Full wwPDB EM Validation Report

Feb 9, 2026 – 04:43 PM JST

PDB ID	:	9LUT / pdb_00009lut
EMDB ID	:	EMD-63404
Title	:	PSI-LHCI supercomplex binding with 4 Lhcas from M. polymorpha
Authors	:	Tsai, P.-C.; La Rocca, R.; Shen, J.-R.; Akita, F.
Deposited on	:	2025-02-10
Resolution	:	1.94 Å(reported)
Based on initial model	:	6L35

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:

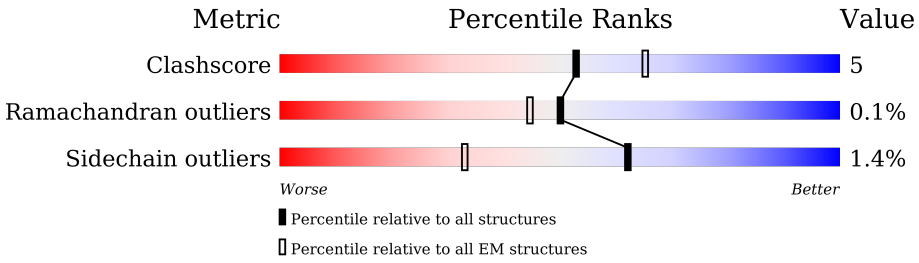
EMDB validation analysis	:	0.0.1.dev131
Mogul	:	1.8.5 (274361), CSD as541be (2020)
MolProbity	:	4-5-2 with Phenix2.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
EM percentile statistics	:	202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.48

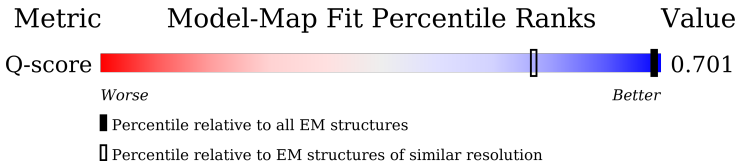
1 Overall quality at a glance (i)

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

The reported resolution of this entry is 1.94 Å.

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





Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	210492	15764	-
Ramachandran outliers	207382	16835	-
Sidechain outliers	206894	16415	-
Q-score	-	25397	1283 (1.45 - 2.44)

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	6	243	73% 7% 20%
2	2	267	72% 25%
3	3	279	72% 7% 21%
4	5	249	73% 7% 20%

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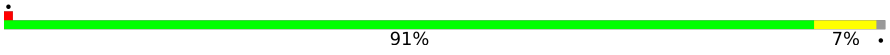
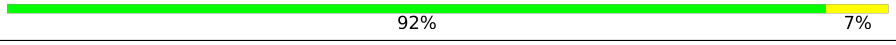
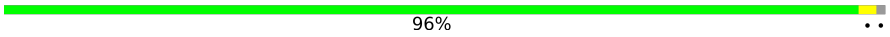
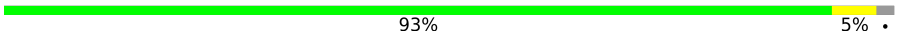
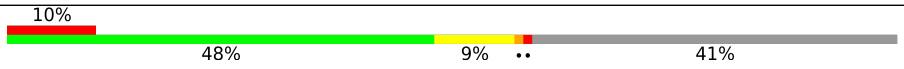
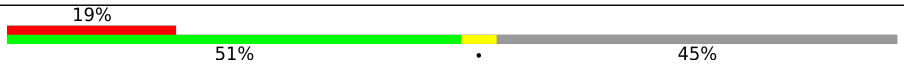
Mol	Chain	Length	Quality of chain
5	A	750	
6	B	734	
7	C	81	
8	D	215	
9	E	132	
10	F	246	
11	G	161	
12	I	36	
13	J	42	
14	K	135	
15	M	32	
16	H	142	
17	L	221	

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
18	CHL	2	301	X	-	-	-
18	CHL	2	305	X	-	-	-
18	CHL	2	306	X	-	-	-
18	CHL	2	307	X	-	-	-
18	CHL	2	314	X	-	-	-
18	CHL	2	320	X	-	-	-
18	CHL	3	306	X	-	-	-
18	CHL	3	314	X	-	-	-
18	CHL	5	304	X	-	-	-
18	CHL	5	305	X	-	-	-
18	CHL	5	306	X	-	-	-
18	CHL	5	313	X	-	-	-
18	CHL	6	301	X	-	-	-
18	CHL	6	306	X	-	-	-
19	CLA	2	302	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
19	CLA	2	303	X	-	-	-
19	CLA	2	304	X	-	-	-
19	CLA	2	308	X	-	-	-
19	CLA	2	309	X	-	-	-
19	CLA	2	310	X	-	-	-
19	CLA	2	311	X	-	-	-
19	CLA	2	313	X	-	-	-
19	CLA	3	301	X	-	-	-
19	CLA	3	302	X	-	-	-
19	CLA	3	303	X	-	-	-
19	CLA	3	304	X	-	-	-
19	CLA	3	305	X	-	-	-
19	CLA	3	307	X	-	-	-
19	CLA	3	308	X	-	-	-
19	CLA	3	309	X	-	-	-
19	CLA	3	310	X	-	-	-
19	CLA	3	312	X	-	-	-
19	CLA	3	313	X	-	-	-
19	CLA	5	302	X	-	-	-
19	CLA	5	303	X	-	-	-
19	CLA	5	307	X	-	-	-
19	CLA	5	308	X	-	-	-
19	CLA	5	309	X	-	-	-
19	CLA	5	310	X	-	-	-
19	CLA	5	312	X	-	-	-
19	CLA	6	302	X	-	-	-
19	CLA	6	303	X	-	-	-
19	CLA	6	304	X	-	-	-
19	CLA	6	305	X	-	-	-
19	CLA	6	307	X	-	-	-
19	CLA	6	308	X	-	-	-
19	CLA	6	309	X	-	-	-
19	CLA	6	310	X	-	-	-
19	CLA	6	311	X	-	-	-
19	CLA	6	313	X	-	-	-
19	CLA	6	314	X	-	-	-
19	CLA	A	803	X	-	-	-
19	CLA	A	804	X	-	-	-
19	CLA	A	805	X	-	-	-
19	CLA	A	806	X	-	-	-
19	CLA	A	807	X	-	-	-
19	CLA	A	808	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
19	CLA	A	809	X	-	-	-
19	CLA	A	810	X	-	-	-
19	CLA	A	812	X	-	-	-
19	CLA	A	813	X	-	-	-
19	CLA	A	814	X	-	-	-
19	CLA	A	815	X	-	-	-
19	CLA	A	816	X	-	-	-
19	CLA	A	817	X	-	-	-
19	CLA	A	820	X	-	-	-
19	CLA	A	821	X	-	-	-
19	CLA	A	824	X	-	-	-
19	CLA	A	826	X	-	-	-
19	CLA	A	827	X	-	-	-
19	CLA	A	828	X	-	-	-
19	CLA	A	829	X	-	-	-
19	CLA	A	830	X	-	-	-
19	CLA	A	834	X	-	-	-
19	CLA	A	835	X	-	-	-
19	CLA	A	837	X	-	-	-
19	CLA	A	838	X	-	-	-
19	CLA	A	839	X	-	-	-
19	CLA	A	840	X	-	-	-
19	CLA	A	841	X	-	-	-
19	CLA	A	842	X	-	-	-
19	CLA	A	843	X	-	-	-
19	CLA	B	801	X	-	-	-
19	CLA	B	802	X	-	-	-
19	CLA	B	803	X	-	-	-
19	CLA	B	804	X	-	-	-
19	CLA	B	806	X	-	-	-
19	CLA	B	807	X	-	-	-
19	CLA	B	808	X	-	-	-
19	CLA	B	809	X	-	-	-
19	CLA	B	810	X	-	-	-
19	CLA	B	811	X	-	-	-
19	CLA	B	812	X	-	-	-
19	CLA	B	814	X	-	-	-
19	CLA	B	815	X	-	-	-
19	CLA	B	818	X	-	-	-
19	CLA	B	819	X	-	-	-
19	CLA	B	821	X	-	-	-
19	CLA	B	823	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
19	CLA	B	825	X	-	-	-
19	CLA	B	826	X	-	-	-
19	CLA	B	827	X	-	-	-
19	CLA	B	828	X	-	-	-
19	CLA	B	829	X	-	-	-
19	CLA	B	832	X	-	-	-
19	CLA	B	833	X	-	-	-
19	CLA	B	835	X	-	-	-
19	CLA	B	836	X	-	-	-
19	CLA	B	837	X	-	-	-
19	CLA	B	838	X	-	-	-
19	CLA	B	839	X	-	-	-
19	CLA	B	842	X	-	-	-
19	CLA	F	301	X	-	-	-
19	CLA	F	303	X	-	-	-
19	CLA	F	304	X	-	-	-
19	CLA	G	203	X	-	-	-
19	CLA	G	204	X	-	-	-
19	CLA	J	102	X	-	-	-
19	CLA	K	202	X	-	-	-
19	CLA	K	203	X	-	-	-
19	CLA	L	301	X	-	-	-
19	CLA	L	303	X	-	-	-

2 Entry composition

There are 30 unique types of molecules in this entry. The entry contains 36239 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	6	194	Total	C	N	O	S	0	0
			1496	977	248	268	3		

- Molecule 2 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	2	201	Total	C	N	O	S	0	0
			1557	1025	253	274	5		

- Molecule 3 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	3	220	Total	C	N	O	S	0	0
			1705	1115	277	307	6		

- Molecule 4 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	5	198	Total	C	N	O	S	0	0
			1549	1022	248	275	4		

- Molecule 5 is a protein called Photosystem I P700 chlorophyll a apoprotein A1.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	A	742	Total	C	N	O	S	0	0
			5846	3837	988	1004	17		

- Molecule 6 is a protein called Photosystem I P700 chlorophyll a apoprotein A2.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	B	733	Total	C	N	O	S	0	0
			5854	3839	998	1003	14		

- Molecule 7 is a protein called Photosystem I iron-sulfur center.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	C	80	Total	C	N	O	S	0	0
			602	368	104	119	11		

- Molecule 8 is a protein called Photosystem I reaction center subunit II, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	D	142	Total	C	N	O	S	0	0
			1112	719	191	199	3		

- Molecule 9 is a protein called Photosystem I reaction centre subunit IV.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	E	64	Total	C	N	O	S	0	0
			503	319	86	96	2		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
10	F	161	Total	C	N	O	S	0	0
			1248	809	212	225	2		

- Molecule 11 is a protein called Photosystem I reaction center subunit V, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	G	90	Total	C	N	O	S	0	0
			673	432	117	123	1		

- Molecule 12 is a protein called Photosystem I reaction center subunit VIII.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	I	35	Total	C	N	O	S	0	0
			274	187	36	49	2		

- Molecule 13 is a protein called Photosystem I reaction center subunit IX.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	J	41	Total	C	N	O	S	0	0
			328	225	48	54	1		

- Molecule 14 is a protein called PSI-K.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	K	80	Total	C	N	O	S	0	0
			561	354	97	106	4		

- Molecule 15 is a protein called Photosystem I reaction center subunit XII.

Mol	Chain	Residues	Atoms				AltConf	Trace
15	M	30	Total	C	N	O	0	0
			235	155	36	44		

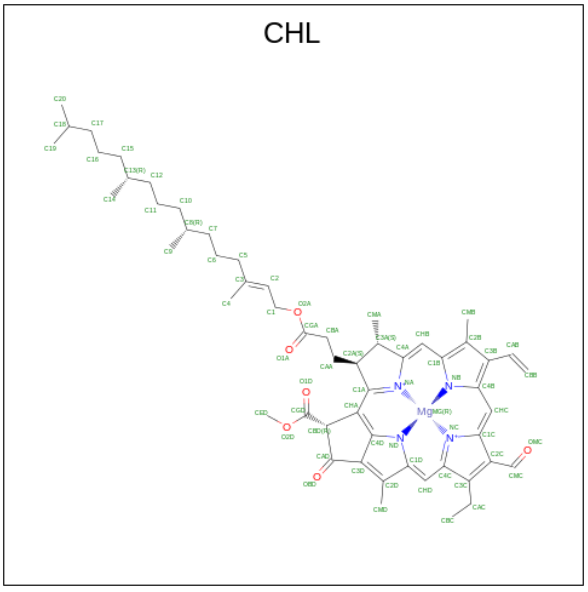
- Molecule 16 is a protein called Photosystem I reaction center subunit VI, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	H	78	Total	C	N	O	S	0	0
			578	374	99	103	2		

- Molecule 17 is a protein called PSI subunit V.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	L	128	Total	C	N	O	S	0	0
			958	639	150	167	2		

- Molecule 18 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
18	6	1	Total	C	Mg	N	O	0
			51	40	1	4	6	

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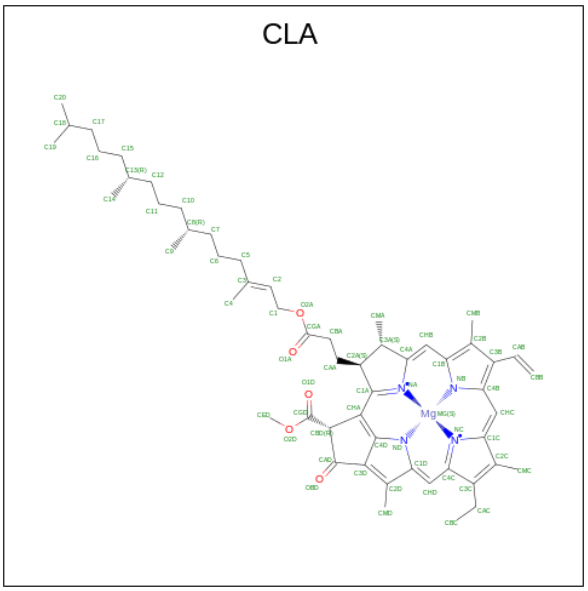
Mol	Chain	Residues	Atoms					AltConf
18	6	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
18	2	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
18	2	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
18	2	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
18	2	1	Total	C	Mg	N	O	0
			49	38	1	4	6	
18	2	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
18	2	1	Total	C	Mg	N	O	0
			52	41	1	4	6	
18	3	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
18	3	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
18	5	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
18	5	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
18	5	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
18	5	1	Total	C	Mg	N	O	0
			43	34	1	4	4	

- Molecule 19 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
19	6	1	Total 61	C 51	Mg 1	N 4	O 5	0
19	6	1	Total 55	C 45	Mg 1	N 4	O 5	0
19	6	1	Total 49	C 39	Mg 1	N 4	O 5	0
19	6	1	Total 45	C 35	Mg 1	N 4	O 5	0
19	6	1	Total 45	C 35	Mg 1	N 4	O 5	0
19	6	1	Total 50	C 40	Mg 1	N 4	O 5	0
19	6	1	Total 65	C 55	Mg 1	N 4	O 5	0
19	6	1	Total 56	C 46	Mg 1	N 4	O 5	0
19	6	1	Total 45	C 35	Mg 1	N 4	O 5	0
19	6	1	Total 65	C 55	Mg 1	N 4	O 5	0
19	6	1	Total 45	C 35	Mg 1	N 4	O 5	0
19	6	1	Total 45	C 35	Mg 1	N 4	O 5	0
19	2	1	Total 65	C 55	Mg 1	N 4	O 5	0
19	2	1	Total 45	C 35	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
19	2	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
19	2	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	2	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
19	2	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
19	2	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	2	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	2	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
19	3	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
19	3	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
19	3	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
19	3	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	3	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
19	3	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
19	3	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	3	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
19	3	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
19	3	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
19	3	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
19	3	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	5	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
19	5	1	Total	C	Mg	N	O	0
			50	40	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
19	5	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	5	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
19	5	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
19	5	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
19	5	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
19	5	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
19	5	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	5	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			48	38	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
19	A	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
19	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
19	A	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			62	52	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
19	B	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			60	50	1	4	5	

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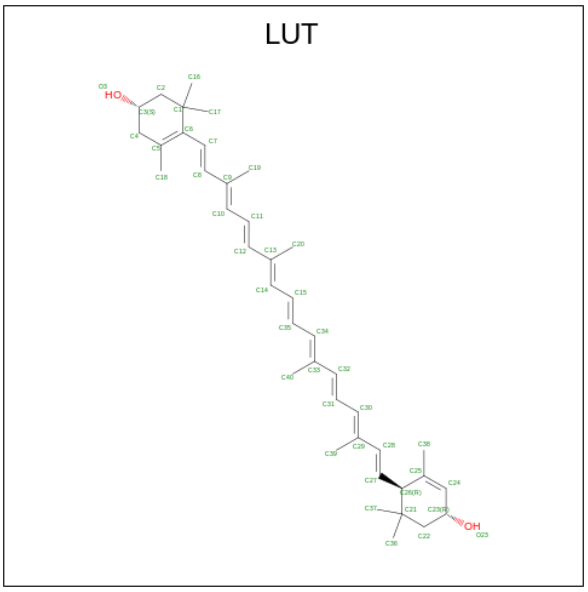
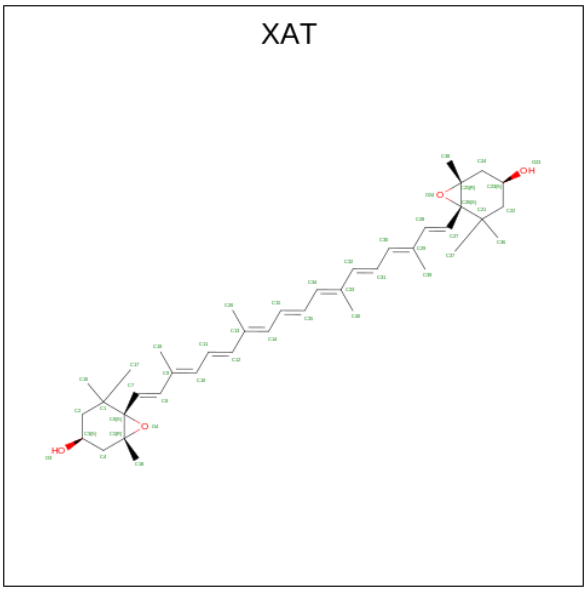
Mol	Chain	Residues	Atoms					AltConf
19	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
19	F	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
19	F	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	F	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
19	G	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	G	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	J	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
19	K	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
19	K	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
19	K	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	L	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
19	L	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
19	L	1	Total	C	Mg	N	O	0
			42	34	1	4	3	

- Molecule 20 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).



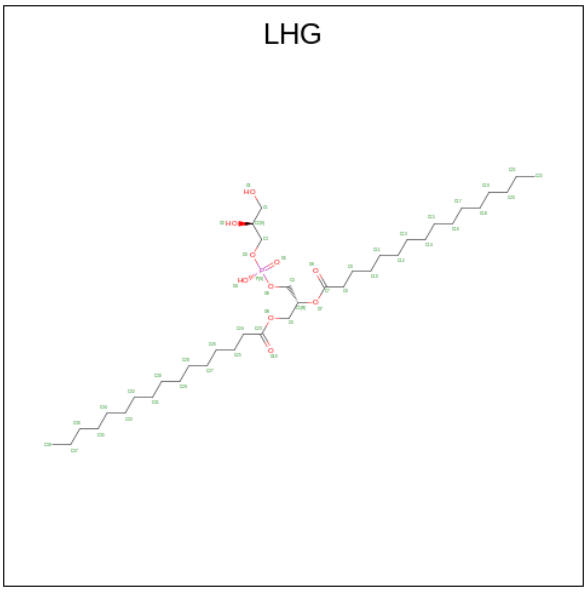
Mol	Chain	Residues	Atoms			AltConf
20	6	1	Total	C	O	0
			42	40	2	
20	6	1	Total	C	O	0
			42	40	2	
20	2	1	Total	C	O	0
			42	40	2	
20	2	1	Total	C	O	0
			42	40	2	
20	2	1	Total	C	O	0
			42	40	2	
20	3	1	Total	C	O	0
			42	40	2	
20	3	1	Total	C	O	0
			42	40	2	
20	5	1	Total	C	O	0
			42	40	2	
20	5	1	Total	C	O	0
			42	40	2	
20	J	1	Total	C	O	0
			42	40	2	

- Molecule 21 is (3S,5R,6S,3'S,5'R,6'S)-5,6,5',6'-DIEPOXY-5,6,5',6'- TETRAHYDRO-BETA ,BETA-CAROTENE-3,3'-DIOL (CCD ID: XAT) (formula: $C_{40}H_{56}O_4$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			AltConf
21	6	1	Total	C	O	0
			44	40	4	

- Molecule 22 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: $C_{38}H_{75}O_{10}P$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
22	6	1	Total	C	O	P	0
			49	38	10	1	
22	6	1	Total	C	O	P	0
			27	16	10	1	

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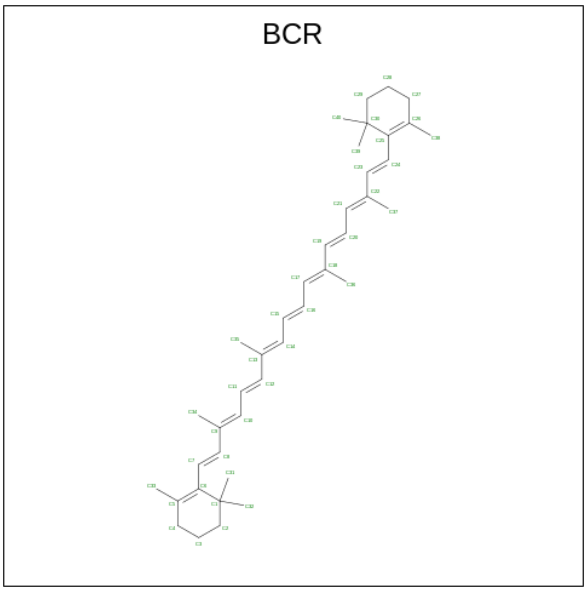
Mol	Chain	Residues	Atoms	AltConf
22	2	1	Total C O P 38 27 10 1	0
22	5	1	Total C O P 44 33 10 1	0
22	A	1	Total C O P 49 38 10 1	0
22	A	1	Total C O P 34 23 10 1	0

- Molecule 23 is BETA-CAROTENE (CCD ID: BCR) (formula: $C_{40}H_{56}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
23	2	1	Total C 40 40	0
23	3	1	Total C 40 40	0
23	5	1	Total C 40 40	0
23	A	1	Total C 40 40	0
23	A	1	Total C 40 40	0
23	A	1	Total C 40 40	0
23	A	1	Total C 40 40	0

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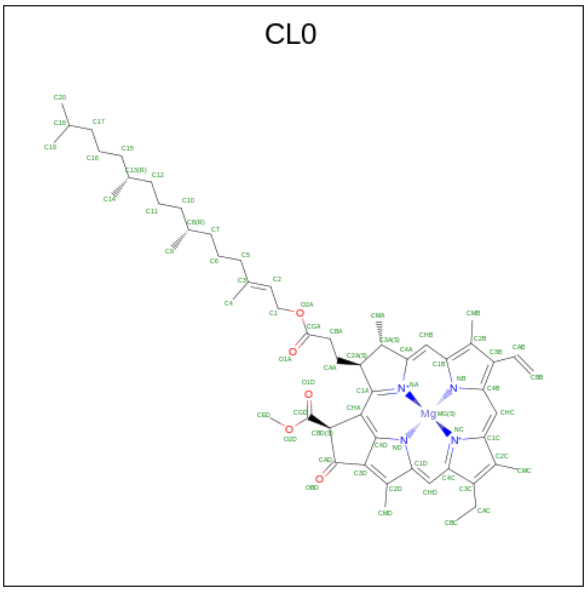
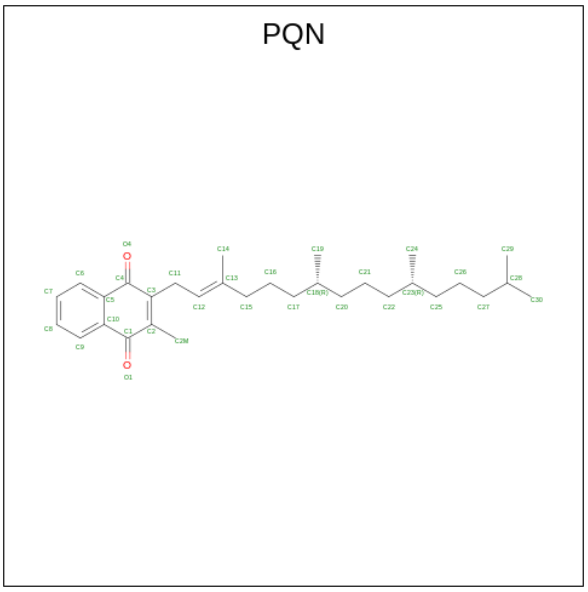
Mol	Chain	Residues	Atoms	AltConf
23	A	1	Total C 40 40	0
23	B	1	Total C 40 40	0
23	B	1	Total C 40 40	0
23	B	1	Total C 40 40	0
23	B	1	Total C 40 40	0
23	B	1	Total C 40 40	0
23	F	1	Total C 40 40	0
23	F	1	Total C 40 40	0
23	G	1	Total C 40 40	0
23	G	1	Total C 40 40	0
23	I	1	Total C 40 40	0
23	J	1	Total C 40 40	0
23	K	1	Total C 40 40	0
23	K	1	Total C 40 40	0
23	M	1	Total C 40 40	0
23	L	1	Total C 40 40	0
23	L	1	Total C 40 40	0

- Molecule 24 is CHLOROPHYLL A ISOMER (CCD ID: CL0) (formula: $C_{55}H_{72}MgN_4O_5$) (labeled as "Ligand of Interest" by depositor).



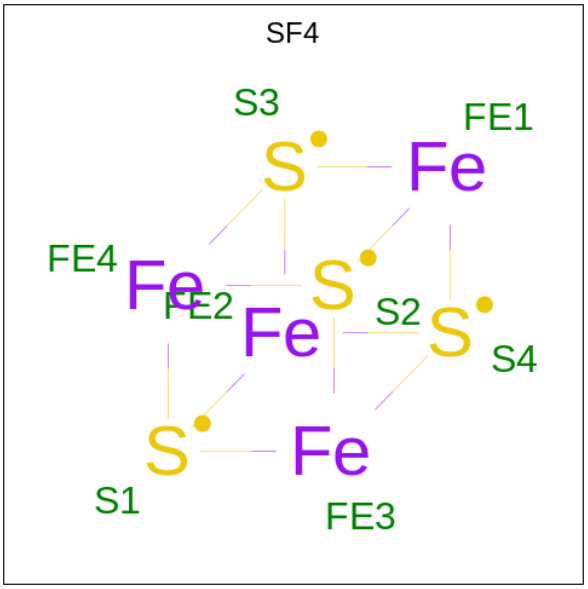
Mol	Chain	Residues	Atoms					AltConf
24	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

- Molecule 25 is PHYLLOQUINONE (CCD ID: PQN) (formula: $C_{31}H_{46}O_2$) (labeled as "Ligand of Interest" by depositor).



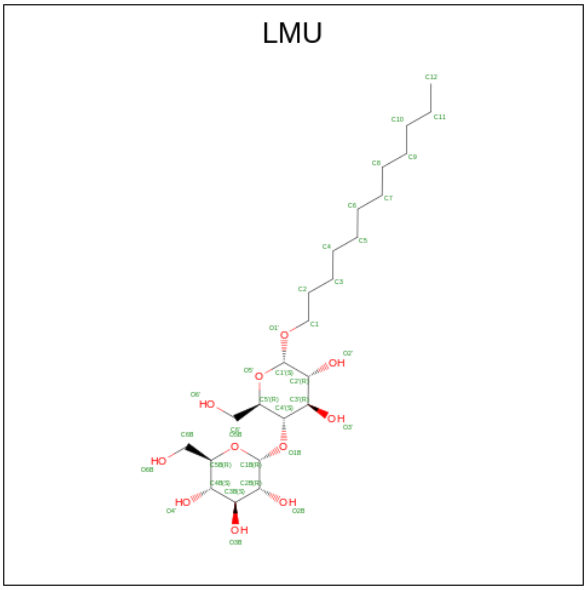
Mol	Chain	Residues	Atoms			AltConf
25	A	1	Total	C	O	0
			33	31	2	
25	B	1	Total	C	O	0
			33	31	2	

- Molecule 26 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4) (labeled as "Ligand of Interest" by depositor).



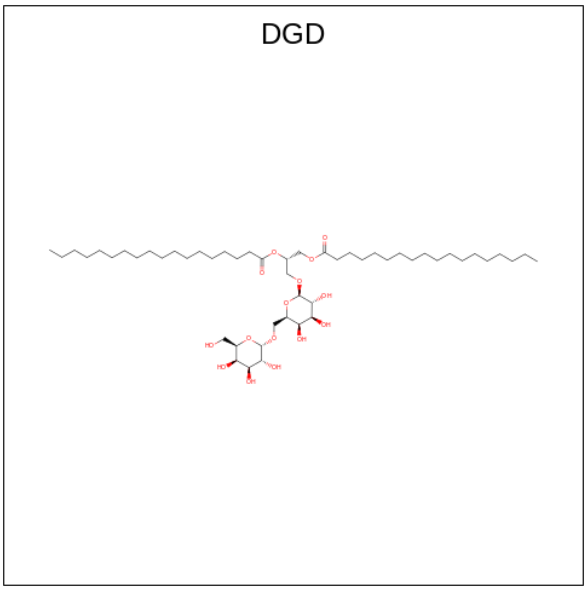
Mol	Chain	Residues	Atoms	AltConf
26	A	1	Total Fe S 8 4 4	0
26	C	1	Total Fe S 8 4 4	0
26	C	1	Total Fe S 8 4 4	0

- Molecule 27 is DODECYL-ALPHA-D-MALTOSIDE (CCD ID: LMU) (formula: $C_{24}H_{46}O_{11}$) (labeled as "Ligand of Interest" by depositor).



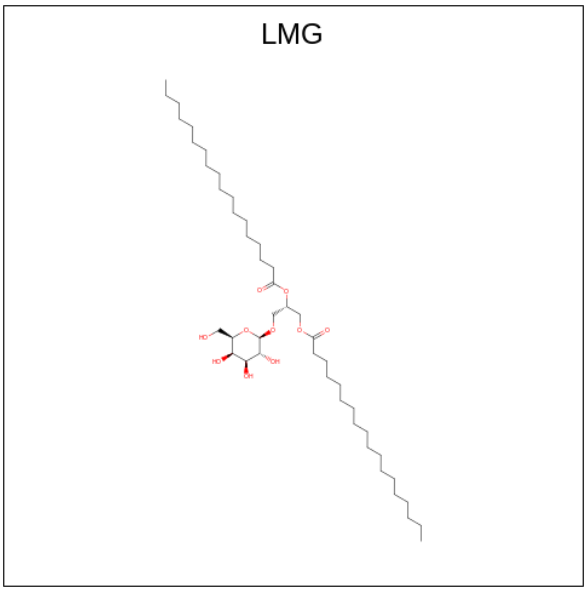
Mol	Chain	Residues	Atoms			AltConf
27	A	1	Total 35	C 24	O 11	0
27	B	1	Total 35	C 24	O 11	0
27	B	1	Total 35	C 24	O 11	0
27	G	1	Total 35	C 24	O 11	0

- Molecule 28 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
28	B	1	Total 66	C 51	O 15	0

- Molecule 29 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
29	J	1	Total C O 30 20 10	0
29	J	1	Total C O 41 31 10	0

- Molecule 30 is water.

Mol	Chain	Residues	Atoms	AltConf
30	6	14	Total O 14 14	0
30	2	25	Total O 25 25	0
30	3	37	Total O 37 37	0
30	5	17	Total O 17 17	0
30	A	184	Total O 184 184	0
30	B	205	Total O 205 205	0
30	C	45	Total O 45 45	0
30	D	20	Total O 20 20	0
30	E	17	Total O 17 17	0
30	F	20	Total O 20 20	0

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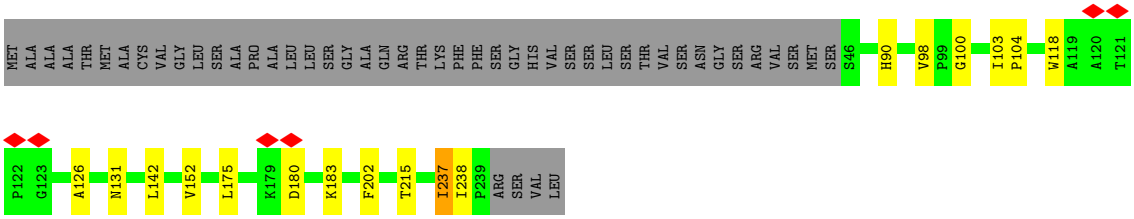
Mol	Chain	Residues	Atoms	AltConf
30	G	2	Total O 2 2	0
30	I	3	Total O 3 3	0
30	J	4	Total O 4 4	0
30	K	2	Total O 2 2	0
30	M	2	Total O 2 2	0
30	L	9	Total O 9 9	0

3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

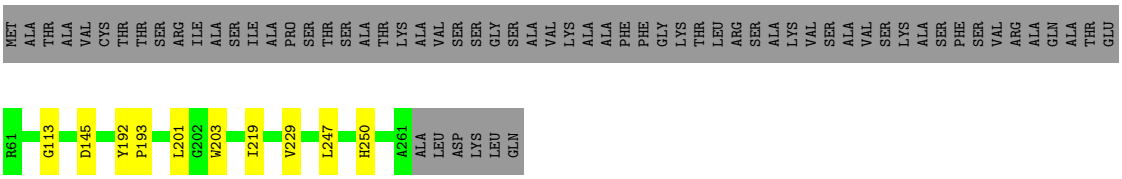
• Molecule 1: Chlorophyll a-b binding protein, chloroplastic

Chain 6:



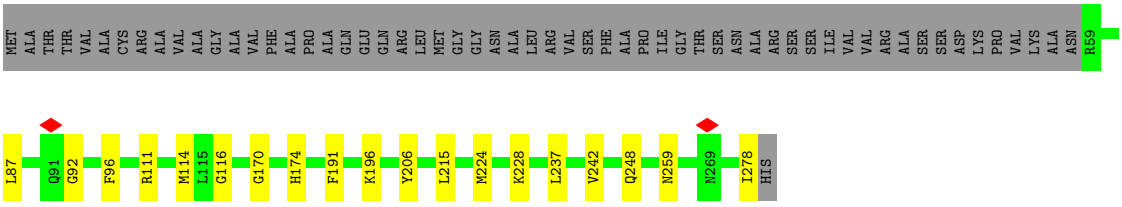
• Molecule 2: Chlorophyll a-b binding protein, chloroplastic

Chain 2:



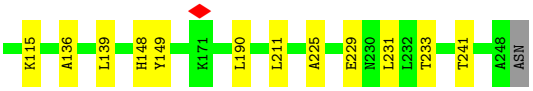
• Molecule 3: Chlorophyll a-b binding protein, chloroplastic

Chain 3:



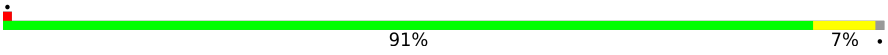
• Molecule 4: Chlorophyll a-b binding protein, chloroplastic

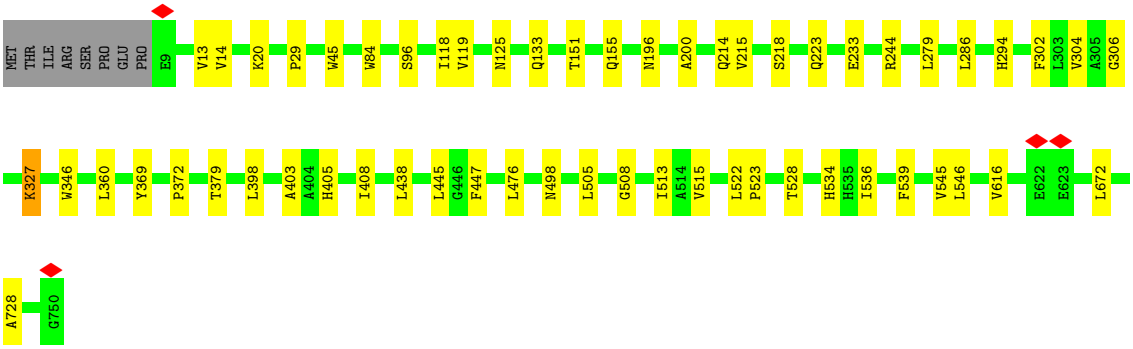
Chain 5:



• Molecule 5: Photosystem I P700 chlorophyll a apoprotein A1

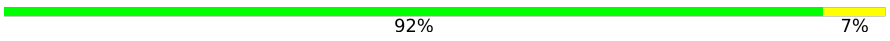
Chain A:

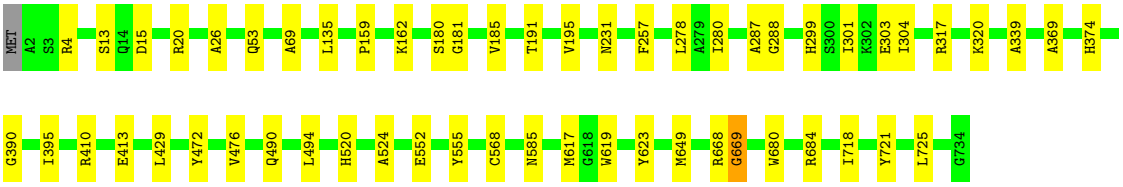




• Molecule 6: Photosystem I P700 chlorophyll a apoprotein A2

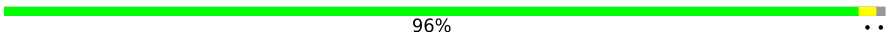
Chain B:

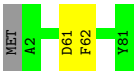




• Molecule 7: Photosystem I iron-sulfur center

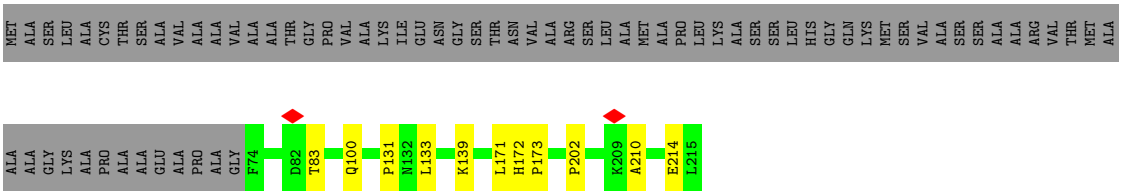
Chain C:





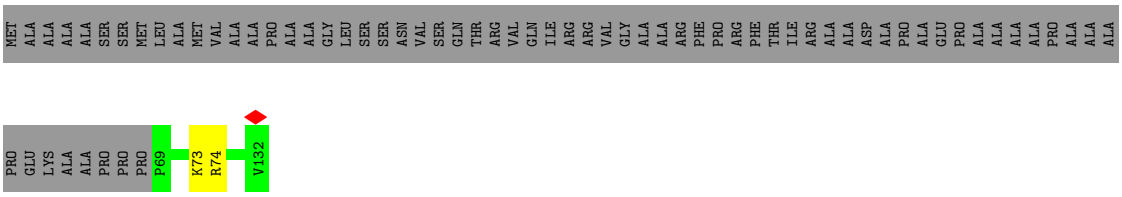
• Molecule 8: Photosystem I reaction center subunit II, chloroplastic

Chain D:

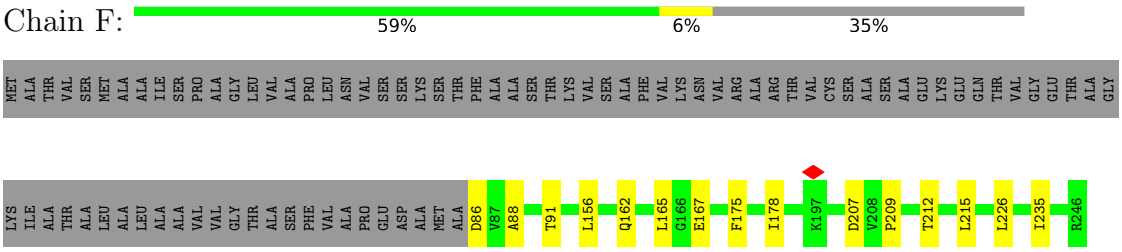


• Molecule 9: Photosystem I reaction centre subunit IV

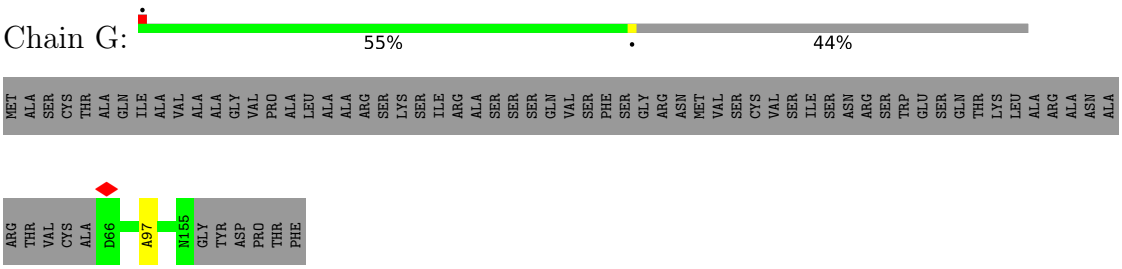
Chain E:



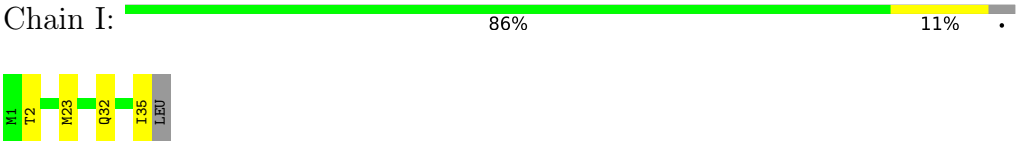
• Molecule 10: Photosystem I reaction center subunit III



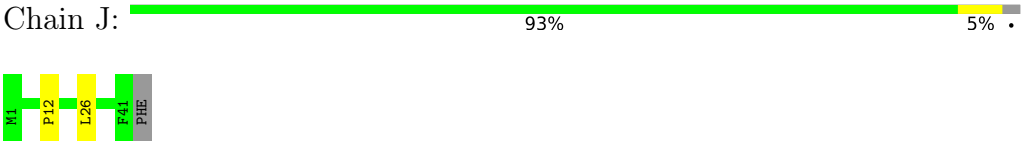
• Molecule 11: Photosystem I reaction center subunit V, chloroplastic



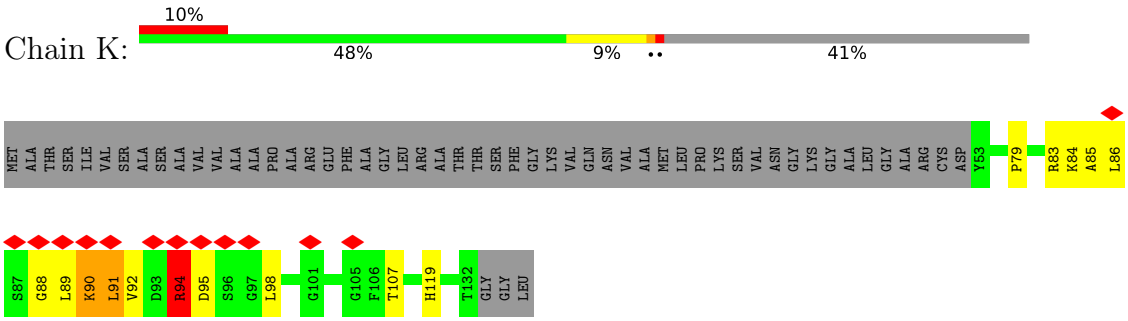
• Molecule 12: Photosystem I reaction center subunit VIII



• Molecule 13: Photosystem I reaction center subunit IX

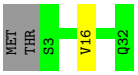


• Molecule 14: PSI-K



• Molecule 15: Photosystem I reaction center subunit XII

Chain M:



• Molecule 16: Photosystem I reaction center subunit VI, chloroplastic

Chain H:

• Molecule 17: PSI subunit V

Chain L:

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	157685	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	50	Depositor
Minimum defocus (nm)	800	Depositor
Maximum defocus (nm)	2000	Depositor
Magnification	165000	Depositor
Image detector	FEI FALCON IV (4k x 4k)	Depositor
Maximum map value	0.674	Depositor
Minimum map value	-0.321	Depositor
Average map value	-0.000	Depositor
Map value standard deviation	0.015	Depositor
Recommended contour level	0.07	Depositor
Map size (Å)	363.5, 363.5, 363.5	wwPDB
Map dimensions	500, 500, 500	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.727, 0.727, 0.727	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: BCR, CL0, LHG, DGD, CHL, PQN, LMG, LMU, SF4, XAT, CLA, 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	6	0.25	0/1546	0.48	0/2112
2	2	0.22	0/1612	0.40	0/2203
3	3	0.24	0/1755	0.46	0/2379
4	5	0.23	0/1600	0.45	0/2185
5	A	0.28	0/6044	0.50	0/8247
6	B	0.31	0/6066	0.56	0/8277
7	C	0.36	0/612	0.58	0/829
8	D	0.20	0/1141	0.47	0/1538
9	E	0.28	0/516	0.40	0/701
10	F	0.22	0/1275	0.49	0/1725
11	G	0.19	0/686	0.42	0/931
12	I	0.30	0/281	0.64	0/384
13	J	0.18	0/338	0.42	0/462
14	K	0.42	0/567	0.59	0/766
15	M	0.21	0/236	0.41	0/317
16	H	0.20	0/591	0.45	0/796
17	L	0.32	0/987	0.55	0/1348
All	All	0.28	0/25853	0.50	0/35200

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
8	D	0	1
9	E	0	1
14	K	0	1
All	All	0	3

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (3) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
8	D	172	HIS	Peptide
9	E	74	ARG	Sidechain
14	K	94	ARG	Sidechain

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	6	1496	0	1474	11	0
2	2	1557	0	1510	9	0
3	3	1705	0	1672	14	0
4	5	1549	0	1528	16	0
5	A	5846	0	5712	39	0
6	B	5854	0	5632	36	0
7	C	602	0	575	1	0
8	D	1112	0	1128	6	0
9	E	503	0	490	0	0
10	F	1248	0	1291	9	0
11	G	673	0	678	1	0
12	I	274	0	285	2	0
13	J	328	0	339	2	0
14	K	561	0	581	11	0
15	M	235	0	259	1	0
16	H	578	0	590	2	0
17	L	958	0	956	11	0
18	2	302	0	234	11	0
18	3	112	0	101	4	0
18	5	178	0	120	1	0
18	6	97	0	68	6	0
19	2	482	0	433	12	0
19	3	618	0	535	15	0
19	5	549	0	501	11	0
19	6	626	0	548	18	0
19	A	2443	0	2417	59	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
19	B	2485	0	2516	57	0
19	F	146	0	121	4	0
19	G	90	0	66	1	0
19	J	42	0	31	1	0
19	K	140	0	104	1	0
19	L	147	0	123	4	0
20	2	126	0	168	8	0
20	3	84	0	112	11	0
20	5	84	0	112	7	0
20	6	84	0	112	4	0
20	J	42	0	56	4	0
21	6	44	0	56	3	0
22	2	38	0	46	0	0
22	5	44	0	58	5	0
22	6	76	0	98	6	0
22	A	83	0	112	3	0
23	2	40	0	56	2	0
23	3	40	0	56	2	0
23	5	40	0	56	2	0
23	A	200	0	280	17	0
23	B	200	0	280	13	0
23	F	80	0	112	6	0
23	G	80	0	112	6	0
23	I	40	0	56	2	0
23	J	40	0	56	6	0
23	K	80	0	112	4	0
23	L	80	0	112	4	0
23	M	40	0	56	3	0
24	A	65	0	72	2	0
25	A	33	0	46	2	0
25	B	33	0	46	1	0
26	A	8	0	0	0	0
26	C	16	0	0	0	0
27	A	35	0	46	0	0
27	B	70	0	92	4	0
27	G	35	0	46	2	0
28	B	66	0	96	4	0
29	J	71	0	85	3	0
30	2	25	0	0	0	0
30	3	37	0	0	0	0
30	5	17	0	0	0	0
30	6	14	0	0	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
30	A	184	0	0	0	0
30	B	205	0	0	2	0
30	C	45	0	0	0	0
30	D	20	0	0	0	0
30	E	17	0	0	0	0
30	F	20	0	0	0	0
30	G	2	0	0	0	0
30	I	3	0	0	0	0
30	J	4	0	0	0	0
30	K	2	0	0	0	0
30	L	9	0	0	0	0
30	M	2	0	0	0	0
All	All	36239	0	35421	364	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 5.

All (364) 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)
3:3:242:VAL:HG11	20:3:316:LUT:H32	1.69	0.74
3:3:191:PHE:HE2	18:3:306:CHL:HBB2	1.56	0.71
19:A:824:CLA:H2	14:K:88:GLY:HA3	1.73	0.71
19:A:811:CLA:HBB2	19:A:814:CLA:HMA3	1.75	0.68
1:6:98:VAL:HG11	20:6:315:LUT:H12	1.76	0.68
2:2:229:VAL:HG11	20:2:316:LUT:H32	1.76	0.66
19:B:812:CLA:HBA2	27:G:202:LMU:H41	1.79	0.63
4:5:231:LEU:HB2	20:5:315:LUT:H22	1.81	0.62
5:A:151:THR:H	5:A:155:GLN:HE22	1.46	0.62
15:M:16:VAL:HG23	23:M:101:BCR:H14C	1.82	0.62
5:A:214:GLN:HA	5:A:218:SER:HB2	1.81	0.61
1:6:237:ILE:HG22	1:6:238:ILE:HG13	1.81	0.61
19:A:837:CLA:HBA2	19:K:201:CLA:H2	1.83	0.61
13:J:12:PRO:HB2	20:J:101:LUT:H163	1.81	0.61
18:2:301:CHL:H71	18:3:314:CHL:H72	1.81	0.61
1:6:100:GLY:O	30:6:401:HOH:O	2.16	0.61
19:B:812:CLA:HBB2	19:B:814:CLA:HMA3	1.82	0.61
19:2:302:CLA:H51	19:2:303:CLA:H3A	1.83	0.60
19:A:822:CLA:H102	19:A:825:CLA:H71	1.83	0.60
19:A:821:CLA:HBB2	23:A:848:BCR:H402	1.84	0.60
14:K:86:LEU:HB2	14:K:90:LYS:HB3	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:B:159:PRO:HA	6:B:162:LYS:HE2	1.83	0.59
17:L:92:ASN:HB3	19:L:301:CLA:HAC1	1.84	0.59
23:G:201:BCR:H362	23:G:205:BCR:H312	1.85	0.59
6:B:15:ASP:HB3	6:B:20:ARG:HB2	1.84	0.58
12:I:32:GLN:HE21	12:I:35:ILE:HG22	1.68	0.58
3:3:92:GLY:HA3	5:A:13:VAL:HA	1.85	0.58
5:A:505:LEU:HD21	5:A:513:ILE:HG13	1.85	0.57
27:B:850:LMU:H4'	27:G:202:LMU:H6D	1.86	0.57
14:K:92:VAL:HG13	14:K:94:ARG:HE	1.69	0.57
18:6:301:CHL:HBA1	19:5:314:CLA:HED1	1.87	0.56
6:B:191:THR:HG21	6:B:278:LEU:HB2	1.87	0.56
19:B:832:CLA:HBA1	10:F:235:ILE:HD12	1.88	0.56
19:6:312:CLA:H112	22:6:317:LHG:H301	1.87	0.55
8:D:100:GLN:HG2	16:H:67:ALA:HB2	1.89	0.55
5:A:398:LEU:HD21	19:A:808:CLA:H142	1.88	0.55
5:A:279:LEU:HB2	5:A:513:ILE:HD12	1.89	0.55
6:B:585:ASN:HB2	19:B:802:CLA:HBC2	1.89	0.55
14:K:83:ARG:HB3	14:K:91:LEU:HD22	1.88	0.55
19:A:810:CLA:H71	23:J:103:BCR:H343	1.89	0.55
19:B:818:CLA:HBA2	19:B:827:CLA:HBB2	1.89	0.55
5:A:476:LEU:HB2	5:A:528:THR:HG23	1.89	0.54
3:3:96:PHE:HB2	19:3:302:CLA:H43	1.89	0.54
19:6:305:CLA:HBA1	20:6:318:LUT:H30	1.89	0.54
4:5:148:HIS:HD2	19:5:307:CLA:HBB1	1.72	0.54
1:6:180:ASP:HB3	1:6:183:LYS:HB2	1.89	0.54
5:A:29:PRO:HB2	5:A:45:TRP:HH2	1.73	0.54
19:B:823:CLA:HBB2	23:B:846:BCR:H343	1.90	0.54
5:A:508:GLY:HA2	5:A:523:PRO:HB3	1.88	0.54
19:L:302:CLA:HAB	23:L:305:BCR:H352	1.90	0.53
17:L:102:PRO:HA	17:L:105:ARG:HD3	1.90	0.53
4:5:148:HIS:CD2	19:5:307:CLA:HBB1	2.44	0.53
18:6:301:CHL:H2	22:6:317:LHG:H302	1.91	0.53
19:2:308:CLA:HBA2	23:2:319:BCR:H381	1.91	0.53
19:L:302:CLA:H51	23:L:305:BCR:H323	1.91	0.53
20:3:315:LUT:H171	20:3:315:LUT:H8	1.91	0.53
4:5:233:THR:HG22	4:5:241:THR:HG21	1.91	0.52
5:A:125:ASN:HB3	5:A:133:GLN:HB3	1.91	0.52
3:3:111:ARG:HA	3:3:114:MET:HE3	1.91	0.52
3:3:224:MET:HG3	3:3:228:LYS:HE3	1.92	0.52
19:6:309:CLA:HAB	20:6:315:LUT:H32	1.90	0.52
10:F:209:PRO:HD3	29:J:104:LMG:HC71	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:6:302:CLA:HAB	21:6:316:XAT:H32	1.93	0.51
5:A:728:ALA:HA	22:A:846:LHG:H342	1.91	0.51
6:B:619:TRP:O	6:B:623:TYR:HB3	2.10	0.51
3:3:87:LEU:HD21	19:A:813:CLA:H12	1.93	0.51
19:3:302:CLA:H51	19:A:811:CLA:H92	1.93	0.50
19:5:301:CLA:HAB	20:5:316:LUT:H12	1.93	0.50
2:2:193:PRO:HB3	18:2:307:CHL:HBC2	1.93	0.50
5:A:522:LEU:HD11	5:A:616:VAL:HA	1.93	0.50
19:B:816:CLA:H2	23:G:201:BCR:H282	1.94	0.50
30:B:901:HOH:O	8:D:202:PRO:HD3	2.11	0.50
10:F:178:ILE:HG23	19:F:303:CLA:HAA1	1.94	0.50
6:B:472:TYR:HB3	10:F:88:ALA:HA	1.94	0.49
19:B:841:CLA:H193	12:I:23:MET:HE3	1.94	0.49
5:A:302:PHE:HE1	19:A:822:CLA:HAB	1.77	0.49
19:B:817:CLA:H193	19:B:820:CLA:HBC1	1.94	0.49
14:K:79:PRO:HG3	14:K:85:ALA:HB2	1.95	0.49
19:A:822:CLA:H101	23:A:851:BCR:H10C	1.94	0.49
5:A:346:TRP:HB3	19:A:807:CLA:HAC1	1.95	0.49
19:A:805:CLA:H201	19:B:802:CLA:H141	1.95	0.49
23:A:848:BCR:H321	23:A:848:BCR:HC8	1.95	0.49
6:B:721:TYR:HB2	19:B:803:CLA:HED2	1.94	0.49
5:A:405:HIS:HA	5:A:408:ILE:HD12	1.94	0.49
19:B:802:CLA:HHB	19:B:803:CLA:H202	1.94	0.49
18:2:320:CHL:HAA1	22:5:318:LHG:H292	1.95	0.49
8:D:210:ALA:HB1	8:D:214:GLU:HB2	1.95	0.49
5:A:536:ILE:HD12	24:A:802:CL0:H63	1.95	0.49
13:J:26:LEU:HB2	23:J:103:BCR:H371	1.94	0.49
19:2:312:CLA:H43	18:3:314:CHL:H121	1.94	0.49
18:2:314:CHL:HHC	18:2:314:CHL:HBB1	1.95	0.49
5:A:279:LEU:HD21	5:A:372:PRO:HD2	1.94	0.49
19:B:806:CLA:HBC2	19:B:830:CLA:HMA1	1.95	0.49
17:L:211:LEU:HG	19:L:303:CLA:HED3	1.95	0.48
23:F:302:BCR:HC32	29:J:105:LMG:H132	1.95	0.48
14:K:98:LEU:HB2	14:K:107:THR:HG21	1.95	0.48
19:3:302:CLA:H52	19:A:814:CLA:H193	1.95	0.48
5:A:286:LEU:HD13	19:A:819:CLA:HMA2	1.94	0.48
19:B:830:CLA:H143	19:B:841:CLA:HED3	1.95	0.48
1:6:90:HIS:HD2	21:6:316:XAT:H15	1.79	0.48
19:A:806:CLA:H2	19:A:812:CLA:H92	1.95	0.48
4:5:136:ALA:HA	4:5:139:LEU:HD12	1.96	0.48
5:A:327:LYS:HE3	5:A:327:LYS:HB2	1.42	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:B:807:CLA:H191	28:B:849:DGD:HAG3	1.95	0.48
6:B:299:HIS:HB3	6:B:304:ILE:HD11	1.95	0.48
6:B:429:LEU:HD11	19:B:838:CLA:HMB2	1.96	0.48
19:A:818:CLA:H101	23:K:205:BCR:HC22	1.95	0.48
2:2:145:ASP:HB2	23:2:319:BCR:H332	1.95	0.47
2:2:247:LEU:HB2	20:2:315:LUT:H222	1.95	0.47
5:A:200:ALA:HB2	5:A:306:GLY:HA3	1.96	0.47
19:A:841:CLA:H121	25:A:844:PQN:H272	1.96	0.47
14:K:91:LEU:HD23	14:K:91:LEU:HA	1.69	0.47
4:5:225:ALA:HB1	4:5:229:GLU:HG2	1.96	0.47
19:3:309:CLA:H2	19:3:310:CLA:HMD2	1.96	0.47
3:3:170:GLY:O	3:3:174:HIS:HB2	2.14	0.47
6:B:410:ARG:HA	6:B:413:GLU:HB2	1.95	0.47
19:B:838:CLA:H192	23:F:305:BCR:H272	1.97	0.47
19:6:310:CLA:H2	19:6:311:CLA:HMD2	1.97	0.47
6:B:69:ALA:HB2	6:B:135:LEU:HB2	1.95	0.47
6:B:718:ILE:HD12	19:B:828:CLA:HAB	1.97	0.47
19:B:812:CLA:H122	27:B:850:LMU:H92	1.97	0.47
19:A:810:CLA:H111	19:A:810:CLA:H152	1.79	0.47
6:B:257:PHE:HZ	19:B:818:CLA:H71	1.80	0.47
19:B:834:CLA:H51	23:F:302:BCR:H312	1.96	0.47
20:J:101:LUT:H7	20:J:101:LUT:H181	1.61	0.47
5:A:438:LEU:HD21	5:A:545:VAL:HG12	1.97	0.47
19:3:301:CLA:HAB	20:3:316:LUT:H12	1.97	0.46
4:5:231:LEU:HD22	20:5:315:LUT:H172	1.96	0.46
18:5:313:CHL:HHC	18:5:313:CHL:HBB1	1.97	0.46
19:A:823:CLA:HHB	19:A:824:CLA:H12	1.97	0.46
6:B:374:HIS:HE2	19:B:829:CLA:C1B	2.29	0.46
19:3:312:CLA:HBC1	20:3:315:LUT:H162	1.97	0.46
19:6:303:CLA:HBC1	18:6:306:CHL:HBB2	1.98	0.46
4:5:211:LEU:HD12	22:5:318:LHG:H101	1.97	0.46
6:B:317:ARG:HB3	6:B:320:LYS:HD2	1.96	0.46
3:3:278:ILE:HD12	19:A:816:CLA:HBD	1.98	0.46
6:B:231:ASN:HA	19:B:817:CLA:HAA2	1.98	0.46
19:B:816:CLA:H61	19:B:816:CLA:H41	1.70	0.46
19:B:826:CLA:HMA1	23:B:847:BCR:H14C	1.98	0.46
23:G:201:BCR:H311	23:G:201:BCR:HC7	1.74	0.46
19:A:823:CLA:HAA1	14:K:85:ALA:HB3	1.98	0.45
6:B:524:ALA:HB2	19:B:838:CLA:HMA1	1.97	0.45
18:6:301:CHL:H11	4:5:149:TYR:HB2	1.98	0.45
19:6:305:CLA:HBB2	18:6:306:CHL:CBB	2.47	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:B:801:CLA:H152	23:L:305:BCR:H17C	1.97	0.45
19:B:811:CLA:HHC	19:B:811:CLA:HBB1	1.96	0.45
6:B:369:ALA:HB1	6:B:725:LEU:HD11	1.99	0.45
10:F:207:ASP:HA	29:J:104:LMG:HC61	1.98	0.45
19:A:821:CLA:HHC	19:A:821:CLA:HBB1	1.98	0.45
8:D:83:THR:HG23	8:D:131:PRO:HB2	1.99	0.45
19:2:302:CLA:H91	19:2:302:CLA:H112	1.77	0.45
6:B:53:GLN:HG2	19:B:806:CLA:H3A	1.99	0.45
19:5:308:CLA:H61	19:5:308:CLA:H41	1.66	0.45
19:6:308:CLA:HHC	19:6:308:CLA:HBB1	1.98	0.45
19:3:309:CLA:HHC	19:3:309:CLA:HBB1	1.99	0.45
23:3:317:BCR:HC7	23:3:317:BCR:H331	1.66	0.45
19:A:831:CLA:H62	22:A:846:LHG:H132	1.98	0.45
23:F:305:BCR:H11C	23:F:305:BCR:H341	1.85	0.45
19:6:307:CLA:H3A	19:6:307:CLA:HBA2	1.81	0.45
18:2:320:CHL:HHC	18:2:320:CHL:HBB1	1.99	0.45
6:B:301:ILE:HG23	19:B:820:CLA:HED3	1.98	0.45
6:B:668:ARG:O	6:B:669:GLY:C	2.60	0.45
19:B:801:CLA:H52	19:B:840:CLA:H43	1.99	0.45
19:B:810:CLA:H13	28:B:849:DGD:HAH2	1.99	0.45
14:K:83:ARG:HE	14:K:91:LEU:HD13	1.82	0.45
19:3:310:CLA:HHC	19:3:310:CLA:HBB1	1.99	0.44
19:3:311:CLA:HHC	19:3:311:CLA:HBB1	1.99	0.44
19:B:812:CLA:HAC1	27:B:850:LMU:H51	1.99	0.44
19:A:807:CLA:H203	23:A:848:BCR:H10C	1.99	0.44
19:B:806:CLA:H8	19:B:825:CLA:HBA2	1.98	0.44
19:B:824:CLA:H3A	19:B:842:CLA:HED3	1.98	0.44
23:B:845:BCR:H15C	23:B:845:BCR:H351	1.87	0.44
19:6:312:CLA:HHC	19:6:312:CLA:HBB1	1.99	0.44
4:5:70:GLY:HA2	22:5:318:LHG:HC11	1.98	0.44
19:A:833:CLA:HBB1	19:B:801:CLA:HAA2	1.99	0.44
6:B:26:ALA:HB2	28:B:849:DGD:HA42	1.99	0.44
2:2:192:TYR:HB3	19:2:309:CLA:HED2	2.00	0.44
19:3:305:CLA:HHC	19:3:305:CLA:HBB1	2.00	0.44
19:3:313:CLA:HHC	19:3:313:CLA:HBB1	2.00	0.44
19:5:311:CLA:HHC	19:5:311:CLA:HBB1	2.00	0.44
19:A:824:CLA:HHC	19:A:824:CLA:HBB1	1.99	0.44
19:B:812:CLA:H101	19:B:812:CLA:H61	1.84	0.44
20:2:315:LUT:H15	20:2:315:LUT:H201	1.80	0.44
19:A:836:CLA:HHC	19:A:836:CLA:HBB1	2.00	0.44
8:D:139:LYS:HE3	8:D:171:LEU:HD13	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:L:77:GLU:O	17:L:81:THR:OG1	2.36	0.44
19:A:825:CLA:HBB2	22:A:847:LHG:HC92	2.00	0.44
23:B:846:BCR:H361	23:B:846:BCR:H20C	1.77	0.44
23:B:848:BCR:H15C	23:B:848:BCR:H351	1.78	0.44
2:2:201:LEU:HD12	20:2:315:LUT:H22	1.98	0.44
5:A:29:PRO:HB3	19:A:805:CLA:HAC1	2.00	0.44
3:3:215:LEU:HD12	20:3:315:LUT:H222	1.99	0.44
23:5:317:BCR:H15C	23:5:317:BCR:H351	1.81	0.44
5:A:196:ASN:HB3	19:A:821:CLA:HMD2	2.00	0.44
19:A:837:CLA:HHC	19:A:837:CLA:HBB1	2.00	0.44
19:2:310:CLA:HBB1	19:2:310:CLA:HHC	1.99	0.44
19:A:808:CLA:HED2	19:A:808:CLA:H62	2.00	0.44
19:6:304:CLA:HHC	19:6:304:CLA:HBB1	1.99	0.43
19:6:310:CLA:HHC	19:6:310:CLA:HBB1	1.99	0.43
19:A:842:CLA:HHC	19:A:842:CLA:HBB1	2.00	0.43
19:A:808:CLA:H152	19:A:808:CLA:H111	1.76	0.43
10:F:212:THR:HA	10:F:215:LEU:HG	1.99	0.43
23:J:103:BCR:H403	23:J:103:BCR:H24C	1.82	0.43
18:6:306:CHL:HHC	18:6:306:CHL:HBB1	2.00	0.43
19:3:303:CLA:HAC1	19:3:308:CLA:H151	1.99	0.43
19:A:834:CLA:HHC	19:A:834:CLA:HBB1	2.01	0.43
23:A:849:BCR:H11C	23:A:849:BCR:H341	1.91	0.43
19:B:807:CLA:HHC	19:B:807:CLA:HBB1	2.01	0.43
23:J:103:BCR:HC8	23:J:103:BCR:H311	2.00	0.43
20:3:316:LUT:H7	20:3:316:LUT:H181	1.74	0.43
4:5:115:LYS:HE3	4:5:115:LYS:HB3	1.77	0.43
22:5:318:LHG:H242	22:5:318:LHG:H112	2.01	0.43
5:A:244:ARG:HG3	19:A:816:CLA:HED3	2.01	0.43
5:A:360:LEU:HD11	19:A:820:CLA:H71	2.00	0.43
5:A:405:HIS:HE1	19:A:831:CLA:NA	2.16	0.43
19:A:834:CLA:H8	25:B:843:PQN:H202	2.00	0.43
19:2:311:CLA:HAC2	19:2:312:CLA:H201	2.01	0.43
23:B:848:BCR:H24C	23:B:848:BCR:H403	1.82	0.43
23:G:205:BCR:H403	23:G:205:BCR:H23C	2.00	0.43
19:J:102:CLA:HHC	19:J:102:CLA:HBB1	2.00	0.43
14:K:119:HIS:CG	23:K:205:BCR:H12C	2.53	0.43
19:5:309:CLA:HHC	19:5:309:CLA:HBB1	2.00	0.43
19:B:842:CLA:H161	19:B:842:CLA:H141	1.79	0.43
19:A:812:CLA:HHC	19:A:812:CLA:HBB1	2.00	0.43
19:F:301:CLA:HMC2	23:F:302:BCR:H381	2.01	0.43
16:H:108:GLY:O	16:H:112:LEU:HB2	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:2:305:CHL:HBB1	19:2:308:CLA:HBC1	2.01	0.43
19:5:312:CLA:HHC	19:5:312:CLA:HBB1	2.01	0.43
6:B:395:ILE:HD13	6:B:555:TYR:HA	2.01	0.43
19:B:825:CLA:H62	19:B:825:CLA:H41	1.92	0.43
23:B:847:BCR:H15C	23:B:847:BCR:H351	1.81	0.43
10:F:162:GLN:HA	10:F:165:LEU:HG	2.00	0.43
1:6:237:ILE:HD12	1:6:237:ILE:HA	1.93	0.43
2:2:203:TRP:HB2	19:2:309:CLA:HBA1	1.99	0.43
5:A:498:ASN:HB2	19:A:837:CLA:HED2	2.00	0.43
10:F:156:LEU:HD22	10:F:167:GLU:HG2	2.01	0.43
17:L:123:LYS:HA	17:L:123:LYS:HD3	1.87	0.43
19:6:312:CLA:H72	22:6:317:LHG:H182	2.00	0.43
18:3:314:CHL:HED2	18:3:314:CHL:HBD	1.95	0.43
6:B:181:GLY:HA2	6:B:185:VAL:HB	2.01	0.43
6:B:680:TRP:CE2	6:B:684:ARG:HG3	2.54	0.43
19:F:304:CLA:HHC	19:F:304:CLA:HBB1	2.00	0.42
18:2:301:CHL:HHC	18:2:301:CHL:HBB1	2.01	0.42
19:5:307:CLA:H41	19:5:307:CLA:H61	1.68	0.42
5:A:534:HIS:CG	19:A:839:CLA:HED3	2.54	0.42
19:B:807:CLA:H72	19:B:807:CLA:H111	1.94	0.42
19:B:814:CLA:H92	19:B:825:CLA:H12	2.00	0.42
19:B:830:CLA:H91	28:B:849:DGD:HBW2	2.00	0.42
19:B:831:CLA:H3A	19:B:831:CLA:HBA2	1.85	0.42
19:F:301:CLA:HHC	19:F:301:CLA:HBB1	2.00	0.42
19:G:203:CLA:HHC	19:G:203:CLA:HBB1	2.00	0.42
1:6:152:VAL:HG11	20:6:318:LUT:H401	2.00	0.42
19:6:312:CLA:H202	23:5:317:BCR:H331	2.00	0.42
20:5:316:LUT:H191	20:5:316:LUT:H11	1.76	0.42
19:A:808:CLA:HAB	23:A:849:BCR:HC32	2.00	0.42
19:6:313:CLA:HBB1	19:6:313:CLA:HHC	2.00	0.42
5:A:403:ALA:HB2	23:A:851:BCR:H323	2.01	0.42
6:B:490:GLN:HA	6:B:494:LEU:HB2	2.00	0.42
8:D:83:THR:HB	8:D:133:LEU:HB2	2.01	0.42
4:5:190:LEU:HD12	20:5:315:LUT:H222	2.01	0.42
19:A:825:CLA:HBB1	19:A:825:CLA:HHC	2.01	0.42
6:B:552:GLU:OE2	30:B:901:HOH:O	2.22	0.42
20:J:101:LUT:H11	20:J:101:LUT:H191	1.89	0.42
19:3:311:CLA:HHB	19:3:312:CLA:HBC3	2.01	0.42
6:B:339:ALA:HB2	23:B:847:BCR:H372	2.01	0.42
4:5:99:TRP:CE2	19:5:307:CLA:HBC3	2.55	0.42
5:A:20:LYS:HA	5:A:20:LYS:HD2	1.95	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:A:438:LEU:HG	5:A:546:LEU:HB2	2.02	0.42
5:A:445:LEU:HB3	5:A:539:PHE:HB2	2.01	0.42
6:B:390:GLY:HA2	23:B:847:BCR:H393	2.01	0.42
23:B:844:BCR:H11C	23:B:844:BCR:H341	1.87	0.42
23:G:201:BCR:H11C	23:G:201:BCR:H341	1.86	0.42
2:2:250:HIS:CG	19:2:312:CLA:HAA2	2.55	0.42
19:5:302:CLA:HHC	19:5:302:CLA:HBB1	2.01	0.42
19:A:820:CLA:H111	19:A:822:CLA:HBB2	2.00	0.42
19:2:312:CLA:HHC	19:2:312:CLA:HBB1	2.01	0.42
17:L:78:THR:HG22	17:L:81:THR:H	1.85	0.42
23:A:851:BCR:H321	23:A:851:BCR:HC7	1.85	0.42
19:B:822:CLA:HMB1	19:B:823:CLA:H2	2.02	0.42
23:J:103:BCR:H341	23:J:103:BCR:H11C	1.81	0.42
17:L:77:GLU:H	17:L:77:GLU:HG2	1.73	0.42
22:5:318:LHG:H251	22:5:318:LHG:H282	1.84	0.41
19:A:822:CLA:H171	19:A:832:CLA:HBC1	2.02	0.41
19:B:809:CLA:HHC	19:B:809:CLA:HBB1	2.01	0.41
19:B:841:CLA:HHC	19:B:841:CLA:HBB1	2.01	0.41
2:2:113:GLY:HA2	20:2:316:LUT:H381	2.02	0.41
18:2:301:CHL:H2	18:2:301:CHL:H61	1.61	0.41
3:3:206:TYR:HB3	19:3:308:CLA:HED2	2.01	0.41
3:3:248:GLN:HE21	3:3:259:ASN:HD22	1.67	0.41
23:A:852:BCR:H321	23:A:852:BCR:HC7	1.86	0.41
23:A:852:BCR:H403	23:A:852:BCR:H24C	1.87	0.41
6:B:520:HIS:CG	19:B:838:CLA:HED3	2.55	0.41
6:B:649:MET:HE1	19:B:809:CLA:H41	2.01	0.41
20:J:101:LUT:H35	20:J:101:LUT:H401	1.83	0.41
17:L:83:SER:HB3	17:L:86:ILE:HB	2.02	0.41
23:L:305:BCR:H15C	23:L:305:BCR:H351	1.87	0.41
1:6:118:TRP:CE2	1:6:126:ALA:HB2	2.55	0.41
4:5:58:LEU:HD22	4:5:59:PRO:HD2	2.02	0.41
24:A:802:CL0:H14	24:A:802:CL0:H2	1.86	0.41
19:A:839:CLA:HHC	19:A:839:CLA:HAB	1.91	0.41
6:B:287:ALA:HB2	19:B:820:CLA:HBC2	2.02	0.41
19:B:840:CLA:HHC	19:B:840:CLA:HBB1	2.01	0.41
14:K:79:PRO:HA	14:K:91:LEU:HD21	2.01	0.41
17:L:76:LEU:HB3	17:L:77:GLU:H	1.67	0.41
17:L:146:VAL:HG22	17:L:197:PHE:HE1	1.84	0.41
19:A:818:CLA:HHC	19:A:818:CLA:HBB1	2.02	0.41
19:2:309:CLA:H12	20:2:315:LUT:H173	2.02	0.41
19:3:302:CLA:HHC	19:3:302:CLA:HBB1	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:5:316:LUT:H15	20:5:316:LUT:H201	1.83	0.41
19:A:819:CLA:HBB1	19:A:819:CLA:HHC	2.02	0.41
23:A:848:BCR:H11C	23:A:848:BCR:H341	1.93	0.41
19:B:816:CLA:H51	23:B:845:BCR:HC21	2.01	0.41
7:C:61:ASP:HA	7:C:62:PHE:HA	1.85	0.41
22:6:317:LHG:H342	22:6:317:LHG:H311	1.89	0.41
20:2:317:LUT:H15	20:2:317:LUT:H201	1.86	0.41
20:3:316:LUT:H11	20:3:316:LUT:H191	1.82	0.41
18:2:305:CHL:HBB2	18:2:306:CHL:HAB	2.02	0.41
3:3:237:LEU:HG	20:3:315:LUT:H191	2.02	0.41
23:A:852:BCR:H20C	23:A:852:BCR:H361	1.81	0.41
19:B:840:CLA:H93	23:I:101:BCR:H382	2.03	0.41
23:K:204:BCR:H311	23:K:204:BCR:HC7	1.73	0.41
23:M:101:BCR:H20C	23:M:101:BCR:H361	1.98	0.41
4:5:231:LEU:HD13	20:5:315:LUT:H163	2.01	0.41
5:A:304:VAL:HG21	19:A:818:CLA:H121	2.02	0.41
19:A:807:CLA:H151	23:A:848:BCR:H323	2.02	0.41
23:J:103:BCR:H20C	23:J:103:BCR:H361	1.89	0.41
1:6:237:ILE:HG23	19:6:314:CLA:C4B	2.51	0.41
3:3:116:GLY:HA2	20:3:316:LUT:H381	2.02	0.41
20:3:315:LUT:H7	20:3:315:LUT:H181	1.79	0.41
5:A:84:TRP:HZ3	23:A:849:BCR:H322	1.86	0.41
5:A:118:ILE:HG13	5:A:119:VAL:HG13	2.02	0.41
5:A:294:HIS:HB2	19:A:819:CLA:C1B	2.51	0.41
19:A:835:CLA:HMC2	19:B:804:CLA:H101	2.03	0.41
23:A:851:BCR:H20C	23:A:851:BCR:H361	1.93	0.41
23:K:204:BCR:H15C	23:K:204:BCR:H351	1.87	0.41
20:3:316:LUT:H15	20:3:316:LUT:H201	1.83	0.41
5:A:379:THR:HG21	5:A:515:VAL:HB	2.03	0.41
5:A:447:PHE:C	19:A:835:CLA:HBB2	2.46	0.41
19:A:842:CLA:H41	25:A:844:PQN:H18	2.02	0.41
6:B:180:SER:HB3	6:B:288:GLY:HA3	2.02	0.41
19:6:302:CLA:HBC1	22:6:317:LHG:H142	2.03	0.40
6:B:4:ARG:HB2	6:B:13:SER:HB2	2.02	0.40
19:6:308:CLA:H11	27:B:851:LMU:H41	2.03	0.40
22:6:317:LHG:H262	22:6:317:LHG:H132	2.01	0.40
5:A:672:LEU:HD11	6:B:617:MET:HB2	2.02	0.40
18:2:307:CHL:HMA1	20:2:317:LUT:H403	2.03	0.40
18:2:320:CHL:HMA3	4:5:55:LEU:HD13	2.03	0.40
19:A:811:CLA:H12	19:A:811:CLA:H52	1.94	0.40
19:A:819:CLA:H3A	19:A:819:CLA:HBA2	1.84	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:A:828:CLA:H93	19:A:828:CLA:H112	1.86	0.40
23:A:851:BCR:H11C	23:A:851:BCR:H341	1.91	0.40
6:B:303:GLU:HG3	11:G:97:ALA:HA	2.03	0.40
19:B:829:CLA:H171	23:B:844:BCR:H352	2.03	0.40
19:B:832:CLA:HAB	19:B:833:CLA:H192	2.03	0.40
23:B:845:BCR:HC7	23:B:845:BCR:H311	1.92	0.40
23:3:317:BCR:H11C	23:3:317:BCR:H341	1.90	0.40
23:A:850:BCR:H24C	23:A:850:BCR:H371	1.94	0.40
19:B:816:CLA:HBA1	23:G:201:BCR:H281	2.02	0.40
10:F:175:PHE:HB2	23:F:302:BCR:H321	2.03	0.40
23:M:101:BCR:H15C	23:M:101:BCR:H351	1.91	0.40
17:L:79:PRO:O	17:L:80:VAL:C	2.65	0.40
1:6:104:PRO:HG2	30:6:401:HOH:O	2.21	0.40
1:6:202:PHE:CZ	21:6:316:XAT:H10	2.56	0.40
23:I:101:BCR:H20C	23:I:101:BCR:H361	1.95	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	6	192/243 (79%)	189 (98%)	3 (2%)	0	100 100
2	2	199/267 (74%)	196 (98%)	3 (2%)	0	100 100
3	3	218/279 (78%)	210 (96%)	8 (4%)	0	100 100
4	5	196/249 (79%)	191 (97%)	5 (3%)	0	100 100
5	A	740/750 (99%)	722 (98%)	18 (2%)	0	100 100
6	B	731/734 (100%)	713 (98%)	17 (2%)	1 (0%)	48 41
7	C	78/81 (96%)	76 (97%)	2 (3%)	0	100 100
8	D	140/215 (65%)	134 (96%)	5 (4%)	1 (1%)	19 9

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	E	62/132 (47%)	61 (98%)	1 (2%)	0	100	100
10	F	159/246 (65%)	156 (98%)	3 (2%)	0	100	100
11	G	88/161 (55%)	88 (100%)	0	0	100	100
12	I	33/36 (92%)	33 (100%)	0	0	100	100
13	J	39/42 (93%)	38 (97%)	1 (3%)	0	100	100
14	K	78/135 (58%)	73 (94%)	5 (6%)	0	100	100
15	M	28/32 (88%)	28 (100%)	0	0	100	100
16	H	74/142 (52%)	72 (97%)	2 (3%)	0	100	100
17	L	124/221 (56%)	117 (94%)	6 (5%)	1 (1%)	16	7
All	All	3179/3965 (80%)	3097 (97%)	79 (2%)	3 (0%)	50	41

All (3) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
8	D	173	PRO
17	L	78	THR
6	B	669	GLY

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	6	152/190 (80%)	146 (96%)	6 (4%)	27	14
2	2	155/204 (76%)	154 (99%)	1 (1%)	84	83
3	3	173/216 (80%)	172 (99%)	1 (1%)	84	83
4	5	159/202 (79%)	159 (100%)	0	100	100
5	A	603/611 (99%)	596 (99%)	7 (1%)	67	61
6	B	597/598 (100%)	593 (99%)	4 (1%)	81	79
7	C	68/69 (99%)	68 (100%)	0	100	100
8	D	116/161 (72%)	116 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
9	E	57/99 (58%)	56 (98%)	1 (2%)	54 43
10	F	129/189 (68%)	126 (98%)	3 (2%)	45 33
11	G	70/125 (56%)	70 (100%)	0	100 100
12	I	31/32 (97%)	30 (97%)	1 (3%)	34 22
13	J	35/36 (97%)	35 (100%)	0	100 100
14	K	58/96 (60%)	52 (90%)	6 (10%)	6 1
15	M	28/30 (93%)	28 (100%)	0	100 100
16	H	58/107 (54%)	56 (97%)	2 (3%)	32 19
17	L	97/169 (57%)	94 (97%)	3 (3%)	35 22
All	All	2586/3134 (82%)	2551 (99%)	35 (1%)	62 55

All (35) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	6	103	ILE
1	6	131	ASN
1	6	142	LEU
1	6	175	LEU
1	6	215	THR
1	6	237	ILE
2	2	219	ILE
3	3	196	LYS
5	A	14	VAL
5	A	96	SER
5	A	215	VAL
5	A	223	GLN
5	A	233	GLU
5	A	327	LYS
5	A	369	TYR
6	B	195	VAL
6	B	280	ILE
6	B	476	VAL
6	B	568	CYS
9	E	73	LYS
10	F	86	ASP
10	F	91	THR
10	F	226	LEU
12	I	2	THR
14	K	84	LYS

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Mol	Chain	Res	Type
14	K	89	LEU
14	K	90	LYS
14	K	91	LEU
14	K	94	ARG
14	K	95	ASP
16	H	96	LYS
16	H	99	ILE
17	L	76	LEU
17	L	77	GLU
17	L	78	THR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (40) such sidechains are listed below:

Mol	Chain	Res	Type
1	6	220	ASN
1	6	235	ASN
2	2	175	ASN
2	2	183	ASN
2	2	246	ASN
3	3	67	GLN
3	3	213	ASN
3	3	248	GLN
3	3	275	ASN
4	5	91	GLN
4	5	96	ASN
5	A	155	GLN
5	A	265	ASN
5	A	366	HIS
5	A	384	GLN
5	A	583	GLN
6	B	229	GLN
6	B	235	GLN
6	B	236	ASN
6	B	241	ASN
6	B	248	GLN
6	B	399	ASN
6	B	483	ASN
6	B	603	GLN
6	B	605	ASN
6	B	630	GLN
6	B	704	GLN
7	C	16	GLN

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Mol	Chain	Res	Type
7	C	37	ASN
9	E	123	ASN
10	F	162	GLN
11	G	90	GLN
11	G	96	GLN
11	G	116	GLN
12	I	32	GLN
13	J	30	ASN
16	H	80	ASN
16	H	131	GLN
16	H	135	GLN
17	L	92	ASN

5.3.3 RNA

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates

There are no oligosaccharides in this entry.

5.6 Ligand geometry

207 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	$\#\|Z\| > 2$
19	CLA	A	821	5	45,53,73	1.54	7 (15%)	52,89,113	1.11	4 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CHL	6	306	1	46,54,74	1.51	8 (17%)	49,90,114	1.16	4 (8%)
19	CLA	6	304	30	49,57,73	1.46	7 (14%)	55,93,113	1.12	4 (7%)
19	CLA	6	308	1	50,58,73	1.46	7 (14%)	58,95,113	1.05	3 (5%)
19	CLA	A	812	5	65,73,73	1.29	7 (10%)	76,113,113	0.94	3 (3%)
19	CLA	B	838	6	65,73,73	1.24	8 (12%)	76,113,113	1.03	5 (6%)
19	CLA	A	833	5	55,63,73	1.38	7 (12%)	64,101,113	1.10	7 (10%)
22	LHG	6	319	-	26,26,48	0.36	0	29,32,54	0.48	0
19	CLA	2	311	2	45,53,73	1.57	7 (15%)	52,89,113	1.17	5 (9%)
19	CLA	3	307	3	60,68,73	1.27	6 (10%)	70,107,113	1.24	6 (8%)
18	CHL	5	304	30	46,54,74	1.49	9 (19%)	49,90,114	1.29	7 (14%)
19	CLA	6	303	1	55,63,73	1.38	7 (12%)	64,101,113	1.05	5 (7%)
19	CLA	A	834	5	65,73,73	1.33	7 (10%)	76,113,113	0.92	3 (3%)
23	BCR	5	317	-	41,41,41	1.75	8 (19%)	56,56,56	1.98	18 (32%)
19	CLA	A	841	5	65,73,73	1.26	7 (10%)	76,113,113	0.99	4 (5%)
23	BCR	B	848	-	41,41,41	1.80	8 (19%)	56,56,56	2.08	15 (26%)
19	CLA	5	303	30	45,53,73	1.50	7 (15%)	52,89,113	1.17	6 (11%)
19	CLA	3	305	3	46,54,73	1.51	7 (15%)	53,90,113	1.13	5 (9%)
19	CLA	5	312	4	65,73,73	1.30	7 (10%)	76,113,113	1.03	4 (5%)
27	LMU	G	202	-	36,36,36	0.27	0	47,47,47	0.68	0
19	CLA	A	820	5	65,73,73	1.23	7 (10%)	76,113,113	1.06	5 (6%)
19	CLA	B	827	6	65,73,73	1.31	7 (10%)	76,113,113	0.98	5 (6%)
18	CHL	2	307	30	49,57,74	1.43	8 (16%)	52,93,114	1.18	7 (13%)
19	CLA	A	832	5	50,58,73	1.47	7 (14%)	58,95,113	1.06	3 (5%)
23	BCR	B	847	-	41,41,41	1.67	9 (21%)	56,56,56	1.76	14 (25%)
19	CLA	B	832	6	65,73,73	1.27	7 (10%)	76,113,113	1.04	4 (5%)
23	BCR	L	305	-	41,41,41	1.66	8 (19%)	56,56,56	1.73	15 (26%)
19	CLA	B	829	6	65,73,73	1.27	7 (10%)	76,113,113	0.92	4 (5%)
23	BCR	A	848	-	41,41,41	1.73	8 (19%)	56,56,56	1.88	15 (26%)
20	LUT	2	315	-	42,43,43	1.65	8 (19%)	51,60,60	1.78	12 (23%)
19	CLA	A	811	5	55,63,73	1.39	7 (12%)	64,101,113	1.06	4 (6%)
19	CLA	B	833	6	65,73,73	1.29	7 (10%)	76,113,113	1.04	6 (7%)
23	BCR	A	852	-	41,41,41	1.73	8 (19%)	56,56,56	1.80	14 (25%)
19	CLA	G	203	11	45,53,73	1.60	7 (15%)	52,89,113	1.03	3 (5%)
18	CHL	2	306	30	43,51,74	1.50	8 (18%)	45,86,114	1.41	9 (20%)
19	CLA	B	813	6	45,53,73	1.52	7 (15%)	52,89,113	1.22	5 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
19	CLA	B	804	-	65,73,73	1.20	7 (10%)	76,113,113	1.08	7 (9%)
19	CLA	A	827	30	55,63,73	1.33	6 (10%)	64,101,113	1.07	5 (7%)
19	CLA	B	819	6	65,73,73	1.23	6 (9%)	76,113,113	1.04	5 (6%)
19	CLA	3	302	3	55,63,73	1.46	7 (12%)	64,101,113	0.97	4 (6%)
22	LHG	6	317	19	48,48,48	0.28	0	51,54,54	0.37	0
19	CLA	B	834	6	60,68,73	1.31	7 (11%)	70,107,113	1.02	5 (7%)
23	BCR	A	851	-	41,41,41	1.67	9 (21%)	56,56,56	1.75	15 (26%)
22	LHG	2	318	19	37,37,48	0.31	0	40,43,54	0.41	0
19	CLA	A	829	5	65,73,73	1.28	7 (10%)	76,113,113	1.04	4 (5%)
18	CHL	2	320	4	52,60,74	1.43	9 (17%)	56,97,114	1.08	5 (8%)
19	CLA	3	308	3	65,73,73	1.21	7 (10%)	76,113,113	1.09	5 (6%)
19	CLA	B	828	6	65,73,73	1.28	7 (10%)	76,113,113	0.99	5 (6%)
23	BCR	A	849	-	41,41,41	1.73	8 (19%)	56,56,56	1.74	15 (26%)
19	CLA	5	314	4	45,53,73	1.61	7 (15%)	52,89,113	1.49	8 (15%)
19	CLA	3	313	30	45,53,73	1.53	7 (15%)	52,89,113	1.15	4 (7%)
18	CHL	2	305	30	46,54,74	1.48	9 (19%)	49,90,114	1.26	6 (12%)
19	CLA	A	825	5	65,73,73	1.29	7 (10%)	76,113,113	1.03	5 (6%)
19	CLA	B	811	6	65,73,73	1.27	7 (10%)	76,113,113	0.91	3 (3%)
19	CLA	2	302	2	65,73,73	1.23	7 (10%)	76,113,113	1.05	5 (6%)
27	LMU	B	851	-	36,36,36	0.22	0	47,47,47	0.41	0
19	CLA	B	839	6	47,55,73	1.50	7 (14%)	54,91,113	1.17	6 (11%)
19	CLA	B	807	6	65,73,73	1.31	8 (12%)	76,113,113	0.98	3 (3%)
20	LUT	3	315	-	42,43,43	1.62	8 (19%)	51,60,60	1.74	14 (27%)
19	CLA	A	813	5	54,62,73	1.37	7 (12%)	62,99,113	1.06	5 (8%)
23	BCR	J	103	-	41,41,41	1.81	8 (19%)	56,56,56	2.25	20 (35%)
19	CLA	3	311	3	55,63,73	1.40	7 (12%)	64,101,113	1.16	5 (7%)
19	CLA	5	311	4	61,69,73	1.30	5 (8%)	71,108,113	1.05	5 (7%)
19	CLA	A	822	30	65,73,73	1.24	8 (12%)	76,113,113	1.01	5 (6%)
19	CLA	B	814	6	65,73,73	1.29	7 (10%)	76,113,113	0.99	5 (6%)
19	CLA	6	307	30	45,53,73	1.56	7 (15%)	52,89,113	1.30	7 (13%)
19	CLA	A	836	5	60,68,73	1.33	7 (11%)	70,107,113	0.94	3 (4%)
19	CLA	A	831	5	65,73,73	1.35	7 (10%)	76,113,113	0.91	5 (6%)
19	CLA	A	835	5	65,73,73	1.26	7 (10%)	76,113,113	1.03	5 (6%)
19	CLA	B	808	6	60,68,73	1.31	7 (11%)	70,107,113	1.06	4 (5%)
19	CLA	2	313	2	50,58,73	1.45	6 (12%)	58,95,113	1.19	6 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
19	CLA	3	312	3	42,50,73	1.58	7 (16%)	48,85,113	1.22	5 (10%)
19	CLA	3	304	30	45,53,73	1.51	7 (15%)	52,89,113	1.23	6 (11%)
22	LHG	5	318	-	43,43,48	0.28	0	46,49,54	0.35	0
19	CLA	A	818	5	60,68,73	1.40	7 (11%)	70,107,113	1.13	5 (7%)
19	CLA	2	308	2	45,53,73	1.46	6 (13%)	52,89,113	1.20	5 (9%)
19	CLA	B	820	30	57,65,73	1.38	8 (14%)	66,103,113	1.01	4 (6%)
19	CLA	6	310	22	56,64,73	1.39	7 (12%)	65,102,113	1.00	3 (4%)
20	LUT	5	316	-	42,43,43	1.62	8 (19%)	51,60,60	1.85	13 (25%)
18	CHL	5	306	30	46,54,74	1.45	8 (17%)	49,90,114	1.25	6 (12%)
19	CLA	A	809	5	48,56,73	1.51	7 (14%)	55,92,113	1.12	5 (9%)
23	BCR	B	846	-	41,41,41	1.81	7 (17%)	56,56,56	2.16	17 (30%)
19	CLA	B	809	6	65,73,73	1.28	7 (10%)	76,113,113	0.90	3 (3%)
19	CLA	B	836	30	45,53,73	1.50	7 (15%)	52,89,113	1.24	5 (9%)
19	CLA	B	818	6	62,70,73	1.35	8 (12%)	72,109,113	1.11	6 (8%)
20	LUT	2	317	-	42,43,43	1.65	8 (19%)	51,60,60	1.95	11 (21%)
19	CLA	K	203	14	45,53,73	1.49	7 (15%)	52,89,113	1.17	5 (9%)
19	CLA	2	310	22	56,64,73	1.37	7 (12%)	65,102,113	0.99	4 (6%)
22	LHG	A	847	19	33,33,48	0.31	0	36,39,54	0.39	0
19	CLA	B	835	6	45,53,73	1.49	7 (15%)	52,89,113	1.18	4 (7%)
19	CLA	B	803	6	65,73,73	1.31	7 (10%)	76,113,113	0.82	3 (3%)
19	CLA	6	311	1	45,53,73	1.56	7 (15%)	52,89,113	1.28	6 (11%)
19	CLA	A	816	5	42,50,73	1.57	7 (16%)	48,85,113	1.25	5 (10%)
19	CLA	B	816	6	65,73,73	1.28	7 (10%)	76,113,113	1.07	5 (6%)
18	CHL	2	314	2	46,54,74	1.48	8 (17%)	49,90,114	1.14	4 (8%)
19	CLA	2	312	2	65,73,73	1.30	7 (10%)	76,113,113	1.01	5 (6%)
19	CLA	L	303	30	42,50,73	1.56	7 (16%)	48,85,113	1.26	5 (10%)
19	CLA	A	805	5	65,73,73	1.24	7 (10%)	76,113,113	0.99	5 (6%)
19	CLA	A	817	30	45,53,73	1.50	6 (13%)	52,89,113	1.31	6 (11%)
19	CLA	B	825	30	65,73,73	1.25	7 (10%)	76,113,113	1.11	7 (9%)
19	CLA	B	824	6	45,53,73	1.47	7 (15%)	52,89,113	1.19	6 (11%)
23	BCR	K	205	-	41,41,41	1.69	8 (19%)	56,56,56	1.56	11 (19%)
19	CLA	B	805	6	45,53,73	1.56	8 (17%)	52,89,113	1.17	4 (7%)
19	CLA	B	822	6	46,54,73	1.55	8 (17%)	53,90,113	1.11	4 (7%)
23	BCR	F	305	-	41,41,41	1.71	8 (19%)	56,56,56	1.78	15 (26%)
23	BCR	G	205	-	41,41,41	1.75	8 (19%)	56,56,56	1.74	15 (26%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
23	BCR	K	204	-	41,41,41	1.71	8 (19%)	56,56,56	1.79	17 (30%)
29	LMG	J	104	-	30,30,55	0.62	0	38,38,63	0.70	0
25	PQN	A	844	-	34,34,34	0.35	0	42,45,45	0.64	1 (2%)
19	CLA	3	309	30	55,63,73	1.39	7 (12%)	64,101,113	1.01	4 (6%)
19	CLA	5	309	30	60,68,73	1.32	7 (11%)	70,107,113	0.97	3 (4%)
19	CLA	B	815	6	65,73,73	1.27	7 (10%)	76,113,113	0.97	4 (5%)
18	CHL	3	314	3	66,74,74	1.27	9 (13%)	73,114,114	1.11	9 (12%)
27	LMU	B	850	-	36,36,36	0.25	0	47,47,47	0.41	0
19	CLA	J	102	13	42,50,73	1.58	7 (16%)	48,85,113	1.22	4 (8%)
19	CLA	F	303	30	45,53,73	1.50	7 (15%)	52,89,113	1.19	4 (7%)
19	CLA	A	810	5	65,73,73	1.23	7 (10%)	76,113,113	1.02	5 (6%)
19	CLA	5	308	4	60,68,73	1.26	6 (10%)	70,107,113	1.07	5 (7%)
19	CLA	3	301	3	60,68,73	1.30	7 (11%)	70,107,113	1.05	5 (7%)
19	CLA	3	310	3	43,51,73	1.63	7 (16%)	49,86,113	1.15	4 (8%)
24	CL0	A	802	5	65,73,73	1.57	8 (12%)	76,113,113	0.80	2 (2%)
19	CLA	F	301	30	60,68,73	1.35	8 (13%)	70,107,113	1.01	4 (5%)
19	CLA	6	305	30	45,53,73	1.51	7 (15%)	52,89,113	1.17	4 (7%)
23	BCR	M	101	-	41,41,41	1.73	8 (19%)	56,56,56	1.73	13 (23%)
18	CHL	6	301	1	51,59,74	1.36	8 (15%)	55,96,114	1.19	6 (10%)
19	CLA	B	841	6	65,73,73	1.34	7 (10%)	76,113,113	0.90	3 (3%)
20	LUT	2	316	-	42,43,43	1.61	8 (19%)	51,60,60	1.62	11 (21%)
18	CHL	3	306	30	46,54,74	1.47	8 (17%)	49,90,114	1.38	8 (16%)
20	LUT	3	316	-	42,43,43	1.65	8 (19%)	51,60,60	1.83	14 (27%)
19	CLA	A	801	5	55,63,73	1.37	7 (12%)	64,101,113	1.09	5 (7%)
19	CLA	A	808	5	65,73,73	1.25	7 (10%)	76,113,113	1.03	4 (5%)
19	CLA	B	801	30	65,73,73	1.28	7 (10%)	76,113,113	1.05	8 (10%)
19	CLA	B	802	30	65,73,73	1.24	8 (12%)	76,113,113	0.98	6 (7%)
18	CHL	2	301	2	66,74,74	1.24	8 (12%)	73,114,114	1.00	5 (6%)
19	CLA	5	307	4	59,67,73	1.28	7 (11%)	68,105,113	1.14	5 (7%)
19	CLA	6	302	1	61,69,73	1.28	7 (11%)	71,108,113	1.04	5 (7%)
19	CLA	2	309	2	61,69,73	1.27	7 (11%)	71,108,113	1.19	7 (9%)
20	LUT	5	315	-	42,43,43	1.65	8 (19%)	51,60,60	1.63	9 (17%)
19	CLA	L	302	17	60,68,73	1.30	7 (11%)	70,107,113	0.98	4 (5%)
19	CLA	B	823	6	55,63,73	1.44	7 (12%)	64,101,113	1.22	6 (9%)
21	XAT	6	316	-	39,47,47	0.66	2 (5%)	54,74,74	0.97	3 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
28	DGD	B	849	-	67,67,67	0.53	0	81,81,81	0.74	1 (1%)
19	CLA	G	204	11	45,53,73	1.52	7 (15%)	52,89,113	1.17	5 (9%)
19	CLA	A	830	5	65,73,73	1.32	7 (10%)	76,113,113	0.98	4 (5%)
23	BCR	B	845	-	41,41,41	1.71	8 (19%)	56,56,56	1.78	14 (25%)
25	PQN	B	843	-	34,34,34	0.39	0	42,45,45	0.59	0
19	CLA	B	806	6	65,73,73	1.25	7 (10%)	76,113,113	1.00	4 (5%)
23	BCR	L	304	-	41,41,41	1.74	9 (21%)	56,56,56	1.94	18 (32%)
19	CLA	A	824	5	65,73,73	1.28	6 (9%)	76,113,113	1.05	5 (6%)
19	CLA	A	826	30	65,73,73	1.33	7 (10%)	76,113,113	1.04	6 (7%)
19	CLA	A	840	5	50,58,73	1.48	7 (14%)	58,95,113	1.16	5 (8%)
23	BCR	I	101	-	41,41,41	1.68	8 (19%)	56,56,56	1.68	14 (25%)
18	CHL	5	305	30	43,51,74	1.52	8 (18%)	45,86,114	1.30	6 (13%)
19	CLA	2	304	30	50,58,73	1.42	7 (14%)	58,95,113	1.12	6 (10%)
27	LMU	A	853	-	36,36,36	0.25	0	47,47,47	0.71	3 (6%)
19	CLA	3	303	30	47,55,73	1.46	7 (14%)	54,91,113	1.17	6 (11%)
19	CLA	5	302	4	50,58,73	1.51	7 (14%)	58,95,113	1.00	3 (5%)
19	CLA	2	303	2	45,53,73	1.55	7 (15%)	52,89,113	1.18	6 (11%)
20	LUT	6	315	-	42,43,43	1.65	8 (19%)	51,60,60	1.63	12 (23%)
19	CLA	A	803	-	65,73,73	1.24	6 (9%)	76,113,113	1.02	5 (6%)
19	CLA	B	842	-	65,73,73	1.25	7 (10%)	76,113,113	0.95	4 (5%)
19	CLA	A	823	5	45,53,73	1.52	7 (15%)	52,89,113	1.22	5 (9%)
29	LMG	J	105	-	41,41,55	0.53	0	49,49,63	0.69	0
19	CLA	A	806	5	55,63,73	1.36	8 (14%)	64,101,113	1.09	5 (7%)
23	BCR	2	319	-	41,41,41	1.81	8 (19%)	56,56,56	2.12	19 (33%)
19	CLA	B	830	6	60,68,73	1.32	7 (11%)	70,107,113	1.08	6 (8%)
23	BCR	B	844	-	41,41,41	1.69	8 (19%)	56,56,56	1.78	15 (26%)
23	BCR	A	850	-	41,41,41	1.71	8 (19%)	56,56,56	1.67	13 (23%)
19	CLA	A	807	5	65,73,73	1.22	6 (9%)	76,113,113	1.06	5 (6%)
19	CLA	6	313	1	45,53,73	1.56	7 (15%)	52,89,113	1.14	4 (7%)
19	CLA	6	314	1	45,53,73	1.51	7 (15%)	52,89,113	1.26	7 (13%)
19	CLA	K	202	14	44,52,73	1.60	8 (18%)	55,88,113	1.07	3 (5%)
26	SF4	C	102	7	0,12,12	-	-	-		
19	CLA	L	301	17	45,53,73	1.52	7 (15%)	52,89,113	1.24	6 (11%)
23	BCR	G	201	-	41,41,41	1.69	8 (19%)	56,56,56	1.76	14 (25%)
19	CLA	A	838	5	51,59,73	1.47	7 (13%)	59,96,113	1.20	7 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
19	CLA	B	810	6	65,73,73	1.27	7 (10%)	76,113,113	1.01	7 (9%)
19	CLA	B	812	6	60,68,73	1.36	7 (11%)	70,107,113	1.06	5 (7%)
19	CLA	B	826	30	53,61,73	1.35	7 (13%)	61,98,113	1.10	5 (8%)
19	CLA	B	831	6	45,53,73	1.58	7 (15%)	52,89,113	1.14	3 (5%)
19	CLA	B	837	6	52,60,73	1.47	7 (13%)	60,97,113	1.15	5 (8%)
19	CLA	B	840	30	65,73,73	1.24	7 (10%)	76,113,113	1.10	6 (7%)
20	LUT	J	101	-	42,43,43	1.65	8 (19%)	51,60,60	1.89	14 (27%)
20	LUT	6	318	-	42,43,43	1.67	8 (19%)	51,60,60	2.01	16 (31%)
22	LHG	A	846	-	48,48,48	0.27	0	51,54,54	0.38	0
19	CLA	6	309	1	65,73,73	1.21	7 (10%)	76,113,113	1.03	6 (7%)
26	SF4	C	101	7	0,12,12	-	-	-		
19	CLA	A	828	5	65,73,73	1.30	7 (10%)	76,113,113	1.07	6 (7%)
19	CLA	A	843	22	45,53,73	1.52	7 (15%)	52,89,113	1.16	5 (9%)
26	SF4	A	845	5,6	0,12,12	-	-	-		
19	CLA	A	815	5	51,59,73	1.44	7 (13%)	59,96,113	1.15	5 (8%)
19	CLA	A	839	5	55,63,73	1.38	7 (12%)	64,101,113	1.07	4 (6%)
19	CLA	A	819	5	57,65,73	1.39	8 (14%)	66,103,113	1.06	5 (7%)
19	CLA	5	301	4	60,68,73	1.30	7 (11%)	70,107,113	1.06	5 (7%)
19	CLA	A	804	30	65,73,73	1.24	7 (10%)	76,113,113	1.05	6 (7%)
19	CLA	B	821	6	43,51,73	1.54	7 (16%)	49,86,113	1.20	5 (10%)
19	CLA	K	201	30	51,59,73	1.40	7 (13%)	59,96,113	1.21	7 (11%)
18	CHL	5	313	4	43,51,74	1.50	8 (18%)	45,86,114	1.18	4 (8%)
19	CLA	A	837	5	45,53,73	1.51	7 (15%)	52,89,113	1.19	4 (7%)
19	CLA	F	304	10	41,49,73	1.63	7 (17%)	47,84,113	1.17	4 (8%)
23	BCR	3	317	-	41,41,41	1.70	10 (24%)	56,56,56	1.84	18 (32%)
19	CLA	5	310	4	44,52,73	1.50	7 (15%)	51,88,113	1.17	5 (9%)
19	CLA	A	842	5	65,73,73	1.31	7 (10%)	76,113,113	0.94	3 (3%)
23	BCR	F	302	-	41,41,41	1.71	8 (19%)	56,56,56	1.78	15 (26%)
19	CLA	B	817	6	65,73,73	1.30	7 (10%)	76,113,113	1.00	5 (6%)
19	CLA	A	814	5	65,73,73	1.26	7 (10%)	76,113,113	1.02	5 (6%)
19	CLA	6	312	1	65,73,73	1.25	6 (9%)	76,113,113	1.13	5 (6%)

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
19	CLA	A	821	5	1/1/11/20	2/13/91/115	-
18	CHL	6	306	1	3/3/16/26	4/15/113/137	-
19	CLA	6	304	30	1/1/11/20	2/18/96/115	-
19	CLA	6	308	1	1/1/12/20	0/19/97/115	-
19	CLA	A	812	5	1/1/15/20	6/37/115/115	-
19	CLA	B	838	6	1/1/15/20	3/37/115/115	-
19	CLA	A	833	5	-	1/25/103/115	-
22	LHG	6	319	-	-	2/31/31/53	-
19	CLA	2	311	2	1/1/11/20	4/13/91/115	-
19	CLA	3	307	3	1/1/14/20	7/31/109/115	-
18	CHL	5	304	30	3/3/16/26	3/15/113/137	-
19	CLA	6	303	1	1/1/13/20	3/25/103/115	-
19	CLA	A	834	5	1/1/15/20	3/37/115/115	-
23	BCR	5	317	-	-	6/29/63/63	0/2/2/2
19	CLA	A	841	5	1/1/15/20	6/37/115/115	-
23	BCR	B	848	-	-	5/29/63/63	0/2/2/2
19	CLA	5	303	30	1/1/11/20	1/13/91/115	-
19	CLA	3	305	3	1/1/11/20	0/15/93/115	-
19	CLA	5	312	4	1/1/15/20	12/37/115/115	-
27	LMU	G	202	-	-	7/21/61/61	0/2/2/2
19	CLA	A	820	5	1/1/15/20	7/37/115/115	-
19	CLA	B	827	6	1/1/15/20	1/37/115/115	-
18	CHL	2	307	30	2/2/16/26	1/19/117/137	-
19	CLA	A	832	5	-	0/19/97/115	-
23	BCR	B	847	-	-	1/29/63/63	0/2/2/2
19	CLA	B	832	6	1/1/15/20	3/37/115/115	-
23	BCR	L	305	-	-	3/29/63/63	0/2/2/2
19	CLA	B	829	6	1/1/15/20	2/37/115/115	-
23	BCR	A	848	-	-	5/29/63/63	0/2/2/2
20	LUT	2	315	-	-	2/29/67/67	0/2/2/2
19	CLA	A	811	5	-	3/25/103/115	-
19	CLA	B	833	6	1/1/15/20	2/37/115/115	-
23	BCR	A	852	-	-	7/29/63/63	0/2/2/2
19	CLA	G	203	11	1/1/11/20	4/13/91/115	-
18	CHL	2	306	30	3/3/15/26	2/12/110/137	-
19	CLA	B	819	6	1/1/15/20	8/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
19	CLA	B	804	-	1/1/15/20	2/37/115/115	-
19	CLA	A	827	30	1/1/13/20	0/25/103/115	-
19	CLA	B	813	6	-	2/13/91/115	-
19	CLA	3	302	3	1/1/13/20	1/25/103/115	-
22	LHG	6	317	19	-	8/53/53/53	-
19	CLA	B	834	6	-	2/31/109/115	-
23	BCR	A	851	-	-	0/29/63/63	0/2/2/2
22	LHG	2	318	19	-	3/42/42/53	-
19	CLA	A	829	5	1/1/15/20	5/37/115/115	-
18	CHL	2	320	4	3/3/17/26	4/23/121/137	-
19	CLA	3	308	3	1/1/15/20	0/37/115/115	-
19	CLA	B	828	6	1/1/15/20	3/37/115/115	-
23	BCR	A	849	-	-	3/29/63/63	0/2/2/2
19	CLA	5	314	4	-	6/13/91/115	-
19	CLA	3	313	30	1/1/11/20	6/13/91/115	-
18	CHL	2	305	30	3/3/16/26	2/15/113/137	-
19	CLA	B	811	6	1/1/15/20	6/37/115/115	-
19	CLA	A	825	5	-	5/37/115/115	-
19	CLA	2	302	2	1/1/15/20	5/37/115/115	-
27	LMU	B	851	-	-	4/21/61/61	0/2/2/2
19	CLA	B	839	6	1/1/11/20	2/16/94/115	-
19	CLA	B	807	6	1/1/15/20	7/37/115/115	-
20	LUT	3	315	-	-	4/29/67/67	0/2/2/2
19	CLA	A	813	5	1/1/12/20	0/24/102/115	-
23	BCR	J	103	-	-	6/29/63/63	0/2/2/2
19	CLA	3	311	3	-	5/25/103/115	-
19	CLA	5	311	4	-	2/33/111/115	-
19	CLA	B	814	6	1/1/15/20	8/37/115/115	-
19	CLA	A	822	30	-	0/37/115/115	-
19	CLA	6	307	30	1/1/11/20	3/13/91/115	-
19	CLA	B	808	6	1/1/14/20	1/31/109/115	-
19	CLA	A	835	5	1/1/15/20	2/37/115/115	-
19	CLA	A	831	5	-	4/37/115/115	-
19	CLA	A	836	5	-	3/31/109/115	-
19	CLA	2	313	2	1/1/12/20	1/19/97/115	-
19	CLA	3	312	3	1/1/10/20	1/10/88/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
19	CLA	3	304	30	1/1/11/20	2/13/91/115	-
22	LHG	5	318	-	-	9/48/48/53	-
19	CLA	A	818	5	-	7/31/109/115	-
19	CLA	2	308	2	1/1/11/20	1/13/91/115	-
19	CLA	B	820	30	-	0/28/106/115	-
19	CLA	6	310	22	1/1/13/20	3/27/105/115	-
20	LUT	5	316	-	-	3/29/67/67	0/2/2/2
18	CHL	5	306	30	3/3/16/26	2/15/113/137	-
19	CLA	A	809	5	1/1/11/20	1/17/95/115	-
23	BCR	B	846	-	-	5/29/63/63	0/2/2/2
19	CLA	B	809	6	1/1/15/20	2/37/115/115	-
19	CLA	B	836	30	1/1/11/20	1/13/91/115	-
19	CLA	B	818	6	1/1/14/20	3/34/112/115	-
20	LUT	2	317	-	-	4/29/67/67	0/2/2/2
19	CLA	K	203	14	1/1/11/20	4/13/91/115	-
19	CLA	2	310	22	1/1/13/20	2/27/105/115	-
22	LHG	A	847	19	-	5/38/38/53	-
19	CLA	B	835	6	1/1/11/20	3/13/91/115	-
19	CLA	B	803	6	1/1/15/20	3/37/115/115	-
19	CLA	6	311	1	1/1/11/20	4/13/91/115	-
19	CLA	A	816	5	1/1/10/20	1/10/88/115	-
19	CLA	B	816	6	-	9/37/115/115	-
18	CHL	2	314	2	3/3/16/26	4/15/113/137	-
19	CLA	2	312	2	-	4/37/115/115	-
19	CLA	L	303	30	1/1/10/20	1/10/88/115	-
19	CLA	A	805	5	1/1/15/20	4/37/115/115	-
19	CLA	A	817	30	1/1/11/20	2/13/91/115	-
19	CLA	B	825	30	1/1/15/20	7/37/115/115	-
19	CLA	B	824	6	-	4/13/91/115	-
23	BCR	K	205	-	-	18/29/63/63	0/2/2/2
19	CLA	B	805	6	-	3/13/91/115	-
19	CLA	B	822	6	-	1/15/93/115	-
23	BCR	F	305	-	-	4/29/63/63	0/2/2/2
23	BCR	G	205	-	-	0/29/63/63	0/2/2/2
23	BCR	K	204	-	-	3/29/63/63	0/2/2/2
29	LMG	J	104	-	-	6/25/45/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	PQN	A	844	-	-	5/23/43/43	0/2/2/2
19	CLA	3	309	30	1/1/13/20	2/25/103/115	-
19	CLA	5	309	30	1/1/14/20	3/31/109/115	-
19	CLA	B	815	6	1/1/15/20	3/37/115/115	-
18	CHL	3	314	3	3/3/20/26	8/39/137/137	-
27	LMU	B	850	-	-	7/21/61/61	0/2/2/2
19	CLA	J	102	13	1/1/10/20	2/10/88/115	-
19	CLA	F	303	30	1/1/11/20	1/13/91/115	-
19	CLA	A	810	5	1/1/15/20	5/37/115/115	-
19	CLA	5	308	4	1/1/14/20	3/31/109/115	-
19	CLA	3	301	3	1/1/14/20	2/31/109/115	-
19	CLA	3	310	3	1/1/10/20	0/11/89/115	-
24	CL0	A	802	5	-	1/37/135/135	-
19	CLA	F	301	30	1/1/14/20	2/31/109/115	-
19	CLA	6	305	30	1/1/11/20	2/13/91/115	-
23	BCR	M	101	-	-	2/29/63/63	0/2/2/2
18	CHL	6	301	1	3/3/17/26	5/21/119/137	-
19	CLA	B	841	6	-	1/37/115/115	-
20	LUT	2	316	-	-	0/29/67/67	0/2/2/2
18	CHL	3	306	30	2/2/16/26	2/15/113/137	-
20	LUT	3	316	-	-	3/29/67/67	0/2/2/2
19	CLA	A	801	5	-	5/25/103/115	-
19	CLA	A	808	5	1/1/15/20	9/37/115/115	-
19	CLA	B	801	30	1/1/15/20	8/37/115/115	-
19	CLA	B	802	30	1/1/15/20	6/37/115/115	-
18	CHL	2	301	2	3/3/20/26	5/39/137/137	-
19	CLA	5	307	4	1/1/13/20	12/30/108/115	-
19	CLA	6	302	1	1/1/14/20	2/33/111/115	-
19	CLA	2	309	2	1/1/14/20	5/33/111/115	-
20	LUT	5	315	-	-	2/29/67/67	0/2/2/2
19	CLA	L	302	17	-	5/31/109/115	-
19	CLA	B	823	6	1/1/13/20	3/25/103/115	-
21	XAT	6	316	-	-	1/31/93/93	0/4/4/4
28	DGD	B	849	-	-	21/55/95/95	0/2/2/2
19	CLA	G	204	11	1/1/11/20	4/13/91/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
19	CLA	A	830	5	1/1/15/20	3/37/115/115	-
23	BCR	B	845	-	-	5/29/63/63	0/2/2/2
25	PQN	B	843	-	-	1/23/43/43	0/2/2/2
19	CLA	B	806	6	1/1/15/20	4/37/115/115	-
23	BCR	L	304	-	-	2/29/63/63	0/2/2/2
19	CLA	A	824	5	1/1/15/20	2/37/115/115	-
19	CLA	A	826	30	1/1/15/20	6/37/115/115	-
19	CLA	A	840	5	1/1/12/20	2/19/97/115	-
23	BCR	I	101	-	-	1/29/63/63	0/2/2/2
18	CHL	5	305	30	3/3/15/26	0/12/110/137	-
19	CLA	2	304	30	1/1/12/20	1/19/97/115	-
27	LMU	A	853	-	-	4/21/61/61	0/2/2/2
19	CLA	3	303	30	1/1/11/20	0/16/94/115	-
19	CLA	5	302	4	1/1/12/20	3/19/97/115	-
19	CLA	2	303	2	1/1/11/20	5/13/91/115	-
20	LUT	6	315	-	-	2/29/67/67	0/2/2/2
19	CLA	A	803	-	1/1/15/20	5/37/115/115	-
19	CLA	B	842	-	1/1/15/20	17/37/115/115	-
19	CLA	A	823	5	-	3/13/91/115	-
29	LMG	J	105	-	-	9/36/56/70	0/1/1/1
19	CLA	A	806	5	1/1/13/20	3/25/103/115	-
23	BCR	2	319	-	-	8/29/63/63	0/2/2/2
19	CLA	B	830	6	-	4/31/109/115	-
23	BCR	B	844	-	-	2/29/63/63	0/2/2/2
23	BCR	A	850	-	-	0/29/63/63	0/2/2/2
19	CLA	A	807	5	1/1/15/20	6/37/115/115	-
19	CLA	6	313	1	1/1/11/20	5/13/91/115	-
19	CLA	6	314	1	1/1/11/20	4/13/91/115	-
19	CLA	K	202	14	1/1/11/20	4/13/89/115	-
26	SF4	C	102	7	-	-	0/6/5/5
19	CLA	L	301	17	1/1/11/20	1/13/91/115	-
23	BCR	G	201	-	-	4/29/63/63	0/2/2/2
19	CLA	A	838	5	1/1/12/20	3/21/99/115	-
19	CLA	B	810	6	1/1/15/20	4/37/115/115	-
19	CLA	B	812	6	1/1/14/20	5/31/109/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
19	CLA	B	826	30	1/1/12/20	4/23/101/115	-
19	CLA	B	837	6	1/1/12/20	2/22/100/115	-
19	CLA	B	831	6	-	5/13/91/115	-
19	CLA	B	840	30	-	6/37/115/115	-
20	LUT	J	101	-	-	2/29/67/67	0/2/2/2
20	LUT	6	318	-	-	6/29/67/67	0/2/2/2
22	LHG	A	846	-	-	7/53/53/53	-
19	CLA	6	309	1	1/1/15/20	8/37/115/115	-
26	SF4	C	101	7	-	-	0/6/5/5
19	CLA	A	828	5	1/1/15/20	16/37/115/115	-
19	CLA	A	843	22	1/1/11/20	4/13/91/115	-
26	SF4	A	845	5,6	-	-	0/6/5/5
19	CLA	A	815	5	1/1/12/20	1/21/99/115	-
19	CLA	A	839	5	1/1/13/20	0/25/103/115	-
19	CLA	A	819	5	-	5/28/106/115	-
19	CLA	5	301	4	-	2/31/109/115	-
19	CLA	A	804	30	1/1/15/20	4/37/115/115	-
19	CLA	B	821	6	1/1/10/20	0/11/89/115	-
19	CLA	K	201	30	-	6/21/99/115	-
18	CHL	5	313	4	3/3/15/26	1/12/110/137	-
19	CLA	A	837	5	1/1/11/20	4/13/91/115	-
19	CLA	F	304	10	1/1/10/20	2/8/86/115	-
23	BCR	3	317	-	-	3/29/63/63	0/2/2/2
19	CLA	5	310	4	1/1/11/20	6/11/89/115	-
19	CLA	A	842	5	1/1/15/20	2/37/115/115	-
23	BCR	F	302	-	-	3/29/63/63	0/2/2/2
19	CLA	B	817	6	-	2/37/115/115	-
19	CLA	A	814	5	1/1/15/20	5/37/115/115	-
19	CLA	6	312	1	-	4/37/115/115	-

