wwPDB EM Validation Summary Report (i)

Mar 20, 2026 – 04:33 PM UTC

PDB ID	:	9I9L / pdb_00009i9l
EMDB ID	:	EMD-52762
Title	:	Structure of Far-Red Photosystem I from C. thermalis PCC 7203
Authors	:	Consoli, G.; Tufaill, F.; Murray, J.W.; Fantuzzi, A.; Rutherford, A.W.
Deposited on	:	2025-02-06
Resolution	:	1.89 Å(reported)

This is a wwPDB EM Validation Summary Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the (i) symbol.

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

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

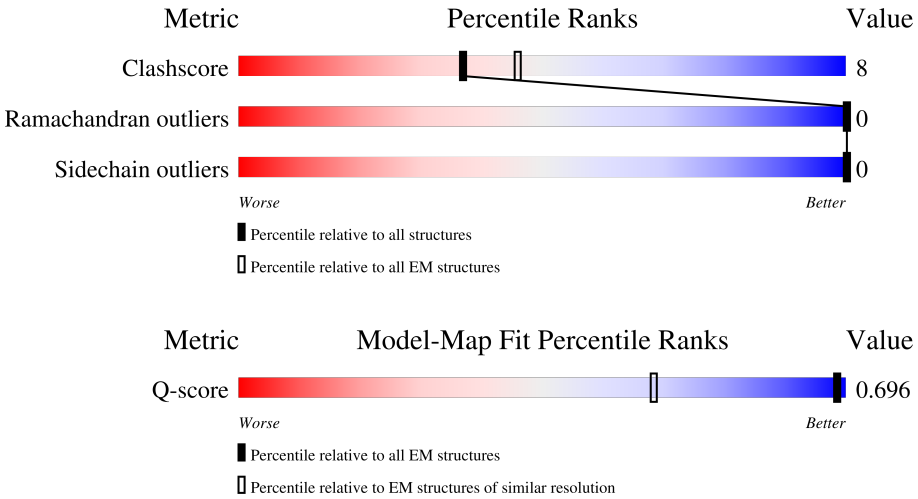
EMDB validation analysis	:	0.0.1.dev132
Mogul	:	2022.3.0, CSD as543be (2022)
MolProbity	:	4-5-2 with Phenix2.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics	:	202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

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 1.89 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	1004 (1.39 - 2.38)

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	A	782	81% 15% .
1	N	782	84% 12% .
1	a	782	83% 13% .
2	B	740	86% 14%

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Mol	Chain	Length	Quality of chain
2	O	740	88% 12%
2	b	740	89% 11%
3	C	81	90% 9%
3	P	81	95%
3	c	81	90% 9%
4	D	142	87% 11%
4	Q	142	84% 14%
4	d	142	91% 7%
5	E	66	89% 9%
5	R	66	89% 9%
5	e	66	92% 6%
6	F	161	73% 12% 15%
6	S	161	74% 11% 15%
6	f	161	75% 10% 15%
7	I	51	57% 25% 18%
7	T	51	63% 20% 18%
7	g	51	65% 18% 18%
8	J	46	83% 17%
8	U	46	80% 20%
8	h	46	85% 15%
9	K	80	12% 84% 10% 6%
9	V	80	11% 84% 10% 6%
9	i	80	10% 80% 14% 6%
10	L	183	84% 10% 6%
10	W	183	87% 7% 6%

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Mol	Chain	Length	Quality of chain
10	j	183	85% 9% 6%
11	M	32	84% 12%
11	Y	32	91% 6%
11	k	32	88% 9%
12	X	29	10% 97%
12	Z	29	14% 93% 7%
12	l	29	14% 90% 10%

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
13	CL0	A	801	X	-	-	-
13	CL0	N	801	X	-	-	-
13	CL0	a	801	X	-	-	-
14	F6C	A	802	X	-	-	-
14	F6C	A	824	X	-	-	-
14	F6C	A	826	X	-	-	-
14	F6C	A	856	X	-	-	-
14	F6C	B	832	X	-	-	-
14	F6C	B	839	X	-	-	-
14	F6C	L	201	X	-	-	-
14	F6C	L	204	X	-	-	-
14	F6C	N	802	X	-	-	-
14	F6C	N	824	X	-	-	-
14	F6C	N	826	X	-	-	-
14	F6C	N	856	X	-	-	-
14	F6C	O	832	X	-	-	-
14	F6C	O	839	X	-	-	-
14	F6C	W	201	X	-	-	-
14	F6C	W	204	X	-	-	-
14	F6C	a	802	X	-	-	-
14	F6C	a	824	X	-	-	-
14	F6C	a	826	X	-	-	-
14	F6C	a	855	X	-	-	-
14	F6C	b	832	X	-	-	-
14	F6C	b	839	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	F6C	j	201	X	-	-	-
14	F6C	j	204	X	-	-	-
15	CLA	A	803	X	-	-	-
15	CLA	A	804	X	-	-	-
15	CLA	A	805	X	-	-	-
15	CLA	A	806	X	-	-	-
15	CLA	A	807	X	-	-	-
15	CLA	A	808	X	-	-	-
15	CLA	A	809	X	-	-	-
15	CLA	A	810	X	-	-	-
15	CLA	A	811	X	-	-	-
15	CLA	A	812	X	-	-	-
15	CLA	A	813	X	-	-	-
15	CLA	A	814	X	-	-	-
15	CLA	A	815	X	-	-	-
15	CLA	A	816	X	-	-	-
15	CLA	A	817	X	-	-	-
15	CLA	A	818	X	-	-	-
15	CLA	A	819	X	-	-	-
15	CLA	A	820	X	-	-	-
15	CLA	A	821	X	-	-	-
15	CLA	A	822	X	-	-	-
15	CLA	A	823	X	-	-	-
15	CLA	A	825	X	-	-	-
15	CLA	A	827	X	-	-	-
15	CLA	A	828	X	-	-	-
15	CLA	A	829	X	-	-	-
15	CLA	A	830	X	-	-	-
15	CLA	A	831	X	-	-	-
15	CLA	A	832	X	-	-	-
15	CLA	A	833	X	-	-	-
15	CLA	A	834	X	-	-	-
15	CLA	A	835	X	-	-	-
15	CLA	A	836	X	-	-	-
15	CLA	A	837	X	-	-	-
15	CLA	A	838	X	-	-	-
15	CLA	A	839	X	-	-	-
15	CLA	A	840	X	-	-	-
15	CLA	A	841	X	-	-	-
15	CLA	A	842	X	-	-	-
15	CLA	B	801	X	-	-	-
15	CLA	B	802	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
15	CLA	B	803	X	-	-	-
15	CLA	B	804	X	-	-	-
15	CLA	B	805	X	-	-	-
15	CLA	B	806	X	-	-	-
15	CLA	B	807	X	-	-	-
15	CLA	B	808	X	-	-	-
15	CLA	B	809	X	-	-	-
15	CLA	B	810	X	-	-	-
15	CLA	B	811	X	-	-	-
15	CLA	B	813	X	-	-	-
15	CLA	B	814	X	-	-	-
15	CLA	B	815	X	-	-	-
15	CLA	B	816	X	-	-	-
15	CLA	B	817	X	-	-	-
15	CLA	B	818	X	-	-	-
15	CLA	B	819	X	-	-	-
15	CLA	B	820	X	-	-	-
15	CLA	B	821	X	-	-	-
15	CLA	B	822	X	-	-	-
15	CLA	B	823	X	-	-	-
15	CLA	B	824	X	-	-	-
15	CLA	B	825	X	-	-	-
15	CLA	B	826	X	-	-	-
15	CLA	B	827	X	-	-	-
15	CLA	B	828	X	-	-	-
15	CLA	B	829	X	-	-	-
15	CLA	B	830	X	-	-	-
15	CLA	B	831	X	-	-	-
15	CLA	B	833	X	-	-	-
15	CLA	B	834	X	-	-	-
15	CLA	B	835	X	-	-	-
15	CLA	B	836	X	-	-	-
15	CLA	B	837	X	-	-	-
15	CLA	B	838	X	-	-	-
15	CLA	B	840	X	-	-	-
15	CLA	F	201	X	-	-	-
15	CLA	K	102	X	-	-	-
15	CLA	K	103	X	-	-	-
15	CLA	L	202	X	-	-	-
15	CLA	L	203	X	-	-	-
15	CLA	N	803	X	-	-	-
15	CLA	N	804	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
15	CLA	N	805	X	-	-	-
15	CLA	N	806	X	-	-	-
15	CLA	N	807	X	-	-	-
15	CLA	N	808	X	-	-	-
15	CLA	N	809	X	-	-	-
15	CLA	N	810	X	-	-	-
15	CLA	N	811	X	-	-	-
15	CLA	N	812	X	-	-	-
15	CLA	N	813	X	-	-	-
15	CLA	N	814	X	-	-	-
15	CLA	N	815	X	-	-	-
15	CLA	N	816	X	-	-	-
15	CLA	N	817	X	-	-	-
15	CLA	N	818	X	-	-	-
15	CLA	N	819	X	-	-	-
15	CLA	N	820	X	-	-	-
15	CLA	N	821	X	-	-	-
15	CLA	N	822	X	-	-	-
15	CLA	N	823	X	-	-	-
15	CLA	N	825	X	-	-	-
15	CLA	N	827	X	-	-	-
15	CLA	N	828	X	-	-	-
15	CLA	N	829	X	-	-	-
15	CLA	N	830	X	-	-	-
15	CLA	N	831	X	-	-	-
15	CLA	N	832	X	-	-	-
15	CLA	N	833	X	-	-	-
15	CLA	N	834	X	-	-	-
15	CLA	N	835	X	-	-	-
15	CLA	N	836	X	-	-	-
15	CLA	N	837	X	-	-	-
15	CLA	N	838	X	-	-	-
15	CLA	N	839	X	-	-	-
15	CLA	N	840	X	-	-	-
15	CLA	N	841	X	-	-	-
15	CLA	N	842	X	-	-	-
15	CLA	O	801	X	-	-	-
15	CLA	O	802	X	-	-	-
15	CLA	O	803	X	-	-	-
15	CLA	O	804	X	-	-	-
15	CLA	O	805	X	-	-	-
15	CLA	O	806	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
15	CLA	O	807	X	-	-	-
15	CLA	O	808	X	-	-	-
15	CLA	O	809	X	-	-	-
15	CLA	O	810	X	-	-	-
15	CLA	O	811	X	-	-	-
15	CLA	O	813	X	-	-	-
15	CLA	O	814	X	-	-	-
15	CLA	O	815	X	-	-	-
15	CLA	O	816	X	-	-	-
15	CLA	O	817	X	-	-	-
15	CLA	O	818	X	-	-	-
15	CLA	O	819	X	-	-	-
15	CLA	O	820	X	-	-	-
15	CLA	O	821	X	-	-	-
15	CLA	O	822	X	-	-	-
15	CLA	O	823	X	-	-	-
15	CLA	O	824	X	-	-	-
15	CLA	O	825	X	-	-	-
15	CLA	O	826	X	-	-	-
15	CLA	O	827	X	-	-	-
15	CLA	O	828	X	-	-	-
15	CLA	O	829	X	-	-	-
15	CLA	O	830	X	-	-	-
15	CLA	O	831	X	-	-	-
15	CLA	O	833	X	-	-	-
15	CLA	O	834	X	-	-	-
15	CLA	O	835	X	-	-	-
15	CLA	O	836	X	-	-	-
15	CLA	O	837	X	-	-	-
15	CLA	O	838	X	-	-	-
15	CLA	O	840	X	-	-	-
15	CLA	S	201	X	-	-	-
15	CLA	V	102	X	-	-	-
15	CLA	V	103	X	-	-	-
15	CLA	W	202	X	-	-	-
15	CLA	W	203	X	-	-	-
15	CLA	X	102	X	-	-	-
15	CLA	Z	102	X	-	-	-
15	CLA	a	803	X	-	-	-
15	CLA	a	804	X	-	-	-
15	CLA	a	805	X	-	-	-
15	CLA	a	806	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
15	CLA	a	807	X	-	-	-
15	CLA	a	808	X	-	-	-
15	CLA	a	809	X	-	-	-
15	CLA	a	810	X	-	-	-
15	CLA	a	811	X	-	-	-
15	CLA	a	812	X	-	-	-
15	CLA	a	813	X	-	-	-
15	CLA	a	814	X	-	-	-
15	CLA	a	815	X	-	-	-
15	CLA	a	816	X	-	-	-
15	CLA	a	817	X	-	-	-
15	CLA	a	818	X	-	-	-
15	CLA	a	819	X	-	-	-
15	CLA	a	820	X	-	-	-
15	CLA	a	821	X	-	-	-
15	CLA	a	822	X	-	-	-
15	CLA	a	823	X	-	-	-
15	CLA	a	825	X	-	-	-
15	CLA	a	827	X	-	-	-
15	CLA	a	828	X	-	-	-
15	CLA	a	829	X	-	-	-
15	CLA	a	830	X	-	-	-
15	CLA	a	831	X	-	-	-
15	CLA	a	832	X	-	-	-
15	CLA	a	833	X	-	-	-
15	CLA	a	834	X	-	-	-
15	CLA	a	835	X	-	-	-
15	CLA	a	836	X	-	-	-
15	CLA	a	837	X	-	-	-
15	CLA	a	838	X	-	-	-
15	CLA	a	839	X	-	-	-
15	CLA	a	840	X	-	-	-
15	CLA	a	841	X	-	-	-
15	CLA	a	842	X	-	-	-
15	CLA	b	801	X	-	-	-
15	CLA	b	802	X	-	-	-
15	CLA	b	803	X	-	-	-
15	CLA	b	804	X	-	-	-
15	CLA	b	805	X	-	-	-
15	CLA	b	806	X	-	-	-
15	CLA	b	807	X	-	-	-
15	CLA	b	808	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
15	CLA	b	809	X	-	-	-
15	CLA	b	810	X	-	-	-
15	CLA	b	811	X	-	-	-
15	CLA	b	813	X	-	-	-
15	CLA	b	814	X	-	-	-
15	CLA	b	815	X	-	-	-
15	CLA	b	816	X	-	-	-
15	CLA	b	817	X	-	-	-
15	CLA	b	818	X	-	-	-
15	CLA	b	819	X	-	-	-
15	CLA	b	820	X	-	-	-
15	CLA	b	821	X	-	-	-
15	CLA	b	822	X	-	-	-
15	CLA	b	823	X	-	-	-
15	CLA	b	824	X	-	-	-
15	CLA	b	825	X	-	-	-
15	CLA	b	826	X	-	-	-
15	CLA	b	827	X	-	-	-
15	CLA	b	828	X	-	-	-
15	CLA	b	829	X	-	-	-
15	CLA	b	830	X	-	-	-
15	CLA	b	831	X	-	-	-
15	CLA	b	833	X	-	-	-
15	CLA	b	834	X	-	-	-
15	CLA	b	835	X	-	-	-
15	CLA	b	836	X	-	-	-
15	CLA	b	837	X	-	-	-
15	CLA	b	838	X	-	-	-
15	CLA	b	840	X	-	-	-
15	CLA	f	201	X	-	-	-
15	CLA	i	102	X	-	-	-
15	CLA	i	103	X	-	-	-
15	CLA	j	202	X	-	-	-
15	CLA	j	203	X	-	-	-
15	CLA	l	102	X	-	-	-

2 Entry composition (i)

There are 24 unique types of molecules in this entry. The entry contains 75954 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 Photosystem I P700 chlorophyll a apoprotein A1.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	753	Total	C	N	O	S	0	0
			5900	3869	1012	988	31		
1	N	753	Total	C	N	O	S	0	0
			5900	3869	1012	988	31		
1	a	753	Total	C	N	O	S	0	0
			5900	3869	1012	988	31		

- Molecule 2 is a protein called Photosystem I P700 chlorophyll a apoprotein A2.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	739	Total	C	N	O	S	0	0
			5913	3897	994	1004	18		
2	O	739	Total	C	N	O	S	0	0
			5913	3897	994	1004	18		
2	b	739	Total	C	N	O	S	0	0
			5913	3897	994	1004	18		

- Molecule 3 is a protein called Photosystem I iron-sulfur center.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	C	80	Total	C	N	O	S	0	0
			600	368	103	118	11		
3	P	80	Total	C	N	O	S	0	0
			600	368	103	118	11		
3	c	80	Total	C	N	O	S	0	0
			600	368	103	118	11		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
4	D	139	Total	C	N	O	S	0	0
			1090	692	193	202	3		

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Mol	Chain	Residues	Atoms					AltConf	Trace
4	Q	139	Total	C	N	O	S	0	0
			1090	692	193	202	3		
4	d	139	Total	C	N	O	S	0	0
			1090	692	193	202	3		

- Molecule 5 is a protein called Photosystem I reaction center subunit IV.

Mol	Chain	Residues	Atoms				AltConf	Trace
5	E	65	Total	C	N	O	0	0
			530	341	92	97		
5	R	65	Total	C	N	O	0	0
			530	341	92	97		
5	e	65	Total	C	N	O	0	0
			530	341	92	97		

- Molecule 6 is a protein called Photosystem I reaction center subunit III.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	F	137	Total	C	N	O	S	0	0
			1075	698	176	197	4		
6	S	137	Total	C	N	O	S	0	0
			1075	698	176	197	4		
6	f	137	Total	C	N	O	S	0	0
			1075	698	176	197	4		

- Molecule 7 is a protein called Photosystem I reaction center subunit VIII.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	I	42	Total	C	N	O	S	0	0
			351	247	47	55	2		
7	T	42	Total	C	N	O	S	0	0
			351	247	47	55	2		
7	g	42	Total	C	N	O	S	0	0
			351	247	47	55	2		

- Molecule 8 is a protein called Photosystem I reaction center subunit IX.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	J	46	Total	C	N	O	S	0	0
			373	256	54	59	4		
8	U	46	Total	C	N	O	S	0	0
			373	256	54	59	4		

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Mol	Chain	Residues	Atoms					AltConf	Trace
8	h	46	Total	C	N	O	S	0	0
			373	256	54	59	4		

- Molecule 9 is a protein called Photosystem I reaction center subunit PsaK.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	K	75	Total	C	N	O	S	0	0
			539	356	88	94	1		
9	V	75	Total	C	N	O	S	0	0
			539	356	88	94	1		
9	i	75	Total	C	N	O	S	0	0
			539	356	88	94	1		

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
K	12	MET	-	initiating methionine	UNP K9TX25
V	12	MET	-	initiating methionine	UNP K9TX25
i	12	MET	-	initiating methionine	UNP K9TX25

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

Mol	Chain	Residues	Atoms					AltConf	Trace
10	L	172	Total	C	N	O	S	0	0
			1309	839	224	242	4		
10	W	172	Total	C	N	O	S	0	0
			1309	839	224	242	4		
10	j	172	Total	C	N	O	S	0	0
			1309	839	224	242	4		

- Molecule 11 is a protein called Photosystem I reaction center subunit XII.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	M	31	Total	C	N	O	S	0	0
			240	160	37	42	1		
11	Y	31	Total	C	N	O	S	0	0
			240	160	37	42	1		
11	k	31	Total	C	N	O	S	0	0
			240	160	37	42	1		

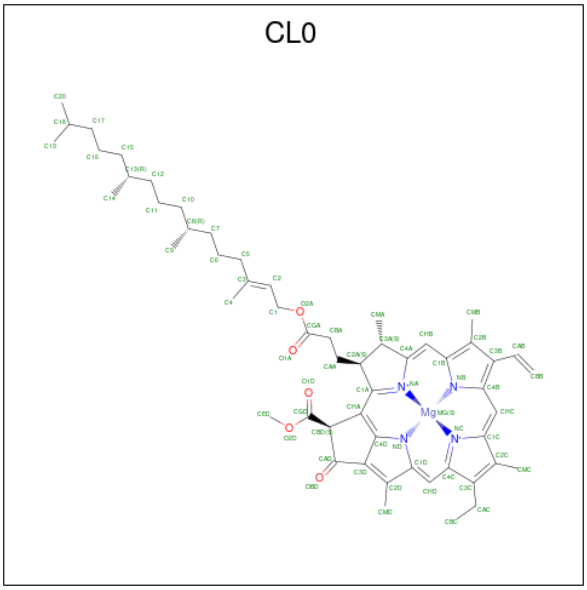
There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
M	0	MET	-	initiating methionine	UNP K9TSY6
Y	0	MET	-	initiating methionine	UNP K9TSY6
k	0	MET	-	initiating methionine	UNP K9TSY6

- Molecule 12 is a protein called Photosystem one PsaX.

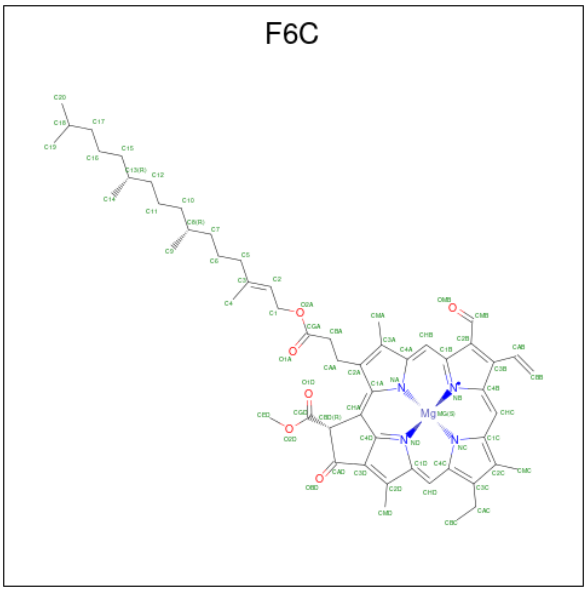
Mol	Chain	Residues	Atoms				AltConf	Trace
12	X	29	Total 227	C 157	N 36	O 34	0	0
12	Z	29	Total 227	C 157	N 36	O 34	0	0
12	l	29	Total 227	C 157	N 36	O 34	0	0

- Molecule 13 is CHLOROPHYLL A ISOMER (CCD ID: CL0) (formula: $C_{55}H_{72}MgN_4O_5$).



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

- Molecule 14 is Chlorophyll F (CCD ID: F6C) (formula: $C_{55}H_{68}MgN_4O_6$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
14	A	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	A	1	Total	C	Mg	N	O	0
			52	41	1	4	6	
14	A	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	A	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	B	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	B	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	L	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	L	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	N	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	N	1	Total	C	Mg	N	O	0
			52	41	1	4	6	
14	N	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	N	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	O	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	O	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

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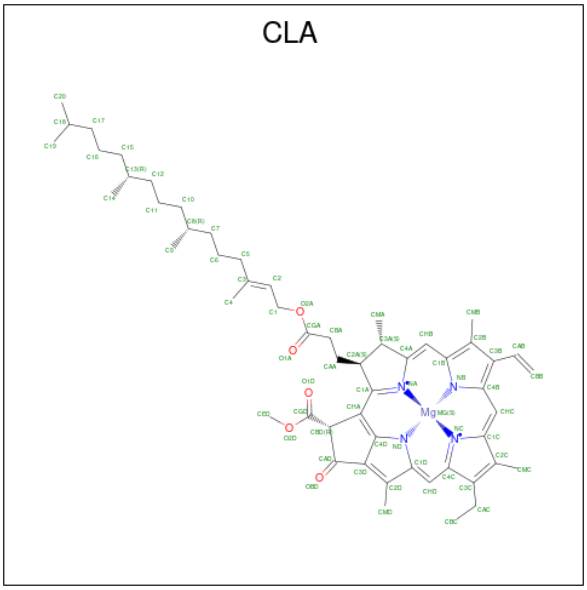
Mol	Chain	Residues	Atoms					AltConf
14	W	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	W	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	a	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	a	1	Total	C	Mg	N	O	0
			52	41	1	4	6	
14	a	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	a	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	b	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	b	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	j	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	j	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

- Molecule 15 is CHLOROPHYLL A (CCD ID: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



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

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Mol	Chain	Residues	Atoms					AltConf
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
15	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			62	52	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	F	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	K	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	K	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
15	L	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	L	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	X	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			60	50	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
15	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms	AltConf
15	N	1	Total C Mg N O 60 50 1 4 5	0
15	N	1	Total C Mg N O 65 55 1 4 5	0
15	N	1	Total C Mg N O 65 55 1 4 5	0
15	N	1	Total C Mg N O 50 40 1 4 5	0
15	N	1	Total C Mg N O 55 45 1 4 5	0
15	N	1	Total C Mg N O 65 55 1 4 5	0
15	N	1	Total C Mg N O 65 55 1 4 5	0
15	N	1	Total C Mg N O 54 44 1 4 5	0
15	N	1	Total C Mg N O 51 41 1 4 5	0
15	N	1	Total C Mg N O 55 45 1 4 5	0
15	N	1	Total C Mg N O 65 55 1 4 5	0
15	N	1	Total C Mg N O 50 40 1 4 5	0
15	N	1	Total C Mg N O 65 55 1 4 5	0
15	N	1	Total C Mg N O 65 55 1 4 5	0
15	O	1	Total C Mg N O 65 55 1 4 5	0
15	O	1	Total C Mg N O 65 55 1 4 5	0
15	O	1	Total C Mg N O 65 55 1 4 5	0
15	O	1	Total C Mg N O 65 55 1 4 5	0
15	O	1	Total C Mg N O 65 55 1 4 5	0
15	O	1	Total C Mg N O 65 55 1 4 5	0
15	O	1	Total C Mg N O 65 55 1 4 5	0

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Mol	Chain	Residues	Atoms					AltConf
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			62	52	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	O	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	S	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	V	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	V	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
15	W	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	W	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	Z	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
15	a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
15	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
15	a	1	Total 50	C 40	Mg 1	N 4	O 5	0
15	a	1	Total 55	C 45	Mg 1	N 4	O 5	0
15	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
15	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
15	a	1	Total 54	C 44	Mg 1	N 4	O 5	0
15	a	1	Total 51	C 41	Mg 1	N 4	O 5	0
15	a	1	Total 55	C 45	Mg 1	N 4	O 5	0
15	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
15	a	1	Total 50	C 40	Mg 1	N 4	O 5	0
15	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
15	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
15	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
15	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
15	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
15	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
15	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
15	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
15	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
15	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
15	b	1	Total 65	C 55	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			62	52	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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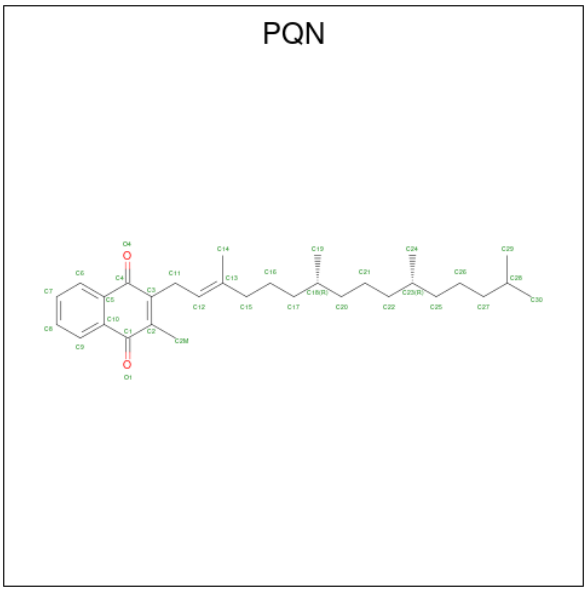
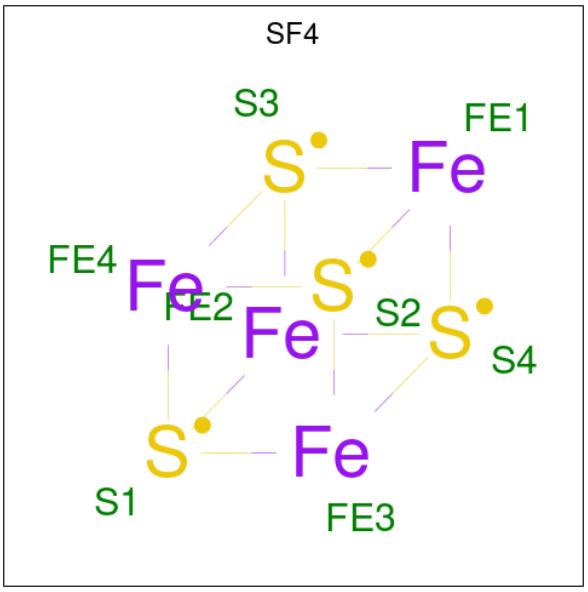
Mol	Chain	Residues	Atoms					AltConf
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	f	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	i	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
15	i	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
15	j	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
15	j	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
15	l	1	Total	C	Mg	N	O	0
			55	45	1	4	5	

- Molecule 16 is PHYLLOQUINONE (CCD ID: PQN) (formula: $C_{31}H_{46}O_2$).



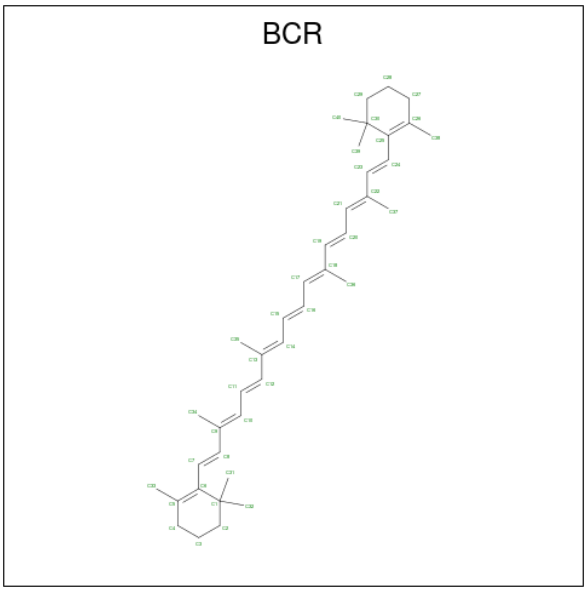
Mol	Chain	Residues	Atoms	AltConf
16	A	1	Total C O 33 31 2	0
16	B	1	Total C O 33 31 2	0
16	N	1	Total C O 33 31 2	0
16	O	1	Total C O 33 31 2	0
16	a	1	Total C O 33 31 2	0
16	b	1	Total C O 33 31 2	0

- Molecule 17 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms	AltConf
17	A	1	Total Fe S 8 4 4	0
17	C	1	Total Fe S 8 4 4	0
17	C	1	Total Fe S 8 4 4	0
17	N	1	Total Fe S 8 4 4	0
17	P	1	Total Fe S 8 4 4	0
17	P	1	Total Fe S 8 4 4	0
17	a	1	Total Fe S 8 4 4	0
17	c	1	Total Fe S 8 4 4	0
17	c	1	Total Fe S 8 4 4	0

- Molecule 18 is BETA-CAROTENE (CCD ID: BCR) (formula: $C_{40}H_{56}$).



Mol	Chain	Residues	Atoms	AltConf
18	A	1	Total C 40 40	0
18	A	1	Total C 40 40	0
18	A	1	Total C 40 40	0
18	A	1	Total C 40 40	0
18	A	1	Total C 40 40	0
18	A	1	Total C 40 40	0
18	B	1	Total C 40 40	0
18	B	1	Total C 40 40	0
18	B	1	Total C 40 40	0
18	B	1	Total C 40 40	0
18	B	1	Total C 40 40	0
18	B	1	Total C 40 40	0
18	F	1	Total C 40 40	0
18	F	1	Total C 40 40	0

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Mol	Chain	Residues	Atoms	AltConf
18	I	1	Total C 40 40	0
18	I	1	Total C 40 40	0
18	J	1	Total C 40 40	0
18	J	1	Total C 40 40	0
18	K	1	Total C 25 25	0
18	L	1	Total C 40 40	0
18	L	1	Total C 40 40	0
18	L	1	Total C 40 40	0
18	M	1	Total C 40 40	0
18	N	1	Total C 40 40	0
18	N	1	Total C 40 40	0
18	N	1	Total C 40 40	0
18	N	1	Total C 40 40	0
18	N	1	Total C 40 40	0
18	N	1	Total C 40 40	0
18	O	1	Total C 40 40	0
18	O	1	Total C 40 40	0
18	O	1	Total C 40 40	0
18	O	1	Total C 40 40	0
18	O	1	Total C 40 40	0
18	O	1	Total C 40 40	0

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Mol	Chain	Residues	Atoms	AltConf
18	O	1	Total C 40 40	0
18	S	1	Total C 40 40	0
18	T	1	Total C 40 40	0
18	T	1	Total C 40 40	0
18	U	1	Total C 40 40	0
18	U	1	Total C 40 40	0
18	V	1	Total C 25 25	0
18	W	1	Total C 40 40	0
18	W	1	Total C 40 40	0
18	Y	1	Total C 40 40	0
18	a	1	Total C 40 40	0
18	a	1	Total C 40 40	0
18	a	1	Total C 40 40	0
18	a	1	Total C 40 40	0
18	a	1	Total C 40 40	0
18	a	1	Total C 40 40	0
18	b	1	Total C 40 40	0
18	b	1	Total C 40 40	0
18	b	1	Total C 40 40	0
18	b	1	Total C 40 40	0
18	b	1	Total C 40 40	0

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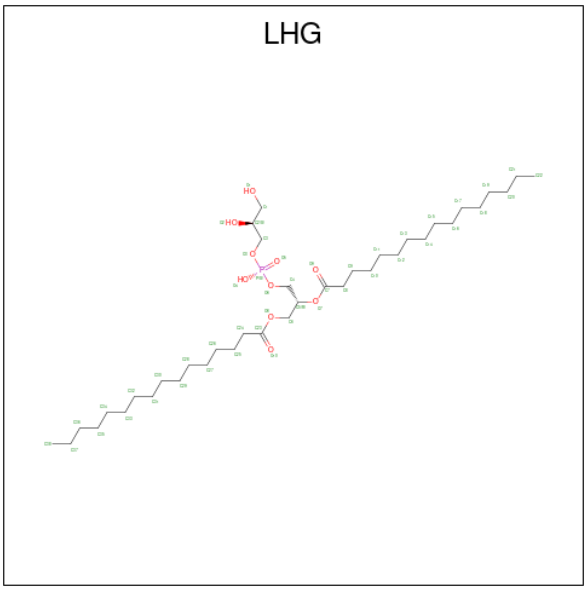
Mol	Chain	Residues	Atoms	AltConf
18	b	1	Total C 40 40	0
18	b	1	Total C 40 40	0
18	f	1	Total C 40 40	0
18	g	1	Total C 40 40	0
18	g	1	Total C 40 40	0
18	h	1	Total C 40 40	0
18	h	1	Total C 40 40	0
18	i	1	Total C 25 25	0
18	j	1	Total C 40 40	0
18	k	1	Total C 40 40	0

- Molecule 19 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: $C_{38}H_{75}O_{10}P$).



Mol	Chain	Residues	Atoms	AltConf
19	A	1	Total C O P 42 31 10 1	0

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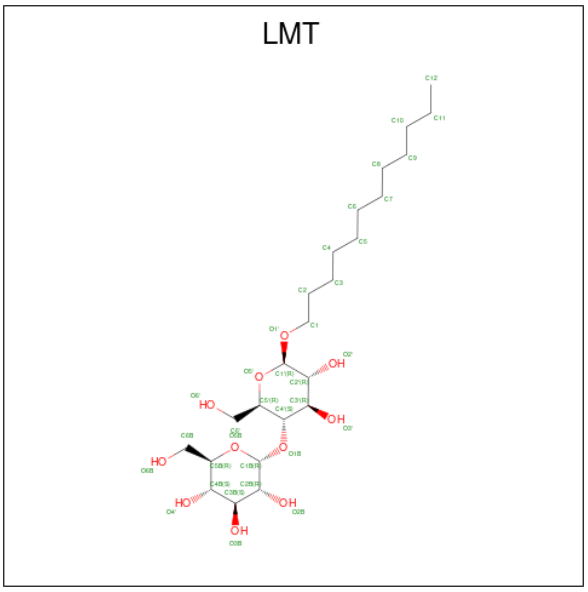
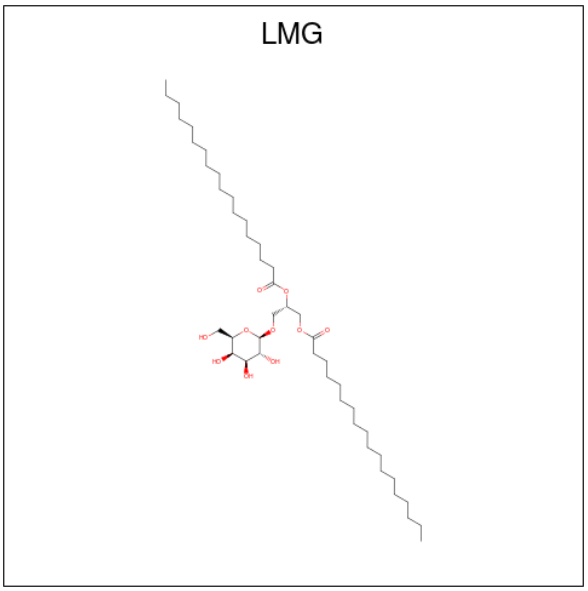
Mol	Chain	Residues	Atoms				AltConf
19	B	1	Total	C	O	P	0
			49	38	10	1	
19	F	1	Total	C	O	P	0
			49	38	10	1	
19	L	1	Total	C	O	P	0
			49	38	10	1	
19	X	1	Total	C	O	P	0
			44	33	10	1	
19	N	1	Total	C	O	P	0
			42	31	10	1	
19	N	1	Total	C	O	P	0
			49	38	10	1	
19	W	1	Total	C	O	P	0
			49	38	10	1	
19	Y	1	Total	C	O	P	0
			49	38	10	1	
19	Z	1	Total	C	O	P	0
			44	33	10	1	
19	a	1	Total	C	O	P	0
			42	31	10	1	
19	f	1	Total	C	O	P	0
			49	38	10	1	
19	j	1	Total	C	O	P	0
			49	38	10	1	
19	k	1	Total	C	O	P	0
			49	38	10	1	
19	l	1	Total	C	O	P	0
			44	33	10	1	

- Molecule 20 is DODECYL-BETA-D-MALTOSIDE (CCD ID: LMT) (formula: $C_{24}H_{46}O_{11}$).



Mol	Chain	Residues	Atoms	AltConf
20	A	1	Total C O 31 20 11	0
20	A	1	Total C O 28 17 11	0
20	A	1	Total C O 35 24 11	0
20	N	1	Total C O 31 20 11	0
20	N	1	Total C O 28 17 11	0
20	N	1	Total C O 35 24 11	0
20	a	1	Total C O 31 20 11	0
20	a	1	Total C O 28 17 11	0
20	a	1	Total C O 35 24 11	0

- Molecule 21 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID: LMG) (formula: $C_{45}H_{86}O_{10}$).



Mol	Chain	Residues	Atoms	AltConf
21	A	1	Total C O 44 34 10	0
21	B	1	Total C O 55 45 10	0
21	B	1	Total C O 44 34 10	0
21	I	1	Total C O 37 27 10	0
21	J	1	Total C O 55 45 10	0
21	L	1	Total C O 50 40 10	0
21	N	1	Total C O 44 34 10	0
21	O	1	Total C O 55 45 10	0
21	T	1	Total C O 37 27 10	0
21	U	1	Total C O 55 45 10	0
21	W	1	Total C O 50 40 10	0
21	b	1	Total C O 55 45 10	0
21	g	1	Total C O 37 27 10	0
21	h	1	Total C O 55 45 10	0

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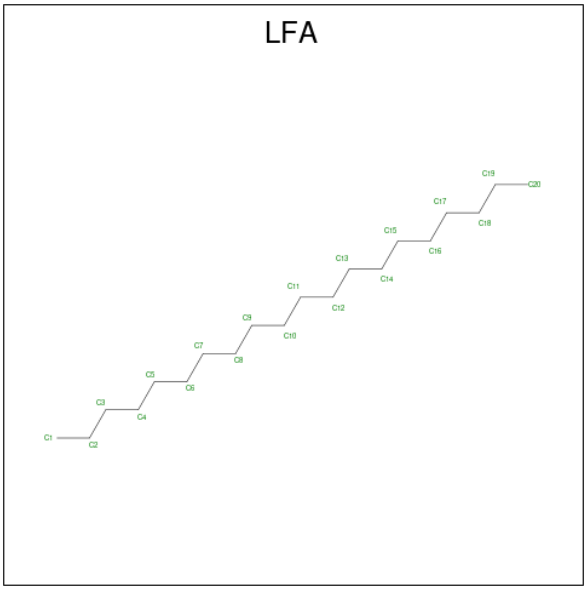
Mol	Chain	Residues	Atoms			AltConf
21	j	1	Total	C	O	0
			50	40	10	

- Molecule 22 is EICOSANE (CCD ID: LFA) (formula: $C_{20}H_{42}$).



Mol	Chain	Residues	Atoms		AltConf
22	B	1	Total	C	0
			16	16	
22	L	1	Total	C	0
			15	15	
22	O	1	Total	C	0
			16	16	
22	W	1	Total	C	0
			15	15	
22	b	1	Total	C	0
			16	16	
22	j	1	Total	C	0
			15	15	

- Molecule 23 is CALCIUM ION (CCD ID: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		AltConf
23	L	1	Total	Ca	0
			1	1	
23	W	1	Total	Ca	0
			1	1	

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Mol	Chain	Residues	Atoms	AltConf
23	j	1	Total Ca 1 1	0

- Molecule 24 is water.

Mol	Chain	Residues	Atoms	AltConf
24	A	50	Total O 50 50	0
24	B	55	Total O 55 55	0
24	C	4	Total O 4 4	0
24	D	10	Total O 10 10	0
24	E	2	Total O 2 2	0
24	F	2	Total O 2 2	0
24	I	2	Total O 2 2	0
24	K	1	Total O 1 1	0
24	L	9	Total O 9 9	0
24	N	51	Total O 51 51	0
24	O	51	Total O 51 51	0
24	P	3	Total O 3 3	0
24	Q	12	Total O 12 12	0
24	R	2	Total O 2 2	0
24	S	2	Total O 2 2	0
24	T	2	Total O 2 2	0
24	V	1	Total O 1 1	0
24	W	12	Total O 12 12	0

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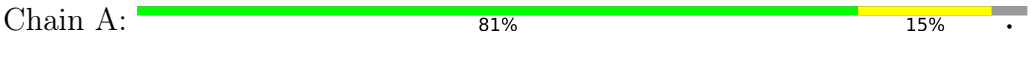
Mol	Chain	Residues	Atoms	AltConf
24	a	51	Total O 51 51	0
24	b	54	Total O 54 54	0
24	c	2	Total O 2 2	0
24	d	12	Total O 12 12	0
24	e	2	Total O 2 2	0
24	f	2	Total O 2 2	0
24	g	2	Total O 2 2	0
24	i	1	Total O 1 1	0
24	j	8	Total O 8 8	0

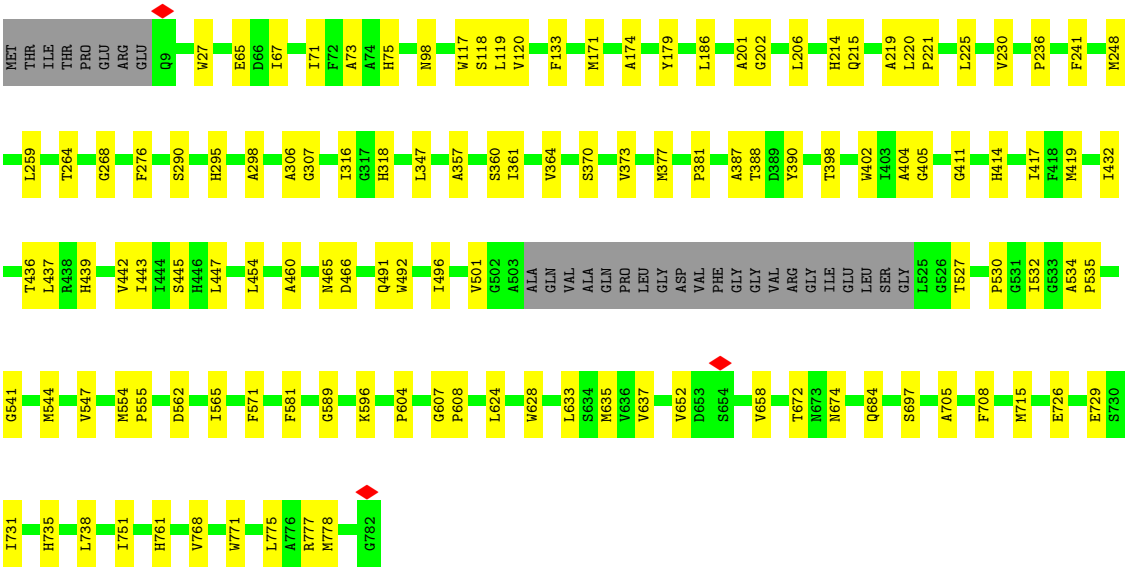
3 Residue-property plots (i)

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: Photosystem I P700 chlorophyll a apoprotein A1

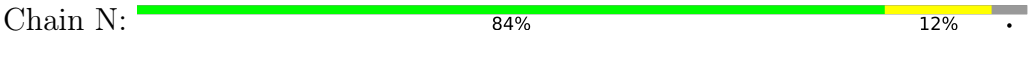
Chain A:

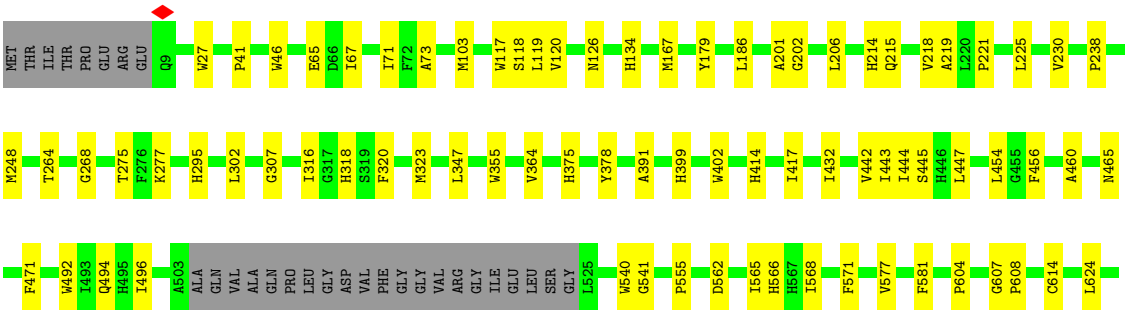




• Molecule 1: Photosystem I P700 chlorophyll a apoprotein A1

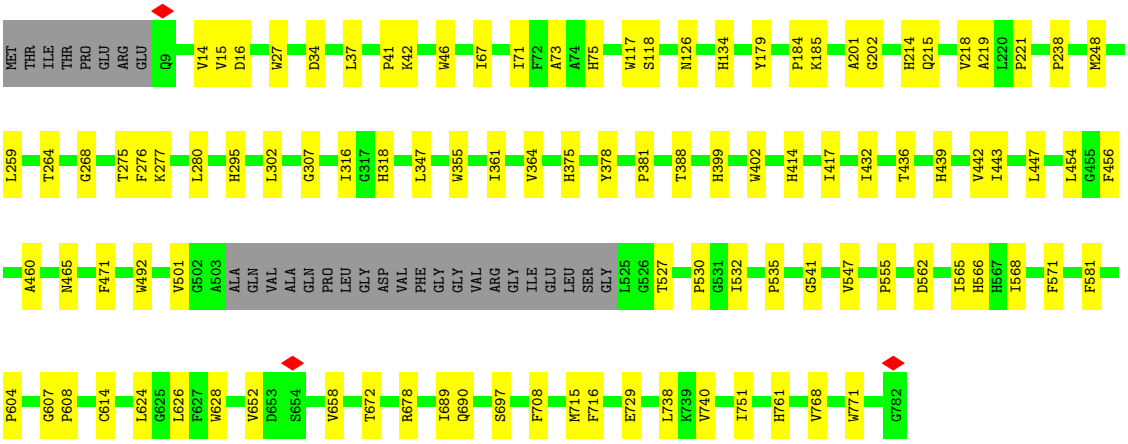
Chain N:





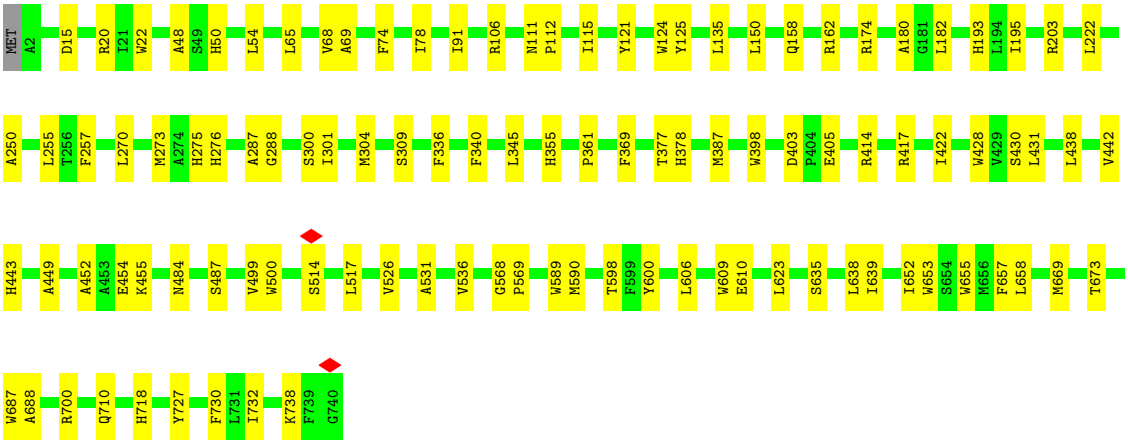
• Molecule 1: Photosystem I P700 chlorophyll a apoprotein A1

Chain a:



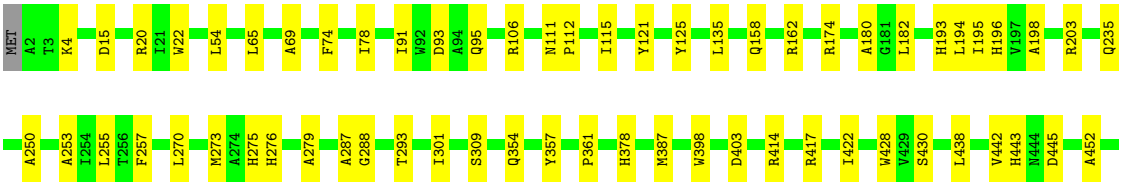
• Molecule 2: Photosystem I P700 chlorophyll a apoprotein A2

Chain B:



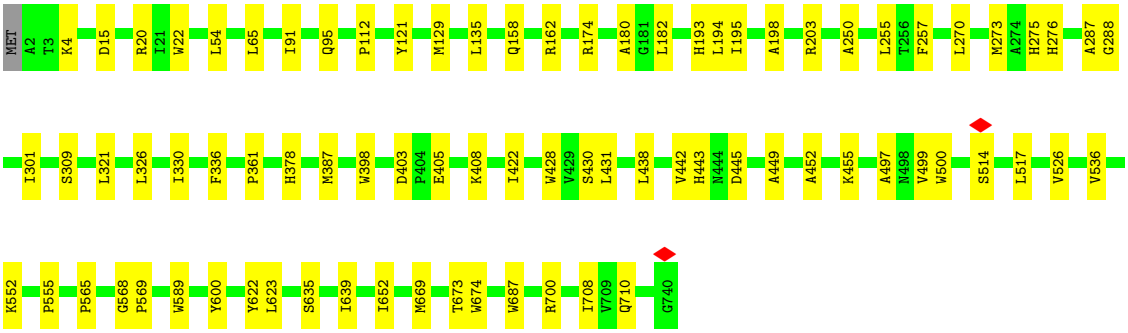
• Molecule 2: Photosystem I P700 chlorophyll a apoprotein A2

Chain O:



• Molecule 2: Photosystem I P700 chlorophyll a apoprotein A2

Chain b:

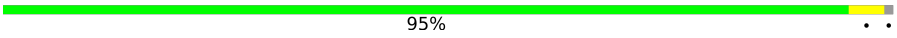


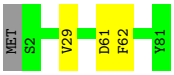
• Molecule 3: Photosystem I iron-sulfur center

Chain C:

• Molecule 3: Photosystem I iron-sulfur center

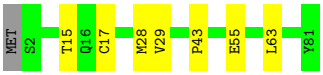
Chain P:





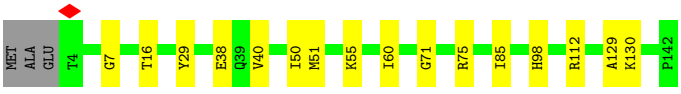
• Molecule 3: Photosystem I iron-sulfur center

Chain c:



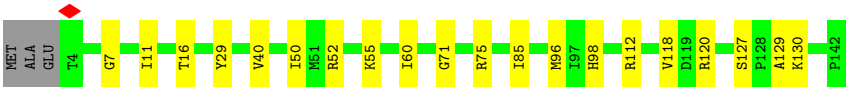
• Molecule 4: Photosystem I reaction center subunit II

Chain D:



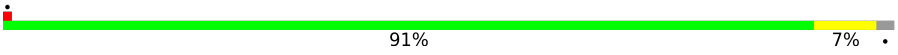
• Molecule 4: Photosystem I reaction center subunit II

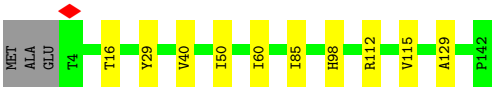
Chain Q:



• Molecule 4: Photosystem I reaction center subunit II

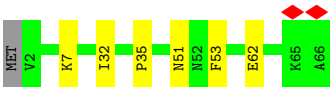
Chain d:





• Molecule 5: Photosystem I reaction center subunit IV

Chain E:

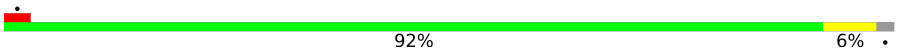


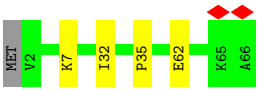
• Molecule 5: Photosystem I reaction center subunit IV

Chain R:

• Molecule 5: Photosystem I reaction center subunit IV

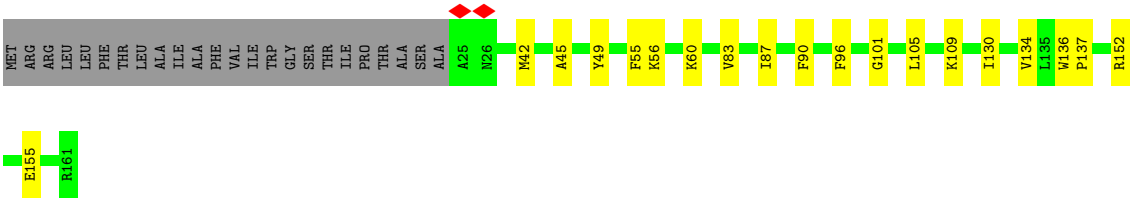
Chain e:





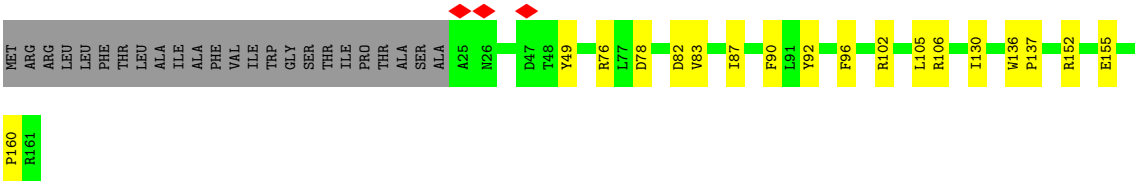
• Molecule 6: Photosystem I reaction center subunit III

Chain F:



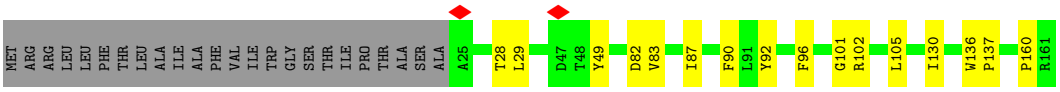
• Molecule 6: Photosystem I reaction center subunit III

Chain S:



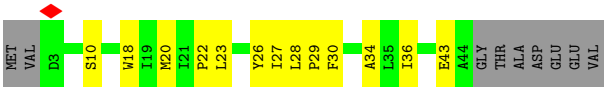
• Molecule 6: Photosystem I reaction center subunit III

Chain f:



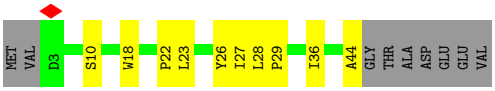
• Molecule 7: Photosystem I reaction center subunit VIII

Chain I:



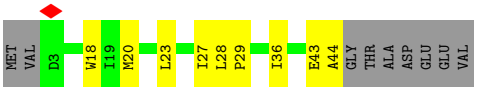
• Molecule 7: Photosystem I reaction center subunit VIII

Chain T:



• Molecule 7: Photosystem I reaction center subunit VIII

Chain g:



• Molecule 8: Photosystem I reaction center subunit IX

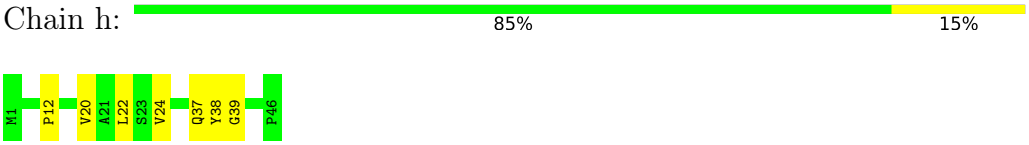
Chain J:

• Molecule 8: Photosystem I reaction center subunit IX

Chain U:

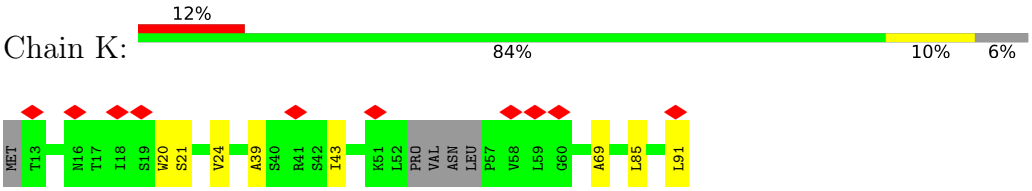
• Molecule 8: Photosystem I reaction center subunit IX

Chain h:



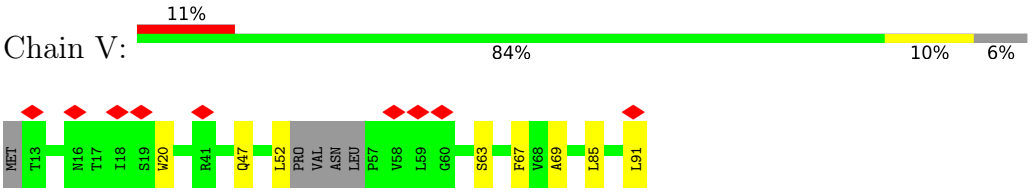
• Molecule 9: Photosystem I reaction center subunit PsaK

Chain K:



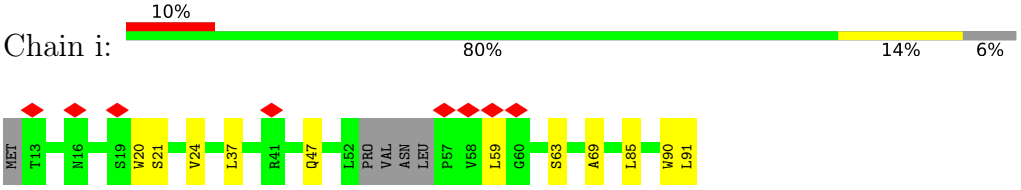
• Molecule 9: Photosystem I reaction center subunit PsaK

Chain V:



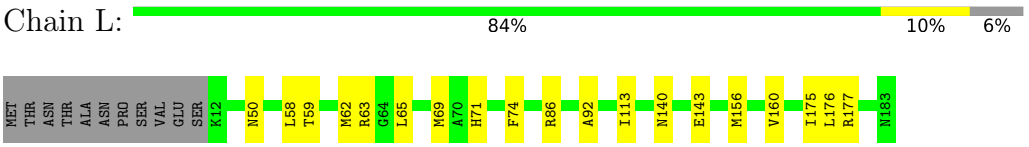
• Molecule 9: Photosystem I reaction center subunit PsaK

Chain i:



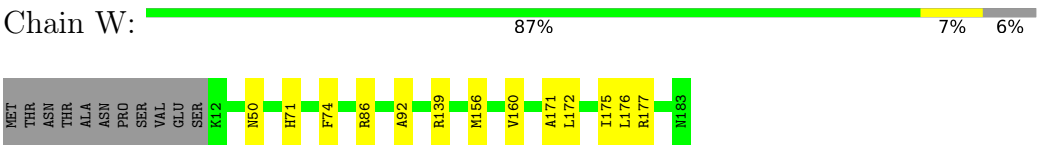
• Molecule 10: Photosystem I reaction center subunit XI

Chain L:



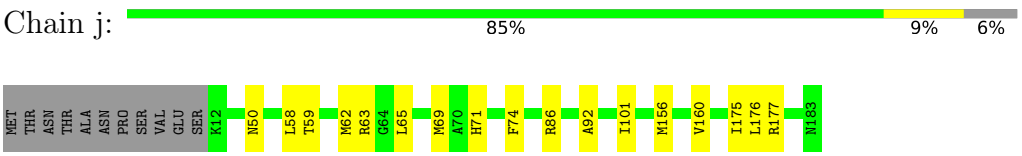
• Molecule 10: Photosystem I reaction center subunit XI

Chain W:



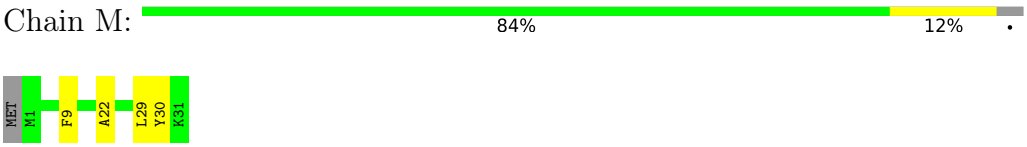
• Molecule 10: Photosystem I reaction center subunit XI

Chain j:



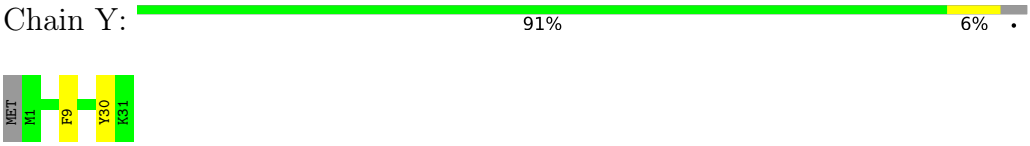
• Molecule 11: Photosystem I reaction center subunit XII

Chain M:



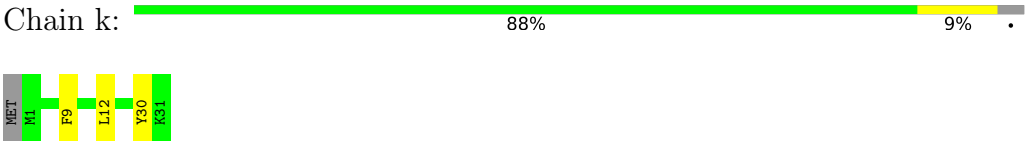
• Molecule 11: Photosystem I reaction center subunit XII

Chain Y:



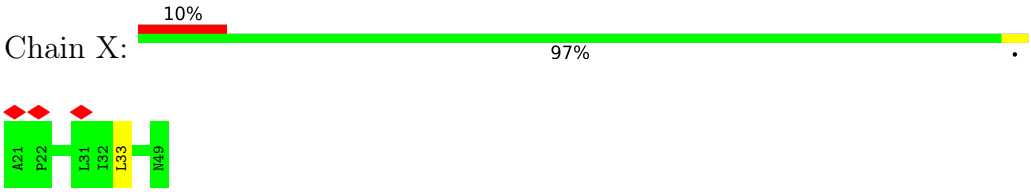
• Molecule 11: Photosystem I reaction center subunit XII

Chain k:



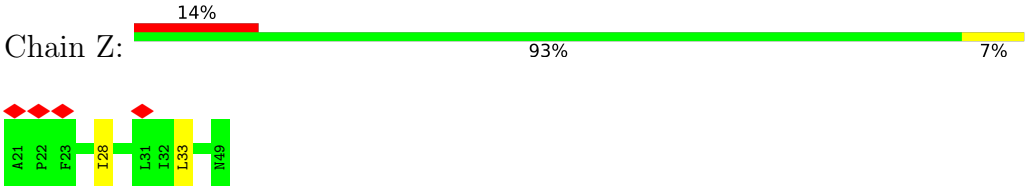
• Molecule 12: Photosystem one PsaX

Chain X:



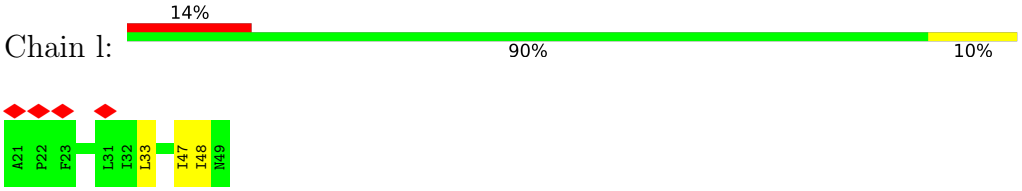
• Molecule 12: Photosystem one PsaX

Chain Z:



• Molecule 12: Photosystem one PsaX

Chain l:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	300000	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 ($e^-/Å^2$)	40	Depositor
Minimum defocus (nm)	600	Depositor
Maximum defocus (nm)	2000	Depositor
Magnification	Not provided	
Image detector	FEI FALCON IV (4k x 4k)	Depositor
Maximum map value	1.172	Depositor
Minimum map value	-0.295	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.021	Depositor
Recommended contour level	0.13	Depositor
Map size (Å)	469.96, 469.96, 469.96	wwPDB
Map dimensions	600, 600, 600	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.78326666, 0.78326666, 0.78326666	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: LMT, LHG, CL0, SF4, CLA, CA, BCR, LMG, F6C, LFA, PQN

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	A	0.12	0/6106	0.28	0/8323
1	N	0.09	0/6106	0.24	0/8323
1	a	0.09	0/6106	0.24	0/8323
2	B	0.12	0/6139	0.29	0/8394
2	O	0.10	0/6139	0.24	0/8394
2	b	0.10	0/6139	0.25	0/8394
3	C	0.10	0/610	0.27	0/827
3	P	0.09	0/610	0.27	0/827
3	c	0.10	0/610	0.28	0/827
4	D	0.10	0/1115	0.30	0/1501
4	Q	0.09	0/1115	0.26	0/1501
4	d	0.08	0/1115	0.26	0/1501
5	E	0.08	0/540	0.23	0/728
5	R	0.08	0/540	0.23	0/728
5	e	0.08	0/540	0.26	0/728
6	F	0.13	0/1104	0.32	0/1501
6	S	0.10	0/1104	0.28	0/1501
6	f	0.10	0/1104	0.28	0/1501
7	I	0.14	0/366	0.45	0/503
7	T	0.13	0/366	0.36	0/503
7	g	0.13	0/366	0.35	0/503
8	J	0.11	0/386	0.29	0/526
8	U	0.08	0/386	0.25	0/526
8	h	0.08	0/386	0.24	0/526
9	K	0.11	0/550	0.31	0/751
9	V	0.08	0/550	0.27	0/751
9	i	0.08	0/550	0.25	0/751
10	L	0.12	0/1340	0.32	0/1821
10	W	0.09	0/1340	0.24	0/1821
10	j	0.09	0/1340	0.24	0/1821
11	M	0.10	0/243	0.20	0/329
11	Y	0.07	0/243	0.17	0/329

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
11	k	0.07	0/243	0.16	0/329
12	X	0.12	0/233	0.29	0/319
12	Z	0.07	0/233	0.23	0/319
12	l	0.07	0/233	0.22	0/319
All	All	0.10	0/56196	0.26	0/76569

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

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	A	5900	0	5735	94	0
1	N	5900	0	5735	78	0
1	a	5900	0	5735	81	0
2	B	5913	0	5649	90	0
2	O	5913	0	5649	71	0
2	b	5913	0	5649	68	0
3	C	600	0	579	4	0
3	P	600	0	579	2	0
3	c	600	0	579	5	0
4	D	1090	0	1097	11	0
4	Q	1090	0	1097	13	0
4	d	1090	0	1097	8	0
5	E	530	0	535	3	0
5	R	530	0	535	3	0
5	e	530	0	535	2	0
6	F	1075	0	1081	18	0
6	S	1075	0	1081	15	0
6	f	1075	0	1081	13	0
7	I	351	0	354	10	0
7	T	351	0	354	8	0
7	g	351	0	354	9	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
8	J	373	0	390	10	0
8	U	373	0	390	8	0
8	h	373	0	390	6	0
9	K	539	0	578	6	0
9	V	539	0	578	6	0
9	i	539	0	578	7	0
10	L	1309	0	1289	14	0
10	W	1309	0	1289	12	0
10	j	1309	0	1289	14	0
11	M	240	0	261	4	0
11	Y	240	0	261	2	0
11	k	240	0	261	3	0
12	X	227	0	244	1	0
12	Z	227	0	244	2	0
12	l	227	0	244	2	0
13	A	65	0	72	3	0
13	N	65	0	72	2	0
13	a	65	0	72	2	0
14	A	250	0	0	0	0
14	B	132	0	0	1	0
14	L	132	0	0	2	0
14	N	250	0	0	0	0
14	O	132	0	0	1	0
14	W	132	0	0	1	0
14	a	250	0	0	0	0
14	b	132	0	0	1	0
14	j	132	0	0	1	0
15	A	2259	0	2271	100	0
15	B	2303	0	2383	108	0
15	F	65	0	72	0	0
15	K	95	0	72	1	0
15	L	125	0	131	3	0
15	N	2259	0	2271	94	0
15	O	2303	0	2383	98	0
15	S	65	0	72	1	0
15	V	95	0	72	1	0
15	W	125	0	131	3	0
15	X	55	0	49	1	0
15	Z	55	0	49	1	0
15	a	2259	0	2271	85	0
15	b	2303	0	2383	98	0
15	f	65	0	72	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
15	i	95	0	72	1	0
15	j	125	0	131	3	0
15	l	55	0	49	1	0
16	A	33	0	46	1	0
16	B	33	0	46	3	0
16	N	33	0	46	2	0
16	O	33	0	46	4	0
16	a	33	0	46	2	0
16	b	33	0	46	4	0
17	A	8	0	0	0	0
17	C	16	0	0	0	0
17	N	8	0	0	0	0
17	P	16	0	0	0	0
17	a	8	0	0	0	0
17	c	16	0	0	1	0
18	A	240	0	336	19	0
18	B	240	0	336	21	0
18	F	80	0	112	5	0
18	I	80	0	112	4	0
18	J	80	0	112	7	0
18	K	25	0	33	0	0
18	L	120	0	168	7	0
18	M	40	0	56	4	0
18	N	240	0	336	17	0
18	O	280	0	392	17	0
18	S	40	0	56	3	0
18	T	80	0	112	6	0
18	U	80	0	112	6	0
18	V	25	0	33	0	0
18	W	80	0	112	7	0
18	Y	40	0	56	3	0
18	a	240	0	336	16	0
18	b	280	0	392	20	0
18	f	40	0	56	4	0
18	g	80	0	112	5	0
18	h	80	0	112	7	0
18	i	25	0	33	0	0
18	j	40	0	56	1	0
18	k	40	0	56	4	0
19	A	42	0	54	0	0
19	B	49	0	74	4	0
19	F	49	0	74	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
19	L	49	0	74	6	0
19	N	91	0	128	2	0
19	W	49	0	74	8	0
19	X	44	0	61	3	0
19	Y	49	0	74	4	0
19	Z	44	0	61	1	0
19	a	42	0	54	0	0
19	f	49	0	74	2	0
19	j	49	0	74	7	0
19	k	49	0	74	5	0
19	l	44	0	61	3	0
20	A	94	0	110	5	0
20	N	94	0	110	3	0
20	a	94	0	110	3	0
21	A	44	0	61	1	0
21	B	99	0	147	4	0
21	I	37	0	44	4	0
21	J	55	0	86	0	0
21	L	50	0	70	4	0
21	N	44	0	61	0	0
21	O	55	0	86	6	0
21	T	37	0	44	2	0
21	U	55	0	86	1	0
21	W	50	0	70	4	0
21	b	55	0	86	5	0
21	g	37	0	44	3	0
21	h	55	0	86	2	0
21	j	50	0	70	3	0
22	B	16	0	28	1	0
22	L	15	0	29	2	0
22	O	16	0	28	1	0
22	W	15	0	29	1	0
22	b	16	0	28	2	0
22	j	15	0	29	1	0
23	L	1	0	0	0	0
23	W	1	0	0	0	0
23	j	1	0	0	0	0
24	A	50	0	0	0	0
24	B	55	0	0	1	0
24	C	4	0	0	0	0
24	D	10	0	0	0	0
24	E	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
24	F	2	0	0	0	0
24	I	2	0	0	0	0
24	K	1	0	0	0	0
24	L	9	0	0	0	0
24	N	51	0	0	0	0
24	O	51	0	0	1	0
24	P	3	0	0	0	0
24	Q	12	0	0	0	0
24	R	2	0	0	0	0
24	S	2	0	0	0	0
24	T	2	0	0	0	0
24	V	1	0	0	0	0
24	W	12	0	0	0	0
24	a	51	0	0	0	0
24	b	54	0	0	1	0
24	c	2	0	0	0	0
24	d	12	0	0	0	0
24	e	2	0	0	0	0
24	f	2	0	0	0	0
24	g	2	0	0	0	0
24	i	1	0	0	0	0
24	j	8	0	0	0	0
All	All	75954	0	74982	1150	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 8.

The worst 5 of 1150 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:U:37:GLN:HE21	8:U:38:TYR:H	1.13	0.91
8:J:37:GLN:HE21	8:J:38:TYR:H	1.20	0.85
8:h:37:GLN:HE21	8:h:38:TYR:H	1.27	0.83
18:N:850:BCR:H362	15:O:802:CLA:H42	1.67	0.76
18:A:850:BCR:H362	15:B:802:CLA:H42	1.67	0.75

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	A	749/782 (96%)	732 (98%)	17 (2%)	0	100	100
1	N	749/782 (96%)	736 (98%)	13 (2%)	0	100	100
1	a	749/782 (96%)	736 (98%)	13 (2%)	0	100	100
2	B	737/740 (100%)	722 (98%)	15 (2%)	0	100	100
2	O	737/740 (100%)	723 (98%)	14 (2%)	0	100	100
2	b	737/740 (100%)	723 (98%)	14 (2%)	0	100	100
3	C	78/81 (96%)	75 (96%)	3 (4%)	0	100	100
3	P	78/81 (96%)	77 (99%)	1 (1%)	0	100	100
3	c	78/81 (96%)	75 (96%)	3 (4%)	0	100	100
4	D	137/142 (96%)	135 (98%)	2 (2%)	0	100	100
4	Q	137/142 (96%)	135 (98%)	2 (2%)	0	100	100
4	d	137/142 (96%)	135 (98%)	2 (2%)	0	100	100
5	E	63/66 (96%)	63 (100%)	0	0	100	100
5	R	63/66 (96%)	63 (100%)	0	0	100	100
5	e	63/66 (96%)	63 (100%)	0	0	100	100
6	F	135/161 (84%)	132 (98%)	3 (2%)	0	100	100
6	S	135/161 (84%)	132 (98%)	3 (2%)	0	100	100
6	f	135/161 (84%)	132 (98%)	3 (2%)	0	100	100
7	I	40/51 (78%)	38 (95%)	2 (5%)	0	100	100
7	T	40/51 (78%)	38 (95%)	2 (5%)	0	100	100
7	g	40/51 (78%)	38 (95%)	2 (5%)	0	100	100
8	J	44/46 (96%)	44 (100%)	0	0	100	100
8	U	44/46 (96%)	44 (100%)	0	0	100	100
8	h	44/46 (96%)	44 (100%)	0	0	100	100
9	K	71/80 (89%)	68 (96%)	3 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	V	71/80 (89%)	69 (97%)	2 (3%)	0	100	100
9	i	71/80 (89%)	70 (99%)	1 (1%)	0	100	100
10	L	170/183 (93%)	169 (99%)	1 (1%)	0	100	100
10	W	170/183 (93%)	170 (100%)	0	0	100	100
10	j	170/183 (93%)	170 (100%)	0	0	100	100
11	M	29/32 (91%)	29 (100%)	0	0	100	100
11	Y	29/32 (91%)	29 (100%)	0	0	100	100
11	k	29/32 (91%)	29 (100%)	0	0	100	100
12	X	27/29 (93%)	26 (96%)	1 (4%)	0	100	100
12	Z	27/29 (93%)	26 (96%)	1 (4%)	0	100	100
12	l	27/29 (93%)	26 (96%)	1 (4%)	0	100	100
All	All	6840/7179 (95%)	6716 (98%)	124 (2%)	0	100	100

There are no Ramachandran outliers to report.

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	A	600/623 (96%)	600 (100%)	0	100	100
1	N	600/623 (96%)	600 (100%)	0	100	100
1	a	600/623 (96%)	600 (100%)	0	100	100
2	B	594/595 (100%)	594 (100%)	0	100	100
2	O	594/595 (100%)	594 (100%)	0	100	100
2	b	594/595 (100%)	594 (100%)	0	100	100
3	C	68/69 (99%)	68 (100%)	0	100	100
3	P	68/69 (99%)	68 (100%)	0	100	100
3	c	68/69 (99%)	68 (100%)	0	100	100
4	D	114/116 (98%)	114 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	Q	114/116 (98%)	114 (100%)	0	100	100
4	d	114/116 (98%)	114 (100%)	0	100	100
5	E	57/58 (98%)	57 (100%)	0	100	100
5	R	57/58 (98%)	57 (100%)	0	100	100
5	e	57/58 (98%)	57 (100%)	0	100	100
6	F	116/135 (86%)	116 (100%)	0	100	100
6	S	116/135 (86%)	116 (100%)	0	100	100
6	f	116/135 (86%)	116 (100%)	0	100	100
7	I	37/44 (84%)	37 (100%)	0	100	100
7	T	37/44 (84%)	37 (100%)	0	100	100
7	g	37/44 (84%)	37 (100%)	0	100	100
8	J	41/41 (100%)	41 (100%)	0	100	100
8	U	41/41 (100%)	41 (100%)	0	100	100
8	h	41/41 (100%)	41 (100%)	0	100	100
9	K	60/65 (92%)	60 (100%)	0	100	100
9	V	60/65 (92%)	60 (100%)	0	100	100
9	i	60/65 (92%)	60 (100%)	0	100	100
10	L	135/146 (92%)	135 (100%)	0	100	100
10	W	135/146 (92%)	135 (100%)	0	100	100
10	j	135/146 (92%)	135 (100%)	0	100	100
11	M	26/27 (96%)	26 (100%)	0	100	100
11	Y	26/27 (96%)	26 (100%)	0	100	100
11	k	26/27 (96%)	26 (100%)	0	100	100
12	X	24/24 (100%)	24 (100%)	0	100	100
12	Z	24/24 (100%)	24 (100%)	0	100	100
12	l	24/24 (100%)	24 (100%)	0	100	100
All	All	5616/5829 (96%)	5616 (100%)	0	100	100

There are no protein residues with a non-rotameric sidechain to report.

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 64 such sidechains are listed below:

Mol	Chain	Res	Type
2	b	496	HIS
2	b	637	GLN
1	N	215	GLN
1	N	114	GLN
4	d	110	GLN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains (i)

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

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 402 ligands modelled in this entry, 3 are monoatomic - leaving 399 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
15	CLA	B	810	2	69,73,73	1.17	8 (11%)	82,113,113	1.23	5 (6%)
14	F6C	L	204	24	72,74,74	1.59	8 (11%)	83,114,114	2.02	15 (18%)
15	CLA	O	833	2	59,63,73	1.27	7 (11%)	70,101,113	1.33	6 (8%)
15	CLA	b	822	2	59,63,73	1.30	9 (15%)	70,101,113	1.21	5 (7%)
19	LHG	Y	101	-	48,48,48	0.50	0	51,54,54	0.48	0
15	CLA	b	810	2	69,73,73	1.17	8 (11%)	82,113,113	1.24	5 (6%)
15	CLA	B	835	24	49,53,73	1.40	8 (16%)	58,89,113	1.40	4 (6%)
15	CLA	A	806	1	69,73,73	1.16	7 (10%)	82,113,113	1.24	6 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	CLA	A	825	1	69,73,73	1.17	8 (11%)	82,113,113	1.24	5 (6%)
15	CLA	O	814	2	49,53,73	1.37	6 (12%)	58,89,113	1.46	6 (10%)
15	CLA	B	806	2	69,73,73	1.17	7 (10%)	82,113,113	1.28	6 (7%)
15	CLA	b	828	2	69,73,73	1.17	8 (11%)	82,113,113	1.30	8 (9%)
15	CLA	A	809	1	64,68,73	1.21	8 (12%)	76,107,113	1.29	6 (7%)
15	CLA	a	821	1	64,68,73	1.22	8 (12%)	76,107,113	1.29	6 (7%)
15	CLA	B	809	2	69,73,73	1.17	8 (11%)	82,113,113	1.29	6 (7%)
14	F6C	b	839	24	72,74,74	1.58	8 (11%)	83,114,114	2.07	15 (18%)
15	CLA	B	816	2	69,73,73	1.17	8 (11%)	82,113,113	1.27	5 (6%)
18	BCR	O	848	-	41,41,41	0.29	0	56,56,56	0.62	0
15	CLA	b	820	2	49,53,73	1.39	7 (14%)	58,89,113	1.44	4 (6%)
15	CLA	V	103	24	54,58,73	1.33	8 (14%)	64,95,113	1.40	6 (9%)
21	LMG	T	103	-	37,37,55	0.56	0	45,45,63	0.65	0
18	BCR	B	846	-	41,41,41	0.31	0	56,56,56	0.87	1 (1%)
15	CLA	B	831	2	69,73,73	1.16	7 (10%)	82,113,113	1.25	8 (9%)
15	CLA	O	801	2	69,73,73	1.17	8 (11%)	82,113,113	1.21	6 (7%)
15	CLA	N	808	1	49,53,73	1.38	7 (14%)	58,89,113	1.45	6 (10%)
18	BCR	S	202	-	41,41,41	0.30	0	56,56,56	0.51	0
20	LMT	A	852	-	32,32,36	0.56	0	43,43,47	0.69	0
15	CLA	N	842	1	69,73,73	1.18	8 (11%)	82,113,113	1.23	6 (7%)
15	CLA	O	835	24	49,53,73	1.40	8 (16%)	58,89,113	1.40	4 (6%)
18	BCR	N	846	-	41,41,41	0.32	0	56,56,56	0.67	1 (1%)
15	CLA	b	809	2	69,73,73	1.17	8 (11%)	82,113,113	1.23	6 (7%)
19	LHG	N	851	-	41,41,48	0.54	0	44,47,54	0.49	0
15	CLA	A	837	1	55,59,73	1.31	7 (12%)	64,96,113	1.37	8 (12%)
20	LMT	N	853	-	29,29,36	0.56	0	40,40,47	1.42	4 (10%)
15	CLA	N	804	1	69,73,73	1.18	8 (11%)	82,113,113	1.26	4 (4%)
15	CLA	A	804	1	69,73,73	1.18	8 (11%)	82,113,113	1.26	4 (4%)
19	LHG	F	204	-	48,48,48	0.50	0	51,54,54	0.46	0
15	CLA	O	820	2	49,53,73	1.39	7 (14%)	58,89,113	1.44	4 (6%)
15	CLA	N	834	1	69,73,73	1.17	8 (11%)	82,113,113	1.23	4 (4%)
15	CLA	B	826	2	66,70,73	1.19	7 (10%)	78,109,113	1.25	5 (6%)
18	BCR	B	842	-	41,41,41	0.31	0	56,56,56	0.56	0
13	CL0	N	801	1	58,73,73	2.24	9 (15%)	60,113,113	1.63	13 (21%)
15	CLA	a	834	1	69,73,73	1.17	8 (11%)	82,113,113	1.23	4 (4%)
18	BCR	A	847	-	41,41,41	0.31	0	56,56,56	0.60	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	CLA	O	807	2	69,73,73	1.16	7 (10%)	82,113,113	1.25	7 (8%)
15	CLA	A	818	1	69,73,73	1.15	9 (13%)	82,113,113	1.33	5 (6%)
15	CLA	A	830	1	69,73,73	1.17	7 (10%)	82,113,113	1.24	7 (8%)
13	CL0	a	801	1	58,73,73	2.24	9 (15%)	60,113,113	1.63	13 (21%)
21	LMG	j	206	-	50,50,55	0.50	0	58,58,63	0.61	0
15	CLA	a	819	1	69,73,73	1.18	9 (13%)	82,113,113	1.25	6 (7%)
18	BCR	N	845	-	41,41,41	0.35	0	56,56,56	0.93	2 (3%)
19	LHG	j	207	-	48,48,48	0.50	0	51,54,54	0.46	0
15	CLA	A	839	1	69,73,73	1.17	8 (11%)	82,113,113	1.28	6 (7%)
15	CLA	a	803	-	69,73,73	1.15	8 (11%)	82,113,113	1.27	7 (8%)
18	BCR	a	845	-	41,41,41	0.35	0	56,56,56	0.93	2 (3%)
15	CLA	A	834	1	69,73,73	1.17	8 (11%)	82,113,113	1.23	4 (4%)
14	F6C	j	201	2	72,74,74	1.61	8 (11%)	83,114,114	1.97	14 (16%)
15	CLA	N	805	1,15	64,68,73	1.22	7 (10%)	76,107,113	1.29	4 (5%)
20	LMT	a	854	-	36,36,36	0.54	0	47,47,47	0.64	0
18	BCR	A	848	-	41,41,41	0.31	0	56,56,56	0.54	0
14	F6C	A	802	24	72,74,74	1.59	10 (13%)	83,114,114	2.01	14 (16%)
14	F6C	a	802	24	72,74,74	1.59	10 (13%)	83,114,114	1.99	13 (15%)
15	CLA	a	806	1	69,73,73	1.16	6 (8%)	82,113,113	1.24	5 (6%)
15	CLA	O	830	2	69,73,73	1.16	7 (10%)	82,113,113	1.24	6 (7%)
15	CLA	a	804	1	69,73,73	1.19	8 (11%)	82,113,113	1.26	4 (4%)
15	CLA	A	822	24	69,73,73	1.18	8 (11%)	82,113,113	1.26	5 (6%)
15	CLA	N	833	1	59,63,73	1.26	8 (13%)	70,101,113	1.34	6 (8%)
15	CLA	a	809	1	64,68,73	1.20	7 (10%)	76,107,113	1.29	6 (7%)
15	CLA	a	816	1	49,53,73	1.40	7 (14%)	58,89,113	1.42	4 (6%)
18	BCR	B	843	-	41,41,41	0.31	0	56,56,56	0.61	0
18	BCR	b	848	-	41,41,41	0.29	0	56,56,56	0.63	0
14	F6C	a	855	24	72,74,74	1.57	8 (11%)	83,114,114	2.08	15 (18%)
14	F6C	a	826	24	72,74,74	1.61	8 (11%)	83,114,114	2.08	19 (22%)
18	BCR	U	102	-	41,41,41	0.37	0	56,56,56	1.30	8 (14%)
18	BCR	I	102	-	41,41,41	0.29	0	56,56,56	0.44	0
22	LFA	b	850	-	15,15,19	0.23	0	14,14,18	0.19	0
15	CLA	a	842	1	69,73,73	1.18	8 (11%)	82,113,113	1.24	6 (7%)
15	CLA	a	823	1	60,64,73	1.25	7 (11%)	71,102,113	1.35	6 (8%)
15	CLA	N	832	1	54,58,73	1.31	8 (14%)	64,95,113	1.38	6 (9%)
16	PQN	b	841	-	34,34,34	0.35	0	43,45,45	0.61	1 (2%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	CLA	B	803	-	69,73,73	1.16	9 (13%)	82,113,113	1.28	6 (7%)
15	CLA	j	202	10	69,73,73	1.16	8 (11%)	82,113,113	1.27	7 (8%)
18	BCR	F	202	-	41,41,41	0.32	0	56,56,56	0.94	2 (3%)
15	CLA	b	807	2	69,73,73	1.16	8 (11%)	82,113,113	1.25	7 (8%)
15	CLA	N	822	24	69,73,73	1.18	8 (11%)	82,113,113	1.25	5 (6%)
15	CLA	B	824	24	69,73,73	1.17	7 (10%)	82,113,113	1.29	7 (8%)
15	CLA	N	838	1	59,63,73	1.26	7 (11%)	70,101,113	1.32	5 (7%)
15	CLA	W	202	10	69,73,73	1.16	8 (11%)	82,113,113	1.27	6 (7%)
15	CLA	O	829	2	69,73,73	1.17	8 (11%)	82,113,113	1.25	6 (7%)
15	CLA	B	815	2	61,65,73	1.24	7 (11%)	72,103,113	1.34	8 (11%)
14	F6C	L	201	2	72,74,74	1.62	8 (11%)	83,114,114	1.94	13 (15%)
18	BCR	a	846	-	41,41,41	0.32	0	56,56,56	0.67	1 (1%)
18	BCR	b	842	-	41,41,41	0.31	0	56,56,56	0.55	0
15	CLA	a	831	1	69,73,73	1.17	8 (11%)	82,113,113	1.26	6 (7%)
15	CLA	b	835	24	49,53,73	1.40	8 (16%)	58,89,113	1.40	4 (6%)
18	BCR	N	848	-	41,41,41	0.31	0	56,56,56	0.50	0
15	CLA	O	818	24	69,73,73	1.18	8 (11%)	82,113,113	1.24	5 (6%)
21	LMG	O	849	-	55,55,55	0.49	0	63,63,63	0.58	0
22	LFA	B	849	-	15,15,19	0.23	0	14,14,18	0.20	0
19	LHG	B	851	-	48,48,48	0.50	0	51,54,54	0.48	0
15	CLA	O	821	24	57,61,73	1.28	6 (10%)	67,98,113	1.39	8 (11%)
15	CLA	i	103	24	54,58,73	1.33	7 (12%)	64,95,113	1.38	6 (9%)
14	F6C	j	204	24	72,74,74	1.59	8 (11%)	83,114,114	2.04	16 (19%)
15	CLA	A	819	1	69,73,73	1.18	9 (13%)	82,113,113	1.25	6 (7%)
18	BCR	a	848	-	41,41,41	0.31	0	56,56,56	0.50	0
15	CLA	b	838	2	69,73,73	1.16	7 (10%)	82,113,113	1.26	8 (9%)
17	SF4	C	102	3	0,12,12	-	-	-		
14	F6C	N	802	24	72,74,74	1.59	10 (13%)	83,114,114	1.98	12 (14%)
14	F6C	W	204	24	72,74,74	1.59	8 (11%)	83,114,114	2.04	16 (19%)
21	LMG	L	207	-	50,50,55	0.50	0	58,58,63	0.61	0
14	F6C	B	839	24	72,74,74	1.58	8 (11%)	83,114,114	2.07	15 (18%)
15	CLA	A	838	1	59,63,73	1.26	7 (11%)	70,101,113	1.32	5 (7%)
15	CLA	B	819	2	59,63,73	1.27	8 (13%)	70,101,113	1.32	6 (8%)
14	F6C	b	832	2	72,74,74	1.60	9 (12%)	83,114,114	2.02	17 (20%)
15	CLA	N	814	1	69,73,73	1.17	7 (10%)	82,113,113	1.26	5 (6%)
19	LHG	f	203	-	48,48,48	0.50	0	51,54,54	0.46	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	BCR	J	102	-	41,41,41	0.38	0	56,56,56	1.28	9 (16%)
15	CLA	A	829	1	64,68,73	1.20	7 (10%)	76,107,113	1.25	5 (6%)
15	CLA	O	828	2	69,73,73	1.17	8 (11%)	82,113,113	1.30	8 (9%)
15	CLA	b	812	2	60,64,73	1.26	7 (11%)	71,102,113	1.37	6 (8%)
15	CLA	N	823	1	60,64,73	1.25	7 (11%)	71,102,113	1.34	5 (7%)
15	CLA	b	819	2	59,63,73	1.27	8 (13%)	70,101,113	1.32	6 (8%)
19	LHG	k	101	-	48,48,48	0.50	0	51,54,54	0.48	0
15	CLA	A	810	1	61,65,73	1.24	7 (11%)	72,103,113	1.36	7 (9%)
14	F6C	W	201	2	72,74,74	1.62	8 (11%)	83,114,114	1.94	13 (15%)
18	BCR	B	845	-	41,41,41	0.31	0	56,56,56	0.55	0
18	BCR	N	849	-	41,41,41	0.31	0	56,56,56	0.58	0
19	LHG	A	851	-	41,41,48	0.54	0	44,47,54	0.49	0
15	CLA	O	802	24	69,73,73	1.17	7 (10%)	82,113,113	1.21	6 (7%)
18	BCR	g	102	-	41,41,41	0.29	0	56,56,56	0.45	0
15	CLA	O	817	2	64,68,73	1.21	8 (12%)	76,107,113	1.24	4 (5%)
15	CLA	O	809	2	69,73,73	1.17	8 (11%)	82,113,113	1.24	6 (7%)
15	CLA	a	837	1	55,59,73	1.31	7 (12%)	64,96,113	1.37	8 (12%)
15	CLA	O	816	2	69,73,73	1.19	8 (11%)	82,113,113	1.25	6 (7%)
15	CLA	A	816	1	49,53,73	1.39	7 (14%)	58,89,113	1.41	4 (6%)
15	CLA	N	835	1	69,73,73	1.17	8 (11%)	82,113,113	1.23	6 (7%)
15	CLA	a	840	1	54,58,73	1.31	7 (12%)	64,95,113	1.40	6 (9%)
15	CLA	b	827	2	69,73,73	1.16	7 (10%)	82,113,113	1.23	8 (9%)
15	CLA	N	829	1	64,68,73	1.20	7 (10%)	76,107,113	1.25	5 (6%)
15	CLA	A	805	1,15	64,68,73	1.22	7 (10%)	76,107,113	1.29	5 (6%)
15	CLA	N	821	1	64,68,73	1.22	8 (12%)	76,107,113	1.29	6 (7%)
15	CLA	A	841	1	69,73,73	1.16	9 (13%)	82,113,113	1.29	5 (6%)
15	CLA	b	804	2	69,73,73	1.17	8 (11%)	82,113,113	1.25	5 (6%)
15	CLA	b	826	2	66,70,73	1.19	8 (12%)	78,109,113	1.25	5 (6%)
17	SF4	C	101	3	0,12,12	-	-	-		
15	CLA	O	826	2	66,70,73	1.19	8 (12%)	78,109,113	1.25	5 (6%)
15	CLA	O	810	2	69,73,73	1.17	8 (11%)	82,113,113	1.23	5 (6%)
14	F6C	O	832	2	72,74,74	1.60	9 (12%)	83,114,114	2.02	17 (20%)
18	BCR	B	847	-	41,41,41	0.32	0	56,56,56	0.77	1 (1%)
15	CLA	B	837	2	69,73,73	1.16	7 (10%)	82,113,113	1.26	8 (9%)
21	LMG	I	103	-	37,37,55	0.56	0	45,45,63	0.65	0
15	CLA	A	823	1	60,64,73	1.25	7 (11%)	71,102,113	1.34	6 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	CLA	B	840	2	69,73,73	1.17	8 (11%)	82,113,113	1.26	5 (6%)
18	BCR	g	101	-	41,41,41	0.33	0	56,56,56	0.71	0
18	BCR	L	205	-	41,41,41	0.32	0	56,56,56	0.63	0
15	CLA	N	841	1	69,73,73	1.17	9 (13%)	82,113,113	1.27	5 (6%)
15	CLA	N	836	1	58,62,73	1.27	8 (13%)	68,99,113	1.35	6 (8%)
15	CLA	N	818	1	69,73,73	1.16	9 (13%)	82,113,113	1.31	5 (6%)
15	CLA	N	831	1	69,73,73	1.17	9 (13%)	82,113,113	1.27	7 (8%)
22	LFA	W	208	-	14,14,19	0.23	0	13,13,18	0.24	0
15	CLA	A	813	1	58,62,73	1.28	7 (12%)	68,99,113	1.36	7 (10%)
15	CLA	A	812	1,15	69,73,73	1.17	8 (11%)	82,113,113	1.25	5 (6%)
18	BCR	b	847	-	41,41,41	0.32	0	56,56,56	0.93	1 (1%)
15	CLA	B	812	2	60,64,73	1.26	8 (13%)	71,102,113	1.37	6 (8%)
15	CLA	X	102	12	59,63,73	1.27	7 (11%)	70,101,113	1.33	6 (8%)
21	LMG	N	855	-	44,44,55	0.53	0	52,52,63	0.63	0
19	LHG	W	207	-	48,48,48	0.50	0	51,54,54	0.46	0
20	LMT	N	852	-	32,32,36	0.56	0	43,43,47	0.68	0
15	CLA	b	833	2	59,63,73	1.27	7 (11%)	70,101,113	1.33	6 (8%)
15	CLA	O	825	2	69,73,73	1.17	9 (13%)	82,113,113	1.27	6 (7%)
18	BCR	W	209	-	41,41,41	0.29	0	56,56,56	0.64	0
15	CLA	A	831	1	69,73,73	1.17	8 (11%)	82,113,113	1.25	6 (7%)
15	CLA	l	102	12	59,63,73	1.27	7 (11%)	70,101,113	1.33	6 (8%)
21	LMG	B	850	-	44,44,55	0.53	0	52,52,63	0.64	0
15	CLA	b	815	2	61,65,73	1.24	7 (11%)	72,103,113	1.34	8 (11%)
15	CLA	a	838	1	59,63,73	1.26	7 (11%)	70,101,113	1.32	5 (7%)
15	CLA	O	823	24	69,73,73	1.17	8 (11%)	82,113,113	1.29	5 (6%)
15	CLA	A	815	1	59,63,73	1.27	7 (11%)	70,101,113	1.34	6 (8%)
15	CLA	B	818	24	69,73,73	1.18	8 (11%)	82,113,113	1.25	5 (6%)
17	SF4	N	844	2,1	0,12,12	-	-	-		
15	CLA	B	834	24	49,53,73	1.39	8 (16%)	58,89,113	1.42	6 (10%)
18	BCR	M	101	-	41,41,41	0.31	0	56,56,56	0.65	1 (1%)
15	CLA	b	808	2	69,73,73	1.15	8 (11%)	82,113,113	1.29	8 (9%)
15	CLA	N	810	1	61,65,73	1.24	7 (11%)	72,103,113	1.36	7 (9%)
15	CLA	b	837	2	69,73,73	1.16	7 (10%)	82,113,113	1.26	8 (9%)
18	BCR	A	850	-	41,41,41	0.31	0	56,56,56	0.83	0
18	BCR	b	845	-	41,41,41	0.31	0	56,56,56	0.55	0
21	LMG	b	849	-	55,55,55	0.49	0	63,63,63	0.58	0
15	CLA	b	831	2	69,73,73	1.17	7 (10%)	82,113,113	1.26	8 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	CLA	A	808	1	49,53,73	1.38	7 (14%)	58,89,113	1.44	6 (10%)
18	BCR	O	844	-	41,41,41	0.30	0	56,56,56	0.49	0
15	CLA	F	201	24	69,73,73	1.18	8 (11%)	82,113,113	1.24	6 (7%)
19	LHG	a	851	-	41,41,48	0.54	0	44,47,54	0.49	0
15	CLA	A	811	1	61,65,73	1.24	6 (9%)	72,103,113	1.31	5 (6%)
15	CLA	O	819	2	59,63,73	1.27	8 (13%)	70,101,113	1.32	6 (8%)
18	BCR	O	843	-	41,41,41	0.31	0	56,56,56	0.61	0
15	CLA	b	803	-	69,73,73	1.16	9 (13%)	82,113,113	1.28	7 (8%)
22	LFA	L	209	-	14,14,19	0.23	0	13,13,18	0.22	0
16	PQN	B	841	-	34,34,34	0.35	0	43,45,45	0.62	1 (2%)
15	CLA	N	816	1	49,53,73	1.40	7 (14%)	58,89,113	1.41	4 (6%)
13	CL0	A	801	1	58,73,73	2.25	9 (15%)	60,113,113	1.62	13 (21%)
15	CLA	O	831	2	69,73,73	1.16	7 (10%)	82,113,113	1.26	8 (9%)
14	F6C	A	856	24	72,74,74	1.57	8 (11%)	83,114,114	2.08	15 (18%)
15	CLA	Z	102	12	59,63,73	1.27	7 (11%)	70,101,113	1.32	6 (8%)
15	CLA	a	805	1,15	64,68,73	1.22	7 (10%)	76,107,113	1.29	4 (5%)
16	PQN	a	843	-	34,34,34	0.35	0	43,45,45	0.61	1 (2%)
15	CLA	b	806	2	69,73,73	1.17	7 (10%)	82,113,113	1.27	4 (4%)
15	CLA	O	803	-	69,73,73	1.16	9 (13%)	82,113,113	1.28	7 (8%)
15	CLA	N	820	1	69,73,73	1.17	8 (11%)	82,113,113	1.32	7 (8%)
15	CLA	B	836	2	69,73,73	1.17	7 (10%)	82,113,113	1.27	8 (9%)
15	CLA	a	812	1,15	69,73,73	1.17	8 (11%)	82,113,113	1.24	5 (6%)
15	CLA	O	805	2	69,73,73	1.16	7 (10%)	82,113,113	1.28	8 (9%)
15	CLA	N	807	1	69,73,73	1.17	8 (11%)	82,113,113	1.27	6 (7%)
15	CLA	a	813	1	58,62,73	1.28	7 (12%)	68,99,113	1.36	7 (10%)
20	LMT	A	854	-	36,36,36	0.54	0	47,47,47	0.64	0
18	BCR	a	850	-	41,41,41	0.31	0	56,56,56	0.84	0
15	CLA	O	806	2	69,73,73	1.17	7 (10%)	82,113,113	1.27	5 (6%)
18	BCR	T	102	-	41,41,41	0.29	0	56,56,56	0.44	0
15	CLA	L	203	10	64,68,73	1.21	8 (12%)	76,107,113	1.30	7 (9%)
18	BCR	L	210	-	41,41,41	0.29	0	56,56,56	0.66	0
15	CLA	A	835	1	69,73,73	1.17	8 (11%)	82,113,113	1.24	6 (7%)
15	CLA	O	813	2	69,73,73	1.17	7 (10%)	82,113,113	1.26	5 (6%)
15	CLA	B	813	2	69,73,73	1.17	7 (10%)	82,113,113	1.26	5 (6%)
15	CLA	a	822	24	69,73,73	1.18	8 (11%)	82,113,113	1.25	5 (6%)
15	CLA	a	818	1	69,73,73	1.15	9 (13%)	82,113,113	1.33	6 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	BCR	a	847	-	41,41,41	0.31	0	56,56,56	0.63	1 (1%)
15	CLA	N	815	1	59,63,73	1.27	7 (11%)	70,101,113	1.34	5 (7%)
15	CLA	A	820	1	69,73,73	1.16	8 (11%)	82,113,113	1.34	8 (9%)
17	SF4	P	101	3	0,12,12	-	-	-		
14	F6C	a	824	24	58,60,74	1.79	7 (12%)	65,97,114	2.22	14 (21%)
15	CLA	A	827	24	59,63,73	1.25	7 (11%)	70,101,113	1.38	8 (11%)
18	BCR	O	846	-	41,41,41	0.32	0	56,56,56	0.80	2 (3%)
15	CLA	a	827	24	59,63,73	1.25	7 (11%)	70,101,113	1.37	7 (10%)
15	CLA	b	824	24	69,73,73	1.17	7 (10%)	82,113,113	1.28	7 (8%)
18	BCR	O	845	-	41,41,41	0.31	0	56,56,56	0.55	0
15	CLA	A	807	1	69,73,73	1.17	8 (11%)	82,113,113	1.28	6 (7%)
15	CLA	N	830	1	69,73,73	1.17	7 (10%)	82,113,113	1.24	6 (7%)
18	BCR	N	850	-	41,41,41	0.31	0	56,56,56	0.83	0
15	CLA	A	832	1	54,58,73	1.31	8 (14%)	64,95,113	1.38	6 (9%)
15	CLA	W	203	10	64,68,73	1.21	8 (12%)	76,107,113	1.31	7 (9%)
15	CLA	B	838	2	69,73,73	1.16	7 (10%)	82,113,113	1.26	8 (9%)
19	LHG	L	208	-	48,48,48	0.50	0	51,54,54	0.46	0
15	CLA	O	815	2	61,65,73	1.24	7 (11%)	72,103,113	1.33	7 (9%)
15	CLA	b	818	24	69,73,73	1.18	8 (11%)	82,113,113	1.25	5 (6%)
15	CLA	N	811	1	61,65,73	1.24	8 (13%)	72,103,113	1.31	5 (6%)
15	CLA	B	827	2	69,73,73	1.16	7 (10%)	82,113,113	1.22	7 (8%)
15	CLA	N	803	-	69,73,73	1.15	8 (11%)	82,113,113	1.27	7 (8%)
18	BCR	Y	102	-	41,41,41	0.31	0	56,56,56	0.65	1 (1%)
15	CLA	B	808	2	69,73,73	1.15	7 (10%)	82,113,113	1.27	8 (9%)
15	CLA	O	824	24	69,73,73	1.16	7 (10%)	82,113,113	1.29	7 (8%)
15	CLA	a	811	1	61,65,73	1.24	6 (9%)	72,103,113	1.31	5 (6%)
15	CLA	b	829	2	69,73,73	1.17	8 (11%)	82,113,113	1.25	6 (7%)
20	LMT	A	853	-	29,29,36	0.56	0	40,40,47	1.41	4 (10%)
15	CLA	a	832	1	54,58,73	1.31	8 (14%)	64,95,113	1.39	6 (9%)
15	CLA	L	202	10	69,73,73	1.16	8 (11%)	82,113,113	1.27	7 (8%)
21	LMG	B	848	-	55,55,55	0.49	0	63,63,63	0.59	0
17	SF4	c	101	3	0,12,12	-	-	-		
15	CLA	N	819	1	69,73,73	1.18	9 (13%)	82,113,113	1.25	6 (7%)
14	F6C	N	856	24	72,74,74	1.57	8 (11%)	83,114,114	2.08	15 (18%)
15	CLA	N	825	1	69,73,73	1.17	8 (11%)	82,113,113	1.24	5 (6%)
18	BCR	F	203	-	41,41,41	0.30	0	56,56,56	0.52	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	CLA	a	814	1	69,73,73	1.17	7 (10%)	82,113,113	1.26	5 (6%)
15	CLA	a	833	1	59,63,73	1.26	8 (13%)	70,101,113	1.35	6 (8%)
18	BCR	V	101	-	25,25,41	0.52	1 (4%)	33,33,56	0.50	0
15	CLA	O	834	24	49,53,73	1.38	8 (16%)	58,89,113	1.43	7 (12%)
14	F6C	N	826	24	72,74,74	1.61	8 (11%)	83,114,114	2.03	15 (18%)
15	CLA	b	816	2	69,73,73	1.19	8 (11%)	82,113,113	1.25	5 (6%)
14	F6C	O	839	24	72,74,74	1.58	8 (11%)	83,114,114	2.07	15 (18%)
15	CLA	O	804	2	69,73,73	1.17	8 (11%)	82,113,113	1.25	5 (6%)
18	BCR	a	849	-	41,41,41	0.31	0	56,56,56	0.57	0
19	LHG	X	101	-	43,43,48	0.52	0	46,49,54	0.48	0
15	CLA	B	814	2	49,53,73	1.38	6 (12%)	58,89,113	1.45	6 (10%)
18	BCR	f	202	-	41,41,41	0.30	0	56,56,56	0.51	0
21	LMG	g	103	-	37,37,55	0.56	0	45,45,63	0.64	0
18	BCR	K	101	-	25,25,41	0.52	1 (4%)	33,33,56	0.51	0
15	CLA	a	835	1	69,73,73	1.17	8 (11%)	82,113,113	1.23	6 (7%)
18	BCR	N	847	-	41,41,41	0.30	0	56,56,56	0.60	1 (1%)
15	CLA	B	801	2	69,73,73	1.17	8 (11%)	82,113,113	1.21	6 (7%)
15	CLA	B	805	2	69,73,73	1.16	7 (10%)	82,113,113	1.28	7 (8%)
18	BCR	j	205	-	41,41,41	0.32	0	56,56,56	0.62	0
14	F6C	N	824	24	58,60,74	1.79	8 (13%)	65,97,114	2.22	14 (21%)
18	BCR	b	846	-	41,41,41	0.31	0	56,56,56	0.86	2 (3%)
15	CLA	b	840	2	69,73,73	1.17	8 (11%)	82,113,113	1.25	5 (6%)
15	CLA	a	836	1	58,62,73	1.27	8 (13%)	68,99,113	1.35	7 (10%)
15	CLA	b	805	2	69,73,73	1.16	7 (10%)	82,113,113	1.27	7 (8%)
21	LMG	h	103	-	55,55,55	0.49	0	63,63,63	0.59	0
18	BCR	A	846	-	41,41,41	0.32	0	56,56,56	0.65	1 (1%)
15	CLA	B	820	2	49,53,73	1.39	7 (14%)	58,89,113	1.44	4 (6%)
15	CLA	V	102	9	49,53,73	1.40	7 (14%)	58,89,113	1.41	4 (6%)
18	BCR	h	102	-	41,41,41	0.38	0	56,56,56	1.31	8 (14%)
18	BCR	I	101	-	41,41,41	0.33	0	56,56,56	0.71	0
15	CLA	b	825	2	69,73,73	1.17	9 (13%)	82,113,113	1.27	6 (7%)
15	CLA	K	103	24	54,58,73	1.33	8 (14%)	64,95,113	1.40	6 (9%)
18	BCR	A	845	-	41,41,41	0.35	0	56,56,56	0.93	2 (3%)
15	CLA	a	808	1	49,53,73	1.38	7 (14%)	58,89,113	1.44	6 (10%)
15	CLA	O	840	2	69,73,73	1.17	8 (11%)	82,113,113	1.26	5 (6%)
15	CLA	B	807	2	69,73,73	1.16	8 (11%)	82,113,113	1.25	7 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
14	F6C	A	824	24	58,60,74	1.79	8 (13%)	65,97,114	2.22	14 (21%)
15	CLA	N	813	1	58,62,73	1.28	7 (12%)	68,99,113	1.36	7 (10%)
15	CLA	O	822	2	59,63,73	1.27	8 (13%)	70,101,113	1.34	6 (8%)
15	CLA	b	801	2	69,73,73	1.17	7 (10%)	82,113,113	1.21	6 (7%)
15	CLA	f	201	24	69,73,73	1.18	8 (11%)	82,113,113	1.24	6 (7%)
20	LMT	a	853	-	29,29,36	0.56	0	40,40,47	1.41	4 (10%)
15	CLA	b	821	24	57,61,73	1.28	6 (10%)	67,98,113	1.38	8 (11%)
15	CLA	b	814	2	49,53,73	1.37	6 (12%)	58,89,113	1.45	5 (8%)
22	LFA	j	208	-	14,14,19	0.23	0	13,13,18	0.23	0
15	CLA	b	817	2	64,68,73	1.21	8 (12%)	76,107,113	1.25	4 (5%)
18	BCR	O	847	-	41,41,41	0.31	0	56,56,56	0.93	1 (1%)
20	LMT	a	852	-	32,32,36	0.56	0	43,43,47	0.69	0
15	CLA	A	840	1	54,58,73	1.32	7 (12%)	64,95,113	1.39	6 (9%)
15	CLA	i	102	9	49,53,73	1.39	7 (14%)	58,89,113	1.41	4 (6%)
18	BCR	U	101	-	41,41,41	0.31	0	56,56,56	0.48	0
15	CLA	b	823	24	69,73,73	1.17	8 (11%)	82,113,113	1.30	5 (6%)
15	CLA	A	821	1	64,68,73	1.22	8 (12%)	76,107,113	1.29	6 (7%)
15	CLA	B	802	24	69,73,73	1.17	6 (8%)	82,113,113	1.22	6 (7%)
15	CLA	a	830	1	69,73,73	1.17	7 (10%)	82,113,113	1.23	7 (8%)
15	CLA	b	834	24	49,53,73	1.39	8 (16%)	58,89,113	1.41	7 (12%)
18	BCR	T	101	-	41,41,41	0.33	0	56,56,56	0.71	0
22	LFA	O	850	-	15,15,19	0.23	0	14,14,18	0.19	0
18	BCR	L	206	-	41,41,41	0.30	0	56,56,56	0.67	0
15	CLA	N	817	24	49,53,73	1.40	8 (16%)	58,89,113	1.43	4 (6%)
21	LMG	J	103	-	55,55,55	0.49	0	63,63,63	0.59	0
15	CLA	B	830	2	69,73,73	1.16	7 (10%)	82,113,113	1.24	6 (7%)
16	PQN	O	841	-	34,34,34	0.35	0	43,45,45	0.61	1 (2%)
15	CLA	N	828	1	69,73,73	1.17	8 (11%)	82,113,113	1.28	5 (6%)
17	SF4	a	844	2,1	0,12,12	-	-	-		
15	CLA	A	828	1	69,73,73	1.17	8 (11%)	82,113,113	1.28	4 (4%)
15	CLA	O	837	2	69,73,73	1.16	7 (10%)	82,113,113	1.27	8 (9%)
15	CLA	O	838	2	69,73,73	1.16	8 (11%)	82,113,113	1.26	6 (7%)
21	LMG	A	855	-	44,44,55	0.53	0	52,52,63	0.63	0
20	LMT	N	854	-	36,36,36	0.54	0	47,47,47	0.64	0
18	BCR	h	101	-	41,41,41	0.31	0	56,56,56	0.48	0
15	CLA	N	840	1	54,58,73	1.31	7 (12%)	64,95,113	1.39	6 (9%)
15	CLA	N	809	1	64,68,73	1.21	8 (12%)	76,107,113	1.28	6 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	CLA	A	817	24	49,53,73	1.40	8 (16%)	58,89,113	1.43	4 (6%)
15	CLA	B	833	2	59,63,73	1.27	7 (11%)	70,101,113	1.33	6 (8%)
15	CLA	B	825	2	69,73,73	1.17	9 (13%)	82,113,113	1.28	7 (8%)
15	CLA	K	102	9	49,53,73	1.40	7 (14%)	58,89,113	1.41	4 (6%)
18	BCR	B	844	-	41,41,41	0.30	0	56,56,56	0.47	0
15	CLA	a	820	1	69,73,73	1.17	8 (11%)	82,113,113	1.36	8 (9%)
19	LHG	l	101	-	43,43,48	0.52	0	46,49,54	0.48	0
17	SF4	A	844	2,1	0,12,12	-	-	-		
15	CLA	B	822	2	59,63,73	1.31	9 (15%)	70,101,113	1.21	5 (7%)
18	BCR	b	843	-	41,41,41	0.30	0	56,56,56	0.61	0
15	CLA	b	811	2	49,53,73	1.39	8 (16%)	58,89,113	1.42	4 (6%)
17	SF4	P	102	3	0,12,12	-	-	-		
18	BCR	W	205	-	41,41,41	0.32	0	56,56,56	0.58	0
19	LHG	N	857	-	48,48,48	0.50	0	51,54,54	0.46	0
15	CLA	a	807	1	69,73,73	1.17	8 (11%)	82,113,113	1.28	6 (7%)
15	CLA	a	841	1	69,73,73	1.16	9 (13%)	82,113,113	1.28	5 (6%)
15	CLA	N	837	1	55,59,73	1.31	7 (12%)	64,96,113	1.37	7 (10%)
15	CLA	a	810	1	61,65,73	1.24	7 (11%)	72,103,113	1.36	7 (9%)
18	BCR	i	101	-	25,25,41	0.52	1 (4%)	33,33,56	0.51	0
15	CLA	b	830	2	69,73,73	1.16	7 (10%)	82,113,113	1.24	6 (7%)
18	BCR	J	101	-	41,41,41	0.31	0	56,56,56	0.49	0
15	CLA	A	836	1	58,62,73	1.27	8 (13%)	68,99,113	1.35	6 (8%)
15	CLA	b	813	2	69,73,73	1.17	7 (10%)	82,113,113	1.27	6 (7%)
16	PQN	A	843	-	34,34,34	0.35	0	43,45,45	0.60	1 (2%)
15	CLA	a	829	1	64,68,73	1.21	7 (10%)	76,107,113	1.25	5 (6%)
15	CLA	O	812	2	60,64,73	1.26	8 (13%)	71,102,113	1.37	6 (8%)
15	CLA	B	821	24	57,61,73	1.28	6 (10%)	67,98,113	1.38	8 (11%)
18	BCR	k	102	-	41,41,41	0.31	0	56,56,56	0.65	1 (1%)
15	CLA	b	836	2	69,73,73	1.17	8 (11%)	82,113,113	1.27	8 (9%)
18	BCR	O	842	-	41,41,41	0.31	0	56,56,56	0.56	0
18	BCR	b	844	-	41,41,41	0.30	0	56,56,56	0.48	0
19	LHG	Z	101	-	43,43,48	0.52	0	46,49,54	0.48	0
14	F6C	A	826	24	72,74,74	1.61	8 (11%)	83,114,114	2.03	16 (19%)
15	CLA	N	827	24	59,63,73	1.26	7 (11%)	70,101,113	1.38	8 (11%)
15	CLA	A	842	1	69,73,73	1.18	8 (11%)	82,113,113	1.23	6 (7%)
15	CLA	B	829	2	69,73,73	1.17	8 (11%)	82,113,113	1.25	6 (7%)
15	CLA	B	828	2	69,73,73	1.16	8 (11%)	82,113,113	1.30	8 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
14	F6C	B	832	2	72,74,74	1.60	9 (12%)	83,114,114	2.02	17 (20%)
15	CLA	N	839	1	69,73,73	1.17	8 (11%)	82,113,113	1.27	5 (6%)
15	CLA	O	836	2	69,73,73	1.17	7 (10%)	82,113,113	1.27	7 (8%)
18	BCR	A	849	-	41,41,41	0.31	0	56,56,56	0.57	0
15	CLA	A	833	1	59,63,73	1.26	8 (13%)	70,101,113	1.34	6 (8%)
15	CLA	a	839	1	69,73,73	1.17	8 (11%)	82,113,113	1.26	5 (6%)
15	CLA	j	203	10	64,68,73	1.21	8 (12%)	76,107,113	1.31	7 (9%)
15	CLA	a	825	1	69,73,73	1.17	8 (11%)	82,113,113	1.24	5 (6%)
15	CLA	a	817	24	49,53,73	1.40	8 (16%)	58,89,113	1.43	4 (6%)
15	CLA	B	811	2	49,53,73	1.39	8 (16%)	58,89,113	1.41	4 (6%)
15	CLA	B	804	2	69,73,73	1.17	8 (11%)	82,113,113	1.25	5 (6%)
15	CLA	O	827	2	69,73,73	1.16	8 (11%)	82,113,113	1.22	7 (8%)
15	CLA	a	815	1	59,63,73	1.27	8 (13%)	70,101,113	1.33	6 (8%)
15	CLA	N	806	1	69,73,73	1.16	6 (8%)	82,113,113	1.25	5 (6%)
15	CLA	O	808	2	69,73,73	1.15	7 (10%)	82,113,113	1.30	8 (9%)
15	CLA	A	814	1	69,73,73	1.17	7 (10%)	82,113,113	1.26	5 (6%)
17	SF4	c	102	3	0,12,12	-	-	-		
16	PQN	N	843	-	34,34,34	0.34	0	43,45,45	0.60	1 (2%)
15	CLA	O	811	2	49,53,73	1.39	8 (16%)	58,89,113	1.41	4 (6%)
15	CLA	a	828	1	69,73,73	1.17	8 (11%)	82,113,113	1.28	5 (6%)
15	CLA	B	817	2	64,68,73	1.21	8 (12%)	76,107,113	1.25	4 (5%)
21	LMG	W	206	-	50,50,55	0.50	0	58,58,63	0.60	0
15	CLA	B	823	24	69,73,73	1.17	8 (11%)	82,113,113	1.29	5 (6%)
15	CLA	S	201	24	69,73,73	1.18	8 (11%)	82,113,113	1.24	6 (7%)
15	CLA	b	802	24	69,73,73	1.17	6 (8%)	82,113,113	1.22	6 (7%)
15	CLA	N	812	1,15	69,73,73	1.17	8 (11%)	82,113,113	1.25	5 (6%)
15	CLA	A	803	-	69,73,73	1.15	8 (11%)	82,113,113	1.27	8 (9%)
21	LMG	U	103	-	55,55,55	0.49	0	63,63,63	0.59	0

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
15	CLA	B	810	2	1/1/15/20	11/39/115/115	-
14	F6C	L	204	24	1/1/10/16	11/41/97/97	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	CLA	O	833	2	1/1/13/20	8/27/103/115	-
15	CLA	b	822	2	1/1/13/20	8/27/103/115	-
19	LHG	Y	101	-	-	17/53/53/53	-
15	CLA	b	810	2	1/1/15/20	12/39/115/115	-
15	CLA	B	835	24	1/1/11/20	10/15/91/115	-
15	CLA	A	806	1	1/1/15/20	15/39/115/115	-
15	CLA	A	825	1	1/1/15/20	10/39/115/115	-
15	CLA	O	814	2	1/1/11/20	5/15/91/115	-
15	CLA	B	806	2	1/1/15/20	20/39/115/115	-
15	CLA	b	828	2	1/1/15/20	15/39/115/115	-
15	CLA	A	809	1	1/1/14/20	16/33/109/115	-
15	CLA	a	821	1	1/1/14/20	4/33/109/115	-
15	CLA	B	809	2	1/1/15/20	13/39/115/115	-
14	F6C	b	839	24	1/1/10/16	13/41/97/97	-
15	CLA	B	816	2	1/1/15/20	11/39/115/115	-
18	BCR	O	848	-	-	3/29/63/63	0/2/2/2
15	CLA	b	820	2	1/1/11/20	2/15/91/115	-
15	CLA	V	103	24	1/1/12/20	4/21/97/115	-
21	LMG	T	103	-	-	15/32/52/70	0/1/1/1
18	BCR	B	846	-	-	0/29/63/63	0/2/2/2
15	CLA	B	831	2	1/1/15/20	10/39/115/115	-
15	CLA	O	801	2	1/1/15/20	10/39/115/115	-
15	CLA	N	808	1	1/1/11/20	0/15/91/115	-
18	BCR	S	202	-	-	2/29/63/63	0/2/2/2
20	LMT	A	852	-	-	0/17/57/61	0/2/2/2
15	CLA	N	842	1	1/1/15/20	15/39/115/115	-
15	CLA	O	835	24	1/1/11/20	10/15/91/115	-
18	BCR	N	846	-	-	7/29/63/63	0/2/2/2
15	CLA	b	809	2	1/1/15/20	16/39/115/115	-
19	LHG	N	851	-	-	12/46/46/53	-
15	CLA	A	837	1	1/1/12/20	8/23/99/115	-
20	LMT	N	853	-	-	8/14/54/61	0/2/2/2
15	CLA	N	804	1	1/1/15/20	5/39/115/115	-
15	CLA	A	804	1	1/1/15/20	5/39/115/115	-
19	LHG	F	204	-	-	24/53/53/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	CLA	O	820	2	1/1/11/20	2/15/91/115	-
15	CLA	N	834	1	1/1/15/20	7/39/115/115	-
15	CLA	B	826	2	1/1/14/20	13/36/112/115	-
18	BCR	B	842	-	-	3/29/63/63	0/2/2/2
13	CL0	N	801	1	3/3/20/25	9/37/135/135	-
15	CLA	a	834	1	1/1/15/20	6/39/115/115	-
18	BCR	A	847	-	-	4/29/63/63	0/2/2/2
15	CLA	O	807	2	1/1/15/20	4/39/115/115	-
15	CLA	A	818	1	1/1/15/20	21/39/115/115	-
15	CLA	A	830	1	1/1/15/20	7/39/115/115	-
13	CL0	a	801	1	3/3/20/25	9/37/135/135	-
21	LMG	j	206	-	-	10/45/65/70	0/1/1/1
15	CLA	a	819	1	1/1/15/20	11/39/115/115	-
18	BCR	N	845	-	-	3/29/63/63	0/2/2/2
19	LHG	j	207	-	-	12/53/53/53	-
15	CLA	A	839	1	1/1/15/20	18/39/115/115	-
15	CLA	a	803	-	1/1/15/20	9/39/115/115	-
18	BCR	a	845	-	-	3/29/63/63	0/2/2/2
15	CLA	A	834	1	1/1/15/20	6/39/115/115	-
14	F6C	j	201	2	1/1/10/16	8/41/97/97	-
15	CLA	N	805	1,15	1/1/14/20	9/33/109/115	-
20	LMT	a	854	-	-	4/21/61/61	0/2/2/2
18	BCR	A	848	-	-	6/29/63/63	0/2/2/2
14	F6C	A	802	24	1/1/10/16	7/41/97/97	-
14	F6C	a	802	24	1/1/10/16	7/41/97/97	-
15	CLA	a	806	1	1/1/15/20	16/39/115/115	-
15	CLA	O	830	2	1/1/15/20	11/39/115/115	-
15	CLA	a	804	1	1/1/15/20	5/39/115/115	-
15	CLA	A	822	24	1/1/15/20	13/39/115/115	-
15	CLA	N	833	1	1/1/13/20	3/27/103/115	-
15	CLA	a	809	1	1/1/14/20	12/33/109/115	-
15	CLA	a	816	1	1/1/11/20	6/15/91/115	-
18	BCR	B	843	-	-	3/29/63/63	0/2/2/2
18	BCR	b	848	-	-	3/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	F6C	a	855	24	1/1/10/16	14/41/97/97	-
14	F6C	a	826	24	1/1/10/16	17/41/97/97	-
18	BCR	U	102	-	-	8/29/63/63	0/2/2/2
18	BCR	I	102	-	-	4/29/63/63	0/2/2/2
22	LFA	b	850	-	-	5/13/13/17	-
15	CLA	a	842	1	1/1/15/20	15/39/115/115	-
15	CLA	a	823	1	1/1/13/20	6/29/105/115	-
15	CLA	N	832	1	1/1/12/20	2/21/97/115	-
16	PQN	b	841	-	-	0/23/43/43	0/2/2/2
15	CLA	B	803	-	1/1/15/20	5/39/115/115	-
15	CLA	j	202	10	1/1/15/20	4/39/115/115	-
18	BCR	F	202	-	-	6/29/63/63	0/2/2/2
15	CLA	b	807	2	1/1/15/20	4/39/115/115	-
15	CLA	N	822	24	1/1/15/20	14/39/115/115	-
15	CLA	B	824	24	1/1/15/20	14/39/115/115	-
15	CLA	N	838	1	1/1/13/20	11/27/103/115	-
15	CLA	W	202	10	1/1/15/20	5/39/115/115	-
15	CLA	O	829	2	1/1/15/20	15/39/115/115	-
15	CLA	B	815	2	1/1/13/20	6/30/106/115	-
14	F6C	L	201	2	1/1/10/16	8/41/97/97	-
18	BCR	a	846	-	-	8/29/63/63	0/2/2/2
18	BCR	b	842	-	-	3/29/63/63	0/2/2/2
15	CLA	a	831	1	1/1/15/20	12/39/115/115	-
15	CLA	b	835	24	1/1/11/20	10/15/91/115	-
18	BCR	N	848	-	-	5/29/63/63	0/2/2/2
15	CLA	O	818	24	1/1/15/20	8/39/115/115	-
21	LMG	O	849	-	-	5/50/70/70	0/1/1/1
22	LFA	B	849	-	-	5/13/13/17	-
19	LHG	B	851	-	-	17/53/53/53	-
15	CLA	O	821	24	1/1/12/20	9/25/101/115	-
15	CLA	i	103	24	1/1/12/20	2/21/97/115	-
14	F6C	j	204	24	1/1/10/16	9/41/97/97	-
15	CLA	A	819	1	1/1/15/20	13/39/115/115	-
18	BCR	a	848	-	-	6/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	CLA	b	838	2	1/1/15/20	8/39/115/115	-
17	SF4	C	102	3	-	-	0/6/5/5
14	F6C	N	802	24	1/1/10/16	9/41/97/97	-
14	F6C	W	204	24	1/1/10/16	10/41/97/97	-
21	LMG	L	207	-	-	10/45/65/70	0/1/1/1
14	F6C	B	839	24	1/1/10/16	13/41/97/97	-
15	CLA	A	838	1	1/1/13/20	10/27/103/115	-
15	CLA	B	819	2	1/1/13/20	12/27/103/115	-
14	F6C	b	832	2	1/1/10/16	5/41/97/97	-
15	CLA	N	814	1	1/1/15/20	8/39/115/115	-
19	LHG	f	203	-	-	26/53/53/53	-
18	BCR	J	102	-	-	8/29/63/63	0/2/2/2
15	CLA	A	829	1	1/1/14/20	17/33/109/115	-
15	CLA	O	828	2	1/1/15/20	13/39/115/115	-
15	CLA	b	812	2	-	11/29/105/115	-
15	CLA	N	823	1	1/1/13/20	6/29/105/115	-
15	CLA	b	819	2	1/1/13/20	12/27/103/115	-
19	LHG	k	101	-	-	15/53/53/53	-
15	CLA	A	810	1	1/1/13/20	7/30/106/115	-
14	F6C	W	201	2	1/1/10/16	8/41/97/97	-
18	BCR	B	845	-	-	8/29/63/63	0/2/2/2
18	BCR	N	849	-	-	3/29/63/63	0/2/2/2
19	LHG	A	851	-	-	12/46/46/53	-
15	CLA	O	802	24	1/1/15/20	12/39/115/115	-
18	BCR	g	102	-	-	4/29/63/63	0/2/2/2
15	CLA	O	817	2	1/1/14/20	13/33/109/115	-
15	CLA	O	809	2	1/1/15/20	15/39/115/115	-
15	CLA	a	837	1	1/1/12/20	8/23/99/115	-
15	CLA	O	816	2	1/1/15/20	11/39/115/115	-
15	CLA	A	816	1	1/1/11/20	6/15/91/115	-
15	CLA	N	835	1	1/1/15/20	9/39/115/115	-
15	CLA	a	840	1	1/1/12/20	0/21/97/115	-
15	CLA	b	827	2	1/1/15/20	6/39/115/115	-
15	CLA	N	829	1	1/1/14/20	15/33/109/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	CLA	A	805	1,15	1/1/14/20	9/33/109/115	-
15	CLA	N	821	1	1/1/14/20	6/33/109/115	-
15	CLA	A	841	1	1/1/15/20	14/39/115/115	-
15	CLA	b	804	2	1/1/15/20	9/39/115/115	-
15	CLA	b	826	2	1/1/14/20	11/36/112/115	-
17	SF4	C	101	3	-	-	0/6/5/5
15	CLA	O	826	2	1/1/14/20	11/36/112/115	-
15	CLA	O	810	2	1/1/15/20	10/39/115/115	-
14	F6C	O	832	2	1/1/10/16	7/41/97/97	-
18	BCR	B	847	-	-	3/29/63/63	0/2/2/2
15	CLA	B	837	2	1/1/15/20	11/39/115/115	-
21	LMG	I	103	-	-	14/32/52/70	0/1/1/1
15	CLA	A	823	1	1/1/13/20	6/29/105/115	-
15	CLA	B	840	2	1/1/15/20	12/39/115/115	-
18	BCR	g	101	-	-	8/29/63/63	0/2/2/2
18	BCR	L	205	-	-	4/29/63/63	0/2/2/2
15	CLA	N	841	1	1/1/15/20	13/39/115/115	-
15	CLA	N	836	1	1/1/12/20	7/26/102/115	-
15	CLA	N	818	1	1/1/15/20	20/39/115/115	-
15	CLA	N	831	1	1/1/15/20	12/39/115/115	-
22	LFA	W	208	-	-	0/12/12/17	-
15	CLA	A	813	1	1/1/12/20	7/26/102/115	-
15	CLA	A	812	1,15	1/1/15/20	20/39/115/115	-
18	BCR	b	847	-	-	6/29/63/63	0/2/2/2
15	CLA	B	812	2	-	11/29/105/115	-
15	CLA	X	102	12	1/1/13/20	2/27/103/115	-
21	LMG	N	855	-	-	10/39/59/70	0/1/1/1
19	LHG	W	207	-	-	14/53/53/53	-
20	LMT	N	852	-	-	0/17/57/61	0/2/2/2
15	CLA	b	833	2	1/1/13/20	8/27/103/115	-
15	CLA	O	825	2	1/1/15/20	3/39/115/115	-
18	BCR	W	209	-	-	1/29/63/63	0/2/2/2
15	CLA	A	831	1	1/1/15/20	12/39/115/115	-
15	CLA	l	102	12	1/1/13/20	2/27/103/115	-
21	LMG	B	850	-	-	10/39/59/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	CLA	b	815	2	1/1/13/20	4/30/106/115	-
15	CLA	a	838	1	1/1/13/20	11/27/103/115	-
15	CLA	O	823	24	1/1/15/20	9/39/115/115	-
15	CLA	A	815	1	1/1/13/20	2/27/103/115	-
15	CLA	B	818	24	1/1/15/20	7/39/115/115	-
17	SF4	N	844	2,1	-	-	0/6/5/5
15	CLA	B	834	24	1/1/11/20	6/15/91/115	-
18	BCR	M	101	-	-	6/29/63/63	0/2/2/2
15	CLA	b	808	2	1/1/15/20	7/39/115/115	-
15	CLA	N	810	1	1/1/13/20	8/30/106/115	-
15	CLA	b	837	2	1/1/15/20	11/39/115/115	-
18	BCR	A	850	-	-	13/29/63/63	0/2/2/2
18	BCR	b	845	-	-	8/29/63/63	0/2/2/2
21	LMG	b	849	-	-	6/50/70/70	0/1/1/1
15	CLA	b	831	2	1/1/15/20	10/39/115/115	-
15	CLA	A	808	1	1/1/11/20	2/15/91/115	-
18	BCR	O	844	-	-	4/29/63/63	0/2/2/2
15	CLA	F	201	24	1/1/15/20	10/39/115/115	-
19	LHG	a	851	-	-	12/46/46/53	-
15	CLA	A	811	1	1/1/13/20	11/30/106/115	-
15	CLA	O	819	2	1/1/13/20	12/27/103/115	-
18	BCR	O	843	-	-	3/29/63/63	0/2/2/2
15	CLA	b	803	-	1/1/15/20	3/39/115/115	-
22	LFA	L	209	-	-	0/12/12/17	-
16	PQN	B	841	-	-	0/23/43/43	0/2/2/2
15	CLA	N	816	1	1/1/11/20	6/15/91/115	-
13	CL0	A	801	1	3/3/20/25	5/37/135/135	-
15	CLA	O	831	2	1/1/15/20	10/39/115/115	-
14	F6C	A	856	24	1/1/10/16	15/41/97/97	-
15	CLA	Z	102	12	1/1/13/20	2/27/103/115	-
15	CLA	a	805	1,15	1/1/14/20	9/33/109/115	-
16	PQN	a	843	-	-	0/23/43/43	0/2/2/2
15	CLA	b	806	2	1/1/15/20	19/39/115/115	-
15	CLA	O	803	-	1/1/15/20	3/39/115/115	-
15	CLA	N	820	1	1/1/15/20	22/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	CLA	B	836	2	1/1/15/20	7/39/115/115	-
15	CLA	a	812	1,15	1/1/15/20	17/39/115/115	-
15	CLA	O	805	2	1/1/15/20	10/39/115/115	-
15	CLA	N	807	1	1/1/15/20	18/39/115/115	-
15	CLA	a	813	1	1/1/12/20	6/26/102/115	-
20	LMT	A	854	-	-	4/21/61/61	0/2/2/2
18	BCR	a	850	-	-	13/29/63/63	0/2/2/2
15	CLA	O	806	2	1/1/15/20	19/39/115/115	-
18	BCR	T	102	-	-	4/29/63/63	0/2/2/2
15	CLA	L	203	10	1/1/14/20	11/33/109/115	-
18	BCR	L	210	-	-	1/29/63/63	0/2/2/2
15	CLA	A	835	1	1/1/15/20	9/39/115/115	-
15	CLA	O	813	2	1/1/15/20	13/39/115/115	-
15	CLA	B	813	2	1/1/15/20	13/39/115/115	-
15	CLA	a	822	24	1/1/15/20	13/39/115/115	-
15	CLA	a	818	1	1/1/15/20	19/39/115/115	-
18	BCR	a	847	-	-	4/29/63/63	0/2/2/2
15	CLA	N	815	1	1/1/13/20	2/27/103/115	-
15	CLA	A	820	1	1/1/15/20	19/39/115/115	-
17	SF4	P	101	3	-	-	0/6/5/5
14	F6C	a	824	24	1/1/7/16	7/25/81/97	-
15	CLA	A	827	24	1/1/13/20	1/27/103/115	-
18	BCR	O	846	-	-	1/29/63/63	0/2/2/2
15	CLA	a	827	24	1/1/13/20	1/27/103/115	-
15	CLA	b	824	24	1/1/15/20	14/39/115/115	-
18	BCR	O	845	-	-	8/29/63/63	0/2/2/2
15	CLA	A	807	1	1/1/15/20	17/39/115/115	-
15	CLA	N	830	1	1/1/15/20	6/39/115/115	-
18	BCR	N	850	-	-	13/29/63/63	0/2/2/2
15	CLA	A	832	1	1/1/12/20	2/21/97/115	-
15	CLA	W	203	10	1/1/14/20	9/33/109/115	-
15	CLA	B	838	2	1/1/15/20	9/39/115/115	-
19	LHG	L	208	-	-	13/53/53/53	-
15	CLA	O	815	2	1/1/13/20	8/30/106/115	-
15	CLA	b	818	24	1/1/15/20	8/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	CLA	N	811	1	1/1/13/20	12/30/106/115	-
15	CLA	B	827	2	1/1/15/20	6/39/115/115	-
15	CLA	N	803	-	1/1/15/20	9/39/115/115	-
18	BCR	Y	102	-	-	6/29/63/63	0/2/2/2
15	CLA	B	808	2	1/1/15/20	8/39/115/115	-
15	CLA	O	824	24	1/1/15/20	14/39/115/115	-
15	CLA	a	811	1	1/1/13/20	11/30/106/115	-
15	CLA	b	829	2	1/1/15/20	16/39/115/115	-
20	LMT	A	853	-	-	8/14/54/61	0/2/2/2
15	CLA	a	832	1	1/1/12/20	2/21/97/115	-
15	CLA	L	202	10	1/1/15/20	5/39/115/115	-
21	LMG	B	848	-	-	4/50/70/70	0/1/1/1
17	SF4	c	101	3	-	-	0/6/5/5
15	CLA	N	819	1	1/1/15/20	13/39/115/115	-
14	F6C	N	856	24	1/1/10/16	15/41/97/97	-
15	CLA	N	825	1	1/1/15/20	11/39/115/115	-
18	BCR	F	203	-	-	2/29/63/63	0/2/2/2
15	CLA	a	814	1	1/1/15/20	7/39/115/115	-
15	CLA	a	833	1	1/1/13/20	4/27/103/115	-
18	BCR	V	101	-	-	0/18/35/63	0/1/1/2
15	CLA	O	834	24	1/1/11/20	6/15/91/115	-
14	F6C	N	826	24	1/1/10/16	13/41/97/97	-
15	CLA	b	816	2	1/1/15/20	11/39/115/115	-
14	F6C	O	839	24	1/1/10/16	13/41/97/97	-
15	CLA	O	804	2	1/1/15/20	8/39/115/115	-
18	BCR	a	849	-	-	3/29/63/63	0/2/2/2
19	LHG	X	101	-	-	21/48/48/53	-
15	CLA	B	814	2	1/1/11/20	4/15/91/115	-
18	BCR	f	202	-	-	2/29/63/63	0/2/2/2
21	LMG	g	103	-	-	16/32/52/70	0/1/1/1
18	BCR	K	101	-	-	0/18/35/63	0/1/1/2
15	CLA	a	835	1	1/1/15/20	8/39/115/115	-
18	BCR	N	847	-	-	5/29/63/63	0/2/2/2
15	CLA	B	801	2	1/1/15/20	10/39/115/115	-
15	CLA	B	805	2	1/1/15/20	11/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	BCR	j	205	-	-	2/29/63/63	0/2/2/2
14	F6C	N	824	24	1/1/7/16	7/25/81/97	-
18	BCR	b	846	-	-	0/29/63/63	0/2/2/2
15	CLA	b	840	2	1/1/15/20	13/39/115/115	-
15	CLA	a	836	1	1/1/12/20	7/26/102/115	-
15	CLA	b	805	2	1/1/15/20	8/39/115/115	-
21	LMG	h	103	-	-	15/50/70/70	0/1/1/1
18	BCR	A	846	-	-	8/29/63/63	0/2/2/2
15	CLA	B	820	2	1/1/11/20	4/15/91/115	-
15	CLA	V	102	9	1/1/11/20	9/15/91/115	-
18	BCR	h	102	-	-	8/29/63/63	0/2/2/2
18	BCR	I	101	-	-	8/29/63/63	0/2/2/2
15	CLA	b	825	2	1/1/15/20	3/39/115/115	-
15	CLA	K	103	24	1/1/12/20	2/21/97/115	-
18	BCR	A	845	-	-	3/29/63/63	0/2/2/2
15	CLA	a	808	1	1/1/11/20	2/15/91/115	-
15	CLA	O	840	2	1/1/15/20	13/39/115/115	-
15	CLA	B	807	2	1/1/15/20	4/39/115/115	-
14	F6C	A	824	24	1/1/7/16	8/25/81/97	-
15	CLA	N	813	1	1/1/12/20	6/26/102/115	-
15	CLA	O	822	2	1/1/13/20	10/27/103/115	-
15	CLA	b	801	2	1/1/15/20	9/39/115/115	-
15	CLA	f	201	24	1/1/15/20	9/39/115/115	-
20	LMT	a	853	-	-	8/14/54/61	0/2/2/2
15	CLA	b	821	24	1/1/12/20	9/25/101/115	-
15	CLA	b	814	2	1/1/11/20	6/15/91/115	-
22	LFA	j	208	-	-	0/12/12/17	-
15	CLA	b	817	2	1/1/14/20	13/33/109/115	-
18	BCR	O	847	-	-	6/29/63/63	0/2/2/2
20	LMT	a	852	-	-	0/17/57/61	0/2/2/2
15	CLA	A	840	1	1/1/12/20	2/21/97/115	-
15	CLA	i	102	9	1/1/11/20	9/15/91/115	-
18	BCR	U	101	-	-	7/29/63/63	0/2/2/2
15	CLA	b	823	24	1/1/15/20	9/39/115/115	-
15	CLA	A	821	1	1/1/14/20	6/33/109/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	CLA	B	802	24	1/1/15/20	12/39/115/115	-
15	CLA	a	830	1	1/1/15/20	5/39/115/115	-
15	CLA	b	834	24	1/1/11/20	4/15/91/115	-
18	BCR	T	101	-	-	8/29/63/63	0/2/2/2
22	LFA	O	850	-	-	7/13/13/17	-
18	BCR	L	206	-	-	2/29/63/63	0/2/2/2
15	CLA	N	817	24	1/1/11/20	6/15/91/115	-
21	LMG	J	103	-	-	16/50/70/70	0/1/1/1
15	CLA	B	830	2	1/1/15/20	11/39/115/115	-
16	PQN	O	841	-	-	0/23/43/43	0/2/2/2
15	CLA	N	828	1	1/1/15/20	8/39/115/115	-
17	SF4	a	844	2,1	-	-	0/6/5/5
15	CLA	A	828	1	1/1/15/20	8/39/115/115	-
15	CLA	O	837	2	1/1/15/20	10/39/115/115	-
15	CLA	O	838	2	1/1/15/20	6/39/115/115	-
21	LMG	A	855	-	-	11/39/59/70	0/1/1/1
20	LMT	N	854	-	-	4/21/61/61	0/2/2/2
18	BCR	h	101	-	-	7/29/63/63	0/2/2/2
15	CLA	N	840	1	1/1/12/20	2/21/97/115	-
15	CLA	N	809	1	1/1/14/20	14/33/109/115	-
15	CLA	A	817	24	1/1/11/20	6/15/91/115	-
15	CLA	B	833	2	1/1/13/20	6/27/103/115	-
15	CLA	B	825	2	1/1/15/20	3/39/115/115	-
15	CLA	K	102	9	1/1/11/20	8/15/91/115	-
18	BCR	B	844	-	-	4/29/63/63	0/2/2/2
15	CLA	a	820	1	1/1/15/20	19/39/115/115	-
19	LHG	l	101	-	-	23/48/48/53	-
17	SF4	A	844	2,1	-	-	0/6/5/5
15	CLA	B	822	2	1/1/13/20	10/27/103/115	-
18	BCR	b	843	-	-	3/29/63/63	0/2/2/2
15	CLA	b	811	2	1/1/11/20	3/15/91/115	-
19	LHG	N	857	-	-	24/53/53/53	-
18	BCR	W	205	-	-	4/29/63/63	0/2/2/2
17	SF4	P	102	3	-	-	0/6/5/5
15	CLA	a	807	1	1/1/15/20	18/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	CLA	a	841	1	1/1/15/20	13/39/115/115	-
15	CLA	N	837	1	1/1/12/20	7/23/99/115	-
15	CLA	a	810	1	1/1/13/20	8/30/106/115	-
18	BCR	i	101	-	-	0/18/35/63	0/1/1/2
15	CLA	b	830	2	1/1/15/20	11/39/115/115	-
18	BCR	J	101	-	-	7/29/63/63	0/2/2/2
15	CLA	A	836	1	1/1/12/20	7/26/102/115	-
15	CLA	b	813	2	1/1/15/20	11/39/115/115	-
16	PQN	A	843	-	-	0/23/43/43	0/2/2/2
15	CLA	a	829	1	1/1/14/20	14/33/109/115	-
15	CLA	O	812	2	-	10/29/105/115	-
15	CLA	B	821	24	1/1/12/20	10/25/101/115	-
18	BCR	k	102	-	-	6/29/63/63	0/2/2/2
15	CLA	b	836	2	1/1/15/20	8/39/115/115	-
18	BCR	O	842	-	-	3/29/63/63	0/2/2/2
18	BCR	b	844	-	-	4/29/63/63	0/2/2/2
19	LHG	Z	101	-	-	23/48/48/53	-
14	F6C	A	826	24	1/1/10/16	12/41/97/97	-
15	CLA	N	827	24	1/1/13/20	1/27/103/115	-
15	CLA	A	842	1	1/1/15/20	15/39/115/115	-
15	CLA	B	829	2	1/1/15/20	18/39/115/115	-
15	CLA	B	828	2	1/1/15/20	12/39/115/115	-
14	F6C	B	832	2	1/1/10/16	5/41/97/97	-
15	CLA	N	839	1	1/1/15/20	17/39/115/115	-
15	CLA	O	836	2	1/1/15/20	8/39/115/115	-
18	BCR	A	849	-	-	3/29/63/63	0/2/2/2
15	CLA	A	833	1	1/1/13/20	3/27/103/115	-
15	CLA	a	839	1	1/1/15/20	15/39/115/115	-
15	CLA	j	203	10	1/1/14/20	10/33/109/115	-
15	CLA	a	825	1	1/1/15/20	11/39/115/115	-
15	CLA	a	817	24	1/1/11/20	6/15/91/115	-
15	CLA	B	811	2	1/1/11/20	3/15/91/115	-
15	CLA	B	804	2	1/1/15/20	9/39/115/115	-
15	CLA	O	827	2	1/1/15/20	6/39/115/115	-
15	CLA	a	815	1	1/1/13/20	2/27/103/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	CLA	N	806	1	1/1/15/20	16/39/115/115	-
15	CLA	O	808	2	1/1/15/20	8/39/115/115	-
15	CLA	A	814	1	1/1/15/20	8/39/115/115	-
17	SF4	c	102	3	-	-	0/6/5/5
16	PQN	N	843	-	-	0/23/43/43	0/2/2/2
15	CLA	O	811	2	1/1/11/20	3/15/91/115	-
15	CLA	a	828	1	1/1/15/20	7/39/115/115	-
15	CLA	B	817	2	1/1/14/20	13/33/109/115	-
21	LMG	W	206	-	-	10/45/65/70	0/1/1/1
15	CLA	B	823	24	1/1/15/20	9/39/115/115	-
15	CLA	S	201	24	1/1/15/20	10/39/115/115	-
15	CLA	b	802	24	1/1/15/20	12/39/115/115	-
15	CLA	N	812	1,15	1/1/15/20	19/39/115/115	-
15	CLA	A	803	-	1/1/15/20	11/39/115/115	-
21	LMG	U	103	-	-	14/50/70/70	0/1/1/1

The worst 5 of 2099 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	a	801	CL0	C1B-C2B	9.06	1.49	1.39
13	N	801	CL0	C1B-C2B	9.06	1.49	1.39
13	A	801	CL0	C1B-C2B	9.04	1.49	1.39
14	j	201	F6C	C2A-C3A	8.65	1.55	1.36
14	W	201	F6C	C2A-C3A	8.61	1.55	1.36

The worst 5 of 1915 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	b	839	F6C	CAA-C2A-C3A	-9.85	109.43	127.87
14	O	839	F6C	CAA-C2A-C3A	-9.83	109.46	127.87
14	B	839	F6C	CAA-C2A-C3A	-9.83	109.46	127.87
14	a	826	F6C	CAA-C2A-C3A	-9.77	109.56	127.87
14	W	204	F6C	CAA-C2A-C3A	-9.64	109.81	127.87

5 of 276 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
13	A	801	CL0	NC
13	A	801	CL0	NA

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Mol	Chain	Res	Type	Atom
13	A	801	CL0	ND
13	N	801	CL0	NC
13	N	801	CL0	NA

5 of 3325 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
14	A	802	F6C	C1B-C2B-CMB-OMB
14	A	802	F6C	C3B-C2B-CMB-OMB
14	A	824	F6C	C1B-C2B-CMB-OMB
14	A	824	F6C	C3B-C2B-CMB-OMB
14	A	826	F6C	CHA-CBD-CGD-O2D

There are no ring outliers.

