Full wwPDB EM Validation Report ⓘ

Jun 18, 2025 – 07:44 am BST

PDB ID	:	9GRX / pdb_00009grx
EMDB ID	:	EMD-51527
Title	:	NDH-PSI-LHCI supercomplex from S. oleracea
Authors	:	Introini, B.; Hahn, A.; Kuehlbrandt, W.
Deposited on	:	2024-09-13
Resolution	:	3.19 Å(reported)
Based on initial models	:	., 4y28, 6khj

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:

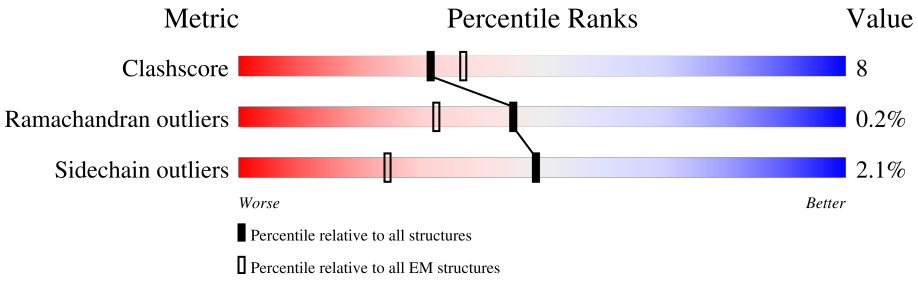
EMDB validation analysis	:	0.0.1.dev118
Mogul	:	1.8.4, CSD as541be (2020)
MolProbity	:	4-5-2 with Phenix2.0rc1
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.44

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 3.19 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)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

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	157	82% 17%
2	1	403	83% 17%
3	2	372	63% 17% 19%
4	3	139	79% 20%
5	4	93	86% 14%
6	5	154	91% 8%
7	6	125	82% 18%
8	7	144	92% 8%

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Mol	Chain	Length	Quality of chain
9	8	143	81% 18%
10	9	174	83% 16%
11	A	350	81% 18%
12	B	488	75% 24%
13	C	115	82% 17%
14	D	498	80% 20%
15	E	100	81% 18%
16	F	742	77% 20%
17	G	176	79% 19%
18	H	389	77% 18% 5%
19	I	163	85% 15%
20	J	158	77% 22%
21	K	202	74% 23%
22	L	109	88% 11%
23	M	141	78% 21%
24	N	165	85% 15%
25	O	95	8% 86% 12%
26	U	240	5% 58% 9% 32%
27	a	742	84% 16%
28	b	733	84% 16%
29	c	81	85% 12%
30	d	143	83% 17%
31	e	68	6% 87% 13%
32	f	153	88% 12%
33	g	97	6% 81% 18%

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Mol	Chain	Length	Quality of chain
34	h	95	79% 21%
35	i	31	77% 19%
36	j	42	86% 14%
37	k	130	44% 7% 49%
38	l	160	84% 16%
39	w	215	80% 18%
40	x	198	84% 16%
41	y	221	86% 14%
42	z	193	76% 21%

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
50	CLA	a	801	X	-	-	-
50	CLA	a	802	X	-	-	-
50	CLA	a	809	X	-	-	-
50	CLA	a	811	X	-	-	-
50	CLA	a	812	X	-	-	-
50	CLA	a	813	X	-	-	-
50	CLA	a	814	X	-	-	-
50	CLA	a	815	X	-	-	-
50	CLA	a	816	X	-	-	-
50	CLA	a	817	X	-	-	-
50	CLA	a	818	X	-	-	-
50	CLA	a	819	X	-	-	-
50	CLA	a	820	X	-	-	-
50	CLA	a	821	X	-	-	-
50	CLA	a	822	X	-	-	-
50	CLA	a	823	X	-	-	-
50	CLA	a	824	X	-	-	-
50	CLA	a	826	X	-	-	-
50	CLA	a	833	X	-	-	-
50	CLA	a	834	X	-	-	-
50	CLA	a	835	X	-	-	-
50	CLA	a	836	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
50	CLA	a	837	X	-	-	-
50	CLA	a	838	X	-	-	-
50	CLA	a	839	X	-	-	-
50	CLA	a	840	X	-	-	-
50	CLA	a	841	X	-	-	-
50	CLA	a	842	X	-	-	-
50	CLA	a	843	X	-	-	-
50	CLA	a	844	X	-	-	-
50	CLA	a	845	X	-	-	-
50	CLA	a	846	X	-	-	-
50	CLA	a	847	X	-	-	-
50	CLA	a	848	X	-	-	-
50	CLA	a	849	X	-	-	-
50	CLA	a	850	X	-	-	-
50	CLA	a	851	X	-	-	-
50	CLA	a	852	X	-	-	-
50	CLA	a	853	X	-	-	-
50	CLA	a	854	X	-	-	-
50	CLA	a	855	X	-	-	-
50	CLA	a	856	X	-	-	-
50	CLA	a	857	X	-	-	-
50	CLA	a	858	X	-	-	-
50	CLA	b	801	X	-	-	-
50	CLA	b	802	X	-	-	-
50	CLA	b	803	X	-	-	-
50	CLA	b	804	X	-	-	-
50	CLA	b	805	X	-	-	-
50	CLA	b	806	X	-	-	-
50	CLA	b	807	X	-	-	-
50	CLA	b	808	X	-	-	-
50	CLA	b	809	X	-	-	-
50	CLA	b	810	X	-	-	-
50	CLA	b	811	X	-	-	-
50	CLA	b	812	X	-	-	-
50	CLA	b	813	X	-	-	-
50	CLA	b	814	X	-	-	-
50	CLA	b	815	X	-	-	-
50	CLA	b	822	X	-	-	-
50	CLA	b	823	X	-	-	-
50	CLA	b	824	X	-	-	-
50	CLA	b	825	X	-	-	-
50	CLA	b	826	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
50	CLA	b	828	X	-	-	-
50	CLA	b	832	X	-	-	-
50	CLA	b	833	X	-	-	-
50	CLA	b	834	X	-	-	-
50	CLA	b	835	X	-	-	-
50	CLA	b	836	X	-	-	-
50	CLA	b	837	X	-	-	-
50	CLA	b	838	X	-	-	-
50	CLA	b	839	X	-	-	-
50	CLA	b	840	X	-	-	-
50	CLA	b	841	X	-	-	-
50	CLA	b	842	X	-	-	-
50	CLA	b	843	X	-	-	-
50	CLA	b	844	X	-	-	-
50	CLA	b	845	X	-	-	-
50	CLA	b	846	X	-	-	-
50	CLA	b	847	X	-	-	-
50	CLA	b	848	X	-	-	-
50	CLA	b	849	X	-	-	-
50	CLA	b	851	X	-	-	-
50	CLA	f	301	X	-	-	-
50	CLA	f	302	X	-	-	-
50	CLA	f	303	X	-	-	-
50	CLA	g	201	X	-	-	-
50	CLA	g	203	X	-	-	-
50	CLA	g	204	X	-	-	-
50	CLA	h	201	X	-	-	-
50	CLA	j	102	X	-	-	-
50	CLA	k	203	X	-	-	-
50	CLA	k	204	X	-	-	-
50	CLA	k	205	X	-	-	-
50	CLA	l	301	X	-	-	-
50	CLA	l	305	X	-	-	-
50	CLA	l	306	X	-	-	-
50	CLA	w	302	X	-	-	-
50	CLA	w	303	X	-	-	-
50	CLA	w	305	X	-	-	-
50	CLA	w	306	X	-	-	-
50	CLA	w	307	X	-	-	-
50	CLA	w	308	X	-	-	-
50	CLA	w	310	X	-	-	-
50	CLA	w	314	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
50	CLA	w	315	X	-	-	-
50	CLA	w	316	X	-	-	-
50	CLA	x	302	X	-	-	-
50	CLA	x	303	X	-	-	-
50	CLA	x	304	X	-	-	-
50	CLA	x	306	X	-	-	-
50	CLA	x	307	X	-	-	-
50	CLA	x	308	X	-	-	-
50	CLA	x	309	X	-	-	-
50	CLA	x	310	X	-	-	-
50	CLA	x	312	X	-	-	-
50	CLA	x	313	X	-	-	-
50	CLA	x	316	X	-	-	-
50	CLA	x	318	X	-	-	-
50	CLA	y	302	X	-	-	-
50	CLA	y	303	X	-	-	-
50	CLA	y	304	X	-	-	-
50	CLA	y	305	X	-	-	-
50	CLA	y	306	X	-	-	-
50	CLA	y	307	X	-	-	-
50	CLA	y	308	X	-	-	-
50	CLA	y	309	X	-	-	-
50	CLA	y	310	X	-	-	-
50	CLA	y	311	X	-	-	-
50	CLA	y	312	X	-	-	-
50	CLA	y	313	X	-	-	-
50	CLA	y	314	X	-	-	-
50	CLA	z	302	X	-	-	-
50	CLA	z	303	X	-	-	-
50	CLA	z	305	X	-	-	-
50	CLA	z	306	X	-	-	-
50	CLA	z	307	X	-	-	-
50	CLA	z	308	X	-	-	-
50	CLA	z	309	X	-	-	-
50	CLA	z	310	X	-	-	-
50	CLA	z	311	X	-	-	-
50	CLA	z	316	X	-	-	-
50	CLA	z	319	X	-	-	-
52	CL0	a	808	X	-	-	-
54	CHL	w	304	X	-	-	-
54	CHL	w	309	X	-	-	-
54	CHL	w	311	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
54	CHL	x	301	X	-	-	-
54	CHL	x	305	X	-	-	-
54	CHL	x	311	X	-	-	-
54	CHL	x	319	X	-	-	-
54	CHL	z	304	X	-	-	-
54	CHL	z	312	X	-	-	-
55	LUT	w	320	-	-	X	-
55	LUT	y	315	-	-	X	-
55	LUT	y	316	-	-	X	-
55	LUT	z	320	-	-	X	-

2 Entry composition (i)

There are 55 unique types of molecules in this entry. The entry contains 83864 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 Photosynthetic NDH subunit of lumenal location 1, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	0	157	Total	C	N	O	S	0	0
			1317	840	227	248	2		

- Molecule 2 is a protein called Photosynthetic NDH subunit of subcomplex B 1, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	1	403	Total	C	N	O	S	0	0
			3133	1994	515	607	17		

- Molecule 3 is a protein called Photosynthetic NDH subunit of subcomplex B 2, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	2	300	Total	C	N	O	S	0	0
			2305	1463	383	452	7		

- Molecule 4 is a protein called Photosynthetic NDH subunit of subcomplex B 3, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	3	139	Total	C	N	O	S	0	0
			1093	690	185	210	8		

- Molecule 5 is a protein called Photosynthetic NDH subunit of subcomplex B 4, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	4	93	Total	C	N	O	S	0	0
			756	482	125	143	6		

- Molecule 6 is a protein called Photosynthetic NDH subunit of subcomplex B 5, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	5	154	Total	C	N	O	S	0	0
			1258	816	194	242	6		

- Molecule 7 is a protein called Photosynthetic NDH subunit of lumenal location 2, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	6	125	Total	C	N	O	S	0	0
			1048	675	174	193	6		

- Molecule 8 is a protein called Photosynthetic NDH subunit of lumenal location 3, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	7	144	Total	C	N	O	S	0	0
			1156	739	198	213	6		

- Molecule 9 is a protein called peptidylprolyl isomerase.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	8	143	Total	C	N	O	S	0	0
			1075	680	187	201	7		

- Molecule 10 is a protein called Peptidyl-prolyl cis-trans isomerase.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	9	174	Total	C	N	O	S	0	0
			1326	836	233	251	6		

- Molecule 11 is a protein called NAD(P)H-quinone oxidoreductase subunit 1, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	A	350	Total	C	N	O	S	0	0
			2728	1821	420	482	5		

- Molecule 12 is a protein called NAD(P)H-quinone oxidoreductase subunit 2 A, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	B	488	Total	C	N	O	S	0	0
			3799	2506	583	683	27		

- Molecule 13 is a protein called NAD(P)H-quinone oxidoreductase subunit 3, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	C	115	Total	C	N	O	S	0	0
			944	653	133	155	3		

- Molecule 14 is a protein called NAD(P)H-quinone oxidoreductase chain 4, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	D	498	Total	C	N	O	S	0	0
			3955	2660	607	665	23		

- Molecule 15 is a protein called NAD(P)H-quinone oxidoreductase subunit 4L, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	E	100	Total	C	N	O	S	0	0
			780	509	133	135	3		

- Molecule 16 is a protein called NAD(P)H-quinone oxidoreductase subunit 5, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	F	722	Total	C	N	O	S	0	0
			5796	3885	889	990	32		

- Molecule 17 is a protein called NAD(P)H-quinone oxidoreductase subunit 6, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	G	176	Total	C	N	O	S	0	0
			1357	910	204	238	5		

- Molecule 18 is a protein called NAD(P)H-quinone oxidoreductase subunit H, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	H	371	Total	C	N	O	S	0	0
			3008	1948	506	535	19		

- Molecule 19 is a protein called NAD(P)H-quinone oxidoreductase subunit I, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	I	163	Total	C	N	O	S	0	0
			1329	845	226	246	12		

- Molecule 20 is a protein called NAD(P)H-quinone oxidoreductase subunit J, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	J	158	Total	C	N	O	S	0	0
			1324	864	224	231	5		

- Molecule 21 is a protein called NAD(P)H-quinone oxidoreductase subunit K, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	K	202	Total	C	N	O	S	0	0
			1597	1020	272	294	11		

- Molecule 22 is a protein called NAD(P)H-quinone oxidoreductase subunit L, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	L	109	Total	C	N	O	S	0	0
			936	639	147	144	6		

- Molecule 23 is a protein called NAD(P)H-quinone oxidoreductase subunit M, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	M	141	Total	C	N	O	S	0	0
			1169	743	196	221	9		

- Molecule 24 is a protein called NAD(P)H-quinone oxidoreductase subunit N, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	N	165	Total	C	N	O	S	0	0
			1323	862	228	228	5		

- Molecule 25 is a protein called NAD(P)H-quinone oxidoreductase subunit O, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	O	95	Total	C	N	O	S	0	0
			786	515	127	142	2		

- Molecule 26 is a protein called NAD(P)H-quinone oxidoreductase subunit U, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	U	163	Total	C	N	O	S	0	0
			1266	802	218	243	3		

- Molecule 27 is a protein called Photosystem I P700 chlorophyll a apoprotein A1.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	a	742	Total	C	N	O	S	0	0
			5827	3817	991	1001	18		

- Molecule 28 is a protein called Photosystem I P700 chlorophyll a apoprotein A2.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	b	733	Total	C	N	O	S	0	0
			5855	3841	996	1003	15		

- Molecule 29 is a protein called Photosystem I iron-sulfur center.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	c	81	Total	C	N	O	S	0	0
			623	385	108	118	12		

- Molecule 30 is a protein called Photosystem I reaction center subunit II, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	d	143	Total	C	N	O	S	0	0
			1132	729	194	205	4		

- Molecule 31 is a protein called Photosystem I reaction center subunit IV, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	e	68	Total	C	N	O	S	0	0
			546	348	98	99	1		

- Molecule 32 is a protein called Photosystem I reaction center subunit III, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	f	153	Total	C	N	O	S	0	0
			1211	785	206	217	3		

- Molecule 33 is a protein called Photosystem I reaction center subunit V, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	g	97	Total	C	N	O	S	0	0
			759	493	123	141	2		

- Molecule 34 is a protein called Photosystem I reaction center subunit VI, chloroplastic.

Mol	Chain	Residues	Atoms				AltConf	Trace
34	h	95	Total	C	N	O	0	0
			737	479	120	138		

- Molecule 35 is a protein called Photosystem I reaction center subunit VIII.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	i	31	Total	C	N	O	S	0	0
			244	168	36	38	2		

- Molecule 36 is a protein called Photosystem I reaction center subunit IX.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	j	42	Total	C	N	O	S	0	0
			345	236	51	57	1		

- Molecule 37 is a protein called PSI-K.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	k	66	Total	C	N	O	S	0	0
			462	294	78	87	3		

- Molecule 38 is a protein called Photosystem I reaction center subunit XI, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
38	l	160	Total	C	N	O	S	0	0
			1200	791	192	212	5		

- Molecule 39 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	w	215	Total	C	N	O	S	0	0
			1689	1096	281	300	12		

- Molecule 40 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	x	198	Total	C	N	O	S	0	0
			1568	1023	256	284	5		

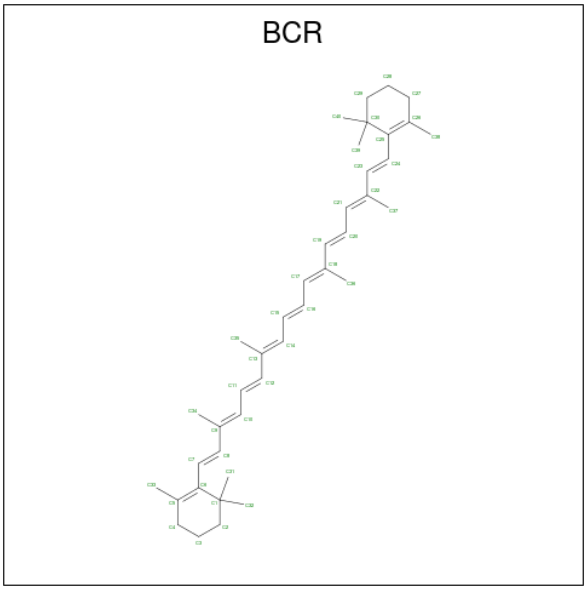
- Molecule 41 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	y	221	Total	C	N	O	S	0	0
			1713	1125	277	306	5		

- Molecule 42 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	z	193	Total	C	N	O	S	0	0
			1498	973	250	270	5		

- Molecule 43 is BETA-CAROTENE (CCD ID: BCR) (formula: $C_{40}H_{56}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms		AltConf
43	4	1	Total	C	0
			40	40	
43	a	1	Total	C	0
			27	27	
43	a	1	Total	C	0
			30	30	
43	a	1	Total	C	0
			39	39	
43	a	1	Total	C	0
			40	40	
43	a	1	Total	C	0
			40	40	
43	a	1	Total	C	0
			40	40	
43	a	1	Total	C	0
			39	39	
43	b	1	Total	C	0
			40	40	
43	b	1	Total	C	0
			40	40	

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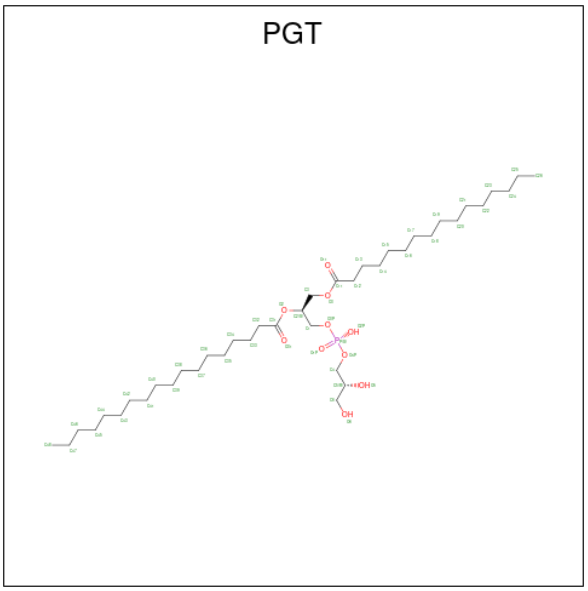
Mol	Chain	Residues	Atoms	AltConf
43	b	1	Total C 40 40	0
43	b	1	Total C 40 40	0
43	b	1	Total C 40 40	0
43	b	1	Total C 40 40	0
43	b	1	Total C 40 40	0
43	f	1	Total C 40 40	0
43	g	1	Total C 40 40	0
43	i	1	Total C 40 40	0
43	j	1	Total C 40 40	0
43	j	1	Total C 40 40	0
43	k	1	Total C 40 40	0
43	k	1	Total C 40 40	0
43	l	1	Total C 40 40	0
43	l	1	Total C 40 40	0
43	l	1	Total C 40 40	0
43	w	1	Total C 40 40	0
43	x	1	Total C 40 40	0
43	y	1	Total C 40 40	0
43	z	1	Total C 40 40	0

- Molecule 44 is (1S)-2-{[{[(2R)-2,3-DIHYDROXYPROPYL]OXY}(HYDROXY)PHOSPHORYL]OXY}-1-[(PALMITOYLOXY)METHYL]ETHYL STEARATE (CCD ID: PGT) (formula: $C_{40}H_{79}O_{10}P$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
44	5	1	Total	C	O	P	0
			35	24	10	1	
44	A	1	Total	C	O	P	0
			32	21	10	1	
44	A	1	Total	C	O	P	0
			37	26	10	1	
44	A	1	Total	C	O	P	0
			38	27	10	1	
44	A	1	Total	C	O	P	0
			44	33	10	1	
44	B	1	Total	C	O	P	0
			34	23	10	1	
44	B	1	Total	C	O	P	0
			42	31	10	1	
44	B	1	Total	C	O	P	0
			46	35	10	1	
44	B	1	Total	C	O	P	0
			35	24	10	1	
44	D	1	Total	C	O	P	0
			34	23	10	1	
44	F	1	Total	C	O	P	0
			43	32	10	1	
44	I	1	Total	C	O	P	0
			44	33	10	1	
44	L	1	Total	C	O	P	0
			40	29	10	1	
44	N	1	Total	C	O	P	0
			26	15	10	1	

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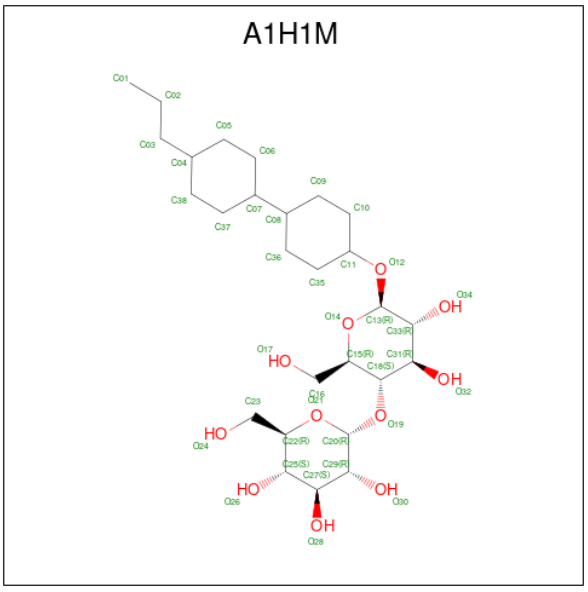
Mol	Chain	Residues	Atoms				AltConf
44	a	1	Total	C	O	P	0
			32	21	10	1	
44	a	1	Total	C	O	P	0
			33	22	10	1	
44	a	1	Total	C	O	P	0
			46	35	10	1	
44	b	1	Total	C	O	P	0
			48	37	10	1	
44	b	1	Total	C	O	P	0
			39	28	10	1	
44	f	1	Total	C	O	P	0
			39	28	10	1	
44	w	1	Total	C	O	P	0
			40	29	10	1	
44	z	1	Total	C	O	P	0
			45	34	10	1	
44	z	1	Total	C	O	P	0
			33	22	10	1	
44	z	1	Total	C	O	P	0
			46	35	10	1	

- Molecule 45 is 4-trans-(4-trans-Propylcyclohexyl)-cyclohexyl alpha-maltoside (CCD ID: A1H1M) (formula: $C_{27}H_{48}O_{11}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			AltConf
45	5	1	Total	C	O	0
			38	27	11	

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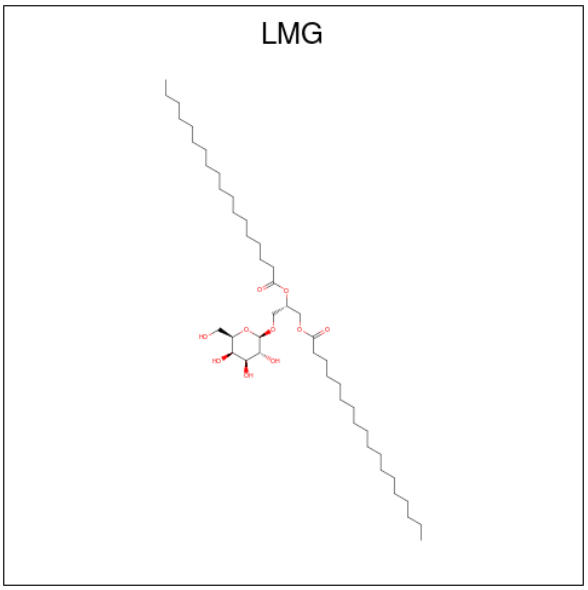
Mol	Chain	Residues	Atoms			AltConf
45	F	1	Total	C	O	0
			38	27	11	

- Molecule 46 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID: LMG) (formula: $C_{45}H_{86}O_{10}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			AltConf
46	7	1	Total	C	O	0
			41	31	10	
46	B	1	Total	C	O	0
			37	27	10	
46	D	1	Total	C	O	0
			34	24	10	
46	F	1	Total	C	O	0
			28	18	10	
46	H	1	Total	C	O	0
			33	23	10	
46	f	1	Total	C	O	0
			34	24	10	
46	j	1	Total	C	O	0
			34	24	10	
46	j	1	Total	C	O	0
			37	27	10	
46	w	1	Total	C	O	0
			40	30	10	
46	x	1	Total	C	O	0
			48	38	10	

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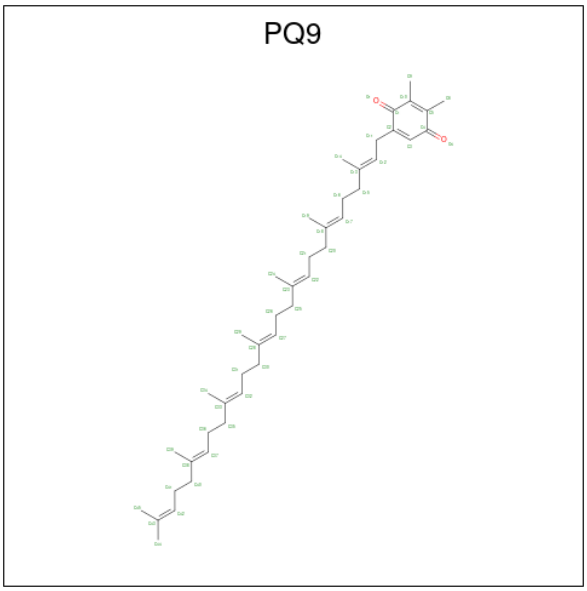
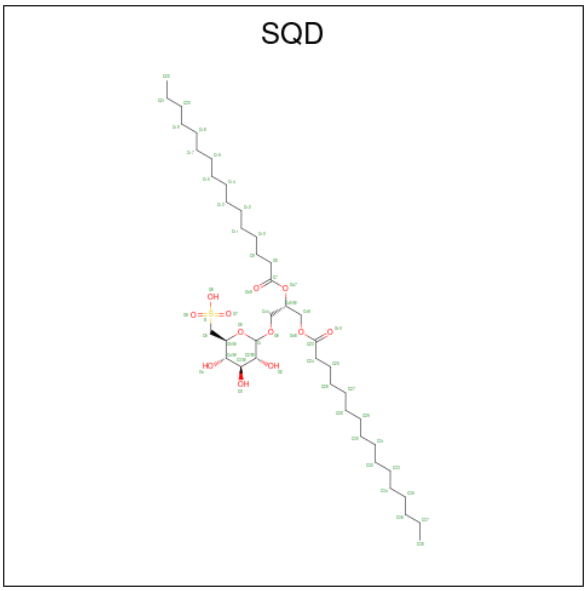
Mol	Chain	Residues	Atoms	AltConf
46	z	1	Total C O 40 30 10	0
46	z	1	Total C O 36 26 10	0

- Molecule 47 is 5-[(2E,6E,10E,14E,18E,22E)-3,7,11,15,19,23,27-HEPTAMETHYLOCTACOSA-2,6,10,14,18,22,26-HEPTAENYL]-2,3-DIMETHYLBENZO-1,4-QUINONE (CCD ID: PQ9) (formula: $C_{43}H_{64}O_2$) (labeled as "Ligand of Interest" by depositor).



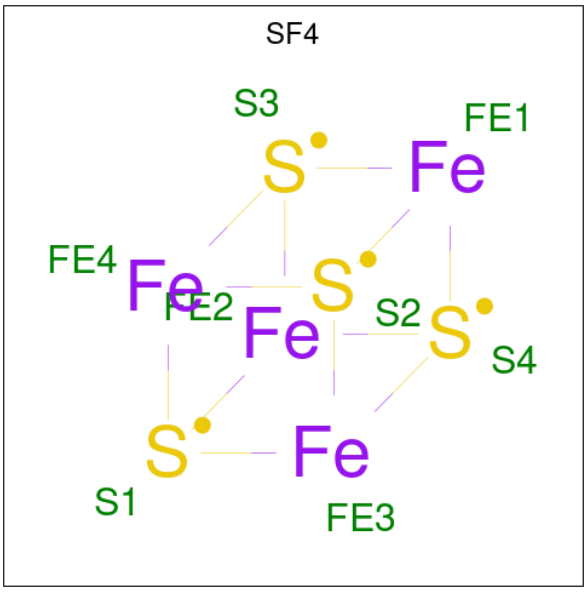
Mol	Chain	Residues	Atoms	AltConf
47	A	1	Total C O 36 34 2	0

- Molecule 48 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (CCD ID: SQD) (formula: $C_{41}H_{78}O_{12}S$) (labeled as "Ligand of Interest" by depositor).



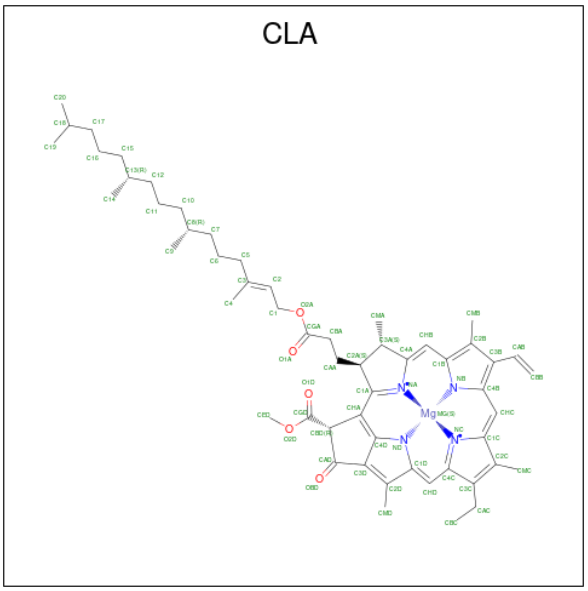
Mol	Chain	Residues	Atoms				AltConf
48	B	1	Total 40	C 27	O 12	S 1	0
48	F	1	Total 41	C 28	O 12	S 1	0
48	F	1	Total 43	C 30	O 12	S 1	0
48	a	1	Total 36	C 23	O 12	S 1	0
48	j	1	Total 42	C 29	O 12	S 1	0
48	w	1	Total 31	C 18	O 12	S 1	0
48	w	1	Total 41	C 28	O 12	S 1	0

- Molecule 49 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
49	I	1	Total Fe S 8 4 4	0
49	I	1	Total Fe S 8 4 4	0
49	K	1	Total Fe S 8 4 4	0
49	a	1	Total Fe S 8 4 4	0
49	c	1	Total Fe S 8 4 4	0
49	c	1	Total Fe S 8 4 4	0

- Molecule 50 is CHLOROPHYLL A (CCD ID: CLA) (formula: $C_{55}H_{72}MgN_4O_5$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
50	a	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
50	a	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			63	53	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
50	a	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
50	a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			42	35	1	3	3	
50	a	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
50	a	1	Total	C	Mg	N	O	0
			64	54	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
50	b	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			62	52	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
50	b	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
50	b	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
50	b	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
50	f	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
50	f	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
50	f	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
50	g	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
50	g	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
50	g	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
50	h	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
50	j	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
50	k	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
50	k	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
50	k	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
50	l	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
50	l	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
50	l	1	Total	C	Mg	N	O	0
			60	50	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
50	w	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
50	w	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
50	w	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
50	w	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	w	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
50	w	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	w	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	w	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
50	w	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
50	w	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
50	x	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
50	x	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
50	x	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
50	x	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
50	x	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
50	x	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
50	x	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
50	x	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
50	x	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	x	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
50	x	1	Total	C	Mg	N	O	0
			45	35	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
50	x	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
50	y	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
50	y	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
50	y	1	Total	C	Mg	N	O	0
			39	33	1	4	1	
50	y	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
50	y	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
50	y	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
50	y	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	y	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
50	y	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	y	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
50	y	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
50	y	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	y	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	z	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
50	z	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
50	z	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
50	z	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
50	z	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
50	z	1	Total	C	Mg	N	O	0
			43	33	1	4	5	
50	z	1	Total	C	Mg	N	O	0
			42	34	1	4	3	

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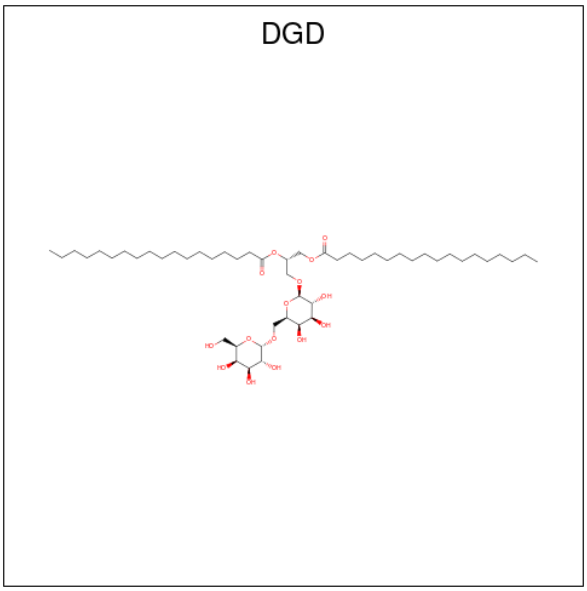
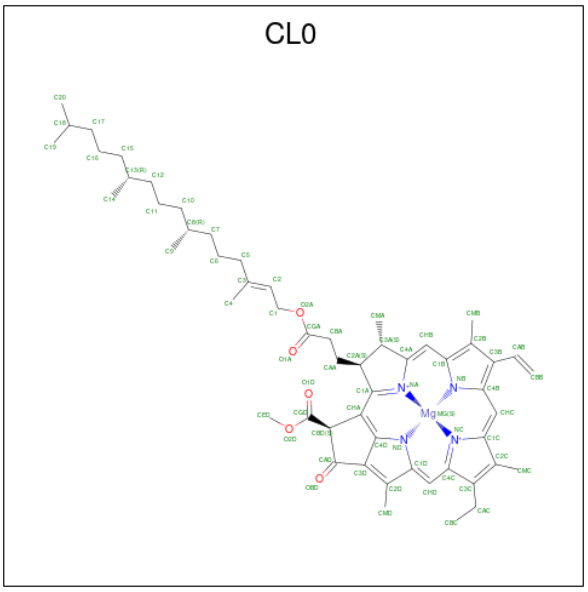
Mol	Chain	Residues	Atoms					AltConf
50	z	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
50	z	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
50	z	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
50	z	1	Total	C	Mg	N	O	0
			42	34	1	4	3	

- Molecule 51 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (CCD ID: DGD) (formula: $C_{51}H_{96}O_{15}$) (labeled as "Ligand of Interest" by depositor).



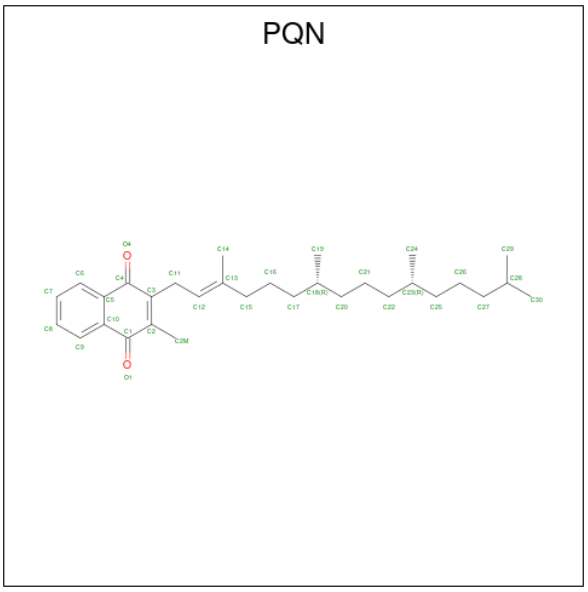
Mol	Chain	Residues	Atoms			AltConf
51	a	1	Total	C	O	0
			66	51	15	
51	b	1	Total	C	O	0
			59	44	15	
51	x	1	Total	C	O	0
			48	33	15	

- Molecule 52 is CHLOROPHYLL A ISOMER (CCD ID: CL0) (formula: $C_{55}H_{72}MgN_4O_5$) (labeled as "Ligand of Interest" by depositor).



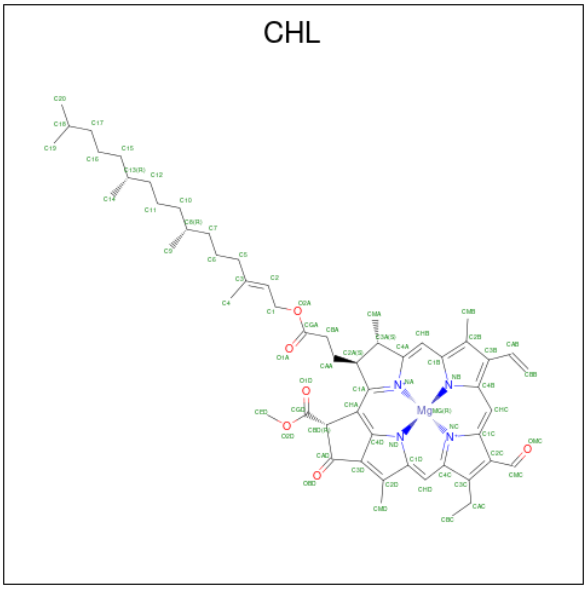
Mol	Chain	Residues	Atoms					AltConf
52	a	1	Total	C	Mg	N	O	0
			61	52	1	4	4	

- Molecule 53 is PHYLLOQUINONE (CCD ID: PQN) (formula: $C_{31}H_{46}O_2$) (labeled as "Ligand of Interest" by depositor).



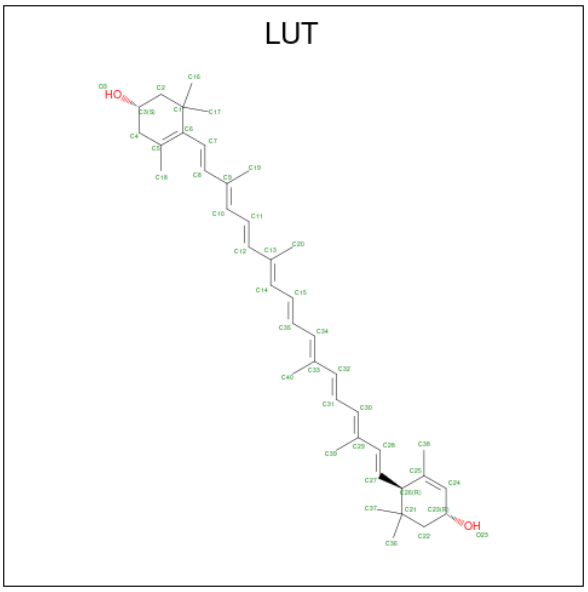
Mol	Chain	Residues	Atoms			AltConf
53	a	1	Total	C	O	0
			33	31	2	
53	b	1	Total	C	O	0
			33	31	2	

- Molecule 54 is CHLOROPHYLL B (CCD ID: CHL) (formula: $C_{55}H_{70}MgN_4O_6$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
54	w	1	Total	C	Mg	N	O	0
			45	34	1	4	6	
54	w	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
54	w	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
54	x	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
54	x	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
54	x	1	Total	C	Mg	N	O	0
			40	31	1	4	4	
54	x	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
54	z	1	Total	C	Mg	N	O	0
			42	33	1	4	4	
54	z	1	Total	C	Mg	N	O	0
			61	50	1	4	6	

- Molecule 55 is (3R,3'R,6S)-4,5-DIDEHYDRO-5,6-DIHYDRO-BETA,BETA-CAROTENE-3,3'-DIOL (CCD ID: LUT) (formula: $C_{40}H_{56}O_2$) (labeled as "Ligand of Interest" by depositor).



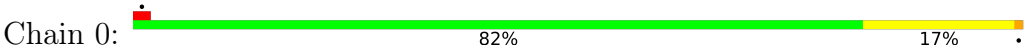
Mol	Chain	Residues	Atoms			AltConf
55	w	1	Total	C	O	0
			42	40	2	
55	w	1	Total	C	O	0
			42	40	2	
55	x	1	Total	C	O	0
			42	40	2	
55	x	1	Total	C	O	0
			42	40	2	
55	y	1	Total	C	O	0
			42	40	2	
55	y	1	Total	C	O	0
			42	40	2	
55	z	1	Total	C	O	0
			42	40	2	
55	z	1	Total	C	O	0
			42	40	2	

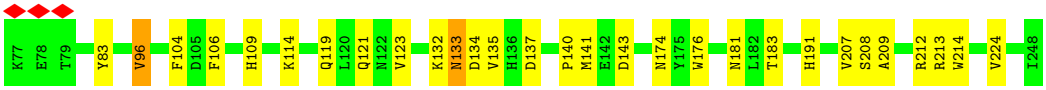
3 Residue-property plots (i)

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: Photosynthetic NDH subunit of lumenal location 1, chloroplastic

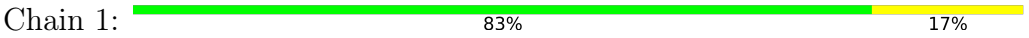
Chain 0:

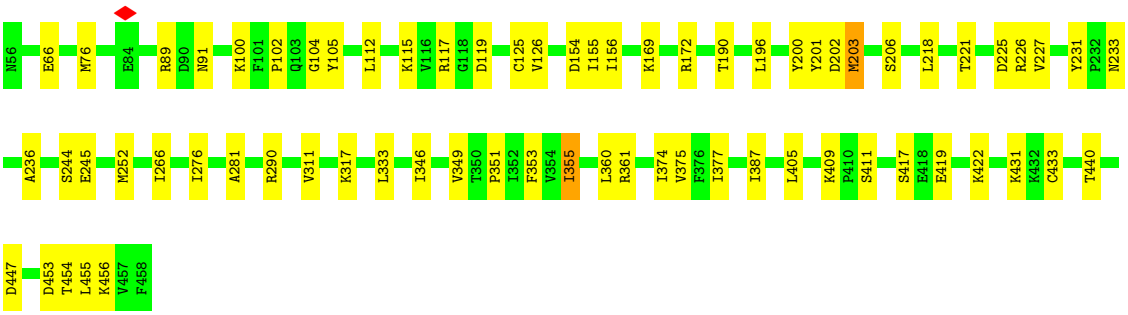




• Molecule 2: Photosynthetic NDH subunit of subcomplex B 1, chloroplastic

Chain 1:





• Molecule 3: Photosynthetic NDH subunit of subcomplex B 2, chloroplastic

Chain 2:

• Molecule 4: Photosynthetic NDH subunit of subcomplex B 3, chloroplastic

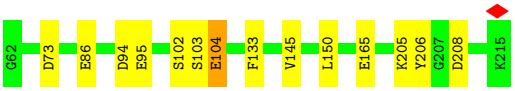
Chain 3:

• Molecule 5: Photosynthetic NDH subunit of subcomplex B 4, chloroplastic

Chain 4:

• Molecule 6: Photosynthetic NDH subunit of subcomplex B 5, chloroplastic

Chain 5:

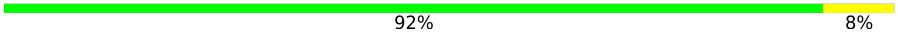


• Molecule 7: Photosynthetic NDH subunit of lumenal location 2, chloroplastic

Chain 6:

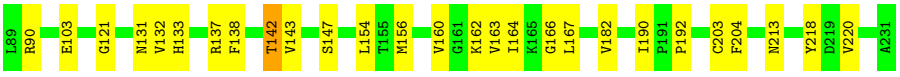
• Molecule 8: Photosynthetic NDH subunit of lumenal location 3, chloroplastic

Chain 7:



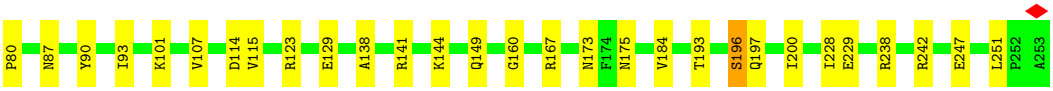
• Molecule 9: peptidylprolyl isomerase

Chain 8:

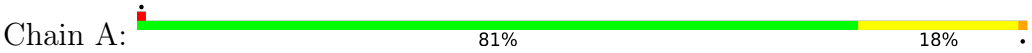


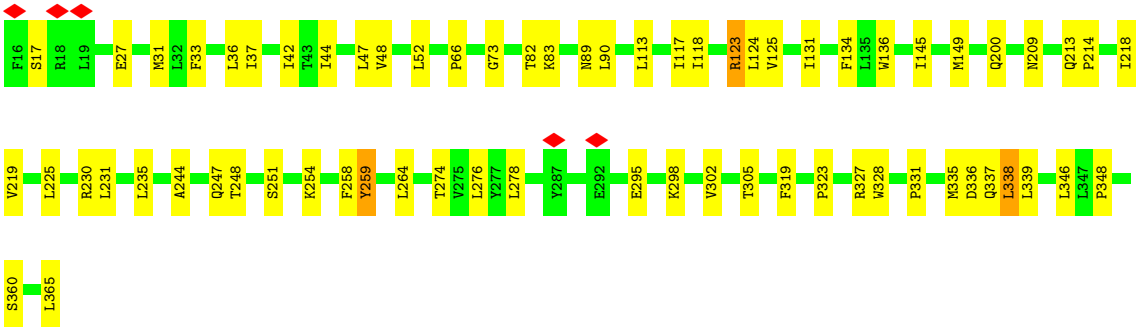
• Molecule 10: Peptidyl-prolyl cis-trans isomerase

Chain 9:

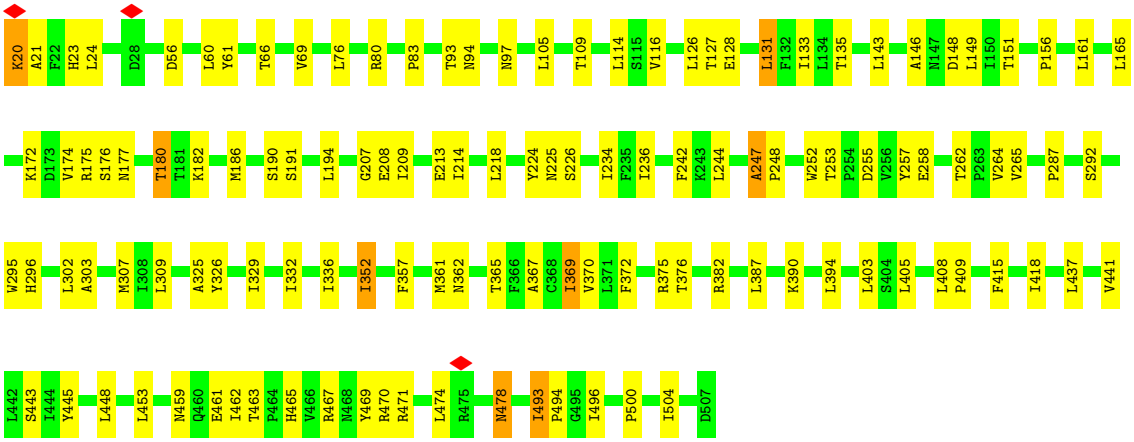


• Molecule 11: NAD(P)H-quinone oxidoreductase subunit 1, chloroplastic

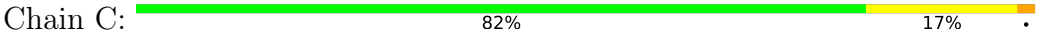


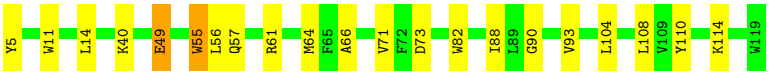


• Molecule 12: NAD(P)H-quinone oxidoreductase subunit 2 A, chloroplastic

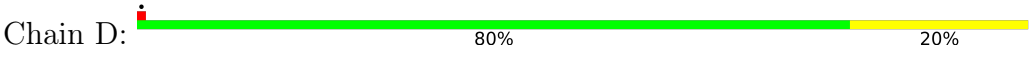


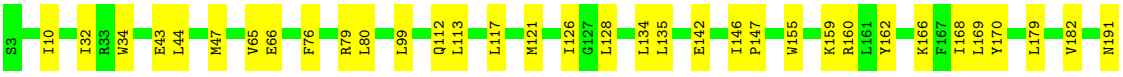
• Molecule 13: NAD(P)H-quinone oxidoreductase subunit 3, chloroplastic

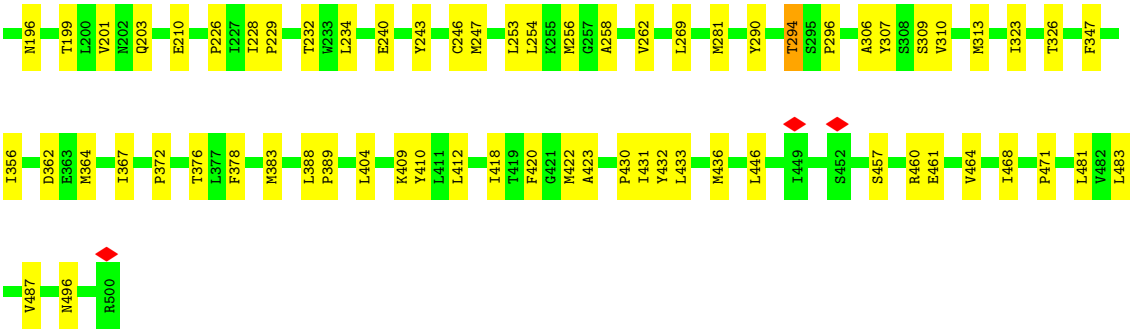




• Molecule 14: NAD(P)H-quinone oxidoreductase chain 4, chloroplastic





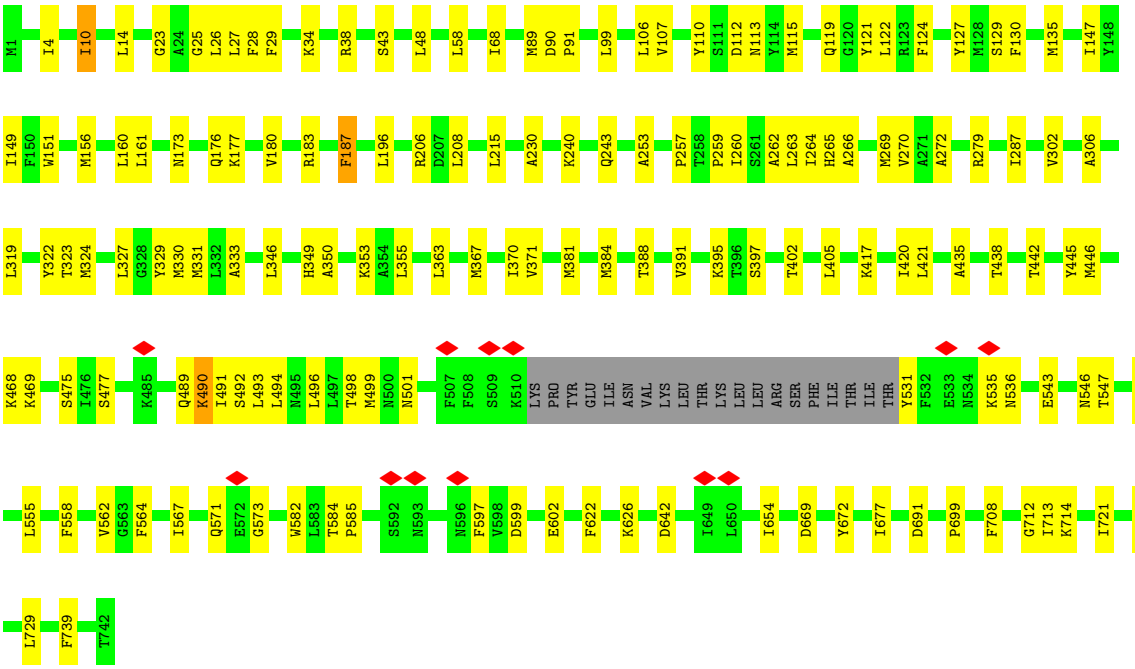


• Molecule 15: NAD(P)H-quinone oxidoreductase subunit 4L, chloroplastic

Chain E:

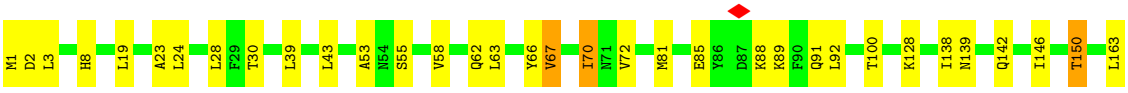
• Molecule 16: NAD(P)H-quinone oxidoreductase subunit 5, chloroplastic

Chain F:



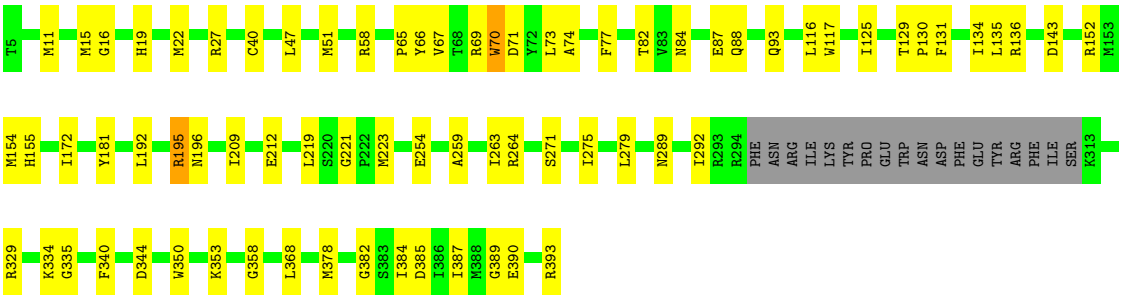
• Molecule 17: NAD(P)H-quinone oxidoreductase subunit 6, chloroplastic

Chain G:



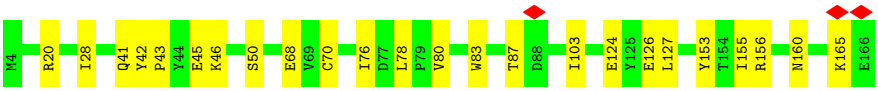
• Molecule 18: NAD(P)H-quinone oxidoreductase subunit H, chloroplastic

Chain H:



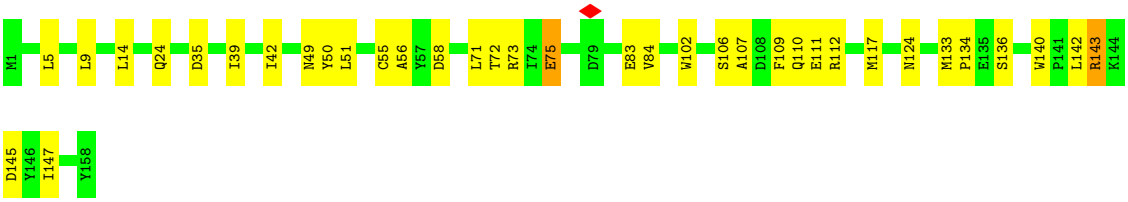
• Molecule 19: NAD(P)H-quinone oxidoreductase subunit I, chloroplastic

Chain I:



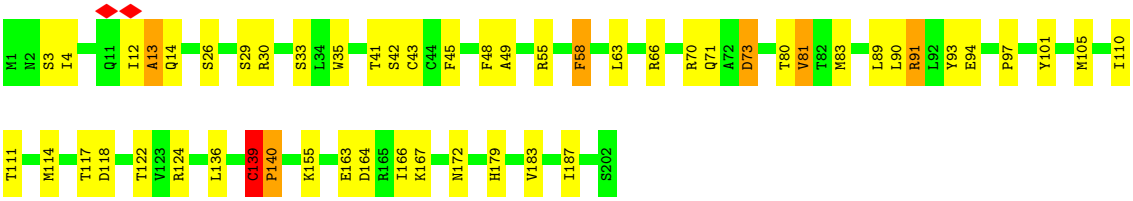
• Molecule 20: NAD(P)H-quinone oxidoreductase subunit J, chloroplastic

Chain J:



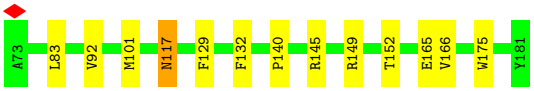
• Molecule 21: NAD(P)H-quinone oxidoreductase subunit K, chloroplastic

Chain K:



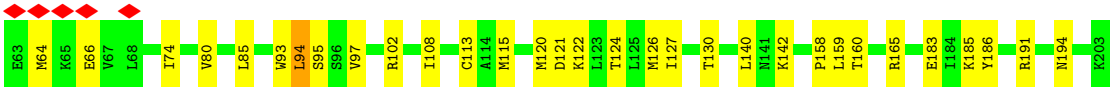
• Molecule 22: NAD(P)H-quinone oxidoreductase subunit L, chloroplastic

Chain L:



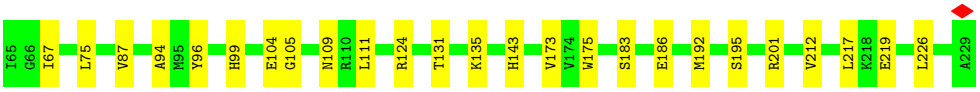
• Molecule 23: NAD(P)H-quinone oxidoreductase subunit M, chloroplastic

Chain M:



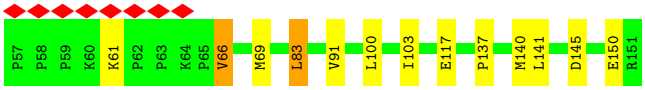
• Molecule 24: NAD(P)H-quinone oxidoreductase subunit N, chloroplastic

Chain N:



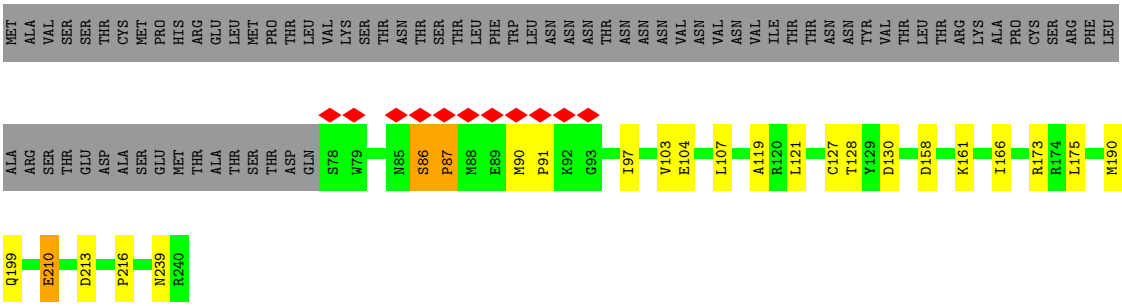
• Molecule 25: NAD(P)H-quinone oxidoreductase subunit O, chloroplastic

Chain O:



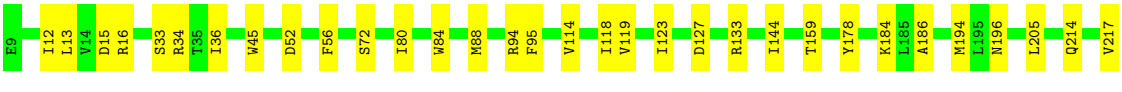
• Molecule 26: NAD(P)H-quinone oxidoreductase subunit U, chloroplastic

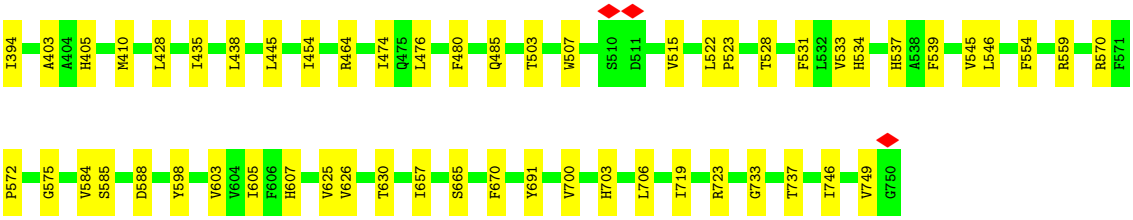
Chain U:



• Molecule 27: Photosystem I P700 chlorophyll a apoprotein A1

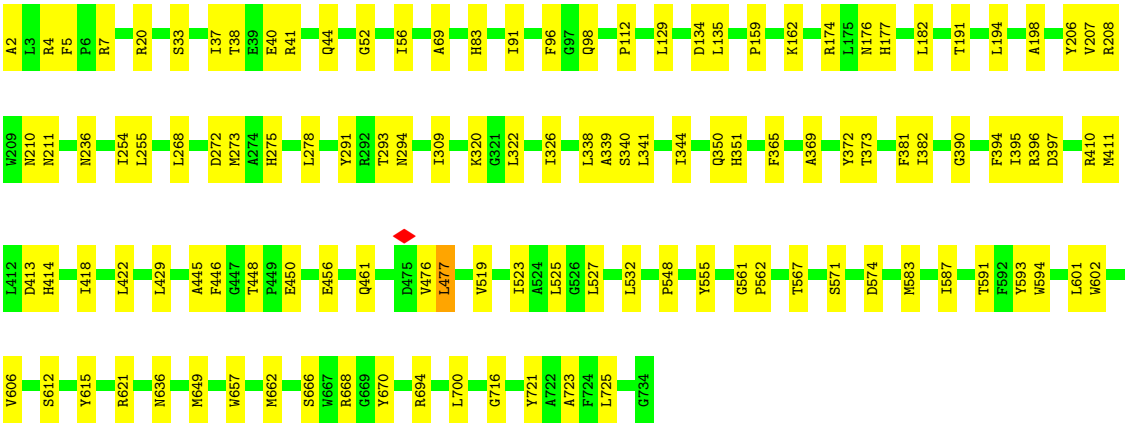
Chain a:





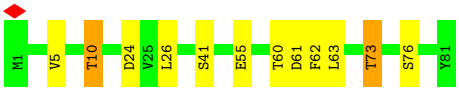
• Molecule 28: Photosystem I P700 chlorophyll a apoprotein A2

Chain b:



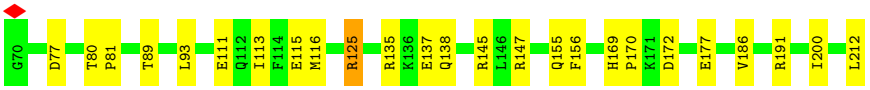
• Molecule 29: Photosystem I iron-sulfur center

Chain c:



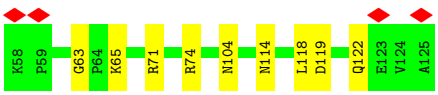
• Molecule 30: Photosystem I reaction center subunit II, chloroplastic

Chain d:



• Molecule 31: Photosystem I reaction center subunit IV, chloroplastic

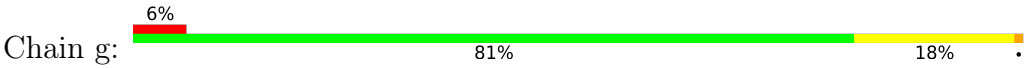
Chain e:



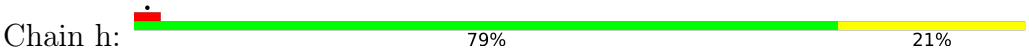
• Molecule 32: Photosystem I reaction center subunit III, chloroplastic

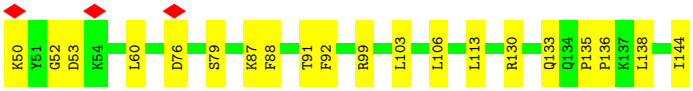
Chain f:

• Molecule 33: Photosystem I reaction center subunit V, chloroplastic

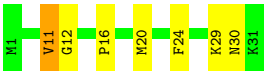


• Molecule 34: Photosystem I reaction center subunit VI, chloroplastic

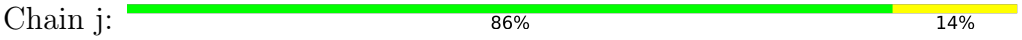




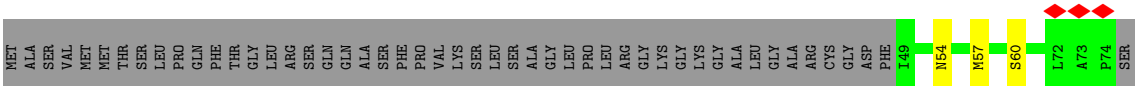
• Molecule 35: Photosystem I reaction center subunit VIII

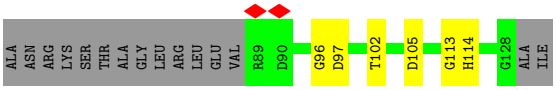


• Molecule 36: Photosystem I reaction center subunit IX

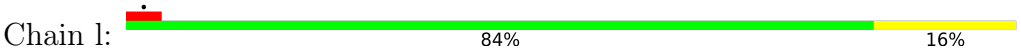


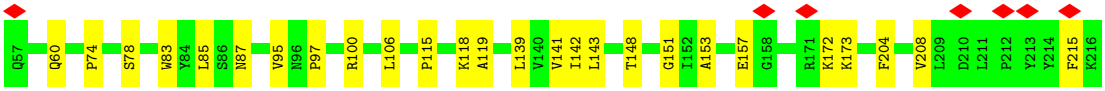
• Molecule 37: PSI-K





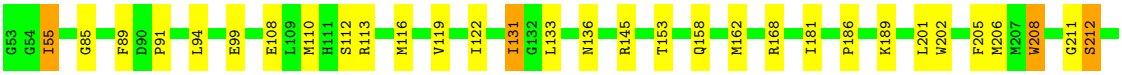
• Molecule 38: Photosystem I reaction center subunit XI, chloroplastic





• Molecule 39: Chlorophyll a-b binding protein, chloroplastic

Chain w:



• Molecule 40: Chlorophyll a-b binding protein, chloroplastic

Chain x:

• Molecule 41: Chlorophyll a-b binding protein, chloroplastic

Chain y:

• Molecule 42: Chlorophyll a-b binding protein, chloroplastic

Chain z:

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	38385	Depositor
Resolution determination method	OTHER	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	40	Depositor
Minimum defocus (nm)	700	Depositor
Maximum defocus (nm)	1700	Depositor
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	3.744	Depositor
Minimum map value	-0.387	Depositor
Average map value	0.043	Depositor
Map value standard deviation	0.080	Depositor
Recommended contour level	0.3	Depositor
Map size (Å)	428.544, 428.544, 428.544	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.837, 0.837, 0.837	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: PQ9, LMG, PQN, A1H1M, DGD, SF4, CHL, BCR, CLA, SQD, CL0, PGT, LUT

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	0.15	0/1351	0.40	0/1831
2	1	0.13	0/3200	0.35	0/4340
3	2	0.13	0/2350	0.35	0/3186
4	3	0.15	0/1118	0.41	0/1512
5	4	0.17	0/777	0.38	0/1051
6	5	0.23	0/1301	0.44	0/1770
7	6	0.17	0/1075	0.40	0/1448
8	7	0.18	0/1178	0.38	0/1589
9	8	0.14	0/1101	0.34	0/1494
10	9	0.11	0/1352	0.35	1/1821 (0.1%)
11	A	0.21	0/2795	0.45	1/3810 (0.0%)
12	B	0.22	0/3890	0.48	0/5290
13	C	0.25	0/977	0.48	0/1333
14	D	0.16	0/4072	0.36	0/5535
15	E	0.18	0/791	0.42	0/1070
16	F	0.20	0/5965	0.43	1/8100 (0.0%)
17	G	0.17	0/1388	0.37	0/1893
18	H	0.17	0/3081	0.39	0/4170
19	I	0.15	0/1357	0.38	0/1839
20	J	0.13	0/1369	0.32	0/1862
21	K	0.18	0/1633	0.44	0/2212
22	L	0.17	0/975	0.43	0/1328
23	M	0.20	0/1193	0.46	0/1611
24	N	0.13	0/1363	0.33	0/1852
25	O	0.16	0/811	0.42	0/1100
26	U	0.22	0/1297	0.61	4/1764 (0.2%)
27	a	0.13	0/6024	0.31	0/8220
28	b	0.13	0/6067	0.31	0/8282
29	c	0.13	0/636	0.34	0/860
30	d	0.14	0/1162	0.37	0/1569
31	e	0.15	0/559	0.36	0/757
32	f	0.14	0/1239	0.30	0/1671

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
33	g	0.14	0/779	0.35	0/1055
34	h	0.13	0/758	0.32	0/1029
35	i	0.17	0/251	0.38	0/339
36	j	0.14	0/357	0.31	0/484
37	k	0.10	0/467	0.27	0/630
38	l	0.15	0/1235	0.35	0/1685
39	w	0.20	0/1750	0.45	0/2389
40	x	0.14	0/1619	0.32	0/2206
41	y	0.17	0/1768	0.39	0/2400
42	z	0.15	0/1546	0.35	1/2104 (0.0%)
All	All	0.17	0/73977	0.39	8/100491 (0.0%)

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
11	A	0	1
18	H	0	1
21	K	0	2
39	w	0	1
All	All	0	5

There are no bond length outliers.

All (8) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	U	91	PRO	N-CA-CB	13.58	110.53	102.92
26	U	87	PRO	N-CA-CB	8.01	111.67	103.25
10	9	80	PRO	N-CA-CB	6.78	110.46	103.00
11	A	258	PHE	CA-CB-CG	6.34	120.14	113.80
16	F	499	MET	CA-CB-CG	6.20	126.51	114.10
42	z	153	VAL	N-CA-C	-5.26	107.26	113.42
26	U	86	SER	CA-C-N	5.13	126.25	119.84
26	U	86	SER	C-N-CA	5.13	126.25	119.84

There are no chirality outliers.

All (5) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
11	A	123	ARG	Sidechain
18	H	195	ARG	Sidechain
21	K	139	CYS	Peptide
21	K	91	ARG	Sidechain
39	w	212	SER	Peptide

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	1317	0	1268	16	0
2	1	3133	0	3096	43	0
3	2	2305	0	2298	37	0
4	3	1093	0	1078	18	0
5	4	756	0	700	15	0
6	5	1258	0	1147	11	0
7	6	1048	0	1020	19	0
8	7	1156	0	1172	6	0
9	8	1075	0	1051	16	0
10	9	1326	0	1307	16	0
11	A	2728	0	2807	53	0
12	B	3799	0	3881	88	0
13	C	944	0	951	21	0
14	D	3955	0	4064	68	0
15	E	780	0	824	17	0
16	F	5796	0	5847	113	0
17	G	1357	0	1415	32	0
18	H	3008	0	3025	57	0
19	I	1329	0	1310	17	0
20	J	1324	0	1283	21	0
21	K	1597	0	1619	42	0
22	L	936	0	930	10	0
23	M	1169	0	1155	24	0
24	N	1323	0	1334	16	0
25	O	786	0	789	7	0
26	U	1266	0	1182	15	0
27	a	5827	0	5685	90	0
28	b	5855	0	5629	89	0
29	c	623	0	602	10	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
30	d	1132	0	1145	17	0
31	e	546	0	555	8	0
32	f	1211	0	1236	14	0
33	g	759	0	736	13	0
34	h	737	0	733	18	0
35	i	244	0	262	7	0
36	j	345	0	347	6	0
37	k	462	0	474	7	0
38	l	1200	0	1208	22	0
39	w	1689	0	1617	45	0
40	x	1568	0	1516	32	0
41	y	1713	0	1679	51	0
42	z	1498	0	1471	48	0
43	4	40	0	56	4	0
43	a	255	0	348	18	0
43	b	280	0	392	22	0
43	f	40	0	56	2	0
43	g	40	0	56	2	0
43	i	40	0	56	2	0
43	j	80	0	112	10	0
43	k	80	0	112	0	0
43	l	120	0	168	5	0
43	w	40	0	56	1	0
43	x	40	0	55	1	0
43	y	40	0	56	1	0
43	z	40	0	55	1	0
44	5	35	0	40	2	0
44	A	151	0	185	3	0
44	B	157	0	200	6	0
44	D	34	0	38	1	0
44	F	43	0	59	0	0
44	I	44	0	61	0	0
44	L	40	0	50	2	0
44	N	26	0	22	2	0
44	a	111	0	132	6	0
44	b	87	0	117	2	0
44	f	39	0	48	0	0
44	w	40	0	53	1	0
44	z	124	0	164	9	0
45	5	38	0	0	0	0
45	F	38	0	0	6	0
46	7	41	0	52	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
46	B	37	0	44	1	0
46	D	34	0	38	1	0
46	F	28	0	26	2	0
46	H	33	0	36	1	0
46	f	34	0	38	1	0
46	j	71	0	82	3	0
46	w	40	0	50	2	0
46	x	48	0	66	4	0
46	z	76	0	92	7	0
47	A	36	0	45	15	0
48	B	40	0	44	10	0
48	F	84	0	96	18	0
48	a	36	0	36	3	0
48	j	42	0	51	0	0
48	w	72	0	72	15	0
49	I	16	0	0	1	0
49	K	8	0	0	0	0
49	a	8	0	0	0	0
49	c	16	0	0	0	0
50	a	2583	0	2598	106	0
50	b	2314	0	2287	91	0
50	f	140	0	113	3	0
50	g	144	0	115	4	0
50	h	46	0	33	2	0
50	j	42	0	31	0	0
50	k	140	0	108	5	0
50	l	145	0	116	5	0
50	w	526	0	461	29	0
50	x	608	0	518	19	0
50	y	676	0	603	40	0
50	z	532	0	432	26	0
51	a	66	0	96	2	0
51	b	59	0	79	3	0
51	x	48	0	54	2	0
52	a	61	0	62	0	0
53	a	33	0	46	1	0
53	b	33	0	46	3	0
54	w	135	0	88	13	0
54	x	179	0	115	9	0
54	z	103	0	84	7	0
55	w	84	0	112	30	0
55	x	84	0	112	21	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
55	y	84	0	112	60	0
55	z	84	0	112	34	0
All	All	83864	0	83596	1415	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 8.

All (1415) 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)
50:y:302:CLA:H42	55:y:315:LUT:C37	1.52	1.37
41:y:240:TYR:CE1	55:y:315:LUT:H162	1.60	1.34
42:z:174:ASP:HA	55:z:320:LUT:O23	1.30	1.30
11:A:259:TYR:CE2	47:A:405:PQ9:H161	1.65	1.29
11:A:259:TYR:CD2	47:A:405:PQ9:H161	1.74	1.21
40:x:191:ASN:OD1	55:x:320:LUT:O23	1.58	1.19
50:y:303:CLA:C1B	55:y:315:LUT:H173	1.74	1.18
42:z:175:PRO:HD2	55:z:320:LUT:C23	1.81	1.11
50:y:302:CLA:H42	55:y:315:LUT:H373	1.18	1.07
11:A:259:TYR:HD2	47:A:405:PQ9:C18	1.70	1.05
39:w:205:PHE:CZ	55:w:320:LUT:H163	1.91	1.05
42:z:175:PRO:HD2	55:z:320:LUT:O23	1.56	1.05
41:y:240:TYR:CE1	55:y:315:LUT:C16	2.41	1.04
41:y:80:LEU:HD12	55:y:316:LUT:H24	1.41	1.00
41:y:240:TYR:HE1	55:y:315:LUT:H162	0.94	1.00
39:w:205:PHE:CE1	55:w:320:LUT:C16	2.45	0.99
41:y:115:ALA:HB2	55:y:316:LUT:C16	1.94	0.97
42:z:174:ASP:HA	55:z:320:LUT:H1	1.27	0.97
42:z:174:ASP:CA	55:z:320:LUT:O23	2.14	0.95
50:y:311:CLA:C1B	55:y:316:LUT:H173	1.96	0.95
50:y:302:CLA:C4	55:y:315:LUT:C37	2.44	0.95
16:F:712:GLY:HA3	45:F:804:A1H1M:C38	1.97	0.94
41:y:77:PHE:CD2	55:y:316:LUT:H373	2.05	0.91
41:y:209:PRO:HD2	55:y:315:LUT:C23	2.01	0.91
50:y:303:CLA:C2B	55:y:315:LUT:H173	2.02	0.90
11:A:259:TYR:CD2	47:A:405:PQ9:C16	2.56	0.89
42:z:173:PHE:O	55:z:320:LUT:H24	1.72	0.89
16:F:712:GLY:CA	45:F:804:A1H1M:C38	2.52	0.88
41:y:77:PHE:CE2	55:y:316:LUT:H373	2.08	0.88
39:w:205:PHE:CE1	55:w:320:LUT:H162	2.08	0.87
11:A:259:TYR:CE2	47:A:405:PQ9:C16	2.56	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:A:259:TYR:HE2	47:A:405:PQ9:H161	1.39	0.86
42:z:175:PRO:CD	55:z:320:LUT:O23	2.22	0.86
16:F:262:ALA:O	16:F:266:ALA:HB3	1.76	0.86
54:w:311:CHL:HBB2	48:w:318:SQD:C8	2.06	0.85
42:z:175:PRO:HD2	55:z:320:LUT:H23	1.58	0.84
16:F:23:GLY:HA2	48:F:805:SQD:H112	1.61	0.83
39:w:205:PHE:CZ	55:w:320:LUT:C16	2.62	0.82
41:y:209:PRO:HD2	55:y:315:LUT:H23	1.60	0.82
50:y:303:CLA:C1B	55:y:315:LUT:C17	2.57	0.81
50:y:310:CLA:H2	55:y:316:LUT:C36	2.11	0.81
50:z:309:CLA:O1D	55:z:321:LUT:H363	1.80	0.80
43:b:820:BCR:H17C	50:b:840:CLA:H143	1.61	0.80
50:y:302:CLA:C4	55:y:315:LUT:H373	2.08	0.80
50:y:302:CLA:H42	55:y:315:LUT:H371	1.59	0.79
42:z:176:LEU:HD23	55:z:320:LUT:H222	1.66	0.78
11:A:259:TYR:CD2	47:A:405:PQ9:C18	2.62	0.76
50:z:309:CLA:O1D	55:z:321:LUT:C36	2.33	0.76
39:w:94:LEU:HD12	55:w:319:LUT:H23	1.68	0.76
27:a:537:HIS:HB3	50:a:822:CLA:HBB1	1.67	0.76
9:8:133:HIS:HD1	9:8:147:SER:HG	1.32	0.76
12:B:20:LYS:HB2	13:C:90:GLY:HA3	1.69	0.75
54:w:311:CHL:HBB2	48:w:318:SQD:H82	1.67	0.74
54:x:319:CHL:HBB2	50:z:307:CLA:HAC1	1.70	0.74
17:G:43:LEU:HD13	17:G:66:TYR:HB3	1.69	0.74
41:y:240:TYR:CD1	55:y:315:LUT:C16	2.69	0.74
41:y:240:TYR:CD1	55:y:315:LUT:H162	2.22	0.73
2:1:227:VAL:HG13	2:1:245:GLU:HB3	1.69	0.73
54:w:311:CHL:HBB2	48:w:318:SQD:H81	1.69	0.73
16:F:564:PHE:HA	16:F:567:ILE:HG22	1.71	0.73
39:w:206:MET:HB2	55:w:320:LUT:O3	1.89	0.72
50:w:306:CLA:H2	55:w:319:LUT:C36	2.20	0.72
14:D:383:MET:HG3	48:F:805:SQD:C30	2.20	0.72
36:j:10:VAL:HG13	36:j:12:PRO:HD2	1.71	0.72
50:w:306:CLA:H2	55:w:319:LUT:H363	1.72	0.72
14:D:247:MET:HE2	14:D:347:PHE:HB2	1.72	0.71
21:K:4:ILE:HG22	23:M:186:TYR:HB2	1.72	0.71
43:b:816:BCR:HC7	33:g:146:ILE:HD11	1.72	0.71
43:a:830:BCR:H16C	50:a:844:CLA:H43	1.72	0.70
29:c:55:GLU:HB2	29:c:63:LEU:HD13	1.73	0.70
41:y:209:PRO:HD2	55:y:315:LUT:C24	2.21	0.70
50:z:306:CLA:C4D	55:z:320:LUT:H382	2.22	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:H:51:MET:HG2	18:H:70:TRP:HE1	1.57	0.70
50:w:308:CLA:CBB	55:w:320:LUT:H14	2.22	0.70
21:K:172:ASN:ND2	23:M:113:CYS:SG	2.64	0.70
41:y:234:MET:HB3	55:y:316:LUT:C35	2.22	0.70
3:2:160:GLN:HG3	3:2:177:SER:HB3	1.75	0.69
42:z:173:PHE:O	55:z:320:LUT:C24	2.39	0.69
2:1:290:ARG:HH22	5:4:89:GLU:HG3	1.57	0.69
24:N:105:GLY:O	24:N:109:ASN:HB2	1.92	0.69
41:y:77:PHE:HE2	55:y:316:LUT:H26	1.56	0.69
42:z:175:PRO:CD	55:z:320:LUT:C23	2.67	0.69
3:2:160:GLN:NE2	16:F:477:SER:O	2.24	0.69
20:J:147:ILE:HG21	25:O:103:ILE:HD11	1.74	0.69
41:y:115:ALA:CA	55:y:316:LUT:H163	2.23	0.68
16:F:672:TYR:CE2	48:F:801:SQD:H121	2.28	0.68
3:2:227:SER:HB3	3:2:246:ALA:HB1	1.75	0.68
13:C:66:ALA:HB1	17:G:72:VAL:HG22	1.76	0.68
16:F:490:LYS:HD2	16:F:492:SER:H	1.58	0.68
20:J:133:MET:HE3	20:J:134:PRO:HD2	1.74	0.68
12:B:247:ALA:HB3	12:B:302:LEU:HD13	1.76	0.67
27:a:531:PHE:HA	50:a:823:CLA:HED1	1.76	0.67
39:w:206:MET:CG	55:w:320:LUT:H22	2.24	0.67
13:C:55:TRP:HE1	13:C:57:GLN:HE21	1.40	0.67
43:b:819:BCR:H323	44:z:301:PGT:H381	1.75	0.67
50:w:307:CLA:HAA1	50:w:307:CLA:HBD	1.76	0.67
25:O:137:PRO:HD2	25:O:140:MET:HE3	1.77	0.67
50:y:303:CLA:C4B	55:y:315:LUT:C17	2.72	0.67
14:D:372:PRO:HB2	48:F:805:SQD:H442	1.75	0.67
50:w:306:CLA:C2	55:w:319:LUT:H363	2.24	0.66
12:B:177:ASN:HB3	15:E:84:ILE:HG12	1.77	0.66
19:I:20:ARG:HD2	26:U:216:PRO:HB2	1.78	0.66
50:y:303:CLA:NB	55:y:315:LUT:C17	2.59	0.66
4:3:81:ALA:HB3	4:3:184:VAL:HG22	1.77	0.66
39:w:205:PHE:CE1	55:w:320:LUT:H163	2.20	0.66
50:y:303:CLA:C2B	55:y:315:LUT:C17	2.73	0.66
14:D:431:ILE:HD11	48:F:801:SQD:C23	2.26	0.66
28:b:254:ILE:HG22	28:b:255:LEU:HG	1.78	0.66
42:z:175:PRO:CD	55:z:320:LUT:H23	2.26	0.65
28:b:418:ILE:HG23	50:b:851:CLA:HBB2	1.78	0.65
50:b:828:CLA:HBD	50:b:828:CLA:HBA2	1.77	0.65
16:F:712:GLY:HA2	45:F:804:A1H1M:C38	2.24	0.65
39:w:112:SER:HB3	39:w:227:GLY:HA3	1.77	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:215:VAL:HG22	50:x:303:CLA:H2	1.77	0.65
41:y:262:PRO:O	41:y:266:ASN:ND2	2.30	0.65
1:0:121:GLN:HA	1:0:208:SER:O	1.97	0.65
41:y:237:ILE:HG21	55:y:316:LUT:H12	1.77	0.65
2:1:346:ILE:HD12	2:1:351:PRO:HB3	1.80	0.64
27:a:214:GLN:HA	27:a:218:SER:HB2	1.78	0.64
50:z:302:CLA:HBA1	50:z:302:CLA:HBD	1.80	0.64
50:a:824:CLA:HED3	50:a:824:CLA:H2A	1.79	0.64
2:1:361:ARG:HG3	2:1:374:ILE:HG21	1.79	0.64
50:y:310:CLA:H2	55:y:316:LUT:H362	1.80	0.63
50:z:306:CLA:CHA	55:z:320:LUT:H382	2.28	0.63
27:a:354:LEU:HD21	50:a:846:CLA:HBB1	1.79	0.63
11:A:42:ILE:HG23	11:A:264:LEU:HD21	1.80	0.63
18:H:172:ILE:HG23	18:H:279:LEU:HD22	1.80	0.63
50:w:307:CLA:HBB2	54:w:309:CHL:HAB	1.80	0.63
41:y:77:PHE:HD2	55:y:316:LUT:H373	1.60	0.63
41:y:115:ALA:HB2	55:y:316:LUT:H162	1.81	0.63
2:1:411:SER:OG	2:1:433:CYS:SG	2.57	0.63
14:D:226:PRO:HD2	14:D:313:MET:HG3	1.80	0.63
43:a:810:BCR:H323	50:a:823:CLA:HBC3	1.80	0.63
14:D:281:MET:HE1	14:D:404:LEU:HD13	1.80	0.62
14:D:372:PRO:HB2	48:F:805:SQD:C44	2.28	0.62
40:x:106:GLY:HA2	55:x:321:LUT:H181	1.81	0.62
16:F:468:LYS:O	16:F:536:ASN:ND2	2.32	0.62
50:y:311:CLA:C2B	55:y:316:LUT:H173	2.30	0.62
18:H:69:ARG:NH2	21:K:139:CYS:SG	2.69	0.62
16:F:38:ARG:NH1	39:w:212:SER:OG	2.33	0.62
43:a:827:BCR:H362	43:a:828:BCR:H21C	1.82	0.62
28:b:615:TYR:OH	28:b:621:ARG:NH2	2.31	0.62
50:b:847:CLA:H2	50:b:848:CLA:HMB1	1.79	0.62
34:h:99:ARG:NH1	38:l:151:GLY:O	2.32	0.62
40:x:79:PRO:HD2	55:x:321:LUT:H23	1.82	0.62
18:H:93:GLN:O	18:H:289:ASN:ND2	2.33	0.62
27:a:372:PRO:HG3	27:a:378:ALA:HB2	1.82	0.62
16:F:90:ASP:OD2	16:F:279:ARG:NH1	2.33	0.61
50:b:822:CLA:HBA2	50:b:822:CLA:HBD	1.81	0.61
54:w:304:CHL:CMC	55:w:319:LUT:H163	2.31	0.61
3:2:70:LEU:HD21	3:2:163:LEU:HD11	1.81	0.61
2:1:203:MET:HB2	2:1:225:ASP:HB2	1.81	0.61
41:y:77:PHE:CE2	55:y:316:LUT:H26	2.34	0.61
42:z:71:PRO:HD2	55:z:321:LUT:H3	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:l:83:TRP:O	38:l:87:ASN:ND2	2.30	0.61
16:F:599:ASP:HB3	16:F:602:GLU:HB2	1.82	0.61
50:b:843:CLA:H91	50:b:844:CLA:H62	1.83	0.61
50:g:201:CLA:H2A	50:g:201:CLA:HED2	1.81	0.61
43:4:101:BCR:H23C	14:D:471:PRO:HB3	1.82	0.61
50:x:307:CLA:H52	55:x:321:LUT:H27	1.83	0.61
42:z:146:GLU:O	42:z:150:ILE:HB	2.01	0.61
41:y:115:ALA:CB	55:y:316:LUT:C16	2.77	0.61
11:A:247:GLN:O	21:K:71:GLN:NE2	2.33	0.60
11:A:259:TYR:HE2	47:A:405:PQ9:C12	2.13	0.60
23:M:108:ILE:HB	23:M:124:THR:HG21	1.83	0.60
10:9:87:ASN:HD22	10:9:123:ARG:HD3	1.66	0.60
41:y:77:PHE:HE2	55:y:316:LUT:H373	1.66	0.60
42:z:176:LEU:CD2	55:z:320:LUT:H222	2.31	0.60
50:a:857:CLA:H92	43:l:302:BCR:H21C	1.82	0.60
28:b:694:ARG:NH1	38:l:153:ALA:O	2.34	0.60
50:w:306:CLA:C2	55:w:319:LUT:C36	2.80	0.60
16:F:402:THR:HG23	16:F:446:MET:HB3	1.82	0.60
39:w:136:ASN:O	39:w:145:ARG:NH2	2.32	0.60
12:B:208:GLU:HB2	12:B:214:ILE:HG22	1.82	0.60
16:F:490:LYS:HB3	16:F:493:LEU:HG	1.82	0.60
3:2:63:ARG:NH2	3:2:155:SER:O	2.34	0.60
26:U:127:CYS:O	26:U:173:ARG:NH2	2.33	0.60
10:9:138:ALA:HB2	10:9:242:ARG:HH21	1.67	0.60
30:d:135:ARG:HB2	30:d:138:GLN:HG3	1.83	0.60
50:z:306:CLA:C4D	55:z:320:LUT:C38	2.80	0.60
18:H:84:ASN:HA	18:H:87:GLU:HG2	1.84	0.60
50:a:818:CLA:H91	43:a:830:BCR:H24C	1.82	0.60
14:D:32:ILE:HG12	14:D:112:GLN:HG2	1.83	0.59
50:b:839:CLA:H71	50:b:840:CLA:H42	1.83	0.59
13:C:114:LYS:O	17:G:175:ARG:NH2	2.32	0.59
27:a:194:MET:HB2	50:a:838:CLA:HBC2	1.83	0.59
27:a:474:ILE:HG12	43:a:810:BCR:H362	1.83	0.59
27:a:13:LEU:HB3	27:a:184:LYS:HD2	1.85	0.59
2:1:156:ILE:HD11	2:1:196:LEU:HD21	1.83	0.59
50:b:801:CLA:HAC1	53:b:827:PQN:H171	1.85	0.59
27:a:570:ARG:NH1	44:a:807:PGT:O11	2.35	0.59
50:a:815:CLA:HAB	43:j:101:BCR:H352	1.85	0.59
29:c:61:ASP:OD2	31:e:114:ASN:ND2	2.33	0.59
29:c:73:THR:H	29:c:76:SER:HB3	1.66	0.59
18:H:154:MET:SD	18:H:154:MET:N	2.76	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:l:97:PRO:HA	38:l:100:ARG:HD3	1.84	0.59
16:F:302:VAL:HG13	16:F:438:THR:HG21	1.83	0.59
50:a:853:CLA:H51	50:a:854:CLA:H171	1.84	0.59
40:x:101:ARG:HB3	50:x:312:CLA:HBC3	1.85	0.59
41:y:115:ALA:HB2	55:y:316:LUT:H163	1.83	0.59
41:y:208:ASN:HA	55:y:315:LUT:H24	1.84	0.59
44:z:301:PGT:H172	54:z:312:CHL:HBA1	1.84	0.59
48:B:604:SQD:H61	14:D:162:TYR:HB2	1.84	0.59
19:I:42:TYR:OH	19:I:126:GLU:OE1	2.20	0.58
24:N:94:ALA:HB2	24:N:217:LEU:HD13	1.85	0.58
32:f:199:ASP:HA	46:j:105:LMG:HC61	1.85	0.58
36:j:12:PRO:HB2	43:j:103:BCR:H291	1.84	0.58
40:x:192:PRO:HD2	55:x:320:LUT:H23	1.85	0.58
11:A:251:SER:HB2	21:K:70:ARG:HB3	1.84	0.58
16:F:10:ILE:HD12	16:F:14:LEU:HD22	1.84	0.58
3:2:60:LEU:HD12	3:2:68:LEU:HD23	1.85	0.58
15:E:16:ILE:HG21	17:G:23:ALA:HB1	1.85	0.58
25:O:100:LEU:HB3	25:O:103:ILE:HD12	1.85	0.58
50:b:845:CLA:H111	34:h:113:LEU:HD23	1.85	0.58
14:D:296:PRO:HG3	14:D:432:TYR:HB3	1.85	0.58
16:F:257:PRO:HG2	16:F:260:ILE:HG12	1.84	0.58
11:A:200:GLN:NE2	11:A:276:LEU:O	2.37	0.58
13:C:57:GLN:NE2	17:G:81:MET:O	2.35	0.58
20:J:73:ARG:NH2	20:J:75:GLU:OE1	2.37	0.58
27:a:585:SER:OG	27:a:588:ASP:OD1	2.22	0.58
43:b:819:BCR:H392	43:b:820:BCR:H23C	1.85	0.58
10:9:90:TYR:HB3	10:9:251:LEU:HD22	1.86	0.58
50:b:811:CLA:HAA1	43:b:819:BCR:H16C	1.86	0.58
10:9:173:ASN:ND2	10:9:175:ASN:OD1	2.37	0.58
10:9:184:VAL:HG22	10:9:200:ILE:HG12	1.86	0.58
50:y:310:CLA:HAB	50:y:310:CLA:H51	1.86	0.58
43:4:101:BCR:H373	14:D:481:LEU:HD13	1.85	0.58
12:B:60:LEU:HD12	12:B:126:LEU:HD23	1.85	0.58
28:b:369:ALA:HB1	28:b:725:LEU:HD11	1.84	0.57
42:z:92:CYS:HB3	42:z:196:GLY:HA3	1.85	0.57
5:4:51:ASP:OD2	14:D:460:ARG:NH1	2.36	0.57
12:B:114:LEU:HD11	12:B:367:ALA:HA	1.85	0.57
21:K:81:VAL:HG11	21:K:89:LEU:HD22	1.85	0.57
27:a:531:PHE:HE2	43:a:810:BCR:H313	1.69	0.57
50:x:312:CLA:HMC1	55:x:320:LUT:C31	2.34	0.57
15:E:13:LEU:HG	17:G:19:LEU:HD21	1.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:c:10:THR:HG21	31:e:74:ARG:HH22	1.68	0.57
12:B:176:SER:O	12:B:180:THR:OG1	2.22	0.57
30:d:115:GLU:O	30:d:145:ARG:NH1	2.38	0.57
30:d:172:ASP:N	30:d:172:ASP:OD1	2.37	0.57
1:0:119:GLN:NE2	17:G:142:GLN:OE1	2.38	0.57
11:A:83:LYS:NZ	21:K:73:ASP:OD1	2.36	0.57
14:D:323:ILE:HD12	14:D:409:LYS:HD2	1.87	0.57
42:z:77:VAL:HB	42:z:80:ASN:HB2	1.86	0.57
4:3:203:PRO:HA	16:F:490:LYS:HZ1	1.70	0.57
17:G:63:LEU:O	17:G:67:VAL:HB	2.04	0.57
39:w:108:GLU:O	39:w:112:SER:OG	2.22	0.57
50:y:303:CLA:C3B	55:y:315:LUT:C17	2.82	0.57
9:8:90:ARG:NH2	9:8:204:PHE:O	2.34	0.57
39:w:113:ARG:NH1	54:w:311:CHL:OBD	2.37	0.57
3:2:209:PHE:HE1	3:2:341:ILE:HG12	1.68	0.57
21:K:179:HIS:NE2	23:M:120:MET:O	2.30	0.57
28:b:174:ARG:HB2	50:b:833:CLA:HBC2	1.86	0.57
14:D:134:LEU:HD22	14:D:182:VAL:HG22	1.87	0.57
16:F:319:LEU:O	16:F:323:THR:OG1	2.22	0.57
12:B:148:ASP:HB3	12:B:151:THR:HG22	1.86	0.56
28:b:268:LEU:HB2	28:b:273:MET:HE3	1.87	0.56
42:z:126:GLN:NE2	42:z:134:VAL:O	2.37	0.56
42:z:156:GLN:HA	42:z:159:MET:HG3	1.87	0.56
12:B:149:LEU:HB2	12:B:209:ILE:HB	1.85	0.56
18:H:88:GLN:OE1	20:J:24:GLN:NE2	2.38	0.56
16:F:546:ASN:HB3	39:w:201:LEU:HA	1.85	0.56
50:a:824:CLA:H92	43:b:831:BCR:H15C	1.86	0.56
4:3:203:PRO:HA	16:F:490:LYS:NZ	2.20	0.56
30:d:191:ARG:NH2	30:d:212:LEU:OXT	2.39	0.56
24:N:131:THR:HA	24:N:135:LYS:HB2	1.87	0.56
12:B:390:LYS:HD2	12:B:469:TYR:HB3	1.86	0.56
14:D:210:GLU:HG3	14:D:269:LEU:HD23	1.88	0.56
50:w:310:CLA:H192	50:w:314:CLA:HAC2	1.87	0.56
2:1:202:ASP:OD1	12:B:382:ARG:NH1	2.38	0.56
18:H:271:SER:O	18:H:275:ILE:HD12	2.04	0.56
27:a:144:ILE:HD13	50:a:845:CLA:H11	1.87	0.56
39:w:217:MET:O	39:w:221:THR:HG23	2.06	0.56
46:x:315:LMG:H371	50:x:316:CLA:H3A	1.87	0.56
41:y:170:ARG:HB3	50:y:312:CLA:HMC2	1.86	0.56
2:1:196:LEU:HB3	2:1:221:THR:HG23	1.88	0.56
48:B:604:SQD:H121	16:F:699:PRO:HB3	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:D:66:GLU:O	14:D:79:ARG:HA	2.06	0.56
28:b:326:ILE:HG23	50:b:839:CLA:HBC3	1.87	0.56
1:0:134:ASP:OD2	1:0:174:ASN:ND2	2.38	0.56
7:6:161:VAL:HG12	11:A:17:SER:HB2	1.87	0.56
16:F:173:ASN:HB3	48:F:801:SQD:O8	2.06	0.56
27:a:670:PHE:HZ	50:a:820:CLA:H101	1.71	0.56
50:b:801:CLA:H143	50:b:825:CLA:H12	1.86	0.56
32:f:201:PRO:HD3	46:j:105:LMG:HC71	1.88	0.56
5:4:37:MET:HE1	6:5:150:LEU:HB3	1.88	0.56
9:8:121:GLY:HA3	9:8:182:VAL:HB	1.88	0.56
11:A:259:TYR:HE2	47:A:405:PQ9:C13	2.19	0.56
19:I:70:CYS:HB3	49:I:202:SF4:S1	2.46	0.56
28:b:422:LEU:HG	50:b:851:CLA:HAB	1.87	0.56
48:w:318:SQD:H81	48:w:318:SQD:H461	1.87	0.55
41:y:230:GLY:O	41:y:234:MET:HG3	2.07	0.55
3:2:296:ARG:NH2	4:3:114:ASP:OD2	2.40	0.55
27:a:194:MET:HE2	50:a:838:CLA:HHD	1.87	0.55
27:a:445:LEU:HB3	27:a:539:PHE:HB2	1.87	0.55
43:b:816:BCR:H342	33:g:146:ILE:HG13	1.89	0.55
39:w:110:MET:HA	39:w:110:MET:HE3	1.88	0.55
43:y:301:BCR:H391	50:y:311:CLA:H12	1.88	0.55
3:2:317:ARG:NH1	3:2:320:TYR:O	2.36	0.55
8:7:115:ILE:HA	16:F:215:LEU:HD21	1.87	0.55
12:B:372:PHE:O	12:B:376:THR:HB	2.07	0.55
16:F:370:ILE:HG13	16:F:371:VAL:HG13	1.88	0.55
41:y:221:GLU:HG3	41:y:225:LYS:HE3	1.88	0.55
50:z:309:CLA:CGD	55:z:321:LUT:H363	2.37	0.55
33:g:74:SER:HB3	50:g:203:CLA:HED2	1.87	0.55
39:w:250:GLU:O	39:w:254:ARG:HG3	2.06	0.55
3:2:301:LYS:HG2	3:2:316:ILE:HG12	1.87	0.55
9:8:103:GLU:OE2	9:8:103:GLU:N	2.39	0.55
14:D:423:ALA:HB1	16:F:187:PHE:HD1	1.71	0.55
16:F:388:THR:HG23	16:F:395:LYS:HE2	1.89	0.55
2:1:66:GLU:O	15:E:95:GLN:NE2	2.40	0.55
4:3:184:VAL:HG21	16:F:491:ILE:HD11	1.87	0.55
5:4:67:THR:HG23	14:D:155:TRP:HA	1.89	0.55
12:B:143:LEU:HD13	12:B:156:PRO:HD3	1.88	0.55
33:g:95:PHE:O	33:g:99:ASN:ND2	2.39	0.55
16:F:571:GLN:NE2	16:F:573:GLY:O	2.40	0.55
27:a:118:ILE:HB	43:j:103:BCR:H322	1.89	0.55
27:a:588:ASP:OD2	27:a:723:ARG:NH1	2.40	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:a:362:ILE:HG23	27:a:392:MET:HE1	1.89	0.55
28:b:429:LEU:HD11	50:b:815:CLA:HMB2	1.88	0.55
42:z:181:ASP:OD1	42:z:181:ASP:N	2.36	0.55
7:6:121:ARG:NH2	17:G:53:ALA:O	2.40	0.54
12:B:172:LYS:O	15:E:87:ASN:ND2	2.40	0.54
12:B:415:PHE:HB3	12:B:496:ILE:HD12	1.89	0.54
27:a:127:ASP:OD1	27:a:133:ARG:NH1	2.39	0.54
39:w:122:ILE:HG21	39:w:237:LEU:HD13	1.89	0.54
18:H:71:ASP:HA	18:H:387:ILE:HD11	1.89	0.54
28:b:159:PRO:HA	28:b:162:LYS:HE2	1.89	0.54
29:c:61:ASP:OD2	31:e:74:ARG:NH2	2.40	0.54
50:y:308:CLA:HAB	55:y:316:LUT:H403	1.90	0.54
42:z:65:GLY:HA3	42:z:193:ILE:HG21	1.88	0.54
10:9:141:ARG:NH1	10:9:149:GLN:OE1	2.40	0.54
16:F:322:TYR:CZ	16:F:353:LYS:HE2	2.42	0.54
27:a:244:ARG:NH1	41:y:272:LYS:O	2.39	0.54
50:a:848:CLA:H42	38:l:85:LEU:HD21	1.89	0.54
28:b:91:ILE:HB	28:b:112:PRO:HB2	1.89	0.54
50:y:312:CLA:HBA1	50:y:312:CLA:HBD	1.89	0.54
50:y:302:CLA:H42	55:y:315:LUT:H372	1.76	0.54
46:z:314:LMG:H132	46:z:314:LMG:H292	1.90	0.54
50:b:805:CLA:H151	50:b:836:CLA:HBB2	1.88	0.54
53:b:827:PQN:H172	43:b:850:BCR:H382	1.90	0.54
50:b:843:CLA:H142	50:b:843:CLA:HMB2	1.88	0.54
39:w:202:TRP:HB3	48:w:318:SQD:C32	2.36	0.54
41:y:140:VAL:HG21	55:y:316:LUT:H42	1.90	0.54
41:y:207:PHE:O	55:y:315:LUT:H24	2.08	0.54
11:A:44:ILE:O	11:A:48:VAL:HG23	2.07	0.54
15:E:100:ASN:ND2	45:F:804:A1H1M:O28	2.40	0.54
16:F:708:PHE:CE2	45:F:804:A1H1M:C02	2.90	0.54
10:9:101:LYS:NZ	14:D:203:GLN:OE1	2.36	0.54
12:B:357:PHE:O	12:B:361:MET:HG3	2.07	0.54
24:N:192:MET:O	24:N:195:SER:OG	2.25	0.54
44:z:301:PGT:H142	54:z:312:CHL:H3A	1.89	0.54
1:0:123:VAL:HG11	1:0:224:VAL:HG11	1.88	0.54
7:6:79:THR:HA	9:8:203:CYS:HB3	1.89	0.54
14:D:356:ILE:HG13	14:D:367:ILE:HD13	1.88	0.54
19:I:126:GLU:HG3	24:N:124:ARG:HH12	1.73	0.54
21:K:93:TYR:OH	23:M:191:ARG:NH1	2.41	0.54
28:b:338:LEU:HD21	50:b:842:CLA:HBB1	1.90	0.54
28:b:694:ARG:NH2	35:i:30:ASN:OD1	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:z:228:ASP:OD1	42:z:228:ASP:N	2.40	0.54
1:0:181:ASN:OD1	1:0:183:THR:OG1	2.26	0.54
43:a:828:BCR:H20C	50:a:839:CLA:H202	1.90	0.54
28:b:422:LEU:HD13	28:b:532:LEU:HA	1.90	0.54
28:b:670:TYR:OH	50:b:803:CLA:OBD	2.26	0.54
41:y:115:ALA:CB	55:y:316:LUT:H163	2.38	0.54
41:y:208:ASN:OD1	55:y:315:LUT:O23	2.26	0.54
14:D:281:MET:HE3	14:D:418:ILE:HD13	1.90	0.54
16:F:25:GLY:O	16:F:29:PHE:N	2.36	0.54
16:F:306:ALA:HB2	16:F:438:THR:HG23	1.89	0.54
9:8:162:LYS:NZ	12:B:213:GLU:OE2	2.35	0.53
28:b:410:ARG:O	28:b:414:HIS:ND1	2.35	0.53
39:w:85:GLY:H	39:w:221:THR:HG22	1.73	0.53
41:y:240:TYR:CD1	55:y:315:LUT:H163	2.43	0.53
12:B:361:MET:HE3	12:B:405:LEU:HA	1.90	0.53
32:f:93:LYS:O	32:f:97:GLN:HG3	2.08	0.53
34:h:106:LEU:HD22	38:l:141:VAL:HG13	1.90	0.53
7:6:173:THR:O	7:6:173:THR:OG1	2.23	0.53
12:B:80:ARG:NH1	44:B:603:PGT:O6	2.41	0.53
12:B:409:PRO:HG3	14:D:142:GLU:HB3	1.88	0.53
50:b:814:CLA:HAB	43:b:831:BCR:HC8	1.91	0.53
42:z:70:ASP:OD1	55:z:321:LUT:O3	2.27	0.53
27:a:205:LEU:HD22	43:a:827:BCR:H361	1.89	0.53
28:b:351:HIS:ND1	50:b:809:CLA:OBD	2.38	0.53
8:7:153:LYS:O	8:7:157:MET:HG3	2.09	0.53
12:B:207:GLY:O	15:E:58:LYS:NZ	2.33	0.53
12:B:441:VAL:HG12	48:B:604:SQD:H282	1.90	0.53
21:K:105:MET:HB2	21:K:136:LEU:HD23	1.89	0.53
24:N:96:TYR:O	24:N:212:VAL:HA	2.08	0.53
28:b:649:MET:HG2	28:b:723:ALA:HB2	1.89	0.53
50:b:804:CLA:HMA2	44:b:829:PGT:H332	1.91	0.53
50:b:840:CLA:ND	50:b:847:CLA:HMB1	2.23	0.53
30:d:135:ARG:NH2	30:d:137:GLU:OE1	2.41	0.53
54:w:311:CHL:CBB	48:w:318:SQD:H82	2.38	0.53
3:2:154:ASP:OD2	16:F:475:SER:OG	2.23	0.53
7:6:85:GLU:HA	7:6:89:GLU:HG3	1.91	0.53
23:M:127:ILE:HD11	23:M:140:LEU:HD22	1.90	0.53
24:N:87:VAL:HG11	24:N:111:LEU:HD21	1.90	0.53
50:a:858:CLA:H143	50:b:844:CLA:HAB	1.91	0.53
2:1:231:TYR:HB2	2:1:236:ALA:HB2	1.91	0.53
12:B:478:ASN:OD1	12:B:478:ASN:N	2.41	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:445:TYR:HE1	48:B:604:SQD:O3	1.91	0.53
15:E:13:LEU:HB3	15:E:40:ALA:HB2	1.91	0.53
28:b:37:ILE:HG13	28:b:41:ARG:HD2	1.91	0.53
28:b:52:GLY:O	28:b:56:ILE:HD12	2.08	0.53
18:H:264:ARG:HH21	18:H:385:ASP:HB2	1.74	0.53
27:a:16:ARG:NH1	48:a:859:SQD:O7	2.42	0.53
28:b:373:THR:HG22	50:b:835:CLA:HAB	1.91	0.53
54:z:312:CHL:HBB1	54:z:312:CHL:HHC	1.91	0.53
39:w:119:VAL:HG11	55:w:320:LUT:H30	1.91	0.53
3:2:277:ASN:O	3:2:327:SER:OG	2.26	0.52
5:4:75:GLN:O	5:4:79:GLU:HG3	2.09	0.52
19:I:43:PRO:HG2	24:N:99:HIS:HB3	1.91	0.52
21:K:183:VAL:HG22	23:M:159:LEU:HD22	1.90	0.52
27:a:405:HIS:HE1	50:a:846:CLA:NA	2.07	0.52
27:a:706:LEU:O	32:f:179:ARG:NH1	2.42	0.52
39:w:181:ILE:HG23	48:w:318:SQD:C23	2.39	0.52
55:z:321:LUT:H181	55:z:321:LUT:C8	2.39	0.52
14:D:389:PRO:HB2	16:F:149:ILE:HG23	1.91	0.52
14:D:433:LEU:O	14:D:436:MET:HB3	2.09	0.52
27:a:394:ILE:HG21	50:a:845:CLA:HHC	1.91	0.52
50:a:811:CLA:H2A	50:a:811:CLA:HED3	1.91	0.52
42:z:143:LEU:HD23	46:z:315:LMG:H311	1.90	0.52
12:B:76:LEU:HD22	44:B:603:PGT:H132	1.91	0.52
16:F:496:LEU:HD12	16:F:498:THR:H	1.74	0.52
16:F:712:GLY:HA2	45:F:804:A1H1M:C37	2.39	0.52
18:H:58:ARG:HH22	21:K:117:THR:HB	1.73	0.52
18:H:223:MET:HE1	18:H:384:ILE:HG12	1.92	0.52
50:a:858:CLA:H91	50:b:803:CLA:H112	1.92	0.52
27:a:464:ARG:NH2	50:a:849:CLA:O1D	2.43	0.52
28:b:182:LEU:HD13	50:b:833:CLA:HHB	1.92	0.52
11:A:124:LEU:HD11	11:A:305:THR:HB	1.92	0.52
12:B:248:PRO:HB3	46:F:802:LMG:H121	1.90	0.52
16:F:113:ASN:HB2	16:F:547:THR:HB	1.91	0.52
50:x:303:CLA:HBA2	50:x:303:CLA:HBD	1.90	0.52
12:B:303:ALA:O	12:B:307:MET:HG3	2.09	0.52
18:H:67:VAL:HG21	18:H:82:THR:HG21	1.91	0.52
28:b:309:ILE:HD11	28:b:320:LYS:HG3	1.92	0.52
28:b:381:PHE:HB3	50:b:805:CLA:H112	1.91	0.52
50:b:822:CLA:H43	36:j:29:ILE:HG21	1.91	0.52
42:z:71:PRO:HA	46:z:314:LMG:HC3	1.91	0.52
42:z:115:LYS:HD2	42:z:118:GLU:HG3	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:a:833:CLA:HBC2	50:a:845:CLA:H91	1.91	0.52
28:b:4:ARG:NH1	35:i:29:LYS:O	2.43	0.52
2:1:453:ASP:O	2:1:456:LYS:NZ	2.37	0.52
3:2:275:LEU:HD13	3:2:341:ILE:HG21	1.91	0.52
50:b:801:CLA:H13	50:b:825:CLA:H142	1.92	0.52
44:z:301:PGT:H121	54:z:312:CHL:HAA2	1.92	0.52
16:F:107:VAL:HG21	16:F:263:LEU:HB2	1.91	0.52
18:H:254:GLU:HG2	18:H:259:ALA:HB2	1.92	0.52
19:I:153:TYR:HE1	22:L:166:VAL:HG21	1.74	0.52
42:z:72:LEU:HD12	55:z:321:LUT:H22	1.91	0.52
43:a:803:BCR:H353	50:a:835:CLA:H11	1.92	0.52
50:a:820:CLA:H111	50:a:856:CLA:H18	1.91	0.52
50:z:306:CLA:CBB	55:z:320:LUT:H34	2.40	0.52
16:F:349:HIS:O	16:F:353:LYS:HB2	2.10	0.51
50:b:833:CLA:HAB	50:b:834:CLA:HAC2	1.91	0.51
50:w:308:CLA:HBB2	55:w:320:LUT:H14	1.92	0.51
14:D:383:MET:HE3	16:F:156:MET:HG2	1.92	0.51
14:D:383:MET:CG	48:F:805:SQD:C30	2.88	0.51
28:b:429:LEU:HG	50:b:815:CLA:HBB1	1.93	0.51
50:b:833:CLA:HAA2	50:b:837:CLA:H112	1.92	0.51
11:A:348:PRO:HG3	13:C:108:LEU:HD21	1.92	0.51
12:B:375:ARG:NH1	12:B:471:ARG:O	2.44	0.51
22:L:145:ARG:NH2	44:N:301:PGT:O5	2.43	0.51
28:b:429:LEU:HB3	28:b:525:LEU:HB2	1.92	0.51
21:K:33:SER:OG	21:K:35:TRP:NE1	2.44	0.51
27:a:196:ASN:ND2	50:a:812:CLA:O1D	2.44	0.51
42:z:240:PRO:HD2	50:z:310:CLA:HMA3	1.91	0.51
14:D:65:VAL:HA	14:D:80:LEU:O	2.10	0.51
17:G:62:GLN:O	17:G:66:TYR:HB2	2.10	0.51
50:b:845:CLA:HBB2	35:i:12:GLY:HA3	1.92	0.51
50:y:303:CLA:NB	55:y:315:LUT:H172	2.25	0.51
8:7:92:GLU:OE2	8:7:92:GLU:N	2.43	0.51
40:x:106:GLY:HA2	55:x:321:LUT:C18	2.40	0.51
5:4:12:ARG:O	16:F:206:ARG:NH2	2.40	0.51
12:B:116:VAL:HA	12:B:126:LEU:HD11	1.91	0.51
18:H:344:ASP:HB2	18:H:350:TRP:HB2	1.93	0.51
50:a:815:CLA:HHB	50:a:835:CLA:HHB	1.92	0.51
14:D:196:ASN:HB3	14:D:199:THR:HG22	1.92	0.51
24:N:173:VAL:HG22	24:N:201:ARG:HB2	1.92	0.51
14:D:420:PHE:O	14:D:423:ALA:HB3	2.10	0.51
50:b:807:CLA:H112	50:b:836:CLA:H202	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:262:THR:HA	12:B:265:VAL:HG12	1.93	0.51
27:a:80:ILE:HD12	50:a:813:CLA:HAB	1.91	0.51
50:a:850:CLA:H11	50:k:204:CLA:H111	1.93	0.51
28:b:662:MET:O	28:b:666:SER:OG	2.25	0.51
28:b:721:TYR:HB2	50:b:802:CLA:HED3	1.92	0.51
34:h:76:ASP:OD1	38:l:173:LYS:NZ	2.41	0.51
27:a:13:LEU:HD12	27:a:186:ALA:HB3	1.93	0.50
50:a:838:CLA:H111	50:a:839:CLA:H191	1.93	0.50
41:y:122:GLY:O	41:y:129:GLN:NE2	2.43	0.50
42:z:191:LYS:HD3	50:z:319:CLA:HAA2	1.93	0.50
12:B:387:LEU:HD21	12:B:394:LEU:HD23	1.94	0.50
12:B:443:SER:O	12:B:443:SER:OG	2.23	0.50
22:L:117:ASN:OD1	22:L:117:ASN:N	2.44	0.50
43:a:828:BCR:H342	50:a:845:CLA:H2	1.92	0.50
39:w:227:GLY:O	39:w:231:MET:HG3	2.12	0.50
50:w:308:CLA:H41	55:w:320:LUT:H10	1.92	0.50
14:D:226:PRO:HD3	14:D:254:LEU:HD22	1.93	0.50
16:F:112:ASP:OD1	16:F:121:TYR:OH	2.21	0.50
28:b:98:GLN:OE1	34:h:130:ARG:NH1	2.44	0.50
33:g:157:THR:HG21	46:z:315:LMG:HC8	1.93	0.50
8:7:183:LEU:HD22	8:7:216:VAL:HG21	1.93	0.50
16:F:355:LEU:HB2	16:F:555:LEU:HB3	1.93	0.50
20:J:117:MET:HB3	20:J:142:LEU:HB2	1.92	0.50
27:a:733:GLY:O	27:a:737:THR:OG1	2.27	0.50
29:c:24:ASP:OD2	30:d:169:HIS:ND1	2.44	0.50
30:d:81:PRO:HB2	30:d:125:ARG:HD2	1.93	0.50
35:i:16:PRO:O	35:i:20:MET:HG3	2.11	0.50
12:B:56:ASP:N	12:B:56:ASP:OD1	2.40	0.50
12:B:165:LEU:HD21	15:E:76:ILE:HG12	1.94	0.50
12:B:445:TYR:HE1	48:B:604:SQD:HO3	1.53	0.50
16:F:672:TYR:CD2	48:F:801:SQD:H121	2.47	0.50
17:G:30:THR:OG1	17:G:91:GLN:N	2.44	0.50
18:H:47:LEU:HD13	21:K:41:THR:HG22	1.94	0.50
27:a:360:LEU:HD11	50:a:833:CLA:H61	1.94	0.50
50:y:311:CLA:HBD	50:y:311:CLA:HBA1	1.93	0.50
42:z:157:ARG:NH2	54:z:312:CHL:O1D	2.45	0.50
5:4:73:GLU:OE2	14:D:160:ARG:NH2	2.45	0.50
12:B:135:THR:HG21	17:G:165:VAL:HG21	1.94	0.50
28:b:129:LEU:HD23	28:b:134:ASP:HB3	1.94	0.50
28:b:339:ALA:HB2	43:b:820:BCR:H372	1.92	0.50
28:b:390:GLY:HA3	43:b:820:BCR:H382	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2:169:SER:O	3:2:169:SER:OG	2.26	0.50
6:5:102:SER:HB3	6:5:104:GLU:HG2	1.94	0.50
11:A:131:ILE:HD11	11:A:134:PHE:HD2	1.76	0.50
27:a:545:VAL:HG21	50:a:852:CLA:HMA1	1.94	0.50
50:a:835:CLA:HAB	43:j:101:BCR:C5	2.41	0.50
28:b:350:GLN:OE1	28:b:372:TYR:OH	2.29	0.50
40:x:209:GLY:O	40:x:213:MET:HG3	2.11	0.50
12:B:80:ARG:HD3	44:B:603:PGT:H11	1.94	0.50
20:J:9:LEU:HD22	20:J:14:LEU:HD22	1.94	0.50
21:K:122:THR:O	21:K:124:ARG:NH1	2.35	0.50
27:a:274:THR:OG1	27:a:289:THR:OG1	2.25	0.50
27:a:353:ASN:ND2	50:a:801:CLA:OBD	2.33	0.50
39:w:89:PHE:CE2	55:w:319:LUT:H26	2.46	0.50
13:C:71:VAL:HG13	17:G:163:LEU:HB3	1.94	0.50
14:D:306:ALA:O	14:D:309:SER:OG	2.24	0.50
34:h:103:LEU:HB2	38:l:148:THR:HG21	1.94	0.50
11:A:235:LEU:HD12	11:A:338:LEU:HD22	1.93	0.49
11:A:244:ALA:HB3	11:A:248:THR:HA	1.93	0.49
14:D:117:LEU:HD22	14:D:147:PRO:HA	1.94	0.49
16:F:176:GLN:HE22	48:F:801:SQD:H4	1.76	0.49
31:e:104:ASN:OD1	31:e:104:ASN:N	2.42	0.49
40:x:178:LEU:HD21	40:x:189:ILE:HG22	1.94	0.49
40:x:225:VAL:HG23	40:x:226:THR:HG23	1.94	0.49
12:B:194:LEU:HD12	12:B:236:ILE:HA	1.94	0.49
20:J:107:ALA:HB1	20:J:111:GLU:HG3	1.93	0.49
21:K:187:ILE:H	21:K:187:ILE:HD12	1.76	0.49
40:x:101:ARG:NH1	54:x:305:CHL:OBD	2.45	0.49
14:D:234:LEU:HD22	14:D:310:VAL:HG23	1.94	0.49
23:M:142:LYS:NZ	23:M:183:GLU:OE1	2.44	0.49
32:f:206:LEU:HA	32:f:209:ARG:HG3	1.93	0.49
39:w:55:ILE:HG23	39:w:211:GLY:HA3	1.94	0.49
9:8:137:ARG:HA	9:8:143:VAL:HA	1.95	0.49
13:C:56:LEU:HD13	18:H:11:MET:HE2	1.94	0.49
16:F:58:LEU:HD13	16:F:89:MET:HE2	1.93	0.49
50:a:843:CLA:H72	50:a:844:CLA:H42	1.94	0.49
34:h:50:LYS:HG3	34:h:52:GLY:H	1.76	0.49
3:2:105:ILE:HG12	3:2:205:SER:HB3	1.94	0.49
4:3:161:LYS:HD3	6:5:86:GLU:HG3	1.95	0.49
9:8:166:GLY:HA3	9:8:190:ILE:HG12	1.93	0.49
28:b:83:HIS:H	34:h:144:ILE:HB	1.78	0.49
18:H:212:GLU:HB2	26:U:193:PHE:HD1	1.78	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:a:410:MET:HE1	27:a:428:LEU:HD11	1.93	0.49
50:b:801:CLA:H203	35:i:20:MET:HE3	1.95	0.49
2:1:102:PRO:HG2	2:1:105:TYR:HB2	1.94	0.49
17:G:139:ASN:HB3	17:G:142:GLN:HB2	1.95	0.49
19:I:124:GLU:OE2	24:N:124:ARG:NE	2.44	0.49
24:N:183:SER:OG	24:N:186:GLU:OE1	2.28	0.49
27:a:371:MET:SD	50:a:841:CLA:HBD	2.52	0.49
42:z:65:GLY:O	42:z:197:ARG:NH2	2.45	0.49
12:B:234:ILE:HD11	16:F:739:PHE:HB2	1.95	0.49
23:M:93:TRP:O	23:M:94:LEU:C	2.56	0.49
43:a:828:BCR:H372	50:a:839:CLA:H171	1.95	0.49
28:b:2:ALA:HB3	28:b:7:ARG:HA	1.93	0.49
39:w:231:MET:HB3	55:w:319:LUT:C35	2.43	0.49
18:H:58:ARG:NH1	21:K:118:ASP:OD2	2.46	0.49
25:O:145:ASP:OD1	25:O:145:ASP:N	2.36	0.49
50:a:811:CLA:HBB2	50:a:838:CLA:HMA3	1.94	0.49
42:z:160:GLU:HB2	50:z:305:CLA:HBC1	1.95	0.49
16:F:161:LEU:HB3	16:F:260:ILE:HG21	1.95	0.49
28:b:129:LEU:HD22	28:b:135:LEU:HD23	1.94	0.49
30:d:77:ASP:O	30:d:80:THR:OG1	2.29	0.49
41:y:115:ALA:HA	55:y:316:LUT:H163	1.93	0.49
17:G:146:ILE:O	17:G:150:THR:OG1	2.31	0.48
27:a:665:SER:HB2	28:b:445:ALA:HB1	1.95	0.48
50:a:857:CLA:H161	38:l:143:LEU:HD11	1.95	0.48
6:5:104:GLU:HG2	6:5:104:GLU:H	1.38	0.48
11:A:48:VAL:HG11	22:L:129:PHE:HA	1.95	0.48
14:D:376:THR:HA	48:F:805:SQD:H242	1.95	0.48
16:F:442:THR:HA	16:F:445:TYR:CZ	2.48	0.48
43:a:831:BCR:H23C	50:a:854:CLA:H111	1.95	0.48
50:b:811:CLA:HBC3	43:b:819:BCR:H372	1.94	0.48
44:D:602:PGT:H181	16:F:28:PHE:HE2	1.77	0.48
16:F:23:GLY:CA	48:F:805:SQD:H112	2.39	0.48
16:F:106:LEU:HB3	16:F:551:PRO:HB3	1.95	0.48
26:U:97:ILE:HD12	26:U:166:ILE:HD12	1.95	0.48
4:3:207:GLU:O	16:F:531:TYR:N	2.47	0.48
6:5:208:ASP:OD1	6:5:208:ASP:N	2.45	0.48
14:D:388:LEU:HD11	16:F:156:MET:HB2	1.94	0.48
16:F:322:TYR:CE2	16:F:405:LEU:HD23	2.48	0.48
18:H:152:ARG:O	18:H:155:HIS:NE2	2.46	0.48
53:a:825:PQN:H171	43:b:831:BCR:H382	1.95	0.48
50:x:308:CLA:C3B	55:x:321:LUT:H183	2.43	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:x:320:LUT:C8	55:x:320:LUT:H181	2.42	0.48
18:H:15:MET:HE1	18:H:378:MET:HE1	1.94	0.48
27:a:52:ASP:OD2	44:a:807:PGT:O6	2.31	0.48
50:b:807:CLA:HAB	50:b:836:CLA:H13	1.96	0.48
40:x:152:TYR:CE1	54:x:319:CHL:HBD	2.49	0.48
50:y:303:CLA:C4B	55:y:315:LUT:H172	2.43	0.48
4:3:143:GLU:HB2	4:3:184:VAL:HB	1.96	0.48
12:B:186:MET:HE3	12:B:242:PHE:HE1	1.79	0.48
20:J:14:LEU:HD23	20:J:39:ILE:HG12	1.96	0.48
26:U:97:ILE:HG23	26:U:175:LEU:HD23	1.96	0.48
50:a:835:CLA:HBA1	50:a:835:CLA:HBD	1.94	0.48
38:l:115:PRO:HG3	50:l:301:CLA:HBB1	1.96	0.48
55:y:316:LUT:H181	55:y:316:LUT:C8	2.42	0.48
5:4:12:ARG:HB2	16:F:585:PRO:HG3	1.96	0.48
21:K:164:ASP:HA	21:K:167:LYS:HG3	1.96	0.48
50:a:833:CLA:H3A	50:a:833:CLA:HBA2	1.54	0.48
50:a:857:CLA:H152	43:l:304:BCR:H15C	1.94	0.48
28:b:397:ASP:HA	30:d:200:ILE:HD13	1.95	0.48
43:b:831:BCR:H321	32:f:167:PHE:HB2	1.95	0.48
42:z:175:PRO:HG2	42:z:176:LEU:HD22	1.94	0.48
3:2:181:GLU:OE2	16:F:469:LYS:NZ	2.46	0.48
20:J:55:CYS:SG	20:J:56:ALA:N	2.86	0.48
21:K:30:ARG:NH1	21:K:101:TYR:OH	2.46	0.48
23:M:93:TRP:O	23:M:95:SER:N	2.46	0.48
26:U:158:ASP:HA	26:U:161:LYS:HB2	1.96	0.48
28:b:456:GLU:HG3	32:f:82:LEU:HD11	1.96	0.48
50:f:303:CLA:H3A	43:f:304:BCR:H382	1.95	0.48
54:w:311:CHL:CBB	48:w:318:SQD:C8	2.86	0.48
1:0:83:TYR:HB3	1:0:96:VAL:HG13	1.95	0.48
1:0:212:ARG:HH21	1:0:213:ARG:HH21	1.62	0.48
16:F:489:GLN:N	16:F:489:GLN:OE1	2.47	0.48
28:b:410:ARG:HA	28:b:413:ASP:HB2	1.96	0.48
50:b:845:CLA:H161	50:b:845:CLA:H122	1.74	0.48
37:k:114:HIS:CD2	50:k:205:CLA:NC	2.81	0.48
38:l:106:LEU:HD22	43:l:303:BCR:H10C	1.95	0.48
38:l:204:PHE:HA	38:l:208:VAL:HB	1.96	0.48
3:2:210:LYS:HB3	3:2:308:GLY:HA3	1.95	0.48
4:3:118:TYR:HD1	4:3:136:SER:HB2	1.79	0.48
27:a:84:TRP:O	27:a:88:MET:HG2	2.14	0.48
50:x:312:CLA:H41	55:x:320:LUT:H28	1.96	0.48
42:z:63:ALA:HB3	42:z:66:ASP:HB2	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:6:121:ARG:NH1	17:G:1:MET:O	2.47	0.47
10:9:160:GLY:O	10:9:197:GLN:NE2	2.48	0.47
11:A:90:LEU:HD11	13:C:40:LYS:HG2	1.96	0.47
16:F:381:MET:HA	16:F:384:MET:HB2	1.96	0.47
27:a:356:MET:HG3	50:a:842:CLA:HHB	1.94	0.47
27:a:379:THR:HG21	27:a:515:VAL:HB	1.96	0.47
27:a:559:ARG:NH2	30:d:89:THR:O	2.47	0.47
28:b:373:THR:HG23	28:b:591:THR:HG21	1.96	0.47
33:g:96:GLN:O	33:g:100:MET:HG3	2.14	0.47
40:x:104:MET:HG2	55:x:320:LUT:C35	2.44	0.47
41:y:225:LYS:HG2	50:y:314:CLA:HED3	1.96	0.47
12:B:182:LYS:HA	16:F:721:ILE:HD13	1.96	0.47
14:D:430:PRO:HG2	16:F:183:ARG:HG2	1.94	0.47
16:F:99:LEU:HD11	16:F:350:ALA:HB3	1.96	0.47
23:M:93:TRP:C	23:M:95:SER:N	2.72	0.47
27:a:118:ILE:HG13	27:a:119:VAL:HG13	1.95	0.47
50:a:858:CLA:H192	50:a:858:CLA:H162	1.79	0.47
31:e:63:GLY:HA2	31:e:118:LEU:HD11	1.96	0.47
33:g:97:ARG:NH2	33:g:134:GLY:O	2.47	0.47
40:x:106:GLY:O	40:x:110:MET:HG3	2.14	0.47
11:A:225:LEU:HD21	11:A:323:PRO:HB3	1.96	0.47
14:D:191:ASN:OD1	14:D:191:ASN:N	2.45	0.47
16:F:180:VAL:HG11	48:F:801:SQD:H45	1.96	0.47
16:F:355:LEU:HD11	16:F:397:SER:HB2	1.97	0.47
18:H:131:PHE:HZ	21:K:49:ALA:HB1	1.80	0.47
55:w:319:LUT:C8	55:w:319:LUT:H181	2.44	0.47
4:3:123:ARG:HB2	4:3:126:LEU:HD12	1.97	0.47
18:H:130:PRO:O	18:H:134:ILE:HG23	2.14	0.47
50:a:815:CLA:H202	50:a:834:CLA:H61	1.97	0.47
50:z:306:CLA:H42	50:z:319:CLA:H3A	1.96	0.47
2:1:104:GLY:HA3	12:B:172:LYS:HG3	1.95	0.47
4:3:140:GLU:HG3	4:3:166:TRP:CD1	2.50	0.47
14:D:243:TYR:HA	14:D:246:CYS:HB2	1.96	0.47
21:K:163:GLU:O	21:K:166:ILE:HG13	2.14	0.47
50:h:201:CLA:HBB2	43:l:303:BCR:H311	1.96	0.47
39:w:206:MET:HB2	55:w:320:LUT:H22	1.97	0.47
5:4:12:ARG:NH2	16:F:582:TRP:O	2.47	0.47
7:6:100:ARG:NH2	7:6:136:GLN:OE1	2.46	0.47
7:6:151:ASP:OD1	7:6:152:ASP:N	2.47	0.47
12:B:20:LYS:HA	12:B:20:LYS:HD3	1.50	0.47
14:D:159:LYS:HB2	14:D:240:GLU:HG2	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:F:10:ILE:O	16:F:14:LEU:HB2	2.14	0.47
23:M:121:ASP:OD1	23:M:122:LYS:NZ	2.36	0.47
51:b:821:DGD:HB81	50:b:842:CLA:HBC2	1.97	0.47
39:w:208:TRP:HB3	50:w:308:CLA:HBA1	1.97	0.47
55:w:320:LUT:C8	55:w:320:LUT:H181	2.45	0.47
2:1:117:ARG:NH2	2:1:119:ASP:OD2	2.43	0.47
3:2:79:SER:OG	3:2:81:LYS:NZ	2.47	0.47
11:A:200:GLN:NE2	11:A:209:ASN:OD1	2.30	0.47
12:B:114:LEU:HG	12:B:370:VAL:HG21	1.97	0.47
12:B:326:TYR:HA	12:B:329:ILE:HG12	1.97	0.47
16:F:330:MET:HE2	16:F:346:LEU:HA	1.96	0.47
26:U:210:GLU:H	26:U:210:GLU:HG3	1.43	0.47
27:a:123:ILE:HG21	28:b:446:PHE:HA	1.97	0.47
28:b:236:ASN:OD1	28:b:236:ASN:N	2.47	0.47
50:b:805:CLA:H193	50:b:805:CLA:H161	1.80	0.47
50:w:303:CLA:H3A	50:w:303:CLA:HBA2	1.53	0.47
12:B:20:LYS:HB2	13:C:90:GLY:CA	2.43	0.47
13:C:82:TRP:HD1	13:C:93:VAL:HB	1.80	0.47
15:E:22:VAL:HG11	17:G:100:THR:HG21	1.97	0.47
18:H:154:MET:HG2	21:K:140:PRO:HG2	1.95	0.47
27:a:271:ASP:OD1	27:a:271:ASP:N	2.40	0.47
44:a:805:PGT:H322	39:w:91:PRO:HB3	1.96	0.47
50:a:834:CLA:H112	43:j:103:BCR:H19C	1.97	0.47
50:w:310:CLA:HHB	55:w:320:LUT:H362	1.95	0.47
50:z:319:CLA:CHC	55:z:320:LUT:H203	2.45	0.47
3:2:244:MET:HE3	3:2:244:MET:HA	1.95	0.47
7:6:114:MET:HE3	17:G:128:LYS:HB3	1.97	0.47
11:A:214:PRO:O	11:A:218:ILE:HG13	2.15	0.47
12:B:247:ALA:HB1	12:B:248:PRO:HD2	1.97	0.47
16:F:243:GLN:HE22	16:F:331:MET:HG2	1.80	0.47
18:H:117:TRP:NE1	18:H:382:GLY:O	2.45	0.47
50:b:815:CLA:H18	43:f:304:BCR:H272	1.97	0.47
50:h:201:CLA:HBA1	50:h:201:CLA:H3A	1.48	0.47
39:w:237:LEU:HD22	39:w:248:PRO:HB3	1.97	0.47
4:3:201:ASP:CG	4:3:202:GLY:H	2.23	0.47
12:B:146:ALA:HB1	12:B:151:THR:HG23	1.97	0.47
21:K:12:ILE:HG22	21:K:163:GLU:HG3	1.97	0.47
27:a:12:ILE:HD13	50:a:811:CLA:HAA2	1.97	0.47
50:a:856:CLA:H101	50:a:856:CLA:H62	1.74	0.47
28:b:657:TRP:HB2	28:b:716:GLY:HA3	1.96	0.47
32:f:112:ASP:OD1	32:f:112:ASP:N	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:h:87:LYS:O	34:h:91:THR:HG23	2.15	0.47
37:k:54:ASN:ND2	50:k:205:CLA:OBD	2.48	0.47
41:y:251:PRO:O	55:y:315:LUT:O3	2.32	0.47
2:1:422:LYS:HB3	2:1:422:LYS:HE2	1.67	0.46
10:9:144:LYS:HA	10:9:229:GLU:HG3	1.96	0.46
47:A:405:PQ9:H311	47:A:405:PQ9:H291	1.73	0.46
12:B:146:ALA:O	12:B:148:ASP:N	2.47	0.46
19:I:68:GLU:OE1	19:I:83:TRP:NE1	2.42	0.46
39:w:235:VAL:HG12	50:w:310:CLA:HBC3	1.96	0.46
50:w:303:CLA:HBA1	48:w:317:SQD:O7	2.15	0.46
42:z:197:ARG:HB3	50:z:307:CLA:HBC3	1.96	0.46
12:B:474:LEU:HD23	12:B:474:LEU:HA	1.78	0.46
17:G:85:GLU:HB3	17:G:88:LYS:HG2	1.96	0.46
20:J:50:TYR:HB3	20:J:72:THR:HG23	1.98	0.46
26:U:104:GLU:HA	26:U:107:LEU:HD12	1.97	0.46
50:a:849:CLA:H2A	38:l:119:ALA:O	2.15	0.46
41:y:140:VAL:HG21	55:y:316:LUT:C4	2.45	0.46
42:z:106:GLU:HG3	42:z:112:ASN:HB3	1.96	0.46
42:z:174:ASP:C	55:z:320:LUT:O23	2.58	0.46
1:0:140:PRO:HG2	1:0:143:ASP:HB3	1.98	0.46
5:4:1:MET:HE2	5:4:1:MET:HB2	1.81	0.46
7:6:131:GLN:O	7:6:135:LYS:HG2	2.16	0.46
11:A:52:LEU:HD11	22:L:129:PHE:HB2	1.96	0.46
13:C:114:LYS:HD3	13:C:114:LYS:HA	1.71	0.46
16:F:391:VAL:HG12	16:F:543:GLU:HA	1.97	0.46
19:I:46:LYS:HG3	19:I:155:ILE:HD12	1.97	0.46
21:K:83:MET:O	23:M:165:ARG:NH1	2.39	0.46
22:L:140:PRO:HB3	44:N:301:PGT:H2	1.98	0.46
50:f:301:CLA:H42	36:j:15:SER:HA	1.96	0.46
42:z:162:ASP:HB3	42:z:165:LYS:HB2	1.98	0.46
9:8:160:VAL:HG23	9:8:162:LYS:HG2	1.96	0.46
9:8:192:PRO:HB3	9:8:213:ASN:HA	1.98	0.46
50:a:809:CLA:H93	50:y:310:CLA:H111	1.97	0.46
28:b:207:VAL:O	28:b:208:ARG:NH1	2.48	0.46
39:w:206:MET:HB2	55:w:320:LUT:C2	2.45	0.46
2:1:172:ARG:NH1	12:B:461:GLU:OE1	2.49	0.46
11:A:231:LEU:HB3	11:A:327:ARG:HA	1.98	0.46
12:B:445:TYR:CE1	48:B:604:SQD:O3	2.64	0.46
14:D:10:ILE:HG22	14:D:126:ILE:HG21	1.97	0.46
16:F:160:LEU:HD11	48:F:805:SQD:H292	1.96	0.46
27:a:319:LEU:HD23	50:a:843:CLA:HED2	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:a:859:SQD:H3	41:y:91:PHE:CE1	2.51	0.46
50:b:841:CLA:HAA1	50:b:841:CLA:HBD	1.96	0.46
11:A:328:TRP:O	18:H:129:THR:OG1	2.26	0.46
18:H:65:PRO:O	18:H:69:ARG:NH1	2.48	0.46
19:I:165:LYS:HD2	19:I:165:LYS:HA	1.76	0.46
27:a:296:LEU:O	27:a:300:ILE:HG12	2.15	0.46
27:a:480:PHE:HB3	50:a:822:CLA:H11	1.98	0.46
27:a:691:TYR:OH	50:a:854:CLA:OBD	2.31	0.46
50:a:824:CLA:HHC	50:a:824:CLA:H111	1.98	0.46
28:b:69:ALA:HB2	28:b:135:LEU:HB2	1.97	0.46
12:B:83:PRO:HA	12:B:93:THR:O	2.15	0.46
12:B:500:PRO:O	12:B:504:ILE:HG13	2.16	0.46
14:D:43:GLU:O	14:D:47:MET:HG3	2.16	0.46
17:G:55:SER:HB3	17:G:58:VAL:HB	1.96	0.46
39:w:206:MET:HG2	55:w:320:LUT:H22	1.97	0.46
50:z:306:CLA:ND	55:z:320:LUT:C38	2.79	0.46
12:B:128:GLU:OE2	13:C:110:TYR:OH	2.31	0.46
18:H:221:GLY:HA3	18:H:335:GLY:HA2	1.97	0.46
18:H:358:GLY:N	18:H:390:GLU:OE2	2.43	0.46
21:K:105:MET:HA	21:K:136:LEU:HB3	1.97	0.46
50:b:844:CLA:H112	50:b:844:CLA:H151	1.80	0.46
50:w:307:CLA:HBA2	50:w:307:CLA:H3A	1.68	0.46
5:4:65:ASP:N	5:4:65:ASP:OD1	2.48	0.46
19:I:156:ARG:HA	22:L:149:ARG:HD3	1.97	0.46
50:b:807:CLA:H161	50:b:807:CLA:H141	1.82	0.46
16:F:642:ASP:N	16:F:642:ASP:OD1	2.49	0.46
18:H:51:MET:N	18:H:393:ARG:OXT	2.43	0.46
18:H:73:LEU:HD22	18:H:116:LEU:HD23	1.98	0.46
27:a:454:ILE:HG22	50:a:849:CLA:HBC2	1.98	0.46
50:a:809:CLA:HBA1	41:y:80:LEU:HB3	1.98	0.46
46:z:314:LMG:O10	46:z:314:LMG:O2	2.31	0.46
4:3:155:GLU:O	4:3:159:LEU:HB2	2.16	0.45
12:B:253:THR:HG22	12:B:325:ALA:HB1	1.97	0.45
12:B:258:GLU:HB3	15:E:99:LEU:HD22	1.98	0.45
14:D:44:LEU:HD12	14:D:47:MET:HE2	1.98	0.45
16:F:230:ALA:HB2	16:F:287:ILE:HD12	1.98	0.45
28:b:273:MET:HE2	50:b:846:CLA:HMA2	1.98	0.45
51:x:317:DGD:HD5	51:x:317:DGD:HE1	1.66	0.45
7:6:97:ALA:O	7:6:101:ILE:HG12	2.16	0.45
11:A:302:VAL:HG22	44:L:201:PGT:H381	1.97	0.45
11:A:360:SER:O	26:U:239:ASN:ND2	2.44	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:G:2:ASP:OD2	17:G:8:HIS:ND1	2.49	0.45
18:H:135:LEU:HD23	18:H:135:LEU:HA	1.83	0.45
27:a:95:PHE:HB3	27:a:114:VAL:HG22	1.97	0.45
50:a:801:CLA:H143	43:a:827:BCR:HC41	1.98	0.45
48:a:859:SQD:H3	41:y:91:PHE:CZ	2.52	0.45
29:c:60:THR:OG1	29:c:62:PHE:O	2.21	0.45
50:y:314:CLA:H152	50:y:314:CLA:H111	1.71	0.45
2:1:353:PHE:HB2	2:1:374:ILE:HD12	1.97	0.45
6:5:95:GLU:HB3	16:F:119:GLN:HG3	1.98	0.45
11:A:27:GLU:O	11:A:31:MET:HE3	2.16	0.45
11:A:113:LEU:HD11	13:C:14:LEU:HD13	1.98	0.45
12:B:463:THR:HG22	12:B:465:HIS:H	1.82	0.45
16:F:367:MET:HE3	16:F:367:MET:HB3	1.88	0.45
20:J:102:TRP:HE1	20:J:124:ASN:HB3	1.81	0.45
3:2:305:VAL:HG22	3:2:312:VAL:HG22	1.97	0.45
18:H:219:LEU:HD13	18:H:223:MET:HG2	1.97	0.45
28:b:206:TYR:O	28:b:211:ASN:ND2	2.50	0.45
50:b:813:CLA:HBB1	50:b:851:CLA:CBB	2.46	0.45
38:l:215:PHE:HA	50:l:301:CLA:HAA2	1.98	0.45
48:w:318:SQD:C32	48:w:318:SQD:H282	2.46	0.45
50:y:313:CLA:H41	50:y:313:CLA:H61	1.53	0.45
2:1:196:LEU:HD22	2:1:201:TYR:HE2	1.81	0.45
3:2:86:TRP:HB3	39:w:186:PRO:HB3	1.98	0.45
7:6:190:ILE:O	7:6:194:LEU:HD23	2.17	0.45
14:D:307:TYR:OH	16:F:691:ASP:OD1	2.30	0.45
16:F:417:LYS:O	16:F:421:LEU:HG	2.17	0.45
20:J:49:ASN:OD1	26:U:199:GLN:NE2	2.43	0.45
23:M:85:LEU:CD2	23:M:120:MET:HE2	2.46	0.45
25:O:91:VAL:HG11	25:O:100:LEU:HD11	1.99	0.45
50:a:809:CLA:H92	50:a:809:CLA:H62	1.79	0.45
50:a:814:CLA:H72	50:a:846:CLA:HBC3	1.98	0.45
50:a:820:CLA:H152	43:j:101:BCR:H351	1.97	0.45
42:z:154:GLU:OE2	42:z:157:ARG:NH1	2.50	0.45
9:8:131:ASN:HA	9:8:154:LEU:O	2.17	0.45
16:F:26:LEU:HD13	48:F:805:SQD:H2	1.98	0.45
27:a:435:ILE:HG13	27:a:554:PHE:HE2	1.80	0.45
28:b:456:GLU:OE1	28:b:461:GLN:NE2	2.49	0.45
3:2:110:ASN:OD1	3:2:200:THR:OG1	2.35	0.45
12:B:352:ILE:H	12:B:352:ILE:HG12	1.60	0.45
12:B:462:ILE:O	12:B:467:ARG:NH2	2.49	0.45
13:C:49:GLU:OE1	21:K:91:ARG:NH2	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:b:450:GLU:OE2	32:f:129:ARG:NE	2.48	0.45
32:f:136:TYR:CZ	36:j:40:PRO:HG3	2.52	0.45
37:k:96:GLY:HA3	50:k:203:CLA:HMA3	1.99	0.45
50:l:306:CLA:H92	50:l:306:CLA:H61	1.87	0.45
3:2:271:PRO:HG2	3:2:272:ILE:HD12	1.97	0.45
44:B:606:PGT:H62	14:D:113:LEU:HD13	1.97	0.45
15:E:53:ASP:OD2	15:E:58:LYS:NZ	2.50	0.45
15:E:60:ASN:ND2	17:G:55:SER:OG	2.50	0.45
19:I:127:LEU:HD23	24:N:124:ARG:HD3	1.98	0.45
27:a:657:ILE:HD12	28:b:621:ARG:HG3	1.99	0.45
50:a:858:CLA:HBB1	50:b:803:CLA:C1B	2.47	0.45
38:l:172:LYS:NZ	38:l:173:LYS:O	2.48	0.45
2:1:112:LEU:HD11	12:B:174:VAL:HG12	1.98	0.45
16:F:177:LYS:NZ	16:F:669:ASP:OD2	2.39	0.45
17:G:39:LEU:O	17:G:43:LEU:HG	2.17	0.45
18:H:47:LEU:HD23	18:H:389:GLY:HA2	1.99	0.45
24:N:104:GLU:N	24:N:104:GLU:OE1	2.50	0.45
27:a:36:ILE:HG13	27:a:45:TRP:NE1	2.32	0.45
27:a:324:GLU:HG2	27:a:336:LYS:HG3	1.99	0.45
50:a:801:CLA:H111	50:a:838:CLA:H42	1.97	0.45
50:a:857:CLA:H13	50:a:857:CLA:H102	1.86	0.45
28:b:448:THR:O	28:b:448:THR:OG1	2.30	0.45
50:b:806:CLA:HBA1	35:i:11:VAL:HG11	1.99	0.45
50:b:810:CLA:H3A	50:b:810:CLA:HBA2	1.62	0.45
33:g:145:SER:HA	43:g:202:BCR:H20C	1.99	0.45
41:y:104:ASN:ND2	50:y:313:CLA:OBD	2.50	0.45
50:z:302:CLA:C4B	55:z:320:LUT:H173	2.47	0.45
2:1:190:THR:CG2	48:B:604:SQD:H441	2.47	0.45
7:6:100:ARG:HE	7:6:137:ASP:CG	2.25	0.45
47:A:405:PQ9:H311	47:A:405:PQ9:H351	1.44	0.45
16:F:558:PHE:O	16:F:562:VAL:HB	2.17	0.45
28:b:5:PHE:O	28:b:20:ARG:NH1	2.37	0.45
51:b:821:DGD:HB92	51:b:821:DGD:HBW1	1.74	0.45
40:x:214:LEU:HD11	46:x:315:LMG:H162	1.98	0.45
41:y:109:MET:HB3	55:y:315:LUT:C35	2.46	0.45
2:1:89:ARG:HG3	2:1:100:LYS:HB3	1.99	0.44
12:B:218:LEU:HD22	12:B:224:TYR:HA	1.99	0.44
13:C:82:TRP:CD1	13:C:93:VAL:HB	2.52	0.44
16:F:319:LEU:HD23	16:F:322:TYR:HE1	1.83	0.44
16:F:322:TYR:HE2	16:F:405:LEU:HD23	1.82	0.44
21:K:35:TRP:N	21:K:73:ASP:OD2	2.38	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:a:522:LEU:HD23	27:a:523:PRO:HD2	1.98	0.44
50:a:838:CLA:HBA1	50:a:838:CLA:H3A	1.66	0.44
28:b:56:ILE:HD13	50:b:804:CLA:HAB	1.99	0.44
28:b:322:LEU:HD12	28:b:322:LEU:HA	1.87	0.44
28:b:341:LEU:HD23	28:b:382:ILE:HD13	1.98	0.44
34:h:99:ARG:NH2	38:l:157:GLU:OE2	2.49	0.44
34:h:130:ARG:HB2	34:h:133:GLN:HE21	1.82	0.44
39:w:131:ILE:HG22	39:w:133:LEU:HG	1.99	0.44
2:1:115:LYS:HE2	15:E:99:LEU:HD23	1.99	0.44
2:1:266:ILE:HD12	2:1:281:ALA:HB2	1.99	0.44
2:1:317:LYS:HA	2:1:333:LEU:HD13	1.99	0.44
14:D:99:LEU:HD23	14:D:99:LEU:HA	1.87	0.44
18:H:74:ALA:HB1	18:H:77:PHE:HD2	1.82	0.44
55:x:321:LUT:H181	55:x:321:LUT:C8	2.47	0.44
42:z:72:LEU:HD21	44:z:313:PGT:H151	1.99	0.44
42:z:216:THR:OG1	42:z:217:GLY:N	2.50	0.44
5:4:12:ARG:HD2	16:F:68:ILE:HG13	1.99	0.44
5:4:31:VAL:HG22	44:5:301:PGT:H331	1.99	0.44
6:5:205:LYS:HE2	6:5:206:TYR:CZ	2.51	0.44
7:6:173:THR:HG22	13:C:5:TYR:HB2	1.99	0.44
16:F:130:PHE:HE2	16:F:156:MET:HE1	1.82	0.44
20:J:42:ILE:HG13	26:U:103:VAL:HG21	1.99	0.44
27:a:56:PHE:HE1	50:a:813:CLA:HED1	1.82	0.44
38:l:118:LYS:HG2	50:l:301:CLA:HMA1	1.98	0.44
39:w:162:MET:HE3	39:w:162:MET:HB3	1.91	0.44
40:x:150:PHE:HA	40:x:153:VAL:HG22	1.99	0.44
50:y:311:CLA:NB	55:y:316:LUT:H173	2.31	0.44
1:0:209:ALA:HB3	1:0:214:TRP:HE3	1.82	0.44
3:2:284:THR:HA	3:2:298:THR:HG23	2.00	0.44
11:A:33:PHE:O	11:A:37:ILE:HG22	2.16	0.44
50:a:802:CLA:H92	50:a:802:CLA:H61	1.83	0.44
50:b:803:CLA:H111	43:b:850:BCR:H362	1.99	0.44
50:b:845:CLA:H102	50:b:845:CLA:H13	1.59	0.44
30:d:116:MET:HE3	30:d:116:MET:HB3	1.84	0.44
50:x:312:CLA:C4D	55:x:320:LUT:H382	2.47	0.44
50:z:302:CLA:C3B	55:z:320:LUT:H173	2.47	0.44
46:z:315:LMG:H112	46:z:315:LMG:H141	1.79	0.44
2:1:447:ASP:OD1	2:1:447:ASP:N	2.40	0.44
11:A:295:GLU:OE2	11:A:298:LYS:NZ	2.45	0.44
12:B:257:TYR:HA	12:B:265:VAL:HG21	1.99	0.44
14:D:457:SER:HB2	14:D:461:GLU:HB2	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:F:491:ILE:HA	16:F:494:LEU:HD12	1.98	0.44
18:H:66:TYR:OH	21:K:114:MET:O	2.33	0.44
27:a:257:GLY:HA3	41:y:272:LYS:HA	2.00	0.44
44:a:805:PGT:H322	44:a:805:PGT:H352	1.82	0.44
50:a:836:CLA:HAB	43:j:101:BCR:H392	2.00	0.44
50:a:858:CLA:H93	50:b:801:CLA:HAB	1.98	0.44
30:d:147:ARG:NH1	30:d:177:GLU:OE1	2.50	0.44
2:1:126:VAL:HG13	2:1:156:ILE:HB	1.99	0.44
10:9:114:ASP:HB3	10:9:175:ASN:HD21	1.83	0.44
20:J:140:TRP:HB2	20:J:143:ARG:HD3	1.99	0.44
38:l:118:LYS:HA	38:l:118:LYS:HD2	1.73	0.44
50:w:308:CLA:H41	50:w:308:CLA:H62	1.62	0.44
40:x:203:GLU:O	46:x:315:LMG:O5	2.30	0.44
1:0:106:PHE:HB3	1:0:109:HIS:HB2	1.99	0.44
1:0:133:ASN:OD1	1:0:133:ASN:N	2.51	0.44
3:2:60:LEU:HB3	3:2:159:VAL:HG21	1.98	0.44
17:G:67:VAL:HA	17:G:70:ILE:HG22	2.00	0.44
20:J:136:SER:HB2	23:M:160:THR:HB	2.00	0.44
23:M:194:ASN:OD1	23:M:194:ASN:N	2.50	0.44
28:b:411:MET:HE2	43:b:819:BCR:H292	1.99	0.44
41:y:266:ASN:O	41:y:270:SER:OG	2.32	0.44
50:z:306:CLA:HBB2	55:z:320:LUT:H34	1.98	0.44
1:0:141:MET:HG3	1:0:176:TRP:CE2	2.53	0.44
7:6:130:LYS:HD3	7:6:130:LYS:HA	1.75	0.44
44:B:602:PGT:H151	44:B:602:PGT:H121	1.74	0.44
14:D:290:TYR:O	14:D:294:THR:OG1	2.30	0.44
18:H:71:ASP:H	18:H:390:GLU:HB2	1.83	0.44
18:H:136:ARG:NH1	18:H:181:TYR:OH	2.44	0.44
50:a:846:CLA:H62	50:a:846:CLA:H41	1.80	0.44
28:b:527:LEU:HD12	50:b:851:CLA:HED3	1.99	0.44
50:b:802:CLA:H121	50:b:802:CLA:H161	1.78	0.44
50:b:805:CLA:H52	51:b:821:DGD:HB72	2.00	0.44
50:b:812:CLA:HBD	50:b:849:CLA:HMB1	2.00	0.44
41:y:115:ALA:N	55:y:316:LUT:H163	2.32	0.44
4:3:148:LEU:HD13	4:3:172:ILE:HD13	1.98	0.44
14:D:258:ALA:O	14:D:262:VAL:HG23	2.17	0.44
27:a:364:VAL:O	27:a:368:MET:HG3	2.16	0.44
50:a:836:CLA:H143	43:j:101:BCR:HC31	2.00	0.44
3:2:165:CYS:SG	3:2:166:THR:N	2.91	0.43
12:B:448:LEU:HD11	14:D:168:ILE:HD13	1.99	0.43
21:K:90:LEU:HD23	23:M:97:VAL:HG23	1.98	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:b:571:SER:OG	28:b:574:ASP:OD2	2.36	0.43
50:b:840:CLA:H192	50:b:840:CLA:H161	1.77	0.43
39:w:189:LYS:HE3	39:w:189:LYS:HB2	1.67	0.43
50:y:303:CLA:C3B	55:y:315:LUT:H171	2.47	0.43
44:5:301:PGT:H361	44:5:301:PGT:H332	1.89	0.43
27:a:72:SER:OG	27:a:178:TYR:HB2	2.18	0.43
50:a:814:CLA:H102	50:a:820:CLA:HBC1	2.00	0.43
50:a:826:CLA:HAB	50:a:844:CLA:HMB1	2.00	0.43
43:b:831:BCR:H381	50:f:301:CLA:HMC1	2.00	0.43
30:d:169:HIS:HB3	30:d:170:PRO:HD3	1.99	0.43
37:k:60:SER:OG	37:k:113:GLY:O	2.37	0.43
40:x:110:MET:HE3	40:x:127:TRP:CD2	2.53	0.43
50:y:314:CLA:H193	50:y:314:CLA:H162	1.88	0.43
50:z:306:CLA:H3A	50:z:306:CLA:HBA2	1.63	0.43
3:2:189:VAL:HG12	3:2:360:TRP:HE3	1.84	0.43
7:6:86:ARG:HA	7:6:86:ARG:HD2	1.77	0.43
7:6:197:LEU:HD23	7:6:197:LEU:HA	1.87	0.43
11:A:259:TYR:OH	47:A:405:PQ9:O1	2.32	0.43
12:B:415:PHE:HA	12:B:418:ILE:HG12	2.01	0.43
13:C:110:TYR:CZ	17:G:168:ILE:HG23	2.53	0.43
28:b:583:MET:HE3	28:b:583:MET:HB3	1.78	0.43
43:b:850:BCR:H20C	43:b:850:BCR:H361	1.83	0.43
54:w:309:CHL:HHC	54:w:309:CHL:HBB1	2.00	0.43
40:x:213:MET:HB3	55:x:321:LUT:C35	2.49	0.43
41:y:261:ASP:HA	41:y:262:PRO:HD3	1.91	0.43
3:2:183:MET:HB3	3:2:183:MET:HE3	1.75	0.43
12:B:242:PHE:O	12:B:252:TRP:NE1	2.51	0.43
14:D:253:LEU:HA	14:D:256:MET:HG3	2.00	0.43
23:M:158:PRO:HB2	23:M:160:THR:HG23	1.99	0.43
24:N:219:GLU:HG2	24:N:226:LEU:HA	2.00	0.43
50:a:801:CLA:H161	50:a:801:CLA:H202	1.79	0.43
50:b:825:CLA:H2A	35:i:24:PHE:HE1	1.83	0.43
12:B:365:THR:O	12:B:369:ILE:HG12	2.18	0.43
14:D:160:ARG:HG2	14:D:160:ARG:HH11	1.82	0.43
21:K:110:ILE:HG22	21:K:111:THR:HG23	2.01	0.43
27:a:503:THR:HG21	50:a:850:CLA:HMA2	2.00	0.43
50:a:856:CLA:HAB	28:b:525:LEU:HD21	2.00	0.43
28:b:594:TRP:HD1	50:b:849:CLA:HMC1	1.83	0.43
2:1:252:MET:HE3	2:1:252:MET:HB3	1.91	0.43
3:2:98:LEU:HD11	3:2:335:TYR:HB3	2.00	0.43
11:A:48:VAL:HG22	22:L:132:PHE:CG	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:292:SER:HA	12:B:295:TRP:NE1	2.34	0.43
13:C:11:TRP:CD1	17:G:3:LEU:HD11	2.53	0.43
14:D:281:MET:HE2	14:D:410:TYR:CE2	2.54	0.43
50:a:836:CLA:HAB	43:j:101:BCR:H24C	2.01	0.43
50:b:805:CLA:H72	50:b:805:CLA:H111	1.87	0.43
53:b:827:PQN:H252	53:b:827:PQN:H212	1.67	0.43
37:k:57:MET:HE3	37:k:57:MET:HB3	1.80	0.43
50:x:312:CLA:H3A	50:x:312:CLA:HBA2	1.59	0.43
50:x:318:CLA:HED1	44:z:317:PGT:H401	1.99	0.43
3:2:57:ILE:HG22	3:2:71:GLN:HA	2.00	0.43
3:2:317:ARG:HB2	3:2:345:PRO:HG3	2.00	0.43
12:B:94:ASN:OD1	12:B:97:ASN:ND2	2.52	0.43
25:O:69:MET:HE1	25:O:141:LEU:HB2	2.00	0.43
28:b:636:ASN:OD1	28:b:636:ASN:N	2.52	0.43
50:b:828:CLA:H62	50:b:828:CLA:H41	1.77	0.43
32:f:96:LYS:HD3	32:f:96:LYS:HA	1.65	0.43
50:g:203:CLA:H41	50:g:203:CLA:H61	1.87	0.43
54:w:311:CHL:HAB	48:w:318:SQD:H92	2.01	0.43
54:z:304:CHL:HBB2	54:z:312:CHL:HBC1	2.01	0.43
2:1:226:ARG:O	2:1:244:SER:N	2.52	0.43
4:3:71:GLU:C	4:3:73:LEU:H	2.26	0.43
16:F:260:ILE:O	16:F:264:ILE:HB	2.18	0.43
50:b:801:CLA:H152	43:l:302:BCR:H15C	2.01	0.43
50:b:812:CLA:H3A	50:b:851:CLA:O1A	2.19	0.43
50:x:312:CLA:C4	55:x:320:LUT:H28	2.48	0.43
54:x:319:CHL:HED3	42:z:51:PRO:HD2	2.01	0.43
42:z:143:LEU:HD12	42:z:143:LEU:HA	1.88	0.43
54:z:312:CHL:H93	54:z:312:CHL:H111	1.89	0.43
11:A:66:PRO:HB2	11:A:73:GLY:HA3	2.00	0.43
12:B:105:LEU:O	12:B:109:THR:OG1	2.30	0.43
18:H:66:TYR:CE2	21:K:114:MET:HB2	2.54	0.43
27:a:410:MET:HE3	27:a:410:MET:HB3	1.79	0.43
27:a:438:LEU:HD21	27:a:545:VAL:HG12	1.99	0.43
27:a:746:ILE:HD12	27:a:746:ILE:HA	1.91	0.43
50:a:846:CLA:H192	50:a:846:CLA:H161	1.76	0.43
48:w:318:SQD:H81	48:w:318:SQD:C46	2.47	0.43
40:x:79:PRO:HD2	55:x:321:LUT:C23	2.46	0.43
6:5:94:ASP:OD1	6:5:94:ASP:N	2.43	0.43
12:B:214:ILE:HD11	12:B:287:PRO:HB2	2.01	0.43
46:D:601:LMG:HC92	46:D:601:LMG:H291	1.81	0.43
16:F:353:LYS:HD2	16:F:353:LYS:HA	1.85	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:G:24:LEU:O	17:G:28:LEU:HB2	2.19	0.43
21:K:70:ARG:HA	21:K:97:PRO:HD3	2.01	0.43
27:a:485:GLN:HG2	27:a:507:TRP:HE3	1.84	0.43
27:a:575:GLY:HA2	28:b:562:PRO:HD3	2.00	0.43
44:a:805:PGT:H341	44:a:805:PGT:H32	2.00	0.43
50:a:839:CLA:H152	50:a:839:CLA:H18	1.66	0.43
50:b:826:CLA:H51	50:b:826:CLA:H8	1.94	0.43
50:w:310:CLA:H141	50:w:310:CLA:H162	1.87	0.43
54:x:301:CHL:CBB	54:x:311:CHL:HBB2	2.49	0.43
2:1:125:CYS:HB2	2:1:155:ILE:HD13	2.00	0.42
2:1:375:VAL:HG12	2:1:377:ILE:HG12	2.01	0.42
12:B:21:ALA:C	12:B:23:HIS:N	2.76	0.42
15:E:49:SER:HB2	15:E:59:GLY:HA3	2.00	0.42
19:I:76:ILE:HG13	19:I:78:LEU:HB2	2.01	0.42
21:K:58:PHE:CE1	21:K:63:LEU:HD23	2.54	0.42
27:a:94:ARG:HE	27:a:94:ARG:HB3	1.61	0.42
27:a:438:LEU:HG	27:a:546:LEU:HB2	2.01	0.42
50:b:804:CLA:H3A	44:b:829:PGT:H381	2.00	0.42
32:f:148:LEU:HD22	32:f:159:GLU:HG2	2.01	0.42
40:x:158:TRP:HH2	46:z:314:LMG:HC8	1.84	0.42
40:x:221:VAL:O	40:x:225:VAL:HG22	2.19	0.42
2:1:405:LEU:HD22	2:1:431:LYS:HB3	2.01	0.42
47:A:405:PQ9:H162	47:A:405:PQ9:H143	1.93	0.42
47:A:405:PQ9:H261	47:A:405:PQ9:H242	1.85	0.42
48:B:604:SQD:H251	14:D:169:LEU:HD13	2.00	0.42
14:D:76:PHE:CD1	14:D:135:LEU:HB3	2.54	0.42
16:F:34:LYS:HG2	16:F:122:LEU:HD13	2.01	0.42
23:M:130:THR:O	23:M:130:THR:OG1	2.37	0.42
27:a:343:THR:HA	50:a:842:CLA:H193	1.96	0.42
27:a:572:PRO:HB3	27:a:719:ILE:HB	2.01	0.42
50:a:836:CLA:H62	43:j:103:BCR:H363	2.01	0.42
40:x:143:PHE:CE2	50:z:310:CLA:HHC	2.54	0.42
41:y:186:PHE:CE2	50:y:312:CLA:HBB2	2.54	0.42
50:y:308:CLA:H101	50:y:313:CLA:H43	2.00	0.42
12:B:131:LEU:HD11	17:G:165:VAL:HG22	2.00	0.42
48:B:604:SQD:H81	14:D:166:LYS:HG3	2.00	0.42
19:I:80:VAL:HG22	24:N:143:HIS:CD2	2.54	0.42
27:a:703:HIS:HE1	50:a:824:CLA:ND	2.17	0.42
28:b:476:VAL:HG22	28:b:477:LEU:H	1.85	0.42
50:b:840:CLA:C4D	50:b:847:CLA:HMB1	2.49	0.42
34:h:138:LEU:HD23	34:h:138:LEU:HA	1.90	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:x:155:ILE:HD13	40:x:155:ILE:HA	1.81	0.42
2:1:154:ASP:OD2	2:1:172:ARG:NH2	2.41	0.42
44:A:403:PGT:H131	44:A:403:PGT:H161	1.66	0.42
14:D:128:LEU:HD22	14:D:256:MET:SD	2.59	0.42
16:F:183:ARG:HD3	16:F:183:ARG:HA	1.78	0.42
18:H:329:ARG:NH2	20:J:83:GLU:OE1	2.39	0.42
28:b:561:GLY:O	28:b:567:THR:OG1	2.37	0.42
39:w:225:LYS:HB2	39:w:225:LYS:HE3	1.69	0.42
50:w:303:CLA:HAA1	50:w:307:CLA:HMA2	2.00	0.42
40:x:107:VAL:HG11	55:x:320:LUT:H12	2.01	0.42
6:5:165:GLU:HG3	14:D:34:TRP:CZ2	2.54	0.42
12:B:493:ILE:HD12	12:B:493:ILE:HA	1.79	0.42
44:B:602:PGT:H161	44:B:602:PGT:H321	2.01	0.42
16:F:91:PRO:HB3	16:F:582:TRP:CD1	2.54	0.42
16:F:147:ILE:O	16:F:151:TRP:HB2	2.18	0.42
27:a:393:TRP:HZ3	27:a:598:TYR:HA	1.85	0.42
50:a:814:CLA:H152	50:a:845:CLA:HBB2	2.01	0.42
28:b:33:SER:OG	28:b:396:ARG:NH2	2.52	0.42
50:b:844:CLA:H41	50:b:844:CLA:H61	1.57	0.42
34:h:79:SER:HB2	38:l:95:VAL:HG13	2.00	0.42
37:k:102:THR:OG1	37:k:105:ASP:OD1	2.33	0.42
50:w:308:CLA:HBB1	55:w:320:LUT:H14	2.00	0.42
10:9:175:ASN:OD1	10:9:175:ASN:N	2.46	0.42
11:A:47:LEU:HD21	47:A:405:PQ9:H292	2.02	0.42
12:B:244:LEU:HD22	12:B:332:ILE:HD11	2.02	0.42
14:D:362:ASP:OD1	14:D:362:ASP:N	2.52	0.42
22:L:101:MET:HE2	22:L:101:MET:HB2	1.89	0.42
27:a:13:LEU:HA	41:y:87:GLY:HA3	2.01	0.42
27:a:476:LEU:HB2	27:a:528:THR:HG23	2.01	0.42
50:a:854:CLA:H93	50:a:854:CLA:H61	1.86	0.42
30:d:93:LEU:HD23	30:d:93:LEU:HA	1.93	0.42
42:z:136:TRP:NE1	50:z:309:CLA:HAC2	2.34	0.42
9:8:132:VAL:HG22	9:8:156:MET:HE1	2.02	0.42
46:B:605:LMG:H112	46:B:605:LMG:HC8	1.65	0.42
14:D:464:VAL:O	14:D:468:ILE:HG13	2.20	0.42
16:F:110:TYR:HD1	16:F:259:PRO:HG3	1.84	0.42
16:F:270:VAL:HB	16:F:327:LEU:HD11	2.00	0.42
27:a:218:SER:O	27:a:222:ASN:HB2	2.19	0.42
50:a:802:CLA:C1D	50:a:841:CLA:HBB2	2.50	0.42
51:a:804:DGD:HA92	50:a:839:CLA:H51	2.02	0.42
50:a:857:CLA:H141	38:l:139:LEU:HD11	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:b:823:CLA:H41	50:b:823:CLA:H62	1.73	0.42
42:z:180:LYS:HA	42:z:180:LYS:HD2	1.88	0.42
2:1:169:LYS:HD2	5:4:90:GLU:HG3	2.02	0.42
2:1:233:ASN:OD1	2:1:233:ASN:N	2.52	0.42
3:2:77:VAL:HB	3:2:105:ILE:HB	2.01	0.42
3:2:162:GLU:HG2	3:2:175:VAL:HG22	2.01	0.42
13:C:88:ILE:HD12	17:G:146:ILE:HD11	2.00	0.42
16:F:571:GLN:HE22	16:F:597:PHE:HB2	1.85	0.42
18:H:192:LEU:HB2	19:I:28:ILE:HG21	2.02	0.42
23:M:74:ILE:HD12	23:M:74:ILE:HA	1.88	0.42
27:a:217:VAL:HG13	27:a:237:PRO:HB3	2.02	0.42
28:b:601:LEU:HA	28:b:606:VAL:HG12	2.01	0.42
50:b:809:CLA:HBA2	50:b:809:CLA:H3A	1.70	0.42
50:b:822:CLA:H92	50:b:822:CLA:H62	1.84	0.42
29:c:5:VAL:HG11	29:c:26:LEU:HD21	2.02	0.42
50:x:306:CLA:HAA1	50:x:306:CLA:HBD	2.02	0.42
54:x:311:CHL:HHC	54:x:311:CHL:HBB1	2.02	0.42
54:x:319:CHL:HBA1	54:x:319:CHL:H3A	1.49	0.42
2:1:311:VAL:HG13	2:1:349:VAL:HG11	2.01	0.42
2:1:387:ILE:O	2:1:409:LYS:NZ	2.52	0.42
3:2:228:HIS:ND1	3:2:229:PRO:HD2	2.35	0.42
9:8:164:ILE:HG13	9:8:167:LEU:HB2	2.01	0.42
12:B:493:ILE:HG22	12:B:494:PRO:HD3	2.01	0.42
16:F:196:LEU:HB3	16:F:208:LEU:HD11	2.02	0.42
26:U:119:ALA:C	26:U:121:LEU:H	2.28	0.42
27:a:315:ILE:HG13	50:a:812:CLA:HED1	2.02	0.42
51:a:804:DGD:HBG1	51:a:804:DGD:HA81	2.02	0.42
50:b:847:CLA:H92	50:b:847:CLA:H61	1.82	0.42
36:j:32:PHE:O	46:j:104:LMG:O4	2.35	0.42
39:w:168:ARG:NE	50:x:316:CLA:OBD	2.48	0.42
42:z:235:GLY:HA2	42:z:238:VAL:HG12	2.01	0.42
2:1:91:ASN:O	12:B:470:ARG:NH2	2.52	0.42
7:6:124:ILE:HD12	7:6:124:ILE:HA	1.90	0.42
10:9:107:VAL:HG13	10:9:251:LEU:HD21	2.02	0.42
14:D:146:ILE:HD13	14:D:146:ILE:HA	1.86	0.42
16:F:622:PHE:O	16:F:626:LYS:HB2	2.19	0.42
18:H:209:ILE:HG12	18:H:368:LEU:HD21	2.02	0.42
20:J:106:SER:OG	20:J:110:GLN:NE2	2.52	0.42
26:U:190:MET:HE3	26:U:190:MET:HB2	1.90	0.42
50:a:801:CLA:H93	50:a:838:CLA:H42	2.01	0.42
28:b:40:GLU:OE1	28:b:44:GLN:NE2	2.49	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:b:519:VAL:HG21	28:b:593:TYR:HB2	2.02	0.42
28:b:612:SER:HA	28:b:615:TYR:HE1	1.85	0.42
34:h:50:LYS:N	34:h:53:ASP:OD2	2.52	0.42
48:w:318:SQD:C8	48:w:318:SQD:H461	2.50	0.42
50:x:307:CLA:H61	50:x:307:CLA:H92	1.80	0.42
9:8:138:PHE:HB2	9:8:142:THR:HG23	2.01	0.41
9:8:218:TYR:HB3	9:8:220:VAL:HG13	2.02	0.41
10:9:196:SER:O	10:9:196:SER:OG	2.38	0.41
12:B:362:ASN:HA	12:B:365:THR:HG22	2.02	0.41
12:B:437:LEU:HD21	14:D:179:LEU:HD23	2.02	0.41
48:B:604:SQD:O2	48:B:604:SQD:H442	2.20	0.41
18:H:378:MET:N	18:H:378:MET:SD	2.92	0.41
21:K:45:PHE:O	21:K:48:PHE:HB3	2.20	0.41
27:a:389:THR:CG2	50:a:820:CLA:HAB	2.50	0.41
43:b:818:BCR:H392	50:b:836:CLA:H51	2.02	0.41
34:h:135:PRO:HA	34:h:136:PRO:HD3	1.96	0.41
37:k:57:MET:HE2	50:k:205:CLA:C1D	2.50	0.41
39:w:116:MET:HB3	55:w:320:LUT:C15	2.50	0.41
2:1:206:SER:HB2	2:1:218:LEU:HD11	2.02	0.41
3:2:162:GLU:HG3	3:2:175:VAL:HG13	2.02	0.41
14:D:121:MET:HE1	14:D:253:LEU:HD11	2.02	0.41
16:F:323:THR:OG1	16:F:353:LYS:HE3	2.20	0.41
20:J:51:LEU:HA	20:J:71:LEU:HD23	2.01	0.41
27:a:312:ASN:OD1	27:a:312:ASN:N	2.53	0.41
43:a:831:BCR:H342	50:a:846:CLA:H162	2.02	0.41
28:b:662:MET:HB2	50:b:803:CLA:C4C	2.50	0.41
33:g:79:LEU:HD23	33:g:79:LEU:HA	1.95	0.41
39:w:168:ARG:HH12	39:w:181:ILE:HD11	1.85	0.41
39:w:206:MET:CB	55:w:320:LUT:H22	2.50	0.41
44:w:313:PGT:H2	50:w:316:CLA:HMC2	2.02	0.41
42:z:175:PRO:N	55:z:320:LUT:O23	2.53	0.41
1:0:104:PHE:CE1	1:0:114:LYS:HB3	2.55	0.41
10:9:93:ILE:HG21	10:9:228:ILE:HD11	2.02	0.41
11:A:219:VAL:HG13	11:A:346:LEU:HD22	2.02	0.41
44:A:402:PGT:O5	17:G:89:LYS:NZ	2.43	0.41
16:F:127:TYR:OH	48:F:805:SQD:H252	2.20	0.41
48:F:805:SQD:H4	48:F:805:SQD:O7	2.20	0.41
18:H:47:LEU:HD11	21:K:42:SER:HB2	2.02	0.41
18:H:131:PHE:O	18:H:134:ILE:HG12	2.21	0.41
50:b:845:CLA:H62	50:b:845:CLA:H41	1.89	0.41
30:d:156:PHE:CZ	30:d:169:HIS:HB2	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:187:ASP:OD1	32:f:187:ASP:N	2.52	0.41
43:w:301:BCR:H332	46:x:315:LMG:H302	2.02	0.41
40:x:152:TYR:HE1	54:x:319:CHL:HBD	1.85	0.41
40:x:245:THR:N	40:x:248:GLN:OE1	2.47	0.41
50:x:310:CLA:HBA2	50:x:310:CLA:H3A	1.70	0.41
50:z:306:CLA:CBB	55:z:320:LUT:H32	2.50	0.41
10:9:238:ARG:HE	10:9:238:ARG:HB3	1.52	0.41
11:A:145:ILE:HD11	17:G:67:VAL:HG13	2.02	0.41
11:A:274:THR:HA	11:A:278:LEU:HB2	2.03	0.41
16:F:329:TYR:OH	16:F:435:ALA:O	2.39	0.41
16:F:333:ALA:HB2	16:F:420:ILE:HG12	2.02	0.41
18:H:289:ASN:HB3	18:H:292:ILE:HG22	2.02	0.41
21:K:66:ARG:HE	21:K:66:ARG:HB3	1.65	0.41
23:M:64:MET:HG2	23:M:66:GLU:HG2	2.02	0.41
44:a:806:PGT:O1P	50:a:826:CLA:NB	2.53	0.41
50:a:814:CLA:H121	50:a:814:CLA:H162	1.75	0.41
28:b:194:LEU:HA	28:b:198:ALA:HB3	2.02	0.41
50:b:802:CLA:H192	50:b:802:CLA:H162	1.87	0.41
31:e:119:ASP:OD1	31:e:119:ASP:N	2.48	0.41
38:l:74:PRO:O	38:l:78:SER:HB2	2.21	0.41
50:w:308:CLA:H3A	50:w:308:CLA:HBA2	1.63	0.41
46:w:312:LMG:H192	46:w:312:LMG:H162	1.87	0.41
50:y:308:CLA:H93	50:y:313:CLA:H43	2.02	0.41
50:y:310:CLA:H2	55:y:316:LUT:H363	2.00	0.41
50:z:316:CLA:NC	44:z:317:PGT:H11	2.35	0.41
11:A:225:LEU:HD22	11:A:230:ARG:HB2	2.02	0.41
21:K:155:LYS:HB3	24:N:175:TRP:HH2	1.86	0.41
27:a:403:ALA:HB2	43:a:830:BCR:H323	2.01	0.41
27:a:533:VAL:HG11	27:a:607:HIS:CG	2.55	0.41
27:a:534:HIS:ND1	50:a:823:CLA:HED2	2.36	0.41
28:b:395:ILE:HD13	28:b:555:TYR:HA	2.02	0.41
28:b:523:ILE:HG23	50:b:849:CLA:HBB1	2.03	0.41
40:x:206:LEU:HA	40:x:206:LEU:HD23	1.86	0.41
50:y:302:CLA:C4	55:y:315:LUT:H372	2.44	0.41
8:7:132:LEU:HA	8:7:132:LEU:HD23	1.86	0.41
18:H:195:ARG:O	18:H:196:ASN:C	2.64	0.41
43:a:810:BCR:H11C	43:a:810:BCR:H341	1.78	0.41
28:b:275:HIS:HE1	50:b:841:CLA:C4D	2.34	0.41
50:b:837:CLA:HBA1	50:b:837:CLA:H3A	1.71	0.41
33:g:136:ASN:O	33:g:140:VAL:HG23	2.21	0.41
46:w:312:LMG:H302	46:w:312:LMG:H331	1.73	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:x:308:CLA:H42	43:x:314:BCR:H402	2.02	0.41
21:K:94:GLU:OE2	23:M:102:ARG:NH2	2.54	0.41
27:a:33:SER:OG	27:a:34:ARG:N	2.54	0.41
34:h:60:LEU:HD23	34:h:60:LEU:HA	1.84	0.41
34:h:106:LEU:HD23	34:h:106:LEU:HA	1.94	0.41
50:w:308:CLA:CBB	55:w:320:LUT:H12	2.50	0.41
50:w:316:CLA:HED3	50:w:316:CLA:HBD	1.68	0.41
40:x:214:LEU:HD23	40:x:214:LEU:HA	1.89	0.41
50:z:306:CLA:C1A	55:z:320:LUT:H382	2.51	0.41
2:1:200:TYR:CE2	12:B:453:LEU:HD11	2.55	0.41
4:3:199:GLU:O	4:3:200:LYS:HG2	2.21	0.41
5:4:41:TRP:HB2	6:5:133:PHE:HD2	1.85	0.41
12:B:255:ASP:OD1	12:B:255:ASP:N	2.54	0.41
12:B:332:ILE:O	12:B:336:ILE:HG12	2.21	0.41
18:H:143:ASP:OD2	21:K:55:ARG:NH2	2.54	0.41
18:H:334:LYS:HZ2	18:H:334:LYS:HG3	1.58	0.41
46:H:401:LMG:O5	46:H:401:LMG:O4	2.27	0.41
19:I:76:ILE:HD12	19:I:103:ILE:HG22	2.01	0.41
21:K:3:SER:HB3	23:M:185:LYS:HD3	2.02	0.41
50:a:842:CLA:H92	50:a:842:CLA:H61	1.87	0.41
28:b:129:LEU:HD11	50:b:807:CLA:HMA2	2.02	0.41
28:b:340:SER:O	28:b:344:ILE:HG23	2.21	0.41
30:d:111:GLU:HG2	30:d:125:ARG:HA	2.01	0.41
46:f:306:LMG:H292	50:z:310:CLA:H3A	2.02	0.41
50:w:306:CLA:HED2	50:w:306:CLA:H2A	2.01	0.41
51:x:317:DGD:HG31	51:x:317:DGD:HD2	1.82	0.41
1:0:123:VAL:HG12	1:0:207:VAL:HG22	2.02	0.41
1:0:191:HIS:HA	1:0:207:VAL:O	2.21	0.41
2:1:276:ILE:HD13	2:1:276:ILE:HA	1.86	0.41
2:1:355:ILE:HG22	2:1:360:LEU:HD23	2.02	0.41
3:2:76:HIS:NE2	3:2:103:GLY:O	2.38	0.41
6:5:102:SER:HB3	6:5:104:GLU:CG	2.50	0.41
10:9:90:TYR:OH	10:9:247:GLU:OE2	2.30	0.41
11:A:335:MET:O	11:A:339:LEU:HG	2.21	0.41
11:A:336:ASP:OD1	11:A:337:GLN:N	2.53	0.41
12:B:161:LEU:HD21	15:E:73:GLU:HG2	2.02	0.41
14:D:483:LEU:O	14:D:487:VAL:HG13	2.21	0.41
16:F:253:ALA:HB1	16:F:265:HIS:NE2	2.36	0.41
18:H:209:ILE:HD11	18:H:368:LEU:HD11	2.01	0.41
19:I:41:GLN:O	19:I:45:GLU:N	2.52	0.41
21:K:12:ILE:HG13	21:K:13:ALA:H	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:M:108:ILE:HG12	23:M:115:MET:HB2	2.03	0.41
25:O:83:LEU:HD13	25:O:83:LEU:HA	1.88	0.41
26:U:213:ASP:OD1	26:U:213:ASP:N	2.54	0.41
27:a:302:PHE:CE1	50:a:843:CLA:HBB1	2.56	0.41
27:a:537:HIS:CE1	27:a:603:VAL:HG12	2.56	0.41
27:a:537:HIS:HE1	27:a:603:VAL:HG12	1.85	0.41
27:a:539:PHE:CE2	50:a:858:CLA:HAB	2.56	0.41
50:a:814:CLA:H111	50:a:814:CLA:H71	1.53	0.41
50:a:849:CLA:H41	50:a:849:CLA:H62	1.83	0.41
28:b:191:THR:HG21	28:b:278:LEU:HB2	2.03	0.41
28:b:365:PHE:HB3	28:b:602:TRP:CZ3	2.56	0.41
43:b:816:BCR:H313	50:b:828:CLA:H111	2.02	0.41
43:b:819:BCR:H363	50:b:838:CLA:H12	2.03	0.41
50:b:828:CLA:H62	50:b:828:CLA:H92	1.81	0.41
50:b:828:CLA:H42	44:z:301:PGT:H181	2.03	0.41
50:b:840:CLA:H62	50:b:840:CLA:H41	1.82	0.41
31:e:65:LYS:HB2	31:e:65:LYS:HE3	1.93	0.41
34:h:88:PHE:O	34:h:92:PHE:HB2	2.21	0.41
38:l:139:LEU:HA	38:l:142:ILE:HD12	2.03	0.41
50:l:305:CLA:HMB2	50:l:306:CLA:HMA2	2.02	0.41
50:w:306:CLA:H71	50:w:306:CLA:H112	1.78	0.41
50:w:307:CLA:HBB2	54:w:309:CHL:CAB	2.48	0.41
54:w:311:CHL:CBB	48:w:318:SQD:H81	2.46	0.41
54:x:311:CHL:HBB1	55:x:321:LUT:H161	2.02	0.41
11:A:82:THR:HB	21:K:29:SER:OG	2.21	0.41
11:A:264:LEU:HD23	11:A:264:LEU:HA	1.78	0.41
12:B:175:ARG:HE	12:B:175:ARG:HB2	1.71	0.41
12:B:403:LEU:HD22	12:B:408:LEU:HG	2.03	0.41
16:F:135:MET:HE1	16:F:272:ALA:HB2	2.02	0.41
18:H:19:HIS:HB3	18:H:22:MET:HG2	2.02	0.41
18:H:51:MET:HE3	18:H:70:TRP:CD1	2.56	0.41
27:a:12:ILE:HG21	50:a:811:CLA:HAA2	2.03	0.41
27:a:389:THR:HG23	27:a:605:ILE:HG21	2.03	0.41
43:a:827:BCR:H11C	43:a:827:BCR:H341	1.96	0.41
43:b:817:BCR:H15C	43:b:817:BCR:H351	1.91	0.41
50:y:303:CLA:CHB	55:y:315:LUT:H173	2.40	0.41
8:7:144:ASN:OD1	8:7:144:ASN:N	2.52	0.40
15:E:92:ARG:H	15:E:92:ARG:HG2	1.48	0.40
16:F:48:LEU:HD12	16:F:48:LEU:HA	1.84	0.40
16:F:677:ILE:HG23	48:F:801:SQD:H1	2.03	0.40
31:e:71:ARG:HB2	31:e:122:GLN:HB3	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:w:110:MET:HE1	54:w:311:CHL:CAD	2.52	0.40
50:w:306:CLA:H92	50:w:306:CLA:H62	1.88	0.40
50:w:308:CLA:HAA1	55:w:320:LUT:H41	2.02	0.40
50:x:307:CLA:HMC2	55:x:321:LUT:C31	2.52	0.40
3:2:324:LEU:O	3:2:343:THR:HA	2.21	0.40
11:A:149:MET:HE2	11:A:149:MET:HB2	1.96	0.40
12:B:66:THR:HA	12:B:69:VAL:HG22	2.03	0.40
12:B:190:SER:OG	12:B:191:SER:N	2.54	0.40
16:F:714:LYS:O	46:F:802:LMG:O2	2.35	0.40
16:F:726:PHE:CD1	17:G:100:THR:HG22	2.56	0.40
18:H:340:PHE:HB3	18:H:353:LYS:HB3	2.04	0.40
43:a:829:BCR:H24C	43:a:829:BCR:H371	1.83	0.40
43:g:202:BCR:H11C	43:g:202:BCR:H341	1.94	0.40
41:y:141:ILE:HG22	41:y:143:PRO:HG2	2.03	0.40
44:z:317:PGT:H352	44:z:317:PGT:H322	1.94	0.40
2:1:417:SER:OG	2:1:419:GLU:OE1	2.39	0.40
4:3:80:PHE:HE2	4:3:100:ALA:HB3	1.86	0.40
11:A:89:ASN:OD1	11:A:254:LYS:NZ	2.54	0.40
11:A:278:LEU:HD11	11:A:319:PHE:HE2	1.86	0.40
12:B:309:LEU:HD22	16:F:713:ILE:HG21	2.04	0.40
13:C:61:ARG:HA	13:C:64:MET:HE2	2.03	0.40
20:J:109:PHE:O	20:J:112:ARG:HB2	2.21	0.40
28:b:177:HIS:HB3	50:b:833:CLA:HHC	2.03	0.40
28:b:583:MET:O	28:b:587:ILE:HG12	2.21	0.40
50:b:805:CLA:H2	50:b:805:CLA:H62	1.90	0.40
29:c:41:SER:HG	30:d:186:VAL:H	1.69	0.40
33:g:80:SER:HB3	33:g:151:ALA:HB2	2.02	0.40
33:g:164:PRO:HB2	50:g:201:CLA:C4C	2.51	0.40
43:i:101:BCR:H24C	43:i:101:BCR:H392	1.82	0.40
39:w:224:ILE:HD13	39:w:224:ILE:HA	1.98	0.40
40:x:213:MET:HB3	55:x:321:LUT:C34	2.51	0.40
41:y:135:TRP:HB2	55:y:316:LUT:H3	2.02	0.40
50:y:308:CLA:CHB	50:y:313:CLA:H111	2.52	0.40
43:4:101:BCR:H15C	43:4:101:BCR:H351	1.84	0.40
43:4:101:BCR:H361	43:4:101:BCR:H20C	1.81	0.40
7:6:139:LYS:HB2	7:6:139:LYS:NZ	2.36	0.40
11:A:117:ILE:HD11	11:A:136:TRP:HB2	2.03	0.40
11:A:118:ILE:HD13	11:A:118:ILE:HA	1.90	0.40
44:A:403:PGT:H362	44:A:403:PGT:H391	1.65	0.40
14:D:364:MET:HB3	14:D:367:ILE:HD11	2.02	0.40
14:D:423:ALA:HB1	16:F:187:PHE:CD1	2.55	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:F:567:ILE:HD12	16:F:567:ILE:HA	1.98	0.40
18:H:212:GLU:HB3	26:U:199:GLN:HB3	2.02	0.40
18:H:353:LYS:HG2	20:J:55:CYS:HB2	2.03	0.40
22:L:83:LEU:HD13	44:L:201:PGT:H41	2.03	0.40
50:a:834:CLA:HBB2	50:a:837:CLA:H72	2.03	0.40
50:a:838:CLA:H62	50:a:838:CLA:H92	1.80	0.40
28:b:33:SER:HG	28:b:396:ARG:HH22	1.69	0.40
28:b:668:ARG:HG3	28:b:700:LEU:O	2.21	0.40
40:x:181:ASN:ND2	40:x:186:PRO:HA	2.37	0.40
40:x:191:ASN:HA	55:x:320:LUT:O23	2.20	0.40
42:z:206:PHE:CE1	55:z:320:LUT:C16	3.05	0.40
43:z:318:BCR:H20C	43:z:318:BCR:H361	1.81	0.40
1:0:132:LYS:HB3	1:0:137:ASP:HB2	2.04	0.40
4:3:155:GLU:HG2	4:3:168:LEU:HB2	2.03	0.40
9:8:167:LEU:HA	9:8:167:LEU:HD23	1.87	0.40
11:A:331:PRO:HB3	18:H:125:ILE:HG22	2.03	0.40
14:D:228:ILE:HA	14:D:229:PRO:HA	1.94	0.40
16:F:115:MET:HG3	16:F:124:PHE:CD2	2.57	0.40
16:F:161:LEU:HD22	16:F:260:ILE:HG13	2.04	0.40
16:F:240:LYS:NZ	16:F:269:MET:HE3	2.37	0.40
18:H:16:GLY:HA2	18:H:27:ARG:HG3	2.03	0.40
20:J:5:LEU:HD23	20:J:84:VAL:HG21	2.04	0.40
50:a:835:CLA:H62	50:a:835:CLA:H41	1.91	0.40
50:a:853:CLA:H3A	50:a:853:CLA:HBA2	1.93	0.40
28:b:176:ASN:ND2	28:b:291:TYR:O	2.53	0.40
28:b:523:ILE:CG2	50:b:849:CLA:HBB1	2.51	0.40
28:b:548:PRO:HD2	29:c:62:PHE:CZ	2.57	0.40
50:b:841:CLA:H43	33:g:156:ALA:HB3	2.04	0.40
43:i:101:BCR:H20C	43:i:101:BCR:H361	1.91	0.40
39:w:99:GLU:OE1	48:w:317:SQD:O2	2.39	0.40
40:x:197:PRO:HG3	50:x:312:CLA:HED3	2.03	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	155/157 (99%)	152 (98%)	3 (2%)	0	100	100
2	1	401/403 (100%)	393 (98%)	8 (2%)	0	100	100
3	2	292/372 (78%)	286 (98%)	5 (2%)	1 (0%)	37	69
4	3	137/139 (99%)	129 (94%)	8 (6%)	0	100	100
5	4	91/93 (98%)	90 (99%)	1 (1%)	0	100	100
6	5	152/154 (99%)	149 (98%)	3 (2%)	0	100	100
7	6	123/125 (98%)	122 (99%)	1 (1%)	0	100	100
8	7	142/144 (99%)	141 (99%)	1 (1%)	0	100	100
9	8	141/143 (99%)	136 (96%)	5 (4%)	0	100	100
10	9	172/174 (99%)	167 (97%)	5 (3%)	0	100	100
11	A	348/350 (99%)	340 (98%)	8 (2%)	0	100	100
12	B	486/488 (100%)	453 (93%)	32 (7%)	1 (0%)	44	75
13	C	113/115 (98%)	103 (91%)	9 (8%)	1 (1%)	14	49
14	D	496/498 (100%)	483 (97%)	12 (2%)	1 (0%)	44	75
15	E	98/100 (98%)	96 (98%)	2 (2%)	0	100	100
16	F	718/742 (97%)	683 (95%)	33 (5%)	2 (0%)	37	69
17	G	174/176 (99%)	165 (95%)	9 (5%)	0	100	100
18	H	367/389 (94%)	352 (96%)	15 (4%)	0	100	100
19	I	161/163 (99%)	157 (98%)	4 (2%)	0	100	100
20	J	156/158 (99%)	152 (97%)	4 (3%)	0	100	100
21	K	200/202 (99%)	189 (94%)	8 (4%)	3 (2%)	8	38
22	L	107/109 (98%)	104 (97%)	3 (3%)	0	100	100
23	M	139/141 (99%)	129 (93%)	9 (6%)	1 (1%)	19	54
24	N	163/165 (99%)	156 (96%)	6 (4%)	1 (1%)	22	57
25	O	93/95 (98%)	90 (97%)	1 (1%)	2 (2%)	5	30
26	U	161/240 (67%)	151 (94%)	7 (4%)	3 (2%)	6	34
27	a	740/742 (100%)	721 (97%)	19 (3%)	0	100	100
28	b	731/733 (100%)	716 (98%)	15 (2%)	0	100	100
29	c	79/81 (98%)	77 (98%)	2 (2%)	0	100	100
30	d	141/143 (99%)	135 (96%)	6 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
31	e	66/68 (97%)	62 (94%)	4 (6%)	0	100	100
32	f	151/153 (99%)	150 (99%)	1 (1%)	0	100	100
33	g	95/97 (98%)	91 (96%)	2 (2%)	2 (2%)	5	31
34	h	93/95 (98%)	92 (99%)	1 (1%)	0	100	100
35	i	29/31 (94%)	28 (97%)	1 (3%)	0	100	100
36	j	40/42 (95%)	40 (100%)	0	0	100	100
37	k	62/130 (48%)	61 (98%)	1 (2%)	0	100	100
38	l	158/160 (99%)	152 (96%)	6 (4%)	0	100	100
39	w	213/215 (99%)	202 (95%)	11 (5%)	0	100	100
40	x	196/198 (99%)	194 (99%)	2 (1%)	0	100	100
41	y	219/221 (99%)	214 (98%)	5 (2%)	0	100	100
42	z	191/193 (99%)	188 (98%)	3 (2%)	0	100	100
All	All	8990/9337 (96%)	8691 (97%)	281 (3%)	18 (0%)	45	75

All (18) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
16	F	501	ASN
21	K	140	PRO
23	M	94	LEU
25	O	61	LYS
26	U	86	SER
26	U	87	PRO
33	g	164	PRO
12	B	247	ALA
21	K	13	ALA
24	N	67	ILE
25	O	66	VAL
3	2	245	LYS
16	F	535	LYS
21	K	14	GLN
26	U	90	MET
13	C	55	TRP
14	D	412	LEU
33	g	163	ASP

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	143/143 (100%)	140 (98%)	3 (2%)	48	74
2	1	340/340 (100%)	334 (98%)	6 (2%)	54	77
3	2	260/321 (81%)	253 (97%)	7 (3%)	40	69
4	3	120/120 (100%)	116 (97%)	4 (3%)	33	64
5	4	76/76 (100%)	76 (100%)	0	100	100
6	5	131/131 (100%)	127 (97%)	4 (3%)	35	66
7	6	112/112 (100%)	112 (100%)	0	100	100
8	7	123/123 (100%)	120 (98%)	3 (2%)	44	71
9	8	114/115 (99%)	112 (98%)	2 (2%)	54	77
10	9	143/144 (99%)	138 (96%)	5 (4%)	31	63
11	A	296/304 (97%)	289 (98%)	7 (2%)	44	71
12	B	424/424 (100%)	408 (96%)	16 (4%)	28	60
13	C	99/99 (100%)	96 (97%)	3 (3%)	36	66
14	D	430/430 (100%)	421 (98%)	9 (2%)	48	74
15	E	86/86 (100%)	83 (96%)	3 (4%)	31	63
16	F	626/652 (96%)	614 (98%)	12 (2%)	52	76
17	G	153/153 (100%)	148 (97%)	5 (3%)	33	64
18	H	321/339 (95%)	318 (99%)	3 (1%)	75	89
19	I	150/150 (100%)	147 (98%)	3 (2%)	50	75
20	J	140/140 (100%)	135 (96%)	5 (4%)	30	62
21	K	180/180 (100%)	173 (96%)	7 (4%)	27	60
22	L	99/99 (100%)	94 (95%)	5 (5%)	20	53
23	M	129/129 (100%)	127 (98%)	2 (2%)	58	79
24	N	139/139 (100%)	138 (99%)	1 (1%)	81	92
25	O	87/87 (100%)	83 (95%)	4 (5%)	23	56
26	U	127/212 (60%)	124 (98%)	3 (2%)	44	71

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
27	a	598/598 (100%)	586 (98%)	12 (2%)	50 75
28	b	599/599 (100%)	591 (99%)	8 (1%)	65 83
29	c	71/71 (100%)	69 (97%)	2 (3%)	38 68
30	d	122/122 (100%)	119 (98%)	3 (2%)	42 71
31	e	60/60 (100%)	60 (100%)	0	100 100
32	f	126/126 (100%)	125 (99%)	1 (1%)	79 90
33	g	82/82 (100%)	82 (100%)	0	100 100
34	h	79/79 (100%)	79 (100%)	0	100 100
35	i	27/27 (100%)	26 (96%)	1 (4%)	29 62
36	j	37/37 (100%)	37 (100%)	0	100 100
37	k	49/97 (50%)	48 (98%)	1 (2%)	50 75
38	l	123/123 (100%)	122 (99%)	1 (1%)	79 90
39	w	177/177 (100%)	171 (97%)	6 (3%)	32 63
40	x	166/166 (100%)	164 (99%)	2 (1%)	67 85
41	y	173/173 (100%)	173 (100%)	0	100 100
42	z	154/154 (100%)	148 (96%)	6 (4%)	27 60
All	All	7691/7939 (97%)	7526 (98%)	165 (2%)	49 74

All (165) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	0	96	VAL
1	0	133	ASN
1	0	135	VAL
2	1	76	MET
2	1	203	MET
2	1	355	ILE
2	1	440	THR
2	1	454	THR
2	1	455	LEU
3	2	34	ASP
3	2	58	VAL
3	2	149	ARG
3	2	165	CYS
3	2	227	SER
3	2	348	ILE

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Mol	Chain	Res	Type
3	2	367	GLU
4	3	101	THR
4	3	136	SER
4	3	138	MET
4	3	176	THR
6	5	73	ASP
6	5	103	SER
6	5	104	GLU
6	5	145	VAL
8	7	141	ASP
8	7	161	PHE
8	7	170	VAL
9	8	142	THR
9	8	163	VAL
10	9	115	VAL
10	9	129	GLU
10	9	167	ARG
10	9	193	THR
10	9	196	SER
11	A	36	LEU
11	A	123	ARG
11	A	125	VAL
11	A	213	GLN
11	A	259	TYR
11	A	338	LEU
11	A	365	LEU
12	B	20	LYS
12	B	24	LEU
12	B	61	TYR
12	B	127	THR
12	B	131	LEU
12	B	133	ILE
12	B	180	THR
12	B	225	ASN
12	B	226	SER
12	B	264	VAL
12	B	296	HIS
12	B	352	ILE
12	B	369	ILE
12	B	459	ASN
12	B	478	ASN
12	B	493	ILE

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Mol	Chain	Res	Type
13	C	49	GLU
13	C	73	ASP
13	C	104	LEU
14	D	170	TYR
14	D	201	VAL
14	D	232	THR
14	D	294	THR
14	D	326	THR
14	D	378	PHE
14	D	422	MET
14	D	446	LEU
14	D	496	ASN
15	E	13	LEU
15	E	44	ASN
15	E	63	SER
16	F	4	ILE
16	F	10	ILE
16	F	27	LEU
16	F	43	SER
16	F	129	SER
16	F	187	PHE
16	F	324	MET
16	F	363	LEU
16	F	490	LYS
16	F	584	THR
16	F	654	ILE
16	F	729	LEU
17	G	67	VAL
17	G	70	ILE
17	G	92	LEU
17	G	138	ILE
17	G	150	THR
18	H	40	CYS
18	H	70	TRP
18	H	263	ILE
19	I	50	SER
19	I	87	THR
19	I	160	ASN
20	J	35	ASP
20	J	58	ASP
20	J	75	GLU
20	J	143	ARG

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Mol	Chain	Res	Type
20	J	145	ASP
21	K	26	SER
21	K	43	CYS
21	K	58	PHE
21	K	73	ASP
21	K	80	THR
21	K	81	VAL
21	K	139	CYS
22	L	92	VAL
22	L	117	ASN
22	L	152	THR
22	L	165	GLU
22	L	175	TRP
23	M	80	VAL
23	M	126	MET
24	N	75	LEU
25	O	66	VAL
25	O	83	LEU
25	O	117	GLU
25	O	150	GLU
26	U	128	THR
26	U	130	ASP
26	U	210	GLU
27	a	15	ASP
27	a	159	THR
27	a	259	THR
27	a	312	ASN
27	a	363	VAL
27	a	369	TYR
27	a	584	VAL
27	a	625	VAL
27	a	626	VAL
27	a	630	THR
27	a	700	VAL
27	a	749	VAL
28	b	38	THR
28	b	96	PHE
28	b	210	ASN
28	b	272	ASP
28	b	293	THR
28	b	294	ASN
28	b	394	PHE

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Mol	Chain	Res	Type
28	b	477	LEU
29	c	10	THR
29	c	73	THR
30	d	113	ILE
30	d	125	ARG
30	d	155	GLN
32	f	105	SER
35	i	11	VAL
37	k	97	ASP
38	l	60	GLN
39	w	55	ILE
39	w	131	ILE
39	w	153	THR
39	w	158	GLN
39	w	208	TRP
39	w	216	VAL
40	x	61	LEU
40	x	141	THR
42	z	58	HIS
42	z	77	VAL
42	z	134	VAL
42	z	176	LEU
42	z	181	ASP
42	z	238	VAL

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	119	GLN
1	0	199	ASN
2	1	142	GLN
2	1	170	ASN
4	3	96	HIS
10	9	173	ASN
10	9	188	ASN
11	A	213	GLN
11	A	361	GLN
12	B	147	ASN
12	B	468	ASN
13	C	57	GLN
14	D	110	ASN
15	E	44	ASN

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Mol	Chain	Res	Type
16	F	176	GLN
16	F	390	HIS
16	F	459	ASN
16	F	534	ASN
16	F	571	GLN
17	G	142	GLN
18	H	18	HIS
19	I	96	ASN
20	J	12	HIS
20	J	24	GLN
20	J	124	ASN
21	K	23	ASN
21	K	172	ASN
23	M	117	GLN
27	a	214	GLN
27	a	721	GLN
28	b	10	GLN
28	b	156	HIS
28	b	333	GLN
28	b	506	ASN
28	b	704	GLN
30	d	112	GLN
32	f	223	ASN
33	g	107	GLN
39	w	240	GLN
40	x	99	ASN
41	y	254	ASN
42	z	209	GLN

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 (i)

248 ligands are modelled in this entry.