All (1374) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	A	802	CL0	MG-NC	5.78	2.20	2.06
23	2	319	BCR	C21-C22	5.61	1.43	1.35
24	A	802	CL0	MG-NA	5.49	2.19	2.06
19	5	311	CLA	C4B-NB	4.95	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	A	831	CLA	MG-NA	4.93	2.18	2.06
23	B	848	BCR	C10-C9	4.93	1.42	1.35
19	3	310	CLA	C4B-NB	4.91	1.39	1.35
19	3	311	CLA	C4B-NB	4.89	1.39	1.35
19	B	823	CLA	MG-NA	4.88	2.17	2.06
19	B	841	CLA	C4B-NB	4.87	1.39	1.35
19	5	302	CLA	C4B-NB	4.86	1.39	1.35
19	6	313	CLA	C4B-NB	4.86	1.39	1.35
19	3	313	CLA	C4B-NB	4.85	1.39	1.35
19	5	312	CLA	C4B-NB	4.85	1.39	1.35
19	B	822	CLA	C4B-NB	4.85	1.39	1.35
19	2	312	CLA	C4B-NB	4.84	1.39	1.35
19	B	820	CLA	C4B-NB	4.84	1.39	1.35
18	2	301	CHL	C4B-NB	4.83	1.39	1.35
19	G	203	CLA	C4B-NB	4.83	1.39	1.35
19	F	304	CLA	C4B-NB	4.83	1.39	1.35
18	6	306	CHL	C4B-NB	4.82	1.39	1.35
19	A	836	CLA	C4B-NB	4.81	1.39	1.35
19	A	818	CLA	C4B-NB	4.81	1.39	1.35
19	A	834	CLA	C4B-NB	4.81	1.39	1.35
19	6	304	CLA	C4B-NB	4.80	1.39	1.35
19	B	837	CLA	MG-NA	4.79	2.17	2.06
19	A	842	CLA	C4B-NB	4.79	1.39	1.35
19	B	827	CLA	MG-NA	4.78	2.17	2.06
19	B	818	CLA	C4B-NB	4.78	1.39	1.35
19	F	301	CLA	C4B-NB	4.77	1.39	1.35
19	A	830	CLA	MG-NA	4.77	2.17	2.06
19	6	312	CLA	C4B-NB	4.77	1.39	1.35
19	5	309	CLA	C4B-NB	4.76	1.39	1.35
19	3	309	CLA	C4B-NB	4.76	1.39	1.35
19	6	310	CLA	C4B-NB	4.76	1.39	1.35
19	J	102	CLA	C4B-NB	4.75	1.39	1.35
19	6	308	CLA	C4B-NB	4.74	1.39	1.35
19	A	812	CLA	C4B-NB	4.74	1.39	1.35
19	3	302	CLA	MG-NA	4.73	2.17	2.06
19	3	302	CLA	C4B-NB	4.73	1.39	1.35
19	A	838	CLA	MG-NA	4.72	2.17	2.06
19	3	305	CLA	C4B-NB	4.71	1.39	1.35
19	A	819	CLA	C4B-NB	4.70	1.39	1.35
18	2	320	CHL	C4B-NB	4.69	1.39	1.35
19	A	824	CLA	C4B-NB	4.68	1.39	1.35
19	B	809	CLA	C4B-NB	4.67	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	A	826	CLA	MG-NA	4.66	2.17	2.06
19	2	310	CLA	C4B-NB	4.66	1.39	1.35
19	5	302	CLA	C4C-C3C	-4.66	1.37	1.45
24	A	802	CL0	C4B-NB	4.66	1.39	1.35
19	A	825	CLA	C4B-NB	4.65	1.39	1.35
18	2	314	CHL	C4B-NB	4.65	1.39	1.35
18	5	313	CHL	C4B-NB	4.65	1.39	1.35
19	B	807	CLA	C4B-NB	4.64	1.39	1.35
19	A	821	CLA	C4B-NB	4.64	1.39	1.35
19	B	811	CLA	C4B-NB	4.63	1.39	1.35
19	3	310	CLA	MG-NA	4.62	2.17	2.06
19	5	314	CLA	MG-NA	4.61	2.17	2.06
19	A	837	CLA	C4B-NB	4.60	1.39	1.35
19	B	840	CLA	C4B-NB	4.60	1.39	1.35
19	A	809	CLA	MG-NA	4.59	2.17	2.06
19	B	805	CLA	MG-NA	4.56	2.17	2.06
19	B	833	CLA	MG-NA	4.56	2.17	2.06
19	G	203	CLA	MG-NA	4.54	2.17	2.06
19	2	311	CLA	MG-NA	4.54	2.17	2.06
19	B	812	CLA	MG-NA	4.53	2.17	2.06
19	B	821	CLA	C4C-C3C	-4.53	1.37	1.45
19	A	818	CLA	MG-NA	4.52	2.17	2.06
19	B	810	CLA	C1C-C2C	-4.51	1.35	1.44
19	3	307	CLA	C1C-C2C	-4.51	1.35	1.44
19	B	829	CLA	C4C-C3C	-4.51	1.37	1.45
19	B	807	CLA	C4C-C3C	-4.51	1.37	1.45
19	B	831	CLA	C4C-C3C	-4.51	1.37	1.45
19	5	307	CLA	C1C-C2C	-4.50	1.35	1.44
19	B	819	CLA	C4C-C3C	-4.50	1.37	1.45
19	A	835	CLA	C1C-C2C	-4.50	1.35	1.44
19	B	842	CLA	C4C-C3C	-4.50	1.37	1.45
19	A	833	CLA	C4C-C3C	-4.49	1.37	1.45
19	A	828	CLA	C4C-C3C	-4.49	1.37	1.45
19	B	827	CLA	C4C-C3C	-4.49	1.37	1.45
19	A	806	CLA	C4C-C3C	-4.48	1.37	1.45
19	5	308	CLA	C4C-C3C	-4.47	1.37	1.45
18	5	306	CHL	C4C-C3C	-4.47	1.37	1.45
19	A	836	CLA	C4C-C3C	-4.47	1.37	1.45
19	B	804	CLA	C1C-C2C	-4.47	1.35	1.44
19	K	202	CLA	C4B-NB	4.47	1.39	1.35
19	B	841	CLA	C4C-C3C	-4.46	1.37	1.45
19	B	803	CLA	C4C-C3C	-4.46	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	A	803	CLA	C4C-C3C	-4.46	1.37	1.45
24	A	802	CL0	C4C-C3C	-4.45	1.37	1.45
19	2	311	CLA	C4C-C3C	-4.45	1.37	1.45
19	3	310	CLA	C4C-C3C	-4.45	1.37	1.45
19	B	809	CLA	C4C-C3C	-4.45	1.37	1.45
19	L	302	CLA	C4C-C3C	-4.45	1.37	1.45
19	B	827	CLA	C1C-C2C	-4.44	1.36	1.44
19	B	818	CLA	C4C-C3C	-4.44	1.37	1.45
19	6	309	CLA	C4C-C3C	-4.44	1.37	1.45
19	6	307	CLA	MG-NA	4.44	2.16	2.06
19	6	311	CLA	C4C-C3C	-4.43	1.37	1.45
19	A	827	CLA	C4C-C3C	-4.43	1.37	1.45
19	B	809	CLA	C1C-C2C	-4.43	1.36	1.44
19	A	810	CLA	C4C-C3C	-4.43	1.37	1.45
19	L	301	CLA	C4C-C3C	-4.43	1.37	1.45
19	F	301	CLA	C4C-C3C	-4.43	1.37	1.45
19	3	301	CLA	C4C-C3C	-4.43	1.37	1.45
19	B	838	CLA	C4C-C3C	-4.42	1.37	1.45
19	A	811	CLA	C4C-C3C	-4.42	1.37	1.45
19	5	303	CLA	C4C-C3C	-4.42	1.37	1.45
19	B	826	CLA	C4C-C3C	-4.42	1.37	1.45
19	B	805	CLA	C4C-C3C	-4.42	1.37	1.45
19	A	812	CLA	C4C-C3C	-4.42	1.37	1.45
19	A	829	CLA	C4C-C3C	-4.42	1.37	1.45
19	A	815	CLA	C4C-C3C	-4.42	1.37	1.45
19	B	814	CLA	MG-NA	4.42	2.16	2.06
19	A	826	CLA	C4C-C3C	-4.42	1.37	1.45
19	A	805	CLA	C4C-C3C	-4.41	1.37	1.45
19	2	309	CLA	C4C-C3C	-4.41	1.37	1.45
19	K	201	CLA	C4C-C3C	-4.41	1.37	1.45
19	6	303	CLA	C4C-C3C	-4.41	1.37	1.45
19	2	303	CLA	C4C-C3C	-4.41	1.37	1.45
19	A	813	CLA	C4C-C3C	-4.41	1.37	1.45
19	A	832	CLA	C4C-C3C	-4.41	1.37	1.45
19	2	310	CLA	C4C-C3C	-4.41	1.37	1.45
18	3	306	CHL	C4C-C3C	-4.41	1.37	1.45
19	A	834	CLA	C4C-C3C	-4.41	1.37	1.45
19	F	303	CLA	C4C-C3C	-4.41	1.37	1.45
19	A	809	CLA	C4C-C3C	-4.41	1.37	1.45
19	3	302	CLA	C1C-C2C	-4.40	1.36	1.44
19	A	807	CLA	C1C-C2C	-4.40	1.36	1.44
19	5	301	CLA	C4C-C3C	-4.40	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	B	811	CLA	C4C-C3C	-4.40	1.37	1.45
19	5	314	CLA	C4C-C3C	-4.40	1.37	1.45
19	A	842	CLA	C4C-C3C	-4.40	1.37	1.45
19	5	309	CLA	C4C-C3C	-4.40	1.37	1.45
19	A	818	CLA	C4C-C3C	-4.40	1.37	1.45
19	6	313	CLA	C4C-C3C	-4.40	1.37	1.45
19	K	202	CLA	C4C-C3C	-4.40	1.37	1.45
19	B	816	CLA	C1C-C2C	-4.39	1.36	1.44
19	2	304	CLA	C4C-C3C	-4.39	1.37	1.45
19	B	813	CLA	C4C-C3C	-4.39	1.37	1.45
19	A	840	CLA	MG-NA	4.39	2.16	2.06
19	A	823	CLA	C4C-C3C	-4.39	1.37	1.45
19	6	310	CLA	C4C-C3C	-4.39	1.37	1.45
19	A	807	CLA	C4C-C3C	-4.39	1.37	1.45
19	B	810	CLA	C4C-C3C	-4.39	1.37	1.45
19	A	831	CLA	C1C-C2C	-4.38	1.36	1.44
19	2	308	CLA	C4C-C3C	-4.38	1.37	1.45
19	B	825	CLA	C4C-C3C	-4.38	1.37	1.45
19	B	817	CLA	C4C-C3C	-4.38	1.37	1.45
19	K	203	CLA	C4C-C3C	-4.38	1.37	1.45
19	A	828	CLA	C1C-C2C	-4.38	1.36	1.44
23	J	103	BCR	C17-C18	4.38	1.41	1.35
19	B	841	CLA	C1C-C2C	-4.38	1.36	1.44
19	B	828	CLA	C4C-C3C	-4.37	1.37	1.45
19	A	801	CLA	C4C-C3C	-4.37	1.37	1.45
19	6	304	CLA	C4C-C3C	-4.37	1.37	1.45
19	2	312	CLA	C4C-C3C	-4.37	1.37	1.45
19	3	303	CLA	C4C-C3C	-4.37	1.37	1.45
19	L	303	CLA	C4B-NB	4.37	1.39	1.35
19	B	839	CLA	C4C-C3C	-4.37	1.37	1.45
19	A	821	CLA	C4C-C3C	-4.37	1.37	1.45
19	A	835	CLA	C4C-C3C	-4.37	1.37	1.45
19	A	830	CLA	C4C-C3C	-4.37	1.37	1.45
19	A	841	CLA	C4C-C3C	-4.37	1.37	1.45
19	A	826	CLA	C4B-NB	4.37	1.39	1.35
19	A	830	CLA	C1C-C2C	-4.36	1.36	1.44
19	3	304	CLA	C4C-C3C	-4.36	1.37	1.45
19	B	829	CLA	C1C-C2C	-4.36	1.36	1.44
23	B	846	BCR	C21-C22	4.36	1.41	1.35
19	B	840	CLA	C4C-C3C	-4.36	1.37	1.45
19	6	308	CLA	C4C-C3C	-4.36	1.37	1.45
19	3	309	CLA	C4C-C3C	-4.36	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	A	808	CLA	C4C-C3C	-4.36	1.37	1.45
19	B	835	CLA	C4C-C3C	-4.36	1.37	1.45
19	B	817	CLA	MG-NA	4.36	2.16	2.06
19	3	312	CLA	C4C-C3C	-4.36	1.37	1.45
19	F	304	CLA	C4C-C3C	-4.36	1.37	1.45
19	3	301	CLA	C4B-NB	4.36	1.39	1.35
19	3	308	CLA	C4C-C3C	-4.35	1.37	1.45
19	3	305	CLA	C4C-C3C	-4.35	1.37	1.45
19	B	832	CLA	MG-NA	4.35	2.16	2.06
19	B	832	CLA	C4C-C3C	-4.35	1.37	1.45
19	B	834	CLA	C4C-C3C	-4.35	1.37	1.45
19	J	102	CLA	C4C-C3C	-4.35	1.37	1.45
19	6	312	CLA	C4C-C3C	-4.35	1.37	1.45
19	A	831	CLA	C4C-C3C	-4.35	1.37	1.45
19	A	843	CLA	C4C-C3C	-4.35	1.37	1.45
19	B	822	CLA	C4C-C3C	-4.35	1.37	1.45
19	B	824	CLA	C4C-C3C	-4.34	1.37	1.45
19	B	815	CLA	C4C-C3C	-4.34	1.37	1.45
19	A	805	CLA	C1C-C2C	-4.34	1.36	1.44
19	2	303	CLA	C4B-NB	4.34	1.39	1.35
19	B	805	CLA	C4B-NB	4.34	1.39	1.35
19	3	313	CLA	C4C-C3C	-4.34	1.37	1.45
19	2	313	CLA	MG-NA	4.34	2.16	2.06
19	A	837	CLA	C4C-C3C	-4.33	1.37	1.45
19	B	834	CLA	C1C-C2C	-4.33	1.36	1.44
19	2	302	CLA	C4C-C3C	-4.33	1.37	1.45
19	5	312	CLA	C4C-C3C	-4.33	1.37	1.45
19	A	817	CLA	C1C-C2C	-4.33	1.36	1.44
19	B	831	CLA	C1C-C2C	-4.33	1.36	1.44
19	G	203	CLA	C4C-C3C	-4.33	1.37	1.45
19	A	816	CLA	C4C-C3C	-4.33	1.37	1.45
19	A	840	CLA	C1C-C2C	-4.33	1.36	1.44
19	B	801	CLA	C4C-C3C	-4.33	1.37	1.45
19	A	814	CLA	C1C-C2C	-4.33	1.36	1.44
19	B	814	CLA	C1C-C2C	-4.33	1.36	1.44
19	3	304	CLA	C1C-C2C	-4.33	1.36	1.44
19	B	816	CLA	MG-NA	4.33	2.16	2.06
19	K	202	CLA	C1C-C2C	-4.33	1.36	1.44
19	A	820	CLA	C1C-C2C	-4.33	1.36	1.44
19	B	824	CLA	C1C-C2C	-4.33	1.36	1.44
19	6	311	CLA	C4B-NB	4.32	1.39	1.35
18	6	301	CHL	C4C-C3C	-4.32	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	A	838	CLA	C4C-C3C	-4.32	1.37	1.45
19	2	303	CLA	MG-NA	4.32	2.16	2.06
19	B	836	CLA	C4C-C3C	-4.32	1.37	1.45
19	G	204	CLA	C4C-C3C	-4.32	1.37	1.45
19	A	840	CLA	C4C-C3C	-4.32	1.37	1.45
19	A	843	CLA	C1C-C2C	-4.32	1.36	1.44
19	6	307	CLA	C4C-C3C	-4.32	1.37	1.45
19	2	313	CLA	C1C-C2C	-4.32	1.36	1.44
19	A	832	CLA	C1C-C2C	-4.32	1.36	1.44
19	F	303	CLA	C1C-C2C	-4.32	1.36	1.44
19	B	812	CLA	C4B-NB	4.32	1.39	1.35
19	B	804	CLA	C4C-C3C	-4.32	1.37	1.45
19	A	825	CLA	C1C-C2C	-4.32	1.36	1.44
19	B	801	CLA	C1C-C2C	-4.32	1.36	1.44
19	B	831	CLA	MG-NA	4.32	2.16	2.06
19	B	836	CLA	C1C-C2C	-4.31	1.36	1.44
19	5	310	CLA	C1C-C2C	-4.31	1.36	1.44
19	3	311	CLA	C4C-C3C	-4.31	1.37	1.45
19	5	302	CLA	C1C-C2C	-4.31	1.36	1.44
19	A	820	CLA	C4C-C3C	-4.31	1.37	1.45
19	B	816	CLA	C4C-C3C	-4.31	1.37	1.45
19	A	843	CLA	C4B-NB	4.31	1.39	1.35
19	B	842	CLA	C4B-NB	4.31	1.39	1.35
19	A	822	CLA	C4C-C3C	-4.31	1.37	1.45
18	3	314	CHL	C4B-NB	4.31	1.39	1.35
19	A	834	CLA	MG-NA	4.31	2.16	2.06
19	B	830	CLA	C4C-C3C	-4.31	1.37	1.45
19	A	811	CLA	C1C-C2C	-4.31	1.36	1.44
19	A	839	CLA	C1C-C2C	-4.31	1.36	1.44
19	B	812	CLA	C4C-C3C	-4.31	1.37	1.45
19	6	302	CLA	C4C-C3C	-4.31	1.37	1.45
19	G	204	CLA	C4B-NB	4.30	1.39	1.35
19	A	824	CLA	C1C-C2C	-4.30	1.36	1.44
19	6	311	CLA	MG-NA	4.30	2.16	2.06
19	5	314	CLA	C1C-C2C	-4.30	1.36	1.44
19	B	808	CLA	C4C-C3C	-4.30	1.37	1.45
19	B	823	CLA	C1C-C2C	-4.30	1.36	1.44
19	B	823	CLA	C4C-C3C	-4.30	1.37	1.45
19	B	811	CLA	C1C-C2C	-4.30	1.36	1.44
19	A	804	CLA	C4C-C3C	-4.29	1.37	1.45
19	A	839	CLA	C4C-C3C	-4.29	1.37	1.45
19	B	818	CLA	MG-NA	4.29	2.16	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	3	312	CLA	C4B-NB	4.29	1.39	1.35
19	A	813	CLA	C1C-C2C	-4.29	1.36	1.44
19	B	837	CLA	C4C-C3C	-4.29	1.37	1.45
19	6	303	CLA	C1C-C2C	-4.29	1.36	1.44
19	B	833	CLA	C4B-NB	4.29	1.39	1.35
19	2	313	CLA	C4C-C3C	-4.29	1.37	1.45
19	5	311	CLA	C4C-C3C	-4.29	1.37	1.45
19	2	311	CLA	C4B-NB	4.29	1.39	1.35
19	A	823	CLA	C4B-NB	4.29	1.39	1.35
19	6	307	CLA	C1C-C2C	-4.29	1.36	1.44
19	A	834	CLA	C1C-C2C	-4.29	1.36	1.44
19	B	819	CLA	C1C-C2C	-4.29	1.36	1.44
19	A	831	CLA	C4B-NB	4.28	1.39	1.35
19	A	814	CLA	C4C-C3C	-4.28	1.37	1.45
18	3	314	CHL	MG-NA	4.28	2.16	2.06
19	B	806	CLA	C4C-C3C	-4.28	1.37	1.45
19	5	303	CLA	C4B-NB	4.28	1.39	1.35
24	A	802	CL0	C1C-C2C	-4.28	1.36	1.44
19	6	305	CLA	C4C-C3C	-4.28	1.37	1.45
19	A	825	CLA	C4C-C3C	-4.28	1.37	1.45
19	3	302	CLA	C4C-C3C	-4.27	1.37	1.45
19	B	808	CLA	C1C-C2C	-4.27	1.36	1.44
19	A	819	CLA	C1C-C2C	-4.27	1.36	1.44
19	3	307	CLA	C4C-C3C	-4.27	1.37	1.45
19	B	830	CLA	C4B-NB	4.27	1.39	1.35
19	A	842	CLA	C1C-C2C	-4.27	1.36	1.44
23	J	103	BCR	C21-C22	4.27	1.41	1.35
19	3	308	CLA	C1C-C2C	-4.27	1.36	1.44
19	B	801	CLA	C4B-NB	4.27	1.39	1.35
18	2	307	CHL	C4C-C3C	-4.27	1.37	1.45
19	A	803	CLA	C1C-C2C	-4.27	1.36	1.44
19	5	302	CLA	MG-NA	4.27	2.16	2.06
19	2	304	CLA	C1C-C2C	-4.27	1.36	1.44
19	A	826	CLA	C1C-C2C	-4.27	1.36	1.44
19	3	312	CLA	MG-NA	4.26	2.16	2.06
19	B	832	CLA	C1C-C2C	-4.26	1.36	1.44
19	B	803	CLA	C1C-C2C	-4.26	1.36	1.44
19	6	310	CLA	C1C-C2C	-4.26	1.36	1.44
19	B	812	CLA	C1C-C2C	-4.26	1.36	1.44
19	A	804	CLA	C1C-C2C	-4.26	1.36	1.44
19	6	314	CLA	C1C-C2C	-4.26	1.36	1.44
19	2	310	CLA	C1C-C2C	-4.26	1.36	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	3	301	CLA	C1C-C2C	-4.26	1.36	1.44
19	B	833	CLA	C4C-C3C	-4.26	1.37	1.45
19	B	835	CLA	C1C-C2C	-4.26	1.36	1.44
19	L	302	CLA	C4B-NB	4.26	1.39	1.35
19	A	824	CLA	C4C-C3C	-4.26	1.37	1.45
19	B	820	CLA	C4C-C3C	-4.26	1.37	1.45
19	5	303	CLA	C1C-C2C	-4.26	1.36	1.44
19	A	818	CLA	C1C-C2C	-4.26	1.36	1.44
19	A	815	CLA	MG-NA	4.25	2.16	2.06
19	A	838	CLA	C1C-C2C	-4.25	1.36	1.44
19	B	842	CLA	C1C-C2C	-4.25	1.36	1.44
19	6	314	CLA	C4C-C3C	-4.25	1.37	1.45
18	2	320	CHL	MG-NA	4.25	2.16	2.06
18	2	301	CHL	C4C-C3C	-4.25	1.37	1.45
19	2	308	CLA	C1C-C2C	-4.25	1.36	1.44
19	5	312	CLA	C1C-C2C	-4.25	1.36	1.44
19	A	827	CLA	C1C-C2C	-4.25	1.36	1.44
19	A	822	CLA	C1C-C2C	-4.25	1.36	1.44
19	A	823	CLA	C1C-C2C	-4.25	1.36	1.44
19	3	303	CLA	C4B-NB	4.25	1.39	1.35
23	B	846	BCR	C14-C13	4.25	1.41	1.35
23	B	846	BCR	C17-C18	4.25	1.41	1.35
19	B	839	CLA	C1C-C2C	-4.25	1.36	1.44
18	5	313	CHL	C4C-C3C	-4.25	1.37	1.45
19	A	816	CLA	C1C-C2C	-4.25	1.36	1.44
19	B	830	CLA	C1C-C2C	-4.25	1.36	1.44
19	A	841	CLA	C1C-C2C	-4.25	1.36	1.44
19	A	806	CLA	C4B-NB	4.25	1.39	1.35
19	2	303	CLA	C1C-C2C	-4.25	1.36	1.44
19	2	311	CLA	C1C-C2C	-4.24	1.36	1.44
19	B	817	CLA	C4B-NB	4.24	1.39	1.35
19	K	203	CLA	C4B-NB	4.24	1.39	1.35
19	K	201	CLA	C1C-C2C	-4.24	1.36	1.44
19	6	304	CLA	C1C-C2C	-4.24	1.36	1.44
19	3	303	CLA	C1C-C2C	-4.24	1.36	1.44
19	L	301	CLA	C1C-C2C	-4.24	1.36	1.44
18	5	306	CHL	C4B-NB	4.24	1.39	1.35
19	3	313	CLA	C1C-C2C	-4.24	1.36	1.44
19	A	821	CLA	C1C-C2C	-4.24	1.36	1.44
19	L	303	CLA	C1C-C2C	-4.24	1.36	1.44
20	6	318	LUT	C14-C13	4.24	1.41	1.35
18	2	314	CHL	C4C-C3C	-4.24	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	B	817	CLA	C1C-C2C	-4.23	1.36	1.44
19	6	314	CLA	C4B-NB	4.23	1.39	1.35
18	2	320	CHL	C4C-C3C	-4.23	1.37	1.45
19	A	815	CLA	C4B-NB	4.23	1.39	1.35
19	6	311	CLA	C1C-C2C	-4.23	1.36	1.44
19	A	808	CLA	C1C-C2C	-4.23	1.36	1.44
19	A	837	CLA	C1C-C2C	-4.23	1.36	1.44
19	5	314	CLA	C4B-NB	4.23	1.39	1.35
19	3	309	CLA	C1C-C2C	-4.23	1.36	1.44
19	6	308	CLA	C1C-C2C	-4.23	1.36	1.44
19	B	818	CLA	C1C-C2C	-4.23	1.36	1.44
18	6	306	CHL	C4C-C3C	-4.22	1.37	1.45
19	A	839	CLA	MG-NA	4.22	2.16	2.06
19	5	301	CLA	C4B-NB	4.22	1.39	1.35
19	A	801	CLA	C4B-NB	4.22	1.39	1.35
19	B	813	CLA	C1C-C2C	-4.22	1.36	1.44
19	B	823	CLA	C4B-NB	4.22	1.39	1.35
19	B	802	CLA	C4C-C3C	-4.22	1.37	1.45
19	A	806	CLA	C1C-C2C	-4.22	1.36	1.44
18	3	314	CHL	C4C-C3C	-4.22	1.37	1.45
19	5	309	CLA	C1C-C2C	-4.22	1.36	1.44
19	A	815	CLA	C1C-C2C	-4.22	1.36	1.44
19	5	308	CLA	C4B-NB	4.22	1.39	1.35
19	B	825	CLA	C1C-C2C	-4.22	1.36	1.44
19	2	304	CLA	C4B-NB	4.22	1.39	1.35
19	A	812	CLA	C1C-C2C	-4.21	1.36	1.44
19	A	836	CLA	C1C-C2C	-4.21	1.36	1.44
19	5	308	CLA	C1C-C2C	-4.21	1.36	1.44
19	B	815	CLA	C1C-C2C	-4.21	1.36	1.44
19	B	826	CLA	C1C-C2C	-4.21	1.36	1.44
19	L	301	CLA	C4B-NB	4.21	1.39	1.35
19	A	811	CLA	MG-NA	4.21	2.16	2.06
19	3	312	CLA	C1C-C2C	-4.21	1.36	1.44
19	2	313	CLA	C4B-NB	4.21	1.39	1.35
19	B	806	CLA	C4B-NB	4.21	1.39	1.35
19	6	303	CLA	MG-NA	4.21	2.16	2.06
19	B	807	CLA	MG-NA	4.21	2.16	2.06
19	2	309	CLA	C4B-NB	4.21	1.39	1.35
19	B	810	CLA	C4B-NB	4.21	1.39	1.35
19	J	102	CLA	C1C-C2C	-4.21	1.36	1.44
19	B	813	CLA	C4B-NB	4.21	1.39	1.35
19	G	203	CLA	C1C-C2C	-4.21	1.36	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	L	302	CLA	C1C-C2C	-4.21	1.36	1.44
19	G	204	CLA	C1C-C2C	-4.20	1.36	1.44
18	2	307	CHL	C4B-NB	4.20	1.39	1.35
19	3	310	CLA	C1C-C2C	-4.20	1.36	1.44
19	5	301	CLA	C1C-C2C	-4.20	1.36	1.44
19	5	307	CLA	C4C-C3C	-4.20	1.37	1.45
19	3	308	CLA	C4B-NB	4.20	1.39	1.35
23	B	846	BCR	C10-C9	4.20	1.41	1.35
19	B	822	CLA	C1C-C2C	-4.20	1.36	1.44
19	A	810	CLA	C1C-C2C	-4.20	1.36	1.44
18	5	305	CHL	C4C-C3C	-4.20	1.37	1.45
19	2	312	CLA	C1C-C2C	-4.20	1.36	1.44
19	A	813	CLA	C4B-NB	4.20	1.39	1.35
19	2	302	CLA	C1C-C2C	-4.20	1.36	1.44
19	B	835	CLA	C4B-NB	4.20	1.39	1.35
19	3	311	CLA	C1C-C2C	-4.20	1.36	1.44
19	B	803	CLA	C4B-NB	4.20	1.39	1.35
19	3	304	CLA	C4B-NB	4.19	1.38	1.35
19	6	309	CLA	C1C-C2C	-4.19	1.36	1.44
18	5	304	CHL	C4B-NB	4.19	1.38	1.35
19	6	305	CLA	C1C-C2C	-4.19	1.36	1.44
19	3	305	CLA	C1C-C2C	-4.19	1.36	1.44
19	B	821	CLA	C1C-C2C	-4.19	1.36	1.44
19	B	833	CLA	C1C-C2C	-4.19	1.36	1.44
19	A	816	CLA	C4B-NB	4.19	1.38	1.35
19	2	312	CLA	MG-NA	4.19	2.16	2.06
18	2	305	CHL	C4B-NB	4.19	1.38	1.35
19	A	801	CLA	C1C-C2C	-4.19	1.36	1.44
19	6	302	CLA	C4B-NB	4.19	1.38	1.35
19	A	820	CLA	C4B-NB	4.19	1.38	1.35
19	B	826	CLA	C4B-NB	4.19	1.38	1.35
19	6	302	CLA	C1C-C2C	-4.19	1.36	1.44
19	A	817	CLA	C4C-C3C	-4.19	1.37	1.45
19	A	805	CLA	C4B-NB	4.18	1.38	1.35
19	B	837	CLA	C4B-NB	4.18	1.38	1.35
19	B	822	CLA	MG-NA	4.18	2.16	2.06
18	3	306	CHL	C4B-NB	4.18	1.38	1.35
19	B	839	CLA	MG-NA	4.18	2.16	2.06
19	B	837	CLA	C1C-C2C	-4.18	1.36	1.44
19	B	815	CLA	C4B-NB	4.18	1.38	1.35
19	F	303	CLA	C4B-NB	4.18	1.38	1.35
19	5	311	CLA	C1C-C2C	-4.18	1.36	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	B	840	CLA	C1C-C2C	-4.18	1.36	1.44
18	6	306	CHL	MG-NA	4.18	2.16	2.06
18	2	305	CHL	C4C-C3C	-4.18	1.37	1.45
18	5	305	CHL	MG-NA	4.18	2.16	2.06
18	2	307	CHL	MG-NA	4.18	2.16	2.06
19	B	815	CLA	MG-NA	4.18	2.16	2.06
19	B	814	CLA	C4C-C3C	-4.18	1.37	1.45
18	2	306	CHL	C4C-C3C	-4.17	1.37	1.45
19	B	831	CLA	C4B-NB	4.17	1.38	1.35
19	B	828	CLA	C1C-C2C	-4.17	1.36	1.44
18	3	306	CHL	MG-NA	4.17	2.16	2.06
19	B	806	CLA	C1C-C2C	-4.17	1.36	1.44
19	K	203	CLA	C1C-C2C	-4.17	1.36	1.44
19	B	816	CLA	C4B-NB	4.17	1.38	1.35
19	A	842	CLA	MG-NA	4.17	2.16	2.06
23	J	103	BCR	C14-C13	4.17	1.41	1.35
19	5	310	CLA	C4B-NB	4.17	1.38	1.35
19	B	825	CLA	C4B-NB	4.17	1.38	1.35
19	6	312	CLA	C1C-C2C	-4.17	1.36	1.44
19	A	819	CLA	MG-NA	4.16	2.16	2.06
19	L	303	CLA	C4C-C3C	-4.16	1.37	1.45
19	A	832	CLA	C4B-NB	4.16	1.38	1.35
18	5	304	CHL	MG-NA	4.16	2.16	2.06
19	6	303	CLA	C4B-NB	4.16	1.38	1.35
19	K	201	CLA	C4B-NB	4.16	1.38	1.35
19	2	309	CLA	C1C-C2C	-4.16	1.36	1.44
19	B	838	CLA	C1C-C2C	-4.16	1.36	1.44
19	6	313	CLA	C1C-C2C	-4.15	1.36	1.44
18	5	305	CHL	C4B-NB	4.15	1.38	1.35
19	A	809	CLA	C1C-C2C	-4.15	1.36	1.44
19	2	302	CLA	C4B-NB	4.15	1.38	1.35
19	2	308	CLA	C4B-NB	4.15	1.38	1.35
19	A	838	CLA	C4B-NB	4.15	1.38	1.35
19	A	833	CLA	C1C-C2C	-4.15	1.36	1.44
19	A	808	CLA	C4B-NB	4.15	1.38	1.35
19	6	309	CLA	C4B-NB	4.15	1.38	1.35
19	A	809	CLA	C4B-NB	4.15	1.38	1.35
19	B	807	CLA	C1C-C2C	-4.14	1.36	1.44
19	A	829	CLA	C4B-NB	4.14	1.38	1.35
19	B	821	CLA	C4B-NB	4.14	1.38	1.35
19	L	301	CLA	MG-NA	4.14	2.16	2.06
19	B	836	CLA	C4B-NB	4.14	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	A	825	CLA	MG-NA	4.13	2.16	2.06
19	B	828	CLA	MG-NA	4.13	2.16	2.06
19	B	801	CLA	MG-NA	4.13	2.16	2.06
19	F	301	CLA	MG-NA	4.13	2.16	2.06
18	5	304	CHL	C4C-C3C	-4.13	1.37	1.45
19	A	804	CLA	C4B-NB	4.13	1.38	1.35
19	A	810	CLA	C4B-NB	4.13	1.38	1.35
19	B	819	CLA	C4B-NB	4.13	1.38	1.35
19	F	304	CLA	C1C-C2C	-4.13	1.36	1.44
19	B	832	CLA	C4B-NB	4.13	1.38	1.35
19	5	312	CLA	MG-NA	4.13	2.16	2.06
19	B	828	CLA	C4B-NB	4.12	1.38	1.35
19	6	313	CLA	MG-NA	4.12	2.16	2.06
19	A	830	CLA	C4B-NB	4.12	1.38	1.35
19	B	802	CLA	C4B-NB	4.12	1.38	1.35
19	B	829	CLA	C4B-NB	4.12	1.38	1.35
19	B	838	CLA	C4B-NB	4.11	1.38	1.35
19	A	840	CLA	C4B-NB	4.11	1.38	1.35
19	A	841	CLA	C4B-NB	4.11	1.38	1.35
19	A	816	CLA	MG-NA	4.11	2.16	2.06
19	A	829	CLA	C1C-C2C	-4.11	1.36	1.44
19	A	822	CLA	C4B-NB	4.11	1.38	1.35
19	A	819	CLA	C4C-C3C	-4.11	1.38	1.45
19	F	304	CLA	MG-NA	4.10	2.16	2.06
19	B	802	CLA	C1C-C2C	-4.10	1.36	1.44
23	J	103	BCR	C10-C9	4.10	1.41	1.35
19	B	820	CLA	C1C-C2C	-4.10	1.36	1.44
19	3	307	CLA	C4B-NB	4.10	1.38	1.35
19	A	833	CLA	C4B-NB	4.10	1.38	1.35
19	B	839	CLA	C4B-NB	4.09	1.38	1.35
19	B	805	CLA	C1C-C2C	-4.09	1.36	1.44
19	B	834	CLA	C4B-NB	4.09	1.38	1.35
20	6	318	LUT	C34-C33	4.09	1.41	1.35
19	A	827	CLA	C4B-NB	4.08	1.38	1.35
19	A	832	CLA	MG-NA	4.08	2.16	2.06
18	2	306	CHL	MG-NA	4.08	2.16	2.06
19	A	824	CLA	MG-NA	4.07	2.15	2.06
19	A	829	CLA	MG-NA	4.07	2.15	2.06
19	B	827	CLA	C4B-NB	4.07	1.38	1.35
19	6	305	CLA	C4B-NB	4.07	1.38	1.35
19	A	817	CLA	C4B-NB	4.07	1.38	1.35
19	F	301	CLA	C1C-C2C	-4.07	1.36	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	J	102	CLA	MG-NA	4.07	2.15	2.06
19	A	811	CLA	C4B-NB	4.06	1.38	1.35
23	5	317	BCR	C10-C9	4.06	1.41	1.35
19	B	814	CLA	C4B-NB	4.05	1.38	1.35
19	B	824	CLA	C4B-NB	4.05	1.38	1.35
19	A	835	CLA	MG-NA	4.05	2.15	2.06
19	A	807	CLA	C4B-NB	4.05	1.38	1.35
19	A	812	CLA	MG-NA	4.05	2.15	2.06
19	6	310	CLA	MG-NA	4.05	2.15	2.06
18	2	314	CHL	MG-NA	4.04	2.15	2.06
19	B	829	CLA	MG-NA	4.03	2.15	2.06
18	2	305	CHL	MG-NA	4.03	2.15	2.06
19	5	310	CLA	MG-NA	4.03	2.15	2.06
19	A	823	CLA	MG-NA	4.03	2.15	2.06
20	5	315	LUT	C10-C9	4.03	1.41	1.35
19	G	204	CLA	MG-NA	4.03	2.15	2.06
19	A	803	CLA	C4B-NB	4.02	1.38	1.35
20	2	317	LUT	C30-C29	4.02	1.41	1.35
20	J	101	LUT	C30-C29	4.02	1.41	1.35
19	B	830	CLA	MG-NA	4.02	2.15	2.06
20	2	317	LUT	C10-C9	4.02	1.41	1.35
19	L	303	CLA	MG-NA	4.02	2.15	2.06
18	2	306	CHL	C4B-NB	4.02	1.38	1.35
19	3	309	CLA	MG-NA	4.02	2.15	2.06
19	A	814	CLA	C4B-NB	4.02	1.38	1.35
19	6	305	CLA	MG-NA	4.01	2.15	2.06
19	6	307	CLA	C4B-NB	4.01	1.38	1.35
19	A	821	CLA	MG-NA	4.01	2.15	2.06
19	A	814	CLA	MG-NA	4.00	2.15	2.06
18	2	301	CHL	MG-NA	4.00	2.15	2.06
20	2	317	LUT	C14-C13	3.99	1.41	1.35
19	A	839	CLA	C4B-NB	3.98	1.38	1.35
18	6	301	CHL	C4B-NB	3.98	1.38	1.35
19	B	804	CLA	C4B-NB	3.98	1.38	1.35
20	6	315	LUT	C34-C33	3.98	1.41	1.35
19	3	305	CLA	MG-NA	3.97	2.15	2.06
23	G	205	BCR	C17-C18	3.97	1.41	1.35
19	B	802	CLA	MG-NA	3.96	2.15	2.06
23	5	317	BCR	C14-C13	3.96	1.41	1.35
20	3	316	LUT	C10-C9	3.96	1.41	1.35
20	2	315	LUT	C10-C9	3.96	1.41	1.35
19	A	833	CLA	MG-NA	3.95	2.15	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	G	205	BCR	C21-C22	3.95	1.41	1.35
23	K	205	BCR	C21-C22	3.95	1.41	1.35
19	3	311	CLA	MG-NA	3.95	2.15	2.06
20	5	315	LUT	C34-C33	3.94	1.41	1.35
19	B	808	CLA	C4B-NB	3.94	1.38	1.35
19	B	813	CLA	MG-NA	3.94	2.15	2.06
20	2	317	LUT	C34-C33	3.94	1.41	1.35
19	B	834	CLA	MG-NA	3.94	2.15	2.06
20	6	315	LUT	C10-C9	3.93	1.41	1.35
19	6	308	CLA	MG-NA	3.93	2.15	2.06
18	5	306	CHL	MG-NA	3.93	2.15	2.06
19	A	817	CLA	MG-NA	3.92	2.15	2.06
19	A	843	CLA	MG-NA	3.92	2.15	2.06
20	6	318	LUT	C10-C9	3.92	1.41	1.35
23	5	317	BCR	C17-C18	3.91	1.41	1.35
19	B	803	CLA	MG-NA	3.91	2.15	2.06
19	B	808	CLA	MG-NA	3.91	2.15	2.06
20	J	101	LUT	C34-C33	3.90	1.41	1.35
19	B	825	CLA	MG-NA	3.90	2.15	2.06
19	5	307	CLA	C4B-NB	3.90	1.38	1.35
19	B	836	CLA	MG-NA	3.90	2.15	2.06
19	B	821	CLA	MG-NA	3.90	2.15	2.06
19	B	810	CLA	MG-NA	3.90	2.15	2.06
19	B	806	CLA	MG-NA	3.89	2.15	2.06
19	B	820	CLA	MG-NA	3.89	2.15	2.06
19	2	310	CLA	MG-NA	3.89	2.15	2.06
20	3	316	LUT	C34-C33	3.89	1.40	1.35
19	A	841	CLA	MG-NA	3.89	2.15	2.06
19	K	202	CLA	MG-NA	3.89	2.15	2.06
20	3	316	LUT	C14-C13	3.88	1.40	1.35
20	J	101	LUT	C14-C13	3.88	1.40	1.35
20	3	316	LUT	C30-C29	3.87	1.40	1.35
19	B	838	CLA	MG-NA	3.87	2.15	2.06
23	B	848	BCR	C14-C13	3.86	1.40	1.35
19	3	304	CLA	MG-NA	3.86	2.15	2.06
19	A	813	CLA	MG-NA	3.86	2.15	2.06
20	2	315	LUT	C30-C29	3.85	1.40	1.35
20	6	315	LUT	C14-C13	3.85	1.40	1.35
20	5	316	LUT	C10-C9	3.85	1.40	1.35
20	2	315	LUT	C34-C33	3.84	1.40	1.35
19	A	804	CLA	MG-NA	3.84	2.15	2.06
19	6	314	CLA	MG-NA	3.83	2.15	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	848	BCR	C17-C18	3.83	1.40	1.35
19	B	841	CLA	MG-NA	3.83	2.15	2.06
19	5	309	CLA	MG-NA	3.83	2.15	2.06
19	K	201	CLA	MG-NA	3.82	2.15	2.06
23	G	205	BCR	C14-C13	3.82	1.40	1.35
19	6	304	CLA	MG-NA	3.82	2.15	2.06
19	B	811	CLA	MG-NA	3.82	2.15	2.06
20	2	315	LUT	C14-C13	3.82	1.40	1.35
23	K	205	BCR	C17-C18	3.82	1.40	1.35
19	5	303	CLA	MG-NA	3.81	2.15	2.06
19	A	808	CLA	MG-NA	3.81	2.15	2.06
19	A	835	CLA	C4B-NB	3.81	1.38	1.35
19	A	828	CLA	MG-NA	3.81	2.15	2.06
23	M	101	BCR	C10-C9	3.80	1.40	1.35
19	6	302	CLA	MG-NA	3.80	2.15	2.06
19	2	304	CLA	MG-NA	3.80	2.15	2.06
23	L	304	BCR	C17-C18	3.80	1.40	1.35
19	3	303	CLA	MG-NA	3.79	2.15	2.06
23	M	101	BCR	C14-C13	3.78	1.40	1.35
18	6	301	CHL	MG-NA	3.78	2.15	2.06
19	A	801	CLA	MG-NA	3.78	2.15	2.06
23	K	205	BCR	C10-C9	3.78	1.40	1.35
20	5	315	LUT	C30-C29	3.77	1.40	1.35
23	A	850	BCR	C10-C9	3.77	1.40	1.35
19	5	301	CLA	MG-NA	3.77	2.15	2.06
19	3	313	CLA	MG-NA	3.77	2.15	2.06
23	M	101	BCR	C17-C18	3.76	1.40	1.35
23	B	845	BCR	C14-C13	3.76	1.40	1.35
20	5	315	LUT	C14-C13	3.75	1.40	1.35
23	B	848	BCR	C21-C22	3.75	1.40	1.35
19	A	828	CLA	C4B-NB	3.75	1.38	1.35
19	L	302	CLA	MG-NA	3.74	2.15	2.06
19	F	303	CLA	MG-NA	3.74	2.15	2.06
19	A	806	CLA	MG-NA	3.73	2.15	2.06
20	J	101	LUT	C10-C9	3.73	1.40	1.35
20	5	316	LUT	C34-C33	3.73	1.40	1.35
19	A	836	CLA	MG-NA	3.72	2.15	2.06
19	K	203	CLA	MG-NA	3.72	2.15	2.06
19	A	837	CLA	MG-NA	3.71	2.15	2.06
23	F	305	BCR	C17-C18	3.71	1.40	1.35
23	L	304	BCR	C14-C13	3.71	1.40	1.35
18	5	313	CHL	MG-NA	3.71	2.15	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	5	310	CLA	C4C-C3C	-3.71	1.37	1.44
20	5	316	LUT	C14-C13	3.71	1.40	1.35
23	K	205	BCR	C14-C13	3.70	1.40	1.35
20	2	316	LUT	C34-C33	3.70	1.40	1.35
23	B	845	BCR	C17-C18	3.70	1.40	1.35
23	A	848	BCR	C17-C18	3.69	1.40	1.35
23	5	317	BCR	C21-C22	3.69	1.40	1.35
23	G	205	BCR	C10-C9	3.68	1.40	1.35
23	F	305	BCR	C21-C22	3.68	1.40	1.35
23	B	845	BCR	C21-C22	3.68	1.40	1.35
23	B	844	BCR	C10-C9	3.67	1.40	1.35
23	A	849	BCR	C17-C18	3.67	1.40	1.35
19	B	809	CLA	MG-NA	3.67	2.15	2.06
23	A	852	BCR	C14-C13	3.67	1.40	1.35
19	A	822	CLA	MG-NA	3.67	2.15	2.06
20	5	316	LUT	C30-C29	3.66	1.40	1.35
23	A	848	BCR	C21-C22	3.66	1.40	1.35
19	B	803	CLA	MG-NC	3.65	2.14	2.06
19	2	302	CLA	MG-NA	3.64	2.14	2.06
23	A	849	BCR	C21-C22	3.64	1.40	1.35
23	A	848	BCR	C14-C13	3.64	1.40	1.35
23	A	848	BCR	C10-C9	3.64	1.40	1.35
23	A	852	BCR	C17-C18	3.64	1.40	1.35
23	2	319	BCR	C10-C9	3.63	1.40	1.35
23	B	845	BCR	C10-C9	3.63	1.40	1.35
20	2	316	LUT	C14-C13	3.62	1.40	1.35
19	B	835	CLA	MG-NA	3.62	2.14	2.06
23	A	850	BCR	C14-C13	3.62	1.40	1.35
19	A	810	CLA	MG-NA	3.62	2.14	2.06
23	L	304	BCR	C21-C22	3.60	1.40	1.35
20	3	315	LUT	C34-C33	3.60	1.40	1.35
23	F	305	BCR	C10-C9	3.60	1.40	1.35
23	F	302	BCR	C17-C18	3.59	1.40	1.35
23	L	304	BCR	C10-C9	3.58	1.40	1.35
19	B	842	CLA	MG-NA	3.57	2.14	2.06
20	6	315	LUT	C30-C29	3.56	1.40	1.35
23	B	844	BCR	C14-C13	3.55	1.40	1.35
19	A	805	CLA	MG-NA	3.55	2.14	2.06
19	5	311	CLA	MG-NA	3.55	2.14	2.06
19	3	301	CLA	MG-NA	3.54	2.14	2.06
23	3	317	BCR	C17-C18	3.54	1.40	1.35
23	A	850	BCR	C17-C18	3.54	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	A	852	BCR	C10-C9	3.54	1.40	1.35
19	B	819	CLA	MG-NA	3.53	2.14	2.06
23	A	849	BCR	C14-C13	3.53	1.40	1.35
19	2	309	CLA	MG-NA	3.51	2.14	2.06
20	6	318	LUT	C30-C29	3.51	1.40	1.35
20	3	315	LUT	C8-C9	-3.50	1.38	1.45
19	A	820	CLA	MG-NA	3.50	2.14	2.06
20	3	315	LUT	C14-C13	3.50	1.40	1.35
23	B	844	BCR	C17-C18	3.50	1.40	1.35
23	F	305	BCR	C14-C13	3.50	1.40	1.35
23	F	302	BCR	C14-C13	3.49	1.40	1.35
19	A	803	CLA	MG-NA	3.49	2.14	2.06
23	B	847	BCR	C8-C9	-3.49	1.38	1.45
23	K	204	BCR	C10-C9	3.48	1.40	1.35
20	2	316	LUT	C30-C29	3.48	1.40	1.35
23	2	319	BCR	C14-C13	3.48	1.40	1.35
23	M	101	BCR	C21-C22	3.46	1.40	1.35
23	B	847	BCR	C23-C22	-3.46	1.38	1.45
20	3	315	LUT	C30-C29	3.45	1.40	1.35
19	5	307	CLA	MG-NA	3.44	2.14	2.06
23	F	302	BCR	C10-C9	3.43	1.40	1.35
23	L	305	BCR	C17-C18	3.42	1.40	1.35
23	K	204	BCR	C14-C13	3.42	1.40	1.35
23	F	302	BCR	C21-C22	3.41	1.40	1.35
19	6	312	CLA	MG-NA	3.40	2.14	2.06
23	K	204	BCR	C17-C18	3.40	1.40	1.35
23	A	850	BCR	C23-C22	-3.39	1.38	1.45
23	A	849	BCR	C10-C9	3.38	1.40	1.35
23	3	317	BCR	C14-C13	3.37	1.40	1.35
20	2	316	LUT	C10-C9	3.35	1.40	1.35
19	3	307	CLA	MG-NA	3.35	2.14	2.06
23	3	317	BCR	C10-C9	3.35	1.40	1.35
23	L	305	BCR	C21-C22	3.33	1.40	1.35
23	A	851	BCR	C23-C22	-3.31	1.38	1.45
23	I	101	BCR	C10-C9	3.31	1.40	1.35
19	A	827	CLA	MG-NA	3.31	2.14	2.06
23	I	101	BCR	C23-C22	-3.31	1.38	1.45
19	B	826	CLA	MG-NA	3.30	2.14	2.06
20	3	315	LUT	C10-C9	3.30	1.40	1.35
19	B	840	CLA	MG-NA	3.29	2.14	2.06
23	I	101	BCR	C14-C13	3.29	1.40	1.35
19	6	309	CLA	MG-NA	3.29	2.14	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	2	319	BCR	C17-C18	3.28	1.40	1.35
23	A	852	BCR	C23-C22	-3.28	1.38	1.45
19	5	308	CLA	MG-NA	3.27	2.14	2.06
23	G	201	BCR	C23-C22	-3.26	1.38	1.45
19	A	840	CLA	MG-NC	3.26	2.14	2.06
19	2	308	CLA	MG-NA	3.25	2.14	2.06
23	K	204	BCR	C21-C22	3.25	1.40	1.35
23	L	305	BCR	C10-C9	3.24	1.40	1.35
19	3	308	CLA	MG-NA	3.24	2.14	2.06
20	2	316	LUT	C8-C9	-3.24	1.39	1.45
19	B	841	CLA	MG-NC	3.24	2.14	2.06
19	B	824	CLA	MG-NA	3.24	2.14	2.06
23	A	851	BCR	C17-C18	3.23	1.40	1.35
23	I	101	BCR	C17-C18	3.23	1.40	1.35
23	B	847	BCR	C14-C13	3.22	1.40	1.35
23	A	852	BCR	C21-C22	3.22	1.40	1.35
23	A	850	BCR	C21-C22	3.22	1.40	1.35
23	A	851	BCR	C21-C22	3.22	1.40	1.35
23	L	305	BCR	C14-C13	3.22	1.40	1.35
23	3	317	BCR	C23-C22	-3.21	1.39	1.45
23	A	851	BCR	C8-C9	-3.21	1.39	1.45
19	A	831	CLA	MG-NC	3.20	2.13	2.06
23	3	317	BCR	C8-C9	-3.19	1.39	1.45
23	B	844	BCR	C21-C22	3.19	1.40	1.35
19	B	823	CLA	MG-NC	3.19	2.13	2.06
23	F	302	BCR	C23-C22	-3.19	1.39	1.45
23	3	317	BCR	C21-C22	3.18	1.40	1.35
19	A	807	CLA	MG-NA	3.18	2.13	2.06
23	G	201	BCR	C17-C18	3.18	1.40	1.35
23	G	201	BCR	C14-C13	3.18	1.40	1.35
23	L	305	BCR	C23-C22	-3.17	1.39	1.45
23	I	101	BCR	C8-C9	-3.16	1.39	1.45
23	B	847	BCR	C10-C9	3.16	1.40	1.35
23	G	201	BCR	C8-C9	-3.14	1.39	1.45
23	K	204	BCR	C8-C9	-3.14	1.39	1.45
23	G	201	BCR	C21-C22	3.14	1.39	1.35
23	M	101	BCR	C23-C22	-3.13	1.39	1.45
19	3	302	CLA	MG-NC	3.13	2.13	2.06
23	A	849	BCR	C8-C9	-3.13	1.39	1.45
23	B	844	BCR	C23-C22	-3.11	1.39	1.45
23	A	851	BCR	C14-C13	3.11	1.39	1.35
20	6	315	LUT	C8-C9	-3.10	1.39	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	L	304	BCR	C23-C22	-3.10	1.39	1.45
19	A	826	CLA	MG-NC	3.09	2.13	2.06
23	F	302	BCR	C8-C9	-3.07	1.39	1.45
19	5	314	CLA	MG-NC	3.07	2.13	2.06
19	B	837	CLA	MG-NC	3.06	2.13	2.06
20	J	101	LUT	C8-C9	-3.06	1.39	1.45
19	B	831	CLA	MG-NC	3.06	2.13	2.06
23	A	851	BCR	C10-C9	3.05	1.39	1.35
19	A	809	CLA	MG-NC	3.05	2.13	2.06
19	B	817	CLA	MG-NC	3.04	2.13	2.06
23	G	201	BCR	C10-C9	3.04	1.39	1.35
23	K	204	BCR	C23-C22	-3.03	1.39	1.45
23	A	848	BCR	C23-C22	-3.03	1.39	1.45
23	G	205	BCR	C8-C9	-3.02	1.39	1.45
19	B	812	CLA	MG-NC	3.01	2.13	2.06
23	B	847	BCR	C17-C18	3.01	1.39	1.35
23	A	852	BCR	C8-C9	-3.00	1.39	1.45
23	B	847	BCR	C12-C13	-3.00	1.39	1.45
19	A	832	CLA	MG-NC	2.99	2.13	2.06
20	2	315	LUT	C8-C9	-2.98	1.39	1.45
20	2	317	LUT	C8-C9	-2.98	1.39	1.45
23	F	305	BCR	C23-C22	-2.98	1.39	1.45
20	5	316	LUT	C8-C9	-2.97	1.39	1.45
23	F	305	BCR	C8-C9	-2.96	1.39	1.45
23	K	205	BCR	C8-C9	-2.96	1.39	1.45
23	2	319	BCR	C8-C9	-2.95	1.39	1.45
23	I	101	BCR	C21-C22	2.95	1.39	1.35
23	L	305	BCR	C8-C9	-2.94	1.39	1.45
20	3	316	LUT	C8-C9	-2.94	1.39	1.45
23	A	849	BCR	C23-C22	-2.94	1.39	1.45
23	G	201	BCR	C19-C18	-2.93	1.39	1.45
23	B	847	BCR	C21-C22	2.92	1.39	1.35
23	A	848	BCR	C8-C9	-2.92	1.39	1.45
23	B	848	BCR	C8-C9	-2.92	1.39	1.45
20	5	315	LUT	C8-C9	-2.92	1.39	1.45
19	A	830	CLA	MG-NC	2.91	2.13	2.06
19	6	307	CLA	MG-NC	2.91	2.13	2.06
23	L	304	BCR	C8-C9	-2.91	1.39	1.45
19	A	838	CLA	MG-NC	2.90	2.13	2.06
23	A	851	BCR	C12-C13	-2.90	1.39	1.45
23	I	101	BCR	C19-C18	-2.90	1.39	1.45
23	B	845	BCR	C23-C22	-2.89	1.39	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	5	304	CHL	C2C-C1C	-2.89	1.39	1.44
23	5	317	BCR	C23-C22	-2.89	1.39	1.45
23	A	852	BCR	C19-C18	-2.89	1.39	1.45
19	A	839	CLA	MG-NC	2.88	2.13	2.06
19	B	804	CLA	MG-NA	2.87	2.13	2.06
19	A	829	CLA	MG-NC	2.86	2.13	2.06
23	2	319	BCR	C23-C22	-2.86	1.39	1.45
23	B	847	BCR	C19-C18	-2.85	1.39	1.45
18	2	305	CHL	C2C-C1C	-2.85	1.39	1.44
18	3	314	CHL	C2C-C1C	-2.85	1.39	1.44
19	B	814	CLA	MG-NC	2.85	2.13	2.06
23	G	201	BCR	C12-C13	-2.85	1.39	1.45
18	2	314	CHL	C2C-C1C	-2.85	1.39	1.44
23	K	205	BCR	C23-C22	-2.84	1.39	1.45
23	5	317	BCR	C8-C9	-2.84	1.39	1.45
18	2	320	CHL	C2C-C1C	-2.84	1.39	1.44
23	G	205	BCR	C23-C22	-2.84	1.39	1.45
23	B	848	BCR	C23-C22	-2.84	1.39	1.45
23	B	845	BCR	C8-C9	-2.84	1.39	1.45
18	6	301	CHL	C2C-C1C	-2.83	1.39	1.44
23	A	850	BCR	C8-C9	-2.83	1.39	1.45
19	B	839	CLA	MG-NC	2.83	2.13	2.06
19	A	828	CLA	C3D-C4D	-2.83	1.37	1.44
18	5	306	CHL	C2C-C1C	-2.82	1.39	1.44
19	A	811	CLA	MG-NC	2.82	2.13	2.06
18	2	306	CHL	C2C-C1C	-2.82	1.39	1.44
18	3	306	CHL	C2C-C1C	-2.82	1.39	1.44
19	A	834	CLA	MG-NC	2.81	2.13	2.06
18	2	307	CHL	C2C-C1C	-2.81	1.39	1.44
23	A	851	BCR	C19-C18	-2.81	1.39	1.45
18	5	313	CHL	C2C-C1C	-2.80	1.39	1.44
23	M	101	BCR	C8-C9	-2.80	1.39	1.45
19	A	818	CLA	MG-NC	2.79	2.12	2.06
19	2	311	CLA	MG-NC	2.78	2.12	2.06
19	B	828	CLA	MG-NC	2.78	2.12	2.06
23	A	850	BCR	C19-C18	-2.78	1.40	1.45
18	2	301	CHL	C2C-C1C	-2.78	1.39	1.44
18	5	305	CHL	C2C-C1C	-2.77	1.39	1.44
23	B	844	BCR	C8-C9	-2.77	1.40	1.45
23	J	103	BCR	C8-C9	-2.77	1.40	1.45
20	3	315	LUT	C12-C13	-2.76	1.40	1.45
19	B	830	CLA	C3D-C4D	-2.76	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	6	306	CHL	C2C-C1C	-2.75	1.39	1.44
23	I	101	BCR	C12-C13	-2.74	1.40	1.45
23	J	103	BCR	C23-C22	-2.73	1.40	1.45
23	3	317	BCR	C19-C18	-2.72	1.40	1.45
23	A	849	BCR	C12-C13	-2.72	1.40	1.45
19	A	828	CLA	MG-NC	2.71	2.12	2.06
23	B	846	BCR	C8-C9	-2.71	1.40	1.45
23	B	844	BCR	C19-C18	-2.71	1.40	1.45
20	6	318	LUT	C8-C9	-2.70	1.40	1.45
19	B	808	CLA	MG-NC	2.70	2.12	2.06
23	L	305	BCR	C19-C18	-2.69	1.40	1.45
23	3	317	BCR	C12-C13	-2.68	1.40	1.45
23	K	204	BCR	C19-C18	-2.68	1.40	1.45
19	K	202	CLA	CAB-C3B	-2.68	1.46	1.51
19	6	303	CLA	MG-NC	2.67	2.12	2.06
19	B	833	CLA	MG-NC	2.66	2.12	2.06
19	3	310	CLA	MG-NC	2.66	2.12	2.06
18	5	305	CHL	MG-NC	2.65	2.12	2.06
20	2	316	LUT	C12-C13	-2.65	1.40	1.45
19	B	815	CLA	MG-NC	2.65	2.12	2.06
19	B	805	CLA	MG-NC	2.65	2.12	2.06
19	A	833	CLA	C3D-C4D	-2.65	1.38	1.44
24	A	802	CL0	C1D-C2D	-2.65	1.40	1.45
23	F	302	BCR	C19-C18	-2.65	1.40	1.45
19	G	203	CLA	MG-NC	2.64	2.12	2.06
19	6	311	CLA	MG-NC	2.64	2.12	2.06
23	K	204	BCR	C12-C13	-2.64	1.40	1.45
20	3	315	LUT	C32-C33	-2.64	1.40	1.45
19	A	803	CLA	C1D-C2D	-2.63	1.40	1.45
23	F	302	BCR	C12-C13	-2.62	1.40	1.45
19	B	801	CLA	MG-NC	2.62	2.12	2.06
20	2	316	LUT	C32-C33	-2.61	1.40	1.45
19	A	827	CLA	C3D-C4D	-2.61	1.38	1.44
19	A	841	CLA	MG-NC	2.61	2.12	2.06
20	6	318	LUT	C32-C33	-2.60	1.40	1.45
19	A	824	CLA	C3D-C4D	-2.60	1.38	1.44
19	A	816	CLA	MG-NC	2.60	2.12	2.06
19	A	835	CLA	MG-NC	2.60	2.12	2.06
23	M	101	BCR	C19-C18	-2.60	1.40	1.45
19	B	803	CLA	C1D-C2D	-2.60	1.40	1.45
23	L	304	BCR	C19-C18	-2.59	1.40	1.45
18	5	304	CHL	MG-NC	2.58	2.12	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	B	841	CLA	C3D-C4D	-2.58	1.38	1.44
20	3	315	LUT	C28-C29	-2.58	1.40	1.45
23	L	304	BCR	C12-C13	-2.58	1.40	1.45
19	2	303	CLA	C3D-C4D	-2.58	1.38	1.44
19	A	815	CLA	MG-NC	2.57	2.12	2.06
18	2	307	CHL	MG-NC	2.57	2.12	2.06
19	B	829	CLA	C3D-C4D	-2.57	1.38	1.44
23	B	846	BCR	C23-C22	-2.57	1.40	1.45
18	6	306	CHL	CHC-C1C	2.57	1.41	1.35
19	B	807	CLA	C3D-C4D	-2.56	1.38	1.44
19	B	840	CLA	C3D-C4D	-2.56	1.38	1.44
20	5	315	LUT	C28-C29	-2.56	1.40	1.45
20	5	315	LUT	C32-C33	-2.55	1.40	1.45
18	2	301	CHL	CHC-C1C	2.55	1.41	1.35
19	A	828	CLA	C1D-C2D	-2.55	1.40	1.45
23	A	848	BCR	C19-C18	-2.55	1.40	1.45
19	B	832	CLA	MG-NC	2.55	2.12	2.06
23	A	848	BCR	C12-C13	-2.55	1.40	1.45
18	3	314	CHL	CHC-C1C	2.55	1.41	1.35
20	6	315	LUT	C32-C33	-2.54	1.40	1.45
19	B	826	CLA	C3D-C4D	-2.54	1.38	1.44
19	A	808	CLA	C3D-C4D	-2.54	1.38	1.44
23	L	305	BCR	C12-C13	-2.54	1.40	1.45
19	B	824	CLA	C3D-C4D	-2.54	1.38	1.44
20	2	316	LUT	C28-C29	-2.54	1.40	1.45
19	A	832	CLA	C3D-C4D	-2.54	1.38	1.44
19	6	305	CLA	MG-NC	2.53	2.12	2.06
19	B	808	CLA	C3D-C4D	-2.53	1.38	1.44
19	B	820	CLA	C3D-C4D	-2.53	1.38	1.44
18	2	305	CHL	MG-NC	2.53	2.12	2.06
18	5	313	CHL	CHC-C1C	2.52	1.41	1.35
19	A	842	CLA	C3D-C4D	-2.52	1.38	1.44
19	A	822	CLA	C3D-C4D	-2.52	1.38	1.44
23	A	849	BCR	C19-C18	-2.52	1.40	1.45
19	3	312	CLA	MG-NC	2.52	2.12	2.06
18	2	307	CHL	CHC-C1C	2.51	1.41	1.35
19	B	806	CLA	MG-NC	2.51	2.12	2.06
18	5	305	CHL	CHC-C1C	2.51	1.41	1.35
23	2	319	BCR	C12-C13	-2.51	1.40	1.45
19	A	811	CLA	C3D-C4D	-2.51	1.38	1.44
19	A	805	CLA	C3D-C4D	-2.51	1.38	1.44
19	B	831	CLA	C3D-C4D	-2.51	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	A	831	CLA	C1D-C2D	-2.51	1.40	1.45
19	B	817	CLA	C3D-C4D	-2.50	1.38	1.44
19	3	301	CLA	C3D-C4D	-2.50	1.38	1.44
19	6	303	CLA	C3D-C4D	-2.50	1.38	1.44
19	B	827	CLA	C1D-C2D	-2.50	1.40	1.45
19	B	821	CLA	C3D-C4D	-2.50	1.38	1.44
19	A	814	CLA	C3D-C4D	-2.50	1.38	1.44
19	B	842	CLA	C3D-C4D	-2.49	1.38	1.44
19	G	203	CLA	C3D-C4D	-2.49	1.38	1.44
18	6	301	CHL	CHC-C1C	2.49	1.41	1.35
19	L	302	CLA	C3D-C4D	-2.49	1.38	1.44
19	B	828	CLA	C3D-C4D	-2.49	1.38	1.44
23	F	305	BCR	C19-C18	-2.49	1.40	1.45
18	2	306	CHL	MG-NC	2.49	2.12	2.06
20	6	315	LUT	C28-C29	-2.49	1.40	1.45
19	A	834	CLA	C3D-C4D	-2.48	1.38	1.44
19	5	301	CLA	C3D-C4D	-2.48	1.38	1.44
23	K	205	BCR	C12-C13	-2.48	1.40	1.45
23	F	305	BCR	C12-C13	-2.48	1.40	1.45
19	A	841	CLA	C3D-C4D	-2.47	1.38	1.44
19	A	806	CLA	C3D-C4D	-2.47	1.38	1.44
20	6	318	LUT	C28-C29	-2.47	1.40	1.45
19	B	811	CLA	C3D-C4D	-2.47	1.38	1.44
19	B	818	CLA	C3D-C4D	-2.47	1.38	1.44
21	6	316	XAT	O24-C25	-2.47	1.42	1.46
19	A	818	CLA	C3D-C4D	-2.47	1.38	1.44
20	J	101	LUT	C12-C13	-2.47	1.40	1.45
19	2	302	CLA	C3D-C4D	-2.47	1.38	1.44
19	B	816	CLA	MG-NC	2.47	2.12	2.06
19	5	310	CLA	MG-NC	2.47	2.12	2.06
19	A	819	CLA	MG-NC	2.47	2.12	2.06
23	A	850	BCR	C12-C13	-2.47	1.40	1.45
18	5	306	CHL	CHC-C1C	2.47	1.41	1.35
19	B	835	CLA	C3D-C4D	-2.47	1.38	1.44
19	A	801	CLA	C3D-C4D	-2.46	1.38	1.44
19	B	806	CLA	C3D-C4D	-2.46	1.38	1.44
19	6	305	CLA	C3D-C4D	-2.46	1.38	1.44
19	A	807	CLA	C3D-C4D	-2.46	1.38	1.44
19	B	813	CLA	C3D-C4D	-2.46	1.38	1.44
19	A	813	CLA	C3D-C4D	-2.46	1.38	1.44
19	A	812	CLA	C3D-C4D	-2.46	1.38	1.44
19	K	202	CLA	C3D-C4D	-2.46	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	2	313	CLA	MG-NC	2.46	2.12	2.06
19	L	302	CLA	C1D-C2D	-2.45	1.40	1.45
19	A	825	CLA	MG-NC	2.45	2.12	2.06
18	2	320	CHL	C3D-C4D	-2.45	1.38	1.44
19	B	833	CLA	C3D-C4D	-2.45	1.38	1.44
19	B	838	CLA	C3D-C4D	-2.45	1.38	1.44
18	3	306	CHL	C3D-C4D	-2.45	1.38	1.44
19	A	832	CLA	C1D-C2D	-2.45	1.40	1.45
19	B	825	CLA	C3D-C4D	-2.45	1.38	1.44
19	B	837	CLA	C3D-C4D	-2.45	1.38	1.44
19	B	829	CLA	MG-NC	2.45	2.12	2.06
19	3	307	CLA	C3D-C4D	-2.45	1.38	1.44
19	A	836	CLA	C3D-C4D	-2.45	1.38	1.44
19	B	827	CLA	C3D-C4D	-2.45	1.38	1.44
19	6	302	CLA	C3D-C4D	-2.45	1.38	1.44
19	B	807	CLA	MG-NC	2.45	2.12	2.06
19	6	312	CLA	C3D-C4D	-2.45	1.38	1.44
19	2	303	CLA	MG-NC	2.44	2.12	2.06
19	6	308	CLA	C3D-C4D	-2.44	1.38	1.44
19	A	830	CLA	C1D-C2D	-2.44	1.40	1.45
19	A	816	CLA	C3D-C4D	-2.44	1.38	1.44
19	B	836	CLA	C3D-C4D	-2.44	1.38	1.44
19	B	812	CLA	C3D-C4D	-2.44	1.38	1.44
19	A	821	CLA	C1D-C2D	-2.44	1.40	1.45
19	B	831	CLA	C1D-C2D	-2.44	1.40	1.45
19	5	311	CLA	C3D-C4D	-2.44	1.38	1.44
19	A	819	CLA	C3D-C4D	-2.44	1.38	1.44
19	B	819	CLA	C3D-C4D	-2.44	1.38	1.44
18	6	306	CHL	MG-NC	2.44	2.12	2.06
20	5	316	LUT	C32-C33	-2.44	1.40	1.45
23	B	844	BCR	C12-C13	-2.44	1.40	1.45
19	A	817	CLA	MG-NC	2.44	2.12	2.06
20	2	315	LUT	C32-C33	-2.43	1.40	1.45
18	2	314	CHL	MG-NC	2.43	2.12	2.06
19	A	835	CLA	C3D-C4D	-2.43	1.38	1.44
19	L	303	CLA	MG-NC	2.43	2.12	2.06
19	A	821	CLA	C3D-C4D	-2.43	1.38	1.44
19	A	825	CLA	C3D-C4D	-2.43	1.38	1.44
19	5	302	CLA	C1D-C2D	-2.43	1.40	1.45
19	3	308	CLA	C3D-C4D	-2.43	1.38	1.44
18	2	306	CHL	CHC-C1C	2.43	1.41	1.35
18	3	306	CHL	CHC-C1C	2.42	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	B	804	CLA	C1D-C2D	-2.42	1.40	1.45
18	3	314	CHL	C3D-C4D	-2.42	1.38	1.44
19	6	307	CLA	C1D-C2D	-2.42	1.40	1.45
23	A	852	BCR	C12-C13	-2.42	1.40	1.45
19	B	810	CLA	C1D-C2D	-2.42	1.40	1.45
21	6	316	XAT	O4-C5	-2.42	1.42	1.46
19	G	204	CLA	MG-NC	2.42	2.12	2.06
19	B	834	CLA	C3D-C4D	-2.42	1.38	1.44
19	A	820	CLA	C3D-C4D	-2.42	1.38	1.44
18	2	320	CHL	MG-NC	2.42	2.12	2.06
19	B	814	CLA	C3D-C4D	-2.42	1.38	1.44
19	A	824	CLA	MG-NC	2.41	2.12	2.06
19	5	302	CLA	C3D-C4D	-2.41	1.38	1.44
19	A	829	CLA	C3D-C4D	-2.41	1.38	1.44
23	B	845	BCR	C19-C18	-2.41	1.40	1.45
19	F	304	CLA	C3D-C4D	-2.41	1.38	1.44
18	3	314	CHL	C2C-C3C	2.41	1.42	1.36
19	A	826	CLA	C1D-C2D	-2.41	1.40	1.45
19	3	311	CLA	MG-NC	2.41	2.12	2.06
19	B	839	CLA	C3D-C4D	-2.41	1.38	1.44
19	A	801	CLA	C1D-C2D	-2.41	1.40	1.45
20	3	316	LUT	C28-C29	-2.41	1.40	1.45
20	3	316	LUT	C32-C33	-2.41	1.40	1.45
19	3	313	CLA	C3D-C4D	-2.40	1.38	1.44
19	A	817	CLA	C3D-C4D	-2.40	1.38	1.44
19	B	802	CLA	MG-NC	2.40	2.12	2.06
23	B	848	BCR	C12-C13	-2.40	1.40	1.45
19	A	809	CLA	C3D-C4D	-2.40	1.38	1.44
19	B	809	CLA	C3D-C4D	-2.40	1.38	1.44
19	6	310	CLA	C3D-C4D	-2.40	1.38	1.44
19	3	303	CLA	C3D-C4D	-2.40	1.38	1.44
19	5	307	CLA	C3D-C4D	-2.40	1.38	1.44
23	G	205	BCR	C12-C13	-2.40	1.40	1.45
18	2	320	CHL	CHC-C1C	2.40	1.41	1.35
19	6	313	CLA	C3D-C4D	-2.40	1.38	1.44
19	B	815	CLA	C3D-C4D	-2.40	1.38	1.44
19	F	301	CLA	C1D-C2D	-2.40	1.40	1.45
24	A	802	CL0	C3D-C4D	-2.40	1.38	1.44
23	M	101	BCR	C12-C13	-2.40	1.40	1.45
18	6	301	CHL	MG-NC	2.40	2.12	2.06
19	6	314	CLA	C3D-C4D	-2.40	1.38	1.44
23	5	317	BCR	C19-C18	-2.40	1.40	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	5	308	CLA	C3D-C4D	-2.40	1.38	1.44
19	A	833	CLA	MG-NC	2.39	2.12	2.06
19	3	311	CLA	C3D-C4D	-2.39	1.38	1.44
19	A	842	CLA	MG-NC	2.39	2.12	2.06
19	5	309	CLA	C3D-C4D	-2.39	1.38	1.44
19	A	823	CLA	C3D-C4D	-2.39	1.38	1.44
19	2	308	CLA	C3D-C4D	-2.39	1.38	1.44
19	B	824	CLA	C1D-C2D	-2.39	1.40	1.45
19	B	807	CLA	C1D-C2D	-2.39	1.40	1.45
18	5	304	CHL	C3D-C4D	-2.39	1.38	1.44
19	A	833	CLA	C1D-C2D	-2.39	1.40	1.45
19	A	837	CLA	C3D-C4D	-2.39	1.38	1.44
19	B	834	CLA	MG-NC	2.38	2.11	2.06
19	5	302	CLA	MG-NC	2.38	2.11	2.06
19	F	301	CLA	C3D-C4D	-2.38	1.38	1.44
19	F	301	CLA	MG-NC	2.38	2.11	2.06
23	B	848	BCR	C19-C18	-2.38	1.40	1.45
18	5	313	CHL	C3D-C4D	-2.38	1.38	1.44
19	B	820	CLA	C1D-C2D	-2.38	1.40	1.45
19	A	814	CLA	MG-NC	2.38	2.11	2.06
19	A	808	CLA	MG-NC	2.38	2.11	2.06
18	2	305	CHL	C3D-C4D	-2.38	1.38	1.44
19	3	304	CLA	C3D-C4D	-2.38	1.38	1.44
20	5	316	LUT	C28-C29	-2.38	1.40	1.45
18	2	320	CHL	C2C-C3C	2.38	1.41	1.36
19	2	304	CLA	C3D-C4D	-2.38	1.38	1.44
19	B	809	CLA	C1D-C2D	-2.38	1.40	1.45
20	2	315	LUT	C28-C29	-2.38	1.40	1.45
19	B	823	CLA	C3D-C4D	-2.38	1.38	1.44
19	A	823	CLA	MG-NC	2.38	2.11	2.06
23	G	205	BCR	C19-C18	-2.38	1.40	1.45
18	2	305	CHL	CHC-C1C	2.38	1.41	1.35
19	B	801	CLA	C1D-C2D	-2.38	1.40	1.45
19	3	302	CLA	C3D-C4D	-2.38	1.38	1.44
19	A	815	CLA	C3D-C4D	-2.38	1.38	1.44
19	A	843	CLA	C3D-C4D	-2.38	1.38	1.44
19	L	303	CLA	C3D-C4D	-2.37	1.38	1.44
18	5	305	CHL	C3D-C4D	-2.37	1.38	1.44
19	B	822	CLA	C3D-C4D	-2.37	1.38	1.44
19	6	304	CLA	C3D-C4D	-2.37	1.38	1.44
19	A	838	CLA	C3D-C4D	-2.37	1.38	1.44
20	2	315	LUT	C12-C13	-2.37	1.40	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	B	830	CLA	MG-NC	2.37	2.11	2.06
19	A	810	CLA	C3D-C4D	-2.37	1.38	1.44
19	B	816	CLA	C3D-C4D	-2.37	1.38	1.44
19	2	310	CLA	C3D-C4D	-2.37	1.38	1.44
18	5	304	CHL	CHC-C1C	2.37	1.41	1.35
19	6	309	CLA	C3D-C4D	-2.37	1.38	1.44
19	6	307	CLA	C3D-C4D	-2.37	1.38	1.44
19	5	312	CLA	C3D-C4D	-2.37	1.38	1.44
19	F	303	CLA	C3D-C4D	-2.37	1.38	1.44
23	B	845	BCR	C12-C13	-2.36	1.40	1.45
20	5	316	LUT	C12-C13	-2.36	1.40	1.45
19	3	312	CLA	C3D-C4D	-2.36	1.38	1.44
19	G	204	CLA	C3D-C4D	-2.36	1.38	1.44
19	B	805	CLA	C3D-C4D	-2.36	1.38	1.44
19	B	832	CLA	C3D-C4D	-2.36	1.38	1.44
19	5	303	CLA	C3D-C4D	-2.36	1.38	1.44
19	B	821	CLA	C1D-C2D	-2.35	1.40	1.45
18	3	306	CHL	MG-NC	2.35	2.11	2.06
18	2	306	CHL	C3D-C4D	-2.35	1.38	1.44
19	A	830	CLA	C3D-C4D	-2.35	1.38	1.44
19	B	803	CLA	C3D-C4D	-2.35	1.38	1.44
19	6	308	CLA	C1D-C2D	-2.35	1.40	1.45
20	5	315	LUT	C12-C13	-2.35	1.40	1.45
19	2	313	CLA	C3D-C4D	-2.35	1.38	1.44
19	2	312	CLA	MG-NC	2.35	2.11	2.06
19	B	829	CLA	C1D-C2D	-2.35	1.40	1.45
19	J	102	CLA	C3D-C4D	-2.35	1.38	1.44
19	K	203	CLA	C3D-C4D	-2.35	1.38	1.44
19	A	839	CLA	C3D-C4D	-2.35	1.38	1.44
19	B	810	CLA	C3D-C4D	-2.35	1.38	1.44
19	K	201	CLA	C3D-C4D	-2.35	1.38	1.44
19	A	801	CLA	MG-NC	2.34	2.11	2.06
19	A	804	CLA	MG-NC	2.34	2.11	2.06
19	B	811	CLA	MG-NC	2.34	2.11	2.06
19	L	301	CLA	MG-NC	2.34	2.11	2.06
19	5	310	CLA	C3D-C4D	-2.34	1.38	1.44
19	3	305	CLA	C3D-C4D	-2.34	1.38	1.44
18	2	307	CHL	C1D-C2D	-2.34	1.40	1.45
18	2	314	CHL	C3D-C4D	-2.34	1.38	1.44
19	3	309	CLA	C3D-C4D	-2.34	1.38	1.44
18	6	301	CHL	C3D-C4D	-2.34	1.38	1.44
19	A	831	CLA	C3D-C4D	-2.33	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	6	314	CLA	MG-NC	2.33	2.11	2.06
19	A	814	CLA	C1D-C2D	-2.33	1.40	1.45
19	B	818	CLA	C1D-C2D	-2.33	1.40	1.45
19	B	822	CLA	MG-NC	2.33	2.11	2.06
19	B	818	CLA	MG-NC	2.33	2.11	2.06
18	2	305	CHL	C2C-C3C	2.33	1.41	1.36
19	B	813	CLA	MG-NC	2.33	2.11	2.06
18	5	304	CHL	C2C-C3C	2.33	1.41	1.36
18	2	320	CHL	C1D-C2D	-2.33	1.40	1.45
18	2	301	CHL	C3D-C4D	-2.33	1.38	1.44
19	F	304	CLA	MG-NC	2.33	2.11	2.06
19	2	309	CLA	C3D-C4D	-2.33	1.38	1.44
19	B	828	CLA	C1D-C2D	-2.32	1.40	1.45
18	5	306	CHL	C3D-C4D	-2.32	1.38	1.44
19	2	311	CLA	C3D-C4D	-2.32	1.38	1.44
18	3	314	CHL	MG-NC	2.32	2.11	2.06
19	B	801	CLA	C3D-C4D	-2.32	1.38	1.44
19	5	312	CLA	MG-NC	2.32	2.11	2.06
19	3	310	CLA	C3D-C4D	-2.32	1.38	1.44
19	2	312	CLA	C1D-C2D	-2.32	1.40	1.45
18	6	306	CHL	C3D-C4D	-2.32	1.38	1.44
19	5	314	CLA	C1D-C2D	-2.31	1.40	1.45
19	K	202	CLA	C1D-C2D	-2.31	1.40	1.45
19	6	311	CLA	C3D-C4D	-2.31	1.39	1.44
19	B	809	CLA	MG-NC	2.31	2.11	2.06
19	A	813	CLA	C1D-C2D	-2.31	1.40	1.45
19	A	819	CLA	C1D-C2D	-2.31	1.40	1.45
23	K	205	BCR	C19-C18	-2.31	1.41	1.45
19	L	301	CLA	C3D-C4D	-2.30	1.39	1.44
19	B	842	CLA	C1D-C2D	-2.30	1.40	1.45
19	B	814	CLA	C1D-C2D	-2.30	1.40	1.45
19	A	829	CLA	C1D-C2D	-2.30	1.40	1.45
19	A	840	CLA	C3D-C4D	-2.30	1.39	1.44
19	3	310	CLA	C1D-C2D	-2.30	1.40	1.45
19	B	816	CLA	C1D-C2D	-2.30	1.40	1.45
19	A	843	CLA	MG-NC	2.29	2.11	2.06
19	2	312	CLA	C3D-C4D	-2.29	1.39	1.44
19	B	837	CLA	C1D-C2D	-2.29	1.40	1.45
18	2	307	CHL	C3D-C4D	-2.29	1.39	1.44
19	B	827	CLA	MG-NC	2.29	2.11	2.06
19	J	102	CLA	MG-NC	2.29	2.11	2.06
19	B	823	CLA	C1D-C2D	-2.29	1.40	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	2	301	CHL	MG-NC	2.29	2.11	2.06
19	6	308	CLA	MG-NC	2.29	2.11	2.06
19	B	836	CLA	MG-NC	2.29	2.11	2.06
19	A	838	CLA	C1D-C2D	-2.29	1.40	1.45
18	5	306	CHL	C1D-C2D	-2.28	1.40	1.45
19	B	833	CLA	C1D-C2D	-2.28	1.40	1.45
19	A	843	CLA	C1D-C2D	-2.28	1.40	1.45
19	B	808	CLA	C1D-C2D	-2.28	1.40	1.45
23	2	319	BCR	C19-C18	-2.28	1.41	1.45
19	A	811	CLA	C1D-C2D	-2.28	1.40	1.45
19	F	304	CLA	C1D-C2D	-2.28	1.40	1.45
23	5	317	BCR	C12-C13	-2.27	1.41	1.45
19	3	305	CLA	MG-NC	2.27	2.11	2.06
19	G	203	CLA	C1D-C2D	-2.27	1.40	1.45
19	B	834	CLA	C1D-C2D	-2.27	1.40	1.45
19	A	826	CLA	C3D-C4D	-2.27	1.39	1.44
19	2	309	CLA	C1D-C2D	-2.27	1.40	1.45
20	6	315	LUT	C12-C13	-2.27	1.41	1.45
20	3	316	LUT	C12-C13	-2.26	1.41	1.45
19	A	836	CLA	C1D-C2D	-2.26	1.40	1.45
19	A	812	CLA	MG-NC	2.26	2.11	2.06
19	B	802	CLA	C1D-C2D	-2.26	1.40	1.45
20	J	101	LUT	C28-C29	-2.26	1.41	1.45
19	3	309	CLA	MG-NC	2.26	2.11	2.06
18	2	314	CHL	CHC-C1C	2.26	1.40	1.35
19	A	834	CLA	C1D-C2D	-2.25	1.40	1.45
19	A	808	CLA	C1D-C2D	-2.25	1.40	1.45
19	A	842	CLA	C1D-C2D	-2.25	1.40	1.45
19	K	202	CLA	MG-NC	2.25	2.11	2.06
19	B	825	CLA	MG-NC	2.25	2.11	2.06
19	6	310	CLA	MG-NC	2.24	2.11	2.06
19	A	815	CLA	C1D-C2D	-2.24	1.40	1.45
19	2	311	CLA	C1D-C2D	-2.24	1.40	1.45
20	2	317	LUT	C12-C13	-2.24	1.41	1.45
19	5	301	CLA	MG-NC	2.24	2.11	2.06
19	B	820	CLA	CHC-C1C	2.23	1.40	1.35
19	B	810	CLA	MG-NC	2.23	2.11	2.06
19	B	804	CLA	C3D-C4D	-2.23	1.39	1.44
18	3	306	CHL	C1D-C2D	-2.23	1.40	1.45
19	K	203	CLA	MG-NC	2.22	2.11	2.06
19	5	310	CLA	C1D-C2D	-2.22	1.40	1.45
19	A	821	CLA	MG-NC	2.22	2.11	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	6	302	CLA	MG-NC	2.22	2.11	2.06
18	5	313	CHL	C1D-C2D	-2.22	1.41	1.45
19	A	809	CLA	C1D-C2D	-2.22	1.41	1.45
19	3	302	CLA	C1D-C2D	-2.21	1.41	1.45
19	A	805	CLA	C1D-C2D	-2.21	1.41	1.45
19	A	810	CLA	C1D-C2D	-2.21	1.41	1.45
19	B	838	CLA	MG-NC	2.21	2.11	2.06
19	B	835	CLA	MG-NC	2.21	2.11	2.06
20	J	101	LUT	C32-C33	-2.21	1.41	1.45
19	B	830	CLA	C1D-C2D	-2.20	1.41	1.45
23	L	304	BCR	C29-C28	-2.20	1.47	1.52
18	6	301	CHL	C1D-C2D	-2.20	1.41	1.45
19	5	309	CLA	C1D-C2D	-2.20	1.41	1.45
19	B	805	CLA	C1D-C2D	-2.20	1.41	1.45
19	A	812	CLA	C1D-C2D	-2.20	1.41	1.45
19	B	813	CLA	C1D-C2D	-2.20	1.41	1.45
19	3	304	CLA	MG-NC	2.20	2.11	2.06
19	A	803	CLA	C3D-C4D	-2.20	1.39	1.44
19	5	307	CLA	C1D-C2D	-2.20	1.41	1.45
20	6	318	LUT	C12-C13	-2.20	1.41	1.45
19	B	806	CLA	C1D-C2D	-2.20	1.41	1.45
19	B	826	CLA	C1D-C2D	-2.20	1.41	1.45
19	2	310	CLA	C1D-C2D	-2.20	1.41	1.45
19	6	313	CLA	MG-NC	2.20	2.11	2.06
19	6	305	CLA	C1D-C2D	-2.19	1.41	1.45
19	6	310	CLA	C1D-C2D	-2.19	1.41	1.45
19	A	804	CLA	C3D-C4D	-2.19	1.39	1.44
19	A	841	CLA	C1D-C2D	-2.19	1.41	1.45
19	A	823	CLA	C1D-C2D	-2.19	1.41	1.45
19	5	314	CLA	C3D-C4D	-2.19	1.39	1.44
19	L	303	CLA	C1D-C2D	-2.18	1.41	1.45
19	3	304	CLA	C1D-C2D	-2.18	1.41	1.45
19	A	822	CLA	C1D-C2D	-2.18	1.41	1.45
19	K	201	CLA	C1D-C2D	-2.18	1.41	1.45
19	B	822	CLA	C1D-C2D	-2.18	1.41	1.45
19	B	821	CLA	MG-NC	2.18	2.11	2.06
19	3	309	CLA	C1D-C2D	-2.18	1.41	1.45
19	3	301	CLA	C1D-C2D	-2.18	1.41	1.45
19	B	815	CLA	C1D-C2D	-2.18	1.41	1.45
18	2	301	CHL	C1D-C2D	-2.18	1.41	1.45
19	L	301	CLA	C1D-C2D	-2.18	1.41	1.45
18	6	306	CHL	C1D-C2D	-2.17	1.41	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	2	302	CLA	C1D-C2D	-2.17	1.41	1.45
19	B	811	CLA	C1D-C2D	-2.17	1.41	1.45
19	A	810	CLA	MG-NC	2.17	2.11	2.06
18	2	305	CHL	C1D-C2D	-2.16	1.41	1.45
19	B	841	CLA	C1D-C2D	-2.16	1.41	1.45
19	5	301	CLA	C1D-C2D	-2.16	1.41	1.45
19	2	303	CLA	C1D-C2D	-2.16	1.41	1.45
19	A	818	CLA	C1D-C2D	-2.16	1.41	1.45
18	5	304	CHL	C1D-C2D	-2.16	1.41	1.45
19	3	305	CLA	C1D-C2D	-2.16	1.41	1.45
19	F	303	CLA	C1D-C2D	-2.16	1.41	1.45
18	5	313	CHL	MG-NC	2.16	2.11	2.06
19	5	312	CLA	C1D-C2D	-2.16	1.41	1.45
19	B	835	CLA	C1D-C2D	-2.16	1.41	1.45
20	2	317	LUT	C32-C33	-2.15	1.41	1.45
18	5	305	CHL	C1D-C2D	-2.15	1.41	1.45
19	3	312	CLA	C1D-C2D	-2.15	1.41	1.45
19	6	309	CLA	C1D-C2D	-2.15	1.41	1.45
19	A	840	CLA	C1D-C2D	-2.15	1.41	1.45
23	B	846	BCR	C12-C13	-2.15	1.41	1.45
19	2	304	CLA	MG-NC	2.14	2.11	2.06
19	B	819	CLA	C1D-C2D	-2.14	1.41	1.45
19	B	832	CLA	C1D-C2D	-2.14	1.41	1.45
19	K	201	CLA	MG-NC	2.14	2.11	2.06
19	5	303	CLA	MG-NC	2.14	2.11	2.06
18	5	306	CHL	MG-NC	2.14	2.11	2.06
19	B	802	CLA	C3D-C4D	-2.14	1.39	1.44
19	A	819	CLA	CHC-C1C	2.14	1.40	1.35
19	B	839	CLA	C1D-C2D	-2.14	1.41	1.45
19	6	313	CLA	C1D-C2D	-2.14	1.41	1.45
19	B	825	CLA	C1D-C2D	-2.14	1.41	1.45
19	B	840	CLA	C1D-C2D	-2.13	1.41	1.45
19	A	816	CLA	C1D-C2D	-2.13	1.41	1.45
19	A	813	CLA	MG-NC	2.13	2.11	2.06
19	6	311	CLA	C1D-C2D	-2.13	1.41	1.45
19	J	102	CLA	C1D-C2D	-2.13	1.41	1.45
19	B	820	CLA	MG-NC	2.13	2.11	2.06
19	B	842	CLA	MG-NC	2.12	2.11	2.06
19	5	307	CLA	MG-NC	2.12	2.11	2.06
19	A	806	CLA	CHC-C1C	2.12	1.40	1.35
19	3	303	CLA	MG-NC	2.12	2.11	2.06
20	2	317	LUT	C28-C29	-2.12	1.41	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	5	308	CLA	C1D-C2D	-2.12	1.41	1.45
19	B	817	CLA	C1D-C2D	-2.12	1.41	1.45
23	3	317	BCR	C29-C28	-2.11	1.47	1.52
19	3	311	CLA	C1D-C2D	-2.11	1.41	1.45
19	A	836	CLA	MG-NC	2.11	2.11	2.06
19	K	203	CLA	C1D-C2D	-2.11	1.41	1.45
19	2	308	CLA	C1D-C2D	-2.11	1.41	1.45
19	F	303	CLA	MG-NC	2.11	2.11	2.06
19	A	827	CLA	C1D-C2D	-2.11	1.41	1.45
19	A	806	CLA	MG-NC	2.11	2.11	2.06
19	2	304	CLA	C1D-C2D	-2.11	1.41	1.45
19	2	310	CLA	MG-NC	2.11	2.11	2.06
19	L	302	CLA	MG-NC	2.10	2.11	2.06
19	B	818	CLA	CHC-C1C	2.10	1.40	1.35
19	G	204	CLA	C1D-C2D	-2.10	1.41	1.45
19	5	303	CLA	C1D-C2D	-2.10	1.41	1.45
19	A	837	CLA	C1D-C2D	-2.10	1.41	1.45
19	B	802	CLA	CHC-C1C	2.10	1.40	1.35
19	A	839	CLA	C1D-C2D	-2.10	1.41	1.45
23	A	851	BCR	C29-C28	-2.09	1.47	1.52
18	3	314	CHL	C1D-C2D	-2.09	1.41	1.45
19	A	807	CLA	C1D-C2D	-2.09	1.41	1.45
19	6	302	CLA	C1D-C2D	-2.09	1.41	1.45
23	J	103	BCR	C12-C13	-2.09	1.41	1.45
18	2	306	CHL	C1D-C2D	-2.08	1.41	1.45
18	2	314	CHL	C1D-C2D	-2.08	1.41	1.45
19	A	822	CLA	MG-NC	2.07	2.11	2.06
19	3	303	CLA	C1D-C2D	-2.07	1.41	1.45
19	6	304	CLA	C1D-C2D	-2.07	1.41	1.45
19	A	835	CLA	C1D-C2D	-2.07	1.41	1.45
19	B	840	CLA	CHC-C1C	2.07	1.40	1.35
19	B	838	CLA	C1D-C2D	-2.06	1.41	1.45
19	B	812	CLA	C1D-C2D	-2.06	1.41	1.45
19	6	304	CLA	MG-NC	2.06	2.11	2.06
19	3	308	CLA	CHC-C1C	2.06	1.40	1.35
19	B	826	CLA	CHC-C1C	2.06	1.40	1.35
23	3	317	BCR	C2-C3	-2.05	1.47	1.52
19	A	805	CLA	MG-NC	2.05	2.11	2.06
19	6	303	CLA	C1D-C2D	-2.05	1.41	1.45
19	B	836	CLA	C1D-C2D	-2.05	1.41	1.45
19	2	302	CLA	MG-NC	2.05	2.11	2.06
24	A	802	CL0	MG-ND	-2.05	2.01	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	6	314	CLA	C1D-C2D	-2.04	1.41	1.45
19	A	806	CLA	C1D-C2D	-2.04	1.41	1.45
19	B	805	CLA	CHC-C1C	2.04	1.40	1.35
19	3	307	CLA	C1D-C2D	-2.04	1.41	1.45
19	A	820	CLA	MG-NC	2.04	2.11	2.06
19	3	313	CLA	MG-NC	2.03	2.11	2.06
19	3	313	CLA	C1D-C2D	-2.03	1.41	1.45
19	A	820	CLA	C1D-C2D	-2.03	1.41	1.45
19	3	308	CLA	C1D-C2D	-2.03	1.41	1.45
23	J	103	BCR	C19-C18	-2.03	1.41	1.45
19	5	309	CLA	MG-NC	2.03	2.11	2.06
19	A	822	CLA	CHC-C1C	2.03	1.40	1.35
19	2	309	CLA	CHC-C1C	2.02	1.40	1.35
19	A	837	CLA	MG-NC	2.02	2.11	2.06
19	B	838	CLA	CHC-C1C	2.02	1.40	1.35
19	6	312	CLA	C1D-C2D	-2.01	1.41	1.45
19	B	804	CLA	CHC-C1C	2.01	1.40	1.35
19	B	807	CLA	CHC-C1C	2.01	1.40	1.35
19	B	822	CLA	CHC-C1C	2.01	1.40	1.35
19	F	301	CLA	CHC-C1C	2.01	1.40	1.35
19	6	309	CLA	CHC-C1C	2.01	1.40	1.35
19	A	825	CLA	C1D-C2D	-2.01	1.41	1.45
19	A	804	CLA	C1D-C2D	-2.01	1.41	1.45
19	3	301	CLA	CHC-C1C	2.00	1.40	1.35
23	B	847	BCR	C11-C10	-2.00	1.37	1.43
19	B	824	CLA	MG-NC	2.00	2.11	2.06