331 monomers are involved in 769 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
15	B	810	CLA	2	0
14	L	204	F6C	1	0
15	O	833	CLA	1	0
15	b	822	CLA	1	0
19	Y	101	LHG	4	0
15	b	810	CLA	1	0
15	A	806	CLA	7	0
15	A	825	CLA	1	0
15	O	814	CLA	1	0
15	B	806	CLA	5	0
15	b	828	CLA	4	0
15	A	809	CLA	5	0
15	a	821	CLA	1	0
15	B	809	CLA	7	0
15	B	816	CLA	4	0
18	O	848	BCR	4	0
15	b	820	CLA	2	0
21	T	103	LMG	2	0
18	B	846	BCR	5	0
15	B	831	CLA	3	0
15	O	801	CLA	1	0
15	N	808	CLA	1	0
18	S	202	BCR	3	0
20	A	852	LMT	2	0
15	N	842	CLA	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
18	N	846	BCR	3	0
15	b	809	CLA	6	0
15	A	837	CLA	2	0
20	N	853	LMT	1	0
15	N	804	CLA	4	0
15	A	804	CLA	3	0
19	F	204	LHG	2	0
15	O	820	CLA	2	0
15	N	834	CLA	2	0
15	B	826	CLA	5	0
18	B	842	BCR	3	0
13	N	801	CL0	2	0
15	a	834	CLA	2	0
18	A	847	BCR	2	0
15	O	807	CLA	1	0
15	A	818	CLA	6	0
15	A	830	CLA	3	0
13	a	801	CL0	2	0
21	j	206	LMG	3	0
15	a	819	CLA	6	0
18	N	845	BCR	3	0
19	j	207	LHG	7	0
15	A	839	CLA	2	0
15	a	803	CLA	8	0
18	a	845	BCR	3	0
15	A	834	CLA	2	0
14	j	201	F6C	1	0
20	a	854	LMT	1	0
18	A	848	BCR	2	0
15	a	806	CLA	8	0
15	O	830	CLA	5	0
15	a	804	CLA	5	0
15	A	822	CLA	3	0
15	N	833	CLA	2	0
15	a	809	CLA	1	0
15	a	816	CLA	1	0
18	B	843	BCR	1	0
18	b	848	BCR	5	0
18	U	102	BCR	5	0
22	b	850	LFA	2	0
15	a	842	CLA	2	0
15	a	823	CLA	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
16	b	841	PQN	4	0
15	B	803	CLA	8	0
15	j	202	CLA	2	0
18	F	202	BCR	2	0
15	b	807	CLA	4	0
15	N	822	CLA	5	0
15	B	824	CLA	6	0
15	N	838	CLA	3	0
15	W	202	CLA	2	0
15	O	829	CLA	7	0
14	L	201	F6C	1	0
18	a	846	BCR	2	0
18	b	842	BCR	2	0
15	a	831	CLA	3	0
15	O	818	CLA	2	0
21	O	849	LMG	6	0
22	B	849	LFA	1	0
19	B	851	LHG	4	0
15	O	821	CLA	1	0
15	A	819	CLA	6	0
18	a	848	BCR	1	0
15	b	838	CLA	8	0
21	L	207	LMG	4	0
15	A	838	CLA	2	0
15	B	819	CLA	1	0
14	b	832	F6C	1	0
15	N	814	CLA	6	0
19	f	203	LHG	2	0
18	J	102	BCR	6	0
15	A	829	CLA	3	0
15	O	828	CLA	2	0
15	b	812	CLA	4	0
15	N	823	CLA	3	0
15	b	819	CLA	1	0
19	k	101	LHG	5	0
15	A	810	CLA	4	0
14	W	201	F6C	1	0
18	N	849	BCR	2	0
15	O	802	CLA	4	0
15	O	817	CLA	3	0
15	O	809	CLA	6	0
15	a	837	CLA	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
15	O	816	CLA	2	0
15	A	816	CLA	3	0
15	a	840	CLA	1	0
15	N	829	CLA	5	0
15	A	805	CLA	1	0
15	N	821	CLA	1	0
15	A	841	CLA	6	0
15	b	804	CLA	6	0
15	b	826	CLA	5	0
15	O	826	CLA	4	0
15	O	810	CLA	1	0
14	O	832	F6C	1	0
18	B	847	BCR	10	0
15	B	837	CLA	6	0
21	I	103	LMG	4	0
15	A	823	CLA	2	0
15	B	840	CLA	3	0
18	g	101	BCR	5	0
18	L	205	BCR	1	0
15	N	841	CLA	3	0
15	N	836	CLA	1	0
15	N	818	CLA	7	0
15	N	831	CLA	2	0
22	W	208	LFA	1	0
15	A	813	CLA	3	0
15	A	812	CLA	3	0
18	b	847	BCR	2	0
15	B	812	CLA	6	0
15	X	102	CLA	1	0
19	W	207	LHG	8	0
20	N	852	LMT	1	0
15	b	833	CLA	1	0
15	O	825	CLA	1	0
18	W	209	BCR	6	0
15	A	831	CLA	4	0
15	l	102	CLA	1	0
15	b	815	CLA	1	0
15	a	838	CLA	1	0
15	O	823	CLA	3	0
15	A	815	CLA	3	0
15	B	818	CLA	2	0
15	B	834	CLA	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
18	M	101	BCR	4	0
15	b	808	CLA	6	0
15	N	810	CLA	4	0
15	b	837	CLA	7	0
18	A	850	BCR	8	0
21	b	849	LMG	5	0
15	b	831	CLA	3	0
18	O	844	BCR	3	0
15	A	811	CLA	3	0
15	O	819	CLA	2	0
18	O	843	BCR	1	0
15	b	803	CLA	8	0
22	L	209	LFA	2	0
16	B	841	PQN	3	0
15	N	816	CLA	2	0
13	A	801	CL0	3	0
15	O	831	CLA	4	0
15	Z	102	CLA	1	0
15	a	805	CLA	1	0
16	a	843	PQN	2	0
15	b	806	CLA	6	0
15	O	803	CLA	8	0
15	N	820	CLA	7	0
15	B	836	CLA	3	0
15	a	812	CLA	4	0
15	O	805	CLA	2	0
15	N	807	CLA	4	0
15	a	813	CLA	2	0
20	A	854	LMT	2	0
18	a	850	BCR	7	0
15	O	806	CLA	4	0
15	L	203	CLA	1	0
18	L	210	BCR	3	0
15	A	835	CLA	2	0
15	O	813	CLA	2	0
15	B	813	CLA	2	0
15	a	822	CLA	2	0
15	a	818	CLA	5	0
18	a	847	BCR	2	0
15	N	815	CLA	2	0
15	A	820	CLA	7	0
15	A	827	CLA	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
18	O	846	BCR	4	0
15	b	824	CLA	4	0
18	O	845	BCR	1	0
15	A	807	CLA	4	0
15	N	830	CLA	2	0
18	N	850	BCR	7	0
15	W	203	CLA	1	0
15	B	838	CLA	7	0
19	L	208	LHG	6	0
15	O	815	CLA	1	0
15	b	818	CLA	1	0
15	N	811	CLA	2	0
15	B	827	CLA	1	0
15	N	803	CLA	7	0
18	Y	102	BCR	3	0
15	B	808	CLA	4	0
15	O	824	CLA	5	0
15	a	811	CLA	2	0
15	b	829	CLA	5	0
20	A	853	LMT	1	0
15	L	202	CLA	2	0
21	B	848	LMG	4	0
15	N	819	CLA	5	0
15	N	825	CLA	2	0
18	F	203	BCR	3	0
15	a	814	CLA	7	0
15	a	833	CLA	1	0
15	O	834	CLA	2	0
15	b	816	CLA	3	0
15	O	804	CLA	5	0
18	a	849	BCR	1	0
19	X	101	LHG	3	0
15	B	814	CLA	1	0
18	f	202	BCR	4	0
21	g	103	LMG	3	0
18	N	847	BCR	2	0
15	B	801	CLA	1	0
15	B	805	CLA	3	0
18	j	205	BCR	1	0
18	b	846	BCR	5	0
15	b	840	CLA	1	0
15	a	836	CLA	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
15	b	805	CLA	2	0
21	h	103	LMG	2	0
18	A	846	BCR	2	0
15	B	820	CLA	3	0
15	V	102	CLA	1	0
18	h	102	BCR	7	0
18	I	101	BCR	4	0
15	b	825	CLA	1	0
18	A	845	BCR	4	0
15	O	840	CLA	1	0
15	B	807	CLA	3	0
15	N	813	CLA	3	0
15	O	822	CLA	1	0
15	f	201	CLA	2	0
20	a	853	LMT	1	0
15	b	821	CLA	1	0
22	j	208	LFA	1	0
15	b	817	CLA	3	0
18	O	847	BCR	1	0
20	a	852	LMT	1	0
15	A	840	CLA	1	0
15	i	102	CLA	1	0
18	U	101	BCR	1	0
15	b	823	CLA	3	0
15	A	821	CLA	1	0
15	B	802	CLA	5	0
15	a	830	CLA	2	0
15	b	834	CLA	3	0
18	T	101	BCR	6	0
22	O	850	LFA	1	0
18	L	206	BCR	3	0
15	B	830	CLA	3	0
16	O	841	PQN	4	0
15	O	837	CLA	4	0
15	O	838	CLA	8	0
21	A	855	LMG	1	0
20	N	854	LMT	1	0
15	N	840	CLA	1	0
15	N	809	CLA	4	0
15	B	825	CLA	2	0
15	K	102	CLA	1	0
18	B	844	BCR	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
15	a	820	CLA	6	0
19	l	101	LHG	3	0
15	B	822	CLA	1	0
18	b	843	BCR	3	0
15	b	811	CLA	1	0
18	W	205	BCR	1	0
19	N	857	LHG	2	0
15	a	807	CLA	3	0
15	a	841	CLA	5	0
15	N	837	CLA	3	0
15	a	810	CLA	4	0
15	b	830	CLA	3	0
18	J	101	BCR	1	0
15	A	836	CLA	1	0
15	b	813	CLA	1	0
16	A	843	PQN	1	0
15	a	829	CLA	4	0
15	O	812	CLA	5	0
15	B	821	CLA	1	0
18	k	102	BCR	4	0
15	b	836	CLA	2	0
18	O	842	BCR	3	0
18	b	844	BCR	3	0
19	Z	101	LHG	1	0
15	N	827	CLA	1	0
15	A	842	CLA	2	0
15	B	829	CLA	6	0
15	B	828	CLA	1	0
14	B	832	F6C	1	0
15	N	839	CLA	3	0
15	O	836	CLA	3	0
18	A	849	BCR	1	0
15	A	833	CLA	2	0
15	a	839	CLA	2	0
15	j	203	CLA	1	0
15	a	825	CLA	1	0
15	B	811	CLA	1	0
15	B	804	CLA	6	0
15	O	827	CLA	1	0
15	a	815	CLA	3	0
15	N	806	CLA	7	0
15	O	808	CLA	5	0

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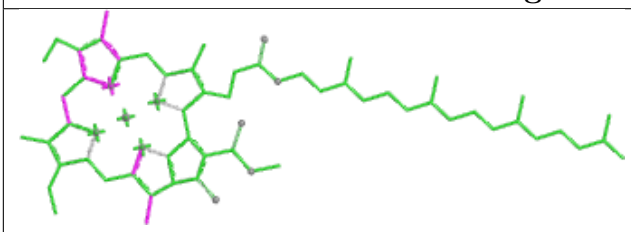
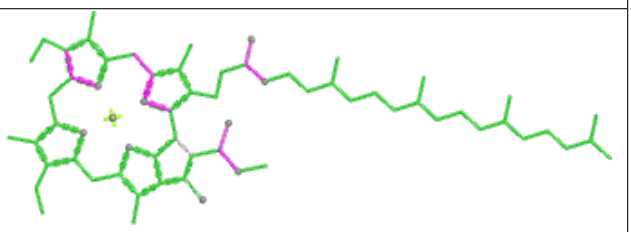
Mol	Chain	Res	Type	Clashes	Symm-Clashes
15	A	814	CLA	8	0
17	c	102	SF4	1	0
16	N	843	PQN	2	0
15	O	811	CLA	1	0
15	B	817	CLA	3	0
21	W	206	LMG	4	0
15	B	823	CLA	2	0
15	S	201	CLA	1	0
15	b	802	CLA	4	0
15	N	812	CLA	3	0
15	A	803	CLA	7	0
21	U	103	LMG	1	0

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

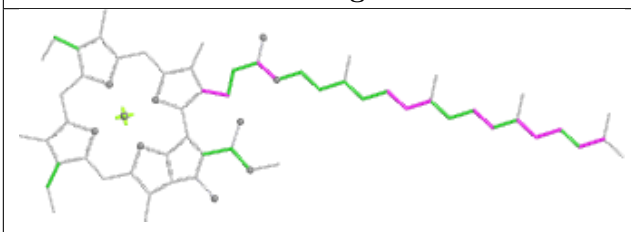
Ligand CLA B 810



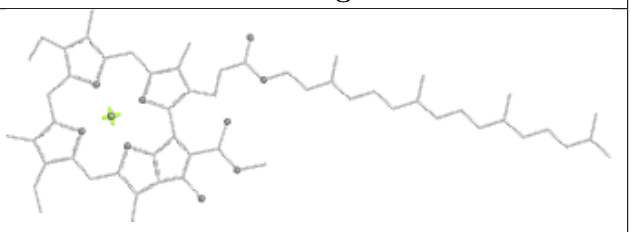
Bond lengths



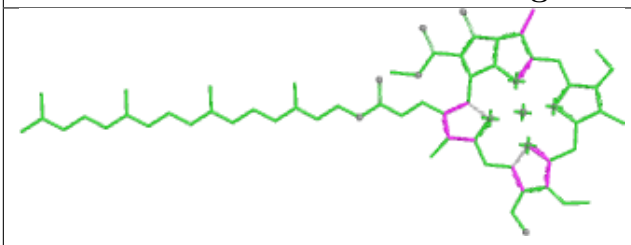
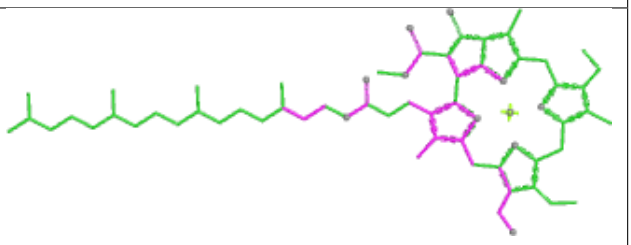
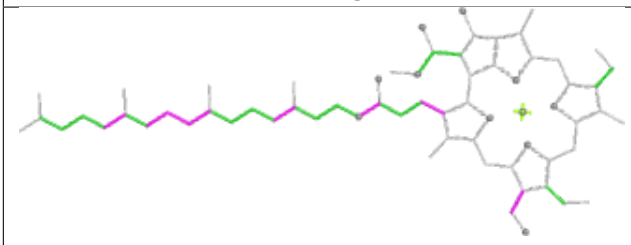
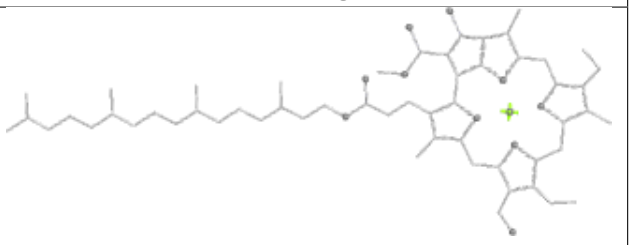
Bond angles

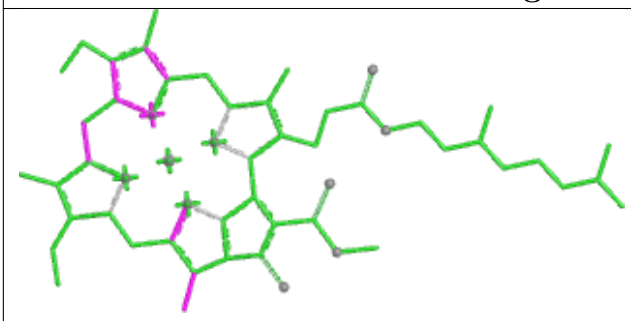
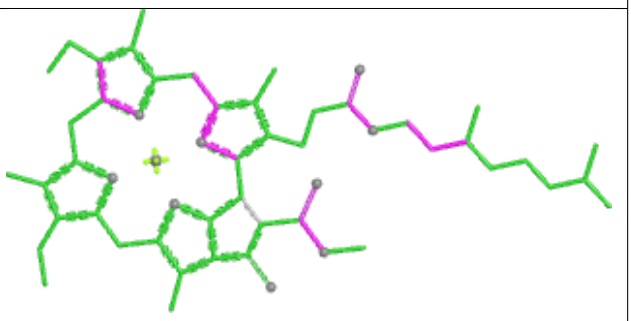
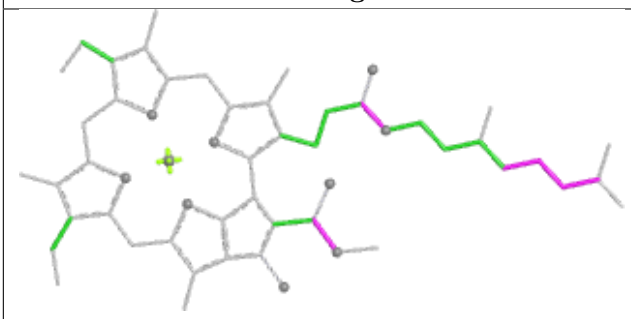
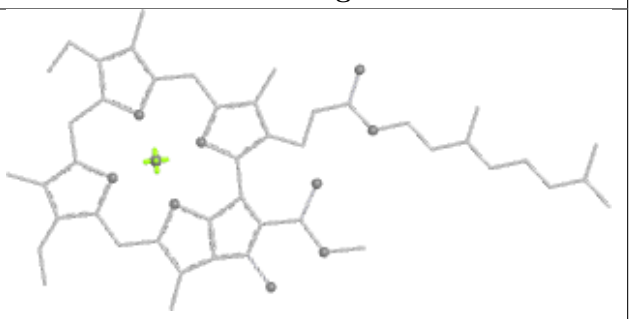


Torsions

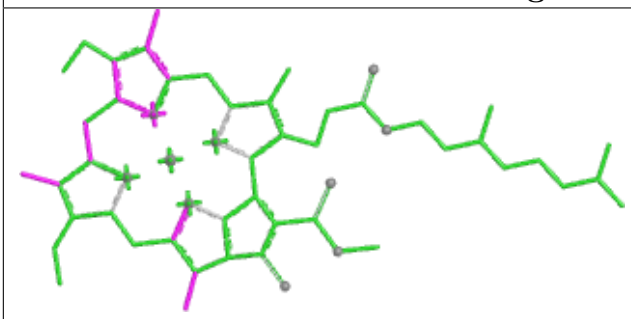


Rings

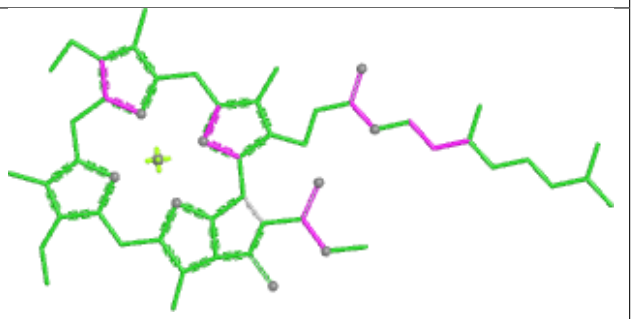
Ligand F6C L 204	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA O 833	
 Bond lengths	 Bond angles
 Torsions	 Rings

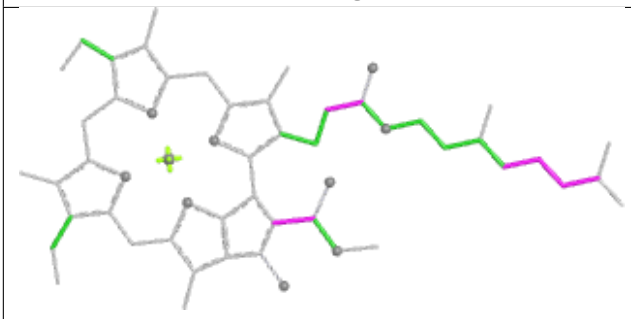
Ligand CLA b 822



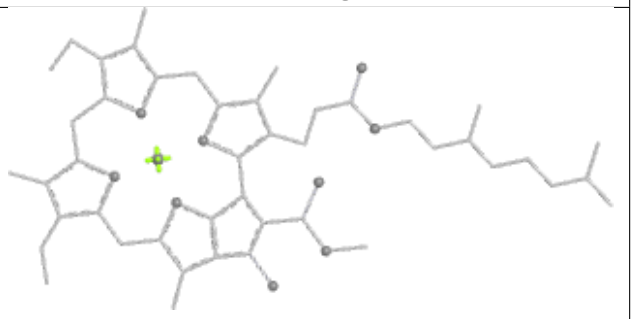
Bond lengths



Bond angles

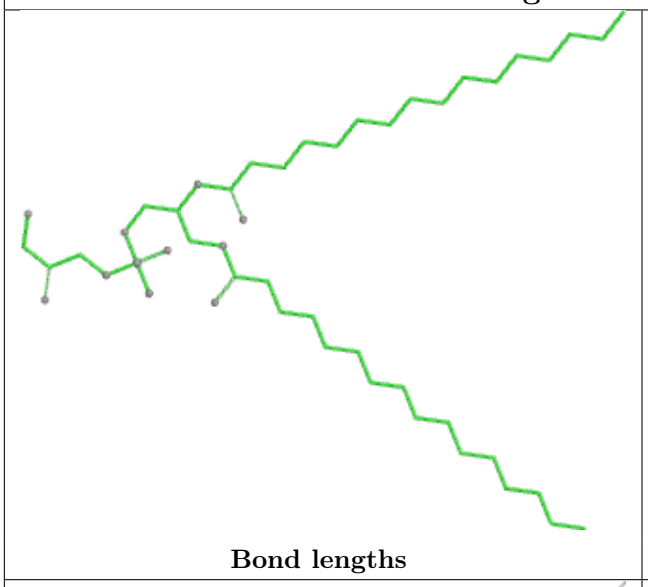


Torsions

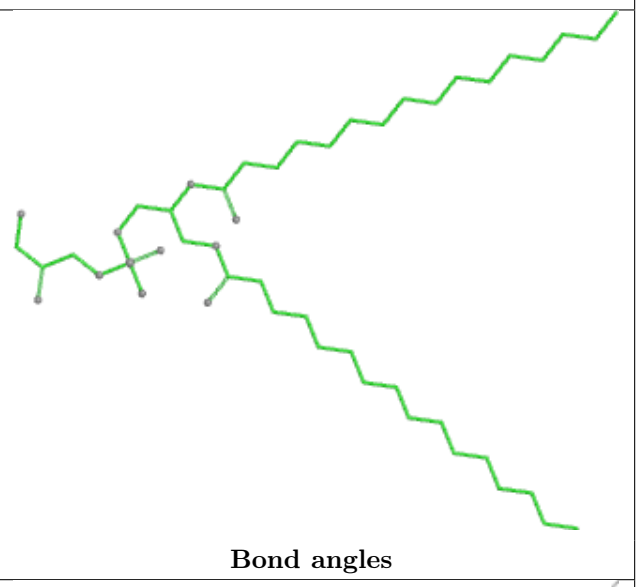


Rings

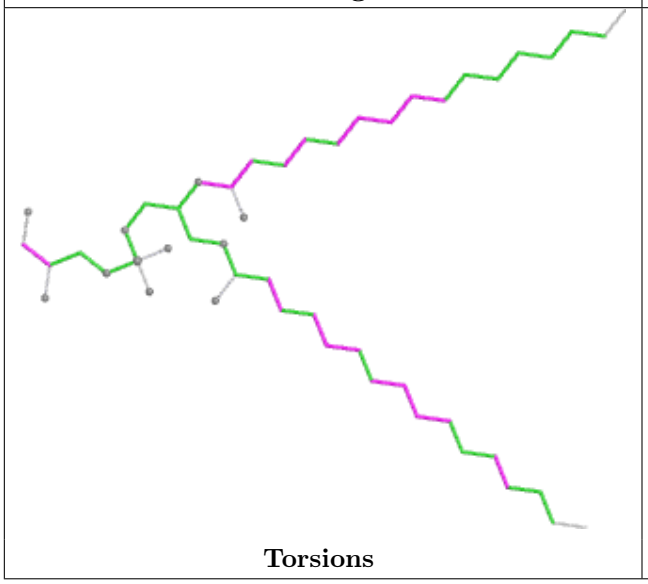
Ligand LHG Y 101



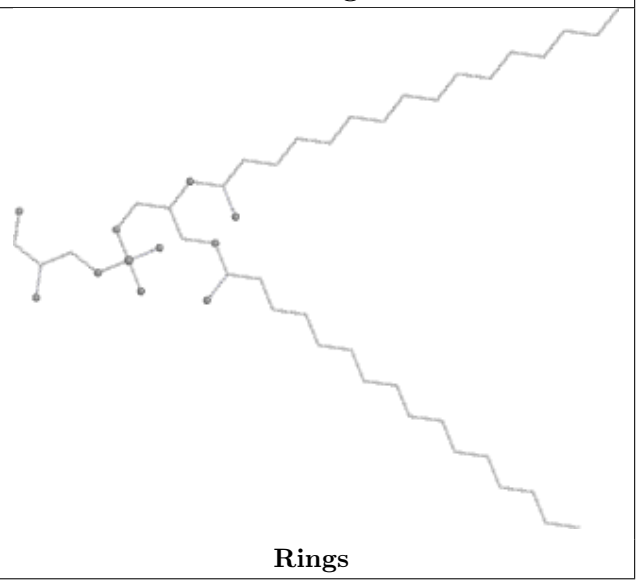
Bond lengths



Bond angles

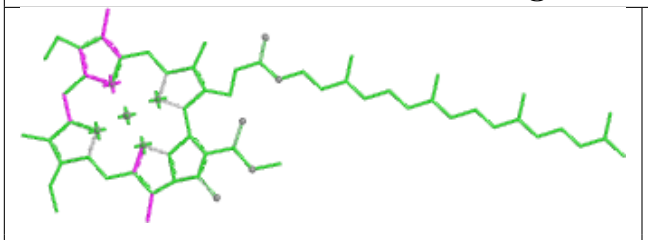


Torsions

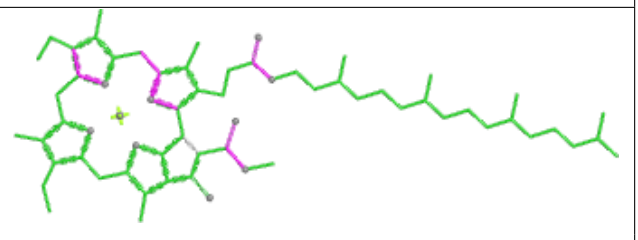


Rings

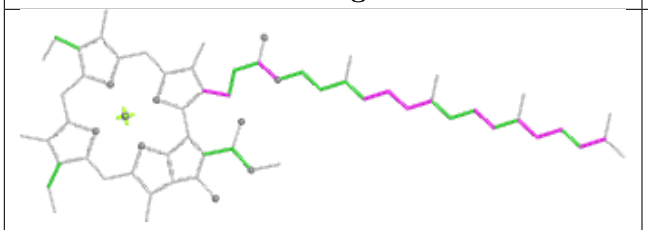
Ligand CLA b 810



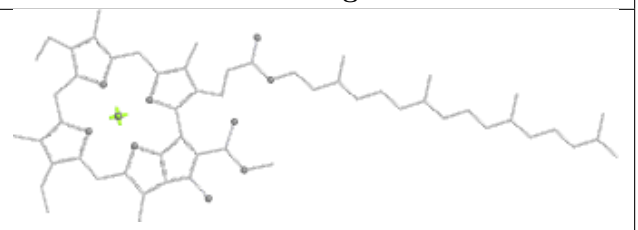
Bond lengths



Bond angles

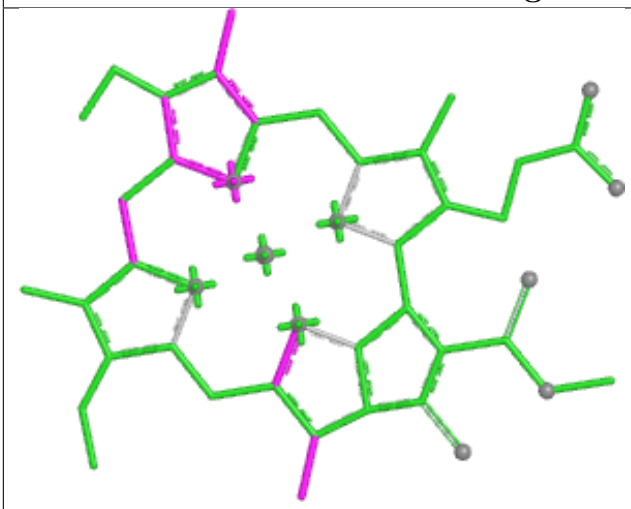


Torsions

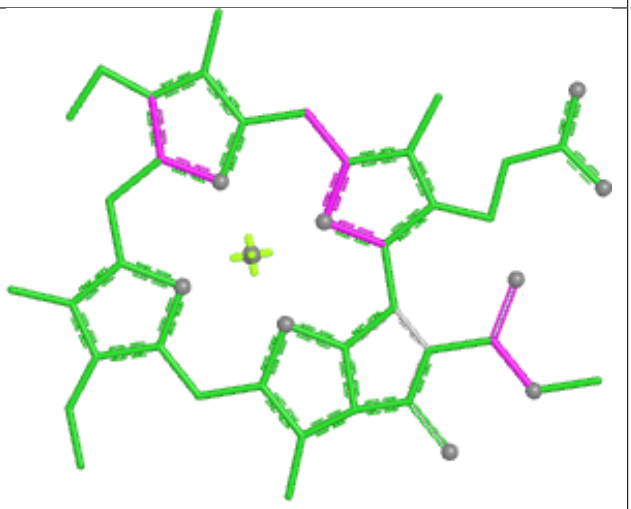


Rings

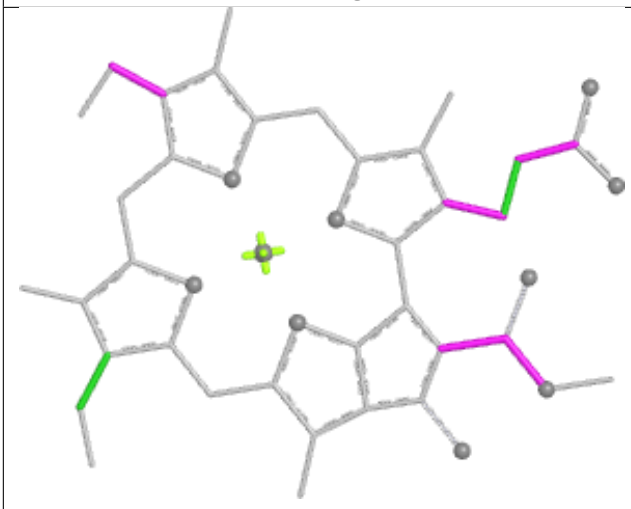
Ligand CLA B 835



Bond lengths



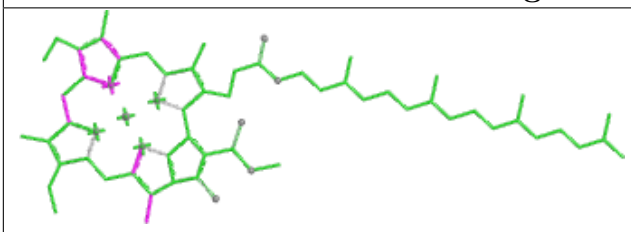
Bond angles



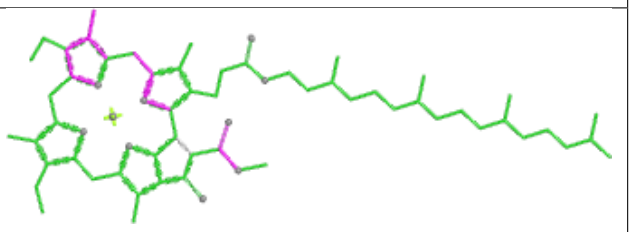
Torsions

Rings

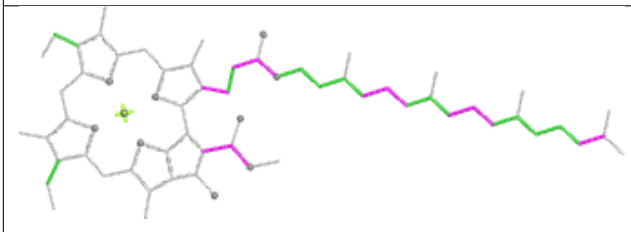
Ligand CLA A 806



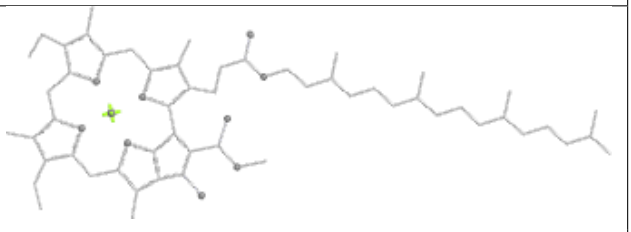
Bond lengths



Bond angles

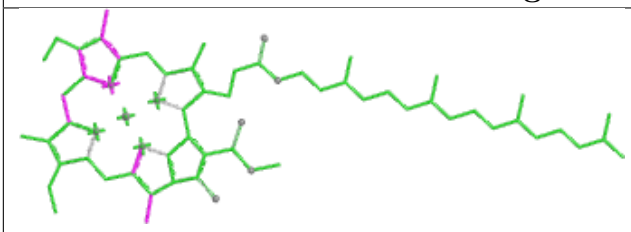


Torsions

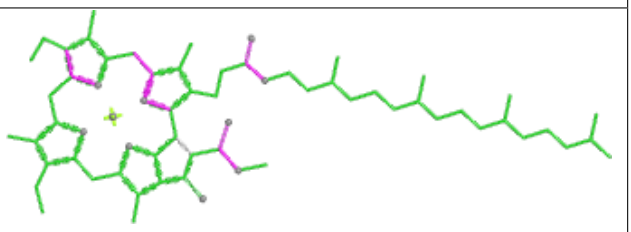


Rings

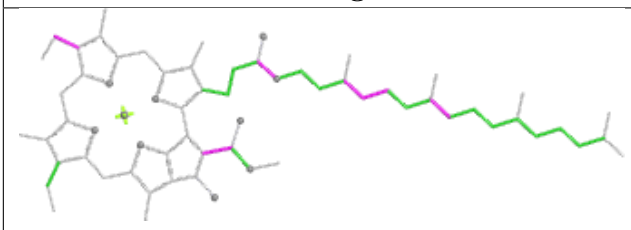
Ligand CLA A 825



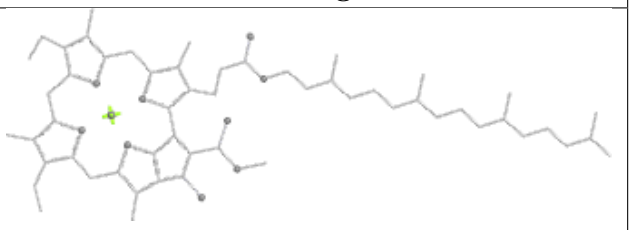
Bond lengths



Bond angles

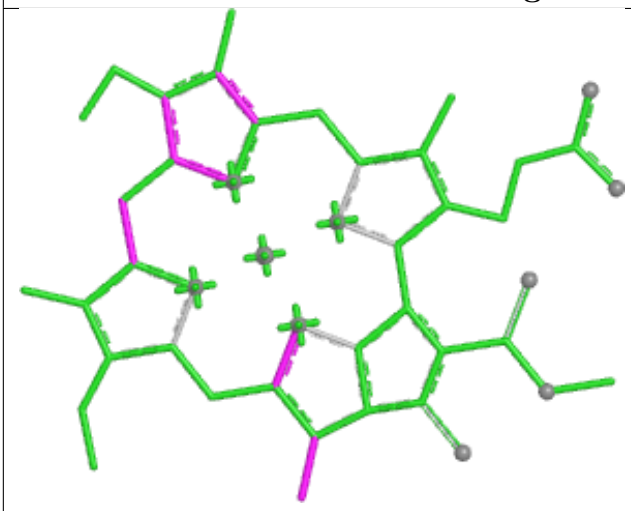


Torsions

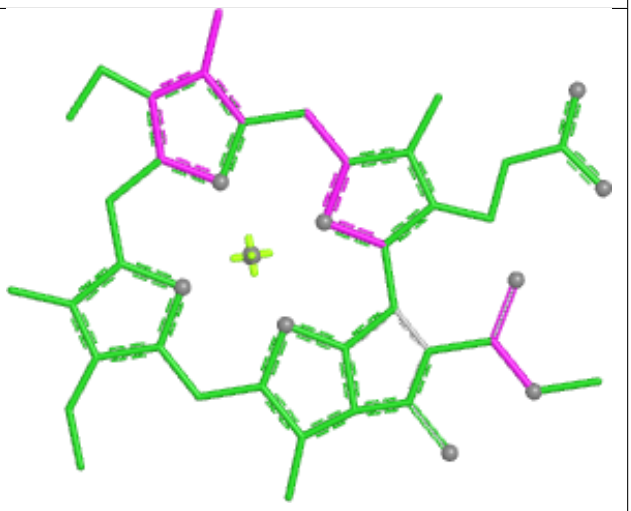


Rings

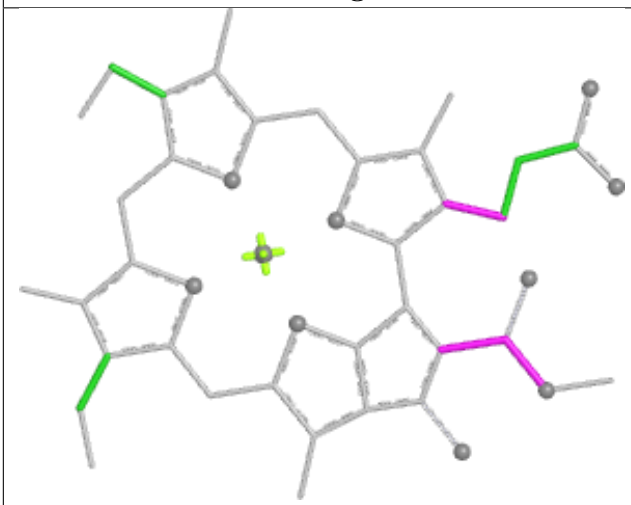
Ligand CLA O 814



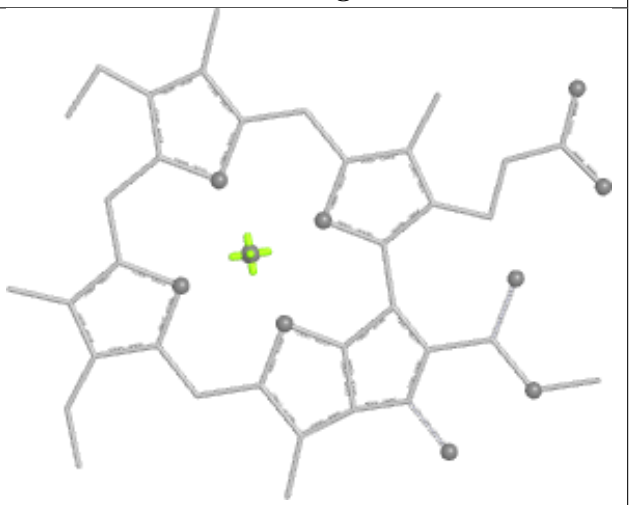
Bond lengths



Bond angles

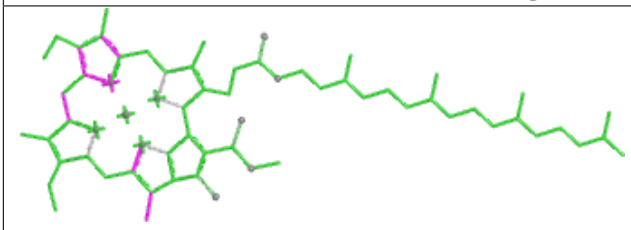


Torsions

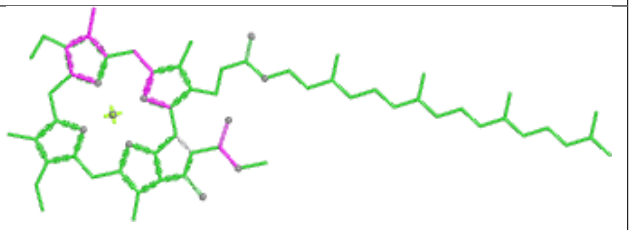


Rings

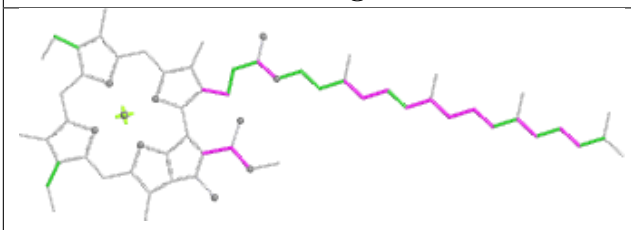
Ligand CLA B 806



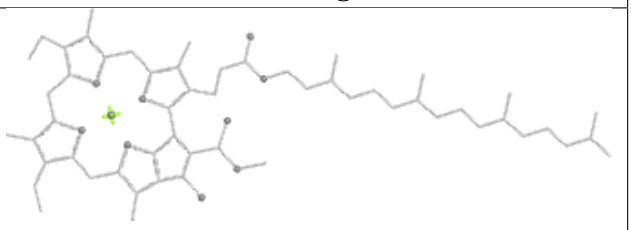
Bond lengths



Bond angles

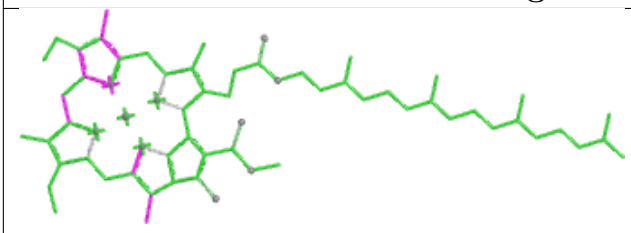


Torsions

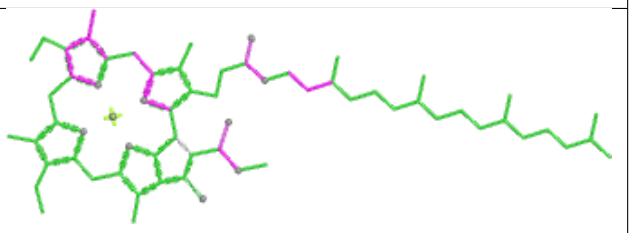


Rings

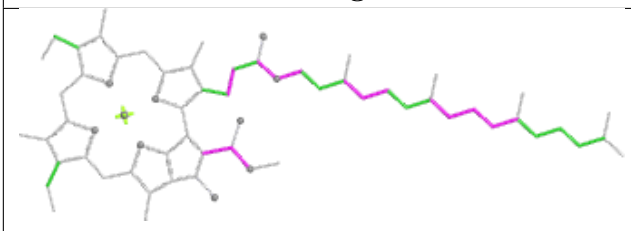
Ligand CLA b 828



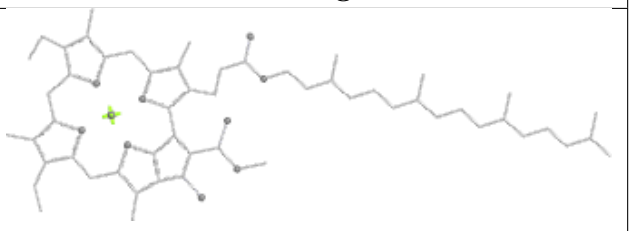
Bond lengths



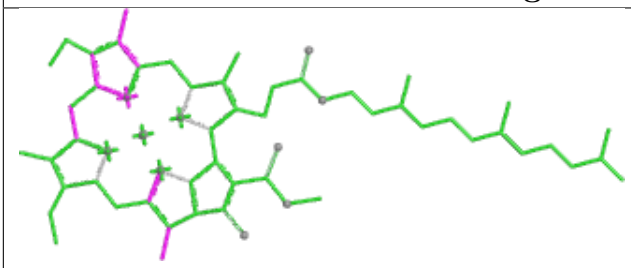
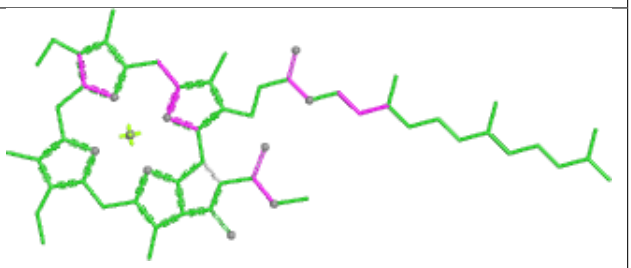
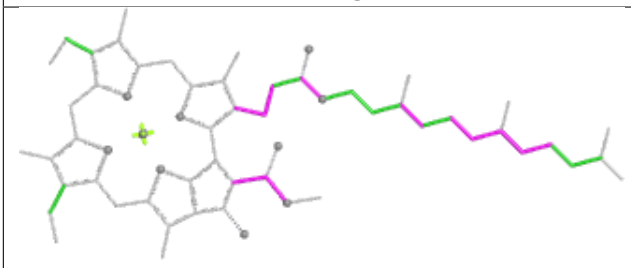
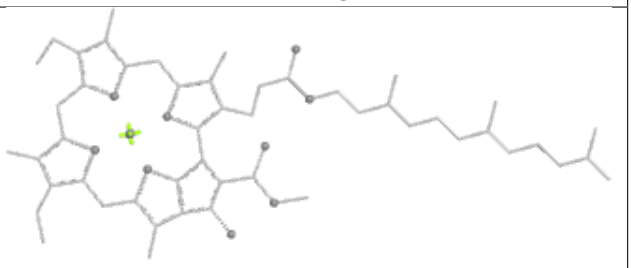
Bond angles

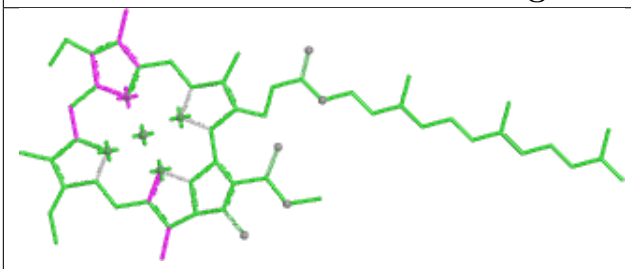
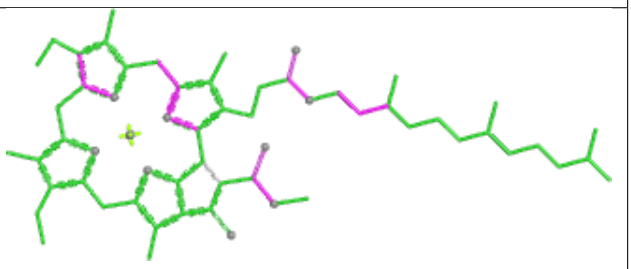
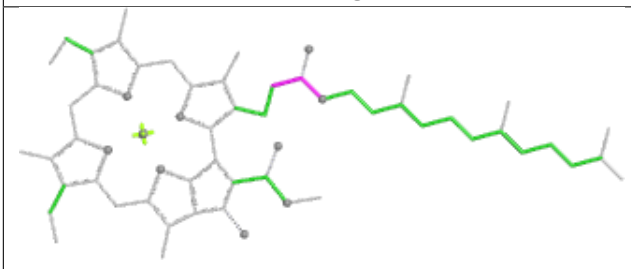
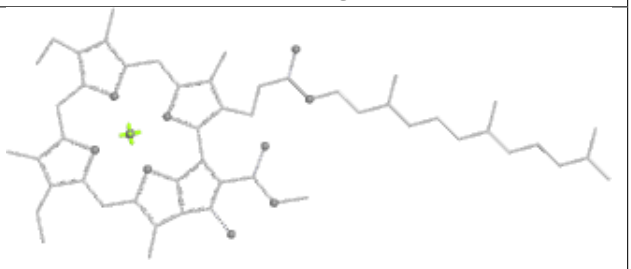


Torsions

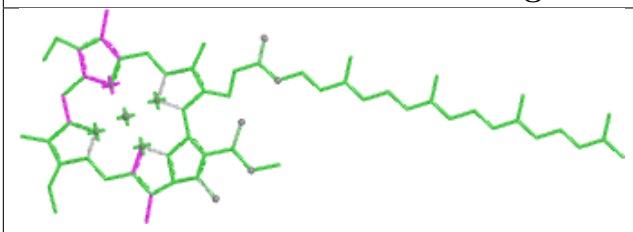


Rings

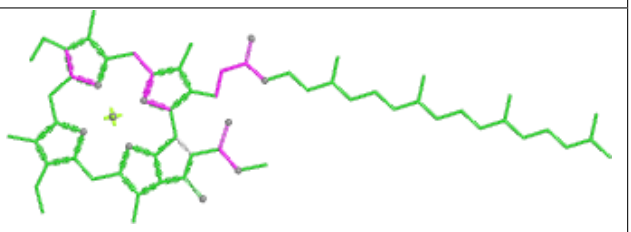
Ligand CLA A 809	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

Ligand CLA a 821	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

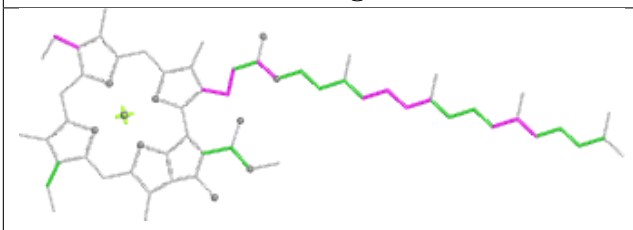
Ligand CLA B 809



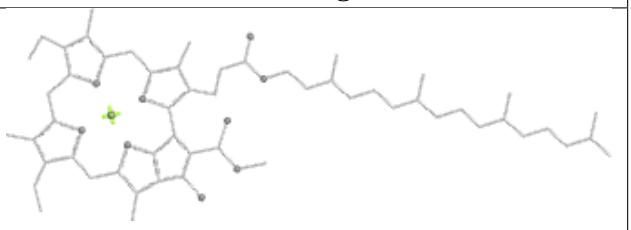
Bond lengths



Bond angles

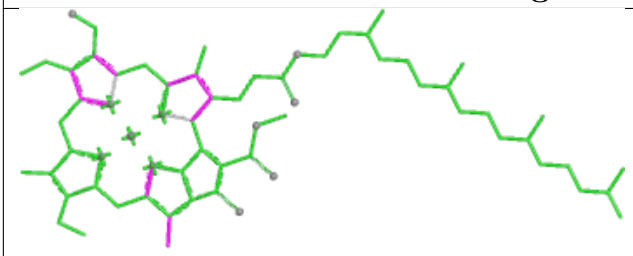


Torsions

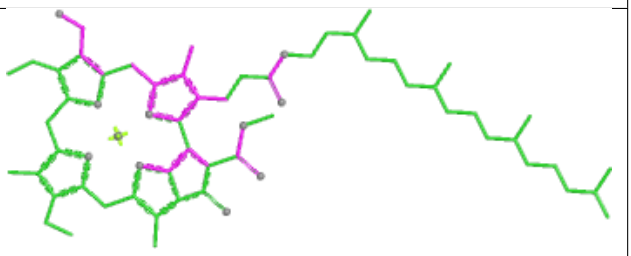


Rings

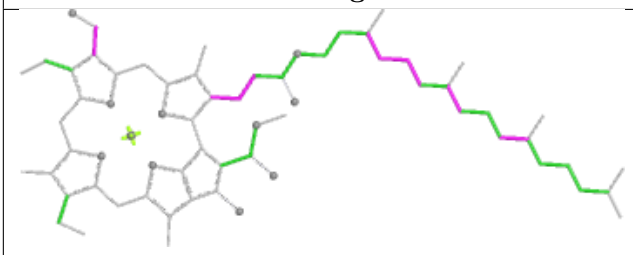
Ligand F6C b 839



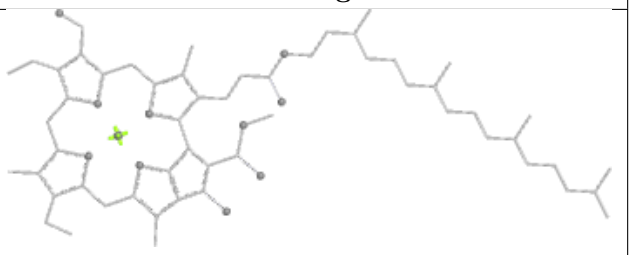
Bond lengths



Bond angles

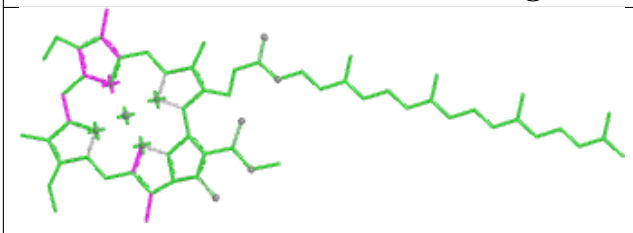


Torsions

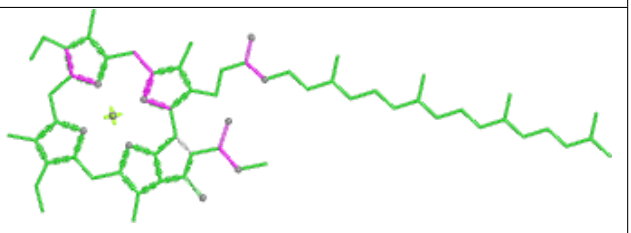


Rings

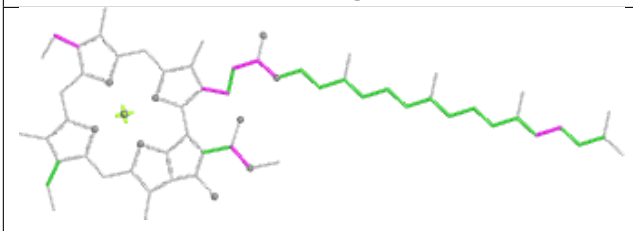
Ligand CLA B 816



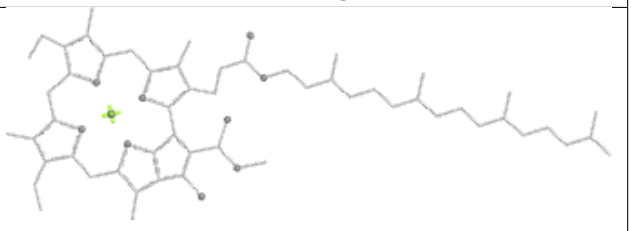
Bond lengths



Bond angles

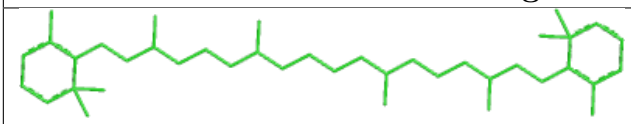


Torsions

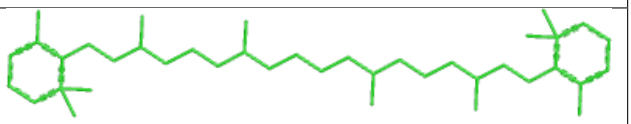


Rings

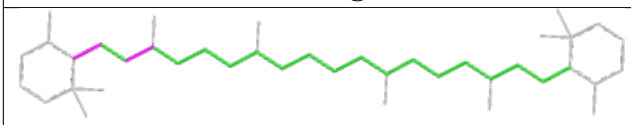
Ligand BCR O 848



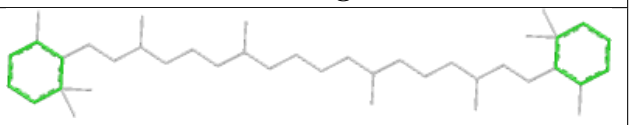
Bond lengths



Bond angles

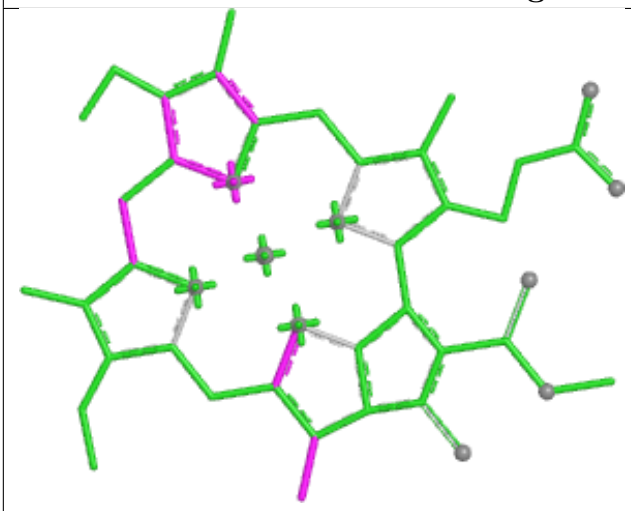


Torsions

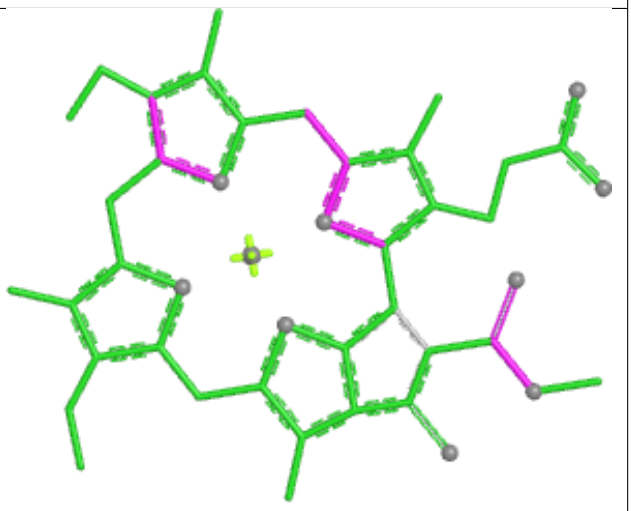


Rings

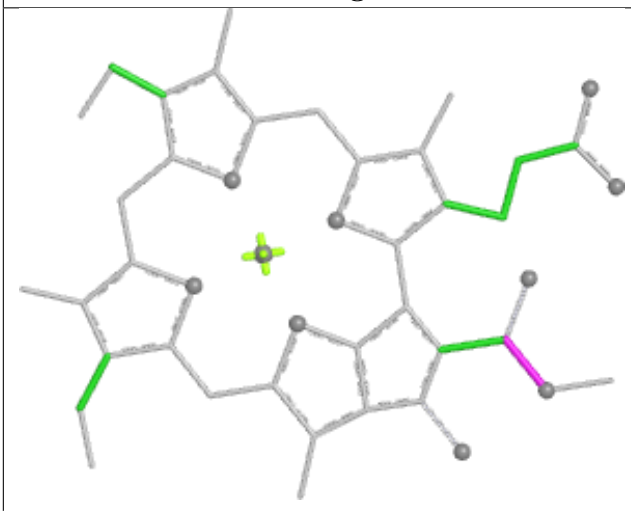
Ligand CLA b 820



Bond lengths



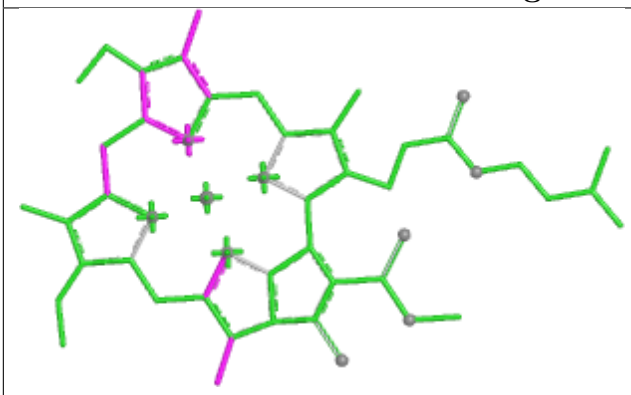
Bond angles



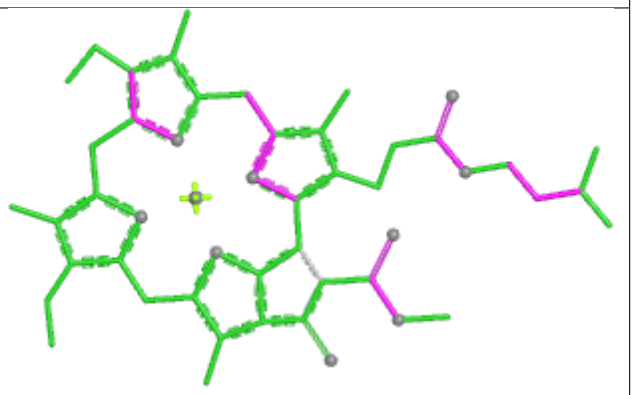
Torsions

Rings

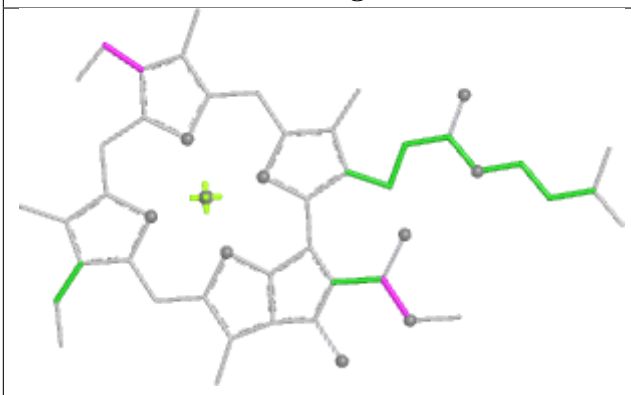
Ligand CLA V 103



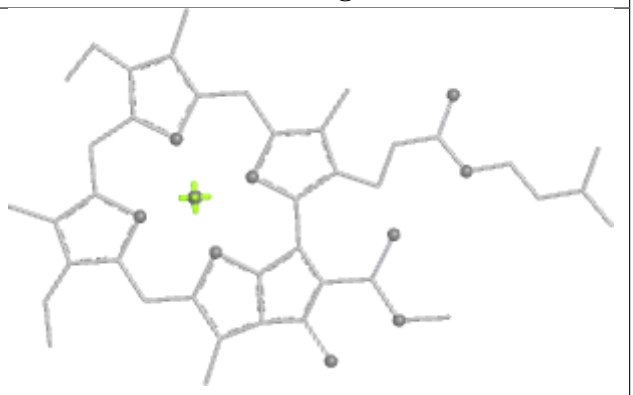
Bond lengths



Bond angles

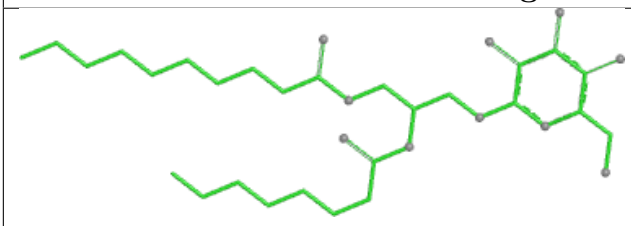


Torsions

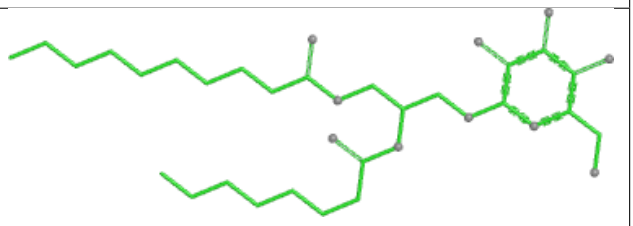


Rings

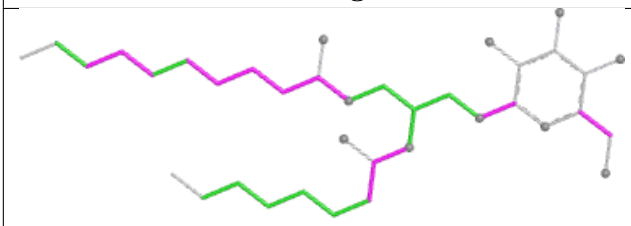
Ligand LMG T 103



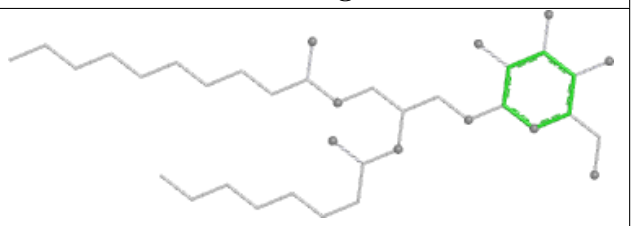
Bond lengths



Bond angles

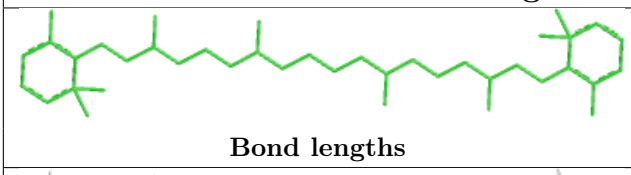


Torsions

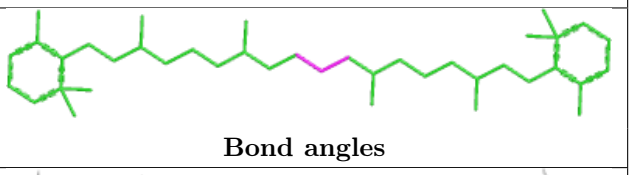


Rings

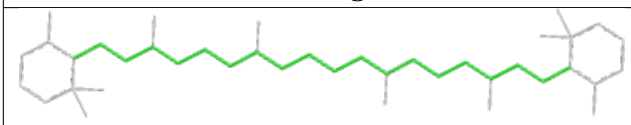
Ligand BCR B 846



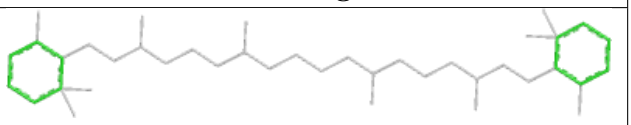
Bond lengths



Bond angles

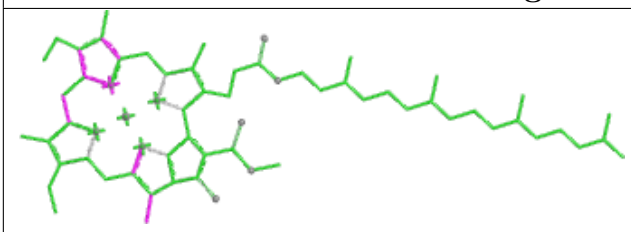


Torsions

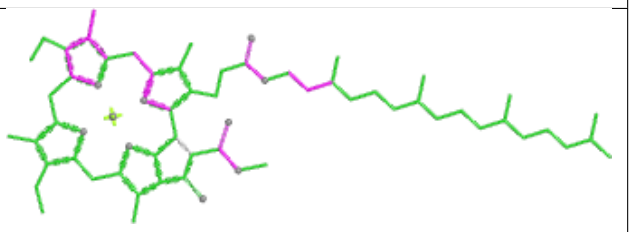


Rings

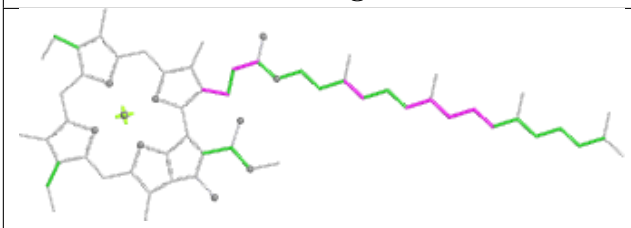
Ligand CLA B 831



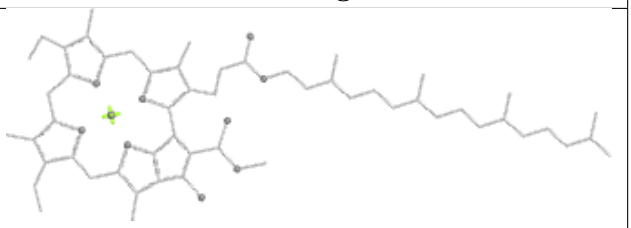
Bond lengths



Bond angles

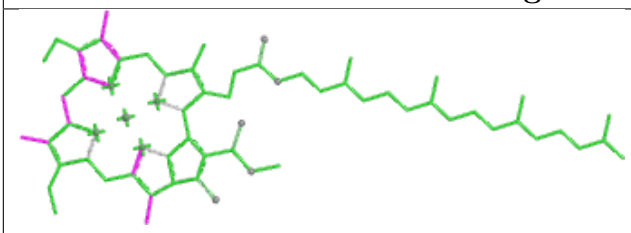


Torsions

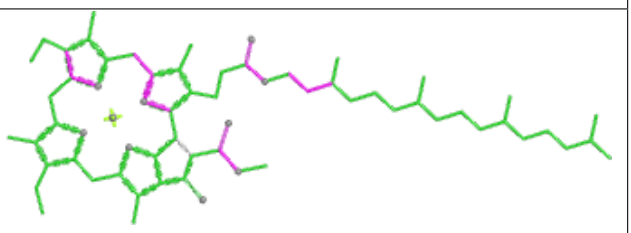


Rings

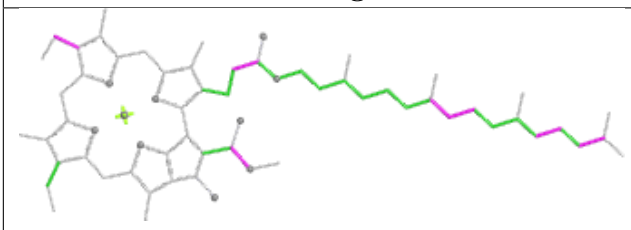
Ligand CLA O 801



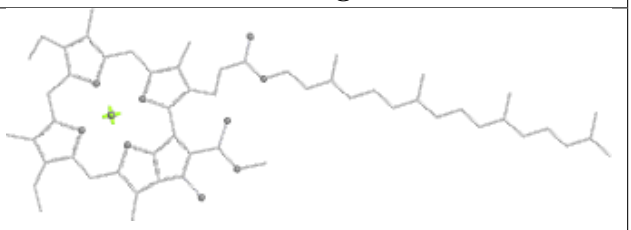
Bond lengths



Bond angles

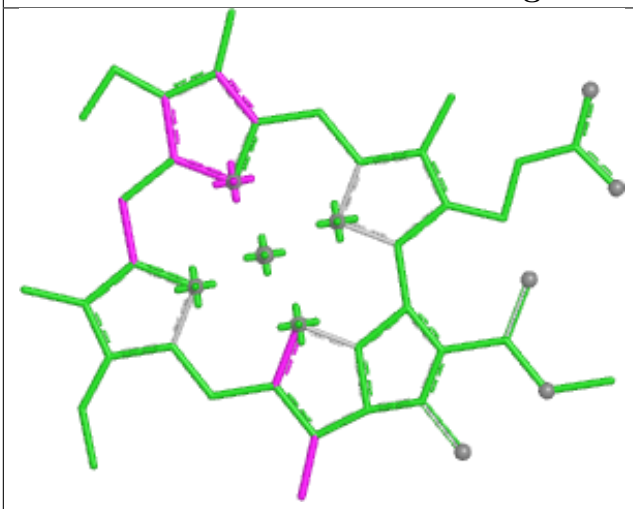


Torsions

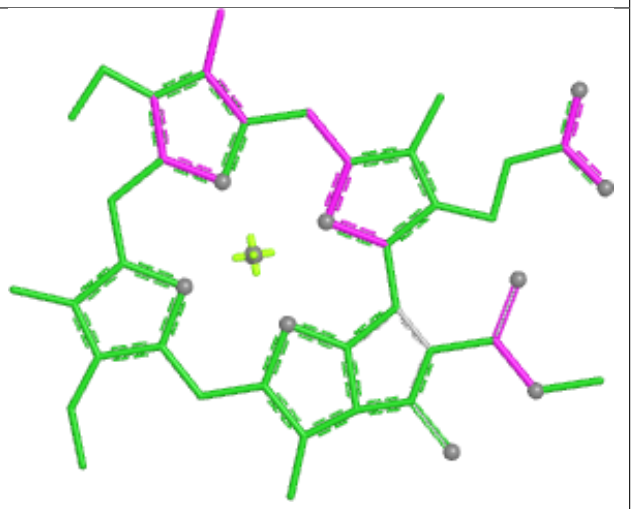


Rings

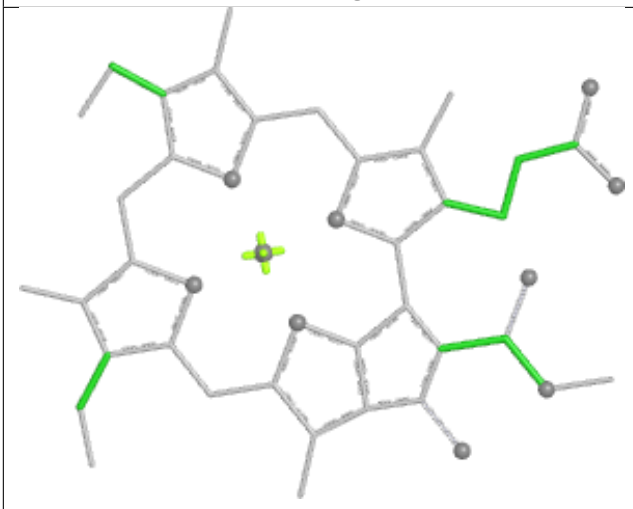
Ligand CLA N 808



Bond lengths



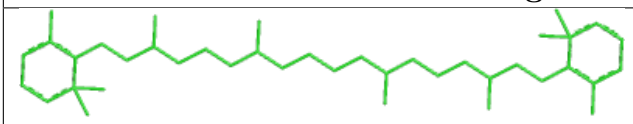
Bond angles



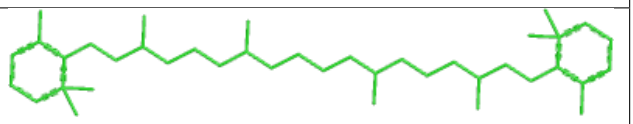
Torsions

Rings

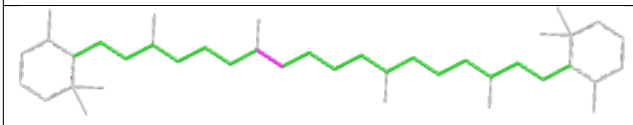
Ligand BCR S 202



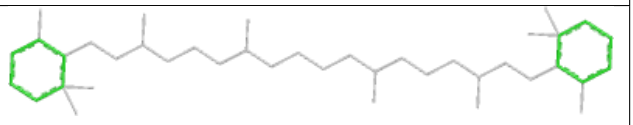
Bond lengths



Bond angles

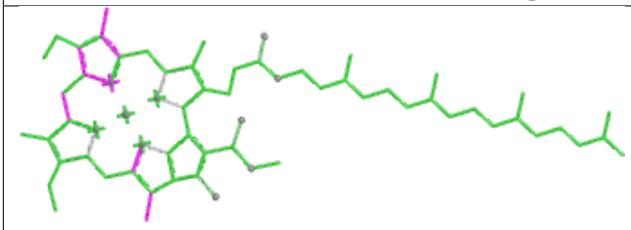


Torsions

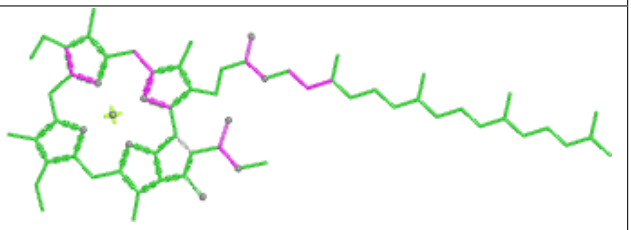


Rings

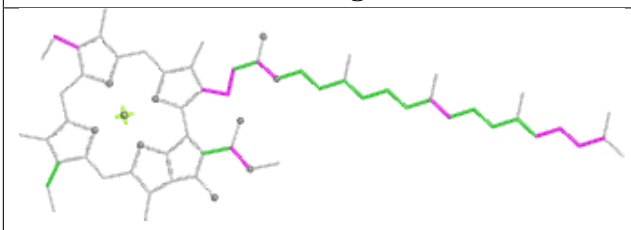
Ligand CLA N 842



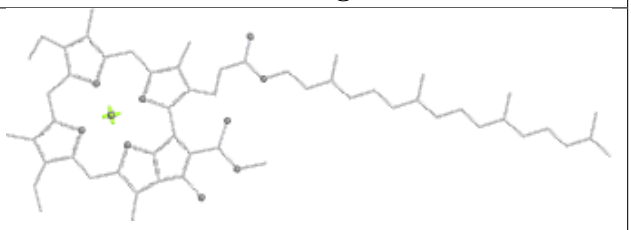
Bond lengths



Bond angles

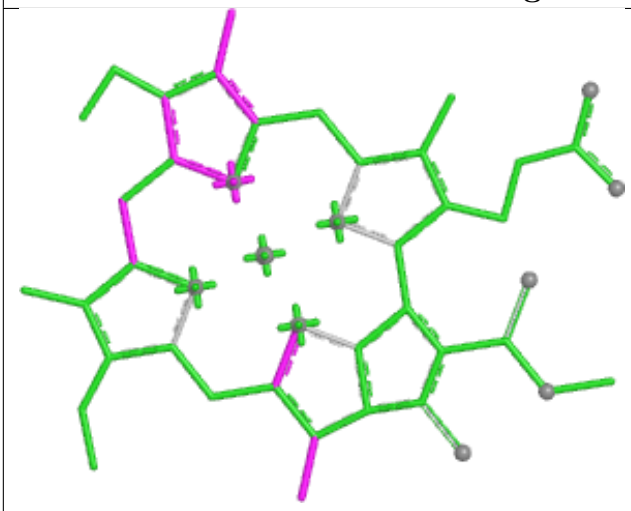


Torsions

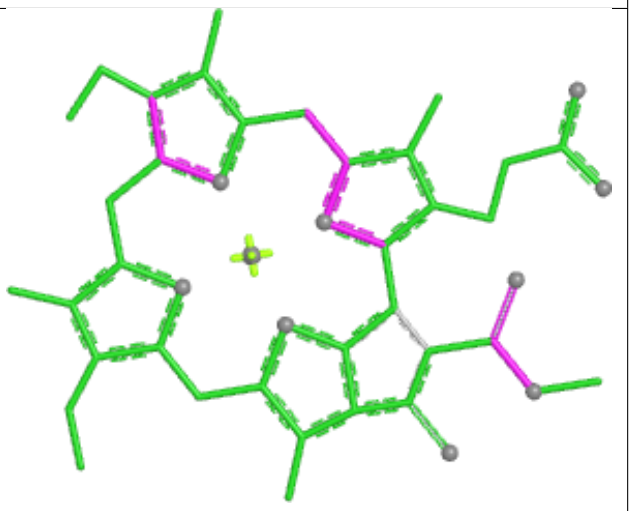


Rings

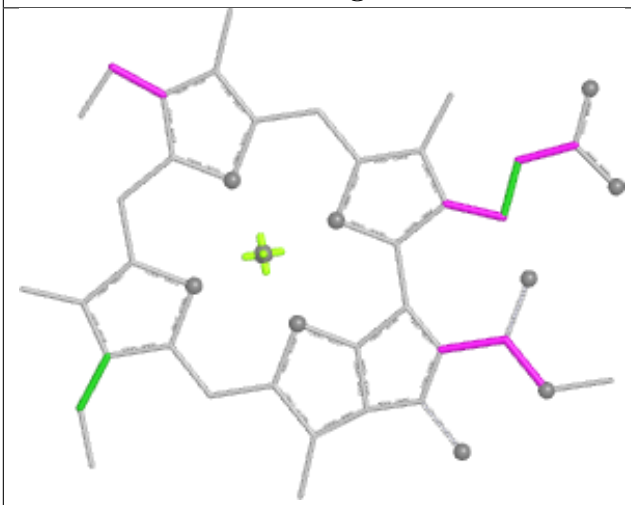
Ligand CLA O 835



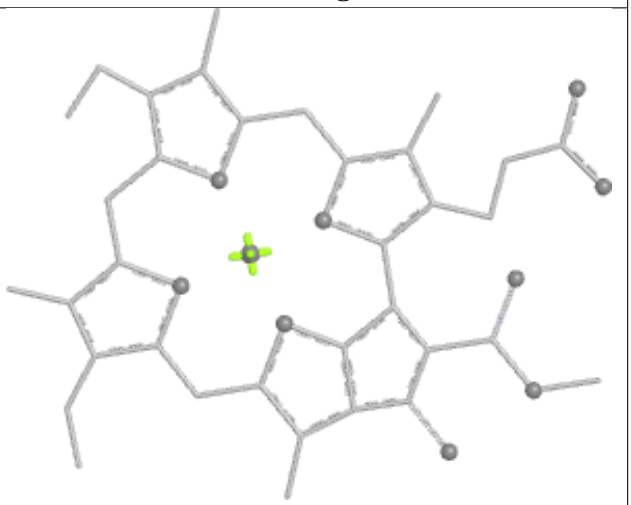
Bond lengths



Bond angles

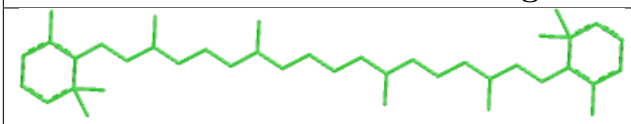


Torsions

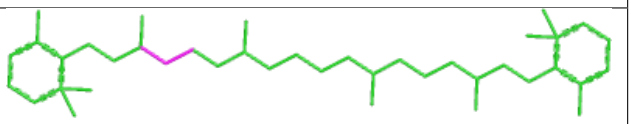


Rings

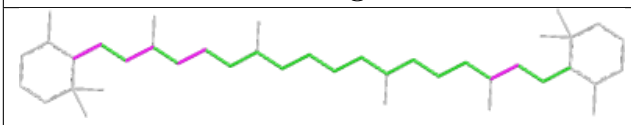
Ligand BCR N 846



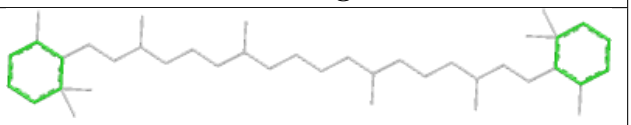
Bond lengths



Bond angles

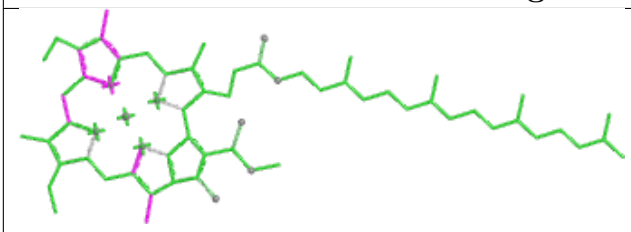


Torsions

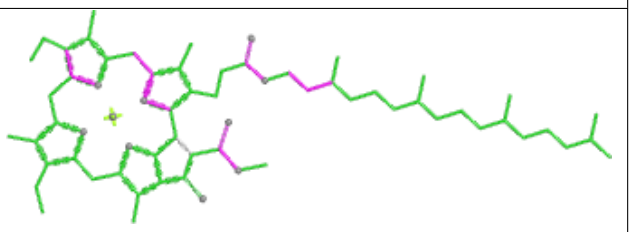


Rings

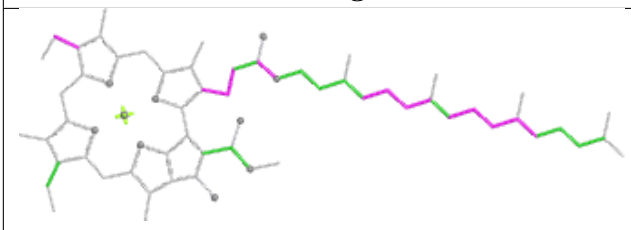
Ligand CLA b 809



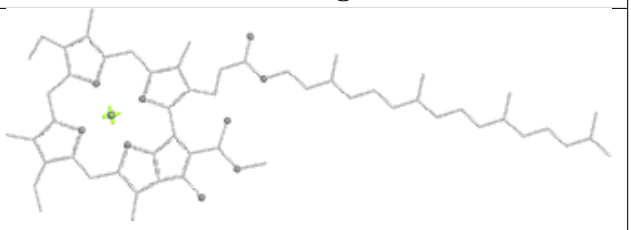
Bond lengths



Bond angles

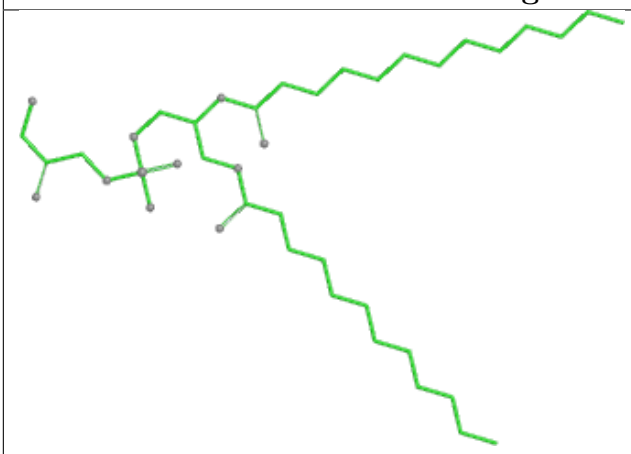


Torsions

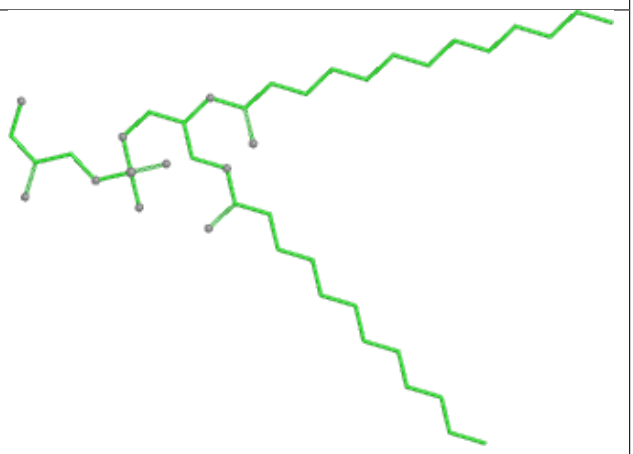


Rings

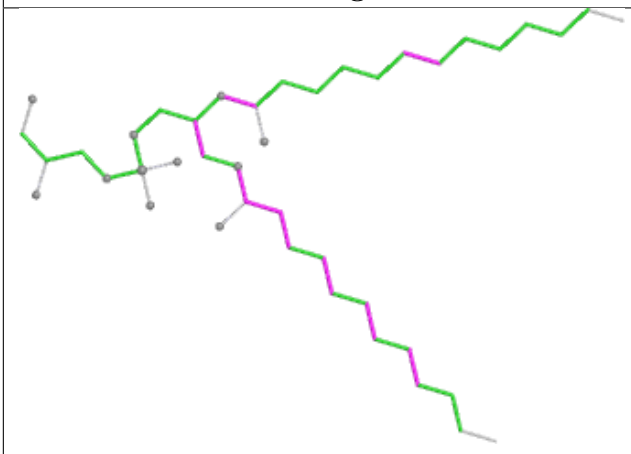
Ligand LHG N 851



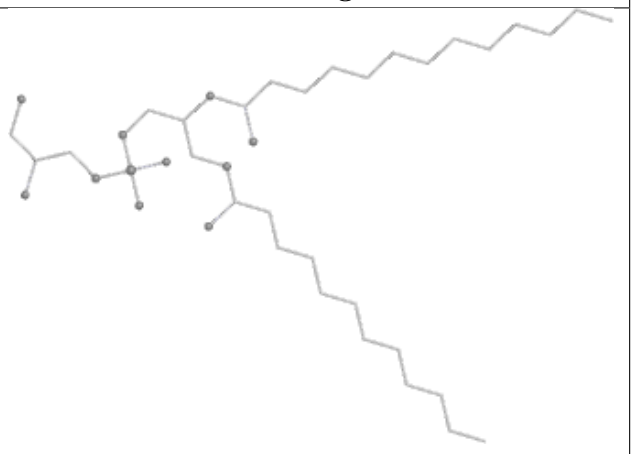
Bond lengths



Bond angles

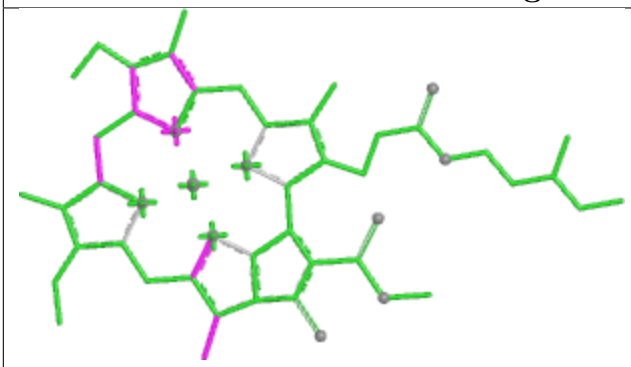


Torsions

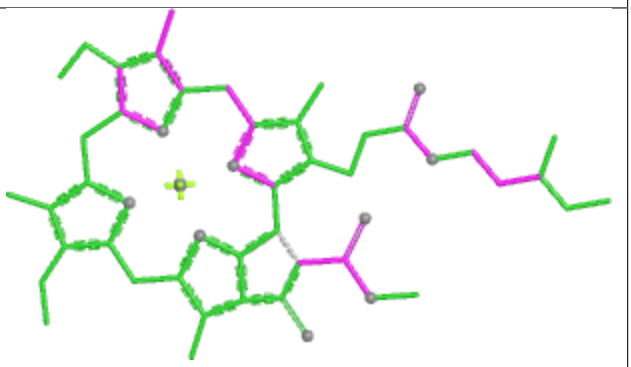


Rings

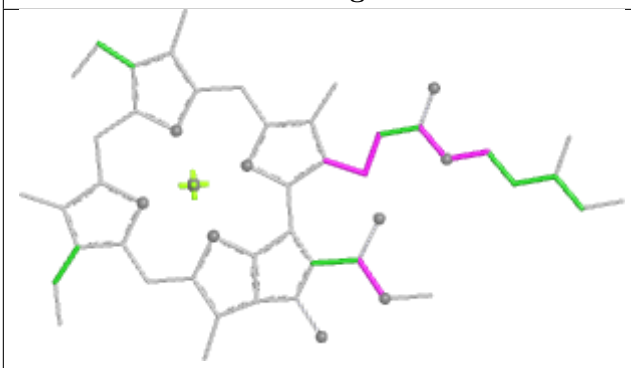
Ligand CLA A 837



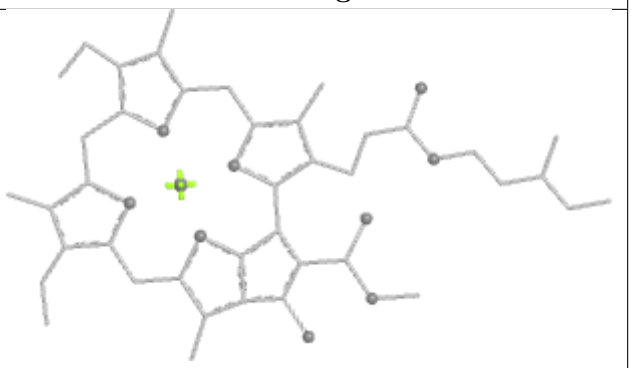
Bond lengths



Bond angles

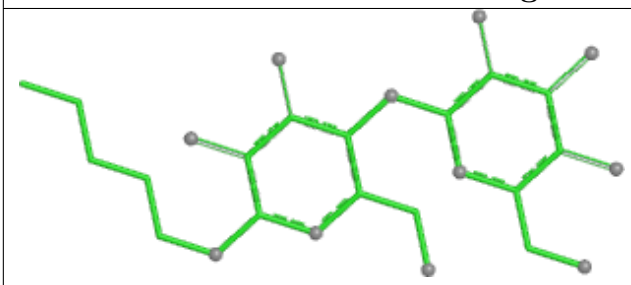


Torsions

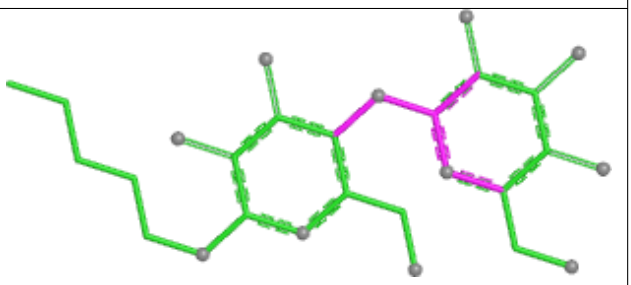


Rings

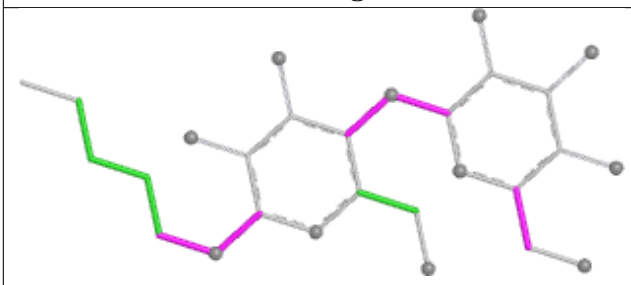
Ligand LMT N 853



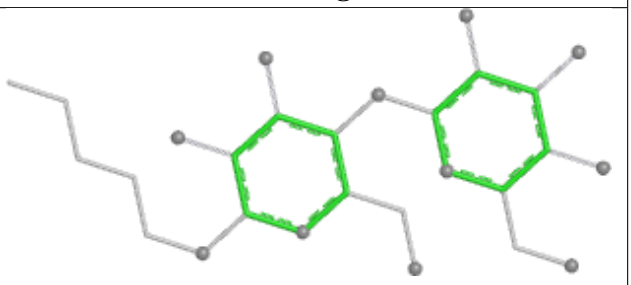
Bond lengths



Bond angles

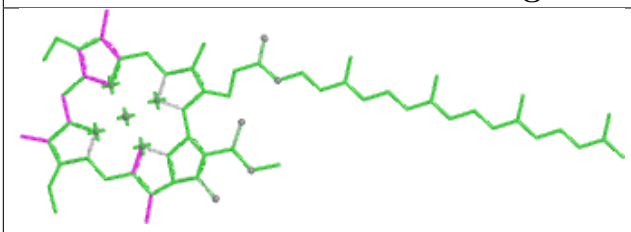


Torsions

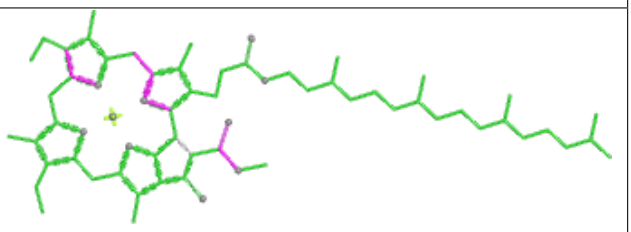


Rings

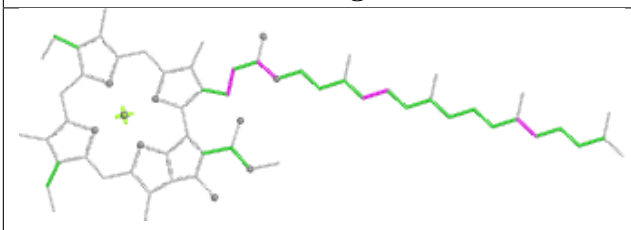
Ligand CLA N 804



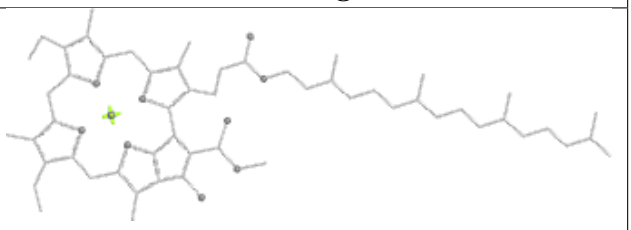
Bond lengths



Bond angles

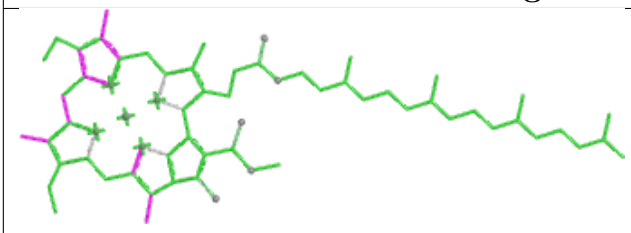


Torsions



Rings

Ligand CLA A 804



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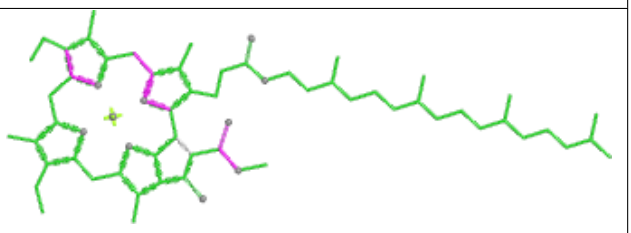
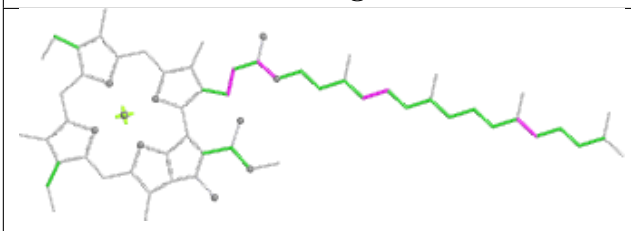
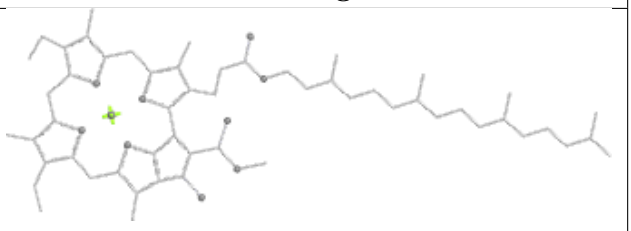


Bond angles

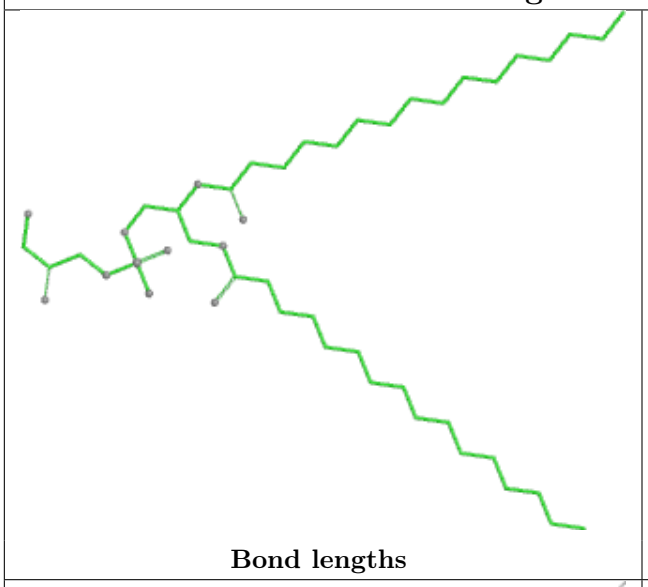


Torsions

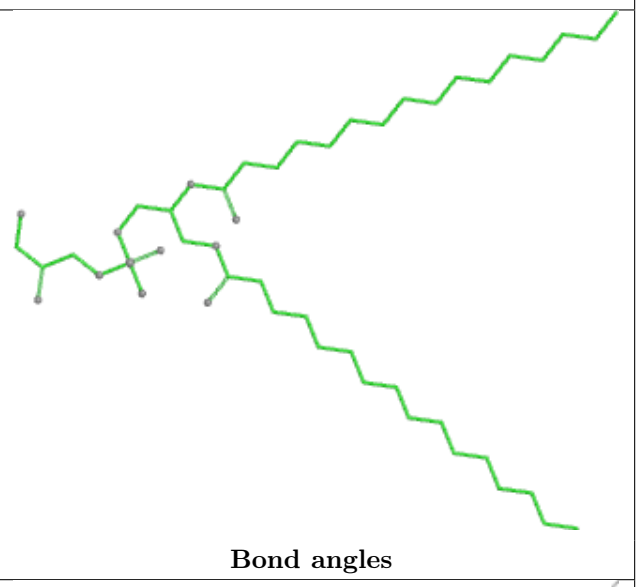


Rings

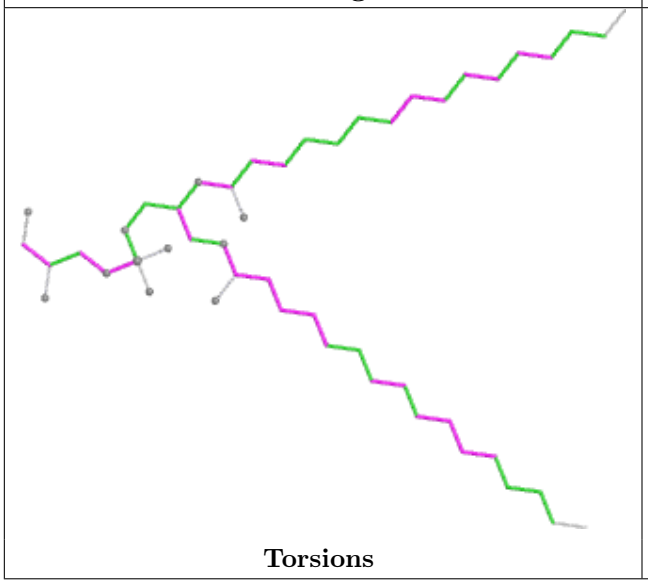
Ligand LHG F 204



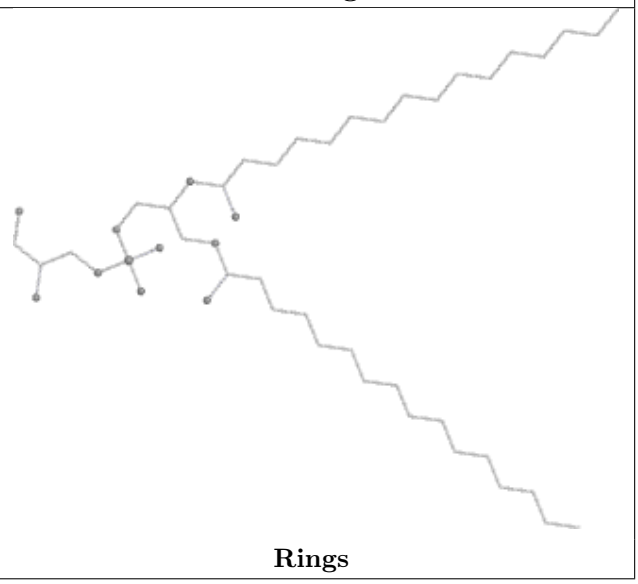
Bond lengths



Bond angles

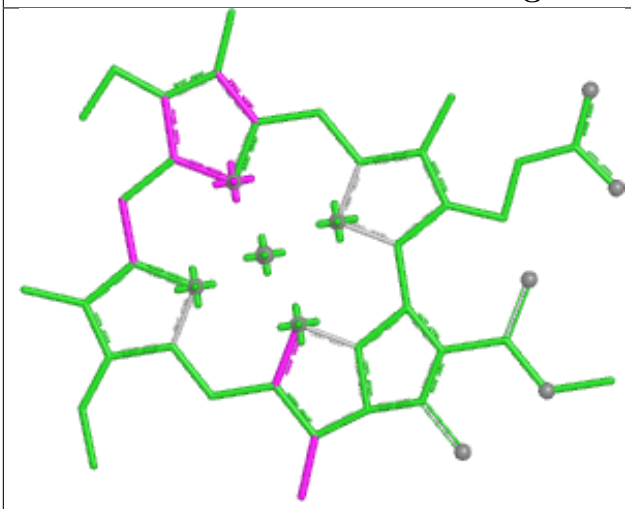


Torsions

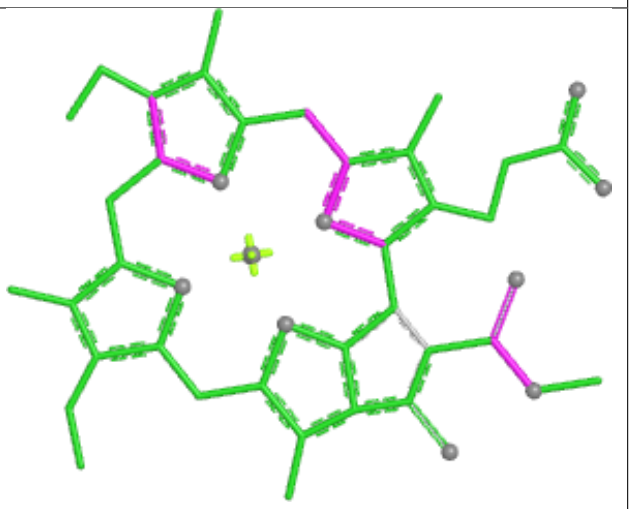


Rings

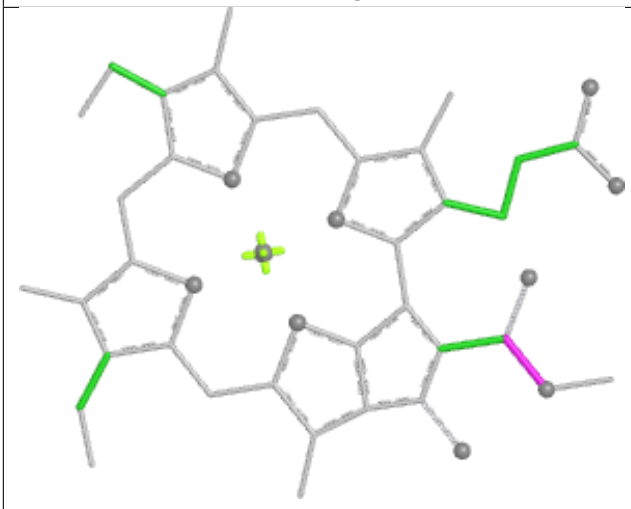
Ligand CLA O 820



Bond lengths



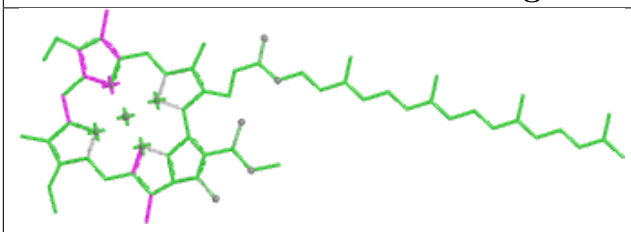
Bond angles



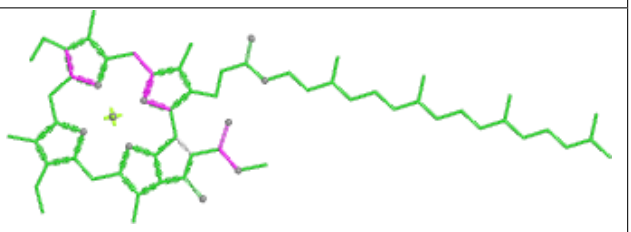
Torsions

Rings

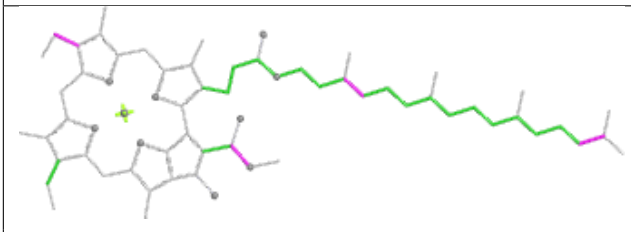
Ligand CLA N 834



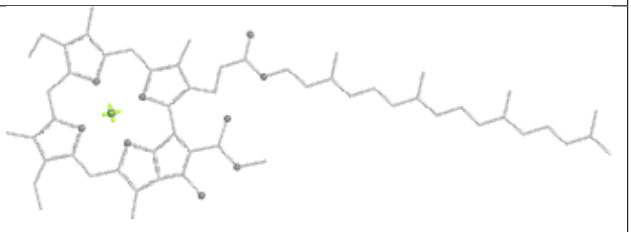
Bond lengths



Bond angles

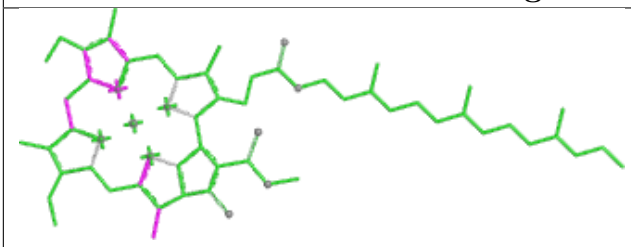


Torsions

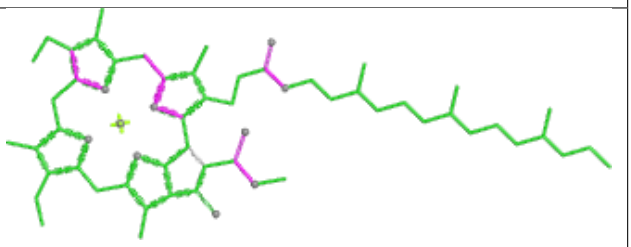


Rings

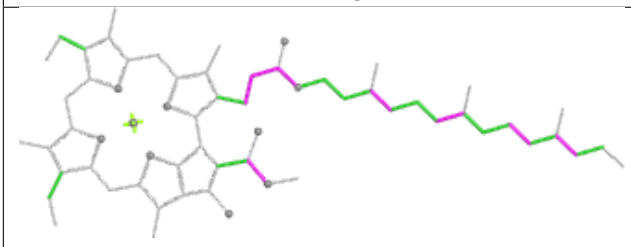
Ligand CLA B 826



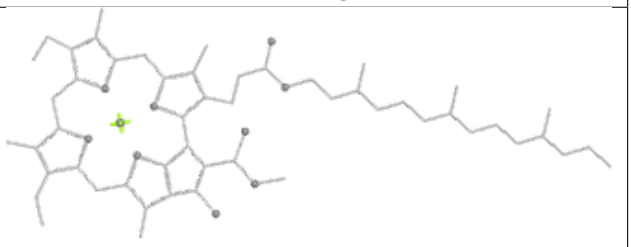
Bond lengths



Bond angles



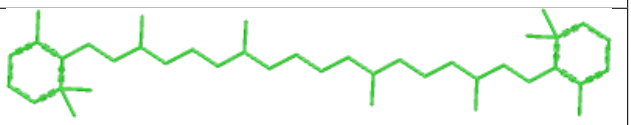
Torsions



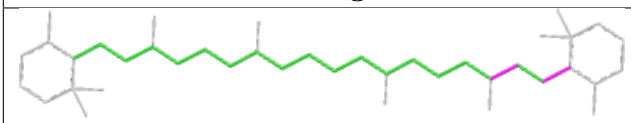
Rings

Ligand BCR B 842

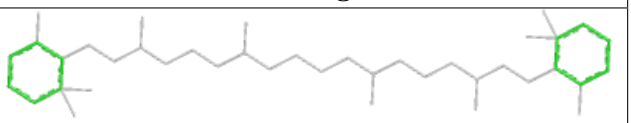
Bond lengths



Bond angles

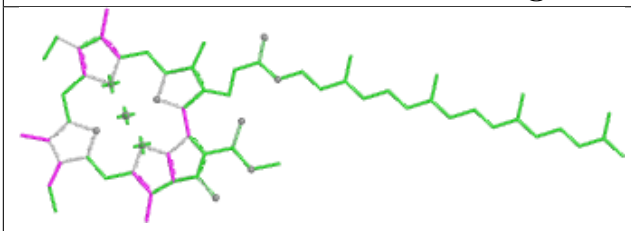


Torsions

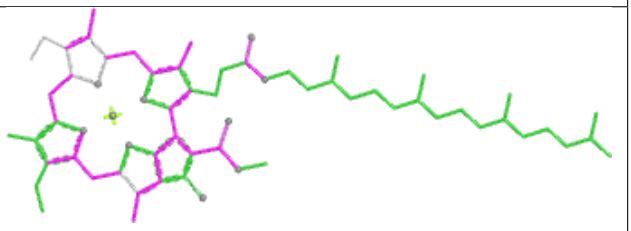


Rings

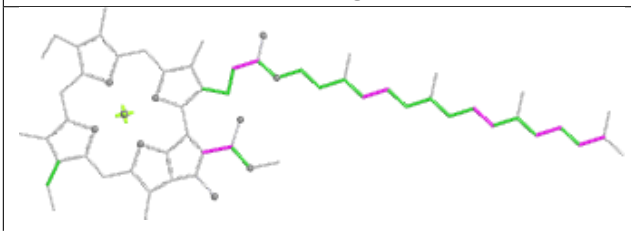
Ligand CL0 N 801



Bond lengths



Bond angles



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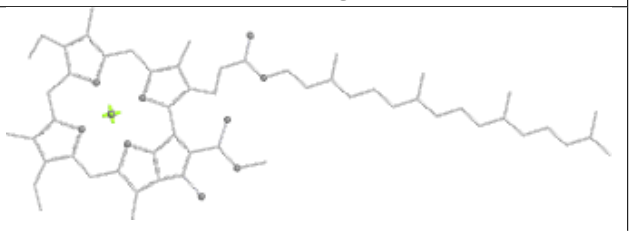
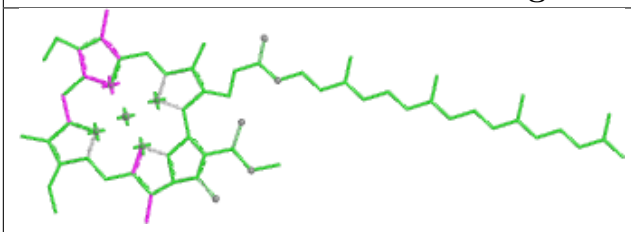
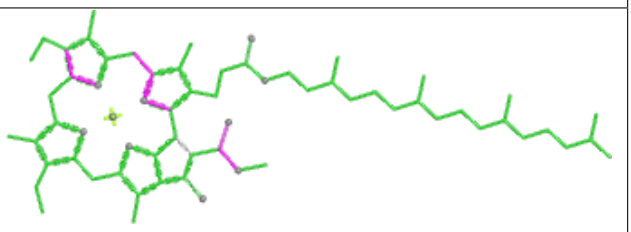