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	$\#\|Z\| > 2$
46	LMG	z	315	-	36,36,55	0.98	1 (2%)	44,44,63	1.14	2 (4%)
44	PGT	z	317	50	45,45,50	0.51	0	48,51,56	0.48	0
50	CLA	a	851	27	46,54,73	1.56	7 (15%)	53,90,113	1.90	8 (15%)
49	SF4	a	832	27,28	0,12,12	-	-	-		
50	CLA	a	801	-	65,73,73	1.35	7 (10%)	76,113,113	1.70	10 (13%)
50	CLA	b	813	-	43,51,73	1.59	7 (16%)	49,86,113	1.76	7 (14%)
46	LMG	D	601	-	34,34,55	1.01	1 (2%)	42,42,63	1.14	2 (4%)
43	BCR	i	101	-	41,41,41	0.65	0	56,56,56	1.13	2 (3%)
50	CLA	x	310	-	43,51,73	1.57	7 (16%)	49,86,113	1.84	8 (16%)
50	CLA	b	840	-	65,73,73	1.34	7 (10%)	76,113,113	1.70	9 (11%)
43	BCR	g	202	-	41,41,41	0.69	0	56,56,56	1.01	3 (5%)
50	CLA	b	803	-	65,73,73	1.34	6 (9%)	76,113,113	1.88	12 (15%)
51	DGD	x	317	-	49,49,67	1.12	0	63,63,81	1.05	2 (3%)
50	CLA	a	857	-	65,73,73	1.36	7 (10%)	76,113,113	1.72	9 (11%)
43	BCR	4	101	-	41,41,41	0.64	0	56,56,56	1.19	4 (7%)
43	BCR	b	850	-	41,41,41	0.70	0	56,56,56	1.18	6 (10%)
50	CLA	b	844	28	65,73,73	1.37	7 (10%)	76,113,113	1.70	9 (11%)
50	CLA	z	303	-	41,49,73	1.64	8 (19%)	47,84,113	1.91	10 (21%)
50	CLA	a	842	-	65,73,73	1.34	7 (10%)	76,113,113	1.66	11 (14%)
54	CHL	z	304	42	42,50,74	1.69	7 (16%)	44,85,114	2.31	8 (18%)
46	LMG	F	802	-	28,28,55	1.10	1 (3%)	36,36,63	1.16	2 (5%)
50	CLA	a	835	-	58,66,73	1.43	7 (12%)	67,104,113	1.81	10 (14%)
50	CLA	b	848	-	42,50,73	1.60	7 (16%)	48,85,113	2.02	8 (16%)
50	CLA	k	204	-	57,65,73	1.44	7 (12%)	66,103,113	1.86	10 (15%)
50	CLA	a	812	-	59,66,73	1.36	8 (13%)	70,101,113	1.72	9 (12%)
44	PGT	b	830	50	38,38,50	0.54	0	41,44,56	0.50	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
50	CLA	x	309	-	42,50,73	1.58	7 (16%)	48,85,113	1.96	7 (14%)
50	CLA	z	305	-	50,58,73	1.53	7 (14%)	58,95,113	1.84	9 (15%)
50	CLA	a	845	-	65,73,73	1.35	7 (10%)	76,113,113	1.70	10 (13%)
50	CLA	b	849	-	50,58,73	1.53	7 (14%)	58,95,113	1.92	7 (12%)
50	CLA	w	310	-	65,73,73	1.36	7 (10%)	76,113,113	1.81	15 (19%)
44	PGT	A	402	-	36,36,50	0.56	0	39,42,56	0.51	0
50	CLA	w	306	39	65,73,73	1.36	7 (10%)	76,113,113	1.67	11 (14%)
50	CLA	a	815	27	65,73,73	1.34	8 (12%)	76,113,113	1.74	11 (14%)
50	CLA	a	839	-	65,73,73	1.34	7 (10%)	76,113,113	1.63	11 (14%)
50	CLA	b	834	-	45,53,73	1.57	7 (15%)	52,89,113	1.81	7 (13%)
50	CLA	x	307	40	60,68,73	1.40	7 (11%)	70,107,113	1.81	11 (15%)
50	CLA	b	808	-	43,51,73	1.58	7 (16%)	49,86,113	1.91	7 (14%)
55	LUT	x	321	-	42,43,43	0.84	0	51,60,60	0.86	2 (3%)
50	CLA	z	309	-	42,50,73	1.58	7 (16%)	48,85,113	1.95	8 (16%)
50	CLA	a	854	-	65,73,73	1.34	7 (10%)	76,113,113	1.61	12 (15%)
46	LMG	x	315	-	48,48,55	0.84	1 (2%)	56,56,63	1.10	2 (3%)
50	CLA	g	203	-	52,60,73	1.50	7 (13%)	60,97,113	1.76	8 (13%)
43	BCR	a	830	-	41,41,41	0.70	0	56,56,56	1.03	3 (5%)
46	LMG	z	314	-	40,40,55	1.12	4 (10%)	48,48,63	1.07	1 (2%)
50	CLA	b	838	-	52,60,73	1.52	7 (13%)	60,97,113	1.88	10 (16%)
50	CLA	f	302	-	42,50,73	1.59	7 (16%)	48,85,113	2.04	7 (14%)
50	CLA	a	826	44	45,53,73	1.55	7 (15%)	52,89,113	1.88	7 (13%)
43	BCR	w	301	-	41,41,41	0.63	0	56,56,56	1.05	4 (7%)
50	CLA	b	801	-	65,73,73	1.35	7 (10%)	76,113,113	1.67	11 (14%)
49	SF4	c	102	29	0,12,12	-	-	-		
54	CHL	x	305	-	46,54,74	1.73	10 (21%)	49,90,114	2.22	14 (28%)
43	BCR	b	820	-	41,41,41	0.70	0	56,56,56	1.15	5 (8%)
55	LUT	x	320	-	42,43,43	0.82	0	51,60,60	0.58	0
44	PGT	B	602	-	41,41,50	0.53	0	44,47,56	0.44	0
50	CLA	a	817	-	41,49,73	1.63	7 (17%)	47,84,113	1.89	7 (14%)
43	BCR	j	103	-	41,41,41	0.69	0	56,56,56	1.16	5 (8%)
43	BCR	z	318	-	41,41,41	0.68	0	56,56,56	1.41	6 (10%)
50	CLA	a	822	-	51,59,73	1.48	7 (13%)	59,96,113	2.07	10 (16%)
50	CLA	b	824	44	65,73,73	1.33	7 (10%)	76,113,113	1.79	9 (11%)
50	CLA	b	836	-	65,73,73	1.36	7 (10%)	76,113,113	1.69	10 (13%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
50	CLA	y	305	41	45,53,73	1.57	7 (15%)	52,89,113	1.87	7 (13%)
50	CLA	y	309	-	42,50,73	1.61	7 (16%)	48,85,113	1.76	7 (14%)
50	CLA	w	308	39	65,73,73	1.35	6 (9%)	76,113,113	1.77	12 (15%)
43	BCR	b	816	-	41,41,41	0.67	0	56,56,56	1.15	4 (7%)
50	CLA	x	308	-	50,58,73	1.54	7 (14%)	58,95,113	1.90	9 (15%)
43	BCR	x	314	-	41,41,41	0.61	0	56,56,56	1.16	4 (7%)
50	CLA	b	807	-	65,73,73	1.34	7 (10%)	76,113,113	1.75	10 (13%)
44	PGT	A	403	-	37,37,50	0.31	0	40,43,56	0.37	0
50	CLA	b	826	-	55,63,73	1.47	7 (12%)	64,101,113	1.85	9 (14%)
51	DGD	b	821	-	60,60,67	1.02	0	74,74,81	1.03	3 (4%)
45	A1H1M	5	302	-	41,41,41	1.08	2 (4%)	58,58,58	1.94	13 (22%)
55	LUT	y	316	-	42,43,43	0.83	0	51,60,60	0.75	1 (1%)
50	CLA	a	814	-	65,73,73	1.35	7 (10%)	76,113,113	1.75	9 (11%)
50	CLA	b	851	-	47,55,73	1.52	7 (14%)	54,91,113	1.91	8 (14%)
50	CLA	y	304	-	38,47,73	1.68	7 (18%)	45,81,113	1.98	8 (17%)
50	CLA	b	812	-	62,70,73	1.39	7 (11%)	72,109,113	1.71	12 (16%)
50	CLA	z	302	-	55,63,73	1.47	8 (14%)	64,101,113	1.77	8 (12%)
50	CLA	a	816	-	42,50,73	1.57	7 (16%)	48,85,113	1.84	7 (14%)
50	CLA	y	310	41	65,73,73	1.33	7 (10%)	76,113,113	1.74	10 (13%)
50	CLA	a	843	-	65,73,73	1.37	7 (10%)	76,113,113	1.73	10 (13%)
53	PQN	b	827	-	34,34,34	1.02	3 (8%)	42,45,45	1.88	10 (23%)
44	PGT	z	301	-	44,44,50	0.50	0	47,50,56	0.50	0
50	CLA	a	837	-	65,73,73	1.36	7 (10%)	76,113,113	1.69	9 (11%)
50	CLA	a	840	-	42,50,73	1.58	7 (16%)	48,85,113	1.89	6 (12%)
50	CLA	a	853	-	65,73,73	1.34	7 (10%)	76,113,113	1.73	11 (14%)
50	CLA	z	308	-	42,50,73	2.14	11 (26%)	40,82,113	2.30	8 (20%)
49	SF4	I	201	19	0,12,12	-	-	-		
54	CHL	w	311	-	47,55,74	1.59	8 (17%)	49,90,114	2.10	10 (20%)
48	SQD	w	317	-	30,31,54	0.52	1 (3%)	39,42,65	0.58	0
50	CLA	a	819	-	60,68,73	1.40	7 (11%)	70,107,113	1.75	9 (12%)
50	CLA	b	842	-	57,65,73	1.44	7 (12%)	66,103,113	1.67	11 (16%)
50	CLA	b	847	-	60,68,73	1.39	6 (10%)	70,107,113	1.85	12 (17%)
50	CLA	w	315	39	46,54,73	1.57	7 (15%)	53,90,113	1.94	8 (15%)
50	CLA	a	855	-	42,50,73	1.60	7 (16%)	48,85,113	1.97	7 (14%)
50	CLA	b	804	-	41,49,73	1.62	8 (19%)	47,84,113	1.95	9 (19%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
50	CLA	y	303	-	55,63,73	1.47	7 (12%)	64,101,113	1.85	7 (10%)
50	CLA	w	307	-	45,53,73	1.60	7 (15%)	52,89,113	1.83	9 (17%)
43	BCR	b	819	-	41,41,41	0.73	1 (2%)	56,56,56	1.23	6 (10%)
50	CLA	y	302	41	52,60,73	1.47	8 (15%)	65,97,113	2.11	12 (18%)
44	PGT	N	301	-	25,25,50	0.65	0	28,31,56	0.58	0
44	PGT	a	807	-	45,45,50	0.51	0	48,51,56	0.50	0
50	CLA	y	308	-	65,73,73	1.35	7 (10%)	76,113,113	1.74	10 (13%)
50	CLA	b	814	-	65,73,73	1.36	7 (10%)	76,113,113	1.86	12 (15%)
46	LMG	f	306	-	34,34,55	1.02	1 (2%)	42,42,63	1.15	2 (4%)
49	SF4	I	202	19	0,12,12	-	-	-		
50	CLA	b	837	-	65,73,73	1.34	7 (10%)	76,113,113	1.74	10 (13%)
51	DGD	a	804	-	67,67,67	1.02	2 (2%)	81,81,81	1.00	1 (1%)
44	PGT	I	203	-	43,43,50	0.52	0	46,49,56	0.47	0
48	SQD	j	106	-	41,42,54	0.44	1 (2%)	50,53,65	0.57	1 (2%)
50	CLA	b	811	-	45,53,73	1.58	7 (15%)	52,89,113	1.90	9 (17%)
50	CLA	b	825	-	65,73,73	1.35	7 (10%)	76,113,113	1.65	11 (14%)
50	CLA	b	833	-	65,73,73	1.32	7 (10%)	76,113,113	1.75	11 (14%)
50	CLA	z	316	44	47,55,73	1.53	7 (14%)	54,91,113	1.83	8 (14%)
50	CLA	a	836	27	65,73,73	1.34	7 (10%)	76,113,113	1.65	10 (13%)
50	CLA	a	858	-	65,73,73	1.36	7 (10%)	76,113,113	1.54	8 (10%)
50	CLA	a	833	-	65,73,73	1.36	7 (10%)	76,113,113	1.65	11 (14%)
52	CL0	a	808	-	61,69,73	2.35	18 (29%)	70,107,113	2.52	21 (30%)
43	BCR	j	101	-	41,41,41	0.70	0	56,56,56	1.15	3 (5%)
50	CLA	k	205	-	42,50,73	1.58	7 (16%)	48,85,113	1.97	8 (16%)
50	CLA	a	802	-	60,68,73	1.41	7 (11%)	70,107,113	1.72	10 (14%)
54	CHL	z	312	42	61,69,74	1.54	10 (16%)	67,108,114	2.20	14 (20%)
50	CLA	b	845	-	65,73,73	1.35	7 (10%)	76,113,113	1.49	11 (14%)
44	PGT	B	603	-	45,45,50	0.51	0	48,51,56	0.46	0
48	SQD	F	805	-	42,43,54	0.45	0	51,54,65	0.80	2 (3%)
50	CLA	k	203	-	41,49,73	1.65	8 (19%)	47,84,113	1.97	7 (14%)
50	CLA	z	311	-	55,63,73	1.46	7 (12%)	64,101,113	1.68	10 (15%)
44	PGT	a	805	-	31,31,50	0.59	0	34,37,56	0.56	0
50	CLA	a	820	-	65,73,73	1.35	7 (10%)	76,113,113	1.67	11 (14%)
43	BCR	a	803	-	27,27,41	0.70	0	34,35,56	1.23	2 (5%)
44	PGT	5	301	-	34,34,50	0.57	0	37,40,56	0.58	0
44	PGT	f	305	-	38,38,50	0.54	0	41,44,56	0.50	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
50	CLA	a	809	-	57,65,73	1.43	7 (12%)	66,103,113	1.83	12 (18%)
50	CLA	z	310	42	41,49,73	1.60	7 (17%)	47,84,113	2.07	10 (21%)
46	LMG	H	401	-	33,33,55	1.07	2 (6%)	41,41,63	1.26	4 (9%)
48	SQD	F	801	-	40,41,54	0.44	1 (2%)	49,52,65	1.06	3 (6%)
50	CLA	f	301	-	57,65,73	1.43	7 (12%)	66,103,113	1.89	10 (15%)
50	CLA	a	846	-	65,73,73	1.36	7 (10%)	76,113,113	1.76	11 (14%)
50	CLA	f	303	-	41,49,73	1.62	7 (17%)	47,84,113	1.97	8 (17%)
50	CLA	x	313	40	53,61,73	1.52	8 (15%)	61,98,113	1.76	12 (19%)
43	BCR	b	831	-	41,41,41	0.64	0	56,56,56	1.33	10 (17%)
50	CLA	b	805	28	65,73,73	1.35	7 (10%)	76,113,113	1.77	10 (13%)
50	CLA	x	303	40	57,65,73	1.48	7 (12%)	66,103,113	1.73	12 (18%)
50	CLA	l	301	-	45,53,73	1.59	7 (15%)	52,89,113	1.91	7 (13%)
50	CLA	x	304	40	47,55,73	1.54	7 (14%)	54,91,113	1.84	7 (12%)
50	CLA	b	822	-	58,66,73	1.42	7 (12%)	67,104,113	1.82	9 (13%)
50	CLA	y	313	41	65,73,73	1.36	7 (10%)	76,113,113	1.84	10 (13%)
55	LUT	w	320	-	42,43,43	0.74	0	51,60,60	0.62	0
50	CLA	b	832	-	54,62,73	1.49	7 (12%)	62,99,113	1.82	9 (14%)
43	BCR	b	818	-	41,41,41	0.66	0	56,56,56	1.03	3 (5%)
50	CLA	a	850	-	65,73,73	1.34	6 (9%)	76,113,113	1.63	12 (15%)
44	PGT	L	201	-	39,39,50	0.54	0	42,45,56	0.54	0
44	PGT	w	313	50	39,39,50	0.54	0	42,45,56	0.50	0
43	BCR	k	201	-	41,41,41	0.69	0	56,56,56	1.47	11 (19%)
50	CLA	z	306	42	56,64,73	1.43	6 (10%)	65,102,113	1.88	14 (21%)
50	CLA	a	856	-	64,72,73	1.34	7 (10%)	74,111,113	1.53	10 (13%)
54	CHL	x	311	-	41,48,74	1.97	9 (21%)	42,82,114	2.05	6 (14%)
43	BCR	f	304	-	41,41,41	0.67	0	56,56,56	1.05	4 (7%)
50	CLA	b	828	-	60,68,73	1.43	7 (11%)	70,107,113	1.66	8 (11%)
43	BCR	l	303	-	41,41,41	0.63	0	56,56,56	1.20	5 (8%)
50	CLA	y	314	41	65,73,73	1.36	7 (10%)	76,113,113	1.67	13 (17%)
50	CLA	a	813	-	52,60,73	1.50	7 (13%)	60,97,113	1.75	9 (15%)
50	CLA	l	306	-	60,68,73	1.41	8 (13%)	70,107,113	1.78	12 (17%)
50	CLA	b	843	-	65,73,73	1.34	8 (12%)	76,113,113	1.77	9 (11%)
49	SF4	K	301	21	0,12,12	-	-	-		
50	CLA	a	811	-	65,73,73	1.35	7 (10%)	76,113,113	1.75	10 (13%)
50	CLA	b	806	-	52,60,73	1.50	7 (13%)	60,97,113	1.89	9 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
50	CLA	a	852	-	51,59,73	1.50	7 (13%)	59,96,113	1.87	12 (20%)
50	CLA	y	307	-	41,49,73	1.57	6 (14%)	51,84,113	2.07	8 (15%)
43	BCR	l	302	-	41,41,41	0.64	0	56,56,56	1.03	2 (3%)
43	BCR	a	829	-	41,41,41	0.75	0	56,56,56	1.16	6 (10%)
43	BCR	a	827	-	40,40,41	0.67	0	54,54,56	1.13	5 (9%)
50	CLA	a	823	-	55,63,73	1.47	7 (12%)	64,101,113	1.78	9 (14%)
50	CLA	x	306	-	60,68,73	1.40	8 (13%)	70,107,113	1.75	8 (11%)
50	CLA	w	305	-	51,59,73	1.50	7 (13%)	59,96,113	1.98	9 (15%)
54	CHL	w	304	-	45,53,74	1.77	10 (22%)	52,89,114	2.17	13 (25%)
48	SQD	w	318	-	40,41,54	0.43	1 (2%)	49,52,65	0.92	3 (6%)
50	CLA	a	847	-	40,48,73	1.78	7 (17%)	40,76,113	1.50	7 (17%)
44	PGT	A	401	-	31,31,50	0.58	0	34,37,56	0.60	0
50	CLA	y	306	-	39,48,73	1.57	7 (17%)	43,82,113	2.09	9 (20%)
50	CLA	x	316	-	45,53,73	1.57	7 (15%)	52,89,113	1.88	8 (15%)
43	BCR	b	817	-	41,41,41	0.67	0	56,56,56	1.18	6 (10%)
50	CLA	b	815	-	65,73,73	1.35	7 (10%)	76,113,113	1.77	10 (13%)
44	PGT	z	313	-	32,32,50	0.58	0	35,38,56	0.53	0
46	LMG	w	312	-	40,40,55	0.95	1 (2%)	48,48,63	1.11	2 (4%)
50	CLA	y	311	-	51,59,73	1.54	8 (15%)	59,96,113	1.97	9 (15%)
50	CLA	b	839	-	65,73,73	1.35	7 (10%)	76,113,113	1.72	10 (13%)
44	PGT	B	606	-	34,34,50	0.54	0	37,40,56	0.72	1 (2%)
46	LMG	j	104	-	34,34,55	1.03	1 (2%)	42,42,63	1.15	2 (4%)
44	PGT	a	806	50	32,32,50	0.60	0	35,38,56	0.53	0
55	LUT	w	319	-	42,43,43	0.80	0	51,60,60	0.86	1 (1%)
50	CLA	a	824	-	65,73,73	1.35	7 (10%)	76,113,113	1.77	10 (13%)
46	LMG	7	301	-	41,41,55	1.00	2 (4%)	49,49,63	1.23	4 (8%)
50	CLA	a	844	-	57,65,73	1.43	7 (12%)	66,103,113	1.73	11 (16%)
50	CLA	b	846	-	65,73,73	1.34	7 (10%)	76,113,113	1.68	9 (11%)
50	CLA	l	305	38	40,48,73	1.66	7 (17%)	46,83,113	1.90	8 (17%)
55	LUT	z	320	-	42,43,43	0.90	0	51,60,60	0.70	0
50	CLA	j	102	36	42,50,73	1.58	7 (16%)	48,85,113	2.02	7 (14%)
50	CLA	x	312	40	65,73,73	1.34	7 (10%)	76,113,113	1.68	10 (13%)
45	A1H1M	F	804	-	41,41,41	1.27	5 (12%)	58,58,58	1.85	16 (27%)
50	CLA	y	312	-	51,59,73	1.49	7 (13%)	59,96,113	1.83	8 (13%)
50	CLA	a	834	-	65,73,73	1.34	7 (10%)	76,113,113	1.69	8 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
50	CLA	a	848	-	52,60,73	1.50	7 (13%)	60,97,113	1.78	9 (15%)
43	BCR	a	831	-	40,40,41	0.64	0	54,54,56	1.16	5 (9%)
49	SF4	c	101	29	0,12,12	-	-	-		
50	CLA	x	318	-	44,53,73	1.51	6 (13%)	49,88,113	1.99	8 (16%)
54	CHL	x	319	42	50,58,74	1.67	9 (18%)	52,94,114	2.14	11 (21%)
46	LMG	B	605	-	37,37,55	0.99	2 (5%)	45,45,63	1.06	2 (4%)
53	PQN	a	825	-	34,34,34	1.01	3 (8%)	42,45,45	1.81	10 (23%)
50	CLA	a	849	-	65,73,73	1.36	7 (10%)	76,113,113	1.64	11 (14%)
44	PGT	A	404	-	43,43,50	0.51	0	46,49,56	0.46	0
50	CLA	w	314	44	44,52,73	1.57	7 (15%)	49,87,113	2.03	8 (16%)
50	CLA	w	302	-	50,58,73	1.55	7 (14%)	58,95,113	1.89	8 (13%)
50	CLA	b	841	-	55,63,73	1.47	8 (14%)	64,101,113	1.87	9 (14%)
50	CLA	a	818	-	59,67,73	1.40	7 (11%)	68,105,113	1.72	11 (16%)
50	CLA	z	307	42	60,68,73	1.40	7 (11%)	70,107,113	1.76	10 (14%)
43	BCR	a	828	-	41,41,41	0.71	0	56,56,56	1.09	3 (5%)
50	CLA	b	823	-	55,63,73	1.47	8 (14%)	64,101,113	1.78	11 (17%)
50	CLA	x	302	-	41,49,73	1.62	7 (17%)	47,84,113	2.08	9 (19%)
55	LUT	y	315	-	42,43,43	0.85	0	51,60,60	0.61	0
44	PGT	b	829	-	47,47,50	0.50	0	50,53,56	0.45	0
50	CLA	w	316	39	50,58,73	1.53	7 (14%)	58,95,113	2.00	12 (20%)
50	CLA	a	838	-	65,73,73	1.32	7 (10%)	76,113,113	1.78	10 (13%)
55	LUT	z	321	-	42,43,43	0.81	0	51,60,60	0.64	0
50	CLA	b	835	-	59,67,73	1.40	7 (11%)	68,105,113	1.73	10 (14%)
48	SQD	a	859	-	35,36,54	0.49	1 (2%)	44,47,65	0.84	2 (4%)
54	CHL	x	301	-	43,51,74	1.68	8 (18%)	45,86,114	2.20	8 (17%)
43	BCR	a	810	-	30,30,41	0.83	1 (3%)	39,39,56	1.34	6 (15%)
50	CLA	a	841	-	55,63,73	1.45	7 (12%)	64,101,113	1.78	10 (15%)
50	CLA	b	810	-	50,58,73	1.54	7 (14%)	58,95,113	1.83	7 (12%)
43	BCR	k	202	-	41,41,41	0.70	0	56,56,56	1.14	4 (7%)
44	PGT	D	602	-	33,33,50	0.57	0	36,39,56	0.60	0
50	CLA	g	204	33	43,51,73	1.58	7 (16%)	49,86,113	1.85	8 (16%)
50	CLA	h	201	34	46,54,73	1.56	7 (15%)	53,90,113	1.94	7 (13%)
54	CHL	w	309	-	43,51,74	1.69	7 (16%)	45,86,114	2.17	8 (17%)
43	BCR	y	301	-	41,41,41	0.66	0	56,56,56	1.04	3 (5%)
50	CLA	w	303	39	45,53,73	1.58	8 (17%)	52,89,113	1.93	9 (17%)
50	CLA	a	821	-	63,71,73	1.33	6 (9%)	77,110,113	1.89	12 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
47	PQ9	A	405	-	36,36,45	2.93	19 (52%)	45,46,57	11.16	23 (51%)
50	CLA	z	319	-	42,50,73	1.62	7 (16%)	48,85,113	1.89	5 (10%)
50	CLA	b	802	-	65,73,73	1.34	7 (10%)	76,113,113	1.60	9 (11%)
48	SQD	B	604	-	39,40,54	0.51	1 (2%)	48,51,65	0.61	0
43	BCR	l	304	-	41,41,41	0.68	0	56,56,56	1.08	4 (7%)
44	PGT	B	601	-	33,33,50	0.58	0	36,39,56	0.56	0
50	CLA	g	201	-	49,57,73	1.53	7 (14%)	55,93,113	1.72	8 (14%)
44	PGT	F	803	-	42,42,50	0.52	0	45,48,56	0.47	0
46	LMG	j	105	-	37,37,55	0.96	1 (2%)	45,45,63	1.08	2 (4%)
50	CLA	b	809	-	59,67,73	1.42	7 (11%)	68,105,113	1.74	11 (16%)

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
46	LMG	z	315	-	-	9/31/51/70	0/1/1/1
50	CLA	a	851	27	1/1/11/20	6/15/93/115	-
44	PGT	z	317	50	-	17/50/50/55	-
49	SF4	a	832	27,28	-	-	0/6/5/5
50	CLA	a	801	-	1/1/15/20	14/37/115/115	-
50	CLA	b	813	-	1/1/10/20	5/11/89/115	-
46	LMG	D	601	-	-	13/29/49/70	0/1/1/1
50	CLA	x	310	-	1/1/10/20	3/11/89/115	-
43	BCR	i	101	-	-	7/29/63/63	0/2/2/2
50	CLA	b	840	-	1/1/15/20	18/37/115/115	-
43	BCR	g	202	-	-	6/29/63/63	0/2/2/2
50	CLA	b	803	-	1/1/15/20	17/37/115/115	-
51	DGD	x	317	-	-	24/37/77/95	0/2/2/2
50	CLA	a	857	-	1/1/15/20	12/37/115/115	-
43	BCR	4	101	-	-	8/29/63/63	0/2/2/2
43	BCR	b	850	-	-	2/29/63/63	0/2/2/2
50	CLA	b	844	28	1/1/15/20	21/37/115/115	-
50	CLA	z	303	-	1/1/10/20	3/8/86/115	-
50	CLA	a	842	-	1/1/15/20	24/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	CHL	z	304	42	3/3/15/26	5/10/108/137	-
46	LMG	F	802	-	-	5/23/43/70	0/1/1/1
50	CLA	a	835	-	1/1/13/20	13/29/107/115	-
50	CLA	b	848	-	1/1/10/20	5/10/88/115	-
50	CLA	k	204	-	1/1/13/20	7/28/106/115	-
50	CLA	a	812	-	1/1/14/20	18/33/109/115	-
44	PGT	b	830	50	-	16/43/43/55	-
50	CLA	x	309	-	1/1/10/20	4/10/88/115	-
50	CLA	z	305	-	1/1/12/20	6/19/97/115	-
50	CLA	a	845	-	1/1/15/20	15/37/115/115	-
50	CLA	b	849	-	1/1/12/20	7/19/97/115	-
50	CLA	w	310	-	1/1/15/20	20/37/115/115	-
50	CLA	w	306	39	1/1/15/20	16/37/115/115	-
50	CLA	x	307	40	1/1/14/20	11/31/109/115	-
50	CLA	a	815	27	1/1/15/20	15/37/115/115	-
50	CLA	a	839	-	1/1/15/20	15/37/115/115	-
50	CLA	b	834	-	1/1/11/20	4/13/91/115	-
44	PGT	A	402	-	-	13/41/41/55	-
50	CLA	b	808	-	1/1/10/20	6/11/89/115	-
55	LUT	x	321	-	-	6/29/67/67	0/2/2/2
50	CLA	z	309	-	1/1/10/20	2/10/88/115	-
50	CLA	a	854	-	1/1/15/20	14/37/115/115	-
46	LMG	x	315	-	-	16/43/63/70	0/1/1/1
50	CLA	g	203	-	1/1/12/20	4/22/100/115	-
43	BCR	a	830	-	-	8/29/63/63	0/2/2/2
50	CLA	f	302	-	1/1/10/20	1/10/88/115	-
50	CLA	b	838	-	1/1/12/20	9/22/100/115	-
46	LMG	z	314	-	-	13/35/55/70	0/1/1/1
50	CLA	a	826	44	1/1/11/20	10/13/91/115	-
43	BCR	w	301	-	-	3/29/63/63	0/2/2/2
50	CLA	b	801	-	1/1/15/20	19/37/115/115	-
55	LUT	x	320	-	-	2/29/67/67	0/2/2/2
54	CHL	x	305	-	3/3/16/26	2/15/113/137	-
43	BCR	b	820	-	-	2/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
49	SF4	c	102	29	-	-	0/6/5/5
50	CLA	a	822	-	1/1/12/20	7/21/99/115	-
50	CLA	a	817	-	1/1/10/20	2/8/86/115	-
50	CLA	b	824	44	1/1/15/20	20/37/115/115	-
43	BCR	j	103	-	-	8/29/63/63	0/2/2/2
50	CLA	b	836	-	1/1/15/20	13/37/115/115	-
43	BCR	z	318	-	-	9/29/63/63	0/2/2/2
50	CLA	y	309	-	1/1/10/20	4/10/88/115	-
50	CLA	y	305	41	1/1/11/20	3/13/91/115	-
44	PGT	B	602	-	-	11/46/46/55	-
50	CLA	w	308	39	1/1/15/20	21/37/115/115	-
43	BCR	b	816	-	-	6/29/63/63	0/2/2/2
50	CLA	x	308	-	1/1/12/20	7/19/97/115	-
50	CLA	b	807	-	1/1/15/20	17/37/115/115	-
43	BCR	x	314	-	-	11/29/63/63	0/2/2/2
44	PGT	A	403	-	-	18/42/42/55	-
50	CLA	b	826	-	1/1/13/20	12/25/103/115	-
51	DGD	b	821	-	-	22/48/88/95	0/2/2/2
45	A1H1M	5	302	-	-	10/19/79/79	0/4/4/4
50	CLA	a	814	-	1/1/15/20	20/37/115/115	-
50	CLA	b	851	-	1/1/11/20	1/16/94/115	-
50	CLA	y	304	-	1/1/9/20	0/4/82/115	-
50	CLA	b	812	-	1/1/14/20	9/34/112/115	-
50	CLA	z	302	-	1/1/13/20	9/25/103/115	-
50	CLA	a	816	-	1/1/10/20	4/10/88/115	-
50	CLA	y	310	41	1/1/15/20	9/37/115/115	-
50	CLA	a	843	-	1/1/15/20	18/37/115/115	-
53	PQN	b	827	-	-	8/23/43/43	0/2/2/2
50	CLA	a	840	-	1/1/10/20	4/10/88/115	-
50	CLA	a	837	-	1/1/15/20	11/37/115/115	-
44	PGT	z	301	-	-	18/49/49/55	-
50	CLA	a	853	-	1/1/15/20	14/37/115/115	-
50	CLA	z	308	-	1/1/11/20	6/13/88/115	-
54	CHL	w	311	-	3/3/15/26	5/16/114/137	-
49	SF4	I	201	19	-	-	0/6/5/5

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
48	SQD	w	317	-	-	5/26/46/69	0/1/1/1
50	CLA	a	819	-	1/1/14/20	12/31/109/115	-
50	CLA	b	842	-	1/1/13/20	19/28/106/115	-
50	CLA	b	847	-	1/1/14/20	12/31/109/115	-
50	CLA	w	315	39	1/1/11/20	6/15/93/115	-
50	CLA	a	855	-	1/1/10/20	2/10/88/115	-
50	CLA	b	804	-	1/1/10/20	0/8/86/115	-
50	CLA	y	303	-	1/1/13/20	10/25/103/115	-
50	CLA	w	307	-	1/1/11/20	6/13/91/115	-
50	CLA	y	302	41	1/1/13/20	6/23/99/115	-
43	BCR	b	819	-	-	5/29/63/63	0/2/2/2
44	PGT	N	301	-	-	15/30/30/55	-
44	PGT	a	807	-	-	16/50/50/55	-
50	CLA	y	308	-	1/1/15/20	17/37/115/115	-
50	CLA	b	814	-	1/1/15/20	12/37/115/115	-
46	LMG	f	306	-	-	12/29/49/70	0/1/1/1
51	DGD	a	804	-	-	32/55/95/95	0/2/2/2
50	CLA	b	837	-	1/1/15/20	19/37/115/115	-
55	LUT	y	316	-	-	4/29/67/67	0/2/2/2
50	CLA	b	833	-	1/1/15/20	15/37/115/115	-
44	PGT	I	203	-	-	15/48/48/55	-
50	CLA	b	811	-	1/1/11/20	6/13/91/115	-
50	CLA	b	825	-	1/1/15/20	14/37/115/115	-
50	CLA	z	316	44	1/1/11/20	3/16/94/115	-
48	SQD	j	106	-	-	8/37/57/69	0/1/1/1
50	CLA	a	836	27	1/1/15/20	16/37/115/115	-
50	CLA	a	858	-	1/1/15/20	13/37/115/115	-
50	CLA	a	833	-	1/1/15/20	19/37/115/115	-
52	CL0	a	808	-	3/3/18/25	5/33/125/135	-
43	BCR	j	101	-	-	10/29/63/63	0/2/2/2
50	CLA	k	205	-	1/1/10/20	6/10/88/115	-
50	CLA	a	802	-	1/1/14/20	8/31/109/115	-
54	CHL	z	312	42	3/3/19/26	12/33/131/137	-
50	CLA	b	845	-	1/1/15/20	19/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
44	PGT	B	603	-	-	21/50/50/55	-
50	CLA	k	203	-	1/1/10/20	2/8/86/115	-
50	CLA	z	311	-	1/1/13/20	9/25/103/115	-
48	SQD	F	805	-	-	7/38/58/69	0/1/1/1
44	PGT	a	805	-	-	15/36/36/55	-
50	CLA	a	820	-	1/1/15/20	15/37/115/115	-
43	BCR	a	803	-	-	5/21/38/63	0/1/1/2
50	CLA	a	809	-	1/1/13/20	6/28/106/115	-
44	PGT	5	301	-	-	17/39/39/55	-
50	CLA	z	310	42	1/1/10/20	6/8/86/115	-
44	PGT	f	305	-	-	14/43/43/55	-
50	CLA	f	301	-	1/1/13/20	13/28/106/115	-
46	LMG	H	401	-	-	10/28/48/70	0/1/1/1
48	SQD	F	801	-	-	3/36/56/69	0/1/1/1
50	CLA	a	846	-	1/1/15/20	17/37/115/115	-
50	CLA	f	303	-	1/1/10/20	2/8/86/115	-
50	CLA	x	313	40	1/1/12/20	7/23/101/115	-
50	CLA	b	805	28	1/1/15/20	23/37/115/115	-
43	BCR	b	831	-	-	5/29/63/63	0/2/2/2
50	CLA	x	303	40	1/1/13/20	9/28/106/115	-
50	CLA	l	301	-	1/1/11/20	5/13/91/115	-
50	CLA	x	304	40	1/1/11/20	3/16/94/115	-
50	CLA	b	822	-	1/1/13/20	8/29/107/115	-
50	CLA	y	313	41	1/1/15/20	19/37/115/115	-
55	LUT	w	320	-	-	1/29/67/67	0/2/2/2
50	CLA	b	832	-	1/1/12/20	13/24/102/115	-
43	BCR	b	818	-	-	6/29/63/63	0/2/2/2
50	CLA	a	850	-	1/1/15/20	13/37/115/115	-
44	PGT	L	201	-	-	11/44/44/55	-
44	PGT	w	313	50	-	10/44/44/55	-
43	BCR	k	201	-	-	5/29/63/63	0/2/2/2
50	CLA	z	306	42	1/1/13/20	9/27/105/115	-
50	CLA	a	856	-	1/1/14/20	8/35/113/115	-
54	CHL	x	311	-	3/3/14/26	4/8/102/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
43	BCR	f	304	-	-	2/29/63/63	0/2/2/2
50	CLA	b	828	-	1/1/14/20	14/31/109/115	-
50	CLA	y	314	41	1/1/15/20	18/37/115/115	-
43	BCR	l	303	-	-	6/29/63/63	0/2/2/2
50	CLA	a	813	-	1/1/12/20	5/22/100/115	-
50	CLA	l	306	-	1/1/14/20	16/31/109/115	-
50	CLA	b	843	-	1/1/15/20	19/37/115/115	-
49	SF4	K	301	21	-	-	0/6/5/5
50	CLA	a	811	-	1/1/15/20	21/37/115/115	-
50	CLA	b	806	-	1/1/12/20	6/22/100/115	-
50	CLA	a	852	-	1/1/12/20	8/21/99/115	-
50	CLA	y	307	-	1/1/10/20	4/10/86/115	-
50	CLA	x	306	-	1/1/14/20	13/31/109/115	-
43	BCR	a	829	-	-	2/29/63/63	0/2/2/2
50	CLA	a	823	-	1/1/13/20	8/25/103/115	-
43	BCR	a	827	-	-	3/27/61/63	0/2/2/2
43	BCR	l	302	-	-	8/29/63/63	0/2/2/2
50	CLA	w	305	-	1/1/12/20	4/21/99/115	-
54	CHL	w	304	-	3/3/16/26	6/15/111/137	-
48	SQD	w	318	-	-	8/36/56/69	0/1/1/1
50	CLA	a	847	-	1/1/7/20	7/22/62/115	-
50	CLA	y	306	-	1/1/10/20	5/8/86/115	-
44	PGT	A	401	-	-	11/36/36/55	-
50	CLA	x	316	-	1/1/11/20	6/13/91/115	-
43	BCR	b	817	-	-	3/29/63/63	0/2/2/2
50	CLA	b	815	-	1/1/15/20	10/37/115/115	-
44	PGT	z	313	-	-	14/37/37/55	-
50	CLA	y	311	-	1/1/12/20	5/21/99/115	-
46	LMG	w	312	-	-	16/35/55/70	0/1/1/1
50	CLA	b	839	-	1/1/15/20	19/37/115/115	-
44	PGT	B	606	-	-	24/39/39/55	-
46	LMG	j	104	-	-	10/29/49/70	0/1/1/1
44	PGT	a	806	50	-	14/37/37/55	-
55	LUT	w	319	-	-	6/29/67/67	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
50	CLA	a	824	-	1/1/15/20	13/37/115/115	-
46	LMG	7	301	-	-	14/36/56/70	0/1/1/1
50	CLA	a	844	-	1/1/13/20	10/28/106/115	-
50	CLA	b	846	-	1/1/15/20	16/37/115/115	-
50	CLA	l	305	38	1/1/10/20	1/6/84/115	-
55	LUT	z	320	-	-	7/29/67/67	0/2/2/2
50	CLA	j	102	36	1/1/10/20	5/10/88/115	-
50	CLA	x	312	40	1/1/15/20	19/37/115/115	-
50	CLA	y	312	-	1/1/12/20	6/21/99/115	-
45	A1H1M	F	804	-	-	13/19/79/79	1/4/4/4
50	CLA	a	834	-	1/1/15/20	12/37/115/115	-
50	CLA	a	848	-	1/1/12/20	7/22/100/115	-
50	CLA	x	318	-	1/1/11/20	9/15/93/115	-
54	CHL	x	319	42	3/3/16/26	8/20/118/137	-
43	BCR	a	831	-	-	10/27/61/63	0/2/2/2
49	SF4	c	101	29	-	-	0/6/5/5
46	LMG	B	605	-	-	17/32/52/70	0/1/1/1
53	PQN	a	825	-	-	7/23/43/43	0/2/2/2
50	CLA	a	849	-	1/1/15/20	19/37/115/115	-
44	PGT	A	404	-	-	16/48/48/55	-
50	CLA	w	314	44	1/1/10/20	9/11/90/115	-
50	CLA	w	302	-	1/1/12/20	11/19/97/115	-
50	CLA	b	841	-	1/1/13/20	9/25/103/115	-
50	CLA	a	818	-	1/1/13/20	11/30/108/115	-
50	CLA	z	307	42	1/1/14/20	10/31/109/115	-
50	CLA	b	823	-	1/1/13/20	11/25/103/115	-
43	BCR	a	828	-	-	0/29/63/63	0/2/2/2
50	CLA	x	302	-	1/1/10/20	2/8/86/115	-
55	LUT	y	315	-	-	0/29/67/67	0/2/2/2
44	PGT	b	829	-	-	20/52/52/55	-
50	CLA	w	316	39	1/1/12/20	8/19/97/115	-
50	CLA	a	838	-	1/1/15/20	14/37/115/115	-
55	LUT	z	321	-	-	0/29/67/67	0/2/2/2
50	CLA	b	835	-	1/1/13/20	9/30/108/115	-
48	SQD	a	859	-	-	6/31/51/69	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	CHL	x	301	-	3/3/15/26	4/12/110/137	-
43	BCR	a	810	-	-	12/24/41/63	0/1/1/2
50	CLA	a	841	-	1/1/13/20	9/25/103/115	-
50	CLA	b	810	-	1/1/12/20	5/19/97/115	-
43	BCR	k	202	-	-	4/29/63/63	0/2/2/2
44	PGT	D	602	-	-	11/38/38/55	-
50	CLA	g	204	33	1/1/10/20	7/11/89/115	-
50	CLA	h	201	34	1/1/11/20	8/15/93/115	-
54	CHL	w	309	-	3/3/15/26	4/12/110/137	-
43	BCR	y	301	-	-	6/29/63/63	0/2/2/2
50	CLA	w	303	39	1/1/11/20	3/13/91/115	-
50	CLA	a	821	-	1/1/14/20	14/35/111/115	-
50	CLA	z	319	-	1/1/10/20	3/10/88/115	-
47	PQ9	A	405	-	-	4/31/51/61	0/1/1/1
50	CLA	b	802	-	1/1/15/20	23/37/115/115	-
48	SQD	B	604	-	-	5/35/55/69	0/1/1/1
43	BCR	l	304	-	-	7/29/63/63	0/2/2/2
44	PGT	B	601	-	-	16/38/38/55	-
50	CLA	g	201	-	1/1/11/20	10/18/96/115	-
44	PGT	F	803	-	-	12/47/47/55	-
46	LMG	j	105	-	-	18/32/52/70	0/1/1/1
49	SF4	I	202	19	-	-	0/6/5/5
50	CLA	b	809	-	1/1/13/20	14/30/108/115	-

All (1175) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
52	a	808	CL0	MG-NA	9.16	2.28	2.06
47	A	405	PQ9	C3-C2	7.67	1.54	1.34
50	z	308	CLA	C3D-C4D	-7.02	1.41	1.51
47	A	405	PQ9	C11-C2	6.76	1.58	1.51
54	x	311	CHL	CHB-C4A	6.19	1.39	1.34
50	a	847	CLA	C1A-CHA	-6.03	1.38	1.51
54	z	312	CHL	CMC-C2C	5.52	1.56	1.45
54	w	309	CHL	CMC-C2C	5.52	1.56	1.45
54	x	319	CHL	CMC-C2C	5.46	1.56	1.45
54	w	304	CHL	CMC-C2C	5.45	1.56	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	x	301	CHL	CMC-C2C	5.44	1.56	1.45
54	x	311	CHL	CMC-C2C	5.44	1.56	1.45
54	z	304	CHL	CMC-C2C	5.42	1.56	1.45
50	x	303	CLA	MG-NA	5.40	2.19	2.06
54	x	305	CHL	CMC-C2C	5.40	1.56	1.45
50	z	319	CLA	MG-NA	5.29	2.18	2.06
54	w	311	CHL	CMC-C2C	5.24	1.56	1.45
50	w	307	CLA	MG-NA	5.24	2.18	2.06
50	k	203	CLA	MG-NA	5.21	2.18	2.06
50	x	313	CLA	MG-NA	5.19	2.18	2.06
52	a	808	CL0	O2A-C1	5.18	1.60	1.42
50	y	309	CLA	MG-NA	5.18	2.18	2.06
50	b	849	CLA	MG-NA	5.16	2.18	2.06
50	g	204	CLA	MG-NA	5.13	2.18	2.06
50	a	812	CLA	MG-NA	5.13	2.18	2.06
50	w	315	CLA	MG-NA	5.13	2.18	2.06
50	z	309	CLA	MG-NA	5.12	2.18	2.06
50	a	819	CLA	MG-NA	5.09	2.18	2.06
50	g	203	CLA	MG-NA	5.09	2.18	2.06
50	b	848	CLA	MG-NA	5.07	2.18	2.06
50	a	822	CLA	MG-NA	5.06	2.18	2.06
50	z	311	CLA	MG-NA	5.06	2.18	2.06
50	a	853	CLA	MG-NA	5.06	2.18	2.06
50	f	302	CLA	MG-NA	5.05	2.18	2.06
50	b	814	CLA	MG-NA	5.05	2.18	2.06
50	l	301	CLA	MG-NA	5.04	2.18	2.06
50	z	308	CLA	MG-NA	5.04	2.18	2.06
50	y	307	CLA	MG-NA	5.03	2.18	2.06
50	a	821	CLA	MG-NA	5.03	2.18	2.06
50	y	314	CLA	MG-NA	5.03	2.18	2.06
50	j	102	CLA	MG-NA	5.03	2.18	2.06
50	a	846	CLA	MG-NA	5.02	2.18	2.06
50	b	805	CLA	MG-NA	5.02	2.18	2.06
50	k	204	CLA	MG-NA	5.02	2.18	2.06
50	h	201	CLA	MG-NA	5.02	2.18	2.06
50	x	308	CLA	MG-NA	5.02	2.18	2.06
50	y	304	CLA	MG-NA	5.01	2.18	2.06
50	a	837	CLA	MG-NA	5.01	2.18	2.06
50	l	305	CLA	MG-NA	5.01	2.18	2.06
50	x	302	CLA	MG-NA	5.01	2.18	2.06
50	a	855	CLA	MG-NA	5.00	2.18	2.06
50	b	841	CLA	MG-NA	5.00	2.18	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	845	CLA	MG-NA	5.00	2.18	2.06
50	w	314	CLA	MG-NA	5.00	2.18	2.06
50	a	851	CLA	MG-NA	5.00	2.18	2.06
50	a	802	CLA	MG-NA	5.00	2.18	2.06
50	g	201	CLA	MG-NA	5.00	2.18	2.06
50	x	316	CLA	MG-NA	4.99	2.18	2.06
50	y	303	CLA	MG-NA	4.99	2.18	2.06
50	x	309	CLA	MG-NA	4.99	2.18	2.06
50	b	825	CLA	MG-NA	4.99	2.18	2.06
50	b	826	CLA	MG-NA	4.99	2.18	2.06
50	w	302	CLA	MG-NA	4.98	2.18	2.06
50	b	844	CLA	MG-NA	4.98	2.18	2.06
50	x	310	CLA	MG-NA	4.98	2.18	2.06
50	a	814	CLA	MG-NA	4.97	2.18	2.06
50	w	305	CLA	MG-NA	4.97	2.18	2.06
50	a	823	CLA	MG-NA	4.97	2.18	2.06
50	a	849	CLA	MG-NA	4.97	2.18	2.06
50	b	851	CLA	MG-NA	4.96	2.18	2.06
50	a	801	CLA	MG-NA	4.96	2.18	2.06
50	b	810	CLA	MG-NA	4.96	2.18	2.06
50	b	836	CLA	MG-NA	4.96	2.18	2.06
50	a	842	CLA	MG-NA	4.96	2.18	2.06
50	y	311	CLA	MG-NA	4.96	2.18	2.06
50	z	303	CLA	MG-NA	4.96	2.18	2.06
50	b	835	CLA	MG-NA	4.96	2.18	2.06
50	a	852	CLA	MG-NA	4.96	2.18	2.06
50	b	801	CLA	MG-NA	4.96	2.18	2.06
50	b	832	CLA	MG-NA	4.95	2.18	2.06
50	b	806	CLA	MG-NA	4.95	2.18	2.06
50	y	305	CLA	MG-NA	4.95	2.18	2.06
52	a	808	CL0	CHC-C1C	4.95	1.47	1.35
50	f	301	CLA	MG-NA	4.95	2.18	2.06
50	a	841	CLA	MG-NA	4.95	2.18	2.06
50	a	817	CLA	MG-NA	4.95	2.18	2.06
50	b	823	CLA	MG-NA	4.94	2.18	2.06
50	a	857	CLA	MG-NA	4.94	2.18	2.06
50	y	308	CLA	MG-NA	4.94	2.18	2.06
50	b	838	CLA	MG-NA	4.93	2.18	2.06
50	l	306	CLA	MG-NA	4.93	2.18	2.06
50	b	828	CLA	MG-NA	4.92	2.18	2.06
50	y	306	CLA	MG-NA	4.92	2.18	2.06
50	f	303	CLA	MG-NA	4.92	2.18	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	z	316	CLA	MG-NA	4.92	2.18	2.06
50	a	811	CLA	MG-NA	4.92	2.18	2.06
50	x	306	CLA	MG-NA	4.92	2.18	2.06
50	x	318	CLA	MG-NA	4.92	2.17	2.06
50	a	824	CLA	MG-NA	4.92	2.17	2.06
50	b	808	CLA	MG-NA	4.91	2.17	2.06
50	w	306	CLA	MG-NA	4.91	2.17	2.06
50	b	845	CLA	MG-NA	4.91	2.17	2.06
50	z	310	CLA	MG-NA	4.91	2.17	2.06
50	z	302	CLA	MG-NA	4.91	2.17	2.06
50	b	839	CLA	MG-NA	4.91	2.17	2.06
50	a	809	CLA	MG-NA	4.91	2.17	2.06
50	a	848	CLA	MG-NA	4.90	2.17	2.06
50	a	840	CLA	MG-NA	4.90	2.17	2.06
50	b	833	CLA	MG-NA	4.90	2.17	2.06
50	b	843	CLA	MG-NA	4.89	2.17	2.06
50	a	834	CLA	MG-NA	4.89	2.17	2.06
50	b	834	CLA	MG-NA	4.89	2.17	2.06
50	b	846	CLA	MG-NA	4.89	2.17	2.06
50	k	205	CLA	MG-NA	4.89	2.17	2.06
50	a	843	CLA	MG-NA	4.89	2.17	2.06
50	b	804	CLA	MG-NA	4.89	2.17	2.06
50	a	816	CLA	MG-NA	4.89	2.17	2.06
50	b	807	CLA	MG-NA	4.88	2.17	2.06
50	y	312	CLA	MG-NA	4.88	2.17	2.06
50	a	826	CLA	MG-NA	4.88	2.17	2.06
50	x	304	CLA	MG-NA	4.88	2.17	2.06
50	b	842	CLA	MG-NA	4.88	2.17	2.06
50	a	838	CLA	MG-NA	4.88	2.17	2.06
50	b	824	CLA	MG-NA	4.88	2.17	2.06
50	b	809	CLA	MG-NA	4.87	2.17	2.06
50	b	815	CLA	MG-NA	4.87	2.17	2.06
50	b	822	CLA	MG-NA	4.87	2.17	2.06
50	b	837	CLA	MG-NA	4.86	2.17	2.06
50	b	840	CLA	MG-NA	4.86	2.17	2.06
50	b	813	CLA	MG-NA	4.85	2.17	2.06
50	a	833	CLA	MG-NA	4.84	2.17	2.06
50	a	835	CLA	MG-NA	4.84	2.17	2.06
50	a	844	CLA	MG-NA	4.84	2.17	2.06
50	a	836	CLA	MG-NA	4.84	2.17	2.06
50	x	312	CLA	MG-NA	4.84	2.17	2.06
50	z	305	CLA	MG-NA	4.83	2.17	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	y	313	CLA	MG-NA	4.83	2.17	2.06
50	z	307	CLA	MG-NA	4.83	2.17	2.06
50	w	316	CLA	MG-NA	4.83	2.17	2.06
50	w	310	CLA	MG-NA	4.82	2.17	2.06
50	a	856	CLA	MG-NA	4.82	2.17	2.06
50	b	803	CLA	MG-NA	4.81	2.17	2.06
50	a	858	CLA	MG-NA	4.81	2.17	2.06
50	a	839	CLA	MG-NA	4.79	2.17	2.06
50	b	847	CLA	MG-NA	4.79	2.17	2.06
50	b	802	CLA	MG-NA	4.79	2.17	2.06
50	w	303	CLA	MG-NA	4.78	2.17	2.06
50	a	813	CLA	MG-NA	4.78	2.17	2.06
50	a	820	CLA	MG-NA	4.78	2.17	2.06
50	a	850	CLA	MG-NA	4.78	2.17	2.06
50	a	854	CLA	MG-NA	4.76	2.17	2.06
50	y	310	CLA	MG-NA	4.76	2.17	2.06
50	y	302	CLA	MG-NA	4.75	2.17	2.06
50	b	811	CLA	MG-NA	4.75	2.17	2.06
47	A	405	PQ9	C15-C13	4.75	1.61	1.51
50	b	812	CLA	MG-NA	4.74	2.17	2.06
50	a	818	CLA	MG-NA	4.74	2.17	2.06
50	w	308	CLA	MG-NA	4.73	2.17	2.06
50	a	815	CLA	MG-NA	4.71	2.17	2.06
50	x	307	CLA	MG-NA	4.70	2.17	2.06
50	z	306	CLA	MG-NA	4.66	2.17	2.06
52	a	808	CL0	O2D-CGD	4.64	1.45	1.30
52	a	808	CL0	C3C-C2C	4.45	1.46	1.36
52	a	808	CL0	CHD-C1D	4.42	1.47	1.38
50	z	308	CLA	C4B-NB	4.36	1.39	1.35
50	x	303	CLA	C4B-NB	4.35	1.39	1.35
50	y	307	CLA	C4B-NB	4.34	1.39	1.35
50	b	828	CLA	C4B-NB	4.33	1.39	1.35
50	z	303	CLA	C4B-NB	4.33	1.39	1.35
50	b	814	CLA	C4B-NB	4.32	1.39	1.35
50	y	303	CLA	C4B-NB	4.29	1.39	1.35
47	A	405	PQ9	C20-C18	4.27	1.60	1.51
50	x	313	CLA	C4B-NB	4.27	1.39	1.35
50	g	201	CLA	C4B-NB	4.27	1.39	1.35
52	a	808	CL0	C3D-C4D	-4.26	1.34	1.44
50	k	203	CLA	C4B-NB	4.25	1.39	1.35
50	l	305	CLA	C4B-NB	4.25	1.39	1.35
50	b	813	CLA	C4B-NB	4.25	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	b	841	CLA	C4B-NB	4.24	1.39	1.35
50	b	836	CLA	C4B-NB	4.24	1.39	1.35
50	z	319	CLA	C4B-NB	4.23	1.39	1.35
50	g	204	CLA	C4B-NB	4.23	1.39	1.35
50	a	820	CLA	C4B-NB	4.23	1.39	1.35
50	y	304	CLA	C4B-NB	4.23	1.39	1.35
50	z	308	CLA	C3D-CAD	-4.22	1.44	1.51
50	a	817	CLA	C4B-NB	4.22	1.39	1.35
50	a	856	CLA	C4B-NB	4.22	1.39	1.35
50	a	834	CLA	C4B-NB	4.21	1.39	1.35
50	b	815	CLA	C4B-NB	4.21	1.39	1.35
50	a	823	CLA	C4B-NB	4.21	1.39	1.35
50	y	309	CLA	C4B-NB	4.21	1.39	1.35
50	a	833	CLA	C4B-NB	4.20	1.39	1.35
50	b	802	CLA	C4B-NB	4.20	1.39	1.35
50	b	848	CLA	C4B-NB	4.19	1.38	1.35
50	b	823	CLA	C4B-NB	4.19	1.38	1.35
50	b	832	CLA	C4B-NB	4.19	1.38	1.35
50	z	305	CLA	C4B-NB	4.18	1.38	1.35
50	b	808	CLA	C4B-NB	4.18	1.38	1.35
50	x	302	CLA	C4B-NB	4.18	1.38	1.35
50	b	805	CLA	C4B-NB	4.18	1.38	1.35
50	a	842	CLA	C4B-NB	4.18	1.38	1.35
50	z	302	CLA	C4B-NB	4.17	1.38	1.35
50	b	844	CLA	C4B-NB	4.17	1.38	1.35
50	f	302	CLA	C4B-NB	4.17	1.38	1.35
50	b	810	CLA	C4B-NB	4.16	1.38	1.35
50	b	843	CLA	C4B-NB	4.16	1.38	1.35
50	w	314	CLA	C4B-NB	4.16	1.38	1.35
50	y	306	CLA	C4B-NB	4.16	1.38	1.35
50	y	314	CLA	C4B-NB	4.16	1.38	1.35
50	y	311	CLA	C4B-NB	4.16	1.38	1.35
50	a	821	CLA	C4B-NB	4.16	1.38	1.35
50	a	843	CLA	C4B-NB	4.15	1.38	1.35
50	b	849	CLA	C4B-NB	4.15	1.38	1.35
50	a	802	CLA	C4B-NB	4.15	1.38	1.35
50	w	302	CLA	C4B-NB	4.15	1.38	1.35
50	b	811	CLA	C4B-NB	4.15	1.38	1.35
50	a	858	CLA	C4B-NB	4.14	1.38	1.35
50	a	847	CLA	C4B-NB	4.14	1.38	1.35
50	a	837	CLA	C4B-NB	4.14	1.38	1.35
50	b	835	CLA	C4B-NB	4.14	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	z	309	CLA	C4B-NB	4.14	1.38	1.35
50	a	857	CLA	C4B-NB	4.14	1.38	1.35
50	a	851	CLA	C4B-NB	4.13	1.38	1.35
50	k	204	CLA	C4B-NB	4.13	1.38	1.35
50	x	310	CLA	C4B-NB	4.13	1.38	1.35
50	k	205	CLA	C4B-NB	4.13	1.38	1.35
50	a	855	CLA	C4B-NB	4.13	1.38	1.35
50	x	308	CLA	C4B-NB	4.12	1.38	1.35
50	b	842	CLA	C4B-NB	4.12	1.38	1.35
50	x	318	CLA	C4B-NB	4.12	1.38	1.35
50	b	812	CLA	C4B-NB	4.12	1.38	1.35
50	a	847	CLA	C1B-CHB	-4.11	1.34	1.45
50	g	203	CLA	C4B-NB	4.11	1.38	1.35
50	w	308	CLA	C4B-NB	4.11	1.38	1.35
50	a	844	CLA	C4B-NB	4.11	1.38	1.35
50	a	849	CLA	C4B-NB	4.11	1.38	1.35
50	x	309	CLA	C4B-NB	4.11	1.38	1.35
50	w	307	CLA	C4B-NB	4.11	1.38	1.35
50	a	813	CLA	C4B-NB	4.10	1.38	1.35
50	b	801	CLA	C4B-NB	4.10	1.38	1.35
50	l	301	CLA	C4B-NB	4.10	1.38	1.35
50	a	852	CLA	C4B-NB	4.10	1.38	1.35
50	b	840	CLA	C4B-NB	4.10	1.38	1.35
50	f	301	CLA	C4B-NB	4.10	1.38	1.35
50	f	303	CLA	C4B-NB	4.10	1.38	1.35
50	j	102	CLA	C4B-NB	4.10	1.38	1.35
50	b	809	CLA	C4B-NB	4.09	1.38	1.35
50	b	806	CLA	C4B-NB	4.09	1.38	1.35
50	z	310	CLA	C4B-NB	4.09	1.38	1.35
50	z	316	CLA	C4B-NB	4.09	1.38	1.35
50	a	839	CLA	C4B-NB	4.08	1.38	1.35
50	y	305	CLA	C4B-NB	4.07	1.38	1.35
50	x	306	CLA	C4B-NB	4.07	1.38	1.35
50	a	840	CLA	C4B-NB	4.06	1.38	1.35
50	b	846	CLA	C4B-NB	4.06	1.38	1.35
50	b	839	CLA	C4B-NB	4.06	1.38	1.35
50	b	826	CLA	C4B-NB	4.06	1.38	1.35
50	w	315	CLA	C4B-NB	4.06	1.38	1.35
54	x	311	CHL	C4B-NB	4.05	1.38	1.35
50	h	201	CLA	C4B-NB	4.05	1.38	1.35
50	a	814	CLA	C4B-NB	4.05	1.38	1.35
50	a	816	CLA	C4B-NB	4.04	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	846	CLA	C4B-NB	4.04	1.38	1.35
50	w	303	CLA	C4B-NB	4.04	1.38	1.35
50	b	837	CLA	C4B-NB	4.03	1.38	1.35
50	z	311	CLA	C4B-NB	4.03	1.38	1.35
50	w	306	CLA	C4B-NB	4.03	1.38	1.35
50	b	838	CLA	C4B-NB	4.02	1.38	1.35
50	a	845	CLA	C4B-NB	4.02	1.38	1.35
50	w	305	CLA	C4B-NB	4.02	1.38	1.35
50	b	824	CLA	C4B-NB	4.02	1.38	1.35
50	a	853	CLA	C4B-NB	4.02	1.38	1.35
50	b	804	CLA	C4B-NB	4.02	1.38	1.35
50	b	834	CLA	C4B-NB	4.01	1.38	1.35
50	a	818	CLA	C4B-NB	4.01	1.38	1.35
50	w	310	CLA	C4B-NB	4.01	1.38	1.35
50	b	851	CLA	C4B-NB	4.01	1.38	1.35
50	x	316	CLA	C4B-NB	4.00	1.38	1.35
50	a	811	CLA	C4B-NB	4.00	1.38	1.35
50	a	824	CLA	C4B-NB	4.00	1.38	1.35
50	l	306	CLA	C4B-NB	4.00	1.38	1.35
50	a	826	CLA	C4B-NB	3.99	1.38	1.35
50	a	801	CLA	C4B-NB	3.99	1.38	1.35
50	x	304	CLA	C4B-NB	3.97	1.38	1.35
50	y	313	CLA	C4B-NB	3.97	1.38	1.35
50	w	316	CLA	C4B-NB	3.96	1.38	1.35
50	a	854	CLA	C4B-NB	3.96	1.38	1.35
50	a	809	CLA	C4B-NB	3.96	1.38	1.35
50	y	312	CLA	C4B-NB	3.94	1.38	1.35
50	a	850	CLA	C4B-NB	3.94	1.38	1.35
50	b	822	CLA	C4B-NB	3.94	1.38	1.35
50	z	306	CLA	C4B-NB	3.93	1.38	1.35
50	y	308	CLA	C4B-NB	3.93	1.38	1.35
50	a	835	CLA	C4B-NB	3.93	1.38	1.35
50	a	848	CLA	C4B-NB	3.93	1.38	1.35
50	a	822	CLA	C4B-NB	3.92	1.38	1.35
50	b	803	CLA	C4B-NB	3.92	1.38	1.35
50	b	807	CLA	C4B-NB	3.92	1.38	1.35
50	b	825	CLA	C4B-NB	3.90	1.38	1.35
50	z	307	CLA	C4B-NB	3.90	1.38	1.35
50	a	819	CLA	C4B-NB	3.85	1.38	1.35
50	x	307	CLA	C4B-NB	3.85	1.38	1.35
47	A	405	PQ9	C25-C23	3.85	1.59	1.51
54	x	301	CHL	C4B-NB	3.85	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	841	CLA	C4B-NB	3.85	1.38	1.35
54	x	319	CHL	C4B-NB	3.84	1.38	1.35
54	w	304	CHL	C4B-NB	3.84	1.38	1.35
50	a	815	CLA	C4B-NB	3.83	1.38	1.35
54	w	309	CHL	C4B-NB	3.80	1.38	1.35
54	z	304	CHL	C4B-NB	3.80	1.38	1.35
50	a	836	CLA	C4B-NB	3.79	1.38	1.35
50	x	312	CLA	C4B-NB	3.78	1.38	1.35
50	a	838	CLA	C4B-NB	3.77	1.38	1.35
54	w	304	CHL	CAB-C3B	-3.75	1.43	1.51
50	b	845	CLA	C4B-NB	3.74	1.38	1.35
50	b	847	CLA	C4B-NB	3.73	1.38	1.35
50	y	302	CLA	C2C-C1C	3.71	1.46	1.40
54	x	305	CHL	C4B-NB	3.70	1.38	1.35
54	w	311	CHL	C4B-NB	3.68	1.38	1.35
52	a	808	CL0	MG-NC	3.67	2.15	2.06
54	z	312	CHL	C4B-NB	3.65	1.38	1.35
50	b	833	CLA	C4B-NB	3.64	1.38	1.35
54	x	311	CHL	C3B-C2B	-3.64	1.35	1.40
52	a	808	CL0	OBD-CAD	3.64	1.28	1.22
50	y	310	CLA	C4B-NB	3.55	1.38	1.35
47	A	405	PQ9	C10-C5	3.55	1.53	1.35
52	a	808	CL0	CHD-C4C	3.55	1.47	1.39
54	x	319	CHL	C3B-C2B	-3.54	1.35	1.40
47	A	405	PQ9	C11-C12	3.51	1.55	1.50
54	x	301	CHL	O2D-CGD	3.50	1.41	1.33
47	A	405	PQ9	C35-C33	3.50	1.61	1.51
54	z	304	CHL	O2D-CGD	3.49	1.41	1.33
50	b	844	CLA	C3B-C2B	-3.48	1.35	1.40
54	w	311	CHL	C3B-C2B	-3.48	1.35	1.40
54	x	305	CHL	C3B-C2B	-3.46	1.35	1.40
54	w	309	CHL	C3B-C2B	-3.46	1.35	1.40
54	w	309	CHL	O2D-CGD	3.45	1.41	1.33
50	b	847	CLA	CHC-C1C	3.45	1.43	1.35
54	w	304	CHL	O2D-CGD	3.45	1.41	1.33
54	x	311	CHL	O2D-CGD	3.45	1.41	1.33
50	b	845	CLA	CHC-C1C	3.44	1.43	1.35
54	w	311	CHL	O2D-CGD	3.44	1.41	1.33
54	z	312	CHL	O2D-CGD	3.44	1.41	1.33
50	w	308	CLA	CHC-C1C	3.42	1.43	1.35
50	a	813	CLA	CHC-C1C	3.38	1.43	1.35
54	x	319	CHL	O2D-CGD	3.38	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	b	812	CLA	CHC-C1C	3.38	1.43	1.35
50	b	811	CLA	CHC-C1C	3.38	1.43	1.35
50	w	303	CLA	CHC-C1C	3.38	1.43	1.35
54	x	301	CHL	C3B-C2B	-3.37	1.35	1.40
50	a	858	CLA	C3B-C2B	-3.37	1.35	1.40
50	z	308	CLA	C4D-ND	3.37	1.38	1.34
50	y	308	CLA	CHC-C1C	3.37	1.43	1.35
50	z	306	CLA	CHC-C1C	3.36	1.43	1.35
54	x	305	CHL	O2A-CGA	3.36	1.42	1.30
50	a	849	CLA	C3B-C2B	-3.35	1.35	1.40
50	b	801	CLA	C3B-C2B	-3.35	1.35	1.40
50	b	813	CLA	CHC-C1C	3.34	1.43	1.35
50	a	818	CLA	CHC-C1C	3.34	1.43	1.35
54	z	304	CHL	C3B-C2B	-3.34	1.35	1.40
50	a	835	CLA	CHC-C1C	3.33	1.43	1.35
54	w	304	CHL	O2A-CGA	3.33	1.41	1.30
50	a	839	CLA	CHC-C1C	3.33	1.43	1.35
50	b	803	CLA	CHC-C1C	3.33	1.43	1.35
50	x	307	CLA	CHC-C1C	3.33	1.43	1.35
50	z	307	CLA	CHC-C1C	3.33	1.43	1.35
50	l	306	CLA	CHC-C1C	3.33	1.43	1.35
50	b	839	CLA	CHC-C1C	3.32	1.43	1.35
50	a	815	CLA	CHC-C1C	3.32	1.43	1.35
50	y	313	CLA	CHC-C1C	3.31	1.43	1.35
50	b	804	CLA	CHC-C1C	3.31	1.43	1.35
50	b	822	CLA	CHC-C1C	3.31	1.43	1.35
50	b	814	CLA	CHC-C1C	3.31	1.43	1.35
50	w	306	CLA	CHC-C1C	3.31	1.43	1.35
50	a	843	CLA	C3B-C2B	-3.31	1.35	1.40
50	a	826	CLA	CHC-C1C	3.31	1.43	1.35
50	f	301	CLA	CHC-C1C	3.31	1.43	1.35
50	a	801	CLA	CHC-C1C	3.30	1.43	1.35
50	a	843	CLA	CHC-C1C	3.30	1.43	1.35
50	y	310	CLA	CHC-C1C	3.30	1.43	1.35
50	l	301	CLA	CHC-C1C	3.30	1.43	1.35
50	y	302	CLA	C4B-NB	3.30	1.38	1.35
50	x	303	CLA	C3B-C2B	-3.30	1.35	1.40
50	b	837	CLA	CHC-C1C	3.30	1.43	1.35
50	f	303	CLA	CHC-C1C	3.30	1.43	1.35
50	a	814	CLA	CHC-C1C	3.30	1.43	1.35
50	b	815	CLA	CHC-C1C	3.30	1.43	1.35
50	a	850	CLA	CHC-C1C	3.29	1.43	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	w	316	CLA	CHC-C1C	3.29	1.43	1.35
54	x	305	CHL	O2D-CGD	3.29	1.41	1.33
50	a	841	CLA	CHC-C1C	3.29	1.43	1.35
50	b	809	CLA	CHC-C1C	3.29	1.43	1.35
50	a	856	CLA	CHC-C1C	3.28	1.43	1.35
50	b	828	CLA	CHC-C1C	3.28	1.43	1.35
50	z	316	CLA	CHC-C1C	3.28	1.43	1.35
50	a	848	CLA	CHC-C1C	3.27	1.43	1.35
50	a	845	CLA	CHC-C1C	3.27	1.43	1.35
45	F	804	A1H1M	O12-C11	-3.27	1.40	1.44
50	w	302	CLA	CHC-C1C	3.27	1.43	1.35
50	a	820	CLA	CHC-C1C	3.27	1.43	1.35
50	a	833	CLA	C3B-C2B	-3.27	1.35	1.40
47	A	405	PQ9	C3-C4	3.26	1.53	1.44
50	a	857	CLA	C3B-C2B	-3.26	1.35	1.40
50	b	813	CLA	C3B-C2B	-3.26	1.35	1.40
50	a	851	CLA	CHC-C1C	3.26	1.43	1.35
50	b	842	CLA	CHC-C1C	3.26	1.43	1.35
50	z	305	CLA	CHC-C1C	3.26	1.43	1.35
50	l	305	CLA	CHC-C1C	3.26	1.43	1.35
50	a	809	CLA	CHC-C1C	3.26	1.43	1.35
50	b	826	CLA	CHC-C1C	3.26	1.43	1.35
50	y	304	CLA	CHC-C1C	3.26	1.43	1.35
50	b	825	CLA	CHC-C1C	3.26	1.43	1.35
50	b	851	CLA	CHC-C1C	3.26	1.43	1.35
50	b	834	CLA	CHC-C1C	3.25	1.43	1.35
50	y	305	CLA	CHC-C1C	3.25	1.43	1.35
50	a	858	CLA	CHC-C1C	3.25	1.43	1.35
50	x	312	CLA	CHC-C1C	3.25	1.43	1.35
50	a	842	CLA	CHC-C1C	3.24	1.43	1.35
50	x	316	CLA	CHC-C1C	3.24	1.43	1.35
50	a	846	CLA	C3B-C2B	-3.24	1.35	1.40
50	a	854	CLA	CHC-C1C	3.24	1.43	1.35
50	b	848	CLA	CHC-C1C	3.24	1.43	1.35
47	A	405	PQ9	C9-C10	3.24	1.57	1.50
50	f	302	CLA	CHC-C1C	3.24	1.43	1.35
50	b	810	CLA	CHC-C1C	3.24	1.43	1.35
50	b	808	CLA	CHC-C1C	3.24	1.43	1.35
50	z	310	CLA	CHC-C1C	3.23	1.43	1.35
50	a	840	CLA	CHC-C1C	3.23	1.43	1.35
50	w	314	CLA	CHC-C1C	3.23	1.43	1.35
50	k	204	CLA	CHC-C1C	3.23	1.43	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	816	CLA	CHC-C1C	3.23	1.43	1.35
50	j	102	CLA	CHC-C1C	3.23	1.43	1.35
50	a	820	CLA	C3B-C2B	-3.23	1.35	1.40
50	a	802	CLA	CHC-C1C	3.22	1.43	1.35
50	a	823	CLA	CHC-C1C	3.22	1.43	1.35
50	a	824	CLA	CHC-C1C	3.22	1.43	1.35
50	y	311	CLA	C3B-C2B	-3.22	1.35	1.40
50	b	807	CLA	CHC-C1C	3.22	1.43	1.35
50	g	201	CLA	CHC-C1C	3.22	1.43	1.35
50	z	319	CLA	C3B-C2B	-3.22	1.35	1.40
50	b	805	CLA	CHC-C1C	3.22	1.43	1.35
50	x	306	CLA	CHC-C1C	3.22	1.43	1.35
50	x	304	CLA	CHC-C1C	3.22	1.43	1.35
50	a	833	CLA	CHC-C1C	3.21	1.43	1.35
50	h	201	CLA	CHC-C1C	3.21	1.43	1.35
50	w	310	CLA	CHC-C1C	3.21	1.43	1.35
50	y	312	CLA	CHC-C1C	3.21	1.43	1.35
50	y	311	CLA	CHC-C1C	3.21	1.43	1.35
50	b	838	CLA	CHC-C1C	3.21	1.43	1.35
50	b	823	CLA	CHC-C1C	3.21	1.43	1.35
50	z	308	CLA	C3B-C2B	-3.21	1.35	1.40
50	a	836	CLA	CHC-C1C	3.20	1.43	1.35
50	b	802	CLA	C3B-C2B	-3.20	1.35	1.40
50	y	306	CLA	CHC-C1C	3.20	1.43	1.35
50	b	836	CLA	CHC-C1C	3.20	1.43	1.35
50	b	842	CLA	C3B-C2B	-3.20	1.35	1.40
50	y	307	CLA	CHC-C1C	3.20	1.43	1.35
50	b	812	CLA	C3B-C2B	-3.19	1.35	1.40
50	y	314	CLA	CHC-C1C	3.19	1.43	1.35
50	z	303	CLA	CHC-C1C	3.19	1.43	1.35
50	x	308	CLA	CHC-C1C	3.19	1.43	1.35
50	a	817	CLA	CHC-C1C	3.19	1.43	1.35
50	b	840	CLA	CHC-C1C	3.19	1.43	1.35
50	a	847	CLA	C3B-C2B	-3.19	1.35	1.40
50	x	310	CLA	CHC-C1C	3.19	1.43	1.35
50	a	811	CLA	CHC-C1C	3.19	1.43	1.35
50	b	808	CLA	C3B-C2B	-3.19	1.35	1.40
50	w	305	CLA	CHC-C1C	3.19	1.43	1.35
50	w	306	CLA	C3B-C2B	-3.19	1.35	1.40
50	a	844	CLA	C3B-C2B	-3.18	1.36	1.40
50	b	838	CLA	C3B-C2B	-3.18	1.36	1.40
50	a	855	CLA	CHC-C1C	3.18	1.43	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	y	309	CLA	CHC-C1C	3.18	1.43	1.35
50	a	813	CLA	C3B-C2B	-3.18	1.36	1.40
50	b	841	CLA	CHC-C1C	3.18	1.43	1.35
50	a	819	CLA	CHC-C1C	3.18	1.43	1.35
50	a	834	CLA	CHC-C1C	3.18	1.43	1.35
50	k	205	CLA	CHC-C1C	3.18	1.43	1.35
50	a	852	CLA	CHC-C1C	3.18	1.43	1.35
50	b	849	CLA	CHC-C1C	3.18	1.43	1.35
50	a	837	CLA	CHC-C1C	3.18	1.43	1.35
50	x	309	CLA	CHC-C1C	3.17	1.43	1.35
50	a	856	CLA	C3B-C2B	-3.17	1.36	1.40
50	b	806	CLA	CHC-C1C	3.17	1.43	1.35
50	z	302	CLA	CHC-C1C	3.17	1.43	1.35
54	x	311	CHL	MG-NA	3.16	2.13	2.06
50	a	844	CLA	CHC-C1C	3.16	1.43	1.35
50	b	802	CLA	CHC-C1C	3.16	1.43	1.35
50	x	302	CLA	CHC-C1C	3.16	1.43	1.35
50	a	848	CLA	C3B-C2B	-3.16	1.36	1.40
50	b	805	CLA	C3B-C2B	-3.16	1.36	1.40
50	b	846	CLA	C3B-C2B	-3.16	1.36	1.40
50	a	838	CLA	CHC-C1C	3.15	1.43	1.35
50	x	304	CLA	C3B-C2B	-3.15	1.36	1.40
50	a	853	CLA	CHC-C1C	3.15	1.43	1.35
50	b	804	CLA	C3B-C2B	-3.15	1.36	1.40
50	b	824	CLA	CHC-C1C	3.15	1.43	1.35
50	b	807	CLA	C3B-C2B	-3.15	1.36	1.40
50	y	306	CLA	C3B-C2B	-3.15	1.36	1.40
50	a	822	CLA	CHC-C1C	3.15	1.43	1.35
50	z	311	CLA	C3B-C2B	-3.14	1.36	1.40
50	x	312	CLA	C3B-C2B	-3.14	1.36	1.40
50	x	318	CLA	C3B-C2B	-3.14	1.36	1.40
47	A	405	PQ9	C5-C4	3.14	1.54	1.48
50	a	837	CLA	C3B-C2B	-3.14	1.36	1.40
54	z	312	CHL	C3B-C2B	-3.14	1.36	1.40
50	k	203	CLA	CHC-C1C	3.13	1.43	1.35
50	a	846	CLA	CHC-C1C	3.13	1.43	1.35
50	x	313	CLA	CHC-C1C	3.13	1.43	1.35
50	w	315	CLA	C3B-C2B	-3.13	1.36	1.40
50	b	832	CLA	CHC-C1C	3.13	1.43	1.35
50	z	308	CLA	CHC-C1C	3.13	1.43	1.35
50	l	305	CLA	C3B-C2B	-3.13	1.36	1.40
50	a	821	CLA	CHC-C1C	3.13	1.43	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	847	CLA	CHC-C1C	3.13	1.43	1.35
50	b	828	CLA	C3B-C2B	-3.13	1.36	1.40
52	a	808	CL0	C1D-ND	-3.13	1.33	1.37
50	b	843	CLA	C3B-C2B	-3.13	1.36	1.40
50	b	825	CLA	C3B-C2B	-3.12	1.36	1.40
50	b	846	CLA	CHC-C1C	3.12	1.43	1.35
50	b	836	CLA	C3B-C2B	-3.12	1.36	1.40
50	w	310	CLA	C3B-C2B	-3.12	1.36	1.40
50	b	833	CLA	C3B-C2B	-3.12	1.36	1.40
50	y	309	CLA	C3B-C2B	-3.12	1.36	1.40
50	a	850	CLA	C3B-C2B	-3.11	1.36	1.40
50	z	309	CLA	CHC-C1C	3.11	1.42	1.35
50	w	302	CLA	C3B-C2B	-3.11	1.36	1.40
50	b	833	CLA	CHC-C1C	3.11	1.42	1.35
50	y	303	CLA	CHC-C1C	3.11	1.42	1.35
50	a	814	CLA	C3B-C2B	-3.11	1.36	1.40
50	b	810	CLA	C3B-C2B	-3.11	1.36	1.40
50	w	307	CLA	CHC-C1C	3.10	1.42	1.35
50	g	203	CLA	C3B-C2B	-3.10	1.36	1.40
50	b	835	CLA	CHC-C1C	3.10	1.42	1.35
50	g	204	CLA	CHC-C1C	3.10	1.42	1.35
50	a	857	CLA	CHC-C1C	3.10	1.42	1.35
50	w	315	CLA	CHC-C1C	3.10	1.42	1.35
50	k	204	CLA	C3B-C2B	-3.10	1.36	1.40
50	a	823	CLA	C3B-C2B	-3.10	1.36	1.40
50	a	840	CLA	C3B-C2B	-3.10	1.36	1.40
50	z	303	CLA	C3B-C2B	-3.09	1.36	1.40
50	b	840	CLA	C3B-C2B	-3.09	1.36	1.40
54	w	309	CHL	MG-NA	3.09	2.13	2.06
50	b	832	CLA	C3B-C2B	-3.09	1.36	1.40
50	x	316	CLA	C3B-C2B	-3.09	1.36	1.40
50	a	812	CLA	CHC-C1C	3.09	1.42	1.35
50	a	802	CLA	C3B-C2B	-3.09	1.36	1.40
50	a	815	CLA	C3B-C2B	-3.08	1.36	1.40
50	z	306	CLA	C3B-C2B	-3.08	1.36	1.40
50	a	824	CLA	C3B-C2B	-3.08	1.36	1.40
50	b	809	CLA	C3B-C2B	-3.08	1.36	1.40
50	a	811	CLA	C3B-C2B	-3.08	1.36	1.40
50	g	204	CLA	C3B-C2B	-3.08	1.36	1.40
50	x	308	CLA	C3B-C2B	-3.08	1.36	1.40
50	k	203	CLA	C3B-C2B	-3.08	1.36	1.40
50	h	201	CLA	C3B-C2B	-3.08	1.36	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	y	304	CLA	C3B-C2B	-3.08	1.36	1.40
50	b	806	CLA	C3B-C2B	-3.08	1.36	1.40
50	x	313	CLA	C3B-C2B	-3.08	1.36	1.40
50	y	303	CLA	C3B-C2B	-3.07	1.36	1.40
50	a	849	CLA	CHC-C1C	3.07	1.42	1.35
50	f	303	CLA	C3B-C2B	-3.07	1.36	1.40
50	z	311	CLA	CHC-C1C	3.07	1.42	1.35
50	y	312	CLA	C3B-C2B	-3.07	1.36	1.40
50	y	305	CLA	C3B-C2B	-3.07	1.36	1.40
50	x	302	CLA	C3B-C2B	-3.07	1.36	1.40
50	y	313	CLA	C3B-C2B	-3.07	1.36	1.40
50	x	318	CLA	CHC-C1C	3.07	1.42	1.35
50	a	801	CLA	C3B-C2B	-3.06	1.36	1.40
50	b	803	CLA	C3B-C2B	-3.06	1.36	1.40
54	w	311	CHL	MG-NA	3.06	2.13	2.06
50	a	817	CLA	C3B-C2B	-3.06	1.36	1.40
50	b	848	CLA	C3B-C2B	-3.06	1.36	1.40
50	a	852	CLA	C3B-C2B	-3.06	1.36	1.40
50	b	843	CLA	CHC-C1C	3.06	1.42	1.35
50	z	319	CLA	CHC-C1C	3.06	1.42	1.35
50	a	853	CLA	C3B-C2B	-3.05	1.36	1.40
50	b	826	CLA	C3B-C2B	-3.05	1.36	1.40
50	g	203	CLA	CHC-C1C	3.05	1.42	1.35
50	a	855	CLA	C3B-C2B	-3.05	1.36	1.40
50	x	310	CLA	C3B-C2B	-3.05	1.36	1.40
50	f	302	CLA	C3B-C2B	-3.05	1.36	1.40
50	l	301	CLA	C3B-C2B	-3.05	1.36	1.40
50	a	835	CLA	C3B-C2B	-3.04	1.36	1.40
50	a	854	CLA	C3B-C2B	-3.04	1.36	1.40
54	x	319	CHL	MG-NA	3.04	2.13	2.06
50	b	823	CLA	C3B-C2B	-3.04	1.36	1.40
54	w	304	CHL	MG-NA	3.04	2.13	2.06
50	w	305	CLA	C3B-C2B	-3.04	1.36	1.40
50	g	201	CLA	C3B-C2B	-3.04	1.36	1.40
50	j	102	CLA	C3B-C2B	-3.03	1.36	1.40
50	b	815	CLA	C3B-C2B	-3.03	1.36	1.40
50	w	308	CLA	C3B-C2B	-3.03	1.36	1.40
54	x	301	CHL	MG-NA	3.03	2.13	2.06
50	b	822	CLA	C3B-C2B	-3.02	1.36	1.40
50	a	834	CLA	C3B-C2B	-3.02	1.36	1.40
50	b	841	CLA	C3B-C2B	-3.02	1.36	1.40
50	x	309	CLA	C3B-C2B	-3.02	1.36	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
45	F	804	A1H1M	O21-C22	-3.02	1.37	1.44
50	a	836	CLA	C3B-C2B	-3.02	1.36	1.40
50	w	303	CLA	C3B-C2B	-3.02	1.36	1.40
54	x	305	CHL	MG-NA	3.02	2.13	2.06
50	x	307	CLA	C3B-C2B	-3.01	1.36	1.40
50	b	837	CLA	C3B-C2B	-3.01	1.36	1.40
50	a	851	CLA	C3B-C2B	-3.01	1.36	1.40
54	z	312	CHL	O2A-CGA	3.01	1.42	1.33
50	w	308	CLA	C1D-ND	-3.01	1.34	1.37
50	b	834	CLA	C3B-C2B	-3.01	1.36	1.40
50	a	819	CLA	C3B-C2B	-3.01	1.36	1.40
50	z	316	CLA	C3B-C2B	-3.01	1.36	1.40
50	w	316	CLA	C3B-C2B	-3.00	1.36	1.40
50	a	816	CLA	C3B-C2B	-3.00	1.36	1.40
50	a	854	CLA	C1D-ND	-3.00	1.34	1.37
50	b	844	CLA	CHC-C1C	3.00	1.42	1.35
50	b	811	CLA	C3B-C2B	-3.00	1.36	1.40
50	y	314	CLA	C3B-C2B	-3.00	1.36	1.40
50	a	809	CLA	C3B-C2B	-3.00	1.36	1.40
50	b	824	CLA	C3B-C2B	-2.99	1.36	1.40
50	a	839	CLA	C3B-C2B	-2.98	1.36	1.40
50	y	310	CLA	C3B-C2B	-2.98	1.36	1.40
50	w	314	CLA	C3B-C2B	-2.98	1.36	1.40
54	z	304	CHL	MG-NA	2.98	2.13	2.06
50	x	306	CLA	C3B-C2B	-2.97	1.36	1.40
50	k	205	CLA	C3B-C2B	-2.97	1.36	1.40
50	x	303	CLA	CHC-C1C	2.97	1.42	1.35
50	a	836	CLA	C1D-ND	-2.95	1.34	1.37
50	z	309	CLA	C3B-C2B	-2.95	1.36	1.40
50	w	307	CLA	C3B-C2B	-2.94	1.36	1.40
50	b	801	CLA	CHC-C1C	2.94	1.42	1.35
54	x	319	CHL	O2A-CGA	2.94	1.41	1.33
50	a	838	CLA	C3B-C2B	-2.94	1.36	1.40
50	z	302	CLA	C3B-C2B	-2.94	1.36	1.40
52	a	808	CL0	C3D-C2D	2.93	1.47	1.39
50	z	305	CLA	C3B-C2B	-2.93	1.36	1.40
50	f	301	CLA	C3B-C2B	-2.92	1.36	1.40
50	a	845	CLA	C3B-C2B	-2.92	1.36	1.40
52	a	808	CL0	C4D-CHA	2.91	1.48	1.38
50	z	308	CLA	C1D-CHD	2.90	1.41	1.35
50	z	310	CLA	C3B-C2B	-2.89	1.36	1.40
50	l	306	CLA	C1D-ND	-2.89	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	z	307	CLA	C3B-C2B	-2.88	1.36	1.40
50	b	803	CLA	C1D-ND	-2.88	1.34	1.37
50	b	845	CLA	C1D-ND	-2.88	1.34	1.37
53	b	827	PQN	C10-C5	-2.87	1.35	1.40
50	y	308	CLA	C3B-C2B	-2.86	1.36	1.40
50	b	811	CLA	C1D-ND	-2.85	1.34	1.37
50	a	841	CLA	C3B-C2B	-2.84	1.36	1.40
50	b	839	CLA	C1D-ND	-2.83	1.34	1.37
50	a	818	CLA	C3B-C2B	-2.83	1.36	1.40
50	b	839	CLA	C3B-C2B	-2.83	1.36	1.40
50	b	835	CLA	C3B-C2B	-2.82	1.36	1.40
50	a	856	CLA	C1D-ND	-2.82	1.34	1.37
50	a	801	CLA	C1D-ND	-2.80	1.34	1.37
50	x	307	CLA	C1D-ND	-2.80	1.34	1.37
53	a	825	PQN	C10-C5	-2.80	1.36	1.40
50	a	826	CLA	C3B-C2B	-2.80	1.36	1.40
50	a	858	CLA	C1D-ND	-2.80	1.34	1.37
50	a	842	CLA	C3B-C2B	-2.80	1.36	1.40
50	x	304	CLA	C1D-ND	-2.80	1.34	1.37
47	A	405	PQ9	C30-C28	2.79	1.57	1.51
50	z	302	CLA	C1D-ND	-2.78	1.34	1.37
50	l	306	CLA	C3B-C2B	-2.78	1.36	1.40
50	y	313	CLA	C1D-ND	-2.77	1.34	1.37
50	y	308	CLA	C1D-ND	-2.77	1.34	1.37
50	a	845	CLA	C1D-ND	-2.76	1.34	1.37
54	z	312	CHL	MG-NA	2.76	2.12	2.06
47	A	405	PQ9	C24-C23	2.75	1.57	1.50
50	a	841	CLA	C1D-ND	-2.75	1.34	1.37
50	b	847	CLA	C1D-ND	-2.75	1.34	1.37
50	b	845	CLA	C3B-C2B	-2.75	1.36	1.40
50	a	835	CLA	C1D-ND	-2.74	1.34	1.37
50	a	850	CLA	C1D-ND	-2.74	1.34	1.37
50	z	316	CLA	C1D-ND	-2.74	1.34	1.37
50	w	316	CLA	C1D-ND	-2.74	1.34	1.37
50	a	811	CLA	C1D-ND	-2.73	1.34	1.37
50	b	813	CLA	C1D-ND	-2.73	1.34	1.37
50	z	306	CLA	C1D-ND	-2.73	1.34	1.37
50	a	824	CLA	C1D-ND	-2.73	1.34	1.37
50	b	838	CLA	C1D-ND	-2.72	1.34	1.37
50	y	312	CLA	C1D-ND	-2.71	1.34	1.37
46	z	314	LMG	C4-C5	2.71	1.58	1.53
50	a	838	CLA	C1D-ND	-2.71	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	A	405	PQ9	C2-C1	2.70	1.54	1.49
50	a	857	CLA	C1D-ND	-2.70	1.34	1.37
50	b	825	CLA	C1D-ND	-2.70	1.34	1.37
45	F	804	A1H1M	O14-C15	-2.70	1.37	1.44
50	b	806	CLA	C1D-ND	-2.70	1.34	1.37
50	b	842	CLA	C1D-ND	-2.70	1.34	1.37
50	a	843	CLA	C1D-ND	-2.70	1.34	1.37
50	a	816	CLA	C1D-ND	-2.70	1.34	1.37
50	b	815	CLA	C1D-ND	-2.69	1.34	1.37
50	y	310	CLA	C1D-ND	-2.69	1.34	1.37
50	a	809	CLA	C1D-ND	-2.69	1.34	1.37
50	a	818	CLA	C1D-ND	-2.69	1.34	1.37
50	a	813	CLA	C1D-ND	-2.69	1.34	1.37
50	b	826	CLA	C1D-ND	-2.68	1.34	1.37
50	b	802	CLA	C1D-ND	-2.68	1.34	1.37
50	z	307	CLA	C1D-ND	-2.68	1.34	1.37
50	a	848	CLA	C1D-ND	-2.67	1.34	1.37
50	b	836	CLA	C1D-ND	-2.67	1.34	1.37
50	a	815	CLA	C1D-ND	-2.67	1.34	1.37
50	b	844	CLA	C1D-ND	-2.67	1.34	1.37
50	b	851	CLA	C3B-C2B	-2.67	1.36	1.40
50	y	307	CLA	C1D-ND	-2.65	1.34	1.37
50	b	847	CLA	C3B-C2B	-2.65	1.36	1.40
50	x	306	CLA	C1D-ND	-2.65	1.34	1.37
50	w	307	CLA	C1D-ND	-2.65	1.34	1.37
50	b	814	CLA	C1D-ND	-2.65	1.34	1.37
50	f	301	CLA	C1D-ND	-2.65	1.34	1.37
50	z	310	CLA	C1D-ND	-2.64	1.34	1.37
50	y	311	CLA	C1D-ND	-2.64	1.34	1.37
50	a	817	CLA	C1D-ND	-2.64	1.34	1.37
50	a	840	CLA	C1D-ND	-2.64	1.34	1.37
50	b	804	CLA	C1D-ND	-2.64	1.34	1.37
50	b	822	CLA	C1D-ND	-2.64	1.34	1.37
50	a	826	CLA	C1D-ND	-2.64	1.34	1.37
50	b	814	CLA	C3B-C2B	-2.64	1.36	1.40
50	a	853	CLA	C1D-ND	-2.64	1.34	1.37
50	b	810	CLA	C1D-ND	-2.64	1.34	1.37
50	b	837	CLA	C1D-ND	-2.63	1.34	1.37
50	b	851	CLA	C1D-ND	-2.63	1.34	1.37
50	b	812	CLA	C1D-ND	-2.62	1.34	1.37
50	w	310	CLA	C1D-ND	-2.62	1.34	1.37
46	z	314	LMG	C3-C2	2.62	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	b	841	CLA	C1D-ND	-2.62	1.34	1.37
50	b	843	CLA	C1D-ND	-2.62	1.34	1.37
50	w	303	CLA	C1D-ND	-2.62	1.34	1.37
50	a	839	CLA	C1D-ND	-2.62	1.34	1.37
50	b	809	CLA	C1D-ND	-2.61	1.34	1.37
50	a	842	CLA	C1D-ND	-2.61	1.34	1.37
50	b	834	CLA	C1D-ND	-2.61	1.34	1.37
46	z	314	LMG	C4-C3	2.61	1.59	1.52
50	a	814	CLA	C1D-ND	-2.61	1.34	1.37
50	w	314	CLA	C1D-ND	-2.60	1.34	1.37
50	w	307	CLA	C1B-CHB	-2.60	1.33	1.41
50	z	303	CLA	C1D-ND	-2.59	1.34	1.37
50	a	802	CLA	C1D-ND	-2.59	1.34	1.37
50	a	823	CLA	C1D-ND	-2.59	1.34	1.37
50	a	821	CLA	C1D-ND	-2.59	1.34	1.37
50	y	304	CLA	C1D-ND	-2.59	1.34	1.37
50	a	846	CLA	C1D-ND	-2.59	1.34	1.37
50	f	302	CLA	C1D-ND	-2.59	1.34	1.37
50	w	302	CLA	C1D-ND	-2.59	1.34	1.37
50	l	305	CLA	C1D-ND	-2.59	1.34	1.37
50	y	302	CLA	C1D-ND	-2.59	1.34	1.37
50	a	822	CLA	C1D-ND	-2.59	1.34	1.37
50	x	313	CLA	C1D-ND	-2.58	1.34	1.37
50	b	808	CLA	C1D-ND	-2.58	1.34	1.37
50	b	823	CLA	C1D-ND	-2.58	1.34	1.37
50	k	205	CLA	C1D-ND	-2.58	1.34	1.37
50	l	301	CLA	C1D-ND	-2.58	1.34	1.37
50	y	305	CLA	C1D-ND	-2.58	1.34	1.37
50	k	204	CLA	C1D-ND	-2.58	1.34	1.37
50	g	204	CLA	C1D-ND	-2.58	1.34	1.37
50	x	312	CLA	C1D-ND	-2.57	1.34	1.37
50	b	848	CLA	C1D-ND	-2.57	1.34	1.37
50	a	833	CLA	C1D-ND	-2.57	1.34	1.37
50	a	855	CLA	C1D-ND	-2.57	1.34	1.37
50	b	828	CLA	C1D-ND	-2.57	1.34	1.37
50	a	851	CLA	C1D-ND	-2.57	1.34	1.37
50	a	837	CLA	C1D-ND	-2.56	1.34	1.37
50	w	306	CLA	C1D-ND	-2.56	1.34	1.37
50	b	835	CLA	C1D-ND	-2.56	1.34	1.37
54	z	312	CHL	C2-C3	2.56	1.39	1.33
50	g	201	CLA	C1D-ND	-2.56	1.34	1.37
50	x	309	CLA	C1D-ND	-2.56	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	b	833	CLA	C1D-ND	-2.56	1.34	1.37
50	z	319	CLA	C1B-CHB	-2.56	1.33	1.41
50	x	316	CLA	C1D-ND	-2.55	1.34	1.37
50	x	303	CLA	C1B-CHB	-2.55	1.33	1.41
50	a	812	CLA	C1D-ND	-2.55	1.34	1.37
50	z	305	CLA	C1D-ND	-2.55	1.34	1.37
50	a	849	CLA	C1D-ND	-2.55	1.34	1.37
50	f	303	CLA	C1D-ND	-2.55	1.34	1.37
50	b	807	CLA	C1D-ND	-2.55	1.34	1.37
50	w	315	CLA	C1B-CHB	-2.55	1.33	1.41
52	a	808	CL0	C1C-NC	-2.54	1.34	1.37
50	b	824	CLA	C1D-ND	-2.54	1.34	1.37
50	y	314	CLA	C1D-ND	-2.54	1.34	1.37
50	b	832	CLA	C1D-ND	-2.54	1.34	1.37
50	a	844	CLA	C1D-ND	-2.54	1.34	1.37
50	z	309	CLA	C1D-ND	-2.54	1.34	1.37
50	a	820	CLA	C1D-ND	-2.53	1.34	1.37
50	y	303	CLA	C1D-ND	-2.53	1.34	1.37
50	b	846	CLA	C1D-ND	-2.52	1.34	1.37
50	w	305	CLA	C1D-ND	-2.52	1.34	1.37
50	b	805	CLA	C1D-ND	-2.52	1.34	1.37
53	a	825	PQN	C2M-C2	-2.52	1.45	1.50
50	y	309	CLA	C1B-CHB	-2.52	1.34	1.41
50	b	849	CLA	C1D-ND	-2.52	1.34	1.37
53	b	827	PQN	C11-C12	-2.51	1.47	1.50
50	y	302	CLA	C4C-C3C	2.51	1.47	1.42
50	b	840	CLA	C1D-ND	-2.51	1.34	1.37
50	a	852	CLA	C1D-ND	-2.51	1.34	1.37
51	a	804	DGD	C1D-C2D	2.51	1.59	1.52
50	b	849	CLA	C1B-CHB	-2.50	1.34	1.41
50	z	309	CLA	C1B-CHB	-2.50	1.34	1.41
50	z	308	CLA	C4D-CHA	2.50	1.39	1.35
50	b	801	CLA	C1D-ND	-2.50	1.34	1.37
50	x	303	CLA	MG-NC	2.50	2.12	2.06
50	x	313	CLA	C1B-CHB	-2.50	1.34	1.41
52	a	808	CL0	C1B-CHB	2.50	1.47	1.41
43	a	810	BCR	C1-C6	-2.49	1.50	1.53
50	a	834	CLA	C1B-CHB	-2.49	1.34	1.41
50	h	201	CLA	C1D-ND	-2.49	1.34	1.37
50	w	315	CLA	C1D-ND	-2.49	1.34	1.37
50	j	102	CLA	C1D-ND	-2.49	1.34	1.37
50	l	306	CLA	C1B-CHB	-2.48	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	g	204	CLA	C1B-CHB	-2.48	1.34	1.41
50	g	203	CLA	C1D-ND	-2.48	1.34	1.37
50	a	845	CLA	C1B-CHB	-2.47	1.34	1.41
50	x	308	CLA	C1D-ND	-2.47	1.34	1.37
50	a	819	CLA	C1B-CHB	-2.47	1.34	1.41
50	a	819	CLA	C1D-ND	-2.47	1.34	1.37
50	a	849	CLA	C1B-CHB	-2.47	1.34	1.41
50	x	310	CLA	C1D-ND	-2.46	1.34	1.37
54	x	301	CHL	CHC-C1C	2.46	1.41	1.35
50	b	814	CLA	C1B-CHB	-2.46	1.34	1.41
54	z	312	CHL	CHC-C1C	2.46	1.41	1.35
50	z	311	CLA	C1D-ND	-2.46	1.34	1.37
50	a	820	CLA	C1B-CHB	-2.46	1.34	1.41
50	a	852	CLA	C1B-CHB	-2.46	1.34	1.41
50	z	308	CLA	C1B-CHB	-2.46	1.34	1.41
50	k	203	CLA	C1B-CHB	-2.46	1.34	1.41
50	g	201	CLA	C1B-CHB	-2.45	1.34	1.41
50	b	805	CLA	C1B-CHB	-2.45	1.34	1.41
50	a	843	CLA	C1B-CHB	-2.45	1.34	1.41
50	y	311	CLA	C1B-CHB	-2.45	1.34	1.41
50	z	311	CLA	C1B-CHB	-2.45	1.34	1.41
50	a	834	CLA	C1D-ND	-2.45	1.34	1.37
50	x	302	CLA	C1B-CHB	-2.45	1.34	1.41
50	b	849	CLA	C3B-C2B	-2.45	1.37	1.40
50	b	825	CLA	C1B-CHB	-2.44	1.34	1.41
50	a	813	CLA	C1B-CHB	-2.44	1.34	1.41
50	g	203	CLA	C1B-CHB	-2.44	1.34	1.41
50	x	312	CLA	C1B-CHB	-2.44	1.34	1.41
50	z	319	CLA	C1D-ND	-2.44	1.34	1.37
50	y	307	CLA	C1B-CHB	-2.44	1.34	1.41
50	b	848	CLA	C1B-CHB	-2.43	1.34	1.41
50	a	837	CLA	C1B-CHB	-2.43	1.34	1.41
54	x	319	CHL	CHC-C1C	2.43	1.41	1.35
50	a	850	CLA	C1B-CHB	-2.43	1.34	1.41
50	y	314	CLA	C1B-CHB	-2.43	1.34	1.41
54	z	304	CHL	CHC-C1C	2.43	1.41	1.35
50	a	814	CLA	C1B-CHB	-2.43	1.34	1.41
50	x	303	CLA	C1D-ND	-2.43	1.34	1.37
50	a	822	CLA	C1B-CHB	-2.43	1.34	1.41
50	x	313	CLA	MG-NC	2.42	2.12	2.06
50	b	851	CLA	C1B-CHB	-2.42	1.34	1.41
50	b	824	CLA	C1B-CHB	-2.42	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	y	304	CLA	C1B-CHB	-2.42	1.34	1.41
50	x	310	CLA	C1B-CHB	-2.42	1.34	1.41
50	b	833	CLA	C1B-CHB	-2.42	1.34	1.41
50	a	817	CLA	C1B-CHB	-2.42	1.34	1.41
50	b	836	CLA	C1B-CHB	-2.42	1.34	1.41
50	a	853	CLA	C1B-CHB	-2.42	1.34	1.41
53	b	827	PQN	C2M-C2	-2.42	1.45	1.50
50	w	305	CLA	C1B-CHB	-2.41	1.34	1.41
54	w	304	CHL	CHC-C1C	2.41	1.41	1.35
54	x	305	CHL	CBA-CGA	2.41	1.56	1.50
50	f	302	CLA	C1B-CHB	-2.41	1.34	1.41
54	w	304	CHL	CBA-CGA	2.41	1.56	1.50
50	k	204	CLA	C1B-CHB	-2.41	1.34	1.41
50	a	833	CLA	C1B-CHB	-2.41	1.34	1.41
50	a	809	CLA	C1B-CHB	-2.41	1.34	1.41
50	b	846	CLA	C1B-CHB	-2.41	1.34	1.41
50	b	810	CLA	C1B-CHB	-2.41	1.34	1.41
46	f	306	LMG	O8-C28	2.41	1.40	1.33
50	b	823	CLA	C1B-CHB	-2.41	1.34	1.41
50	l	305	CLA	C1B-CHB	-2.41	1.34	1.41
50	x	309	CLA	C1B-CHB	-2.41	1.34	1.41
50	b	835	CLA	C1B-CHB	-2.40	1.34	1.41
50	h	201	CLA	C1B-CHB	-2.40	1.34	1.41
50	l	301	CLA	C1B-CHB	-2.40	1.34	1.41
50	a	802	CLA	C1B-CHB	-2.40	1.34	1.41
50	j	102	CLA	C1B-CHB	-2.40	1.34	1.41
50	w	302	CLA	C1B-CHB	-2.40	1.34	1.41
50	a	822	CLA	C3B-C2B	-2.40	1.37	1.40
50	b	826	CLA	C1B-CHB	-2.40	1.34	1.41
50	y	303	CLA	C1B-CHB	-2.40	1.34	1.41
50	k	203	CLA	C1D-ND	-2.40	1.34	1.37
50	a	824	CLA	C1B-CHB	-2.40	1.34	1.41
52	a	808	CL0	C4B-CHC	2.40	1.47	1.41
50	y	309	CLA	C1D-ND	-2.40	1.34	1.37
50	a	841	CLA	C1B-CHB	-2.40	1.34	1.41
50	b	801	CLA	C1B-CHB	-2.39	1.34	1.41
46	j	104	LMG	O8-C28	2.39	1.40	1.33
50	b	843	CLA	C1B-CHB	-2.39	1.34	1.41
50	a	823	CLA	C1B-CHB	-2.39	1.34	1.41
50	b	841	CLA	C1B-CHB	-2.39	1.34	1.41
50	b	809	CLA	C1B-CHB	-2.39	1.34	1.41
50	b	828	CLA	C1B-CHB	-2.39	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	851	CLA	C1B-CHB	-2.39	1.34	1.41
50	z	306	CLA	C1B-CHB	-2.39	1.34	1.41
50	b	839	CLA	C1B-CHB	-2.39	1.34	1.41
50	a	838	CLA	C1B-CHB	-2.39	1.34	1.41
50	a	815	CLA	C1B-CHB	-2.38	1.34	1.41
50	b	808	CLA	C1B-CHB	-2.38	1.34	1.41
50	b	804	CLA	C1B-CHB	-2.38	1.34	1.41
50	z	303	CLA	C1B-CHB	-2.38	1.34	1.41
50	a	840	CLA	C1B-CHB	-2.38	1.34	1.41
50	b	813	CLA	C1B-CHB	-2.38	1.34	1.41
50	a	821	CLA	C1B-CHB	-2.38	1.34	1.41
50	w	306	CLA	C1B-CHB	-2.38	1.34	1.41
50	x	318	CLA	C1B-CHB	-2.38	1.34	1.41
50	a	801	CLA	C1B-CHB	-2.38	1.34	1.41
50	a	816	CLA	C1B-CHB	-2.38	1.34	1.41
50	z	307	CLA	C1B-CHB	-2.38	1.34	1.41
50	k	205	CLA	C1B-CHB	-2.38	1.34	1.41
50	y	306	CLA	C1B-CHB	-2.38	1.34	1.41
50	z	319	CLA	MG-NC	2.38	2.11	2.06
50	a	842	CLA	C1B-CHB	-2.38	1.34	1.41
50	b	837	CLA	C1B-CHB	-2.38	1.34	1.41
50	x	302	CLA	C1D-ND	-2.38	1.34	1.37
50	b	844	CLA	C1B-CHB	-2.37	1.34	1.41
50	k	203	CLA	MG-NC	2.37	2.11	2.06
54	w	309	CHL	CHC-C1C	2.37	1.41	1.35
50	a	811	CLA	C1B-CHB	-2.37	1.34	1.41
50	b	834	CLA	C1B-CHB	-2.37	1.34	1.41
50	w	316	CLA	C1B-CHB	-2.37	1.34	1.41
50	a	854	CLA	C1B-CHB	-2.37	1.34	1.41
50	b	812	CLA	C1B-CHB	-2.37	1.34	1.41
50	b	802	CLA	C1B-CHB	-2.37	1.34	1.41
50	a	847	CLA	CHB-C4A	2.37	1.39	1.31
50	b	840	CLA	C1B-CHB	-2.36	1.34	1.41
50	f	303	CLA	C1B-CHB	-2.36	1.34	1.41
50	a	858	CLA	C1B-CHB	-2.36	1.34	1.41
50	b	815	CLA	C1B-CHB	-2.36	1.34	1.41
50	w	315	CLA	MG-NC	2.36	2.11	2.06
50	a	846	CLA	C1B-CHB	-2.36	1.34	1.41
54	x	305	CHL	CHC-C1C	2.36	1.41	1.35
50	a	855	CLA	C1B-CHB	-2.36	1.34	1.41
50	b	838	CLA	C1B-CHB	-2.36	1.34	1.41
54	x	311	CHL	MG-NC	2.36	2.11	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	x	316	CLA	C1B-CHB	-2.36	1.34	1.41
50	w	310	CLA	C1B-CHB	-2.35	1.34	1.41
50	a	836	CLA	C1B-CHB	-2.35	1.34	1.41
50	a	856	CLA	C1B-CHB	-2.35	1.34	1.41
46	7	301	LMG	O8-C28	2.35	1.40	1.33
50	z	308	CLA	MG-NC	2.35	2.11	2.06
50	b	822	CLA	C1B-CHB	-2.35	1.34	1.41
46	B	605	LMG	O8-C28	2.35	1.40	1.33
50	z	302	CLA	C1B-CHB	-2.35	1.34	1.41
50	a	847	CLA	C1D-ND	-2.35	1.34	1.37
50	f	301	CLA	C1B-CHB	-2.35	1.34	1.41
50	b	842	CLA	C1B-CHB	-2.34	1.34	1.41
50	w	303	CLA	C1B-CHB	-2.34	1.34	1.41
50	y	305	CLA	C1B-CHB	-2.34	1.34	1.41
50	b	832	CLA	C1B-CHB	-2.34	1.34	1.41
50	w	307	CLA	MG-NC	2.34	2.11	2.06
50	b	807	CLA	C1B-CHB	-2.34	1.34	1.41
50	w	314	CLA	C1B-CHB	-2.34	1.34	1.41
50	y	312	CLA	C1B-CHB	-2.34	1.34	1.41
53	a	825	PQN	C11-C12	-2.34	1.47	1.50
50	a	857	CLA	C1B-CHB	-2.34	1.34	1.41
50	a	835	CLA	C1B-CHB	-2.33	1.34	1.41
50	b	849	CLA	MG-NC	2.33	2.11	2.06
50	z	310	CLA	C1B-CHB	-2.33	1.34	1.41
50	b	806	CLA	C1B-CHB	-2.33	1.34	1.41
50	x	306	CLA	C1B-CHB	-2.33	1.34	1.41
50	y	302	CLA	C1B-CHB	-2.32	1.34	1.41
50	a	844	CLA	C1B-CHB	-2.32	1.34	1.41
50	a	839	CLA	C1B-CHB	-2.32	1.34	1.41
50	z	316	CLA	C1B-CHB	-2.32	1.34	1.41
50	a	848	CLA	C1B-CHB	-2.32	1.34	1.41
50	b	847	CLA	C1B-CHB	-2.32	1.34	1.41
46	D	601	LMG	O8-C28	2.32	1.40	1.33
50	x	307	CLA	C1B-CHB	-2.32	1.34	1.41
50	b	803	CLA	C1B-CHB	-2.31	1.34	1.41
50	a	818	CLA	C1B-CHB	-2.31	1.34	1.41
50	b	832	CLA	MG-NC	2.31	2.11	2.06
46	z	314	LMG	O8-C28	2.30	1.40	1.33
50	a	826	CLA	C1B-CHB	-2.30	1.34	1.41
50	b	811	CLA	C1B-CHB	-2.29	1.34	1.41
50	y	313	CLA	C1B-CHB	-2.29	1.34	1.41
50	x	308	CLA	C1B-CHB	-2.29	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	z	305	CLA	C1B-CHB	-2.29	1.34	1.41
50	b	801	CLA	MG-NC	2.29	2.11	2.06
50	y	308	CLA	C1B-CHB	-2.29	1.34	1.41
50	b	845	CLA	C1B-CHB	-2.29	1.34	1.41
50	y	310	CLA	C1B-CHB	-2.29	1.34	1.41
50	g	204	CLA	MG-NC	2.28	2.11	2.06
50	y	309	CLA	MG-NC	2.28	2.11	2.06
50	z	302	CLA	MG-NC	2.28	2.11	2.06
50	x	308	CLA	MG-NC	2.28	2.11	2.06
50	w	308	CLA	C1B-CHB	-2.27	1.34	1.41
54	w	311	CHL	CHC-C1C	2.27	1.40	1.35
50	x	304	CLA	C1B-CHB	-2.27	1.34	1.41
50	z	309	CLA	MG-NC	2.27	2.11	2.06
50	a	849	CLA	MG-NC	2.26	2.11	2.06
50	y	314	CLA	MG-NC	2.26	2.11	2.06
46	x	315	LMG	O8-C28	2.26	1.39	1.33
50	a	802	CLA	MG-NC	2.25	2.11	2.06
52	a	808	CL0	O2A-CGA	-2.25	1.32	1.42
50	a	812	CLA	MG-NC	2.25	2.11	2.06
50	x	316	CLA	MG-NC	2.25	2.11	2.06
46	w	312	LMG	O8-C28	2.25	1.39	1.33
54	x	311	CHL	CHC-C1C	2.25	1.40	1.35
46	H	401	LMG	O8-C28	2.24	1.39	1.33
54	x	319	CHL	MG-NC	2.24	2.11	2.06
50	b	836	CLA	MG-NC	2.24	2.11	2.06
50	b	841	CLA	MG-NC	2.24	2.11	2.06
50	x	302	CLA	MG-NC	2.24	2.11	2.06
50	a	842	CLA	MG-NC	2.23	2.11	2.06
50	a	812	CLA	CAB-C3B	2.23	1.50	1.42
46	F	802	LMG	O8-C28	2.23	1.39	1.33
54	w	309	CHL	MG-NC	2.23	2.11	2.06
50	k	204	CLA	MG-NC	2.23	2.11	2.06
50	a	821	CLA	MG-NC	2.23	2.11	2.06
50	b	848	CLA	MG-NC	2.23	2.11	2.06
50	a	824	CLA	MG-NC	2.23	2.11	2.06
50	y	307	CLA	MG-NC	2.22	2.11	2.06
50	a	834	CLA	MG-NC	2.22	2.11	2.06
50	f	302	CLA	MG-NC	2.22	2.11	2.06
50	g	201	CLA	MG-NC	2.22	2.11	2.06
50	a	852	CLA	MG-NC	2.21	2.11	2.06
50	z	303	CLA	MG-NC	2.21	2.11	2.06
45	5	302	A1H1M	C10-C11	2.21	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	g	203	CLA	MG-NC	2.21	2.11	2.06
50	a	846	CLA	MG-NC	2.21	2.11	2.06
50	x	306	CLA	MG-NC	2.21	2.11	2.06
50	x	309	CLA	MG-NC	2.21	2.11	2.06
50	z	311	CLA	MG-NC	2.21	2.11	2.06
50	b	806	CLA	MG-NC	2.20	2.11	2.06
50	y	303	CLA	MG-NC	2.20	2.11	2.06
50	a	853	CLA	MG-NC	2.20	2.11	2.06
50	x	318	CLA	MG-NC	2.20	2.11	2.06
50	b	823	CLA	MG-NC	2.20	2.11	2.06
50	b	835	CLA	MG-NC	2.20	2.11	2.06
50	l	301	CLA	MG-NC	2.20	2.11	2.06
50	a	845	CLA	MG-NC	2.20	2.11	2.06
50	a	837	CLA	MG-NC	2.20	2.11	2.06
50	a	822	CLA	MG-NC	2.20	2.11	2.06
50	w	314	CLA	MG-NC	2.20	2.11	2.06
50	y	304	CLA	MG-NC	2.20	2.11	2.06
50	z	305	CLA	MG-NC	2.19	2.11	2.06
50	a	817	CLA	MG-NC	2.19	2.11	2.06
50	b	805	CLA	MG-NC	2.19	2.11	2.06
50	b	833	CLA	MG-NC	2.19	2.11	2.06
50	b	825	CLA	MG-NC	2.19	2.11	2.06
50	a	856	CLA	MG-NC	2.19	2.11	2.06
50	b	802	CLA	MG-NC	2.19	2.11	2.06
50	l	305	CLA	MG-NC	2.19	2.11	2.06
50	b	851	CLA	MG-NC	2.19	2.11	2.06
54	x	301	CHL	MG-NC	2.19	2.11	2.06
50	k	205	CLA	MG-NC	2.19	2.11	2.06
50	f	303	CLA	MG-NC	2.19	2.11	2.06
50	h	201	CLA	MG-NC	2.19	2.11	2.06
50	a	819	CLA	MG-NC	2.19	2.11	2.06
50	a	814	CLA	MG-NC	2.18	2.11	2.06
50	w	305	CLA	MG-NC	2.18	2.11	2.06
54	w	304	CHL	MG-NC	2.18	2.11	2.06
50	w	302	CLA	MG-NC	2.18	2.11	2.06
50	j	102	CLA	MG-NC	2.18	2.11	2.06
50	a	812	CLA	C4B-CHC	-2.18	1.39	1.43
50	b	810	CLA	MG-NC	2.17	2.11	2.06
50	y	305	CLA	MG-NC	2.17	2.11	2.06
50	a	811	CLA	MG-NC	2.17	2.11	2.06
50	a	801	CLA	MG-NC	2.17	2.11	2.06
50	a	857	CLA	MG-NC	2.17	2.11	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	b	842	CLA	MG-NC	2.17	2.11	2.06
54	z	304	CHL	MG-NC	2.17	2.11	2.06
50	b	837	CLA	MG-NC	2.17	2.11	2.06
50	w	306	CLA	MG-NC	2.17	2.11	2.06
46	j	105	LMG	O8-C28	2.17	1.39	1.33
50	b	814	CLA	MG-NC	2.16	2.11	2.06
50	z	302	CLA	CAA-C2A	2.16	1.58	1.54
50	b	843	CLA	MG-NC	2.16	2.11	2.06
50	b	840	CLA	MG-NC	2.16	2.11	2.06
50	b	839	CLA	MG-NC	2.16	2.11	2.06
50	a	841	CLA	MG-NC	2.16	2.11	2.06
50	a	851	CLA	MG-NC	2.16	2.11	2.06
50	b	826	CLA	MG-NC	2.16	2.11	2.06
50	a	823	CLA	MG-NC	2.15	2.11	2.06
50	b	846	CLA	MG-NC	2.15	2.11	2.06
50	x	310	CLA	MG-NC	2.15	2.11	2.06
50	b	834	CLA	MG-NC	2.15	2.11	2.06
46	z	315	LMG	O8-C28	2.15	1.39	1.33
45	F	804	A1H1M	C13-C33	2.15	1.58	1.52
50	a	858	CLA	MG-NC	2.15	2.11	2.06
50	a	855	CLA	MG-NC	2.14	2.11	2.06
54	x	305	CHL	C3B-CAB	-2.14	1.43	1.47
50	a	838	CLA	MG-NC	2.14	2.11	2.06
50	b	807	CLA	MG-NC	2.14	2.11	2.06
50	b	813	CLA	MG-NC	2.14	2.11	2.06
50	b	828	CLA	MG-NC	2.14	2.11	2.06
50	a	820	CLA	MG-NC	2.14	2.11	2.06
50	l	306	CLA	MG-NC	2.14	2.11	2.06
50	w	310	CLA	MG-NC	2.14	2.11	2.06
50	y	308	CLA	MG-NC	2.14	2.11	2.06
50	z	316	CLA	MG-NC	2.14	2.11	2.06
47	A	405	PQ9	C21-C22	2.14	1.57	1.50
50	b	808	CLA	MG-NC	2.14	2.11	2.06
50	b	804	CLA	MG-NC	2.13	2.11	2.06
50	b	809	CLA	MG-NC	2.13	2.11	2.06
50	f	301	CLA	MG-NC	2.13	2.11	2.06
50	z	310	CLA	MG-NC	2.13	2.11	2.06
50	y	302	CLA	CAA-C2A	2.13	1.58	1.54
50	w	303	CLA	MG-NC	2.13	2.11	2.06
50	a	835	CLA	MG-NC	2.12	2.11	2.06
54	x	305	CHL	MG-NC	2.12	2.11	2.06
50	b	838	CLA	MG-NC	2.12	2.11	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	w	311	CHL	MG-NC	2.12	2.11	2.06
50	a	836	CLA	MG-NC	2.12	2.11	2.06
50	y	311	CLA	MG-NC	2.11	2.11	2.06
48	F	801	SQD	O8-S	2.11	1.55	1.47
50	a	833	CLA	MG-NC	2.11	2.11	2.06
50	b	822	CLA	MG-NC	2.11	2.11	2.06
50	z	307	CLA	MG-NC	2.11	2.11	2.06
48	a	859	SQD	O8-S	2.10	1.55	1.47
43	b	819	BCR	C30-C25	-2.10	1.50	1.53
50	a	843	CLA	MG-NC	2.10	2.11	2.06
50	a	826	CLA	MG-NC	2.10	2.11	2.06
50	a	840	CLA	MG-NC	2.09	2.11	2.06
50	a	844	CLA	MG-NC	2.09	2.11	2.06
50	a	848	CLA	MG-NC	2.09	2.11	2.06
45	5	302	A1H1M	C35-C11	2.09	1.56	1.51
47	A	405	PQ9	O4-C4	-2.09	1.19	1.24
50	a	818	CLA	MG-NC	2.09	2.11	2.06
50	y	306	CLA	MG-NC	2.09	2.11	2.06
50	a	839	CLA	MG-NC	2.09	2.11	2.06
50	x	312	CLA	MG-NC	2.08	2.11	2.06
50	a	816	CLA	MG-NC	2.08	2.11	2.06
50	x	304	CLA	MG-NC	2.08	2.11	2.06
47	A	405	PQ9	C29-C28	2.08	1.56	1.50
48	w	318	SQD	O8-S	2.08	1.55	1.47
45	F	804	A1H1M	O19-C18	-2.08	1.38	1.43
50	b	844	CLA	MG-NC	2.07	2.11	2.06
50	a	809	CLA	MG-NC	2.07	2.11	2.06
50	a	813	CLA	MG-NC	2.07	2.11	2.06
50	x	313	CLA	CAA-C2A	2.07	1.57	1.54
47	A	405	PQ9	C10-C1	2.07	1.54	1.47
50	y	312	CLA	MG-NC	2.07	2.11	2.06
50	a	812	CLA	CHB-C1B	-2.07	1.34	1.39
50	x	306	CLA	CAA-C2A	2.07	1.57	1.54
54	w	311	CHL	C3B-CAB	-2.06	1.43	1.47
50	b	841	CLA	CAA-C2A	2.06	1.57	1.54
50	y	313	CLA	MG-NC	2.06	2.11	2.06
50	a	815	CLA	CAA-C2A	2.06	1.57	1.54
48	w	317	SQD	O8-S	2.06	1.54	1.47
50	b	824	CLA	MG-NC	2.06	2.11	2.06
50	b	812	CLA	MG-NC	2.05	2.11	2.06
50	a	812	CLA	CBB-CAB	-2.05	1.27	1.32
48	j	106	SQD	O8-S	2.05	1.54	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	w	303	CLA	CHD-C1D	2.05	1.42	1.38
50	k	203	CLA	CAA-C2A	2.05	1.57	1.53
46	B	605	LMG	O7-C10	2.05	1.40	1.34
50	x	307	CLA	MG-NC	2.05	2.11	2.06
51	a	804	DGD	O1G-C1A	2.04	1.39	1.33
50	a	854	CLA	MG-NC	2.04	2.11	2.06
50	b	811	CLA	MG-NC	2.04	2.11	2.06
48	B	604	SQD	O8-S	2.04	1.54	1.47
50	w	316	CLA	MG-NC	2.04	2.11	2.06
47	A	405	PQ9	C22-C23	2.03	1.37	1.33
50	b	815	CLA	MG-NC	2.03	2.11	2.06
54	x	301	CHL	O1D-CGD	2.03	1.26	1.21
52	a	808	CL0	C4D-ND	2.03	1.40	1.37
46	H	401	LMG	O6-C1	2.03	1.47	1.41
50	b	823	CLA	CAA-C2A	2.02	1.57	1.54
50	y	310	CLA	MG-NC	2.02	2.11	2.06
50	b	843	CLA	CAA-C2A	2.02	1.57	1.54
50	y	306	CLA	CAA-C2A	2.02	1.57	1.53
50	b	845	CLA	MG-NC	2.02	2.11	2.06
54	x	319	CHL	O1D-CGD	2.01	1.26	1.21
46	7	301	LMG	O6-C1	2.01	1.47	1.41
54	z	312	CHL	O1D-CGD	2.01	1.26	1.21
50	y	302	CLA	MG-NC	2.01	2.11	2.06
50	b	804	CLA	CAA-C2A	2.01	1.57	1.53
54	x	311	CHL	O1D-CGD	2.01	1.26	1.21
50	l	306	CLA	CAA-C2A	2.01	1.57	1.54
50	z	303	CLA	CAA-C2A	2.01	1.57	1.53
54	z	312	CHL	MG-NC	2.00	2.11	2.06
54	w	304	CHL	O1D-CGD	2.00	1.26	1.21
50	a	815	CLA	MG-NC	2.00	2.11	2.06
50	y	311	CLA	CAA-C2A	2.00	1.57	1.54

