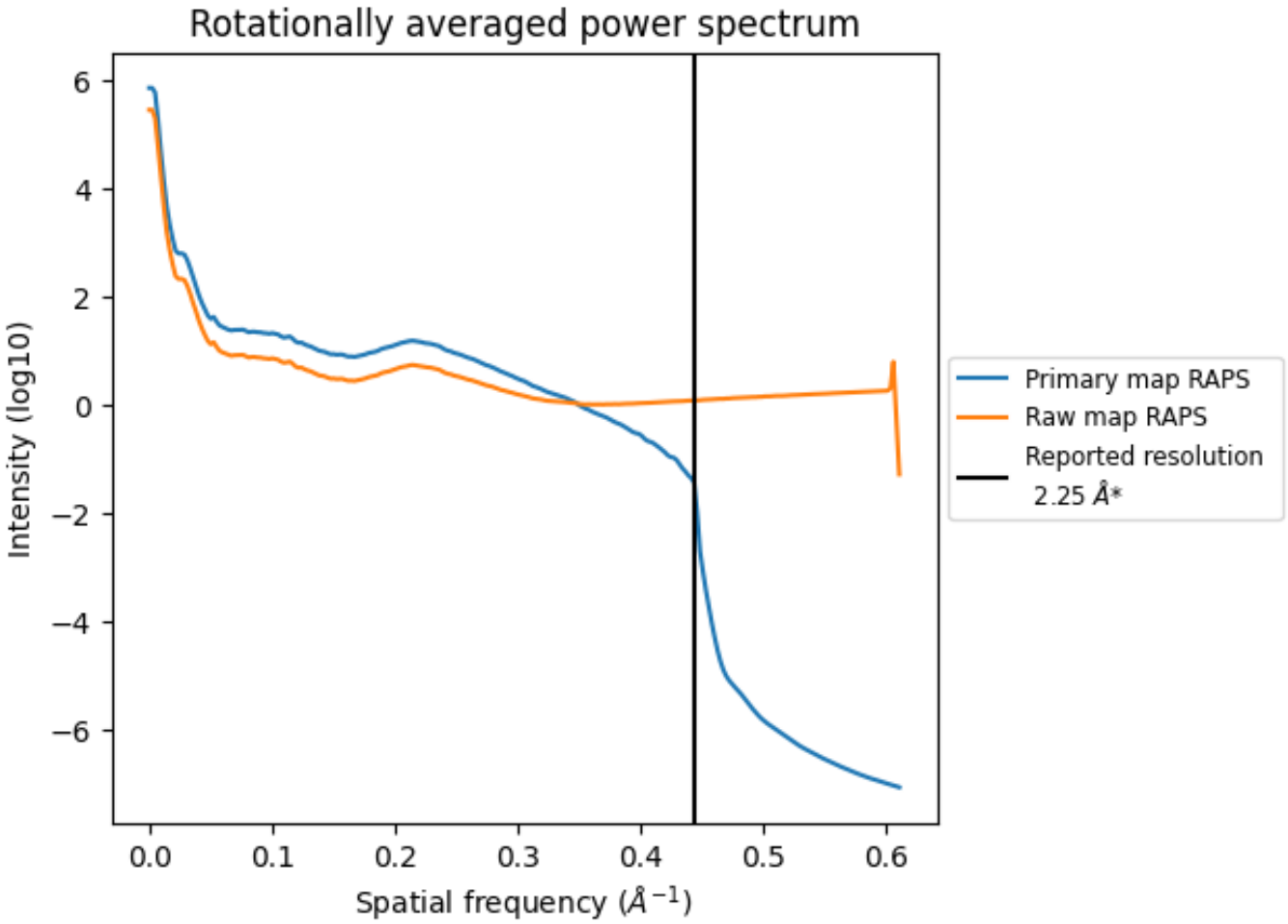
7.2 Volume estimate



The volume at the recommended contour level is 735 nm^3; this corresponds to an approximate mass of 664 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)