Rings

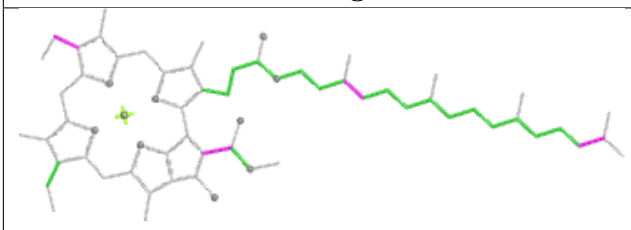
Ligand CLA a 834



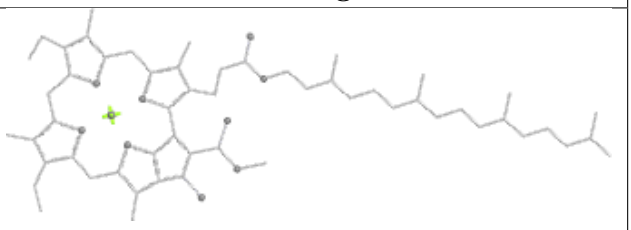
Bond lengths



Bond angles



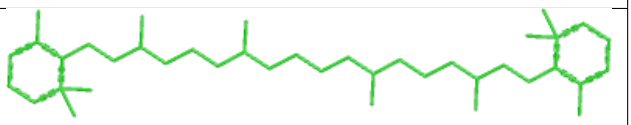
Torsions



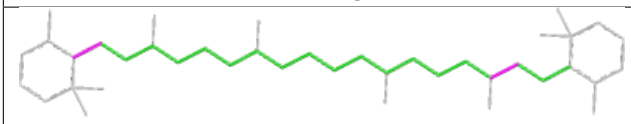
Rings

Ligand BCR A 847

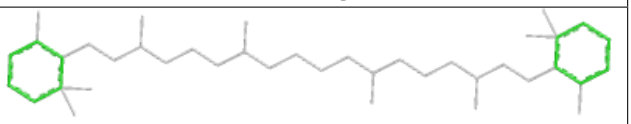
Bond lengths



Bond angles

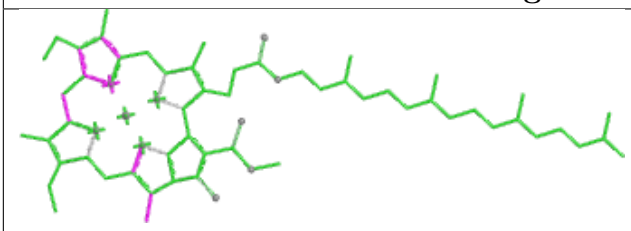


Torsions

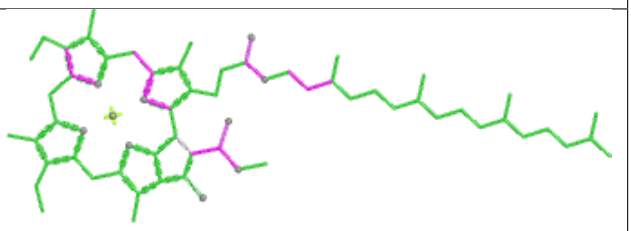


Rings

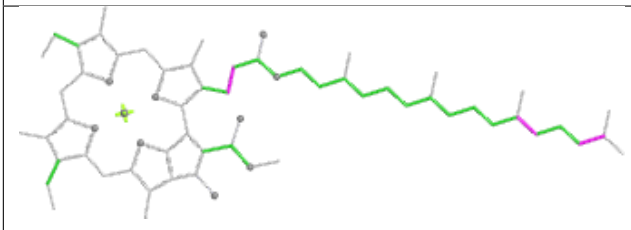
Ligand CLA O 807



Bond lengths



Bond angles



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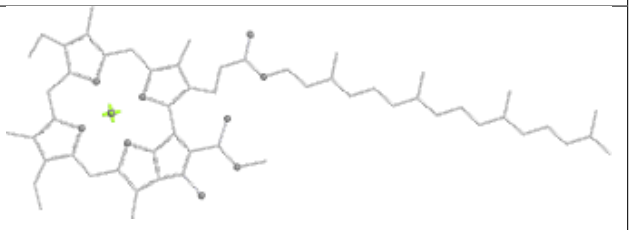
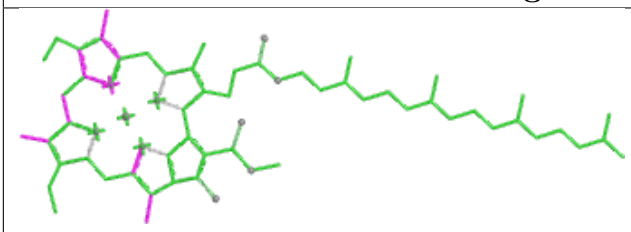


Rings

Ligand CLA A 818



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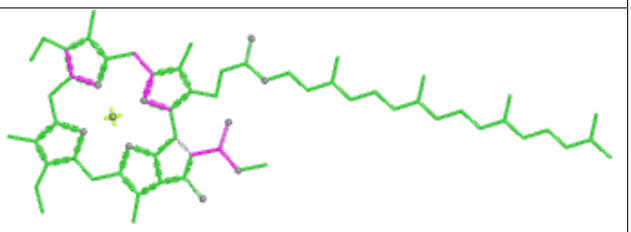
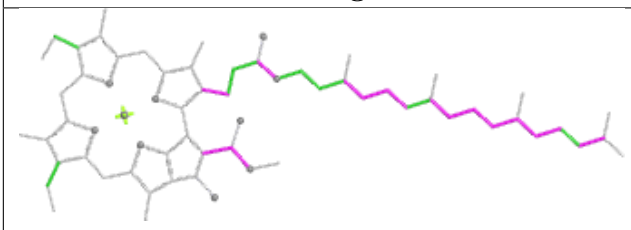
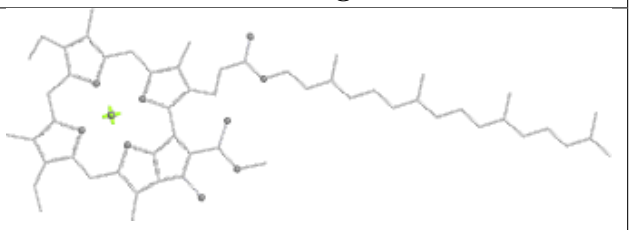


Bond angles

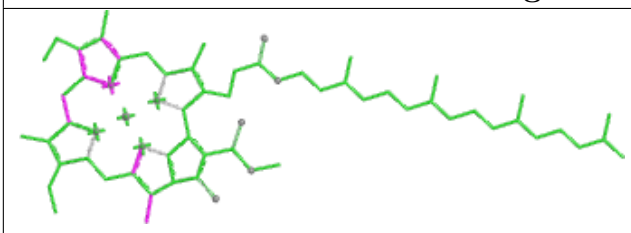


Torsions

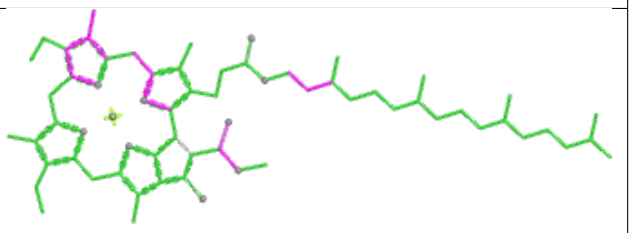


Rings

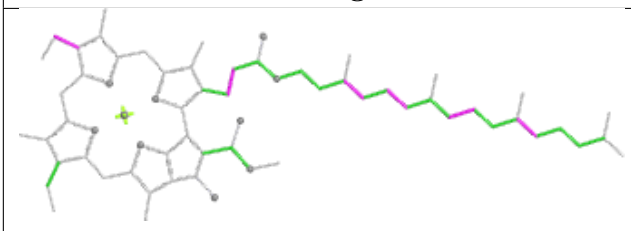
Ligand CLA A 830



Bond lengths



Bond angles



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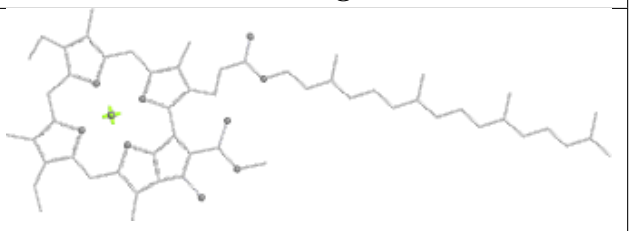
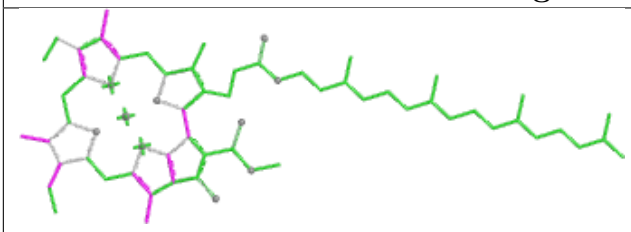


Rings

Ligand CL0 a 801



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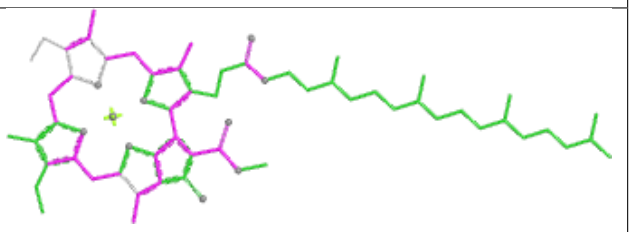
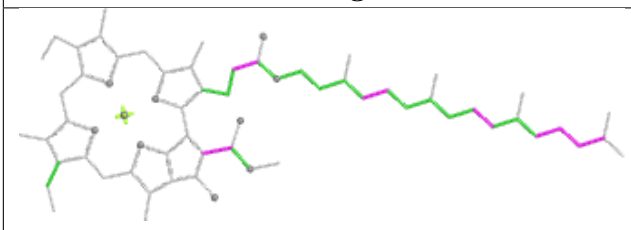


Bond angles



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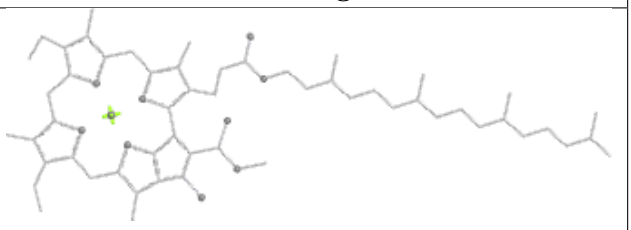
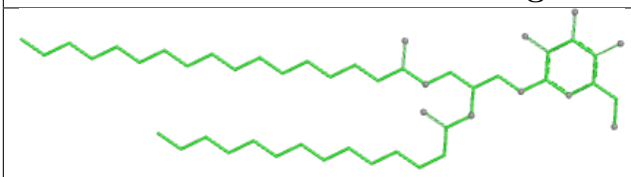
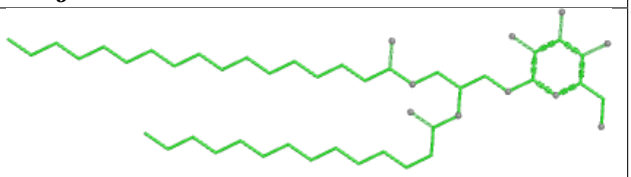
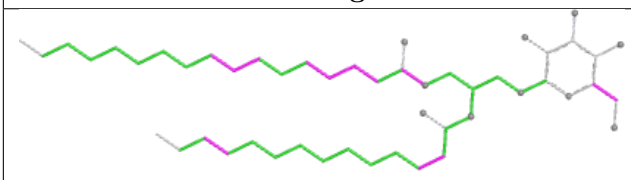


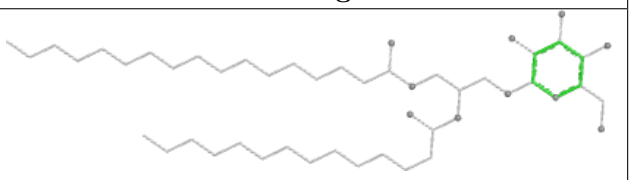
Rings

Ligand LMG j 206

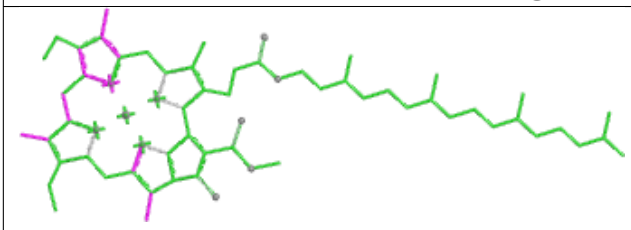

Bond lengths

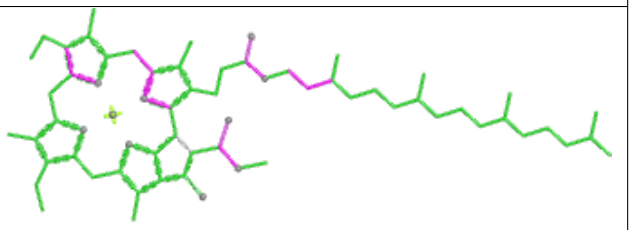

Bond angles

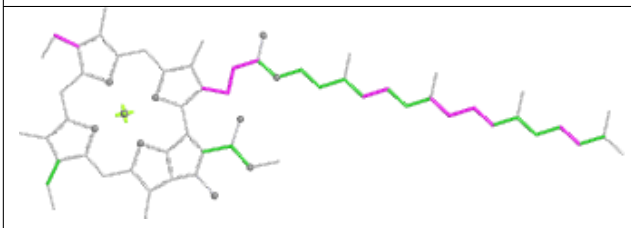

Torsions

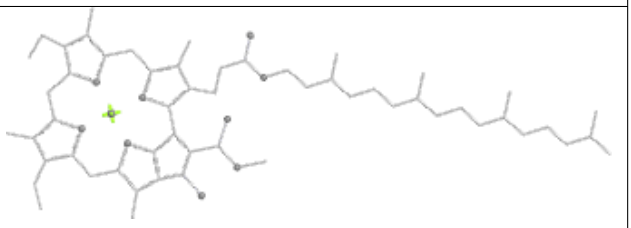

Rings

Ligand CLA a 819

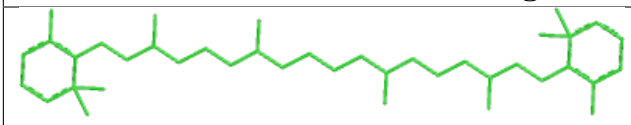

Bond lengths

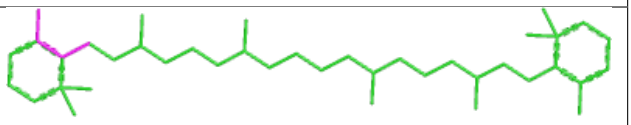

Bond angles

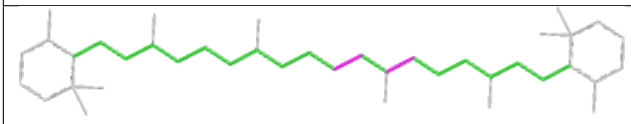

Torsions

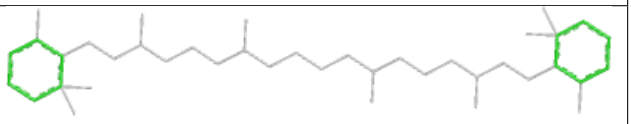

Rings

Ligand BCR N 845

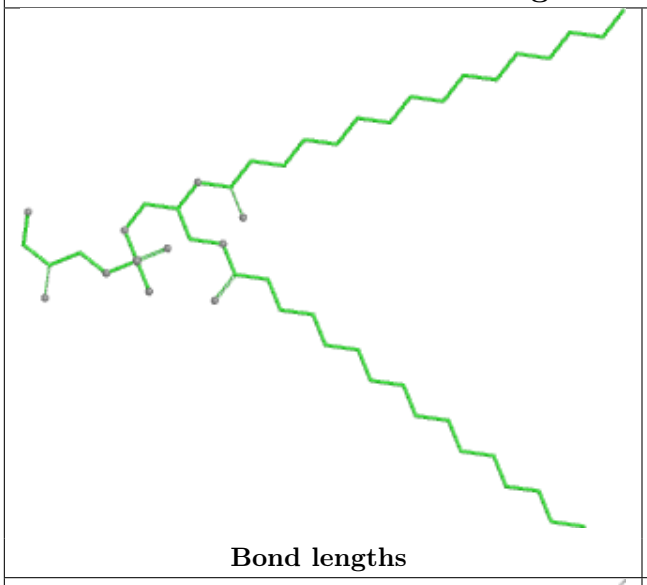

Bond lengths


Bond angles


Torsions


Rings

Ligand LHG j 207



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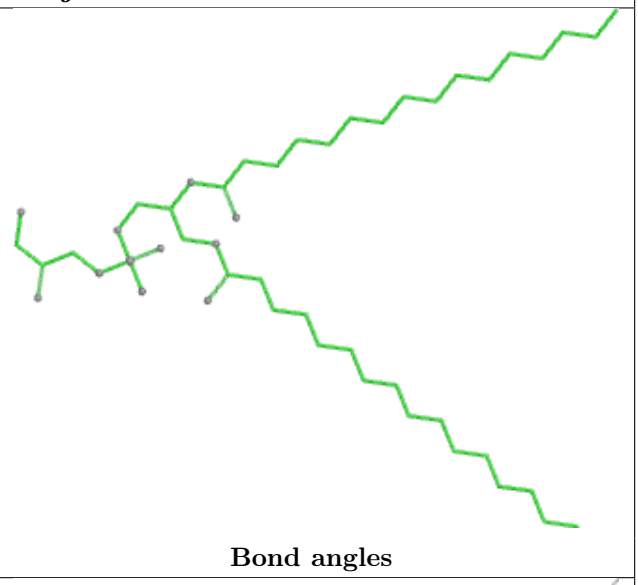
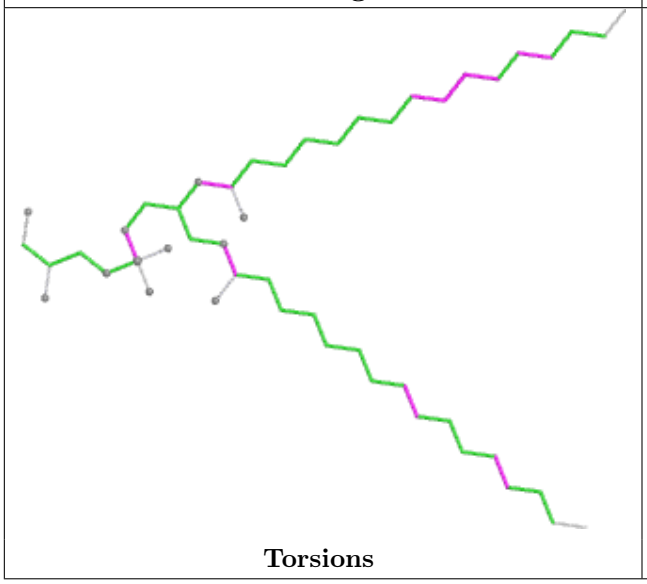
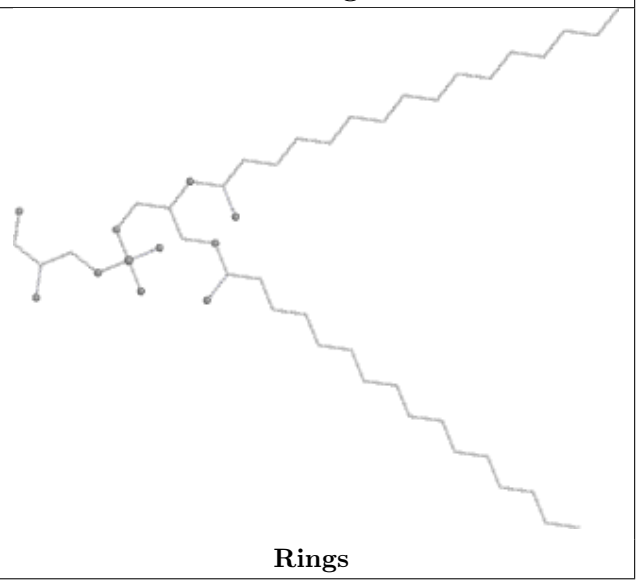


Bond angles

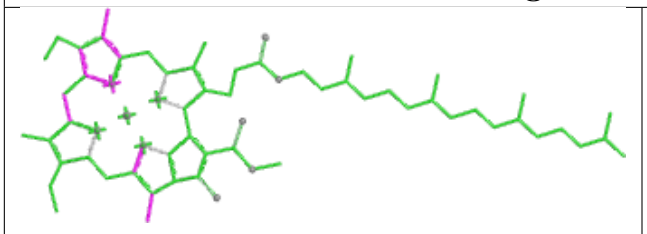


Torsions

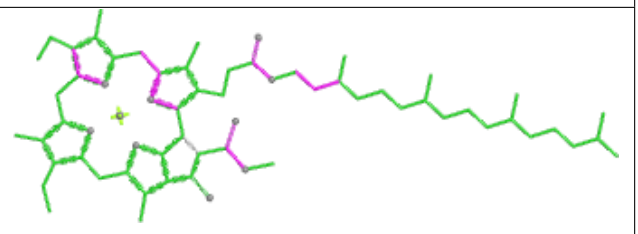


Rings

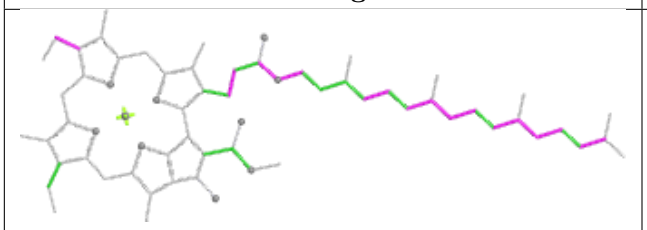
Ligand CLA A 839



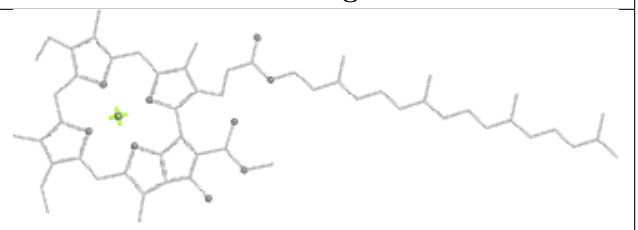
Bond lengths



Bond angles

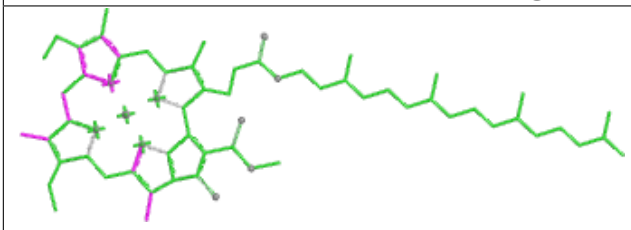


Torsions

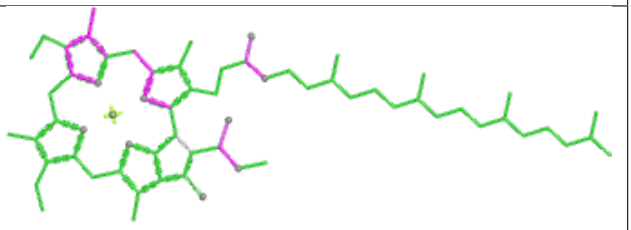


Rings

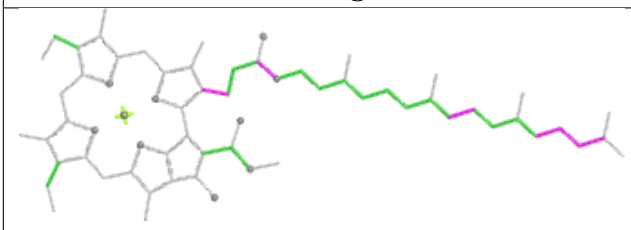
Ligand CLA a 803



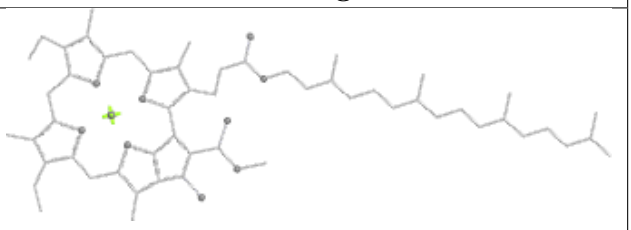
Bond lengths



Bond angles



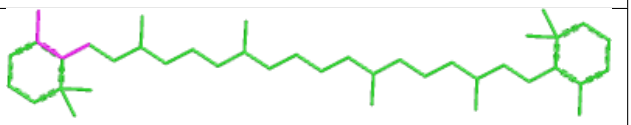
Torsions



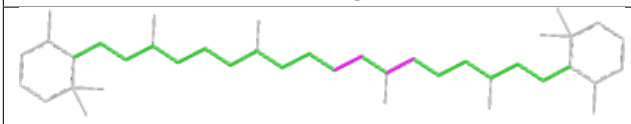
Rings

Ligand BCR a 845

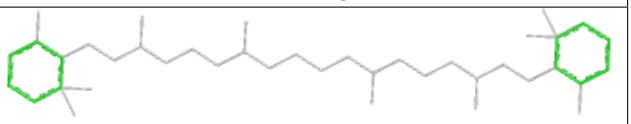
Bond lengths



Bond angles

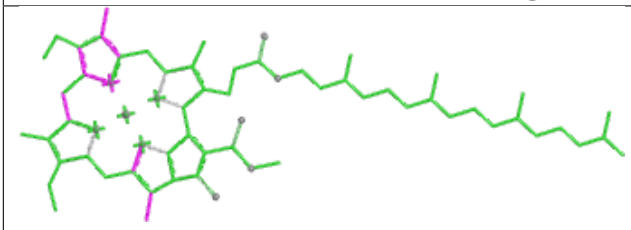


Torsions

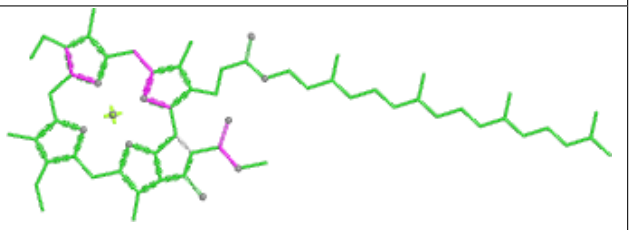


Rings

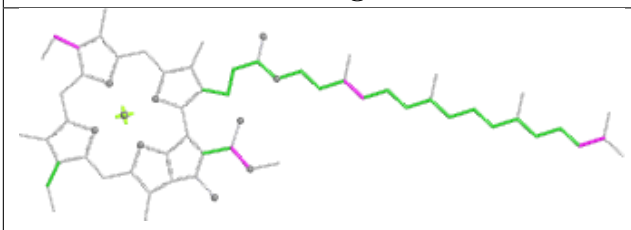
Ligand CLA A 834



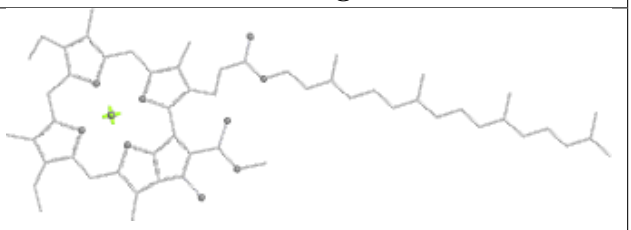
Bond lengths



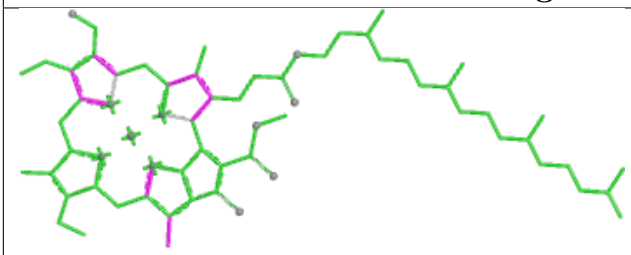
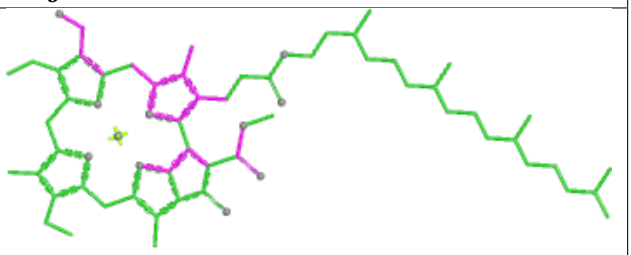
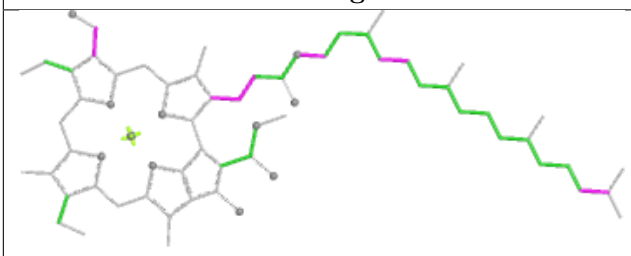
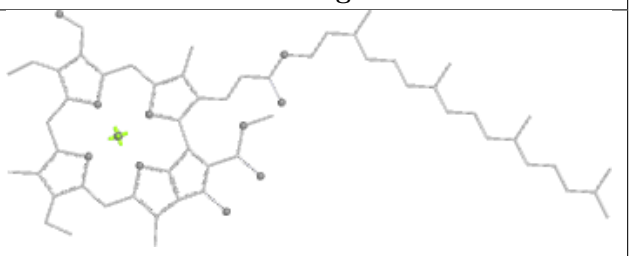
Bond angles

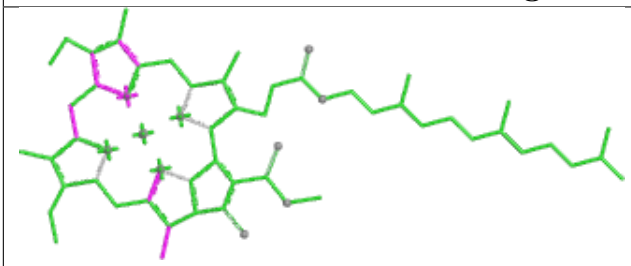
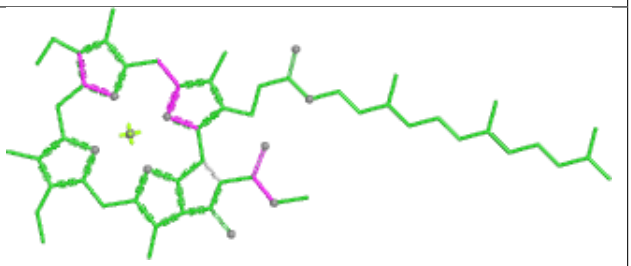
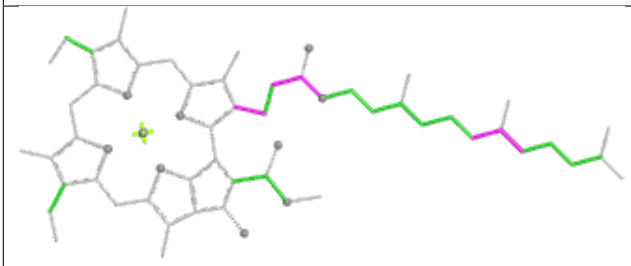
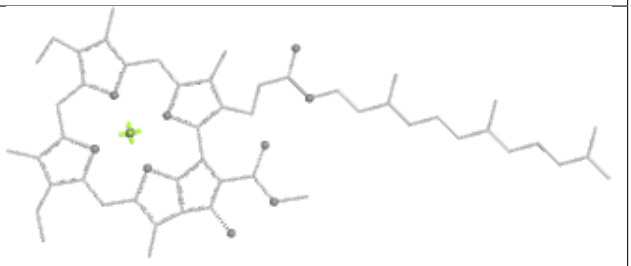


Torsions

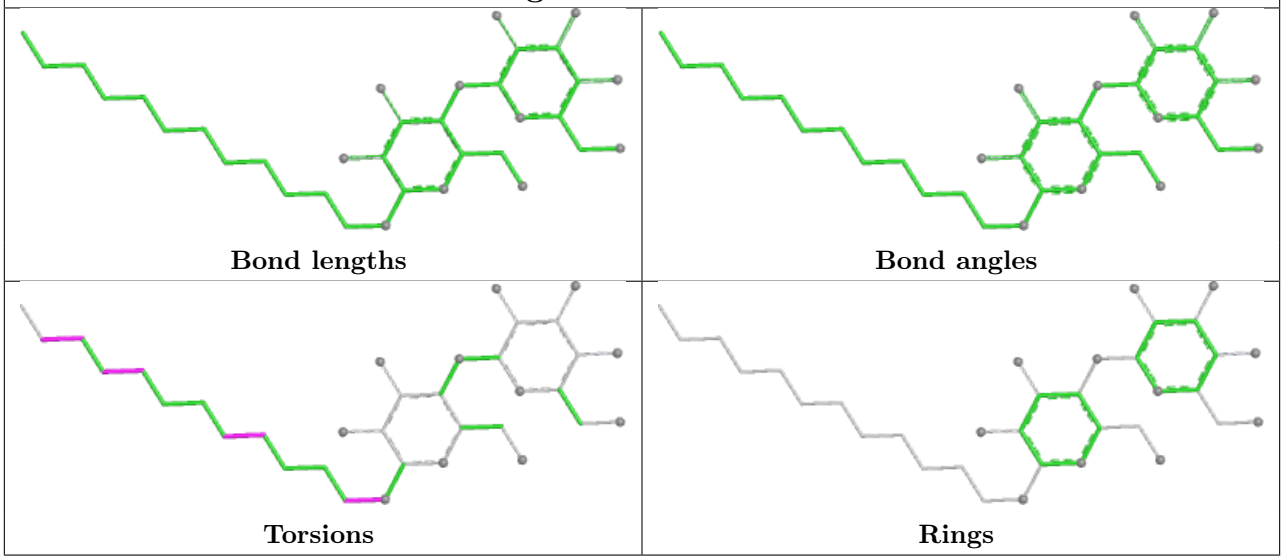


Rings

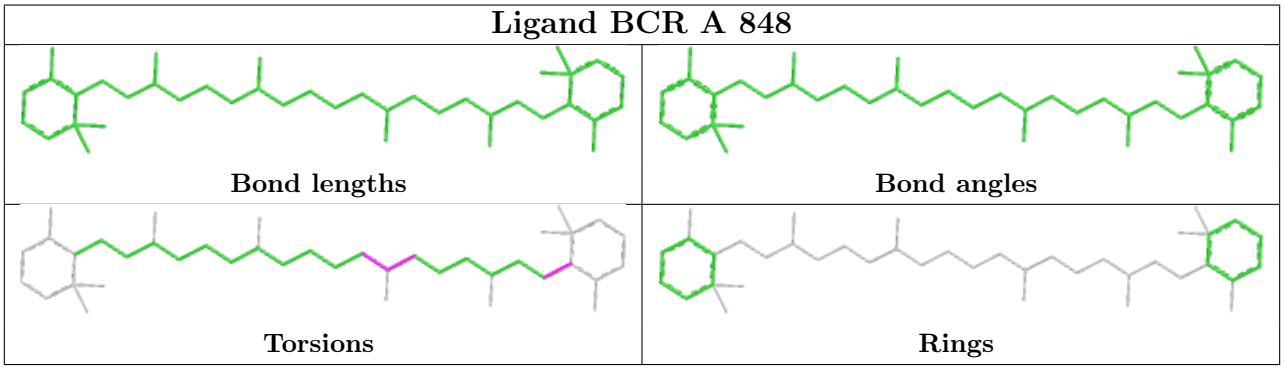
Ligand F6C j 201	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA N 805	
 Bond lengths	 Bond angles
 Torsions	 Rings

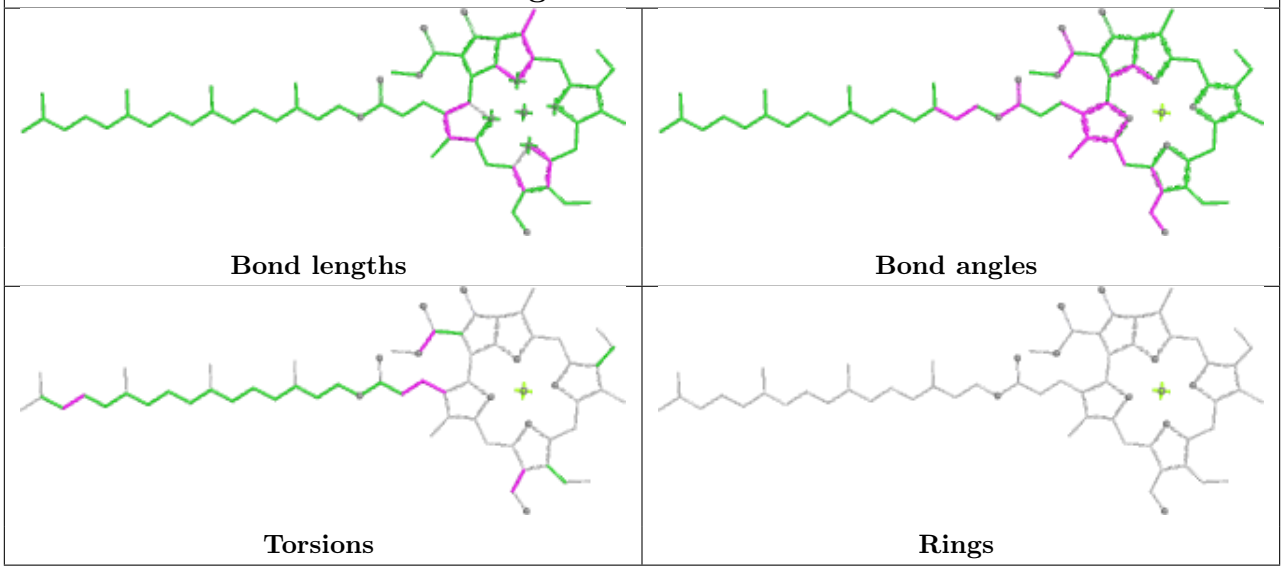
Ligand LMT a 854



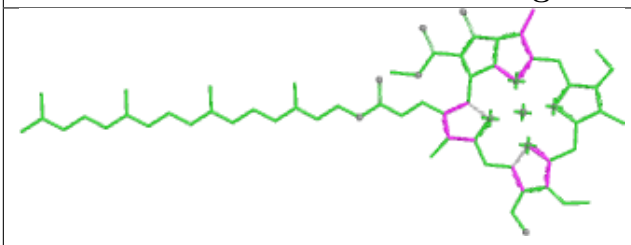
Ligand BCR A 848



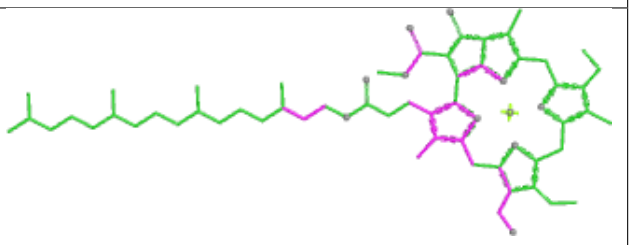
Ligand F6C A 802



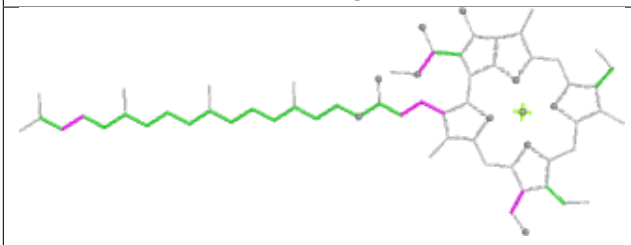
Ligand F6C a 802



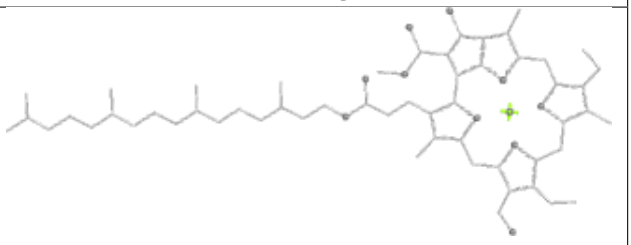
Bond lengths



Bond angles

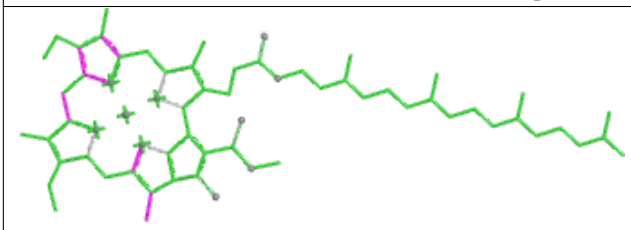


Torsions

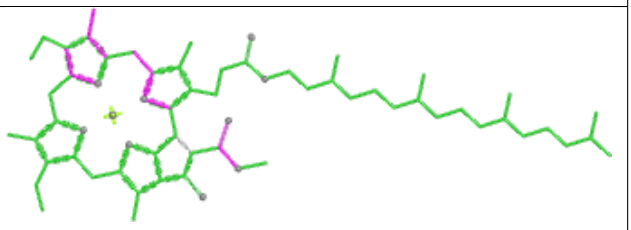


Rings

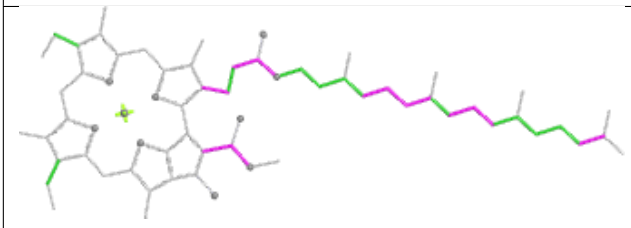
Ligand CLA a 806



Bond lengths



Bond angles



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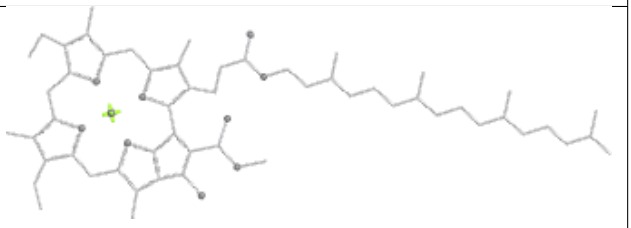
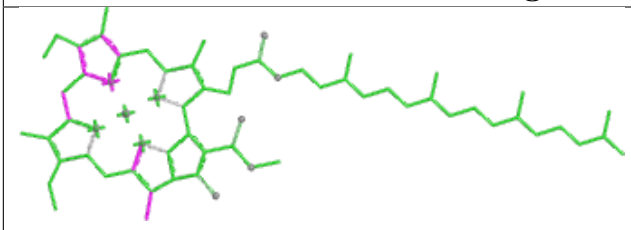
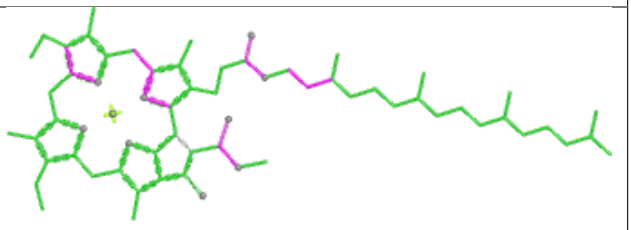


Rings

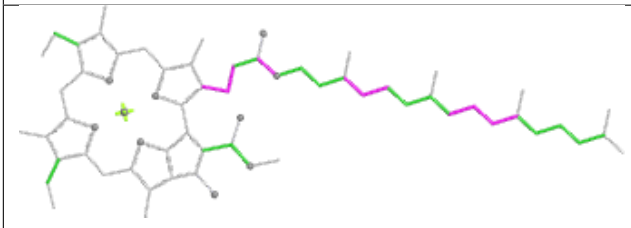
Ligand CLA O 830



Bond lengths



Bond angles



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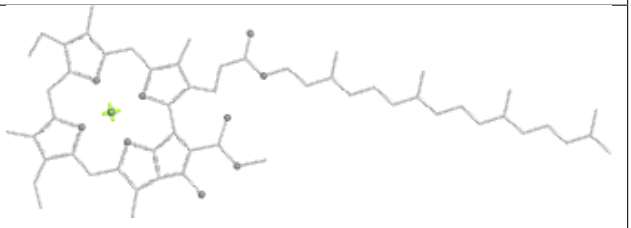
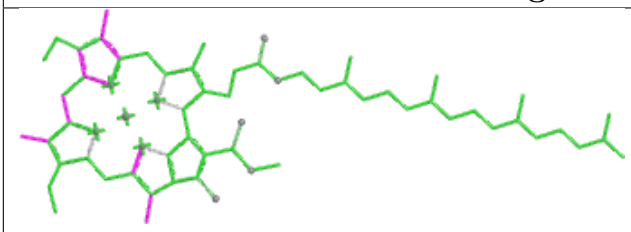
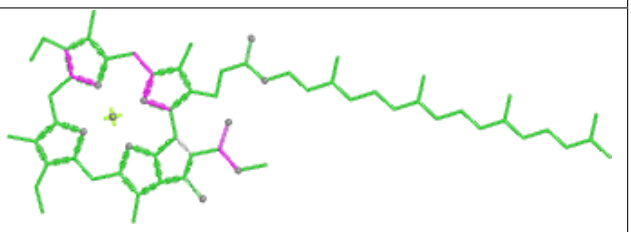


Rings

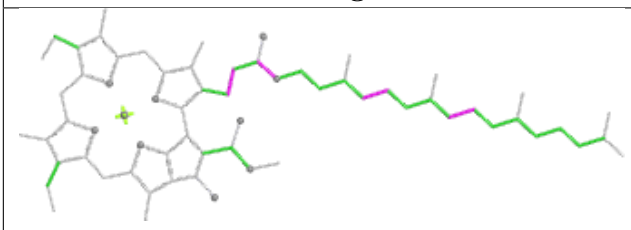
Ligand CLA a 804



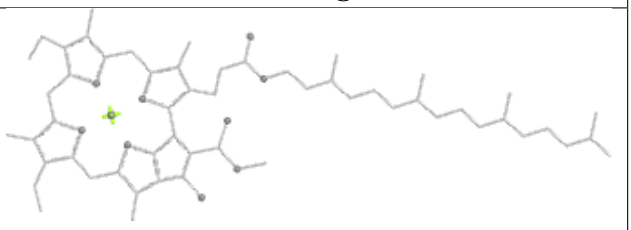
Bond lengths



Bond angles

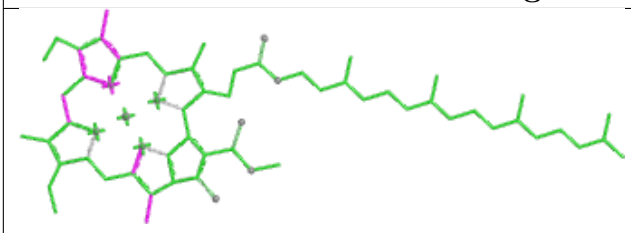


Torsions

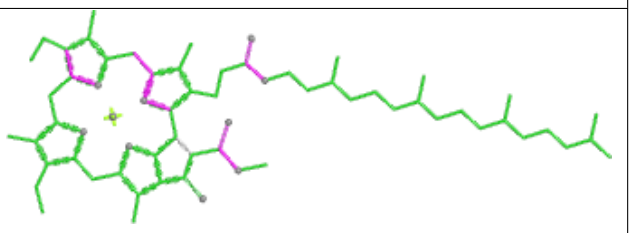


Rings

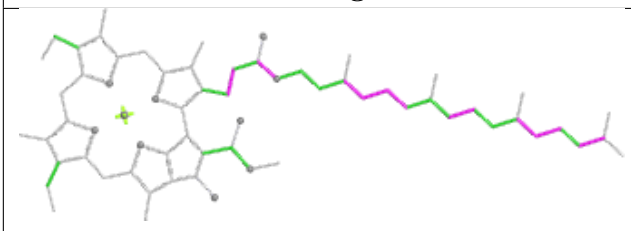
Ligand CLA A 822



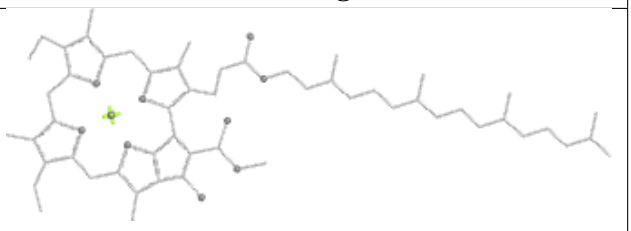
Bond lengths



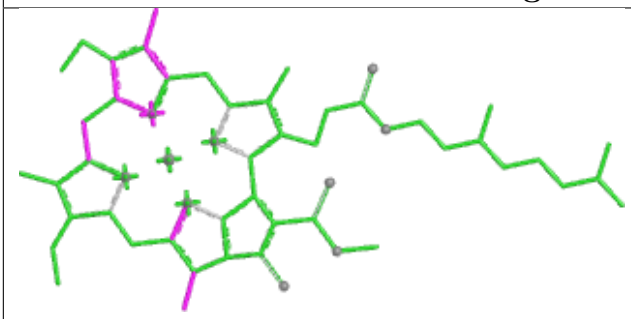
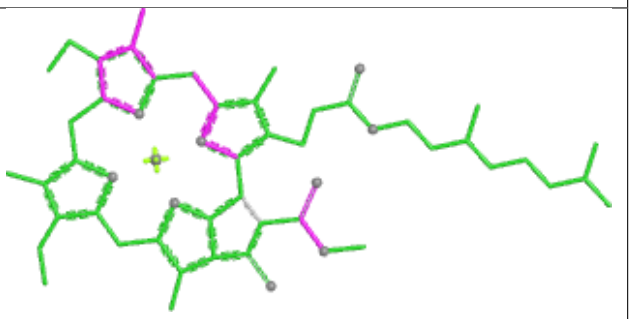
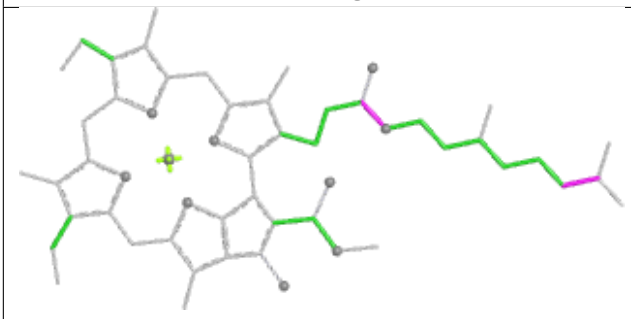
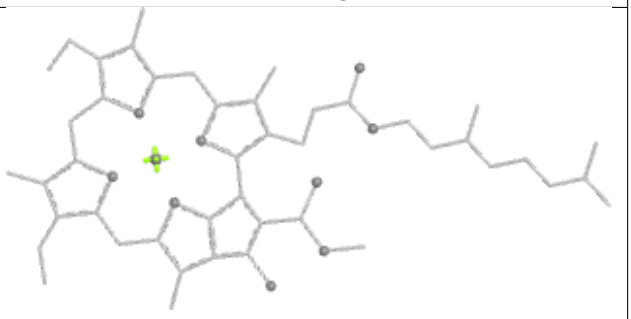
Bond angles

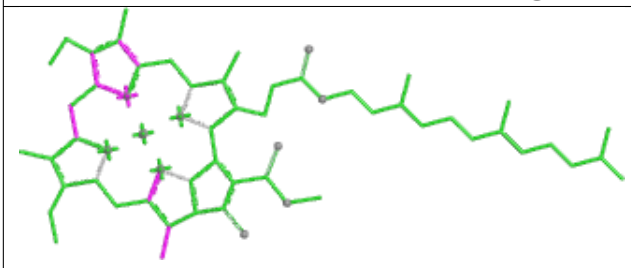
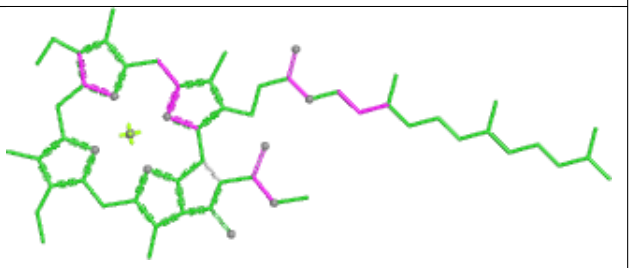
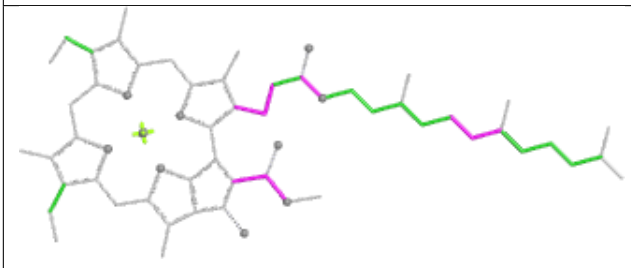
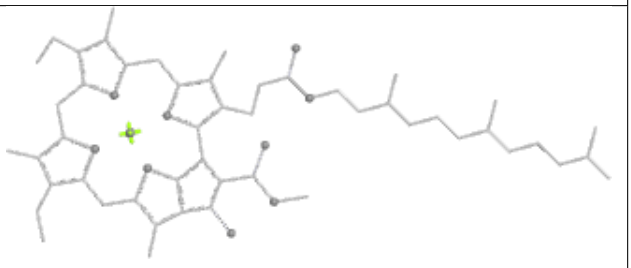


Torsions

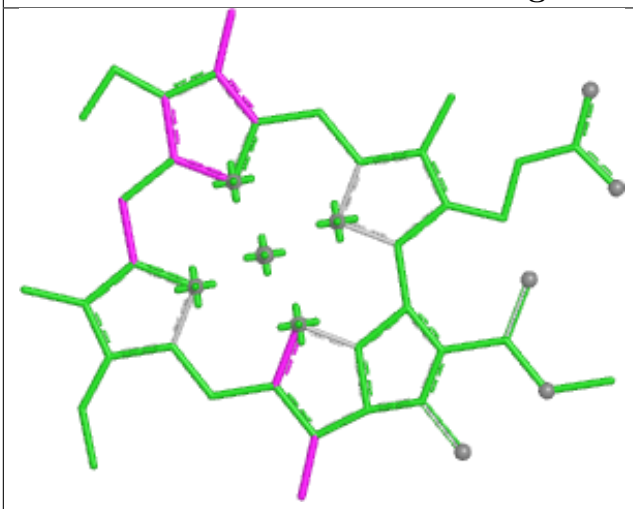


Rings

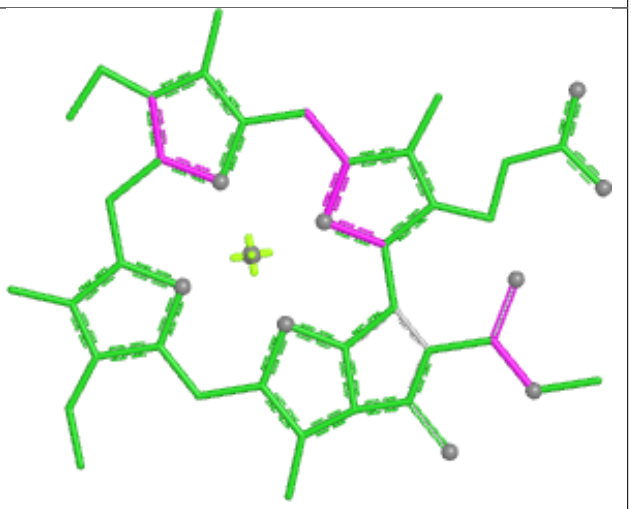
Ligand CLA N 833	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA a 809	
	
Bond lengths	Bond angles
	
Torsions	Rings

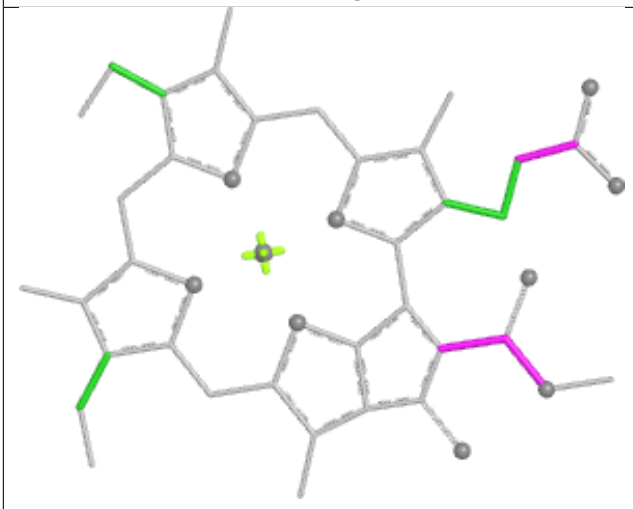
Ligand CLA a 816



Bond lengths



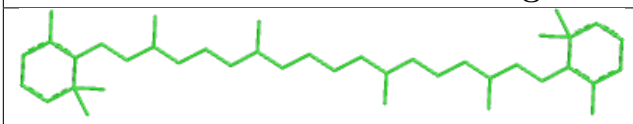
Bond angles



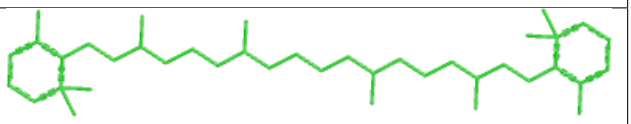
Torsions

Rings

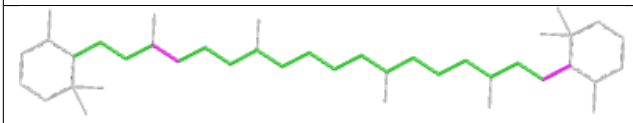
Ligand BCR B 843



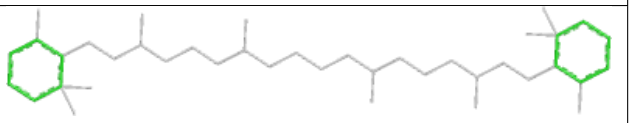
Bond lengths



Bond angles

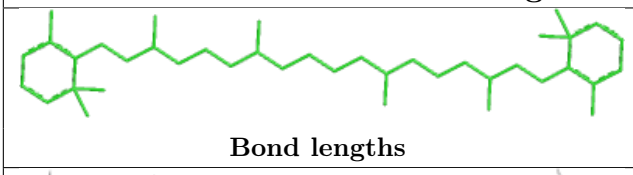


Torsions

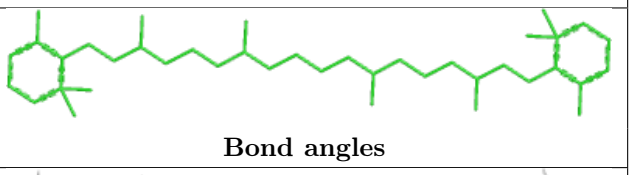


Rings

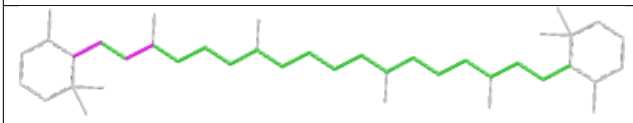
Ligand BCR b 848



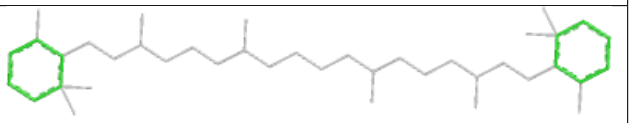
Bond lengths



Bond angles

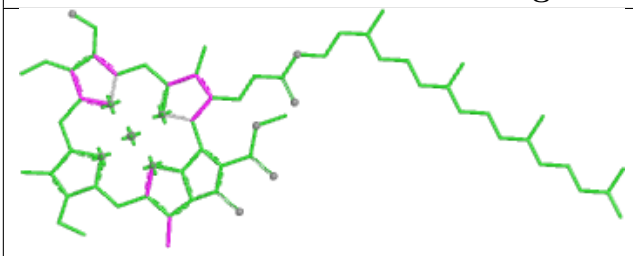


Torsions

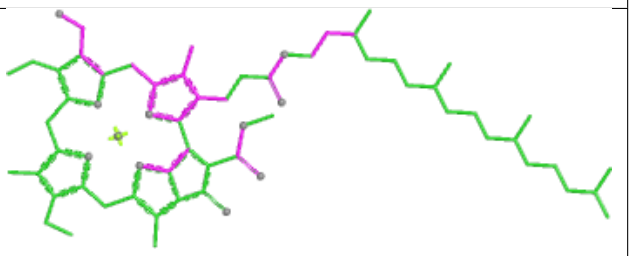


Rings

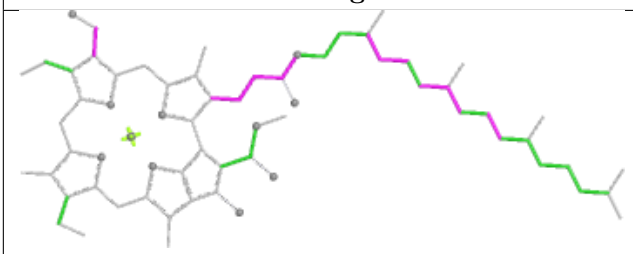
Ligand F6C a 855



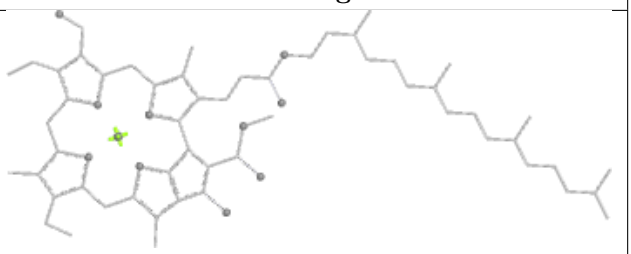
Bond lengths



Bond angles

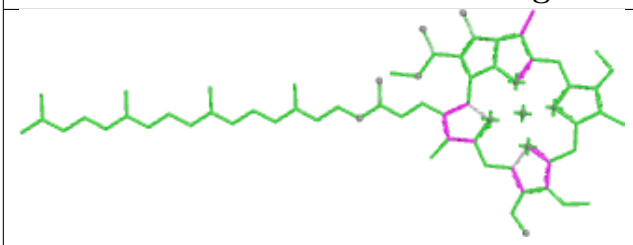


Torsions

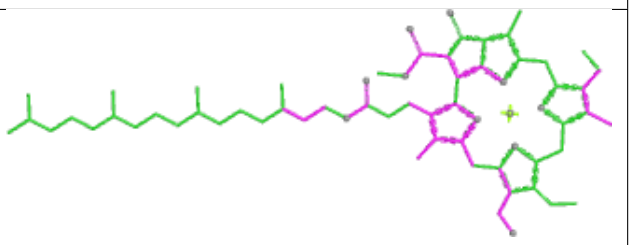


Rings

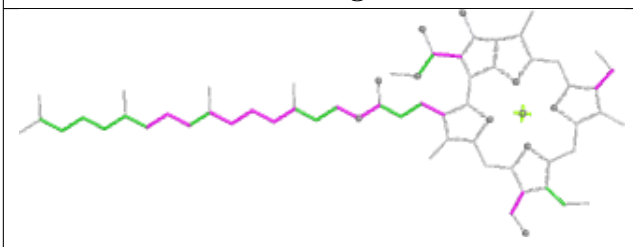
Ligand F6C a 826



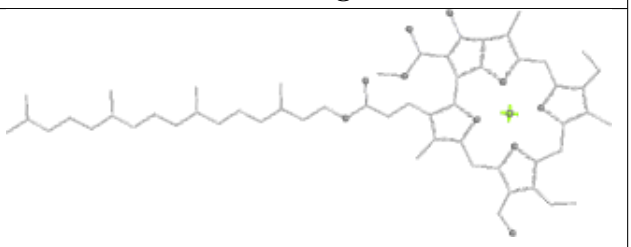
Bond lengths



Bond angles

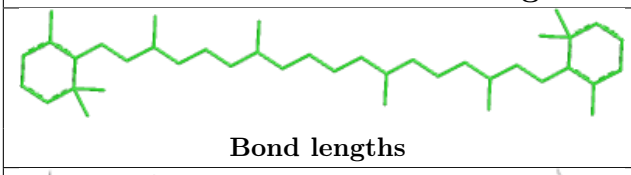


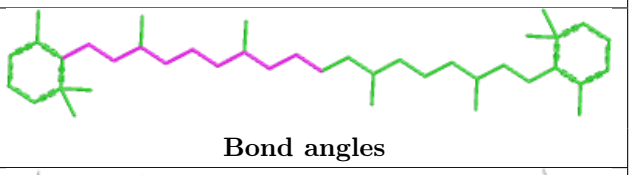
Torsions

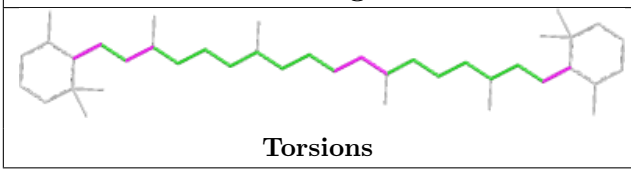


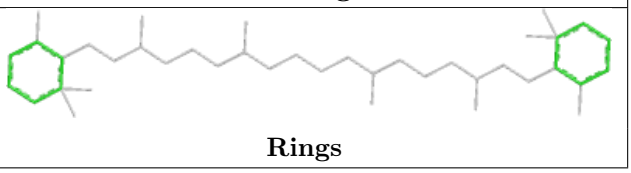
Rings

Ligand BCR U 102

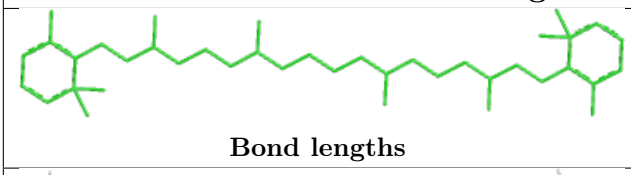

Bond lengths


Bond angles


Torsions


Rings

Ligand BCR I 102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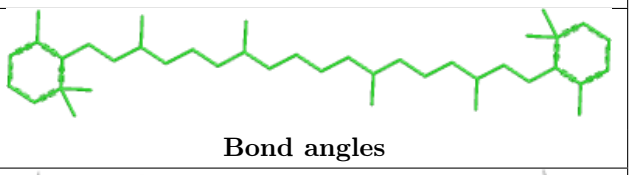
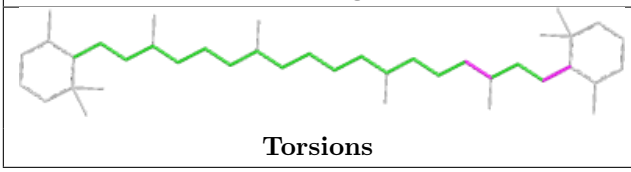

Bond angles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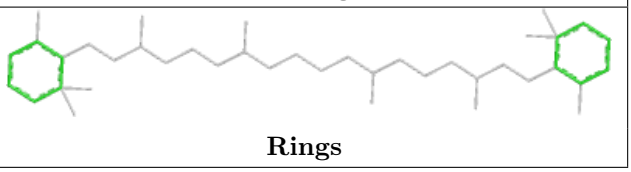
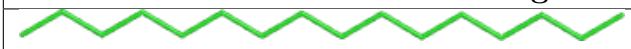

Rings

Ligand LFA b 850

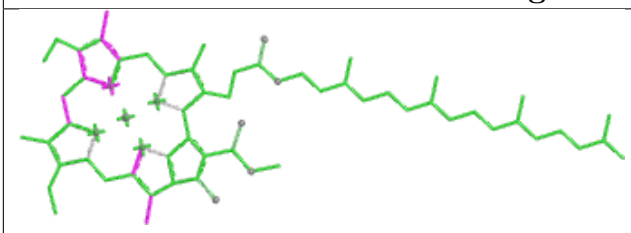

Bond lengths

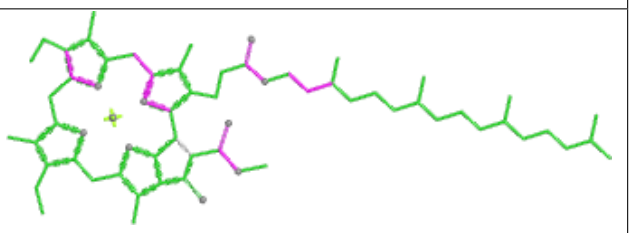

Bond angles

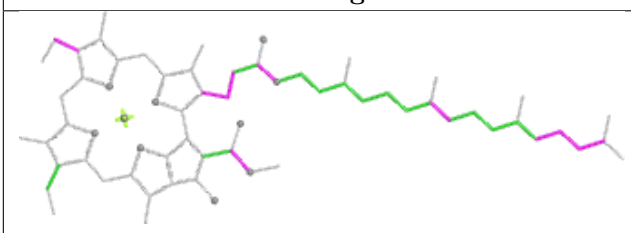

Torsions

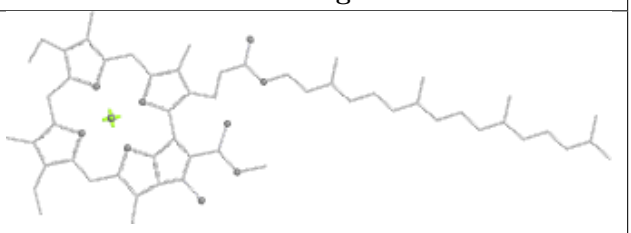

Rings

Ligand CLA a 842

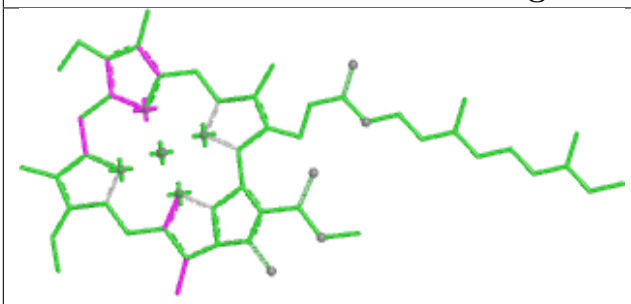

Bond lengths


Bond angles

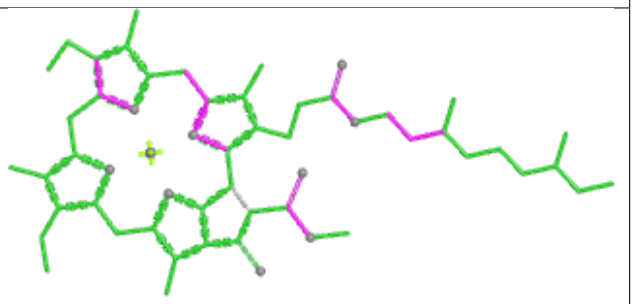

Torsions


Rings

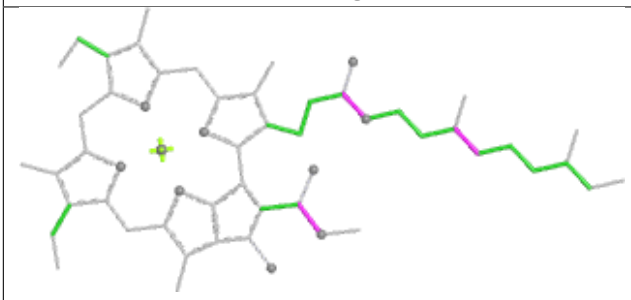
Ligand CLA a 823



Bond lengths



Bond angles



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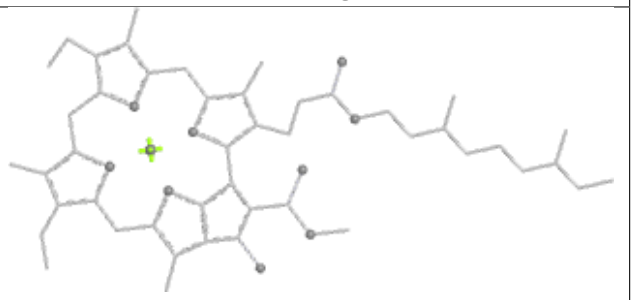
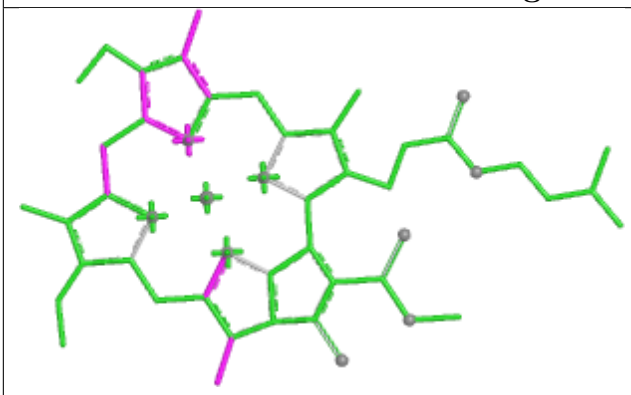
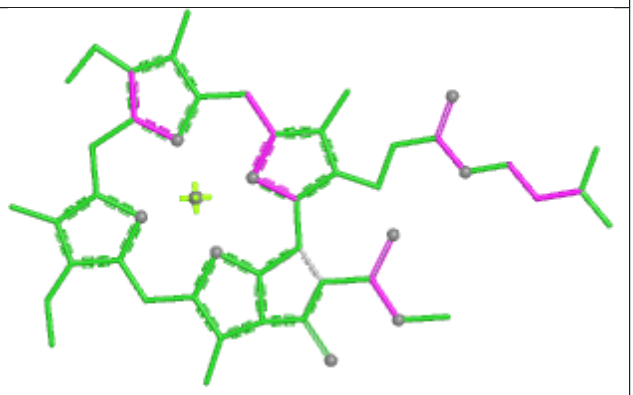


Rings

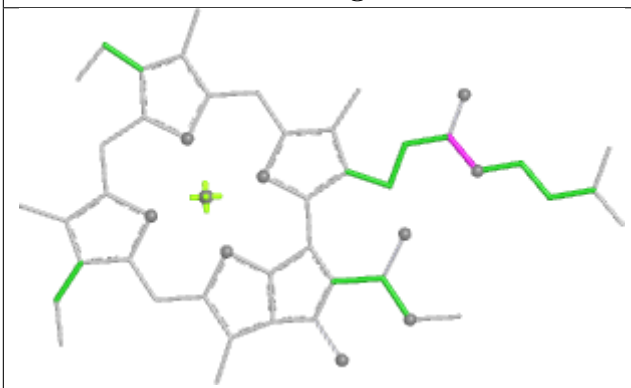
Ligand CLA N 832



Bond lengths



Bond angles



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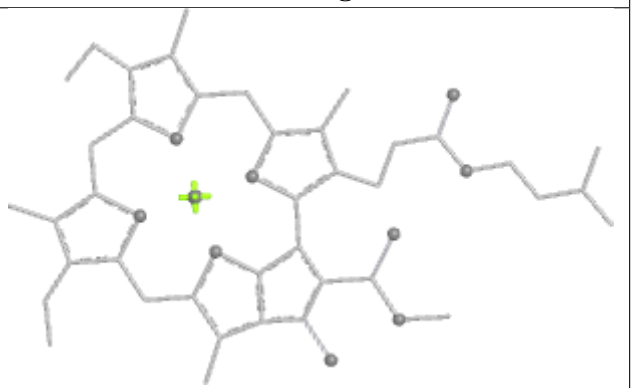
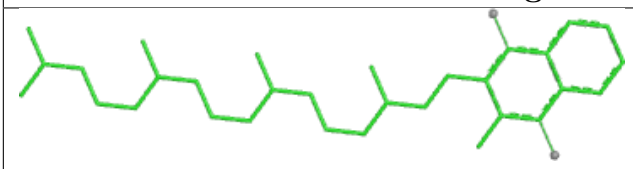
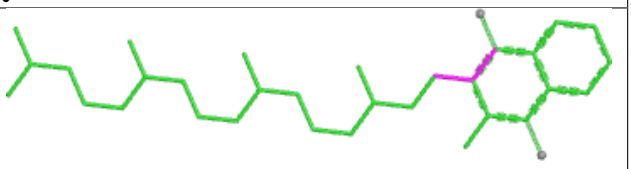


Rings

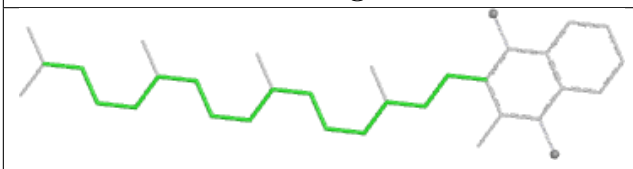
Ligand PQN b 841



Bond lengths



Bond angles



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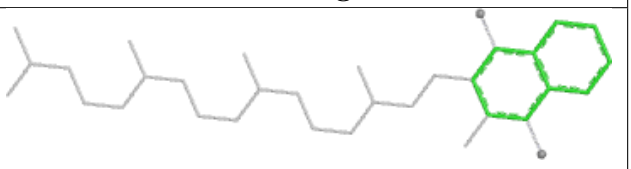
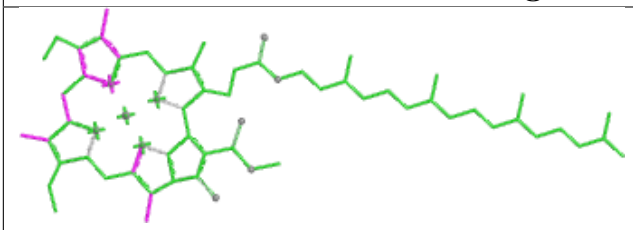
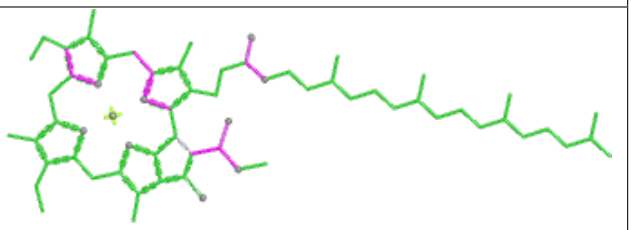


Rings

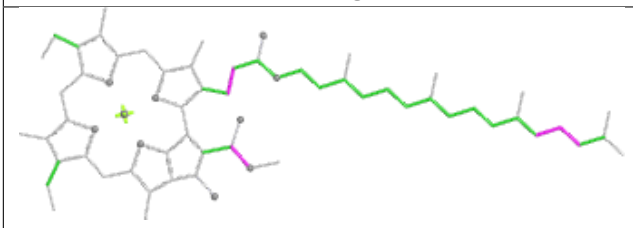
Ligand CLA B 803



Bond lengths



Bond angles



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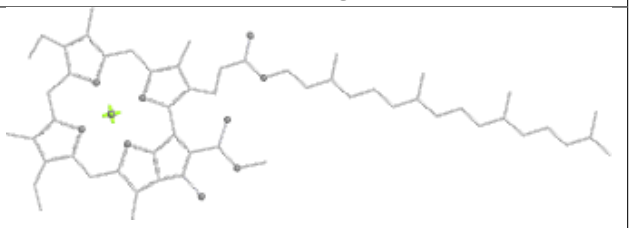
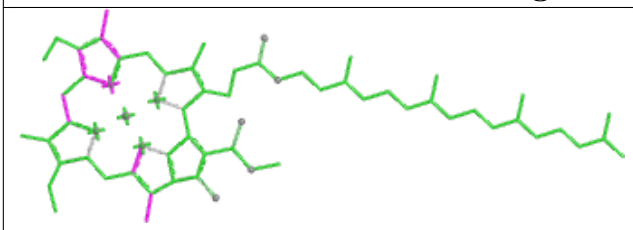


Rings

Ligand CLA j 202



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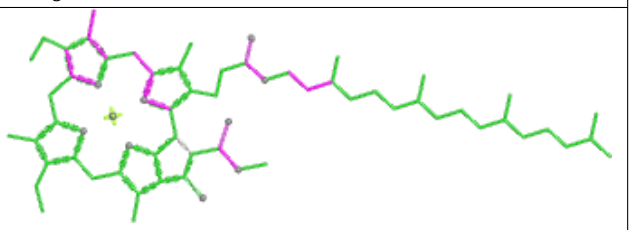
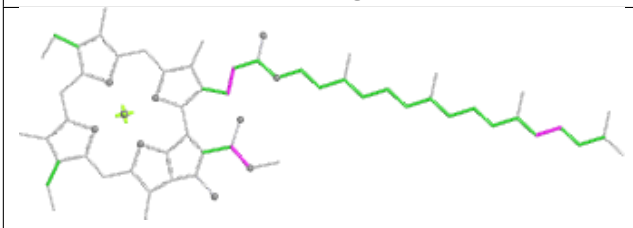


Bond angles



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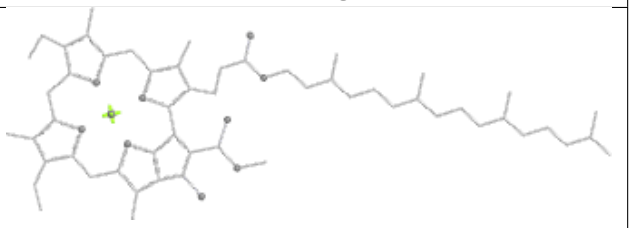
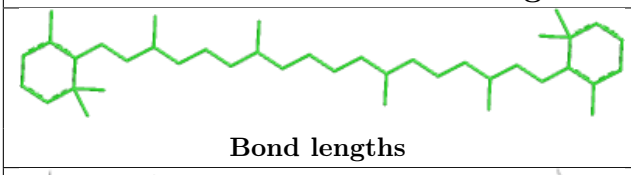
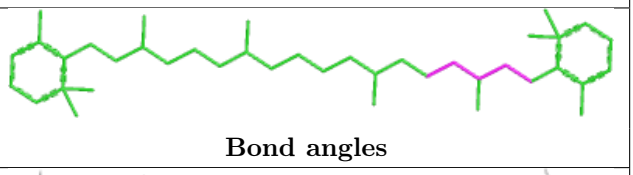


Rings

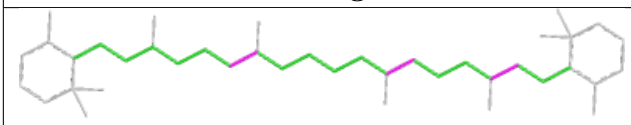
Ligand BCR F 202



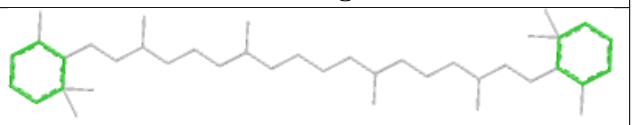
Bond lengths



Bond angles

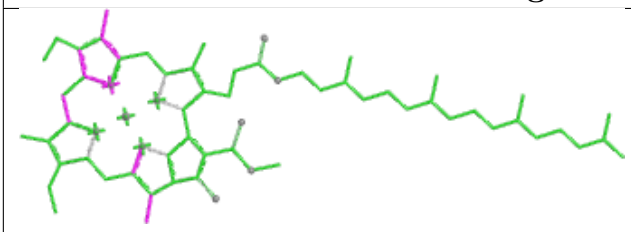


Torsions

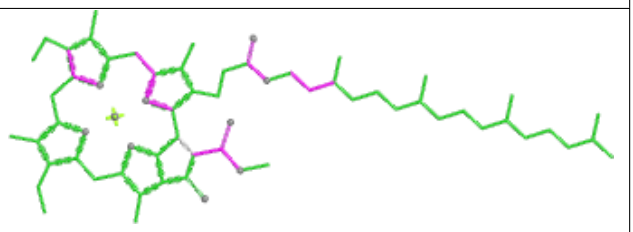


Rings

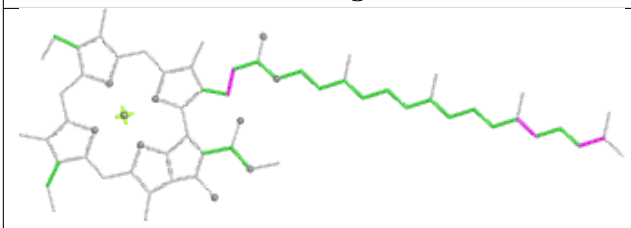
Ligand CLA b 807



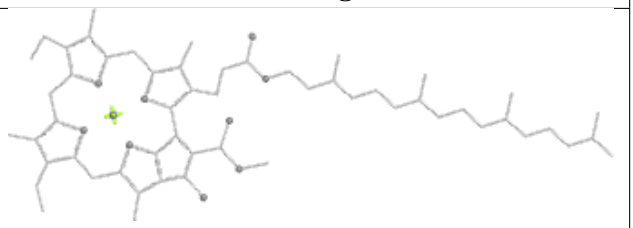
Bond lengths



Bond angles

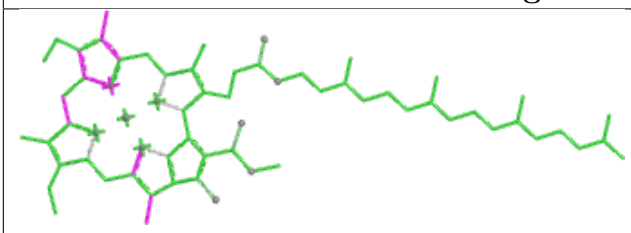


Torsions



Rings

Ligand CLA N 822



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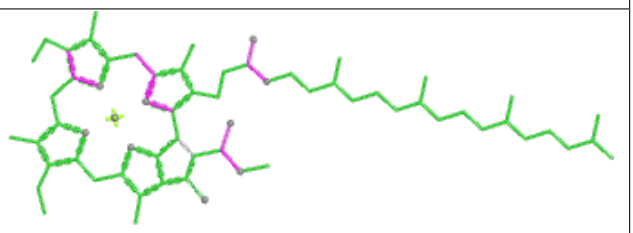
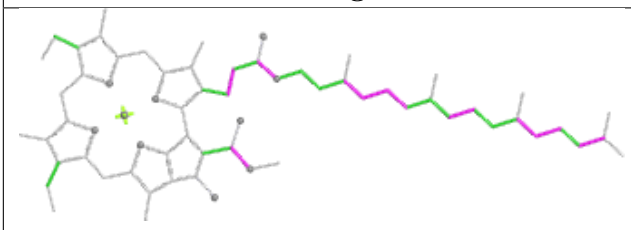


Bond angles



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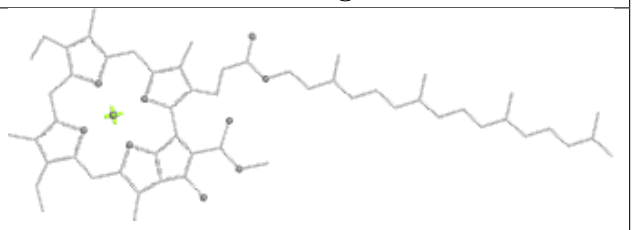
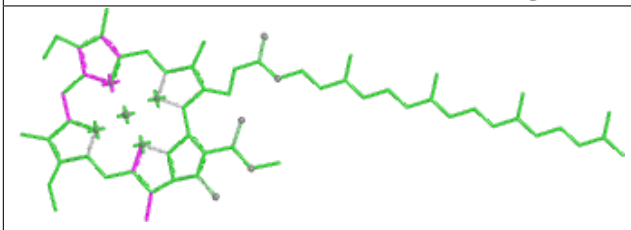
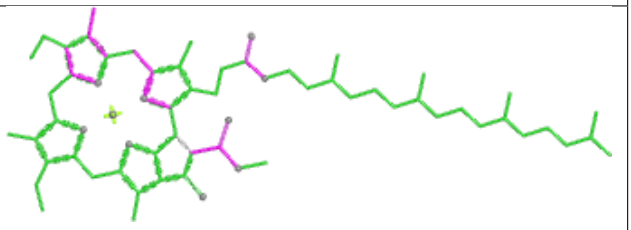


Rings

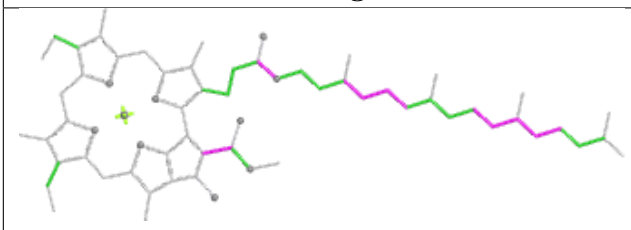
Ligand CLA B 824



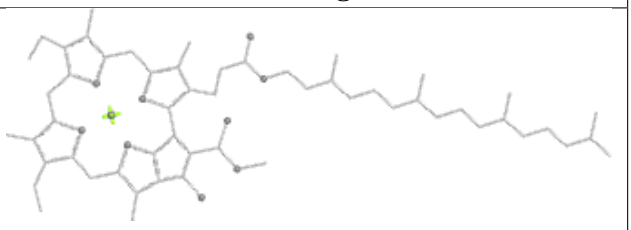
Bond lengths



Bond angles

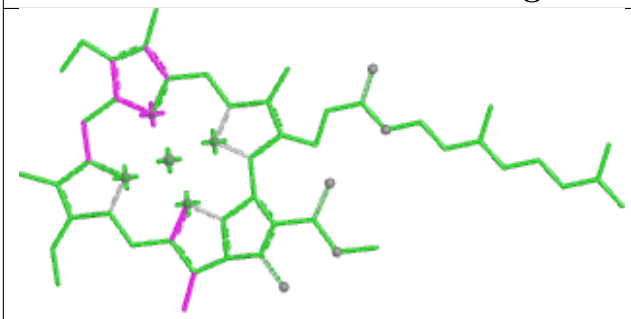


Torsions

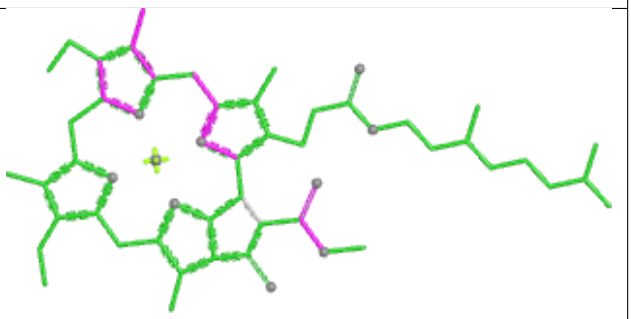


Rings

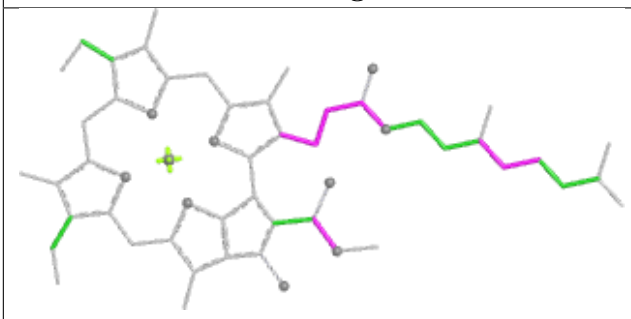
Ligand CLA N 838



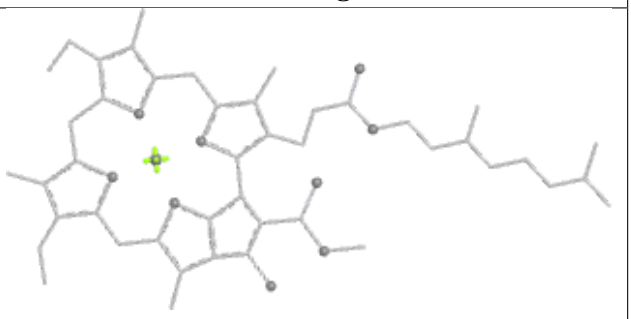
Bond lengths



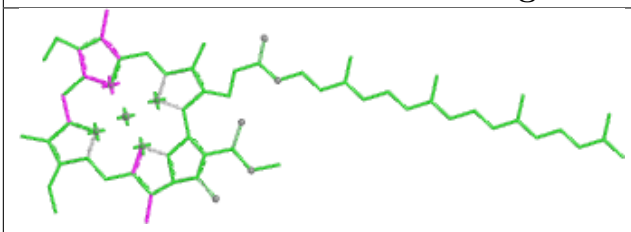
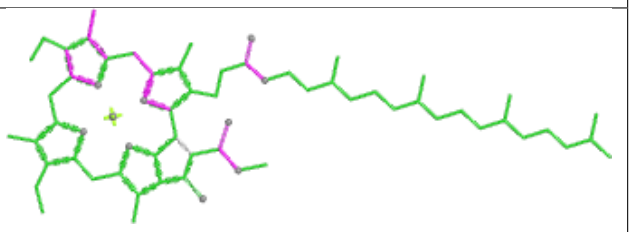
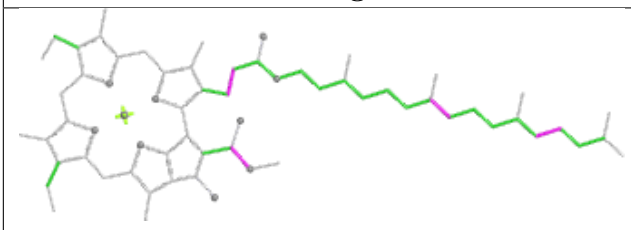
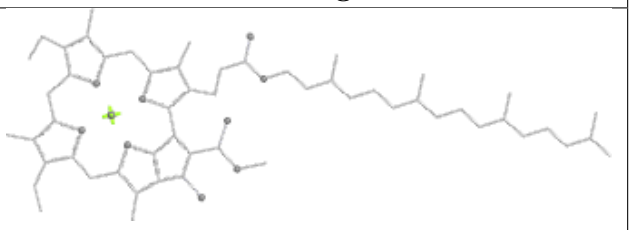
Bond angles

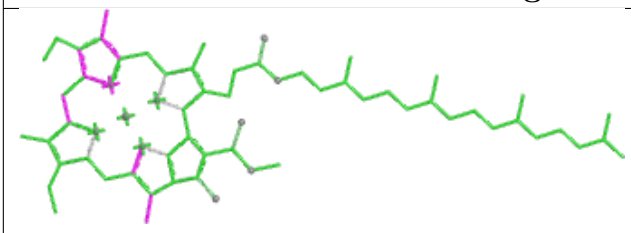
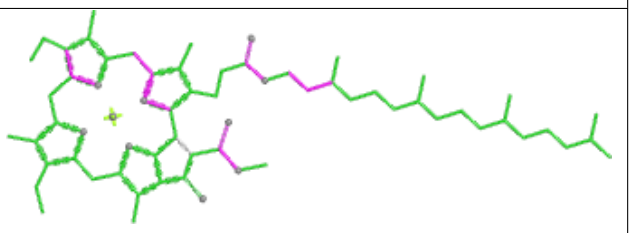
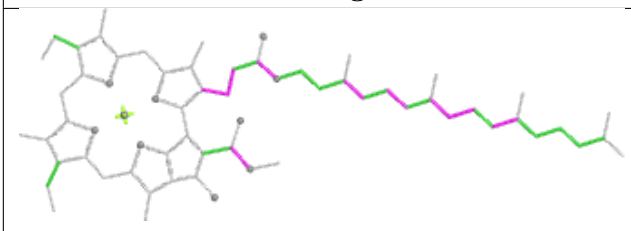
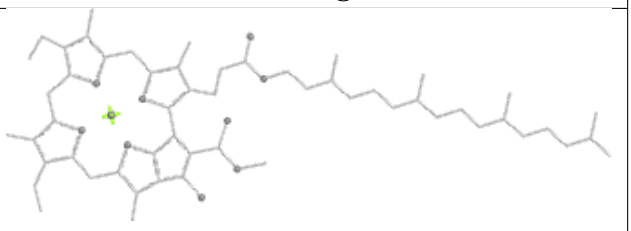


Torsions

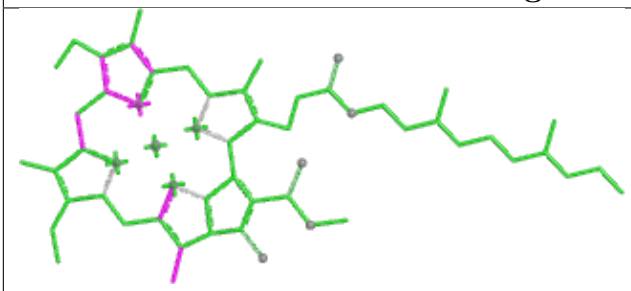


Rings

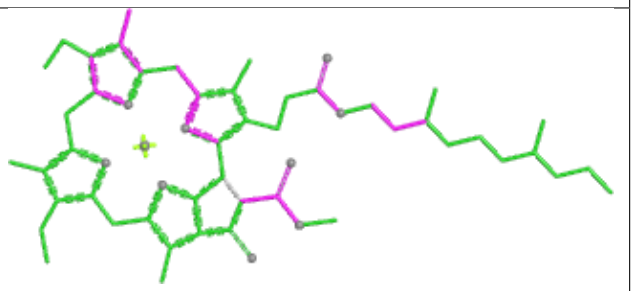
Ligand CLA W 202	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA O 829	
 Bond lengths	 Bond angles
 Torsions	 Rings

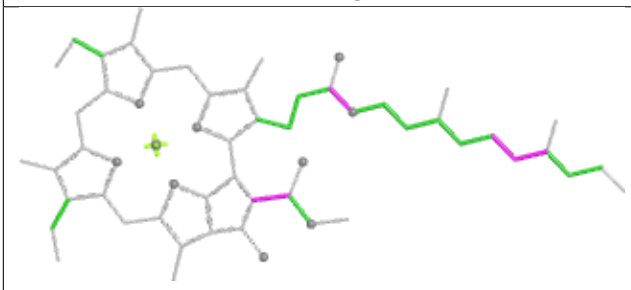
Ligand CLA B 815



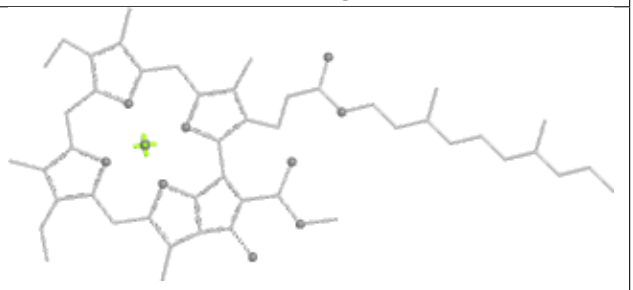
Bond lengths



Bond angles

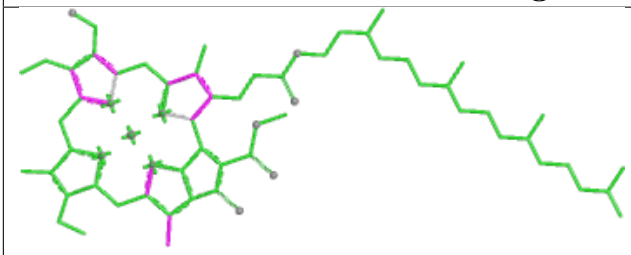


Torsions

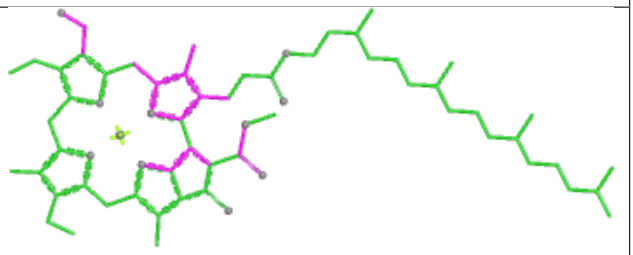


Rings

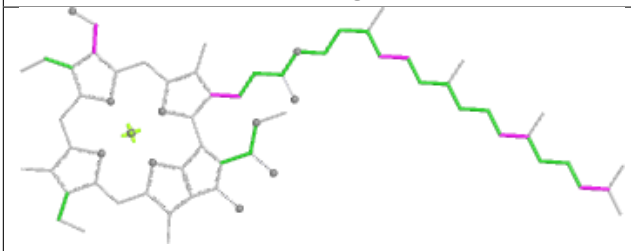
Ligand F6C L 201



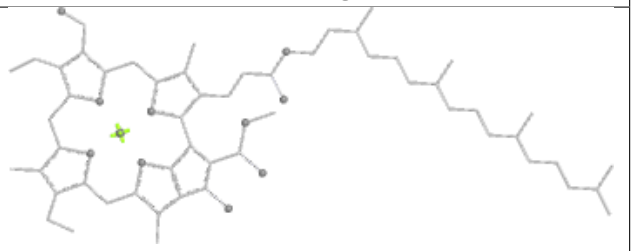
Bond lengths



Bond angles

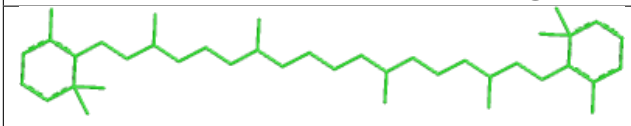


Torsions

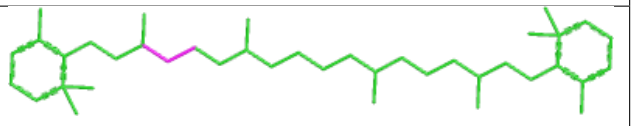


Rings

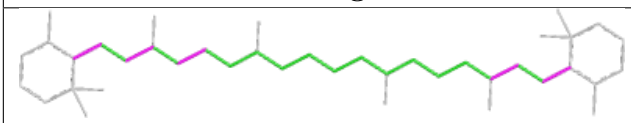
Ligand BCR a 846



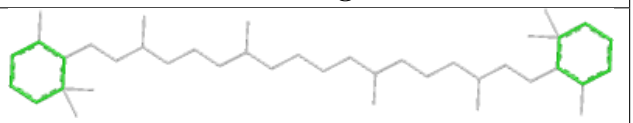
Bond lengths



Bond angles

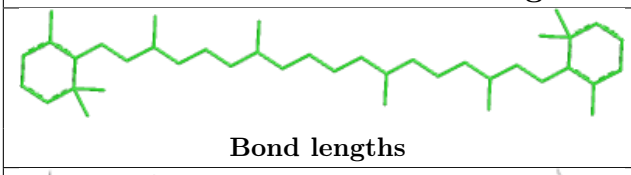


Torsions

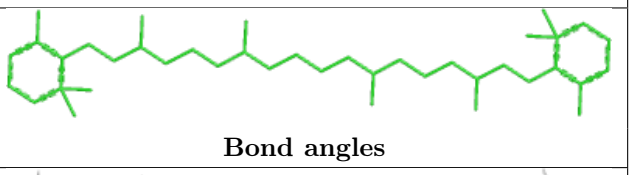


Rings

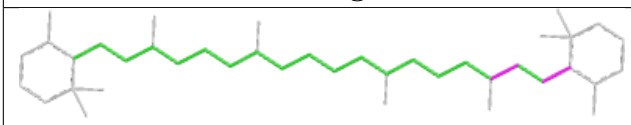
Ligand BCR b 842



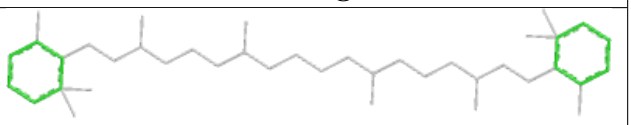
Bond lengths



Bond angles

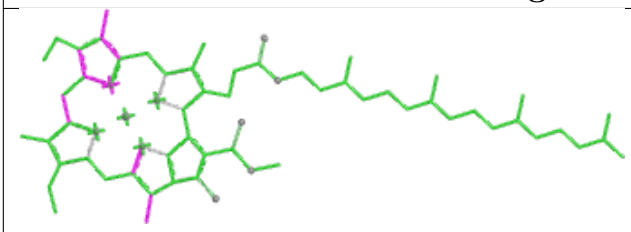


Torsions

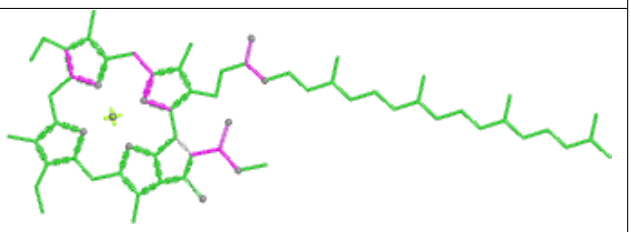


Rings

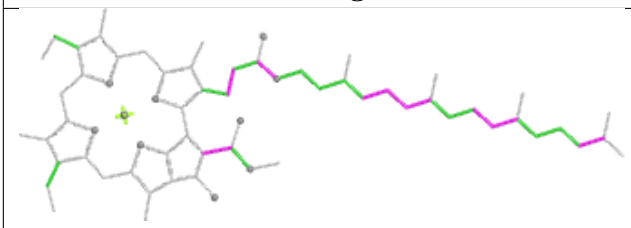
Ligand CLA a 831



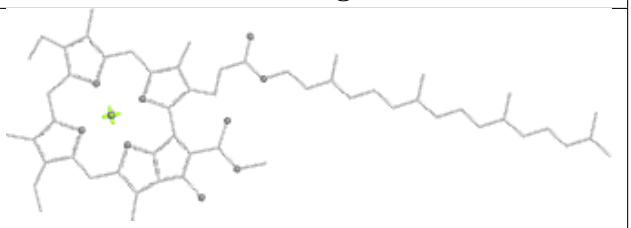
Bond lengths



Bond angles

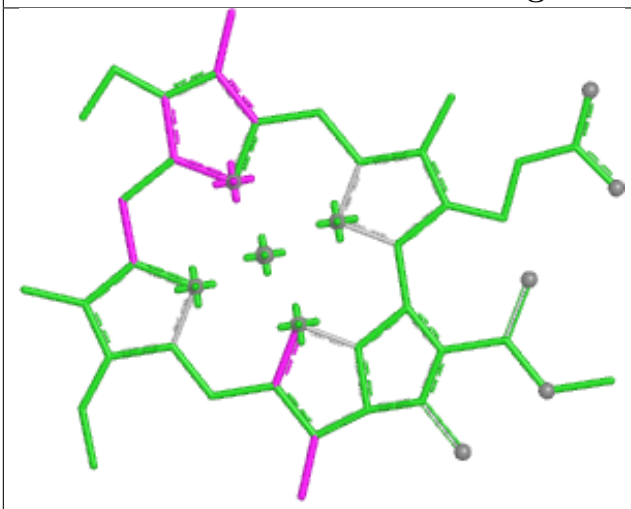


Torsions

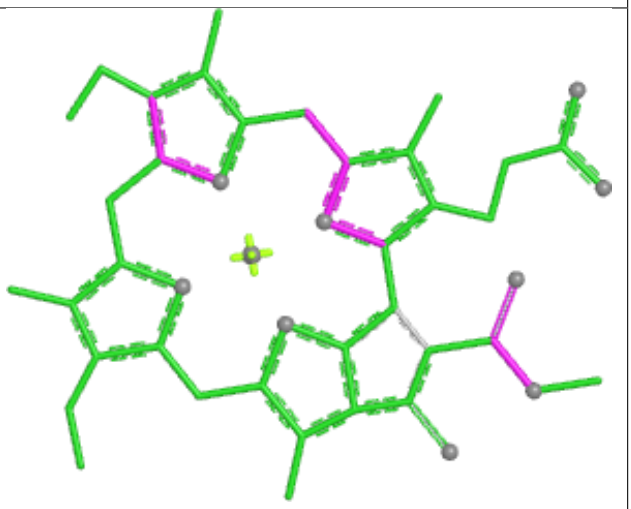


Rings

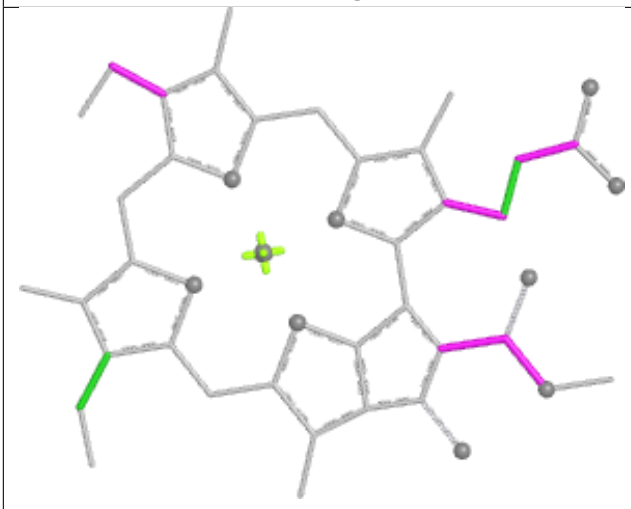
Ligand CLA b 835



Bond lengths



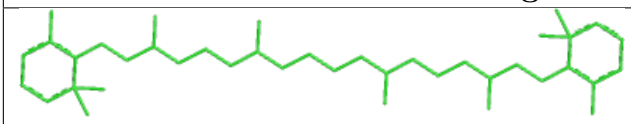
Bond angles



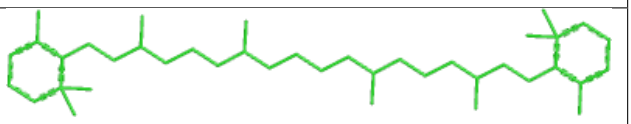
Torsions

Rings

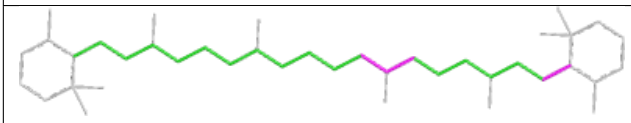
Ligand BCR N 848



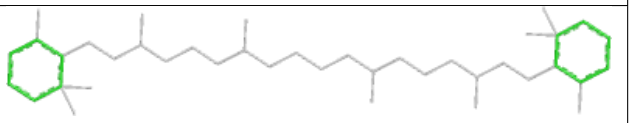
Bond lengths



Bond angles

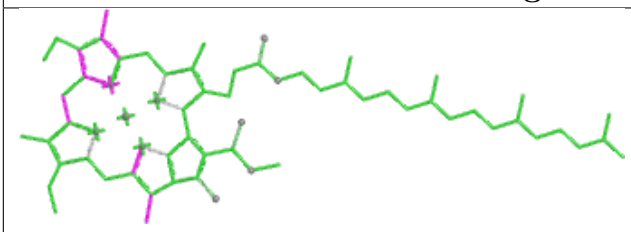


Torsions

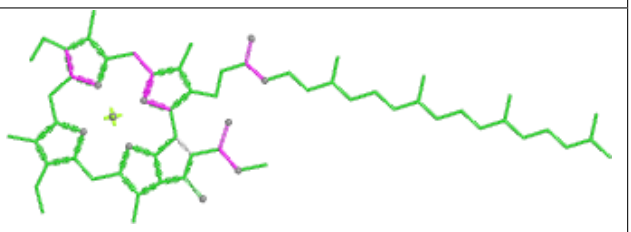


Rings

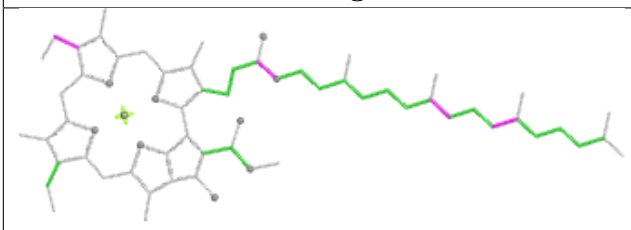
Ligand CLA O 818



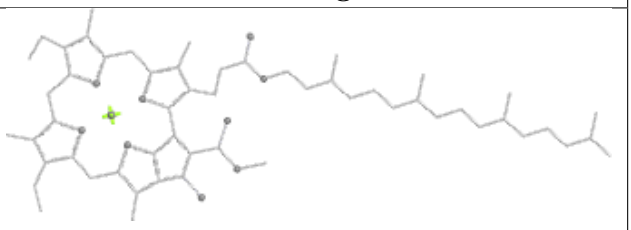
Bond lengths



Bond angles



Torsions

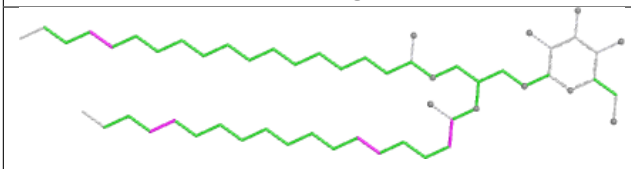


Rings

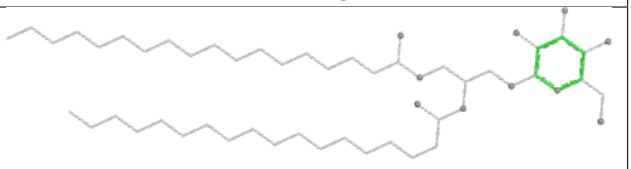
Ligand LMG O 849

Bond lengths

Bond angles



Torsions

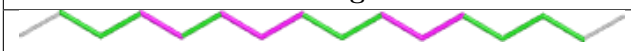


Rings

Ligand LFA B 849

Bond lengths

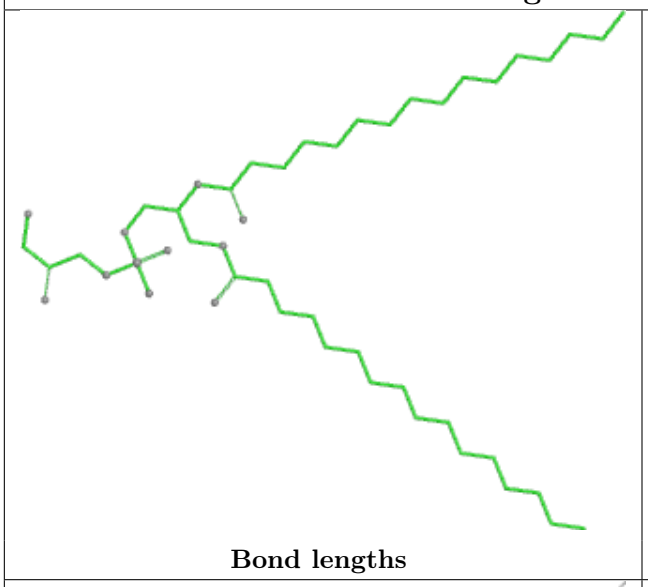
Bond angles



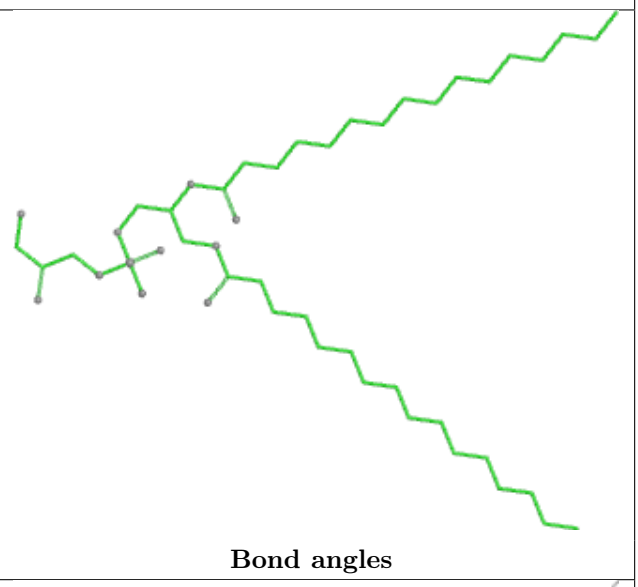
Torsions

Rings

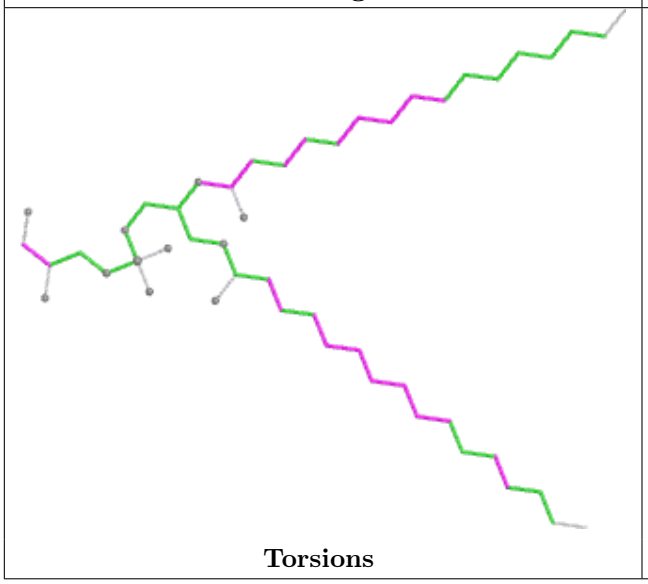
Ligand LHG B 851



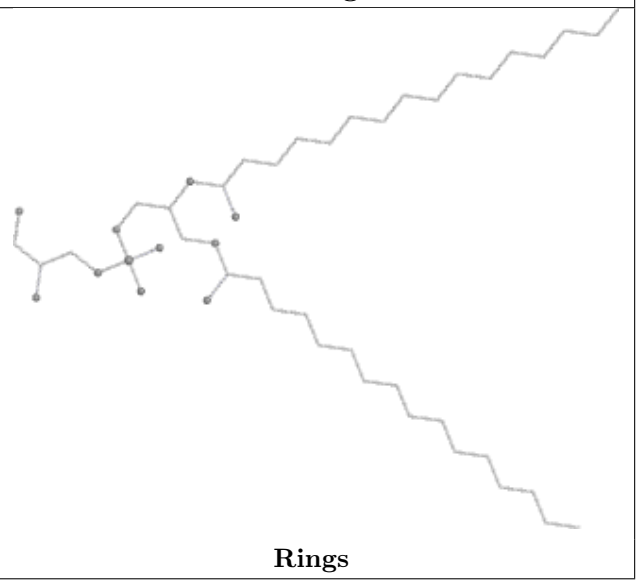
Bond lengths



Bond angles

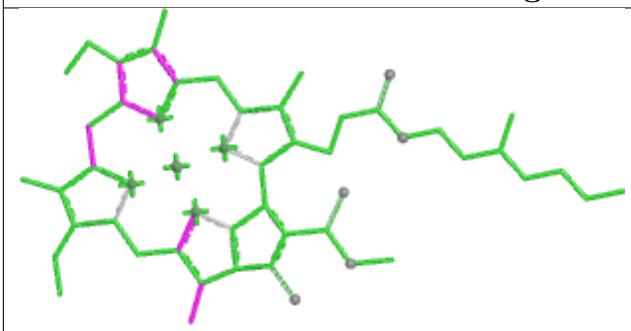


Torsions

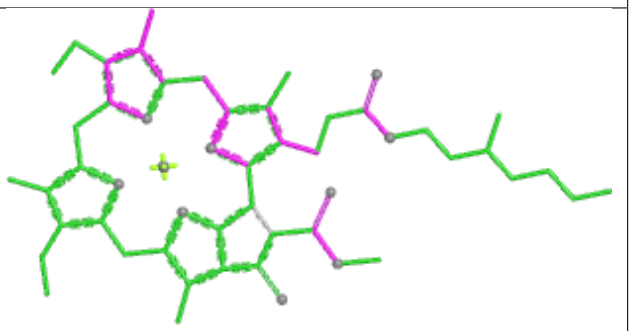


Rings

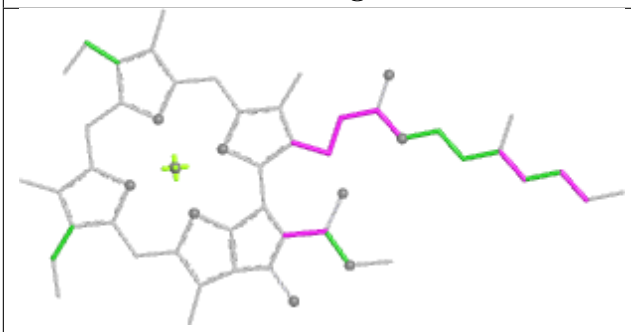
Ligand CLA O 821



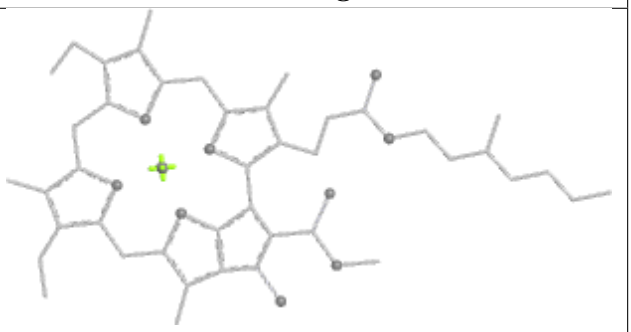
Bond lengths



Bond angles

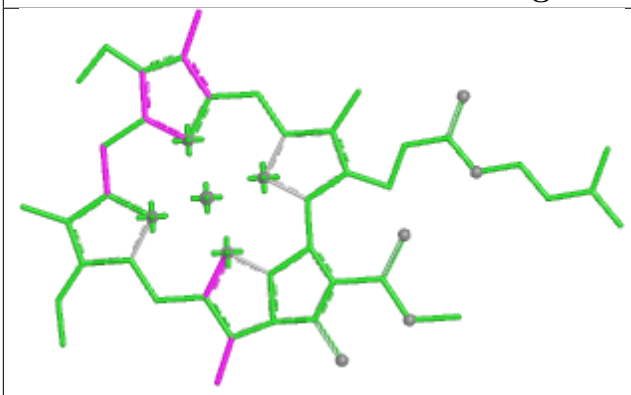


Torsions

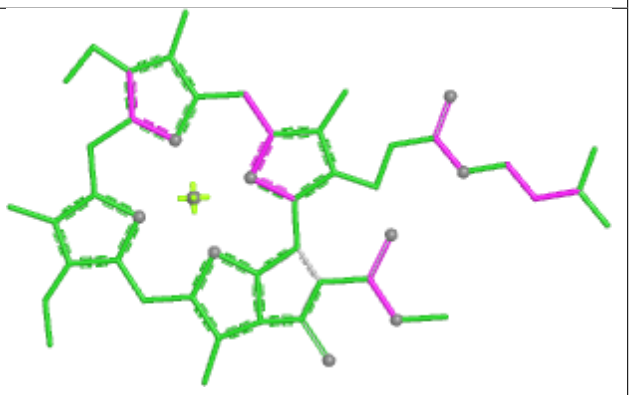


Rings

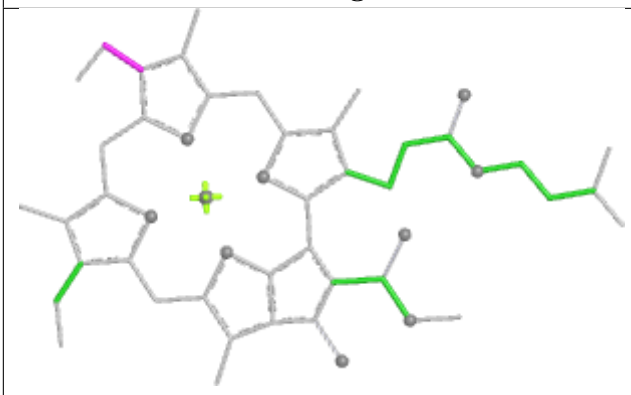
Ligand CLA i 103



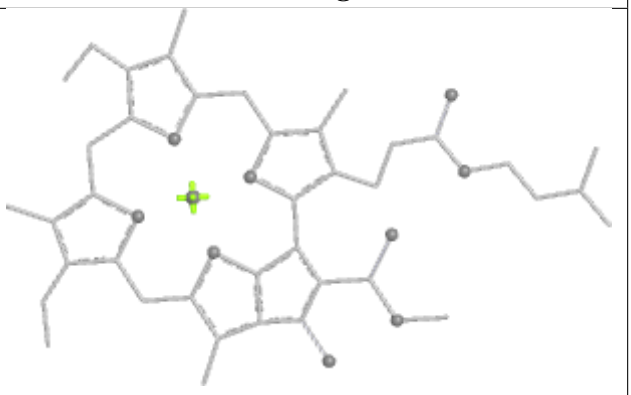
Bond lengths



Bond angles

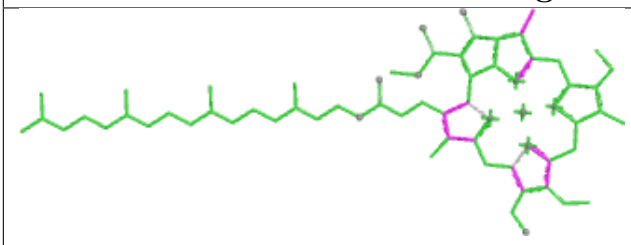


Torsions

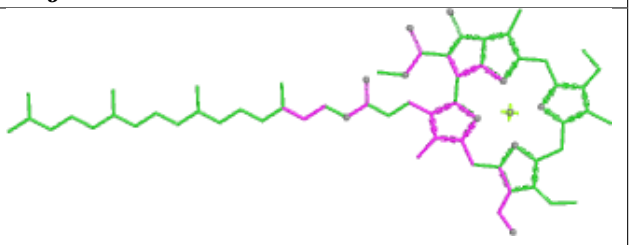


Rings

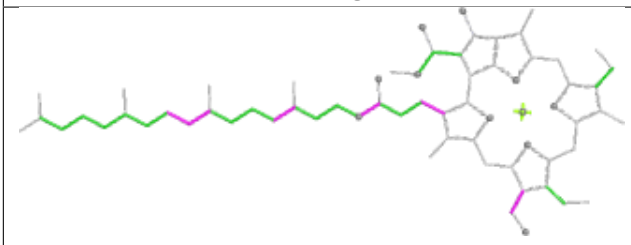
Ligand F6C j 204



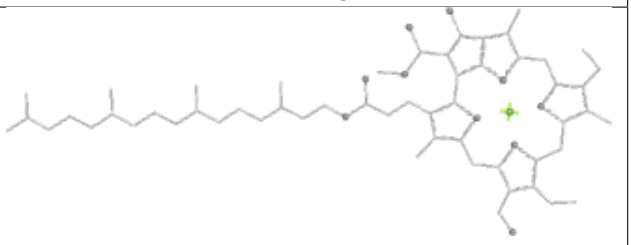
Bond lengths



Bond angles

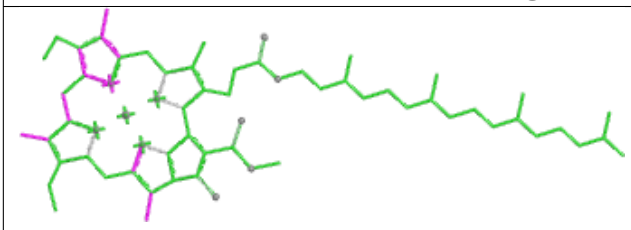


Torsions

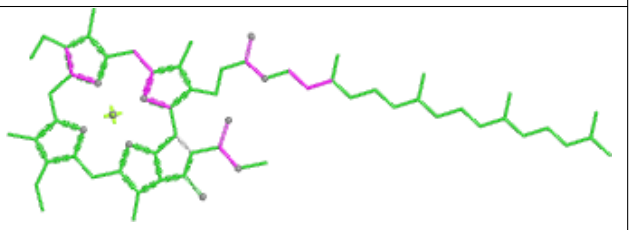


Rings

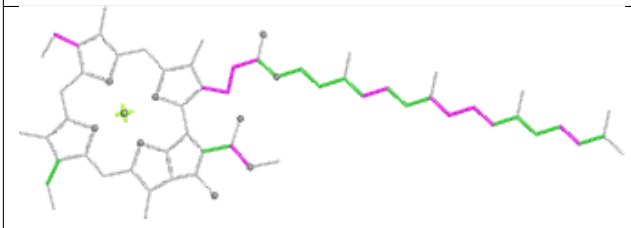
Ligand CLA A 819



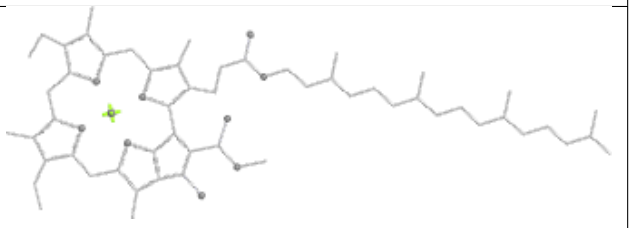
Bond lengths



Bond angles

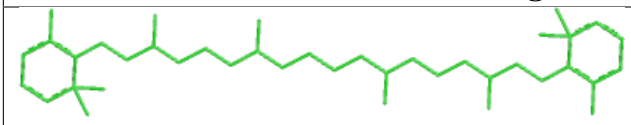


Torsions

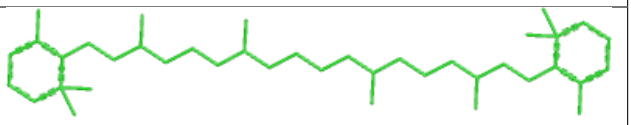


Rings

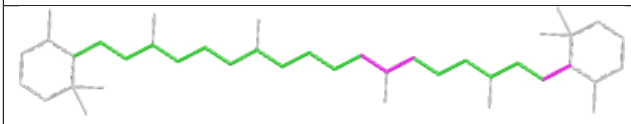
Ligand BCR a 848



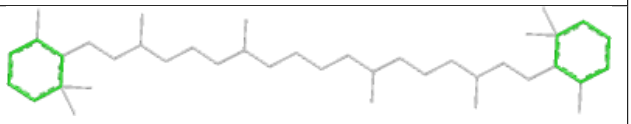
Bond lengths



Bond angles

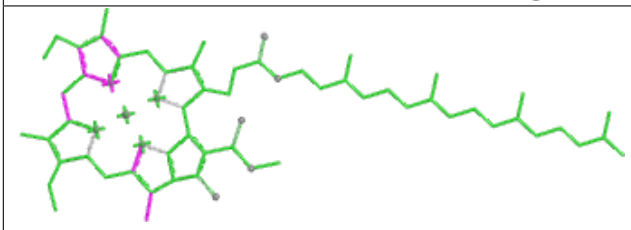


Torsions

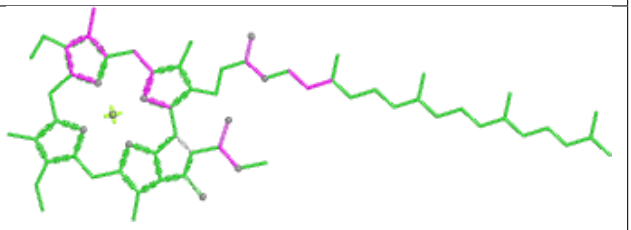


Rings

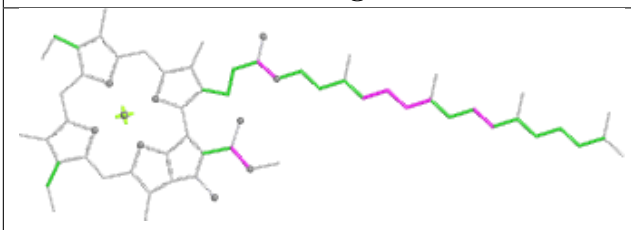
Ligand CLA b 838



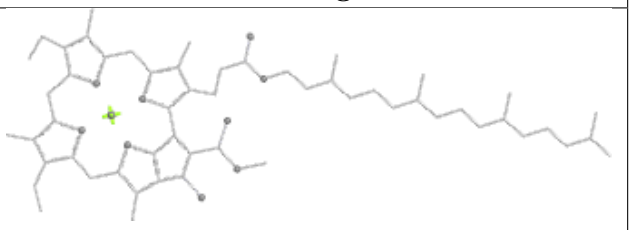
Bond lengths



Bond angles

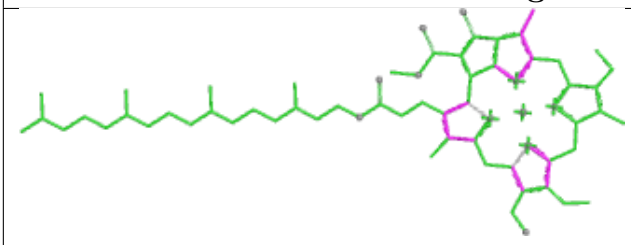


Torsions

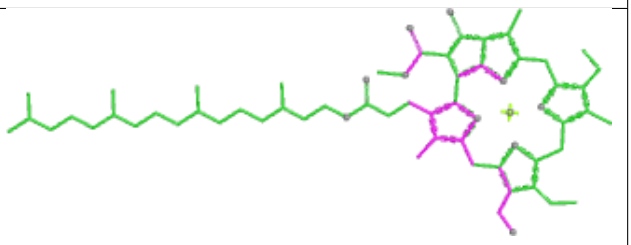


Rings

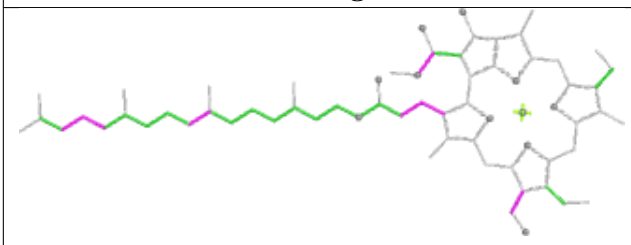
Ligand F6C N 802



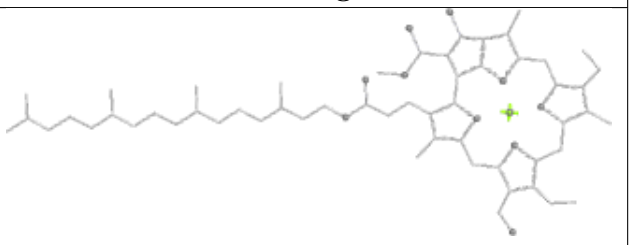
Bond lengths



Bond angles

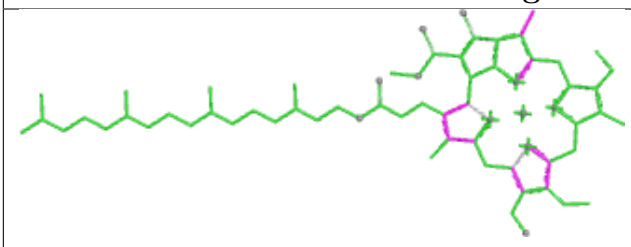


Torsions

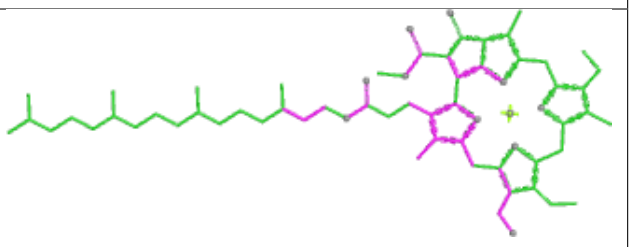


Rings

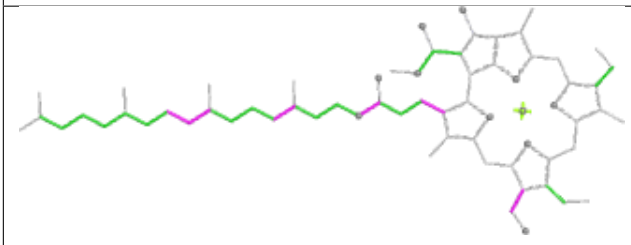
Ligand F6C W 204



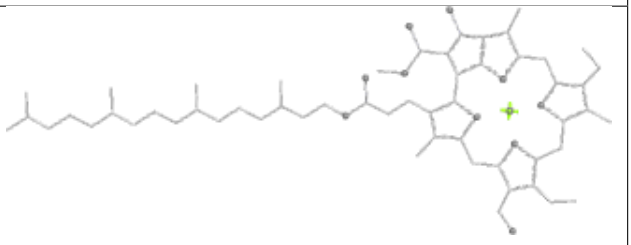
Bond lengths



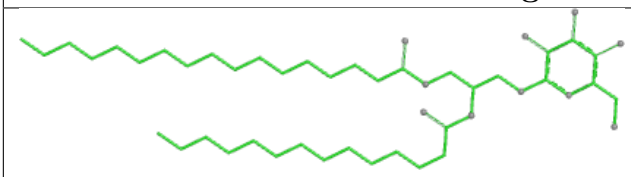
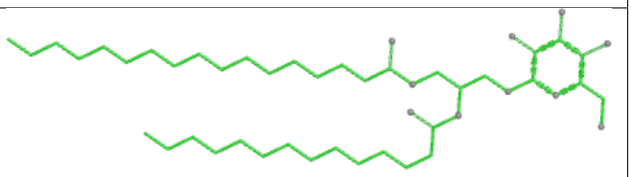
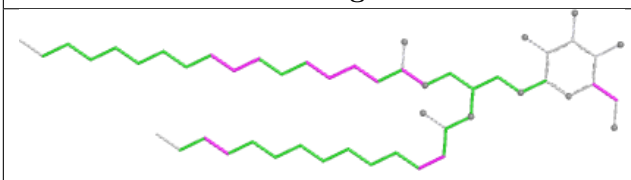
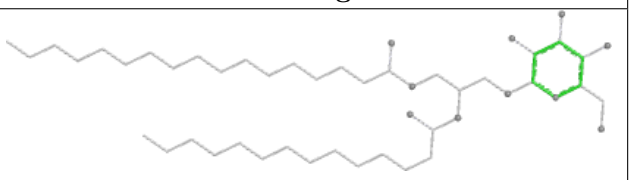
Bond angles