All (1719) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
47	A	405	PQ9	C34-C33-C35	-28.08	83.87	115.98
47	A	405	PQ9	C19-C18-C20	-27.38	69.21	115.27
47	A	405	PQ9	C24-C23-C25	-27.28	69.37	115.27
47	A	405	PQ9	C14-C13-C15	-26.98	69.88	115.27
47	A	405	PQ9	C29-C28-C27	17.84	169.45	123.68
47	A	405	PQ9	C15-C13-C12	-17.81	85.07	121.12
47	A	405	PQ9	C25-C23-C22	-17.60	85.50	121.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
47	A	405	PQ9	C20-C18-C17	-17.23	86.25	121.12
47	A	405	PQ9	C29-C28-C30	-16.75	87.09	115.27
47	A	405	PQ9	C34-C33-C32	16.62	166.31	123.68
54	z	312	CHL	C4A-NA-C1A	13.00	112.55	106.71
47	A	405	PQ9	C19-C18-C17	12.38	155.44	123.68
47	A	405	PQ9	C14-C13-C12	12.19	154.95	123.68
47	A	405	PQ9	C24-C23-C22	12.16	154.86	123.68
50	y	313	CLA	C4A-NA-C1A	11.23	111.76	106.71
50	b	803	CLA	C4A-NA-C1A	11.15	111.72	106.71
50	b	824	CLA	C4A-NA-C1A	10.98	111.64	106.71
50	a	822	CLA	C4A-NA-C1A	10.94	111.62	106.71
50	a	838	CLA	C4A-NA-C1A	10.94	111.62	106.71
50	a	846	CLA	C4A-NA-C1A	10.86	111.59	106.71
50	w	316	CLA	C4A-NA-C1A	10.85	111.58	106.71
54	x	319	CHL	C4A-NA-C1A	10.84	111.58	106.71
50	b	843	CLA	C4A-NA-C1A	10.73	111.53	106.71
50	b	833	CLA	C4A-NA-C1A	10.72	111.53	106.71
50	a	814	CLA	C4A-NA-C1A	10.62	111.48	106.71
50	b	805	CLA	C4A-NA-C1A	10.60	111.47	106.71
50	k	204	CLA	C4A-NA-C1A	10.60	111.47	106.71
50	f	302	CLA	C4A-NA-C1A	10.59	111.47	106.71
50	b	814	CLA	C4A-NA-C1A	10.55	111.45	106.71
50	w	305	CLA	C4A-NA-C1A	10.49	111.42	106.71
50	a	824	CLA	C4A-NA-C1A	10.48	111.42	106.71
50	b	807	CLA	C4A-NA-C1A	10.47	111.41	106.71
50	w	314	CLA	C4A-NA-C1A	10.45	111.40	106.71
54	x	305	CHL	C4A-NA-C1A	10.44	111.40	106.71
50	j	102	CLA	C4A-NA-C1A	10.40	111.38	106.71
50	h	201	CLA	C4A-NA-C1A	10.39	111.38	106.71
50	f	301	CLA	C4A-NA-C1A	10.38	111.37	106.71
50	z	310	CLA	C4A-NA-C1A	10.35	111.36	106.71
50	x	308	CLA	C4A-NA-C1A	10.31	111.34	106.71
50	w	308	CLA	C4A-NA-C1A	10.29	111.33	106.71
50	a	811	CLA	C4A-NA-C1A	10.28	111.33	106.71
50	y	304	CLA	C4A-NA-C1A	10.28	111.33	106.71
50	y	308	CLA	C4A-NA-C1A	10.27	111.33	106.71
50	y	303	CLA	C4A-NA-C1A	10.27	111.32	106.71
50	a	853	CLA	C4A-NA-C1A	10.25	111.31	106.71
50	b	841	CLA	C4A-NA-C1A	10.24	111.31	106.71
50	y	311	CLA	C4A-NA-C1A	10.23	111.31	106.71
50	b	837	CLA	C4A-NA-C1A	10.23	111.31	106.71
50	a	857	CLA	C4A-NA-C1A	10.22	111.30	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	826	CLA	C4A-NA-C1A	10.19	111.29	106.71
54	z	304	CHL	C4A-NA-C1A	10.18	111.28	106.71
50	b	848	CLA	C4A-NA-C1A	10.17	111.28	106.71
50	b	815	CLA	C4A-NA-C1A	10.13	111.26	106.71
50	y	310	CLA	C4A-NA-C1A	10.11	111.25	106.71
50	x	306	CLA	C4A-NA-C1A	10.09	111.24	106.71
50	b	806	CLA	C4A-NA-C1A	10.08	111.24	106.71
50	w	315	CLA	C4A-NA-C1A	10.07	111.23	106.71
54	x	301	CHL	C4A-NA-C1A	10.07	111.23	106.71
50	x	307	CLA	C4A-NA-C1A	10.06	111.23	106.71
50	x	318	CLA	C4A-NA-C1A	10.06	111.23	106.71
50	x	302	CLA	C4A-NA-C1A	10.05	111.22	106.71
50	w	302	CLA	C4A-NA-C1A	10.02	111.21	106.71
50	x	309	CLA	C4A-NA-C1A	10.00	111.20	106.71
50	a	821	CLA	C4A-NA-C1A	9.99	111.20	106.71
50	b	801	CLA	C4A-NA-C1A	9.99	111.20	106.71
50	a	855	CLA	C4A-NA-C1A	9.97	111.19	106.71
50	b	822	CLA	C4A-NA-C1A	9.97	111.19	106.71
50	a	801	CLA	C4A-NA-C1A	9.95	111.18	106.71
50	a	815	CLA	C4A-NA-C1A	9.94	111.18	106.71
50	b	840	CLA	C4A-NA-C1A	9.93	111.17	106.71
50	a	834	CLA	C4A-NA-C1A	9.92	111.16	106.71
50	b	838	CLA	C4A-NA-C1A	9.85	111.14	106.71
54	w	309	CHL	C4A-NA-C1A	9.82	111.12	106.71
54	w	304	CHL	C4A-NA-C1A	9.80	111.11	106.71
50	b	808	CLA	C4A-NA-C1A	9.78	111.10	106.71
50	a	843	CLA	C4A-NA-C1A	9.77	111.10	106.71
50	b	836	CLA	C4A-NA-C1A	9.77	111.10	106.71
50	a	851	CLA	C4A-NA-C1A	9.75	111.09	106.71
50	z	302	CLA	C4A-NA-C1A	9.75	111.09	106.71
50	a	837	CLA	C4A-NA-C1A	9.75	111.09	106.71
50	z	309	CLA	C4A-NA-C1A	9.74	111.08	106.71
50	a	809	CLA	C4A-NA-C1A	9.74	111.08	106.71
50	y	306	CLA	C4A-NA-C1A	9.73	111.08	106.71
50	z	305	CLA	C4A-NA-C1A	9.72	111.08	106.71
50	b	846	CLA	C4A-NA-C1A	9.70	111.07	106.71
50	l	301	CLA	C4A-NA-C1A	9.69	111.06	106.71
54	w	311	CHL	C4A-NA-C1A	9.68	111.06	106.71
50	z	307	CLA	C4A-NA-C1A	9.65	111.05	106.71
50	f	303	CLA	C4A-NA-C1A	9.65	111.04	106.71
50	k	205	CLA	C4A-NA-C1A	9.64	111.04	106.71
50	y	305	CLA	C4A-NA-C1A	9.62	111.03	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	a	819	CLA	C4A-NA-C1A	9.62	111.03	106.71
50	x	316	CLA	C4A-NA-C1A	9.62	111.03	106.71
50	b	844	CLA	C4A-NA-C1A	9.61	111.03	106.71
50	a	823	CLA	C4A-NA-C1A	9.60	111.02	106.71
50	b	847	CLA	C4A-NA-C1A	9.60	111.02	106.71
50	a	845	CLA	C4A-NA-C1A	9.59	111.02	106.71
50	b	810	CLA	C4A-NA-C1A	9.59	111.02	106.71
50	b	832	CLA	C4A-NA-C1A	9.57	111.01	106.71
50	l	306	CLA	C4A-NA-C1A	9.55	111.00	106.71
50	a	835	CLA	C4A-NA-C1A	9.54	111.00	106.71
50	k	203	CLA	C4A-NA-C1A	9.54	110.99	106.71
50	z	306	CLA	C4A-NA-C1A	9.52	110.98	106.71
50	y	302	CLA	C4A-NA-C1A	9.51	110.98	106.71
50	a	841	CLA	C4A-NA-C1A	9.50	110.98	106.71
50	b	823	CLA	C4A-NA-C1A	9.49	110.97	106.71
50	w	306	CLA	C4A-NA-C1A	9.49	110.97	106.71
50	w	303	CLA	C4A-NA-C1A	9.46	110.96	106.71
54	x	311	CHL	C4A-NA-C1A	9.44	110.95	106.71
50	a	826	CLA	C4A-NA-C1A	9.41	110.94	106.71
50	g	204	CLA	C4A-NA-C1A	9.40	110.93	106.71
50	a	802	CLA	C4A-NA-C1A	9.38	110.92	106.71
50	b	839	CLA	C4A-NA-C1A	9.34	110.91	106.71
50	b	849	CLA	C4A-NA-C1A	9.32	110.90	106.71
50	z	319	CLA	C4A-NA-C1A	9.29	110.88	106.71
50	a	812	CLA	C4A-NA-C1A	9.28	110.88	106.71
50	x	310	CLA	C4A-NA-C1A	9.28	110.88	106.71
50	z	316	CLA	C4A-NA-C1A	9.24	110.86	106.71
50	b	851	CLA	C4A-NA-C1A	9.21	110.85	106.71
50	a	836	CLA	C4A-NA-C1A	9.21	110.85	106.71
50	y	307	CLA	C4A-NA-C1A	9.20	110.84	106.71
50	a	840	CLA	C4A-NA-C1A	9.14	110.82	106.71
50	a	842	CLA	C4A-NA-C1A	9.13	110.81	106.71
50	a	852	CLA	C4A-NA-C1A	9.12	110.81	106.71
50	a	817	CLA	C4A-NA-C1A	9.08	110.79	106.71
50	b	804	CLA	C4A-NA-C1A	9.08	110.79	106.71
50	a	833	CLA	C4A-NA-C1A	9.07	110.78	106.71
50	z	308	CLA	C4A-NA-C1A	9.06	110.78	106.71
50	b	812	CLA	C4A-NA-C1A	9.06	110.78	106.71
50	b	811	CLA	C4A-NA-C1A	9.03	110.77	106.71
50	a	849	CLA	C4A-NA-C1A	8.98	110.74	106.71
50	y	314	CLA	C4A-NA-C1A	8.97	110.74	106.71
50	b	825	CLA	C4A-NA-C1A	8.95	110.73	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	w	310	CLA	C4A-NA-C1A	8.94	110.73	106.71
50	b	835	CLA	C4A-NA-C1A	8.91	110.71	106.71
50	x	312	CLA	C4A-NA-C1A	8.89	110.70	106.71
50	z	303	CLA	C4A-NA-C1A	8.88	110.70	106.71
50	x	304	CLA	C4A-NA-C1A	8.85	110.68	106.71
50	a	820	CLA	C4A-NA-C1A	8.82	110.67	106.71
50	y	312	CLA	C4A-NA-C1A	8.80	110.66	106.71
50	b	834	CLA	C4A-NA-C1A	8.79	110.66	106.71
47	A	405	PQ9	C30-C28-C27	-8.78	103.34	121.12
50	a	844	CLA	C4A-NA-C1A	8.78	110.65	106.71
50	a	848	CLA	C4A-NA-C1A	8.78	110.65	106.71
50	b	828	CLA	C4A-NA-C1A	8.78	110.65	106.71
50	b	809	CLA	C4A-NA-C1A	8.75	110.64	106.71
50	a	816	CLA	C4A-NA-C1A	8.74	110.64	106.71
50	l	305	CLA	C4A-NA-C1A	8.71	110.62	106.71
50	x	313	CLA	C4A-NA-C1A	8.66	110.60	106.71
50	a	839	CLA	C4A-NA-C1A	8.58	110.56	106.71
50	g	203	CLA	C4A-NA-C1A	8.53	110.54	106.71
50	b	802	CLA	C4A-NA-C1A	8.52	110.54	106.71
50	w	307	CLA	C4A-NA-C1A	8.52	110.54	106.71
50	z	311	CLA	C4A-NA-C1A	8.49	110.52	106.71
50	a	854	CLA	C4A-NA-C1A	8.47	110.52	106.71
50	a	850	CLA	C4A-NA-C1A	8.45	110.51	106.71
50	x	303	CLA	C4A-NA-C1A	8.43	110.50	106.71
50	y	309	CLA	C4A-NA-C1A	8.19	110.39	106.71
50	a	818	CLA	C4A-NA-C1A	8.16	110.38	106.71
47	A	405	PQ9	C11-C12-C13	-8.12	113.28	126.79
50	b	842	CLA	C4A-NA-C1A	8.10	110.35	106.71
50	b	813	CLA	C4A-NA-C1A	8.07	110.33	106.71
50	a	856	CLA	C4A-NA-C1A	7.83	110.23	106.71
50	a	858	CLA	C4A-NA-C1A	7.81	110.22	106.71
50	a	813	CLA	C4A-NA-C1A	7.80	110.21	106.71
50	g	201	CLA	C4A-NA-C1A	7.76	110.19	106.71
52	a	808	CL0	CMD-C2D-C1D	7.71	138.30	124.71
47	A	405	PQ9	C16-C17-C18	-7.51	109.58	127.66
52	a	808	CL0	C2C-C1C-NC	6.97	116.50	109.97
52	a	808	CL0	C2D-C1D-ND	6.73	115.06	110.10
53	b	827	PQN	C14-C13-C15	6.71	126.55	115.27
53	a	825	PQN	C14-C13-C15	6.46	126.14	115.27
47	A	405	PQ9	C21-C22-C23	-6.45	112.13	127.66
47	A	405	PQ9	C26-C27-C28	-6.15	112.85	127.66
52	a	808	CL0	C1C-C2C-C3C	-5.87	100.78	106.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	845	CLA	C4A-NA-C1A	5.85	109.33	106.71
50	y	307	CLA	CAB-C3B-C4B	5.79	137.36	128.46
50	y	302	CLA	CAB-C3B-C4B	5.72	137.25	128.46
43	z	318	BCR	C16-C17-C18	-5.70	119.18	127.31
50	a	821	CLA	CAB-C3B-C4B	5.68	137.20	128.46
52	a	808	CL0	C4A-NA-C1A	5.56	109.21	106.71
50	y	302	CLA	C1C-NC-C4C	5.43	109.15	106.71
50	z	308	CLA	C1D-CHD-C4C	5.37	126.38	120.68
54	z	304	CHL	CAA-C2A-C3A	-5.22	103.91	116.10
52	a	808	CL0	C1B-C2B-C3B	-5.08	102.19	106.92
45	5	302	A1H1M	C36-C08-C07	5.08	123.32	112.59
45	5	302	A1H1M	C06-C07-C08	4.93	122.99	112.59
52	a	808	CL0	C3D-C2D-C1D	-4.90	99.15	105.83
45	5	302	A1H1M	C13-O14-C15	4.87	123.24	113.69
53	b	827	PQN	C15-C13-C12	-4.80	111.40	121.12
50	a	852	CLA	O2D-CGD-CBD	4.80	119.80	111.27
50	b	849	CLA	CMB-C2B-C1B	-4.68	121.27	128.46
52	a	808	CL0	C1D-ND-C4D	-4.60	103.07	106.33
45	F	804	A1H1M	C06-C07-C08	4.58	122.27	112.59
45	F	804	A1H1M	C13-O14-C15	4.53	122.59	113.69
48	F	801	SQD	O47-C7-C8	-4.47	101.86	111.50
53	a	825	PQN	C15-C13-C12	-4.42	112.18	121.12
50	y	307	CLA	CAB-C3B-C2B	-4.41	116.05	124.69
47	A	405	PQ9	C11-C2-C1	4.41	120.46	116.88
50	b	839	CLA	O2D-CGD-CBD	4.36	119.02	111.27
50	y	309	CLA	O2D-CGD-CBD	4.33	118.96	111.27
43	4	101	BCR	C16-C17-C18	-4.32	121.14	127.31
47	A	405	PQ9	C35-C33-C32	-4.32	109.82	120.50
50	a	821	CLA	CAB-C3B-C2B	-4.32	116.23	124.69
50	a	847	CLA	O2D-CGD-CBD	4.30	118.90	111.27
54	z	304	CHL	O2D-CGD-CBD	4.29	118.90	111.27
54	w	304	CHL	CAB-C3B-C4B	4.27	135.03	128.46
45	5	302	A1H1M	C09-C10-C11	4.25	117.36	110.82
50	a	818	CLA	O2D-CGD-CBD	4.25	118.82	111.27
50	a	822	CLA	CMB-C2B-C1B	-4.24	121.95	128.46
43	a	803	BCR	C21-C20-C19	-4.21	117.03	125.34
50	b	810	CLA	O2D-CGD-CBD	4.20	118.74	111.27
54	x	319	CHL	O2D-CGD-CBD	4.20	118.73	111.27
50	z	308	CLA	OBD-CAD-CBD	-4.20	120.97	124.98
50	y	302	CLA	CAB-C3B-C2B	-4.18	116.49	124.69
54	w	309	CHL	CAA-C2A-C3A	-4.14	103.91	114.26
50	x	312	CLA	O2D-CGD-CBD	4.13	118.61	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
52	a	808	CL0	CHD-C1D-ND	-4.13	120.66	124.45
50	b	837	CLA	O2D-CGD-CBD	4.12	118.59	111.27
50	b	840	CLA	O2D-CGD-CBD	4.11	118.58	111.27
54	w	311	CHL	O2D-CGD-CBD	4.11	118.58	111.27
50	w	310	CLA	CAC-C3C-C2C	4.09	134.52	127.53
50	b	843	CLA	O2D-CGD-CBD	4.09	118.53	111.27
50	a	812	CLA	O2D-CGD-CBD	4.08	118.53	111.27
50	a	813	CLA	O2D-CGD-CBD	4.07	118.51	111.27
50	b	815	CLA	O2D-CGD-CBD	4.07	118.50	111.27
50	h	201	CLA	O2D-CGD-CBD	4.06	118.48	111.27
54	x	301	CHL	CAA-C2A-C3A	-4.06	104.13	114.26
50	a	819	CLA	O2D-CGD-CBD	4.05	118.46	111.27
50	w	314	CLA	O2D-CGD-CBD	4.05	118.46	111.27
50	a	834	CLA	O2D-CGD-CBD	4.04	118.45	111.27
50	x	304	CLA	O2D-CGD-CBD	4.04	118.44	111.27
50	f	301	CLA	O2D-CGD-CBD	4.03	118.43	111.27
54	w	309	CHL	O2D-CGD-CBD	4.03	118.43	111.27
50	a	801	CLA	O2D-CGD-CBD	4.03	118.43	111.27
50	b	847	CLA	O2D-CGD-CBD	4.03	118.42	111.27
50	b	849	CLA	O2D-CGD-CBD	4.02	118.41	111.27
43	k	201	BCR	C15-C14-C13	-4.02	121.58	127.31
50	a	845	CLA	O2D-CGD-CBD	4.01	118.39	111.27
50	z	319	CLA	O2D-CGD-CBD	4.01	118.39	111.27
50	y	303	CLA	O2D-CGD-CBD	4.00	118.38	111.27
50	b	836	CLA	O2D-CGD-CBD	4.00	118.38	111.27
50	b	809	CLA	O2D-CGD-CBD	3.99	118.36	111.27
50	z	308	CLA	O2D-CGD-CBD	3.99	118.36	111.27
50	z	310	CLA	O2D-CGD-CBD	3.99	118.35	111.27
50	a	817	CLA	O2D-CGD-CBD	3.98	118.34	111.27
50	b	814	CLA	CMB-C2B-C1B	-3.97	122.36	128.46
50	b	845	CLA	O2D-CGD-CBD	3.97	118.32	111.27
50	a	826	CLA	O2D-CGD-CBD	3.96	118.31	111.27
50	x	313	CLA	O2D-CGD-CBD	3.95	118.29	111.27
50	x	303	CLA	O2D-CGD-CBD	3.95	118.29	111.27
50	z	311	CLA	O2D-CGD-CBD	3.93	118.25	111.27
50	a	809	CLA	O2D-CGD-CBD	3.93	118.25	111.27
50	y	313	CLA	O2D-CGD-CBD	3.93	118.25	111.27
50	a	822	CLA	O2D-CGD-CBD	3.92	118.24	111.27
50	x	308	CLA	O2D-CGD-CBD	3.92	118.24	111.27
50	b	832	CLA	O2D-CGD-CBD	3.91	118.22	111.27
50	g	201	CLA	O2D-CGD-CBD	3.91	118.22	111.27
50	g	203	CLA	O2D-CGD-CBD	3.89	118.18	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	w	303	CLA	O2D-CGD-CBD	3.89	118.18	111.27
50	x	310	CLA	O2D-CGD-CBD	3.89	118.18	111.27
50	l	305	CLA	O2D-CGD-CBD	3.89	118.17	111.27
50	b	834	CLA	O2D-CGD-CBD	3.88	118.17	111.27
50	a	836	CLA	O2D-CGD-CBD	3.87	118.15	111.27
50	j	102	CLA	O2D-CGD-CBD	3.87	118.14	111.27
50	b	814	CLA	CHD-C1D-ND	-3.87	120.90	124.45
50	w	302	CLA	O2D-CGD-CBD	3.86	118.12	111.27
50	f	302	CLA	O2D-CGD-CBD	3.86	118.12	111.27
50	b	805	CLA	O2D-CGD-CBD	3.86	118.12	111.27
50	a	816	CLA	O2D-CGD-CBD	3.85	118.11	111.27
50	a	824	CLA	O2D-CGD-CBD	3.85	118.11	111.27
50	z	302	CLA	O2D-CGD-CBD	3.85	118.11	111.27
54	x	311	CHL	O2D-CGD-CBD	3.85	118.10	111.27
50	b	842	CLA	O2D-CGD-CBD	3.85	118.10	111.27
45	5	302	A1H1M	C36-C35-C11	3.84	116.73	110.82
50	a	835	CLA	O2D-CGD-CBD	3.84	118.09	111.27
50	a	814	CLA	O2D-CGD-CBD	3.84	118.09	111.27
50	b	826	CLA	O2D-CGD-CBD	3.84	118.08	111.27
50	b	822	CLA	O2D-CGD-CBD	3.82	118.06	111.27
50	w	310	CLA	CAC-C3C-C4C	-3.82	119.85	124.81
50	b	828	CLA	O2D-CGD-CBD	3.82	118.06	111.27
50	b	851	CLA	CMB-C2B-C1B	-3.82	122.59	128.46
50	a	842	CLA	O2D-CGD-CBD	3.81	118.05	111.27
50	b	802	CLA	O2D-CGD-CBD	3.81	118.05	111.27
50	k	203	CLA	O2D-CGD-CBD	3.81	118.04	111.27
50	a	853	CLA	O2D-CGD-CBD	3.81	118.04	111.27
50	a	854	CLA	O2D-CGD-CBD	3.81	118.04	111.27
50	w	310	CLA	O2D-CGD-CBD	3.81	118.04	111.27
50	a	815	CLA	O2D-CGD-CBD	3.81	118.03	111.27
50	b	851	CLA	O2D-CGD-CBD	3.80	118.02	111.27
50	w	305	CLA	C4-C3-C5	-3.80	111.64	115.98
50	y	314	CLA	O2D-CGD-CBD	3.80	118.01	111.27
50	k	205	CLA	O2D-CGD-CBD	3.79	118.01	111.27
50	b	838	CLA	O2D-CGD-CBD	3.79	118.01	111.27
43	a	831	BCR	C19-C18-C17	-3.79	116.38	124.81
50	b	824	CLA	O2D-CGD-CBD	3.79	118.00	111.27
50	y	306	CLA	O2D-CGD-CBD	3.78	117.99	111.27
45	5	302	A1H1M	C09-C08-C07	-3.77	104.61	112.59
50	y	305	CLA	O2D-CGD-CBD	3.77	117.97	111.27
50	b	844	CLA	O2D-CGD-CBD	3.77	117.96	111.27
50	l	306	CLA	CMB-C2B-C1B	-3.76	122.68	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	833	CLA	O2D-CGD-CBD	3.76	117.95	111.27
50	a	821	CLA	O2D-CGD-CBD	3.76	117.94	111.27
50	x	302	CLA	O2D-CGD-CBD	3.75	117.94	111.27
50	l	301	CLA	O2D-CGD-CBD	3.75	117.93	111.27
54	x	301	CHL	O2D-CGD-CBD	3.75	117.93	111.27
50	b	823	CLA	O2D-CGD-CBD	3.75	117.93	111.27
50	y	307	CLA	O2D-CGD-CBD	3.75	117.93	111.27
50	x	316	CLA	O2D-CGD-CBD	3.75	117.93	111.27
50	z	316	CLA	O2D-CGD-CBD	3.75	117.92	111.27
50	a	846	CLA	O2D-CGD-CBD	3.74	117.92	111.27
50	b	814	CLA	O2D-CGD-CBD	3.74	117.92	111.27
50	a	855	CLA	O2D-CGD-CBD	3.74	117.91	111.27
50	a	848	CLA	O2D-CGD-CBD	3.74	117.91	111.27
50	y	311	CLA	O2D-CGD-CBD	3.74	117.91	111.27
50	w	316	CLA	CHD-C1D-ND	-3.74	121.02	124.45
50	z	306	CLA	O2D-CGD-CBD	3.73	117.89	111.27
50	b	847	CLA	CHD-C1D-ND	-3.72	121.03	124.45
50	b	846	CLA	O2D-CGD-CBD	3.72	117.88	111.27
50	x	307	CLA	O2D-CGD-CBD	3.72	117.88	111.27
50	w	315	CLA	O2D-CGD-CBD	3.72	117.88	111.27
50	x	318	CLA	O2D-CGD-CBD	3.72	117.88	111.27
50	a	850	CLA	O2D-CGD-CBD	3.71	117.85	111.27
50	b	806	CLA	O2D-CGD-CBD	3.70	117.84	111.27
50	b	804	CLA	O2D-CGD-CBD	3.69	117.83	111.27
50	b	803	CLA	CHD-C1D-ND	-3.69	121.06	124.45
50	a	857	CLA	O2D-CGD-CBD	3.69	117.82	111.27
50	a	840	CLA	O2D-CGD-CBD	3.68	117.81	111.27
50	b	825	CLA	O2D-CGD-CBD	3.68	117.81	111.27
50	b	835	CLA	O2D-CGD-CBD	3.68	117.80	111.27
50	y	312	CLA	O2D-CGD-CBD	3.67	117.80	111.27
50	z	307	CLA	O2D-CGD-CBD	3.67	117.80	111.27
54	z	312	CHL	CHD-C1D-ND	-3.67	121.08	124.45
50	a	841	CLA	O2D-CGD-CBD	3.67	117.79	111.27
50	x	309	CLA	O2D-CGD-CBD	3.67	117.79	111.27
50	y	312	CLA	C4-C3-C5	-3.67	111.79	115.98
50	w	307	CLA	O2D-CGD-CBD	3.67	117.78	111.27
50	k	204	CLA	O2D-CGD-CBD	3.66	117.78	111.27
50	y	302	CLA	O2D-CGD-CBD	3.66	117.77	111.27
50	b	808	CLA	O2D-CGD-CBD	3.65	117.75	111.27
50	a	858	CLA	O2D-CGD-CBD	3.65	117.75	111.27
50	b	811	CLA	CHD-C1D-ND	-3.65	121.10	124.45
45	F	804	A1H1M	C36-C08-C07	3.65	120.29	112.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	w	305	CLA	O2D-CGD-CBD	3.64	117.75	111.27
50	b	807	CLA	O2D-CGD-CBD	3.64	117.74	111.27
54	x	305	CHL	O2D-CGD-CBD	3.64	117.74	111.27
45	F	804	A1H1M	C09-C08-C07	-3.64	104.90	112.59
54	w	304	CHL	O2D-CGD-CBD	3.64	117.73	111.27
43	j	101	BCR	C2-C1-C6	3.64	116.08	110.48
50	a	837	CLA	O2D-CGD-CBD	3.63	117.72	111.27
53	a	825	PQN	C9-C10-C5	3.62	123.29	119.26
43	4	101	BCR	C15-C14-C13	-3.62	122.14	127.31
50	b	847	CLA	CMB-C2B-C1B	-3.62	122.90	128.46
50	f	303	CLA	O2D-CGD-CBD	3.62	117.69	111.27
50	w	307	CLA	CMB-C2B-C1B	-3.61	122.91	128.46
50	y	308	CLA	O2D-CGD-CBD	3.61	117.68	111.27
45	5	302	A1H1M	O14-C15-C18	3.61	117.36	109.75
50	b	848	CLA	O2D-CGD-CBD	3.61	117.68	111.27
50	a	856	CLA	O2D-CGD-CBD	3.61	117.68	111.27
50	b	803	CLA	O2D-CGD-CBD	3.60	117.67	111.27
53	b	827	PQN	C9-C10-C5	3.60	123.26	119.26
50	a	839	CLA	O2D-CGD-CBD	3.60	117.66	111.27
51	a	804	DGD	O6D-C1D-O3G	-3.59	101.48	109.97
50	a	820	CLA	O2D-CGD-CBD	3.58	117.63	111.27
43	l	303	BCR	C37-C22-C23	3.58	123.72	118.08
50	z	305	CLA	O2D-CGD-CBD	3.58	117.63	111.27
50	a	849	CLA	O2D-CGD-CBD	3.58	117.63	111.27
50	z	308	CLA	OBD-CAD-C3D	3.58	130.43	125.86
50	b	801	CLA	O2D-CGD-CBD	3.56	117.60	111.27
54	w	304	CHL	CAB-C3B-C2B	-3.56	117.71	124.69
50	a	833	CLA	O2D-CGD-CBD	3.56	117.59	111.27
50	b	813	CLA	O2D-CGD-CBD	3.55	117.58	111.27
50	x	306	CLA	O2D-CGD-CBD	3.53	117.54	111.27
50	w	306	CLA	O2D-CGD-CBD	3.53	117.54	111.27
50	a	851	CLA	O2D-CGD-CBD	3.53	117.53	111.27
50	w	303	CLA	CHD-C1D-ND	-3.52	121.22	124.45
43	j	101	BCR	C16-C17-C18	-3.52	122.28	127.31
50	a	802	CLA	O2D-CGD-CBD	3.52	117.52	111.27
50	a	843	CLA	O2D-CGD-CBD	3.52	117.52	111.27
43	a	827	BCR	C16-C17-C18	-3.52	122.29	127.31
50	a	838	CLA	O2D-CGD-CBD	3.52	117.52	111.27
50	y	304	CLA	CHD-C1D-ND	-3.51	121.23	124.45
48	w	318	SQD	O47-C7-C8	3.50	119.04	111.50
45	F	804	A1H1M	C36-C35-C11	3.50	116.19	110.82
50	x	302	CLA	CAA-C2A-C3A	-3.49	107.95	116.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	815	CLA	CHD-C1D-ND	-3.49	121.25	124.45
54	x	311	CHL	CAA-C2A-C3A	-3.49	104.34	114.44
50	a	844	CLA	O2D-CGD-CBD	3.48	117.46	111.27
50	l	306	CLA	O2D-CGD-CBD	3.48	117.46	111.27
50	a	823	CLA	O2D-CGD-CBD	3.47	117.44	111.27
50	w	308	CLA	CHD-C1D-ND	-3.47	121.26	124.45
50	a	835	CLA	CHD-C1D-ND	-3.46	121.27	124.45
50	z	306	CLA	CHD-C1D-ND	-3.45	121.28	124.45
50	z	303	CLA	O2D-CGD-CBD	3.44	117.38	111.27
43	j	103	BCR	C20-C21-C22	-3.44	122.40	127.31
50	a	841	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
50	a	844	CLA	CHD-C1D-ND	-3.43	121.30	124.45
54	z	312	CHL	O2D-CGD-CBD	3.43	117.36	111.27
50	a	837	CLA	O2A-CGA-CBA	3.43	122.67	111.91
50	a	854	CLA	CMB-C2B-C1B	-3.42	123.21	128.46
50	w	308	CLA	O2D-CGD-CBD	3.41	117.32	111.27
50	a	845	CLA	CMB-C2B-C1B	-3.41	123.23	128.46
50	a	820	CLA	CHD-C1D-ND	-3.40	121.33	124.45
50	y	310	CLA	O2D-CGD-CBD	3.39	117.29	111.27
50	b	849	CLA	CMB-C2B-C3B	3.39	131.02	124.68
50	b	848	CLA	CMB-C2B-C1B	-3.38	123.26	128.46
50	a	851	CLA	CMB-C2B-C1B	-3.37	123.28	128.46
50	a	822	CLA	C4-C3-C5	-3.37	112.13	115.98
50	b	841	CLA	O2D-CGD-CBD	3.37	117.25	111.27
50	a	842	CLA	CMB-C2B-C1B	-3.36	123.30	128.46
54	z	312	CHL	C1-C2-C3	3.36	131.86	126.04
50	b	838	CLA	CMB-C2B-C1B	-3.36	123.30	128.46
50	y	313	CLA	CMB-C2B-C1B	-3.34	123.33	128.46
50	z	309	CLA	O2D-CGD-CBD	3.34	117.20	111.27
50	b	835	CLA	CMB-C2B-C1B	-3.34	123.33	128.46
50	g	204	CLA	O2D-CGD-CBD	3.34	117.20	111.27
50	z	307	CLA	CMB-C2B-C1B	-3.33	123.35	128.46
43	b	850	BCR	C16-C17-C18	-3.32	122.57	127.31
43	b	819	BCR	C11-C10-C9	3.32	132.05	127.31
50	b	839	CLA	CMB-C2B-C1B	-3.32	123.36	128.46
50	y	302	CLA	O2A-CGA-CBA	3.32	122.32	111.91
43	k	201	BCR	C2-C1-C6	3.32	115.59	110.48
50	a	818	CLA	CMB-C2B-C1B	-3.31	123.37	128.46
50	a	811	CLA	CHD-C1D-ND	-3.30	121.42	124.45
50	y	308	CLA	CMB-C2B-C1B	-3.30	123.39	128.46
50	b	811	CLA	O2D-CGD-CBD	3.30	117.13	111.27
50	y	311	CLA	CMB-C2B-C1B	-3.30	123.39	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	z	309	CLA	CMB-C2B-C1B	-3.29	123.41	128.46
50	b	809	CLA	C12-C11-C10	-3.28	102.00	113.62
43	z	318	BCR	C20-C21-C22	-3.28	122.62	127.31
43	a	831	BCR	C19-C20-C21	-3.28	116.75	123.47
50	b	815	CLA	CMB-C2B-C1B	-3.27	123.43	128.46
43	x	314	BCR	C21-C20-C19	-3.27	113.02	123.22
45	F	804	A1H1M	O19-C20-O21	-3.27	101.55	110.67
50	b	804	CLA	CHD-C1D-ND	-3.26	121.45	124.45
43	b	831	BCR	C2-C1-C6	3.26	115.50	110.48
50	a	815	CLA	CHD-C1D-ND	-3.26	121.46	124.45
50	a	826	CLA	CMB-C2B-C1B	-3.25	123.46	128.46
50	a	819	CLA	CMB-C2B-C1B	-3.25	123.47	128.46
50	a	839	CLA	CHD-C1D-ND	-3.25	121.47	124.45
50	a	858	CLA	CHD-C1D-ND	-3.25	121.47	124.45
54	x	301	CHL	CHD-C1D-ND	-3.25	121.47	124.45
50	b	832	CLA	O2A-CGA-CBA	3.25	122.09	111.91
50	b	813	CLA	CHD-C1D-ND	-3.25	121.47	124.45
50	a	811	CLA	O2D-CGD-CBD	3.25	117.04	111.27
50	a	843	CLA	O2A-CGA-CBA	3.24	122.08	111.91
50	b	807	CLA	CHD-C1D-ND	-3.24	121.48	124.45
43	a	810	BCR	C37-C22-C23	3.24	121.75	114.60
50	b	844	CLA	CMB-C2B-C1B	-3.23	123.49	128.46
50	f	301	CLA	CMB-C2B-C1B	-3.23	123.50	128.46
50	x	312	CLA	CMB-C2B-C1B	-3.23	123.50	128.46
43	b	831	BCR	C20-C21-C22	-3.22	122.71	127.31
50	a	843	CLA	CHD-C1D-ND	-3.22	121.49	124.45
50	b	808	CLA	CHD-C1D-ND	-3.22	121.50	124.45
50	b	843	CLA	O2A-CGA-CBA	3.22	122.00	111.91
50	w	308	CLA	CMB-C2B-C1B	-3.21	123.53	128.46
50	b	812	CLA	CHD-C1D-ND	-3.21	121.50	124.45
50	y	311	CLA	C4-C3-C5	-3.20	112.32	115.98
50	b	812	CLA	CMB-C2B-C1B	-3.20	123.54	128.46
50	a	818	CLA	C12-C11-C10	-3.20	102.30	113.62
50	b	846	CLA	O2A-CGA-CBA	3.20	121.95	111.91
50	a	839	CLA	CMB-C2B-C1B	-3.20	123.55	128.46
50	z	308	CLA	CMB-C2B-C1B	-3.20	123.55	128.46
50	a	838	CLA	CMB-C2B-C1B	-3.19	123.56	128.46
50	g	201	CLA	O2A-CGA-CBA	3.19	121.92	111.91
50	b	812	CLA	O2D-CGD-CBD	3.18	116.92	111.27
50	w	315	CLA	CMB-C2B-C1B	-3.18	123.57	128.46
50	b	809	CLA	CMB-C2B-C1B	-3.18	123.58	128.46
54	x	305	CHL	C2C-C3C-C4C	3.18	108.75	106.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	802	CLA	O2A-CGA-CBA	3.17	121.86	111.91
50	b	842	CLA	O2A-CGA-CBA	3.17	121.86	111.91
50	g	201	CLA	CHD-C1D-ND	-3.16	121.55	124.45
50	a	847	CLA	CMB-C2B-C1B	-3.16	123.61	128.46
50	y	313	CLA	CHD-C1D-ND	-3.16	121.55	124.45
50	b	828	CLA	CMB-C2B-C1B	-3.16	123.61	128.46
50	f	301	CLA	CHD-C1D-ND	-3.16	121.55	124.45
43	b	831	BCR	C29-C30-C25	3.15	115.34	110.48
54	x	305	CHL	CAA-C2A-C3A	-3.15	104.14	112.78
50	x	304	CLA	CMB-C2B-C1B	-3.15	123.63	128.46
50	x	307	CLA	O2A-CGA-CBA	3.15	121.78	111.91
50	a	857	CLA	O2A-CGA-CBA	3.14	121.76	111.91
50	b	809	CLA	O2A-CGA-CBA	3.14	121.76	111.91
50	a	813	CLA	CHD-C1D-ND	-3.14	121.57	124.45
50	y	314	CLA	CHD-C1D-ND	-3.14	121.57	124.45
50	z	306	CLA	O2A-CGA-CBA	3.13	121.74	111.91
50	b	851	CLA	O2A-CGA-CBA	3.13	121.72	111.91
50	w	314	CLA	CHD-C1D-ND	-3.13	121.58	124.45
50	a	847	CLA	C2A-C3A-C4A	-3.13	104.31	110.29
50	a	840	CLA	CHD-C1D-ND	-3.13	121.58	124.45
50	a	821	CLA	C12-C11-C10	-3.12	102.58	113.62
50	a	849	CLA	CHD-C1D-ND	-3.12	121.59	124.45
50	a	839	CLA	O2A-CGA-CBA	3.12	121.70	111.91
43	k	201	BCR	C29-C30-C25	3.12	115.28	110.48
50	y	303	CLA	O2A-CGA-CBA	3.12	121.69	111.91
50	b	848	CLA	CHD-C1D-ND	-3.12	121.59	124.45
50	w	306	CLA	CMB-C2B-C1B	-3.11	123.68	128.46
50	a	802	CLA	O2A-CGA-CBA	3.11	121.66	111.91
50	b	822	CLA	CHD-C1D-ND	-3.11	121.60	124.45
50	b	839	CLA	CHD-C1D-ND	-3.11	121.60	124.45
50	a	822	CLA	CMB-C2B-C3B	3.11	130.49	124.68
50	x	304	CLA	CHD-C1D-ND	-3.10	121.60	124.45
50	y	306	CLA	CMB-C2B-C1B	-3.10	123.70	128.46
50	l	306	CLA	O2A-CGA-CBA	3.10	121.64	111.91
50	z	316	CLA	O2A-CGA-CBA	3.10	121.63	111.91
50	b	835	CLA	C12-C11-C10	-3.10	102.67	113.62
50	a	801	CLA	C1-C2-C3	3.10	131.40	126.04
50	b	846	CLA	CMB-C2B-C1B	-3.09	123.71	128.46
50	b	826	CLA	CHD-C1D-ND	-3.09	121.61	124.45
50	k	205	CLA	CHD-C1D-ND	-3.09	121.61	124.45
50	a	809	CLA	CMB-C2B-C1B	-3.09	123.71	128.46
50	a	823	CLA	CMB-C2B-C1B	-3.09	123.71	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	814	CLA	O2A-CGA-CBA	3.09	121.61	111.91
50	b	839	CLA	O2A-CGA-CBA	3.09	121.61	111.91
50	a	852	CLA	C4-C3-C5	-3.09	112.45	115.98
50	a	845	CLA	O2A-CGA-CBA	3.09	121.60	111.91
50	b	833	CLA	CMB-C2B-C1B	-3.09	123.72	128.46
50	b	837	CLA	O2A-CGA-CBA	3.09	121.59	111.91
50	a	843	CLA	CMB-C2B-C1B	-3.09	123.72	128.46
50	y	313	CLA	O2A-CGA-CBA	3.08	121.59	111.91
50	a	819	CLA	O2A-CGA-CBA	3.08	121.59	111.91
50	b	815	CLA	O2A-CGA-CBA	3.08	121.59	111.91
50	y	314	CLA	CMB-C2B-C1B	-3.08	123.73	128.46
50	y	310	CLA	O2A-CGA-CBA	3.08	121.58	111.91
50	a	855	CLA	CMB-C2B-C1B	-3.08	123.73	128.46
50	x	312	CLA	CHD-C1D-ND	-3.08	121.63	124.45
50	a	850	CLA	CMB-C2B-C1B	-3.08	123.74	128.46
50	b	845	CLA	CHD-C1D-ND	-3.08	121.63	124.45
50	w	305	CLA	O2A-CGA-CBA	3.07	121.55	111.91
50	y	314	CLA	O2A-CGA-CBA	3.07	121.55	111.91
54	w	309	CHL	CHD-C1D-ND	-3.07	121.63	124.45
50	w	302	CLA	CMB-C2B-C1B	-3.07	123.75	128.46
50	a	856	CLA	O2A-CGA-CBA	3.07	121.54	111.91
50	g	203	CLA	O2A-CGA-CBA	3.07	121.53	111.91
50	a	817	CLA	CMB-C2B-C1B	-3.07	123.75	128.46
50	k	204	CLA	O2A-CGA-CBA	3.07	121.53	111.91
50	b	806	CLA	O2A-CGA-CBA	3.07	121.53	111.91
43	b	817	BCR	C15-C14-C13	-3.06	122.94	127.31
50	z	319	CLA	CMB-C2B-C1B	-3.06	123.75	128.46
55	x	321	LUT	C28-C29-C30	3.06	123.64	118.94
50	a	811	CLA	O2A-CGA-CBA	3.06	121.52	111.91
50	b	825	CLA	CMB-C2B-C1B	-3.06	123.76	128.46
50	b	825	CLA	C1-C2-C3	3.06	131.33	126.04
50	a	824	CLA	O2A-CGA-CBA	3.06	121.50	111.91
50	w	314	CLA	CMB-C2B-C1B	-3.06	123.77	128.46
50	b	849	CLA	O2A-CGA-CBA	3.06	121.50	111.91
50	a	821	CLA	CHD-C1D-ND	-3.05	121.65	124.45
54	x	305	CHL	CHD-C1D-ND	-3.05	121.65	124.45
50	a	833	CLA	CMB-C2B-C1B	-3.05	123.77	128.46
50	z	303	CLA	CMB-C2B-C1B	-3.05	123.77	128.46
50	z	311	CLA	CMB-C2B-C1B	-3.05	123.77	128.46
50	b	810	CLA	O2A-CGA-CBA	3.05	121.49	111.91
50	a	836	CLA	CMB-C2B-C1B	-3.05	123.78	128.46
50	a	850	CLA	O2A-CGA-CBA	3.05	121.48	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	823	CLA	CMB-C2B-C1B	-3.04	123.78	128.46
50	l	305	CLA	CMB-C2B-C1B	-3.04	123.78	128.46
50	z	302	CLA	O2A-CGA-CBA	3.04	121.46	111.91
50	a	823	CLA	CHD-C1D-ND	-3.04	121.66	124.45
50	a	842	CLA	CHD-C1D-ND	-3.04	121.66	124.45
50	x	309	CLA	CMB-C2B-C1B	-3.04	123.78	128.46
50	x	304	CLA	O2A-CGA-CBA	3.04	121.46	111.91
50	b	834	CLA	CMB-C2B-C1B	-3.04	123.79	128.46
50	y	307	CLA	CMB-C2B-C1B	-3.04	123.79	128.46
50	a	818	CLA	O2A-CGA-CBA	3.04	121.44	111.91
50	a	834	CLA	CMB-C2B-C1B	-3.04	123.79	128.46
50	j	102	CLA	CMB-C2B-C1B	-3.04	123.79	128.46
50	w	315	CLA	CHD-C1D-ND	-3.04	121.66	124.45
50	f	302	CLA	CMB-C2B-C1B	-3.04	123.80	128.46
50	b	822	CLA	O2A-CGA-CBA	3.04	121.44	111.91
50	z	307	CLA	O2A-CGA-CBA	3.04	121.44	111.91
53	b	827	PQN	C2M-C2-C1	-3.04	111.24	116.27
50	b	806	CLA	CHD-C1D-ND	-3.03	121.67	124.45
50	w	316	CLA	O2A-CGA-CBA	3.03	121.42	111.91
50	a	834	CLA	O2A-CGA-CBA	3.03	121.42	111.91
50	a	815	CLA	O2A-CGA-CBA	3.03	121.42	111.91
50	w	316	CLA	CMB-C2B-C1B	-3.03	123.81	128.46
50	a	853	CLA	CMB-C2B-C1B	-3.03	123.81	128.46
50	y	310	CLA	CHD-C1D-ND	-3.03	121.67	124.45
50	b	841	CLA	O2A-CGA-CBA	3.02	121.40	111.91
52	a	808	CL0	CMC-C2C-C1C	3.02	129.65	125.04
50	a	852	CLA	CMB-C2B-C1B	-3.02	123.82	128.46
50	x	313	CLA	CMB-C2B-C1B	-3.02	123.82	128.46
43	l	303	BCR	C24-C23-C22	3.02	130.80	126.23
54	w	304	CHL	CAA-C2A-C3A	-3.02	104.51	112.78
50	k	205	CLA	CMB-C2B-C1B	-3.02	123.83	128.46
50	a	822	CLA	O2A-CGA-CBA	3.02	121.37	111.91
50	w	302	CLA	O2A-CGA-CBA	3.02	121.37	111.91
50	z	311	CLA	O2A-CGA-CBA	3.02	121.37	111.91
50	x	307	CLA	CMB-C2B-C1B	-3.01	123.83	128.46
50	b	832	CLA	CHD-C1D-ND	-3.01	121.69	124.45
54	z	304	CHL	CHD-C1D-ND	-3.01	121.69	124.45
50	z	306	CLA	CMB-C2B-C1B	-3.01	123.83	128.46
50	z	316	CLA	CMB-C2B-C1B	-3.01	123.84	128.46
50	x	303	CLA	O2A-CGA-CBA	3.01	121.35	111.91
50	b	813	CLA	CMB-C2B-C1B	-3.01	123.84	128.46
50	y	305	CLA	CMB-C2B-C1B	-3.01	123.84	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	824	CLA	CMB-C2B-C1B	-3.01	123.84	128.46
54	w	311	CHL	CAA-C2A-C3A	-3.01	104.54	112.78
52	a	808	CL0	O2D-CGD-O1D	-3.01	117.26	124.09
50	x	316	CLA	CMB-C2B-C1B	-3.01	123.84	128.46
50	a	851	CLA	CHD-C1D-ND	-3.00	121.69	124.45
50	b	806	CLA	CMB-C2B-C1B	-3.00	123.85	128.46
50	b	845	CLA	O2A-CGA-CBA	3.00	121.33	111.91
43	b	817	BCR	C2-C1-C6	3.00	115.10	110.48
50	b	805	CLA	O2A-CGA-CBA	3.00	121.31	111.91
50	b	837	CLA	CMB-C2B-C1B	-3.00	123.86	128.46
50	a	815	CLA	CMB-C2B-C1B	-3.00	123.86	128.46
50	a	813	CLA	O2A-CGA-CBA	3.00	121.31	111.91
50	w	303	CLA	CMB-C2B-C1B	-2.99	123.86	128.46
50	a	820	CLA	CMB-C2B-C1B	-2.99	123.86	128.46
50	y	309	CLA	CMB-C2B-C1B	-2.99	123.86	128.46
50	z	302	CLA	CMB-C2B-C1B	-2.99	123.86	128.46
43	j	103	BCR	C16-C17-C18	-2.99	123.04	127.31
50	a	824	CLA	CMB-C2B-C1B	-2.99	123.86	128.46
50	a	852	CLA	O2A-CGA-CBA	2.99	121.29	111.91
50	y	312	CLA	O2A-CGA-CBA	2.99	121.29	111.91
50	b	812	CLA	C1-C2-C3	2.99	131.21	126.04
50	k	203	CLA	CMB-C2B-C1B	-2.99	123.87	128.46
50	a	816	CLA	CMB-C2B-C1B	-2.99	123.87	128.46
50	b	843	CLA	CMB-C2B-C1B	-2.99	123.87	128.46
50	a	818	CLA	CHD-C1D-ND	-2.99	121.71	124.45
50	x	302	CLA	CMB-C2B-C1B	-2.99	123.87	128.46
50	a	816	CLA	CHD-C1D-ND	-2.98	121.71	124.45
50	b	842	CLA	CMB-C2B-C1B	-2.98	123.88	128.46
50	z	303	CLA	CMA-C3A-C2A	-2.98	109.14	116.10
50	a	856	CLA	CMB-C2B-C1B	-2.98	123.88	128.46
50	b	851	CLA	CHD-C1D-ND	-2.98	121.71	124.45
50	b	841	CLA	CMB-C2B-C1B	-2.98	123.89	128.46
50	y	311	CLA	CHD-C1D-ND	-2.98	121.72	124.45
50	a	809	CLA	O2A-CGA-CBA	2.98	121.25	111.91
50	x	302	CLA	C2A-C1A-CHA	2.98	129.05	123.85
50	a	824	CLA	CHD-C1D-ND	-2.98	121.72	124.45
50	b	836	CLA	CMB-C2B-C1B	-2.97	123.89	128.46
50	w	306	CLA	O2A-CGA-CBA	2.97	121.24	111.91
50	a	850	CLA	CHD-C1D-ND	-2.97	121.72	124.45
50	y	304	CLA	CMB-C2B-C1B	-2.97	123.90	128.46
50	x	303	CLA	C2D-C1D-ND	2.97	112.29	110.10
50	b	845	CLA	CMB-C2B-C1B	-2.97	123.90	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	a	813	CLA	CMB-C2B-C1B	-2.97	123.90	128.46
50	a	848	CLA	O2A-CGA-CBA	2.97	121.23	111.91
50	y	310	CLA	CMB-C2B-C1B	-2.97	123.90	128.46
50	z	305	CLA	CMB-C2B-C1B	-2.97	123.90	128.46
50	x	313	CLA	O2A-CGA-CBA	2.97	121.22	111.91
50	l	301	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
50	g	204	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
50	y	312	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
50	b	810	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
50	z	310	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
50	a	821	CLA	O2A-CGA-CBA	2.96	121.21	111.91
50	b	828	CLA	CHD-C1D-ND	-2.96	121.73	124.45
50	b	826	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
50	w	305	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
50	l	301	CLA	CHD-C1D-ND	-2.96	121.73	124.45
50	a	836	CLA	O2A-CGA-CBA	2.96	121.19	111.91
50	a	833	CLA	C1-C2-C3	2.96	131.16	126.04
50	a	823	CLA	O2A-CGA-CBA	2.96	121.19	111.91
50	b	801	CLA	O2A-CGA-CBA	2.96	121.19	111.91
50	b	811	CLA	CMB-C2B-C1B	-2.95	123.92	128.46
50	x	310	CLA	CMB-C2B-C1B	-2.95	123.92	128.46
50	a	840	CLA	CMB-C2B-C1B	-2.95	123.93	128.46
50	a	801	CLA	CMB-C2B-C1B	-2.95	123.93	128.46
50	x	318	CLA	CMB-C2B-C1B	-2.95	123.93	128.46
50	b	844	CLA	CHD-C1D-ND	-2.95	121.75	124.45
50	a	842	CLA	O2A-CGA-CBA	2.95	121.15	111.91
50	a	833	CLA	CHD-C1D-ND	-2.94	121.75	124.45
50	b	844	CLA	O2A-CGA-CBA	2.94	121.14	111.91
50	a	802	CLA	CMB-C2B-C1B	-2.94	123.94	128.46
50	a	809	CLA	CHD-C1D-ND	-2.94	121.75	124.45
54	x	305	CHL	CBC-CAC-C3C	-2.94	104.34	112.43
50	b	802	CLA	CMB-C2B-C1B	-2.93	123.95	128.46
50	a	856	CLA	CHD-C1D-ND	-2.93	121.76	124.45
50	a	838	CLA	CHD-C1D-ND	-2.93	121.76	124.45
50	f	301	CLA	O2A-CGA-CBA	2.93	121.10	111.91
50	b	804	CLA	CMB-C2B-C1B	-2.92	123.97	128.46
50	f	302	CLA	CHD-C1D-ND	-2.92	121.77	124.45
50	y	302	CLA	CMB-C2B-C1B	-2.92	123.98	128.46
50	a	814	CLA	CMB-C2B-C1B	-2.91	123.99	128.46
50	a	835	CLA	O2A-CGA-CBA	2.91	121.05	111.91
50	a	835	CLA	CMB-C2B-C1B	-2.91	123.99	128.46
43	a	810	BCR	C11-C12-C13	2.90	134.57	126.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	838	CLA	CHD-C1D-ND	-2.90	121.79	124.45
50	w	310	CLA	CHD-C1D-ND	-2.90	121.79	124.45
50	a	857	CLA	CMB-C2B-C1B	-2.90	124.00	128.46
50	x	306	CLA	CMB-C2B-C1B	-2.90	124.00	128.46
50	b	803	CLA	C1-C2-C3	2.90	131.06	126.04
50	a	837	CLA	CHD-C1D-ND	-2.90	121.79	124.45
50	b	838	CLA	O2A-CGA-CBA	2.90	121.00	111.91
50	x	307	CLA	CHD-C1D-ND	-2.90	121.79	124.45
50	w	310	CLA	CMC-C2C-C1C	-2.90	120.62	125.04
50	z	305	CLA	O2A-CGA-CBA	2.90	121.00	111.91
50	x	308	CLA	O2A-CGA-CBA	2.90	121.00	111.91
43	b	819	BCR	C15-C14-C13	-2.90	123.18	127.31
50	w	306	CLA	CHD-C1D-ND	-2.90	121.79	124.45
50	a	841	CLA	O2A-CGA-CBA	2.90	120.99	111.91
50	b	826	CLA	O2A-CGA-CBA	2.90	120.99	111.91
50	b	840	CLA	CMB-C2B-C1B	-2.90	124.01	128.46
50	g	203	CLA	CMB-C2B-C1B	-2.90	124.01	128.46
50	y	311	CLA	O2A-CGA-CBA	2.89	120.99	111.91
54	w	304	CHL	CHD-C1D-ND	-2.89	121.79	124.45
50	g	201	CLA	CMB-C2B-C1B	-2.89	124.02	128.46
50	b	809	CLA	CHD-C1D-ND	-2.89	121.80	124.45
50	b	835	CLA	O2A-CGA-CBA	2.89	120.98	111.91
50	a	853	CLA	CHD-C1D-ND	-2.89	121.80	124.45
50	a	811	CLA	CMB-C2B-C1B	-2.89	124.03	128.46
50	b	807	CLA	O2A-CGA-CBA	2.89	120.96	111.91
50	b	803	CLA	O2A-CGA-CBA	2.89	120.96	111.91
50	f	303	CLA	CMB-C2B-C1B	-2.89	124.03	128.46
50	x	312	CLA	O2A-CGA-CBA	2.88	120.96	111.91
50	a	814	CLA	O2A-CGA-CBA	2.88	120.96	111.91
50	w	310	CLA	CMB-C2B-C1B	-2.88	124.03	128.46
50	a	849	CLA	O2A-CGA-CBA	2.88	120.95	111.91
50	y	308	CLA	O2A-CGA-CBA	2.88	120.94	111.91
50	y	310	CLA	C1-C2-C3	2.88	131.02	126.04
50	l	306	CLA	CHD-C1D-ND	-2.88	121.81	124.45
50	a	858	CLA	O2A-CGA-CBA	2.88	120.94	111.91
50	b	805	CLA	CHD-C1D-ND	-2.88	121.81	124.45
50	a	846	CLA	O2A-CGA-CBA	2.88	120.93	111.91
50	b	849	CLA	CHD-C1D-ND	-2.87	121.81	124.45
50	b	836	CLA	O2A-CGA-CBA	2.87	120.93	111.91
50	b	823	CLA	O2A-CGA-CBA	2.87	120.93	111.91
43	b	820	BCR	C15-C14-C13	-2.87	123.21	127.31
50	a	848	CLA	CHD-C1D-ND	-2.87	121.81	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	j	102	CLA	CHD-C1D-ND	-2.87	121.82	124.45
50	a	820	CLA	O2A-CGA-CBA	2.87	120.92	111.91
50	b	847	CLA	O2A-CGA-CBA	2.87	120.91	111.91
50	b	843	CLA	CHD-C1D-ND	-2.87	121.82	124.45
50	b	832	CLA	CMB-C2B-C1B	-2.87	124.06	128.46
50	k	204	CLA	CMB-C2B-C1B	-2.87	124.06	128.46
50	w	310	CLA	O2A-CGA-CBA	2.87	120.90	111.91
50	b	824	CLA	O2A-CGA-CBA	2.86	120.90	111.91
50	y	303	CLA	CMB-C2B-C1B	-2.86	124.06	128.46
50	w	316	CLA	O1D-CGD-CBD	-2.86	118.63	124.48
50	x	308	CLA	CMB-C2B-C1B	-2.86	124.07	128.46
50	b	814	CLA	CMB-C2B-C3B	2.86	130.02	124.68
50	b	822	CLA	CMB-C2B-C1B	-2.85	124.08	128.46
50	a	853	CLA	O2A-CGA-CBA	2.85	120.86	111.91
50	a	838	CLA	O2A-CGA-CBA	2.85	120.84	111.91
50	b	840	CLA	O2A-CGA-CBA	2.85	120.84	111.91
50	w	308	CLA	O2A-CGA-CBA	2.85	120.84	111.91
50	x	306	CLA	CHD-C1D-ND	-2.84	121.84	124.45
50	y	312	CLA	CHD-C1D-ND	-2.84	121.84	124.45
45	F	804	A1H1M	C09-C10-C11	2.84	115.19	110.82
50	b	833	CLA	O2A-CGA-CBA	2.84	120.82	111.91
50	a	801	CLA	O2A-CGA-CBA	2.84	120.82	111.91
50	a	837	CLA	CMB-C2B-C1B	-2.84	124.10	128.46
50	z	303	CLA	CHD-C1D-ND	-2.84	121.85	124.45
51	b	821	DGD	O6D-C1D-O3G	-2.83	103.26	109.97
52	a	808	CL0	CHB-C4A-NA	2.83	128.68	124.34
50	w	302	CLA	CHD-C1D-ND	-2.83	121.85	124.45
50	h	201	CLA	CMB-C2B-C1B	-2.83	124.11	128.46
50	y	303	CLA	C1-C2-C3	2.83	130.94	126.04
50	x	309	CLA	CHD-C1D-ND	-2.83	121.85	124.45
50	l	305	CLA	CHD-C1D-ND	-2.83	121.85	124.45
43	z	318	BCR	C15-C14-C13	-2.83	123.27	127.31
50	b	828	CLA	O2A-CGA-CBA	2.83	120.78	111.91
50	b	803	CLA	CMB-C2B-C1B	-2.83	124.12	128.46
50	z	316	CLA	CHD-C1D-ND	-2.83	121.86	124.45
50	b	825	CLA	O2A-CGA-CBA	2.83	120.78	111.91
50	w	316	CLA	O2D-CGD-O1D	-2.83	118.31	123.84
43	i	101	BCR	C16-C17-C18	-2.82	123.28	127.31
50	a	857	CLA	C1-C2-C3	2.82	130.91	126.04
50	b	834	CLA	CHD-C1D-ND	-2.82	121.87	124.45
50	b	805	CLA	CMB-C2B-C1B	-2.81	124.14	128.46
53	b	827	PQN	C11-C3-C4	-2.81	115.49	118.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	k	201	BCR	C16-C15-C14	-2.81	117.72	123.47
43	4	101	BCR	C29-C30-C25	2.81	114.81	110.48
54	z	312	CHL	CAA-C2A-C3A	-2.81	105.09	112.78
50	b	808	CLA	CMB-C2B-C1B	-2.80	124.15	128.46
50	b	802	CLA	C1-C2-C3	2.80	130.89	126.04
50	a	817	CLA	CMA-C3A-C2A	-2.80	109.56	116.10
52	a	808	CL0	C3C-C4C-NC	2.80	113.71	110.57
50	a	855	CLA	CHD-C1D-ND	-2.80	121.88	124.45
50	a	844	CLA	O2A-CGA-CBA	2.80	120.68	111.91
50	b	807	CLA	CMB-C2B-C1B	-2.80	124.17	128.46
50	x	303	CLA	CHD-C1D-ND	-2.80	121.89	124.45
43	a	810	BCR	C2-C1-C6	2.79	114.78	110.48
46	7	301	LMG	C1-O6-C5	2.79	119.17	113.69
50	b	825	CLA	CHD-C1D-ND	-2.79	121.89	124.45
54	z	304	CHL	CMA-C3A-C2A	-2.79	109.59	116.10
50	x	307	CLA	C1-C2-C3	2.79	130.86	126.04
45	F	804	A1H1M	O14-C13-C33	2.78	116.24	110.35
50	b	802	CLA	CHD-C1D-ND	-2.78	121.89	124.45
50	g	203	CLA	CHD-C1D-ND	-2.78	121.90	124.45
50	y	306	CLA	CHD-C1D-ND	-2.77	121.84	124.52
50	a	821	CLA	CMB-C2B-C1B	-2.77	124.20	128.46
50	a	849	CLA	CMB-C2B-C1B	-2.77	124.21	128.46
43	b	818	BCR	C2-C1-C6	2.77	114.74	110.48
54	w	311	CHL	CHD-C1D-ND	-2.77	121.91	124.45
50	z	307	CLA	C1-C2-C3	2.77	130.83	126.04
50	a	854	CLA	CHD-C1D-ND	-2.77	121.91	124.45
50	y	302	CLA	CHD-C1D-ND	-2.77	121.91	124.45
50	a	812	CLA	O2A-CGA-CBA	2.76	120.58	111.91
50	z	310	CLA	C2A-C1A-CHA	2.76	128.68	123.85
50	a	809	CLA	C1-C2-C3	2.76	130.82	126.04
46	H	401	LMG	C4-C3-C2	-2.76	106.01	110.82
50	a	812	CLA	CHD-C1D-ND	-2.76	121.92	124.45
50	a	858	CLA	CMB-C2B-C1B	-2.75	124.23	128.46
54	x	319	CHL	CHD-C1D-ND	-2.75	121.92	124.45
50	a	848	CLA	CMB-C2B-C1B	-2.75	124.23	128.46
50	w	310	CLA	O1D-CGD-CBD	-2.75	118.86	124.48
50	a	846	CLA	CMB-C2B-C1B	-2.75	124.24	128.46
53	b	827	PQN	C9-C10-C1	-2.75	116.07	120.10
50	a	826	CLA	CHD-C1D-ND	-2.75	121.93	124.45
50	f	303	CLA	CHD-C1D-ND	-2.75	121.93	124.45
50	x	310	CLA	CHD-C1D-ND	-2.74	121.93	124.45
50	b	832	CLA	C1-C2-C3	2.74	130.78	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	b	850	BCR	C2-C1-C6	2.74	114.70	110.48
50	b	851	CLA	CMB-C2B-C3B	2.74	129.80	124.68
43	k	202	BCR	C2-C1-C6	2.74	114.70	110.48
45	F	804	A1H1M	C37-C07-C08	-2.74	106.81	112.59
50	a	802	CLA	CHD-C1D-ND	-2.74	121.94	124.45
50	b	847	CLA	C1-C2-C3	2.73	130.77	126.04
43	b	816	BCR	C2-C1-C6	2.73	114.69	110.48
50	a	850	CLA	C1-C2-C3	2.73	130.77	126.04
50	l	306	CLA	CMB-C2B-C3B	2.73	129.78	124.68
52	a	808	CL0	O2A-CGA-CBA	2.73	124.59	110.26
43	y	301	BCR	C37-C22-C23	2.73	122.37	118.08
50	f	303	CLA	CMA-C3A-C2A	-2.73	109.74	116.10
50	y	303	CLA	CHD-C1D-ND	-2.73	121.95	124.45
50	x	318	CLA	CHD-C1D-ND	-2.73	121.88	124.52
50	b	841	CLA	O1D-CGD-CBD	-2.73	118.91	124.48
48	F	801	SQD	O47-C45-C46	-2.72	98.54	108.40
50	y	302	CLA	C1-C2-C3	2.72	130.75	126.04
50	b	840	CLA	C1-C2-C3	2.72	130.75	126.04
50	k	203	CLA	CHD-C1D-ND	-2.72	121.95	124.45
48	a	859	SQD	O47-C7-C8	2.72	117.36	111.50
50	x	303	CLA	C1-C2-C3	2.72	130.74	126.04
46	D	601	LMG	O1-C7-C8	-2.71	104.35	110.90
43	a	810	BCR	C11-C10-C9	-2.71	123.44	127.31
53	a	825	PQN	C6-C5-C4	-2.71	116.12	120.10
50	a	819	CLA	CHD-C1D-ND	-2.71	121.96	124.45
46	H	401	LMG	C1-O6-C5	2.71	119.01	113.69
50	a	833	CLA	O2A-CGA-CBA	2.71	120.42	111.91
46	j	104	LMG	O1-C7-C8	-2.71	104.36	110.90
43	a	827	BCR	C23-C22-C21	-2.71	118.78	124.81
50	a	815	CLA	C1-C2-C3	2.71	130.73	126.04
50	x	308	CLA	CHD-C1D-ND	-2.71	121.97	124.45
53	b	827	PQN	C6-C5-C4	-2.71	116.13	120.10
50	b	846	CLA	CHD-C1D-ND	-2.71	121.97	124.45
50	x	313	CLA	C2A-C1A-CHA	2.70	128.59	123.86
50	g	203	CLA	C1-C2-C3	2.70	130.72	126.04
50	a	822	CLA	CHD-C1D-ND	-2.70	121.97	124.45
43	b	850	BCR	C20-C21-C22	-2.70	123.45	127.31
50	x	303	CLA	CMB-C2B-C1B	-2.70	124.31	128.46
43	b	820	BCR	C15-C16-C17	-2.70	117.95	123.47
50	z	306	CLA	C2A-C1A-CHA	2.70	128.57	123.86
50	a	847	CLA	CHD-C1D-ND	-2.70	121.98	124.45
52	a	808	CL0	C4D-C3D-CAD	2.69	111.27	108.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	823	CLA	CHD-C1D-ND	-2.69	121.98	124.45
50	a	857	CLA	CHD-C1D-ND	-2.69	121.98	124.45
50	z	310	CLA	CHD-C1D-ND	-2.69	121.98	124.45
46	7	301	LMG	C1-C2-C3	-2.69	104.40	110.00
43	b	816	BCR	C29-C30-C25	2.68	114.61	110.48
50	b	810	CLA	CHD-C1D-ND	-2.68	121.99	124.45
43	x	314	BCR	C29-C30-C25	2.68	114.61	110.48
54	x	311	CHL	CHD-C1D-ND	-2.68	121.99	124.45
43	j	103	BCR	C2-C1-C6	2.68	114.61	110.48
50	b	836	CLA	C1-C2-C3	2.68	130.68	126.04
51	x	317	DGD	O6D-C1D-O3G	-2.68	103.64	109.97
50	a	845	CLA	C1-C2-C3	2.67	130.66	126.04
50	b	812	CLA	O2A-CGA-CBA	2.67	120.29	111.91
50	a	844	CLA	CMB-C2B-C1B	-2.67	124.36	128.46
43	k	202	BCR	C29-C30-C25	2.67	114.59	110.48
50	a	852	CLA	CHD-C1D-ND	-2.66	122.00	124.45
50	z	306	CLA	O2A-CGA-O1A	-2.66	116.87	123.59
50	a	836	CLA	CHD-C1D-ND	-2.66	122.01	124.45
50	z	319	CLA	C2D-C1D-ND	2.66	112.07	110.10
50	g	204	CLA	O1D-CGD-CBD	-2.66	119.04	124.48
50	a	817	CLA	CHD-C1D-ND	-2.66	122.01	124.45
54	z	312	CHL	C2A-C3A-C4A	2.66	106.16	101.87
50	w	305	CLA	C1-C2-C3	2.66	130.64	126.04
43	a	829	BCR	C29-C30-C25	2.65	114.57	110.48
50	a	837	CLA	C1-C2-C3	2.65	130.63	126.04
50	a	812	CLA	C1-C2-C3	2.65	130.63	126.04
50	a	835	CLA	C1-C2-C3	2.65	130.63	126.04
54	x	319	CHL	O2A-CGA-CBA	2.65	120.22	111.91
50	b	841	CLA	CHD-C1D-ND	-2.65	122.02	124.45
50	b	847	CLA	CMB-C2B-C3B	2.65	129.63	124.68
43	g	202	BCR	C16-C17-C18	-2.65	123.53	127.31
43	i	101	BCR	C2-C1-C6	2.64	114.55	110.48
50	l	305	CLA	CMA-C3A-C2A	-2.64	109.93	116.10
50	a	854	CLA	O2A-CGA-CBA	2.64	120.20	111.91
46	z	315	LMG	O1-C7-C8	-2.64	104.52	110.90
50	w	305	CLA	CHD-C1D-ND	-2.64	122.03	124.45
50	y	314	CLA	C1-C2-C3	2.64	130.60	126.04
50	b	849	CLA	C2D-C1D-ND	2.63	112.04	110.10
50	w	307	CLA	C2A-C1A-CHA	2.63	128.46	123.86
50	b	842	CLA	CHD-C1D-ND	-2.63	122.04	124.45
54	x	319	CHL	CAA-C2A-C3A	-2.63	105.58	112.78
50	b	807	CLA	C1-C2-C3	2.62	130.58	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	842	CLA	C1-C2-C3	2.62	130.58	126.04
54	z	312	CHL	O1D-CGD-CBD	-2.62	119.12	124.48
50	a	834	CLA	CHD-C1D-ND	-2.62	122.05	124.45
50	b	801	CLA	CMB-C2B-C1B	-2.62	124.44	128.46
54	z	312	CHL	O2A-CGA-CBA	2.62	120.12	111.91
54	w	309	CHL	CMB-C2B-C1B	-2.61	124.45	128.46
50	a	849	CLA	C1-C2-C3	2.61	130.56	126.04
50	a	820	CLA	C1-C2-C3	2.61	130.56	126.04
50	a	824	CLA	C4-C3-C5	-2.60	110.90	115.27
50	b	837	CLA	CHD-C1D-ND	-2.60	122.06	124.45
50	b	804	CLA	CMA-C3A-C2A	-2.60	110.03	116.10
54	w	304	CHL	CMB-C2B-C1B	-2.60	124.47	128.46
50	b	835	CLA	C1-C2-C3	2.60	130.54	126.04
50	k	204	CLA	C1-C2-C3	2.60	130.53	126.04
50	w	310	CLA	CBC-CAC-C3C	2.60	119.59	112.43
50	x	312	CLA	C1-C2-C3	2.59	130.53	126.04
50	y	305	CLA	CHD-C1D-ND	-2.59	122.07	124.45
50	h	201	CLA	CHD-C1D-ND	-2.59	122.07	124.45
50	a	846	CLA	CHD-C1D-ND	-2.59	122.07	124.45
50	b	836	CLA	CHD-C1D-ND	-2.59	122.07	124.45
50	z	307	CLA	CHD-C1D-ND	-2.59	122.07	124.45
50	a	843	CLA	C1-C2-C3	2.59	130.52	126.04
54	z	304	CHL	C2A-C3A-C4A	2.59	105.09	101.78
53	a	825	PQN	C9-C10-C1	-2.59	116.31	120.10
50	x	313	CLA	C1-C2-C3	2.59	130.52	126.04
43	a	829	BCR	C2-C1-C6	2.59	114.46	110.48
51	b	821	DGD	O5D-C6D-C5D	-2.58	104.27	109.05
50	y	307	CLA	CHD-C1D-ND	-2.58	122.08	124.45
50	b	835	CLA	CHD-C1D-ND	-2.58	122.08	124.45
47	A	405	PQ9	C11-C2-C3	-2.58	119.91	123.30
50	b	803	CLA	C2D-C1D-ND	2.58	112.00	110.10
50	z	319	CLA	CHD-C1D-ND	-2.58	122.09	124.45
43	z	318	BCR	C2-C1-C6	2.57	114.44	110.48
54	z	312	CHL	CMB-C2B-C1B	-2.57	124.51	128.46
50	b	841	CLA	C1-C2-C3	2.57	130.49	126.04
53	a	825	PQN	C10-C5-C4	2.57	123.46	120.68
54	z	304	CHL	CMB-C2B-C1B	-2.57	124.51	128.46
43	a	829	BCR	C28-C27-C26	-2.57	109.48	114.08
50	a	846	CLA	C1-C2-C3	2.57	130.49	126.04
46	w	312	LMG	O1-C7-C8	-2.57	104.70	110.90
50	y	308	CLA	CHD-C1D-ND	-2.57	122.09	124.45
43	b	817	BCR	C15-C16-C17	-2.57	118.21	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	x	301	CHL	CMB-C2B-C1B	-2.57	124.52	128.46
54	w	311	CHL	C2C-C3C-C4C	2.56	108.31	106.49
50	b	815	CLA	C1-C2-C3	2.56	130.47	126.04
50	a	858	CLA	C1-C2-C3	2.56	130.46	126.04
50	k	203	CLA	CAA-C2A-C3A	-2.56	110.14	116.10
50	k	204	CLA	CHD-C1D-ND	-2.55	122.11	124.45
54	x	319	CHL	CMB-C2B-C1B	-2.55	124.54	128.46
50	a	841	CLA	CHD-C1D-ND	-2.55	122.11	124.45
50	a	813	CLA	C1-C2-C3	2.55	130.45	126.04
43	w	301	BCR	C2-C1-C6	2.55	114.41	110.48
43	b	831	BCR	C24-C23-C22	-2.55	122.38	126.23
50	y	308	CLA	C1-C2-C3	2.55	130.45	126.04
50	a	801	CLA	CHD-C1D-ND	-2.55	122.11	124.45
53	a	825	PQN	C2M-C2-C1	-2.55	112.05	116.27
50	b	845	CLA	C1-C2-C3	2.55	130.45	126.04
50	w	307	CLA	CMB-C2B-C3B	2.55	129.44	124.68
43	g	202	BCR	C29-C30-C25	2.55	114.40	110.48
50	w	306	CLA	C1-C2-C3	2.54	130.44	126.04
50	l	306	CLA	O1D-CGD-CBD	-2.54	119.29	124.48
50	z	311	CLA	CHD-C1D-ND	-2.53	122.13	124.45
50	z	305	CLA	CHD-C1D-ND	-2.53	122.13	124.45
44	B	606	PGT	C2-O2-C31	2.53	124.02	117.79
50	a	802	CLA	C1-C2-C3	2.52	130.41	126.04
50	x	316	CLA	CHD-C1D-ND	-2.52	122.14	124.45
50	y	313	CLA	C1-C2-C3	2.52	130.41	126.04
43	b	819	BCR	C37-C22-C23	2.52	122.05	118.08
43	l	302	BCR	C29-C30-C25	2.52	114.36	110.48
50	y	306	CLA	CMA-C3A-C2A	-2.52	110.23	116.10
50	b	824	CLA	CHD-C1D-ND	-2.51	122.14	124.45
43	4	101	BCR	C2-C1-C6	2.51	114.35	110.48
50	a	814	CLA	CHD-C1D-ND	-2.51	122.15	124.45
50	a	833	CLA	O2A-CGA-O1A	-2.51	117.26	123.59
54	x	305	CHL	CMB-C2B-C1B	-2.51	124.61	128.46
43	w	301	BCR	C37-C22-C23	2.50	122.02	118.08
43	l	304	BCR	C29-C30-C25	2.50	114.33	110.48
50	a	839	CLA	C1-C2-C3	2.50	130.37	126.04
46	x	315	LMG	O1-C7-C8	-2.50	104.87	110.90
50	y	311	CLA	C1-C2-C3	2.50	130.36	126.04
47	A	405	PQ9	C6-C5-C4	2.49	120.08	114.99
46	j	105	LMG	O1-C7-C8	-2.49	104.89	110.90
50	z	306	CLA	C1-C2-C3	2.49	130.35	126.04
45	F	804	A1H1M	C13-C33-C31	2.49	115.18	110.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	k	203	CLA	CMA-C3A-C2A	-2.49	110.29	116.10
50	b	825	CLA	C4-C3-C5	-2.49	111.08	115.27
53	b	827	PQN	C10-C5-C4	2.49	123.37	120.68
50	k	203	CLA	C2D-C1D-ND	2.49	111.94	110.10
43	l	302	BCR	C2-C1-C6	2.48	114.30	110.48
50	y	312	CLA	C1-C2-C3	2.48	130.33	126.04
50	x	318	CLA	O2A-CGA-CBA	2.48	122.02	112.23
46	7	301	LMG	C4-C3-C2	-2.48	106.50	110.82
47	A	405	PQ9	C31-C32-C33	-2.48	121.70	127.66
54	z	312	CHL	O2A-CGA-O1A	-2.47	117.35	123.59
54	z	312	CHL	C2A-C1A-CHA	2.47	128.19	123.86
50	l	301	CLA	CED-O2D-CGD	2.47	121.53	115.94
50	a	848	CLA	C1-C2-C3	2.47	130.32	126.04
50	b	847	CLA	C3C-C4C-NC	-2.47	107.80	110.57
50	a	857	CLA	C12-C11-C10	-2.47	101.89	113.24
43	b	816	BCR	C15-C14-C13	-2.46	123.79	127.31
48	j	106	SQD	O6-C44-C45	-2.46	104.96	110.90
45	F	804	A1H1M	O26-C25-C27	-2.46	104.66	110.35
50	x	313	CLA	C2D-C1D-ND	2.46	111.92	110.10
50	a	811	CLA	C1-C2-C3	2.46	130.29	126.04
50	z	303	CLA	O1D-CGD-CBD	-2.46	119.46	124.48
50	b	839	CLA	C1-C2-C3	2.45	130.28	126.04
50	z	311	CLA	C1-C2-C3	2.45	130.28	126.04
50	a	834	CLA	C1-C2-C3	2.45	130.28	126.04
50	a	843	CLA	C12-C11-C10	-2.45	101.97	113.24
50	b	814	CLA	C1-C2-C3	2.45	130.28	126.04
50	a	824	CLA	C12-C11-C10	-2.45	101.99	113.24
46	z	314	LMG	O1-C7-C8	-2.45	105.00	110.90
54	x	319	CHL	C2A-C3A-C4A	2.45	105.82	101.87
50	b	814	CLA	C2D-C1D-ND	2.44	111.91	110.10
54	w	311	CHL	CMB-C2B-C1B	-2.44	124.71	128.46
50	b	837	CLA	C1-C2-C3	2.44	130.27	126.04
50	a	844	CLA	C1-C2-C3	2.44	130.26	126.04
50	b	823	CLA	C1-C2-C3	2.44	130.26	126.04
50	b	846	CLA	C1-C2-C3	2.44	130.26	126.04
50	a	819	CLA	C1-C2-C3	2.44	130.25	126.04
50	a	856	CLA	O1D-CGD-CBD	-2.44	119.50	124.48
50	b	814	CLA	C12-C11-C10	-2.43	102.05	113.24
54	x	311	CHL	C2C-C3C-C4C	2.43	108.29	106.49
50	a	802	CLA	O1D-CGD-CBD	-2.43	119.50	124.48
50	b	841	CLA	O2D-CGD-O1D	-2.43	119.08	123.84
50	a	841	CLA	CMB-C2B-C3B	2.43	129.23	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	w	304	CHL	C2A-C3A-C4A	2.43	105.80	101.87
50	y	309	CLA	C2D-C1D-ND	2.43	111.90	110.10
46	F	802	LMG	O1-C7-C8	-2.43	105.04	110.90
46	H	401	LMG	O1-C7-C8	-2.43	105.04	110.90
50	b	844	CLA	C1-C2-C3	2.43	130.24	126.04
50	b	833	CLA	CHD-C1D-ND	-2.43	122.22	124.45
43	a	827	BCR	C2-C1-C6	2.43	114.22	110.48
50	a	852	CLA	O2D-CGD-O1D	-2.43	119.10	123.84
50	l	306	CLA	O2D-CGD-O1D	-2.42	119.10	123.84
50	l	306	CLA	C2D-C1D-ND	2.42	111.89	110.10
43	b	819	BCR	C21-C20-C19	-2.42	115.66	123.22
54	w	309	CHL	C2C-C3C-C4C	2.42	108.22	106.49
46	f	306	LMG	O1-C7-C8	-2.42	105.06	110.90
50	a	814	CLA	C1-C2-C3	2.42	130.23	126.04
43	k	201	BCR	C24-C25-C26	2.42	127.32	121.46
54	x	305	CHL	C2A-C3A-C4A	2.42	105.78	101.87
54	w	311	CHL	C1-O2A-CGA	2.42	121.56	112.90
50	y	302	CLA	C4-C3-C5	-2.42	111.21	115.27
50	b	802	CLA	C2D-C1D-ND	2.41	111.88	110.10
50	a	836	CLA	C12-C11-C10	-2.41	102.16	113.24
54	w	311	CHL	CBC-CAC-C3C	-2.41	105.79	112.43
50	b	835	CLA	O1D-CGD-CBD	-2.41	119.55	124.48
43	l	303	BCR	C29-C30-C25	2.41	114.19	110.48
50	b	833	CLA	O1D-CGD-CBD	-2.41	119.56	124.48
43	g	202	BCR	C2-C1-C6	2.41	114.19	110.48
50	b	801	CLA	C1-C2-C3	2.41	130.20	126.04
52	a	808	CL0	C1-O2A-CGA	2.40	122.56	112.41
50	a	851	CLA	O2A-CGA-CBA	2.40	121.73	112.23
50	a	850	CLA	C12-C11-C10	-2.40	102.20	113.24
50	b	802	CLA	C12-C11-C10	-2.40	102.20	113.24
50	w	310	CLA	C12-C11-C10	-2.40	102.20	113.24
50	x	313	CLA	CHD-C1D-ND	-2.40	122.25	124.45
50	g	204	CLA	C2D-C1D-ND	2.40	111.87	110.10
50	a	818	CLA	C1-C2-C3	2.40	130.19	126.04
50	b	839	CLA	C12-C11-C10	-2.40	102.22	113.24
50	x	316	CLA	O2A-CGA-CBA	2.40	121.73	114.03
43	a	830	BCR	C2-C1-C6	2.40	114.17	110.48
50	a	845	CLA	CMB-C2B-C3B	2.39	129.16	124.68
50	a	812	CLA	C12-C11-C10	-2.39	102.24	113.24
50	y	312	CLA	C3C-C4C-NC	-2.39	107.89	110.57
43	l	303	BCR	C2-C1-C6	2.39	114.16	110.48
53	a	825	PQN	C11-C3-C4	-2.39	115.94	118.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	g	201	CLA	C2D-C1D-ND	2.39	111.87	110.10
45	5	302	A1H1M	C20-O21-C22	2.39	118.38	113.69
46	x	315	LMG	C1-C2-C3	-2.39	105.02	110.00
50	y	314	CLA	C4-C3-C5	-2.39	111.25	115.27
50	x	303	CLA	O2A-CGA-O1A	-2.39	117.57	123.59
50	x	313	CLA	O1D-CGD-CBD	-2.39	119.60	124.48
50	b	822	CLA	C1-C2-C3	2.39	130.17	126.04
50	a	823	CLA	C1-C2-C3	2.39	130.17	126.04
50	a	856	CLA	C2D-C1D-ND	2.38	111.86	110.10
50	z	309	CLA	C2D-C1D-ND	2.38	111.86	110.10
50	b	840	CLA	CHD-C1D-ND	-2.38	122.27	124.45
50	x	306	CLA	C12-C11-C10	-2.38	102.30	113.24
50	b	805	CLA	C1-C2-C3	2.38	130.16	126.04
50	a	826	CLA	O2A-CGA-CBA	2.38	121.68	114.03
50	w	315	CLA	O2A-CGA-CBA	2.38	121.63	112.23
50	a	842	CLA	C1-C2-C3	2.38	130.16	126.04
50	a	819	CLA	C12-C11-C10	-2.38	102.31	113.24
50	b	851	CLA	O1D-CGD-CBD	-2.38	119.62	124.48
50	b	845	CLA	C3C-C4C-NC	-2.38	107.91	110.57
50	b	809	CLA	C1-C2-C3	2.38	130.15	126.04
50	a	838	CLA	C12-C11-C10	-2.38	102.32	113.24
50	a	837	CLA	C12-C11-C10	-2.37	102.33	113.24
46	B	605	LMG	C1-C2-C3	-2.37	105.05	110.00
50	g	203	CLA	C2D-C1D-ND	2.37	111.85	110.10
54	x	301	CHL	C2C-C3C-C4C	2.37	108.18	106.49
43	b	850	BCR	C29-C30-C25	2.37	114.14	110.48
50	b	844	CLA	C12-C11-C10	-2.37	102.34	113.24
50	a	836	CLA	C1-C2-C3	2.37	130.14	126.04
50	z	309	CLA	CAA-C2A-C3A	-2.37	108.34	114.26
50	y	302	CLA	C3C-C4C-NC	-2.37	107.99	110.57
50	a	854	CLA	C12-C11-C10	-2.37	102.37	113.24
43	b	820	BCR	C2-C1-C6	2.37	114.12	110.48
43	j	103	BCR	C29-C30-C25	2.37	114.12	110.48
50	a	854	CLA	C1-C2-C3	2.36	130.13	126.04
45	F	804	A1H1M	O12-C13-O14	-2.36	104.07	110.67
50	w	315	CLA	C2D-C1D-ND	2.36	111.85	110.10
50	w	303	CLA	O2A-CGA-CBA	2.36	121.62	114.03
43	k	201	BCR	C21-C20-C19	-2.36	115.85	123.22
43	b	816	BCR	C37-C22-C23	2.36	121.80	118.08
43	a	803	BCR	C2-C1-C6	2.36	114.11	110.48
50	b	833	CLA	C12-C11-C10	-2.36	102.42	113.24
43	y	301	BCR	C21-C20-C19	-2.36	115.87	123.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	z	312	CHL	O2D-CGD-O1D	-2.35	119.24	123.84
45	5	302	A1H1M	O26-C25-C27	-2.35	104.91	110.35
50	y	310	CLA	O1D-CGD-CBD	-2.35	119.67	124.48
50	z	303	CLA	O2D-CGD-O1D	-2.35	119.24	123.84
50	x	318	CLA	C3D-C2D-C1D	-2.35	104.73	107.91
50	w	310	CLA	C1-C2-C3	2.35	130.10	126.04
50	z	307	CLA	O1D-CGD-CBD	-2.35	119.68	124.48
50	b	811	CLA	O1D-CGD-CBD	-2.35	119.69	124.48
50	x	312	CLA	C12-C11-C10	-2.34	102.48	113.24
50	y	306	CLA	C3D-C2D-C1D	-2.34	104.74	107.91
43	a	831	BCR	C2-C1-C6	2.34	114.09	110.48
50	a	858	CLA	C12-C11-C10	-2.34	102.48	113.24
50	w	306	CLA	O1D-CGD-CBD	-2.34	119.69	124.48
50	x	307	CLA	O1D-CGD-CBD	-2.34	119.70	124.48
43	x	314	BCR	C37-C22-C23	2.34	121.76	118.08
43	f	304	BCR	C37-C22-C23	2.34	121.76	118.08
50	y	309	CLA	CHD-C1D-ND	-2.34	122.31	124.45
50	a	850	CLA	C3C-C4C-NC	-2.34	107.95	110.57
50	b	844	CLA	C3C-C4C-NC	-2.34	107.95	110.57
50	b	801	CLA	CHD-C1D-ND	-2.34	122.31	124.45
43	a	810	BCR	C8-C9-C10	2.33	122.52	118.94
50	b	841	CLA	C2D-C1D-ND	2.33	111.82	110.10
50	a	802	CLA	C12-C11-C10	-2.33	102.52	113.24
50	b	839	CLA	O1D-CGD-CBD	-2.33	119.72	124.48
50	a	854	CLA	C3C-C4C-NC	-2.33	107.96	110.57
50	x	306	CLA	C1-C2-C3	2.33	130.07	126.04
50	a	842	CLA	C12-C11-C10	-2.33	102.55	113.24
50	b	840	CLA	C12-C11-C10	-2.33	102.55	113.24
50	a	801	CLA	C12-C11-C10	-2.33	102.55	113.24
50	b	843	CLA	C12-C11-C10	-2.33	102.55	113.24
43	a	828	BCR	C29-C30-C25	2.33	114.06	110.48
50	a	848	CLA	C4-C3-C5	-2.32	111.36	115.27
43	b	831	BCR	C16-C15-C14	-2.32	118.71	123.47
46	7	301	LMG	O1-C7-C8	-2.32	105.29	110.90
50	b	803	CLA	C2C-C1C-NC	-2.32	107.80	109.97
43	a	831	BCR	C37-C22-C23	2.32	121.74	118.08
50	w	302	CLA	C1-C2-C3	2.32	130.51	126.75
50	b	812	CLA	C4-C3-C5	-2.32	111.37	115.27
50	z	310	CLA	CMA-C3A-C2A	-2.32	110.68	116.10
50	w	307	CLA	O2A-CGA-CBA	2.32	121.48	114.03
46	z	315	LMG	C1-C2-C3	-2.32	105.17	110.00
43	l	304	BCR	C2-C1-C6	2.32	114.05	110.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	z	308	CLA	O2A-CGA-CBA	2.32	121.48	114.03
50	a	846	CLA	O1D-CGD-CBD	-2.32	119.74	124.48
50	b	835	CLA	CMB-C2B-C3B	2.32	129.01	124.68
50	f	303	CLA	O1D-CGD-CBD	-2.32	119.75	124.48
50	a	846	CLA	C12-C11-C10	-2.31	102.60	113.24
50	z	307	CLA	CMB-C2B-C3B	2.31	129.01	124.68
50	b	846	CLA	C12-C11-C10	-2.31	102.60	113.24
43	k	201	BCR	C33-C5-C4	-2.31	109.17	113.62
50	b	803	CLA	C12-C11-C10	-2.31	102.61	113.24
43	j	103	BCR	C37-C22-C21	-2.31	119.68	122.92
50	b	837	CLA	C12-C11-C10	-2.31	102.62	113.24
50	a	833	CLA	O2D-CGD-O1D	-2.31	119.32	123.84
50	b	811	CLA	O2A-CGA-CBA	2.31	121.45	114.03
50	a	844	CLA	O1D-CGD-CBD	-2.31	119.76	124.48
50	a	854	CLA	O2A-CGA-O1A	-2.31	117.76	123.59
50	b	803	CLA	C3C-C4C-NC	-2.31	107.98	110.57
50	g	204	CLA	CHD-C1D-ND	-2.31	122.33	124.45
54	z	304	CHL	C2A-C1A-CHA	2.31	127.88	123.85
43	b	820	BCR	C29-C30-C25	2.31	114.03	110.48
50	h	201	CLA	O2A-CGA-CBA	2.31	121.34	112.23
50	x	309	CLA	O1D-CGD-CBD	-2.31	119.77	124.48
50	w	314	CLA	C2D-C1D-ND	2.30	111.80	110.10
54	x	311	CHL	CMB-C2B-C1B	-2.30	124.92	128.46
50	b	805	CLA	C12-C11-C10	-2.30	102.66	113.24
50	x	318	CLA	O1D-CGD-CBD	-2.30	119.77	124.48
50	z	306	CLA	C2C-C1C-NC	-2.30	107.81	109.97
50	a	852	CLA	C1-C2-C3	2.30	130.02	126.04
52	a	808	CL0	C3A-C4A-CHB	-2.30	120.09	124.24
50	z	306	CLA	C4-C3-C5	-2.30	111.40	115.27
45	F	804	A1H1M	O28-C27-C29	-2.30	105.03	110.35
53	a	825	PQN	C17-C16-C15	-2.30	107.11	113.36
50	b	812	CLA	C12-C11-C10	-2.30	102.67	113.24
50	w	308	CLA	C2C-C1C-NC	-2.30	107.82	109.97
50	a	841	CLA	O1D-CGD-CBD	-2.30	119.78	124.48
43	z	318	BCR	C37-C22-C21	-2.30	119.70	122.92
50	a	854	CLA	CMB-C2B-C3B	2.30	128.98	124.68
50	f	301	CLA	C1-C2-C3	2.30	130.01	126.04
52	a	808	CL0	C3D-C4D-ND	2.30	113.95	110.24
50	a	853	CLA	C2D-C1D-ND	2.29	111.80	110.10
50	w	308	CLA	O1D-CGD-CBD	-2.29	119.79	124.48
55	w	319	LUT	C28-C29-C30	2.29	122.46	118.94
50	l	306	CLA	C12-C11-C10	-2.29	102.70	113.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	828	CLA	C1-C2-C3	2.29	130.01	126.04
50	x	307	CLA	C12-C11-C10	-2.29	102.71	113.24
50	b	806	CLA	C1-C2-C3	2.29	130.01	126.04
54	z	312	CHL	C4D-CHA-C1A	2.29	124.04	121.25
50	b	807	CLA	C3C-C4C-NC	-2.29	108.00	110.57
50	a	842	CLA	CMB-C2B-C3B	2.29	128.96	124.68
50	b	824	CLA	C1-C2-C3	2.29	130.00	126.04
50	b	833	CLA	C1-C2-C3	2.29	130.00	126.04
50	b	828	CLA	C12-C11-C10	-2.29	102.73	113.24
50	a	845	CLA	C12-C11-C10	-2.29	102.73	113.24
50	b	804	CLA	O1D-CGD-CBD	-2.28	119.81	124.48
43	b	817	BCR	C29-C30-C25	2.28	114.00	110.48
50	y	305	CLA	O2A-CGA-CBA	2.28	121.36	114.03
50	a	812	CLA	O2A-CGA-O1A	-2.28	117.83	123.59
50	z	307	CLA	C3C-C4C-NC	-2.28	108.01	110.57
50	y	314	CLA	C12-C11-C10	-2.28	102.76	113.24
50	g	204	CLA	O2D-CGD-O1D	-2.28	119.38	123.84
50	b	834	CLA	O2A-CGA-CBA	2.28	121.35	114.03
43	a	830	BCR	C29-C30-C25	2.28	113.99	110.48
43	a	828	BCR	C2-C1-C6	2.28	113.99	110.48
50	z	307	CLA	C12-C11-C10	-2.28	102.77	113.24
50	b	806	CLA	O1D-CGD-CBD	-2.28	119.82	124.48
50	x	307	CLA	C3C-C4C-NC	-2.28	108.02	110.57
50	b	822	CLA	O1D-CGD-CBD	-2.28	119.83	124.48
50	x	302	CLA	CMA-C3A-C2A	-2.27	110.79	116.10
50	w	314	CLA	CED-O2D-CGD	2.27	121.08	115.94
50	a	839	CLA	C3C-C4C-NC	-2.27	108.02	110.57
43	a	830	BCR	C20-C21-C22	-2.27	124.07	127.31
50	y	313	CLA	C3C-C4C-NC	-2.27	108.02	110.57
50	b	815	CLA	C12-C11-C10	-2.27	102.80	113.24
50	x	308	CLA	C2D-C1D-ND	2.27	111.78	110.10
50	y	305	CLA	O1D-CGD-CBD	-2.27	119.84	124.48
50	b	824	CLA	C12-C11-C10	-2.27	102.82	113.24
46	H	401	LMG	C1-C2-C3	-2.27	105.27	110.00
50	a	811	CLA	O1D-CGD-CBD	-2.27	119.84	124.48
50	b	826	CLA	C1-C2-C3	2.27	129.97	126.04
50	y	308	CLA	C12-C11-C10	-2.27	102.82	113.24
54	w	311	CHL	C2A-C1A-CHA	2.27	127.82	123.86
43	w	301	BCR	C29-C30-C25	2.27	113.97	110.48
50	a	809	CLA	O1D-CGD-CBD	-2.27	119.85	124.48
50	b	805	CLA	C2D-C1D-ND	2.26	111.77	110.10
43	a	831	BCR	C29-C30-C25	2.26	113.97	110.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	a	853	CLA	C12-C11-C10	-2.26	102.84	113.24
50	b	847	CLA	C12-C11-C10	-2.26	102.84	113.24
50	x	306	CLA	O2A-CGA-O1A	-2.26	117.88	123.59
50	a	818	CLA	C4-C3-C5	-2.26	111.46	115.27
50	a	816	CLA	C3C-C4C-NC	-2.26	108.03	110.57
50	w	308	CLA	C12-C11-C10	-2.26	102.86	113.24
50	a	812	CLA	C2D-C1D-ND	2.26	111.77	110.10
54	x	319	CHL	C2C-C3C-C4C	2.26	108.10	106.49
50	l	306	CLA	C1-C2-C3	2.26	129.95	126.04
50	a	845	CLA	C4-C3-C5	-2.26	111.47	115.27
50	l	301	CLA	O2A-CGA-CBA	2.26	121.28	114.03
50	a	847	CLA	C1B-CHB-C4A	2.26	129.51	125.75
43	f	304	BCR	C16-C15-C14	-2.25	118.86	123.47
46	F	802	LMG	O6-C1-O1	-2.25	104.64	109.97
43	k	201	BCR	C37-C22-C21	-2.25	119.77	122.92
50	b	839	CLA	CMB-C2B-C3B	2.25	128.89	124.68
43	f	304	BCR	C16-C17-C18	-2.25	124.10	127.31
50	b	836	CLA	C12-C11-C10	-2.25	102.90	113.24
50	a	843	CLA	O1D-CGD-CBD	-2.25	119.88	124.48
43	y	301	BCR	C2-C1-C6	2.25	113.94	110.48
50	z	305	CLA	C3C-C4C-NC	-2.25	108.05	110.57
50	z	309	CLA	CMB-C2B-C3B	2.25	128.88	124.68
50	b	823	CLA	O1D-CGD-CBD	-2.25	119.89	124.48
50	a	840	CLA	O1D-CGD-CBD	-2.25	119.89	124.48
45	5	302	A1H1M	O19-C20-O21	-2.25	104.40	110.67
50	y	306	CLA	C3C-C4C-NC	-2.25	108.05	110.57
50	a	826	CLA	C3C-C4C-NC	-2.24	108.05	110.57
50	k	205	CLA	C3C-C4C-NC	-2.24	108.05	110.57
50	a	818	CLA	CMB-C2B-C3B	2.24	128.87	124.68
50	b	848	CLA	CMB-C2B-C3B	2.24	128.87	124.68
50	a	839	CLA	C12-C11-C10	-2.24	102.94	113.24
50	x	303	CLA	CED-O2D-CGD	2.24	121.00	115.94
50	b	847	CLA	O2A-CGA-O1A	-2.24	117.94	123.59
50	a	856	CLA	C12-C11-C10	-2.24	102.95	113.24
50	w	307	CLA	CHD-C1D-ND	-2.24	122.40	124.45
50	w	310	CLA	O2D-CGD-O1D	-2.24	119.46	123.84
50	a	815	CLA	C3C-C4C-NC	-2.24	108.06	110.57
50	a	851	CLA	CMB-C2B-C3B	2.24	128.86	124.68
50	b	810	CLA	C1-C2-C3	2.24	130.37	126.75
43	b	818	BCR	C29-C30-C25	2.24	113.92	110.48
50	a	854	CLA	O1D-CGD-CBD	-2.24	119.91	124.48
50	a	820	CLA	C12-C11-C10	-2.23	102.97	113.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	a	819	CLA	CMB-C2B-C3B	2.23	128.86	124.68
43	b	819	BCR	C2-C1-C6	2.23	113.92	110.48
50	z	305	CLA	O1D-CGD-CBD	-2.23	119.92	124.48
50	z	309	CLA	CHD-C1D-ND	-2.23	122.40	124.45
50	a	848	CLA	O1D-CGD-CBD	-2.23	119.92	124.48
50	b	836	CLA	C4-C3-C5	-2.23	111.52	115.27
50	a	844	CLA	C3C-C4C-NC	-2.23	108.07	110.57
50	a	837	CLA	C2D-C1D-ND	2.23	111.75	110.10
50	a	846	CLA	O2D-CGD-O1D	-2.23	119.48	123.84
50	z	302	CLA	C1-C2-C3	2.23	129.90	126.04
50	a	823	CLA	C2D-C1D-ND	2.23	111.75	110.10
50	a	821	CLA	C1-C2-C3	2.23	129.89	126.04
50	y	310	CLA	C12-C11-C10	-2.22	103.02	113.24
50	b	842	CLA	O1D-CGD-CBD	-2.22	119.93	124.48
50	a	815	CLA	C12-C11-C10	-2.22	103.02	113.24
50	k	204	CLA	O1D-CGD-CBD	-2.22	119.94	124.48
50	z	316	CLA	O1D-CGD-CBD	-2.22	119.94	124.48
50	f	301	CLA	C12-C11-C10	-2.22	102.56	113.29
48	F	805	SQD	C4-C3-C2	-2.22	106.94	110.82
46	w	312	LMG	C1-C2-C3	-2.22	105.37	110.00
43	a	828	BCR	C37-C22-C23	2.22	121.58	118.08
50	w	306	CLA	C12-C11-C10	-2.22	103.04	113.24
50	a	855	CLA	O1D-CGD-CBD	-2.22	119.94	124.48
50	a	849	CLA	C2D-C1D-ND	2.22	111.74	110.10
50	y	310	CLA	C3C-C4C-NC	-2.22	108.08	110.57
50	y	308	CLA	CMB-C2B-C3B	2.22	128.82	124.68
43	b	831	BCR	C3-C4-C5	-2.21	110.12	114.08
50	a	814	CLA	C2D-C1D-ND	2.21	111.73	110.10
50	z	303	CLA	C2D-C1D-ND	2.21	111.73	110.10
43	l	304	BCR	C37-C22-C23	2.21	121.56	118.08
45	F	804	A1H1M	O32-C31-C33	-2.21	105.23	110.35
50	b	801	CLA	C12-C11-C10	-2.21	103.08	113.24
50	w	316	CLA	CMD-C2D-C1D	2.21	128.61	124.71
50	w	308	CLA	C3C-C4C-NC	-2.21	108.09	110.57
50	z	302	CLA	CBA-CAA-C2A	2.21	120.38	113.86
54	x	319	CHL	O2A-CGA-O1A	-2.21	118.02	123.59
43	f	304	BCR	C2-C1-C6	2.21	113.88	110.48
43	w	301	BCR	C21-C20-C19	-2.21	116.33	123.22
50	a	836	CLA	O1D-CGD-CBD	-2.21	119.97	124.48
50	b	848	CLA	C2D-C1D-ND	2.21	111.73	110.10
43	a	810	BCR	C34-C9-C10	-2.21	119.83	122.92
52	a	808	CL0	CMD-C2D-C3D	-2.20	122.54	127.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	a	809	CLA	C12-C11-C10	-2.20	102.65	113.29
50	a	851	CLA	O1D-CGD-CBD	-2.20	119.98	124.48
50	x	304	CLA	C3C-C4C-NC	-2.20	108.10	110.57
50	a	814	CLA	C12-C11-C10	-2.20	103.12	113.24
50	a	839	CLA	CMB-C2B-C3B	2.20	128.79	124.68
50	a	818	CLA	C2A-C1A-CHA	2.20	127.70	123.86
50	a	833	CLA	C12-C11-C10	-2.20	103.13	113.24
50	x	303	CLA	C12-C11-C10	-2.20	102.67	113.29
50	a	845	CLA	CHD-C1D-ND	-2.20	122.43	124.45
50	k	204	CLA	C12-C11-C10	-2.20	102.68	113.29
48	F	805	SQD	C1-O5-C5	2.20	118.00	113.69
54	w	304	CHL	O2D-CGD-O1D	-2.20	119.54	123.84
50	z	306	CLA	C3C-C4C-NC	-2.20	108.11	110.57
50	b	815	CLA	C3C-C4C-NC	-2.20	108.11	110.57
50	a	844	CLA	O2A-CGA-O1A	-2.19	118.06	123.59
50	b	811	CLA	C2C-C1C-NC	-2.19	107.92	109.97
46	j	104	LMG	C1-C2-C3	-2.19	105.43	110.00
50	f	301	CLA	CMB-C2B-C3B	2.19	128.78	124.68
50	l	305	CLA	CAA-C2A-C3A	-2.19	110.98	116.10
50	b	801	CLA	O1D-CGD-CBD	-2.19	120.00	124.48
50	a	838	CLA	O2A-CGA-O1A	-2.19	118.06	123.59
50	a	838	CLA	C1-C2-C3	2.19	129.83	126.04
50	a	818	CLA	C3C-C4C-NC	-2.19	108.12	110.57
50	b	812	CLA	C3C-C4C-NC	-2.19	108.12	110.57
50	b	846	CLA	C3C-C4C-NC	-2.19	108.12	110.57
50	y	308	CLA	C3C-C4C-NC	-2.19	108.12	110.57
50	f	301	CLA	C3C-C4C-NC	-2.19	108.12	110.57
50	y	311	CLA	O1D-CGD-CBD	-2.19	120.01	124.48
50	a	847	CLA	C2D-C1D-ND	2.19	111.72	110.10
50	w	305	CLA	C3C-C4C-NC	-2.19	108.12	110.57
50	a	811	CLA	C2D-C1D-ND	2.19	111.72	110.10
50	b	807	CLA	C12-C11-C10	-2.19	103.19	113.24
45	5	302	A1H1M	C37-C07-C08	-2.18	107.97	112.59
54	w	304	CHL	O2A-CGA-CBA	2.18	121.05	114.03
50	a	822	CLA	C1-C2-C3	2.18	129.82	126.04
50	z	310	CLA	C3C-C4C-NC	-2.18	108.12	110.57
50	y	313	CLA	C12-C11-C10	-2.18	103.21	113.24
50	a	811	CLA	C12-C11-C10	-2.18	103.22	113.24
50	a	849	CLA	C12-C11-C10	-2.18	103.22	113.24
43	j	101	BCR	C29-C30-C25	2.18	113.84	110.48
54	x	301	CHL	C2A-C1A-CHA	2.18	127.67	123.86
50	a	839	CLA	O1D-CGD-CBD	-2.18	120.03	124.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	x	312	CLA	CMB-C2B-C3B	2.18	128.75	124.68
50	z	306	CLA	O1D-CGD-CBD	-2.18	120.03	124.48
50	a	838	CLA	CMB-C2B-C3B	2.18	128.75	124.68
50	a	853	CLA	O1D-CGD-CBD	-2.18	120.03	124.48
50	w	303	CLA	C3C-C4C-NC	-2.18	108.13	110.57
50	a	820	CLA	C2D-C1D-ND	2.18	111.71	110.10
50	b	833	CLA	O2D-CGD-O1D	-2.17	119.59	123.84
50	x	303	CLA	CMD-C2D-C1D	2.17	128.54	124.71
50	b	811	CLA	O2D-CGD-O1D	-2.17	119.59	123.84
50	a	826	CLA	CMB-C2B-C3B	2.17	128.74	124.68
50	b	801	CLA	C2D-C1D-ND	2.17	111.70	110.10
50	w	307	CLA	C2D-C1D-ND	2.17	111.70	110.10
50	b	809	CLA	C3C-C4C-NC	-2.17	108.14	110.57
50	z	302	CLA	O2A-CGA-O1A	-2.17	118.12	123.59
50	f	303	CLA	CAA-C2A-C3A	-2.17	111.04	116.10
50	f	301	CLA	O2A-CGA-O1A	-2.17	118.12	123.59
50	a	855	CLA	C3C-C4C-NC	-2.17	108.14	110.57
50	x	302	CLA	CED-O2D-CGD	2.17	120.84	115.94
50	b	802	CLA	O1D-CGD-CBD	-2.17	120.05	124.48
50	y	304	CLA	C2D-C1D-ND	2.17	111.70	110.10
50	b	838	CLA	C1-C2-C3	2.17	129.79	126.04
50	a	844	CLA	C12-C11-C10	-2.17	102.83	113.29
50	a	821	CLA	C2D-C1D-ND	2.17	111.70	110.10
50	b	813	CLA	O1D-CGD-CBD	-2.17	120.05	124.48
50	b	822	CLA	C3C-C4C-NC	-2.16	108.14	110.57
50	b	824	CLA	C3C-C4C-NC	-2.16	108.14	110.57
50	a	821	CLA	O1D-CGD-CBD	-2.16	120.06	124.48
50	w	303	CLA	O1D-CGD-CBD	-2.16	120.06	124.48
54	w	304	CHL	O1D-CGD-CBD	-2.16	120.06	124.48
50	a	841	CLA	C3C-C4C-NC	-2.16	108.15	110.57
50	b	806	CLA	C2D-C1D-ND	2.16	111.70	110.10
50	a	842	CLA	C2D-C1D-ND	2.16	111.69	110.10
50	y	307	CLA	C2D-C1D-ND	2.16	111.69	110.10
50	a	824	CLA	O2A-CGA-O1A	-2.16	118.15	123.59
50	a	852	CLA	O1D-CGD-CBD	-2.16	120.07	124.48
50	y	313	CLA	CMB-C2B-C3B	2.16	128.71	124.68
45	5	302	A1H1M	O21-C22-C25	2.15	113.61	109.69
50	b	825	CLA	O2A-CGA-O1A	-2.15	118.16	123.59
50	b	838	CLA	C3C-C4C-NC	-2.15	108.16	110.57
50	b	809	CLA	C4-C3-C5	-2.15	111.65	115.27
50	w	316	CLA	C4D-CHA-C1A	2.15	123.87	121.25
50	w	308	CLA	O2D-CGD-O1D	-2.15	119.63	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	823	CLA	C3C-C4C-NC	-2.15	108.16	110.57
50	a	855	CLA	CMD-C2D-C1D	2.15	128.50	124.71
50	w	316	CLA	C3C-C4C-NC	-2.15	108.16	110.57
46	D	601	LMG	C1-C2-C3	-2.15	105.52	110.00
50	l	301	CLA	C3C-C4C-NC	-2.15	108.16	110.57
50	x	312	CLA	C4-C3-C5	-2.15	111.66	115.27
50	a	819	CLA	C2D-C1D-ND	2.15	111.69	110.10
50	b	832	CLA	O2A-CGA-O1A	-2.15	118.17	123.59
50	b	808	CLA	O1D-CGD-CBD	-2.15	120.09	124.48
50	b	804	CLA	C3C-C4C-NC	-2.15	108.16	110.57
50	w	315	CLA	O1D-CGD-CBD	-2.15	120.09	124.48
50	b	811	CLA	C3C-C4C-NC	-2.15	108.16	110.57
50	z	311	CLA	C3C-C4C-NC	-2.15	108.16	110.57
50	a	857	CLA	O1D-CGD-CBD	-2.15	120.09	124.48
50	b	846	CLA	O1D-CGD-CBD	-2.15	120.09	124.48
50	b	815	CLA	CMB-C2B-C3B	2.14	128.69	124.68
50	b	812	CLA	CMB-C2B-C3B	2.14	128.69	124.68
43	b	831	BCR	C37-C22-C21	-2.14	119.92	122.92
50	w	315	CLA	CMB-C2B-C3B	2.14	128.69	124.68
50	b	834	CLA	C3C-C4C-NC	-2.14	108.17	110.57
50	x	302	CLA	C2D-C1D-ND	2.14	111.68	110.10
50	y	314	CLA	C2D-C1D-ND	2.14	111.68	110.10
50	w	314	CLA	CMD-C2D-C1D	2.14	128.48	124.71
50	y	308	CLA	O1D-CGD-CBD	-2.14	120.11	124.48
50	x	309	CLA	C2D-C1D-ND	2.14	111.68	110.10
50	a	822	CLA	C2D-C1D-ND	2.14	111.68	110.10
50	b	826	CLA	C2D-C1D-ND	2.14	111.68	110.10
48	w	318	SQD	O47-C7-O49	-2.14	118.54	123.70
50	a	813	CLA	C3C-C4C-NC	-2.14	108.17	110.57
50	y	302	CLA	O2A-CGA-O1A	-2.14	118.20	123.59
50	b	834	CLA	O1D-CGD-CBD	-2.14	120.11	124.48
50	a	835	CLA	O1D-CGD-CBD	-2.13	120.12	124.48
50	w	310	CLA	CMC-C2C-C3C	2.13	131.91	126.12
43	a	829	BCR	C24-C23-C22	-2.13	123.01	126.23
54	x	319	CHL	C2A-C1A-CHA	2.13	127.59	123.86
50	a	843	CLA	C3C-C4C-NC	-2.13	108.18	110.57
50	f	303	CLA	C3C-C4C-NC	-2.13	108.18	110.57
50	b	842	CLA	CMD-C2D-C1D	2.13	128.47	124.71
50	b	842	CLA	C12-C11-C10	-2.13	103.00	113.29
50	a	820	CLA	O2A-CGA-O1A	-2.13	118.22	123.59
50	a	802	CLA	C2D-C1D-ND	2.13	111.67	110.10
50	w	306	CLA	C3C-C4C-NC	-2.13	108.18	110.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	z	312	CHL	C2C-C3C-C4C	2.13	108.01	106.49
50	z	310	CLA	CMD-C2D-C1D	2.13	128.47	124.71
50	w	316	CLA	C2D-C1D-ND	2.13	111.67	110.10
50	x	310	CLA	O1D-CGD-CBD	-2.13	120.13	124.48
50	b	843	CLA	C4-C3-C5	-2.13	111.69	115.27
50	a	854	CLA	O2D-CGD-O1D	-2.13	119.68	123.84
50	x	306	CLA	CMD-C2D-C1D	2.13	128.46	124.71
46	f	306	LMG	C1-C2-C3	-2.13	105.57	110.00
50	x	304	CLA	C4D-CHA-C1A	2.13	123.84	121.25
43	b	820	BCR	C37-C22-C23	2.13	121.43	118.08
50	a	801	CLA	O2A-CGA-O1A	-2.13	118.23	123.59
54	x	305	CHL	C4D-CHA-C1A	2.13	123.84	121.25
50	k	205	CLA	O1D-CGD-CBD	-2.13	120.14	124.48
50	a	857	CLA	C2D-C1D-ND	2.13	111.67	110.10
50	a	842	CLA	C4-C3-C5	-2.12	111.70	115.27
43	b	831	BCR	C28-C27-C26	-2.12	110.29	114.08
54	x	301	CHL	C2A-C3A-C4A	2.12	105.30	101.87
50	a	841	CLA	C1-C2-C3	2.12	129.71	126.04
43	b	817	BCR	C33-C5-C4	-2.12	109.54	113.62
50	z	305	CLA	C1-C2-C3	2.12	130.18	126.75
50	b	814	CLA	O1D-CGD-CBD	-2.12	120.15	124.48
50	b	842	CLA	C3C-C4C-NC	-2.12	108.19	110.57
50	y	311	CLA	C3C-C4C-NC	-2.12	108.19	110.57
45	F	804	A1H1M	O34-C33-C31	-2.12	105.45	110.35
50	h	201	CLA	C3C-C4C-NC	-2.12	108.19	110.57
50	w	307	CLA	O1D-CGD-CBD	-2.12	120.15	124.48
50	g	203	CLA	O2A-CGA-O1A	-2.12	118.25	123.59
50	a	809	CLA	C3C-C4C-NC	-2.12	108.20	110.57
50	a	850	CLA	O1D-CGD-CBD	-2.12	120.16	124.48
50	a	817	CLA	CAA-C2A-C3A	-2.11	111.16	116.10
50	x	302	CLA	CMD-C2D-C1D	2.11	128.44	124.71
50	a	834	CLA	C2D-C1D-ND	2.11	111.66	110.10
48	w	318	SQD	O47-C45-C44	-2.11	100.75	108.40
50	b	808	CLA	C3C-C4C-NC	-2.11	108.20	110.57
50	w	302	CLA	C3C-C4C-NC	-2.11	108.20	110.57
50	b	803	CLA	CHD-C4C-C3C	2.11	127.94	124.84
43	b	819	BCR	C15-C16-C17	-2.11	119.15	123.47
50	b	838	CLA	O1D-CGD-CBD	-2.11	120.17	124.48
50	z	310	CLA	CAA-C2A-C3A	-2.11	111.17	116.10
50	b	836	CLA	O2A-CGA-O1A	-2.11	118.27	123.59
50	b	825	CLA	CMB-C2B-C3B	2.11	128.63	124.68
50	x	307	CLA	O2A-CGA-O1A	-2.11	118.27	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	a	844	CLA	CMD-C2D-C1D	2.11	128.43	124.71
50	k	204	CLA	C2D-C1D-ND	2.11	111.66	110.10
50	y	314	CLA	CMB-C2B-C3B	2.11	128.62	124.68
43	b	850	BCR	C37-C22-C21	-2.11	119.97	122.92
54	x	305	CHL	O2A-CGA-O1A	-2.11	118.05	123.30
50	a	836	CLA	CMB-C2B-C3B	2.10	128.62	124.68
50	a	840	CLA	C3C-C4C-NC	-2.10	108.21	110.57
50	b	833	CLA	O2A-CGA-O1A	-2.10	118.28	123.59
43	k	201	BCR	C20-C21-C22	-2.10	124.31	127.31
50	w	310	CLA	O2A-CGA-O1A	-2.10	118.29	123.59
50	y	306	CLA	CAA-C2A-C3A	-2.10	111.19	116.10
50	a	835	CLA	O2A-CGA-O1A	-2.10	118.29	123.59
50	b	837	CLA	C3C-C4C-NC	-2.10	108.22	110.57
50	w	316	CLA	C1-C2-C3	2.10	130.15	126.75
50	b	838	CLA	CMB-C2B-C3B	2.10	128.60	124.68
50	x	308	CLA	O2A-CGA-O1A	-2.10	118.30	123.59
50	a	835	CLA	C3C-C4C-NC	-2.10	108.22	110.57
50	b	837	CLA	O1D-CGD-CBD	-2.10	120.19	124.48
50	x	310	CLA	C2D-C1D-ND	2.10	111.65	110.10
50	b	812	CLA	CMD-C2D-C1D	2.10	128.41	124.71
50	a	856	CLA	O2D-CGD-O1D	-2.09	119.74	123.84
50	b	851	CLA	C3C-C4C-NC	-2.09	108.22	110.57
50	a	824	CLA	O1D-CGD-CBD	-2.09	120.20	124.48
50	a	820	CLA	O1D-CGD-CBD	-2.09	120.20	124.48
43	z	318	BCR	C29-C30-C25	2.09	113.70	110.48
50	b	837	CLA	C2D-C1D-ND	2.09	111.64	110.10
50	a	846	CLA	O2A-CGA-O1A	-2.09	118.32	123.59
50	b	840	CLA	O1D-CGD-CBD	-2.09	120.21	124.48
50	b	807	CLA	O2A-CGA-O1A	-2.09	118.32	123.59
50	b	838	CLA	O2A-CGA-O1A	-2.09	118.32	123.59
50	y	309	CLA	O1D-CGD-CBD	-2.09	120.21	124.48
50	w	303	CLA	CMD-C2D-C1D	2.09	128.39	124.71
50	y	307	CLA	O1D-CGD-CBD	-2.09	120.21	124.48
43	b	850	BCR	C16-C15-C14	-2.09	119.20	123.47
50	b	847	CLA	C2C-C1C-NC	-2.09	108.02	109.97
50	b	823	CLA	O2A-CGA-O1A	-2.08	118.33	123.59
50	b	826	CLA	C3C-C4C-NC	-2.08	108.24	110.57
50	b	828	CLA	C3C-C4C-NC	-2.08	108.24	110.57
46	B	605	LMG	O1-C7-C8	-2.08	105.88	110.90
43	a	829	BCR	C16-C17-C18	-2.08	124.34	127.31
50	w	305	CLA	O1D-CGD-CBD	-2.08	120.23	124.48
54	w	304	CHL	C2C-C3C-C4C	2.08	107.97	106.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	832	CLA	O1D-CGD-CBD	-2.08	120.23	124.48
50	x	310	CLA	C3C-C4C-NC	-2.08	108.24	110.57
50	a	849	CLA	O1D-CGD-CBD	-2.08	120.23	124.48
54	x	305	CHL	O2A-CGA-CBA	2.08	120.71	114.03
50	a	820	CLA	CMB-C2B-C3B	2.08	128.57	124.68
43	x	314	BCR	C2-C1-C6	2.08	113.68	110.48
43	l	304	BCR	C28-C27-C26	-2.08	110.37	114.08
50	g	201	CLA	C3C-C4C-NC	-2.08	108.24	110.57
50	w	308	CLA	C1-C2-C3	2.08	129.63	126.04
50	a	822	CLA	O1D-CGD-CBD	-2.08	120.24	124.48
50	a	853	CLA	CMB-C2B-C3B	2.08	128.56	124.68
50	b	801	CLA	C3C-C4C-NC	-2.08	108.24	110.57
43	k	202	BCR	C34-C9-C10	-2.07	120.02	122.92
50	z	308	CLA	CMB-C2B-C3B	2.07	128.56	124.68
43	k	201	BCR	C28-C27-C26	-2.07	110.37	114.08
54	w	309	CHL	C2A-C3A-C4A	2.07	105.22	101.87
50	z	302	CLA	CHD-C1D-ND	-2.07	122.55	124.45
50	z	306	CLA	CED-O2D-CGD	2.07	120.62	115.94
50	a	809	CLA	CMB-C2B-C3B	2.07	128.55	124.68
50	b	809	CLA	CMB-C2B-C3B	2.07	128.55	124.68
50	x	313	CLA	O2A-CGA-O1A	-2.07	118.36	123.59
48	a	859	SQD	O8-S-C6	-2.07	102.44	105.74
50	x	312	CLA	O2A-CGA-O1A	-2.07	118.37	123.59
50	b	815	CLA	CMD-C2D-C1D	2.07	128.36	124.71
50	k	205	CLA	CMD-C2D-C1D	2.07	128.36	124.71
50	a	813	CLA	C4-C3-C5	-2.07	111.79	115.27
50	a	848	CLA	C3C-C4C-NC	-2.07	108.25	110.57
50	a	856	CLA	O2A-CGA-O1A	-2.07	118.37	123.59
50	z	309	CLA	CED-O2D-CGD	2.07	120.61	115.94
54	w	304	CHL	C4D-CHA-C1A	2.07	123.77	121.25
50	b	835	CLA	C2D-C1D-ND	2.07	111.63	110.10
54	w	309	CHL	C2A-C1A-CHA	2.07	127.47	123.86
50	l	305	CLA	C3C-C4C-NC	-2.07	108.31	110.57
50	z	311	CLA	O1D-CGD-CBD	-2.07	120.25	124.48
50	a	812	CLA	C4A-CHB-C1B	2.07	130.84	125.34
50	a	842	CLA	O1D-CGD-CBD	-2.07	120.26	124.48
54	x	305	CHL	C3C-C4C-NC	-2.07	108.25	110.57
50	y	314	CLA	O2A-CGA-O1A	-2.06	118.38	123.59
50	a	811	CLA	CMD-C2D-C1D	2.06	128.35	124.71
43	b	818	BCR	C37-C22-C23	2.06	121.33	118.08
43	k	201	BCR	C3-C4-C5	-2.06	110.40	114.08
48	F	801	SQD	O8-S-C6	-2.06	102.45	105.74

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	a	815	CLA	O1D-CGD-CBD	-2.06	120.27	124.48
50	a	837	CLA	O1D-CGD-CBD	-2.06	120.27	124.48
50	a	846	CLA	C2D-C1D-ND	2.06	111.62	110.10
50	b	845	CLA	O1D-CGD-CBD	-2.06	120.27	124.48
50	b	845	CLA	CMB-C2B-C3B	2.06	128.53	124.68
50	a	833	CLA	O1D-CGD-CBD	-2.06	120.27	124.48
50	b	809	CLA	O1D-CGD-CBD	-2.06	120.27	124.48
50	b	804	CLA	CMB-C2B-C3B	2.06	128.53	124.68
50	a	815	CLA	C4-C3-C5	-2.06	111.81	115.27
50	b	832	CLA	C2D-C1D-ND	2.06	111.62	110.10
43	a	827	BCR	C21-C20-C19	-2.06	119.53	124.67
50	b	825	CLA	C3C-C4C-NC	-2.06	108.26	110.57
50	x	316	CLA	O1D-CGD-CBD	-2.06	120.27	124.48
50	b	839	CLA	CMD-C2D-C1D	2.06	128.34	124.71
50	x	313	CLA	CED-O2D-CGD	2.06	120.59	115.94
50	b	814	CLA	CMD-C2D-C1D	2.06	128.34	124.71
50	b	843	CLA	C5-C3-C2	2.06	125.28	121.12
50	b	842	CLA	C4-C3-C5	-2.06	111.81	115.27
50	b	813	CLA	CMD-C2D-C1D	2.06	128.34	124.71
43	k	202	BCR	C37-C22-C23	2.06	121.31	118.08
50	w	306	CLA	O2D-CGD-O1D	-2.05	119.82	123.84
50	a	816	CLA	C2D-C1D-ND	2.05	111.62	110.10
50	b	805	CLA	CMD-C2D-C1D	2.05	128.33	124.71
50	b	801	CLA	O2D-CGD-O1D	-2.05	119.82	123.84
52	a	808	CL0	CHA-C4D-ND	2.05	136.79	132.50
50	b	810	CLA	C3C-C4C-NC	-2.05	108.27	110.57
54	x	319	CHL	O2D-CGD-O1D	-2.05	119.83	123.84
50	a	853	CLA	C1-C2-C3	2.05	129.59	126.04
50	a	850	CLA	C2A-C1A-CHA	2.05	127.45	123.86
50	z	306	CLA	C2D-C1D-ND	2.05	111.61	110.10
50	z	303	CLA	CAA-C2A-C3A	-2.05	111.31	116.10
50	a	839	CLA	CMD-C2D-C1D	2.05	128.32	124.71
50	b	840	CLA	C3C-C4C-NC	-2.05	108.27	110.57
50	a	813	CLA	CMB-C2B-C3B	2.05	128.51	124.68
50	z	316	CLA	C2D-C1D-ND	2.05	111.61	110.10
50	a	815	CLA	CMB-C2B-C3B	2.05	128.51	124.68
50	f	302	CLA	CMB-C2B-C3B	2.05	128.51	124.68
43	l	303	BCR	C21-C20-C19	-2.05	116.83	123.22
50	z	310	CLA	O1D-CGD-CBD	-2.05	120.30	124.48
55	y	316	LUT	C36-C21-C26	2.05	112.64	109.55
50	w	308	CLA	CMB-C2B-C3B	2.05	128.51	124.68
43	a	827	BCR	C30-C25-C26	-2.05	119.73	122.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	813	CLA	C3C-C4C-NC	-2.05	108.28	110.57
50	y	303	CLA	O2A-CGA-O1A	-2.04	118.43	123.59
50	y	304	CLA	CBA-CAA-C2A	2.04	118.02	113.47
50	b	824	CLA	CMB-C2B-C3B	2.04	128.50	124.68
50	a	858	CLA	O1D-CGD-CBD	-2.04	120.30	124.48
50	a	852	CLA	C2D-C1D-ND	2.04	111.61	110.10
50	b	836	CLA	C2D-C1D-ND	2.04	111.61	110.10
50	a	851	CLA	C3C-C4C-NC	-2.04	108.28	110.57
55	x	321	LUT	C39-C29-C28	-2.04	114.86	118.08
50	w	306	CLA	CMB-C2B-C3B	2.04	128.50	124.68
50	y	304	CLA	C3C-C4C-NC	-2.04	108.28	110.57
50	z	311	CLA	C2D-C1D-ND	2.04	111.61	110.10
54	x	305	CHL	O1D-CGD-CBD	-2.04	120.31	124.48
50	a	801	CLA	CMB-C2B-C3B	2.04	128.50	124.68
50	b	826	CLA	O1D-CGD-CBD	-2.04	120.31	124.48
45	F	804	A1H1M	C03-C04-C05	2.04	116.98	112.11
50	j	102	CLA	CMB-C2B-C3B	2.04	128.49	124.68
50	b	845	CLA	C2C-C1C-NC	-2.04	108.06	109.97
50	a	824	CLA	CMB-C2B-C3B	2.04	128.49	124.68
50	w	316	CLA	CMB-C2B-C3B	2.04	128.49	124.68
50	a	835	CLA	C2A-C1A-CHA	2.04	127.42	123.86
50	x	313	CLA	CMB-C2B-C3B	2.04	128.49	124.68
45	5	302	A1H1M	O12-C13-C33	2.04	113.38	108.10
50	z	305	CLA	CMD-C2D-C1D	2.04	128.30	124.71
50	b	822	CLA	O2A-CGA-O1A	-2.04	118.45	123.59
43	b	831	BCR	C33-C5-C4	-2.04	109.71	113.62
50	a	801	CLA	C3C-C4C-NC	-2.03	108.29	110.57
50	x	318	CLA	C3C-C4C-NC	-2.03	108.29	110.57
50	x	308	CLA	C1-C2-C3	2.03	130.04	126.75
50	b	848	CLA	CMD-C2D-C1D	2.03	128.30	124.71
50	b	843	CLA	C2D-C1D-ND	2.03	111.60	110.10
50	a	847	CLA	O1D-CGD-CBD	-2.03	120.32	124.48
50	a	850	CLA	CMB-C2B-C3B	2.03	128.48	124.68
50	b	848	CLA	O1D-CGD-CBD	-2.03	120.33	124.48
50	j	102	CLA	CMD-C2D-C1D	2.03	128.29	124.71
50	a	809	CLA	O2D-CGD-O1D	-2.03	119.87	123.84
53	b	827	PQN	C10-C1-C2	-2.03	116.06	118.95
50	b	844	CLA	O1D-CGD-CBD	-2.03	120.33	124.48
50	k	204	CLA	CMD-C2D-C1D	2.03	128.29	124.71
50	y	310	CLA	O2D-CGD-O1D	-2.03	119.87	123.84
50	b	814	CLA	C3C-C4C-NC	-2.03	108.30	110.57
50	x	307	CLA	CMB-C2B-C3B	2.03	128.47	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	a	814	CLA	CMD-C2D-C1D	2.03	128.29	124.71
50	f	302	CLA	C3C-C4C-NC	-2.03	108.30	110.57
50	y	314	CLA	CED-O2D-CGD	2.03	120.53	115.94
43	b	831	BCR	C16-C17-C18	-2.03	124.42	127.31
50	l	305	CLA	O1D-CGD-CBD	-2.03	120.34	124.48
50	a	833	CLA	C3C-C4C-NC	-2.02	108.30	110.57
50	j	102	CLA	C2D-C1D-ND	2.02	111.59	110.10
50	z	316	CLA	C3C-C4C-NC	-2.02	108.30	110.57
50	a	836	CLA	O2A-CGA-O1A	-2.02	118.49	123.59
53	a	825	PQN	C10-C1-C2	-2.02	116.07	118.95
51	x	317	DGD	C6D-O5D-C1E	2.02	117.69	113.74
50	l	306	CLA	O2A-CGA-O1A	-2.02	118.49	123.59
50	a	853	CLA	O2A-CGA-O1A	-2.02	118.49	123.59
50	a	817	CLA	CMB-C2B-C3B	2.02	128.46	124.68
50	a	809	CLA	O2A-CGA-O1A	-2.02	118.49	123.59
50	a	821	CLA	C4-C3-C5	-2.02	111.87	115.27
50	w	303	CLA	CMB-C2B-C3B	2.02	128.46	124.68
50	x	316	CLA	C2D-C1D-ND	2.02	111.59	110.10
50	y	304	CLA	CMB-C2B-C3B	2.02	128.46	124.68
50	a	838	CLA	CMD-C2D-C1D	2.02	128.27	124.71
50	a	834	CLA	CMB-C2B-C3B	2.02	128.45	124.68
50	y	305	CLA	C3C-C4C-NC	-2.02	108.31	110.57
50	a	852	CLA	C3C-C4C-NC	-2.02	108.31	110.57
50	x	316	CLA	CMB-C2B-C3B	2.02	128.45	124.68
50	a	849	CLA	CMD-C2D-C1D	2.02	128.27	124.71
52	a	808	CL0	CHA-C1A-NA	-2.02	121.78	126.40
50	a	850	CLA	C4-C3-C5	-2.02	111.88	115.27
50	a	823	CLA	CMB-C2B-C3B	2.01	128.45	124.68
50	x	308	CLA	CMD-C2D-C1D	2.01	128.26	124.71
50	h	201	CLA	CED-O2D-CGD	2.01	120.49	115.94
50	b	806	CLA	CMD-C2D-C1D	2.01	128.26	124.71
50	a	823	CLA	C4-C3-C5	-2.01	111.88	115.27
50	k	205	CLA	CED-O2D-CGD	2.01	120.49	115.94
50	b	805	CLA	C4-C3-C5	-2.01	111.89	115.27
54	w	311	CHL	C2A-C3A-C4A	2.01	105.12	101.87
43	a	829	BCR	C20-C21-C22	-2.01	124.44	127.31
50	b	833	CLA	CMB-C2B-C3B	2.01	128.44	124.68
50	b	803	CLA	O1D-CGD-CBD	-2.01	120.37	124.48
50	b	812	CLA	O2A-CGA-O1A	-2.01	118.52	123.59
50	a	843	CLA	CED-O2D-CGD	2.01	120.48	115.94
50	a	852	CLA	CMB-C2B-C3B	2.01	128.44	124.68
43	b	817	BCR	C1-C6-C5	-2.01	119.78	122.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	b	807	CLA	C4-C3-C5	-2.01	111.89	115.27
53	b	827	PQN	C17-C16-C15	-2.01	107.90	113.36
50	a	802	CLA	C4-C3-C5	-2.01	111.89	115.27
50	b	823	CLA	C2D-C1D-ND	2.01	111.58	110.10
50	y	314	CLA	C3C-C4C-NC	-2.01	108.32	110.57
50	b	845	CLA	C3B-C4B-NB	-2.01	106.61	109.21
50	b	808	CLA	C2D-C1D-ND	2.01	111.58	110.10
51	b	821	DGD	O1G-C1G-C2G	-2.01	102.59	108.43
50	b	823	CLA	CMB-C2B-C3B	2.01	128.43	124.68
50	g	201	CLA	O1D-CGD-CBD	-2.01	120.38	124.48
50	z	311	CLA	CMD-C2D-C1D	2.01	128.25	124.71
50	a	816	CLA	CMB-C2B-C3B	2.00	128.43	124.68
50	z	303	CLA	CMB-C2B-C3B	2.00	128.43	124.68
50	y	306	CLA	O1D-CGD-CBD	-2.00	120.38	124.48
50	f	302	CLA	C2D-C1D-ND	2.00	111.58	110.10
54	x	305	CHL	O2D-CGD-O1D	-2.00	119.92	123.84
50	x	303	CLA	O1D-CGD-CBD	-2.00	120.39	124.48
50	y	313	CLA	O1D-CGD-CBD	-2.00	120.39	124.48
50	a	841	CLA	O2D-CGD-O1D	-2.00	119.92	123.84
50	b	804	CLA	O2D-CGD-O1D	-2.00	119.92	123.84
50	x	310	CLA	CMD-C2D-C1D	2.00	128.24	124.71
50	a	849	CLA	O2A-CGA-O1A	-2.00	118.54	123.59
50	a	845	CLA	O1D-CGD-CBD	-2.00	120.39	124.48
50	b	847	CLA	CMD-C2D-C1D	2.00	128.24	124.71
50	w	302	CLA	O1D-CGD-CBD	-2.00	120.39	124.48
50	b	825	CLA	C12-C11-C10	-2.00	104.04	113.24
50	y	309	CLA	CMD-C2D-C1D	2.00	128.24	124.71
50	x	309	CLA	CMB-C2B-C3B	2.00	128.42	124.68
50	y	304	CLA	CMD-C2D-C1D	2.00	128.24	124.71
46	j	105	LMG	C1-C2-C3	-2.00	105.83	110.00
50	g	204	CLA	CMB-C2B-C3B	2.00	128.42	124.68
50	w	314	CLA	CMB-C2B-C3B	2.00	128.42	124.68

All (174) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
50	a	801	CLA	ND
50	a	802	CLA	ND
50	a	809	CLA	ND
50	a	811	CLA	ND
50	a	812	CLA	ND
50	a	813	CLA	ND

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Mol	Chain	Res	Type	Atom
50	a	814	CLA	ND
50	a	815	CLA	ND
50	a	816	CLA	ND
50	a	817	CLA	ND
50	a	818	CLA	ND
50	a	819	CLA	ND
50	a	820	CLA	ND
50	a	821	CLA	ND
50	a	822	CLA	ND
50	a	823	CLA	ND
50	a	824	CLA	ND
50	a	826	CLA	ND
50	a	833	CLA	ND
50	a	834	CLA	ND
50	a	835	CLA	ND
50	a	836	CLA	ND
50	a	837	CLA	ND
50	a	838	CLA	ND
50	a	839	CLA	ND
50	a	840	CLA	ND
50	a	841	CLA	ND
50	a	842	CLA	ND
50	a	843	CLA	ND
50	a	844	CLA	ND
50	a	845	CLA	ND
50	a	846	CLA	ND
50	a	847	CLA	ND
50	a	848	CLA	ND
50	a	849	CLA	ND
50	a	850	CLA	ND
50	a	851	CLA	ND
50	a	852	CLA	ND
50	a	853	CLA	ND
50	a	854	CLA	ND
50	a	855	CLA	ND
50	a	856	CLA	ND
50	a	857	CLA	ND
50	a	858	CLA	ND
50	b	801	CLA	ND
50	b	802	CLA	ND
50	b	803	CLA	ND
50	b	804	CLA	ND

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Mol	Chain	Res	Type	Atom
50	b	805	CLA	ND
50	b	806	CLA	ND
50	b	807	CLA	ND
50	b	808	CLA	ND
50	b	809	CLA	ND
50	b	810	CLA	ND
50	b	811	CLA	ND
50	b	812	CLA	ND
50	b	813	CLA	ND
50	b	814	CLA	ND
50	b	815	CLA	ND
50	b	822	CLA	ND
50	b	823	CLA	ND
50	b	824	CLA	ND
50	b	825	CLA	ND
50	b	826	CLA	ND
50	b	828	CLA	ND
50	b	832	CLA	ND
50	b	833	CLA	ND
50	b	834	CLA	ND
50	b	835	CLA	ND
50	b	836	CLA	ND
50	b	837	CLA	ND
50	b	838	CLA	ND
50	b	839	CLA	ND
50	b	840	CLA	ND
50	b	841	CLA	ND
50	b	842	CLA	ND
50	b	843	CLA	ND
50	b	844	CLA	ND
50	b	845	CLA	ND
50	b	846	CLA	ND
50	b	847	CLA	ND
50	b	848	CLA	ND
50	b	849	CLA	ND
50	b	851	CLA	ND
50	f	301	CLA	ND
50	f	302	CLA	ND
50	f	303	CLA	ND
50	g	201	CLA	ND
50	g	203	CLA	ND
50	g	204	CLA	ND

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Mol	Chain	Res	Type	Atom
50	h	201	CLA	ND
50	j	102	CLA	ND
50	k	203	CLA	ND
50	k	204	CLA	ND
50	k	205	CLA	ND
50	l	301	CLA	ND
50	l	305	CLA	ND
50	l	306	CLA	ND
50	w	302	CLA	ND
50	w	303	CLA	ND
50	w	305	CLA	ND
50	w	306	CLA	ND
50	w	307	CLA	ND
50	w	308	CLA	ND
50	w	310	CLA	ND
50	w	314	CLA	ND
50	w	315	CLA	ND
50	w	316	CLA	ND
50	x	302	CLA	ND
50	x	303	CLA	ND
50	x	304	CLA	ND
50	x	306	CLA	ND
50	x	307	CLA	ND
50	x	308	CLA	ND
50	x	309	CLA	ND
50	x	310	CLA	ND
50	x	312	CLA	ND
50	x	313	CLA	ND
50	x	316	CLA	ND
50	x	318	CLA	ND
50	y	302	CLA	ND
50	y	303	CLA	ND
50	y	304	CLA	ND
50	y	305	CLA	ND
50	y	306	CLA	ND
50	y	307	CLA	ND
50	y	308	CLA	ND
50	y	309	CLA	ND
50	y	310	CLA	ND
50	y	311	CLA	ND
50	y	312	CLA	ND
50	y	313	CLA	ND

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Mol	Chain	Res	Type	Atom
50	y	314	CLA	ND
50	z	302	CLA	ND
50	z	303	CLA	ND
50	z	305	CLA	ND
50	z	306	CLA	ND
50	z	307	CLA	ND
50	z	308	CLA	ND
50	z	309	CLA	ND
50	z	310	CLA	ND
50	z	311	CLA	ND
50	z	316	CLA	ND
50	z	319	CLA	ND
52	a	808	CL0	NA
52	a	808	CL0	ND
52	a	808	CL0	NC
54	w	304	CHL	NA
54	w	304	CHL	ND
54	w	304	CHL	NC
54	w	309	CHL	NA
54	w	309	CHL	ND
54	w	309	CHL	NC
54	w	311	CHL	NA
54	w	311	CHL	ND
54	w	311	CHL	NC
54	x	301	CHL	NA
54	x	301	CHL	ND
54	x	301	CHL	NC
54	x	305	CHL	NA
54	x	305	CHL	ND
54	x	305	CHL	NC
54	x	311	CHL	NA
54	x	311	CHL	ND
54	x	311	CHL	NC
54	x	319	CHL	NA
54	x	319	CHL	ND
54	x	319	CHL	NC
54	z	304	CHL	NA
54	z	304	CHL	ND
54	z	304	CHL	NC
54	z	312	CHL	NA
54	z	312	CHL	ND
54	z	312	CHL	NC

All (2407) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
43	4	101	BCR	C5-C6-C7-C8
43	4	101	BCR	C7-C8-C9-C10
43	4	101	BCR	C7-C8-C9-C34
43	4	101	BCR	C21-C22-C23-C24
43	4	101	BCR	C37-C22-C23-C24
43	a	803	BCR	C5-C6-C7-C8
43	a	803	BCR	C7-C8-C9-C10
43	a	803	BCR	C7-C8-C9-C34
43	a	810	BCR	C11-C12-C13-C14
43	a	810	BCR	C11-C12-C13-C35
43	a	810	BCR	C17-C18-C19-C20
43	a	810	BCR	C36-C18-C19-C20
43	a	830	BCR	C21-C22-C23-C24
43	a	830	BCR	C37-C22-C23-C24
43	a	830	BCR	C23-C24-C25-C26
43	a	831	BCR	C7-C8-C9-C10
43	a	831	BCR	C7-C8-C9-C34
43	a	831	BCR	C21-C22-C23-C24
43	a	831	BCR	C37-C22-C23-C24
43	b	816	BCR	C7-C8-C9-C10
43	b	816	BCR	C7-C8-C9-C34
43	b	816	BCR	C9-C10-C11-C12
43	b	817	BCR	C9-C10-C11-C12
43	b	818	BCR	C7-C8-C9-C10
43	b	818	BCR	C7-C8-C9-C34
43	b	819	BCR	C1-C6-C7-C8
43	b	819	BCR	C5-C6-C7-C8
43	b	819	BCR	C7-C8-C9-C10
43	b	819	BCR	C7-C8-C9-C34
43	b	820	BCR	C21-C22-C23-C24
43	b	820	BCR	C37-C22-C23-C24
43	b	831	BCR	C17-C18-C19-C20
43	b	831	BCR	C36-C18-C19-C20
43	b	850	BCR	C21-C22-C23-C24
43	b	850	BCR	C37-C22-C23-C24
43	g	202	BCR	C17-C18-C19-C20
43	g	202	BCR	C36-C18-C19-C20
43	i	101	BCR	C21-C22-C23-C24
43	i	101	BCR	C37-C22-C23-C24
43	i	101	BCR	C23-C24-C25-C26
43	j	101	BCR	C11-C12-C13-C14
43	j	101	BCR	C11-C12-C13-C35

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Mol	Chain	Res	Type	Atoms
43	j	101	BCR	C19-C20-C21-C22
43	j	101	BCR	C21-C22-C23-C24
43	j	101	BCR	C37-C22-C23-C24
43	j	103	BCR	C17-C18-C19-C20
43	j	103	BCR	C36-C18-C19-C20
43	j	103	BCR	C23-C24-C25-C26
43	k	201	BCR	C17-C18-C19-C20
43	k	201	BCR	C36-C18-C19-C20
43	l	302	BCR	C7-C8-C9-C10
43	l	302	BCR	C7-C8-C9-C34
43	l	302	BCR	C23-C24-C25-C26
43	l	303	BCR	C21-C22-C23-C24
43	l	303	BCR	C37-C22-C23-C24
43	l	304	BCR	C1-C6-C7-C8
43	x	314	BCR	C5-C6-C7-C8
43	x	314	BCR	C7-C8-C9-C10
43	x	314	BCR	C7-C8-C9-C34
43	x	314	BCR	C11-C12-C13-C14
43	x	314	BCR	C11-C12-C13-C35
43	x	314	BCR	C17-C18-C19-C20
43	x	314	BCR	C36-C18-C19-C20
43	x	314	BCR	C23-C24-C25-C26
43	y	301	BCR	C5-C6-C7-C8
43	y	301	BCR	C21-C22-C23-C24
43	y	301	BCR	C37-C22-C23-C24
43	z	318	BCR	C13-C14-C15-C16
44	5	301	PGT	C1-O3P-P-O1P
44	A	401	PGT	C32-C31-O2-C2
44	A	401	PGT	O31-C31-O2-C2
44	A	401	PGT	C5-C4-O4P-P
44	A	403	PGT	C32-C31-O2-C2
44	A	403	PGT	C4-O4P-P-O1P
44	A	404	PGT	C32-C31-O2-C2
44	A	404	PGT	C1-O3P-P-O1P
44	A	404	PGT	C1-O3P-P-O4P
44	B	601	PGT	C32-C31-O2-C2
44	B	602	PGT	C32-C31-O2-C2
44	B	602	PGT	O31-C31-O2-C2
44	B	602	PGT	C1-O3P-P-O4P
44	B	603	PGT	C4-O4P-P-O3P
44	B	603	PGT	C4-O4P-P-O1P
44	B	603	PGT	C4-O4P-P-O2P

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Mol	Chain	Res	Type	Atoms
44	B	606	PGT	C32-C31-O2-C2
44	B	606	PGT	C2-C1-O3P-P
44	B	606	PGT	C1-O3P-P-O1P
44	B	606	PGT	C1-O3P-P-O4P
44	B	606	PGT	C4-O4P-P-O3P
44	B	606	PGT	C4-O4P-P-O1P
44	B	606	PGT	C5-C4-O4P-P
44	D	602	PGT	O3P-C1-C2-O2
44	F	803	PGT	C32-C31-O2-C2
44	F	803	PGT	O31-C31-O2-C2
44	F	803	PGT	C5-C4-O4P-P
44	I	203	PGT	C1-O3P-P-O1P
44	N	301	PGT	C1-O3P-P-O1P
44	N	301	PGT	C1-O3P-P-O4P
44	N	301	PGT	C4-O4P-P-O1P
44	a	805	PGT	C1-O3P-P-O1P
44	a	805	PGT	C1-O3P-P-O2P
44	a	805	PGT	C1-O3P-P-O4P
44	a	806	PGT	C32-C31-O2-C2
44	a	806	PGT	C1-O3P-P-O1P
44	a	806	PGT	C1-O3P-P-O2P
44	a	806	PGT	C4-O4P-P-O1P
44	a	807	PGT	C1-O3P-P-O2P
44	a	807	PGT	C5-C4-O4P-P
44	b	829	PGT	C32-C31-O2-C2
44	b	829	PGT	C1-O3P-P-O1P
44	b	830	PGT	C1-O3P-P-O4P
44	f	305	PGT	O31-C31-O2-C2
44	z	301	PGT	C2-C1-O3P-P
44	z	301	PGT	C1-O3P-P-O2P
44	z	301	PGT	C4-O4P-P-O3P
44	z	301	PGT	C5-C4-O4P-P
44	z	313	PGT	C32-C31-O2-C2
45	F	804	A1H1M	C06-C07-C08-C09
45	F	804	A1H1M	C06-C07-C08-C36
46	7	301	LMG	C11-C10-O7-C8
46	B	605	LMG	O1-C7-C8-O7
46	B	605	LMG	O9-C10-O7-C8
46	B	605	LMG	C11-C10-O7-C8
46	D	601	LMG	O9-C10-O7-C8
46	j	105	LMG	C2-C1-O1-C7
46	j	105	LMG	O6-C1-O1-C7

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Mol	Chain	Res	Type	Atoms
46	j	105	LMG	O9-C10-O7-C8
46	w	312	LMG	O9-C10-O7-C8
46	w	312	LMG	C11-C10-O7-C8
46	z	314	LMG	O7-C8-C9-O8
47	A	405	PQ9	C2-C11-C12-C13
47	A	405	PQ9	C25-C26-C27-C28
48	B	604	SQD	O5-C1-O6-C44
48	B	604	SQD	O5-C5-C6-S
48	a	859	SQD	O5-C1-O6-C44
48	w	318	SQD	O49-C7-O47-C45
48	w	318	SQD	C8-C7-O47-C45
50	a	801	CLA	O2A-C1-C2-C3
50	a	811	CLA	C1A-C2A-CAA-CBA
50	a	811	CLA	C3A-C2A-CAA-CBA
50	a	811	CLA	C2A-CAA-CBA-CGA
50	a	812	CLA	CBD-CGD-O2D-CED
50	a	812	CLA	C1-C2-C3-C4
50	a	813	CLA	CHA-CBD-CGD-O2D
50	a	815	CLA	CHA-CBD-CGD-O1D
50	a	815	CLA	C1-C2-C3-C5
50	a	816	CLA	CBD-CGD-O2D-CED
50	a	818	CLA	C3A-C2A-CAA-CBA
50	a	818	CLA	C1-C2-C3-C5
50	a	820	CLA	C4-C3-C5-C6
50	a	821	CLA	CBD-CGD-O2D-CED
50	a	822	CLA	C2-C3-C5-C6
50	a	822	CLA	C4-C3-C5-C6
50	a	824	CLA	C1-C2-C3-C5
50	a	826	CLA	C3A-C2A-CAA-CBA
50	a	826	CLA	CHA-CBD-CGD-O2D
50	a	826	CLA	CBD-CGD-O2D-CED
50	a	833	CLA	C3A-C2A-CAA-CBA
50	a	833	CLA	C1-C2-C3-C4
50	a	833	CLA	C1-C2-C3-C5
50	a	833	CLA	C4-C3-C5-C6
50	a	835	CLA	C1-C2-C3-C4
50	a	836	CLA	C11-C10-C8-C7
50	a	837	CLA	C1A-C2A-CAA-CBA
50	a	837	CLA	C3A-C2A-CAA-CBA
50	a	837	CLA	CBD-CGD-O2D-CED
50	a	838	CLA	C3A-C2A-CAA-CBA
50	a	838	CLA	C1-C2-C3-C5

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Mol	Chain	Res	Type	Atoms
50	a	839	CLA	CHA-CBD-CGD-O1D
50	a	839	CLA	CBD-CGD-O2D-CED
50	a	840	CLA	CHA-CBD-CGD-O1D
50	a	840	CLA	CBD-CGD-O2D-CED
50	a	842	CLA	C1A-C2A-CAA-CBA
50	a	842	CLA	C3A-C2A-CAA-CBA
50	a	842	CLA	CHA-CBD-CGD-O1D
50	a	842	CLA	C1-C2-C3-C4
50	a	842	CLA	C1-C2-C3-C5
50	a	843	CLA	CBD-CGD-O2D-CED
50	a	844	CLA	CHA-CBD-CGD-O2D
50	a	845	CLA	C1-C2-C3-C5
50	a	846	CLA	C2-C3-C5-C6
50	a	846	CLA	C4-C3-C5-C6
50	a	847	CLA	C2A-C1A-CHA-C4D
50	a	849	CLA	C1A-C2A-CAA-CBA
50	a	849	CLA	CBD-CGD-O2D-CED
50	a	849	CLA	C1-C2-C3-C4
50	a	849	CLA	C1-C2-C3-C5
50	a	849	CLA	C4-C3-C5-C6
50	a	850	CLA	C1A-C2A-CAA-CBA
50	a	851	CLA	CHA-CBD-CGD-O1D
50	a	852	CLA	CHA-CBD-CGD-O2D
50	a	852	CLA	CAD-CBD-CGD-O1D
50	a	852	CLA	CAD-CBD-CGD-O2D
50	a	854	CLA	CHA-CBD-CGD-O2D
50	a	855	CLA	CBD-CGD-O2D-CED
50	a	856	CLA	CHA-CBD-CGD-O2D
50	a	856	CLA	CBD-CGD-O2D-CED
50	a	856	CLA	C1-C2-C3-C5
50	b	801	CLA	CBD-CGD-O2D-CED
50	b	802	CLA	C1A-C2A-CAA-CBA
50	b	802	CLA	CHA-CBD-CGD-O1D
50	b	803	CLA	C1A-C2A-CAA-CBA
50	b	803	CLA	C3A-C2A-CAA-CBA
50	b	803	CLA	C11-C12-C13-C14
50	b	805	CLA	CBA-CGA-O2A-C1
50	b	805	CLA	O1A-CGA-O2A-C1
50	b	807	CLA	C1A-C2A-CAA-CBA
50	b	807	CLA	CBD-CGD-O2D-CED
50	b	807	CLA	O1D-CGD-O2D-CED
50	b	809	CLA	C1-C2-C3-C4

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Mol	Chain	Res	Type	Atoms
50	b	809	CLA	C1-C2-C3-C5
50	b	810	CLA	C1A-C2A-CAA-CBA
50	b	810	CLA	C3A-C2A-CAA-CBA
50	b	811	CLA	CHA-CBD-CGD-O1D
50	b	812	CLA	C1-C2-C3-C4
50	b	812	CLA	C1-C2-C3-C5
50	b	812	CLA	C11-C10-C8-C9
50	b	822	CLA	CHA-CBD-CGD-O1D
50	b	822	CLA	C4-C3-C5-C6
50	b	823	CLA	C1A-C2A-CAA-CBA
50	b	823	CLA	C2-C3-C5-C6
50	b	824	CLA	C11-C10-C8-C9
50	b	825	CLA	C1-C2-C3-C5
50	b	826	CLA	C1A-C2A-CAA-CBA
50	b	826	CLA	C3A-C2A-CAA-CBA
50	b	826	CLA	C4-C3-C5-C6
50	b	828	CLA	C1-C2-C3-C4
50	b	828	CLA	C2-C3-C5-C6
50	b	832	CLA	CBA-CGA-O2A-C1
50	b	832	CLA	O1A-CGA-O2A-C1
50	b	832	CLA	C1-C2-C3-C5
50	b	832	CLA	C4-C3-C5-C6
50	b	833	CLA	C11-C12-C13-C14
50	b	836	CLA	C11-C12-C13-C14
50	b	837	CLA	C3A-C2A-CAA-CBA
50	b	837	CLA	CHA-CBD-CGD-O2D
50	b	839	CLA	CHA-CBD-CGD-O1D
50	b	839	CLA	CHA-CBD-CGD-O2D
50	b	840	CLA	C1-C2-C3-C4
50	b	841	CLA	C1A-C2A-CAA-CBA
50	b	841	CLA	CBD-CGD-O2D-CED
50	b	842	CLA	C1A-C2A-CAA-CBA
50	b	842	CLA	O1A-CGA-O2A-C1
50	b	842	CLA	C1-C2-C3-C4
50	b	842	CLA	C11-C10-C8-C9
50	b	844	CLA	C1A-C2A-CAA-CBA
50	b	844	CLA	CBD-CGD-O2D-CED
50	b	844	CLA	O2A-C1-C2-C3
50	b	844	CLA	C1-C2-C3-C4
50	b	844	CLA	C1-C2-C3-C5
50	b	844	CLA	C2-C3-C5-C6
50	b	844	CLA	C4-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
50	b	845	CLA	C1A-C2A-CAA-CBA
50	b	845	CLA	C3A-C2A-CAA-CBA
50	b	846	CLA	C3A-C2A-CAA-CBA
50	b	847	CLA	O1A-CGA-O2A-C1
50	b	847	CLA	C2-C1-O2A-CGA
50	b	847	CLA	CBD-CGD-O2D-CED
50	b	848	CLA	CHA-CBD-CGD-O2D
50	b	849	CLA	C1A-C2A-CAA-CBA
50	f	301	CLA	C1A-C2A-CAA-CBA
50	f	301	CLA	C2A-CAA-CBA-CGA
50	f	303	CLA	CBD-CGD-O2D-CED
50	g	201	CLA	CBA-CGA-O2A-C1
50	g	201	CLA	O1A-CGA-O2A-C1
50	g	201	CLA	CBD-CGD-O2D-CED
50	g	203	CLA	CBD-CGD-O2D-CED
50	g	204	CLA	C2A-CAA-CBA-CGA
50	g	204	CLA	CBD-CGD-O2D-CED
50	h	201	CLA	C3A-C2A-CAA-CBA
50	h	201	CLA	CBD-CGD-O2D-CED
50	k	205	CLA	CHA-CBD-CGD-O2D
50	k	205	CLA	CBD-CGD-O2D-CED
50	l	306	CLA	C1A-C2A-CAA-CBA
50	l	306	CLA	C3A-C2A-CAA-CBA
50	l	306	CLA	C2-C3-C5-C6
50	l	306	CLA	C4-C3-C5-C6
50	w	302	CLA	C1A-C2A-CAA-CBA
50	w	302	CLA	C3A-C2A-CAA-CBA
50	w	302	CLA	C1-C2-C3-C5
50	w	303	CLA	C3A-C2A-CAA-CBA
50	w	303	CLA	C2A-CAA-CBA-CGA
50	w	306	CLA	C11-C10-C8-C7
50	w	307	CLA	C1A-C2A-CAA-CBA
50	w	307	CLA	C3A-C2A-CAA-CBA
50	w	307	CLA	CBD-CGD-O2D-CED
50	w	307	CLA	O1D-CGD-O2D-CED
50	w	308	CLA	C3A-C2A-CAA-CBA
50	w	310	CLA	C1A-C2A-CAA-CBA
50	w	314	CLA	C1A-C2A-CAA-CBA
50	w	314	CLA	C3A-C2A-CAA-CBA
50	w	314	CLA	CHA-CBD-CGD-O1D
50	w	314	CLA	CAD-CBD-CGD-O1D
50	w	314	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
50	w	314	CLA	CBD-CGD-O2D-CED
50	w	315	CLA	CHA-CBD-CGD-O1D
50	w	315	CLA	CBD-CGD-O2D-CED
50	w	315	CLA	O1D-CGD-O2D-CED
50	w	316	CLA	C1A-C2A-CAA-CBA
50	w	316	CLA	C3A-C2A-CAA-CBA
50	w	316	CLA	CBD-CGD-O2D-CED
50	w	316	CLA	O1D-CGD-O2D-CED
50	x	302	CLA	CBD-CGD-O2D-CED
50	x	303	CLA	C1A-C2A-CAA-CBA
50	x	303	CLA	CBD-CGD-O2D-CED
50	x	304	CLA	C2A-CAA-CBA-CGA
50	x	306	CLA	CAD-CBD-CGD-O2D
50	x	307	CLA	C4-C3-C5-C6
50	x	309	CLA	C1A-C2A-CAA-CBA
50	x	309	CLA	CHA-CBD-CGD-O2D
50	x	310	CLA	C3A-C2A-CAA-CBA
50	x	312	CLA	C3A-C2A-CAA-CBA
50	x	313	CLA	C2A-CAA-CBA-CGA
50	x	313	CLA	O1A-CGA-O2A-C1
50	x	313	CLA	CBD-CGD-O2D-CED
50	x	316	CLA	CHA-CBD-CGD-O2D
50	x	318	CLA	C1A-C2A-CAA-CBA
50	x	318	CLA	C2A-CAA-CBA-CGA
50	x	318	CLA	CHA-CBD-CGD-O2D
50	y	302	CLA	C1-C2-C3-C5
50	y	303	CLA	CBA-CGA-O2A-C1
50	y	303	CLA	O1A-CGA-O2A-C1
50	y	303	CLA	CHA-CBD-CGD-O1D
50	y	306	CLA	CHA-CBD-CGD-O1D
50	y	306	CLA	CBD-CGD-O2D-CED
50	y	306	CLA	O1D-CGD-O2D-CED
50	y	307	CLA	C1A-C2A-CAA-CBA
50	y	307	CLA	C3A-C2A-CAA-CBA
50	y	307	CLA	CBD-CGD-O2D-CED
50	y	309	CLA	C1A-C2A-CAA-CBA
50	y	311	CLA	C1A-C2A-CAA-CBA
50	y	312	CLA	C1-C2-C3-C4
50	y	312	CLA	C1-C2-C3-C5
50	y	313	CLA	C2-C3-C5-C6
50	y	313	CLA	C4-C3-C5-C6
50	y	314	CLA	C2-C1-O2A-CGA

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Mol	Chain	Res	Type	Atoms
50	y	314	CLA	CHA-CBD-CGD-O1D
50	y	314	CLA	CHA-CBD-CGD-O2D
50	y	314	CLA	C1-C2-C3-C4
50	y	314	CLA	C1-C2-C3-C5
50	z	302	CLA	CHA-CBD-CGD-O1D
50	z	302	CLA	CHA-CBD-CGD-O2D
50	z	302	CLA	CBD-CGD-O2D-CED
50	z	303	CLA	CBD-CGD-O2D-CED
50	z	305	CLA	CHA-CBD-CGD-O1D
50	z	305	CLA	C1-C2-C3-C5
50	z	306	CLA	C1A-C2A-CAA-CBA
50	z	306	CLA	C3A-C2A-CAA-CBA
50	z	306	CLA	C2A-CAA-CBA-CGA
50	z	306	CLA	C1-C2-C3-C4
50	z	306	CLA	C1-C2-C3-C5
50	z	308	CLA	CHA-CBD-CGD-O1D
50	z	308	CLA	CHA-CBD-CGD-O2D
50	z	310	CLA	CHA-CBD-CGD-O1D
50	z	310	CLA	CAD-CBD-CGD-O1D
50	z	310	CLA	CAD-CBD-CGD-O2D
50	z	310	CLA	CBD-CGD-O2D-CED
51	a	804	DGD	C2D-C1D-O3G-C3G
51	a	804	DGD	O6D-C1D-O3G-C3G
51	a	804	DGD	C2E-C1E-O5D-C6D
51	a	804	DGD	O6E-C1E-O5D-C6D
51	b	821	DGD	C2B-C1B-O2G-C2G
51	b	821	DGD	O2G-C2G-C3G-O3G
51	x	317	DGD	O1B-C1B-O2G-C2G
51	x	317	DGD	O6D-C1D-O3G-C3G
51	x	317	DGD	C5D-C6D-O5D-C1E
54	w	304	CHL	C1C-C2C-CMC-OMC
54	w	304	CHL	C3C-C2C-CMC-OMC
54	w	309	CHL	C1A-C2A-CAA-CBA
54	w	309	CHL	C3A-C2A-CAA-CBA
54	w	311	CHL	C1A-C2A-CAA-CBA
54	w	311	CHL	CBD-CGD-O2D-CED
54	x	301	CHL	C1A-C2A-CAA-CBA
54	x	301	CHL	CHA-CBD-CGD-O2D
54	x	301	CHL	CBD-CGD-O2D-CED
54	x	311	CHL	CBD-CGD-O2D-CED
54	x	319	CHL	C1A-C2A-CAA-CBA
54	x	319	CHL	C3A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
54	z	304	CHL	C1C-C2C-CMC-OMC
54	z	312	CHL	C3C-C2C-CMC-OMC
54	z	312	CHL	CBD-CGD-O2D-CED
55	w	319	LUT	C21-C26-C27-C28
55	w	319	LUT	C25-C26-C27-C28
55	w	319	LUT	C27-C28-C29-C30
55	w	319	LUT	C27-C28-C29-C39
55	x	321	LUT	C7-C8-C9-C10
55	x	321	LUT	C7-C8-C9-C19
55	x	321	LUT	C21-C26-C27-C28
55	x	321	LUT	C25-C26-C27-C28
55	y	316	LUT	C21-C26-C27-C28
55	y	316	LUT	C25-C26-C27-C28
55	y	316	LUT	C27-C28-C29-C30
55	y	316	LUT	C27-C28-C29-C39
55	z	320	LUT	C27-C28-C29-C39
50	w	310	CLA	C4C-C3C-CAC-CBC
50	b	848	CLA	O1D-CGD-O2D-CED
50	f	303	CLA	O1D-CGD-O2D-CED
50	h	201	CLA	O1D-CGD-O2D-CED
50	l	301	CLA	O1D-CGD-O2D-CED
50	w	314	CLA	O1D-CGD-O2D-CED
50	x	303	CLA	O1D-CGD-O2D-CED
54	w	309	CHL	O1D-CGD-O2D-CED
50	a	821	CLA	O1D-CGD-O2D-CED
50	k	205	CLA	O1D-CGD-O2D-CED
50	x	313	CLA	O1D-CGD-O2D-CED
50	z	302	CLA	O1D-CGD-O2D-CED
50	z	309	CLA	O1D-CGD-O2D-CED
54	x	301	CHL	O1D-CGD-O2D-CED
54	x	311	CHL	O1D-CGD-O2D-CED
50	a	802	CLA	CBD-CGD-O2D-CED
50	a	811	CLA	CBD-CGD-O2D-CED
50	a	824	CLA	CBD-CGD-O2D-CED
50	b	802	CLA	CBD-CGD-O2D-CED
50	b	805	CLA	CBD-CGD-O2D-CED
50	b	808	CLA	CBD-CGD-O2D-CED
50	b	838	CLA	CBD-CGD-O2D-CED
50	b	845	CLA	CBD-CGD-O2D-CED
50	b	848	CLA	CBD-CGD-O2D-CED
50	f	301	CLA	CBD-CGD-O2D-CED
50	k	203	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
50	l	301	CLA	CBD-CGD-O2D-CED
50	w	302	CLA	CBD-CGD-O2D-CED
50	w	306	CLA	CBD-CGD-O2D-CED
50	w	308	CLA	CBD-CGD-O2D-CED
50	x	306	CLA	CBD-CGD-O2D-CED
50	x	307	CLA	CBD-CGD-O2D-CED
50	y	310	CLA	CBD-CGD-O2D-CED
50	y	312	CLA	CBD-CGD-O2D-CED
50	z	307	CLA	CBD-CGD-O2D-CED
50	z	308	CLA	CBD-CGD-O2D-CED
50	z	309	CLA	CBD-CGD-O2D-CED
54	w	309	CHL	CBD-CGD-O2D-CED
54	x	319	CHL	CBD-CGD-O2D-CED
54	z	304	CHL	CBD-CGD-O2D-CED
44	B	602	PGT	O11-C11-O3-C3
44	a	805	PGT	O11-C11-O3-C3
44	b	830	PGT	O11-C11-O3-C3
44	z	301	PGT	O11-C11-O3-C3
48	w	318	SQD	O10-C23-O48-C46
50	a	809	CLA	O1A-CGA-O2A-C1
50	a	814	CLA	O1A-CGA-O2A-C1
50	a	857	CLA	O1A-CGA-O2A-C1
50	b	838	CLA	O1A-CGA-O2A-C1
50	x	306	CLA	O1A-CGA-O2A-C1
50	x	308	CLA	O1A-CGA-O2A-C1
50	w	310	CLA	C2C-C3C-CAC-CBC
50	a	812	CLA	O1D-CGD-O2D-CED
50	b	801	CLA	O1D-CGD-O2D-CED
50	f	301	CLA	O1D-CGD-O2D-CED
50	g	201	CLA	O1D-CGD-O2D-CED
50	g	203	CLA	O1D-CGD-O2D-CED
54	z	304	CHL	O1D-CGD-O2D-CED
54	z	312	CHL	O1D-CGD-O2D-CED
50	a	851	CLA	CBA-CGA-O2A-C1
50	b	805	CLA	O1D-CGD-O2D-CED
50	b	845	CLA	O1D-CGD-O2D-CED
50	x	302	CLA	O1D-CGD-O2D-CED
50	y	312	CLA	O1D-CGD-O2D-CED
44	a	805	PGT	C12-C11-O3-C3
44	a	806	PGT	C12-C11-O3-C3
44	z	301	PGT	C12-C11-O3-C3
48	w	318	SQD	C24-C23-O48-C46

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Mol	Chain	Res	Type	Atoms
50	a	809	CLA	CBA-CGA-O2A-C1
50	a	815	CLA	CBA-CGA-O2A-C1
50	a	823	CLA	CBA-CGA-O2A-C1
50	a	857	CLA	CBA-CGA-O2A-C1
50	w	302	CLA	CBA-CGA-O2A-C1
50	a	815	CLA	CBD-CGD-O2D-CED
50	a	836	CLA	CBD-CGD-O2D-CED
50	a	845	CLA	CBD-CGD-O2D-CED
50	a	853	CLA	CBD-CGD-O2D-CED
50	a	857	CLA	CBD-CGD-O2D-CED
50	b	803	CLA	CBD-CGD-O2D-CED
50	b	806	CLA	CBD-CGD-O2D-CED
50	b	813	CLA	CBD-CGD-O2D-CED
50	b	823	CLA	CBD-CGD-O2D-CED
50	b	834	CLA	CBD-CGD-O2D-CED
50	x	318	CLA	CBD-CGD-O2D-CED
50	y	303	CLA	CBD-CGD-O2D-CED
50	y	308	CLA	CBD-CGD-O2D-CED
50	z	311	CLA	CBD-CGD-O2D-CED
44	5	301	PGT	O11-C11-O3-C3
44	A	401	PGT	O11-C11-O3-C3
44	A	404	PGT	O11-C11-O3-C3
44	B	601	PGT	O11-C11-O3-C3
44	I	203	PGT	O11-C11-O3-C3
44	a	806	PGT	O11-C11-O3-C3
44	b	829	PGT	O11-C11-O3-C3
46	7	301	LMG	O10-C28-O8-C9
46	D	601	LMG	O10-C28-O8-C9
46	j	104	LMG	O10-C28-O8-C9
46	z	315	LMG	O10-C28-O8-C9
50	a	801	CLA	O1A-CGA-O2A-C1
50	a	815	CLA	O1A-CGA-O2A-C1
50	a	823	CLA	O1A-CGA-O2A-C1
50	a	849	CLA	O1A-CGA-O2A-C1
50	b	815	CLA	O1A-CGA-O2A-C1
50	b	828	CLA	O1A-CGA-O2A-C1
50	b	836	CLA	O1A-CGA-O2A-C1
50	w	302	CLA	O1A-CGA-O2A-C1
50	w	316	CLA	O1A-CGA-O2A-C1
50	x	312	CLA	O1A-CGA-O2A-C1
50	y	314	CLA	O1A-CGA-O2A-C1
51	a	804	DGD	O1A-C1A-O1G-C1G

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Mol	Chain	Res	Type	Atoms
50	w	302	CLA	O1D-CGD-O2D-CED
50	x	306	CLA	O1D-CGD-O2D-CED
50	z	308	CLA	O1D-CGD-O2D-CED
50	a	839	CLA	C15-C16-C17-C18
50	a	811	CLA	O1D-CGD-O2D-CED
50	a	824	CLA	O1D-CGD-O2D-CED
50	a	826	CLA	O1D-CGD-O2D-CED
50	k	203	CLA	O1D-CGD-O2D-CED
45	5	302	A1H1M	O14-C13-O12-C11
45	F	804	A1H1M	C33-C13-O12-C11
50	b	851	CLA	CBD-CGD-O2D-CED
50	j	102	CLA	CBD-CGD-O2D-CED
54	w	304	CHL	CBD-CGD-O2D-CED
50	b	802	CLA	O1D-CGD-O2D-CED
50	b	803	CLA	O1D-CGD-O2D-CED
50	b	847	CLA	O1D-CGD-O2D-CED
44	A	403	PGT	O31-C31-O2-C2
44	A	404	PGT	O31-C31-O2-C2
44	B	601	PGT	O31-C31-O2-C2
44	B	606	PGT	O31-C31-O2-C2
44	b	829	PGT	O31-C31-O2-C2
44	z	313	PGT	O31-C31-O2-C2
46	7	301	LMG	O9-C10-O7-C8
51	b	821	DGD	O1B-C1B-O2G-C2G
45	5	302	A1H1M	C25-C22-C23-O24
50	a	839	CLA	O1A-CGA-O2A-C1
50	w	308	CLA	O1A-CGA-O2A-C1
50	a	851	CLA	O1A-CGA-O2A-C1
45	F	804	A1H1M	O14-C13-O12-C11
50	a	811	CLA	C3-C5-C6-C7
50	a	836	CLA	C3-C5-C6-C7
50	f	301	CLA	C3-C5-C6-C7
53	b	827	PQN	C13-C15-C16-C17
44	A	401	PGT	C12-C11-O3-C3
44	B	601	PGT	C12-C11-O3-C3
44	B	602	PGT	C12-C11-O3-C3
44	I	203	PGT	C12-C11-O3-C3
44	b	829	PGT	C12-C11-O3-C3
44	b	830	PGT	C12-C11-O3-C3
46	7	301	LMG	C29-C28-O8-C9
46	D	601	LMG	C29-C28-O8-C9
46	j	104	LMG	C29-C28-O8-C9

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Mol	Chain	Res	Type	Atoms
50	a	801	CLA	CBA-CGA-O2A-C1
50	a	821	CLA	CBA-CGA-O2A-C1
50	a	833	CLA	CBA-CGA-O2A-C1
50	a	841	CLA	CBA-CGA-O2A-C1
50	a	842	CLA	CBA-CGA-O2A-C1
50	a	849	CLA	CBA-CGA-O2A-C1
50	b	842	CLA	CBA-CGA-O2A-C1
50	x	308	CLA	CBA-CGA-O2A-C1
50	x	312	CLA	CBA-CGA-O2A-C1
50	x	313	CLA	CBA-CGA-O2A-C1
51	a	804	DGD	C2A-C1A-O1G-C1G
44	f	305	PGT	C32-C31-O2-C2
46	D	601	LMG	C11-C10-O7-C8
46	j	105	LMG	C11-C10-O7-C8
51	x	317	DGD	C2B-C1B-O2G-C2G
47	A	405	PQ9	C20-C21-C22-C23
50	b	826	CLA	CBD-CGD-O2D-CED
50	h	201	CLA	CBA-CGA-O2A-C1
50	a	844	CLA	C4-C3-C5-C6
50	b	828	CLA	C4-C3-C5-C6
50	a	820	CLA	C2-C3-C5-C6
50	b	826	CLA	C2-C3-C5-C6
50	x	307	CLA	C2-C3-C5-C6
50	a	835	CLA	CBD-CGD-O2D-CED
50	a	841	CLA	CBD-CGD-O2D-CED
50	a	802	CLA	C2A-CAA-CBA-CGA
50	a	812	CLA	C2A-CAA-CBA-CGA
50	a	848	CLA	C2A-CAA-CBA-CGA
50	a	857	CLA	C2A-CAA-CBA-CGA
50	b	810	CLA	C2A-CAA-CBA-CGA
50	b	823	CLA	C2A-CAA-CBA-CGA
50	b	838	CLA	C2A-CAA-CBA-CGA
50	b	839	CLA	C2A-CAA-CBA-CGA
50	b	845	CLA	C2A-CAA-CBA-CGA
50	g	201	CLA	C2A-CAA-CBA-CGA
50	h	201	CLA	C2A-CAA-CBA-CGA
50	k	204	CLA	C2A-CAA-CBA-CGA
50	l	306	CLA	C2A-CAA-CBA-CGA
50	w	307	CLA	C2A-CAA-CBA-CGA
50	y	312	CLA	C2A-CAA-CBA-CGA
50	z	316	CLA	C2A-CAA-CBA-CGA
50	a	841	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
50	a	816	CLA	O1D-CGD-O2D-CED
50	a	849	CLA	O1D-CGD-O2D-CED
44	A	403	PGT	C13-C14-C15-C16
50	b	801	CLA	C3-C5-C6-C7
50	b	802	CLA	C3-C5-C6-C7
50	b	805	CLA	C3-C5-C6-C7
50	b	847	CLA	C3-C5-C6-C7
50	y	308	CLA	C3-C5-C6-C7
44	5	301	PGT	C12-C11-O3-C3
44	A	404	PGT	C12-C11-O3-C3
46	z	315	LMG	C29-C28-O8-C9
50	a	839	CLA	CBA-CGA-O2A-C1
50	a	843	CLA	CBA-CGA-O2A-C1
50	a	848	CLA	CBA-CGA-O2A-C1
50	b	802	CLA	CBA-CGA-O2A-C1
50	b	815	CLA	CBA-CGA-O2A-C1
50	b	828	CLA	CBA-CGA-O2A-C1
50	b	836	CLA	CBA-CGA-O2A-C1
50	b	846	CLA	CBA-CGA-O2A-C1
50	l	306	CLA	CBA-CGA-O2A-C1
50	w	308	CLA	CBA-CGA-O2A-C1
50	w	316	CLA	CBA-CGA-O2A-C1
50	x	306	CLA	CBA-CGA-O2A-C1
46	w	312	LMG	O6-C5-C6-O5
50	a	837	CLA	O1D-CGD-O2D-CED
50	a	839	CLA	O1D-CGD-O2D-CED
50	z	310	CLA	O1D-CGD-O2D-CED
50	a	812	CLA	C1-C2-C3-C5
50	b	842	CLA	C1-C2-C3-C5
50	w	305	CLA	C1-C2-C3-C5
50	a	814	CLA	CBD-CGD-O2D-CED
50	a	833	CLA	CBD-CGD-O2D-CED
50	b	835	CLA	CBD-CGD-O2D-CED
50	w	310	CLA	CBD-CGD-O2D-CED
44	a	806	PGT	O31-C31-O2-C2
50	a	812	CLA	O1A-CGA-O2A-C1
50	a	833	CLA	O1A-CGA-O2A-C1
50	a	842	CLA	O1A-CGA-O2A-C1
50	a	843	CLA	O1A-CGA-O2A-C1
50	b	802	CLA	O1A-CGA-O2A-C1
50	b	840	CLA	O1A-CGA-O2A-C1
50	b	841	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
50	k	204	CLA	O1A-CGA-O2A-C1
50	w	310	CLA	O1A-CGA-O2A-C1
50	z	305	CLA	O1A-CGA-O2A-C1
50	w	306	CLA	O1D-CGD-O2D-CED
54	w	311	CHL	O1D-CGD-O2D-CED
43	a	810	BCR	C15-C16-C17-C18
43	b	819	BCR	C9-C10-C11-C12
43	g	202	BCR	C19-C20-C21-C22
43	k	201	BCR	C13-C14-C15-C16
50	a	818	CLA	CBD-CGD-O2D-CED
50	b	822	CLA	CBD-CGD-O2D-CED
50	x	308	CLA	CBD-CGD-O2D-CED
50	z	306	CLA	CBD-CGD-O2D-CED
50	a	843	CLA	O1D-CGD-O2D-CED
50	a	814	CLA	C3-C5-C6-C7
50	z	306	CLA	C3-C5-C6-C7
53	a	825	PQN	C13-C15-C16-C17
44	L	201	PGT	C12-C11-O3-C3
44	z	317	PGT	C12-C11-O3-C3
50	a	814	CLA	CBA-CGA-O2A-C1
50	b	838	CLA	CBA-CGA-O2A-C1
50	b	840	CLA	CBA-CGA-O2A-C1
50	b	847	CLA	CBA-CGA-O2A-C1
50	a	834	CLA	O1A-CGA-O2A-C1
50	a	845	CLA	O1A-CGA-O2A-C1
50	b	814	CLA	CBD-CGD-O2D-CED
50	b	843	CLA	CBD-CGD-O2D-CED
46	B	605	LMG	O6-C5-C6-O5
46	D	601	LMG	O6-C5-C6-O5
44	A	403	PGT	C36-C37-C38-C39
46	F	802	LMG	O6-C5-C6-O5
46	w	312	LMG	C4-C5-C6-O5
50	b	845	CLA	C10-C11-C12-C13
50	a	812	CLA	C3-C5-C6-C7
50	y	314	CLA	CBA-CGA-O2A-C1
46	H	401	LMG	O6-C5-C6-O5
50	b	823	CLA	O1A-CGA-O2A-C1
46	B	605	LMG	C29-C30-C31-C32
45	5	302	A1H1M	O21-C22-C23-O24
50	w	308	CLA	C4-C3-C5-C6
50	a	833	CLA	C2-C3-C5-C6
50	b	832	CLA	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
50	w	308	CLA	C2-C3-C5-C6
50	a	839	CLA	C2A-CAA-CBA-CGA
50	x	308	CLA	C2A-CAA-CBA-CGA
45	5	302	A1H1M	O14-C15-C16-O17
45	F	804	A1H1M	O14-C15-C16-O17
44	z	317	PGT	O11-C11-O3-C3
50	a	821	CLA	O1A-CGA-O2A-C1
50	b	846	CLA	O1A-CGA-O2A-C1
47	A	405	PQ9	C13-C15-C16-C17
44	B	606	PGT	C12-C11-O3-C3
50	k	204	CLA	CBA-CGA-O2A-C1
50	z	305	CLA	CBA-CGA-O2A-C1
51	a	804	DGD	O6E-C5E-C6E-O5E
50	z	303	CLA	O1D-CGD-O2D-CED
44	L	201	PGT	O11-C11-O3-C3
50	a	802	CLA	O1A-CGA-O2A-C1
44	D	602	PGT	C32-C31-O2-C2
50	a	809	CLA	C1-C2-C3-C5
50	a	835	CLA	C1-C2-C3-C5
50	b	836	CLA	C1-C2-C3-C5
50	b	840	CLA	C1-C2-C3-C5
50	w	310	CLA	C1-C2-C3-C5
50	x	306	CLA	C1-C2-C3-C5
50	a	855	CLA	O1D-CGD-O2D-CED
50	b	844	CLA	O1D-CGD-O2D-CED
50	y	307	CLA	O1D-CGD-O2D-CED
44	A	403	PGT	O4P-C4-C5-C6
44	z	313	PGT	O4P-C4-C5-C6
44	B	606	PGT	O11-C11-O3-C3
50	a	848	CLA	O1A-CGA-O2A-C1
50	a	844	CLA	C3-C5-C6-C7
50	g	204	CLA	O1D-CGD-O2D-CED
44	B	603	PGT	C12-C11-O3-C3
44	F	803	PGT	C12-C11-O3-C3
44	N	301	PGT	C12-C11-O3-C3
50	a	802	CLA	CBA-CGA-O2A-C1
50	a	812	CLA	CBA-CGA-O2A-C1
50	a	834	CLA	CBA-CGA-O2A-C1
50	a	837	CLA	CBA-CGA-O2A-C1
50	a	845	CLA	CBA-CGA-O2A-C1
50	a	846	CLA	CBA-CGA-O2A-C1
50	b	807	CLA	CBA-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
50	b	809	CLA	CBA-CGA-O2A-C1
50	b	841	CLA	CBA-CGA-O2A-C1
50	b	849	CLA	CBA-CGA-O2A-C1
50	w	310	CLA	CBA-CGA-O2A-C1
46	F	802	LMG	C4-C5-C6-O5
50	a	801	CLA	C15-C16-C17-C18
51	b	821	DGD	C4E-C5E-C6E-O5E
50	a	834	CLA	C15-C16-C17-C18
50	a	846	CLA	C15-C16-C17-C18
50	a	857	CLA	C5-C6-C7-C8
50	b	802	CLA	C10-C11-C12-C13
50	b	824	CLA	C8-C10-C11-C12
50	b	825	CLA	C10-C11-C12-C13
50	b	825	CLA	C15-C16-C17-C18
50	b	841	CLA	C5-C6-C7-C8
50	b	845	CLA	C15-C16-C17-C18
50	w	308	CLA	C10-C11-C12-C13
44	A	403	PGT	O4P-C4-C5-O5
44	B	601	PGT	O4P-C4-C5-O5
44	z	301	PGT	O4P-C4-C5-O5
44	z	301	PGT	C31-C32-C33-C34
46	B	605	LMG	C2-C1-O1-C7
46	j	104	LMG	C2-C1-O1-C7
48	B	604	SQD	C2-C1-O6-C44
48	a	859	SQD	C2-C1-O6-C44
51	b	821	DGD	C9B-CAB-CBB-CCB
46	B	605	LMG	C4-C5-C6-O5
46	H	401	LMG	C4-C5-C6-O5
50	b	822	CLA	C2-C3-C5-C6
50	a	814	CLA	C6-C7-C8-C9
50	a	815	CLA	C14-C13-C15-C16
50	a	820	CLA	C11-C10-C8-C9
50	a	820	CLA	C14-C13-C15-C16
50	a	835	CLA	C6-C7-C8-C9
50	a	839	CLA	C11-C12-C13-C14
50	a	839	CLA	C14-C13-C15-C16
50	a	842	CLA	C14-C13-C15-C16
50	a	843	CLA	C14-C13-C15-C16
50	a	849	CLA	C11-C10-C8-C9
50	a	858	CLA	C11-C12-C13-C14
50	b	803	CLA	C14-C13-C15-C16
50	b	807	CLA	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
50	b	807	CLA	C14-C13-C15-C16
50	b	812	CLA	C11-C12-C13-C14
50	b	825	CLA	C11-C10-C8-C9
50	b	837	CLA	C11-C10-C8-C9
50	b	837	CLA	C11-C12-C13-C14
50	b	843	CLA	C11-C12-C13-C14
50	b	843	CLA	C14-C13-C15-C16
50	b	845	CLA	C6-C7-C8-C9
50	b	846	CLA	C11-C12-C13-C14
50	w	306	CLA	C6-C7-C8-C9
50	w	306	CLA	C11-C12-C13-C14
50	w	310	CLA	C14-C13-C15-C16
50	x	312	CLA	C11-C10-C8-C9
50	x	308	CLA	O1D-CGD-O2D-CED
50	a	843	CLA	C13-C15-C16-C17
50	b	832	CLA	C2A-CAA-CBA-CGA
50	w	316	CLA	C2A-CAA-CBA-CGA
43	a	829	BCR	C7-C8-C9-C34
43	b	831	BCR	C37-C22-C23-C24
43	g	202	BCR	C37-C22-C23-C24
43	j	103	BCR	C37-C22-C23-C24
43	k	202	BCR	C36-C18-C19-C20
43	l	302	BCR	C37-C22-C23-C24
43	l	303	BCR	C36-C18-C19-C20
43	l	304	BCR	C36-C18-C19-C20
55	w	320	LUT	C7-C8-C9-C19
55	x	321	LUT	C27-C28-C29-C39
43	a	829	BCR	C7-C8-C9-C10
43	b	831	BCR	C21-C22-C23-C24
43	g	202	BCR	C21-C22-C23-C24
43	j	103	BCR	C21-C22-C23-C24
43	l	302	BCR	C21-C22-C23-C24
55	x	321	LUT	C27-C28-C29-C30
45	F	804	A1H1M	C18-C15-C16-O17
44	z	313	PGT	C31-C32-C33-C34
46	z	314	LMG	C10-C11-C12-C13
44	B	603	PGT	O11-C11-O3-C3
44	N	301	PGT	O11-C11-O3-C3
50	a	837	CLA	O1A-CGA-O2A-C1
50	l	306	CLA	O1A-CGA-O2A-C1
50	a	815	CLA	C15-C16-C17-C18
50	b	815	CLA	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
50	b	828	CLA	C8-C10-C11-C12
50	b	842	CLA	C5-C6-C7-C8
50	x	307	CLA	C8-C10-C11-C12
53	a	825	PQN	C18-C20-C21-C22
45	5	302	A1H1M	C01-C02-C03-C04
46	j	105	LMG	C29-C28-O8-C9
50	b	823	CLA	CBA-CGA-O2A-C1
50	a	820	CLA	C5-C6-C7-C8
50	a	820	CLA	C15-C16-C17-C18
50	a	824	CLA	C5-C6-C7-C8
50	a	836	CLA	C5-C6-C7-C8
50	a	853	CLA	C10-C11-C12-C13
50	b	846	CLA	C10-C11-C12-C13
50	w	310	CLA	C13-C15-C16-C17
50	y	308	CLA	C10-C11-C12-C13
44	A	403	PGT	C31-C32-C33-C34
44	B	601	PGT	C31-C32-C33-C34
46	7	301	LMG	C10-C11-C12-C13
51	a	804	DGD	C9B-CAB-CBB-CCB
50	a	811	CLA	C15-C16-C17-C18
50	a	812	CLA	C5-C6-C7-C8
50	a	814	CLA	C5-C6-C7-C8
50	a	814	CLA	C13-C15-C16-C17
50	a	819	CLA	C10-C11-C12-C13
50	a	833	CLA	C10-C11-C12-C13
50	a	836	CLA	C10-C11-C12-C13
50	a	837	CLA	C15-C16-C17-C18
50	a	849	CLA	C5-C6-C7-C8
50	a	858	CLA	C15-C16-C17-C18
50	b	824	CLA	C10-C11-C12-C13
50	b	837	CLA	C10-C11-C12-C13
50	b	840	CLA	C5-C6-C7-C8
50	b	840	CLA	C10-C11-C12-C13
50	b	840	CLA	C15-C16-C17-C18
50	b	843	CLA	C15-C16-C17-C18
50	l	306	CLA	C10-C11-C12-C13
50	w	306	CLA	C10-C11-C12-C13
50	w	308	CLA	C5-C6-C7-C8
53	a	825	PQN	C15-C16-C17-C18
44	B	603	PGT	C11-C12-C13-C14
44	b	830	PGT	C11-C12-C13-C14
46	x	315	LMG	C28-C29-C30-C31

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Mol	Chain	Res	Type	Atoms
51	x	317	DGD	C1B-C2B-C3B-C4B
50	a	840	CLA	O1D-CGD-O2D-CED
50	a	833	CLA	C15-C16-C17-C18
50	a	856	CLA	C15-C16-C17-C18
50	a	857	CLA	C15-C16-C17-C18
50	b	807	CLA	C13-C15-C16-C17
50	b	815	CLA	C15-C16-C17-C18
50	b	837	CLA	C5-C6-C7-C8
50	a	822	CLA	CBA-CGA-O2A-C1
51	a	804	DGD	CAA-CBA-CCA-CDA
46	j	104	LMG	O6-C5-C6-O5
46	j	105	LMG	O6-C5-C6-O5
50	a	836	CLA	C15-C16-C17-C18
50	b	809	CLA	C8-C10-C11-C12
50	b	839	CLA	C10-C11-C12-C13
50	w	310	CLA	C10-C11-C12-C13
45	F	804	A1H1M	C37-C07-C08-C09
45	F	804	A1H1M	C37-C07-C08-C36
44	b	829	PGT	C11-C12-C13-C14
44	z	301	PGT	C11-C12-C13-C14
50	b	842	CLA	C8-C10-C11-C12
50	a	837	CLA	C10-C11-C12-C13
50	b	803	CLA	C10-C11-C12-C13
50	b	833	CLA	C5-C6-C7-C8
50	x	303	CLA	C5-C6-C7-C8
50	a	814	CLA	C11-C10-C8-C7
50	a	814	CLA	C12-C13-C15-C16
50	a	843	CLA	C11-C12-C13-C15
50	a	850	CLA	C11-C12-C13-C15
50	b	802	CLA	C12-C13-C15-C16
50	b	824	CLA	C12-C13-C15-C16
50	x	307	CLA	C11-C10-C8-C7
50	y	314	CLA	C11-C12-C13-C15
50	l	306	CLA	C3-C5-C6-C7
50	x	312	CLA	C3-C5-C6-C7
50	y	313	CLA	C3-C5-C6-C7
50	a	811	CLA	O1A-CGA-O2A-C1
43	x	314	BCR	C19-C20-C21-C22
50	a	833	CLA	C2A-CAA-CBA-CGA
50	a	837	CLA	C2A-CAA-CBA-CGA
50	a	844	CLA	C2A-CAA-CBA-CGA
50	b	809	CLA	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
50	b	822	CLA	C2A-CAA-CBA-CGA
50	g	203	CLA	C2A-CAA-CBA-CGA
50	a	846	CLA	O1D-CGD-O2D-CED
50	a	856	CLA	O1D-CGD-O2D-CED
50	b	838	CLA	O1D-CGD-O2D-CED
50	x	309	CLA	O1D-CGD-O2D-CED
51	x	317	DGD	C4D-C5D-C6D-O5D
50	a	819	CLA	C8-C10-C11-C12
50	a	846	CLA	C10-C11-C12-C13
50	b	833	CLA	C10-C11-C12-C13
50	y	310	CLA	C13-C15-C16-C17
45	F	804	A1H1M	O21-C20-O19-C18
51	b	821	DGD	O6E-C5E-C6E-O5E
44	F	803	PGT	O11-C11-O3-C3
50	a	819	CLA	O1A-CGA-O2A-C1
50	a	835	CLA	O1A-CGA-O2A-C1
50	a	844	CLA	O1A-CGA-O2A-C1
50	b	801	CLA	O1A-CGA-O2A-C1
50	b	812	CLA	C8-C10-C11-C12
50	w	308	CLA	C15-C16-C17-C18
50	x	312	CLA	C15-C16-C17-C18
44	D	602	PGT	O31-C31-O2-C2
46	D	601	LMG	C4-C5-C6-O5
50	b	813	CLA	C2A-CAA-CBA-CGA
50	a	820	CLA	C13-C15-C16-C17
50	a	842	CLA	C8-C10-C11-C12
50	a	846	CLA	C5-C6-C7-C8
50	a	850	CLA	C15-C16-C17-C18
50	b	824	CLA	C5-C6-C7-C8
50	b	836	CLA	C10-C11-C12-C13
50	w	308	CLA	C8-C10-C11-C12
50	x	306	CLA	C10-C11-C12-C13
50	y	308	CLA	C15-C16-C17-C18
50	a	821	CLA	C15-C16-C17-C18
50	b	836	CLA	C5-C6-C7-C8
50	b	837	CLA	C15-C16-C17-C18
50	b	839	CLA	C13-C15-C16-C17
50	b	840	CLA	C13-C15-C16-C17
50	w	306	CLA	C8-C10-C11-C12
50	x	312	CLA	C10-C11-C12-C13
50	y	313	CLA	C10-C11-C12-C13
53	b	827	PQN	C20-C21-C22-C23

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Mol	Chain	Res	Type	Atoms
51	x	317	DGD	O6D-C5D-C6D-O5D
46	j	105	LMG	O10-C28-O8-C9
50	b	809	CLA	O1A-CGA-O2A-C1
50	b	841	CLA	O1D-CGD-O2D-CED
50	a	801	CLA	C13-C15-C16-C17
50	a	820	CLA	C8-C10-C11-C12
50	a	845	CLA	C8-C10-C11-C12
50	a	858	CLA	C10-C11-C12-C13
50	b	803	CLA	C15-C16-C17-C18
50	b	815	CLA	C13-C15-C16-C17
50	y	310	CLA	C10-C11-C12-C13
50	y	314	CLA	C10-C11-C12-C13
44	5	301	PGT	C1-O3P-P-O4P
44	A	401	PGT	C4-O4P-P-O3P
44	A	403	PGT	C4-O4P-P-O3P
44	B	601	PGT	C1-O3P-P-O4P
44	F	803	PGT	C4-O4P-P-O3P
44	I	203	PGT	C1-O3P-P-O4P
44	a	806	PGT	C1-O3P-P-O4P
44	a	806	PGT	C4-O4P-P-O3P
44	a	807	PGT	C4-O4P-P-O3P
44	z	301	PGT	C1-O3P-P-O4P
44	z	317	PGT	C1-O3P-P-O4P
50	b	825	CLA	C3-C5-C6-C7
45	5	302	A1H1M	C18-C15-C16-O17
50	a	820	CLA	CBA-CGA-O2A-C1
50	b	837	CLA	CBA-CGA-O2A-C1
50	f	301	CLA	CBA-CGA-O2A-C1
50	a	854	CLA	C10-C11-C12-C13
44	L	201	PGT	C11-C12-C13-C14
51	a	804	DGD	C1A-C2A-C3A-C4A
50	a	845	CLA	O1D-CGD-O2D-CED
44	z	301	PGT	O4P-C4-C5-C6
50	b	839	CLA	C4-C3-C5-C6
50	a	833	CLA	C5-C6-C7-C8
50	a	854	CLA	C15-C16-C17-C18
50	b	805	CLA	C5-C6-C7-C8
50	b	814	CLA	C10-C11-C12-C13
53	a	825	PQN	C23-C25-C26-C27
50	a	818	CLA	C2A-CAA-CBA-CGA
50	a	858	CLA	C2A-CAA-CBA-CGA
50	w	302	CLA	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
50	w	308	CLA	C2A-CAA-CBA-CGA
50	y	303	CLA	C2A-CAA-CBA-CGA
50	y	311	CLA	C2A-CAA-CBA-CGA
46	f	306	LMG	C29-C28-O8-C9
50	a	811	CLA	CBA-CGA-O2A-C1
50	b	803	CLA	CBA-CGA-O2A-C1
50	w	305	CLA	CBA-CGA-O2A-C1
43	a	803	BCR	C15-C16-C17-C18
44	L	201	PGT	C38-C39-C40-C41
54	x	305	CHL	O1D-CGD-O2D-CED
44	N	301	PGT	C32-C31-O2-C2
50	a	843	CLA	C15-C16-C17-C18
44	A	403	PGT	C34-C35-C36-C37
44	z	301	PGT	C35-C36-C37-C38
44	z	317	PGT	C15-C16-C17-C18
50	a	814	CLA	C16-C17-C18-C19
50	a	842	CLA	C16-C17-C18-C20
50	a	843	CLA	C16-C17-C18-C19
50	b	826	CLA	C6-C7-C8-C9
50	b	828	CLA	C11-C12-C13-C14
50	y	313	CLA	C16-C17-C18-C19
50	z	302	CLA	C6-C7-C8-C9
44	5	301	PGT	C37-C38-C39-C40
44	N	301	PGT	O31-C31-O2-C2
50	b	807	CLA	C10-C11-C12-C13
50	b	849	CLA	C1-C2-C3-C5
50	w	302	CLA	C1-C2-C3-C4
50	x	308	CLA	C1-C2-C3-C5
50	z	305	CLA	C1-C2-C3-C4
46	f	306	LMG	C11-C12-C13-C14
50	b	835	CLA	C10-C11-C12-C13
51	a	804	DGD	CAB-CBB-CCB-CDB
50	b	846	CLA	O1D-CGD-O2D-CED
54	x	319	CHL	O1D-CGD-O2D-CED
44	f	305	PGT	C34-C35-C36-C37
50	x	316	CLA	O1D-CGD-O2D-CED
46	w	312	LMG	C2-C1-O1-C7
44	z	317	PGT	C17-C18-C19-C20
50	a	821	CLA	C10-C11-C12-C13
51	a	804	DGD	C8A-C9A-CAA-CBA
50	a	834	CLA	C10-C11-C12-C13
50	b	844	CLA	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
46	f	306	LMG	O10-C28-O8-C9
50	a	819	CLA	C11-C12-C13-C14
50	a	843	CLA	C16-C17-C18-C20
50	b	825	CLA	C16-C17-C18-C20
50	w	308	CLA	O1D-CGD-O2D-CED
50	y	303	CLA	O1D-CGD-O2D-CED
46	H	401	LMG	C30-C31-C32-C33
46	w	312	LMG	C29-C30-C31-C32
50	a	845	CLA	C11-C10-C8-C9
50	b	815	CLA	C14-C13-C15-C16
50	b	825	CLA	C11-C12-C13-C14
50	b	843	CLA	C11-C10-C8-C9
50	y	313	CLA	C11-C10-C8-C9
50	a	818	CLA	O1D-CGD-O2D-CED
44	A	402	PGT	C31-C32-C33-C34
44	L	201	PGT	C13-C14-C15-C16
44	b	830	PGT	C35-C36-C37-C38
46	D	601	LMG	C30-C31-C32-C33
51	b	821	DGD	CEB-CFB-CGB-CHB
52	a	808	CL0	CAA-CBA-CGA-O2A
50	a	815	CLA	C2A-CAA-CBA-CGA
50	x	312	CLA	C2A-CAA-CBA-CGA
43	a	830	BCR	C36-C18-C19-C20
43	j	101	BCR	C36-C18-C19-C20
43	z	318	BCR	C11-C12-C13-C35
46	B	605	LMG	C32-C33-C34-C35
46	x	315	LMG	C31-C32-C33-C34
51	a	804	DGD	C3A-C4A-C5A-C6A
43	j	101	BCR	C17-C18-C19-C20
43	z	318	BCR	C11-C12-C13-C14
51	a	804	DGD	C4B-C5B-C6B-C7B
50	a	847	CLA	CBD-CGD-O2D-CED
46	j	105	LMG	C10-C11-C12-C13
50	a	847	CLA	O1D-CGD-O2D-CED
44	A	402	PGT	C12-C13-C14-C15
44	A	404	PGT	C16-C17-C18-C19
44	B	606	PGT	C13-C14-C15-C16
44	a	807	PGT	C32-C33-C34-C35
50	b	809	CLA	C10-C11-C12-C13
50	a	814	CLA	C16-C17-C18-C20
50	a	839	CLA	C16-C17-C18-C19
50	a	845	CLA	C16-C17-C18-C19

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Mol	Chain	Res	Type	Atoms
50	b	828	CLA	C11-C12-C13-C15
50	y	313	CLA	C16-C17-C18-C20
50	z	302	CLA	C6-C7-C8-C10
50	z	307	CLA	C11-C12-C13-C14
50	b	846	CLA	C8-C10-C11-C12
54	z	312	CHL	C8-C10-C11-C12
44	A	403	PGT	C35-C36-C37-C38
46	w	312	LMG	C15-C16-C17-C18
50	y	310	CLA	O1D-CGD-O2D-CED
46	H	401	LMG	C29-C30-C31-C32
53	a	825	PQN	C20-C21-C22-C23
50	b	849	CLA	O1A-CGA-O2A-C1
51	b	821	DGD	C6B-C7B-C8B-C9B
50	a	818	CLA	C10-C11-C12-C13
50	a	802	CLA	O1D-CGD-O2D-CED
50	a	836	CLA	C3A-C2A-CAA-CBA
50	b	802	CLA	C3A-C2A-CAA-CBA
50	b	805	CLA	C3A-C2A-CAA-CBA
50	b	808	CLA	C3A-C2A-CAA-CBA
50	b	823	CLA	C3A-C2A-CAA-CBA
50	b	834	CLA	C3A-C2A-CAA-CBA
50	b	839	CLA	C3A-C2A-CAA-CBA
50	b	840	CLA	C3A-C2A-CAA-CBA
50	b	844	CLA	C3A-C2A-CAA-CBA
50	b	849	CLA	C3A-C2A-CAA-CBA
50	f	301	CLA	C3A-C2A-CAA-CBA
50	g	204	CLA	C3A-C2A-CAA-CBA
50	x	304	CLA	C3A-C2A-CAA-CBA
50	x	318	CLA	C3A-C2A-CAA-CBA
50	y	311	CLA	C3A-C2A-CAA-CBA
50	z	302	CLA	C3A-C2A-CAA-CBA
54	w	311	CHL	C3A-C2A-CAA-CBA
50	a	839	CLA	C16-C17-C18-C20
50	a	842	CLA	C16-C17-C18-C19
50	a	845	CLA	C16-C17-C18-C20
50	b	825	CLA	C16-C17-C18-C19
50	b	826	CLA	C6-C7-C8-C10
50	z	319	CLA	O1D-CGD-O2D-CED
50	w	314	CLA	C2A-CAA-CBA-CGA
51	x	317	DGD	O1G-C1G-C2G-C3G
50	b	832	CLA	CBD-CGD-O2D-CED
50	a	812	CLA	O2A-C1-C2-C3

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Mol	Chain	Res	Type	Atoms
50	a	819	CLA	O2A-C1-C2-C3
50	a	842	CLA	O2A-C1-C2-C3
50	a	857	CLA	O2A-C1-C2-C3
50	b	802	CLA	O2A-C1-C2-C3
50	b	809	CLA	O2A-C1-C2-C3
50	b	805	CLA	C15-C16-C17-C18
50	a	814	CLA	C4-C3-C5-C6
50	b	814	CLA	C4-C3-C5-C6
50	b	842	CLA	C4-C3-C5-C6
50	a	838	CLA	CBA-CGA-O2A-C1
50	a	813	CLA	C2-C3-C5-C6
50	a	836	CLA	C2-C3-C5-C6
50	b	805	CLA	C2-C3-C5-C6
50	b	833	CLA	C2-C3-C5-C6
50	f	301	CLA	C2-C3-C5-C6
44	a	805	PGT	C32-C31-O2-C2
46	x	315	LMG	C11-C10-O7-C8
50	z	307	CLA	O1D-CGD-O2D-CED
50	a	847	CLA	CMA-C3A-C4A-CHB
46	j	104	LMG	C29-C30-C31-C32
50	b	811	CLA	O1D-CGD-O2D-CED
44	D	602	PGT	C13-C14-C15-C16
51	x	317	DGD	C5A-C6A-C7A-C8A
50	h	201	CLA	O1A-CGA-O2A-C1
44	D	602	PGT	C12-C13-C14-C15
50	x	312	CLA	C2C-C3C-CAC-CBC
50	w	308	CLA	C3-C5-C6-C7
50	a	819	CLA	CBA-CGA-O2A-C1
46	x	315	LMG	C29-C30-C31-C32
50	a	814	CLA	C8-C10-C11-C12
50	b	805	CLA	C10-C11-C12-C13
44	B	601	PGT	O4P-C4-C5-C6
44	z	317	PGT	O4P-C4-C5-C6
44	a	805	PGT	O31-C31-O2-C2
51	a	804	DGD	C4E-C5E-C6E-O5E
51	b	821	DGD	C6A-C7A-C8A-C9A
50	b	828	CLA	C5-C6-C7-C8
50	y	302	CLA	C5-C6-C7-C8
50	b	807	CLA	O1A-CGA-O2A-C1
44	A	403	PGT	C14-C15-C16-C17
52	a	808	CL0	C16-C17-C18-C19
44	A	402	PGT	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
43	4	101	BCR	C1-C6-C7-C8
43	4	101	BCR	C23-C24-C25-C26
43	a	803	BCR	C1-C6-C7-C8
43	a	810	BCR	C5-C6-C7-C8
43	a	827	BCR	C5-C6-C7-C8
43	a	827	BCR	C21-C22-C23-C24
43	a	830	BCR	C23-C24-C25-C30
43	b	816	BCR	C5-C6-C7-C8
43	g	202	BCR	C23-C24-C25-C26
43	i	101	BCR	C5-C6-C7-C8
43	i	101	BCR	C23-C24-C25-C30
43	j	101	BCR	C23-C24-C25-C26
43	j	103	BCR	C5-C6-C7-C8
43	j	103	BCR	C23-C24-C25-C30
43	l	302	BCR	C23-C24-C25-C30
43	l	303	BCR	C5-C6-C7-C8
43	l	304	BCR	C5-C6-C7-C8
43	w	301	BCR	C5-C6-C7-C8
43	w	301	BCR	C23-C24-C25-C26
43	x	314	BCR	C1-C6-C7-C8
43	x	314	BCR	C23-C24-C25-C30
43	y	301	BCR	C1-C6-C7-C8
43	y	301	BCR	C23-C24-C25-C26
43	z	318	BCR	C23-C24-C25-C26
50	b	843	CLA	C3-C5-C6-C7
55	z	320	LUT	C1-C6-C7-C8
55	z	320	LUT	C5-C6-C7-C8
44	b	830	PGT	C37-C38-C39-C40
50	b	808	CLA	O1D-CGD-O2D-CED
50	a	838	CLA	C8-C10-C11-C12
50	a	838	CLA	C10-C11-C12-C13
50	b	839	CLA	C8-C10-C11-C12
50	b	844	CLA	C8-C10-C11-C12
50	b	847	CLA	C10-C11-C12-C13
51	a	804	DGD	C5B-C6B-C7B-C8B
50	a	811	CLA	C8-C10-C11-C12
50	a	846	CLA	C13-C15-C16-C17
50	a	854	CLA	C13-C15-C16-C17
45	5	302	A1H1M	C02-C03-C04-C05
52	a	808	CL0	C2-C1-O2A-CGA
50	a	811	CLA	C4-C3-C5-C6
50	a	836	CLA	C4-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
50	b	824	CLA	C4-C3-C5-C6
50	f	301	CLA	C4-C3-C5-C6
53	b	827	PQN	C14-C13-C15-C16
50	a	811	CLA	C11-C12-C13-C15
50	a	812	CLA	C11-C12-C13-C15
50	a	815	CLA	C12-C13-C15-C16
50	a	820	CLA	C11-C10-C8-C7
50	a	833	CLA	C11-C12-C13-C15
50	a	838	CLA	C12-C13-C15-C16
50	a	842	CLA	C12-C13-C15-C16
50	a	843	CLA	C12-C13-C15-C16
50	b	803	CLA	C12-C13-C15-C16
50	b	806	CLA	C2-C3-C5-C6
50	b	812	CLA	C11-C12-C13-C15
50	b	814	CLA	C2-C3-C5-C6
50	b	824	CLA	C11-C10-C8-C7
50	b	837	CLA	C11-C10-C8-C7
50	b	843	CLA	C11-C10-C8-C7
50	b	843	CLA	C12-C13-C15-C16
50	w	306	CLA	C11-C12-C13-C15
50	x	312	CLA	C11-C10-C8-C7
50	y	313	CLA	C11-C10-C8-C7
50	a	821	CLA	C3-C5-C6-C7
50	a	801	CLA	C10-C11-C12-C13
50	a	849	CLA	C10-C11-C12-C13
50	b	828	CLA	C10-C11-C12-C13
50	a	815	CLA	C16-C17-C18-C19
44	w	313	PGT	O31-C31-O2-C2
46	x	315	LMG	O9-C10-O7-C8
44	z	313	PGT	C11-C12-C13-C14
46	H	401	LMG	C29-C28-O8-C9
50	a	835	CLA	CBA-CGA-O2A-C1
50	b	801	CLA	CBA-CGA-O2A-C1
51	x	317	DGD	C2A-C1A-O1G-C1G
50	a	809	CLA	C2A-CAA-CBA-CGA
50	a	845	CLA	C2A-CAA-CBA-CGA
50	a	853	CLA	C2A-CAA-CBA-CGA
50	b	805	CLA	C2A-CAA-CBA-CGA
50	w	310	CLA	C2A-CAA-CBA-CGA
50	b	805	CLA	C8-C10-C11-C12
50	b	843	CLA	C13-C15-C16-C17
50	a	823	CLA	C1-C2-C3-C5