All (1266) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	B	848	BCR	C11-C10-C9	6.05	135.94	127.31
23	B	848	BCR	C16-C15-C14	5.60	134.95	123.47
23	B	848	BCR	C10-C11-C12	5.49	140.34	123.22
20	2	317	LUT	C28-C29-C30	5.48	127.34	118.94
23	A	852	BCR	C15-C16-C17	5.42	134.58	123.47
23	2	319	BCR	C21-C20-C19	5.32	139.83	123.22
23	2	319	BCR	C20-C21-C22	5.27	134.84	127.31
23	J	103	BCR	C23-C22-C21	5.23	126.96	118.94
20	2	315	LUT	C35-C15-C14	5.19	134.11	123.47
20	2	317	LUT	C39-C29-C30	-5.00	115.92	122.92
20	6	318	LUT	C39-C29-C28	4.98	125.93	118.08
20	3	316	LUT	C35-C15-C14	4.95	133.62	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	5	314	CLA	O2D-CGD-CBD	4.89	119.96	111.27
23	B	846	BCR	C23-C22-C21	4.87	126.41	118.94
23	F	305	BCR	C16-C15-C14	4.72	133.15	123.47
23	B	846	BCR	C37-C22-C21	-4.71	116.33	122.92
23	B	847	BCR	C16-C15-C14	4.70	133.10	123.47
23	J	103	BCR	C37-C22-C21	-4.64	116.43	122.92
23	5	317	BCR	C16-C15-C14	4.62	132.94	123.47
23	B	846	BCR	C16-C15-C14	4.56	132.81	123.47
20	6	318	LUT	C35-C15-C14	4.52	132.74	123.47
20	J	101	LUT	C39-C29-C30	-4.47	116.66	122.92
20	6	318	LUT	C19-C9-C10	-4.46	116.67	122.92
20	5	316	LUT	C35-C15-C14	4.44	132.58	123.47
20	5	316	LUT	C19-C9-C10	-4.44	116.70	122.92
20	5	315	LUT	C35-C15-C14	4.44	132.56	123.47
23	J	103	BCR	C34-C9-C10	-4.41	116.74	122.92
20	J	101	LUT	C28-C29-C30	4.39	125.67	118.94
23	J	103	BCR	C24-C23-C22	4.37	132.84	126.23
23	5	317	BCR	C34-C9-C10	-4.34	116.84	122.92
23	B	844	BCR	C34-C9-C10	-4.29	116.92	122.92
23	J	103	BCR	C8-C9-C10	4.27	125.50	118.94
23	G	201	BCR	C34-C9-C10	-4.27	116.94	122.92
20	J	101	LUT	C15-C35-C34	4.26	132.21	123.47
23	K	204	BCR	C37-C22-C21	-4.24	116.98	122.92
23	B	846	BCR	C19-C18-C17	4.23	125.43	118.94
23	A	848	BCR	C15-C16-C17	4.23	132.14	123.47
23	F	305	BCR	C34-C9-C10	-4.20	117.04	122.92
20	2	315	LUT	C19-C9-C10	-4.19	117.05	122.92
23	2	319	BCR	C34-C9-C10	-4.17	117.09	122.92
20	2	316	LUT	C39-C29-C28	4.17	124.64	118.08
20	5	315	LUT	C15-C35-C34	4.14	131.96	123.47
19	A	825	CLA	CHD-C1D-ND	-4.14	120.65	124.45
20	3	316	LUT	C19-C9-C10	-4.14	117.13	122.92
23	F	302	BCR	C15-C16-C17	4.13	131.94	123.47
20	2	317	LUT	C19-C9-C10	-4.12	117.16	122.92
23	A	849	BCR	C37-C22-C21	-4.11	117.16	122.92
23	B	846	BCR	C34-C9-C10	-4.11	117.16	122.92
23	B	846	BCR	C36-C18-C17	-4.09	117.20	122.92
23	A	848	BCR	C34-C9-C10	-4.07	117.22	122.92
23	K	205	BCR	C37-C22-C21	-4.07	117.23	122.92
23	G	205	BCR	C37-C22-C21	-4.05	117.25	122.92
23	K	205	BCR	C34-C9-C10	-4.03	117.28	122.92
23	K	204	BCR	C38-C26-C25	4.02	129.04	124.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	A	806	CLA	CHD-C1D-ND	-4.02	120.76	124.45
20	2	317	LUT	C15-C35-C34	4.02	131.71	123.47
19	3	307	CLA	CHD-C1D-ND	-4.02	120.76	124.45
19	A	828	CLA	C4D-CHA-C1A	4.02	126.14	121.25
19	3	308	CLA	CHD-C1D-ND	-4.00	120.78	124.45
23	B	845	BCR	C37-C22-C21	-3.99	117.33	122.92
23	B	846	BCR	C24-C23-C22	3.97	132.24	126.23
20	6	315	LUT	C19-C9-C10	-3.97	117.37	122.92
19	A	828	CLA	CHD-C1D-ND	-3.95	120.82	124.45
19	2	303	CLA	CHD-C1D-ND	-3.95	120.83	124.45
19	B	838	CLA	CHD-C1D-ND	-3.94	120.83	124.45
23	2	319	BCR	C38-C26-C25	3.94	128.96	124.53
19	A	820	CLA	CHD-C1D-ND	-3.94	120.83	124.45
23	2	319	BCR	C16-C15-C14	3.94	131.54	123.47
23	M	101	BCR	C34-C9-C10	-3.93	117.41	122.92
23	J	103	BCR	C15-C16-C17	3.93	131.53	123.47
20	J	101	LUT	C19-C9-C10	-3.93	117.42	122.92
23	A	851	BCR	C34-C9-C10	-3.92	117.43	122.92
23	B	848	BCR	C37-C22-C21	-3.92	117.43	122.92
23	K	205	BCR	C15-C16-C17	3.92	131.50	123.47
19	A	818	CLA	O2A-C1-C2	3.91	118.92	108.64
20	6	318	LUT	C31-C30-C29	3.90	132.88	127.31
19	B	819	CLA	CHD-C1D-ND	-3.90	120.87	124.45
23	A	850	BCR	C15-C16-C17	3.90	131.46	123.47
20	6	318	LUT	C18-C5-C6	3.89	128.90	124.53
23	A	852	BCR	C34-C9-C10	-3.89	117.48	122.92
23	K	204	BCR	C34-C9-C10	-3.88	117.48	122.92
20	5	315	LUT	C19-C9-C10	-3.88	117.48	122.92
19	A	824	CLA	CHD-C1D-ND	-3.88	120.89	124.45
23	3	317	BCR	C34-C9-C10	-3.88	117.49	122.92
19	A	804	CLA	C4D-CHA-C1A	3.88	125.97	121.25
23	B	847	BCR	C1-C6-C5	-3.87	117.16	122.61
23	F	305	BCR	C37-C22-C21	-3.87	117.50	122.92
23	B	847	BCR	C7-C8-C9	3.87	132.08	126.23
23	A	848	BCR	C37-C22-C21	-3.86	117.51	122.92
23	A	849	BCR	C34-C9-C10	-3.85	117.53	122.92
19	6	312	CLA	CHD-C1D-ND	-3.85	120.92	124.45
19	A	837	CLA	CHD-C1D-ND	-3.85	120.92	124.45
23	A	850	BCR	C37-C22-C21	-3.85	117.53	122.92
19	B	808	CLA	C4D-CHA-C1A	3.84	125.92	121.25
19	A	807	CLA	CHD-C1D-ND	-3.84	120.92	124.45
23	A	850	BCR	C34-C9-C10	-3.84	117.54	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	5	317	BCR	C37-C22-C21	-3.84	117.55	122.92
23	A	852	BCR	C37-C22-C21	-3.83	117.55	122.92
19	B	840	CLA	CHD-C1D-ND	-3.82	120.94	124.45
19	5	311	CLA	CHD-C1D-ND	-3.82	120.94	124.45
23	F	302	BCR	C37-C22-C21	-3.81	117.58	122.92
23	B	845	BCR	C34-C9-C10	-3.81	117.58	122.92
23	L	305	BCR	C34-C9-C10	-3.80	117.60	122.92
19	2	313	CLA	CHD-C1D-ND	-3.77	120.98	124.45
20	2	316	LUT	C19-C9-C10	-3.77	117.64	122.92
23	B	847	BCR	C34-C9-C8	3.76	124.01	118.08
19	A	827	CLA	CHD-C1D-ND	-3.76	121.00	124.45
19	6	304	CLA	CHD-C1D-ND	-3.75	121.01	124.45
23	B	848	BCR	C35-C13-C14	-3.75	117.68	122.92
19	6	311	CLA	C4D-CHA-C1A	3.74	125.81	121.25
19	A	807	CLA	C4D-CHA-C1A	3.74	125.81	121.25
23	5	317	BCR	C35-C13-C14	-3.74	117.69	122.92
19	6	312	CLA	CAA-C2A-C3A	-3.74	102.54	112.78
20	5	315	LUT	C39-C29-C30	-3.73	117.70	122.92
23	G	205	BCR	C34-C9-C10	-3.73	117.70	122.92
19	A	817	CLA	CHD-C1D-ND	-3.72	121.03	124.45
19	B	819	CLA	C4D-CHA-C1A	3.72	125.78	121.25
19	A	804	CLA	CHD-C1D-ND	-3.72	121.04	124.45
19	B	830	CLA	CHD-C1D-ND	-3.72	121.04	124.45
23	G	205	BCR	C15-C16-C17	3.71	131.08	123.47
20	2	317	LUT	C35-C15-C14	3.71	131.07	123.47
19	A	839	CLA	C4D-CHA-C1A	3.71	125.76	121.25
23	B	844	BCR	C38-C26-C25	3.71	128.69	124.53
23	L	305	BCR	C37-C22-C21	-3.71	117.73	122.92
19	3	307	CLA	C1-O2A-CGA	3.71	126.17	116.44
23	B	844	BCR	C37-C22-C21	-3.70	117.73	122.92
23	I	101	BCR	C37-C22-C21	-3.70	117.73	122.92
20	3	315	LUT	C19-C9-C8	3.70	123.91	118.08
23	F	302	BCR	C34-C9-C10	-3.70	117.74	122.92
20	J	101	LUT	C40-C33-C34	-3.70	117.74	122.92
19	B	839	CLA	C4D-CHA-C1A	3.69	125.74	121.25
23	L	304	BCR	C34-C9-C10	-3.69	117.75	122.92
23	B	846	BCR	C21-C20-C19	3.69	134.74	123.22
19	A	837	CLA	C4D-CHA-C1A	3.69	125.74	121.25
19	A	835	CLA	C4D-CHA-C1A	3.68	125.73	121.25
20	2	317	LUT	C40-C33-C34	-3.68	117.77	122.92
20	2	315	LUT	C20-C13-C14	-3.68	117.77	122.92
23	5	317	BCR	C12-C13-C14	3.67	124.58	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	3	311	CLA	CHD-C1D-ND	-3.67	121.08	124.45
19	K	203	CLA	CHD-C1D-ND	-3.67	121.08	124.45
19	B	839	CLA	CHD-C1D-ND	-3.67	121.08	124.45
19	2	309	CLA	O2A-C1-C2	3.67	118.27	108.64
20	6	315	LUT	C39-C29-C30	-3.67	117.79	122.92
23	G	201	BCR	C37-C22-C21	-3.66	117.80	122.92
19	5	312	CLA	C1-O2A-CGA	3.66	126.04	116.44
19	A	835	CLA	CHD-C1D-ND	-3.66	121.09	124.45
23	I	101	BCR	C34-C9-C10	-3.65	117.81	122.92
23	J	103	BCR	C16-C15-C14	3.65	130.95	123.47
19	B	842	CLA	C4D-CHA-C1A	3.65	125.69	121.25
19	A	805	CLA	C4D-CHA-C1A	3.65	125.69	121.25
23	L	304	BCR	C37-C22-C21	-3.65	117.82	122.92
19	B	842	CLA	CHD-C1D-ND	-3.64	121.11	124.45
19	2	302	CLA	CHD-C1D-ND	-3.64	121.11	124.45
19	5	308	CLA	CHD-C1D-ND	-3.63	121.12	124.45
19	B	837	CLA	C4D-CHA-C1A	3.63	125.66	121.25
23	B	845	BCR	C15-C16-C17	3.62	130.89	123.47
23	2	319	BCR	C35-C13-C14	-3.62	117.85	122.92
18	3	314	CHL	CHD-C1D-ND	-3.62	121.13	124.45
23	I	101	BCR	C37-C22-C23	3.62	123.78	118.08
19	6	303	CLA	CHD-C1D-ND	-3.61	121.13	124.45
19	A	816	CLA	C4D-CHA-C1A	3.61	125.65	121.25
19	A	810	CLA	CHD-C1D-ND	-3.61	121.13	124.45
19	B	826	CLA	CHD-C1D-ND	-3.61	121.14	124.45
23	3	317	BCR	C37-C22-C21	-3.61	117.87	122.92
23	A	851	BCR	C37-C22-C21	-3.61	117.87	122.92
19	B	833	CLA	C4D-CHA-C1A	3.61	125.64	121.25
23	3	317	BCR	C16-C15-C14	3.61	130.86	123.47
20	5	316	LUT	C39-C29-C30	-3.60	117.88	122.92
19	B	817	CLA	CHD-C1D-ND	-3.60	121.14	124.45
23	B	846	BCR	C15-C16-C17	3.60	130.85	123.47
19	B	825	CLA	CHD-C1D-ND	-3.60	121.15	124.45
23	L	305	BCR	C38-C26-C25	3.60	128.57	124.53
20	3	316	LUT	C39-C29-C28	3.58	123.72	118.08
20	2	317	LUT	C32-C33-C34	3.58	124.43	118.94
23	2	319	BCR	C36-C18-C17	-3.58	117.91	122.92
19	A	818	CLA	CHD-C1D-ND	-3.57	121.17	124.45
23	B	846	BCR	C35-C13-C14	-3.57	117.92	122.92
19	A	805	CLA	CHD-C1D-ND	-3.57	121.17	124.45
20	2	315	LUT	C12-C13-C14	3.57	124.42	118.94
19	5	314	CLA	CED-O2D-CGD	3.57	124.01	115.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	B	841	CLA	CHD-C1D-ND	-3.57	121.18	124.45
23	F	302	BCR	C38-C26-C25	3.56	128.53	124.53
20	2	315	LUT	C39-C29-C30	-3.56	117.93	122.92
18	3	306	CHL	CHD-C1D-ND	-3.56	121.18	124.45
20	3	316	LUT	C20-C13-C14	-3.55	117.95	122.92
19	A	829	CLA	CHD-C1D-ND	-3.55	121.19	124.45
19	6	304	CLA	C4D-CHA-C1A	3.54	125.56	121.25
18	5	313	CHL	C4D-CHA-C1A	3.54	125.56	121.25
19	3	305	CLA	CHD-C1D-ND	-3.54	121.20	124.45
19	2	308	CLA	CHD-C1D-ND	-3.54	121.20	124.45
19	6	309	CLA	CHD-C1D-ND	-3.53	121.21	124.45
20	3	315	LUT	C39-C29-C30	-3.53	117.97	122.92
20	5	316	LUT	C20-C13-C14	-3.53	117.97	122.92
19	B	836	CLA	CHD-C1D-ND	-3.53	121.21	124.45
23	G	201	BCR	C38-C26-C25	3.53	128.49	124.53
20	2	317	LUT	C20-C13-C14	-3.53	117.98	122.92
23	G	201	BCR	C15-C16-C17	3.53	130.70	123.47
18	2	305	CHL	C4D-CHA-C1A	3.53	125.54	121.25
19	B	808	CLA	CHD-C1D-ND	-3.52	121.22	124.45
23	B	844	BCR	C16-C15-C14	3.52	130.69	123.47
19	B	812	CLA	CHD-C1D-ND	-3.51	121.22	124.45
23	A	851	BCR	C30-C25-C24	3.51	125.72	115.78
23	B	847	BCR	C37-C22-C21	-3.51	118.01	122.92
19	3	303	CLA	CHD-C1D-ND	-3.51	121.23	124.45
19	B	838	CLA	C4D-CHA-C1A	3.51	125.52	121.25
23	3	317	BCR	C37-C22-C23	3.50	123.60	118.08
23	J	103	BCR	C1-C6-C7	3.50	125.69	115.78
19	K	201	CLA	CHD-C1D-ND	-3.50	121.23	124.45
19	A	823	CLA	CHD-C1D-ND	-3.50	121.24	124.45
19	A	823	CLA	C4D-CHA-C1A	3.50	125.51	121.25
23	3	317	BCR	C30-C25-C24	3.50	125.68	115.78
19	3	301	CLA	CHD-C1D-ND	-3.50	121.24	124.45
19	5	301	CLA	CHD-C1D-ND	-3.49	121.24	124.45
23	L	304	BCR	C24-C23-C22	3.49	131.51	126.23
18	2	306	CHL	CHD-C1D-ND	-3.49	121.25	124.45
18	5	305	CHL	C4D-CHA-C1A	3.49	125.50	121.25
23	B	846	BCR	C12-C13-C14	3.49	124.30	118.94
20	J	101	LUT	C32-C33-C34	3.49	124.30	118.94
19	B	811	CLA	C4D-CHA-C1A	3.49	125.49	121.25
19	5	303	CLA	CHD-C1D-ND	-3.48	121.25	124.45
18	2	306	CHL	C4D-CHA-C1A	3.48	125.49	121.25
19	A	817	CLA	C4D-CHA-C1A	3.48	125.48	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	A	841	CLA	C4D-CHA-C1A	3.47	125.47	121.25
20	3	316	LUT	C39-C29-C30	-3.47	118.07	122.92
19	B	818	CLA	CHD-C1D-ND	-3.46	121.27	124.45
19	B	835	CLA	CHD-C1D-ND	-3.46	121.27	124.45
23	2	319	BCR	C12-C13-C14	3.46	124.25	118.94
19	3	313	CLA	CHD-C1D-ND	-3.46	121.27	124.45
23	B	848	BCR	C12-C13-C14	3.46	124.25	118.94
19	F	303	CLA	C4D-CHA-C1A	3.46	125.46	121.25
19	L	302	CLA	CHD-C1D-ND	-3.46	121.28	124.45
19	B	822	CLA	C4D-CHA-C1A	3.45	125.45	121.25
19	B	823	CLA	C1-O2A-CGA	3.45	125.50	116.44
19	B	841	CLA	C4D-CHA-C1A	3.45	125.45	121.25
19	B	834	CLA	CHD-C1D-ND	-3.44	121.29	124.45
23	M	101	BCR	C37-C22-C21	-3.44	118.10	122.92
19	5	310	CLA	C4D-CHA-C1A	3.44	125.43	121.25
23	B	847	BCR	C34-C9-C10	-3.44	118.11	122.92
19	3	305	CLA	C4D-CHA-C1A	3.44	125.43	121.25
19	6	305	CLA	C4D-CHA-C1A	3.43	125.43	121.25
23	K	205	BCR	C36-C18-C17	-3.43	118.11	122.92
23	J	103	BCR	C1-C6-C5	-3.43	117.78	122.61
23	L	304	BCR	C30-C25-C24	3.43	125.47	115.78
19	A	842	CLA	C4D-CHA-C1A	3.42	125.41	121.25
23	5	317	BCR	C8-C9-C10	3.42	124.19	118.94
19	F	303	CLA	CHD-C1D-ND	-3.42	121.31	124.45
23	K	204	BCR	C16-C15-C14	3.42	130.48	123.47
23	A	851	BCR	C37-C22-C23	3.42	123.47	118.08
18	5	306	CHL	CHD-C1D-ND	-3.42	121.31	124.45
23	A	852	BCR	C38-C26-C25	3.41	128.36	124.53
23	3	317	BCR	C1-C6-C7	3.41	125.43	115.78
19	A	827	CLA	C4D-CHA-C1A	3.41	125.40	121.25
19	B	817	CLA	C4D-CHA-C1A	3.41	125.40	121.25
20	2	316	LUT	C39-C29-C30	-3.41	118.14	122.92
19	3	312	CLA	CHD-C1D-ND	-3.41	121.32	124.45
19	5	307	CLA	C4D-CHA-C1A	3.41	125.40	121.25
18	3	306	CHL	C4D-CHA-C1A	3.41	125.39	121.25
19	A	839	CLA	CHD-C1D-ND	-3.40	121.33	124.45
23	5	317	BCR	C30-C25-C24	3.40	125.40	115.78
19	2	304	CLA	CHD-C1D-ND	-3.40	121.33	124.45
20	6	315	LUT	C15-C35-C34	3.40	130.44	123.47
19	B	812	CLA	C4D-CHA-C1A	3.40	125.39	121.25
23	J	103	BCR	C36-C18-C17	-3.40	118.16	122.92
20	5	316	LUT	C39-C29-C28	3.40	123.43	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	G	201	BCR	C33-C5-C6	3.40	128.34	124.53
19	A	814	CLA	C4D-CHA-C1A	3.40	125.38	121.25
19	A	822	CLA	CHD-C1D-ND	-3.40	121.33	124.45
23	I	101	BCR	C15-C16-C17	3.39	130.42	123.47
23	B	845	BCR	C35-C13-C14	-3.39	118.17	122.92
19	L	303	CLA	CHD-C1D-ND	-3.39	121.34	124.45
19	G	204	CLA	CHD-C1D-ND	-3.39	121.34	124.45
23	L	304	BCR	C29-C30-C25	3.38	115.69	110.48
23	M	101	BCR	C15-C16-C17	3.38	130.40	123.47
20	2	317	LUT	C30-C31-C32	3.38	133.76	123.22
18	5	313	CHL	CHD-C1D-ND	-3.38	121.35	124.45
19	A	840	CLA	C4D-CHA-C1A	3.38	125.36	121.25
19	A	840	CLA	CHD-C1D-ND	-3.38	121.35	124.45
19	B	834	CLA	C4D-CHA-C1A	3.38	125.36	121.25
23	J	103	BCR	C38-C26-C25	3.38	128.32	124.53
19	A	816	CLA	CHD-C1D-ND	-3.37	121.35	124.45
19	K	202	CLA	C4D-CHA-C1A	3.37	125.35	121.25
23	5	317	BCR	C33-C5-C6	3.37	128.31	124.53
19	6	313	CLA	CHD-C1D-ND	-3.37	121.36	124.45
19	A	809	CLA	CHD-C1D-ND	-3.37	121.36	124.45
19	B	820	CLA	CHD-C1D-ND	-3.36	121.36	124.45
19	B	836	CLA	C4D-CHA-C1A	3.36	125.34	121.25
20	3	316	LUT	C12-C13-C14	3.36	124.10	118.94
20	3	315	LUT	C39-C29-C28	3.36	123.37	118.08
19	A	825	CLA	C4D-CHA-C1A	3.36	125.34	121.25
20	J	101	LUT	C1-C6-C7	3.36	125.29	115.78
20	5	316	LUT	C12-C13-C14	3.36	124.10	118.94
19	L	302	CLA	C4D-CHA-C1A	3.36	125.34	121.25
19	B	822	CLA	CHD-C1D-ND	-3.36	121.37	124.45
19	B	804	CLA	CHD-C1D-ND	-3.36	121.37	124.45
19	B	806	CLA	CHD-C1D-ND	-3.35	121.37	124.45
18	2	314	CHL	C4D-CHA-C1A	3.35	125.33	121.25
23	B	845	BCR	C16-C15-C14	3.35	130.33	123.47
19	6	302	CLA	CHD-C1D-ND	-3.35	121.38	124.45
19	A	833	CLA	C4D-CHA-C1A	3.34	125.32	121.25
19	L	303	CLA	C4D-CHA-C1A	3.34	125.32	121.25
23	L	304	BCR	C37-C22-C23	3.34	123.34	118.08
19	6	314	CLA	CHD-C1D-ND	-3.34	121.38	124.45
23	L	305	BCR	C16-C15-C14	3.34	130.32	123.47
19	A	809	CLA	C4D-CHA-C1A	3.34	125.31	121.25
19	A	812	CLA	CHD-C1D-ND	-3.34	121.39	124.45
20	6	318	LUT	C20-C13-C14	-3.34	118.25	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	5	312	CLA	CHD-C1D-ND	-3.33	121.39	124.45
19	B	811	CLA	CHD-C1D-ND	-3.33	121.39	124.45
23	K	205	BCR	C16-C15-C14	3.33	130.30	123.47
19	3	304	CLA	C4D-CHA-C1A	3.33	125.30	121.25
23	L	305	BCR	C35-C13-C14	-3.33	118.26	122.92
19	3	304	CLA	CHD-C1D-ND	-3.32	121.40	124.45
19	2	313	CLA	C4D-CHA-C1A	3.32	125.29	121.25
23	B	845	BCR	C36-C18-C17	-3.32	118.27	122.92
23	2	319	BCR	C1-C6-C5	-3.32	117.93	122.61
19	6	302	CLA	C4D-CHA-C1A	3.32	125.29	121.25
18	2	305	CHL	CHD-C1D-ND	-3.32	121.41	124.45
19	3	311	CLA	C4D-CHA-C1A	3.32	125.28	121.25
20	2	317	LUT	C12-C13-C14	3.32	124.03	118.94
18	5	305	CHL	CHD-C1D-ND	-3.32	121.41	124.45
19	J	102	CLA	CHD-C1D-ND	-3.32	121.41	124.45
20	2	315	LUT	C39-C29-C28	3.31	123.30	118.08
19	2	304	CLA	C4D-CHA-C1A	3.31	125.28	121.25
23	L	304	BCR	C33-C5-C6	3.31	128.25	124.53
23	A	848	BCR	C36-C18-C17	-3.31	118.28	122.92
23	A	849	BCR	C15-C16-C17	3.31	130.26	123.47
19	A	820	CLA	C4D-CHA-C1A	3.31	125.28	121.25
19	3	312	CLA	C4D-CHA-C1A	3.31	125.28	121.25
19	5	311	CLA	C4D-CHA-C1A	3.31	125.28	121.25
19	3	301	CLA	C4D-CHA-C1A	3.31	125.27	121.25
19	3	310	CLA	C4D-CHA-C1A	3.31	125.27	121.25
19	A	819	CLA	C4D-CHA-C1A	3.31	125.27	121.25
20	5	316	LUT	C8-C9-C10	3.30	124.01	118.94
18	2	301	CHL	CHD-C1D-ND	-3.30	121.42	124.45
19	A	815	CLA	CHD-C1D-ND	-3.30	121.42	124.45
20	3	315	LUT	C1-C6-C7	3.30	125.11	115.78
19	A	815	CLA	C4D-CHA-C1A	3.30	125.26	121.25
23	K	205	BCR	C35-C13-C14	-3.30	118.31	122.92
19	A	818	CLA	C4D-CHA-C1A	3.29	125.26	121.25
19	A	811	CLA	CHD-C1D-ND	-3.29	121.43	124.45
19	B	835	CLA	C4D-CHA-C1A	3.29	125.25	121.25
18	6	301	CHL	CHD-C1D-ND	-3.29	121.43	124.45
19	G	204	CLA	C4D-CHA-C1A	3.29	125.25	121.25
19	L	301	CLA	CHD-C1D-ND	-3.28	121.44	124.45
23	J	103	BCR	C35-C13-C14	-3.28	118.33	122.92
19	3	313	CLA	C4D-CHA-C1A	3.28	125.24	121.25
19	B	833	CLA	CHD-C1D-ND	-3.28	121.44	124.45
19	F	304	CLA	CHD-C1D-ND	-3.28	121.44	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	B	818	CLA	C4D-CHA-C1A	3.28	125.24	121.25
19	A	841	CLA	CHD-C1D-ND	-3.27	121.44	124.45
19	5	307	CLA	CHD-C1D-ND	-3.27	121.45	124.45
23	M	101	BCR	C33-C5-C6	3.27	128.20	124.53
23	A	848	BCR	C1-C6-C7	3.27	125.03	115.78
19	A	824	CLA	C4D-CHA-C1A	3.27	125.22	121.25
19	B	821	CLA	CHD-C1D-ND	-3.27	121.45	124.45
19	K	201	CLA	C4D-CHA-C1A	3.27	125.22	121.25
19	5	301	CLA	C4D-CHA-C1A	3.26	125.22	121.25
18	2	314	CHL	CHD-C1D-ND	-3.26	121.46	124.45
19	A	808	CLA	CHD-C1D-ND	-3.26	121.46	124.45
19	B	832	CLA	CHD-C1D-ND	-3.26	121.46	124.45
23	A	848	BCR	C2-C1-C6	3.26	115.50	110.48
23	L	304	BCR	C30-C25-C26	-3.26	118.03	122.61
19	6	314	CLA	C4D-CHA-C1A	3.25	125.21	121.25
18	3	314	CHL	C4D-CHA-C1A	3.25	125.21	121.25
19	2	309	CLA	CHD-C1D-ND	-3.25	121.47	124.45
19	A	811	CLA	C4D-CHA-C1A	3.25	125.21	121.25
20	5	315	LUT	C40-C33-C34	-3.25	118.37	122.92
19	A	810	CLA	C4D-CHA-C1A	3.25	125.20	121.25
19	2	302	CLA	C4D-CHA-C1A	3.24	125.20	121.25
19	B	813	CLA	C4D-CHA-C1A	3.24	125.20	121.25
23	G	205	BCR	C30-C25-C24	3.24	124.94	115.78
19	2	310	CLA	CHD-C1D-ND	-3.24	121.48	124.45
19	B	801	CLA	C4D-CHA-C1A	3.24	125.19	121.25
23	L	304	BCR	C15-C16-C17	3.24	130.10	123.47
19	F	304	CLA	C4D-CHA-C1A	3.24	125.19	121.25
19	J	102	CLA	C4D-CHA-C1A	3.23	125.18	121.25
19	6	307	CLA	CAA-C2A-C1A	3.23	122.55	111.97
19	B	831	CLA	C4D-CHA-C1A	3.22	125.17	121.25
19	5	303	CLA	C4D-CHA-C1A	3.22	125.17	121.25
23	A	849	BCR	C38-C26-C25	3.22	128.14	124.53
19	B	814	CLA	C4D-CHA-C1A	3.22	125.17	121.25
19	5	309	CLA	C4D-CHA-C1A	3.21	125.16	121.25
18	5	304	CHL	CHD-C1D-ND	-3.21	121.50	124.45
20	3	316	LUT	C1-C6-C7	3.21	124.87	115.78
23	F	305	BCR	C38-C26-C25	3.21	128.14	124.53
19	3	303	CLA	C4D-CHA-C1A	3.21	125.16	121.25
23	A	848	BCR	C7-C8-C9	3.21	131.09	126.23
19	B	805	CLA	CHD-C1D-ND	-3.21	121.50	124.45
19	A	836	CLA	CHD-C1D-ND	-3.21	121.51	124.45
23	A	851	BCR	C29-C30-C25	3.20	115.41	110.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	2	319	BCR	C33-C5-C6	3.20	128.12	124.53
19	A	826	CLA	CHA-C1A-NA	-3.20	119.08	126.40
19	B	806	CLA	C4D-CHA-C1A	3.19	125.13	121.25
19	B	821	CLA	C4D-CHA-C1A	3.19	125.13	121.25
23	L	304	BCR	C34-C9-C8	3.19	123.10	118.08
19	6	312	CLA	C4D-CHA-C1A	3.19	125.13	121.25
23	G	205	BCR	C36-C18-C17	-3.19	118.46	122.92
19	B	813	CLA	CHD-C1D-ND	-3.18	121.53	124.45
18	6	306	CHL	CHD-C1D-ND	-3.18	121.53	124.45
19	6	311	CLA	CHD-C1D-ND	-3.18	121.53	124.45
23	F	305	BCR	C1-C6-C5	-3.18	118.13	122.61
19	6	303	CLA	C4D-CHA-C1A	3.17	125.11	121.25
23	B	844	BCR	C35-C13-C14	-3.17	118.48	122.92
19	B	829	CLA	CHD-C1D-ND	-3.17	121.54	124.45
18	2	320	CHL	C4D-CHA-C1A	3.17	125.10	121.25
19	B	824	CLA	CHD-C1D-ND	-3.17	121.54	124.45
20	6	315	LUT	C8-C9-C10	3.17	123.80	118.94
19	A	838	CLA	C4D-CHA-C1A	3.17	125.10	121.25
19	A	833	CLA	CHD-C1D-ND	-3.17	121.55	124.45
19	6	310	CLA	C4D-CHA-C1A	3.16	125.10	121.25
19	B	832	CLA	C4D-CHA-C1A	3.16	125.10	121.25
19	A	813	CLA	C4D-CHA-C1A	3.16	125.09	121.25
23	3	317	BCR	C35-C13-C14	-3.16	118.50	122.92
23	2	319	BCR	C15-C16-C17	3.16	129.94	123.47
19	5	310	CLA	CHD-C1D-ND	-3.15	121.56	124.45
23	K	204	BCR	C33-C5-C6	3.15	128.07	124.53
23	B	847	BCR	C37-C22-C23	3.15	123.04	118.08
23	A	850	BCR	C36-C18-C17	-3.15	118.51	122.92
18	5	304	CHL	C4D-CHA-C1A	3.15	125.08	121.25
19	2	311	CLA	C4D-CHA-C1A	3.15	125.08	121.25
23	L	305	BCR	C36-C18-C17	-3.15	118.51	122.92
18	6	301	CHL	C4D-CHA-C1A	3.15	125.08	121.25
19	A	843	CLA	CHD-C1D-ND	-3.15	121.56	124.45
23	A	848	BCR	C1-C6-C5	-3.14	118.19	122.61
19	B	815	CLA	CHD-C1D-ND	-3.14	121.57	124.45
23	M	101	BCR	C35-C13-C14	-3.14	118.53	122.92
23	B	847	BCR	C35-C13-C14	-3.13	118.53	122.92
18	5	306	CHL	C4D-CHA-C1A	3.13	125.06	121.25
19	A	801	CLA	C4D-CHA-C1A	3.13	125.06	121.25
19	2	312	CLA	CHD-C1D-ND	-3.13	121.58	124.45
19	2	312	CLA	C4A-NA-C1A	3.13	108.11	106.71
19	K	202	CLA	CHD-C1D-ND	-3.13	121.58	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	M	101	BCR	C37-C22-C23	3.13	123.00	118.08
20	5	316	LUT	C1-C6-C7	3.12	124.62	115.78
19	3	307	CLA	C4D-CHA-C1A	3.12	125.05	121.25
23	A	851	BCR	C30-C25-C26	-3.12	118.22	122.61
19	A	829	CLA	C4D-CHA-C1A	3.12	125.05	121.25
23	K	204	BCR	C35-C13-C14	-3.12	118.56	122.92
23	A	849	BCR	C36-C18-C17	-3.12	118.56	122.92
23	L	304	BCR	C36-C18-C17	-3.12	118.56	122.92
23	K	205	BCR	C19-C18-C17	3.12	123.72	118.94
23	J	103	BCR	C7-C8-C9	3.11	130.94	126.23
19	A	834	CLA	C4D-CHA-C1A	3.11	125.04	121.25
20	6	318	LUT	C8-C9-C10	3.11	123.72	118.94
23	I	101	BCR	C34-C9-C8	3.11	122.98	118.08
19	B	810	CLA	C4D-CHA-C1A	3.11	125.04	121.25
19	B	840	CLA	C4D-CHA-C1A	3.11	125.03	121.25
20	6	318	LUT	C39-C29-C30	-3.11	118.57	122.92
19	3	309	CLA	CHD-C1D-ND	-3.11	121.60	124.45
19	5	302	CLA	C4D-CHA-C1A	3.10	125.03	121.25
19	F	301	CLA	C4D-CHA-C1A	3.10	125.02	121.25
19	A	826	CLA	C4A-NA-C1A	3.10	108.10	106.71
19	2	310	CLA	C4D-CHA-C1A	3.10	125.02	121.25
19	6	305	CLA	CHD-C1D-ND	-3.10	121.61	124.45
19	A	821	CLA	C4D-CHA-C1A	3.10	125.02	121.25
23	B	848	BCR	C38-C26-C25	3.10	128.01	124.53
23	G	201	BCR	C37-C22-C23	3.10	122.95	118.08
19	2	312	CLA	C4D-CHA-C1A	3.09	125.02	121.25
19	B	831	CLA	CHD-C1D-ND	-3.09	121.61	124.45
19	G	203	CLA	CHD-C1D-ND	-3.09	121.61	124.45
23	L	305	BCR	C37-C22-C23	3.09	122.95	118.08
23	B	846	BCR	C38-C26-C25	3.09	128.00	124.53
19	K	203	CLA	C4D-CHA-C1A	3.09	125.01	121.25
23	A	851	BCR	C15-C16-C17	3.09	129.79	123.47
19	A	803	CLA	CHA-C1A-NA	-3.09	119.33	126.40
19	6	307	CLA	C4A-NA-C1A	3.09	108.09	106.71
19	6	310	CLA	CHD-C1D-ND	-3.08	121.62	124.45
23	A	852	BCR	C33-C5-C6	3.08	127.99	124.53
20	6	315	LUT	C20-C13-C14	-3.08	118.61	122.92
23	K	204	BCR	C36-C18-C17	-3.08	118.61	122.92
23	B	848	BCR	C7-C8-C9	3.07	130.88	126.23
19	5	309	CLA	CHD-C1D-ND	-3.07	121.63	124.45
23	B	845	BCR	C33-C5-C6	3.07	127.98	124.53
19	3	309	CLA	C4D-CHA-C1A	3.07	124.99	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	F	305	BCR	C36-C18-C17	-3.07	118.62	122.92
23	J	103	BCR	C19-C18-C17	3.07	123.65	118.94
20	2	316	LUT	C15-C35-C34	3.07	129.76	123.47
19	B	825	CLA	CAA-C2A-C3A	-3.07	104.38	112.78
23	F	302	BCR	C36-C18-C17	-3.07	118.63	122.92
23	3	317	BCR	C1-C6-C5	-3.07	118.30	122.61
23	B	844	BCR	C37-C22-C23	3.06	122.91	118.08
19	6	307	CLA	CHA-C1A-NA	-3.06	119.39	126.40
19	B	829	CLA	C4D-CHA-C1A	3.06	124.97	121.25
23	A	851	BCR	C36-C18-C17	-3.06	118.64	122.92
23	G	205	BCR	C35-C13-C14	-3.06	118.64	122.92
23	A	848	BCR	C35-C13-C14	-3.05	118.64	122.92
19	B	816	CLA	C4D-CHA-C1A	3.05	124.97	121.25
19	A	806	CLA	C4D-CHA-C1A	3.05	124.96	121.25
19	A	843	CLA	C4D-CHA-C1A	3.05	124.96	121.25
19	A	832	CLA	C4D-CHA-C1A	3.05	124.96	121.25
19	L	301	CLA	C4D-CHA-C1A	3.05	124.96	121.25
20	2	315	LUT	C8-C9-C10	3.05	123.62	118.94
23	3	317	BCR	C30-C25-C26	-3.05	118.32	122.61
19	A	813	CLA	CHD-C1D-ND	-3.05	121.65	124.45
19	K	201	CLA	C4A-NA-C1A	3.05	108.08	106.71
19	A	822	CLA	C4D-CHA-C1A	3.04	124.95	121.25
20	3	315	LUT	C11-C10-C9	3.04	131.65	127.31
19	3	308	CLA	C4D-CHA-C1A	3.04	124.95	121.25
23	G	205	BCR	C30-C25-C26	-3.04	118.33	122.61
23	G	205	BCR	C16-C15-C14	3.04	129.70	123.47
23	A	851	BCR	C35-C13-C14	-3.04	118.66	122.92
19	5	314	CLA	C4D-CHA-C1A	3.04	124.95	121.25
23	F	302	BCR	C34-C9-C8	3.04	122.86	118.08
19	A	834	CLA	CHD-C1D-ND	-3.04	121.66	124.45
19	5	312	CLA	C4D-CHA-C1A	3.03	124.94	121.25
19	A	842	CLA	CHD-C1D-ND	-3.03	121.67	124.45
20	J	101	LUT	C20-C13-C14	-3.03	118.68	122.92
18	2	320	CHL	CHD-C1D-ND	-3.03	121.67	124.45
19	B	815	CLA	C4D-CHA-C1A	3.03	124.93	121.25
19	6	313	CLA	C4D-CHA-C1A	3.03	124.93	121.25
23	5	317	BCR	C30-C25-C26	-3.03	118.35	122.61
19	B	837	CLA	CHD-C1D-ND	-3.03	121.67	124.45
19	B	828	CLA	C4D-CHA-C1A	3.02	124.93	121.25
19	5	314	CLA	CGD-CBD-CAD	3.02	120.52	110.73
18	6	306	CHL	C4D-CHA-C1A	3.02	124.93	121.25
23	B	845	BCR	C12-C13-C14	3.02	123.58	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	6	307	CLA	C4D-CHA-C1A	3.02	124.92	121.25
19	B	823	CLA	C4D-CHA-C1A	3.02	124.92	121.25
23	M	101	BCR	C16-C15-C14	3.02	129.66	123.47
23	I	101	BCR	C36-C18-C17	-3.01	118.70	122.92
19	2	308	CLA	C4D-CHA-C1A	3.01	124.92	121.25
23	F	302	BCR	C33-C5-C6	3.01	127.91	124.53
19	B	816	CLA	CHD-C1D-ND	-3.01	121.69	124.45
19	A	830	CLA	C4D-CHA-C1A	3.01	124.91	121.25
23	L	305	BCR	C34-C9-C8	3.01	122.81	118.08
23	B	844	BCR	C24-C25-C26	3.01	128.74	121.46
23	L	304	BCR	C35-C13-C14	-3.00	118.72	122.92
20	3	315	LUT	C19-C9-C10	-3.00	118.72	122.92
23	A	848	BCR	C38-C26-C25	3.00	127.90	124.53
20	5	315	LUT	C20-C13-C14	-3.00	118.72	122.92
20	3	315	LUT	C15-C35-C34	3.00	129.61	123.47
19	2	303	CLA	C4D-CHA-C1A	2.99	124.89	121.25
23	L	304	BCR	C7-C8-C9	2.99	130.75	126.23
19	B	807	CLA	C4D-CHA-C1A	2.99	124.89	121.25
20	6	315	LUT	C35-C15-C14	2.99	129.60	123.47
19	B	828	CLA	CHD-C1D-ND	-2.99	121.71	124.45
19	B	823	CLA	CHA-C1A-NA	-2.98	119.56	126.40
20	5	315	LUT	C32-C33-C34	2.98	123.52	118.94
23	A	849	BCR	C35-C13-C14	-2.98	118.74	122.92
23	A	852	BCR	C35-C13-C14	-2.98	118.75	122.92
19	5	308	CLA	C4D-CHA-C1A	2.98	124.87	121.25
19	B	807	CLA	CHD-C1D-ND	-2.98	121.72	124.45
23	B	848	BCR	C36-C18-C17	-2.97	118.76	122.92
19	A	808	CLA	C4D-CHA-C1A	2.97	124.87	121.25
18	3	306	CHL	CHA-C1A-NA	-2.97	119.59	126.40
19	A	801	CLA	CHD-C1D-ND	-2.97	121.73	124.45
19	F	301	CLA	CHD-C1D-ND	-2.97	121.73	124.45
19	5	314	CLA	CHD-C1D-ND	-2.97	121.73	124.45
23	G	201	BCR	C35-C13-C14	-2.97	118.77	122.92
19	A	838	CLA	CHA-C1A-NA	-2.97	119.61	126.40
23	M	101	BCR	C36-C18-C17	-2.96	118.77	122.92
19	A	819	CLA	CHD-C1D-ND	-2.96	121.73	124.45
23	G	201	BCR	C36-C18-C17	-2.96	118.78	122.92
23	A	849	BCR	C16-C15-C14	2.96	129.54	123.47
19	B	810	CLA	CHA-C1A-NA	-2.96	119.63	126.40
19	A	836	CLA	C4D-CHA-C1A	2.95	124.84	121.25
18	2	307	CHL	CHD-C1D-ND	-2.95	121.74	124.45
19	B	825	CLA	C4D-CHA-C1A	2.94	124.83	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	B	847	BCR	C33-C5-C6	2.94	127.83	124.53
19	3	311	CLA	CAA-C2A-C3A	-2.94	104.73	112.78
19	K	201	CLA	CHA-C1A-NA	-2.94	119.67	126.40
19	A	830	CLA	CHA-C1A-NA	-2.93	119.68	126.40
18	2	307	CHL	C4D-CHA-C1A	2.92	124.80	121.25
19	L	301	CLA	CHA-C1A-NA	-2.92	119.72	126.40
23	J	103	BCR	C12-C13-C14	2.92	123.42	118.94
19	A	803	CLA	CHD-C1D-ND	-2.91	121.78	124.45
23	A	849	BCR	C34-C9-C8	2.91	122.67	118.08
23	2	319	BCR	C24-C25-C26	2.91	128.52	121.46
19	A	821	CLA	CHD-C1D-ND	-2.91	121.78	124.45
23	F	302	BCR	C7-C8-C9	2.91	130.63	126.23
19	B	820	CLA	C4D-CHA-C1A	2.91	124.79	121.25
23	L	305	BCR	C15-C16-C17	2.91	129.43	123.47
19	6	308	CLA	CHD-C1D-ND	-2.90	121.79	124.45
20	2	316	LUT	C31-C30-C29	2.90	131.45	127.31
19	A	832	CLA	CHD-C1D-ND	-2.90	121.79	124.45
23	A	852	BCR	C37-C22-C23	2.90	122.64	118.08
23	5	317	BCR	C36-C18-C17	-2.90	118.86	122.92
19	B	828	CLA	CHA-C1A-NA	-2.89	119.77	126.40
23	B	846	BCR	C33-C5-C6	2.89	127.78	124.53
23	M	101	BCR	C38-C26-C25	2.89	127.78	124.53
18	2	307	CHL	CHA-C1A-NA	-2.89	119.77	126.40
23	G	205	BCR	C29-C30-C25	2.89	114.93	110.48
23	A	848	BCR	C19-C18-C17	2.89	123.38	118.94
23	A	849	BCR	C33-C5-C6	2.89	127.77	124.53
23	A	850	BCR	C35-C13-C14	-2.89	118.88	122.92
19	B	827	CLA	CHA-C1A-NA	-2.89	119.78	126.40
24	A	802	CL0	CHA-C1A-NA	-2.89	119.78	126.40
20	6	318	LUT	C12-C13-C14	2.89	123.37	118.94
23	K	204	BCR	C24-C25-C26	2.89	128.46	121.46
19	2	309	CLA	CHA-C1A-NA	-2.89	119.79	126.40
20	3	315	LUT	C7-C8-C9	2.89	130.60	126.23
18	2	301	CHL	CHA-C1A-NA	-2.89	119.79	126.40
23	A	848	BCR	C34-C9-C8	2.88	122.62	118.08
19	A	840	CLA	CHA-C1A-NA	-2.88	119.80	126.40
20	6	315	LUT	C39-C29-C28	2.88	122.62	118.08
19	B	802	CLA	CHA-C1A-NA	-2.88	119.80	126.40
19	6	309	CLA	C4D-CHA-C1A	2.88	124.75	121.25
19	B	823	CLA	C4A-NA-C1A	2.88	108.00	106.71
19	2	311	CLA	CHD-C1D-ND	-2.87	121.81	124.45
19	B	804	CLA	CHA-C1A-NA	-2.87	119.82	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	A	817	CLA	C4A-NA-C1A	2.87	108.00	106.71
19	6	308	CLA	C4D-CHA-C1A	2.87	124.75	121.25
18	5	304	CHL	CHA-C1A-NA	-2.87	119.82	126.40
19	B	825	CLA	CHA-C1A-NA	-2.87	119.82	126.40
23	F	305	BCR	C35-C13-C14	-2.87	118.90	122.92
19	A	833	CLA	CHA-C1A-NA	-2.86	119.84	126.40
23	B	845	BCR	C19-C18-C17	2.86	123.33	118.94
23	3	317	BCR	C36-C18-C17	-2.86	118.91	122.92
19	2	312	CLA	CHA-C1A-NA	-2.86	119.84	126.40
19	3	304	CLA	CHA-C1A-NA	-2.86	119.84	126.40
23	A	852	BCR	C19-C18-C17	2.86	123.33	118.94
23	A	850	BCR	C19-C18-C17	2.86	123.33	118.94
23	I	101	BCR	C33-C5-C6	2.86	127.73	124.53
19	A	821	CLA	CHA-C1A-NA	-2.85	119.87	126.40
19	A	815	CLA	CHA-C1A-NA	-2.85	119.87	126.40
19	B	833	CLA	CHA-C1A-NA	-2.84	119.88	126.40
19	B	803	CLA	CHA-C1A-NA	-2.84	119.88	126.40
23	5	317	BCR	C10-C11-C12	2.84	132.09	123.22
19	6	308	CLA	CHA-C1A-NA	-2.84	119.89	126.40
23	5	317	BCR	C15-C16-C17	2.84	129.30	123.47
23	B	845	BCR	C38-C26-C25	2.84	127.72	124.53
19	A	834	CLA	CHA-C1A-NA	-2.84	119.90	126.40
20	2	317	LUT	C8-C9-C10	2.84	123.29	118.94
20	6	315	LUT	C40-C33-C34	-2.84	118.95	122.92
18	2	320	CHL	CHA-C1A-NA	-2.84	119.91	126.40
19	F	301	CLA	CHA-C1A-NA	-2.83	119.91	126.40
19	B	816	CLA	CHA-C1A-NA	-2.83	119.92	126.40
19	B	810	CLA	CHD-C1D-ND	-2.83	121.85	124.45
23	K	205	BCR	C12-C13-C14	2.83	123.28	118.94
19	B	818	CLA	CHA-C1A-NA	-2.82	119.93	126.40
19	B	832	CLA	CHA-C1A-NA	-2.82	119.94	126.40
18	6	301	CHL	CHA-C1A-NA	-2.82	119.94	126.40
19	3	310	CLA	CHA-C1A-NA	-2.82	119.94	126.40
19	A	801	CLA	CHA-C1A-NA	-2.82	119.94	126.40
19	A	817	CLA	CHA-C1A-NA	-2.82	119.94	126.40
19	B	823	CLA	CHD-C1D-ND	-2.82	121.87	124.45
19	B	801	CLA	CHA-C1A-NA	-2.82	119.95	126.40
19	3	302	CLA	CHA-C1A-NA	-2.81	119.95	126.40
23	3	317	BCR	C15-C16-C17	2.81	129.24	123.47
19	B	837	CLA	CHA-C1A-NA	-2.81	119.97	126.40
19	B	839	CLA	CHA-C1A-NA	-2.81	119.97	126.40
19	B	821	CLA	CHA-C1A-NA	-2.81	119.97	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	2	311	CLA	CHA-C1A-NA	-2.80	119.97	126.40
19	A	814	CLA	CHD-C1D-ND	-2.80	121.88	124.45
20	J	101	LUT	C30-C31-C32	2.80	131.96	123.22
18	6	306	CHL	CHA-C1A-NA	-2.80	119.99	126.40
19	A	804	CLA	CHA-C1A-NA	-2.80	119.99	126.40
19	G	203	CLA	C4D-CHA-C1A	2.80	124.65	121.25
19	B	836	CLA	CHA-C1A-NA	-2.79	120.00	126.40
19	B	802	CLA	CHD-C1D-ND	-2.79	121.89	124.45
23	L	305	BCR	C12-C13-C14	2.79	123.23	118.94
19	A	829	CLA	CHA-C1A-NA	-2.79	120.00	126.40
18	5	306	CHL	CHA-C1A-NA	-2.79	120.01	126.40
19	B	826	CLA	C4D-CHA-C1A	2.79	124.64	121.25
23	B	848	BCR	C34-C9-C8	2.79	122.47	118.08
19	B	813	CLA	CHA-C1A-NA	-2.79	120.01	126.40
19	B	824	CLA	CHA-C1A-NA	-2.79	120.01	126.40
23	A	850	BCR	C38-C26-C25	2.79	127.66	124.53
19	2	313	CLA	CHA-C1A-NA	-2.79	120.02	126.40
19	J	102	CLA	CHA-C1A-NA	-2.79	120.02	126.40
18	2	306	CHL	CHA-C1A-NA	-2.78	120.03	126.40
19	A	814	CLA	CHA-C1A-NA	-2.78	120.03	126.40
19	L	303	CLA	CHA-C1A-NA	-2.78	120.03	126.40
18	5	306	CHL	C2C-C3C-C4C	2.78	108.47	106.49
19	B	807	CLA	CHA-C1A-NA	-2.78	120.03	126.40
20	2	316	LUT	C20-C13-C14	-2.78	119.03	122.92
20	6	318	LUT	C7-C6-C5	2.78	128.19	121.46
19	A	843	CLA	CHA-C1A-NA	-2.77	120.05	126.40
19	3	312	CLA	CHA-C1A-NA	-2.77	120.06	126.40
19	B	840	CLA	CAA-CBA-CGA	2.77	121.35	113.25
23	A	852	BCR	C24-C25-C26	2.77	128.17	121.46
18	2	305	CHL	CHA-C1A-NA	-2.77	120.06	126.40
19	B	814	CLA	CHA-C1A-NA	-2.77	120.06	126.40
19	6	311	CLA	O2D-CGD-CBD	2.77	116.18	111.27
20	3	315	LUT	C40-C33-C34	-2.76	119.05	122.92
23	L	304	BCR	C16-C15-C14	2.76	129.13	123.47
23	5	317	BCR	C29-C30-C25	2.76	114.73	110.48
19	A	819	CLA	CHA-C1A-NA	-2.76	120.07	126.40
19	A	824	CLA	CHA-C1A-NA	-2.76	120.08	126.40
20	6	318	LUT	C10-C11-C12	2.76	131.83	123.22
19	5	314	CLA	CHA-C1A-NA	-2.76	120.08	126.40
18	5	305	CHL	CHA-C1A-NA	-2.76	120.08	126.40
19	5	302	CLA	CHD-C1D-ND	-2.76	121.92	124.45
19	3	309	CLA	CHA-C1A-NA	-2.75	120.09	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	A	840	CLA	C4A-NA-C1A	2.75	107.94	106.71
23	I	101	BCR	C35-C13-C14	-2.75	119.07	122.92
19	A	838	CLA	CHD-C1D-ND	-2.75	121.93	124.45
19	B	815	CLA	CHA-C1A-NA	-2.75	120.10	126.40
19	B	809	CLA	C4D-CHA-C1A	2.75	124.59	121.25
19	A	832	CLA	CHA-C1A-NA	-2.74	120.11	126.40
19	B	812	CLA	CHA-C1A-NA	-2.74	120.12	126.40
23	B	844	BCR	C33-C5-C6	2.74	127.61	124.53
23	A	852	BCR	C36-C18-C17	-2.74	119.08	122.92
18	3	306	CHL	C2C-C3C-C4C	2.74	108.44	106.49
19	6	310	CLA	CHA-C1A-NA	-2.74	120.12	126.40
19	B	809	CLA	CHD-C1D-ND	-2.74	121.93	124.45
19	A	809	CLA	CHA-C1A-NA	-2.74	120.12	126.40
19	3	305	CLA	CHA-C1A-NA	-2.74	120.13	126.40
19	B	805	CLA	C4D-CHA-C1A	2.74	124.58	121.25
19	B	820	CLA	CHA-C1A-NA	-2.74	120.13	126.40
19	B	806	CLA	CHA-C1A-NA	-2.73	120.14	126.40
20	J	101	LUT	C12-C13-C14	2.73	123.14	118.94
23	B	847	BCR	C12-C13-C14	2.73	123.13	118.94
19	5	303	CLA	CHA-C1A-NA	-2.73	120.14	126.40
19	3	303	CLA	CHA-C1A-NA	-2.73	120.14	126.40
19	B	822	CLA	CHA-C1A-NA	-2.73	120.14	126.40
19	5	309	CLA	CHA-C1A-NA	-2.73	120.15	126.40
19	6	311	CLA	CHA-C1A-NA	-2.73	120.15	126.40
19	B	817	CLA	CHA-C1A-NA	-2.73	120.15	126.40
19	F	303	CLA	CHA-C1A-NA	-2.72	120.16	126.40
19	A	842	CLA	CHA-C1A-NA	-2.72	120.16	126.40
19	B	805	CLA	CHA-C1A-NA	-2.72	120.16	126.40
19	A	825	CLA	CHA-C1A-NA	-2.72	120.16	126.40
19	A	823	CLA	CHA-C1A-NA	-2.72	120.17	126.40
19	6	302	CLA	CHA-C1A-NA	-2.72	120.17	126.40
23	I	101	BCR	C38-C26-C25	2.72	127.58	124.53
19	6	305	CLA	CHA-C1A-NA	-2.72	120.17	126.40
19	5	301	CLA	CHA-C1A-NA	-2.72	120.17	126.40
19	A	836	CLA	CHA-C1A-NA	-2.72	120.18	126.40
19	5	307	CLA	CHA-C1A-NA	-2.71	120.18	126.40
19	2	310	CLA	CHA-C1A-NA	-2.71	120.18	126.40
23	G	201	BCR	C7-C6-C5	2.71	128.03	121.46
19	A	813	CLA	CHA-C1A-NA	-2.71	120.20	126.40
20	5	316	LUT	C10-C11-C12	2.71	131.67	123.22
20	3	316	LUT	C31-C30-C29	2.71	131.17	127.31
19	B	827	CLA	C4D-CHA-C1A	2.71	124.54	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	A	831	CLA	CHA-C1A-NA	-2.70	120.20	126.40
19	G	204	CLA	CHA-C1A-NA	-2.70	120.21	126.40
23	A	851	BCR	C16-C15-C14	2.70	129.01	123.47
19	3	302	CLA	CHD-C1D-ND	-2.70	121.97	124.45
19	2	302	CLA	CHA-C1A-NA	-2.70	120.22	126.40
19	B	830	CLA	C4D-CHA-C1A	2.70	124.53	121.25
19	A	837	CLA	CHA-C1A-NA	-2.70	120.23	126.40
19	2	304	CLA	CHA-C1A-NA	-2.69	120.23	126.40
19	A	816	CLA	CHA-C1A-NA	-2.69	120.23	126.40
23	F	302	BCR	C37-C22-C23	2.69	122.32	118.08
23	B	844	BCR	C36-C18-C17	-2.69	119.15	122.92
19	A	811	CLA	CHA-C1A-NA	-2.69	120.24	126.40
19	B	831	CLA	CHA-C1A-NA	-2.69	120.24	126.40
19	B	830	CLA	CHA-C1A-NA	-2.69	120.24	126.40
19	5	302	CLA	CHA-C1A-NA	-2.69	120.24	126.40
20	6	318	LUT	C40-C33-C34	-2.69	119.16	122.92
19	G	203	CLA	CHA-C1A-NA	-2.69	120.25	126.40
19	3	310	CLA	CHD-C1D-ND	-2.68	121.99	124.45
19	2	309	CLA	C4D-CHA-C1A	2.68	124.51	121.25
19	A	818	CLA	CHA-C1A-NA	-2.68	120.26	126.40
20	2	316	LUT	C18-C5-C6	2.68	127.54	124.53
23	J	103	BCR	C24-C25-C26	2.68	127.95	121.46
19	3	301	CLA	CHA-C1A-NA	-2.68	120.27	126.40
19	6	304	CLA	CHA-C1A-NA	-2.67	120.27	126.40
19	A	828	CLA	CHA-C1A-NA	-2.67	120.27	126.40
19	A	833	CLA	CMB-C2B-C1B	-2.67	124.36	128.46
19	6	309	CLA	CHA-C1A-NA	-2.67	120.28	126.40
23	B	848	BCR	C24-C25-C26	2.67	127.93	121.46
19	A	822	CLA	CHA-C1A-NA	-2.67	120.28	126.40
19	B	804	CLA	C4D-CHA-C1A	2.67	124.50	121.25
19	3	313	CLA	CHA-C1A-NA	-2.67	120.29	126.40
20	3	316	LUT	C8-C9-C10	2.67	123.03	118.94
23	G	205	BCR	C19-C18-C17	2.66	123.03	118.94
19	A	808	CLA	CHA-C1A-NA	-2.66	120.30	126.40
19	K	203	CLA	CHA-C1A-NA	-2.66	120.30	126.40
19	2	308	CLA	CHA-C1A-NA	-2.66	120.30	126.40
18	2	301	CHL	C4D-CHA-C1A	2.66	124.49	121.25
19	A	812	CLA	C4D-CHA-C1A	2.66	124.49	121.25
19	B	835	CLA	CHA-C1A-NA	-2.66	120.31	126.40
19	B	814	CLA	CHD-C1D-ND	-2.66	122.01	124.45
20	J	101	LUT	C35-C15-C14	2.66	128.91	123.47
19	5	310	CLA	CHA-C1A-NA	-2.65	120.32	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	F	304	CLA	CHA-C1A-NA	-2.65	120.32	126.40
20	5	316	LUT	C40-C33-C34	-2.65	119.21	122.92
19	6	314	CLA	CHA-C1A-NA	-2.65	120.33	126.40
19	K	202	CLA	CHA-C1A-NA	-2.65	120.33	126.40
18	5	313	CHL	CHA-C1A-NA	-2.65	120.33	126.40
19	B	827	CLA	CHD-C1D-ND	-2.65	122.02	124.45
19	A	803	CLA	CMB-C2B-C1B	-2.64	124.40	128.46
19	3	311	CLA	CHA-C1A-NA	-2.64	120.34	126.40
19	A	841	CLA	CHA-C1A-NA	-2.64	120.35	126.40
19	B	836	CLA	CMB-C2B-C1B	-2.64	124.41	128.46
19	3	308	CLA	CHA-C1A-NA	-2.64	120.36	126.40
19	6	313	CLA	CHA-C1A-NA	-2.64	120.36	126.40
23	5	317	BCR	C7-C6-C5	2.64	127.85	121.46
19	A	839	CLA	CHA-C1A-NA	-2.64	120.36	126.40
19	B	829	CLA	CHA-C1A-NA	-2.64	120.36	126.40
19	L	301	CLA	C4A-NA-C1A	2.64	107.89	106.71
19	5	308	CLA	CHA-C1A-NA	-2.63	120.37	126.40
23	2	319	BCR	C19-C18-C17	2.63	122.98	118.94
23	B	845	BCR	C34-C9-C8	2.63	122.22	118.08
23	3	317	BCR	C12-C13-C14	2.63	122.98	118.94
23	G	201	BCR	C24-C25-C26	2.63	127.83	121.46
18	2	314	CHL	CHA-C1A-NA	-2.63	120.38	126.40
23	A	851	BCR	C34-C9-C8	2.63	122.21	118.08
20	3	316	LUT	C40-C33-C34	-2.62	119.25	122.92
19	B	819	CLA	CHA-C1A-NA	-2.62	120.39	126.40
23	J	103	BCR	C2-C1-C6	2.62	114.52	110.48
18	2	314	CHL	C2C-C3C-C4C	2.62	108.36	106.49
19	A	812	CLA	CHA-C1A-NA	-2.62	120.40	126.40
19	3	310	CLA	C4A-NA-C1A	2.62	107.88	106.71
19	B	811	CLA	CHA-C1A-NA	-2.62	120.40	126.40
19	B	801	CLA	CHD-C1D-ND	-2.62	122.05	124.45
19	3	307	CLA	CHA-C1A-NA	-2.62	120.41	126.40
19	L	302	CLA	CHA-C1A-NA	-2.62	120.41	126.40
19	B	841	CLA	CHA-C1A-NA	-2.62	120.41	126.40
19	B	808	CLA	CHA-C1A-NA	-2.61	120.41	126.40
19	B	842	CLA	CHA-C1A-NA	-2.61	120.41	126.40
20	2	316	LUT	C40-C33-C34	-2.61	119.27	122.92
23	I	101	BCR	C24-C23-C22	2.61	130.18	126.23
23	L	304	BCR	C19-C18-C17	2.61	122.94	118.94
18	3	314	CHL	CHA-C1A-NA	-2.61	120.43	126.40
19	F	301	CLA	C4A-NA-C1A	2.60	107.88	106.71
19	A	810	CLA	CHA-C1A-NA	-2.60	120.45	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	B	846	BCR	C8-C9-C10	2.60	122.93	118.94
20	5	315	LUT	C39-C29-C28	2.59	122.16	118.08
23	A	849	BCR	C24-C25-C26	2.59	127.74	121.46
19	B	834	CLA	CHA-C1A-NA	-2.59	120.47	126.40
19	J	102	CLA	C4A-NA-C1A	2.58	107.87	106.71
19	6	312	CLA	CHA-C1A-NA	-2.58	120.49	126.40
23	M	101	BCR	C12-C13-C14	2.58	122.90	118.94
23	A	849	BCR	C19-C18-C17	2.58	122.90	118.94
20	3	315	LUT	C20-C13-C14	-2.58	119.31	122.92
19	B	838	CLA	CHA-C1A-NA	-2.58	120.50	126.40
20	2	315	LUT	C10-C11-C12	2.58	131.25	123.22
19	5	312	CLA	CHA-C1A-NA	-2.58	120.50	126.40
23	F	305	BCR	C33-C5-C6	2.57	127.42	124.53
27	A	853	LMU	O1B-C4'-C3'	2.57	114.13	107.28
19	A	805	CLA	CHA-C1A-NA	-2.57	120.51	126.40
20	2	315	LUT	C40-C33-C34	-2.57	119.32	122.92
23	L	305	BCR	C19-C18-C17	2.57	122.88	118.94
19	A	835	CLA	CHA-C1A-NA	-2.57	120.52	126.40
23	J	103	BCR	C21-C20-C19	2.56	131.22	123.22
23	B	844	BCR	C12-C13-C14	2.56	122.86	118.94
19	6	303	CLA	CHA-C1A-NA	-2.56	120.54	126.40
19	A	822	CLA	CMB-C2B-C1B	-2.55	124.54	128.46
19	5	314	CLA	O2D-CGD-O1D	-2.55	118.85	123.84
19	B	802	CLA	C4D-CHA-C1A	2.55	124.35	121.25
23	K	204	BCR	C12-C13-C14	2.54	122.85	118.94
19	B	818	CLA	C1-O2A-CGA	2.54	123.12	116.44
19	A	830	CLA	CHD-C1D-ND	-2.54	122.12	124.45
23	A	850	BCR	C33-C5-C6	2.54	127.38	124.53
19	5	311	CLA	CHA-C1A-NA	-2.54	120.58	126.40
20	5	316	LUT	C31-C30-C29	2.54	130.94	127.31
19	A	807	CLA	CHA-C1A-NA	-2.54	120.58	126.40
18	2	305	CHL	C2C-C3C-C4C	2.54	108.30	106.49
23	F	302	BCR	C35-C13-C14	-2.54	119.37	122.92
19	2	303	CLA	CHA-C1A-NA	-2.54	120.59	126.40
19	B	826	CLA	CHA-C1A-NA	-2.54	120.59	126.40
19	B	833	CLA	C4A-NA-C1A	2.53	107.84	106.71
23	B	847	BCR	C36-C18-C17	-2.53	119.38	122.92
19	A	819	CLA	CAC-C3C-C4C	2.53	128.09	124.81
18	3	306	CHL	CMB-C2B-C1B	-2.53	124.58	128.46
19	A	806	CLA	CHA-C1A-NA	-2.53	120.61	126.40
19	2	311	CLA	C4A-NA-C1A	2.53	107.84	106.71
19	A	826	CLA	C4D-CHA-C1A	2.53	124.32	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	A	849	BCR	C12-C13-C14	2.52	122.80	118.94
19	A	831	CLA	C4D-CHA-C1A	2.52	124.31	121.25
19	A	820	CLA	CHA-C1A-NA	-2.51	120.65	126.40
19	B	801	CLA	C4A-NA-C1A	2.51	107.83	106.71
19	B	821	CLA	C4A-NA-C1A	2.51	107.83	106.71
19	B	840	CLA	CHA-C1A-NA	-2.51	120.65	126.40
20	3	315	LUT	C7-C6-C5	-2.51	115.39	121.46
23	F	302	BCR	C19-C18-C17	2.51	122.79	118.94
19	B	837	CLA	CMB-C2B-C1B	-2.51	124.61	128.46
23	A	851	BCR	C19-C18-C17	2.51	122.78	118.94
23	F	302	BCR	C24-C25-C26	2.50	127.52	121.46
23	M	101	BCR	C7-C6-C5	2.50	127.51	121.46
19	B	818	CLA	O2A-C1-C2	-2.49	102.08	108.64
23	L	305	BCR	C24-C23-C22	2.49	130.00	126.23
19	A	838	CLA	CMB-C2B-C1B	-2.49	124.64	128.46
18	3	314	CHL	O2D-CGD-CBD	2.49	115.69	111.27
20	6	318	LUT	C15-C35-C34	2.49	128.56	123.47
19	3	304	CLA	C4A-NA-C1A	2.48	107.82	106.71
21	6	316	XAT	C8-C9-C10	-2.48	115.13	118.94
19	6	307	CLA	CHD-C1D-ND	-2.48	122.17	124.45
23	2	319	BCR	C8-C9-C10	2.48	122.75	118.94
19	5	311	CLA	CAA-C2A-C3A	-2.48	105.99	112.78
20	2	316	LUT	C35-C15-C14	2.48	128.55	123.47
18	2	305	CHL	C1C-C2C-C3C	-2.47	105.15	107.11
19	A	821	CLA	C4A-NA-C1A	2.47	107.82	106.71
23	A	850	BCR	C34-C9-C8	2.47	121.97	118.08
20	2	315	LUT	C31-C30-C29	2.47	130.84	127.31
19	6	314	CLA	O2D-CGD-CBD	2.47	115.66	111.27
18	2	301	CHL	C4A-NA-C1A	2.46	107.81	106.71
20	5	316	LUT	C1-C6-C5	-2.46	119.15	122.61
23	F	305	BCR	C15-C16-C17	2.46	128.51	123.47
23	K	205	BCR	C30-C25-C26	-2.46	119.15	122.61
23	L	304	BCR	C7-C6-C5	2.46	127.42	121.46
20	J	101	LUT	C7-C6-C5	-2.46	115.50	121.46
20	6	315	LUT	C12-C13-C14	2.46	122.71	118.94
23	I	101	BCR	C19-C18-C17	2.45	122.71	118.94
19	2	313	CLA	C4A-NA-C1A	2.45	107.81	106.71
19	A	838	CLA	C4A-NA-C1A	2.45	107.81	106.71
19	L	303	CLA	C4A-NA-C1A	2.45	107.81	106.71
19	A	807	CLA	CMB-C2B-C1B	-2.45	124.70	128.46
20	3	315	LUT	C35-C15-C14	2.45	128.49	123.47
18	6	301	CHL	C2C-C3C-C4C	2.45	108.23	106.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	A	827	CLA	CHA-C1A-NA	-2.45	120.79	126.40
19	B	809	CLA	CHA-C1A-NA	-2.45	120.79	126.40
18	5	304	CHL	C2C-C3C-C4C	2.44	108.23	106.49
19	B	825	CLA	C4A-NA-C1A	2.44	107.80	106.71
23	A	851	BCR	C12-C13-C14	2.44	122.69	118.94
19	A	803	CLA	C2A-C1A-CHA	2.44	128.12	123.86
23	K	204	BCR	C19-C18-C17	2.44	122.68	118.94
23	L	305	BCR	C29-C30-C25	2.44	114.23	110.48
21	6	316	XAT	C11-C10-C9	2.43	130.78	127.31
23	A	848	BCR	C16-C15-C14	2.43	128.46	123.47
23	A	849	BCR	C7-C8-C9	2.43	129.91	126.23
19	2	309	CLA	CMB-C2B-C1B	-2.43	124.73	128.46
19	A	825	CLA	CHD-C1D-C2D	2.43	130.58	125.48
23	K	204	BCR	C15-C16-C17	2.43	128.45	123.47
20	3	316	LUT	C1-C6-C5	-2.43	119.19	122.61
18	2	307	CHL	C4A-NA-C1A	2.43	107.80	106.71
23	A	848	BCR	C24-C25-C26	2.43	127.34	121.46
19	B	804	CLA	CMB-C2B-C1B	-2.42	124.74	128.46
23	K	204	BCR	C7-C6-C5	2.42	127.33	121.46
23	F	305	BCR	C37-C22-C23	2.42	121.89	118.08
23	B	844	BCR	C1-C6-C5	-2.42	119.20	122.61
20	J	101	LUT	C1-C6-C5	-2.42	119.21	122.61
19	B	824	CLA	C4D-CHA-C1A	2.42	124.19	121.25
19	A	803	CLA	C4A-NA-C1A	2.42	107.79	106.71
18	2	306	CHL	O2D-CGD-CBD	2.41	115.56	111.27
19	A	815	CLA	C4A-NA-C1A	2.41	107.79	106.71
19	3	308	CLA	CMB-C2B-C1B	-2.41	124.76	128.46
19	A	820	CLA	CMB-C2B-C1B	-2.41	124.76	128.46
19	A	838	CLA	CAA-C2A-C1A	2.41	119.86	111.97
23	B	845	BCR	C7-C6-C5	2.41	127.29	121.46
23	F	305	BCR	C19-C18-C17	2.40	122.63	118.94
19	A	828	CLA	C4A-NA-C1A	2.40	107.78	106.71
19	B	813	CLA	C4A-NA-C1A	2.40	107.78	106.71
19	B	824	CLA	C2A-C1A-CHA	2.40	128.05	123.86
19	A	826	CLA	C1D-ND-C4D	2.39	108.04	106.33
19	B	801	CLA	O2A-C1-C2	-2.39	102.34	108.64
23	A	848	BCR	C12-C13-C14	2.39	122.61	118.94
23	L	304	BCR	C12-C13-C14	2.38	122.60	118.94
19	A	828	CLA	C1D-ND-C4D	2.38	108.03	106.33
23	5	317	BCR	C37-C22-C23	2.38	121.83	118.08
18	3	306	CHL	CAA-C2A-C1A	2.37	119.76	111.97
23	B	848	BCR	C37-C22-C23	2.37	121.82	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	6	315	LUT	C32-C33-C34	2.37	122.58	118.94
18	5	306	CHL	C4A-NA-C1A	2.36	107.77	106.71
19	B	840	CLA	CAA-C2A-C3A	-2.36	106.31	112.78
23	K	204	BCR	C34-C9-C8	2.36	121.80	118.08
23	M	101	BCR	C19-C18-C17	2.36	122.57	118.94
23	B	844	BCR	C15-C16-C17	2.36	128.31	123.47
20	3	316	LUT	C7-C6-C5	-2.36	115.75	121.46
19	B	804	CLA	C2A-C1A-CHA	2.36	127.98	123.86
23	K	205	BCR	C23-C22-C21	2.36	122.56	118.94
19	5	308	CLA	CMB-C2B-C1B	-2.35	124.84	128.46
18	5	304	CHL	C4A-NA-C1A	2.35	107.76	106.71
18	5	304	CHL	C1C-C2C-C3C	-2.35	105.25	107.11
19	B	827	CLA	C4A-NA-C1A	2.35	107.76	106.71
19	A	826	CLA	C2A-C1A-CHA	2.34	127.96	123.86
19	A	806	CLA	CMB-C2B-C1B	-2.34	124.86	128.46
20	3	315	LUT	C1-C6-C5	-2.34	119.32	122.61
23	3	317	BCR	C29-C30-C25	2.34	114.08	110.48
19	3	307	CLA	CHD-C1D-C2D	2.33	130.38	125.48
19	B	806	CLA	CMB-C2B-C1B	-2.33	124.88	128.46
18	3	314	CHL	CMB-C2B-C1B	-2.33	124.88	128.46
23	L	305	BCR	C24-C25-C26	2.33	127.10	121.46
23	G	201	BCR	C19-C18-C17	2.33	122.51	118.94
23	B	846	BCR	C29-C30-C25	2.32	114.06	110.48
19	B	810	CLA	C4A-NA-C1A	2.32	107.75	106.71
18	3	314	CHL	C2C-C3C-C4C	2.32	108.14	106.49
19	A	843	CLA	C4A-NA-C1A	2.32	107.75	106.71
18	3	306	CHL	C4A-NA-C1A	2.32	107.75	106.71
19	3	308	CLA	CHD-C1D-C2D	2.31	130.34	125.48
23	K	204	BCR	C29-C30-C25	2.31	114.03	110.48
19	A	824	CLA	CHD-C1D-C2D	2.30	130.31	125.48
23	G	201	BCR	C12-C13-C14	2.30	122.48	118.94
18	2	307	CHL	C2C-C3C-C4C	2.30	108.13	106.49
23	A	852	BCR	C12-C13-C14	2.30	122.47	118.94
19	3	301	CLA	CMB-C2B-C1B	-2.30	124.93	128.46
19	A	826	CLA	CHD-C1D-ND	-2.29	122.34	124.45
23	B	848	BCR	C19-C18-C17	2.29	122.46	118.94
19	B	840	CLA	CHD-C1D-C2D	2.29	130.28	125.48
19	A	815	CLA	CMB-C2B-C1B	-2.29	124.95	128.46
19	A	820	CLA	CHD-C1D-C2D	2.29	130.28	125.48
18	2	301	CHL	C2C-C3C-C4C	2.29	108.12	106.49
18	6	306	CHL	C2C-C3C-C4C	2.28	108.12	106.49
19	6	307	CLA	C1D-ND-C4D	2.28	107.96	106.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	A	807	CLA	CHD-C1D-C2D	2.28	130.26	125.48
23	B	844	BCR	C8-C9-C10	2.28	122.44	118.94
23	A	852	BCR	C7-C6-C5	2.28	126.98	121.46
19	B	830	CLA	CHD-C1D-C2D	2.27	130.25	125.48
19	3	302	CLA	C4D-CHA-C1A	2.27	124.01	121.25
23	G	205	BCR	C12-C13-C14	2.27	122.42	118.94
19	A	835	CLA	CMB-C2B-C1B	-2.27	124.98	128.46
18	5	305	CHL	C4A-NA-C1A	2.27	107.72	106.71
23	F	302	BCR	C29-C30-C25	2.26	113.97	110.48
23	F	305	BCR	C12-C13-C14	2.26	122.42	118.94
18	2	305	CHL	C4A-NA-C1A	2.26	107.72	106.71
25	A	844	PQN	C11-C3-C4	-2.26	116.08	118.50
19	B	819	CLA	CMB-C2B-C1B	-2.26	124.99	128.46
19	A	817	CLA	CHD-C1D-C2D	2.26	130.22	125.48
23	3	317	BCR	C24-C25-C26	-2.26	115.99	121.46
20	5	315	LUT	C12-C13-C14	2.26	122.40	118.94
23	B	846	BCR	C7-C6-C5	2.25	126.92	121.46
18	5	304	CHL	CMB-C2B-C1B	-2.25	125.00	128.46
19	A	828	CLA	CHD-C1D-C2D	2.25	130.21	125.48
19	6	313	CLA	CAA-C2A-C3A	-2.25	106.61	112.78
23	A	851	BCR	C24-C25-C26	-2.25	116.01	121.46
19	A	824	CLA	CMD-C2D-C1D	2.25	128.68	124.71
23	A	852	BCR	C34-C9-C8	2.25	121.62	118.08
19	6	309	CLA	CMB-C2B-C1B	-2.25	125.01	128.46
20	6	318	LUT	C28-C29-C30	-2.24	115.50	118.94
23	B	845	BCR	C10-C11-C12	2.24	130.22	123.22
19	B	805	CLA	CMB-C2B-C1B	-2.24	125.02	128.46
19	B	803	CLA	C2A-C1A-CHA	2.24	127.77	123.86
23	2	319	BCR	C23-C24-C25	2.24	133.49	127.20
19	A	801	CLA	CMB-C2B-C1B	-2.24	125.02	128.46
18	2	306	CHL	C4A-NA-C1A	2.24	107.71	106.71
18	5	305	CHL	C2C-C3C-C4C	2.24	108.08	106.49
19	B	830	CLA	CMB-C2B-C1B	-2.23	125.03	128.46
19	A	816	CLA	CMB-C2B-C1B	-2.23	125.03	128.46
19	B	832	CLA	CMB-C2B-C1B	-2.23	125.03	128.46
19	A	823	CLA	C4A-NA-C1A	2.23	107.71	106.71
19	B	810	CLA	C1D-ND-C4D	2.23	107.92	106.33
18	5	313	CHL	C2C-C3C-C4C	2.23	108.08	106.49
19	A	811	CLA	CMB-C2B-C1B	-2.23	125.04	128.46
19	2	309	CLA	C1D-ND-C4D	2.23	107.92	106.33
19	A	830	CLA	CMB-C2B-C1B	-2.23	125.04	128.46
23	B	848	BCR	C33-C5-C6	2.23	127.03	124.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	6	312	CLA	CHD-C1D-C2D	2.23	130.16	125.48
20	3	315	LUT	C31-C30-C29	2.23	130.49	127.31
23	M	101	BCR	C24-C25-C26	2.22	126.85	121.46
19	A	806	CLA	CHD-C1D-C2D	2.22	130.14	125.48
23	3	317	BCR	C19-C18-C17	2.22	122.35	118.94
19	3	309	CLA	C4A-NA-C1A	2.22	107.70	106.71
19	A	837	CLA	CHD-C1D-C2D	2.22	130.13	125.48
23	F	302	BCR	C11-C10-C9	2.22	130.47	127.31
20	5	316	LUT	C7-C6-C5	-2.22	116.09	121.46
19	A	814	CLA	C4A-NA-C1A	2.22	107.70	106.71
19	L	301	CLA	CMB-C2B-C1B	-2.21	125.06	128.46
19	5	310	CLA	C4A-NA-C1A	2.21	107.70	106.71
19	B	839	CLA	C4A-NA-C1A	2.21	107.70	106.71
19	B	825	CLA	CHD-C1D-C2D	2.21	130.12	125.48
23	3	317	BCR	C34-C9-C8	2.21	121.56	118.08
19	B	827	CLA	CMB-C2B-C1B	-2.21	125.07	128.46
19	2	303	CLA	CHD-C1D-C2D	2.21	130.11	125.48
23	A	850	BCR	C29-C30-C25	2.21	113.88	110.48
19	2	313	CLA	CHD-C1D-C2D	2.21	130.10	125.48
19	B	826	CLA	CMB-C2B-C1B	-2.20	125.08	128.46
19	3	304	CLA	CMB-C2B-C1B	-2.20	125.09	128.46
18	2	320	CHL	C2C-C3C-C4C	2.20	108.06	106.49
27	A	853	LMU	O1B-C4'-C5'	-2.20	103.43	109.45
27	A	853	LMU	O3'-C3'-C2'	-2.20	105.27	110.35
23	B	844	BCR	C30-C25-C24	-2.19	109.57	115.78
19	5	311	CLA	CHD-C1D-C2D	2.19	130.08	125.48
19	3	303	CLA	CMB-C2B-C1B	-2.19	125.09	128.46
23	2	319	BCR	C7-C6-C5	2.19	126.77	121.46
23	2	319	BCR	C37-C22-C21	-2.19	119.85	122.92
19	2	303	CLA	CMB-C2B-C1B	-2.19	125.10	128.46
19	A	841	CLA	CMB-C2B-C1B	-2.19	125.10	128.46
20	2	316	LUT	C12-C13-C14	2.19	122.30	118.94
19	B	838	CLA	CHD-C1D-C2D	2.19	130.07	125.48
23	B	845	BCR	C24-C25-C26	2.19	126.76	121.46
20	2	316	LUT	C19-C9-C8	2.19	121.52	118.08
19	A	827	CLA	CHD-C1D-C2D	2.19	130.06	125.48
23	5	317	BCR	C19-C18-C17	2.18	122.29	118.94
23	F	305	BCR	C24-C25-C26	2.18	126.75	121.46
20	6	315	LUT	C31-C30-C29	2.18	130.42	127.31
19	B	826	CLA	CHD-C1D-C2D	2.18	130.06	125.48
19	A	808	CLA	CMB-C2B-C1B	-2.18	125.11	128.46
18	3	314	CHL	C1C-C2C-C3C	-2.18	105.39	107.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	A	813	CLA	CMB-C2B-C1B	-2.18	125.12	128.46
19	B	838	CLA	CMB-C2B-C1B	-2.18	125.12	128.46
23	5	317	BCR	C24-C25-C26	-2.18	116.19	121.46
18	6	301	CHL	C4A-NA-C1A	2.18	107.68	106.71
19	B	814	CLA	CMB-C2B-C1B	-2.17	125.12	128.46
19	B	816	CLA	CMB-C2B-C1B	-2.17	125.12	128.46
23	2	319	BCR	C10-C11-C12	2.17	130.00	123.22
19	6	304	CLA	CHD-C1D-C2D	2.17	130.04	125.48
19	A	831	CLA	CHD-C1D-ND	-2.17	122.46	124.45
23	3	317	BCR	C7-C6-C5	-2.17	116.20	121.46
20	6	318	LUT	C8-C7-C6	2.17	133.30	127.20
19	A	819	CLA	C1C-C2C-C3C	2.17	109.24	106.96
20	3	316	LUT	C10-C11-C12	2.17	129.98	123.22
23	G	205	BCR	C29-C28-C27	-2.17	106.53	111.38
19	A	813	CLA	C4A-NA-C1A	2.16	107.68	106.71
19	B	804	CLA	C1D-ND-C4D	2.16	107.87	106.33
19	B	802	CLA	CMB-C2B-C1B	-2.16	125.15	128.46
19	A	838	CLA	C1D-ND-C4D	2.16	107.87	106.33
19	5	301	CLA	CMB-C2B-C1B	-2.16	125.15	128.46
19	2	309	CLA	C2A-C1A-CHA	2.16	127.63	123.86
19	6	314	CLA	CED-O2D-CGD	2.15	120.81	115.94
18	3	314	CHL	CED-O2D-CGD	2.15	120.81	115.94
19	A	809	CLA	C4A-NA-C1A	2.15	107.67	106.71
23	A	850	BCR	C16-C15-C14	2.15	127.88	123.47
19	A	810	CLA	CMB-C2B-C1B	-2.15	125.16	128.46
19	5	303	CLA	C4A-NA-C1A	2.15	107.67	106.71
28	B	849	DGD	C1E-O6E-C5E	2.15	117.91	113.69
18	5	306	CHL	CMB-C2B-C1B	-2.15	125.16	128.46
18	2	306	CHL	C2C-C3C-C4C	2.15	108.02	106.49
19	5	307	CLA	C7-C6-C5	2.15	119.19	113.36
20	6	318	LUT	C32-C33-C34	2.15	122.23	118.94
19	A	817	CLA	CMB-C2B-C1B	-2.15	125.17	128.46
19	B	823	CLA	CMB-C2B-C1B	-2.14	125.17	128.46
19	L	302	CLA	CMB-C2B-C1B	-2.14	125.17	128.46
18	2	320	CHL	C1C-C2C-C3C	-2.14	105.41	107.11
23	2	319	BCR	C29-C30-C25	2.14	113.78	110.48
19	B	819	CLA	CHD-C1D-C2D	2.14	129.97	125.48
19	K	201	CLA	CAA-C2A-C1A	2.14	118.99	111.97
18	5	305	CHL	CMB-C2B-C1B	-2.14	125.17	128.46
23	B	847	BCR	C29-C30-C25	2.14	113.77	110.48
19	B	817	CLA	CMB-C2B-C1B	-2.14	125.18	128.46
19	G	204	CLA	CMB-C2B-C1B	-2.14	125.18	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	5	310	CLA	CMB-C2B-C1B	-2.14	125.18	128.46
20	2	315	LUT	C35-C34-C33	2.13	130.36	127.31
19	A	835	CLA	CHD-C1D-C2D	2.13	129.96	125.48
19	B	836	CLA	CHD-C1D-C2D	2.13	129.95	125.48
24	A	802	CL0	C4D-CHA-C1A	2.13	123.84	121.25
18	2	306	CHL	CMB-C2B-C1B	-2.13	125.19	128.46
19	5	307	CLA	C1D-ND-C4D	2.13	107.85	106.33
19	2	302	CLA	CMB-C2B-C1B	-2.13	125.19	128.46
19	3	311	CLA	CHD-C1D-C2D	2.13	129.95	125.48
19	A	822	CLA	CHD-C1D-C2D	2.13	129.94	125.48
19	2	310	CLA	C4A-NA-C1A	2.13	107.66	106.71
19	B	813	CLA	CMB-C2B-C1B	-2.12	125.20	128.46
19	A	804	CLA	CMB-C2B-C1B	-2.12	125.20	128.46
23	A	851	BCR	C33-C5-C6	2.12	126.91	124.53
19	2	302	CLA	CHD-C1D-C2D	2.12	129.93	125.48
19	B	829	CLA	CMB-C2B-C1B	-2.12	125.21	128.46
19	B	833	CLA	CMB-C2B-C1B	-2.12	125.21	128.46
23	K	205	BCR	C8-C9-C10	2.12	122.19	118.94
19	A	831	CLA	C4A-NA-C1A	2.12	107.66	106.71
19	3	303	CLA	CHD-C1D-C2D	2.11	129.92	125.48
19	B	834	CLA	CMB-C2B-C1B	-2.11	125.22	128.46
19	B	803	CLA	C4D-CHA-C1A	2.11	123.82	121.25
19	6	314	CLA	CMB-C2B-C1B	-2.11	125.22	128.46
19	2	304	CLA	CMB-C2B-C1B	-2.11	125.22	128.46
23	G	205	BCR	C24-C25-C26	-2.11	116.35	121.46
19	A	827	CLA	CMB-C2B-C1B	-2.11	125.22	128.46
23	F	305	BCR	C24-C23-C22	2.11	129.42	126.23
19	B	830	CLA	CMD-C2D-C1D	2.11	128.43	124.71
19	3	303	CLA	C4A-NA-C1A	2.11	107.65	106.71
19	B	837	CLA	C4A-NA-C1A	2.11	107.65	106.71
19	6	303	CLA	CHD-C1D-C2D	2.11	129.90	125.48
18	2	307	CHL	CMB-C2B-C1B	-2.10	125.23	128.46
19	5	303	CLA	CMB-C2B-C1B	-2.10	125.23	128.46
19	2	312	CLA	CAA-C2A-C1A	2.10	118.86	111.97
19	A	843	CLA	CMB-C2B-C1B	-2.10	125.24	128.46
19	5	314	CLA	CMB-C2B-C1B	-2.10	125.24	128.46
19	B	824	CLA	CMB-C2B-C1B	-2.10	125.24	128.46
19	A	833	CLA	C1D-ND-C4D	2.10	107.83	106.33
20	3	316	LUT	C35-C34-C33	2.10	130.30	127.31
19	B	825	CLA	CMB-C2B-C1B	-2.10	125.24	128.46
21	6	316	XAT	C6-C7-C8	-2.10	121.56	125.99
19	6	309	CLA	CHD-C1D-C2D	2.10	129.88	125.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	5	301	CLA	CHD-C1D-C2D	2.10	129.88	125.48
23	A	852	BCR	C30-C25-C24	-2.10	109.85	115.78
19	B	801	CLA	CAA-C2A-C1A	2.10	118.84	111.97
19	B	821	CLA	CMB-C2B-C1B	-2.09	125.25	128.46
19	K	203	CLA	CHD-C1D-C2D	2.09	129.87	125.48
23	K	204	BCR	C30-C25-C24	-2.09	109.86	115.78
19	L	301	CLA	CAA-C2A-C1A	2.09	118.83	111.97
23	G	201	BCR	C1-C6-C7	-2.09	109.86	115.78
18	3	314	CHL	CHD-C1D-C2D	2.09	129.87	125.48
19	A	814	CLA	CMB-C2B-C1B	-2.09	125.25	128.46
19	B	815	CLA	CMB-C2B-C1B	-2.09	125.25	128.46
19	3	301	CLA	CHD-C1D-C2D	2.09	129.86	125.48
23	K	204	BCR	C23-C24-C25	2.09	133.07	127.20
19	B	814	CLA	C4A-NA-C1A	2.09	107.64	106.71
19	A	810	CLA	CHD-C1D-C2D	2.08	129.85	125.48
23	5	317	BCR	C29-C28-C27	-2.08	106.73	111.38
19	6	307	CLA	C2A-C1A-CHA	2.08	127.50	123.86
19	F	304	CLA	CAA-C2A-C3A	-2.08	111.24	116.10
18	6	301	CHL	CMB-C2B-C1B	-2.08	125.27	128.46
19	6	305	CLA	CMB-C2B-C1B	-2.08	125.27	128.46
19	6	311	CLA	CED-O2D-CGD	2.08	120.64	115.94
20	6	315	LUT	C18-C5-C6	2.08	126.86	124.53
19	2	308	CLA	CMB-C2B-C1B	-2.08	125.27	128.46
19	B	820	CLA	CHD-C1D-C2D	2.08	129.84	125.48
19	B	810	CLA	CMB-C2B-C1B	-2.08	125.27	128.46
18	2	306	CHL	CED-O2D-CGD	2.08	120.63	115.94
19	2	311	CLA	CMB-C2B-C1B	-2.07	125.28	128.46
23	G	205	BCR	C23-C22-C21	2.07	122.12	118.94
19	6	302	CLA	CMB-C2B-C1B	-2.07	125.28	128.46
19	A	839	CLA	CMB-C2B-C1B	-2.07	125.28	128.46
19	F	303	CLA	CMB-C2B-C1B	-2.07	125.28	128.46
23	I	101	BCR	C7-C6-C5	2.07	126.48	121.46
19	L	303	CLA	CMB-C2B-C1B	-2.07	125.28	128.46
19	3	313	CLA	CHD-C1D-C2D	2.07	129.82	125.48
19	2	313	CLA	CMB-C2B-C1B	-2.07	125.28	128.46
19	A	804	CLA	C1D-ND-C4D	2.07	107.80	106.33
19	B	812	CLA	CHD-C1D-C2D	2.07	129.82	125.48
23	A	849	BCR	C7-C6-C5	2.07	126.47	121.46
23	J	103	BCR	C10-C11-C12	2.07	129.66	123.22
19	A	833	CLA	CMB-C2B-C3B	2.07	128.54	124.68
23	L	305	BCR	C10-C11-C12	2.07	129.66	123.22
19	6	302	CLA	CHD-C1D-C2D	2.06	129.81	125.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	A	804	CLA	CHD-C1D-C2D	2.06	129.81	125.48
19	3	307	CLA	C1D-ND-C4D	2.06	107.80	106.33
23	I	101	BCR	C24-C25-C26	2.06	126.45	121.46
19	6	314	CLA	CHD-C1D-C2D	2.06	129.80	125.48
19	B	842	CLA	CHD-C1D-C2D	2.06	129.80	125.48
19	6	303	CLA	CMB-C2B-C1B	-2.06	125.30	128.46
19	B	804	CLA	CAC-C3C-C4C	2.06	127.48	124.81
19	3	305	CLA	CHD-C1D-C2D	2.06	129.80	125.48
23	F	305	BCR	C34-C9-C8	2.06	121.32	118.08
19	5	308	CLA	CHD-C1D-C2D	2.06	129.79	125.48
19	B	812	CLA	CMB-C2B-C1B	-2.06	125.30	128.46
18	2	306	CHL	CHD-C1D-C2D	2.06	129.79	125.48
19	B	822	CLA	C4A-NA-C1A	2.05	107.63	106.71
23	F	302	BCR	C7-C6-C5	2.05	126.44	121.46
19	A	818	CLA	C1-O2A-CGA	2.05	121.83	116.44
19	3	312	CLA	CMB-C2B-C1B	-2.05	125.31	128.46
19	5	303	CLA	CHD-C1D-C2D	2.05	129.78	125.48
19	B	802	CLA	C1D-ND-C4D	2.05	107.79	106.33
18	3	306	CHL	CHD-C1D-C2D	2.05	129.78	125.48
19	2	308	CLA	CHD-C1D-C2D	2.05	129.78	125.48
23	J	103	BCR	C7-C6-C5	-2.05	116.50	121.46
23	L	304	BCR	C24-C25-C26	-2.05	116.50	121.46
20	J	101	LUT	C19-C9-C8	2.05	121.30	118.08
19	B	824	CLA	CHD-C1D-C2D	2.04	129.76	125.48
19	K	201	CLA	CMB-C2B-C1B	-2.04	125.32	128.46
23	B	846	BCR	C24-C25-C26	2.04	126.41	121.46
19	B	835	CLA	CHD-C1D-C2D	2.04	129.76	125.48
19	A	801	CLA	C2A-C1A-CHA	2.04	127.43	123.86
19	B	828	CLA	C2A-C1A-CHA	2.04	127.43	123.86
19	3	302	CLA	C4A-NA-C1A	2.04	107.62	106.71
19	2	304	CLA	CHD-C1D-C2D	2.04	129.76	125.48
23	G	205	BCR	C33-C5-C6	2.04	126.82	124.53
19	A	805	CLA	CMB-C2B-C1B	-2.04	125.33	128.46
19	B	808	CLA	CMB-C2B-C1B	-2.04	125.33	128.46
19	B	801	CLA	C1D-ND-C4D	2.04	107.78	106.33
19	B	802	CLA	C2A-C1A-CHA	2.04	127.42	123.86
19	A	805	CLA	CHD-C1D-C2D	2.04	129.75	125.48
19	B	839	CLA	CHD-C1D-C2D	2.03	129.75	125.48
19	B	801	CLA	CMB-C2B-C1B	-2.03	125.34	128.46
23	A	849	BCR	C37-C22-C23	2.03	121.28	118.08
19	2	303	CLA	CMD-C2D-C1D	2.03	128.30	124.71
19	3	304	CLA	CHD-C1D-C2D	2.03	129.74	125.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	6	311	CLA	CMB-C2B-C1B	-2.03	125.34	128.46
18	2	307	CHL	C2A-C1A-CHA	2.03	127.41	123.86
23	B	844	BCR	C20-C21-C22	2.03	130.21	127.31
19	K	203	CLA	CMB-C2B-C1B	-2.03	125.34	128.46
23	B	847	BCR	C24-C23-C22	2.03	129.30	126.23
19	B	839	CLA	CMB-C2B-C1B	-2.03	125.35	128.46
19	3	312	CLA	C4A-NA-C1A	2.03	107.62	106.71
23	B	847	BCR	C4-C5-C6	-2.03	119.79	122.73
19	6	309	CLA	C2A-C1A-CHA	2.02	127.40	123.86
23	I	101	BCR	C16-C15-C14	2.02	127.62	123.47
23	3	317	BCR	C2-C3-C4	-2.02	106.86	111.38
23	A	850	BCR	C12-C13-C14	2.02	122.04	118.94
19	A	809	CLA	CMB-C2B-C1B	-2.02	125.36	128.46
19	A	823	CLA	CHD-C1D-C2D	2.02	129.72	125.48
23	G	201	BCR	C16-C15-C14	2.02	127.61	123.47
19	A	816	CLA	C4A-NA-C1A	2.02	107.61	106.71
19	B	817	CLA	C4A-NA-C1A	2.02	107.61	106.71
19	G	204	CLA	C4A-NA-C1A	2.02	107.61	106.71
19	A	825	CLA	C1D-ND-C4D	2.02	107.77	106.33
19	3	305	CLA	C4A-NA-C1A	2.02	107.61	106.71
19	K	201	CLA	CHD-C1D-C2D	2.01	129.70	125.48
19	B	828	CLA	CMB-C2B-C1B	-2.01	125.37	128.46
19	B	818	CLA	CHD-C1D-C2D	2.01	129.70	125.48
19	A	833	CLA	C4A-NA-C1A	2.01	107.61	106.71
19	B	816	CLA	C4A-NA-C1A	2.01	107.61	106.71
23	B	848	BCR	C34-C9-C10	-2.01	120.11	122.92
19	B	810	CLA	C2A-C1A-CHA	2.01	127.37	123.86
23	A	850	BCR	C1-C6-C5	-2.01	119.79	122.61
19	B	834	CLA	CHD-C1D-C2D	2.01	129.69	125.48
19	A	829	CLA	CMB-C2B-C1B	-2.01	125.38	128.46
19	A	831	CLA	CMB-C2B-C1B	-2.01	125.38	128.46
20	2	315	LUT	C3-C4-C5	2.01	115.85	111.85
19	B	833	CLA	CAA-C2A-C1A	2.01	118.55	111.97
19	A	840	CLA	CMB-C2B-C1B	-2.00	125.39	128.46
19	2	304	CLA	C4A-NA-C1A	2.00	107.61	106.71
23	K	204	BCR	C37-C22-C23	2.00	121.23	118.08

All (148) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
18	6	301	CHL	NA
18	6	301	CHL	ND

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Mol	Chain	Res	Type	Atom
18	6	301	CHL	NC
18	6	306	CHL	NA
18	6	306	CHL	ND
18	6	306	CHL	NC
18	2	301	CHL	NA
18	2	301	CHL	ND
18	2	301	CHL	NC
18	2	305	CHL	NA
18	2	305	CHL	ND
18	2	305	CHL	NC
18	2	306	CHL	NA
18	2	306	CHL	ND
18	2	306	CHL	NC
18	2	307	CHL	NA
18	2	307	CHL	NC
18	2	314	CHL	NA
18	2	314	CHL	ND
18	2	314	CHL	NC
18	2	320	CHL	NA
18	2	320	CHL	ND
18	2	320	CHL	NC
18	3	306	CHL	NA
18	3	306	CHL	NC
18	3	314	CHL	NA
18	3	314	CHL	ND
18	3	314	CHL	NC
18	5	304	CHL	NA
18	5	304	CHL	ND
18	5	304	CHL	NC
18	5	305	CHL	NA
18	5	305	CHL	ND
18	5	305	CHL	NC
18	5	306	CHL	NA
18	5	306	CHL	ND
18	5	306	CHL	NC
18	5	313	CHL	NA
18	5	313	CHL	ND
18	5	313	CHL	NC
19	6	302	CLA	ND
19	6	303	CLA	ND
19	6	304	CLA	ND
19	6	305	CLA	ND

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Mol	Chain	Res	Type	Atom
19	6	307	CLA	ND
19	6	308	CLA	ND
19	6	309	CLA	ND
19	6	310	CLA	ND
19	6	311	CLA	ND
19	6	313	CLA	ND
19	6	314	CLA	ND
19	2	302	CLA	ND
19	2	303	CLA	ND
19	2	304	CLA	ND
19	2	308	CLA	ND
19	2	309	CLA	ND
19	2	310	CLA	ND
19	2	311	CLA	ND
19	2	313	CLA	ND
19	3	301	CLA	ND
19	3	302	CLA	ND
19	3	303	CLA	ND
19	3	304	CLA	ND
19	3	305	CLA	ND
19	3	307	CLA	ND
19	3	308	CLA	ND
19	3	309	CLA	ND
19	3	310	CLA	ND
19	3	312	CLA	ND
19	3	313	CLA	ND
19	5	302	CLA	ND
19	5	303	CLA	ND
19	5	307	CLA	ND
19	5	308	CLA	ND
19	5	309	CLA	ND
19	5	310	CLA	ND
19	5	312	CLA	ND
19	A	803	CLA	ND
19	A	804	CLA	ND
19	A	805	CLA	ND
19	A	806	CLA	ND
19	A	807	CLA	ND
19	A	808	CLA	ND
19	A	809	CLA	ND
19	A	810	CLA	ND
19	A	812	CLA	ND

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Mol	Chain	Res	Type	Atom
19	A	813	CLA	ND
19	A	814	CLA	ND
19	A	815	CLA	ND
19	A	816	CLA	ND
19	A	817	CLA	ND
19	A	820	CLA	ND
19	A	821	CLA	ND
19	A	824	CLA	ND
19	A	826	CLA	ND
19	A	827	CLA	ND
19	A	828	CLA	ND
19	A	829	CLA	ND
19	A	830	CLA	ND
19	A	834	CLA	ND
19	A	835	CLA	ND
19	A	837	CLA	ND
19	A	838	CLA	ND
19	A	839	CLA	ND
19	A	840	CLA	ND
19	A	841	CLA	ND
19	A	842	CLA	ND
19	A	843	CLA	ND
19	B	801	CLA	ND
19	B	802	CLA	ND
19	B	803	CLA	ND
19	B	804	CLA	ND
19	B	806	CLA	ND
19	B	807	CLA	ND
19	B	808	CLA	ND
19	B	809	CLA	ND
19	B	810	CLA	ND
19	B	811	CLA	ND
19	B	812	CLA	ND
19	B	814	CLA	ND
19	B	815	CLA	ND
19	B	818	CLA	ND
19	B	819	CLA	ND
19	B	821	CLA	ND
19	B	823	CLA	ND
19	B	825	CLA	ND
19	B	826	CLA	ND
19	B	827	CLA	ND

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Mol	Chain	Res	Type	Atom
19	B	828	CLA	ND
19	B	829	CLA	ND
19	B	832	CLA	ND
19	B	833	CLA	ND
19	B	835	CLA	ND
19	B	836	CLA	ND
19	B	837	CLA	ND
19	B	838	CLA	ND
19	B	839	CLA	ND
19	B	842	CLA	ND
19	F	301	CLA	ND
19	F	303	CLA	ND
19	F	304	CLA	ND
19	G	203	CLA	ND
19	G	204	CLA	ND
19	J	102	CLA	ND
19	K	202	CLA	ND
19	K	203	CLA	ND
19	L	301	CLA	ND
19	L	303	CLA	ND

All (764) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
18	2	306	CHL	CBD-CGD-O2D-CED
18	2	306	CHL	O1D-CGD-O2D-CED
18	3	314	CHL	CBD-CGD-O2D-CED
18	3	314	CHL	O1D-CGD-O2D-CED
19	6	311	CLA	CBD-CGD-O2D-CED
19	6	311	CLA	O1D-CGD-O2D-CED
19	6	314	CLA	CBD-CGD-O2D-CED
19	6	314	CLA	O1D-CGD-O2D-CED
19	2	309	CLA	C1A-C2A-CAA-CBA
19	2	309	CLA	C3A-C2A-CAA-CBA
19	2	310	CLA	CHA-CBD-CGD-O1D
19	2	310	CLA	CHA-CBD-CGD-O2D
19	3	307	CLA	CBA-CGA-O2A-C1
19	3	307	CLA	O1A-CGA-O2A-C1
19	3	307	CLA	C2-C3-C5-C6
19	3	307	CLA	C4-C3-C5-C6
19	3	309	CLA	CHA-CBD-CGD-O1D
19	3	309	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
19	3	313	CLA	CHA-CBD-CGD-O1D
19	3	313	CLA	CHA-CBD-CGD-O2D
19	3	313	CLA	CAD-CBD-CGD-O1D
19	5	307	CLA	C1A-C2A-CAA-CBA
19	5	307	CLA	C3A-C2A-CAA-CBA
19	5	308	CLA	C2-C3-C5-C6
19	5	308	CLA	C4-C3-C5-C6
19	5	309	CLA	CHA-CBD-CGD-O1D
19	5	309	CLA	CHA-CBD-CGD-O2D
19	5	310	CLA	C1A-C2A-CAA-CBA
19	5	310	CLA	C3A-C2A-CAA-CBA
19	5	312	CLA	CBA-CGA-O2A-C1
19	5	312	CLA	O1A-CGA-O2A-C1
19	5	312	CLA	CHA-CBD-CGD-O1D
19	5	312	CLA	CHA-CBD-CGD-O2D
19	5	314	CLA	CBD-CGD-O2D-CED
19	5	314	CLA	O1D-CGD-O2D-CED
19	A	801	CLA	C1A-C2A-CAA-CBA
19	A	805	CLA	C1A-C2A-CAA-CBA
19	A	805	CLA	C3A-C2A-CAA-CBA
19	A	811	CLA	CHA-CBD-CGD-O2D
19	A	819	CLA	C3A-C2A-CAA-CBA
19	A	820	CLA	CHA-CBD-CGD-O1D
19	A	820	CLA	CHA-CBD-CGD-O2D
19	A	825	CLA	CHA-CBD-CGD-O1D
19	A	825	CLA	CHA-CBD-CGD-O2D
19	A	828	CLA	O2A-C1-C2-C3
19	A	828	CLA	C1-C2-C3-C4
19	A	828	CLA	C1-C2-C3-C5
19	A	830	CLA	C2A-CAA-CBA-CGA
19	A	831	CLA	CHA-CBD-CGD-O2D
19	A	835	CLA	CHA-CBD-CGD-O1D
19	A	837	CLA	CHA-CBD-CGD-O1D
19	A	837	CLA	CHA-CBD-CGD-O2D
19	A	838	CLA	C4-C3-C5-C6
19	A	840	CLA	CHA-CBD-CGD-O1D
19	A	840	CLA	CHA-CBD-CGD-O2D
19	A	841	CLA	CHA-CBD-CGD-O2D
19	A	843	CLA	CHA-CBD-CGD-O1D
19	A	843	CLA	CHA-CBD-CGD-O2D
19	A	843	CLA	CAD-CBD-CGD-O1D
19	B	802	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
19	B	803	CLA	CHA-CBD-CGD-O1D
19	B	809	CLA	CHA-CBD-CGD-O1D
19	B	809	CLA	CHA-CBD-CGD-O2D
19	B	816	CLA	C4-C3-C5-C6
19	B	823	CLA	CBA-CGA-O2A-C1
19	B	823	CLA	O1A-CGA-O2A-C1
19	B	824	CLA	CHA-CBD-CGD-O1D
19	B	824	CLA	CHA-CBD-CGD-O2D
19	B	825	CLA	C1A-C2A-CAA-CBA
19	B	825	CLA	C3A-C2A-CAA-CBA
19	B	826	CLA	CHA-CBD-CGD-O1D
19	B	826	CLA	CHA-CBD-CGD-O2D
19	B	831	CLA	C1A-C2A-CAA-CBA
19	B	831	CLA	C3A-C2A-CAA-CBA
19	B	840	CLA	C1A-C2A-CAA-CBA
19	B	842	CLA	C1-C2-C3-C4
19	B	842	CLA	C1-C2-C3-C5
19	K	201	CLA	CHA-CBD-CGD-O1D
19	K	201	CLA	CHA-CBD-CGD-O2D
19	K	201	CLA	C2-C3-C5-C6
20	6	318	LUT	C1-C6-C7-C8
20	6	318	LUT	C5-C6-C7-C8
20	2	317	LUT	C27-C28-C29-C30
20	2	317	LUT	C27-C28-C29-C39
20	J	101	LUT	C27-C28-C29-C30
20	J	101	LUT	C27-C28-C29-C39
22	6	317	LHG	O10-C23-O8-C6
22	6	317	LHG	C24-C23-O8-C6
22	6	319	LHG	O10-C23-O8-C6
22	6	319	LHG	C24-C23-O8-C6
22	5	318	LHG	C3-O3-P-O5
23	2	319	BCR	C17-C18-C19-C20
23	2	319	BCR	C36-C18-C19-C20
23	2	319	BCR	C18-C19-C20-C21
23	2	319	BCR	C19-C20-C21-C22
23	2	319	BCR	C23-C24-C25-C26
23	2	319	BCR	C23-C24-C25-C30
23	3	317	BCR	C21-C22-C23-C24
23	3	317	BCR	C37-C22-C23-C24
23	5	317	BCR	C7-C8-C9-C10
23	5	317	BCR	C7-C8-C9-C34
23	5	317	BCR	C37-C22-C23-C24

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Mol	Chain	Res	Type	Atoms
23	A	848	BCR	C7-C8-C9-C34
23	B	844	BCR	C23-C24-C25-C26
23	J	103	BCR	C21-C22-C23-C24
23	J	103	BCR	C37-C22-C23-C24
23	K	205	BCR	C7-C8-C9-C10
23	K	205	BCR	C7-C8-C9-C34
23	K	205	BCR	C18-C19-C20-C21
23	K	205	BCR	C19-C20-C21-C22
23	K	205	BCR	C20-C21-C22-C23
23	K	205	BCR	C20-C21-C22-C37
23	K	205	BCR	C21-C22-C23-C24
23	K	205	BCR	C37-C22-C23-C24
23	K	205	BCR	C22-C23-C24-C25
27	B	850	LMU	O5'-C1'-O1'-C1
27	G	202	LMU	O5'-C1'-O1'-C1
27	G	202	LMU	C2-C1-O1'-C1'
28	B	849	DGD	O1B-C1B-O2G-C2G
29	J	104	LMG	C2-C1-O1-C7
27	G	202	LMU	O5B-C1B-O1B-C4'
29	J	104	LMG	O10-C28-O8-C9
19	B	819	CLA	C3-C5-C6-C7
29	J	104	LMG	C29-C28-O8-C9
28	B	849	DGD	C2B-C1B-O2G-C2G
19	B	825	CLA	C4-C3-C5-C6
19	B	842	CLA	C4-C3-C5-C6
19	B	816	CLA	C2-C3-C5-C6
19	B	842	CLA	C2-C3-C5-C6
19	5	307	CLA	C2A-CAA-CBA-CGA
19	A	803	CLA	C2A-CAA-CBA-CGA
19	A	810	CLA	C2A-CAA-CBA-CGA
19	6	309	CLA	C3-C5-C6-C7
19	B	810	CLA	C3-C5-C6-C7
23	B	848	BCR	C9-C10-C11-C12
27	B	851	LMU	C5'-C4'-O1B-C1B
28	B	849	DGD	O6E-C5E-C6E-O5E
19	A	833	CLA	C3-C5-C6-C7
19	5	307	CLA	C4-C3-C5-C6
19	A	818	CLA	C4-C3-C5-C6
19	A	831	CLA	C4-C3-C5-C6
19	B	801	CLA	C4-C3-C5-C6
19	5	307	CLA	C2-C3-C5-C6
19	A	818	CLA	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
19	A	831	CLA	C2-C3-C5-C6
19	B	801	CLA	C2-C3-C5-C6
29	J	104	LMG	O6-C1-O1-C7
19	A	803	CLA	C3-C5-C6-C7
19	A	828	CLA	CBA-CGA-O2A-C1
19	B	806	CLA	C10-C11-C12-C13
27	B	850	LMU	C2'-C1'-O1'-C1
27	G	202	LMU	C2'-C1'-O1'-C1
19	A	828	CLA	C11-C10-C8-C9
19	B	842	CLA	C11-C10-C8-C9
19	A	808	CLA	C15-C16-C17-C18
19	B	814	CLA	C15-C16-C17-C18
18	6	306	CHL	C2A-CAA-CBA-CGA
20	6	315	LUT	C7-C8-C9-C19
20	6	318	LUT	C11-C12-C13-C20
20	2	315	LUT	C7-C8-C9-C19
20	2	317	LUT	C7-C8-C9-C19
20	3	316	LUT	C7-C8-C9-C19
20	5	316	LUT	C7-C8-C9-C19
23	B	846	BCR	C37-C22-C23-C24
23	B	848	BCR	C11-C12-C13-C35
23	J	103	BCR	C7-C8-C9-C34
20	6	315	LUT	C7-C8-C9-C10
20	6	318	LUT	C11-C12-C13-C14
20	2	315	LUT	C7-C8-C9-C10
20	3	316	LUT	C7-C8-C9-C10
20	5	316	LUT	C7-C8-C9-C10
23	B	846	BCR	C21-C22-C23-C24
23	B	848	BCR	C11-C12-C13-C14
23	J	103	BCR	C7-C8-C9-C10
19	A	828	CLA	O1A-CGA-O2A-C1
28	B	849	DGD	C4E-C5E-C6E-O5E
19	5	307	CLA	C3-C5-C6-C7
28	B	849	DGD	C1A-C2A-C3A-C4A
28	B	849	DGD	C1B-C2B-C3B-C4B
19	A	808	CLA	C5-C6-C7-C8
19	2	302	CLA	C8-C10-C11-C12
19	B	814	CLA	C13-C15-C16-C17
19	A	819	CLA	C8-C10-C11-C12
23	K	205	BCR	C13-C14-C15-C16
23	K	205	BCR	C15-C16-C17-C18
19	2	304	CLA	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
19	B	840	CLA	C2A-CAA-CBA-CGA
19	B	842	CLA	C15-C16-C17-C18
23	K	205	BCR	C6-C7-C8-C9
19	6	309	CLA	C5-C6-C7-C8
19	B	812	CLA	C5-C6-C7-C8
19	B	842	CLA	C3-C5-C6-C7
19	A	818	CLA	C8-C10-C11-C12
20	6	318	LUT	C11-C10-C9-C19
23	K	205	BCR	C11-C10-C9-C34
28	B	849	DGD	C3A-C4A-C5A-C6A
19	B	842	CLA	C10-C11-C12-C13
22	6	317	LHG	C30-C31-C32-C33
29	J	105	LMG	C18-C19-C20-C21
23	K	205	BCR	C11-C10-C9-C8
19	A	841	CLA	C4-C3-C5-C6
22	A	847	LHG	C13-C14-C15-C16
19	A	828	CLA	C6-C7-C8-C9
22	A	846	LHG	C27-C28-C29-C30
25	A	844	PQN	C26-C27-C28-C29
27	B	850	LMU	C11-C10-C9-C8
19	6	312	CLA	C10-C11-C12-C13
19	5	312	CLA	C13-C15-C16-C17
28	B	849	DGD	C5A-C6A-C7A-C8A
19	A	834	CLA	C3A-C2A-CAA-CBA
19	2	309	CLA	O2A-C1-C2-C3
19	A	825	CLA	C4-C3-C5-C6
19	A	825	CLA	C2-C3-C5-C6
19	B	825	CLA	C2-C3-C5-C6
27	A	853	LMU	C5'-C4'-O1B-C1B
19	A	814	CLA	C16-C17-C18-C19
23	2	319	BCR	C1-C6-C7-C8
23	5	317	BCR	C1-C6-C7-C8
23	5	317	BCR	C5-C6-C7-C8
23	A	848	BCR	C23-C24-C25-C26
23	A	849	BCR	C23-C24-C25-C26
23	A	852	BCR	C23-C24-C25-C26
23	B	844	BCR	C23-C24-C25-C30
23	B	845	BCR	C1-C6-C7-C8
23	B	848	BCR	C23-C24-C25-C26
23	F	302	BCR	C23-C24-C25-C26
23	F	305	BCR	C23-C24-C25-C26
23	G	201	BCR	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
23	G	201	BCR	C23-C24-C25-C26
23	J	103	BCR	C23-C24-C25-C26
23	K	204	BCR	C23-C24-C25-C26
23	K	204	BCR	C23-C24-C25-C30
23	M	101	BCR	C1-C6-C7-C8
23	M	101	BCR	C5-C6-C7-C8
23	L	304	BCR	C1-C6-C7-C8
23	L	304	BCR	C5-C6-C7-C8
19	B	842	CLA	C13-C15-C16-C17
18	3	314	CHL	C4-C3-C5-C6
19	A	826	CLA	C11-C10-C8-C7
19	B	801	CLA	C6-C7-C8-C10
27	A	853	LMU	O5B-C1B-O1B-C4'
19	6	310	CLA	C3-C5-C6-C7
19	A	828	CLA	C10-C11-C12-C13
29	J	104	LMG	C28-C29-C30-C31
19	A	836	CLA	C10-C11-C12-C13
25	A	844	PQN	C25-C26-C27-C28
27	B	851	LMU	C3'-C4'-O1B-C1B
27	G	202	LMU	O5'-C5'-C6'-O6'
19	A	841	CLA	C2-C3-C5-C6
19	A	826	CLA	C11-C10-C8-C9
19	B	801	CLA	C6-C7-C8-C9
19	B	816	CLA	C6-C7-C8-C9
20	3	315	LUT	C7-C8-C9-C19
19	3	313	CLA	C1A-C2A-CAA-CBA
19	A	811	CLA	C1A-C2A-CAA-CBA
19	A	812	CLA	C1A-C2A-CAA-CBA
19	A	819	CLA	C1A-C2A-CAA-CBA
19	A	823	CLA	C1A-C2A-CAA-CBA
19	A	834	CLA	C1A-C2A-CAA-CBA
19	B	816	CLA	C1A-C2A-CAA-CBA
19	B	828	CLA	C1A-C2A-CAA-CBA
19	A	814	CLA	C16-C17-C18-C20
27	A	853	LMU	C3'-C4'-O1B-C1B
27	B	851	LMU	O5B-C5B-C6B-O6B
27	G	202	LMU	O5B-C5B-C6B-O6B
18	2	301	CHL	C3-C5-C6-C7
19	3	302	CLA	C3-C5-C6-C7
19	A	829	CLA	C5-C6-C7-C8
29	J	105	LMG	C17-C18-C19-C20
19	6	309	CLA	C16-C17-C18-C20

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Mol	Chain	Res	Type	Atoms
28	B	849	DGD	O1G-C1G-C2G-C3G
22	5	318	LHG	C11-C10-C9-C8
29	J	105	LMG	O6-C5-C6-O5
28	B	849	DGD	CFA-CGA-CHA-CIA
18	2	307	CHL	O2A-C1-C2-C3
19	B	830	CLA	C4-C3-C5-C6
19	A	819	CLA	C2A-CAA-CBA-CGA
19	A	824	CLA	C2-C1-O2A-CGA
29	J	104	LMG	O6-C5-C6-O5
20	6	318	LUT	C11-C10-C9-C8
18	3	314	CHL	C2-C3-C5-C6
19	6	309	CLA	C12-C13-C15-C16
19	A	829	CLA	C6-C7-C8-C10
19	B	816	CLA	C6-C7-C8-C10
19	F	301	CLA	C11-C10-C8-C7
25	B	843	PQN	C13-C15-C16-C17
19	6	309	CLA	C14-C13-C15-C16
19	A	829	CLA	C6-C7-C8-C9
19	B	838	CLA	C6-C7-C8-C9
19	F	301	CLA	C11-C10-C8-C9
19	B	842	CLA	CBA-CGA-O2A-C1
19	3	311	CLA	C2A-CAA-CBA-CGA
19	5	312	CLA	C2A-CAA-CBA-CGA
19	B	802	CLA	C2A-CAA-CBA-CGA
27	B	850	LMU	C7-C8-C9-C10
19	A	828	CLA	C16-C17-C18-C19
19	A	820	CLA	C8-C10-C11-C12
19	A	828	CLA	C5-C6-C7-C8
19	A	803	CLA	C1-C2-C3-C5
19	B	830	CLA	C2-C3-C5-C6
28	B	849	DGD	CBA-CCA-CDA-CEA
19	B	807	CLA	C10-C11-C12-C13
29	J	105	LMG	C7-C8-C9-O8
22	5	318	LHG	C24-C25-C26-C27
19	A	808	CLA	C4-C3-C5-C6
25	A	844	PQN	C26-C27-C28-C30
19	B	825	CLA	C10-C11-C12-C13
28	B	849	DGD	O2G-C2G-C3G-O3G
22	A	847	LHG	C11-C12-C13-C14
19	B	811	CLA	C4-C3-C5-C6
19	A	812	CLA	C2-C1-O2A-CGA
19	2	302	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
19	K	201	CLA	C4-C3-C5-C6
19	B	842	CLA	O1A-CGA-O2A-C1
19	A	804	CLA	C2A-CAA-CBA-CGA
19	B	801	CLA	C2A-CAA-CBA-CGA
19	B	832	CLA	C2A-CAA-CBA-CGA
19	6	309	CLA	C16-C17-C18-C19
20	3	315	LUT	C5-C6-C7-C8
23	A	848	BCR	C5-C6-C7-C8
23	A	849	BCR	C23-C24-C25-C30
23	A	852	BCR	C1-C6-C7-C8
23	A	852	BCR	C23-C24-C25-C30
23	B	846	BCR	C1-C6-C7-C8
23	F	302	BCR	C23-C24-C25-C30
23	G	201	BCR	C1-C6-C7-C8
23	J	103	BCR	C23-C24-C25-C30
23	K	204	BCR	C1-C6-C7-C8
23	K	205	BCR	C1-C6-C7-C8
19	B	816	CLA	C15-C16-C17-C18
27	B	850	LMU	C5-C6-C7-C8
18	3	314	CHL	C11-C12-C13-C15
19	A	828	CLA	C6-C7-C8-C10
19	A	828	CLA	C11-C10-C8-C7
19	B	811	CLA	C2-C3-C5-C6
19	B	819	CLA	C12-C13-C15-C16
19	B	838	CLA	C6-C7-C8-C10
19	A	828	CLA	C16-C17-C18-C20
18	5	313	CHL	CAD-CBD-CGD-O2D
19	6	303	CLA	CAD-CBD-CGD-O2D
19	2	313	CLA	CAD-CBD-CGD-O2D
19	3	312	CLA	CAD-CBD-CGD-O2D
19	5	311	CLA	CAD-CBD-CGD-O2D
19	A	801	CLA	CAD-CBD-CGD-O2D
19	A	826	CLA	CAD-CBD-CGD-O2D
19	A	842	CLA	CAD-CBD-CGD-O2D
19	A	843	CLA	CAD-CBD-CGD-O2D
19	B	811	CLA	CAD-CBD-CGD-O2D
19	B	815	CLA	CAD-CBD-CGD-O2D
19	B	822	CLA	CAD-CBD-CGD-O2D
19	B	825	CLA	CAD-CBD-CGD-O2D
19	B	827	CLA	CAD-CBD-CGD-O2D
19	B	833	CLA	CAD-CBD-CGD-O2D
19	B	836	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
19	F	303	CLA	CAD-CBD-CGD-O2D
19	K	202	CLA	CAD-CBD-CGD-O2D
22	6	317	LHG	C28-C29-C30-C31
19	B	807	CLA	C4-C3-C5-C6
19	B	812	CLA	C4-C3-C5-C6
19	B	842	CLA	C16-C17-C18-C19
22	6	317	LHG	C5-C4-O6-P
18	2	314	CHL	CHA-CBD-CGD-O1D
18	2	314	CHL	CHA-CBD-CGD-O2D
18	2	320	CHL	CHA-CBD-CGD-O1D
19	6	313	CLA	CHA-CBD-CGD-O1D
19	3	301	CLA	CHA-CBD-CGD-O1D
19	3	301	CLA	CHA-CBD-CGD-O2D
19	5	310	CLA	CHA-CBD-CGD-O1D
19	A	807	CLA	CHA-CBD-CGD-O1D
19	A	807	CLA	CHA-CBD-CGD-O2D
19	A	810	CLA	CHA-CBD-CGD-O1D
19	A	810	CLA	CHA-CBD-CGD-O2D
19	A	811	CLA	CHA-CBD-CGD-O1D
19	A	831	CLA	CHA-CBD-CGD-O1D
19	A	835	CLA	CHA-CBD-CGD-O2D
19	A	841	CLA	CHA-CBD-CGD-O1D
19	B	802	CLA	CHA-CBD-CGD-O1D
19	B	803	CLA	CHA-CBD-CGD-O2D
19	B	805	CLA	CHA-CBD-CGD-O2D
19	B	834	CLA	CHA-CBD-CGD-O2D
19	F	304	CLA	CHA-CBD-CGD-O1D
19	F	304	CLA	CHA-CBD-CGD-O2D
19	K	202	CLA	CHA-CBD-CGD-O1D
19	K	203	CLA	CHA-CBD-CGD-O1D
28	B	849	DGD	O1G-C1G-C2G-O2G
19	B	815	CLA	C4-C3-C5-C6
19	3	311	CLA	CAA-CBA-CGA-O2A
23	K	205	BCR	C36-C18-C19-C20
22	5	318	LHG	C9-C10-C11-C12
23	5	317	BCR	C21-C22-C23-C24
23	K	205	BCR	C17-C18-C19-C20
19	B	807	CLA	C3-C5-C6-C7
19	B	814	CLA	C1A-C2A-CAA-CBA
19	B	818	CLA	C1A-C2A-CAA-CBA
19	L	302	CLA	C3-C5-C6-C7
18	2	320	CHL	CAD-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
19	A	807	CLA	CAD-CBD-CGD-O1D
19	A	838	CLA	C2-C3-C5-C6
19	B	802	CLA	CAD-CBD-CGD-O1D
19	6	312	CLA	C11-C10-C8-C7
19	A	808	CLA	C12-C13-C15-C16
19	A	810	CLA	C12-C13-C15-C16
19	A	820	CLA	C11-C12-C13-C15
19	B	817	CLA	C6-C7-C8-C10
19	B	819	CLA	C11-C10-C8-C7
25	A	844	PQN	C17-C18-C20-C21
19	B	828	CLA	C8-C10-C11-C12
19	5	312	CLA	C3-C5-C6-C7
29	J	105	LMG	O7-C8-C9-O8
19	B	842	CLA	C5-C6-C7-C8
19	B	826	CLA	C4-C3-C5-C6
19	B	819	CLA	C14-C13-C15-C16
19	A	841	CLA	C8-C10-C11-C12
22	A	846	LHG	C24-C25-C26-C27
29	J	105	LMG	C12-C13-C14-C15
22	2	318	LHG	C23-C24-C25-C26
19	B	837	CLA	C4-C3-C5-C6
19	6	304	CLA	C1-C2-C3-C4
19	A	819	CLA	CAA-CBA-CGA-O2A
24	A	802	CL0	CAA-CBA-CGA-O2A
19	B	804	CLA	C2A-CAA-CBA-CGA
19	G	204	CLA	C2A-CAA-CBA-CGA
29	J	105	LMG	C29-C28-O8-C9
19	A	818	CLA	C2-C1-O2A-CGA
19	A	828	CLA	C2-C1-O2A-CGA
19	B	803	CLA	C2-C1-O2A-CGA
19	A	818	CLA	C11-C12-C13-C14
29	J	105	LMG	O10-C28-O8-C9
19	A	825	CLA	C8-C10-C11-C12
19	B	816	CLA	C3-C5-C6-C7
23	2	319	BCR	C5-C6-C7-C8
23	K	205	BCR	C5-C6-C7-C8
23	L	305	BCR	C23-C24-C25-C26
19	B	812	CLA	C2-C3-C5-C6
19	B	818	CLA	C2A-CAA-CBA-CGA
22	6	317	LHG	C4-O6-P-O3
22	5	318	LHG	C3-O3-P-O6
22	A	846	LHG	C3-O3-P-O6

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Mol	Chain	Res	Type	Atoms
22	A	847	LHG	C3-O3-P-O6
19	A	818	CLA	C11-C12-C13-C15
19	A	830	CLA	C4-C3-C5-C6
19	B	814	CLA	C4-C3-C5-C6
18	2	301	CHL	C11-C12-C13-C15
19	5	307	CLA	C6-C7-C8-C10
19	A	808	CLA	C2-C3-C5-C6
19	B	826	CLA	C2-C3-C5-C6
18	3	314	CHL	C11-C12-C13-C14
19	A	808	CLA	C14-C13-C15-C16
19	B	819	CLA	C11-C10-C8-C9
19	B	842	CLA	CAA-CBA-CGA-O2A
19	B	815	CLA	C2-C3-C5-C6
28	B	849	DGD	C8B-C9B-CAB-CBB
18	5	306	CHL	CAA-CBA-CGA-O1A
19	6	313	CLA	CAA-CBA-CGA-O1A
19	A	817	CLA	CAA-CBA-CGA-O1A
19	A	801	CLA	C2-C1-O2A-CGA
19	A	808	CLA	C2-C1-O2A-CGA
19	B	801	CLA	C2-C1-O2A-CGA
19	B	841	CLA	C2-C1-O2A-CGA
27	B	850	LMU	C3-C4-C5-C6
19	6	312	CLA	C8-C10-C11-C12
19	K	202	CLA	CAA-CBA-CGA-O2A
19	A	805	CLA	C2A-CAA-CBA-CGA
19	5	311	CLA	C3A-C2A-CAA-CBA
19	B	802	CLA	C3A-C2A-CAA-CBA
19	B	814	CLA	C3A-C2A-CAA-CBA
19	A	812	CLA	C16-C17-C18-C19
19	6	304	CLA	O2A-C1-C2-C3
19	K	202	CLA	CAA-CBA-CGA-O1A
19	2	309	CLA	C2-C3-C5-C6
19	B	812	CLA	C3-C5-C6-C7
27	B	850	LMU	C4-C5-C6-C7
19	6	309	CLA	C11-C10-C8-C9
19	3	307	CLA	C6-C7-C8-C9
19	5	307	CLA	C6-C7-C8-C9
19	B	828	CLA	C11-C10-C8-C9
19	B	842	CLA	C14-C13-C15-C16
18	6	306	CHL	CAA-CBA-CGA-O1A
19	K	203	CLA	CAA-CBA-CGA-O1A
20	5	315	LUT	C20-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
23	3	317	BCR	C20-C21-C22-C37
23	A	852	BCR	C11-C10-C9-C34
23	A	852	BCR	C16-C17-C18-C36
23	B	845	BCR	C11-C10-C9-C34
23	B	845	BCR	C20-C21-C22-C37
23	B	846	BCR	C16-C17-C18-C36
23	F	305	BCR	C35-C13-C14-C15
23	L	305	BCR	C11-C10-C9-C34
19	B	823	CLA	O2A-C1-C2-C3
19	6	313	CLA	CAA-CBA-CGA-O2A
19	6	311	CLA	CAA-CBA-CGA-O1A
19	2	309	CLA	C4-C3-C5-C6
19	A	806	CLA	C4-C3-C5-C6
19	3	311	CLA	C1A-C2A-CAA-CBA
19	B	802	CLA	C1A-C2A-CAA-CBA
19	B	829	CLA	C1A-C2A-CAA-CBA
19	5	312	CLA	C11-C12-C13-C15
18	2	314	CHL	CAA-CBA-CGA-O1A
19	A	818	CLA	C10-C11-C12-C13
19	A	828	CLA	C13-C15-C16-C17
19	6	307	CLA	CAA-CBA-CGA-O1A
19	G	204	CLA	CAA-CBA-CGA-O1A
27	B	851	LMU	C5-C6-C7-C8
22	A	847	LHG	C10-C11-C12-C13
18	5	306	CHL	CAA-CBA-CGA-O2A
19	6	307	CLA	CAA-CBA-CGA-O2A
19	A	817	CLA	CAA-CBA-CGA-O2A
19	G	204	CLA	CAA-CBA-CGA-O2A
19	A	804	CLA	C4-C3-C5-C6
19	B	810	CLA	C4-C3-C5-C6
19	B	819	CLA	C4-C3-C5-C6
18	5	304	CHL	CAA-CBA-CGA-O2A
19	B	830	CLA	C3-C5-C6-C7
20	5	315	LUT	C12-C13-C14-C15
23	A	852	BCR	C11-C10-C9-C8
23	A	852	BCR	C16-C17-C18-C19
23	B	845	BCR	C11-C10-C9-C8
23	B	845	BCR	C20-C21-C22-C23
23	B	846	BCR	C16-C17-C18-C19
23	F	305	BCR	C12-C13-C14-C15
19	2	311	CLA	CAA-CBA-CGA-O1A
19	B	819	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
18	2	314	CHL	CAA-CBA-CGA-O2A
18	3	306	CHL	CAA-CBA-CGA-O2A
19	K	203	CLA	CAA-CBA-CGA-O2A
19	A	812	CLA	C13-C15-C16-C17
19	A	801	CLA	C4-C3-C5-C6
19	B	838	CLA	C4-C3-C5-C6
19	L	302	CLA	C4-C3-C5-C6
18	2	301	CHL	C2-C1-O2A-CGA
19	B	807	CLA	C2-C3-C5-C6
29	J	105	LMG	C20-C21-C22-C23
19	5	312	CLA	C11-C12-C13-C14
22	2	318	LHG	C27-C28-C29-C30
19	6	311	CLA	CAA-CBA-CGA-O2A
19	B	840	CLA	C16-C17-C18-C20
19	A	821	CLA	CAA-CBA-CGA-O2A
23	A	849	BCR	C1-C6-C7-C8
23	B	847	BCR	C23-C24-C25-C30
23	B	848	BCR	C23-C24-C25-C30
23	F	305	BCR	C23-C24-C25-C30
23	G	201	BCR	C23-C24-C25-C30
19	A	823	CLA	CAA-CBA-CGA-O2A
19	A	805	CLA	C4-C3-C5-C6
19	B	808	CLA	C4-C3-C5-C6
19	B	832	CLA	C4-C3-C5-C6
19	A	830	CLA	C2-C3-C5-C6
19	B	814	CLA	C2-C3-C5-C6
19	B	837	CLA	C2-C3-C5-C6
18	2	305	CHL	CAA-CBA-CGA-O2A
18	5	304	CHL	CAA-CBA-CGA-O1A
28	B	849	DGD	C5D-C6D-O5D-C1E
19	2	303	CLA	CAA-CBA-CGA-O2A
19	2	311	CLA	CAA-CBA-CGA-O2A
19	5	308	CLA	C3-C5-C6-C7
19	5	310	CLA	CAA-CBA-CGA-O2A
18	2	301	CHL	C2-C3-C5-C6
19	A	806	CLA	C2-C3-C5-C6
19	B	810	CLA	C2-C3-C5-C6
18	3	306	CHL	CAA-CBA-CGA-O1A
19	6	314	CLA	CAA-CBA-CGA-O2A
19	B	813	CLA	CAA-CBA-CGA-O2A
21	6	316	XAT	C29-C30-C31-C32
27	G	202	LMU	C2-C3-C4-C5

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Mol	Chain	Res	Type	Atoms
18	3	314	CHL	C10-C11-C12-C13
19	2	303	CLA	CAA-CBA-CGA-O1A
19	A	808	CLA	CAA-CBA-CGA-O2A
19	3	313	CLA	CAA-CBA-CGA-O2A
19	2	302	CLA	C4-C3-C5-C6
19	A	829	CLA	C4-C3-C5-C6
19	6	312	CLA	C11-C10-C8-C9
19	A	810	CLA	C14-C13-C15-C16
19	A	841	CLA	C14-C13-C15-C16
28	B	849	DGD	CDA-CEA-CFA-CGA
18	6	306	CHL	CAA-CBA-CGA-O2A
19	6	305	CLA	CAA-CBA-CGA-O2A
22	A	846	LHG	C28-C29-C30-C31
19	B	806	CLA	C3A-C2A-CAA-CBA
19	B	831	CLA	CAA-CBA-CGA-O2A
19	6	313	CLA	CAD-CBD-CGD-O2D
19	2	303	CLA	CAD-CBD-CGD-O2D
19	3	307	CLA	CAD-CBD-CGD-O2D
19	5	302	CLA	CAD-CBD-CGD-O2D
19	5	314	CLA	CAD-CBD-CGD-O2D
19	A	806	CLA	CAD-CBD-CGD-O2D
19	A	809	CLA	CAD-CBD-CGD-O2D
19	A	814	CLA	CAD-CBD-CGD-O2D
19	A	815	CLA	CAD-CBD-CGD-O2D
19	A	816	CLA	CAD-CBD-CGD-O2D
19	A	834	CLA	CAD-CBD-CGD-O2D
19	B	812	CLA	CAD-CBD-CGD-O2D
19	B	814	CLA	CAD-CBD-CGD-O2D
19	B	835	CLA	CAD-CBD-CGD-O2D
19	B	840	CLA	CAD-CBD-CGD-O2D
19	B	842	CLA	CAD-CBD-CGD-O2D
19	L	303	CLA	CAD-CBD-CGD-O2D
19	3	304	CLA	CAA-CBA-CGA-O2A
19	B	835	CLA	CAA-CBA-CGA-O2A
19	5	307	CLA	CAA-CBA-CGA-O2A
19	A	814	CLA	CAA-CBA-CGA-O2A
19	B	811	CLA	CAA-CBA-CGA-O2A
19	B	840	CLA	CAA-CBA-CGA-O2A
19	A	812	CLA	C4-C3-C5-C6
18	2	305	CHL	CAA-CBA-CGA-O1A
19	5	310	CLA	CAA-CBA-CGA-O1A
19	A	821	CLA	CAA-CBA-CGA-O1A

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Mol	Chain	Res	Type	Atoms
19	B	813	CLA	CAA-CBA-CGA-O1A
19	A	801	CLA	C2-C3-C5-C6
19	A	804	CLA	C2-C3-C5-C6
19	B	819	CLA	C2-C3-C5-C6
20	3	315	LUT	C7-C8-C9-C10
23	A	848	BCR	C7-C8-C9-C10
28	B	849	DGD	C1G-C2G-C3G-O3G
19	6	314	CLA	CAA-CBA-CGA-O1A
19	5	314	CLA	CAA-CBA-CGA-O1A
19	A	823	CLA	CAA-CBA-CGA-O1A
19	A	820	CLA	C10-C11-C12-C13
19	K	201	CLA	CAA-CBA-CGA-O2A
19	B	831	CLA	CAA-CBA-CGA-O1A
18	2	301	CHL	O2A-C1-C2-C3
18	2	320	CHL	O2A-C1-C2-C3
19	5	307	CLA	O2A-C1-C2-C3
19	5	309	CLA	O2A-C1-C2-C3
19	A	803	CLA	O2A-C1-C2-C3
19	A	826	CLA	O2A-C1-C2-C3
19	A	829	CLA	O2A-C1-C2-C3
19	B	801	CLA	O2A-C1-C2-C3
19	B	818	CLA	O2A-C1-C2-C3
19	6	303	CLA	CAA-CBA-CGA-O2A
19	B	807	CLA	CAA-CBA-CGA-O2A
19	6	305	CLA	CAA-CBA-CGA-O1A
19	A	837	CLA	CAA-CBA-CGA-O2A
18	6	301	CHL	CHA-CBD-CGD-O1D
18	2	320	CHL	CHA-CBD-CGD-O2D
19	6	310	CLA	CHA-CBD-CGD-O1D
19	6	310	CLA	CHA-CBD-CGD-O2D
19	6	313	CLA	CHA-CBD-CGD-O2D
19	2	302	CLA	CHA-CBD-CGD-O1D
19	2	302	CLA	CHA-CBD-CGD-O2D
19	2	311	CLA	CHA-CBD-CGD-O1D
19	2	311	CLA	CHA-CBD-CGD-O2D
19	2	312	CLA	CHA-CBD-CGD-O1D
19	2	312	CLA	CHA-CBD-CGD-O2D
19	5	301	CLA	CHA-CBD-CGD-O2D
19	5	303	CLA	CHA-CBD-CGD-O2D
19	5	310	CLA	CHA-CBD-CGD-O2D
19	5	314	CLA	CHA-CBD-CGD-O2D
19	A	812	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
19	A	838	CLA	CHA-CBD-CGD-O2D
19	B	804	CLA	CHA-CBD-CGD-O2D
19	B	805	CLA	CHA-CBD-CGD-O1D
19	B	816	CLA	CHA-CBD-CGD-O2D
19	B	831	CLA	CHA-CBD-CGD-O2D
19	B	834	CLA	CHA-CBD-CGD-O1D
19	G	203	CLA	CHA-CBD-CGD-O1D
19	G	203	CLA	CHA-CBD-CGD-O2D
19	G	204	CLA	CHA-CBD-CGD-O1D
19	J	102	CLA	CHA-CBD-CGD-O1D
19	J	102	CLA	CHA-CBD-CGD-O2D
19	K	203	CLA	CHA-CBD-CGD-O2D
19	L	302	CLA	CHA-CBD-CGD-O2D
19	3	304	CLA	CAA-CBA-CGA-O1A
19	B	835	CLA	CAA-CBA-CGA-O1A
19	3	307	CLA	C3-C5-C6-C7
23	L	305	BCR	C11-C10-C9-C8
19	5	314	CLA	CAA-CBA-CGA-O2A
19	A	837	CLA	CAA-CBA-CGA-O1A
19	5	302	CLA	CAA-CBA-CGA-O2A
19	G	203	CLA	CAA-CBA-CGA-O2A
22	5	318	LHG	C16-C17-C18-C19
19	A	820	CLA	C11-C12-C13-C14
19	B	807	CLA	C11-C12-C13-C14
19	B	816	CLA	C11-C10-C8-C9
19	B	817	CLA	C6-C7-C8-C9
28	B	849	DGD	C4B-C5B-C6B-C7B
18	6	301	CHL	CAA-CBA-CGA-O2A
19	B	839	CLA	CAA-CBA-CGA-O2A
19	B	811	CLA	CAA-CBA-CGA-O1A
27	A	853	LMU	C2B-C1B-O1B-C4'
19	3	313	CLA	CAA-CBA-CGA-O1A
19	A	824	CLA	C2A-CAA-CBA-CGA
22	2	318	LHG	C12-C13-C14-C15
19	A	836	CLA	C5-C6-C7-C8
19	L	302	CLA	C2-C3-C5-C6
19	B	840	CLA	CAA-CBA-CGA-O1A
19	K	201	CLA	CAA-CBA-CGA-O1A
28	B	849	DGD	O6D-C5D-C6D-O5D
19	6	307	CLA	C1A-C2A-CAA-CBA
19	2	303	CLA	C1A-C2A-CAA-CBA
19	2	308	CLA	C1A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
19	A	804	CLA	C1A-C2A-CAA-CBA
19	B	801	CLA	C1A-C2A-CAA-CBA
19	B	805	CLA	C1A-C2A-CAA-CBA
19	B	806	CLA	C1A-C2A-CAA-CBA
19	B	824	CLA	C1A-C2A-CAA-CBA
19	B	832	CLA	C1A-C2A-CAA-CBA
22	6	317	LHG	C31-C32-C33-C34
19	A	808	CLA	CAA-CBA-CGA-O1A
19	6	302	CLA	C2A-CAA-CBA-CGA
22	5	318	LHG	C10-C11-C12-C13
22	A	846	LHG	C10-C11-C12-C13
19	A	814	CLA	CAA-CBA-CGA-O1A
19	B	833	CLA	C15-C16-C17-C18
19	G	203	CLA	CAA-CBA-CGA-O1A
22	6	317	LHG	C4-O6-P-O5
22	A	847	LHG	C3-O3-P-O5
19	6	303	CLA	CAA-CBA-CGA-O1A
19	5	302	CLA	CAA-CBA-CGA-O1A
28	B	849	DGD	C5B-C6B-C7B-C8B
28	B	849	DGD	CCB-CDB-CEB-CFB
20	3	315	LUT	C1-C6-C7-C8
20	3	316	LUT	C5-C6-C7-C8
20	5	316	LUT	C5-C6-C7-C8
23	A	848	BCR	C1-C6-C7-C8
23	F	302	BCR	C1-C6-C7-C8
23	I	101	BCR	C1-C6-C7-C8
19	5	307	CLA	C5-C6-C7-C8
19	5	307	CLA	CAA-CBA-CGA-O1A
19	A	807	CLA	C2A-CAA-CBA-CGA
18	3	314	CHL	CAA-CBA-CGA-O2A
19	A	828	CLA	CAA-CBA-CGA-O2A
18	6	301	CHL	CAD-CBD-CGD-O1D
18	6	306	CHL	CAD-CBD-CGD-O1D
18	5	304	CHL	CAD-CBD-CGD-O1D
19	2	312	CLA	CAD-CBD-CGD-O1D
19	B	806	CLA	CAD-CBD-CGD-O1D
19	B	814	CLA	CAD-CBD-CGD-O1D
19	B	829	CLA	CAD-CBD-CGD-O1D
19	B	842	CLA	CAD-CBD-CGD-O1D
19	L	301	CLA	CAD-CBD-CGD-O1D
19	B	810	CLA	CAA-CBA-CGA-O2A
19	B	830	CLA	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
19	L	302	CLA	C5-C6-C7-C8
25	A	844	PQN	C19-C18-C20-C21
19	6	309	CLA	C15-C16-C17-C18
19	5	301	CLA	CAA-CBA-CGA-O2A
19	A	807	CLA	CAA-CBA-CGA-O2A
19	A	826	CLA	CAA-CBA-CGA-O2A
22	5	318	LHG	O8-C23-C24-C25
18	6	301	CHL	CAA-CBA-CGA-O1A
19	3	311	CLA	C4-C3-C5-C6
19	2	303	CLA	C3A-C2A-CAA-CBA
19	3	311	CLA	C3A-C2A-CAA-CBA
19	A	820	CLA	C6-C7-C8-C10
19	B	811	CLA	C11-C12-C13-C15
19	B	824	CLA	C3A-C2A-CAA-CBA
19	6	302	CLA	CAA-CBA-CGA-O2A
19	5	312	CLA	CAA-CBA-CGA-O2A
19	B	825	CLA	CAA-CBA-CGA-O2A
22	A	846	LHG	C11-C10-C9-C8
22	A	846	LHG	C13-C14-C15-C16
20	2	317	LUT	C7-C8-C9-C10
19	A	826	CLA	CAA-CBA-CGA-O1A
19	B	807	CLA	CAA-CBA-CGA-O1A
22	5	318	LHG	O10-C23-C24-C25
19	A	803	CLA	CAA-CBA-CGA-O2A
19	A	842	CLA	CAA-CBA-CGA-O2A
19	A	836	CLA	C8-C10-C11-C12
19	A	807	CLA	CAA-CBA-CGA-O1A
19	B	839	CLA	CAA-CBA-CGA-O1A
19	5	312	CLA	C10-C11-C12-C13
19	2	312	CLA	CAA-CBA-CGA-O2A
19	5	312	CLA	CAA-CBA-CGA-O1A
18	6	301	CHL	C2A-CAA-CBA-CGA

There are no ring outliers.