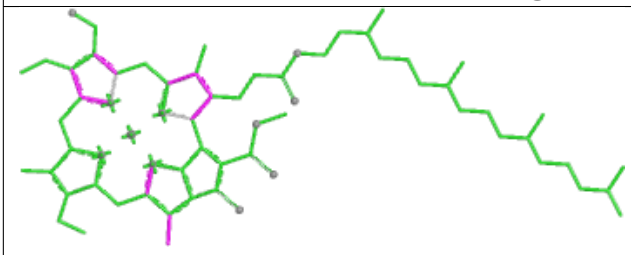
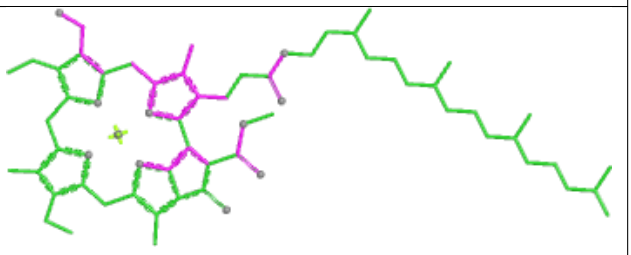
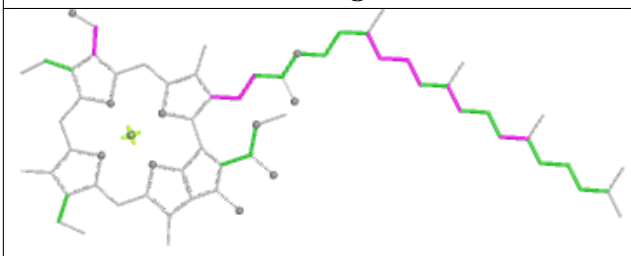
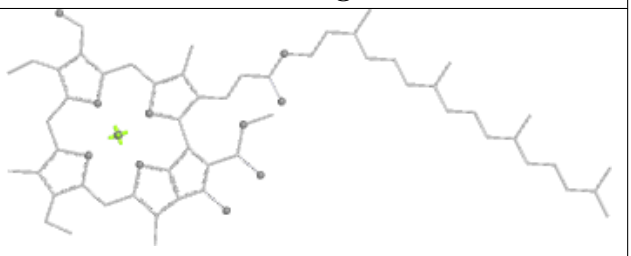


Torsions

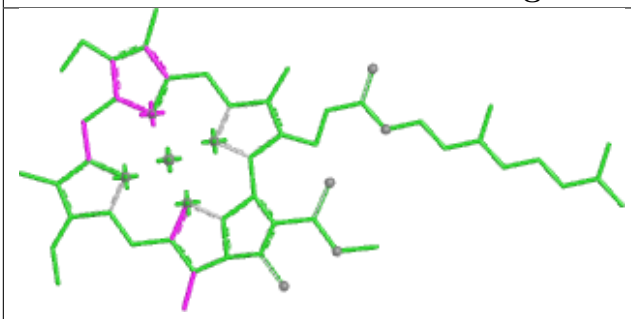


Rings

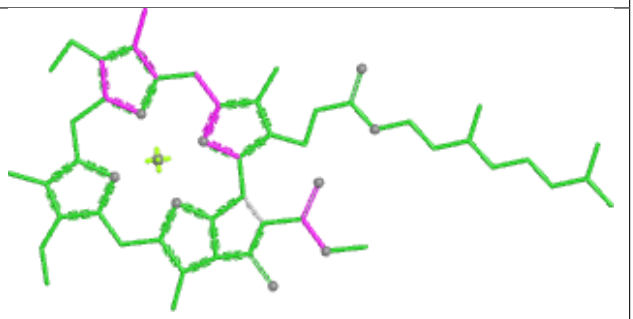
Ligand LMG L 207	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand F6C B 839	
 Bond lengths	 Bond angles
 Torsions	 Rings

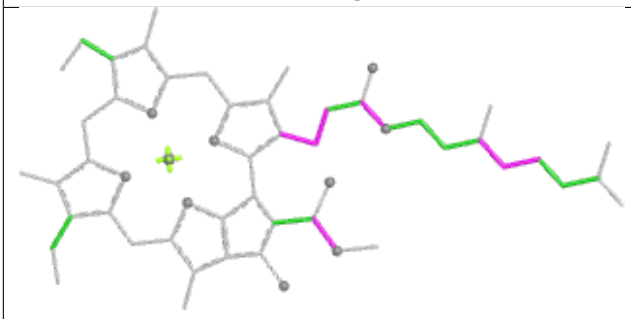
Ligand CLA A 838



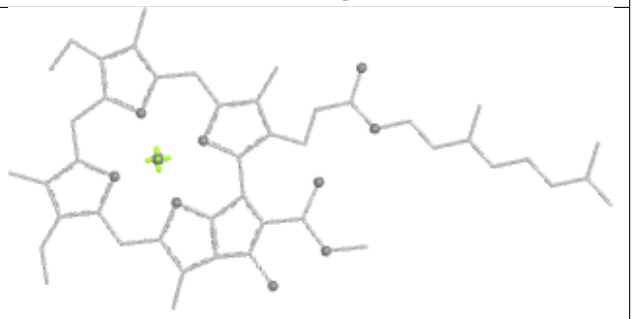
Bond lengths



Bond angles

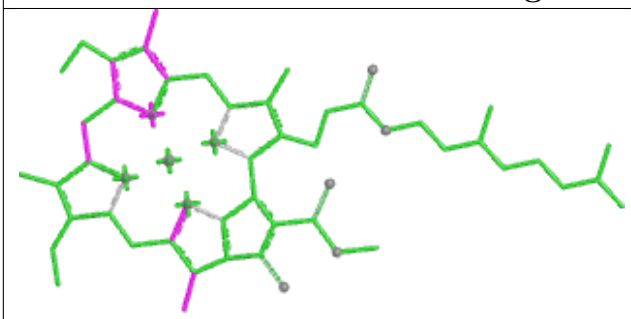


Torsions

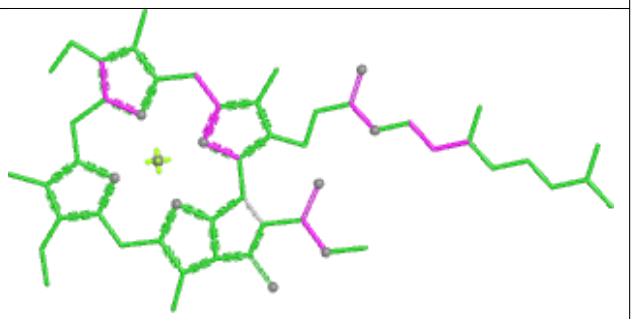


Rings

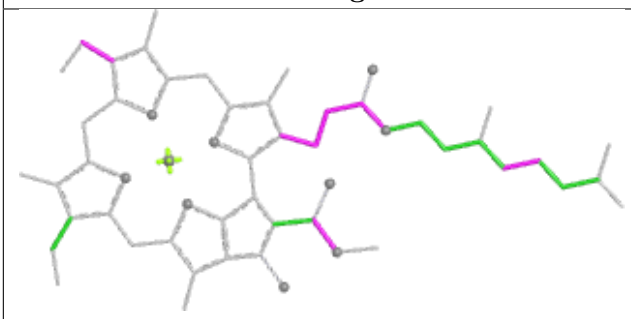
Ligand CLA B 819



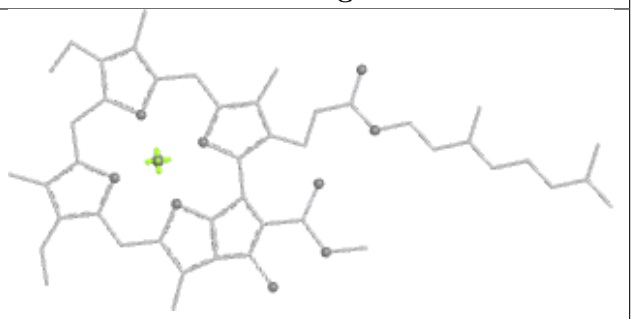
Bond lengths



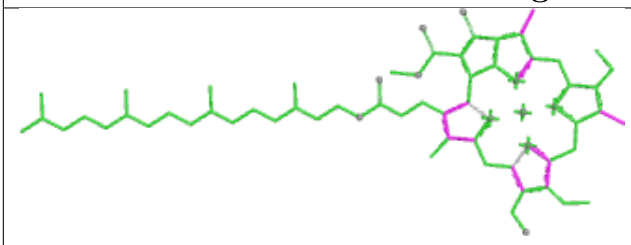
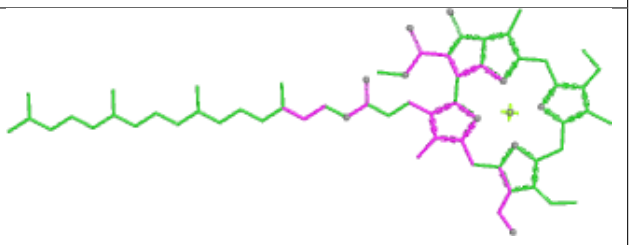
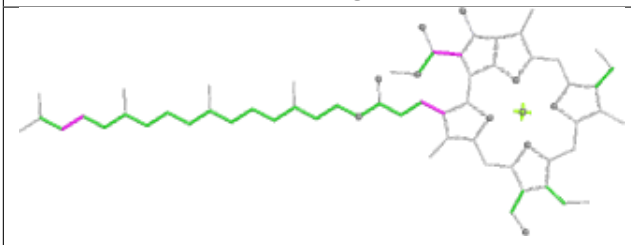
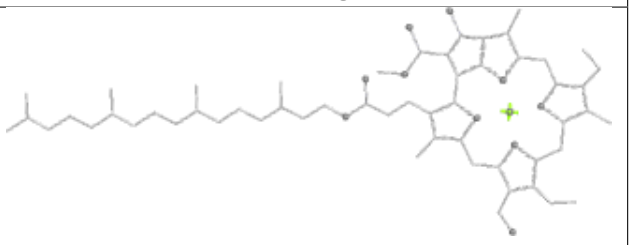
Bond angles

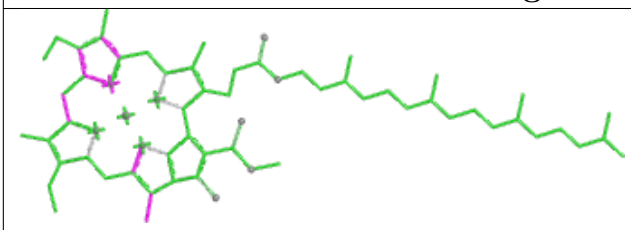
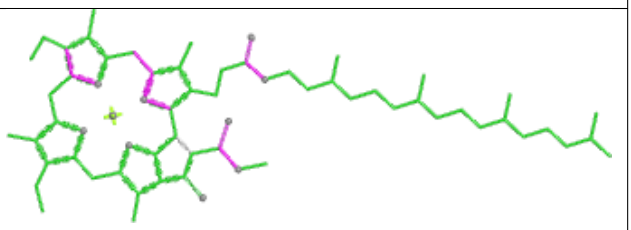
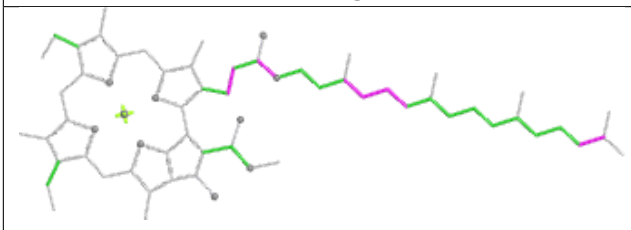
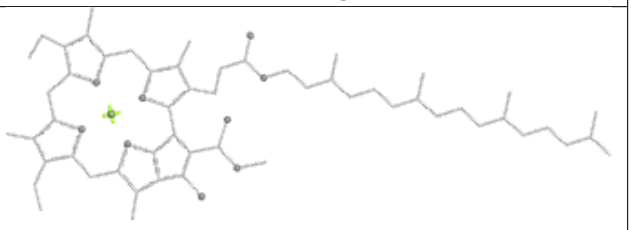


Torsions

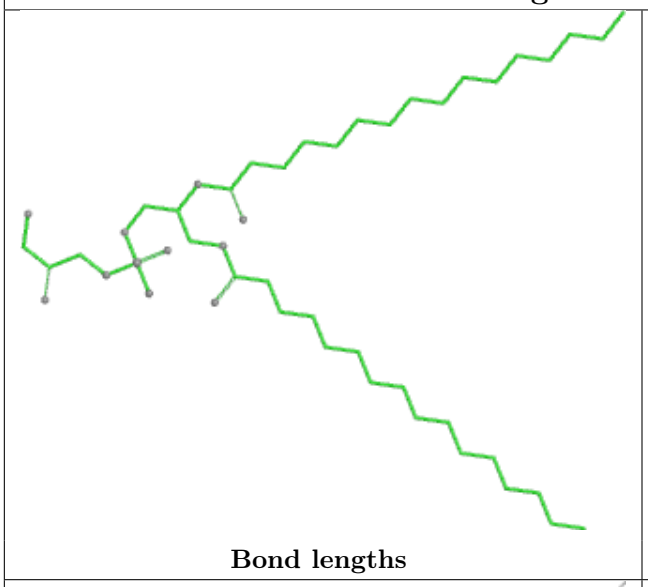


Rings

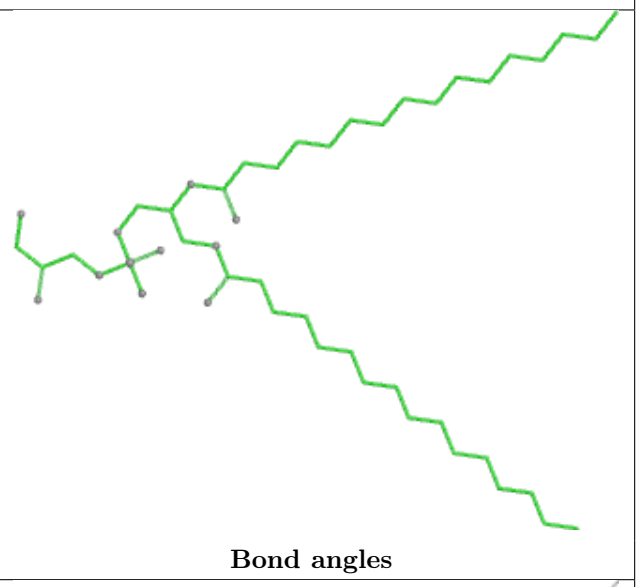
Ligand F6C b 832	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA N 814	
	
Bond lengths	Bond angles
	
Torsions	Rings

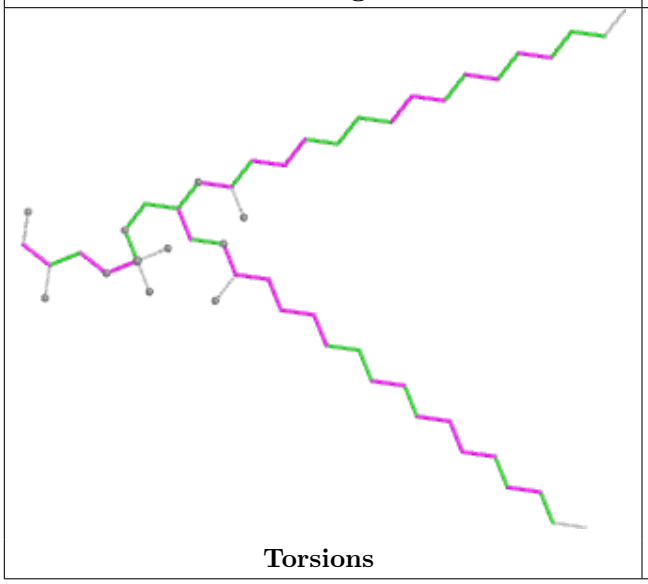
Ligand LHG f 203



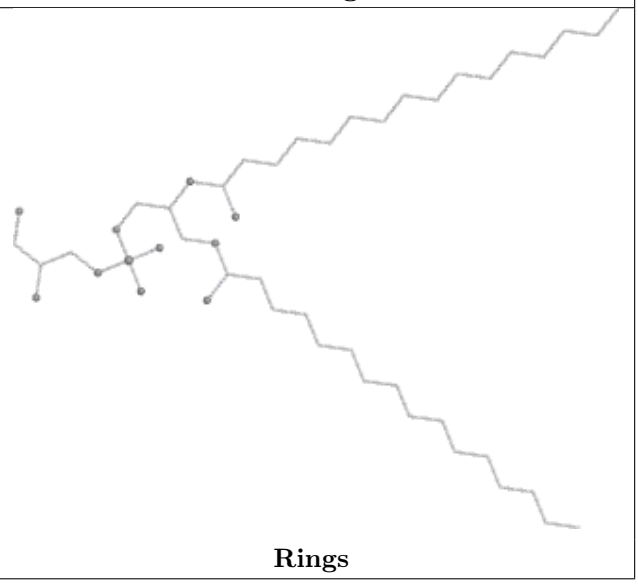
Bond lengths



Bond angles



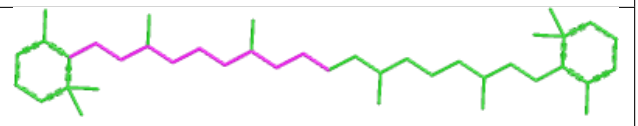
Torsions



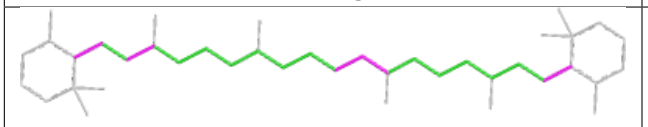
Rings

Ligand BCR J 102

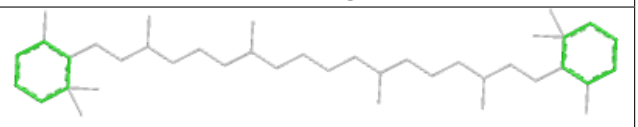
Bond lengths



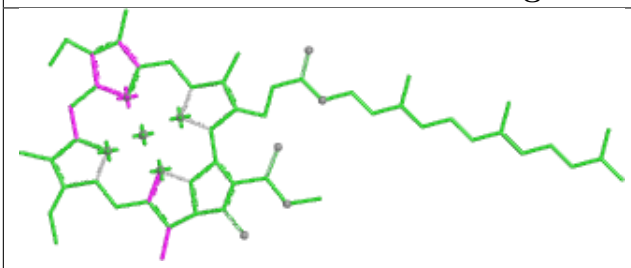
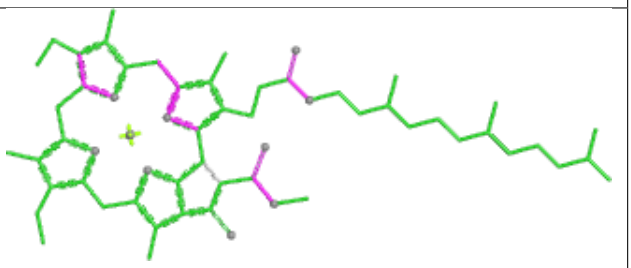
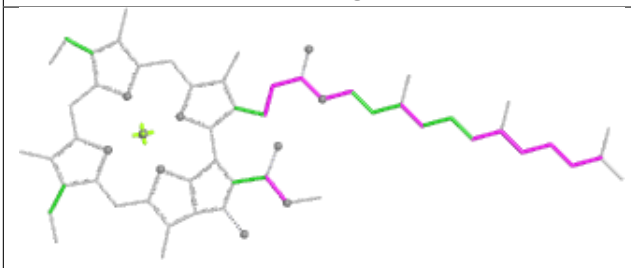
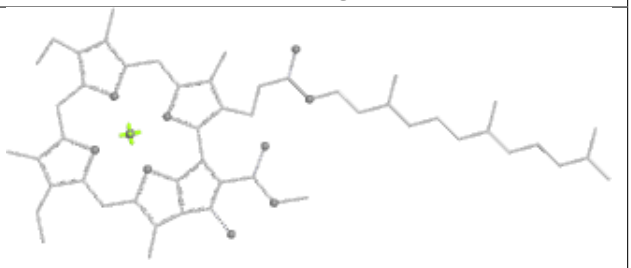
Bond angles

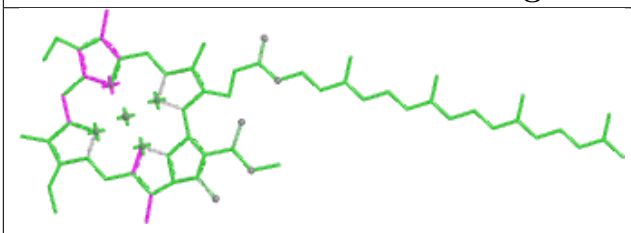
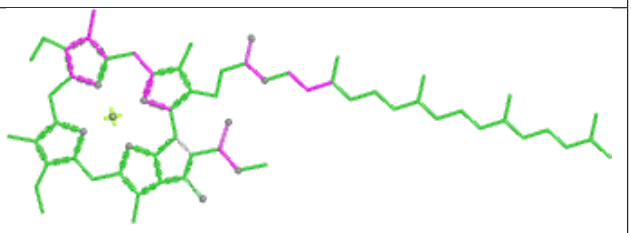
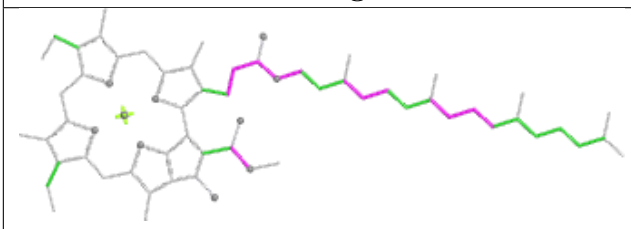
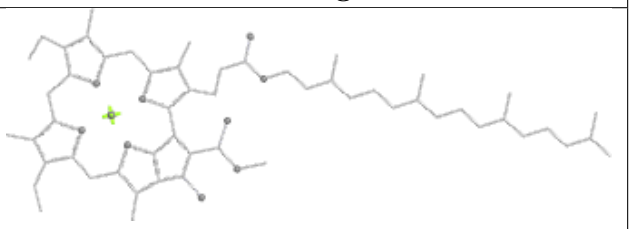


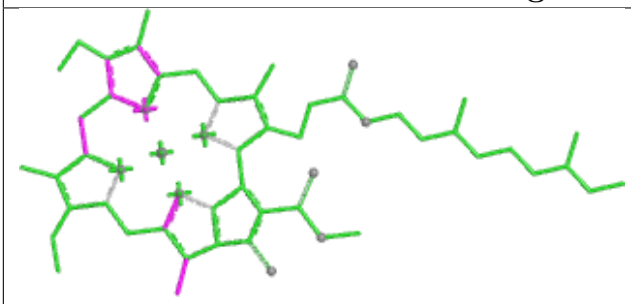
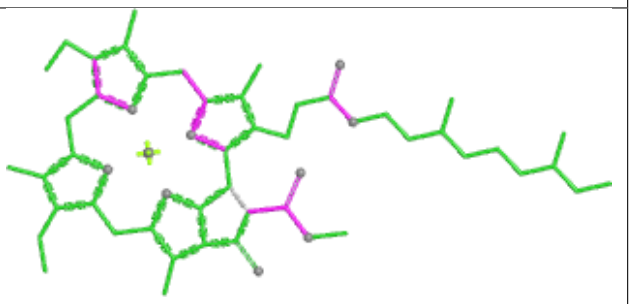
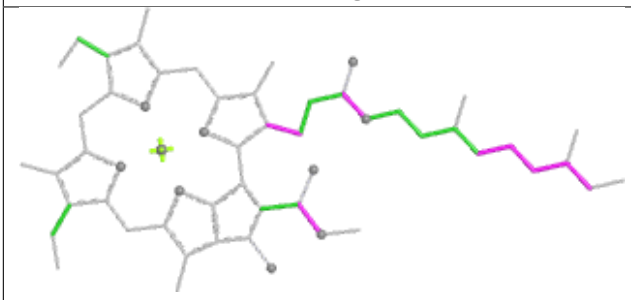
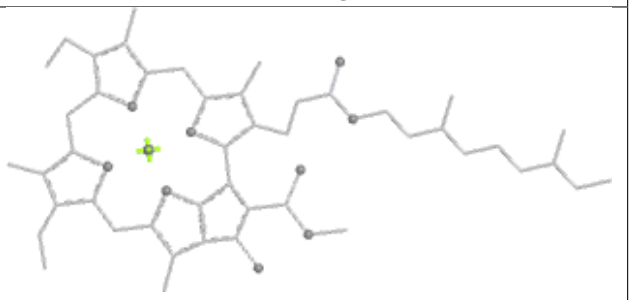
Torsions

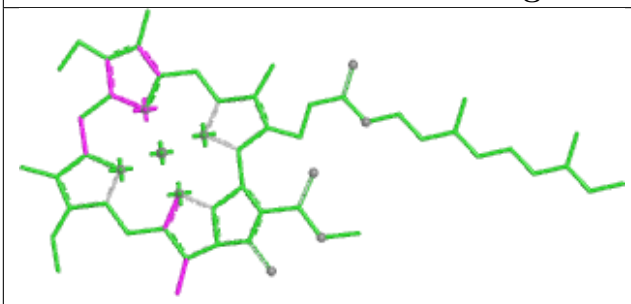
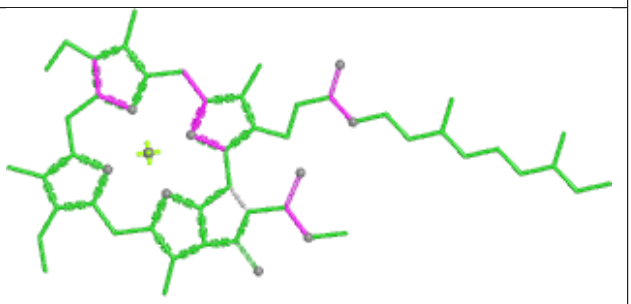
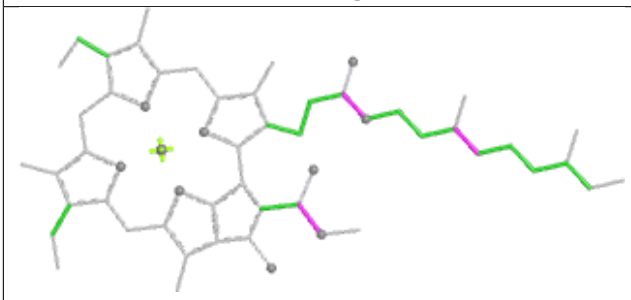
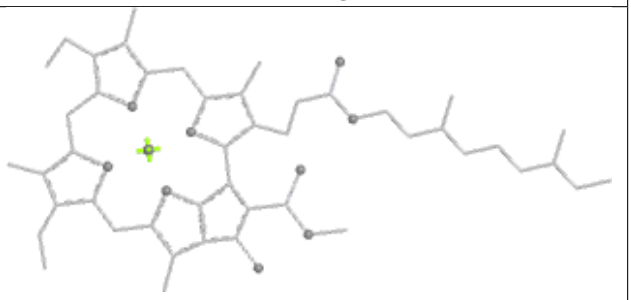


Rings

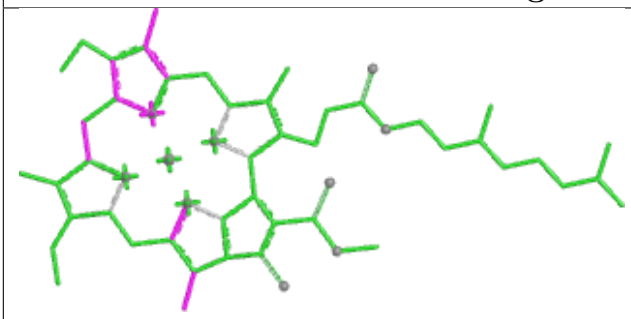
Ligand CLA A 829	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA O 828	
	
Bond lengths	Bond angles
	
Torsions	Rings

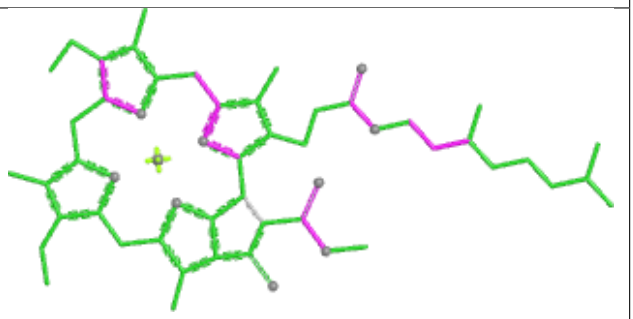
Ligand CLA b 812	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA N 823	
	
Bond lengths	Bond angles
	
Torsions	Rings

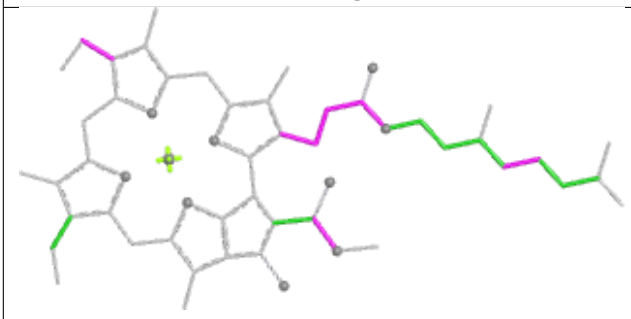
Ligand CLA b 819



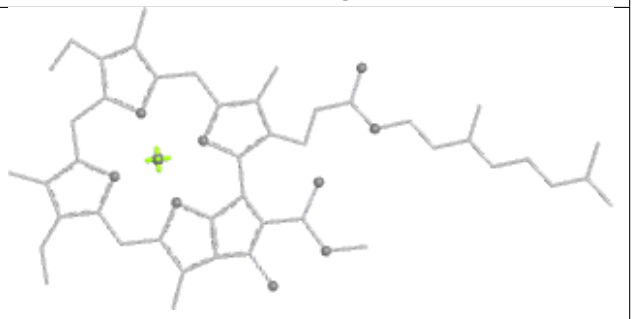
Bond lengths



Bond angles

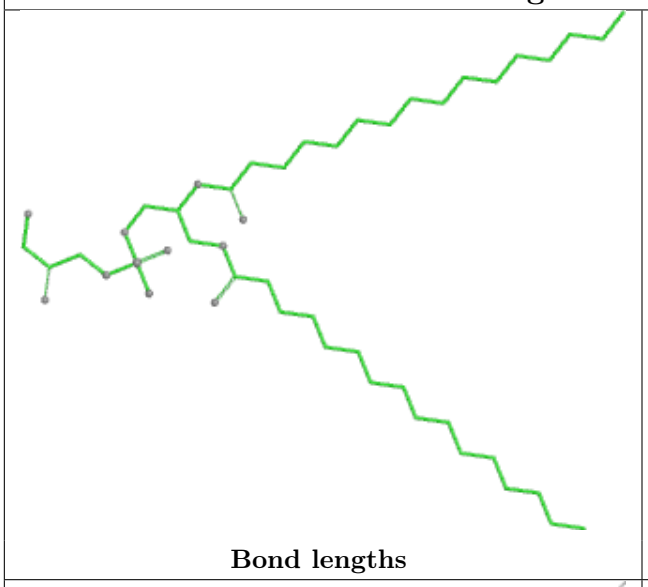


Torsions

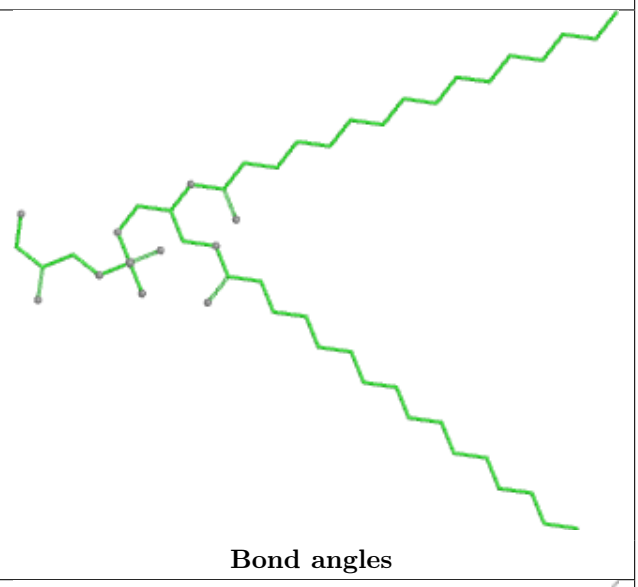


Rings

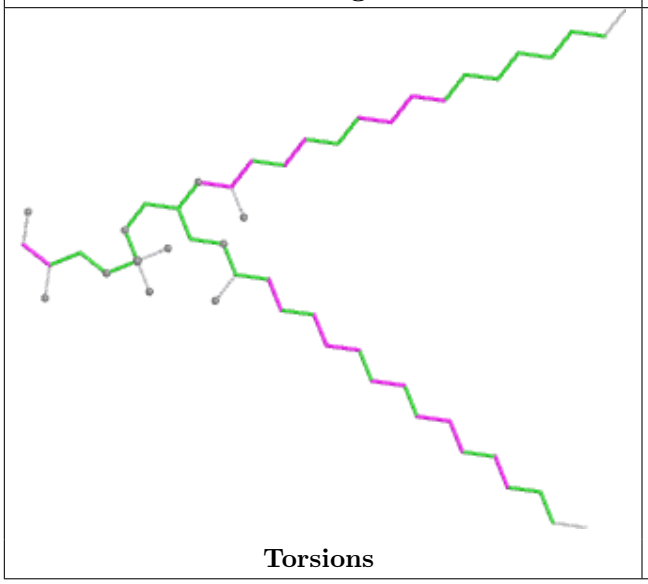
Ligand LHG k 101



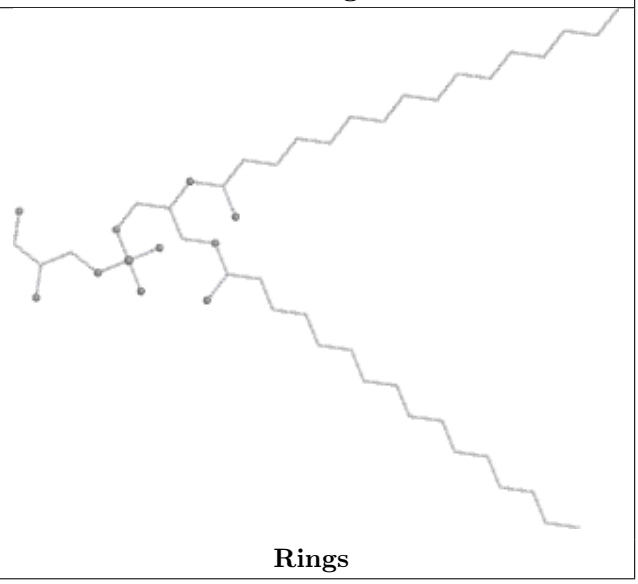
Bond lengths



Bond angles

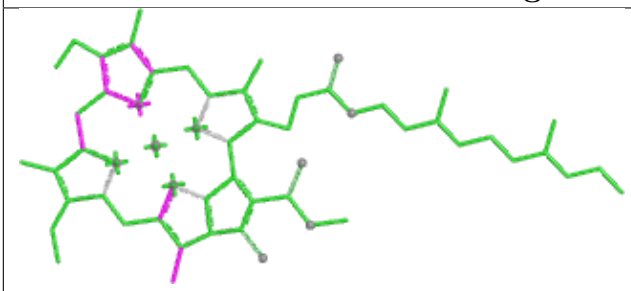


Torsions

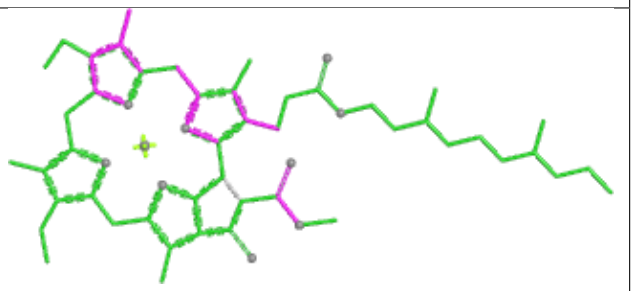


Rings

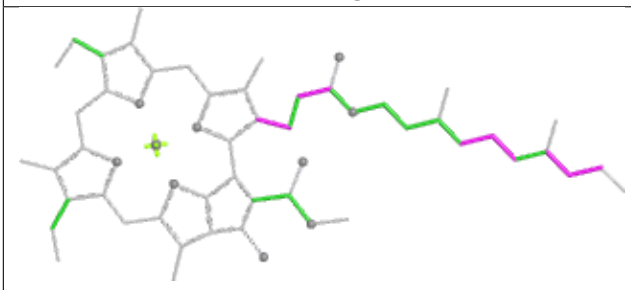
Ligand CLA A 810



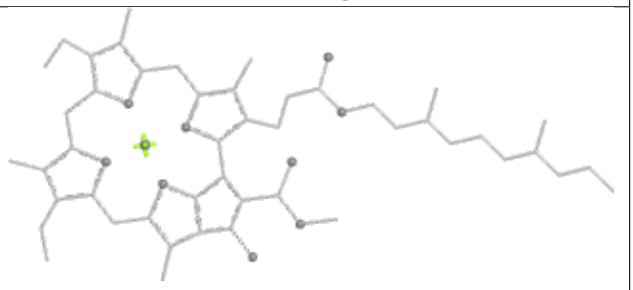
Bond lengths



Bond angles

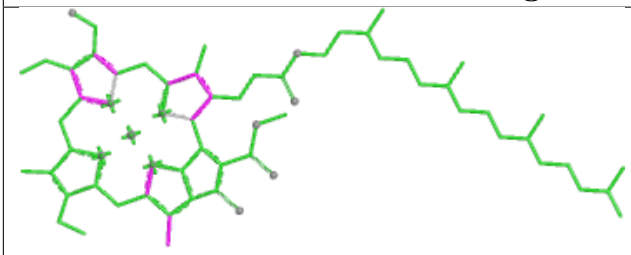


Torsions

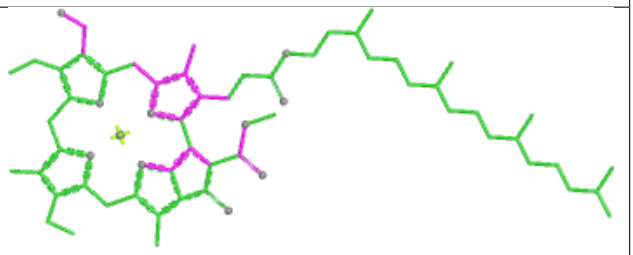


Rings

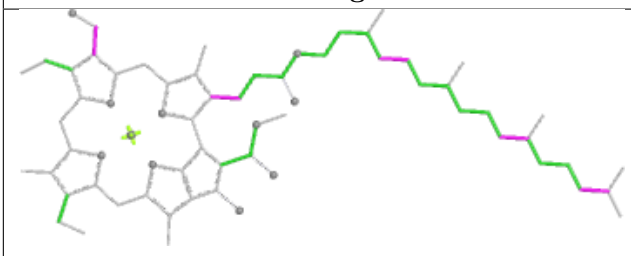
Ligand F6C W 201



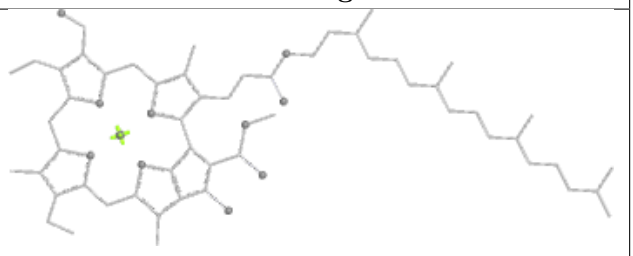
Bond lengths



Bond angles

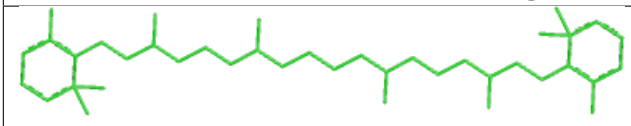


Torsions

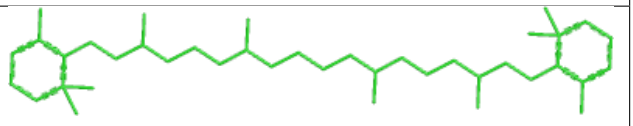


Rings

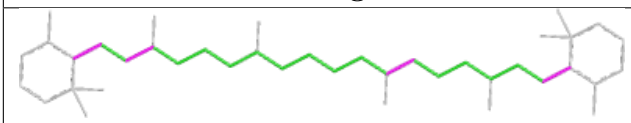
Ligand BCR B 845



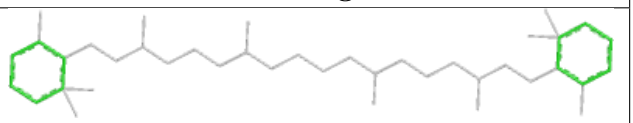
Bond lengths



Bond angles

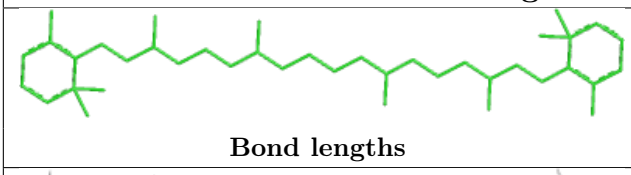


Torsions

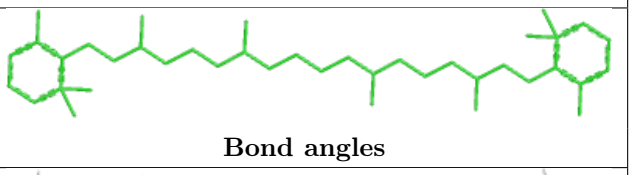


Rings

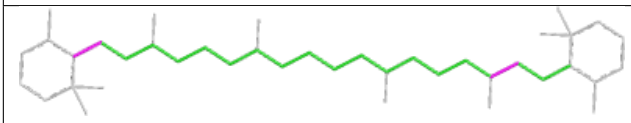
Ligand BCR N 849



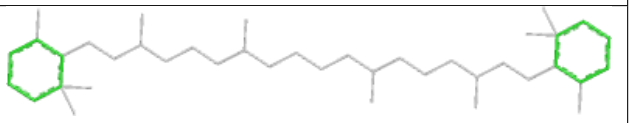
Bond lengths



Bond angles

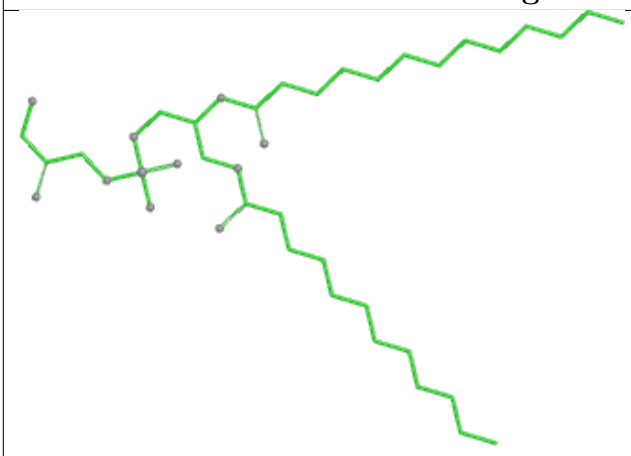


Torsions



Rings

Ligand LHG A 851



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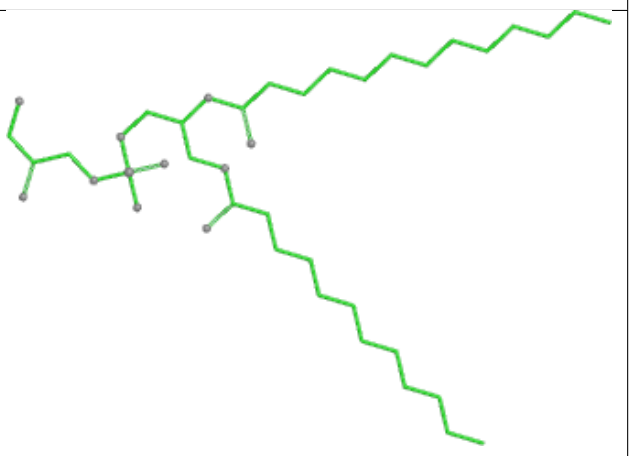
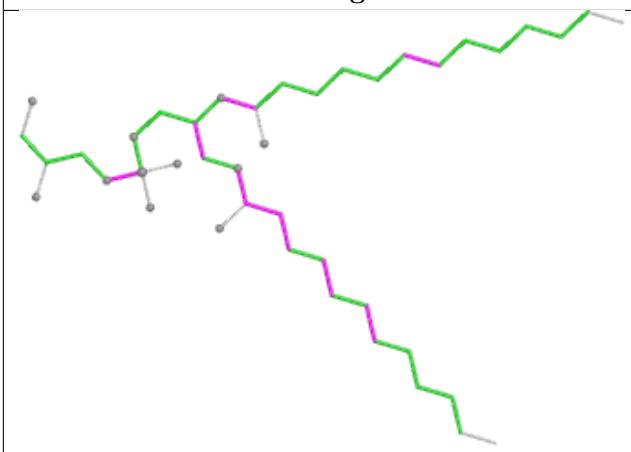


Bond angles



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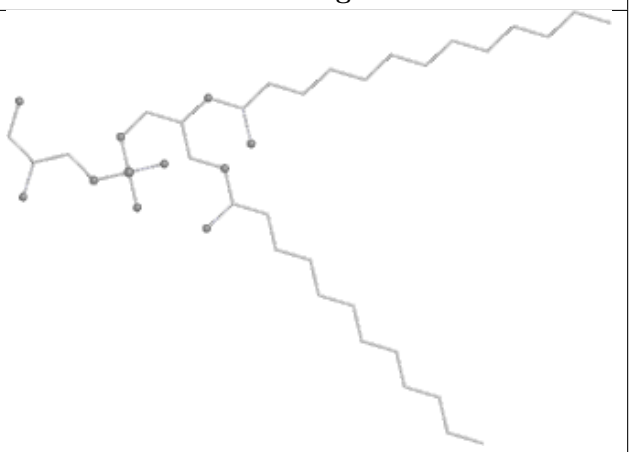
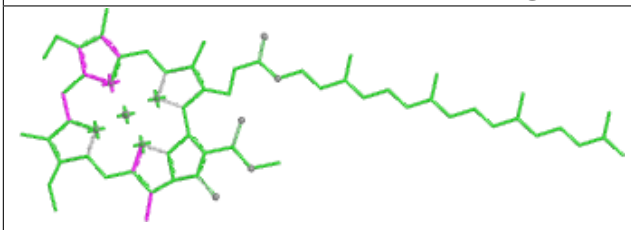
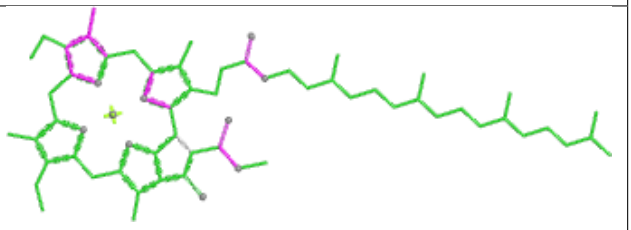


Rings

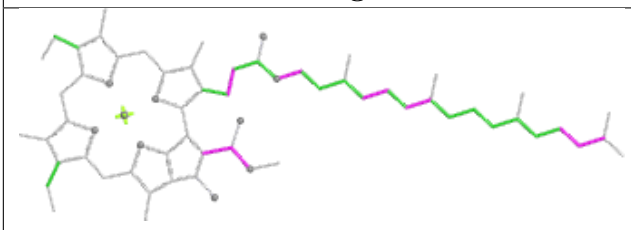
Ligand CLA O 802



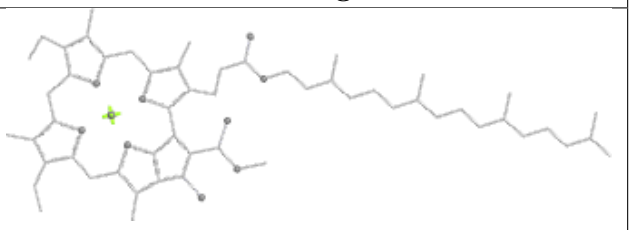
Bond lengths



Bond angles



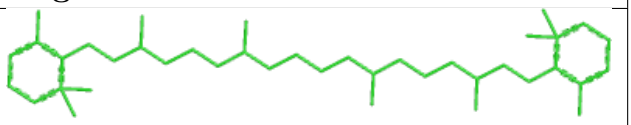
Torsions



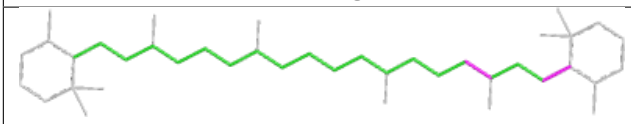
Rings

Ligand BCR g 102

Bond lengths



Bond angles



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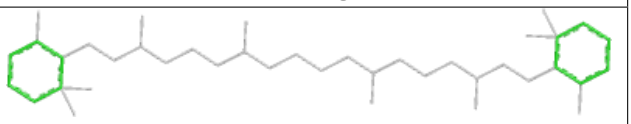
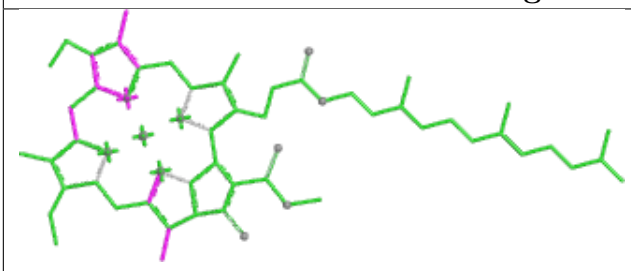
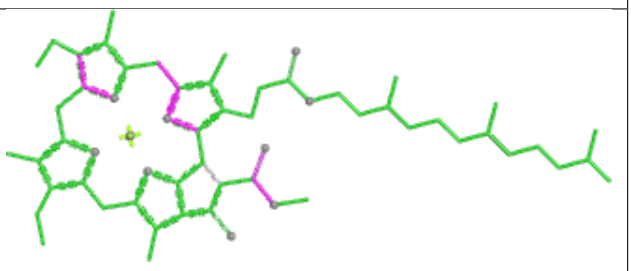


Rings

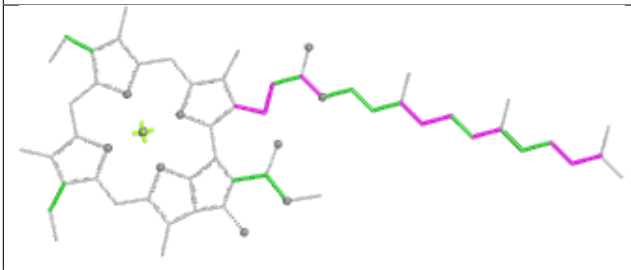
Ligand CLA O 817



Bond lengths



Bond angles



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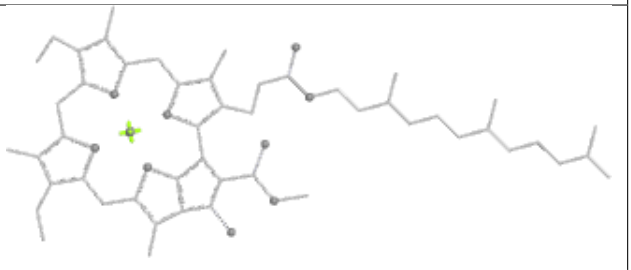
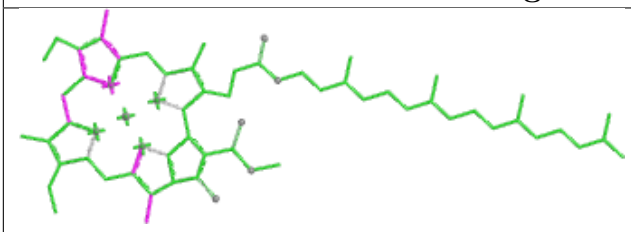
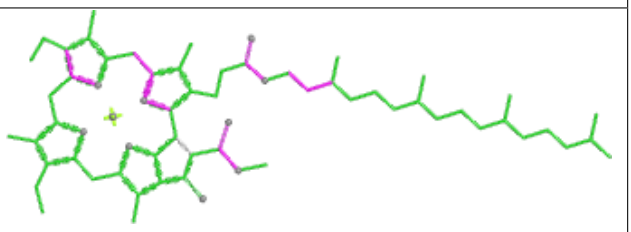


Rings

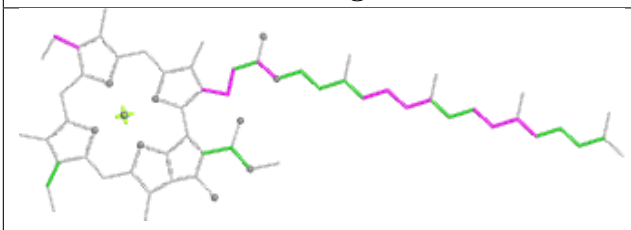
Ligand CLA O 809



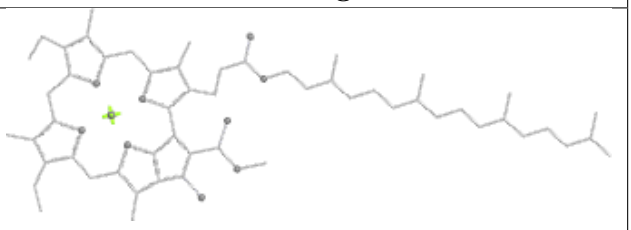
Bond lengths



Bond angles

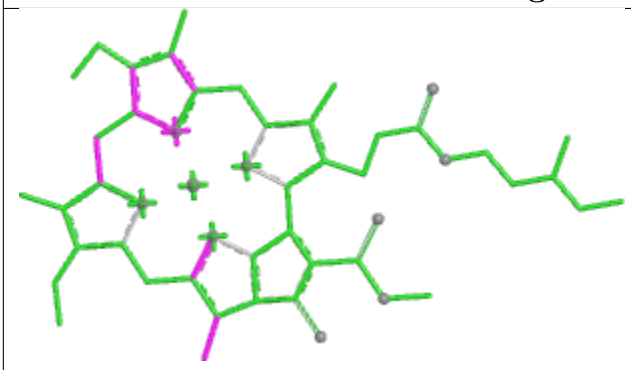


Torsions

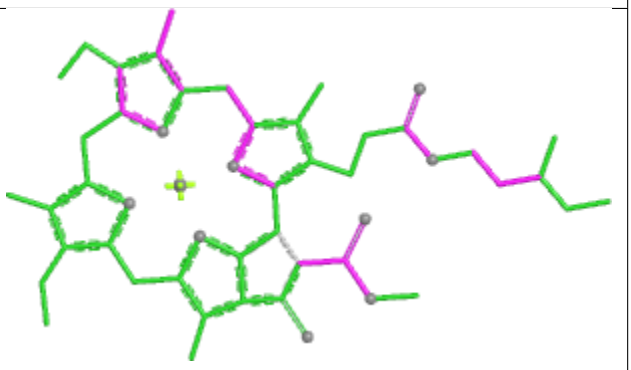


Rings

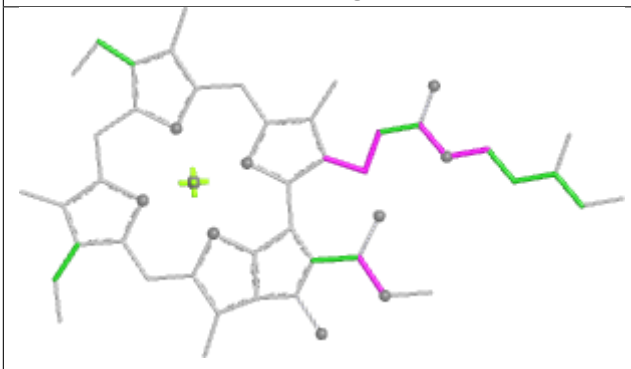
Ligand CLA a 837



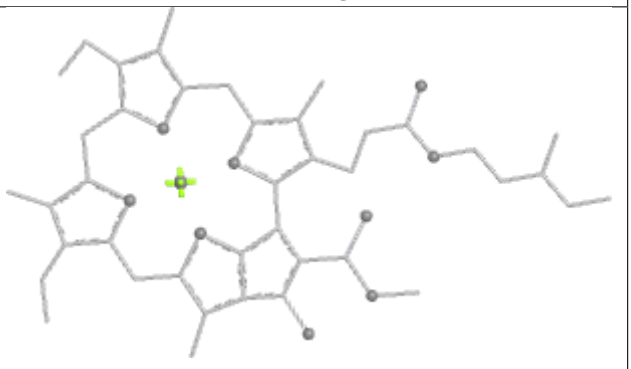
Bond lengths



Bond angles

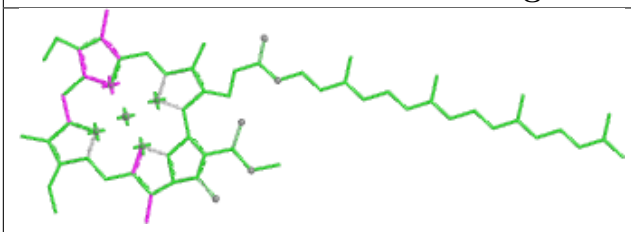


Torsions

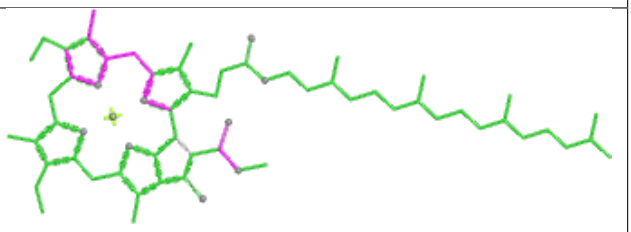


Rings

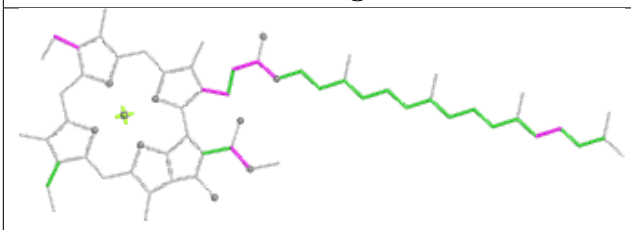
Ligand CLA O 816



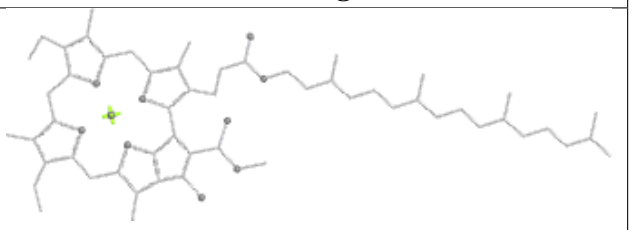
Bond lengths



Bond angles

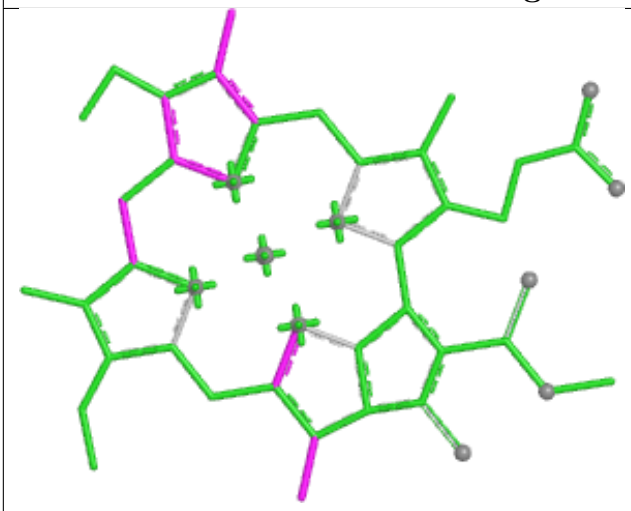


Torsions



Rings

Ligand CLA A 816



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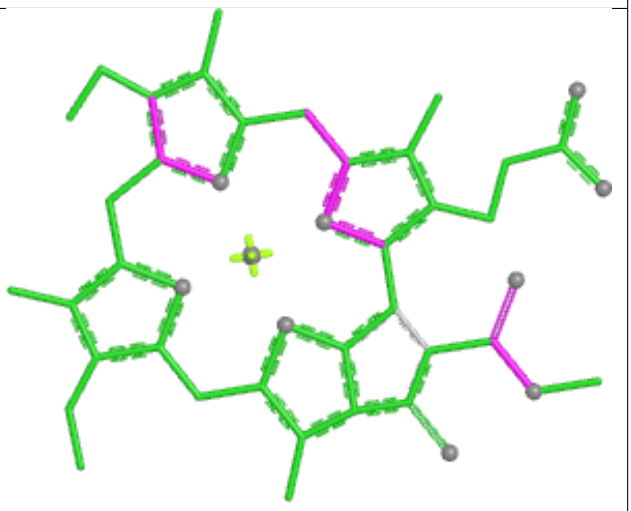
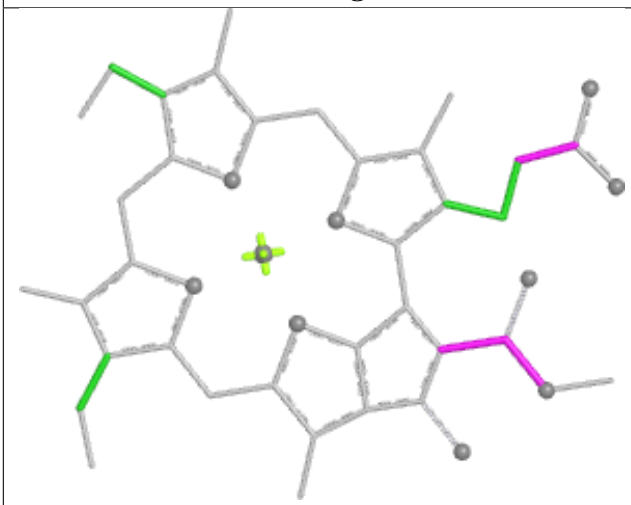
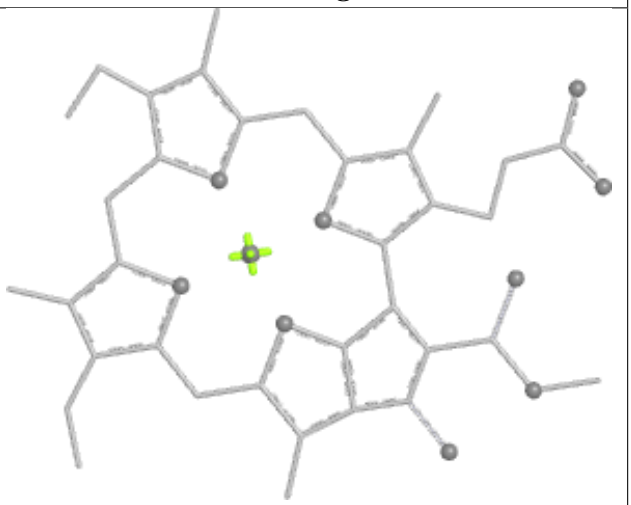


Bond angles

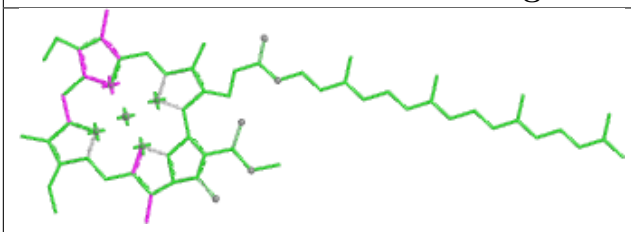


Torsions



Rings

Ligand CLA N 835



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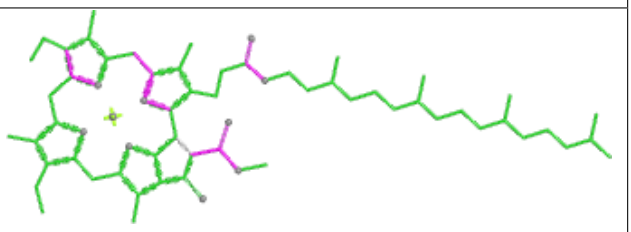
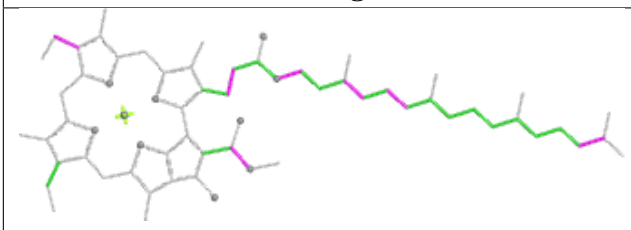
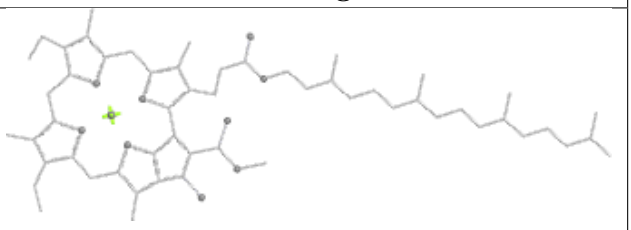


Bond angles

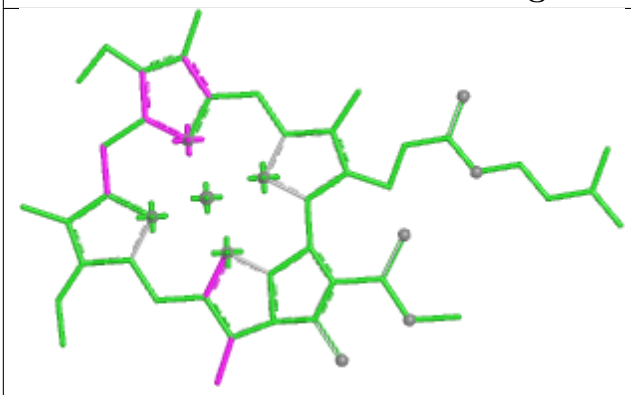


Torsions

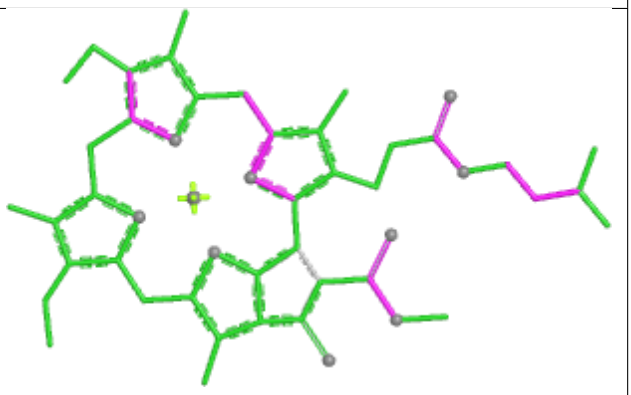


Rings

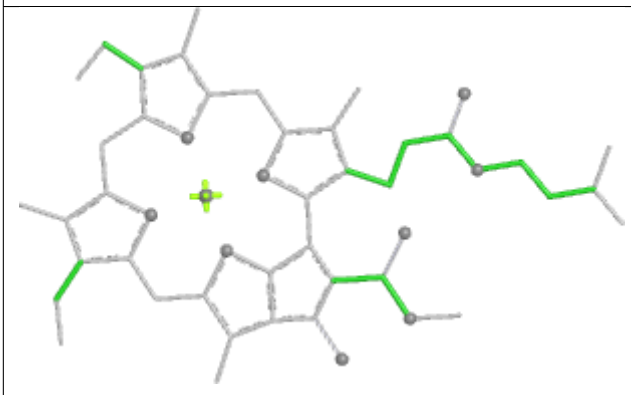
Ligand CLA a 840



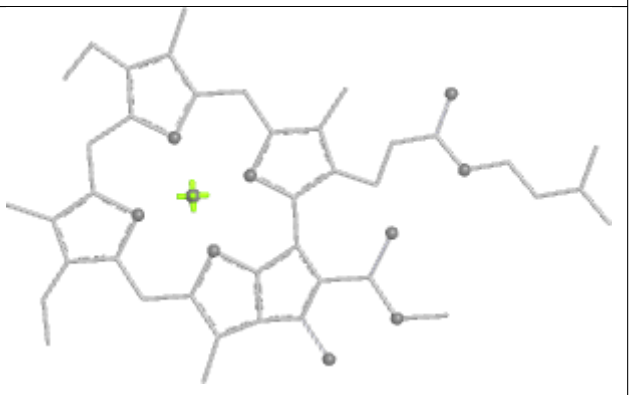
Bond lengths



Bond angles

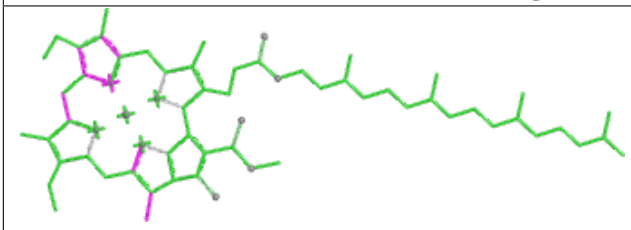


Torsions

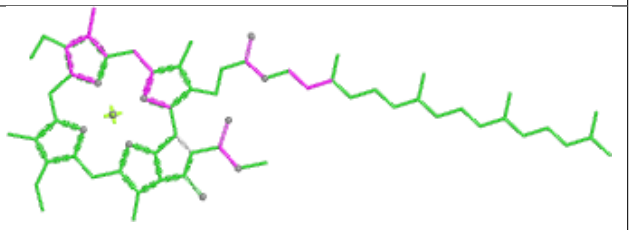


Rings

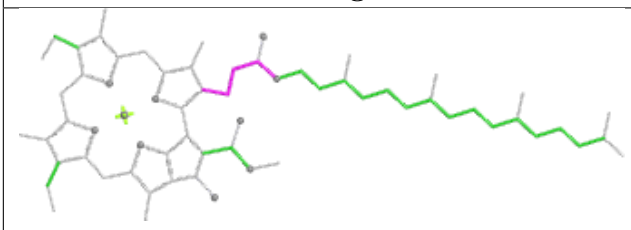
Ligand CLA b 827



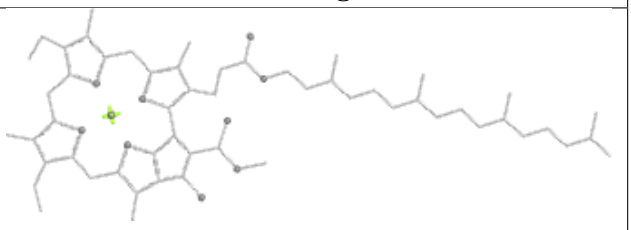
Bond lengths



Bond angles

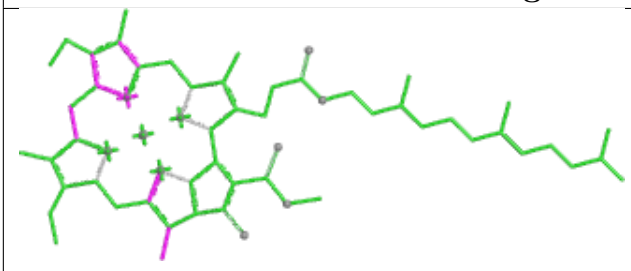


Torsions

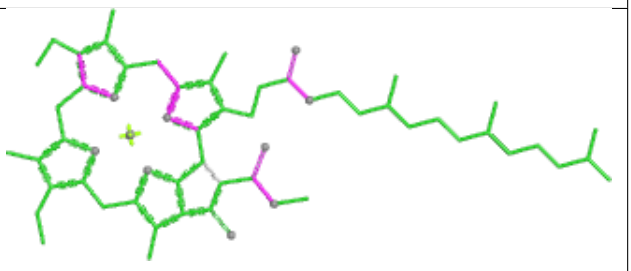


Rings

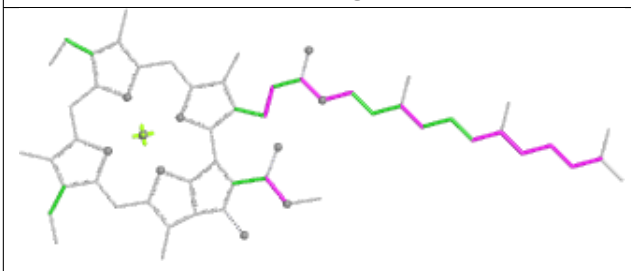
Ligand CLA N 829



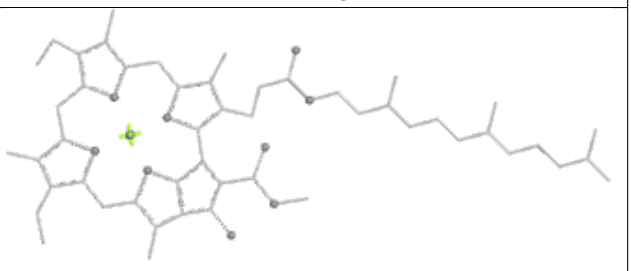
Bond lengths



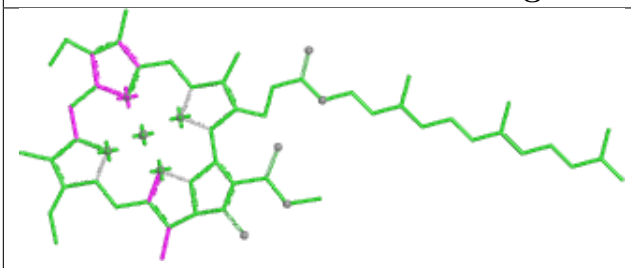
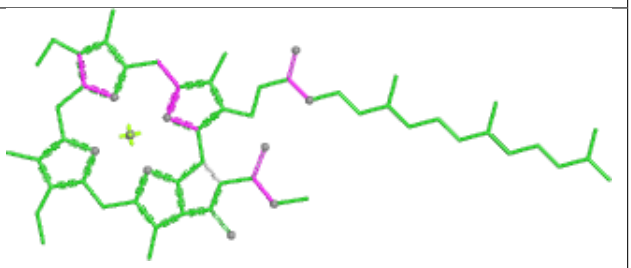
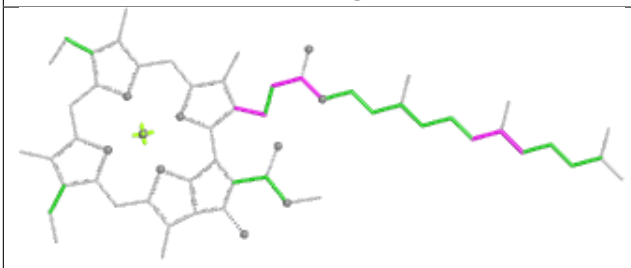
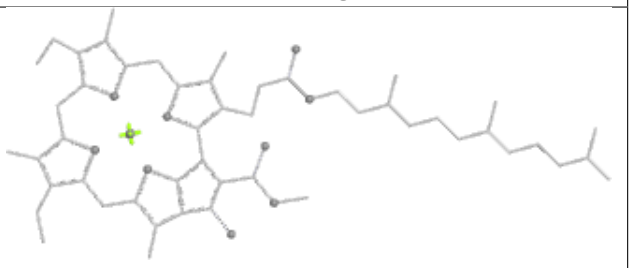
Bond angles

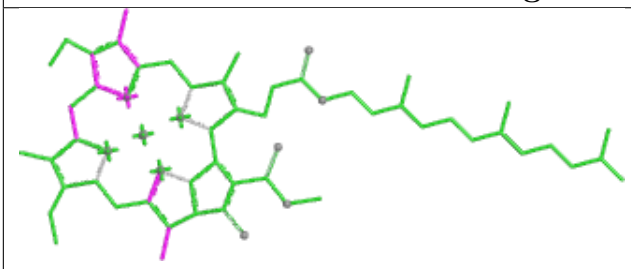
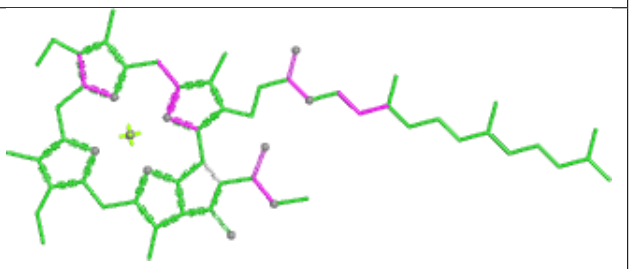
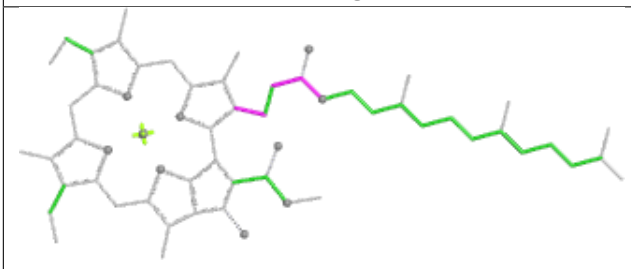
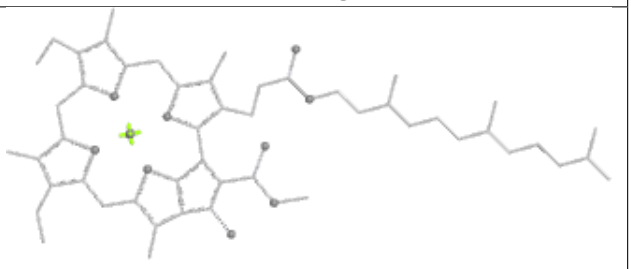


Torsions

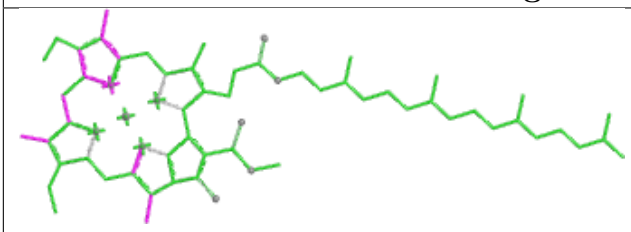


Rings

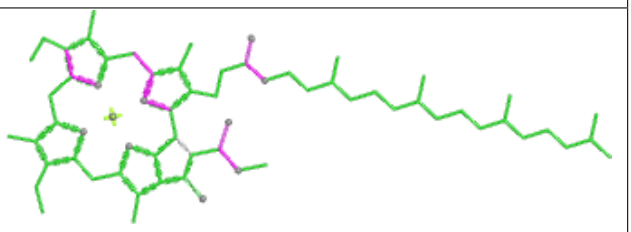
Ligand CLA A 805	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

Ligand CLA N 821	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

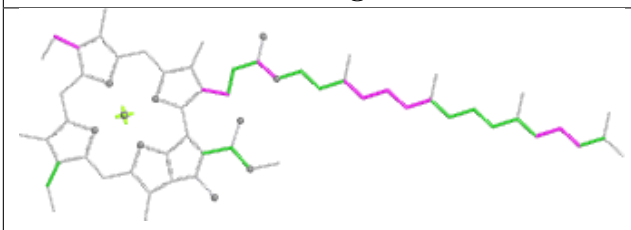
Ligand CLA A 841



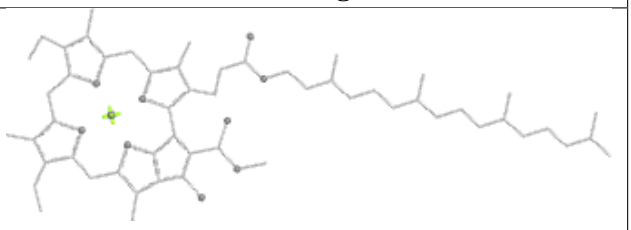
Bond lengths



Bond angles

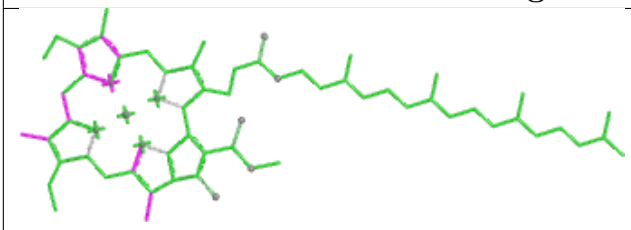


Torsions

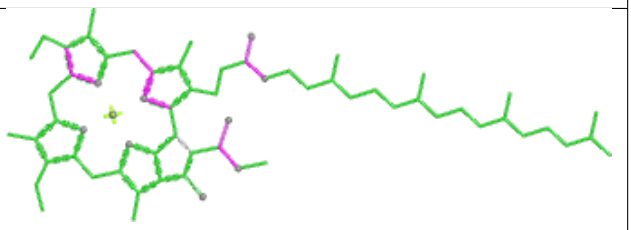


Rings

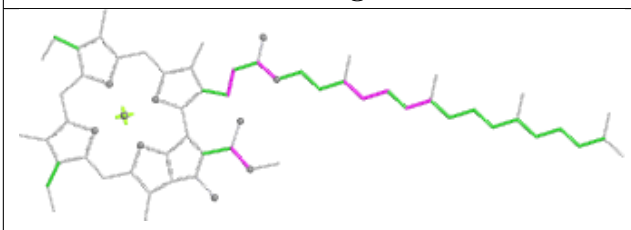
Ligand CLA b 804



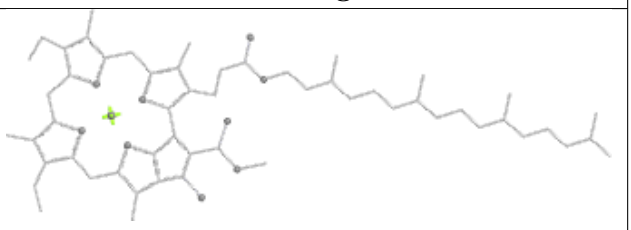
Bond lengths



Bond angles

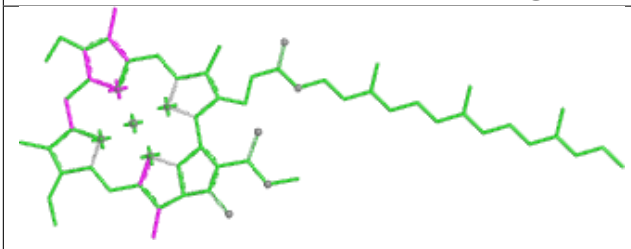


Torsions

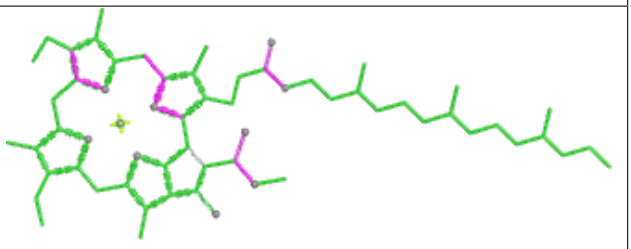


Rings

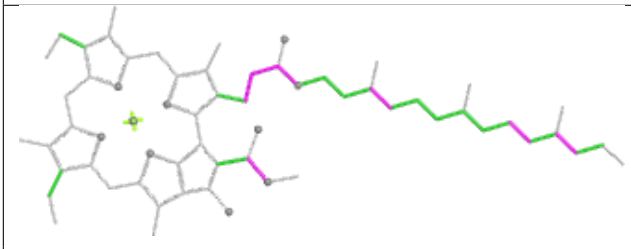
Ligand CLA b 826



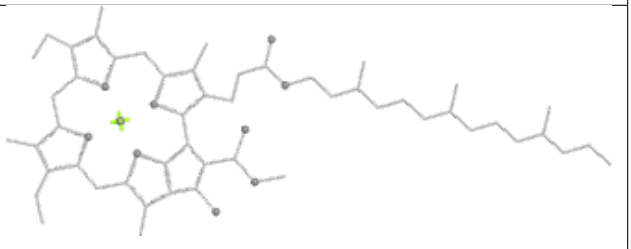
Bond lengths



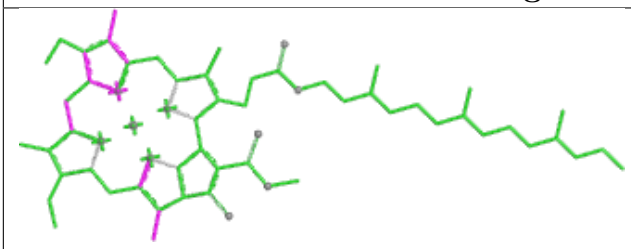
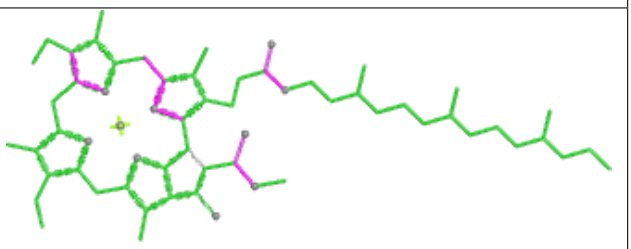
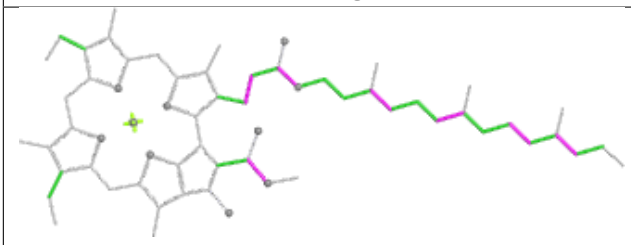
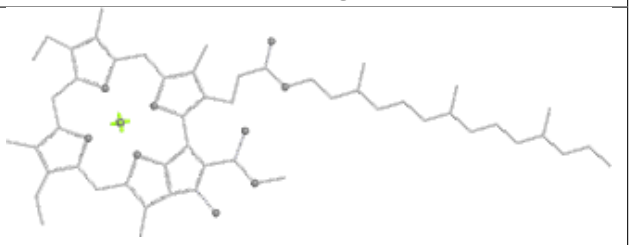
Bond angles

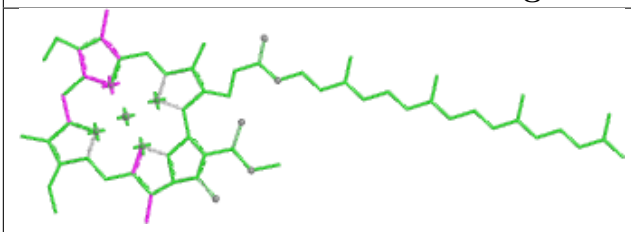
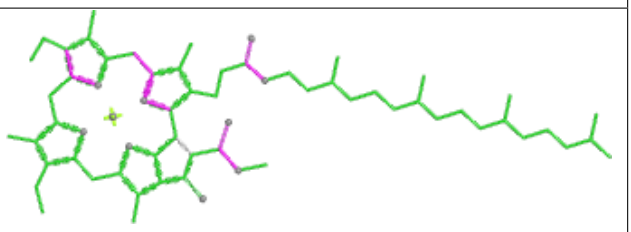
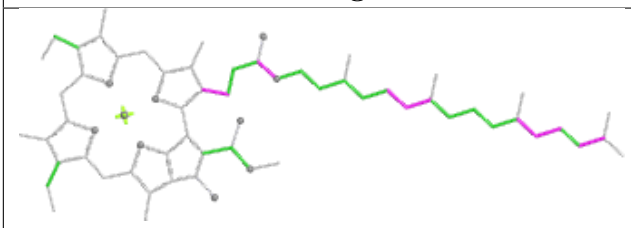
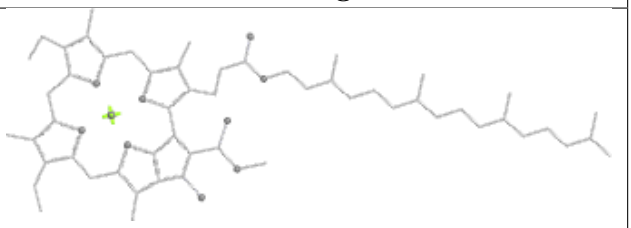


Torsions

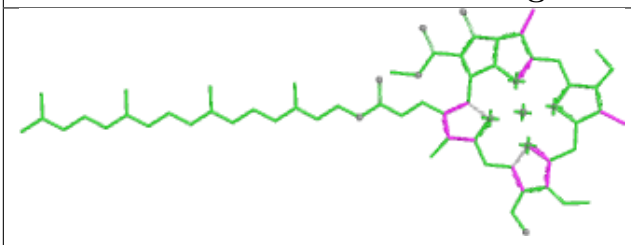


Rings

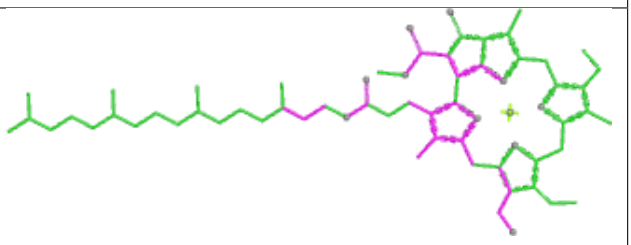
Ligand CLA O 826	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA O 810	
	
Bond lengths	Bond angles
	
Torsions	Rings

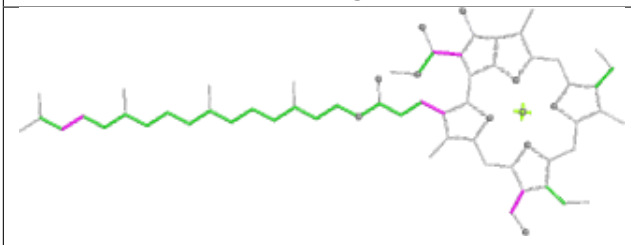
Ligand F6C O 832



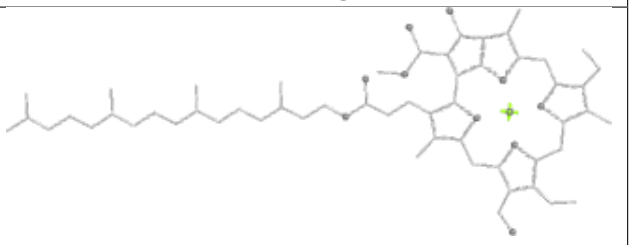
Bond lengths



Bond angles

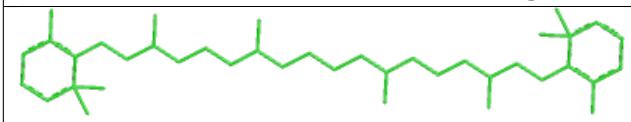


Torsions

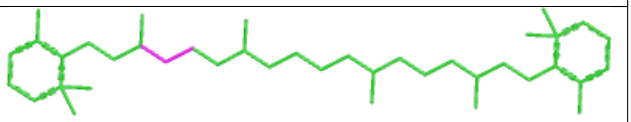


Rings

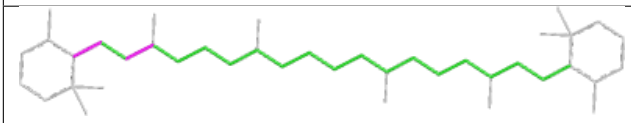
Ligand BCR B 847



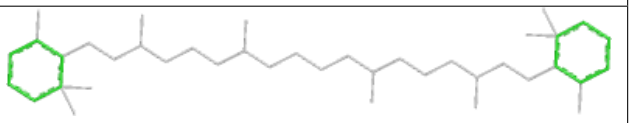
Bond lengths



Bond angles

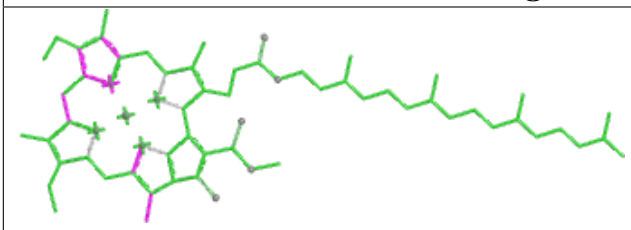


Torsions

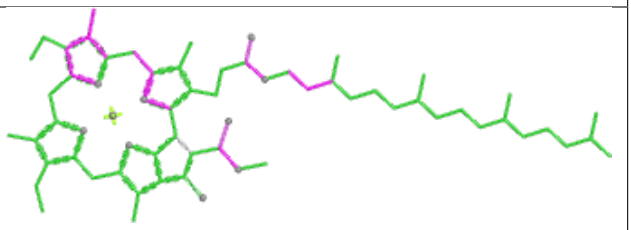


Rings

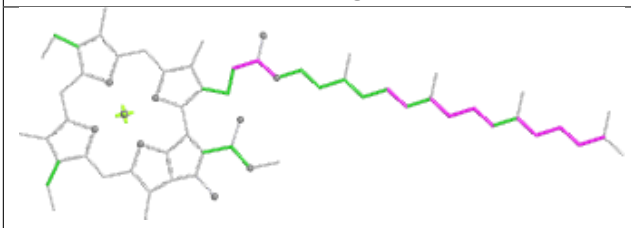
Ligand CLA B 837



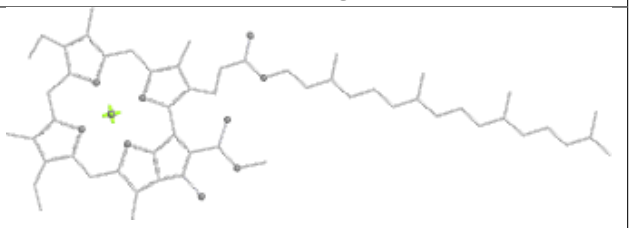
Bond lengths



Bond angles

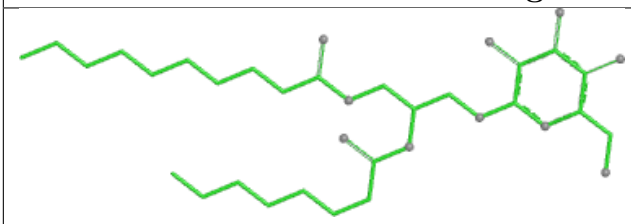


Torsions

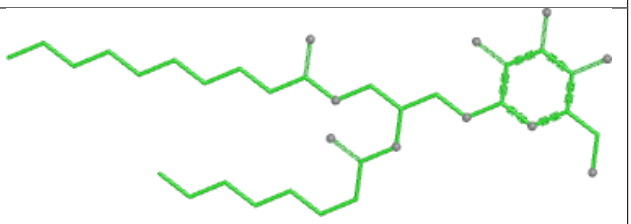


Rings

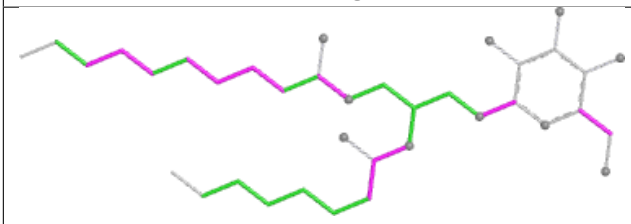
Ligand LMG I 103



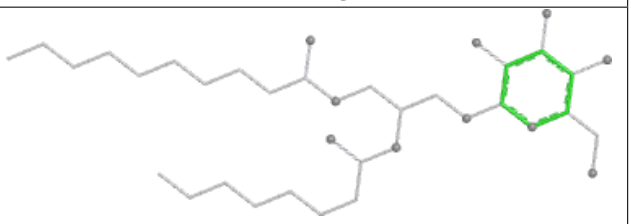
Bond lengths



Bond angles

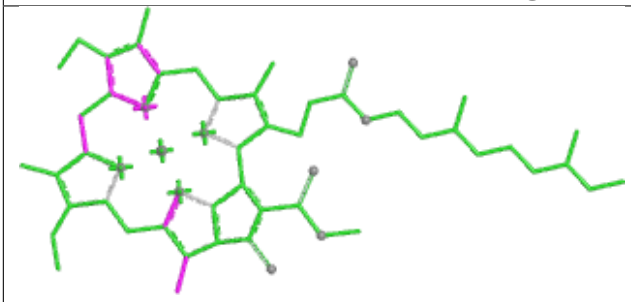


Torsions

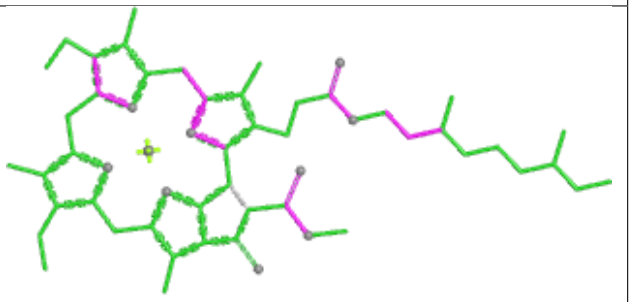


Rings

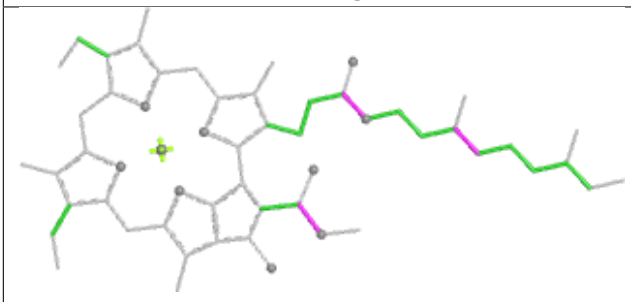
Ligand CLA A 823



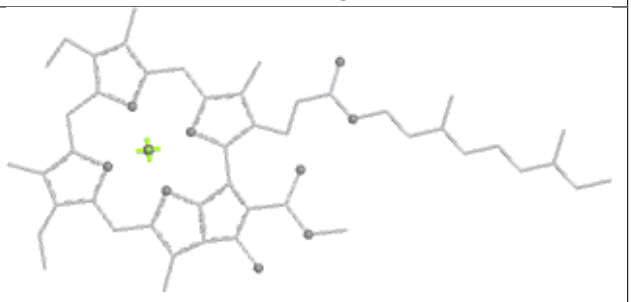
Bond lengths



Bond angles

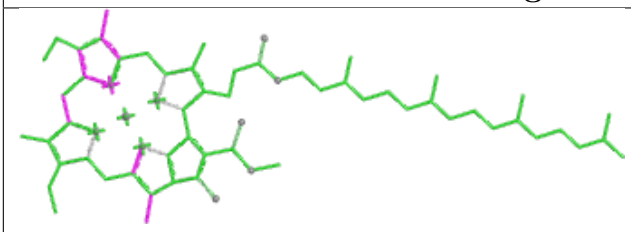


Torsions

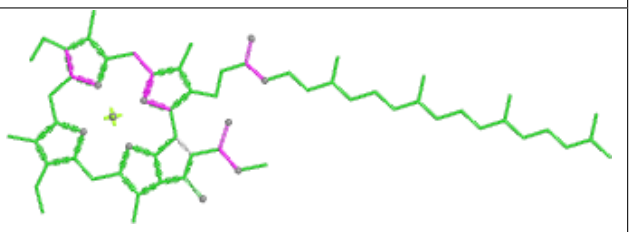


Rings

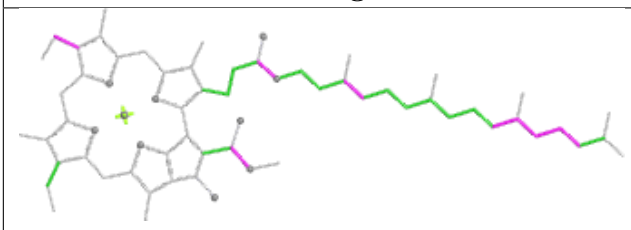
Ligand CLA B 840



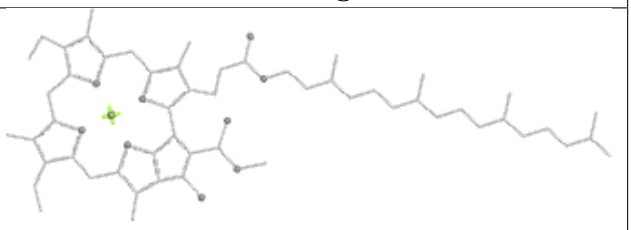
Bond lengths



Bond angles



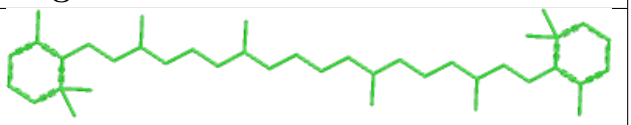
Torsions



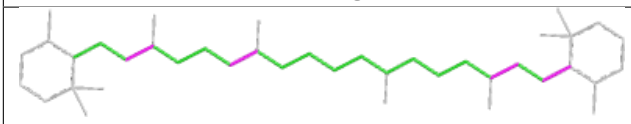
Rings

Ligand BCR g 101

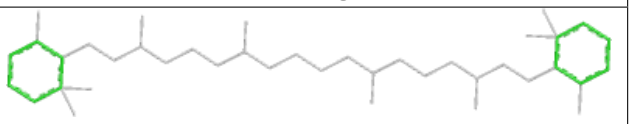
Bond lengths



Bond angles

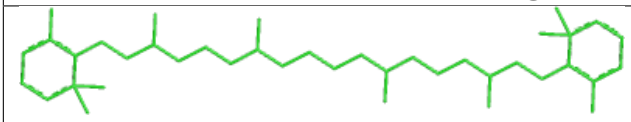


Torsions

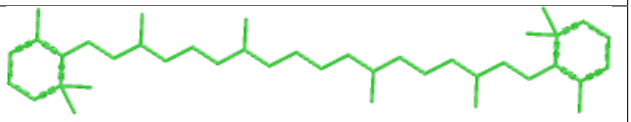


Rings

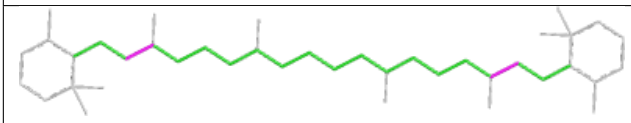
Ligand BCR L 205



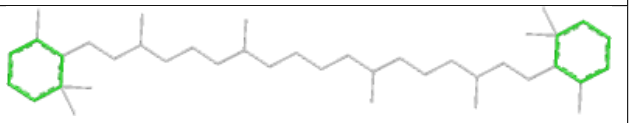
Bond lengths



Bond angles

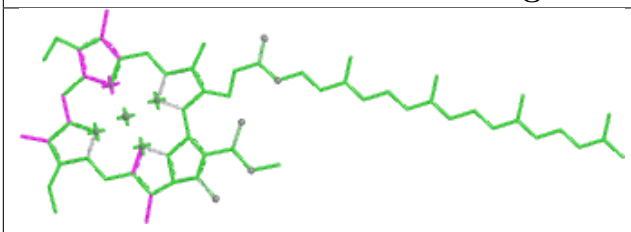


Torsions

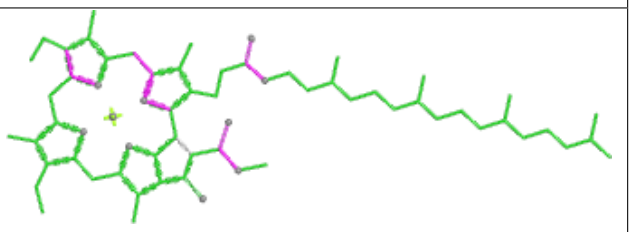


Rings

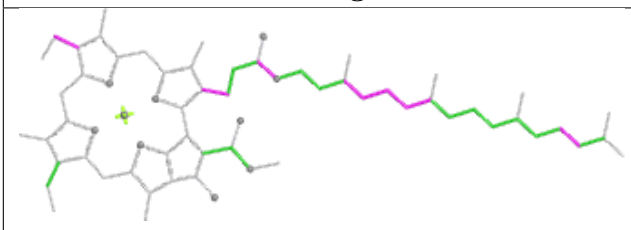
Ligand CLA N 841



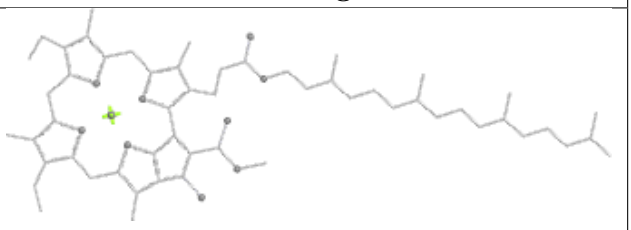
Bond lengths



Bond angles

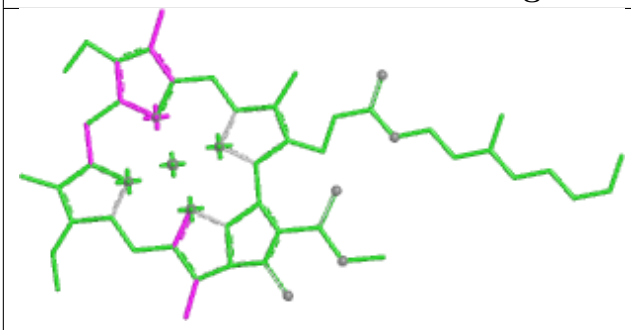


Torsions

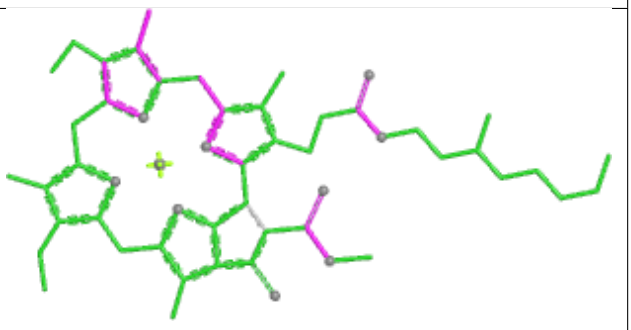


Rings

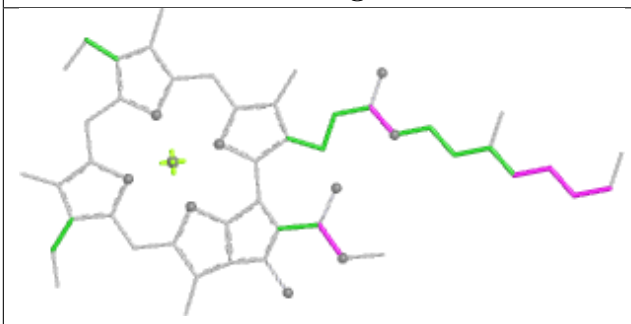
Ligand CLA N 836



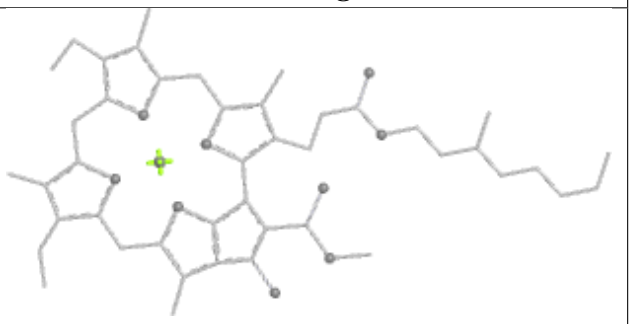
Bond lengths



Bond angles

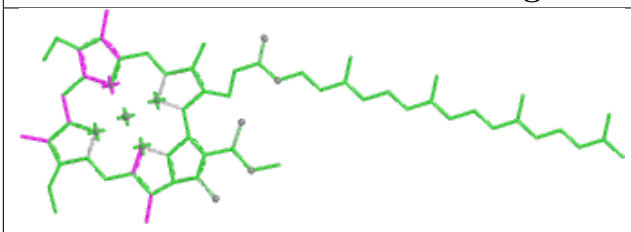


Torsions

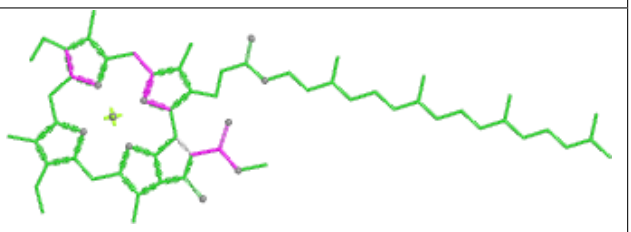


Rings

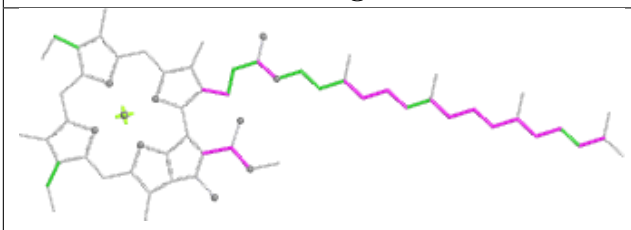
Ligand CLA N 818



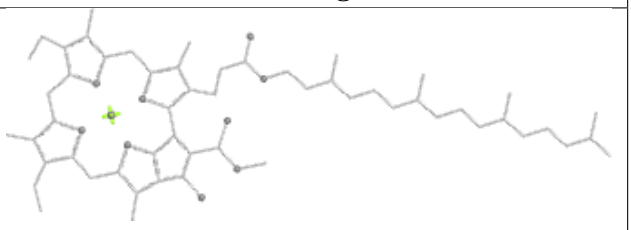
Bond lengths



Bond angles

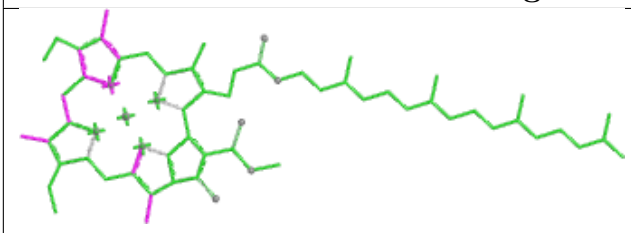


Torsions

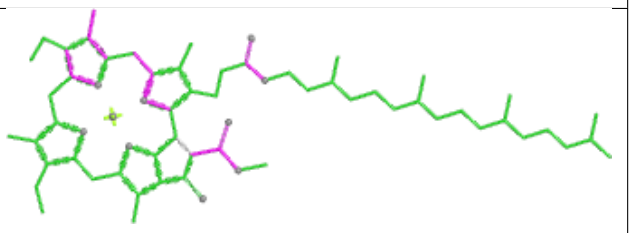


Rings

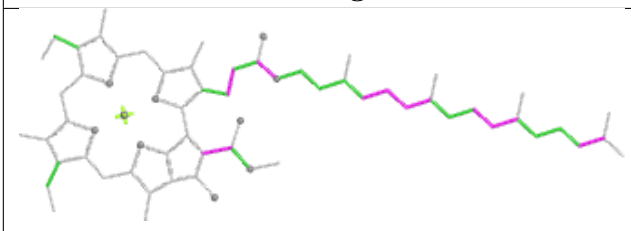
Ligand CLA N 831



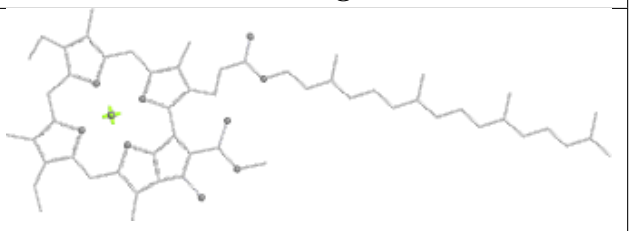
Bond lengths



Bond angles

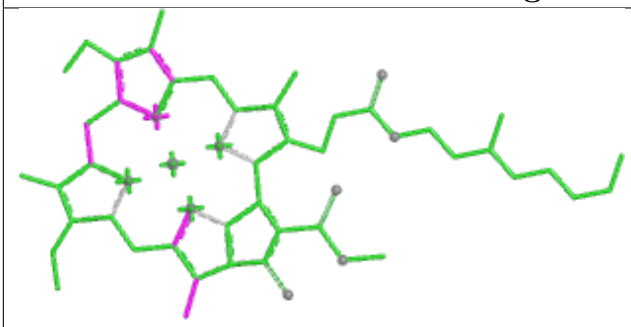


Torsions

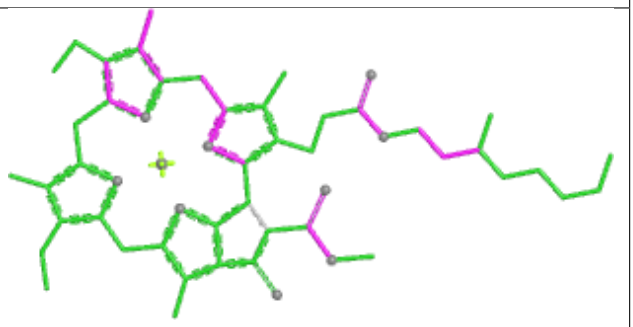


Rings

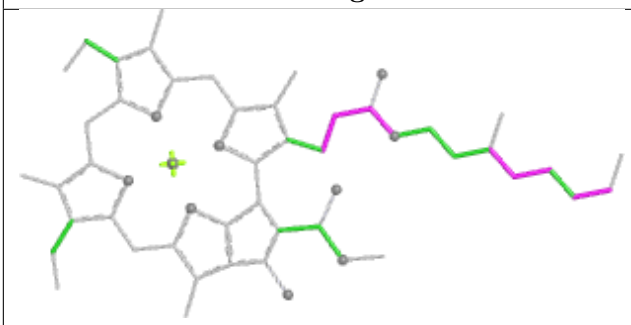
Ligand CLA A 813



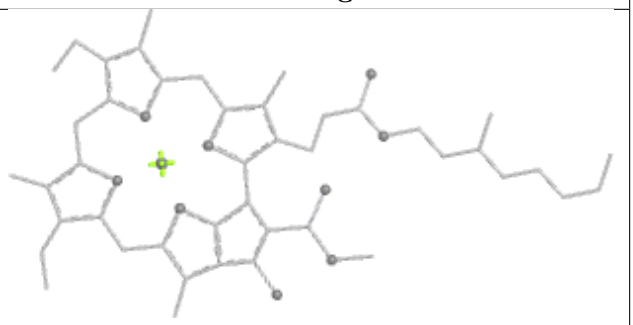
Bond lengths



Bond angles

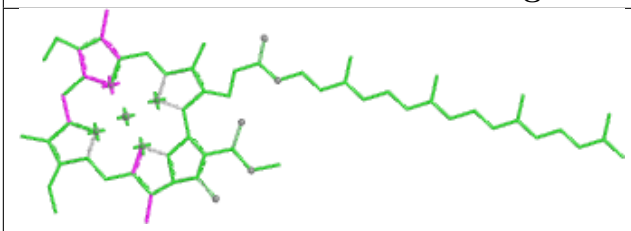


Torsions

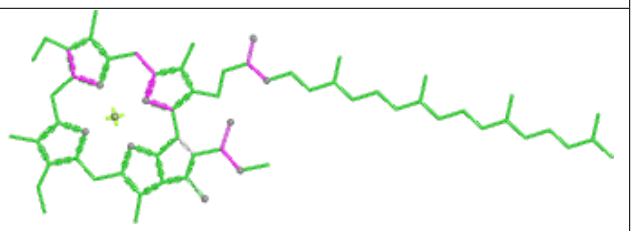


Rings

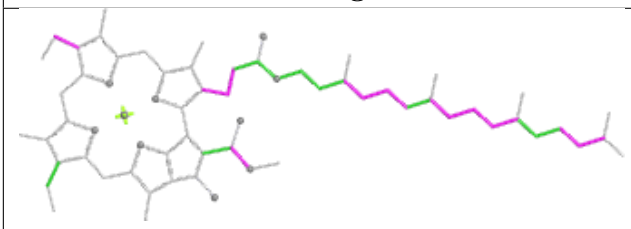
Ligand CLA A 812



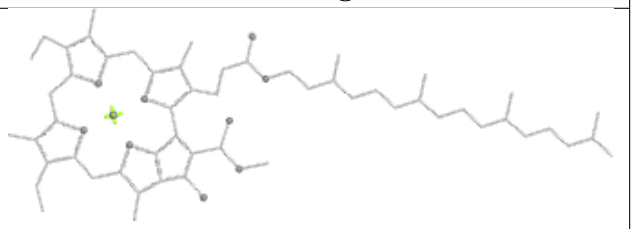
Bond lengths



Bond angles

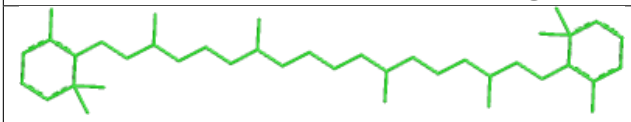


Torsions

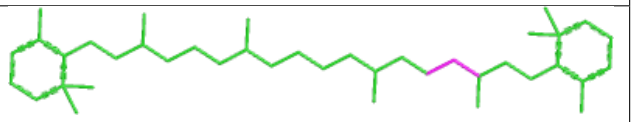


Rings

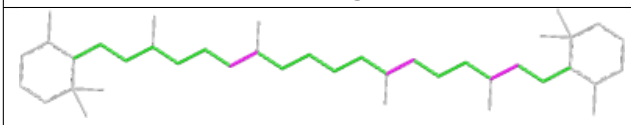
Ligand BCR b 847



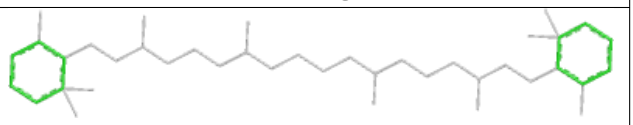
Bond lengths



Bond angles

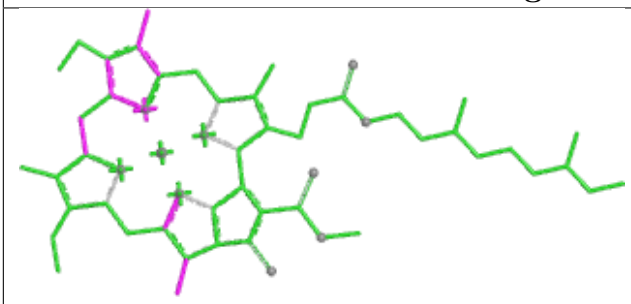


Torsions

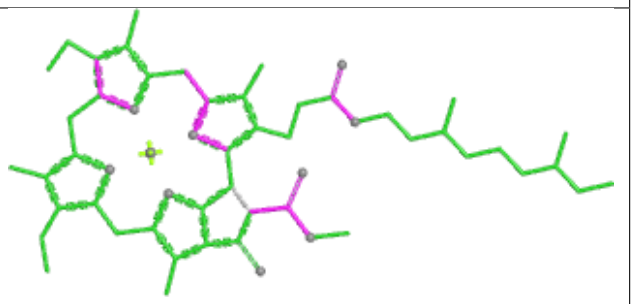


Rings

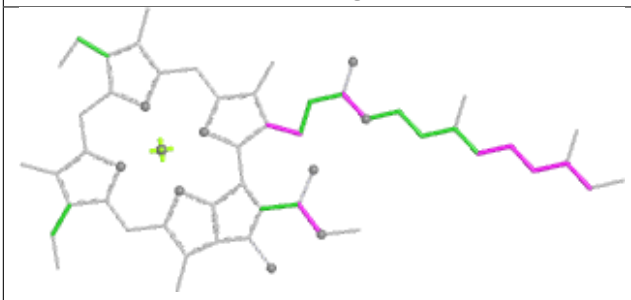
Ligand CLA B 812



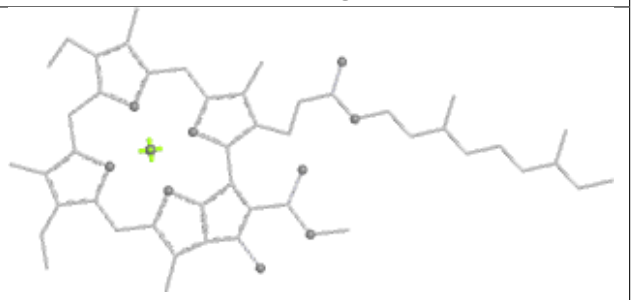
Bond lengths



Bond angles

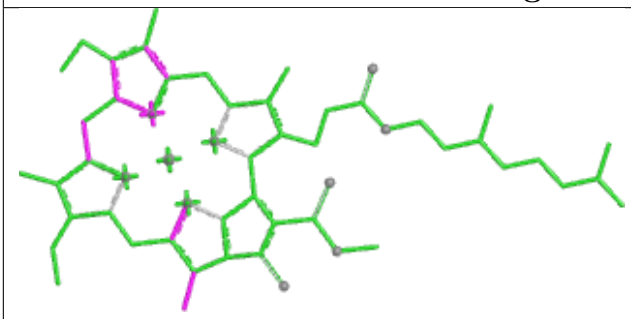


Torsions

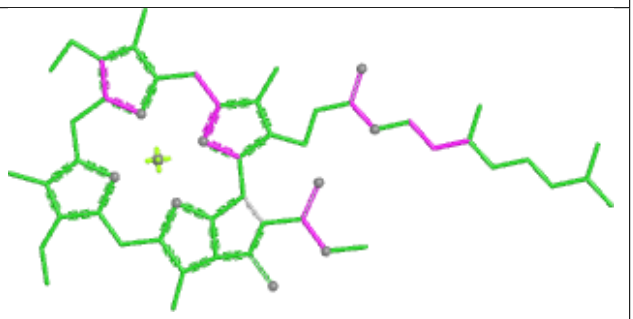


Rings

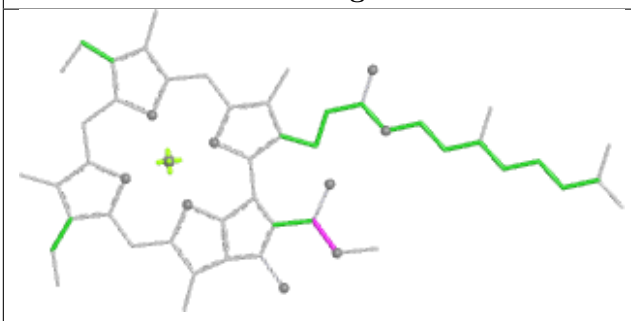
Ligand CLA X 102



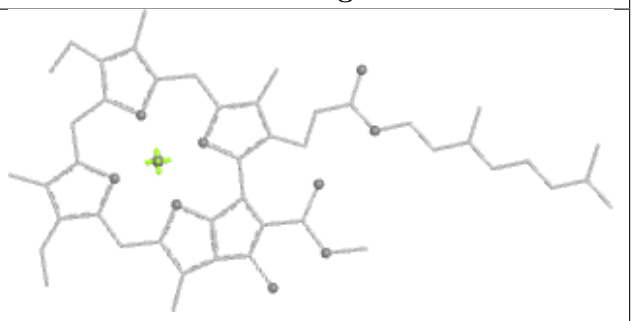
Bond lengths



Bond angles

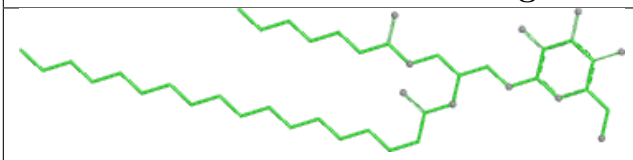


Torsions

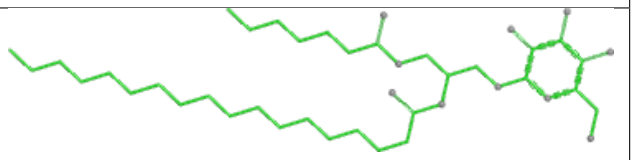


Rings

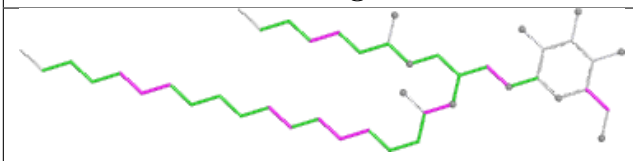
Ligand LMG N 855



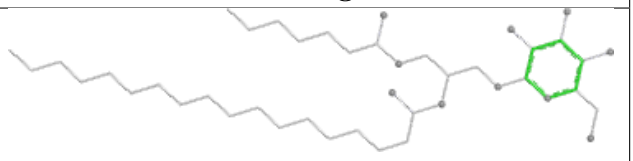
Bond lengths



Bond angles

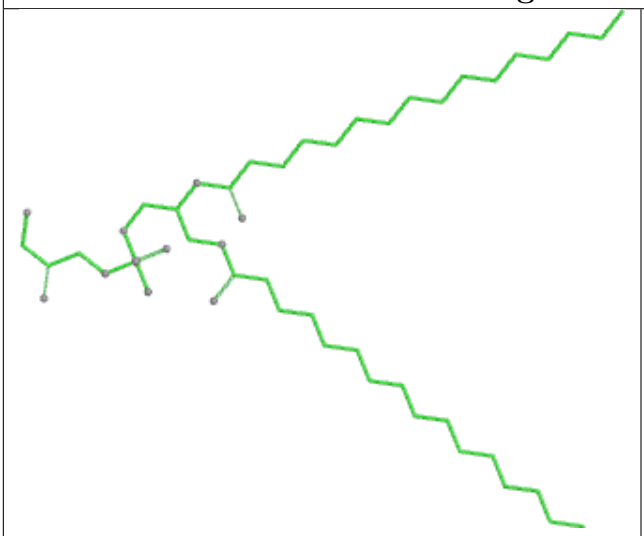


Torsions

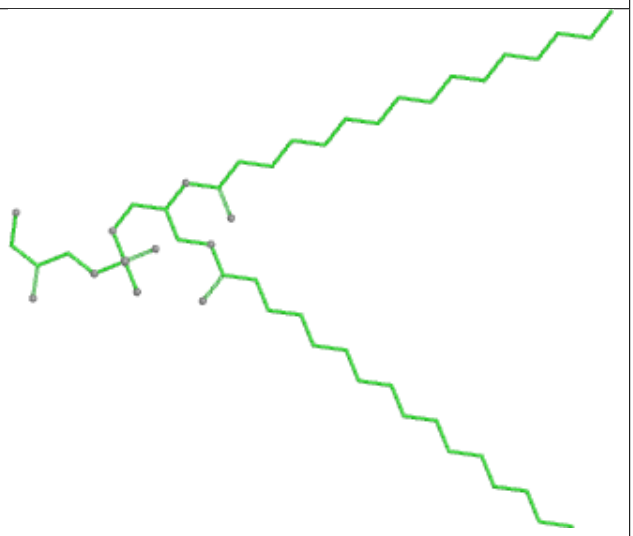


Rings

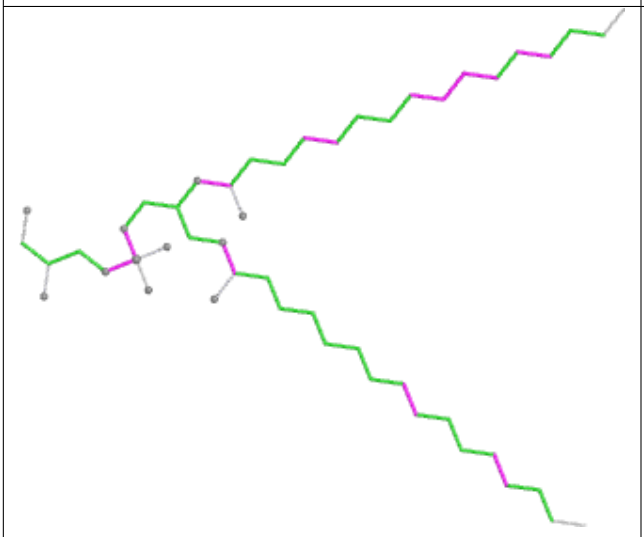
Ligand LHG W 207



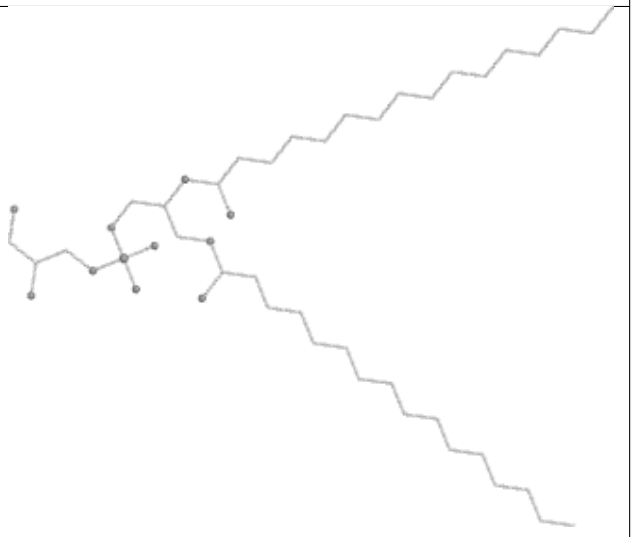
Bond lengths



Bond angles

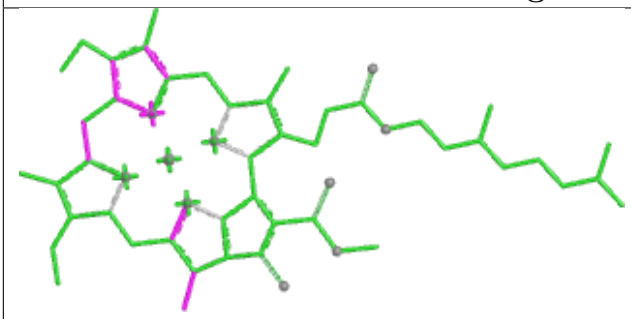


Torsions

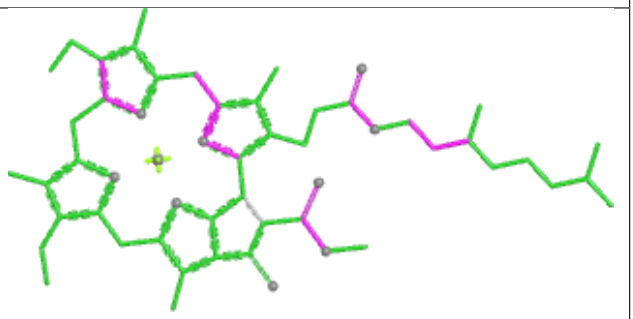


Rings

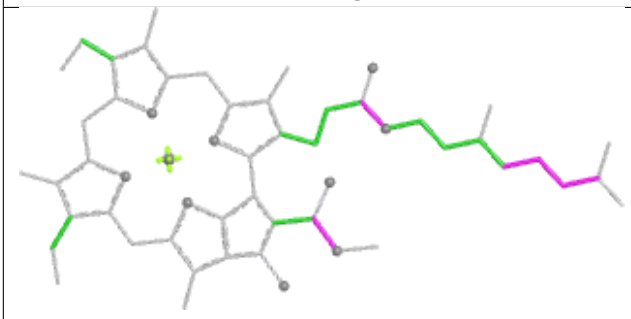
Ligand CLA b 833



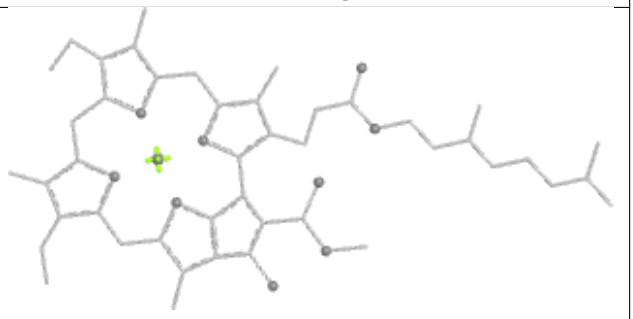
Bond lengths



Bond angles

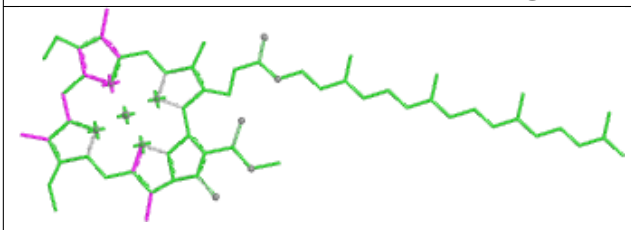


Torsions

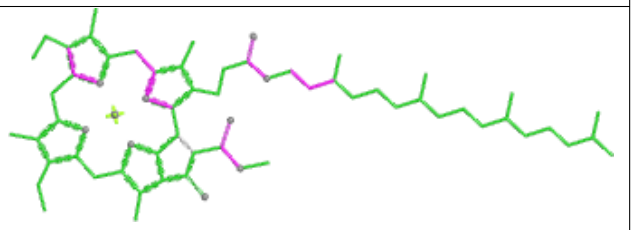


Rings

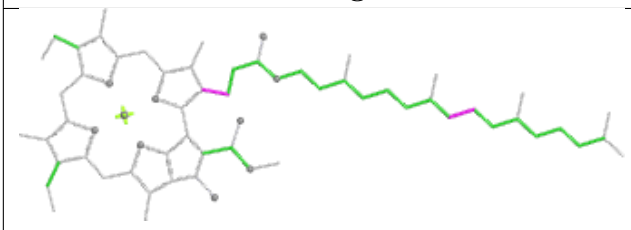
Ligand CLA O 825



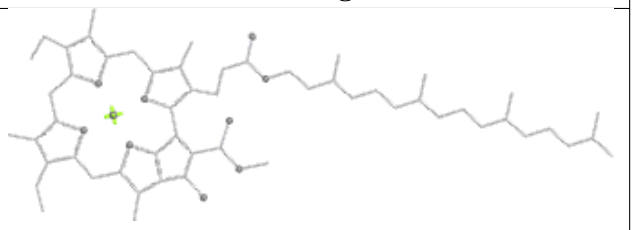
Bond lengths



Bond angles

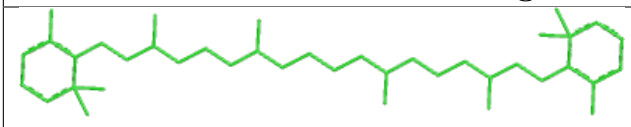


Torsions

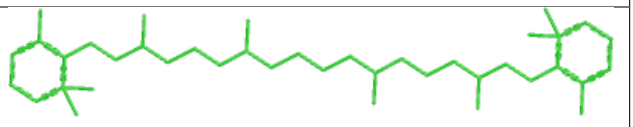


Rings

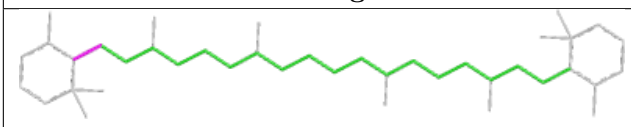
Ligand BCR W 209



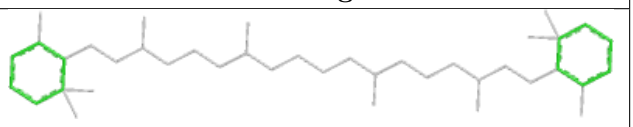
Bond lengths



Bond angles

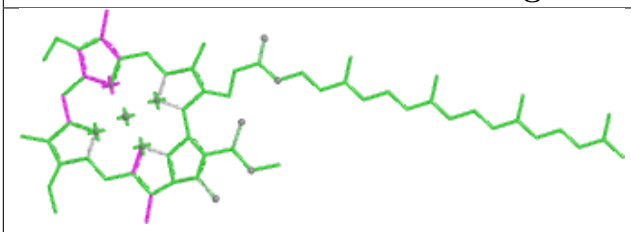


Torsions

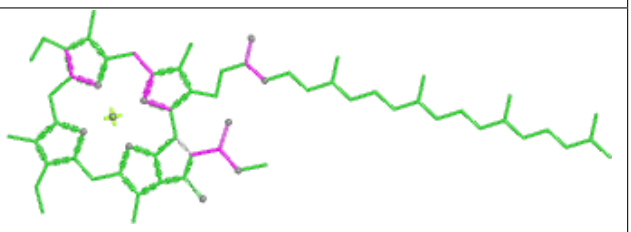


Rings

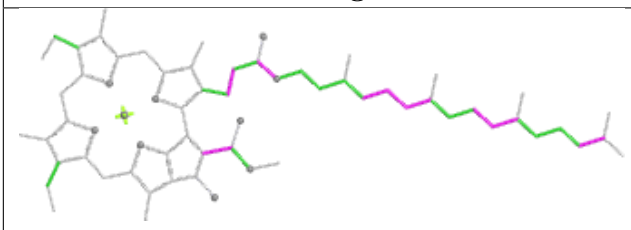
Ligand CLA A 831



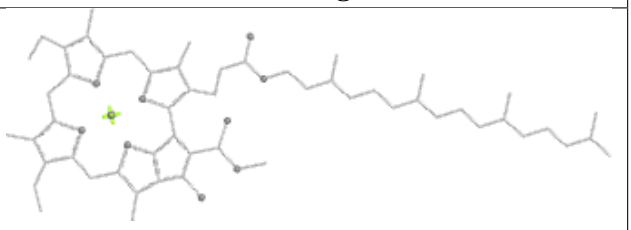
Bond lengths



Bond angles

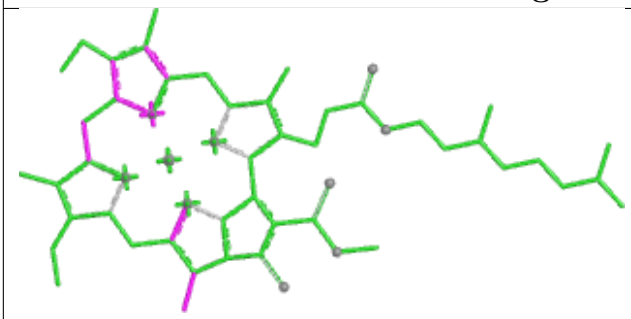


Torsions

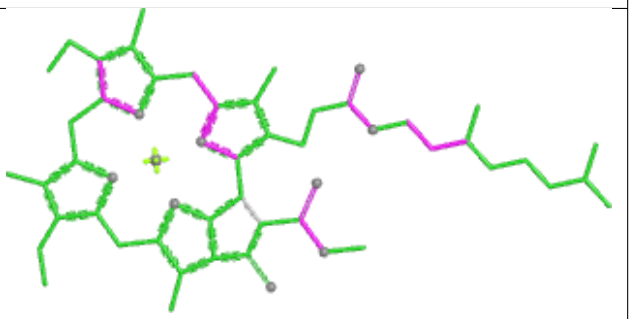


Rings

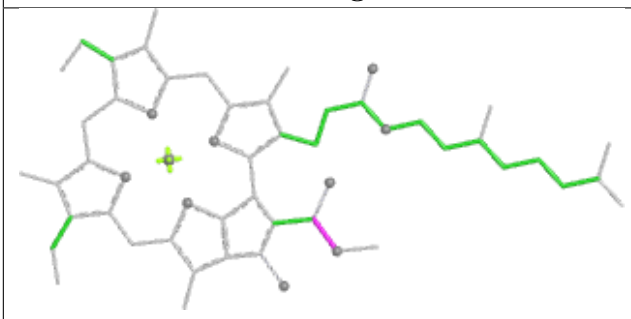
Ligand CLA l 102



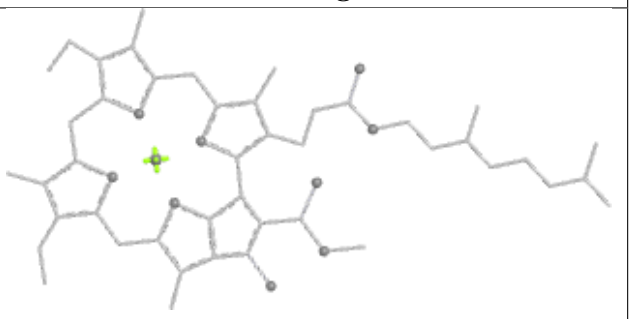
Bond lengths



Bond angles

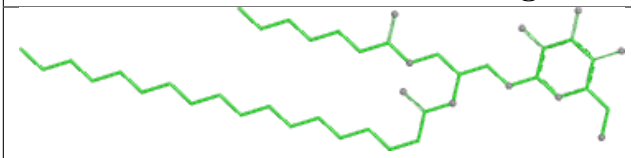


Torsions

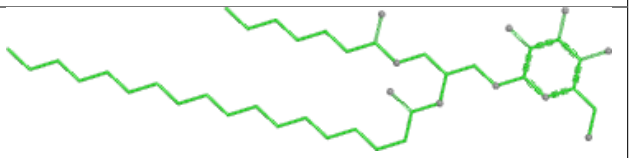


Rings

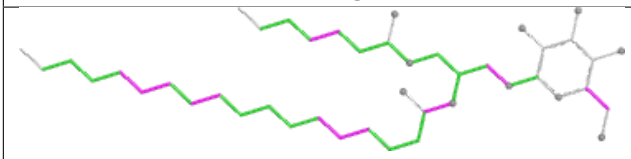
Ligand LMG B 850



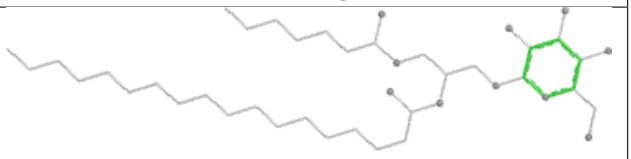
Bond lengths



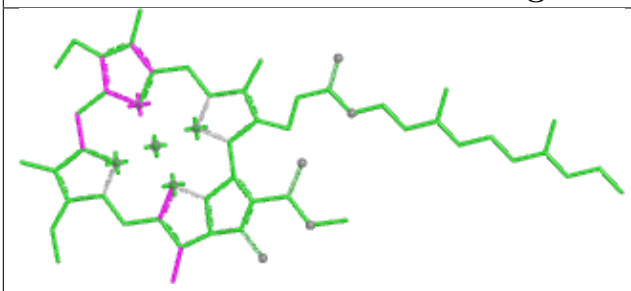
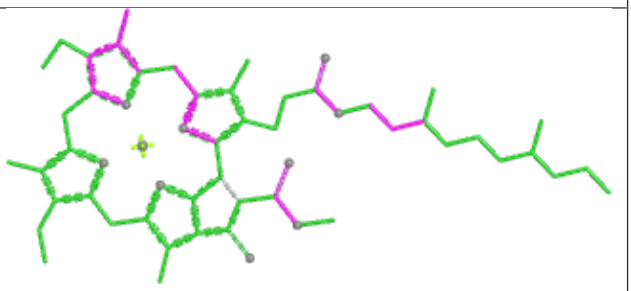
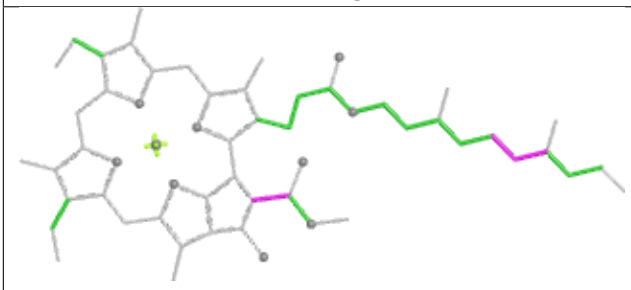
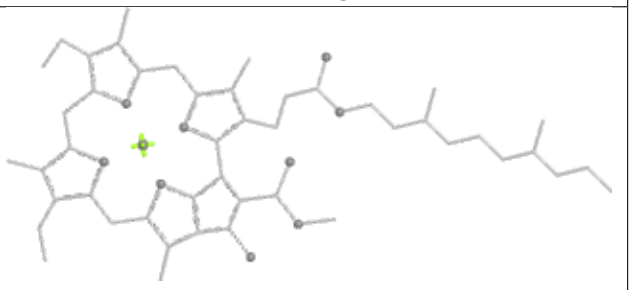
Bond angles