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Mol	Chain	Res	Type	Atoms
50	f	302	CLA	O1D-CGD-O2D-CED
50	a	812	CLA	C12-C13-C15-C16
50	a	838	CLA	C13-C15-C16-C17
50	b	825	CLA	C13-C15-C16-C17
50	b	835	CLA	C8-C10-C11-C12
44	w	313	PGT	C15-C16-C17-C18
50	a	821	CLA	C11-C12-C13-C15
51	x	317	DGD	C3B-C4B-C5B-C6B
44	w	313	PGT	C32-C31-O2-C2
46	z	314	LMG	C11-C10-O7-C8
51	a	804	DGD	C2B-C1B-O2G-C2G
44	B	603	PGT	O3P-C1-C2-O2
50	a	853	CLA	C15-C16-C17-C18
50	w	310	CLA	C15-C16-C17-C18
46	z	314	LMG	C30-C31-C32-C33
46	z	314	LMG	O9-C10-O7-C8
51	a	804	DGD	O1B-C1B-O2G-C2G
44	5	301	PGT	C39-C40-C41-C42
44	z	317	PGT	C34-C35-C36-C37
48	F	801	SQD	C2-C1-O6-C44
51	x	317	DGD	C2D-C1D-O3G-C3G
50	l	306	CLA	C5-C6-C7-C8
44	b	830	PGT	C36-C37-C38-C39
50	b	801	CLA	C16-C17-C18-C20
46	B	605	LMG	C31-C32-C33-C34
50	a	857	CLA	C4-C3-C5-C6
50	b	845	CLA	C4-C3-C5-C6
44	N	301	PGT	C11-C12-C13-C14
54	z	312	CHL	C2-C3-C5-C6
50	a	811	CLA	C11-C12-C13-C14
50	a	833	CLA	C11-C12-C13-C14
50	a	836	CLA	C11-C10-C8-C9
50	a	838	CLA	C14-C13-C15-C16
50	a	843	CLA	C11-C12-C13-C14
50	a	850	CLA	C11-C12-C13-C14
50	a	858	CLA	C11-C10-C8-C9
50	b	801	CLA	C14-C13-C15-C16
50	b	802	CLA	C14-C13-C15-C16
50	b	824	CLA	C14-C13-C15-C16
50	b	839	CLA	C11-C10-C8-C9
50	w	306	CLA	C11-C10-C8-C9
50	x	307	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
50	y	308	CLA	C6-C7-C8-C9
50	y	313	CLA	C6-C7-C8-C9
50	a	856	CLA	C2A-CAA-CBA-CGA
50	b	844	CLA	C2A-CAA-CBA-CGA
44	B	603	PGT	C35-C36-C37-C38
55	w	319	LUT	C11-C12-C13-C20
45	F	804	A1H1M	C29-C20-O19-C18
50	x	307	CLA	O1D-CGD-O2D-CED
50	z	311	CLA	O1D-CGD-O2D-CED
46	7	301	LMG	C31-C32-C33-C34
50	a	818	CLA	C1A-C2A-CAA-CBA
50	a	826	CLA	C1A-C2A-CAA-CBA
50	a	833	CLA	C1A-C2A-CAA-CBA
50	a	836	CLA	C1A-C2A-CAA-CBA
50	a	838	CLA	C1A-C2A-CAA-CBA
50	a	852	CLA	C1A-C2A-CAA-CBA
50	b	805	CLA	C1A-C2A-CAA-CBA
50	b	808	CLA	C1A-C2A-CAA-CBA
50	b	834	CLA	C1A-C2A-CAA-CBA
50	b	835	CLA	C1A-C2A-CAA-CBA
50	b	837	CLA	C1A-C2A-CAA-CBA
50	b	838	CLA	C1A-C2A-CAA-CBA
50	b	840	CLA	C1A-C2A-CAA-CBA
50	b	846	CLA	C1A-C2A-CAA-CBA
50	g	204	CLA	C1A-C2A-CAA-CBA
50	h	201	CLA	C1A-C2A-CAA-CBA
50	w	303	CLA	C1A-C2A-CAA-CBA
50	w	305	CLA	C1A-C2A-CAA-CBA
50	w	308	CLA	C1A-C2A-CAA-CBA
50	x	304	CLA	C1A-C2A-CAA-CBA
50	x	310	CLA	C1A-C2A-CAA-CBA
50	x	312	CLA	C1A-C2A-CAA-CBA
50	y	305	CLA	C1A-C2A-CAA-CBA
50	z	302	CLA	C1A-C2A-CAA-CBA
50	z	305	CLA	C1A-C2A-CAA-CBA
54	x	305	CHL	C1A-C2A-CAA-CBA
50	a	815	CLA	C16-C17-C18-C20
52	a	808	CL0	C16-C17-C18-C20
48	j	106	SQD	C33-C34-C35-C36
51	a	804	DGD	CBA-CCA-CDA-CEA
51	b	821	DGD	C4B-C5B-C6B-C7B
50	b	814	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
50	b	824	CLA	C15-C16-C17-C18
50	b	843	CLA	C8-C10-C11-C12
50	y	314	CLA	C13-C15-C16-C17
44	a	807	PGT	C1-O3P-P-O4P
44	b	830	PGT	C4-O4P-P-O3P
44	A	404	PGT	C36-C37-C38-C39
51	a	804	DGD	CEB-CFB-CGB-CHB
44	A	403	PGT	C11-C12-C13-C14
44	A	403	PGT	O3P-C1-C2-C3
44	D	602	PGT	O3P-C1-C2-C3
44	f	305	PGT	C35-C36-C37-C38
44	z	317	PGT	C16-C17-C18-C19
50	y	310	CLA	C15-C16-C17-C18
50	z	306	CLA	CBA-CGA-O2A-C1
50	y	309	CLA	C3A-C2A-CAA-CBA
46	w	312	LMG	C31-C32-C33-C34
46	H	401	LMG	C11-C10-O7-C8
51	x	317	DGD	O1A-C1A-O1G-C1G
50	a	823	CLA	C2A-CAA-CBA-CGA
46	z	314	LMG	C7-C8-C9-O8
48	B	604	SQD	O6-C44-C45-C46
48	j	106	SQD	O6-C44-C45-C46
48	w	317	SQD	O6-C44-C45-C46
51	a	804	DGD	C1G-C2G-C3G-O3G
44	A	401	PGT	C35-C36-C37-C38
46	D	601	LMG	C13-C14-C15-C16
46	j	104	LMG	C30-C31-C32-C33
50	b	824	CLA	O1A-CGA-O2A-C1
50	z	302	CLA	O1A-CGA-O2A-C1
46	7	301	LMG	C8-C7-O1-C1
50	b	822	CLA	C10-C11-C12-C13
50	a	820	CLA	C10-C11-C12-C13
51	x	317	DGD	C4B-C5B-C6B-C7B
48	F	805	SQD	O47-C7-C8-C9
48	a	859	SQD	O47-C7-C8-C9
48	w	317	SQD	O47-C7-C8-C9
50	w	305	CLA	O1A-CGA-O2A-C1
54	x	319	CHL	O1A-CGA-O2A-C1
44	a	807	PGT	C42-C43-C44-C45
46	x	315	LMG	C34-C35-C36-C37
46	B	605	LMG	O6-C1-O1-C7
44	z	317	PGT	C12-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
50	b	826	CLA	C5-C6-C7-C8
46	H	401	LMG	O10-C28-O8-C9
46	z	315	LMG	C30-C31-C32-C33
44	A	402	PGT	C32-C33-C34-C35
50	a	813	CLA	C4-C3-C5-C6
54	z	312	CHL	C4-C3-C5-C6
50	a	851	CLA	O1D-CGD-O2D-CED
50	z	311	CLA	CBA-CGA-O2A-C1
44	b	830	PGT	C15-C16-C17-C18
46	z	314	LMG	C33-C34-C35-C36
46	B	605	LMG	O8-C28-C29-C30
51	b	821	DGD	CFB-CGB-CHB-CIB
44	B	606	PGT	C3-C2-O2-C31
45	F	804	A1H1M	C35-C11-O12-C13
50	a	801	CLA	C2-C1-O2A-CGA
50	w	302	CLA	C2-C1-O2A-CGA
54	x	319	CHL	C2-C1-O2A-CGA
50	a	841	CLA	C3-C5-C6-C7
50	a	837	CLA	C8-C10-C11-C12
45	5	302	A1H1M	C37-C07-C08-C36
44	A	402	PGT	O3P-C1-C2-O2
44	a	805	PGT	O3P-C1-C2-O2
44	B	601	PGT	C11-C12-C13-C14
50	x	307	CLA	C5-C6-C7-C8
44	a	806	PGT	C16-C17-C18-C19
51	a	804	DGD	CFA-CGA-CHA-CIA
44	b	829	PGT	C12-C13-C14-C15
44	B	602	PGT	C11-C12-C13-C14
50	a	818	CLA	C5-C6-C7-C8
44	B	606	PGT	O2-C2-C3-O3
46	D	601	LMG	O7-C8-C9-O8
46	z	314	LMG	O1-C7-C8-O7
46	z	315	LMG	O7-C8-C9-O8
50	b	823	CLA	C1-C2-C3-C5
44	a	807	PGT	C38-C39-C40-C41
44	z	317	PGT	C14-C15-C16-C17
46	z	314	LMG	C34-C35-C36-C37
50	b	807	CLA	C8-C10-C11-C12
44	b	830	PGT	C32-C33-C34-C35
51	x	317	DGD	C7A-C8A-C9A-CAA
54	w	311	CHL	C2-C1-O2A-CGA
50	a	820	CLA	C12-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
50	a	858	CLA	C11-C10-C8-C7
50	b	801	CLA	C12-C13-C15-C16
50	b	803	CLA	C11-C12-C13-C15
50	b	807	CLA	C11-C10-C8-C7
50	b	814	CLA	C11-C10-C8-C7
50	b	824	CLA	C11-C12-C13-C15
50	b	825	CLA	C11-C10-C8-C7
50	b	839	CLA	C6-C7-C8-C10
50	b	845	CLA	C11-C12-C13-C15
50	b	845	CLA	C12-C13-C15-C16
50	k	204	CLA	C11-C10-C8-C7
50	x	312	CLA	C11-C12-C13-C15
50	y	313	CLA	C6-C7-C8-C10
50	y	314	CLA	C2-C3-C5-C6
54	z	312	CHL	C11-C10-C8-C7
50	b	833	CLA	O1A-CGA-O2A-C1
50	a	812	CLA	C11-C12-C13-C14
50	a	824	CLA	C11-C12-C13-C14
50	a	834	CLA	C11-C12-C13-C14
50	a	842	CLA	C11-C12-C13-C14
50	a	845	CLA	C14-C13-C15-C16
50	b	801	CLA	C11-C10-C8-C9
50	b	814	CLA	C11-C10-C8-C9
50	b	833	CLA	C11-C10-C8-C9
50	b	839	CLA	C6-C7-C8-C9
50	b	842	CLA	C6-C7-C8-C9
50	b	843	CLA	C6-C7-C8-C9
50	b	845	CLA	C11-C12-C13-C14
50	b	846	CLA	C6-C7-C8-C9
50	k	204	CLA	C11-C10-C8-C9
46	j	105	LMG	C12-C13-C14-C15
46	z	314	LMG	C13-C14-C15-C16
51	b	821	DGD	CCB-CDB-CEB-CFB
50	a	813	CLA	CBA-CGA-O2A-C1
50	b	807	CLA	C15-C16-C17-C18
50	b	815	CLA	C2A-CAA-CBA-CGA
50	b	840	CLA	C2A-CAA-CBA-CGA
44	D	602	PGT	C16-C17-C18-C19
46	w	312	LMG	C34-C35-C36-C37
43	b	817	BCR	C37-C22-C23-C24
55	x	320	LUT	C11-C12-C13-C20
44	B	602	PGT	C12-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
43	k	202	BCR	C17-C18-C19-C20
43	z	318	BCR	C21-C22-C23-C24
50	x	312	CLA	C4C-C3C-CAC-CBC
44	B	606	PGT	O4P-C4-C5-C6
51	a	804	DGD	CFB-CGB-CHB-CIB
53	b	827	PQN	C18-C20-C21-C22
44	B	606	PGT	O3P-C1-C2-C3
50	b	844	CLA	C3-C5-C6-C7
44	5	301	PGT	C31-C32-C33-C34
46	7	301	LMG	C28-C29-C30-C31
50	b	837	CLA	O1A-CGA-O2A-C1
50	b	838	CLA	C4-C3-C5-C6
50	b	840	CLA	C4-C3-C5-C6
50	a	811	CLA	C2-C3-C5-C6
44	f	305	PGT	C31-C32-C33-C34
44	b	830	PGT	O4P-C4-C5-O5
46	j	105	LMG	C32-C33-C34-C35
50	b	801	CLA	C16-C17-C18-C19
50	a	826	CLA	C2A-CAA-CBA-CGA
50	b	825	CLA	C2A-CAA-CBA-CGA
50	y	313	CLA	CBA-CGA-O2A-C1
51	b	821	DGD	CAB-CBB-CCB-CDB
44	I	203	PGT	C5-C4-O4P-P
50	a	848	CLA	C3A-C2A-CAA-CBA
50	b	809	CLA	C3A-C2A-CAA-CBA
50	b	841	CLA	C3A-C2A-CAA-CBA
50	y	313	CLA	C3A-C2A-CAA-CBA
50	y	314	CLA	C5-C6-C7-C8
44	b	829	PGT	C16-C17-C18-C19
51	x	317	DGD	C6A-C7A-C8A-C9A
50	a	835	CLA	C10-C11-C12-C13
50	a	844	CLA	CBA-CGA-O2A-C1
50	b	839	CLA	CBA-CGA-O2A-C1
50	a	834	CLA	C8-C10-C11-C12
50	b	846	CLA	C15-C16-C17-C18
44	I	203	PGT	C1-C2-C3-O3
44	w	313	PGT	C1-C2-C3-O3
46	B	605	LMG	O1-C7-C8-C9
46	B	605	LMG	C7-C8-C9-O8
46	j	104	LMG	O1-C7-C8-C9
51	b	821	DGD	O1G-C1G-C2G-C3G
44	b	829	PGT	C32-C33-C34-C35

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Mol	Chain	Res	Type	Atoms
50	b	803	CLA	O2A-C1-C2-C3
50	b	822	CLA	O2A-C1-C2-C3
50	b	826	CLA	O2A-C1-C2-C3
48	j	106	SQD	C30-C31-C32-C33
50	a	822	CLA	O1A-CGA-O2A-C1
53	b	827	PQN	C12-C13-C15-C16
46	j	105	LMG	C11-C12-C13-C14
46	j	105	LMG	C29-C30-C31-C32
54	x	311	CHL	C3C-C2C-CMC-OMC
54	z	304	CHL	C3C-C2C-CMC-OMC
50	b	842	CLA	C3-C5-C6-C7
44	A	403	PGT	O3P-C1-C2-O2
44	B	606	PGT	O3P-C1-C2-O2
46	H	401	LMG	O9-C10-O7-C8
44	N	301	PGT	C12-C13-C14-C15
46	B	605	LMG	O7-C8-C9-O8
46	f	306	LMG	O7-C8-C9-O8
46	j	104	LMG	O1-C7-C8-O7
46	w	312	LMG	O7-C8-C9-O8
46	x	315	LMG	O7-C8-C9-O8
48	w	317	SQD	O6-C44-C45-O47
51	x	317	DGD	O1G-C1G-C2G-O2G
44	a	806	PGT	C15-C16-C17-C18
44	b	830	PGT	C32-C31-O2-C2
45	5	302	A1H1M	C02-C03-C04-C38
46	x	315	LMG	C17-C18-C19-C20
51	a	804	DGD	C6B-C7B-C8B-C9B
46	j	104	LMG	O6-C1-O1-C7
50	b	809	CLA	C5-C6-C7-C8
44	B	601	PGT	C14-C15-C16-C17
50	a	823	CLA	C2-C1-O2A-CGA
50	a	854	CLA	C2-C1-O2A-CGA
50	w	316	CLA	C2-C1-O2A-CGA
50	a	812	CLA	C11-C10-C8-C9
50	a	857	CLA	C14-C13-C15-C16
50	b	802	CLA	C6-C7-C8-C9
50	b	807	CLA	C11-C10-C8-C9
50	b	835	CLA	C11-C10-C8-C9
50	w	306	CLA	C14-C13-C15-C16
54	z	312	CHL	C11-C10-C8-C9
50	a	811	CLA	C10-C11-C12-C13
50	b	845	CLA	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
44	A	402	PGT	C2-C1-O3P-P
44	N	301	PGT	C2-C1-O3P-P
44	a	805	PGT	C2-C1-O3P-P
44	b	829	PGT	C2-C1-O3P-P
44	z	313	PGT	C2-C1-O3P-P
50	a	846	CLA	O1A-CGA-O2A-C1
44	A	403	PGT	C39-C40-C41-C42
50	a	819	CLA	C11-C12-C13-C15
50	b	802	CLA	C16-C17-C18-C19
43	a	830	BCR	C5-C6-C7-C8
43	j	101	BCR	C5-C6-C7-C8
43	j	103	BCR	C1-C6-C7-C8
43	l	302	BCR	C5-C6-C7-C8
43	w	301	BCR	C23-C24-C25-C30
50	b	824	CLA	C3-C5-C6-C7
50	a	824	CLA	C10-C11-C12-C13
50	b	802	CLA	C15-C16-C17-C18
50	w	310	CLA	CAA-CBA-CGA-O2A
44	I	203	PGT	C43-C44-C45-C46
43	a	830	BCR	C17-C18-C19-C20
43	l	303	BCR	C17-C18-C19-C20
43	l	304	BCR	C17-C18-C19-C20
50	b	801	CLA	C10-C11-C12-C13
50	a	858	CLA	C16-C17-C18-C19
50	b	844	CLA	O1A-CGA-O2A-C1
44	N	301	PGT	O3P-C1-C2-C3
50	a	843	CLA	C4-C3-C5-C6
50	a	811	CLA	C6-C7-C8-C10
50	a	812	CLA	C11-C10-C8-C7
50	a	834	CLA	C11-C12-C13-C15
50	a	838	CLA	C11-C10-C8-C7
50	a	839	CLA	C11-C12-C13-C15
50	a	842	CLA	C11-C10-C8-C7
50	a	842	CLA	C11-C12-C13-C15
50	a	845	CLA	C12-C13-C15-C16
50	a	846	CLA	C11-C10-C8-C7
50	a	846	CLA	C12-C13-C15-C16
50	a	849	CLA	C11-C10-C8-C7
50	a	850	CLA	C11-C10-C8-C7
50	a	857	CLA	C12-C13-C15-C16
50	a	858	CLA	C12-C13-C15-C16
50	b	801	CLA	C6-C7-C8-C10

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Mol	Chain	Res	Type	Atoms
50	b	801	CLA	C11-C10-C8-C7
50	b	805	CLA	C11-C12-C13-C15
50	b	805	CLA	C12-C13-C15-C16
50	b	812	CLA	C11-C10-C8-C7
50	b	825	CLA	C11-C12-C13-C15
50	b	833	CLA	C11-C10-C8-C7
50	b	833	CLA	C11-C12-C13-C15
50	b	835	CLA	C11-C10-C8-C7
50	b	836	CLA	C11-C12-C13-C15
50	b	836	CLA	C12-C13-C15-C16
50	b	839	CLA	C11-C12-C13-C15
50	b	842	CLA	C2-C3-C5-C6
50	b	842	CLA	C6-C7-C8-C10
50	b	842	CLA	C11-C10-C8-C7
50	b	843	CLA	C2-C3-C5-C6
50	b	843	CLA	C6-C7-C8-C10
50	b	844	CLA	C6-C7-C8-C10
50	b	846	CLA	C6-C7-C8-C10
50	b	846	CLA	C11-C12-C13-C15
50	b	846	CLA	C12-C13-C15-C16
50	w	308	CLA	C12-C13-C15-C16
50	x	306	CLA	C2-C3-C5-C6
50	y	310	CLA	C12-C13-C15-C16
53	a	825	PQN	C21-C22-C23-C25
43	a	810	BCR	C19-C20-C21-C22
43	k	201	BCR	C19-C20-C21-C22
43	z	318	BCR	C9-C10-C11-C12
50	z	307	CLA	C11-C12-C13-C15
44	b	830	PGT	O31-C31-O2-C2
44	z	313	PGT	C33-C34-C35-C36
50	a	842	CLA	C2A-CAA-CBA-CGA
50	b	806	CLA	C2A-CAA-CBA-CGA
50	b	811	CLA	C2A-CAA-CBA-CGA
51	x	317	DGD	C4A-C5A-C6A-C7A
46	7	301	LMG	C35-C36-C37-C38
45	F	804	A1H1M	C01-C02-C03-C04
44	a	807	PGT	C35-C36-C37-C38
50	l	306	CLA	C11-C12-C13-C14
50	b	845	CLA	C8-C10-C11-C12
50	a	836	CLA	CBA-CGA-O2A-C1
44	L	201	PGT	C32-C33-C34-C35
50	a	811	CLA	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
50	a	812	CLA	CAD-CBD-CGD-O2D
50	a	821	CLA	CAD-CBD-CGD-O2D
50	a	823	CLA	CAD-CBD-CGD-O2D
50	a	834	CLA	CAD-CBD-CGD-O2D
50	a	836	CLA	CAD-CBD-CGD-O2D
50	a	840	CLA	CAD-CBD-CGD-O2D
50	a	841	CLA	CAD-CBD-CGD-O2D
50	a	849	CLA	CAD-CBD-CGD-O2D
50	a	851	CLA	CAD-CBD-CGD-O2D
50	a	853	CLA	CAD-CBD-CGD-O2D
50	b	812	CLA	CAD-CBD-CGD-O2D
50	b	813	CLA	CAD-CBD-CGD-O2D
50	b	814	CLA	CAD-CBD-CGD-O2D
50	f	301	CLA	CAD-CBD-CGD-O2D
50	l	305	CLA	CAD-CBD-CGD-O2D
50	l	306	CLA	CAD-CBD-CGD-O2D
50	w	310	CLA	CAD-CBD-CGD-O2D
50	x	312	CLA	CAD-CBD-CGD-O2D
50	x	316	CLA	CAD-CBD-CGD-O2D
50	z	306	CLA	CAD-CBD-CGD-O2D
50	z	311	CLA	CAD-CBD-CGD-O2D
50	b	833	CLA	C8-C10-C11-C12
50	b	843	CLA	O1D-CGD-O2D-CED
50	a	836	CLA	O1D-CGD-O2D-CED
50	a	850	CLA	C16-C17-C18-C20
50	w	307	CLA	C2C-C3C-CAC-CBC
51	b	821	DGD	C8A-C9A-CAA-CBA
46	x	315	LMG	O6-C1-O1-C7
51	b	821	DGD	O6D-C1D-O3G-C3G
50	a	802	CLA	C5-C6-C7-C8
44	5	301	PGT	C5-C4-O4P-P
44	B	606	PGT	C1-C2-C3-O3
44	D	602	PGT	C5-C4-O4P-P
44	F	803	PGT	C2-C1-O3P-P
46	7	301	LMG	C7-C8-C9-O8
46	f	306	LMG	C7-C8-C9-O8
46	w	312	LMG	C7-C8-C9-O8
46	x	315	LMG	C7-C8-C9-O8
46	z	314	LMG	O1-C7-C8-C9
51	b	821	DGD	C1G-C2G-C3G-O3G
46	F	802	LMG	C11-C10-O7-C8
44	L	201	PGT	O3P-C1-C2-O2

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Mol	Chain	Res	Type	Atoms
50	g	201	CLA	O2A-C1-C2-C3
50	b	834	CLA	O1D-CGD-O2D-CED
50	a	801	CLA	CHA-CBD-CGD-O1D
50	a	801	CLA	CHA-CBD-CGD-O2D
50	a	813	CLA	CHA-CBD-CGD-O1D
50	a	815	CLA	CHA-CBD-CGD-O2D
50	a	819	CLA	CHA-CBD-CGD-O1D
50	a	819	CLA	CHA-CBD-CGD-O2D
50	a	826	CLA	CHA-CBD-CGD-O1D
50	a	838	CLA	CHA-CBD-CGD-O1D
50	a	849	CLA	CHA-CBD-CGD-O1D
50	a	856	CLA	CHA-CBD-CGD-O1D
50	b	808	CLA	CHA-CBD-CGD-O2D
50	b	811	CLA	CHA-CBD-CGD-O2D
50	b	822	CLA	CHA-CBD-CGD-O2D
50	b	824	CLA	CHA-CBD-CGD-O1D
50	b	836	CLA	CHA-CBD-CGD-O2D
50	b	837	CLA	CHA-CBD-CGD-O1D
50	b	842	CLA	CHA-CBD-CGD-O1D
50	b	843	CLA	CHA-CBD-CGD-O1D
50	b	843	CLA	CHA-CBD-CGD-O2D
50	g	204	CLA	CHA-CBD-CGD-O1D
50	j	102	CLA	CHA-CBD-CGD-O2D
50	k	205	CLA	CHA-CBD-CGD-O1D
50	w	306	CLA	CHA-CBD-CGD-O2D
50	x	306	CLA	CHA-CBD-CGD-O1D
50	x	307	CLA	CHA-CBD-CGD-O2D
50	x	309	CLA	CHA-CBD-CGD-O1D
50	x	316	CLA	CHA-CBD-CGD-O1D
50	y	303	CLA	CHA-CBD-CGD-O2D
50	y	310	CLA	CHA-CBD-CGD-O2D
50	z	307	CLA	CHA-CBD-CGD-O2D
50	a	824	CLA	C3-C5-C6-C7
50	y	302	CLA	C3-C5-C6-C7
50	b	803	CLA	O1A-CGA-O2A-C1
46	j	105	LMG	C34-C35-C36-C37
46	7	301	LMG	O7-C8-C9-O8
46	j	105	LMG	O1-C7-C8-O7
46	w	312	LMG	O1-C7-C8-O7
48	B	604	SQD	O6-C44-C45-O47
46	w	312	LMG	C30-C31-C32-C33
44	L	201	PGT	C14-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
50	b	847	CLA	C11-C12-C13-C15
50	j	102	CLA	O1D-CGD-O2D-CED
51	x	317	DGD	C3A-C4A-C5A-C6A
44	f	305	PGT	C32-C33-C34-C35
44	z	301	PGT	C18-C19-C20-C21
46	x	315	LMG	C14-C15-C16-C17
50	g	203	CLA	C2-C3-C5-C6
46	F	802	LMG	O9-C10-O7-C8
50	a	811	CLA	C6-C7-C8-C9
50	a	814	CLA	C14-C13-C15-C16
50	a	838	CLA	C11-C10-C8-C9
50	b	805	CLA	C14-C13-C15-C16
50	b	839	CLA	C11-C12-C13-C14
50	b	844	CLA	C6-C7-C8-C9
50	b	846	CLA	C14-C13-C15-C16
50	y	310	CLA	C14-C13-C15-C16
46	j	104	LMG	C13-C14-C15-C16
50	b	803	CLA	C2C-C3C-CAC-CBC
48	j	106	SQD	C4-C5-C6-S
50	y	308	CLA	C16-C17-C18-C20
50	a	821	CLA	C2A-CAA-CBA-CGA
43	z	318	BCR	C37-C22-C23-C24
50	y	314	CLA	C15-C16-C17-C18
55	z	320	LUT	C27-C28-C29-C30
50	a	848	CLA	C1A-C2A-CAA-CBA
50	a	851	CLA	C1A-C2A-CAA-CBA
50	b	809	CLA	C1A-C2A-CAA-CBA
50	b	839	CLA	C1A-C2A-CAA-CBA
51	b	821	DGD	C1B-C2B-C3B-C4B
50	a	811	CLA	C16-C17-C18-C19
50	a	841	CLA	C5-C6-C7-C8
46	D	601	LMG	C12-C13-C14-C15
44	N	301	PGT	C4-O4P-P-O3P
44	z	317	PGT	C4-O4P-P-O3P
50	b	807	CLA	C1-C2-C3-C5
46	7	301	LMG	C34-C35-C36-C37
51	b	821	DGD	C7B-C8B-C9B-CAB
51	x	317	DGD	C8A-C9A-CAA-CBA
50	a	842	CLA	C3-C5-C6-C7
44	I	203	PGT	C2-C1-O3P-P
44	5	301	PGT	C1-O3P-P-O2P
44	A	401	PGT	C4-O4P-P-O1P

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Mol	Chain	Res	Type	Atoms
44	A	403	PGT	C4-O4P-P-O2P
44	B	601	PGT	C1-O3P-P-O1P
44	B	602	PGT	C1-O3P-P-O1P
44	F	803	PGT	C4-O4P-P-O1P
44	I	203	PGT	C1-O3P-P-O2P
44	N	301	PGT	C4-O4P-P-O2P
44	a	806	PGT	C4-O4P-P-O2P
44	a	807	PGT	C1-O3P-P-O1P
44	a	807	PGT	C4-O4P-P-O1P
44	b	830	PGT	C1-O3P-P-O2P
44	b	830	PGT	C4-O4P-P-O1P
44	w	313	PGT	C1-O3P-P-O2P
44	z	301	PGT	C4-O4P-P-O1P
44	z	317	PGT	C1-O3P-P-O1P
50	a	836	CLA	C16-C17-C18-C19
50	a	846	CLA	C16-C17-C18-C19
44	B	601	PGT	O3P-C1-C2-C3
44	B	603	PGT	O3P-C1-C2-C3
44	L	201	PGT	O3P-C1-C2-C3
44	a	805	PGT	O3P-C1-C2-C3
50	x	310	CLA	C2A-CAA-CBA-CGA
50	a	815	CLA	O1D-CGD-O2D-CED
50	b	832	CLA	C5-C6-C7-C8
44	b	829	PGT	C39-C40-C41-C42
50	a	801	CLA	CAD-CBD-CGD-O1D
50	a	819	CLA	CAD-CBD-CGD-O1D
50	a	826	CLA	CAD-CBD-CGD-O1D
50	a	835	CLA	CAD-CBD-CGD-O1D
50	a	838	CLA	CAD-CBD-CGD-O1D
50	a	839	CLA	CAD-CBD-CGD-O1D
50	a	852	CLA	C2-C3-C5-C6
50	b	824	CLA	CAD-CBD-CGD-O1D
50	b	832	CLA	CAD-CBD-CGD-O1D
50	k	205	CLA	CAD-CBD-CGD-O1D
50	x	316	CLA	CAD-CBD-CGD-O1D
54	z	304	CHL	CAD-CBD-CGD-O1D
44	A	404	PGT	C17-C18-C19-C20
44	I	203	PGT	C14-C15-C16-C17
44	L	201	PGT	C42-C43-C44-C45
44	B	601	PGT	O3P-C1-C2-O2
44	N	301	PGT	O3P-C1-C2-O2
44	z	317	PGT	O3P-C1-C2-O2

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Mol	Chain	Res	Type	Atoms
50	a	801	CLA	C11-C12-C13-C15
50	a	814	CLA	C6-C7-C8-C10
50	a	816	CLA	C3A-C2A-CAA-CBA
50	a	844	CLA	C11-C10-C8-C7
50	a	849	CLA	C3A-C2A-CAA-CBA
50	a	854	CLA	C11-C12-C13-C15
50	a	858	CLA	C11-C12-C13-C15
50	b	802	CLA	C6-C7-C8-C10
50	b	837	CLA	C6-C7-C8-C10
50	b	837	CLA	C12-C13-C15-C16
50	b	844	CLA	C11-C12-C13-C15
50	x	303	CLA	C6-C7-C8-C10
50	y	308	CLA	C12-C13-C15-C16
50	y	313	CLA	C11-C12-C13-C15
53	b	827	PQN	C22-C23-C25-C26
50	a	858	CLA	C1-C2-C3-C5
46	f	306	LMG	C11-C10-O7-C8
44	a	805	PGT	C14-C15-C16-C17
50	a	823	CLA	C6-C7-C8-C10
46	j	105	LMG	O1-C7-C8-C9
46	j	105	LMG	C7-C8-C9-O8
46	w	312	LMG	O1-C7-C8-C9
51	x	317	DGD	C1G-C2G-C3G-O3G
54	x	311	CHL	C1C-C2C-CMC-OMC
54	z	312	CHL	C1C-C2C-CMC-OMC
44	I	203	PGT	O2-C2-C3-O3
44	z	301	PGT	O2-C2-C3-O3
46	j	105	LMG	O7-C8-C9-O8
51	b	821	DGD	O1G-C1G-C2G-O2G
50	a	850	CLA	C16-C17-C18-C19
44	L	201	PGT	C2-C1-O3P-P
50	a	815	CLA	C13-C15-C16-C17
50	b	833	CLA	C15-C16-C17-C18
51	x	317	DGD	C2A-C3A-C4A-C5A
50	a	814	CLA	C11-C10-C8-C9
50	a	842	CLA	C11-C10-C8-C9
50	a	846	CLA	C11-C10-C8-C9
50	a	846	CLA	C14-C13-C15-C16
50	a	858	CLA	C14-C13-C15-C16
50	b	801	CLA	C6-C7-C8-C9
50	b	805	CLA	C11-C12-C13-C14
50	b	836	CLA	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
50	b	840	CLA	C6-C7-C8-C9
50	b	844	CLA	C14-C13-C15-C16
50	l	306	CLA	C11-C10-C8-C9
50	w	308	CLA	C14-C13-C15-C16
50	y	308	CLA	C14-C13-C15-C16
53	a	825	PQN	C21-C22-C23-C24
50	f	301	CLA	O1A-CGA-O2A-C1
44	A	404	PGT	C21-C22-C23-C24
50	y	308	CLA	C16-C17-C18-C19
50	x	312	CLA	C1-C2-C3-C5
50	z	311	CLA	C2A-CAA-CBA-CGA
50	a	849	CLA	CAA-CBA-CGA-O2A
50	b	814	CLA	C13-C15-C16-C17
43	a	810	BCR	C10-C11-C12-C13
43	a	810	BCR	C18-C19-C20-C21
43	z	318	BCR	C10-C11-C12-C13
55	z	320	LUT	C7-C8-C9-C19
44	a	805	PGT	C32-C33-C34-C35
44	z	317	PGT	O4P-C4-C5-O5
46	f	306	LMG	O9-C10-O7-C8
44	A	404	PGT	C32-C33-C34-C35
50	a	836	CLA	C16-C17-C18-C20
50	a	858	CLA	C16-C17-C18-C20
50	b	824	CLA	C16-C17-C18-C20
50	b	806	CLA	O1D-CGD-O2D-CED
50	g	201	CLA	C1-C2-C3-C4
54	x	319	CHL	C1-C2-C3-C4
44	b	829	PGT	C38-C39-C40-C41
44	D	602	PGT	C3-C2-O2-C31
44	N	301	PGT	C3-C2-O2-C31
44	A	402	PGT	O3P-C1-C2-C3
50	b	849	CLA	O1D-CGD-O2D-CED
50	b	803	CLA	C2A-CAA-CBA-CGA
50	x	306	CLA	C2A-CAA-CBA-CGA
50	a	821	CLA	C1-C2-C3-C5
50	b	847	CLA	C5-C6-C7-C8
50	a	833	CLA	C2-C1-O2A-CGA
50	a	842	CLA	C2-C1-O2A-CGA
50	b	807	CLA	C2-C1-O2A-CGA
50	b	825	CLA	C2-C1-O2A-CGA
54	z	312	CHL	C2-C1-O2A-CGA
44	f	305	PGT	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
46	x	315	LMG	C4-C5-C6-O5
50	a	854	CLA	C5-C6-C7-C8
44	A	404	PGT	C5-C4-O4P-P
44	A	402	PGT	C38-C39-C40-C41
50	a	853	CLA	O1D-CGD-O2D-CED
50	x	306	CLA	C11-C12-C13-C15
44	b	829	PGT	C41-C42-C43-C44
43	4	101	BCR	C23-C24-C25-C30
43	a	827	BCR	C1-C6-C7-C8
43	j	101	BCR	C23-C24-C25-C30
43	l	303	BCR	C1-C6-C7-C8
51	b	821	DGD	C3A-C4A-C5A-C6A
44	I	203	PGT	C11-C12-C13-C14
44	B	603	PGT	C17-C18-C19-C20
46	D	601	LMG	O6-C1-O1-C7
50	b	825	CLA	C8-C10-C11-C12
50	a	835	CLA	C2A-CAA-CBA-CGA
50	a	843	CLA	C2A-CAA-CBA-CGA
50	b	801	CLA	C2A-CAA-CBA-CGA
50	b	842	CLA	C2A-CAA-CBA-CGA
50	x	316	CLA	C2A-CAA-CBA-CGA
48	j	106	SQD	O6-C44-C45-O47
51	a	804	DGD	O2G-C2G-C3G-O3G
50	a	818	CLA	CBA-CGA-O2A-C1
44	5	301	PGT	C4-O4P-P-O3P
44	A	401	PGT	C1-O3P-P-O4P
44	A	402	PGT	C4-O4P-P-O3P
44	A	404	PGT	C4-O4P-P-O3P
44	B	602	PGT	C4-O4P-P-O3P
44	D	602	PGT	C4-O4P-P-O3P
44	I	203	PGT	C4-O4P-P-O3P
44	f	305	PGT	C1-O3P-P-O4P
44	f	305	PGT	C4-O4P-P-O3P
44	w	313	PGT	C4-O4P-P-O3P
44	z	313	PGT	C4-O4P-P-O3P
50	b	826	CLA	C1-C2-C3-C5
50	b	838	CLA	C1-C2-C3-C5
52	a	808	CL0	CBA-CGA-O2A-C1
45	F	804	A1H1M	C02-C03-C04-C05
50	z	319	CLA	CBD-CGD-O2D-CED
50	b	840	CLA	C6-C7-C8-C10
50	w	310	CLA	C12-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
50	y	308	CLA	C6-C7-C8-C10
44	5	301	PGT	C33-C34-C35-C36
50	a	801	CLA	C11-C12-C13-C14
50	a	844	CLA	C11-C10-C8-C9
50	b	824	CLA	C11-C12-C13-C14
50	b	837	CLA	C6-C7-C8-C9
50	x	312	CLA	C11-C12-C13-C14
50	y	313	CLA	C11-C12-C13-C14
50	y	314	CLA	C11-C12-C13-C14
43	k	201	BCR	C15-C16-C17-C18
50	a	811	CLA	C16-C17-C18-C20
50	a	823	CLA	C6-C7-C8-C9
50	b	840	CLA	C16-C17-C18-C19
50	y	303	CLA	C6-C7-C8-C10
53	b	827	PQN	C15-C16-C17-C18
48	F	805	SQD	O49-C7-C8-C9
44	B	603	PGT	C36-C37-C38-C39
44	F	803	PGT	C13-C14-C15-C16
44	z	301	PGT	C37-C38-C39-C40
51	a	804	DGD	C4A-C5A-C6A-C7A
43	b	816	BCR	C37-C22-C23-C24
46	w	312	LMG	C14-C15-C16-C17
50	x	307	CLA	CBA-CGA-O2A-C1
50	y	308	CLA	O1A-CGA-O2A-C1
48	a	859	SQD	O49-C7-C8-C9
50	b	806	CLA	O1A-CGA-O2A-C1
44	z	317	PGT	C37-C38-C39-C40
50	x	312	CLA	C16-C17-C18-C20
48	w	317	SQD	O49-C7-C8-C9
44	b	829	PGT	C17-C18-C19-C20
50	y	308	CLA	O1D-CGD-O2D-CED
44	A	402	PGT	C12-C11-O3-C3
50	a	824	CLA	C2A-CAA-CBA-CGA
50	y	303	CLA	C6-C7-C8-C9
48	j	106	SQD	C31-C32-C33-C34
44	B	603	PGT	C12-C13-C14-C15
44	a	807	PGT	C21-C22-C23-C24
51	x	317	DGD	C2B-C3B-C4B-C5B
50	b	802	CLA	C16-C17-C18-C20
50	a	814	CLA	C2-C3-C5-C6
50	a	843	CLA	C2-C3-C5-C6
50	a	854	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
50	x	306	CLA	C2-C1-O2A-CGA
51	a	804	DGD	CEA-CFA-CGA-CHA
50	w	310	CLA	C8-C10-C11-C12
50	a	857	CLA	O1D-CGD-O2D-CED
44	a	807	PGT	C34-C35-C36-C37
46	f	306	LMG	O1-C7-C8-O7
50	a	814	CLA	C2A-CAA-CBA-CGA
50	a	820	CLA	C2A-CAA-CBA-CGA
50	b	846	CLA	C2A-CAA-CBA-CGA
44	A	403	PGT	C38-C39-C40-C41
46	j	105	LMG	C31-C32-C33-C34
45	5	302	A1H1M	C37-C07-C08-C09
50	b	828	CLA	C3A-C2A-CAA-CBA
50	b	842	CLA	C3A-C2A-CAA-CBA
50	b	847	CLA	C3A-C2A-CAA-CBA
50	x	303	CLA	C3A-C2A-CAA-CBA
50	y	312	CLA	C3A-C2A-CAA-CBA
50	z	308	CLA	C3A-C2A-CAA-CBA
54	w	304	CHL	CAA-CBA-CGA-O1A
51	a	804	DGD	C9A-CAA-CBA-CCA
50	a	843	CLA	C11-C10-C8-C9
50	a	850	CLA	C14-C13-C15-C16
50	a	854	CLA	C14-C13-C15-C16
50	b	802	CLA	C11-C12-C13-C14
50	b	840	CLA	C11-C10-C8-C9
50	x	303	CLA	C6-C7-C8-C9
50	y	314	CLA	C14-C13-C15-C16
53	b	827	PQN	C24-C23-C25-C26
50	a	853	CLA	C8-C10-C11-C12
44	A	404	PGT	C22-C23-C24-C25
43	a	810	BCR	C16-C17-C18-C36
43	a	831	BCR	C11-C10-C9-C34
43	a	831	BCR	C35-C13-C14-C15
43	b	818	BCR	C11-C10-C9-C34
43	b	818	BCR	C20-C21-C22-C37
43	f	304	BCR	C35-C13-C14-C15
43	l	304	BCR	C11-C10-C9-C34
46	z	315	LMG	C7-C8-C9-O8
44	B	603	PGT	C18-C19-C20-C21
46	B	605	LMG	O10-C28-C29-C30
50	x	306	CLA	C11-C12-C13-C14
50	x	312	CLA	C16-C17-C18-C19

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Mol	Chain	Res	Type	Atoms
50	a	846	CLA	O2A-C1-C2-C3
50	b	810	CLA	O2A-C1-C2-C3
50	b	841	CLA	O2A-C1-C2-C3
43	k	202	BCR	C37-C22-C23-C24
55	z	320	LUT	C11-C12-C13-C20
50	a	850	CLA	C5-C6-C7-C8
44	A	401	PGT	C3-C2-O2-C31
48	F	805	SQD	C44-C45-O47-C7
50	y	314	CLA	C4-C3-C5-C6
50	b	833	CLA	C1A-C2A-CAA-CBA
50	b	836	CLA	C1A-C2A-CAA-CBA
50	l	301	CLA	C1A-C2A-CAA-CBA
50	y	313	CLA	C1A-C2A-CAA-CBA
50	a	824	CLA	C6-C7-C8-C10
50	a	853	CLA	C11-C12-C13-C15
50	b	845	CLA	C6-C7-C8-C10
50	w	310	CLA	C11-C12-C13-C15
50	b	823	CLA	O1D-CGD-O2D-CED
50	b	802	CLA	C5-C6-C7-C8
44	B	603	PGT	C1-O3P-P-O4P
44	b	829	PGT	C1-O3P-P-O4P
44	5	301	PGT	C35-C36-C37-C38
50	a	850	CLA	CAA-CBA-CGA-O2A
44	f	305	PGT	O3P-C1-C2-O2
44	z	313	PGT	O3P-C1-C2-O2
48	w	317	SQD	C11-C10-C9-C8
50	a	835	CLA	C5-C6-C7-C8
50	b	844	CLA	C10-C11-C12-C13
50	b	828	CLA	O1D-CGD-O2D-CED
44	w	313	PGT	C33-C34-C35-C36
44	A	402	PGT	O11-C11-O3-C3
50	z	311	CLA	O1A-CGA-O2A-C1
46	z	315	LMG	O9-C10-O7-C8
44	5	301	PGT	C32-C33-C34-C35
43	a	810	BCR	C16-C17-C18-C19
43	a	831	BCR	C11-C10-C9-C8
43	a	831	BCR	C12-C13-C14-C15
43	b	818	BCR	C11-C10-C9-C8
43	b	818	BCR	C20-C21-C22-C23
43	f	304	BCR	C12-C13-C14-C15
43	l	304	BCR	C11-C10-C9-C8
51	a	804	DGD	O1G-C1G-C2G-O2G

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Mol	Chain	Res	Type	Atoms
44	a	807	PGT	C33-C34-C35-C36
44	b	829	PGT	C15-C16-C17-C18
43	l	302	BCR	C13-C14-C15-C16
50	a	820	CLA	O1A-CGA-O2A-C1
50	b	839	CLA	O1A-CGA-O2A-C1
50	b	843	CLA	C16-C17-C18-C20
44	I	203	PGT	C41-C42-C43-C44
50	a	818	CLA	C11-C12-C13-C14
50	a	824	CLA	C4-C3-C5-C6
50	b	836	CLA	C4-C3-C5-C6
50	a	841	CLA	C2-C1-O2A-CGA
50	a	853	CLA	C2-C1-O2A-CGA
50	b	839	CLA	C2-C1-O2A-CGA
50	x	312	CLA	C2-C1-O2A-CGA
50	w	306	CLA	O1A-CGA-O2A-C1
50	b	837	CLA	CAA-CBA-CGA-O2A
46	B	605	LMG	C34-C35-C36-C37
50	b	828	CLA	C2A-CAA-CBA-CGA
50	x	307	CLA	C2A-CAA-CBA-CGA
44	B	603	PGT	C44-C45-C46-C47
50	a	822	CLA	C1-C2-C3-C5
50	y	313	CLA	O1A-CGA-O2A-C1
43	a	810	BCR	C1-C6-C7-C8
43	a	830	BCR	C1-C6-C7-C8
43	a	831	BCR	C5-C6-C7-C8
43	i	101	BCR	C1-C6-C7-C8
43	y	301	BCR	C23-C24-C25-C30
44	D	602	PGT	C15-C16-C17-C18
50	l	301	CLA	CAA-CBA-CGA-O2A
43	l	304	BCR	C9-C10-C11-C12
46	x	315	LMG	C15-C16-C17-C18
50	b	807	CLA	C4-C3-C5-C6
43	b	817	BCR	C21-C22-C23-C24
50	b	848	CLA	C1A-C2A-CAA-CBA
50	b	803	CLA	C5-C6-C7-C8
50	y	310	CLA	C2-C3-C5-C6
50	a	847	CLA	C2A-C3A-C4A-CHB
50	a	850	CLA	C3-C5-C6-C7
50	b	846	CLA	C16-C17-C18-C19
50	b	814	CLA	C15-C16-C17-C18
50	z	307	CLA	C10-C11-C12-C13
50	a	812	CLA	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
50	l	301	CLA	CAA-CBA-CGA-O1A
50	w	306	CLA	C1-C2-C3-C5
51	a	804	DGD	CCB-CDB-CEB-CFB
44	B	601	PGT	C15-C16-C17-C18
50	a	834	CLA	C4-C3-C5-C6
50	b	823	CLA	C4-C3-C5-C6
46	x	315	LMG	C21-C22-C23-C24
50	a	845	CLA	C11-C10-C8-C7
50	a	849	CLA	C6-C7-C8-C10
50	b	802	CLA	C11-C10-C8-C7
50	b	805	CLA	C11-C10-C8-C7
54	w	304	CHL	CAA-CBA-CGA-O2A
50	y	303	CLA	C3-C5-C6-C7
50	a	820	CLA	C1-C2-C3-C4
50	a	838	CLA	C1-C2-C3-C4
50	a	845	CLA	C1-C2-C3-C4
50	b	814	CLA	C1-C2-C3-C4
50	b	832	CLA	C1-C2-C3-C4
50	l	306	CLA	C1-C2-C3-C4
50	w	310	CLA	C1-C2-C3-C4
50	x	303	CLA	C1-C2-C3-C4
50	y	302	CLA	C1-C2-C3-C4
50	y	313	CLA	C15-C16-C17-C18
46	D	601	LMG	C2-C1-O1-C7
50	b	843	CLA	C16-C17-C18-C19
44	B	603	PGT	C33-C34-C35-C36
46	x	315	LMG	O1-C7-C8-O7
50	a	856	CLA	O2A-C1-C2-C3
46	H	401	LMG	O7-C10-C11-C12
50	b	842	CLA	CAA-CBA-CGA-O2A
54	w	304	CHL	C2A-CAA-CBA-CGA
44	B	603	PGT	C14-C15-C16-C17
51	x	317	DGD	C2G-C1G-O1G-C1A
44	z	317	PGT	C19-C20-C21-C22
50	b	826	CLA	O1D-CGD-O2D-CED
50	a	850	CLA	C4-C3-C5-C6
50	b	845	CLA	C13-C15-C16-C17
44	B	606	PGT	C17-C18-C19-C20
44	B	601	PGT	C4-O4P-P-O3P
50	b	837	CLA	C1-C2-C3-C5
50	a	844	CLA	C2-C3-C5-C6
50	a	849	CLA	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
46	7	301	LMG	C29-C30-C31-C32
50	a	824	CLA	C6-C7-C8-C9
50	a	854	CLA	C11-C12-C13-C14
50	b	809	CLA	C6-C7-C8-C9
50	b	837	CLA	C14-C13-C15-C16
50	f	301	CLA	C11-C10-C8-C9
50	a	853	CLA	C3A-C2A-CAA-CBA
50	b	813	CLA	C3A-C2A-CAA-CBA
50	b	833	CLA	C3A-C2A-CAA-CBA
44	B	606	PGT	O3-C11-C12-C13
44	z	313	PGT	O2-C31-C32-C33
46	x	315	LMG	O6-C5-C6-O5
44	I	203	PGT	C34-C35-C36-C37
48	a	859	SQD	C46-C45-O47-C7
48	w	318	SQD	C46-C45-O47-C7
50	a	809	CLA	CAD-CBD-CGD-O2D
50	a	814	CLA	CAD-CBD-CGD-O2D
50	a	816	CLA	CAD-CBD-CGD-O2D
50	a	818	CLA	CAD-CBD-CGD-O2D
50	a	846	CLA	CAD-CBD-CGD-O2D
50	b	801	CLA	CAD-CBD-CGD-O2D
50	b	805	CLA	CAD-CBD-CGD-O2D
50	b	849	CLA	CAD-CBD-CGD-O2D
50	j	102	CLA	CAD-CBD-CGD-O2D
50	k	205	CLA	CAD-CBD-CGD-O2D
50	y	305	CLA	CAD-CBD-CGD-O2D
50	y	306	CLA	CAD-CBD-CGD-O2D
50	y	308	CLA	CAD-CBD-CGD-O2D
51	a	804	DGD	C1G-C2G-O2G-C1B
50	w	308	CLA	C16-C17-C18-C20
44	5	301	PGT	O31-C31-O2-C2
50	y	305	CLA	CAA-CBA-CGA-O2A
50	a	834	CLA	CAA-CBA-CGA-O2A
50	b	809	CLA	CAA-CBA-CGA-O2A
44	B	602	PGT	C15-C16-C17-C18
50	a	842	CLA	C4-C3-C5-C6
50	a	854	CLA	C4-C3-C5-C6
50	b	811	CLA	CAA-CBA-CGA-O2A
50	y	308	CLA	C8-C10-C11-C12
50	b	841	CLA	CAA-CBA-CGA-O2A
50	y	311	CLA	O1A-CGA-O2A-C1
43	b	816	BCR	C21-C22-C23-C24

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Mol	Chain	Res	Type	Atoms
55	w	319	LUT	C11-C12-C13-C14
50	a	847	CLA	C2A-CAA-CBA-CGA
44	w	313	PGT	C18-C19-C20-C21
46	D	601	LMG	C7-C8-C9-O8
50	x	303	CLA	CBA-CGA-O2A-C1
50	a	833	CLA	CAA-CBA-CGA-O2A
50	a	852	CLA	CAA-CBA-CGA-O2A
44	a	807	PGT	C15-C16-C17-C18
44	b	830	PGT	C12-C13-C14-C15
50	a	826	CLA	CAA-CBA-CGA-O2A
46	z	314	LMG	C32-C33-C34-C35
50	a	815	CLA	O2A-C1-C2-C3
50	a	833	CLA	O2A-C1-C2-C3
50	b	801	CLA	O2A-C1-C2-C3
50	b	805	CLA	O2A-C1-C2-C3
50	b	812	CLA	O2A-C1-C2-C3
50	b	823	CLA	O2A-C1-C2-C3
50	b	832	CLA	O2A-C1-C2-C3
50	b	835	CLA	O2A-C1-C2-C3
50	f	301	CLA	O2A-C1-C2-C3
50	w	308	CLA	O2A-C1-C2-C3
50	w	306	CLA	C2A-CAA-CBA-CGA
50	k	204	CLA	C8-C10-C11-C12
44	B	606	PGT	O2-C31-C32-C33
50	a	819	CLA	C3-C5-C6-C7
50	b	833	CLA	C16-C17-C18-C20
44	z	313	PGT	O4P-C4-C5-O5
51	a	804	DGD	C7B-C8B-C9B-CAB
50	a	817	CLA	CHA-CBD-CGD-O2D
50	a	833	CLA	CHA-CBD-CGD-O1D
50	a	842	CLA	CHA-CBD-CGD-O2D
50	a	844	CLA	CHA-CBD-CGD-O1D
50	a	847	CLA	CHA-CBD-CGD-O1D
50	a	852	CLA	CHA-CBD-CGD-O1D
50	a	858	CLA	CHA-CBD-CGD-O1D
50	b	801	CLA	CHA-CBD-CGD-O2D
50	b	803	CLA	CHA-CBD-CGD-O1D
50	b	805	CLA	CHA-CBD-CGD-O1D
50	b	805	CLA	CHA-CBD-CGD-O2D
50	b	806	CLA	CHA-CBD-CGD-O2D
50	b	810	CLA	CHA-CBD-CGD-O2D
50	b	815	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
50	b	835	CLA	CHA-CBD-CGD-O1D
50	b	840	CLA	CHA-CBD-CGD-O2D
50	b	848	CLA	CHA-CBD-CGD-O1D
50	g	204	CLA	CHA-CBD-CGD-O2D
50	w	302	CLA	CHA-CBD-CGD-O2D
50	w	314	CLA	CHA-CBD-CGD-O2D
50	w	315	CLA	CHA-CBD-CGD-O2D
50	x	318	CLA	CHA-CBD-CGD-O1D
50	y	306	CLA	CHA-CBD-CGD-O2D
50	y	309	CLA	CHA-CBD-CGD-O2D
50	z	303	CLA	CHA-CBD-CGD-O2D
50	z	307	CLA	CHA-CBD-CGD-O1D
50	z	310	CLA	CHA-CBD-CGD-O2D
50	z	311	CLA	CHA-CBD-CGD-O1D
50	a	848	CLA	CAA-CBA-CGA-O2A
50	a	854	CLA	CAA-CBA-CGA-O2A
44	f	305	PGT	O3P-C1-C2-C3
50	b	847	CLA	CAA-CBA-CGA-O2A
50	w	306	CLA	CAA-CBA-CGA-O2A
44	a	807	PGT	C20-C21-C22-C23
44	A	404	PGT	O2-C2-C3-O3
44	a	806	PGT	O2-C2-C3-O3
44	a	805	PGT	O2-C31-C32-C33
46	z	315	LMG	O8-C28-C29-C30
50	b	839	CLA	CAA-CBA-CGA-O2A
50	b	802	CLA	C2A-CAA-CBA-CGA
50	y	308	CLA	C13-C15-C16-C17
44	a	805	PGT	C11-C12-C13-C14
44	5	301	PGT	C11-C12-C13-C14
50	z	311	CLA	CAA-CBA-CGA-O2A
50	b	833	CLA	C4-C3-C5-C6
50	a	835	CLA	C6-C7-C8-C10
50	a	857	CLA	C11-C12-C13-C15
50	a	853	CLA	C16-C17-C18-C19
50	a	853	CLA	C16-C17-C18-C20
50	l	306	CLA	C11-C12-C13-C15
50	w	308	CLA	C16-C17-C18-C19
50	a	849	CLA	C6-C7-C8-C9
50	b	802	CLA	C11-C10-C8-C9
50	y	313	CLA	C14-C13-C15-C16
50	x	318	CLA	O1D-CGD-O2D-CED
43	i	101	BCR	C13-C14-C15-C16

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Mol	Chain	Res	Type	Atoms
44	z	301	PGT	C17-C18-C19-C20
48	F	801	SQD	C4-C5-C6-S
48	F	805	SQD	C4-C5-C6-S
48	w	318	SQD	C4-C5-C6-S
44	5	301	PGT	C32-C31-O2-C2
46	z	315	LMG	C11-C10-O7-C8
44	f	305	PGT	O3-C11-C12-C13
46	f	306	LMG	O7-C10-C11-C12
50	x	318	CLA	CAA-CBA-CGA-O2A
50	a	801	CLA	CAA-CBA-CGA-O1A
50	b	838	CLA	CAA-CBA-CGA-O1A
50	a	854	CLA	C8-C10-C11-C12
50	b	801	CLA	C2-C3-C5-C6
50	b	815	CLA	C2-C3-C5-C6
50	a	809	CLA	CBD-CGD-O2D-CED
48	j	106	SQD	C32-C33-C34-C35
50	g	201	CLA	CAA-CBA-CGA-O1A
43	k	202	BCR	C21-C22-C23-C24
44	f	305	PGT	O4P-C4-C5-C6
50	a	822	CLA	C1A-C2A-CAA-CBA
50	a	835	CLA	C1A-C2A-CAA-CBA
50	a	839	CLA	C1A-C2A-CAA-CBA
50	a	853	CLA	C1A-C2A-CAA-CBA
50	b	813	CLA	C1A-C2A-CAA-CBA
50	z	308	CLA	C1A-C2A-CAA-CBA
44	B	606	PGT	O11-C11-C12-C13
50	y	308	CLA	CAA-CBA-CGA-O1A
50	b	808	CLA	C2A-CAA-CBA-CGA
44	z	313	PGT	C32-C33-C34-C35
54	z	312	CHL	C2C-C3C-CAC-CBC
50	w	308	CLA	C2-C1-O2A-CGA
44	b	829	PGT	C37-C38-C39-C40
50	b	835	CLA	CBA-CGA-O2A-C1
44	z	313	PGT	O31-C31-C32-C33
50	b	832	CLA	CAA-CBA-CGA-O1A
50	z	311	CLA	CAA-CBA-CGA-O1A
44	B	603	PGT	C41-C42-C43-C44
50	a	821	CLA	C12-C13-C15-C16
44	a	806	PGT	C1-C2-C3-O3
44	z	301	PGT	C1-C2-C3-O3
46	f	306	LMG	O1-C7-C8-C9
50	b	833	CLA	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
50	a	814	CLA	CAA-CBA-CGA-O1A
50	a	821	CLA	CAA-CBA-CGA-O1A
50	a	834	CLA	CAA-CBA-CGA-O1A
50	b	844	CLA	CAA-CBA-CGA-O1A
46	B	605	LMG	C35-C36-C37-C38
50	y	302	CLA	O1D-CGD-O2D-CED
44	B	603	PGT	C2-C1-O3P-P
46	f	306	LMG	O9-C10-C11-C12
50	a	811	CLA	CAA-CBA-CGA-O1A
44	B	606	PGT	C12-C13-C14-C15
44	A	401	PGT	C1-O3P-P-O1P
44	A	404	PGT	C4-O4P-P-O1P
44	B	602	PGT	C4-O4P-P-O1P
44	B	603	PGT	C1-O3P-P-O1P
44	b	829	PGT	C1-O3P-P-O2P
44	z	313	PGT	C4-O4P-P-O1P
44	B	606	PGT	O31-C31-C32-C33
46	H	401	LMG	O9-C10-C11-C12
50	l	306	CLA	CAA-CBA-CGA-O1A
50	w	315	CLA	CAA-CBA-CGA-O1A
50	x	313	CLA	CAA-CBA-CGA-O1A
44	w	313	PGT	O2-C31-C32-C33
50	w	315	CLA	CAA-CBA-CGA-O2A
46	w	312	LMG	O6-C1-O1-C7
44	B	606	PGT	C15-C16-C17-C18
43	a	831	BCR	C23-C24-C25-C26
50	a	824	CLA	C13-C15-C16-C17
50	a	841	CLA	CAA-CBA-CGA-O1A
50	g	201	CLA	CAA-CBA-CGA-O2A
50	y	308	CLA	CAA-CBA-CGA-O2A
50	y	311	CLA	CAA-CBA-CGA-O2A
44	F	803	PGT	C12-C13-C14-C15
46	F	802	LMG	C29-C30-C31-C32
50	b	843	CLA	C2A-CAA-CBA-CGA
50	y	302	CLA	C2A-CAA-CBA-CGA
50	z	316	CLA	CAA-CBA-CGA-O1A
46	7	301	LMG	C13-C14-C15-C16
54	z	312	CHL	C4C-C3C-CAC-CBC
46	f	306	LMG	C15-C16-C17-C18
50	b	824	CLA	CAA-CBA-CGA-O1A
50	a	802	CLA	C4-C3-C5-C6
44	F	803	PGT	C34-C35-C36-C37

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Mol	Chain	Res	Type	Atoms
44	w	313	PGT	C32-C33-C34-C35
46	z	314	LMG	C31-C32-C33-C34
50	b	840	CLA	C16-C17-C18-C20
48	F	805	SQD	C46-C45-O47-C7
48	F	805	SQD	O5-C5-C6-S
48	a	859	SQD	C44-C45-O47-C7
48	j	106	SQD	O5-C5-C6-S
48	w	318	SQD	C44-C45-O47-C7
48	w	318	SQD	O5-C5-C6-S
50	a	812	CLA	CAD-CBD-CGD-O1D
50	a	817	CLA	CAD-CBD-CGD-O1D
50	a	822	CLA	CAD-CBD-CGD-O1D
50	a	837	CLA	CAD-CBD-CGD-O1D
50	a	846	CLA	CAD-CBD-CGD-O1D
50	b	815	CLA	CAD-CBD-CGD-O1D
50	b	836	CLA	CAD-CBD-CGD-O1D
50	b	845	CLA	CAD-CBD-CGD-O1D
50	g	201	CLA	CAD-CBD-CGD-O1D
50	j	102	CLA	CAD-CBD-CGD-O1D
50	w	310	CLA	CAD-CBD-CGD-O1D
50	y	309	CLA	CAD-CBD-CGD-O1D
50	b	839	CLA	CAA-CBA-CGA-O1A
54	x	319	CHL	CAA-CBA-CGA-O1A
51	b	821	DGD	C8B-C9B-CAB-CBB
50	b	805	CLA	CAA-CBA-CGA-O2A
50	b	845	CLA	CAA-CBA-CGA-O2A
50	k	204	CLA	CAA-CBA-CGA-O2A
50	a	834	CLA	C14-C13-C15-C16
50	a	853	CLA	C11-C12-C13-C14
50	b	824	CLA	C6-C7-C8-C9
50	b	844	CLA	C11-C12-C13-C14
50	b	845	CLA	C14-C13-C15-C16
50	b	811	CLA	CAA-CBA-CGA-O1A
50	x	308	CLA	CAA-CBA-CGA-O1A
50	a	854	CLA	C3-C5-C6-C7
44	A	402	PGT	O3-C11-C12-C13
48	F	801	SQD	O47-C7-C8-C9
50	a	835	CLA	CAA-CBA-CGA-O2A
50	b	832	CLA	CAA-CBA-CGA-O2A
50	a	826	CLA	CAA-CBA-CGA-O1A
50	a	821	CLA	CAA-CBA-CGA-O2A
50	a	841	CLA	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
50	a	843	CLA	CAA-CBA-CGA-O2A
50	b	824	CLA	CAA-CBA-CGA-O2A
50	y	314	CLA	CAA-CBA-CGA-O2A
50	z	307	CLA	CAA-CBA-CGA-O2A
50	z	316	CLA	CAA-CBA-CGA-O2A
50	b	828	CLA	CAA-CBA-CGA-O1A
50	x	313	CLA	C4-C3-C5-C6
44	b	829	PGT	O3P-C1-C2-O2
50	a	801	CLA	C11-C10-C8-C7
50	a	824	CLA	C12-C13-C15-C16
50	a	839	CLA	C3A-C2A-CAA-CBA
50	a	850	CLA	C3A-C2A-CAA-CBA
50	b	807	CLA	C3A-C2A-CAA-CBA
50	b	809	CLA	C6-C7-C8-C10
50	b	814	CLA	C12-C13-C15-C16
50	b	824	CLA	C6-C7-C8-C10
50	b	837	CLA	C11-C12-C13-C15
50	w	308	CLA	C11-C10-C8-C7
50	w	310	CLA	C3A-C2A-CAA-CBA
50	y	314	CLA	C12-C13-C15-C16
50	z	319	CLA	C3A-C2A-CAA-CBA
50	a	842	CLA	CAA-CBA-CGA-O1A
44	B	601	PGT	O3-C11-C12-C13
44	5	301	PGT	C40-C41-C42-C43
43	b	831	BCR	C11-C12-C13-C14
43	z	318	BCR	C17-C18-C19-C20
55	x	320	LUT	C11-C12-C13-C14
55	z	320	LUT	C7-C8-C9-C10
50	a	852	CLA	CAA-CBA-CGA-O1A
50	b	842	CLA	CAA-CBA-CGA-O1A
50	y	313	CLA	CAA-CBA-CGA-O1A
44	F	803	PGT	C20-C21-C22-C23
48	F	805	SQD	C11-C12-C13-C14
50	b	802	CLA	C8-C10-C11-C12
44	A	402	PGT	O11-C11-C12-C13
44	a	805	PGT	O31-C31-C32-C33
44	f	305	PGT	O11-C11-C12-C13
46	z	315	LMG	O10-C28-C29-C30
50	a	845	CLA	CAA-CBA-CGA-O1A
50	w	306	CLA	CAA-CBA-CGA-O1A
50	z	307	CLA	CAA-CBA-CGA-O1A
50	a	802	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
50	h	201	CLA	CAA-CBA-CGA-O2A
50	a	842	CLA	C5-C6-C7-C8
50	z	307	CLA	C5-C6-C7-C8
50	a	843	CLA	CAA-CBA-CGA-O1A
50	a	848	CLA	CAA-CBA-CGA-O1A
50	x	318	CLA	CAA-CBA-CGA-O1A
50	b	847	CLA	C2A-CAA-CBA-CGA
44	b	829	PGT	C19-C20-C21-C22
50	b	826	CLA	O1A-CGA-O2A-C1
50	a	819	CLA	C5-C6-C7-C8
44	z	317	PGT	C11-C12-C13-C14
44	B	603	PGT	C40-C41-C42-C43
44	a	807	PGT	C13-C14-C15-C16

All (1) ring outliers are listed below:

Mol	Chain	Res	Type	Atoms
45	F	804	A1H1M	C08-C09-C10-C11-C35-C36

201 monomers are involved in 576 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
46	z	315	LMG	3	0
44	z	317	PGT	3	0
50	a	801	CLA	5	0
50	b	813	CLA	1	0
46	D	601	LMG	1	0
43	i	101	BCR	2	0
50	x	310	CLA	1	0
50	b	840	CLA	6	0
43	g	202	BCR	2	0
50	b	803	CLA	5	0
51	x	317	DGD	2	0
50	a	857	CLA	5	0
43	4	101	BCR	4	0
43	b	850	BCR	3	0
50	b	844	CLA	4	0
50	a	842	CLA	3	0
54	z	304	CHL	1	0
46	F	802	LMG	2	0
50	a	835	CLA	5	0
50	b	848	CLA	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
50	k	204	CLA	1	0
50	a	812	CLA	2	0
50	z	305	CLA	1	0
50	a	845	CLA	5	0
50	b	849	CLA	4	0
50	w	310	CLA	4	0
44	A	402	PGT	1	0
50	w	306	CLA	7	0
50	a	815	CLA	3	0
50	a	839	CLA	5	0
50	b	834	CLA	1	0
50	x	307	CLA	3	0
55	x	321	LUT	11	0
50	z	309	CLA	4	0
50	a	854	CLA	4	0
46	x	315	LMG	4	0
50	g	203	CLA	2	0
43	a	830	BCR	3	0
46	z	314	LMG	4	0
50	b	838	CLA	1	0
50	a	826	CLA	2	0
43	w	301	BCR	1	0
50	b	801	CLA	6	0
54	x	305	CHL	1	0
43	b	820	BCR	4	0
55	x	320	LUT	10	0
44	B	602	PGT	2	0
43	j	103	BCR	4	0
43	z	318	BCR	1	0
50	a	822	CLA	2	0
50	b	836	CLA	4	0
50	w	308	CLA	9	0
43	b	816	BCR	3	0
50	x	308	CLA	2	0
43	x	314	BCR	1	0
50	b	807	CLA	4	0
44	A	403	PGT	2	0
50	b	826	CLA	1	0
51	b	821	DGD	3	0
55	y	316	LUT	28	0
50	a	814	CLA	5	0
50	b	851	CLA	5	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
50	b	812	CLA	2	0
50	z	302	CLA	3	0
50	y	310	CLA	5	0
50	a	843	CLA	3	0
53	b	827	PQN	3	0
44	z	301	PGT	5	0
50	a	837	CLA	1	0
50	a	853	CLA	2	0
54	w	311	CHL	9	0
48	w	317	SQD	2	0
50	b	842	CLA	2	0
50	b	847	CLA	4	0
50	b	804	CLA	3	0
50	y	303	CLA	11	0
50	w	307	CLA	5	0
43	b	819	BCR	6	0
50	y	302	CLA	7	0
44	N	301	PGT	2	0
44	a	807	PGT	2	0
50	y	308	CLA	4	0
50	b	814	CLA	1	0
46	f	306	LMG	1	0
49	I	202	SF4	1	0
50	b	837	CLA	2	0
51	a	804	DGD	2	0
50	b	811	CLA	2	0
50	b	825	CLA	3	0
50	b	833	CLA	5	0
50	z	316	CLA	1	0
50	a	836	CLA	4	0
50	a	858	CLA	6	0
50	a	833	CLA	3	0
43	j	101	BCR	6	0
50	k	205	CLA	3	0
50	a	802	CLA	2	0
54	z	312	CHL	7	0
50	b	845	CLA	5	0
44	B	603	PGT	3	0
48	F	805	SQD	11	0
50	k	203	CLA	1	0
44	a	805	PGT	3	0
50	a	820	CLA	5	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
43	a	803	BCR	1	0
44	5	301	PGT	2	0
50	a	809	CLA	3	0
50	z	310	CLA	3	0
46	H	401	LMG	1	0
48	F	801	SQD	7	0
50	f	301	CLA	2	0
50	a	846	CLA	6	0
50	f	303	CLA	1	0
43	b	831	BCR	5	0
50	b	805	CLA	6	0
50	x	303	CLA	2	0
50	l	301	CLA	3	0
50	b	822	CLA	3	0
50	y	313	CLA	5	0
55	w	320	LUT	21	0
43	b	818	BCR	1	0
50	a	850	CLA	2	0
44	L	201	PGT	2	0
44	w	313	PGT	1	0
50	z	306	CLA	10	0
50	a	856	CLA	3	0
54	x	311	CHL	3	0
43	f	304	BCR	2	0
50	b	828	CLA	5	0
43	l	303	BCR	2	0
50	y	314	CLA	3	0
50	a	813	CLA	2	0
50	l	306	CLA	2	0
50	b	843	CLA	2	0
50	a	811	CLA	4	0
50	b	806	CLA	1	0
50	a	852	CLA	1	0
43	l	302	BCR	2	0
43	a	829	BCR	1	0
43	a	827	BCR	4	0
50	a	823	CLA	3	0
50	x	306	CLA	1	0
54	w	304	CHL	1	0
48	w	318	SQD	13	0
50	x	316	CLA	2	0
43	b	817	BCR	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
50	b	815	CLA	3	0
44	z	313	PGT	1	0
46	w	312	LMG	2	0
50	y	311	CLA	5	0
50	b	839	CLA	2	0
44	B	606	PGT	1	0
46	j	104	LMG	1	0
44	a	806	PGT	1	0
55	w	319	LUT	9	0
50	a	824	CLA	4	0
50	a	844	CLA	3	0
50	b	846	CLA	1	0
50	l	305	CLA	1	0
55	z	320	LUT	27	0
50	x	312	CLA	7	0
45	F	804	A1H1M	6	0
50	y	312	CLA	3	0
50	a	834	CLA	3	0
50	a	848	CLA	1	0
43	a	831	BCR	2	0
50	x	318	CLA	1	0
54	x	319	CHL	5	0
46	B	605	LMG	1	0
53	a	825	PQN	1	0
50	a	849	CLA	4	0
50	w	314	CLA	1	0
50	b	841	CLA	3	0
50	a	818	CLA	1	0
50	z	307	CLA	2	0
43	a	828	BCR	4	0
50	b	823	CLA	1	0
55	y	315	LUT	32	0
44	b	829	PGT	2	0
50	w	316	CLA	2	0
50	a	838	CLA	8	0
55	z	321	LUT	7	0
50	b	835	CLA	1	0
48	a	859	SQD	3	0
54	x	301	CHL	1	0
43	a	810	BCR	4	0
50	a	841	CLA	2	0
50	b	810	CLA	1	0

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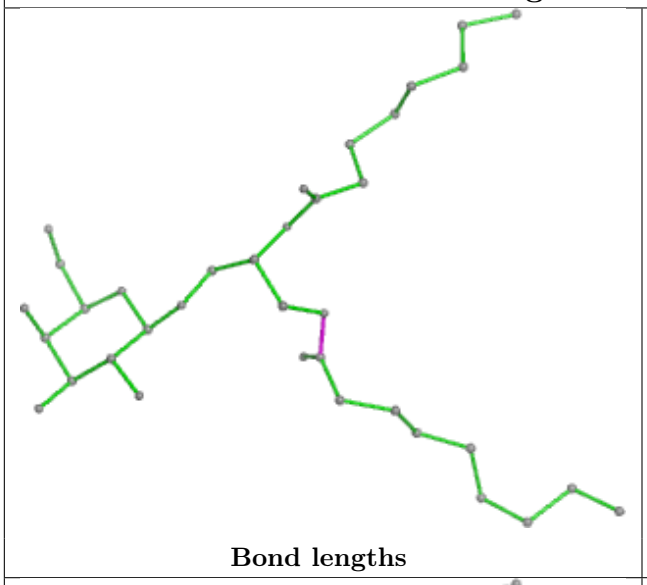
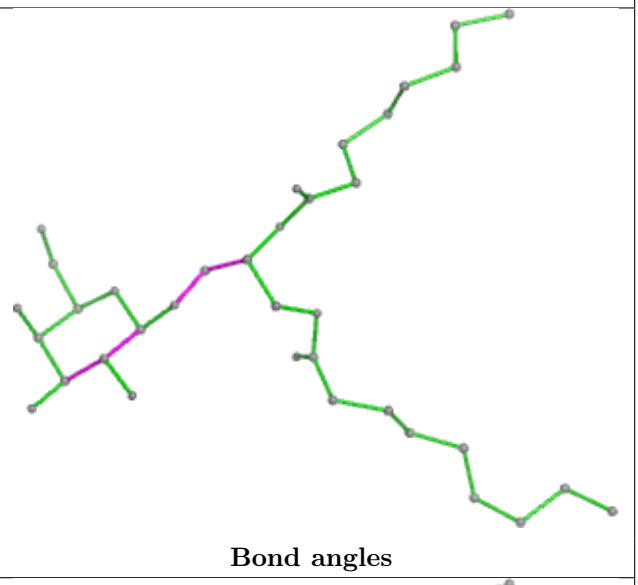
Mol	Chain	Res	Type	Clashes	Symm-Clashes
44	D	602	PGT	1	0
50	h	201	CLA	2	0
54	w	309	CHL	3	0
43	y	301	BCR	1	0
50	w	303	CLA	3	0
47	A	405	PQ9	15	0
50	z	319	CLA	3	0
50	b	802	CLA	3	0
48	B	604	SQD	10	0
43	l	304	BCR	1	0
50	g	201	CLA	2	0
46	j	105	LMG	2	0
50	b	809	CLA	2	0

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.

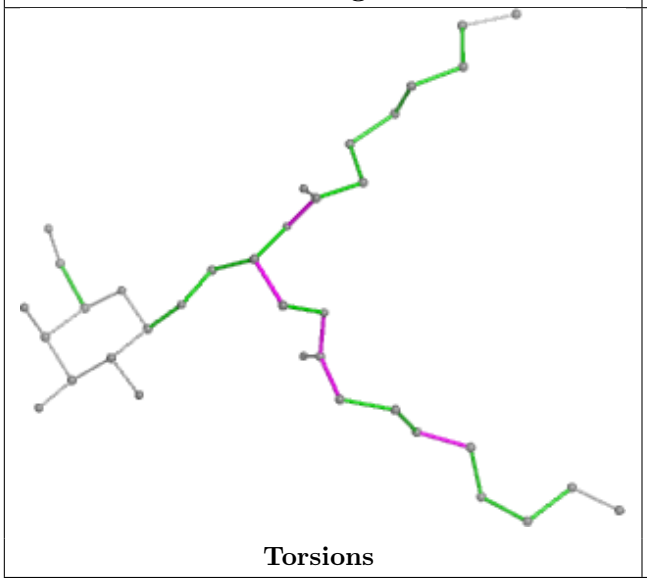
Ligand LMG z 315



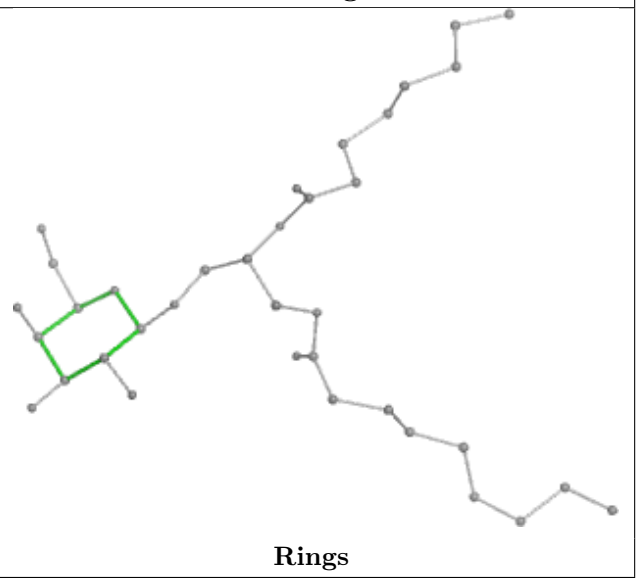
Bond lengths



Bond angles

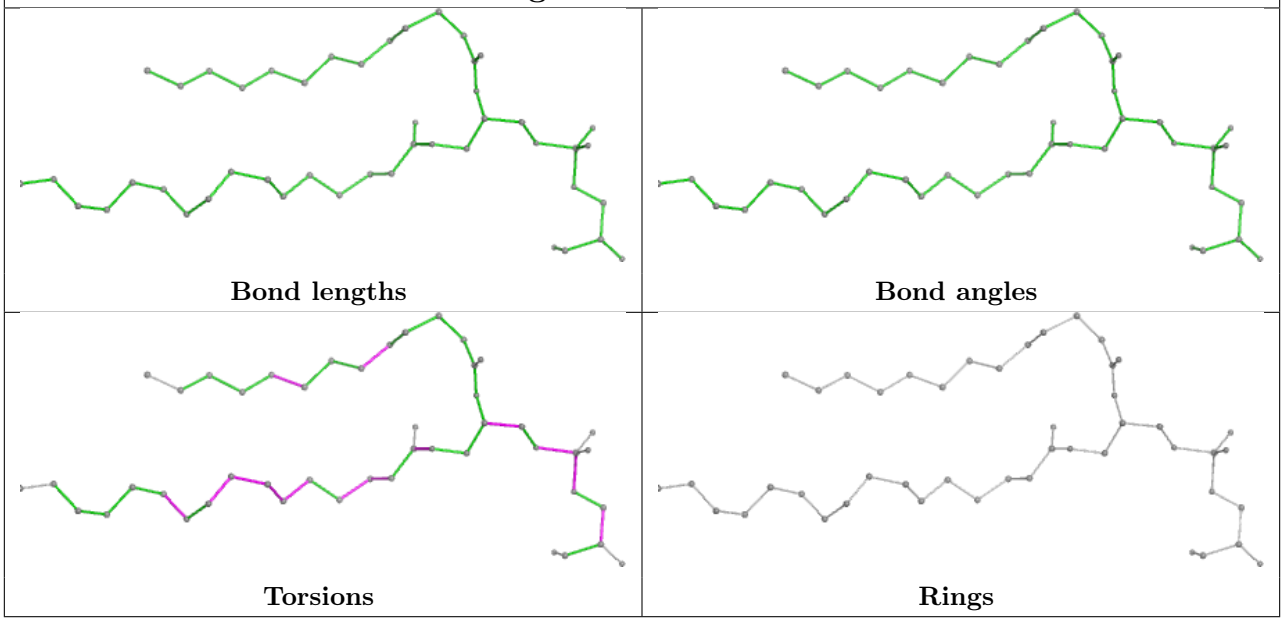


Torsions

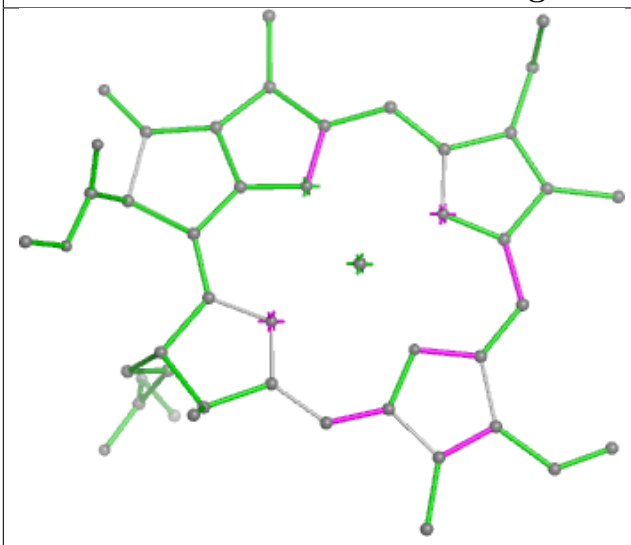


Rings

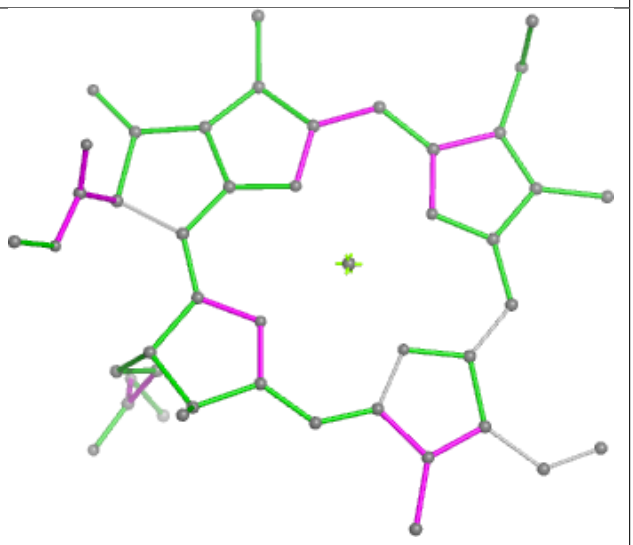
Ligand PGT z 317



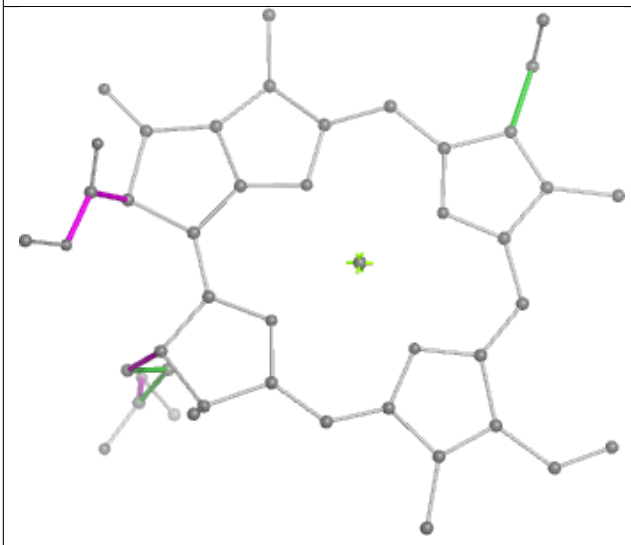
Ligand CLA a 851



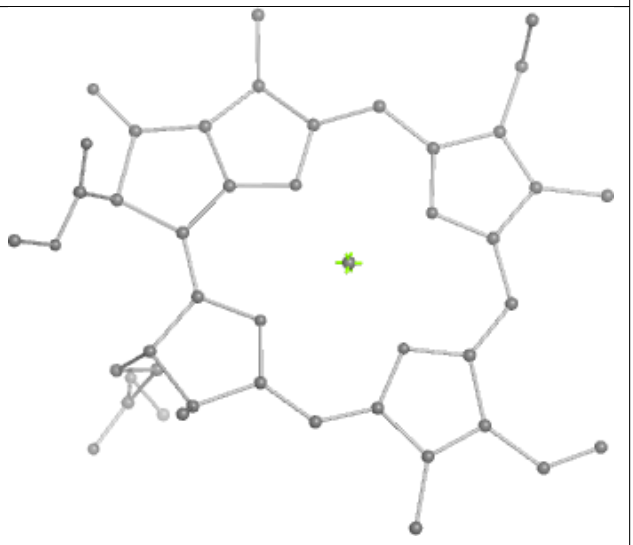
Bond lengths



Bond angles

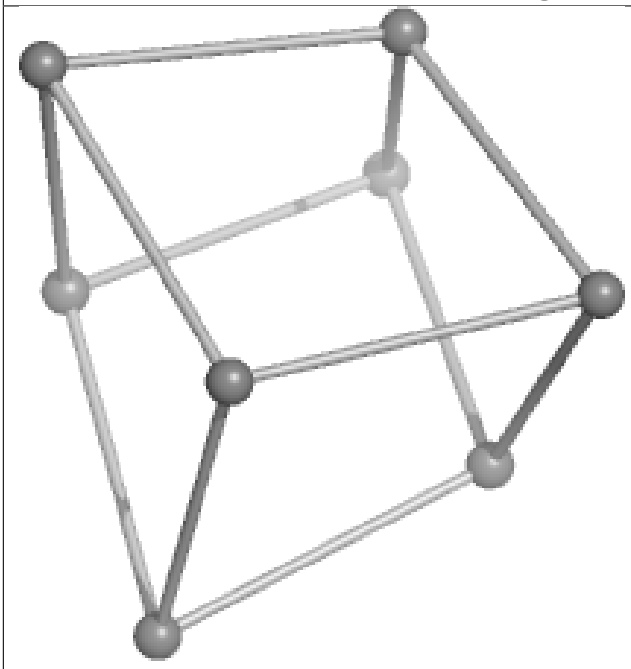


Torsions

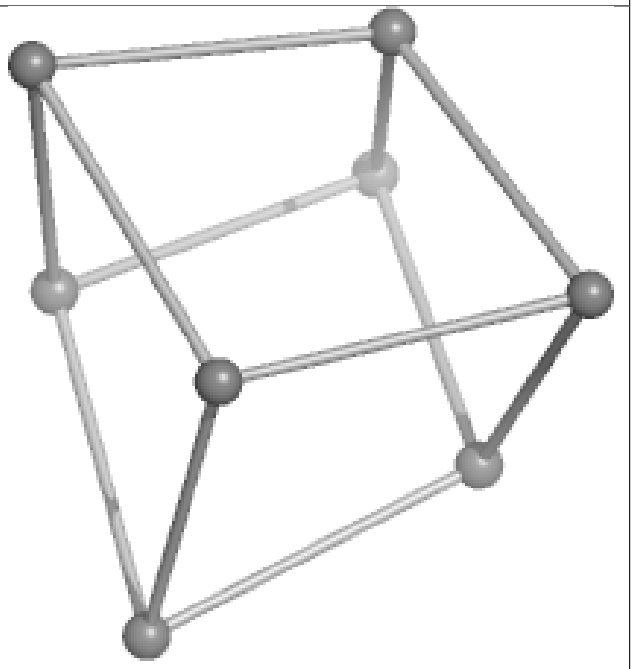


Rings

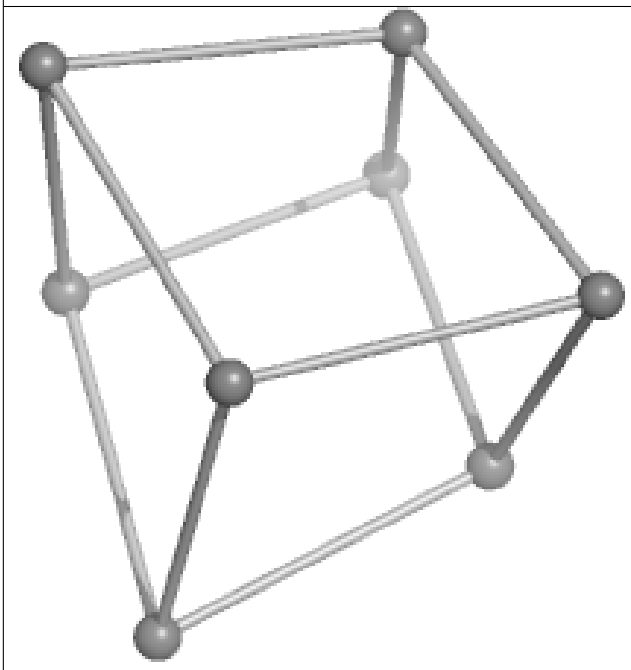
Ligand SF4 a 832



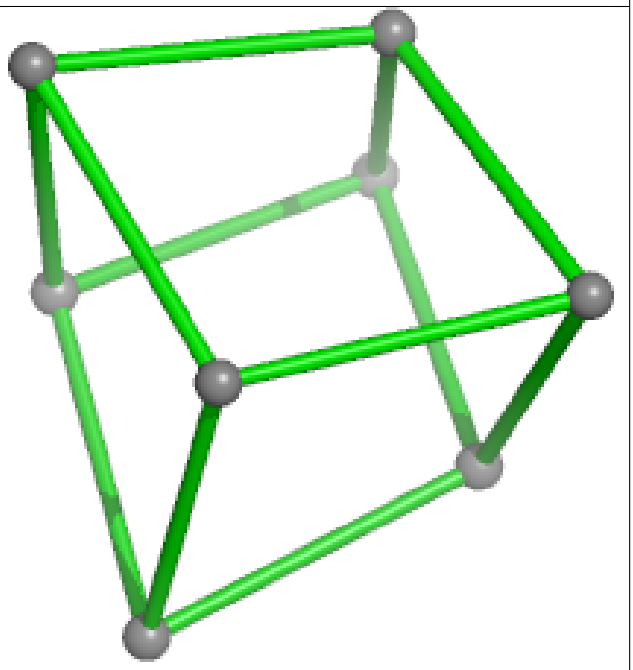
Bond lengths



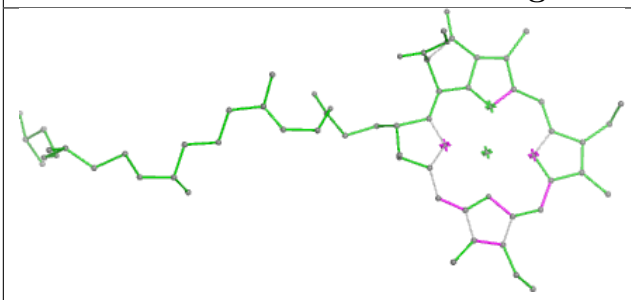
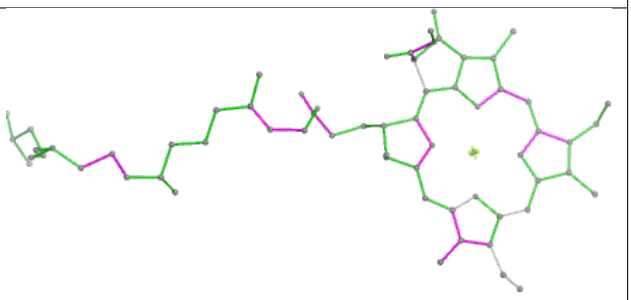
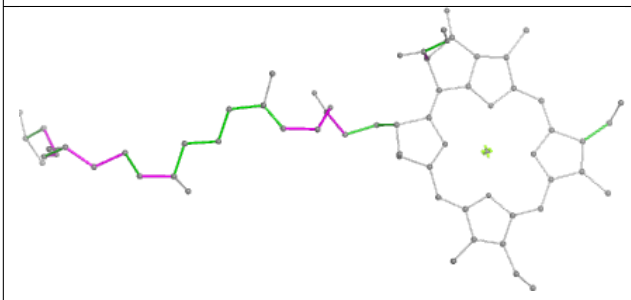
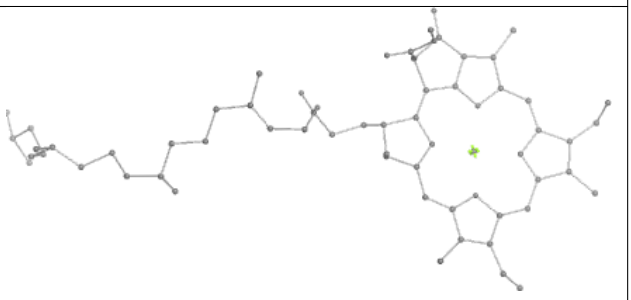
Bond angles



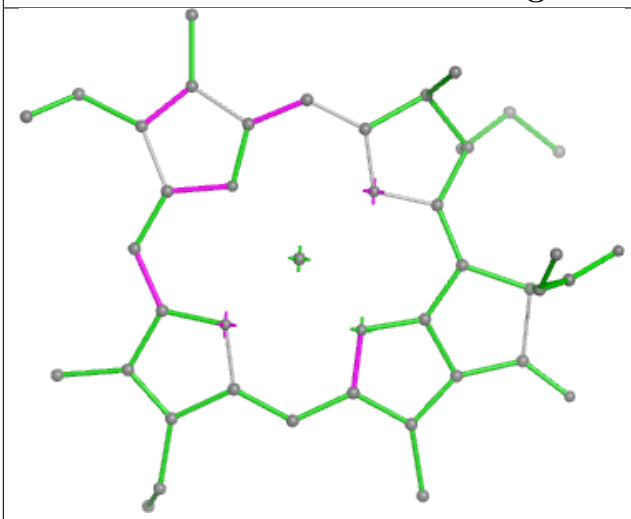
Torsions



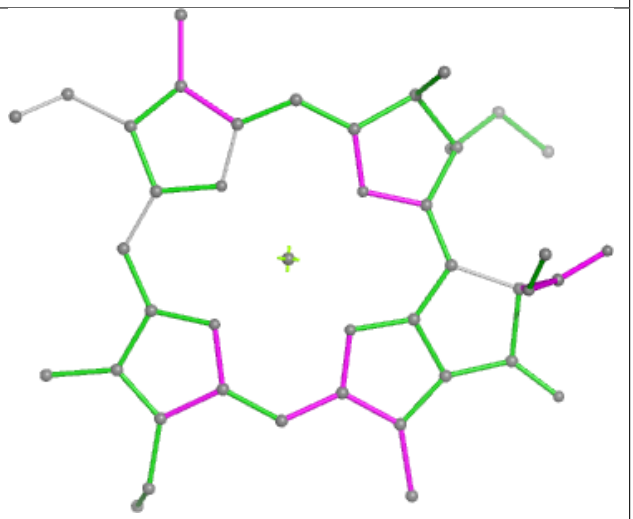
Rings

Ligand CLA a 801	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

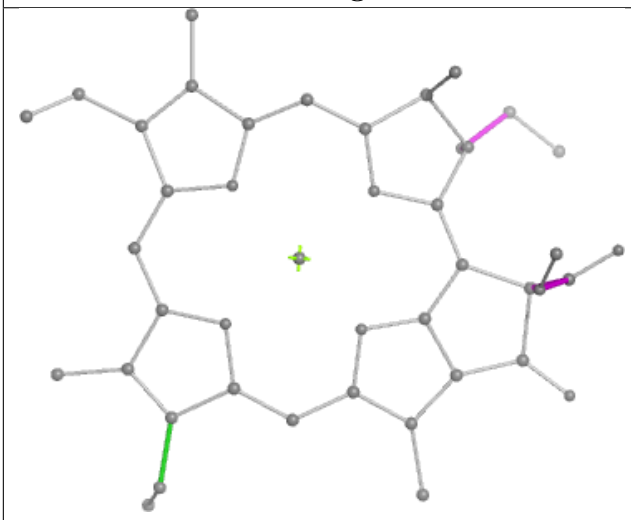
Ligand CLA b 813



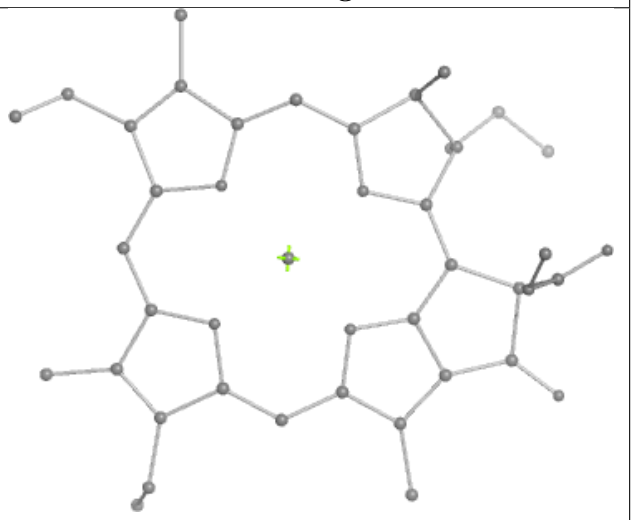
Bond lengths



Bond angles

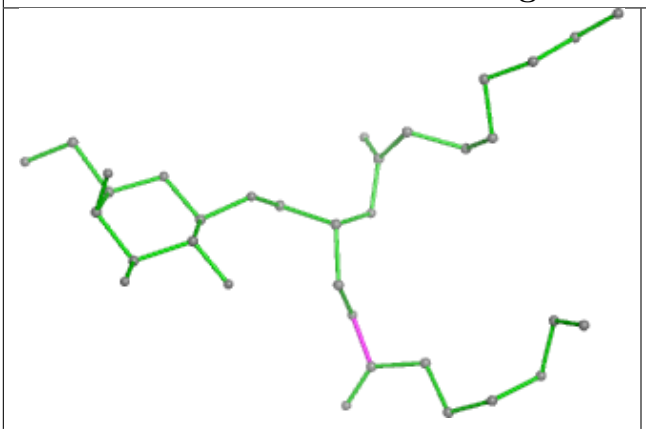


Torsions



Rings

Ligand LMG D 601



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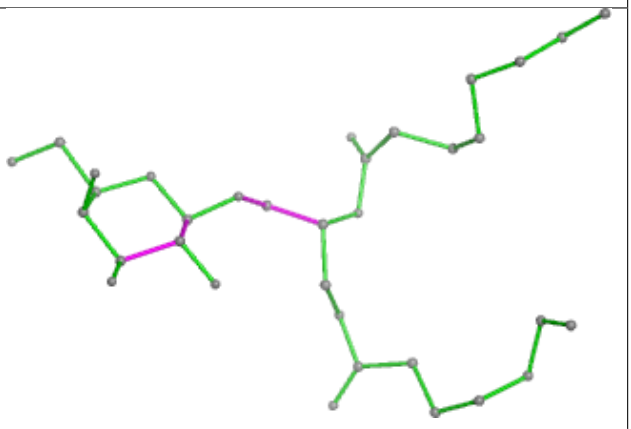
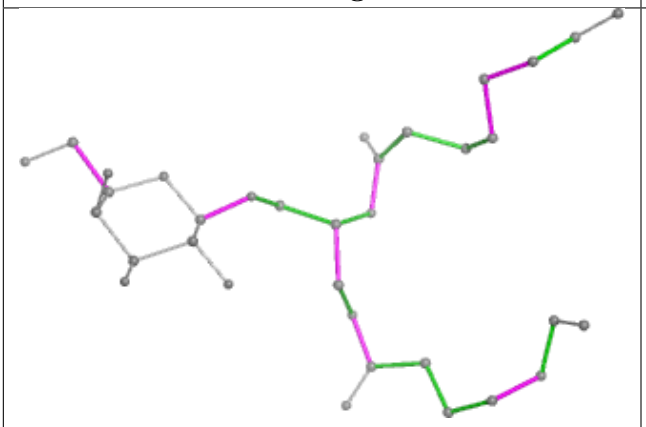
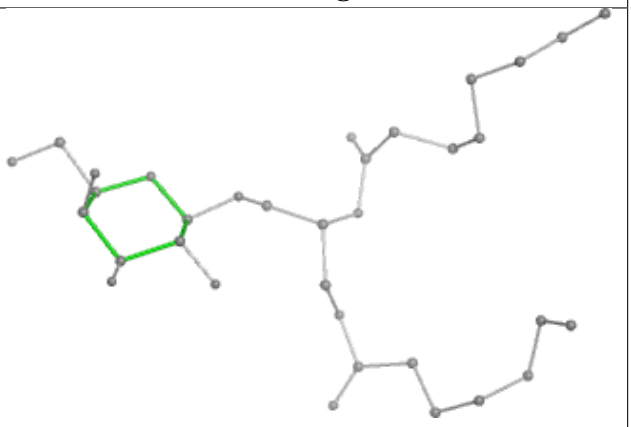


Bond angles

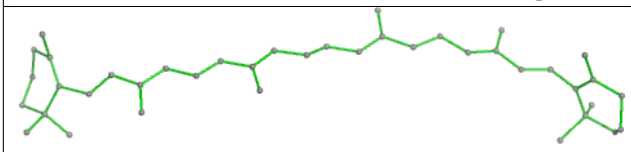


Torsions

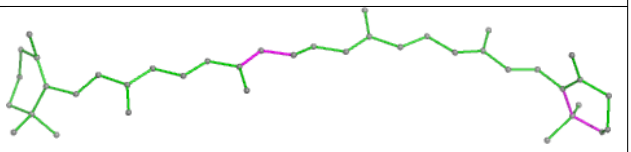


Rings

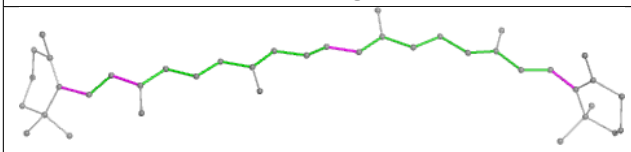
Ligand BCR i 101



Bond lengths



Bond angles



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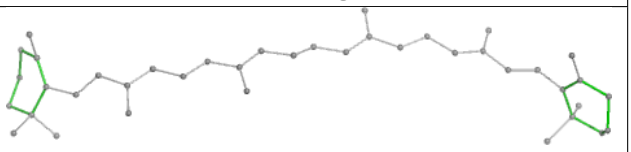
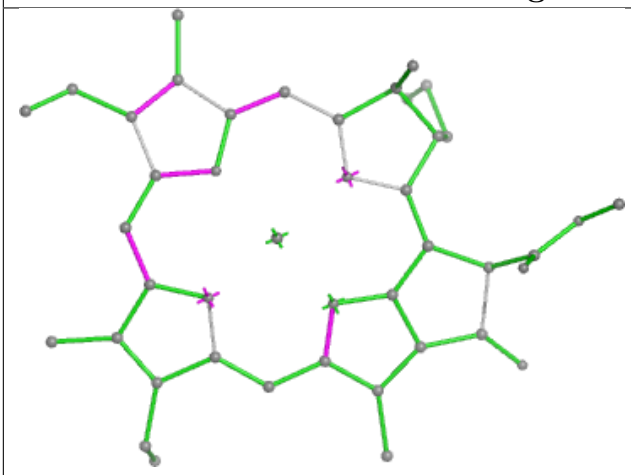


Rings

Ligand CLA x 310



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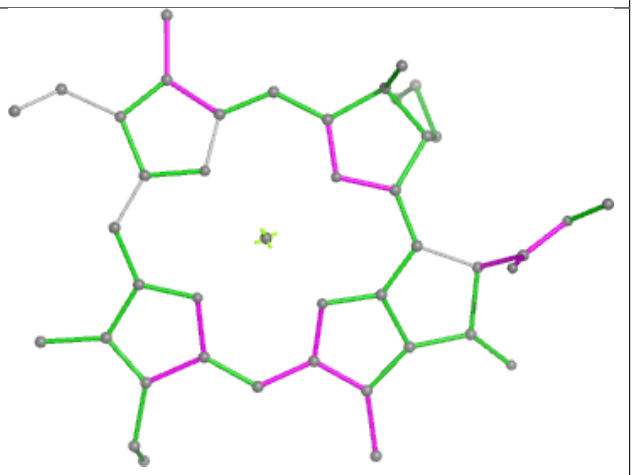
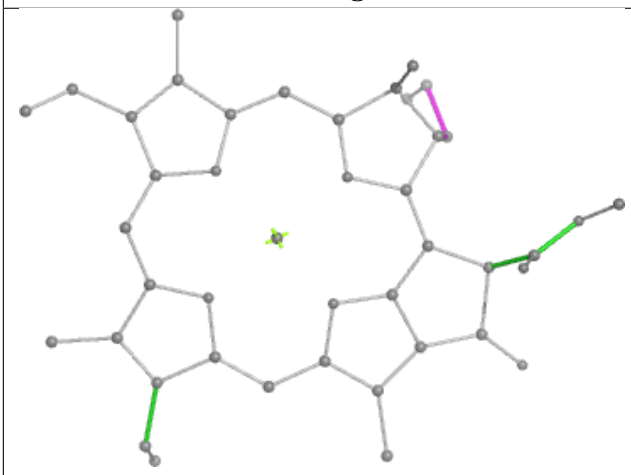


Bond angles



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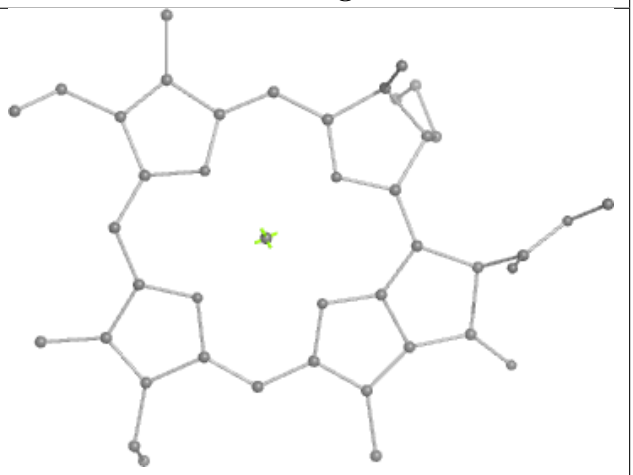
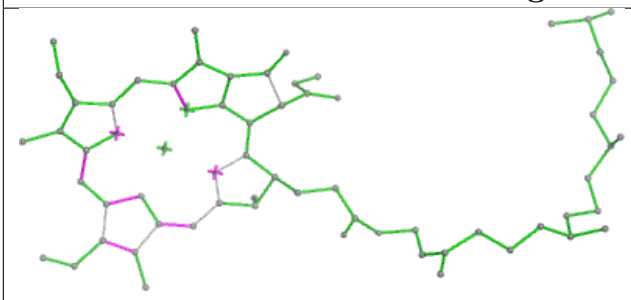
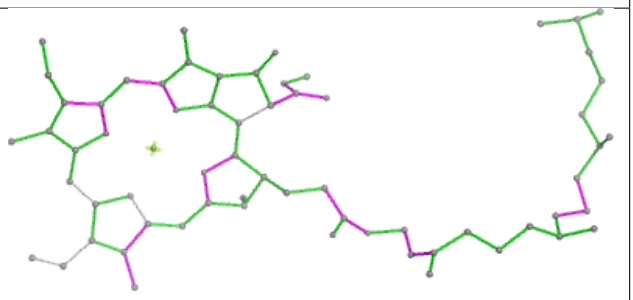


Rings

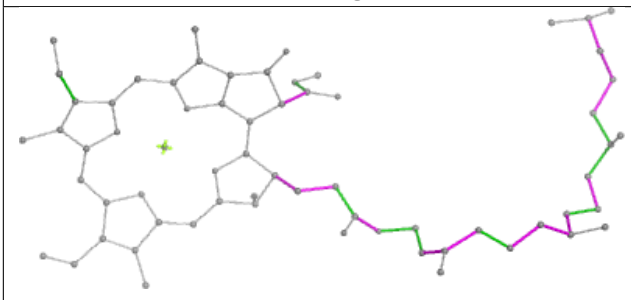
Ligand CLA b 840



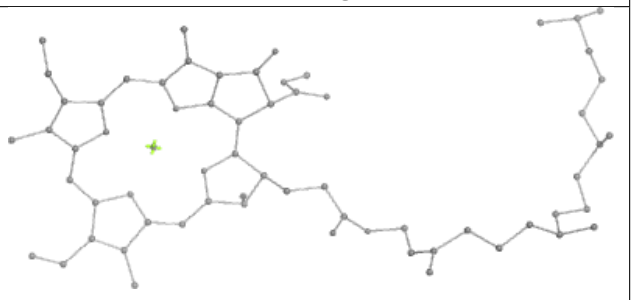
Bond lengths



Bond angles

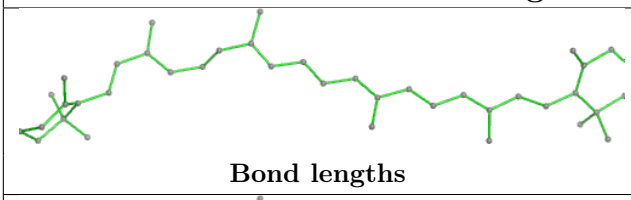


Torsions

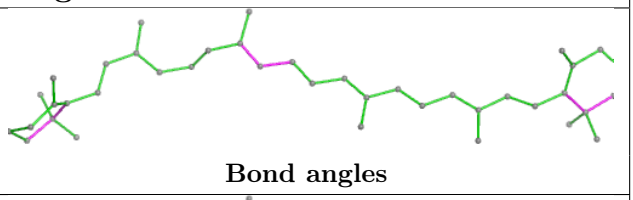


Rings

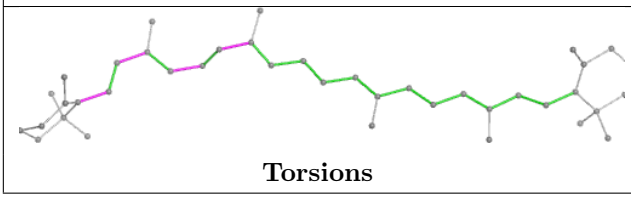
Ligand BCR g 202



Bond lengths



Bond angles



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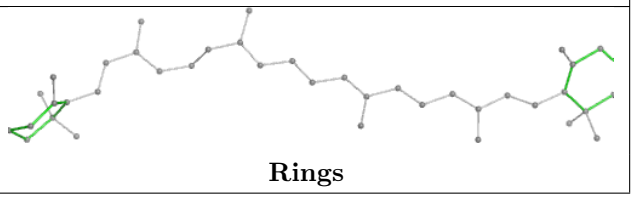
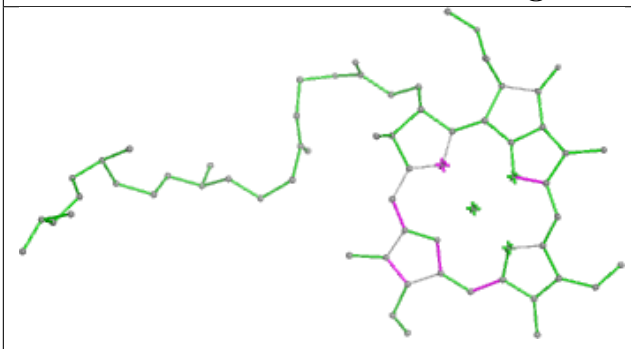
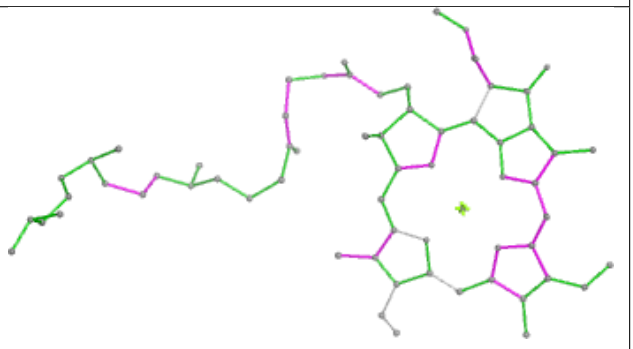


Rings

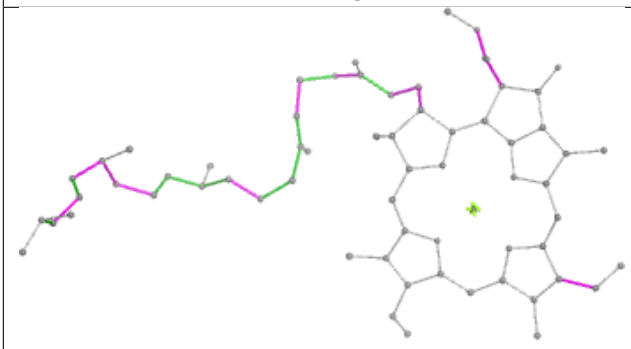
Ligand CLA b 803



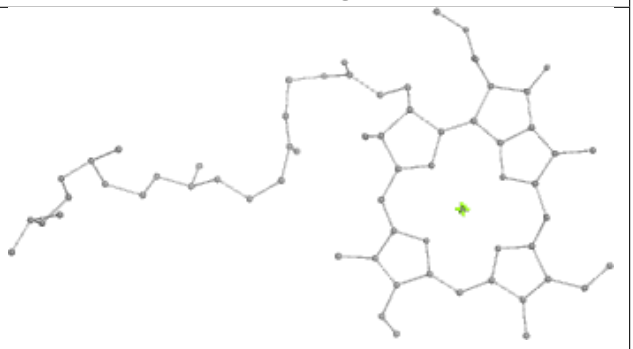
Bond lengths



Bond angles



Torsions

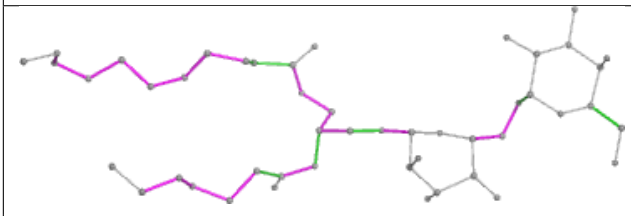


Rings

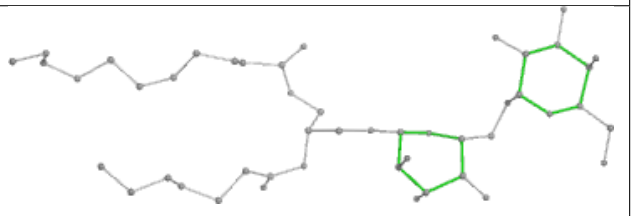
Ligand DGD x 317

Bond lengths

Bond angles

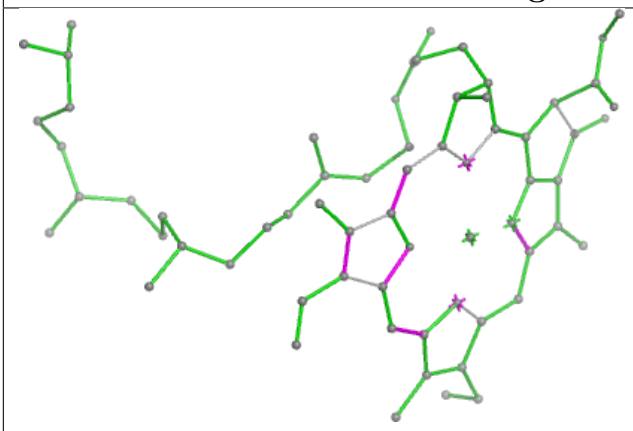


Torsions

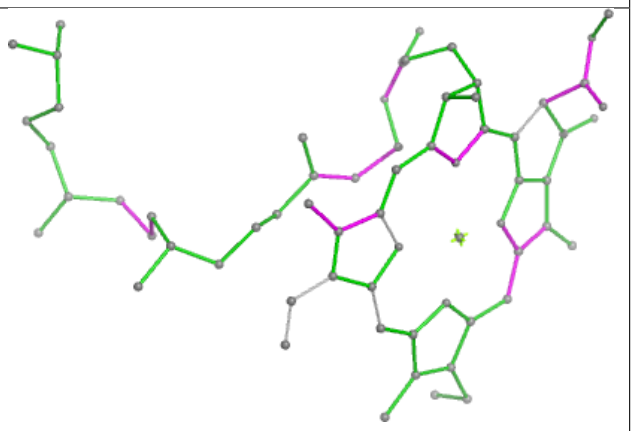


Rings

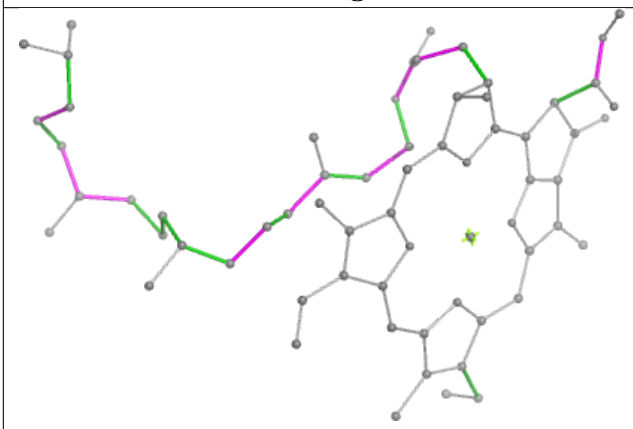
Ligand CLA a 857



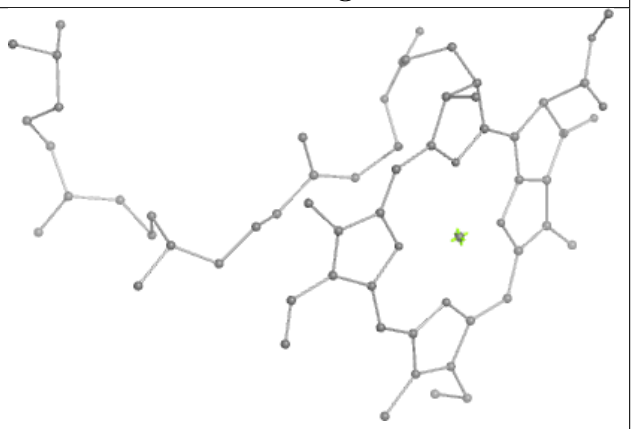
Bond lengths



Bond angles

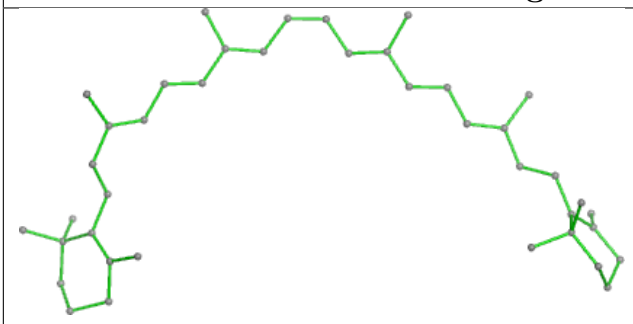


Torsions



Rings

Ligand BCR 4 101



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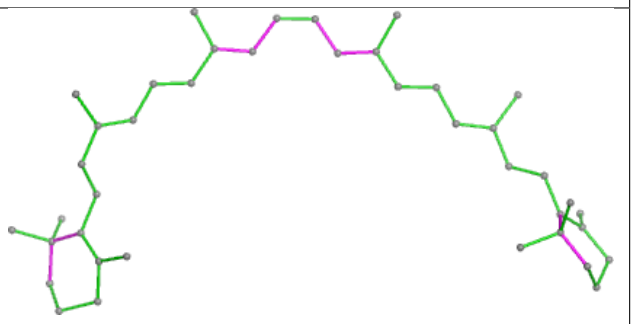
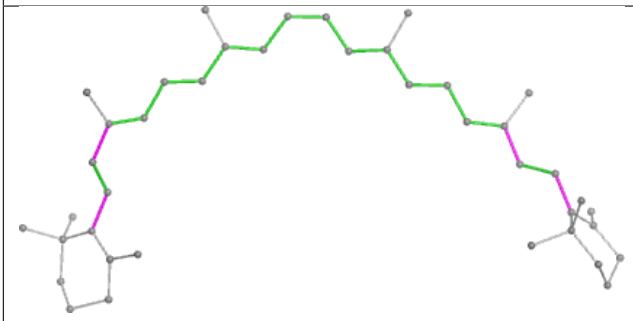
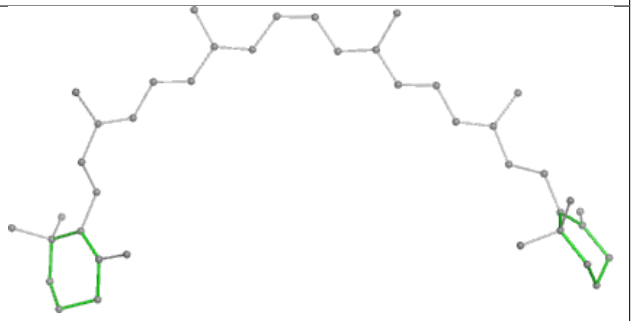


Bond angles

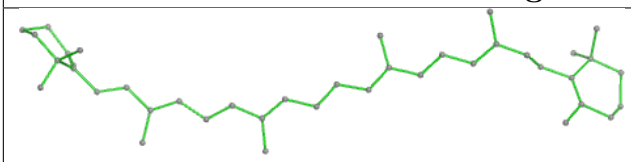


Torsions

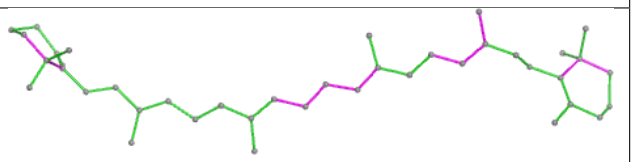


Rings

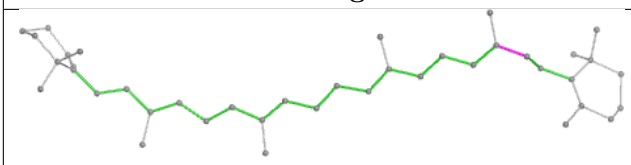
Ligand BCR b 850



Bond lengths



Bond angles



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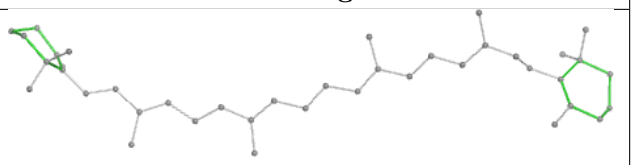
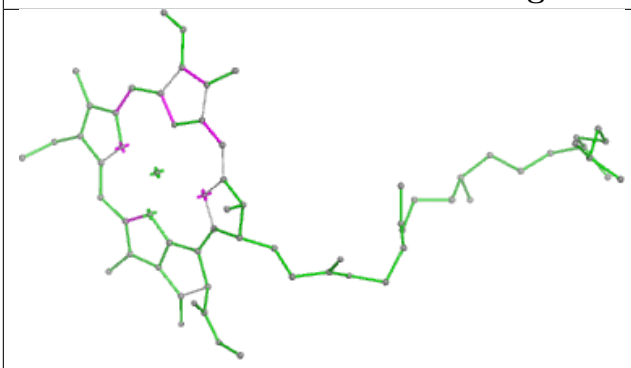
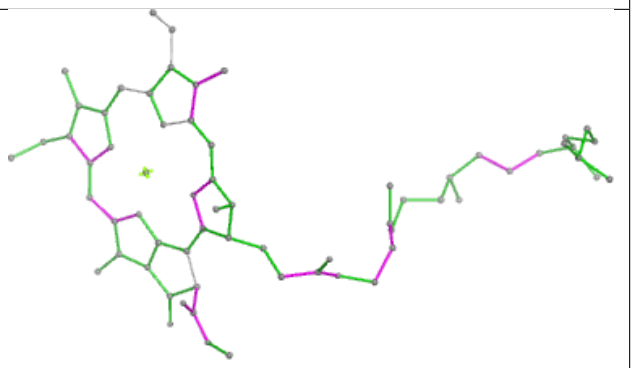


Rings

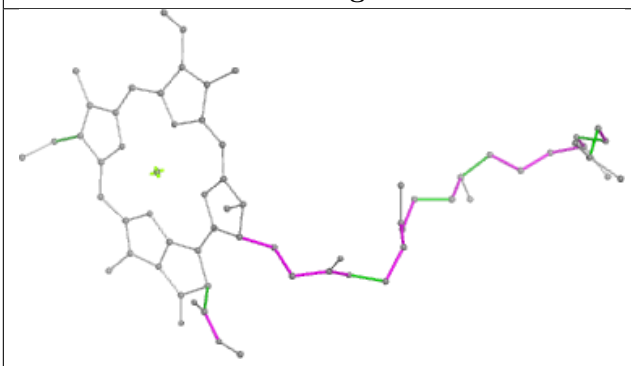
Ligand CLA b 844



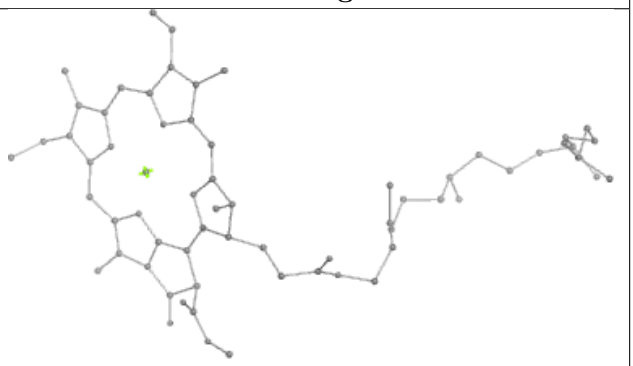
Bond lengths



Bond angles

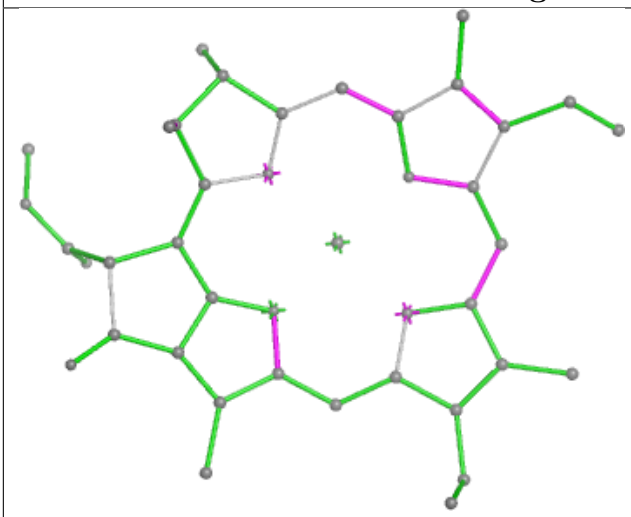


Torsions

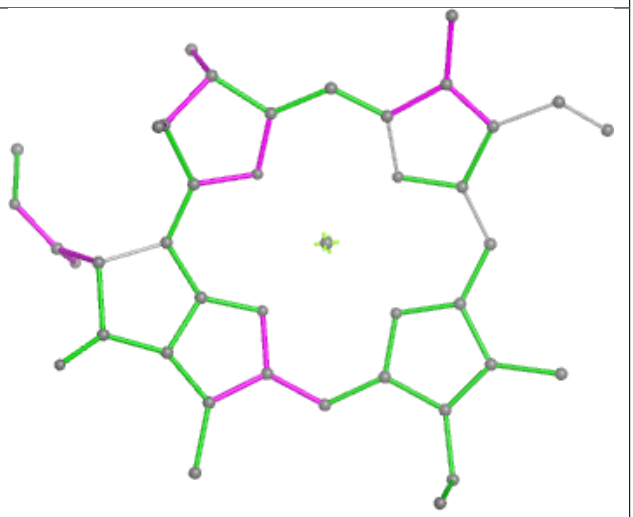


Rings

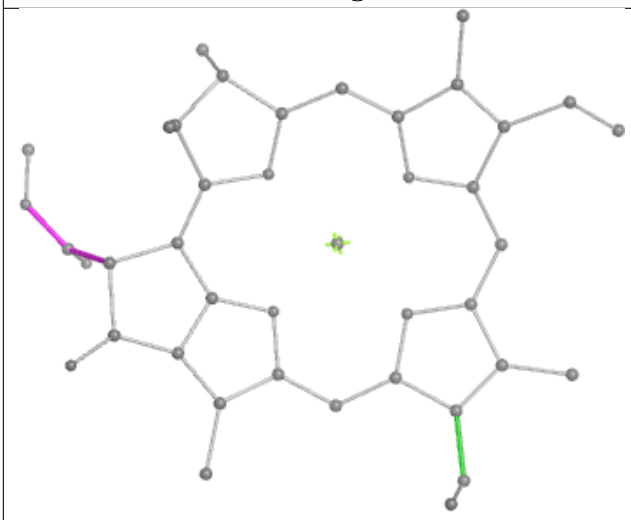
Ligand CLA z 303



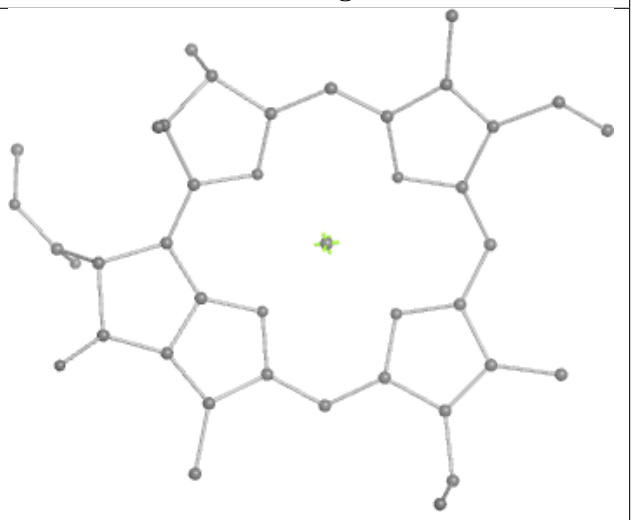
Bond lengths



Bond angles

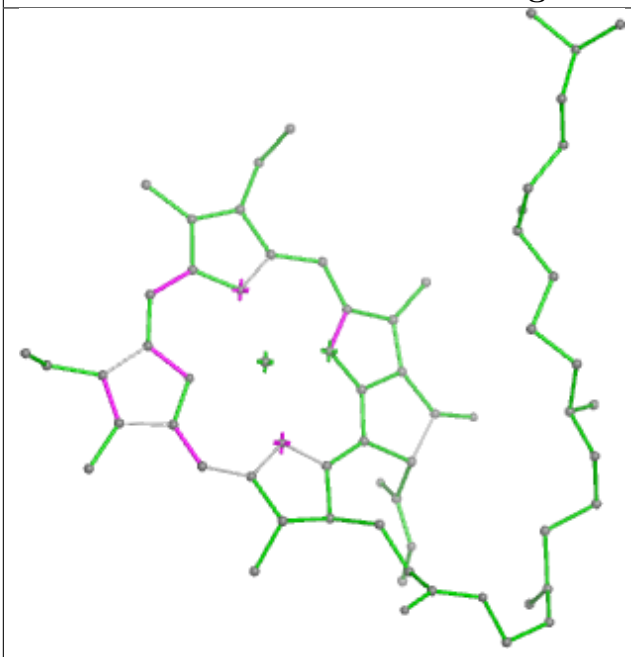


Torsions

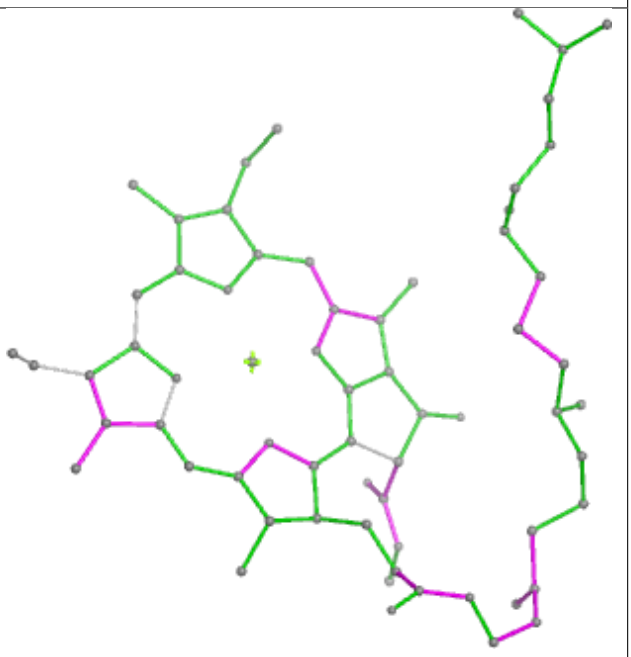


Rings

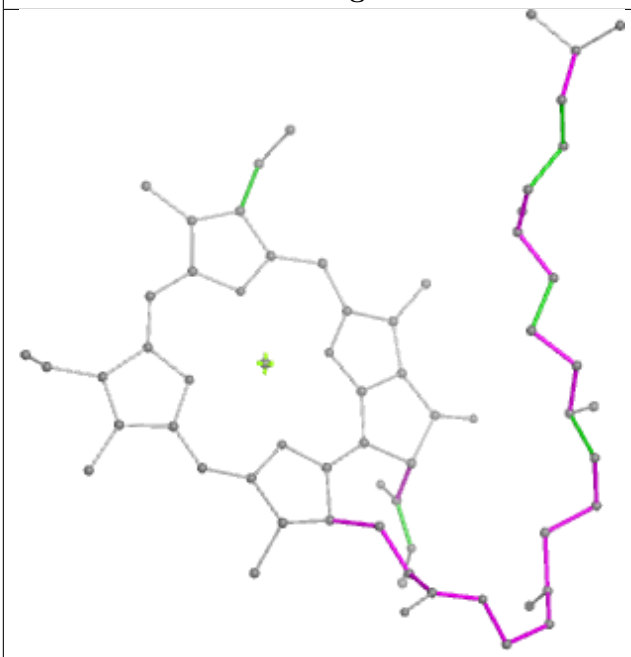
Ligand CLA a 842



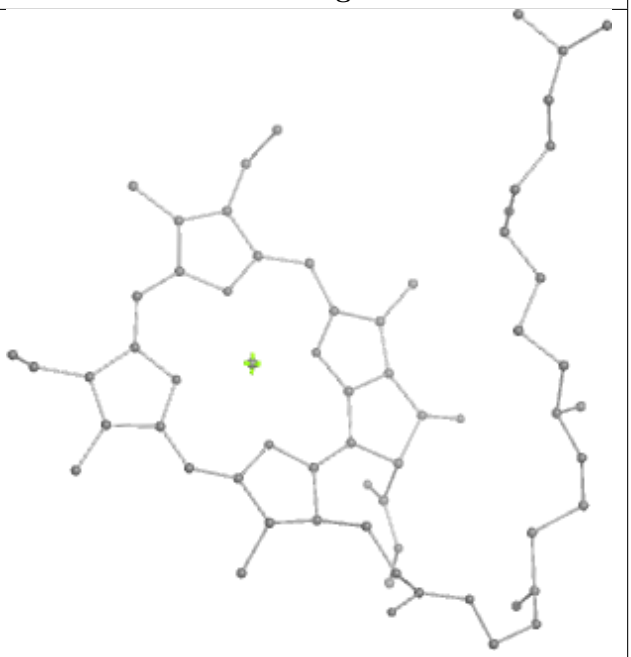
Bond lengths



Bond angles

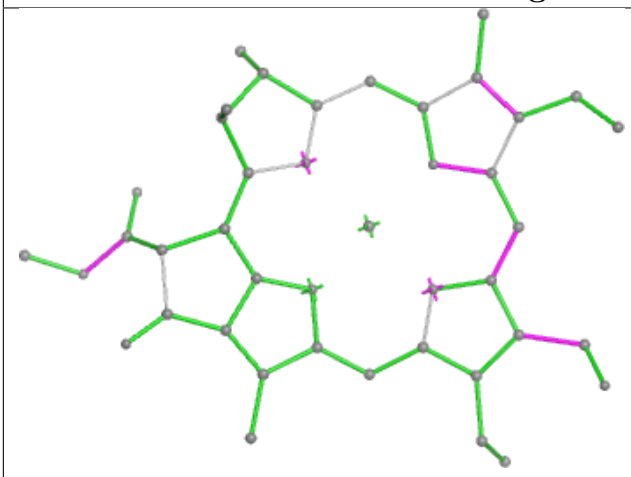


Torsions

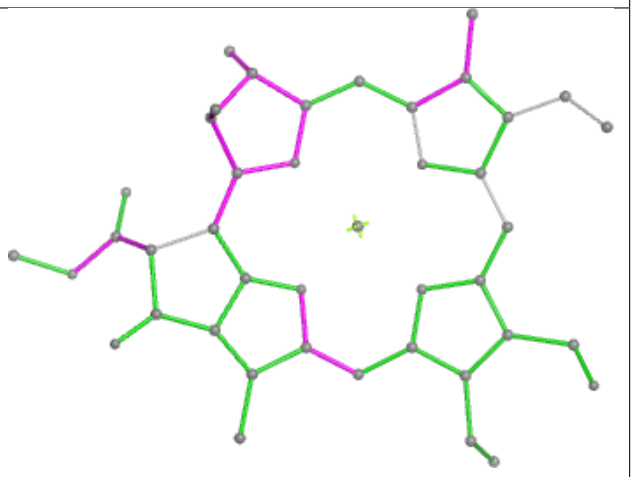


Rings

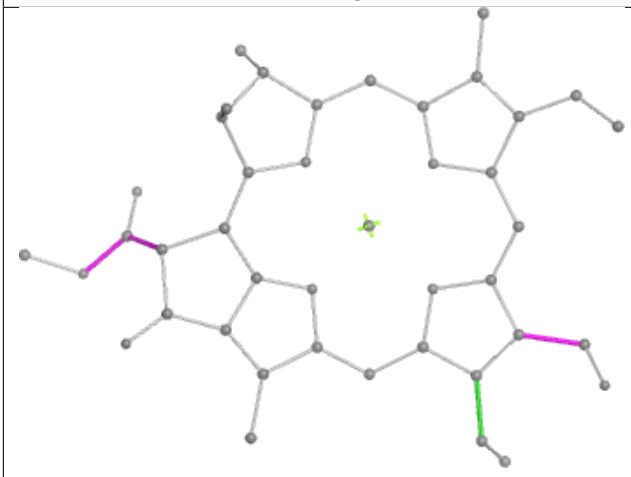
Ligand CHL z 304



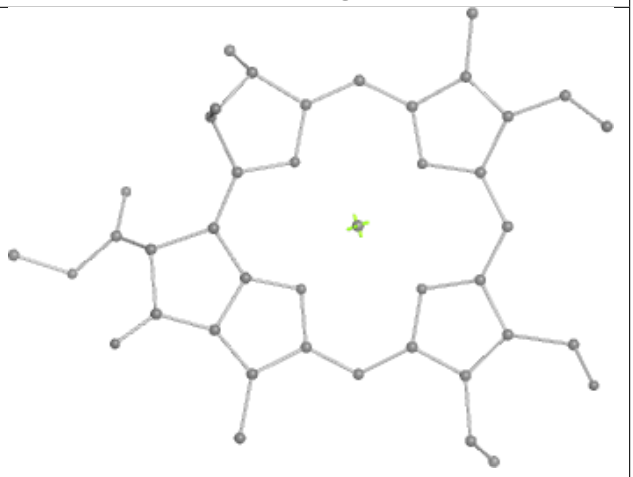
Bond lengths



Bond angles

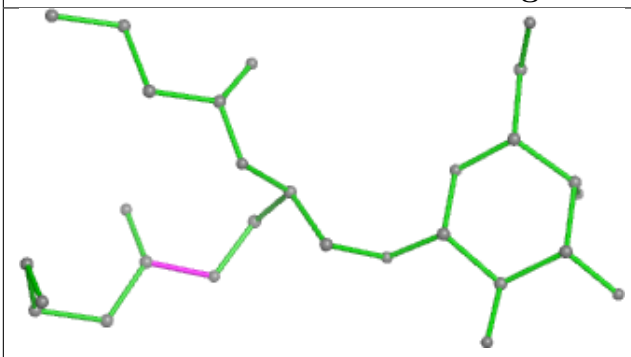


Torsions

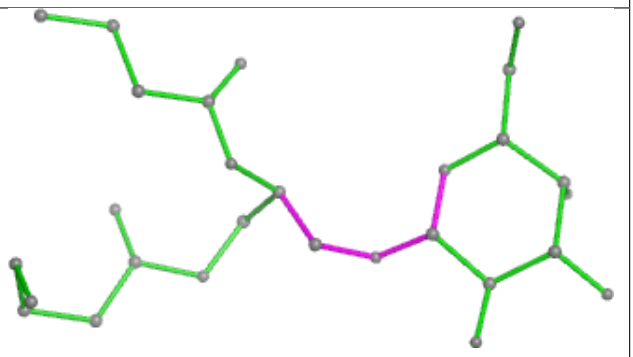


Rings

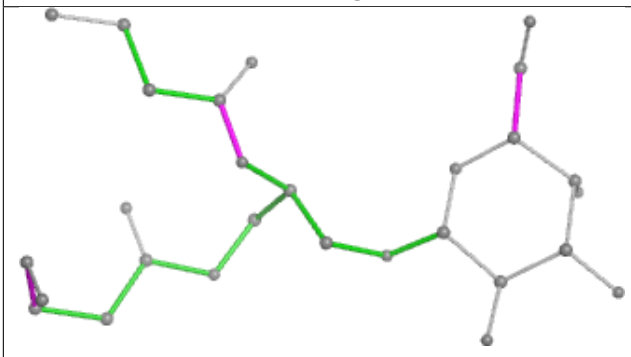
Ligand LMG F 802



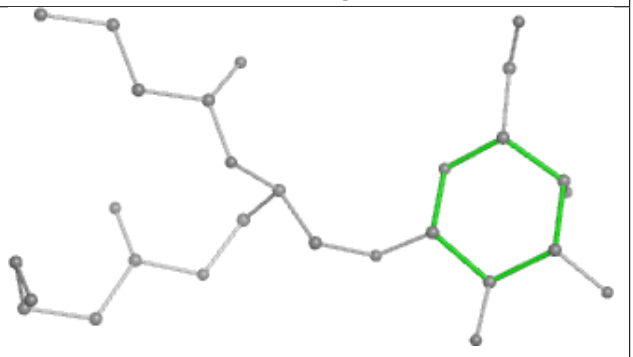
Bond lengths



Bond angles

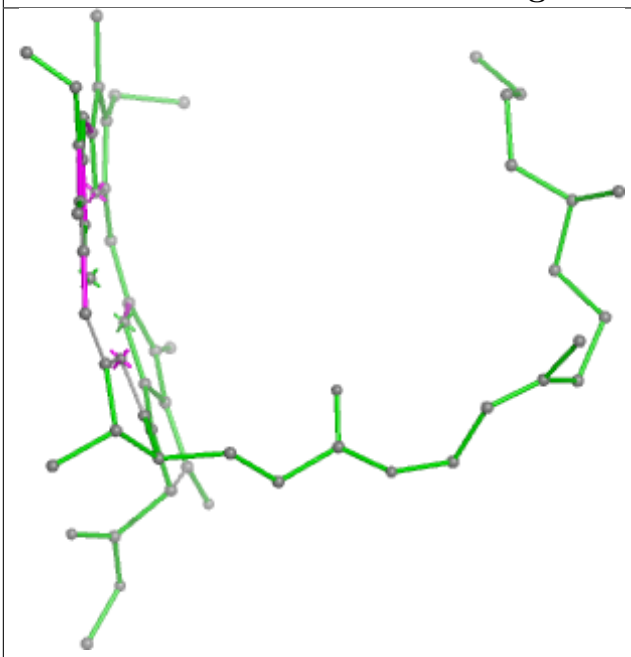


Torsions



Rings

Ligand CLA a 835



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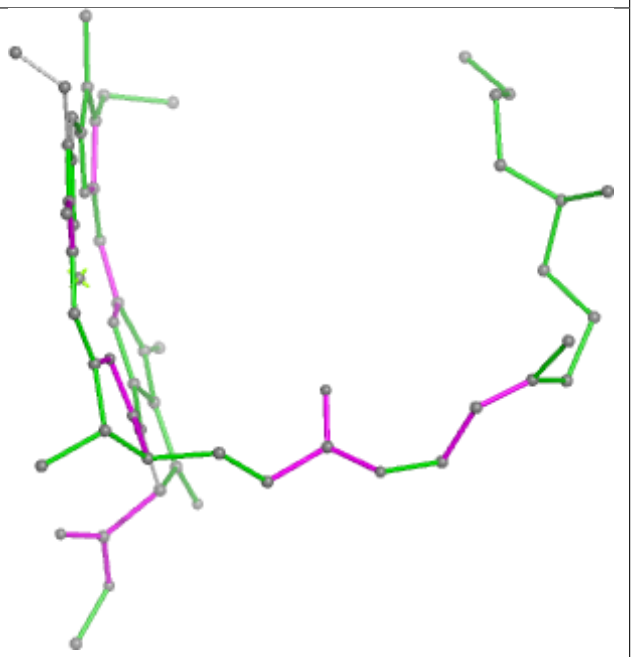
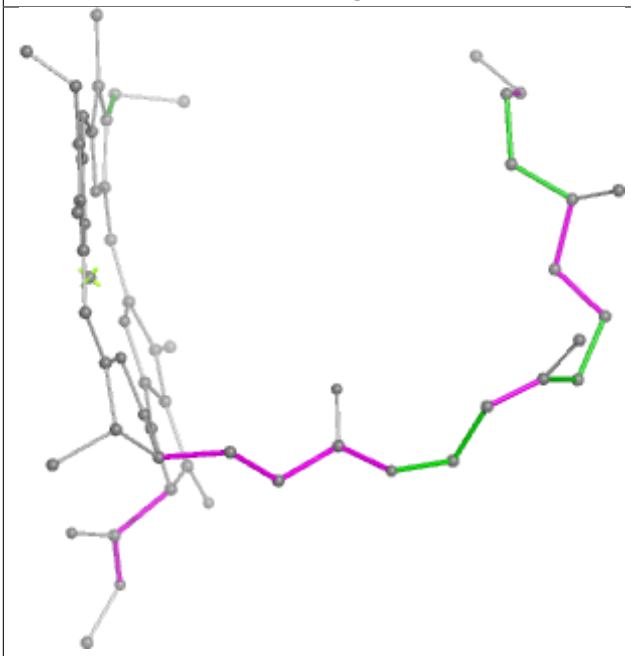
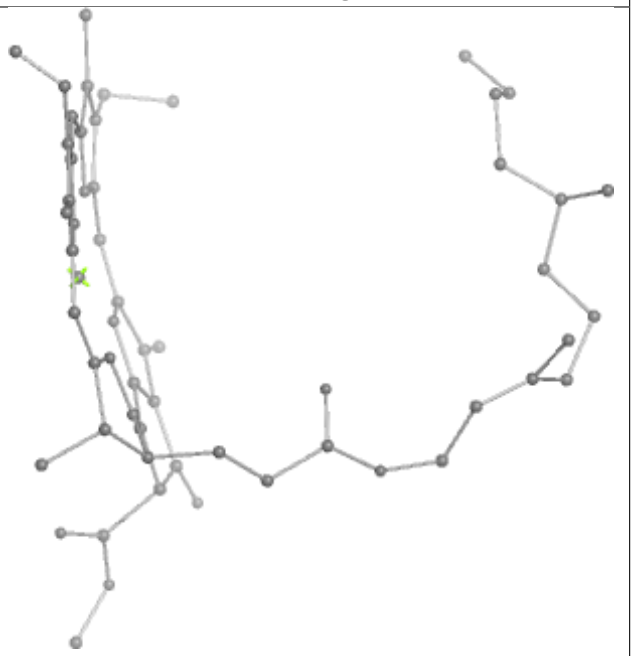


Bond angles

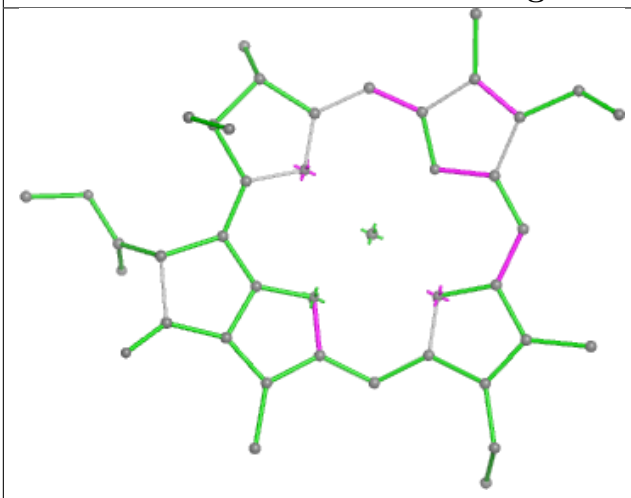


Torsions

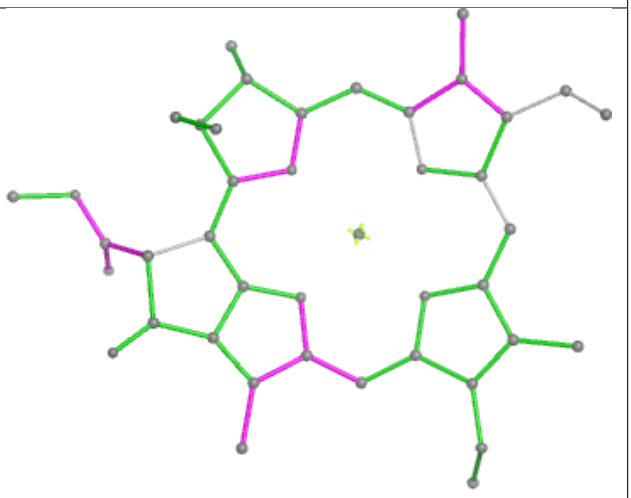


Rings

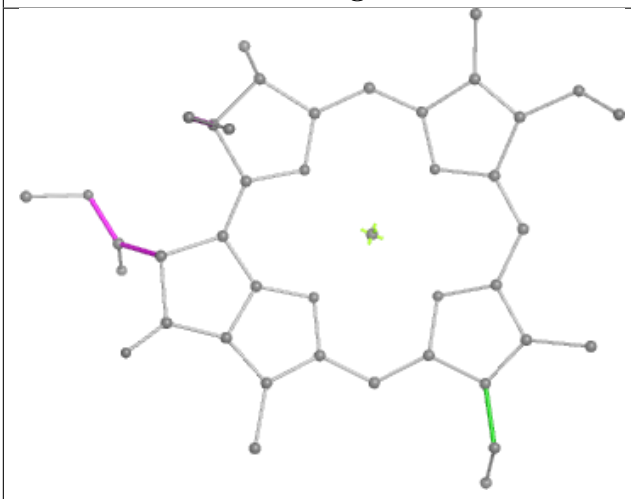
Ligand CLA b 848



Bond lengths



Bond angles



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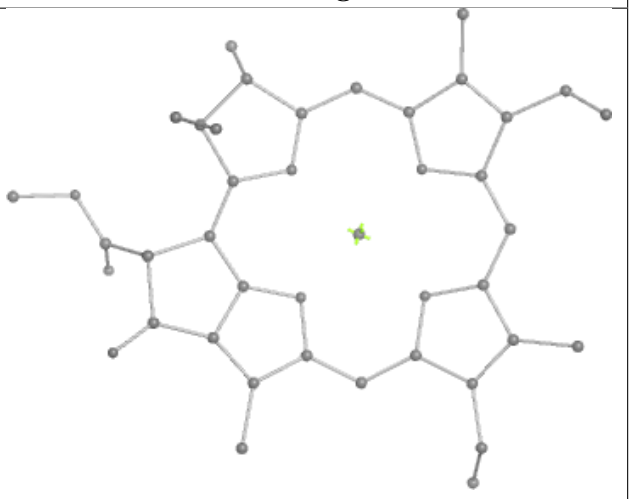
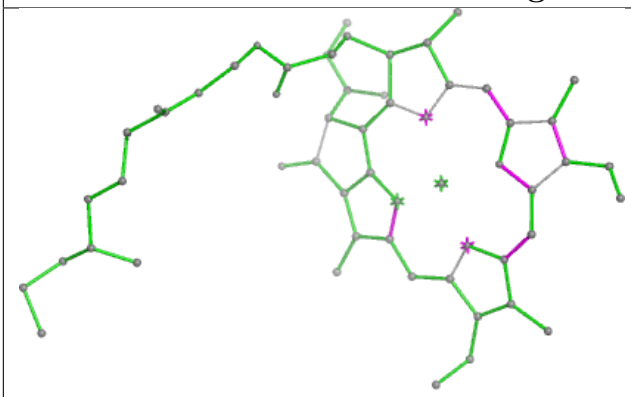
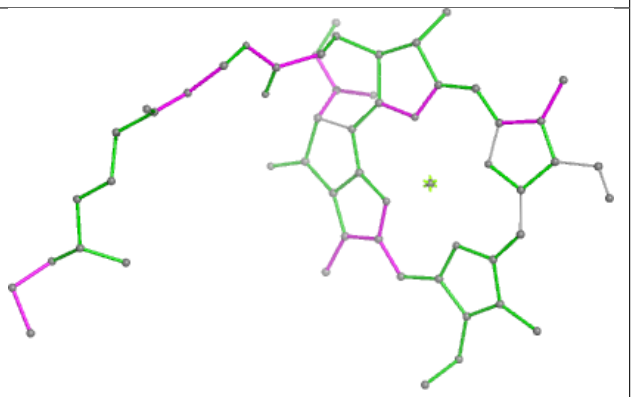


Rings

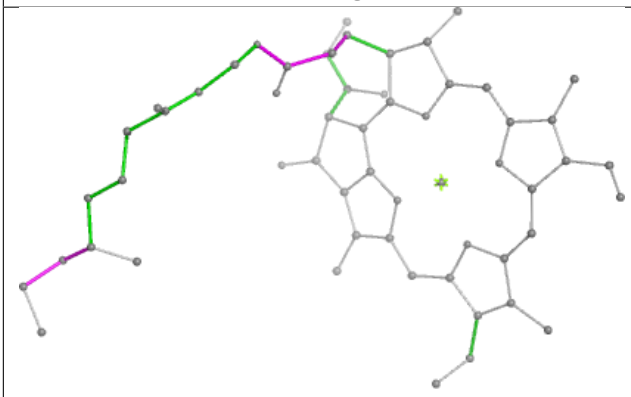
Ligand CLA k 204



Bond lengths



Bond angles



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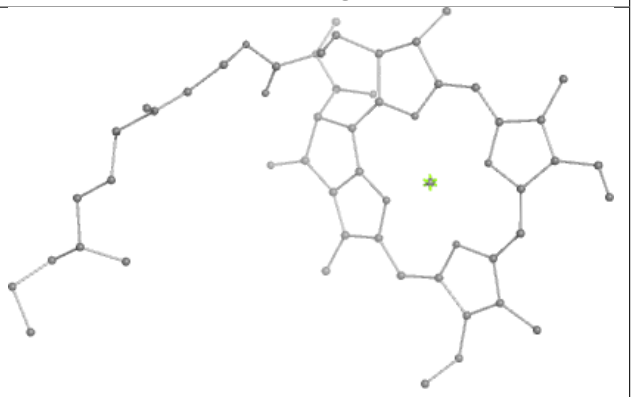
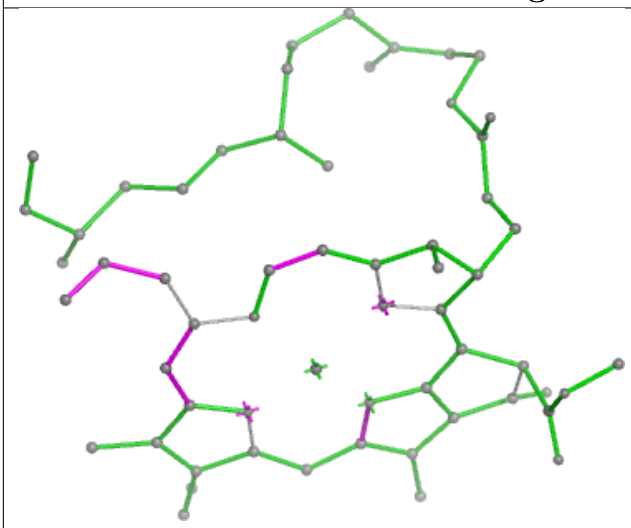
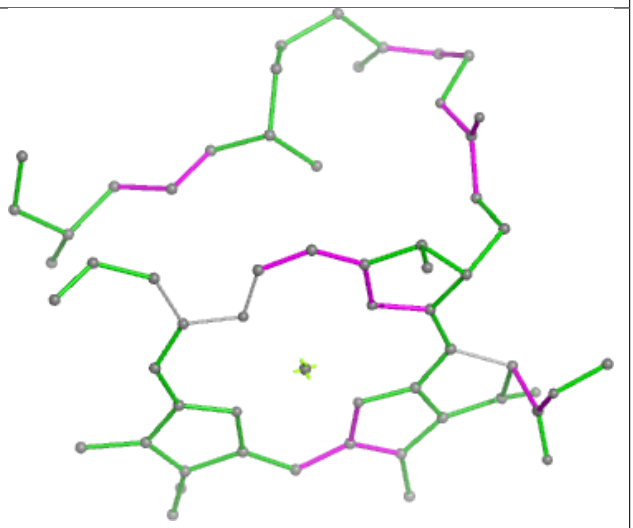


Rings

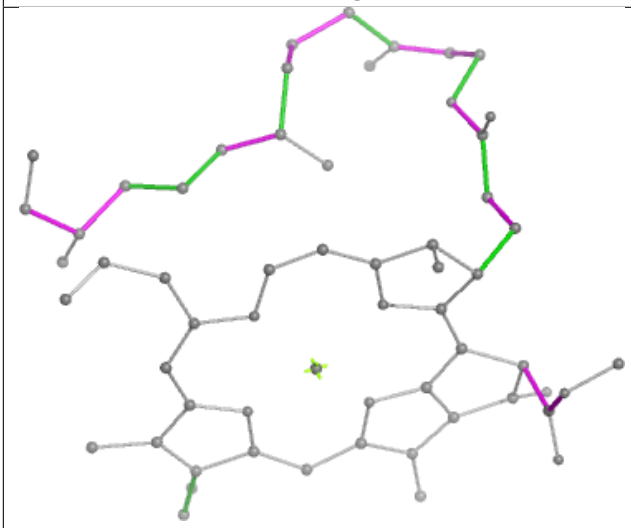
Ligand CLA a 812



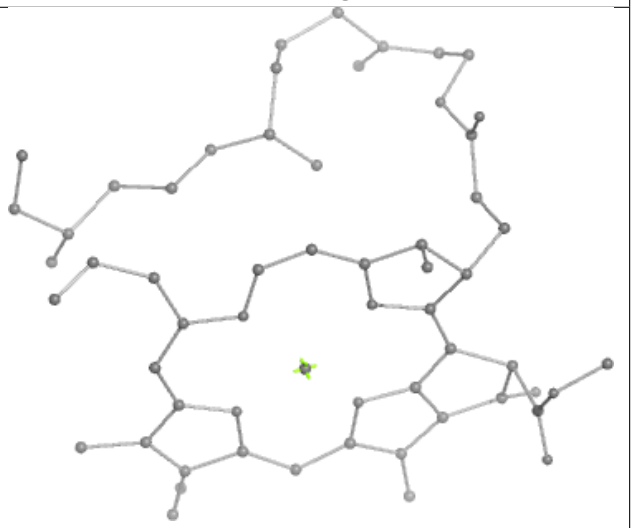
Bond lengths



Bond angles

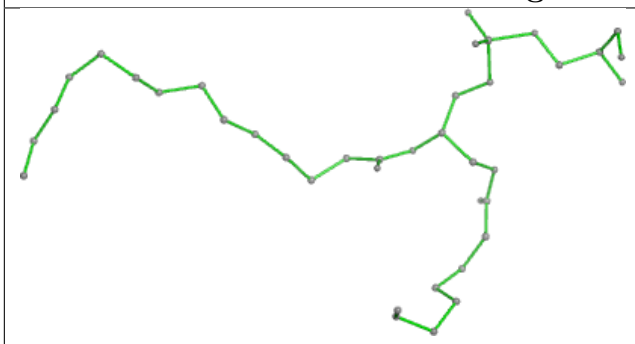


Torsions

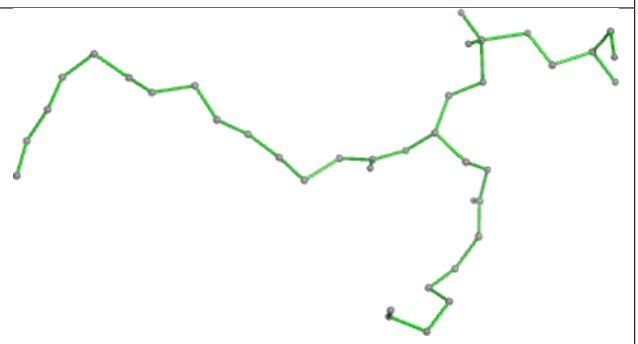


Rings

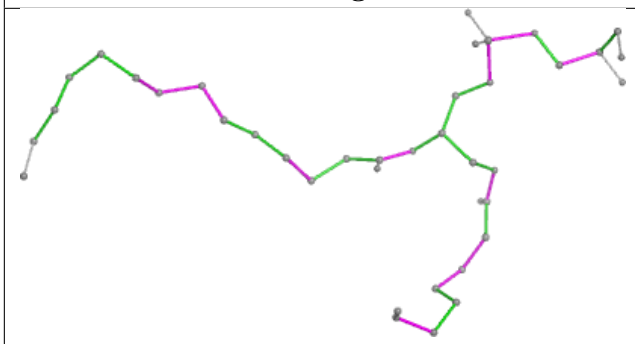
Ligand PGT b 830



Bond lengths



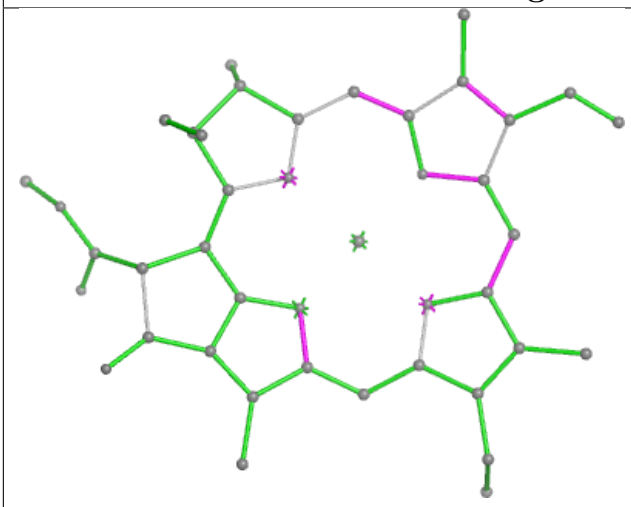
Bond angles



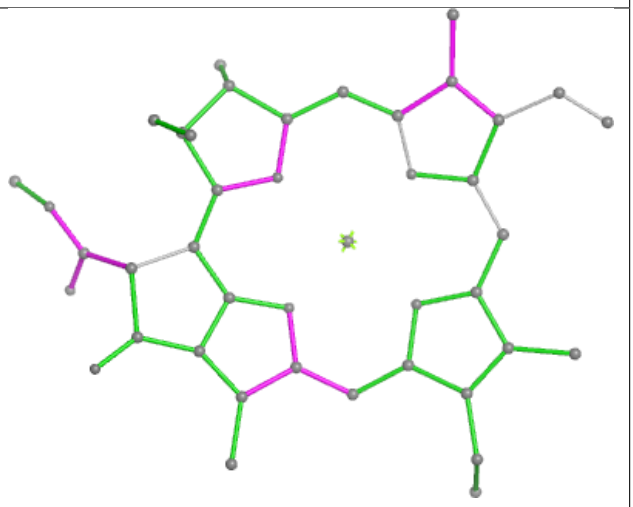
Torsions

Rings

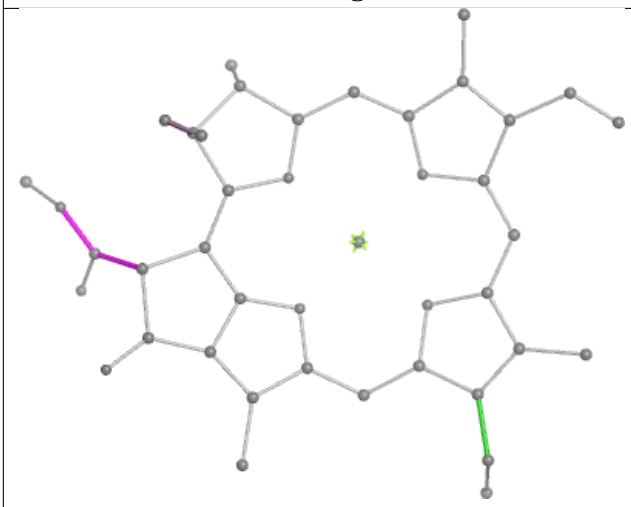
Ligand CLA x 309



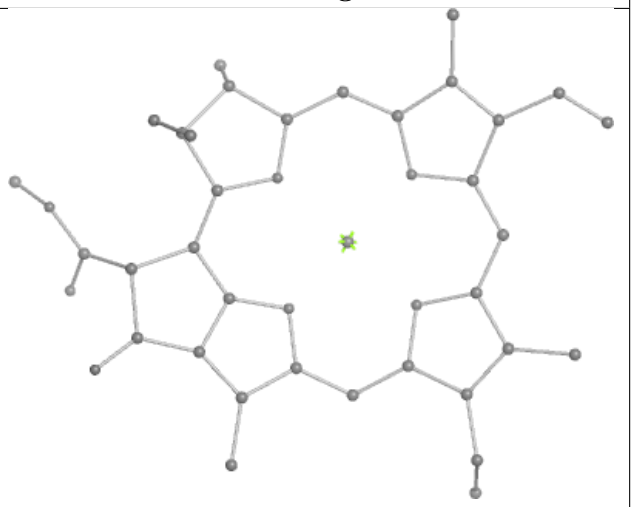
Bond lengths



Bond angles

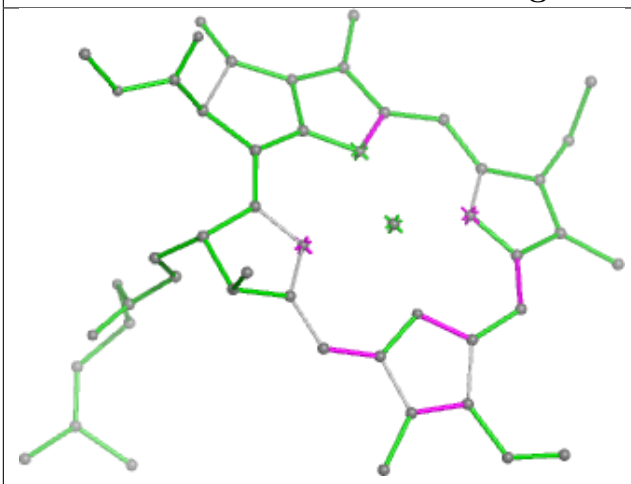


Torsions

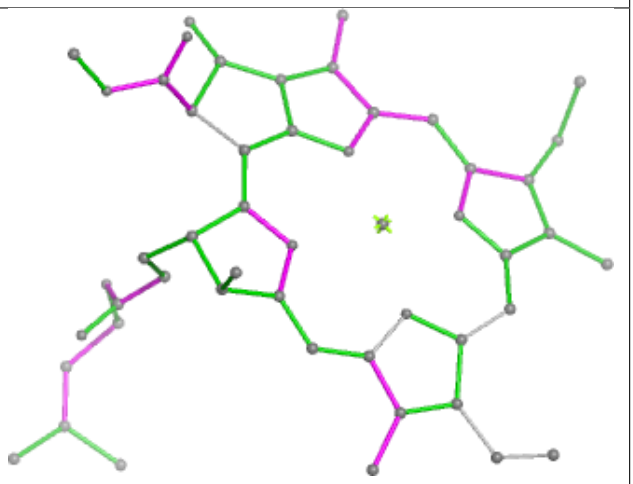


Rings

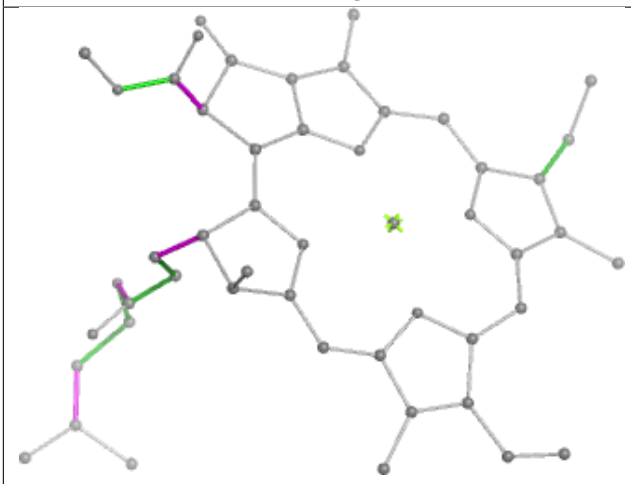
Ligand CLA z 305



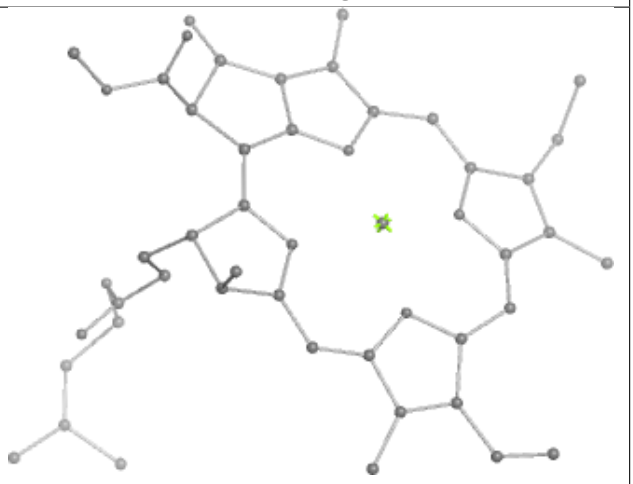
Bond lengths



Bond angles

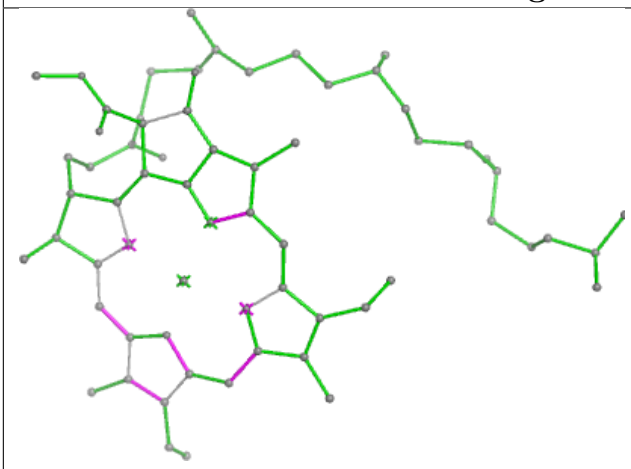


Torsions



Rings

Ligand CLA a 845



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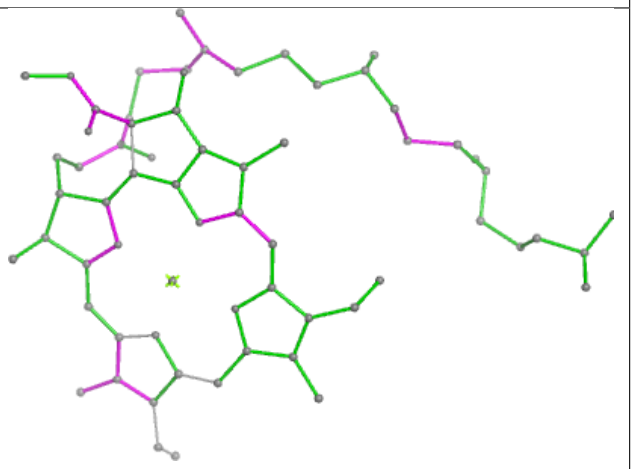
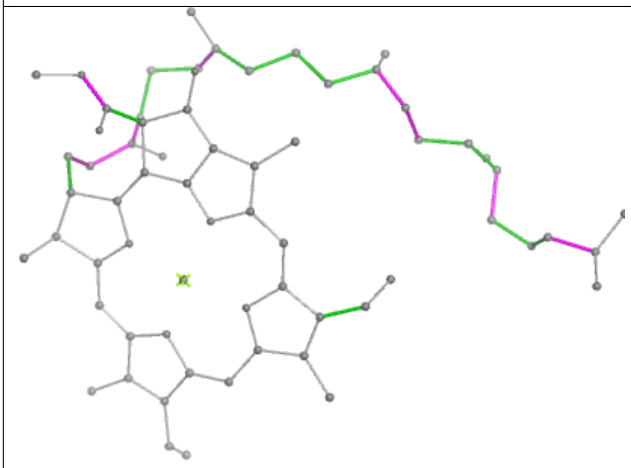
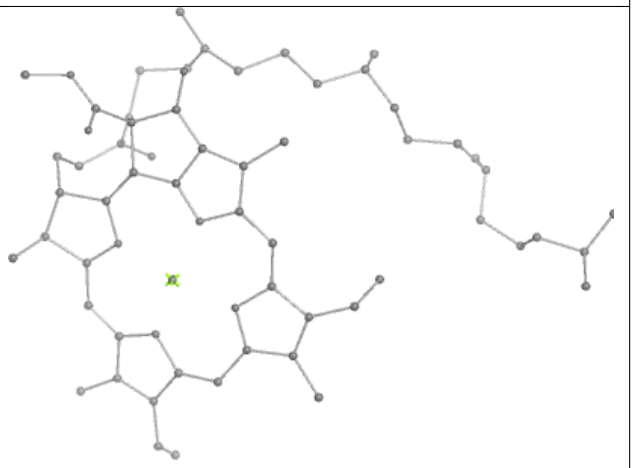


Bond angles

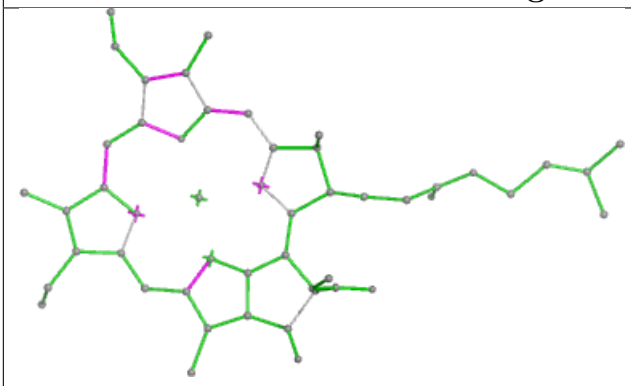


Torsions



Rings

Ligand CLA b 849



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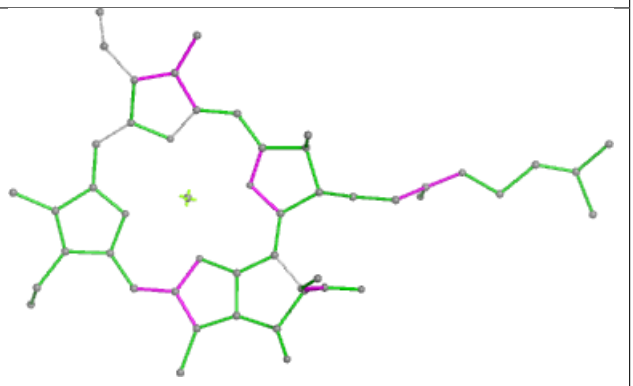
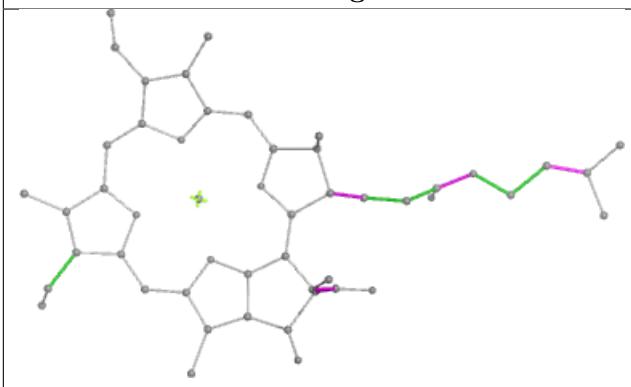
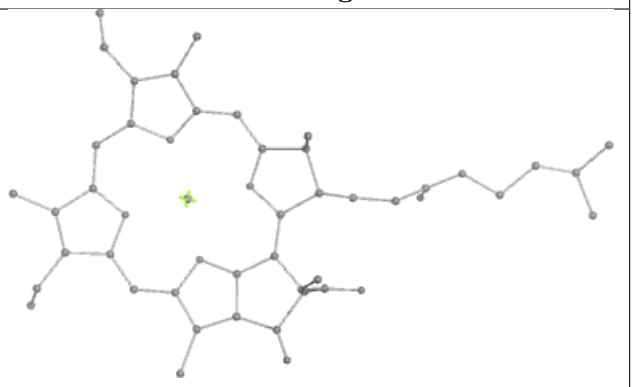