165 monomers are involved in 280 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
19	A	821	CLA	3	0
18	6	306	CHL	3	0
19	6	304	CLA	1	0
19	6	308	CLA	2	0
19	A	812	CLA	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
19	B	838	CLA	4	0
19	A	833	CLA	1	0
19	2	311	CLA	1	0
19	6	303	CLA	1	0
19	A	834	CLA	2	0
23	5	317	BCR	2	0
19	A	841	CLA	1	0
23	B	848	BCR	2	0
19	3	305	CLA	1	0
19	5	312	CLA	1	0
27	G	202	LMU	2	0
19	A	820	CLA	2	0
19	B	827	CLA	1	0
18	2	307	CHL	2	0
19	A	832	CLA	1	0
23	B	847	BCR	4	0
19	B	832	CLA	2	0
23	L	305	BCR	4	0
19	B	829	CLA	2	0
23	A	848	BCR	5	0
20	2	315	LUT	4	0
19	A	811	CLA	3	0
19	B	833	CLA	1	0
23	A	852	BCR	3	0
19	G	203	CLA	1	0
18	2	306	CHL	1	0
19	B	804	CLA	1	0
19	3	302	CLA	4	0
22	6	317	LHG	6	0
19	B	834	CLA	1	0
23	A	851	BCR	5	0
18	2	320	CHL	3	0
19	3	308	CLA	2	0
19	B	828	CLA	1	0
23	A	849	BCR	3	0
19	5	314	CLA	1	0
19	3	313	CLA	1	0
18	2	305	CHL	2	0
19	A	825	CLA	3	0
19	B	811	CLA	1	0
19	2	302	CLA	2	0
27	B	851	LMU	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
19	B	807	CLA	3	0
20	3	315	LUT	5	0
19	A	813	CLA	1	0
23	J	103	BCR	6	0
19	3	311	CLA	2	0
19	5	311	CLA	1	0
19	A	822	CLA	5	0
19	B	814	CLA	2	0
19	6	307	CLA	1	0
19	A	836	CLA	1	0
19	A	831	CLA	2	0
19	A	835	CLA	2	0
19	3	312	CLA	2	0
22	5	318	LHG	5	0
19	A	818	CLA	3	0
19	2	308	CLA	2	0
19	B	820	CLA	3	0
19	6	310	CLA	2	0
20	5	316	LUT	3	0
23	B	846	BCR	2	0
19	B	809	CLA	2	0
19	B	818	CLA	2	0
20	2	317	LUT	2	0
19	2	310	CLA	1	0
22	A	847	LHG	1	0
19	B	803	CLA	2	0
19	6	311	CLA	1	0
19	A	816	CLA	2	0
19	B	816	CLA	4	0
18	2	314	CHL	1	0
19	2	312	CLA	4	0
19	L	303	CLA	1	0
19	A	805	CLA	2	0
19	B	825	CLA	3	0
19	B	824	CLA	1	0
23	K	205	BCR	2	0
19	B	822	CLA	1	0
23	F	305	BCR	2	0
23	G	205	BCR	2	0
23	K	204	BCR	2	0
29	J	104	LMG	2	0
25	A	844	PQN	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
19	3	309	CLA	2	0
19	5	309	CLA	1	0
18	3	314	CHL	3	0
27	B	850	LMU	3	0
19	J	102	CLA	1	0
19	F	303	CLA	1	0
19	A	810	CLA	2	0
19	5	308	CLA	1	0
19	3	301	CLA	1	0
19	3	310	CLA	2	0
24	A	802	CL0	2	0
19	F	301	CLA	2	0
19	6	305	CLA	2	0
23	M	101	BCR	3	0
18	6	301	CHL	3	0
19	B	841	CLA	3	0
20	2	316	LUT	2	0
18	3	306	CHL	1	0
20	3	316	LUT	6	0
19	A	808	CLA	4	0
19	B	801	CLA	3	0
19	B	802	CLA	3	0
18	2	301	CHL	3	0
19	5	307	CLA	4	0
19	6	302	CLA	2	0
19	2	309	CLA	3	0
20	5	315	LUT	4	0
19	L	302	CLA	2	0
19	B	823	CLA	2	0
21	6	316	XAT	3	0
28	B	849	DGD	4	0
23	B	845	BCR	3	0
25	B	843	PQN	1	0
19	B	806	CLA	3	0
19	A	824	CLA	3	0
23	I	101	BCR	2	0
19	3	303	CLA	1	0
19	5	302	CLA	1	0
19	2	303	CLA	1	0
20	6	315	LUT	2	0
19	B	842	CLA	2	0
19	A	823	CLA	2	0

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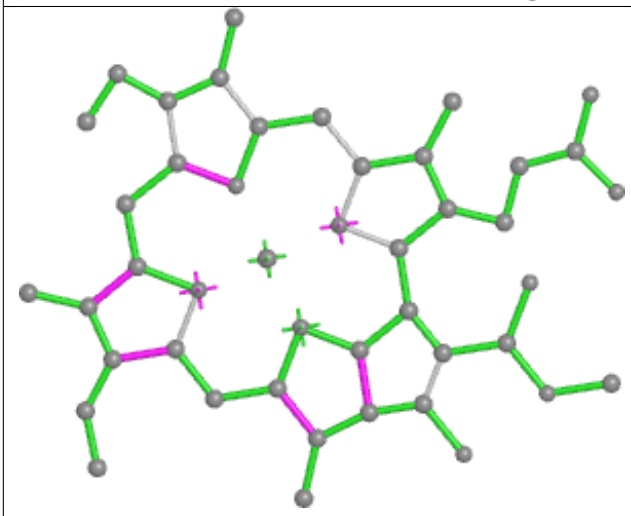
Mol	Chain	Res	Type	Clashes	Symm-Clashes
29	J	105	LMG	1	0
19	A	806	CLA	1	0
23	2	319	BCR	2	0
19	B	830	CLA	3	0
23	B	844	BCR	2	0
23	A	850	BCR	1	0
19	A	807	CLA	3	0
19	6	313	CLA	1	0
19	6	314	CLA	1	0
19	L	301	CLA	1	0
23	G	201	BCR	5	0
19	B	810	CLA	1	0
19	B	812	CLA	5	0
19	B	826	CLA	1	0
19	B	831	CLA	1	0
19	B	840	CLA	3	0
20	J	101	LUT	4	0
20	6	318	LUT	2	0
22	A	846	LHG	2	0
19	6	309	CLA	1	0
19	A	828	CLA	1	0
19	A	839	CLA	2	0
19	A	819	CLA	4	0
19	5	301	CLA	1	0
19	K	201	CLA	1	0
18	5	313	CHL	1	0
19	A	837	CLA	3	0
19	F	304	CLA	1	0
23	3	317	BCR	2	0
19	A	842	CLA	2	0
23	F	302	BCR	4	0
19	B	817	CLA	2	0
19	A	814	CLA	2	0
19	6	312	CLA	4	0

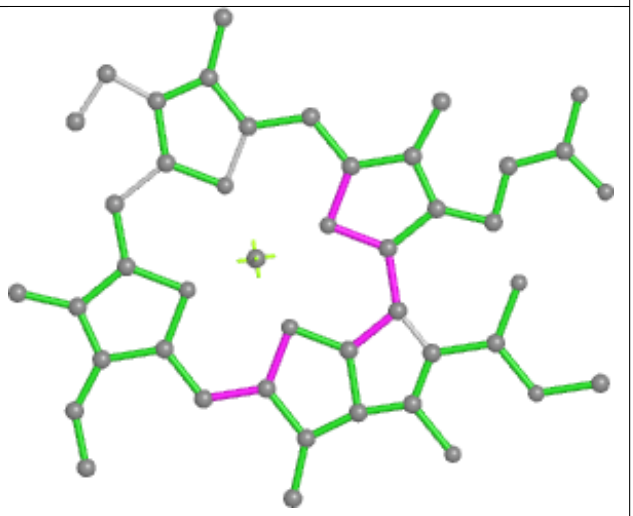
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the

average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

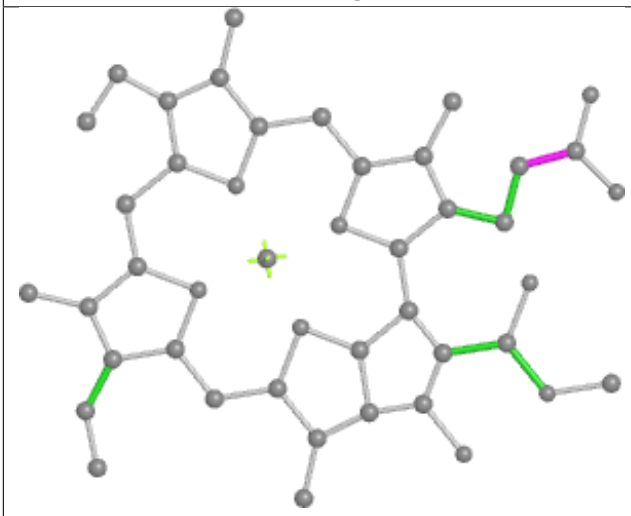
Ligand CLA A 821



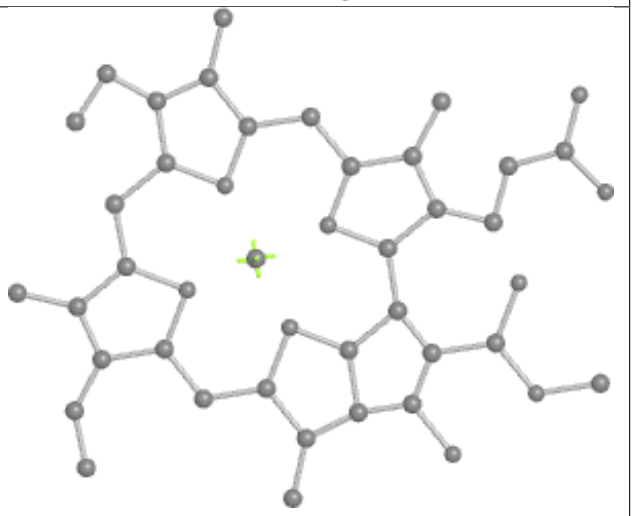
Bond lengths



Bond angles

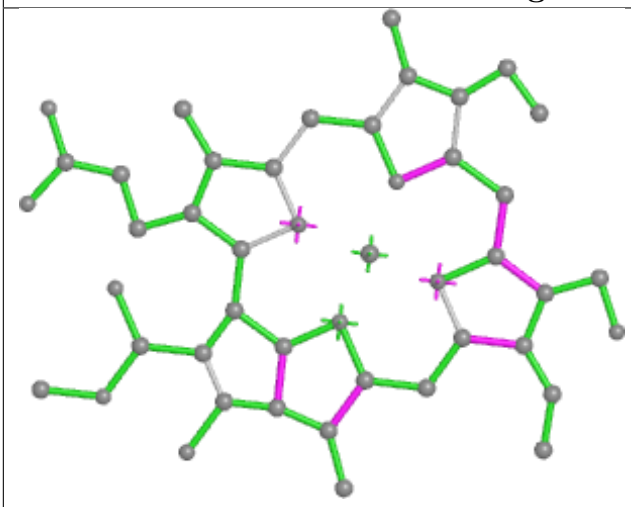


Torsions



Rings

Ligand CHL 6 306



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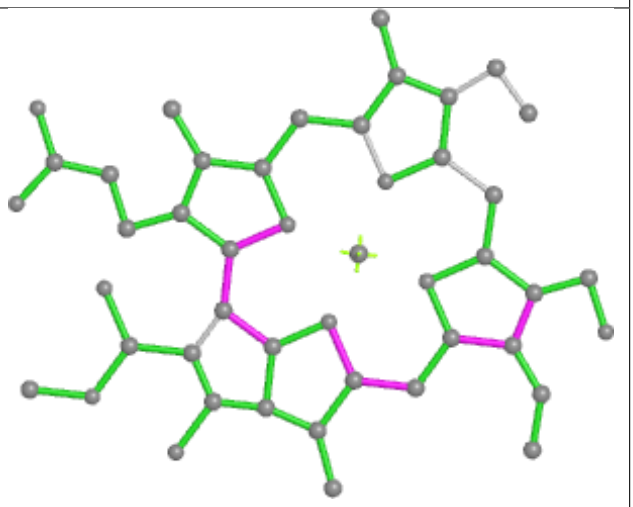
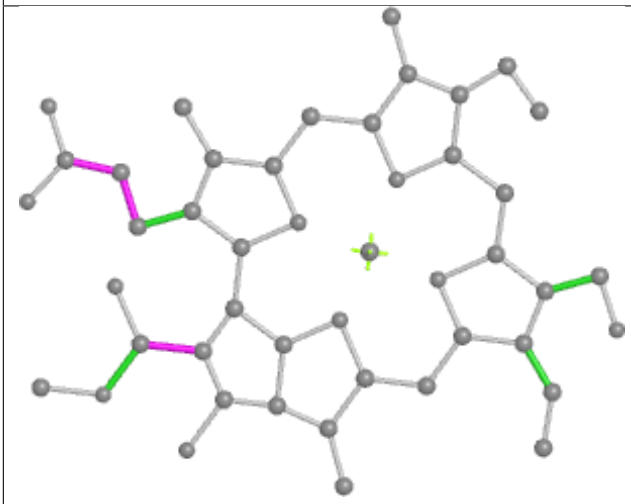
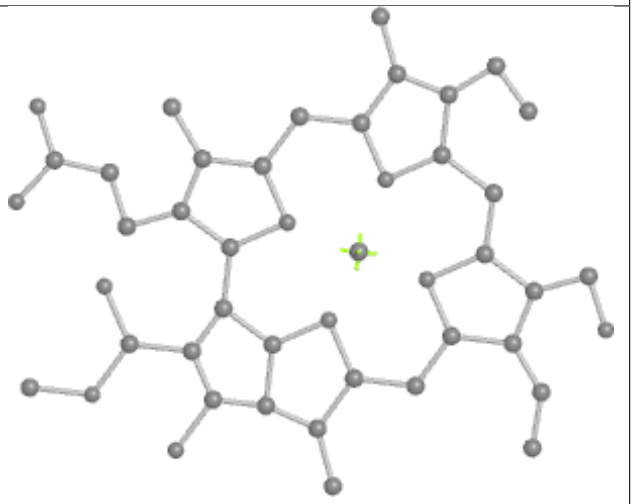


Bond angles

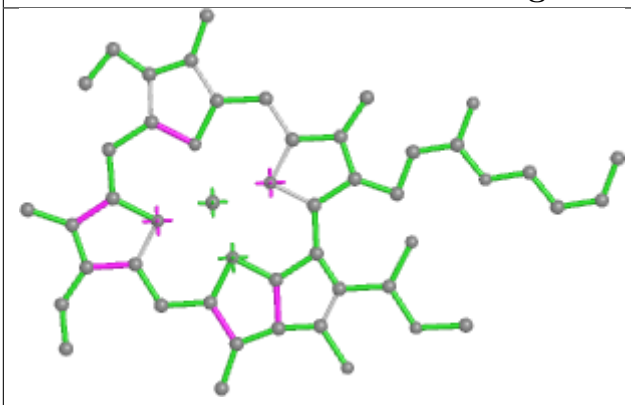


Torsions

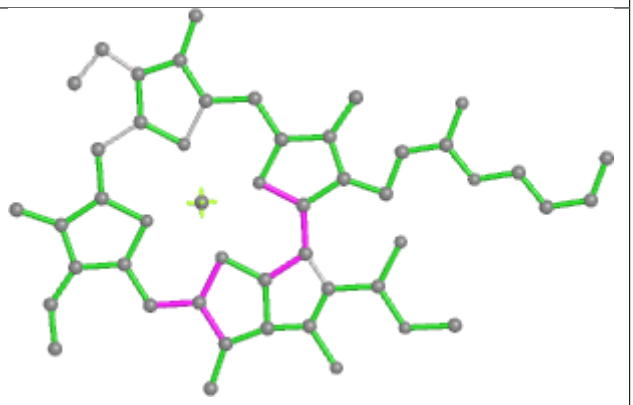


Rings

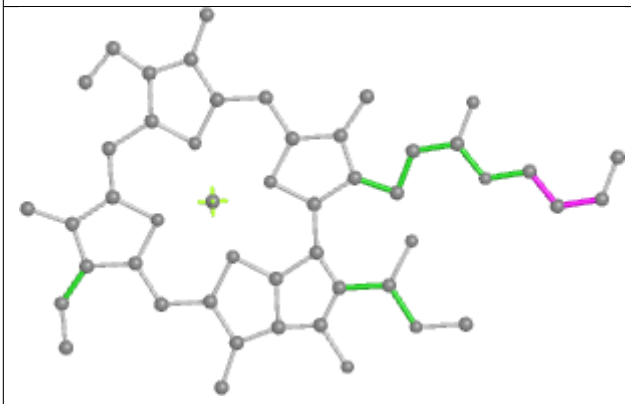
Ligand CLA 6 304



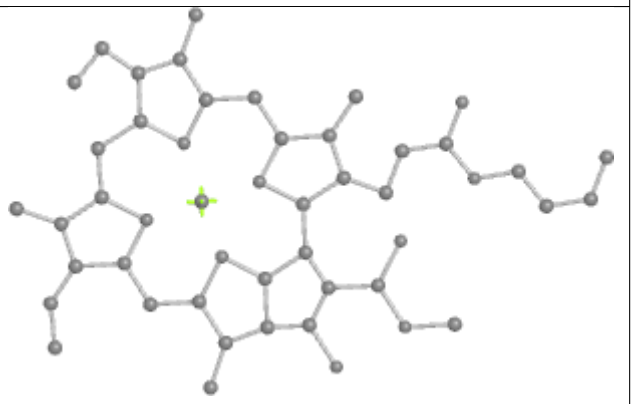
Bond lengths



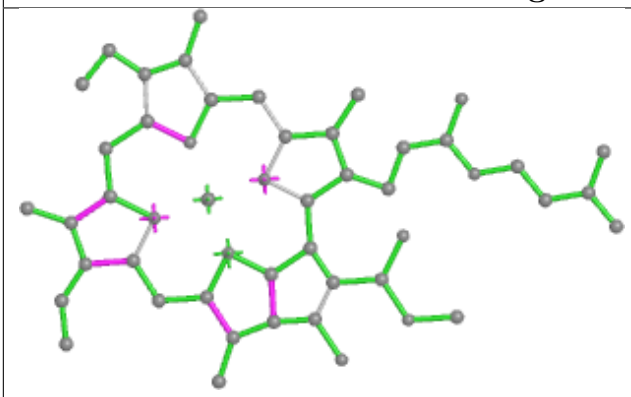
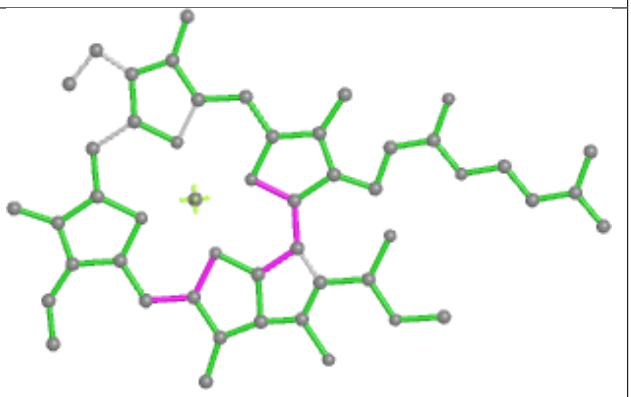
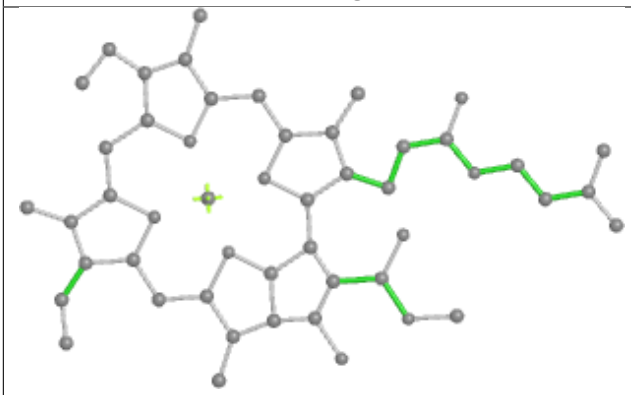
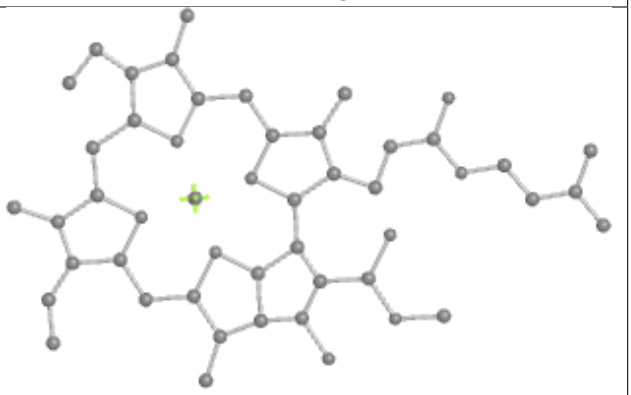
Bond angles

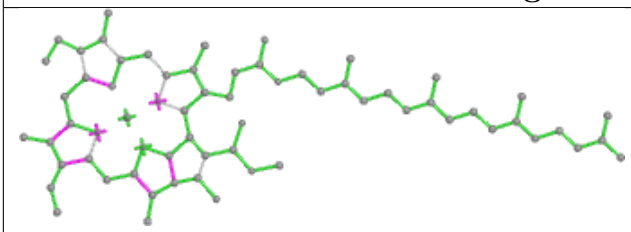
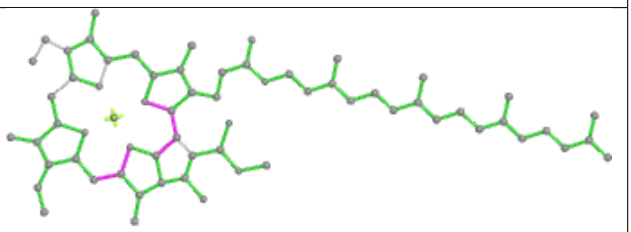
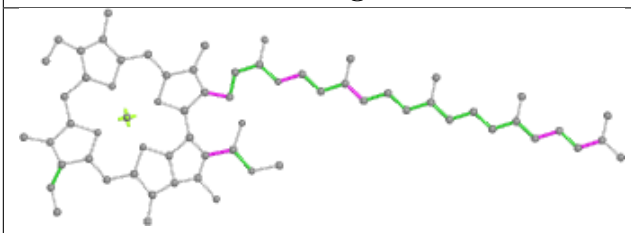
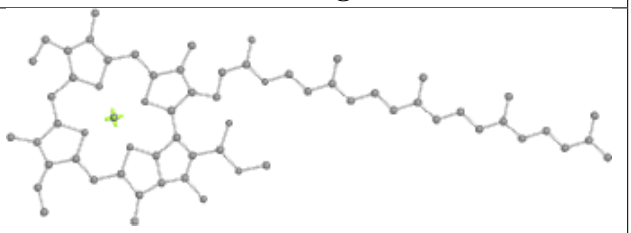


Torsions

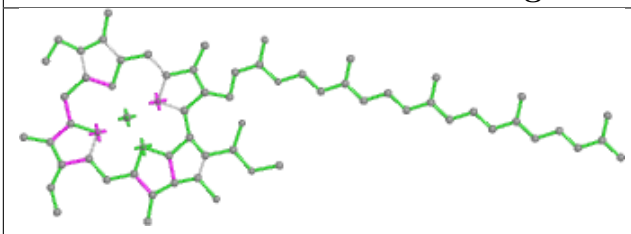


Rings

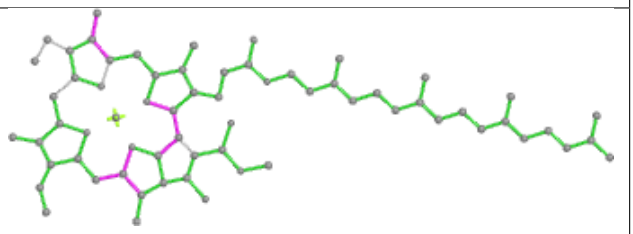
Ligand CLA 6 308	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA A 812	
	
Bond lengths	Bond angles
	
Torsions	Rings

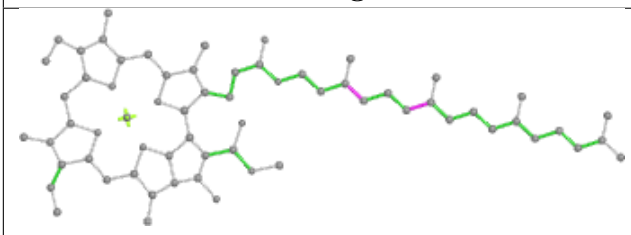
Ligand CLA B 838



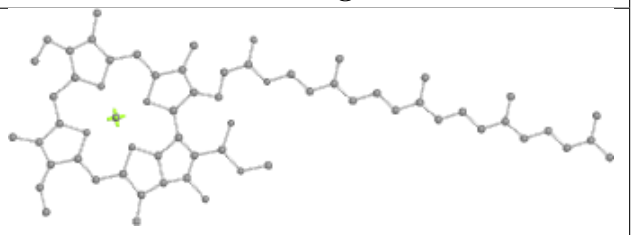
Bond lengths



Bond angles

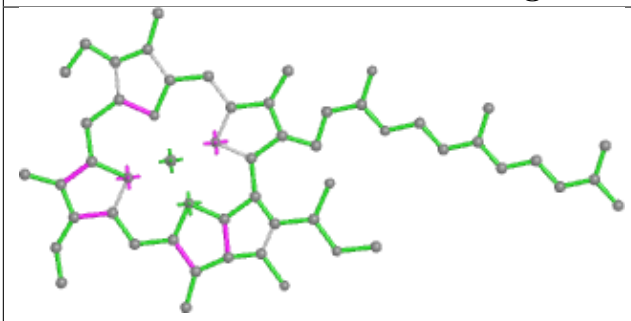


Torsions



Rings

Ligand CLA A 833



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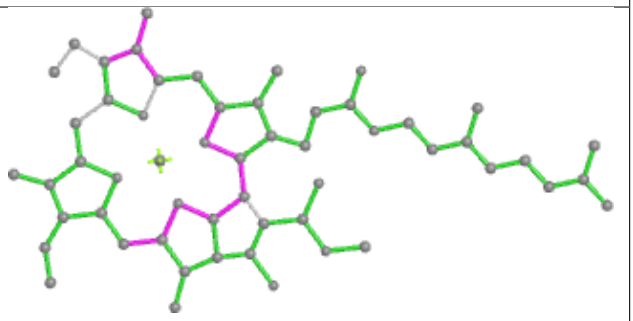
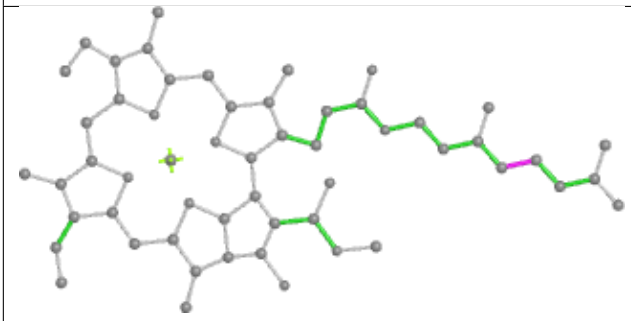


Bond angles



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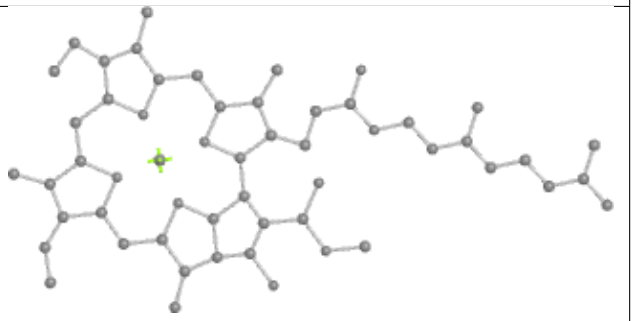
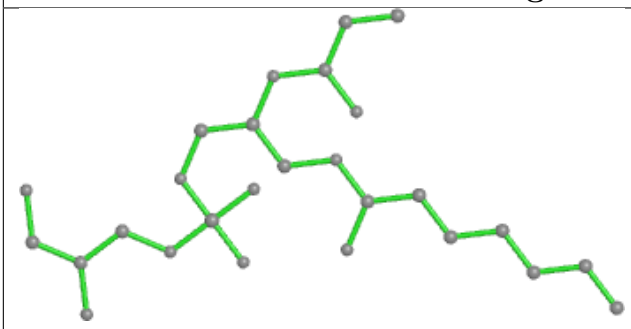


Rings

Ligand LHG 6 319



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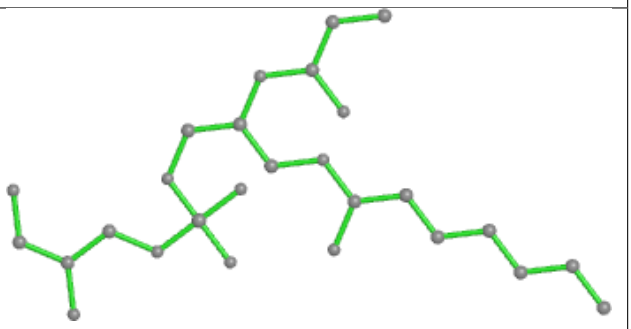
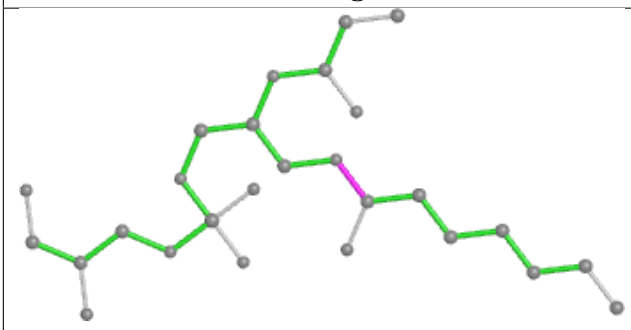


Bond angles



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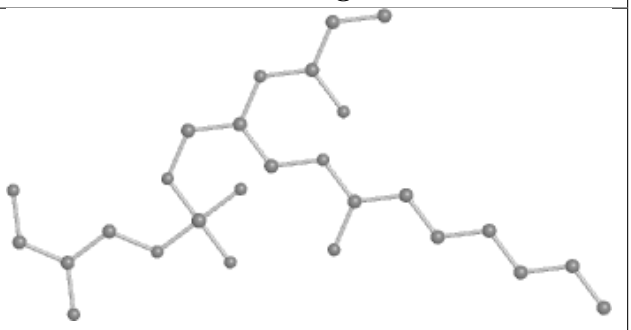
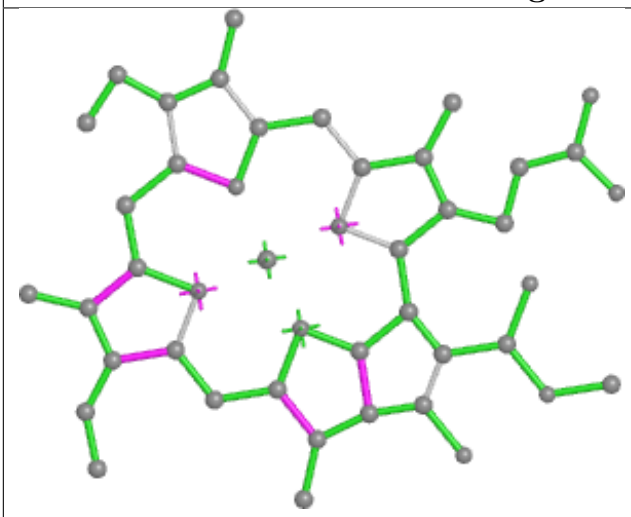


Rings

Ligand CLA 2 311



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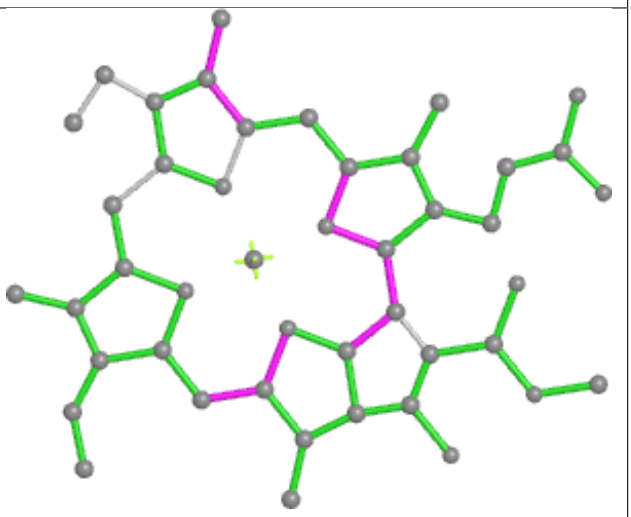
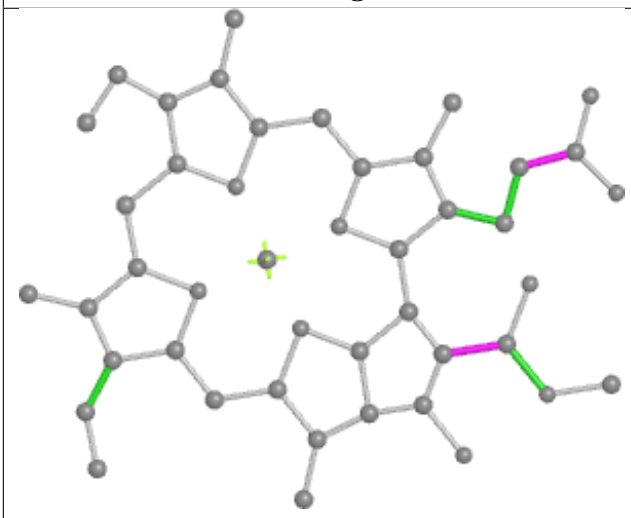


Bond angles



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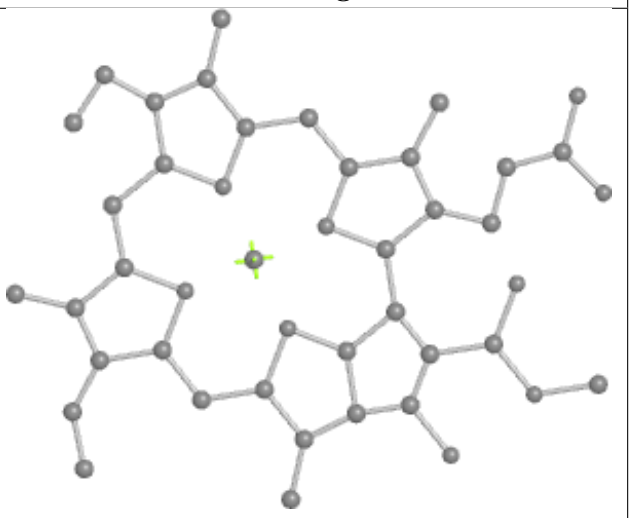
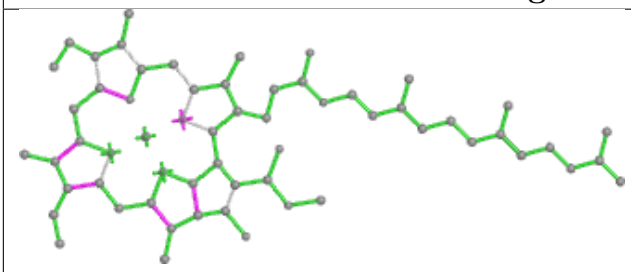


Rings

Ligand CLA 3 307



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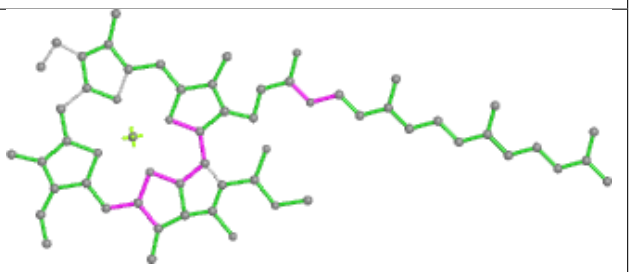
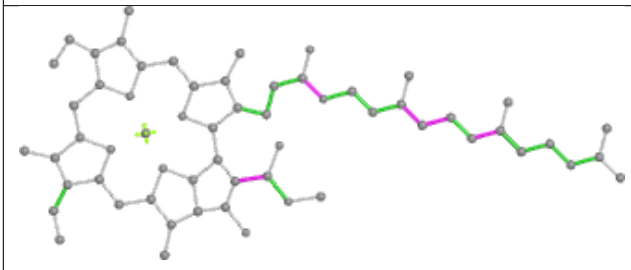


Bond angles



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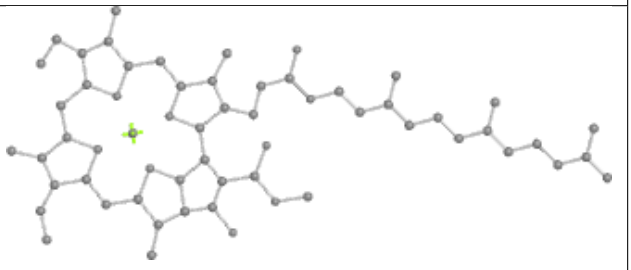
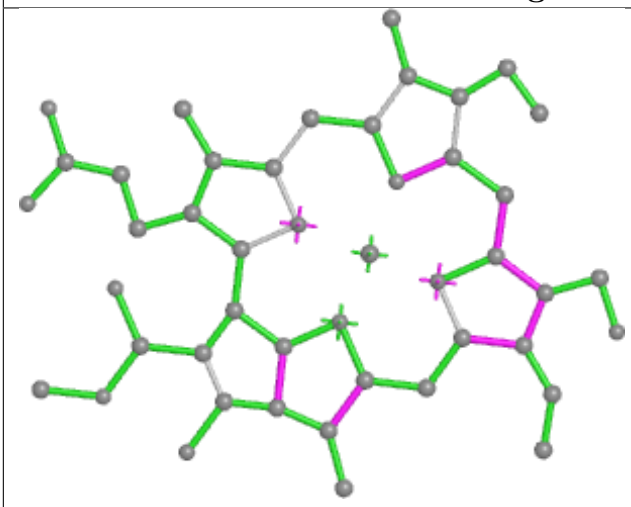


Rings

Ligand CHL 5 304



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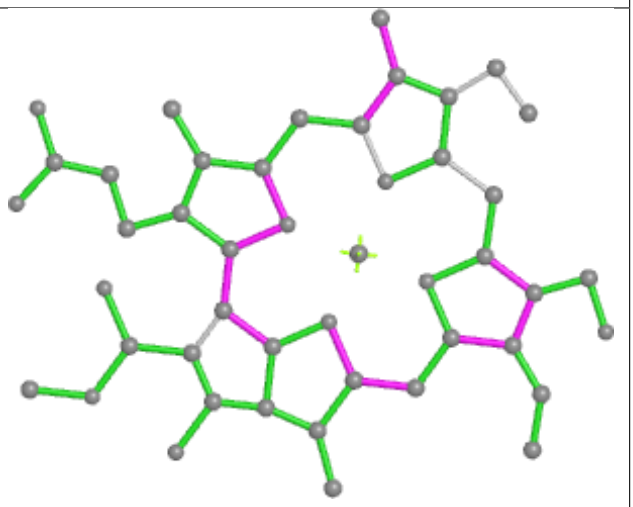
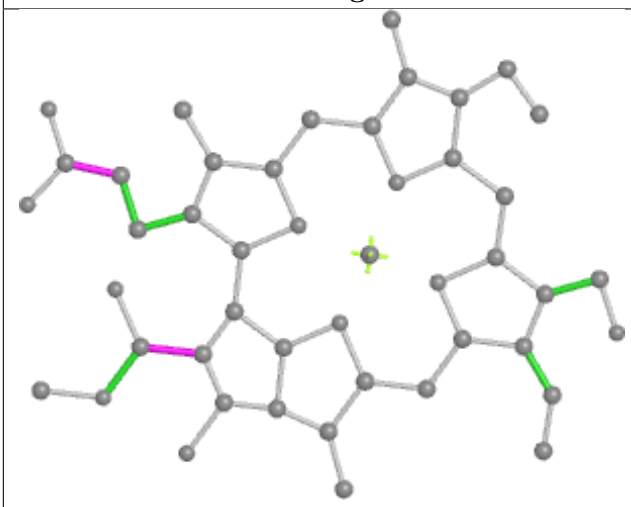


Bond angles



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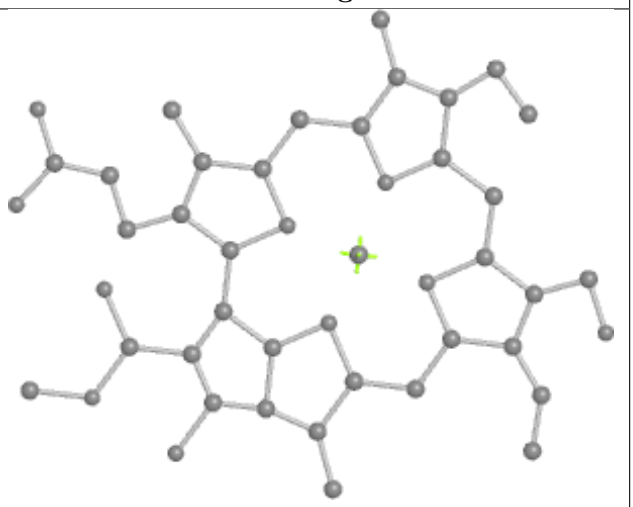
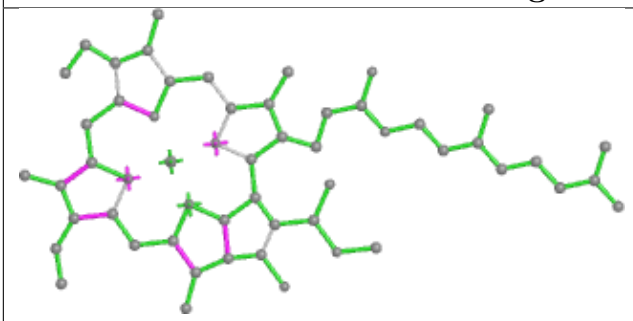


Rings

Ligand CLA 6 303



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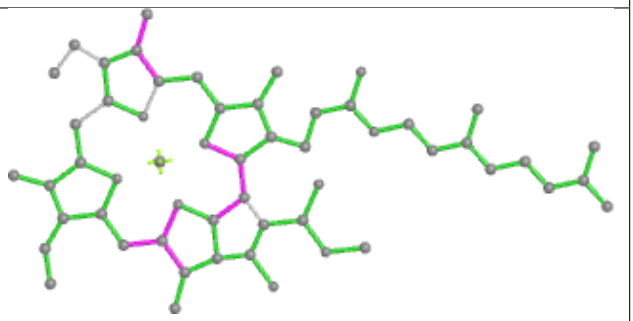
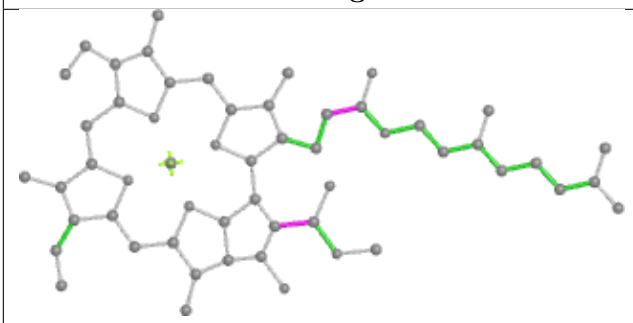
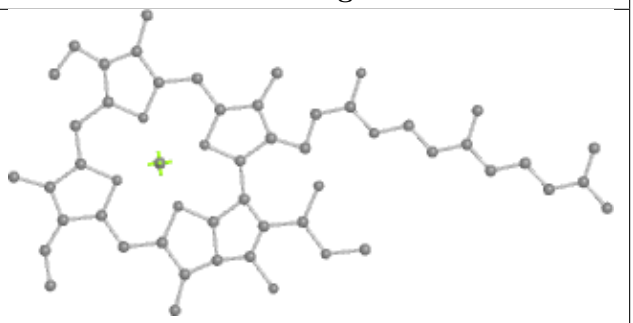


Bond angles

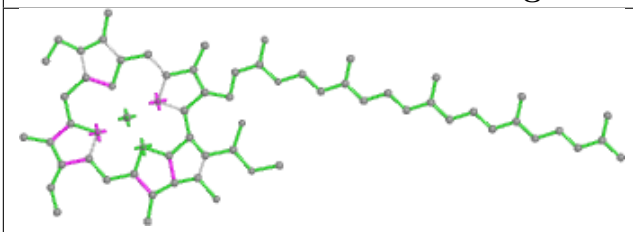


Torsions



Rings

Ligand CLA A 834



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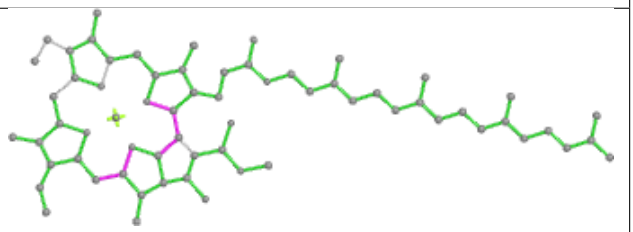
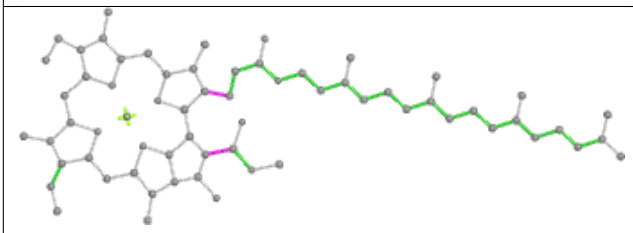
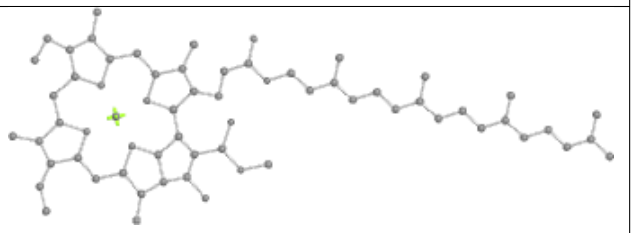


Bond angles

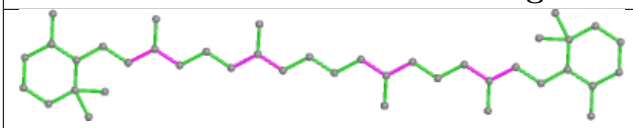


Torsions

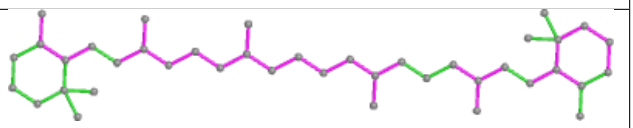


Rings

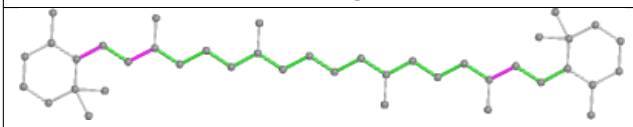
Ligand BCR 5 317



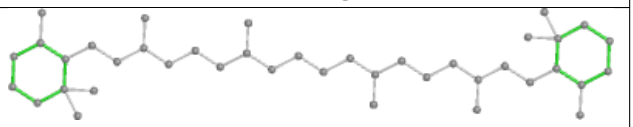
Bond lengths



Bond angles

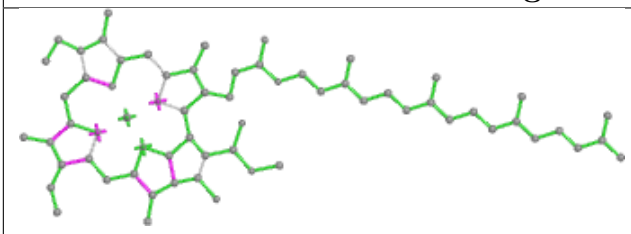


Torsions



Rings

Ligand CLA A 841



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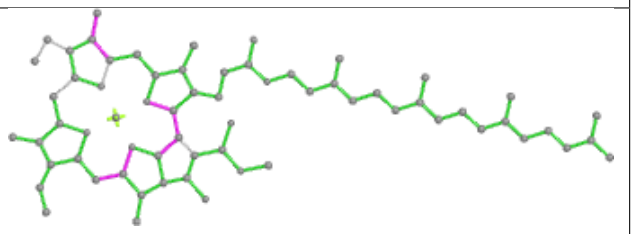
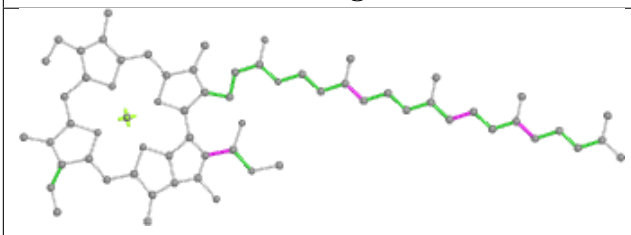
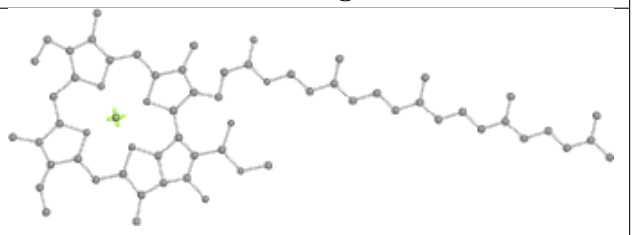


Bond angles

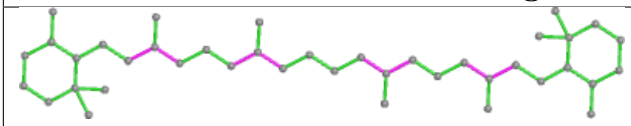


Torsions

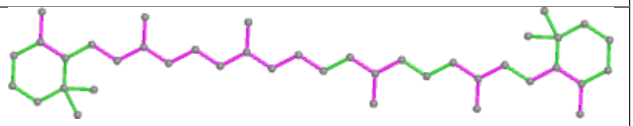


Rings

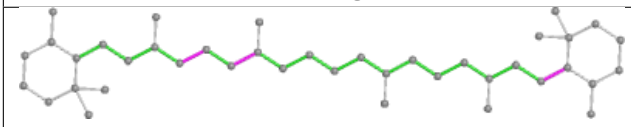
Ligand BCR B 848



Bond lengths



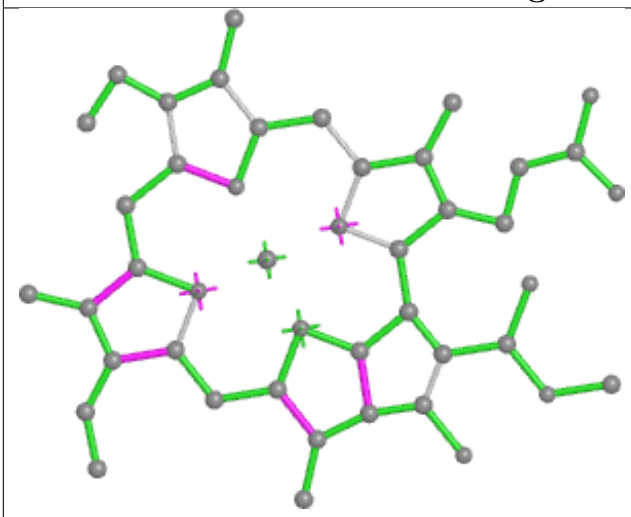
Bond angles



Torsions

Rings

Ligand CLA 5 303



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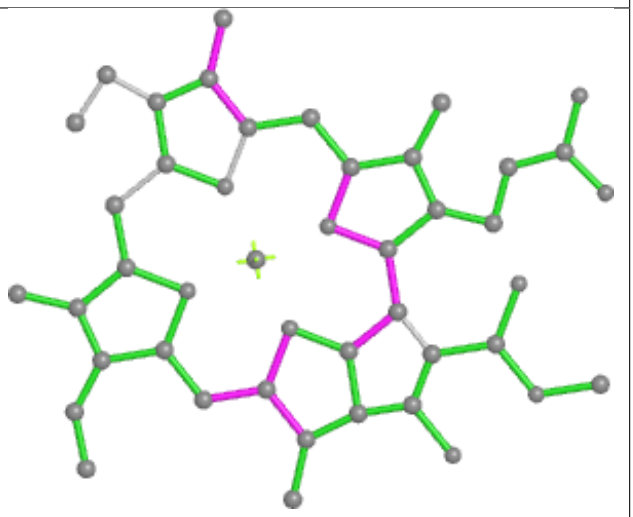

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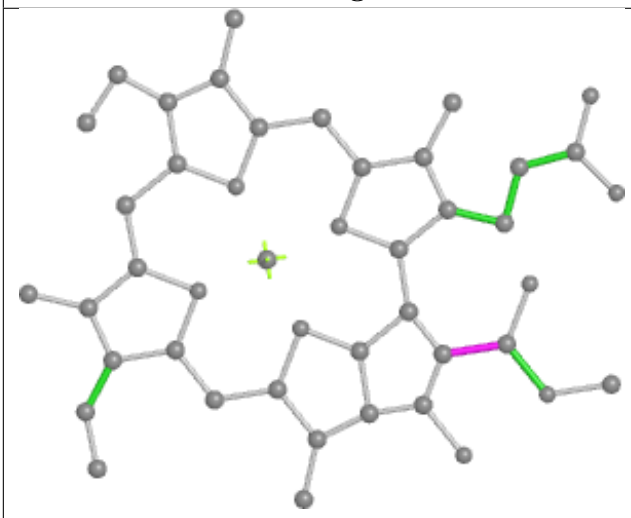

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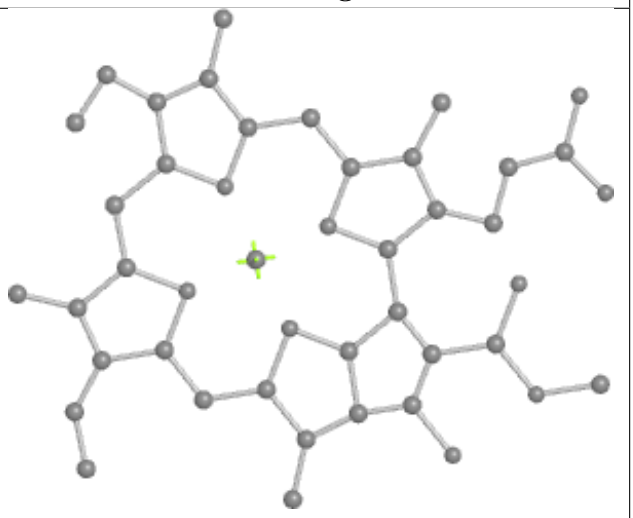
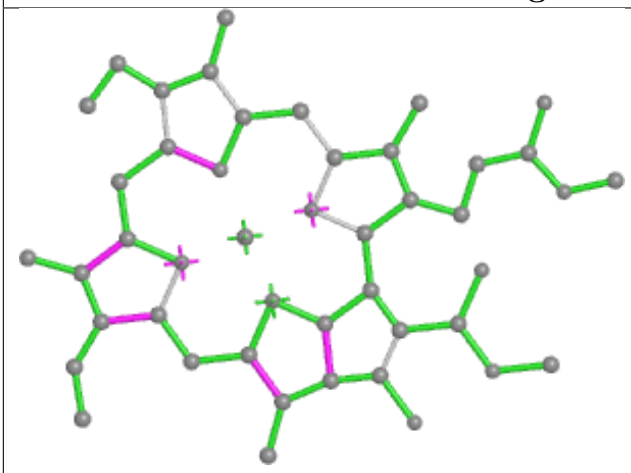


Rings

Ligand CLA 3 305



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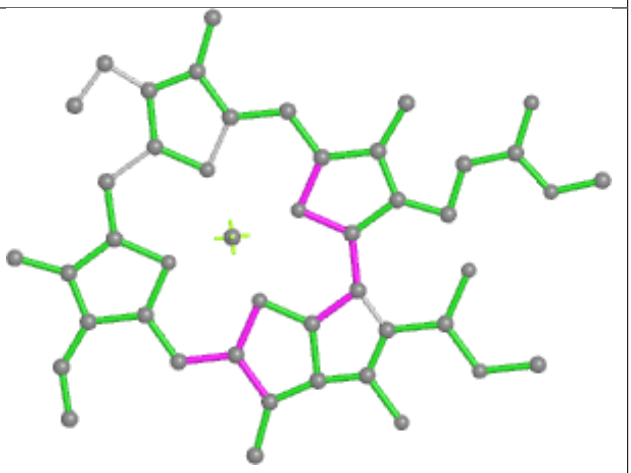
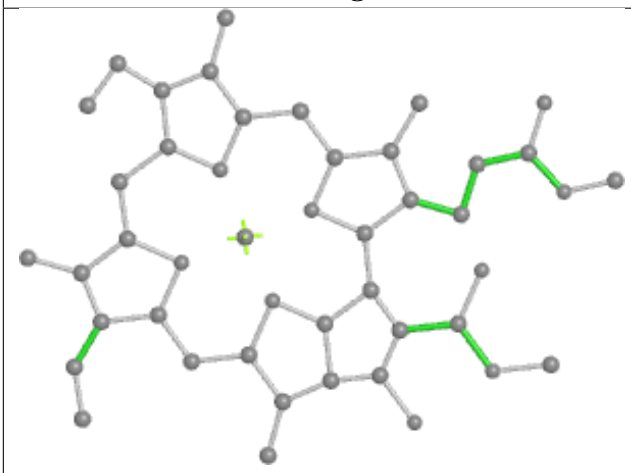


Bond angles



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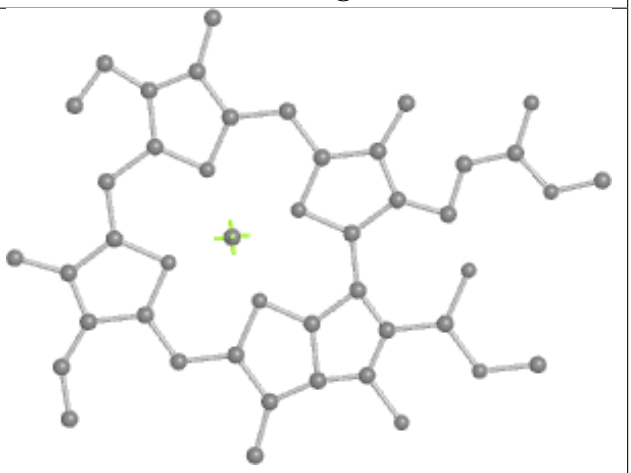
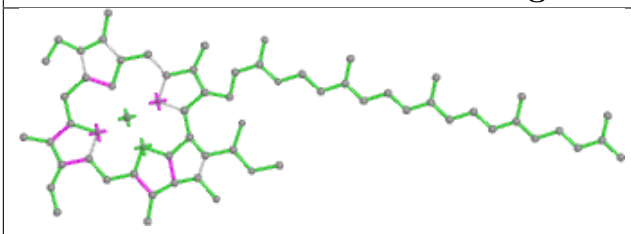


Rings

Ligand CLA 5 312



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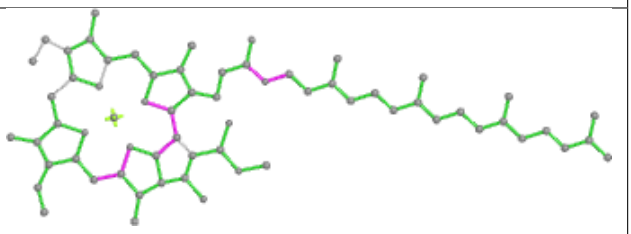

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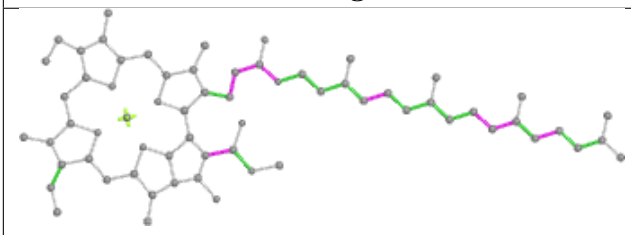

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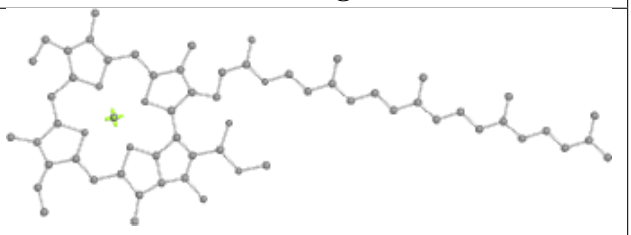
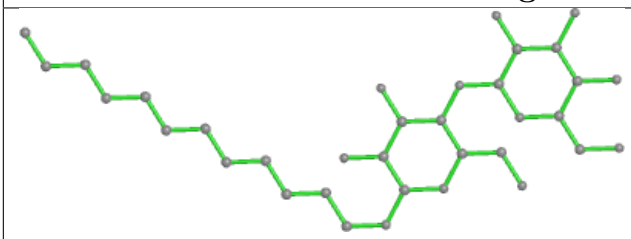
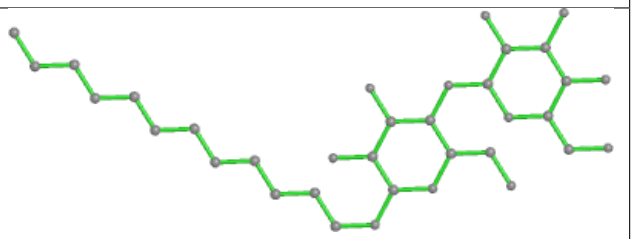


Rings

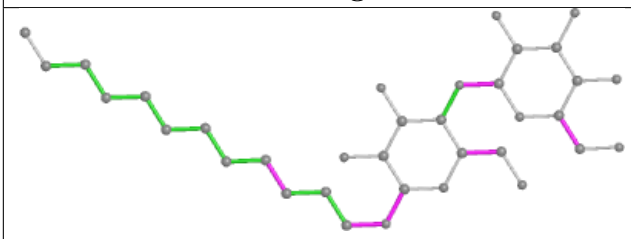
Ligand LMU G 202



Bond lengths



Bond angles



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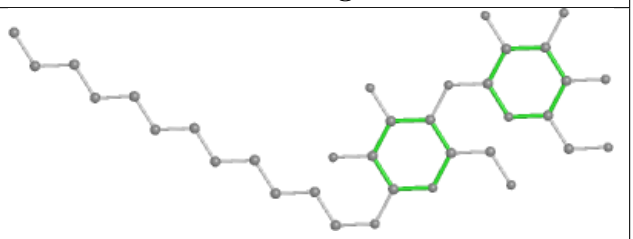
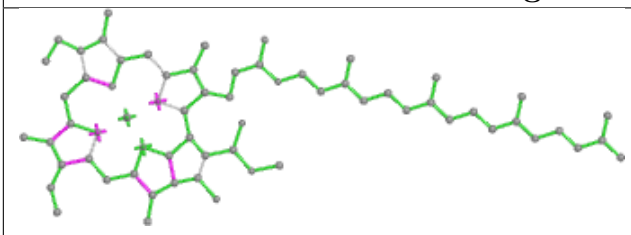


Rings

Ligand CLA A 820



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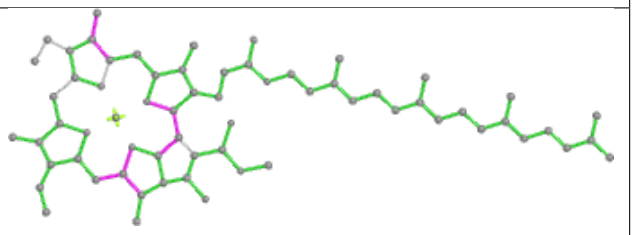
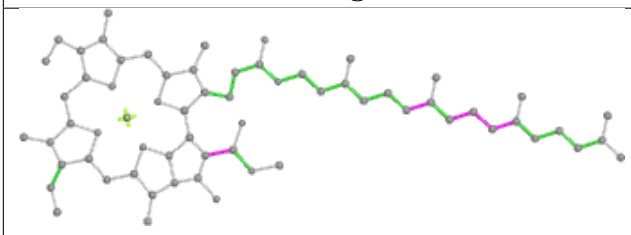


Bond angles



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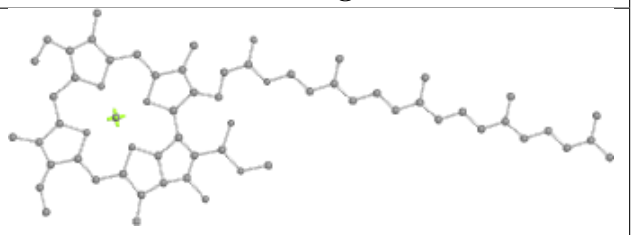
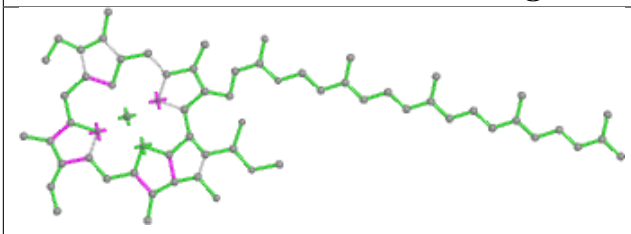


Rings

Ligand CLA B 827



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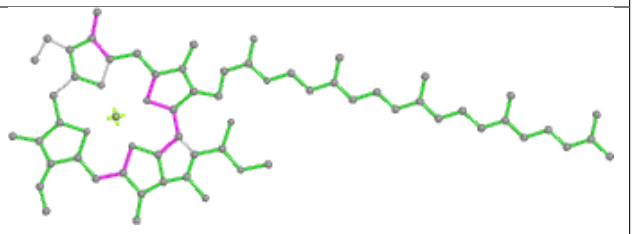
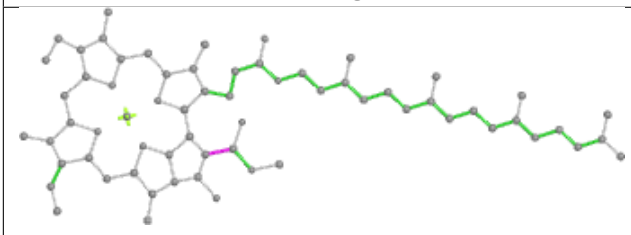


Bond angles



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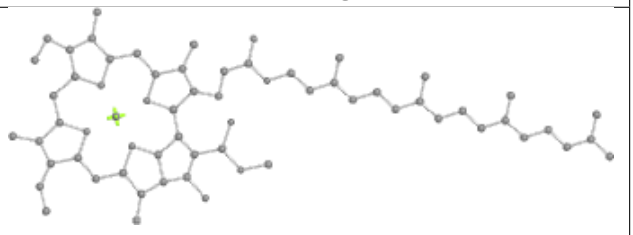
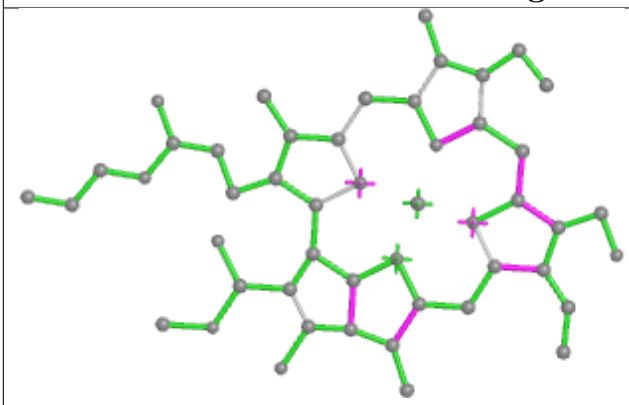


Rings

Ligand CHL 2 307



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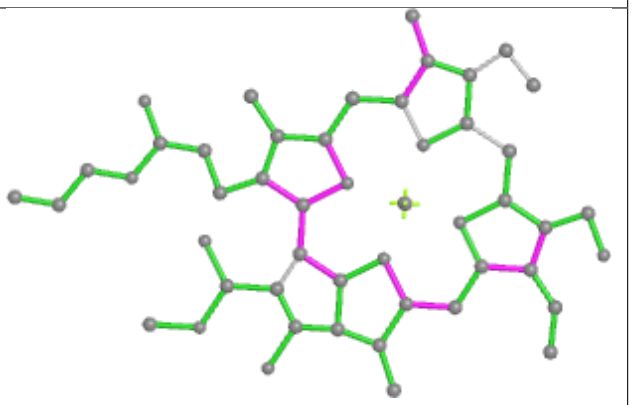
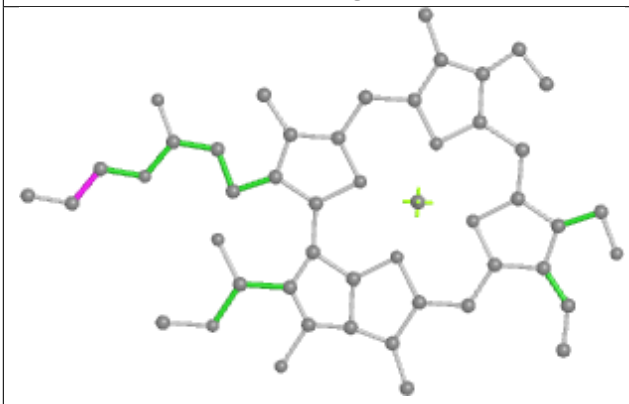


Bond angles



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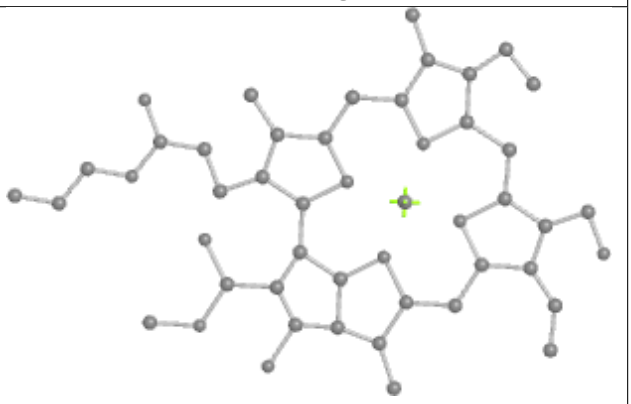
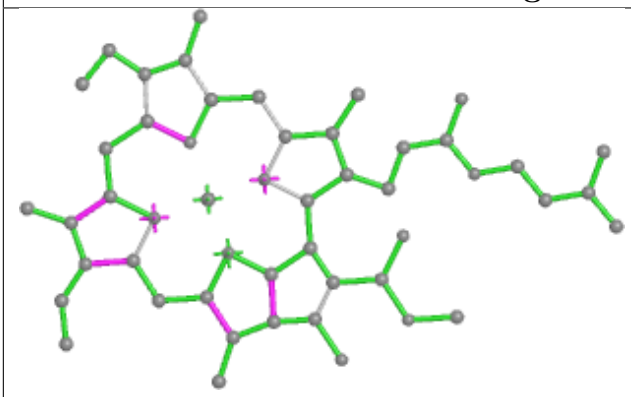


Rings

Ligand CLA A 832



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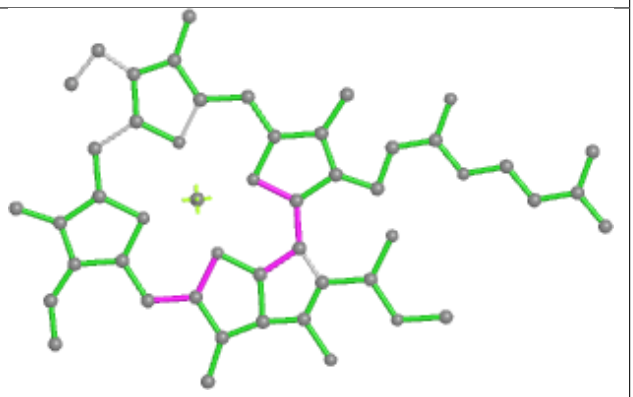

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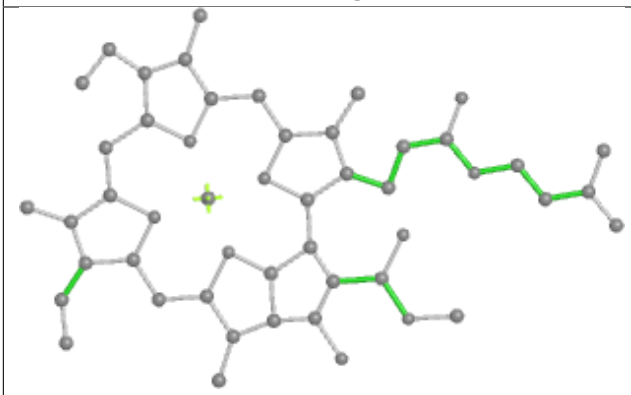

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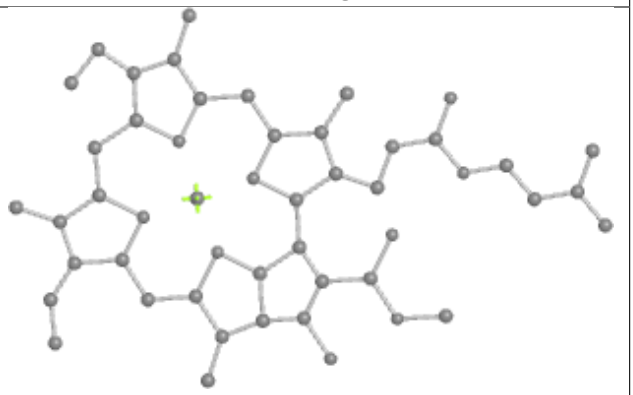
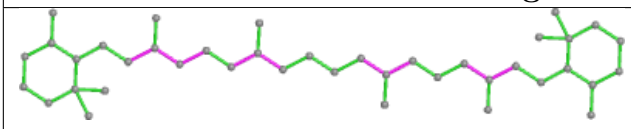


Rings

Ligand BCR B 847



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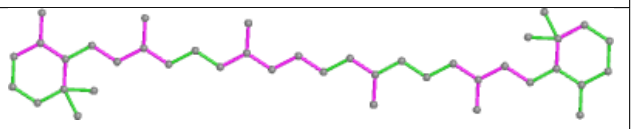
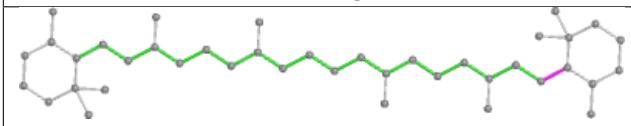


Bond angles



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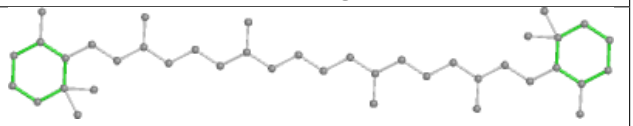
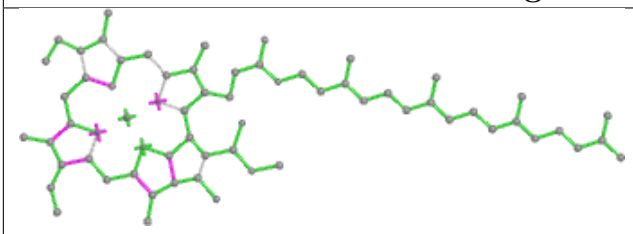


Rings

Ligand CLA B 832



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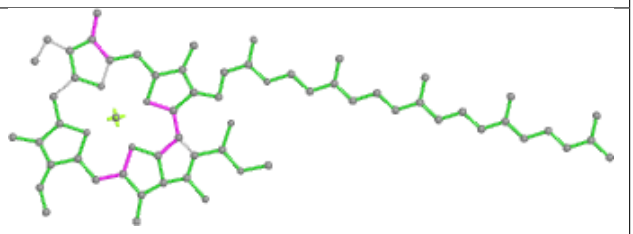
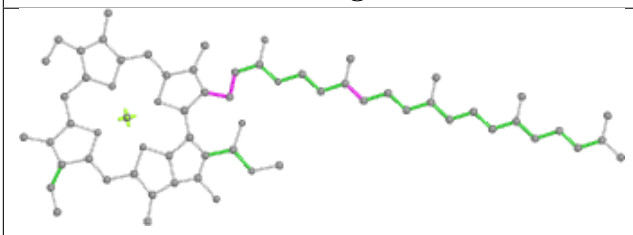


Bond angles



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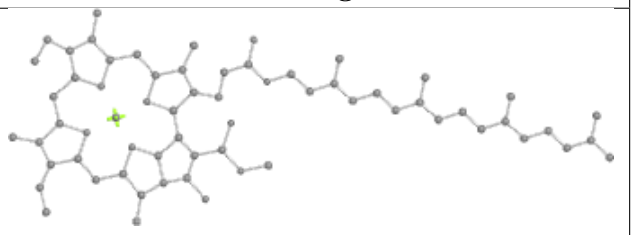
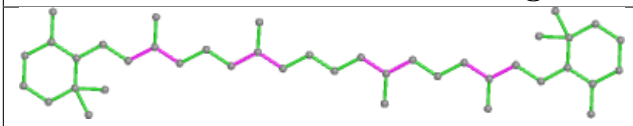


Rings

Ligand BCR L 305



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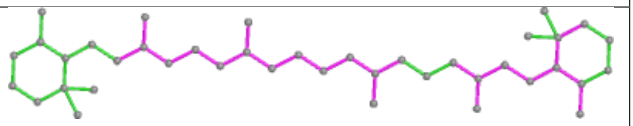
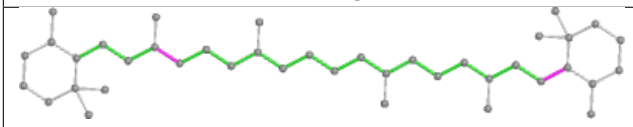


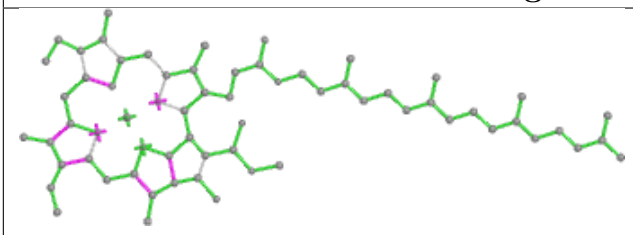
Bond angles



Torsions

Rings

Ligand CLA B 829



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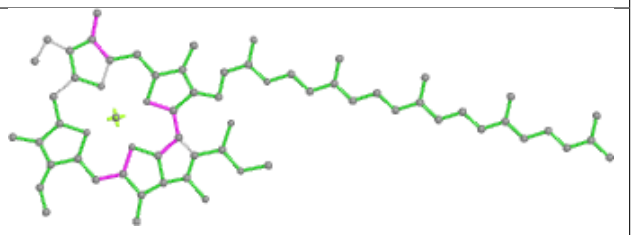
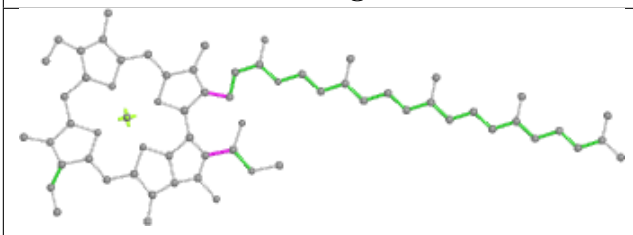


Bond angles



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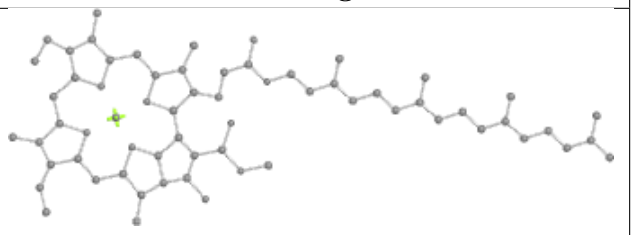
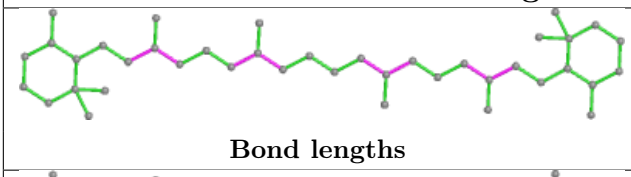
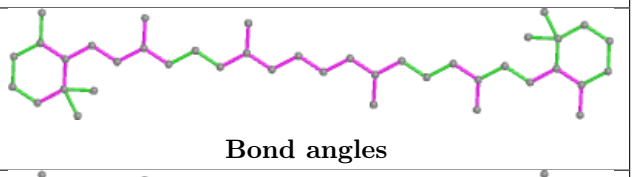


Rings

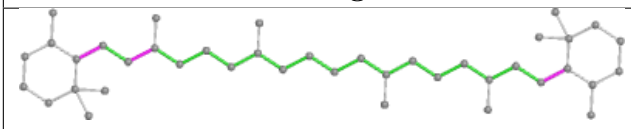
Ligand BCR A 848



Bond lengths



Bond angles



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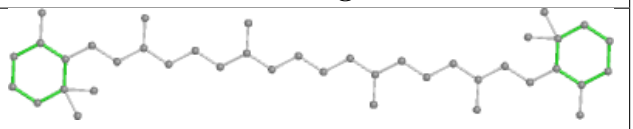
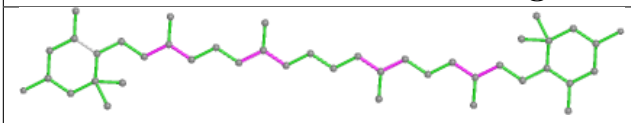
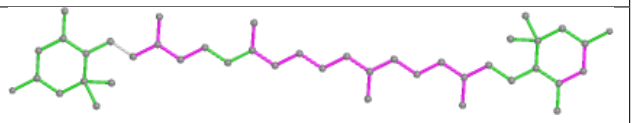


Rings

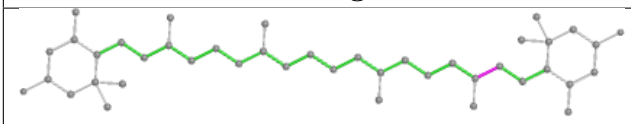
Ligand LUT 2 315



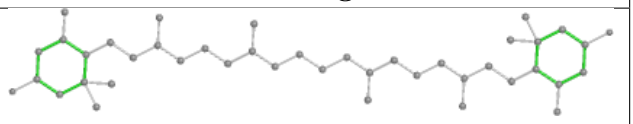
Bond lengths



Bond angles

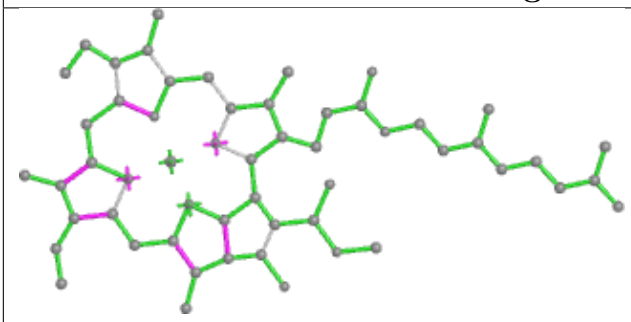


Torsions

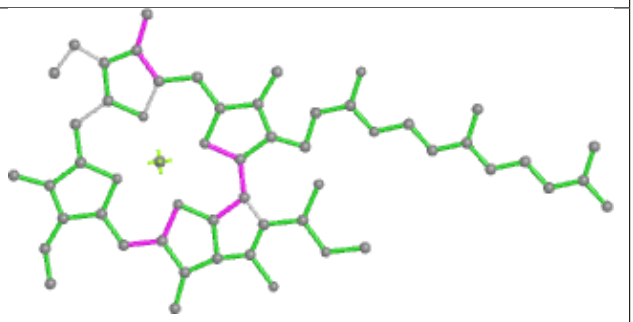


Rings

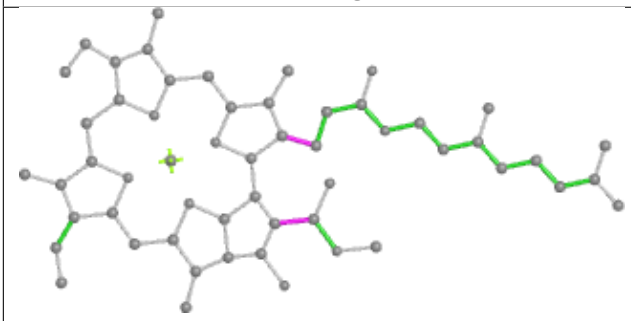
Ligand CLA A 811



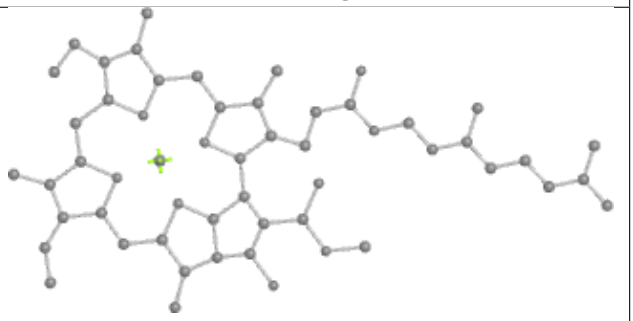
Bond lengths



Bond angles

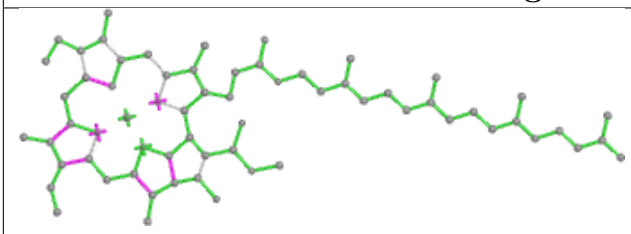


Torsions

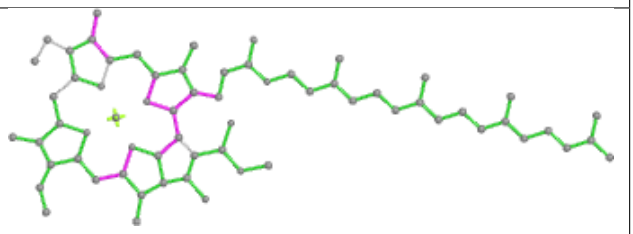


Rings

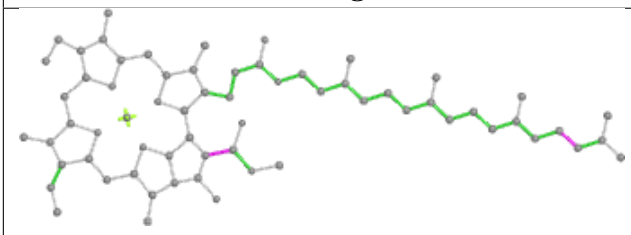
Ligand CLA B 833



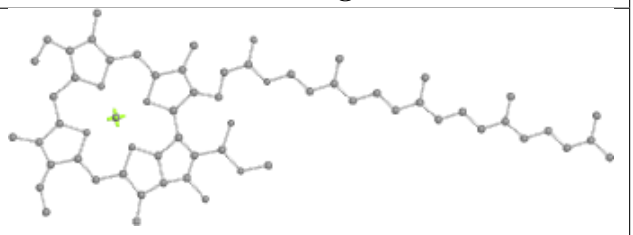
Bond lengths



Bond angles

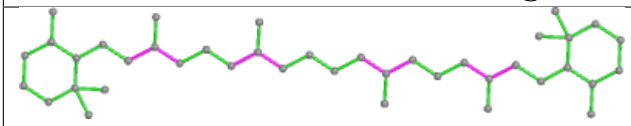


Torsions

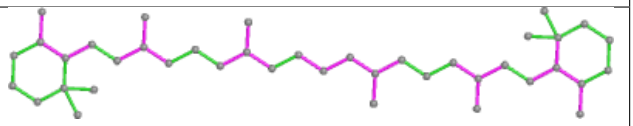


Rings

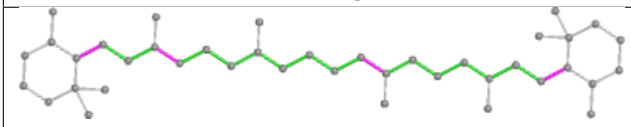
Ligand BCR A 852



Bond lengths



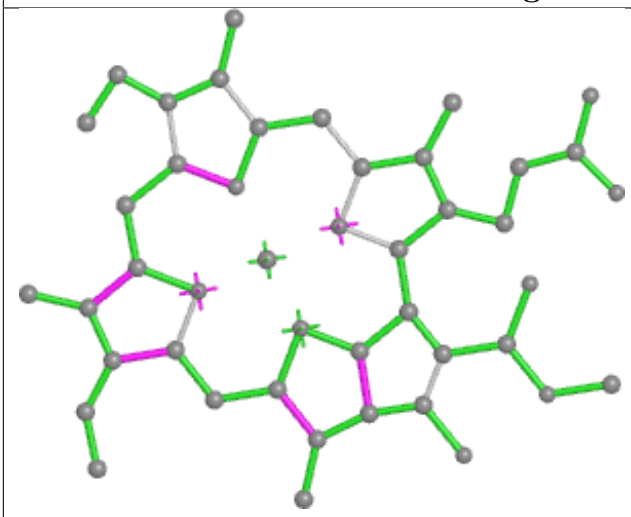
Bond angles



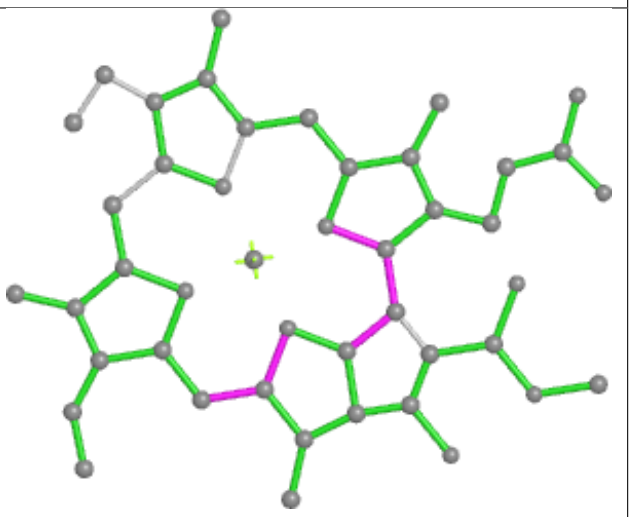
Torsions

Rings

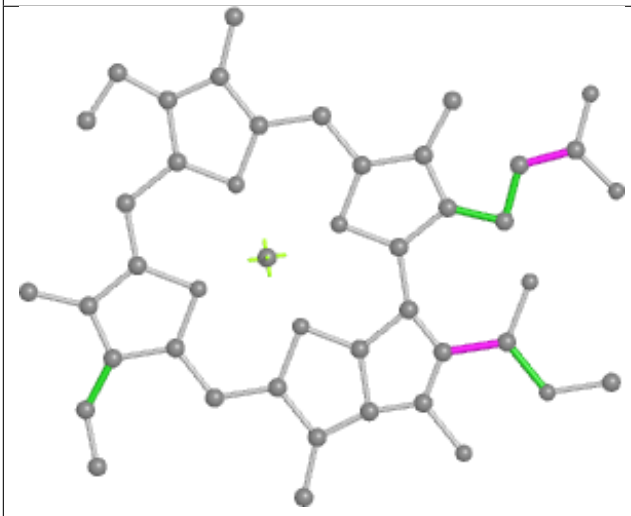
Ligand CLA G 203



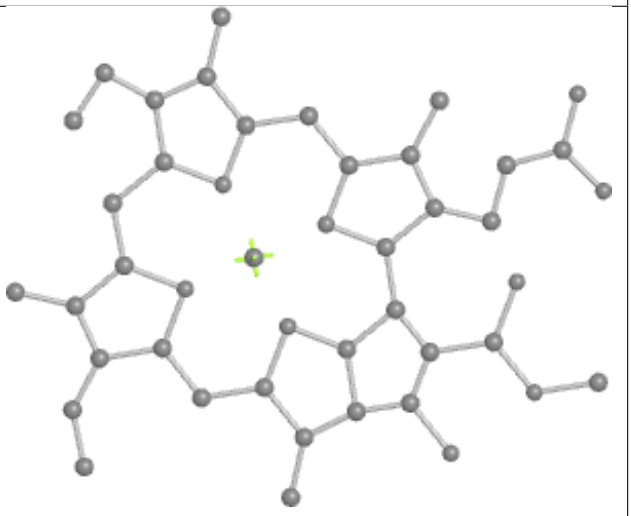
Bond lengths



Bond angles

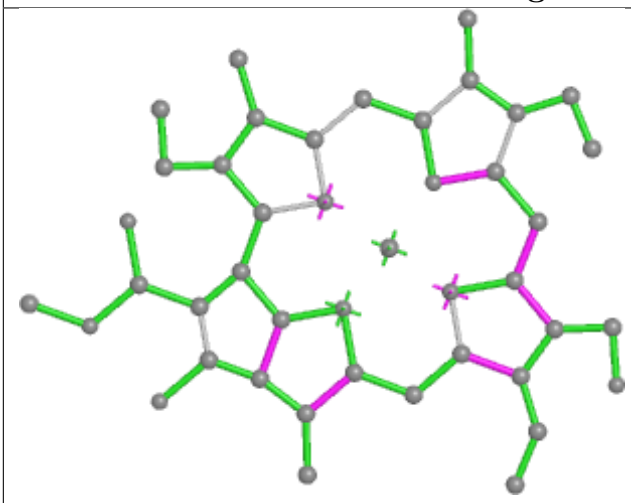


Torsions

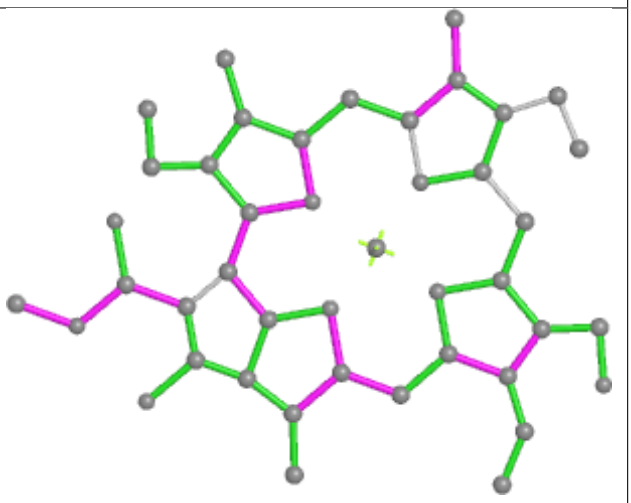


Rings

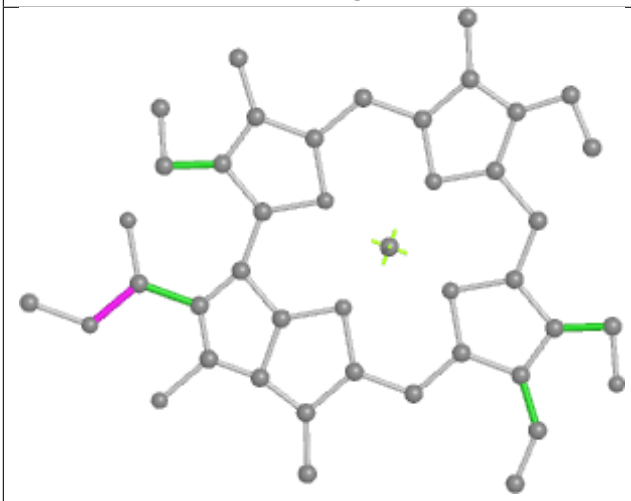
Ligand CHL 2 306



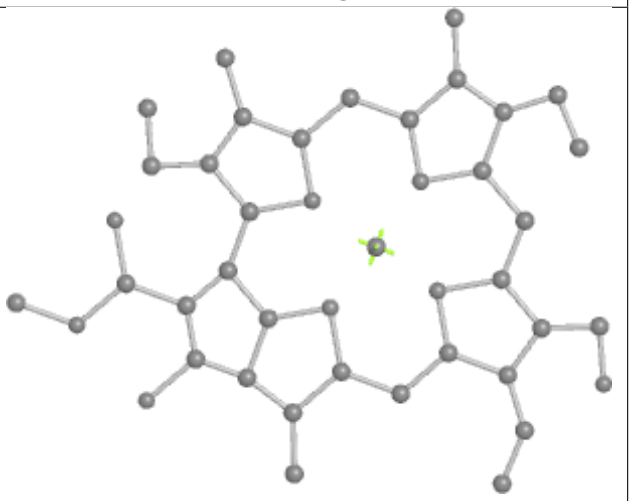
Bond lengths



Bond angles

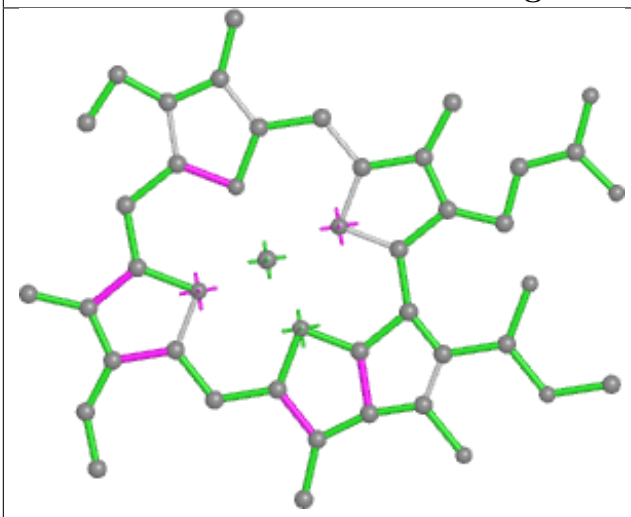


Torsions

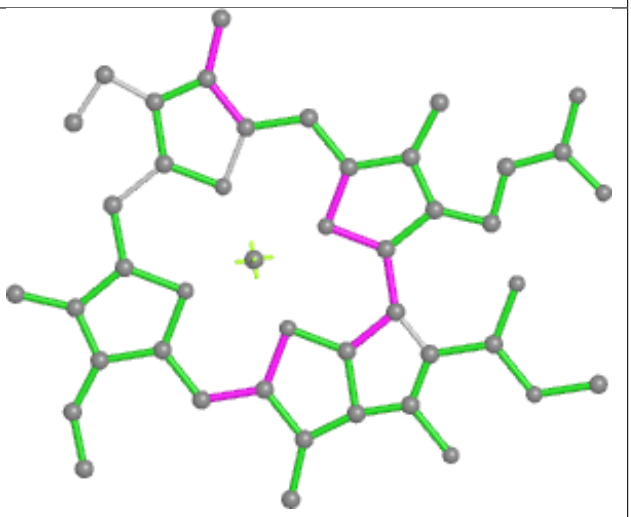


Rings

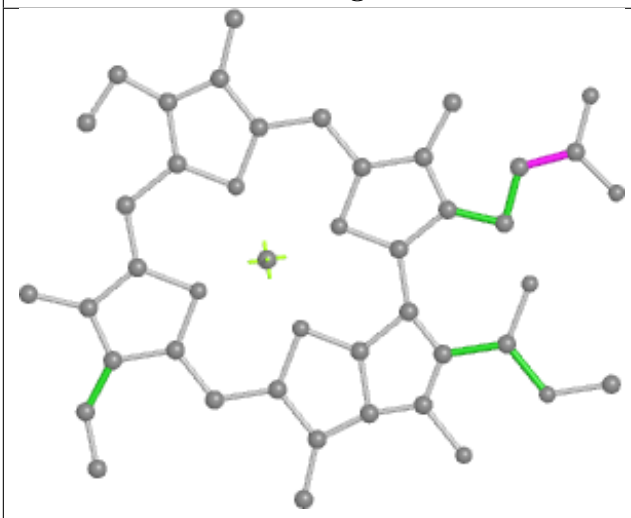
Ligand CLA B 813



Bond lengths



Bond angles



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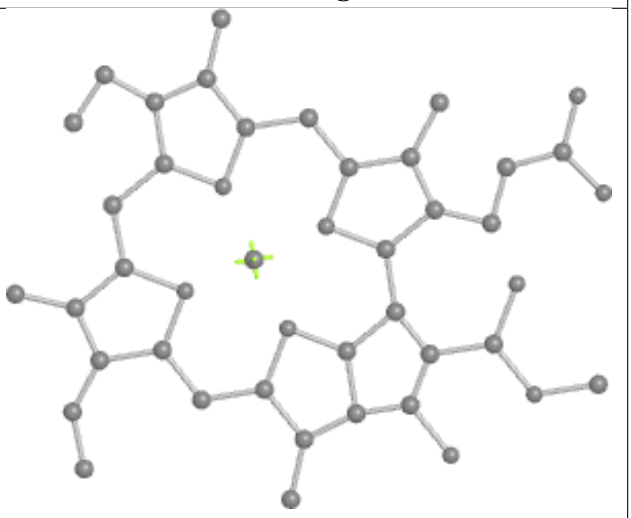
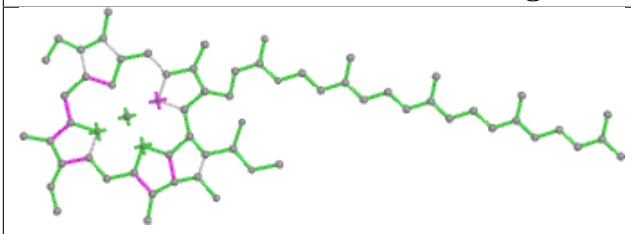
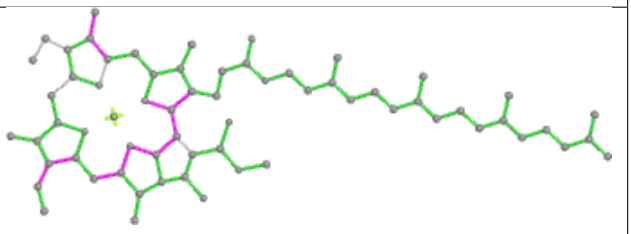


Rings

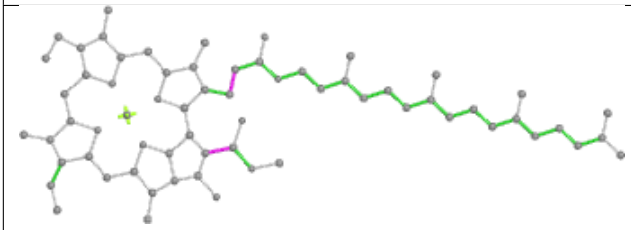
Ligand CLA B 804



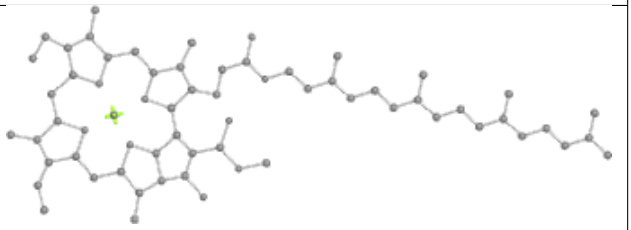
Bond lengths



Bond angles

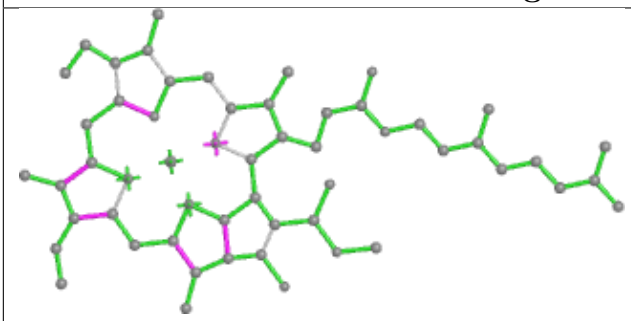


Torsions



Rings

Ligand CLA A 827



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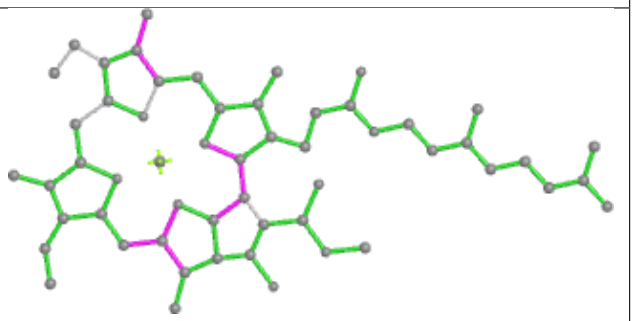
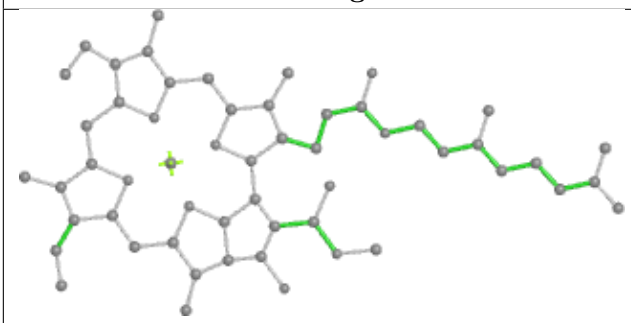


Bond angles



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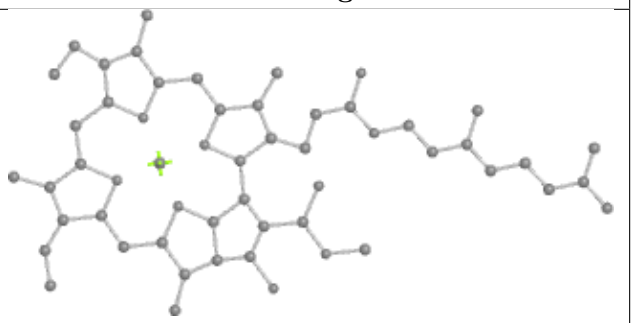
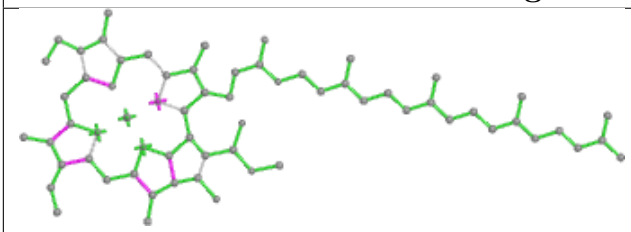
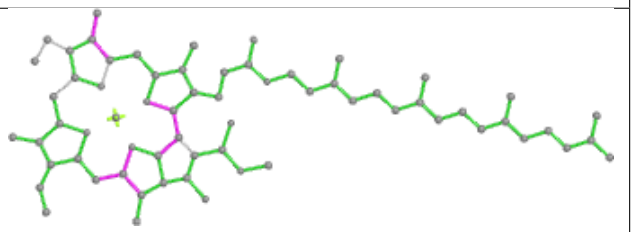


Rings

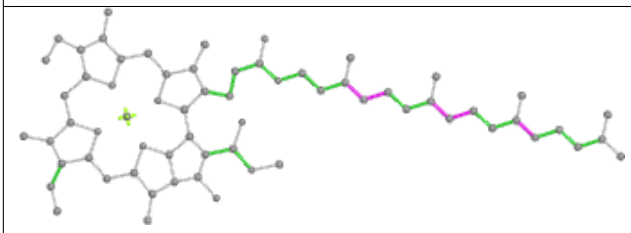
Ligand CLA B 819



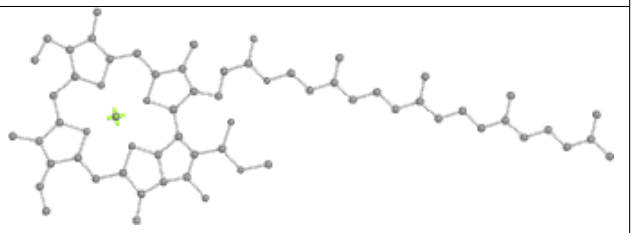
Bond lengths



Bond angles

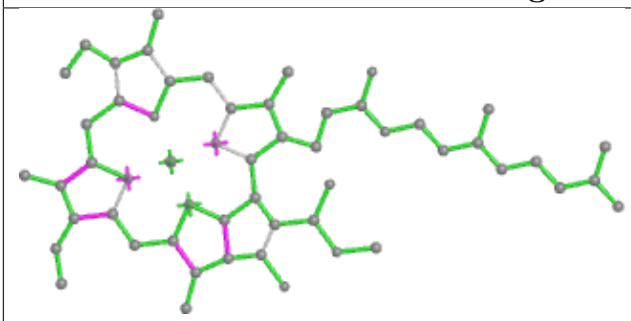


Torsions



Rings

Ligand CLA 3 302



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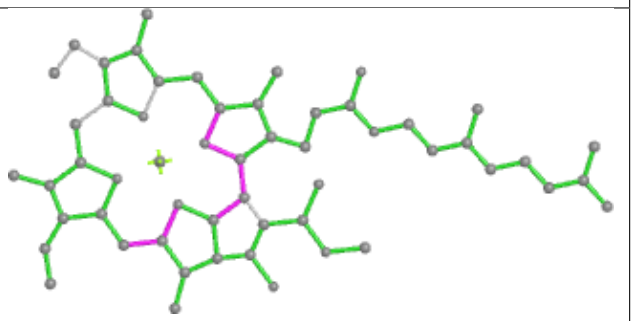
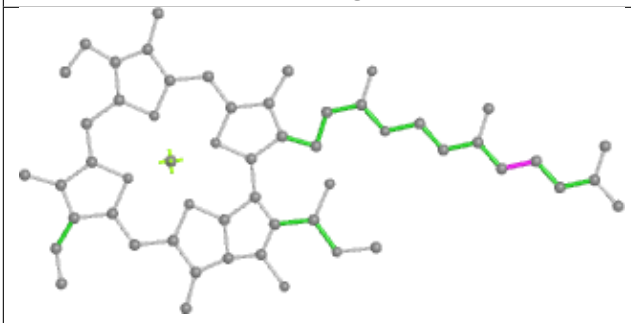


Bond angles



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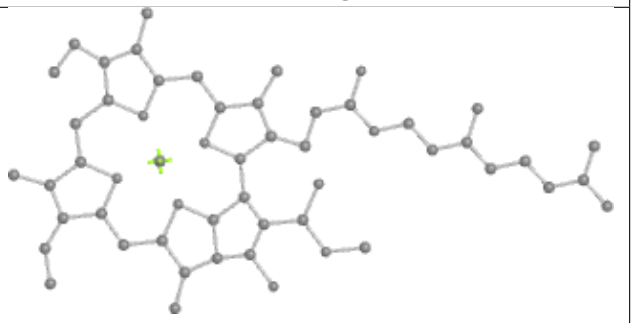
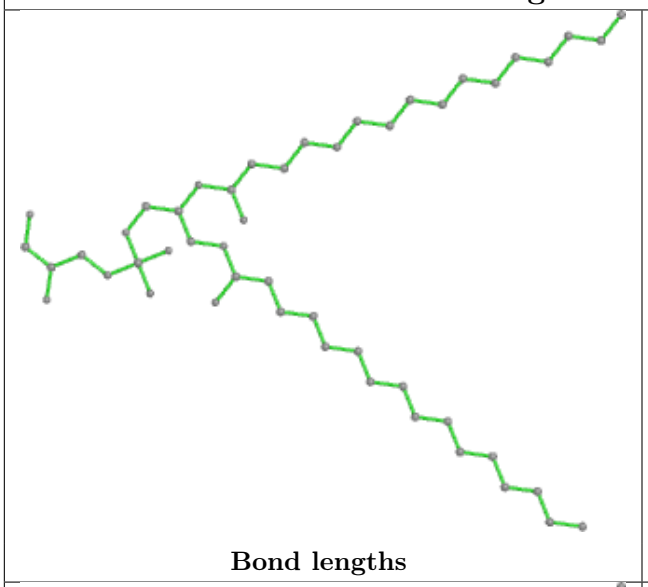


