Full wwPDB EM Validation Report ⓘ

Oct 12, 2026 – 03:13 PM JST

PDB ID	:	9X4P / pdb_00009x4p
EMDB ID	:	EMD-66562
Title	:	photosystem I with six LHCIfrom a green alga as lichen phycobiont
Authors	:	Su, X.D.; Wei, X.L.; Li, M.
Deposited on	:	2025-10-11
Resolution	:	4.10 Å(reported)

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

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

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

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

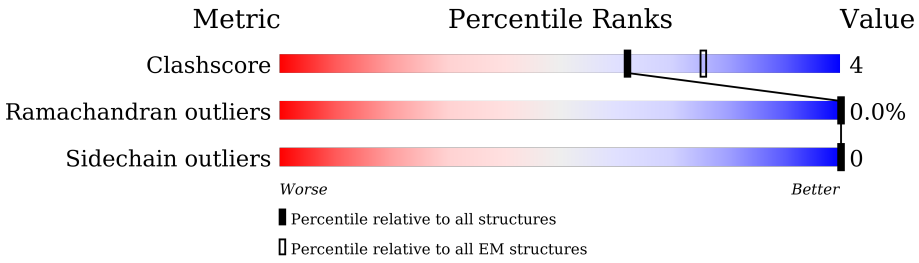
EMDB validation analysis	:	0.0.1.dev133
Mogul	:	1.8.5 (274361), CSD as541be (2020)
MolProbity	:	4-5-2 with Phenix2.2
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics	:	202505.v01 (Using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

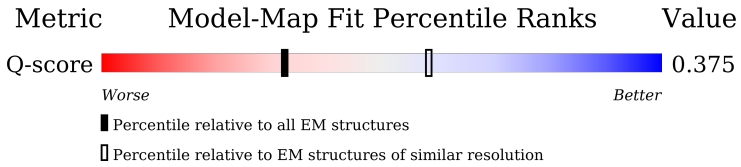
1 Overall quality at a glance (i)

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

The reported resolution of this entry is 4.10 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.





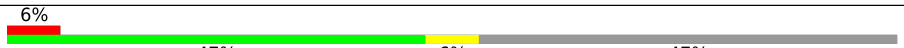
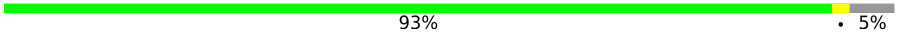
Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	6458 (3.60 - 4.60)

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	1	248	9% 59% 7% 34%
2	3	308	64% 8% 28%
3	5	271	78% 6% 16%
4	6	266	75% 11% 14%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
5	7	279	
6	8	263	
7	A	751	
8	B	734	
9	C	81	
10	D	239	
11	E	111	
12	F	251	
13	I	106	
14	J	41	
15	K	126	
16	L	176	
17	M	32	

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
24	SF4	C	102	-	-	X	-

2 Entry composition (i)

There are 24 unique types of molecules in this entry. The entry contains 35440 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 Lhca1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	1	164	1231	795	204	228	4	0	0

- Molecule 2 is a protein called Lhca3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	3	223	1756	1147	286	321	2	0	0

- Molecule 3 is a protein called Lhca5.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	5	228	1777	1150	300	321	6	0	0

- Molecule 4 is a protein called Lhca5.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	6	229	1750	1141	294	309	6	0	0

- Molecule 5 is a protein called Lhca7.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	7	219	1710	1111	288	308	3	0	0

- Molecule 6 is a protein called Lhca8.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	8	226	1737	1129	289	316	3	0	0

- Molecule 7 is a protein called PsaA.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	A	740	Total	C	N	O	S	0	0
			5824	3812	993	1001	18		

- Molecule 8 is a protein called PsaB.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	B	729	Total	C	N	O	S	0	0
			5785	3798	978	998	11		

- Molecule 9 is a protein called Photosystem I iron-sulfur center.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	C	80	Total	C	N	O	S	0	0
			600	369	103	116	12		

- Molecule 10 is a protein called PsaD.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	D	126	Total	C	N	O	S	0	0
			992	638	172	178	4		

- Molecule 11 is a protein called PsaE.

Mol	Chain	Residues	Atoms				AltConf	Trace
11	E	51	Total	C	N	O	0	0
			405	261	74	70		

- Molecule 12 is a protein called PsaF.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	F	161	Total	C	N	O	S	0	0
			1239	794	217	225	3		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
13	I	32	Total	C	N	O	S	0	0
			242	166	34	41	1		

- Molecule 14 is a protein called Photosystem I reaction center subunit IX.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	J	39	Total	C	N	O	S	0	0
			320	219	45	55	1		

- Molecule 15 is a protein called PsaK.

Mol	Chain	Residues	Atoms				AltConf	Trace
15	K	72	Total	C	N	O	0	0
			502	321	86	95		

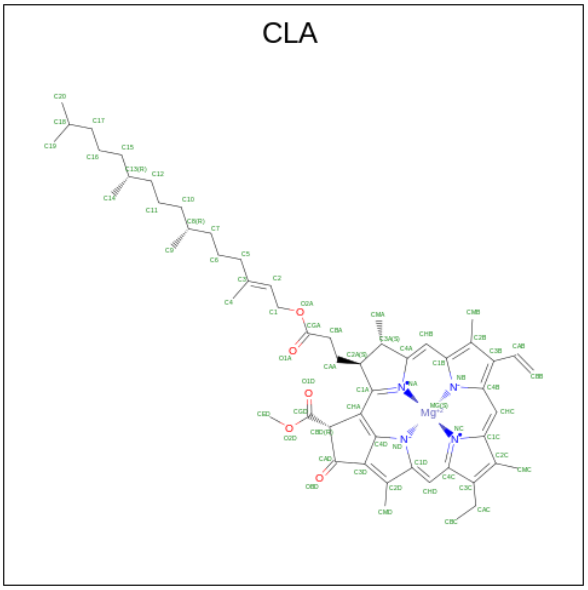
- Molecule 16 is a protein called PsaL.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	L	109	Total	C	N	O	S	0	0
			788	519	128	140	1		

- Molecule 17 is a protein called Photosystem I reaction center subunit XII.

Mol	Chain	Residues	Atoms				AltConf	Trace
17	M	30	Total	C	N	O	0	0
			232	155	36	41		

- Molecule 18 is CHLOROPHYLL A (CCD ID: CLA) (formula: $C_{55}H_{72}MgN_4O_5$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
18	1	1	Total	C	Mg	N	O	0
			40	32	1	4	3	

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf
18	1	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	1	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	1	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	1	1	Total	C	Mg	N	O	0
			39	32	1	4	2	
18	1	1	Total	C	Mg	N	O	0
			39	31	1	4	3	
18	1	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	1	1	Total	C	Mg	N	O	0
			38	30	1	4	3	
18	1	1	Total	C	Mg	N	O	0
			39	31	1	4	3	
18	1	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	1	1	Total	C	Mg	N	O	0
			39	31	1	4	3	
18	1	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	1	1	Total	C	Mg	N	O	0
			37	29	1	4	3	
18	1	1	Total	C	Mg	N	O	0
			39	31	1	4	3	
18	3	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	3	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	3	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
18	3	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	3	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	3	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	3	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
18	3	1	Total	C	Mg	N	O	0
			41	33	1	4	3	

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf
18	3	1	Total	C	Mg	N	O	0
			38	30	1	4	3	
18	3	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	3	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	3	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	3	1	Total	C	Mg	N	O	0
			39	31	1	4	3	
18	3	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	5	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			39	31	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			38	31	1	4	2	

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf
18	5	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	5	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	6	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	6	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	6	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
18	6	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	6	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	6	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	6	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	6	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	6	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	6	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	6	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	6	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
18	6	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
18	6	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	6	1	Total	C	Mg	N	O	0
			39	32	1	4	2	
18	6	1	Total	C	Mg	N	O	0
			38	32	1	4	1	
18	7	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
18	7	1	Total	C	Mg	N	O	0
			54	44	1	4	5	

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf
18	7	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
18	7	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	7	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	7	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	7	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	7	1	Total	C	Mg	N	O	0
			40	33	1	4	2	
18	7	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	7	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	7	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
18	7	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	7	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	7	1	Total	C	Mg	N	O	0
			38	30	1	4	3	
18	8	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	8	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	8	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	8	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	8	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	8	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	8	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	8	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	8	1	Total	C	Mg	N	O	0
			41	33	1	4	3	

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf
18	8	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	8	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	8	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	8	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	8	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	8	1	Total	C	Mg	N	O	0
			37	31	1	4	1	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			41	33	1	4	3	

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf
18	A	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			48	38	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			56	47	1	4	4	
18	A	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf
18	A	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			39	31	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			37	31	1	4	1	
18	B	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			38	30	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			42	34	1	4	3	

Continued on next page...

Continued from previous page...

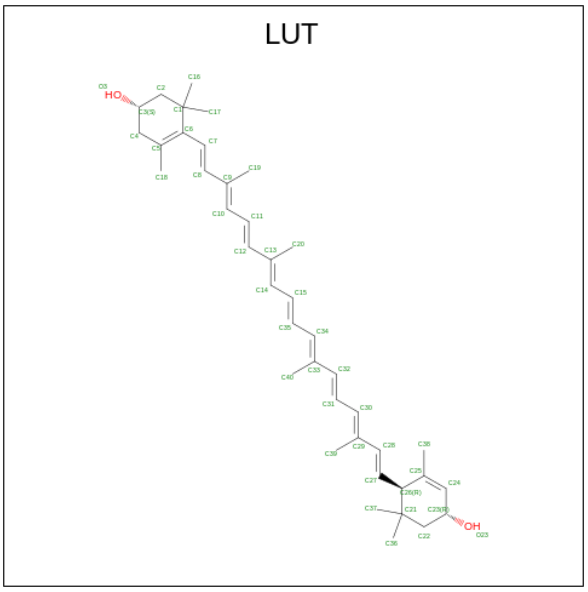
Mol	Chain	Residues	Atoms					AltConf
18	B	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			54	45	1	4	4	
18	B	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			48	38	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			45	37	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			41	33	1	4	3	

Continued on next page...

Continued from previous page...

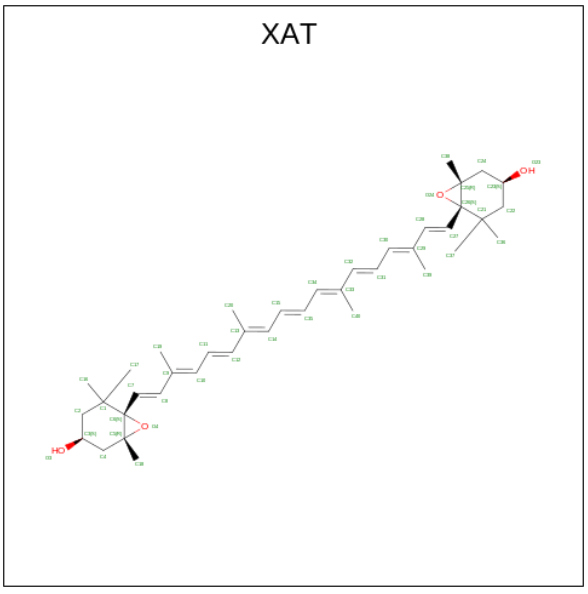
Mol	Chain	Residues	Atoms					AltConf
18	B	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	F	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	F	1	Total	C	Mg	N	O	0
			39	33	1	4	1	
18	F	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
18	J	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	K	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	K	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	K	1	Total	C	Mg	N	O	0
			39	32	1	4	2	
18	L	1	Total	C	Mg	N	O	0
			41	33	1	4	3	

- Molecule 19 is (3R,3'R,6S)-4,5-DIDEHYDRO-5,6-DIHYDRO-BETA,BETA-CAROTENE-3 ,3'-DIOL (CCD ID: LUT) (formula: $C_{40}H_{56}O_2$).



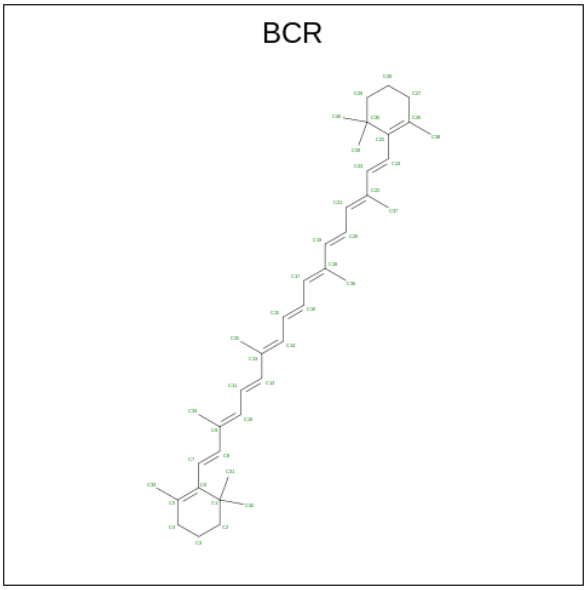
Mol	Chain	Residues	Atoms			AltConf
19	3	1	Total	C	O	0
			42	40	2	
19	5	1	Total	C	O	0
			42	40	2	
19	7	1	Total	C	O	0
			42	40	2	

- Molecule 20 is (3S,5R,6S,3'S,5'R,6'S)-5,6,5',6'-DIEPOXY-5,6,5',6'- TETRAHYDRO-BETA ,BETA-CAROTENE-3,3'-DIOL (CCD ID: XAT) (formula: $C_{40}H_{56}O_4$).



Mol	Chain	Residues	Atoms	AltConf
20	3	1	Total C O 44 40 4	0
20	5	1	Total C O 44 40 4	0
20	6	1	Total C O 44 40 4	0
20	7	1	Total C O 44 40 4	0
20	8	1	Total C O 44 40 4	0

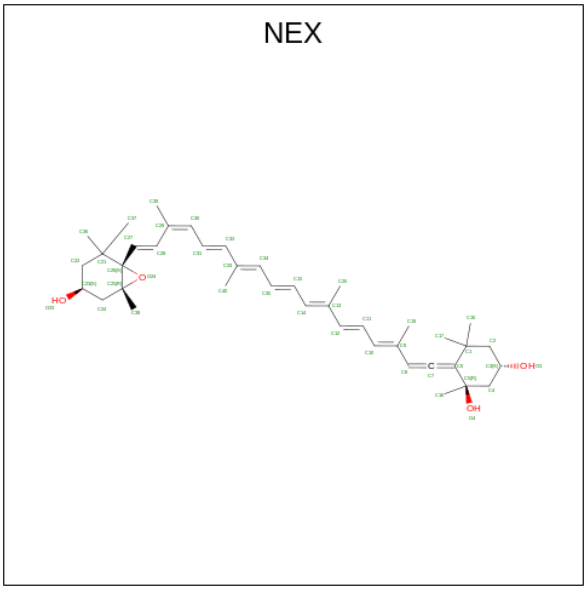
- Molecule 21 is BETA-CAROTENE (CCD ID: BCR) (formula: $C_{40}H_{56}$).



Mol	Chain	Residues	Atoms	AltConf
21	3	1	Total C 40 40	0
21	A	1	Total C 40 40	0
21	A	1	Total C 40 40	0
21	A	1	Total C 40 40	0
21	F	1	Total C 40 40	0
21	J	1	Total C 40 40	0

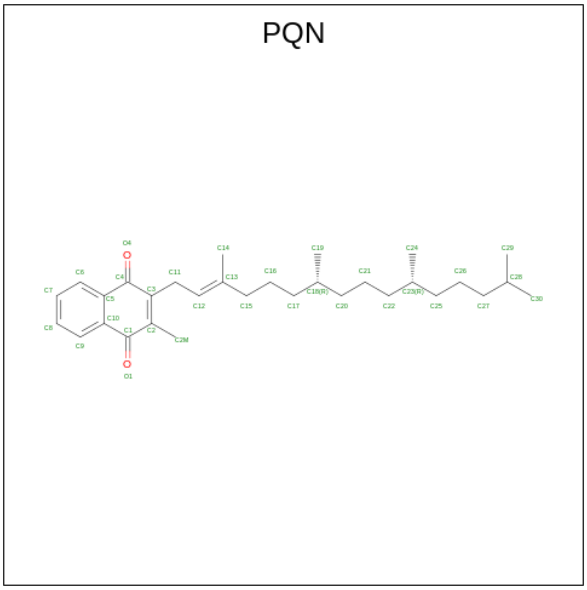
- Molecule 22 is (1R,3R)-6-{(3E,5E,7E,9E,11E,13E,15E,17E)-18-[(1S,4R,6R)-4-HYDROXY-2

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



Mol	Chain	Residues	Atoms			AltConf
22	5	1	Total	C	O	0
			44	40	4	

- Molecule 23 is PHYLLOQUINONE (CCD ID: PQN) (formula: $C_{31}H_{46}O_2$).