Bond angles

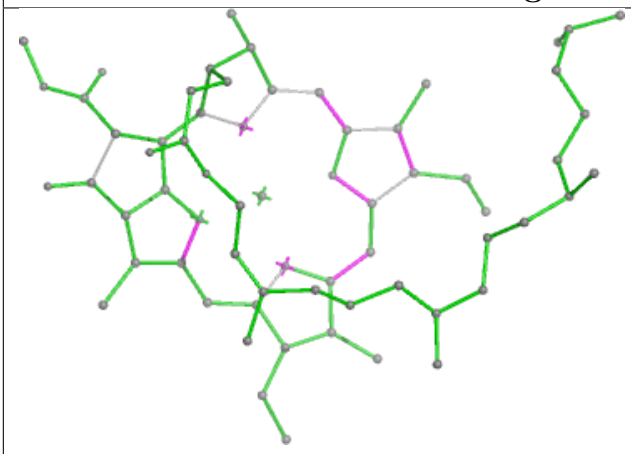


Torsions

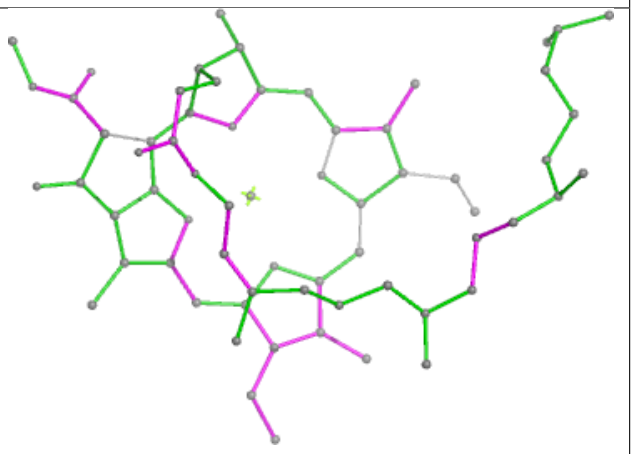


Rings

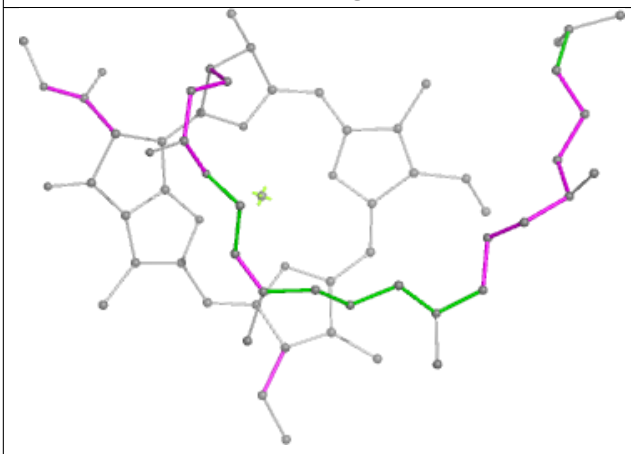
Ligand CLA w 310



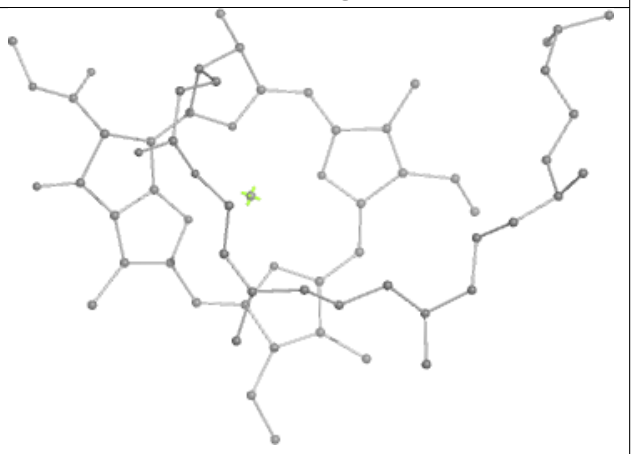
Bond lengths



Bond angles

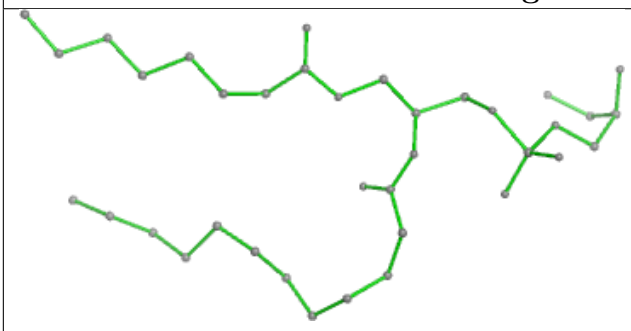


Torsions

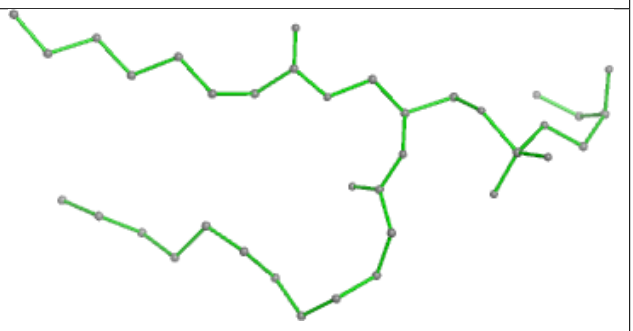


Rings

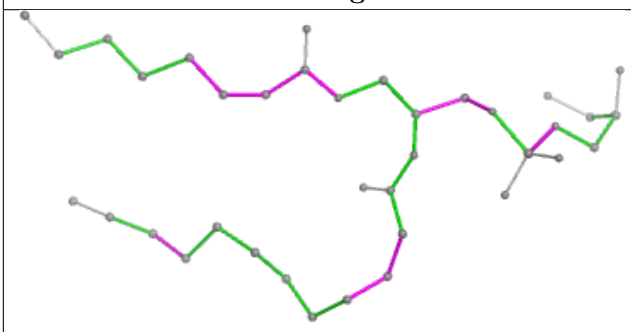
Ligand PGT A 402



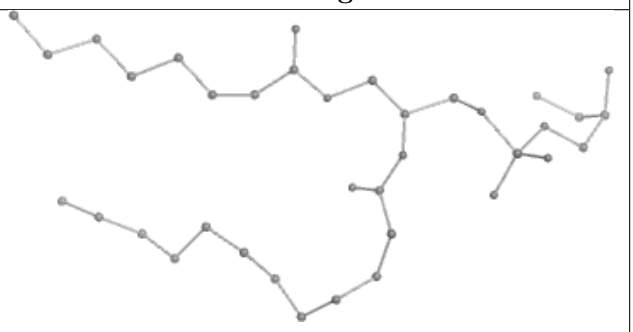
Bond lengths



Bond angles

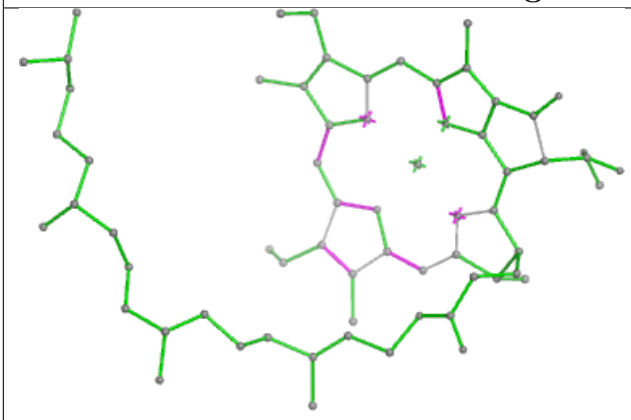


Torsions

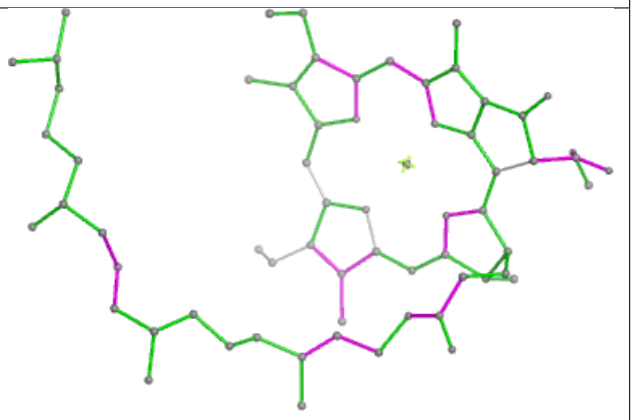


Rings

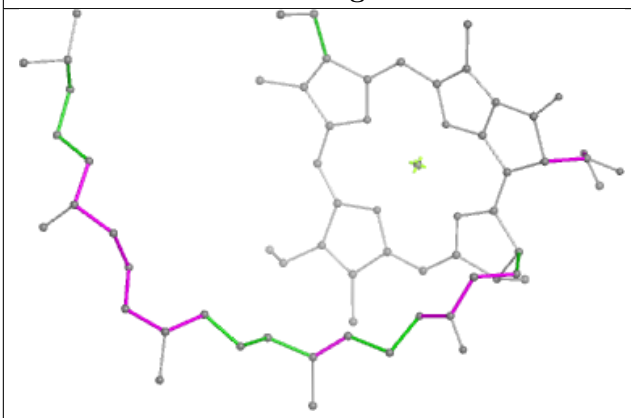
Ligand CLA w 306



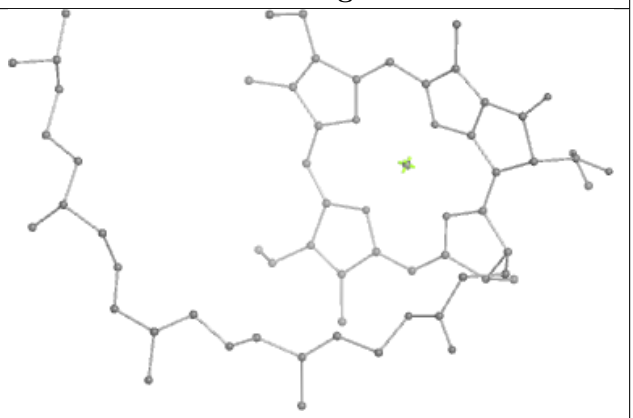
Bond lengths



Bond angles

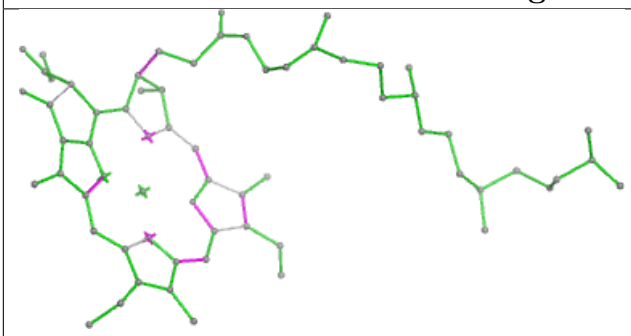


Torsions

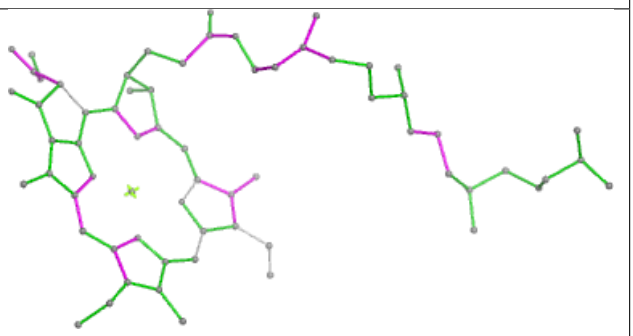


Rings

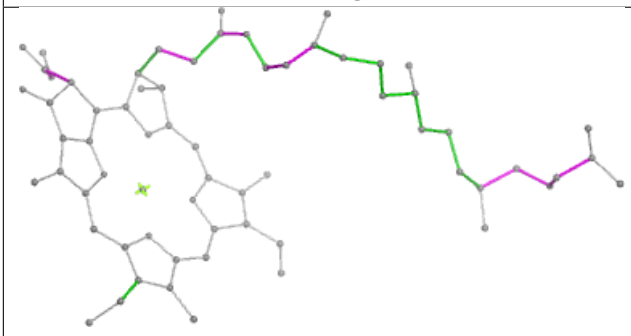
Ligand CLA a 815



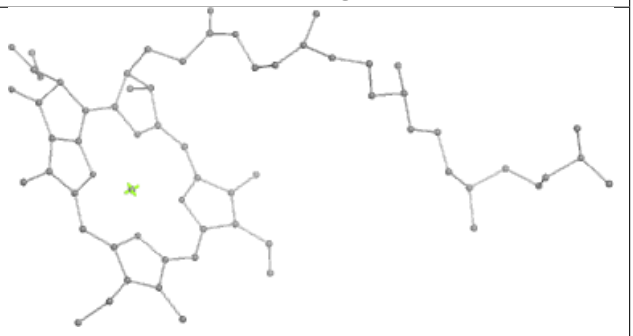
Bond lengths



Bond angles

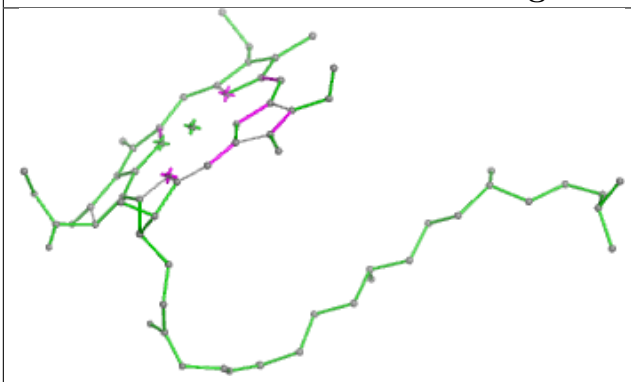


Torsions

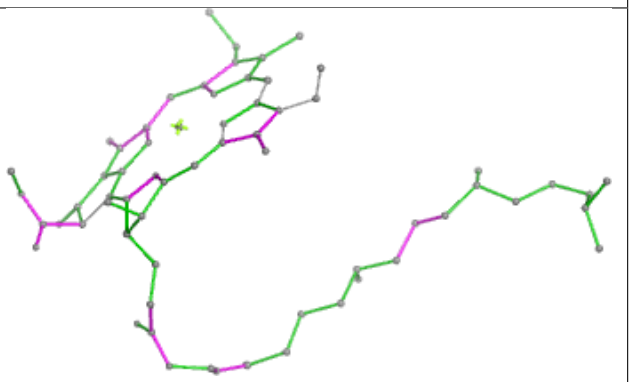


Rings

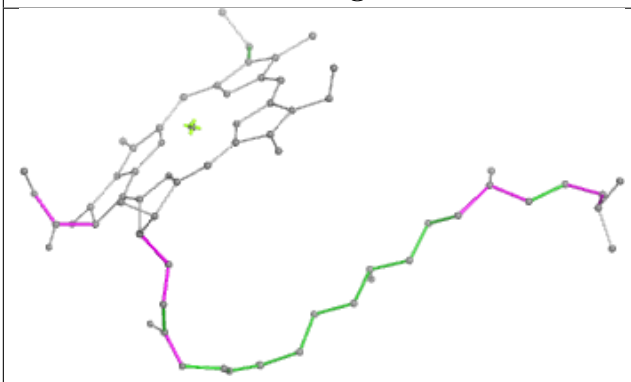
Ligand CLA a 839



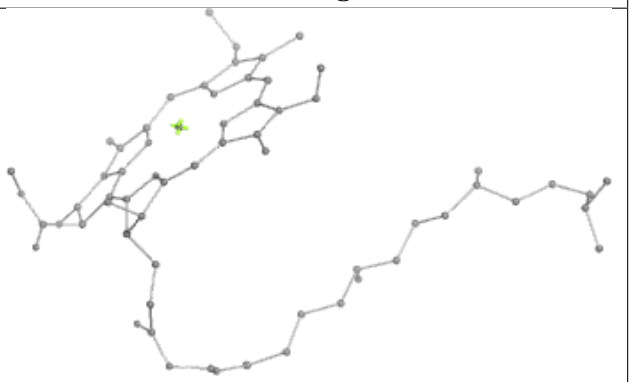
Bond lengths



Bond angles

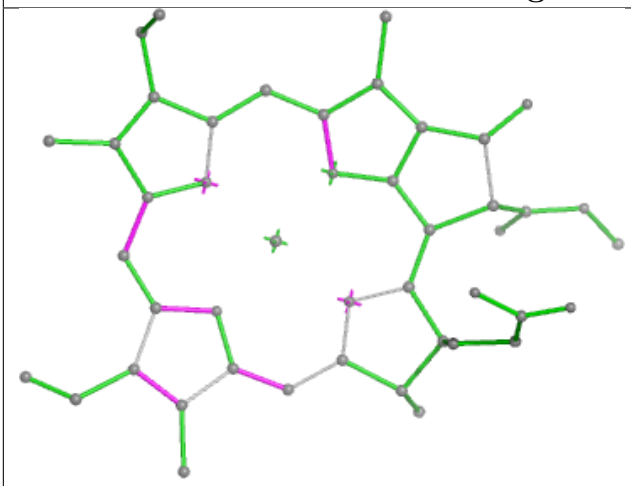


Torsions

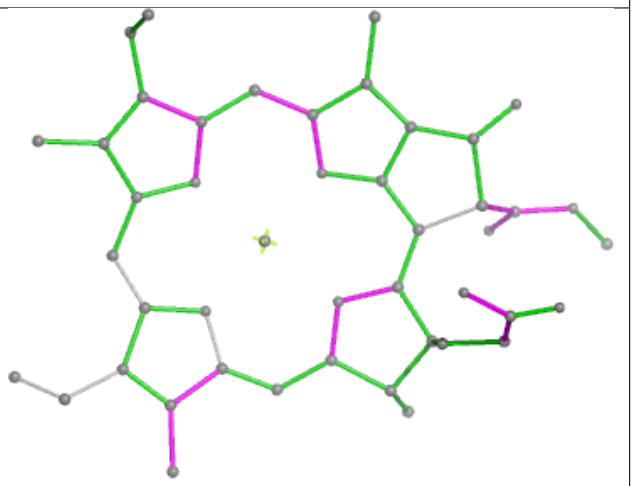


Rings

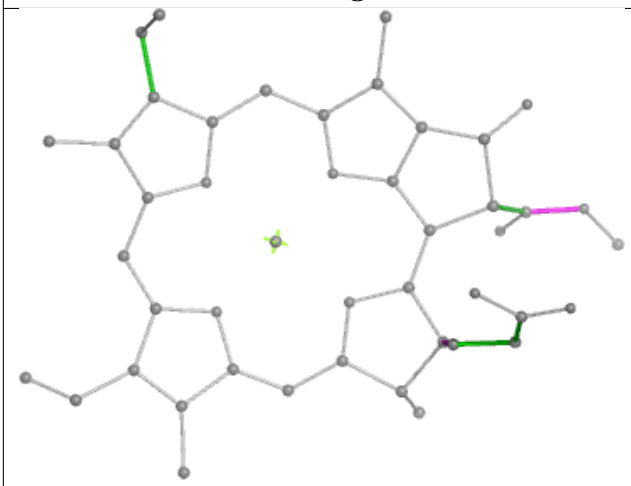
Ligand CLA b 834



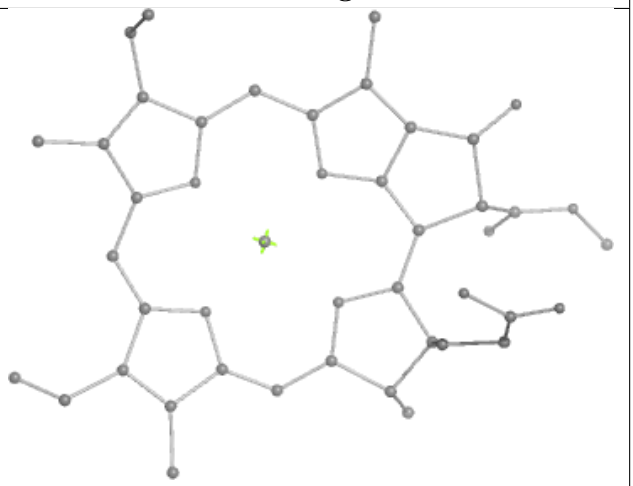
Bond lengths



Bond angles

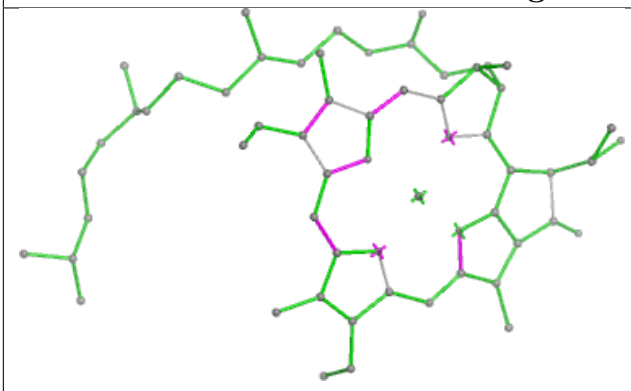


Torsions

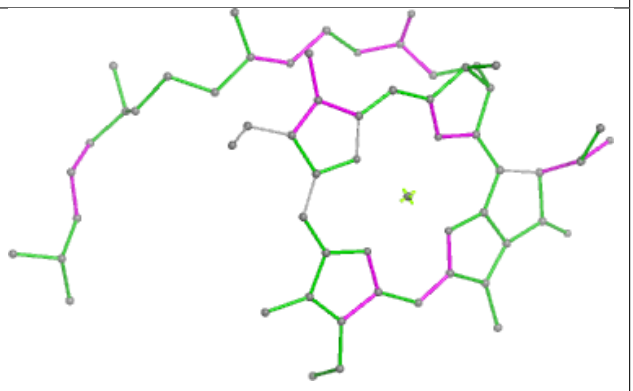


Rings

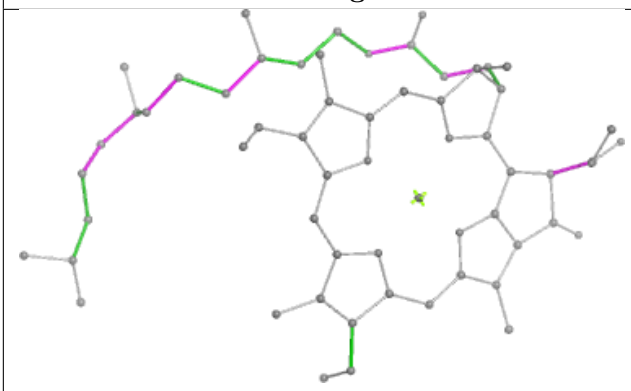
Ligand CLA x 307



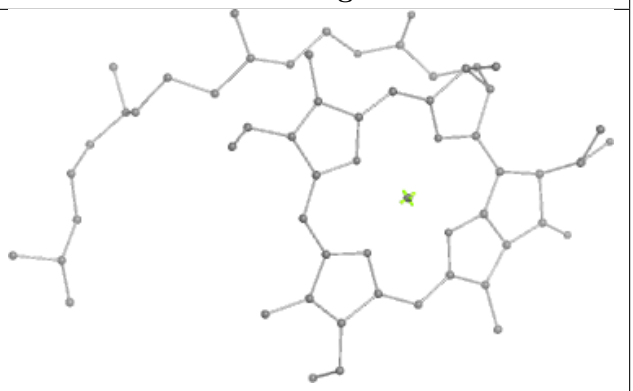
Bond lengths



Bond angles

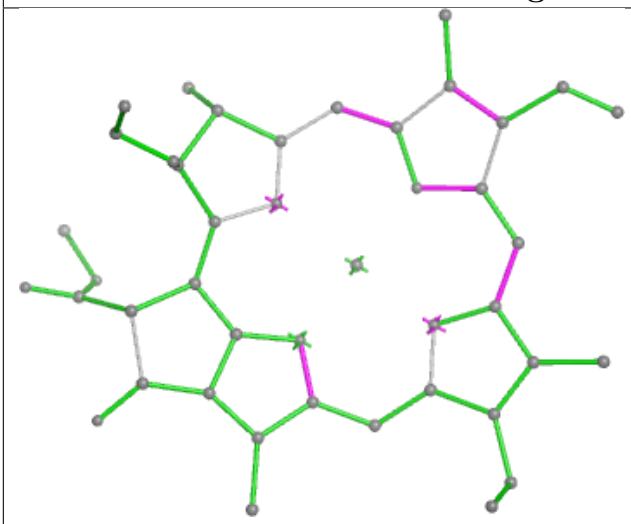


Torsions

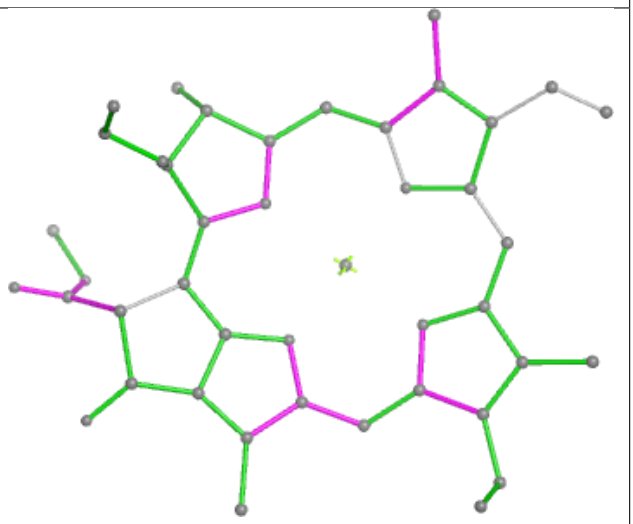


Rings

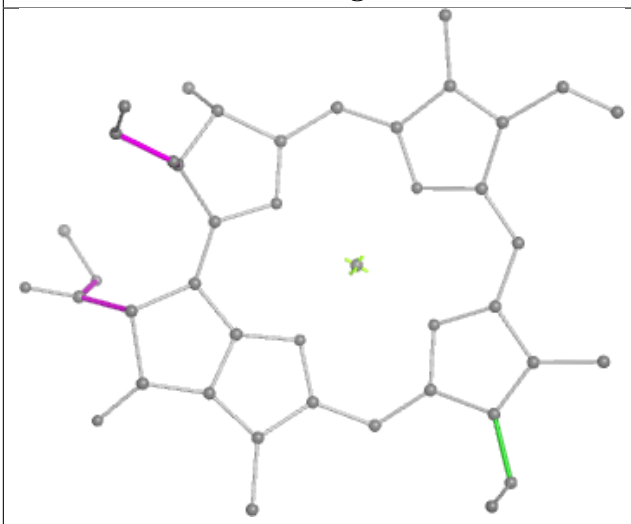
Ligand CLA b 808



Bond lengths



Bond angles



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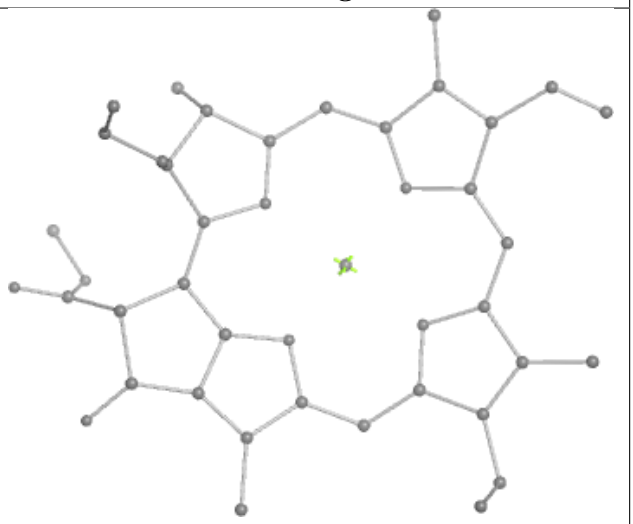
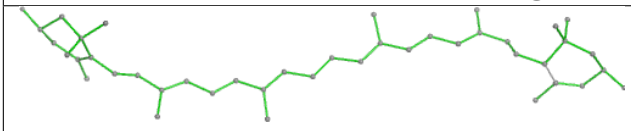


Rings

Ligand LUT x 321



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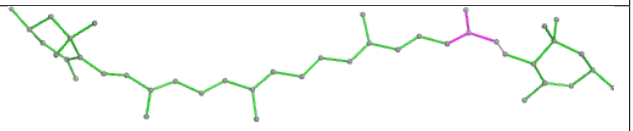
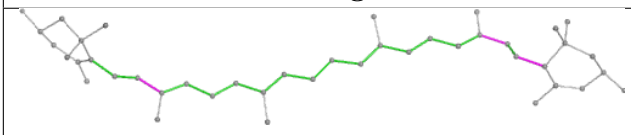


Bond angles



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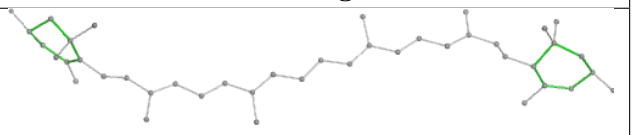
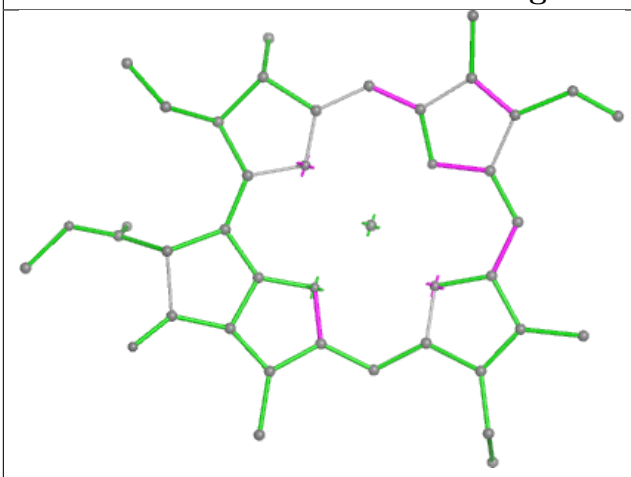
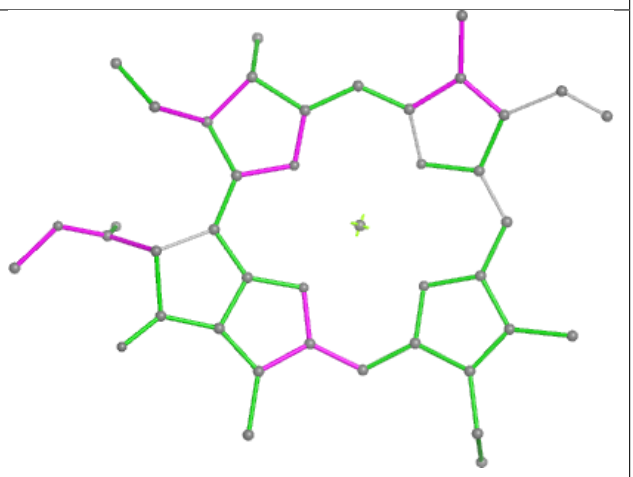


Rings

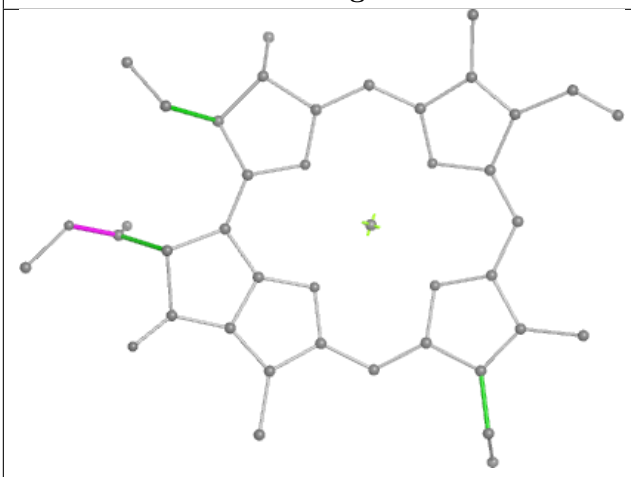
Ligand CLA z 309



Bond lengths



Bond angles



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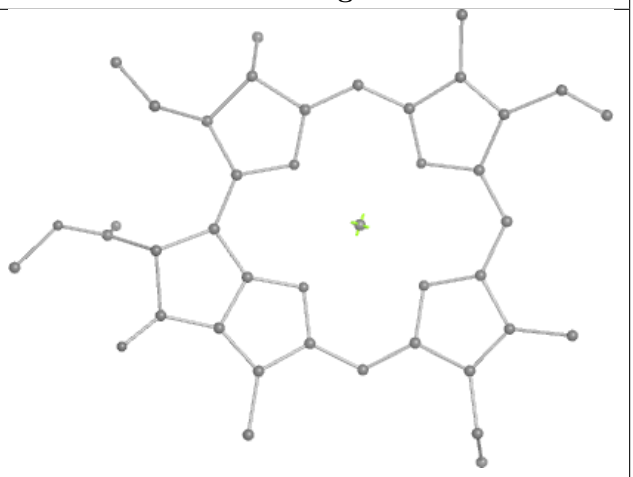
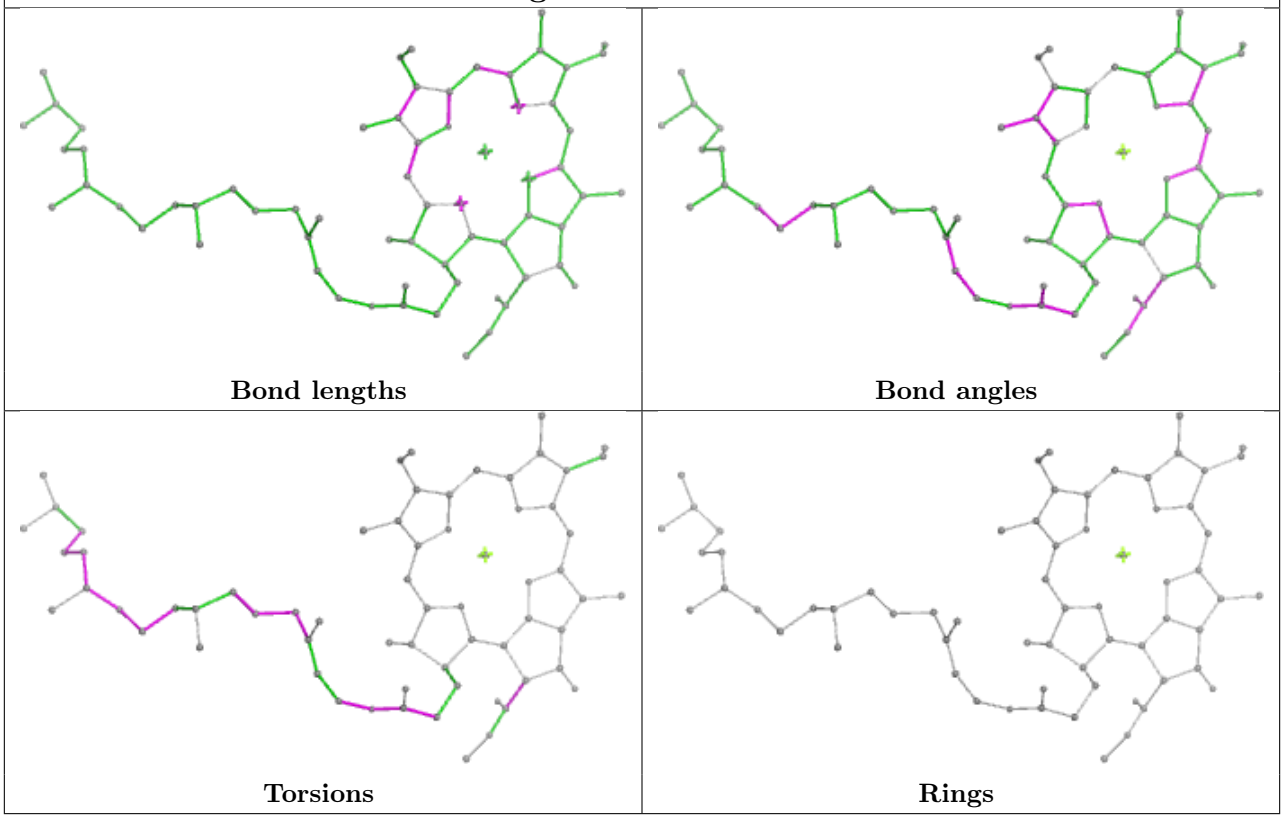
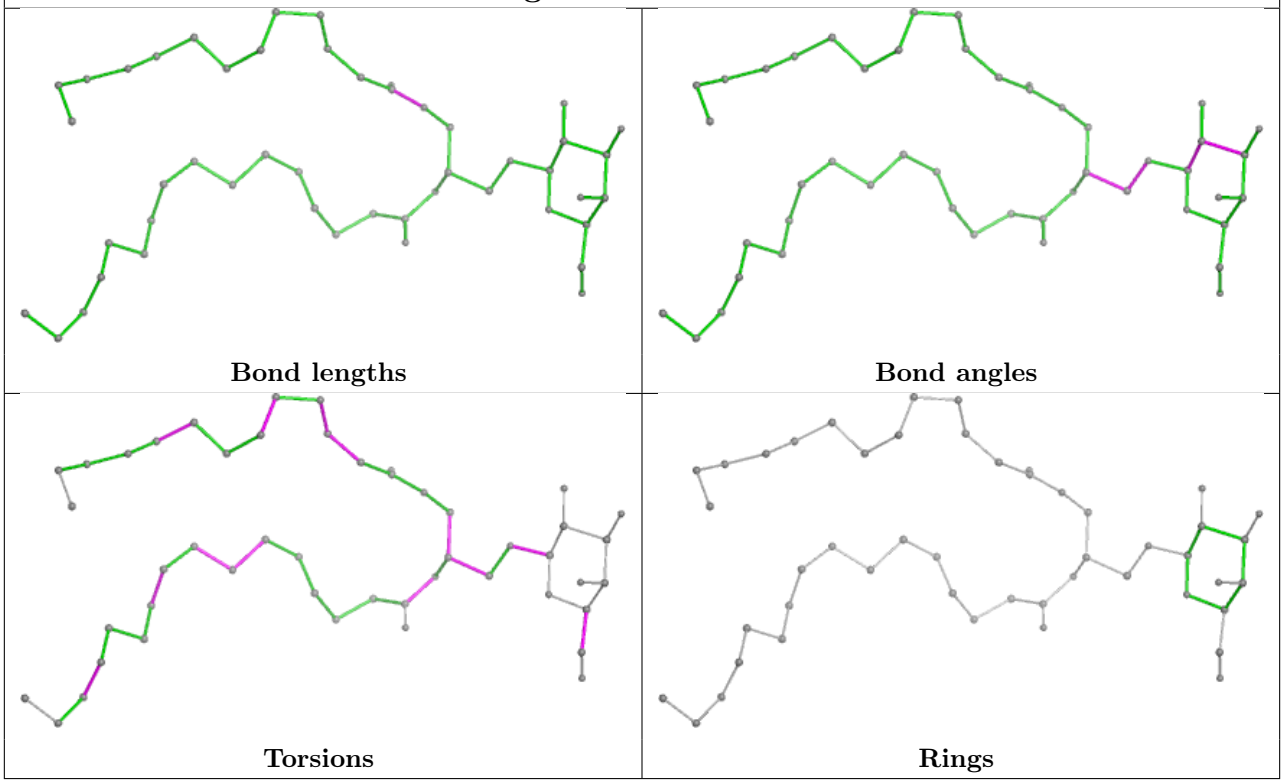


Rings

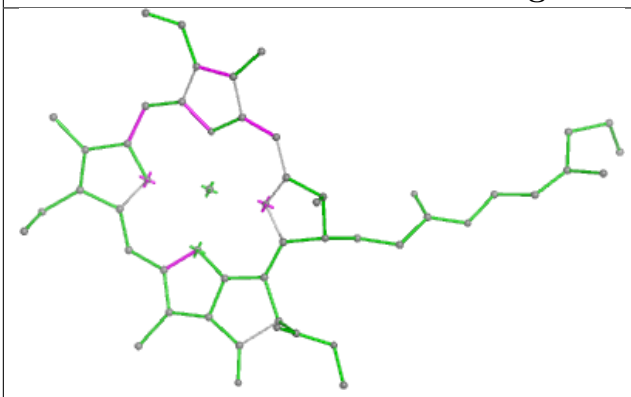
Ligand CLA a 854



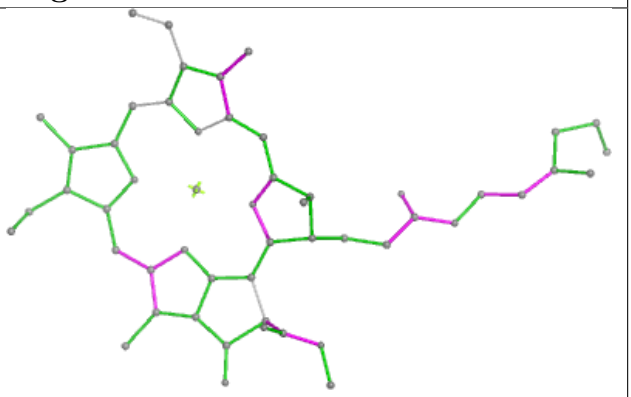
Ligand LMG x 315



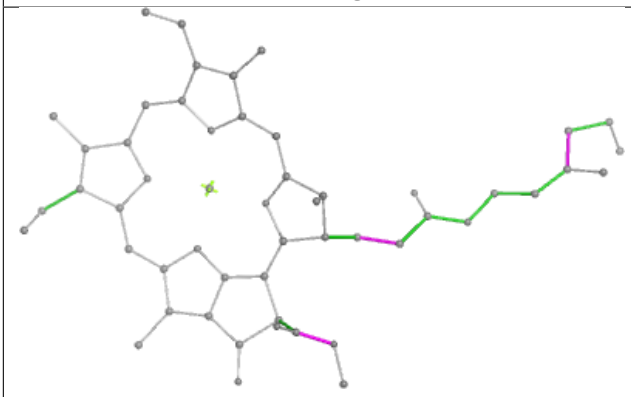
Ligand CLA g 203



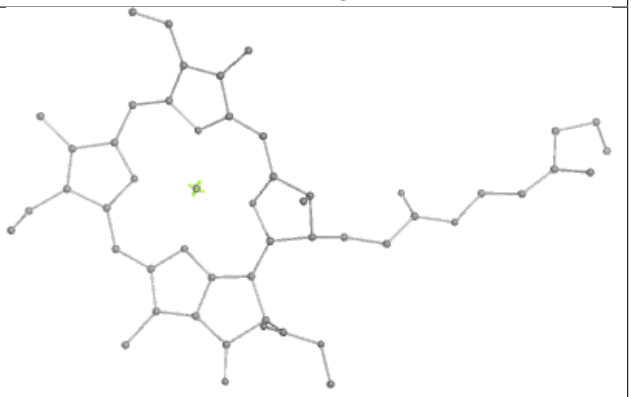
Bond lengths



Bond angles

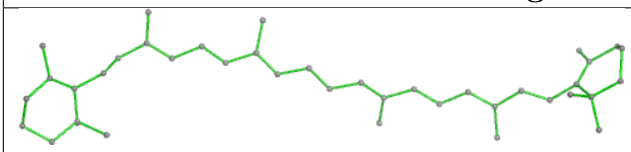


Torsions

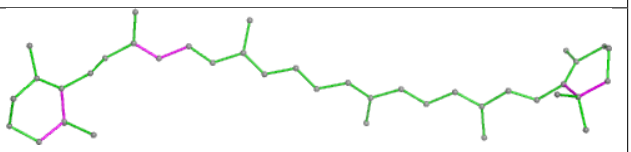


Rings

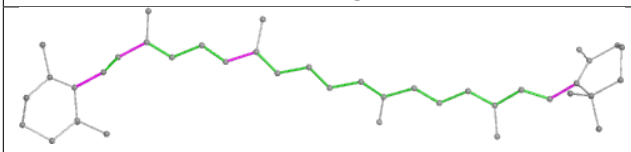
Ligand BCR a 830



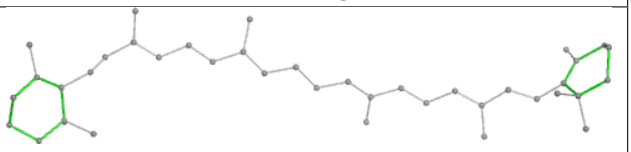
Bond lengths



Bond angles

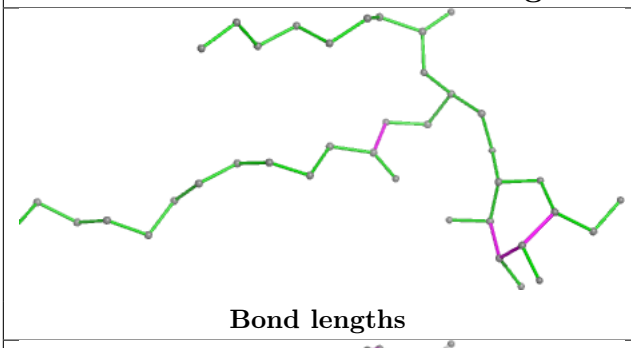


Torsions

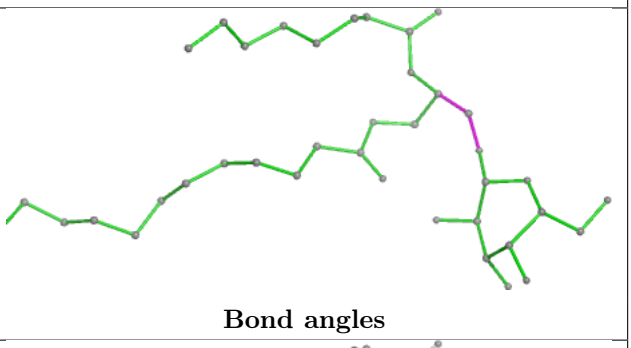


Rings

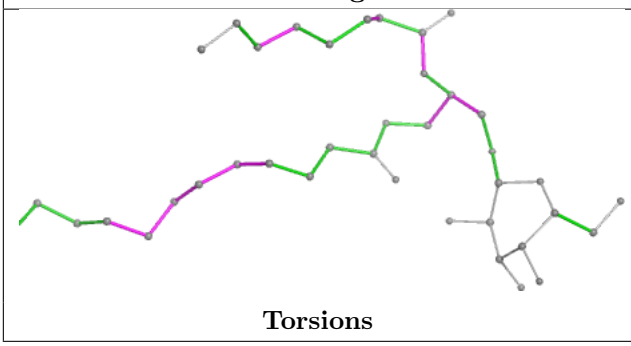
Ligand LMG z 314



Bond lengths



Bond angles



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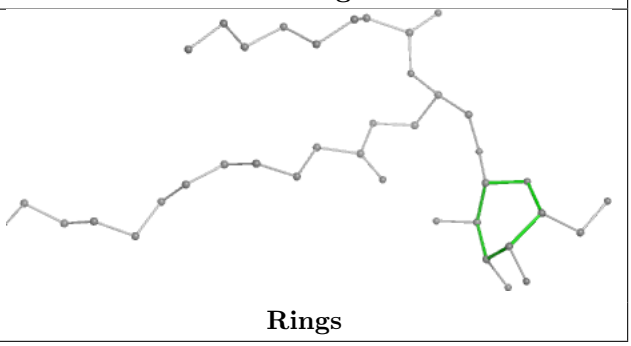
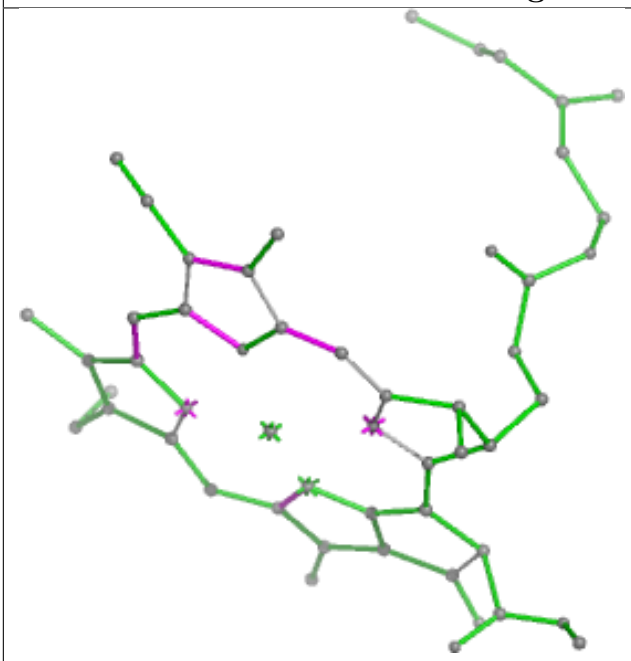


Rings

Ligand CLA b 838



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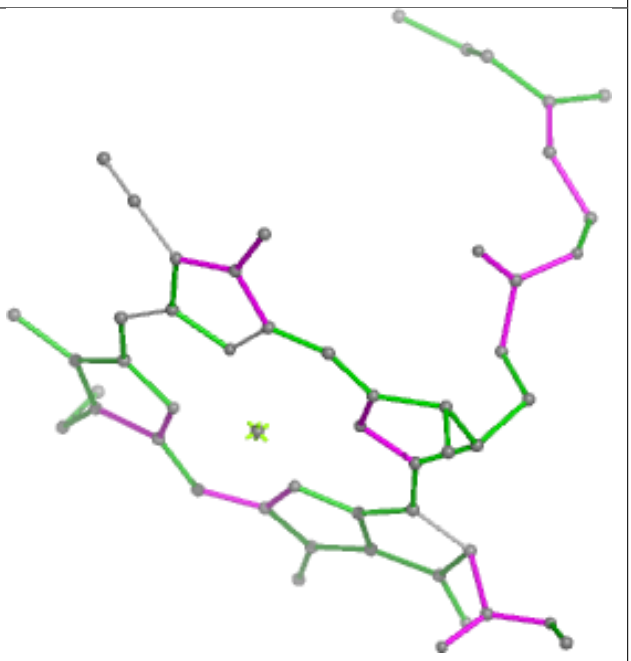
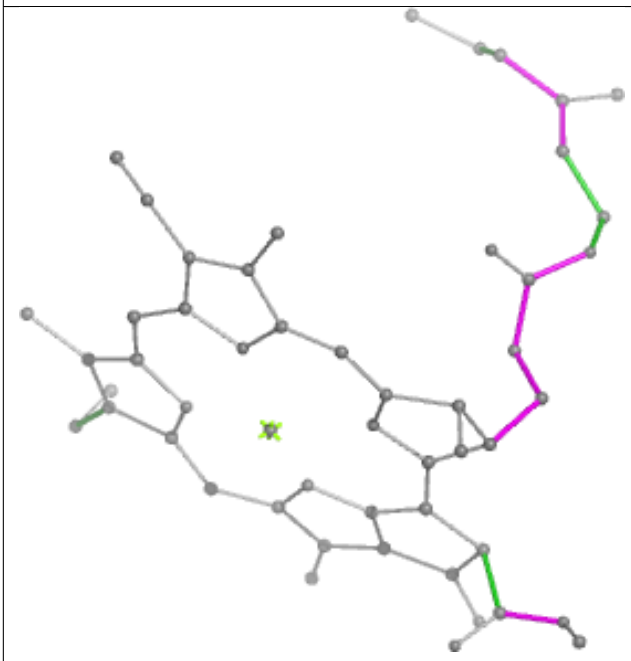
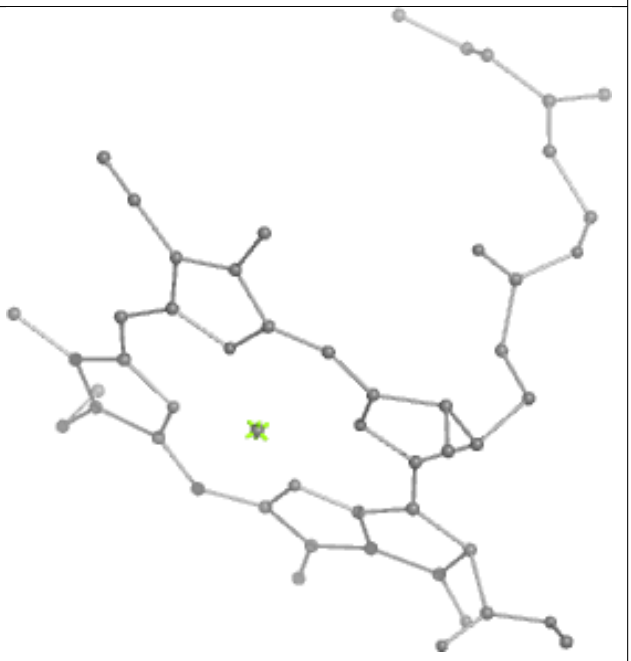


Bond angles

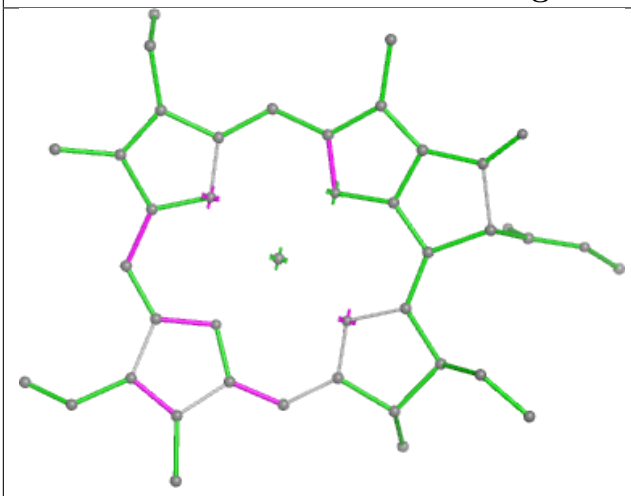


Torsions

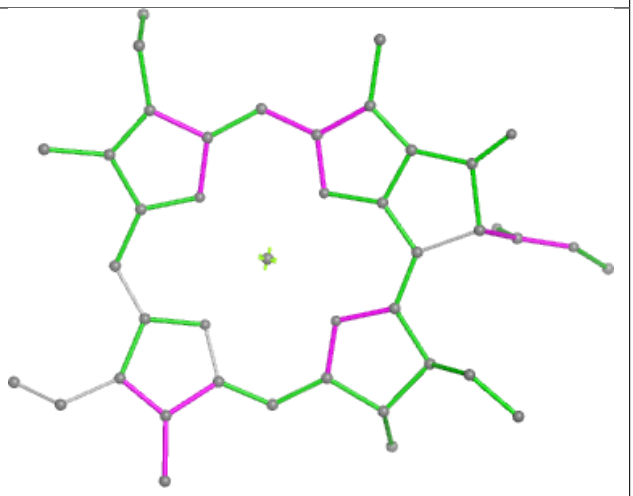


Rings

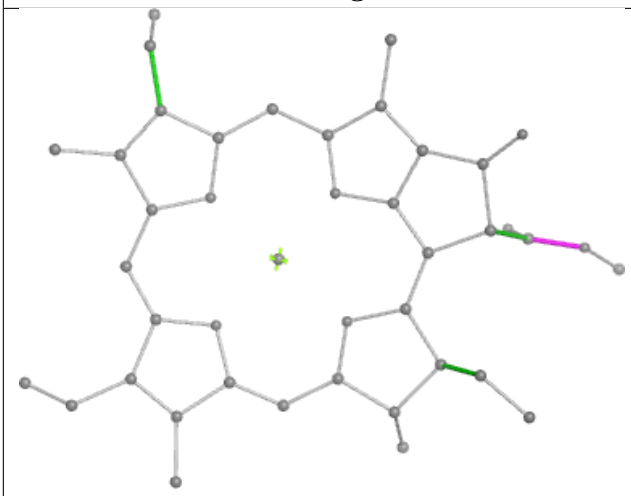
Ligand CLA f 302



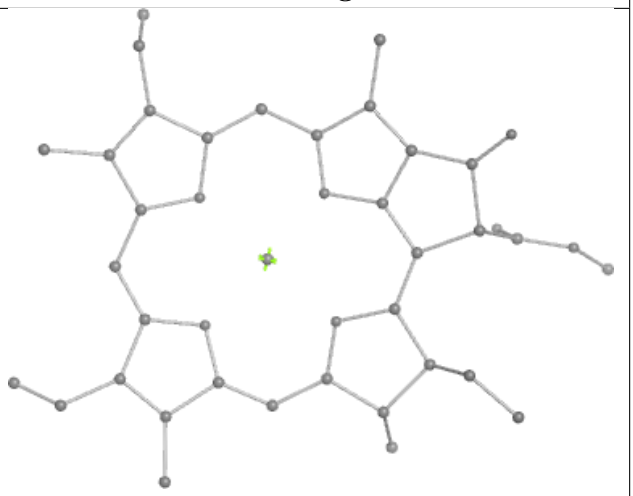
Bond lengths



Bond angles

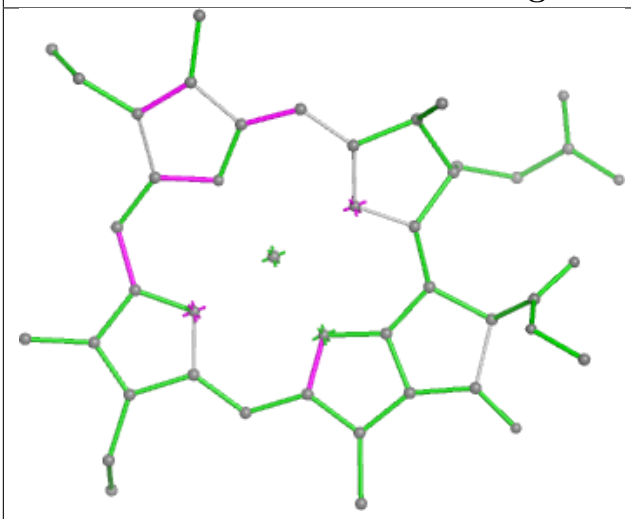


Torsions

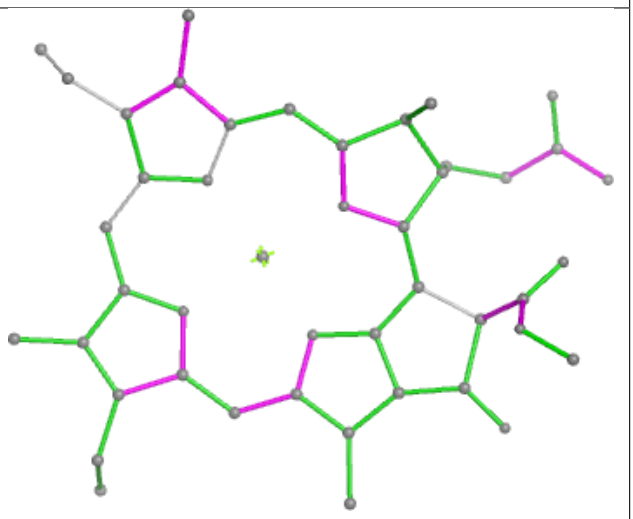


Rings

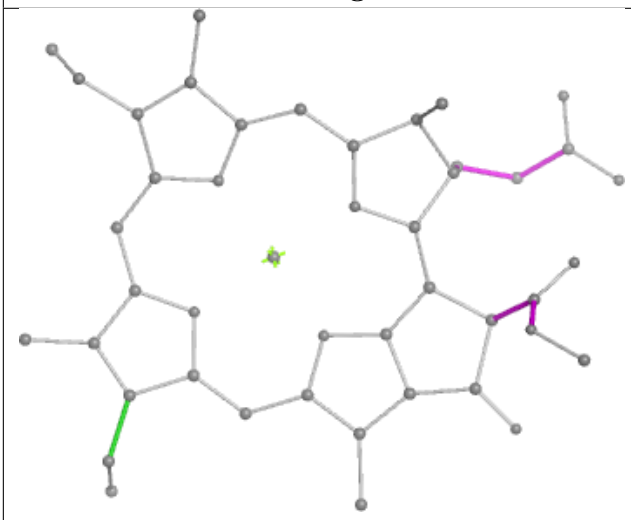
Ligand CLA a 826



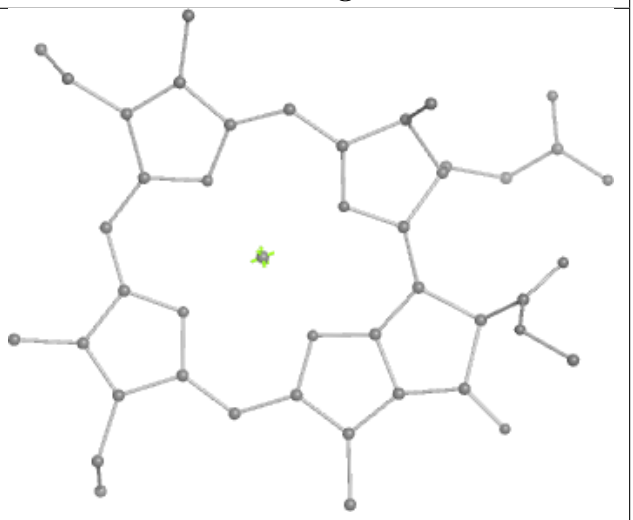
Bond lengths



Bond angles

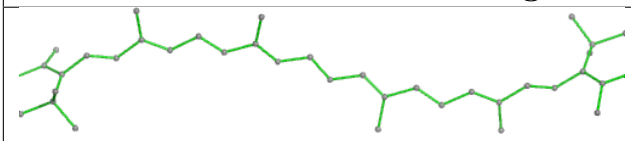


Torsions

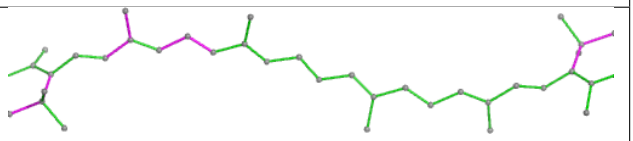


Rings

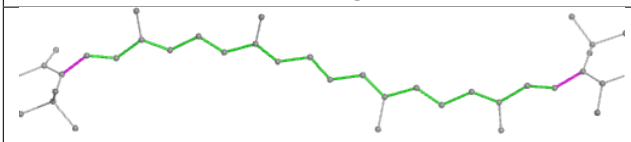
Ligand BCR w 301



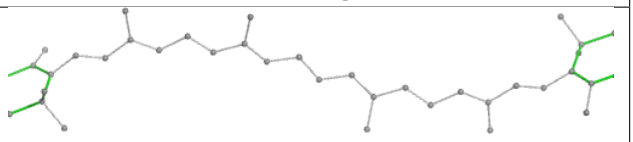
Bond lengths



Bond angles

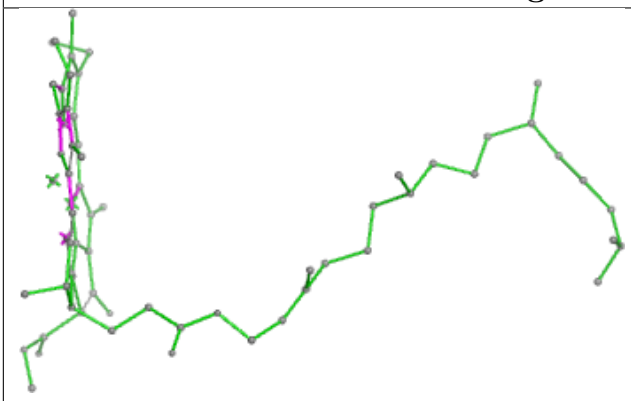


Torsions

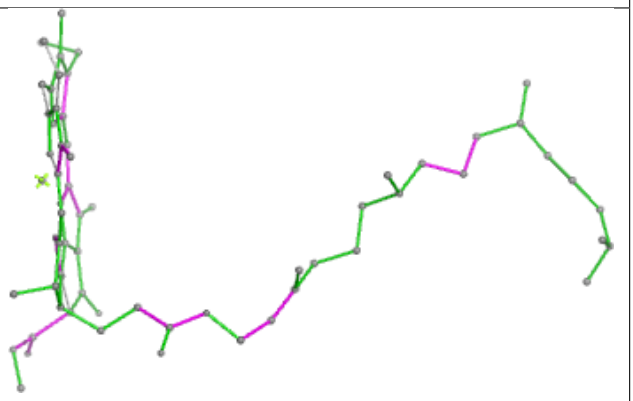


Rings

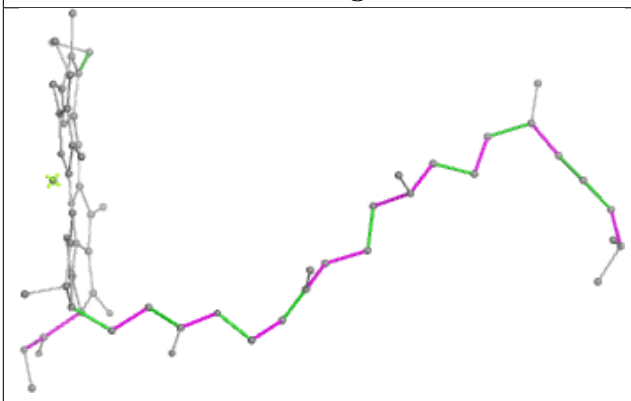
Ligand CLA b 801



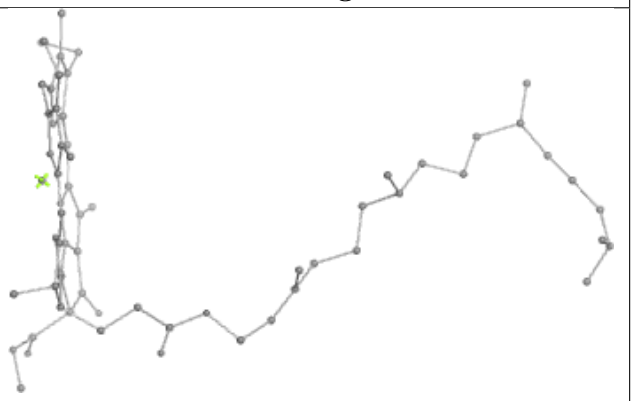
Bond lengths



Bond angles

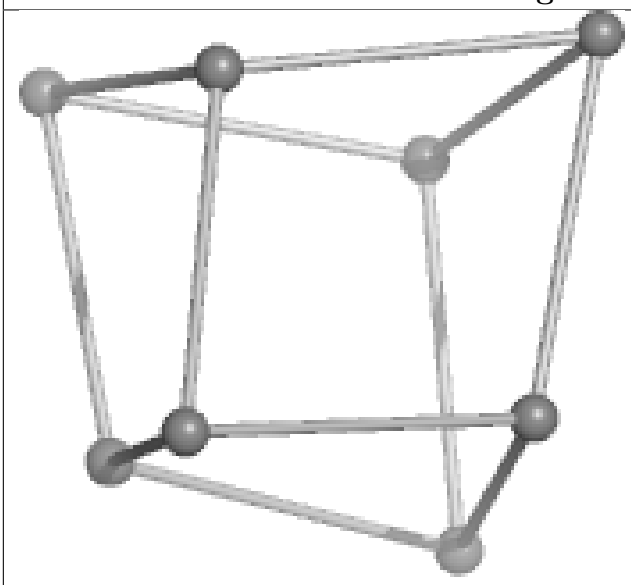


Torsions

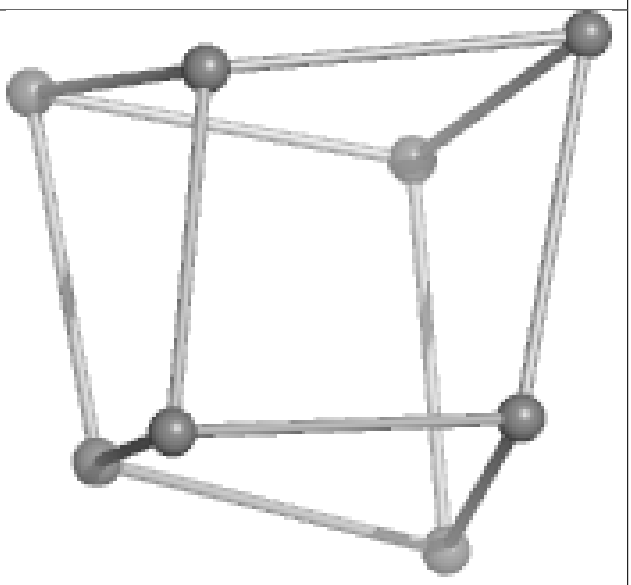


Rings

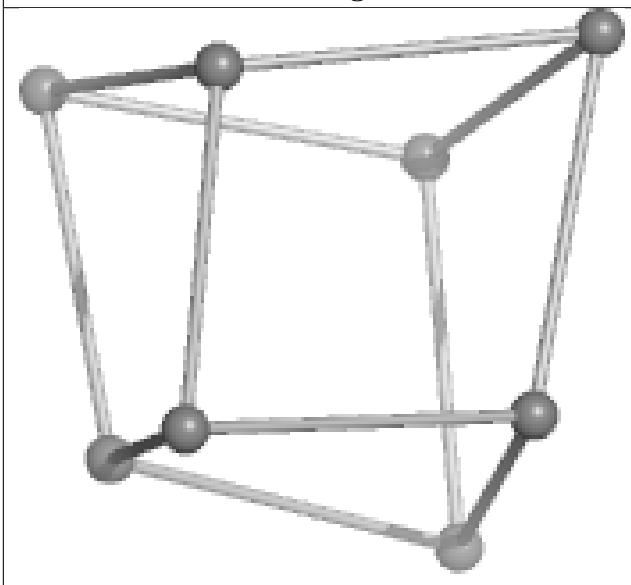
Ligand SF4 c 102



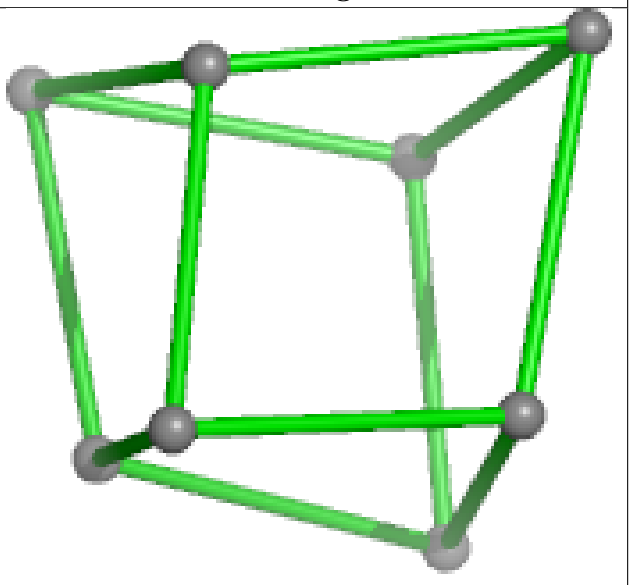
Bond lengths



Bond angles

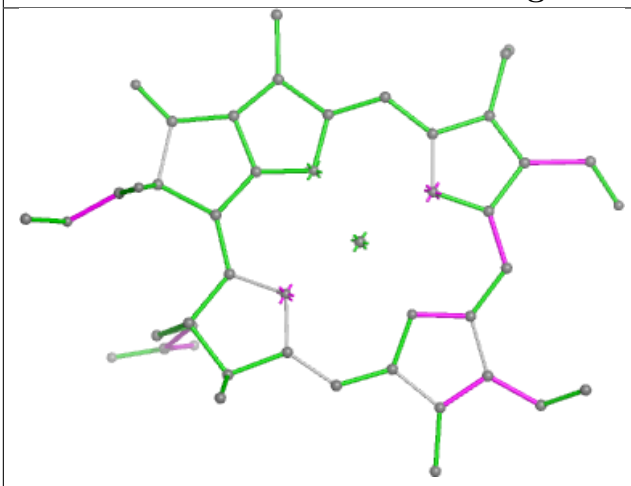


Torsions

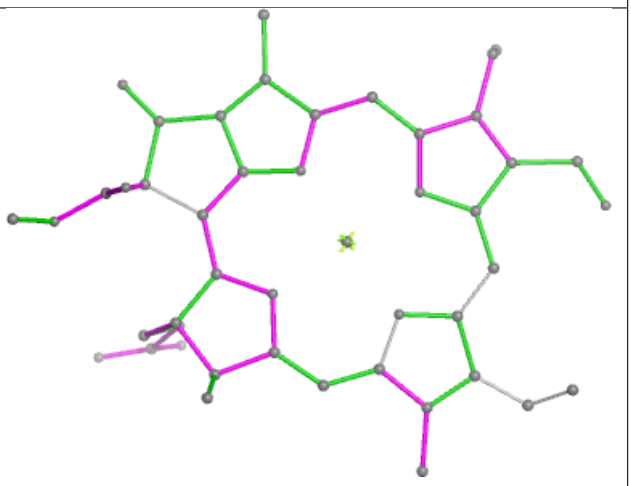


Rings

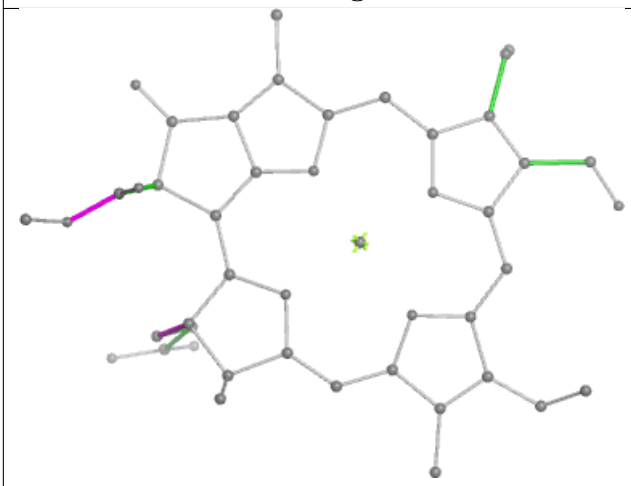
Ligand CHL x 305



Bond lengths



Bond angles



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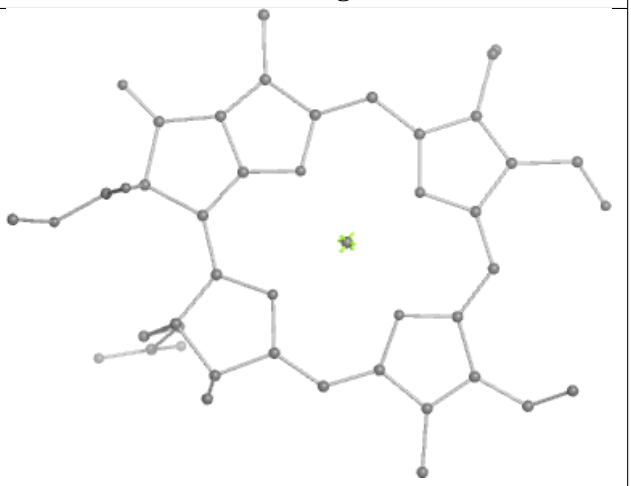
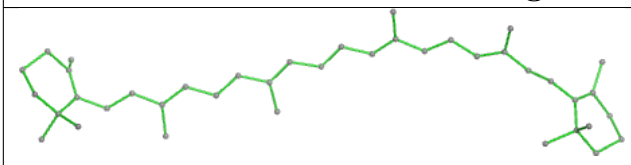


Rings

Ligand BCR b 820



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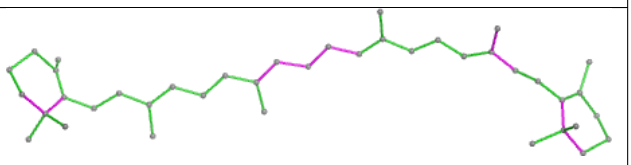
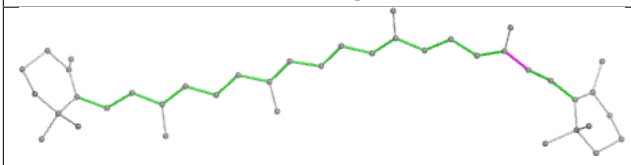
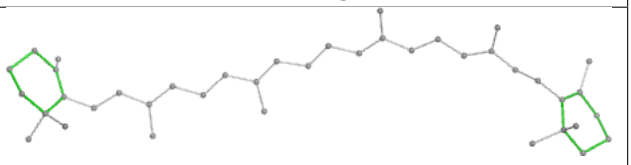


Bond angles

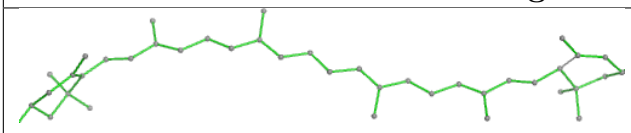


Torsions

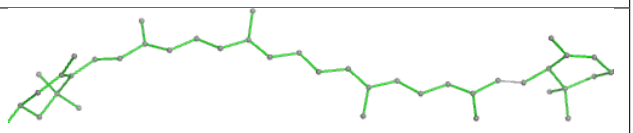


Rings

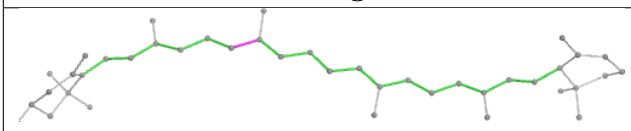
Ligand LUT x 320



Bond lengths



Bond angles



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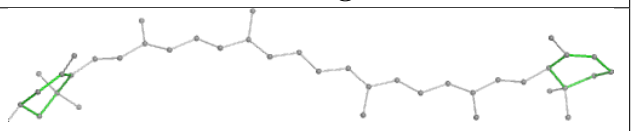
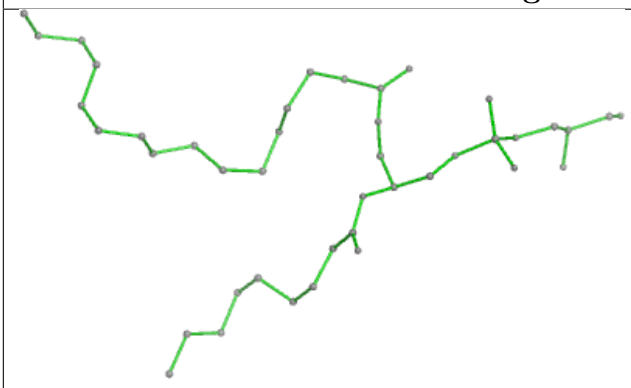


Rings

Ligand PGT B 602



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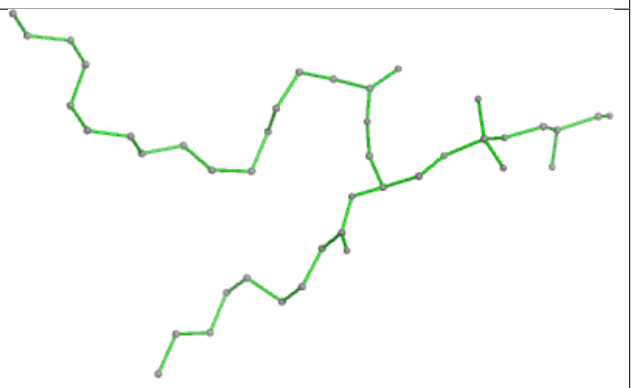
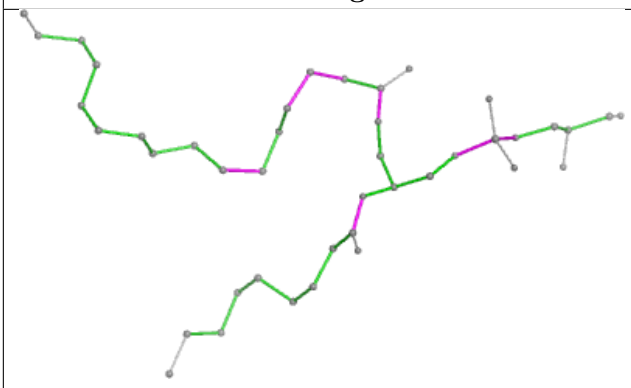


Bond angles



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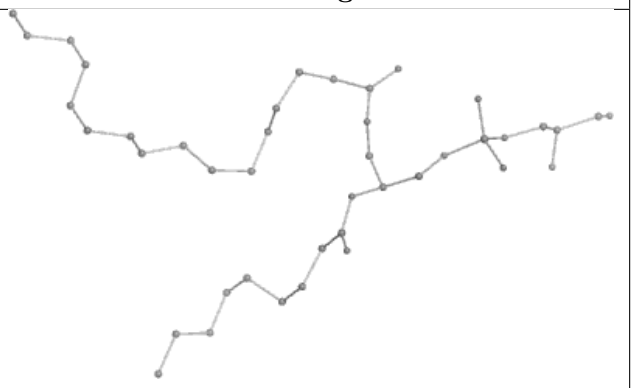
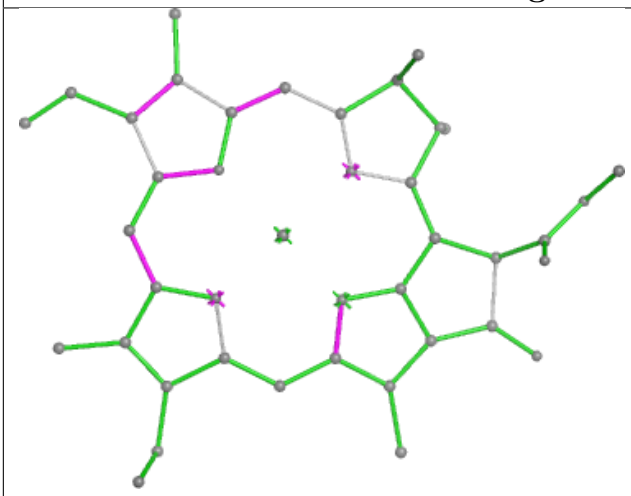


Rings

Ligand CLA a 817



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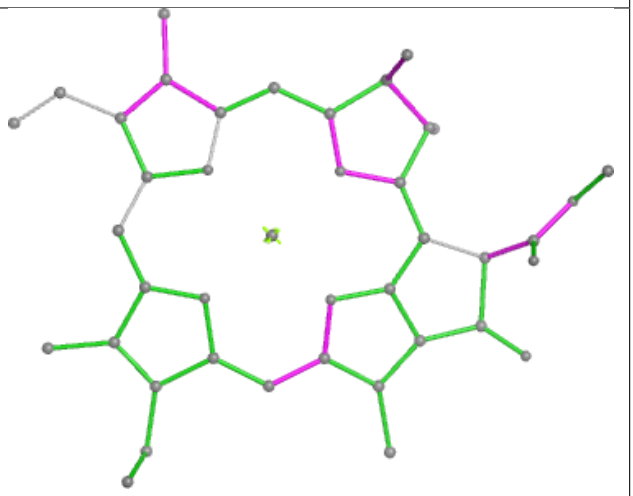
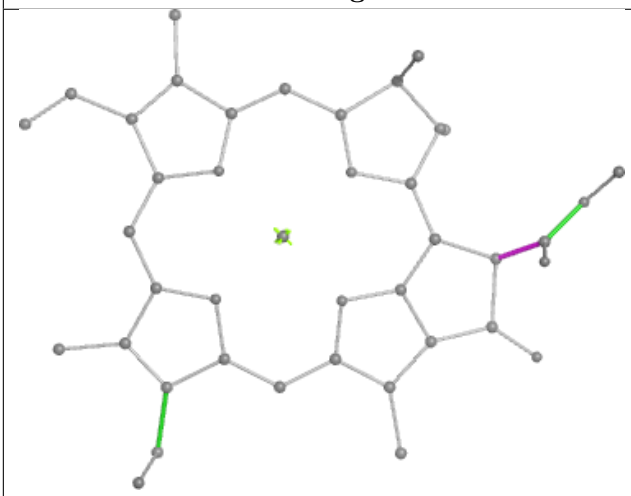


Bond angles



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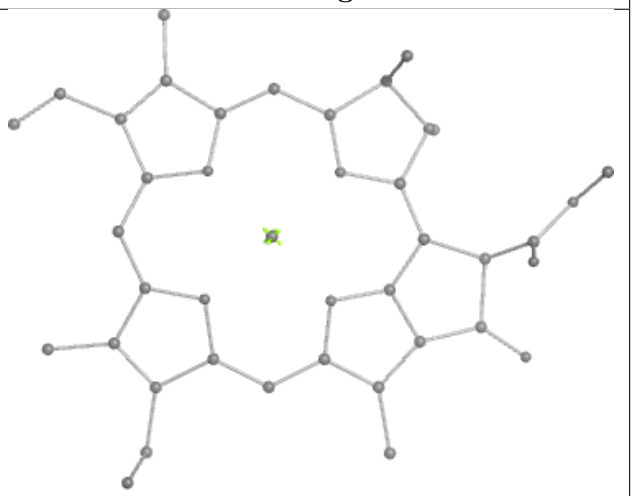
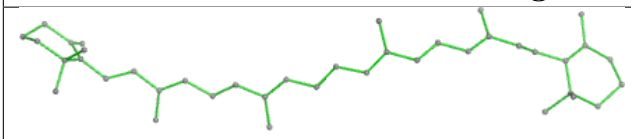


Rings

Ligand BCR j 103



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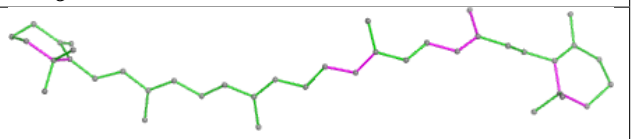
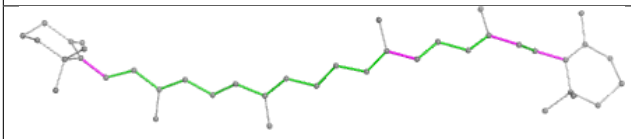


Bond angles



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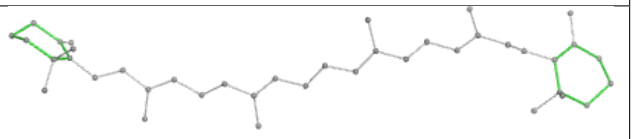
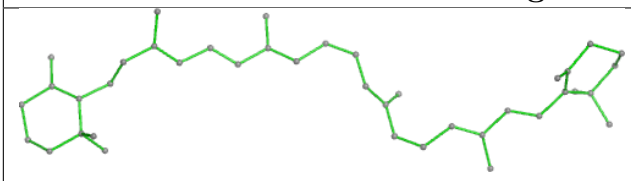
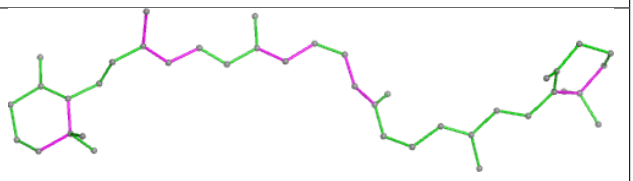


Rings

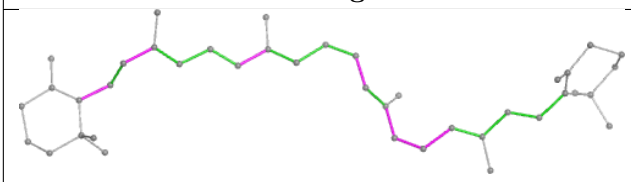
Ligand BCR z 318



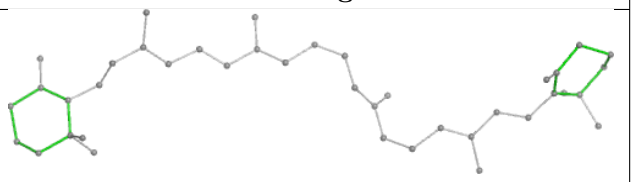
Bond lengths



Bond angles

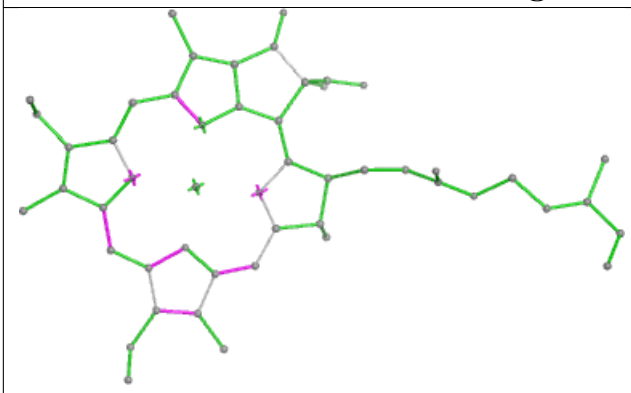


Torsions



Rings

Ligand CLA a 822



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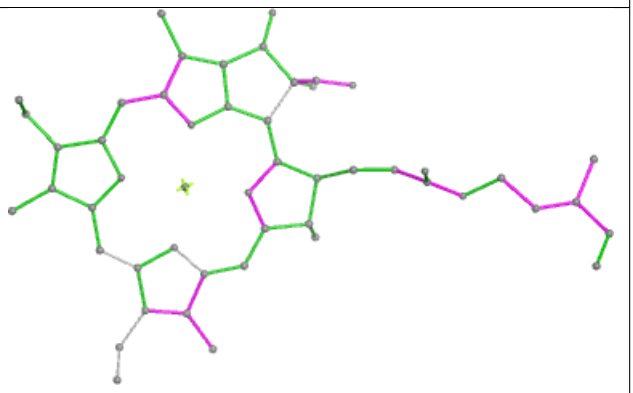
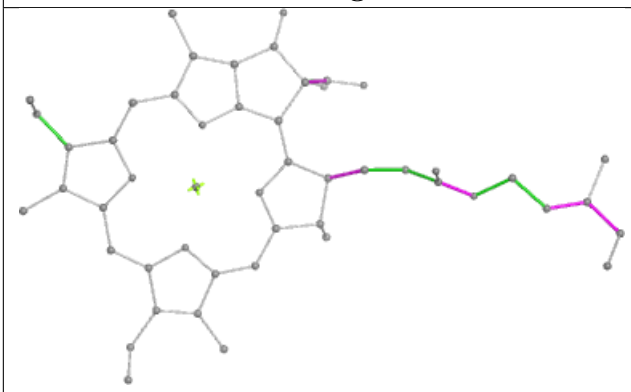
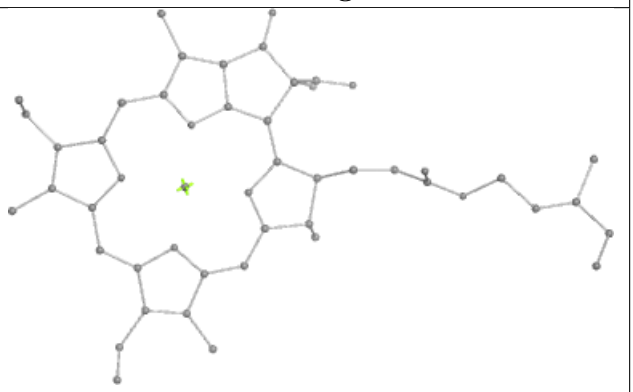


Bond angles

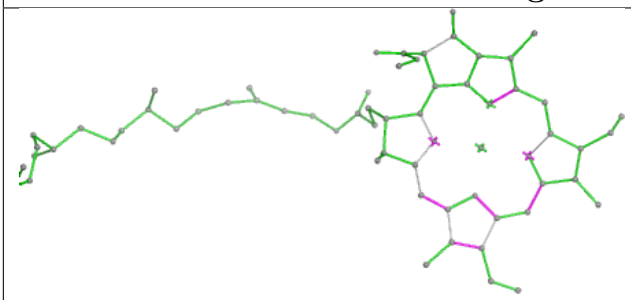


Torsions



Rings

Ligand CLA b 824



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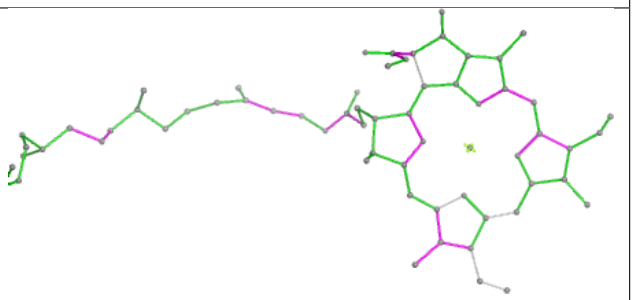
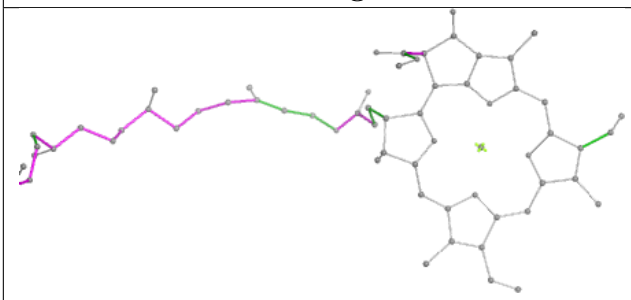
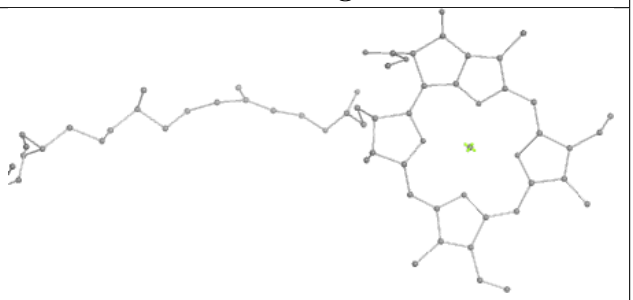


Bond angles

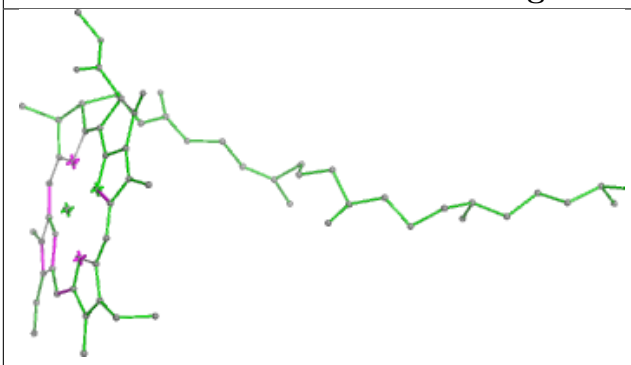


Torsions



Rings

Ligand CLA b 836



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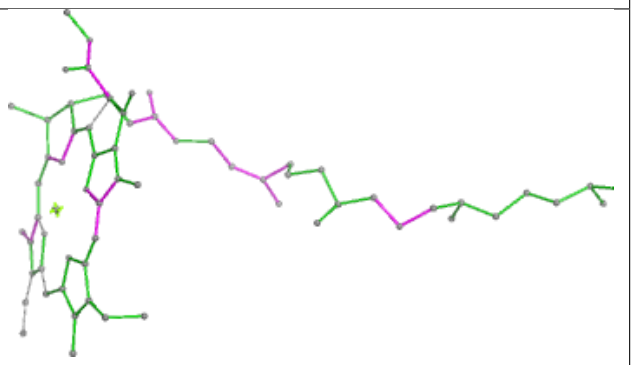
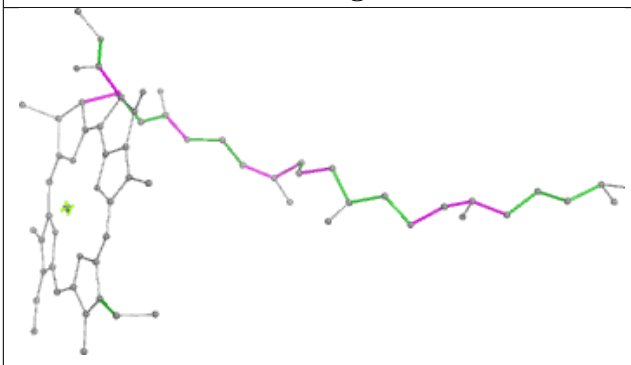
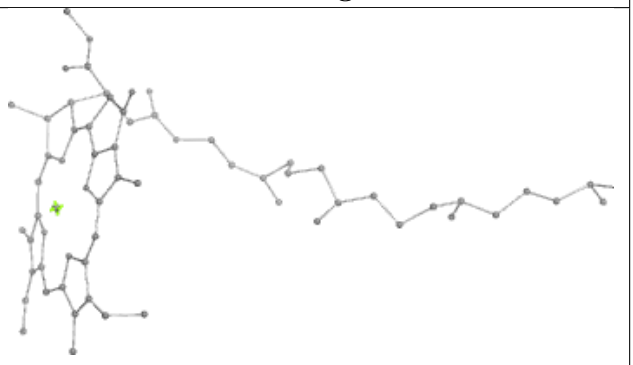


Bond angles

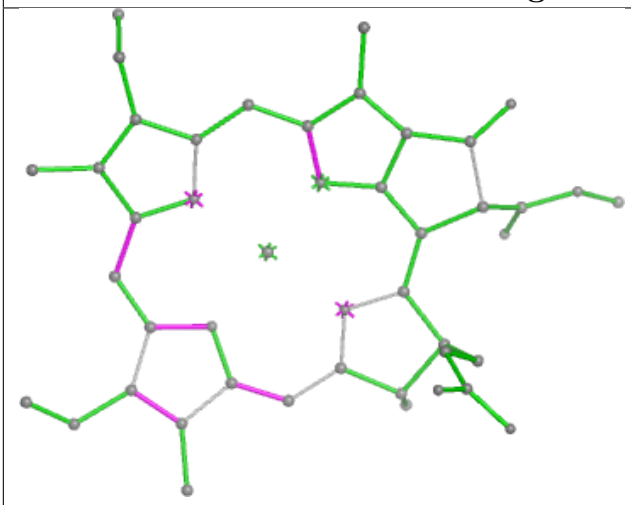


Torsions

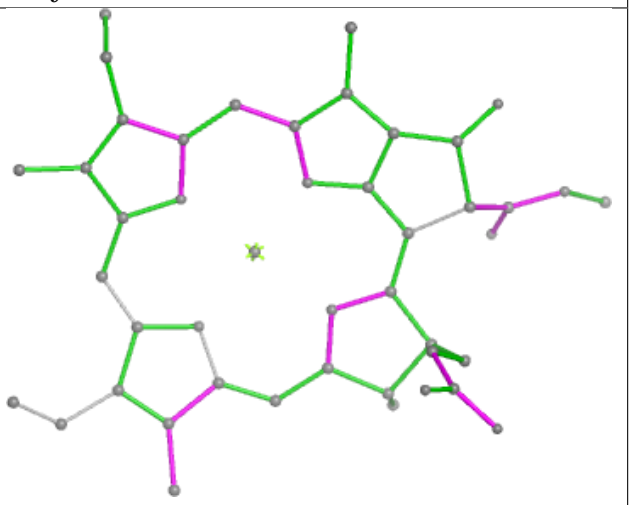


Rings

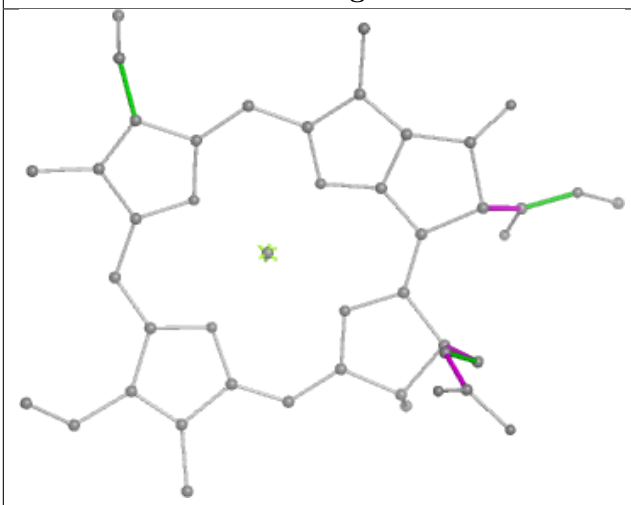
Ligand CLA y 305



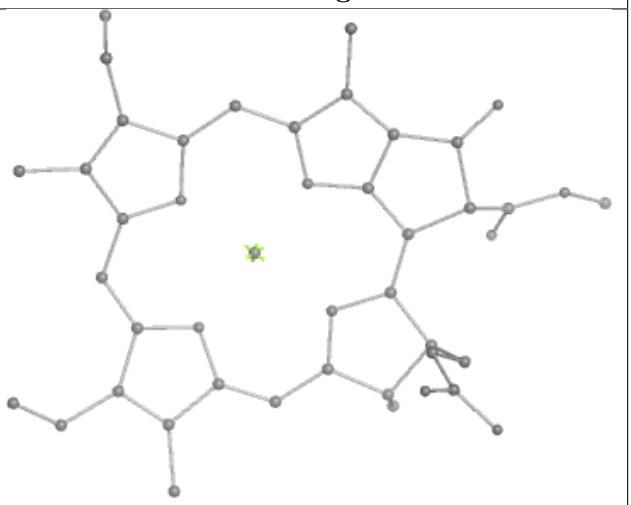
Bond lengths



Bond angles

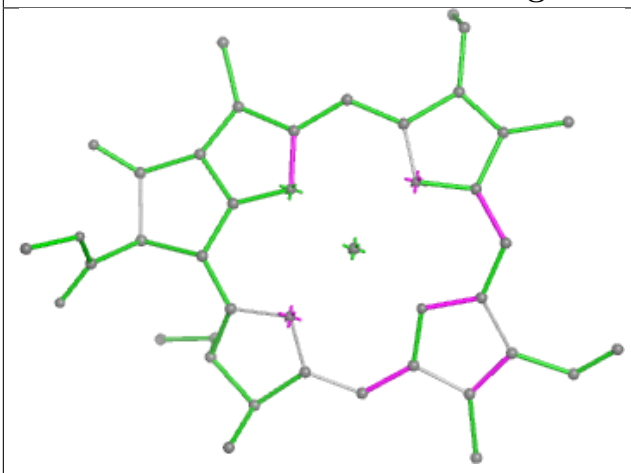


Torsions

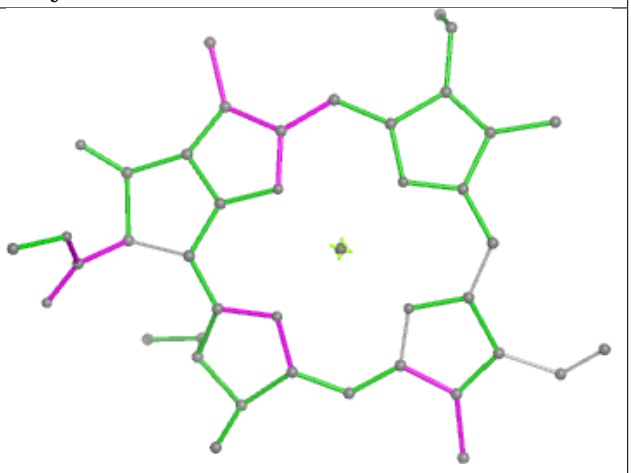


Rings

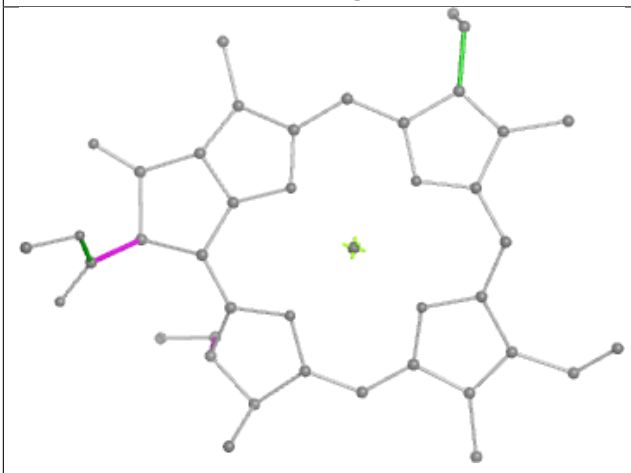
Ligand CLA y 309



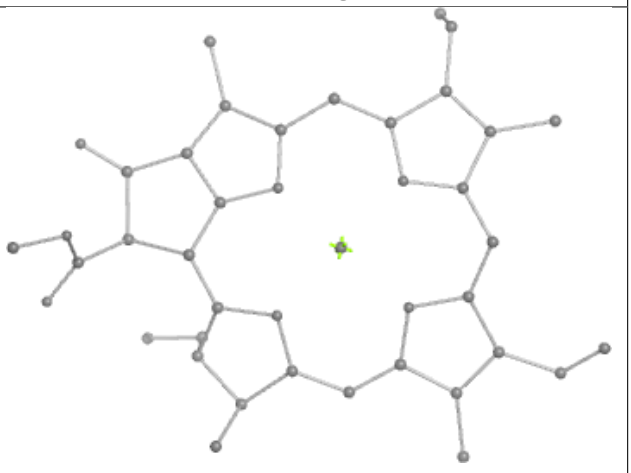
Bond lengths



Bond angles

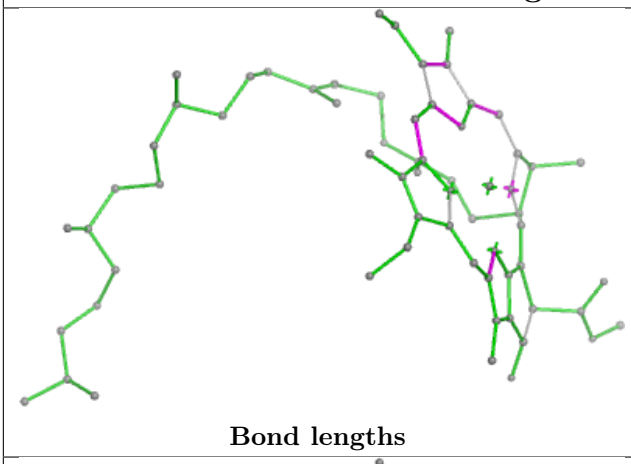


Torsions

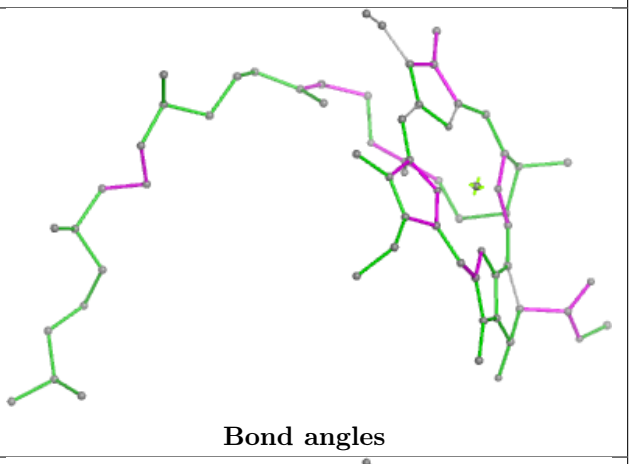


Rings

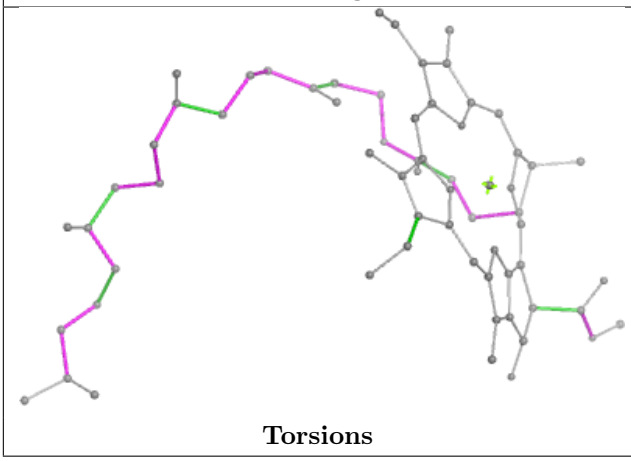
Ligand CLA w 308



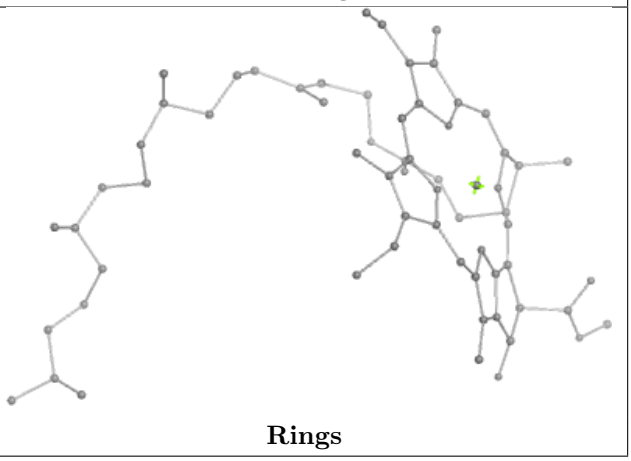
Bond lengths



Bond angles

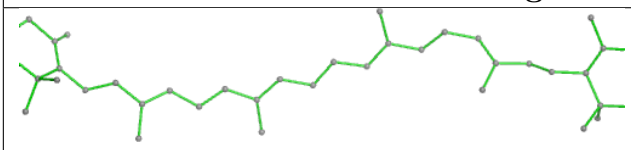


Torsions

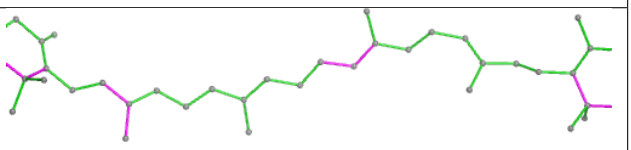


Rings

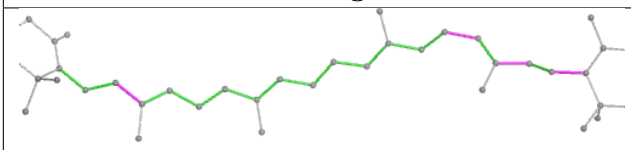
Ligand BCR b 816



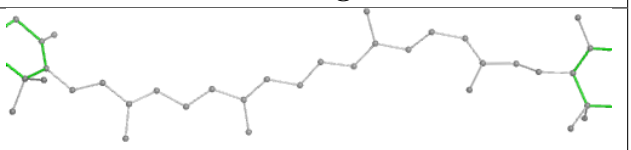
Bond lengths



Bond angles

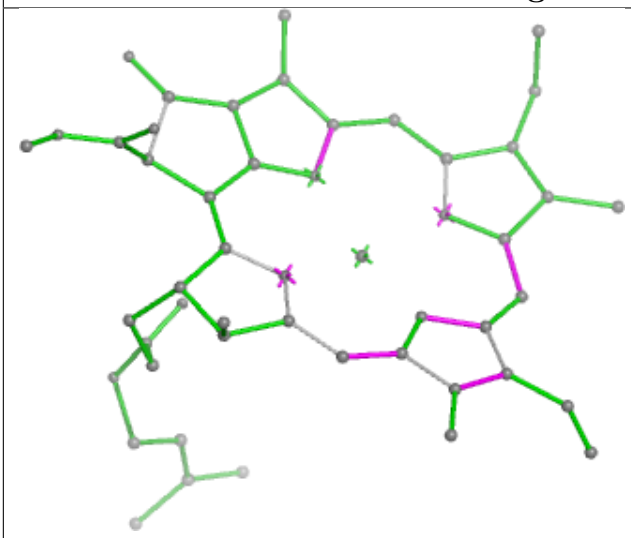


Torsions

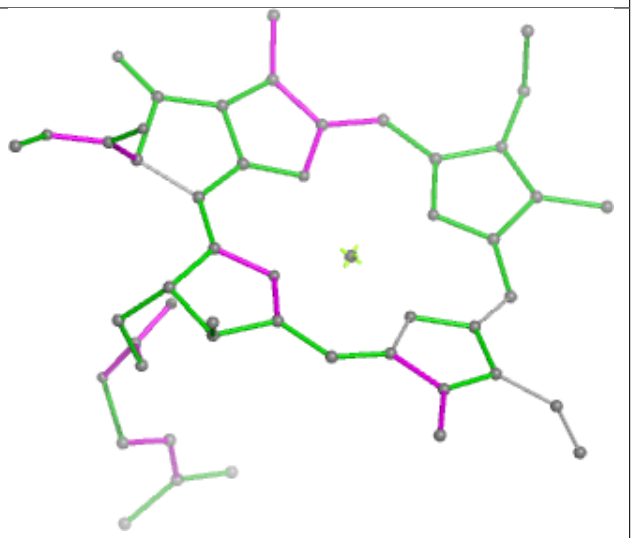


Rings

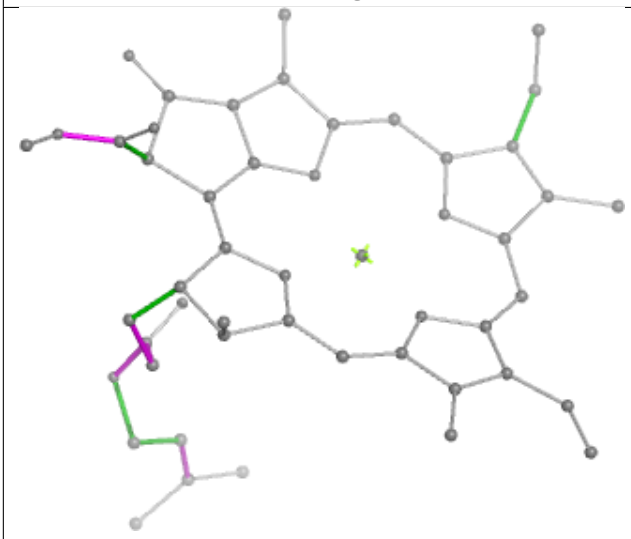
Ligand CLA x 308



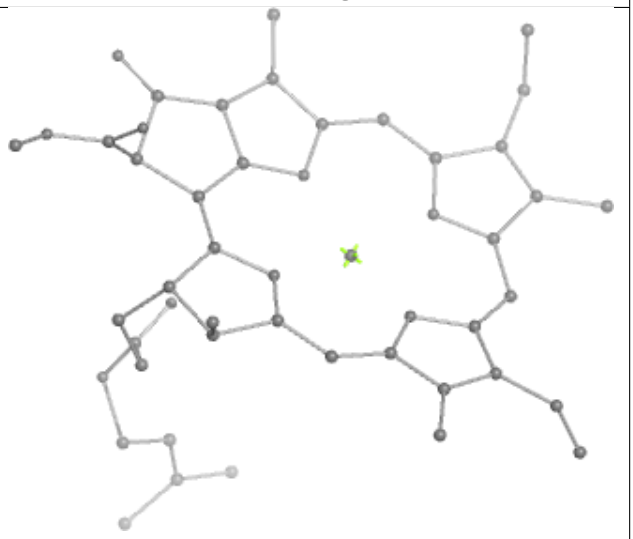
Bond lengths



Bond angles

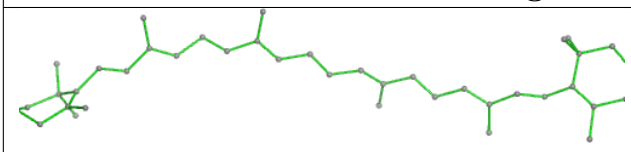


Torsions

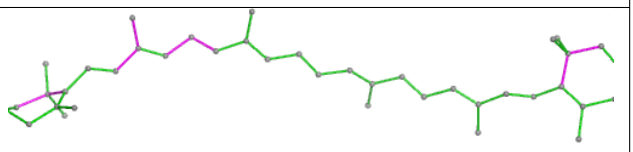


Rings

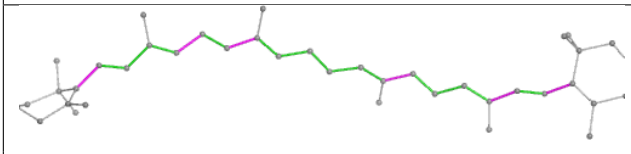
Ligand BCR x 314



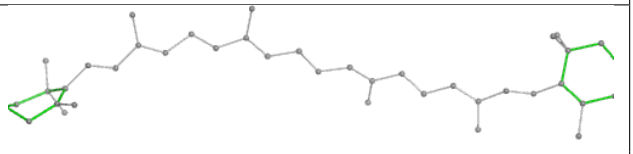
Bond lengths



Bond angles

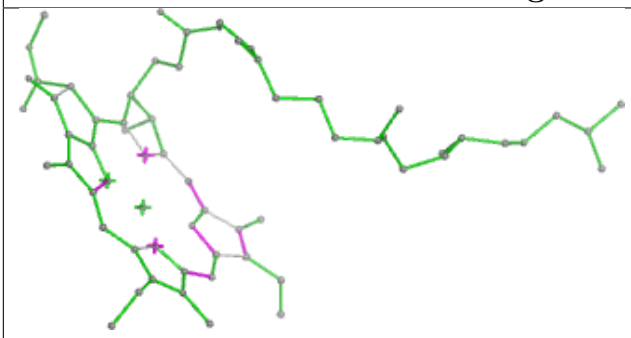


Torsions

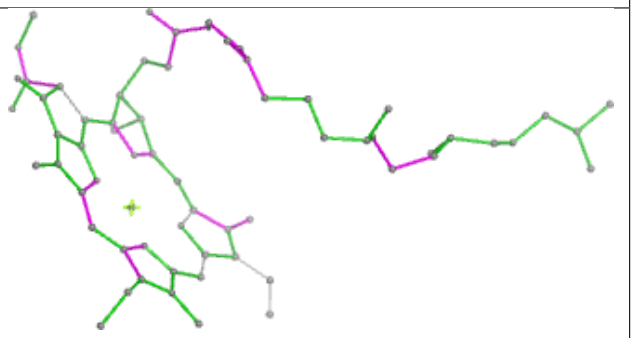


Rings

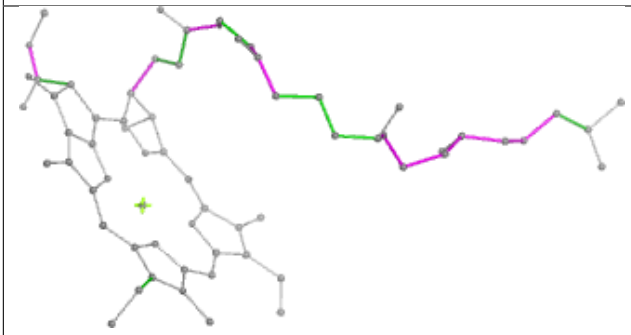
Ligand CLA b 807



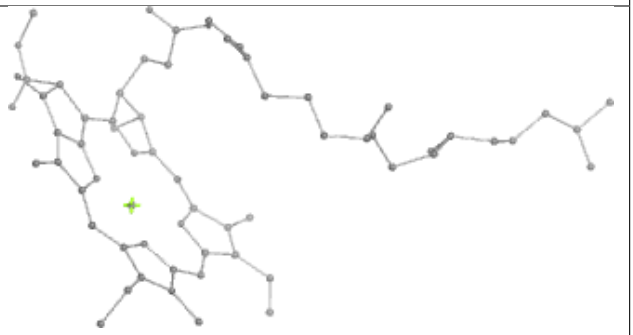
Bond lengths



Bond angles

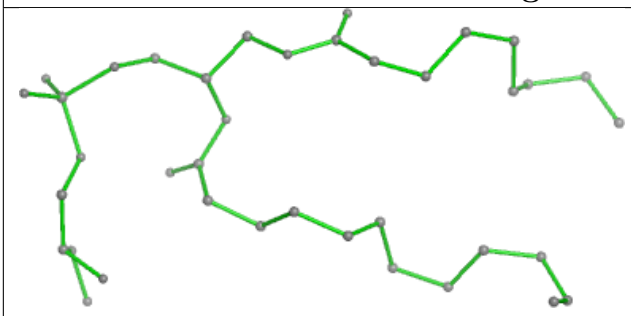


Torsions

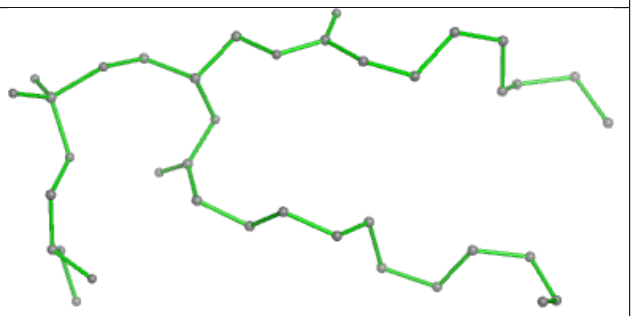


Rings

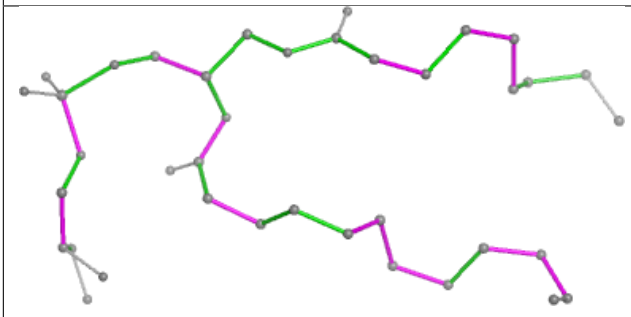
Ligand PGT A 403



Bond lengths



Bond angles



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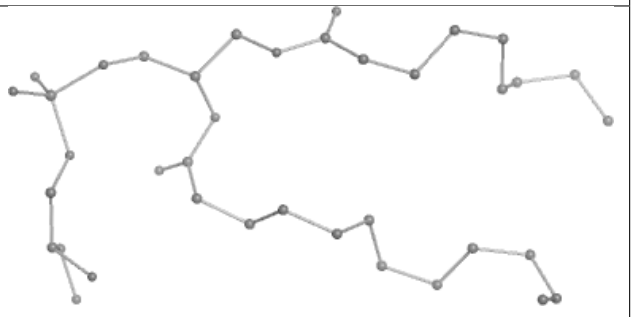
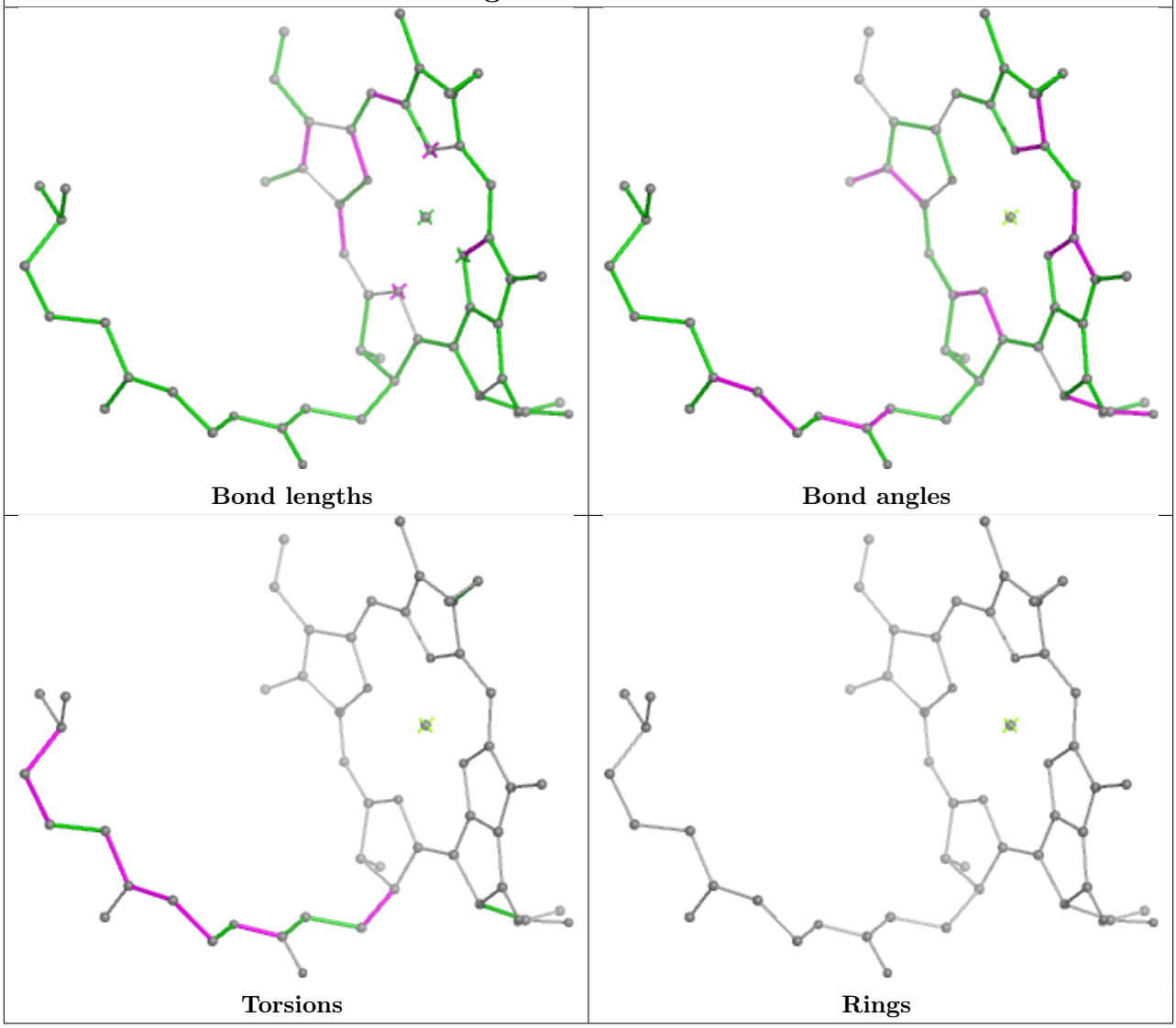
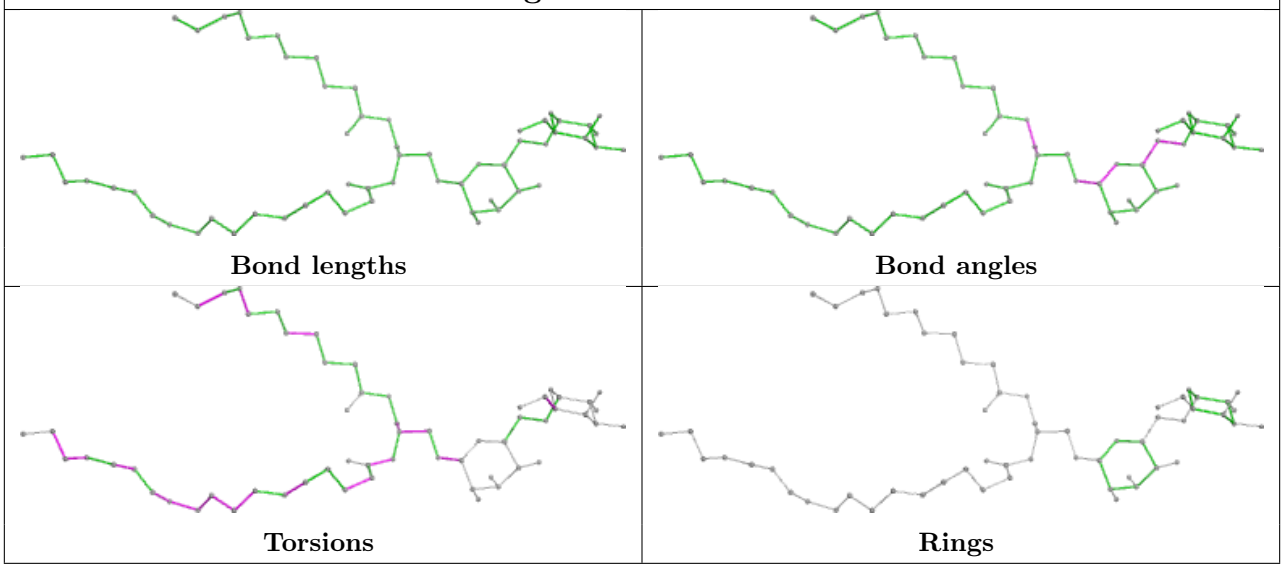


Rings

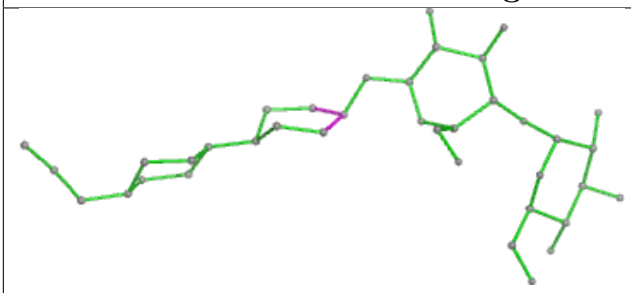
Ligand CLA b 826



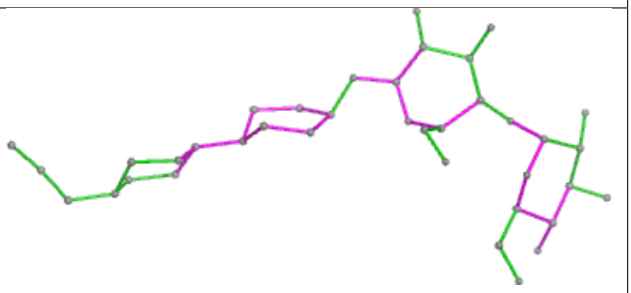
Ligand DGD b 821



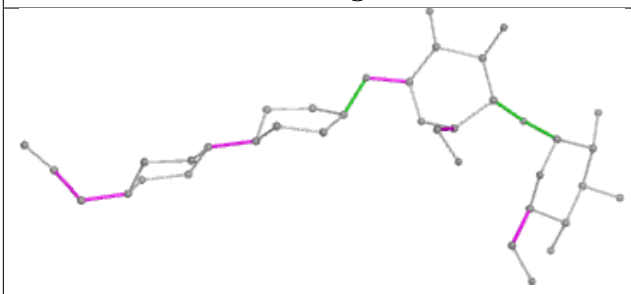
Ligand A1H1M 5 302



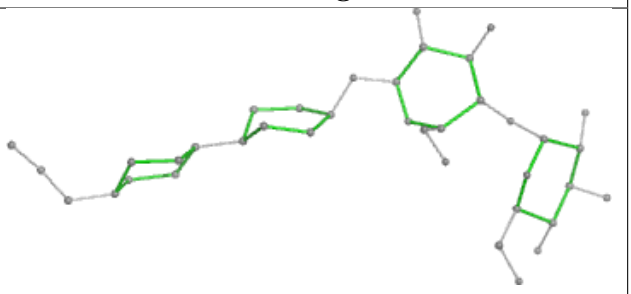
Bond lengths



Bond angles

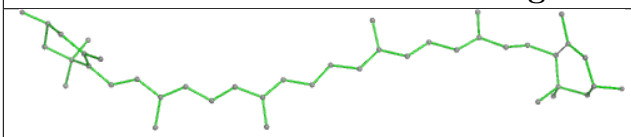


Torsions



Rings

Ligand LUT y 316



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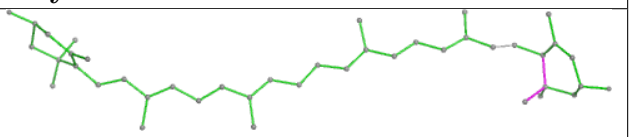
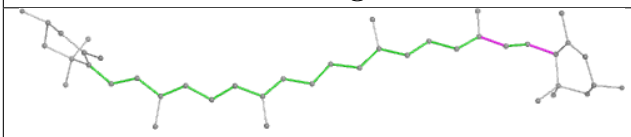


Bond angles



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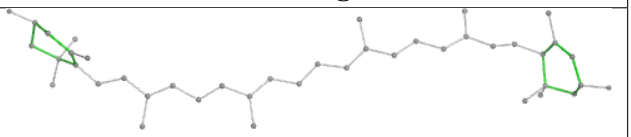
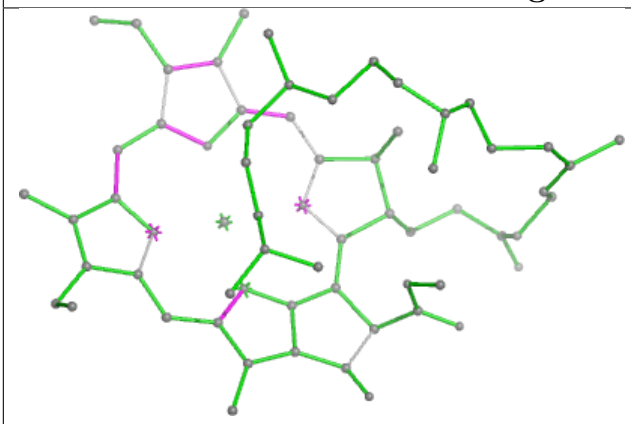
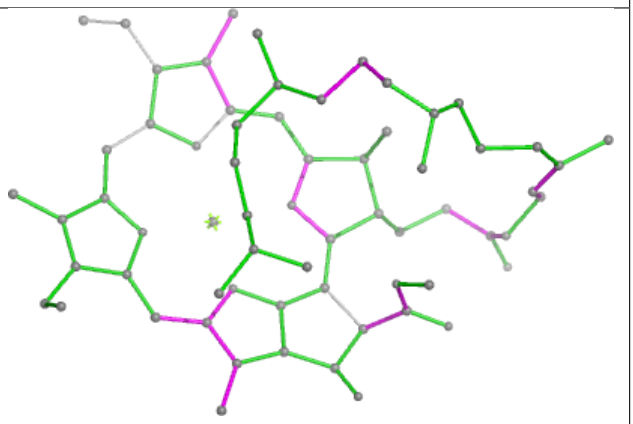


Rings

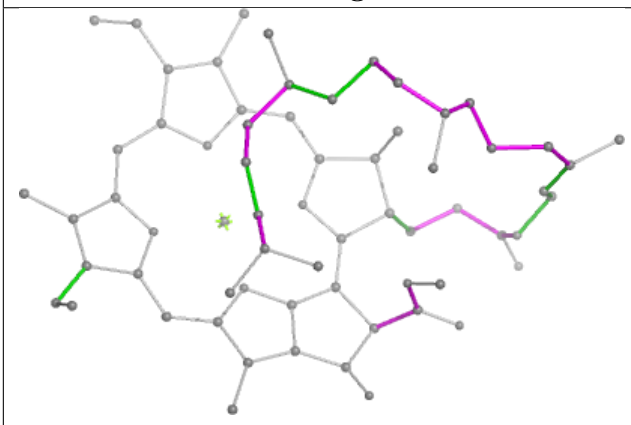
Ligand CLA a 814



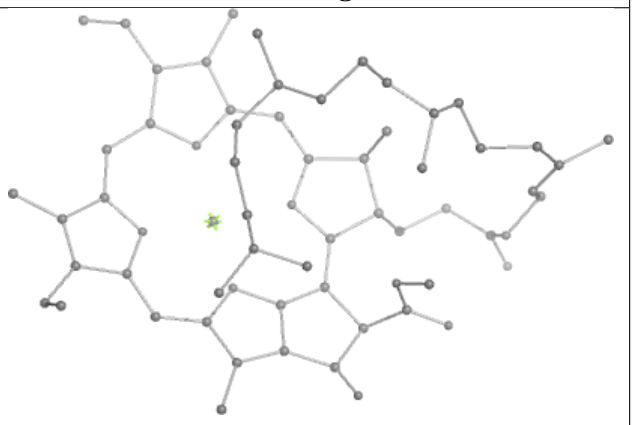
Bond lengths



Bond angles

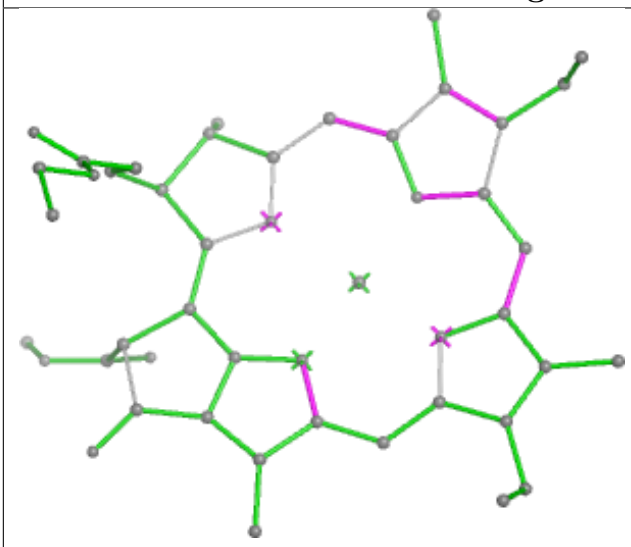


Torsions



Rings

Ligand CLA b 851



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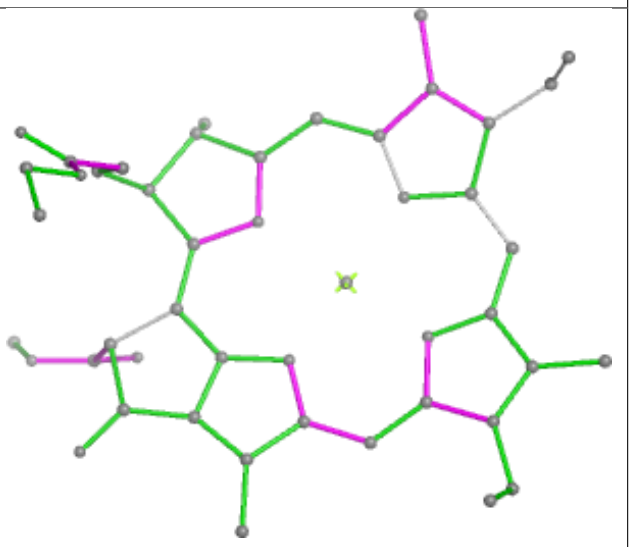
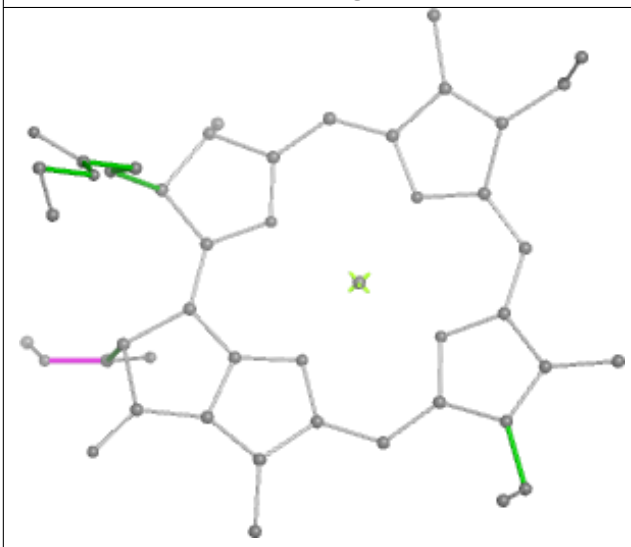
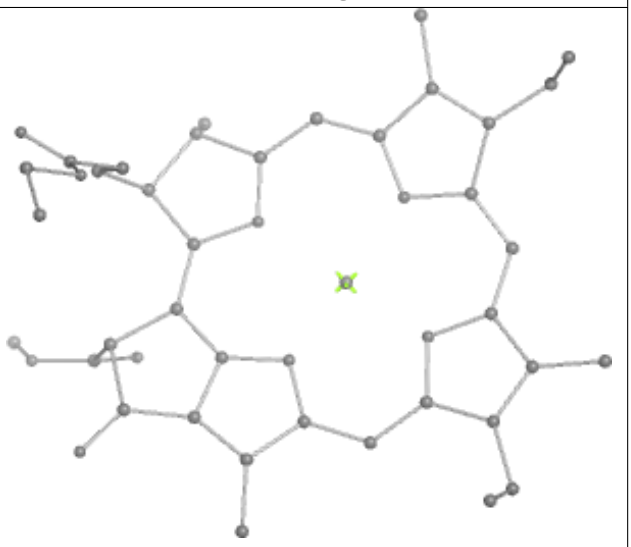


Bond angles

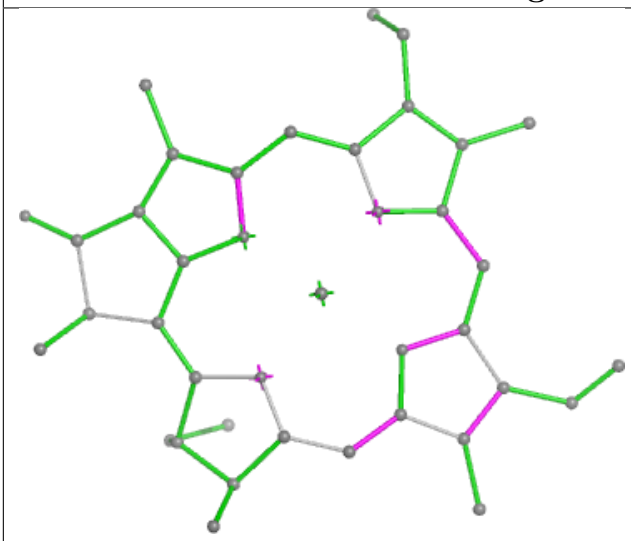


Torsions



Rings

Ligand CLA y 304



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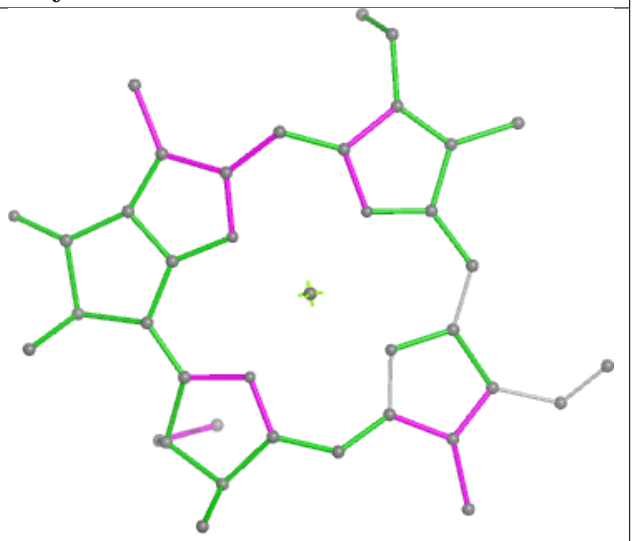
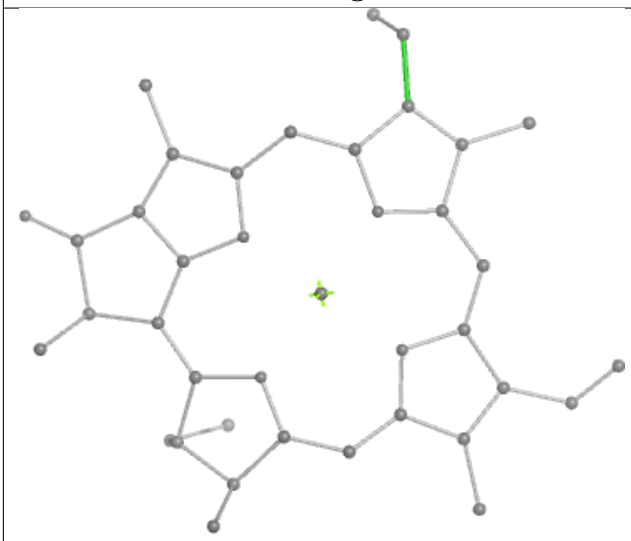
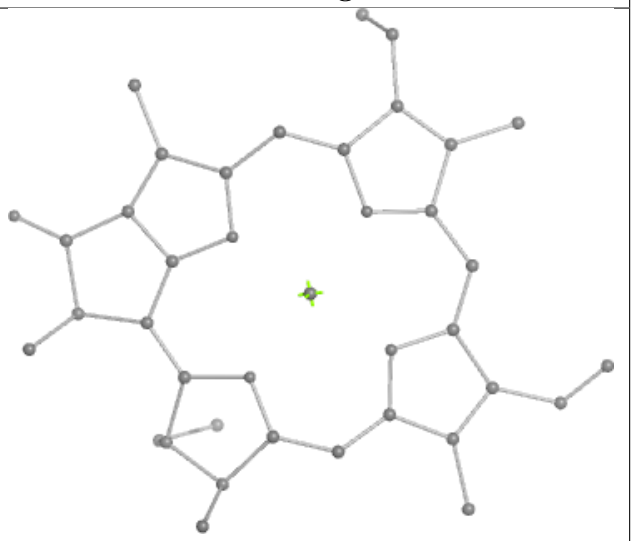


Bond angles

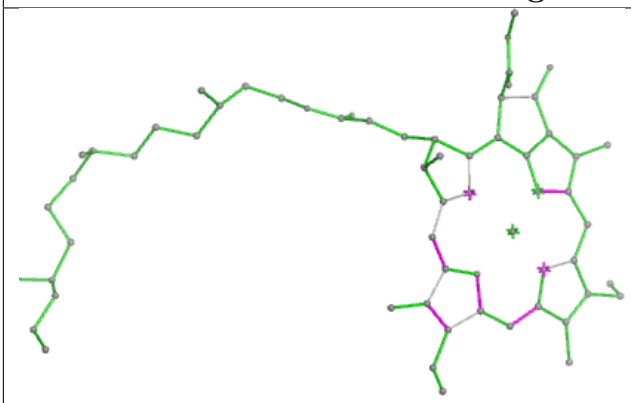


Torsions



Rings

Ligand CLA b 812



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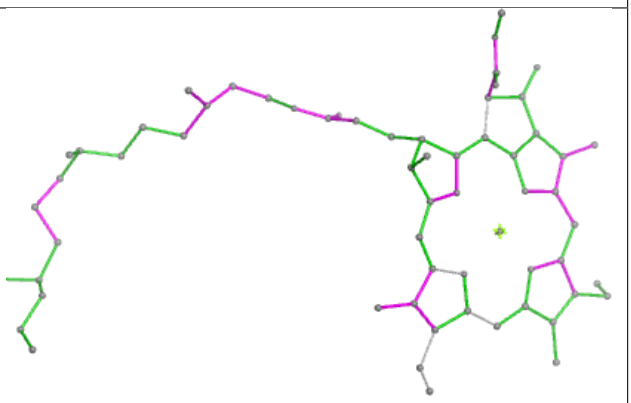
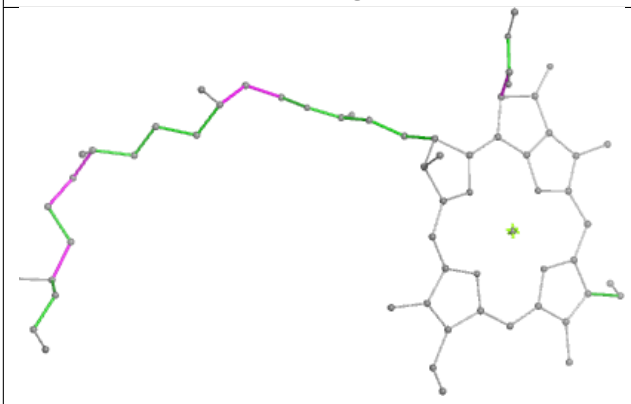
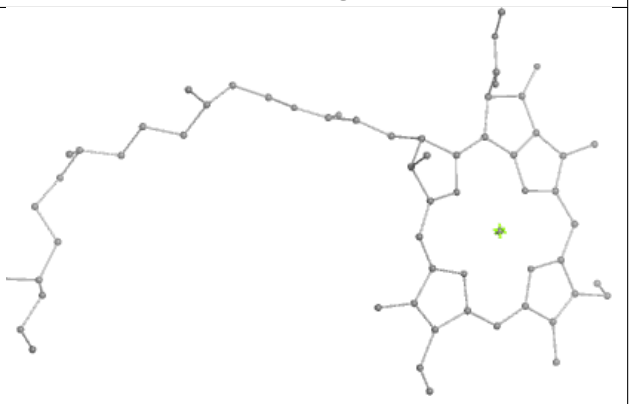


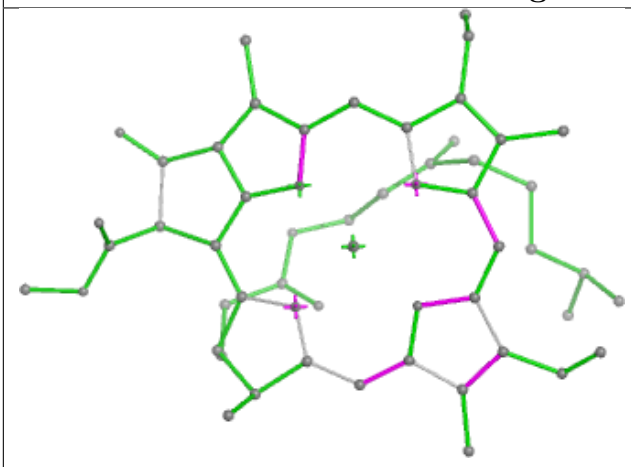
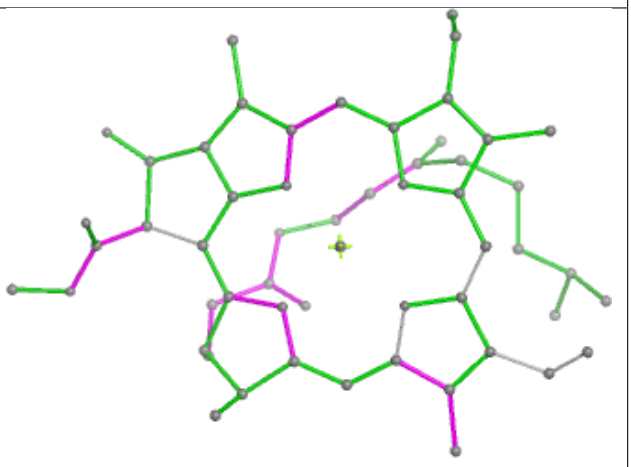
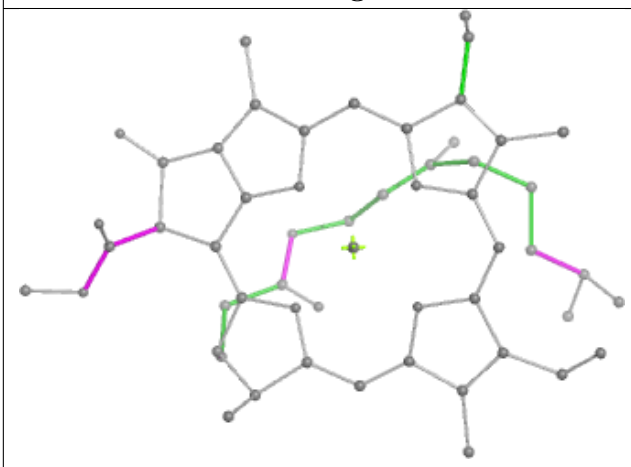
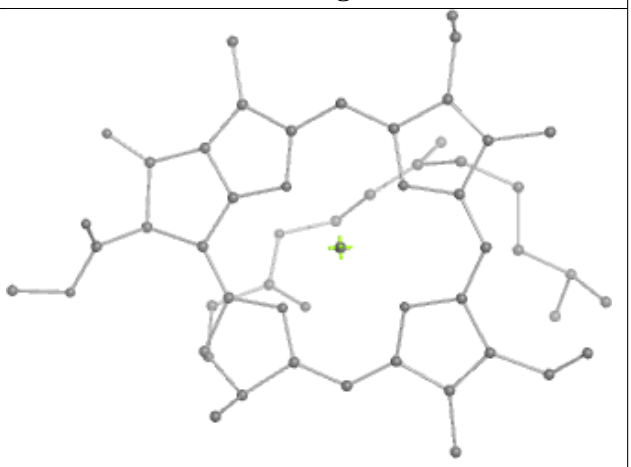
Bond angles