Rings

Ligand LHG 6 317



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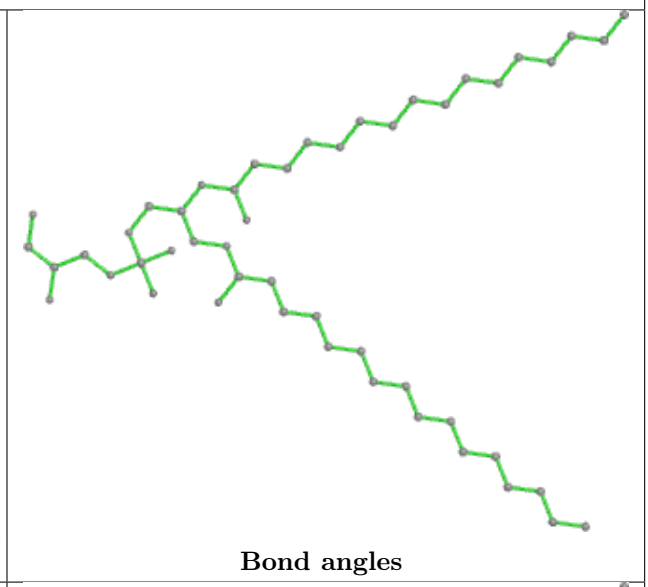
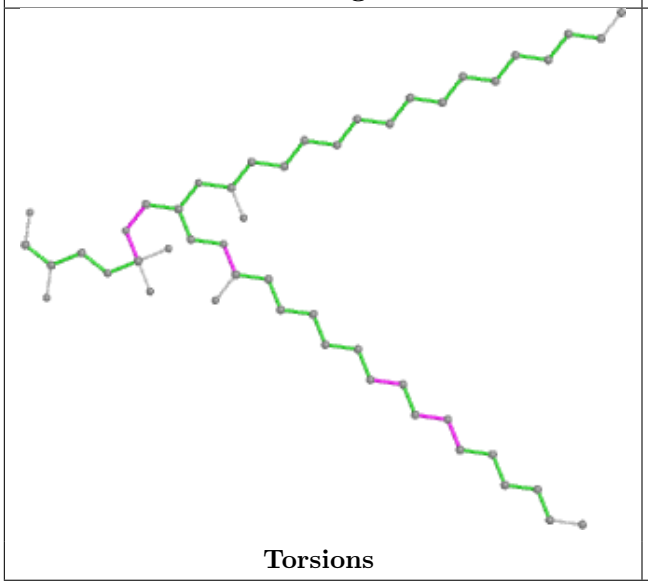
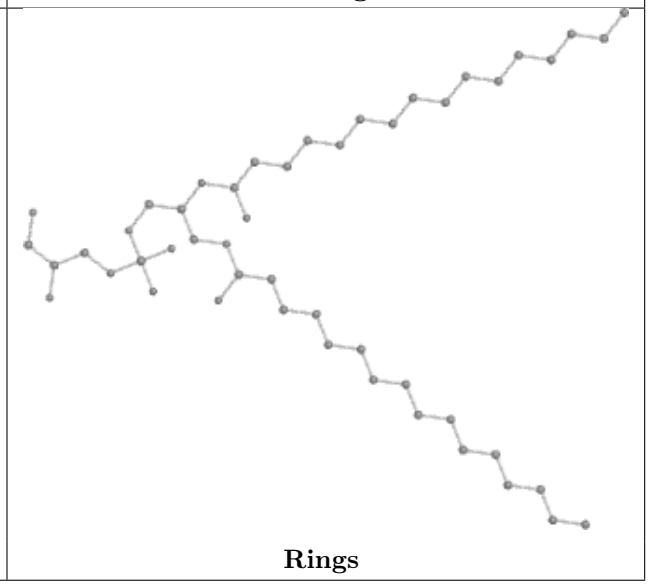


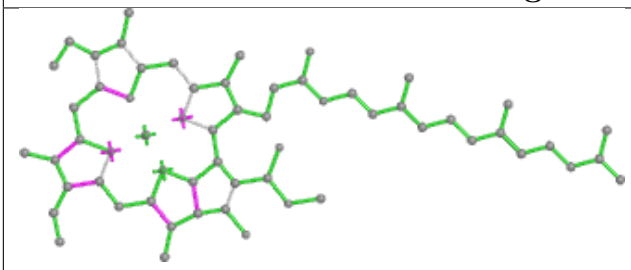
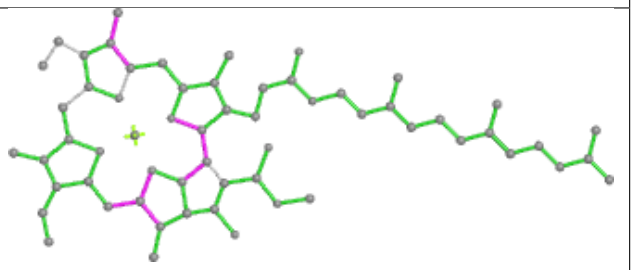
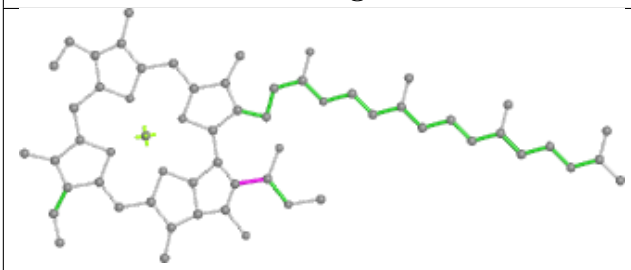
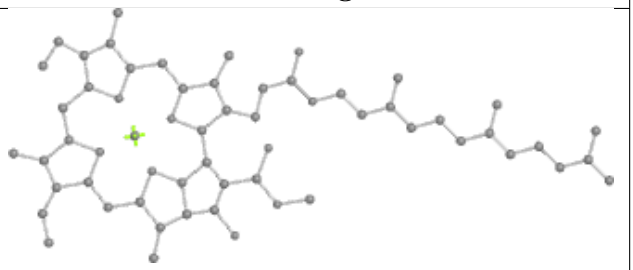
Bond angles

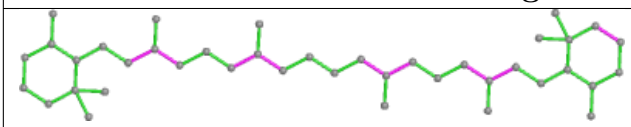
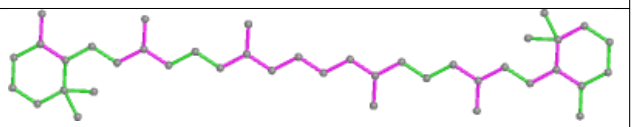
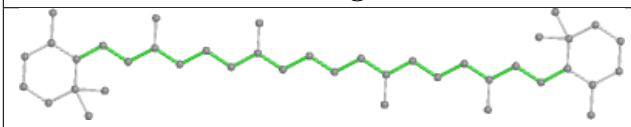
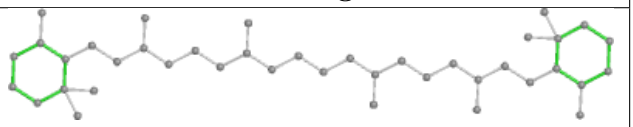


Torsions

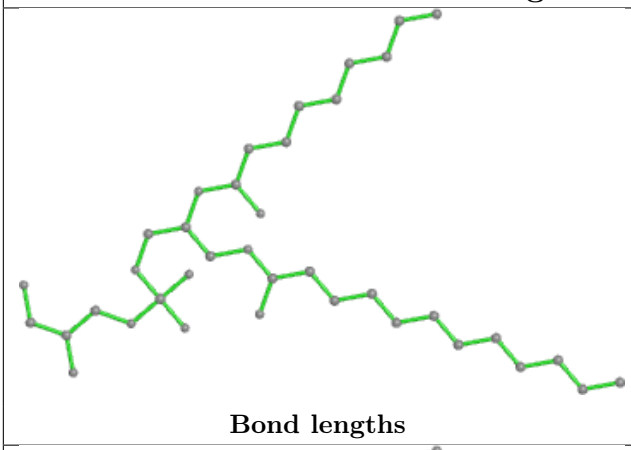


Rings

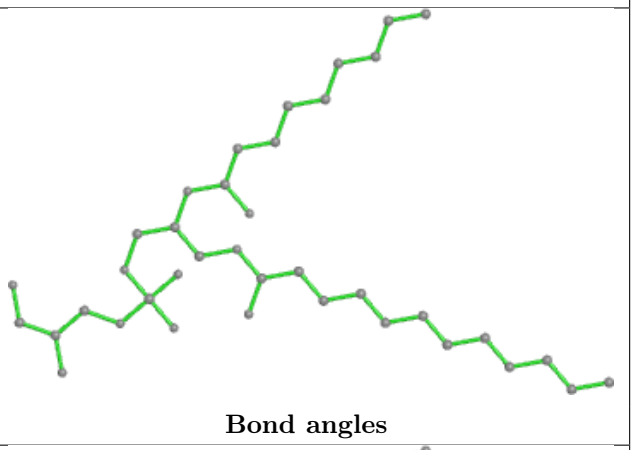
Ligand CLA B 834	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR A 851	
	
Bond lengths	Bond angles
	
Torsions	Rings

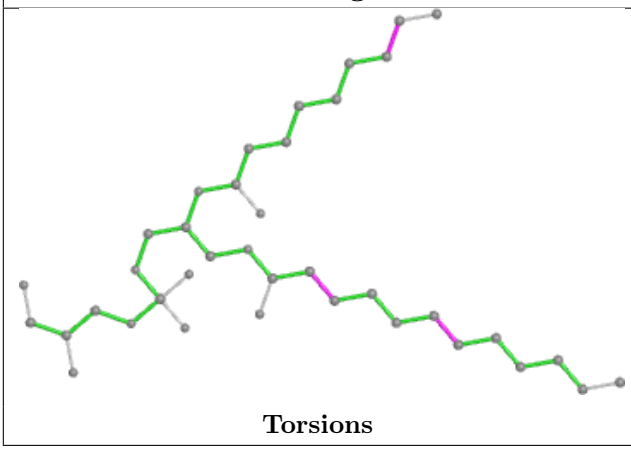
Ligand LHG 2 318



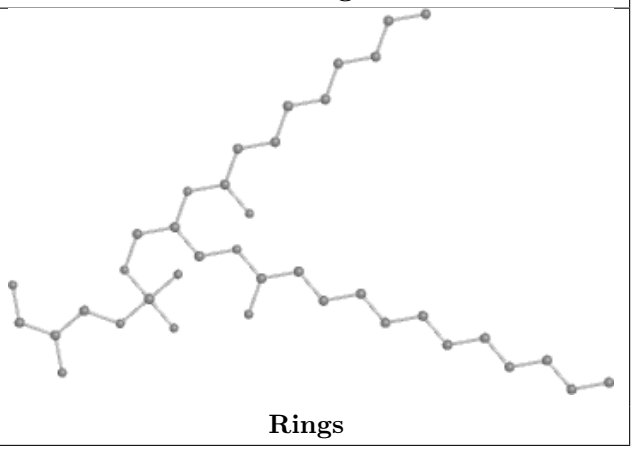
Bond lengths



Bond angles

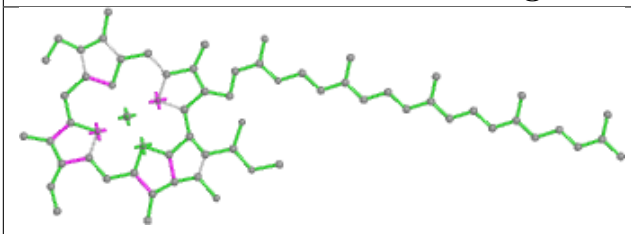


Torsions

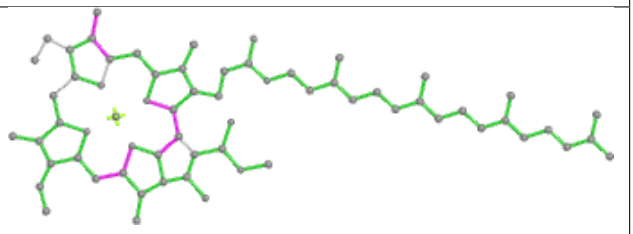


Rings

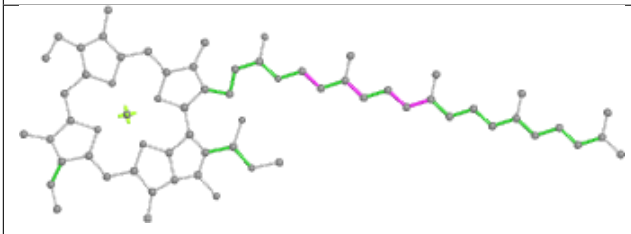
Ligand CLA A 829



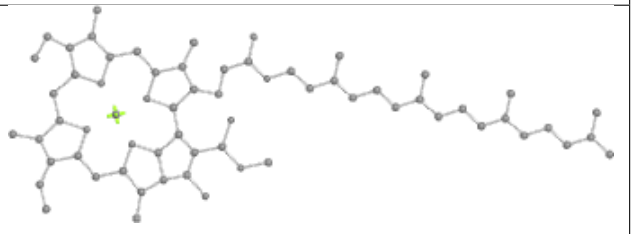
Bond lengths



Bond angles

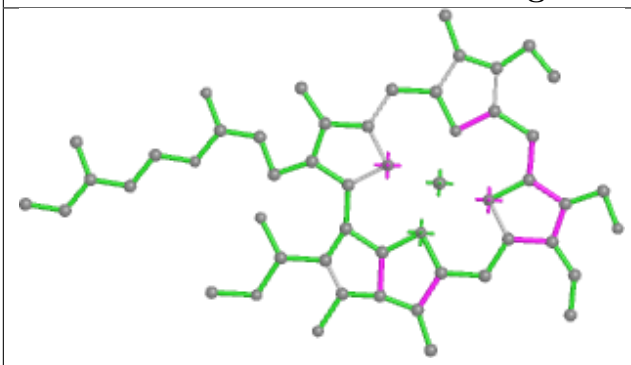


Torsions



Rings

Ligand CHL 2 320



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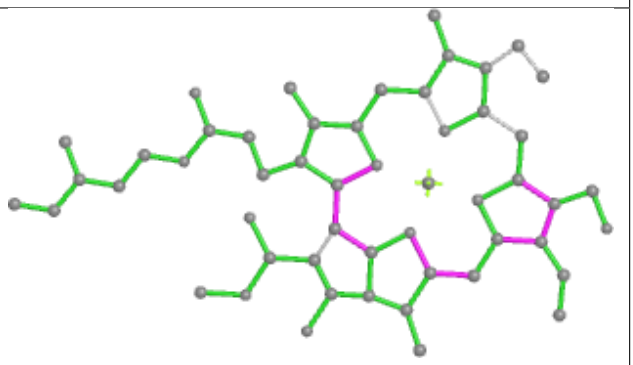
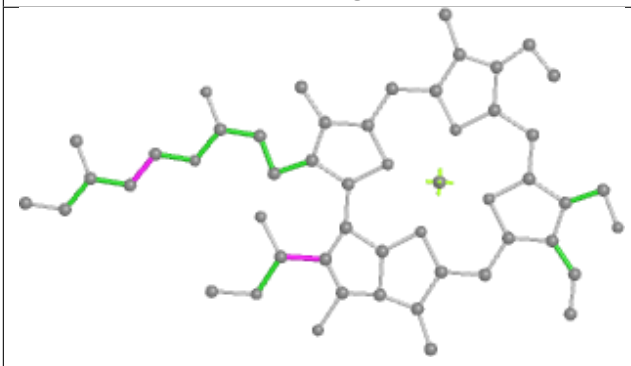
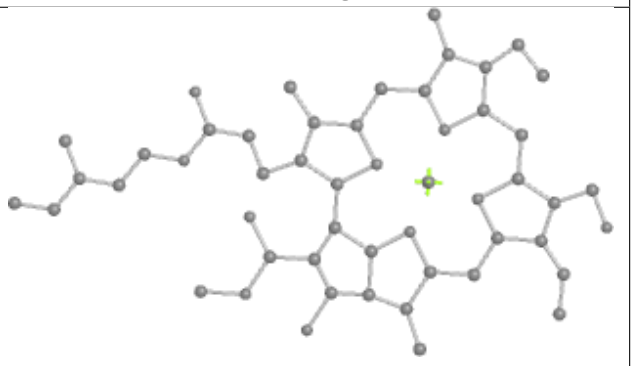


Bond angles

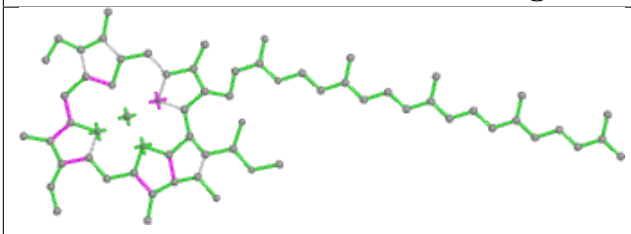


Torsions

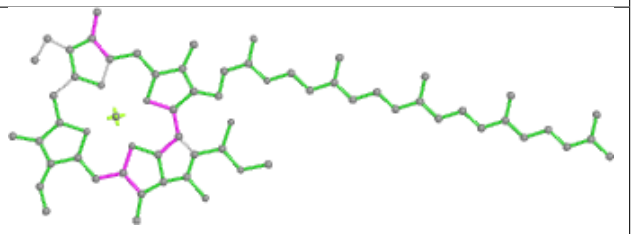


Rings

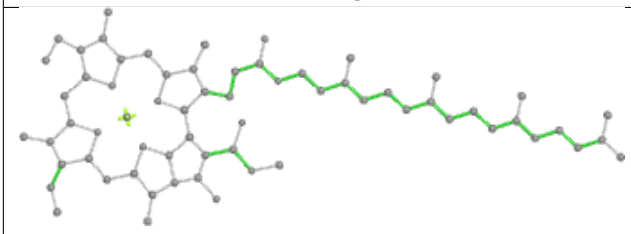
Ligand CLA 3 308



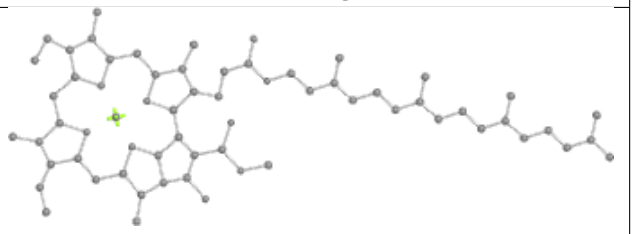
Bond lengths



Bond angles

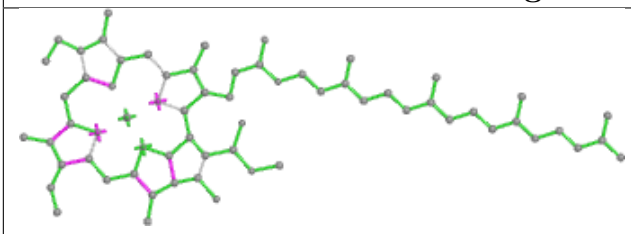


Torsions



Rings

Ligand CLA B 828



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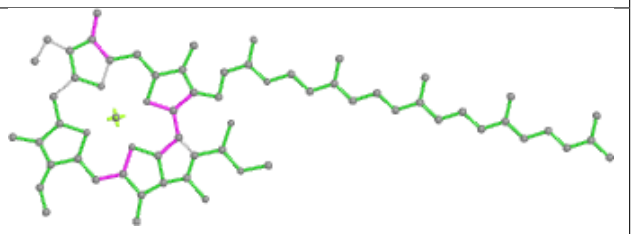
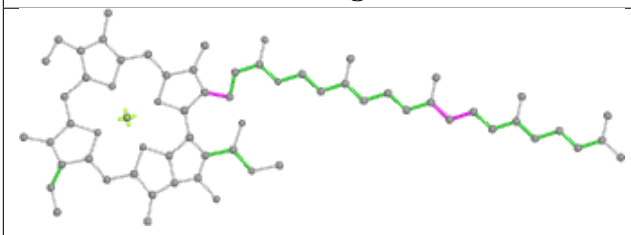
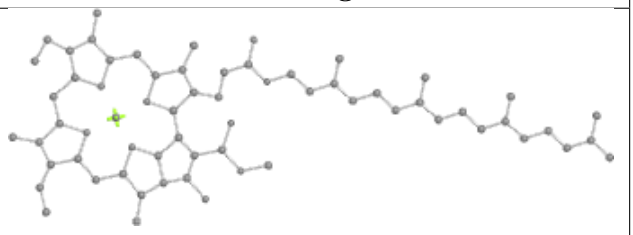


Bond angles

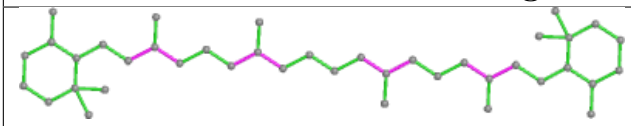


Torsions

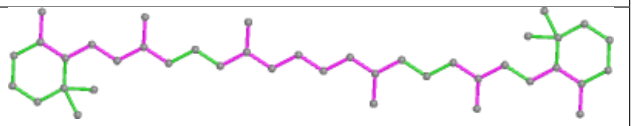


Rings

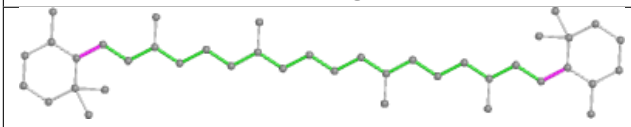
Ligand BCR A 849



Bond lengths



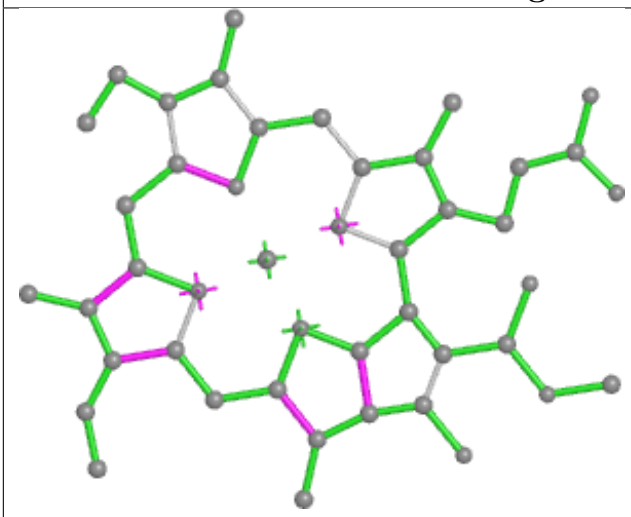
Bond angles



Torsions

Rings

Ligand CLA 5 314



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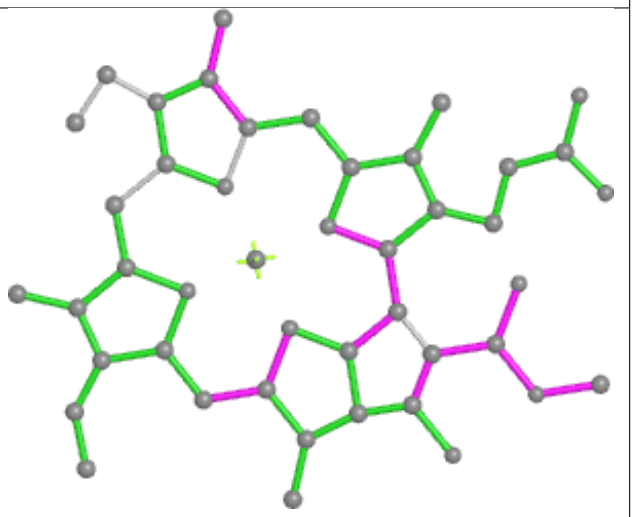
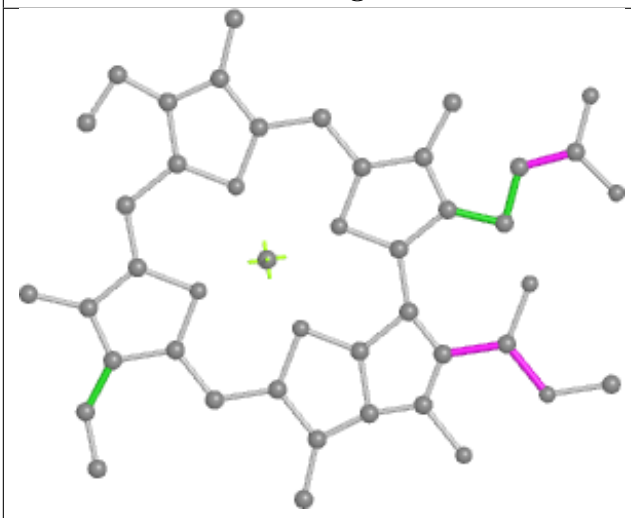


Bond angles



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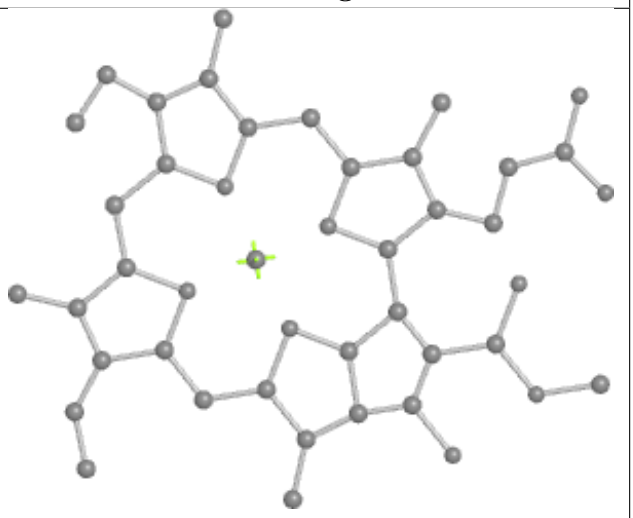
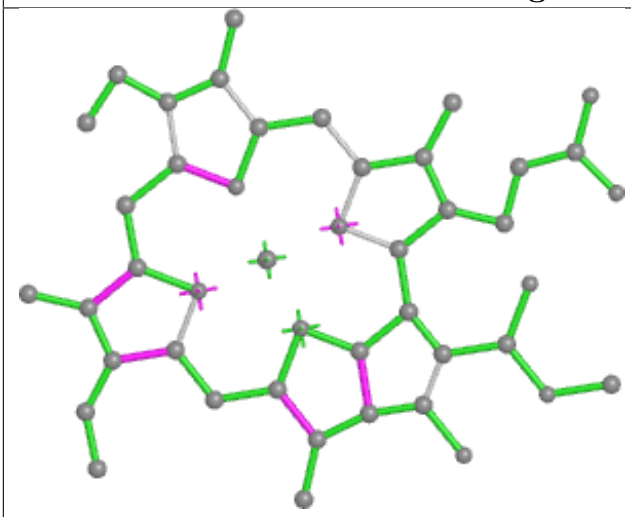


Rings

Ligand CLA 3 313



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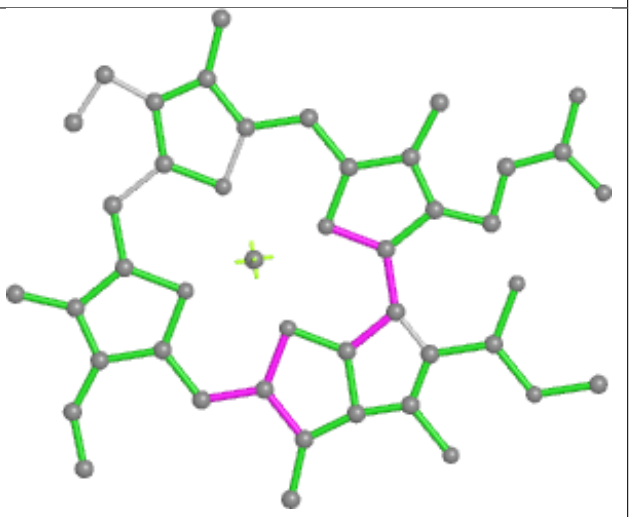
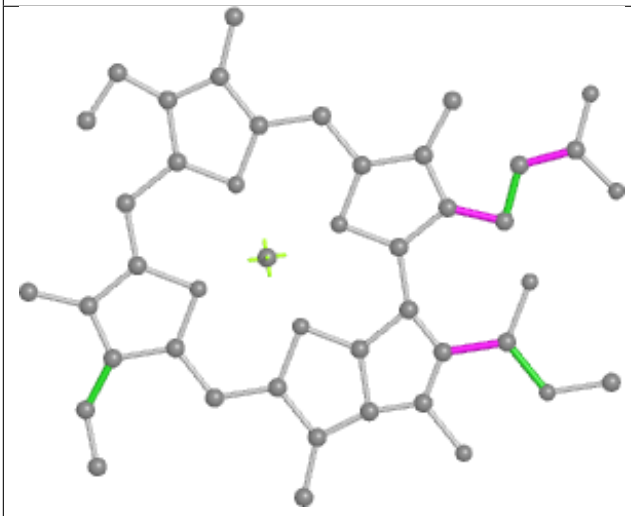


Bond angles



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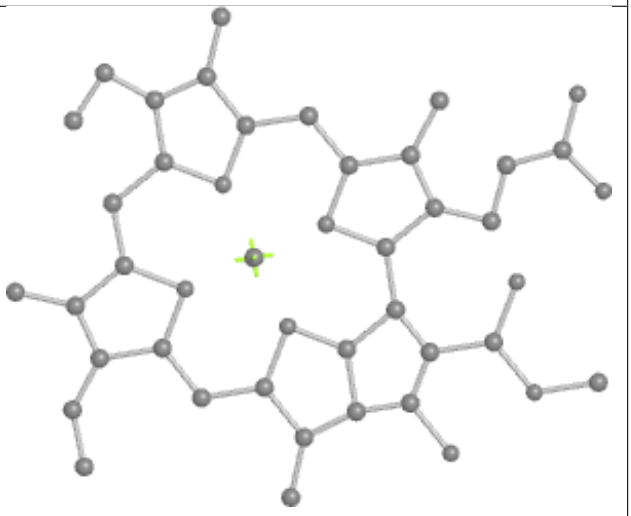
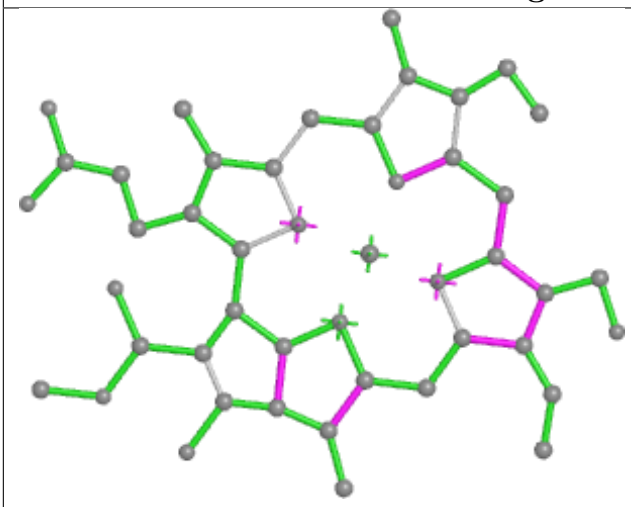
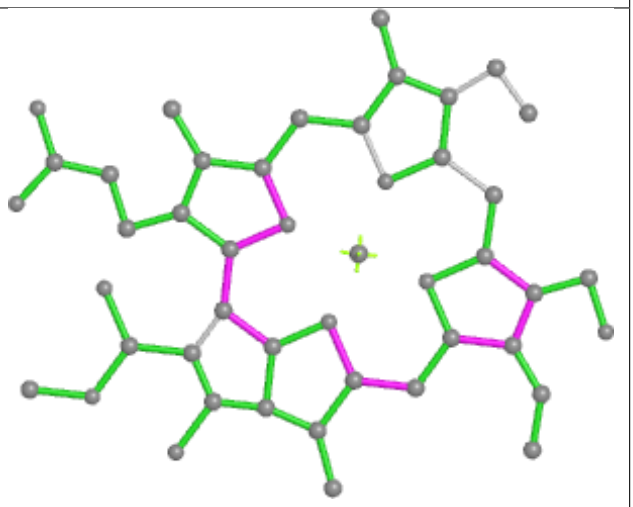


Rings

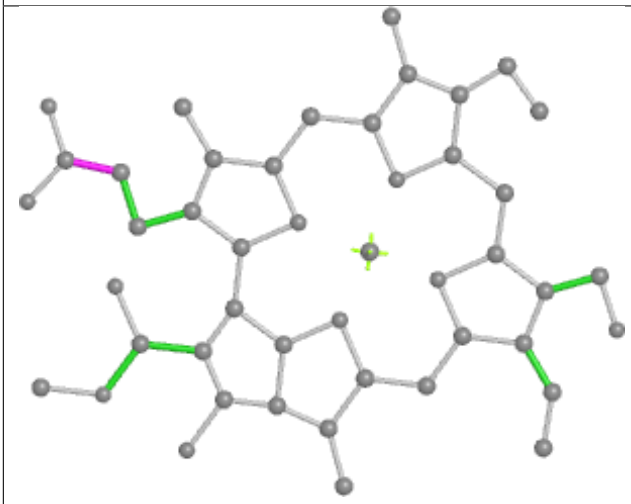
Ligand CHL 2 305



Bond lengths



Bond angles



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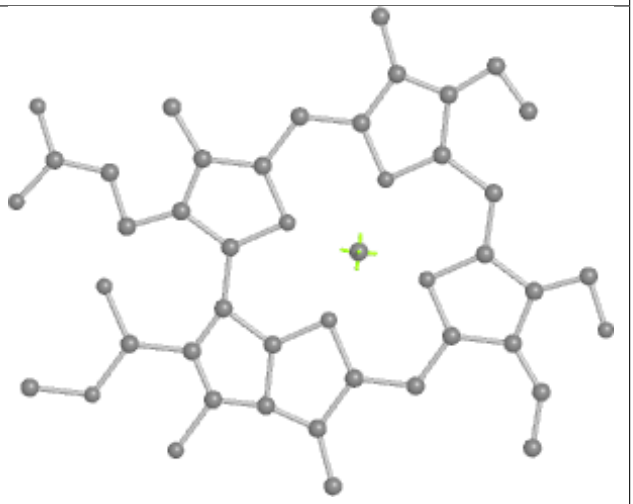
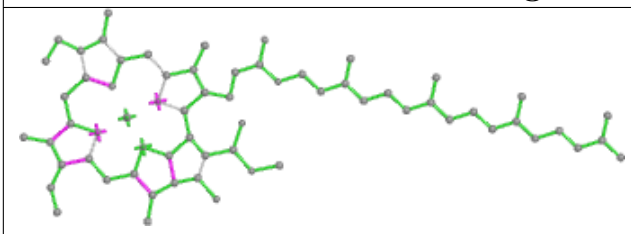


Rings

Ligand CLA A 825



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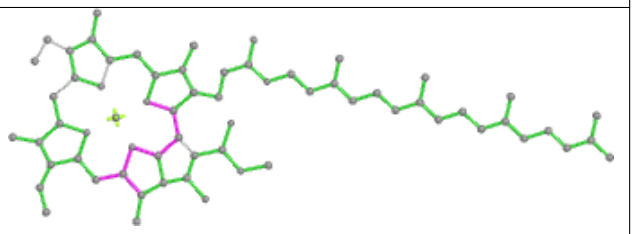
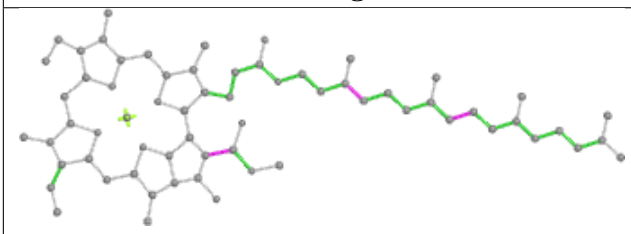
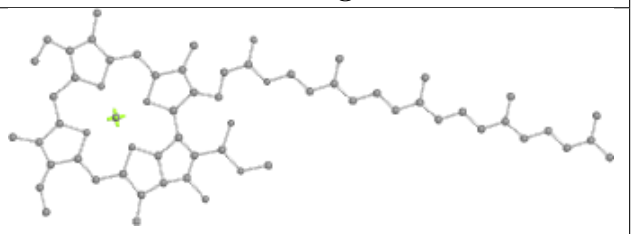


Bond angles

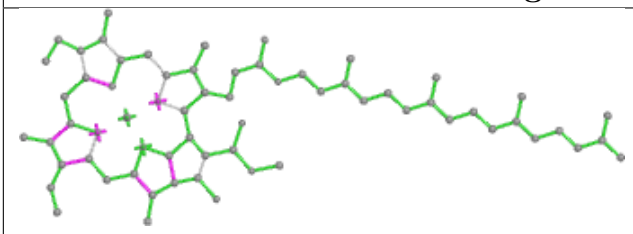


Torsions

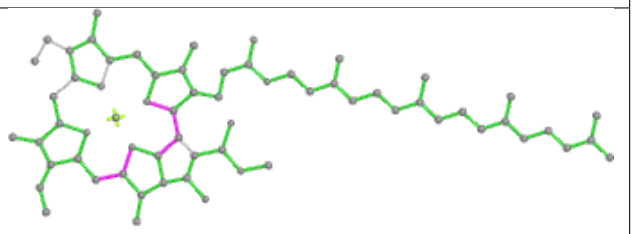


Rings

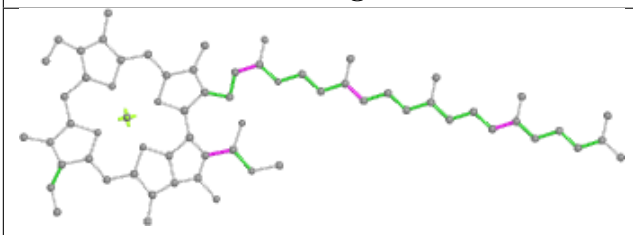
Ligand CLA B 811



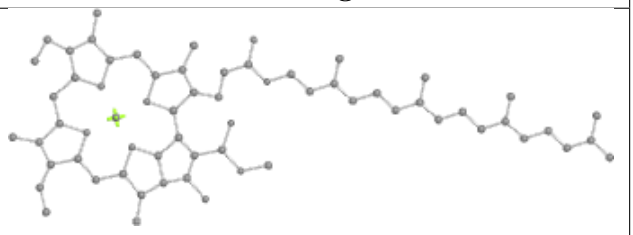
Bond lengths



Bond angles

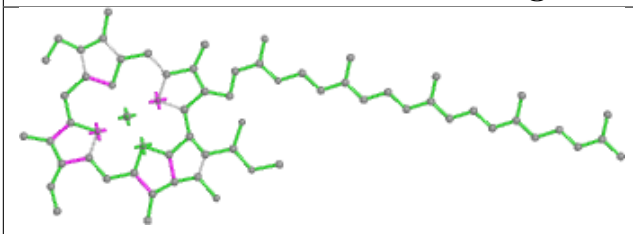


Torsions



Rings

Ligand CLA 2 302



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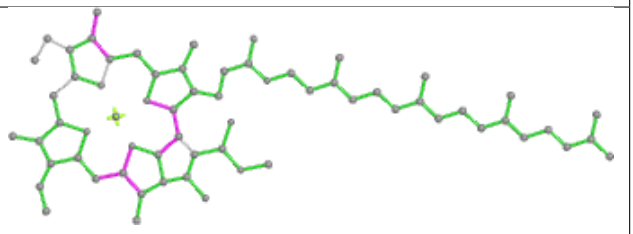
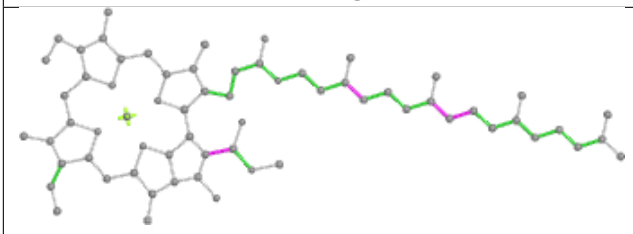
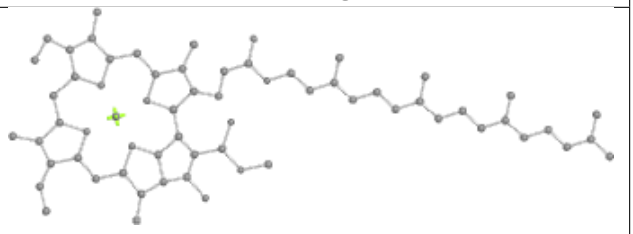


Bond angles

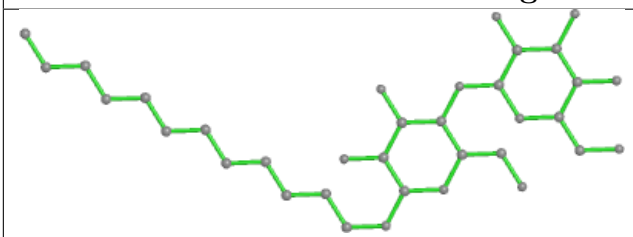


Torsions



Rings

Ligand LMU B 851



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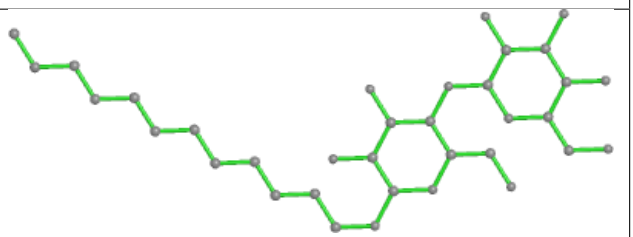
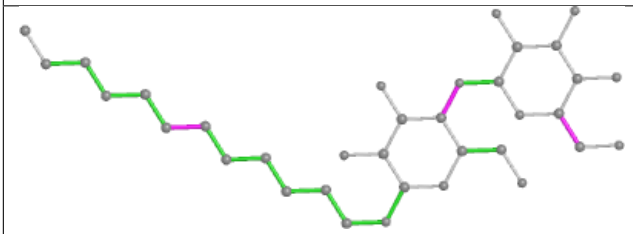


Bond angles



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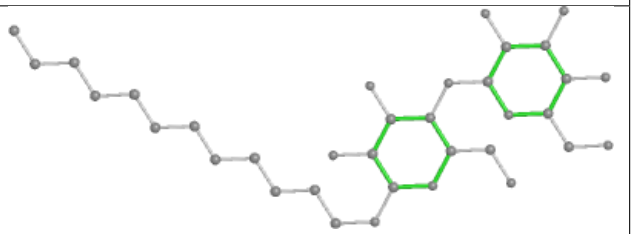
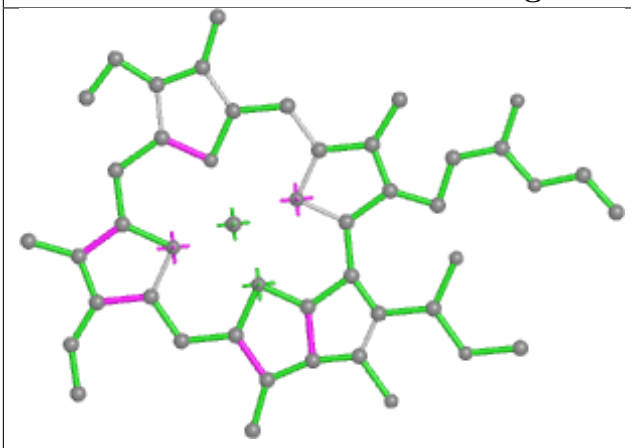
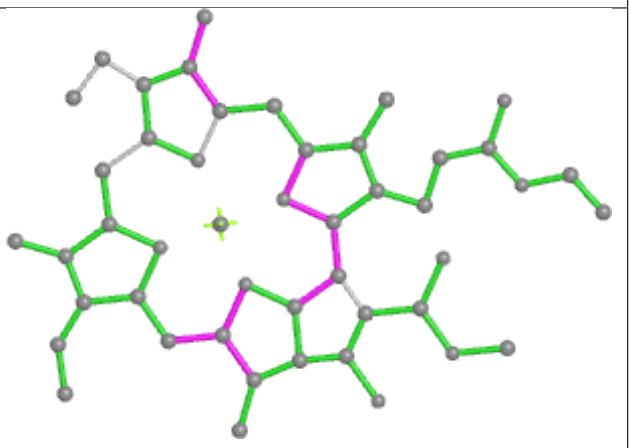


Rings

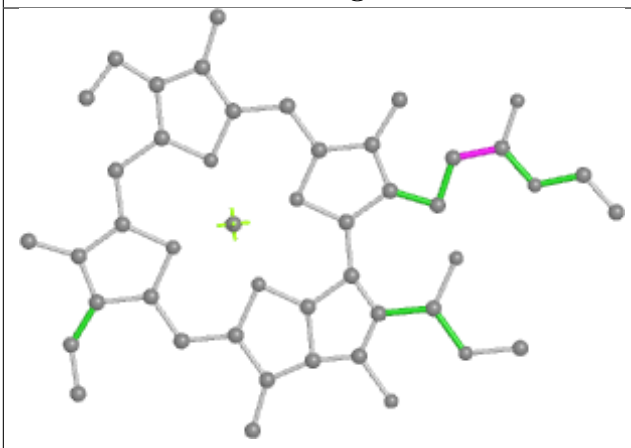
Ligand CLA B 839



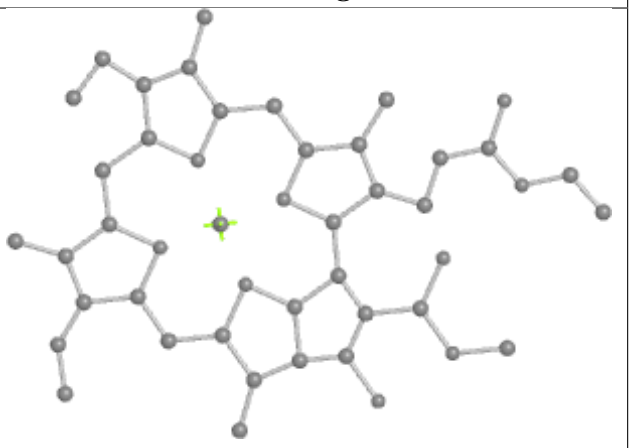
Bond lengths



Bond angles

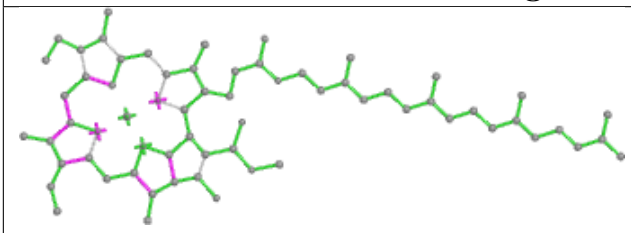


Torsions

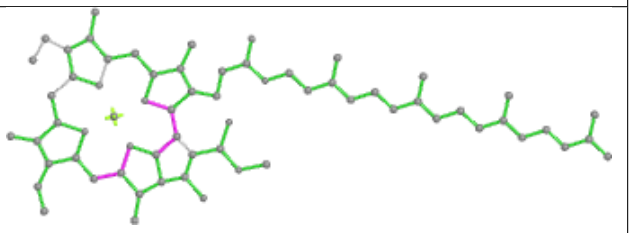


Rings

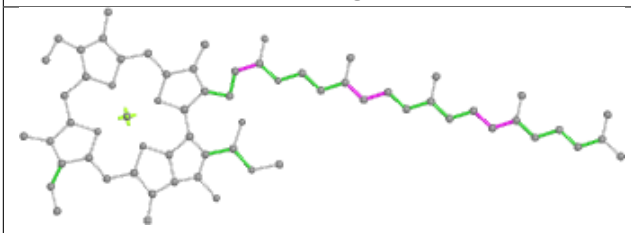
Ligand CLA B 807



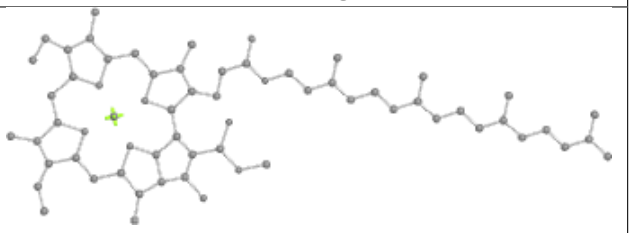
Bond lengths



Bond angles

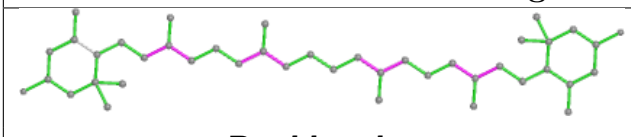


Torsions

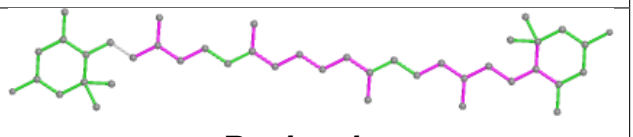


Rings

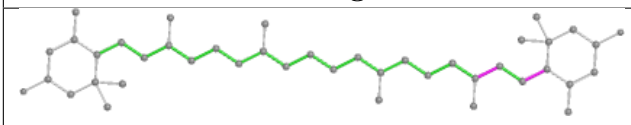
Ligand LUT 3 315



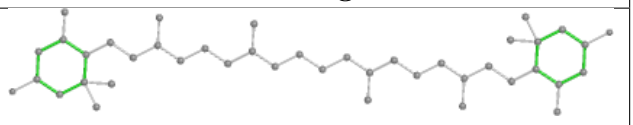
Bond lengths



Bond angles

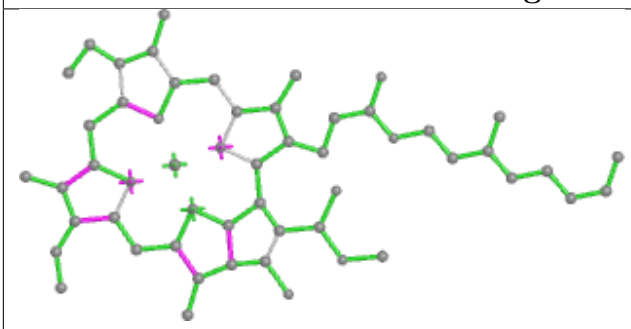


Torsions

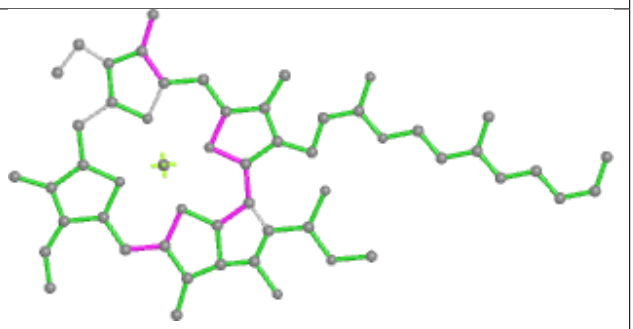


Rings

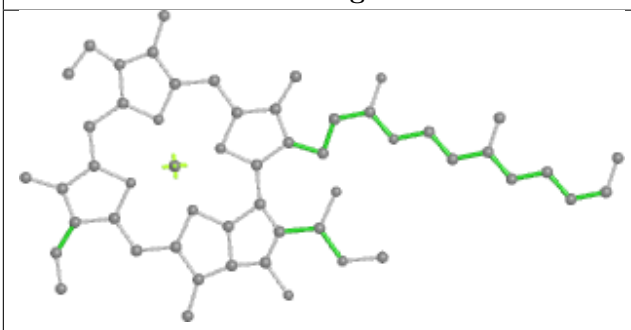
Ligand CLA A 813



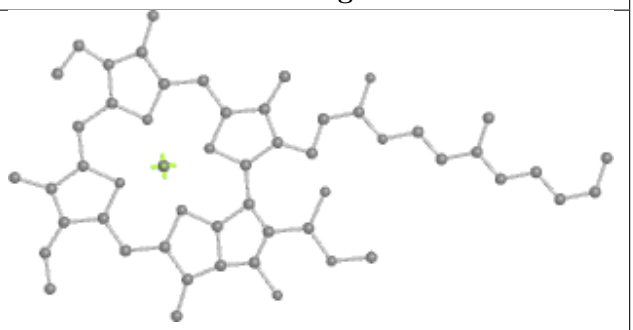
Bond lengths



Bond angles

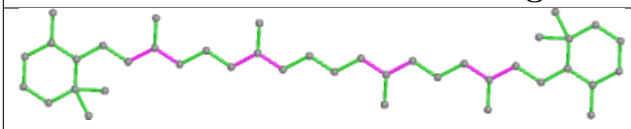


Torsions



Rings

Ligand BCR J 103



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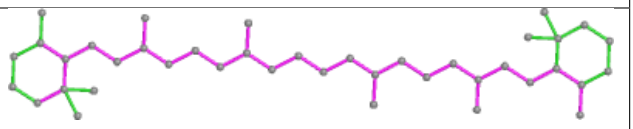
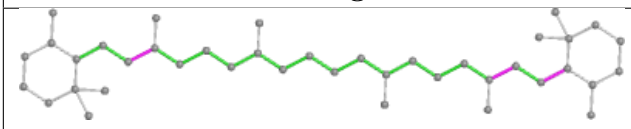
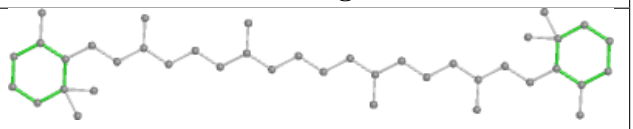


Bond angles

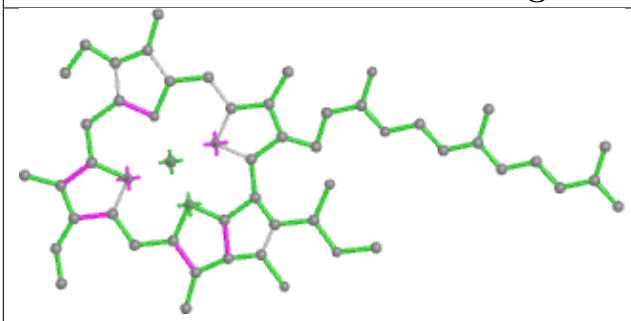


Torsions



Rings

Ligand CLA 3 311



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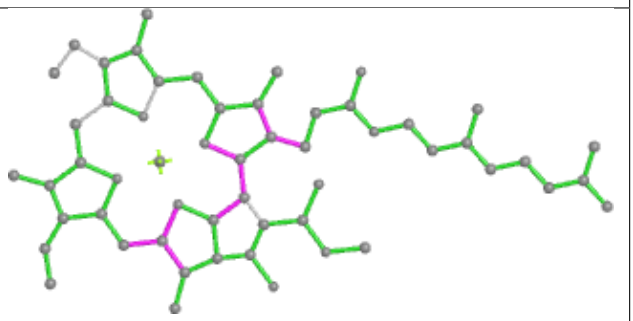
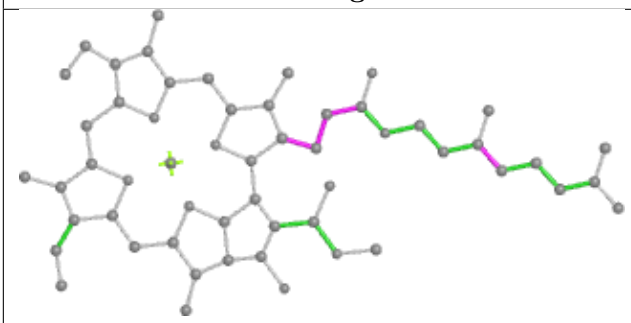


Bond angles



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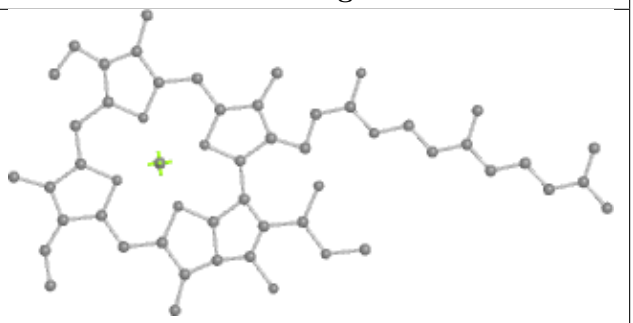
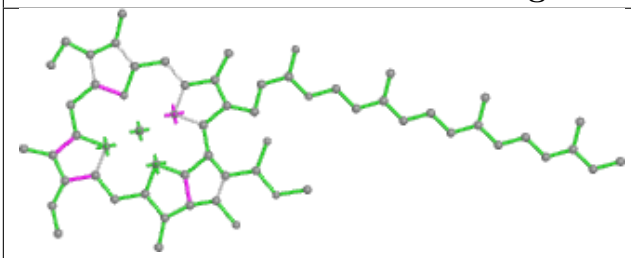


Rings

Ligand CLA 5 311



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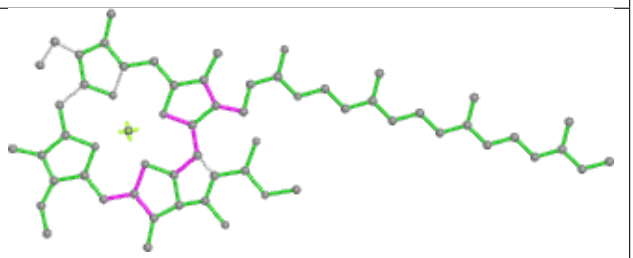
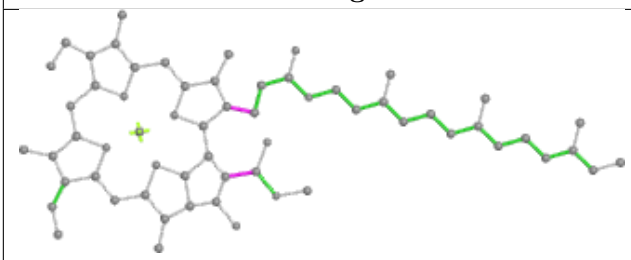
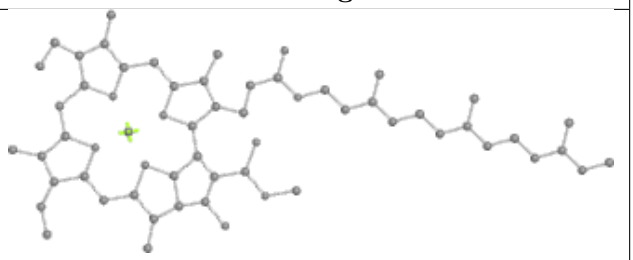


Bond angles

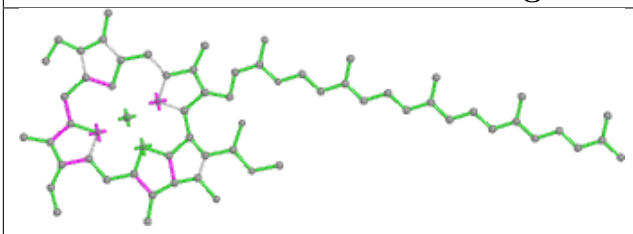


Torsions



Rings

Ligand CLA A 822



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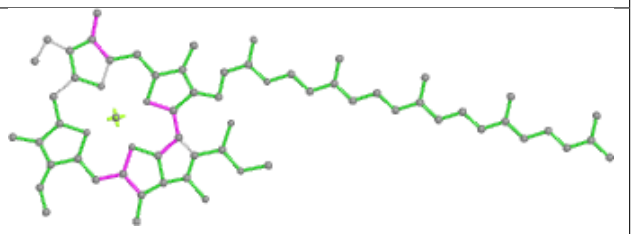
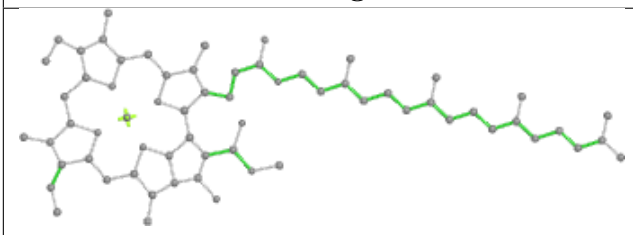


Bond angles



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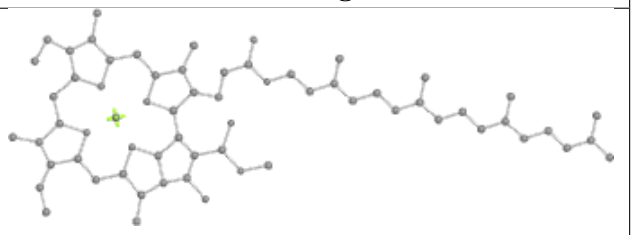
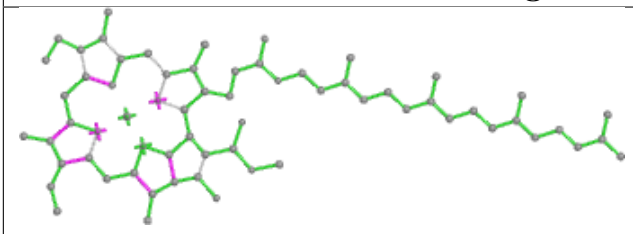


Rings

Ligand CLA B 814



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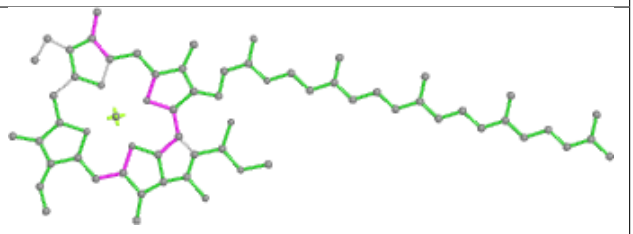
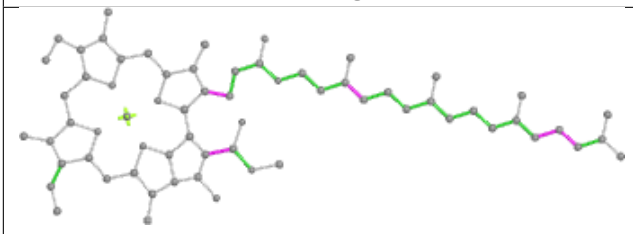


Bond angles



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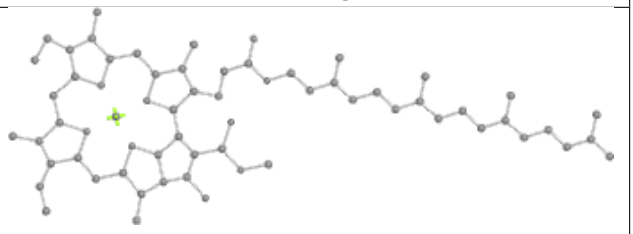
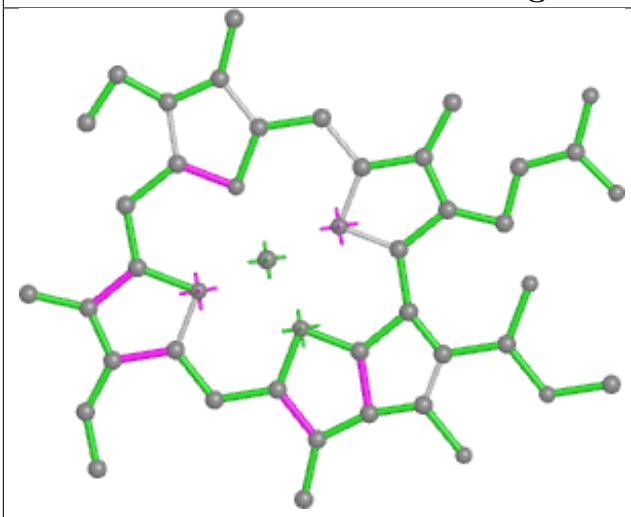


Rings

Ligand CLA 6 307



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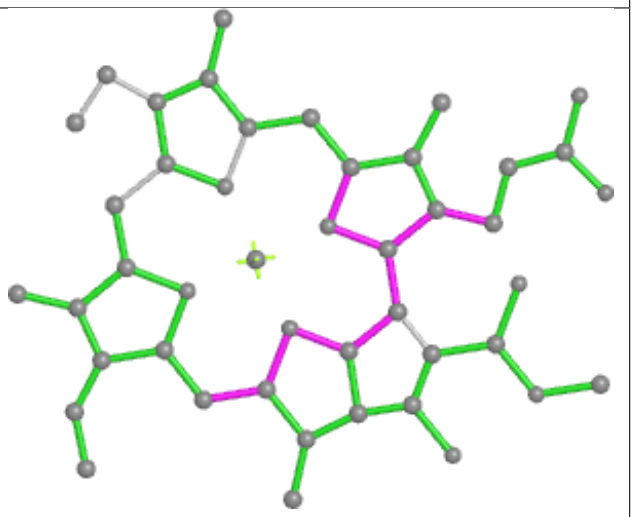
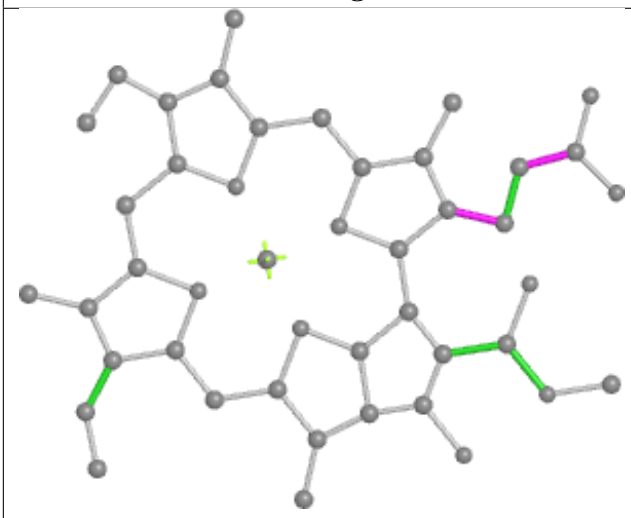


Bond angles



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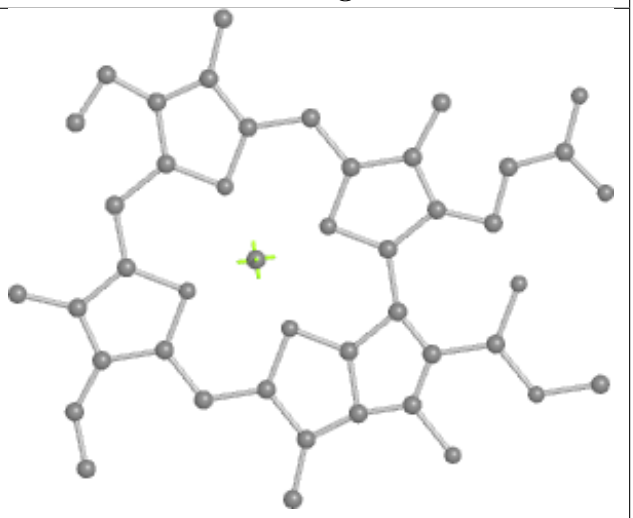
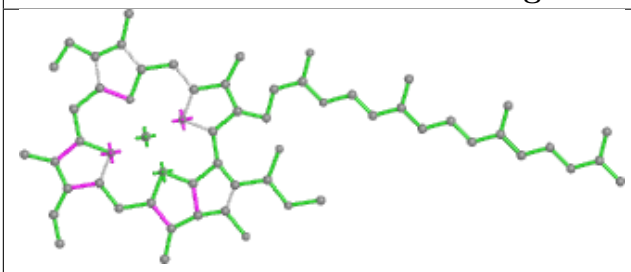


Rings

Ligand CLA A 836



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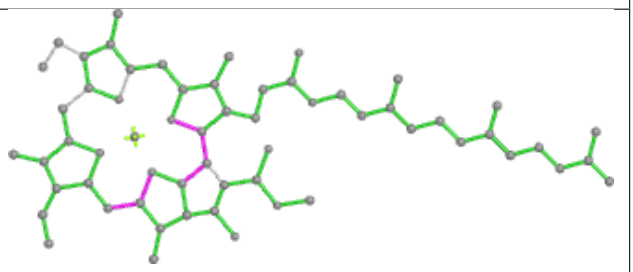
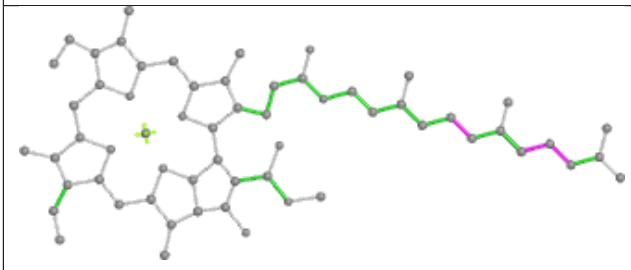


Bond angles



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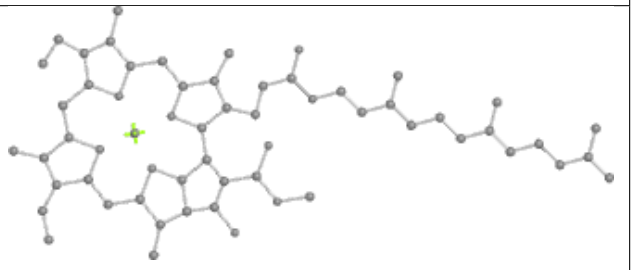
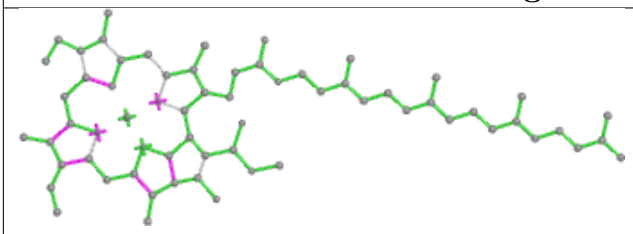


Rings

Ligand CLA A 831



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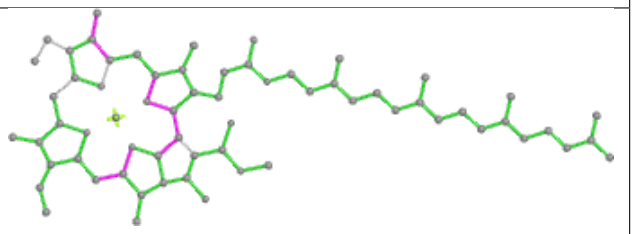
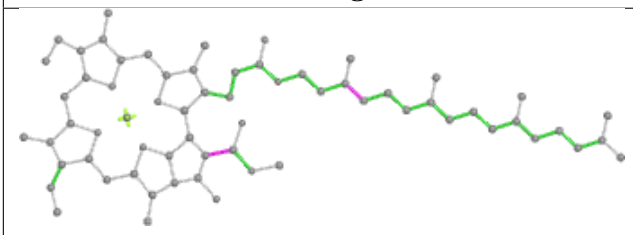


Bond angles



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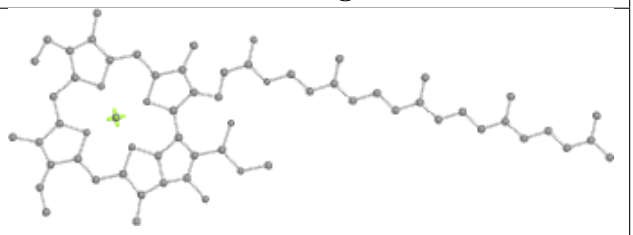
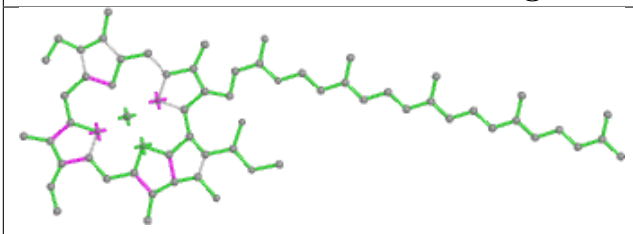


Rings

Ligand CLA A 835



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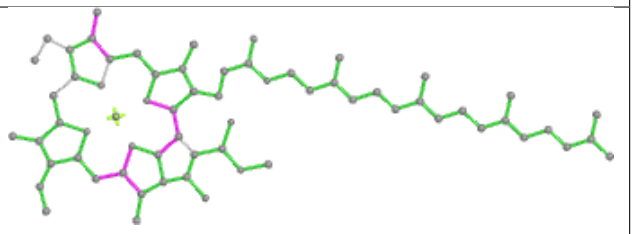
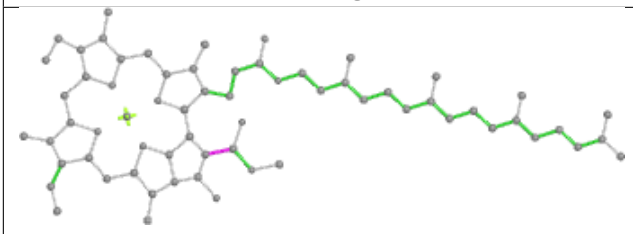


Bond angles



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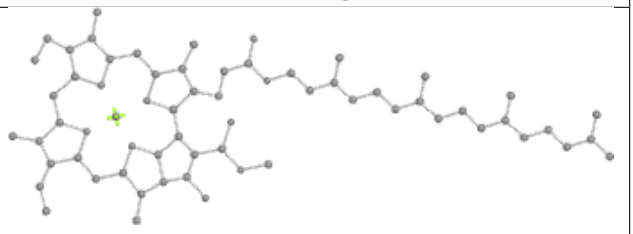
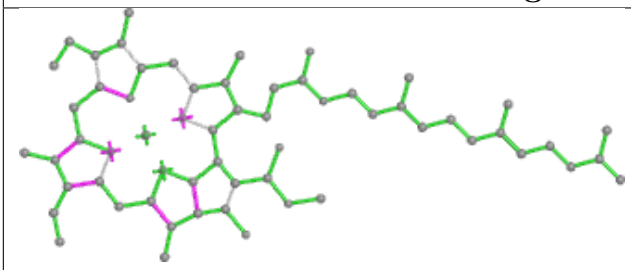


Rings

Ligand CLA B 808



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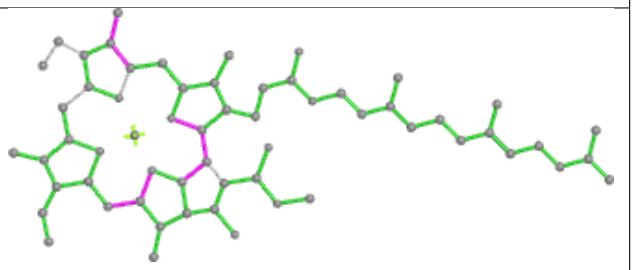
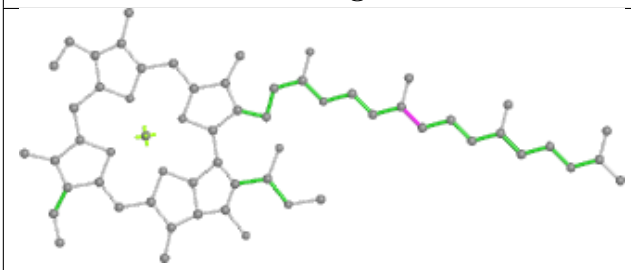


Bond angles



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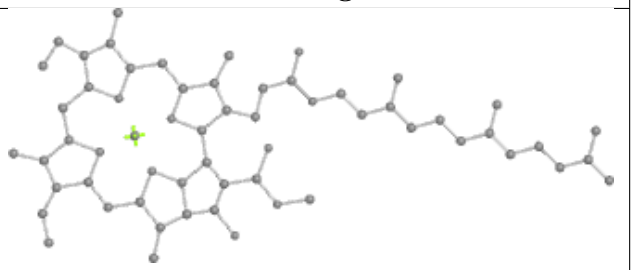
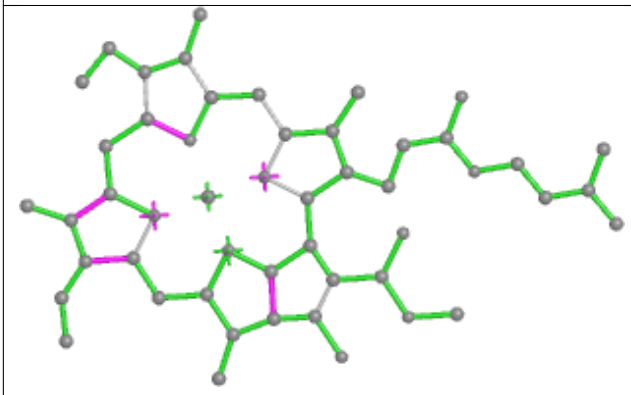


Rings

Ligand CLA 2 313



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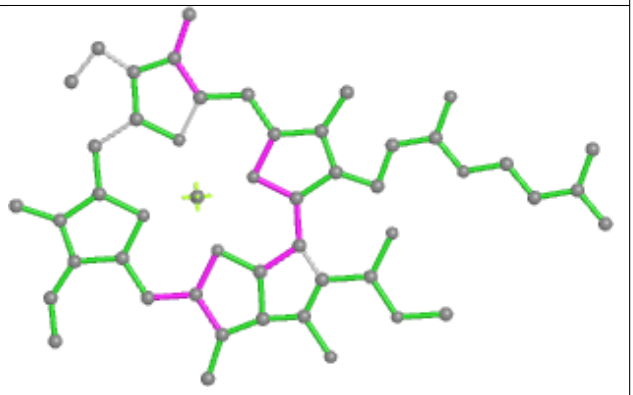
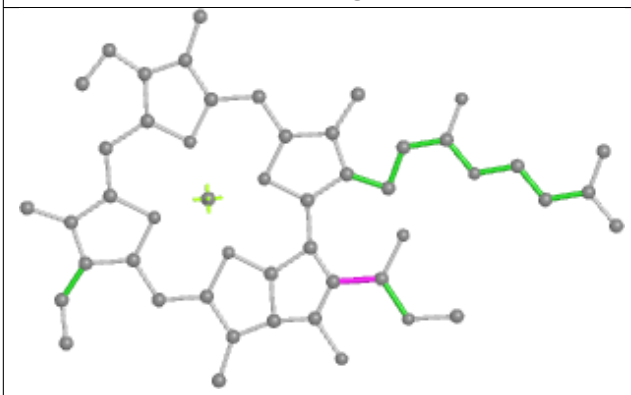
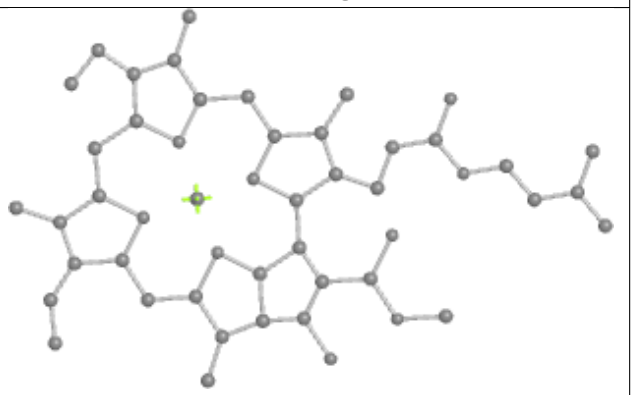


Bond angles

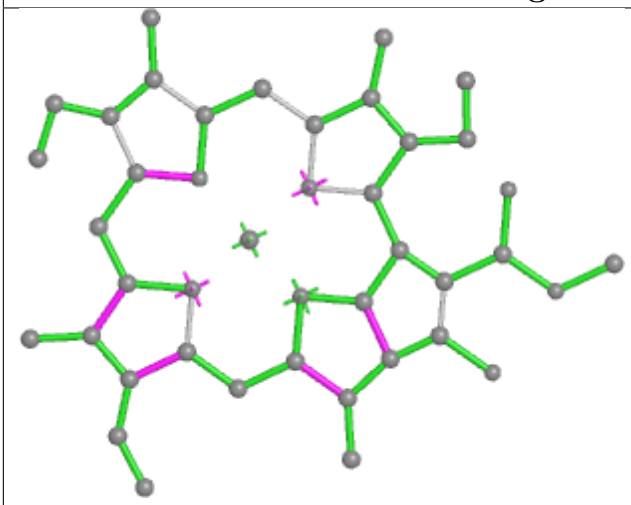


Torsions



Rings

Ligand CLA 3 312



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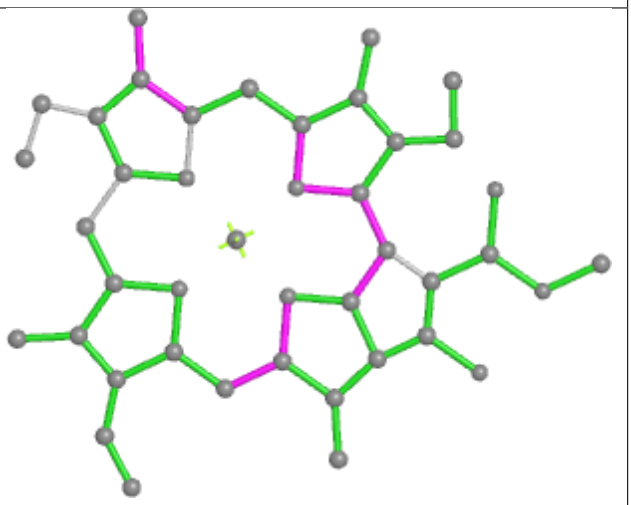
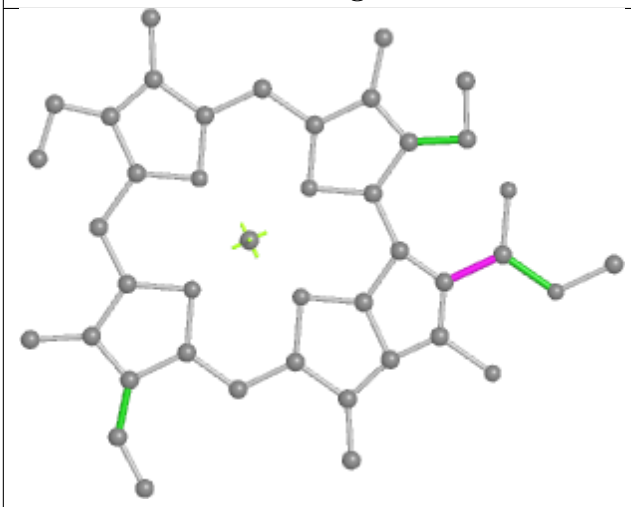


Bond angles



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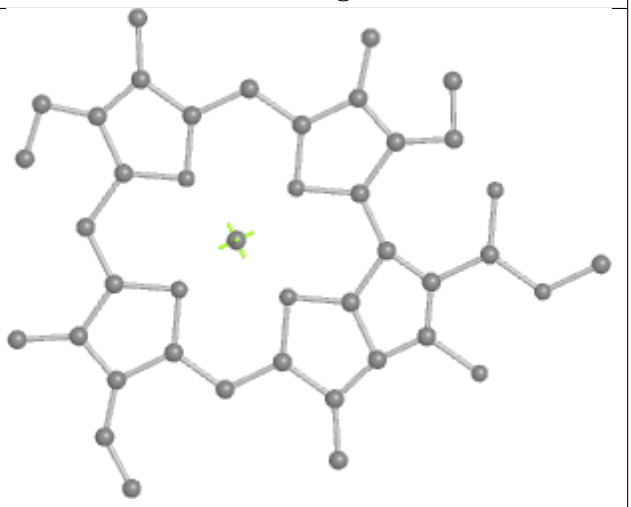
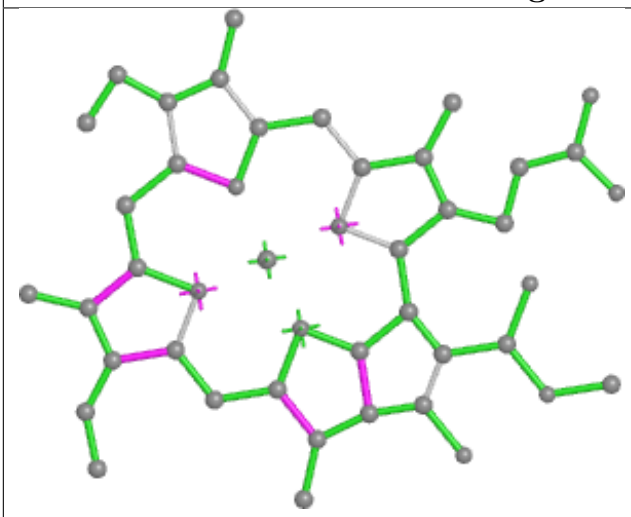
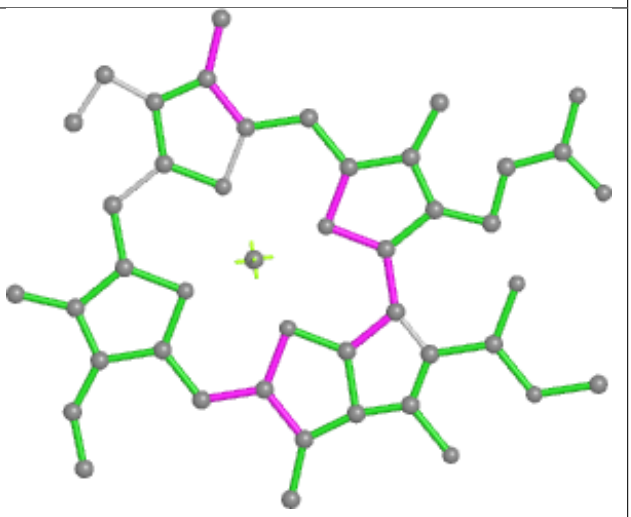


Rings

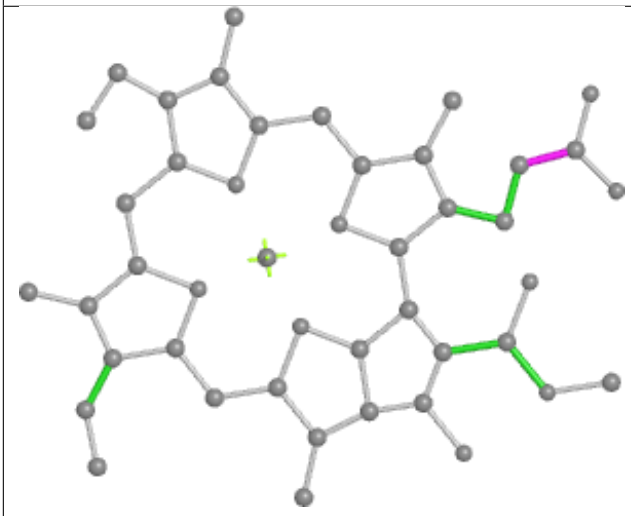
Ligand CLA 3 304



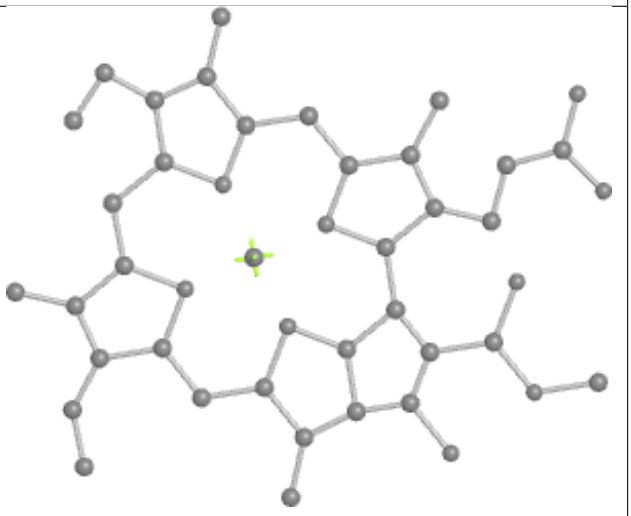
Bond lengths



Bond angles

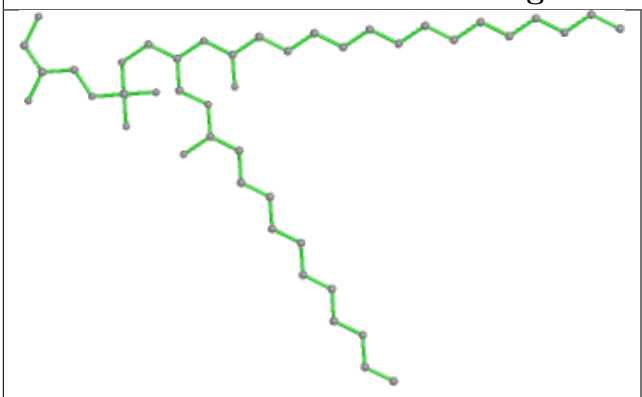


Torsions

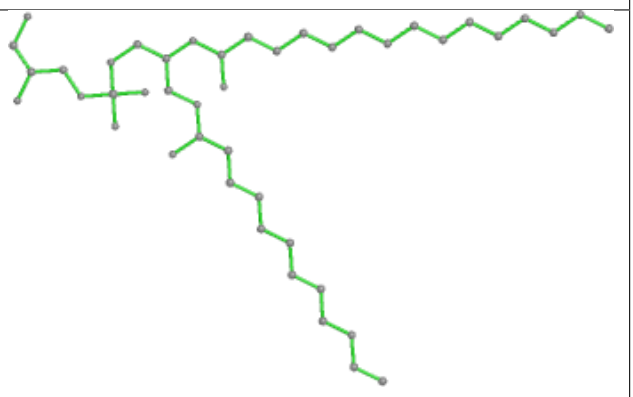


Rings

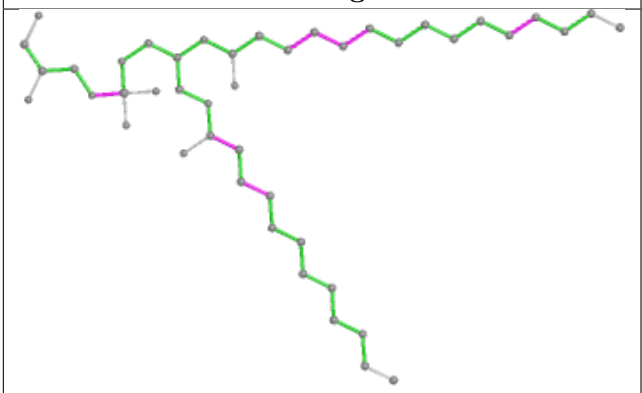
Ligand LHG 5 318



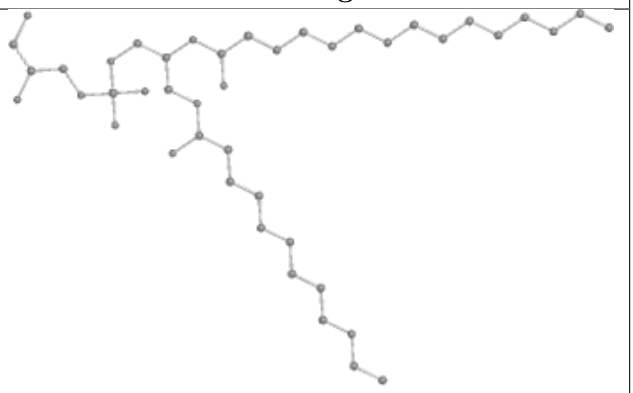
Bond lengths



Bond angles

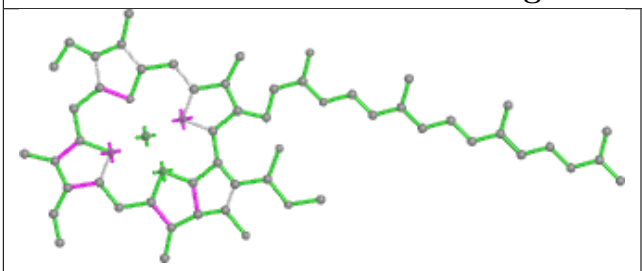


Torsions

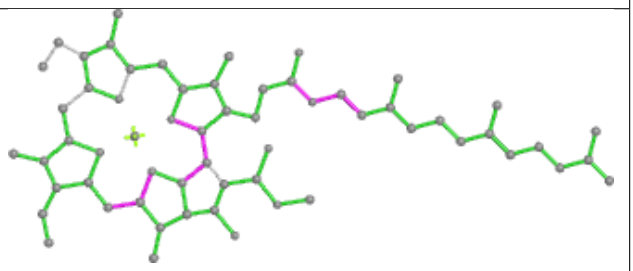


Rings

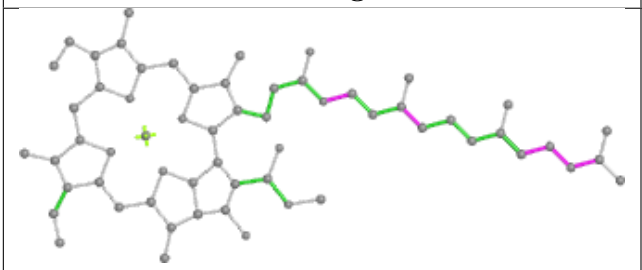
Ligand CLA A 818



Bond lengths



Bond angles



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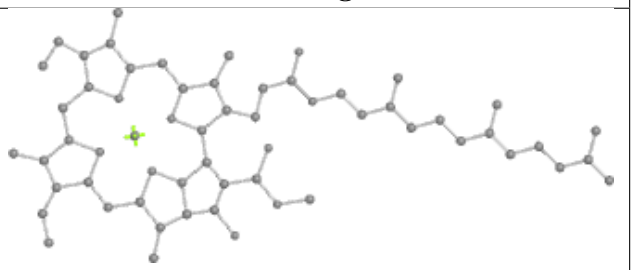
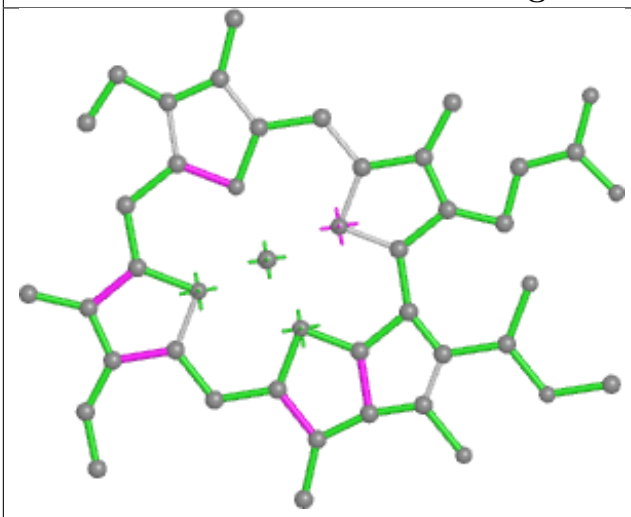


Rings

Ligand CLA 2 308



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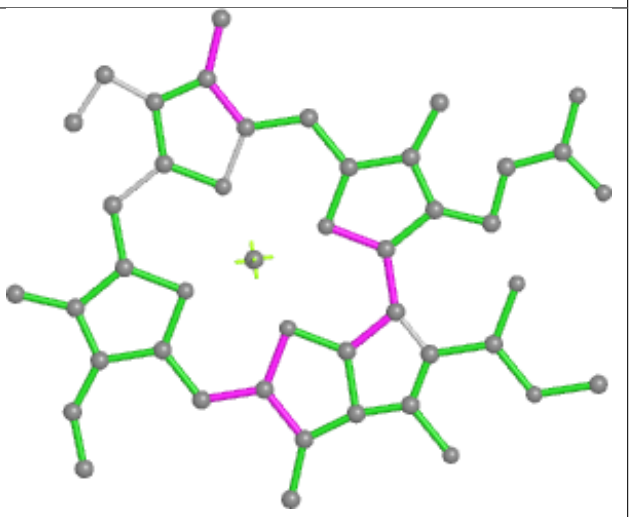
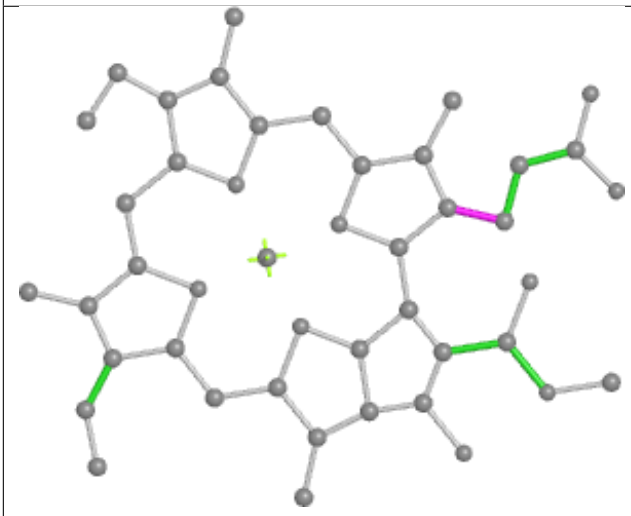
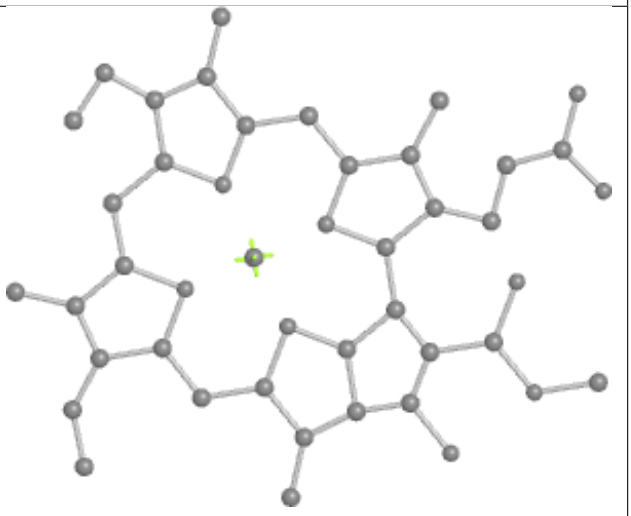


Bond angles

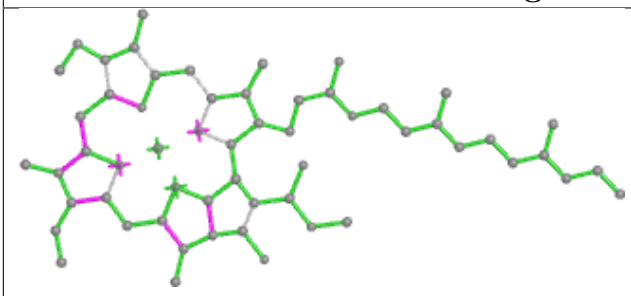


Torsions



Rings

Ligand CLA B 820



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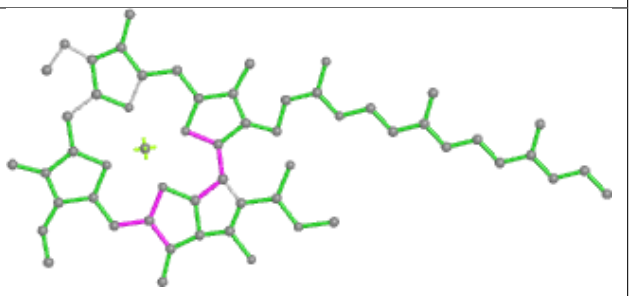
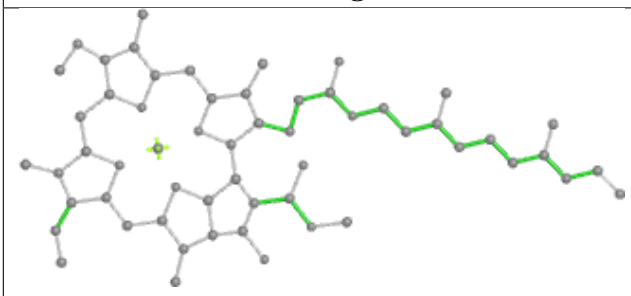


Bond angles



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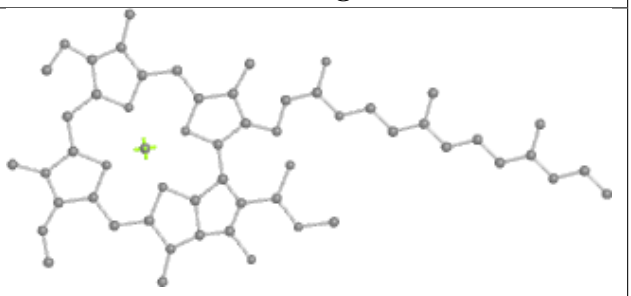
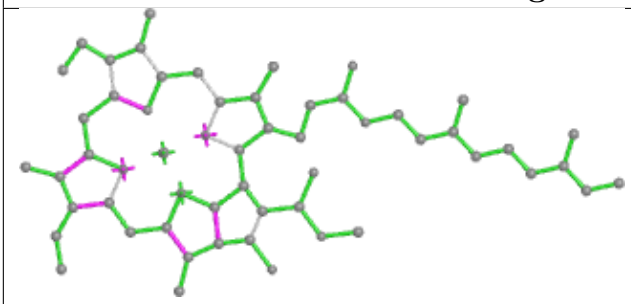
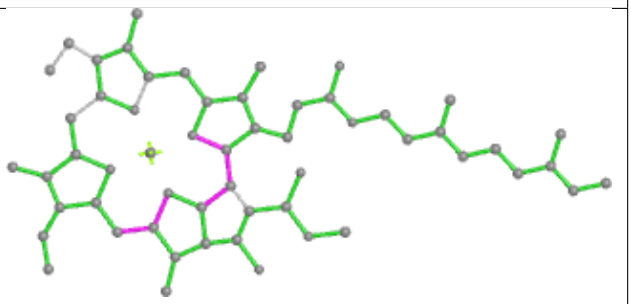


Rings

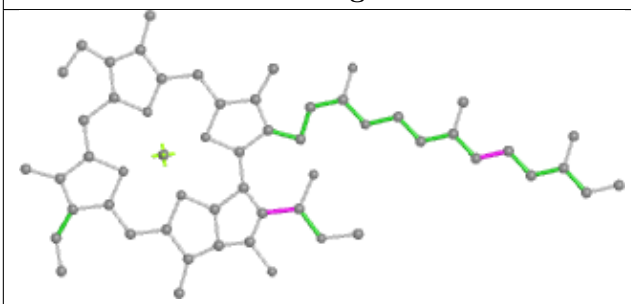
Ligand CLA 6 310



Bond lengths



Bond angles



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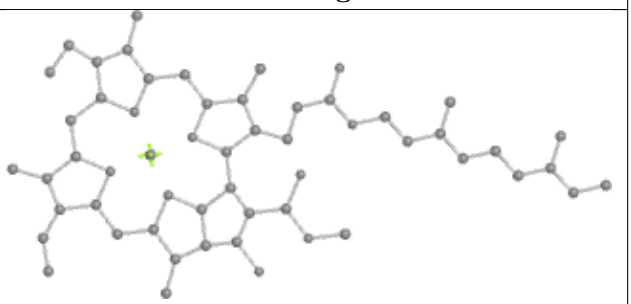
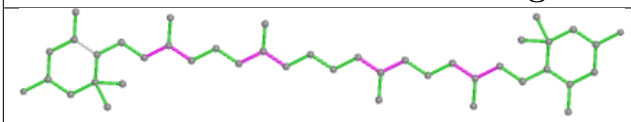


Rings

Ligand LUT 5 316



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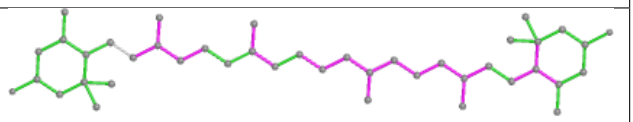
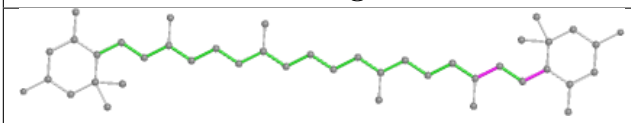


Bond angles



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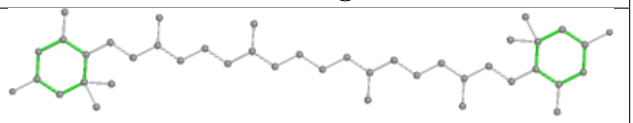
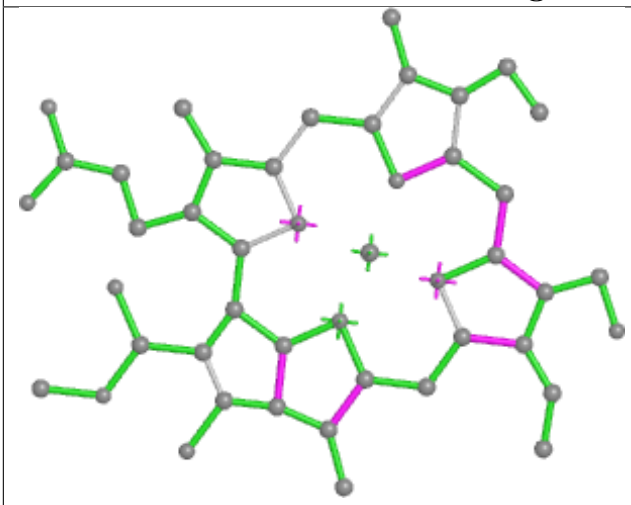
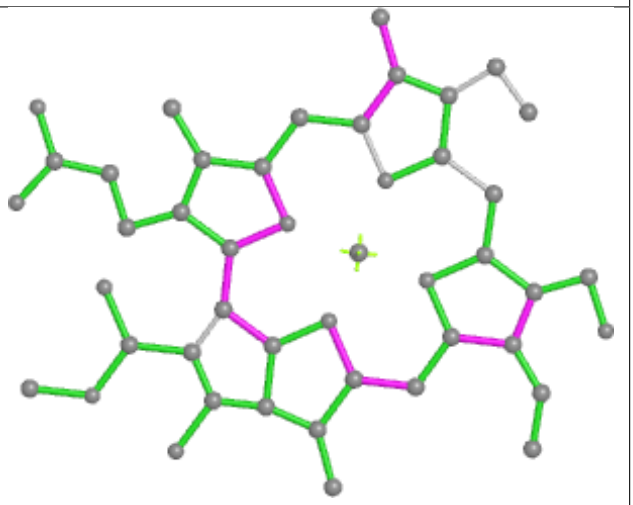


Rings

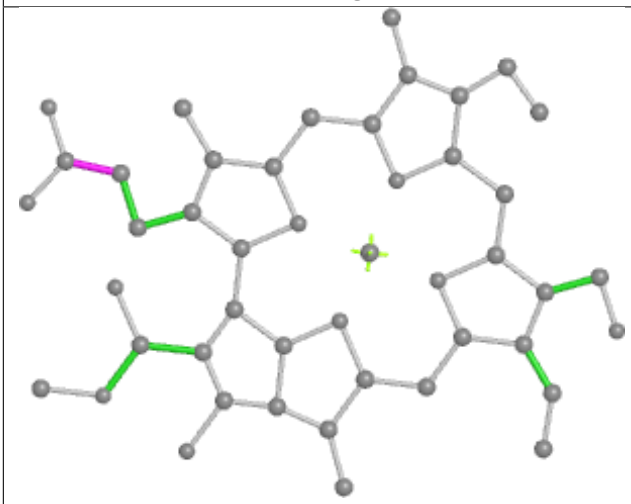
Ligand CHL 5 306



Bond lengths



Bond angles



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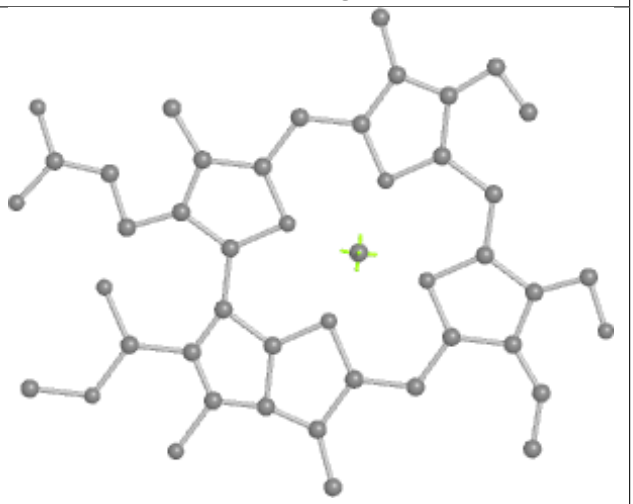
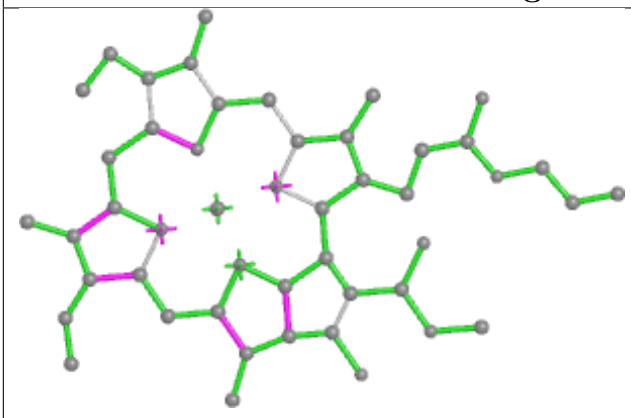


Rings

Ligand CLA A 809



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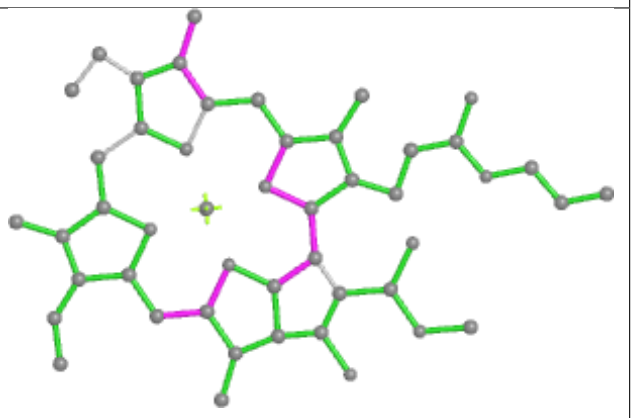
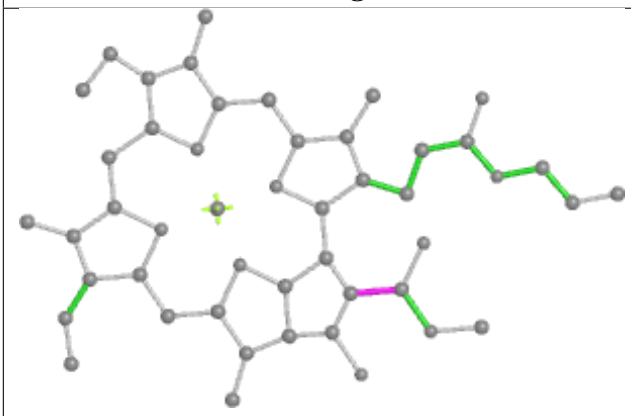


Bond angles



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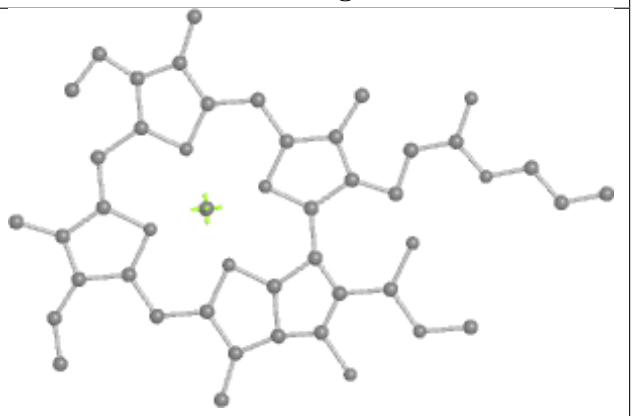
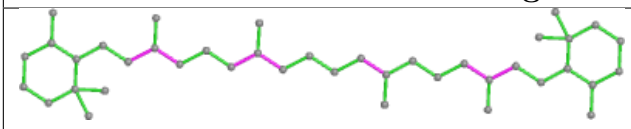
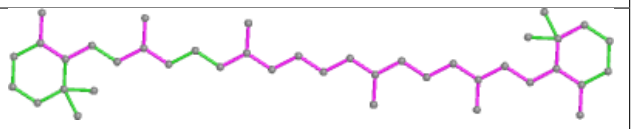


Rings

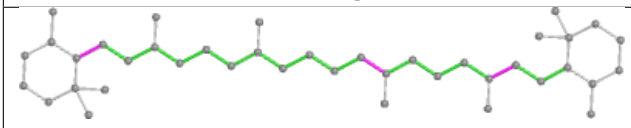
Ligand BCR B 846



Bond lengths



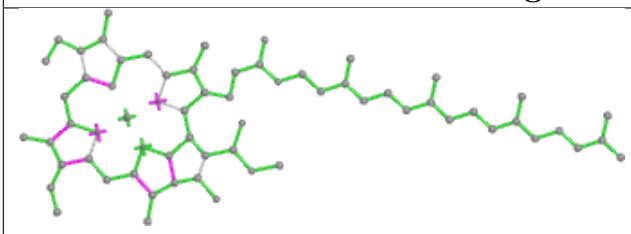
Bond angles



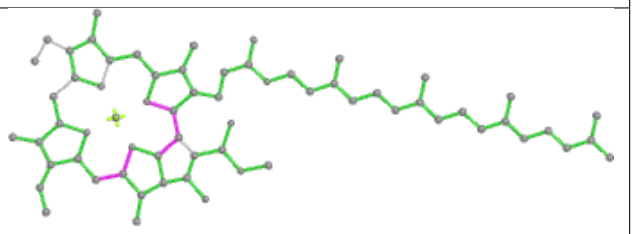
Torsions

Rings

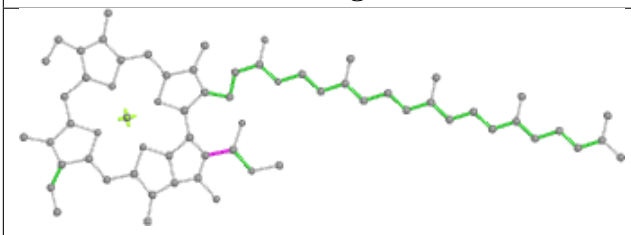
Ligand CLA B 809



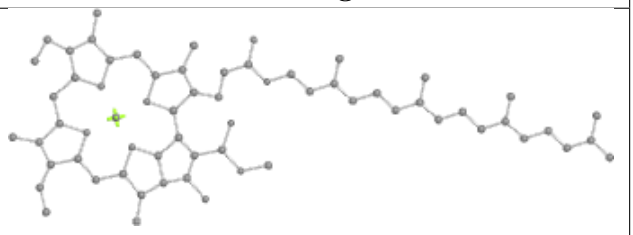
Bond lengths



Bond angles

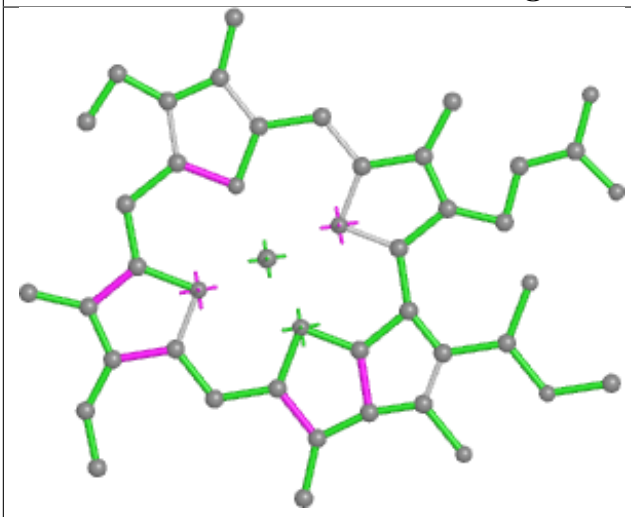


Torsions

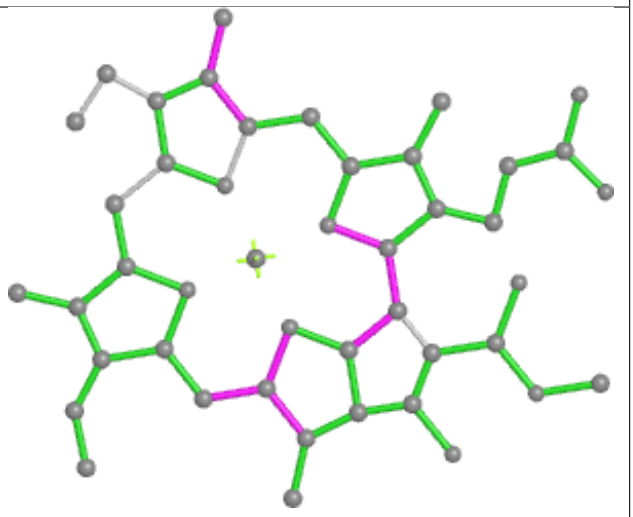


Rings

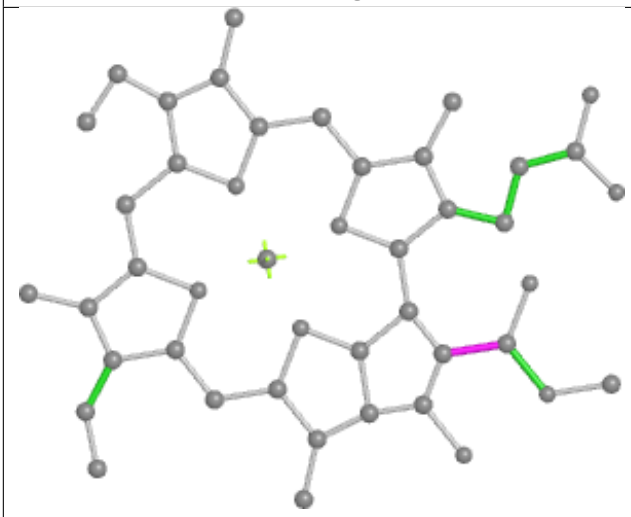
Ligand CLA B 836



Bond lengths



Bond angles



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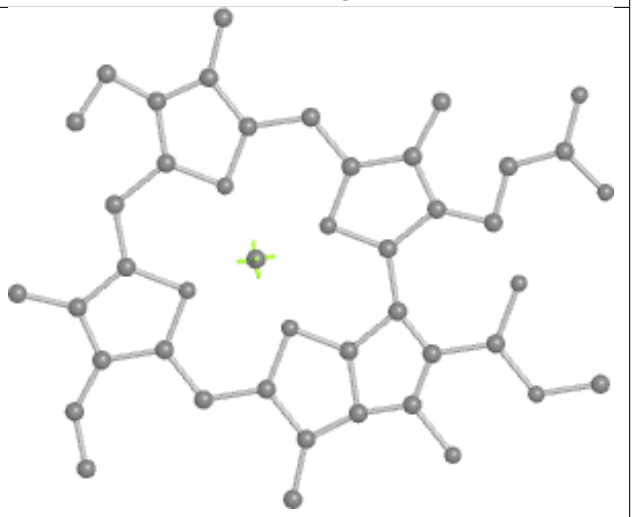
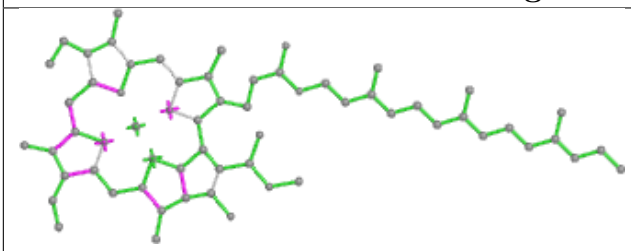
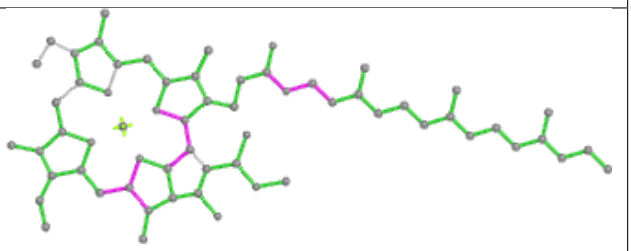
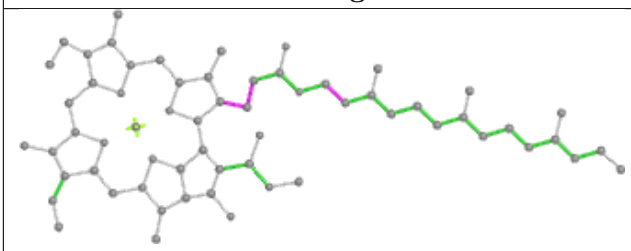
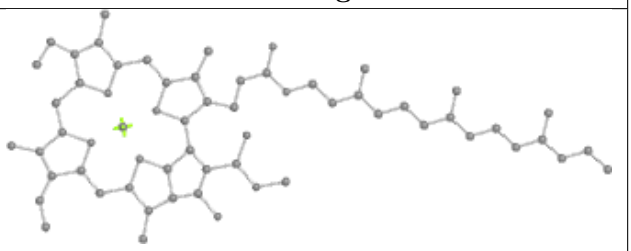
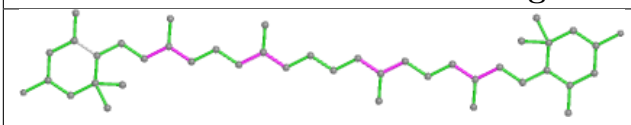
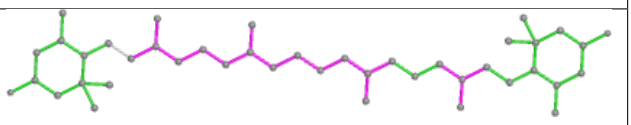
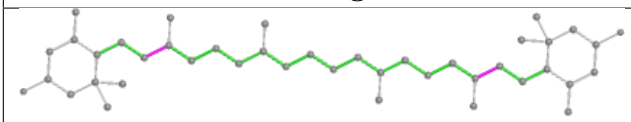
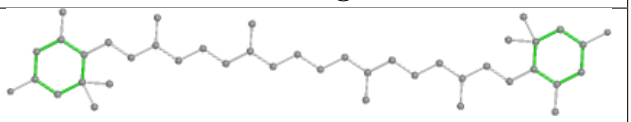
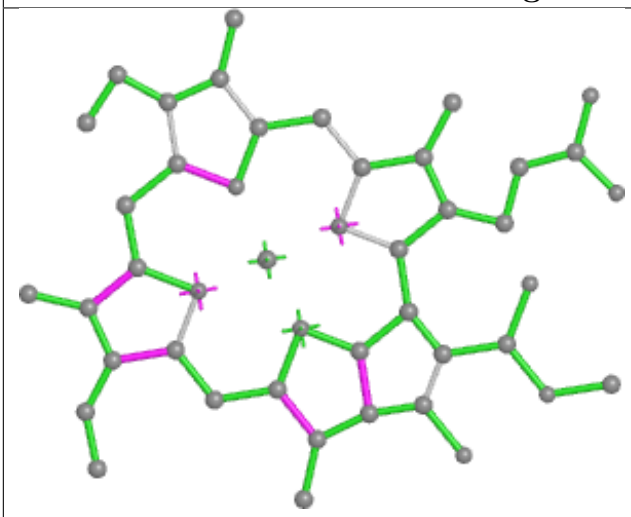