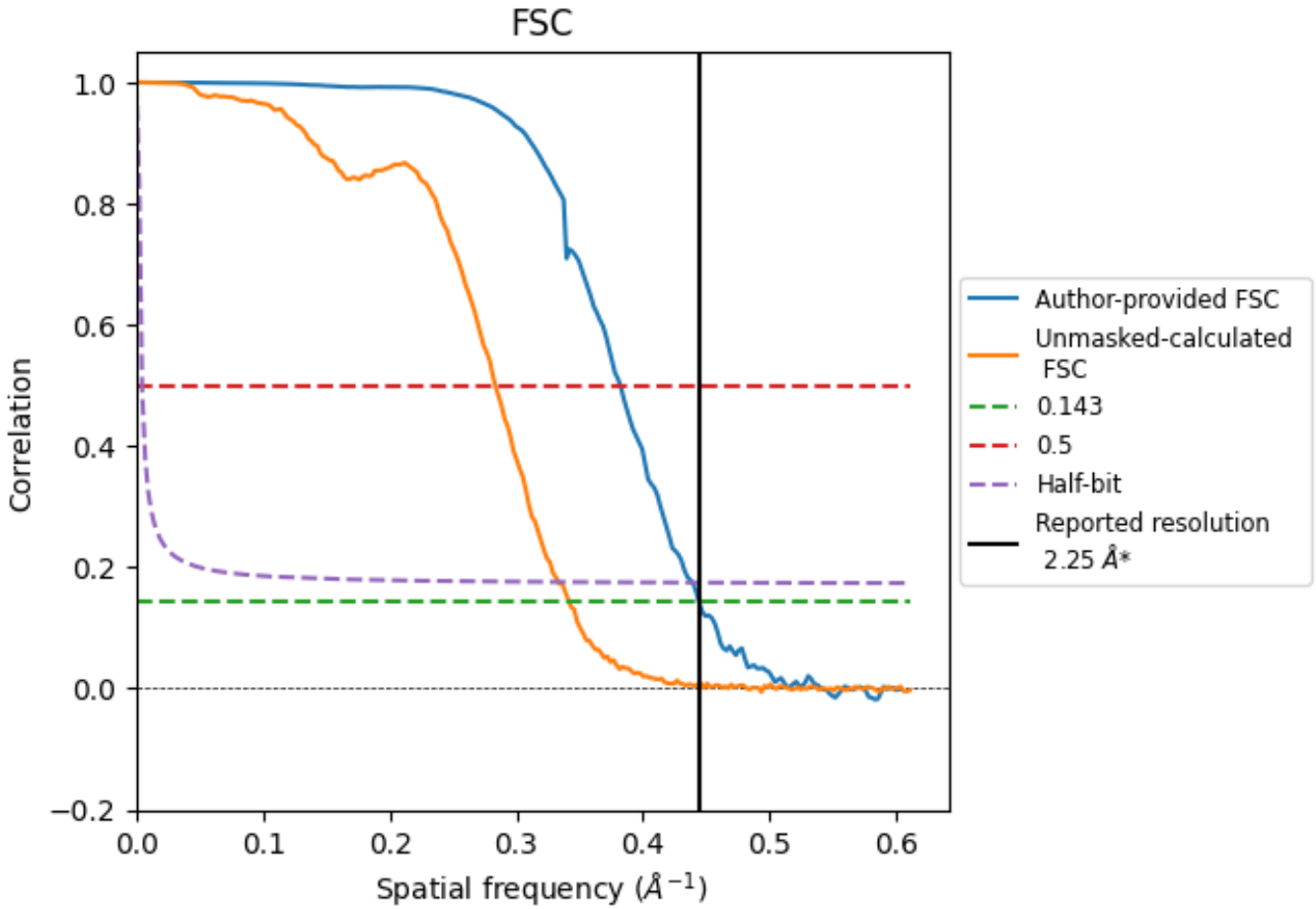


*Reported resolution corresponds to spatial frequency of 0.444 Å^{-1}

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 0.444 Å^{-1}

8.2 Resolution estimates (i)

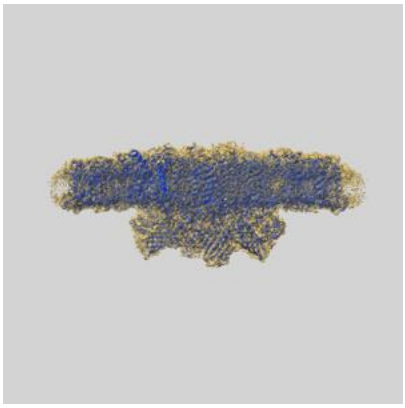
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.25	-	-
Author-provided FSC curve	2.25	2.62	2.28
Unmasked-calculated*	2.93	3.53	3.00

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 2.93 differs from the reported value 2.25 by more than 10 %

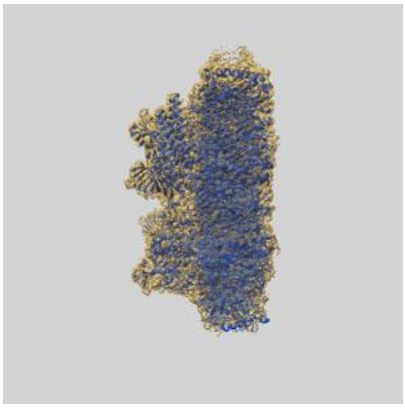
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-69050 and PDB model 23KL. Per-residue inclusion information can be found in section 3 on page 45.