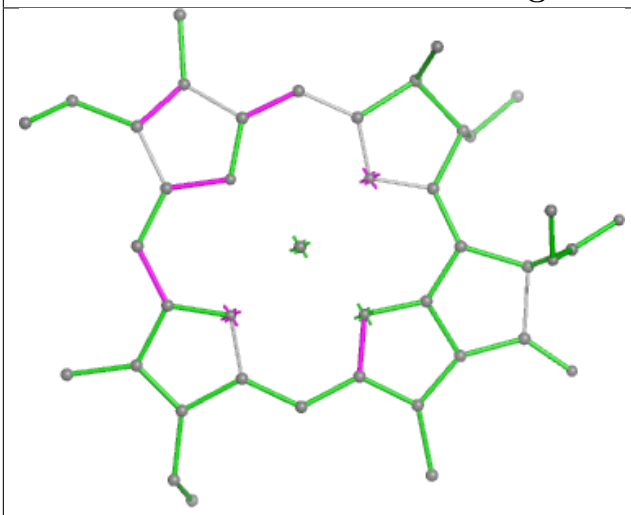
Torsions



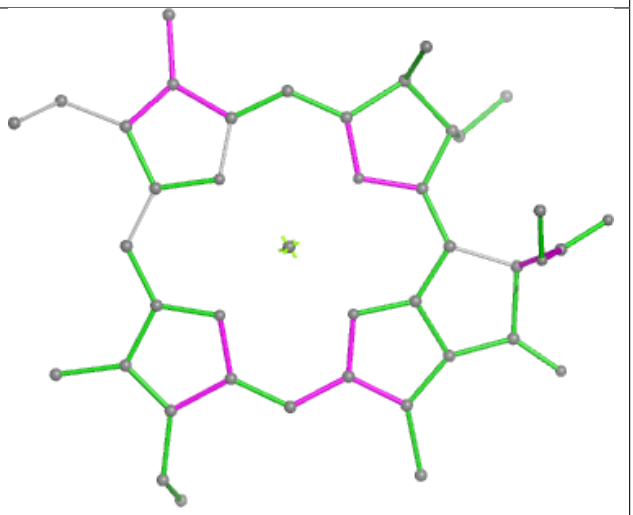
Rings

Ligand CLA z 302	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

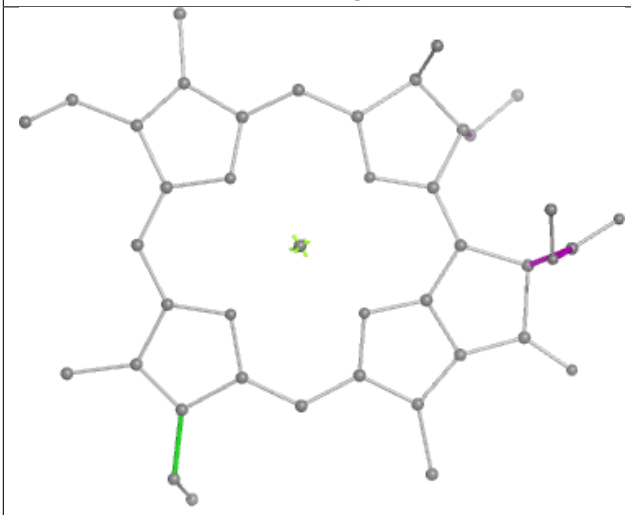
Ligand CLA a 816



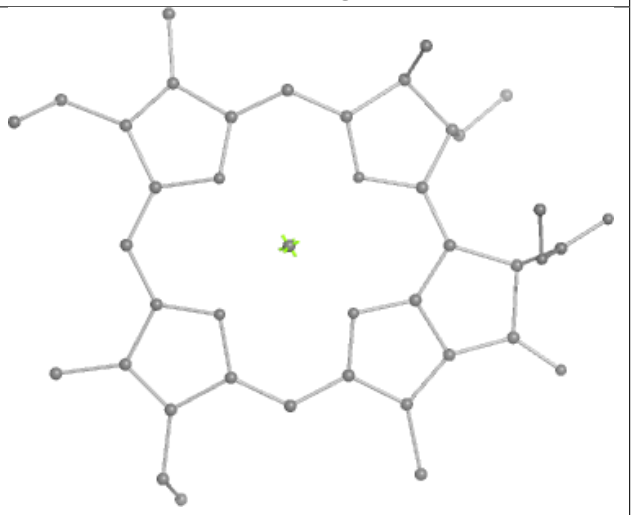
Bond lengths



Bond angles

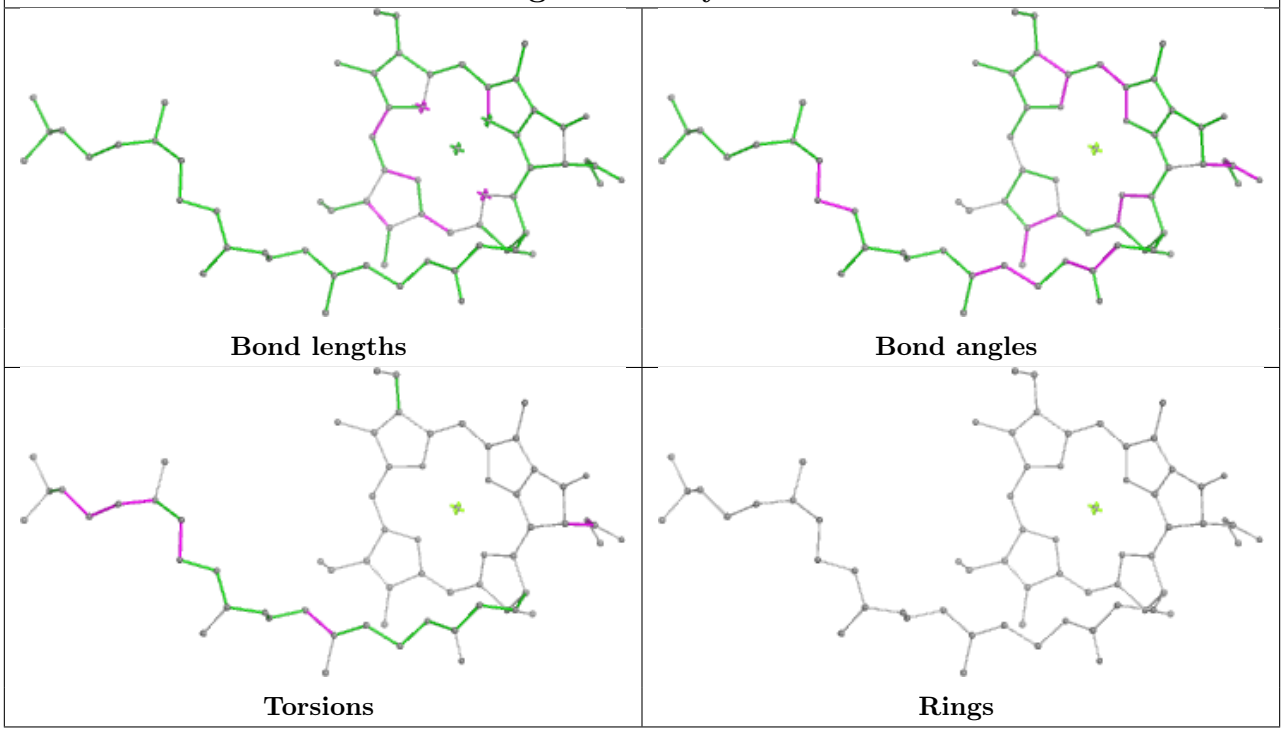


Torsions

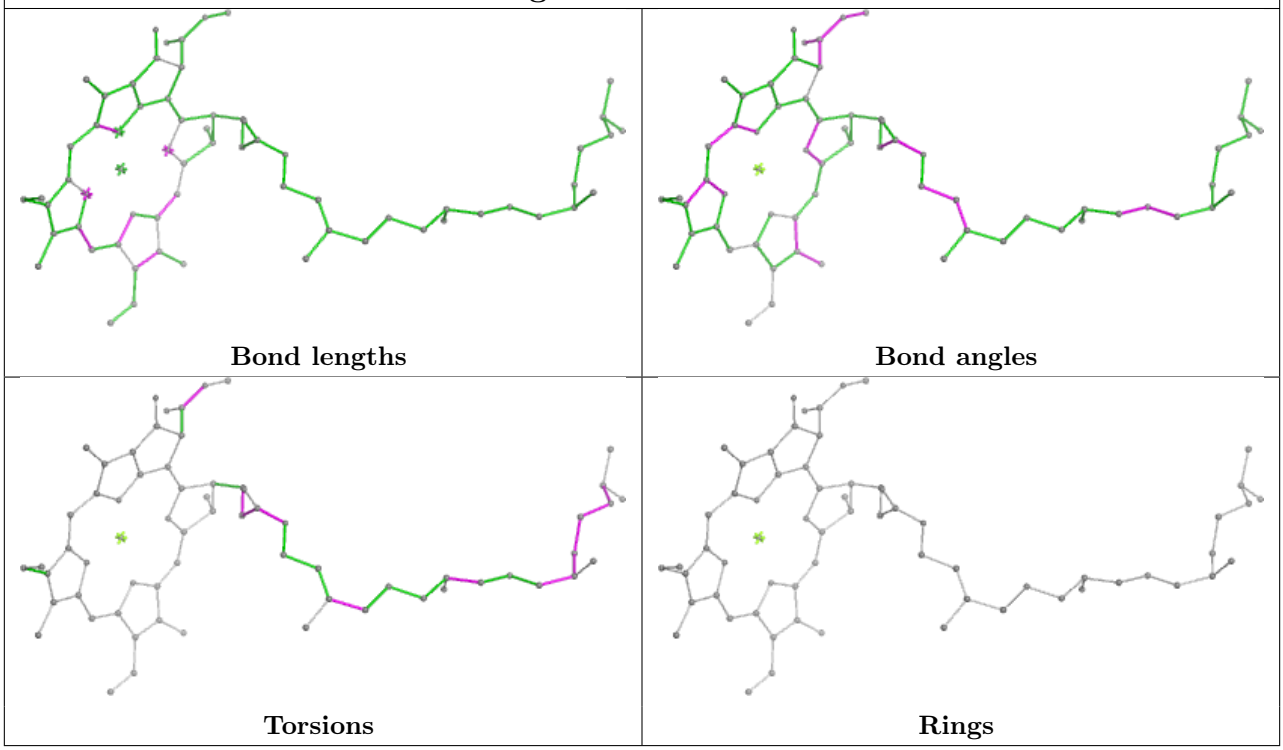


Rings

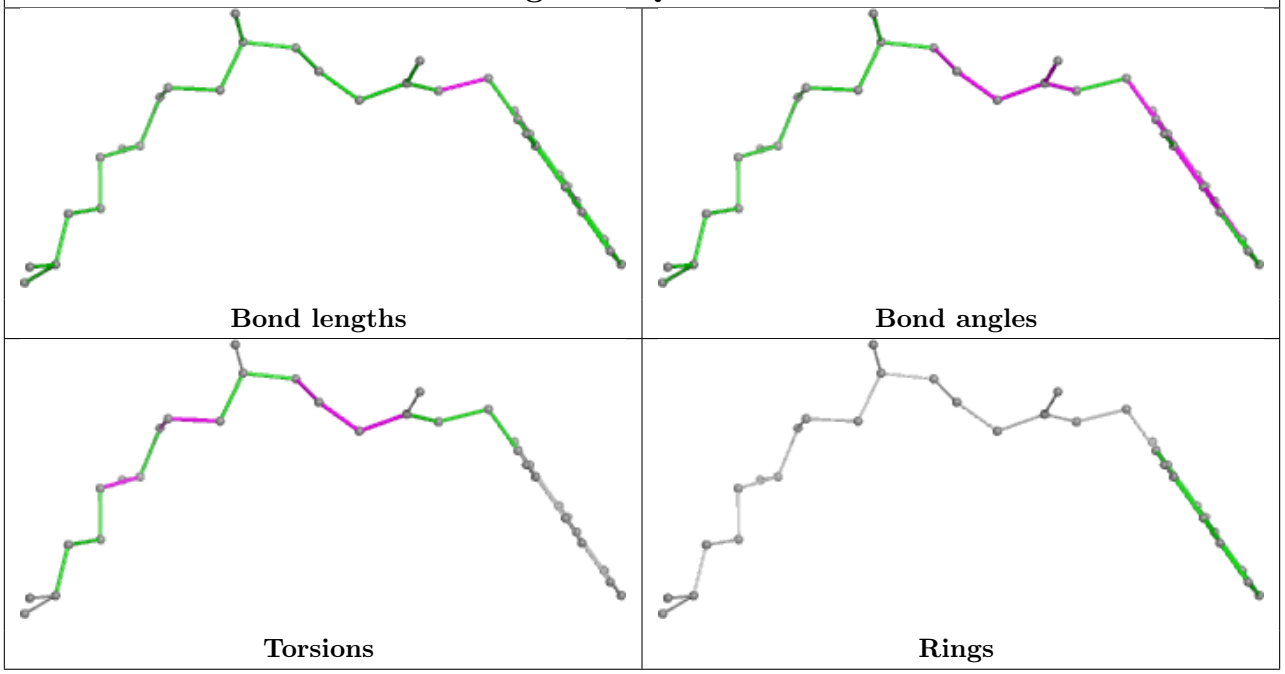
Ligand CLA y 310



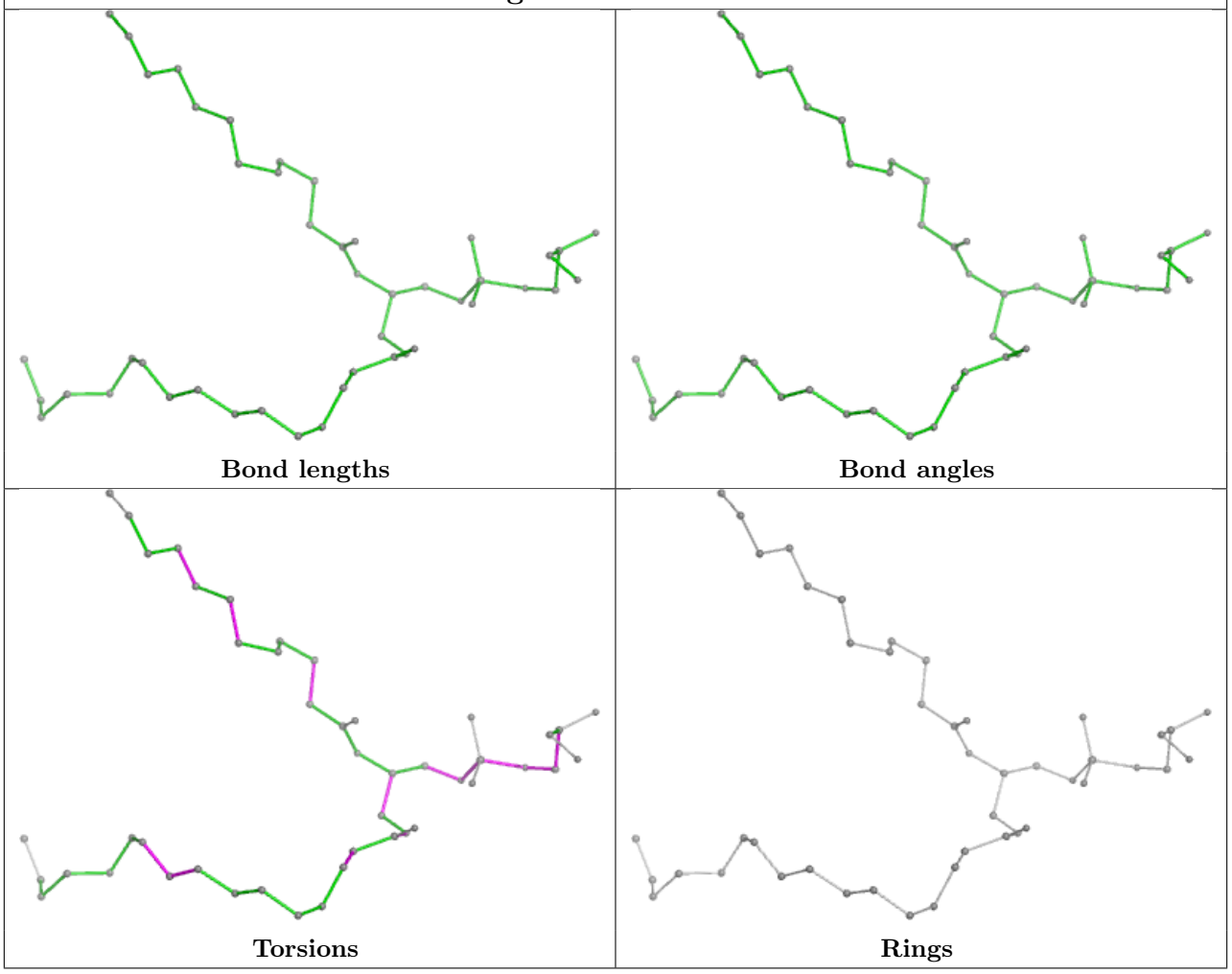
Ligand CLA a 843



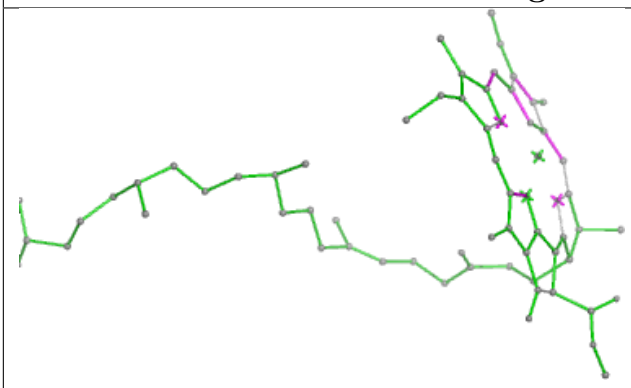
Ligand PQN b 827



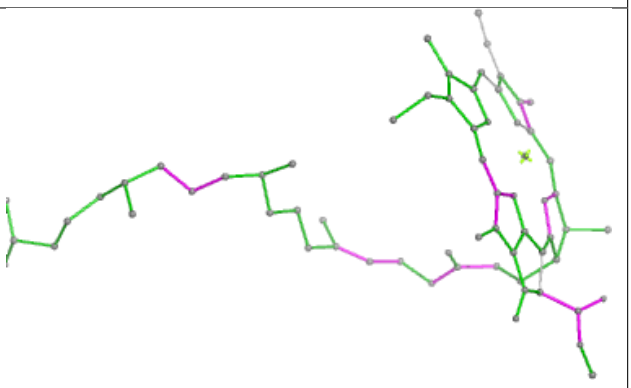
Ligand PGT z 301



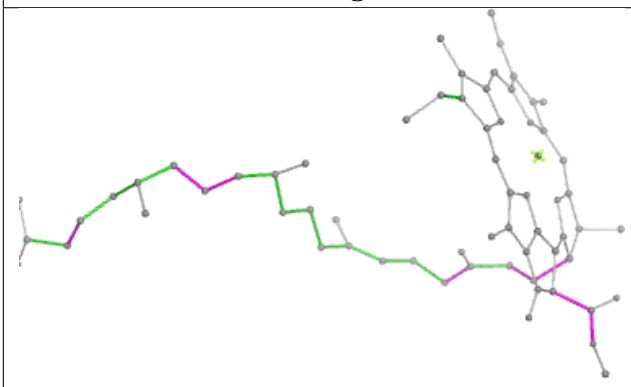
Ligand CLA a 837



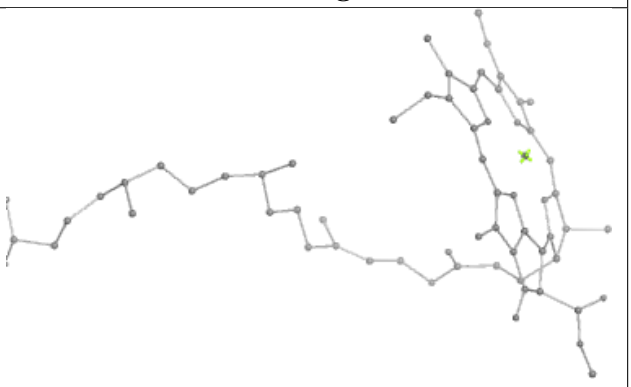
Bond lengths



Bond angles

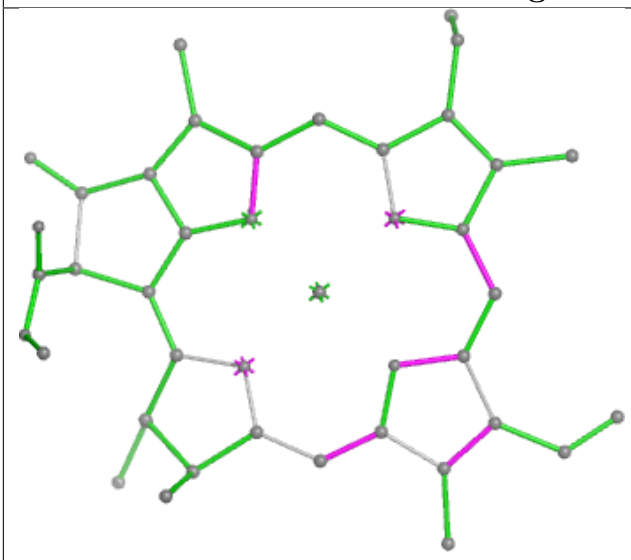


Torsions

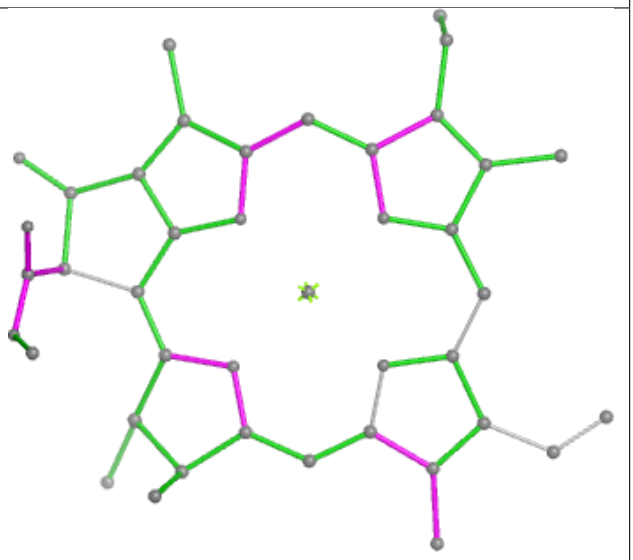


Rings

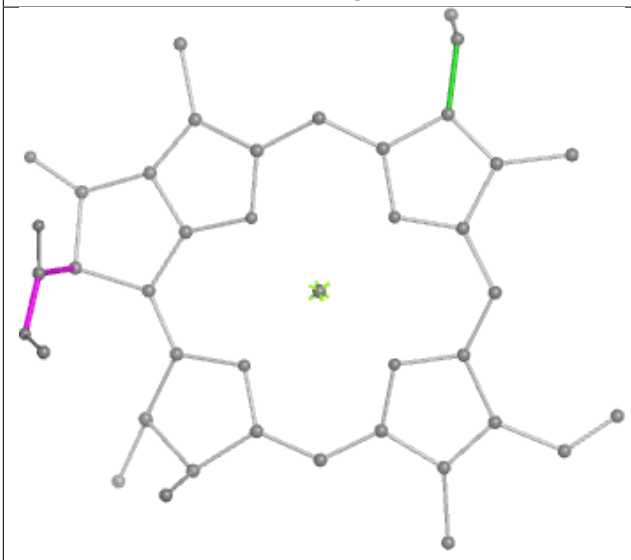
Ligand CLA a 840



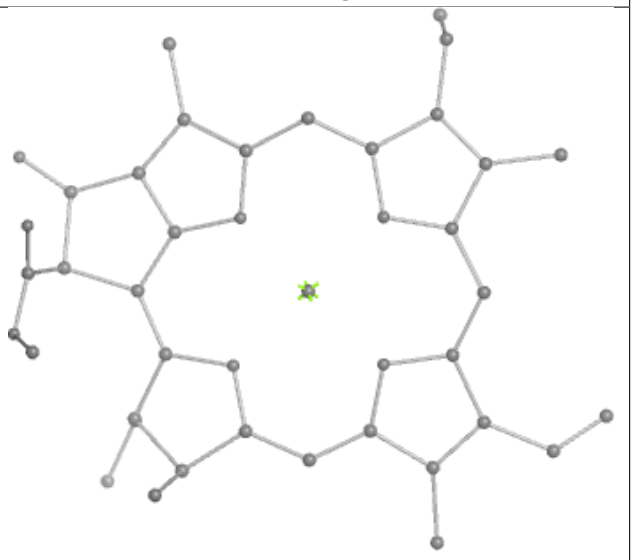
Bond lengths



Bond angles

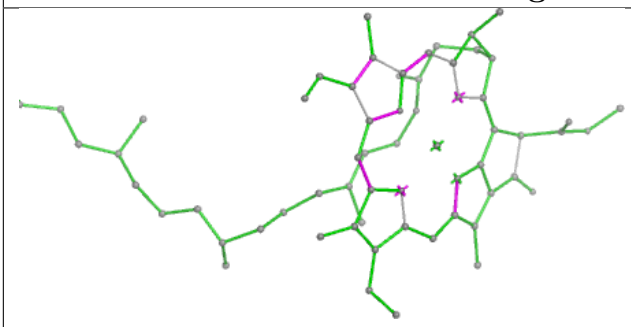


Torsions

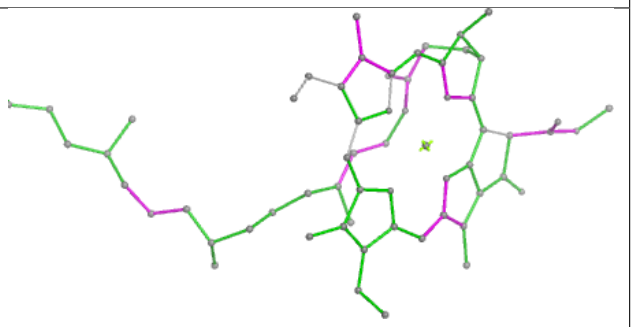


Rings

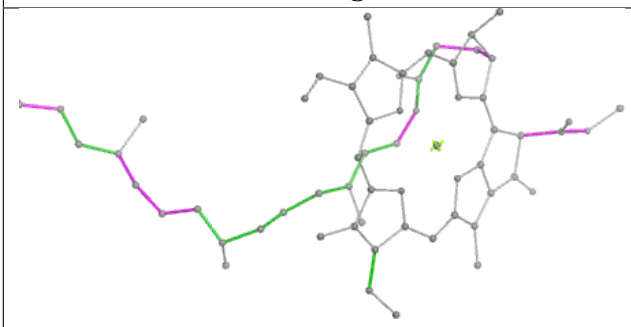
Ligand CLA a 853



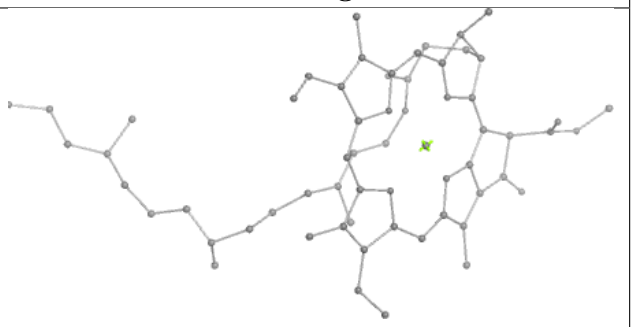
Bond lengths



Bond angles

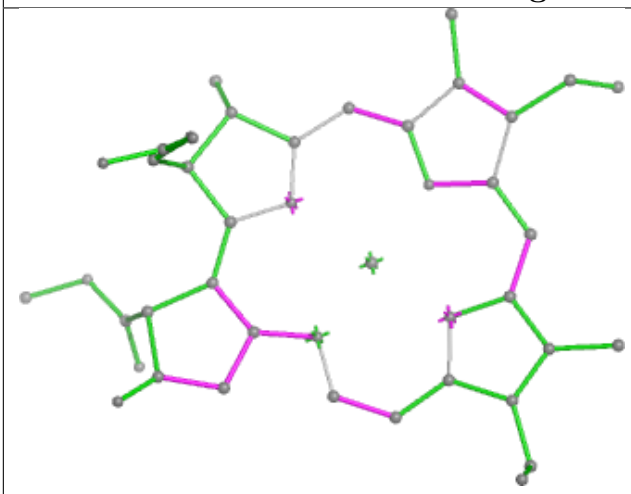


Torsions

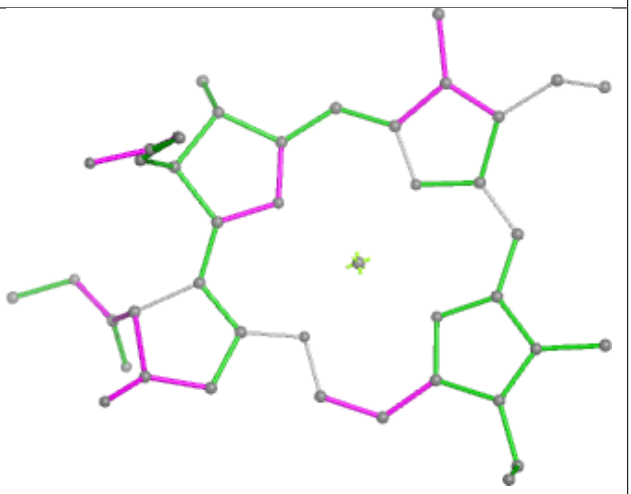


Rings

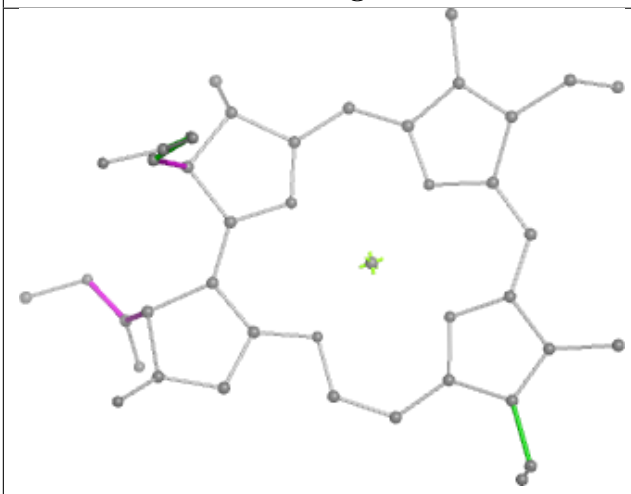
Ligand CLA z 308



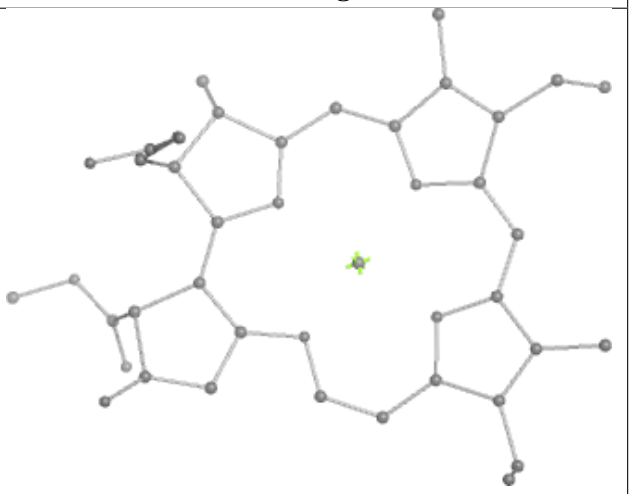
Bond lengths



Bond angles

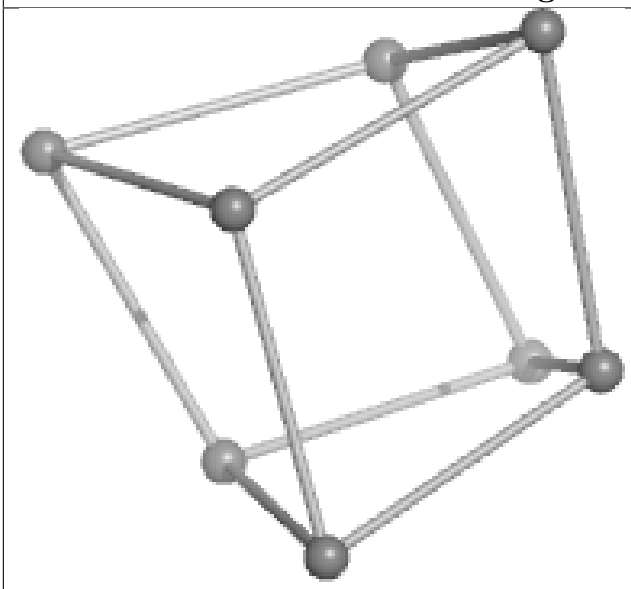


Torsions

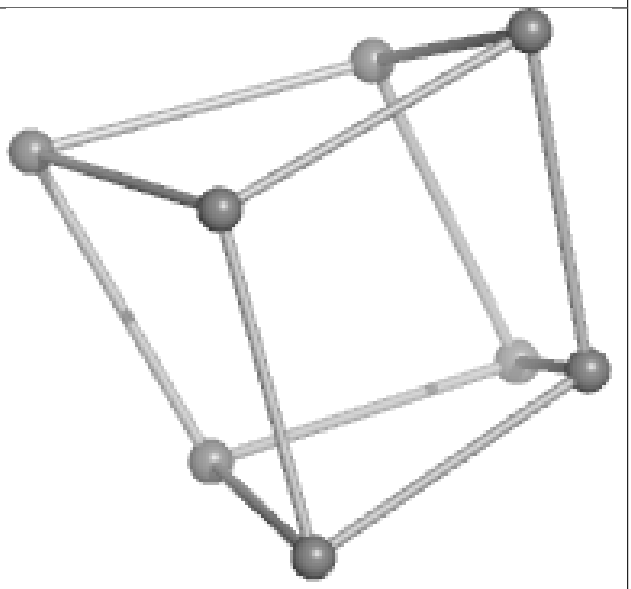


Rings

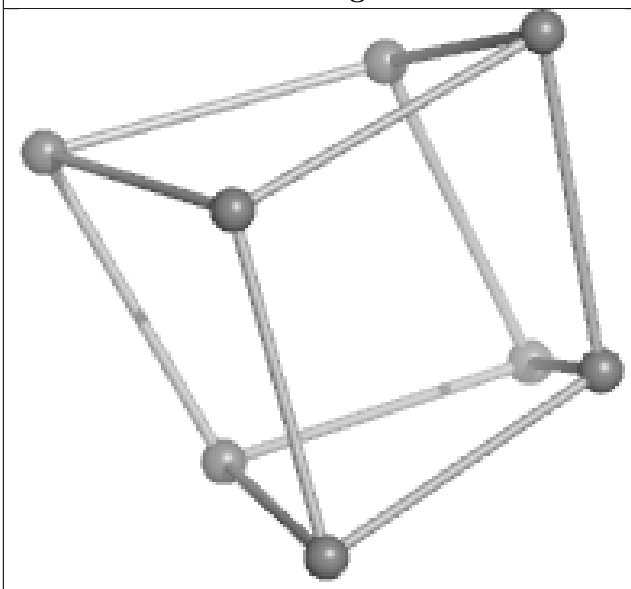
Ligand SF4 I 201



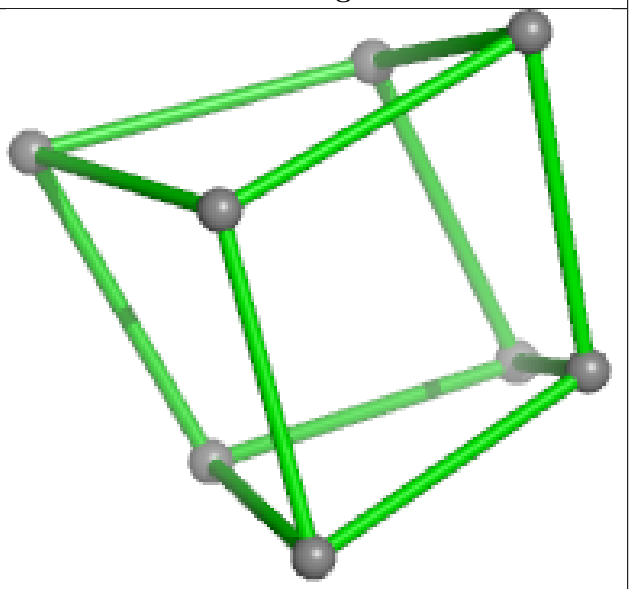
Bond lengths



Bond angles

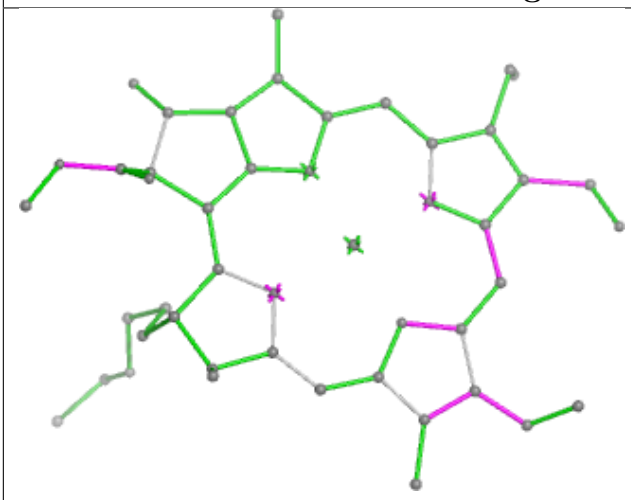


Torsions

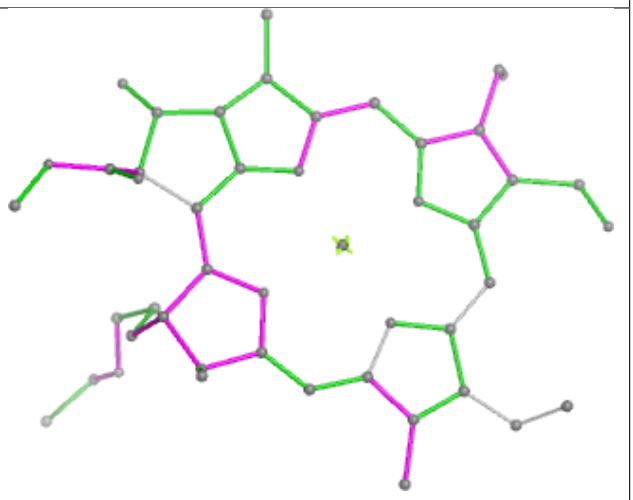


Rings

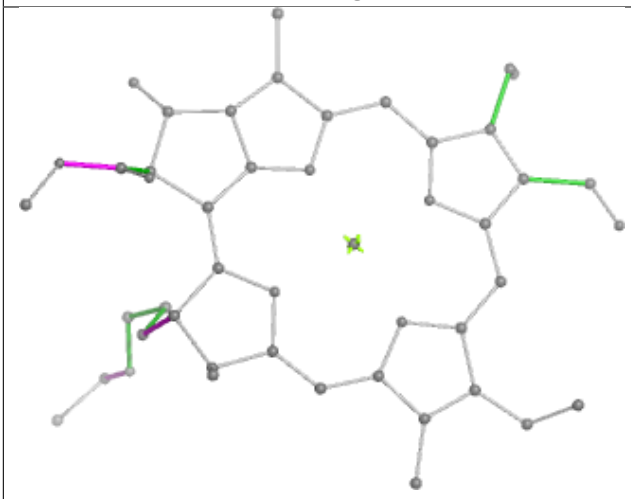
Ligand CHL w 311



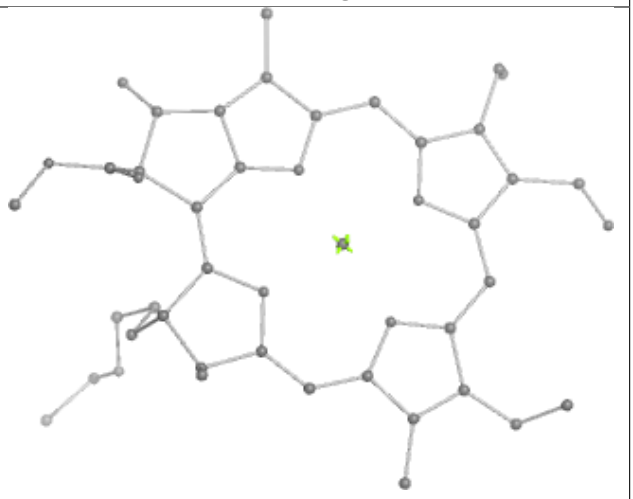
Bond lengths



Bond angles

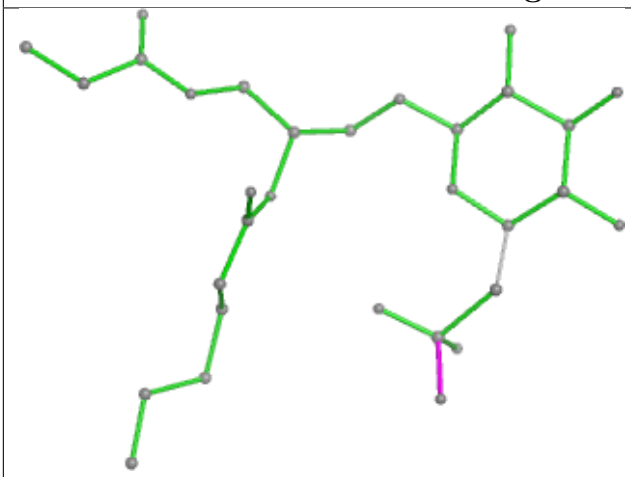


Torsions

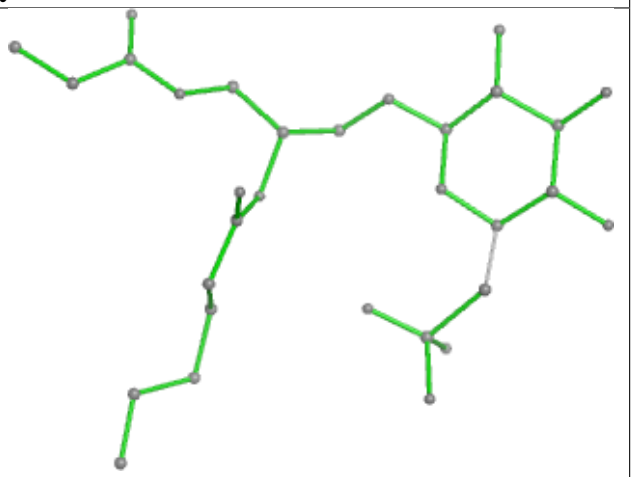


Rings

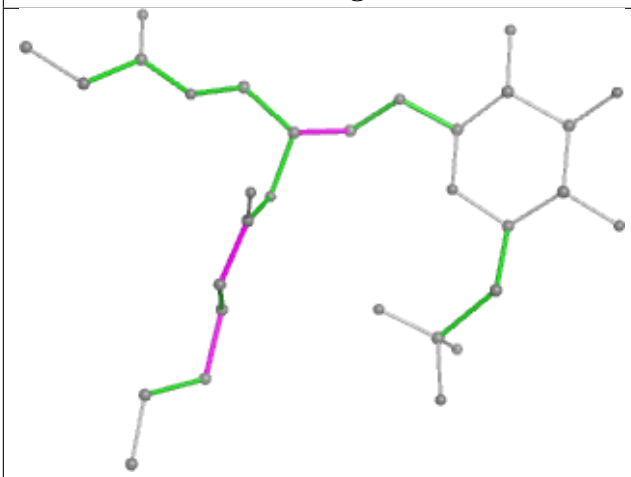
Ligand SQD w 317



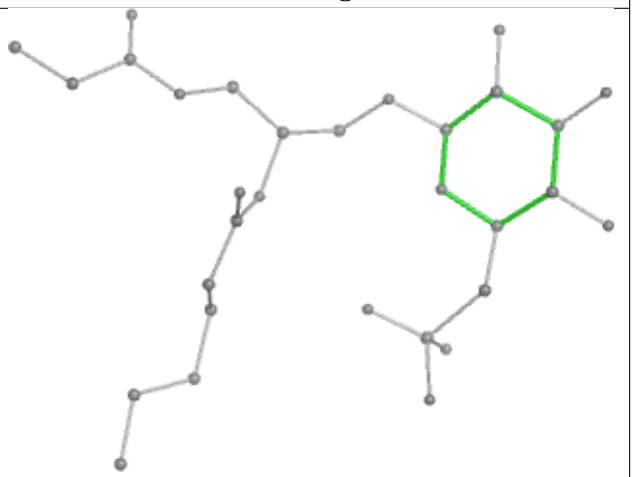
Bond lengths



Bond angles

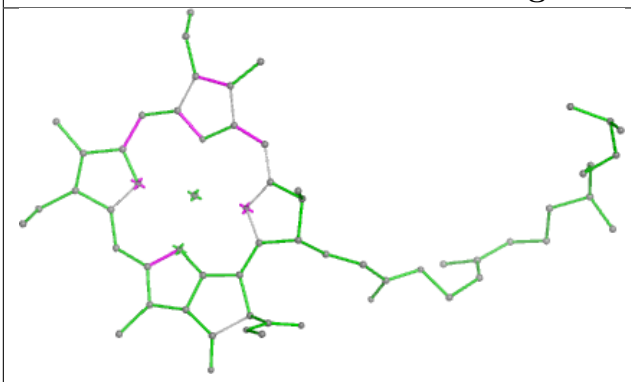


Torsions

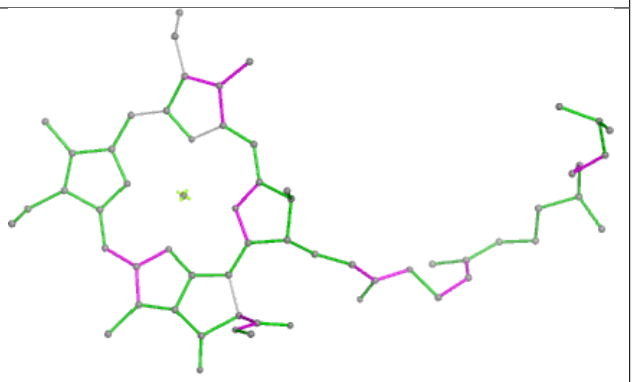


Rings

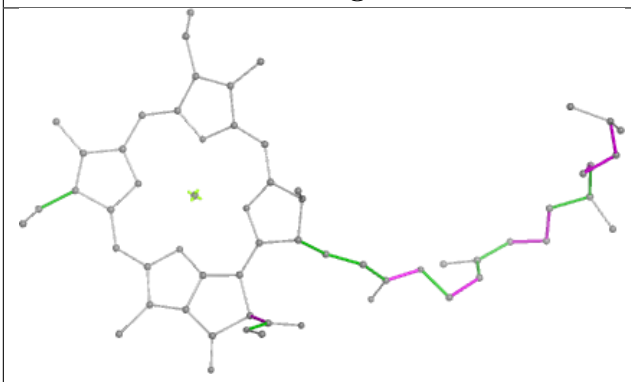
Ligand CLA a 819



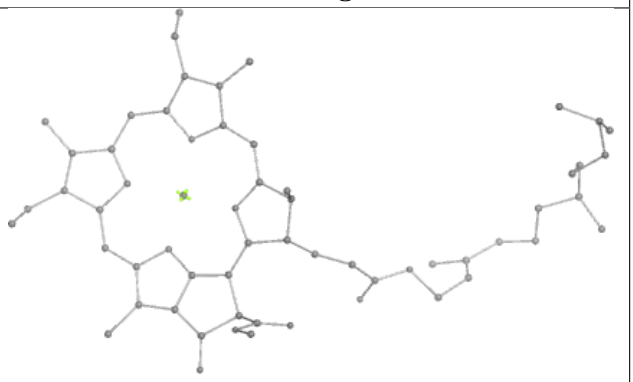
Bond lengths



Bond angles

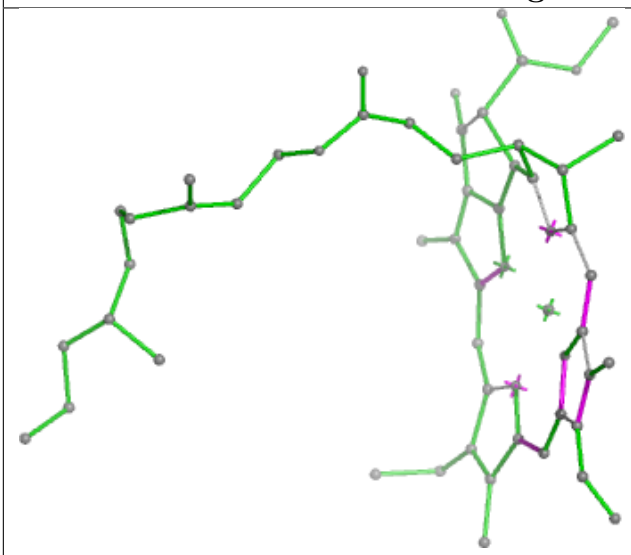


Torsions

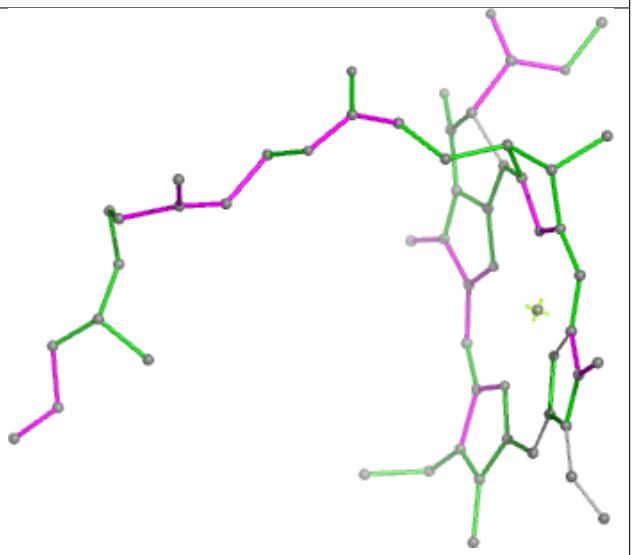


Rings

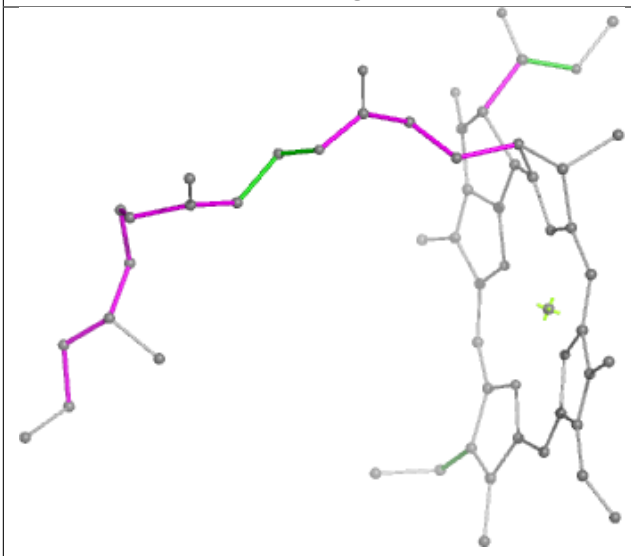
Ligand CLA b 842



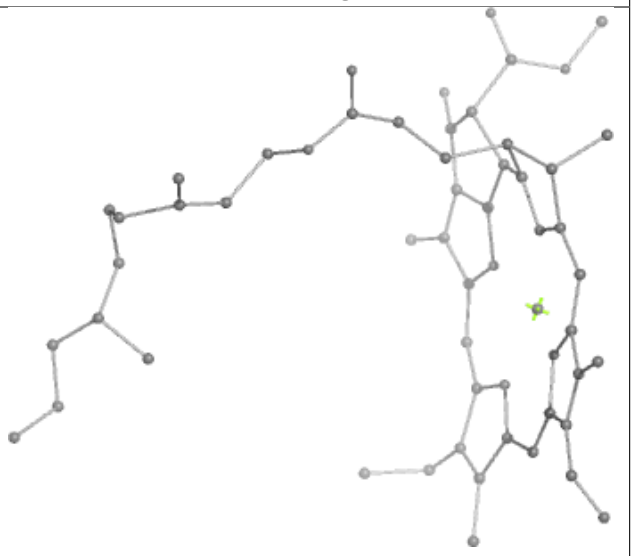
Bond lengths



Bond angles

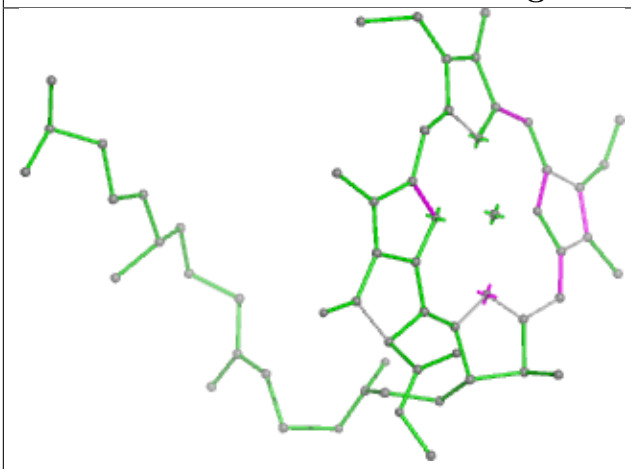


Torsions

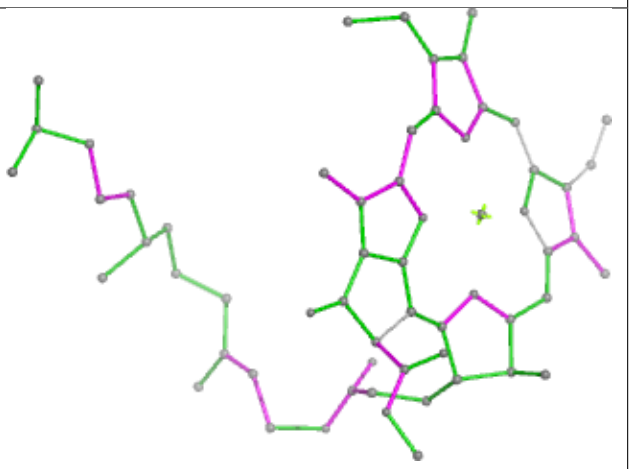


Rings

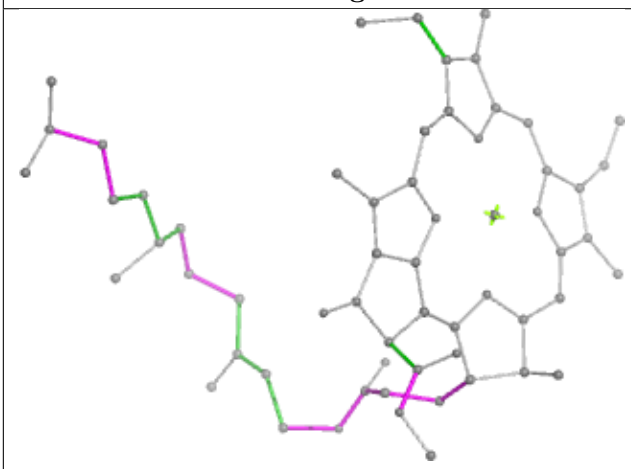
Ligand CLA b 847



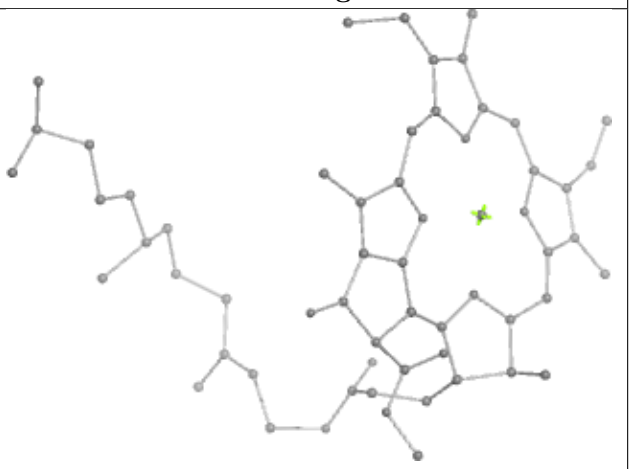
Bond lengths



Bond angles

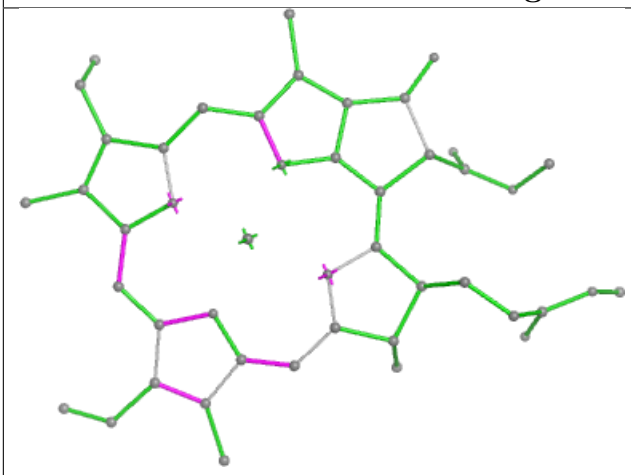


Torsions

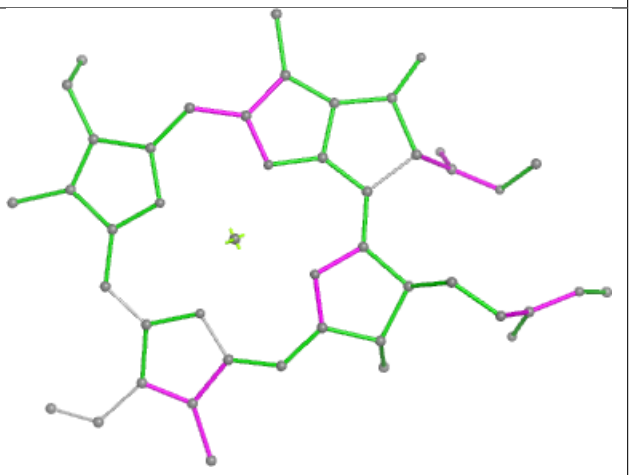


Rings

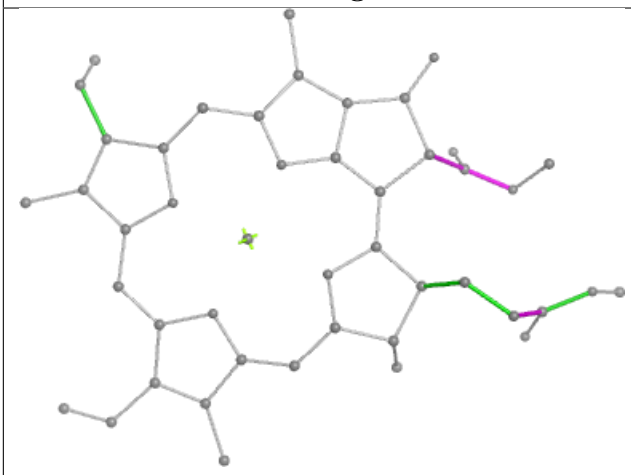
Ligand CLA w 315



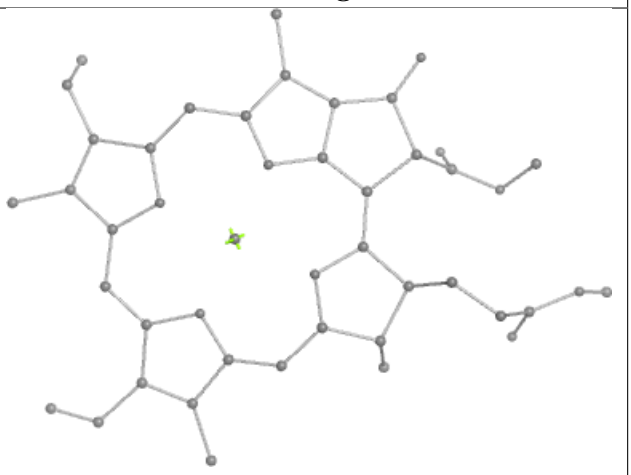
Bond lengths



Bond angles

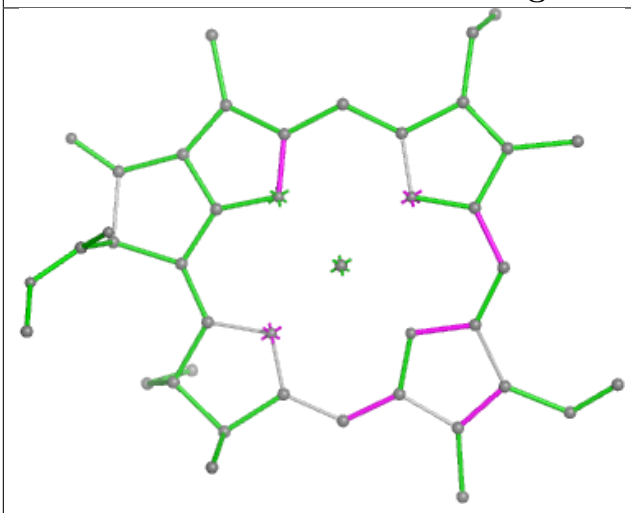


Torsions

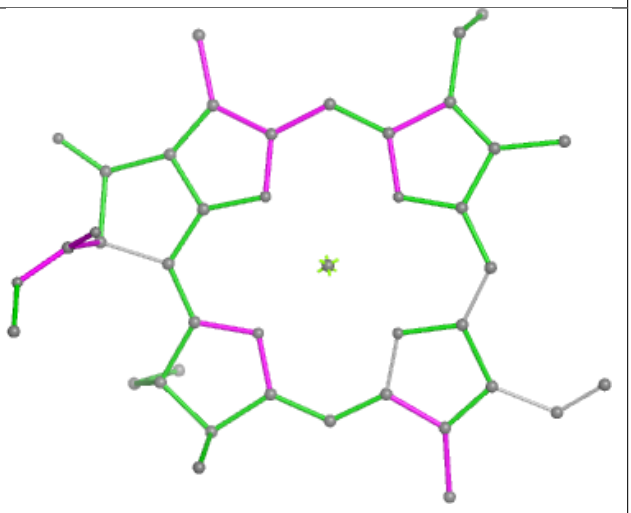


Rings

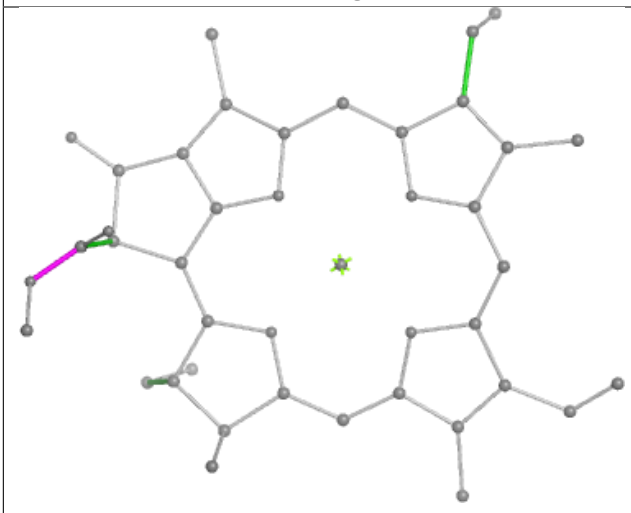
Ligand CLA a 855



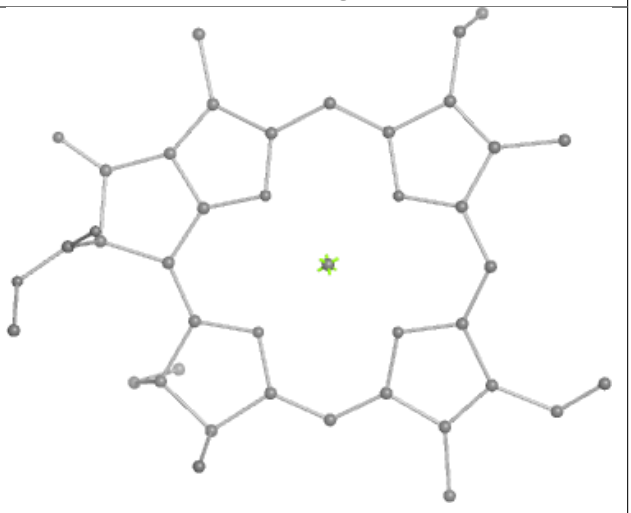
Bond lengths



Bond angles

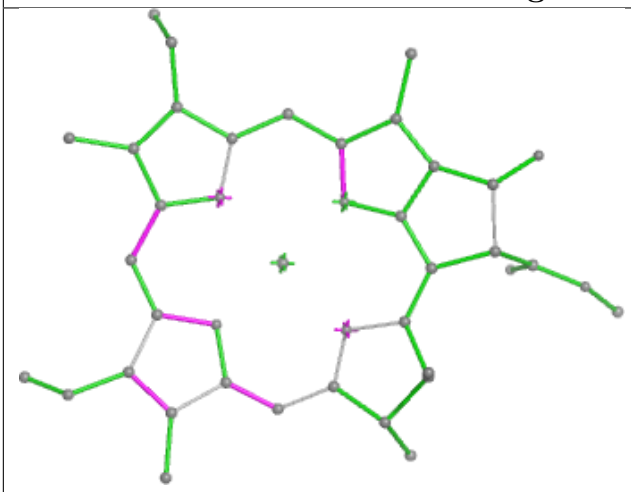


Torsions

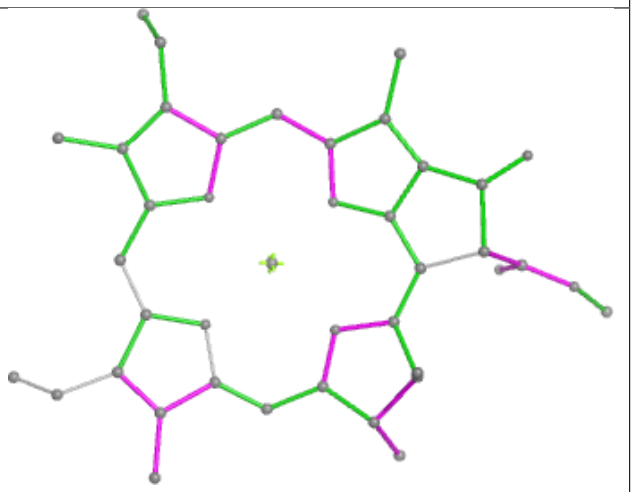


Rings

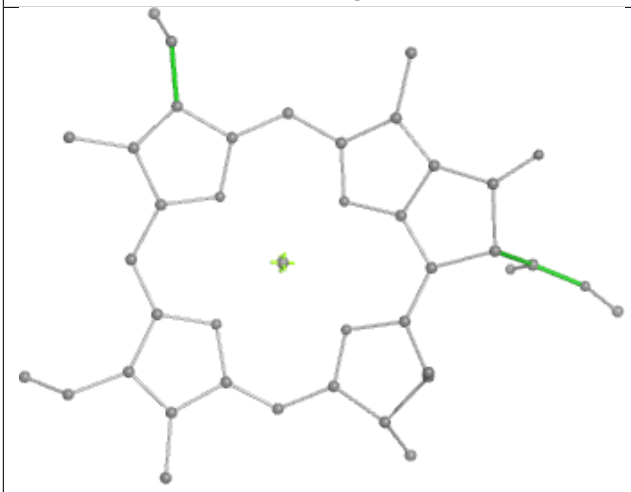
Ligand CLA b 804



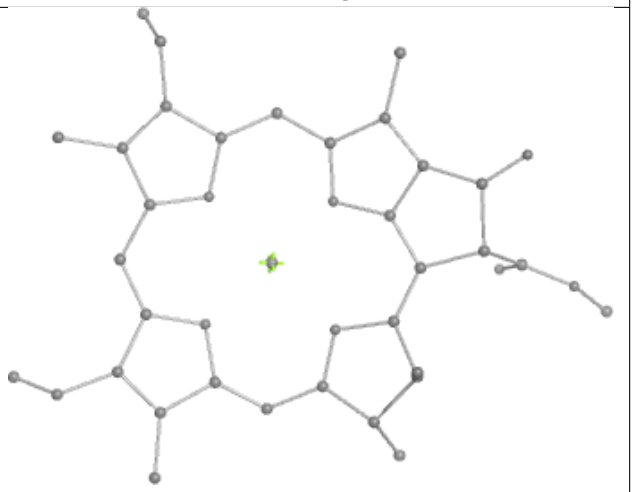
Bond lengths



Bond angles

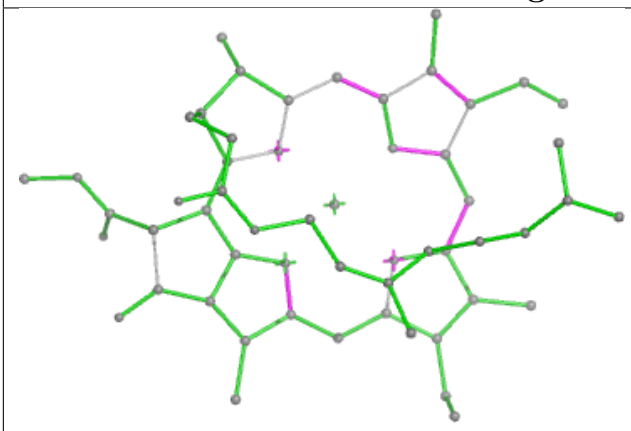


Torsions

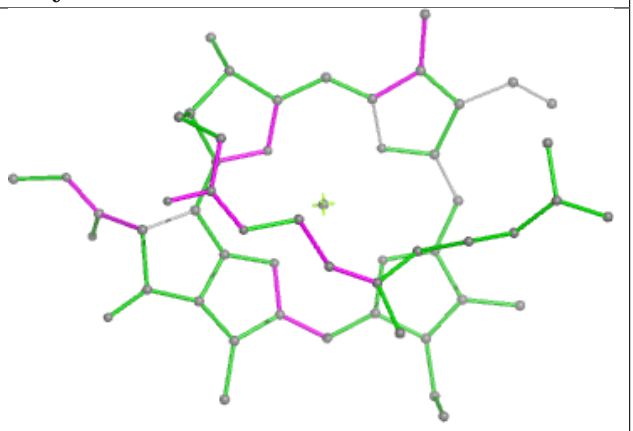


Rings

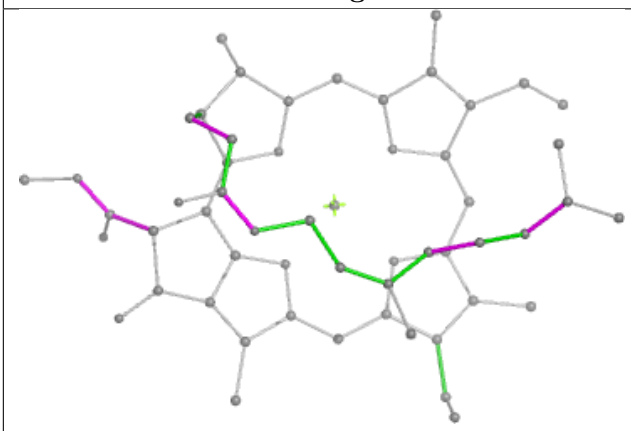
Ligand CLA y 303



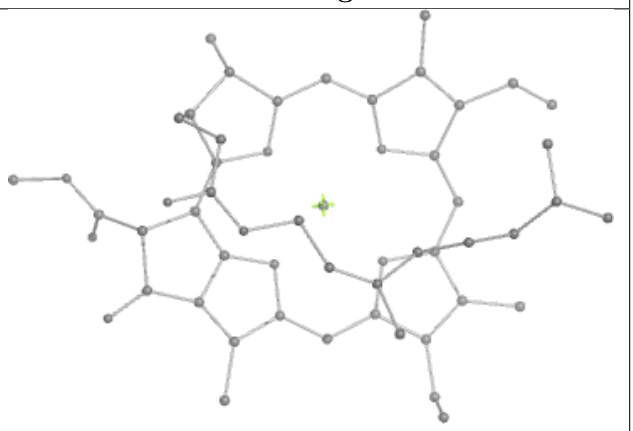
Bond lengths



Bond angles

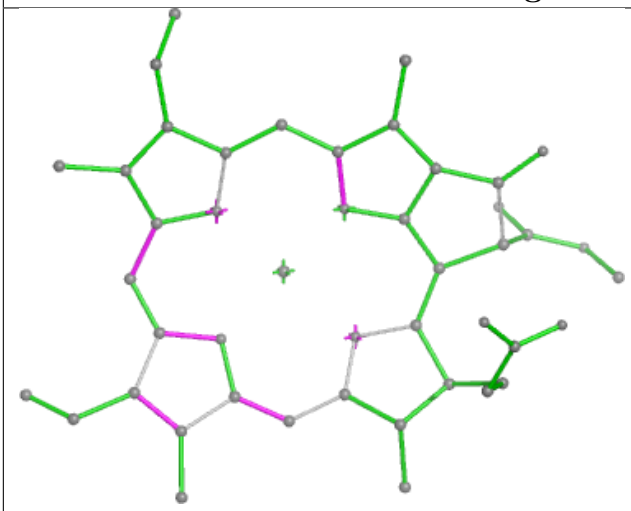


Torsions

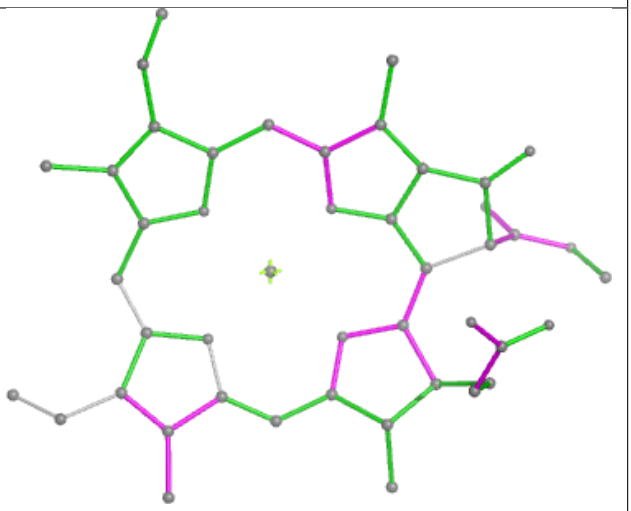


Rings

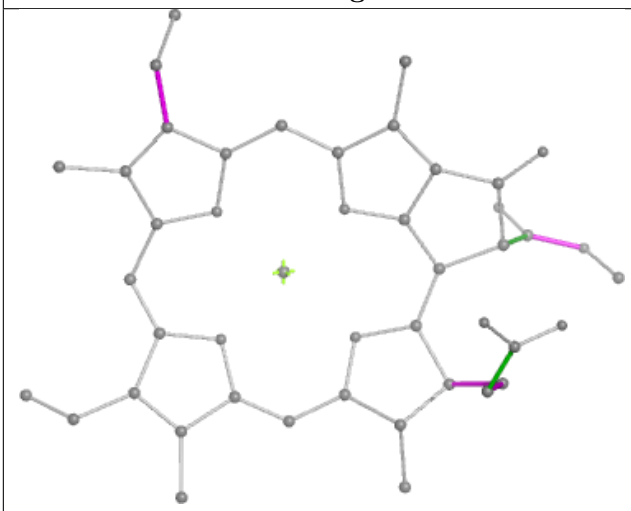
Ligand CLA w 307



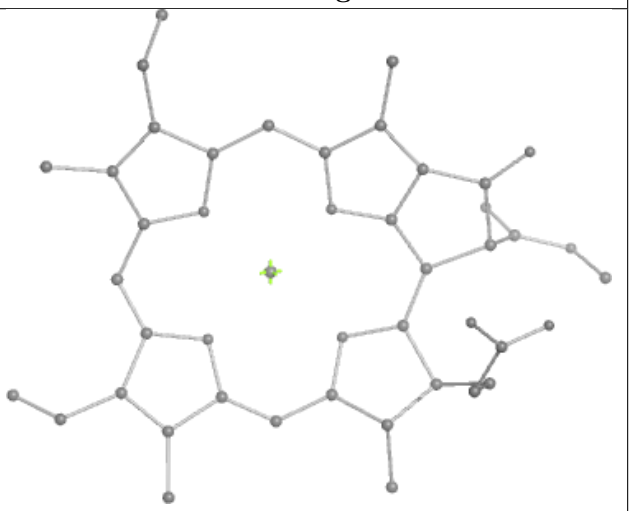
Bond lengths



Bond angles

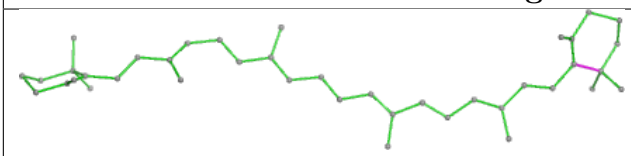


Torsions

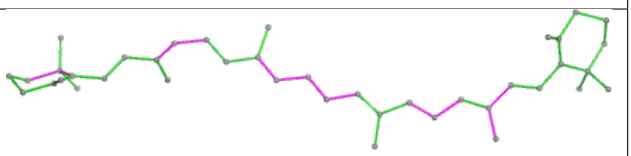


Rings

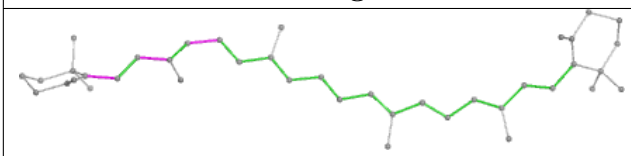
Ligand BCR b 819



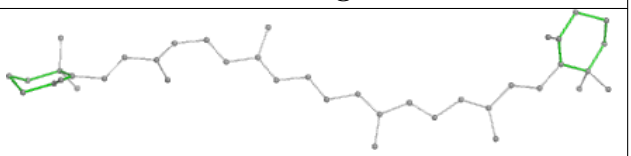
Bond lengths



Bond angles

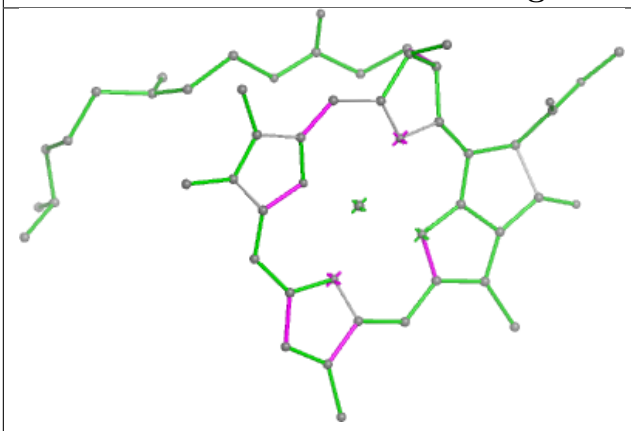


Torsions

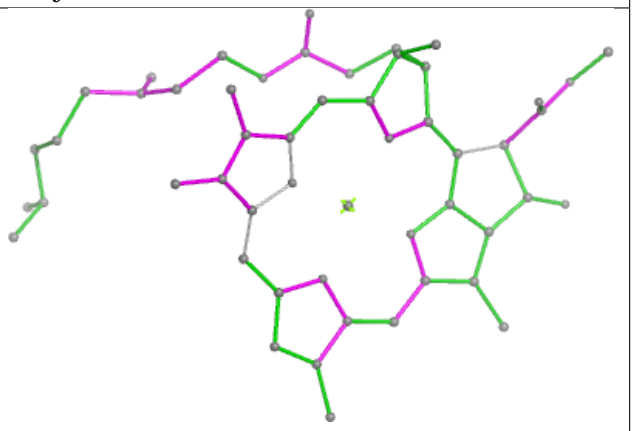


Rings

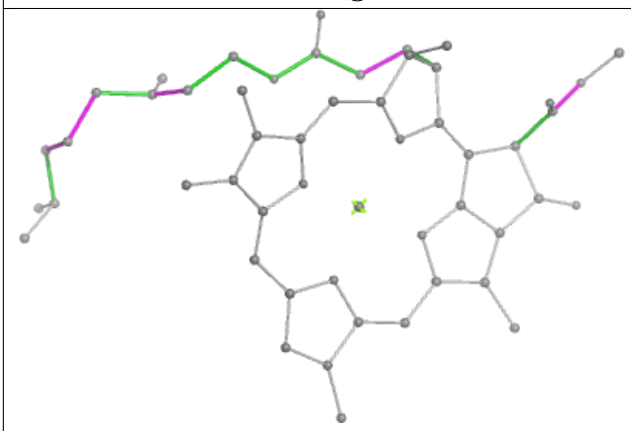
Ligand CLA y 302



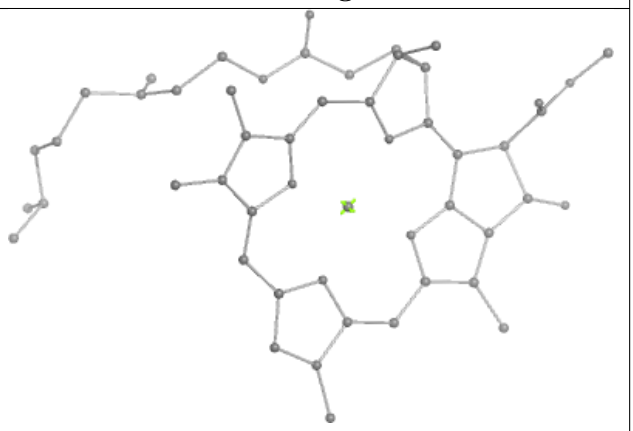
Bond lengths



Bond angles

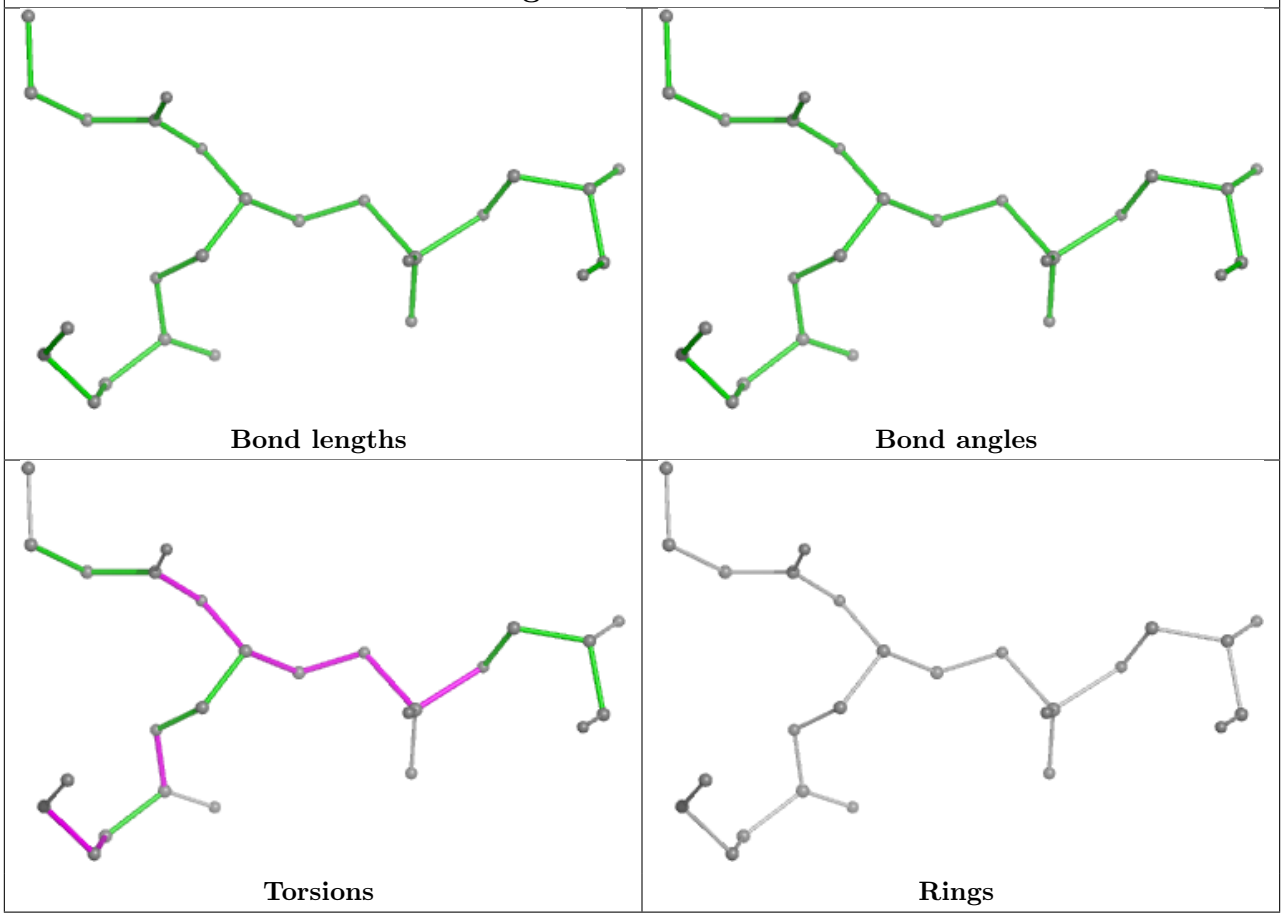


Torsions

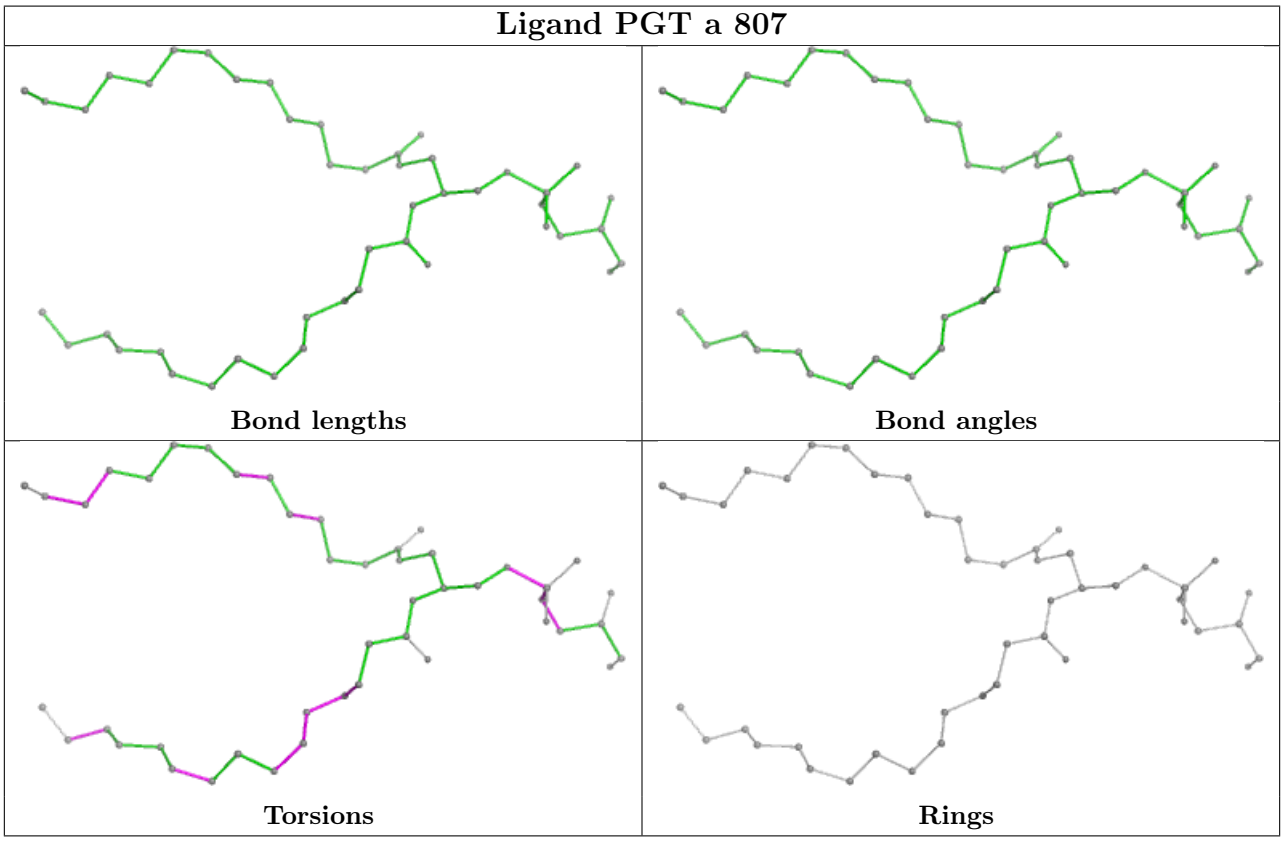


Rings

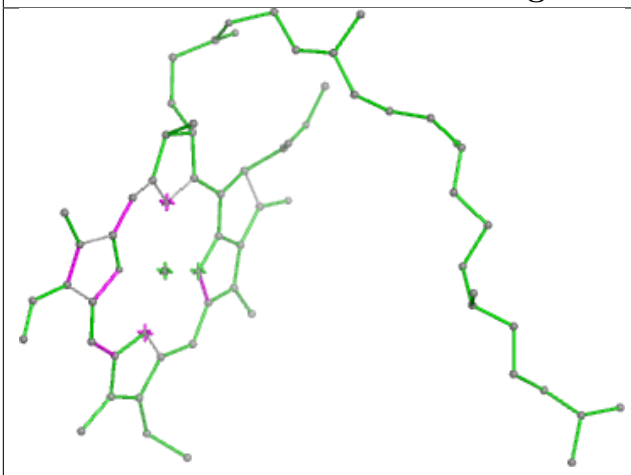
Ligand PGT N 301



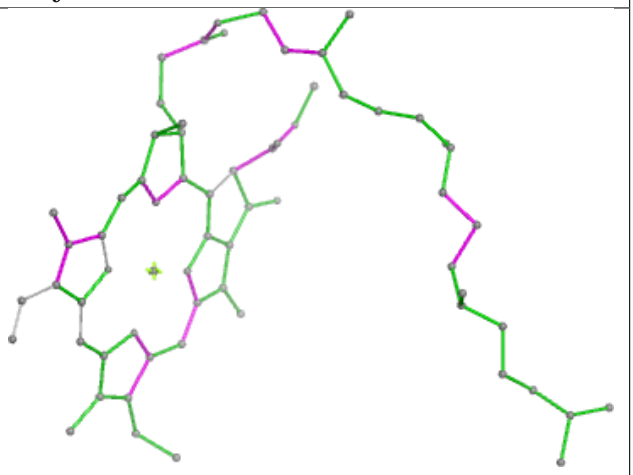
Ligand PGT a 807



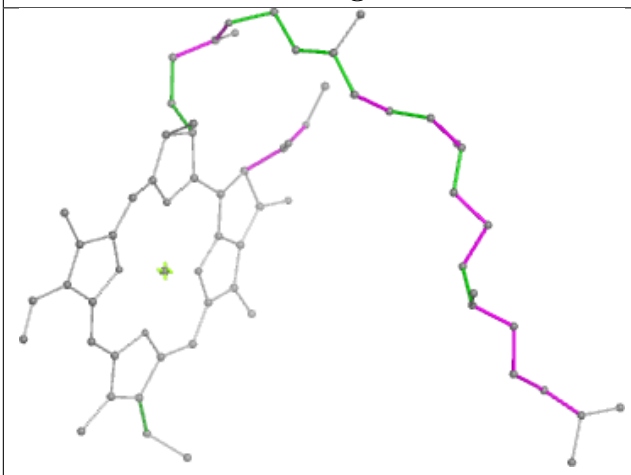
Ligand CLA y 308



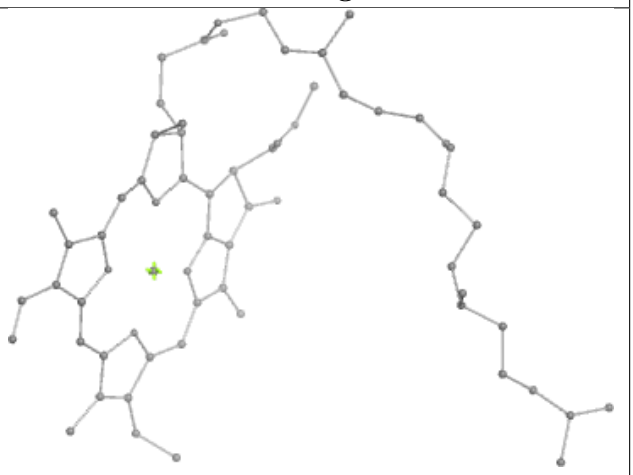
Bond lengths



Bond angles

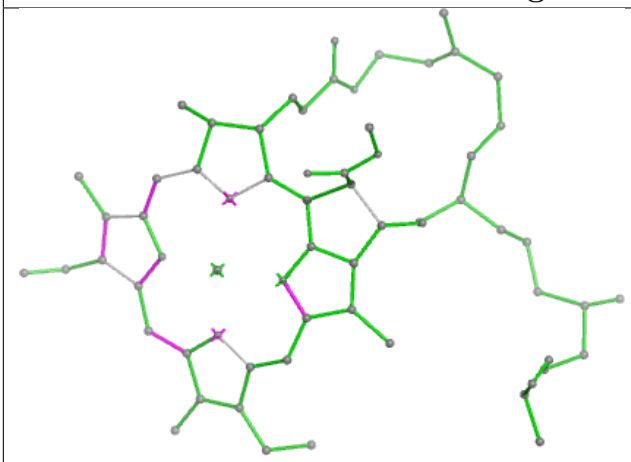


Torsions

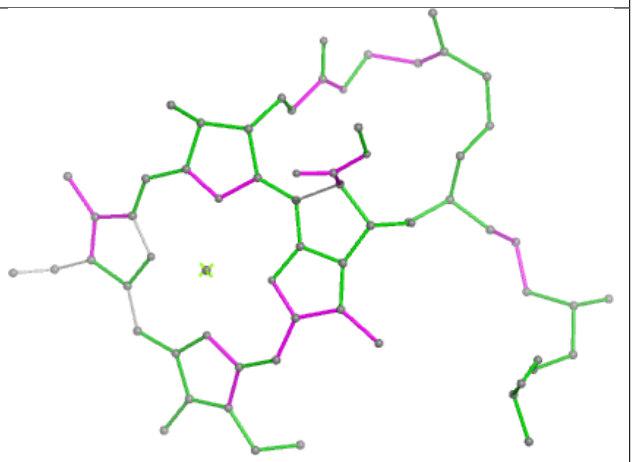


Rings

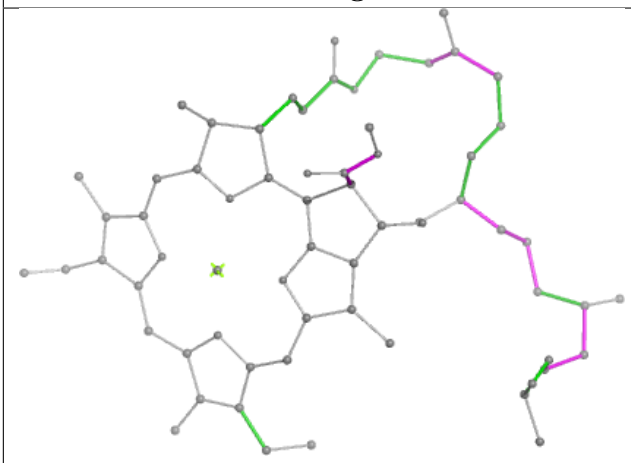
Ligand CLA b 814



Bond lengths



Bond angles



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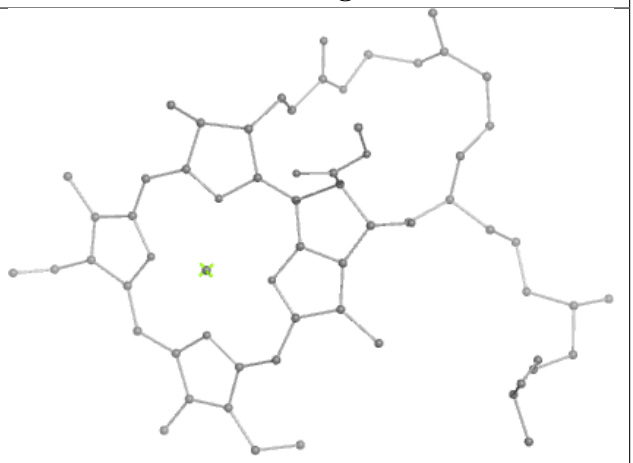
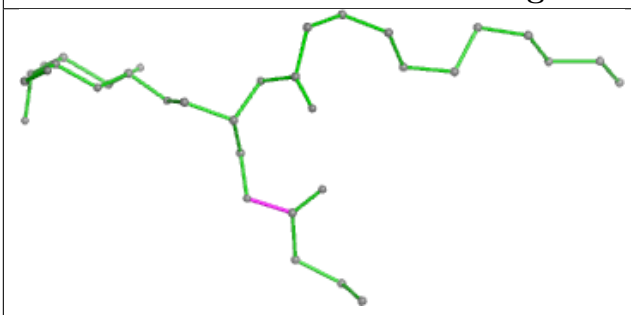
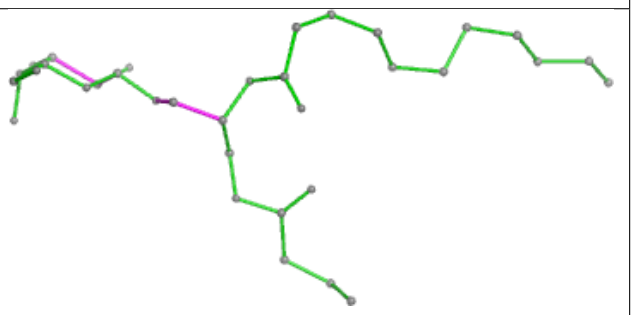


Rings

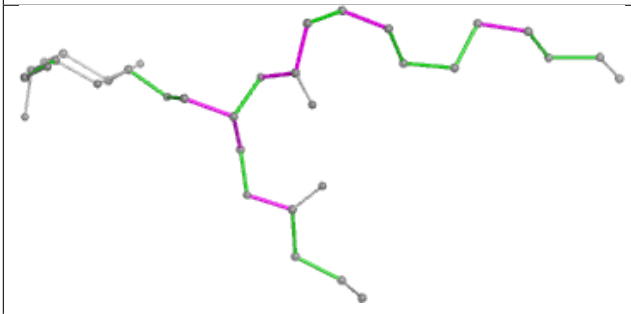
Ligand LMG f 306



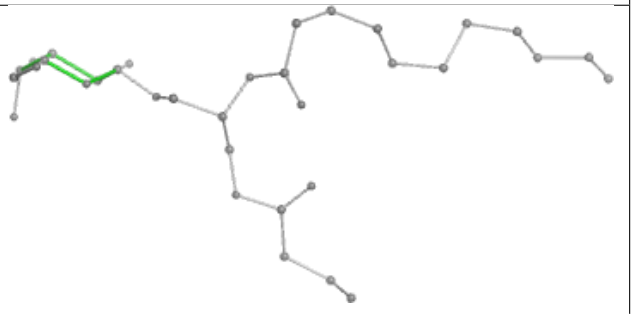
Bond lengths



Bond angles

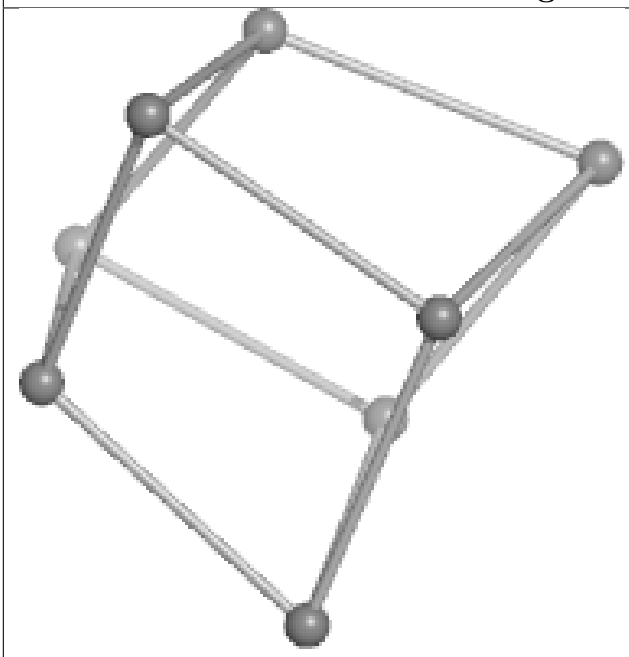


Torsions

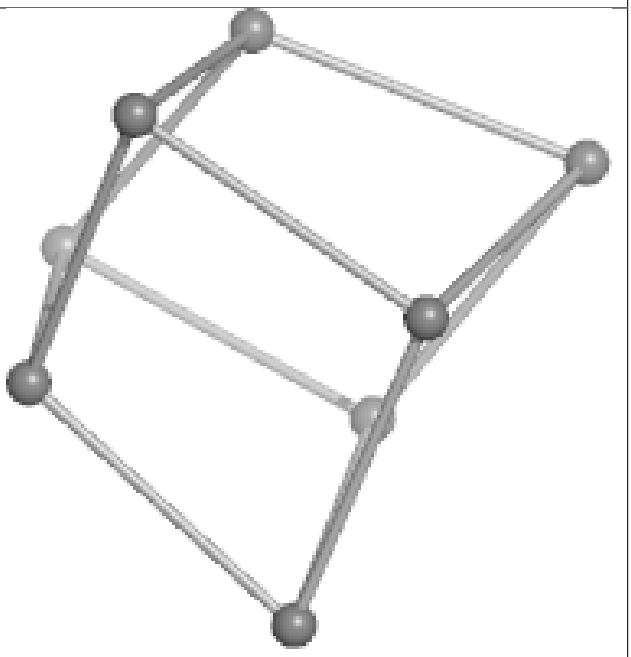


Rings

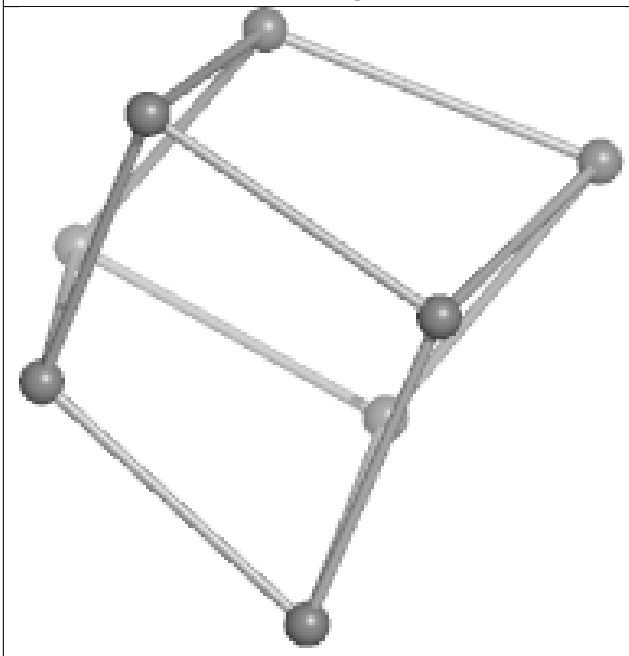
Ligand SF4 I 202



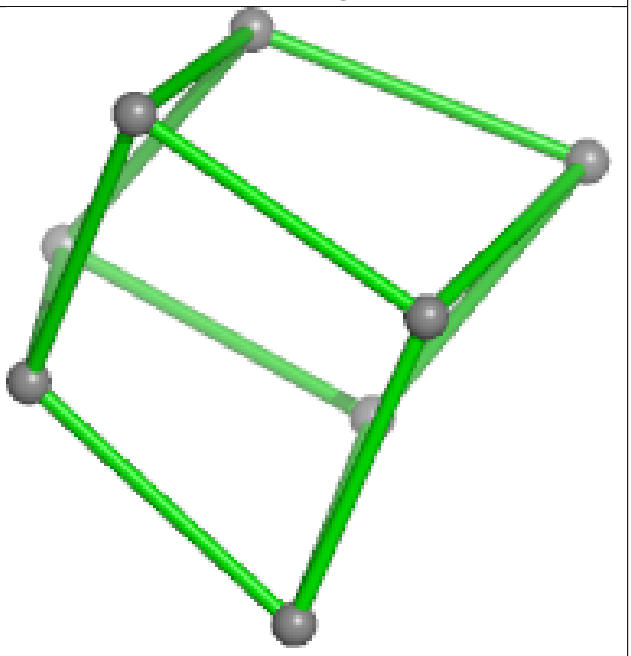
Bond lengths



Bond angles

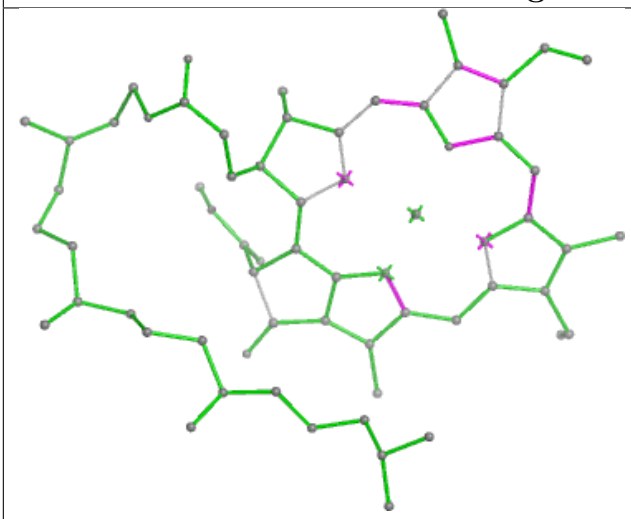


Torsions

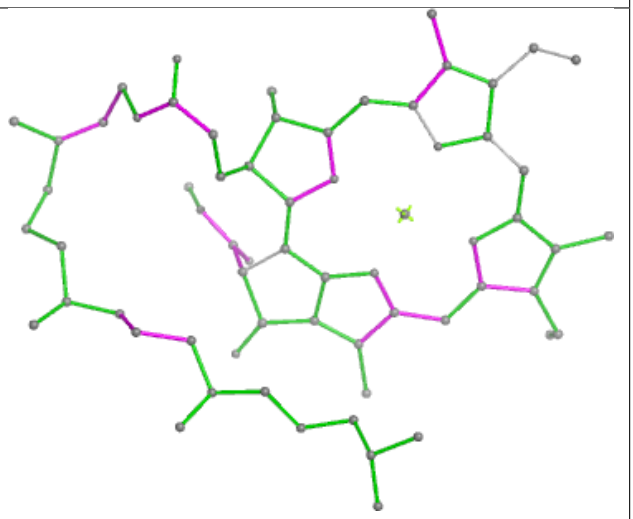


Rings

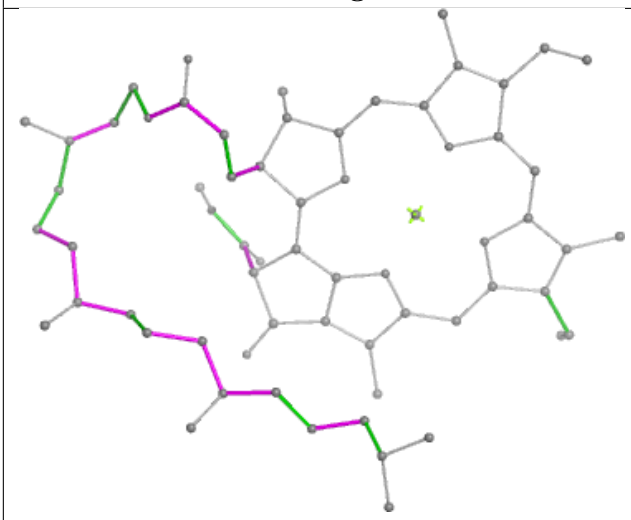
Ligand CLA b 837



Bond lengths



Bond angles



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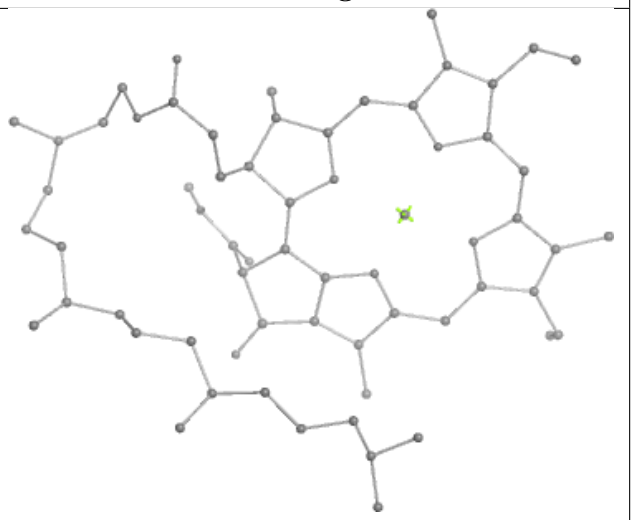
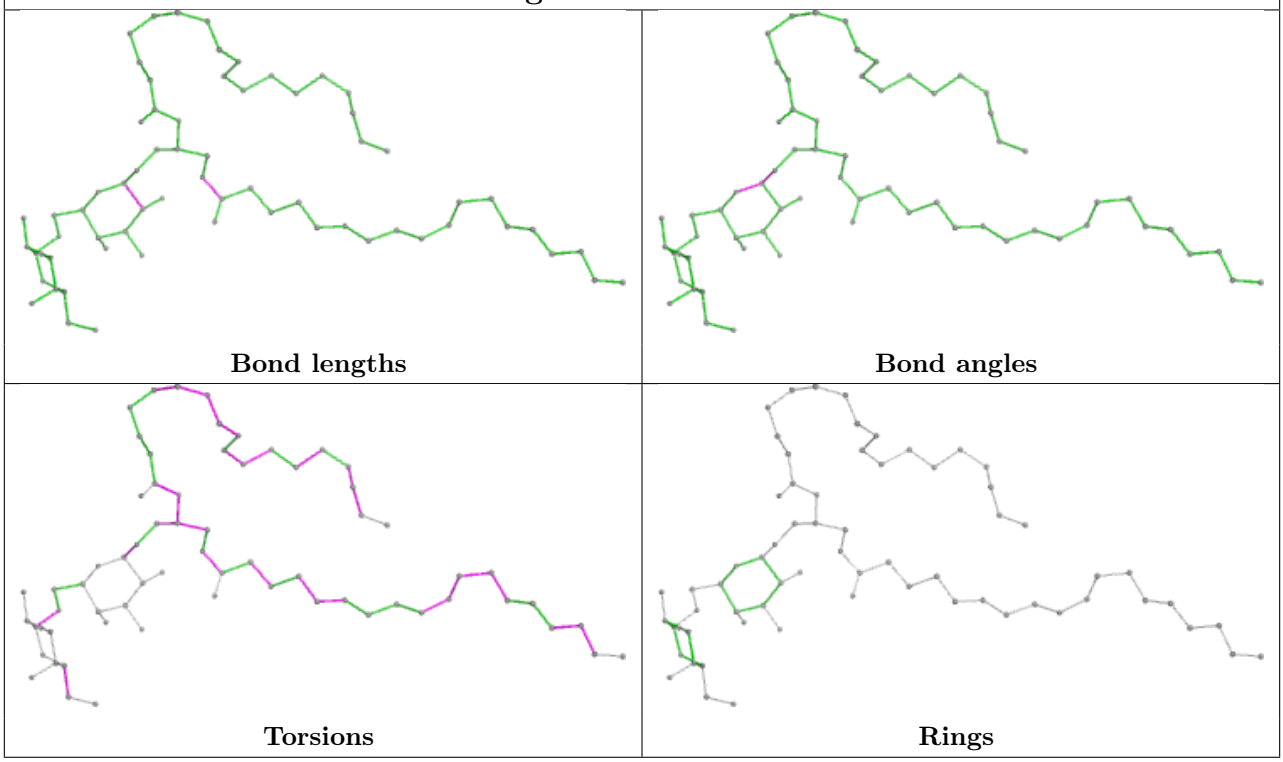
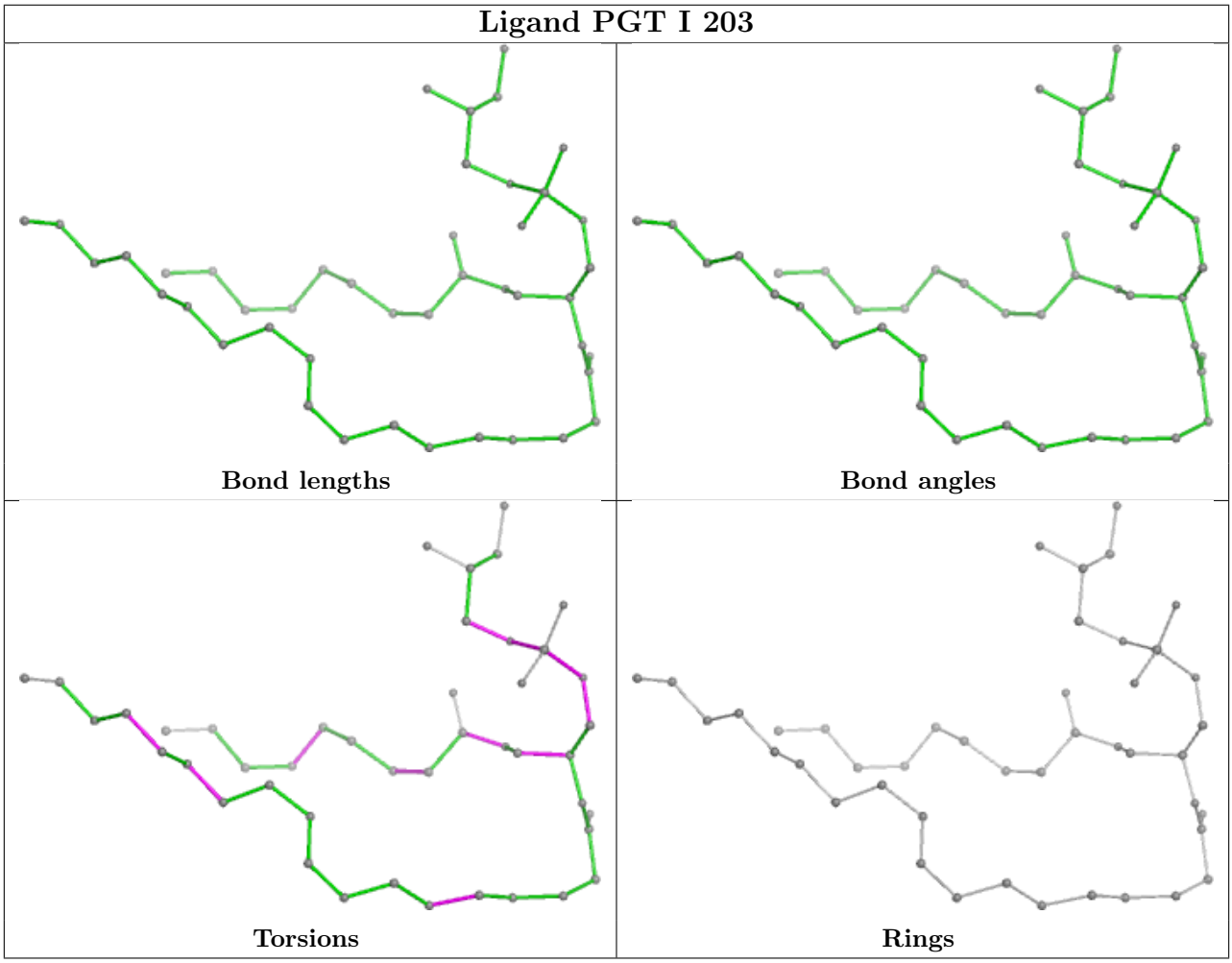


Rings

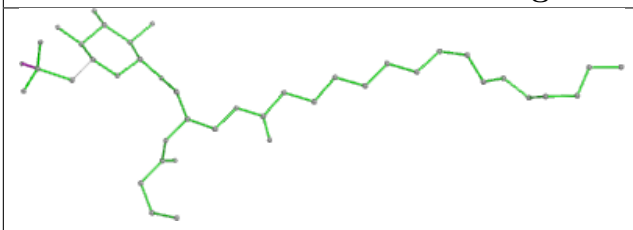
Ligand DGD a 804



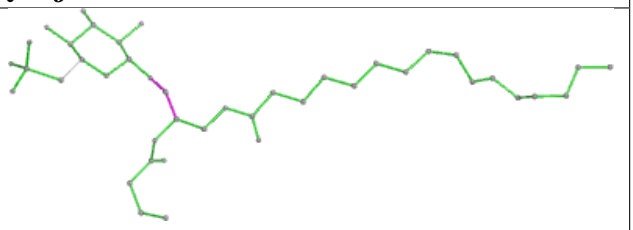
Ligand PGT I 203



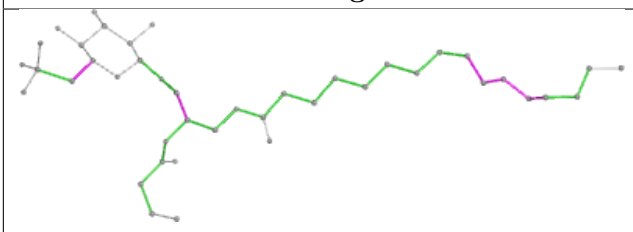
Ligand SQD j 106



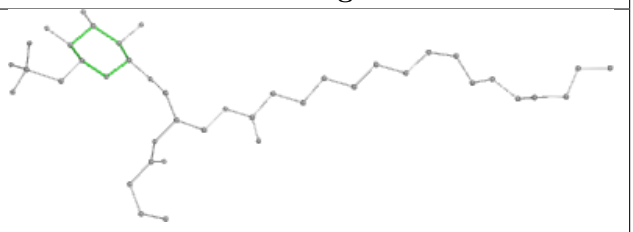
Bond lengths



Bond angles

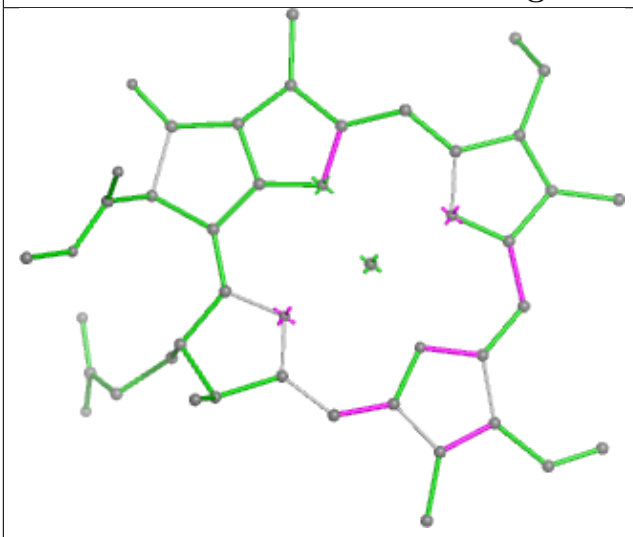


Torsions



Rings

Ligand CLA b 811



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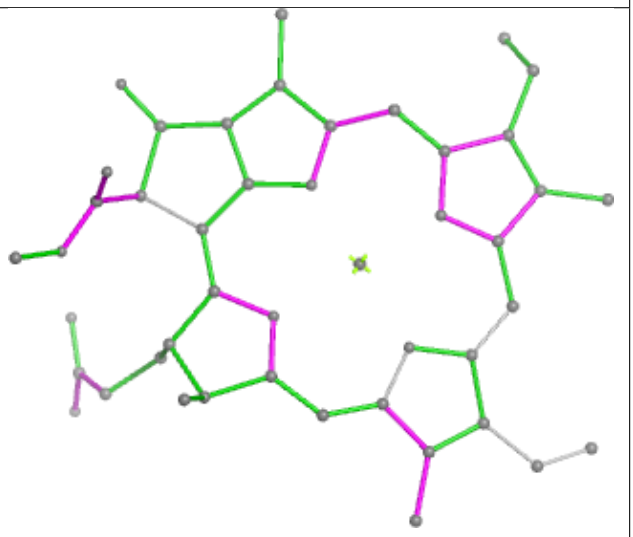
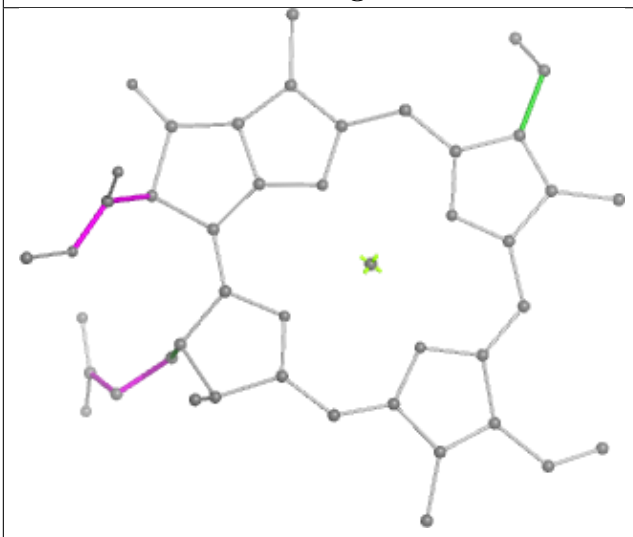
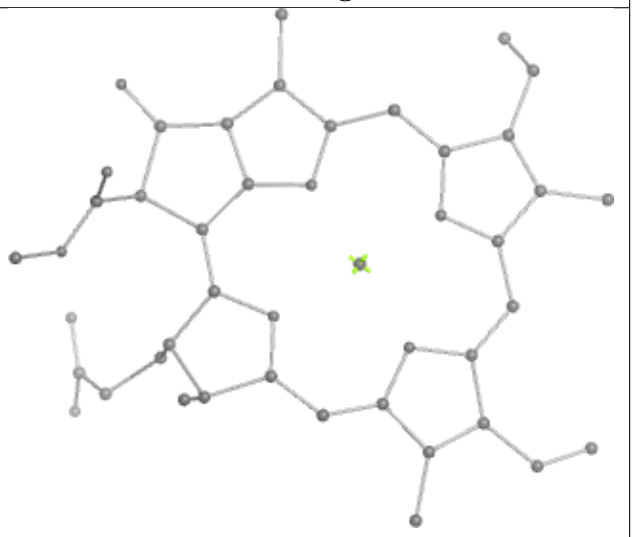


Bond angles

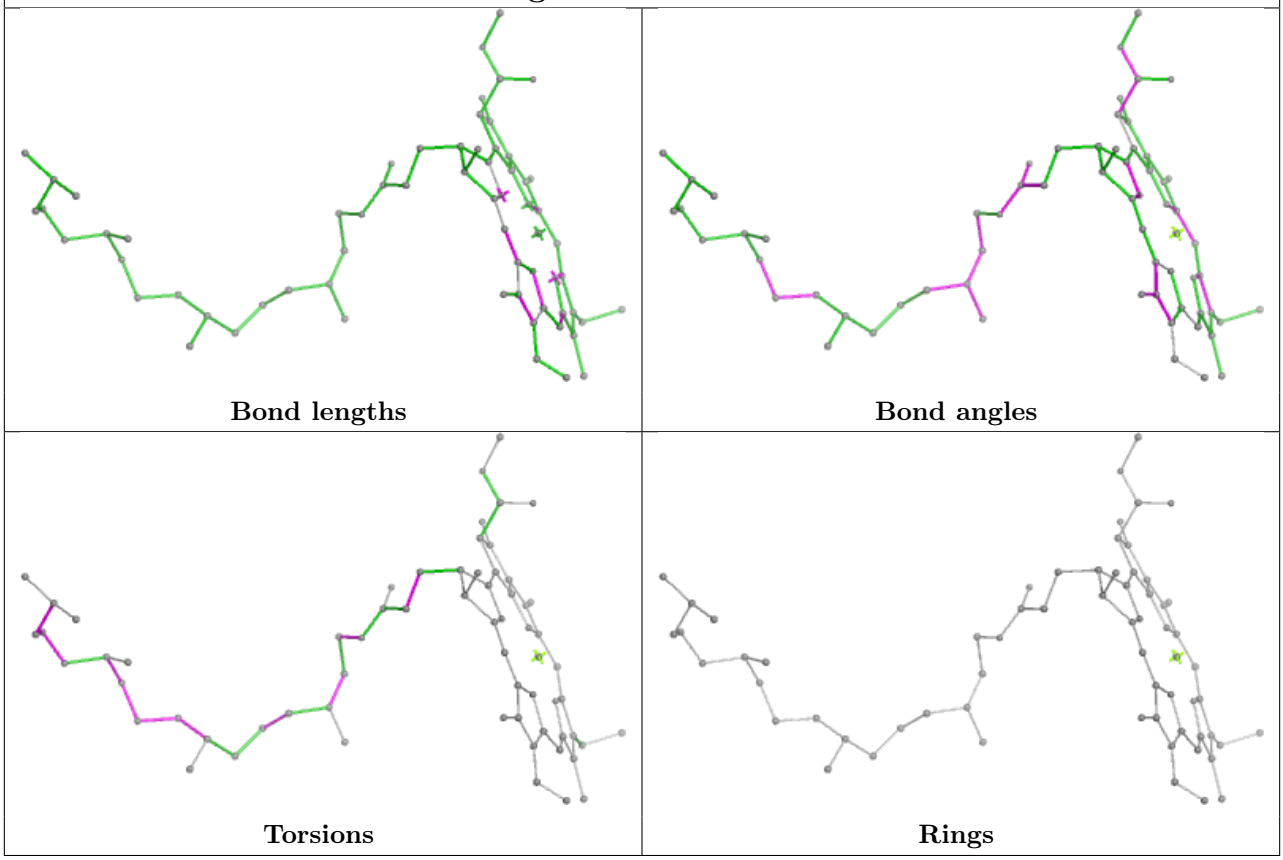


Torsions

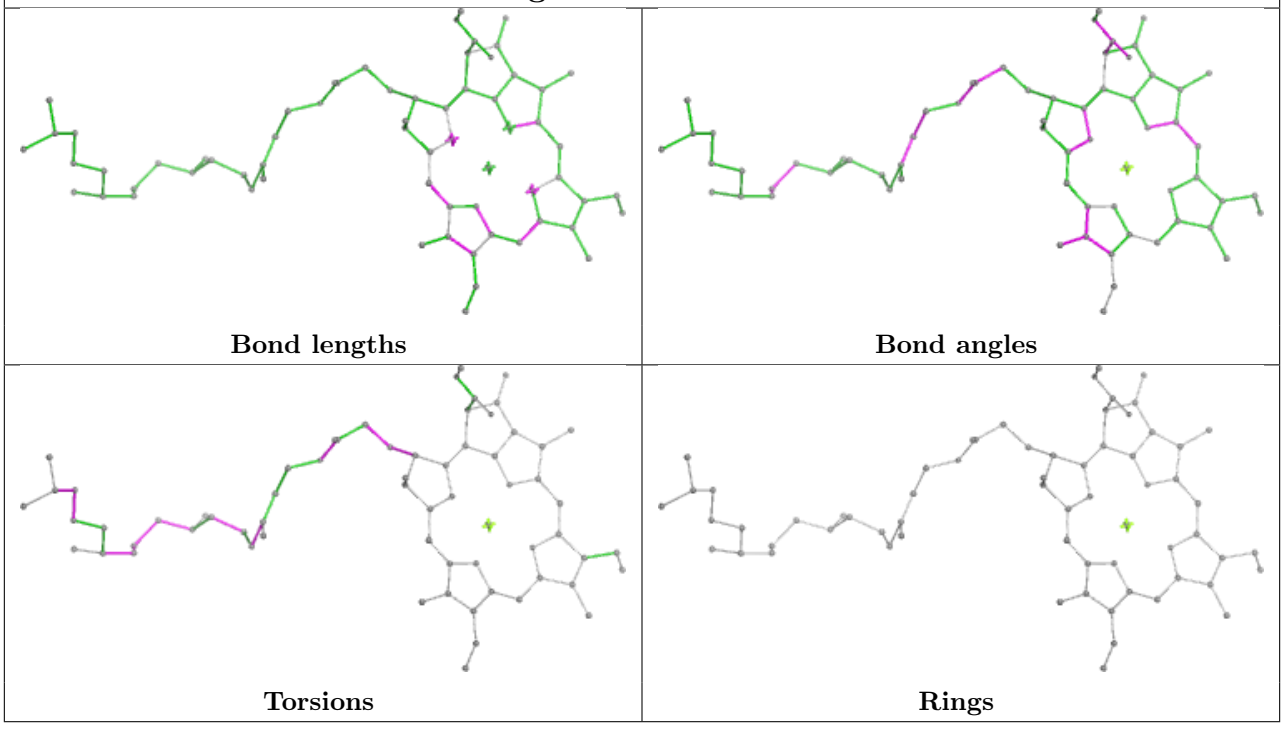


Rings

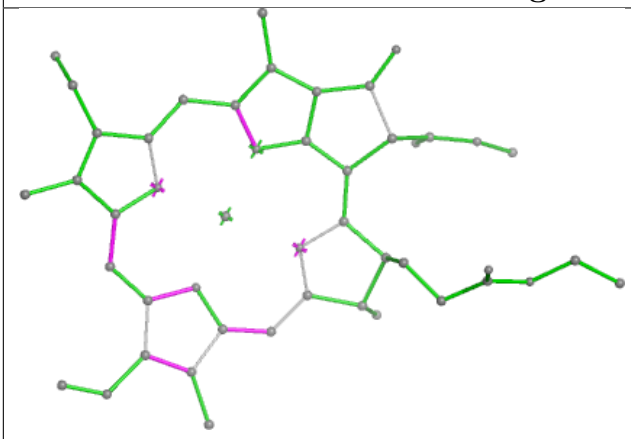
Ligand CLA b 825



Ligand CLA b 833



Ligand CLA z 316



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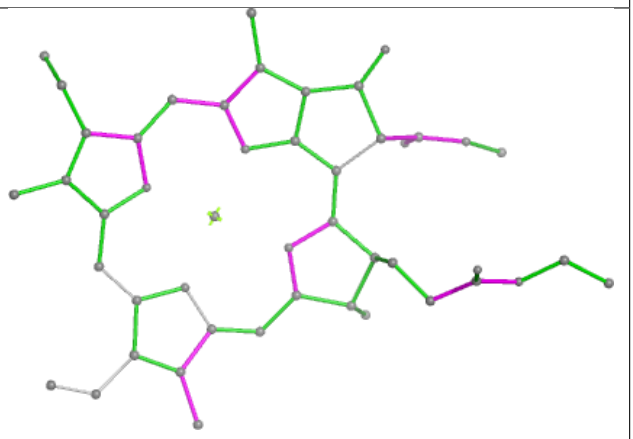
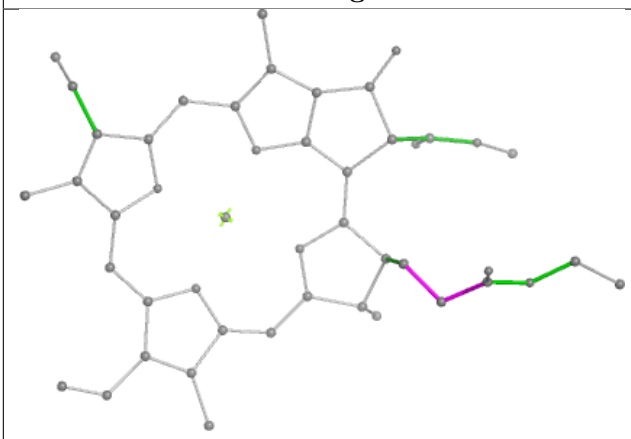
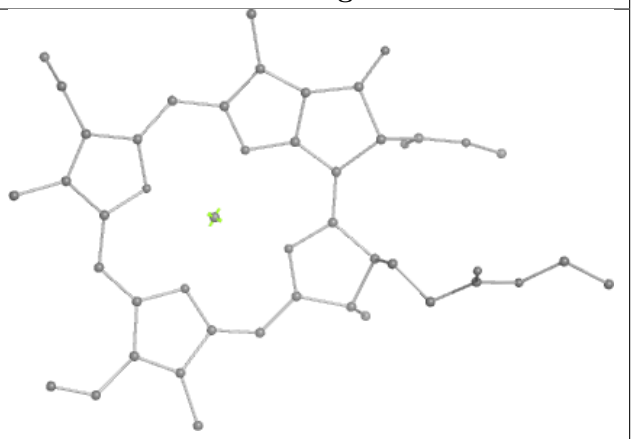


Bond angles

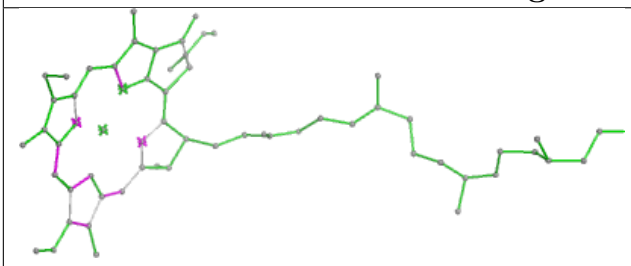


Torsions

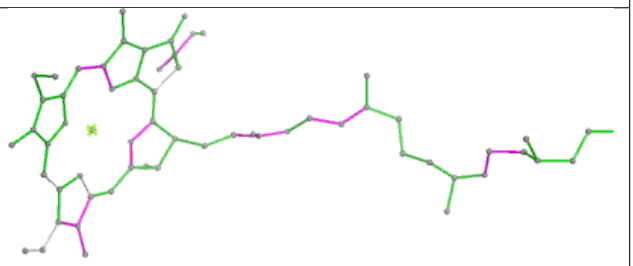


Rings

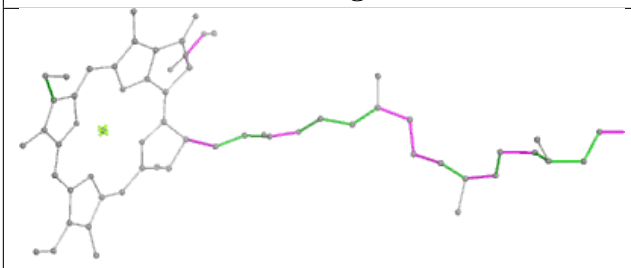
Ligand CLA a 836



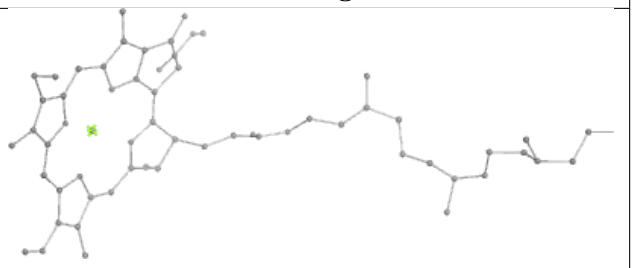
Bond lengths



Bond angles

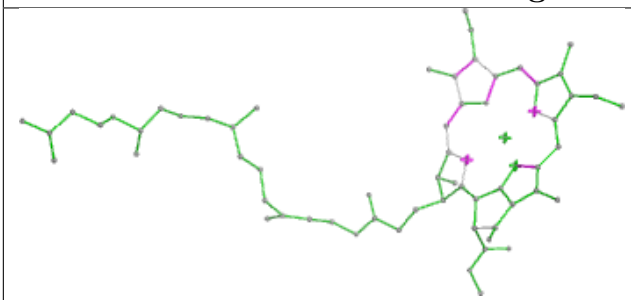


Torsions

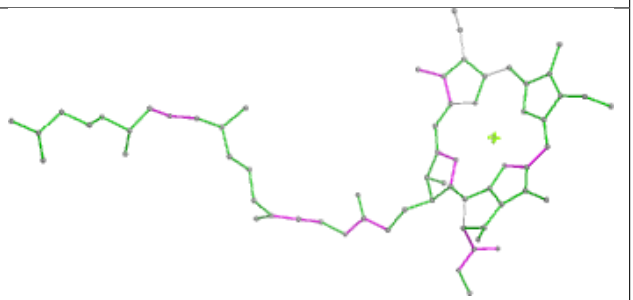


Rings

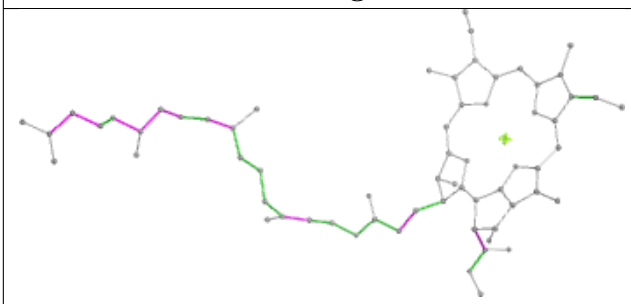
Ligand CLA a 858



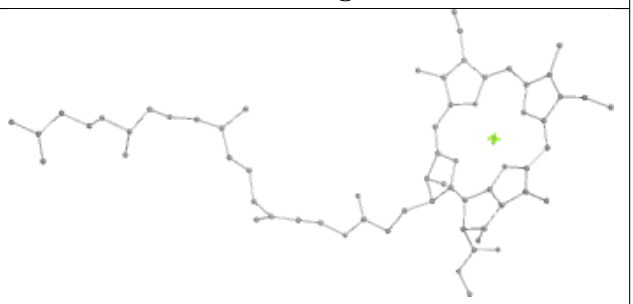
Bond lengths



Bond angles

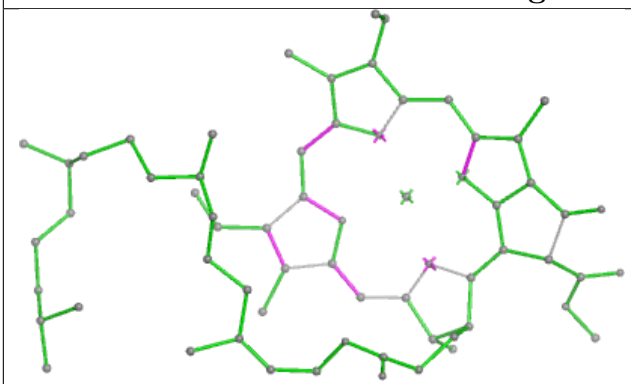


Torsions

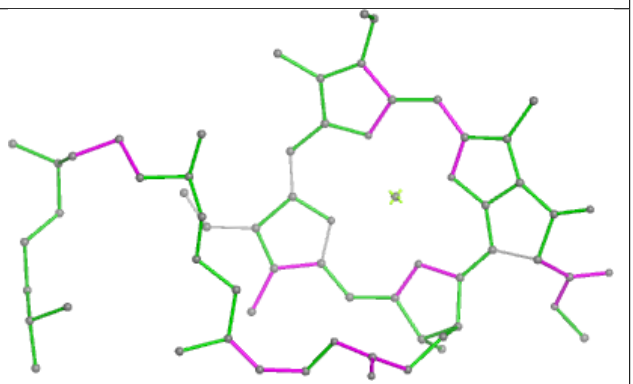


Rings

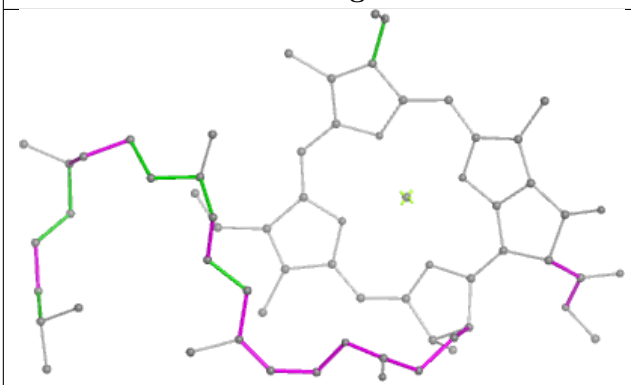
Ligand CLA a 833



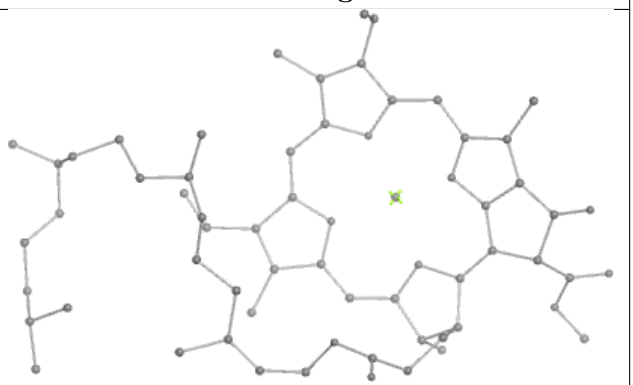
Bond lengths



Bond angles

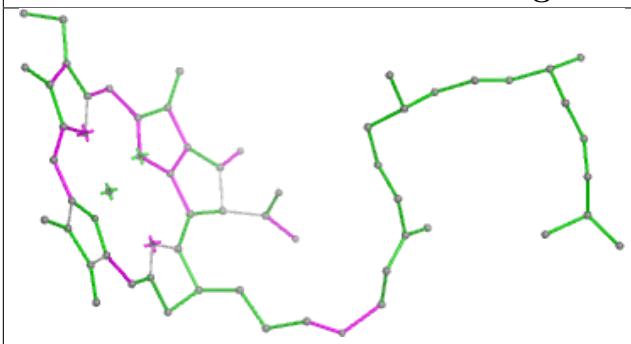


Torsions

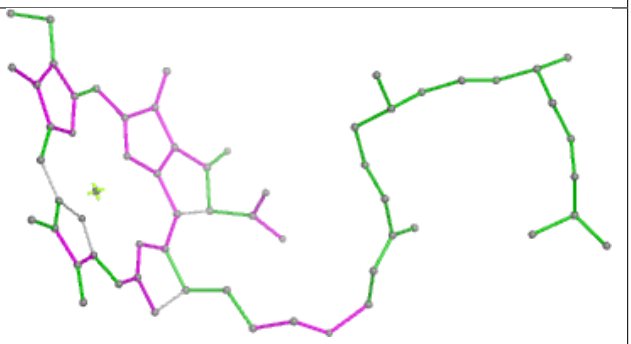


Rings

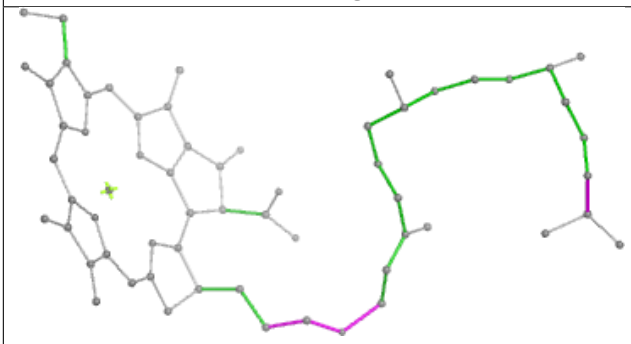
Ligand CL0 a 808



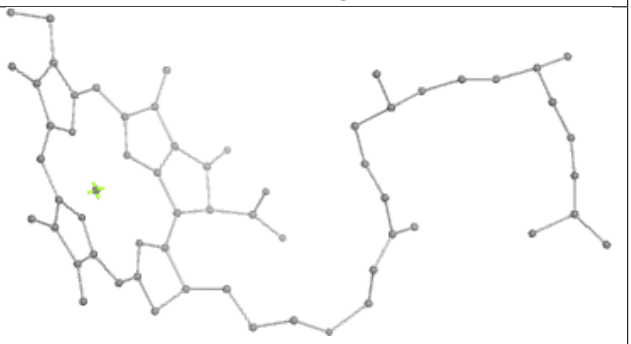
Bond lengths



Bond angles

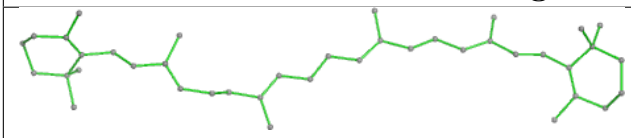


Torsions

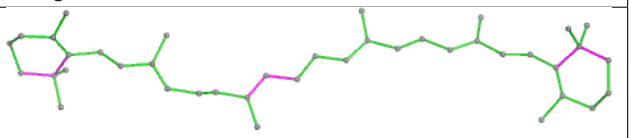


Rings

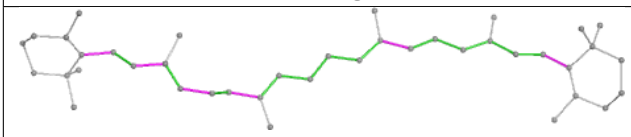
Ligand BCR j 101



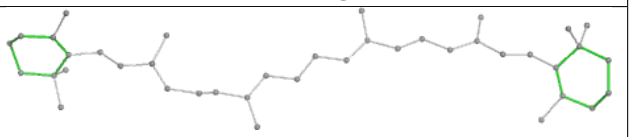
Bond lengths



Bond angles

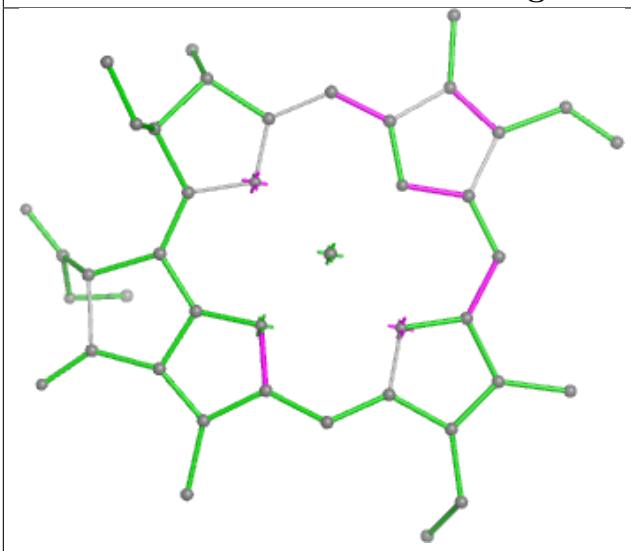


Torsions

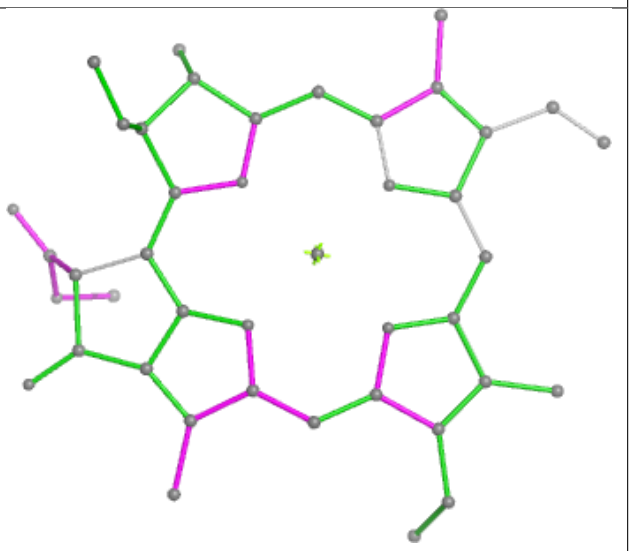


Rings

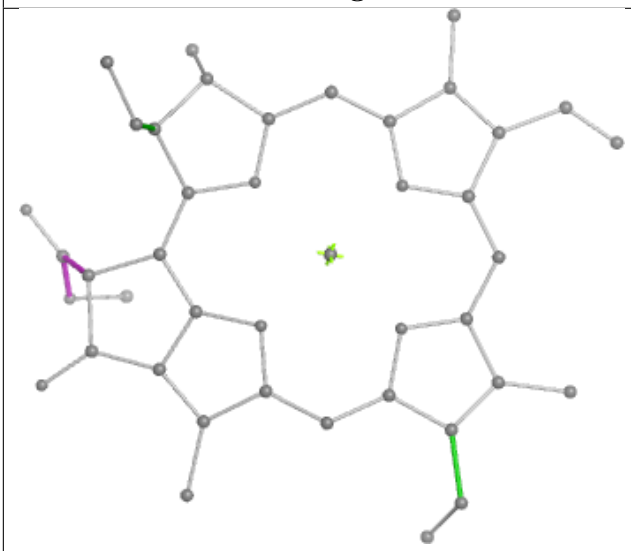
Ligand CLA k 205



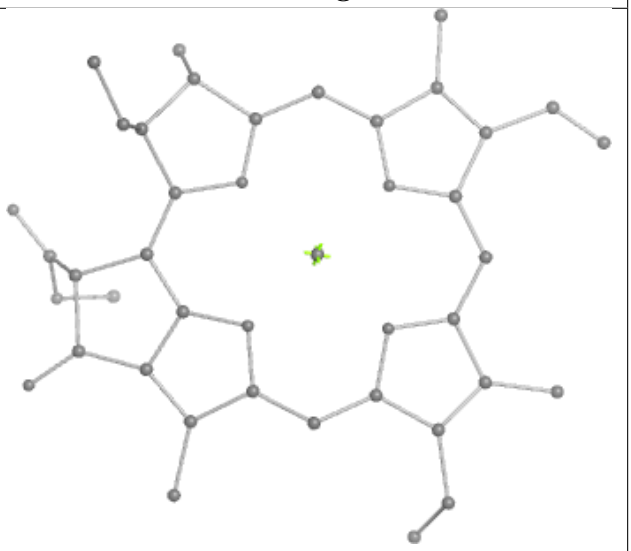
Bond lengths



Bond angles

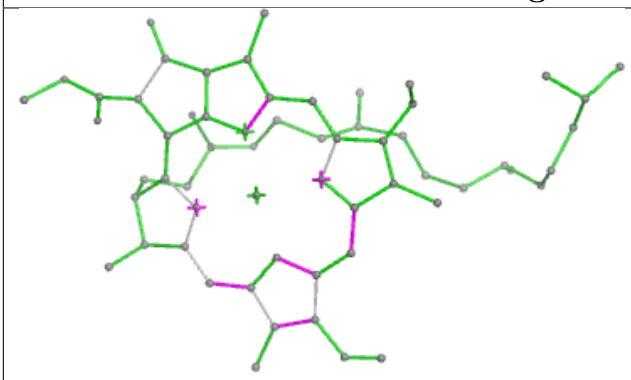


Torsions

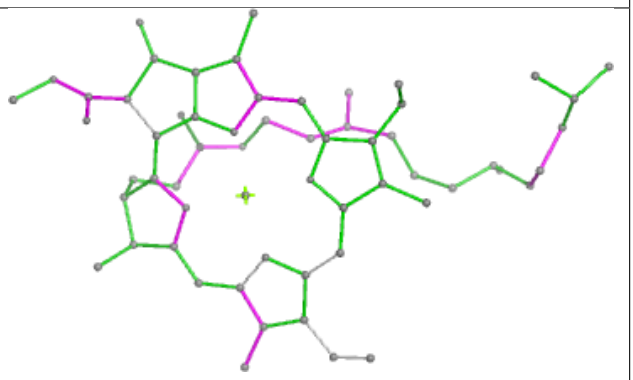


Rings

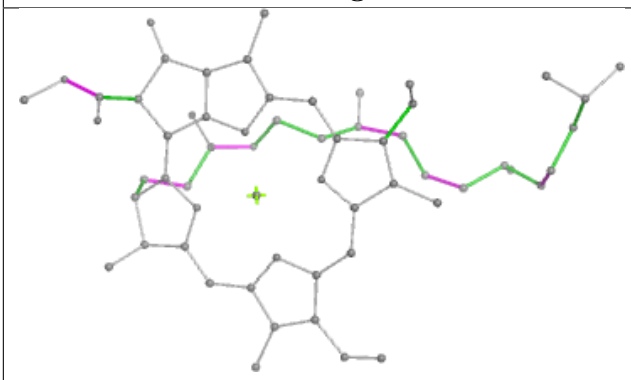
Ligand CLA a 802



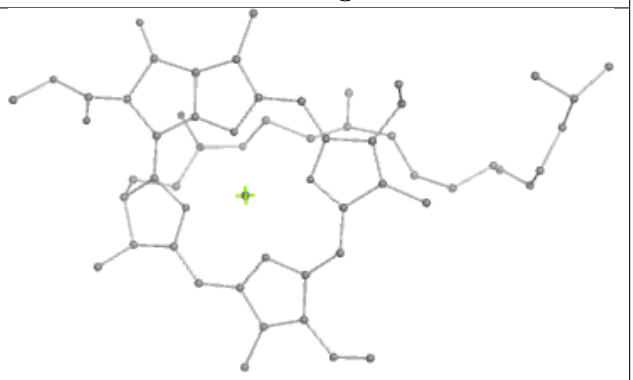
Bond lengths



Bond angles

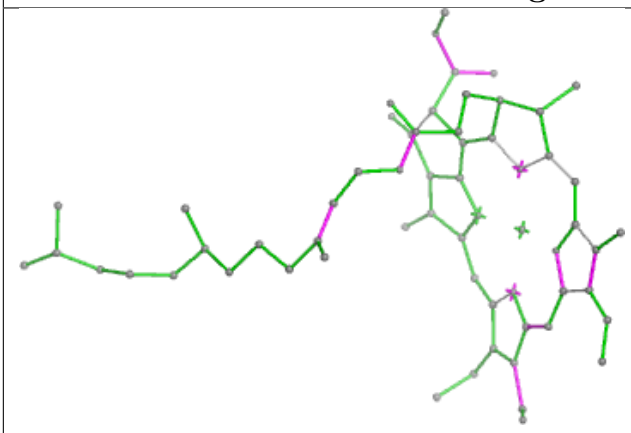


Torsions



Rings

Ligand CHL z 312



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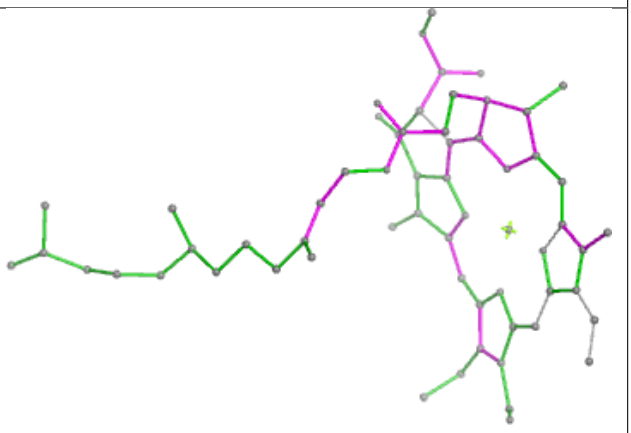
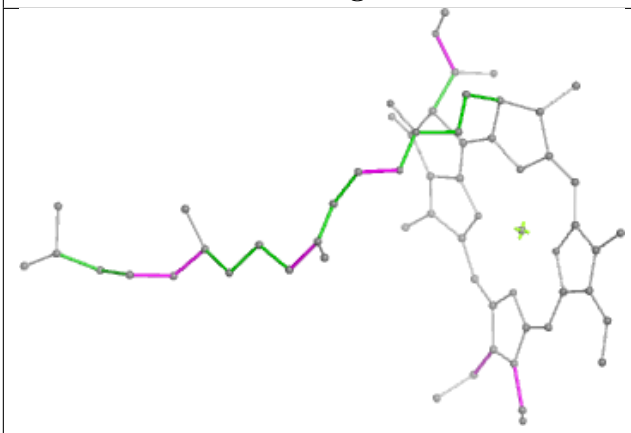


Bond angles



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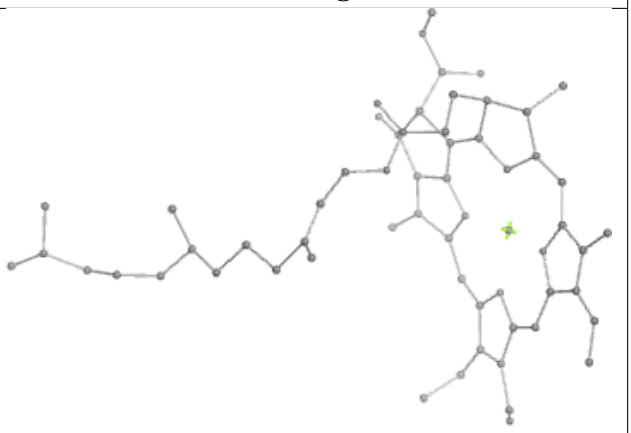
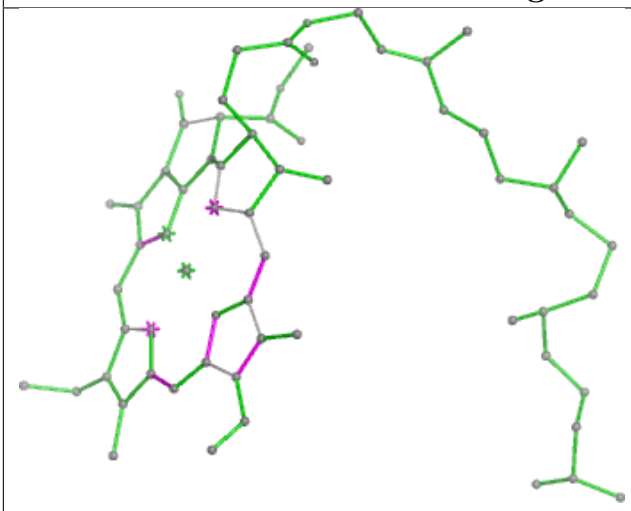
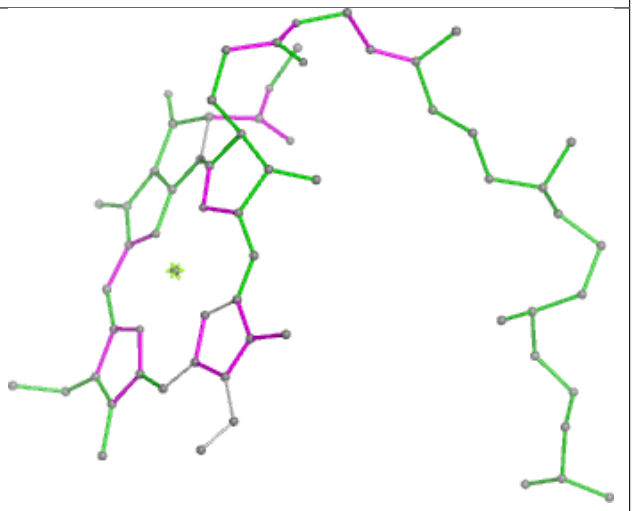


Rings

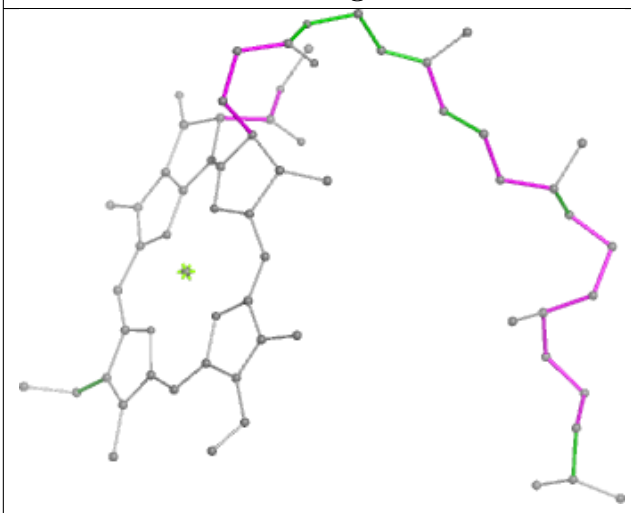
Ligand CLA b 845



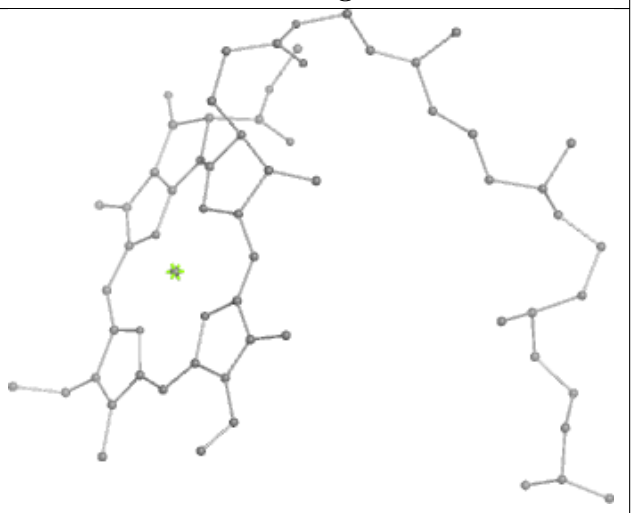
Bond lengths



Bond angles

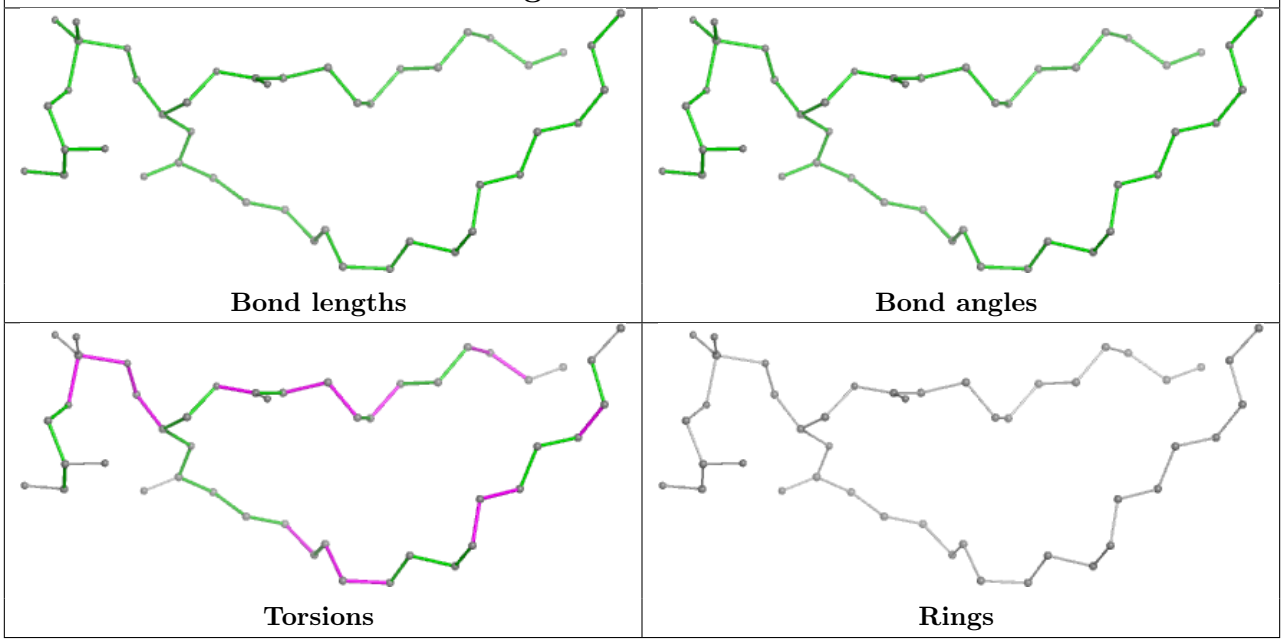


Torsions

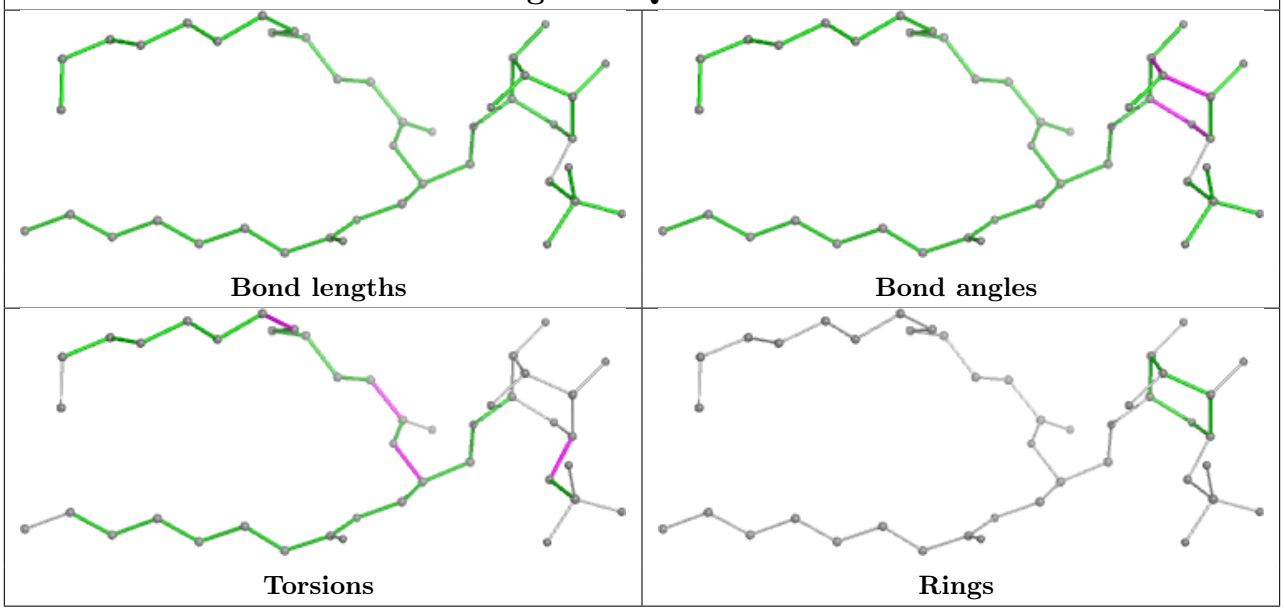


Rings

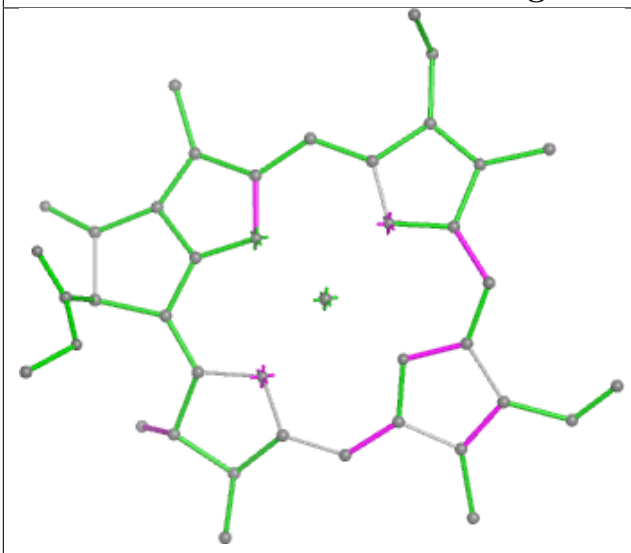
Ligand PGT B 603



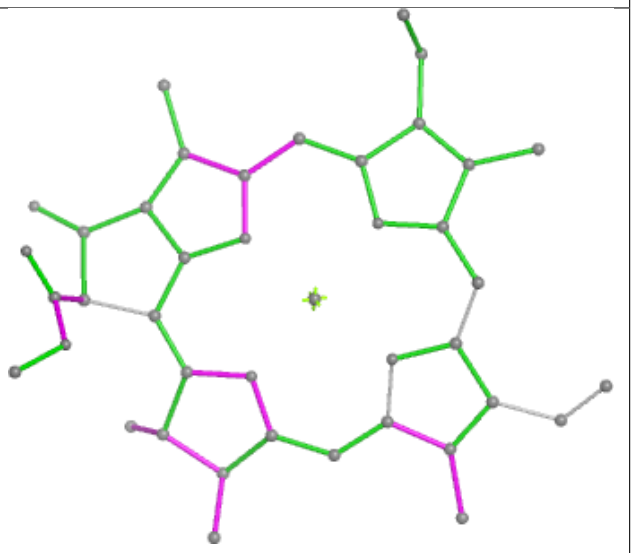
Ligand SQD F 805



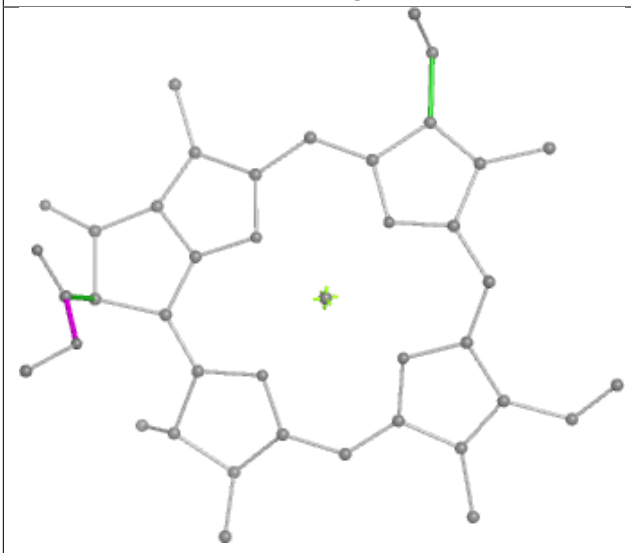
Ligand CLA k 203



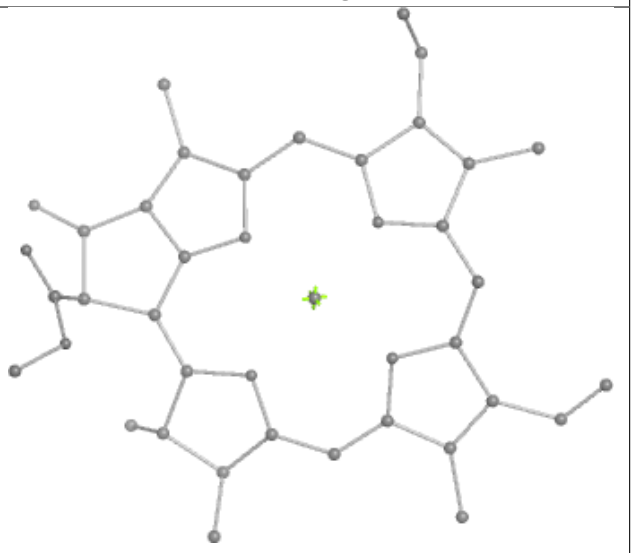
Bond lengths



Bond angles

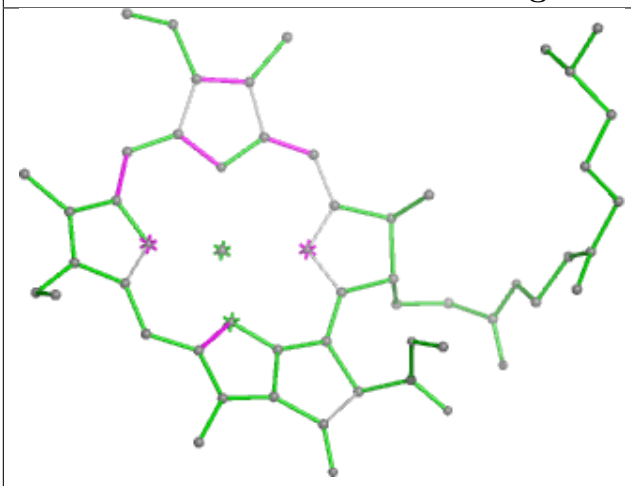


Torsions

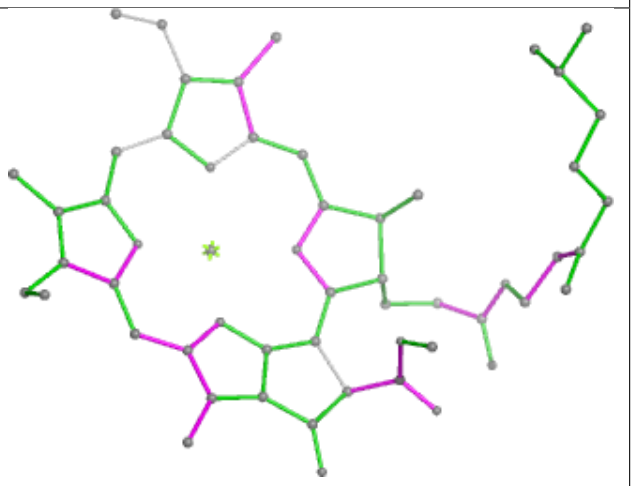


Rings

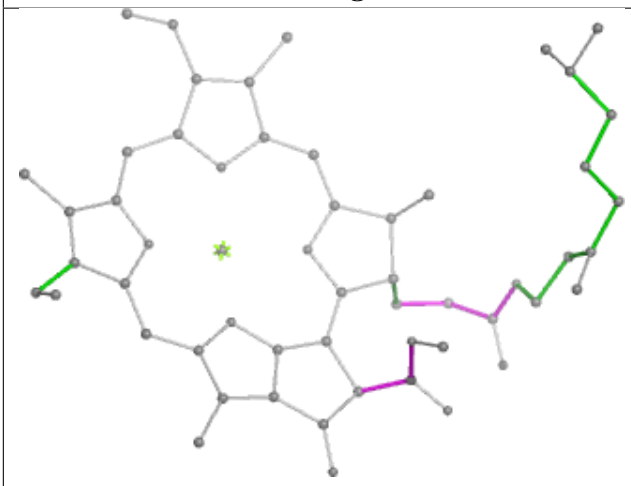
Ligand CLA z 311



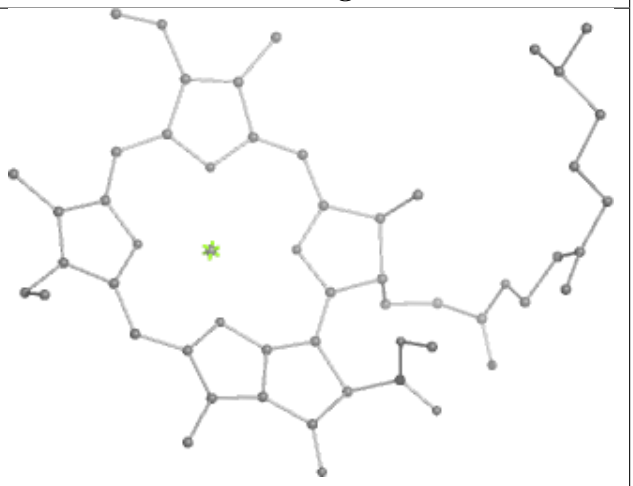
Bond lengths



Bond angles

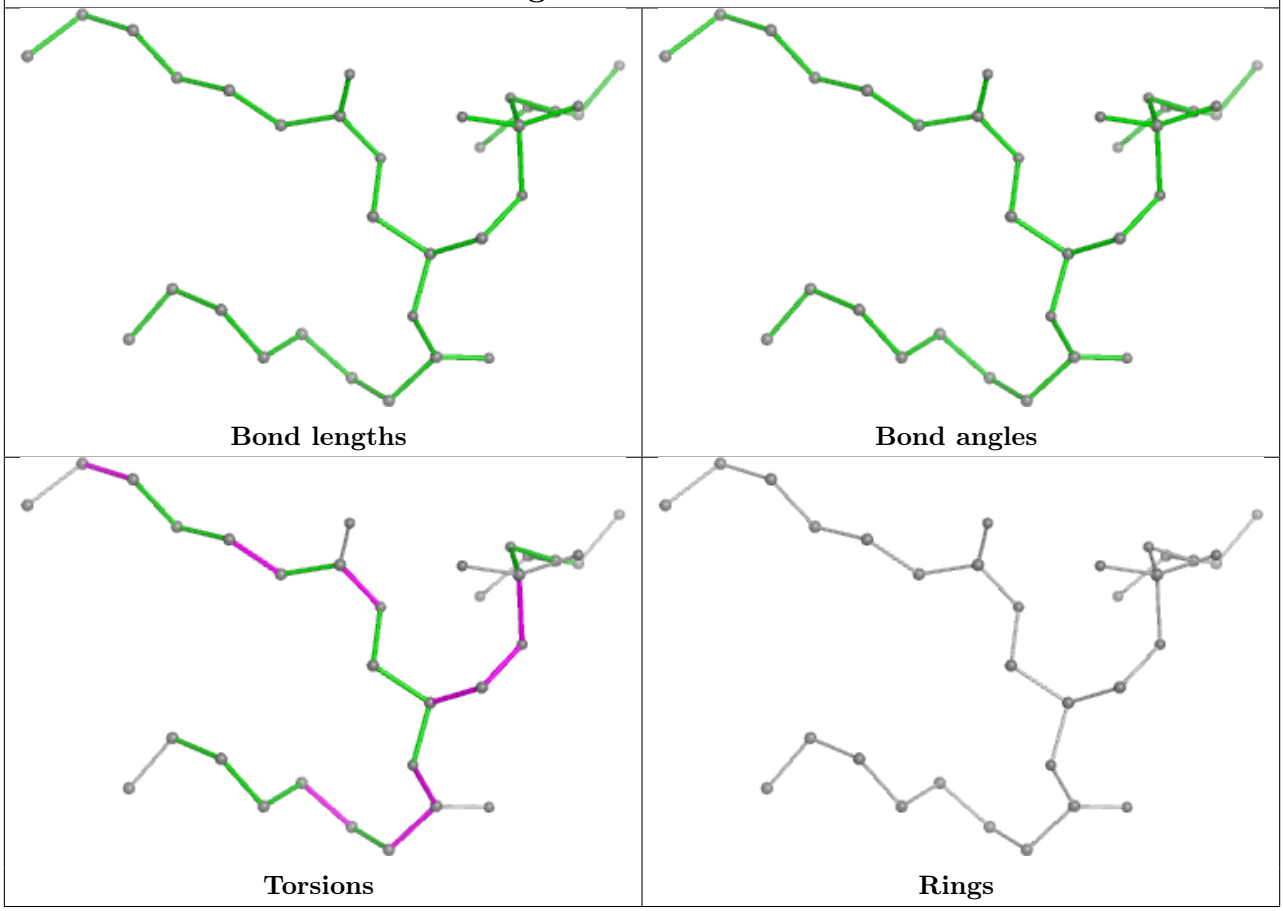


Torsions

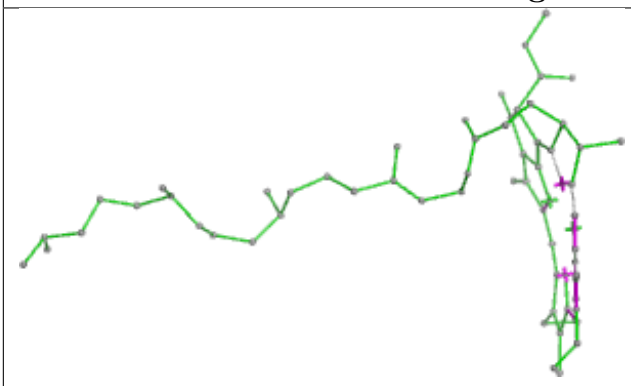


Rings

Ligand PGT a 805



Ligand CLA a 820



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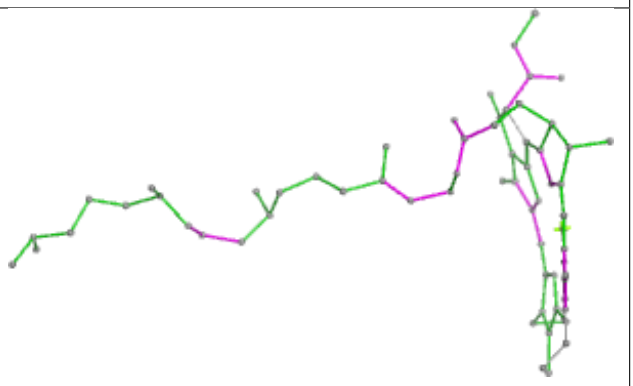
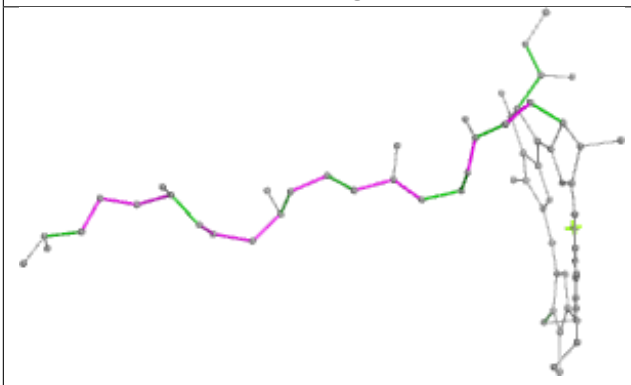
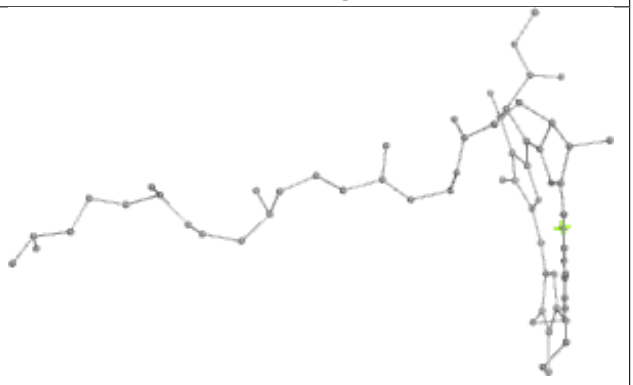


Bond angles

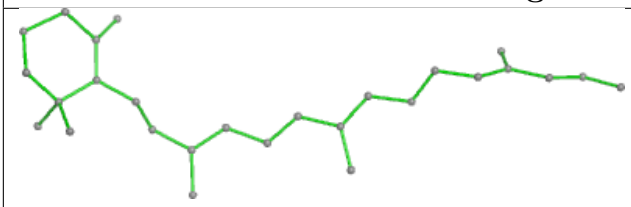


Torsions



Rings

Ligand BCR a 803



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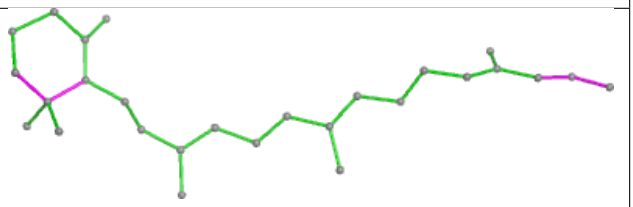
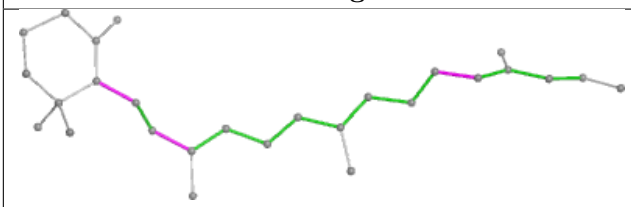


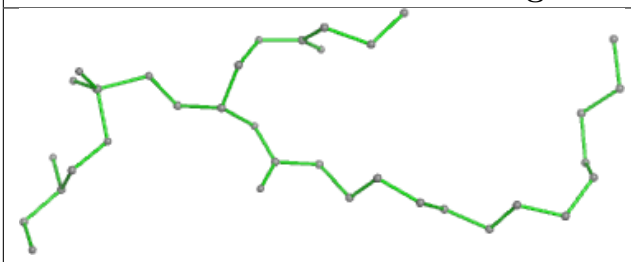
Bond angles



Torsions

Rings

Ligand PGT 5 301



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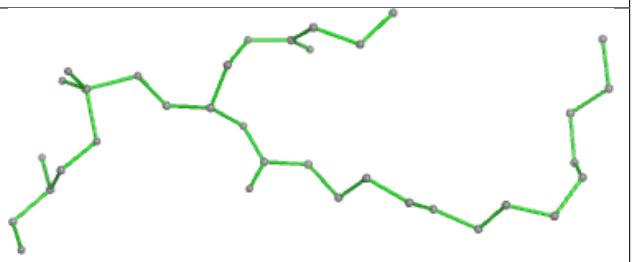
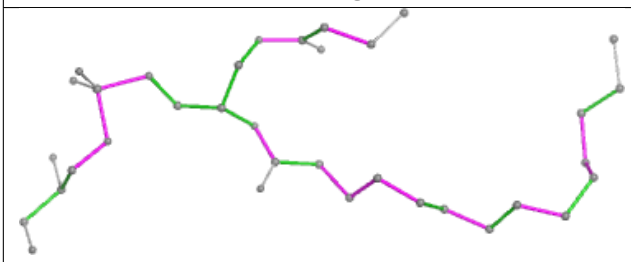
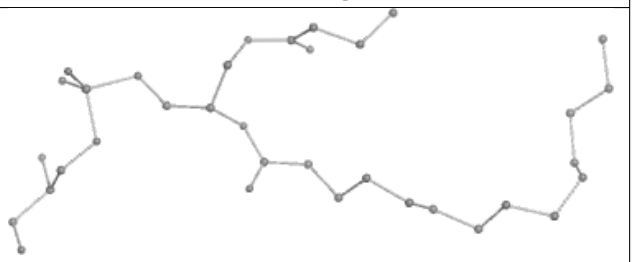


Bond angles

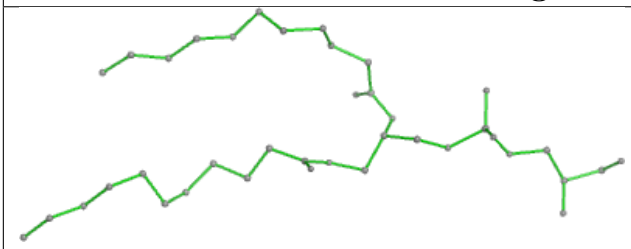


Torsions



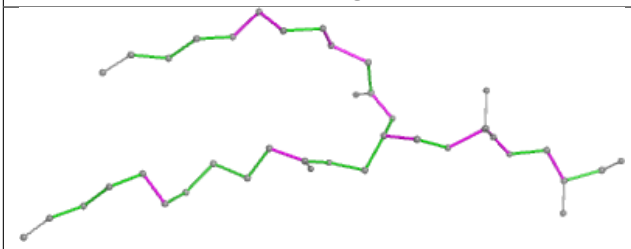
Rings

Ligand PGT f 305

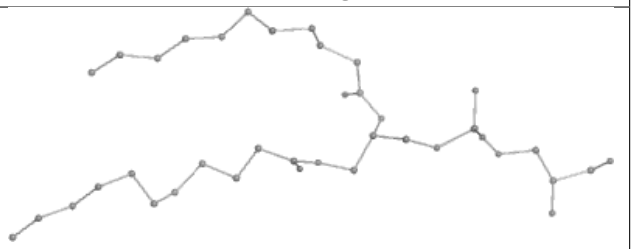


Bond lengths

Bond angles

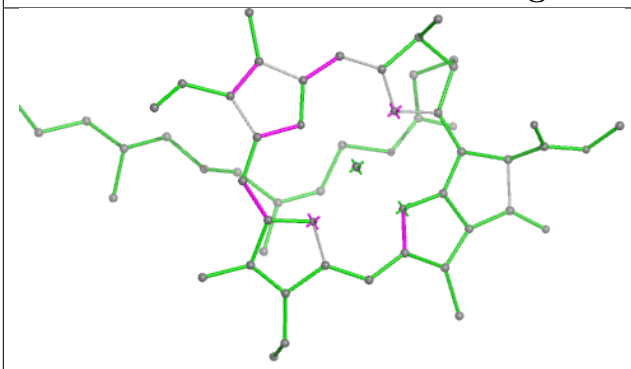


Torsions

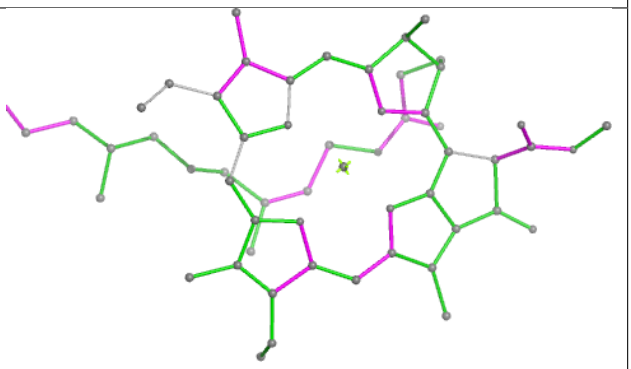


Rings

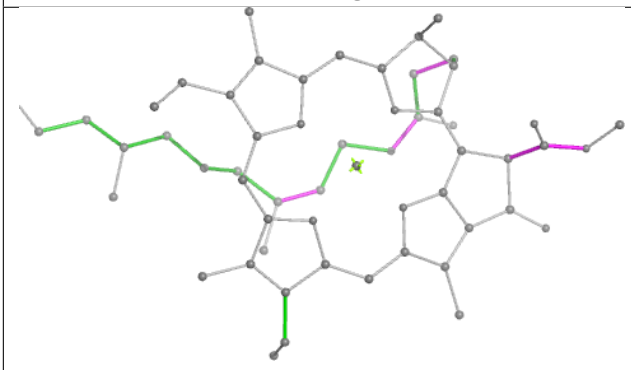
Ligand CLA a 809



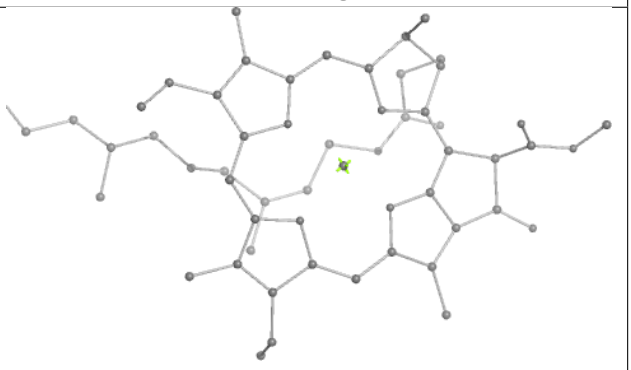
Bond lengths



Bond angles

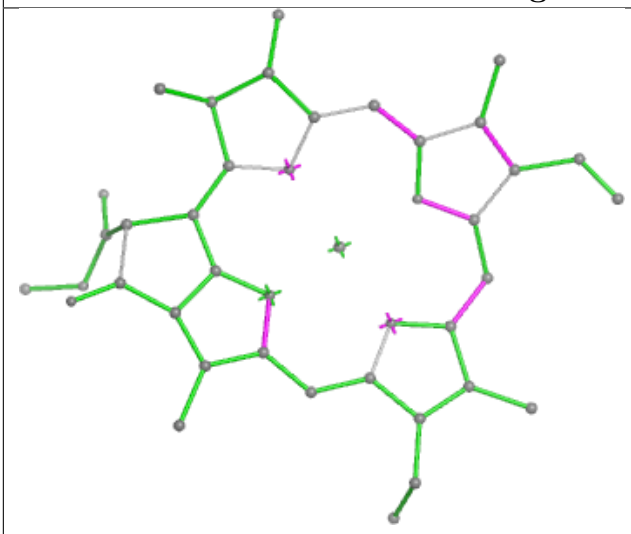


Torsions

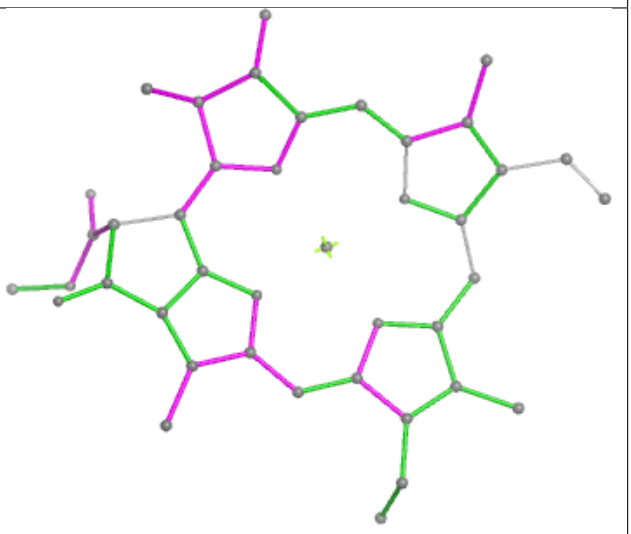


Rings

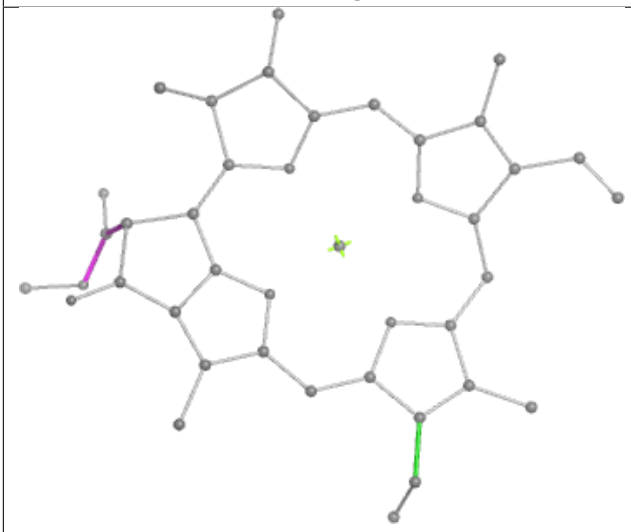
Ligand CLA z 310



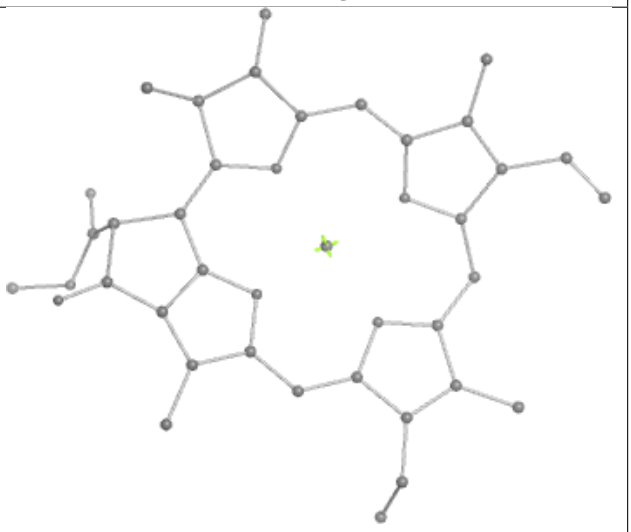
Bond lengths



Bond angles

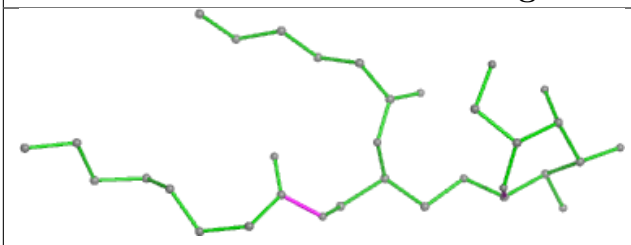


Torsions

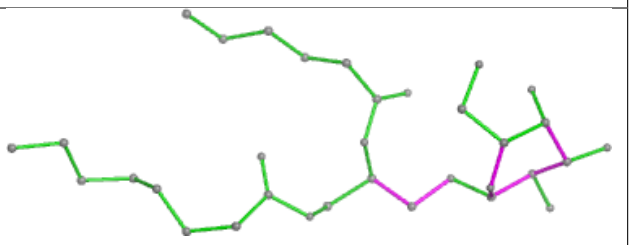


Rings

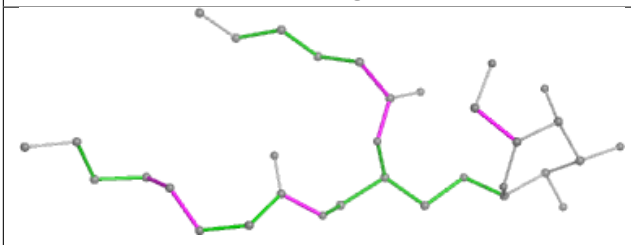
Ligand LMG H 401



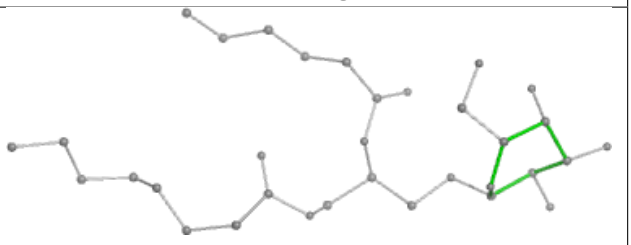
Bond lengths



Bond angles

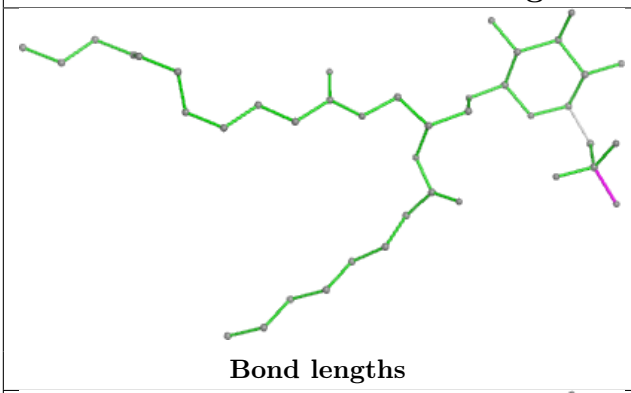


Torsions

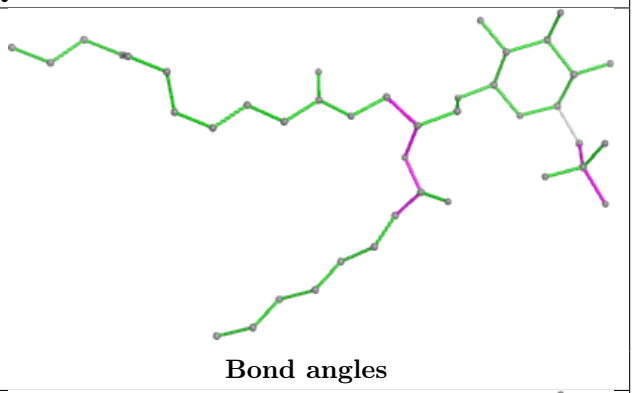


Rings

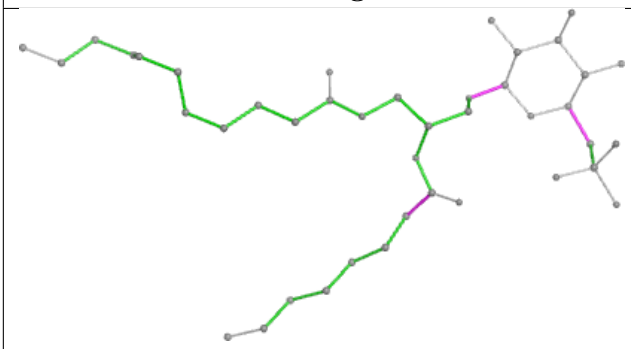
Ligand SQD F 801



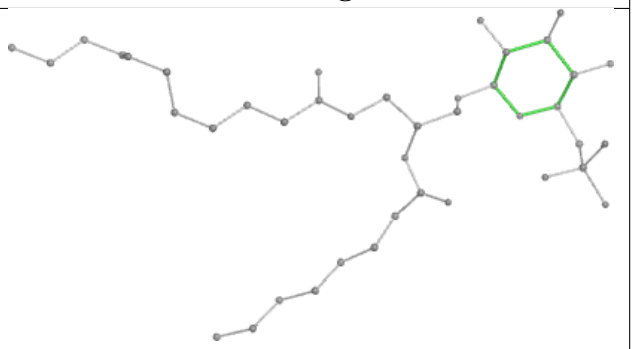
Bond lengths



Bond angles

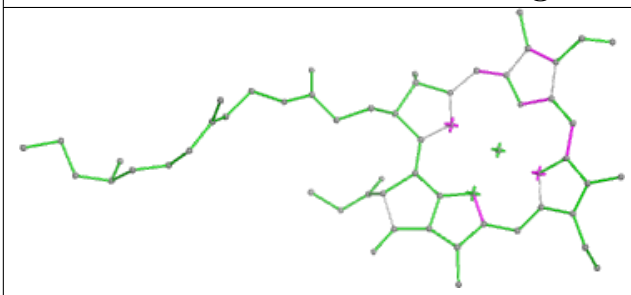


Torsions



Rings

Ligand CLA f 301



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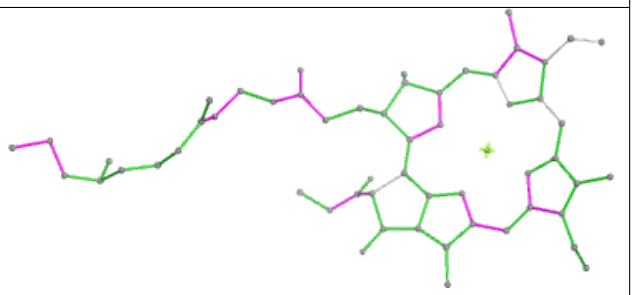
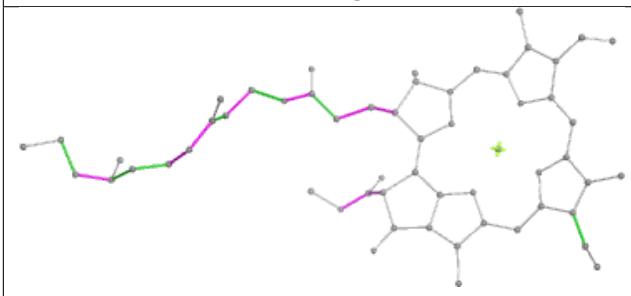
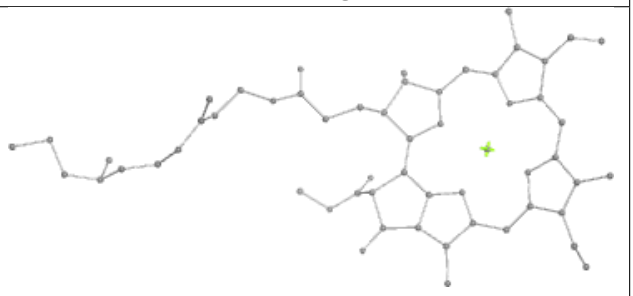


Bond angles

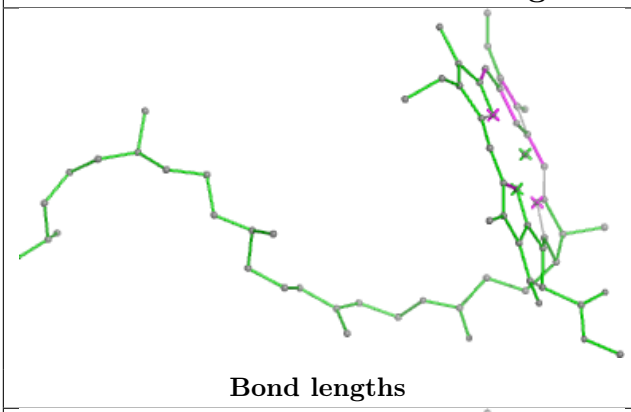


Torsions



Rings

Ligand CLA a 846



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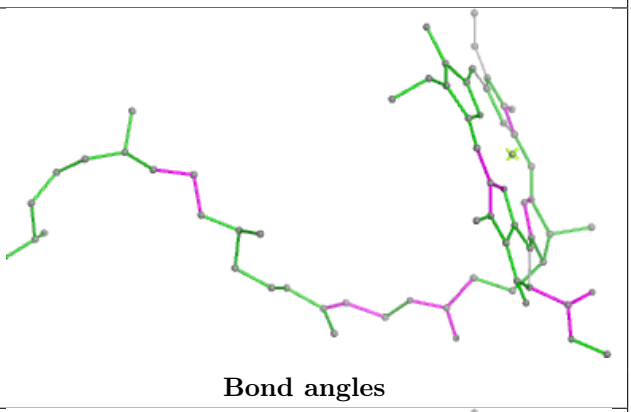
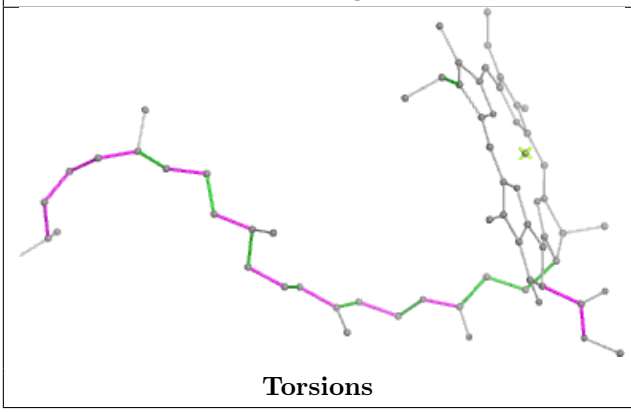
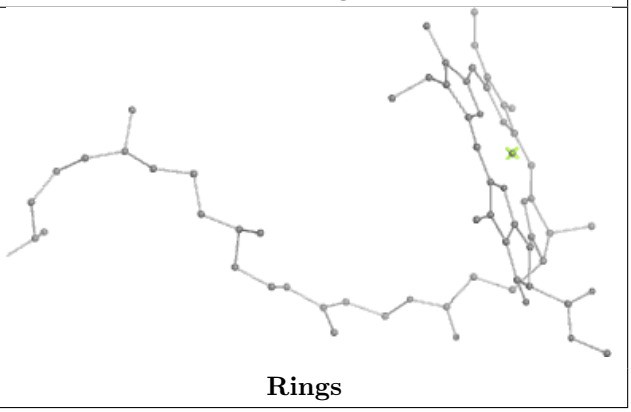


Bond angles

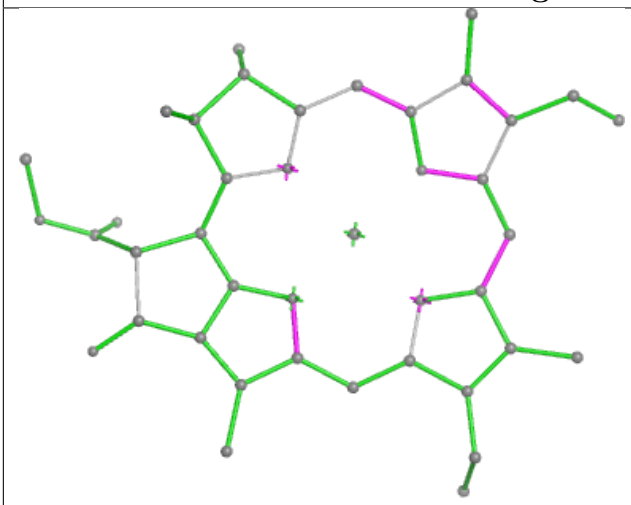


Torsions



Rings

Ligand CLA f 303



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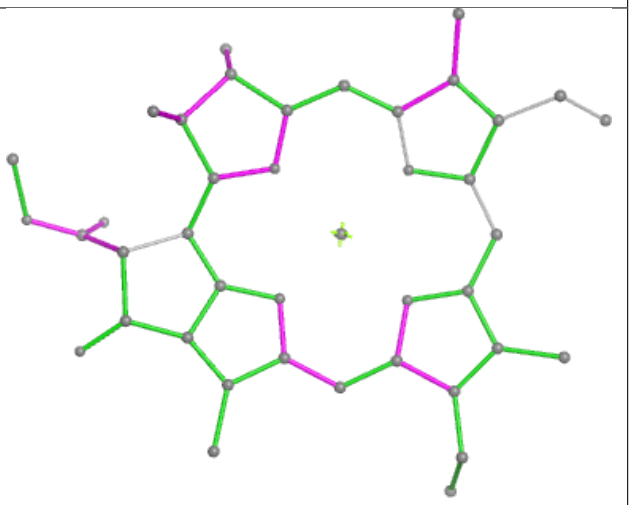
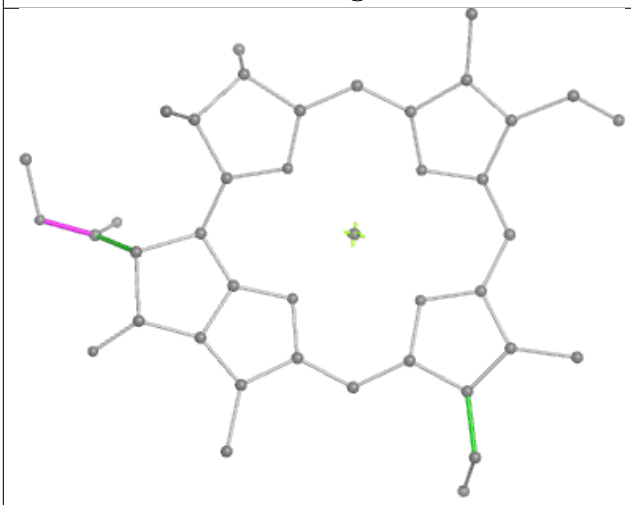


Bond angles



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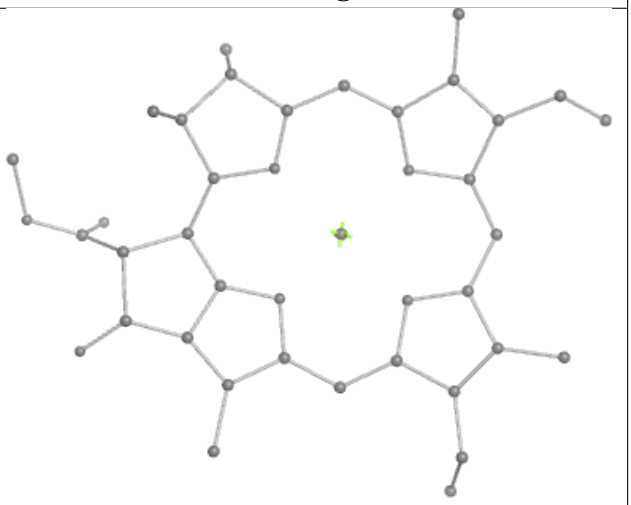
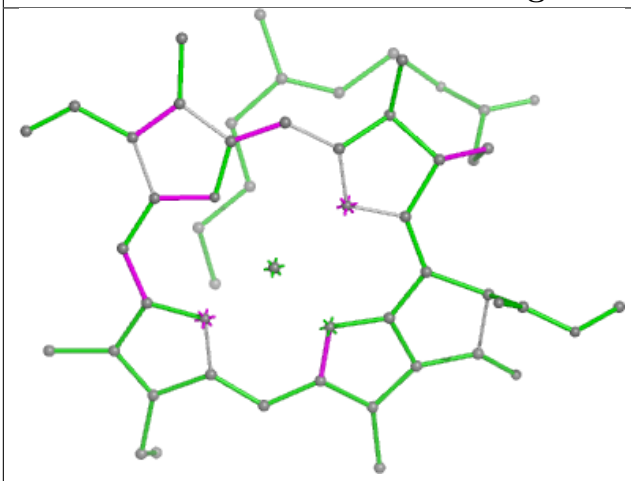
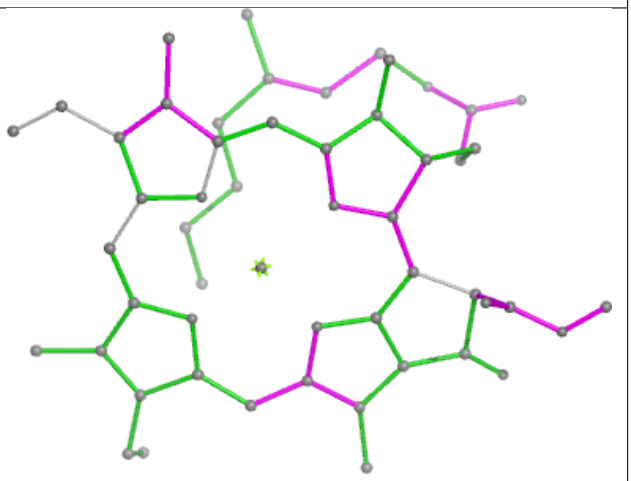


Rings

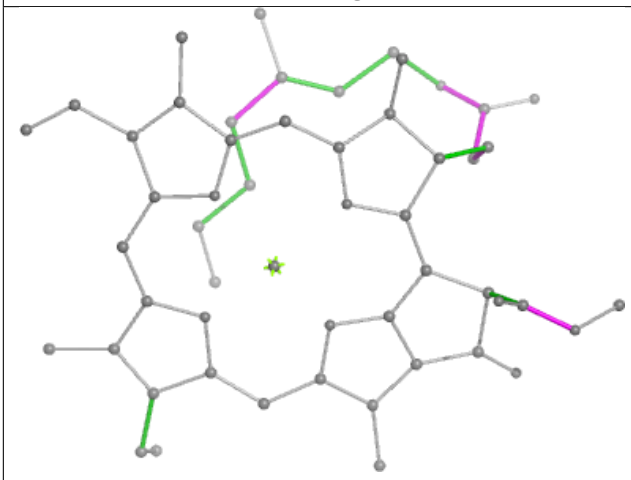
Ligand CLA x 313



Bond lengths



Bond angles



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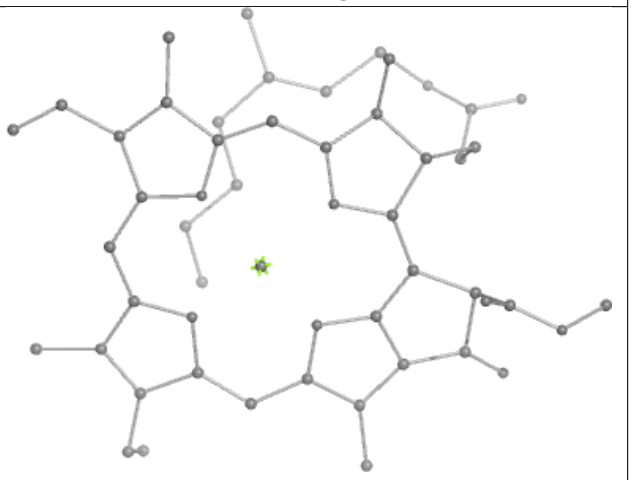
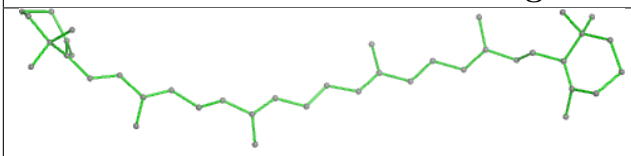
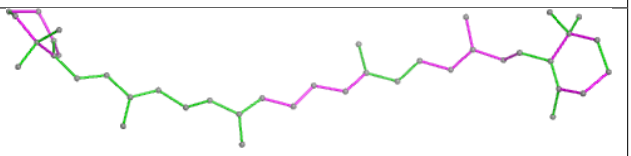


Rings

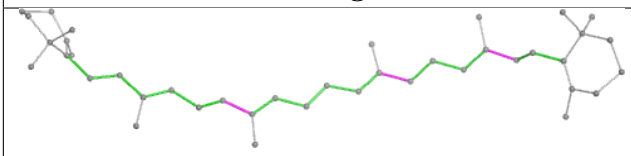
Ligand BCR b 831



Bond lengths



Bond angles



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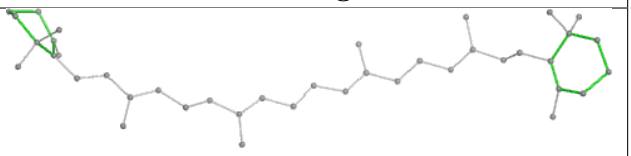
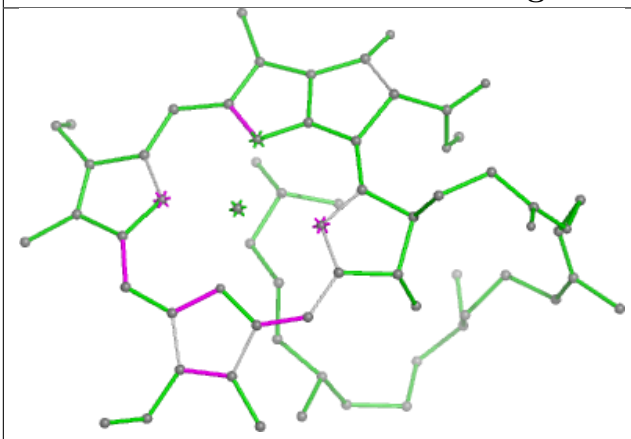
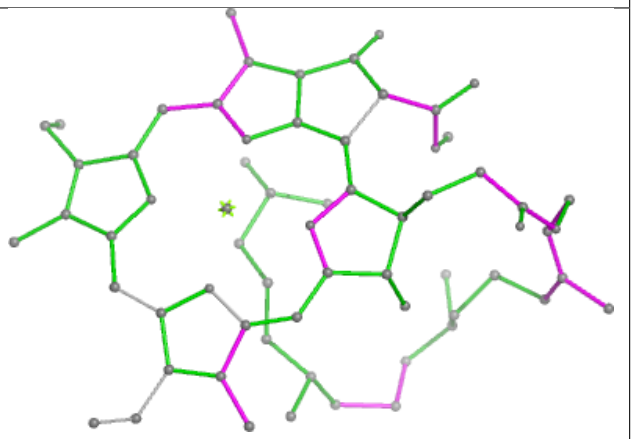


Rings

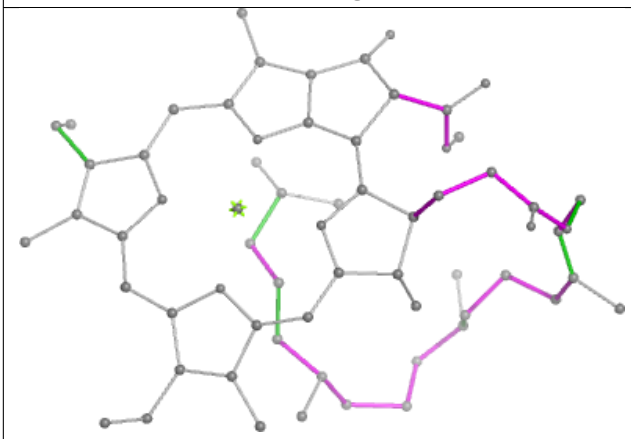
Ligand CLA b 805



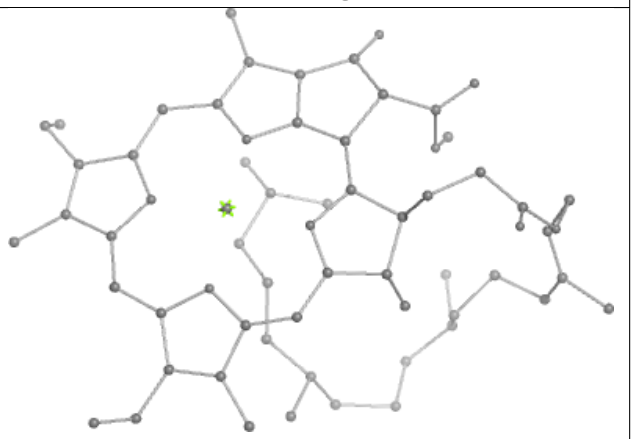
Bond lengths



Bond angles

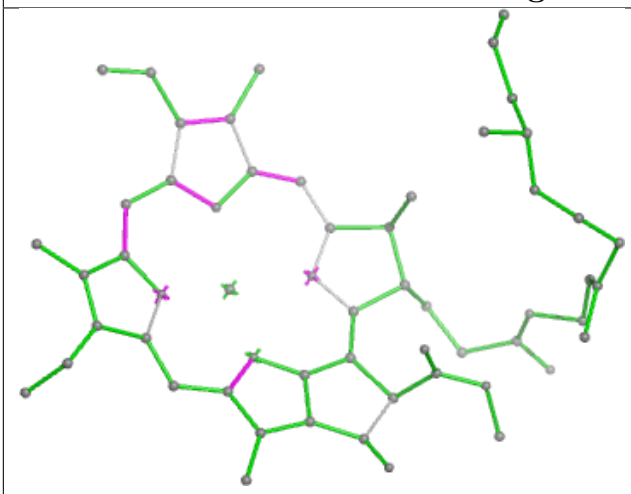


Torsions

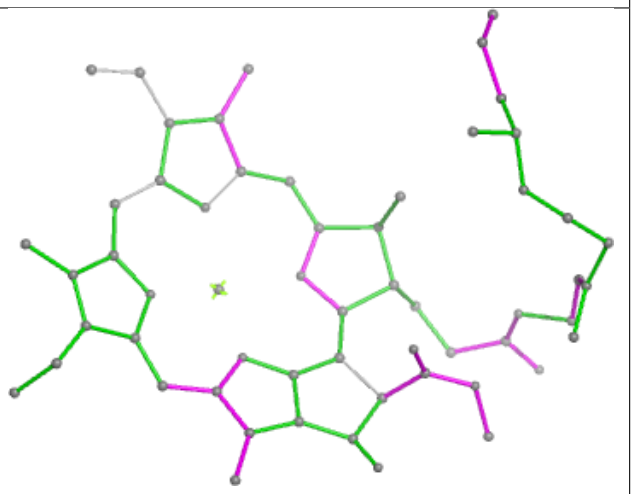


Rings

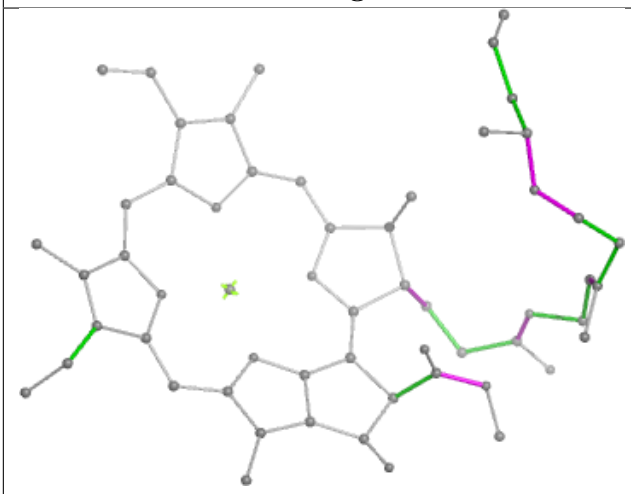
Ligand CLA x 303



Bond lengths



Bond angles



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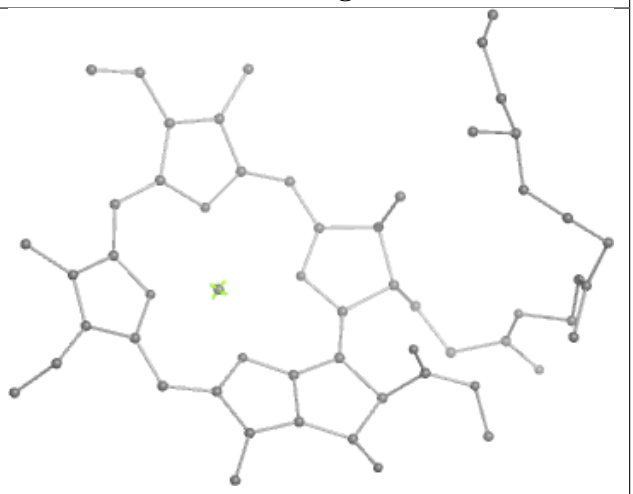
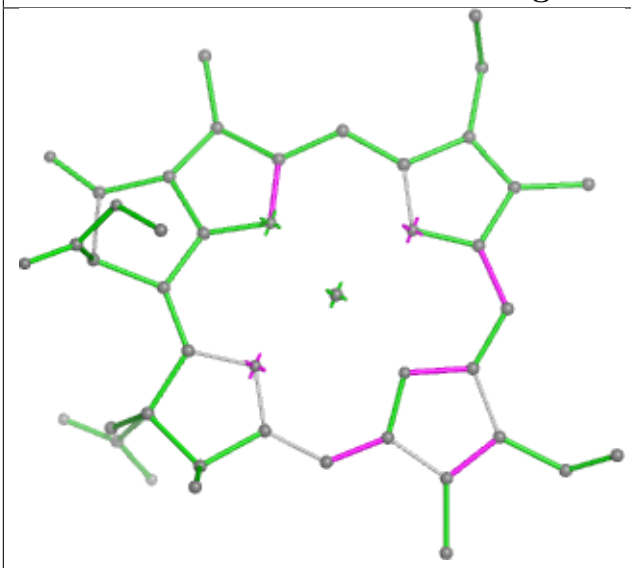


Rings

Ligand CLA l 301



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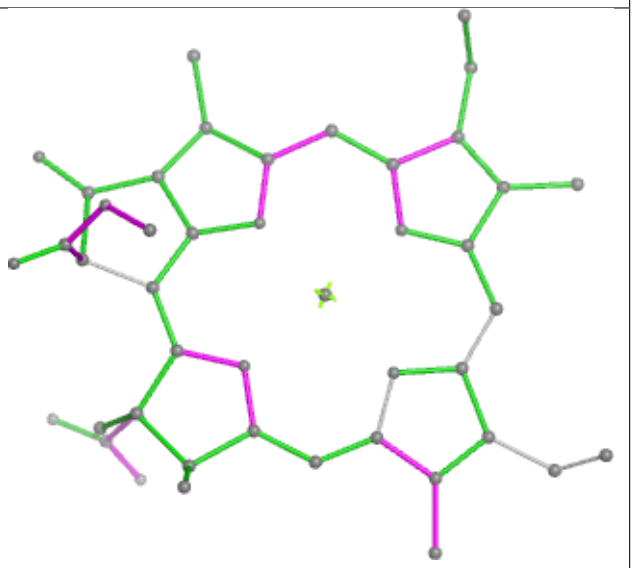
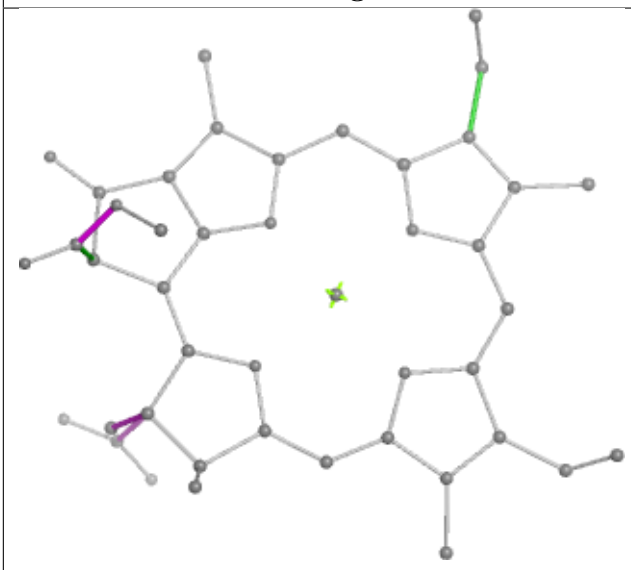
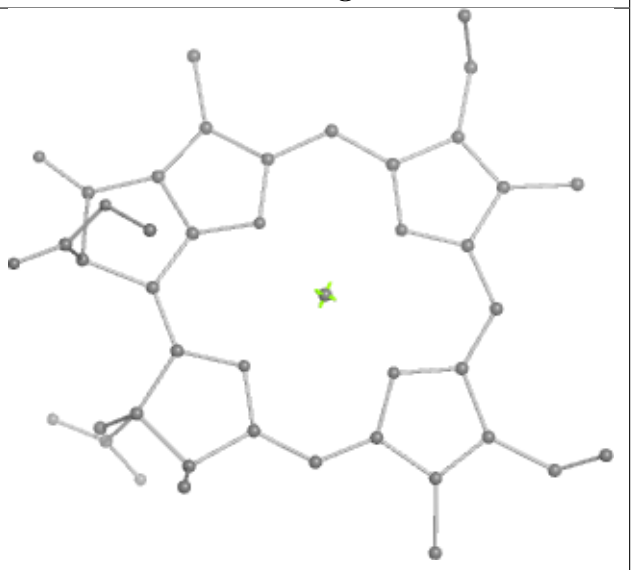