Rings

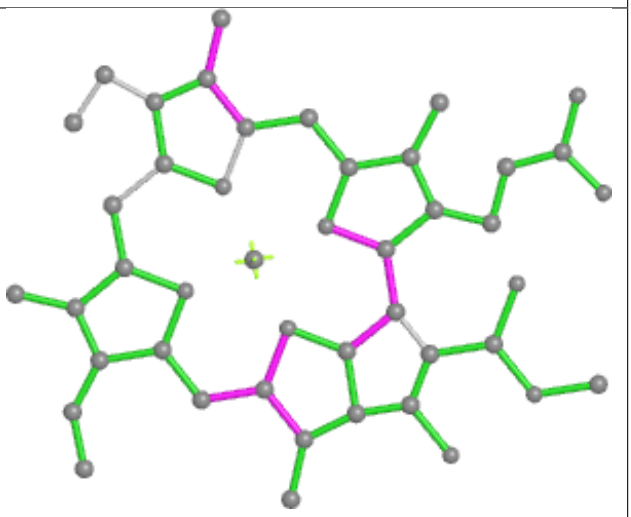
Ligand CLA B 818	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LUT 2 317	
 Bond lengths	 Bond angles
 Torsions	 Rings

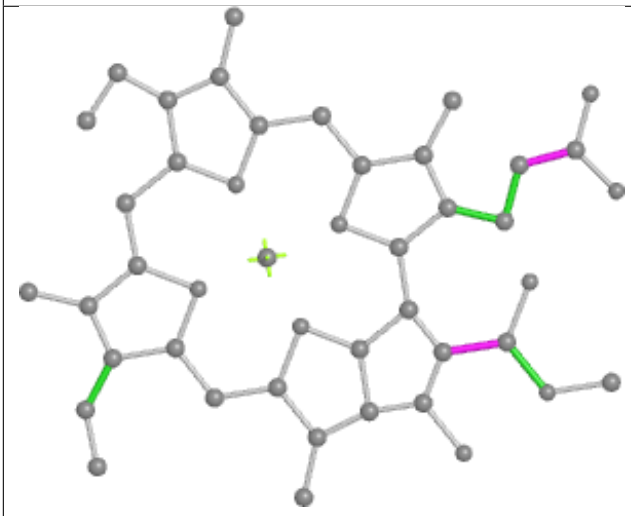
Ligand CLA K 203



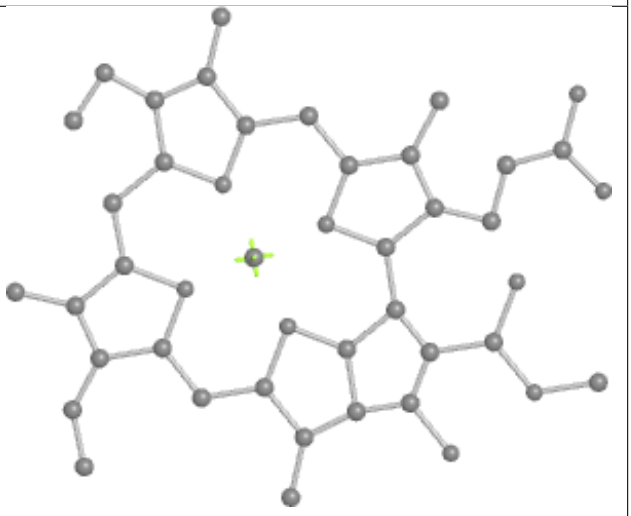
Bond lengths



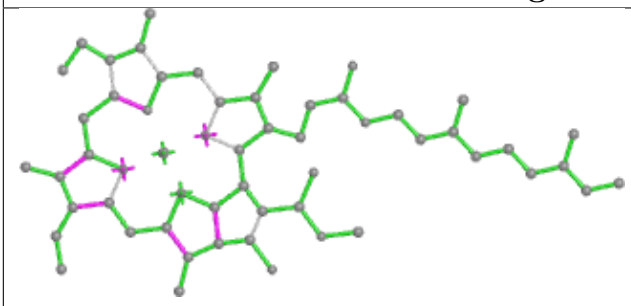
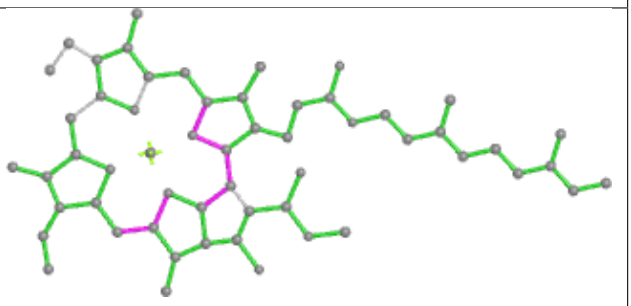
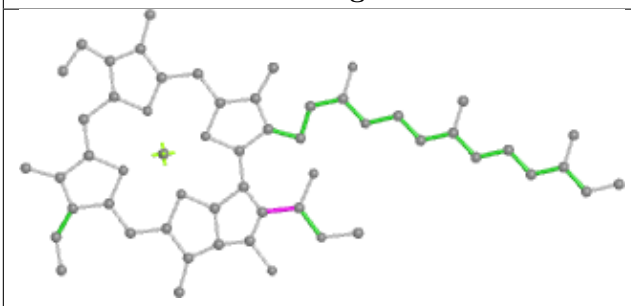
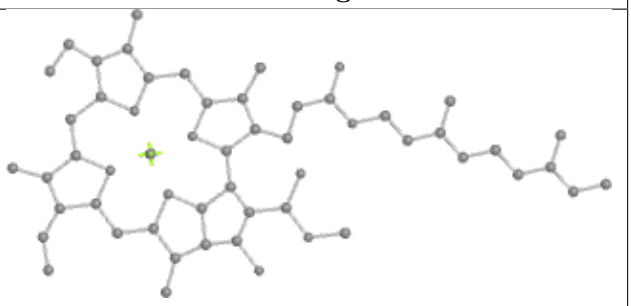
Bond angles

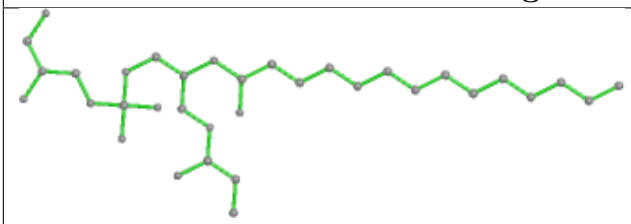
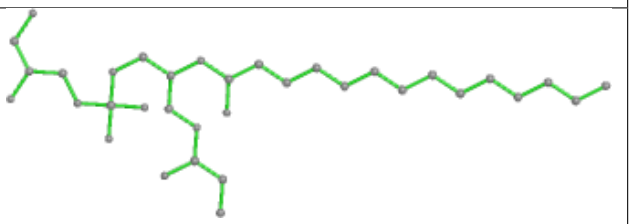
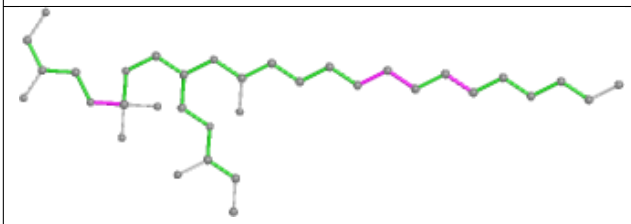
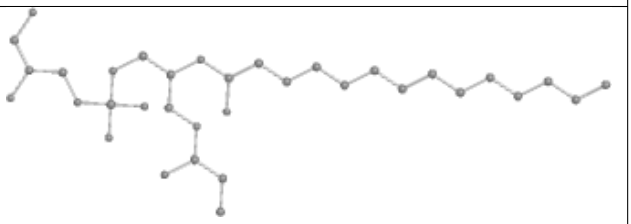


Torsions

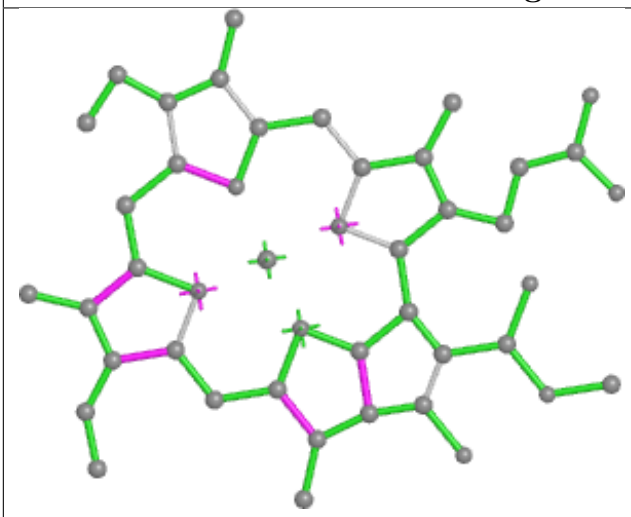


Rings

Ligand CLA 2 310	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LHG A 847	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 835



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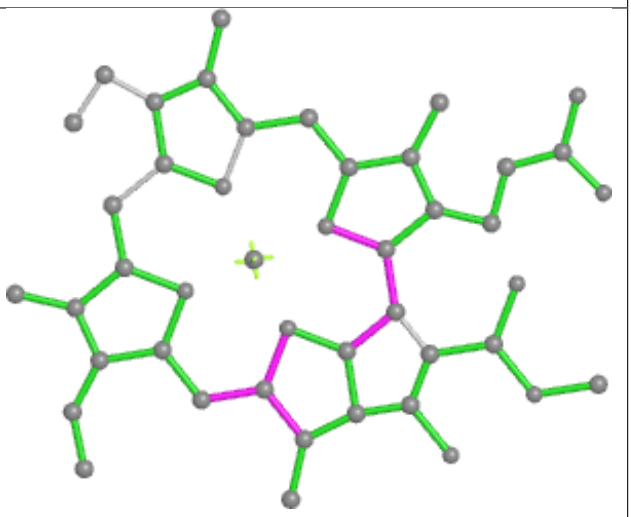

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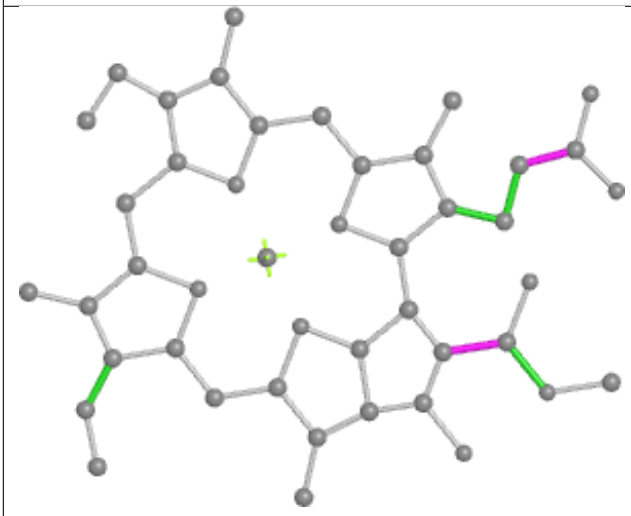

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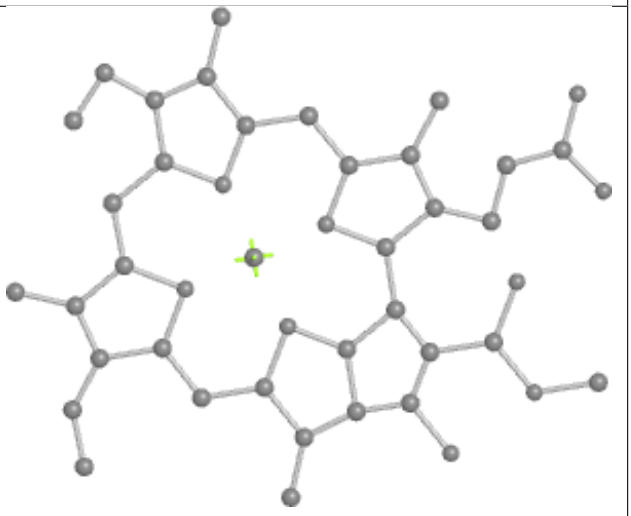
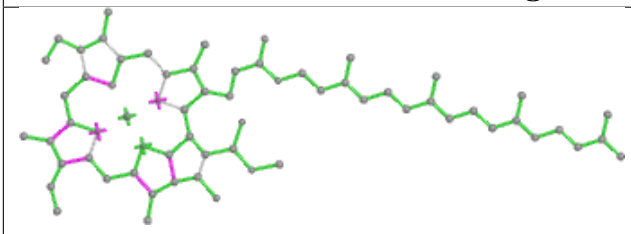


Rings

Ligand CLA B 803



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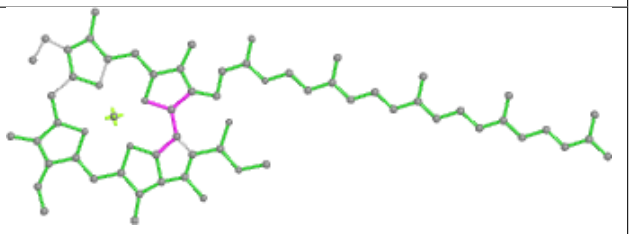
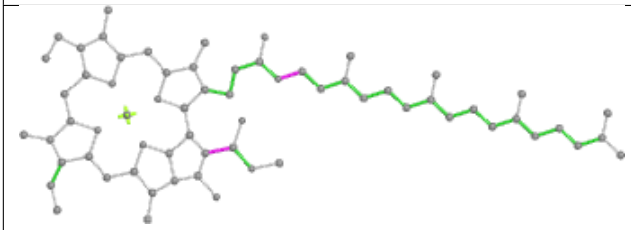


Bond angles



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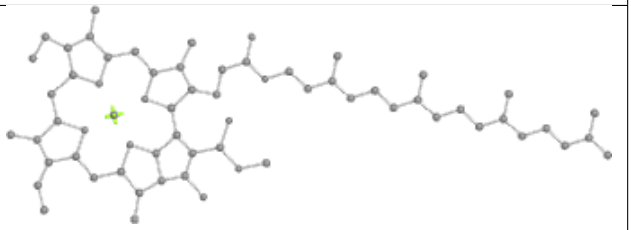
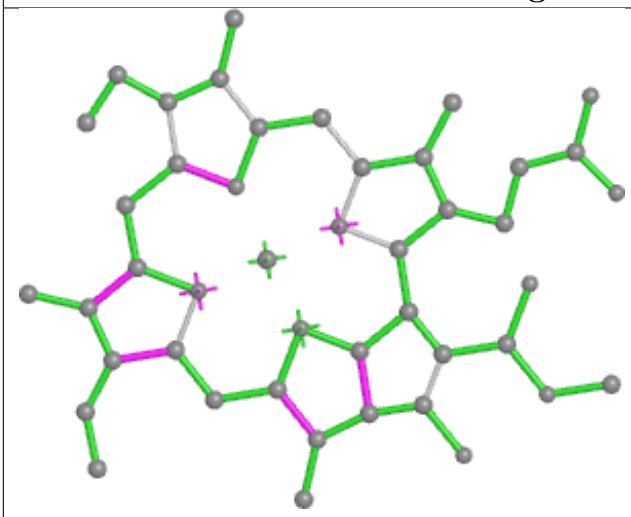


Rings

Ligand CLA 6 311



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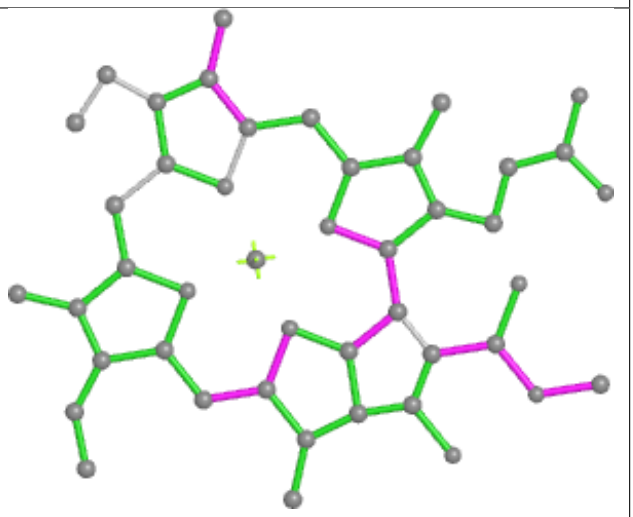
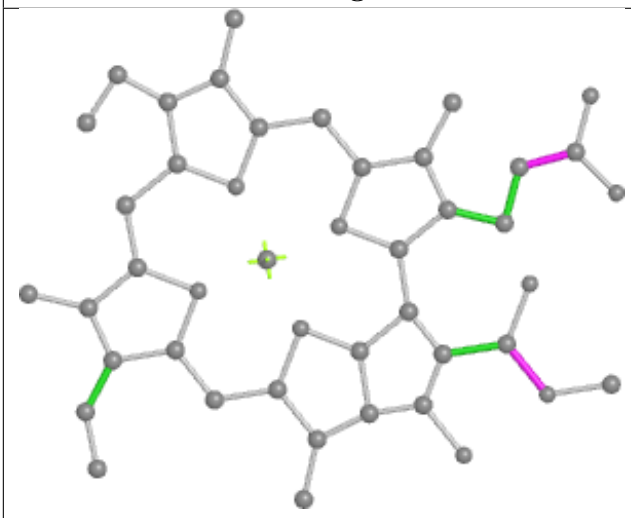


Bond angles



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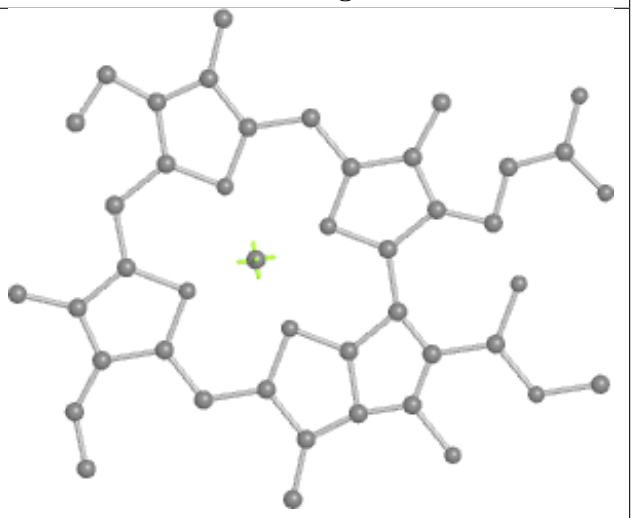
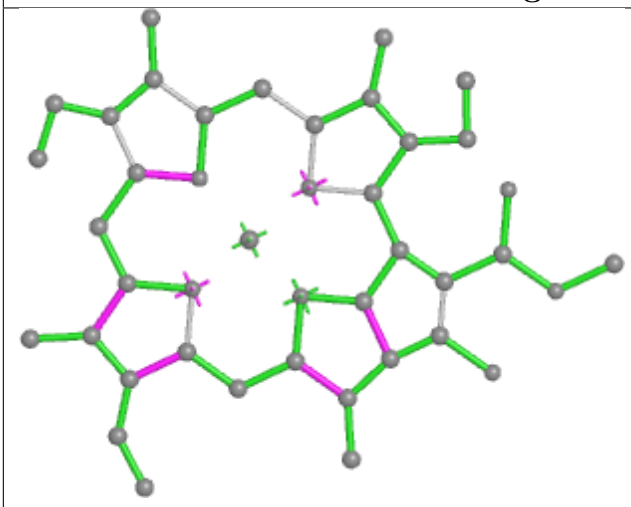


Rings

Ligand CLA A 816



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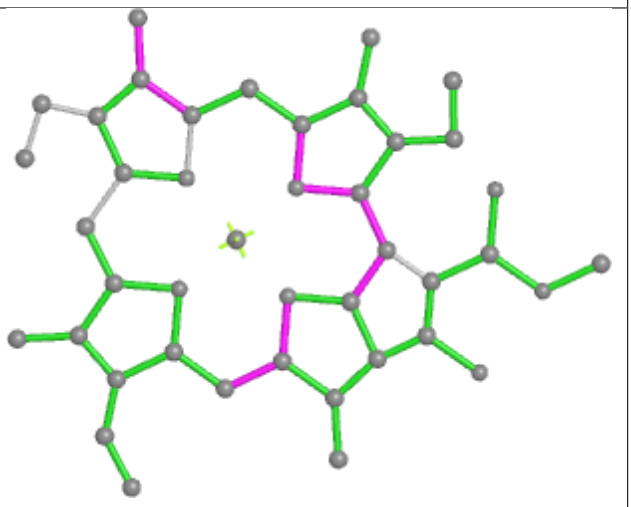

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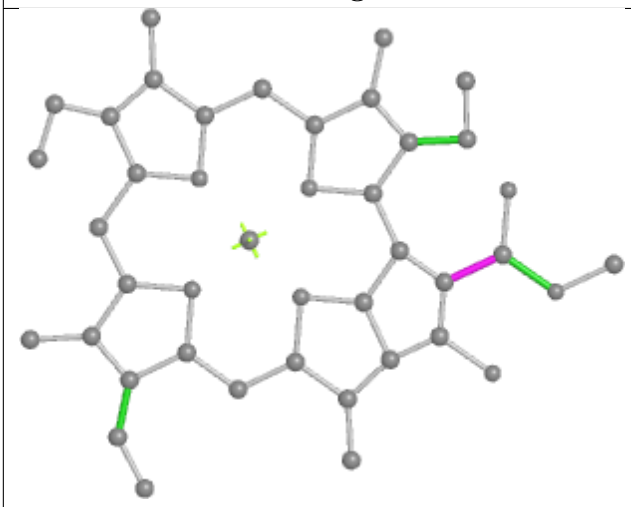

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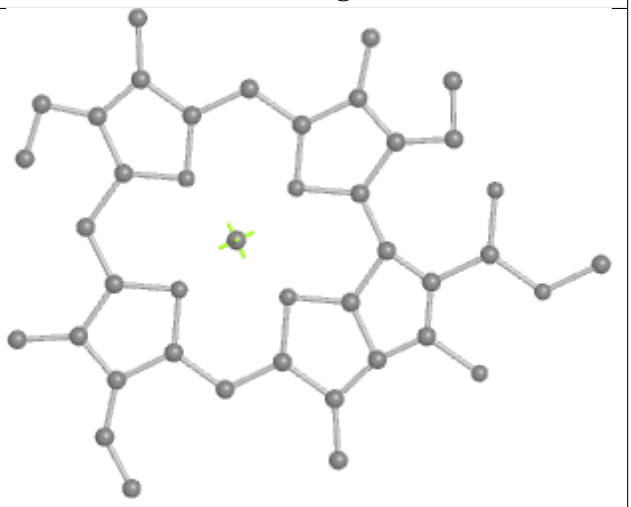
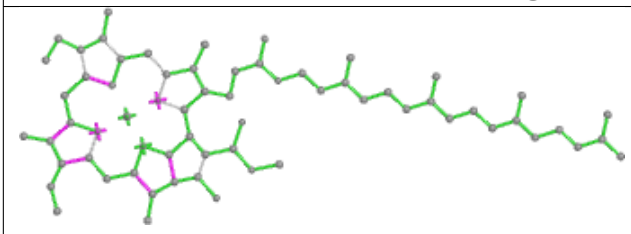


Rings

Ligand CLA B 816



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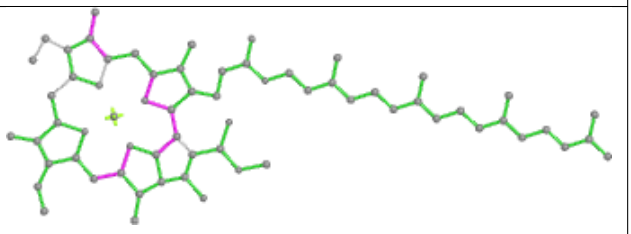
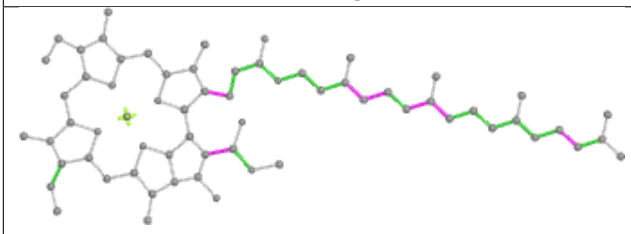


Bond angles



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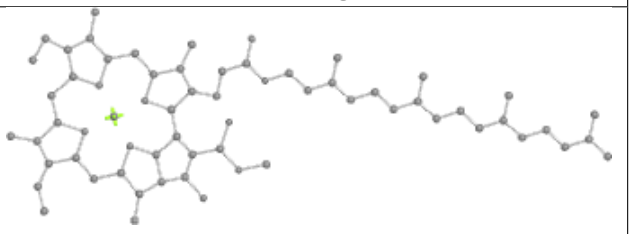
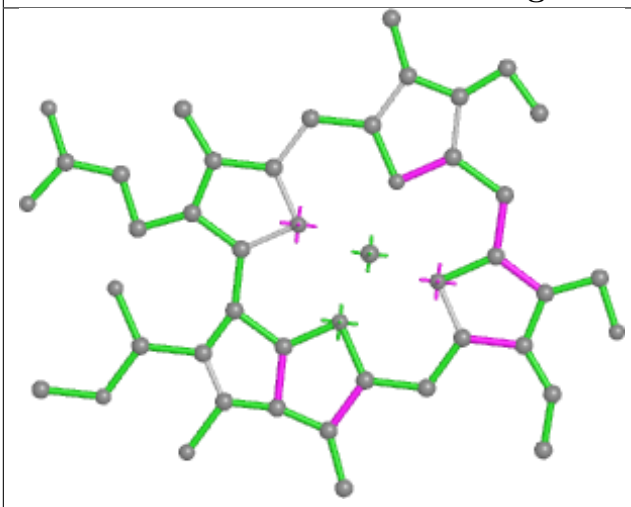


Rings

Ligand CHL 2 314



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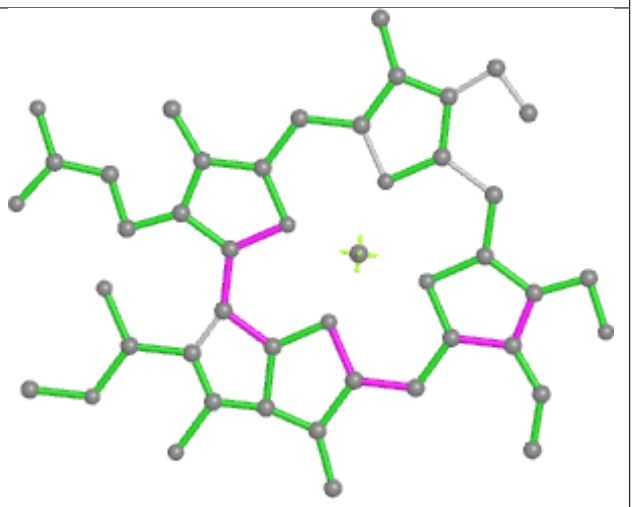
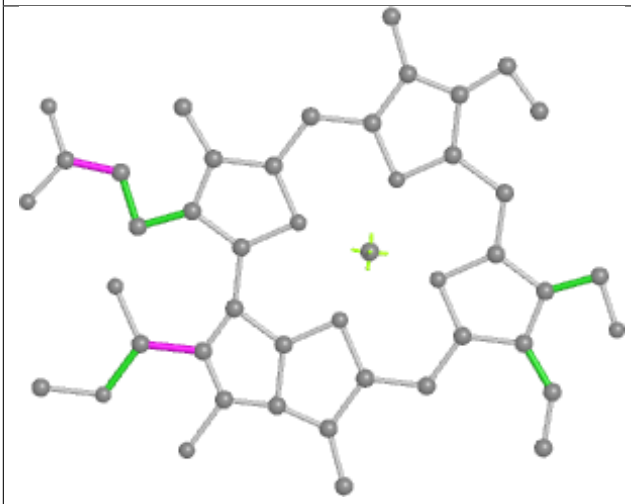


Bond angles



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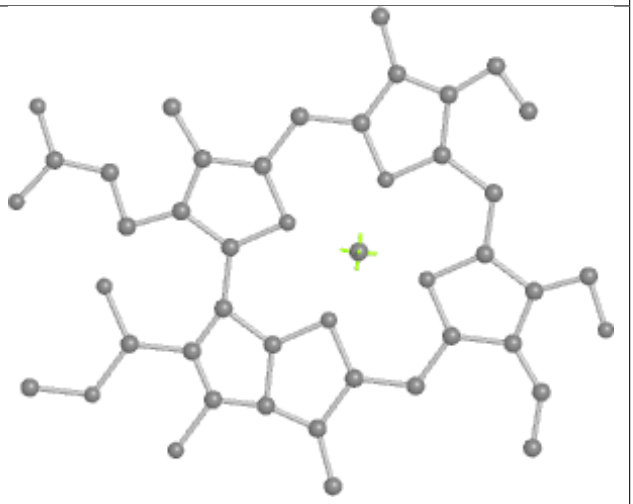
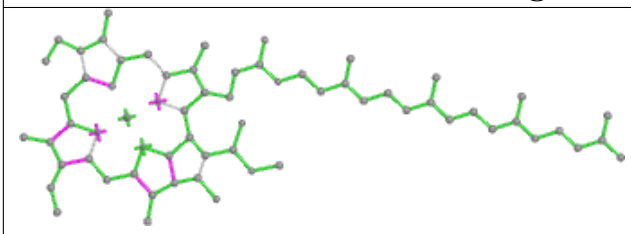


Rings

Ligand CLA 2 312



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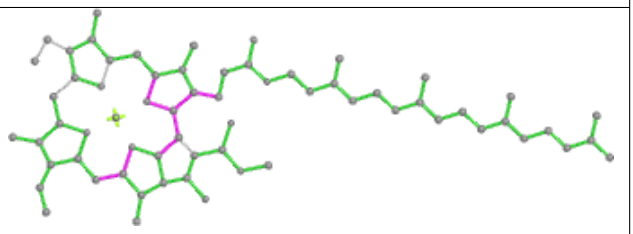

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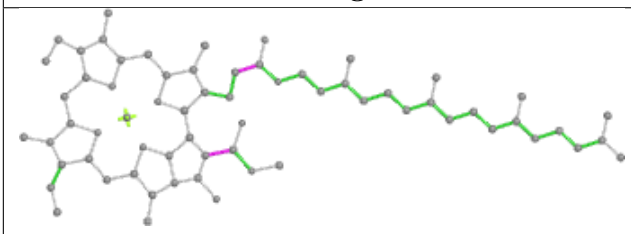

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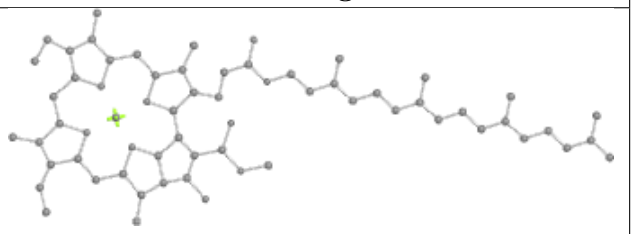
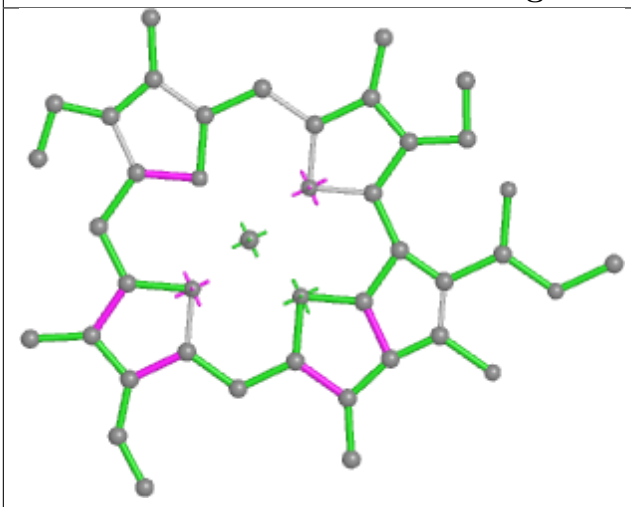


Rings

Ligand CLA L 303



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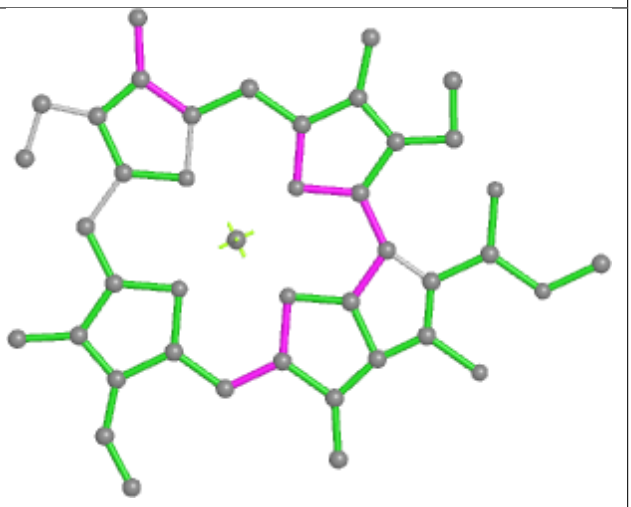
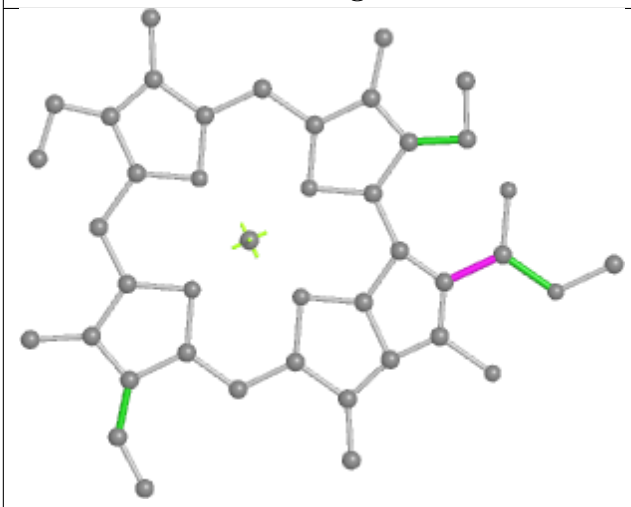


Bond angles



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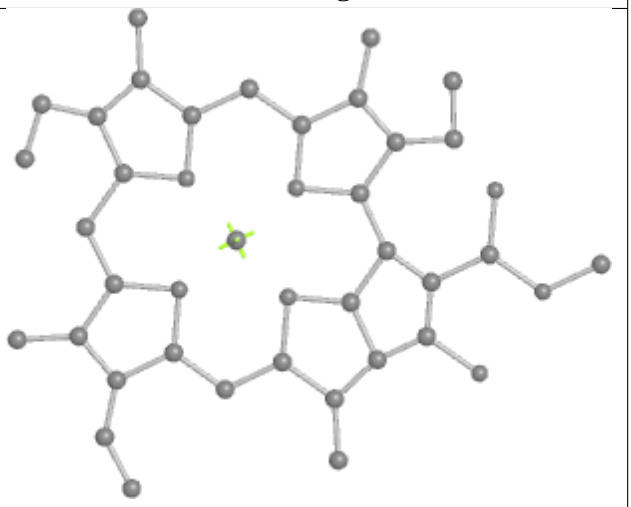
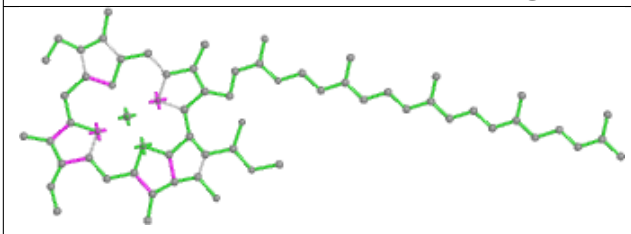


Rings

Ligand CLA A 805



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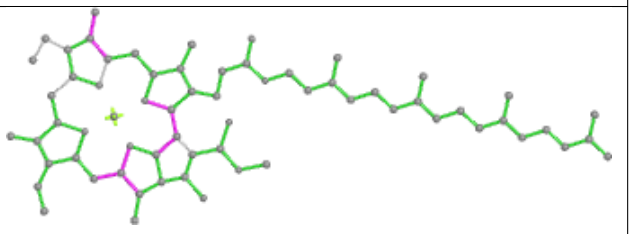

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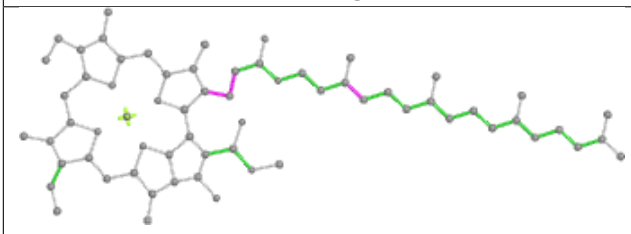

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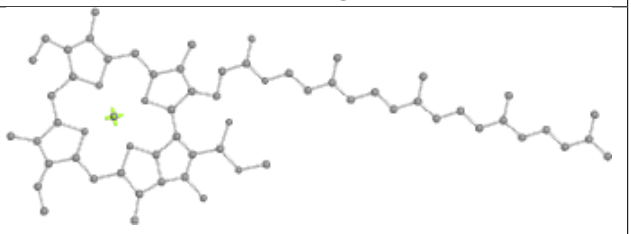
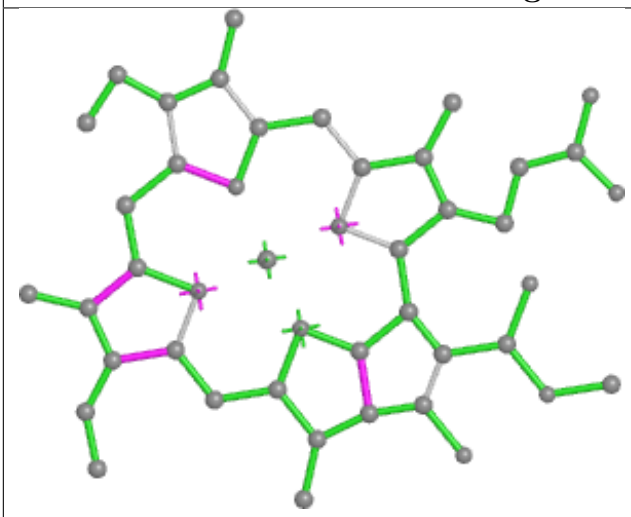


Rings

Ligand CLA A 817



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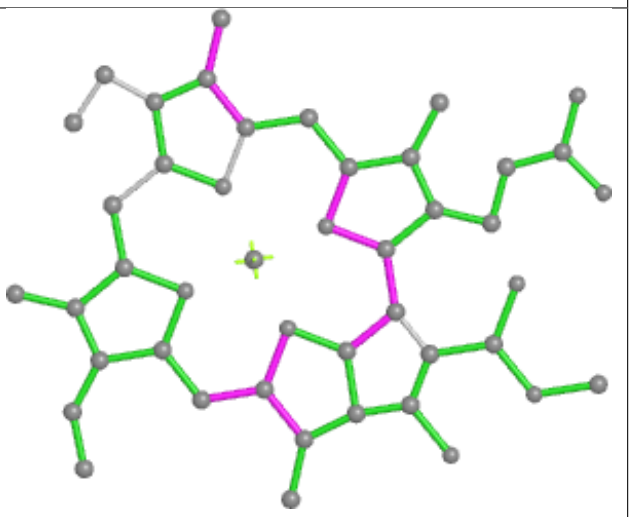
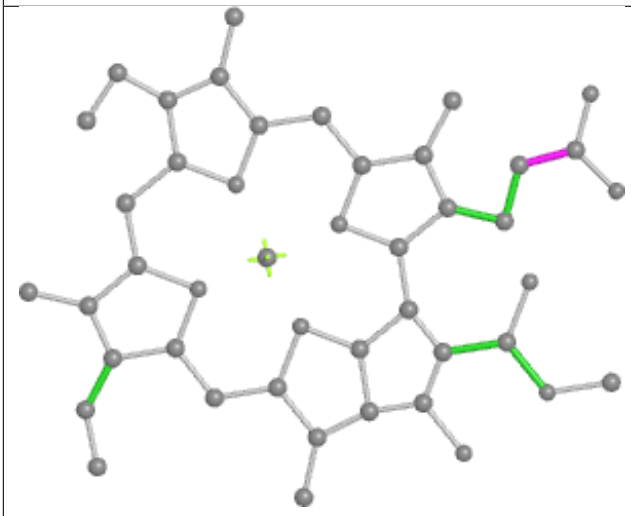


Bond angles



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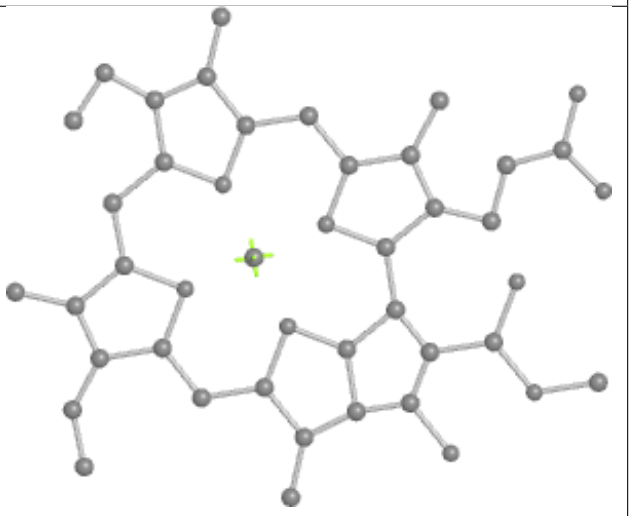
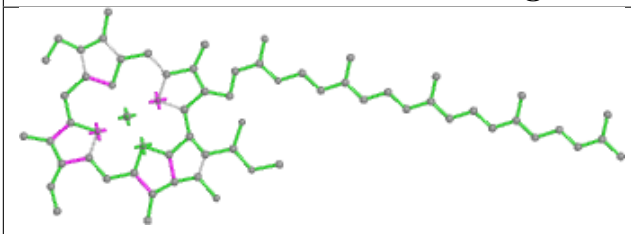


Rings

Ligand CLA B 825



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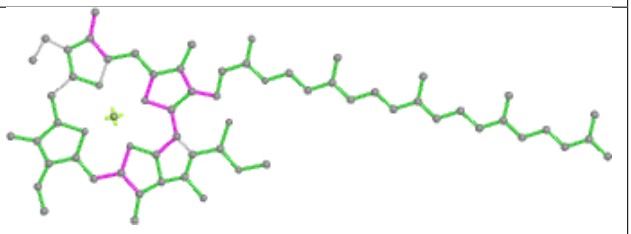
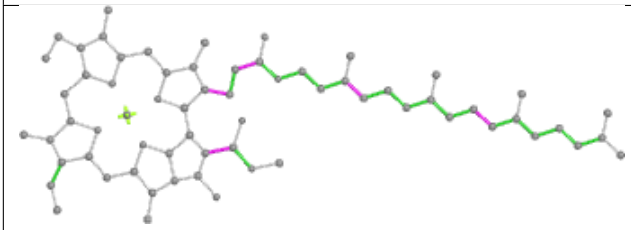


Bond angles



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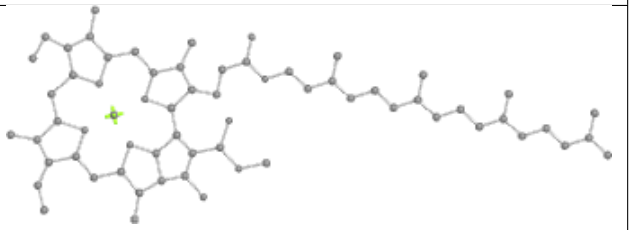
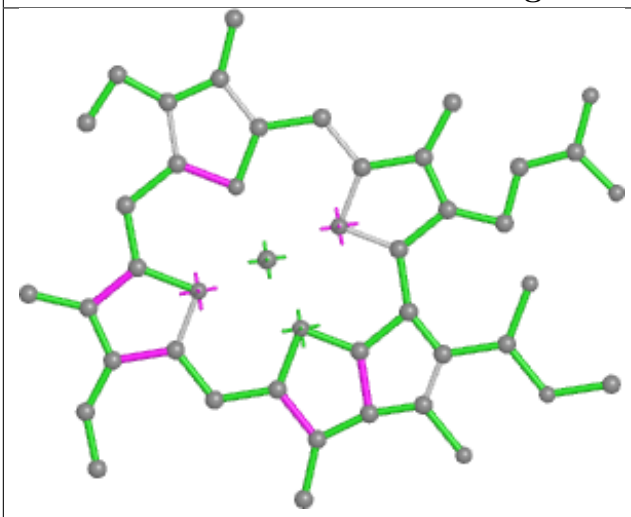


Rings

Ligand CLA B 824



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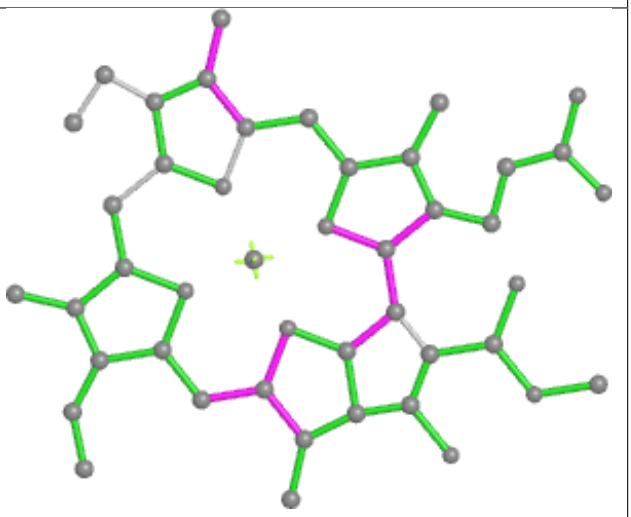
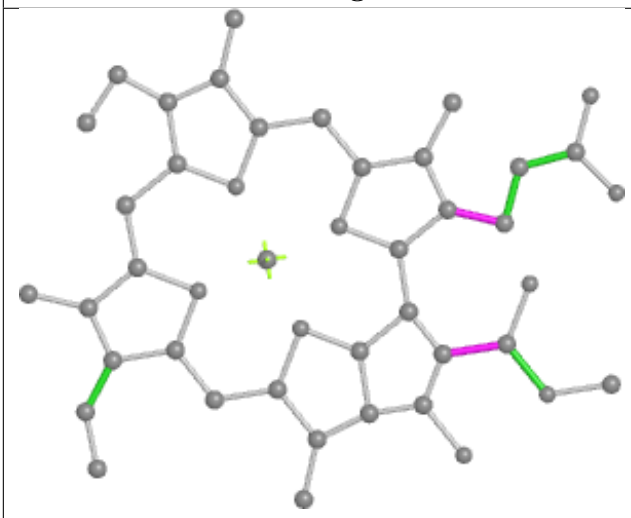


Bond angles



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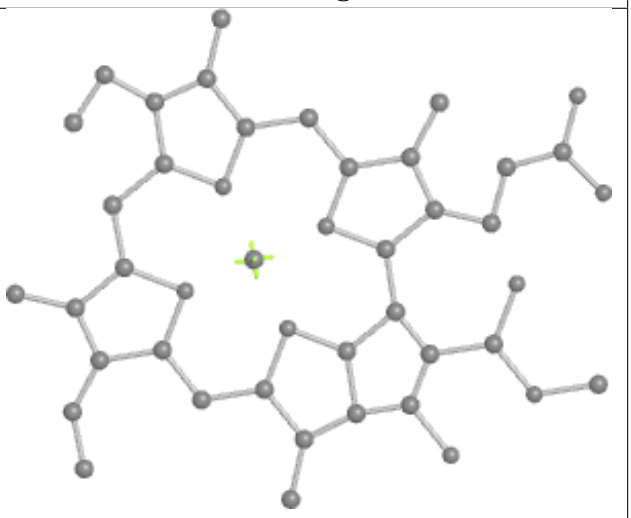
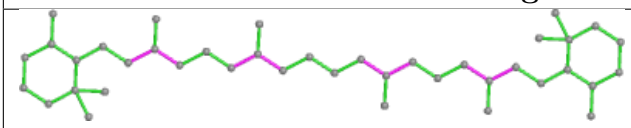
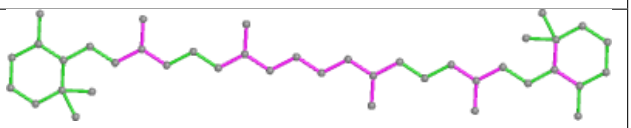


Rings

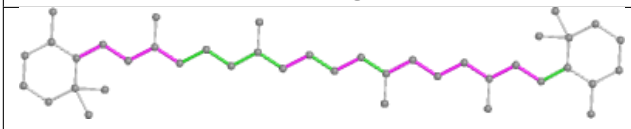
Ligand BCR K 205



Bond lengths



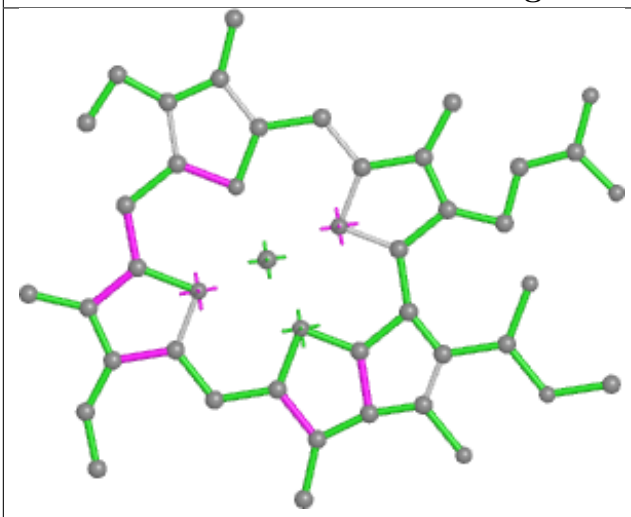
Bond angles



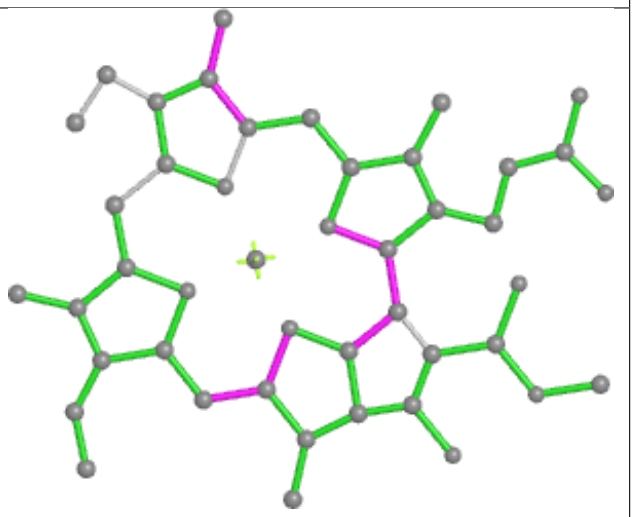
Torsions

Rings

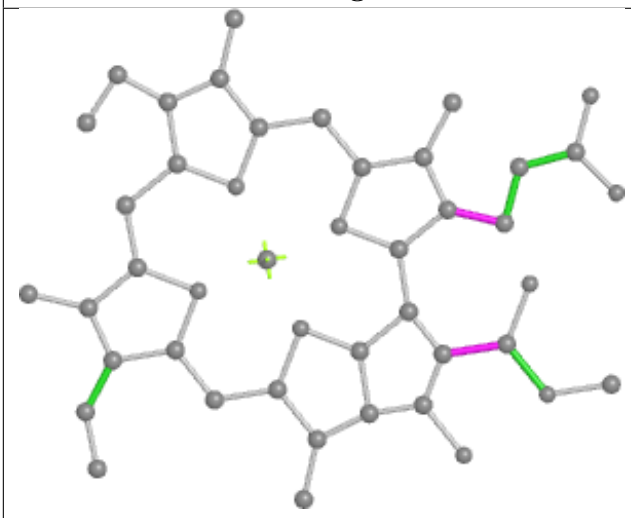
Ligand CLA B 805



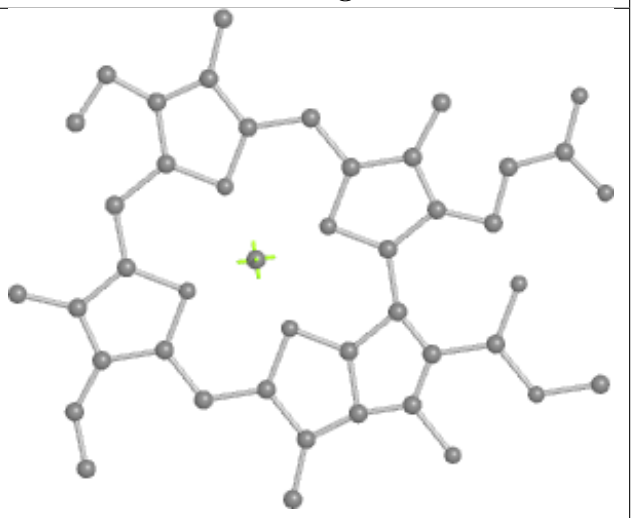
Bond lengths



Bond angles

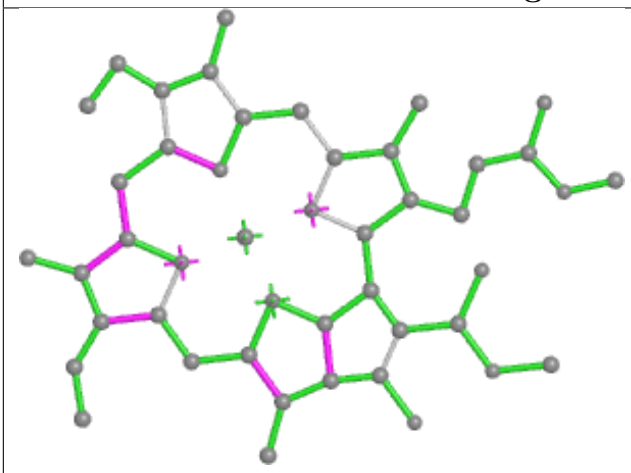


Torsions

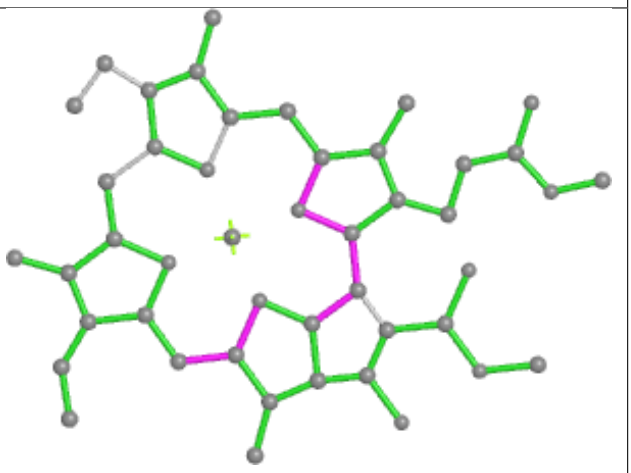


Rings

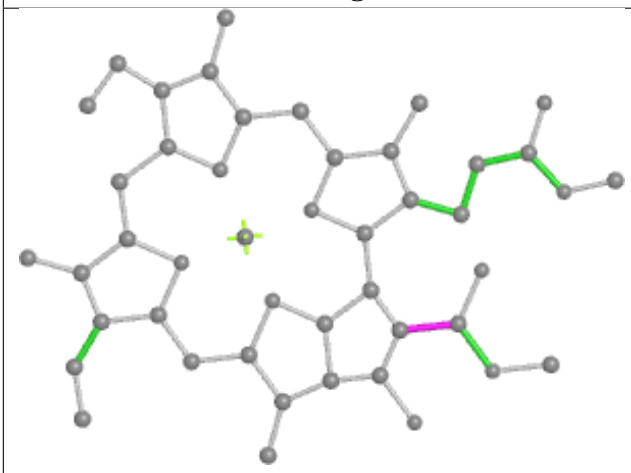
Ligand CLA B 822



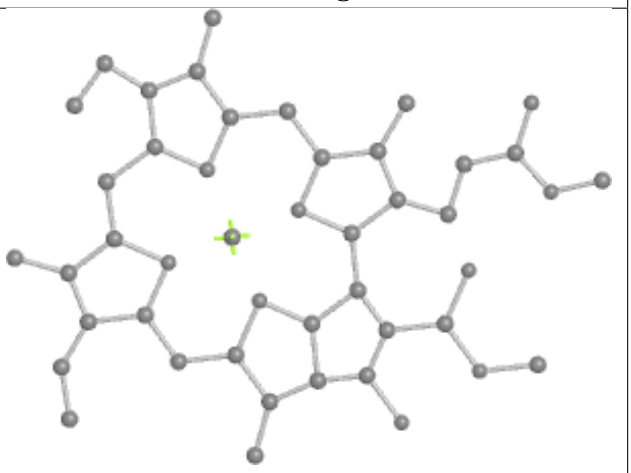
Bond lengths



Bond angles

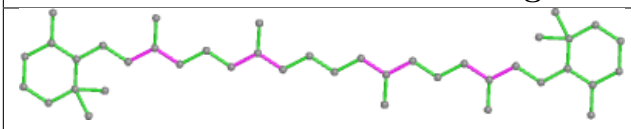


Torsions

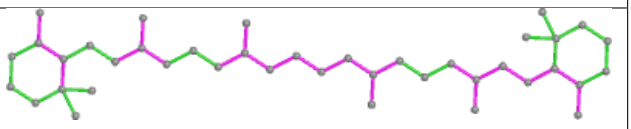


Rings

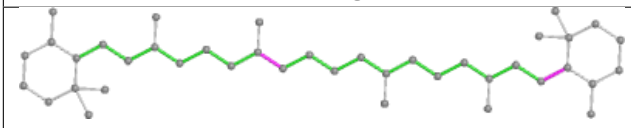
Ligand BCR F 305



Bond lengths



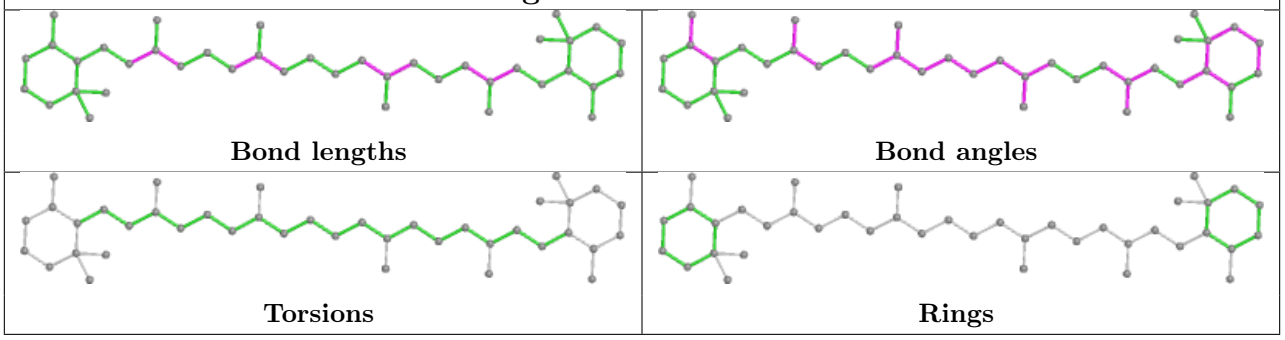
Bond angles



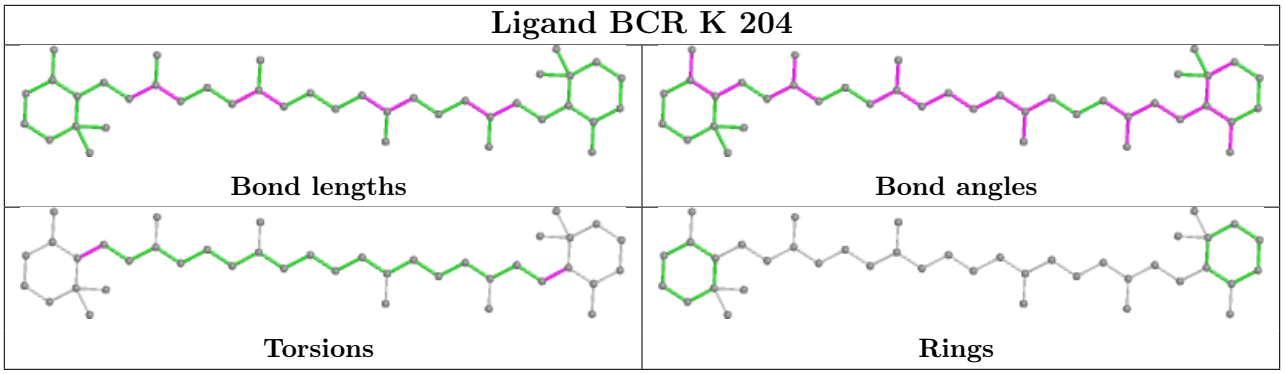
Torsions

Rings

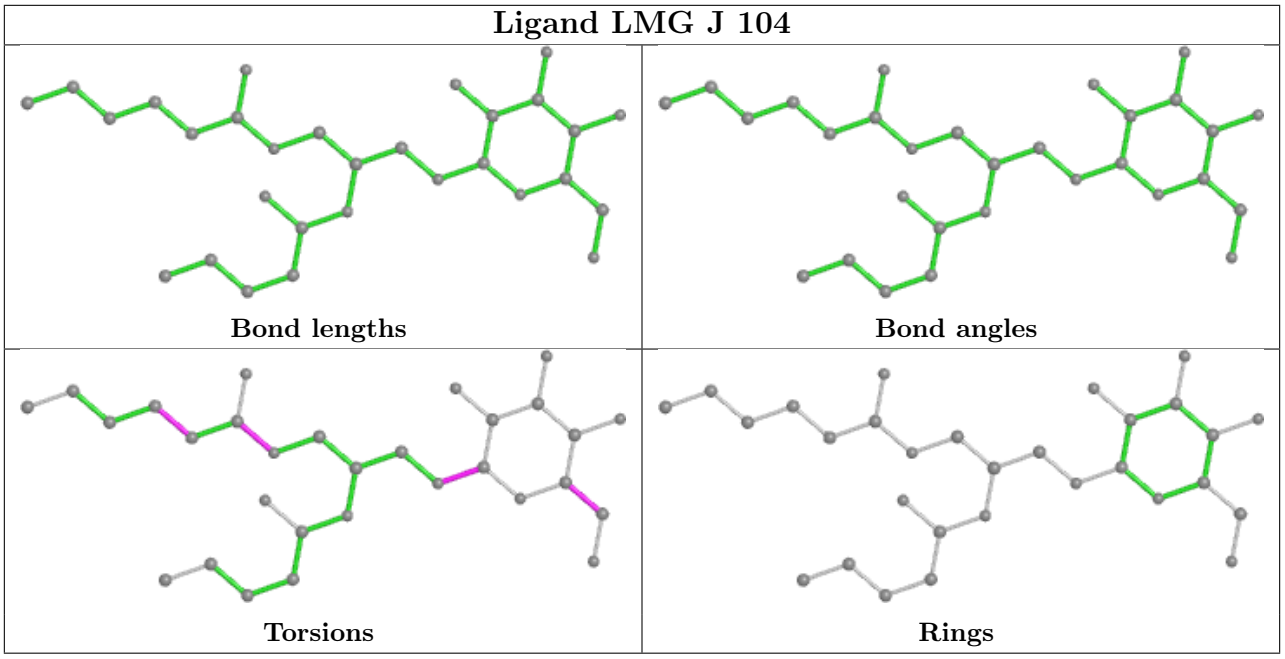
Ligand BCR G 205

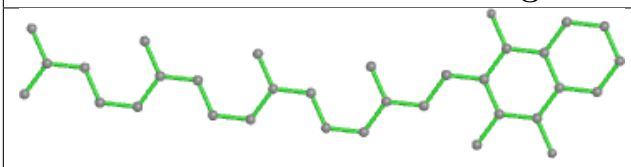
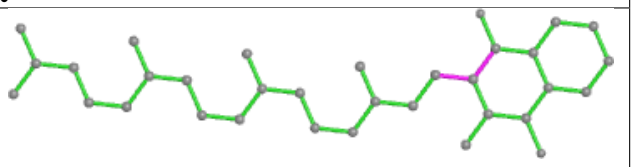
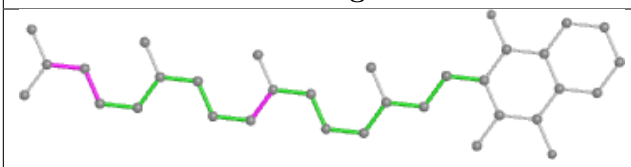
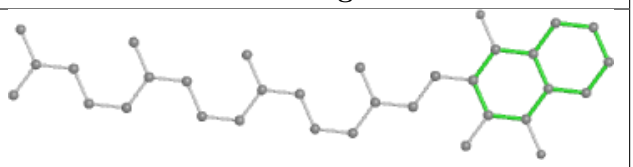


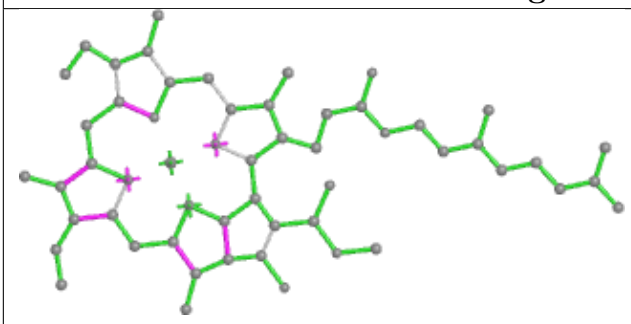
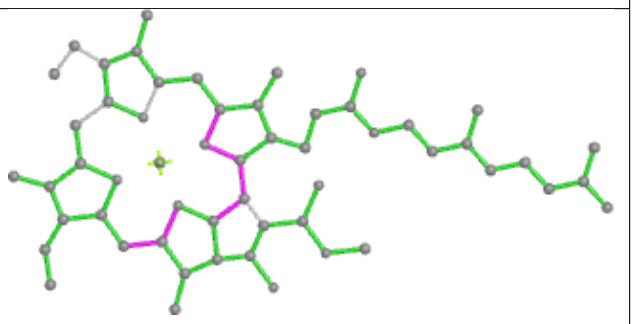
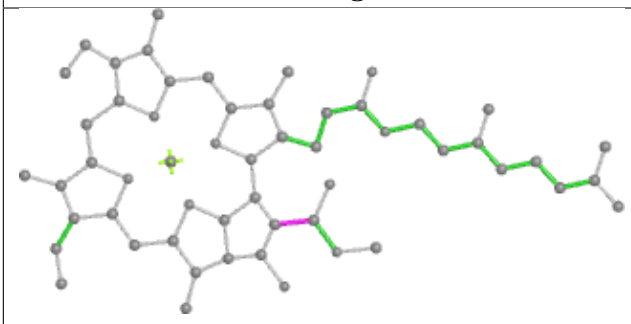
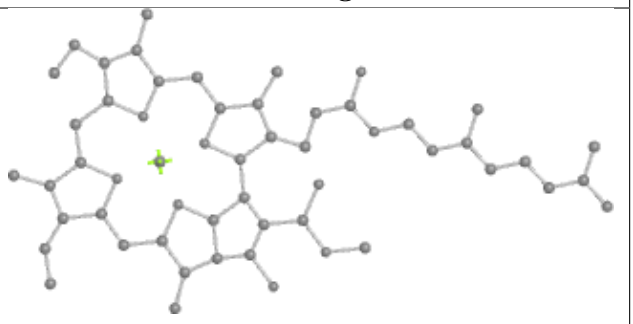
Ligand BCR K 204



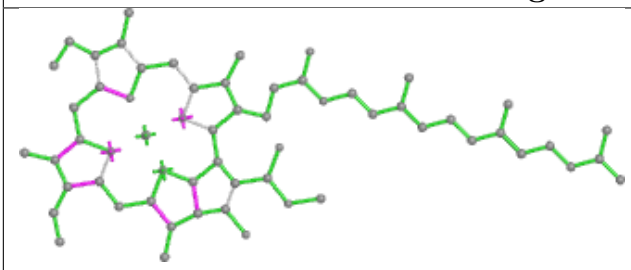
Ligand LMG J 104



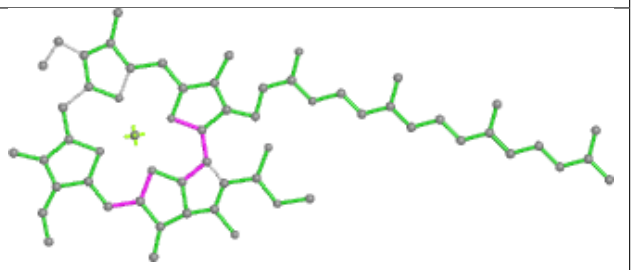
Ligand PQN A 844	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 3 309	
 Bond lengths	 Bond angles
 Torsions	 Rings

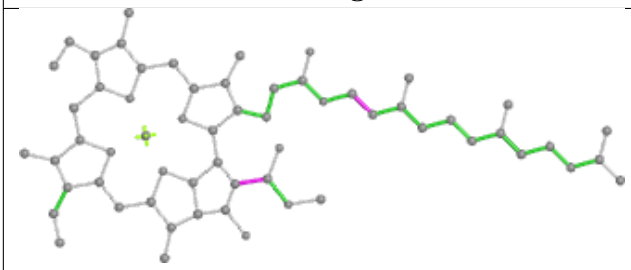
Ligand CLA 5 309



Bond lengths



Bond angles



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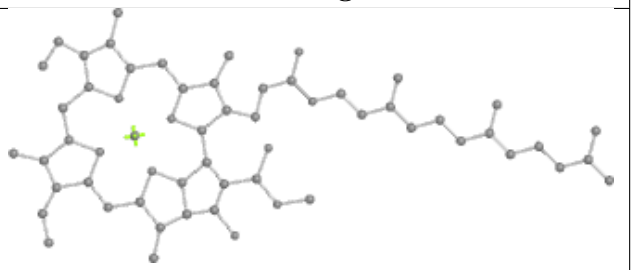
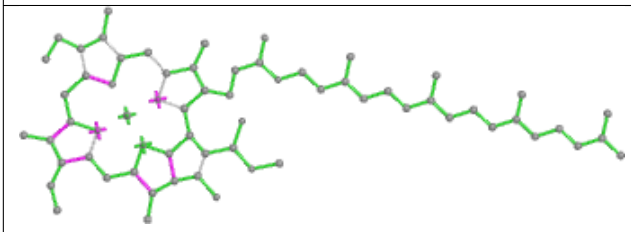


Rings

Ligand CLA B 815



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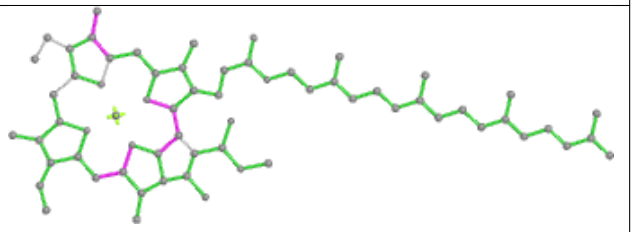
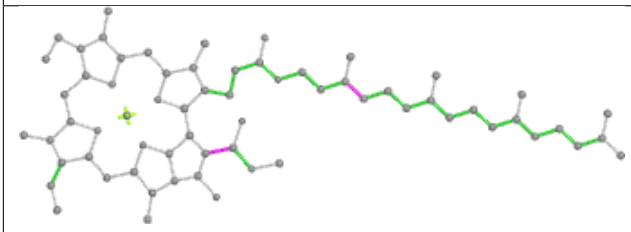


Bond angles



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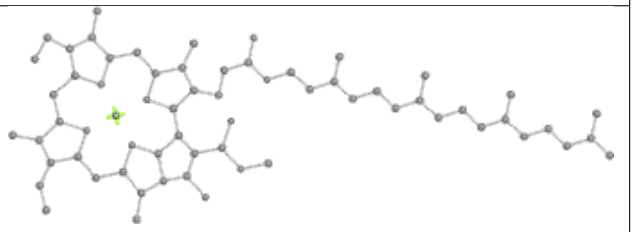
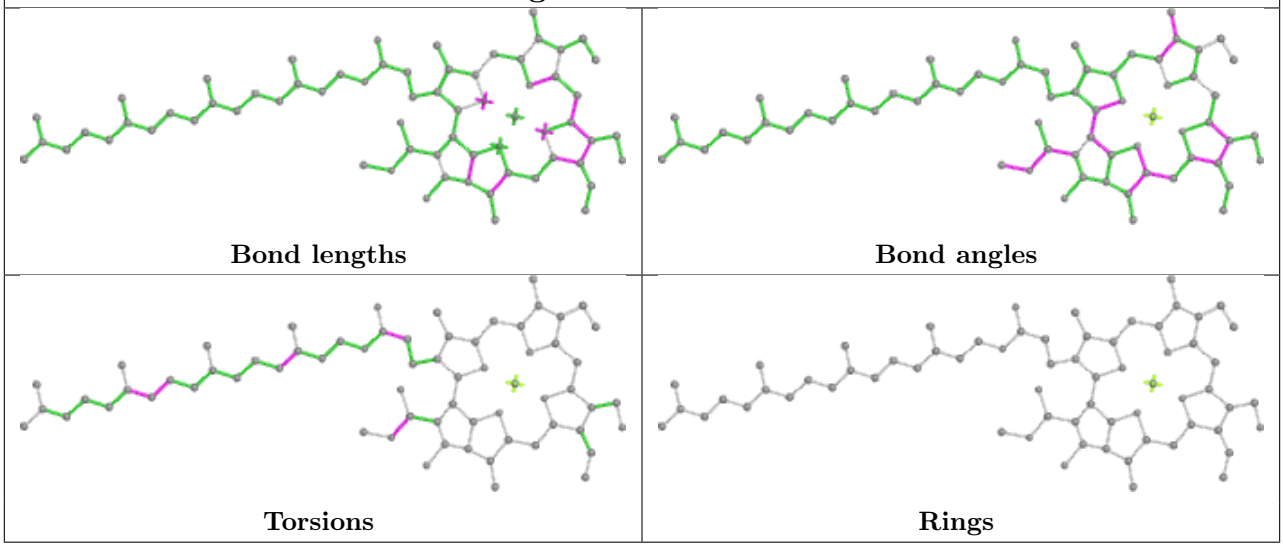
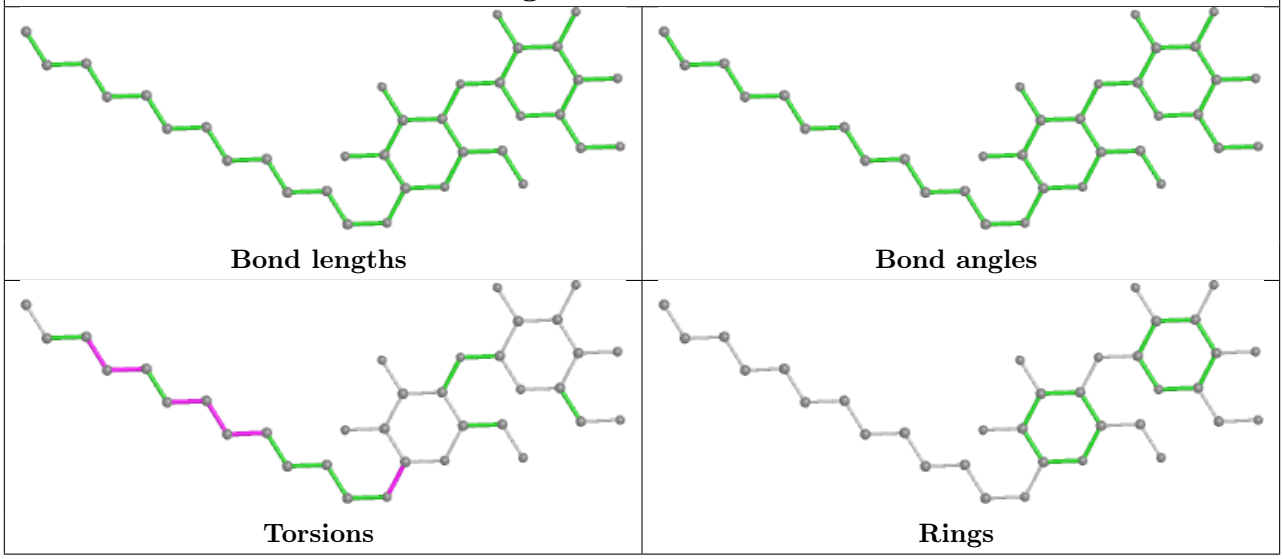


Rings

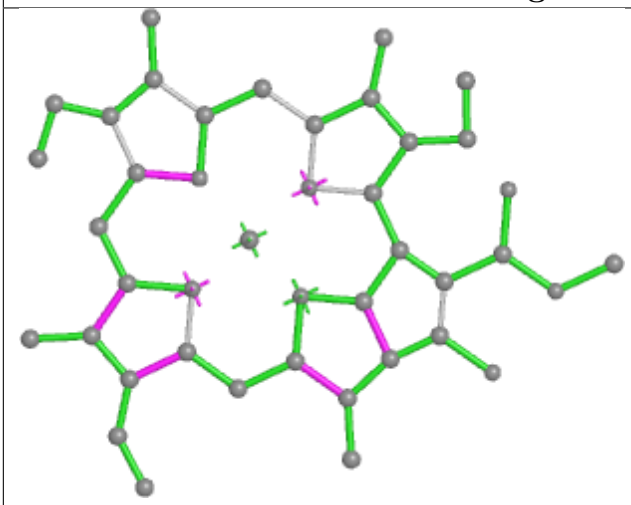
Ligand CHL 3 314



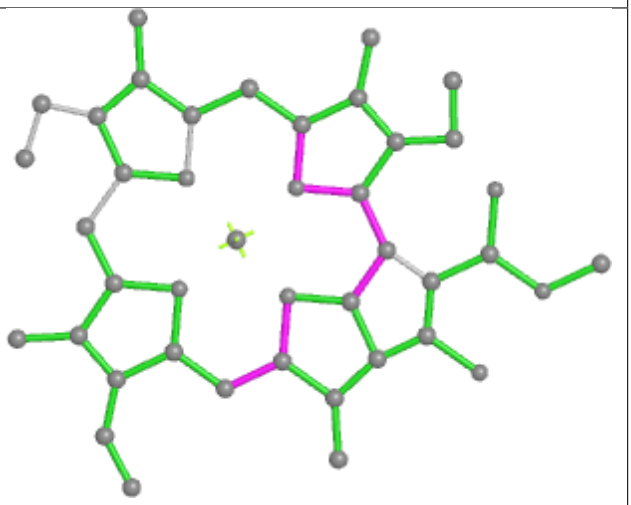
Ligand LMU B 850



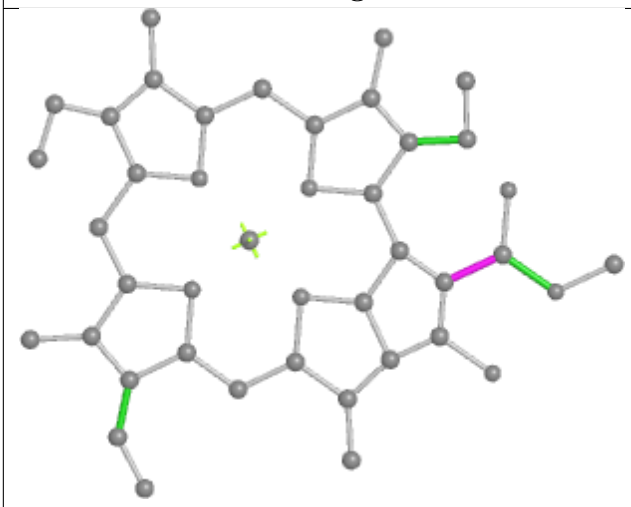
Ligand CLA J 102



Bond lengths



Bond angles



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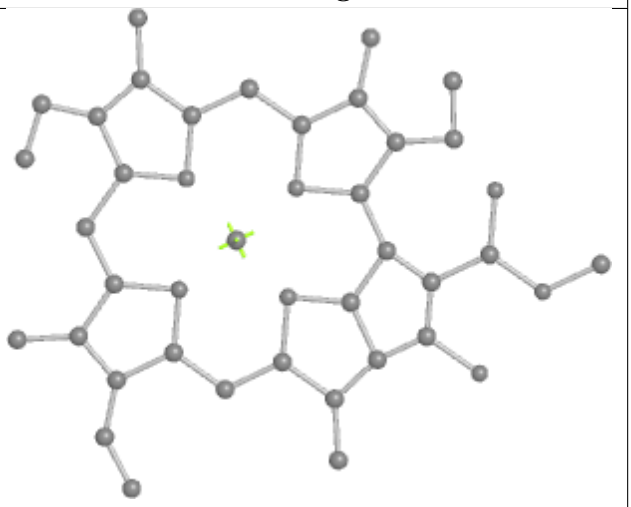
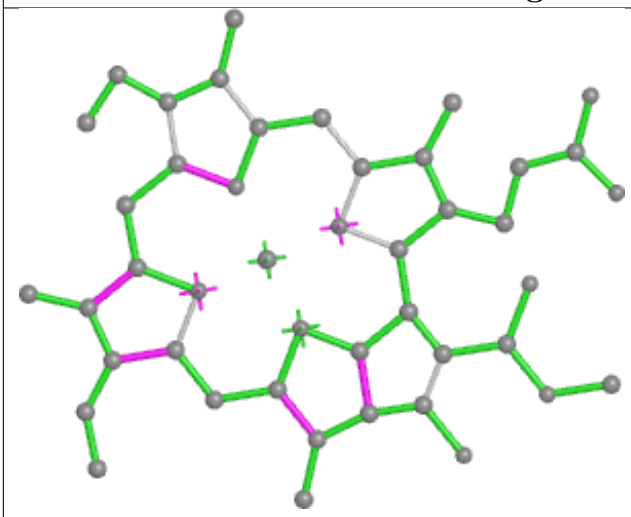
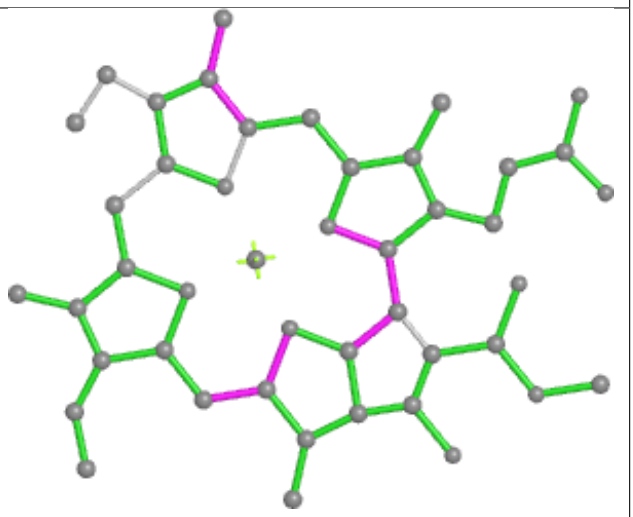


Rings

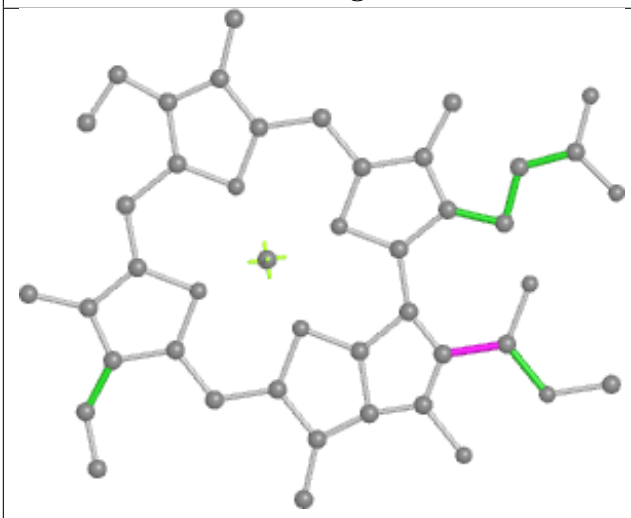
Ligand CLA F 303



Bond lengths



Bond angles



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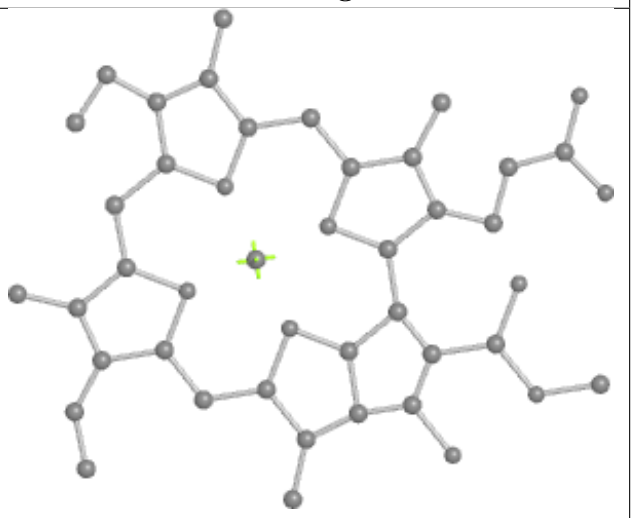
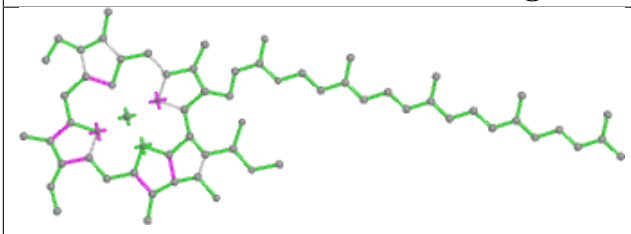
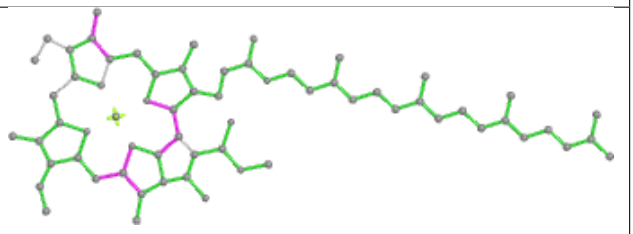


Rings

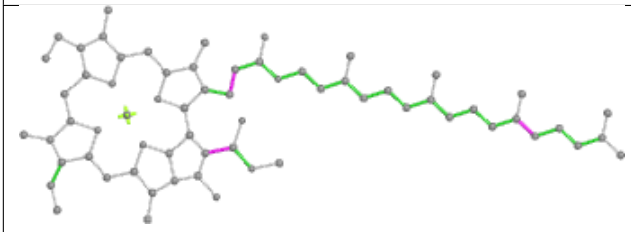
Ligand CLA A 810



Bond lengths



Bond angles



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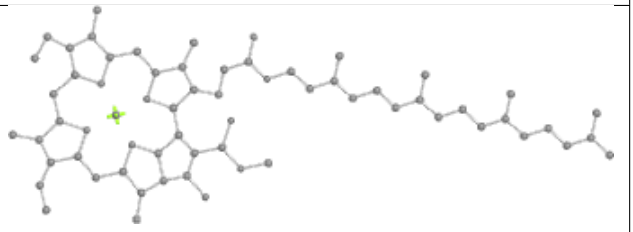
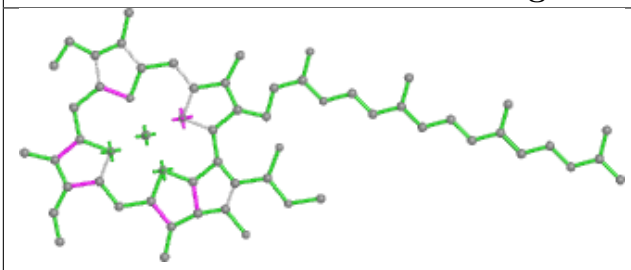
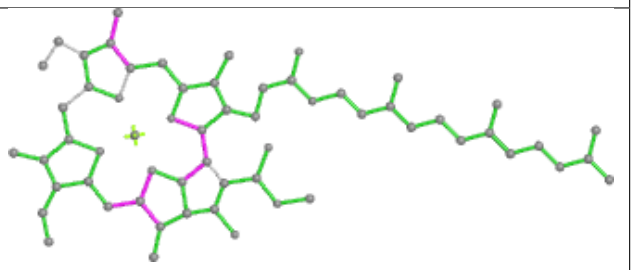
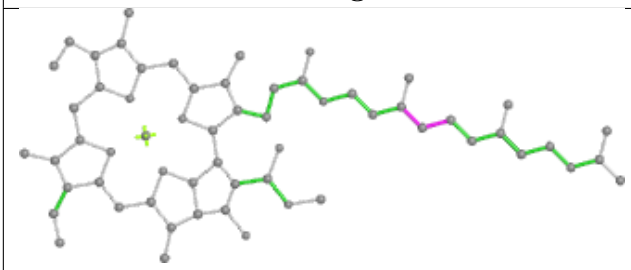
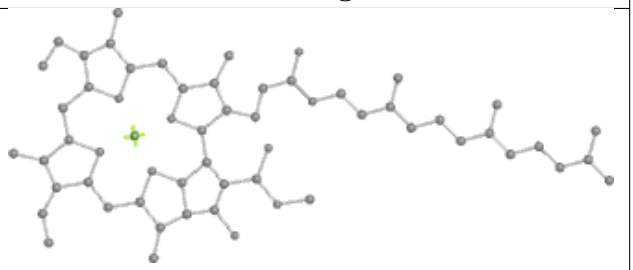
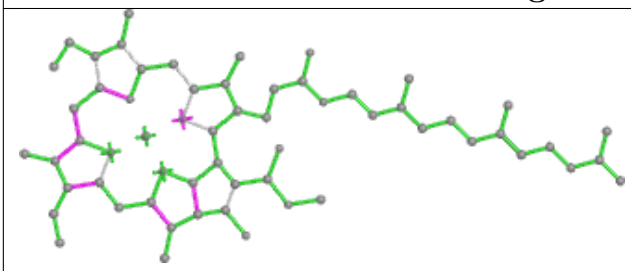
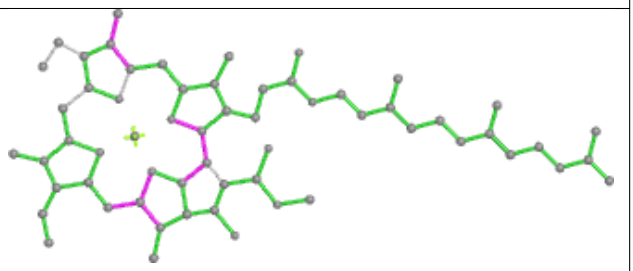
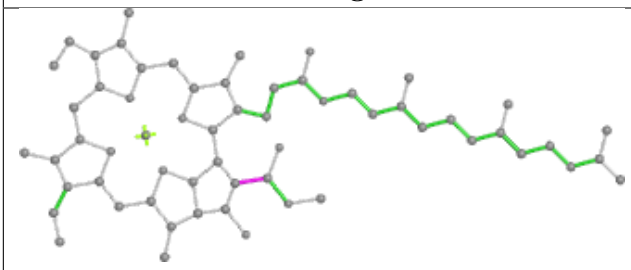
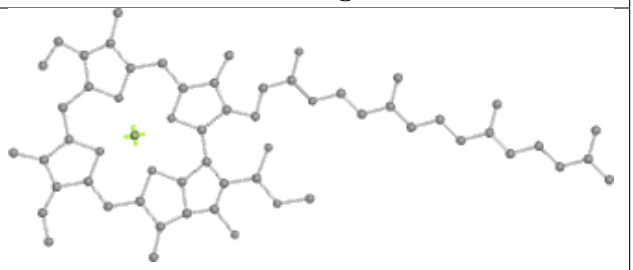
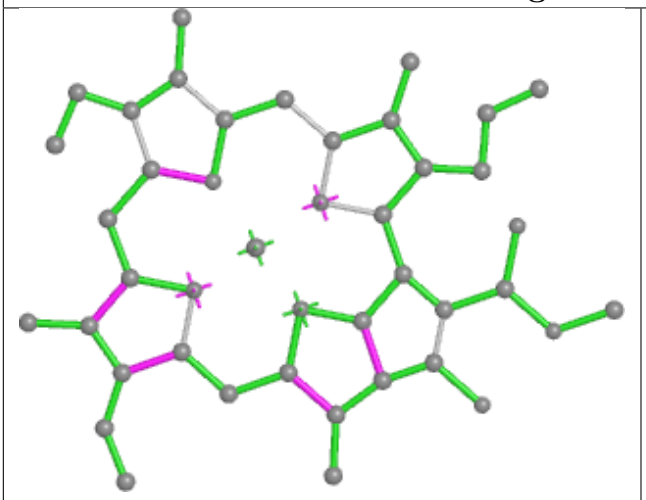


Rings

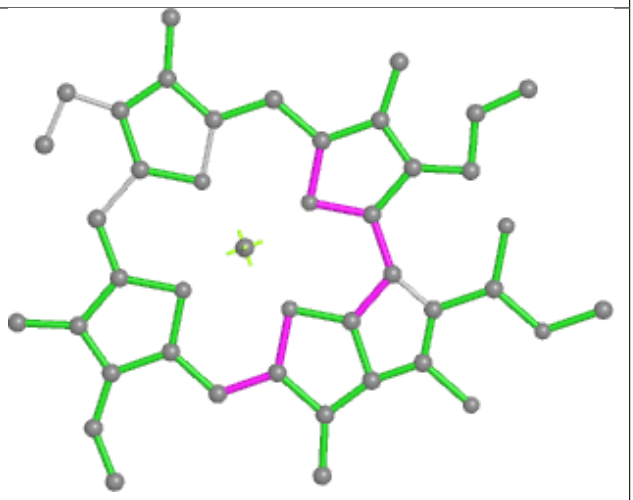
Ligand CLA 5 308	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 3 301	
 Bond lengths	 Bond angles
 Torsions	 Rings

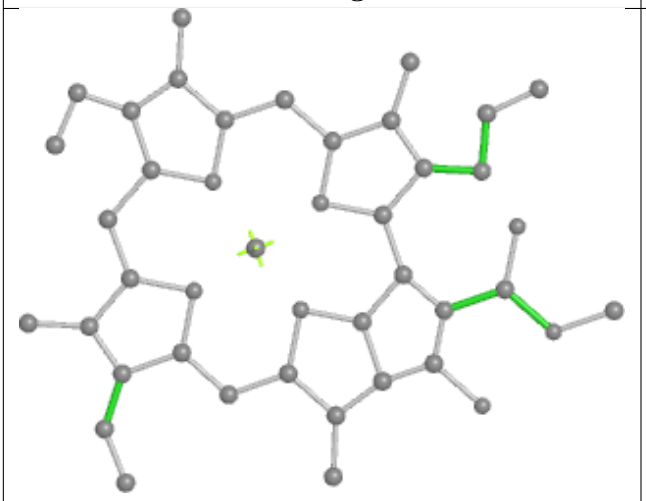
Ligand CLA 3 310



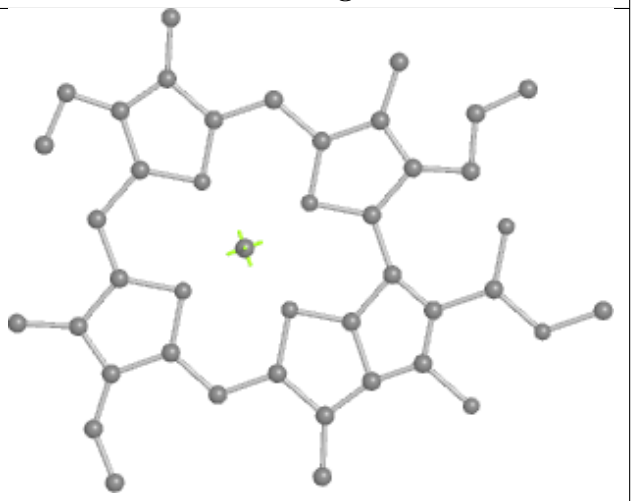
Bond lengths



Bond angles

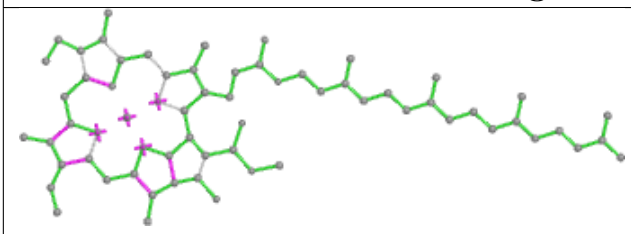


Torsions

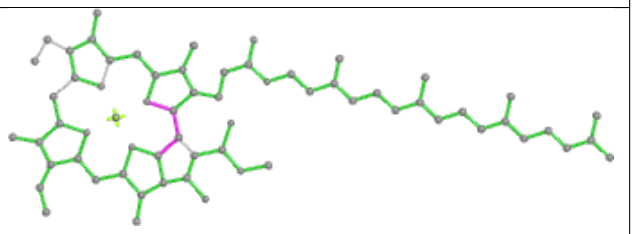


Rings

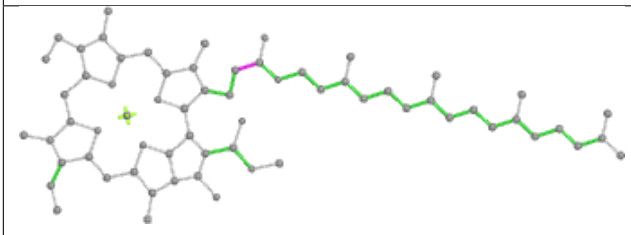
Ligand CL0 A 802



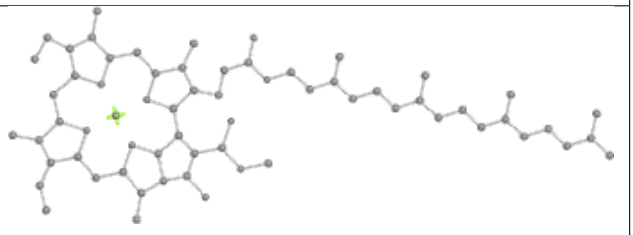
Bond lengths



Bond angles

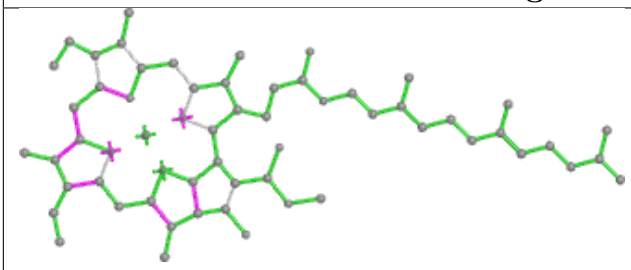


Torsions

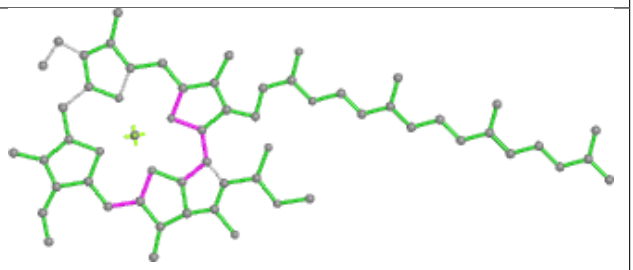


Rings

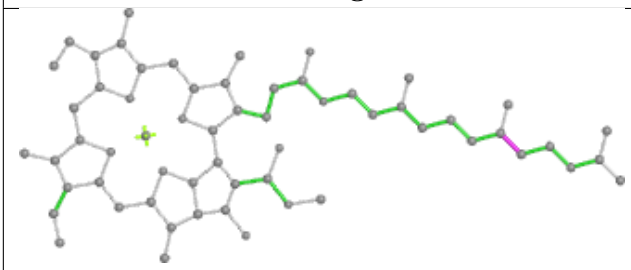
Ligand CLA F 301



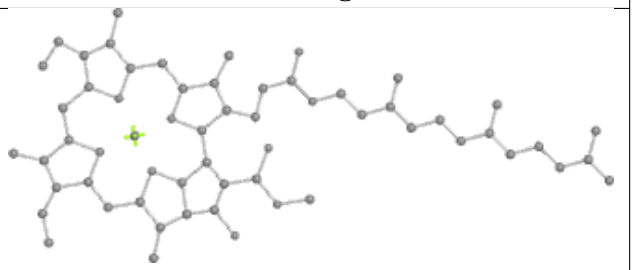
Bond lengths



Bond angles

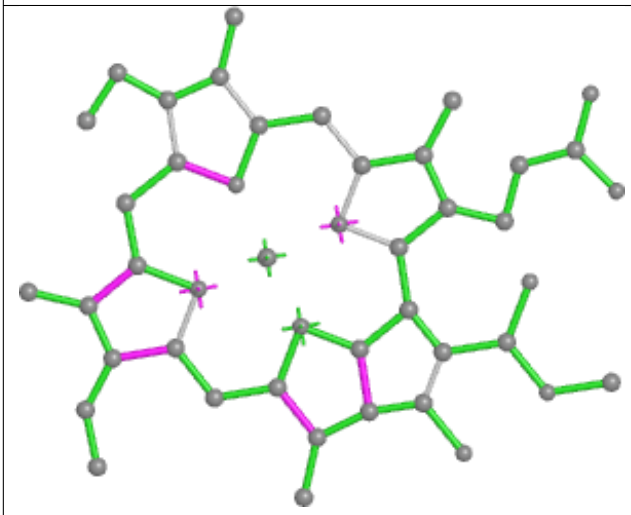


Torsions



Rings

Ligand CLA 6 305



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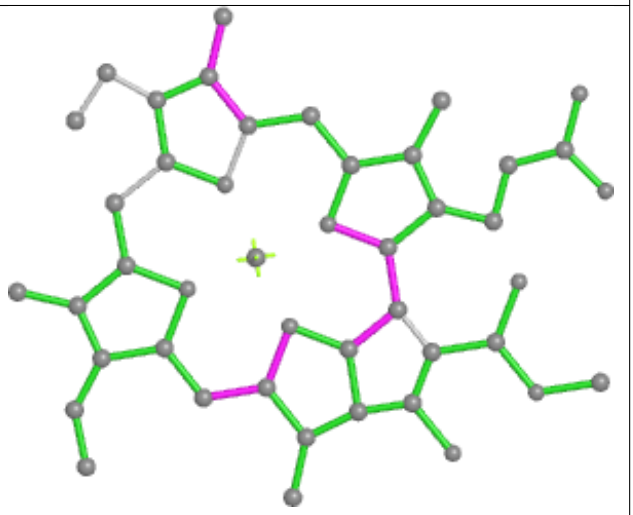

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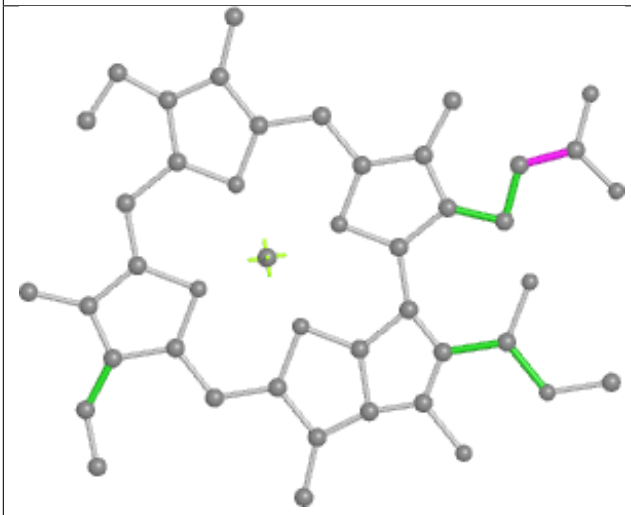

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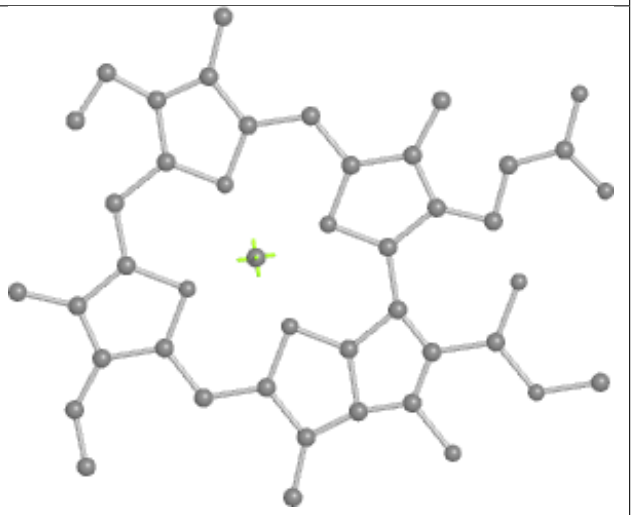
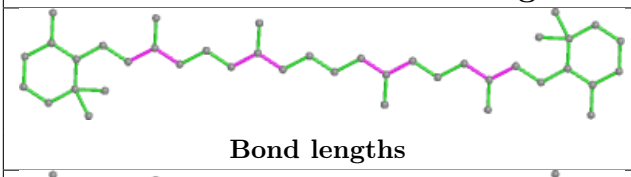


Rings

Ligand BCR M 101



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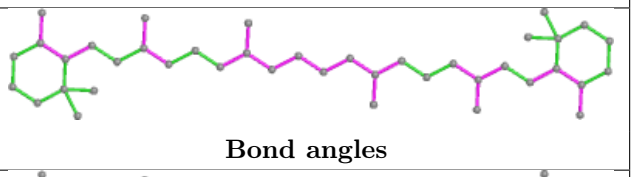
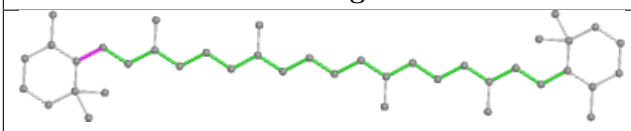


Bond angles



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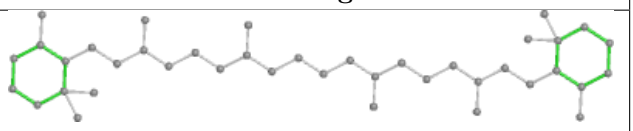
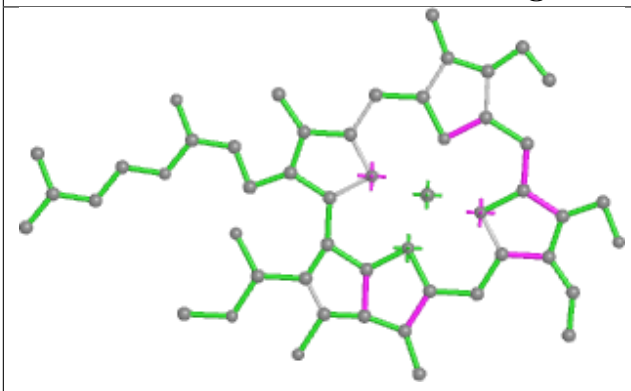


Rings

Ligand CHL 6 301



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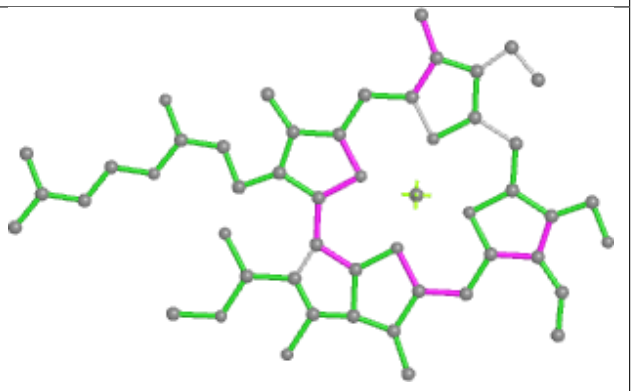

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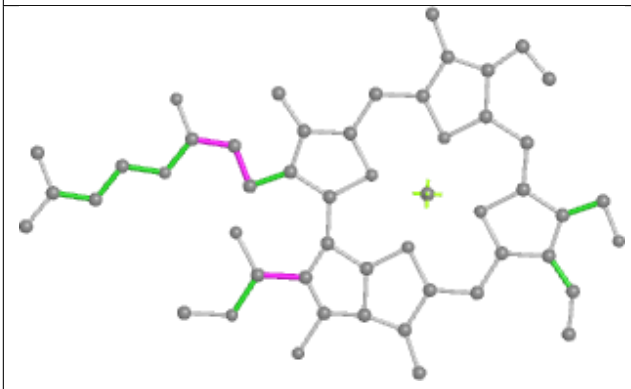

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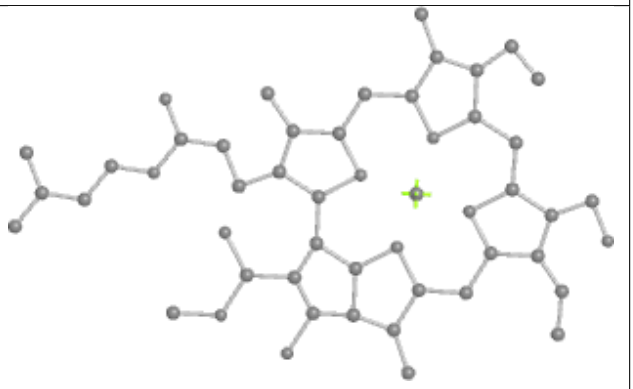
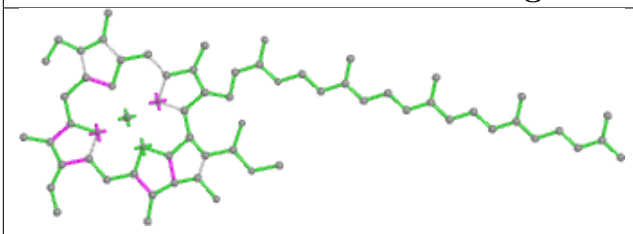


Rings

Ligand CLA B 841



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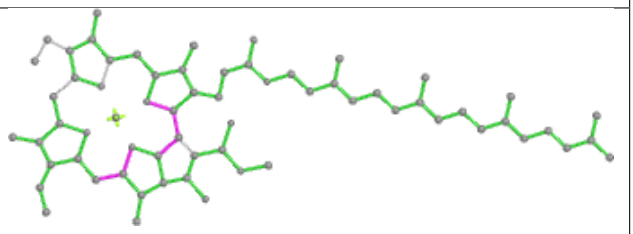

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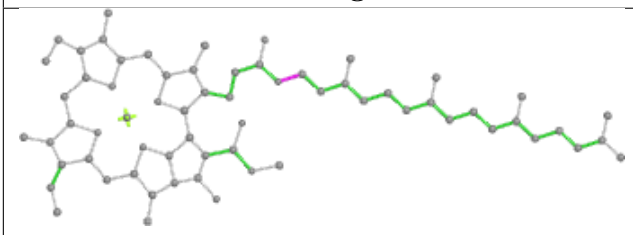

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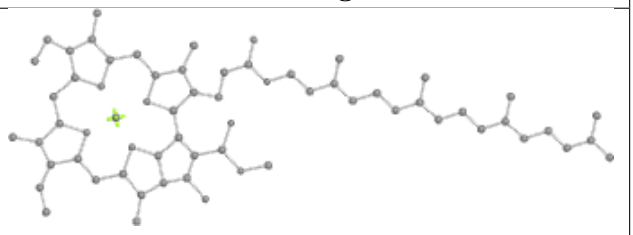
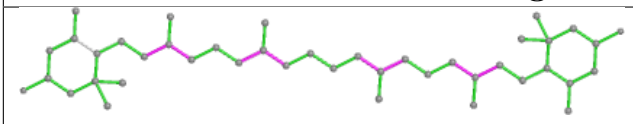


Rings

Ligand LUT 2 316



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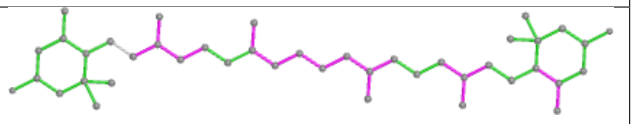
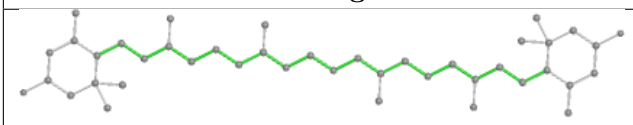


Bond angles



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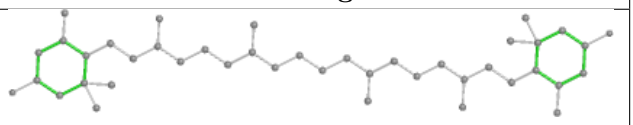
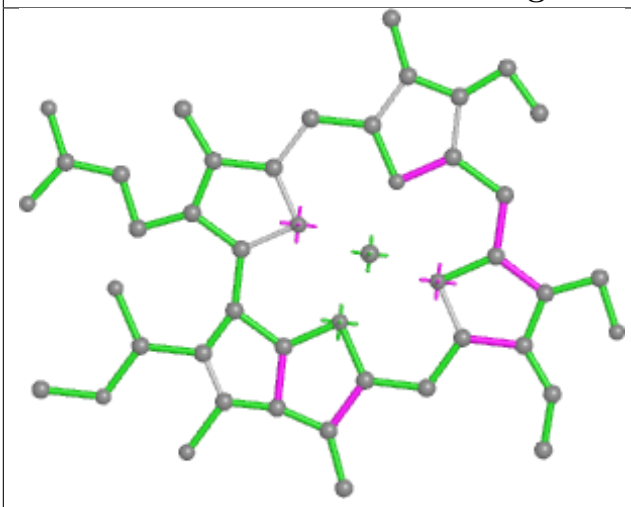


Rings

Ligand CHL 3 306



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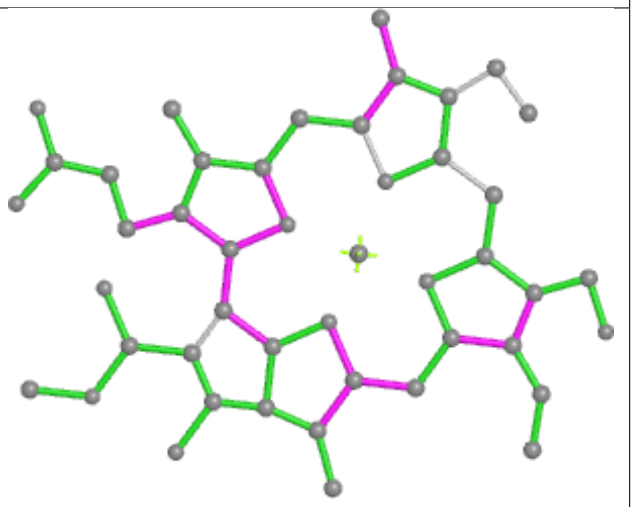

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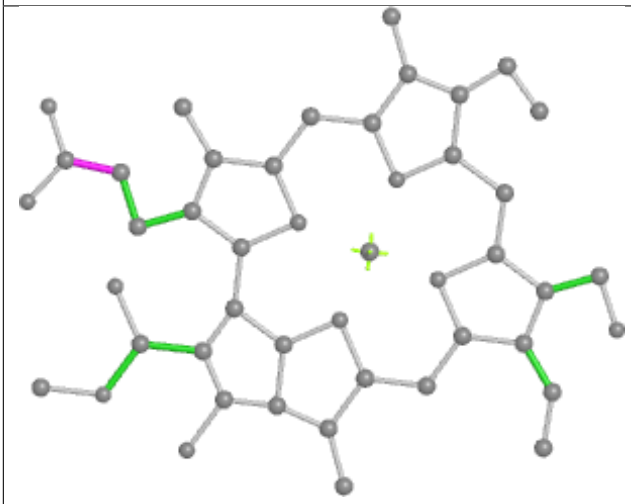

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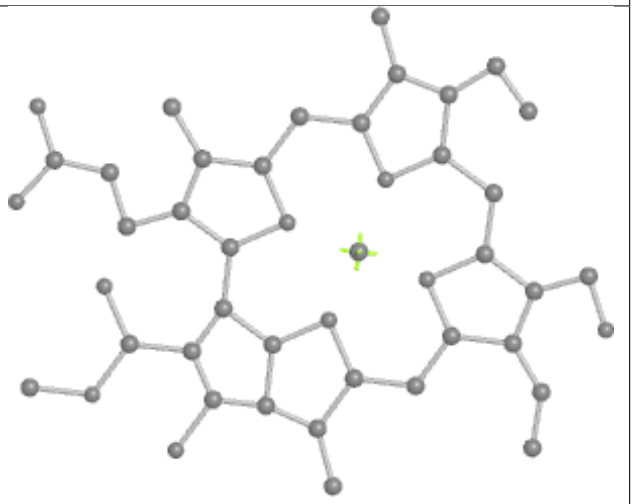
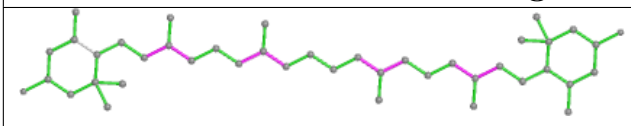


Rings

Ligand LUT 3 316



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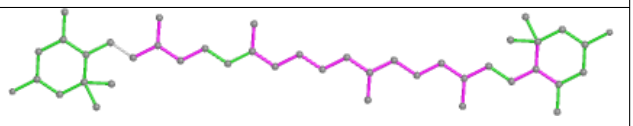

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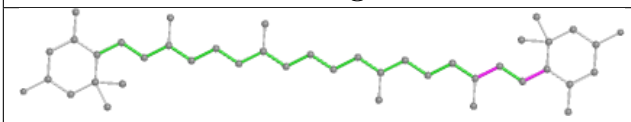

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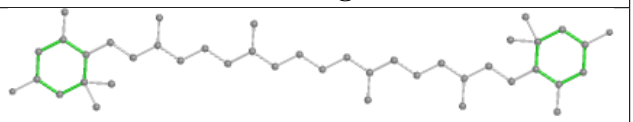
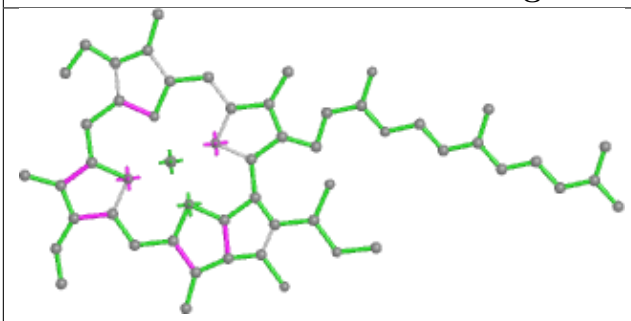