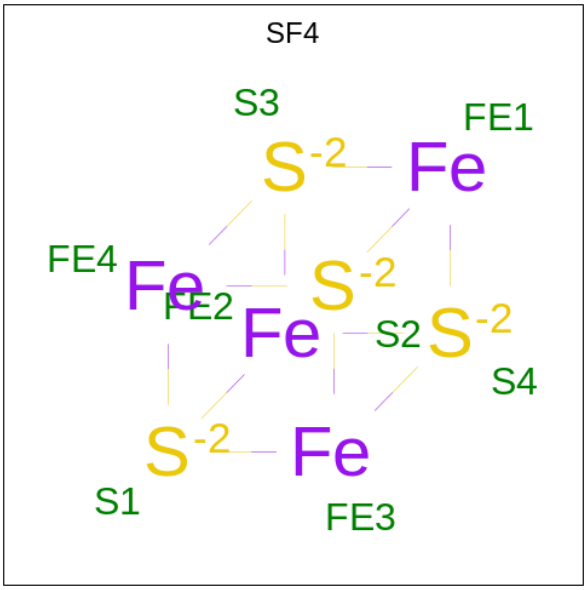
Mol	Chain	Residues	Atoms			AltConf
23	A	1	Total	C	O	0
			23	21	2	

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	AltConf
23	B	1	Total C O 19 17 2	0

- Molecule 24 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4).



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

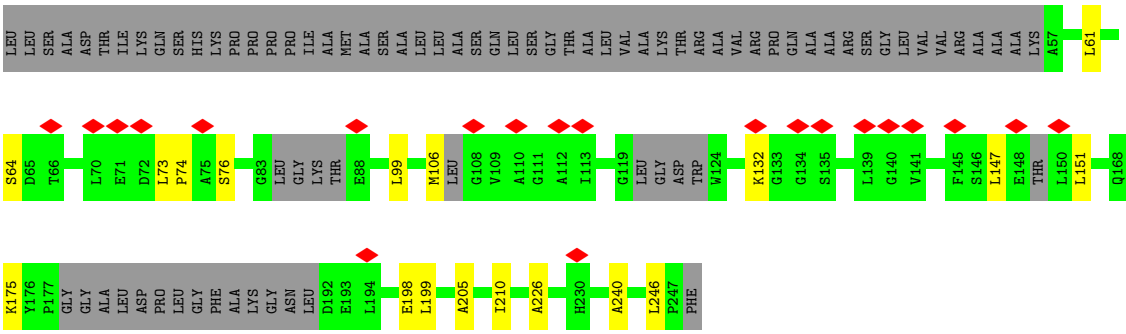
3 Residue-property plots (i)

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: Lhca1

Chain 1:

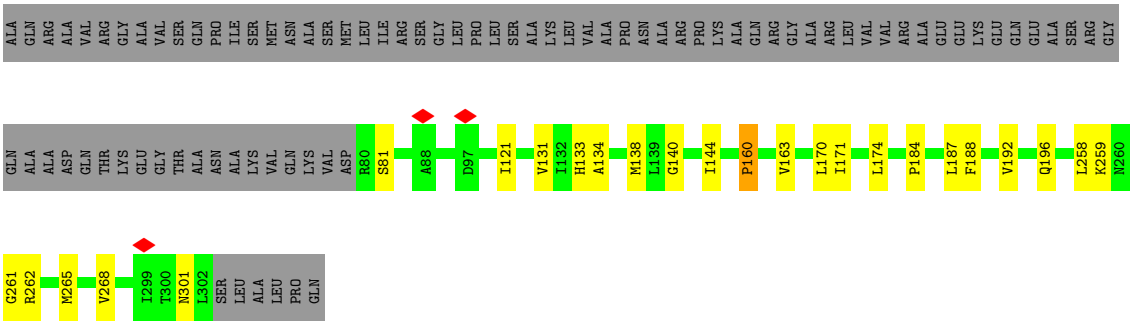




• Molecule 2: Lhca3

Chain 3:

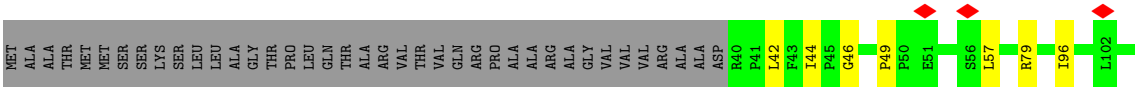


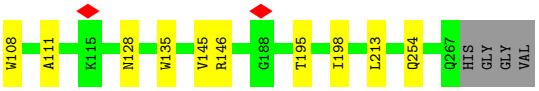


• Molecule 3: Lhca5

Chain 5:



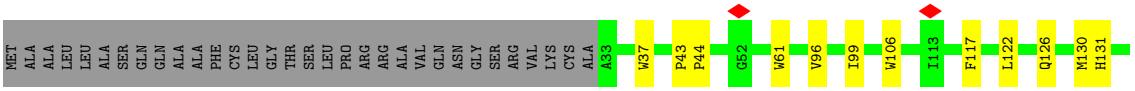


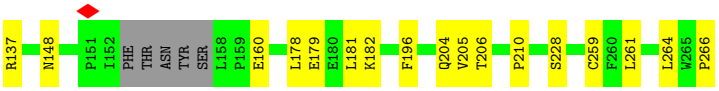


• Molecule 4: Lhca5

Chain 6:





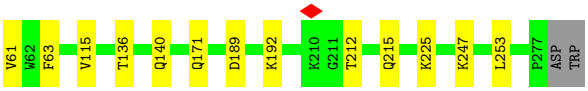


• Molecule 5: Lhca7

Chain 7:



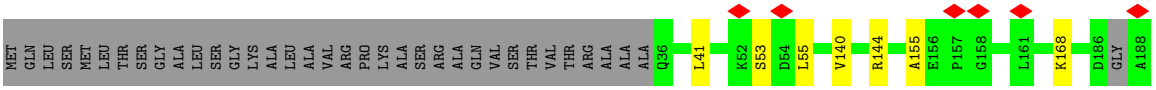


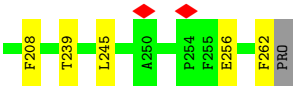


• Molecule 6: Lhca8

Chain 8:



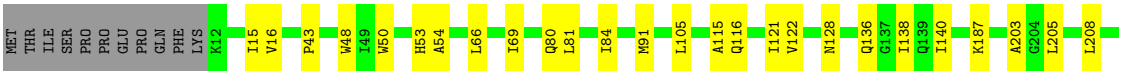


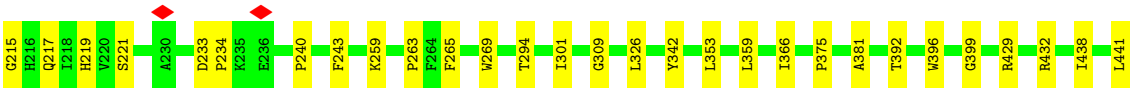


• Molecule 7: PsaA

Chain A:







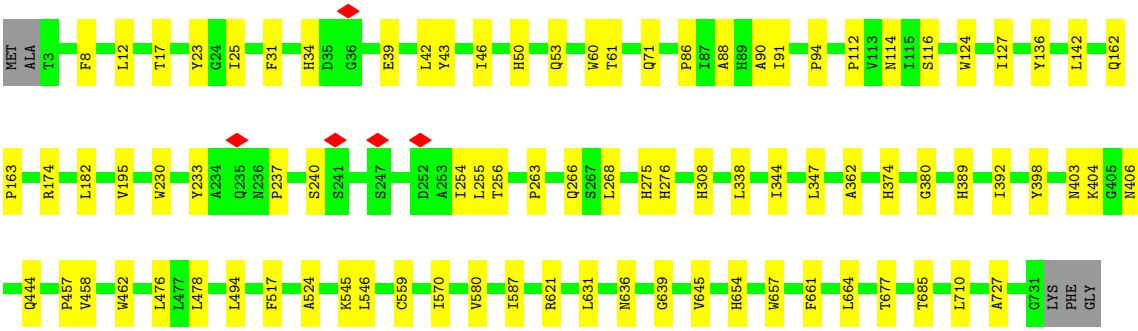




• Molecule 8: PsaB

Chain B:





• Molecule 9: Photosystem I iron-sulfur center

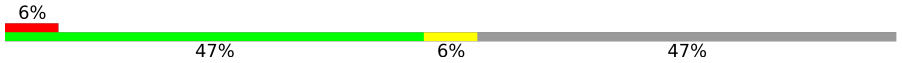
Chain C:

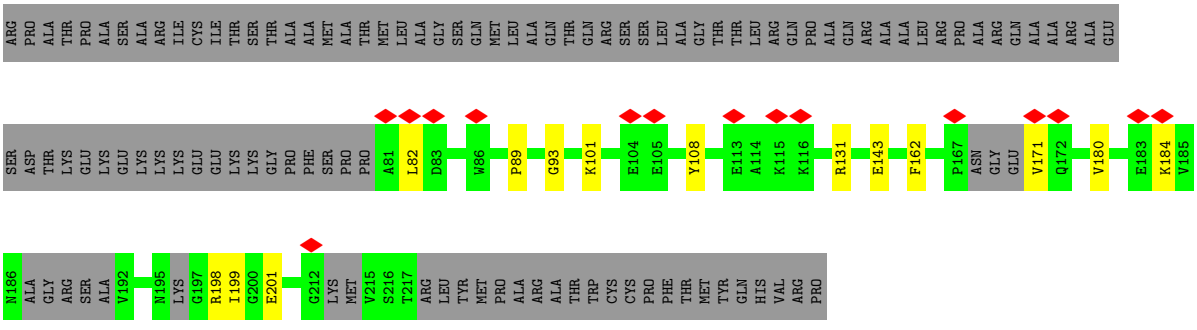




• Molecule 10: PsaD

Chain D:

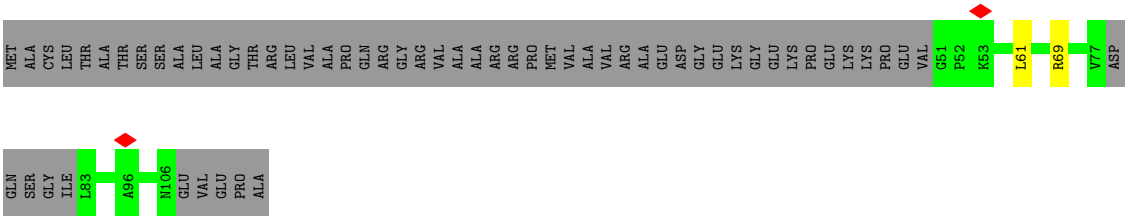




• Molecule 11: PsaE

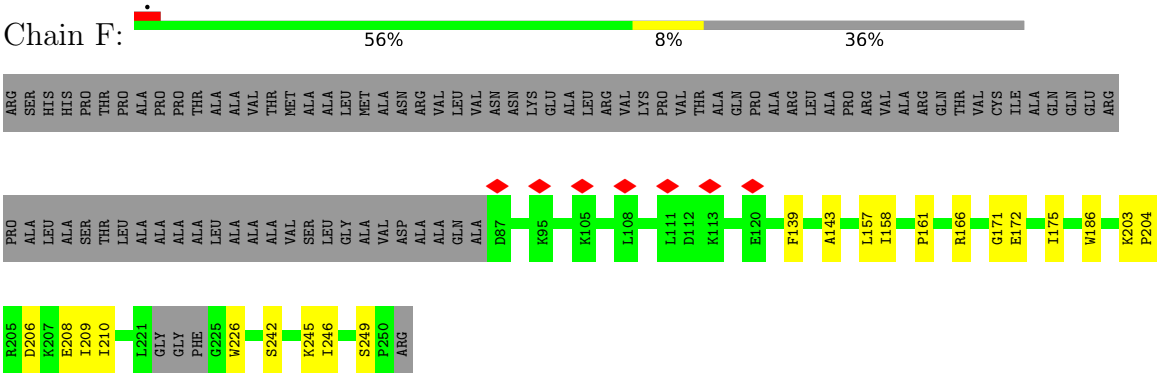
Chain E:





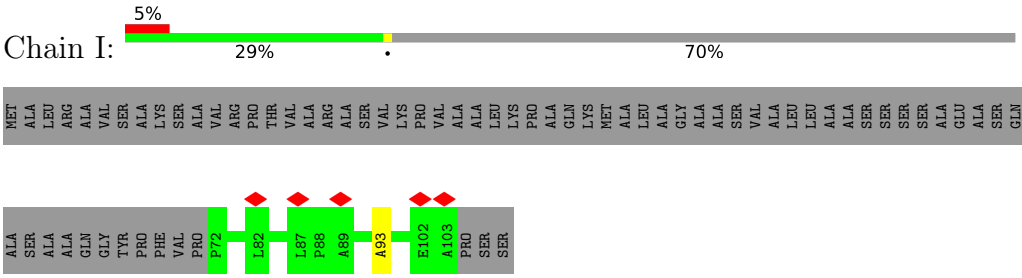
• Molecule 12: PsaF

Chain F:



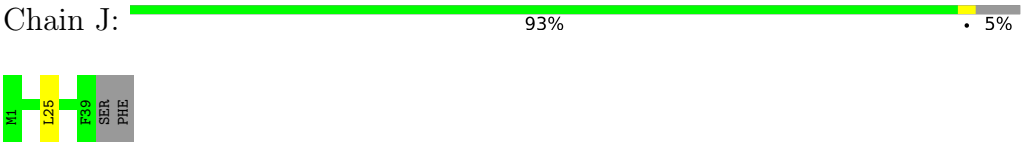
• Molecule 13: Photosystem I reaction center subunit VIII

Chain I:



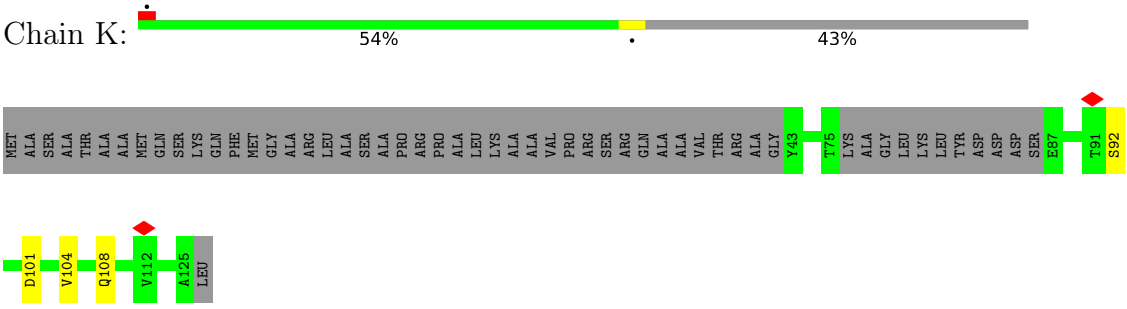
• Molecule 14: Photosystem I reaction center subunit IX

Chain J:



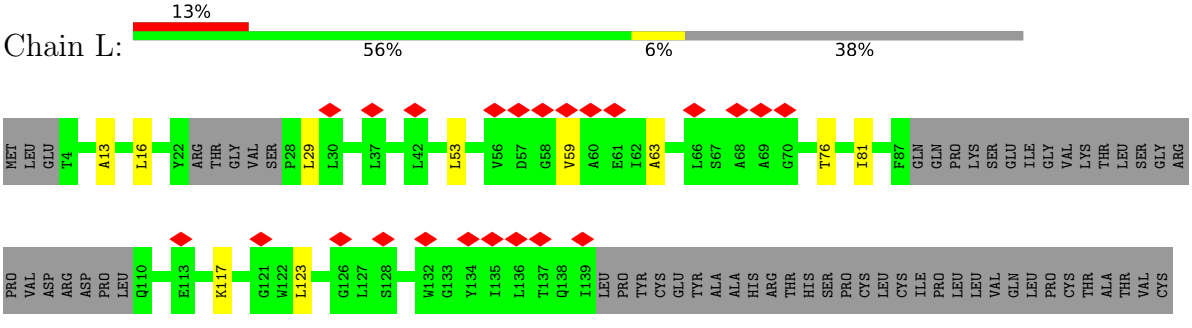
• Molecule 15: PsaK

Chain K:



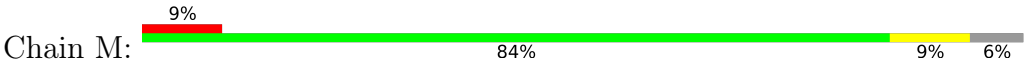
• Molecule 16: PsaL

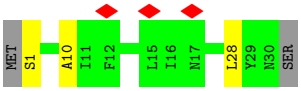
Chain L:





• Molecule 17: Photosystem I reaction center subunit XII





4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	24782	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TECNAI ARCTICA	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/Å^2$)	60	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	2400	Depositor
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.095	Depositor
Minimum map value	-0.011	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.002	Depositor
Recommended contour level	0.016	Depositor
Map size (Å)	408.0, 408.0, 408.0	wwPDB
Map dimensions	400, 400, 400	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.02, 1.02, 1.02	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: CLA, LUT, PQN, XAT, BCR, SF4, NEX

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	1	0.20	0/1260	0.53	0/1707
2	3	0.25	0/1810	0.57	2/2462 (0.1%)
3	5	0.21	0/1834	0.50	0/2501
4	6	0.22	0/1804	0.50	0/2470
5	7	0.21	0/1768	0.47	0/2409
6	8	0.18	0/1789	0.43	0/2433
7	A	0.22	0/6019	0.49	2/8210 (0.0%)
8	B	0.24	0/5999	0.52	0/8203
9	C	0.25	0/610	0.63	0/826
10	D	0.23	0/1011	0.62	0/1359
11	E	0.18	0/414	0.52	0/561
12	F	0.23	0/1263	0.57	0/1703
13	I	0.29	0/250	0.72	0/344
14	J	0.30	0/331	0.57	0/454
15	K	0.18	0/510	0.42	0/694
16	L	0.22	0/805	0.53	0/1097
17	M	0.20	0/235	0.51	0/317
All	All	0.22	0/27712	0.52	4/37750 (0.0%)

There are no bond length outliers.

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	A	483	PHE	CG-CD2-CE2	6.83	132.31	120.70
2	3	160	PRO	CA-C-N	5.50	132.06	121.54
2	3	160	PRO	C-N-CA	5.50	132.06	121.54
7	A	483	PHE	CZ-CE2-CD2	5.01	129.02	120.00

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	1	1231	0	1203	13	0
2	3	1756	0	1708	17	0
3	5	1777	0	1718	14	0
4	6	1750	0	1748	18	0
5	7	1710	0	1643	11	0
6	8	1737	0	1698	9	0
7	A	5824	0	5684	67	0
8	B	5785	0	5535	60	0
9	C	600	0	581	11	0
10	D	992	0	1000	9	0
11	E	405	0	407	1	0
12	F	1239	0	1273	14	0
13	I	242	0	253	1	0
14	J	320	0	322	1	0
15	K	502	0	511	3	0
16	L	788	0	815	6	0
17	M	232	0	246	3	0
18	1	558	0	347	5	0
18	3	576	0	389	5	0
18	5	752	0	525	4	0
18	6	689	0	502	11	0
18	7	610	0	434	6	0
18	8	611	0	418	3	0
18	A	1877	0	1447	39	0
18	B	1850	0	1370	30	0
18	F	126	0	90	3	0
18	J	42	0	31	1	0
18	K	122	0	86	1	0
18	L	41	0	29	0	0
19	3	42	0	56	2	0
19	5	42	0	56	1	0
19	7	42	0	56	2	0
20	3	44	0	56	4	0
20	5	44	0	56	2	0
20	6	44	0	56	2	0
20	7	44	0	56	0	0
20	8	44	0	56	2	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
21	3	40	0	56	1	0
21	A	120	0	168	8	0
21	F	40	0	56	4	0
21	J	40	0	56	4	0
22	5	44	0	56	2	0
23	A	23	0	23	1	0
23	B	19	0	15	0	0
24	A	8	0	0	1	0
24	C	16	0	0	2	0
All	All	35440	0	32891	295	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 4.