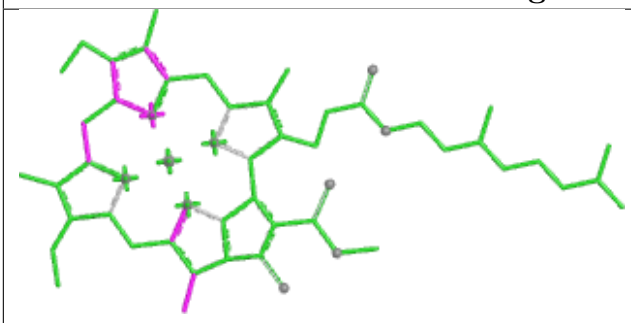
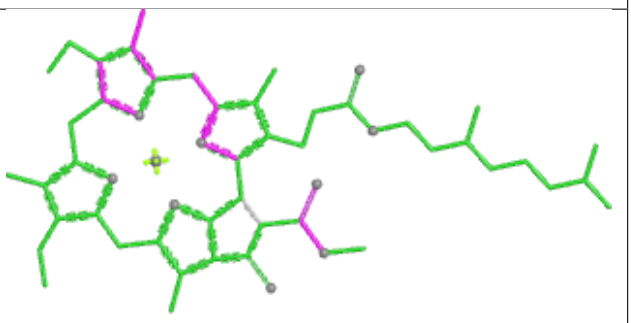
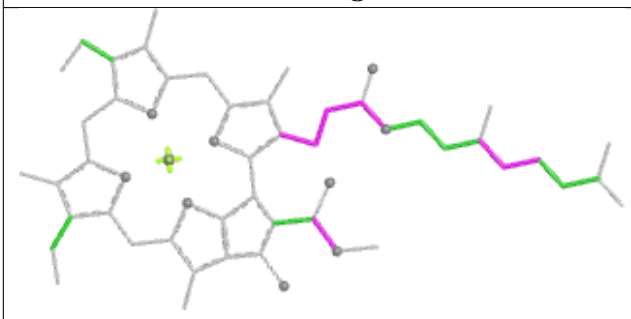
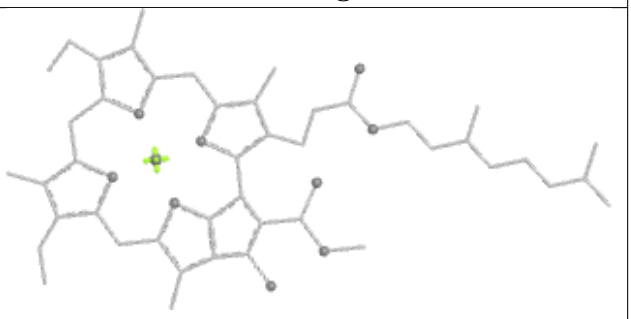


Torsions

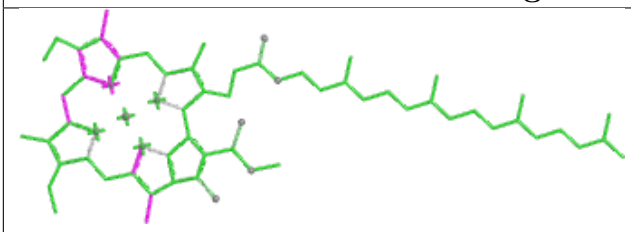


Rings

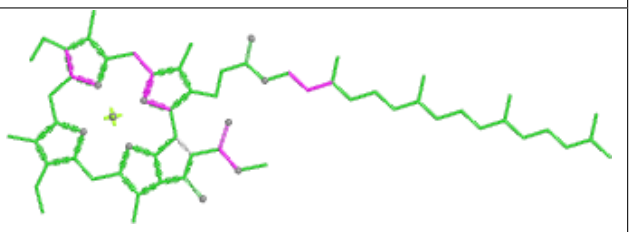
Ligand CLA b 815	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA a 838	
	
Bond lengths	Bond angles
	
Torsions	Rings

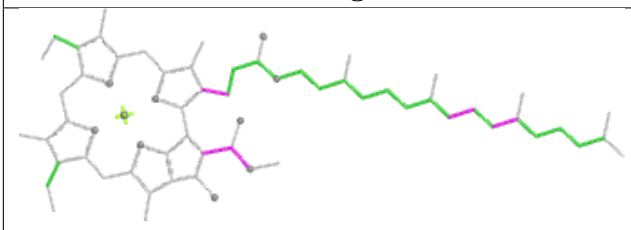
Ligand CLA O 823



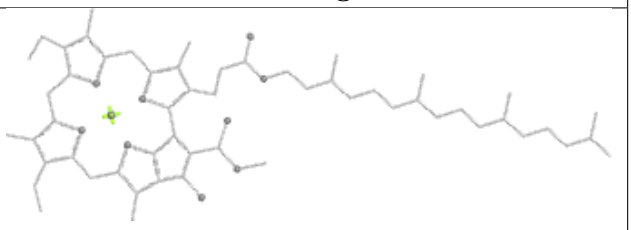
Bond lengths



Bond angles

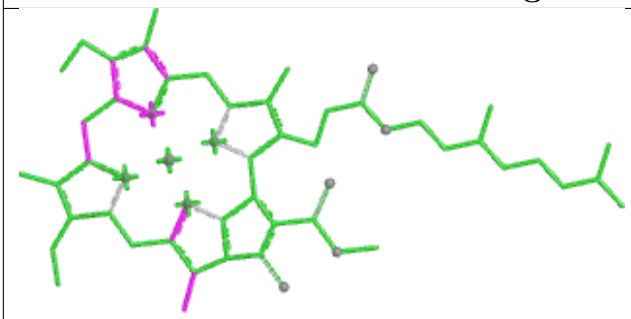


Torsions



Rings

Ligand CLA A 815



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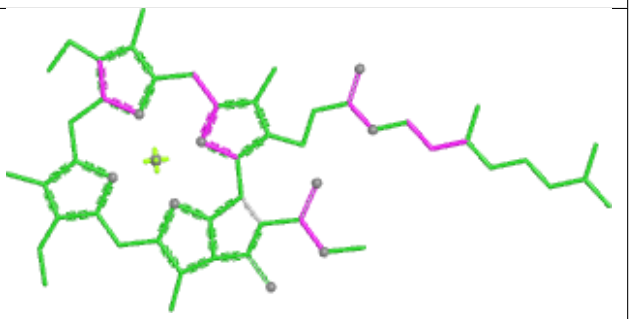
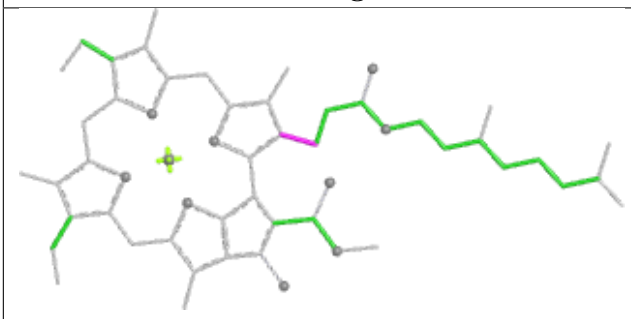
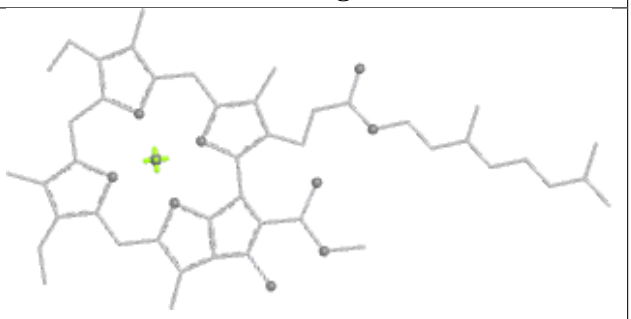


Bond angles

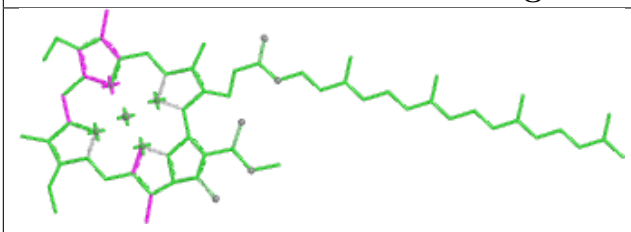


Torsions

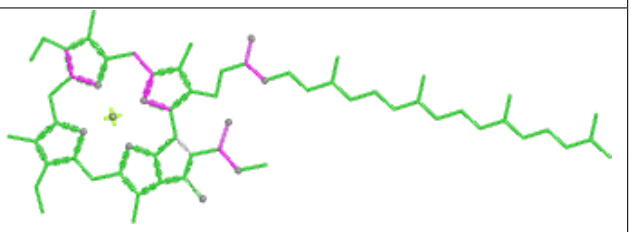


Rings

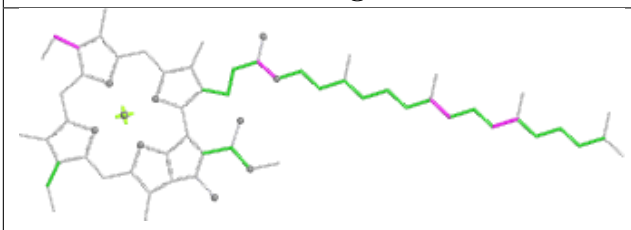
Ligand CLA B 818



Bond lengths



Bond angles



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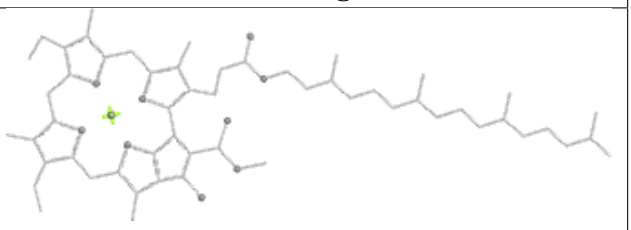
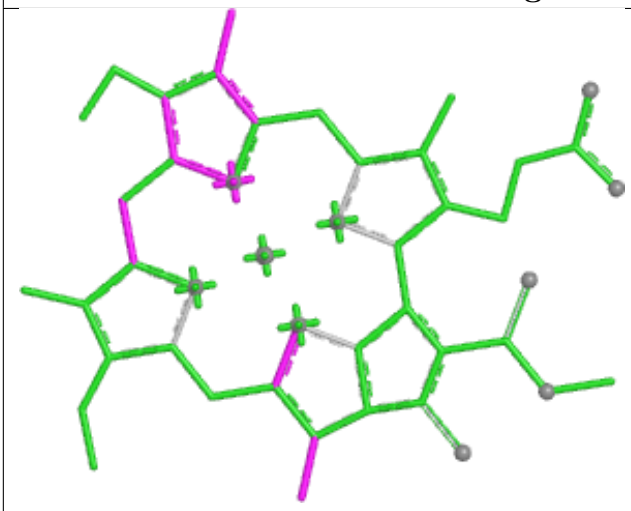
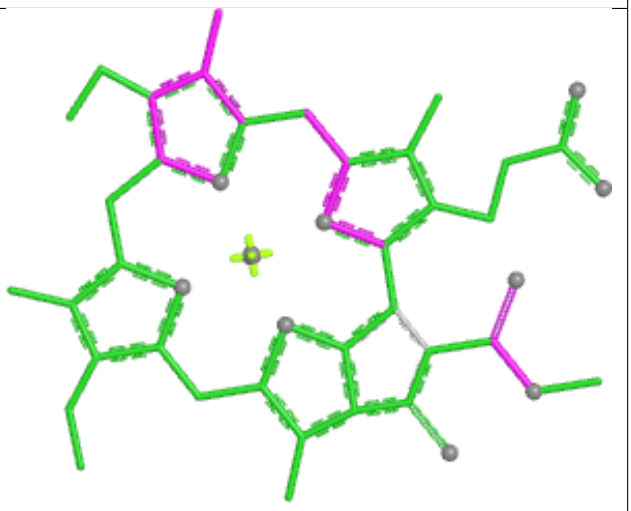


Rings

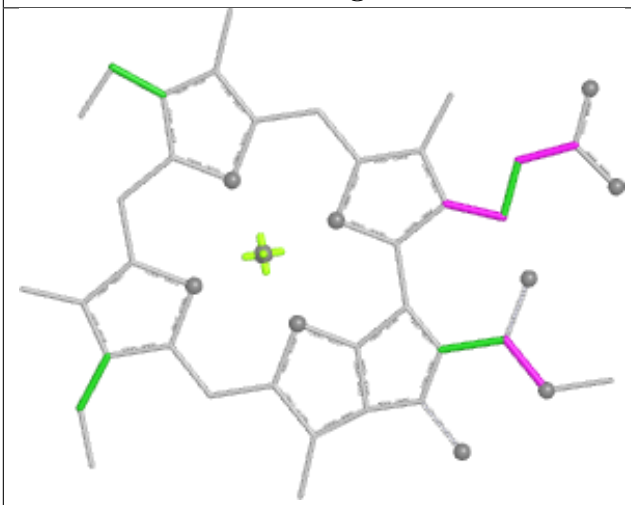
Ligand CLA B 834



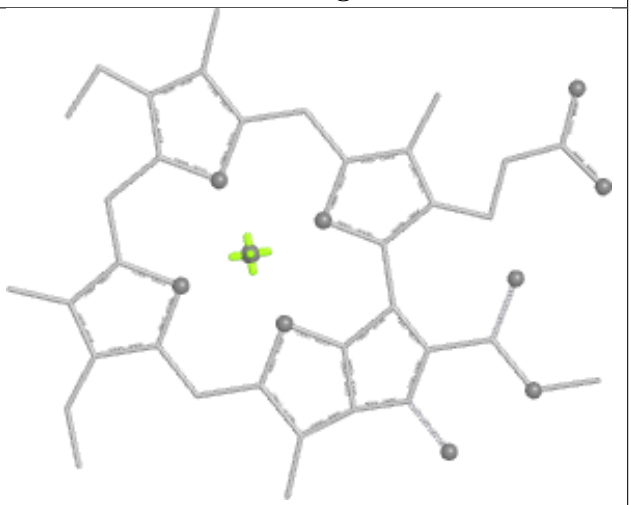
Bond lengths



Bond angles

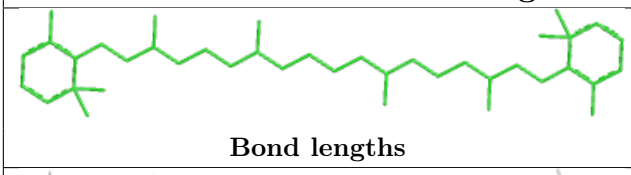


Torsions

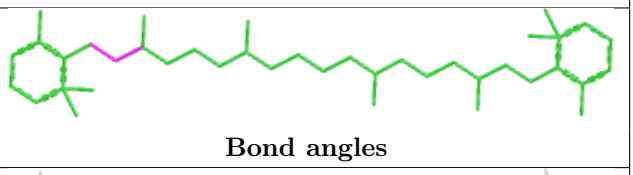


Rings

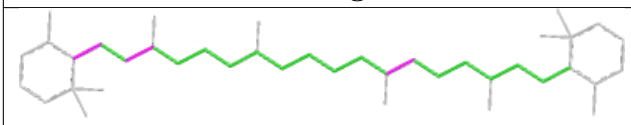
Ligand BCR M 101



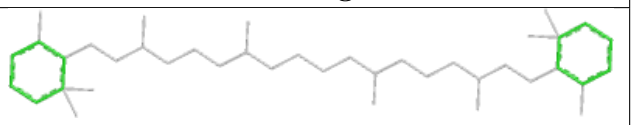
Bond lengths



Bond angles

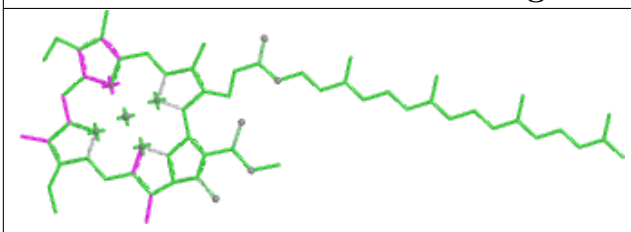


Torsions

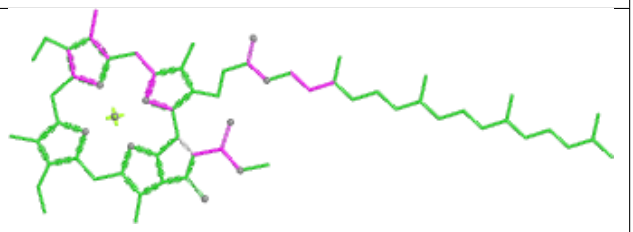


Rings

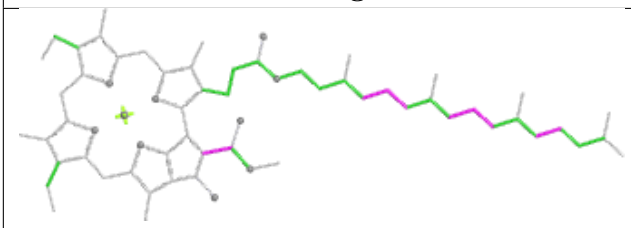
Ligand CLA b 808



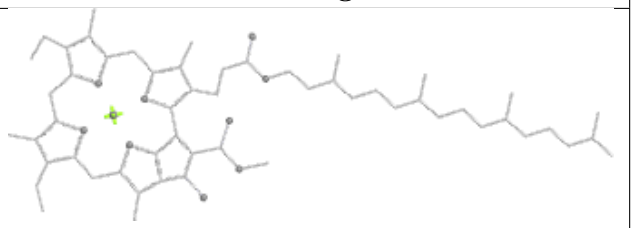
Bond lengths



Bond angles

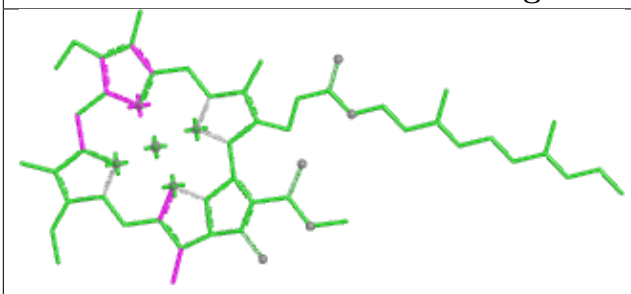


Torsions

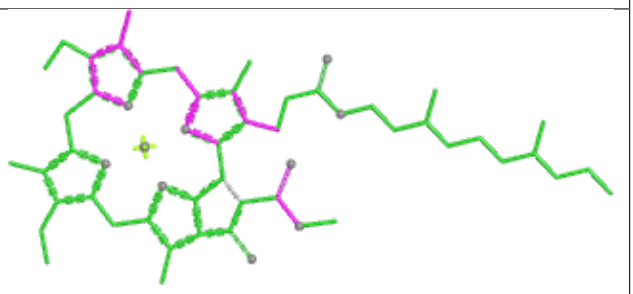


Rings

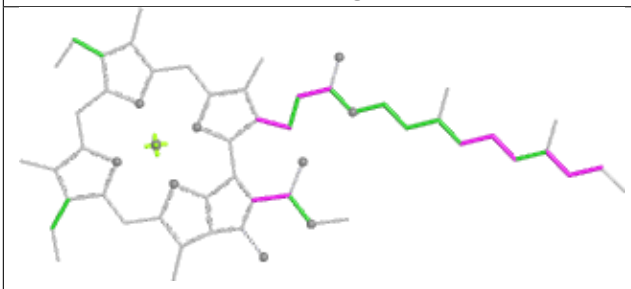
Ligand CLA N 810



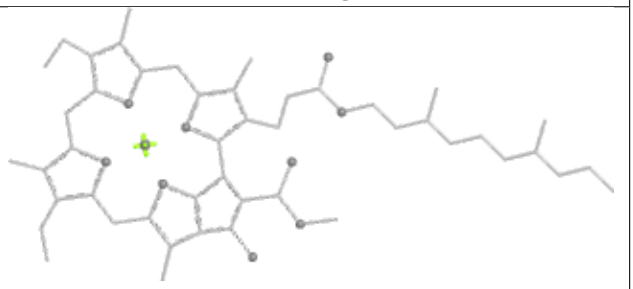
Bond lengths



Bond angles

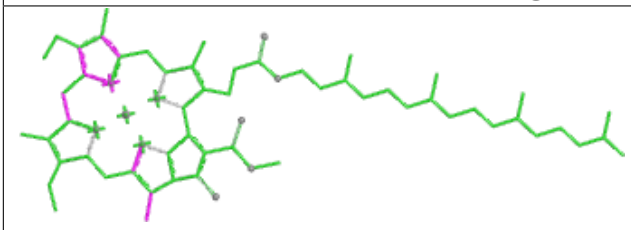


Torsions

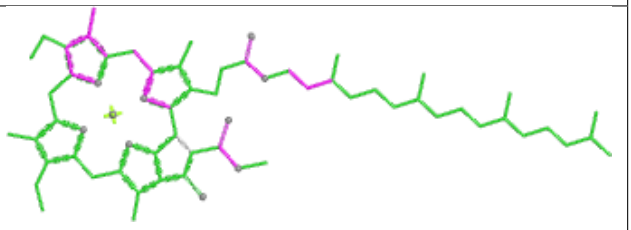


Rings

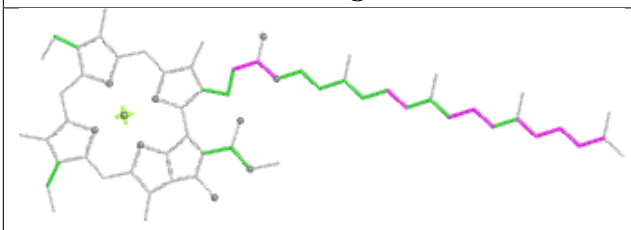
Ligand CLA b 837



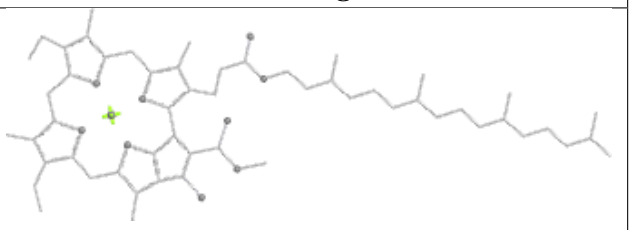
Bond lengths



Bond angles



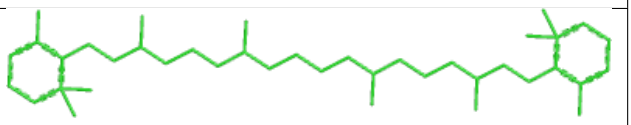
Torsions



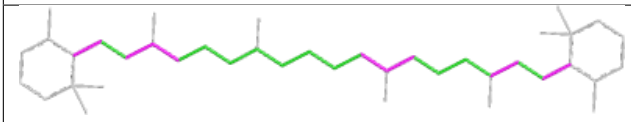
Rings

Ligand BCR A 850

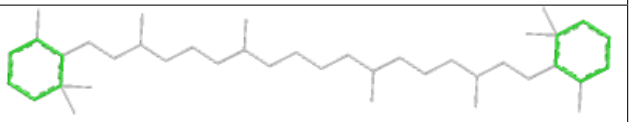
Bond lengths



Bond angles

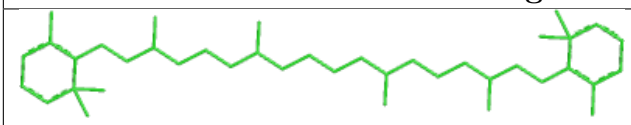


Torsions

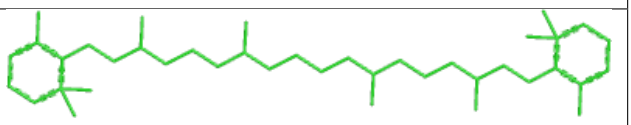


Rings

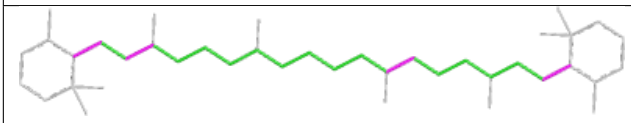
Ligand BCR b 845



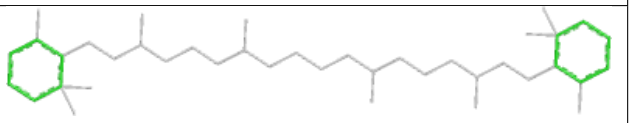
Bond lengths



Bond angles



Torsions

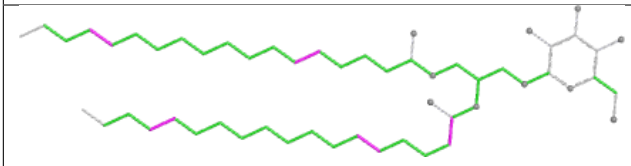


Rings

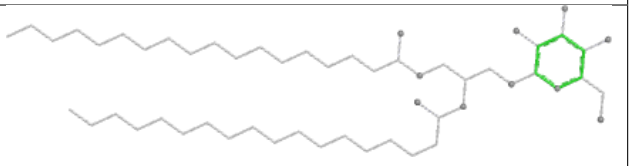
Ligand LMG b 849

Bond lengths

Bond angles

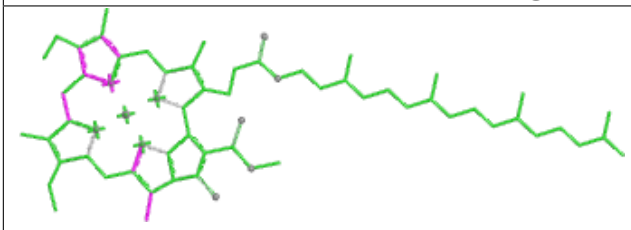


Torsions

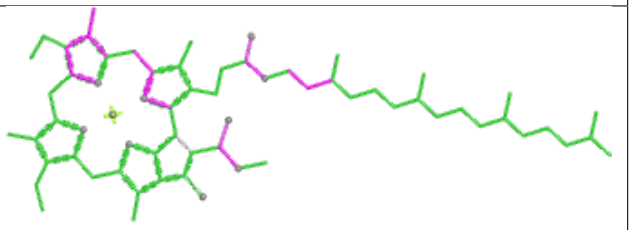


Rings

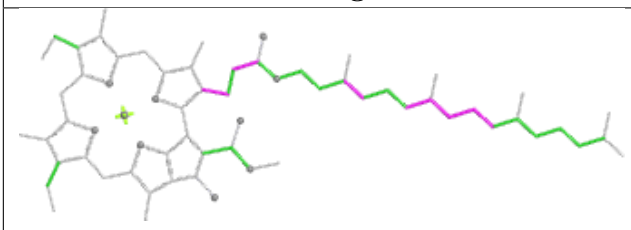
Ligand CLA b 831



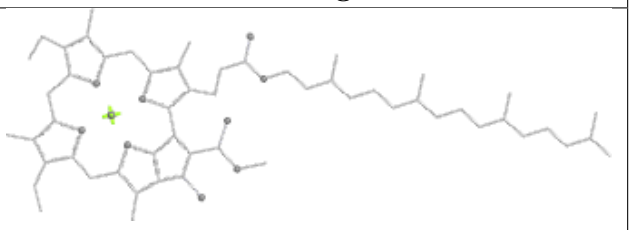
Bond lengths



Bond angles

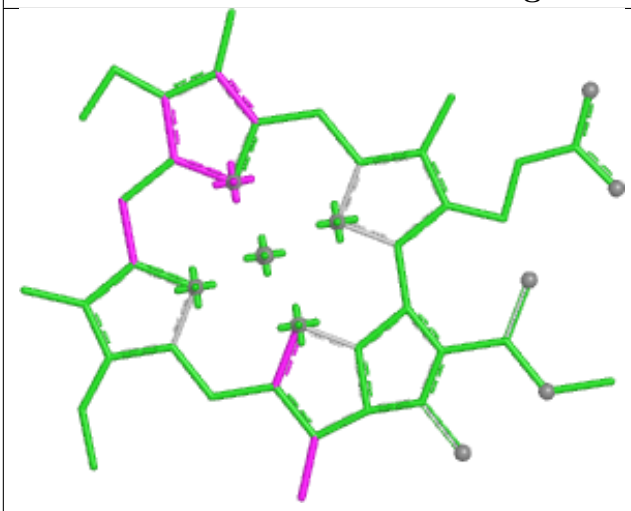


Torsions

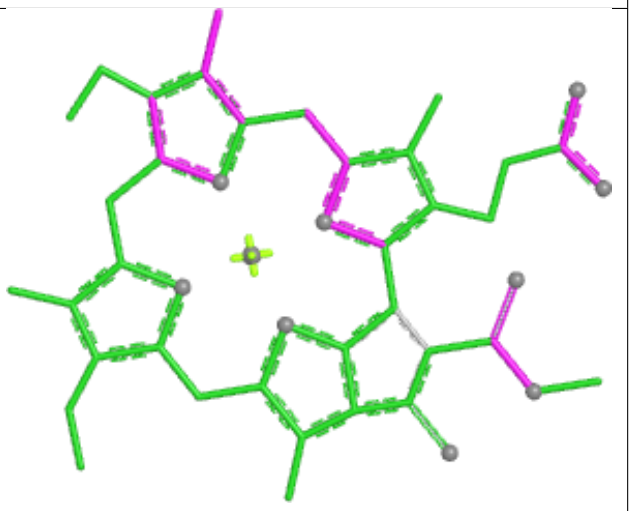


Rings

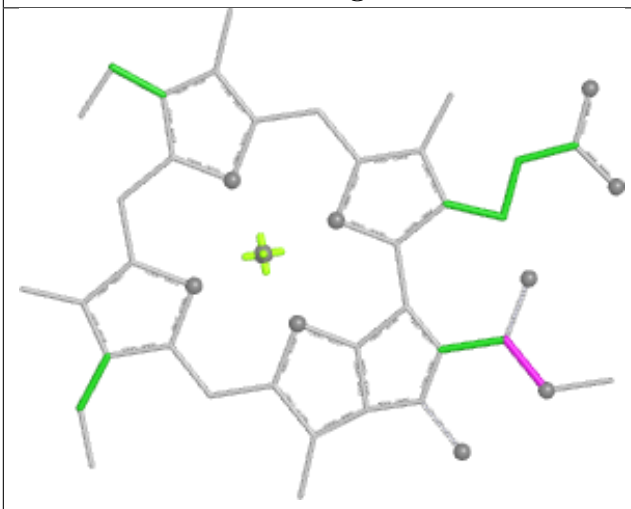
Ligand CLA A 808



Bond lengths



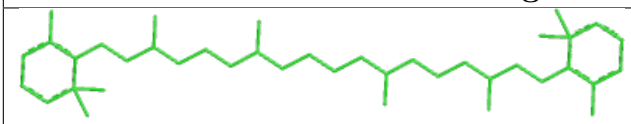
Bond angles



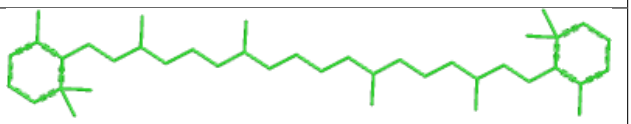
Torsions

Rings

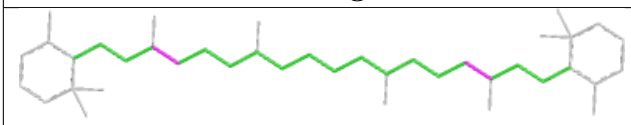
Ligand BCR O 844



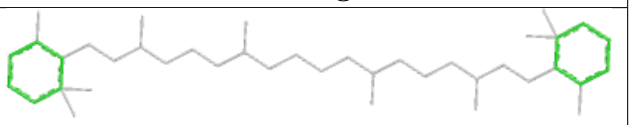
Bond lengths



Bond angles

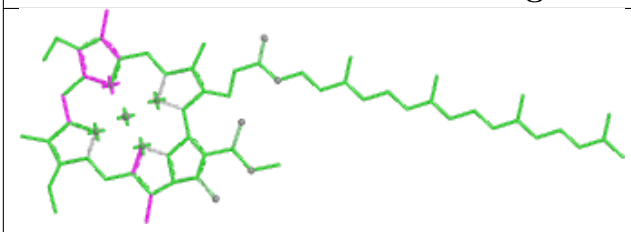


Torsions

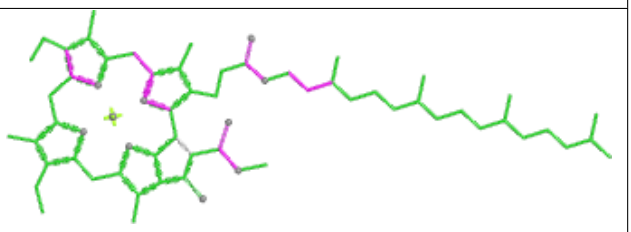


Rings

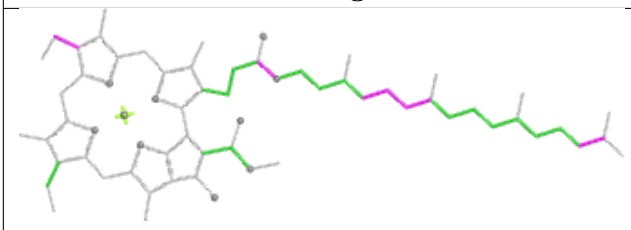
Ligand CLA F 201



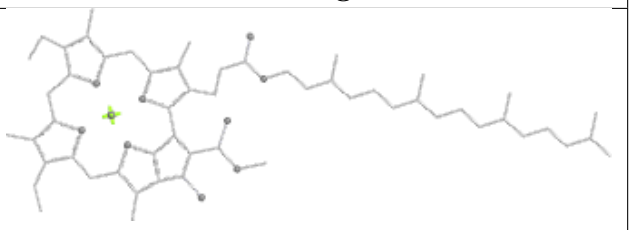
Bond lengths



Bond angles

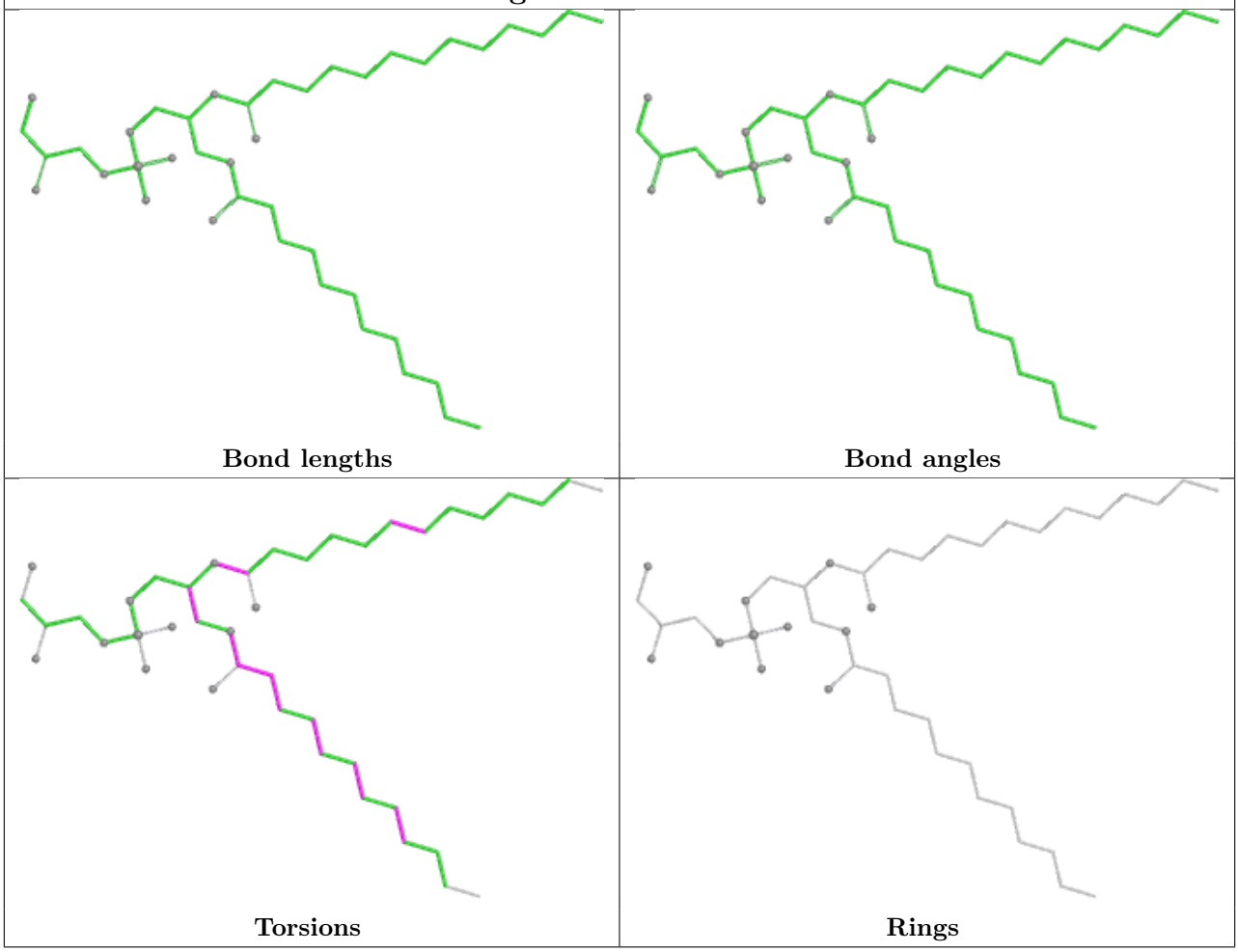


Torsions

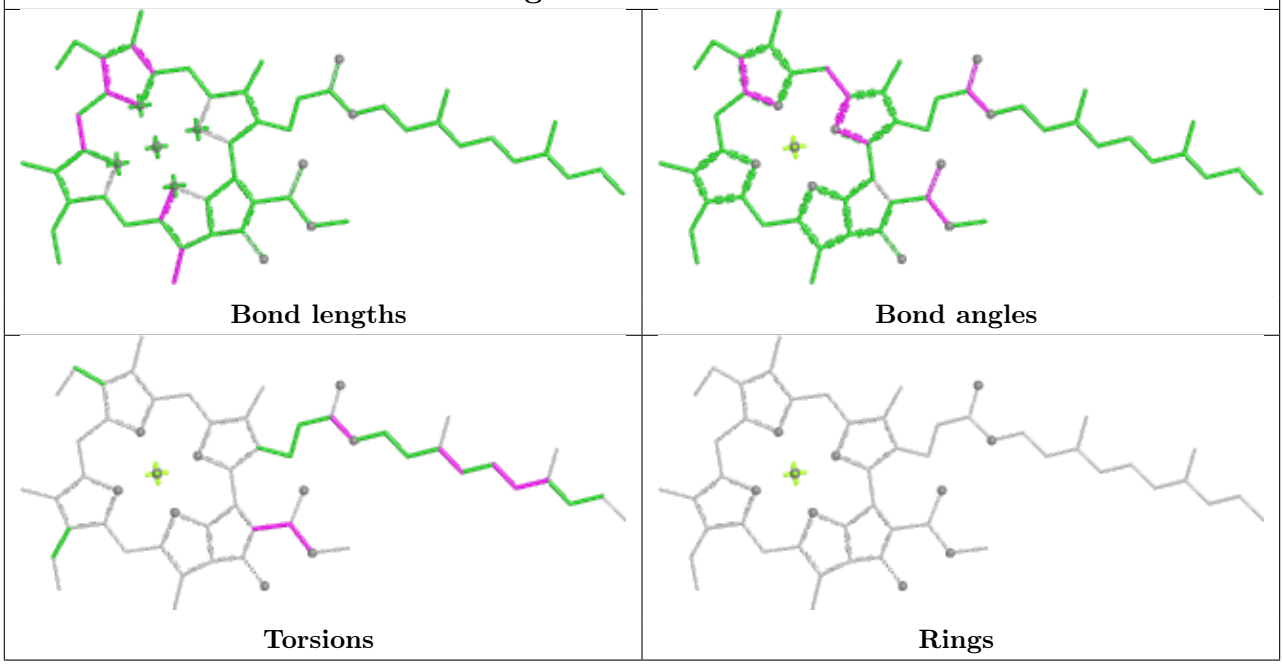


Rings

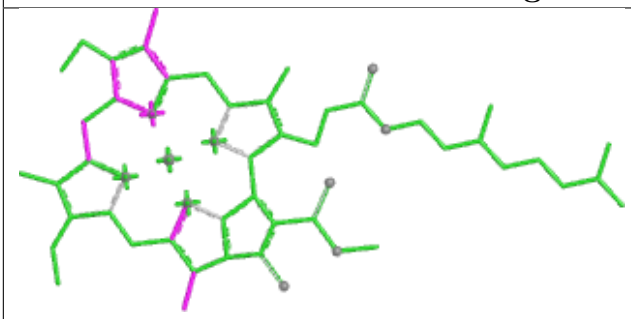
Ligand LHG a 851



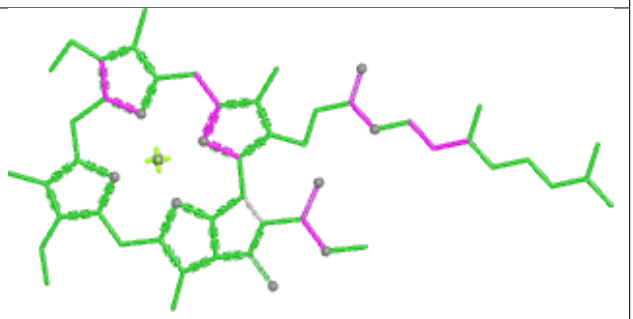
Ligand CLA A 811



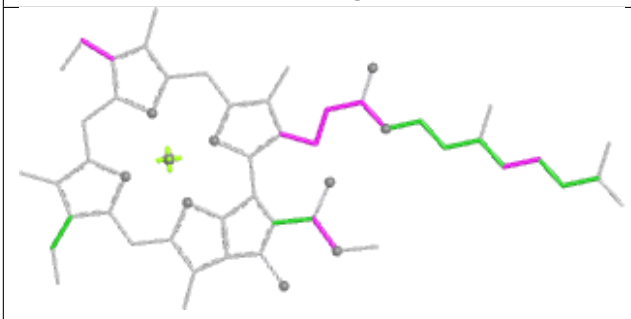
Ligand CLA O 819



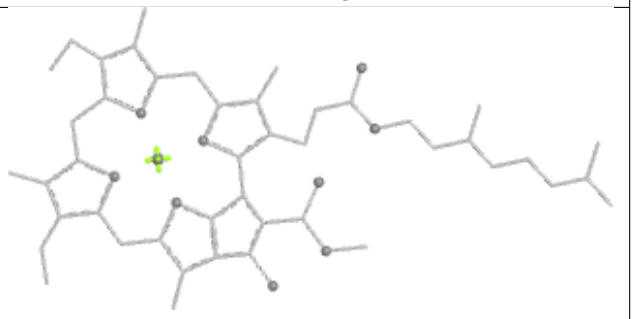
Bond lengths



Bond angles

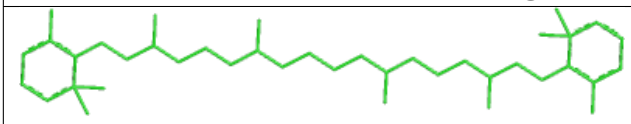


Torsions

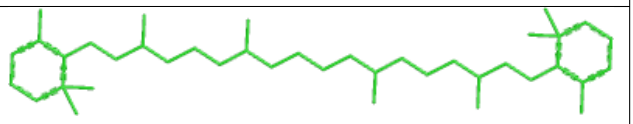


Rings

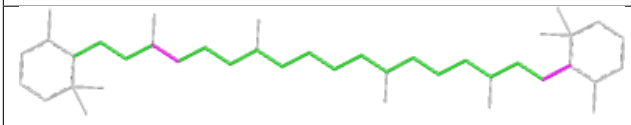
Ligand BCR O 843



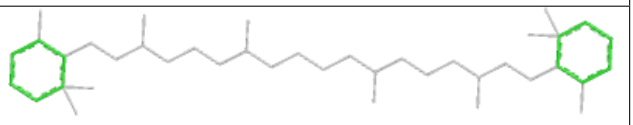
Bond lengths



Bond angles

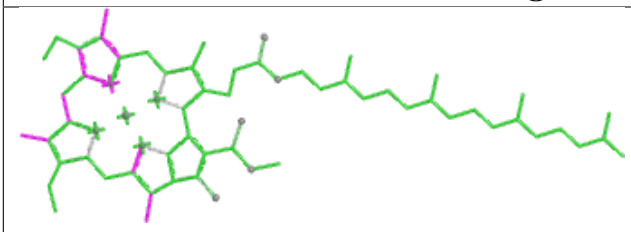


Torsions

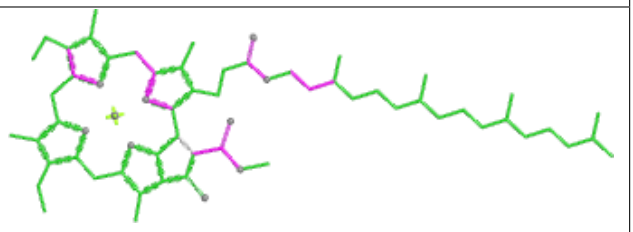


Rings

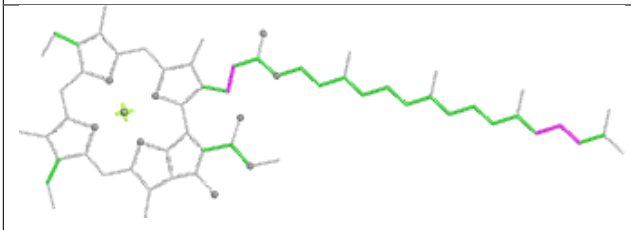
Ligand CLA b 803



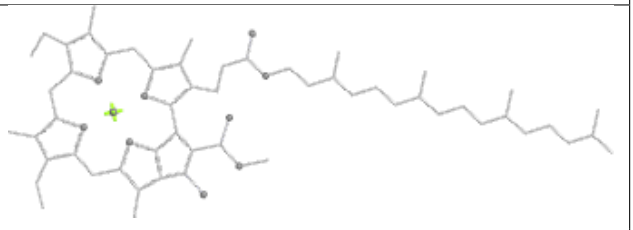
Bond lengths



Bond angles

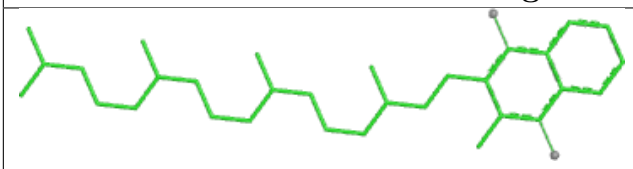


Torsions

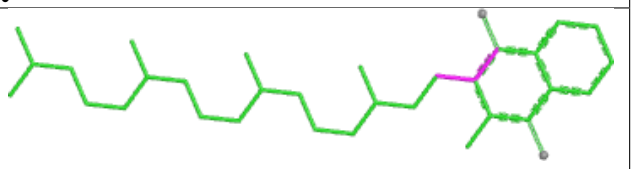


Rings

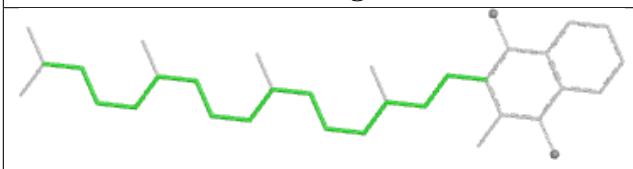
Ligand PQN B 841



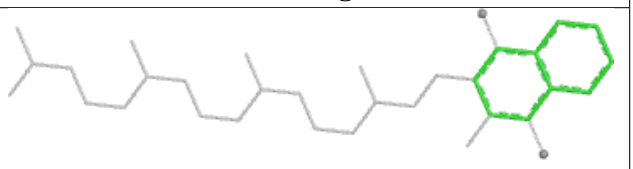
Bond lengths



Bond angles

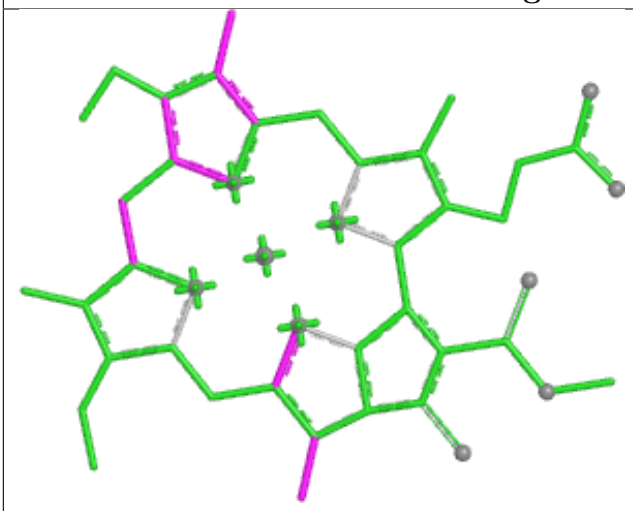


Torsions

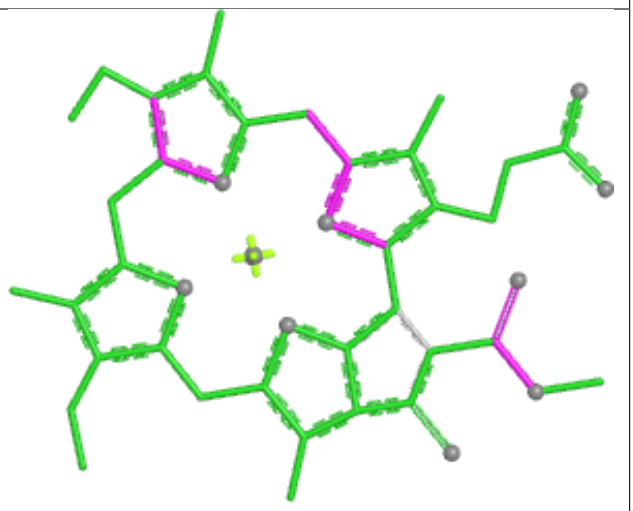


Rings

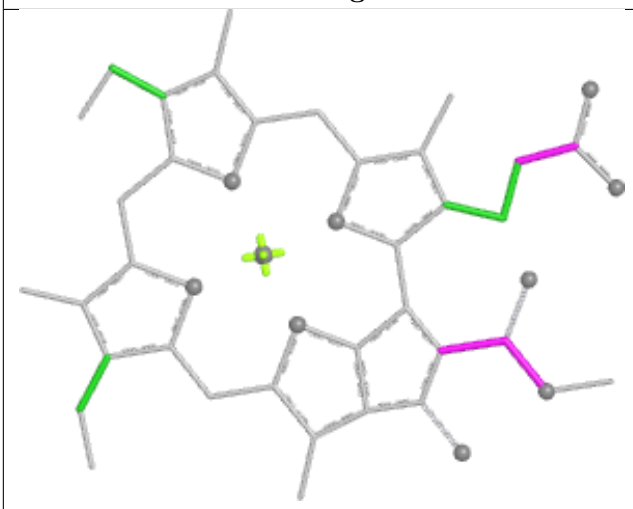
Ligand CLA N 816



Bond lengths



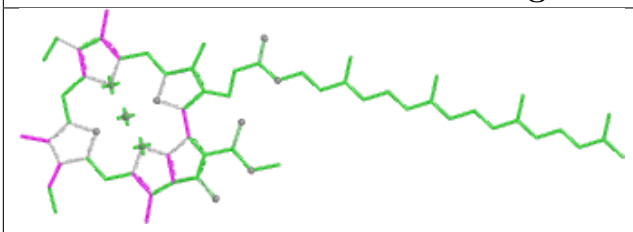
Bond angles



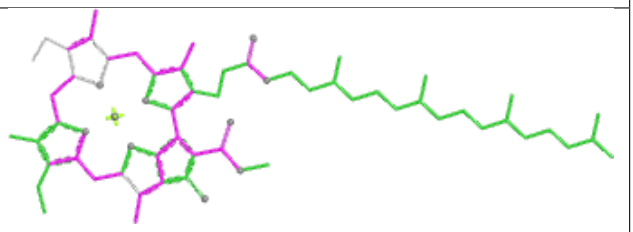
Torsions

Rings

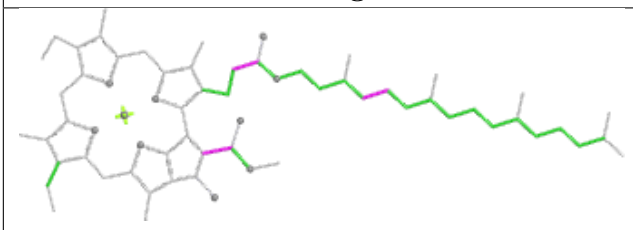
Ligand CL0 A 801



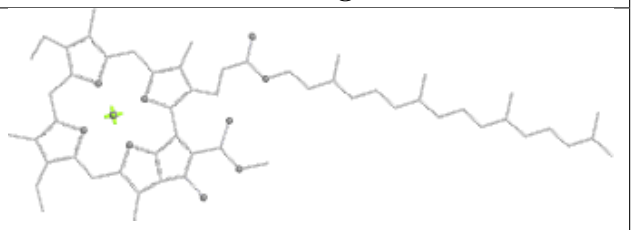
Bond lengths



Bond angles

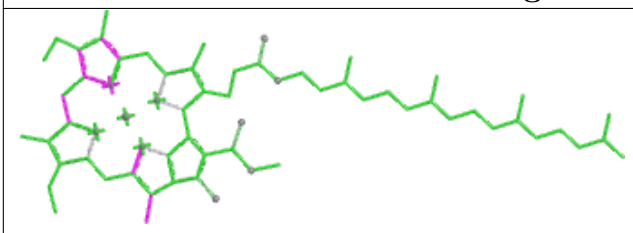


Torsions

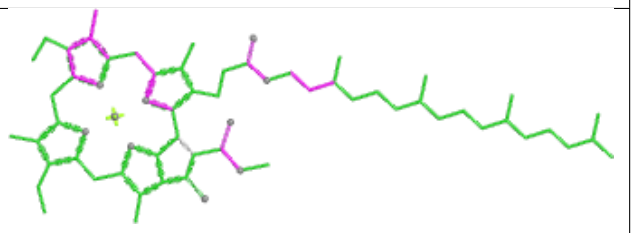


Rings

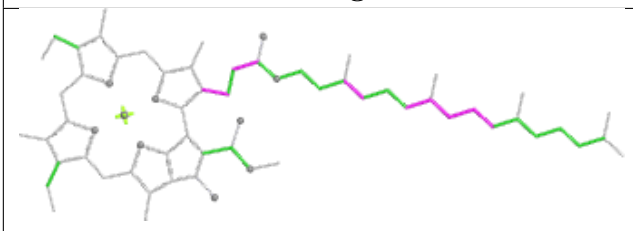
Ligand CLA O 831



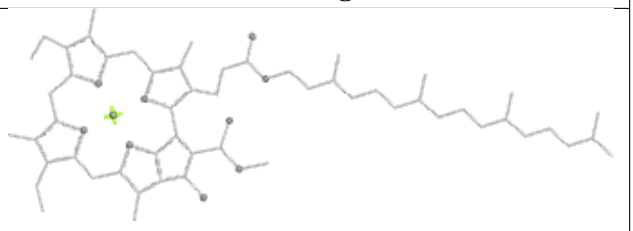
Bond lengths



Bond angles

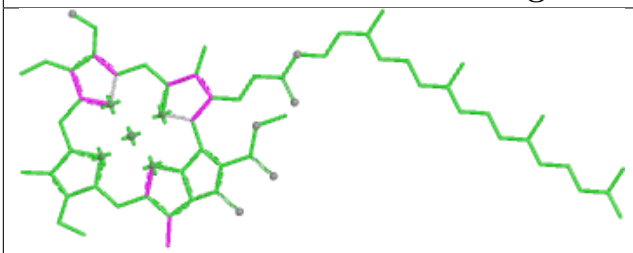


Torsions



Rings

Ligand F6C A 856



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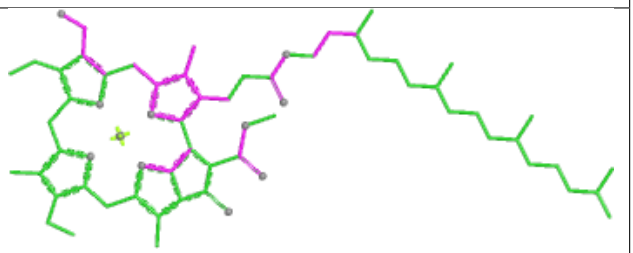
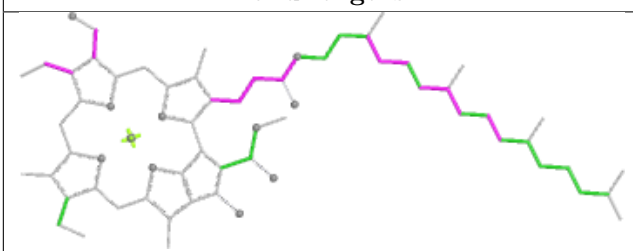
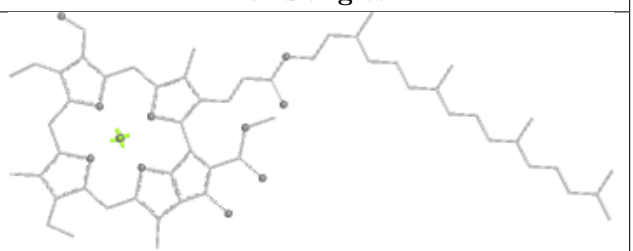


Bond angles

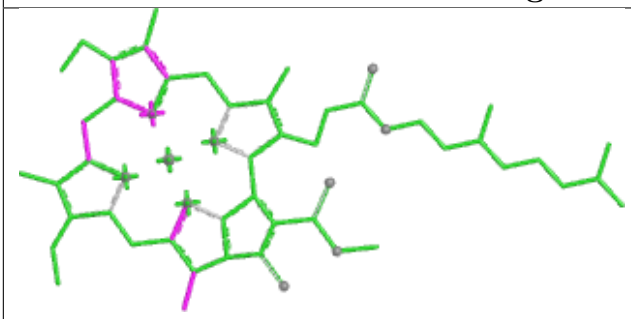


Torsions

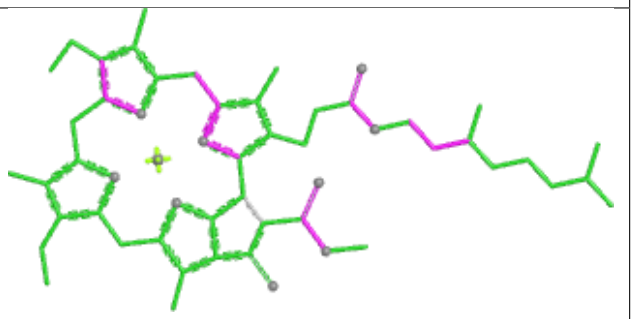


Rings

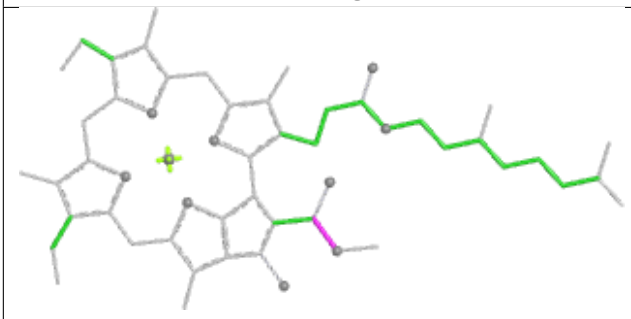
Ligand CLA Z 102



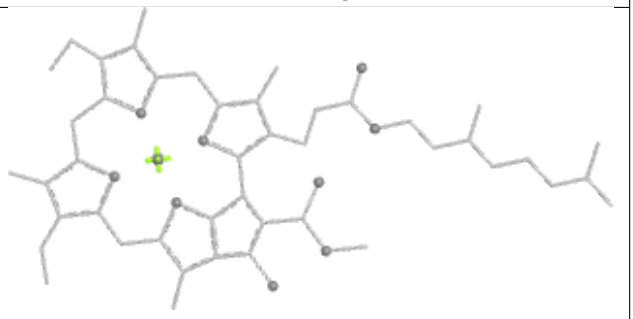
Bond lengths



Bond angles

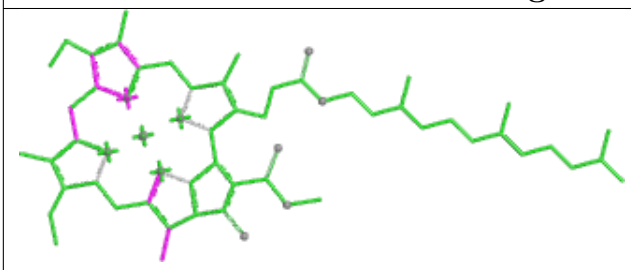


Torsions

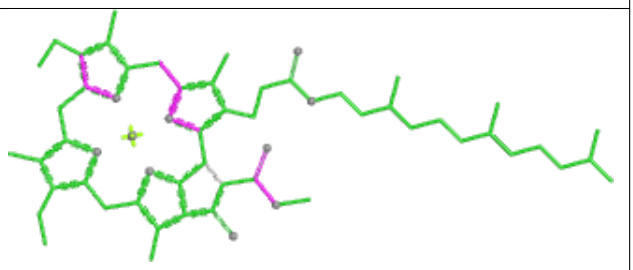


Rings

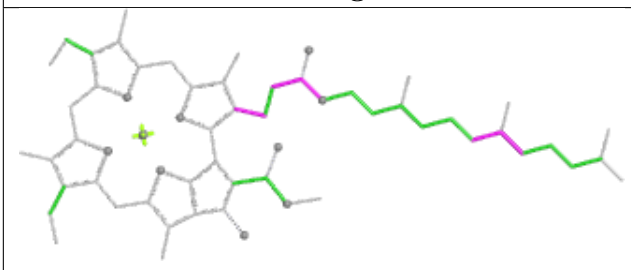
Ligand CLA a 805



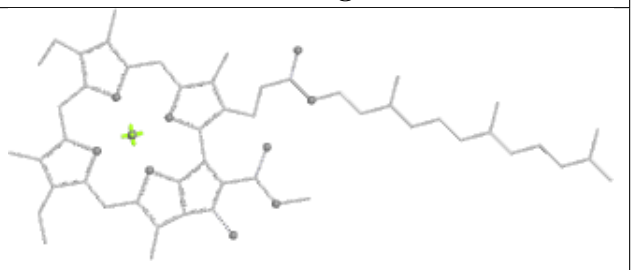
Bond lengths



Bond angles

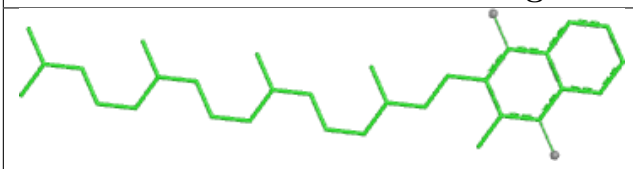


Torsions

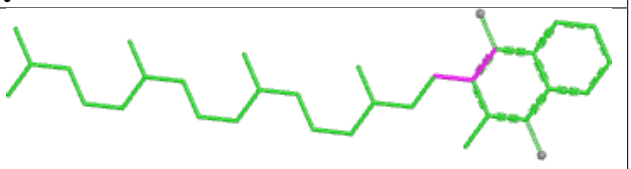


Rings

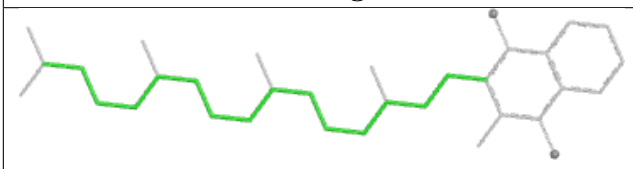
Ligand PQN a 843



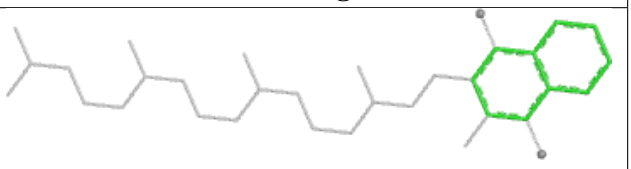
Bond lengths



Bond angles

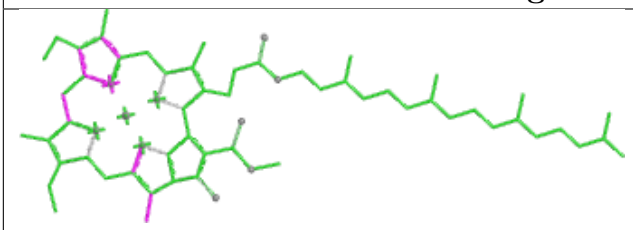


Torsions

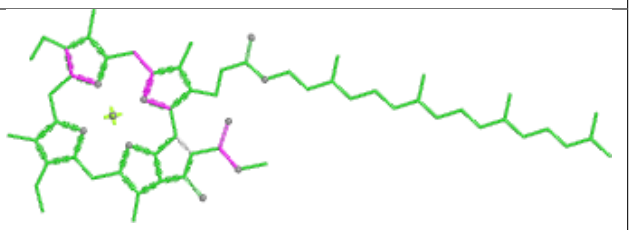


Rings

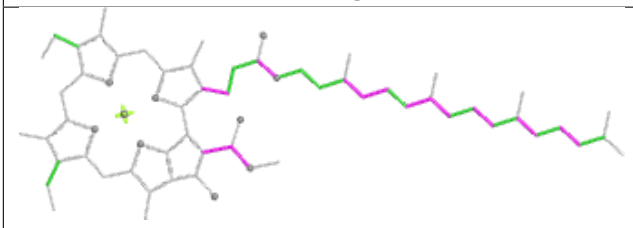
Ligand CLA b 806



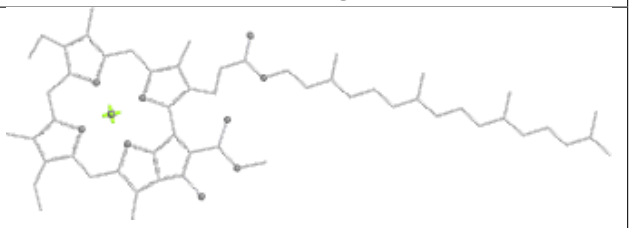
Bond lengths



Bond angles

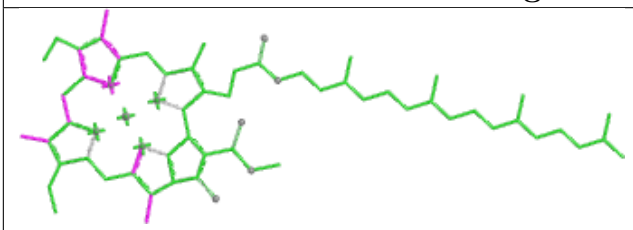


Torsions

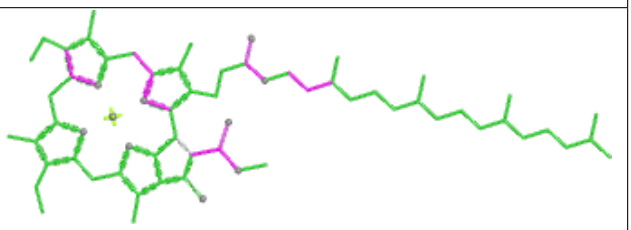


Rings

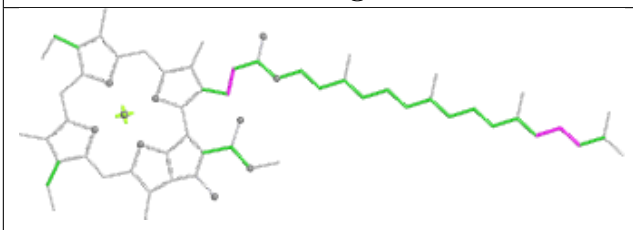
Ligand CLA O 803



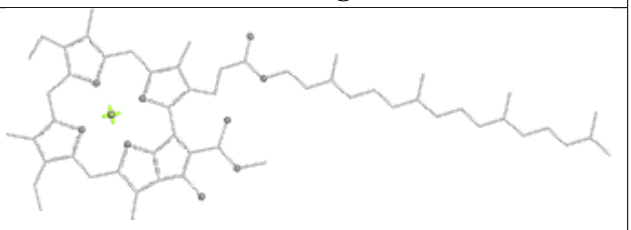
Bond lengths



Bond angles

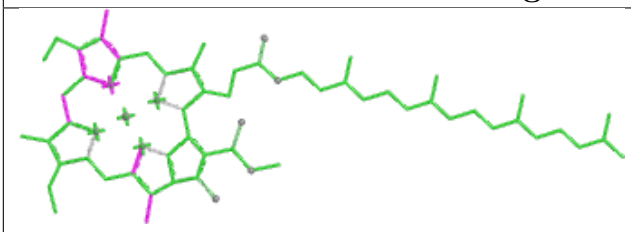


Torsions

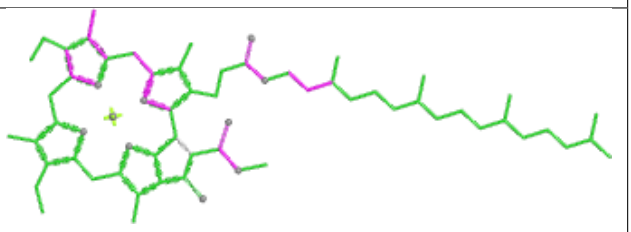


Rings

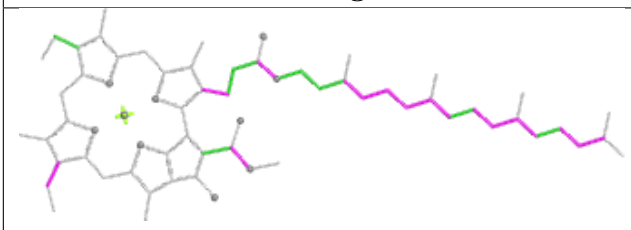
Ligand CLA N 820



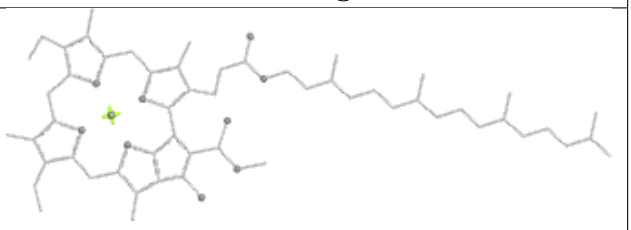
Bond lengths



Bond angles

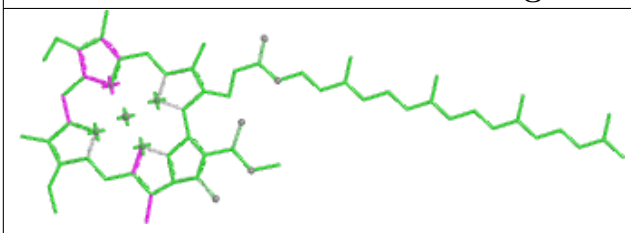


Torsions

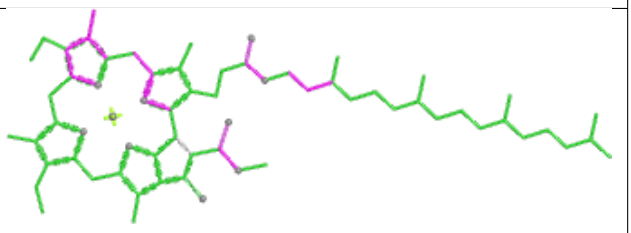


Rings

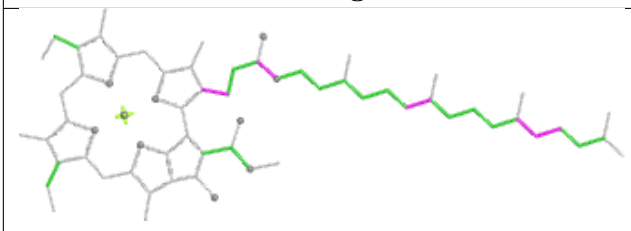
Ligand CLA B 836



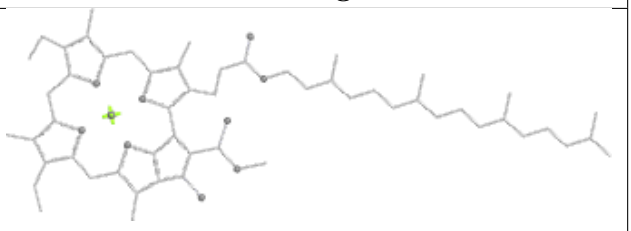
Bond lengths



Bond angles

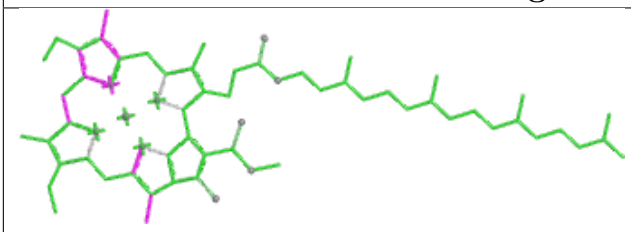


Torsions

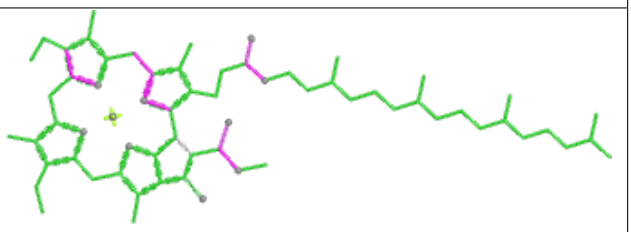


Rings

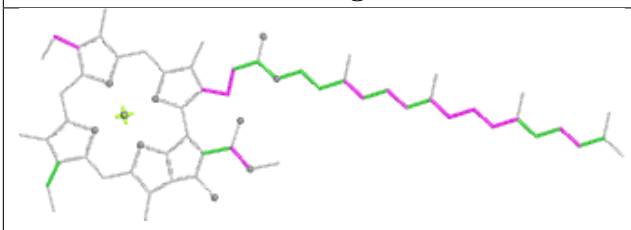
Ligand CLA a 812



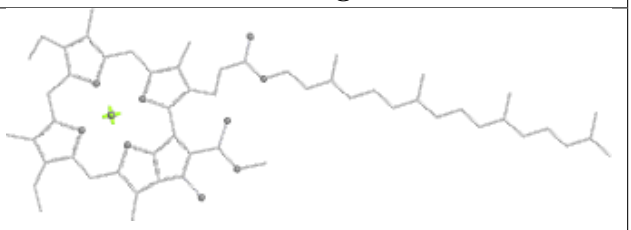
Bond lengths



Bond angles

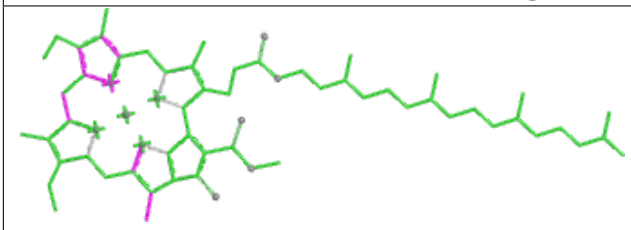


Torsions

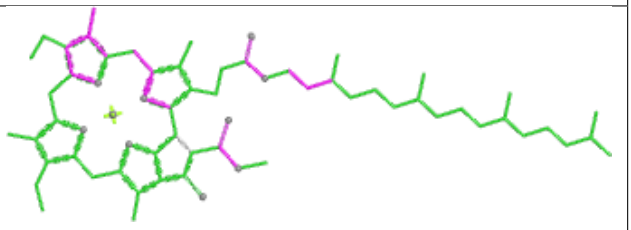


Rings

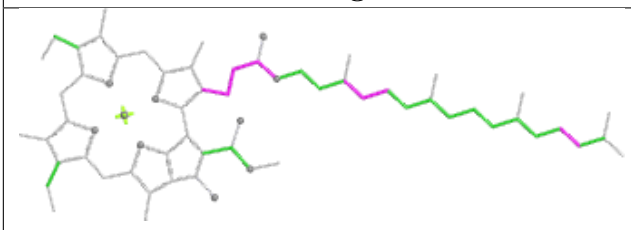
Ligand CLA O 805



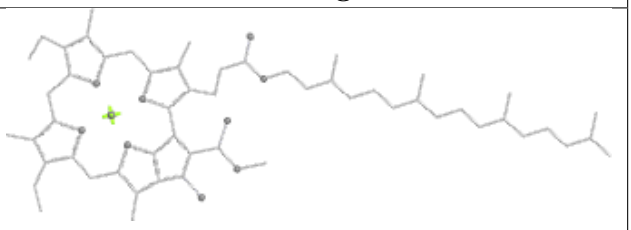
Bond lengths



Bond angles

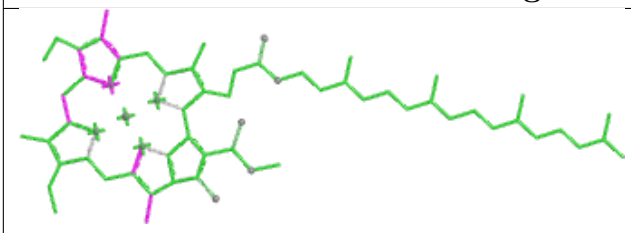


Torsions

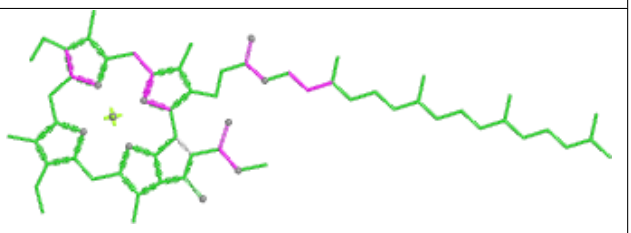


Rings

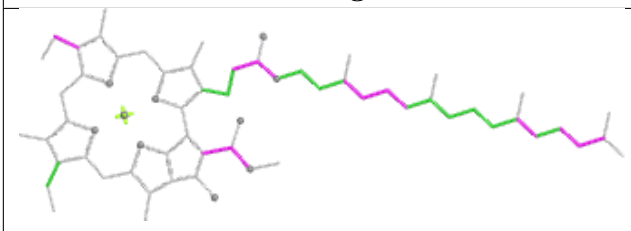
Ligand CLA N 807



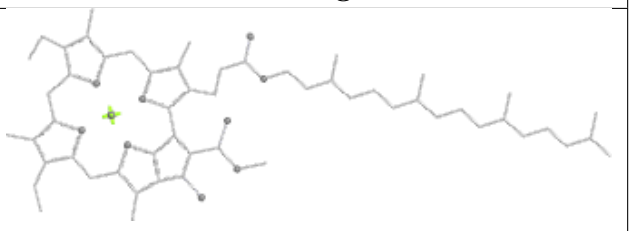
Bond lengths



Bond angles

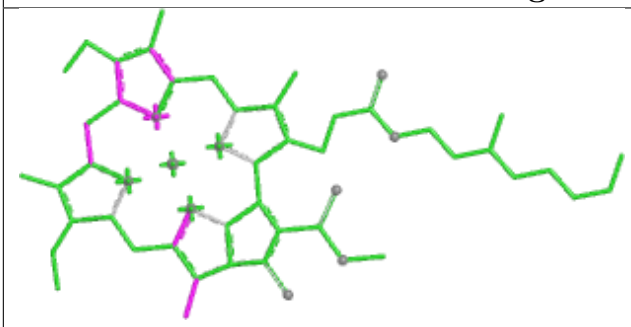


Torsions

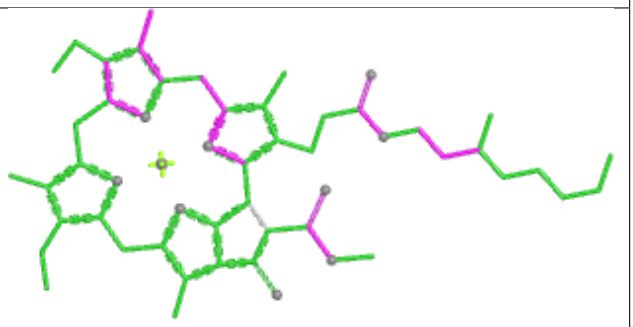


Rings

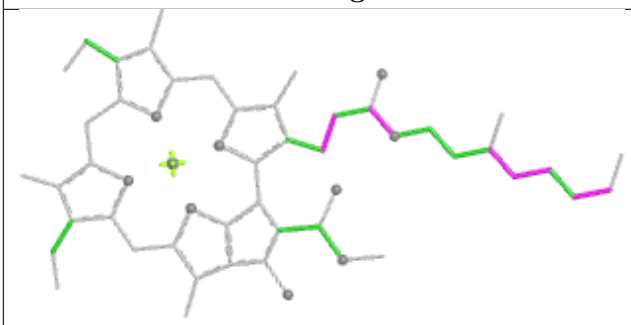
Ligand CLA a 813



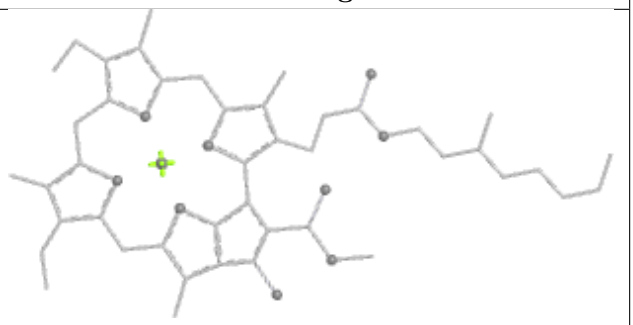
Bond lengths



Bond angles

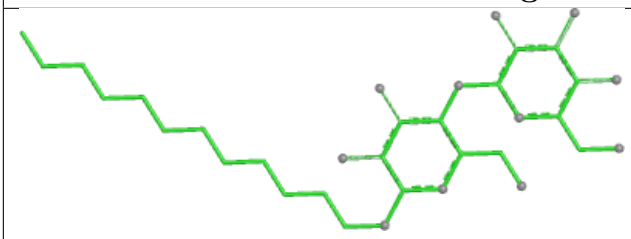


Torsions

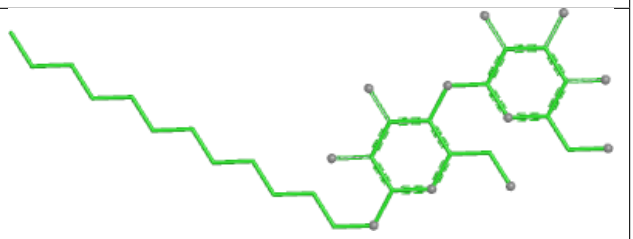


Rings

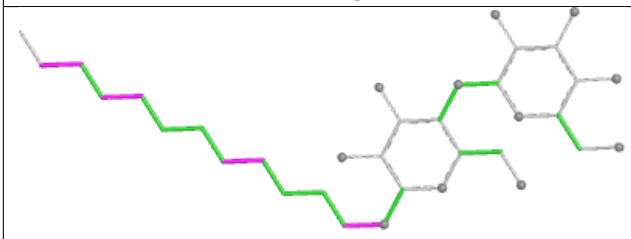
Ligand LMT A 854



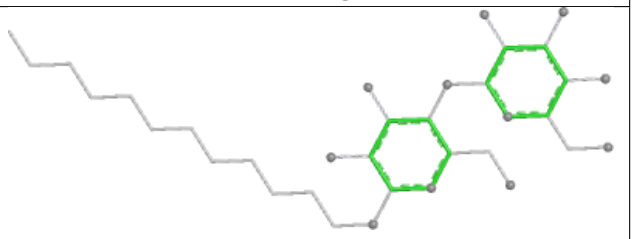
Bond lengths



Bond angles

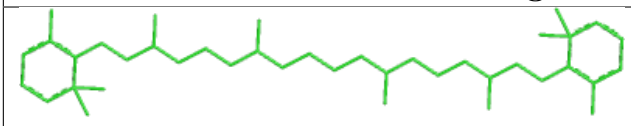


Torsions

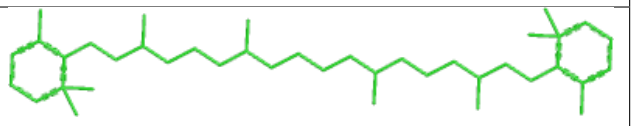


Rings

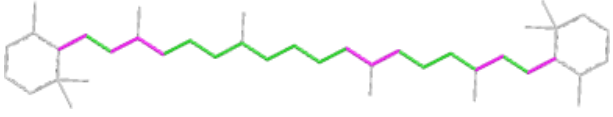
Ligand BCR a 850



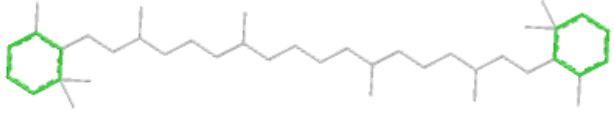
Bond lengths



Bond angles

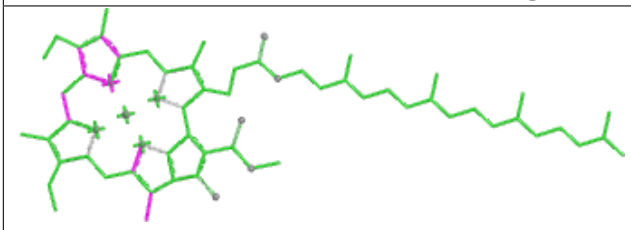


Torsions

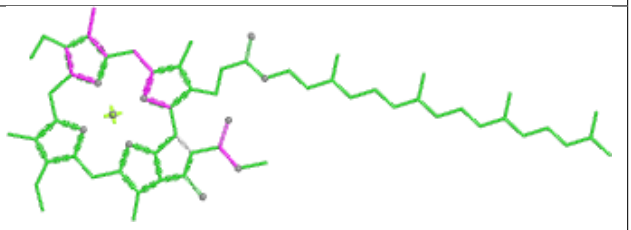


Rings

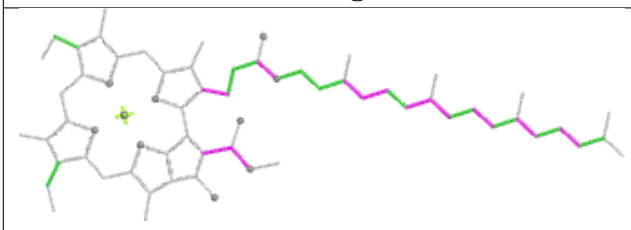
Ligand CLA O 806



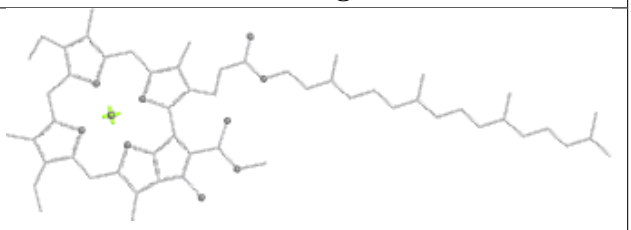
Bond lengths



Bond angles



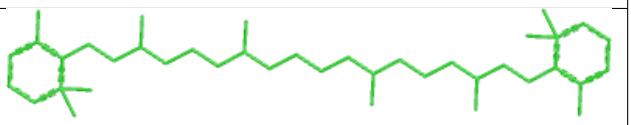
Torsions



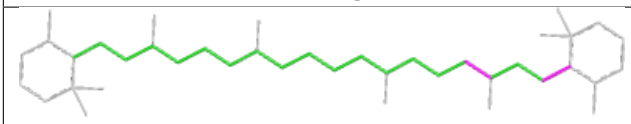
Rings

Ligand BCR T 102

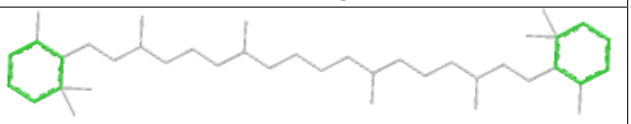
Bond lengths



Bond angles

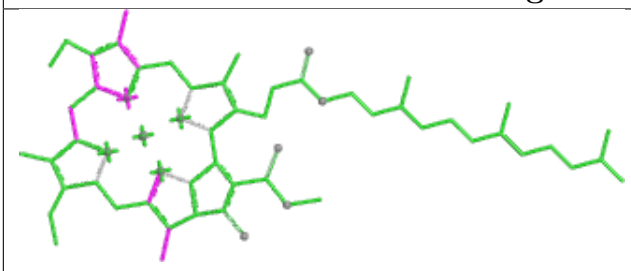


Torsions



Rings

Ligand CLA L 203



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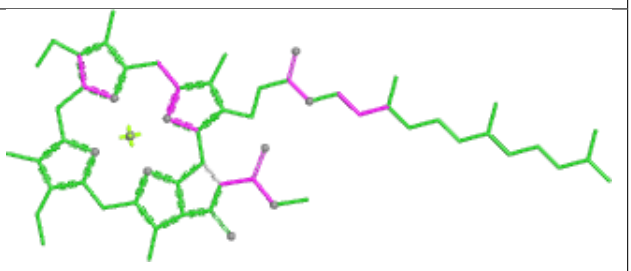
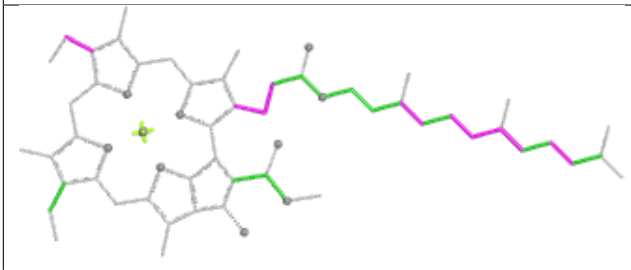
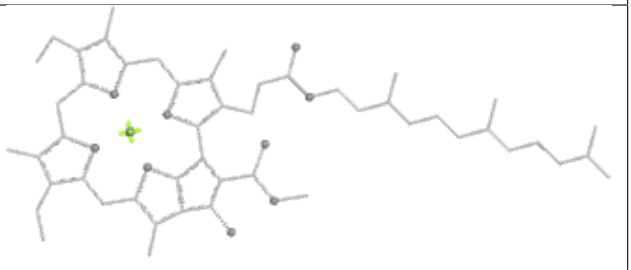


Bond angles

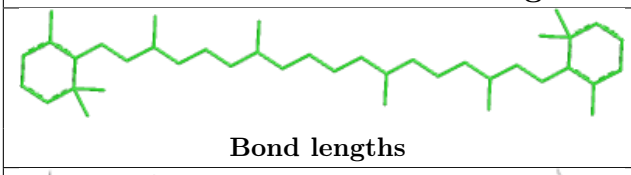


Torsions

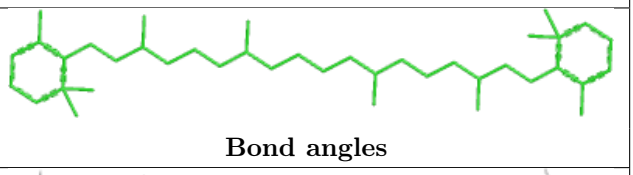


Rings

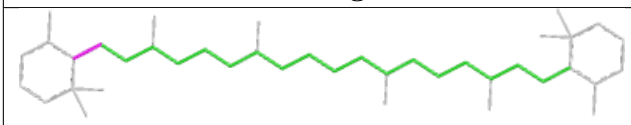
Ligand BCR L 210



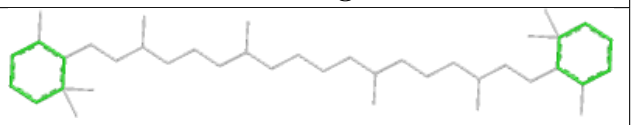
Bond lengths



Bond angles

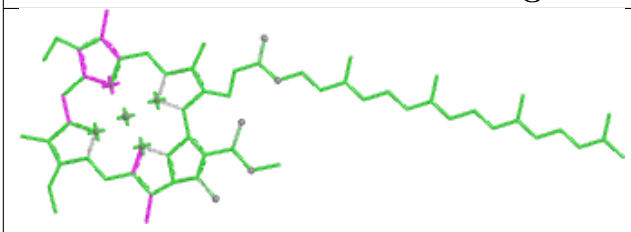


Torsions

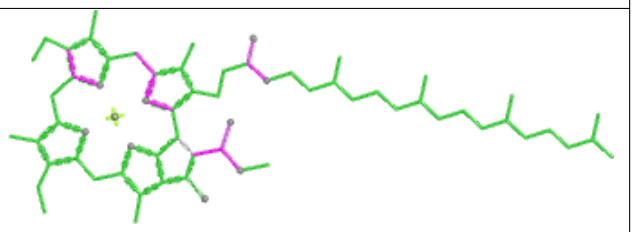


Rings

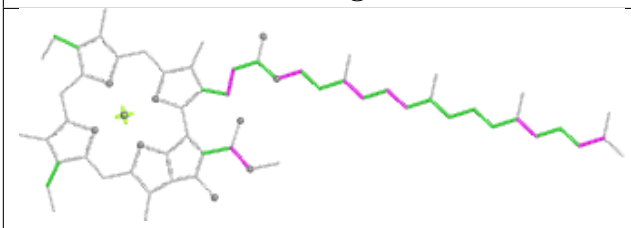
Ligand CLA A 835



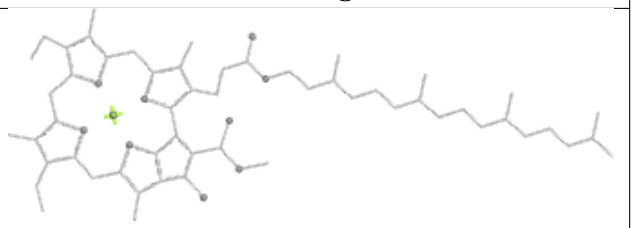
Bond lengths



Bond angles

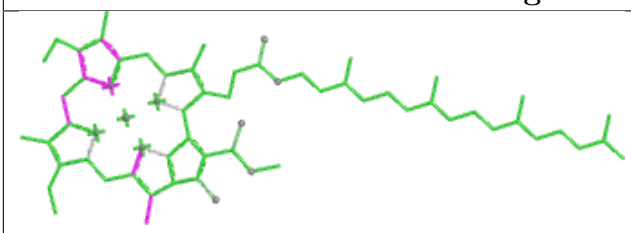


Torsions

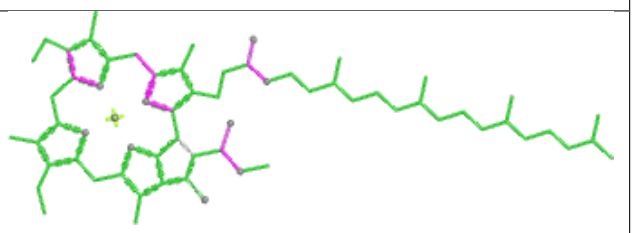


Rings

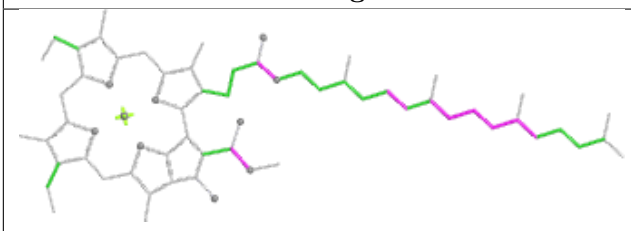
Ligand CLA O 813



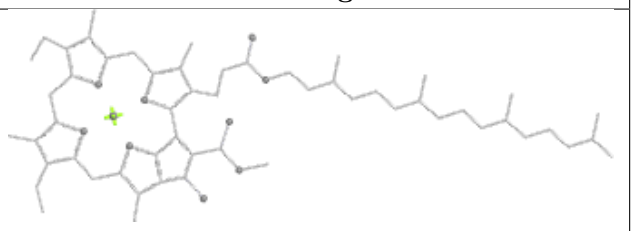
Bond lengths



Bond angles

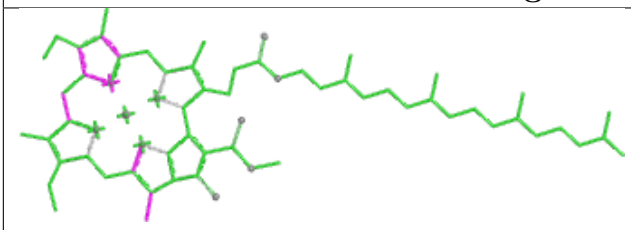


Torsions

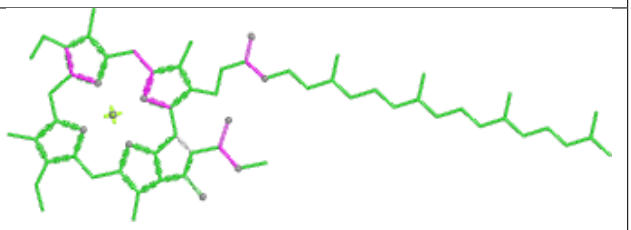


Rings

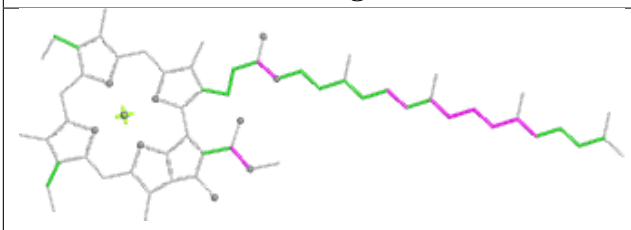
Ligand CLA B 813



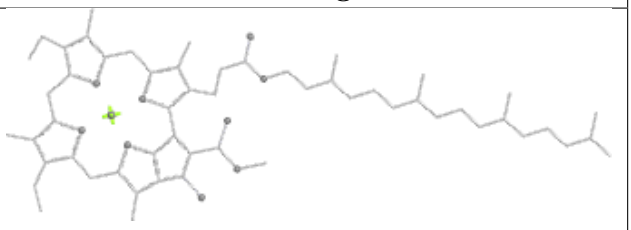
Bond lengths



Bond angles

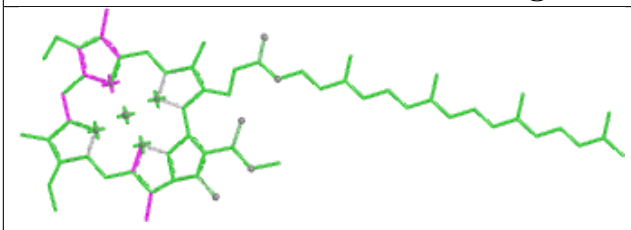


Torsions

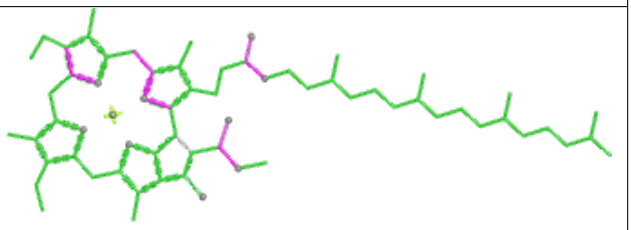


Rings

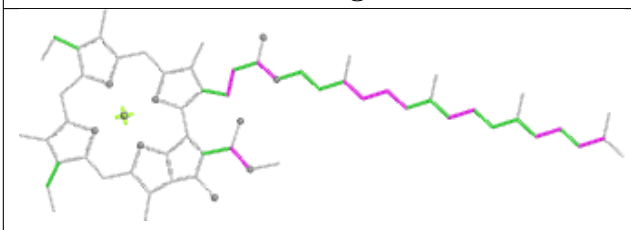
Ligand CLA a 822



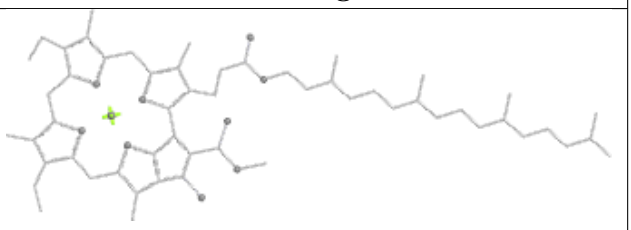
Bond lengths



Bond angles

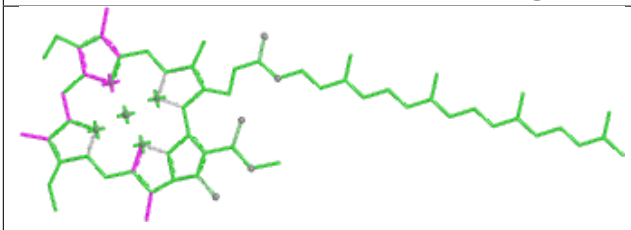


Torsions

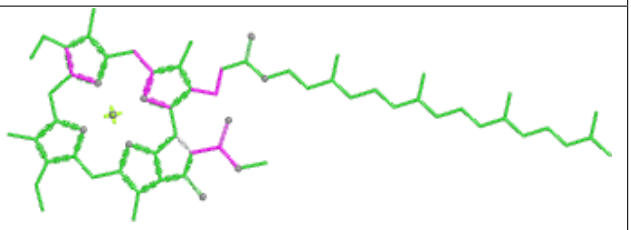


Rings

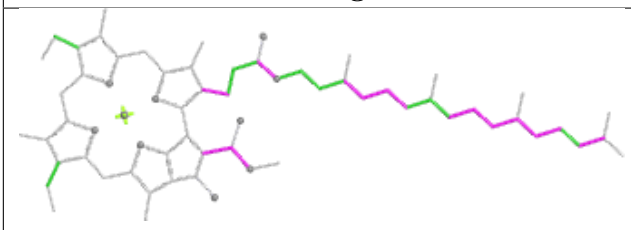
Ligand CLA a 818



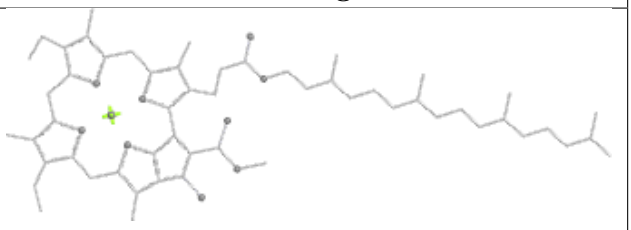
Bond lengths



Bond angles

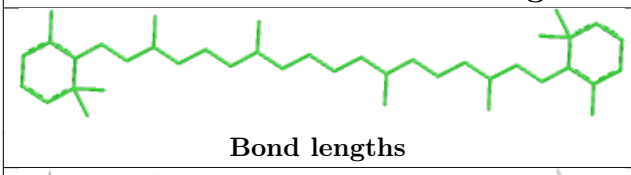


Torsions

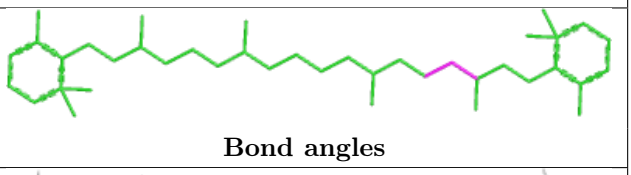


Rings

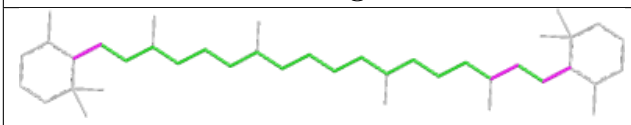
Ligand BCR a 847



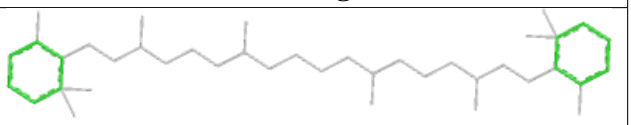
Bond lengths



Bond angles

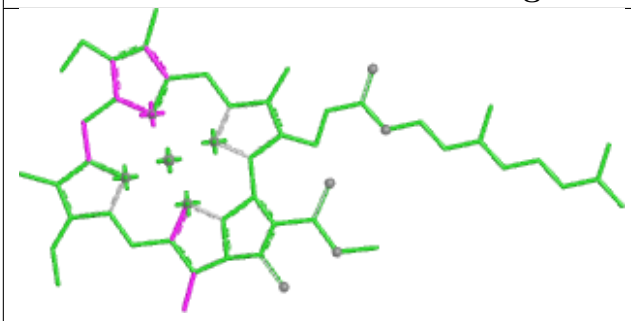


Torsions

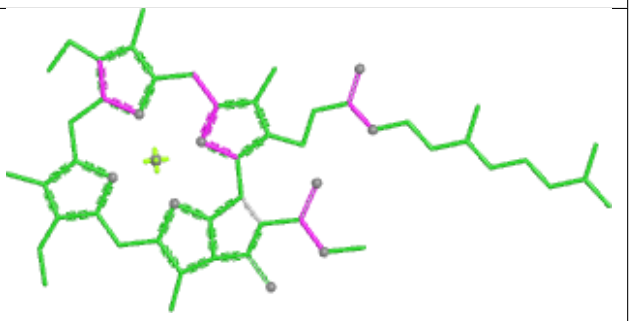


Rings

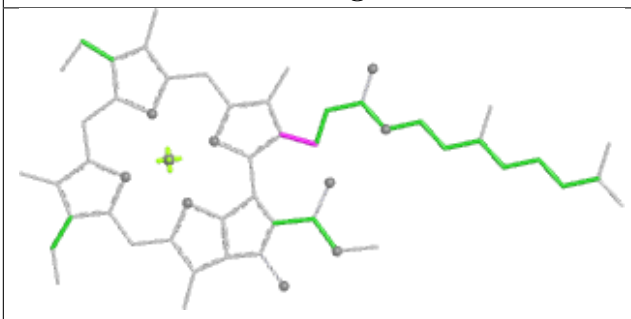
Ligand CLA N 815



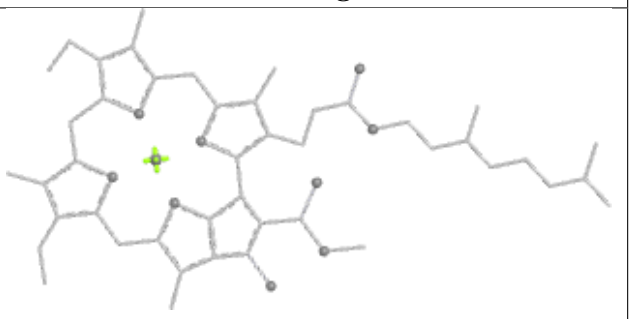
Bond lengths



Bond angles

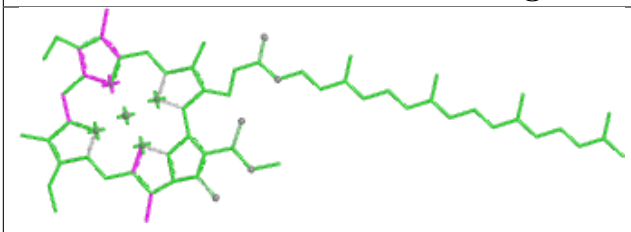


Torsions



Rings

Ligand CLA A 820



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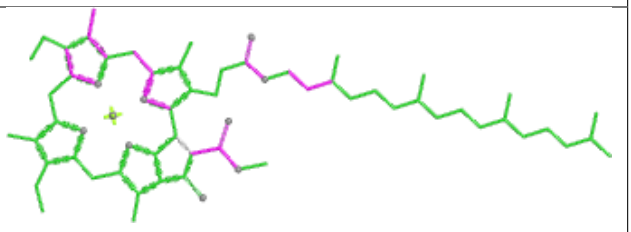
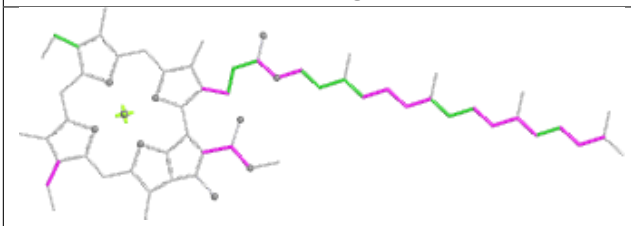
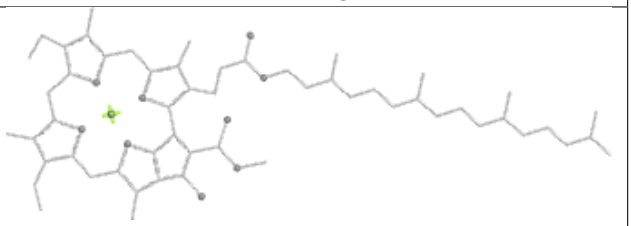


Bond angles

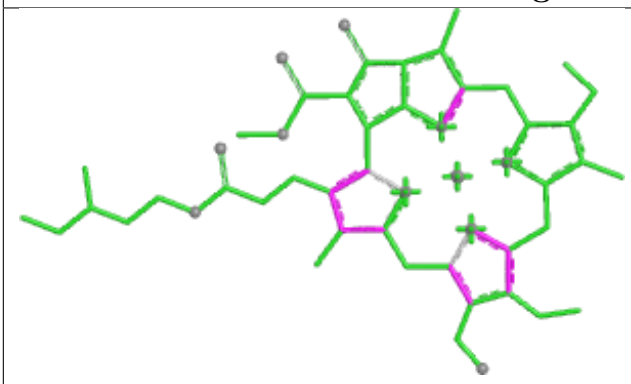


Torsions

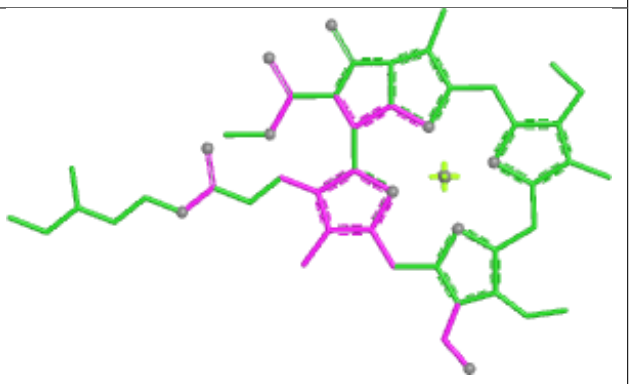


Rings

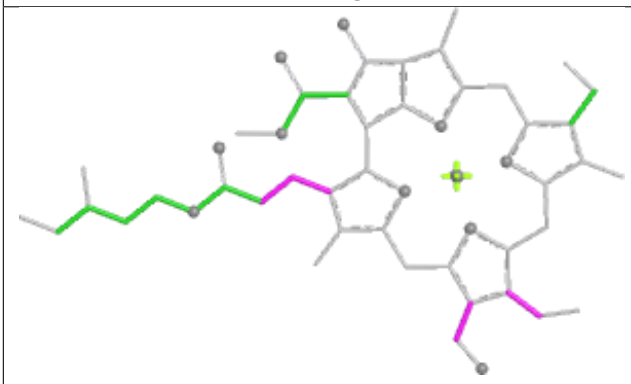
Ligand F6C a 824



Bond lengths



Bond angles



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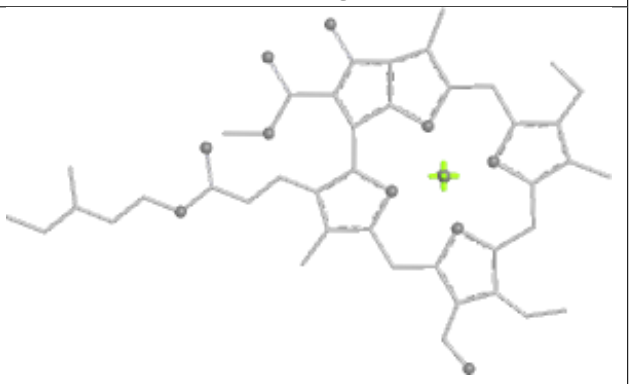
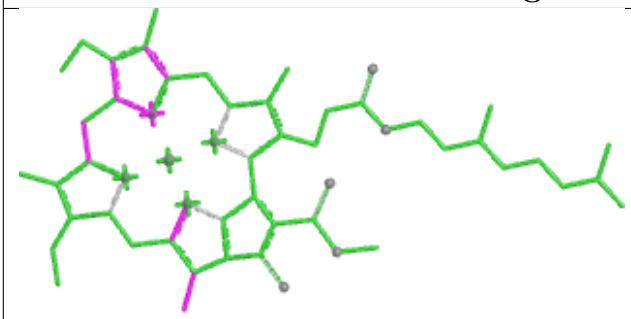


Rings

Ligand CLA A 827



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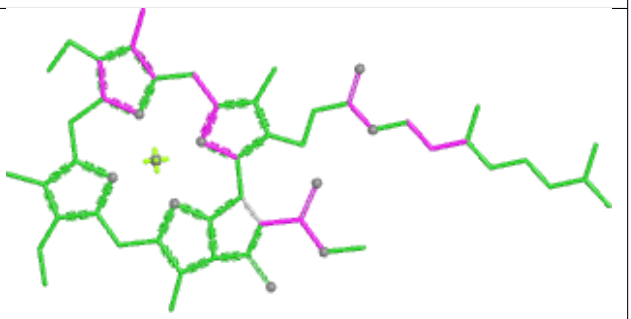
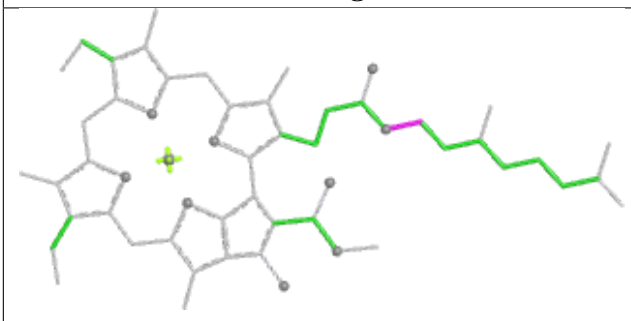
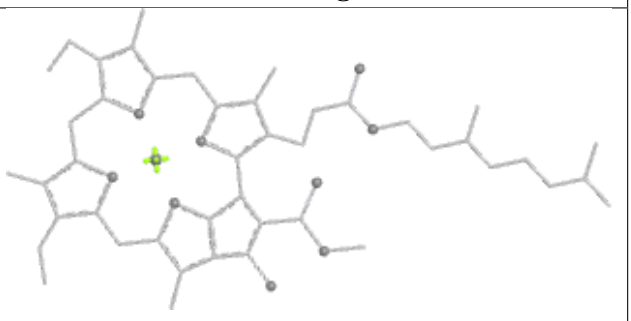