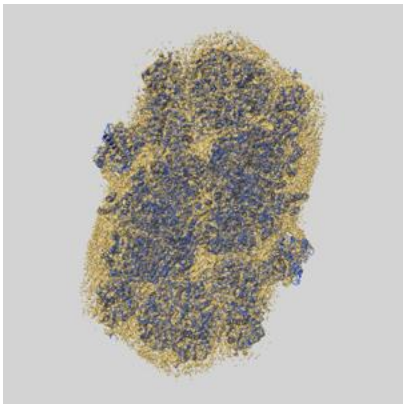
9.1 Map-model overlay



X



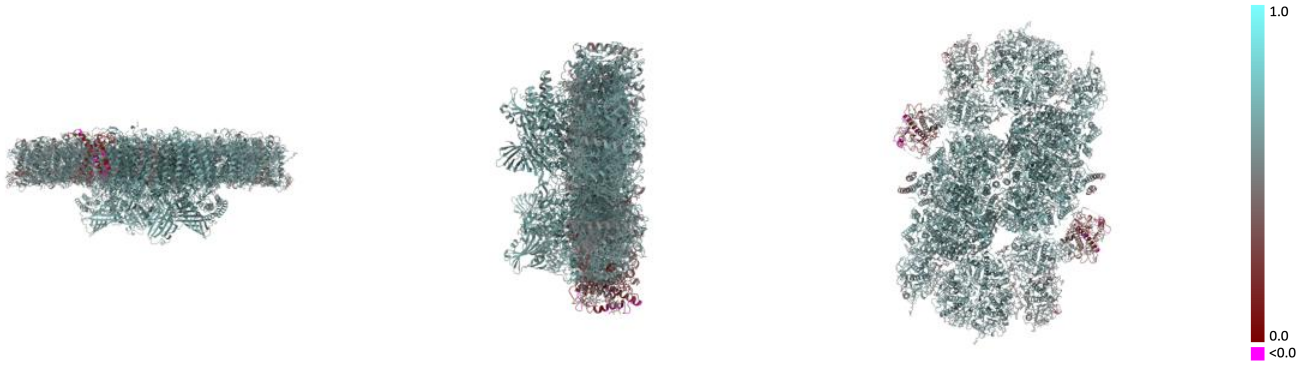
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.07 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