All (295) 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)
9:C:58:CYS:HB2	24:C:102:SF4:S4	2.18	0.83
3:5:135:TRP:HE1	18:6:613:CLA:H3A	1.48	0.78
2:3:192:VAL:O	2:3:196:GLN:HB2	1.87	0.74
9:C:14:CYS:HB2	24:C:102:SF4:S2	2.27	0.73
7:A:53:HIS:HE1	18:A:803:CLA:ND	1.87	0.73
2:3:133:HIS:HE1	18:3:402:CLA:NA	1.87	0.72
7:A:53:HIS:CE1	18:A:803:CLA:ND	2.58	0.71
18:A:820:CLA:HAB	21:A:847:BCR:H17C	1.73	0.71
7:A:658:ILE:HD12	8:B:621:ARG:HG3	1.77	0.66
4:6:181:LEU:HD12	18:6:609:CLA:HHB	1.77	0.66
3:5:96:ILE:HD12	3:5:108:TRP:HB2	1.80	0.64
18:A:832:CLA:HHB	8:B:685:THR:HG22	1.80	0.63
7:A:128:ASN:HB3	7:A:136:GLN:HB3	1.79	0.63
3:5:254:GLN:HB2	22:5:621:NEX:H8	1.81	0.62
1:1:210:ILE:HG22	18:1:612:CLA:HAC1	1.84	0.60
6:8:140:VAL:HG12	6:8:144:ARG:HH12	1.67	0.60
8:B:61:THR:HG23	8:B:142:LEU:HD21	1.83	0.60
8:B:545:LYS:HD3	12:F:249:SER:HB2	1.84	0.60
18:B:825:CLA:H2A	18:B:825:CLA:HED3	1.83	0.60
18:B:828:CLA:HBB1	18:B:836:CLA:HMA2	1.85	0.59
8:B:308:HIS:HA	18:B:843:CLA:HMD1	1.85	0.59
3:5:135:TRP:NE1	18:6:613:CLA:H3A	2.18	0.58
24:A:846:SF4:S2	8:B:559:CYS:HB2	2.43	0.58
7:A:81:LEU:HD21	18:A:813:CLA:HBA2	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:A:43:PRO:HG3	12:F:209:ILE:HD13	1.85	0.58
16:L:53:LEU:HD12	16:L:63:ALA:HB2	1.86	0.58
8:B:12:LEU:HD13	8:B:23:TYR:HB3	1.86	0.58
5:7:115:VAL:HG11	19:7:615:LUT:H12	1.85	0.58
9:C:18:VAL:HG12	9:C:26:LEU:HB3	1.85	0.57
18:A:808:CLA:HAA1	18:A:828:CLA:HED2	1.87	0.57
7:A:399:GLY:HA3	7:A:603:LEU:HD11	1.86	0.57
2:3:140:GLY:HA2	20:3:416:XAT:H381	1.87	0.57
7:A:578:PRO:HA	7:A:582:GLY:HA2	1.87	0.56
7:A:121:ILE:HG23	7:A:122:VAL:HG23	1.86	0.56
7:A:588:ALA:HA	7:A:591:HIS:HD1	1.71	0.56
5:7:212:THR:HG23	5:7:215:GLN:H	1.69	0.56
8:B:254:ILE:HG23	8:B:255:LEU:HG	1.87	0.56
7:A:205:LEU:HD21	18:A:813:CLA:HAA1	1.88	0.56
7:A:521:VAL:HG11	7:A:524:MET:HE3	1.88	0.56
16:L:76:THR:HG21	16:L:123:LEU:HD12	1.88	0.56
1:1:99:LEU:HD22	1:1:175:LYS:HE3	1.87	0.55
18:8:602:CLA:HAB	20:8:616:XAT:H32	1.88	0.55
7:A:91:MET:HE1	18:A:808:CLA:H2A	1.89	0.55
9:C:9:ASP:HB2	10:D:198:ARG:HA	1.88	0.55
7:A:702:TRP:HE1	12:F:246:ILE:HD12	1.72	0.54
7:A:513:ASP:HB2	7:A:515:VAL:HG23	1.89	0.54
3:5:146:ARG:HD2	18:6:601:CLA:HED3	1.89	0.54
7:A:396:TRP:CD1	18:A:828:CLA:HAB	2.42	0.54
7:A:353:LEU:HD11	18:A:830:CLA:HBB1	1.90	0.54
18:6:608:CLA:HBB1	18:6:615:CLA:HBB1	1.88	0.53
7:A:375:PRO:HG2	7:A:381:ALA:HB2	1.91	0.53
8:B:182:LEU:HD21	18:B:815:CLA:HAA1	1.89	0.53
12:F:209:ILE:HG13	12:F:210:ILE:HG13	1.91	0.53
2:3:131:VAL:HG22	2:3:258:LEU:HD21	1.91	0.53
2:3:160:PRO:HA	2:3:163:VAL:HG22	1.92	0.53
18:A:803:CLA:HAB	21:J:101:BCR:HC21	1.91	0.53
5:7:225:LYS:HB3	18:7:610:CLA:HMD1	1.90	0.52
7:A:203:ALA:HB2	7:A:309:GLY:HA3	1.90	0.52
8:B:91:ILE:HB	8:B:112:PRO:HB2	1.91	0.52
18:7:605:CLA:HBB2	18:7:606:CLA:HAB	1.92	0.52
18:A:819:CLA:H62	18:A:819:CLA:HAB	1.91	0.52
2:3:268:VAL:HG11	20:3:416:XAT:H32	1.91	0.52
5:7:171:GLN:HG3	6:8:41:LEU:HD12	1.92	0.52
8:B:380:GLY:HA3	8:B:587:ILE:HD11	1.91	0.52
18:7:602:CLA:H51	18:7:603:CLA:HMA1	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:99:LEU:HD12	1:1:199:LEU:HD13	1.92	0.52
2:3:184:PRO:HA	2:3:187:LEU:HD12	1.91	0.52
7:A:561:ARG:HH21	9:C:81:TYR:HA	1.74	0.52
18:B:809:CLA:HBC1	17:M:10:ALA:HB1	1.92	0.52
18:B:801:CLA:H3A	18:B:801:CLA:O2A	2.10	0.52
2:3:301:ASN:HD21	7:A:265:PHE:HB2	1.75	0.52
6:8:144:ARG:NH2	18:8:607:CLA:C4D	2.60	0.51
8:B:636:ASN:HB2	8:B:639:GLY:H	1.75	0.51
8:B:457:PRO:HB3	8:B:517:PHE:HB2	1.91	0.51
2:3:140:GLY:O	2:3:144:ILE:HB	2.10	0.51
3:5:195:THR:HA	3:5:198:ILE:HG22	1.93	0.51
3:5:96:ILE:HD11	20:5:620:XAT:H363	1.92	0.51
7:A:80:GLN:HE21	7:A:84:ILE:HG13	1.75	0.51
4:6:266:PRO:HB2	18:6:614:CLA:HAB	1.93	0.51
18:A:827:CLA:ND	18:A:835:CLA:HMB1	2.26	0.51
18:3:404:CLA:H3A	21:3:417:BCR:C10	2.40	0.51
12:F:242:SER:HB2	12:F:245:LYS:HB2	1.92	0.51
18:1:602:CLA:HBB2	18:1:603:CLA:C3B	2.41	0.50
8:B:8:PHE:HB2	8:B:34:HIS:HD2	1.74	0.50
4:6:37:TRP:CD1	4:6:61:TRP:HB2	2.47	0.50
18:8:601:CLA:H2A	18:8:601:CLA:HED3	1.92	0.50
12:F:204:PRO:O	12:F:208:GLU:HB2	2.11	0.50
3:5:213:LEU:HD22	18:5:613:CLA:HAC2	1.93	0.50
2:3:133:HIS:HD2	18:3:407:CLA:HMD1	1.77	0.49
6:8:239:THR:HA	6:8:245:LEU:HD23	1.93	0.49
8:B:25:ILE:HA	18:B:806:CLA:HMD3	1.95	0.49
11:E:61:LEU:HD21	11:E:69:ARG:HH11	1.75	0.49
4:6:205:VAL:HG13	4:6:206:THR:HG23	1.94	0.49
7:A:359:LEU:HD12	18:A:825:CLA:HHB	1.95	0.49
1:1:74:PRO:HB2	1:1:199:LEU:HD21	1.93	0.49
3:5:111:ALA:HB1	18:5:604:CLA:HED1	1.94	0.49
7:A:294:THR:HG21	18:A:819:CLA:HED1	1.94	0.49
1:1:73:LEU:HB2	1:1:76:SER:HB2	1.94	0.49
2:3:81:SER:HB2	2:3:259:LYS:HE3	1.94	0.49
16:L:29:LEU:HB3	16:L:117:LYS:HB3	1.95	0.49
7:A:66:LEU:HA	7:A:69:ILE:HD12	1.94	0.49
7:A:574:PRO:HA	7:A:724:ARG:HH22	1.78	0.49
18:B:834:CLA:HBA1	21:F:801:BCR:H362	1.95	0.49
10:D:108:TYR:HD1	10:D:162:PHE:HZ	1.61	0.49
7:A:366:ILE:HD12	18:A:827:CLA:HAA2	1.95	0.48
18:A:840:CLA:HAB	18:A:840:CLA:H102	1.94	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:5:42:LEU:HD21	3:5:49:PRO:HG3	1.94	0.48
7:A:366:ILE:HD13	18:A:826:CLA:HED3	1.95	0.48
8:B:645:VAL:HG23	18:B:811:CLA:HAC1	1.95	0.48
16:L:13:ALA:HA	16:L:16:LEU:HB3	1.94	0.48
4:6:196:PHE:CZ	20:6:617:XAT:H30	2.48	0.48
8:B:580:VAL:HG21	8:B:710:LEU:HD21	1.95	0.48
4:6:106:TRP:HE1	4:6:210:PRO:HD3	1.79	0.48
7:A:116:GLN:HB3	7:A:138:ILE:HB	1.96	0.48
7:A:219:HIS:NE2	18:A:815:CLA:C4D	2.77	0.48
18:A:837:CLA:H2A	18:A:837:CLA:HED2	1.96	0.48
8:B:657:TRP:CZ3	18:B:804:CLA:HHB	2.49	0.47
18:7:601:CLA:H3A	18:7:601:CLA:HBA2	1.54	0.47
18:7:601:CLA:HBB2	18:7:602:CLA:HHD	1.95	0.47
7:A:657:VAL:HG22	7:A:745:ALA:HB3	1.96	0.47
9:C:23:LEU:HD21	10:D:143:GLU:HG2	1.97	0.47
1:1:132:LYS:HA	1:1:132:LYS:HD3	1.73	0.47
2:3:134:ALA:HB1	2:3:261:GLY:HA3	1.97	0.47
5:7:61:VAL:HG23	5:7:63:PHE:H	1.80	0.46
7:A:217:GLN:HA	7:A:221:SER:HB3	1.97	0.46
7:A:622:VAL:HG21	7:A:628:SER:HB3	1.95	0.46
21:A:845:BCR:H11C	21:A:845:BCR:H341	1.80	0.46
4:6:131:HIS:CE1	18:6:615:CLA:NA	2.83	0.46
5:7:136:THR:HB	6:8:262:PHE:HB2	1.97	0.46
12:F:171:GLY:HA2	12:F:175:ILE:HG12	1.98	0.46
7:A:301:ILE:HG13	18:A:819:CLA:HBB1	1.97	0.46
7:A:448:LEU:HD11	18:A:838:CLA:HMB2	1.98	0.46
2:3:121:ILE:HG21	7:A:15:ILE:HD11	1.97	0.46
18:5:607:CLA:H3A	22:5:621:NEX:H361	1.98	0.46
4:6:96:VAL:HA	4:6:99:ILE:HG22	1.98	0.46
20:3:416:XAT:H15	20:3:416:XAT:H201	1.79	0.46
8:B:8:PHE:HB2	8:B:34:HIS:CD2	2.51	0.46
7:A:215:GLY:HA3	18:A:815:CLA:HAB	1.98	0.45
8:B:276:HIS:HB2	18:B:819:CLA:C1B	2.46	0.45
8:B:389:HIS:HD1	8:B:392:ILE:HD12	1.80	0.45
18:5:607:CLA:HAB	20:5:620:XAT:H393	1.98	0.45
7:A:455:LEU:HD22	18:A:834:CLA:HAB	1.98	0.45
8:B:86:PRO:HB2	8:B:116:SER:HB3	1.98	0.45
8:B:403:ASN:HB3	8:B:406:ASN:HB3	1.98	0.45
18:A:837:CLA:HHC	18:A:837:CLA:HBB1	1.97	0.45
21:A:847:BCR:H343	15:K:108:GLN:HB3	1.98	0.45
7:A:597:PHE:HE1	7:A:728:VAL:HG23	1.82	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:B:195:VAL:HG13	8:B:254:ILE:HG12	1.97	0.45
8:B:71:GLN:HG2	8:B:90:ALA:H	1.82	0.45
4:6:148:ASN:HD22	4:6:160:GLU:HA	1.82	0.45
3:5:44:ILE:HG22	3:5:46:GLY:H	1.82	0.44
10:D:199:ILE:HG23	10:D:201:GLU:HG2	2.00	0.44
6:8:208:PHE:CZ	20:8:616:XAT:H10	2.52	0.44
1:1:106:MET:HE3	1:1:205:ALA:HB2	1.99	0.44
1:1:147:LEU:HB3	1:1:151:LEU:HD13	1.99	0.44
7:A:501:ASN:HB2	18:A:836:CLA:HED3	1.99	0.44
7:A:740:TRP:HH2	18:A:808:CLA:HAC1	1.82	0.44
8:B:338:LEU:HD12	18:B:807:CLA:HED1	1.99	0.44
1:1:61:LEU:HB3	1:1:64:SER:HB2	1.99	0.44
8:B:266:GLN:HG3	8:B:362:ALA:HB3	1.98	0.44
18:B:827:CLA:HMA2	18:B:828:CLA:HED2	1.98	0.44
12:F:157:LEU:HD22	12:F:172:GLU:HG2	2.00	0.44
3:5:145:VAL:HG11	18:6:601:CLA:HMA2	2.00	0.44
8:B:162:GLN:HA	8:B:163:PRO:HD3	1.88	0.44
19:5:619:LUT:H35	19:5:619:LUT:H401	1.83	0.44
7:A:53:HIS:NE2	18:A:803:CLA:NB	2.66	0.44
18:A:819:CLA:HBA2	18:A:819:CLA:H3A	1.66	0.44
12:F:166:ARG:HH21	18:F:804:CLA:HAA1	1.83	0.44
20:3:416:XAT:H35	20:3:416:XAT:H401	1.87	0.44
23:A:842:PQN:H171	18:F:802:CLA:HAB	2.00	0.44
8:B:43:TYR:HA	8:B:46:ILE:HD12	1.99	0.44
8:B:53:GLN:HG2	18:B:807:CLA:H3A	2.00	0.44
8:B:268:LEU:HD13	18:B:819:CLA:HMA2	1.99	0.43
19:3:415:LUT:H35	19:3:415:LUT:H401	1.81	0.43
18:7:604:CLA:HBA1	18:7:604:CLA:H3A	1.74	0.43
8:B:233:TYR:HB3	8:B:254:ILE:HG22	2.00	0.43
18:B:801:CLA:H3A	18:B:801:CLA:CGA	2.47	0.43
10:D:180:VAL:HG21	10:D:184:LYS:HD2	2.00	0.43
5:7:189:ASP:HA	5:7:192:LYS:HE2	2.00	0.43
8:B:136:TYR:HB2	17:M:1:SER:HB3	1.99	0.43
18:B:809:CLA:HHB	18:B:810:CLA:HMB2	2.00	0.43
1:1:226:ALA:HA	18:1:612:CLA:HED1	2.00	0.43
4:6:178:LEU:HB3	18:6:609:CLA:HED1	1.99	0.43
7:A:661:TYR:HE1	8:B:444:GLN:HB3	1.83	0.43
8:B:404:LYS:HD2	8:B:404:LYS:HA	1.74	0.43
1:1:151:LEU:HD11	18:1:605:CLA:HBC3	2.00	0.43
2:3:262:ARG:HA	2:3:265:MET:HE3	2.01	0.43
10:D:82:LEU:HD13	10:D:171:VAL:HG21	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:5:128:ASN:HD21	4:6:228:SER:HB3	1.84	0.43
8:B:39:GLU:HG3	8:B:42:LEU:HD23	2.00	0.43
18:B:801:CLA:H42	18:B:801:CLA:HHB	2.00	0.43
12:F:139:PHE:O	12:F:143:ALA:HB2	2.19	0.43
15:K:101:ASP:HA	15:K:104:VAL:HG12	2.00	0.43
7:A:432:ARG:HH21	10:D:93:GLY:H	1.67	0.43
7:A:441:LEU:HB3	7:A:548:LEU:HD12	1.99	0.43
18:A:802:CLA:HED2	18:B:804:CLA:HBB1	2.01	0.43
8:B:374:HIS:CE1	18:B:829:CLA:ND	2.87	0.43
4:6:179:GLU:HA	4:6:182:LYS:HD2	2.00	0.43
7:A:50:TRP:O	7:A:54:ALA:CB	2.67	0.43
7:A:53:HIS:NE2	18:A:803:CLA:NC	2.66	0.43
8:B:398:TYR:HE1	8:B:403:ASN:HB2	1.84	0.43
10:D:89:PRO:HA	10:D:131:ARG:HG2	2.01	0.43
2:3:171:ILE:HG21	2:3:174:LEU:HD23	2.01	0.43
4:6:261:LEU:HD12	4:6:264:LEU:HD23	2.01	0.43
8:B:17:THR:HG21	9:C:77:MET:HE3	2.01	0.43
8:B:230:TRP:HB2	18:B:818:CLA:HBA1	2.01	0.43
8:B:255:LEU:HB3	8:B:275:HIS:HB2	2.01	0.43
7:A:438:ILE:HB	8:B:677:THR:HG21	2.01	0.42
7:A:562:LEU:HG	7:A:580:ARG:HD2	2.01	0.42
18:A:818:CLA:HBA2	18:A:818:CLA:H3A	1.62	0.42
8:B:240:SER:HB2	8:B:263:PRO:HG2	2.01	0.42
9:C:4:ILE:HD12	9:C:6:LYS:HE2	2.01	0.42
4:6:117:PHE:HD2	4:6:122:LEU:HD21	1.84	0.42
18:A:818:CLA:H42	18:A:827:CLA:HBB1	2.00	0.42
8:B:60:TRP:HA	18:B:809:CLA:HBB2	2.01	0.42
7:A:326:LEU:HD12	7:A:342:TYR:HB2	2.01	0.42
7:A:553:GLY:O	7:A:557:ALA:HB2	2.19	0.42
8:B:524:ALA:HB2	18:B:839:CLA:HMA1	2.02	0.42
21:A:845:BCR:H15C	21:A:845:BCR:H351	1.81	0.42
21:A:847:BCR:H20C	21:A:847:BCR:H361	1.79	0.42
8:B:237:PRO:HB3	8:B:256:THR:HG21	2.02	0.42
18:A:807:CLA:HMB2	18:A:808:CLA:H3A	2.02	0.42
14:J:25:LEU:HD12	18:J:102:CLA:HAB	2.01	0.42
5:7:140:GLN:HG2	6:8:256:GLU:HA	2.02	0.42
7:A:240:PRO:HA	7:A:243:PHE:HB2	2.02	0.42
18:A:818:CLA:H41	18:A:818:CLA:H62	1.68	0.42
8:B:174:ARG:HH21	18:B:826:CLA:HMD2	1.84	0.42
8:B:478:LEU:HD22	8:B:494:LEU:HD11	2.01	0.42
21:J:101:BCR:H351	21:J:101:BCR:H15C	1.78	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:3:415:LUT:H15	19:3:415:LUT:H201	1.86	0.42
7:A:488:GLN:HG3	7:A:510:TRP:HE3	1.85	0.42
21:J:101:BCR:H24C	21:J:101:BCR:H371	1.85	0.42
7:A:259:LYS:HD3	7:A:263:PRO:HG3	2.01	0.42
4:6:204:GLN:HE22	4:6:259:CYS:HA	1.84	0.42
7:A:575:CYS:HB2	7:A:584:CYS:SG	2.60	0.42
21:A:847:BCR:H371	21:A:847:BCR:H24C	1.84	0.42
7:A:269:TRP:O	18:A:817:CLA:H3A	2.20	0.42
7:A:392:THR:HG23	7:A:607:ILE:HG21	2.02	0.42
7:A:43:PRO:HB3	7:A:48:TRP:CE3	2.55	0.41
8:B:94:PRO:HB2	18:B:812:CLA:HAA1	2.01	0.41
12:F:186:TRP:HE3	12:F:226:TRP:HD1	1.68	0.41
4:6:43:PRO:HA	4:6:44:PRO:HD3	1.86	0.41
21:A:844:BCR:H24C	21:A:844:BCR:H371	1.79	0.41
18:B:824:CLA:HBA2	18:B:824:CLA:HED3	2.03	0.41
21:J:101:BCR:H20C	21:J:101:BCR:H361	1.88	0.41
5:7:247:LYS:HE3	5:7:247:LYS:HB2	1.83	0.41
18:3:407:CLA:H3A	18:3:407:CLA:HBA2	1.74	0.41
8:B:88:ALA:HB3	8:B:114:ASN:HB2	2.02	0.41
8:B:661:PHE:HD1	8:B:664:LEU:HD12	1.85	0.41
18:B:818:CLA:H2	18:B:818:CLA:H61	1.74	0.41
9:C:23:LEU:HD23	9:C:23:LEU:HA	1.89	0.41
12:F:203:LYS:HE3	12:F:206:ASP:HB2	2.01	0.41
2:3:188:PHE:CG	18:3:405:CLA:HAA1	2.55	0.41
8:B:546:LEU:HD23	8:B:570:ILE:HD12	2.02	0.41
1:1:240:ALA:HA	1:1:246:LEU:HD21	2.03	0.41
4:6:137:ARG:HH22	18:6:607:CLA:C2D	2.33	0.41
18:6:602:CLA:CBB	20:6:617:XAT:H12	2.50	0.41
7:A:429:ARG:HA	7:A:432:ARG:HD3	2.02	0.41
8:B:344:ILE:HD13	8:B:347:LEU:HD12	2.03	0.41
8:B:462:TRP:HE1	8:B:476:LEU:HD12	1.84	0.41
8:B:631:LEU:HD13	8:B:727:ALA:HB2	2.03	0.41
15:K:92:SER:HB3	18:K:201:CLA:HED3	2.03	0.41
2:3:134:ALA:O	2:3:138:MET:HG2	2.21	0.41
7:A:115:ALA:HB3	7:A:140:ILE:HG21	2.02	0.41
7:A:441:LEU:HD13	7:A:548:LEU:HA	2.02	0.41
7:A:574:PRO:HB3	7:A:720:ILE:HB	2.02	0.41
9:C:13:GLY:HA2	9:C:38:GLN:HE21	1.84	0.41
1:1:198:GLU:OE2	18:1:609:CLA:C4A	2.56	0.41
7:A:233:ASP:HA	7:A:234:PRO:HD3	1.94	0.41
8:B:124:TRP:HA	8:B:127:ILE:HG12	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:F:801:BCR:H341	21:F:801:BCR:H11C	1.81	0.41
21:A:847:BCR:H341	21:A:847:BCR:H11C	1.69	0.41
8:B:458:VAL:HG21	12:F:158:ILE:HG23	2.03	0.41
21:F:801:BCR:H24C	21:F:801:BCR:H371	1.73	0.41
13:I:93:ALA:HB1	16:L:81:ILE:HG13	2.03	0.41
16:L:53:LEU:HB3	16:L:59:VAL:HG13	2.03	0.41
5:7:253:LEU:HD22	19:7:615:LUT:H173	2.03	0.41
6:8:155:ALA:HB2	6:8:168:LYS:HG3	2.03	0.41
18:A:802:CLA:HBD	8:B:654:HIS:HB3	2.03	0.41
8:B:31:PHE:HA	8:B:34:HIS:CE1	2.56	0.41
8:B:50:HIS:CE1	18:B:807:CLA:ND	2.89	0.41
3:5:57:LEU:HD13	3:5:79:ARG:HE	1.86	0.40
7:A:105:LEU:HG	7:A:234:PRO:HG2	2.03	0.40
7:A:599:MET:HG3	18:A:826:CLA:HBC1	2.03	0.40
18:A:820:CLA:H2A	18:A:820:CLA:HED2	2.04	0.40
9:C:79:LEU:HG	10:D:101:LYS:HD2	2.03	0.40
7:A:16:VAL:HB	7:A:187:LYS:HD2	2.03	0.40
12:F:161:PRO:HG2	18:F:804:CLA:HAB	2.03	0.40
4:6:126:GLN:O	4:6:130:MET:HG2	2.21	0.40
18:B:806:CLA:H3A	17:M:28:LEU:CD2	2.51	0.40
21:F:801:BCR:H15C	21:F:801:BCR:H351	1.90	0.40
5:7:59:ARG:HA	5:7:60:PRO:HD3	1.98	0.40
6:8:53:SER:HB2	6:8:55:LEU:HG	2.04	0.40
7:A:208:LEU:HD23	7:A:208:LEU:HA	1.91	0.40
18:B:832:CLA:H3A	18:B:833:CLA:OBD	2.21	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	1	150/248 (60%)	136 (91%)	14 (9%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
2	3	221/308 (72%)	210 (95%)	10 (4%)	1 (0%)	24 61
3	5	226/271 (83%)	211 (93%)	15 (7%)	0	100 100
4	6	225/266 (85%)	215 (96%)	10 (4%)	0	100 100
5	7	217/279 (78%)	205 (94%)	12 (6%)	0	100 100
6	8	222/263 (84%)	207 (93%)	15 (7%)	0	100 100
7	A	738/751 (98%)	694 (94%)	44 (6%)	0	100 100
8	B	727/734 (99%)	692 (95%)	35 (5%)	0	100 100
9	C	78/81 (96%)	71 (91%)	7 (9%)	0	100 100
10	D	116/239 (48%)	104 (90%)	12 (10%)	0	100 100
11	E	47/111 (42%)	38 (81%)	9 (19%)	0	100 100
12	F	157/251 (62%)	147 (94%)	10 (6%)	0	100 100
13	I	30/106 (28%)	26 (87%)	4 (13%)	0	100 100
14	J	37/41 (90%)	36 (97%)	1 (3%)	0	100 100
15	K	68/126 (54%)	67 (98%)	1 (2%)	0	100 100
16	L	103/176 (58%)	98 (95%)	5 (5%)	0	100 100
17	M	28/32 (88%)	28 (100%)	0	0	100 100
All	All	3390/4283 (79%)	3185 (94%)	204 (6%)	1 (0%)	100 100

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	3	170	LEU

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	1	124/184 (67%)	124 (100%)	0	100 100
2	3	181/245 (74%)	181 (100%)	0	100 100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	5	183/213 (86%)	183 (100%)	0	100	100
4	6	184/212 (87%)	184 (100%)	0	100	100
5	7	173/213 (81%)	173 (100%)	0	100	100
6	8	176/202 (87%)	176 (100%)	0	100	100
7	A	603/614 (98%)	603 (100%)	0	100	100
8	B	592/595 (100%)	592 (100%)	0	100	100
9	C	69/70 (99%)	69 (100%)	0	100	100
10	D	106/194 (55%)	106 (100%)	0	100	100
11	E	44/89 (49%)	44 (100%)	0	100	100
12	F	128/190 (67%)	128 (100%)	0	100	100
13	I	26/76 (34%)	26 (100%)	0	100	100
14	J	35/37 (95%)	35 (100%)	0	100	100
15	K	50/87 (58%)	50 (100%)	0	100	100
16	L	79/140 (56%)	79 (100%)	0	100	100
17	M	25/27 (93%)	25 (100%)	0	100	100
All	All	2778/3388 (82%)	2778 (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. All (44) such sidechains are listed below:

Mol	Chain	Res	Type
1	1	229	GLN
2	3	196	GLN
2	3	242	ASN
2	3	260	ASN
2	3	288	GLN
2	3	301	ASN
3	5	128	ASN
3	5	158	ASN
3	5	170	ASN
3	5	241	ASN
4	6	131	HIS
4	6	147	GLN
4	6	217	HIS
5	7	82	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	7	107	HIS
5	7	215	GLN
5	7	251	GLN
6	8	65	ASN
6	8	237	ASN
7	A	216	HIS
7	A	225	ASN
7	A	270	ASN
7	A	298	HIS
7	A	442	ASN
7	A	458	HIS
7	A	489	ASN
8	B	34	HIS
8	B	44	GLN
8	B	71	GLN
8	B	236	ASN
8	B	299	HIS
8	B	421	HIS
8	B	452	GLN
8	B	520	HIS
8	B	585	ASN
8	B	627	ASN
8	B	636	ASN
8	B	641	ASN
8	B	672	GLN
8	B	704	GLN
10	D	175	HIS
12	F	169	HIS
15	K	110	HIS
16	L	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)

204 ligands are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
18	CLA	B	840	8	46,50,73	1.50	7 (15%)	55,85,113	1.36	6 (10%)
18	CLA	A	813	7	59,63,73	1.34	9 (15%)	70,100,113	1.31	5 (7%)
18	CLA	B	810	8	43,48,73	1.54	7 (16%)	52,82,113	1.36	7 (13%)
18	CLA	B	833	8	47,51,73	1.49	7 (14%)	56,86,113	1.24	6 (10%)
18	CLA	A	811	7	45,49,73	1.51	7 (15%)	54,84,113	1.36	7 (12%)
18	CLA	B	837	-	45,49,73	1.50	7 (15%)	54,84,113	1.43	8 (14%)
18	CLA	B	816	8	43,48,73	1.65	8 (18%)	52,82,113	1.95	8 (15%)
19	LUT	3	415	-	42,43,43	0.76	0	51,60,60	1.82	17 (33%)
18	CLA	A	823	7	49,53,73	1.46	7 (14%)	59,89,113	1.28	8 (13%)
18	CLA	5	601	3	46,50,73	1.50	7 (15%)	55,85,113	1.35	4 (7%)
18	CLA	8	614	6	44,48,73	1.60	8 (18%)	56,83,113	1.42	6 (10%)
18	CLA	6	611	4	44,49,73	1.54	7 (15%)	52,84,113	1.43	8 (15%)
18	CLA	A	835	7	46,50,73	1.49	7 (15%)	55,85,113	1.36	5 (9%)
18	CLA	5	614	3	44,48,73	1.56	7 (15%)	52,82,113	1.41	7 (13%)
18	CLA	8	612	6	45,49,73	1.51	7 (15%)	54,84,113	1.28	5 (9%)
18	CLA	1	609	1	42,47,73	1.59	6 (14%)	51,81,113	1.34	5 (9%)
18	CLA	5	612	3	44,49,73	1.54	7 (15%)	52,84,113	1.45	9 (17%)
18	CLA	7	607	-	45,49,73	1.50	6 (13%)	54,84,113	1.37	5 (9%)
18	CLA	7	605	5	45,49,73	1.55	7 (15%)	54,84,113	1.28	4 (7%)
18	CLA	8	603	6	44,48,73	1.61	8 (18%)	56,83,113	1.61	10 (17%)
18	CLA	5	603	3	45,49,73	1.58	8 (17%)	57,84,113	1.47	7 (12%)
18	CLA	B	802	-	46,50,73	1.50	6 (13%)	55,85,113	1.35	7 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CLA	B	826	-	45,49,73	1.52	7 (15%)	54,84,113	1.49	6 (11%)
18	CLA	B	842	8	46,50,73	1.49	8 (17%)	55,85,113	1.40	6 (10%)
18	CLA	6	604	4	46,50,73	1.49	6 (13%)	55,85,113	1.31	4 (7%)
18	CLA	1	601	1	43,48,73	1.55	6 (13%)	51,83,113	1.35	5 (9%)
18	CLA	7	612	5	45,49,73	1.51	7 (15%)	54,84,113	1.34	5 (9%)
18	CLA	A	818	7	56,60,73	1.38	8 (14%)	67,97,113	1.29	8 (11%)
18	CLA	A	804	7	45,49,73	1.50	8 (17%)	54,84,113	1.34	8 (14%)
18	CLA	8	610	-	45,49,73	1.50	6 (13%)	54,84,113	1.35	4 (7%)
18	CLA	B	825	8	49,53,73	1.48	7 (14%)	59,89,113	1.23	3 (5%)
18	CLA	A	839	7	46,50,73	1.52	7 (15%)	55,85,113	1.23	5 (9%)
18	CLA	5	610	3	45,49,73	1.51	8 (17%)	54,84,113	1.32	10 (18%)
20	XAT	8	616	-	39,47,47	0.91	0	54,74,74	2.59	18 (33%)
18	CLA	1	614	1	43,47,73	1.62	7 (16%)	55,82,113	1.40	7 (12%)
18	CLA	3	404	2	43,48,73	1.53	6 (13%)	52,82,113	1.35	6 (11%)
18	CLA	8	607	6	45,49,73	1.52	6 (13%)	54,84,113	1.33	7 (12%)
18	CLA	1	606	-	42,47,73	1.64	7 (16%)	53,82,113	1.57	8 (15%)
18	CLA	3	401	2	47,51,73	1.47	7 (14%)	56,86,113	1.35	6 (10%)
21	BCR	3	417	-	41,41,41	0.66	0	56,56,56	1.91	16 (28%)
21	BCR	A	847	-	41,41,41	0.70	0	56,56,56	2.08	16 (28%)
18	CLA	A	832	7	46,50,73	1.50	6 (13%)	55,85,113	1.33	4 (7%)
18	CLA	B	806	8	45,49,73	1.50	8 (17%)	54,84,113	1.29	6 (11%)
18	CLA	B	839	8	62,66,73	1.32	8 (12%)	74,104,113	1.25	8 (10%)
21	BCR	A	844	-	41,41,41	0.74	0	56,56,56	1.91	16 (28%)
20	XAT	3	416	-	39,47,47	0.87	0	54,74,74	2.71	23 (42%)
18	CLA	B	824	8	47,51,73	1.50	7 (14%)	56,86,113	1.22	5 (8%)
18	CLA	5	606	-	44,49,73	1.53	7 (15%)	52,84,113	1.42	4 (7%)
18	CLA	B	807	8	46,50,73	1.48	8 (17%)	55,85,113	1.34	6 (10%)
18	CLA	7	603	5	47,52,73	1.53	7 (14%)	56,88,113	1.45	10 (17%)
18	CLA	1	611	1	41,47,73	1.60	6 (14%)	49,81,113	1.28	5 (10%)
18	CLA	6	613	4	48,52,73	1.48	7 (14%)	56,87,113	1.28	6 (10%)
18	CLA	B	809	8	45,49,73	1.50	7 (15%)	54,84,113	1.36	5 (9%)
18	CLA	3	405	2	43,48,73	1.54	7 (16%)	51,83,113	1.30	5 (9%)
18	CLA	5	613	3	45,49,73	1.49	5 (11%)	54,84,113	1.40	10 (18%)
18	CLA	8	609	6	45,49,73	1.51	6 (13%)	54,84,113	1.36	5 (9%)
18	CLA	B	832	8	45,49,73	1.51	6 (13%)	54,84,113	1.30	4 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
23	PQN	B	844	-	20,20,34	0.44	0	25,28,45	0.91	2 (8%)
24	SF4	C	101	9	0,12,12	-	-	-		
18	CLA	8	604	-	44,49,73	1.53	7 (15%)	52,84,113	1.27	5 (9%)
18	CLA	B	823	8	44,48,73	1.65	7 (15%)	51,82,113	1.29	7 (13%)
22	NEX	5	621	-	38,46,46	0.89	1 (2%)	50,70,70	2.33	14 (28%)
18	CLA	B	841	-	46,50,73	1.49	7 (15%)	55,85,113	1.35	5 (9%)
18	CLA	B	812	8	46,50,73	1.51	7 (15%)	55,85,113	1.33	4 (7%)
18	CLA	1	608	1	41,46,73	1.68	7 (17%)	52,81,113	1.38	8 (15%)
18	CLA	A	829	7	60,64,73	1.34	9 (15%)	72,102,113	1.36	7 (9%)
18	CLA	A	821	-	44,48,73	1.54	7 (15%)	52,82,113	1.54	8 (15%)
18	CLA	3	408	2	45,49,73	1.51	8 (17%)	54,84,113	1.35	9 (16%)
18	CLA	A	843	-	43,48,73	1.54	6 (13%)	51,83,113	1.27	7 (13%)
19	LUT	5	619	-	42,43,43	0.79	0	51,60,60	1.77	14 (27%)
18	CLA	3	412	2	43,48,73	1.53	6 (13%)	51,83,113	1.28	4 (7%)
18	CLA	7	614	5	41,46,73	1.66	9 (21%)	53,80,113	1.42	8 (15%)
18	CLA	F	802	-	45,49,73	1.52	8 (17%)	54,84,113	1.28	5 (9%)
18	CLA	A	834	7	46,50,73	1.50	7 (15%)	55,85,113	1.27	4 (7%)
18	CLA	A	805	7	46,50,73	1.51	9 (19%)	55,85,113	1.33	6 (10%)
18	CLA	6	612	-	57,61,73	1.37	6 (10%)	68,98,113	1.25	5 (7%)
18	CLA	A	828	7	47,51,73	1.47	7 (14%)	56,86,113	1.38	6 (10%)
19	LUT	7	615	-	42,43,43	0.73	0	51,60,60	1.62	11 (21%)
18	CLA	7	609	5	49,53,73	1.47	7 (14%)	59,89,113	1.28	5 (8%)
18	CLA	8	613	6	46,50,73	1.51	7 (15%)	55,85,113	1.28	6 (10%)
18	CLA	1	605	1	41,47,73	1.57	7 (17%)	48,80,113	1.36	4 (8%)
18	CLA	B	804	8	46,50,73	1.49	7 (15%)	55,85,113	1.19	5 (9%)
18	CLA	3	402	2	46,50,73	1.51	7 (15%)	55,85,113	1.39	4 (7%)
18	CLA	A	816	7	43,48,73	1.58	8 (18%)	52,82,113	1.43	6 (11%)
18	CLA	7	604	-	54,58,73	1.41	7 (12%)	65,95,113	1.23	4 (6%)
18	CLA	8	606	-	45,49,73	1.57	9 (20%)	57,84,113	1.29	8 (14%)
23	PQN	A	842	-	24,24,34	0.43	0	30,33,45	0.88	1 (3%)
18	CLA	L	201	16	45,49,73	1.51	5 (11%)	54,84,113	1.36	5 (9%)
18	CLA	5	608	-	44,48,73	1.52	5 (11%)	53,83,113	1.39	5 (9%)
18	CLA	A	817	7	52,56,73	1.44	8 (15%)	62,92,113	1.22	3 (4%)
18	CLA	B	813	8	40,46,73	1.80	8 (20%)	51,80,113	1.41	11 (21%)
18	CLA	A	822	7	46,50,73	1.49	5 (10%)	55,85,113	1.29	4 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CLA	1	610	-	44,49,73	1.54	5 (11%)	52,84,113	1.28	4 (7%)
18	CLA	B	843	-	45,49,73	1.53	6 (13%)	54,84,113	1.42	5 (9%)
18	CLA	3	411	2	43,48,73	1.54	7 (16%)	51,83,113	1.35	5 (9%)
20	XAT	6	617	-	39,47,47	0.92	0	54,74,74	2.60	17 (31%)
20	XAT	7	616	-	39,47,47	0.90	0	54,74,74	2.50	18 (33%)
18	CLA	5	617	3	43,48,73	1.62	8 (18%)	54,83,113	1.48	6 (11%)
18	CLA	1	612	-	43,48,73	1.55	7 (16%)	52,82,113	1.35	5 (9%)
18	CLA	A	820	7	50,54,73	1.46	7 (14%)	60,90,113	1.25	3 (5%)
18	CLA	A	836	7	46,50,73	1.48	6 (13%)	55,85,113	1.39	6 (10%)
18	CLA	A	825	-	60,64,73	1.35	8 (13%)	71,101,113	1.31	3 (4%)
18	CLA	K	201	15	45,49,73	1.52	6 (13%)	54,84,113	1.27	4 (7%)
18	CLA	7	613	5	46,50,73	1.50	7 (15%)	55,85,113	1.32	7 (12%)
18	CLA	B	818	8	58,62,73	1.35	7 (12%)	69,99,113	1.20	7 (10%)
18	CLA	6	615	4	43,47,73	1.55	5 (11%)	49,81,113	1.25	3 (6%)
18	CLA	A	831	7	46,50,73	1.49	7 (15%)	55,85,113	1.27	4 (7%)
18	CLA	7	606	-	46,50,73	1.49	8 (17%)	55,85,113	1.24	5 (9%)
18	CLA	A	802	-	46,50,73	1.52	7 (15%)	55,85,113	1.46	9 (16%)
24	SF4	C	102	9	0,12,12	-	-	-		
18	CLA	A	808	7	69,73,73	1.24	6 (8%)	83,113,113	1.13	4 (4%)
18	CLA	3	410	2	47,51,73	1.51	7 (14%)	56,86,113	1.41	7 (12%)
18	CLA	B	817	8	45,49,73	1.51	6 (13%)	54,84,113	1.34	5 (9%)
18	CLA	1	607	-	43,48,73	1.57	6 (13%)	51,83,113	1.25	4 (7%)
18	CLA	A	803	7	46,50,73	1.52	6 (13%)	55,85,113	1.39	7 (12%)
18	CLA	B	815	8	46,50,73	1.51	7 (15%)	55,85,113	1.40	8 (14%)
18	CLA	5	607	-	45,49,73	1.51	8 (17%)	54,84,113	1.33	4 (7%)
18	CLA	5	616	3	45,49,73	1.50	6 (13%)	54,84,113	1.27	5 (9%)
18	CLA	A	801	7	46,50,73	1.51	7 (15%)	55,85,113	1.17	3 (5%)
18	CLA	6	602	4	59,63,73	1.36	6 (10%)	71,101,113	1.21	4 (5%)
18	CLA	3	406	-	45,49,73	1.52	8 (17%)	54,84,113	1.37	7 (12%)
18	CLA	6	605	-	43,48,73	1.56	6 (13%)	51,83,113	1.32	4 (7%)
18	CLA	B	803	-	46,50,73	1.49	7 (15%)	55,85,113	1.39	8 (14%)
21	BCR	J	101	-	41,41,41	0.68	0	56,56,56	2.34	15 (26%)
18	CLA	B	811	8	42,45,73	1.55	8 (19%)	50,78,113	1.32	5 (10%)
18	CLA	8	615	6	40,45,73	1.64	7 (17%)	53,79,113	1.38	8 (15%)
18	CLA	B	819	8	46,50,73	1.51	6 (13%)	55,85,113	1.27	6 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CLA	7	602	5	58,62,73	1.36	8 (13%)	69,99,113	1.19	3 (4%)
18	CLA	A	809	7	45,49,73	1.51	7 (15%)	54,84,113	1.38	5 (9%)
20	XAT	5	620	-	39,47,47	0.95	0	54,74,74	2.75	25 (46%)
18	CLA	3	414	2	43,48,73	1.53	7 (16%)	51,83,113	1.28	5 (9%)
18	CLA	B	836	8	45,49,73	1.50	7 (15%)	54,84,113	1.35	10 (18%)
18	CLA	6	616	-	41,46,73	1.64	8 (19%)	54,80,113	1.54	8 (14%)
18	CLA	B	814	8	46,50,73	1.49	5 (10%)	55,85,113	1.29	4 (7%)
18	CLA	A	812	7	45,49,73	1.58	9 (20%)	57,84,113	1.37	7 (12%)
18	CLA	5	605	3	44,49,73	1.53	6 (13%)	52,84,113	1.27	4 (7%)
18	CLA	6	610	-	46,50,73	1.50	7 (15%)	55,85,113	1.28	3 (5%)
18	CLA	1	603	1	49,53,73	1.49	5 (10%)	59,89,113	1.38	6 (10%)
18	CLA	7	601	5	50,54,73	1.46	8 (16%)	60,90,113	1.26	4 (6%)
18	CLA	B	835	8	45,49,73	1.50	8 (17%)	54,84,113	1.31	5 (9%)
18	CLA	K	203	15	43,47,73	1.55	6 (13%)	49,81,113	1.33	4 (8%)
18	CLA	6	607	4	46,50,73	1.51	6 (13%)	55,85,113	1.34	4 (7%)
18	CLA	7	611	5	48,52,73	1.49	7 (14%)	58,88,113	1.41	7 (12%)
18	CLA	8	601	6	46,50,73	1.51	7 (15%)	55,85,113	1.24	4 (7%)
18	CLA	A	824	7	46,50,73	1.50	7 (15%)	55,85,113	1.29	4 (7%)
18	CLA	B	821	-	45,49,73	1.52	7 (15%)	54,84,113	1.30	5 (9%)
18	CLA	6	608	4	47,51,73	1.51	9 (19%)	56,86,113	1.29	7 (12%)
18	CLA	B	830	8	43,48,73	1.53	8 (18%)	51,83,113	1.38	7 (13%)
21	BCR	A	845	-	41,41,41	0.74	0	56,56,56	2.06	17 (30%)
18	CLA	8	602	6	46,50,73	1.49	8 (17%)	55,85,113	1.26	5 (9%)
18	CLA	8	605	6	44,48,73	1.54	6 (13%)	53,83,113	1.43	9 (16%)
18	CLA	A	819	7	62,66,73	1.32	8 (12%)	74,104,113	1.21	6 (8%)
18	CLA	B	822	8	46,50,73	1.51	7 (15%)	55,85,113	1.24	5 (9%)