Bond angles

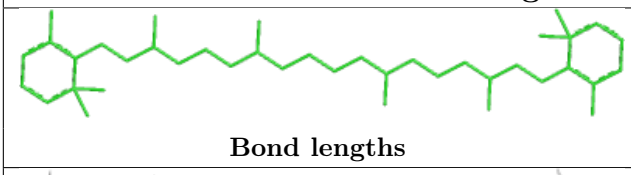


Torsions

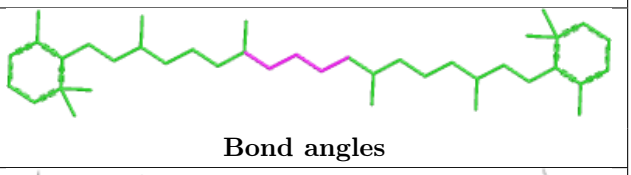


Rings

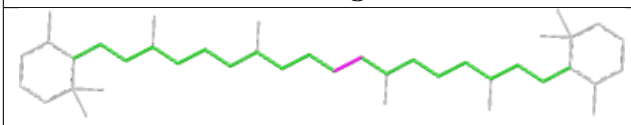
Ligand BCR O 846



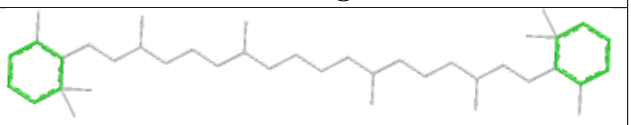
Bond lengths



Bond angles

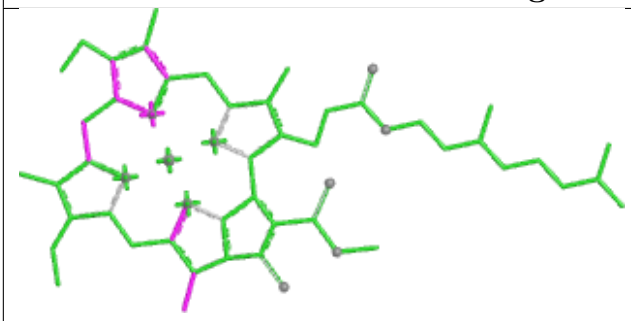


Torsions

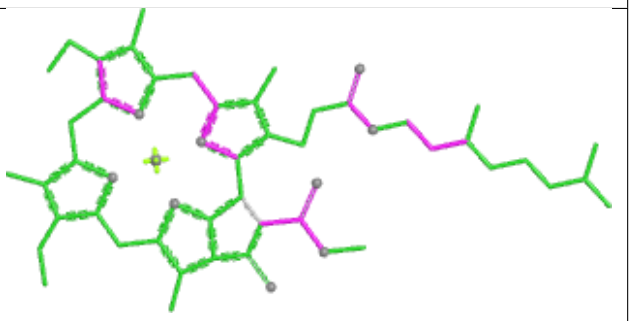


Rings

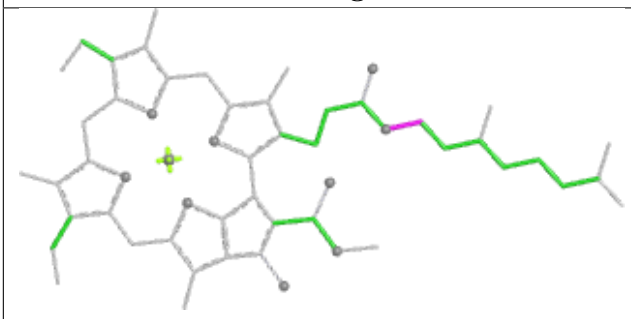
Ligand CLA a 827



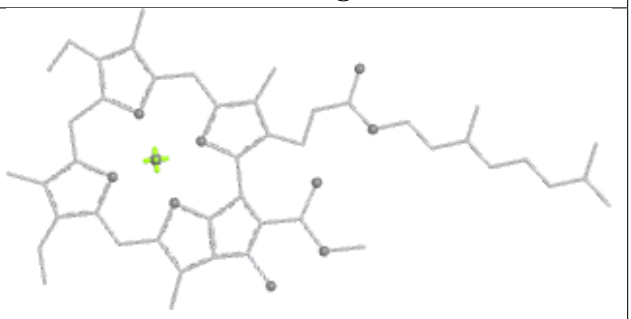
Bond lengths



Bond angles

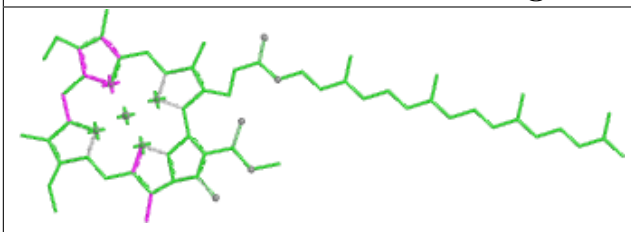


Torsions

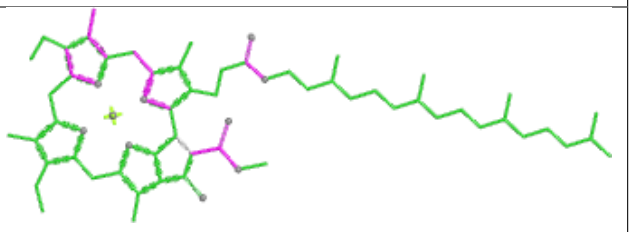


Rings

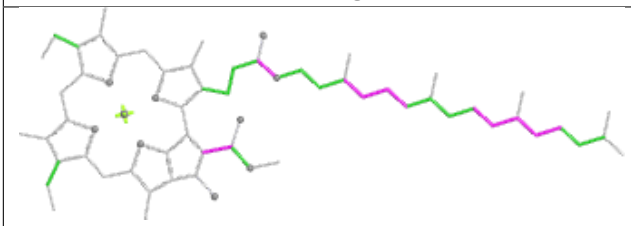
Ligand CLA b 824



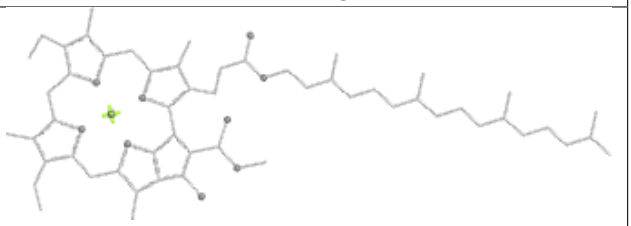
Bond lengths



Bond angles

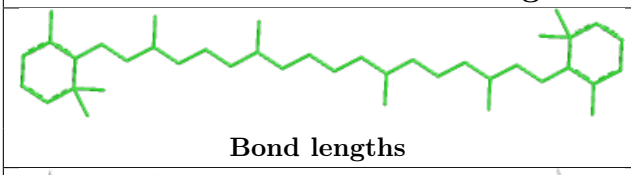


Torsions



Rings

Ligand BCR O 845



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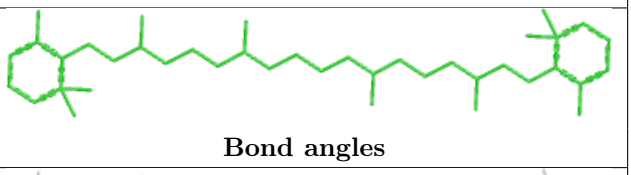
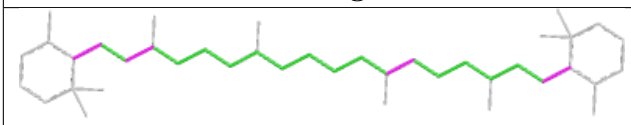


Bond angles



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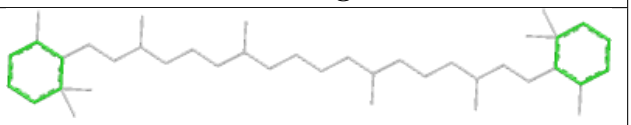
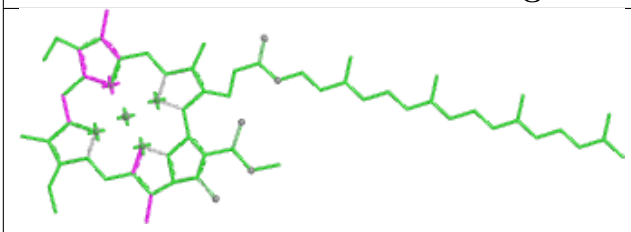
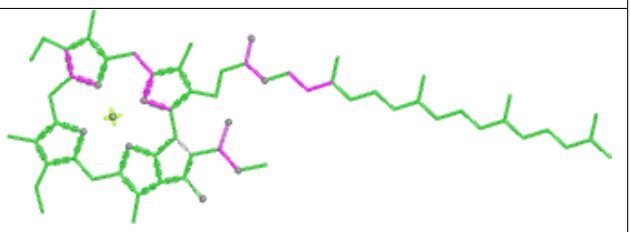


Rings

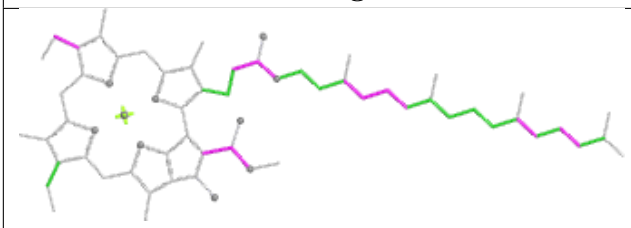
Ligand CLA A 807



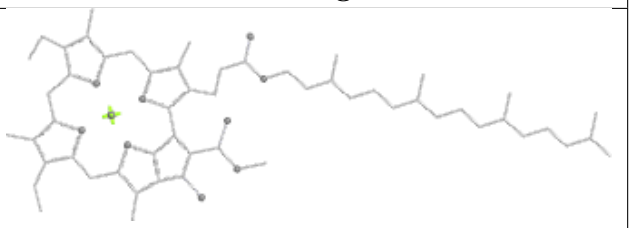
Bond lengths



Bond angles

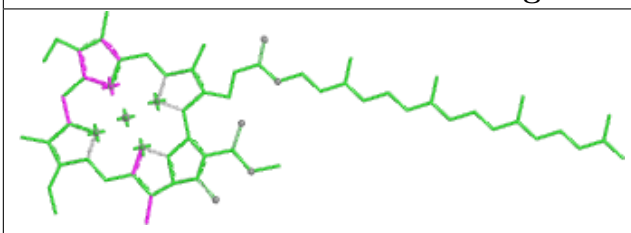


Torsions

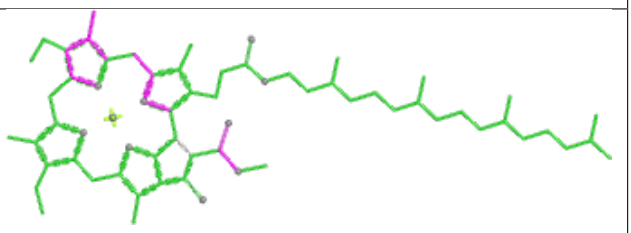


Rings

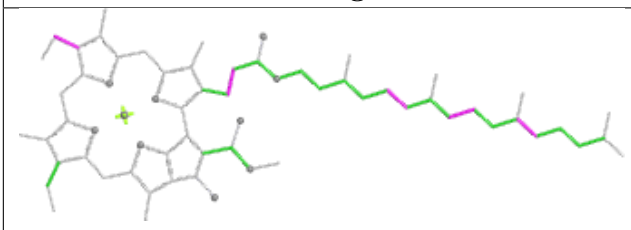
Ligand CLA N 830



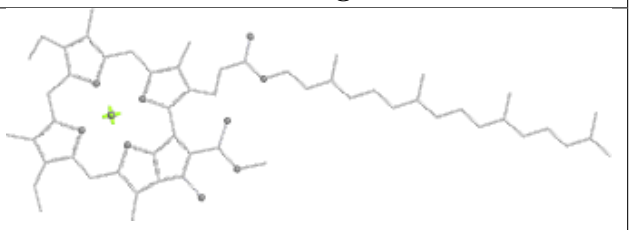
Bond lengths



Bond angles

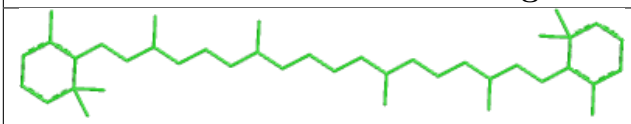


Torsions

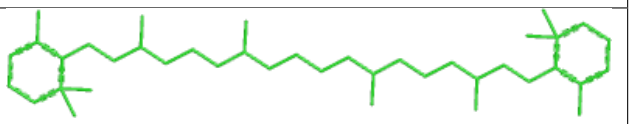


Rings

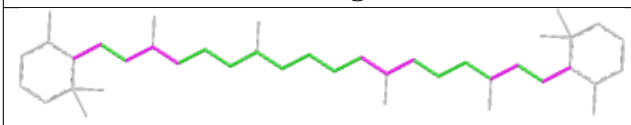
Ligand BCR N 850



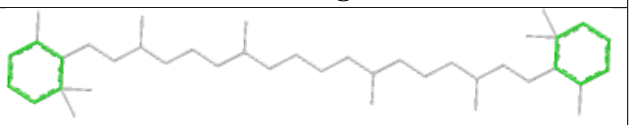
Bond lengths



Bond angles

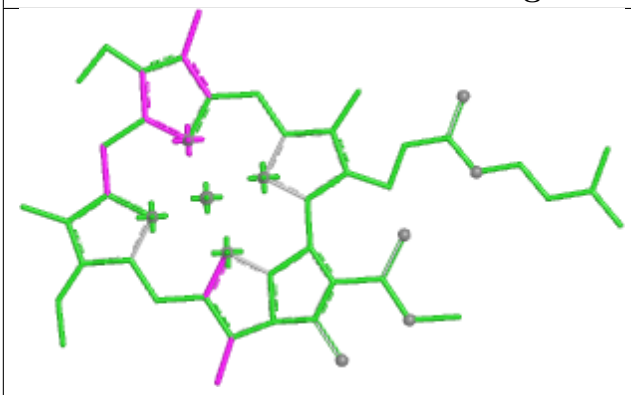


Torsions

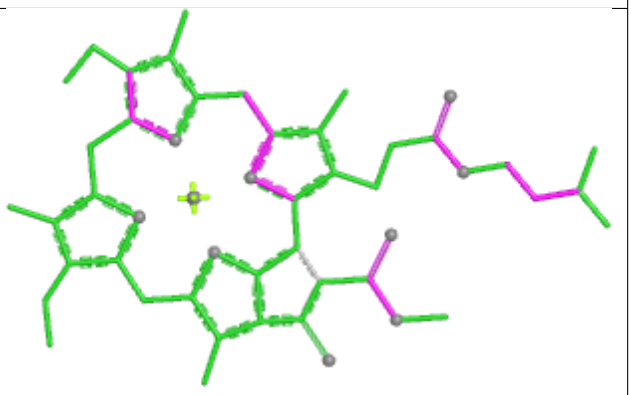


Rings

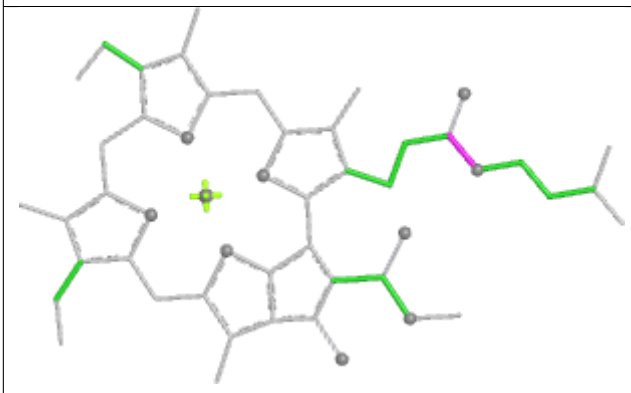
Ligand CLA A 832



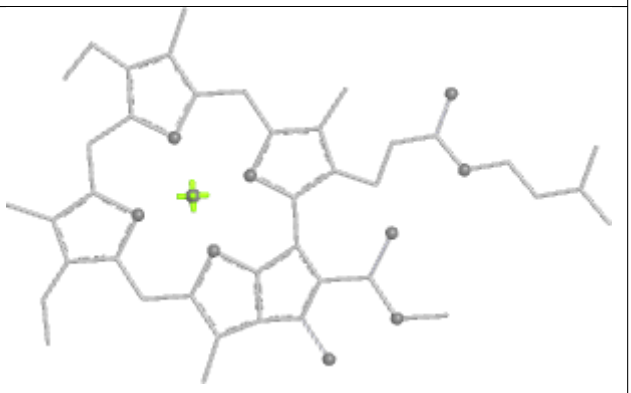
Bond lengths



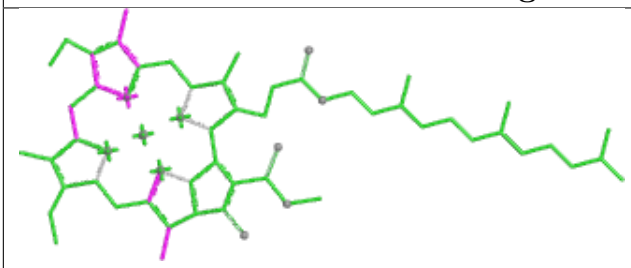
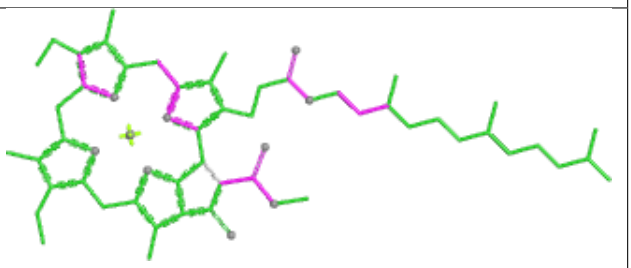
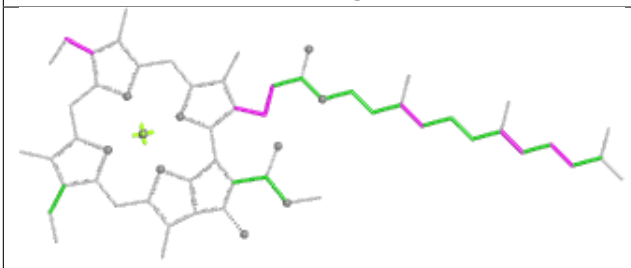
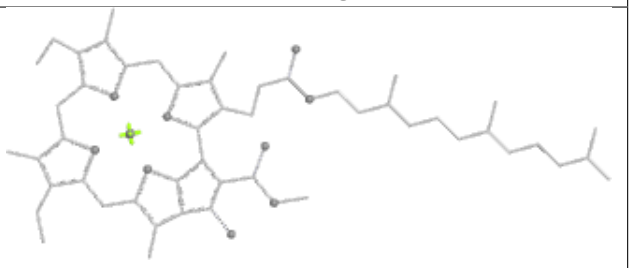
Bond angles

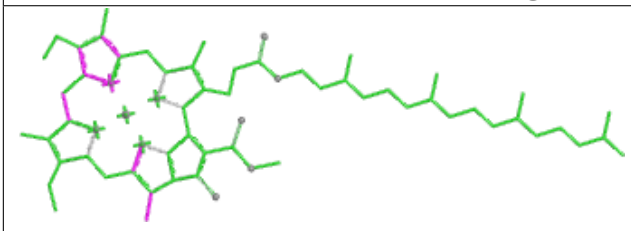
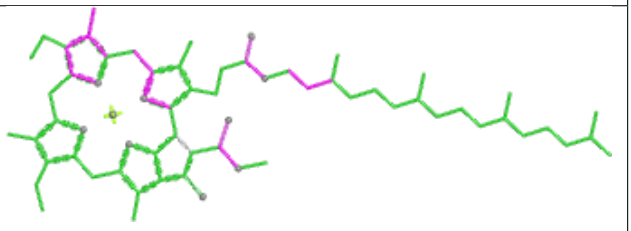
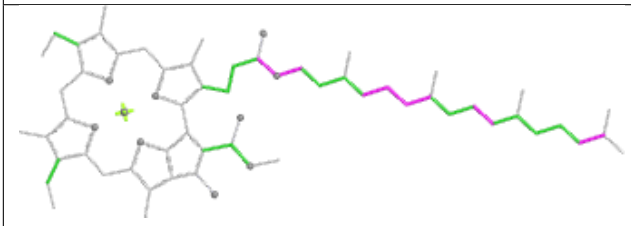
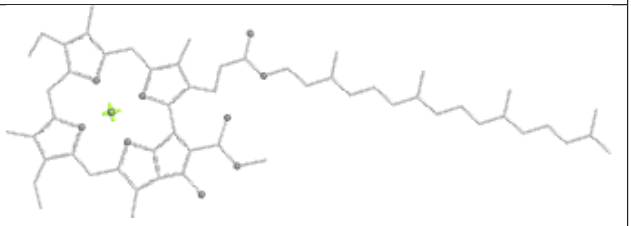


Torsions

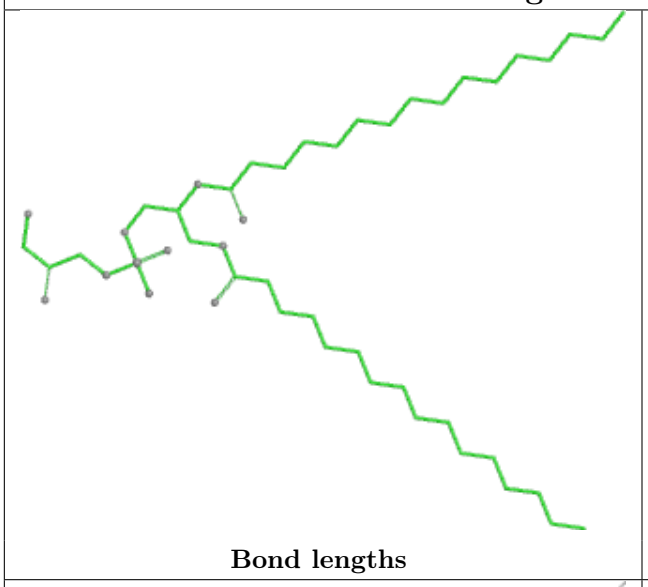


Rings

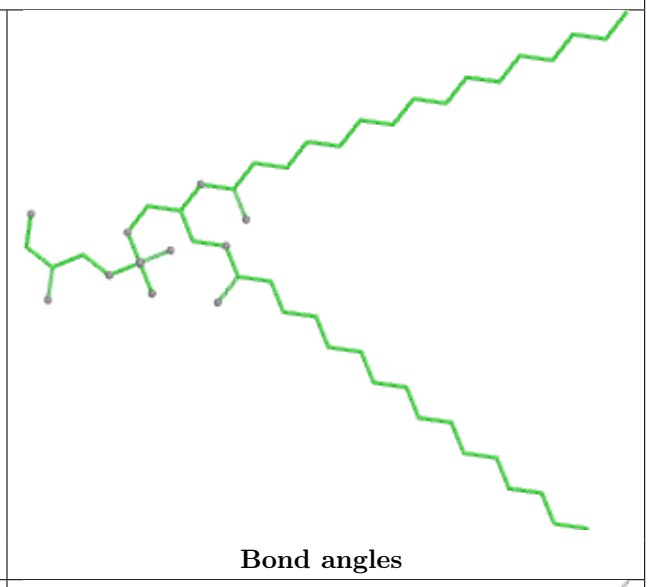
Ligand CLA W 203	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 838	
 Bond lengths	 Bond angles
 Torsions	 Rings

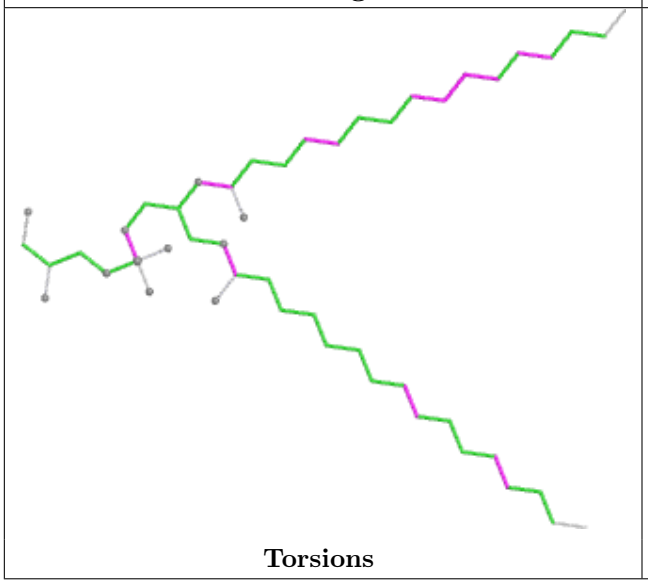
Ligand LHG L 208



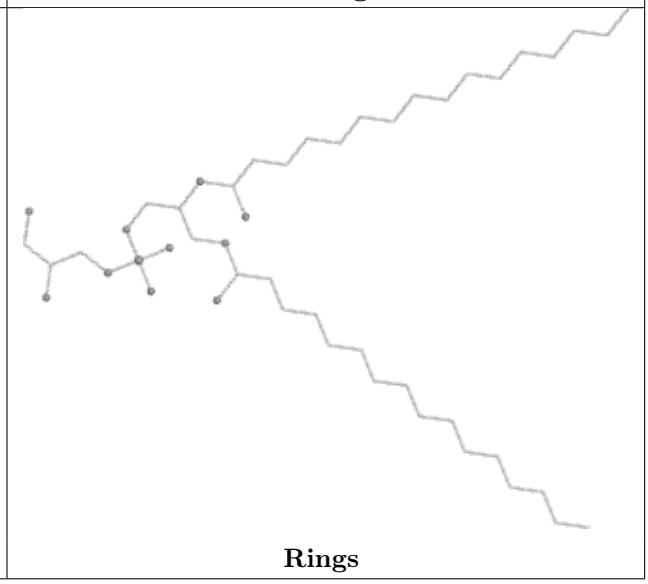
Bond lengths



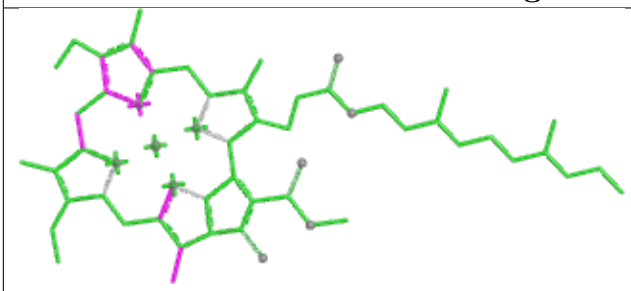
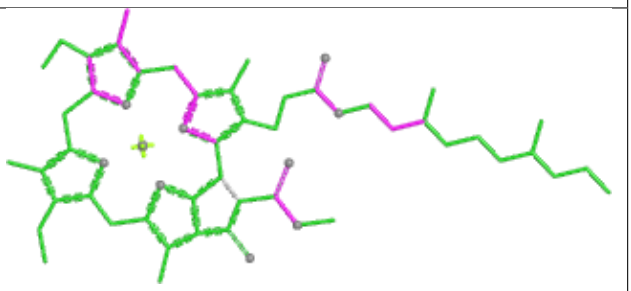
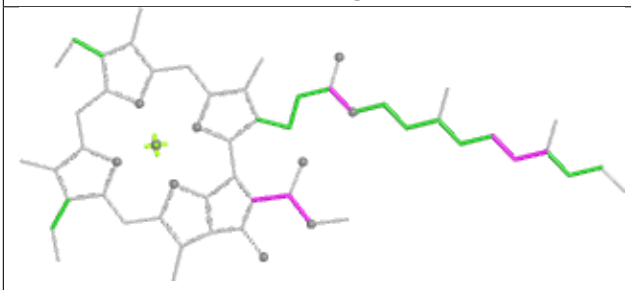
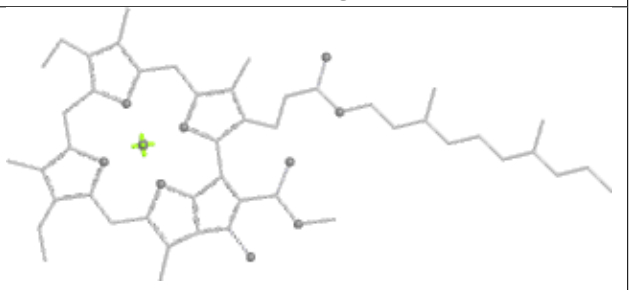
Bond angles

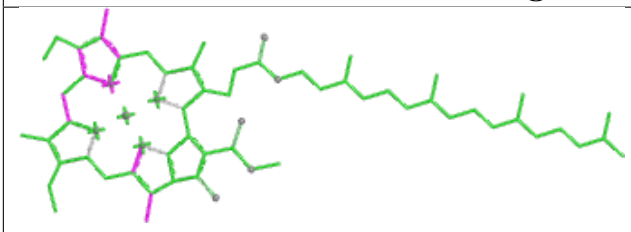
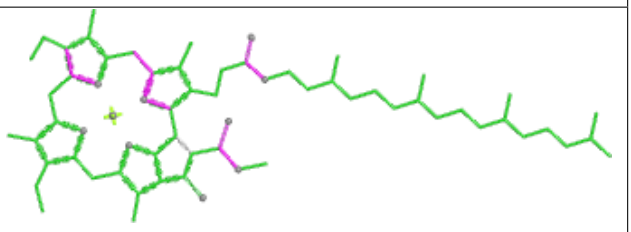
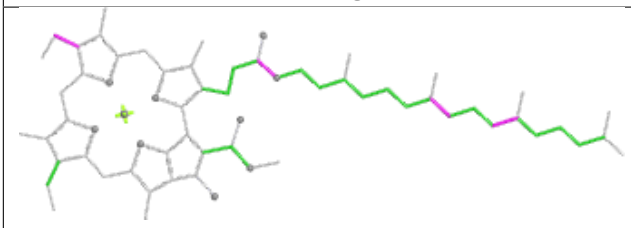
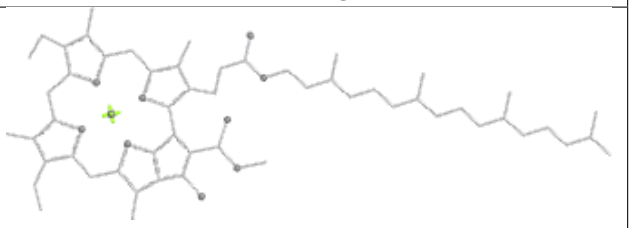


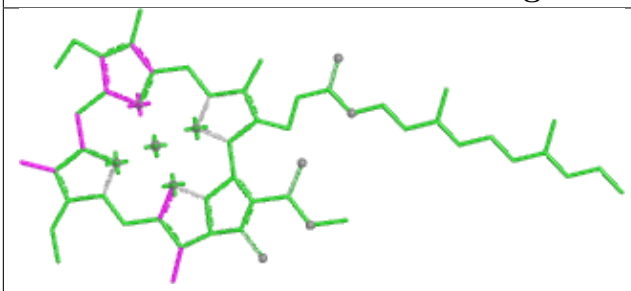
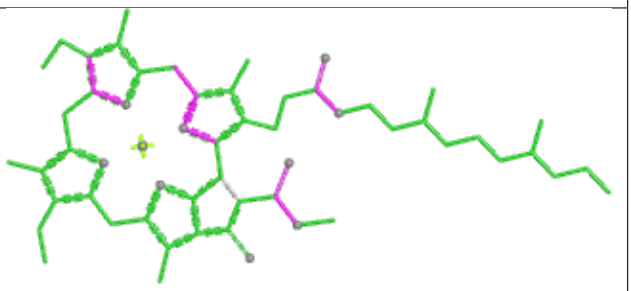
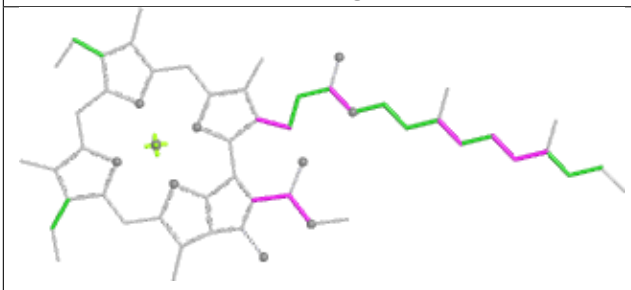
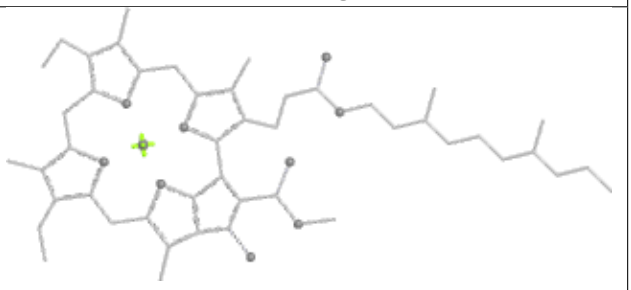
Torsions

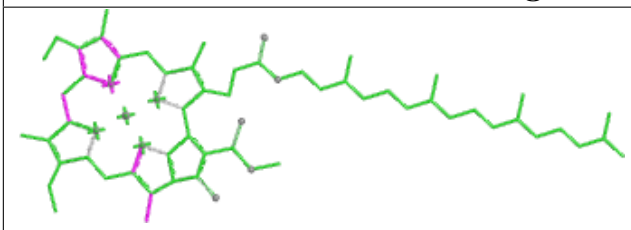
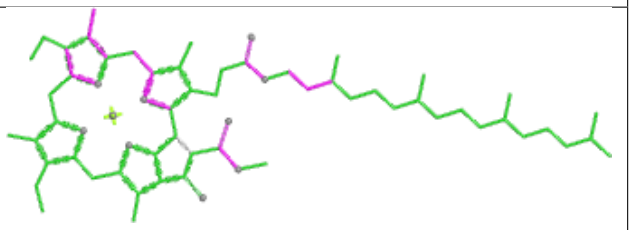
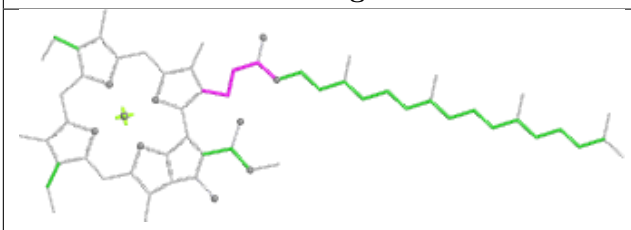
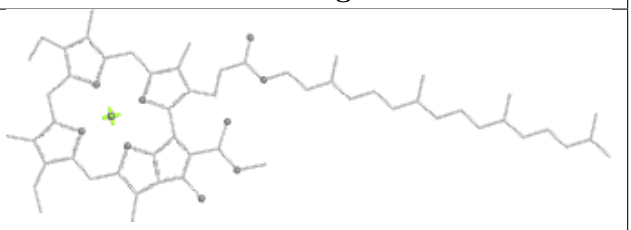


Rings

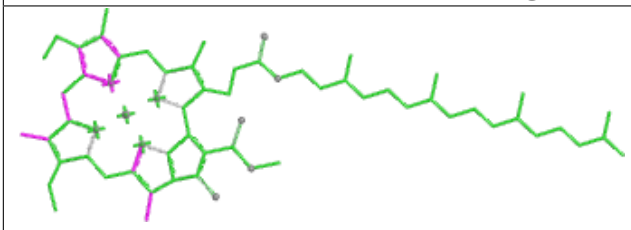
Ligand CLA O 815	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA b 818	
 Bond lengths	 Bond angles
 Torsions	 Rings

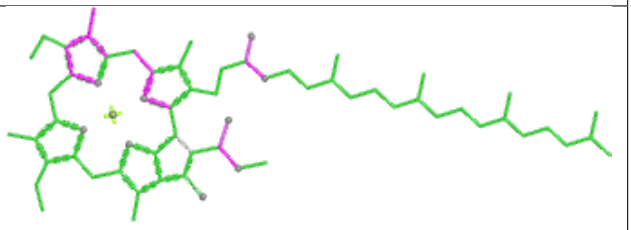
Ligand CLA N 811	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 827	
 Bond lengths	 Bond angles
 Torsions	 Rings

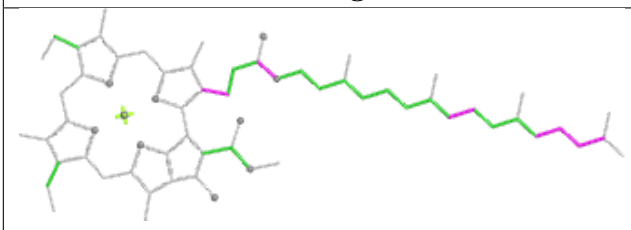
Ligand CLA N 803



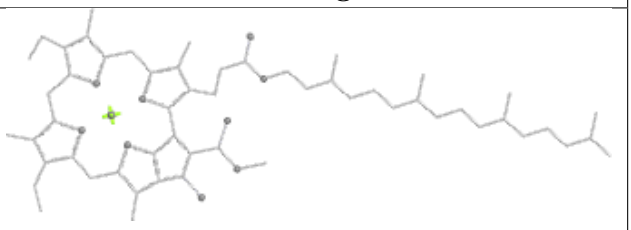
Bond lengths



Bond angles



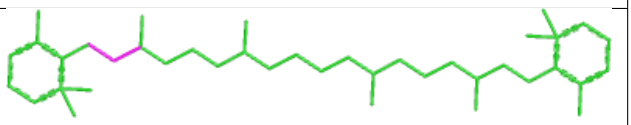
Torsions



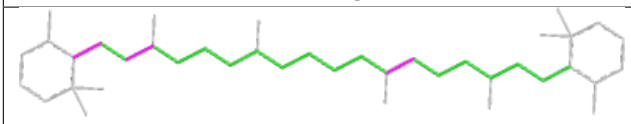
Rings

Ligand BCR Y 102

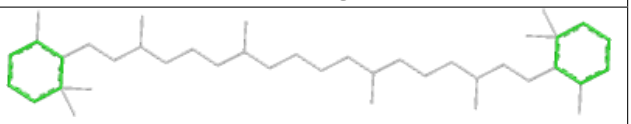
Bond lengths



Bond angles

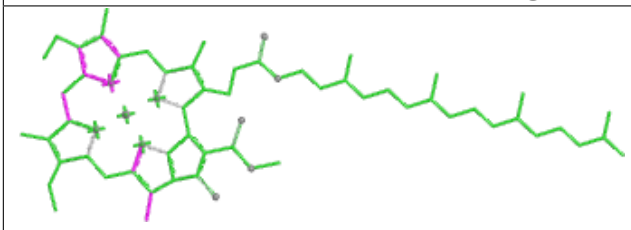


Torsions



Rings

Ligand CLA B 808



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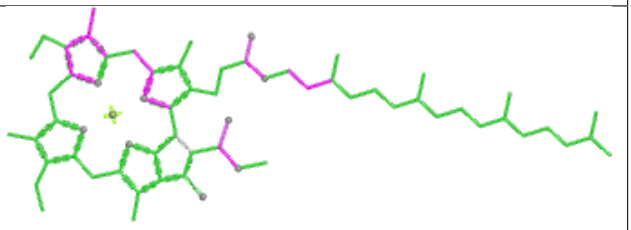
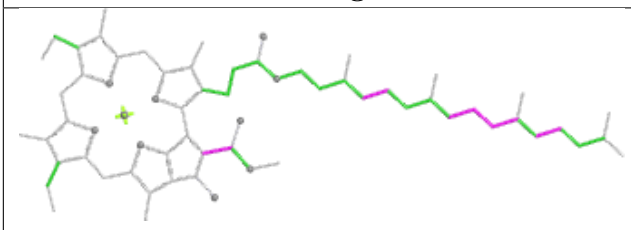
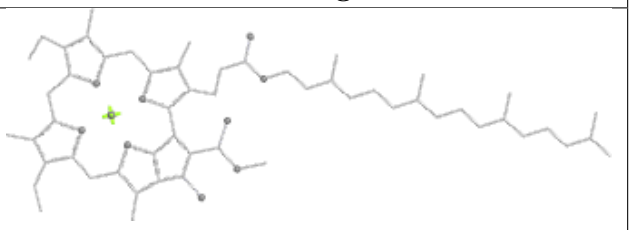


Bond angles

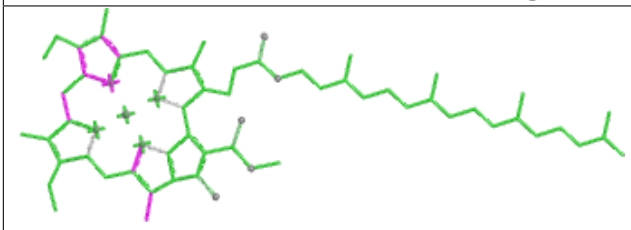


Torsions

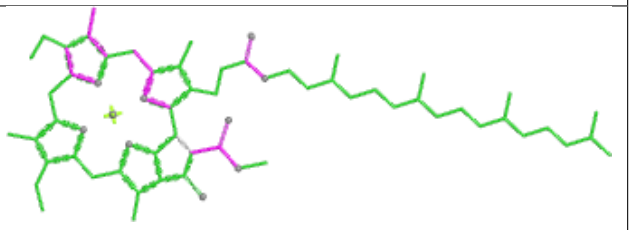


Rings

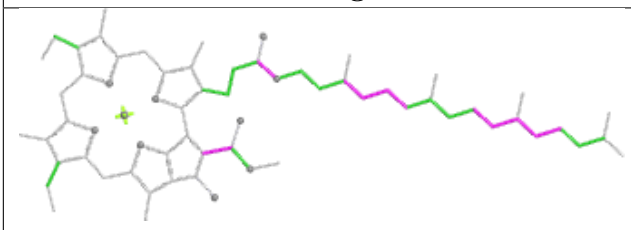
Ligand CLA O 824



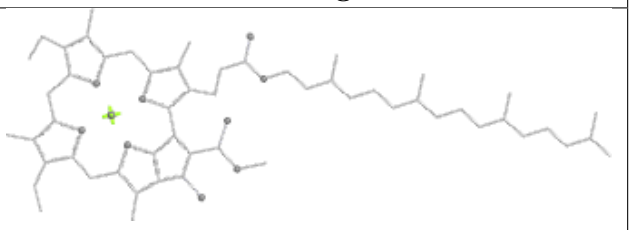
Bond lengths



Bond angles

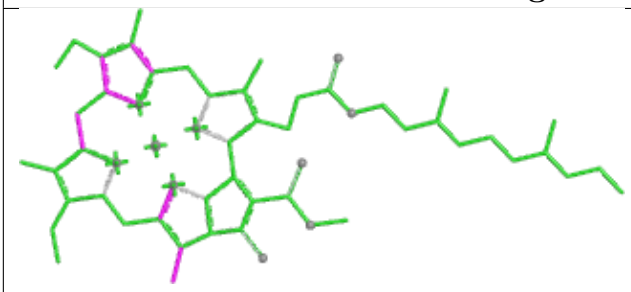


Torsions

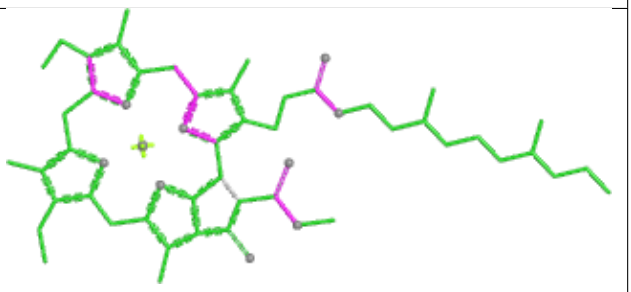


Rings

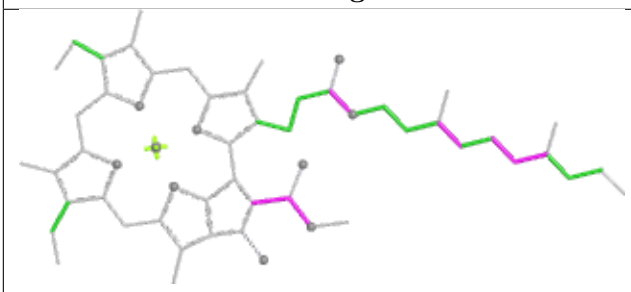
Ligand CLA a 811



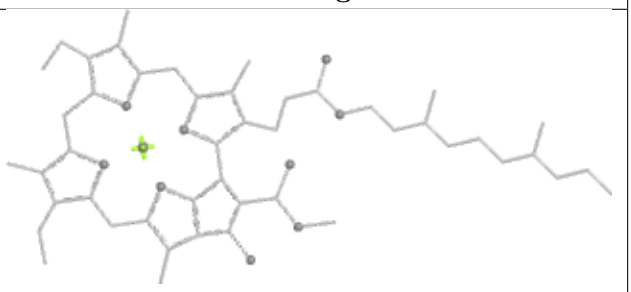
Bond lengths



Bond angles

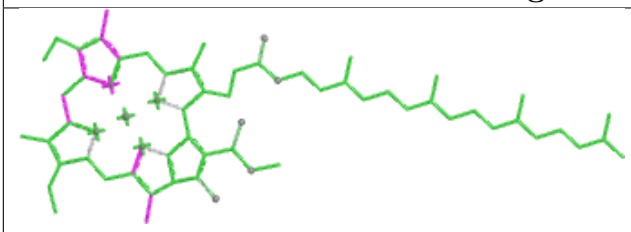


Torsions

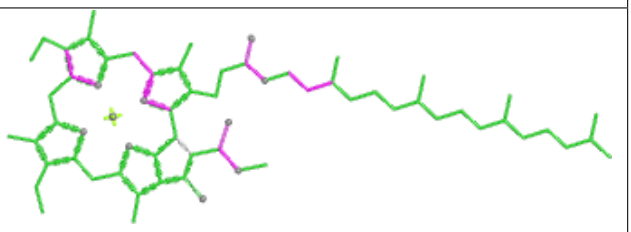


Rings

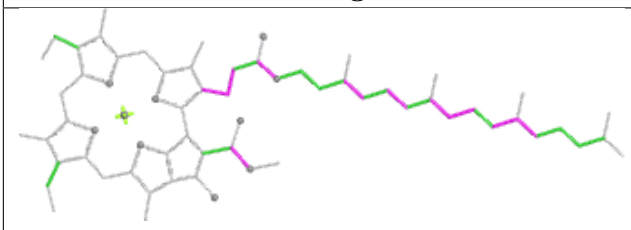
Ligand CLA b 829



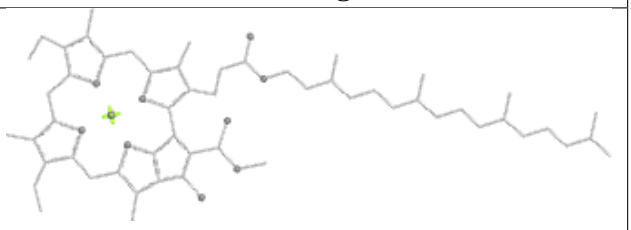
Bond lengths



Bond angles

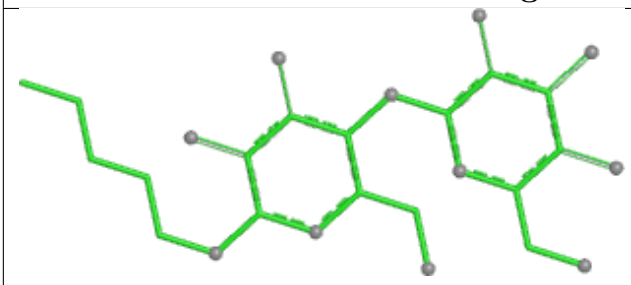


Torsions

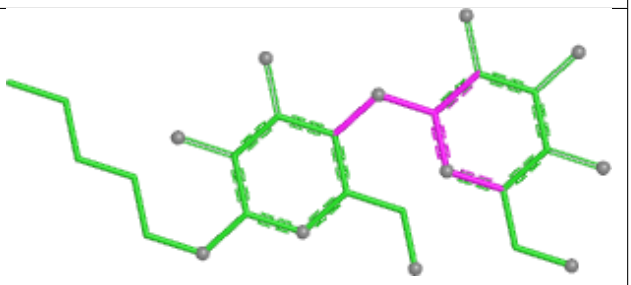


Rings

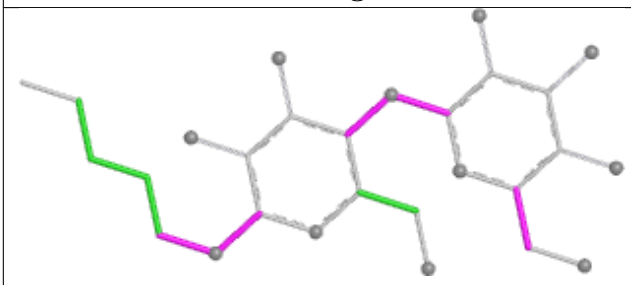
Ligand LMT A 853



Bond lengths



Bond angles



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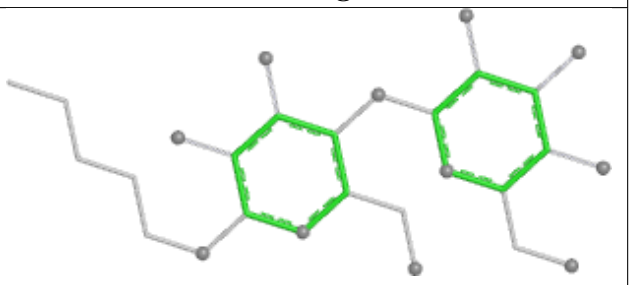
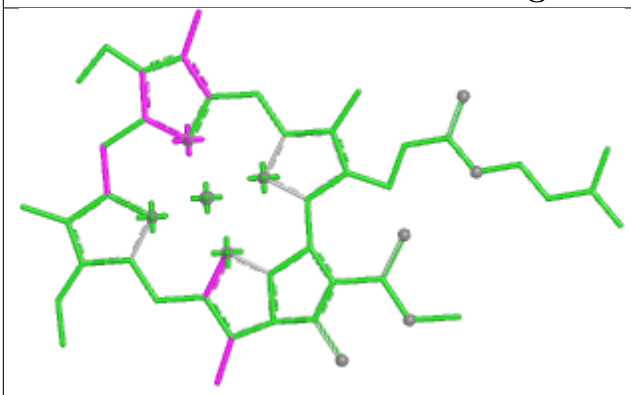
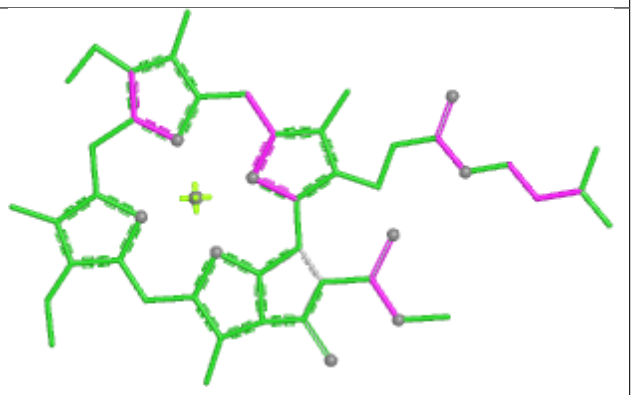


Rings

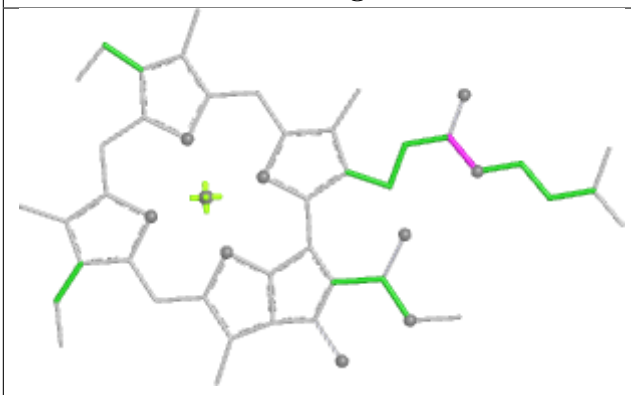
Ligand CLA a 832



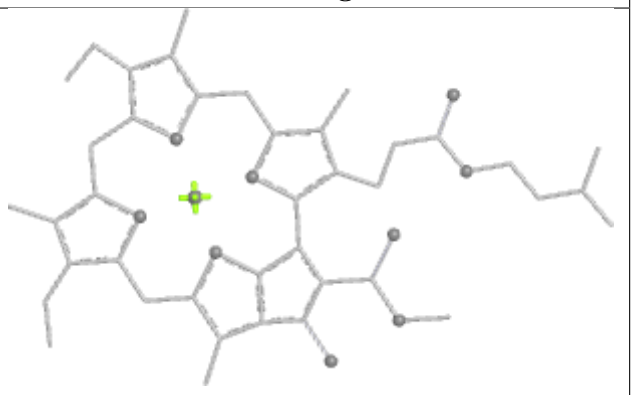
Bond lengths



Bond angles

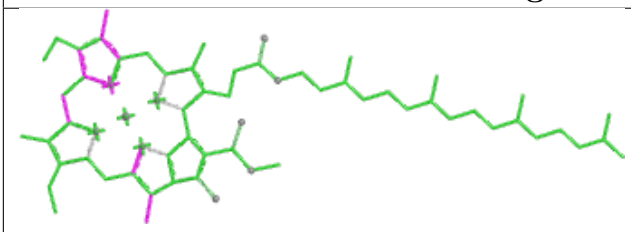


Torsions

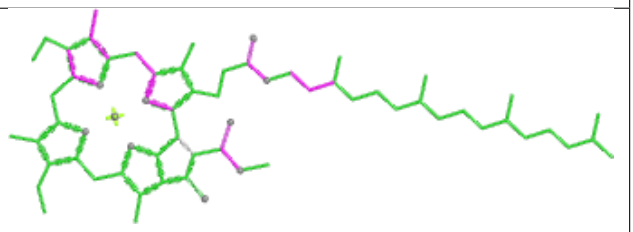


Rings

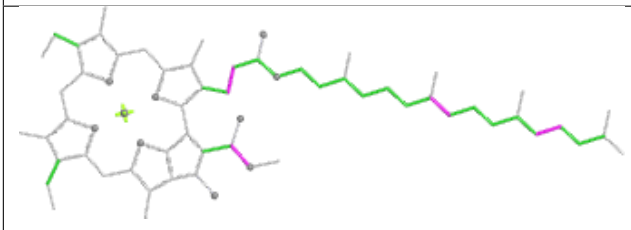
Ligand CLA L 202



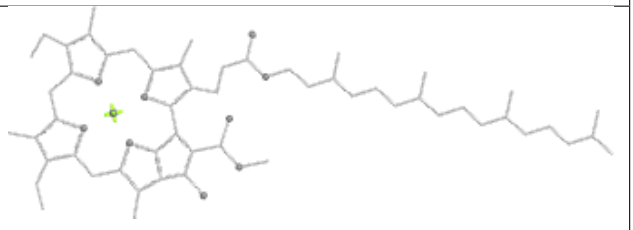
Bond lengths



Bond angles

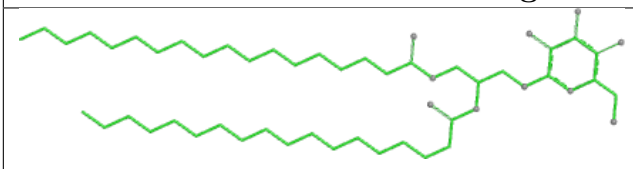


Torsions

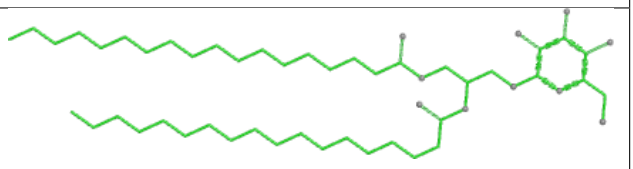


Rings

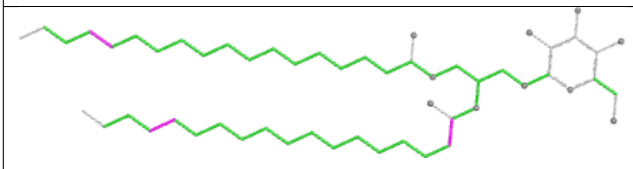
Ligand LMG B 848



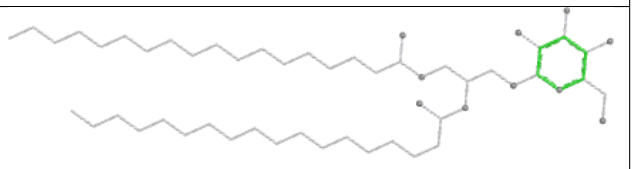
Bond lengths



Bond angles

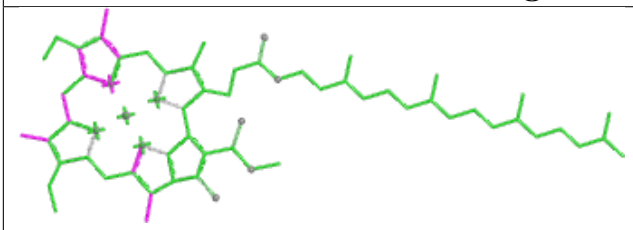


Torsions

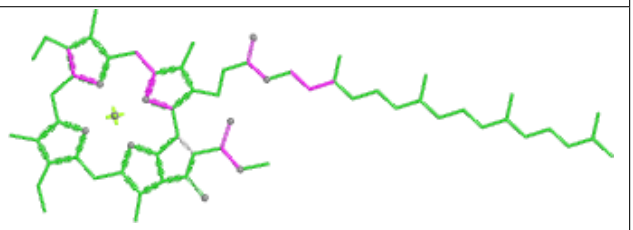


Rings

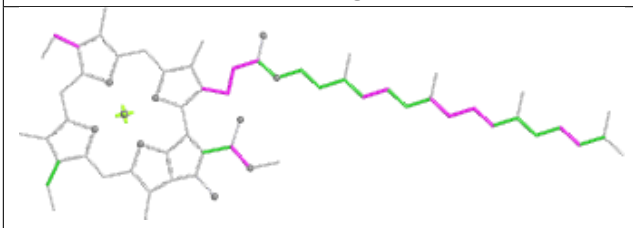
Ligand CLA N 819



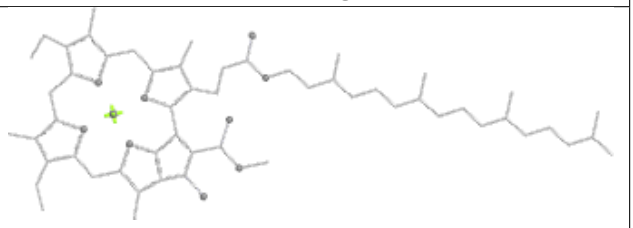
Bond lengths



Bond angles

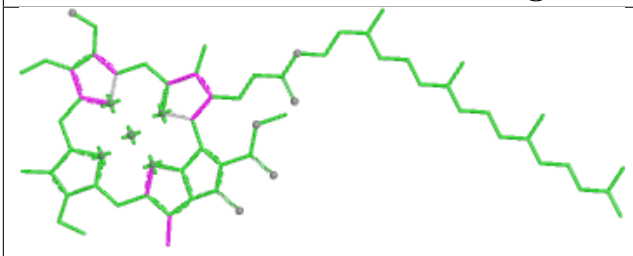


Torsions



Rings

Ligand F6C N 856



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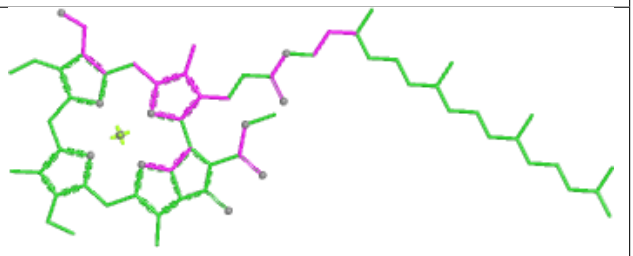
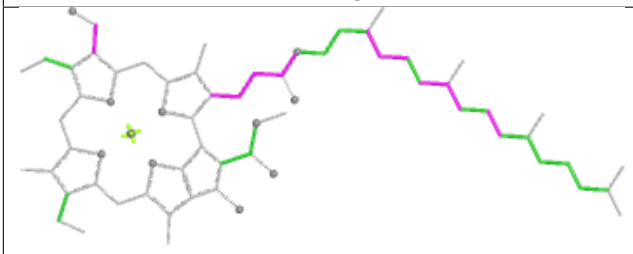


Bond angles



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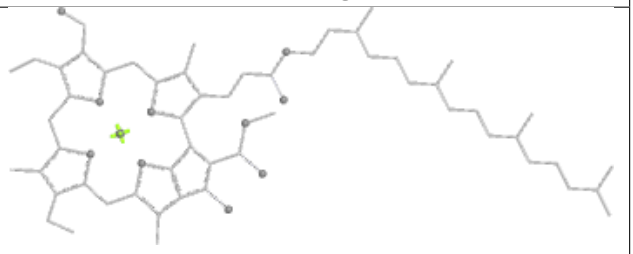
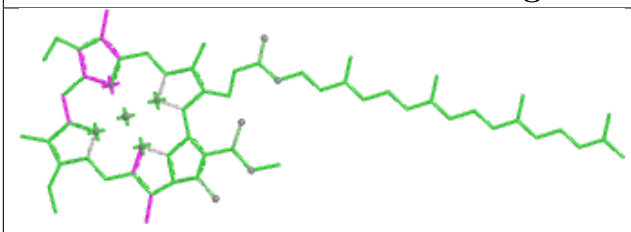
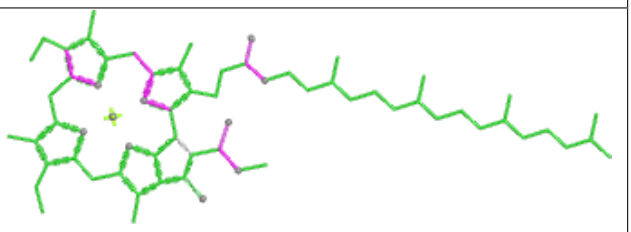


Rings

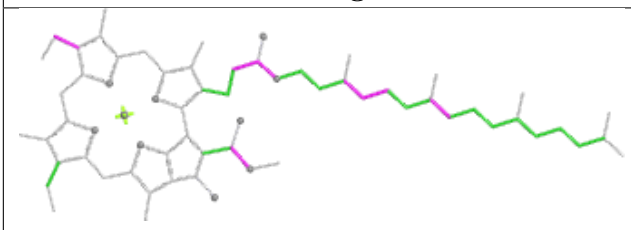
Ligand CLA N 825



Bond lengths



Bond angles



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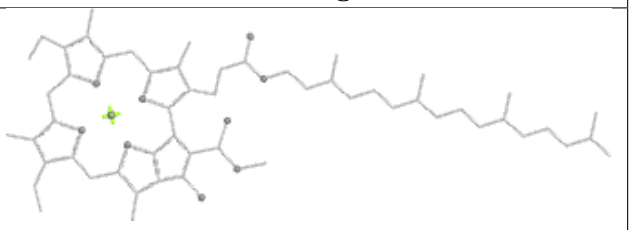
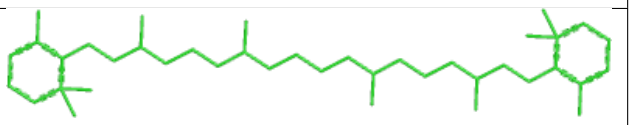


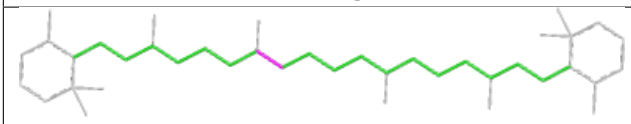
Rings

Ligand BCR F 203

Bond lengths



Bond angles



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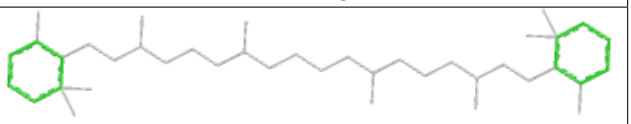
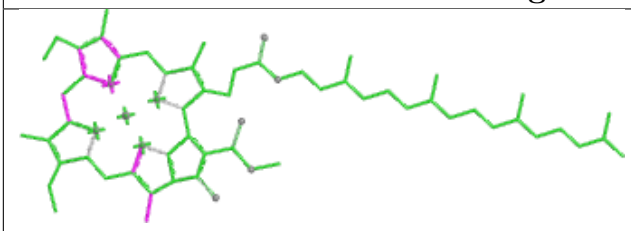


Rings

Ligand CLA a 814



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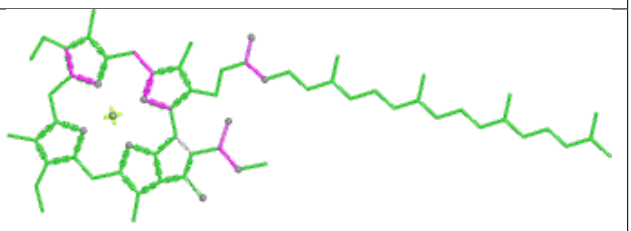
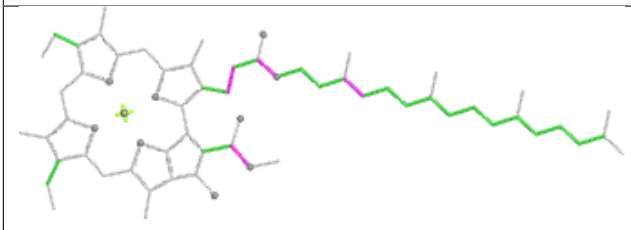


Bond angles



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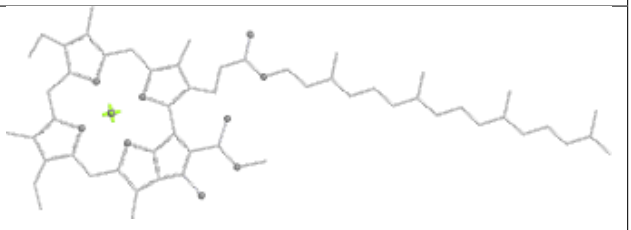
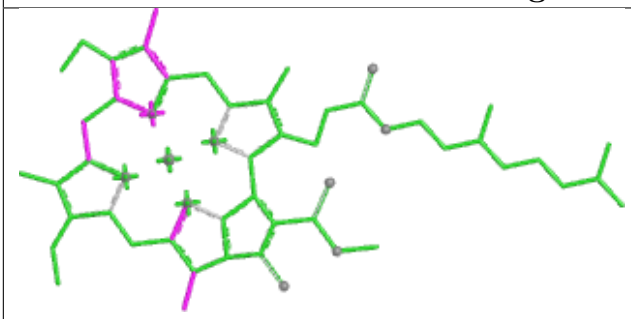
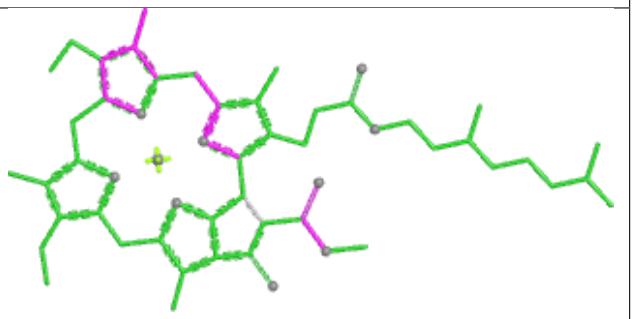


Rings

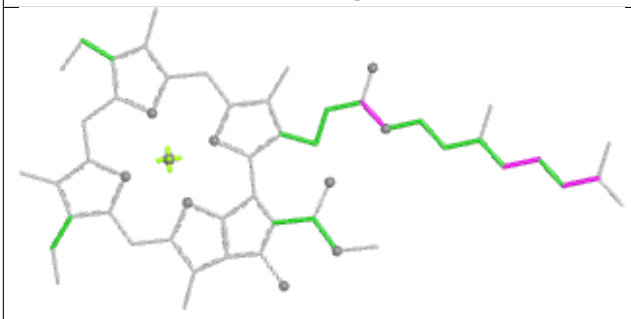
Ligand CLA a 833



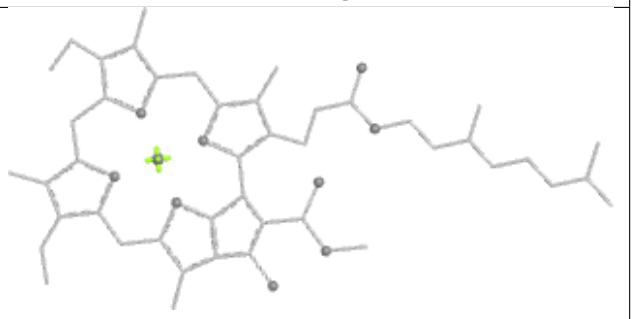
Bond lengths



Bond angles

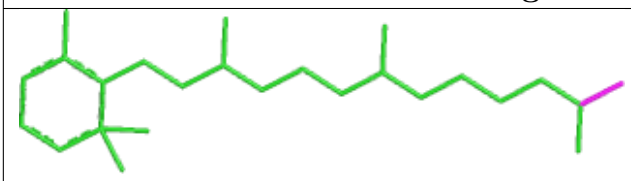


Torsions

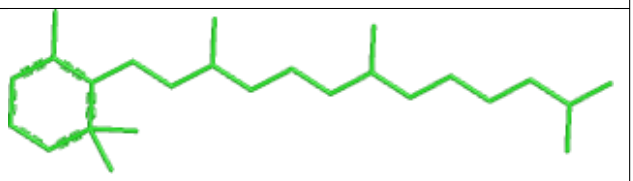


Rings

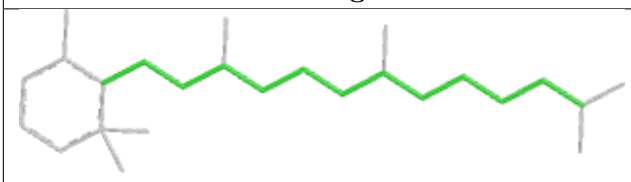
Ligand BCR V 101



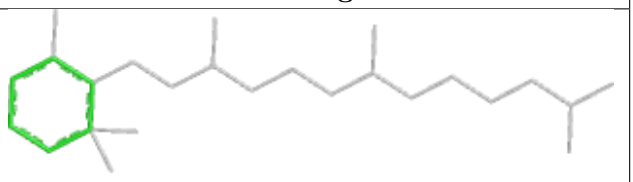
Bond lengths



Bond angles

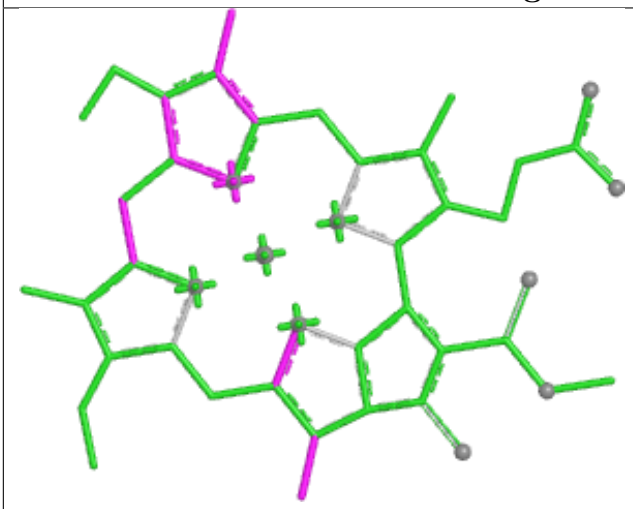


Torsions

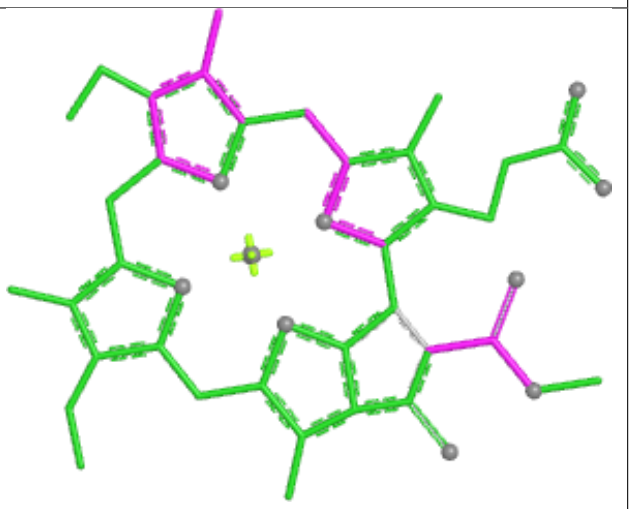


Rings

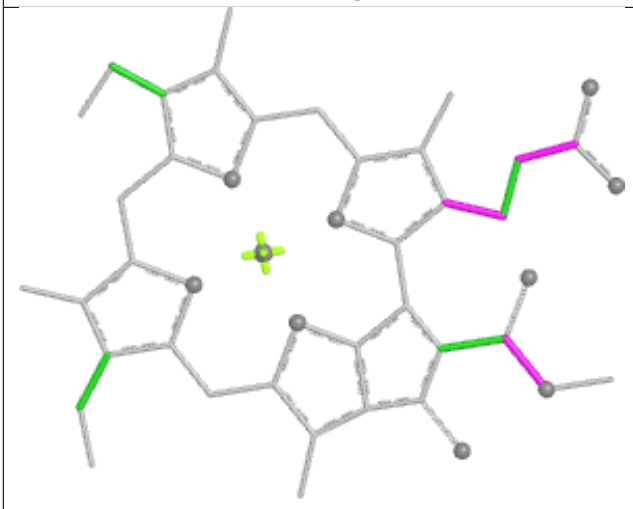
Ligand CLA O 834



Bond lengths



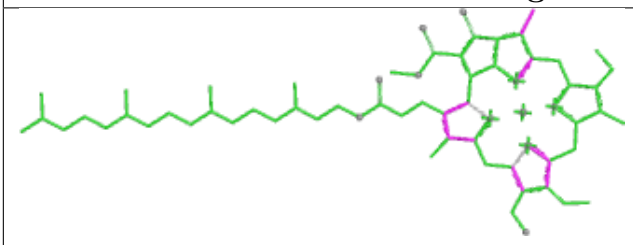
Bond angles



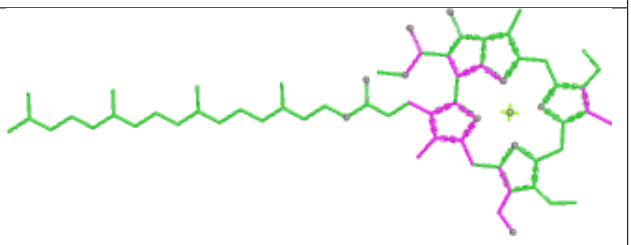
Torsions

Rings

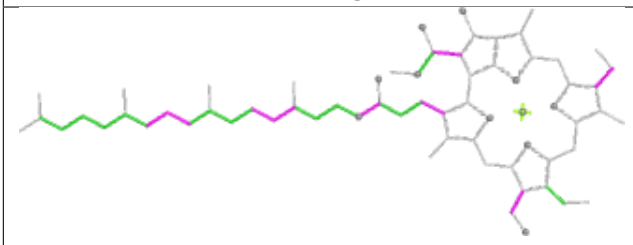
Ligand F6C N 826



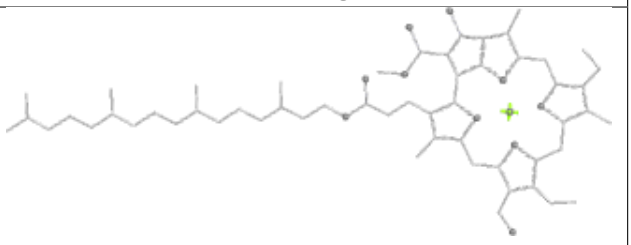
Bond lengths



Bond angles

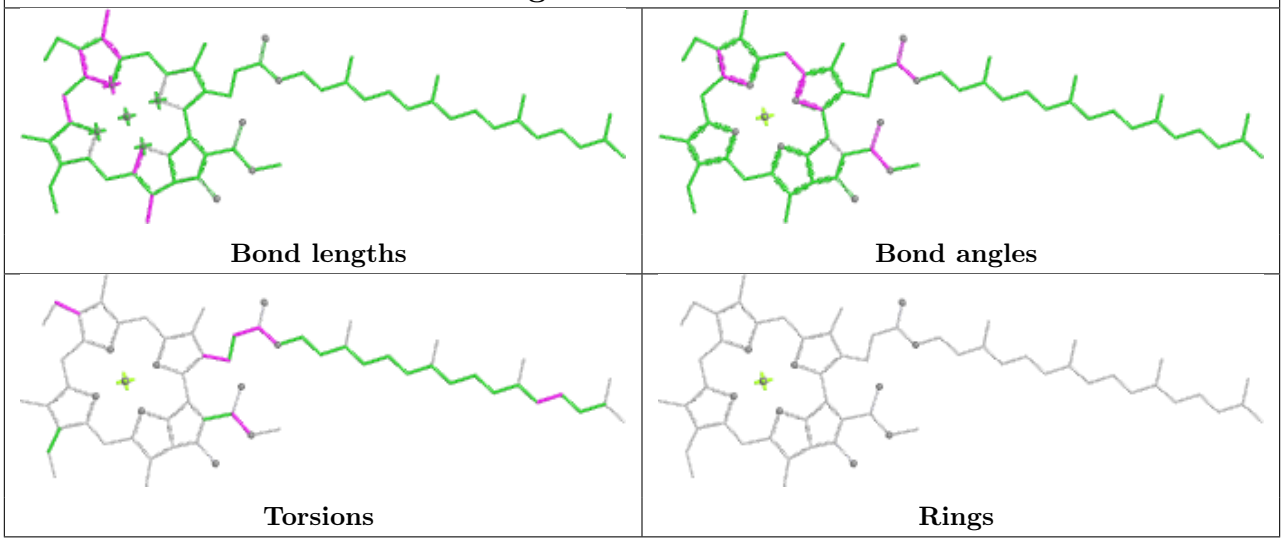


Torsions

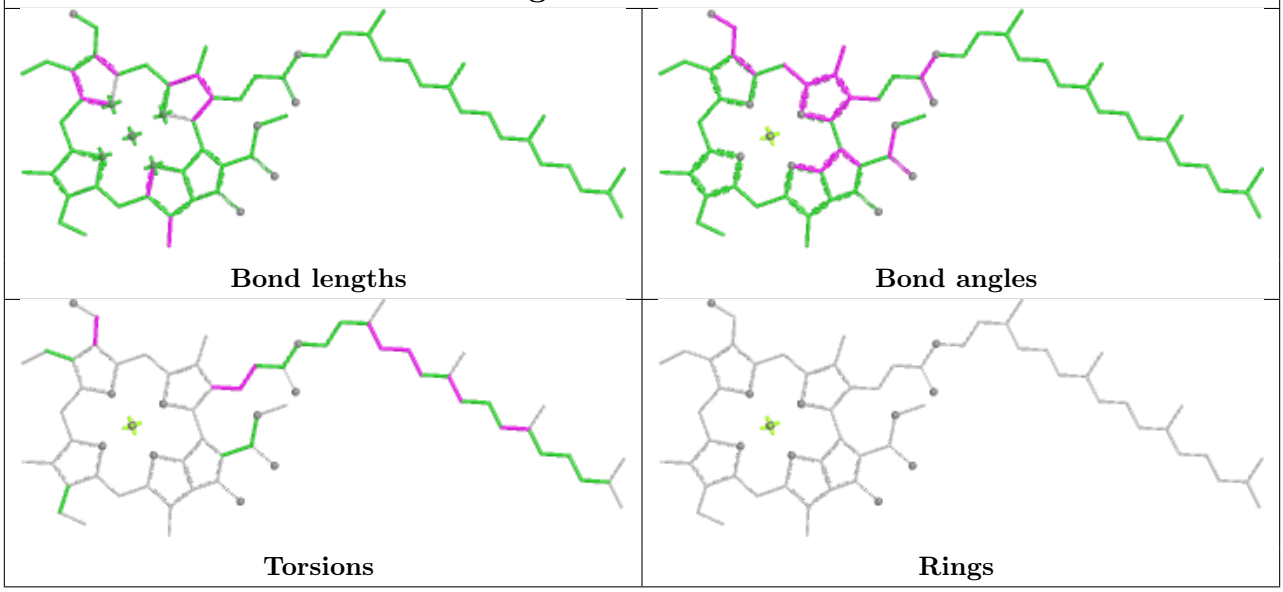


Rings

Ligand CLA b 816



Ligand F6C O 839



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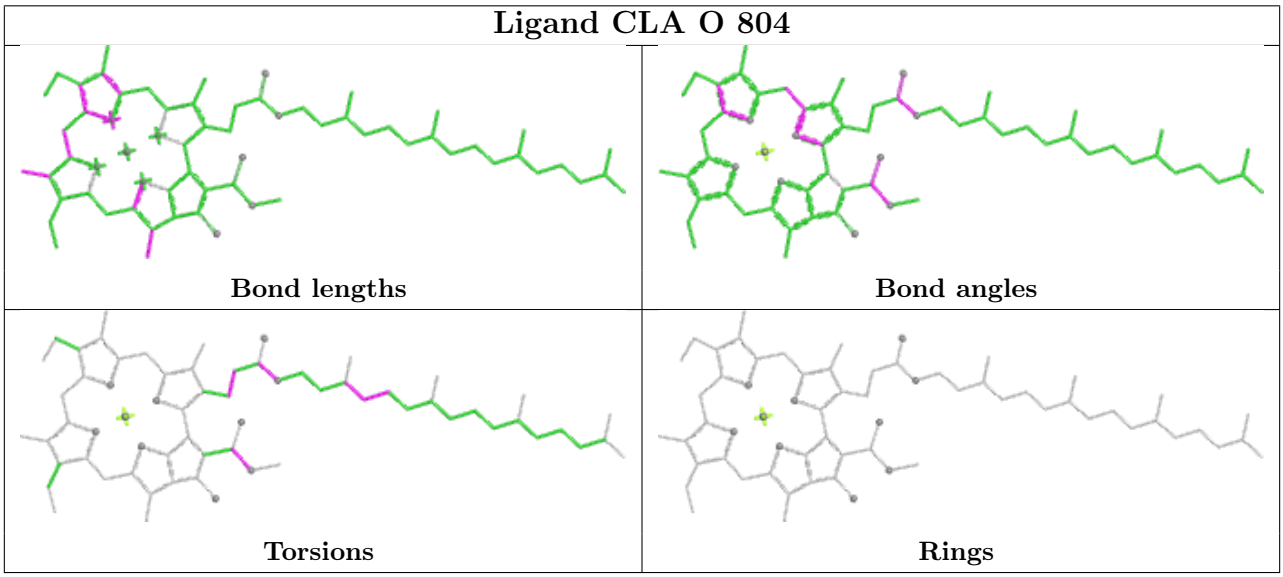
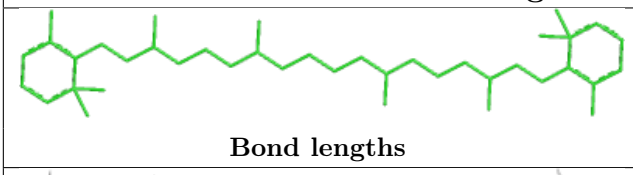
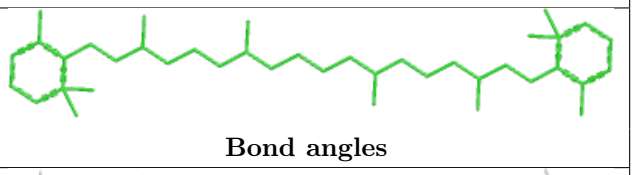


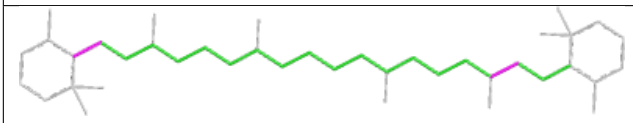
Ligand BCR a 849



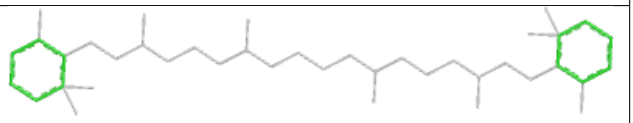
Bond lengths



Bond angles

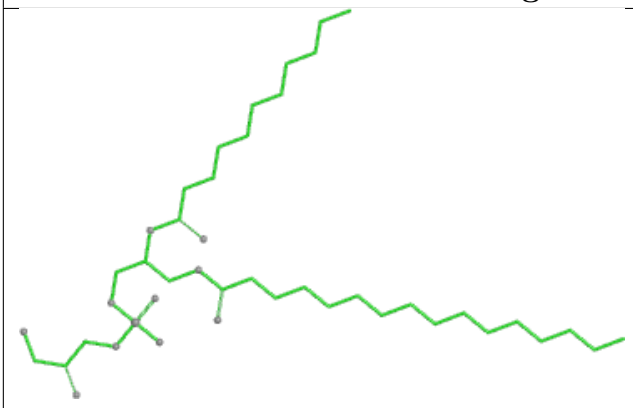


Torsions

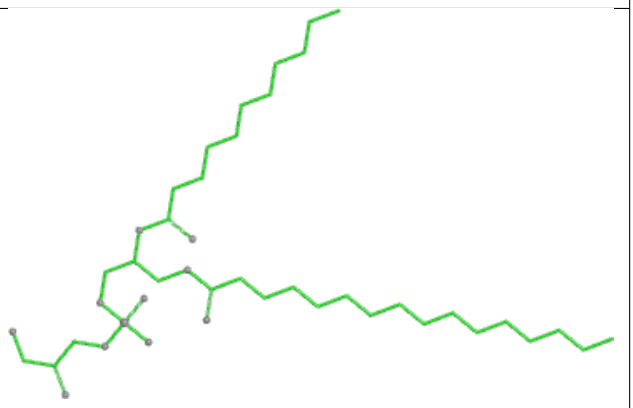


Rings

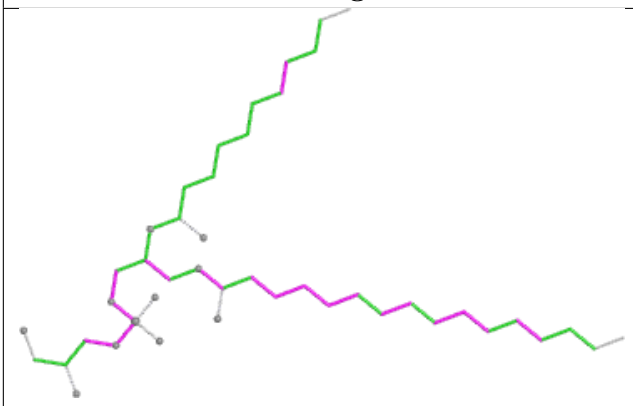
Ligand LHG X 101



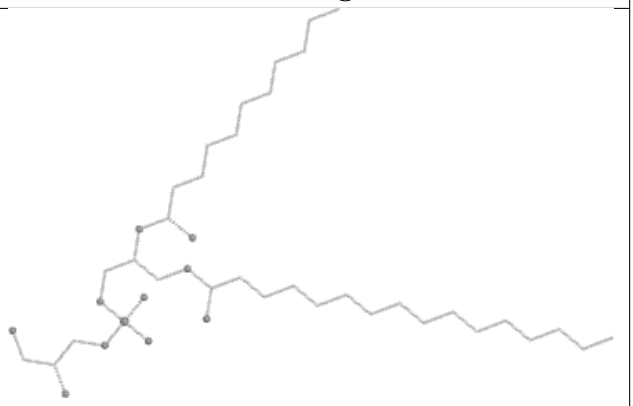
Bond lengths



Bond angles

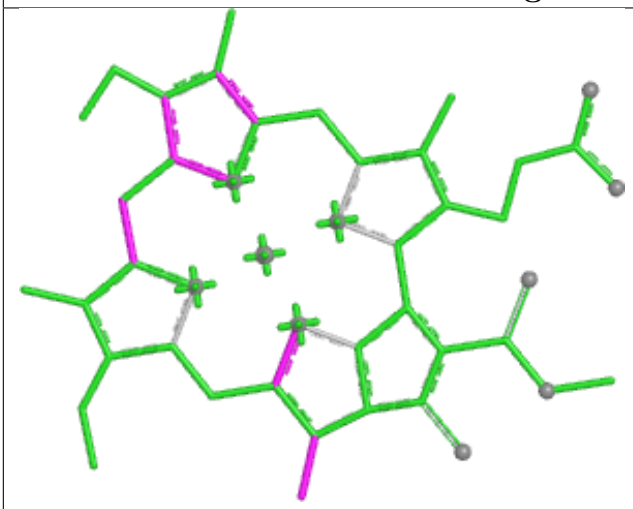


Torsions

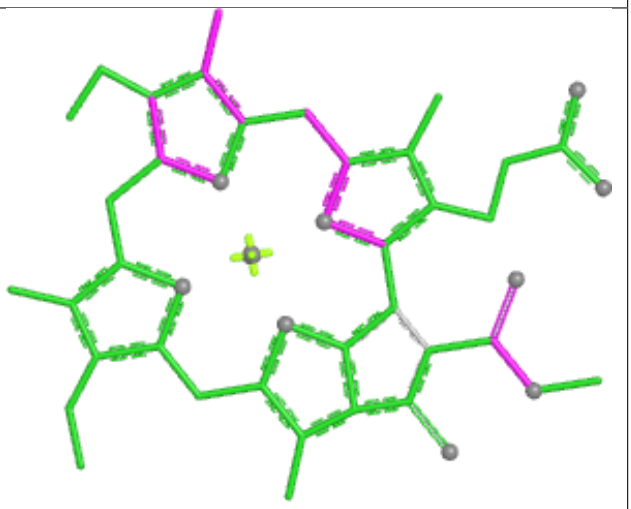


Rings

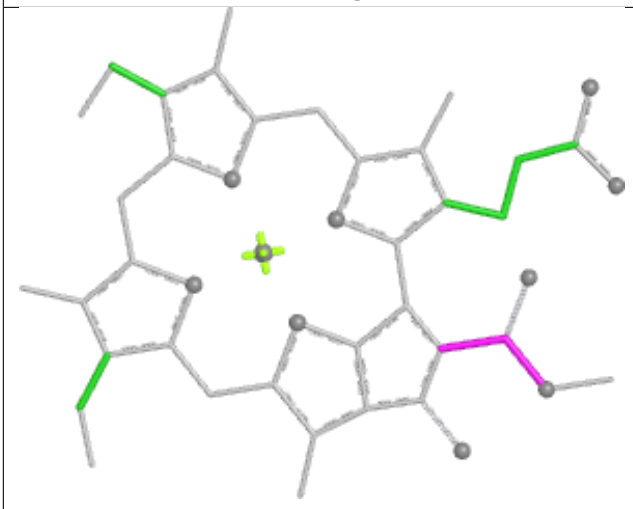
Ligand CLA B 814



Bond lengths



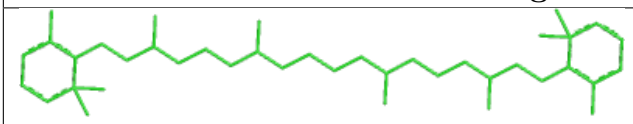
Bond angles



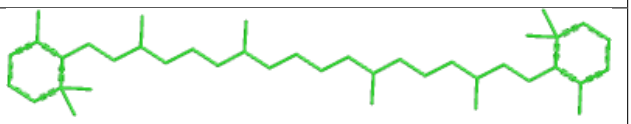
Torsions

Rings

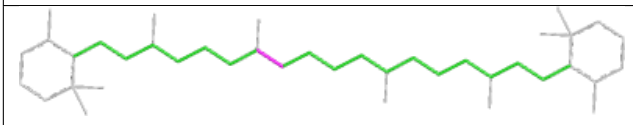
Ligand BCR f 202



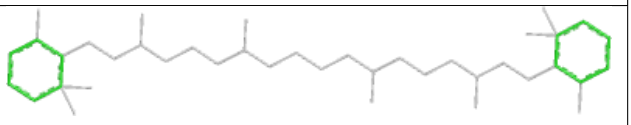
Bond lengths



Bond angles

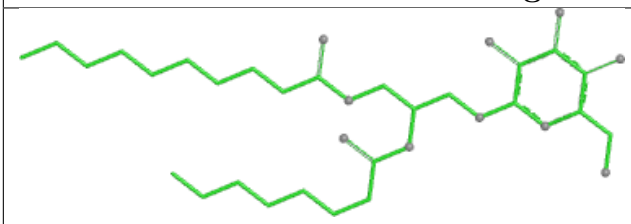


Torsions

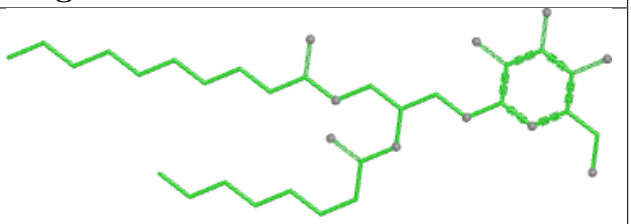


Rings

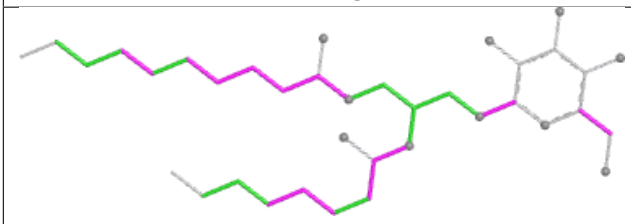
Ligand LMG g 103



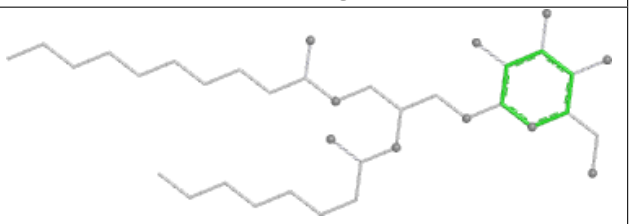
Bond lengths



Bond angles

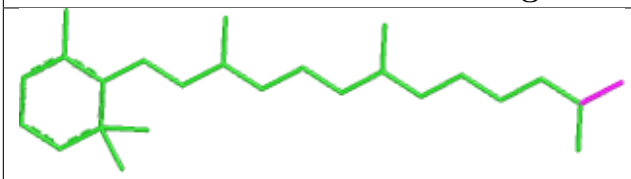


Torsions

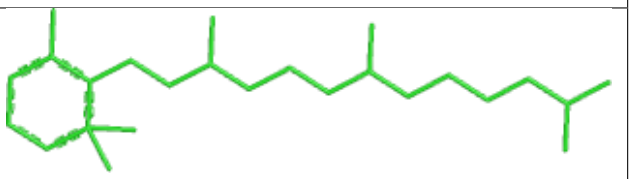


Rings

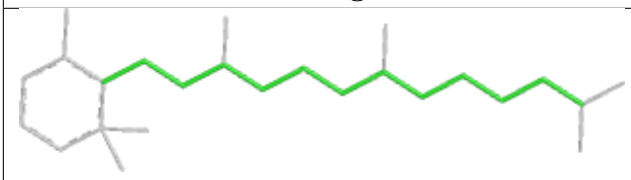
Ligand BCR K 101



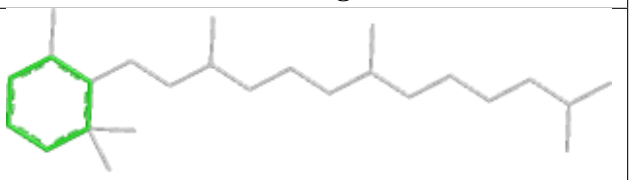
Bond lengths



Bond angles

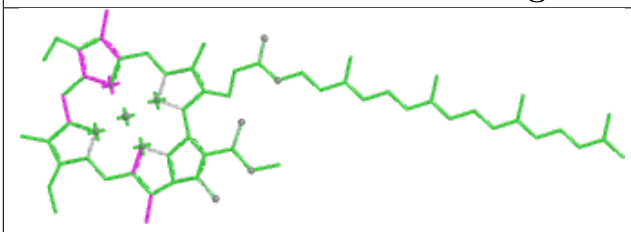


Torsions

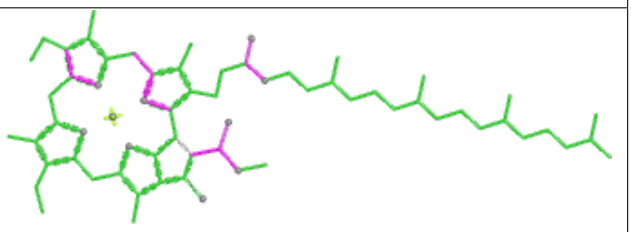


Rings

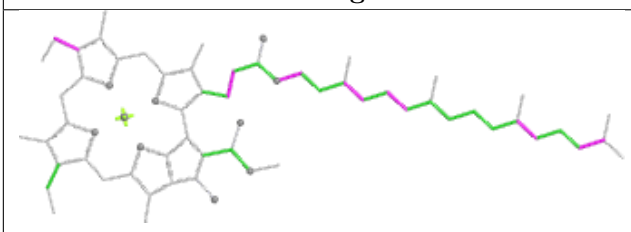
Ligand CLA a 835



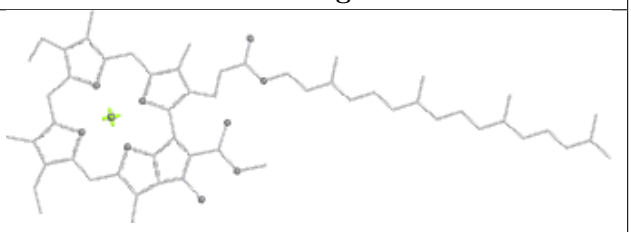
Bond lengths



Bond angles

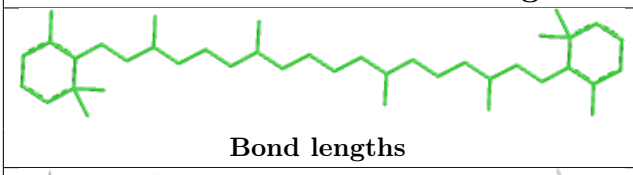


Torsions

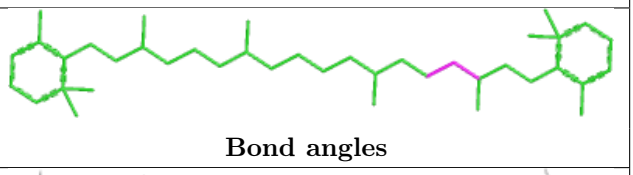


Rings

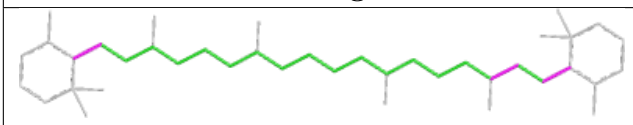
Ligand BCR N 847



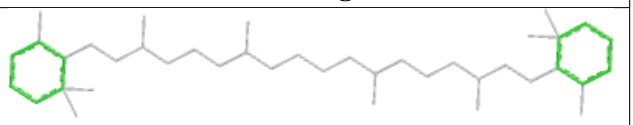
Bond lengths



Bond angles

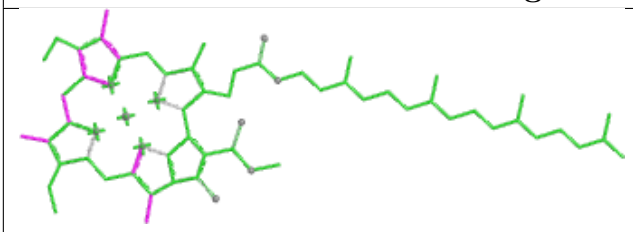


Torsions

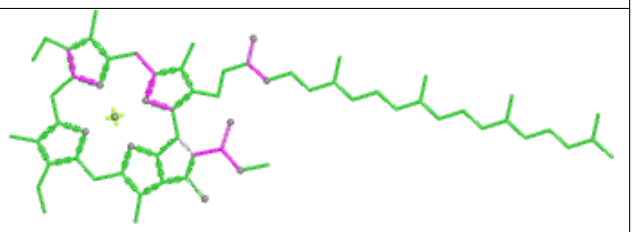


Rings

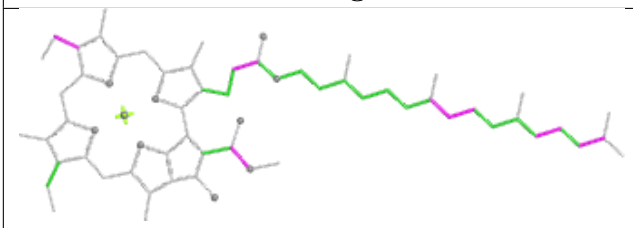
Ligand CLA B 801



Bond lengths



Bond angles



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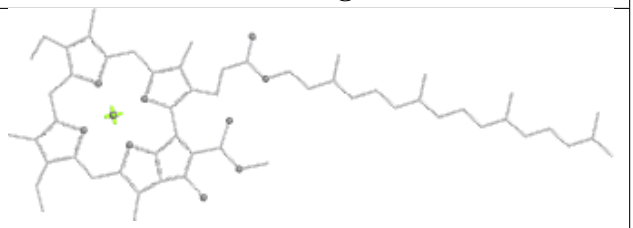
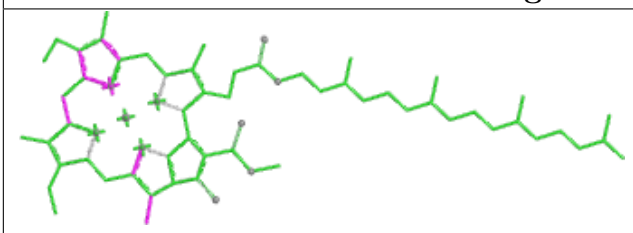
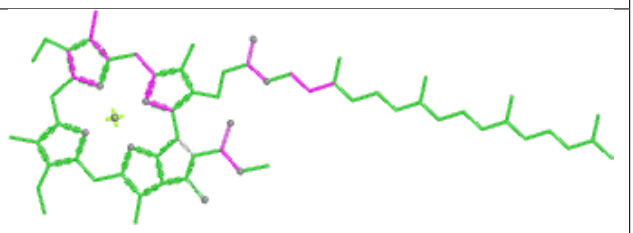


Rings

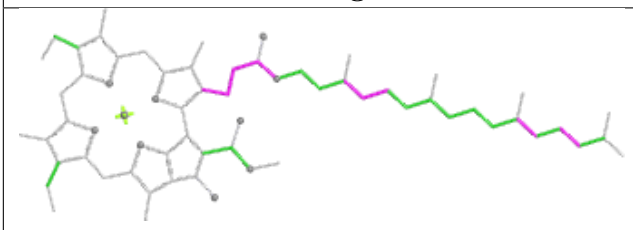
Ligand CLA B 805



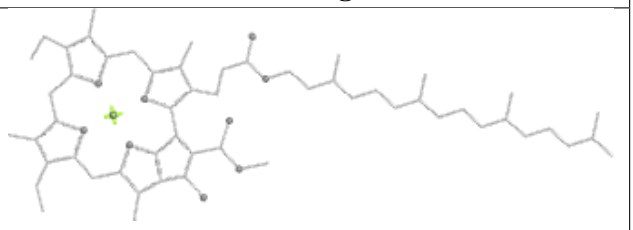
Bond lengths



Bond angles

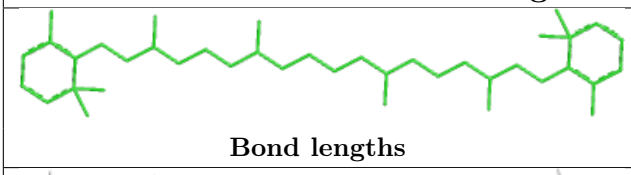


Torsions

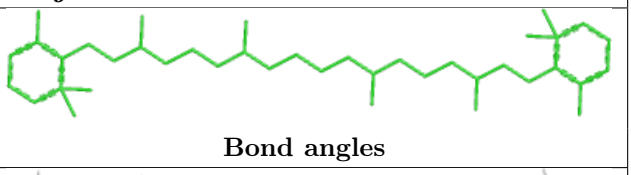


Rings

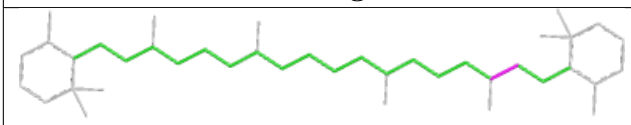
Ligand BCR j 205



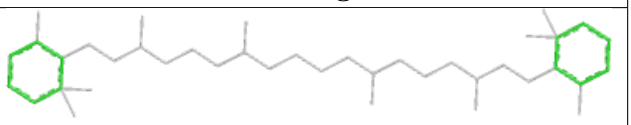
Bond lengths



Bond angles

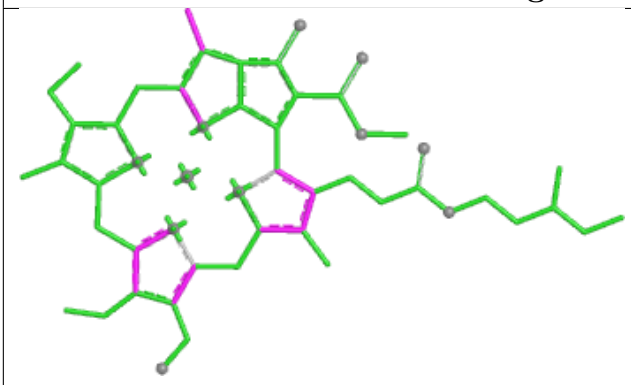


Torsions



Rings

Ligand F6C N 824



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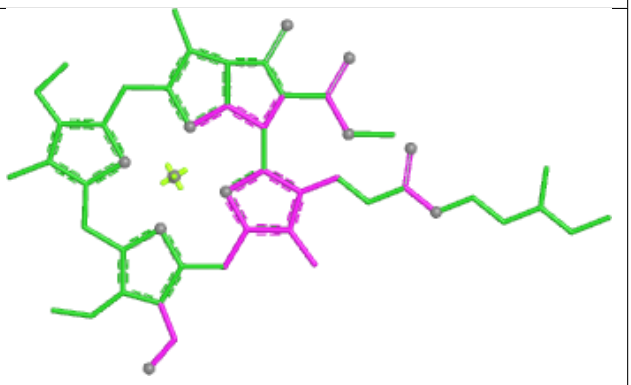
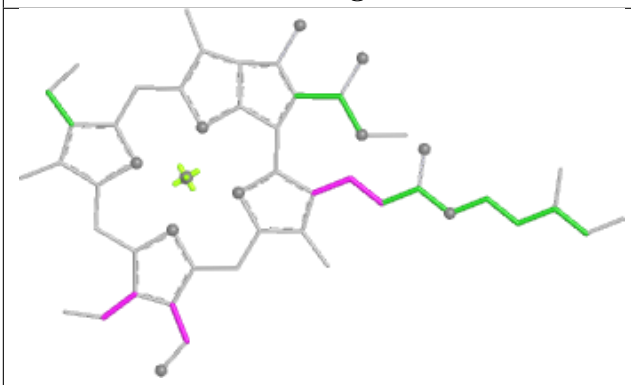
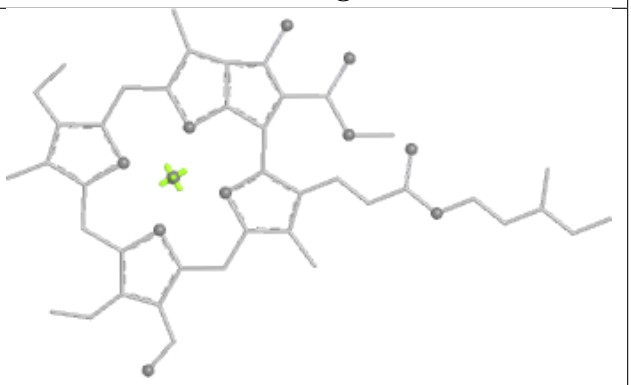


Bond angles

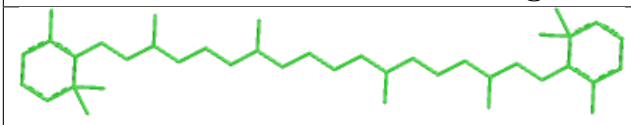


Torsions

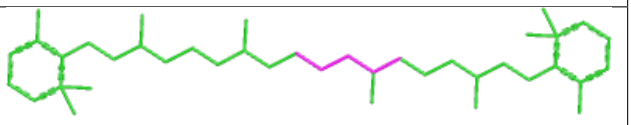


Rings

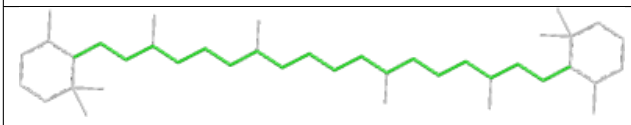
Ligand BCR b 846



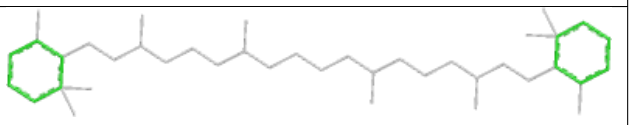
Bond lengths



Bond angles

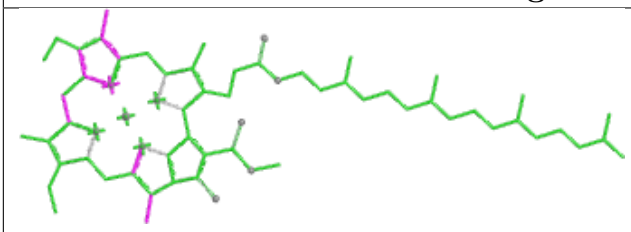


Torsions

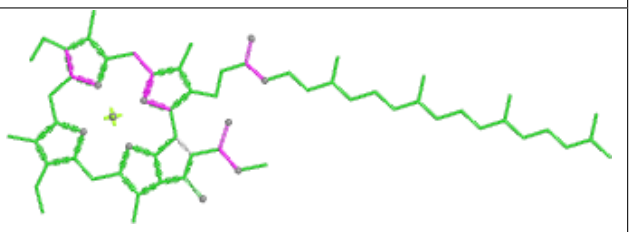


Rings

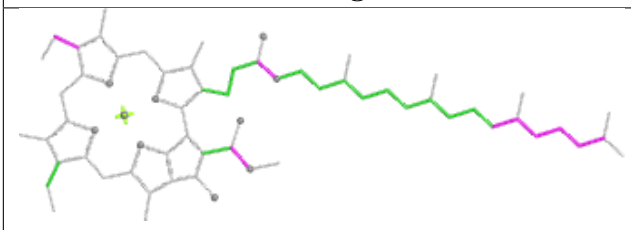
Ligand CLA b 840



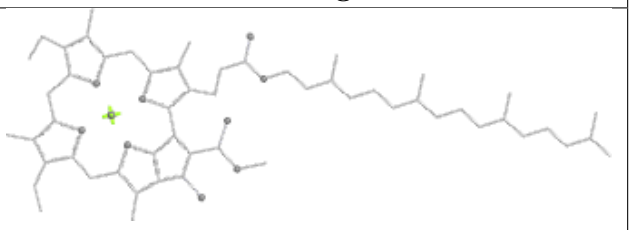
Bond lengths



Bond angles

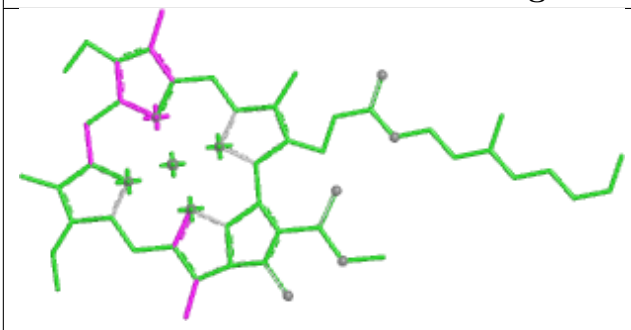


Torsions



Rings

Ligand CLA a 836



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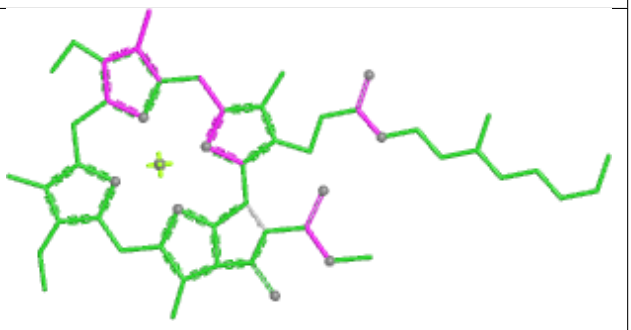
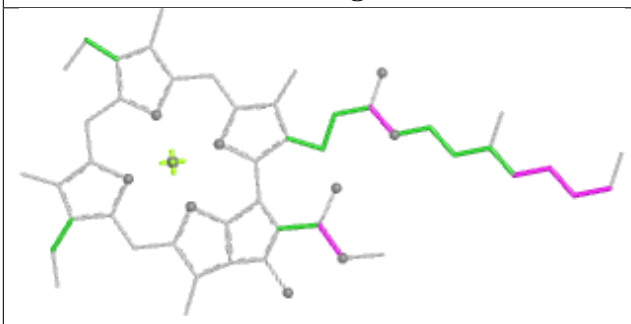


Bond angles



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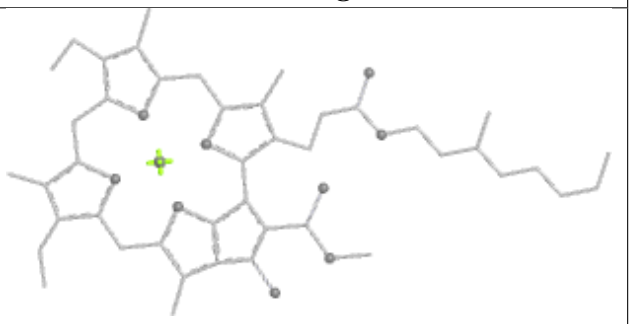
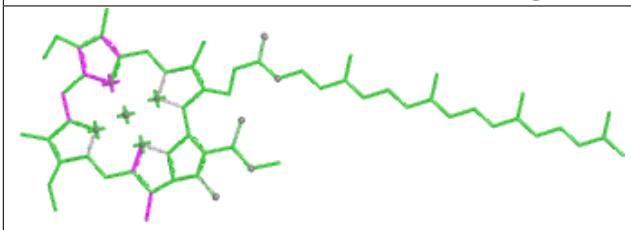
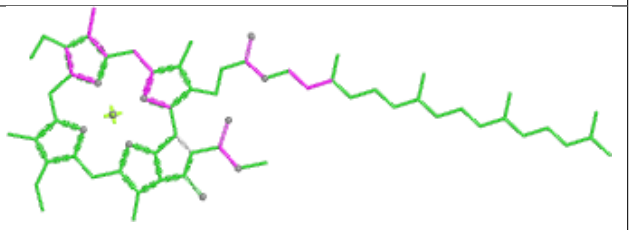


Rings

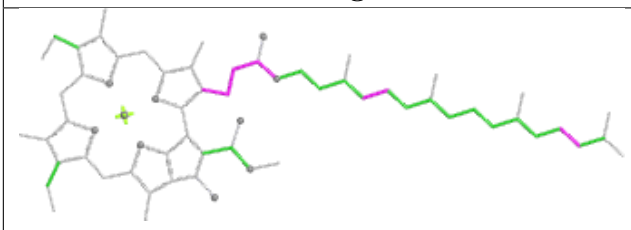
Ligand CLA b 805



Bond lengths



Bond angles



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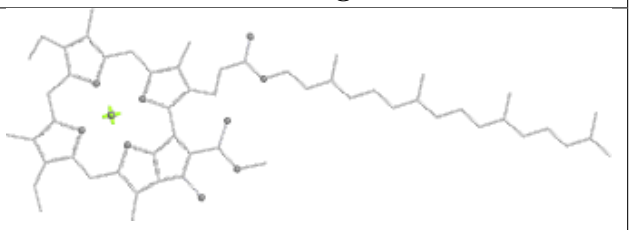
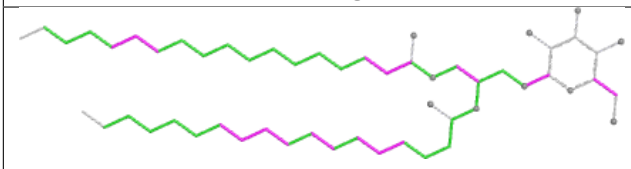


Rings

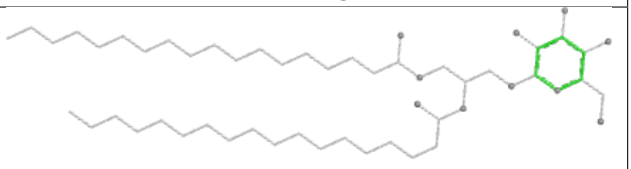
Ligand LMG h 103

Bond lengths

Bond angles



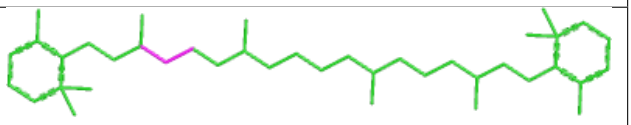
Torsions



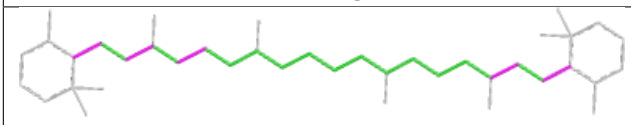
Rings

Ligand BCR A 846

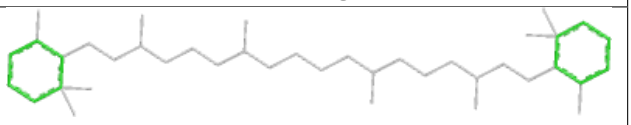
Bond lengths



Bond angles

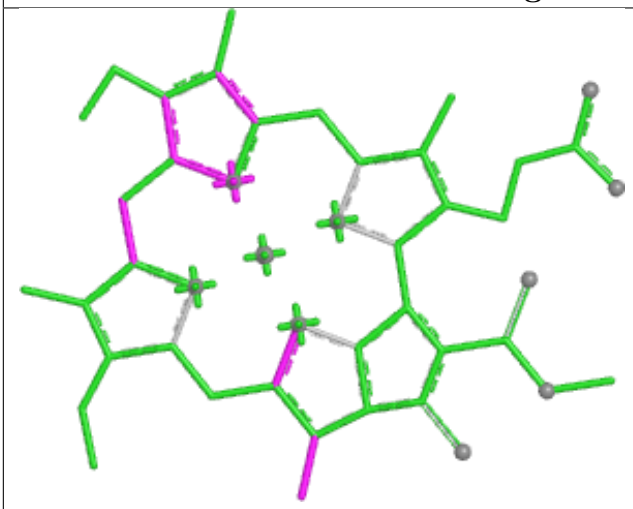


Torsions

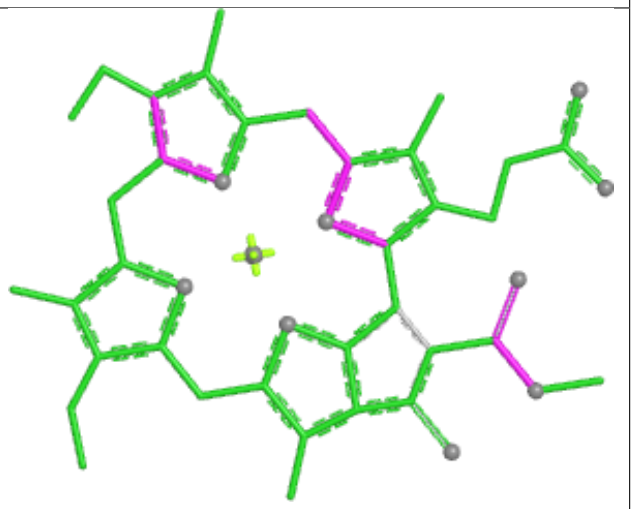


Rings

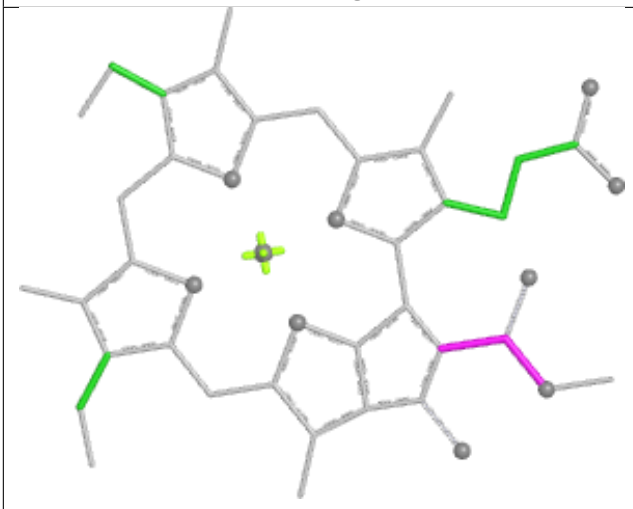
Ligand CLA B 820



Bond lengths



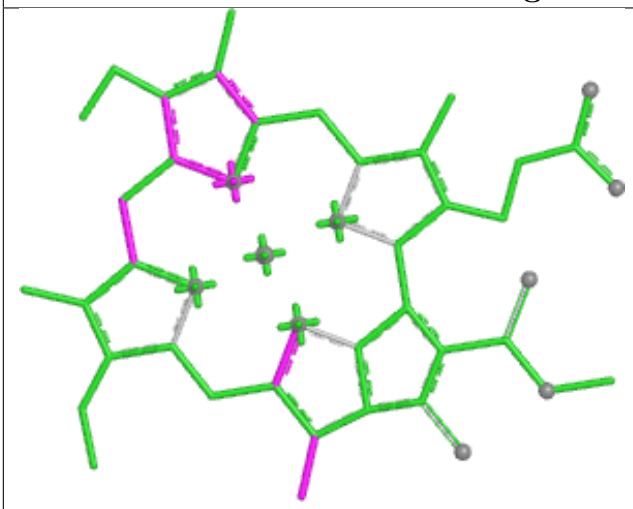
Bond angles



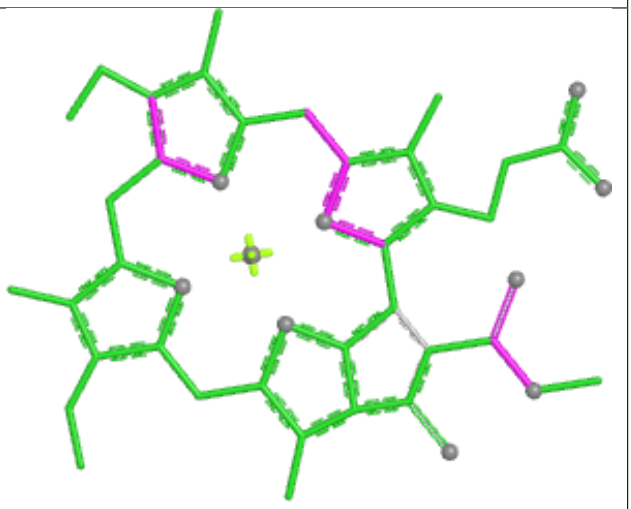
Torsions

Rings

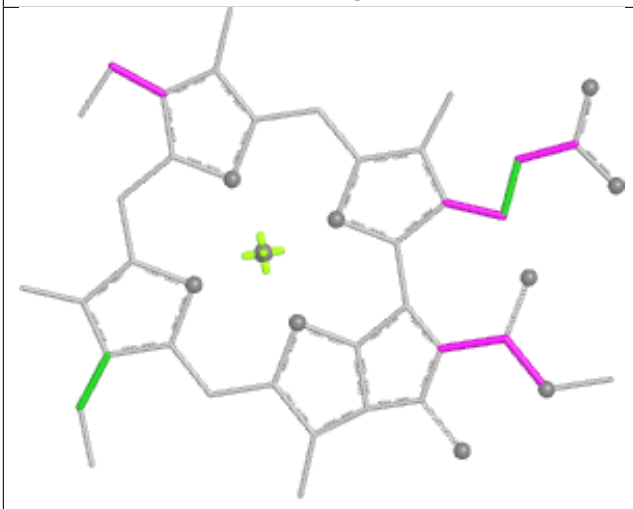
Ligand CLA V 102



Bond lengths



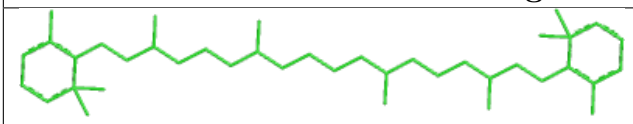
Bond angles



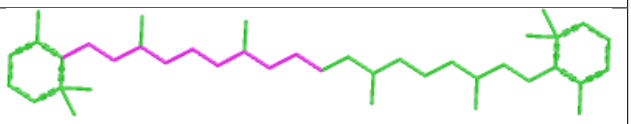
Torsions

Rings

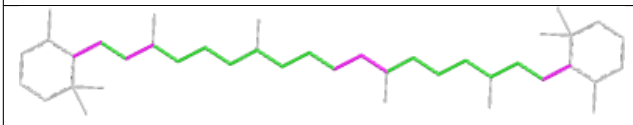
Ligand BCR h 102



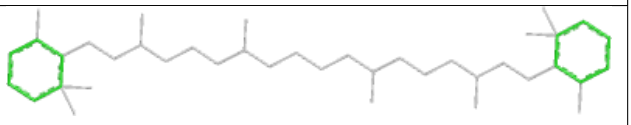
Bond lengths



Bond angles

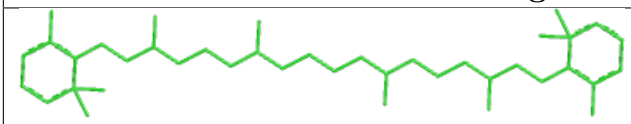


Torsions



Rings

Ligand BCR I 101



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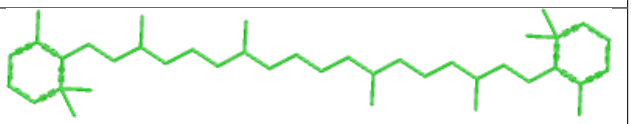

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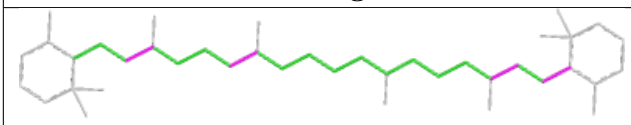

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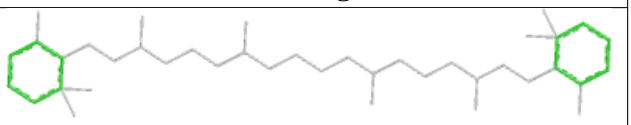
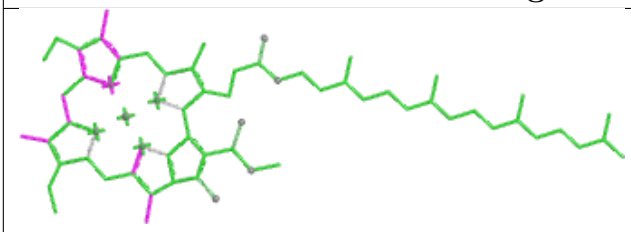


Rings

Ligand CLA b 825



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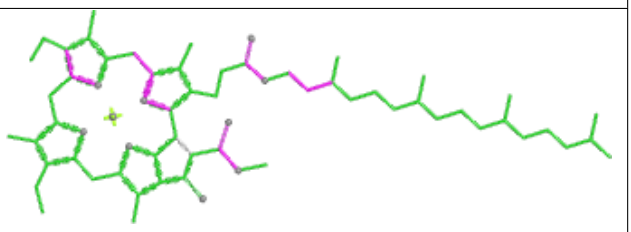
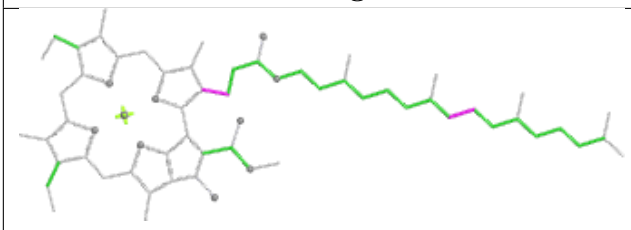


Bond angles



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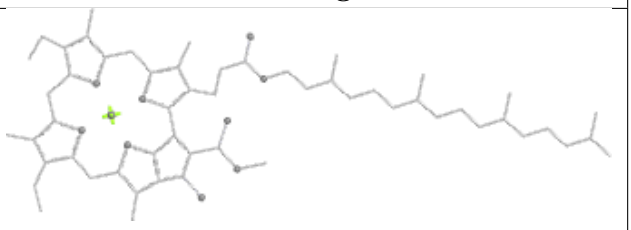
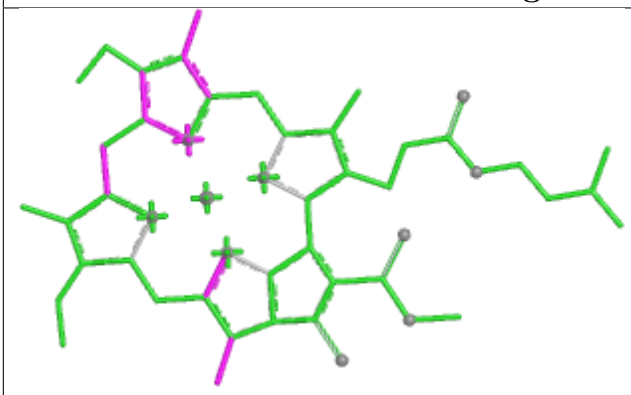


Rings

Ligand CLA K 103



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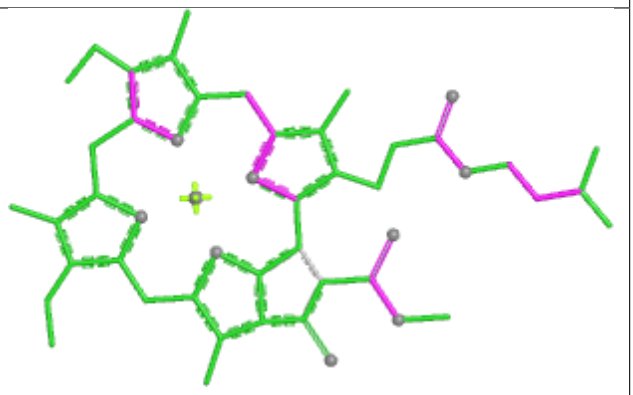

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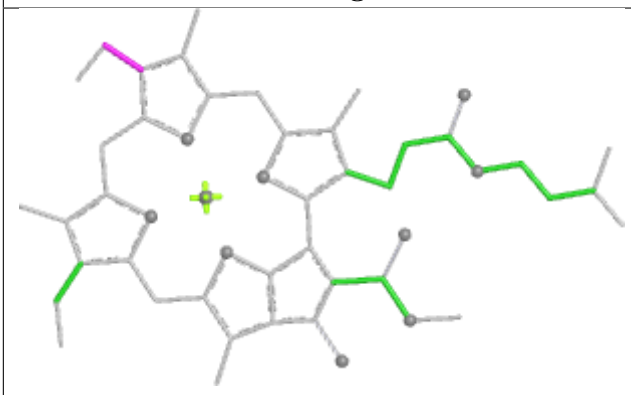