Rings

Ligand CLA A 801



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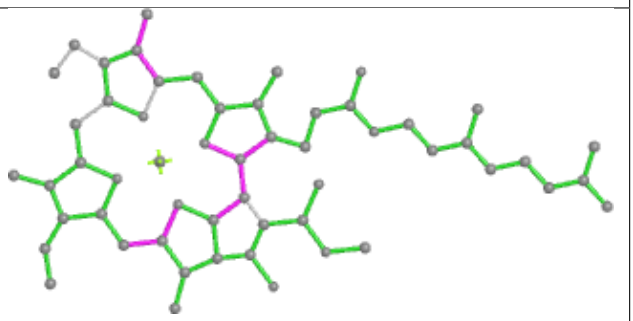
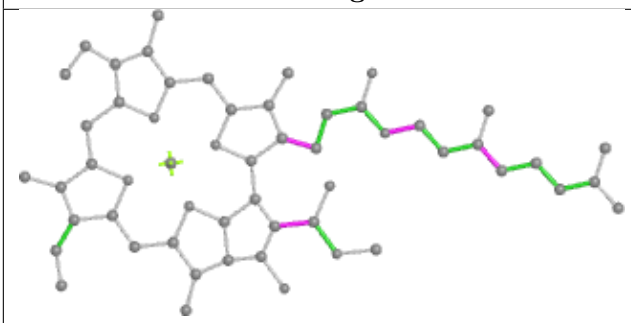


Bond angles



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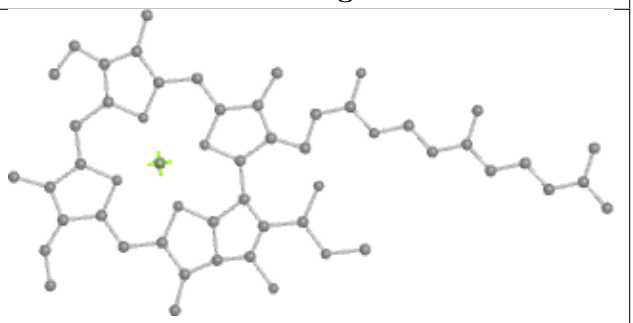
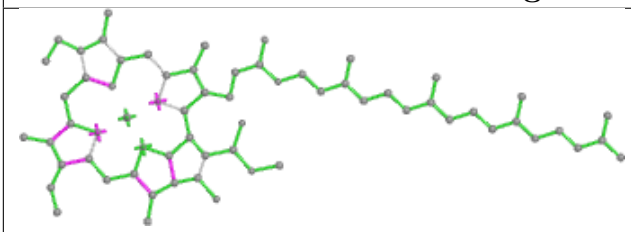


Rings

Ligand CLA A 808



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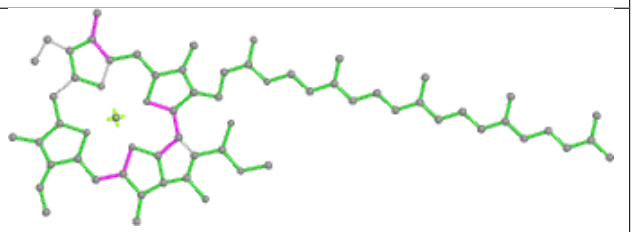
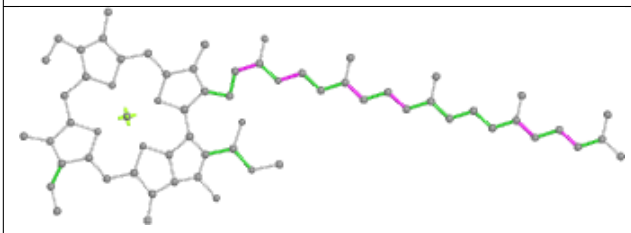


Bond angles



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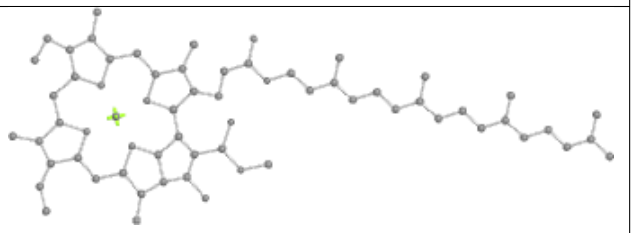
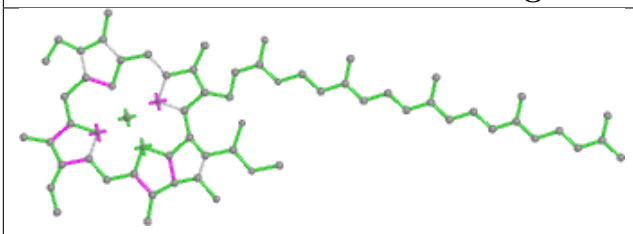


Rings

Ligand CLA B 801



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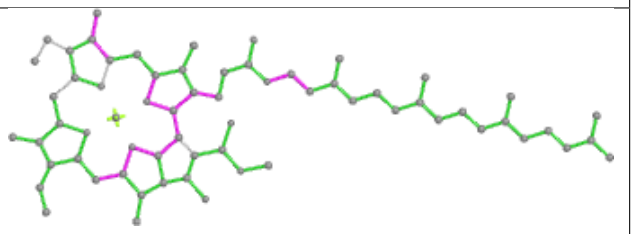

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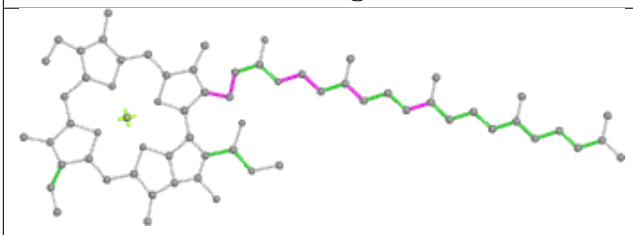

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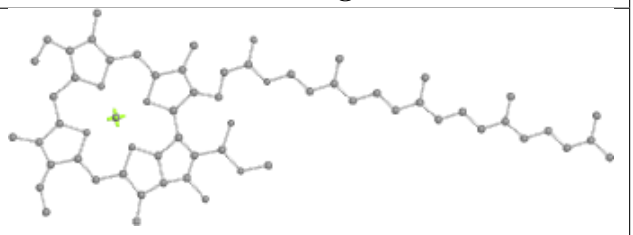
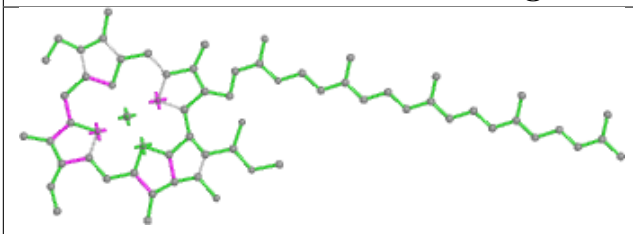


Rings

Ligand CLA B 802



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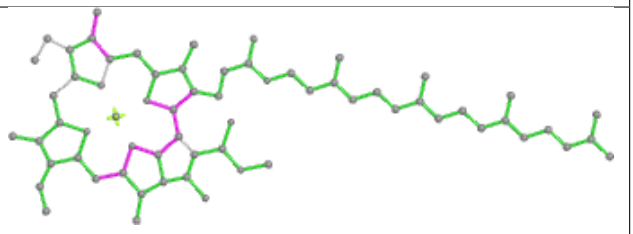

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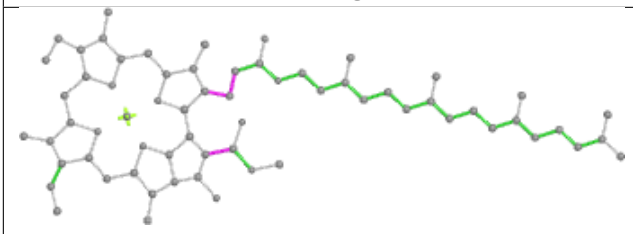

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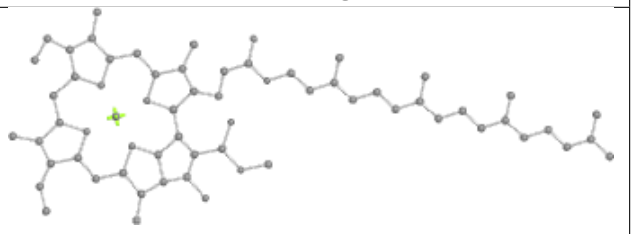
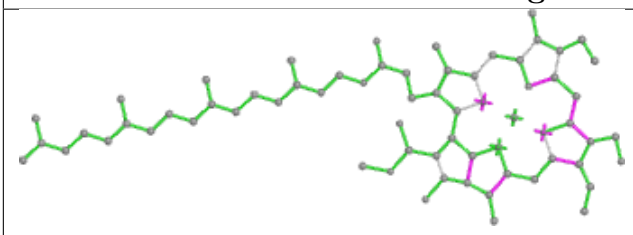


Rings

Ligand CHL 2 301



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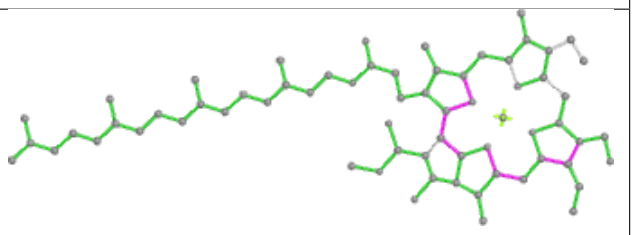
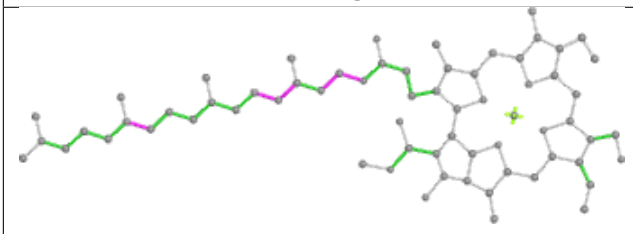


Bond angles



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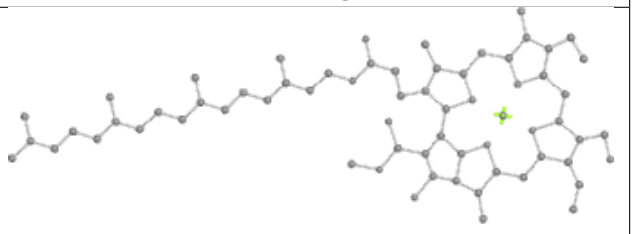
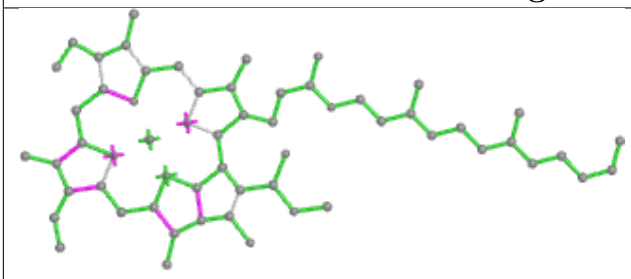
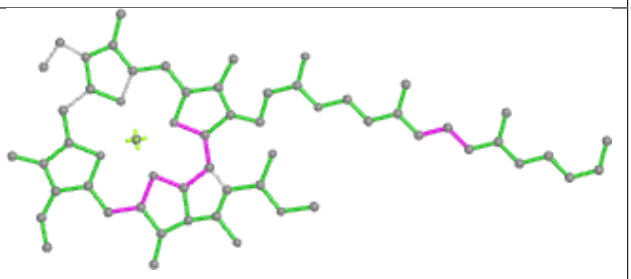
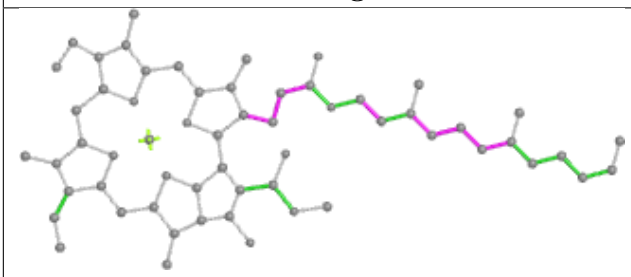
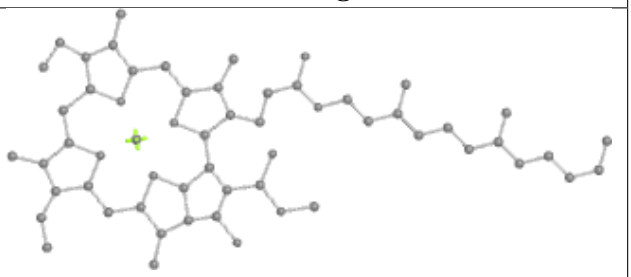
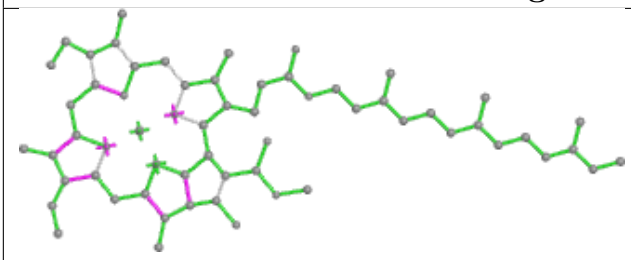
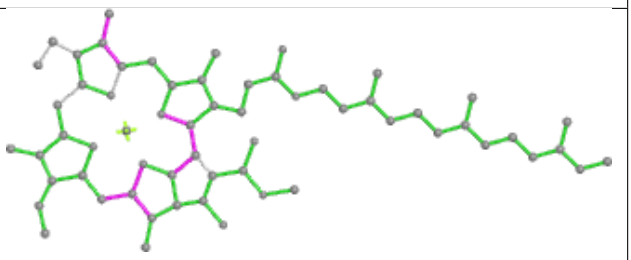
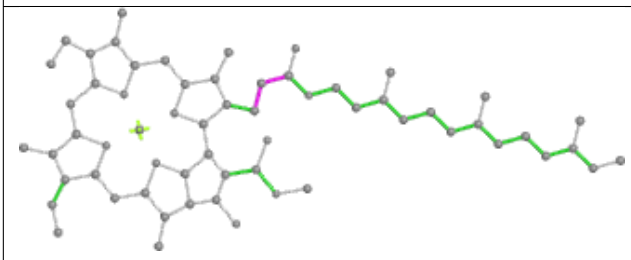
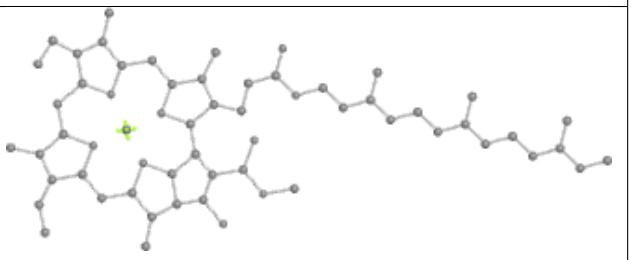
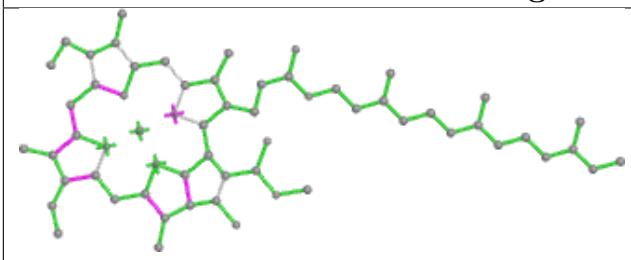


Rings

Ligand CLA 5 307	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 6 302	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 2 309



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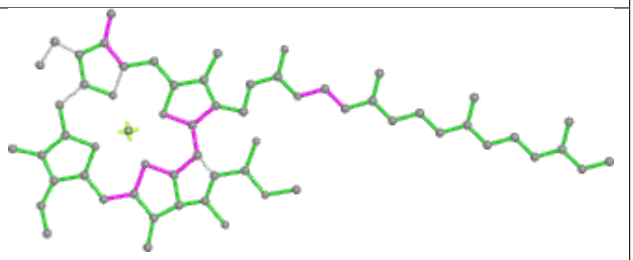

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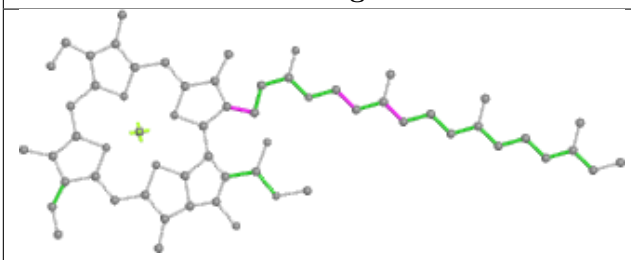

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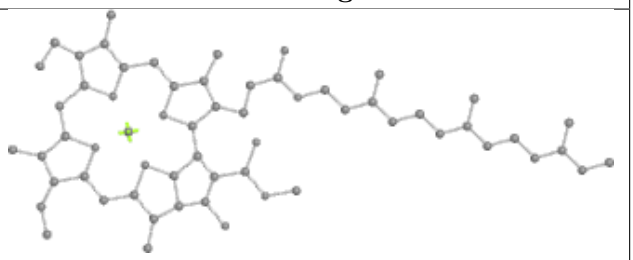
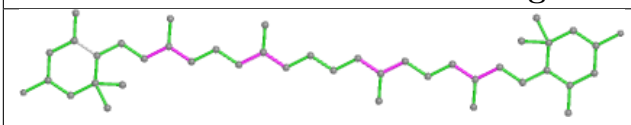


Rings

Ligand LUT 5 315



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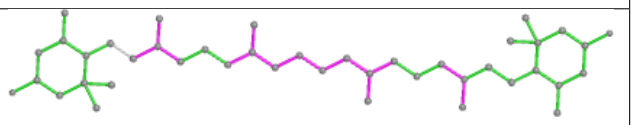

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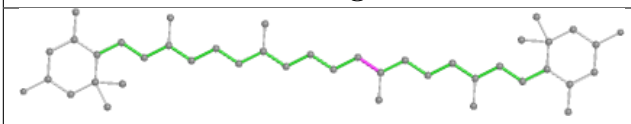

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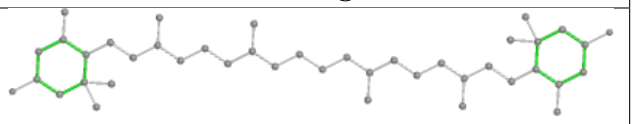
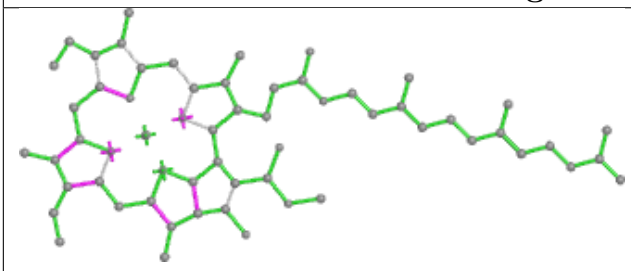


Rings

Ligand CLA L 302



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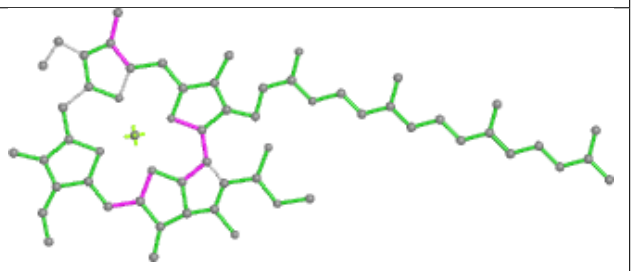

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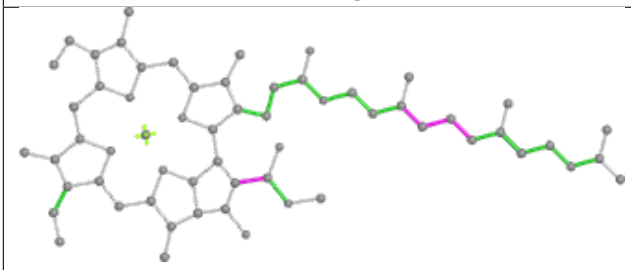

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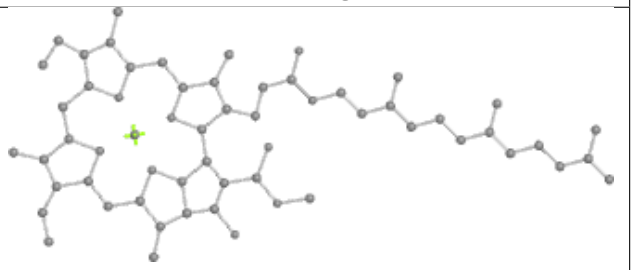
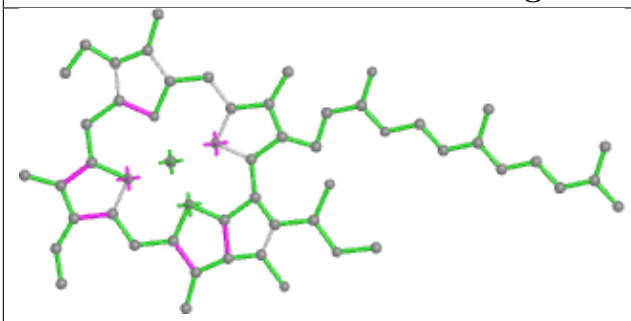


Rings

Ligand CLA B 823



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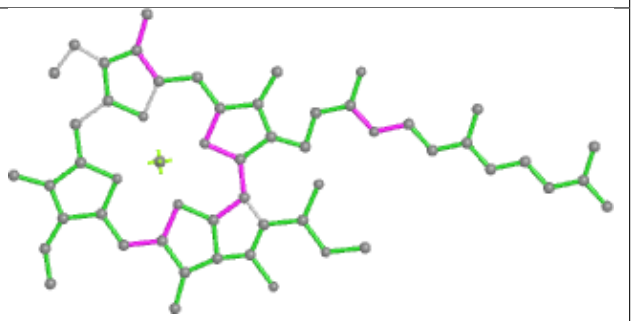
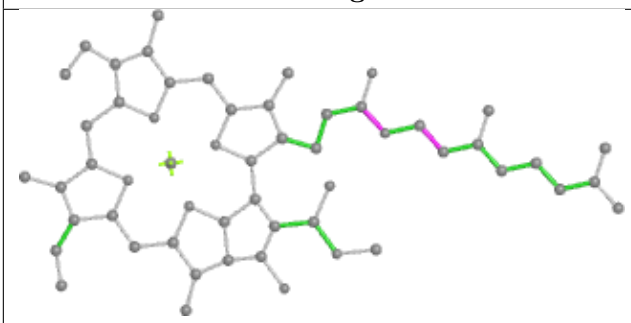
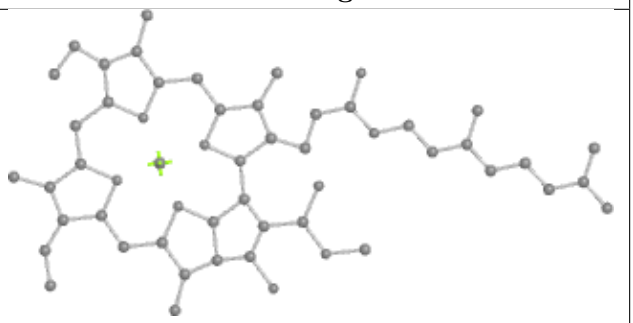


Bond angles

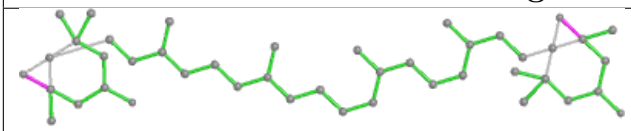


Torsions



Rings

Ligand XAT 6 316



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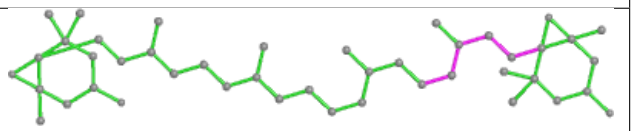
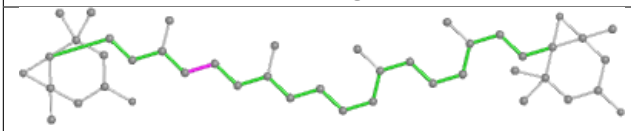


Bond angles



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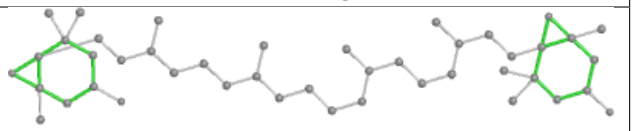
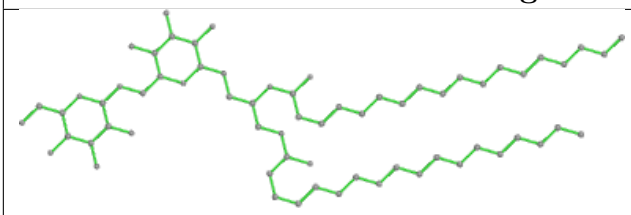


Rings

Ligand DGD B 849



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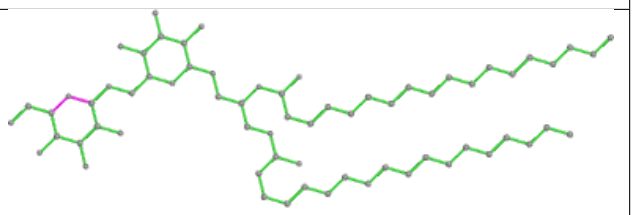

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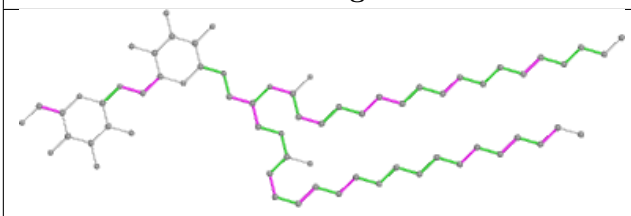

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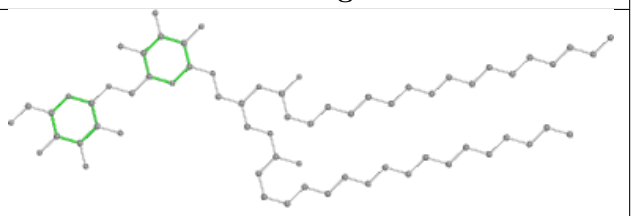
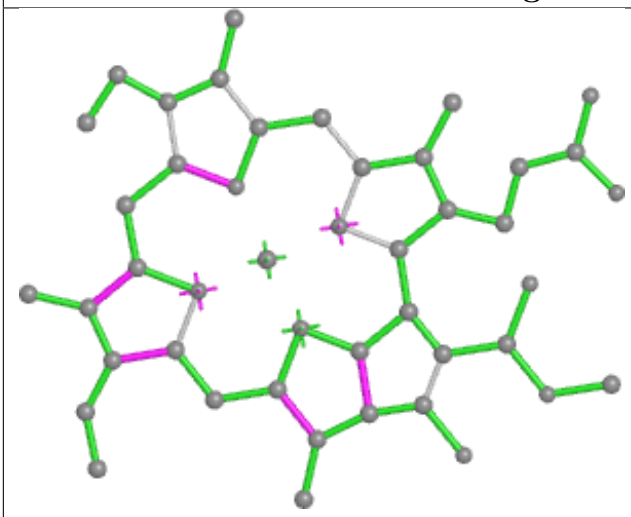


Rings

Ligand CLA G 204



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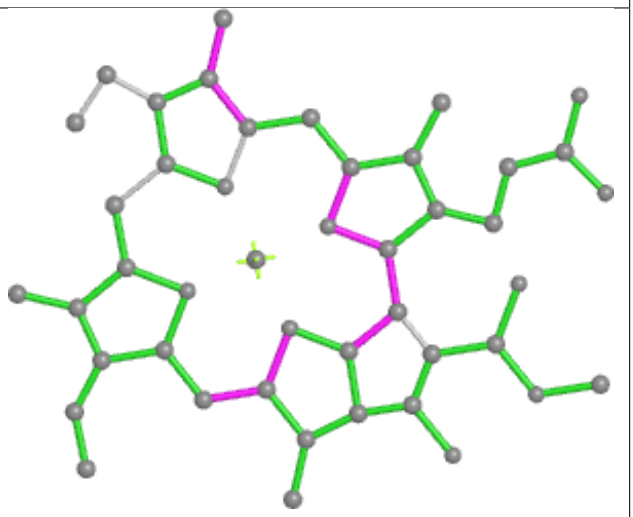

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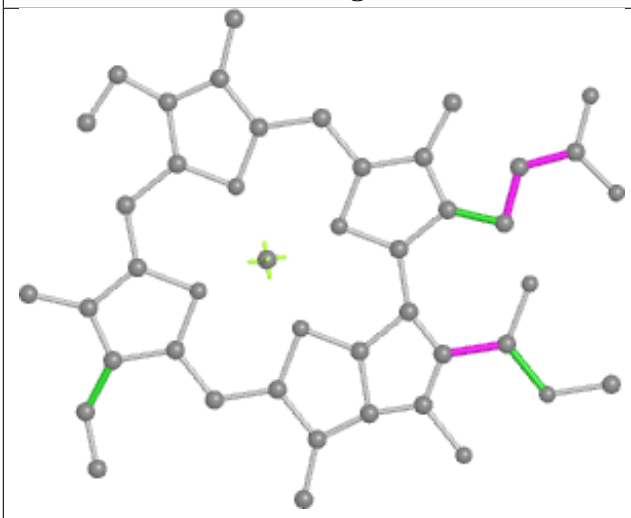

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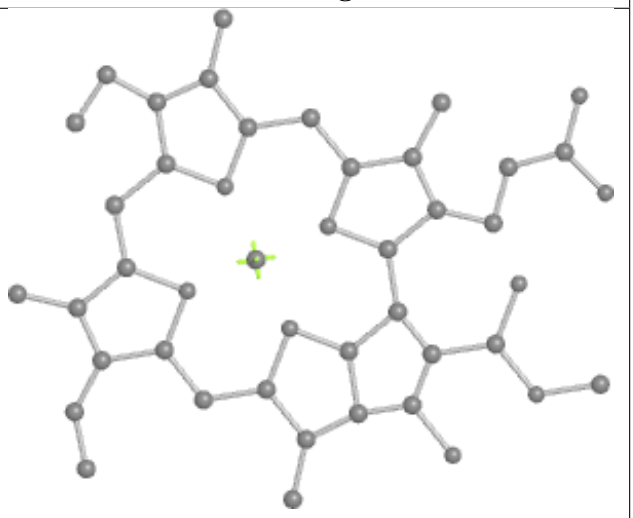
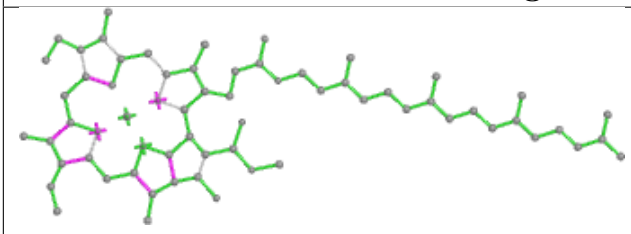


Rings

Ligand CLA A 830



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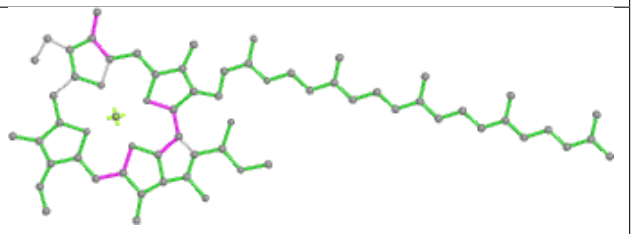
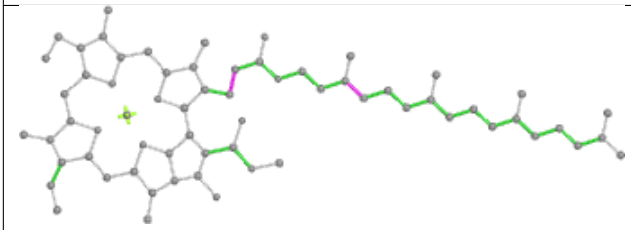


Bond angles



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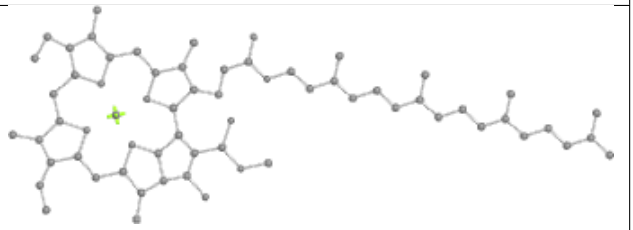
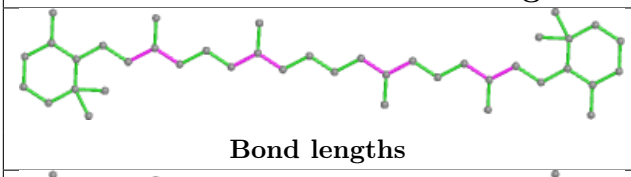


Rings

Ligand BCR B 845



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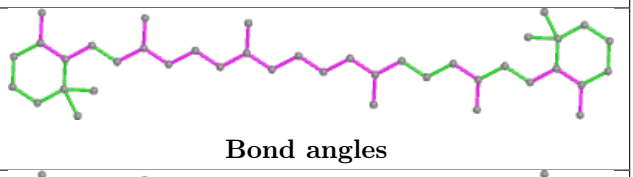

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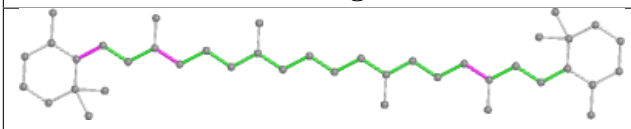

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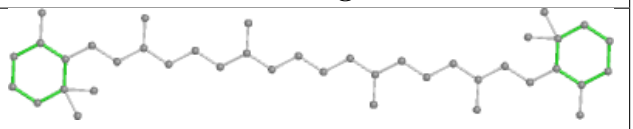
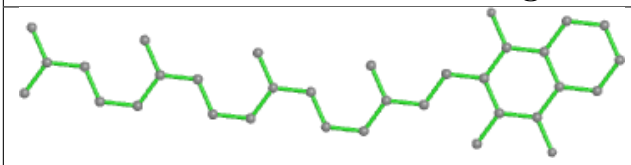


Rings

Ligand PQN B 843



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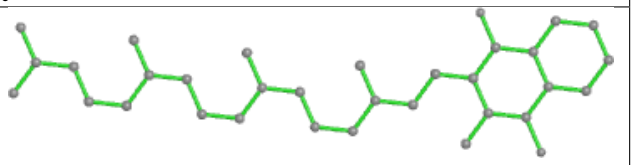
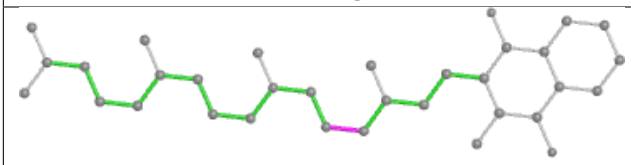


Bond angles



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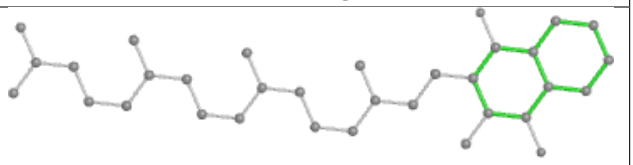
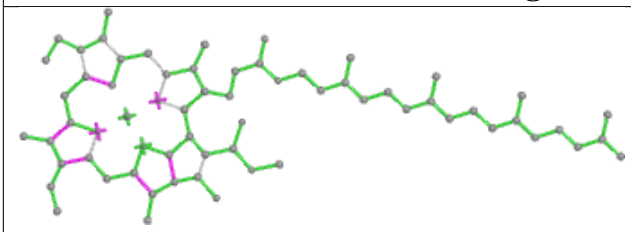


Rings

Ligand CLA B 806



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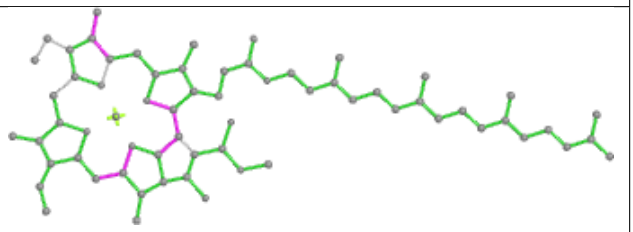
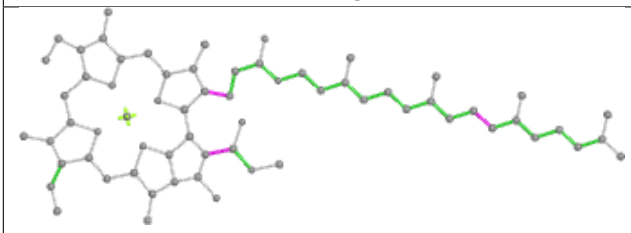
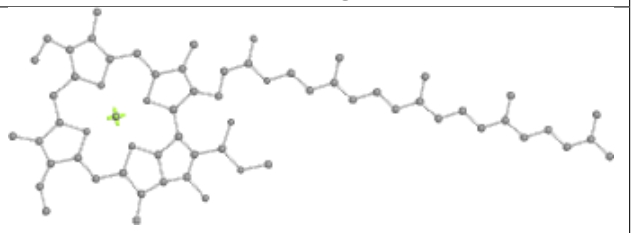


Bond angles

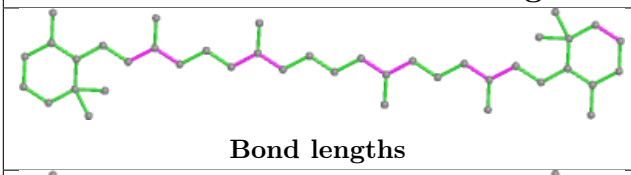


Torsions



Rings

Ligand BCR L 304



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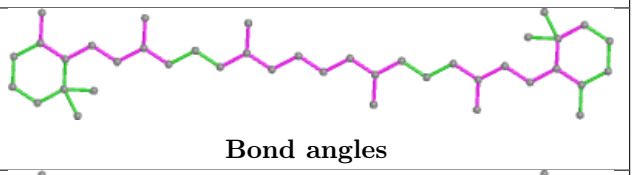
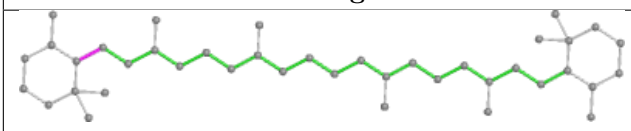


Bond angles



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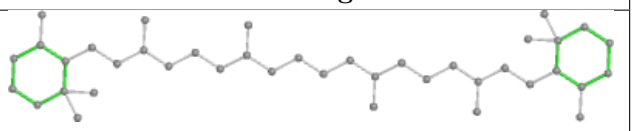
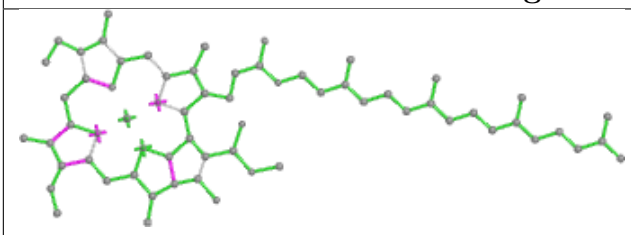


Rings

Ligand CLA A 824



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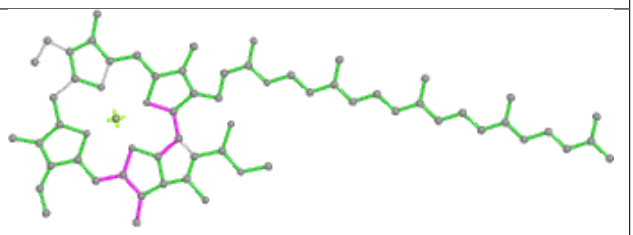
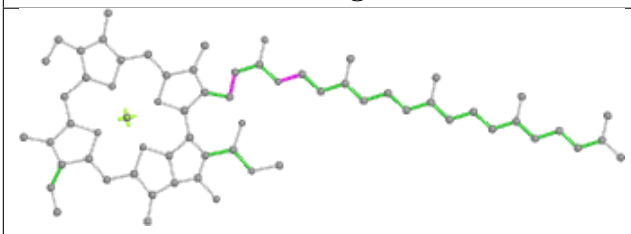


Bond angles



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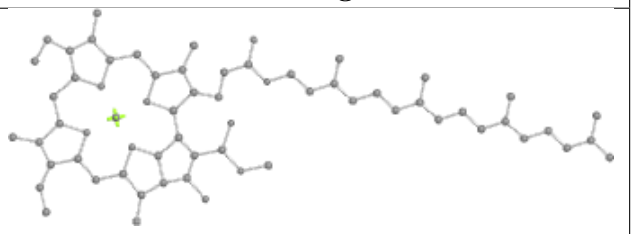
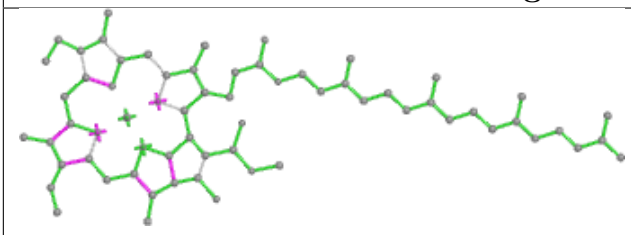
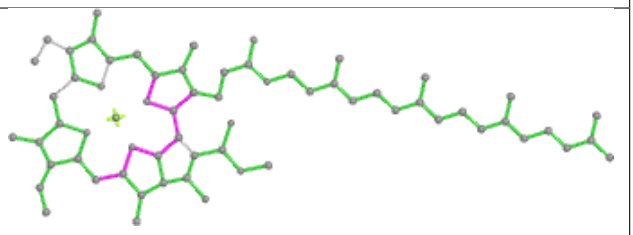


Rings

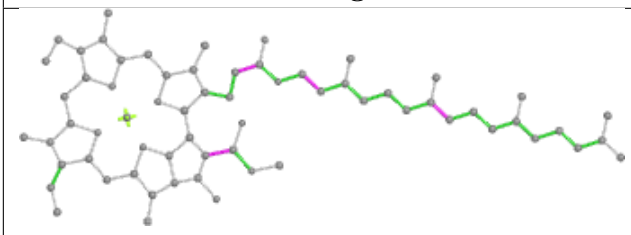
Ligand CLA A 826



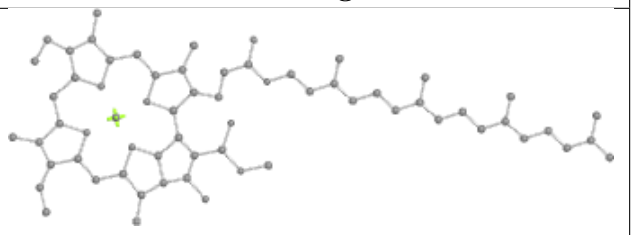
Bond lengths



Bond angles

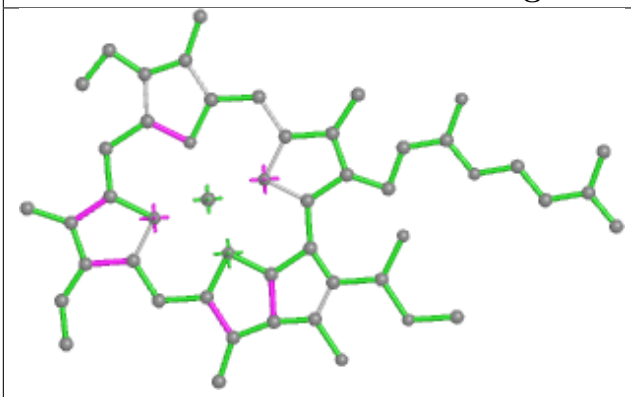


Torsions

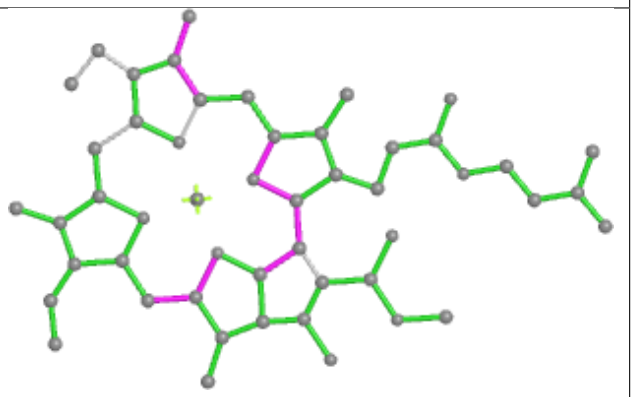


Rings

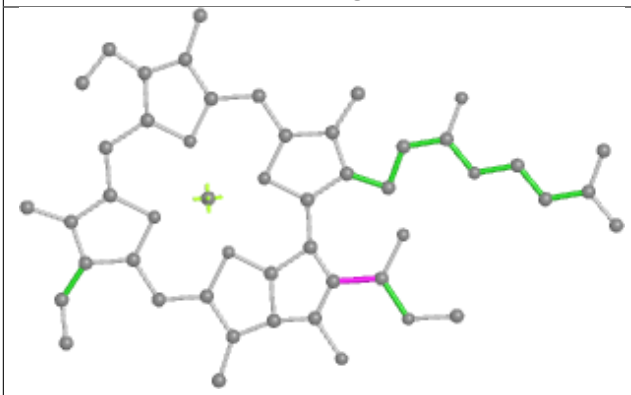
Ligand CLA A 840



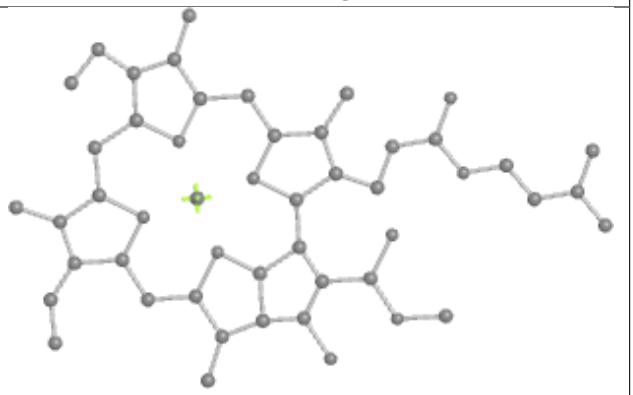
Bond lengths



Bond angles

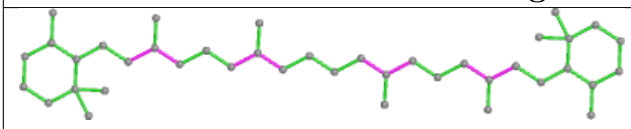


Torsions



Rings

Ligand BCR I 101



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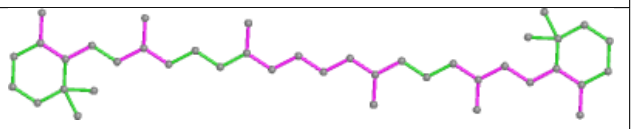
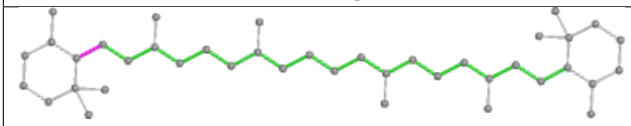
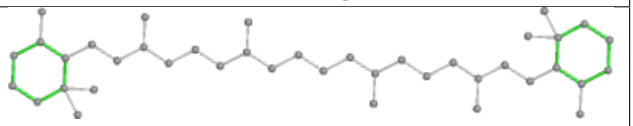


Bond angles

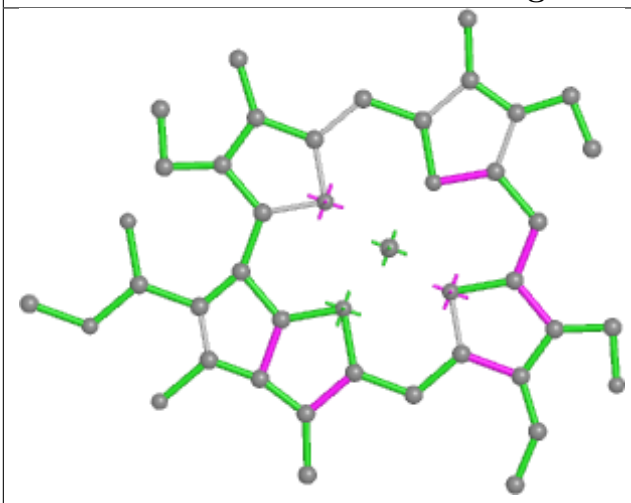


Torsions



Rings

Ligand CHL 5 305



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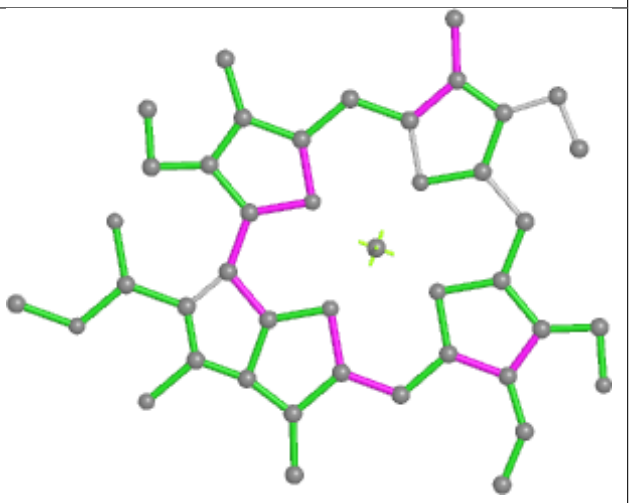
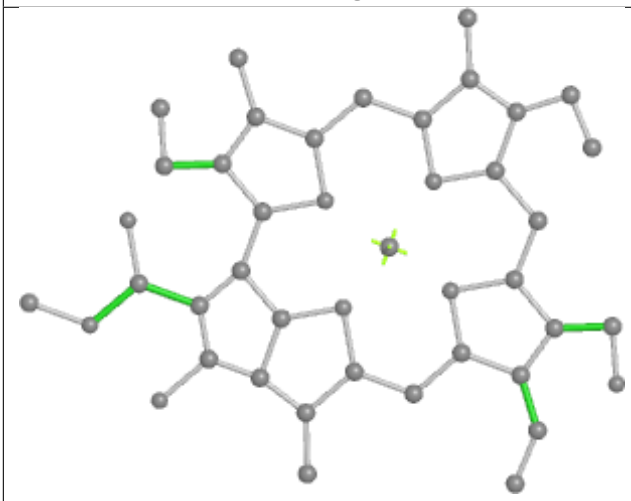


Bond angles



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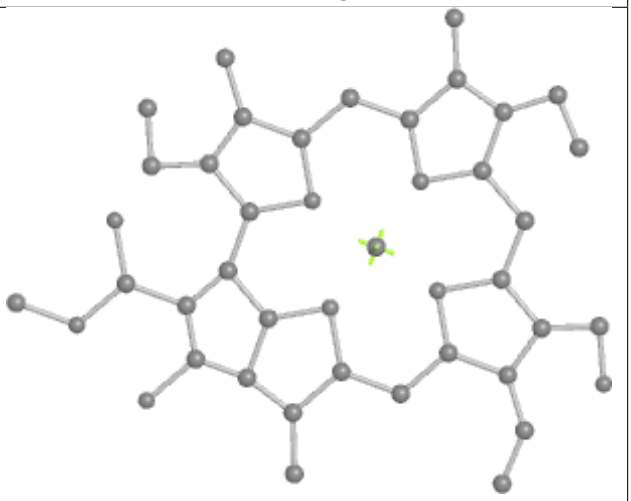
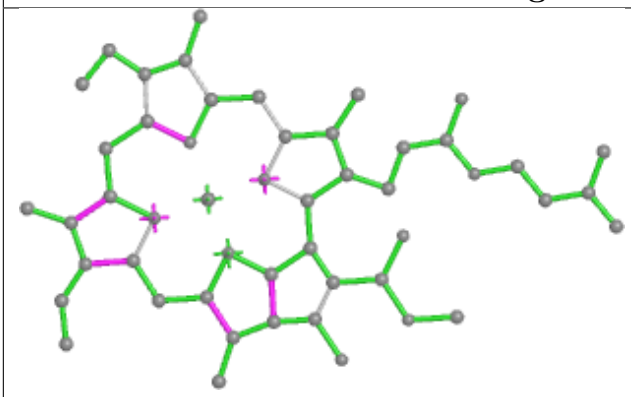


Rings

Ligand CLA 2 304



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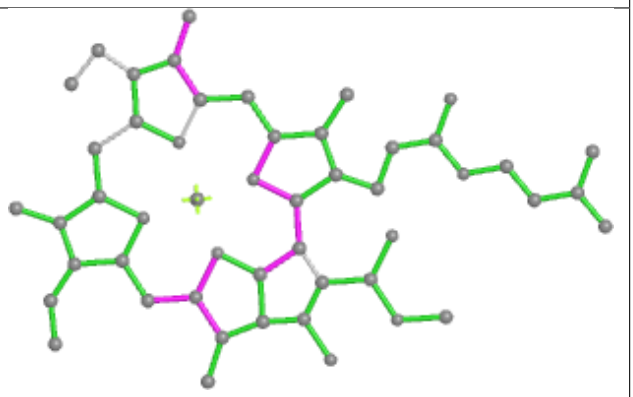
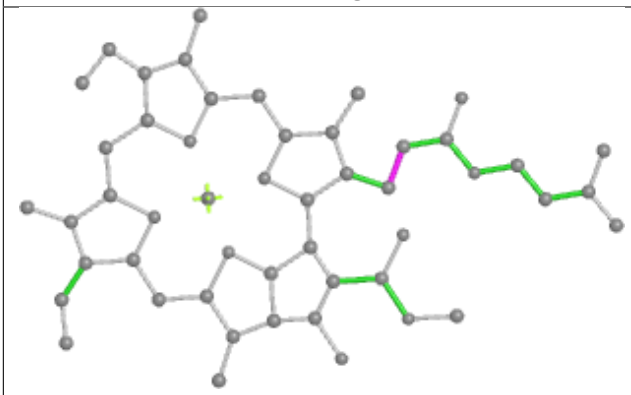


Bond angles



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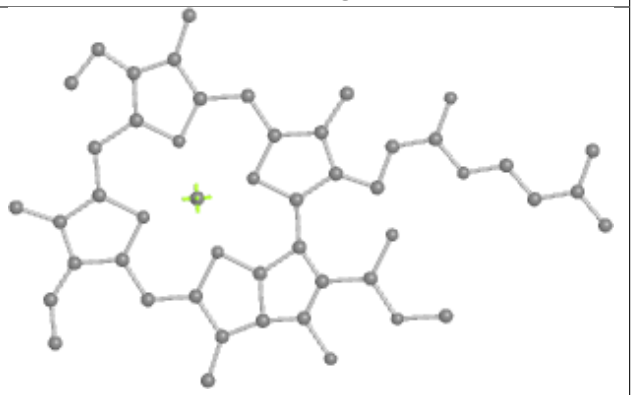
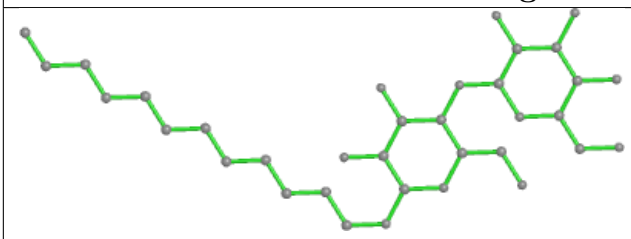


Rings

Ligand LMU A 853



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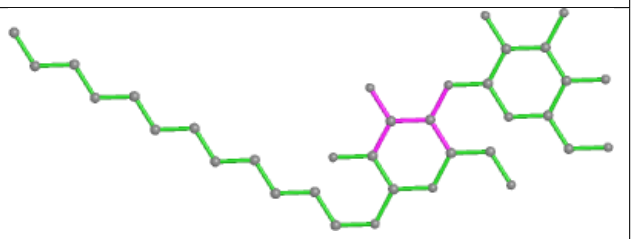
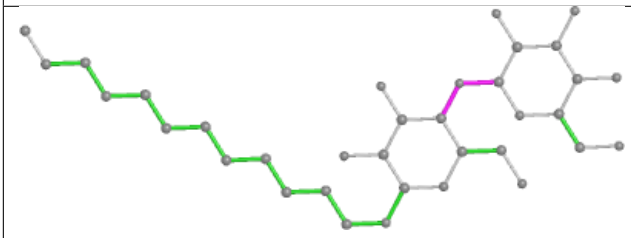


Bond angles



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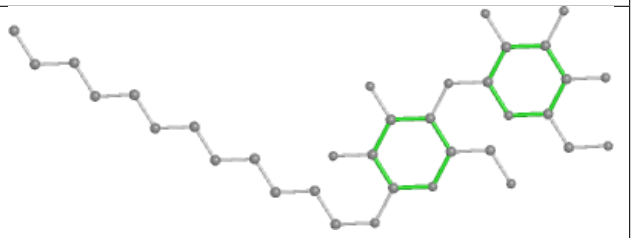
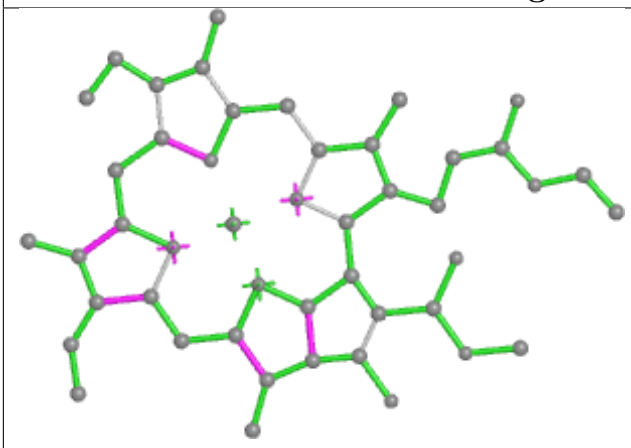


Rings

Ligand CLA 3 303



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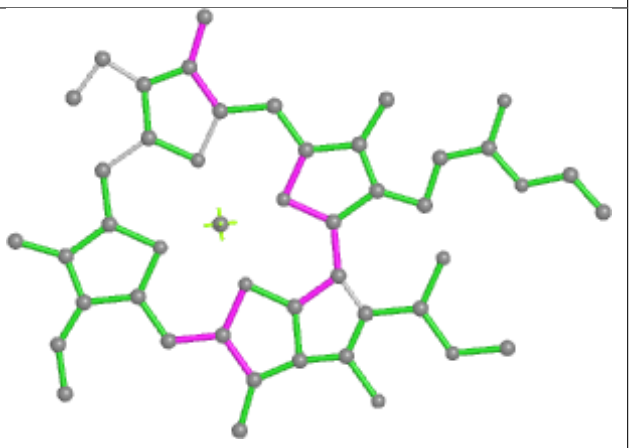

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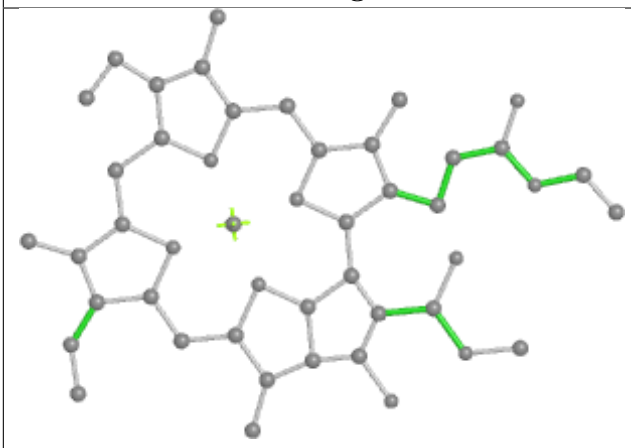

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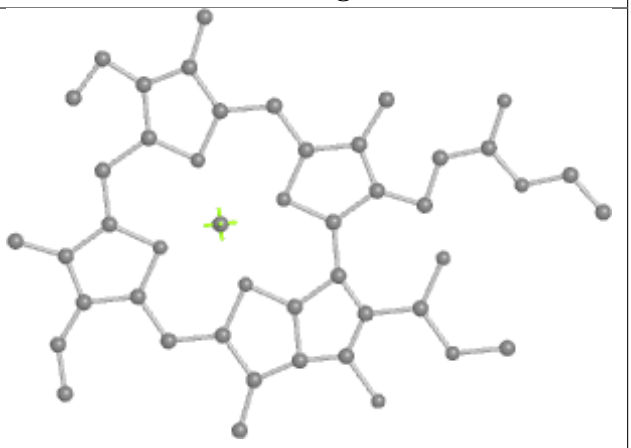
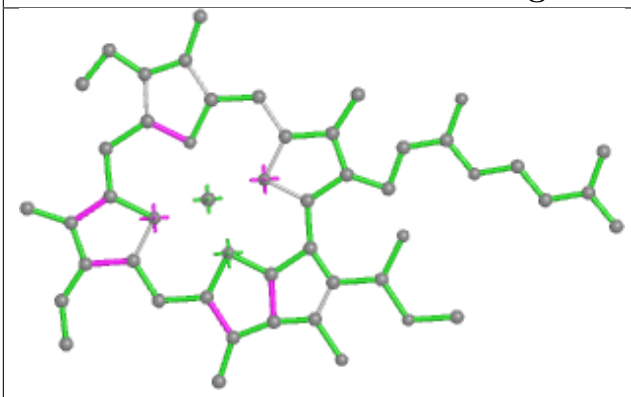


Rings

Ligand CLA 5 302



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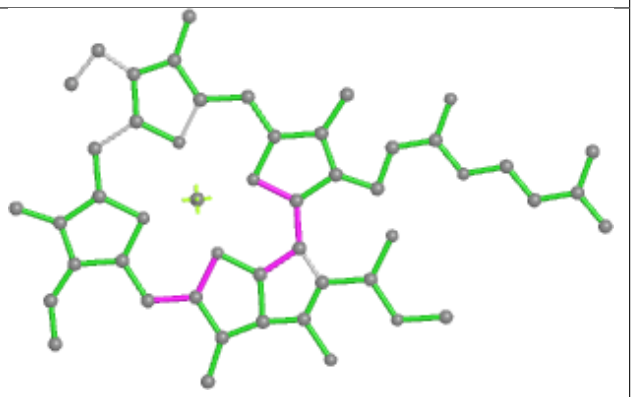
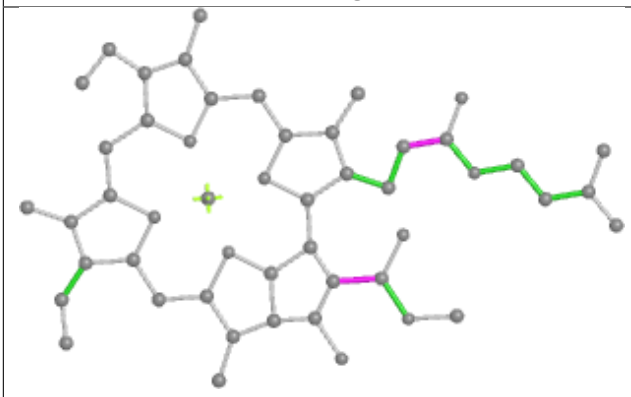


Bond angles



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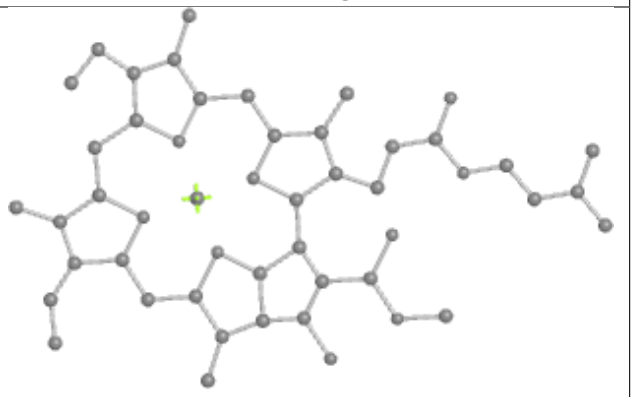
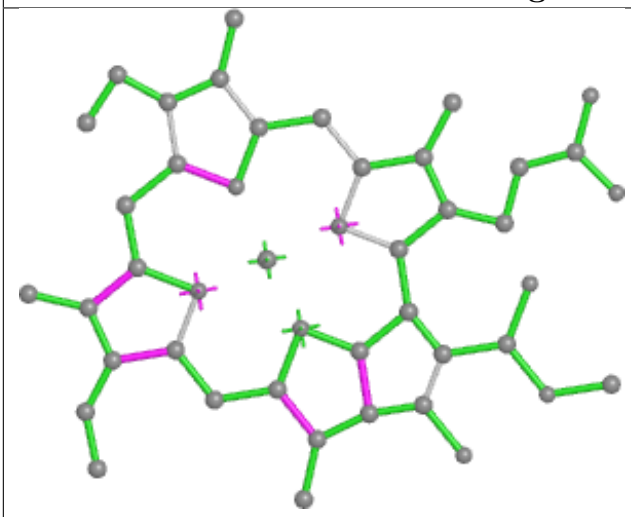


Rings

Ligand CLA 2 303



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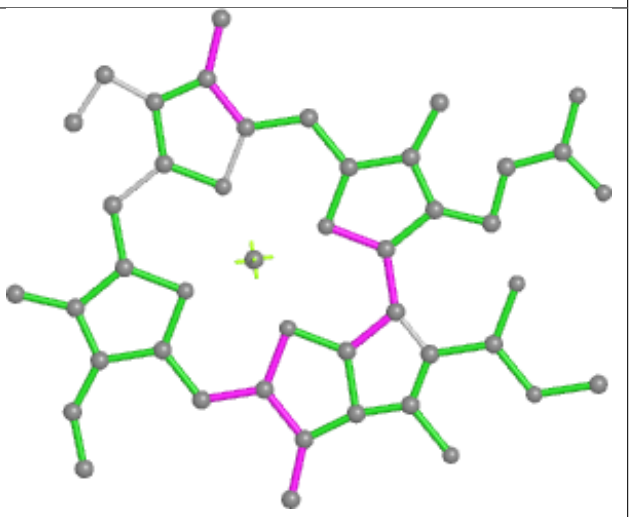
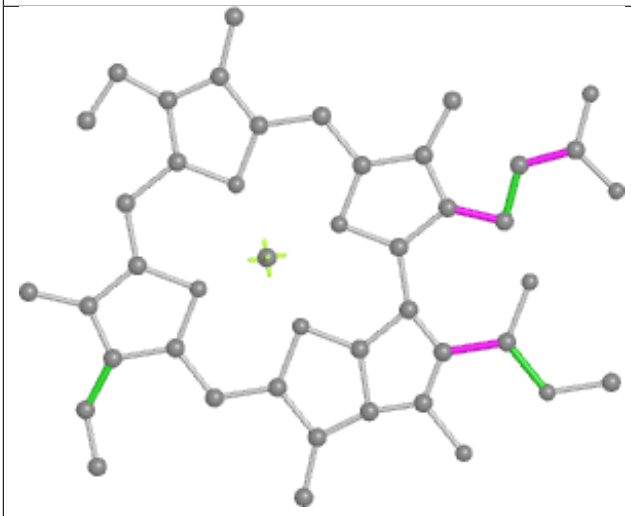


Bond angles



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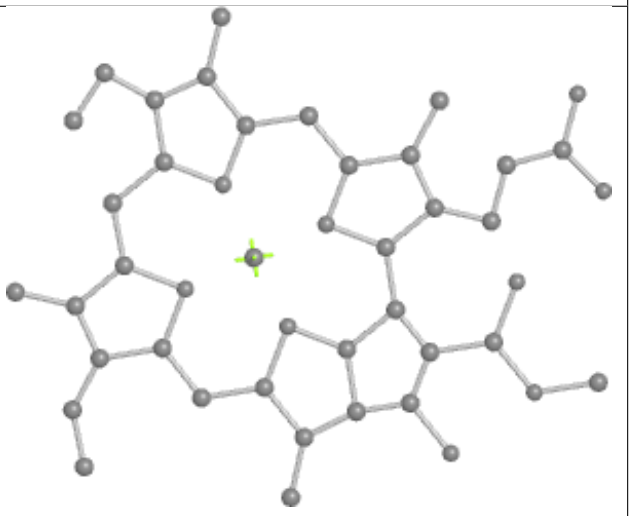
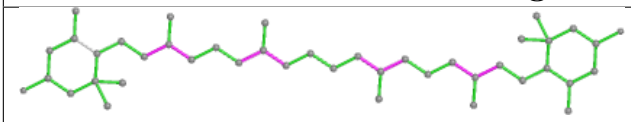


Rings

Ligand LUT 6 315



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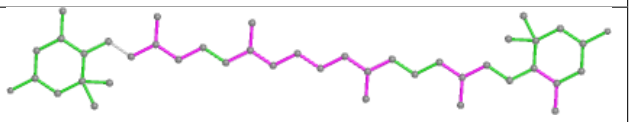
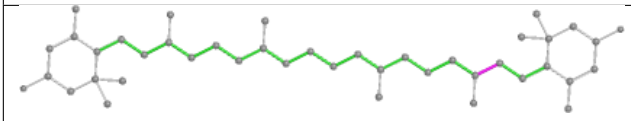


Bond angles



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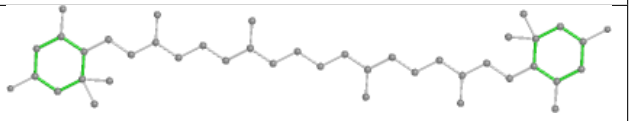
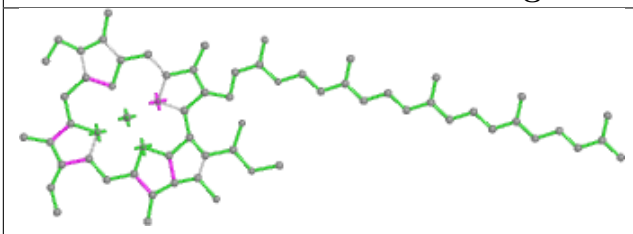


Rings

Ligand CLA A 803



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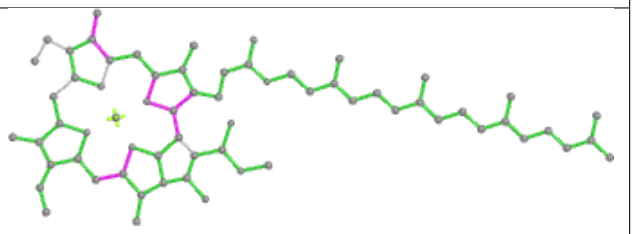
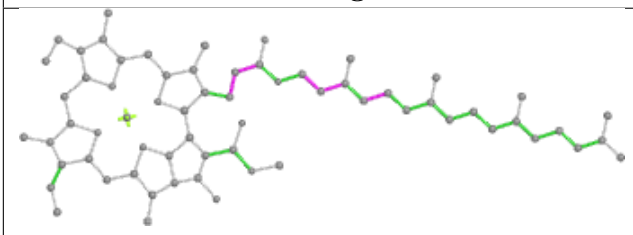


Bond angles



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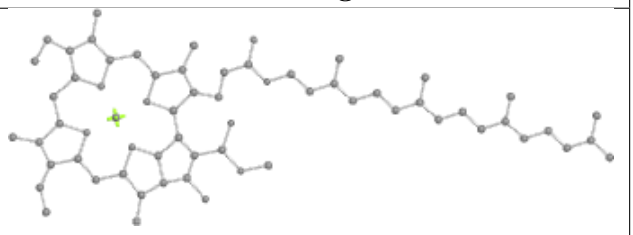
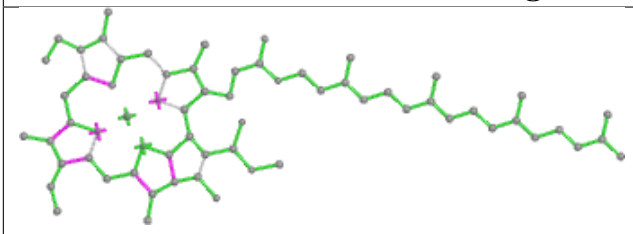


Rings

Ligand CLA B 842



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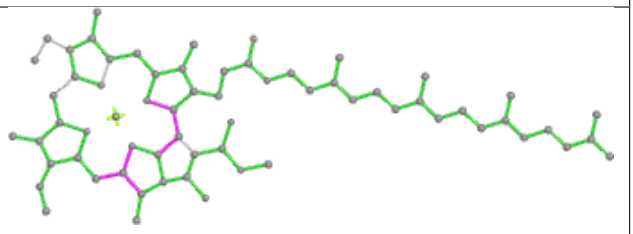
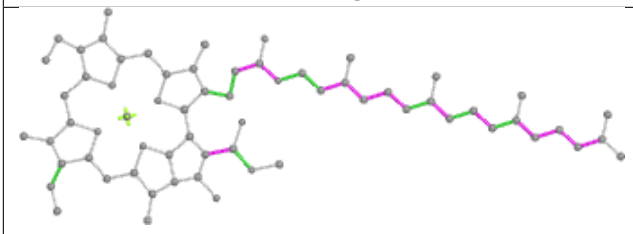


Bond angles



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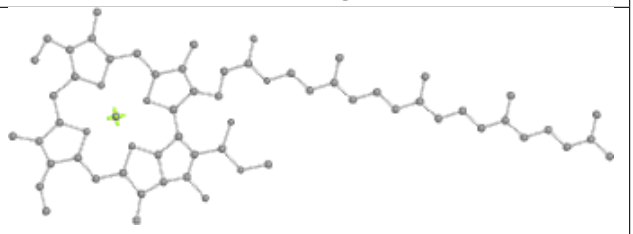
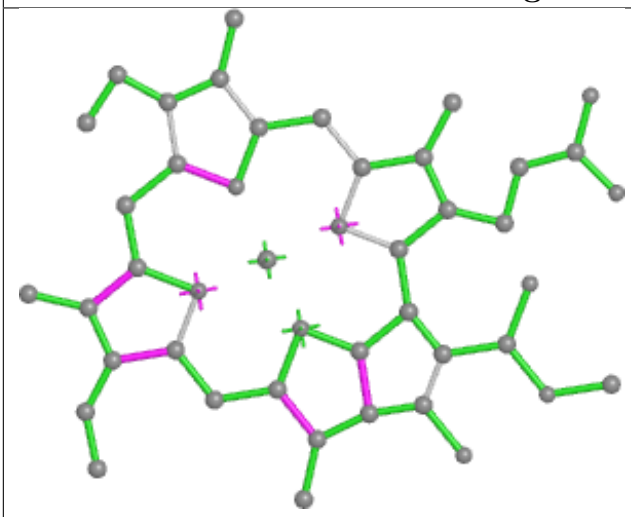


Rings

Ligand CLA A 823



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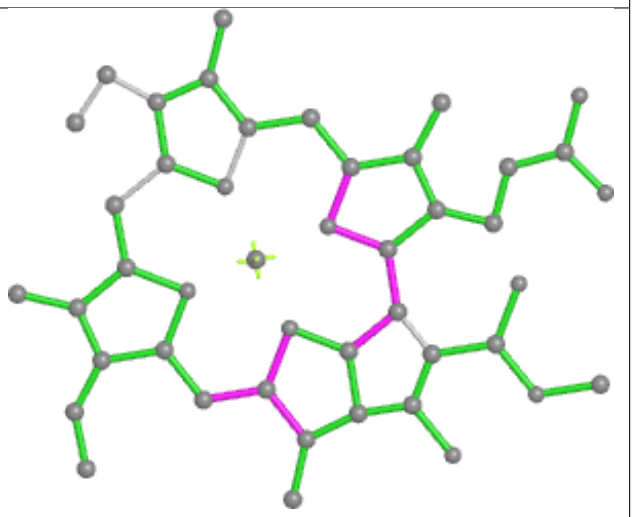
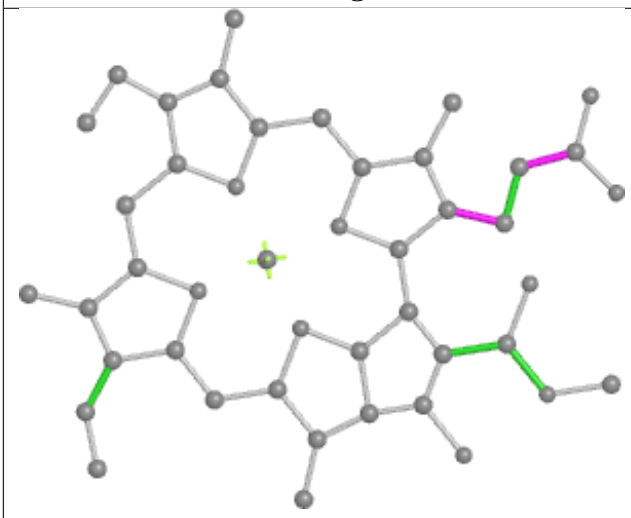
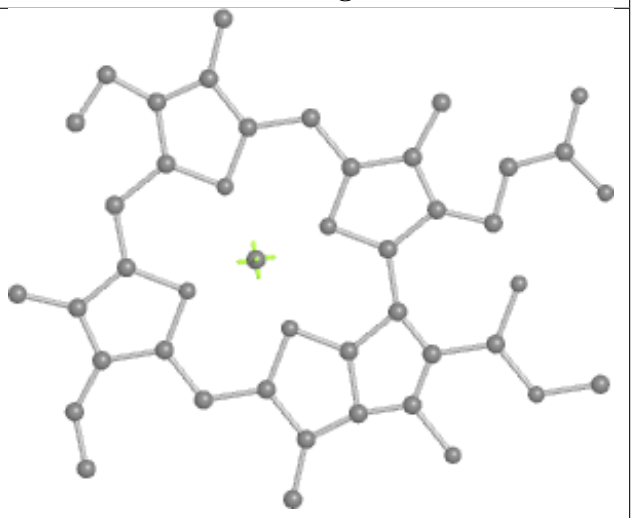


Bond angles

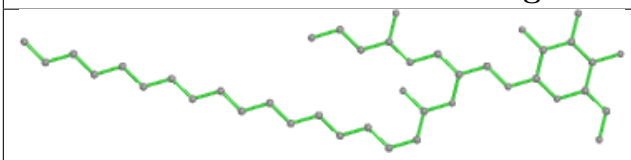


Torsions



Rings

Ligand LMG J 105



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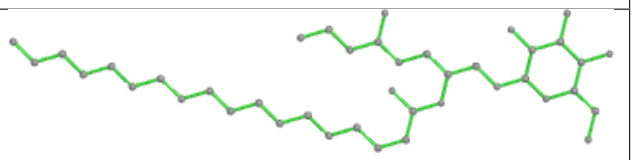
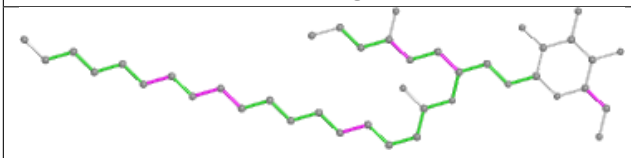


Bond angles



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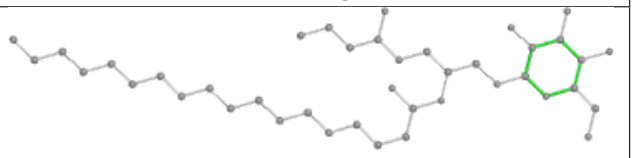
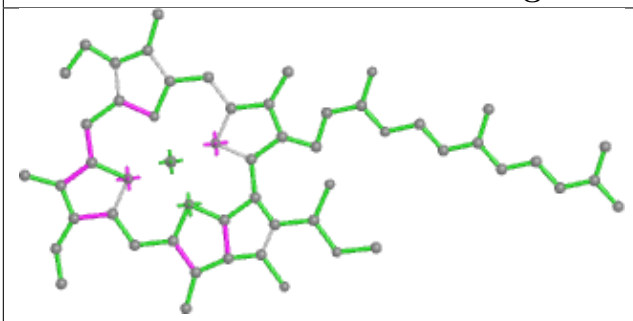
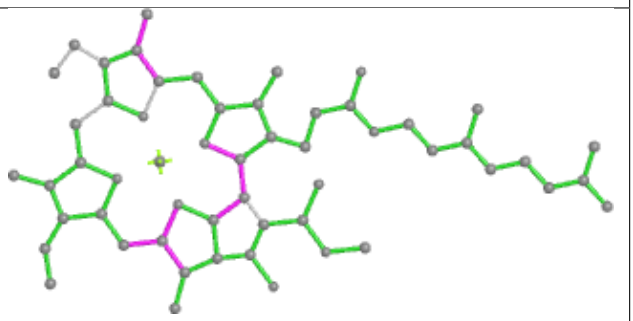


Rings

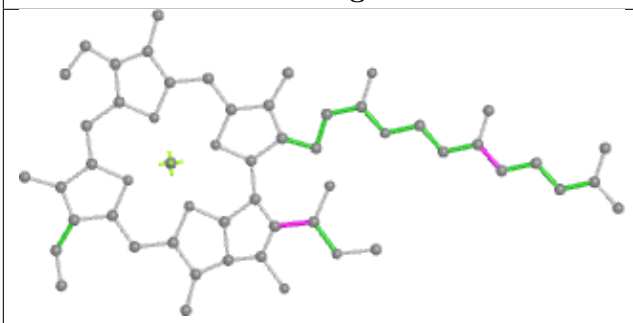
Ligand CLA A 806



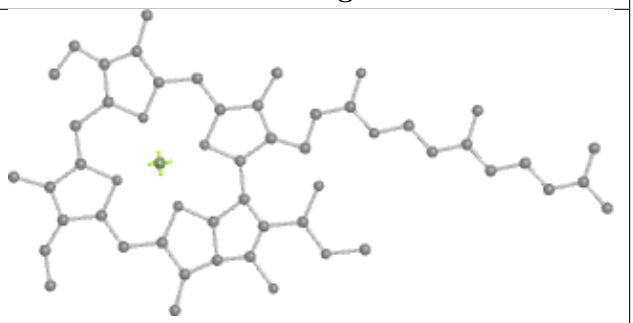
Bond lengths



Bond angles

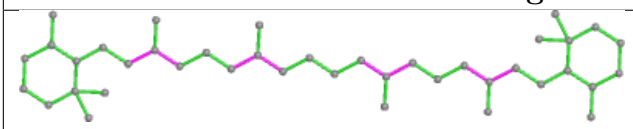


Torsions

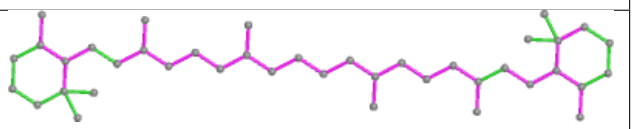


Rings

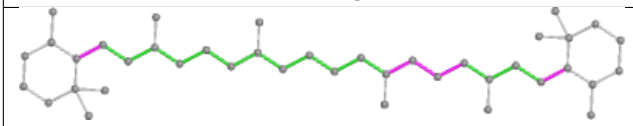
Ligand BCR 2 319



Bond lengths



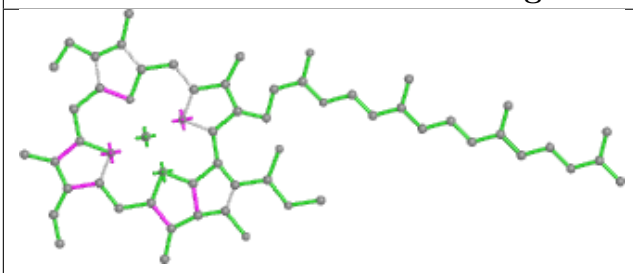
Bond angles



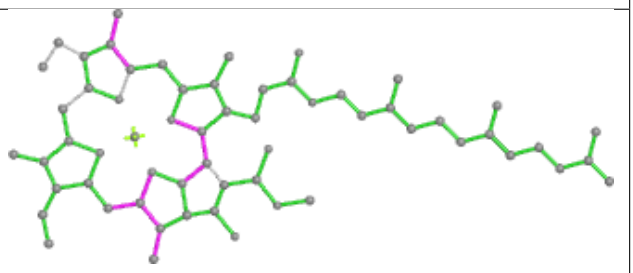
Torsions

Rings

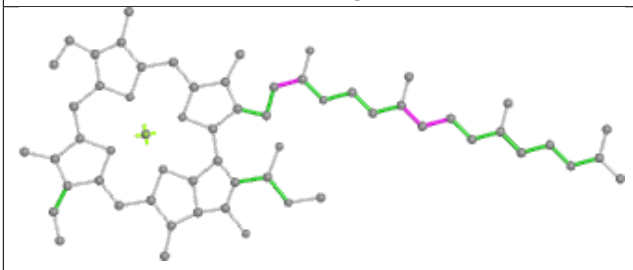
Ligand CLA B 830



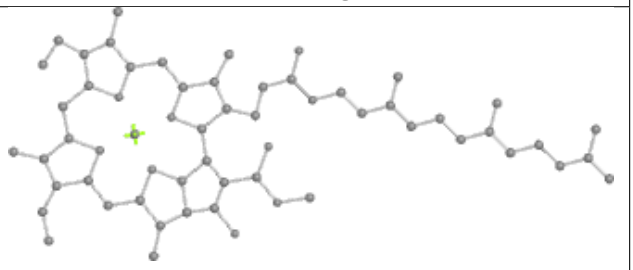
Bond lengths



Bond angles

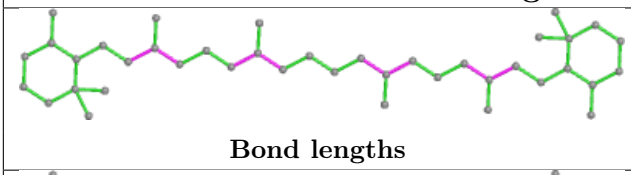


Torsions

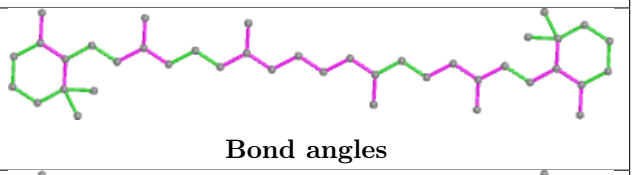


Rings

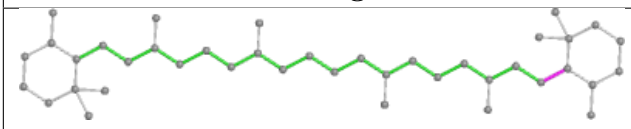
Ligand BCR B 844



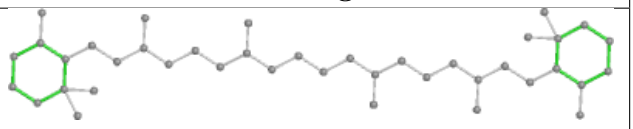
Bond lengths



Bond angles

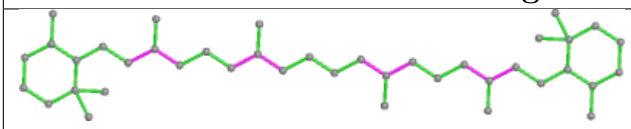


Torsions

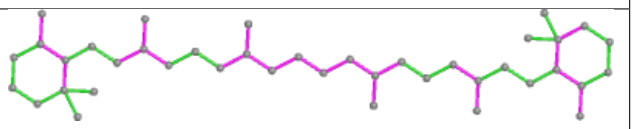


Rings

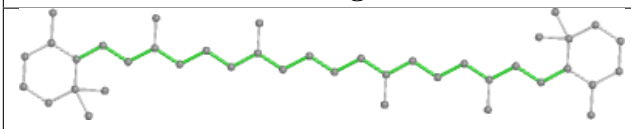
Ligand BCR A 850



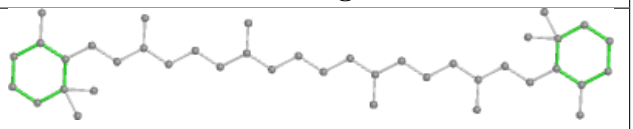
Bond lengths



Bond angles

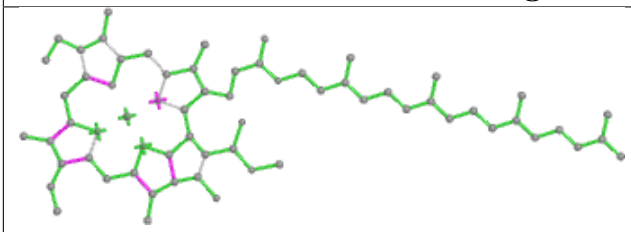


Torsions

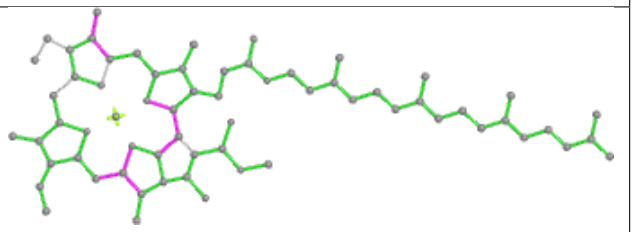


Rings

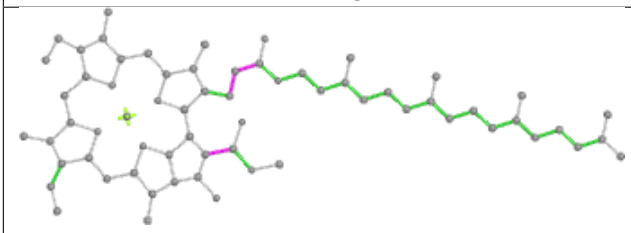
Ligand CLA A 807



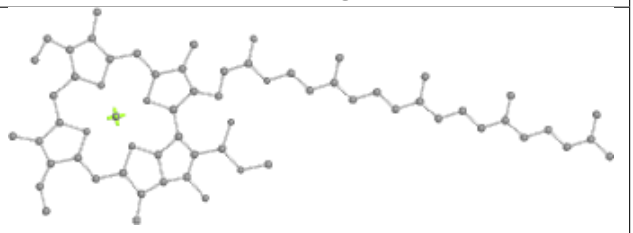
Bond lengths



Bond angles

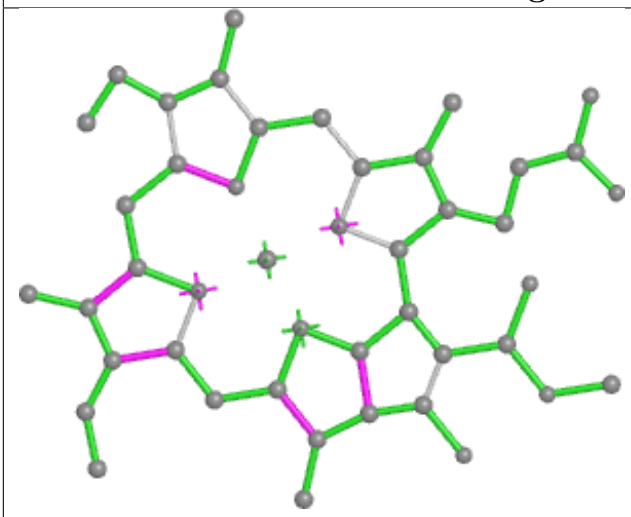


Torsions



Rings

Ligand CLA 6 313



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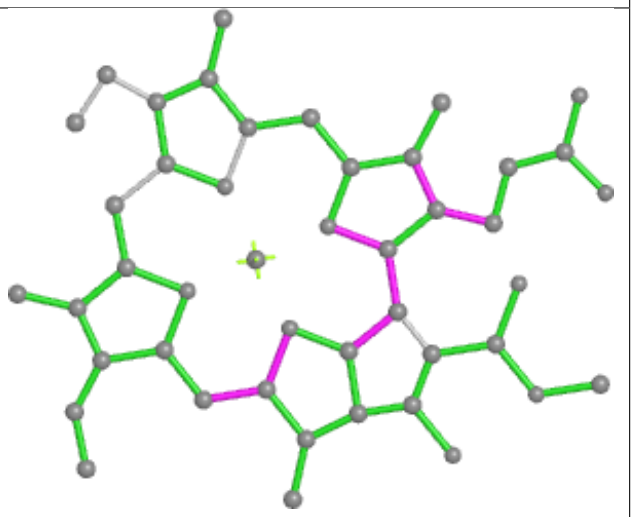
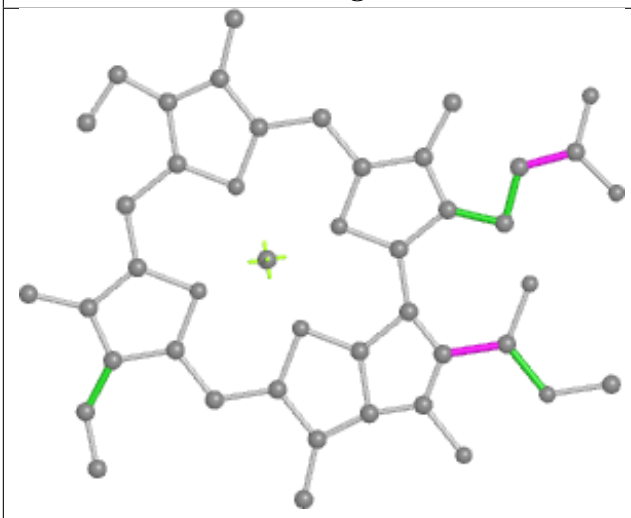
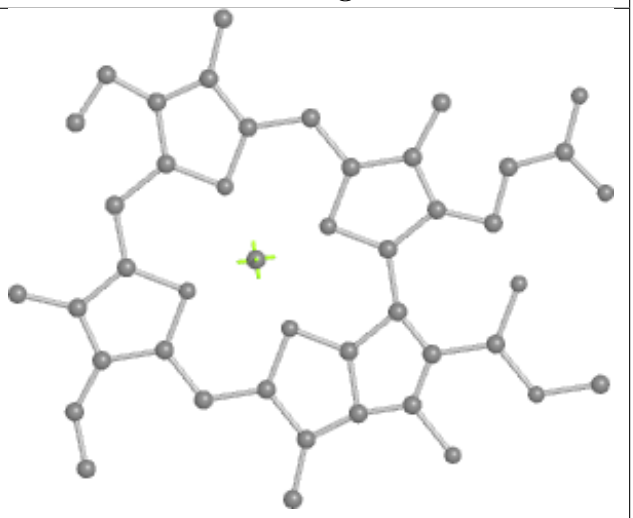


Bond angles

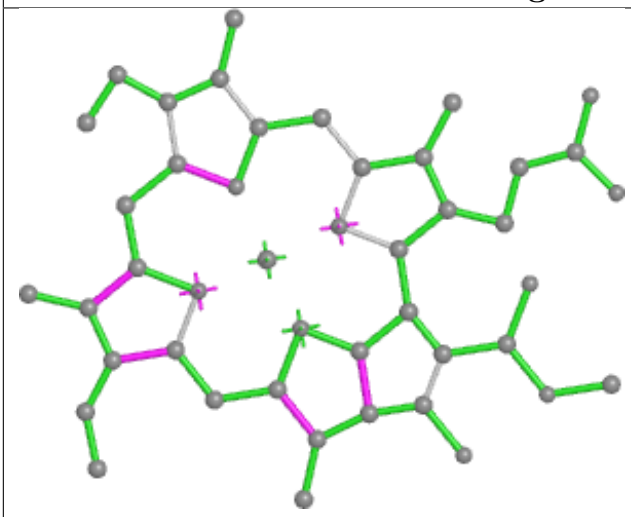


Torsions

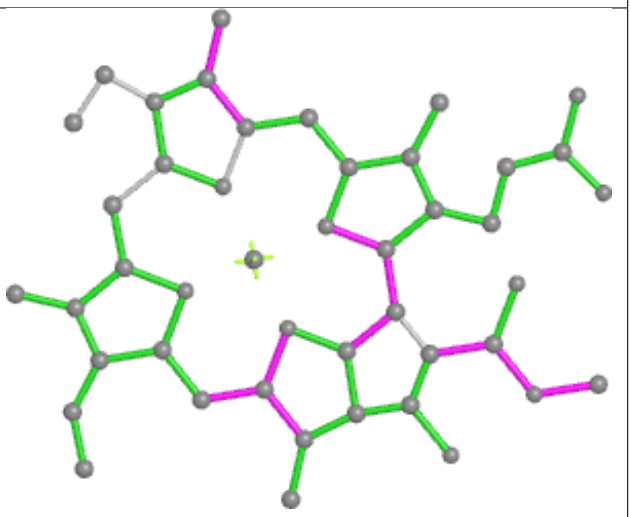


Rings

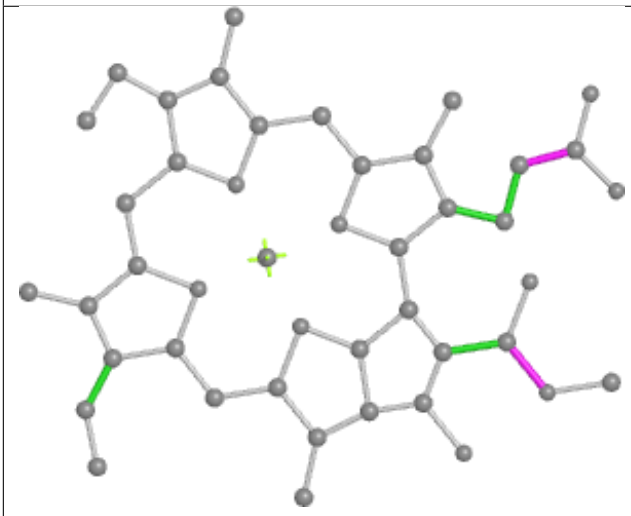
Ligand CLA 6 314



Bond lengths



Bond angles



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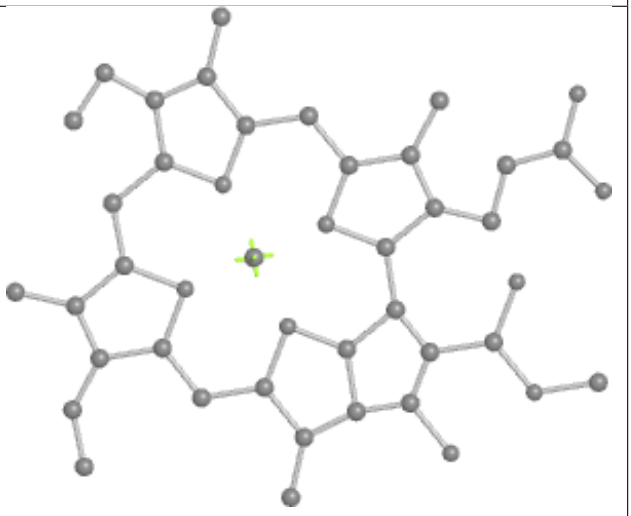
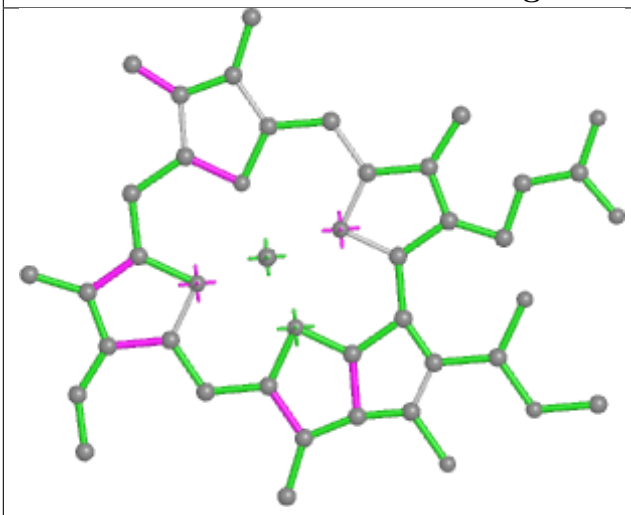
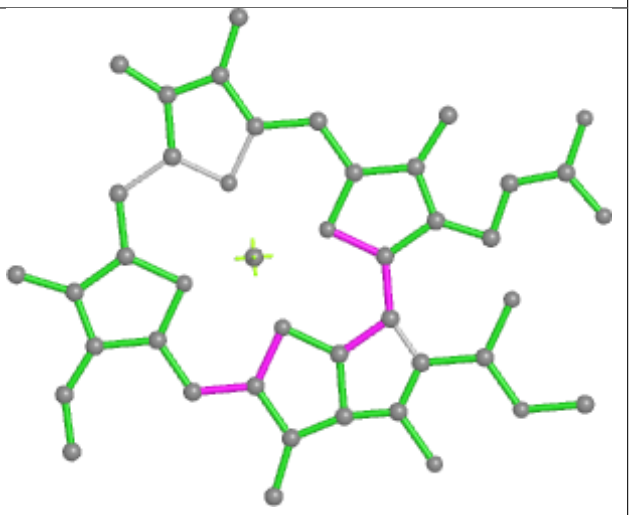


Rings

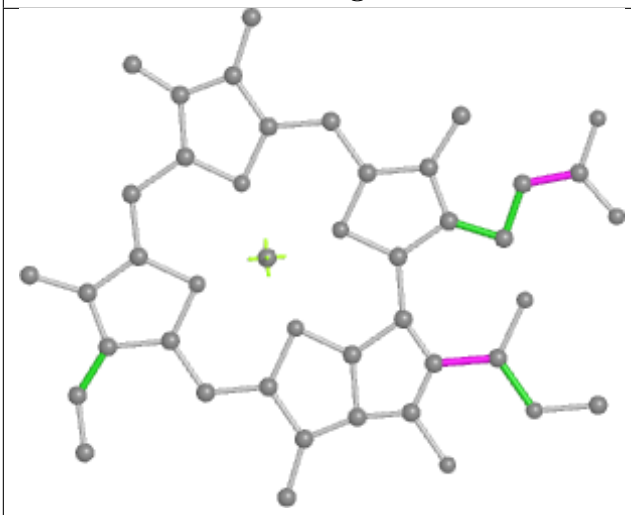
Ligand CLA K 202



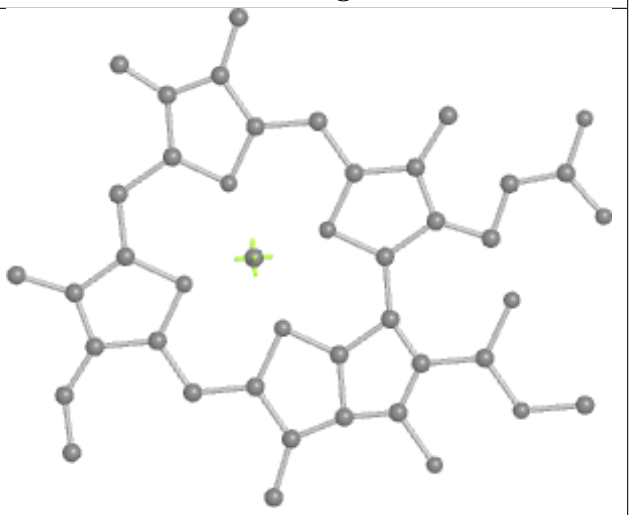
Bond lengths



Bond angles

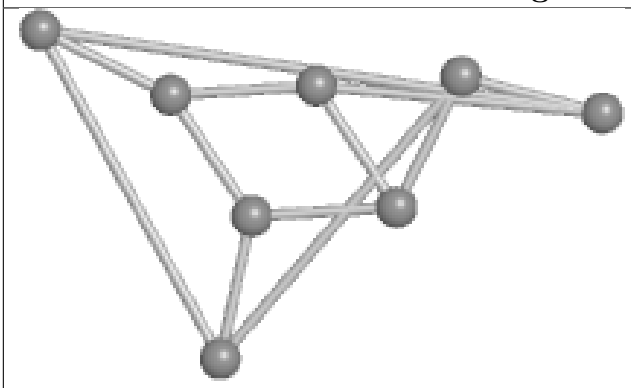


Torsions



Rings

Ligand SF4 C 102



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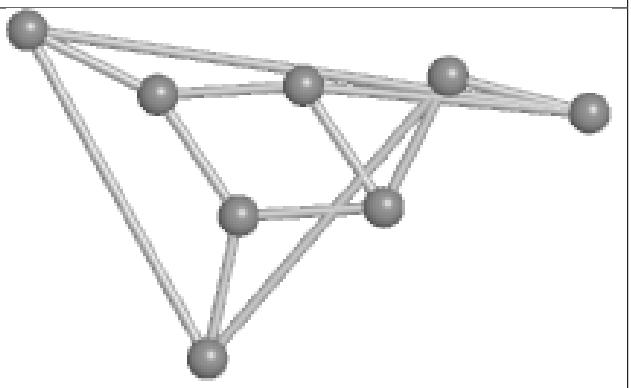
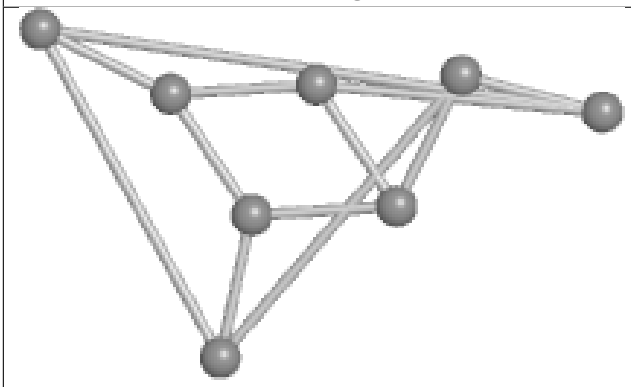


Bond angles



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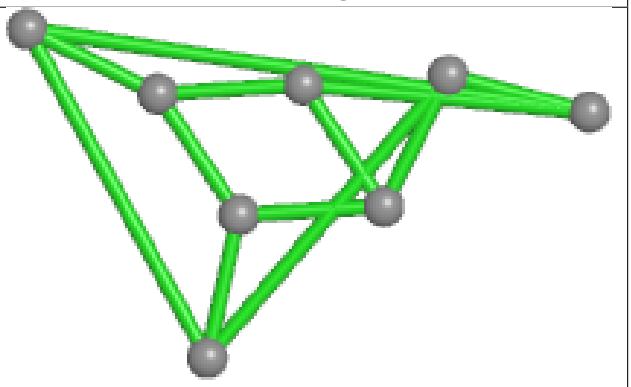
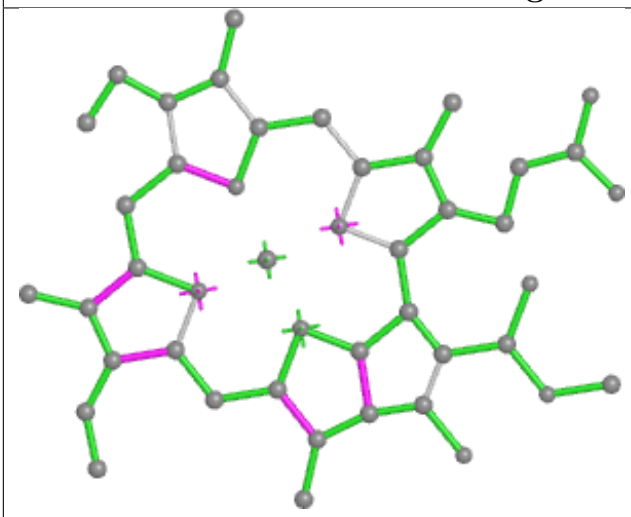
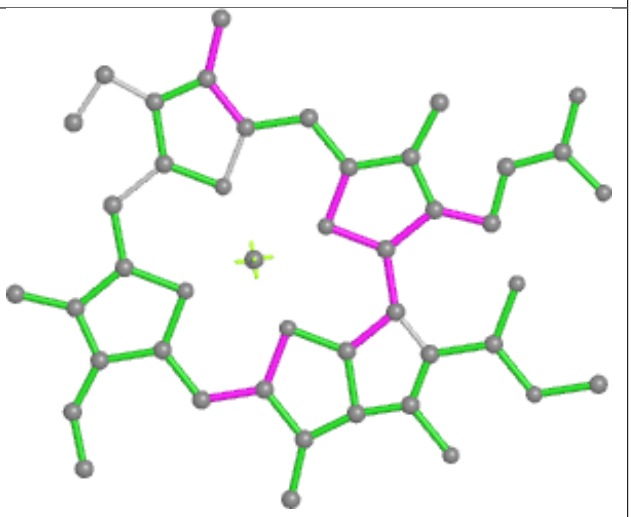


Rings

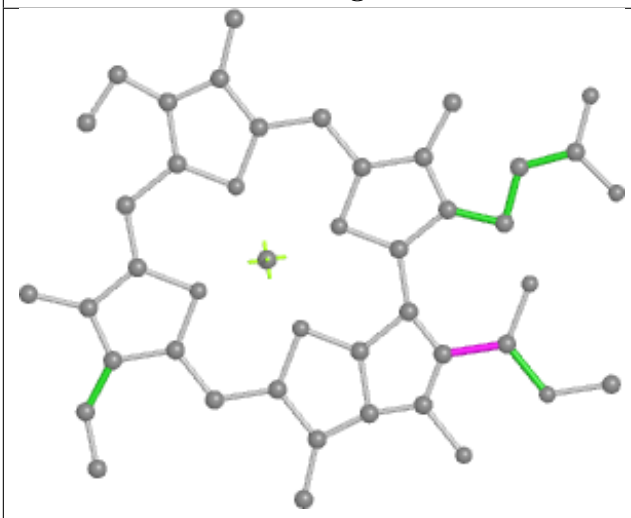
Ligand CLA L 301



Bond lengths



Bond angles



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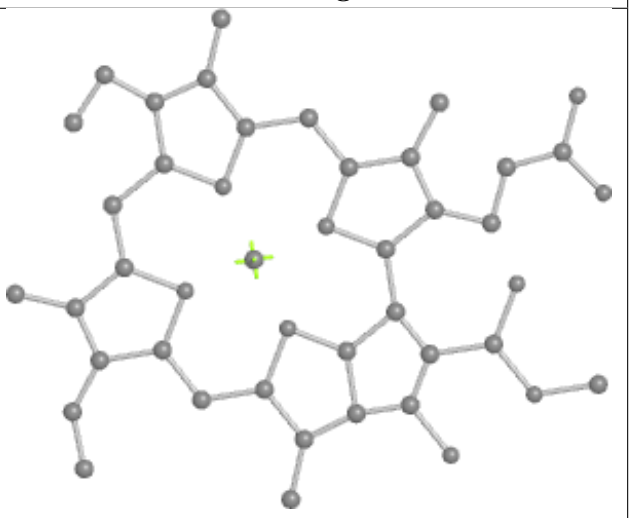
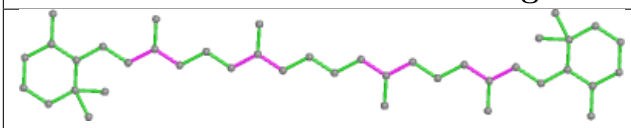


Rings

Ligand BCR G 201



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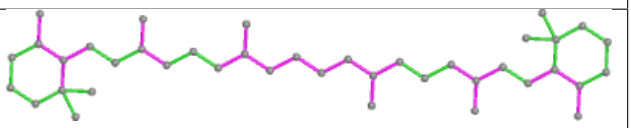
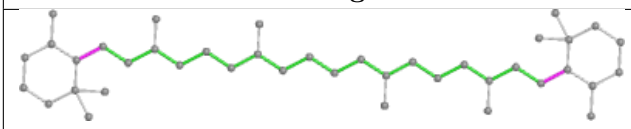


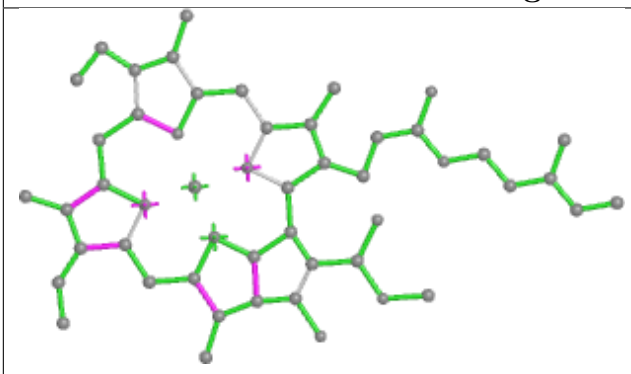
Bond angles



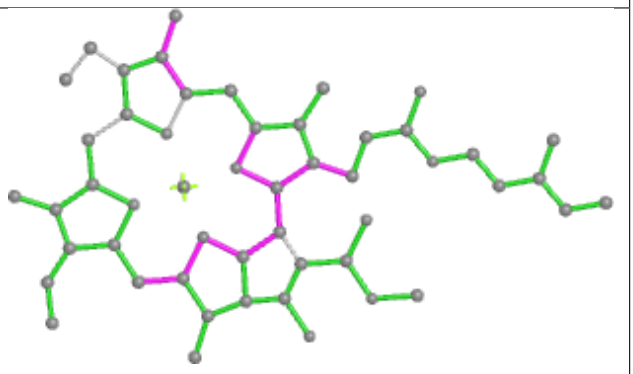
Torsions

Rings

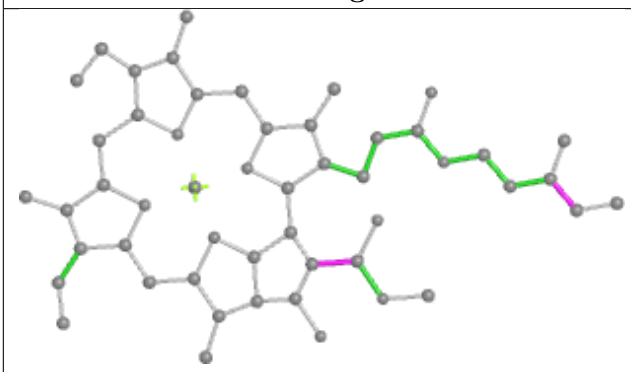
Ligand CLA A 838



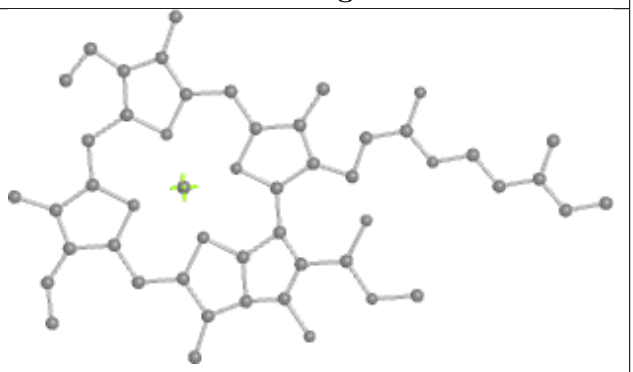
Bond lengths



Bond angles

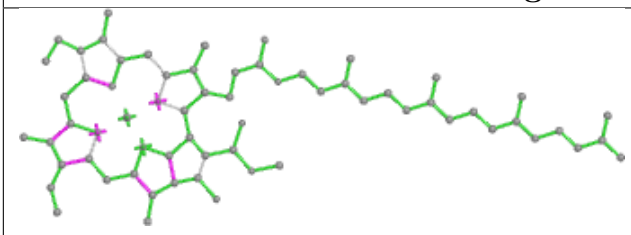


Torsions

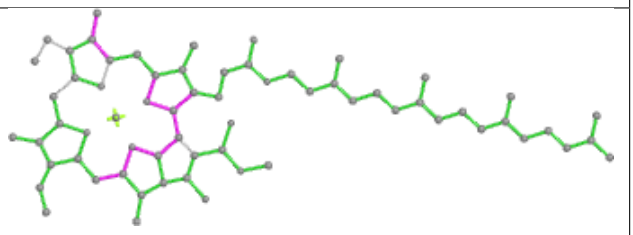


Rings

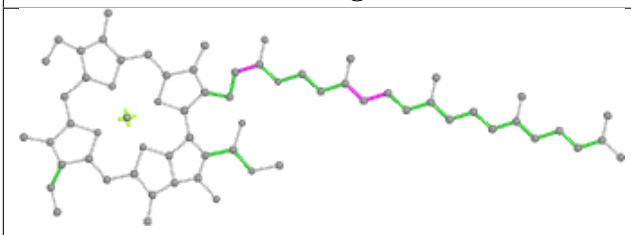
Ligand CLA B 810



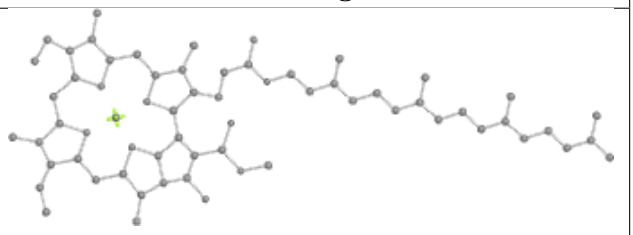
Bond lengths



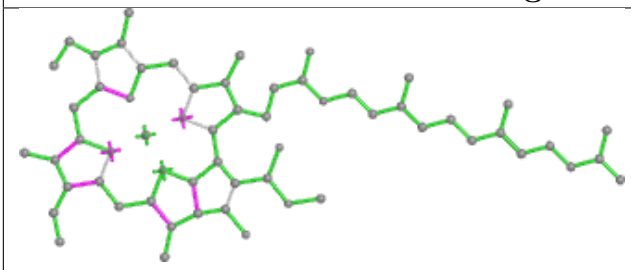
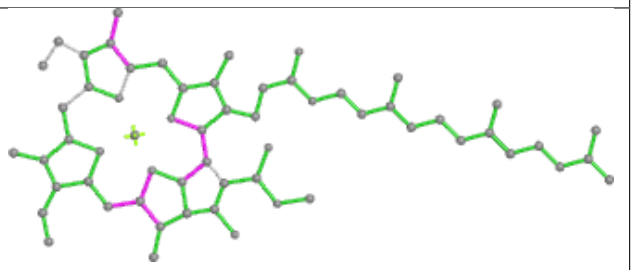
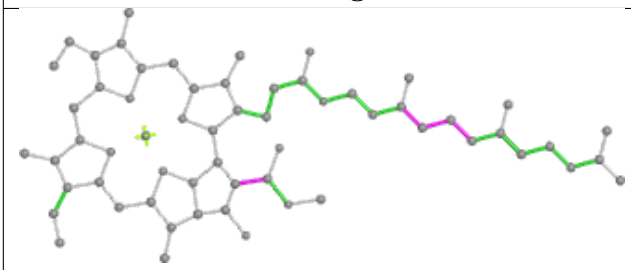
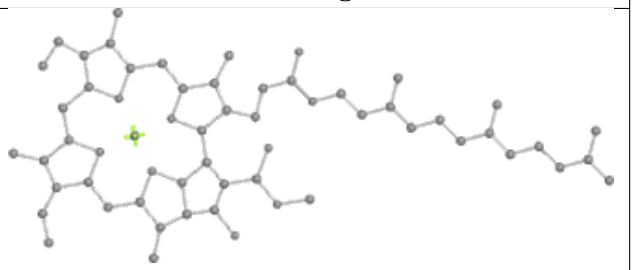
Bond angles