18	CLA	5	615	3	41,46,73	1.63	8 (19%)	51,80,113	1.32	6 (11%)
18	CLA	5	604	-	43,47,73	1.62	8 (18%)	55,82,113	1.41	8 (14%)
18	CLA	3	409	2	41,46,73	1.64	7 (17%)	52,81,113	1.40	8 (15%)
18	CLA	6	609	4	47,51,73	1.49	8 (17%)	56,86,113	1.29	3 (5%)
18	CLA	A	837	7	45,49,73	1.54	7 (15%)	54,84,113	1.47	6 (11%)
18	CLA	F	803	-	42,47,73	1.55	6 (14%)	52,81,113	1.47	6 (11%)
18	CLA	J	102	14	46,50,73	1.50	6 (13%)	55,85,113	1.24	3 (5%)
18	CLA	1	602	1	46,50,73	1.50	6 (13%)	55,85,113	1.21	4 (7%)
18	CLA	A	838	7	46,50,73	1.49	7 (15%)	55,85,113	1.29	6 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CLA	K	202	15	46,50,73	1.50	7 (15%)	55,85,113	1.38	4 (7%)
18	CLA	B	828	8	48,52,73	1.48	9 (18%)	55,86,113	1.36	4 (7%)
18	CLA	B	801	8	58,62,73	1.39	9 (15%)	73,100,113	1.32	7 (9%)
18	CLA	B	820	8	52,56,73	1.42	7 (13%)	62,92,113	1.38	9 (14%)
18	CLA	B	838	8	47,51,73	1.48	8 (17%)	56,86,113	1.31	5 (8%)
18	CLA	B	834	8	64,68,73	1.31	8 (12%)	77,107,113	1.30	6 (7%)
18	CLA	B	829	8	45,49,73	1.50	7 (15%)	54,84,113	1.38	10 (18%)
18	CLA	3	413	-	42,47,73	1.56	6 (14%)	50,82,113	1.32	4 (8%)
18	CLA	8	611	6	44,49,73	1.53	6 (13%)	52,84,113	1.43	5 (9%)
18	CLA	A	810	7	47,51,73	1.47	6 (12%)	56,86,113	1.29	4 (7%)
18	CLA	5	609	3	46,50,73	1.49	7 (15%)	55,85,113	1.32	6 (10%)
18	CLA	A	833	7	44,49,73	1.53	8 (18%)	52,84,113	1.31	6 (11%)
18	CLA	1	604	-	44,48,73	1.60	7 (15%)	56,83,113	1.37	7 (12%)
18	CLA	3	403	-	48,52,73	1.47	7 (14%)	56,87,113	1.30	3 (5%)
18	CLA	8	608	6	45,49,73	1.51	7 (15%)	54,84,113	1.31	5 (9%)
18	CLA	3	407	2	48,52,73	1.46	7 (14%)	56,87,113	1.19	4 (7%)
18	CLA	7	608	5	43,48,73	1.51	6 (13%)	50,82,113	1.29	4 (8%)
18	CLA	A	807	7	46,50,73	1.49	7 (15%)	55,85,113	1.29	4 (7%)
18	CLA	F	804	12	50,54,73	1.46	6 (12%)	60,90,113	1.28	4 (6%)
18	CLA	A	814	7	47,51,73	1.47	7 (14%)	56,86,113	1.26	5 (8%)
18	CLA	A	830	7	49,53,73	1.45	7 (14%)	59,89,113	1.31	4 (6%)
18	CLA	A	806	7	46,50,73	1.51	8 (17%)	55,85,113	1.36	4 (7%)
18	CLA	6	614	4	45,49,73	1.50	7 (15%)	54,84,113	1.35	6 (11%)
18	CLA	5	611	3	46,50,73	1.52	6 (13%)	55,85,113	1.29	6 (10%)
18	CLA	B	808	8	46,50,73	1.50	6 (13%)	55,85,113	1.28	4 (7%)
18	CLA	7	610	-	46,50,73	1.49	7 (15%)	55,85,113	1.28	6 (10%)
18	CLA	1	613	1	40,45,73	1.71	9 (22%)	50,79,113	1.40	8 (16%)
18	CLA	5	618	3	45,49,73	1.52	6 (13%)	54,84,113	1.34	6 (11%)
18	CLA	A	841	7	46,50,73	1.50	7 (15%)	55,85,113	1.28	4 (7%)
18	CLA	B	831	8	49,53,73	1.44	8 (16%)	59,89,113	1.37	6 (10%)
18	CLA	6	603	4	48,52,73	1.57	8 (16%)	61,88,113	1.44	7 (11%)
18	CLA	A	827	7	46,50,73	1.51	9 (19%)	55,85,113	1.39	9 (16%)
18	CLA	6	601	4	45,49,73	1.51	8 (17%)	54,84,113	1.35	4 (7%)
18	CLA	A	840	7	63,67,73	1.30	7 (11%)	75,105,113	1.22	5 (6%)
18	CLA	6	606	-	45,49,73	1.58	8 (17%)	57,84,113	1.34	7 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CLA	A	826	-	45,49,73	1.51	7 (15%)	54,84,113	1.32	7 (12%)
21	BCR	F	801	-	41,41,41	0.68	0	56,56,56	1.98	15 (26%)
24	SF4	A	846	7,8	0,12,12	-	-	-		
18	CLA	5	602	3	64,68,73	1.30	9 (14%)	77,107,113	1.30	5 (6%)
18	CLA	B	805	-	42,47,73	1.65	7 (16%)	54,81,113	1.53	9 (16%)
18	CLA	A	815	7	45,49,73	1.50	6 (13%)	54,84,113	1.34	4 (7%)
18	CLA	B	827	-	45,49,73	1.50	7 (15%)	54,84,113	1.36	9 (16%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	B	840	8	-	4/12/88/115	-
18	CLA	A	813	7	-	13/27/103/115	-
18	CLA	B	810	8	-	5/10/82/115	-
18	CLA	B	833	8	-	7/13/89/115	-
18	CLA	A	811	7	-	5/10/86/115	-
18	CLA	B	837	-	-	2/10/86/115	-
18	CLA	B	816	8	-	4/10/82/115	-
19	LUT	3	415	-	-	2/29/67/67	0/2/2/2
18	CLA	A	823	7	-	10/15/91/115	-
18	CLA	5	601	3	-	7/12/88/115	-
18	CLA	8	614	6	-	0/8/84/115	-
18	CLA	6	611	4	-	4/10/86/115	-
18	CLA	A	835	7	-	7/12/88/115	-
18	CLA	5	614	3	-	6/10/82/115	-
18	CLA	8	612	6	-	4/10/86/115	-
18	CLA	1	609	1	-	5/8/80/115	-
18	CLA	5	612	3	-	4/10/86/115	-
18	CLA	7	607	-	-	4/10/86/115	-
18	CLA	7	605	5	-	7/10/86/115	-
18	CLA	8	603	6	-	4/8/84/115	-
18	CLA	5	603	3	-	3/10/86/115	-
18	CLA	B	802	-	-	4/12/88/115	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	B	826	-	-	3/10/86/115	-
18	CLA	B	842	8	-	6/12/88/115	-
18	CLA	6	604	4	-	4/12/88/115	-
18	CLA	1	601	1	-	5/8/84/115	-
18	CLA	7	612	5	-	5/10/86/115	-
18	CLA	A	818	7	-	11/24/100/115	-
18	CLA	A	804	7	-	3/10/86/115	-
18	CLA	8	610	-	-	6/10/86/115	-
18	CLA	B	825	8	-	8/15/91/115	-
18	CLA	A	839	7	-	3/12/88/115	-
18	CLA	5	610	3	-	0/10/86/115	-
20	XAT	8	616	-	-	3/31/93/93	0/4/4/4
18	CLA	1	614	1	-	4/6/82/115	-
18	CLA	3	404	2	-	6/10/82/115	-
18	CLA	8	607	6	-	3/10/86/115	-
18	CLA	1	606	-	-	0/6/82/115	-
18	CLA	3	401	2	-	8/13/89/115	-
21	BCR	3	417	-	-	4/29/63/63	0/2/2/2
21	BCR	A	847	-	-	2/29/63/63	0/2/2/2
18	CLA	A	832	7	-	6/12/88/115	-
18	CLA	B	806	8	-	5/10/86/115	-
18	CLA	B	839	8	-	12/31/107/115	-
21	BCR	A	844	-	-	2/29/63/63	0/2/2/2
20	XAT	3	416	-	-	5/31/93/93	0/4/4/4
18	CLA	B	824	8	-	7/13/89/115	-
18	CLA	5	606	-	-	5/10/86/115	-
18	CLA	B	807	8	-	5/12/88/115	-
18	CLA	7	603	5	-	8/13/89/115	-
18	CLA	1	611	1	-	5/8/80/115	-
18	CLA	6	613	4	-	5/13/90/115	-
18	CLA	B	809	8	-	4/10/86/115	-
18	CLA	3	405	2	-	6/8/84/115	-
18	CLA	5	613	3	-	4/10/86/115	-
18	CLA	8	609	6	-	5/10/86/115	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	B	832	8	-	6/10/86/115	-
23	PQN	B	844	-	-	2/7/27/43	0/2/2/2
24	SF4	C	101	9	-	-	0/6/5/5
18	CLA	8	604	-	-	4/10/86/115	-
18	CLA	B	823	8	-	4/9/85/115	-
22	NEX	5	621	-	-	6/27/83/83	0/3/3/3
18	CLA	B	841	-	-	7/12/88/115	-
18	CLA	B	812	8	-	4/12/88/115	-
18	CLA	1	608	1	-	2/4/80/115	-
18	CLA	A	829	7	-	11/29/105/115	-
18	CLA	A	821	-	-	4/10/82/115	-
18	CLA	3	408	2	-	2/10/86/115	-
18	CLA	A	843	-	-	3/8/84/115	-
19	LUT	5	619	-	-	5/29/67/67	0/2/2/2
18	CLA	3	412	2	-	2/8/84/115	-
18	CLA	7	614	5	-	2/6/78/115	-
18	CLA	F	802	-	-	3/10/86/115	-
18	CLA	A	834	7	-	6/12/88/115	-
18	CLA	A	805	7	-	7/12/88/115	-
18	CLA	6	612	-	-	12/25/101/115	-
18	CLA	A	828	7	-	9/13/89/115	-
19	LUT	7	615	-	-	2/29/67/67	0/2/2/2
18	CLA	7	609	5	-	9/15/91/115	-
18	CLA	8	613	6	-	7/12/88/115	-
18	CLA	1	605	1	-	3/7/79/115	-
18	CLA	B	804	8	-	5/12/88/115	-
18	CLA	3	402	2	-	6/12/88/115	-
18	CLA	A	816	7	-	5/10/82/115	-
18	CLA	7	604	-	-	9/21/97/115	-
18	CLA	8	606	-	-	5/10/86/115	-
23	PQN	A	842	-	-	3/11/31/43	0/2/2/2
18	CLA	L	201	16	-	3/10/86/115	-
18	CLA	5	608	-	-	4/8/84/115	-
18	CLA	A	817	7	-	7/19/95/115	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	B	813	8	-	1/6/82/115	-
18	CLA	A	822	7	-	5/12/88/115	-
18	CLA	1	610	-	-	6/10/86/115	-
18	CLA	B	843	-	-	6/10/86/115	-
18	CLA	3	411	2	-	3/8/84/115	-
20	XAT	6	617	-	-	2/31/93/93	0/4/4/4
20	XAT	7	616	-	-	2/31/93/93	0/4/4/4
18	CLA	5	617	3	-	3/8/84/115	-
18	CLA	1	612	-	-	6/10/82/115	-
18	CLA	A	820	7	-	9/17/93/115	-
18	CLA	A	836	7	-	5/12/88/115	-
18	CLA	A	825	-	-	10/28/104/115	-
18	CLA	K	201	15	-	4/10/86/115	-
18	CLA	7	613	5	-	5/12/88/115	-
18	CLA	B	818	8	-	9/25/101/115	-
18	CLA	6	615	4	-	2/4/82/115	-
18	CLA	A	831	7	-	8/12/88/115	-
18	CLA	7	606	-	-	7/12/88/115	-
18	CLA	A	802	-	-	5/12/88/115	-
24	SF4	C	102	9	-	-	0/6/5/5
18	CLA	A	808	7	-	7/39/115/115	-
18	CLA	3	410	2	-	11/13/89/115	-
18	CLA	B	817	8	-	4/10/86/115	-
18	CLA	1	607	-	-	4/8/84/115	-
18	CLA	A	803	7	-	2/12/88/115	-
18	CLA	B	815	8	-	4/12/88/115	-
18	CLA	5	607	-	-	6/10/86/115	-
18	CLA	5	616	3	-	7/10/86/115	-
18	CLA	A	801	7	-	7/12/88/115	-
18	CLA	6	602	4	-	12/27/103/115	-
18	CLA	3	406	-	-	7/10/86/115	-
18	CLA	6	605	-	-	2/8/84/115	-
18	CLA	B	803	-	-	6/12/88/115	-
21	BCR	J	101	-	-	5/29/63/63	0/2/2/2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	B	811	8	-	2/4/76/115	-
18	CLA	8	615	6	-	0/2/78/115	-
18	CLA	B	819	8	-	4/12/88/115	-
18	CLA	7	602	5	-	9/26/102/115	-
18	CLA	A	809	7	-	4/10/86/115	-
20	XAT	5	620	-	-	2/31/93/93	0/4/4/4
18	CLA	3	414	2	-	2/8/84/115	-
18	CLA	B	836	8	-	7/10/86/115	-
18	CLA	6	616	-	-	0/4/80/115	-
18	CLA	B	814	8	-	4/12/88/115	-
18	CLA	A	812	7	-	3/10/86/115	-
18	CLA	5	605	3	-	5/10/86/115	-
18	CLA	6	610	-	-	4/12/88/115	-
18	CLA	1	603	1	-	9/15/91/115	-
18	CLA	7	601	5	-	9/17/93/115	-
18	CLA	B	835	8	-	2/10/86/115	-
18	CLA	K	203	15	-	2/4/82/115	-
18	CLA	6	607	4	-	6/12/88/115	-
18	CLA	7	611	5	-	7/13/89/115	-
18	CLA	8	601	6	-	8/12/88/115	-
18	CLA	A	824	7	-	7/12/88/115	-
18	CLA	B	821	-	-	7/10/86/115	-
18	CLA	6	608	4	-	7/13/89/115	-
18	CLA	B	830	8	-	0/8/84/115	-
21	BCR	A	845	-	-	6/29/63/63	0/2/2/2
18	CLA	8	602	6	-	9/12/88/115	-
18	CLA	8	605	6	-	7/8/84/115	-
18	CLA	A	819	7	-	15/31/107/115	-
18	CLA	B	822	8	-	4/12/88/115	-
18	CLA	5	615	3	-	3/3/79/115	-
18	CLA	5	604	-	-	4/6/82/115	-
18	CLA	3	409	2	-	2/4/80/115	-
18	CLA	6	609	4	-	7/13/89/115	-
18	CLA	A	837	7	-	2/10/86/115	-
18	CLA	F	803	-	-	3/6/82/115	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	J	102	14	-	5/12/88/115	-
18	CLA	1	602	1	-	9/12/88/115	-
18	CLA	A	838	7	-	8/12/88/115	-
18	CLA	K	202	15	-	5/12/88/115	-
18	CLA	B	828	8	-	8/12/88/115	-
18	CLA	B	801	8	-	10/25/101/115	-
18	CLA	B	820	8	-	13/19/95/115	-
18	CLA	B	838	8	-	6/13/89/115	-
18	CLA	B	834	8	-	12/33/109/115	-
18	CLA	B	829	8	-	5/10/86/115	-
18	CLA	3	413	-	-	3/6/82/115	-
18	CLA	8	611	6	-	5/10/86/115	-
18	CLA	A	810	7	-	7/13/89/115	-
18	CLA	5	609	3	-	5/12/88/115	-
18	CLA	A	833	7	-	4/10/86/115	-
18	CLA	1	604	-	-	2/8/84/115	-
18	CLA	3	403	-	-	7/13/90/115	-
18	CLA	8	608	6	-	5/10/86/115	-
18	CLA	3	407	2	-	4/13/90/115	-
18	CLA	7	608	5	-	4/7/83/115	-
18	CLA	A	807	7	-	6/12/88/115	-
18	CLA	F	804	12	-	10/17/93/115	-
18	CLA	A	814	7	-	10/13/89/115	-
18	CLA	A	830	7	-	9/15/91/115	-
18	CLA	A	806	7	-	8/12/88/115	-
18	CLA	6	614	4	-	5/10/86/115	-
18	CLA	5	611	3	-	6/12/88/115	-
18	CLA	B	808	8	-	2/12/88/115	-
18	CLA	7	610	-	-	7/12/88/115	-
18	CLA	1	613	1	-	2/4/76/115	-
18	CLA	5	618	3	-	4/10/86/115	-
18	CLA	A	841	7	-	6/12/88/115	-
18	CLA	B	831	8	-	4/15/91/115	-
18	CLA	6	603	4	-	7/13/89/115	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	A	827	7	-	5/12/88/115	-
18	CLA	6	601	4	-	5/10/86/115	-
18	CLA	A	840	7	-	6/32/108/115	-
18	CLA	6	606	-	-	4/10/86/115	-
18	CLA	A	826	-	-	5/10/86/115	-
21	BCR	F	801	-	-	1/29/63/63	0/2/2/2
24	SF4	A	846	7,8	-	-	0/6/5/5
18	CLA	5	602	3	-	9/33/109/115	-
18	CLA	B	805	-	-	3/8/84/115	-
18	CLA	A	815	7	-	5/10/86/115	-
18	CLA	B	827	-	-	3/10/86/115	-