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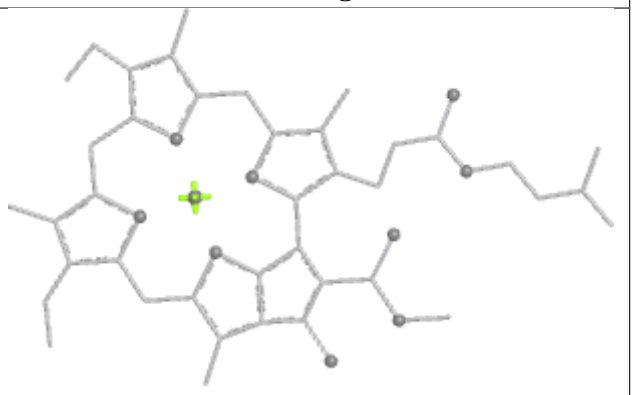
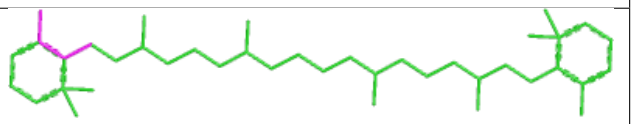


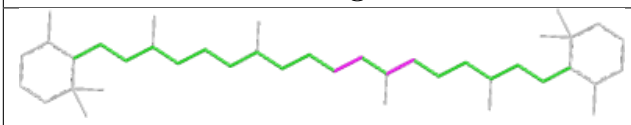
Rings

Ligand BCR A 845

Bond lengths



Bond angles



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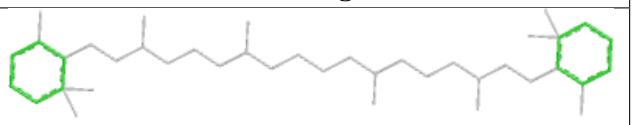
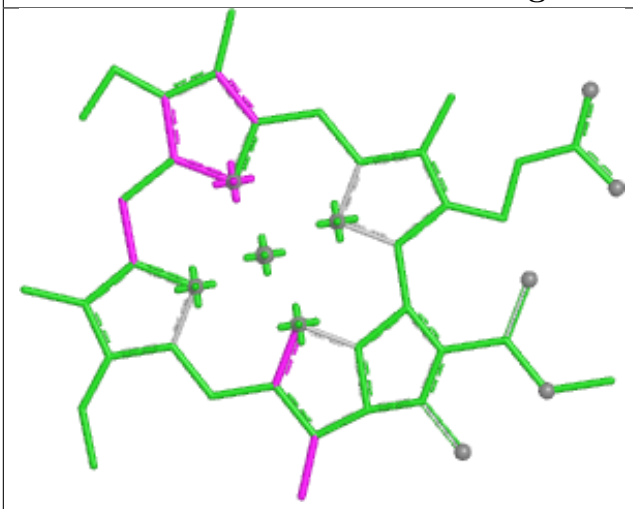


Rings

Ligand CLA a 808



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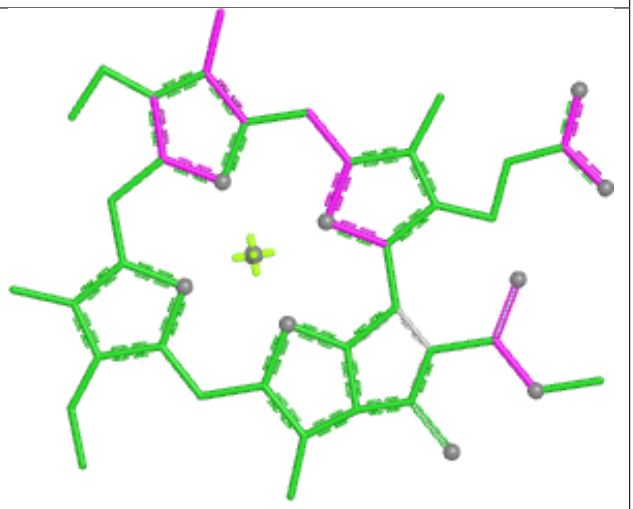
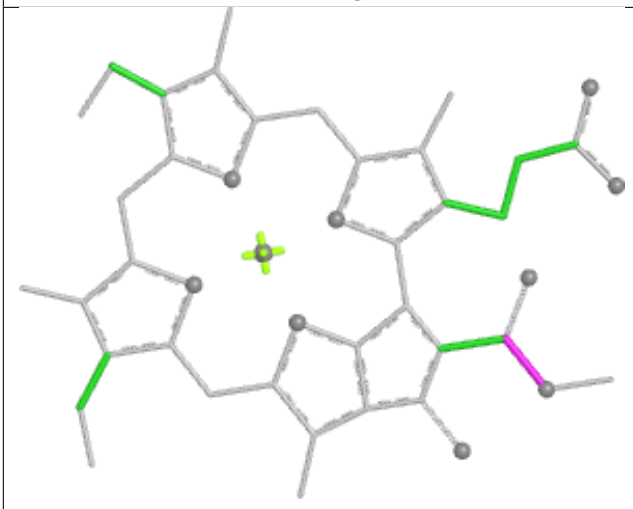


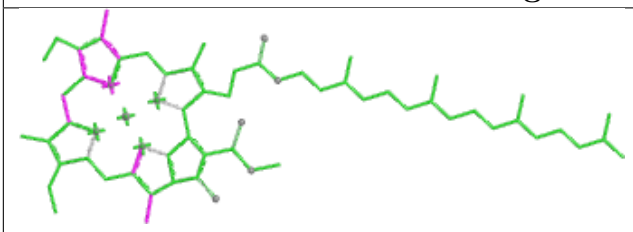
Bond angles



Torsions

Rings

Ligand CLA O 840



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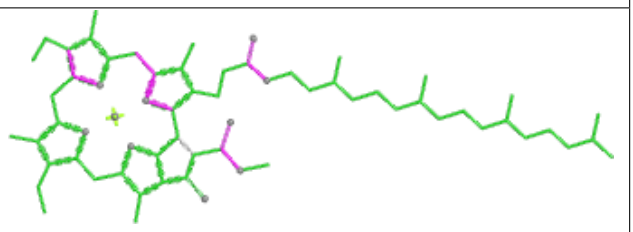
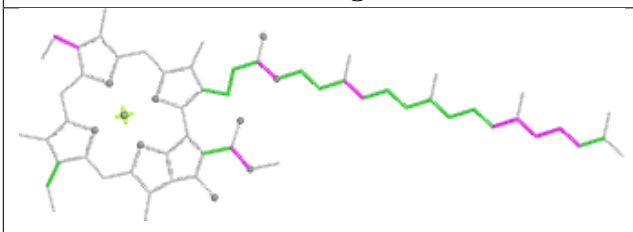


Bond angles



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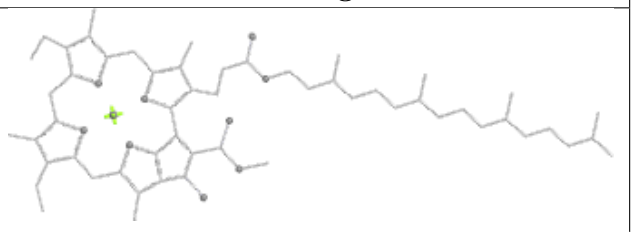
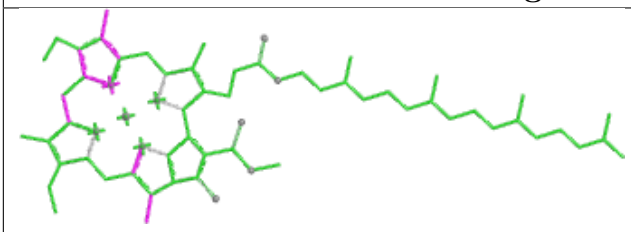


Rings

Ligand CLA B 807



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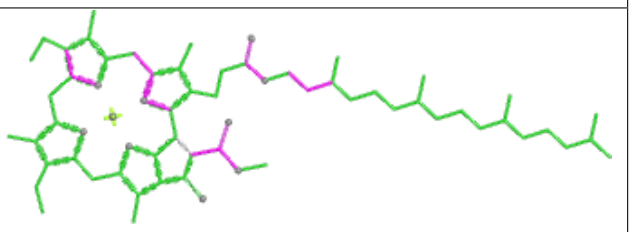
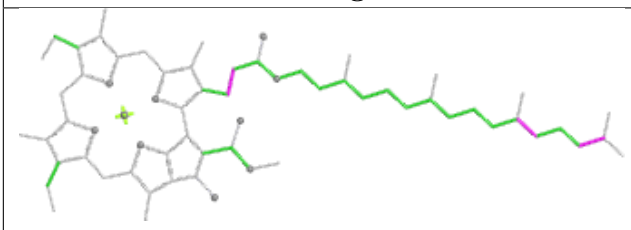


Bond angles



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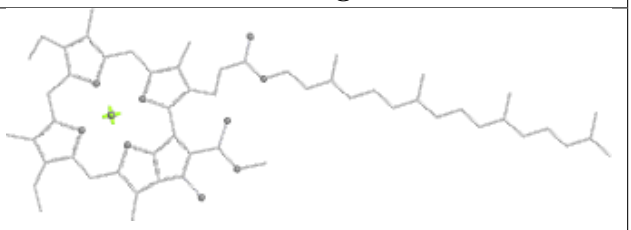
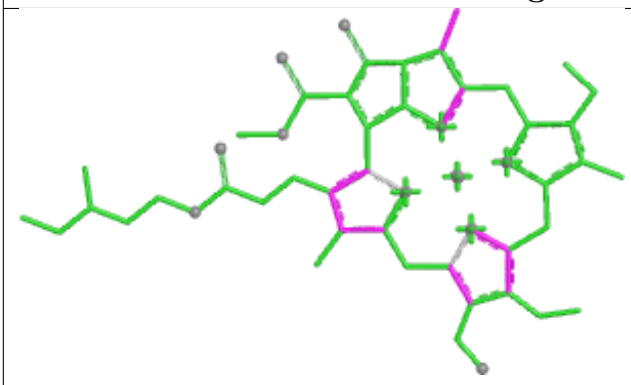


Rings

Ligand F6C A 824



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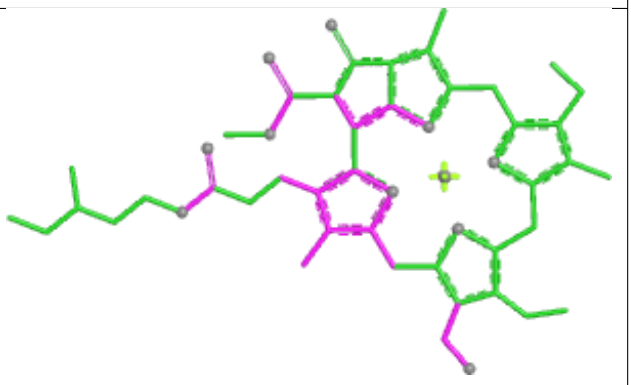
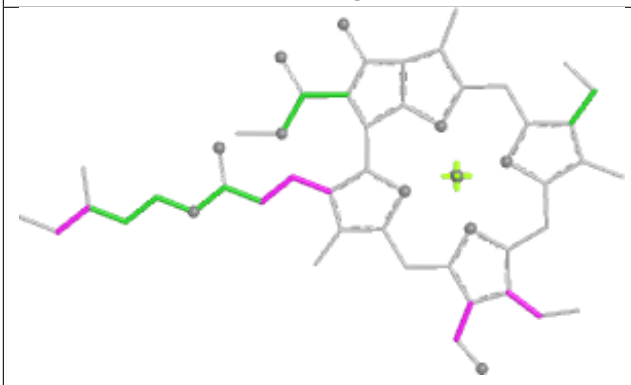


Bond angles



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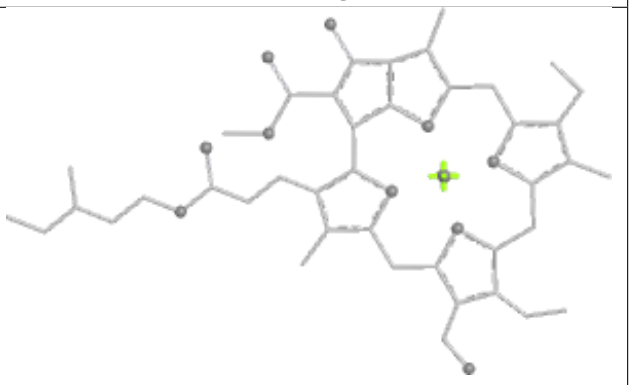
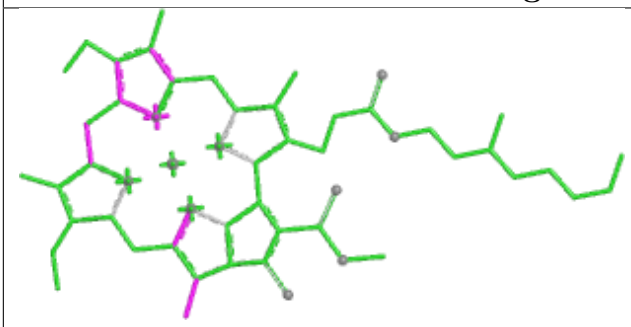


Rings

Ligand CLA N 813



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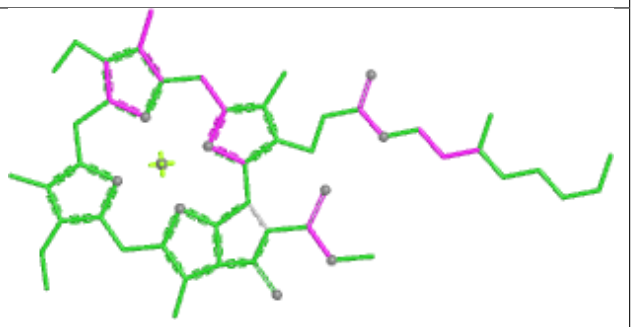
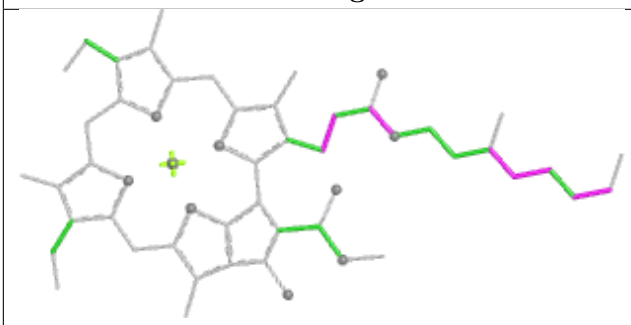


Bond angles



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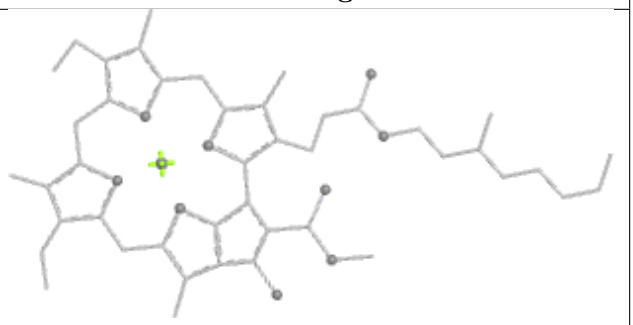
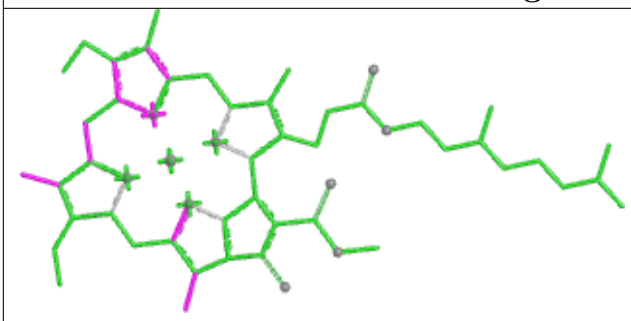


Rings

Ligand CLA O 822



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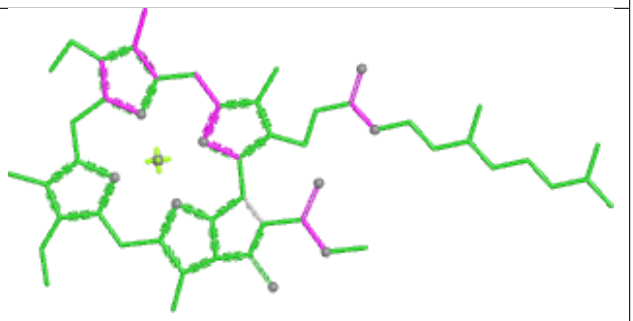
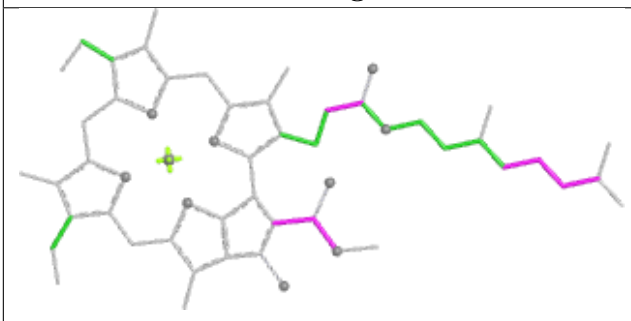
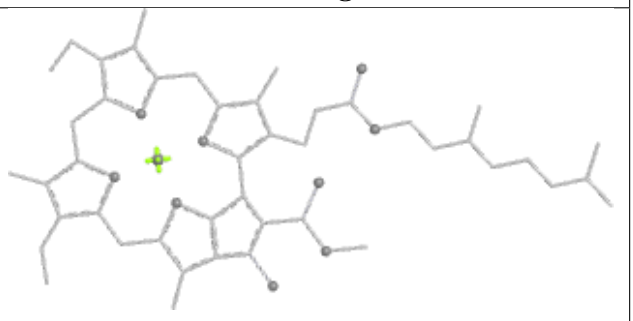


Bond angles

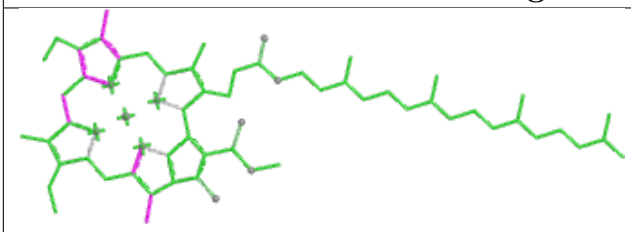


Torsions



Rings

Ligand CLA b 801



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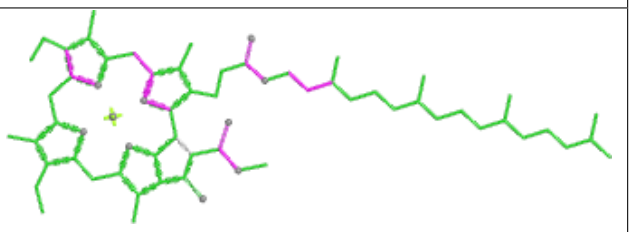
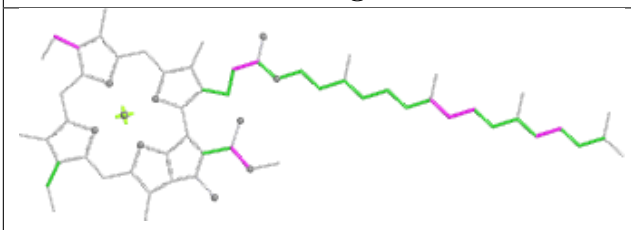


Bond angles



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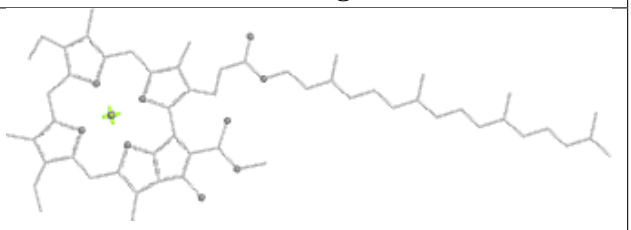
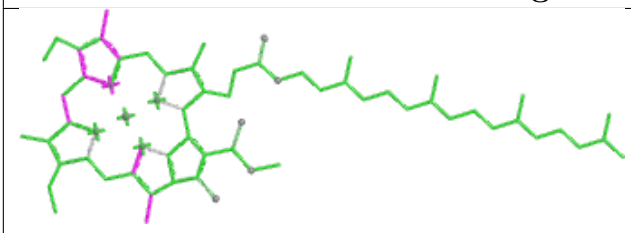


Rings

Ligand CLA f 201



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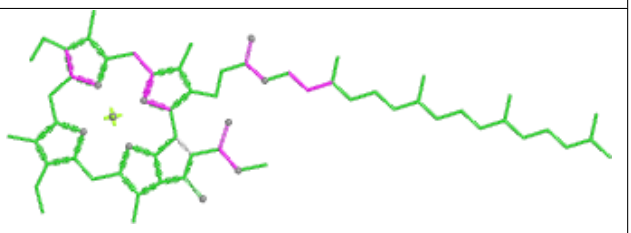
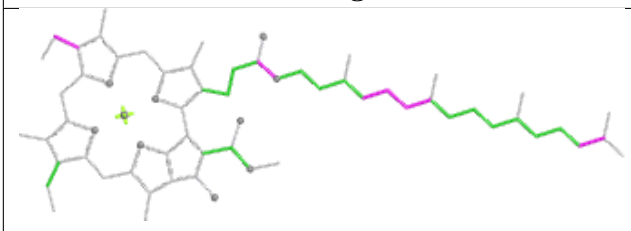


Bond angles



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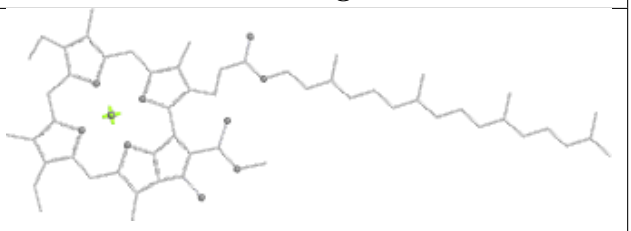
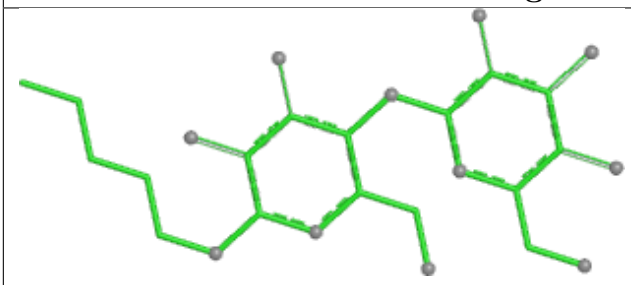
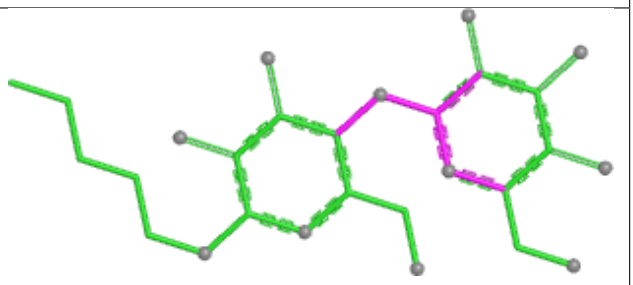


Rings

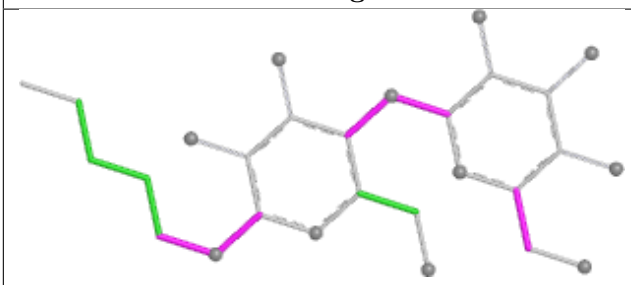
Ligand LMT a 853



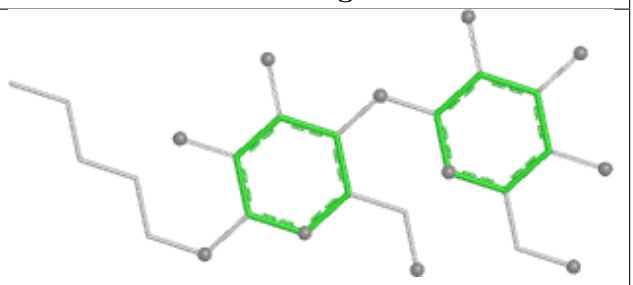
Bond lengths



Bond angles

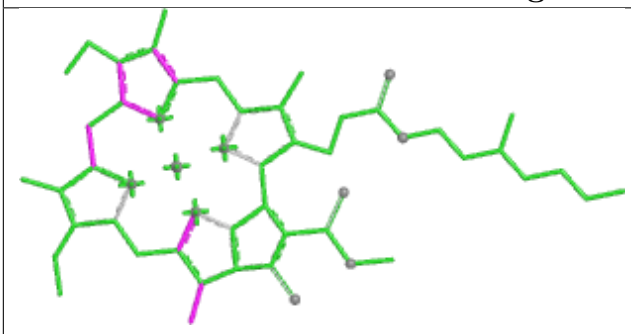


Torsions

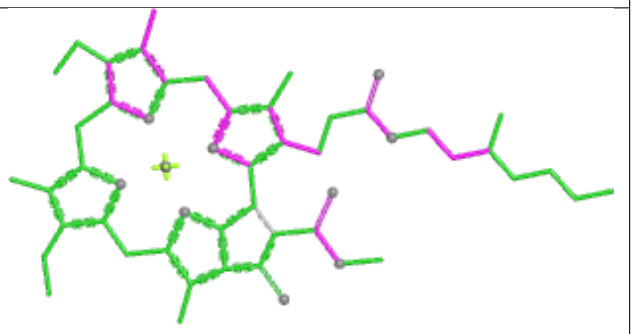


Rings

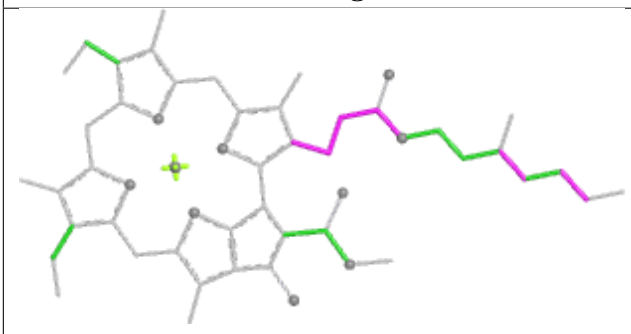
Ligand CLA b 821



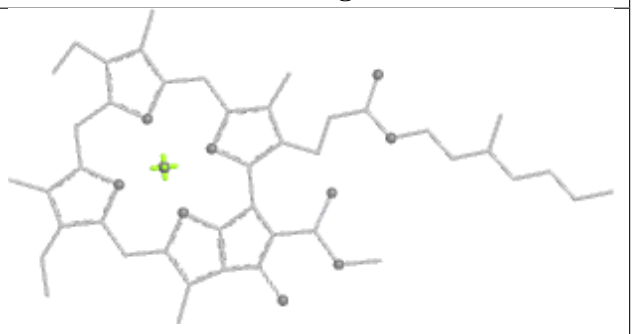
Bond lengths



Bond angles

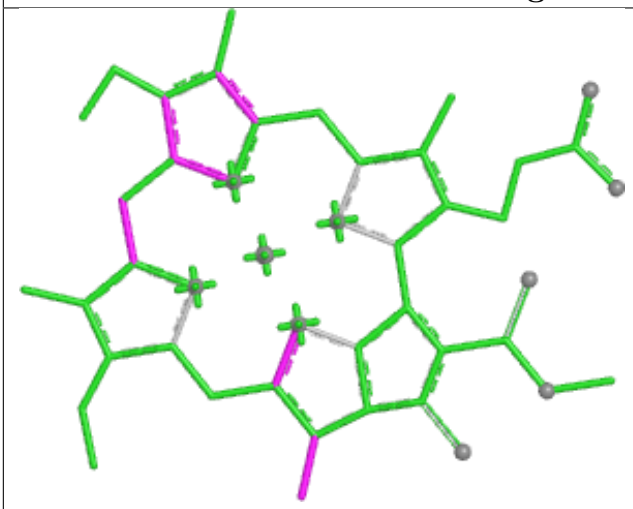


Torsions

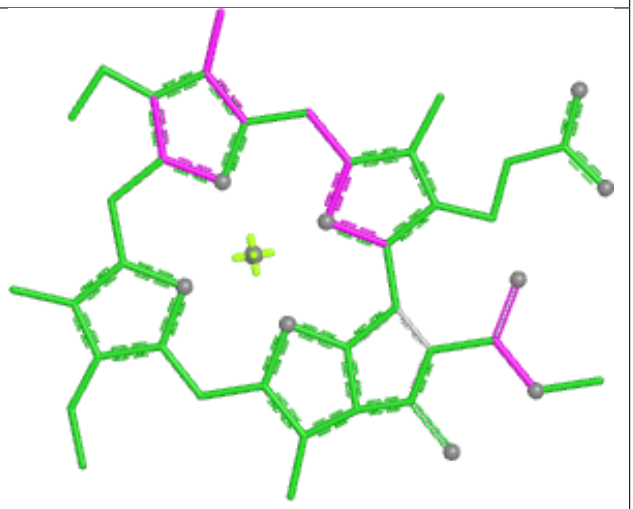


Rings

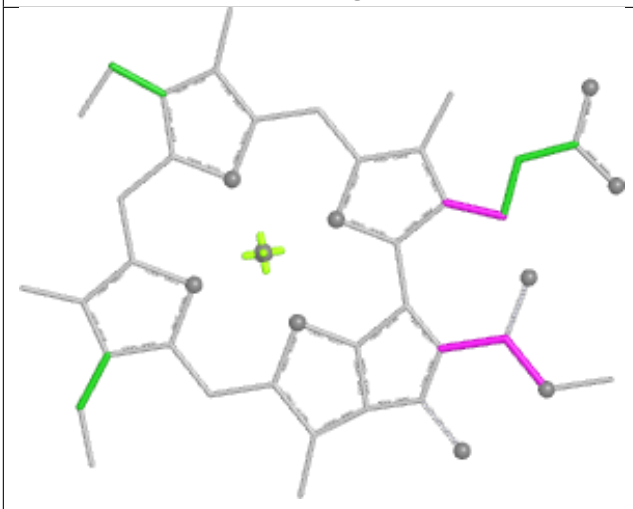
Ligand CLA b 814



Bond lengths



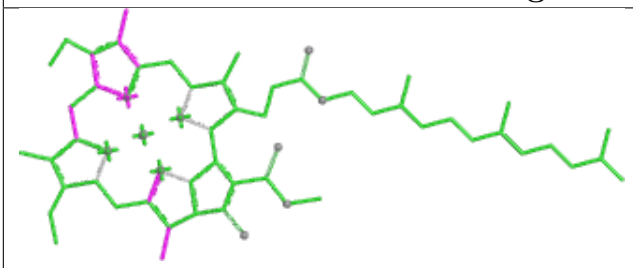
Bond angles



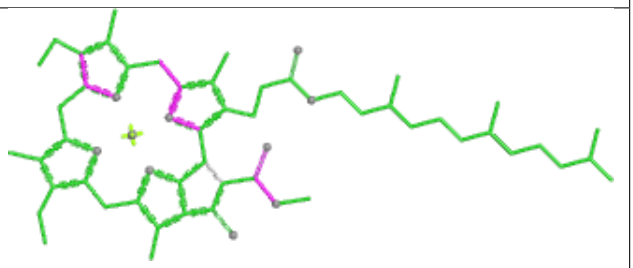
Torsions

Rings

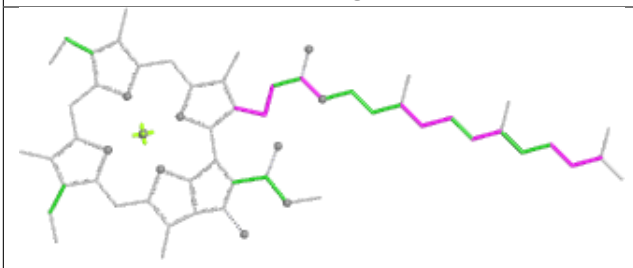
Ligand CLA b 817



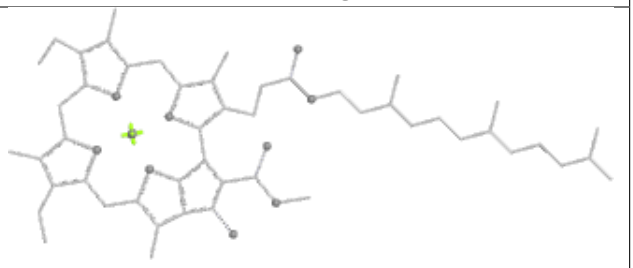
Bond lengths



Bond angles

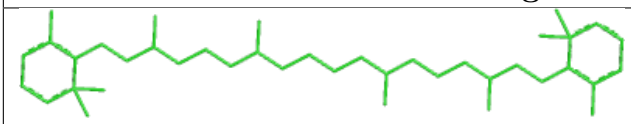


Torsions



Rings

Ligand BCR O 847



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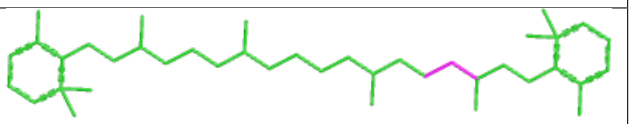

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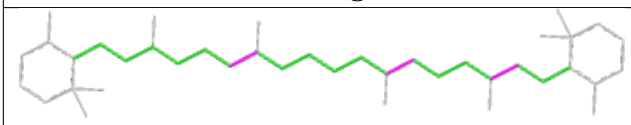
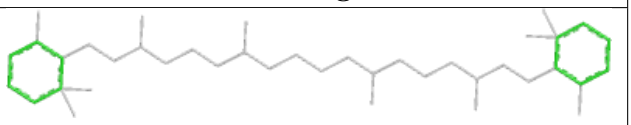
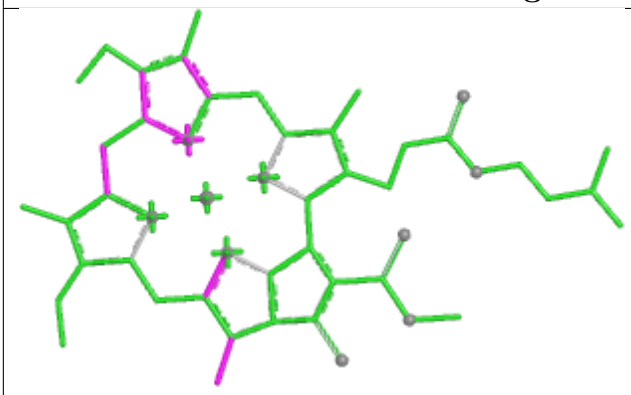


Torsions

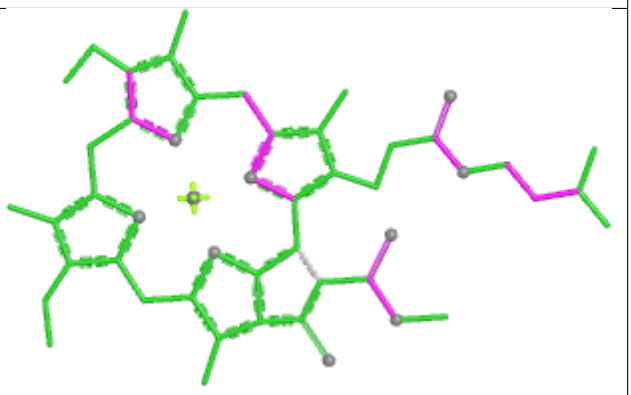


Rings

Ligand CLA A 840



Bond lengths



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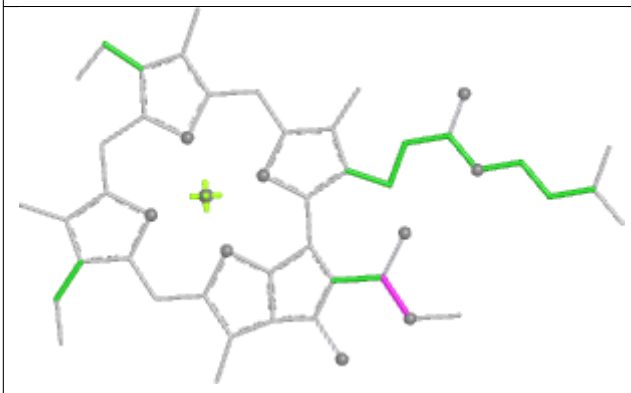
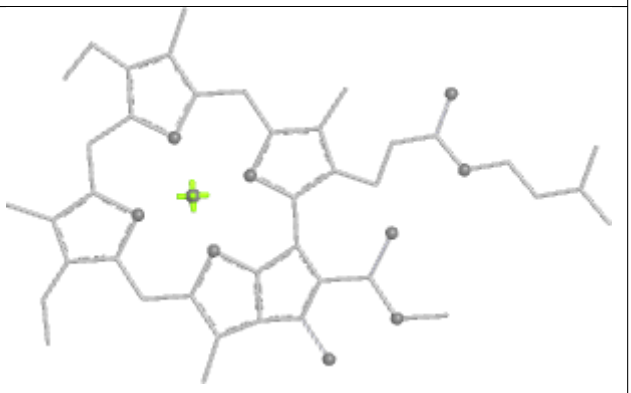
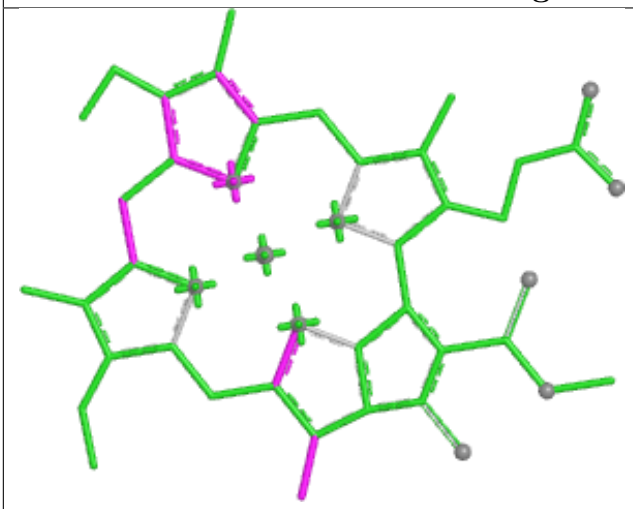


Torsions



Rings

Ligand CLA i 102



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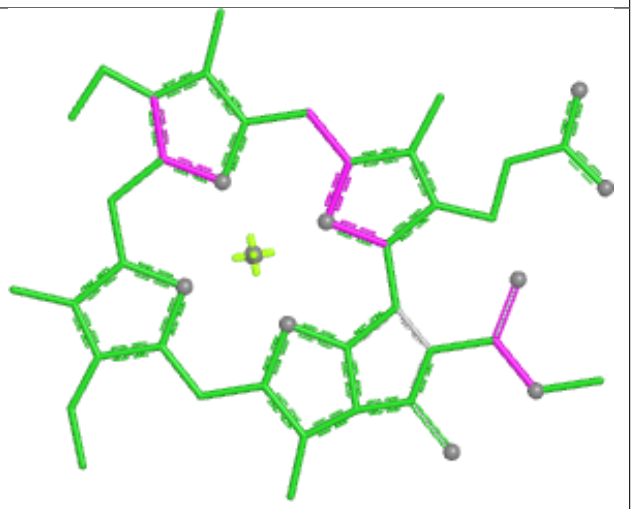
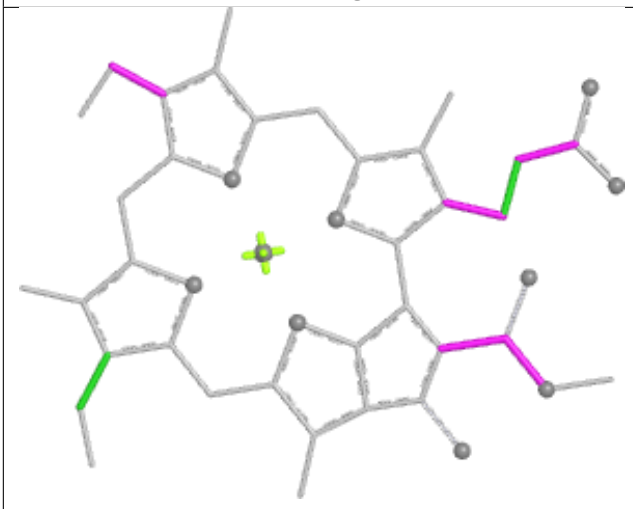


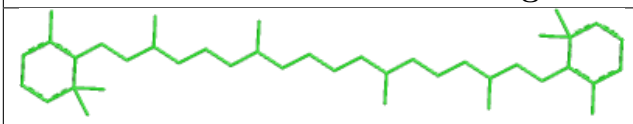
Bond angles



Torsions

Rings

Ligand BCR U 101



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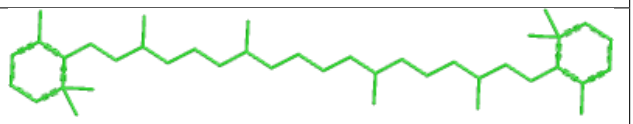
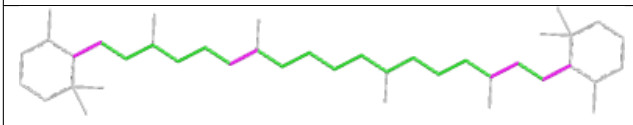
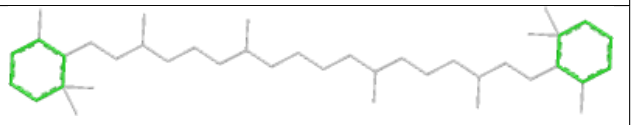


Bond angles

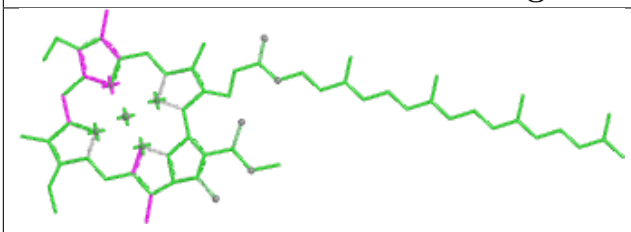


Torsions

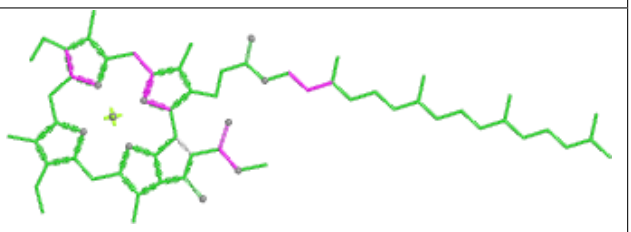


Rings

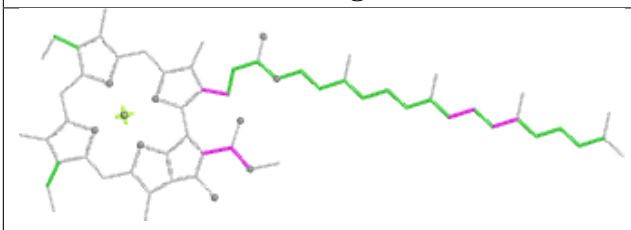
Ligand CLA b 823



Bond lengths



Bond angles



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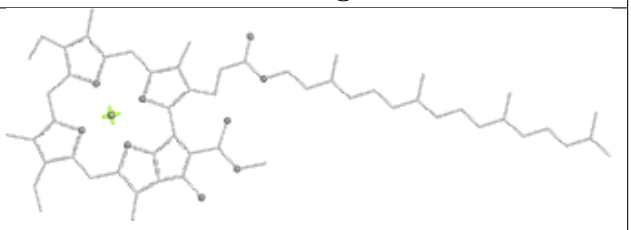
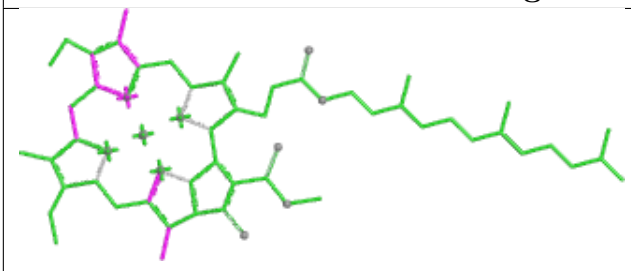
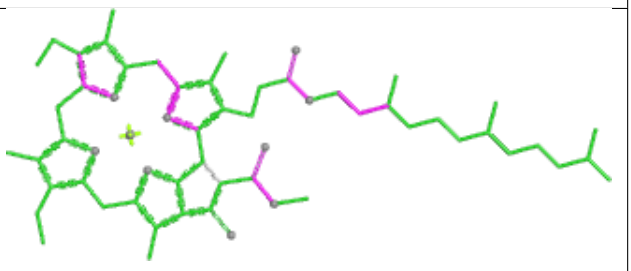


Rings

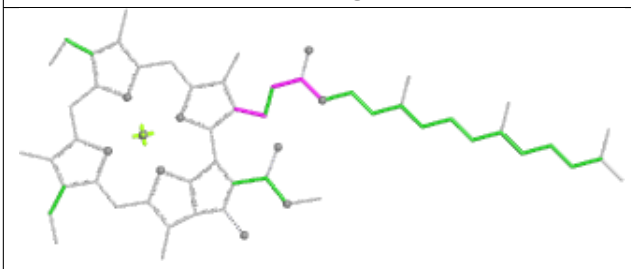
Ligand CLA A 821



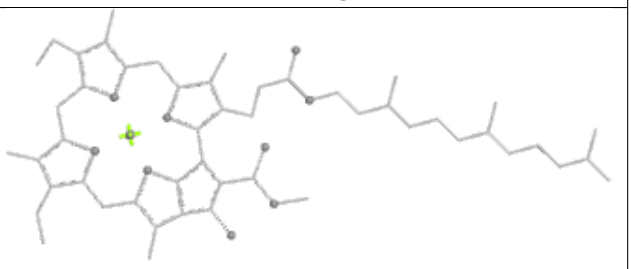
Bond lengths



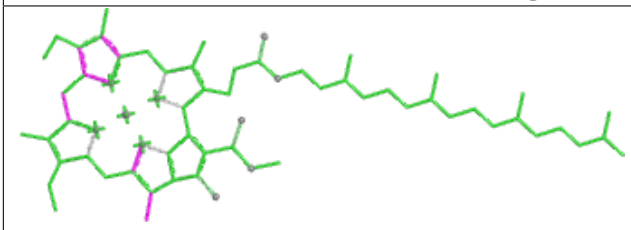
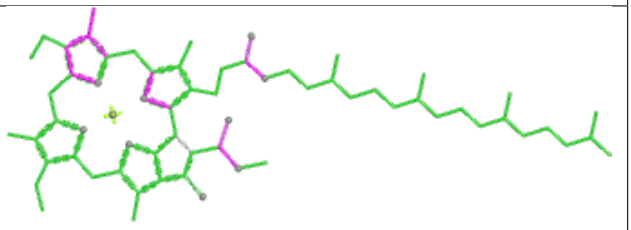
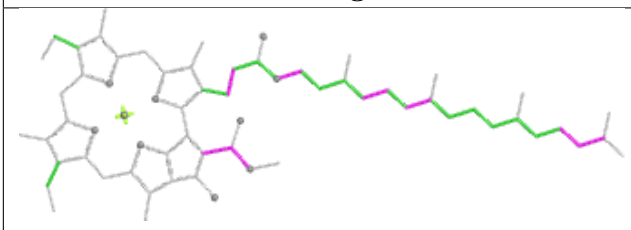
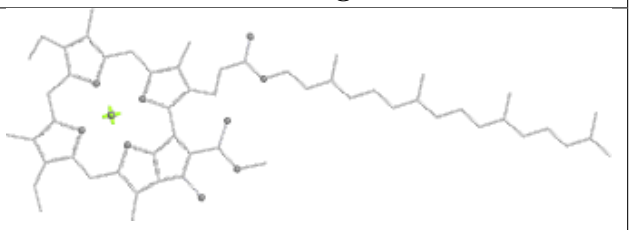
Bond angles

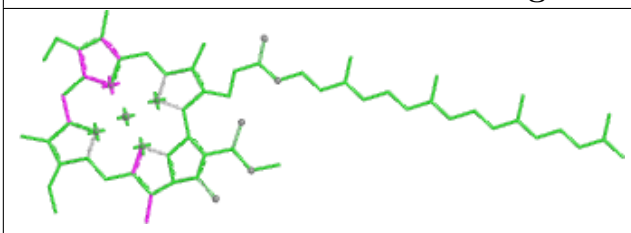
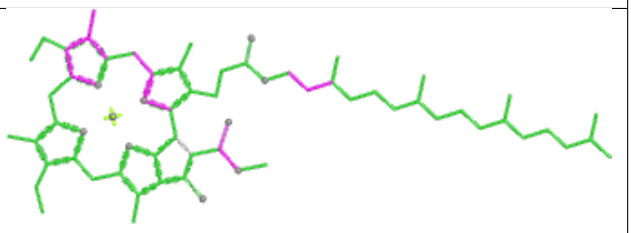
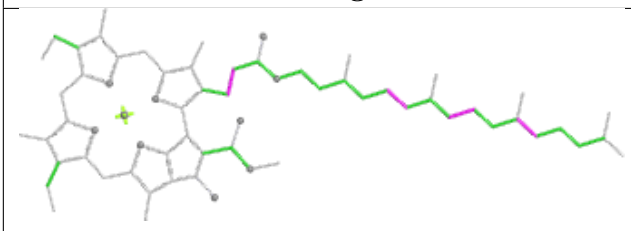
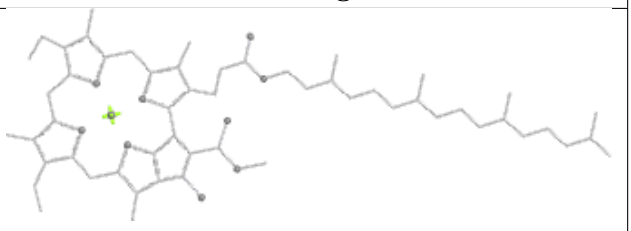


Torsions

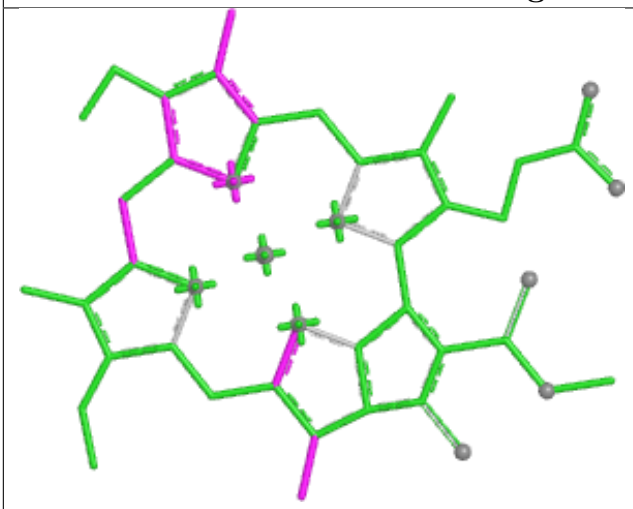


Rings

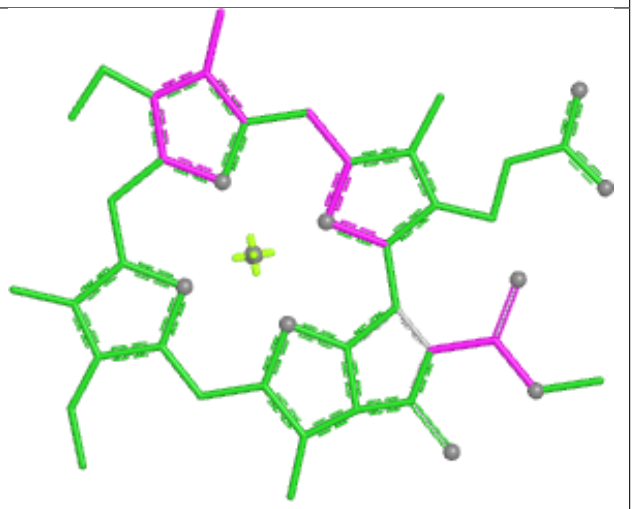
Ligand CLA B 802	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA a 830	
	
Bond lengths	Bond angles
	
Torsions	Rings

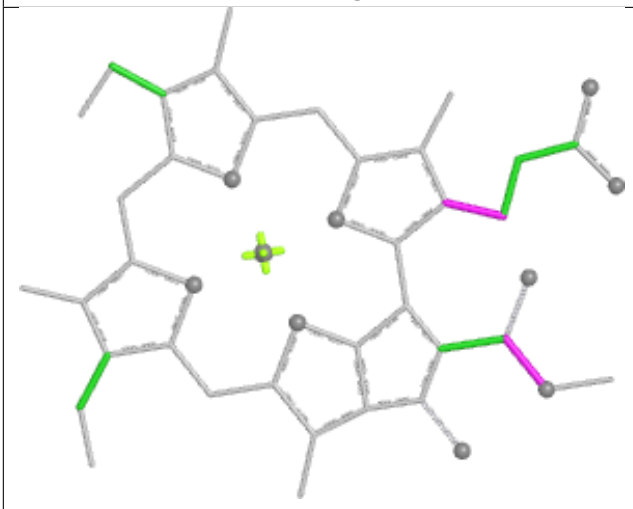
Ligand CLA b 834



Bond lengths



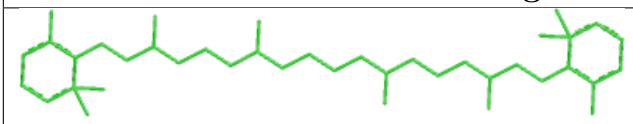
Bond angles



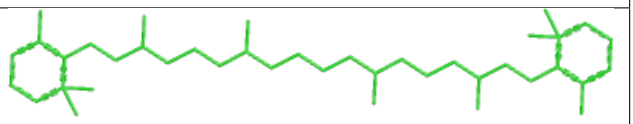
Torsions

Rings

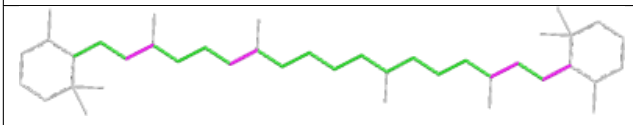
Ligand BCR T 101



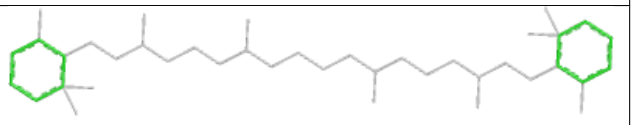
Bond lengths



Bond angles



Torsions

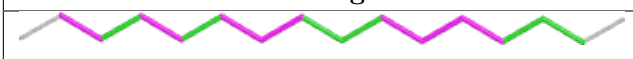


Rings

Ligand LFA O 850

Bond lengths

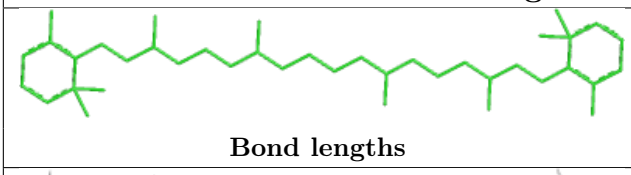
Bond angles



Torsions

Rings

Ligand BCR L 206



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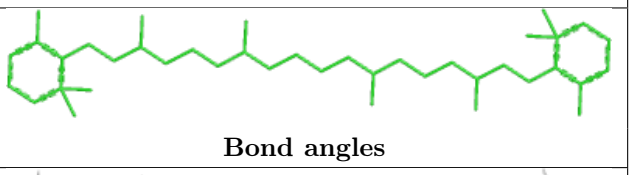

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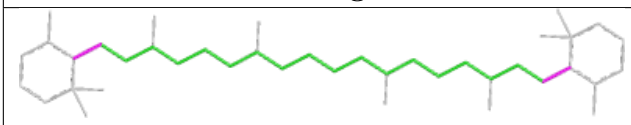

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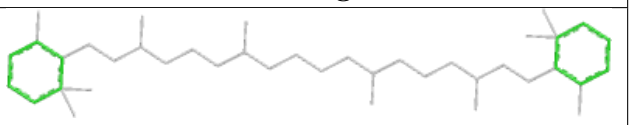
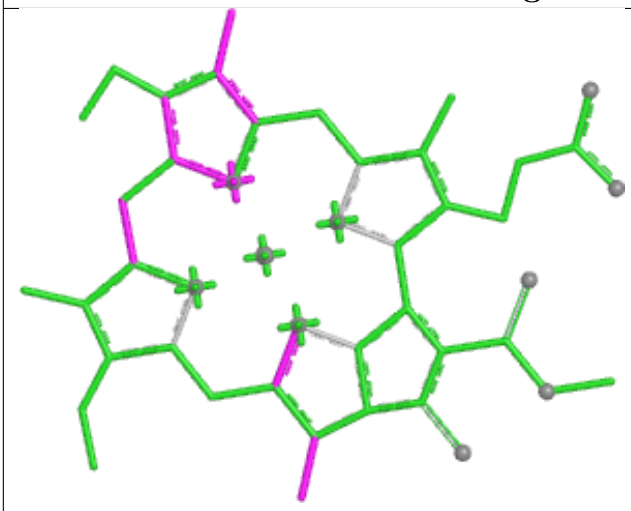


Rings

Ligand CLA N 817



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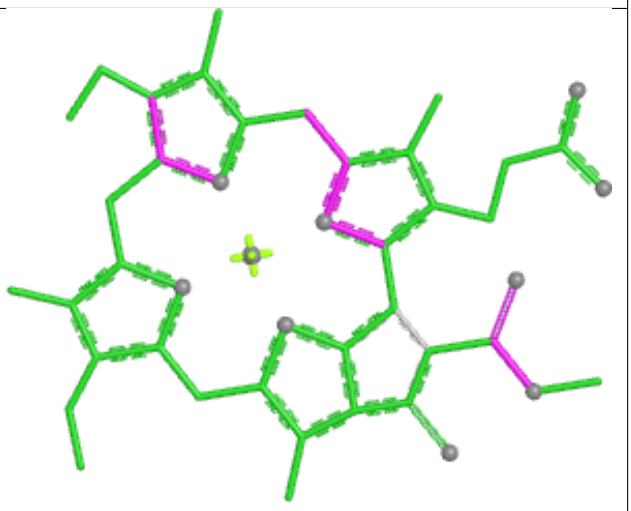
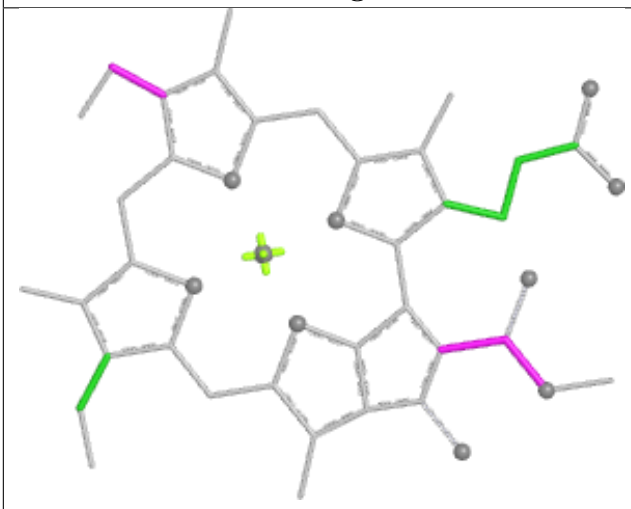


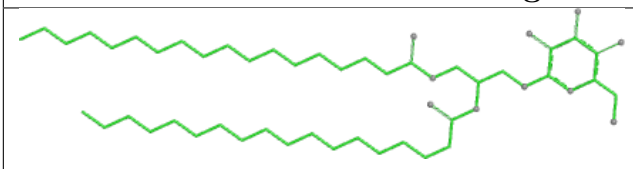
Bond angles

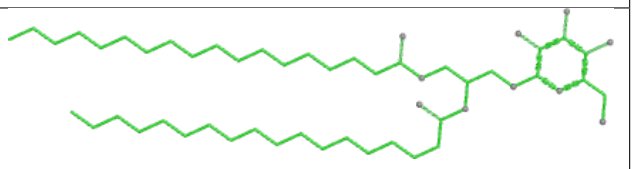


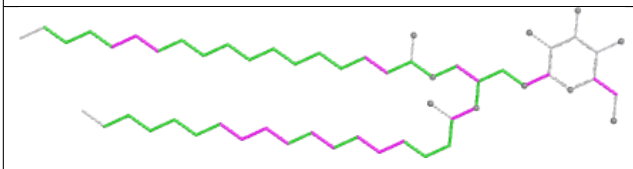
Torsions

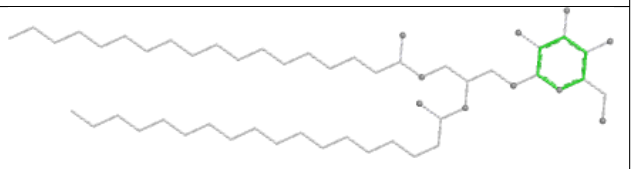
Rings

Ligand LMG J 103

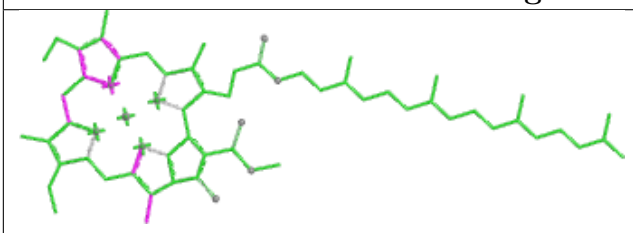

Bond lengths

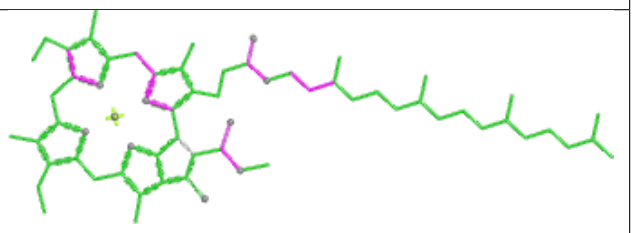

Bond angles

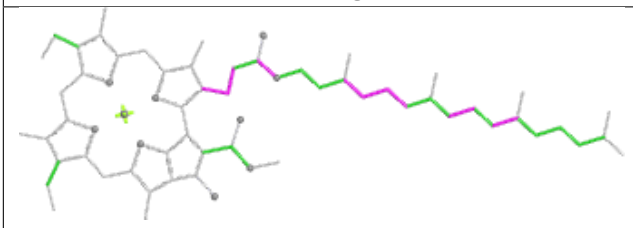

Torsions


Rings

Ligand CLA B 830


Bond lengths


Bond angles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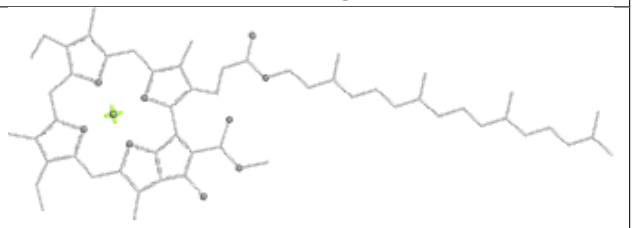
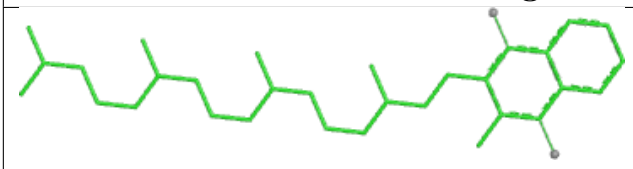
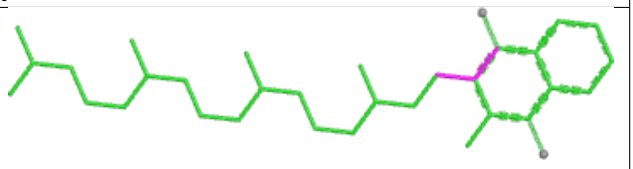
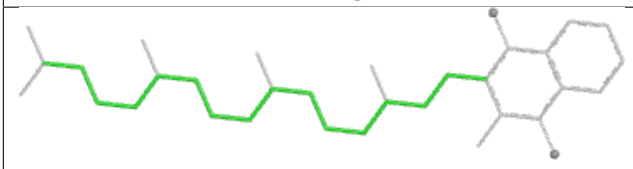
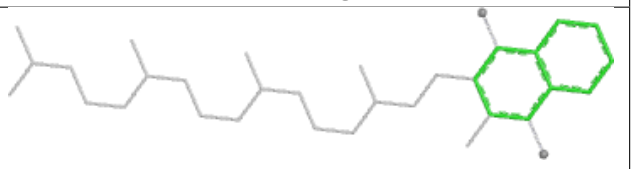

Rings

Ligand PQN O 841

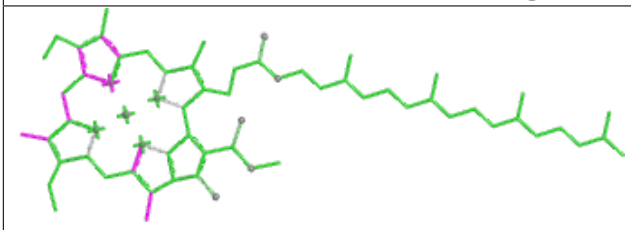

Bond lengths


Bond angles

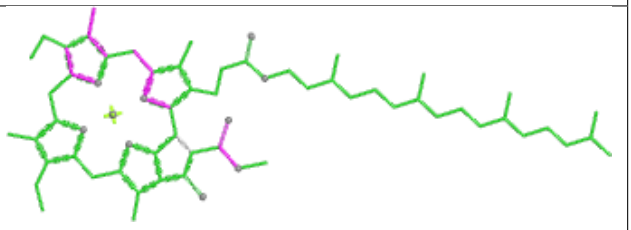

Torsions


Rings

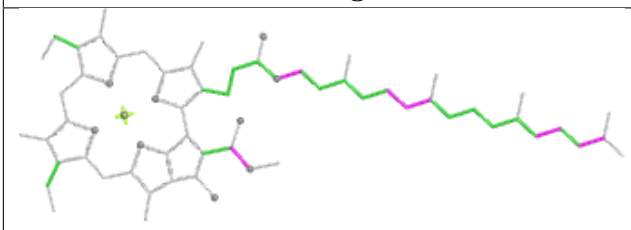
Ligand CLA N 828



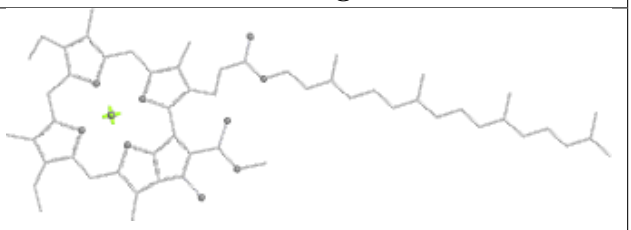
Bond lengths



Bond angles

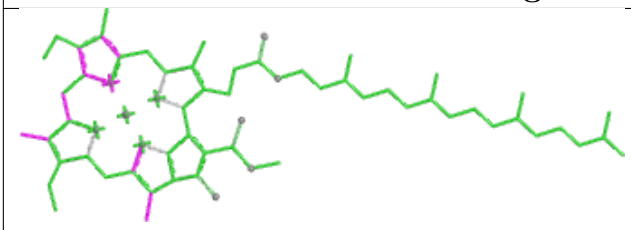


Torsions

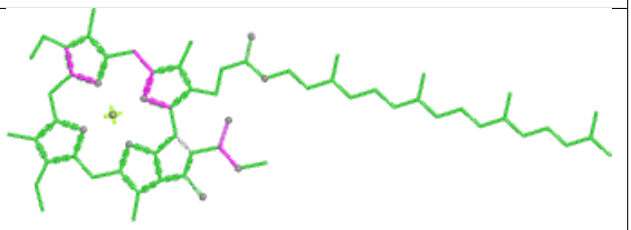


Rings

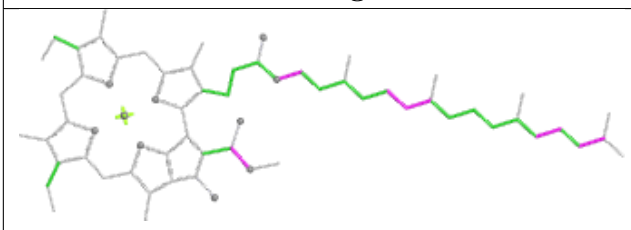
Ligand CLA A 828



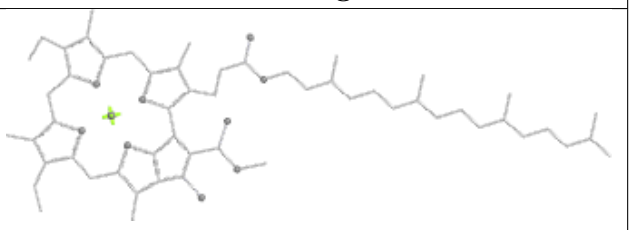
Bond lengths



Bond angles

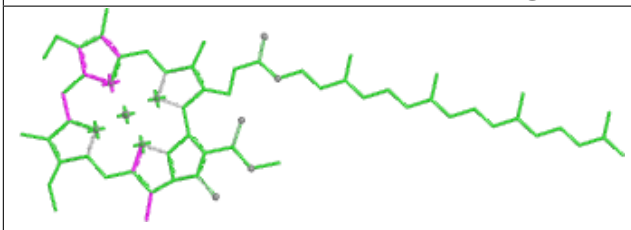


Torsions

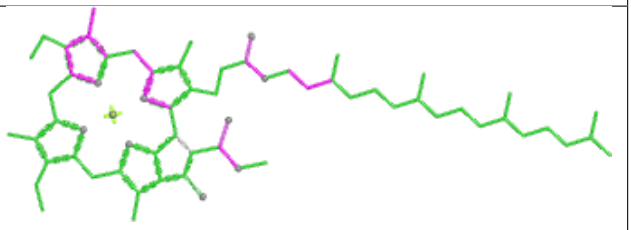


Rings

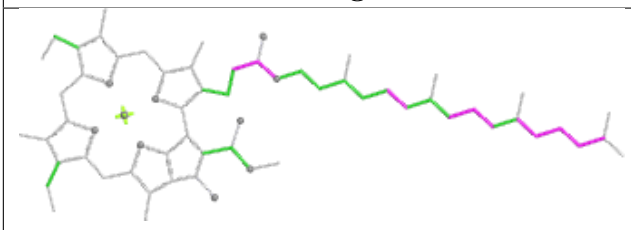
Ligand CLA O 837



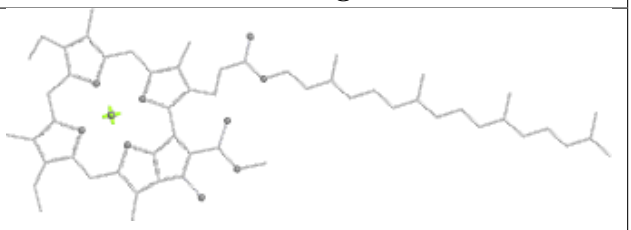
Bond lengths



Bond angles

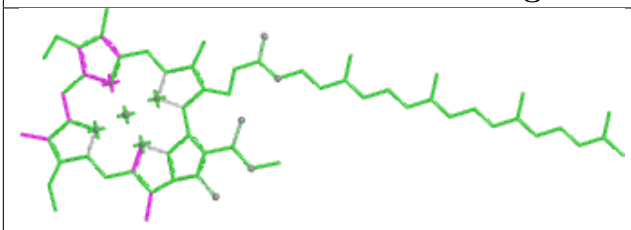


Torsions

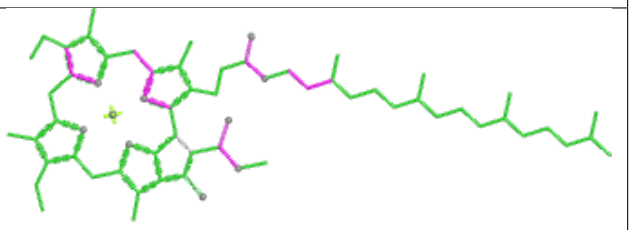


Rings

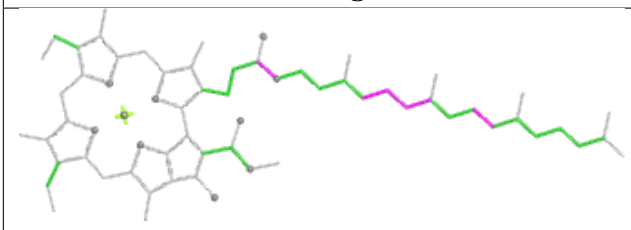
Ligand CLA O 838



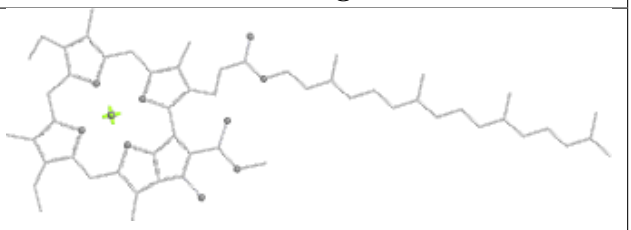
Bond lengths



Bond angles

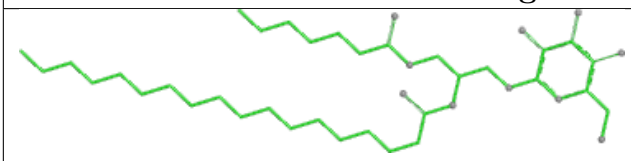


Torsions

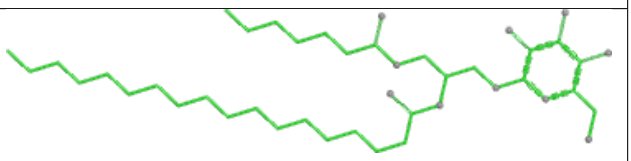


Rings

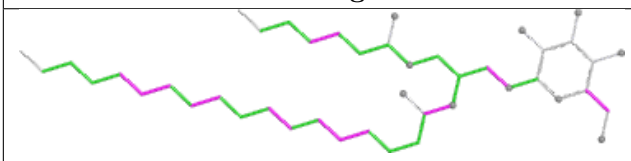
Ligand LMG A 855



Bond lengths



Bond angles



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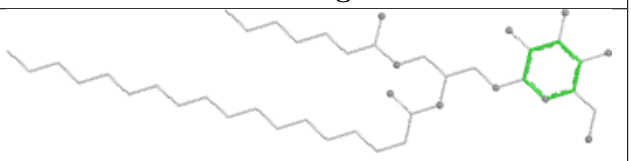
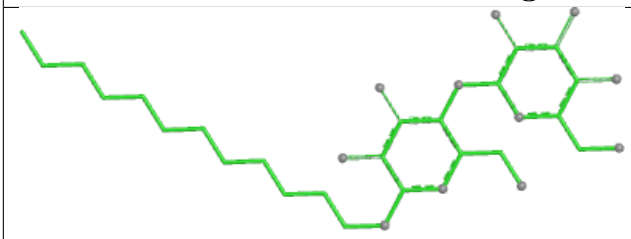
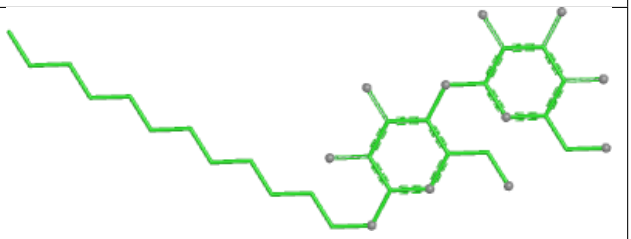


Rings

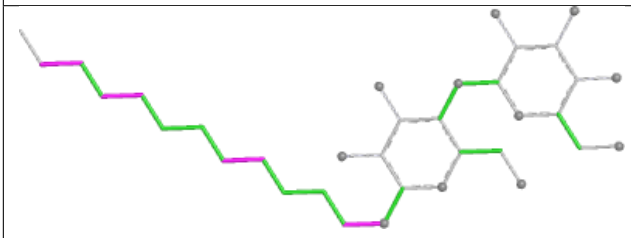
Ligand LMT N 854



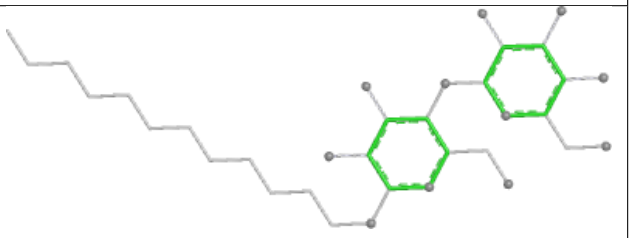
Bond lengths



Bond angles

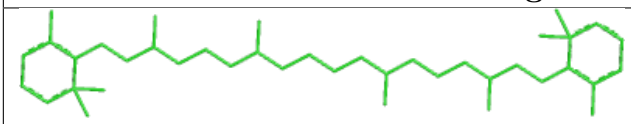


Torsions

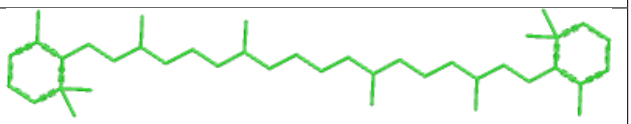


Rings

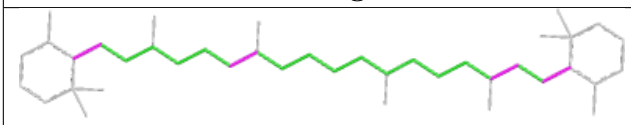
Ligand BCR h 101



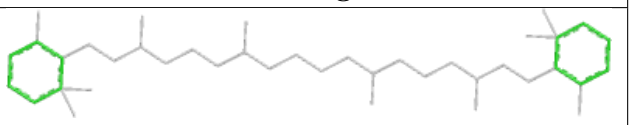
Bond lengths



Bond angles

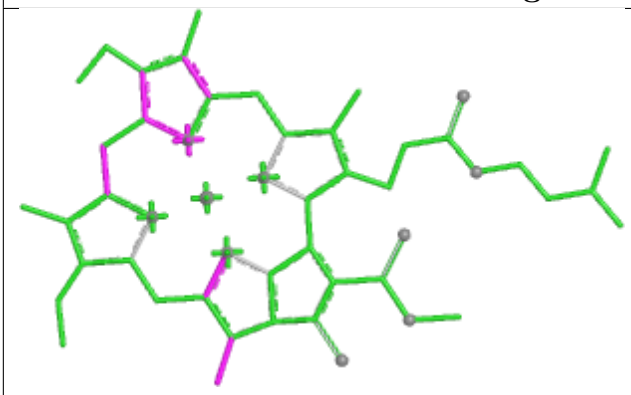


Torsions

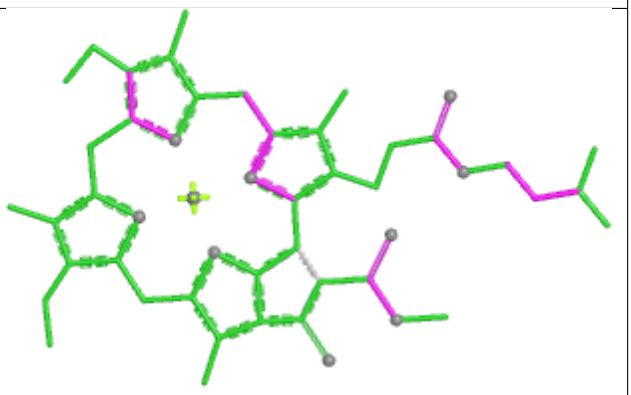


Rings

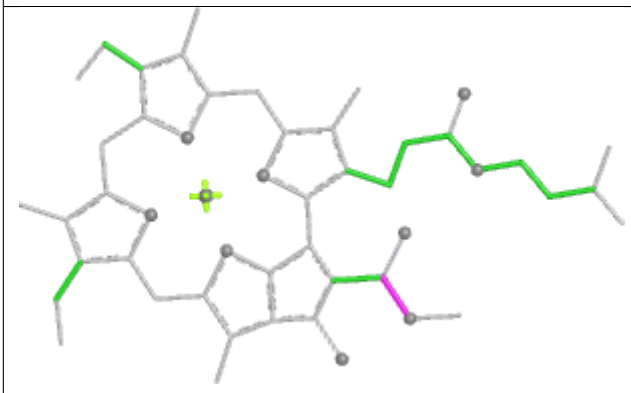
Ligand CLA N 840



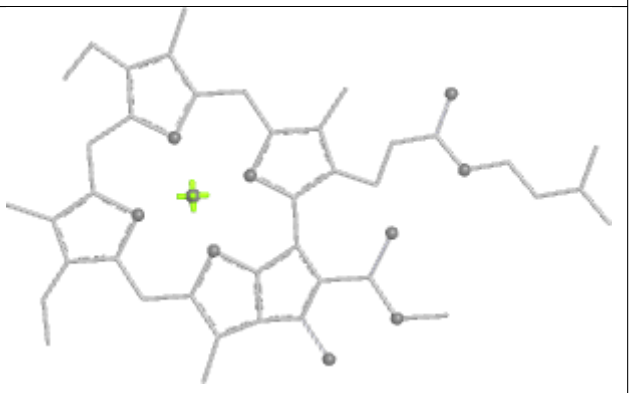
Bond lengths



Bond angles

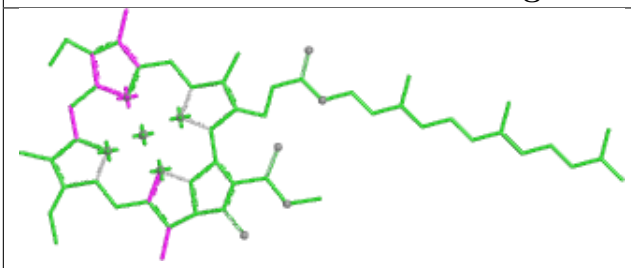


Torsions

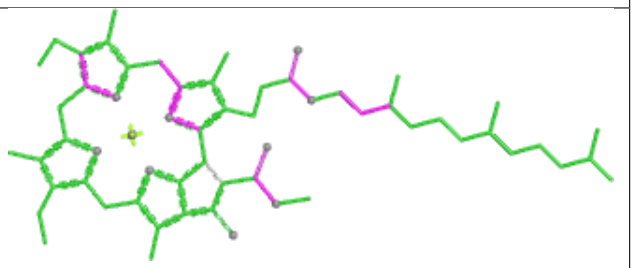


Rings

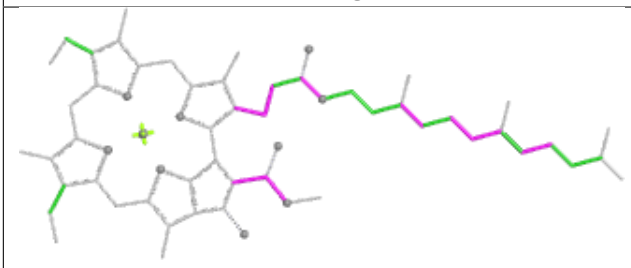
Ligand CLA N 809



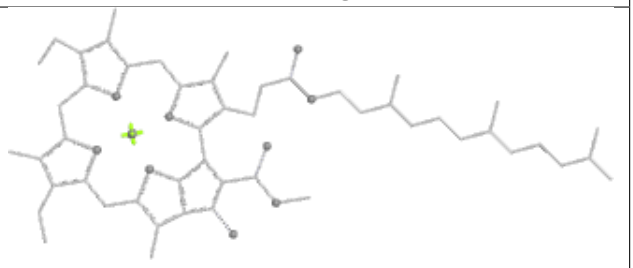
Bond lengths



Bond angles

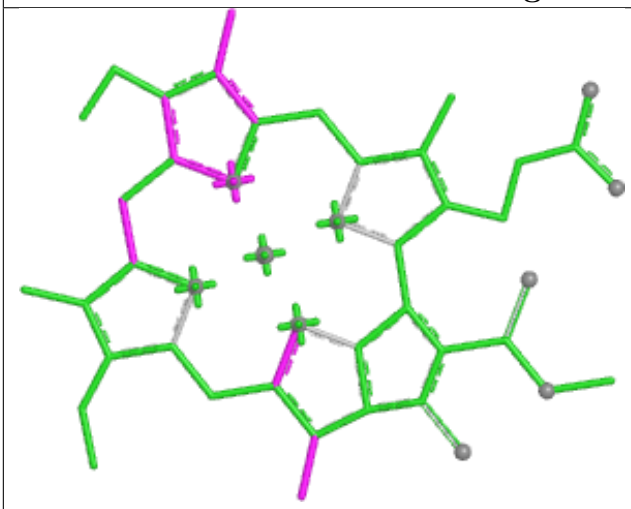


Torsions

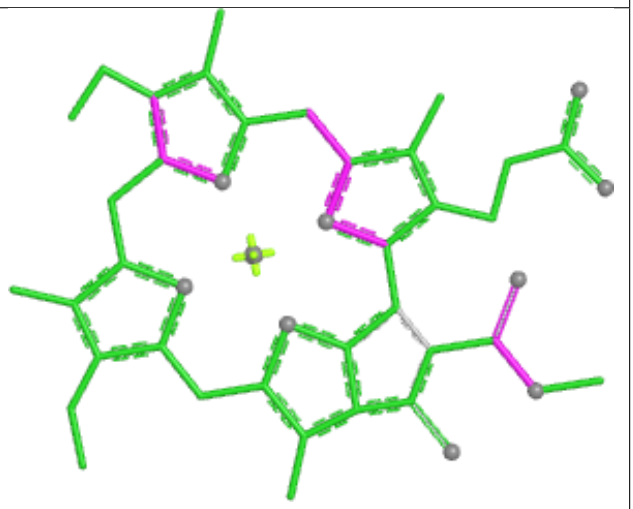


Rings

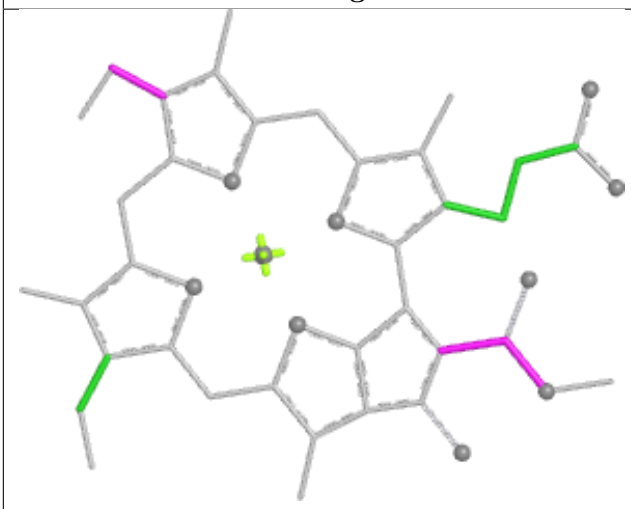
Ligand CLA A 817



Bond lengths



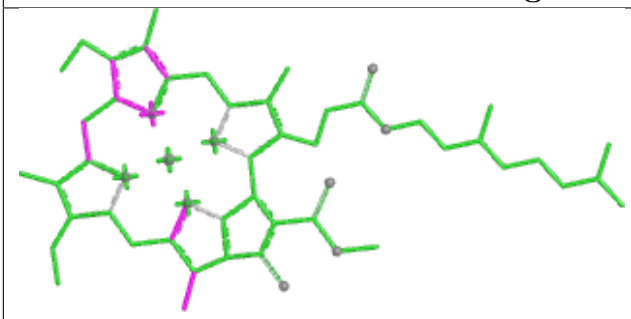
Bond angles



Torsions

Rings

Ligand CLA B 833



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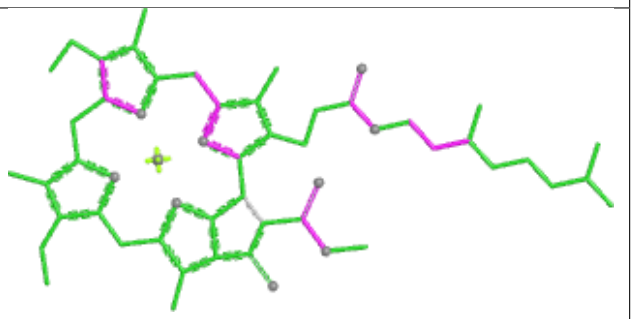
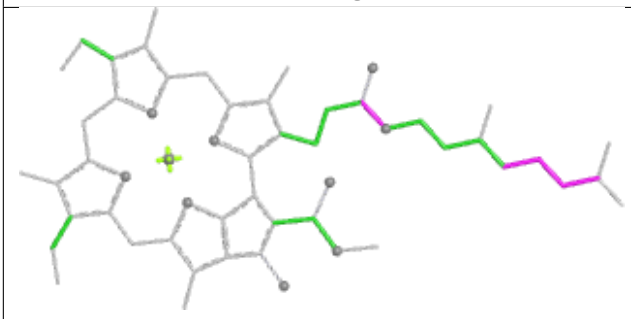
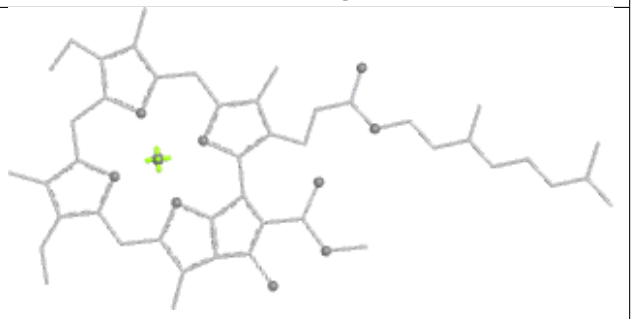


Bond angles

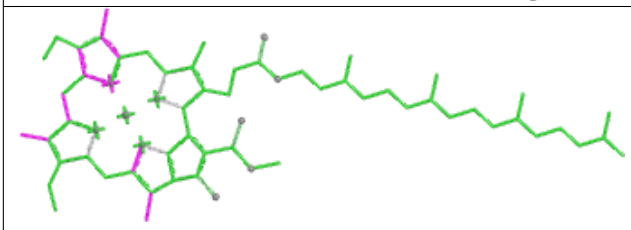


Torsions



Rings

Ligand CLA B 825



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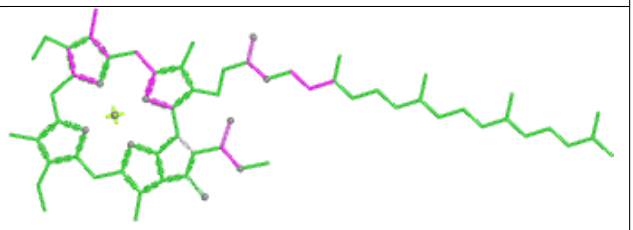
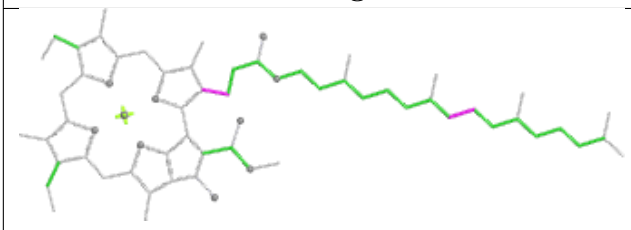


Bond angles



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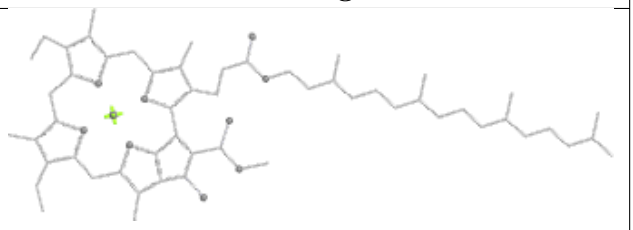
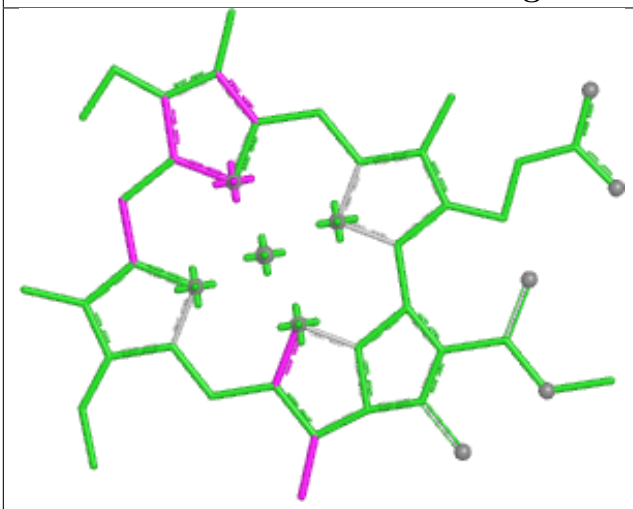


Rings

Ligand CLA K 102



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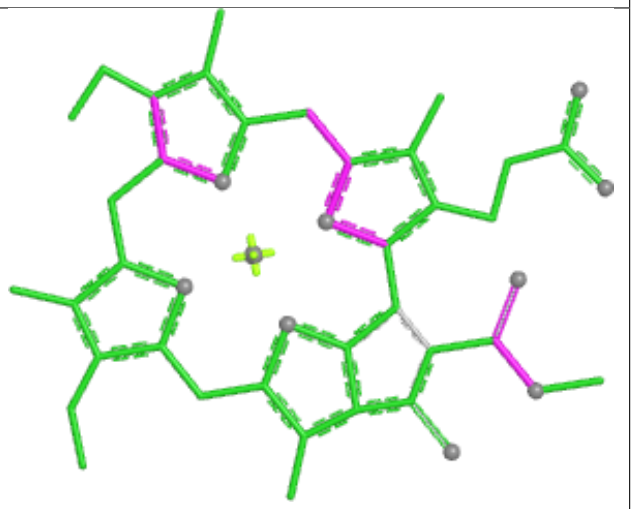
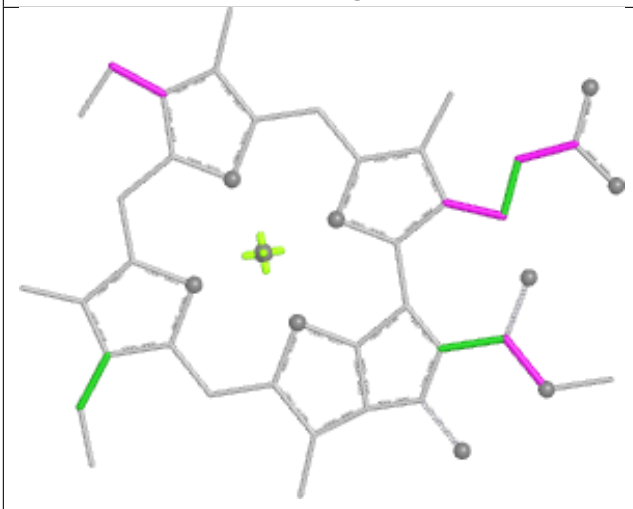


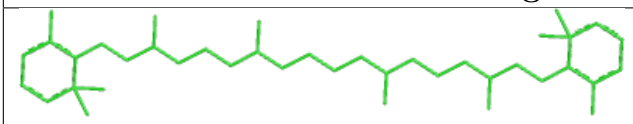
Bond angles



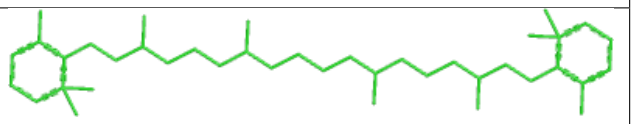
Torsions

Rings

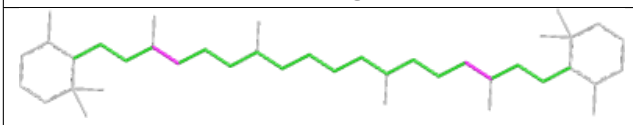
Ligand BCR B 844



Bond lengths



Bond angles



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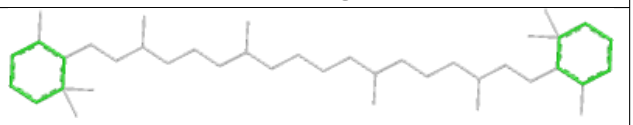
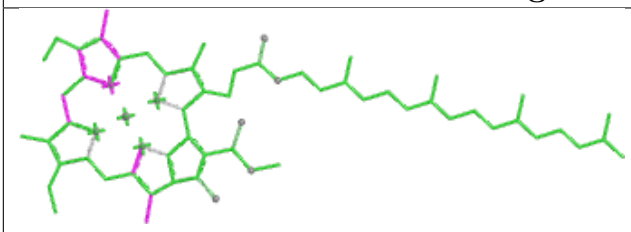
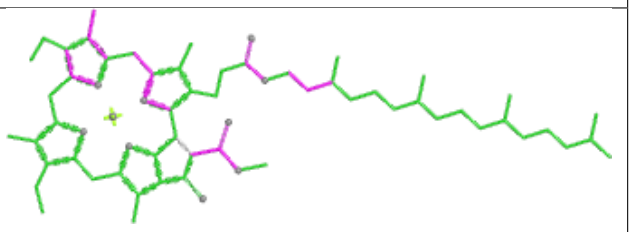


Rings

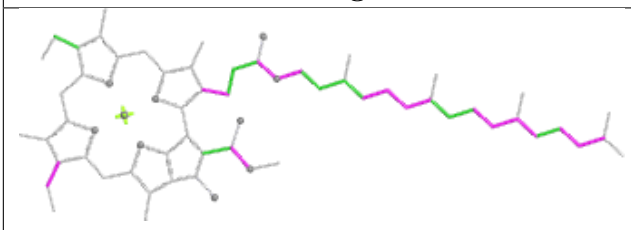
Ligand CLA a 820



Bond lengths



Bond angles



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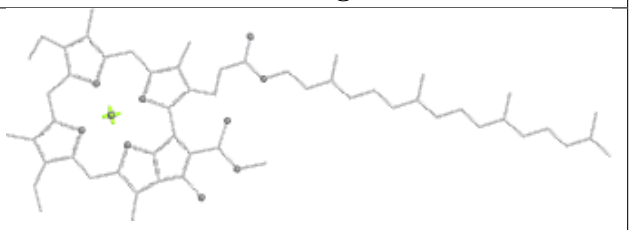
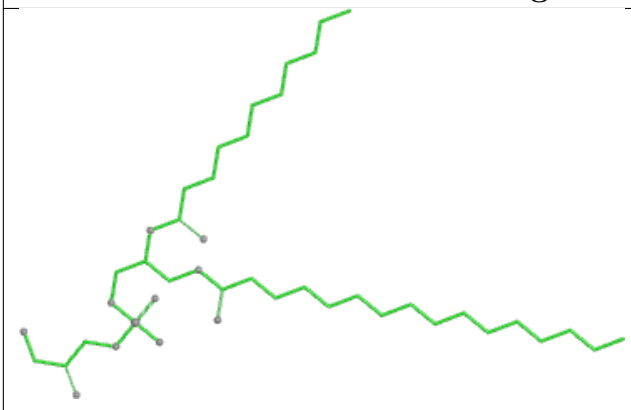
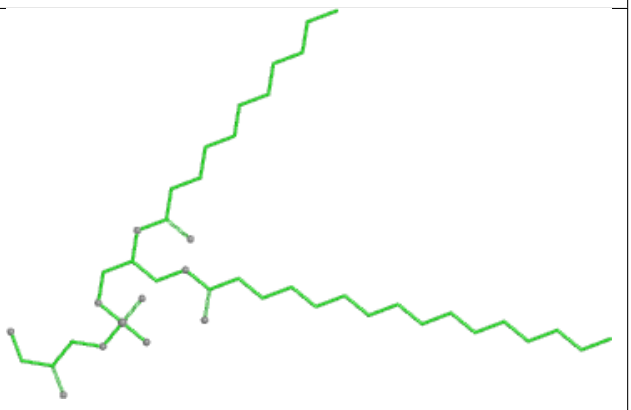


Rings

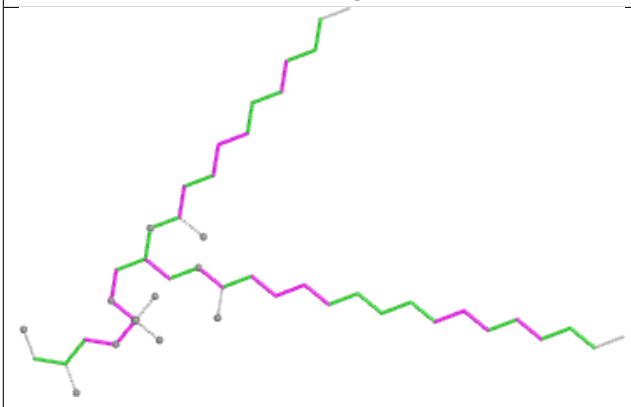
Ligand LHG l 101



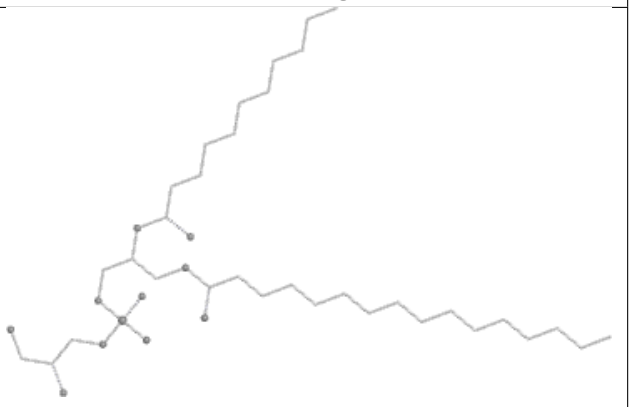
Bond lengths



Bond angles

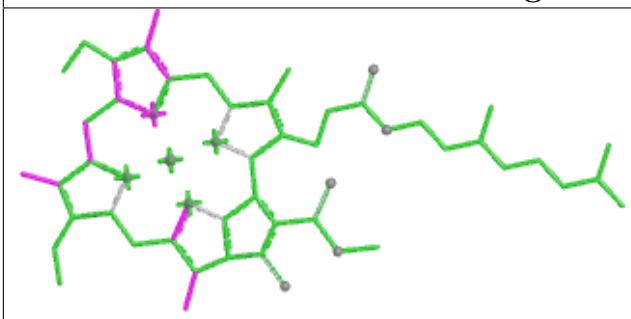


Torsions

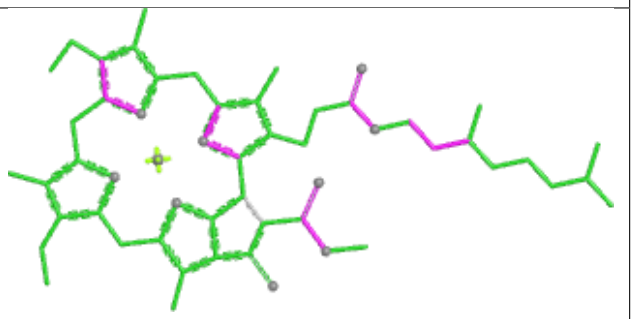


Rings

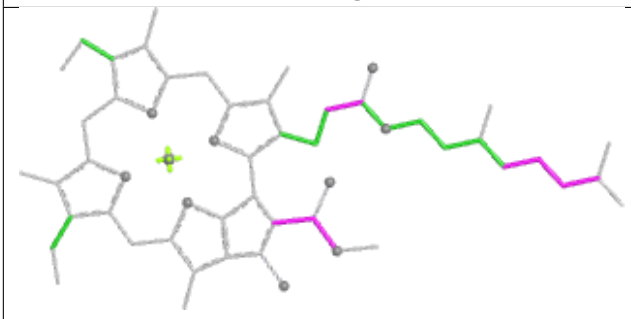
Ligand CLA B 822



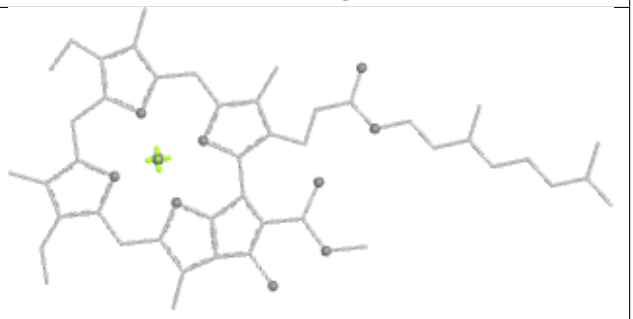
Bond lengths



Bond angles

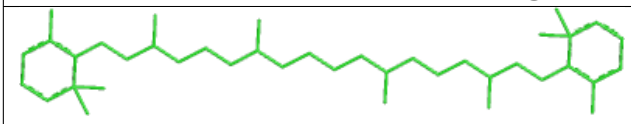


Torsions

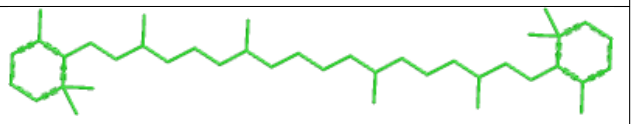


Rings

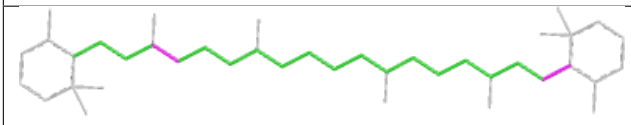
Ligand BCR b 843



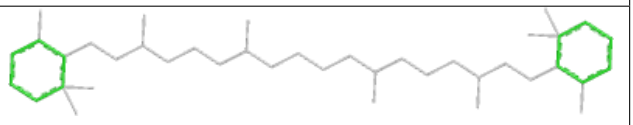
Bond lengths



Bond angles

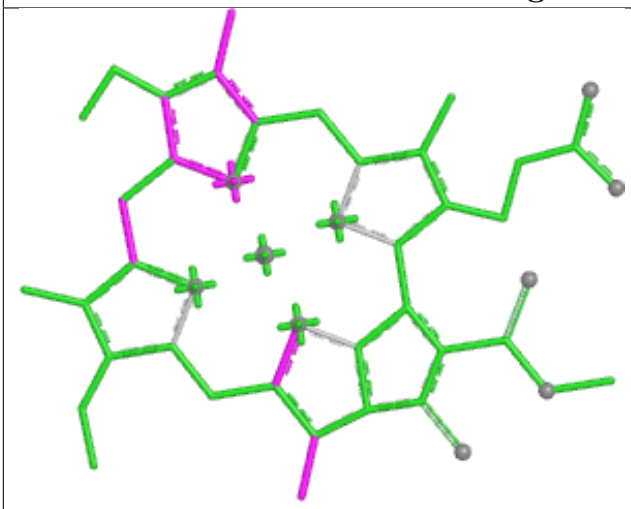


Torsions



Rings

Ligand CLA b 811



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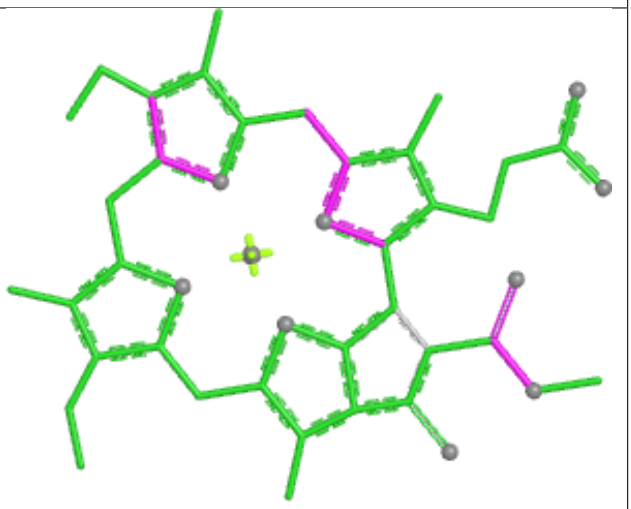
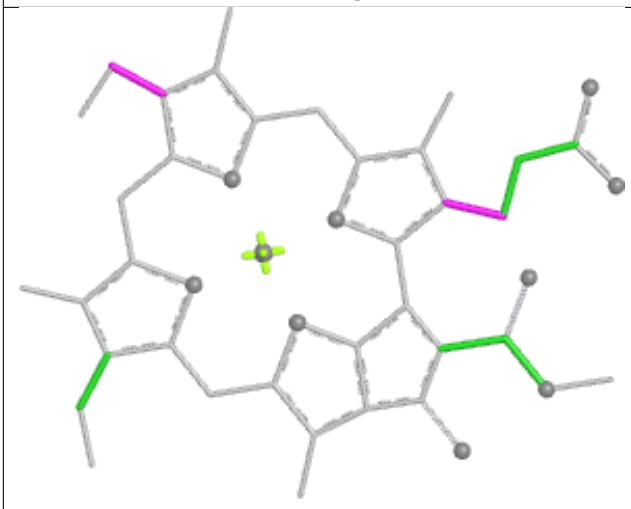


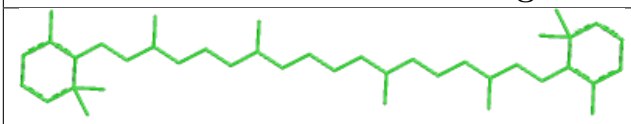
Bond angles



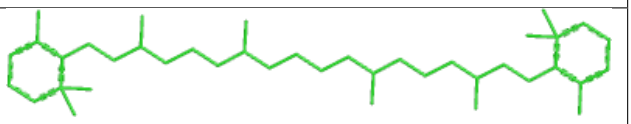
Torsions

Rings

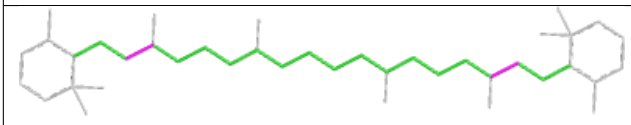
Ligand BCR W 205



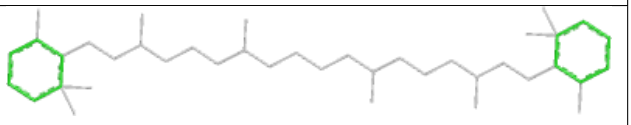
Bond lengths



Bond angles

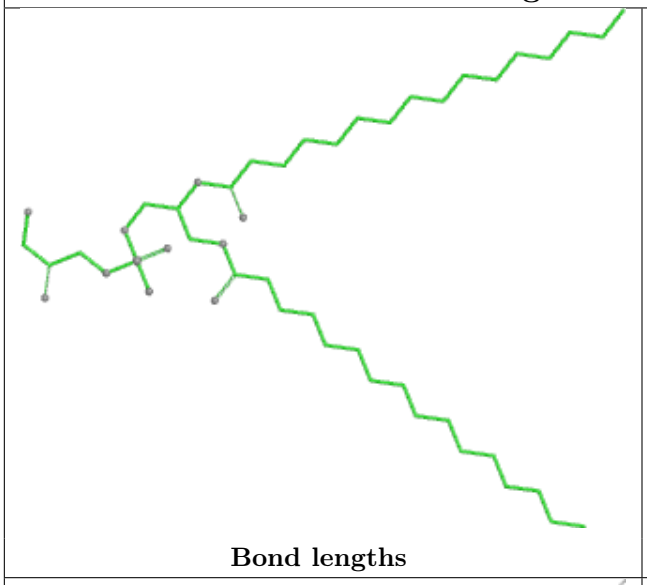


Torsions

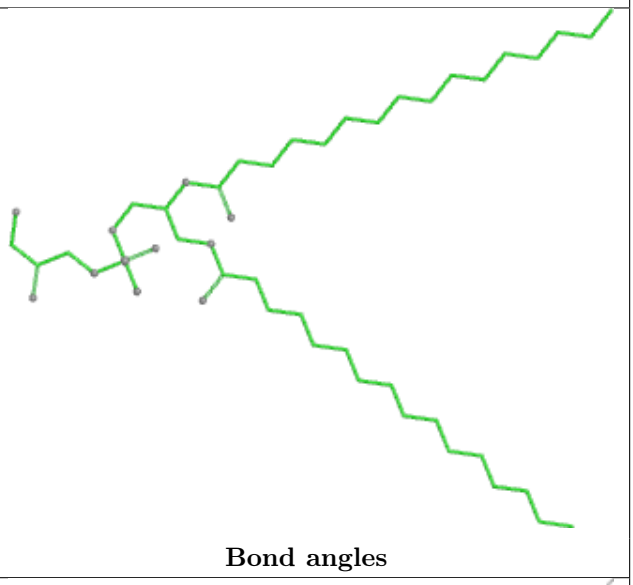


Rings

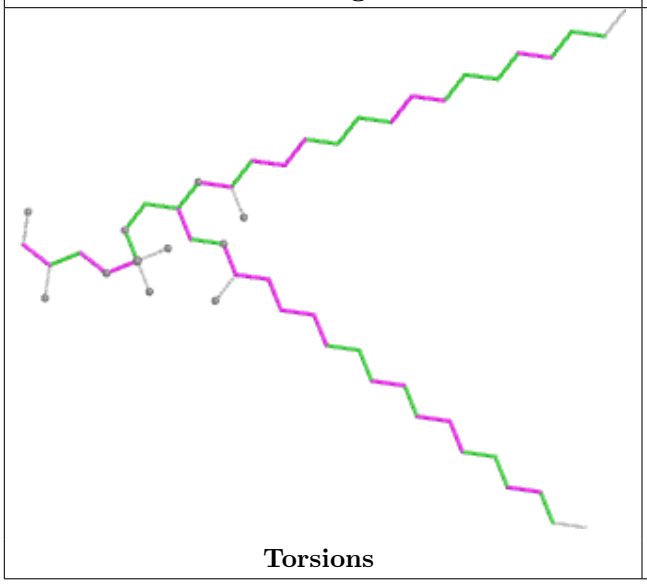
Ligand LHG N 857



Bond lengths



Bond angles



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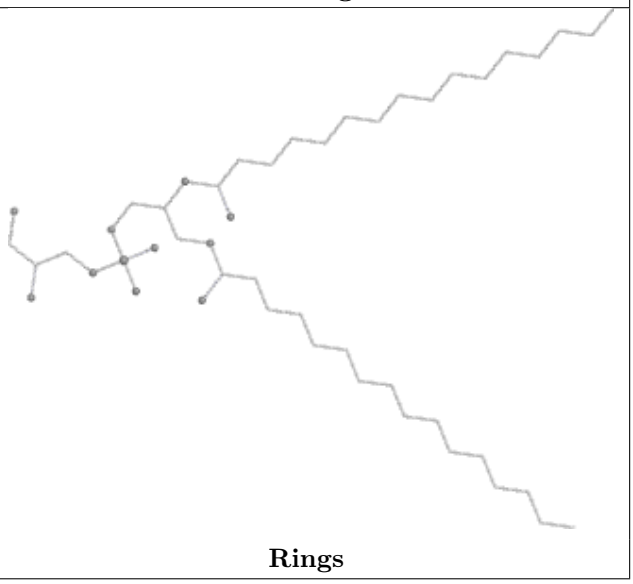
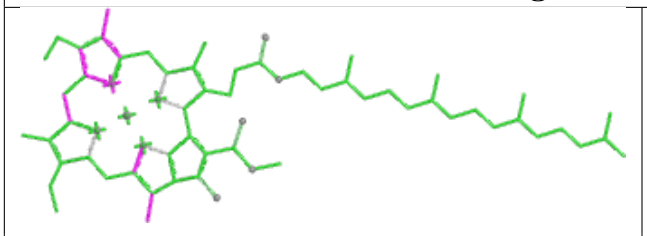
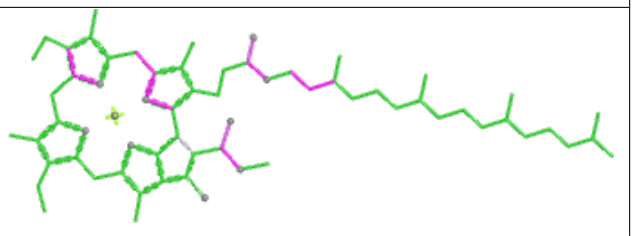


Rings

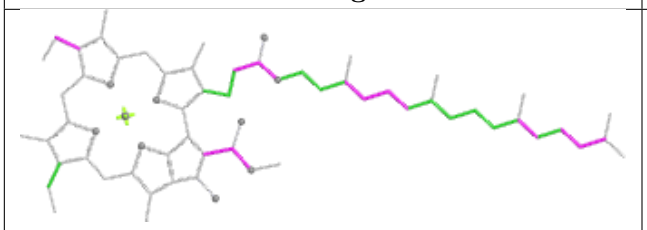
Ligand CLA a 807



Bond lengths



Bond angles



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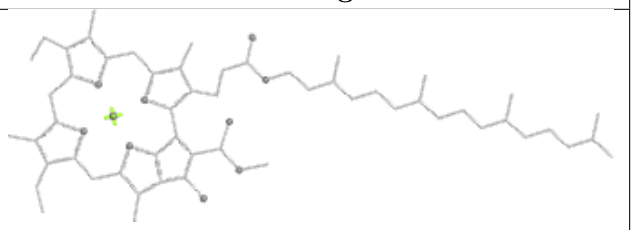
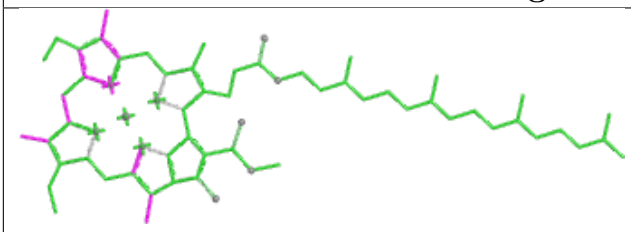


Rings

Ligand CLA a 841



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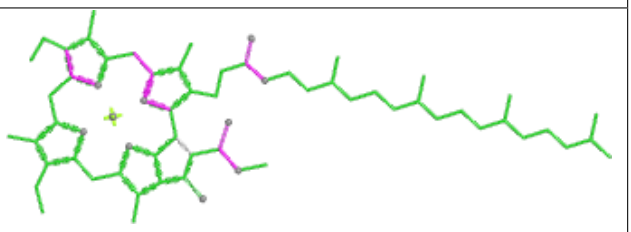
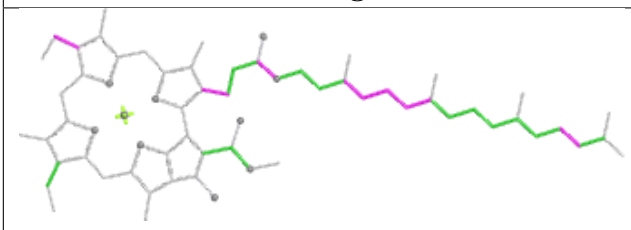


Bond angles



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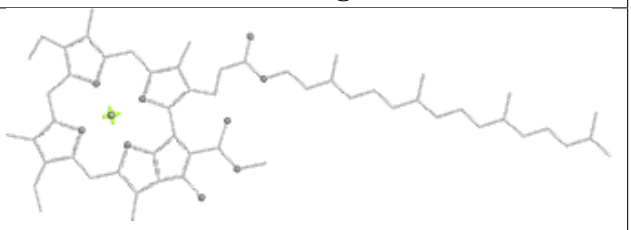
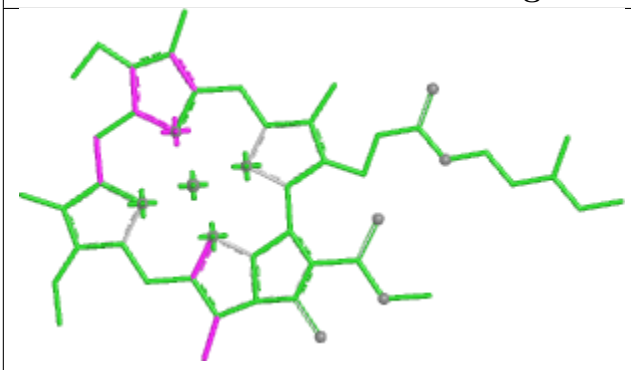


Rings

Ligand CLA N 837



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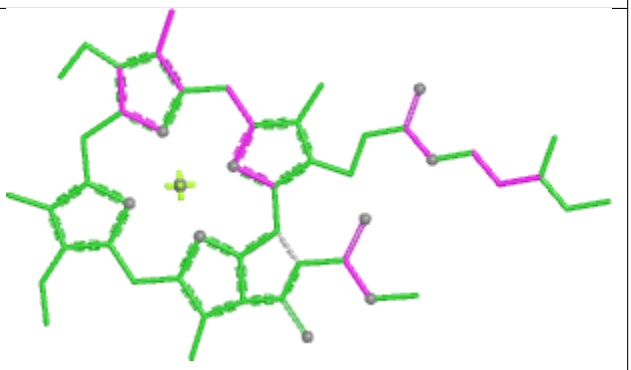

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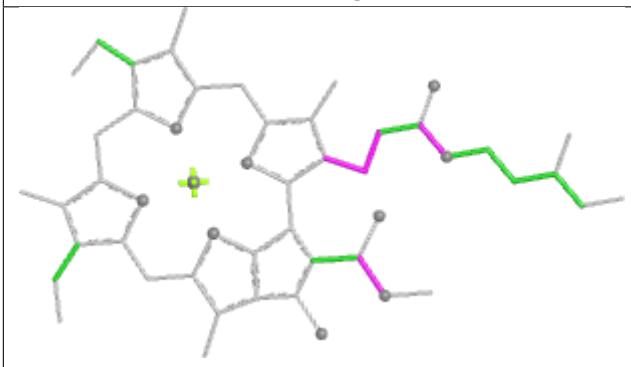

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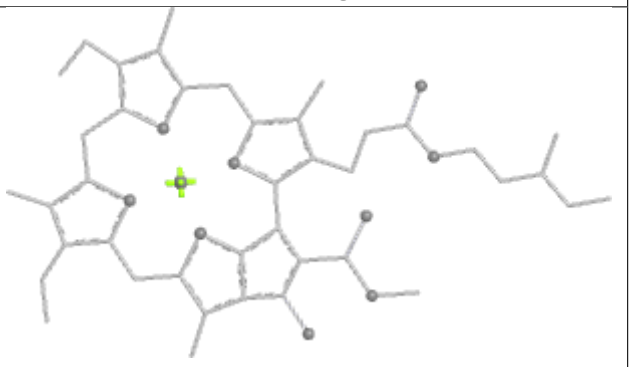
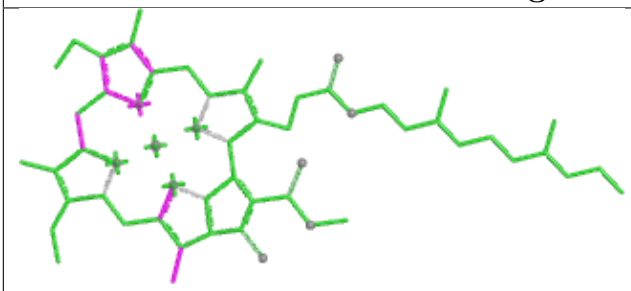
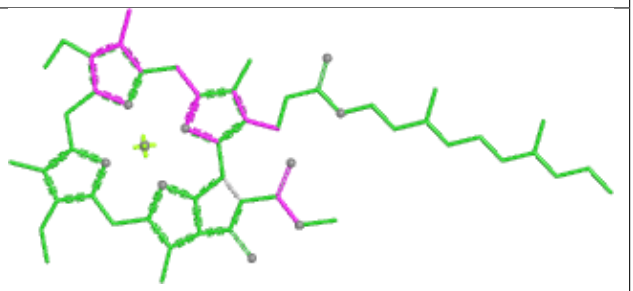