Bond angles

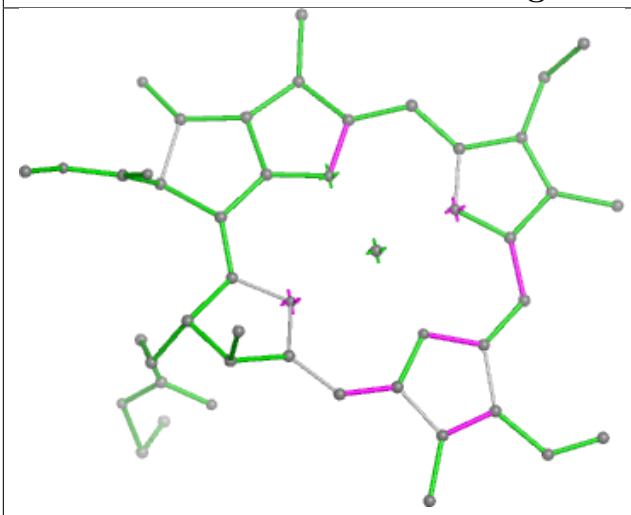


Torsions



Rings

Ligand CLA x 304



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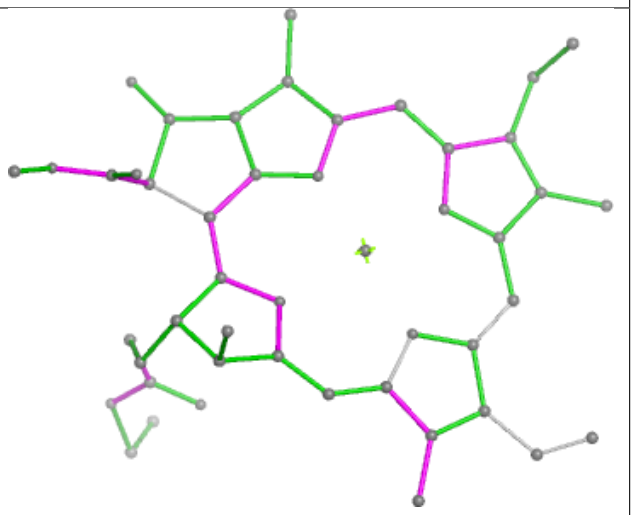
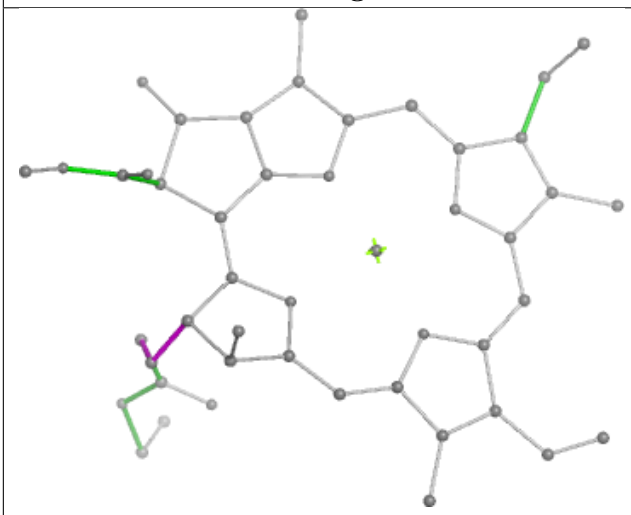
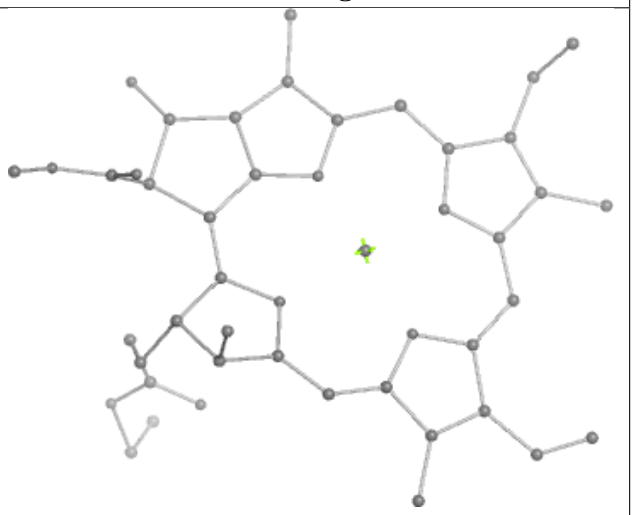


Bond angles

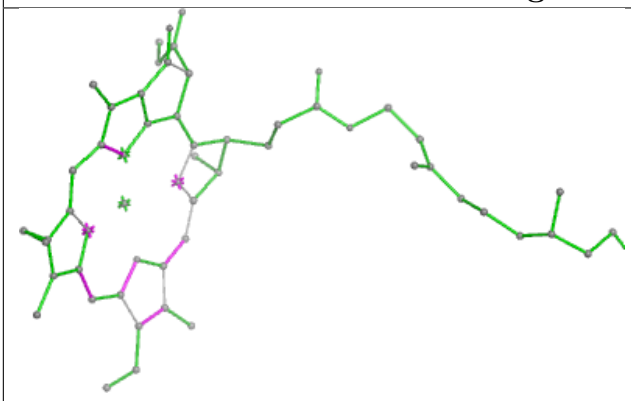


Torsions

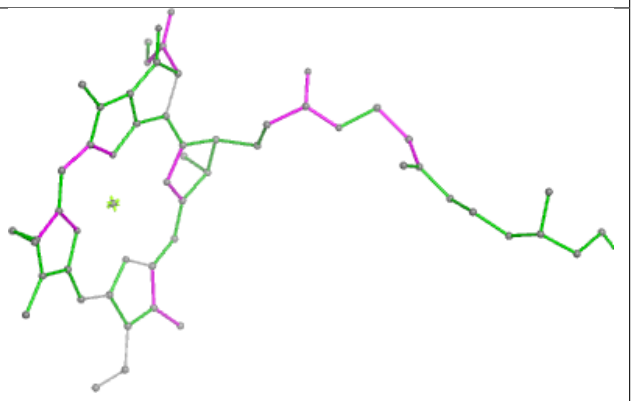


Rings

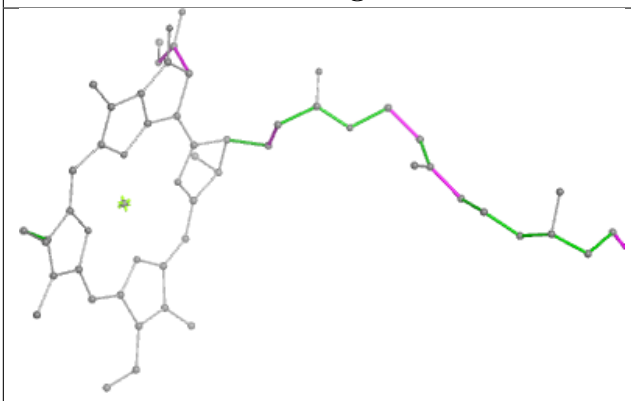
Ligand CLA b 822



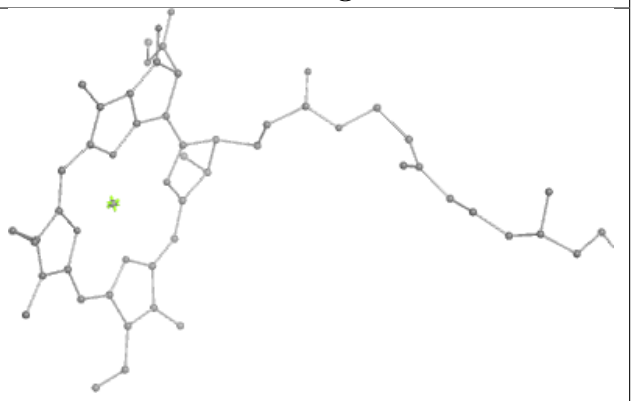
Bond lengths



Bond angles

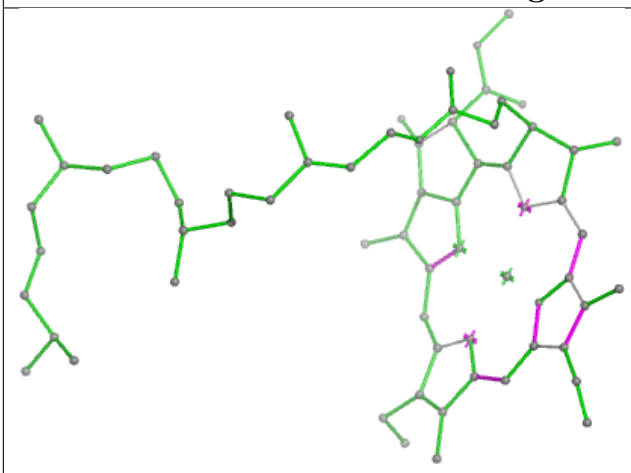


Torsions

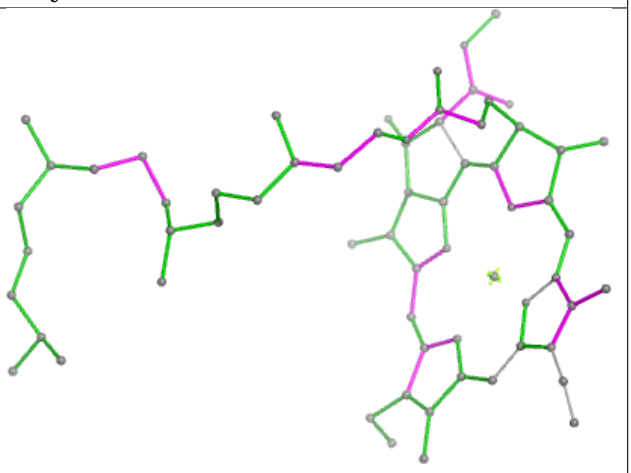


Rings

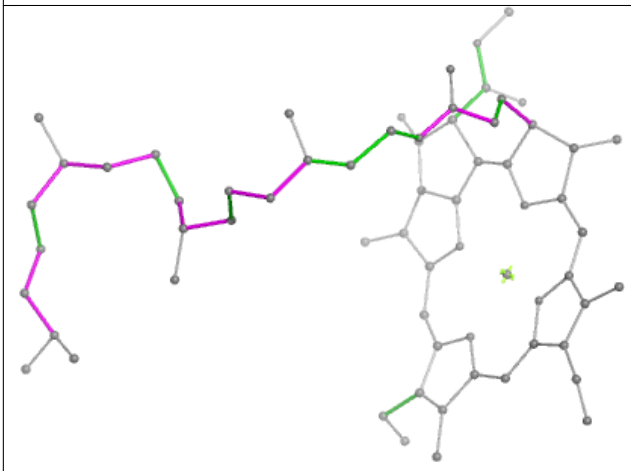
Ligand CLA y 313



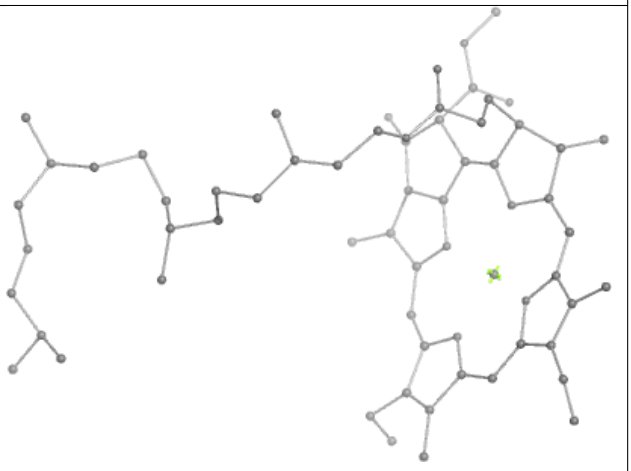
Bond lengths



Bond angles

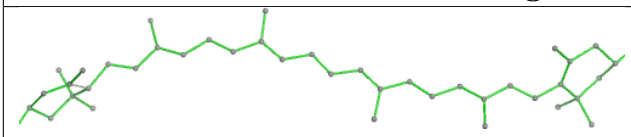


Torsions

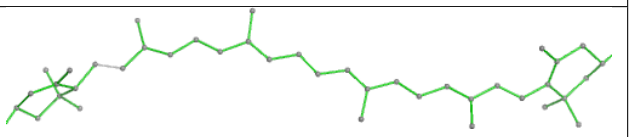


Rings

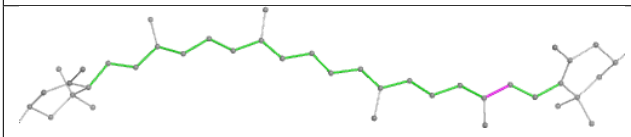
Ligand LUT w 320



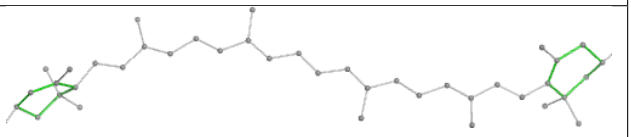
Bond lengths



Bond angles

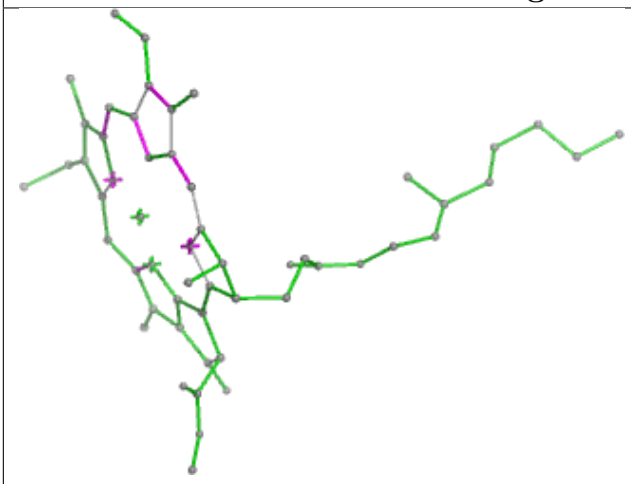


Torsions

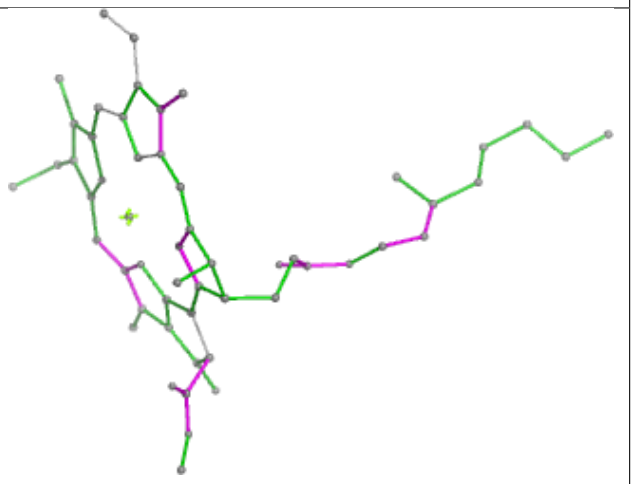


Rings

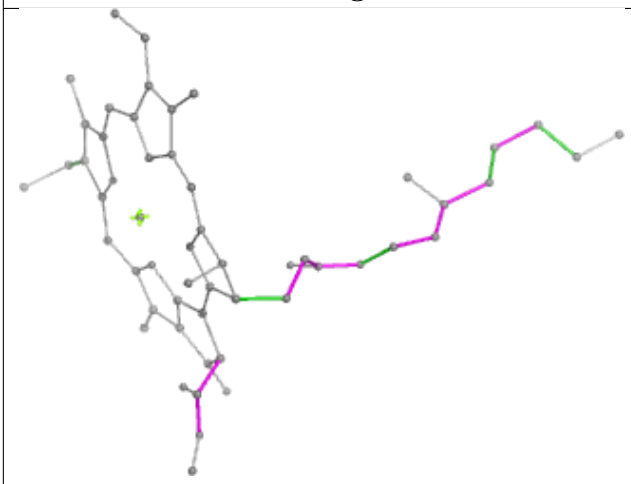
Ligand CLA b 832



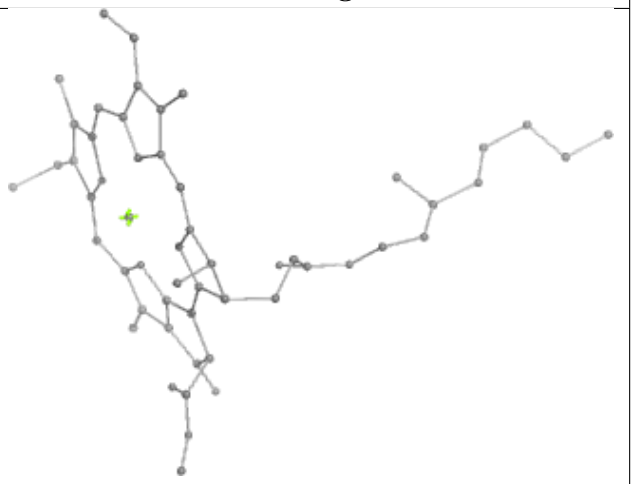
Bond lengths



Bond angles

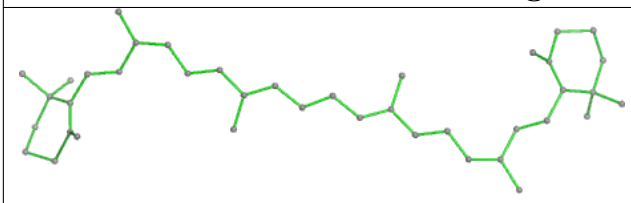


Torsions

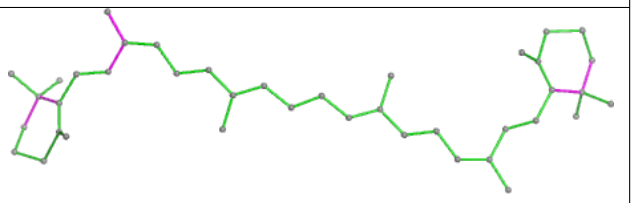


Rings

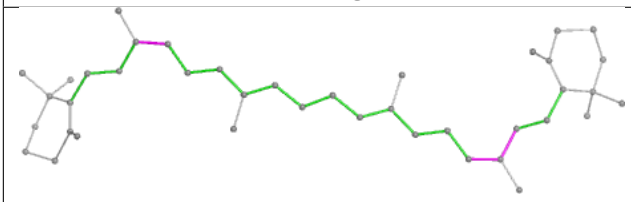
Ligand BCR b 818



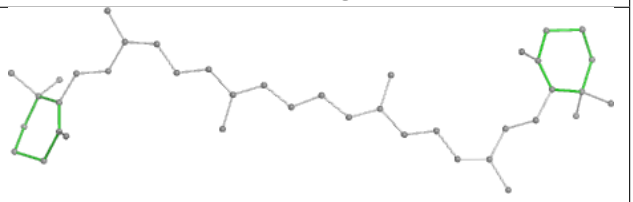
Bond lengths



Bond angles

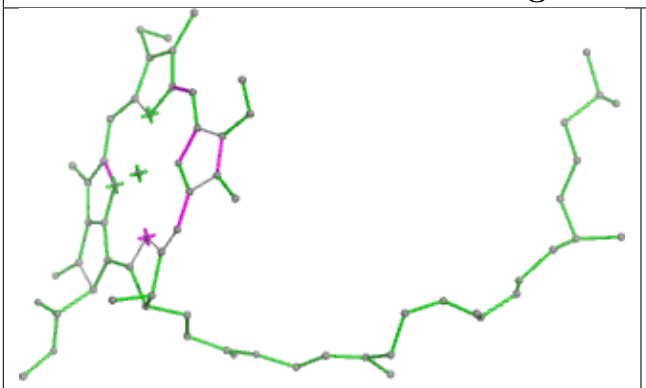


Torsions

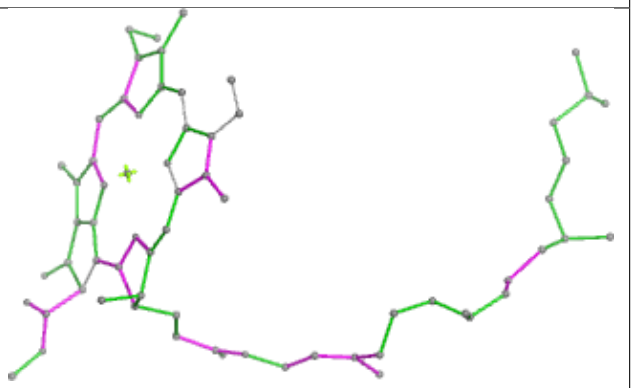


Rings

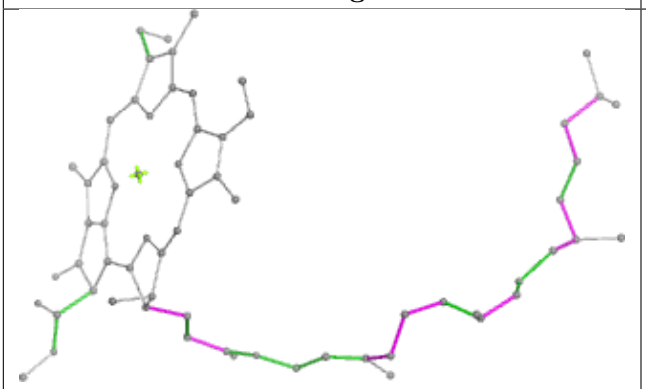
Ligand CLA a 850



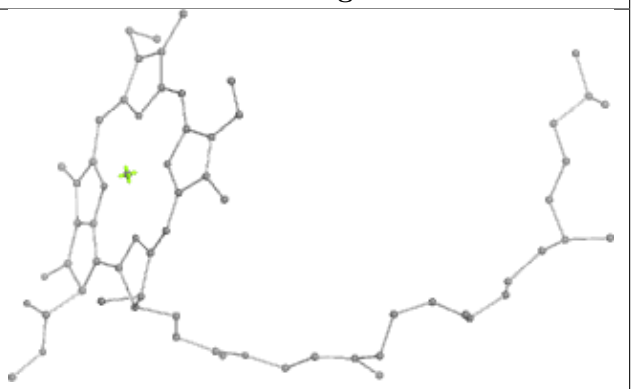
Bond lengths



Bond angles

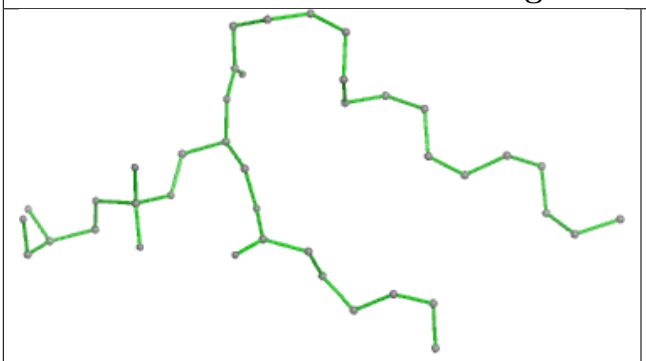


Torsions

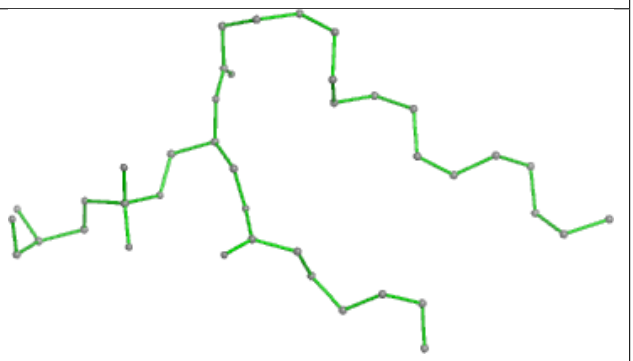


Rings

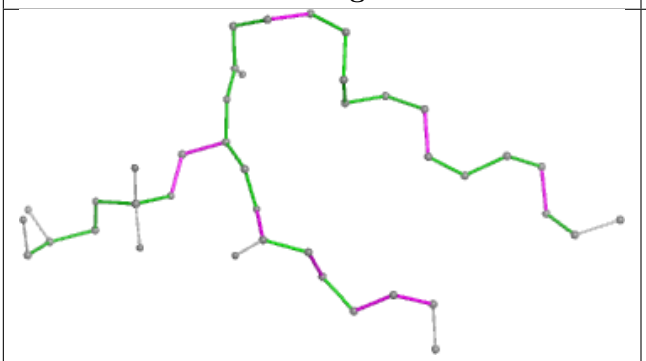
Ligand PGT L 201



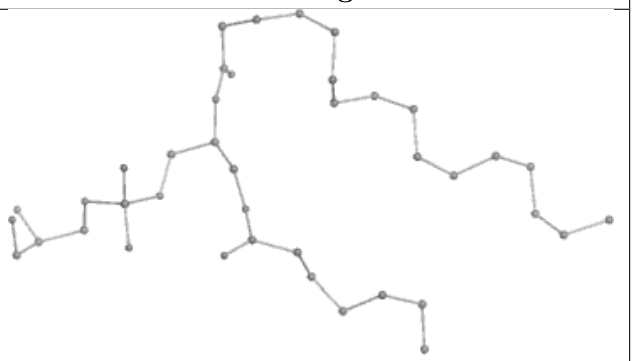
Bond lengths



Bond angles

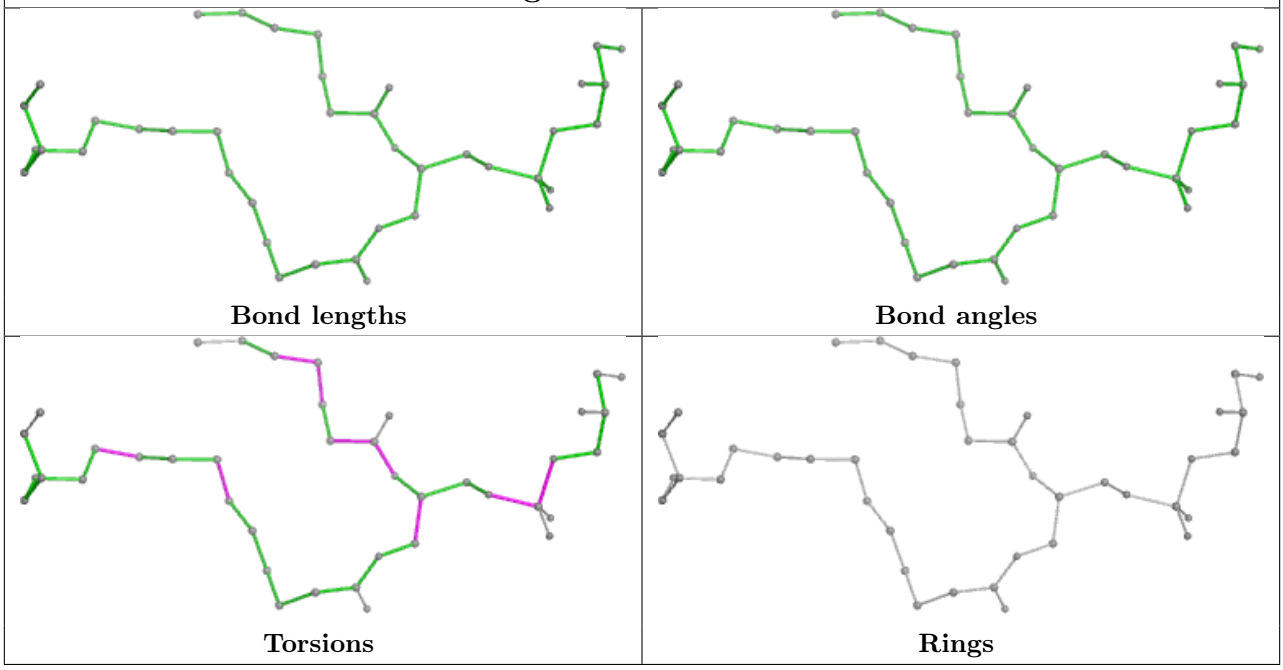


Torsions

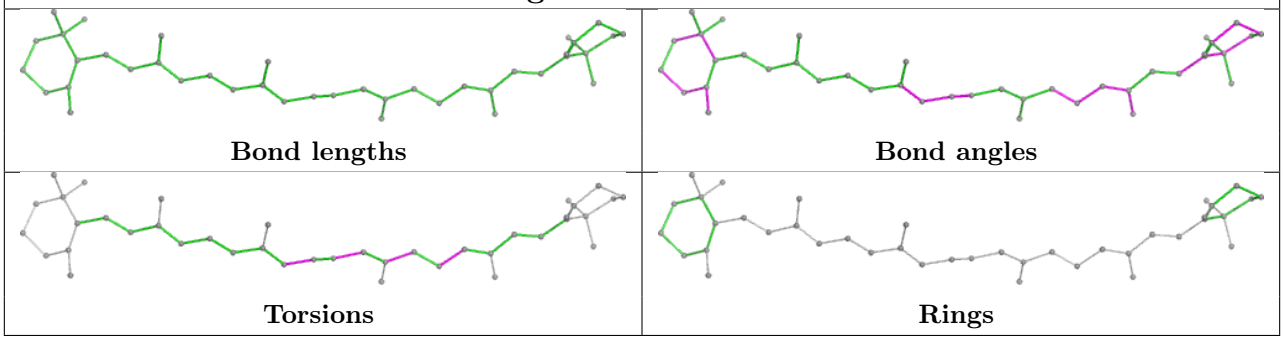


Rings

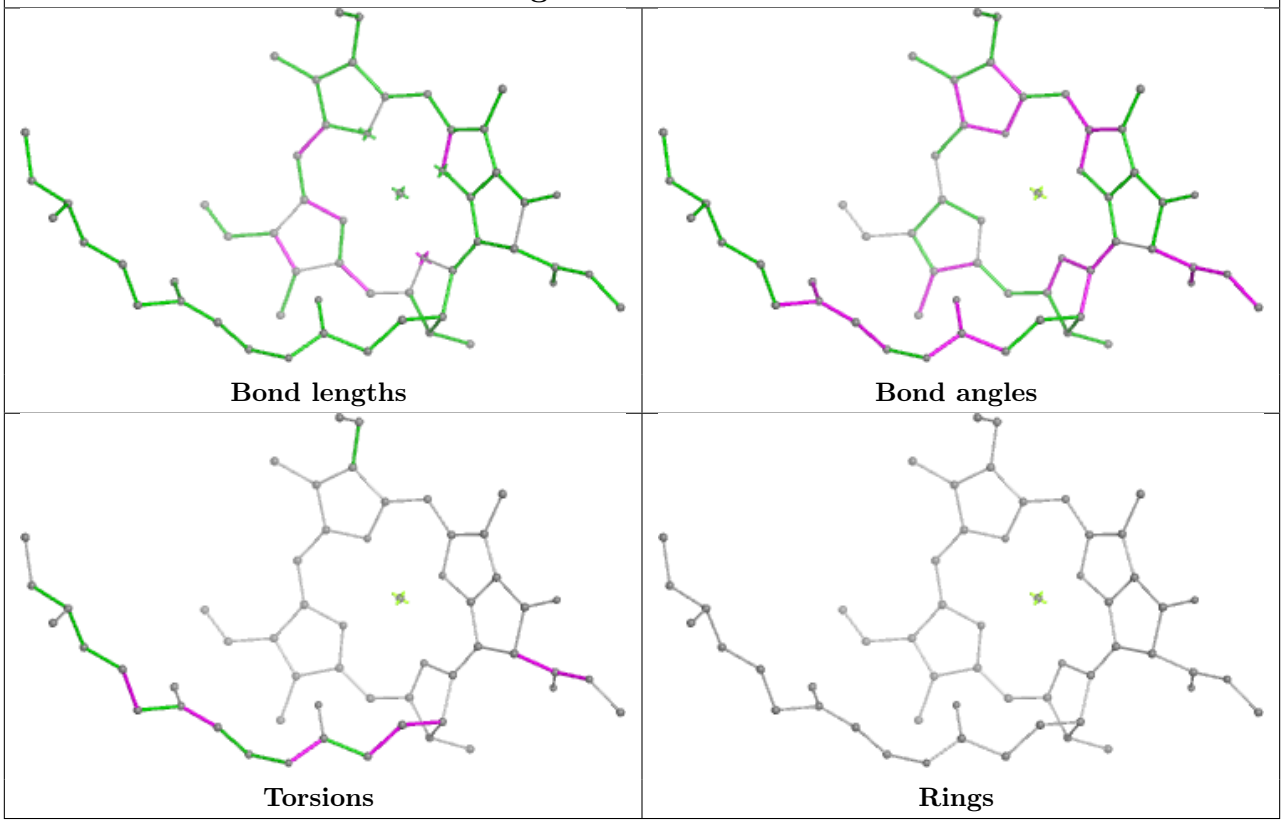
Ligand PGT w 313



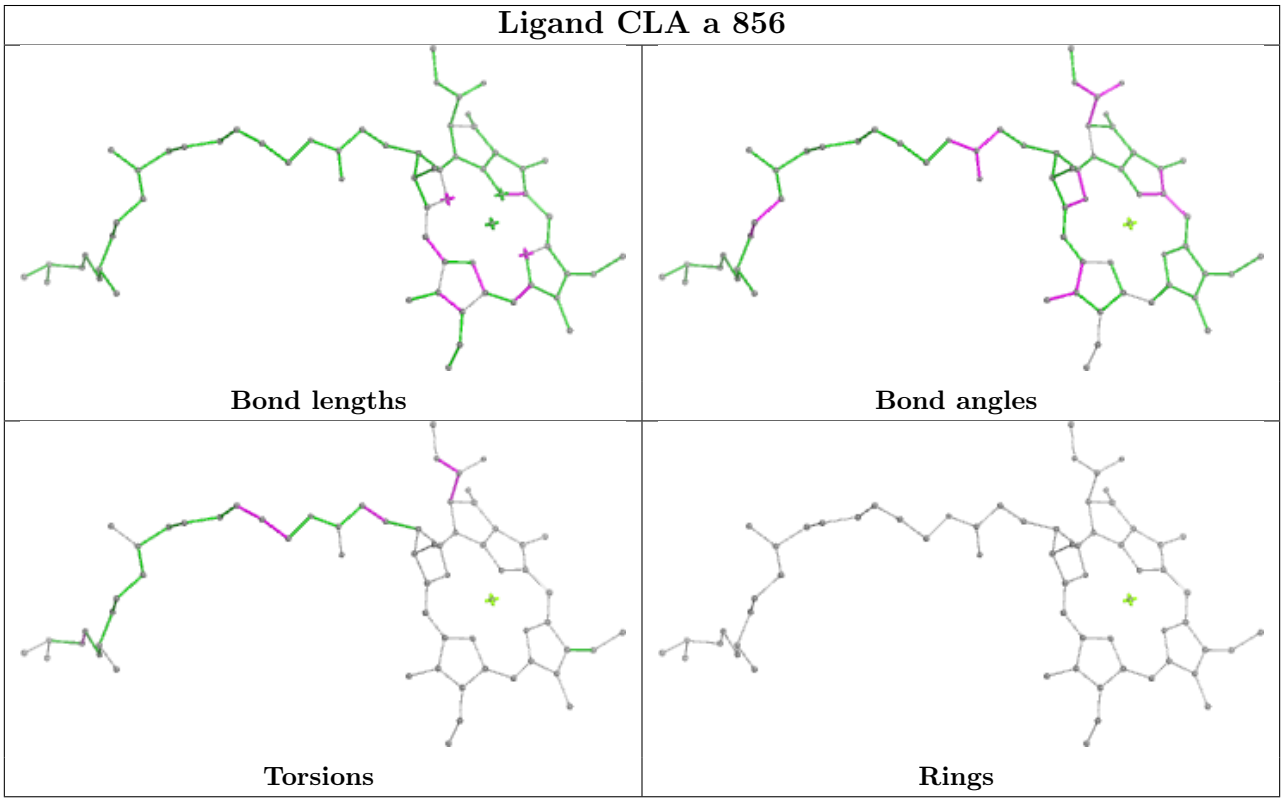
Ligand BCR k 201



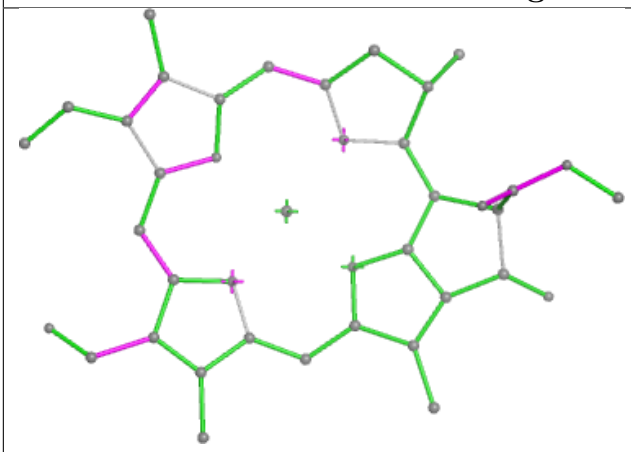
Ligand CLA z 306



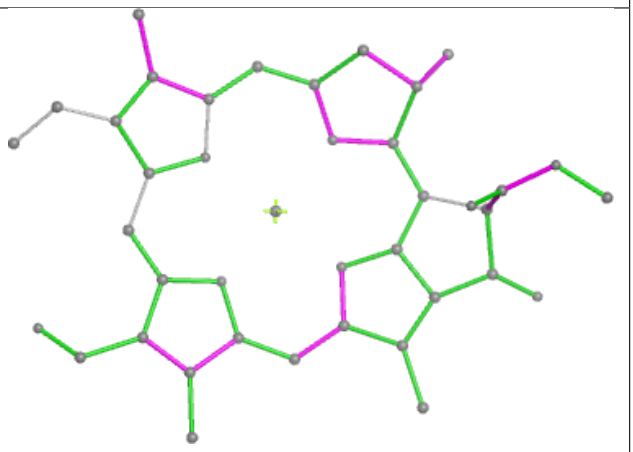
Ligand CLA a 856



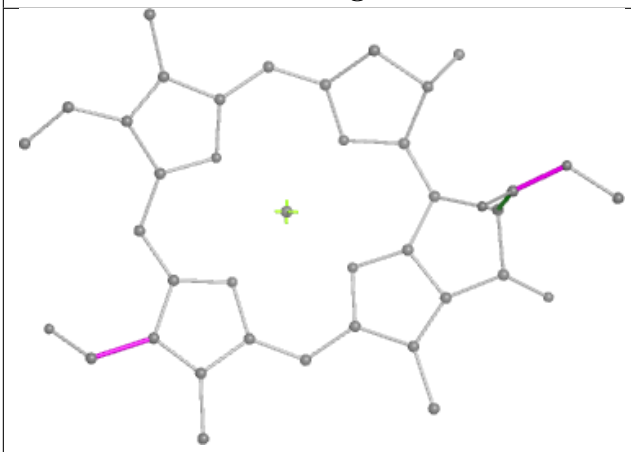
Ligand CHL x 311



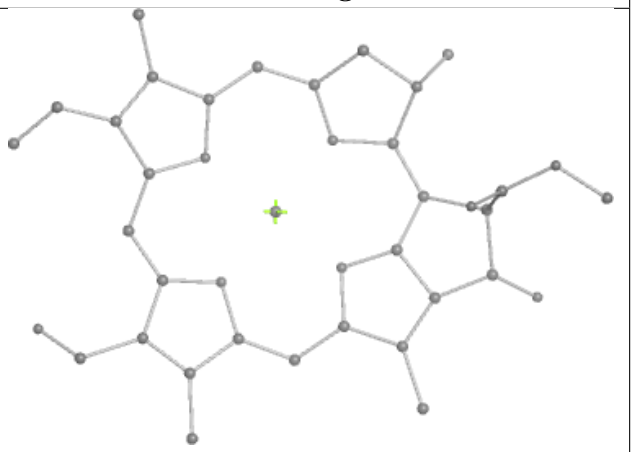
Bond lengths



Bond angles

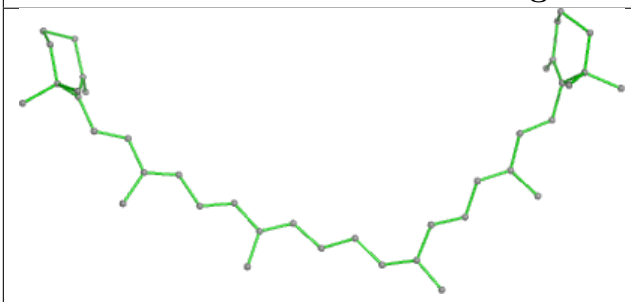


Torsions

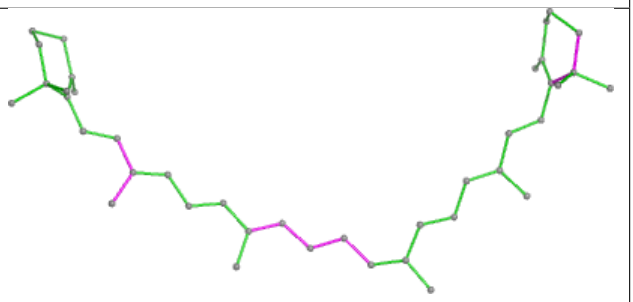


Rings

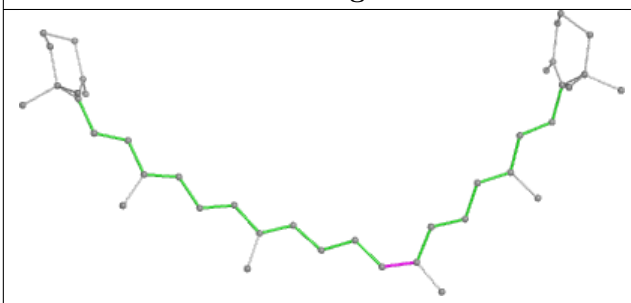
Ligand BCR f 304



Bond lengths



Bond angles



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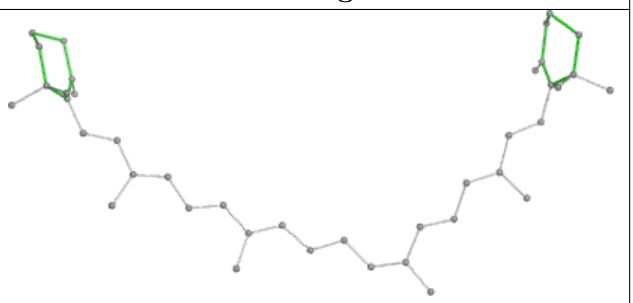
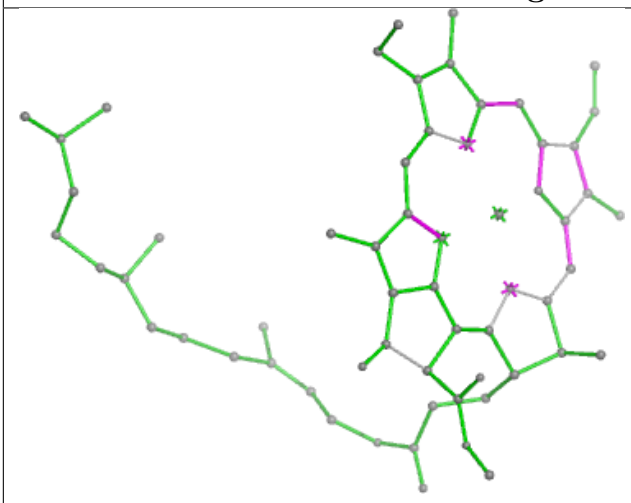
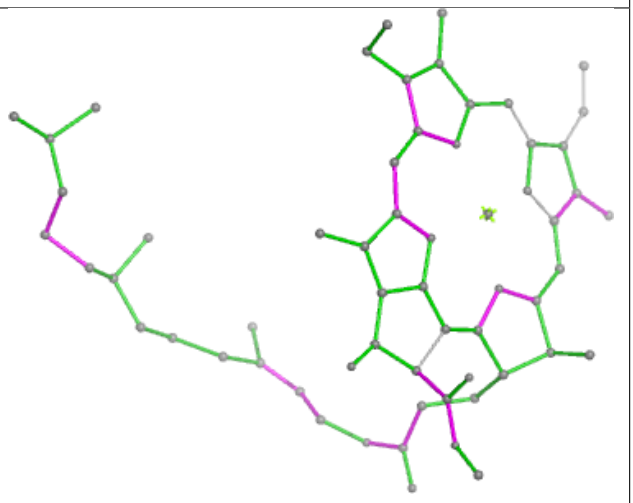


Rings

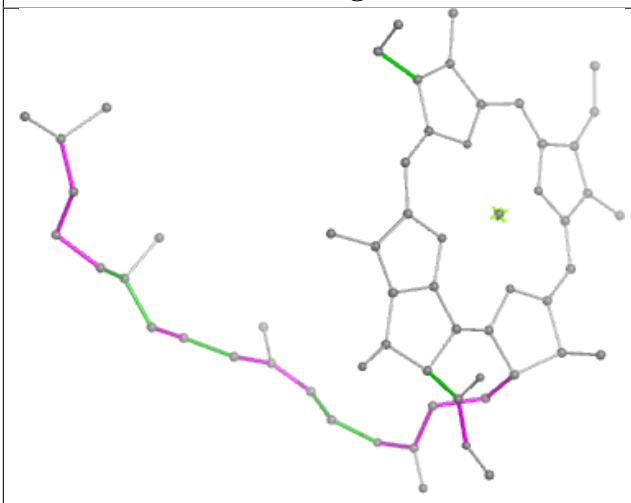
Ligand CLA b 828



Bond lengths



Bond angles



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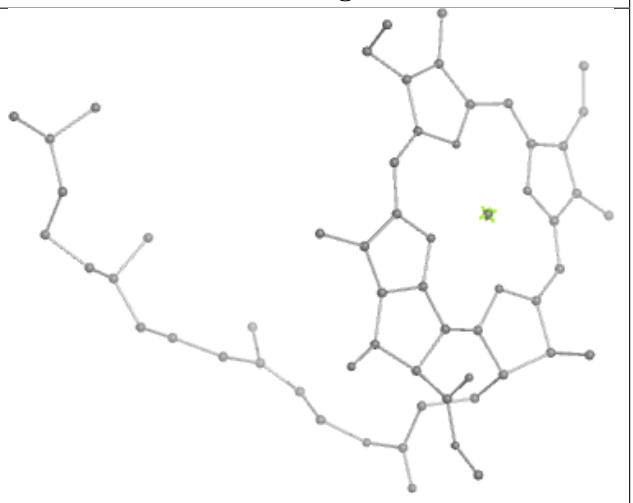
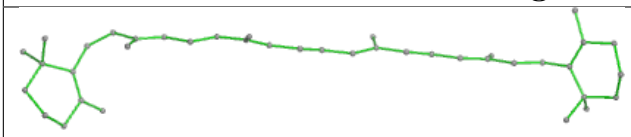
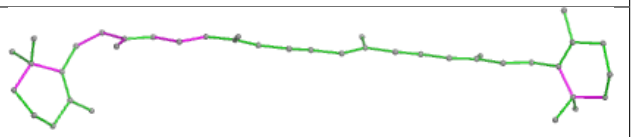


Rings

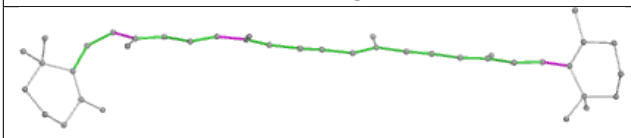
Ligand BCR l 303



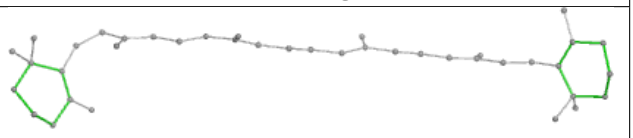
Bond lengths



Bond angles

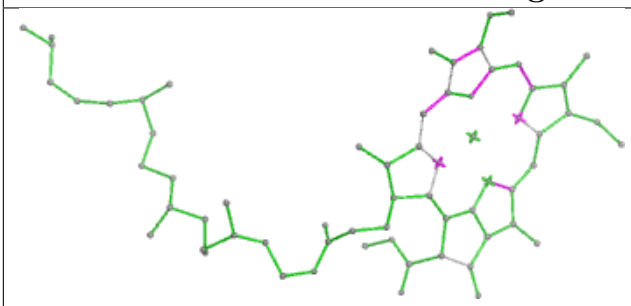


Torsions



Rings

Ligand CLA y 314



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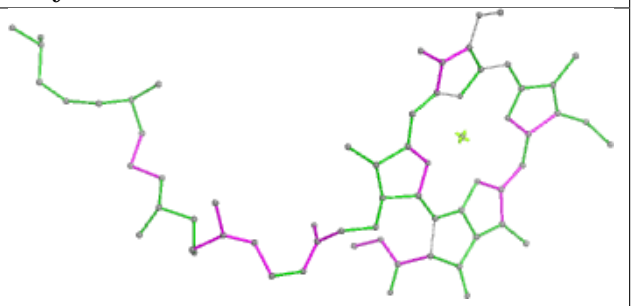
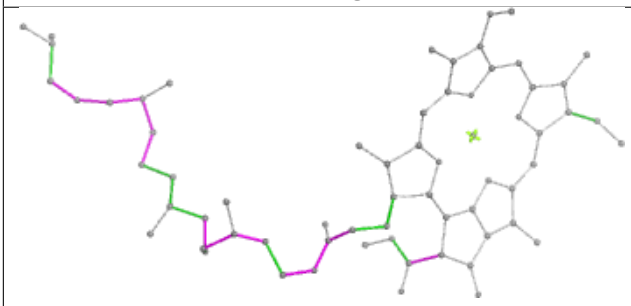


Bond angles



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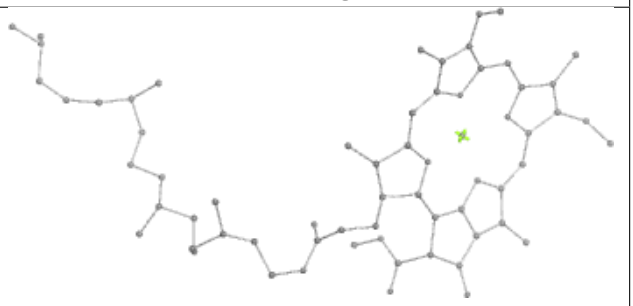
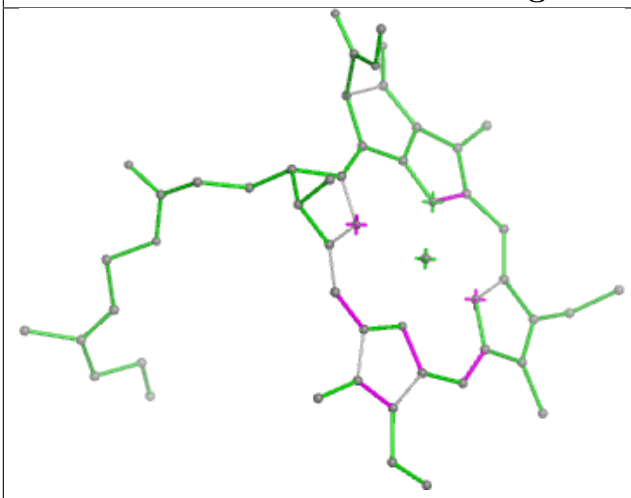


Rings

Ligand CLA a 813



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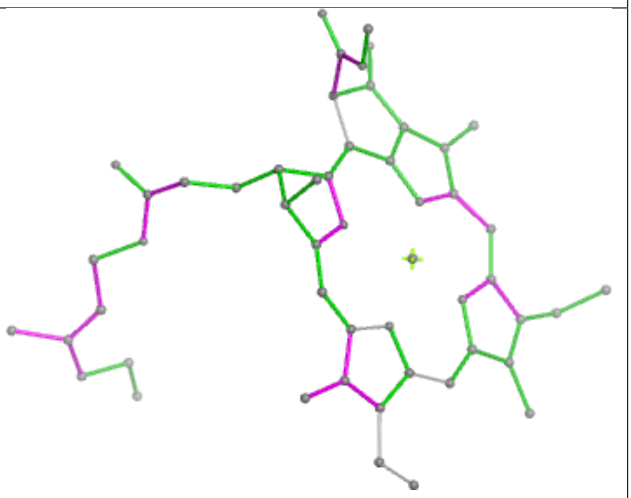
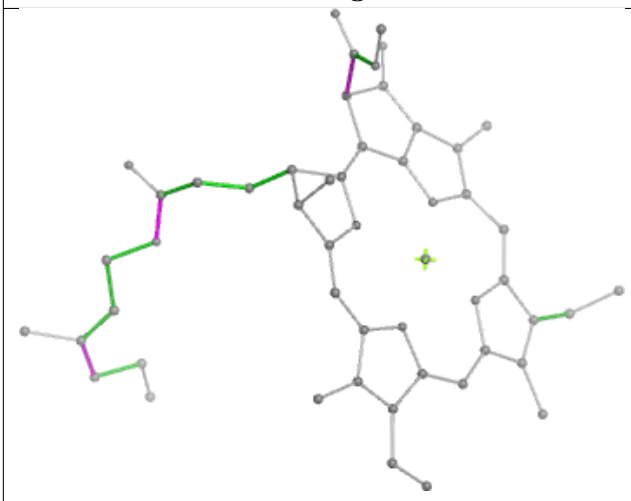


Bond angles



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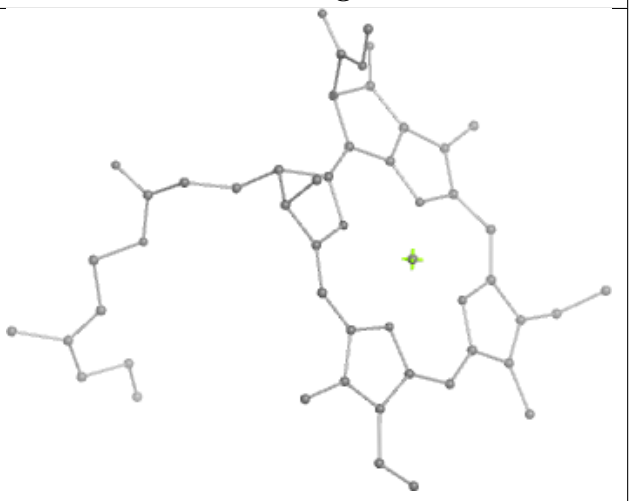
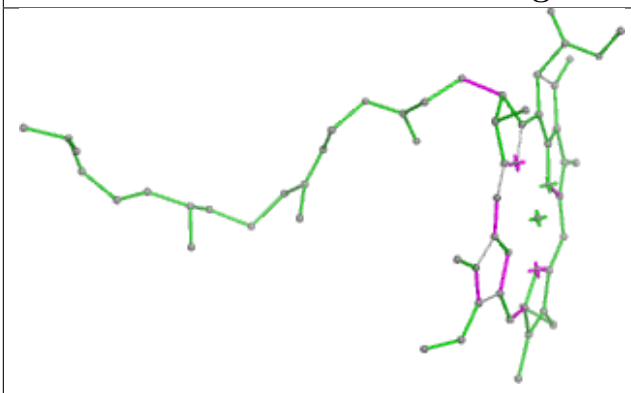


Rings

Ligand CLA l 306



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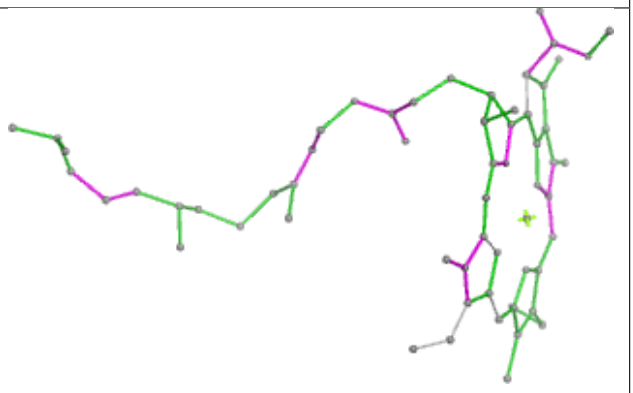
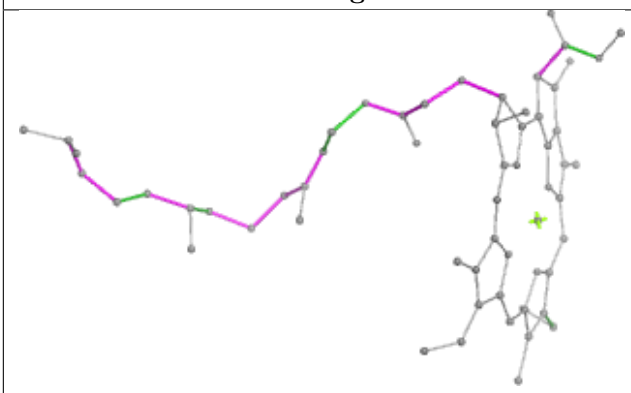
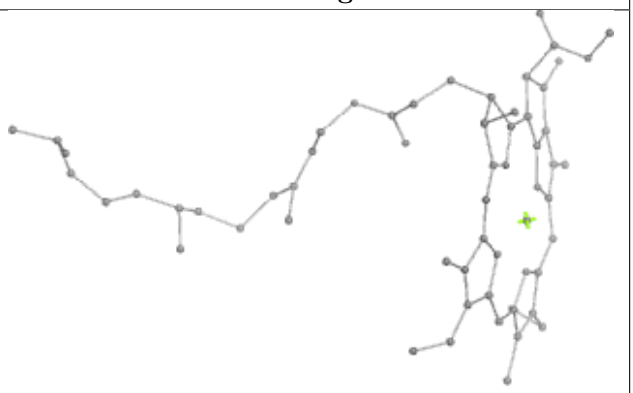


Bond angles

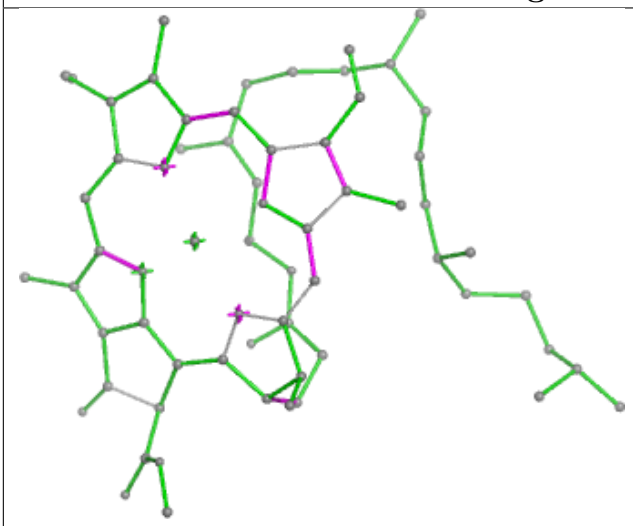


Torsions

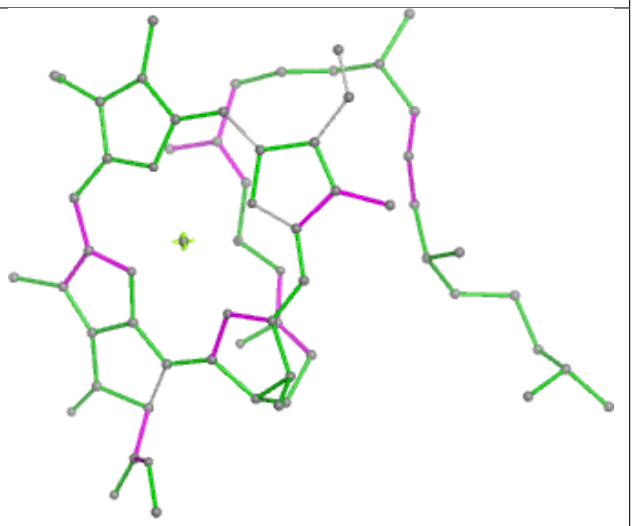


Rings

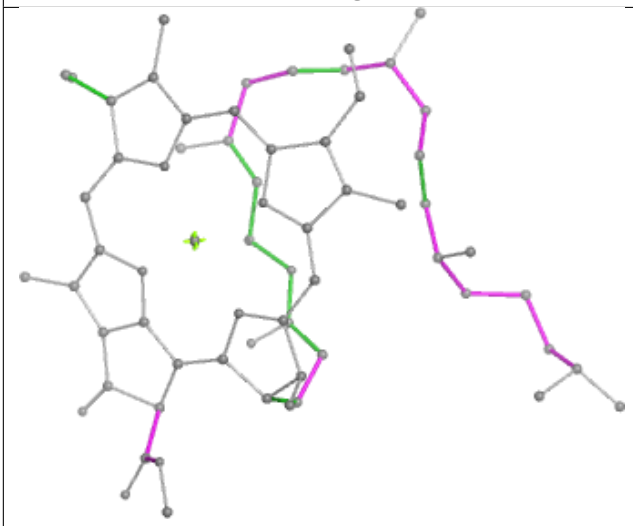
Ligand CLA b 843



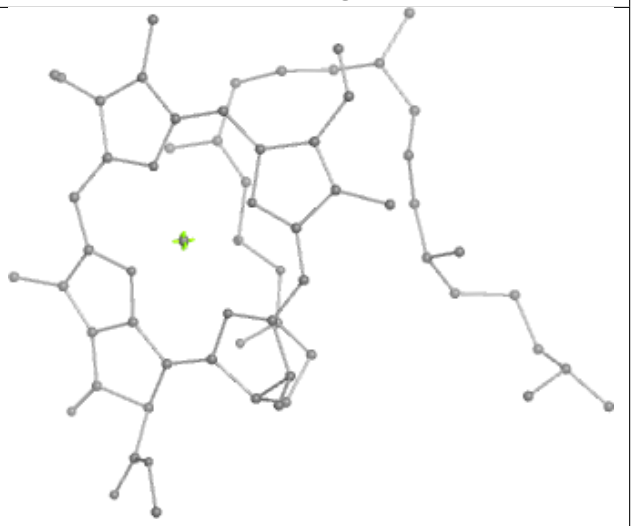
Bond lengths



Bond angles

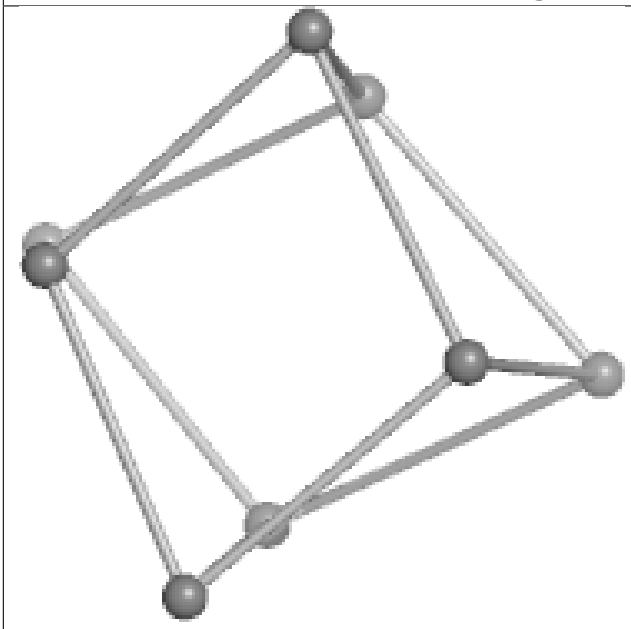


Torsions

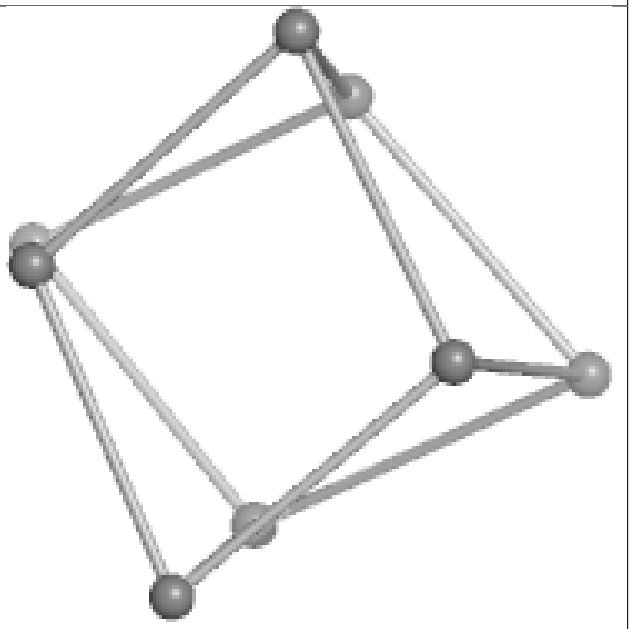


Rings

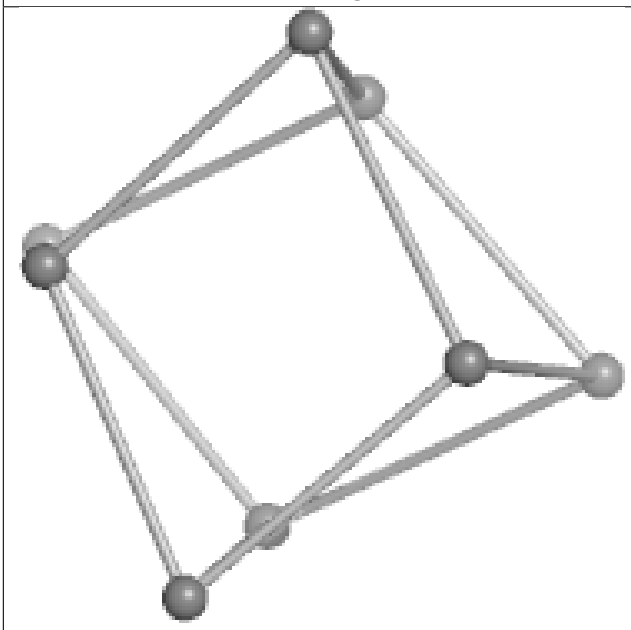
Ligand SF4 K 301



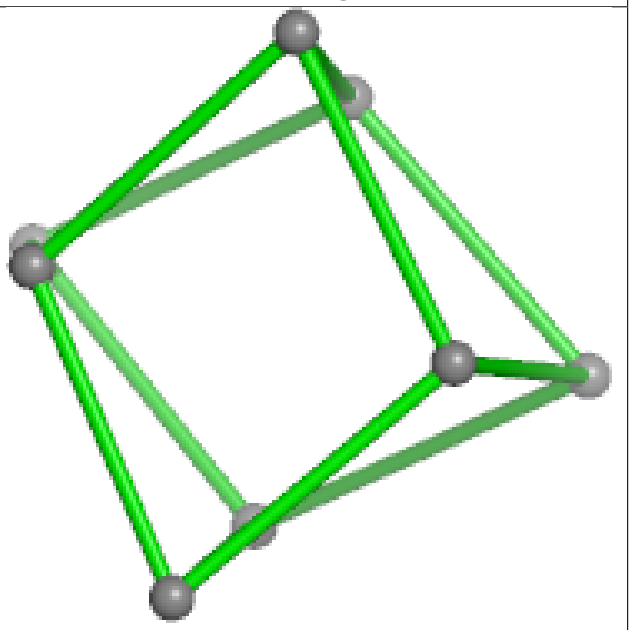
Bond lengths



Bond angles

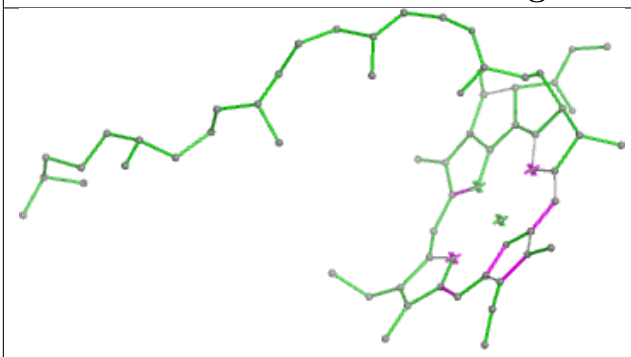


Torsions

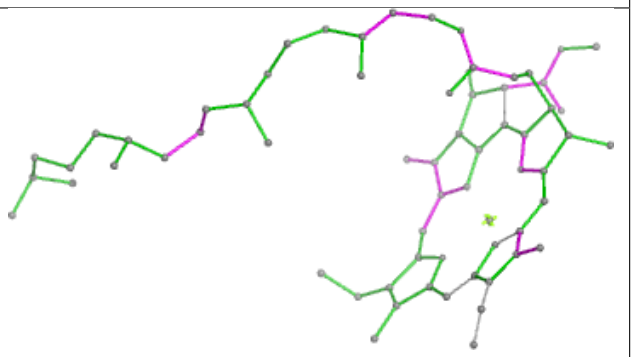


Rings

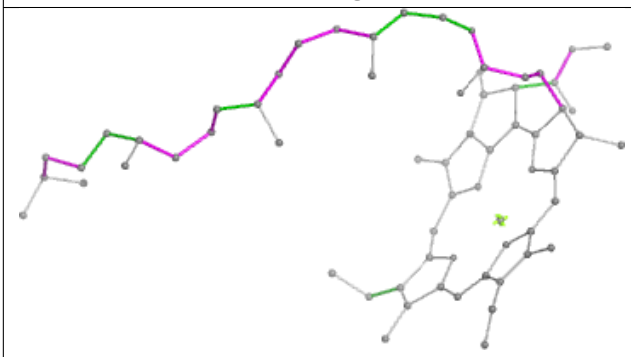
Ligand CLA a 811



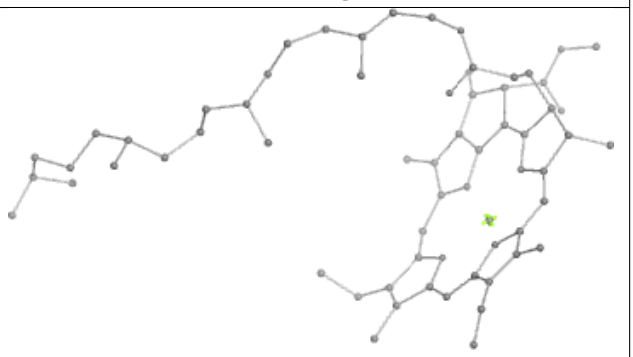
Bond lengths



Bond angles

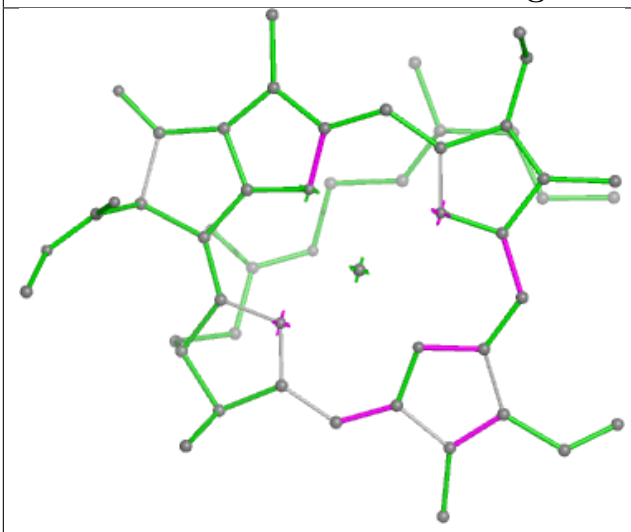


Torsions

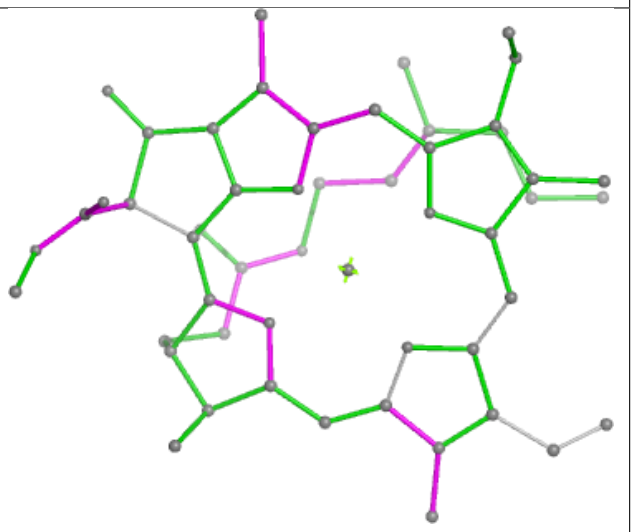


Rings

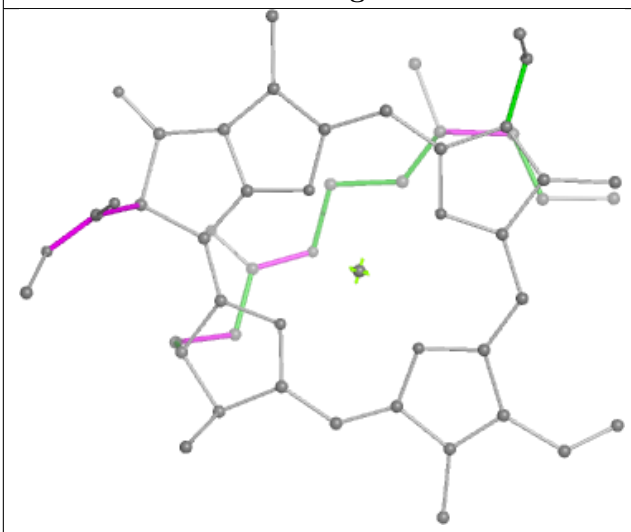
Ligand CLA b 806



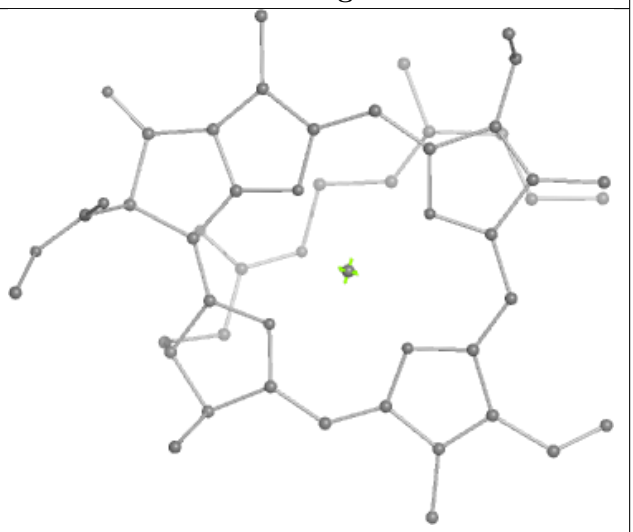
Bond lengths



Bond angles

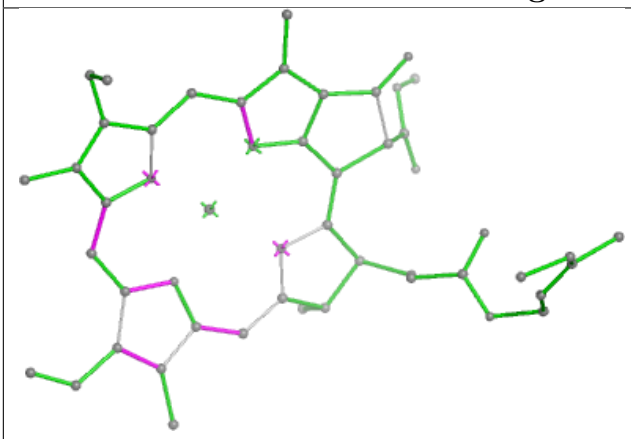


Torsions

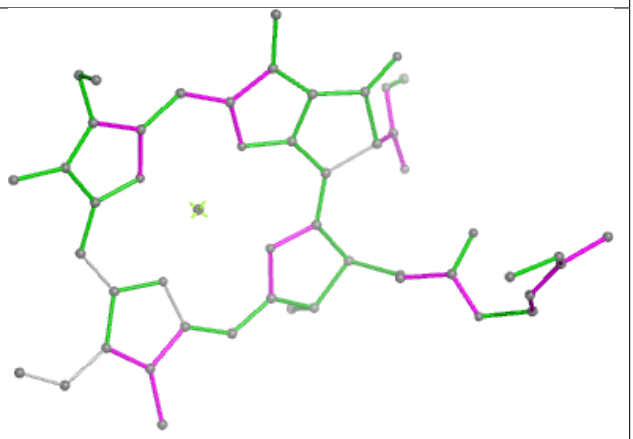


Rings

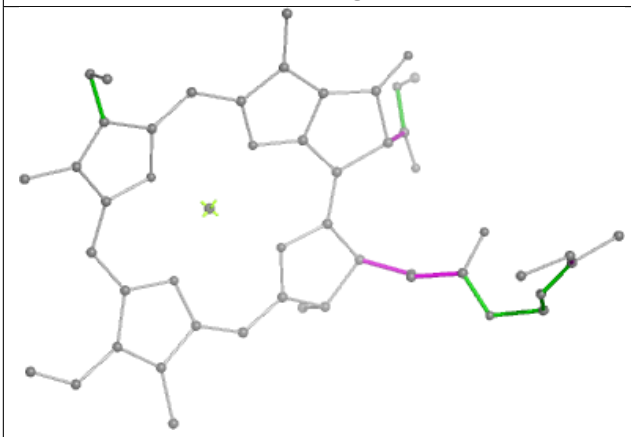
Ligand CLA a 852



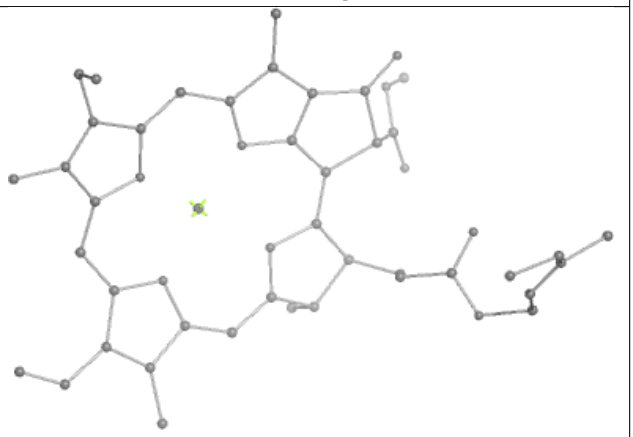
Bond lengths



Bond angles

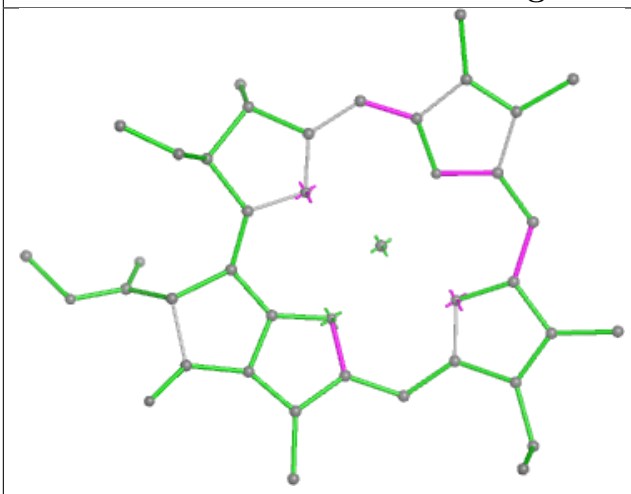


Torsions



Rings

Ligand CLA y 307



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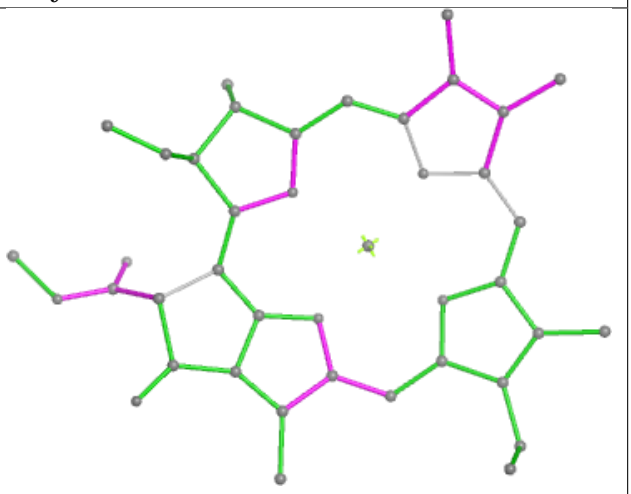
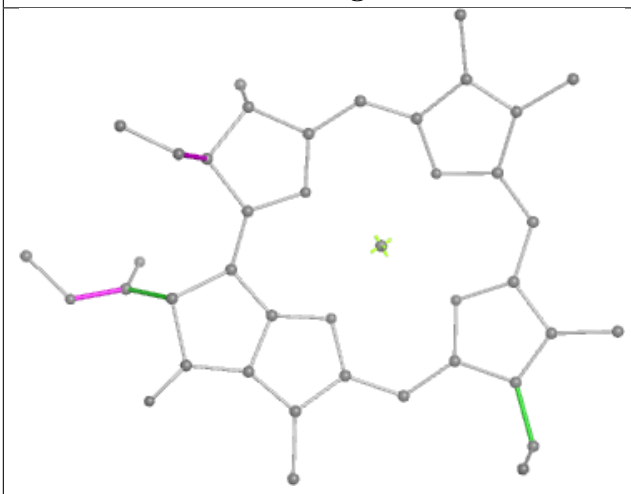
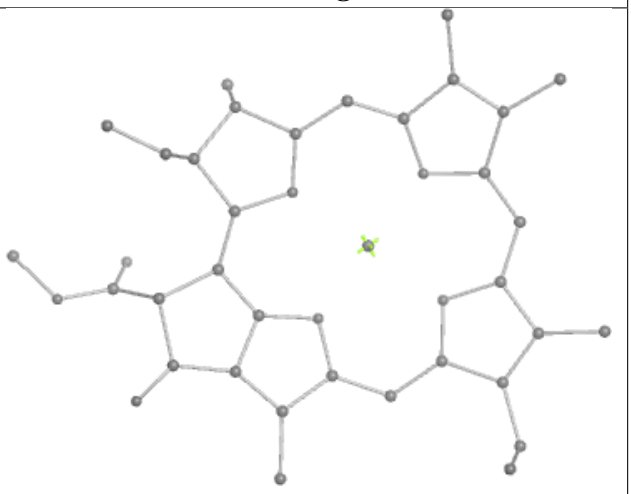


Bond angles

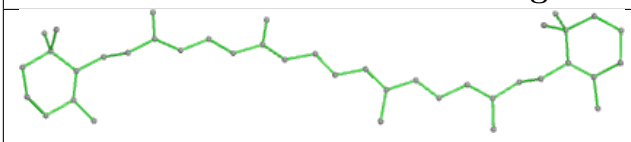


Torsions

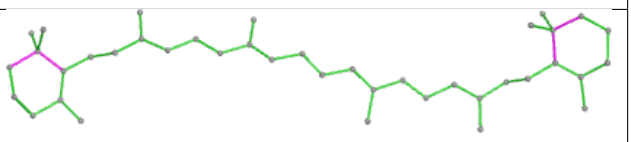


Rings

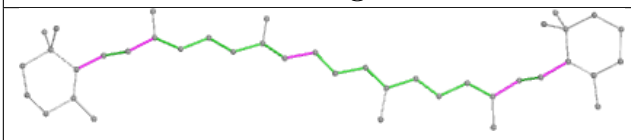
Ligand BCR l 302



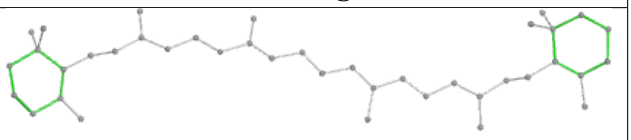
Bond lengths



Bond angles

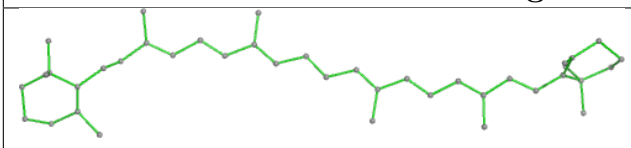


Torsions

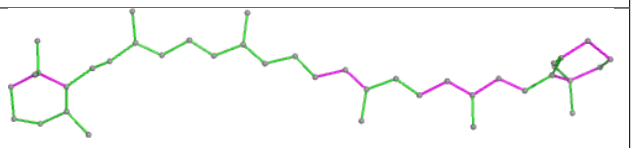


Rings

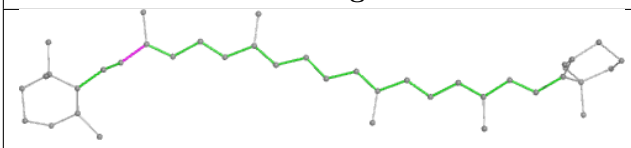
Ligand BCR a 829



Bond lengths



Bond angles



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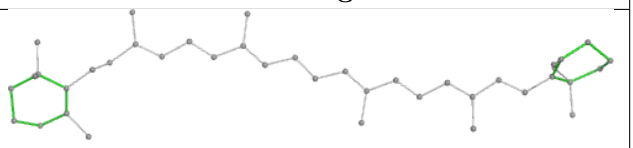
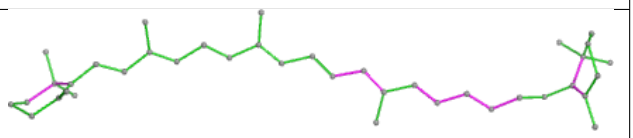


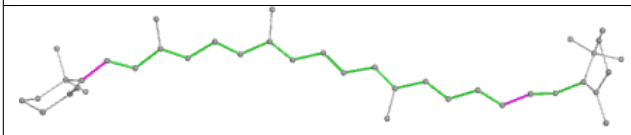
Rings

Ligand BCR a 827

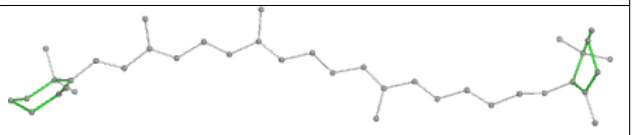
Bond lengths



Bond angles

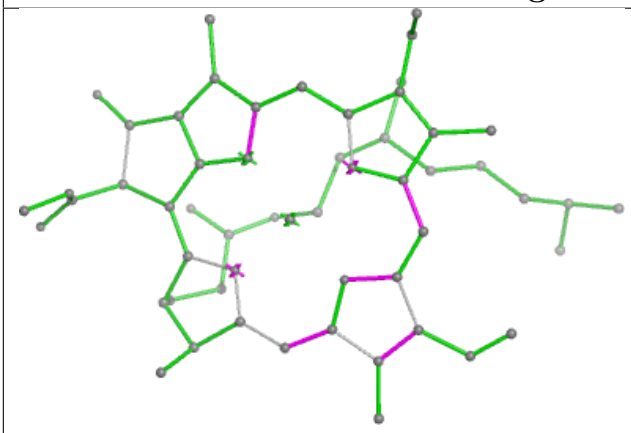


Torsions

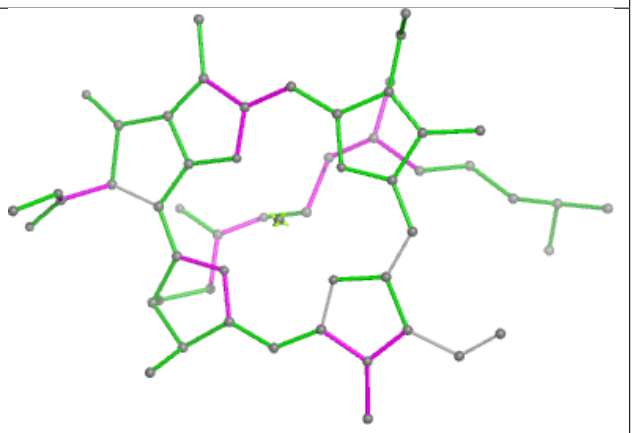


Rings

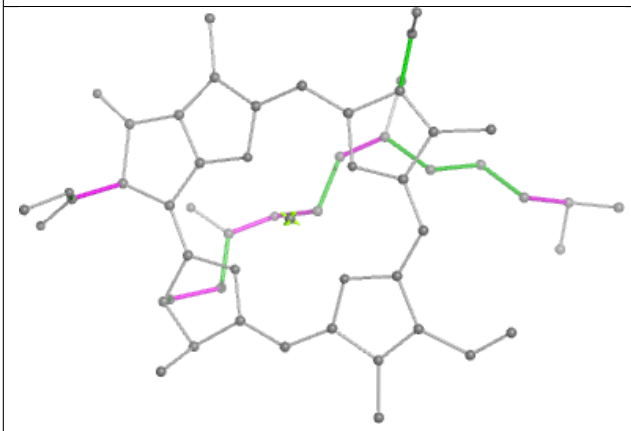
Ligand CLA a 823



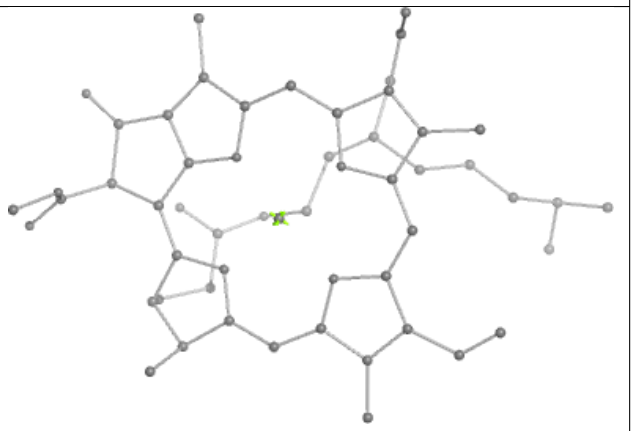
Bond lengths



Bond angles

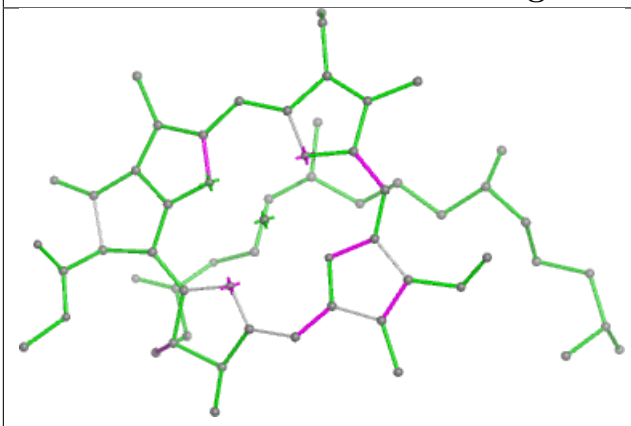


Torsions

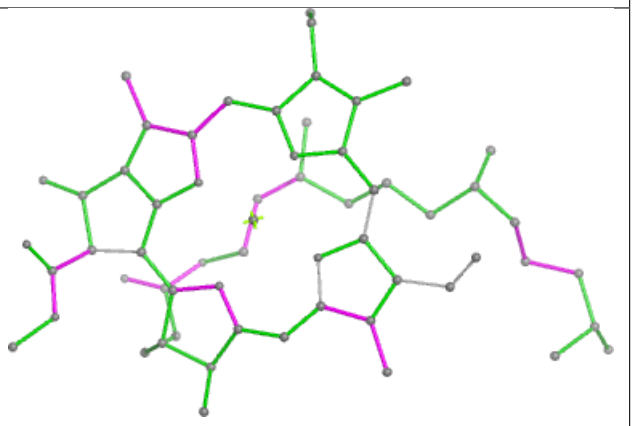


Rings

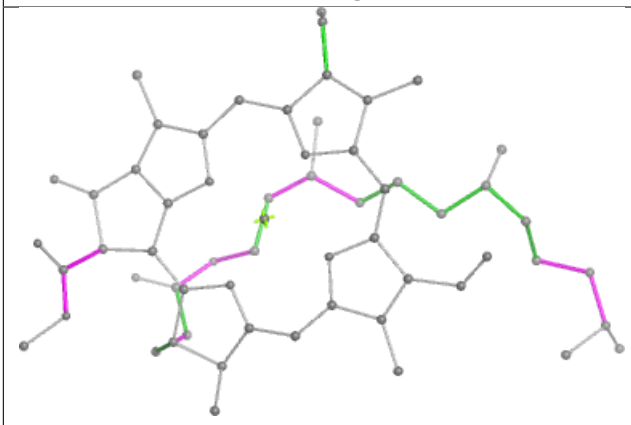
Ligand CLA x 306



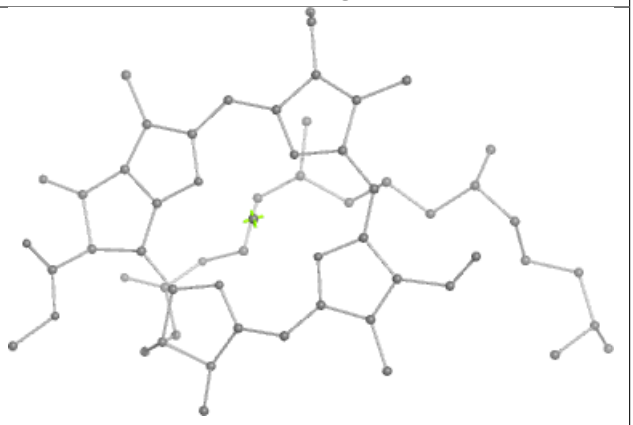
Bond lengths



Bond angles

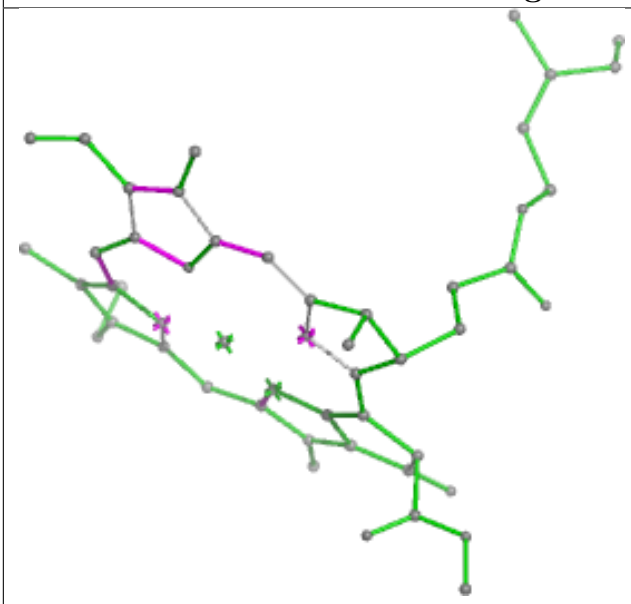


Torsions

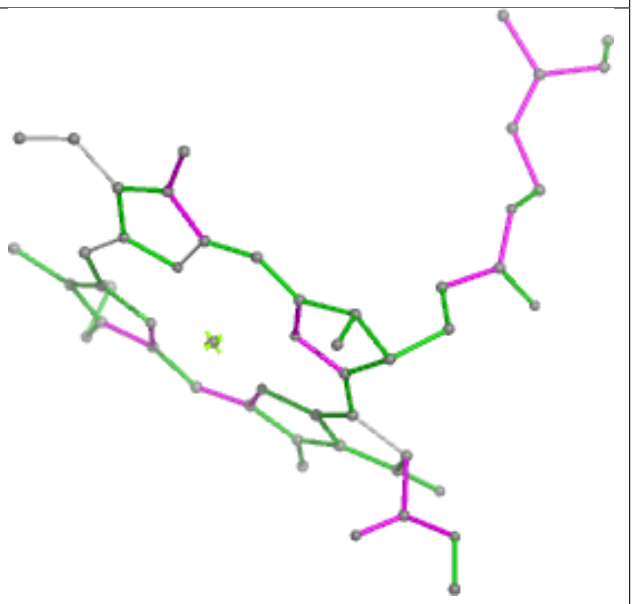


Rings

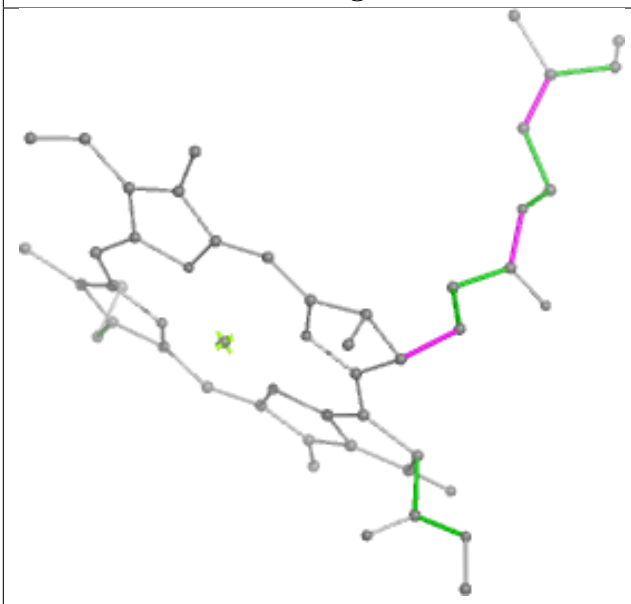
Ligand CLA w 305



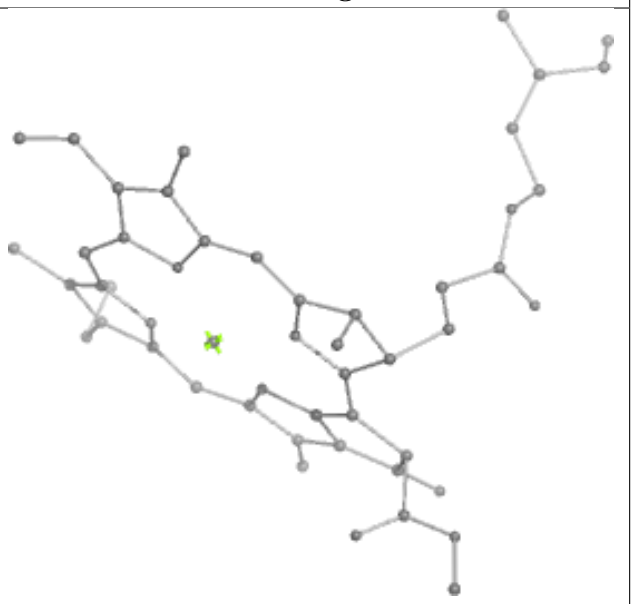
Bond lengths



Bond angles

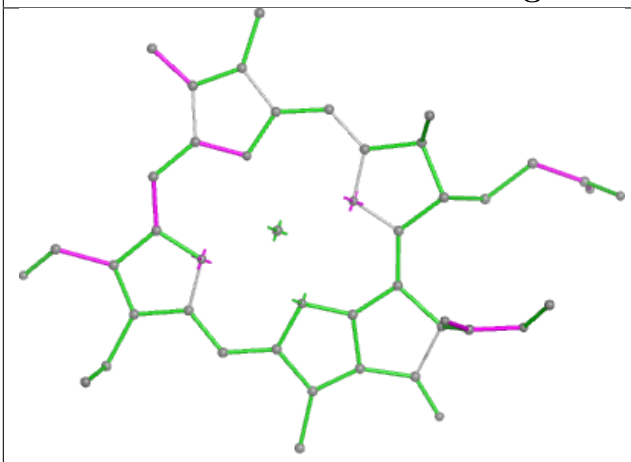


Torsions

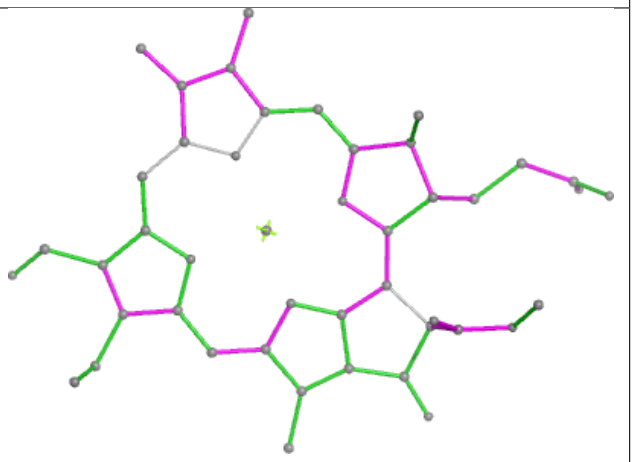


Rings

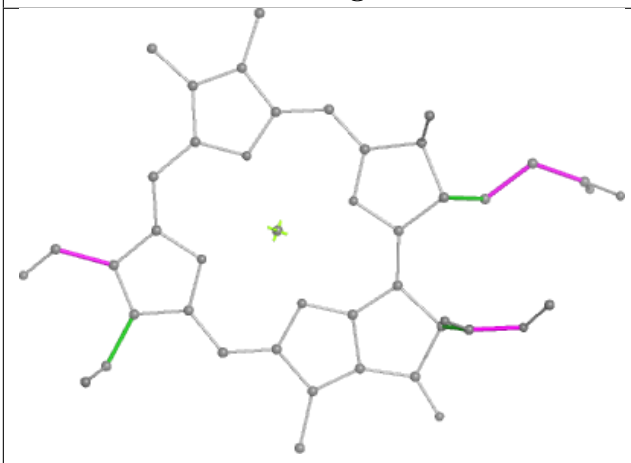
Ligand CHL w 304



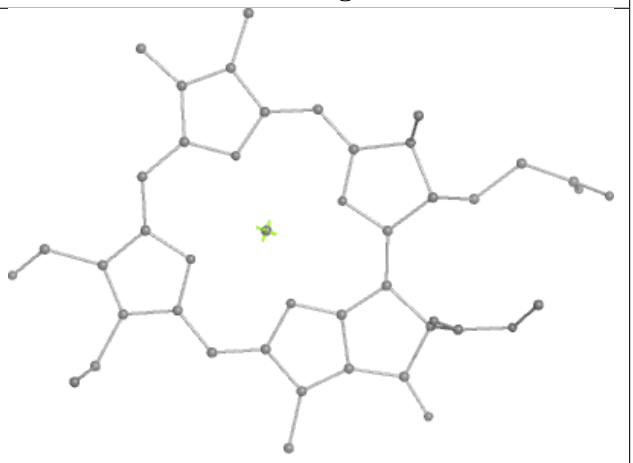
Bond lengths



Bond angles

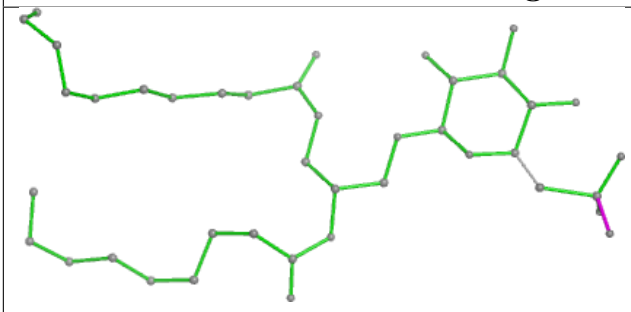


Torsions

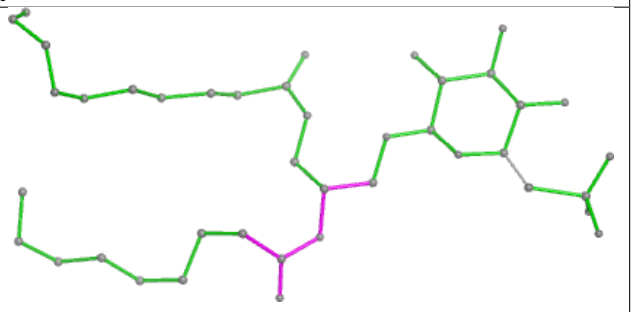


Rings

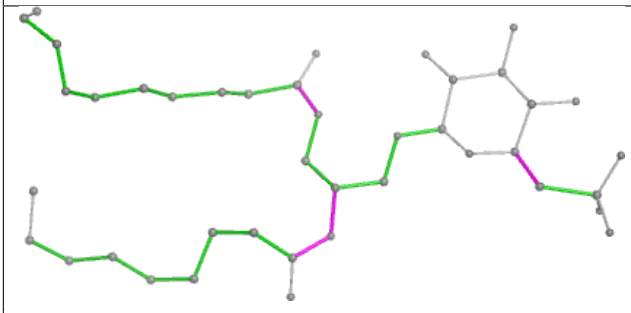
Ligand SQD w 318



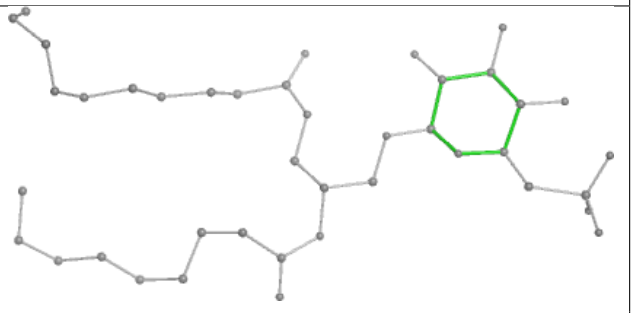
Bond lengths



Bond angles

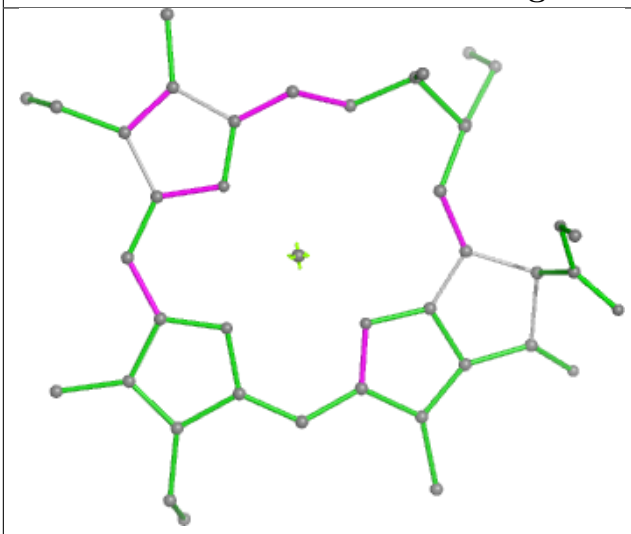


Torsions



Rings

Ligand CLA a 847



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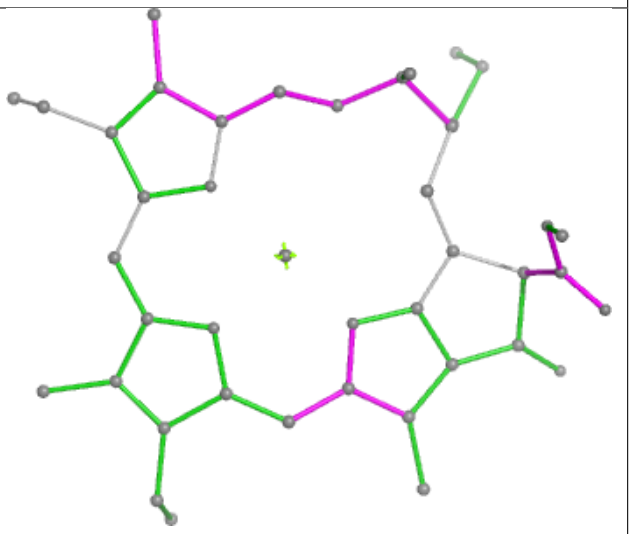
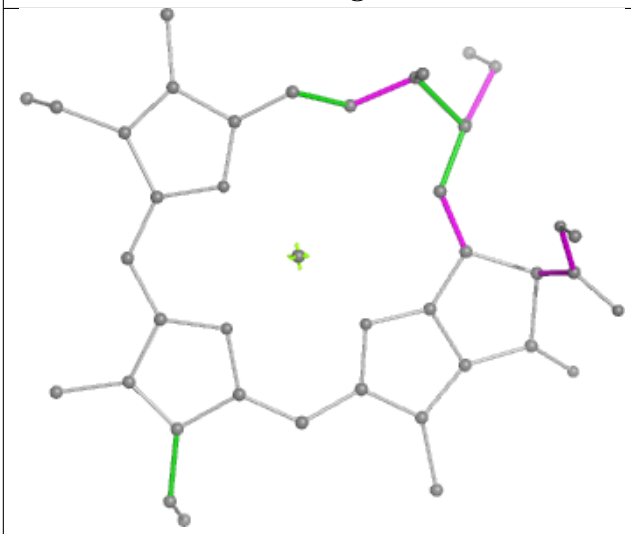
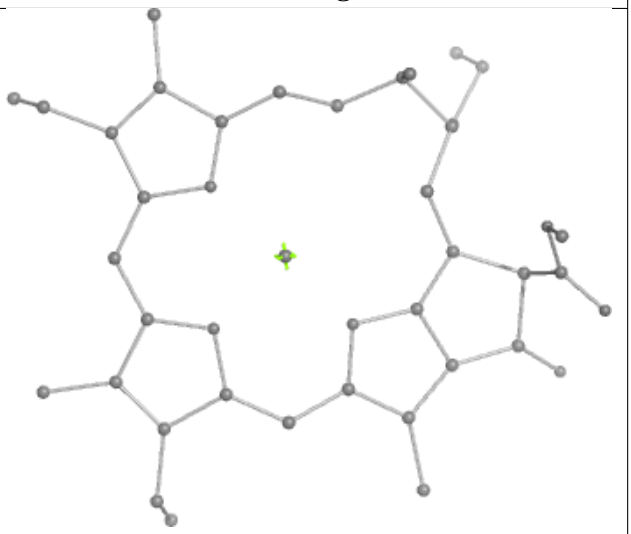


Bond angles

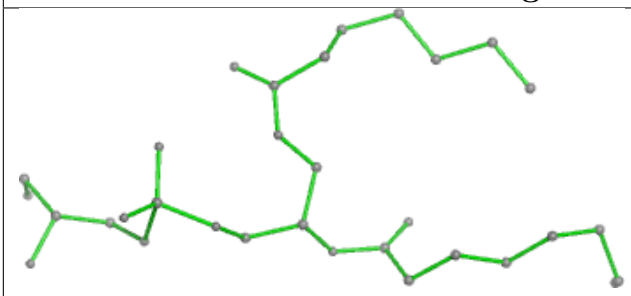


Torsions

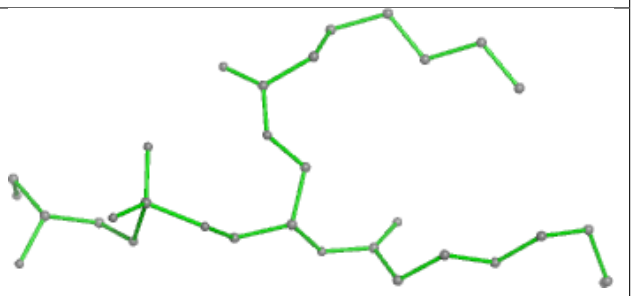


Rings

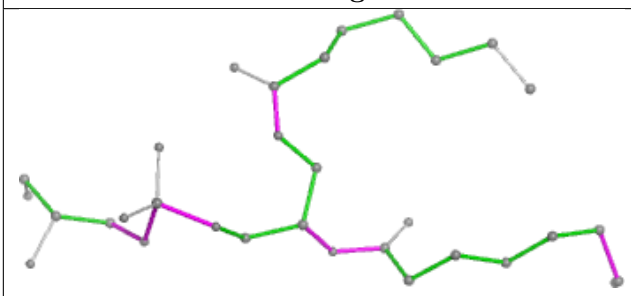
Ligand PGT A 401



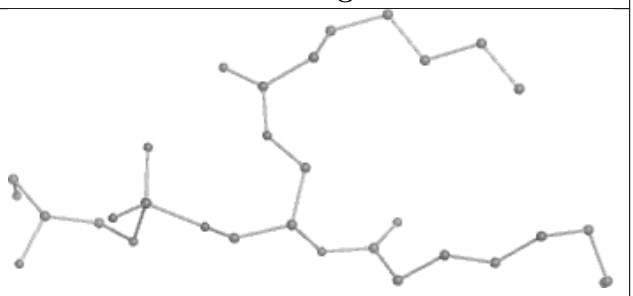
Bond lengths



Bond angles

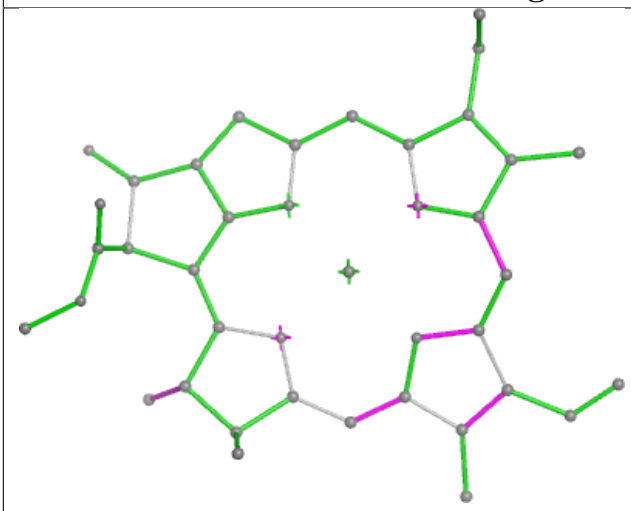


Torsions

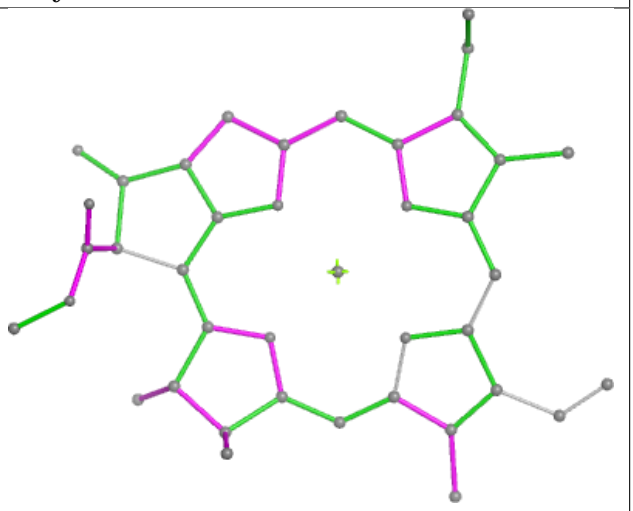


Rings

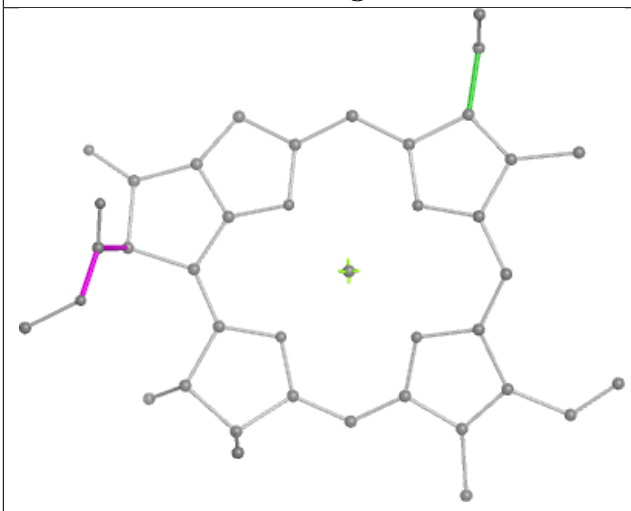
Ligand CLA y 306



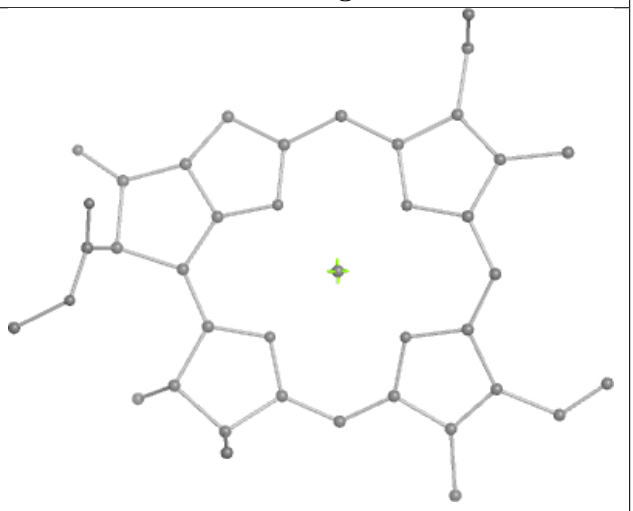
Bond lengths



Bond angles

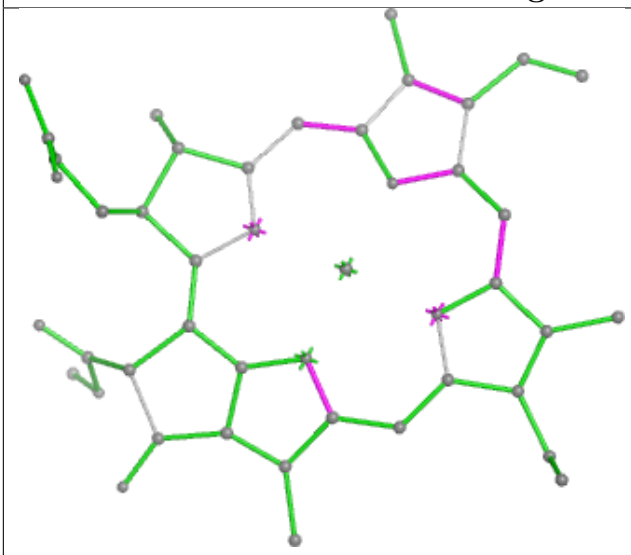


Torsions

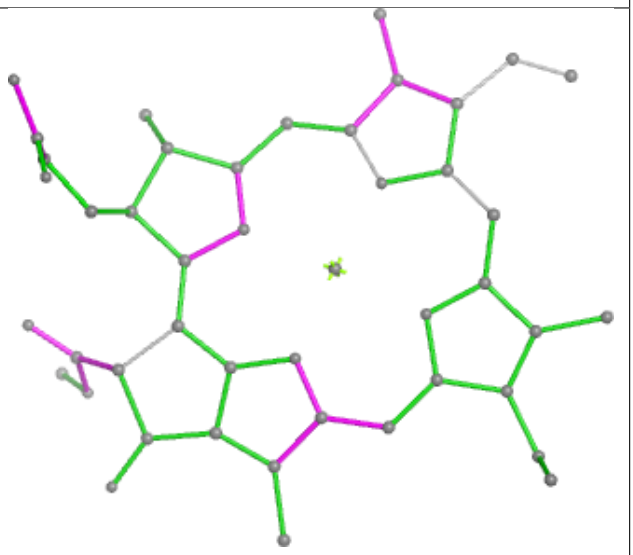


Rings

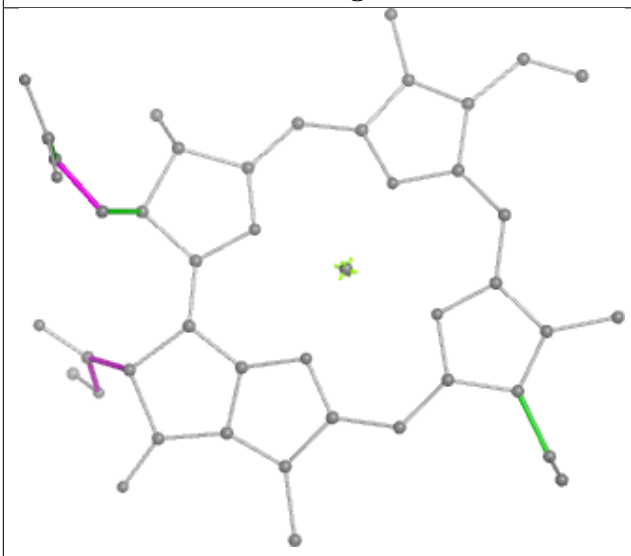
Ligand CLA x 316



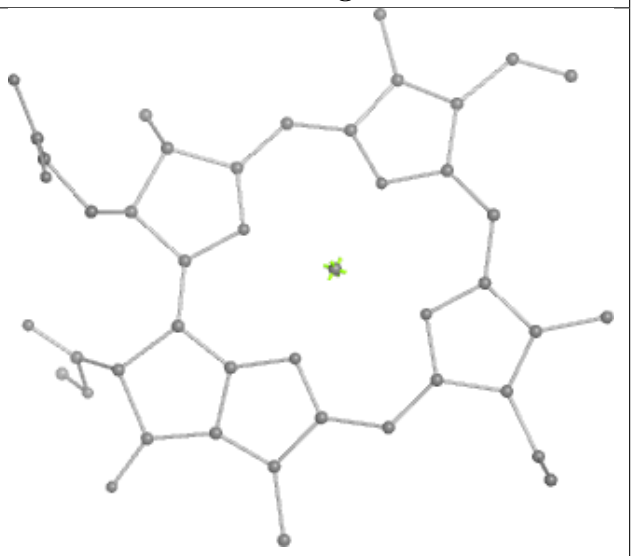
Bond lengths



Bond angles

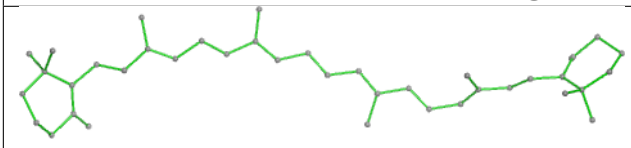


Torsions

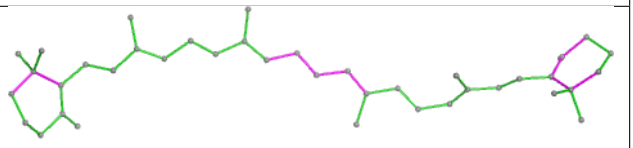


Rings

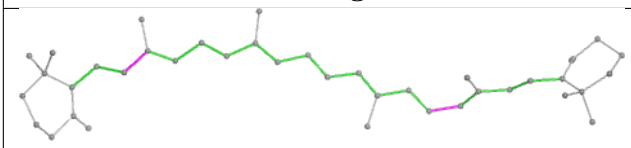
Ligand BCR b 817



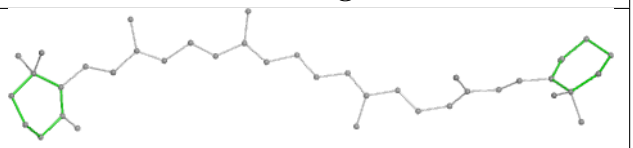
Bond lengths



Bond angles

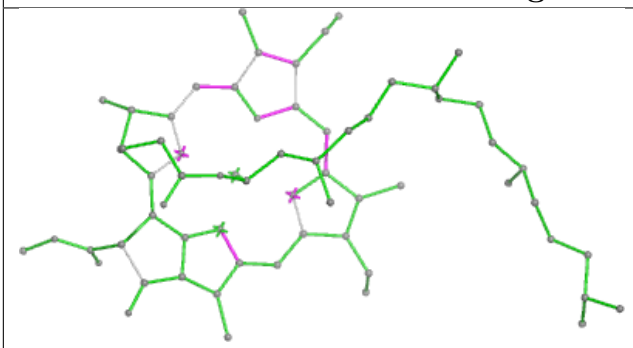


Torsions

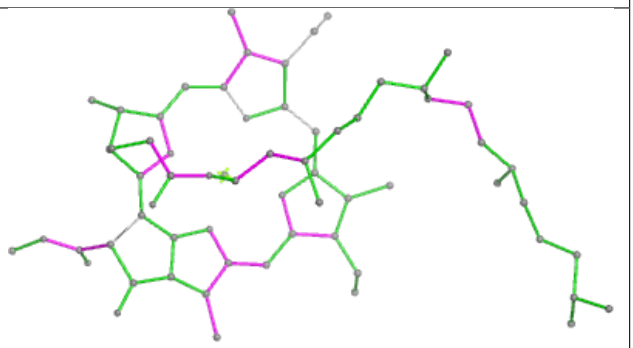


Rings

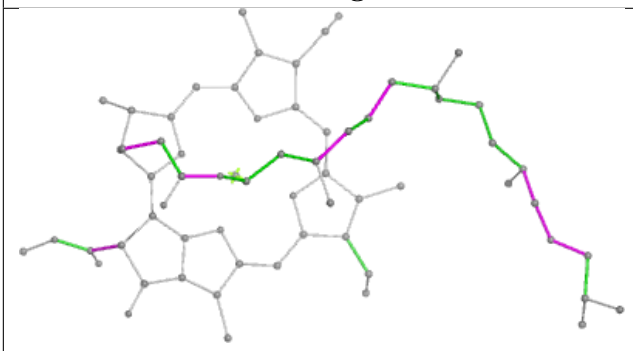
Ligand CLA b 815



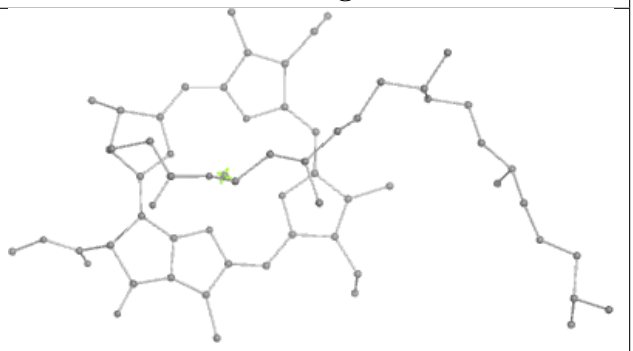
Bond lengths



Bond angles

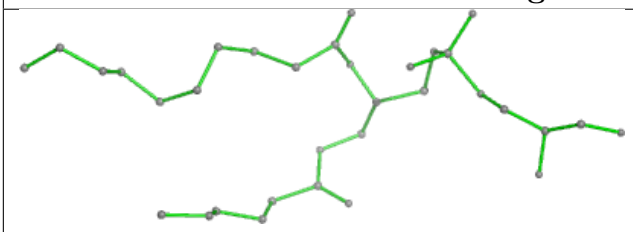


Torsions

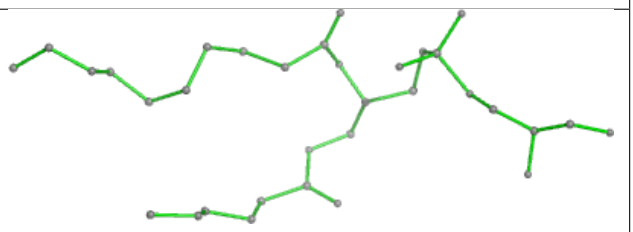


Rings

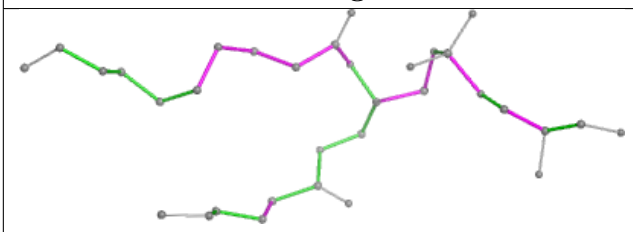
Ligand PGT z 313



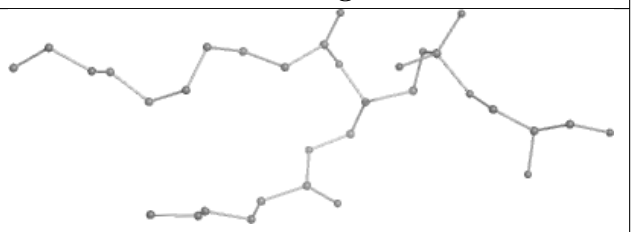
Bond lengths



Bond angles

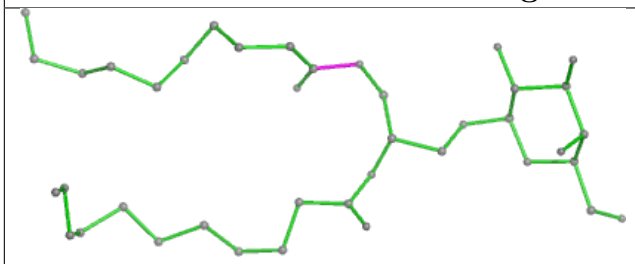


Torsions

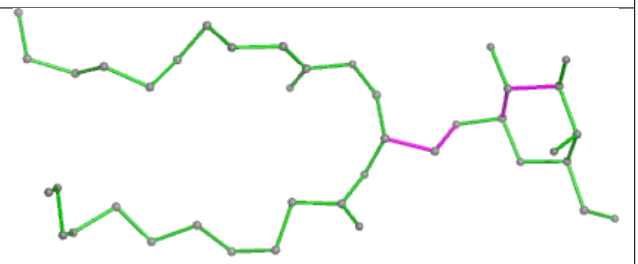


Rings

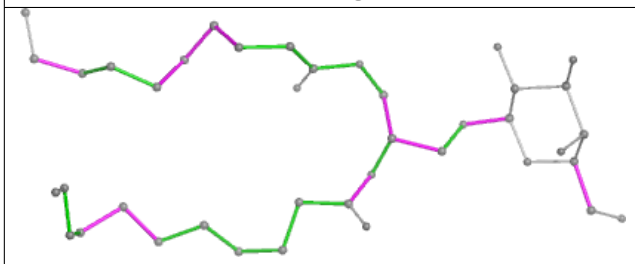
Ligand LMG w 312



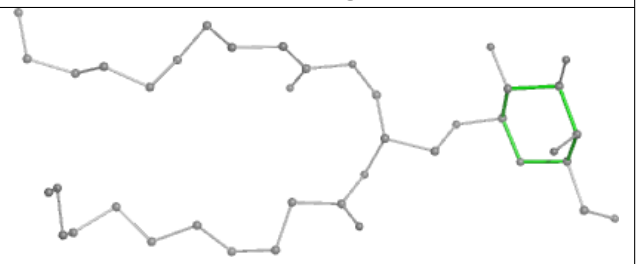
Bond lengths



Bond angles

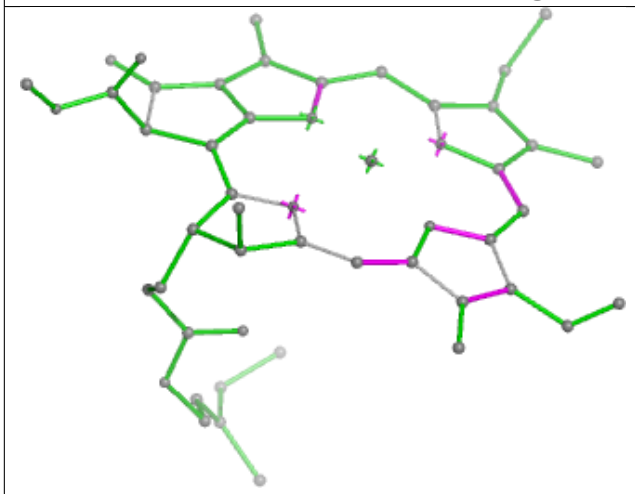


Torsions

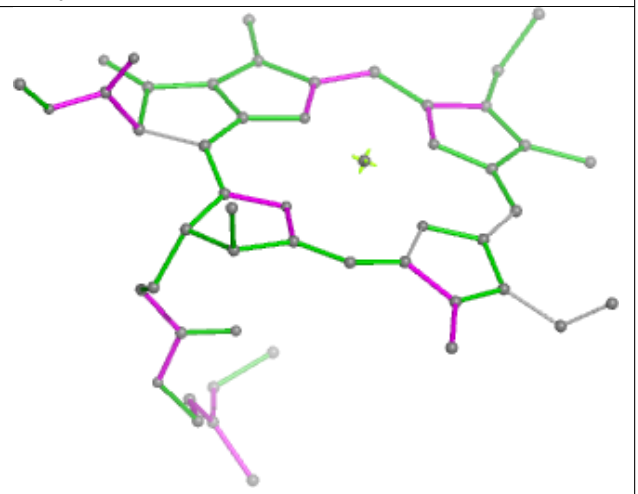


Rings

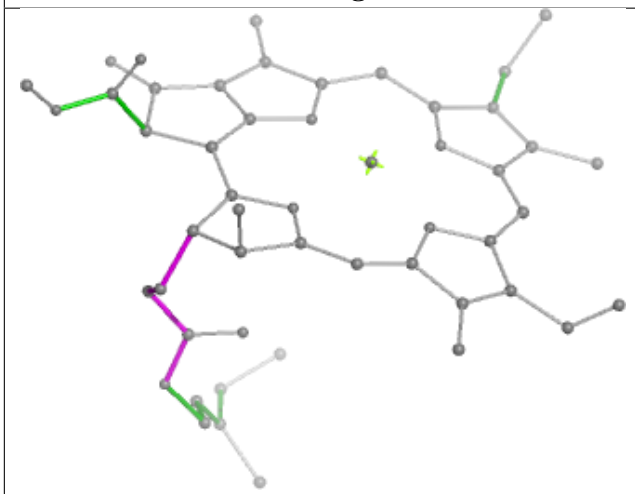
Ligand CLA y 311



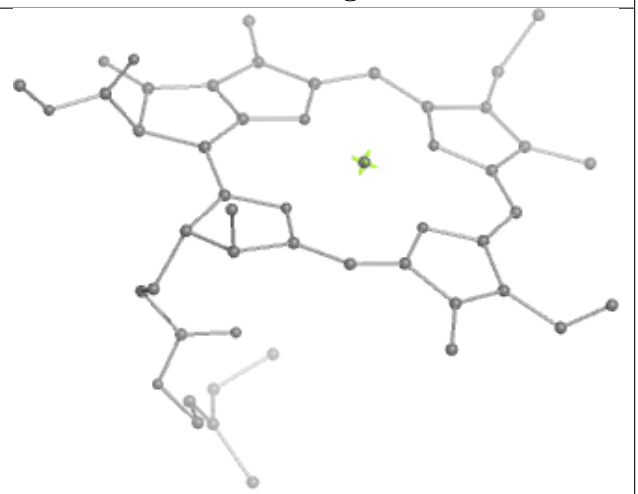
Bond lengths



Bond angles

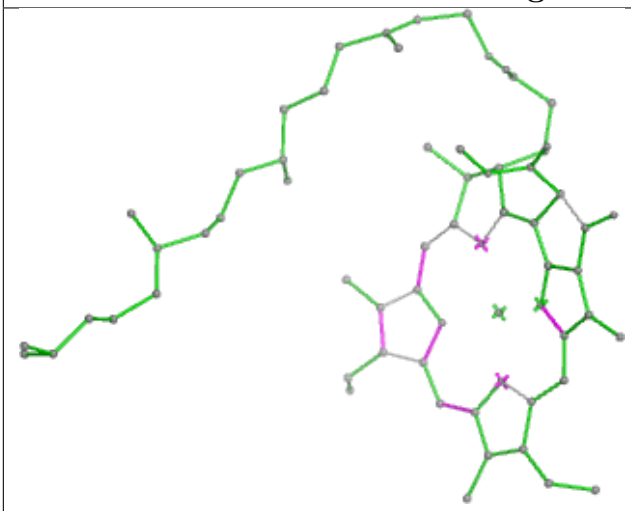


Torsions

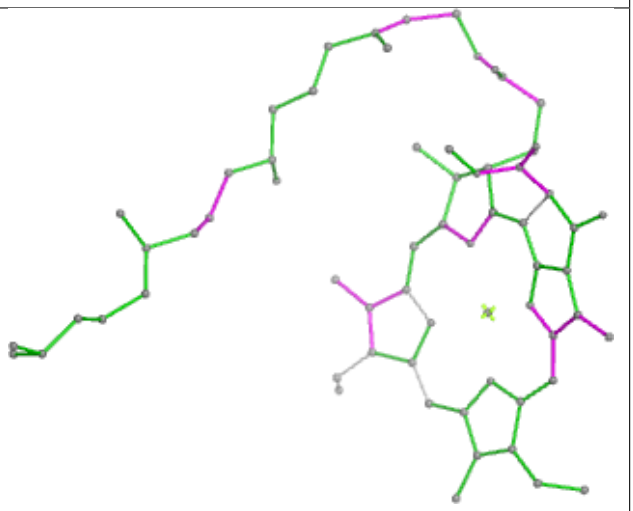


Rings

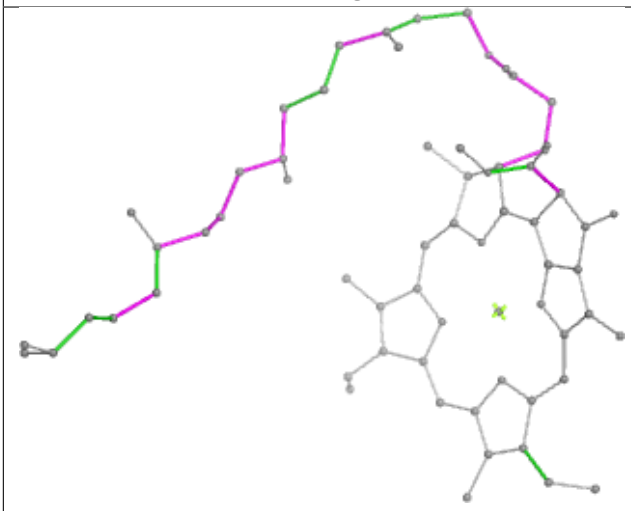
Ligand CLA b 839



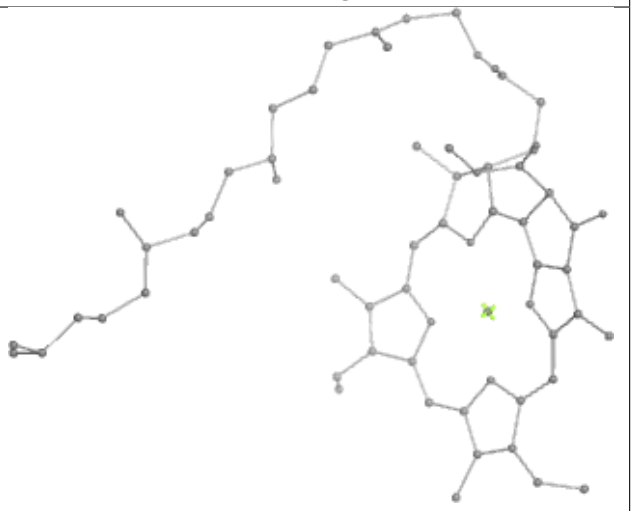
Bond lengths



Bond angles

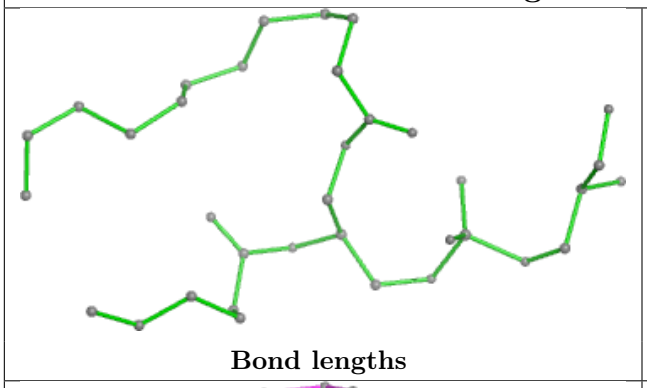


Torsions

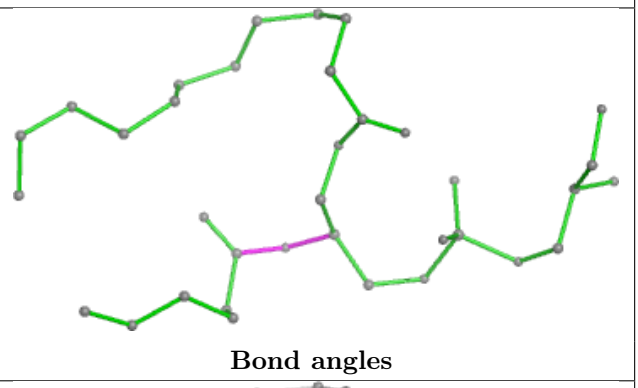


Rings

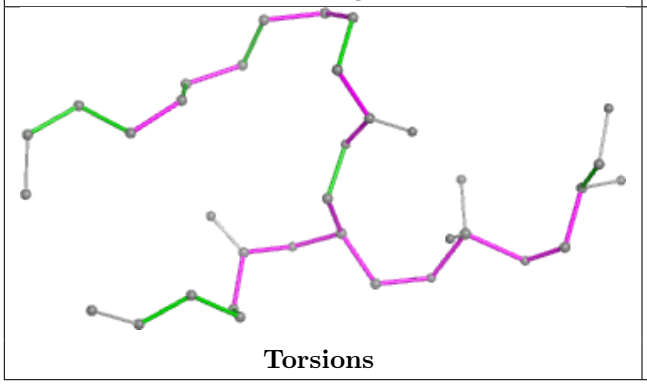
Ligand PGT B 606



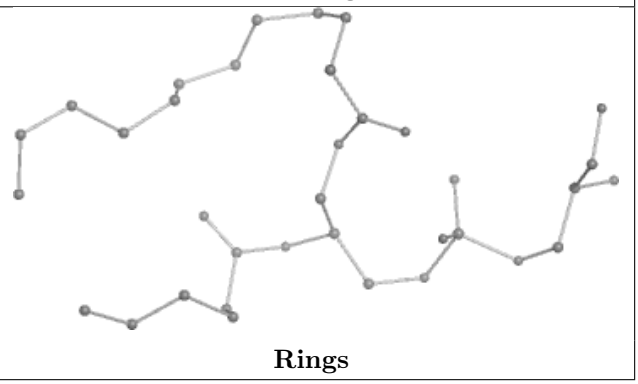
Bond lengths



Bond angles

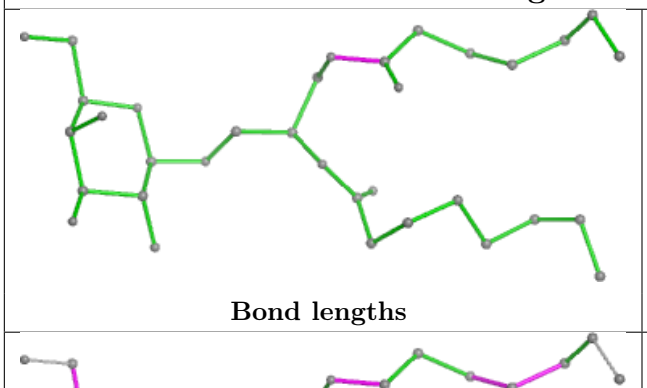


Torsions

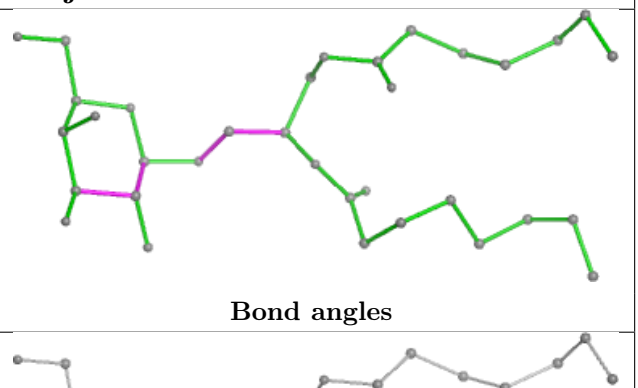


Rings

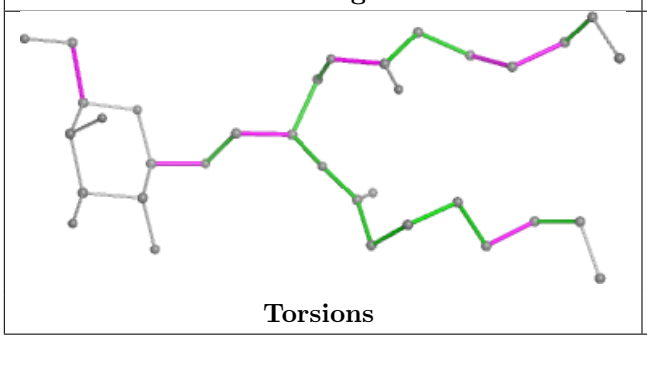
Ligand LMG j 104



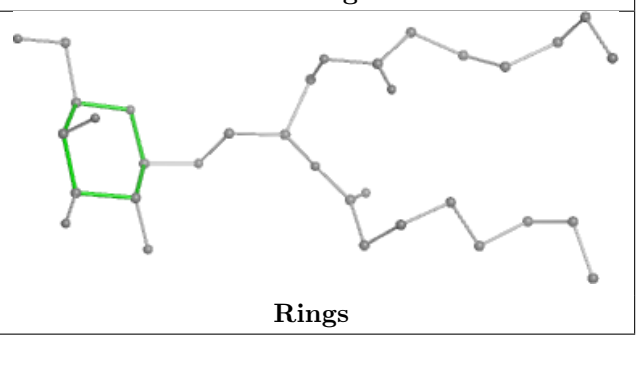
Bond lengths



Bond angles

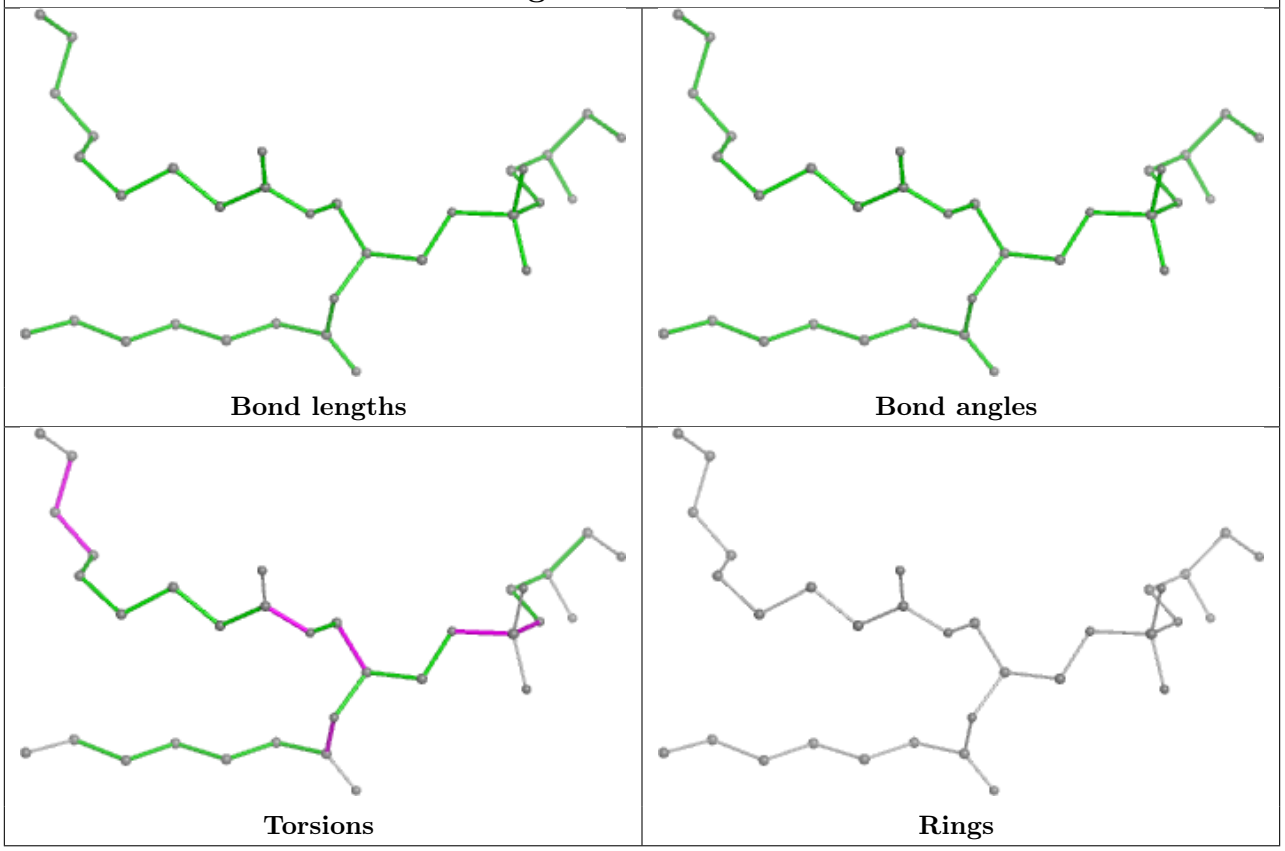


Torsions

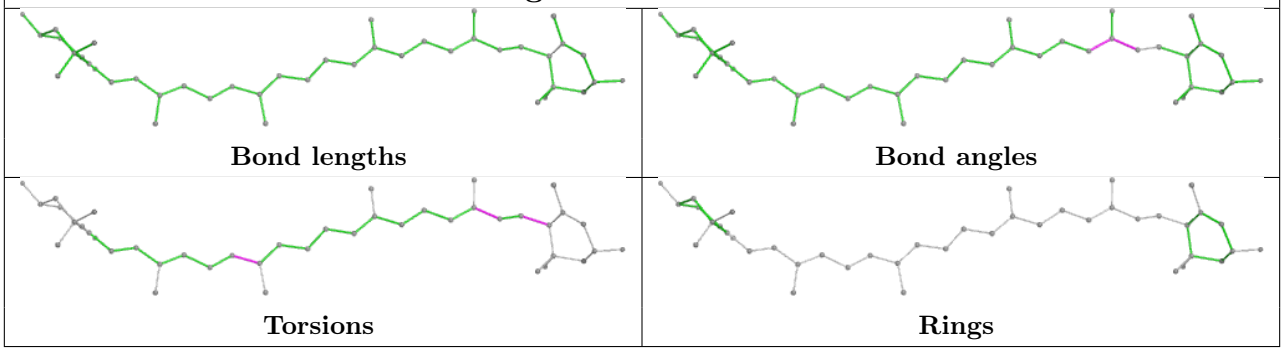


Rings

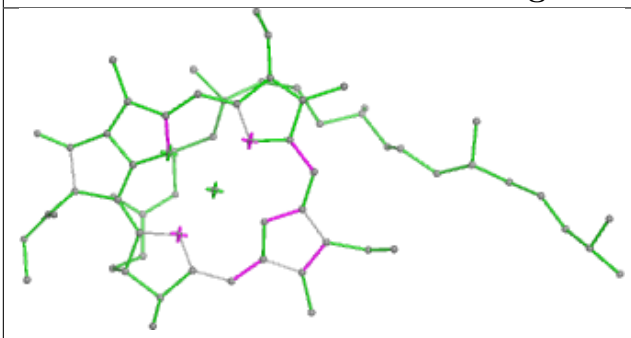
Ligand PGT a 806



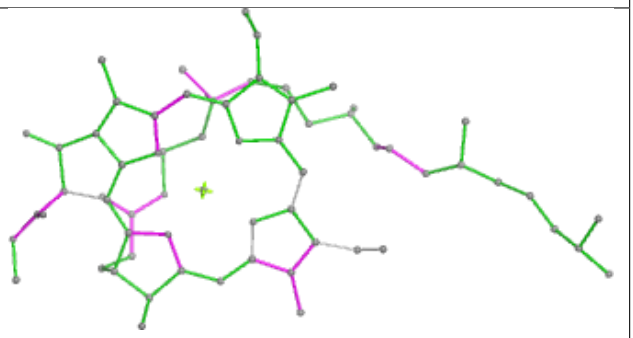
Ligand LUT w 319



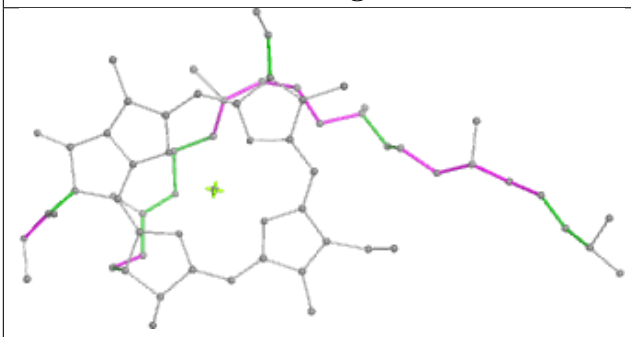
Ligand CLA a 824



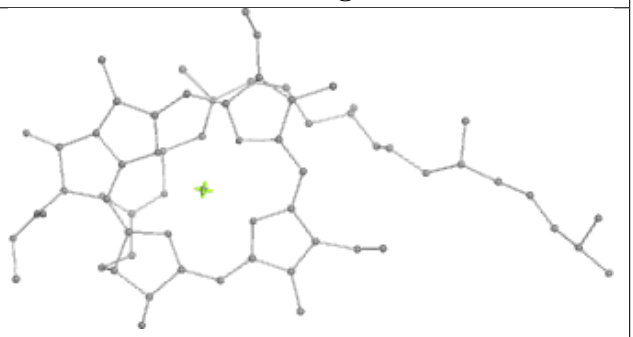
Bond lengths



Bond angles

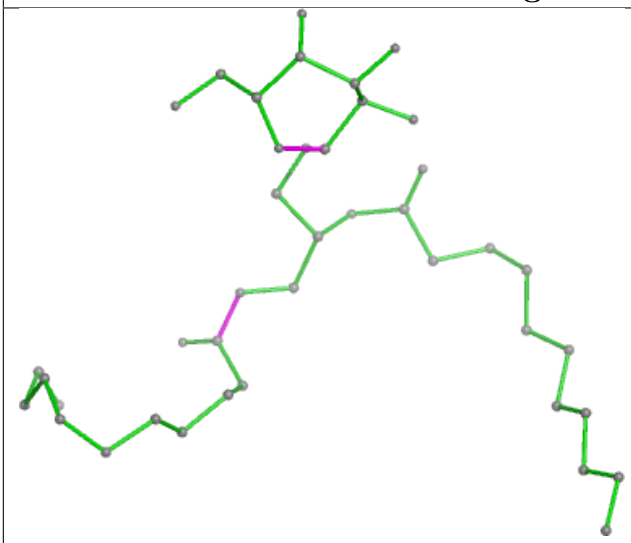


Torsions

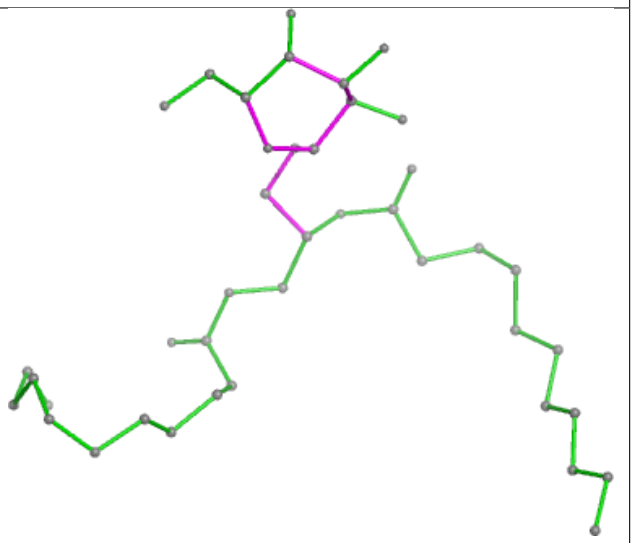


Rings

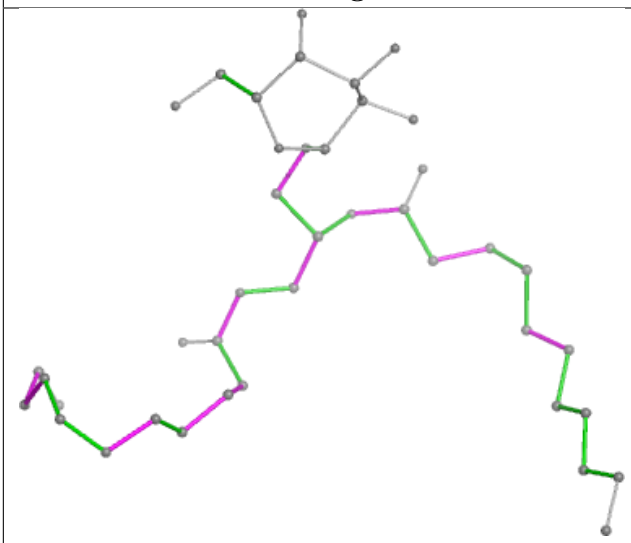
Ligand LMG 7 301



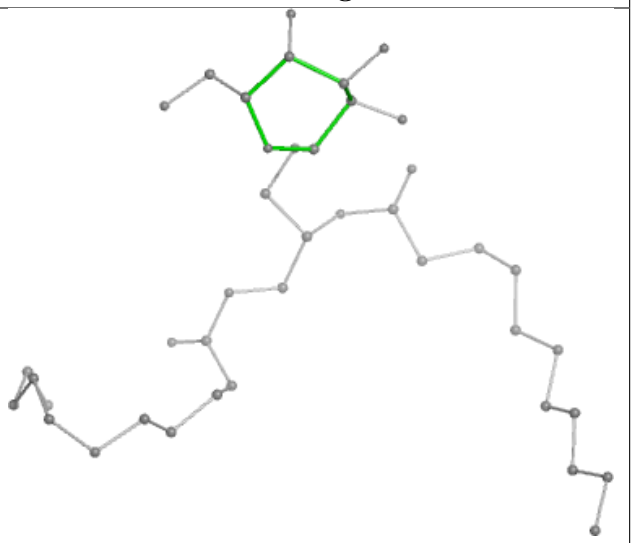
Bond lengths



Bond angles

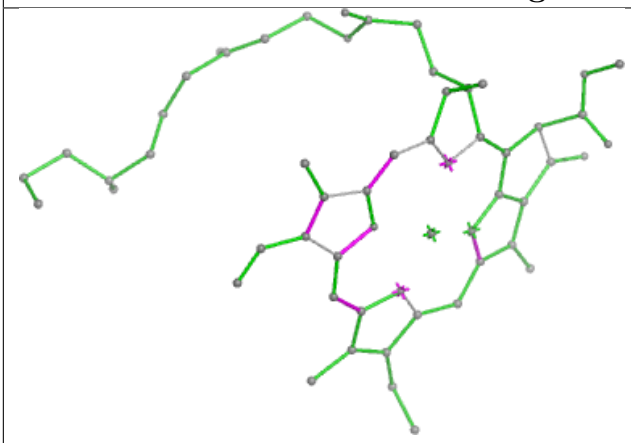


Torsions



Rings

Ligand CLA a 844



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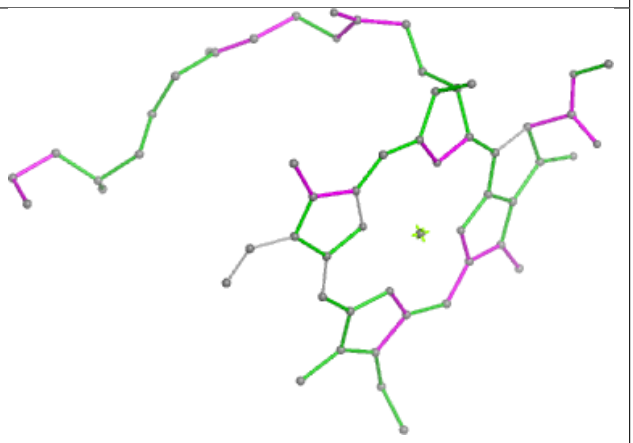
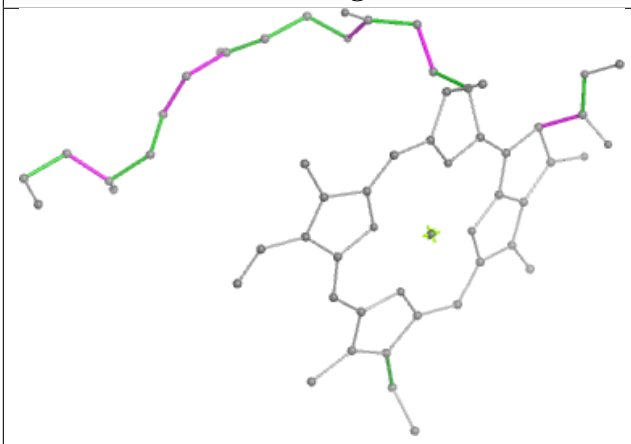
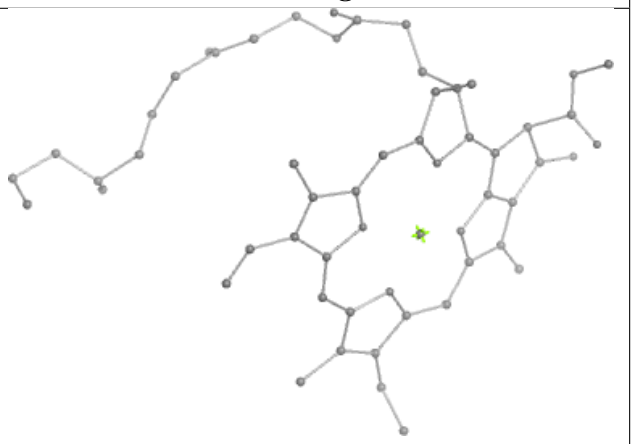


Bond angles

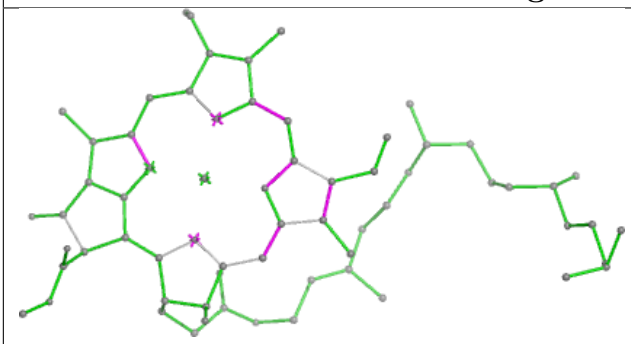


Torsions

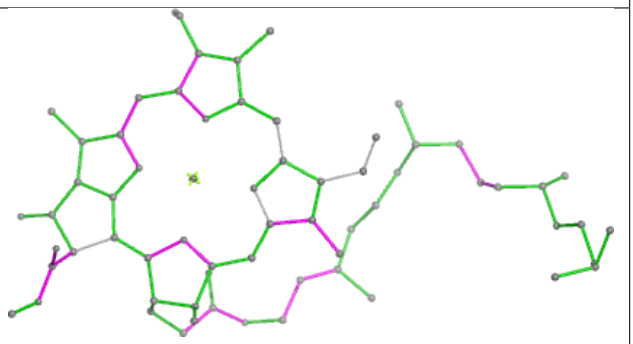


Rings

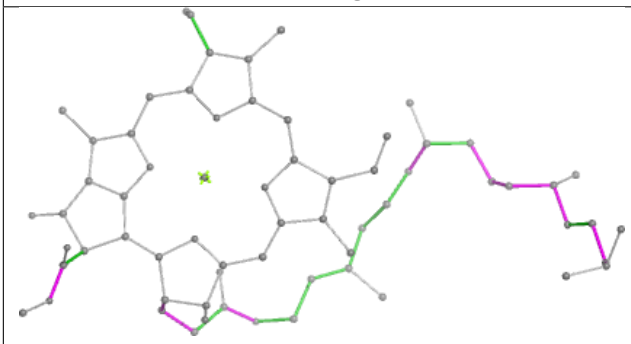
Ligand CLA b 846



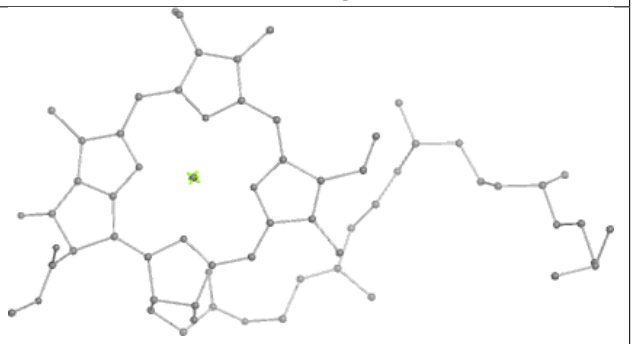
Bond lengths



Bond angles

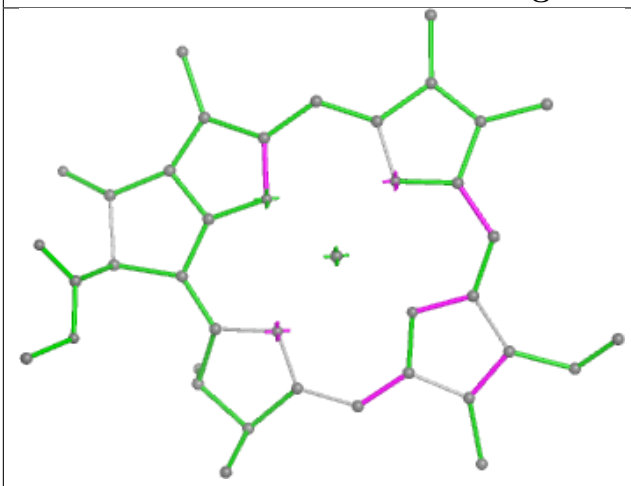


Torsions

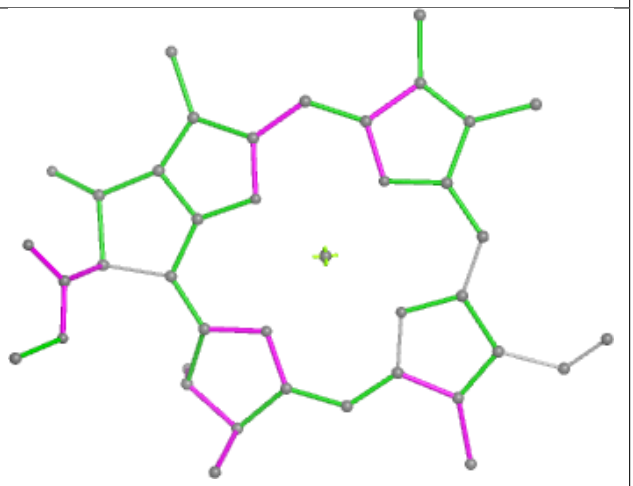


Rings

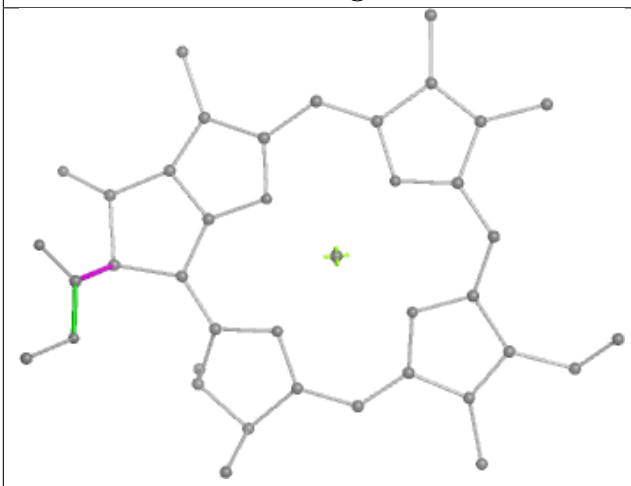
Ligand CLA l 305



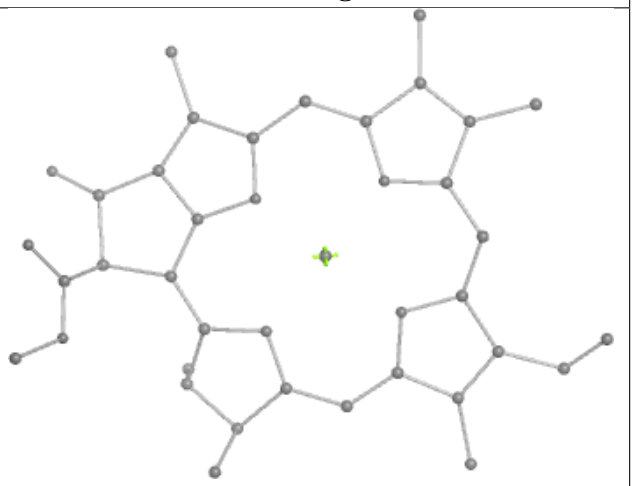
Bond lengths



Bond angles

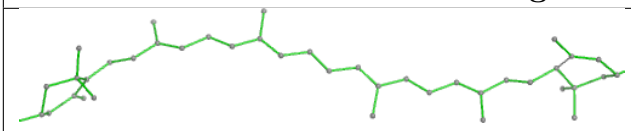


Torsions

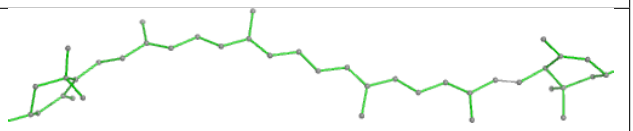


Rings

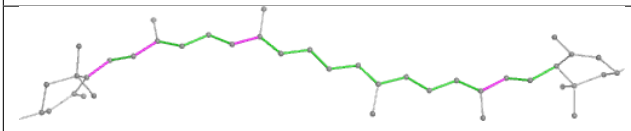
Ligand LUT z 320



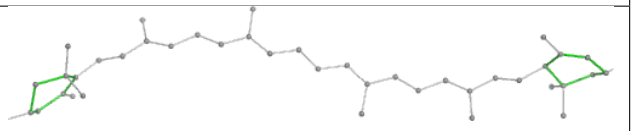
Bond lengths



Bond angles

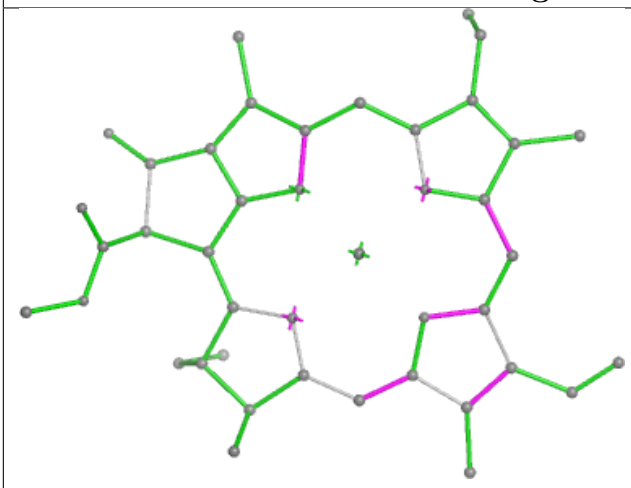


Torsions

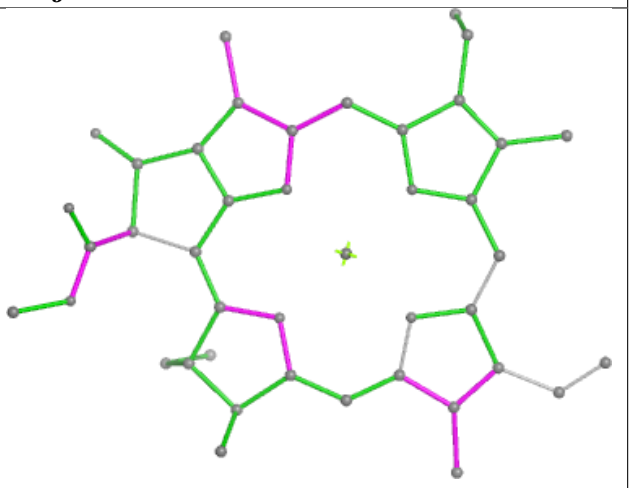


Rings

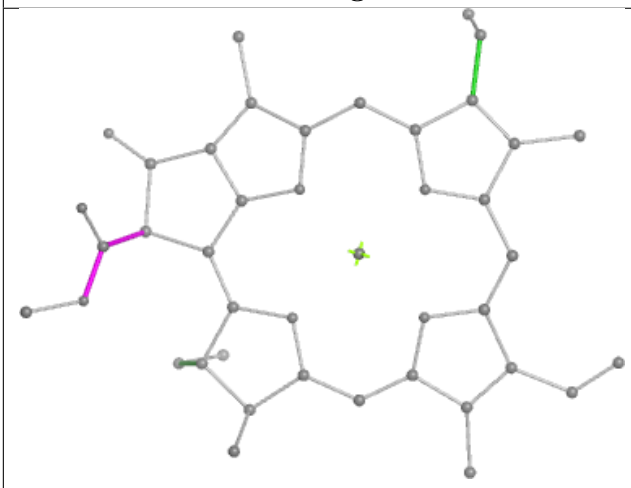
Ligand CLA j 102



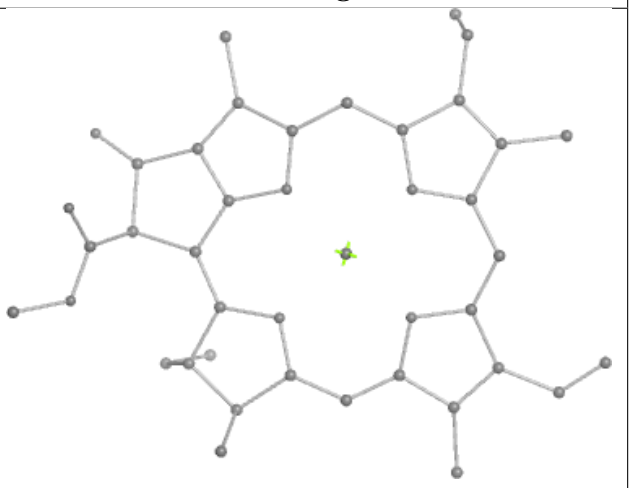
Bond lengths



Bond angles

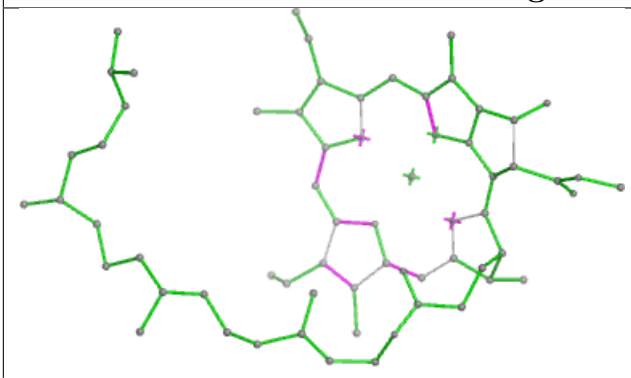


Torsions

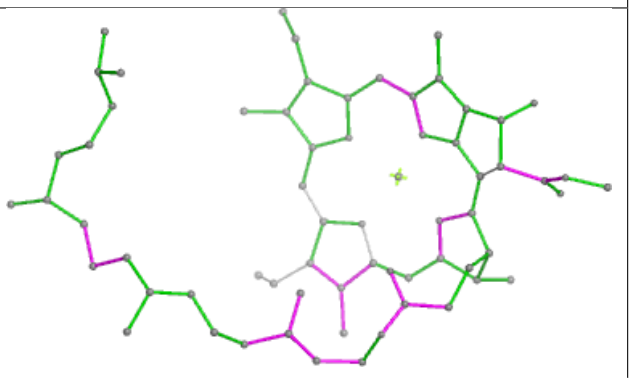


Rings

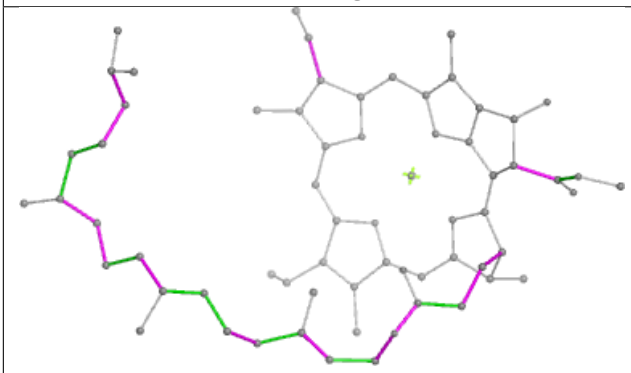
Ligand CLA x 312



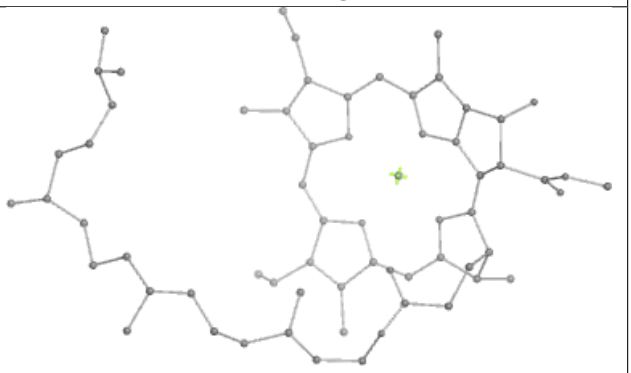
Bond lengths



Bond angles

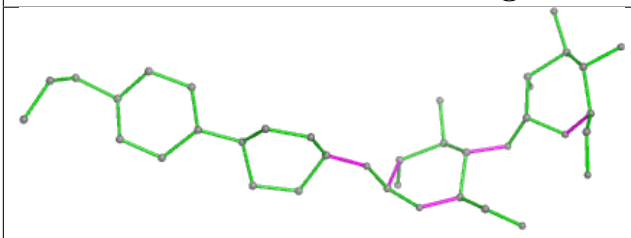


Torsions



Rings

Ligand A1H1M F 804



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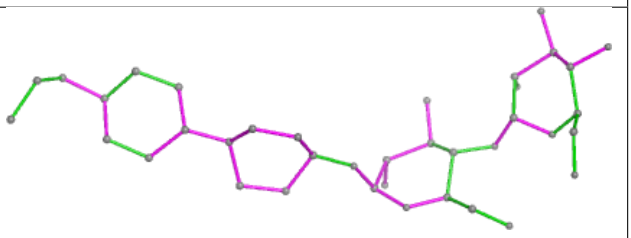
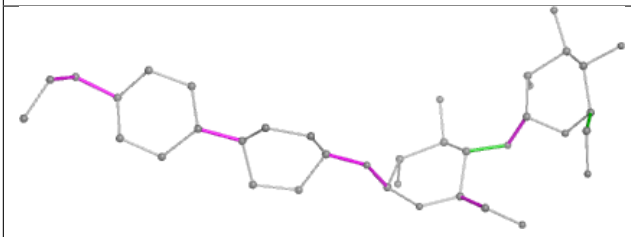
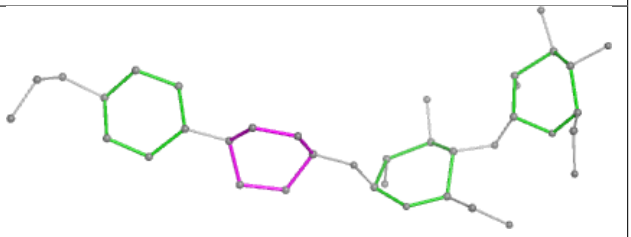


Bond angles

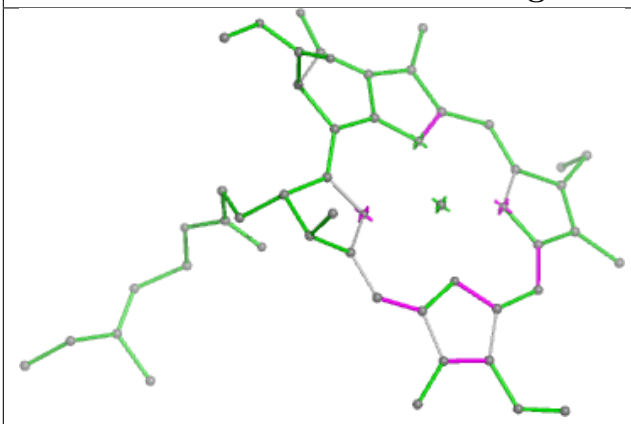


Torsions



Rings

Ligand CLA y 312



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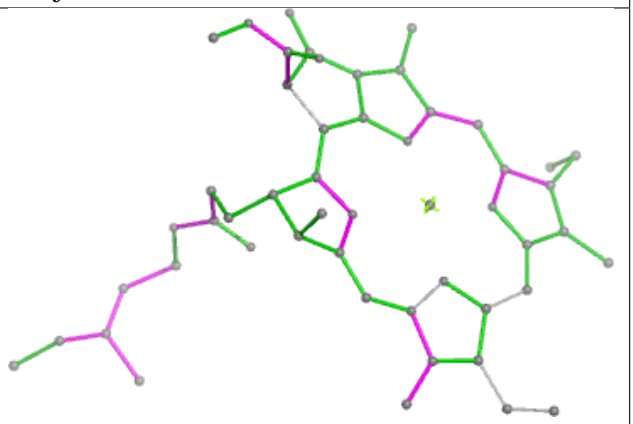
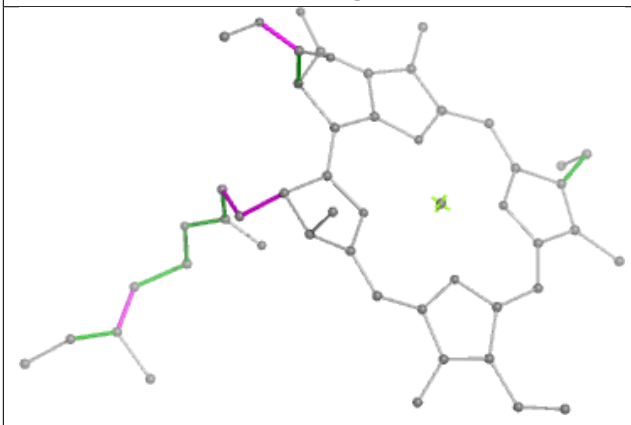
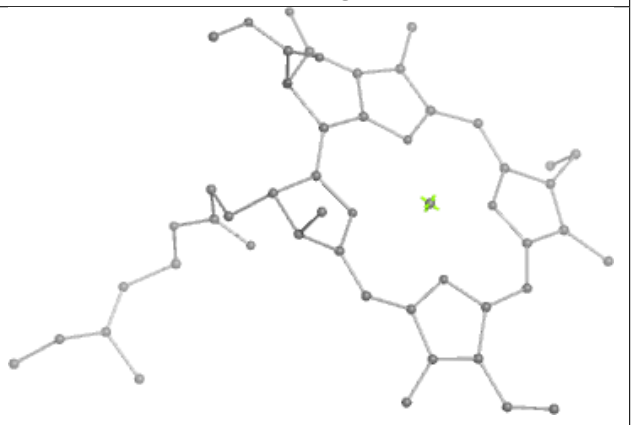