All (1295) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	B	813	CLA	C2B-C1B	4.82	1.49	1.39
18	B	805	CLA	C3B-C4B	4.79	1.49	1.39
18	A	803	CLA	C1D-ND	4.67	1.43	1.37
18	B	813	CLA	C4B-C3B	4.52	1.49	1.41
18	B	805	CLA	C1B-C2B	4.51	1.49	1.41
18	B	816	CLA	C1D-ND	4.38	1.43	1.37
18	3	410	CLA	C1D-ND	4.27	1.43	1.37
18	A	816	CLA	C1D-ND	4.12	1.42	1.37
18	5	611	CLA	C1D-ND	4.09	1.42	1.37
18	6	611	CLA	C1D-ND	4.07	1.42	1.37
18	1	608	CLA	C1D-ND	4.06	1.42	1.37
18	B	834	CLA	C4B-NB	4.05	1.42	1.37
18	B	834	CLA	C1D-ND	4.02	1.42	1.37
18	6	607	CLA	C1D-ND	4.01	1.42	1.37
18	1	602	CLA	C1D-ND	4.01	1.42	1.37
18	6	616	CLA	C1D-ND	3.98	1.42	1.37
18	K	203	CLA	C1D-ND	3.97	1.42	1.37
18	1	604	CLA	C1D-ND	3.96	1.42	1.37
18	8	603	CLA	C1D-ND	3.95	1.42	1.37
18	7	603	CLA	C1D-ND	3.95	1.42	1.37
18	A	825	CLA	C1D-ND	3.94	1.42	1.37
18	B	815	CLA	C1D-ND	3.94	1.42	1.37
18	J	102	CLA	C1D-ND	3.94	1.42	1.37
18	B	824	CLA	C1D-ND	3.93	1.42	1.37
18	5	612	CLA	C1D-ND	3.93	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	6	615	CLA	C1D-ND	3.93	1.42	1.37
18	B	821	CLA	C1D-ND	3.93	1.42	1.37
18	1	607	CLA	C1D-ND	3.93	1.42	1.37
18	5	617	CLA	C1D-ND	3.93	1.42	1.37
18	A	837	CLA	C4B-NB	3.92	1.42	1.37
18	1	606	CLA	C1D-ND	3.92	1.42	1.37
18	7	605	CLA	C1D-ND	3.92	1.42	1.37
18	B	839	CLA	C1D-ND	3.91	1.42	1.37
18	1	601	CLA	C1D-ND	3.91	1.42	1.37
18	6	603	CLA	C1D-ND	3.91	1.42	1.37
18	1	603	CLA	C1D-ND	3.91	1.42	1.37
18	6	613	CLA	C1D-ND	3.91	1.42	1.37
18	5	614	CLA	C1D-ND	3.90	1.42	1.37
18	B	828	CLA	C1D-ND	3.90	1.42	1.37
18	A	827	CLA	C1D-ND	3.90	1.42	1.37
18	B	823	CLA	C1D-ND	3.89	1.42	1.37
18	K	202	CLA	C1D-ND	3.88	1.42	1.37
18	A	802	CLA	C1D-ND	3.87	1.42	1.37
18	B	823	CLA	C3C-C4C	3.87	1.46	1.40
18	1	611	CLA	C1D-ND	3.87	1.42	1.37
18	B	802	CLA	C1D-ND	3.87	1.42	1.37
18	8	614	CLA	C1D-ND	3.87	1.42	1.37
18	1	605	CLA	C1D-ND	3.86	1.42	1.37
18	L	201	CLA	C1D-ND	3.86	1.42	1.37
18	B	838	CLA	C1D-ND	3.86	1.42	1.37
18	B	831	CLA	C1D-ND	3.86	1.42	1.37
18	A	836	CLA	C1D-ND	3.85	1.42	1.37
18	5	613	CLA	C1D-ND	3.85	1.42	1.37
18	8	601	CLA	C1D-ND	3.85	1.42	1.37
18	1	612	CLA	C1D-ND	3.85	1.42	1.37
18	6	605	CLA	C1D-ND	3.85	1.42	1.37
18	1	613	CLA	C1D-ND	3.84	1.42	1.37
18	8	607	CLA	C1D-ND	3.84	1.42	1.37
18	1	609	CLA	C1D-ND	3.84	1.42	1.37
18	3	402	CLA	C1D-ND	3.84	1.42	1.37
18	A	840	CLA	C1D-ND	3.84	1.42	1.37
18	B	843	CLA	C1D-ND	3.83	1.42	1.37
18	1	610	CLA	C1D-ND	3.83	1.42	1.37
18	A	813	CLA	C1D-ND	3.83	1.42	1.37
18	8	613	CLA	C1D-ND	3.83	1.42	1.37
18	8	615	CLA	C1D-ND	3.82	1.42	1.37
18	F	803	CLA	C1D-ND	3.82	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	B	843	CLA	C4B-NB	3.82	1.42	1.37
18	B	833	CLA	C1D-ND	3.82	1.42	1.37
18	5	602	CLA	C1D-ND	3.82	1.42	1.37
18	7	613	CLA	C1D-ND	3.82	1.42	1.37
18	A	824	CLA	C1D-ND	3.81	1.42	1.37
18	6	609	CLA	C1D-ND	3.81	1.42	1.37
18	6	604	CLA	C1D-ND	3.81	1.42	1.37
18	8	610	CLA	C1D-ND	3.81	1.42	1.37
18	B	817	CLA	C1D-ND	3.81	1.42	1.37
18	6	608	CLA	C1D-ND	3.81	1.42	1.37
18	A	833	CLA	C1D-ND	3.80	1.42	1.37
18	B	819	CLA	C1D-ND	3.80	1.42	1.37
18	3	413	CLA	C1D-ND	3.80	1.42	1.37
18	8	609	CLA	C1D-ND	3.80	1.42	1.37
18	A	830	CLA	C1D-ND	3.80	1.42	1.37
18	B	837	CLA	C1D-ND	3.80	1.42	1.37
18	3	405	CLA	C1D-ND	3.79	1.42	1.37
18	5	601	CLA	C1D-ND	3.79	1.42	1.37
18	A	828	CLA	C1D-ND	3.79	1.42	1.37
18	B	818	CLA	C1D-ND	3.79	1.42	1.37
18	7	601	CLA	C1D-ND	3.79	1.42	1.37
18	B	812	CLA	C1D-ND	3.79	1.42	1.37
18	A	839	CLA	C4B-NB	3.79	1.42	1.37
18	5	605	CLA	C1D-ND	3.79	1.42	1.37
18	6	606	CLA	C1D-ND	3.79	1.42	1.37
18	A	821	CLA	C1D-ND	3.79	1.42	1.37
18	8	611	CLA	C1D-ND	3.78	1.42	1.37
18	A	835	CLA	C1D-ND	3.78	1.42	1.37
18	7	614	CLA	C1D-ND	3.78	1.42	1.37
18	B	840	CLA	C1D-ND	3.78	1.42	1.37
18	A	839	CLA	C1D-ND	3.78	1.42	1.37
18	A	832	CLA	C1D-ND	3.78	1.42	1.37
18	7	612	CLA	C1D-ND	3.78	1.42	1.37
18	B	820	CLA	C1D-ND	3.77	1.42	1.37
18	5	603	CLA	C1D-ND	3.77	1.42	1.37
18	3	404	CLA	C1D-ND	3.77	1.42	1.37
18	8	604	CLA	C1D-ND	3.77	1.42	1.37
18	B	813	CLA	C1D-ND	3.77	1.42	1.37
18	3	408	CLA	C1D-ND	3.76	1.42	1.37
18	6	610	CLA	C1D-ND	3.76	1.42	1.37
18	5	608	CLA	C1D-ND	3.76	1.42	1.37
18	7	608	CLA	C1D-ND	3.76	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	A	814	CLA	C1D-ND	3.76	1.42	1.37
18	6	601	CLA	C1D-ND	3.76	1.42	1.37
18	A	815	CLA	C1D-ND	3.76	1.42	1.37
18	1	614	CLA	C1D-ND	3.76	1.42	1.37
18	F	802	CLA	C1D-ND	3.76	1.42	1.37
18	A	805	CLA	C1D-ND	3.75	1.42	1.37
18	8	606	CLA	C1D-ND	3.75	1.42	1.37
18	A	819	CLA	C1D-ND	3.75	1.42	1.37
18	7	604	CLA	C1D-ND	3.75	1.42	1.37
18	5	607	CLA	C1D-ND	3.74	1.42	1.37
18	B	825	CLA	C1D-ND	3.74	1.42	1.37
18	A	806	CLA	C1D-ND	3.74	1.42	1.37
18	5	609	CLA	C1D-ND	3.74	1.42	1.37
18	3	403	CLA	C1D-ND	3.74	1.42	1.37
18	3	414	CLA	C1D-ND	3.73	1.42	1.37
18	L	201	CLA	C4B-NB	3.73	1.42	1.37
18	B	836	CLA	C1D-ND	3.73	1.42	1.37
18	5	618	CLA	C1D-ND	3.73	1.42	1.37
18	A	831	CLA	C1D-ND	3.73	1.42	1.37
18	1	611	CLA	C4B-NB	3.73	1.42	1.37
18	A	807	CLA	C1D-ND	3.73	1.42	1.37
18	A	822	CLA	C1D-ND	3.73	1.42	1.37
18	B	822	CLA	C1D-ND	3.73	1.42	1.37
18	6	602	CLA	C1D-ND	3.73	1.42	1.37
18	8	605	CLA	C1D-ND	3.72	1.42	1.37
18	B	835	CLA	C1D-ND	3.72	1.42	1.37
18	6	614	CLA	C1D-ND	3.72	1.42	1.37
18	A	817	CLA	C1D-ND	3.72	1.42	1.37
18	8	612	CLA	C1D-ND	3.72	1.42	1.37
18	A	820	CLA	C1D-ND	3.72	1.42	1.37
18	A	837	CLA	C1D-ND	3.72	1.42	1.37
18	A	812	CLA	C1D-ND	3.72	1.42	1.37
18	B	808	CLA	C1D-ND	3.72	1.42	1.37
18	1	609	CLA	C4B-NB	3.71	1.42	1.37
18	3	401	CLA	C1D-ND	3.71	1.42	1.37
18	5	615	CLA	C1D-ND	3.71	1.42	1.37
18	A	841	CLA	C1D-ND	3.71	1.42	1.37
18	A	810	CLA	C1D-ND	3.71	1.42	1.37
18	6	608	CLA	C4B-NB	3.71	1.42	1.37
18	F	804	CLA	C1D-ND	3.71	1.42	1.37
18	7	607	CLA	C1D-ND	3.71	1.42	1.37
18	A	801	CLA	C1D-ND	3.71	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	A	834	CLA	C1D-ND	3.70	1.42	1.37
18	A	838	CLA	C1D-ND	3.70	1.42	1.37
18	5	604	CLA	C1D-ND	3.70	1.42	1.37
18	B	814	CLA	C1D-ND	3.70	1.42	1.37
18	B	825	CLA	C4B-NB	3.70	1.42	1.37
18	7	611	CLA	C1D-ND	3.70	1.42	1.37
18	K	201	CLA	C1D-ND	3.69	1.42	1.37
18	8	608	CLA	C1D-ND	3.69	1.42	1.37
18	A	829	CLA	C1D-ND	3.69	1.42	1.37
18	7	606	CLA	C1D-ND	3.69	1.42	1.37
18	7	602	CLA	C1D-ND	3.69	1.42	1.37
18	A	809	CLA	C1D-ND	3.69	1.42	1.37
18	B	841	CLA	C1D-ND	3.69	1.42	1.37
18	B	829	CLA	C1D-ND	3.68	1.42	1.37
18	7	609	CLA	C1D-ND	3.68	1.42	1.37
18	5	606	CLA	C1D-ND	3.68	1.42	1.37
18	7	610	CLA	C1D-ND	3.68	1.42	1.37
18	A	811	CLA	C1D-ND	3.67	1.42	1.37
18	1	608	CLA	C4B-NB	3.67	1.42	1.37
18	A	808	CLA	C1D-ND	3.66	1.42	1.37
18	5	610	CLA	C1D-ND	3.66	1.42	1.37
18	A	843	CLA	C1D-ND	3.66	1.42	1.37
18	5	616	CLA	C1D-ND	3.66	1.42	1.37
18	B	826	CLA	C1D-ND	3.66	1.42	1.37
18	1	607	CLA	C4B-NB	3.65	1.42	1.37
18	7	605	CLA	C4B-NB	3.65	1.42	1.37
18	B	804	CLA	C1D-ND	3.65	1.42	1.37
18	3	412	CLA	C4B-NB	3.64	1.42	1.37
18	A	826	CLA	C1D-ND	3.64	1.42	1.37
18	B	838	CLA	C4B-NB	3.64	1.42	1.37
18	K	201	CLA	C4B-NB	3.64	1.42	1.37
18	B	811	CLA	C1D-ND	3.64	1.42	1.37
18	1	606	CLA	C4B-NB	3.63	1.42	1.37
18	A	823	CLA	C1D-ND	3.63	1.42	1.37
18	B	827	CLA	C1D-ND	3.62	1.42	1.37
18	F	804	CLA	C4B-NB	3.62	1.42	1.37
18	A	801	CLA	C4B-NB	3.62	1.42	1.37
18	6	607	CLA	C4B-NB	3.62	1.42	1.37
18	8	601	CLA	C4B-NB	3.61	1.42	1.37
18	B	810	CLA	C1D-ND	3.61	1.42	1.37
18	6	603	CLA	C4B-NB	3.61	1.42	1.37
18	1	614	CLA	C4B-NB	3.61	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	6	612	CLA	C1D-ND	3.61	1.42	1.37
18	6	602	CLA	C4B-NB	3.61	1.42	1.37
18	B	807	CLA	C1D-ND	3.60	1.42	1.37
18	1	610	CLA	C4B-NB	3.60	1.42	1.37
18	B	822	CLA	C4B-NB	3.60	1.42	1.37
18	F	802	CLA	C4B-NB	3.60	1.42	1.37
18	B	813	CLA	C4B-NB	3.60	1.42	1.37
18	B	812	CLA	C4B-NB	3.59	1.42	1.37
18	6	612	CLA	C4B-NB	3.59	1.42	1.37