Rings

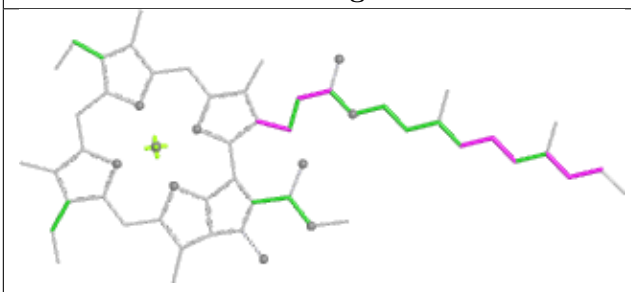
Ligand CLA a 810



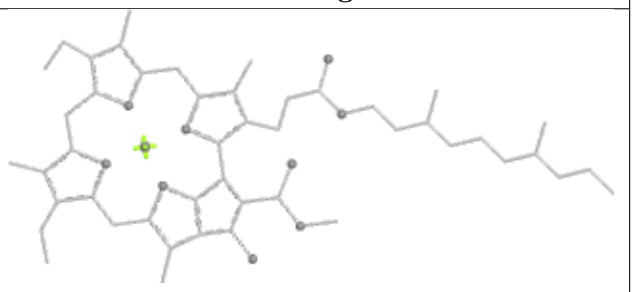
Bond lengths



Bond angles

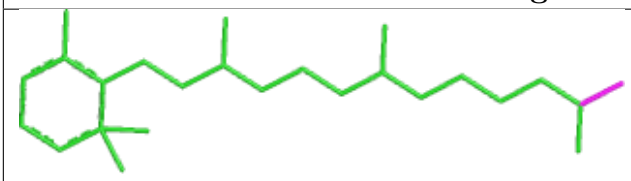


Torsions

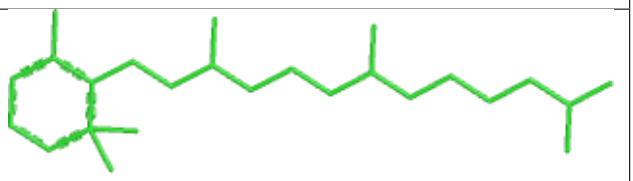


Rings

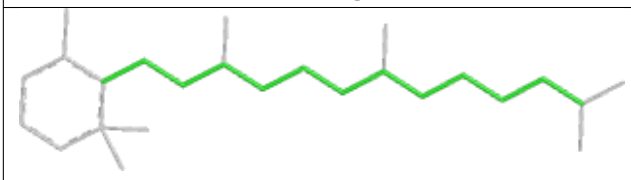
Ligand BCR i 101



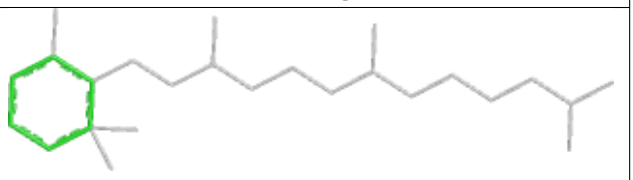
Bond lengths



Bond angles

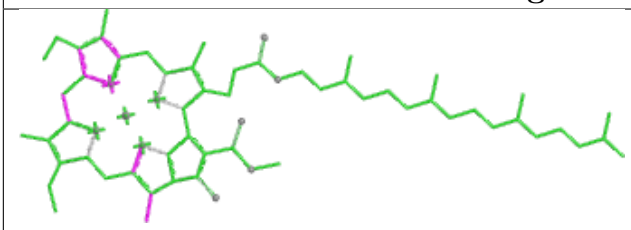


Torsions

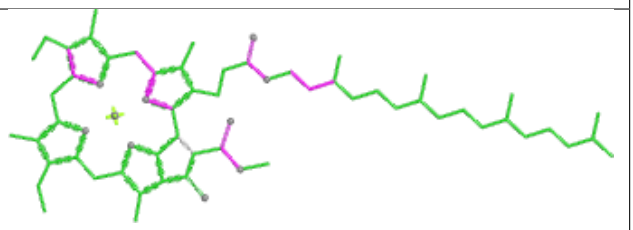


Rings

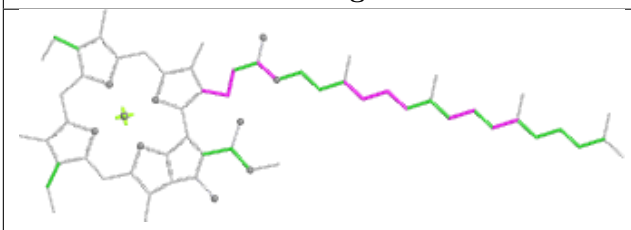
Ligand CLA b 830



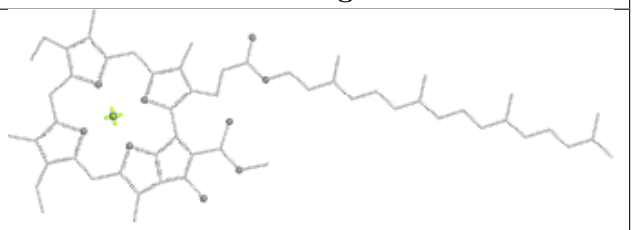
Bond lengths



Bond angles

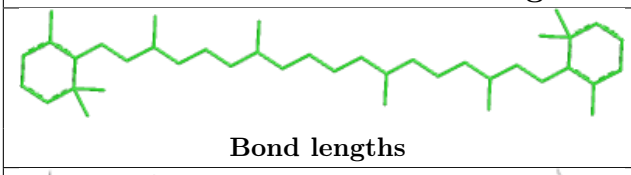


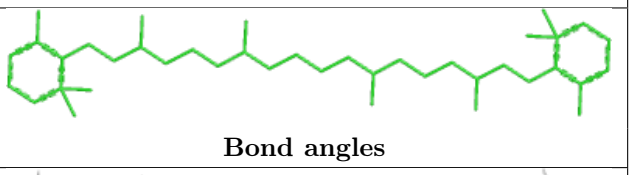
Torsions

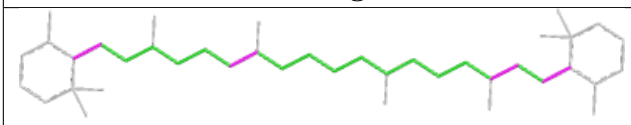


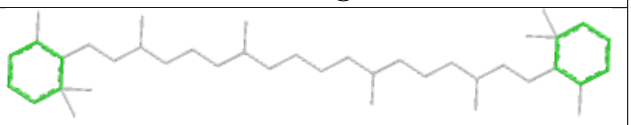
Rings

Ligand BCR J 101

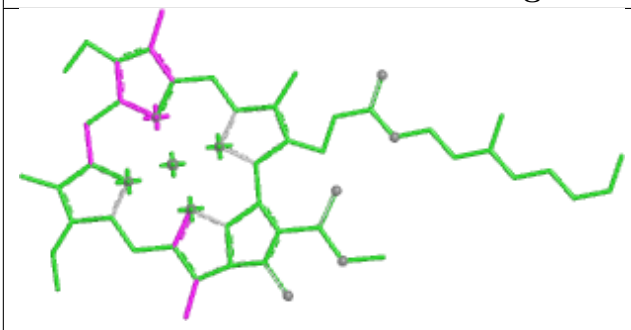

Bond lengths

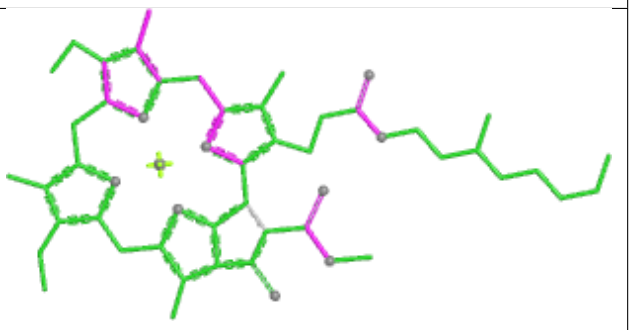

Bond angles

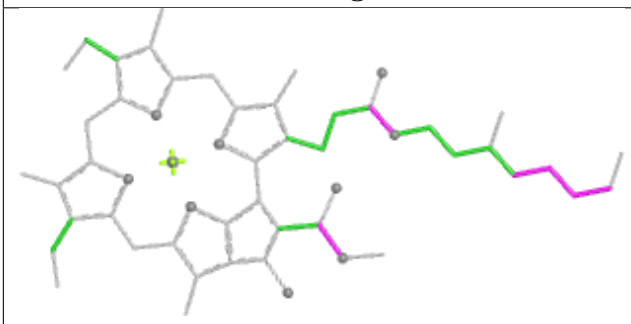

Torsions

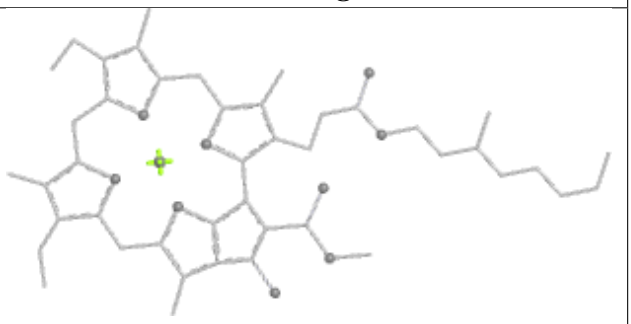

Rings

Ligand CLA A 836

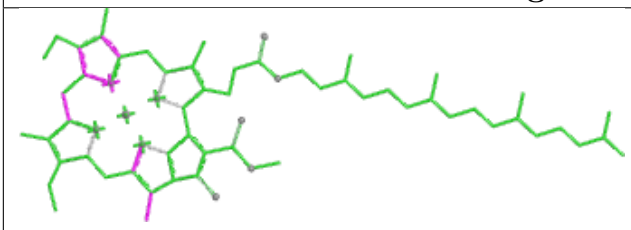

Bond lengths

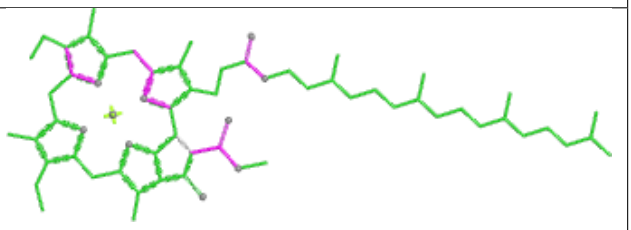

Bond angles

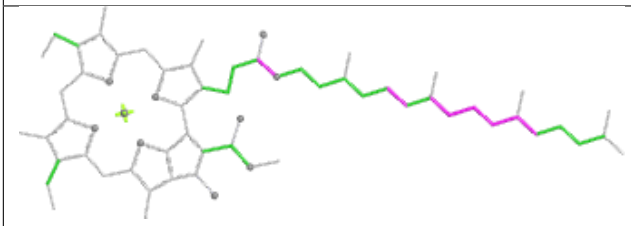

Torsions


Rings

Ligand CLA b 813


Bond lengths


Bond angles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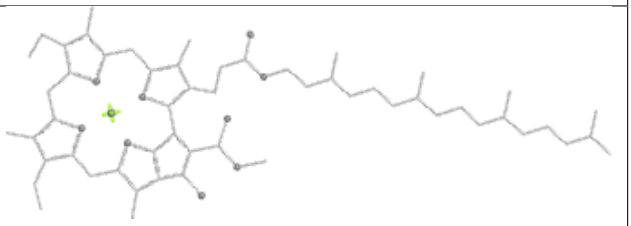
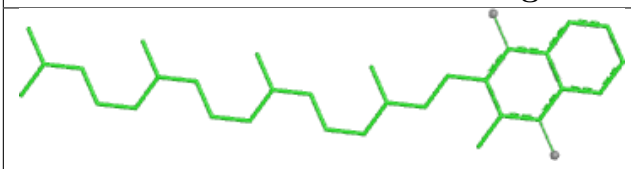
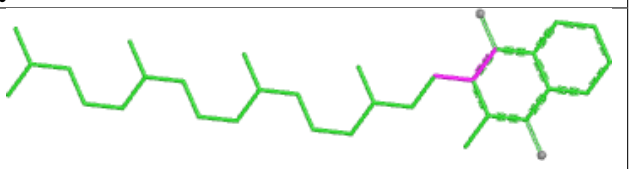
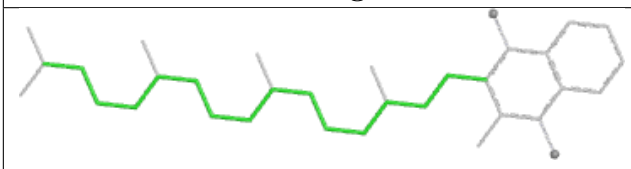
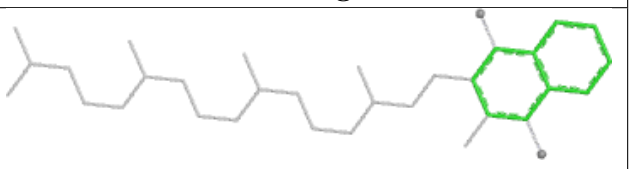
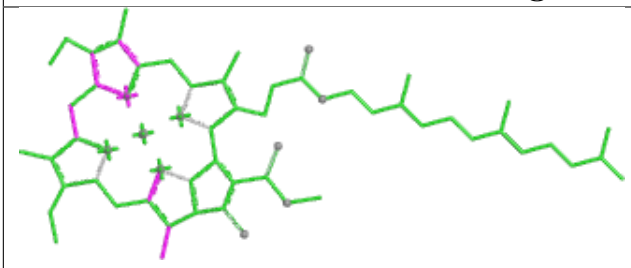
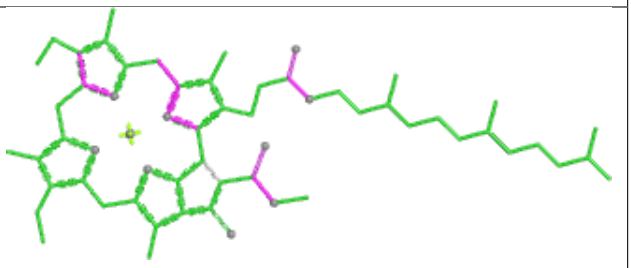
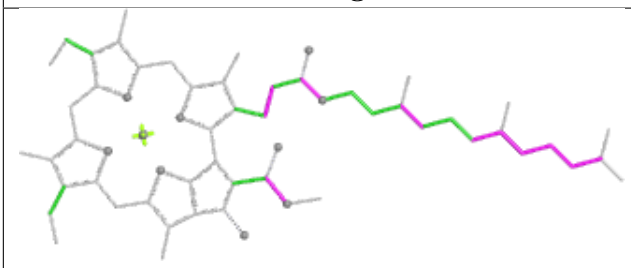
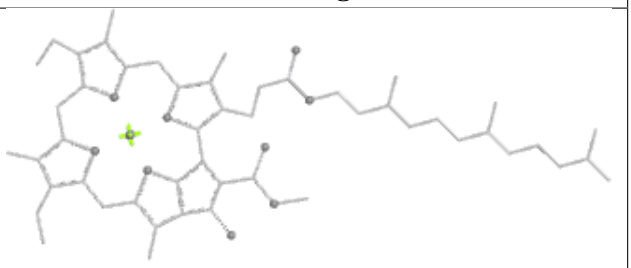
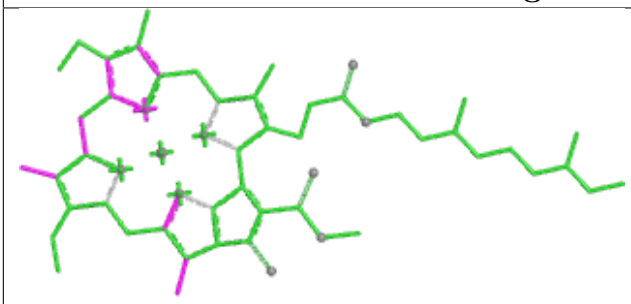
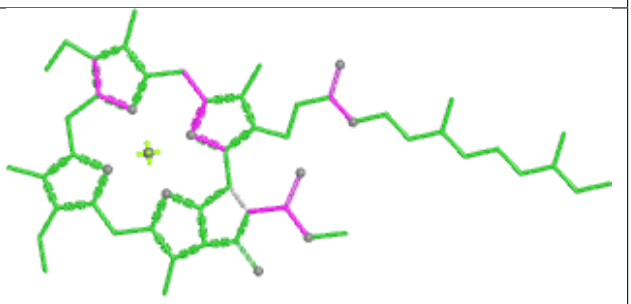
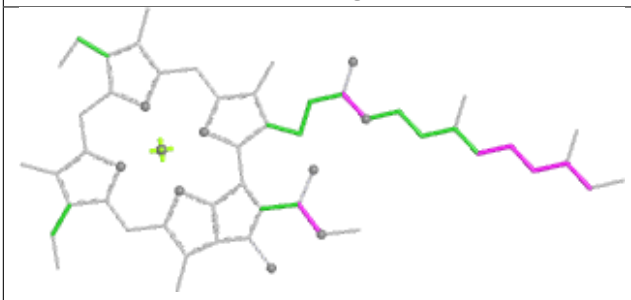
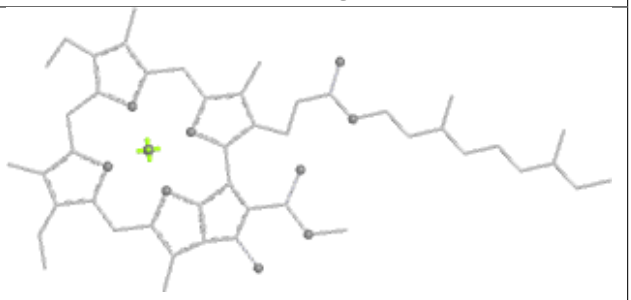
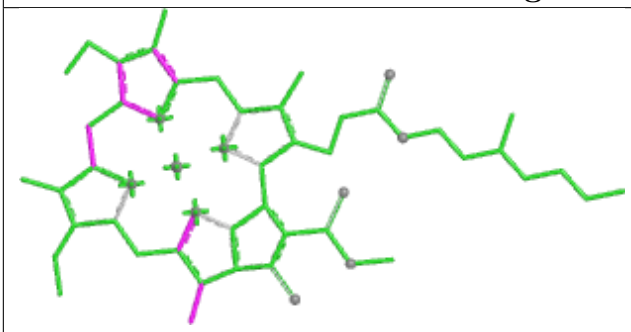
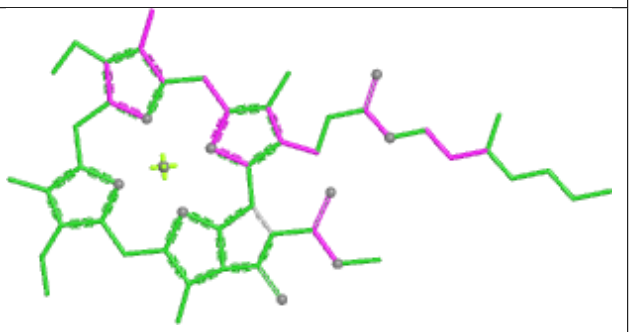
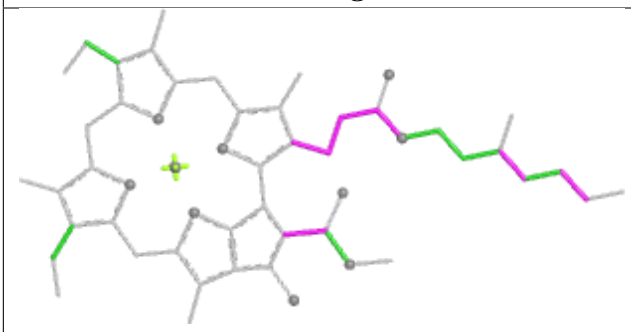
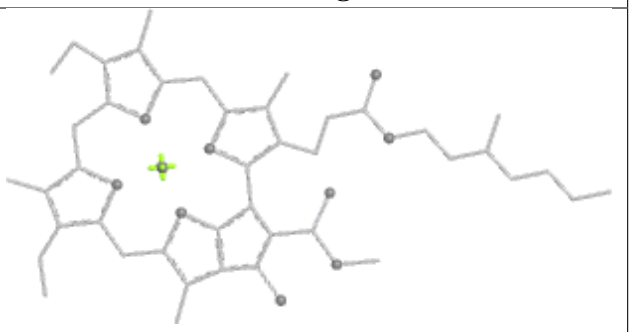

Rings

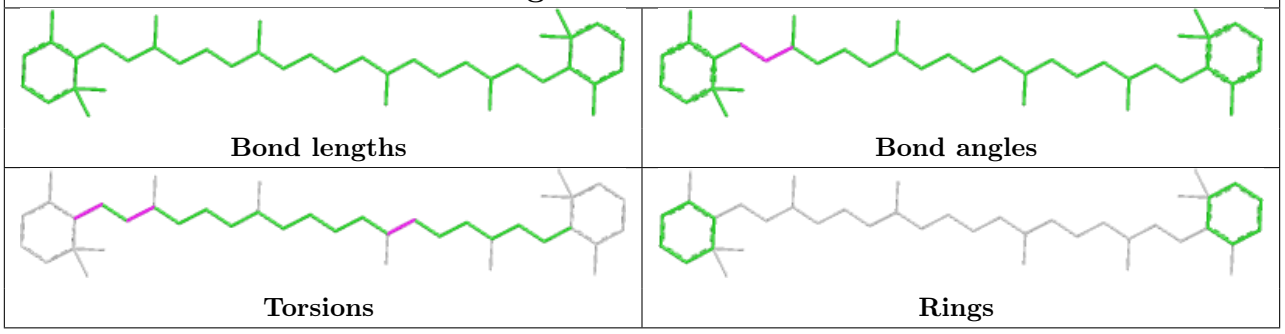
Ligand PQN A 843	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA a 829	
	
Bond lengths	Bond angles
	
Torsions	Rings

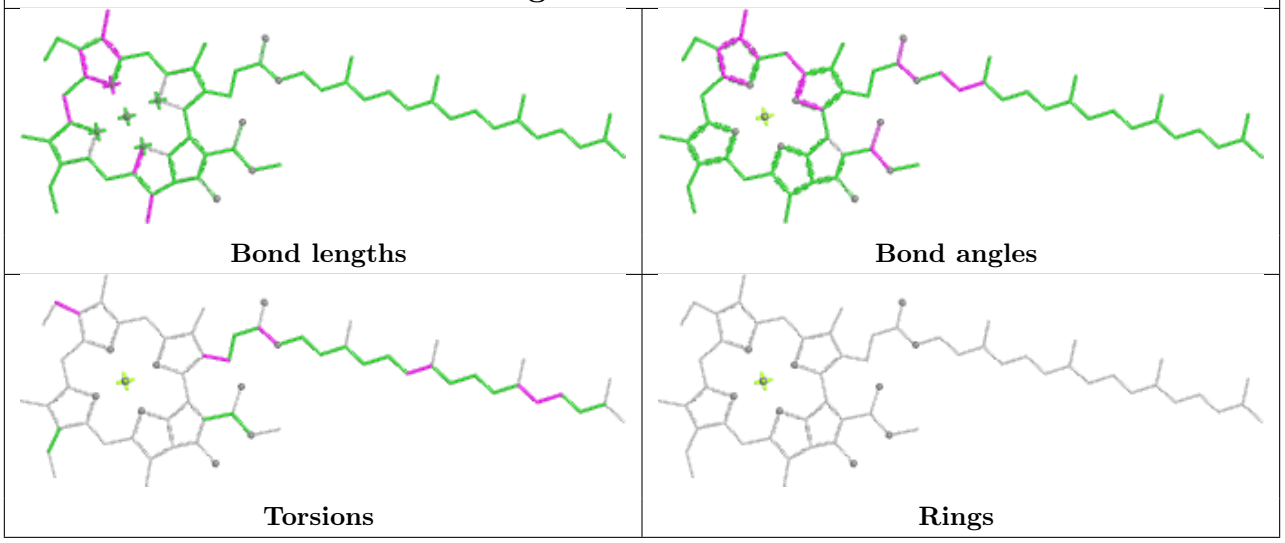
Ligand CLA O 812	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 821	
 Bond lengths	 Bond angles
 Torsions	 Rings

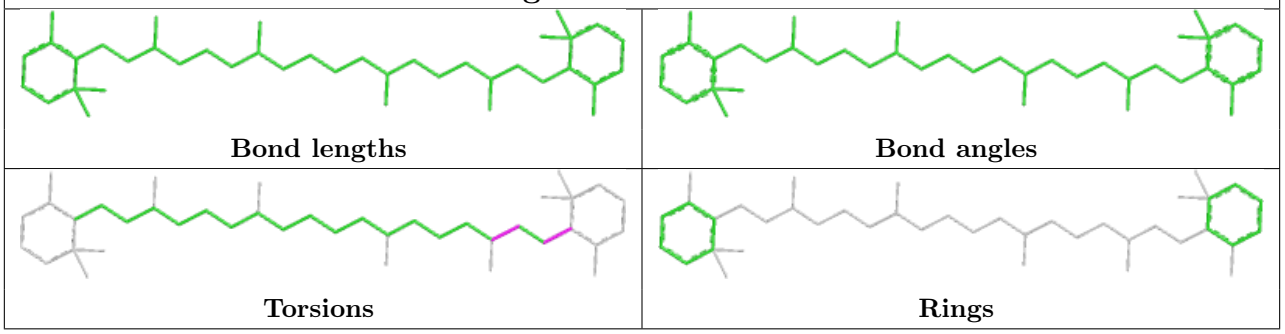
Ligand BCR k 102



Ligand CLA b 836



Ligand BCR O 842



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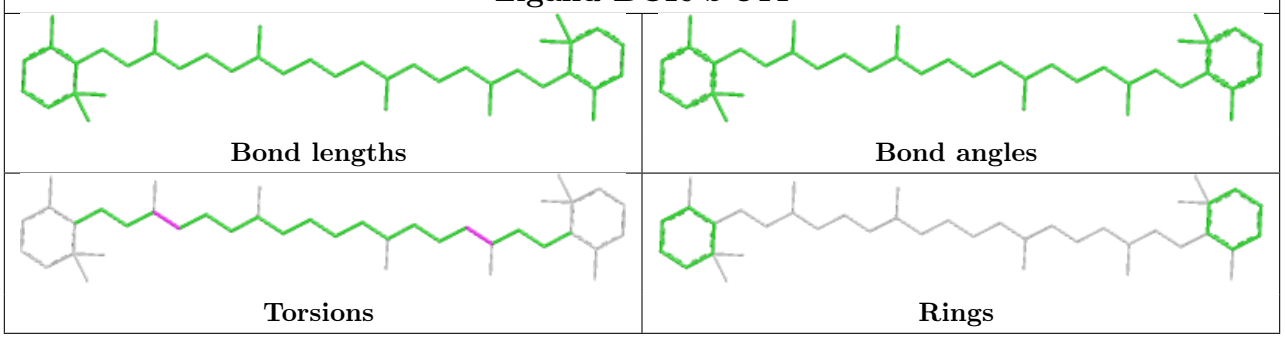
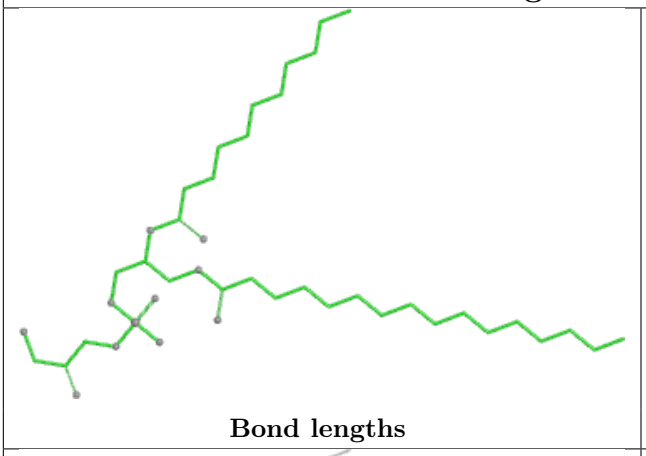
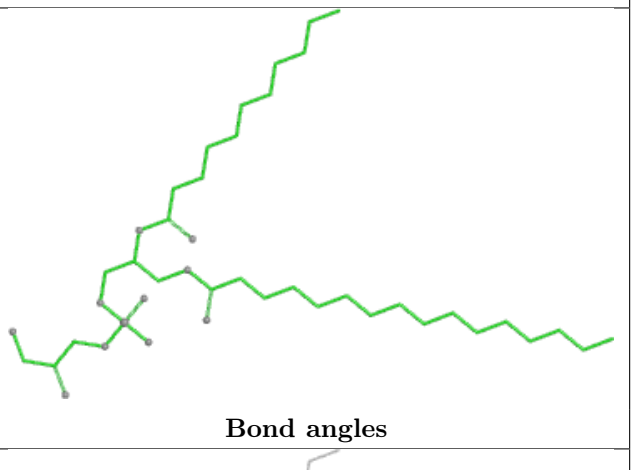


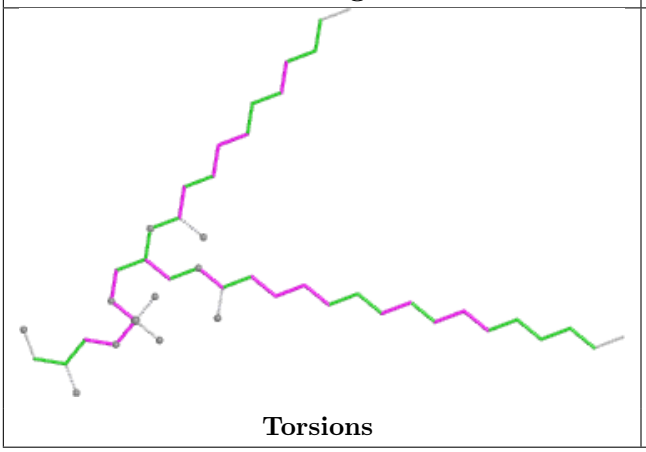
Ligand LHG Z 101



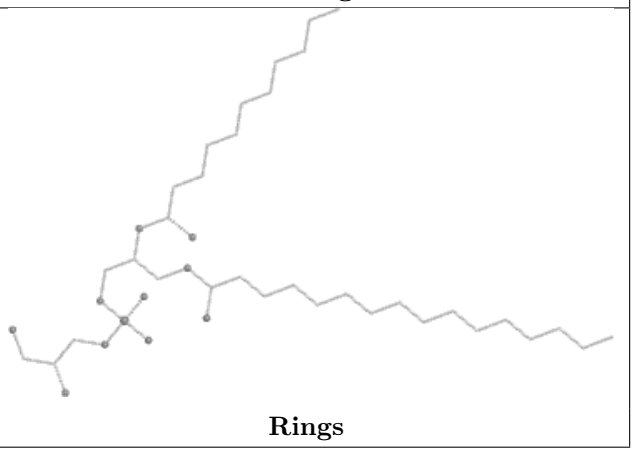
Bond lengths



Bond angles

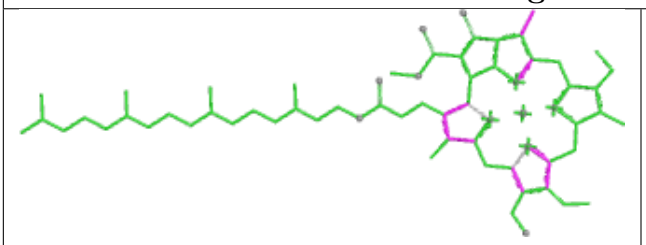


Torsions



Rings

Ligand F6C A 826



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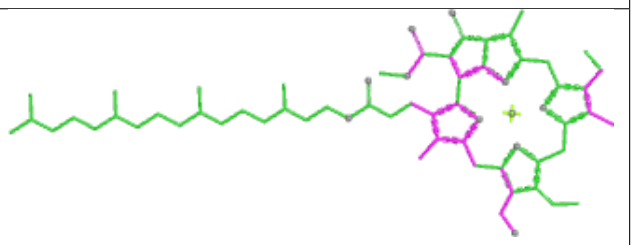
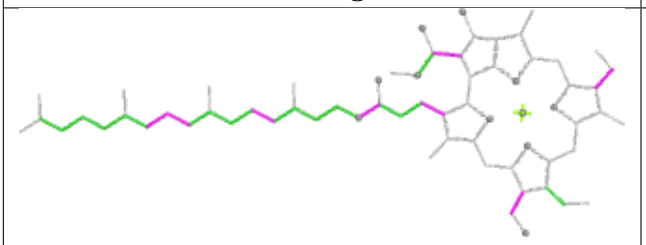


Bond angles



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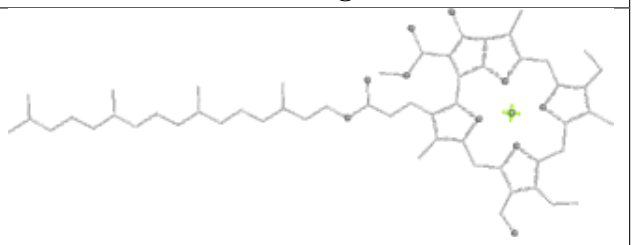
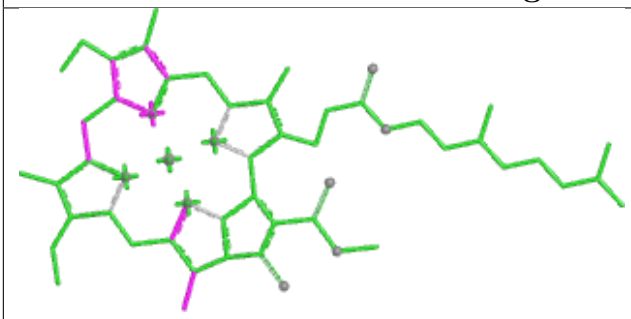
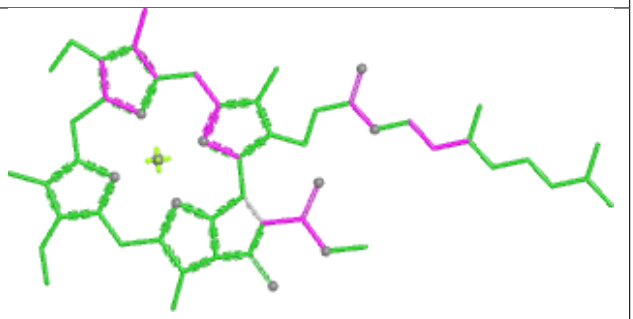


Rings

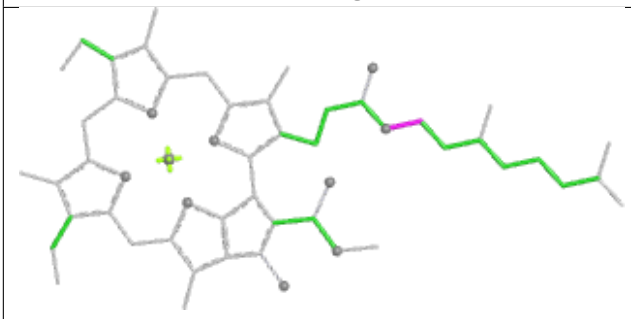
Ligand CLA N 827



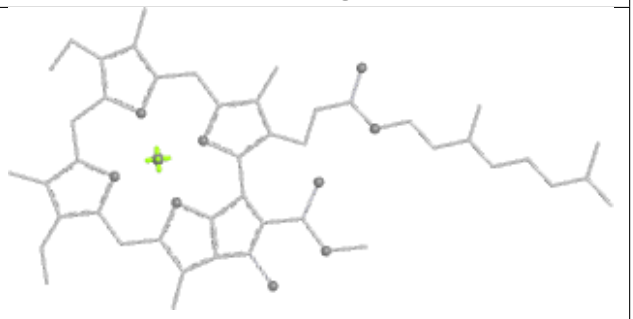
Bond lengths



Bond angles

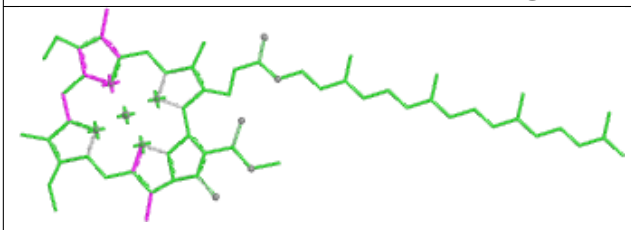


Torsions

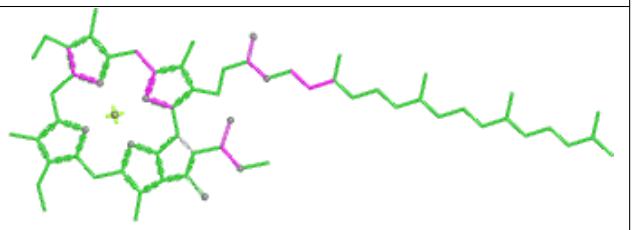


Rings

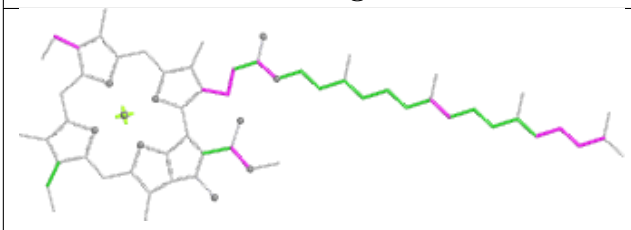
Ligand CLA A 842



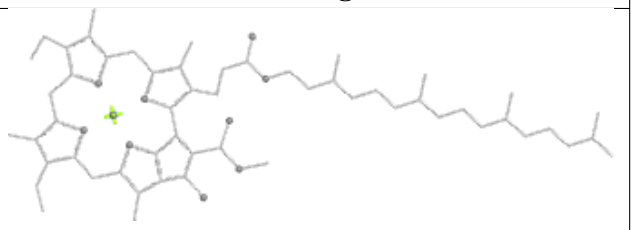
Bond lengths



Bond angles

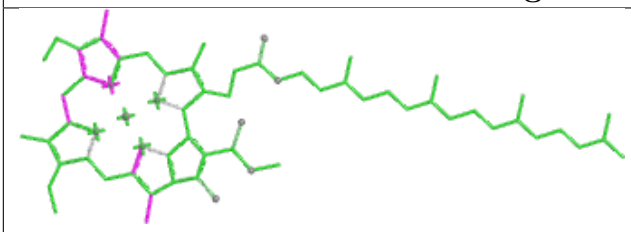


Torsions

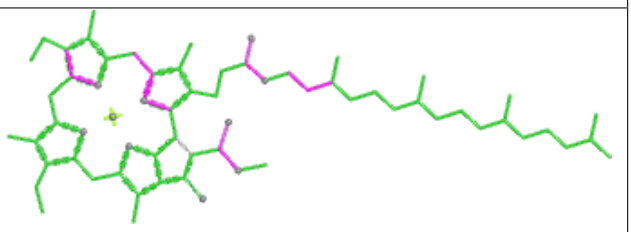


Rings

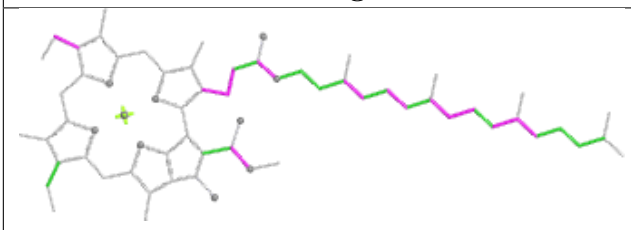
Ligand CLA B 829



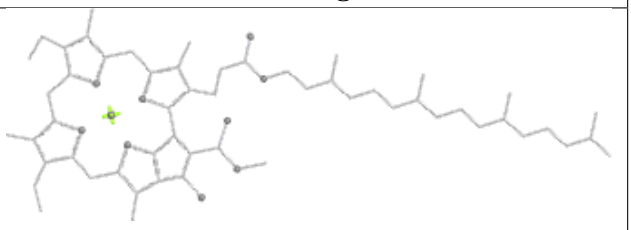
Bond lengths



Bond angles

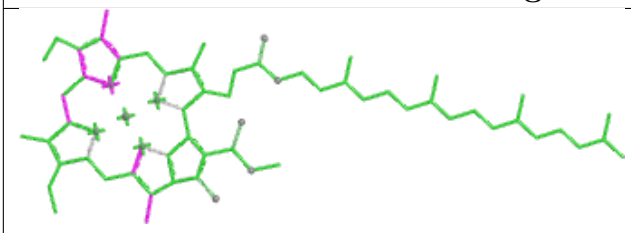


Torsions

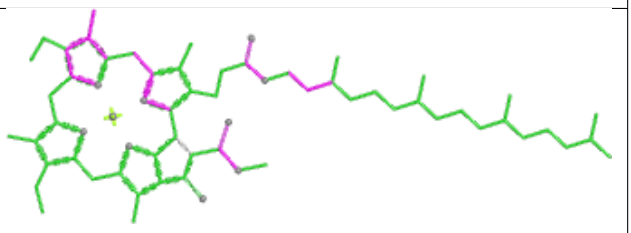


Rings

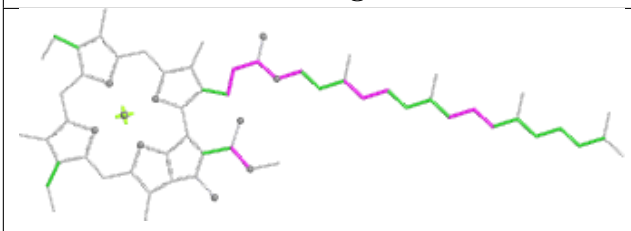
Ligand CLA B 828



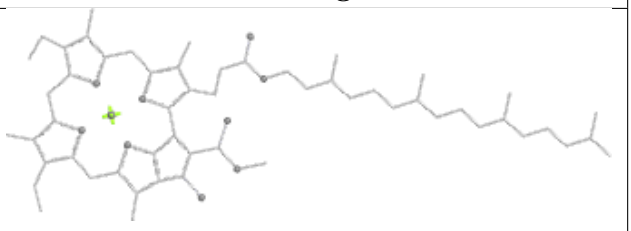
Bond lengths



Bond angles

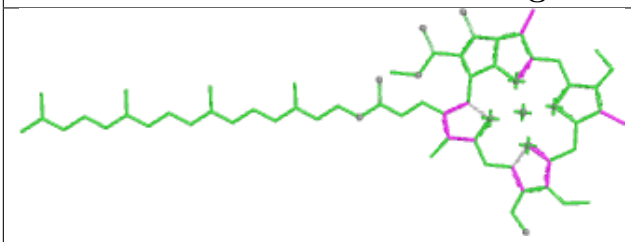


Torsions

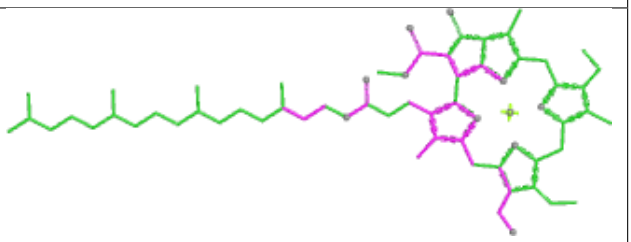


Rings

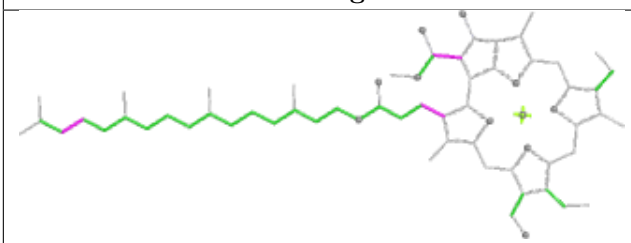
Ligand F6C B 832



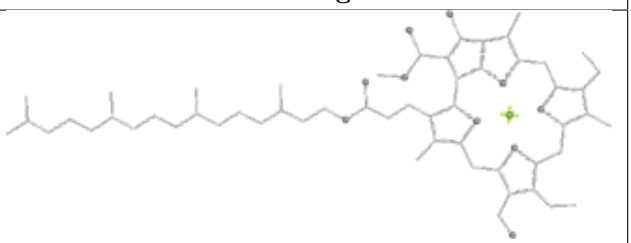
Bond lengths



Bond angles

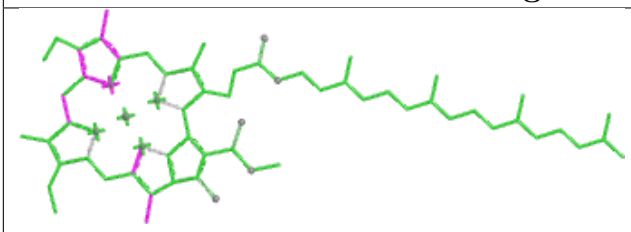


Torsions

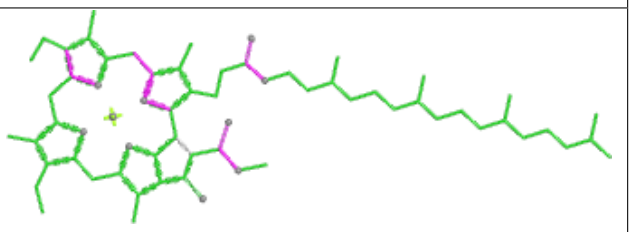


Rings

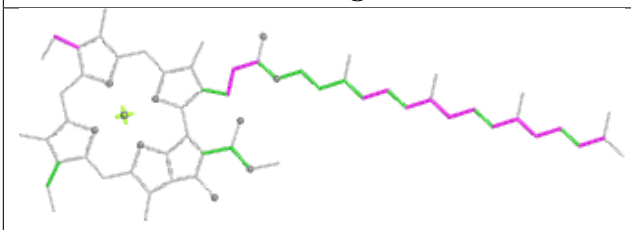
Ligand CLA N 839



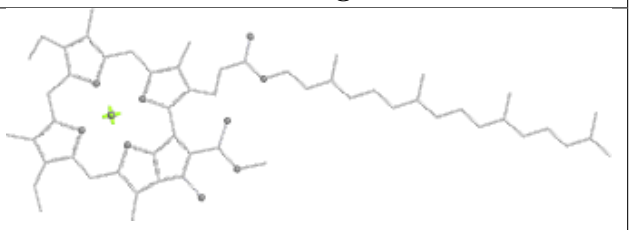
Bond lengths



Bond angles

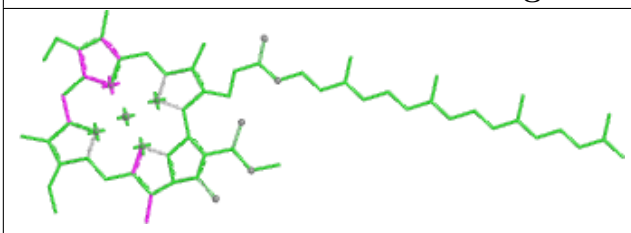


Torsions

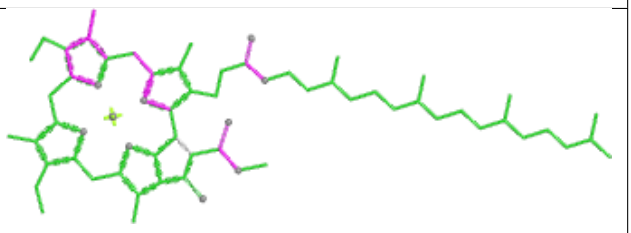


Rings

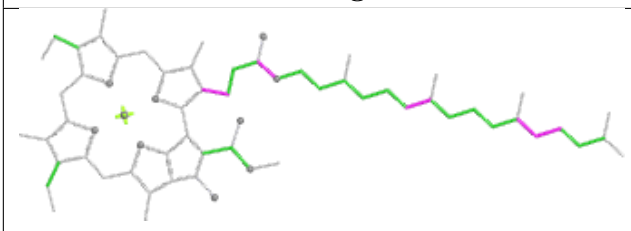
Ligand CLA O 836



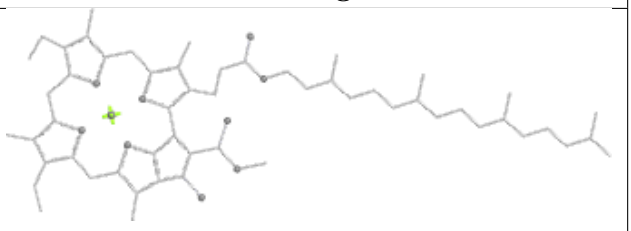
Bond lengths



Bond angles

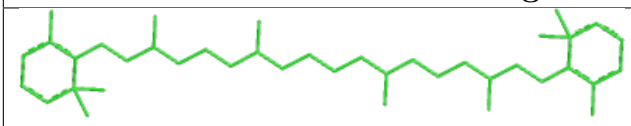


Torsions

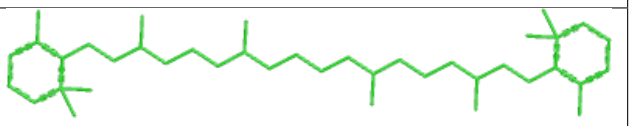


Rings

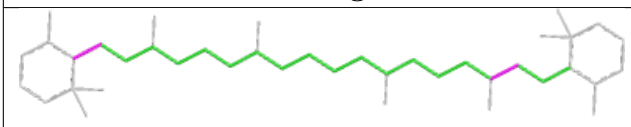
Ligand BCR A 849



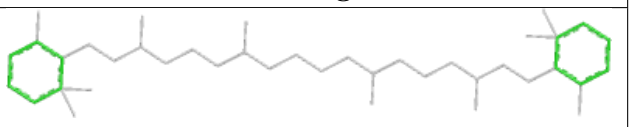
Bond lengths



Bond angles

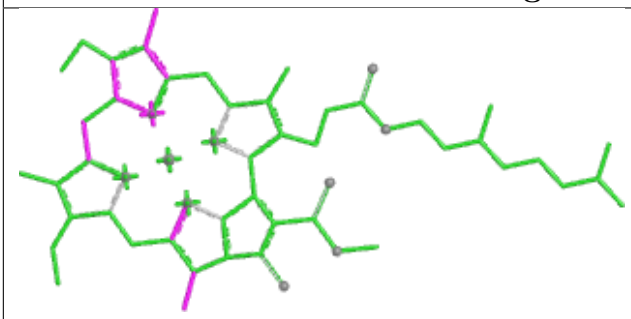


Torsions

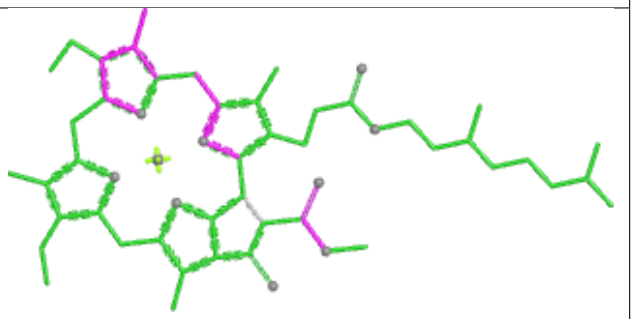


Rings

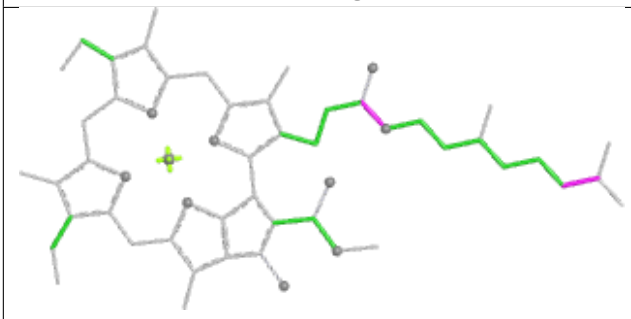
Ligand CLA A 833



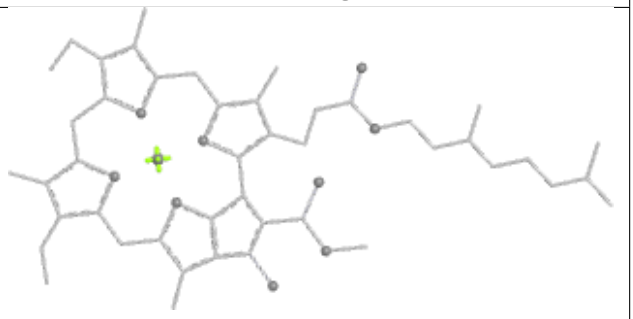
Bond lengths



Bond angles

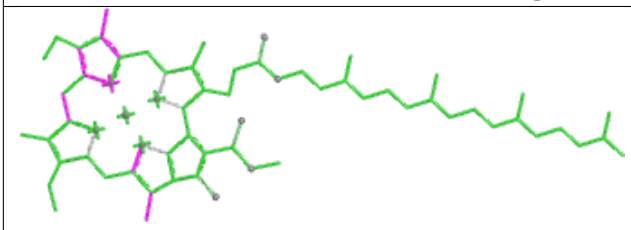


Torsions



Rings

Ligand CLA a 839



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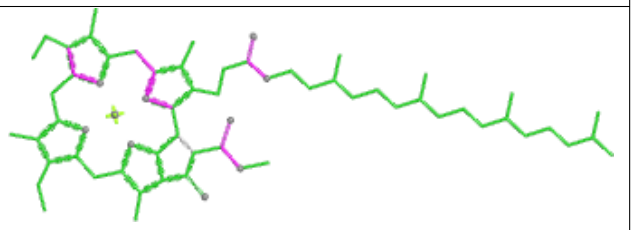
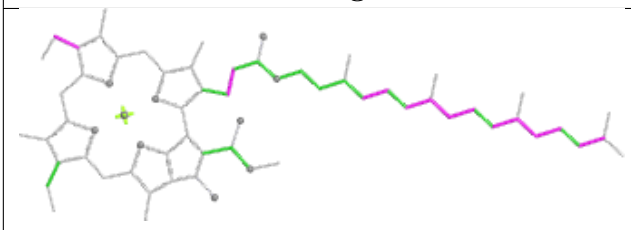
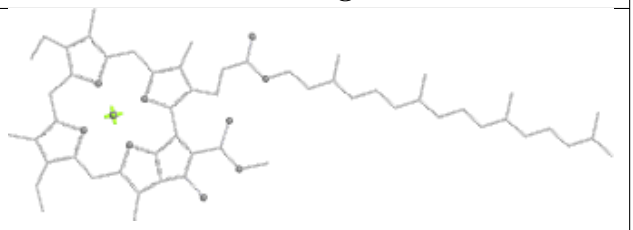


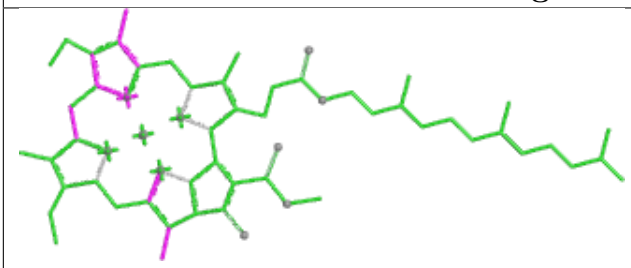
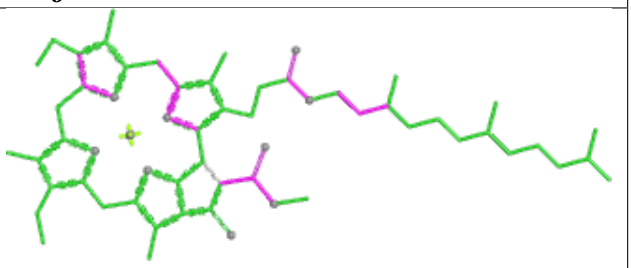
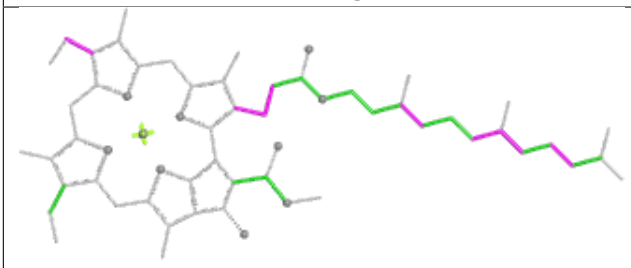
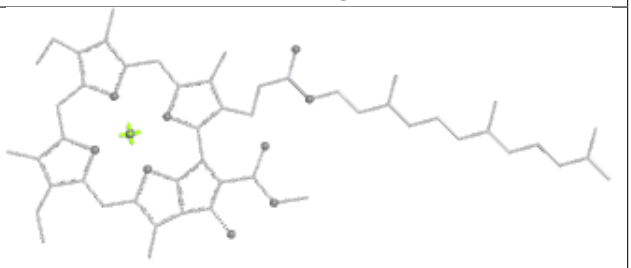
Bond angles



Torsions



Rings

Ligand CLA j 203	
 Bond lengths	 Bond angles
 Torsions	 Rings

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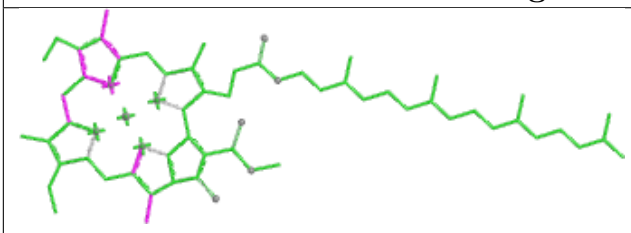
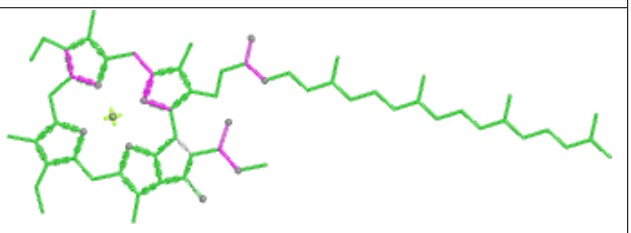
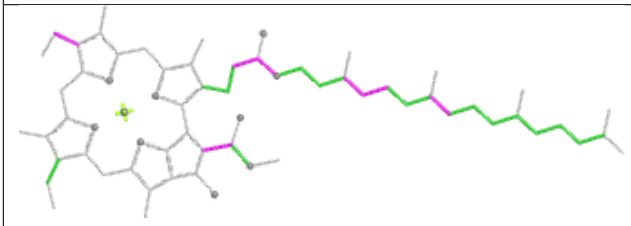
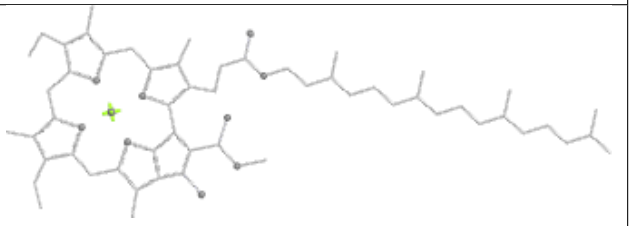
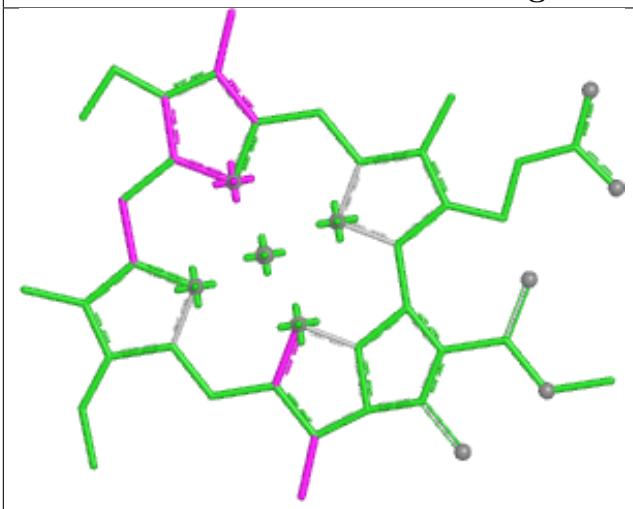
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA a 817



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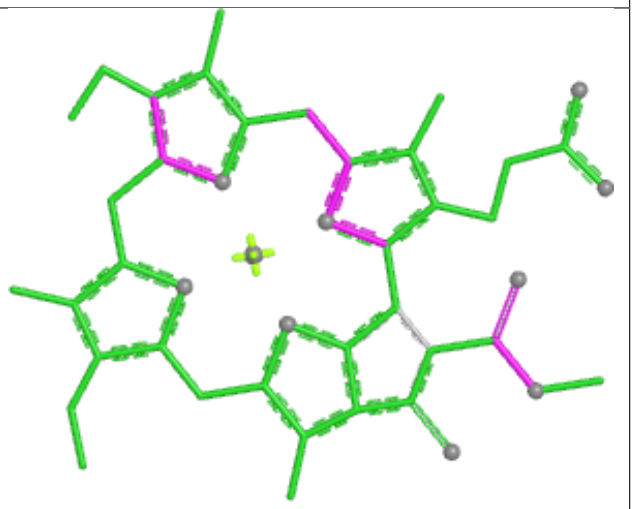
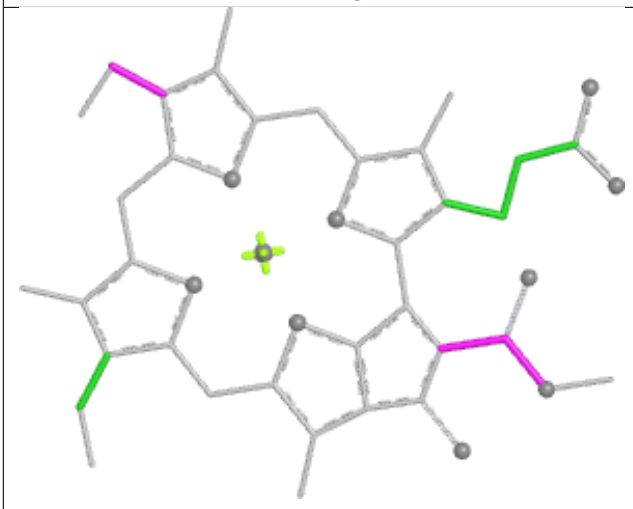


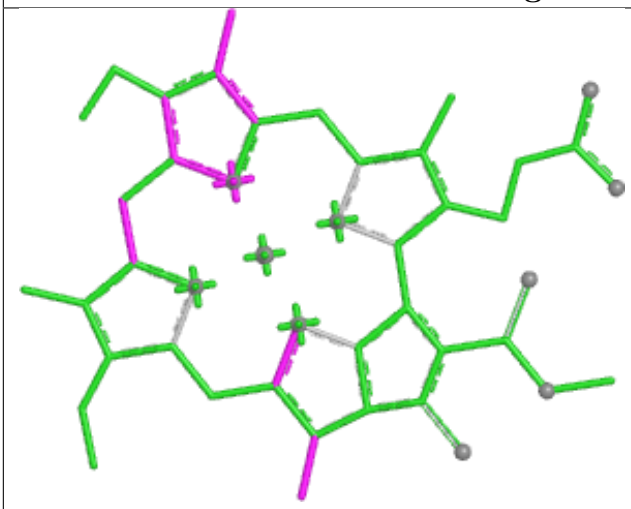
Bond angles



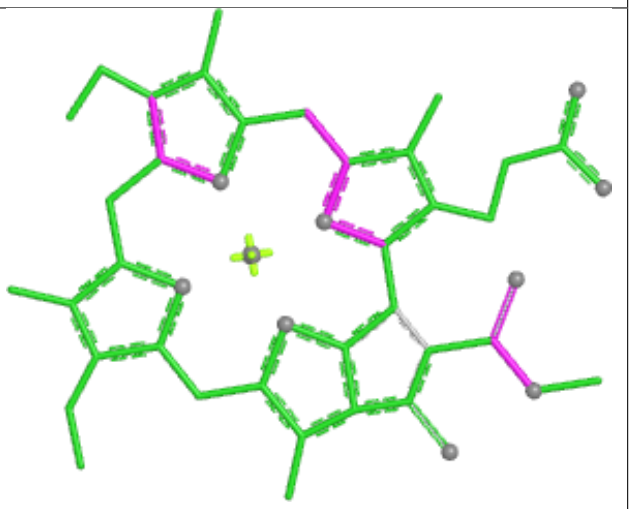
Torsions

Rings

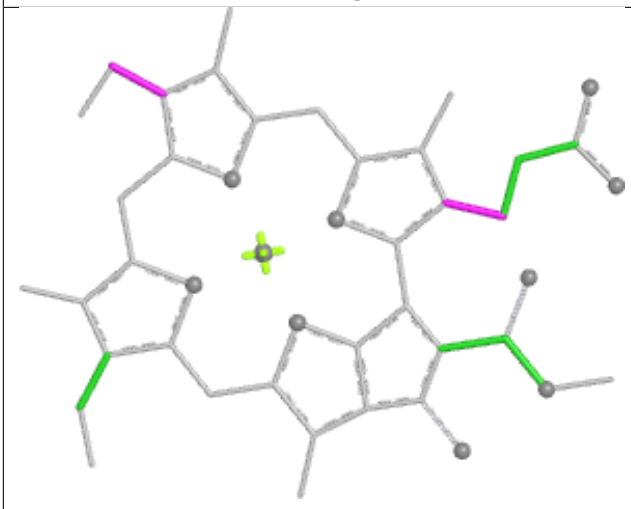
Ligand CLA B 811



Bond lengths



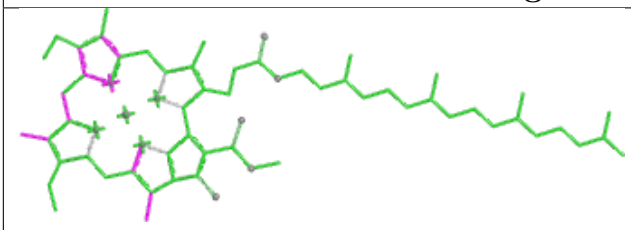
Bond angles



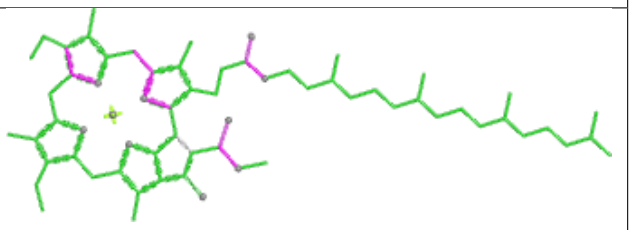
Torsions

Rings

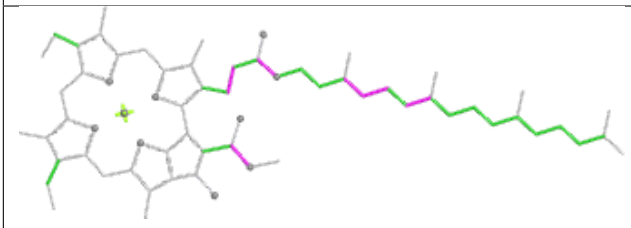
Ligand CLA B 804



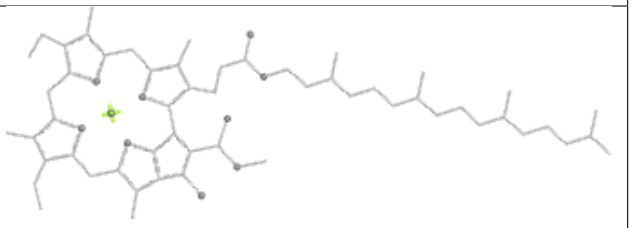
Bond lengths



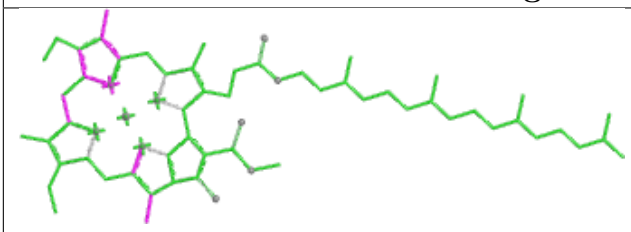
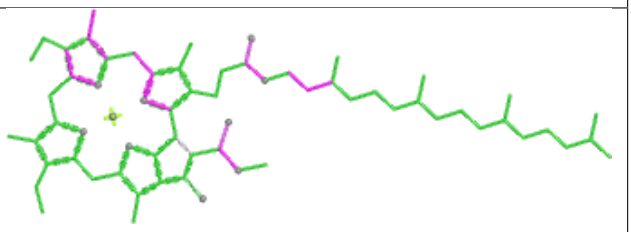
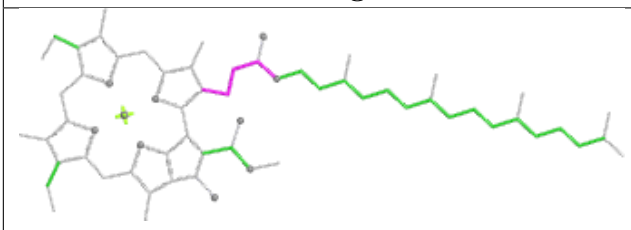
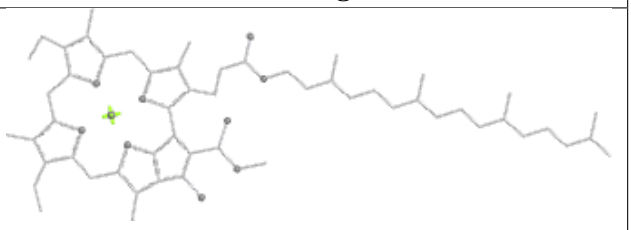
Bond angles

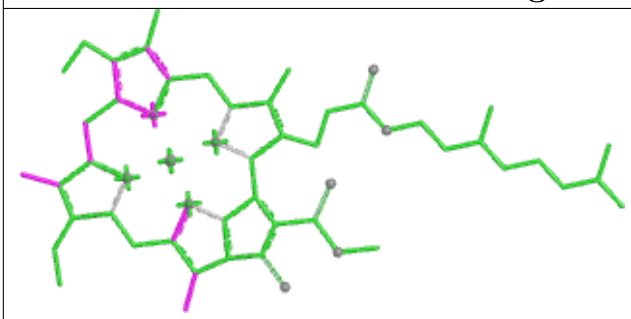
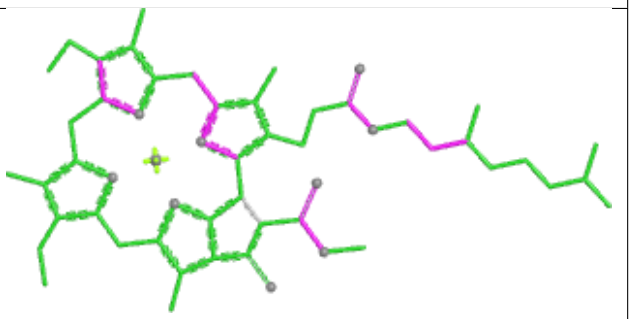
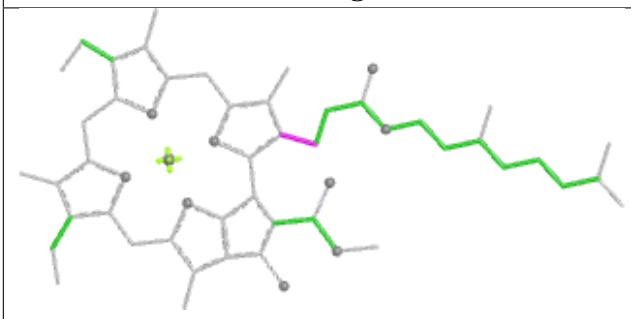
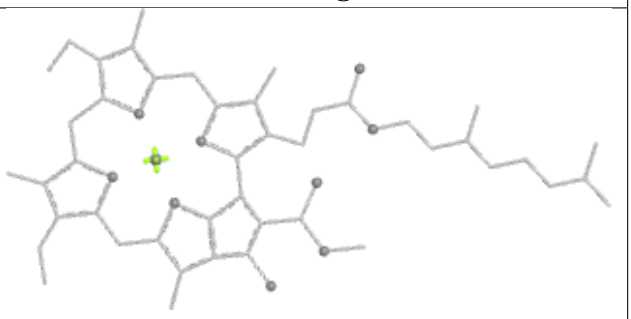


Torsions

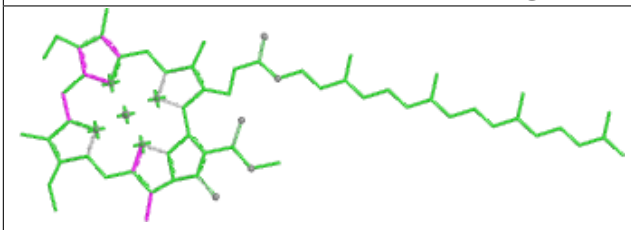


Rings

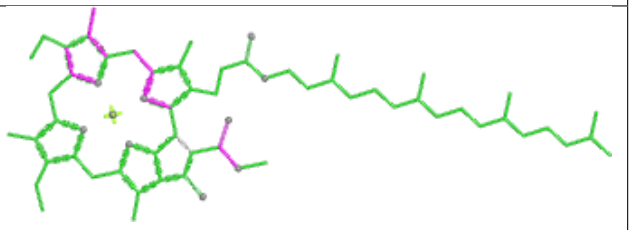
Ligand CLA O 827	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA a 815	
 Bond lengths	 Bond angles
 Torsions	 Rings

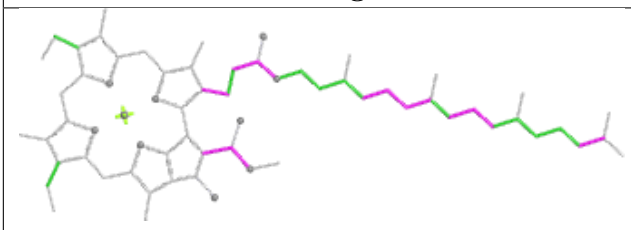
Ligand CLA N 806



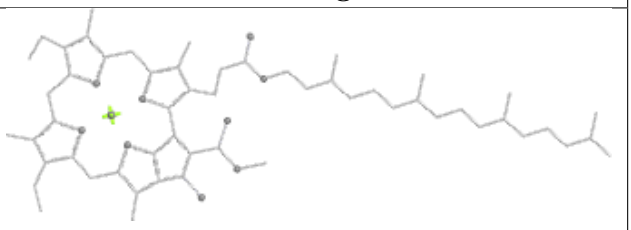
Bond lengths



Bond angles

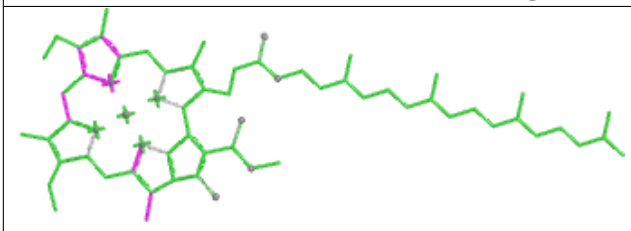


Torsions

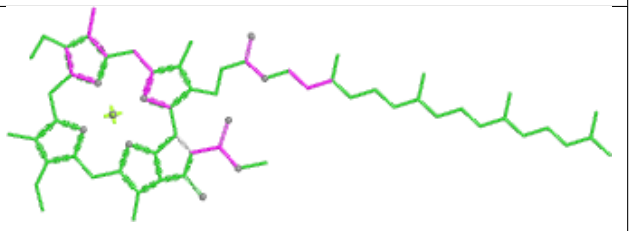


Rings

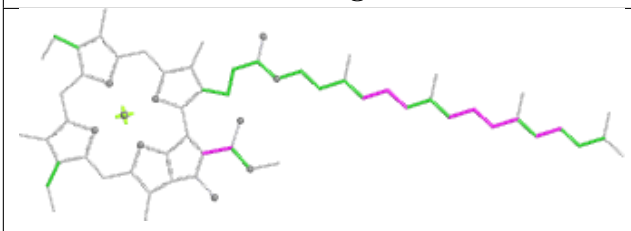
Ligand CLA O 808



Bond lengths



Bond angles



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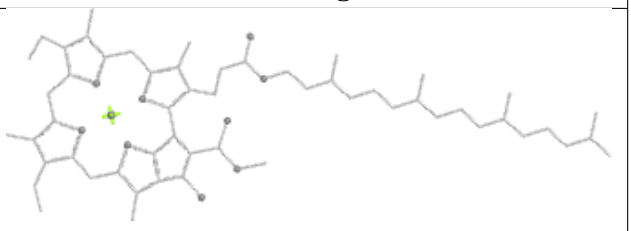
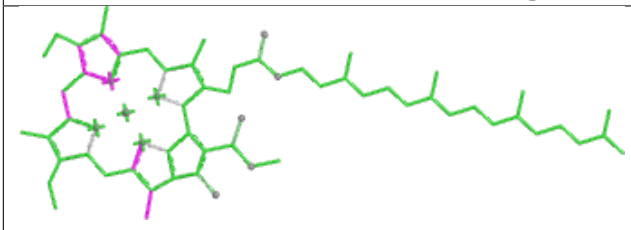
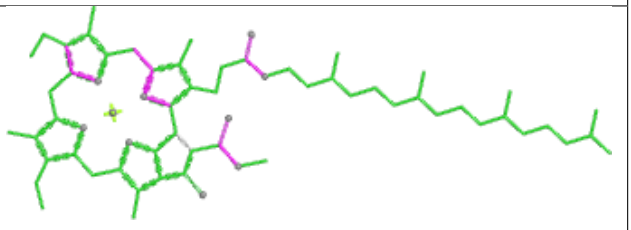


Rings

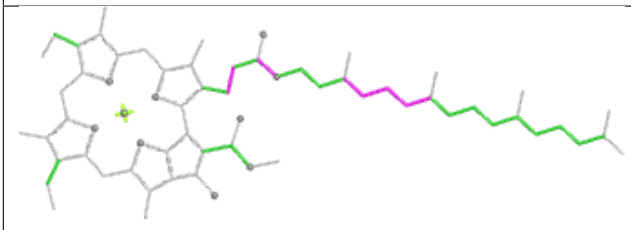
Ligand CLA A 814



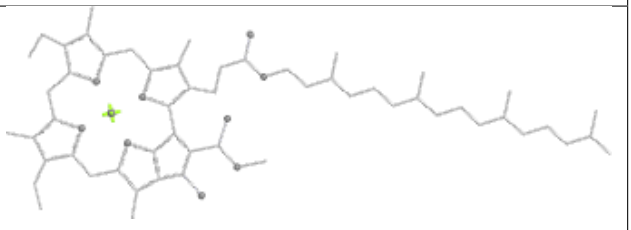
Bond lengths



Bond angles

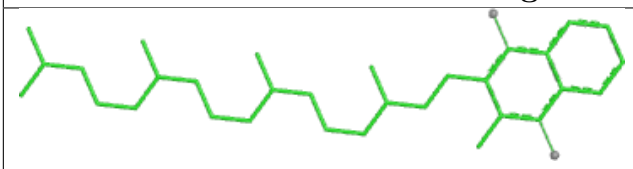


Torsions



Rings

Ligand PQN N 843



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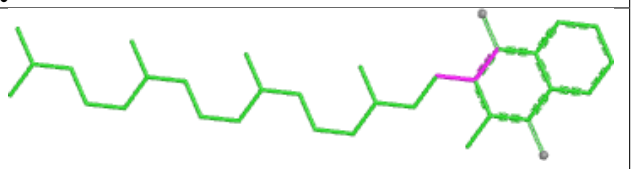
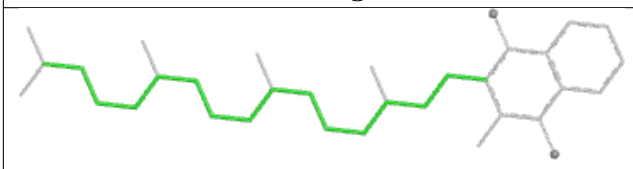
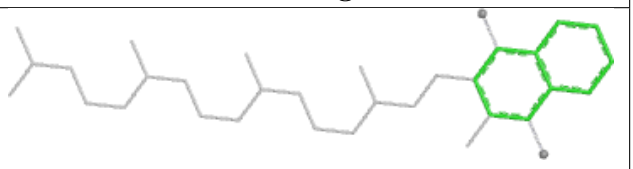


Bond angles

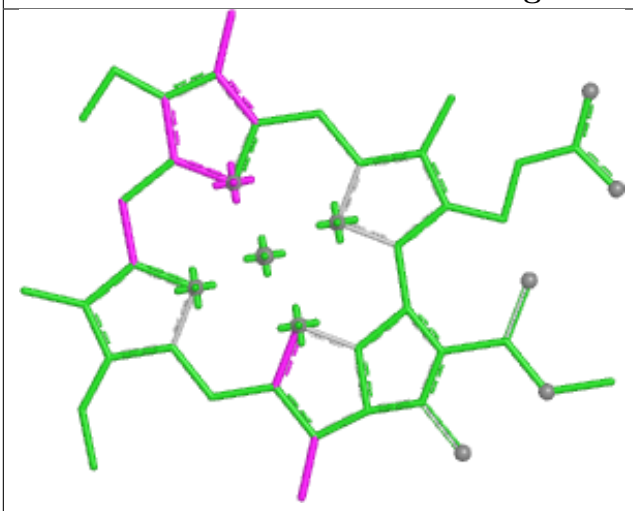


Torsions

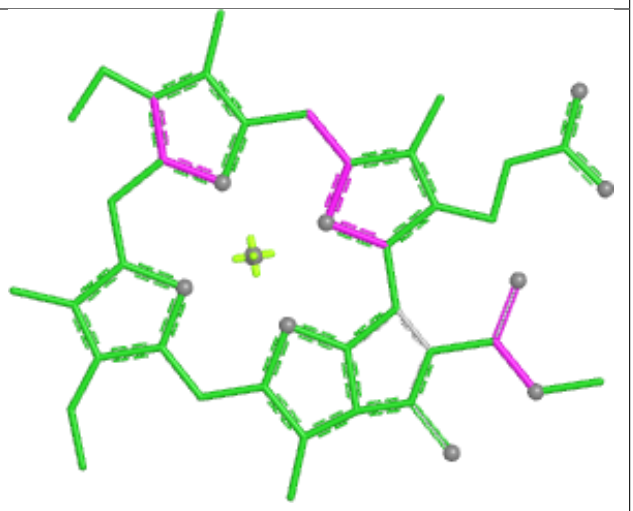


Rings

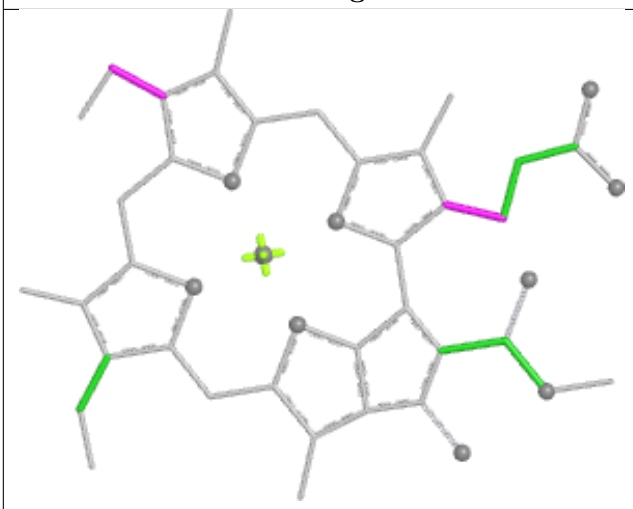
Ligand CLA O 811



Bond lengths



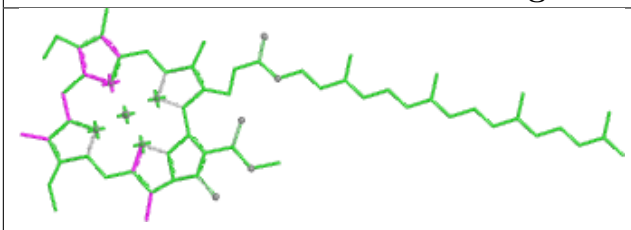
Bond angles



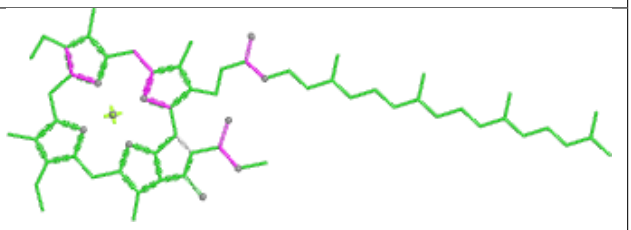
Torsions

Rings

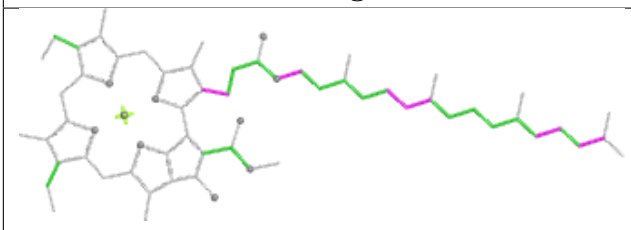
Ligand CLA a 828



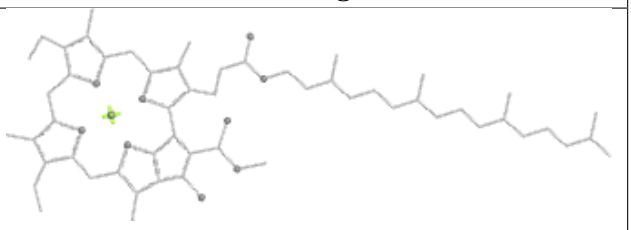
Bond lengths



Bond angles

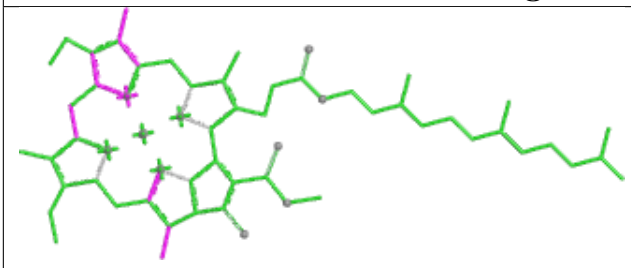


Torsions

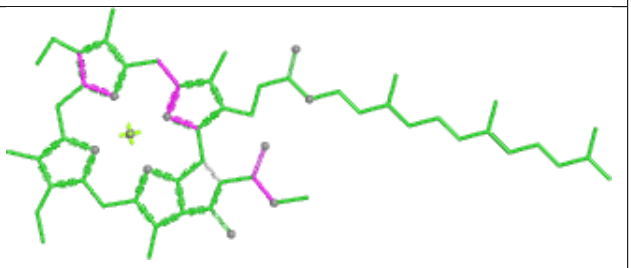


Rings

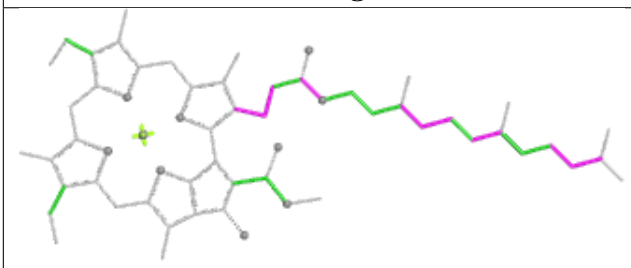
Ligand CLA B 817



Bond lengths



Bond angles



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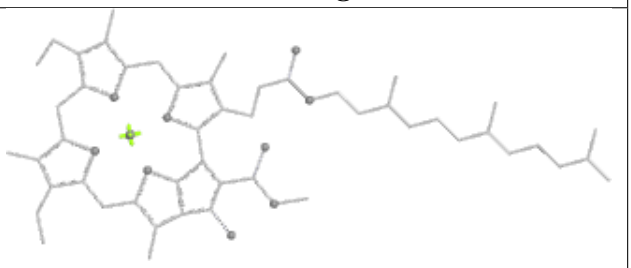
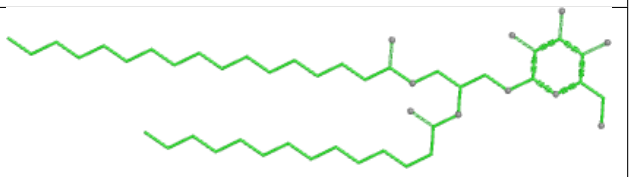


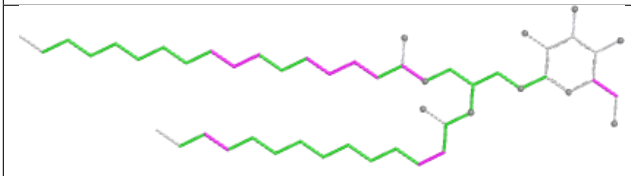
Rings

Ligand LMG W 206

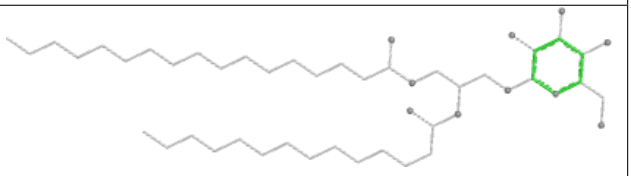
Bond lengths



Bond angles

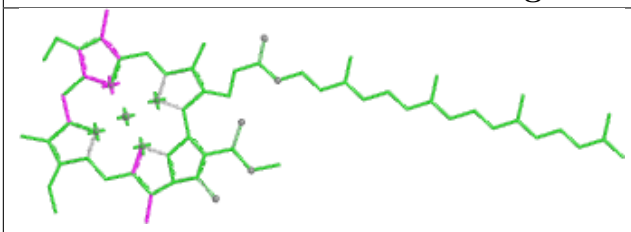


Torsions

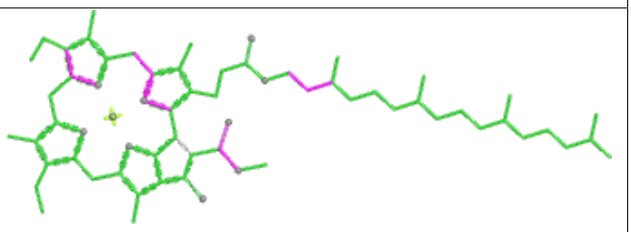


Rings

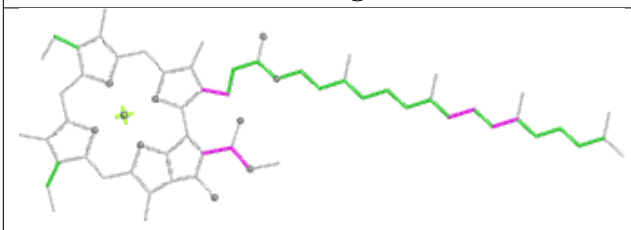
Ligand CLA B 823



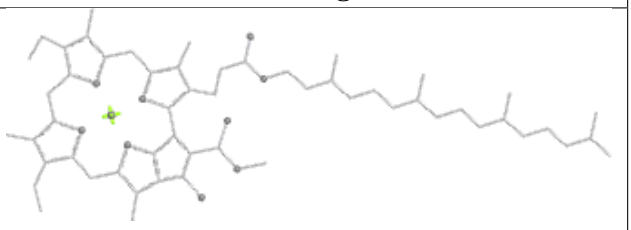
Bond lengths



Bond angles

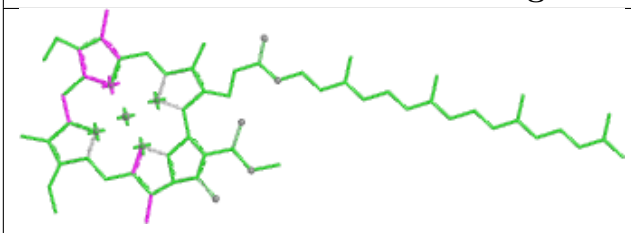


Torsions

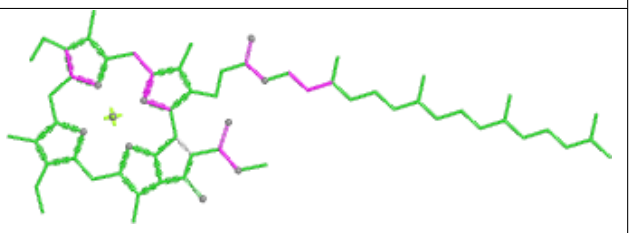


Rings

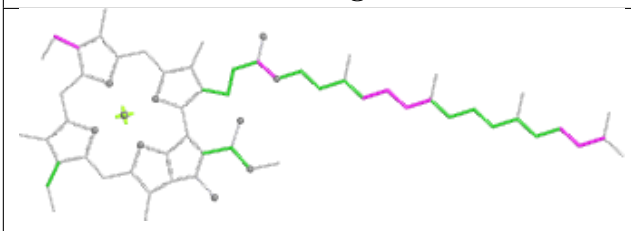
Ligand CLA S 201



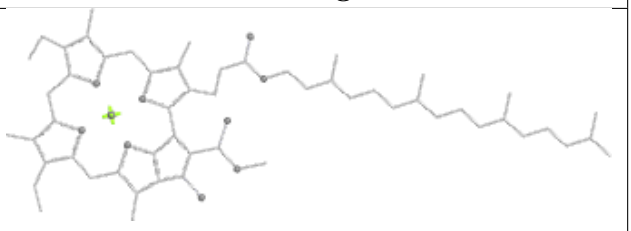
Bond lengths



Bond angles

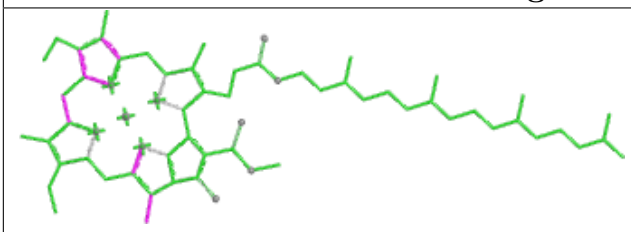


Torsions

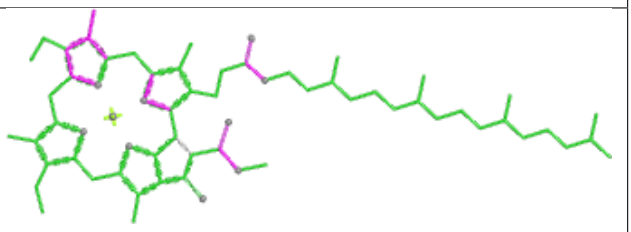


Rings

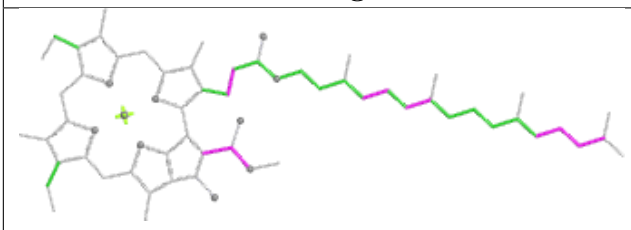
Ligand CLA b 802



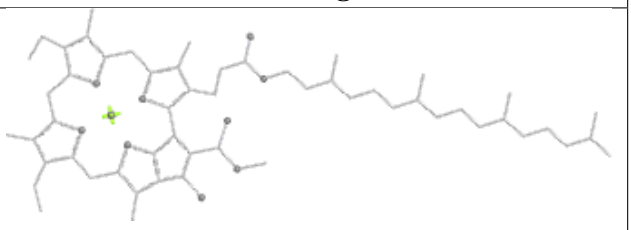
Bond lengths



Bond angles

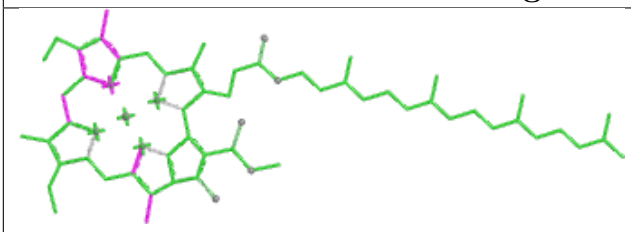


Torsions

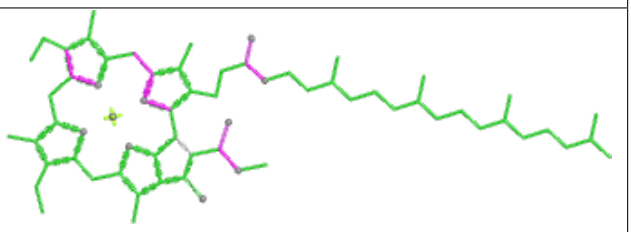


Rings

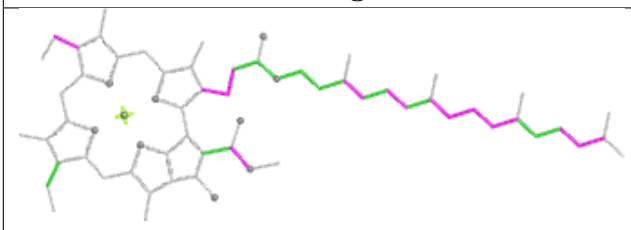
Ligand CLA N 812



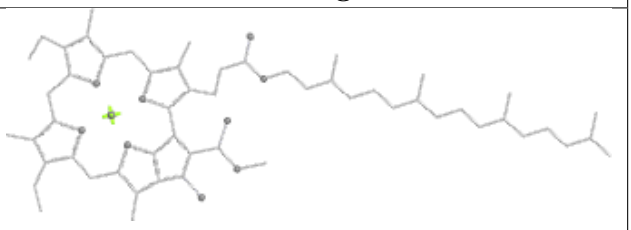
Bond lengths



Bond angles

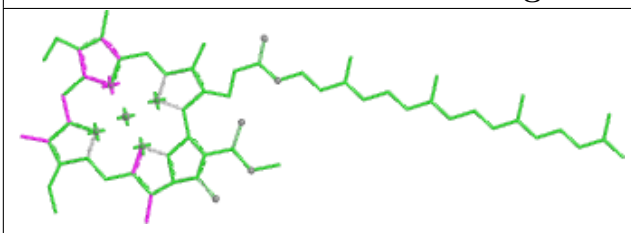


Torsions

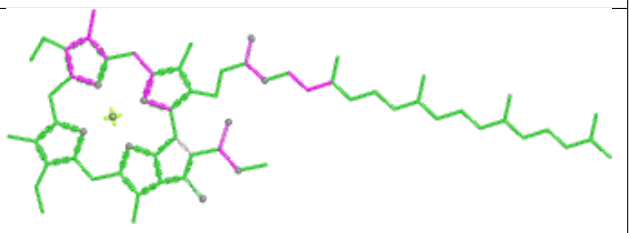


Rings

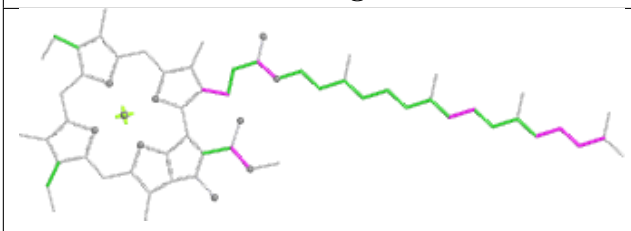
Ligand CLA A 803



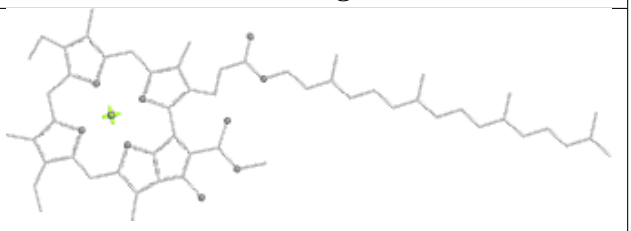
Bond lengths



Bond angles

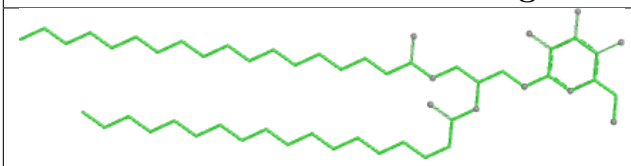


Torsions

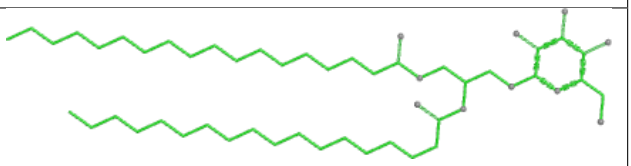


Rings

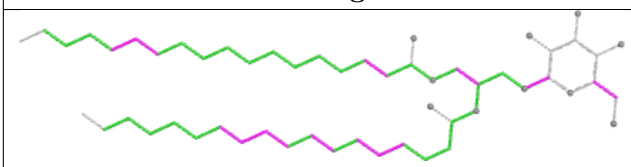
Ligand LMG U 103



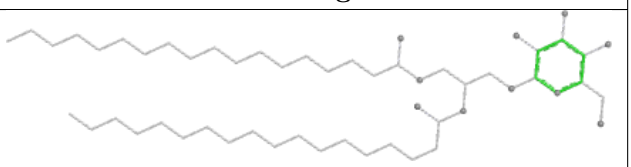
Bond lengths



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.

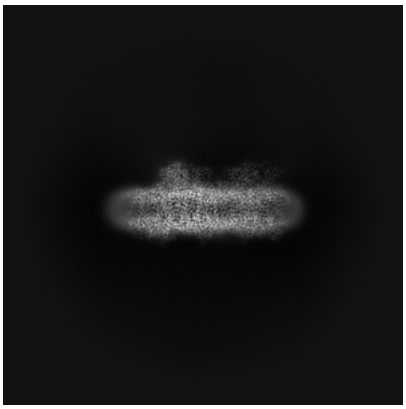
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-52762. These allow visual inspection of the internal detail of the map and identification of artifacts.

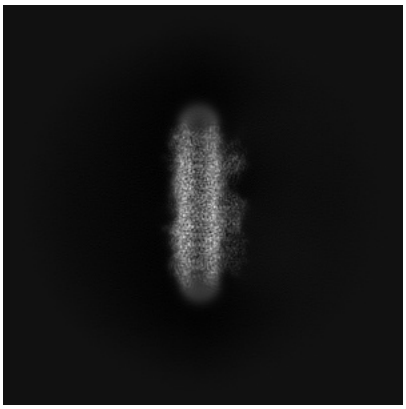
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

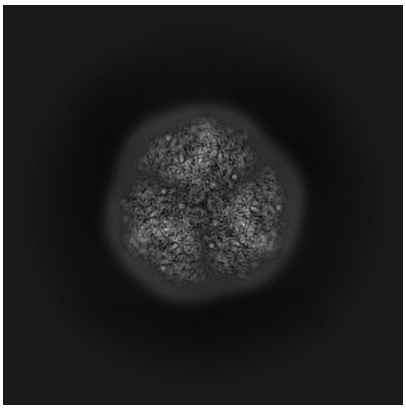
6.1.1 Primary map



X

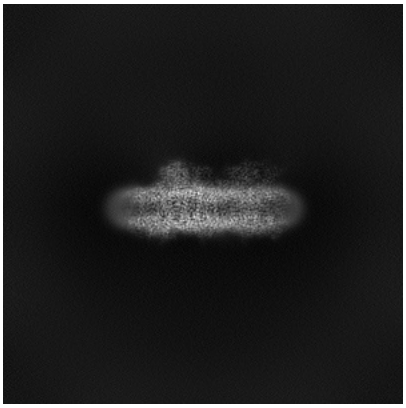


Y



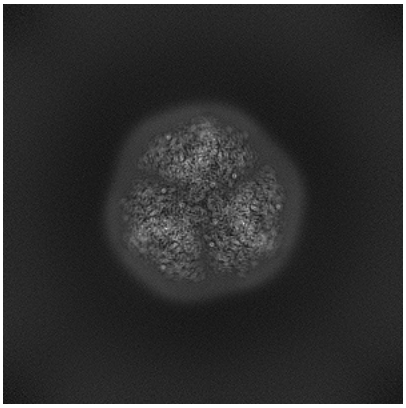
Z

6.1.2 Raw map



X

Y

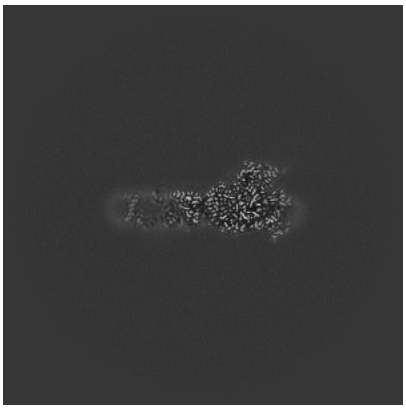


Z

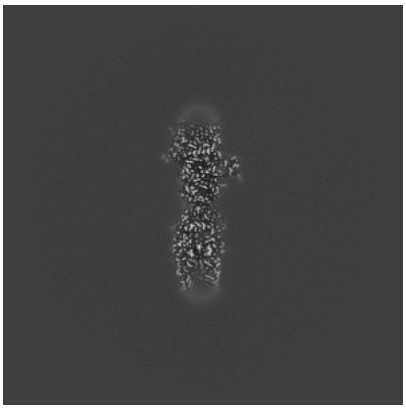
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

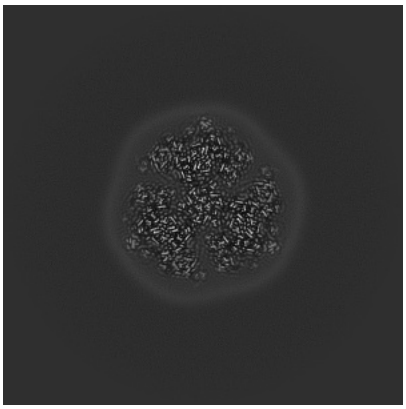
6.2.1 Primary map



X Index: 300

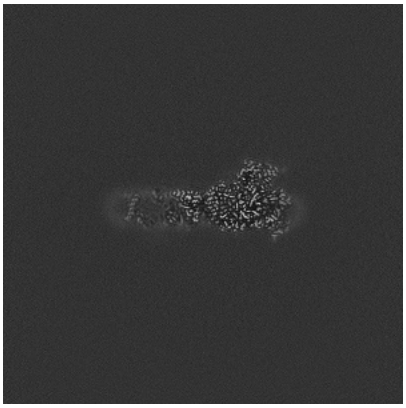


Y Index: 300

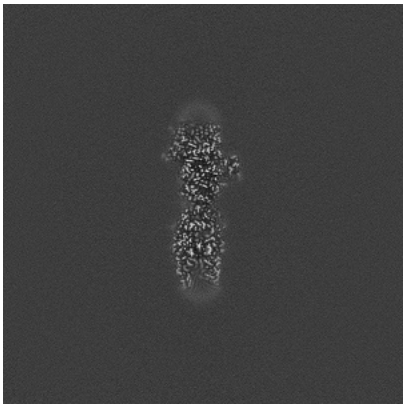


Z Index: 300

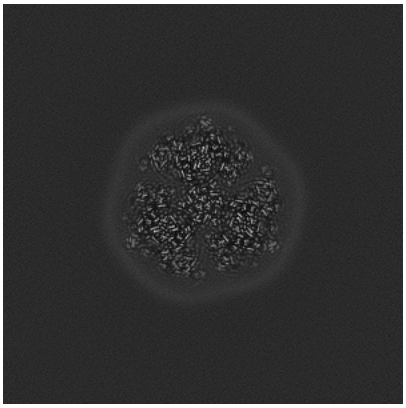
6.2.2 Raw map



X Index: 300



Y Index: 300

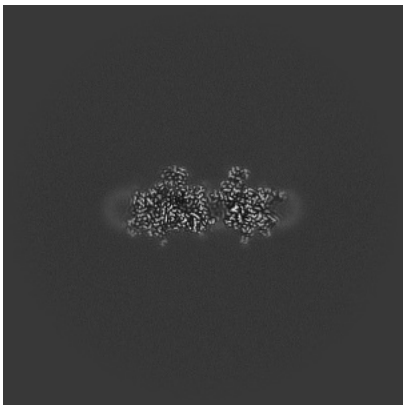


Z Index: 300

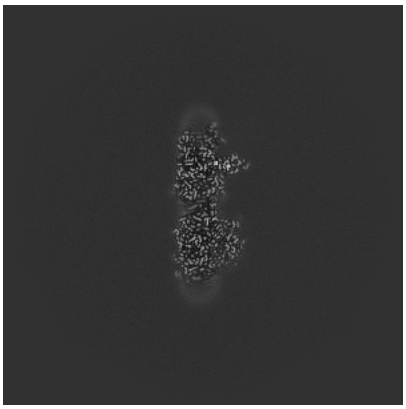
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

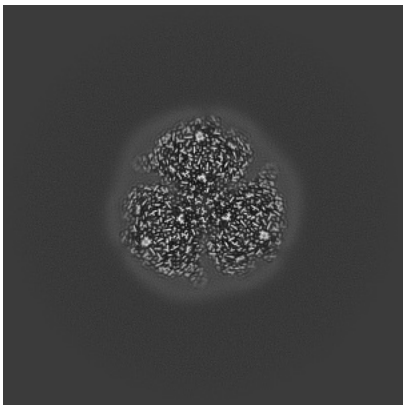
6.3.1 Primary map



X Index: 267

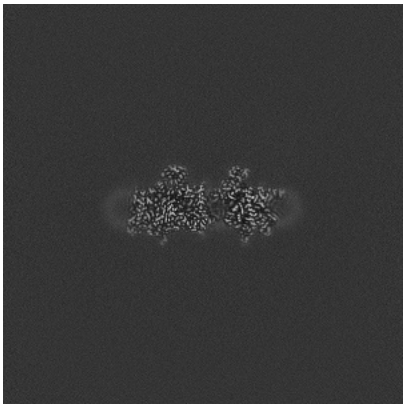


Y Index: 270

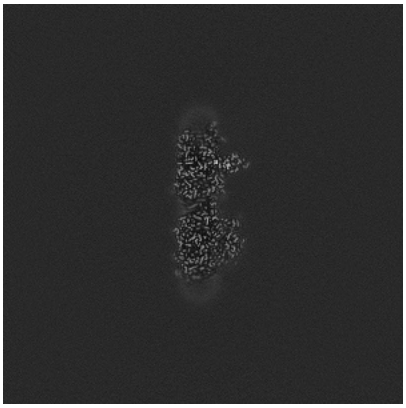


Z Index: 311

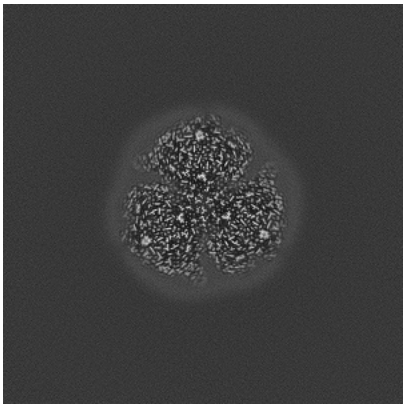
6.3.2 Raw map



X Index: 266



Y Index: 270

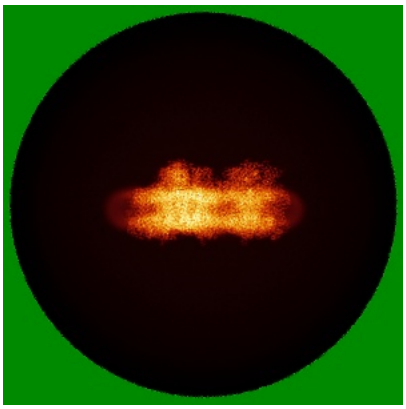


Z Index: 311

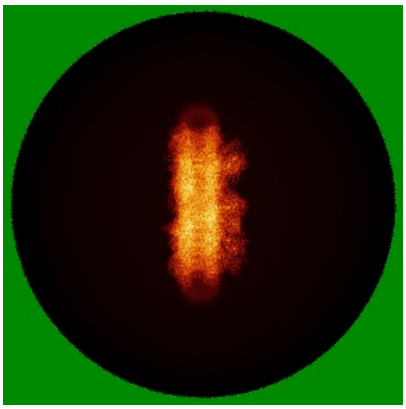
The images above show the largest variance slices of the map in three orthogonal directions.

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

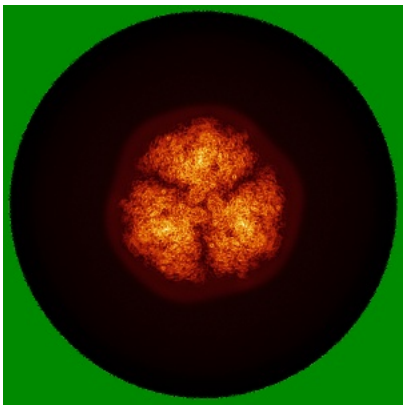
6.4.1 Primary map



X

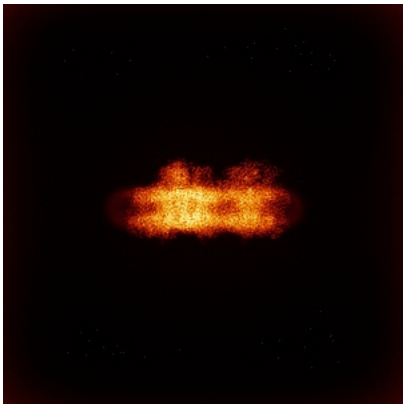


Y

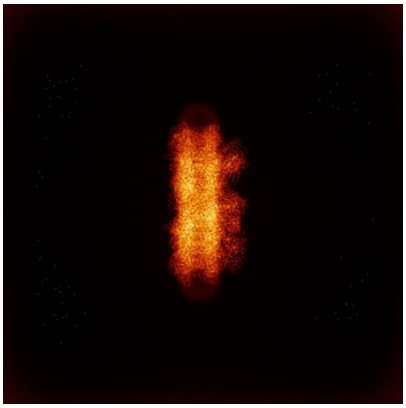


Z

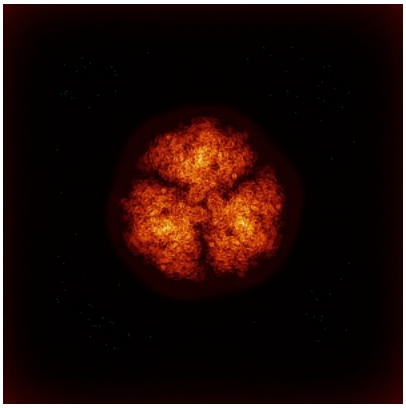
6.4.2 Raw map



X



Y

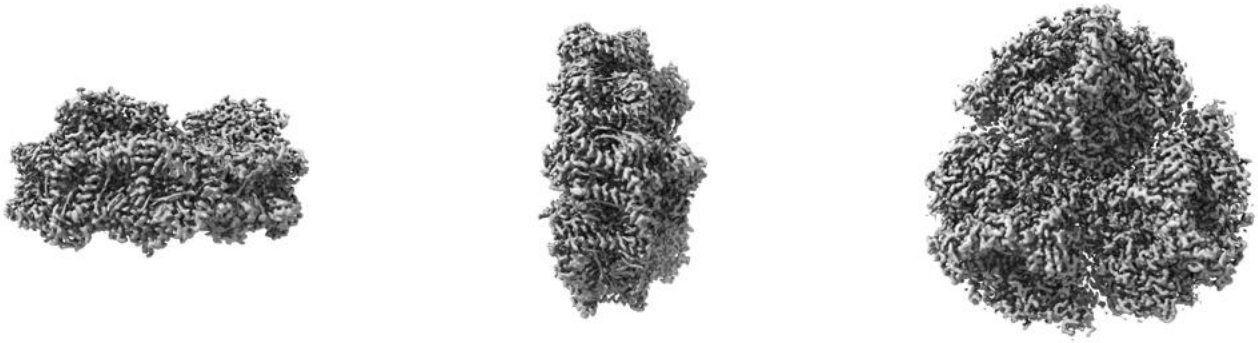


Z

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 0.13. 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.

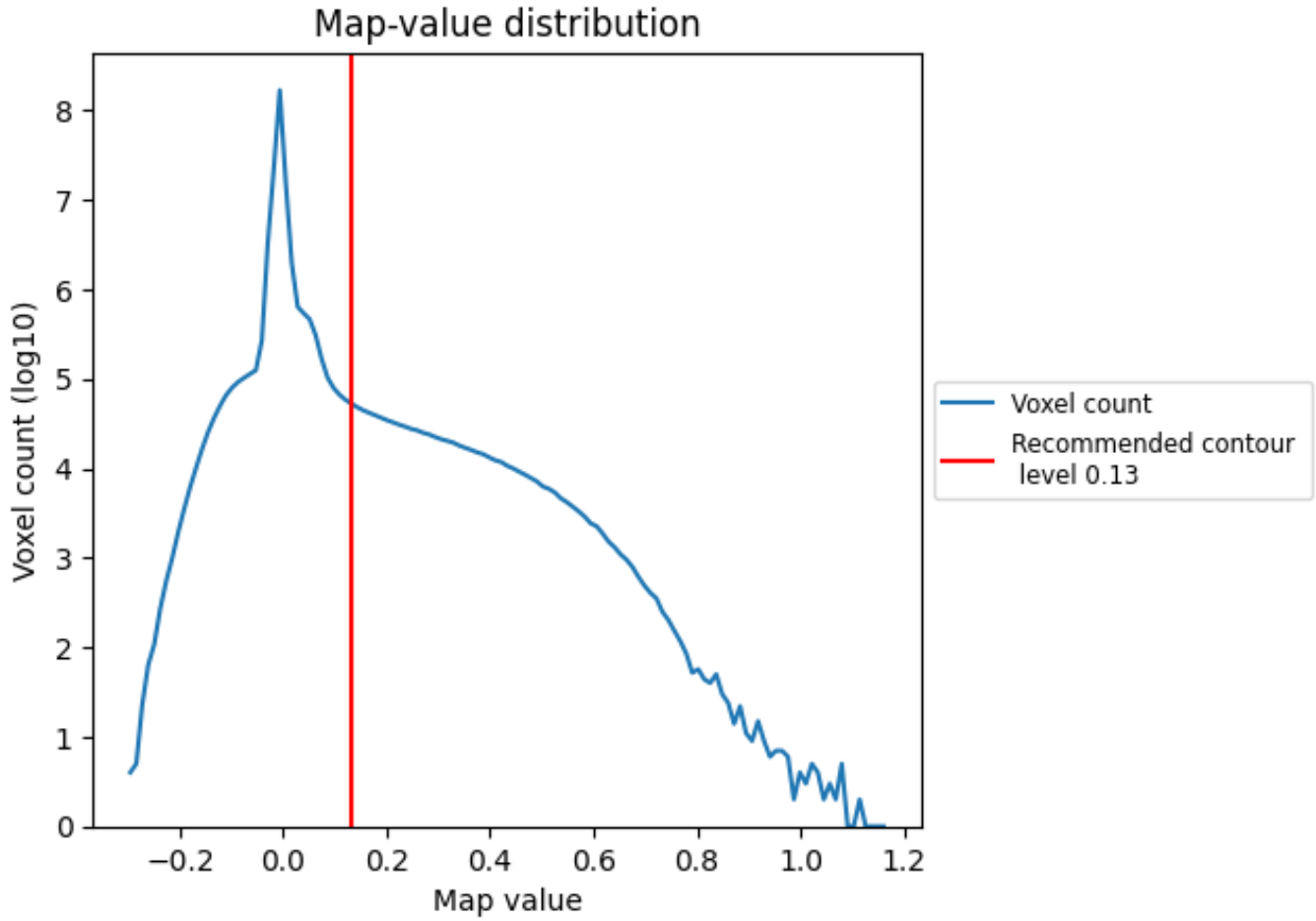
6.6 Mask visualisation (i)

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

7 Map analysis

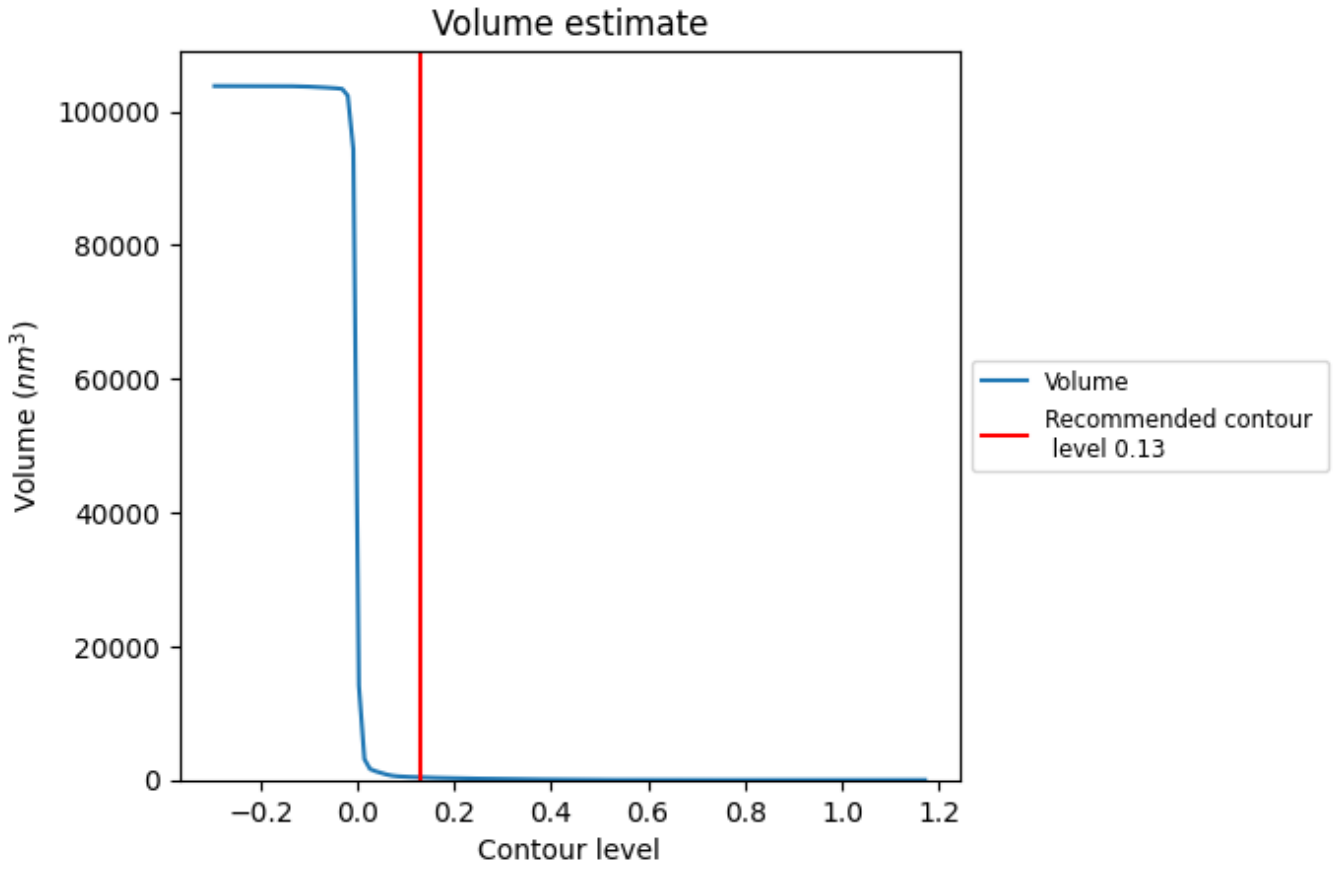
This section contains the results of statistical analysis of the map.

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.

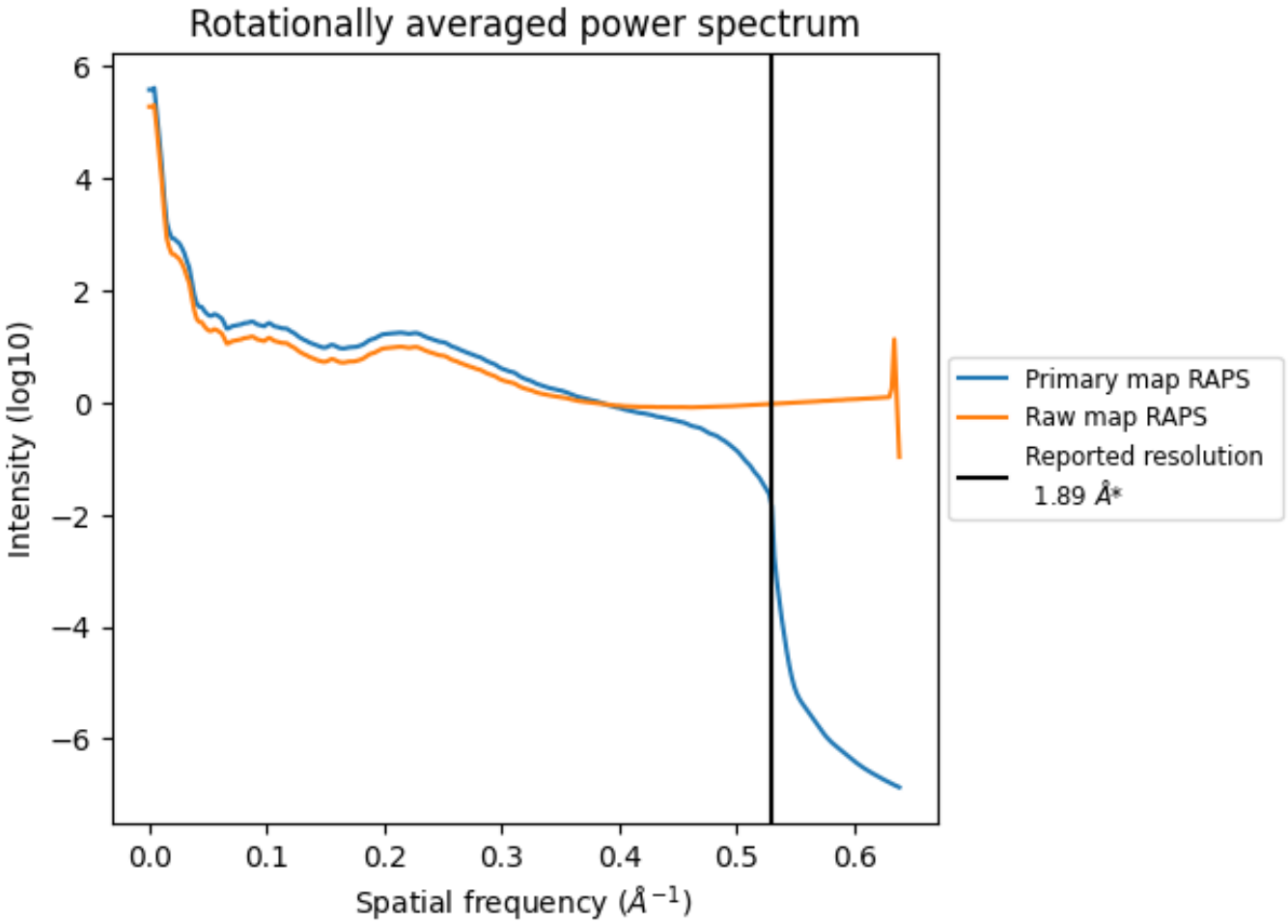
7.2 Volume estimate (i)



The volume at the recommended contour level is 389 nm^3; this corresponds to an approximate mass of 352 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)

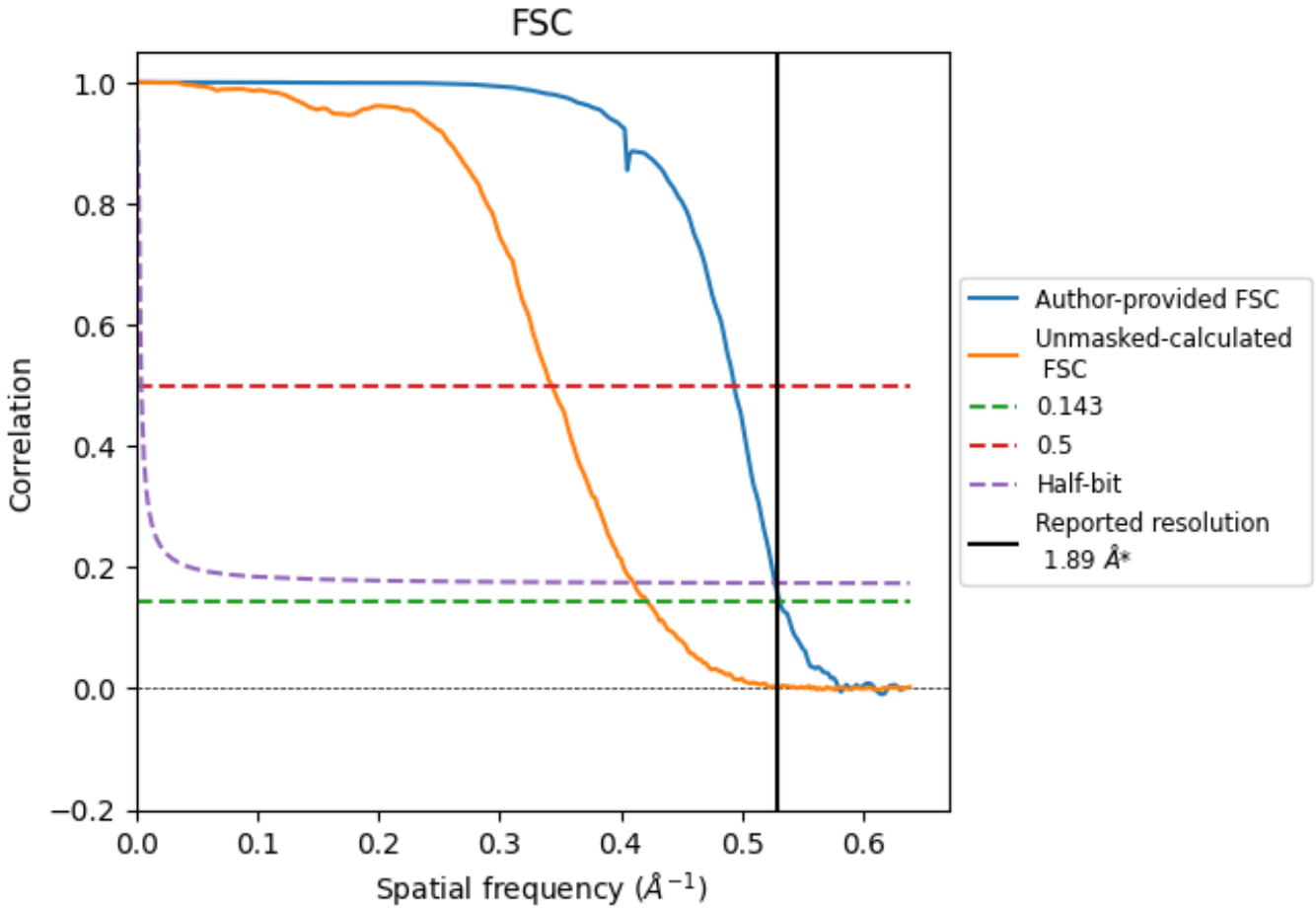


*Reported resolution corresponds to spatial frequency of 0.529 Å^{-1}

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 0.529 Å^{-1}

8.2 Resolution estimates (i)

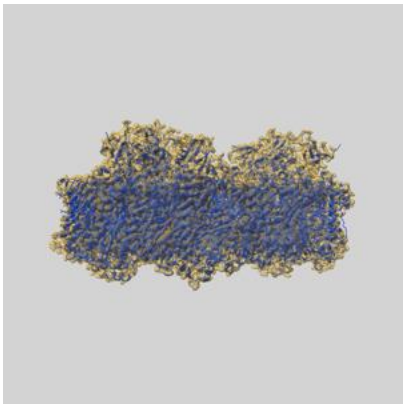
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	1.89	-	-
Author-provided FSC curve	1.88	2.03	1.90
Unmasked-calculated*	2.37	2.91	2.44

*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 2.37 differs from the reported value 1.89 by more than 10 %

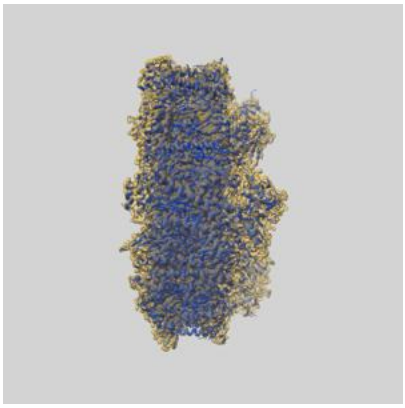
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-52762 and PDB model 9I9L. Per-residue inclusion information can be found in section 3 on page 41.

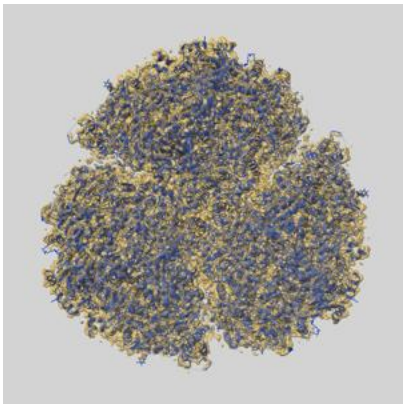
9.1 Map-model overlay



X



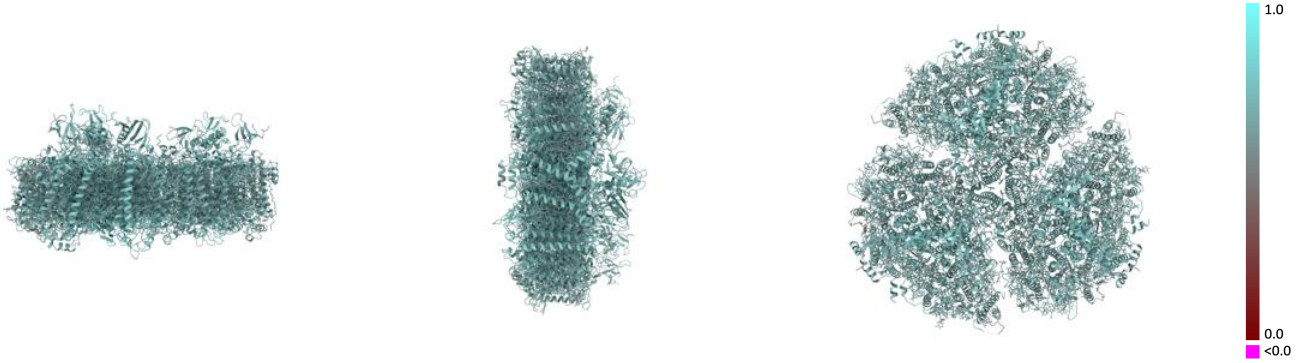
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.13 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

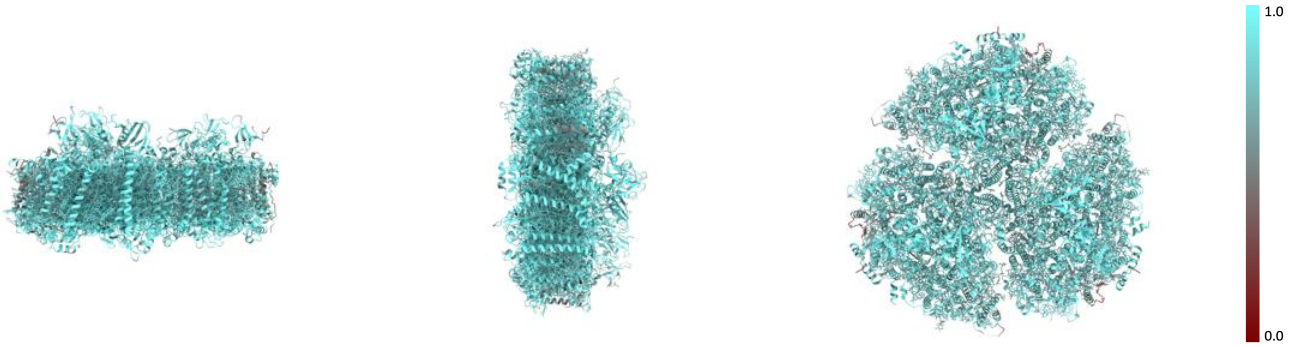
9.2 Q-score mapped to coordinate model



X Y Z

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

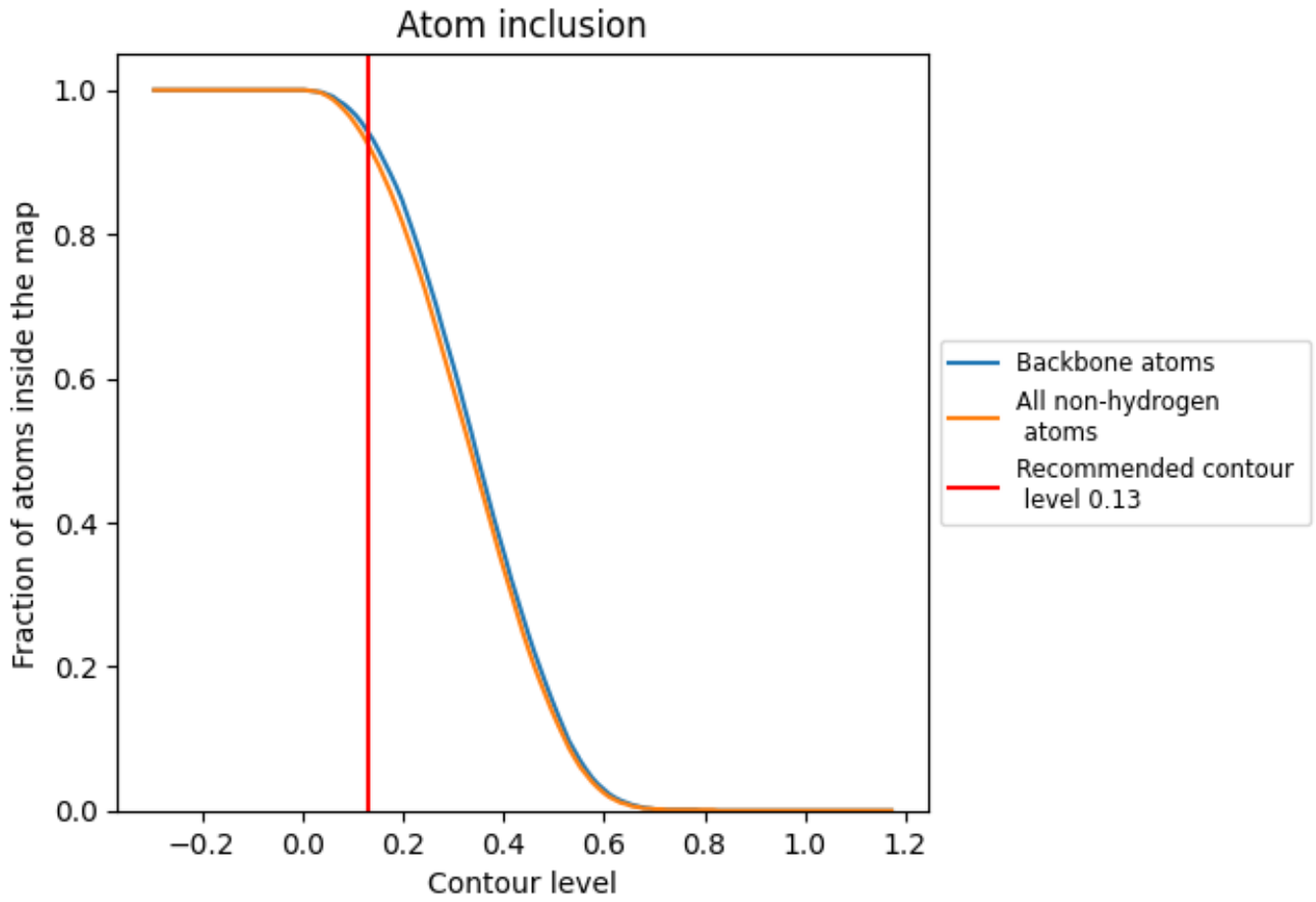
9.3 Atom inclusion mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.13).

9.4 Atom inclusion (i)



At the recommended contour level, 94% of all backbone atoms, 92% 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 (0.13) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9250	0.6960
A	0.9400	0.6990
B	0.9400	0.7000
C	0.9880	0.7270
D	0.9310	0.6920
E	0.8470	0.6580
F	0.8290	0.6420
I	0.9550	0.7160
J	0.8330	0.6500
K	0.7150	0.6260
L	0.9560	0.7200
M	0.9390	0.7080
N	0.9360	0.7010
O	0.9440	0.7040
P	0.9920	0.7290
Q	0.9340	0.6980
R	0.8470	0.6600
S	0.8560	0.6530
T	0.9500	0.7190
U	0.8450	0.6540
V	0.7140	0.6210
W	0.9550	0.7210
X	0.6580	0.6300
Y	0.8930	0.6890
Z	0.6580	0.6320
a	0.9420	0.7030
b	0.9440	0.7030
c	0.9870	0.7260
d	0.9260	0.6960
e	0.8520	0.6570
f	0.8360	0.6460
g	0.9500	0.7210
h	0.8430	0.6530
i	0.7180	0.6270
j	0.9580	0.7220

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Chain	Atom inclusion	Q-score
k	0.8930	0.6890
l	0.6580	0.6270