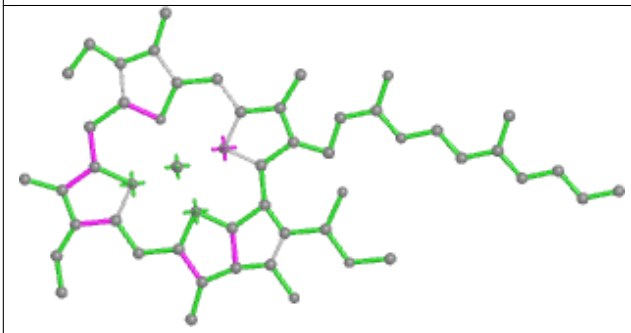
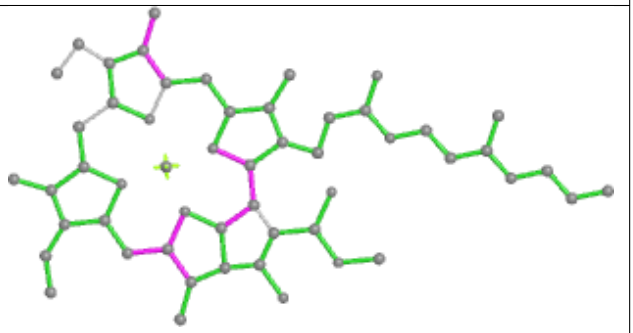
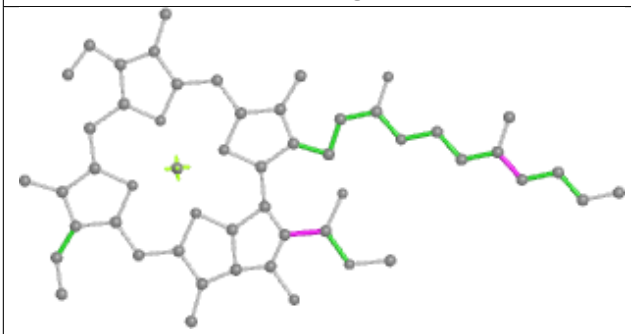
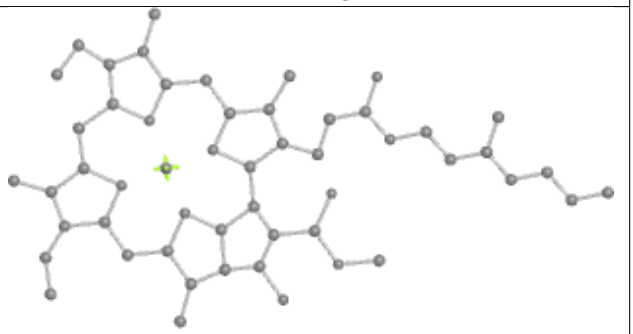


Torsions

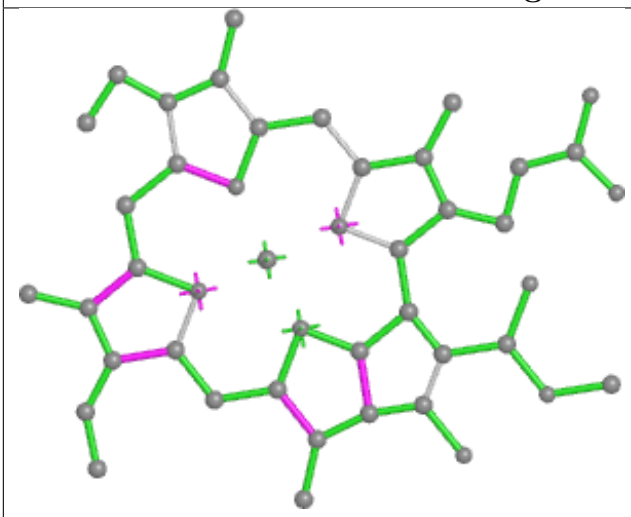


Rings

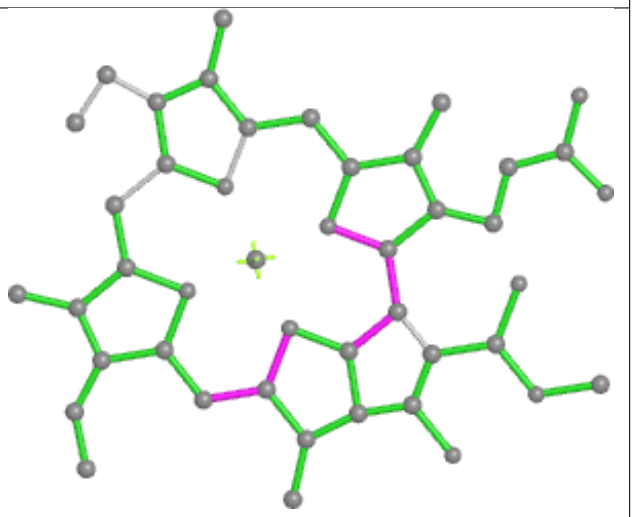
Ligand CLA B 812	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 826	
 Bond lengths	 Bond angles
 Torsions	 Rings

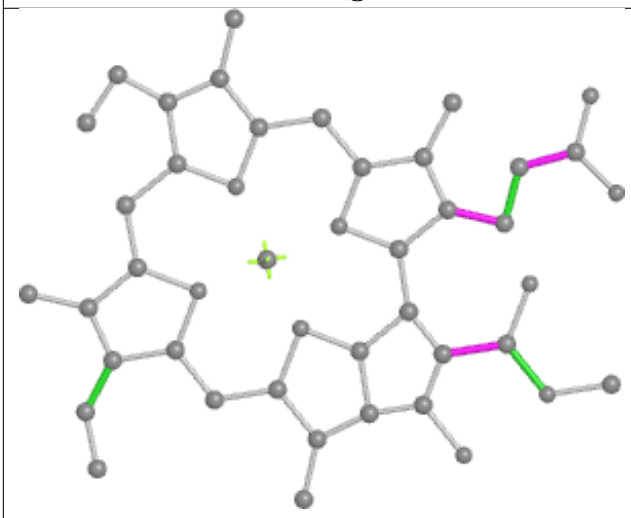
Ligand CLA B 831



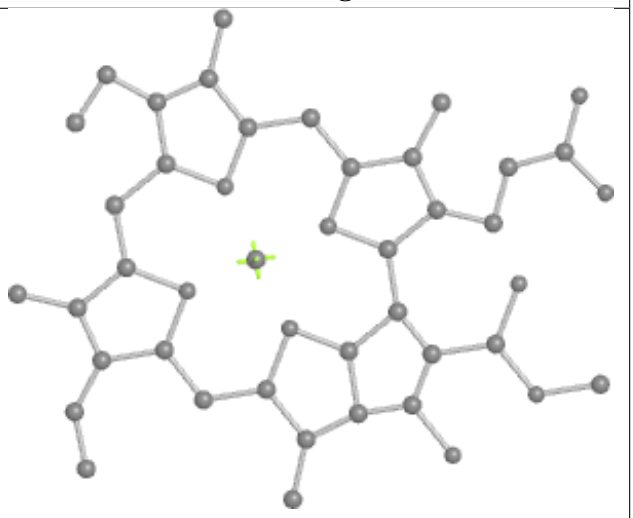
Bond lengths



Bond angles

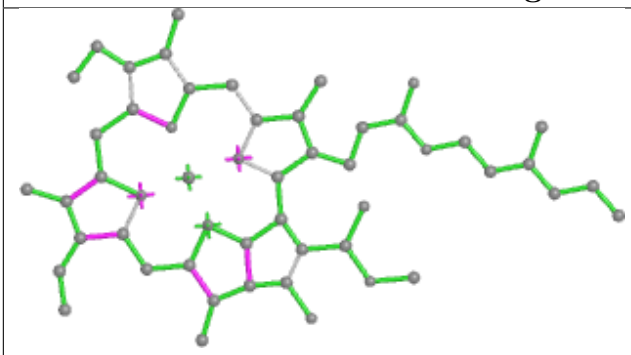


Torsions

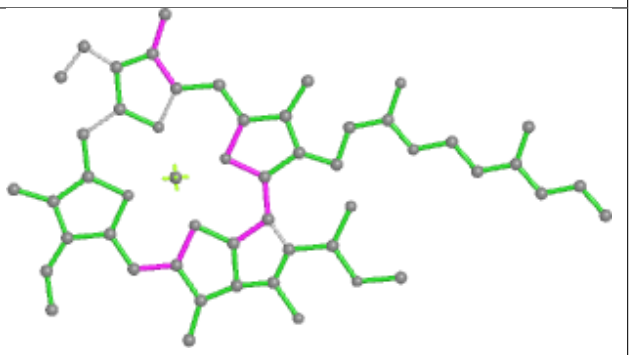


Rings

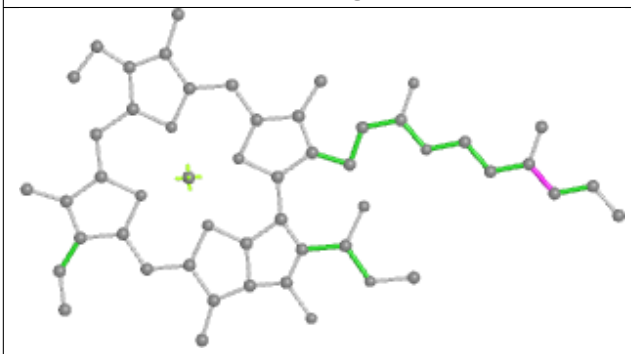
Ligand CLA B 837



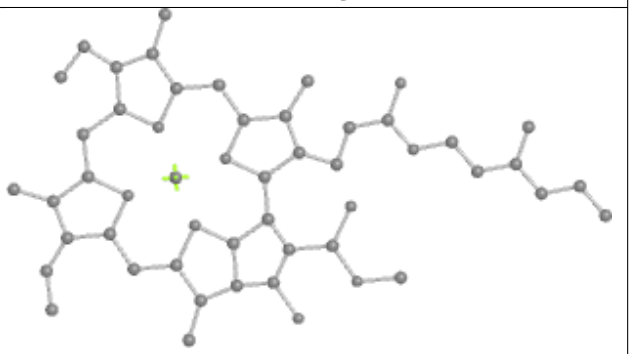
Bond lengths



Bond angles

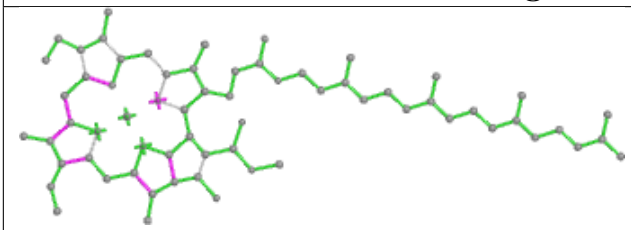


Torsions

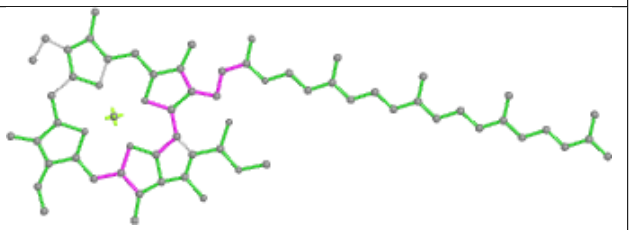


Rings

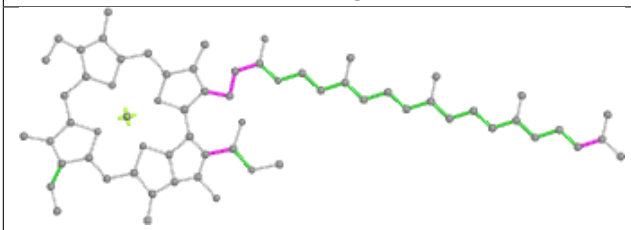
Ligand CLA B 840



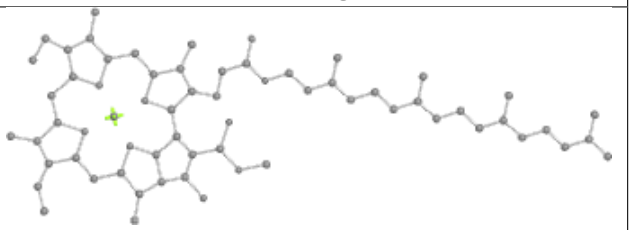
Bond lengths



Bond angles

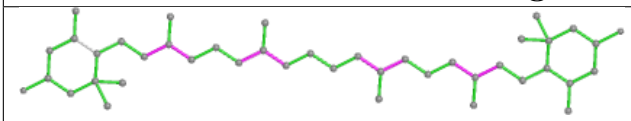


Torsions

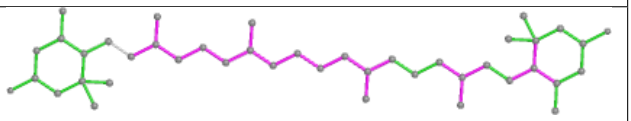


Rings

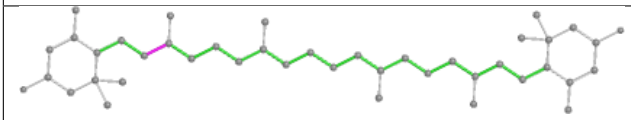
Ligand LUT J 101



Bond lengths



Bond angles



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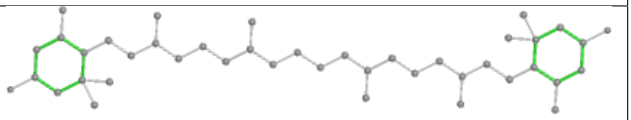
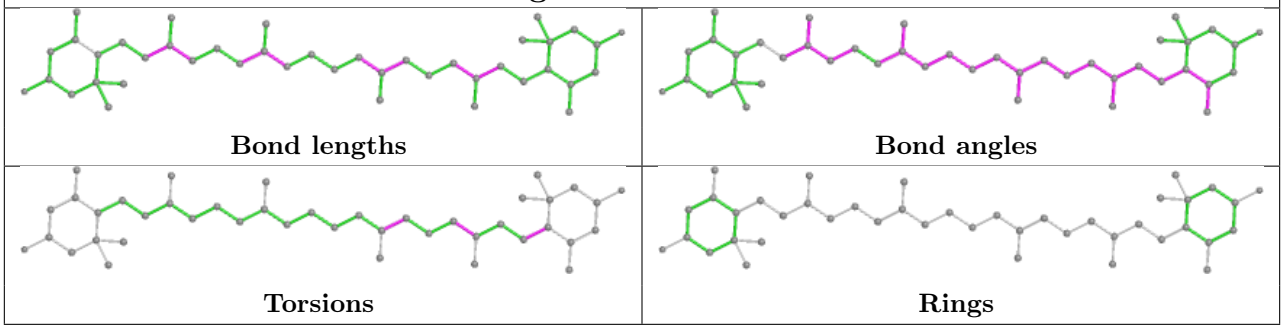


Rings

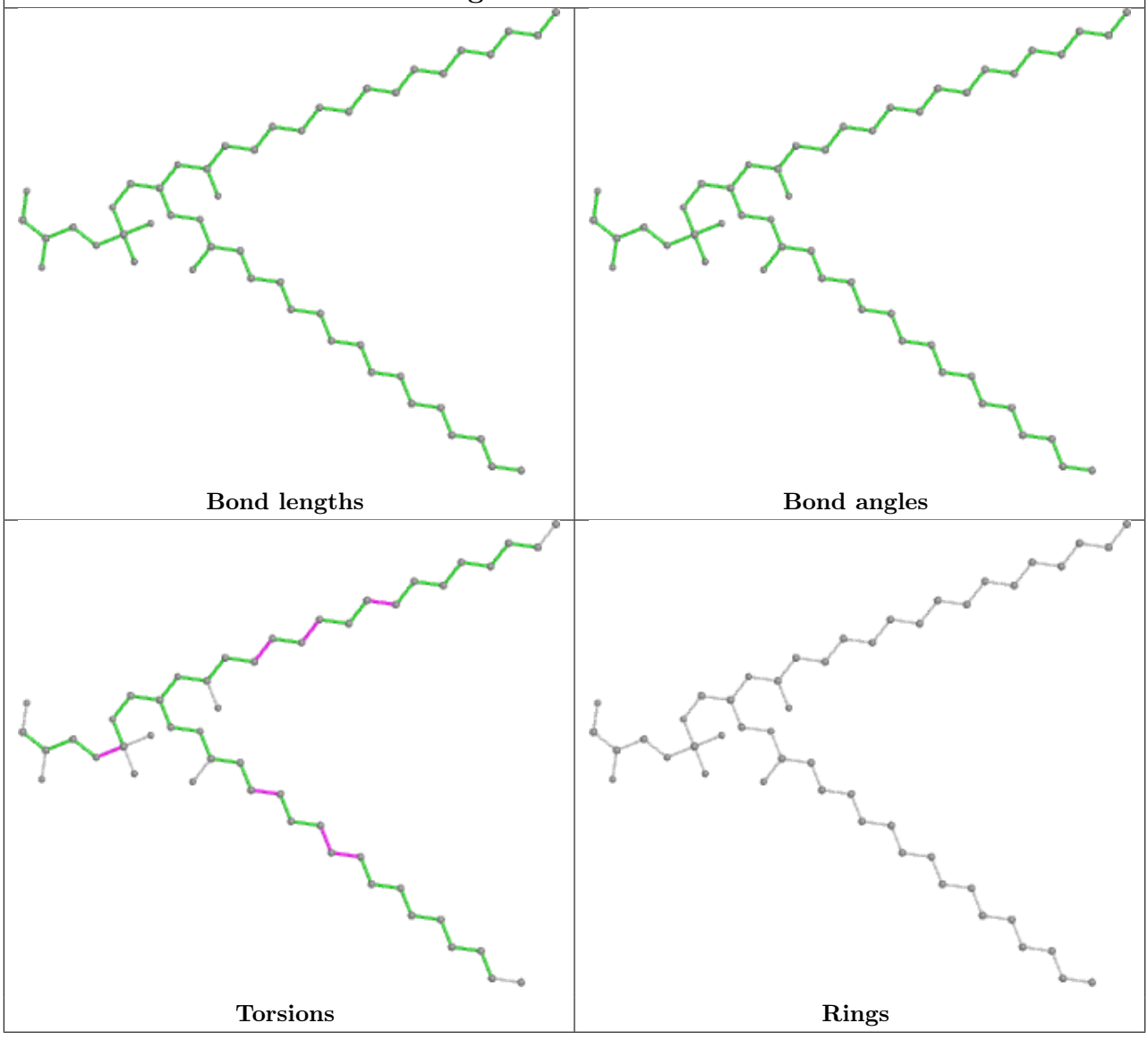
Ligand LUT 6 318



Bond lengths | Bond angles

Torsions | Rings

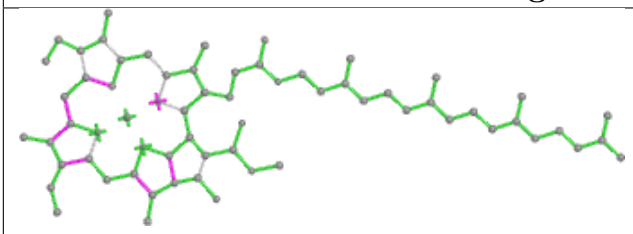
Ligand LHG A 846



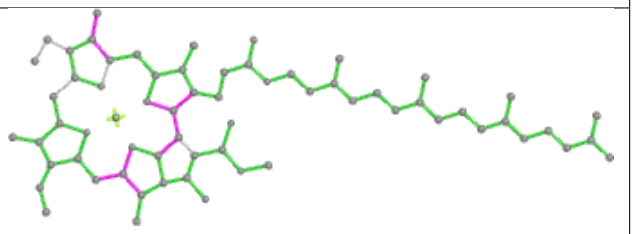
Bond lengths | Bond angles

Torsions | Rings

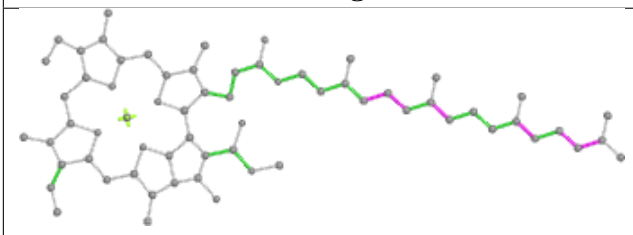
Ligand CLA 6 309



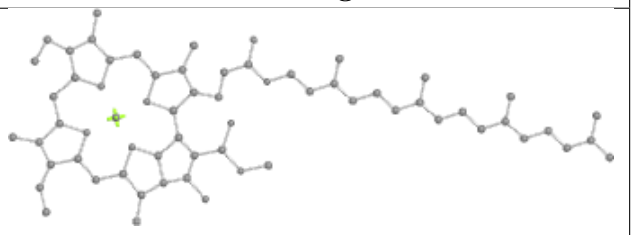
Bond lengths



Bond angles

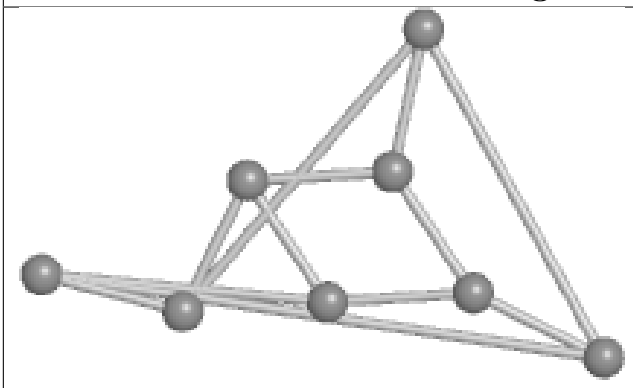


Torsions

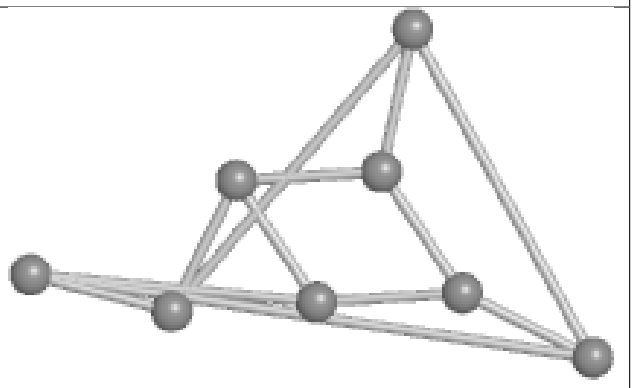


Rings

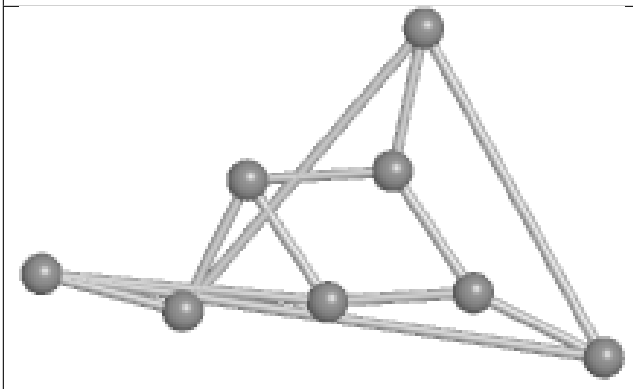
Ligand SF4 C 101



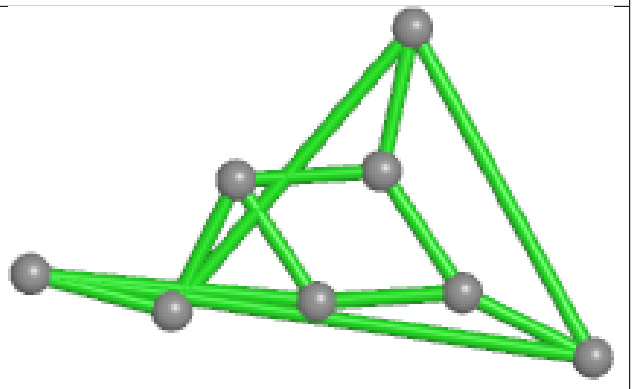
Bond lengths



Bond angles

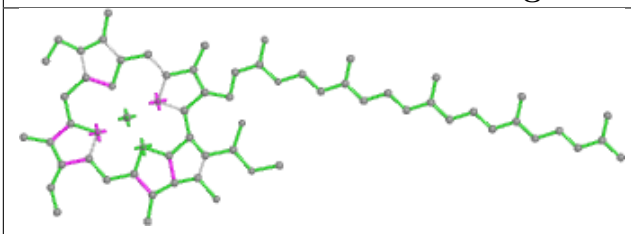


Torsions

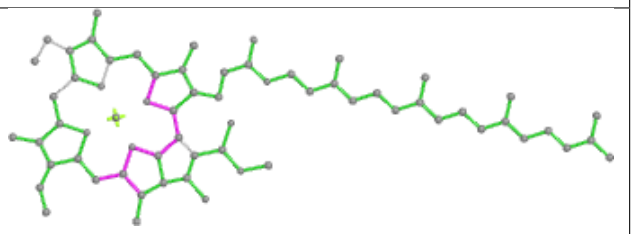


Rings

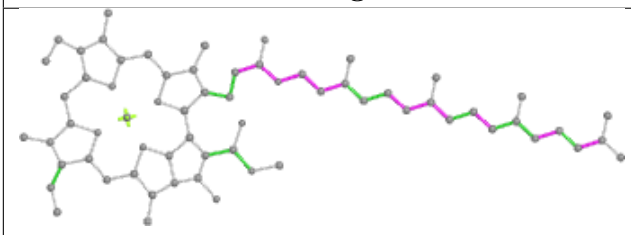
Ligand CLA A 828



Bond lengths



Bond angles



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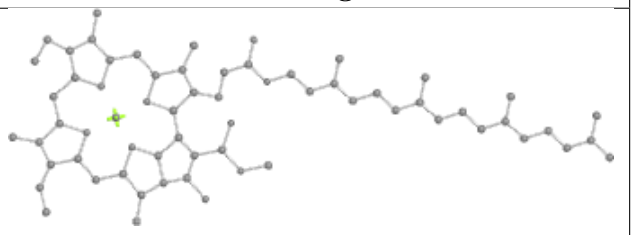
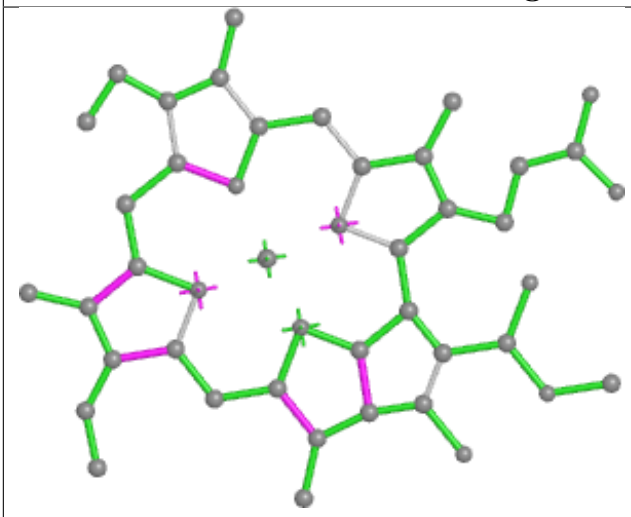
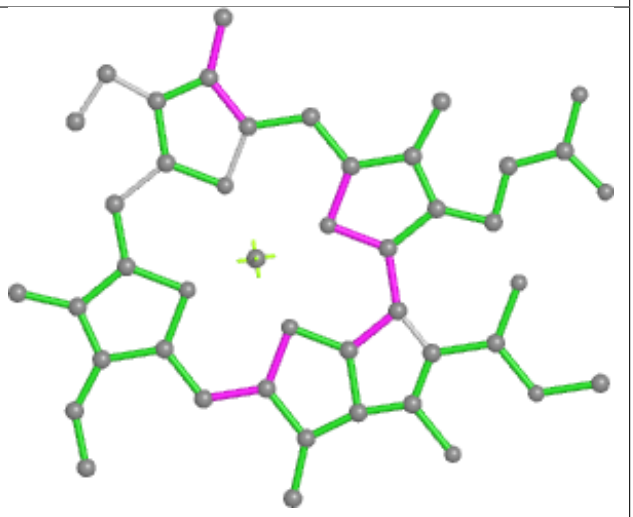


Rings

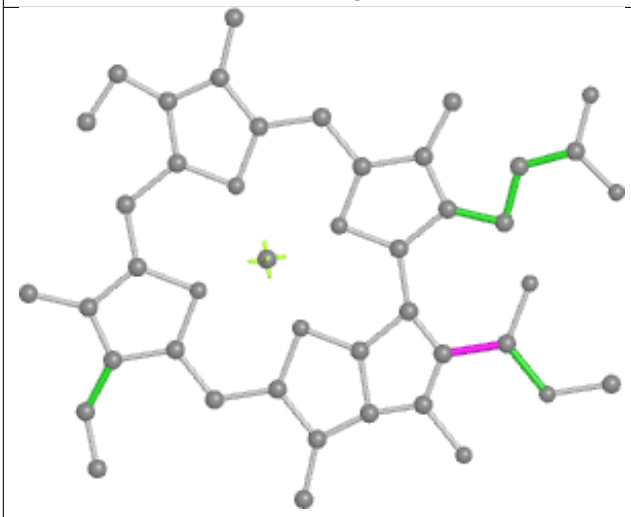
Ligand CLA A 843



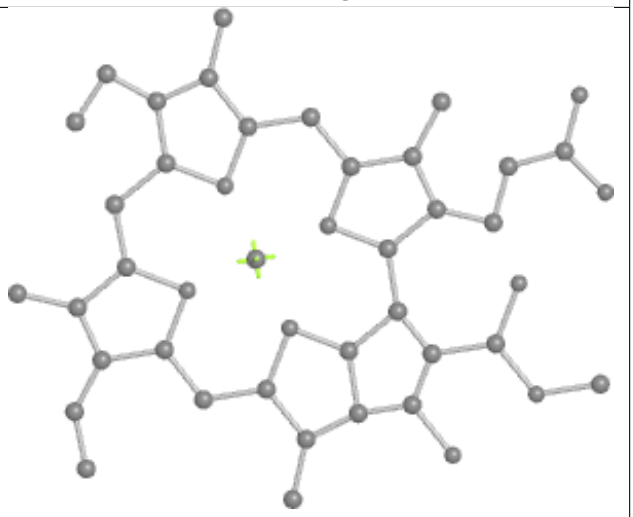
Bond lengths



Bond angles

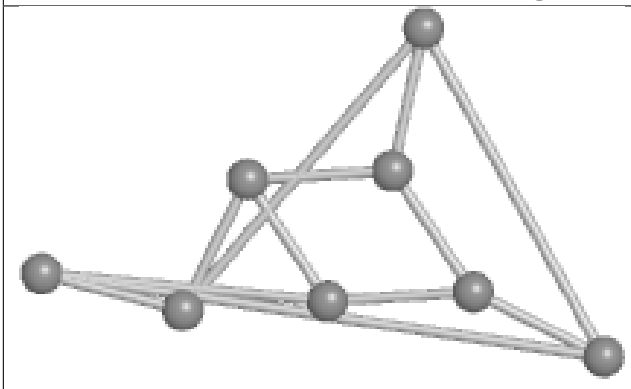


Torsions

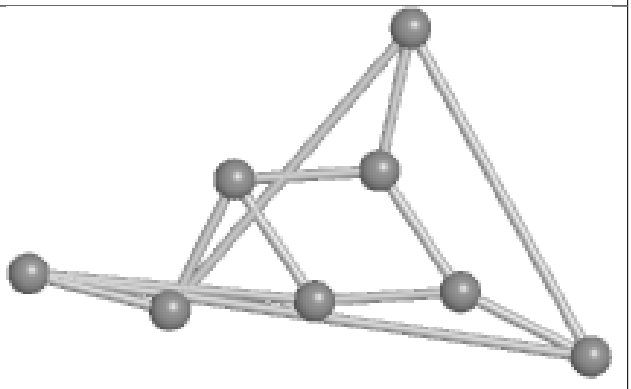


Rings

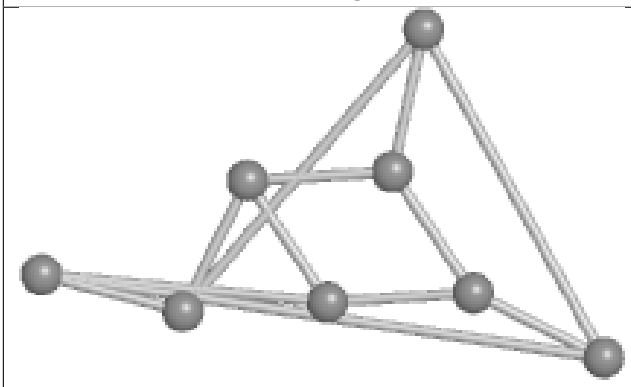
Ligand SF4 A 845



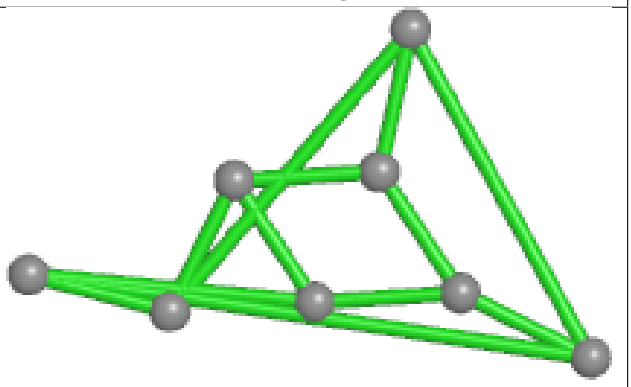
Bond lengths



Bond angles

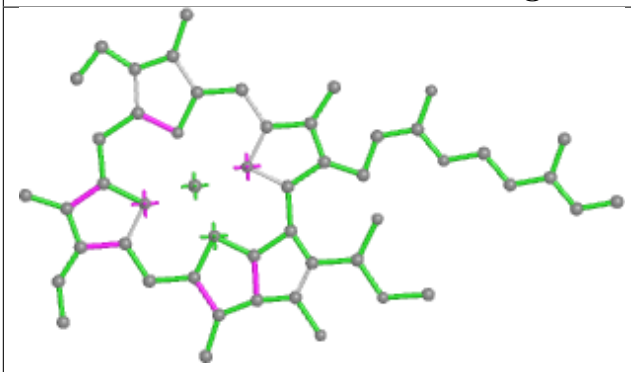


Torsions

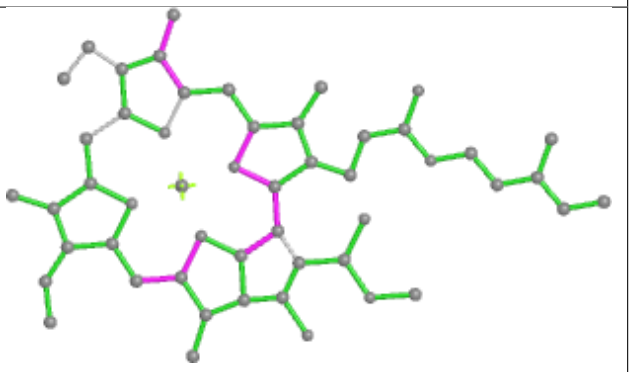


Rings

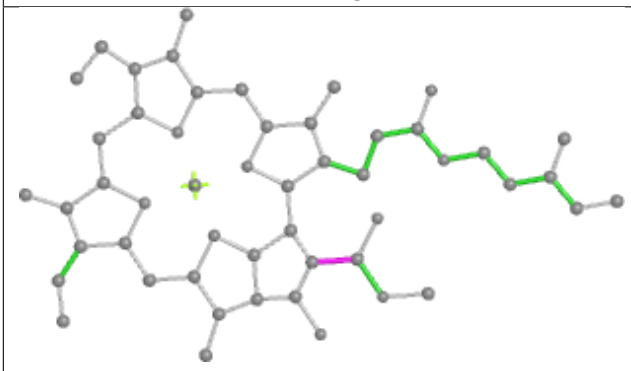
Ligand CLA A 815



Bond lengths



Bond angles



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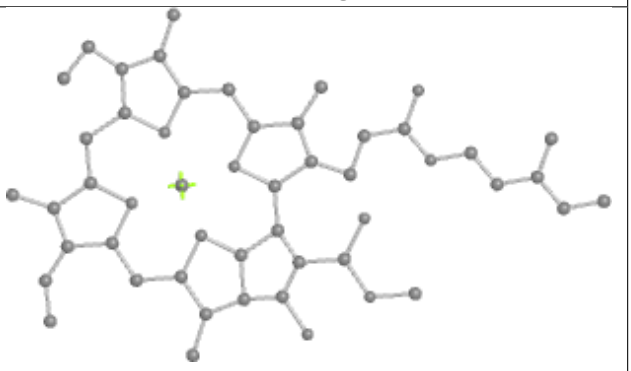
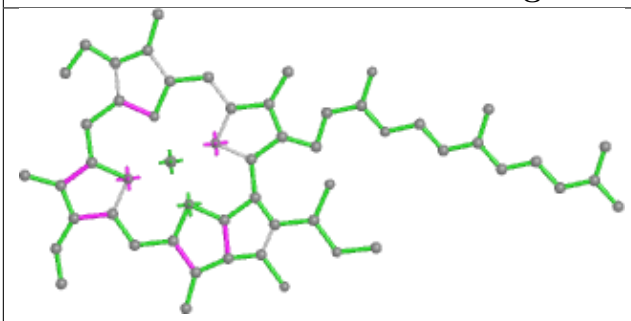
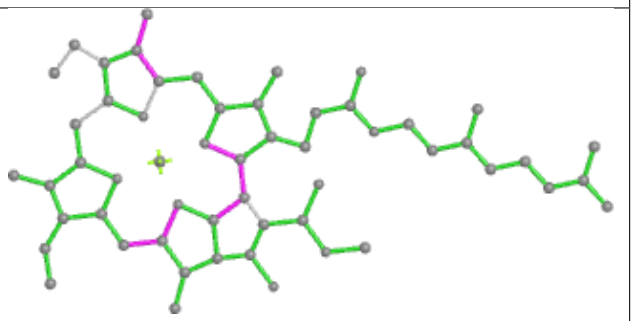


Rings

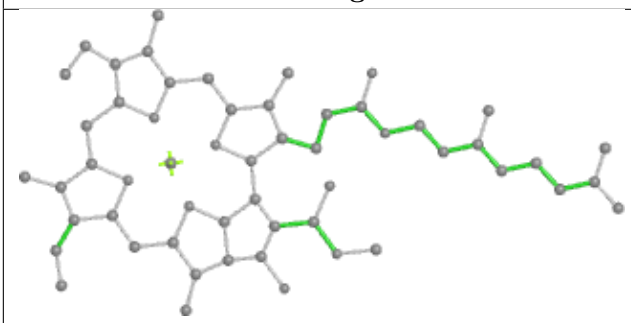
Ligand CLA A 839



Bond lengths



Bond angles



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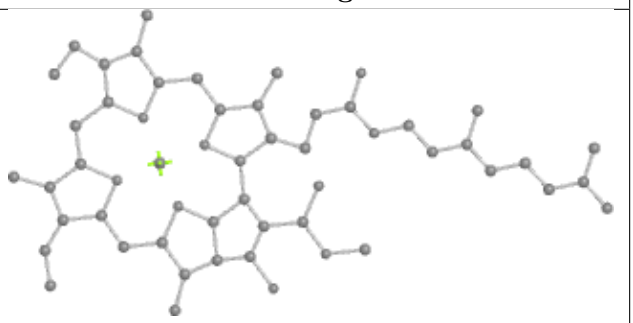
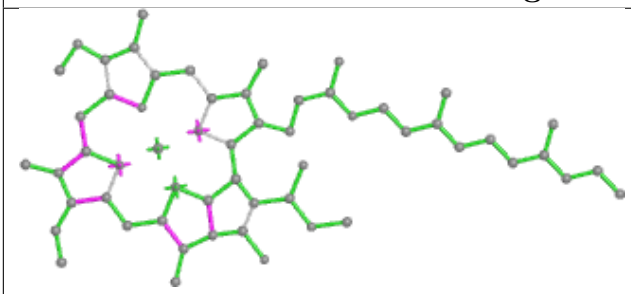
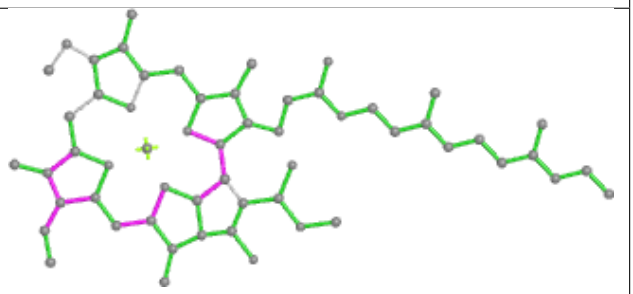


Rings

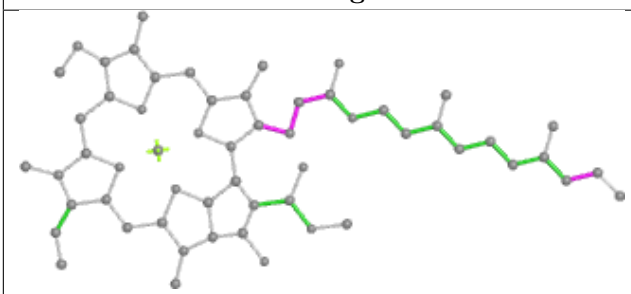
Ligand CLA A 819



Bond lengths



Bond angles



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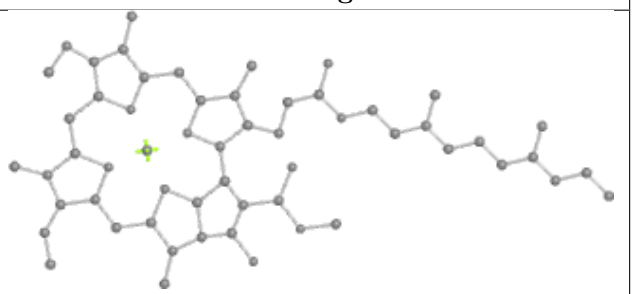
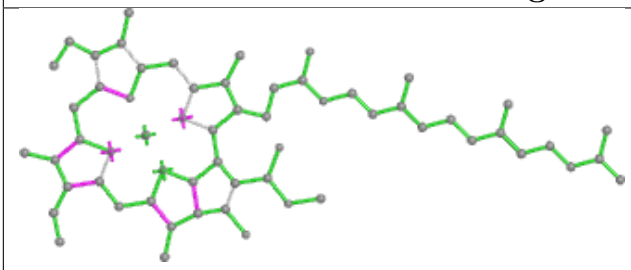
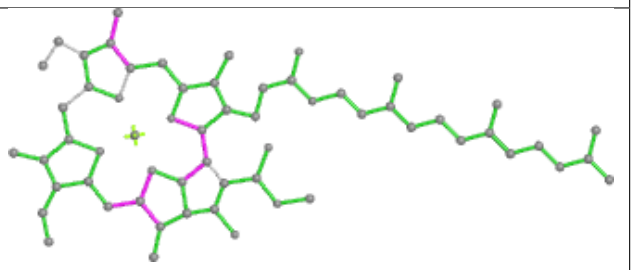
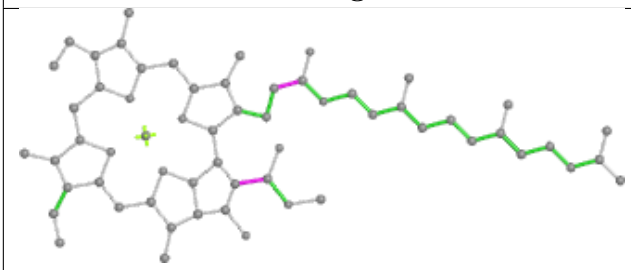
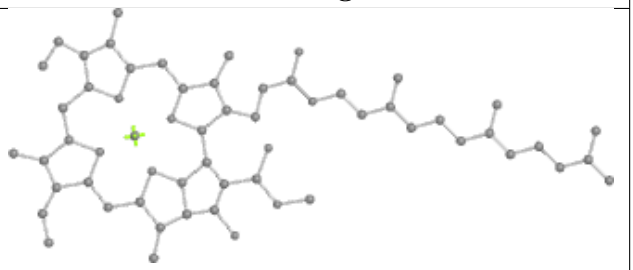
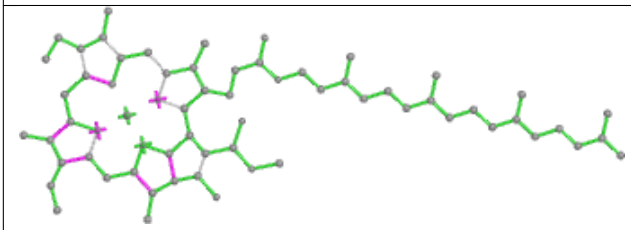
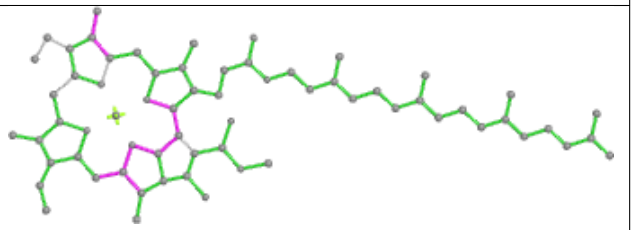
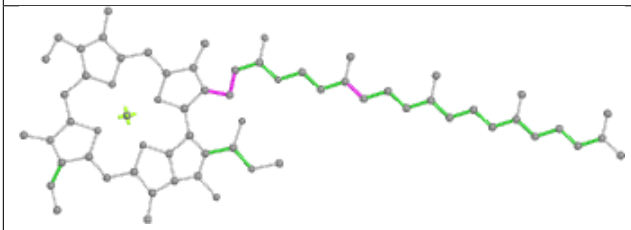
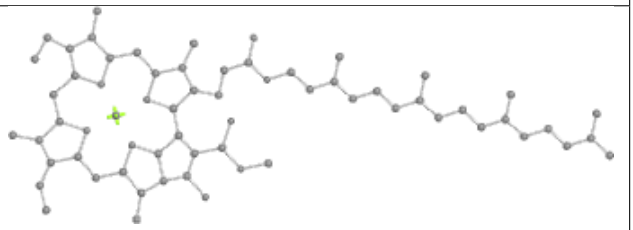
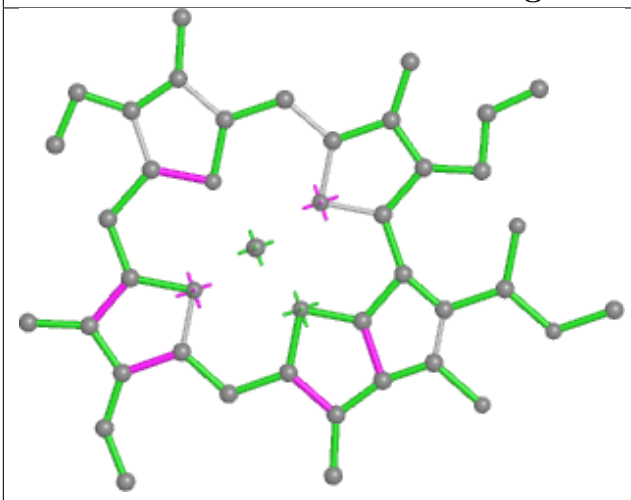


Rings

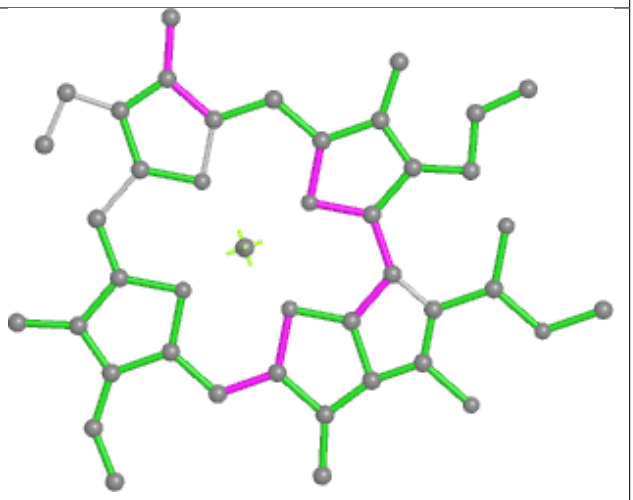
Ligand CLA 5 301	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA A 804	
 Bond lengths	 Bond angles
 Torsions	 Rings

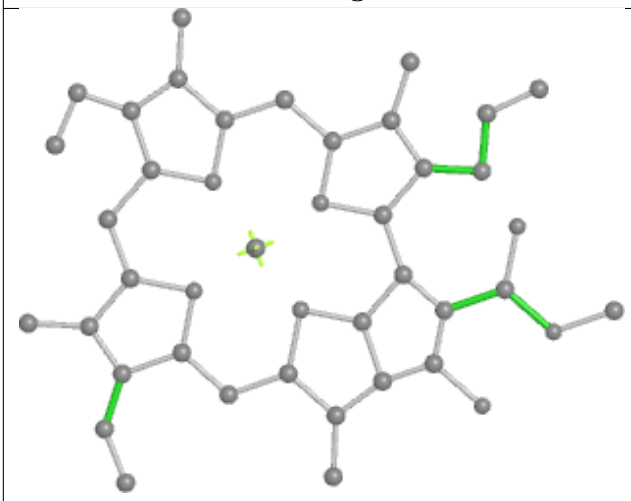
Ligand CLA B 821



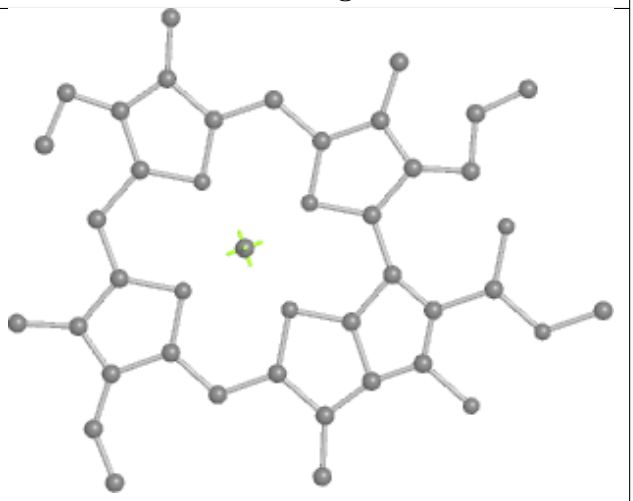
Bond lengths



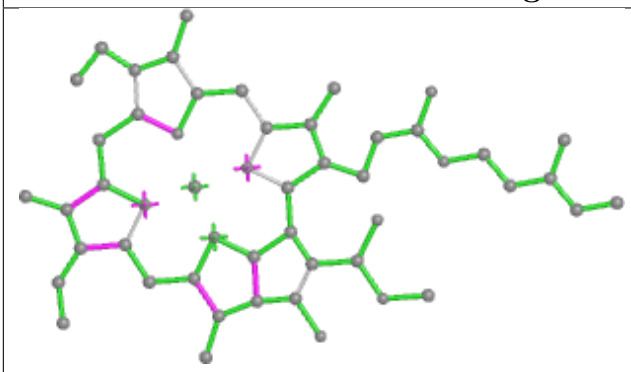
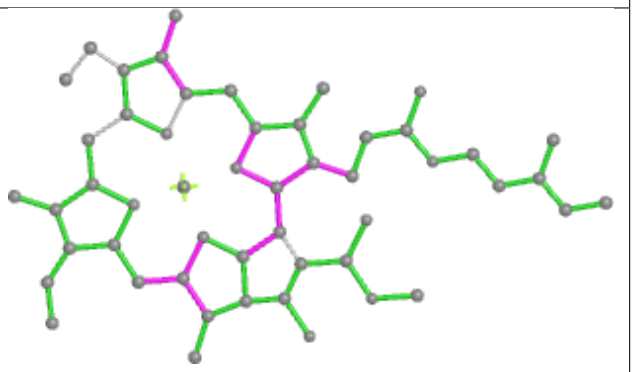
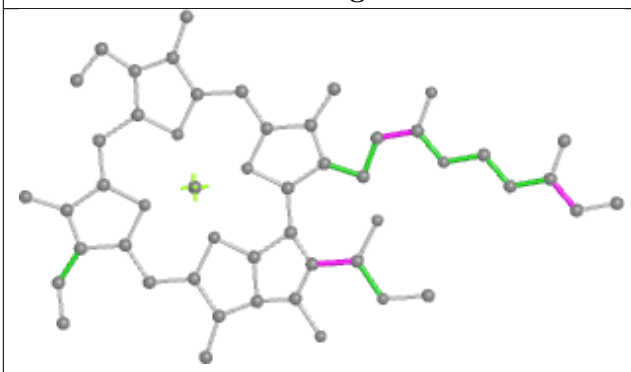
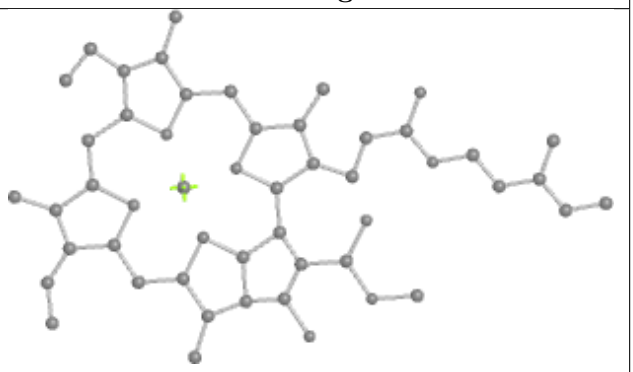
Bond angles



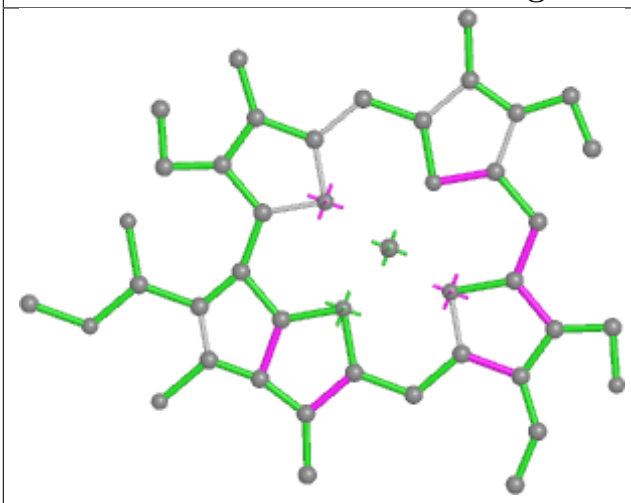
Torsions



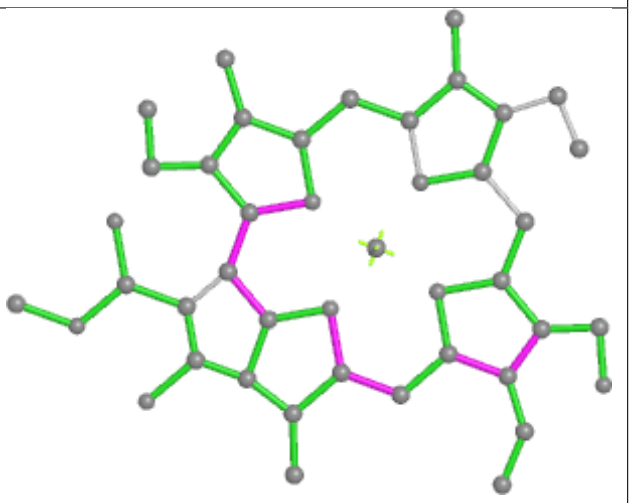
Rings

Ligand CLA K 201	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

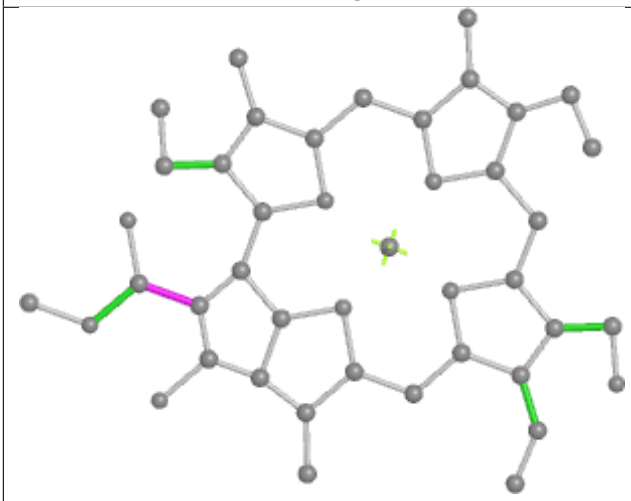
Ligand CHL 5 313



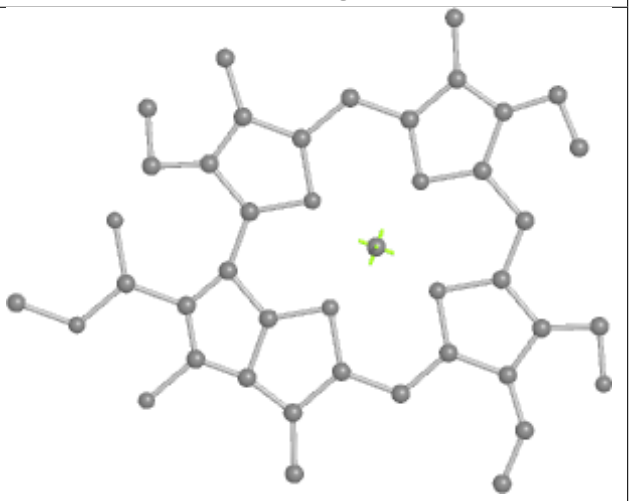
Bond lengths



Bond angles

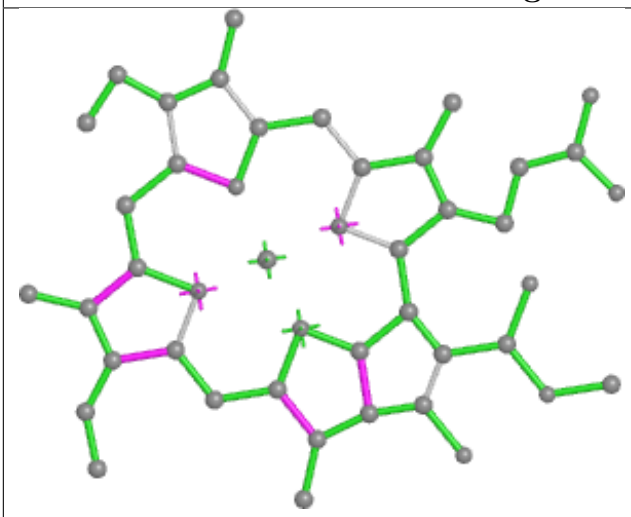


Torsions

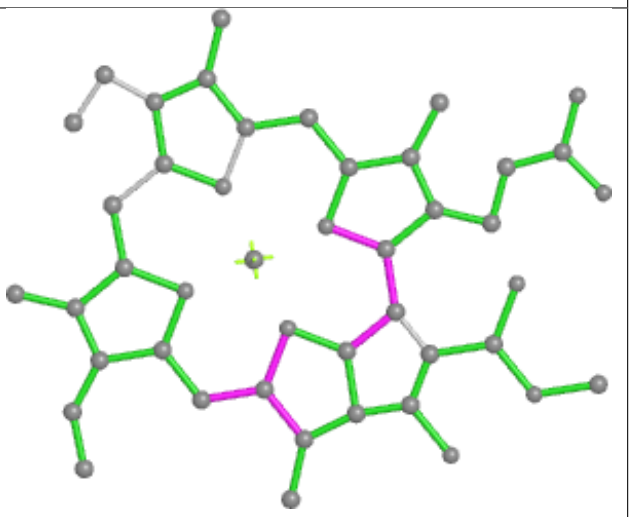


Rings

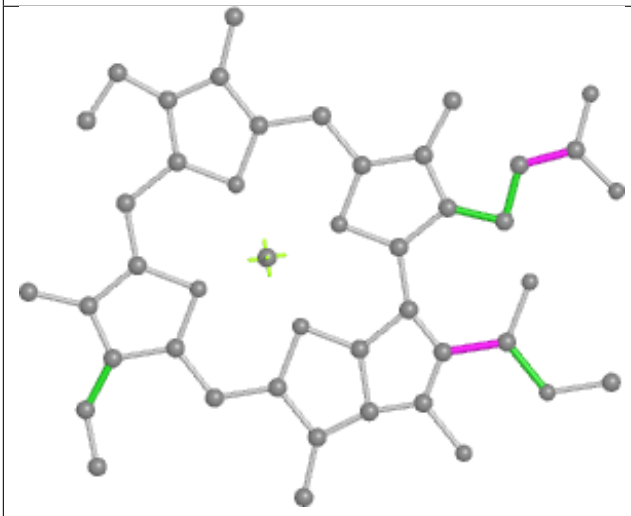
Ligand CLA A 837



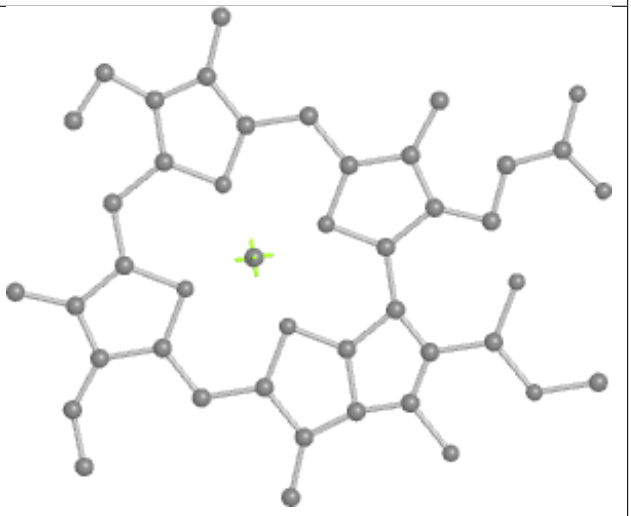
Bond lengths



Bond angles

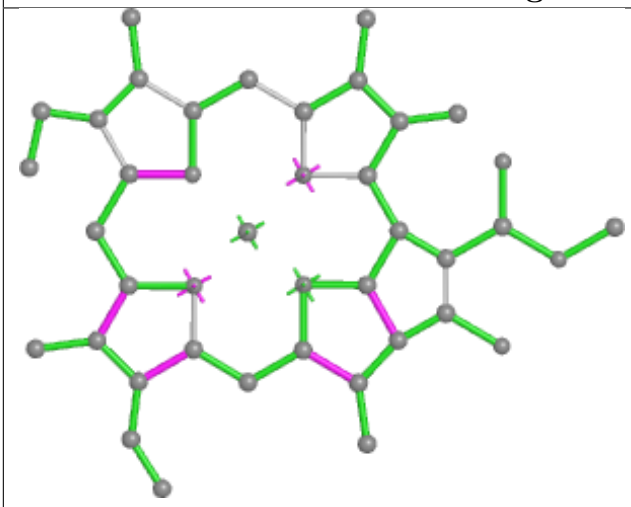


Torsions

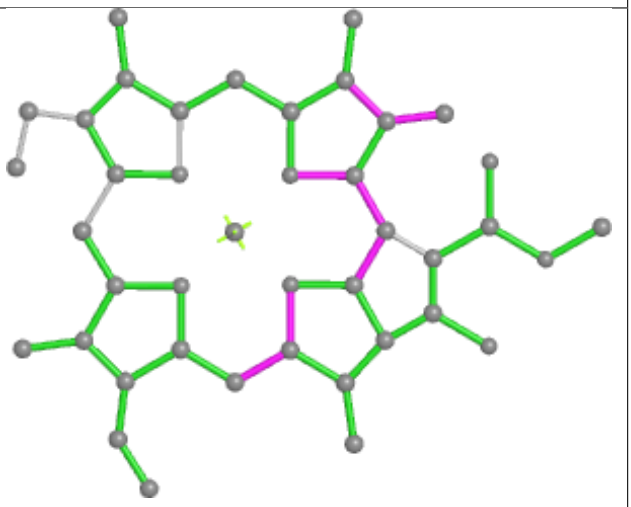


Rings

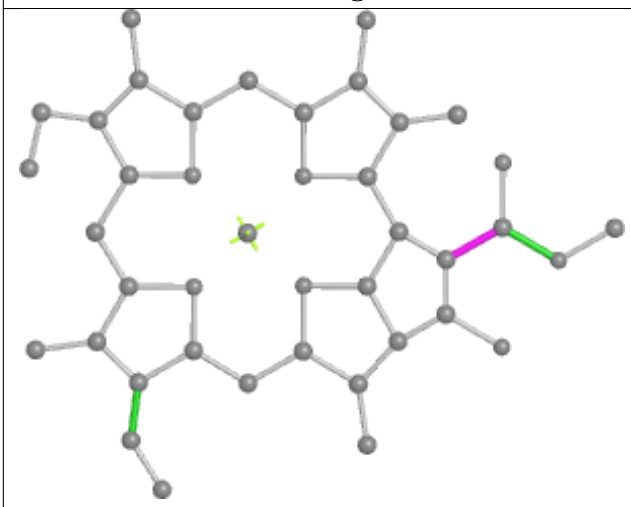
Ligand CLA F 304



Bond lengths



Bond angles



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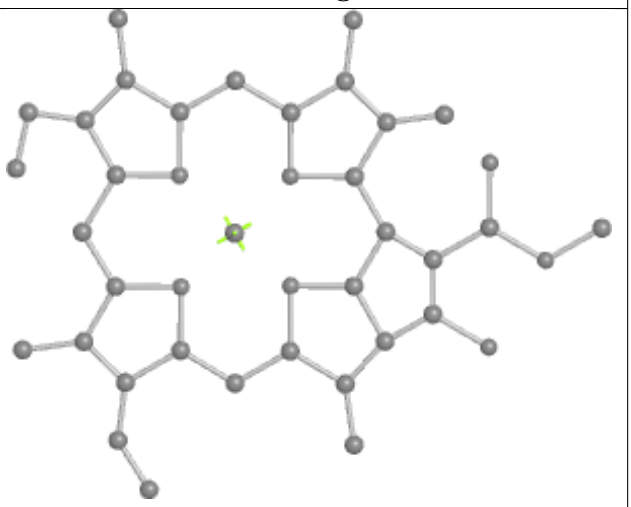
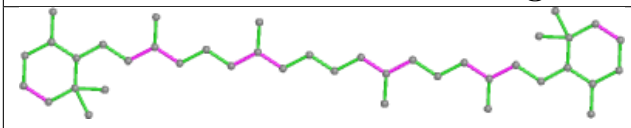
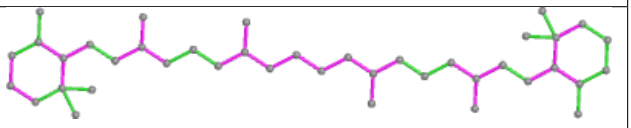


Rings

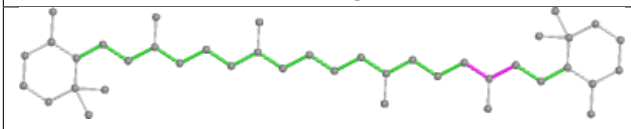
Ligand BCR 3 317



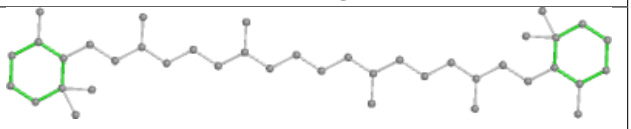
Bond lengths



Bond angles

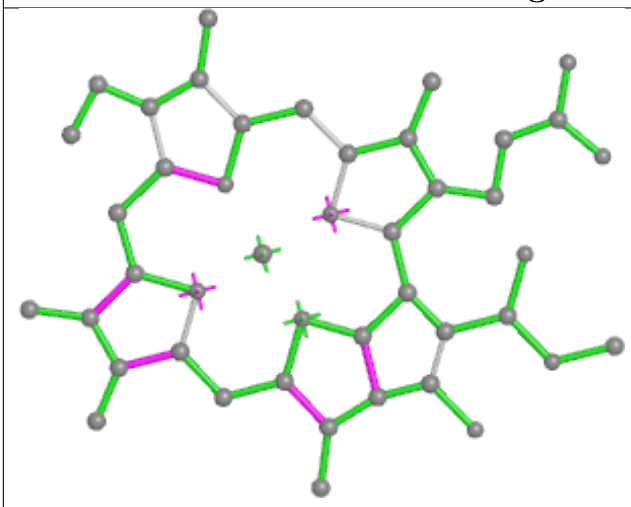


Torsions



Rings

Ligand CLA 5 310



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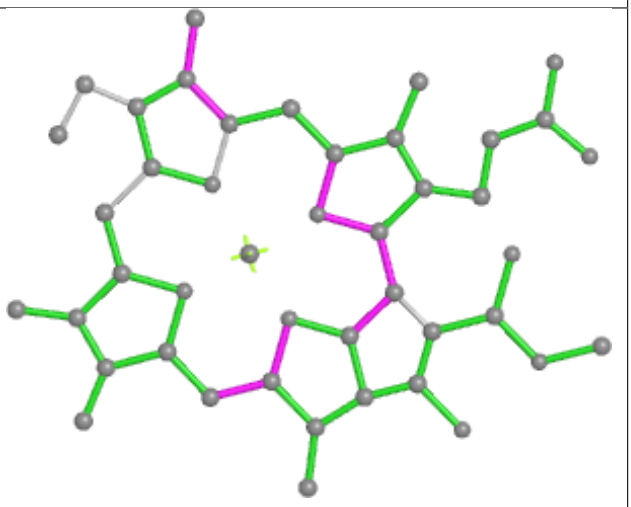
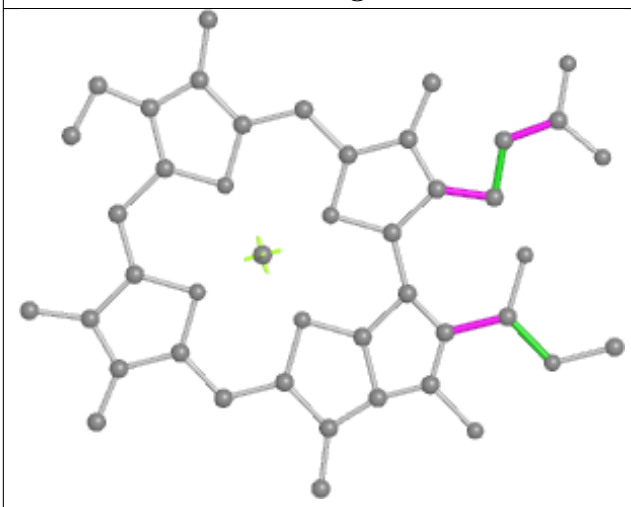
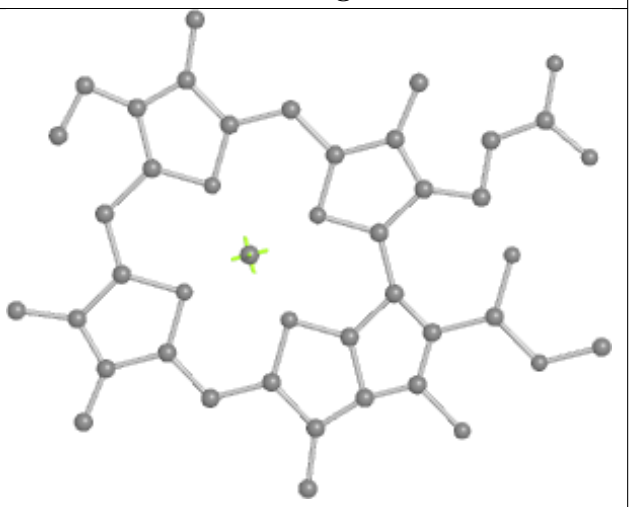


Bond angles

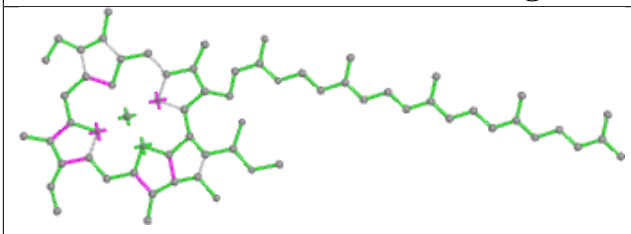


Torsions

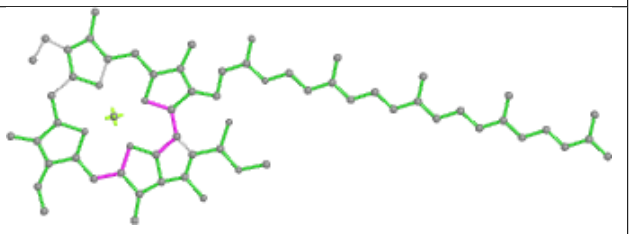


Rings

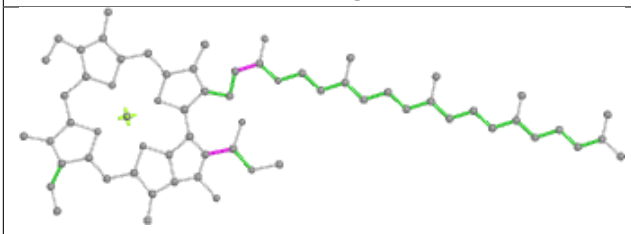
Ligand CLA A 842



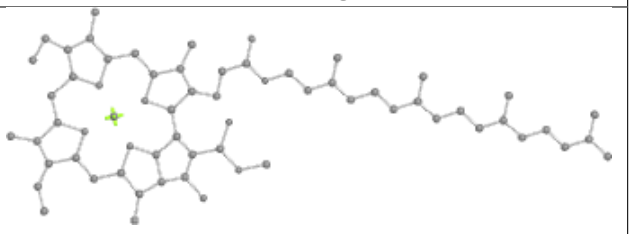
Bond lengths



Bond angles

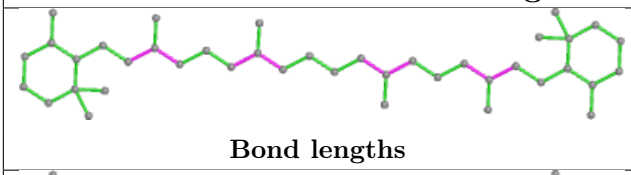


Torsions

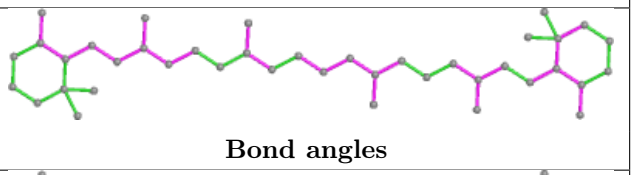


Rings

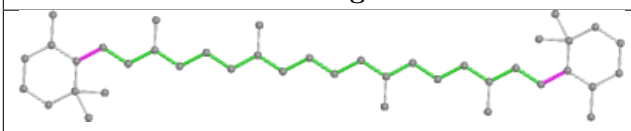
Ligand BCR F 302



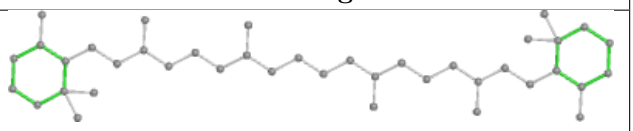
Bond lengths



Bond angles

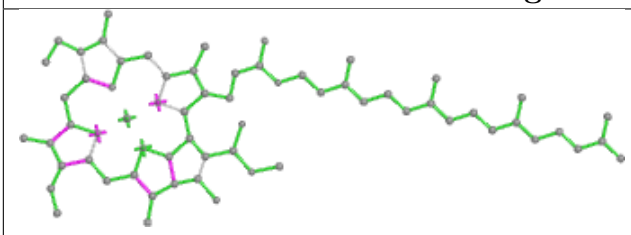


Torsions

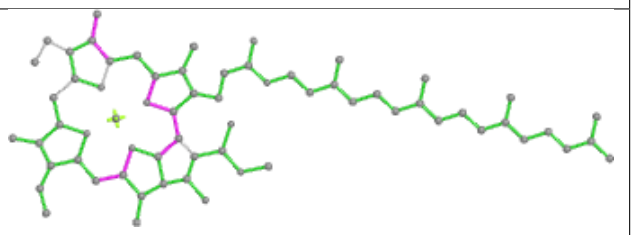


Rings

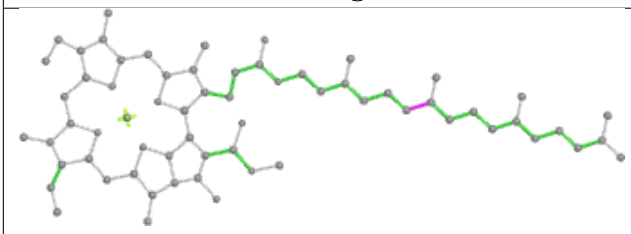
Ligand CLA B 817



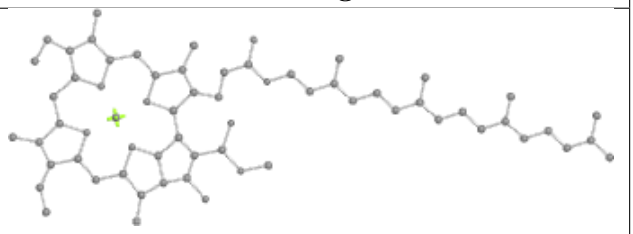
Bond lengths



Bond angles

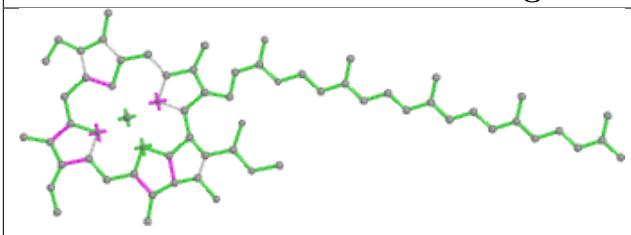


Torsions

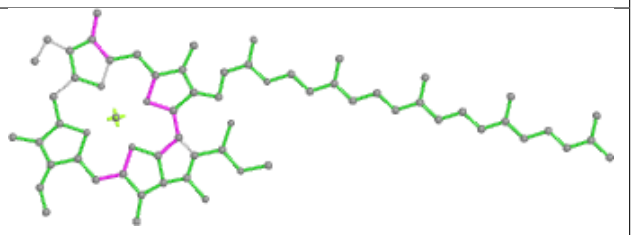


Rings

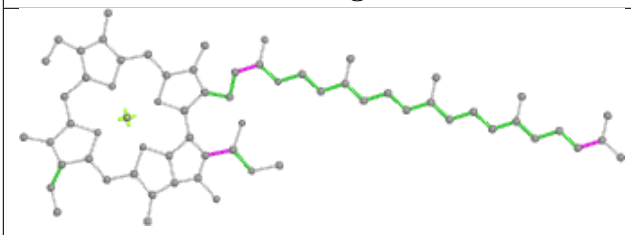
Ligand CLA A 814



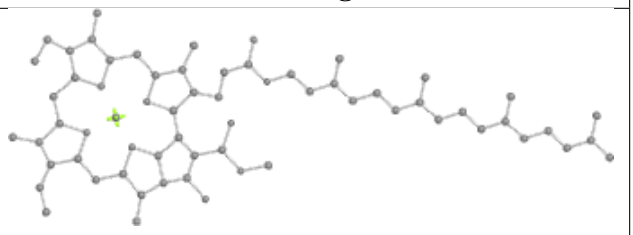
Bond lengths



Bond angles

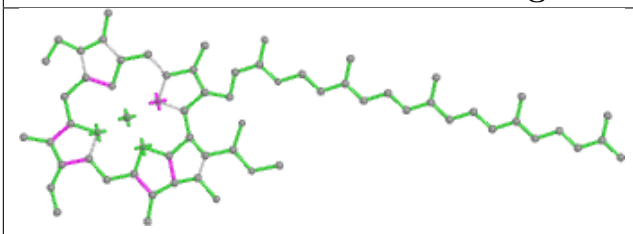


Torsions

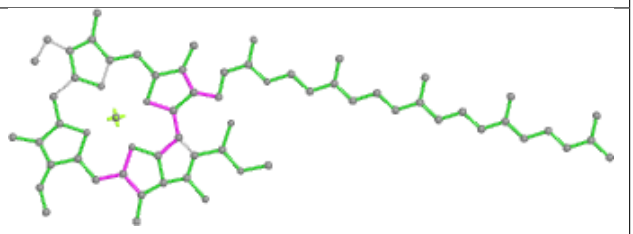


Rings

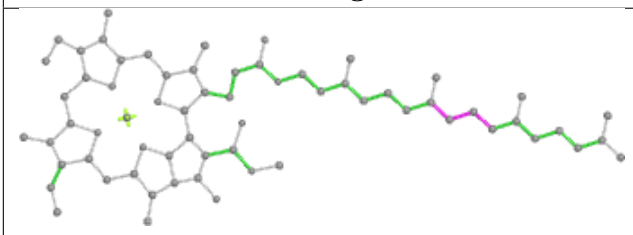
Ligand CLA 6 312



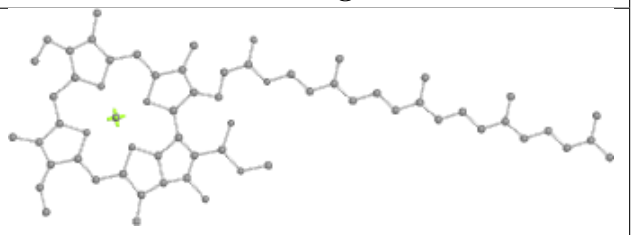
Bond lengths



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.

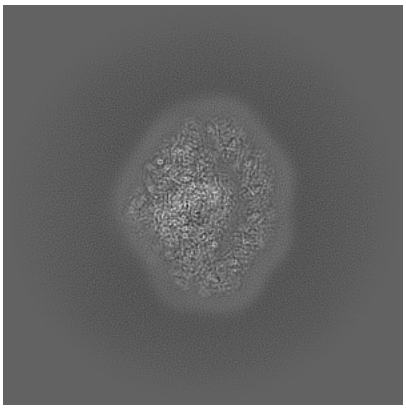
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-63404. These allow visual inspection of the internal detail of the map and identification of artifacts.

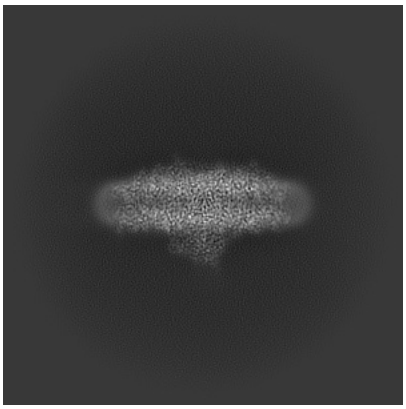
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

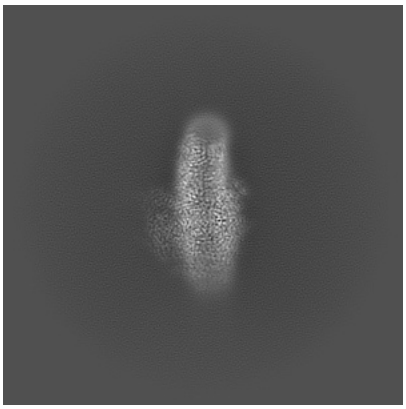
6.1.1 Primary map



X

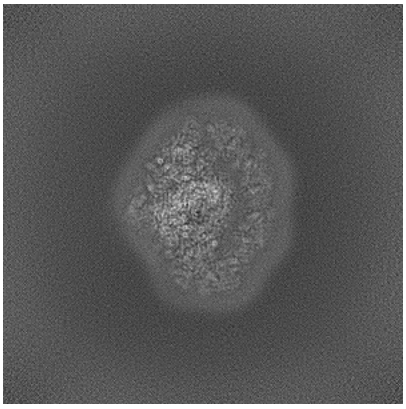


Y

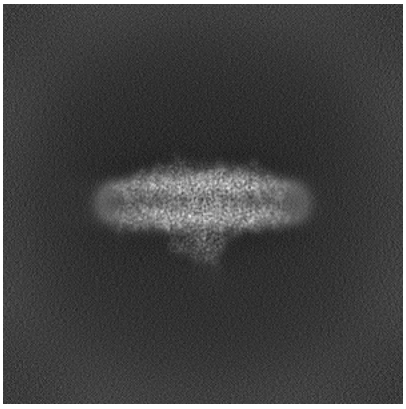


Z

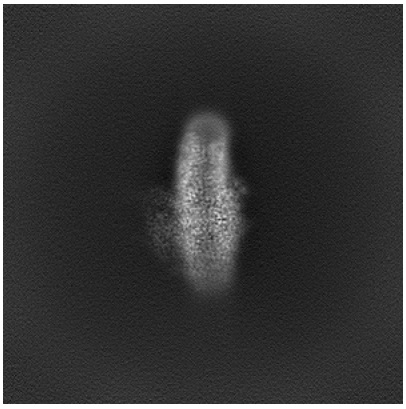
6.1.2 Raw map



X



Y

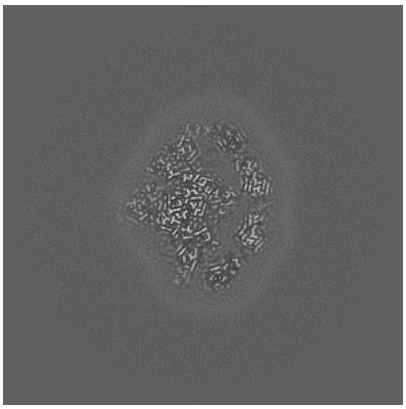


Z

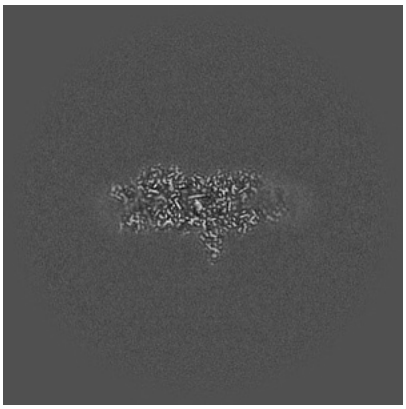
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

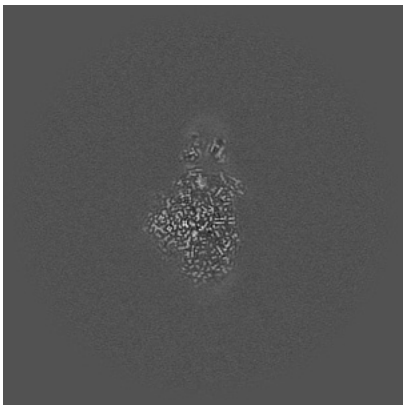
6.2.1 Primary map



X Index: 250

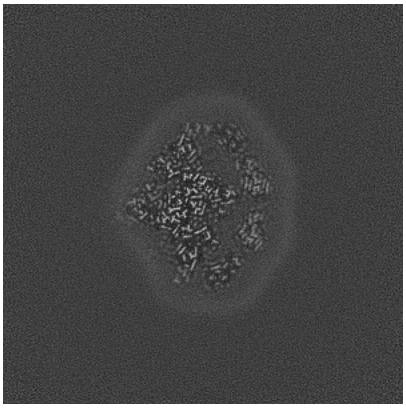


Y Index: 250

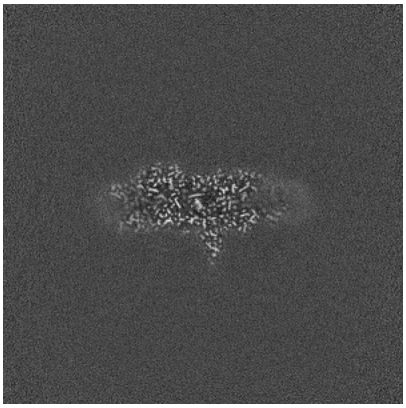


Z Index: 250

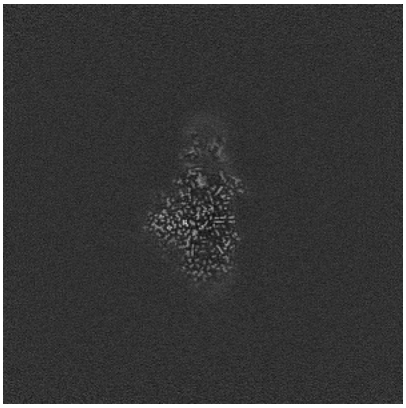
6.2.2 Raw map



X Index: 250



Y Index: 250

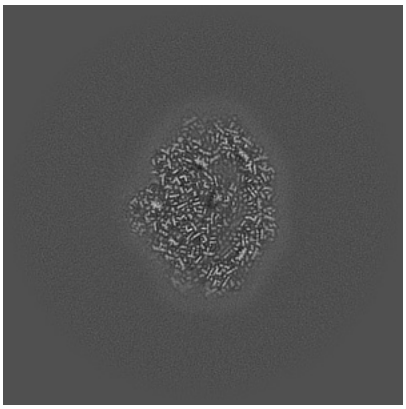


Z Index: 250

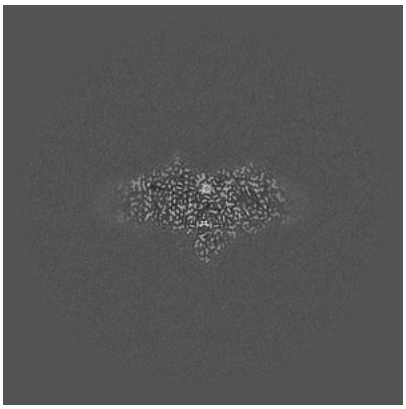
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

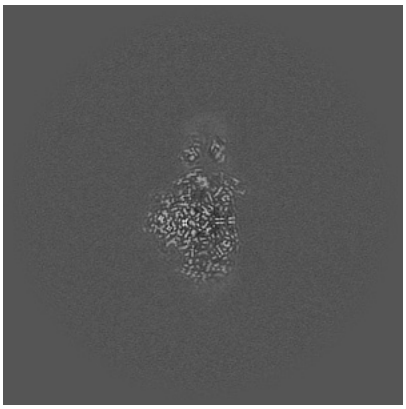
6.3.1 Primary map



X Index: 236

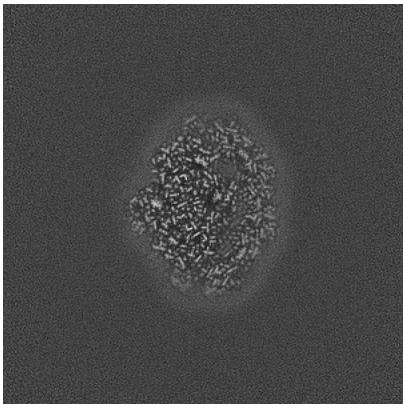


Y Index: 227

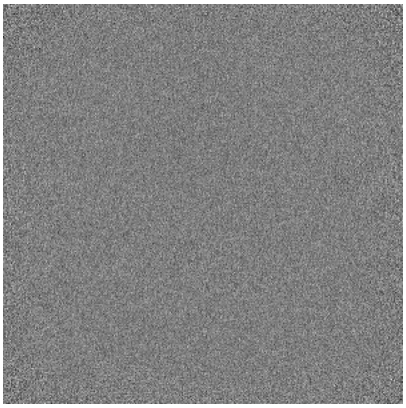


Z Index: 251

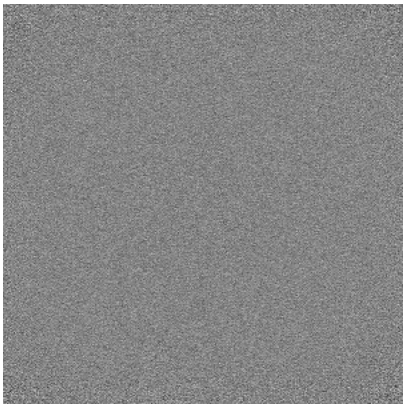
6.3.2 Raw map



X Index: 236



Y Index: 0

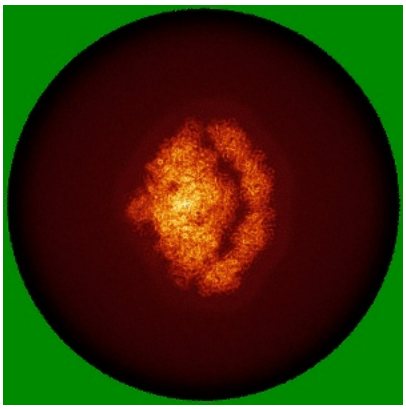


Z Index: 0

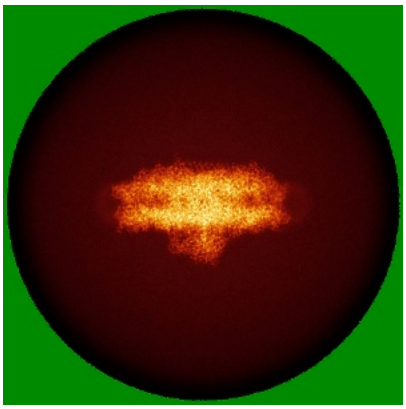
The images above show the largest variance slices of the map in three orthogonal directions.

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

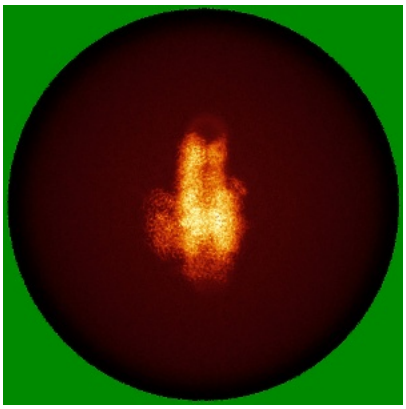
6.4.1 Primary map



X

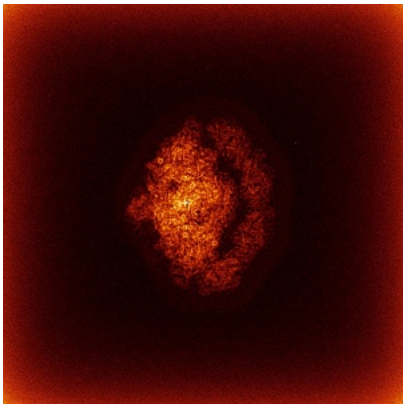


Y

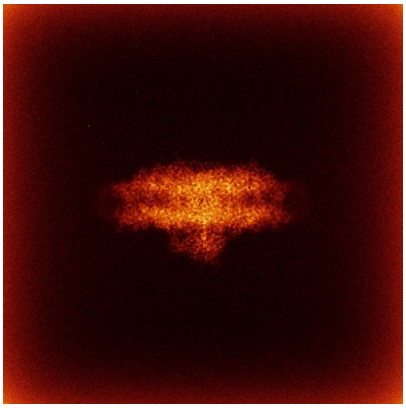


Z

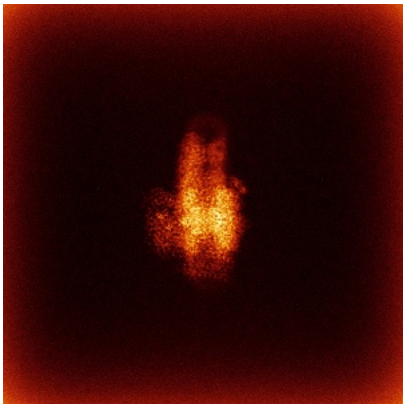
6.4.2 Raw map



X



Y



Z

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

6.5 Orthogonal surface views (i)

6.5.1 Primary map

X Y Z

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

6.5.2 Raw map

X Y Z

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

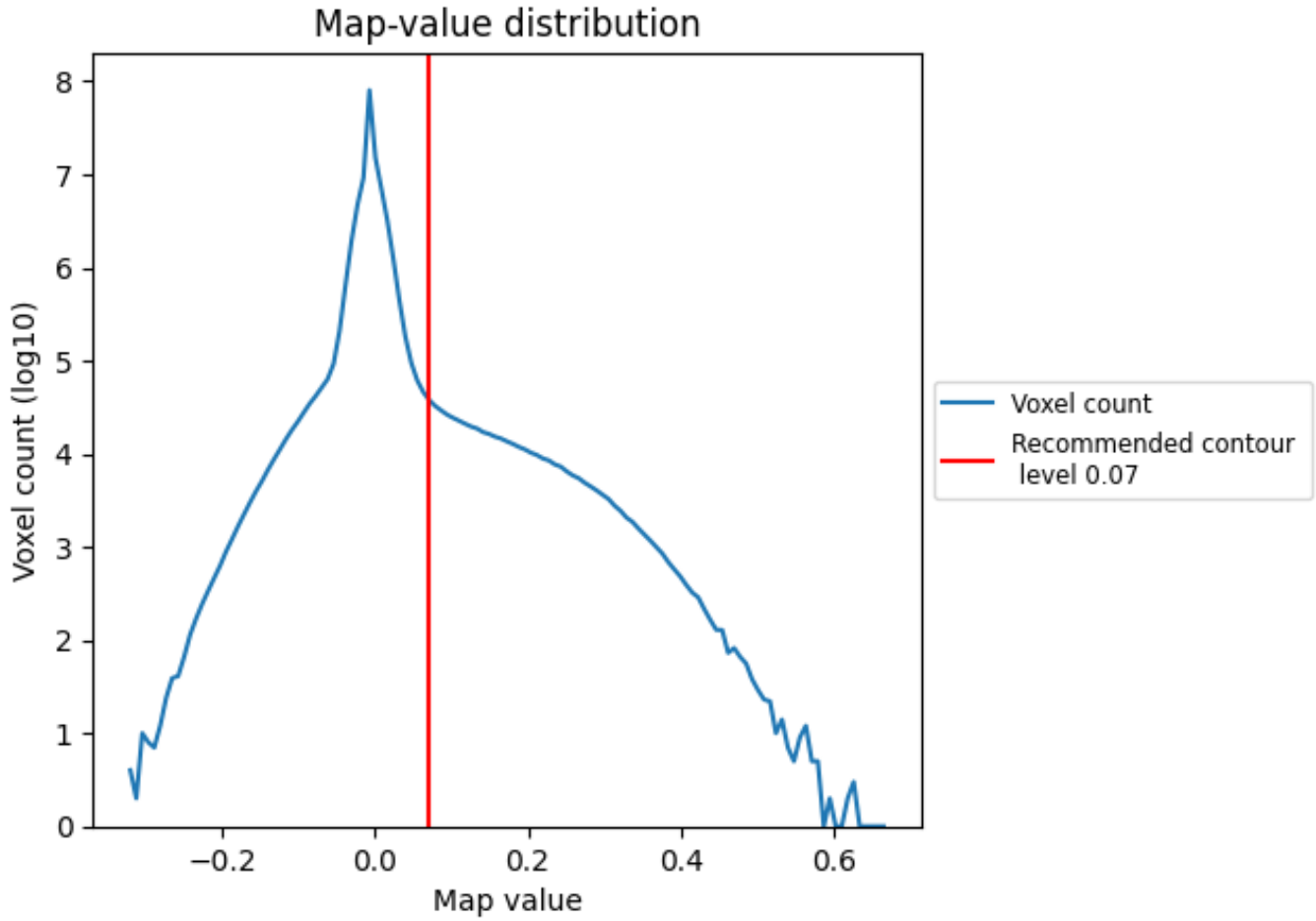
6.6 Mask visualisation (i)

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

7 Map analysis

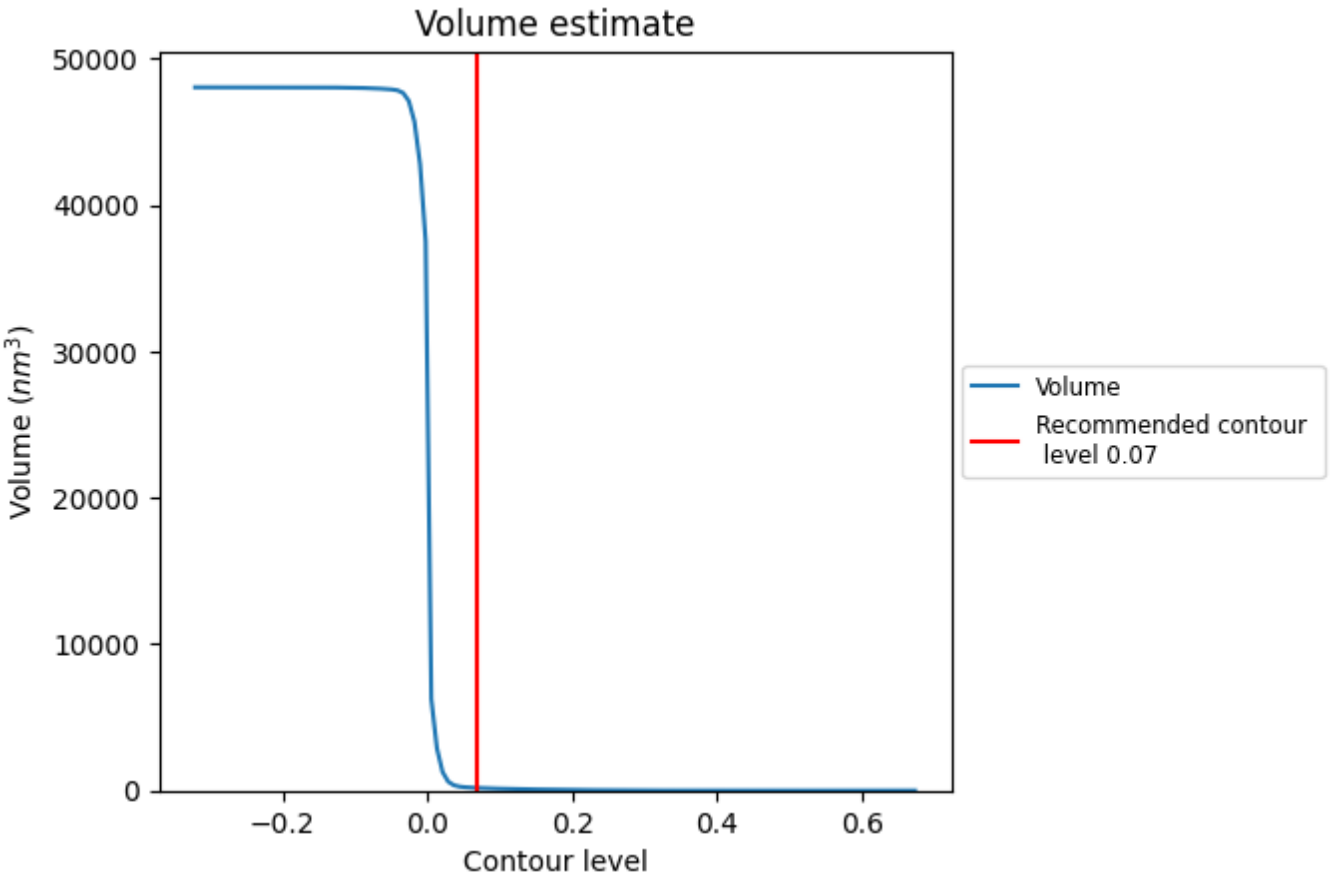
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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

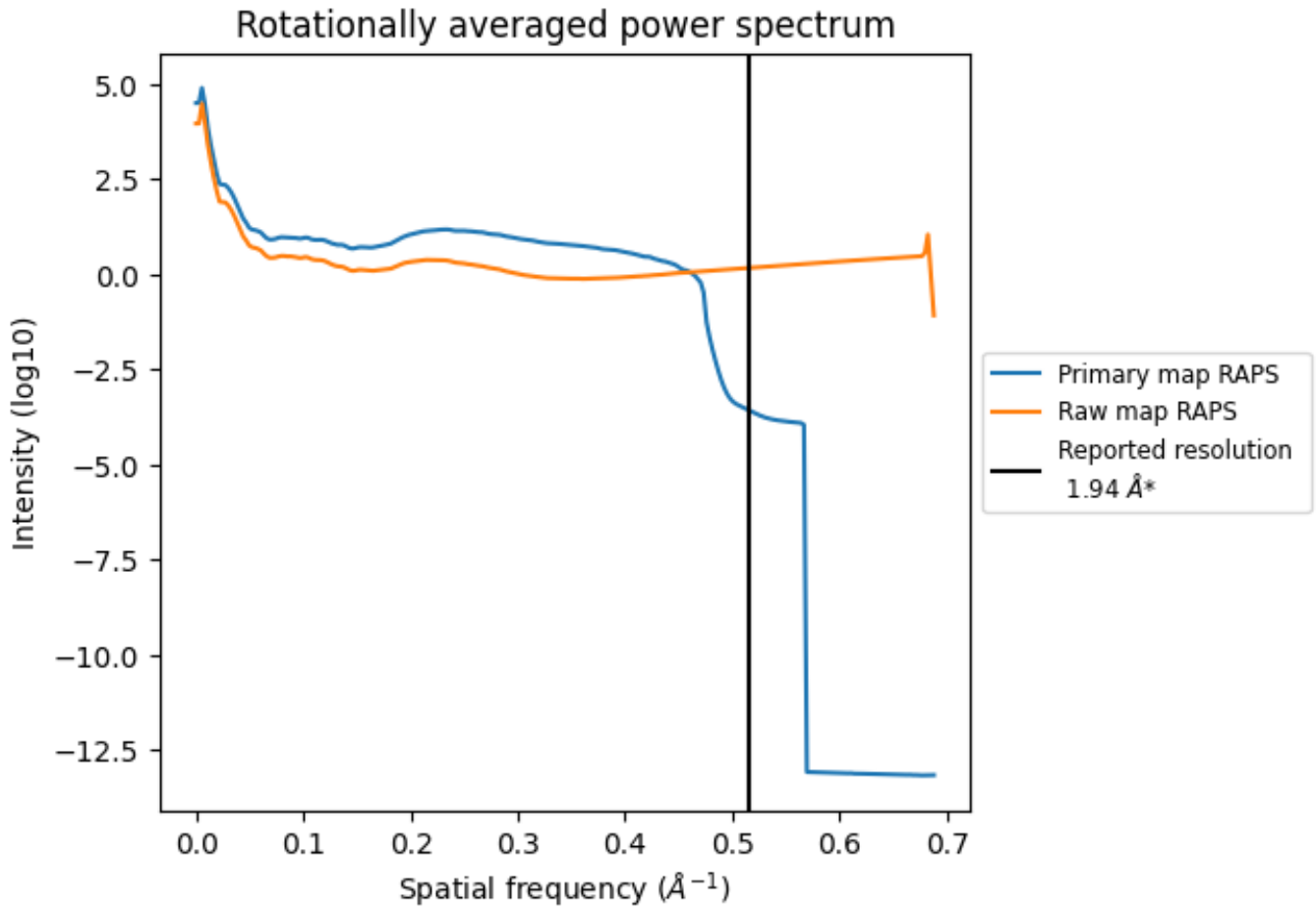
7.2 Volume estimate



The volume at the recommended contour level is 177 nm^3; this corresponds to an approximate mass of 159 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)

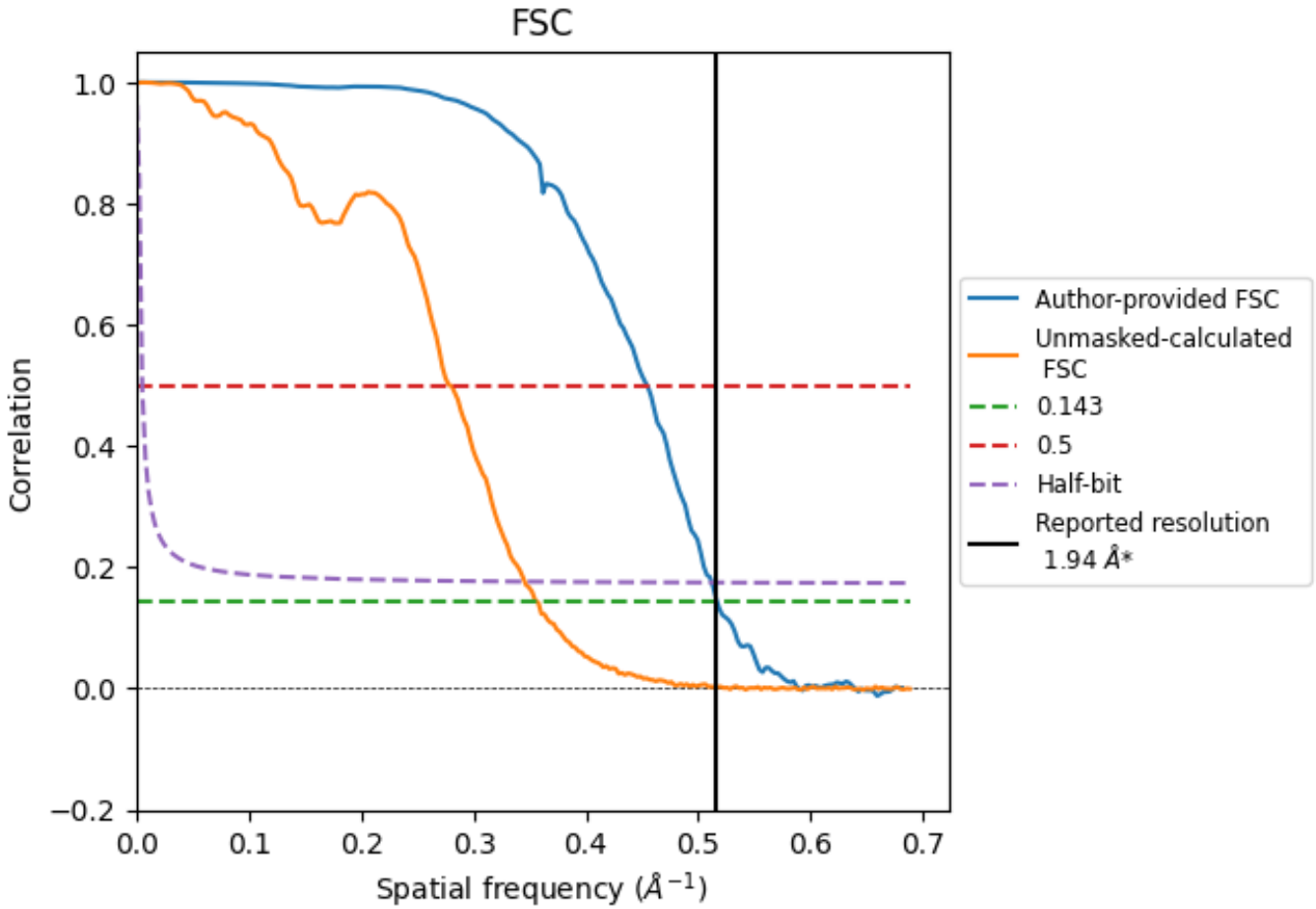


*Reported resolution corresponds to spatial frequency of 0.515 $Å^{-1}$

8 Fourier-Shell correlation

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

8.1 FSC



*Reported resolution corresponds to spatial frequency of 0.515 Å^{-1}

8.2 Resolution estimates (i)

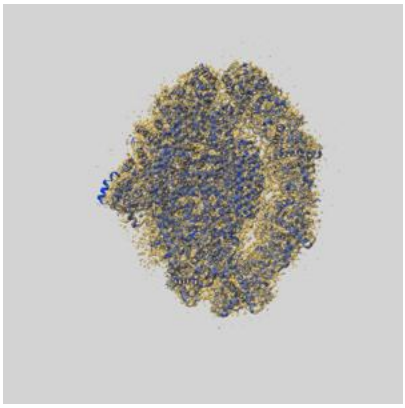
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	1.94	-	-
Author-provided FSC curve	1.94	2.20	1.95
Unmasked-calculated*	2.80	3.58	2.89

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 2.80 differs from the reported value 1.94 by more than 10 %

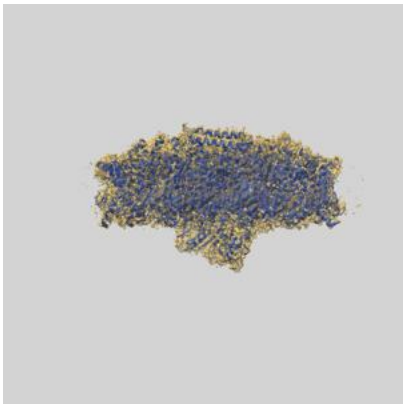
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-63404 and PDB model 9LUT. Per-residue inclusion information can be found in section 3 on page 27.

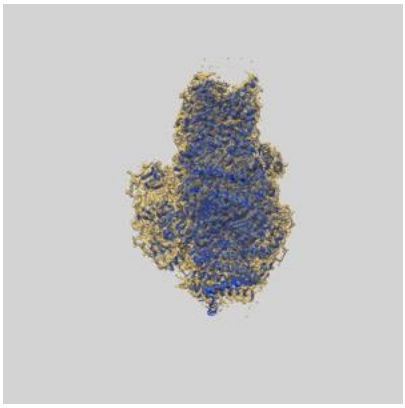
9.1 Map-model overlay



X



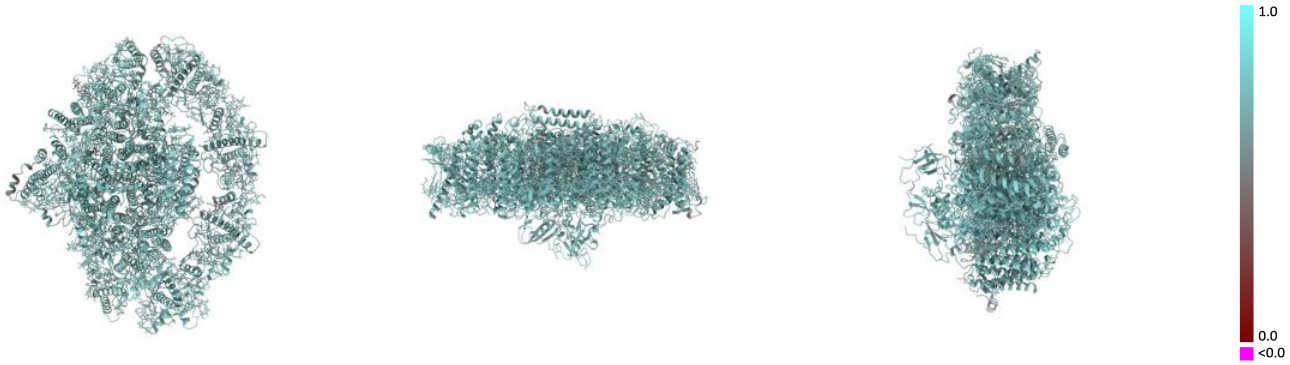
Y



Z

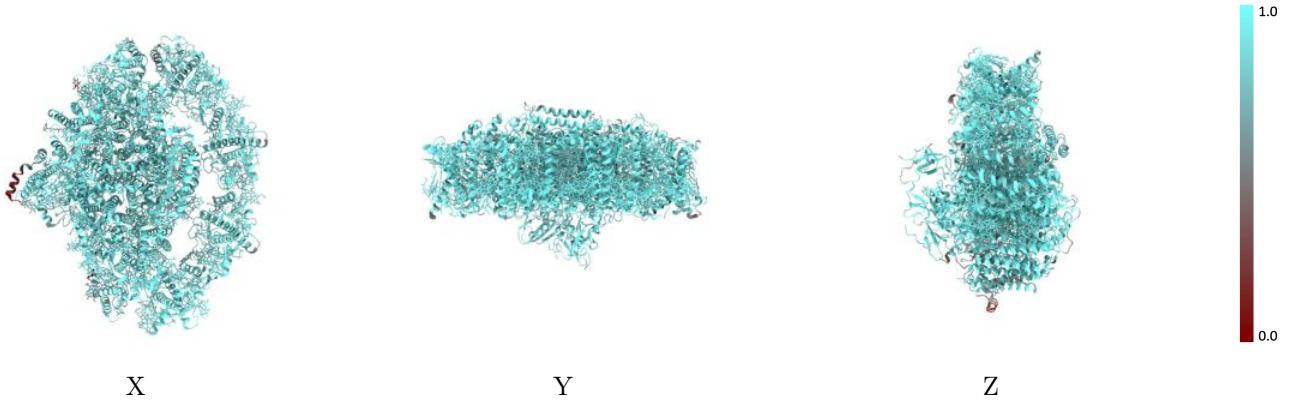
The images above show the 3D surface view of the map at the recommended contour level 0.07 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model (i)



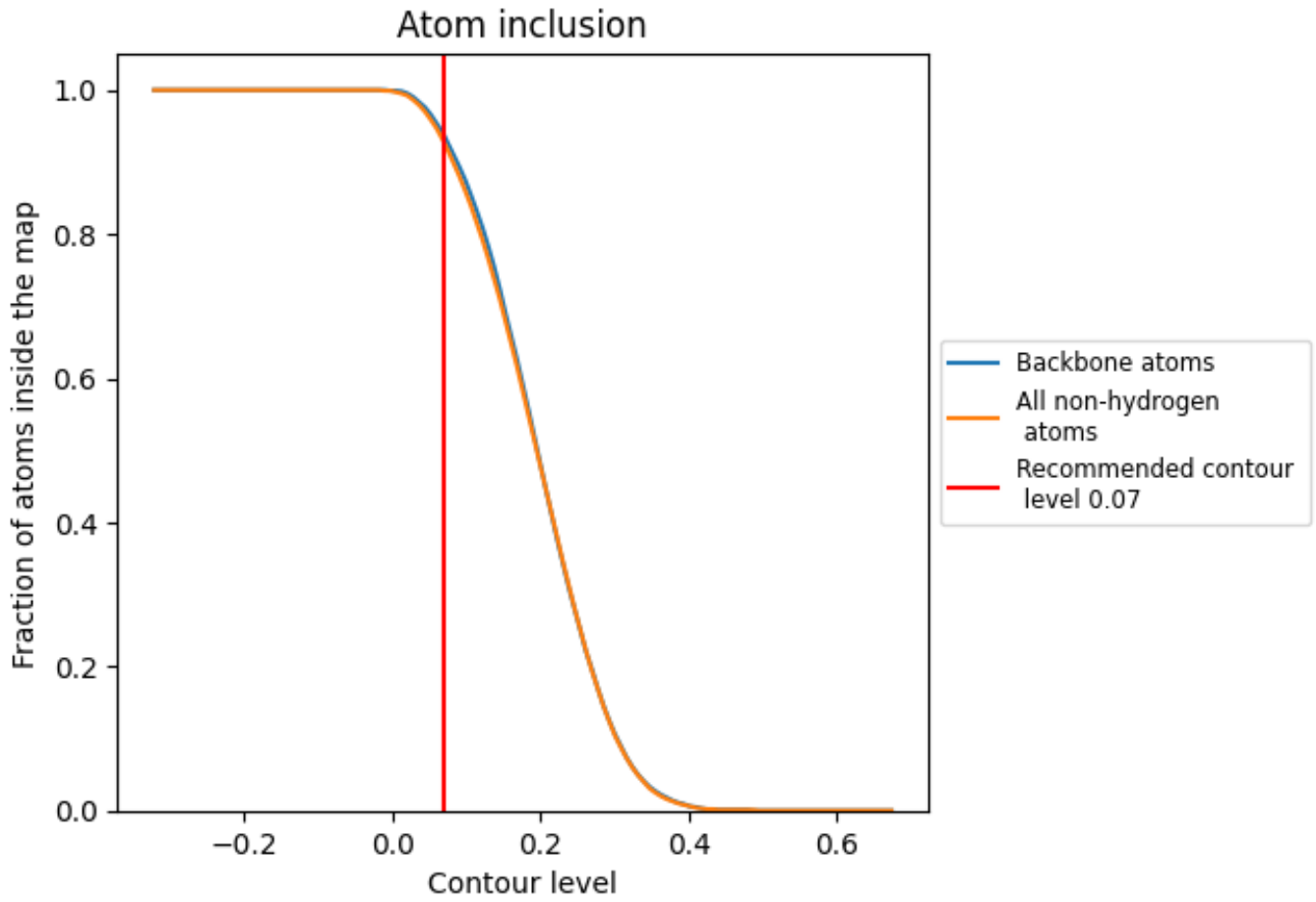
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.07).

9.4 Atom inclusion (i)



At the recommended contour level, 94% of all backbone atoms, 93% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.07) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9280	0.7010
2	0.9240	0.6830
3	0.9280	0.6930
5	0.9090	0.6680
6	0.8820	0.6520
A	0.9680	0.7270
B	0.9610	0.7210
C	0.9830	0.7350
D	0.9250	0.7020
E	0.9100	0.6980
F	0.9190	0.7020
G	0.8640	0.6730
H	0.5090	0.6040
I	0.9620	0.7000
J	0.9460	0.6980
K	0.7170	0.6180
L	0.9140	0.6820
M	0.8680	0.6720