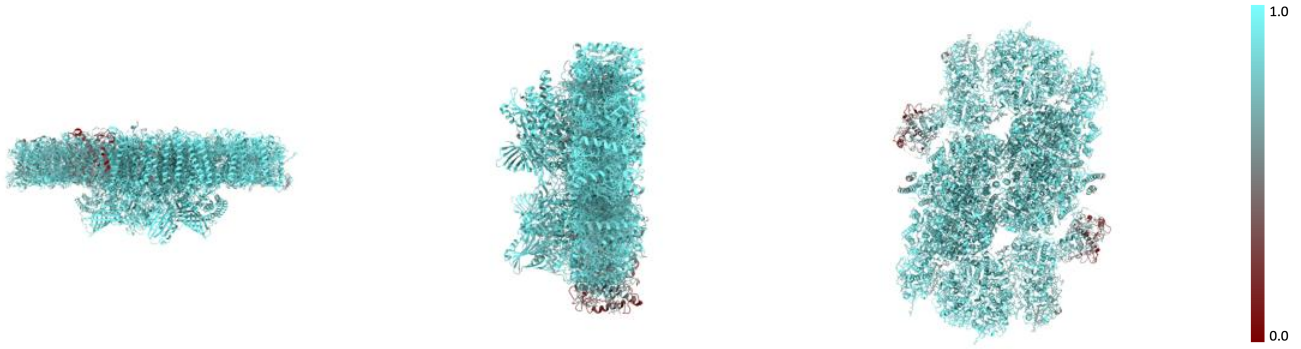
9.2 Q-score mapped to coordinate model



X Y Z

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

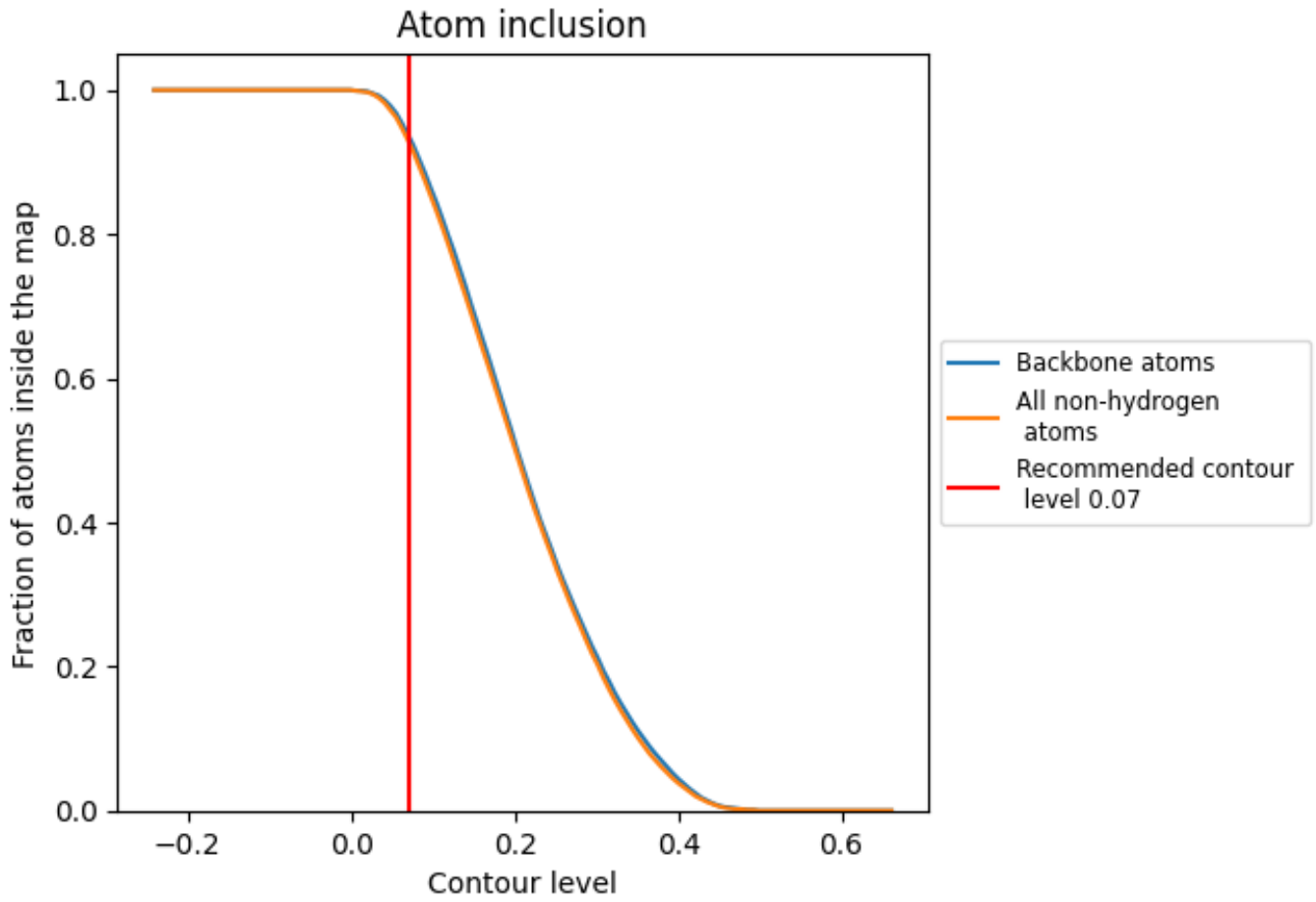
9.3 Atom inclusion mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.07).

9.4 Atom inclusion (i)



At the recommended contour level, 94% of all backbone atoms, 93% 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 (0.07) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9290	0.6010
0	0.5390	0.3090
1	0.5310	0.3170
2	0.6650	0.3730
3	0.6880	0.3880
5	0.6500	0.4290
6	0.6140	0.4290
A	0.9820	0.6590
B	0.9790	0.6540
C	0.9820	0.6510
D	0.9860	0.6650
E	0.9670	0.6140
F	0.9500	0.6130
G	0.9340	0.5850
H	0.9860	0.6410
I	0.9770	0.6290
J	0.9430	0.5960
K	0.9690	0.6220
L	0.9710	0.6520
M	0.9510	0.6000
N	0.9260	0.5830
O	0.9470	0.6280
P	0.9540	0.6310
Q	0.8910	0.6020
R	0.9350	0.5790
S	0.9570	0.5960
T	0.9780	0.6290
U	0.9370	0.6050
V	0.9680	0.6270
W	0.9230	0.5830
X	0.9710	0.6150
Y	0.8360	0.5120
Z	0.9620	0.6020
a	0.9860	0.6600
b	0.9810	0.6510



Continued on next page...

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Chain	Atom inclusion	Q-score
c	0.9800	0.6460
d	0.9880	0.6650
e	0.9590	0.6060
f	0.9770	0.6380
g	0.9270	0.5820
h	0.9840	0.6380
i	0.9450	0.5740
j	0.9720	0.5910
k	0.9680	0.6190
l	0.9800	0.6490
m	0.9540	0.6080
n	0.9560	0.6170
o	0.9500	0.6260
p	0.9460	0.6280
q	0.8990	0.5920
r	0.9090	0.5830
s	0.9410	0.5840
t	0.9850	0.6560
u	0.9310	0.5970
v	0.9580	0.5910
w	0.9560	0.6170
x	0.9630	0.6060
y	0.8290	0.5160
z	0.9420	0.5930