Bond angles

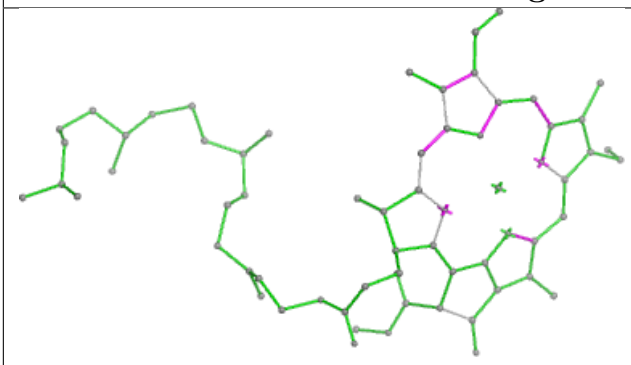


Torsions

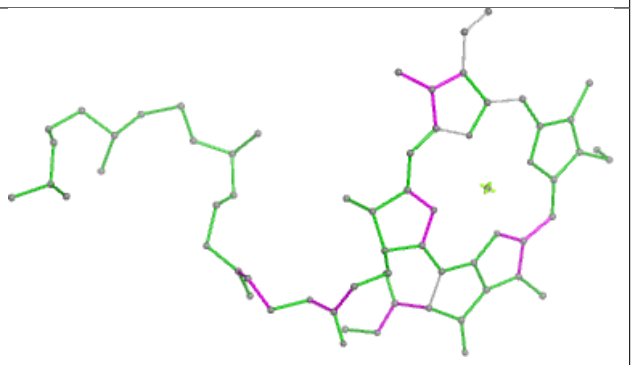


Rings

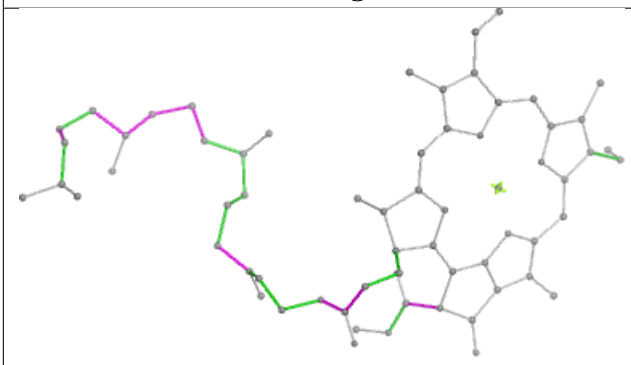
Ligand CLA a 834



Bond lengths



Bond angles



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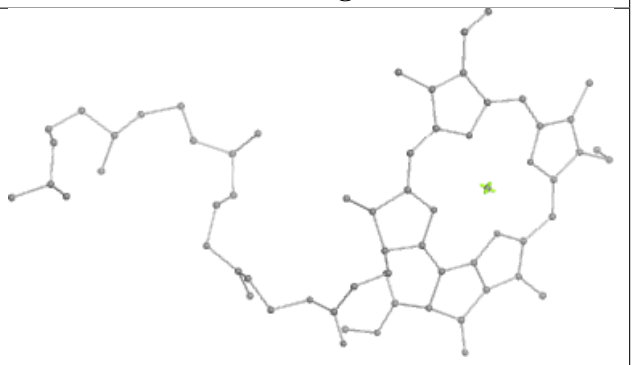
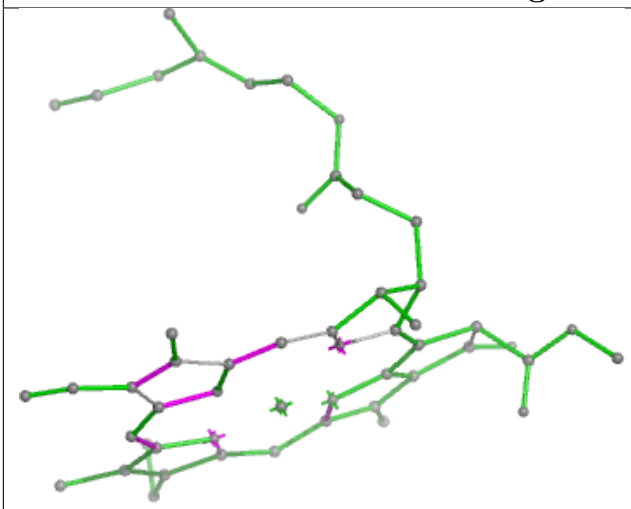


Rings

Ligand CLA a 848



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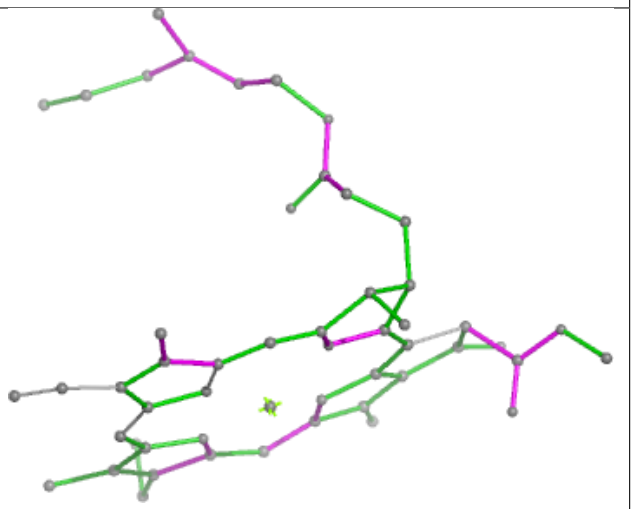
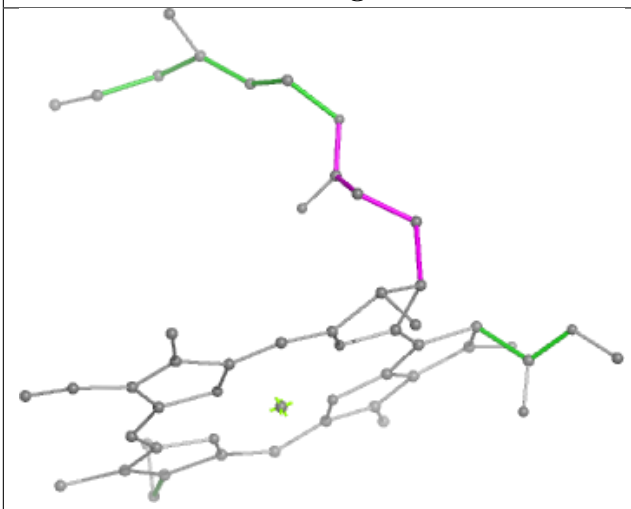


Bond angles



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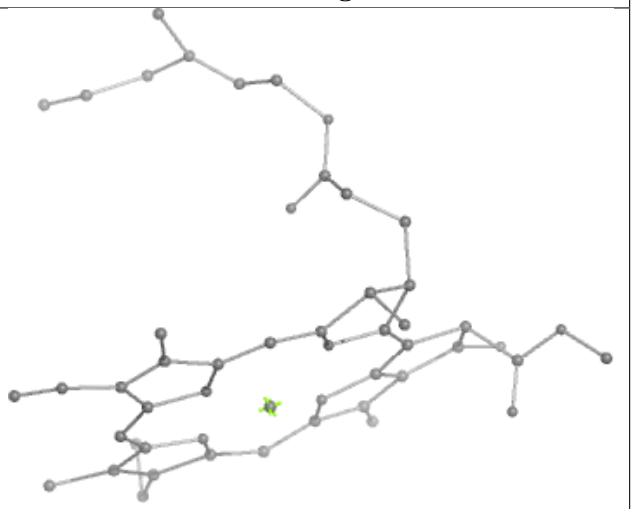
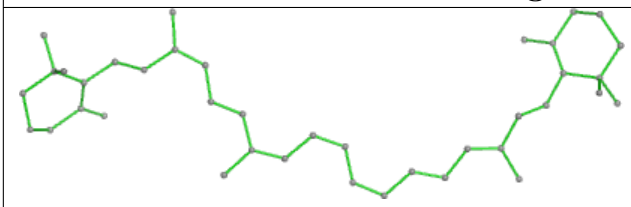


Rings

Ligand BCR a 831



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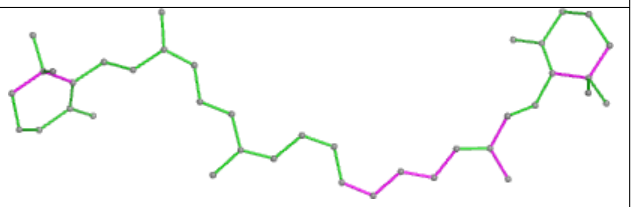
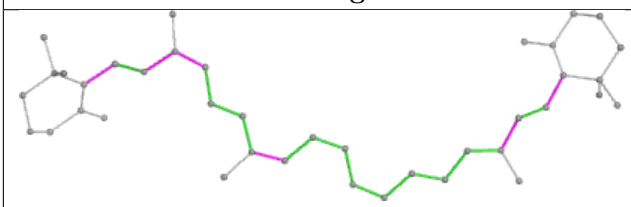
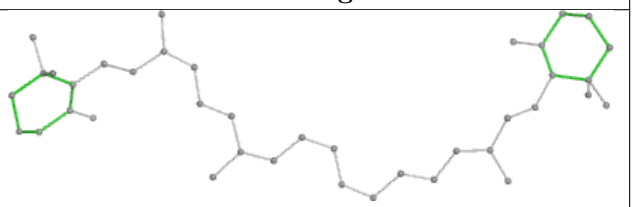


Bond angles

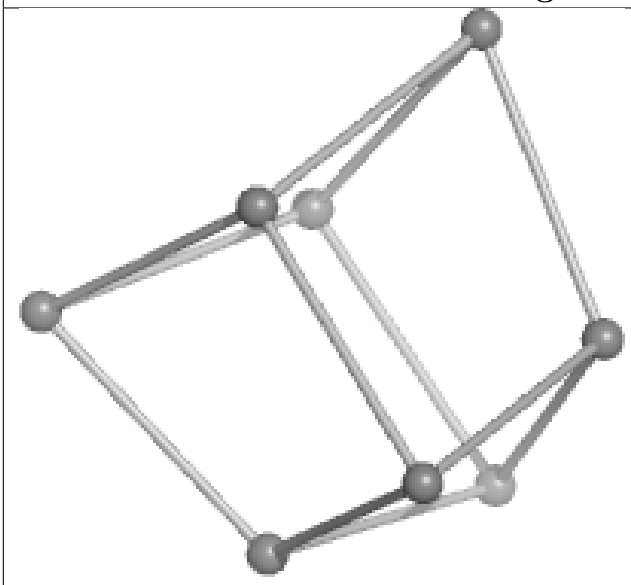


Torsions



Rings

Ligand SF4 c 101



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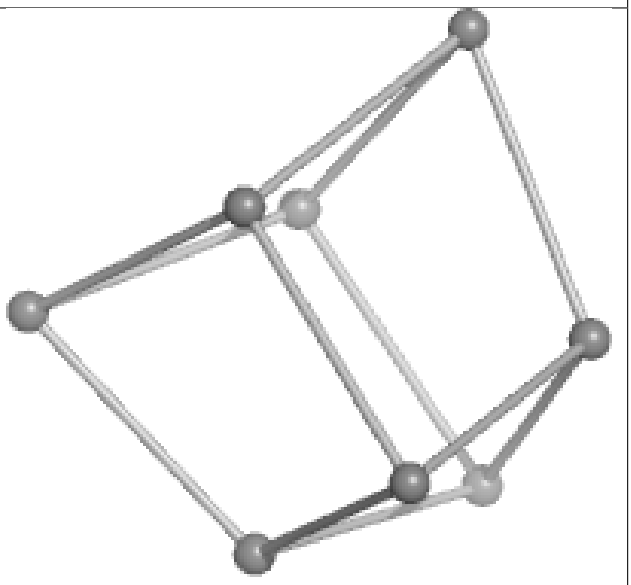
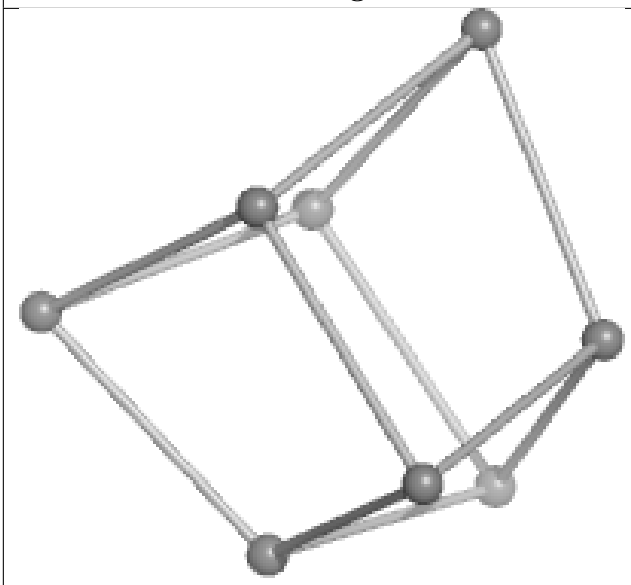
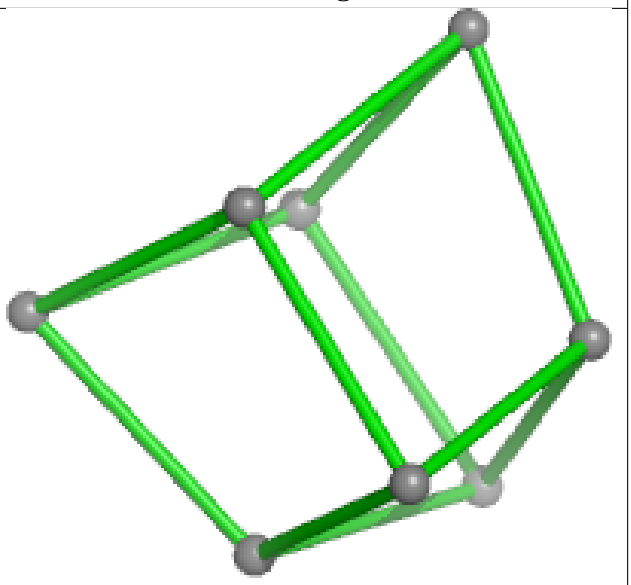


Bond angles

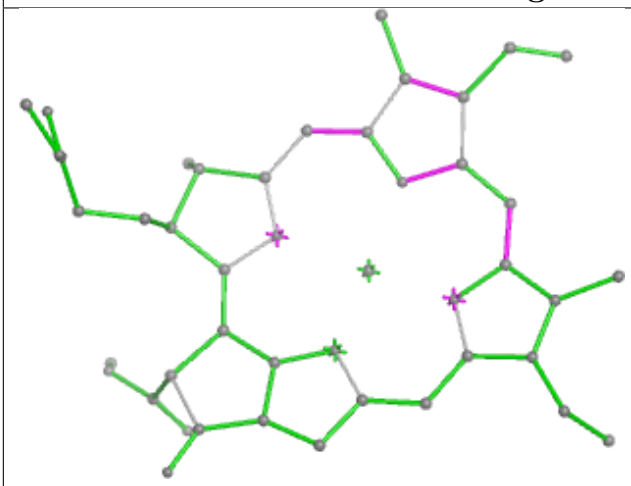


Torsions

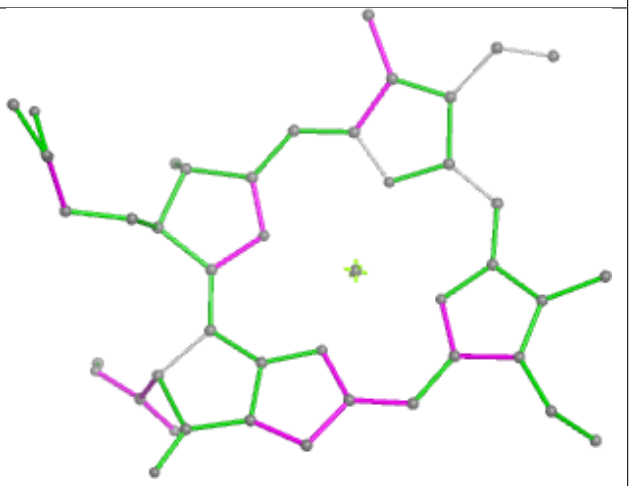


Rings

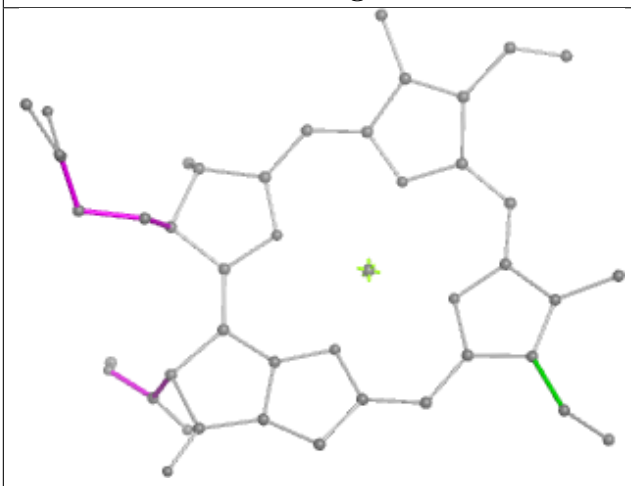
Ligand CLA x 318



Bond lengths



Bond angles



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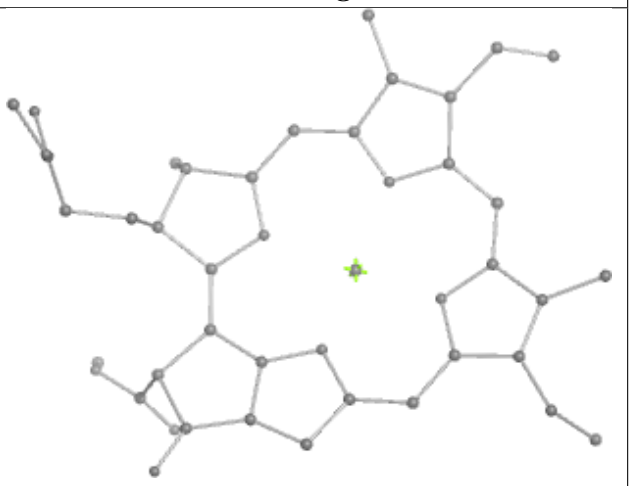
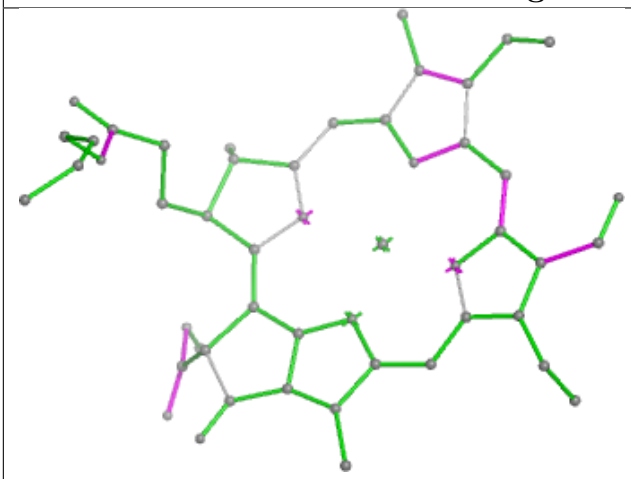


Rings

Ligand CHL x 319



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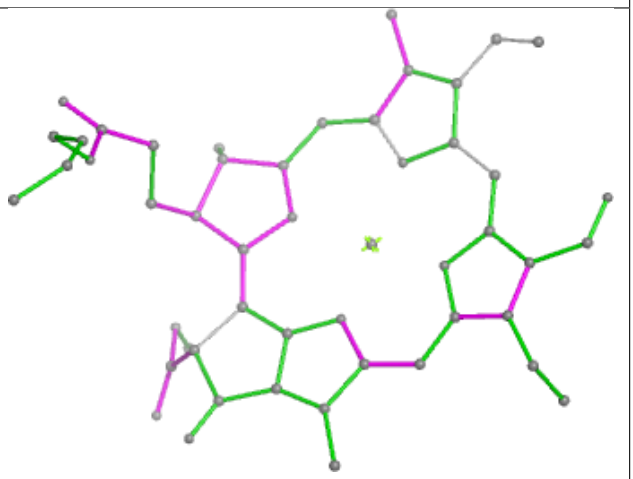
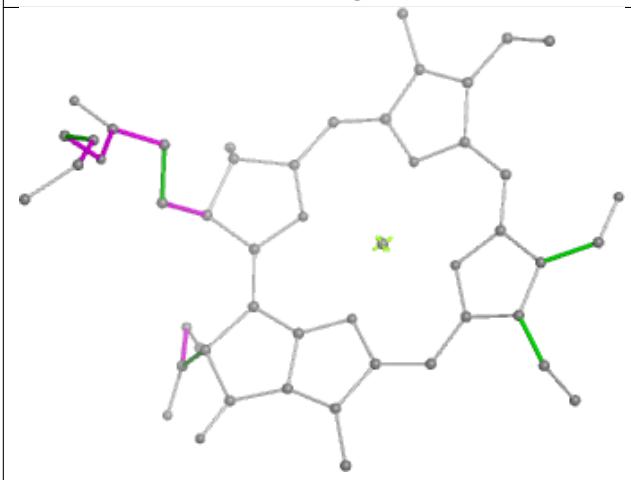
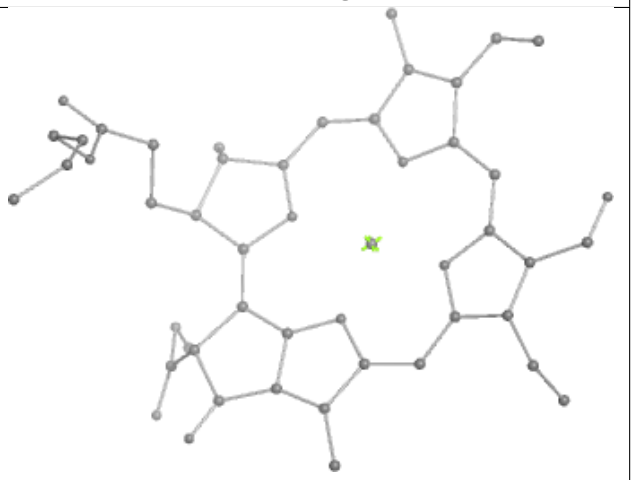


Bond angles



Torsions

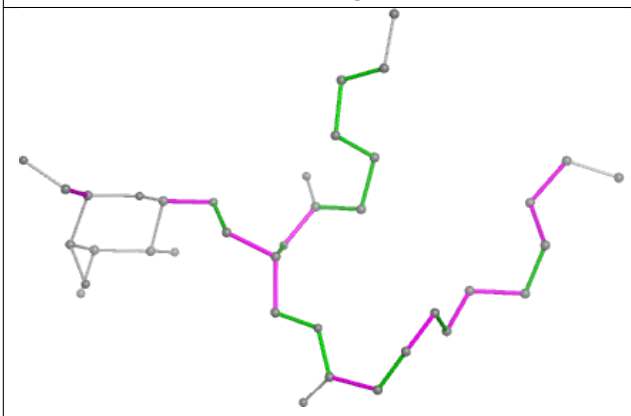


Rings

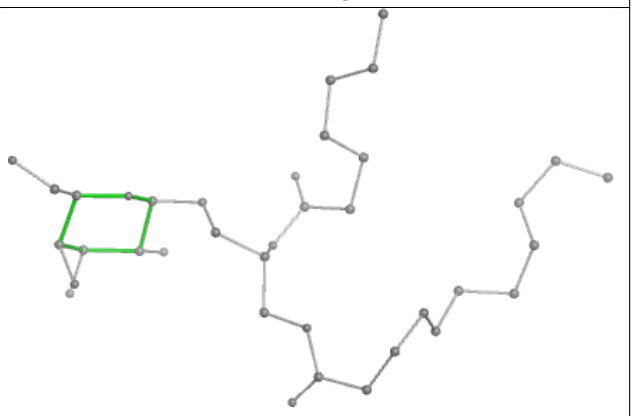
Ligand LMG B 605

Bond lengths

Bond angles

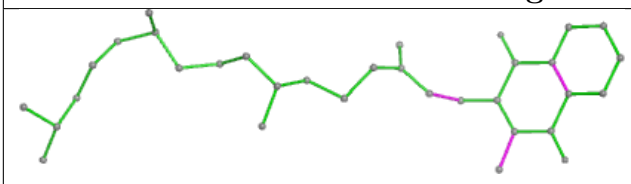


Torsions

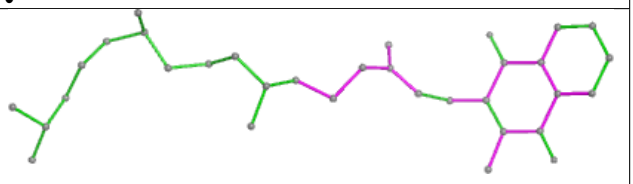


Rings

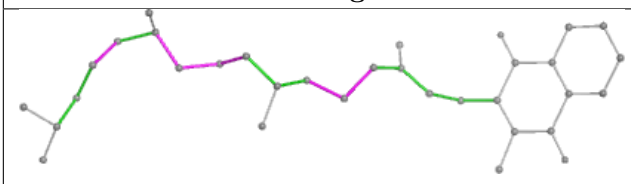
Ligand PQN a 825



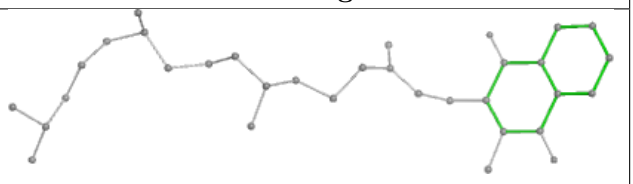
Bond lengths



Bond angles

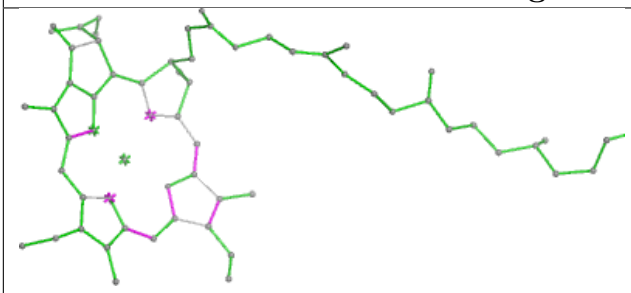


Torsions

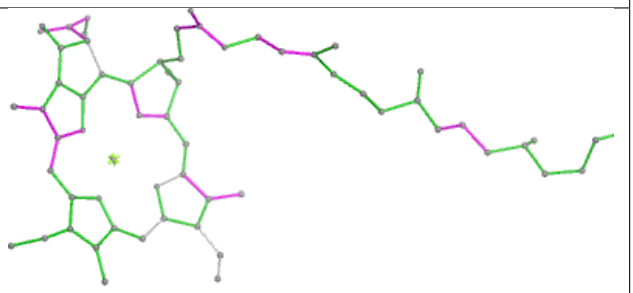


Rings

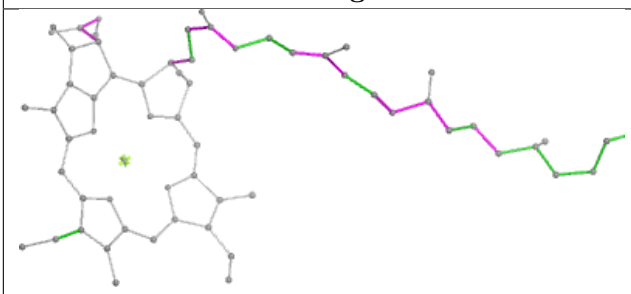
Ligand CLA a 849



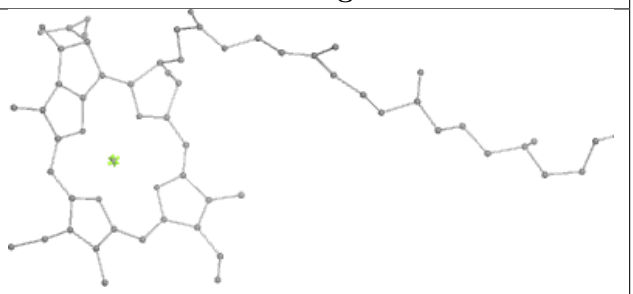
Bond lengths



Bond angles

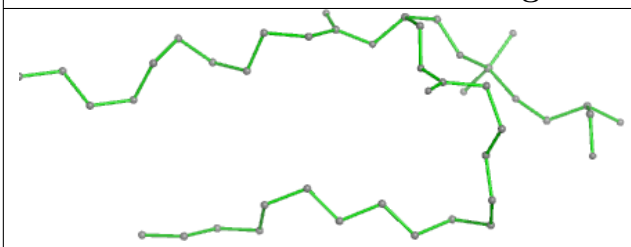


Torsions

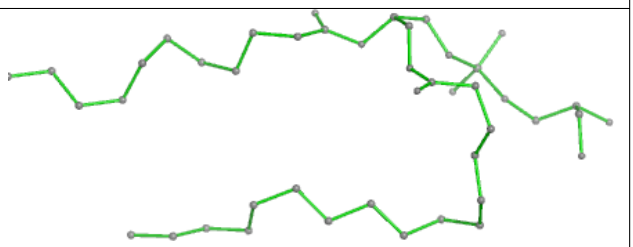


Rings

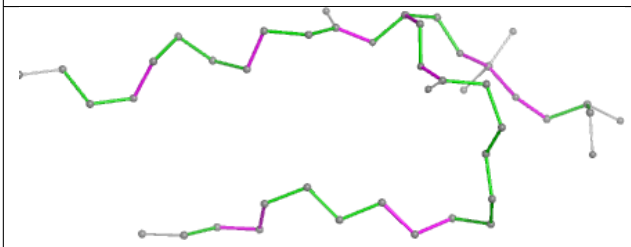
Ligand PGT A 404



Bond lengths



Bond angles



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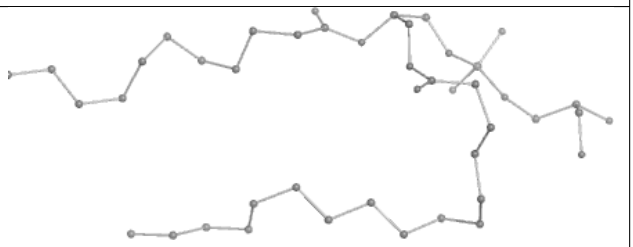
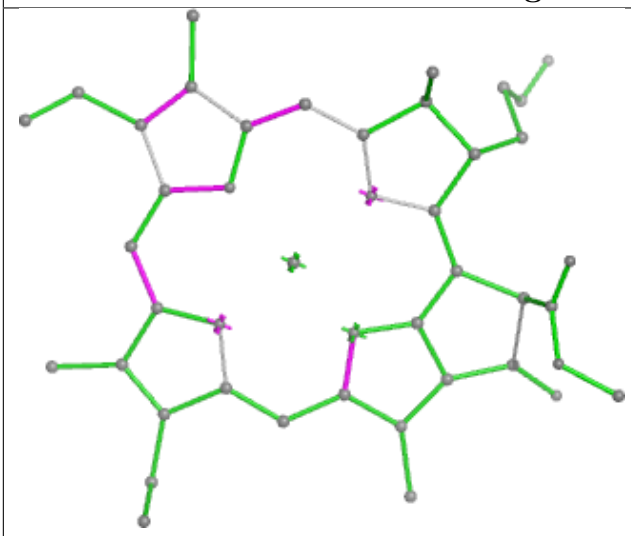
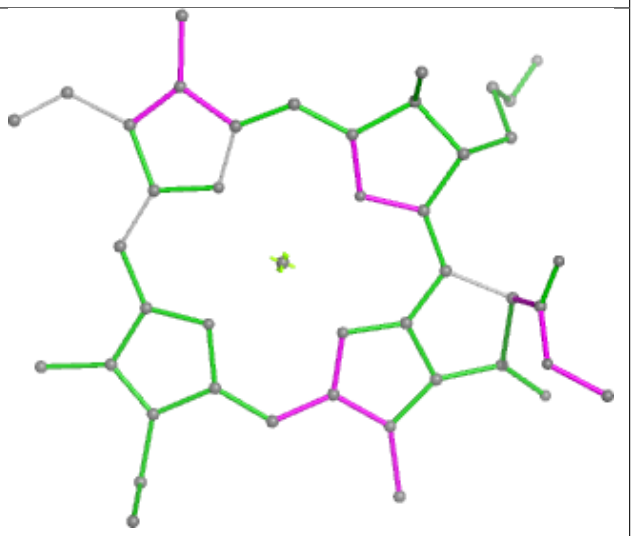


Rings

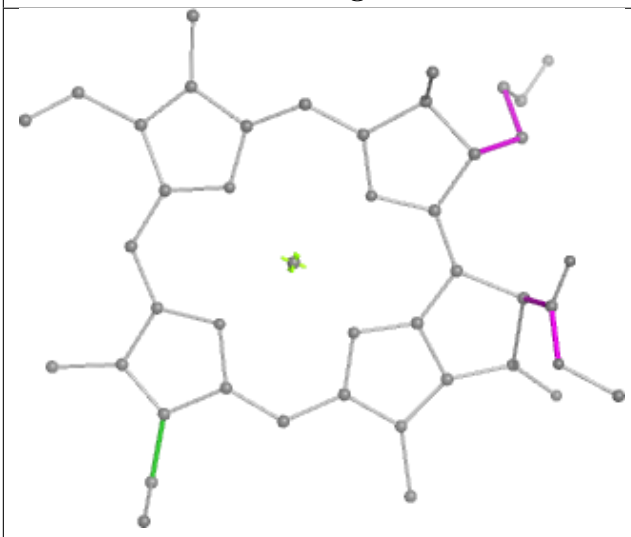
Ligand CLA w 314



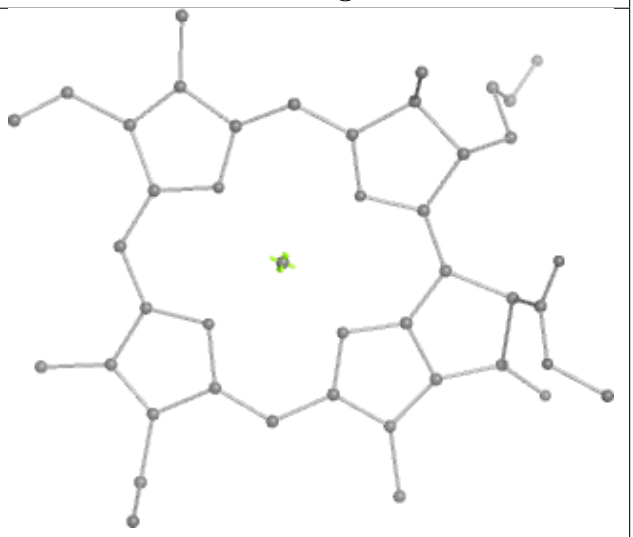
Bond lengths



Bond angles

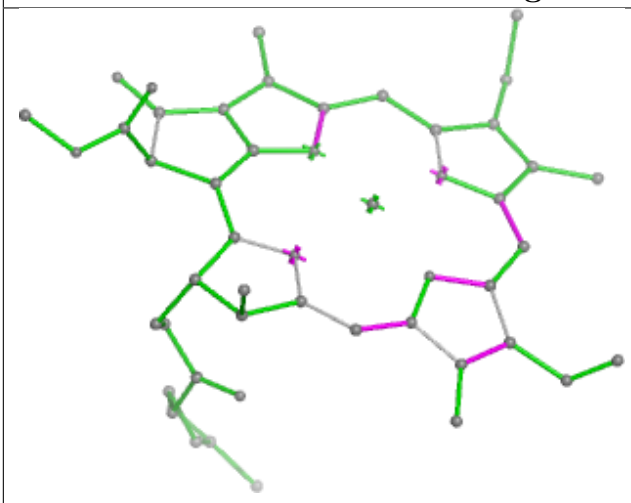


Torsions

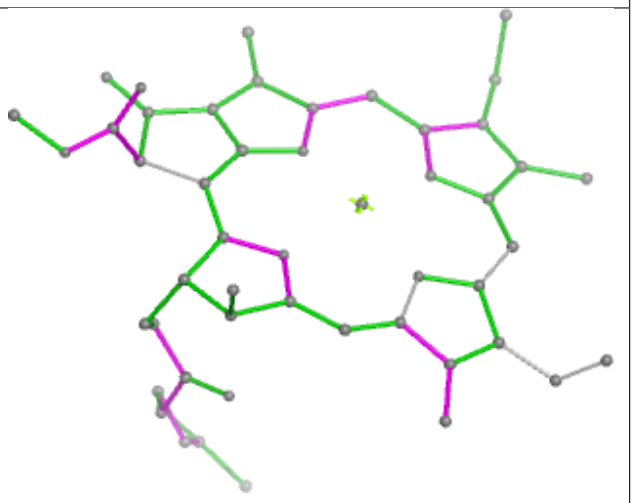


Rings

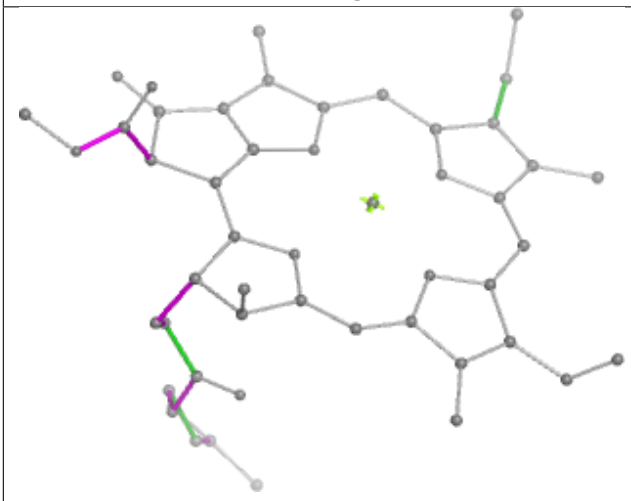
Ligand CLA w 302



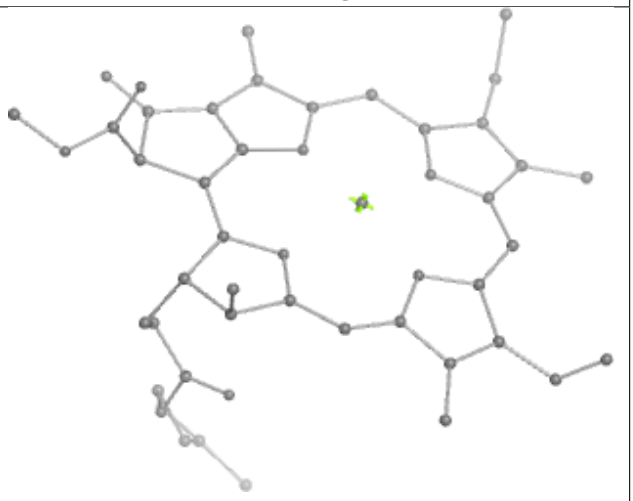
Bond lengths



Bond angles

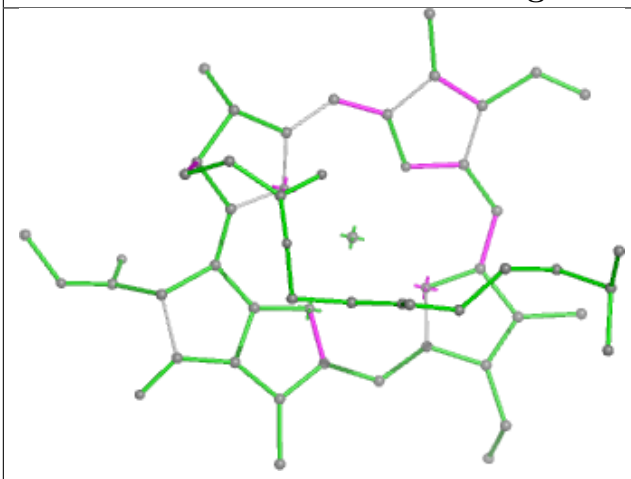


Torsions

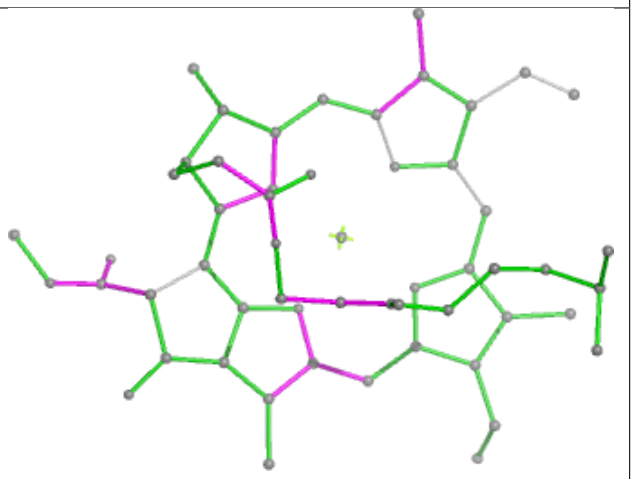


Rings

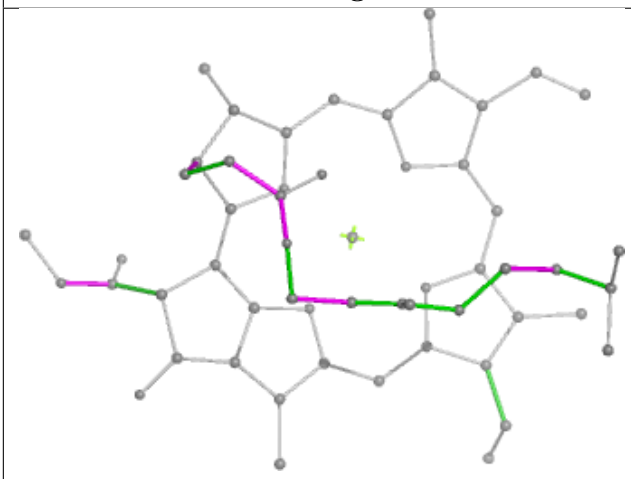
Ligand CLA b 841



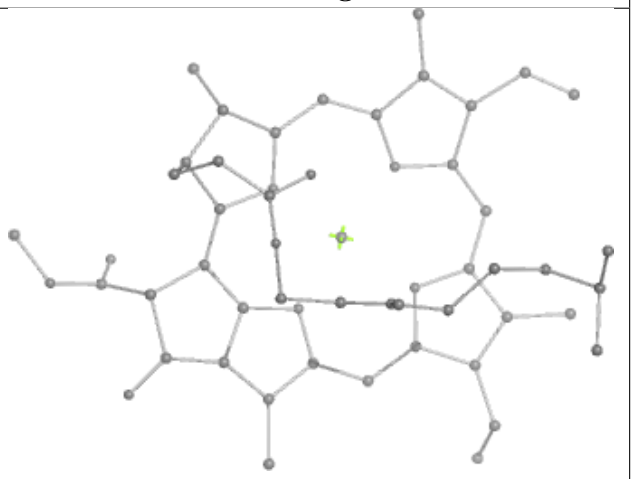
Bond lengths



Bond angles

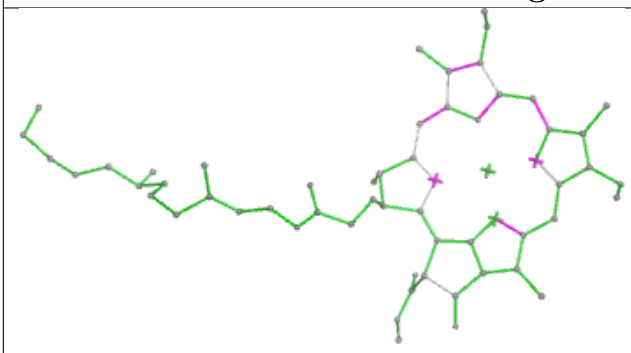


Torsions

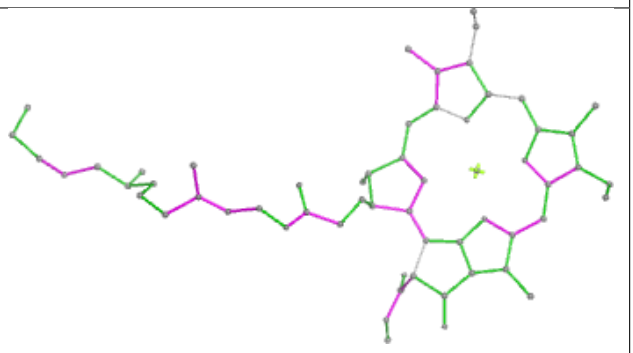


Rings

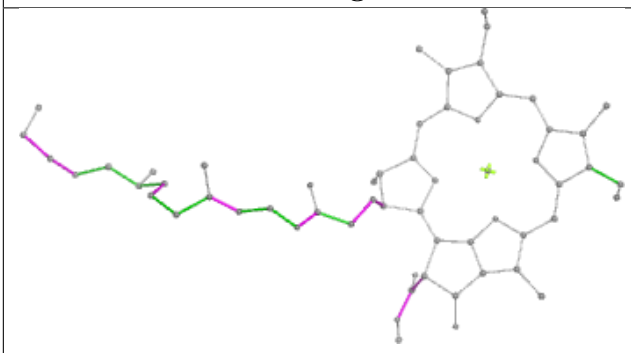
Ligand CLA a 818



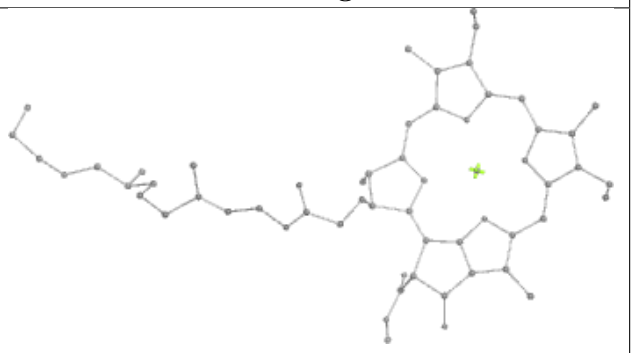
Bond lengths



Bond angles

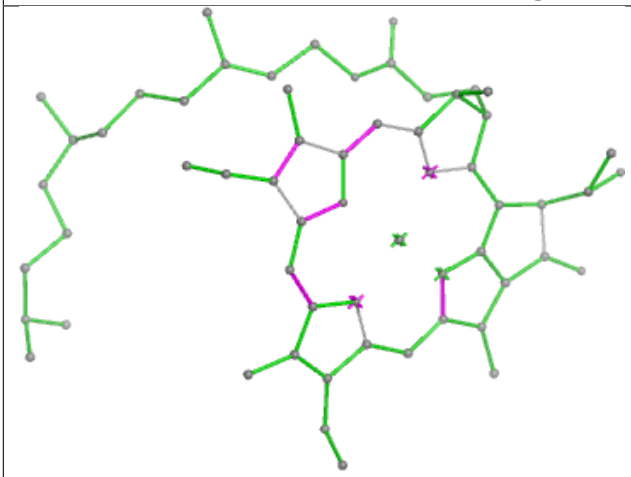


Torsions

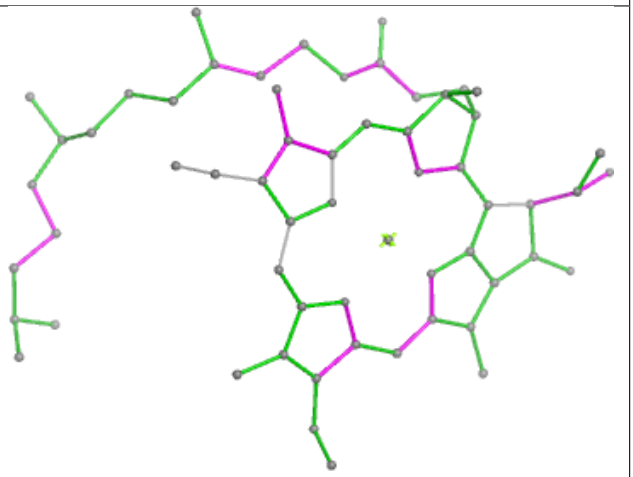


Rings

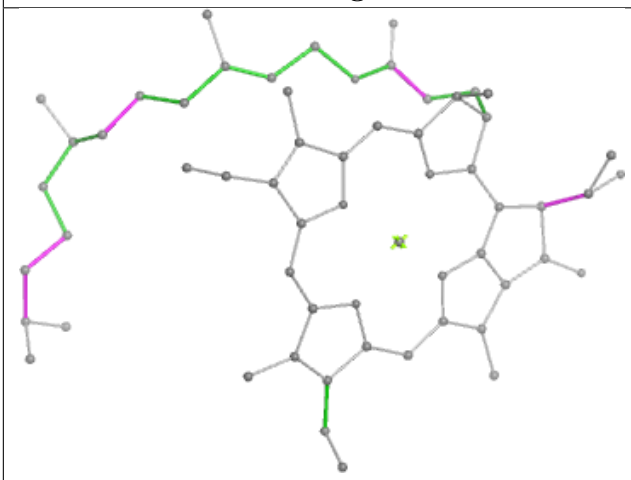
Ligand CLA z 307



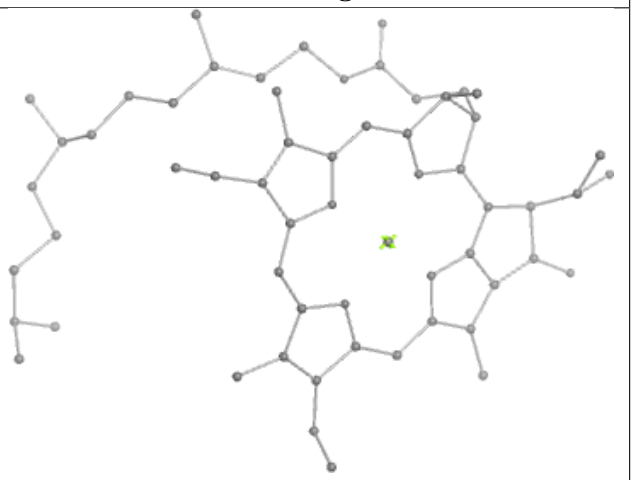
Bond lengths



Bond angles

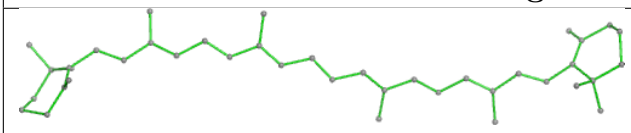


Torsions



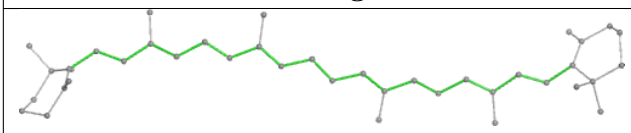
Rings

Ligand BCR a 828



Bond lengths

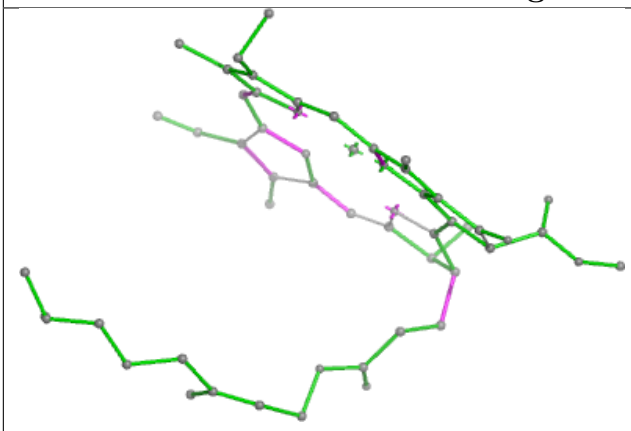
Bond angles



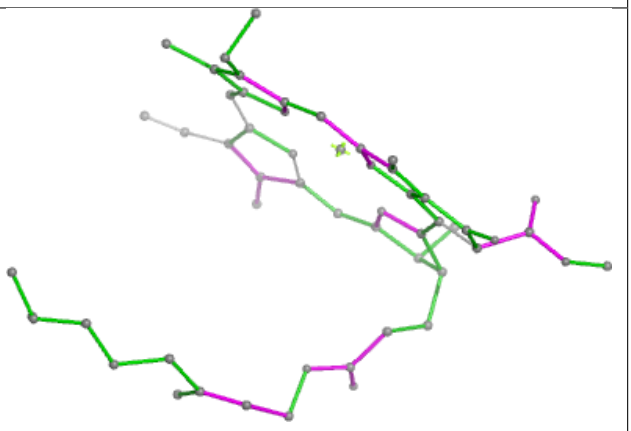
Torsions

Rings

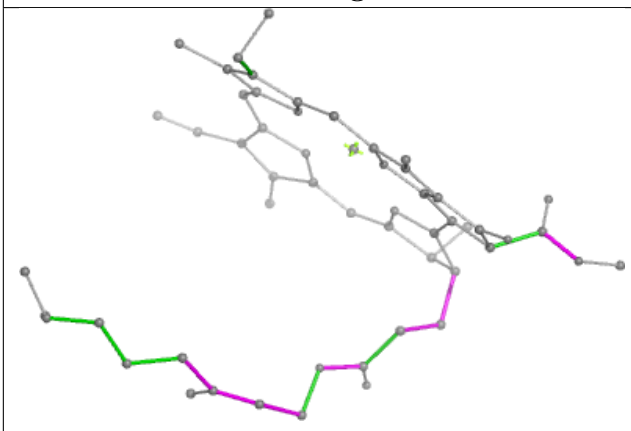
Ligand CLA b 823



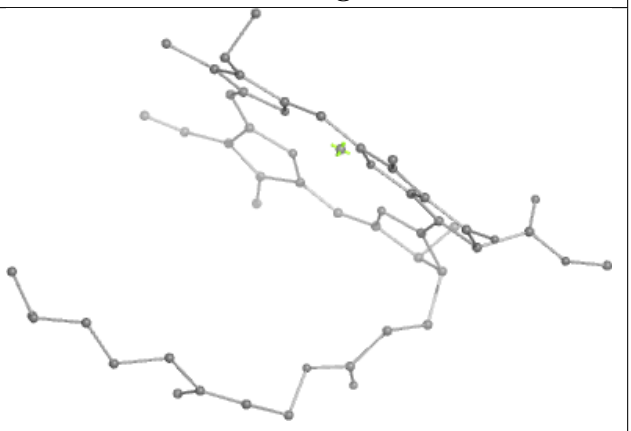
Bond lengths



Bond angles

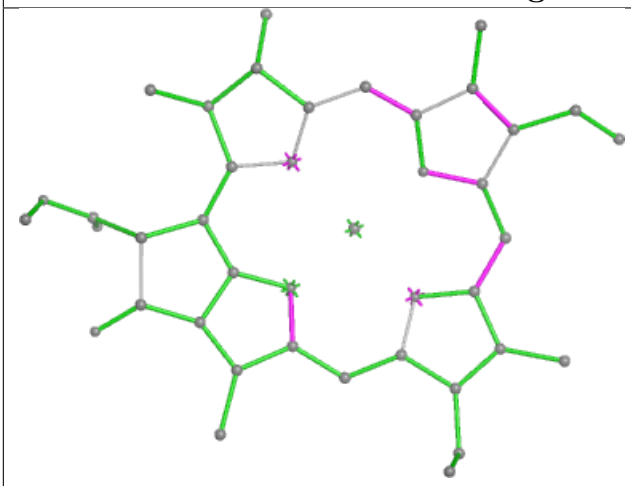


Torsions



Rings

Ligand CLA x 302



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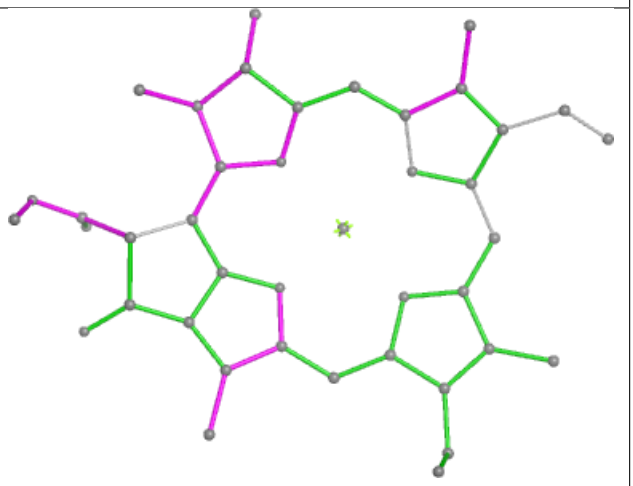
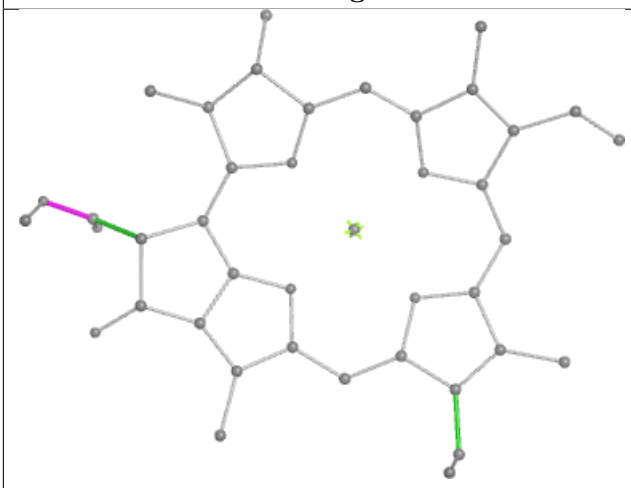
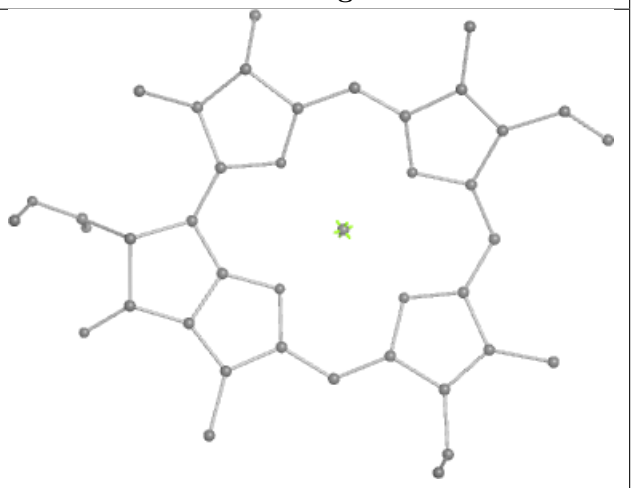


Bond angles

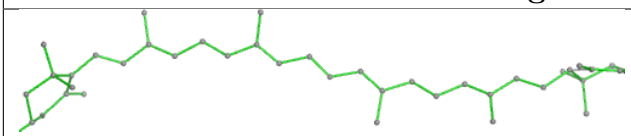


Torsions

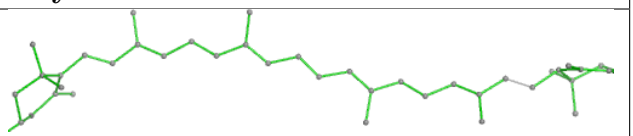


Rings

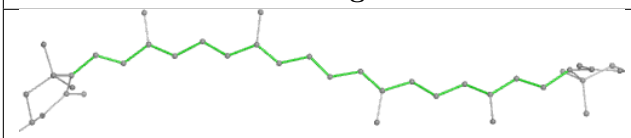
Ligand LUT y 315



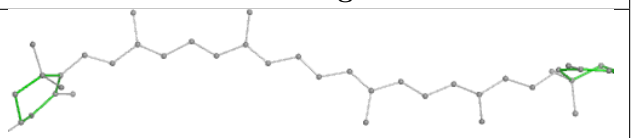
Bond lengths



Bond angles

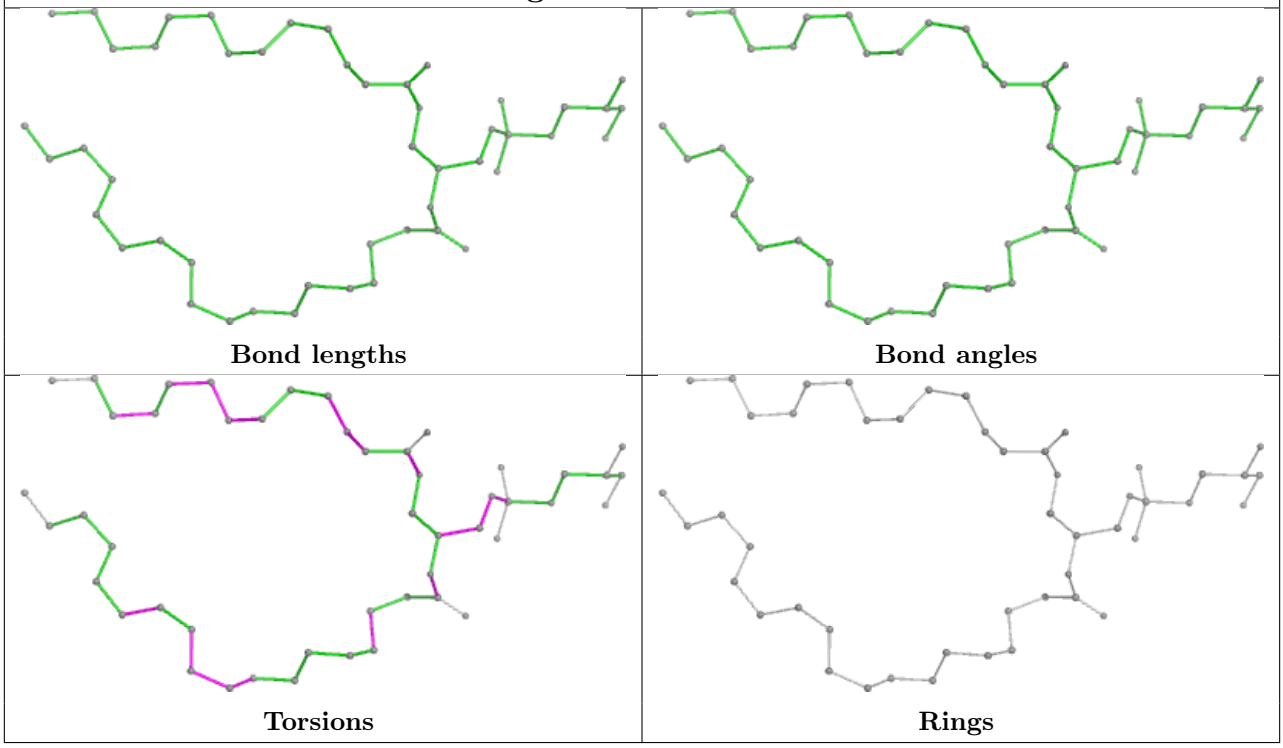


Torsions

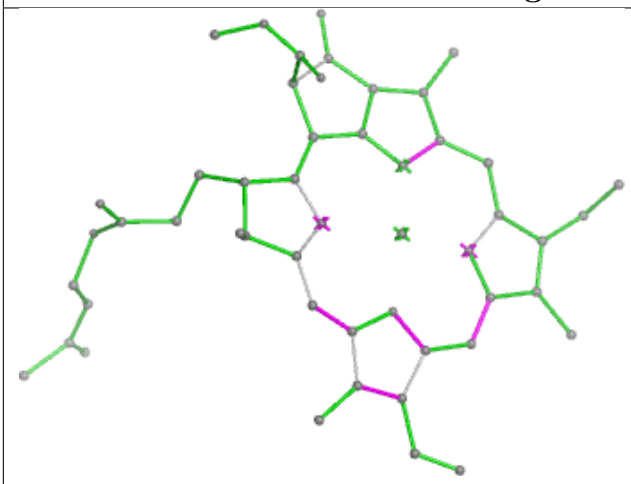


Rings

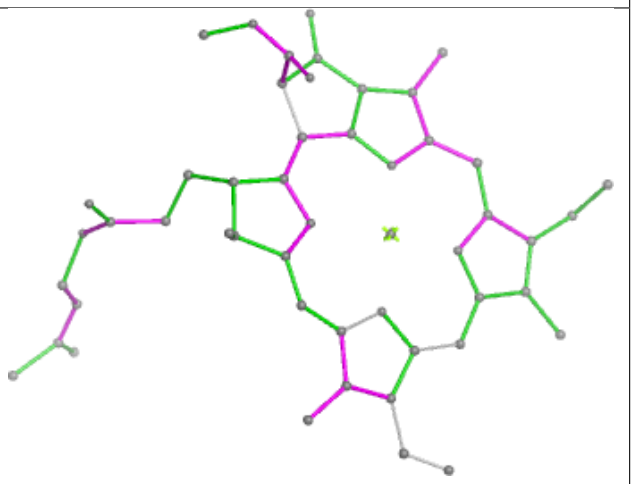
Ligand PGT b 829



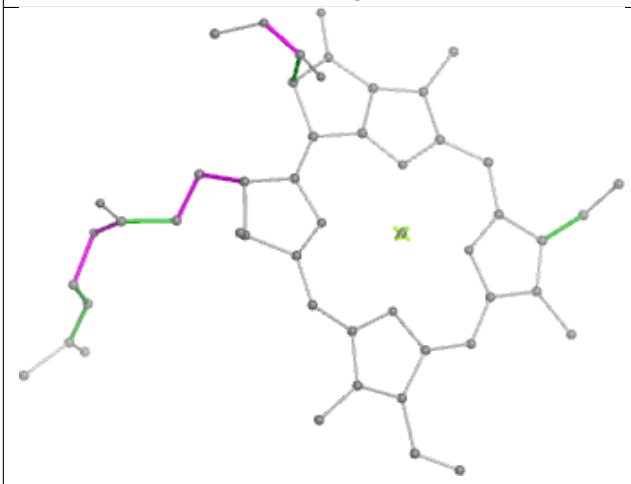
Ligand CLA w 316



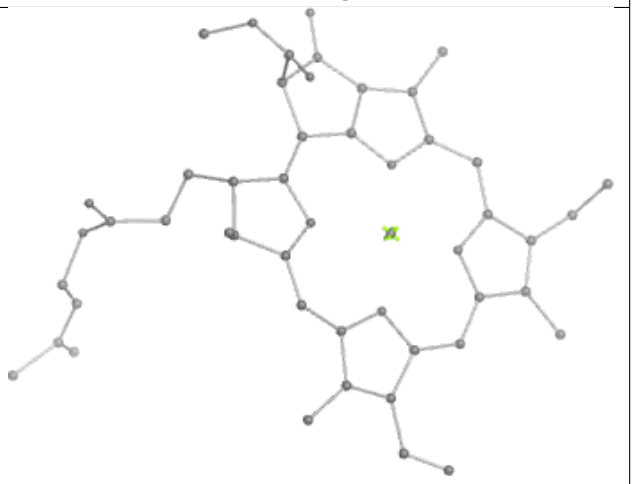
Bond lengths



Bond angles

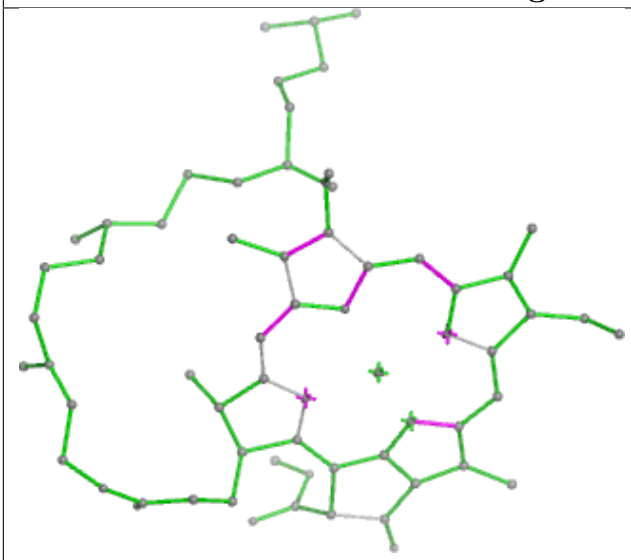


Torsions

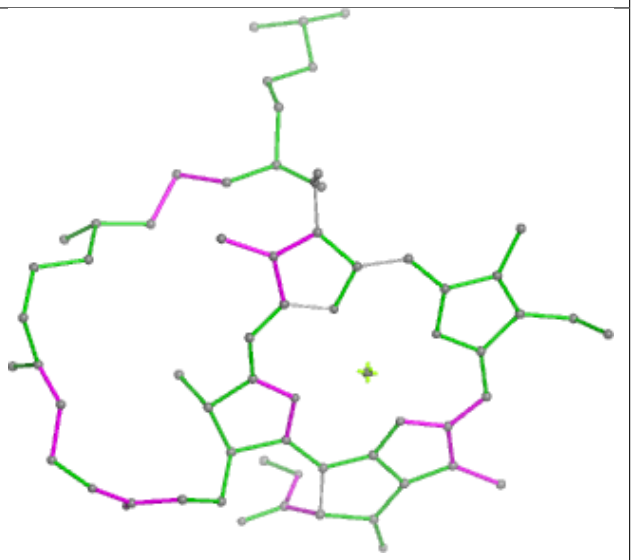


Rings

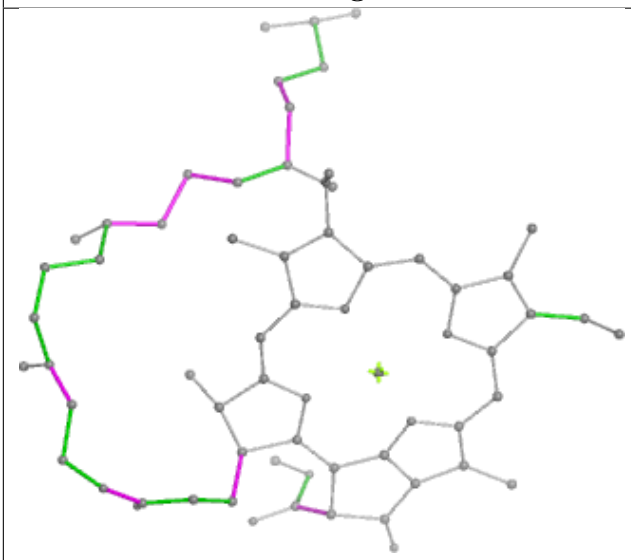
Ligand CLA a 838



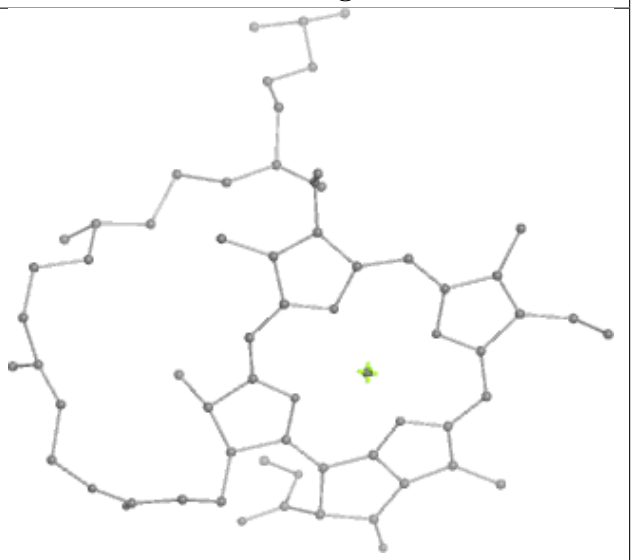
Bond lengths



Bond angles

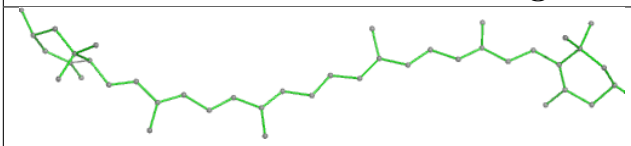


Torsions



Rings

Ligand LUT z 321



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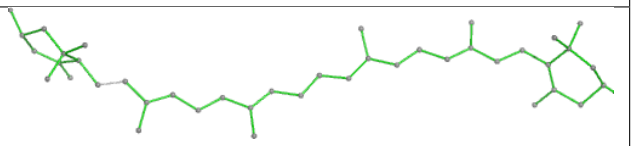
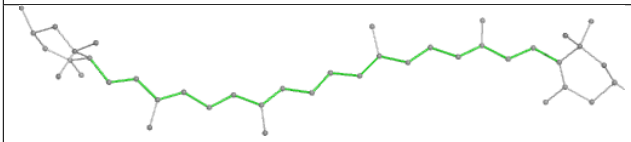
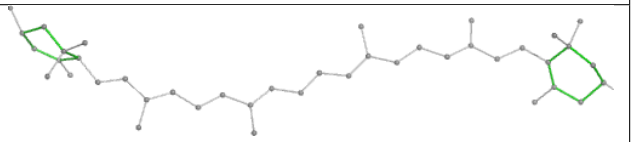


Bond angles

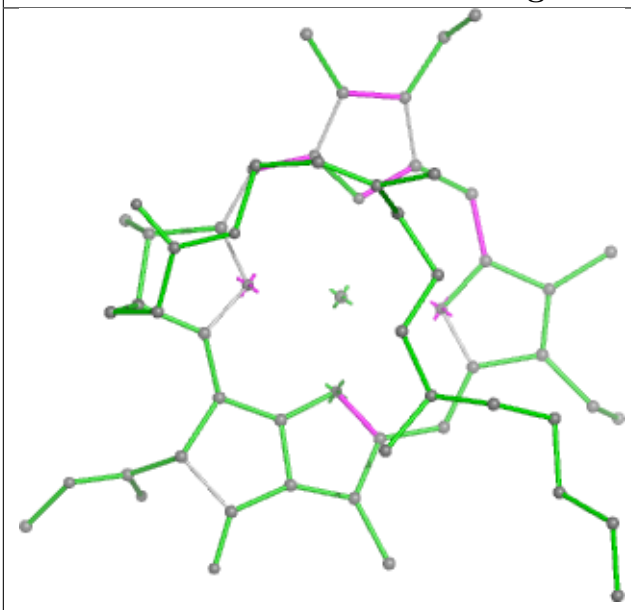


Torsions

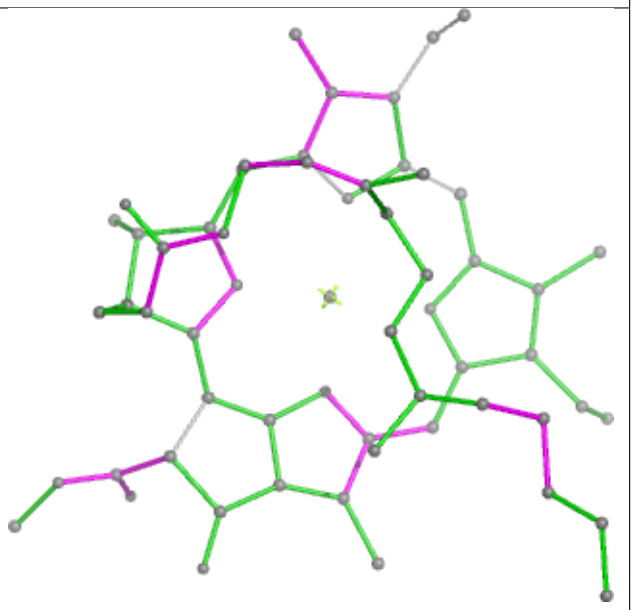


Rings

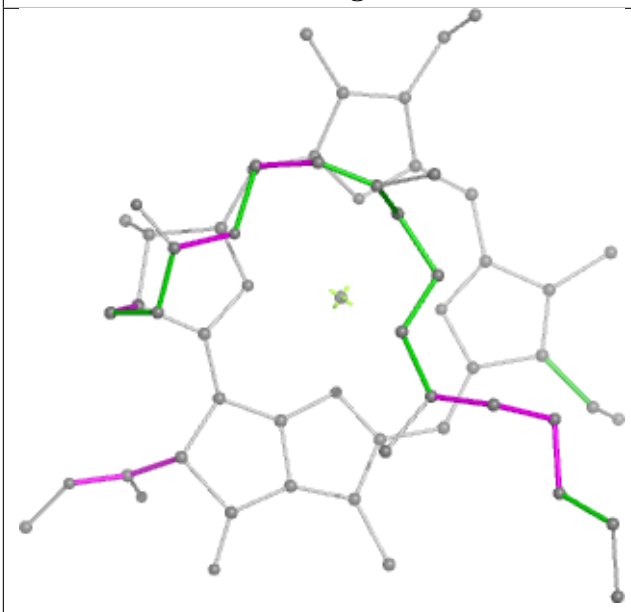
Ligand CLA b 835



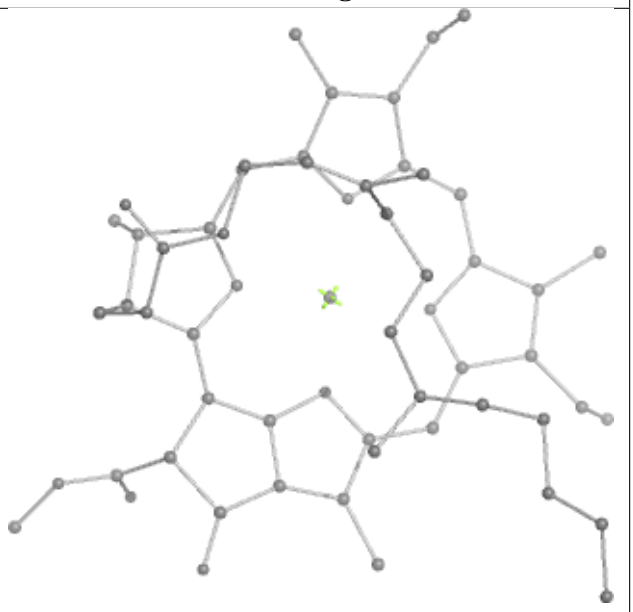
Bond lengths



Bond angles

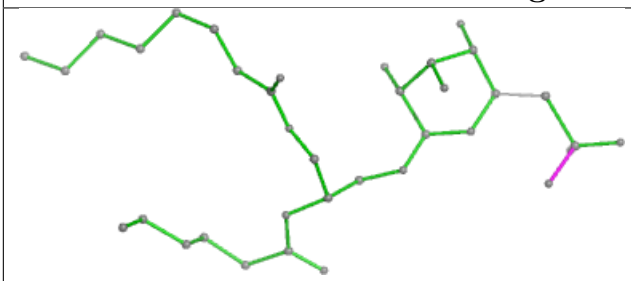


Torsions

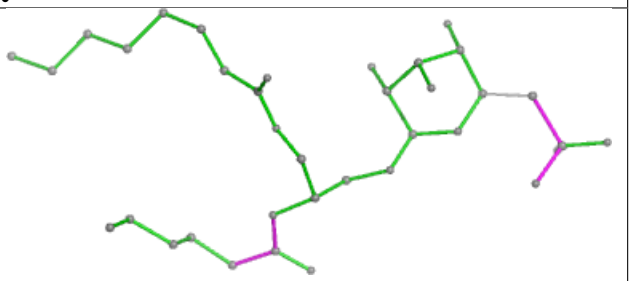


Rings

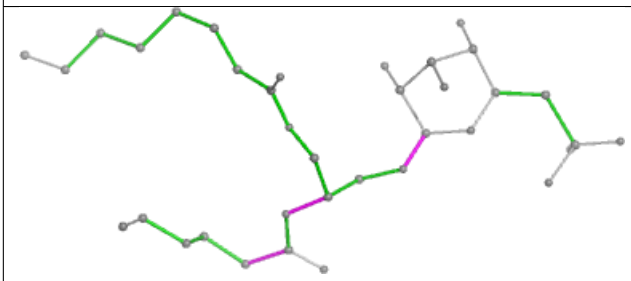
Ligand SQD a 859



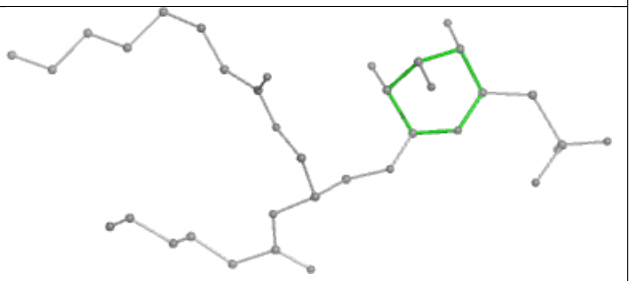
Bond lengths



Bond angles

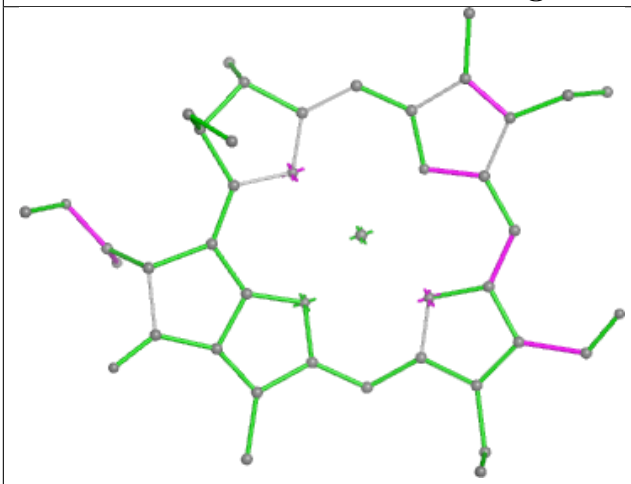


Torsions

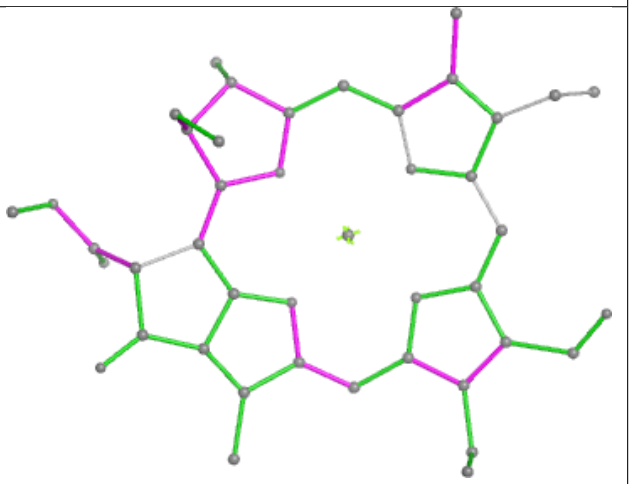


Rings

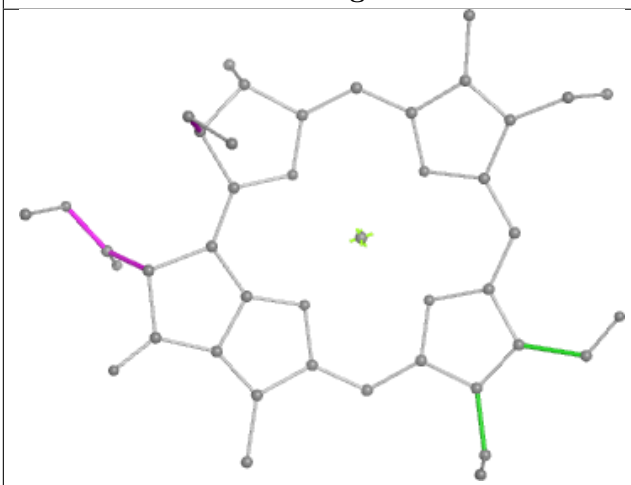
Ligand CHL x 301



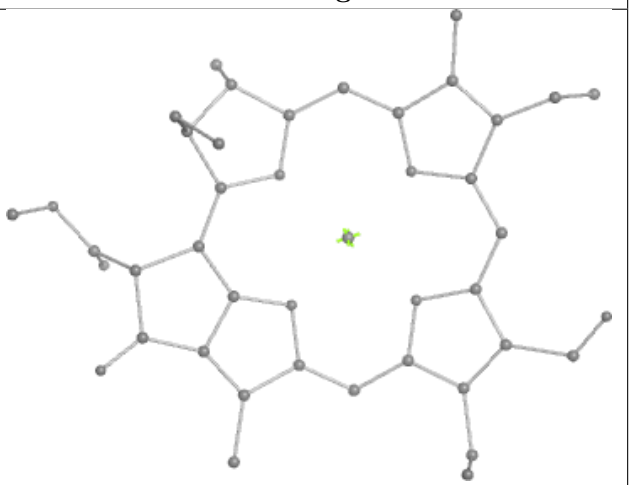
Bond lengths



Bond angles

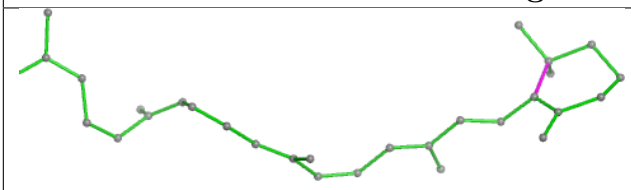


Torsions

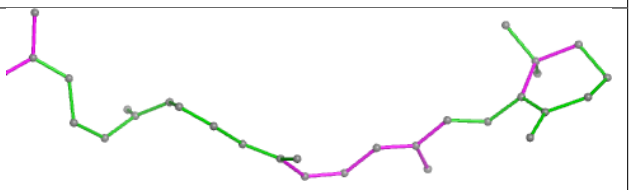


Rings

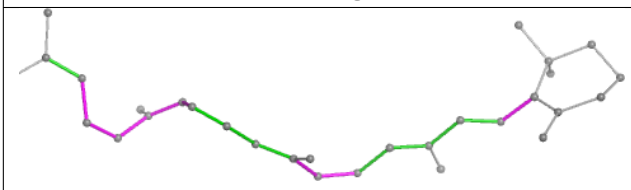
Ligand BCR a 810



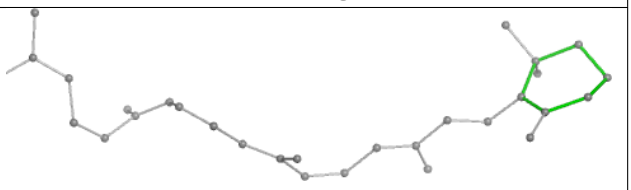
Bond lengths



Bond angles

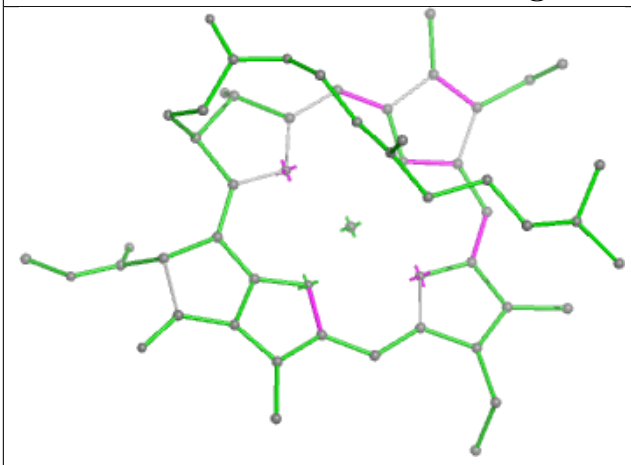


Torsions



Rings

Ligand CLA a 841



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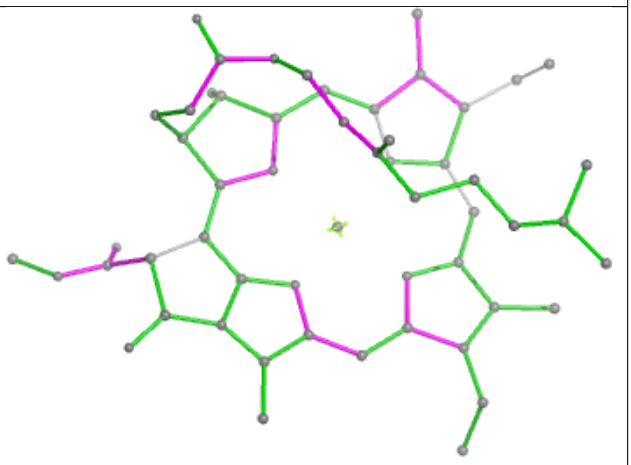
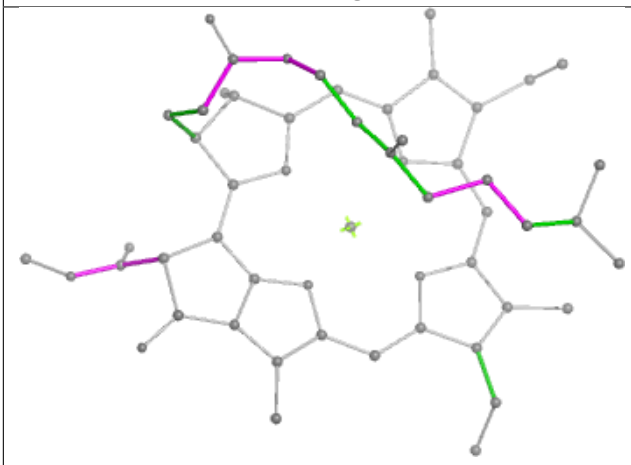


Bond angles



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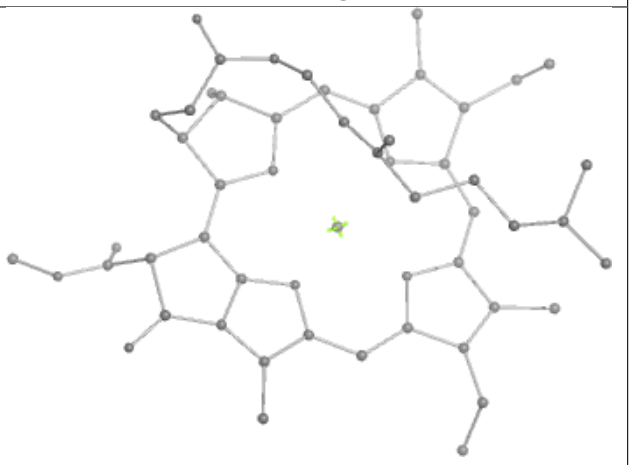
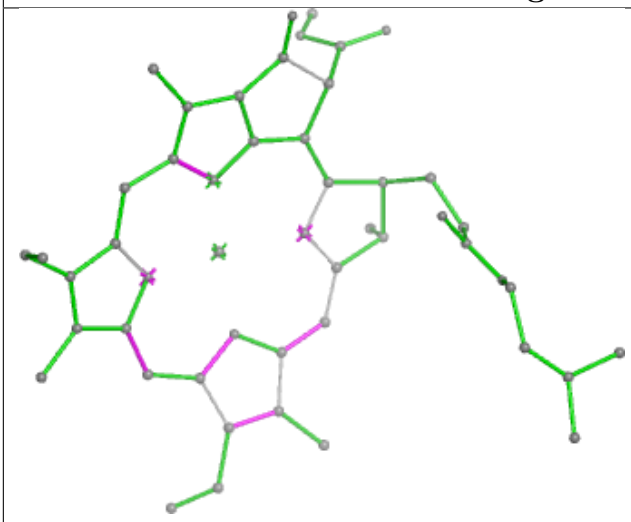


Rings

Ligand CLA b 810



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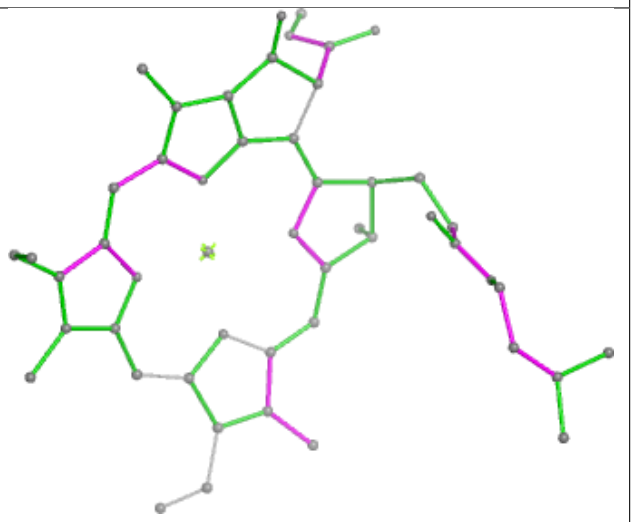
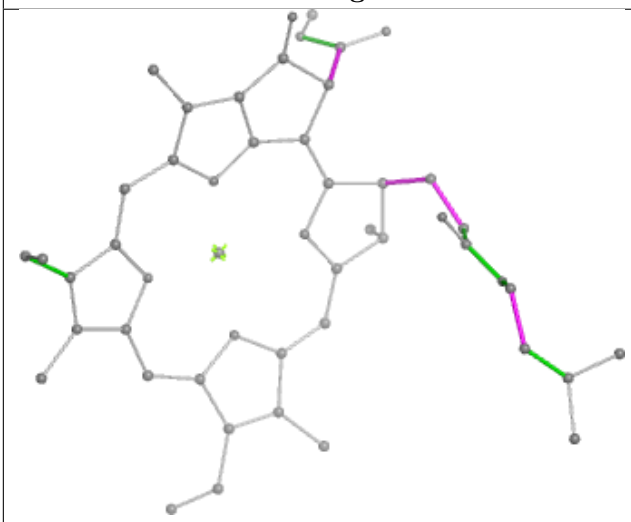


Bond angles



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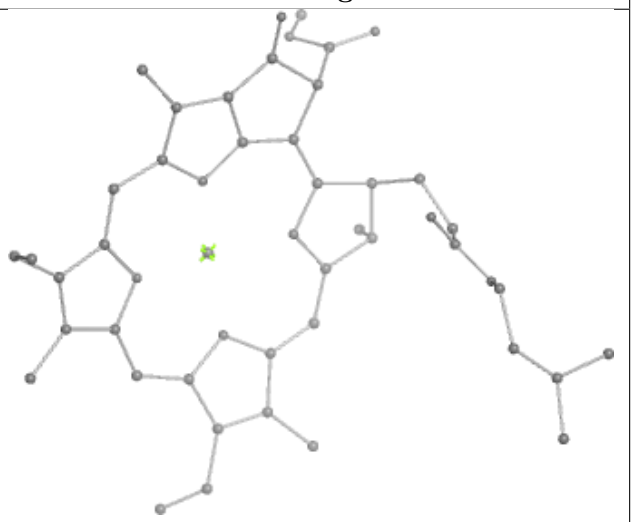
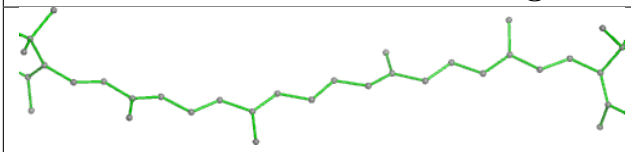


Rings

Ligand BCR k 202



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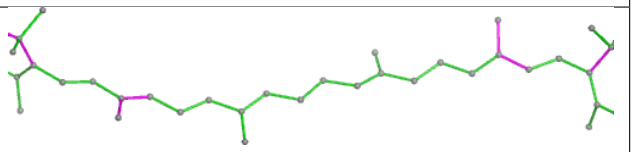
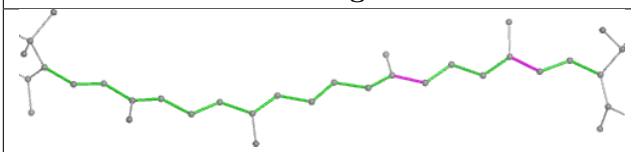
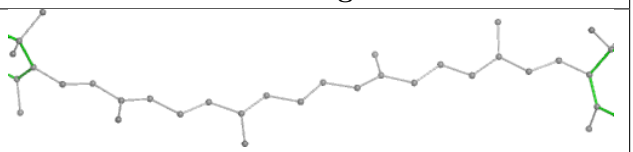


Bond angles

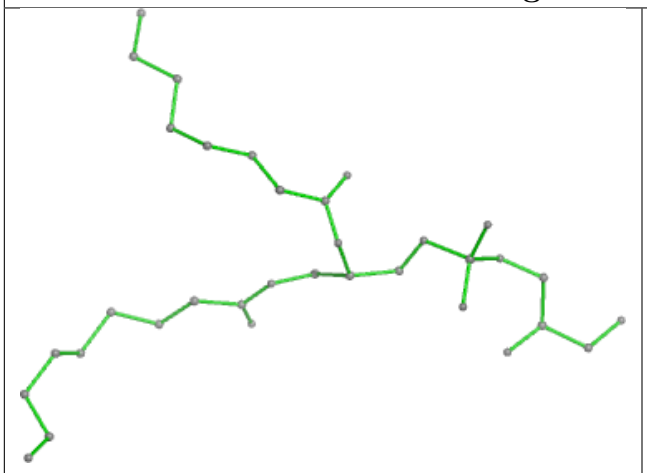


Torsions

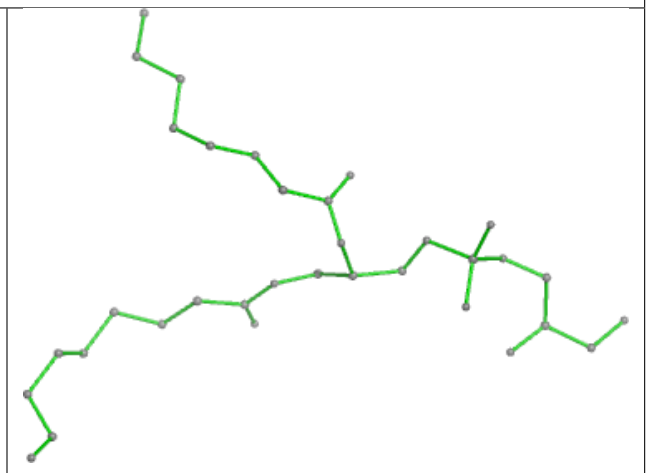


Rings

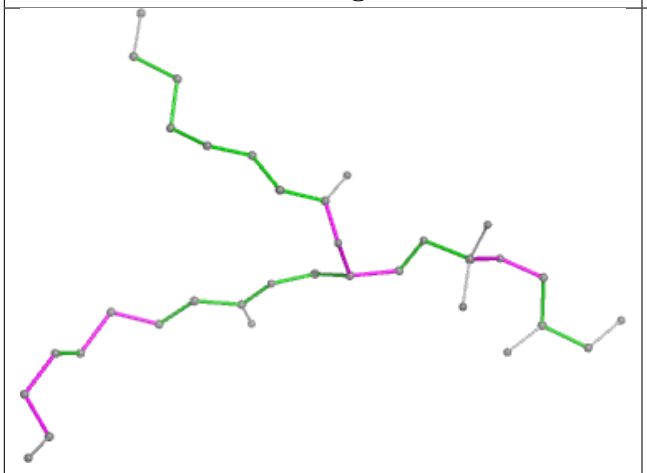
Ligand PGT D 602



Bond lengths



Bond angles



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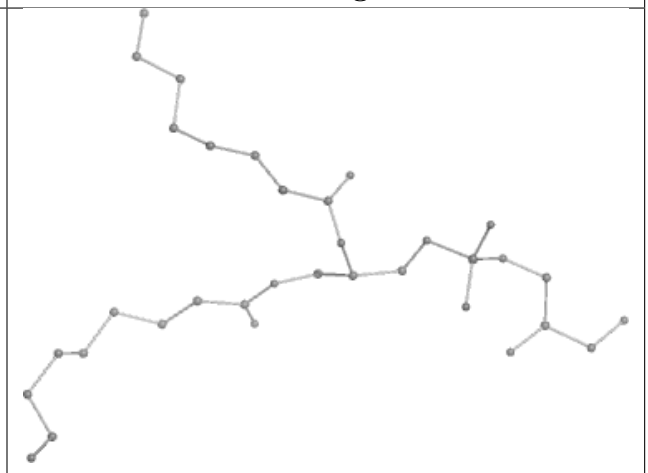
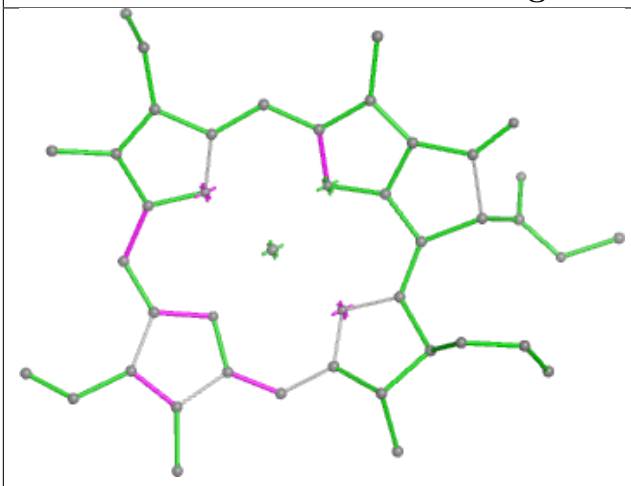


Rings

Ligand CLA g 204



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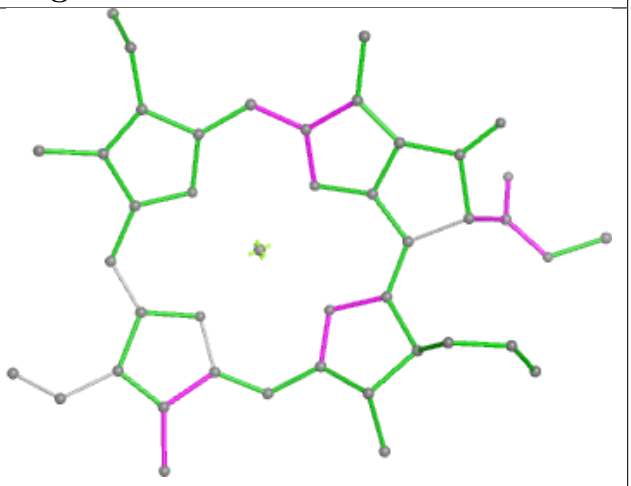
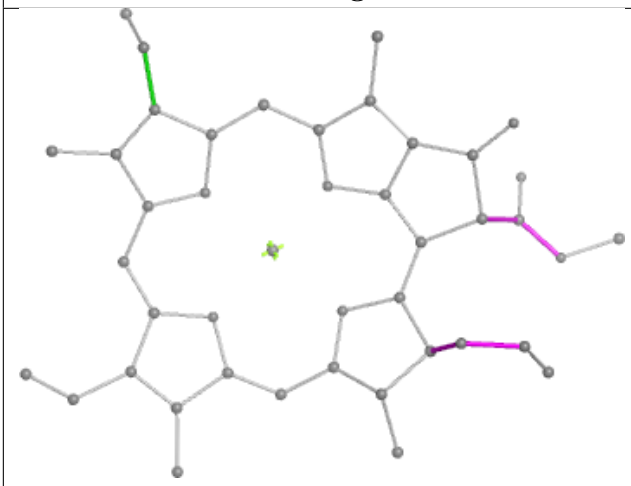


Bond angles



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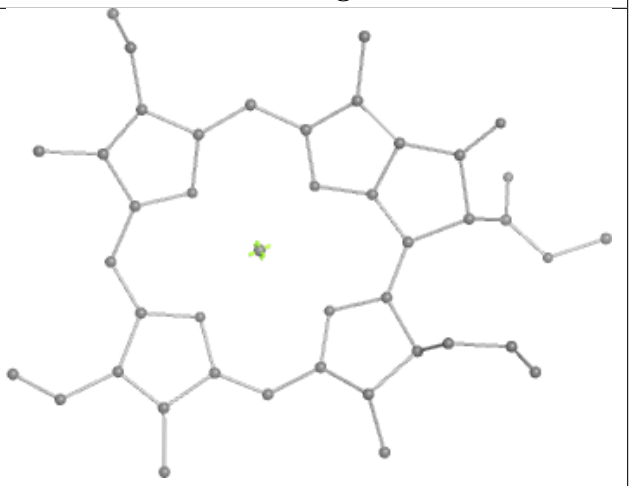
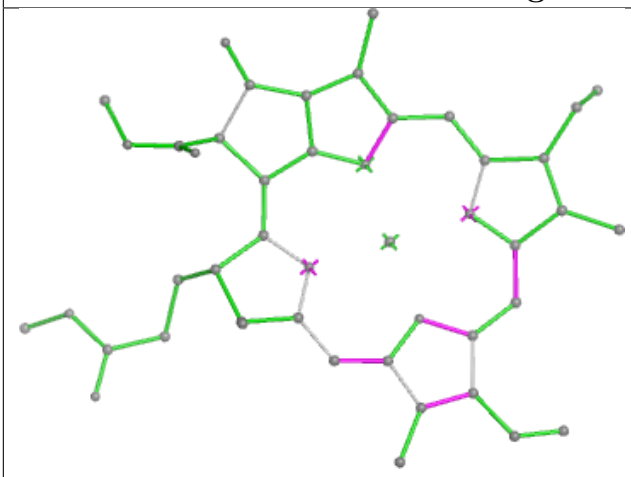


Rings

Ligand CLA h 201



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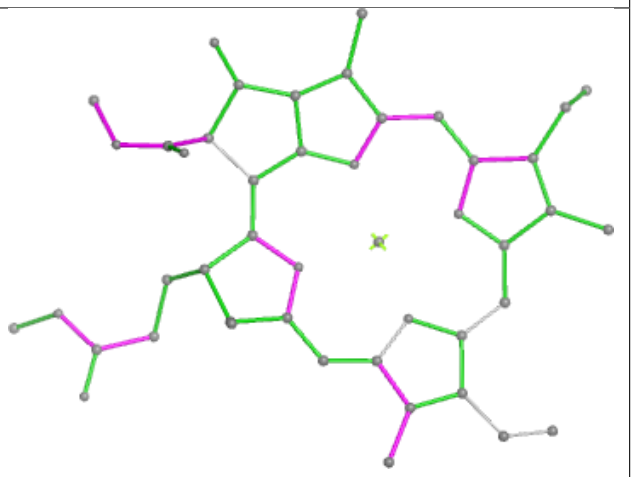
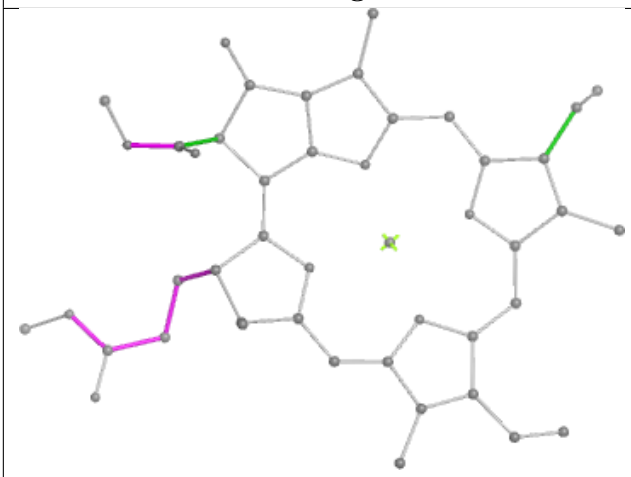


Bond angles



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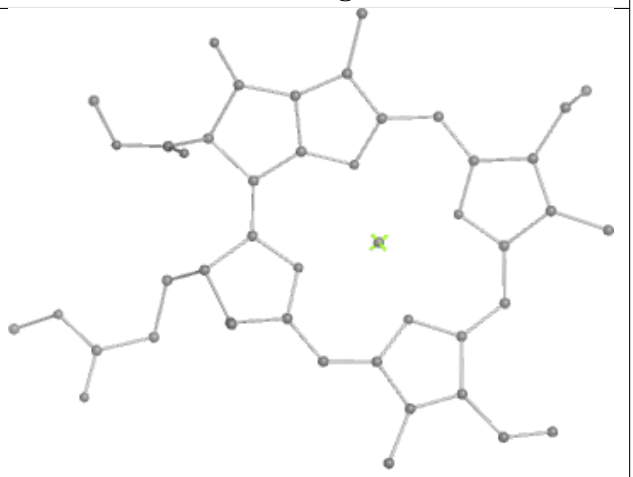
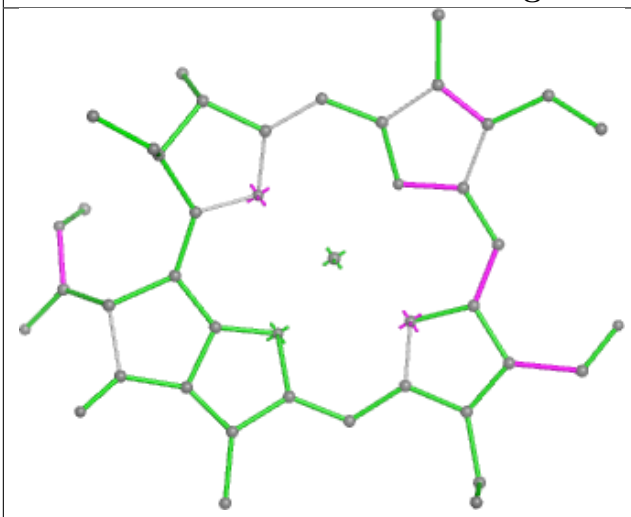


Rings

Ligand CHL w 309



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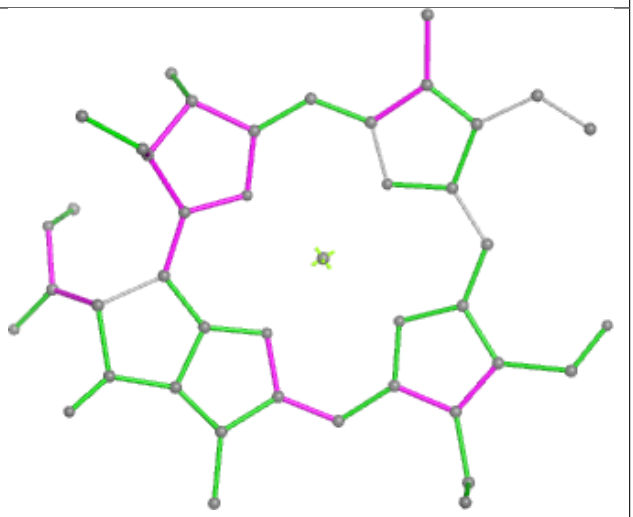
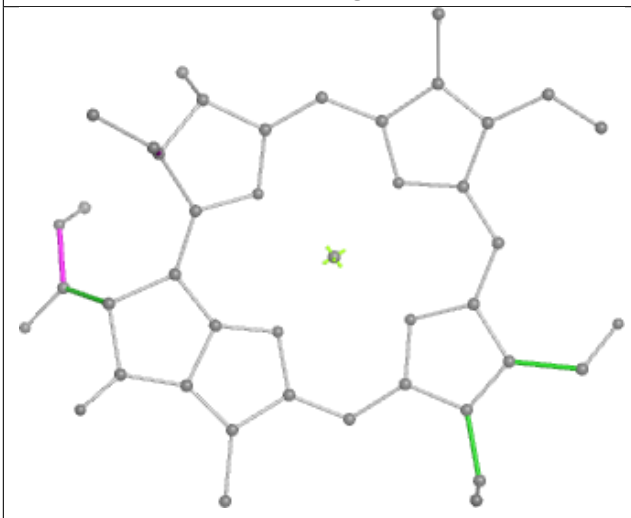


Bond angles



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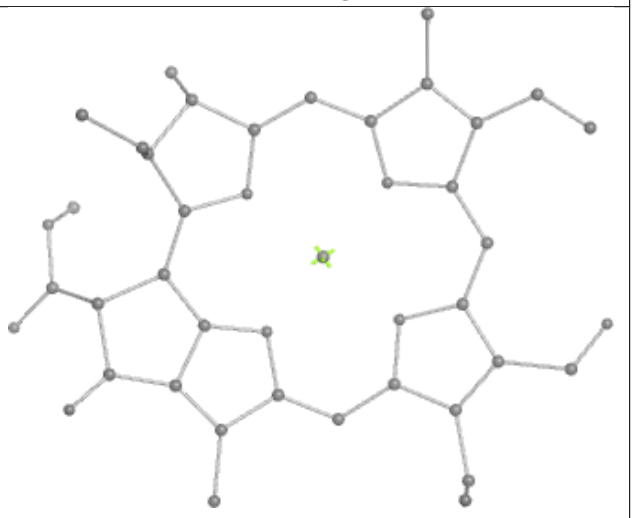
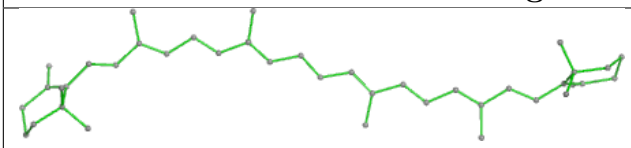


Rings

Ligand BCR y 301



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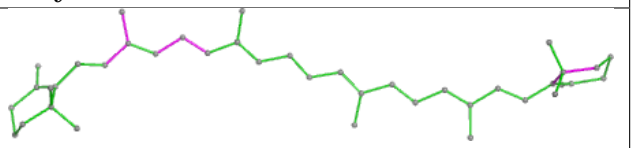
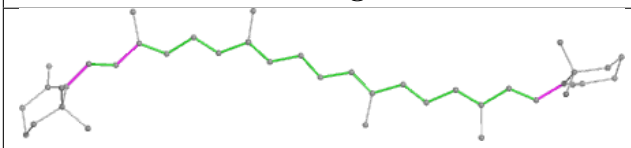


Bond angles



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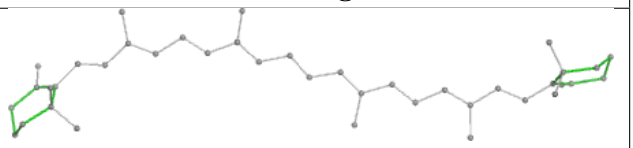
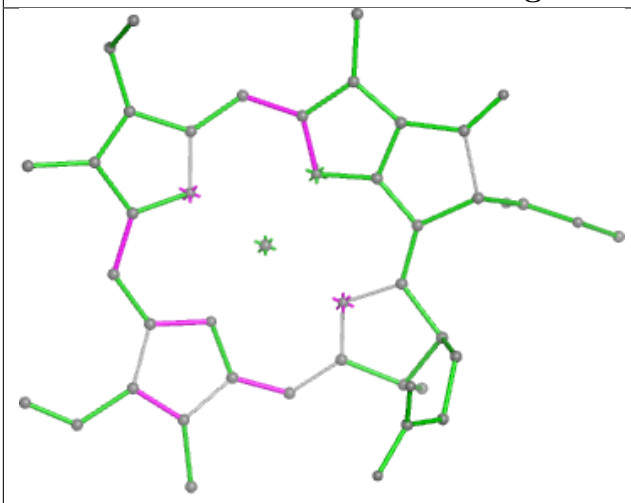


Rings

Ligand CLA w 303



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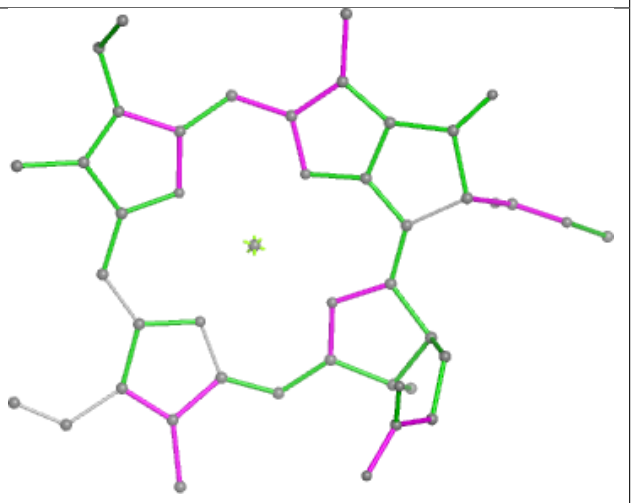
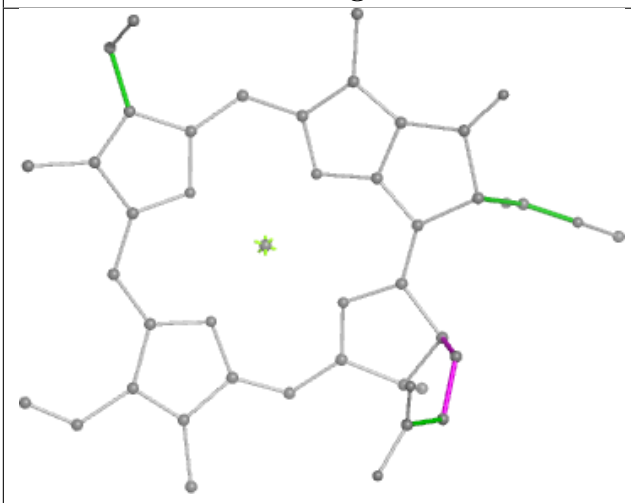


Bond angles



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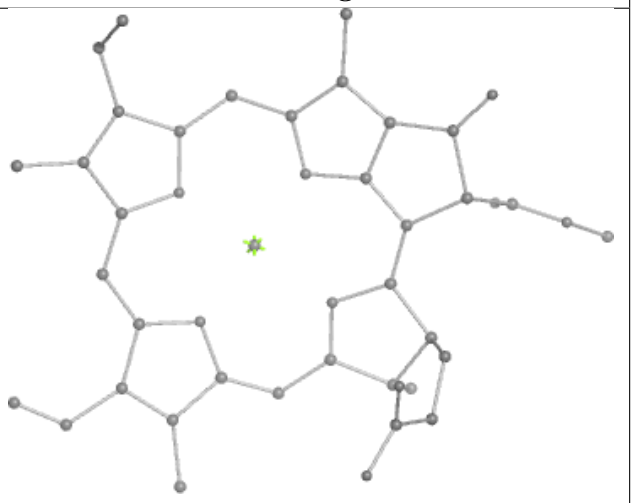
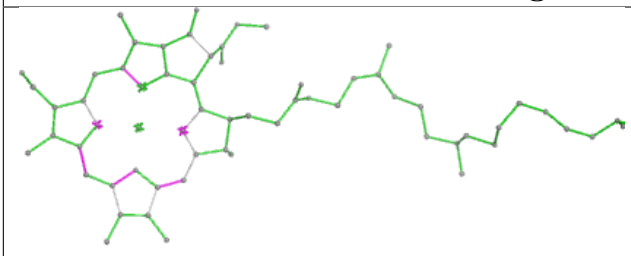


Rings

Ligand CLA a 821



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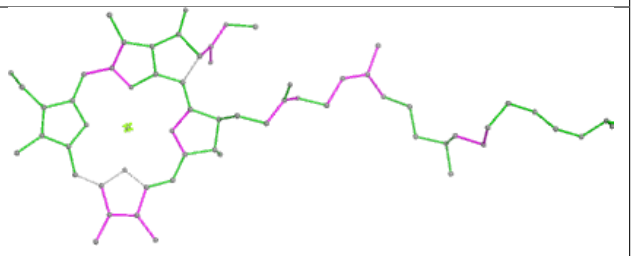
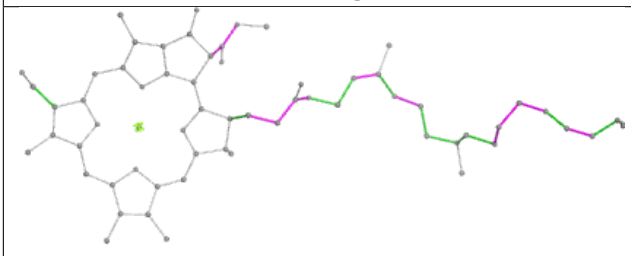


Bond angles



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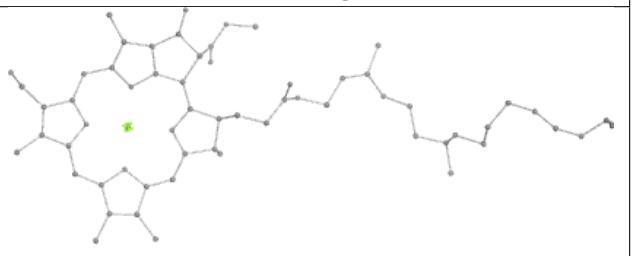
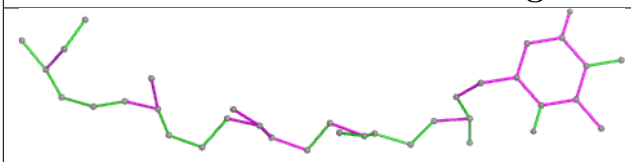
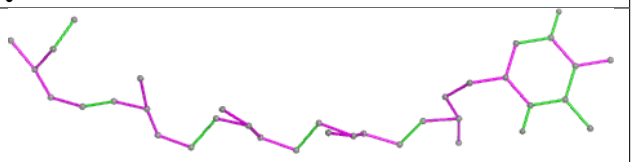


Rings

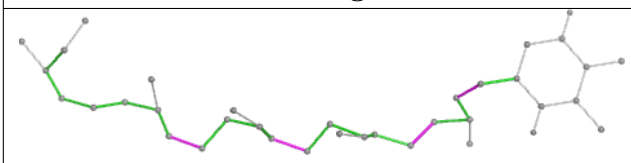
Ligand PQ9 A 405



Bond lengths



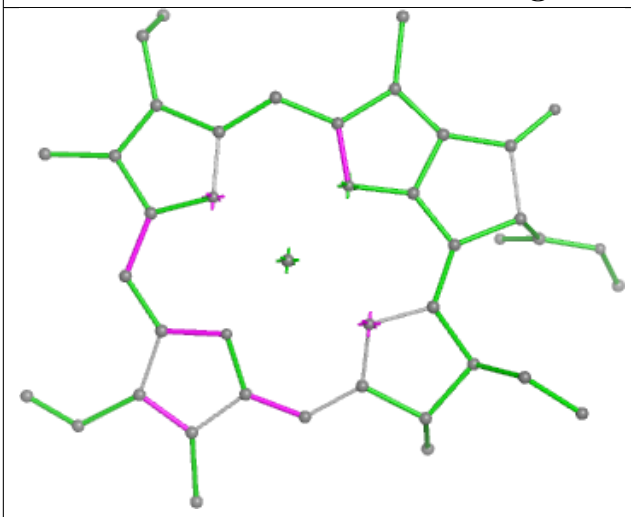
Bond angles



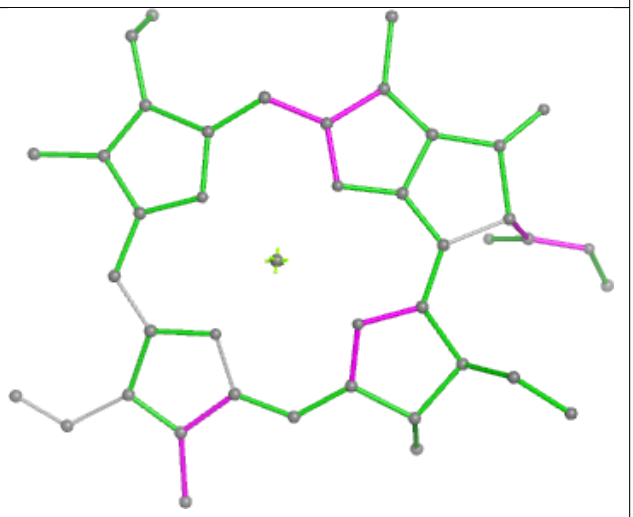
Torsions

Rings

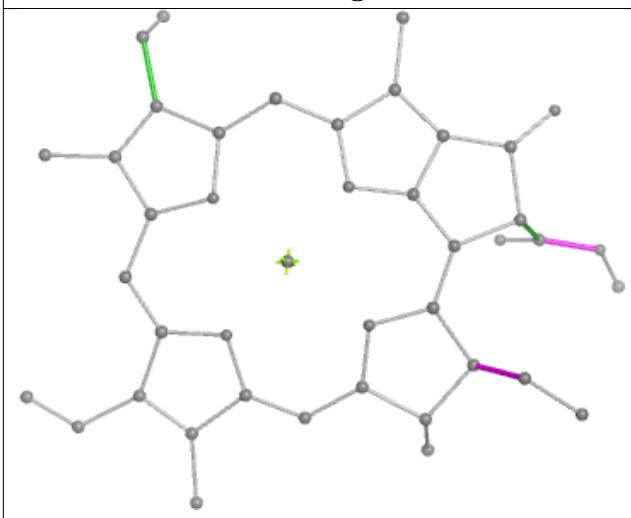
Ligand CLA z 319



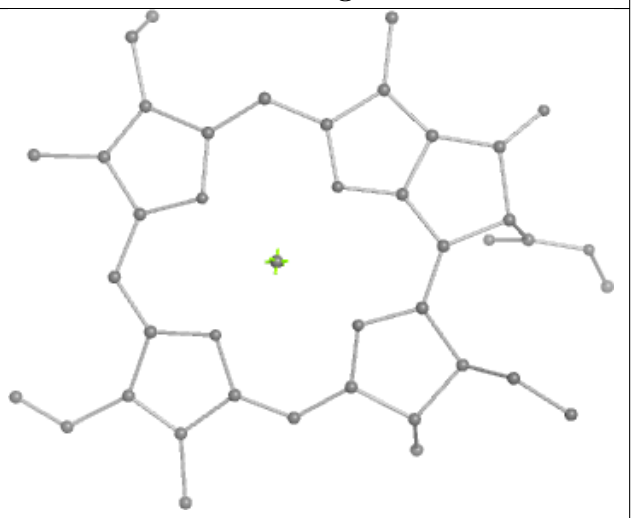
Bond lengths



Bond angles

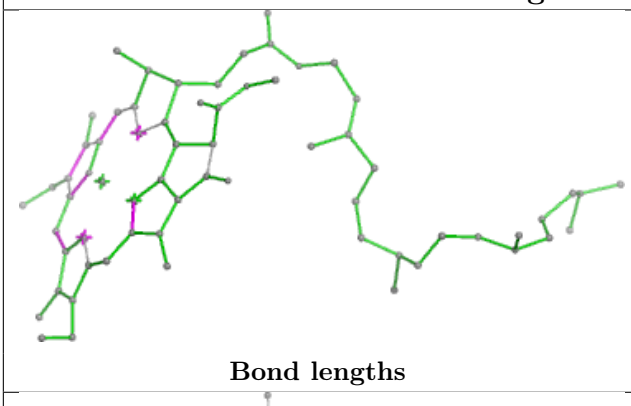


Torsions

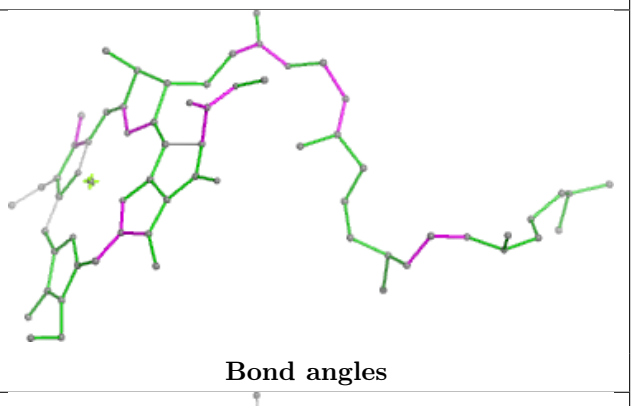


Rings

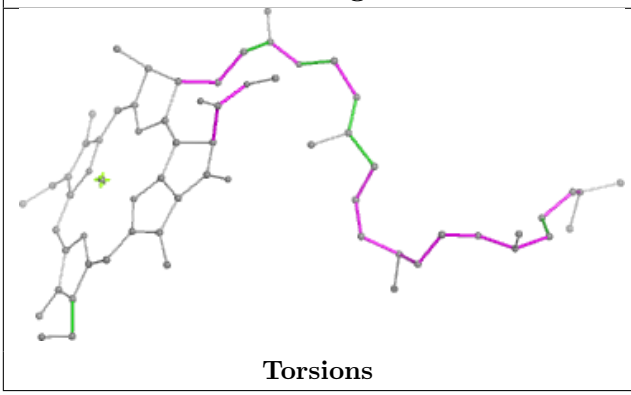
Ligand CLA b 802



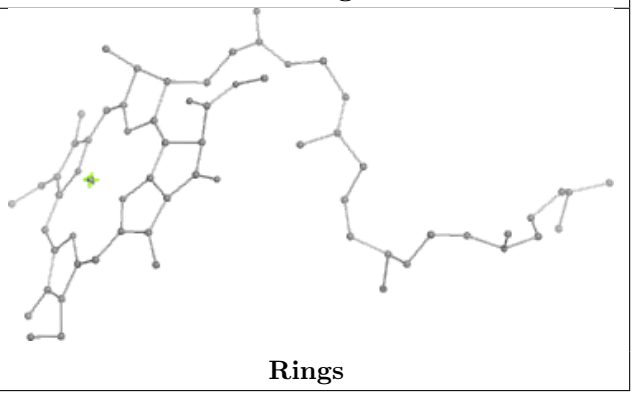
Bond lengths



Bond angles

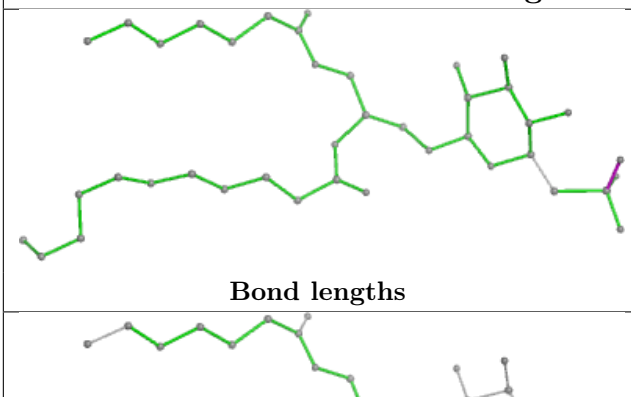


Torsions

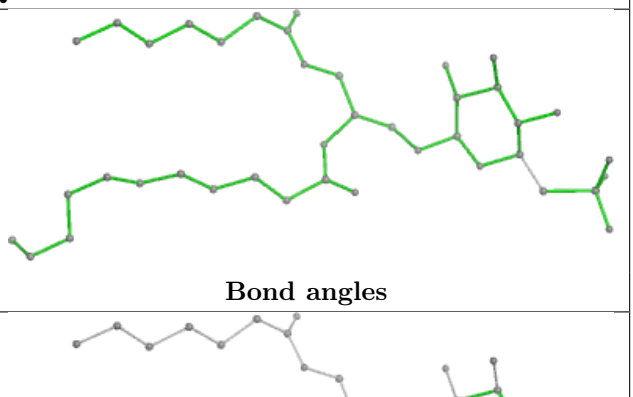


Rings

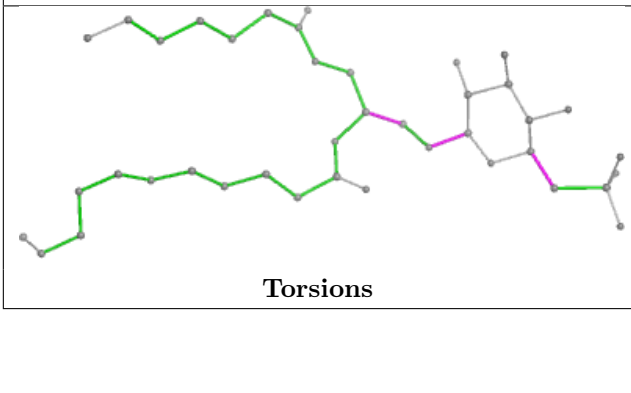
Ligand SQD B 604



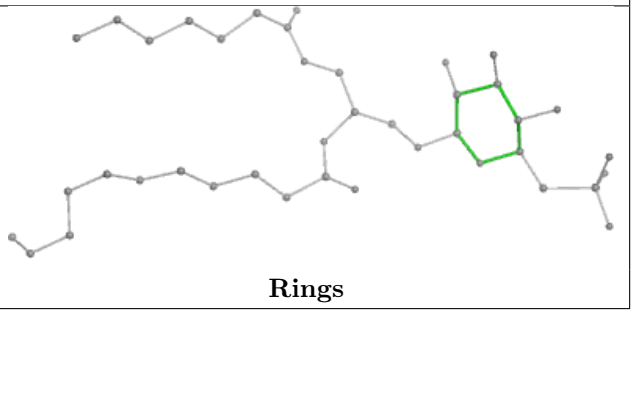
Bond lengths



Bond angles

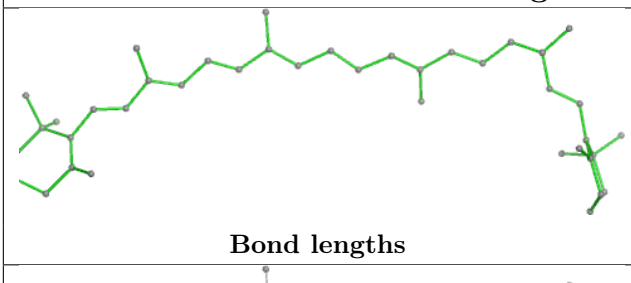


Torsions

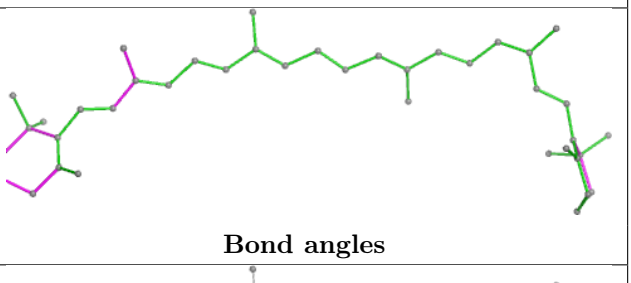


Rings

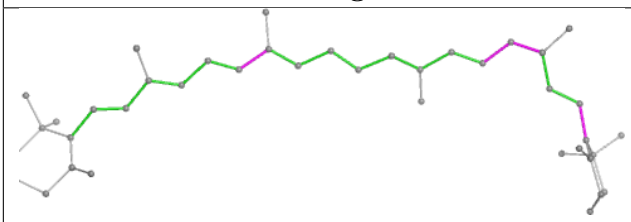
Ligand BCR l 304



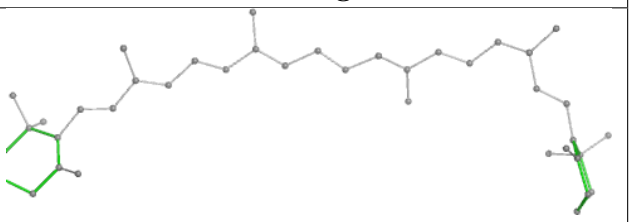
Bond lengths



Bond angles

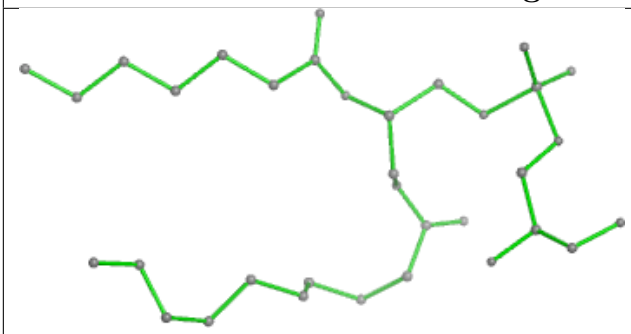


Torsions

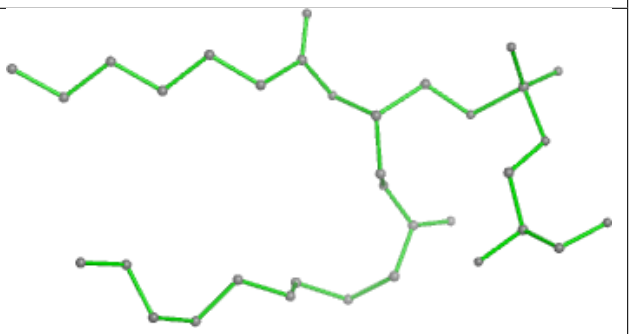


Rings

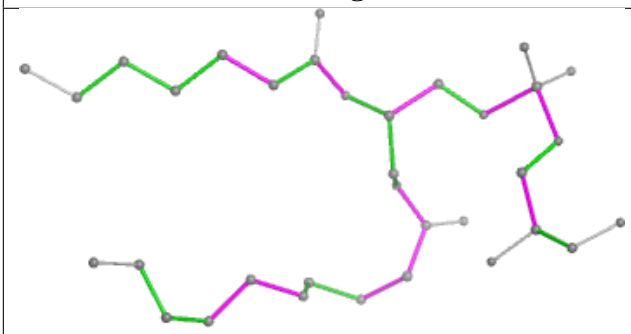
Ligand PGT B 601



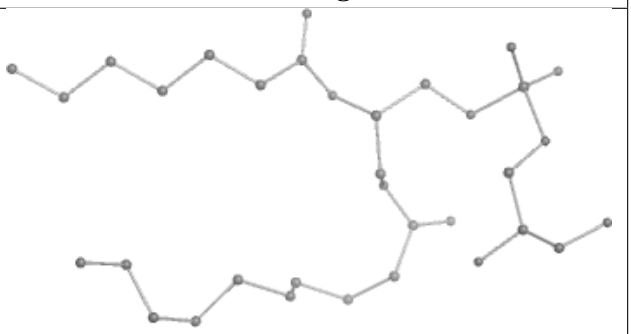
Bond lengths



Bond angles

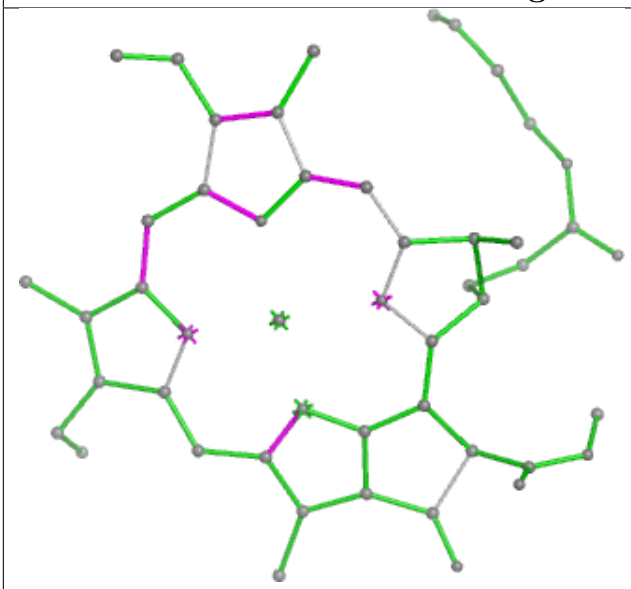


Torsions

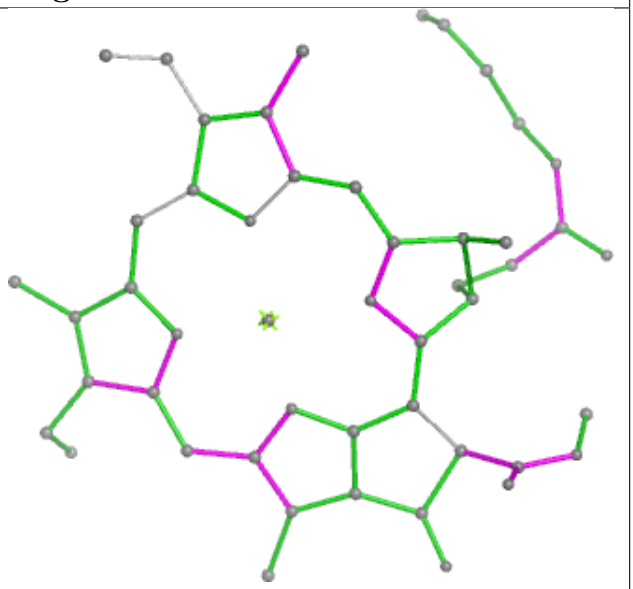


Rings

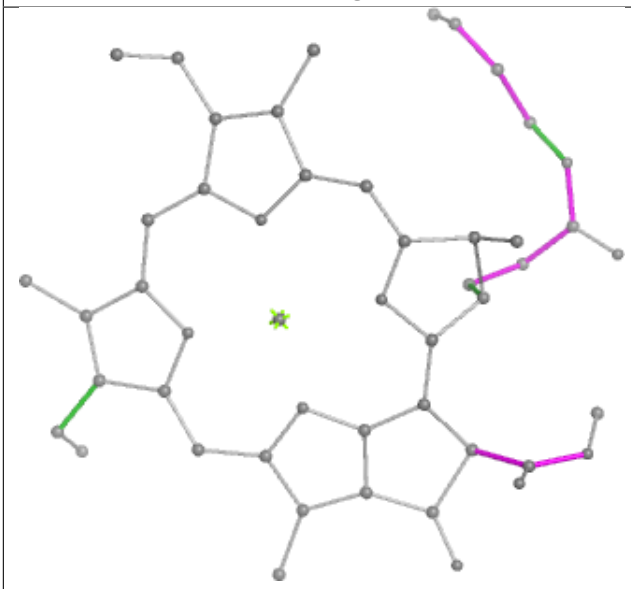
Ligand CLA g 201



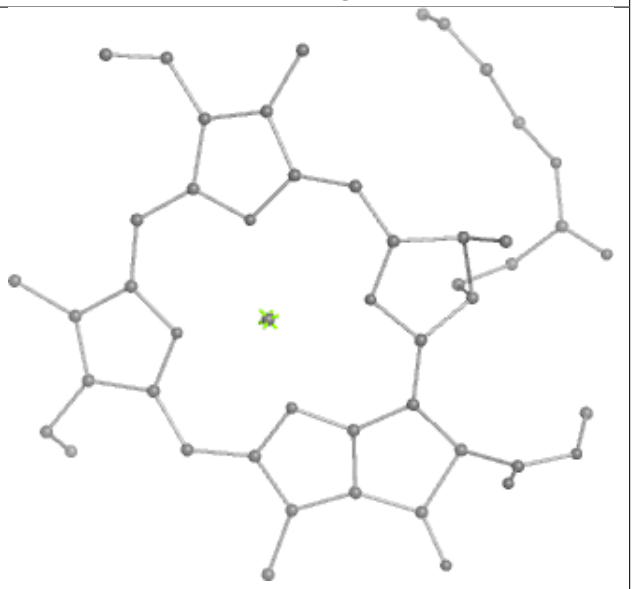
Bond lengths



Bond angles

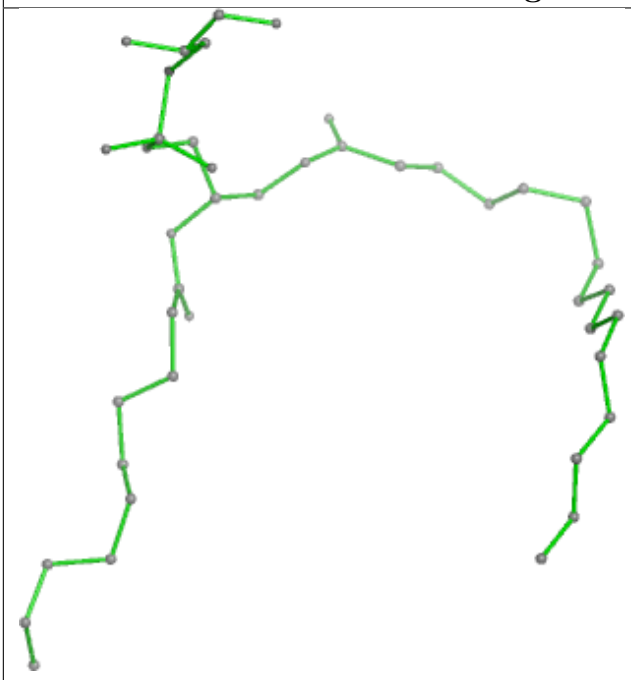


Torsions

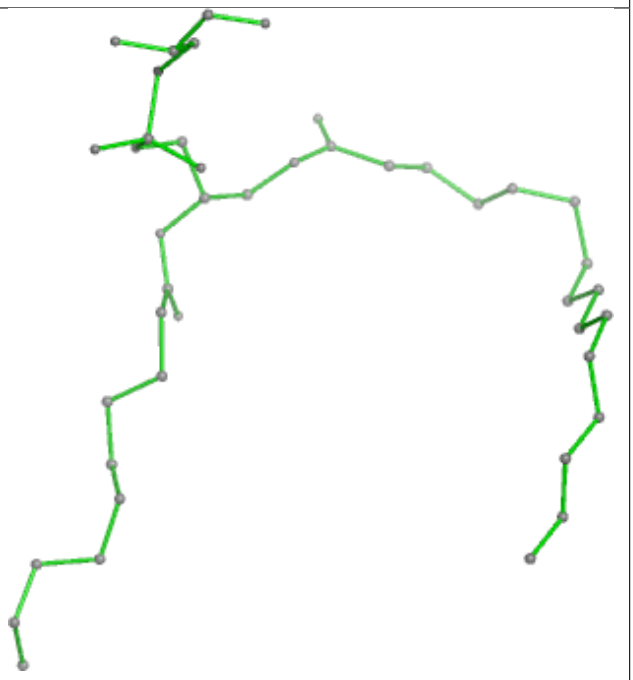


Rings

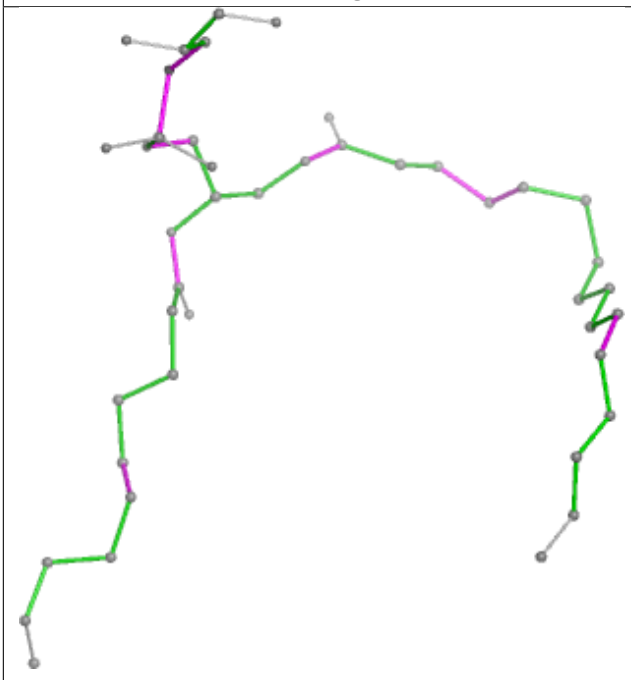
Ligand PGT F 803



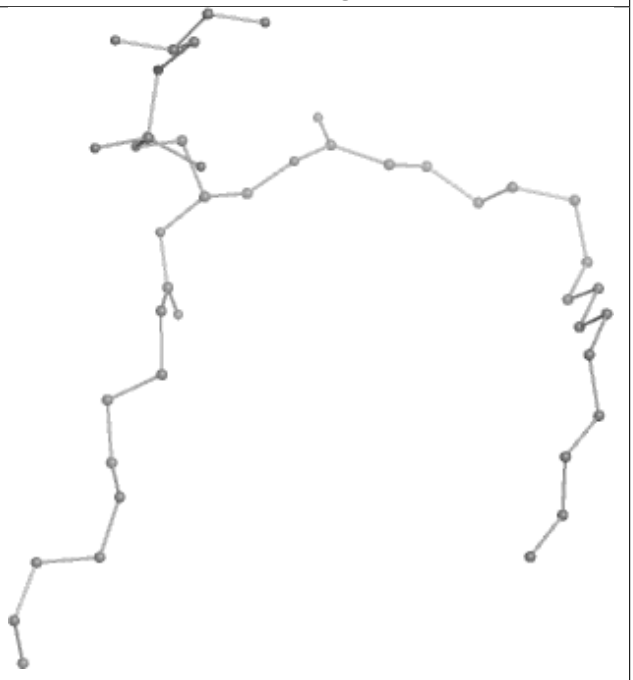
Bond lengths



Bond angles

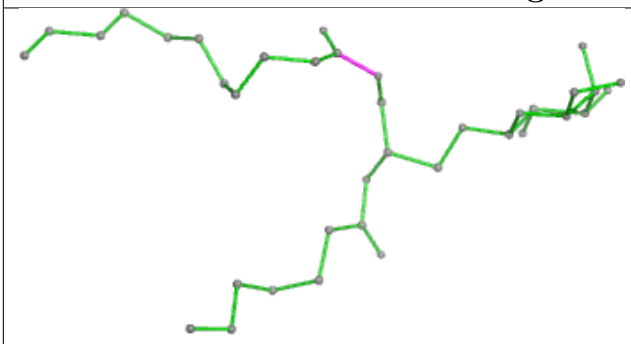


Torsions

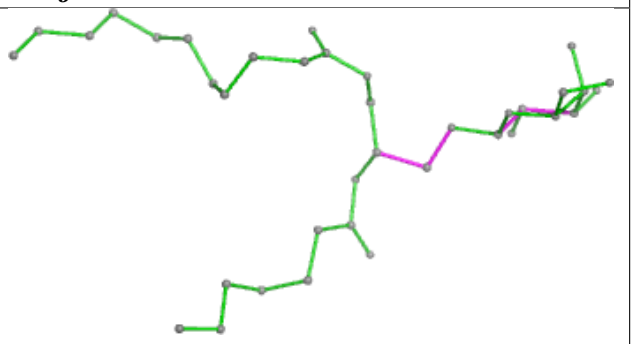


Rings

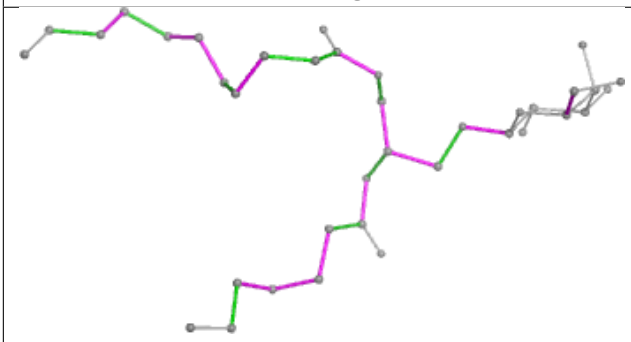
Ligand LMG j 105



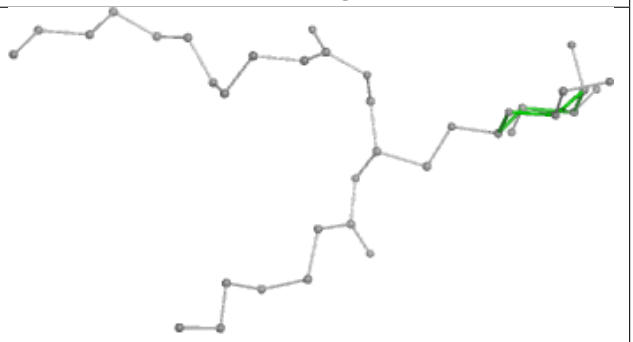
Bond lengths



Bond angles

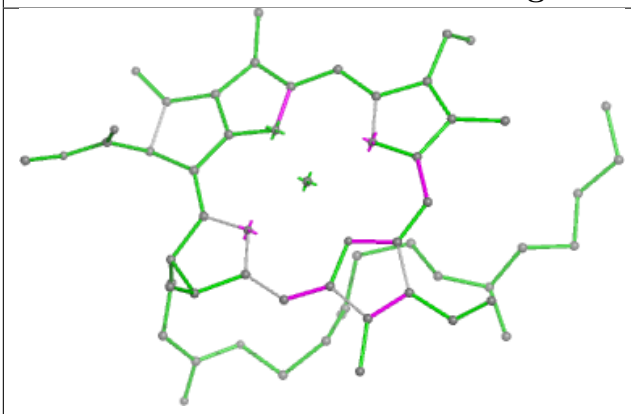


Torsions

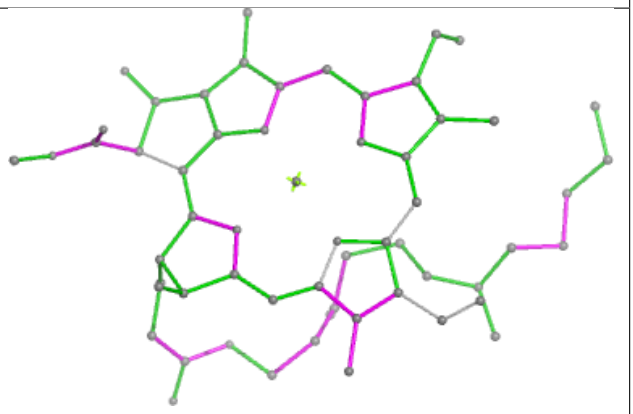


Rings

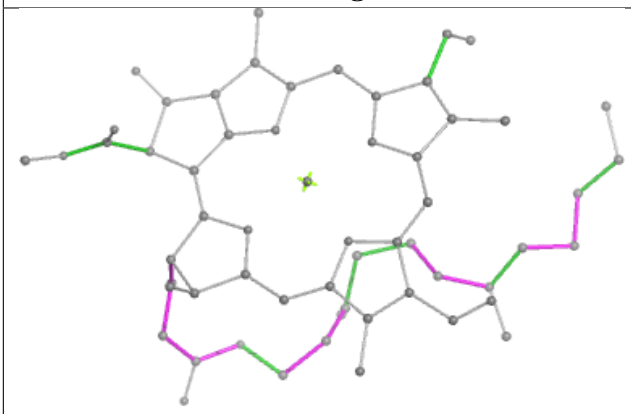
Ligand CLA b 809



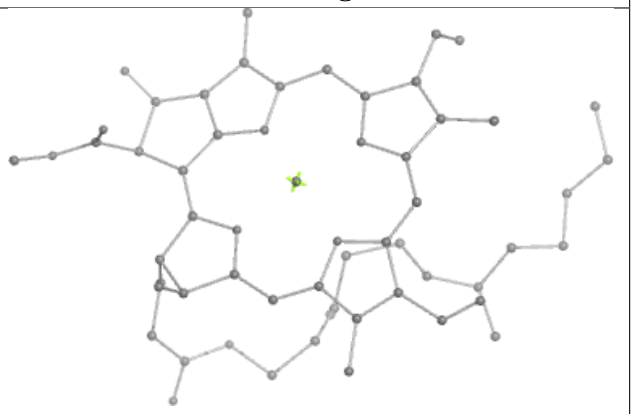
Bond lengths



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.

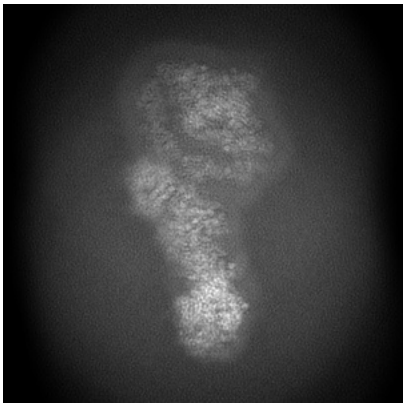
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-51527. These allow visual inspection of the internal detail of the map and identification of artifacts.

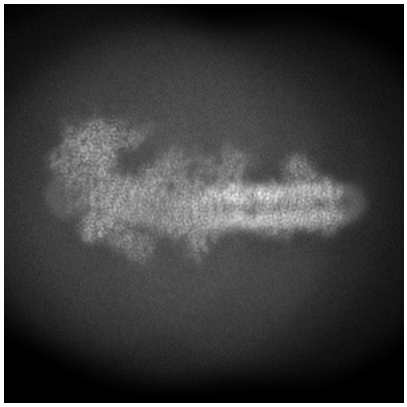
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

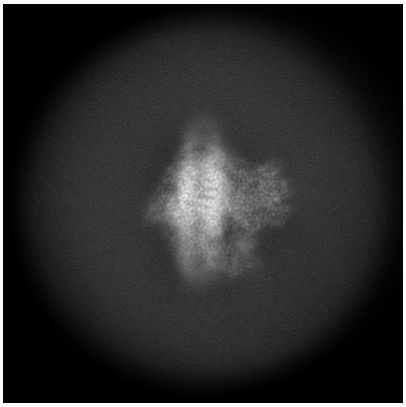
6.1.1 Primary map



X



Y

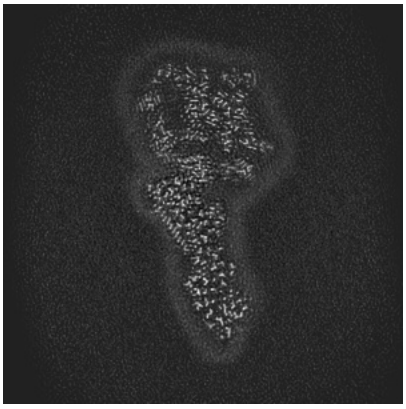


Z

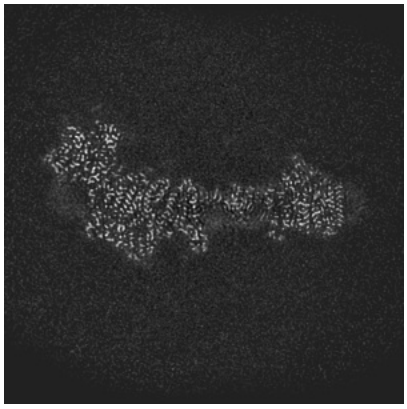
The images above show the map projected in three orthogonal directions.

6.2 Central slices

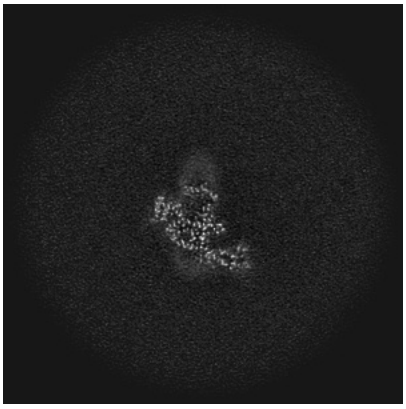
6.2.1 Primary map



X Index: 256



Y Index: 256

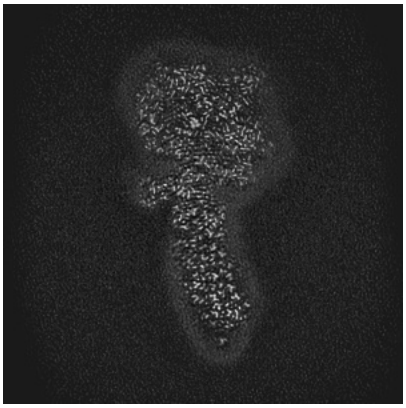


Z Index: 256

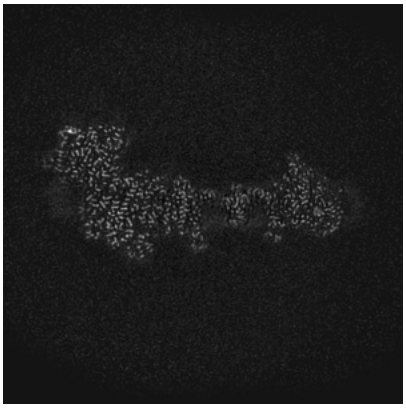
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

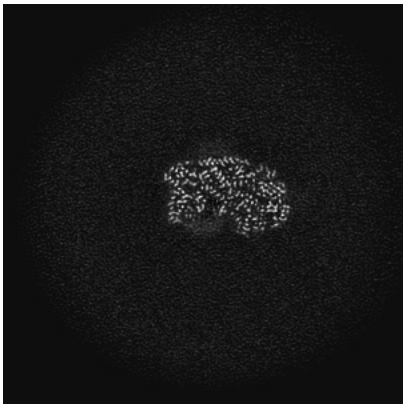
6.3.1 Primary map



X Index: 265



Y Index: 260

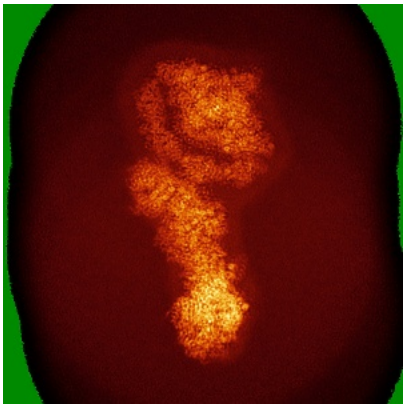


Z Index: 125

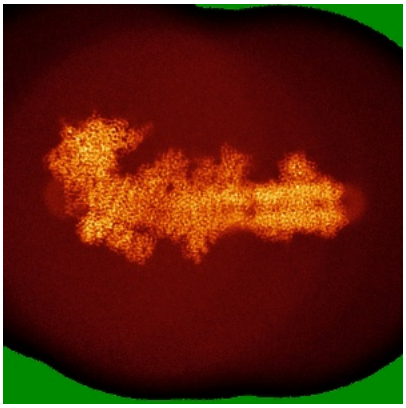
The images above show the largest variance slices of the map in three orthogonal directions.

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

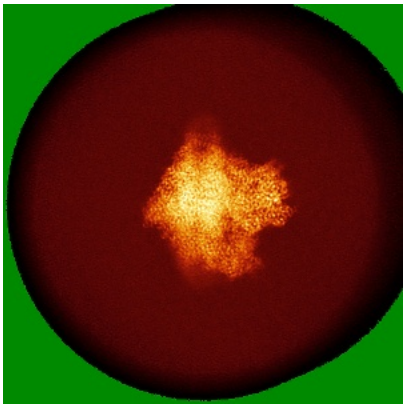
6.4.1 Primary map



X



Y

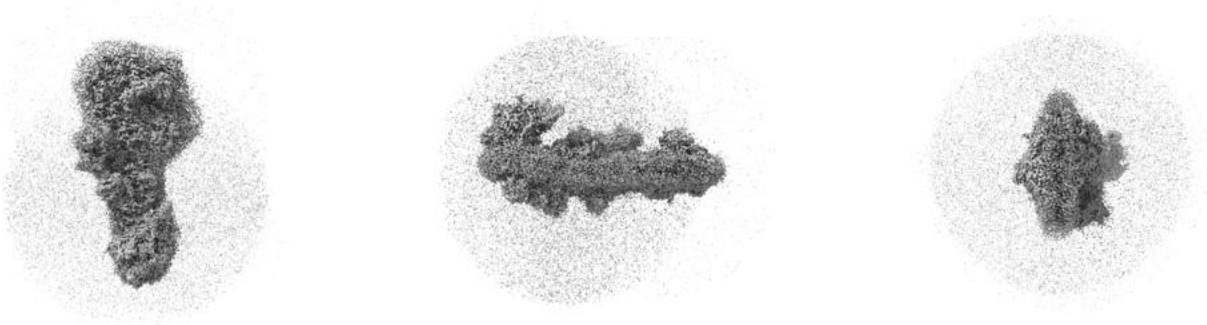


Z

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 0.3. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

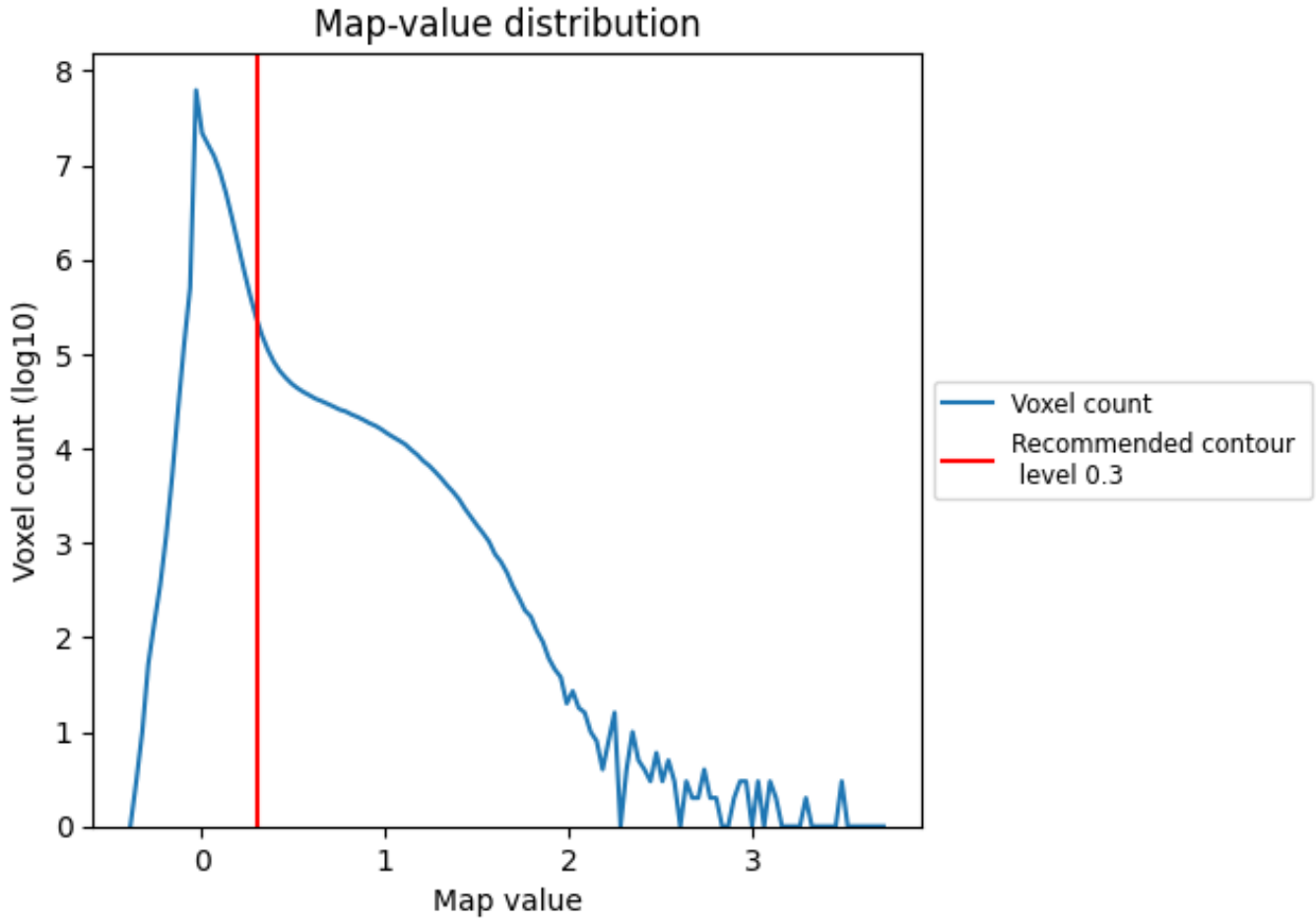
6.6 Mask visualisation (i)

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

7 Map analysis

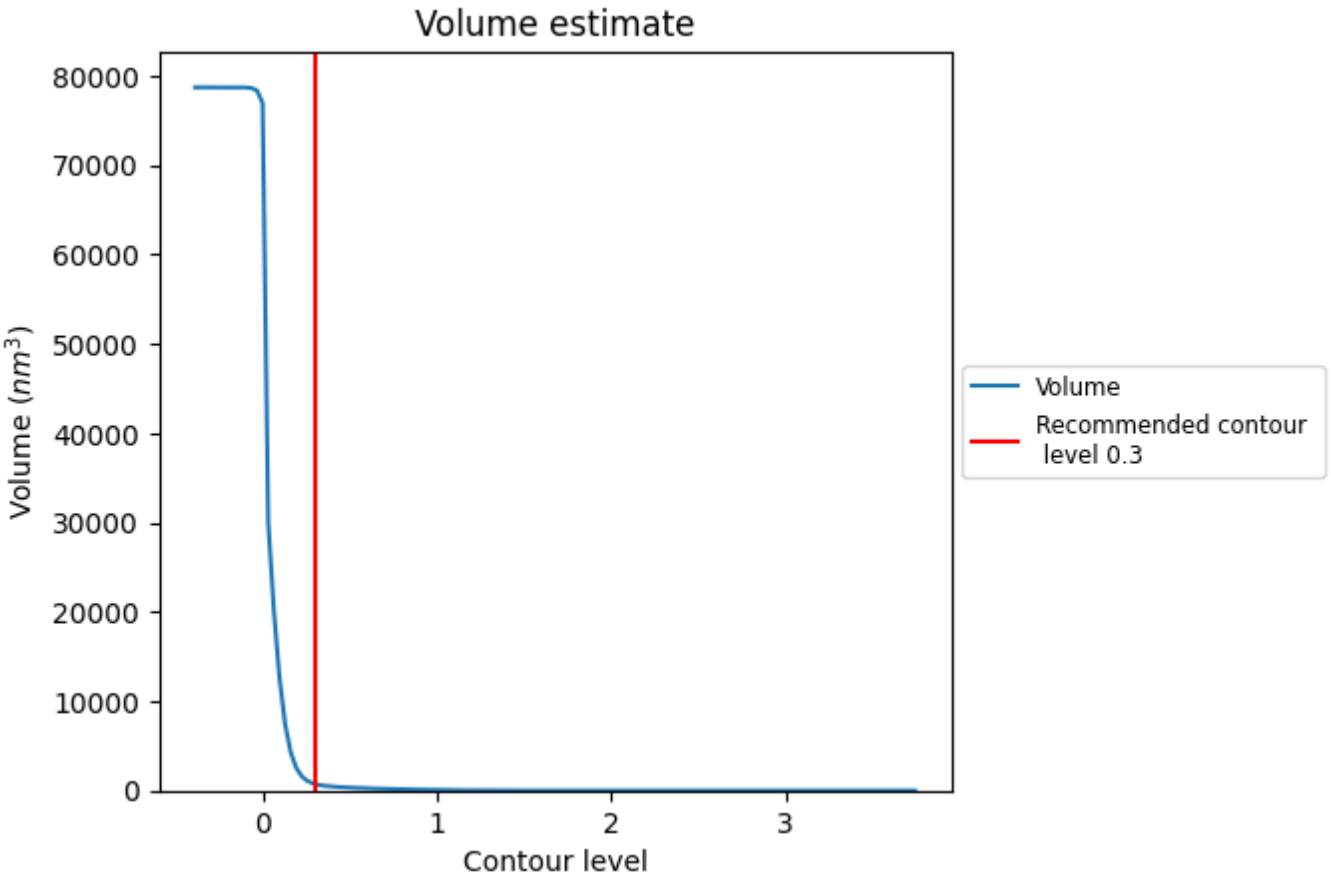
This section contains the results of statistical analysis of the map.

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.

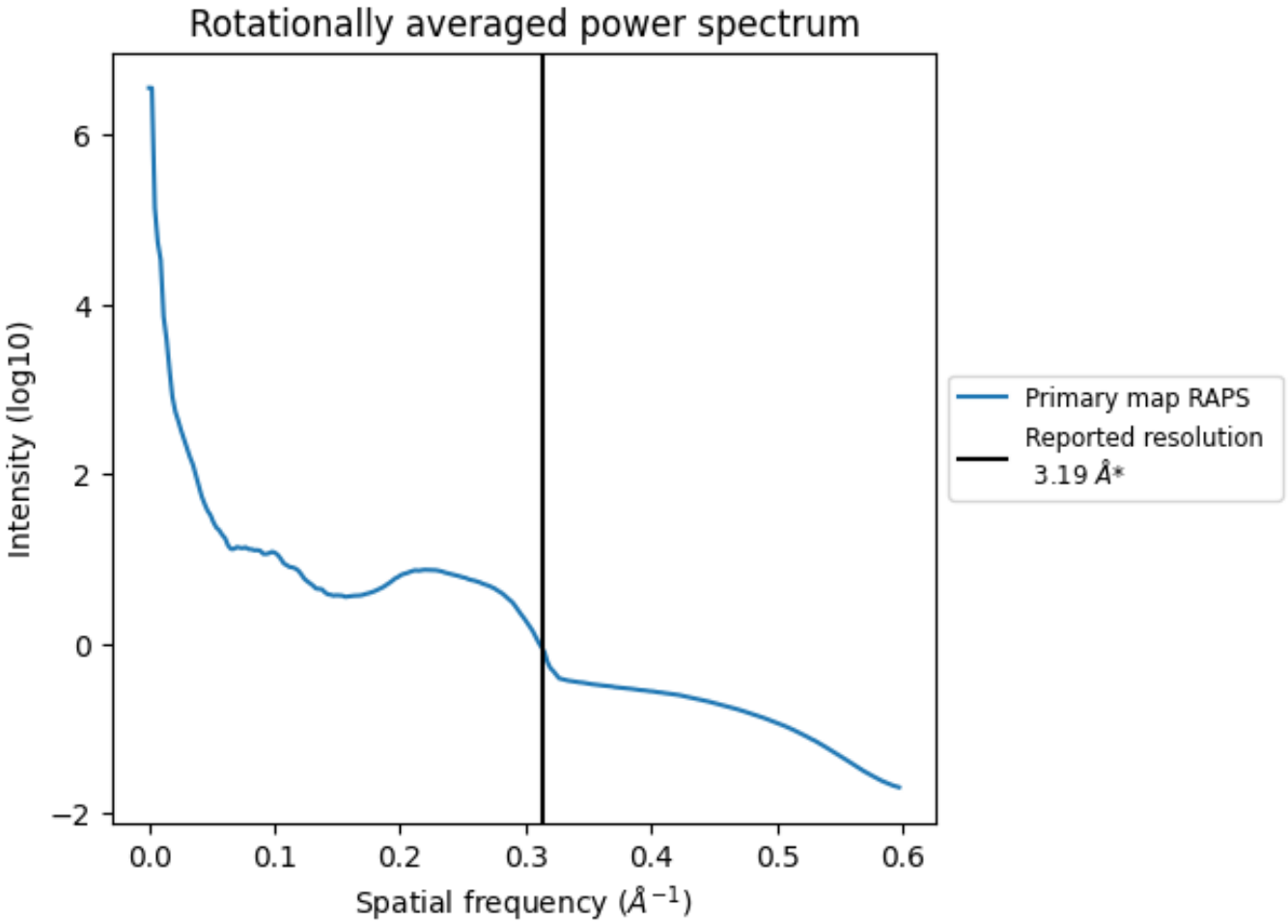
7.2 Volume estimate



The volume at the recommended contour level is 747 nm^3; this corresponds to an approximate mass of 675 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 0.313 $Å^{-1}$

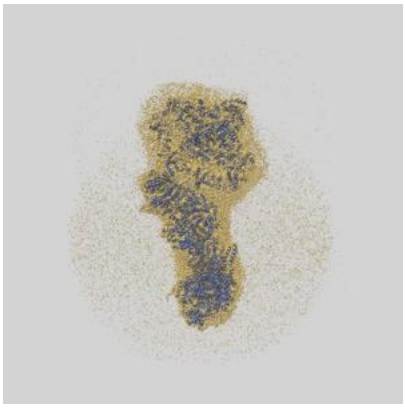
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

9 Map-model fit

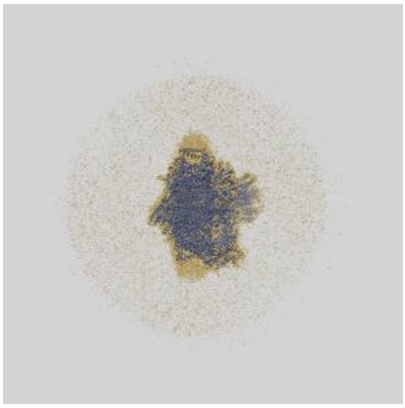
This section contains information regarding the fit between EMDB map EMD-51527 and PDB model 9GRX. Per-residue inclusion information can be found in section 3 on page 34.

9.1 Map-model overlay



X

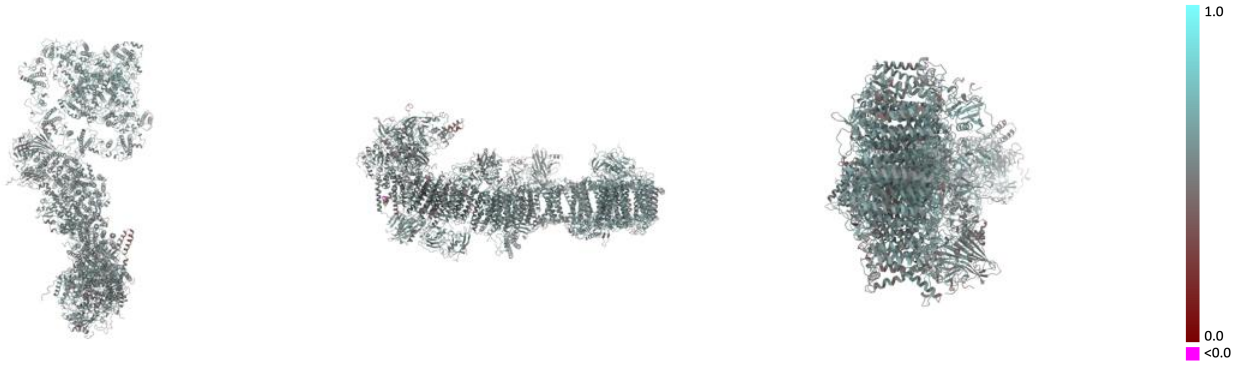
Y



Z

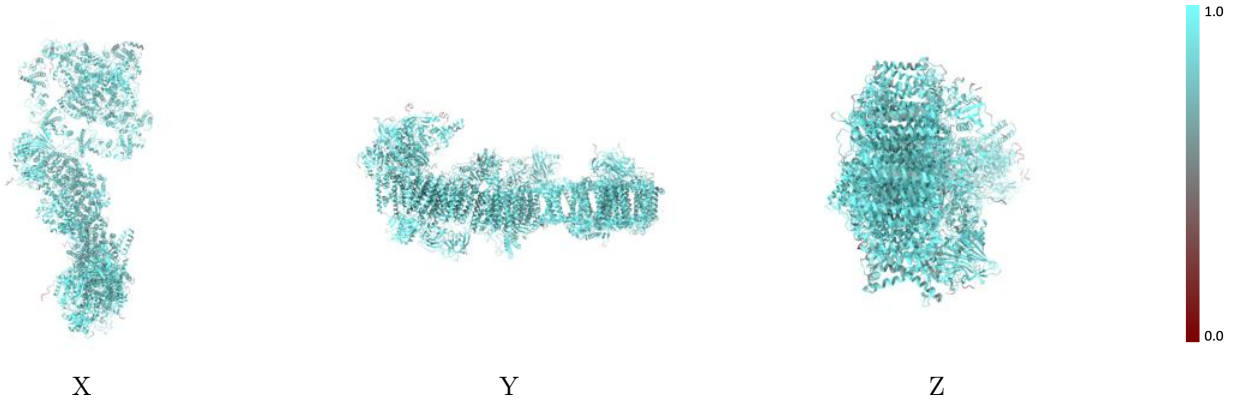
The images above show the 3D surface view of the map at the recommended contour level 0.3 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model (i)



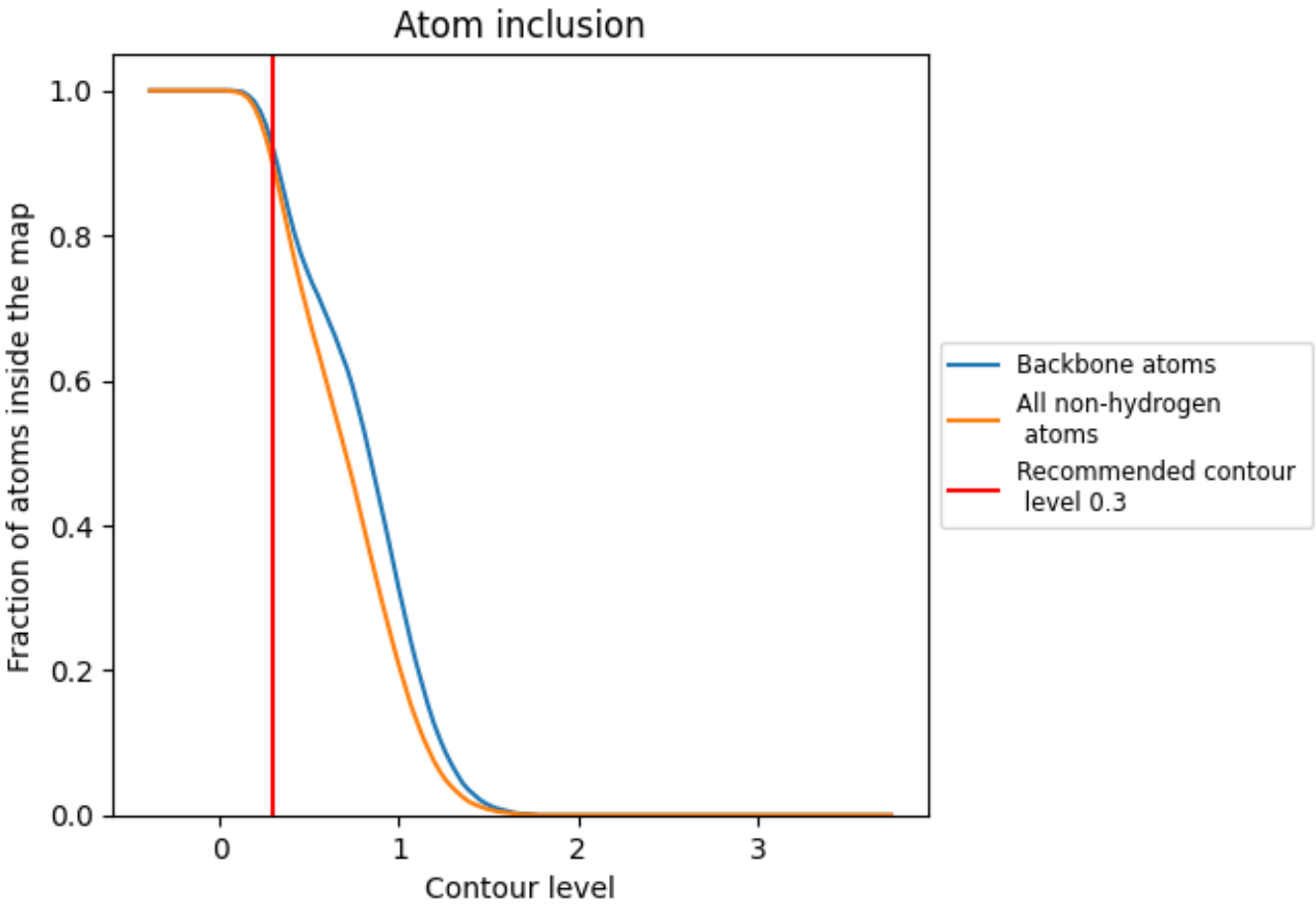
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

9.3 Atom inclusion mapped to coordinate model (i)



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 (0.3).

9.4 Atom inclusion (i)



At the recommended contour level, 92% of all backbone atoms, 90% 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 (0.3) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8960	0.5410
0	0.9360	0.5380
1	0.9010	0.5310
2	0.9130	0.5190
3	0.8660	0.5090
4	0.9060	0.5410
5	0.9090	0.5360
6	0.9370	0.5290
7	0.9390	0.5360
8	0.9580	0.5540
9	0.9370	0.5460
A	0.8730	0.5200
B	0.8910	0.5230
C	0.8800	0.5150
D	0.9330	0.5510
E	0.9290	0.5410
F	0.9090	0.5240
G	0.8980	0.5220
H	0.8970	0.5250
I	0.9000	0.5250
J	0.9310	0.5430
K	0.8970	0.5220
L	0.9000	0.5250
M	0.8910	0.5260
N	0.9000	0.5150
O	0.8800	0.5110
U	0.8480	0.4840
a	0.9150	0.5790
b	0.9070	0.5780
c	0.9210	0.5590
d	0.9030	0.5710
e	0.8230	0.5320
f	0.8740	0.5640
g	0.7850	0.5270
h	0.7260	0.5120

Continued on next page...

Continued from previous page...

Chain	Atom inclusion	Q-score
i	0.8970	0.5740
j	0.8510	0.5490
k	0.8000	0.4920
l	0.8070	0.5390
w	0.9280	0.5470
x	0.8710	0.5420
y	0.9030	0.5330
z	0.8010	0.5160