18	B	819	CLA	C4B-NB	3.59	1.42	1.37
18	A	820	CLA	C4B-NB	3.59	1.42	1.37
18	8	606	CLA	C4B-NB	3.59	1.42	1.37
18	3	411	CLA	C1D-ND	3.58	1.42	1.37
18	B	832	CLA	C1D-ND	3.58	1.42	1.37
18	A	818	CLA	C1D-ND	3.58	1.42	1.37
18	7	603	CLA	C4B-NB	3.58	1.42	1.37
18	B	809	CLA	C1D-ND	3.57	1.42	1.37
18	3	409	CLA	C1D-ND	3.57	1.42	1.37
18	F	803	CLA	C4B-NB	3.57	1.42	1.37
18	6	615	CLA	C4B-NB	3.57	1.42	1.37
18	1	604	CLA	C4B-NB	3.57	1.42	1.37
18	6	606	CLA	C4B-NB	3.57	1.42	1.37
18	8	603	CLA	C4B-NB	3.57	1.42	1.37
18	5	618	CLA	C4B-NB	3.56	1.42	1.37
18	8	613	CLA	C4B-NB	3.56	1.42	1.37
18	8	604	CLA	C4B-NB	3.56	1.42	1.37
18	A	816	CLA	C4B-NB	3.56	1.42	1.37
18	B	824	CLA	C4B-NB	3.56	1.42	1.37
18	J	102	CLA	C4B-NB	3.56	1.42	1.37
18	1	613	CLA	C4B-NB	3.55	1.42	1.37
18	3	407	CLA	C1D-ND	3.55	1.42	1.37
18	3	412	CLA	C1D-ND	3.55	1.42	1.37
18	A	822	CLA	C4B-NB	3.55	1.42	1.37
18	B	803	CLA	C1D-ND	3.55	1.42	1.37
18	5	611	CLA	C4B-NB	3.55	1.42	1.37
18	5	617	CLA	C4B-NB	3.55	1.42	1.37
18	A	804	CLA	C1D-ND	3.55	1.42	1.37
18	5	615	CLA	C4B-NB	3.55	1.42	1.37
18	B	806	CLA	C1D-ND	3.55	1.42	1.37
18	1	601	CLA	C4B-NB	3.54	1.42	1.37
18	8	605	CLA	C4B-NB	3.54	1.42	1.37
18	3	406	CLA	C1D-ND	3.54	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	B	821	CLA	C4B-NB	3.54	1.42	1.37
18	8	607	CLA	C4B-NB	3.54	1.42	1.37
18	8	612	CLA	C4B-NB	3.54	1.42	1.37
18	B	826	CLA	C4B-NB	3.54	1.42	1.37
18	K	202	CLA	C4B-NB	3.54	1.42	1.37
18	6	601	CLA	C4B-NB	3.54	1.42	1.37
18	A	827	CLA	C4B-NB	3.54	1.42	1.37
18	B	816	CLA	C4B-NB	3.54	1.42	1.37
18	A	843	CLA	C4B-NB	3.53	1.42	1.37
18	B	807	CLA	C4B-NB	3.53	1.42	1.37
18	1	612	CLA	C4B-NB	3.52	1.42	1.37
18	6	605	CLA	C4B-NB	3.52	1.42	1.37
18	5	604	CLA	C4B-NB	3.52	1.42	1.37
18	6	610	CLA	C4B-NB	3.52	1.42	1.37
18	7	604	CLA	C4B-NB	3.51	1.42	1.37
18	8	614	CLA	C4B-NB	3.51	1.42	1.37
18	B	806	CLA	C4B-NB	3.51	1.42	1.37
18	3	410	CLA	C4B-NB	3.51	1.42	1.37
18	8	602	CLA	C1D-ND	3.50	1.42	1.37
18	1	605	CLA	C4B-NB	3.50	1.42	1.37
18	3	411	CLA	C4B-NB	3.50	1.42	1.37
18	5	601	CLA	C4B-NB	3.50	1.42	1.37
18	A	811	CLA	C4B-NB	3.50	1.42	1.37
18	5	616	CLA	C4B-NB	3.50	1.42	1.37
18	A	806	CLA	C4B-NB	3.50	1.42	1.37
18	A	841	CLA	C4B-NB	3.50	1.42	1.37
18	B	817	CLA	C4B-NB	3.50	1.42	1.37
18	3	406	CLA	C4B-NB	3.49	1.42	1.37
18	7	606	CLA	C4B-NB	3.49	1.42	1.37
18	A	837	CLA	C3B-C4B	3.49	1.50	1.42
18	1	603	CLA	C4B-NB	3.49	1.42	1.37
18	B	833	CLA	C4B-NB	3.49	1.42	1.37
18	7	614	CLA	C4B-NB	3.49	1.42	1.37
18	5	605	CLA	C4B-NB	3.49	1.42	1.37
18	8	608	CLA	C4B-NB	3.48	1.42	1.37
18	3	409	CLA	C4B-NB	3.48	1.42	1.37
18	A	824	CLA	C4B-NB	3.48	1.42	1.37
18	5	603	CLA	C4B-NB	3.48	1.42	1.37
18	6	611	CLA	C4B-NB	3.48	1.42	1.37
18	A	818	CLA	C4B-NB	3.48	1.42	1.37
18	A	805	CLA	C4B-NB	3.48	1.42	1.37
18	A	819	CLA	C4B-NB	3.47	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	A	817	CLA	C4B-NB	3.47	1.42	1.37
18	B	832	CLA	C4B-NB	3.47	1.42	1.37
18	3	404	CLA	C4B-NB	3.46	1.42	1.37
18	8	611	CLA	C4B-NB	3.46	1.42	1.37
18	A	831	CLA	C4B-NB	3.46	1.42	1.37
18	7	608	CLA	C4B-NB	3.46	1.42	1.37
18	8	602	CLA	C4B-NB	3.46	1.42	1.37
18	B	835	CLA	C4B-NB	3.46	1.42	1.37
18	5	614	CLA	C4B-NB	3.45	1.42	1.37
18	3	403	CLA	C4B-NB	3.45	1.42	1.37
18	K	203	CLA	C4B-NB	3.45	1.42	1.37
18	B	804	CLA	C4B-NB	3.45	1.42	1.37
18	7	607	CLA	C4B-NB	3.45	1.42	1.37
18	7	610	CLA	C4B-NB	3.45	1.42	1.37
18	3	407	CLA	C4B-NB	3.45	1.42	1.37
18	A	823	CLA	C4B-NB	3.44	1.42	1.37
18	8	615	CLA	C4B-NB	3.44	1.42	1.37
18	3	402	CLA	C4B-NB	3.44	1.42	1.37
18	6	616	CLA	C4B-NB	3.44	1.42	1.37
18	B	814	CLA	C4B-NB	3.44	1.42	1.37
18	3	405	CLA	C4B-NB	3.44	1.42	1.37
18	3	413	CLA	C4B-NB	3.43	1.42	1.37
18	B	811	CLA	C4B-NB	3.43	1.42	1.37
18	A	809	CLA	C4B-NB	3.43	1.42	1.37
18	B	830	CLA	C1D-ND	3.43	1.42	1.37
18	B	823	CLA	C4B-NB	3.43	1.42	1.37
18	3	414	CLA	C4B-NB	3.43	1.42	1.37
18	5	606	CLA	C4B-NB	3.43	1.42	1.37
18	8	609	CLA	C4B-NB	3.42	1.42	1.37
18	B	836	CLA	C4B-NB	3.42	1.42	1.37
18	7	601	CLA	C4B-NB	3.42	1.42	1.37
18	B	828	CLA	C4B-NB	3.42	1.42	1.37
18	1	602	CLA	C4B-NB	3.42	1.42	1.37
18	A	812	CLA	C4B-NB	3.41	1.42	1.37
18	A	835	CLA	C4B-NB	3.41	1.42	1.37
18	6	613	CLA	C4B-NB	3.41	1.42	1.37
18	A	803	CLA	C4B-NB	3.41	1.42	1.37
18	B	841	CLA	C4B-NB	3.41	1.42	1.37
18	A	804	CLA	C4B-NB	3.40	1.42	1.37
18	A	814	CLA	C4B-NB	3.40	1.42	1.37
18	A	832	CLA	C4B-NB	3.40	1.42	1.37
18	5	609	CLA	C4B-NB	3.40	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	A	826	CLA	C4B-NB	3.40	1.42	1.37
18	A	838	CLA	C4B-NB	3.40	1.42	1.37
18	A	834	CLA	C4B-NB	3.39	1.42	1.37
18	7	612	CLA	C4B-NB	3.39	1.42	1.37
18	B	808	CLA	C4B-NB	3.39	1.42	1.37
18	A	821	CLA	C4B-NB	3.39	1.42	1.37
18	B	809	CLA	C4B-NB	3.38	1.41	1.37
18	B	839	CLA	C4B-NB	3.38	1.41	1.37
18	5	608	CLA	C4B-NB	3.38	1.41	1.37
18	A	833	CLA	C4B-NB	3.38	1.41	1.37
18	3	408	CLA	C4B-NB	3.37	1.41	1.37
18	6	609	CLA	C4B-NB	3.37	1.41	1.37
18	7	609	CLA	C4B-NB	3.37	1.41	1.37
18	5	607	CLA	C4B-NB	3.37	1.41	1.37
18	7	611	CLA	C4B-NB	3.37	1.41	1.37
18	7	613	CLA	C4B-NB	3.37	1.41	1.37
18	5	610	CLA	C4B-NB	3.37	1.41	1.37
18	6	604	CLA	C4B-NB	3.37	1.41	1.37
18	B	818	CLA	C4B-NB	3.37	1.41	1.37
18	B	830	CLA	C4B-NB	3.37	1.41	1.37
18	8	610	CLA	C4B-NB	3.36	1.41	1.37
18	A	810	CLA	C4B-NB	3.36	1.41	1.37
18	5	612	CLA	C4B-NB	3.36	1.41	1.37
18	A	808	CLA	C4B-NB	3.36	1.41	1.37
18	B	801	CLA	CAB-C3B	-3.35	1.43	1.50
18	3	406	CLA	C4D-ND	-3.35	1.33	1.37
18	A	815	CLA	C4B-NB	3.34	1.41	1.37
18	B	837	CLA	C4B-NB	3.34	1.41	1.37
18	B	829	CLA	C4B-NB	3.34	1.41	1.37
18	A	830	CLA	C4B-NB	3.33	1.41	1.37
18	B	842	CLA	C4B-NB	3.33	1.41	1.37
18	B	802	CLA	C4B-NB	3.33	1.41	1.37
18	A	807	CLA	C4B-NB	3.33	1.41	1.37
18	A	825	CLA	C4B-NB	3.33	1.41	1.37
18	6	614	CLA	C4B-NB	3.32	1.41	1.37
18	B	801	CLA	C4B-NB	3.32	1.41	1.37
18	B	840	CLA	C4B-NB	3.32	1.41	1.37
18	B	827	CLA	C4B-NB	3.32	1.41	1.37
18	B	803	CLA	C4B-NB	3.29	1.41	1.37
18	B	810	CLA	C4B-NB	3.28	1.41	1.37
18	B	815	CLA	C4B-NB	3.28	1.41	1.37
18	6	608	CLA	C4D-ND	-3.28	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	A	802	CLA	C4B-NB	3.28	1.41	1.37
18	A	840	CLA	C4B-NB	3.28	1.41	1.37
18	3	401	CLA	C4B-NB	3.28	1.41	1.37
18	3	401	CLA	C4D-ND	-3.27	1.33	1.37
18	A	836	CLA	C4B-NB	3.26	1.41	1.37
18	B	842	CLA	C4D-ND	-3.26	1.33	1.37
18	5	610	CLA	C4D-ND	-3.25	1.33	1.37
18	B	831	CLA	C4B-NB	3.24	1.41	1.37
18	5	613	CLA	C4B-NB	3.24	1.41	1.37
18	B	803	CLA	C4D-ND	-3.23	1.33	1.37
18	A	829	CLA	C4B-NB	3.22	1.41	1.37
18	B	820	CLA	C4B-NB	3.22	1.41	1.37
18	A	839	CLA	C3B-C4B	3.21	1.50	1.42
18	B	808	CLA	C4D-ND	-3.21	1.33	1.37
18	5	602	CLA	C4B-NB	3.20	1.41	1.37
18	7	602	CLA	C4B-NB	3.20	1.41	1.37
18	3	411	CLA	C4D-ND	-3.20	1.33	1.37
18	A	813	CLA	C4B-NB	3.19	1.41	1.37
18	A	817	CLA	C4D-ND	-3.18	1.33	1.37
18	B	827	CLA	C4D-ND	-3.18	1.33	1.37
18	A	830	CLA	C1B-C2B	3.18	1.50	1.43
18	B	831	CLA	C1B-C2B	3.18	1.50	1.43
18	7	609	CLA	C4D-ND	-3.17	1.33	1.37
18	B	805	CLA	C1D-ND	3.17	1.41	1.37
18	B	842	CLA	C1D-ND	3.17	1.41	1.37
18	7	602	CLA	C4D-ND	-3.17	1.33	1.37
18	A	808	CLA	C4D-ND	-3.17	1.33	1.37
18	A	812	CLA	CAB-C3B	-3.17	1.44	1.50
18	A	828	CLA	C4B-NB	3.17	1.41	1.37
18	8	602	CLA	C4D-ND	-3.16	1.33	1.37
18	5	611	CLA	C4D-ND	-3.14	1.33	1.37
18	A	807	CLA	C4D-ND	-3.14	1.33	1.37
18	B	830	CLA	C4D-ND	-3.14	1.33	1.37
18	A	818	CLA	C4D-ND	-3.14	1.33	1.37
18	6	602	CLA	C4D-ND	-3.14	1.33	1.37
18	7	614	CLA	CAB-C3B	-3.14	1.44	1.50
18	8	601	CLA	C4D-ND	-3.13	1.33	1.37
18	B	805	CLA	C4D-ND	-3.13	1.33	1.37
18	3	408	CLA	C4D-ND	-3.13	1.33	1.37
18	6	612	CLA	C4D-ND	-3.13	1.33	1.37
18	A	826	CLA	C4D-ND	-3.12	1.33	1.37
18	8	606	CLA	CAB-C3B	-3.12	1.44	1.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	A	809	CLA	C4D-ND	-3.12	1.33	1.37
18	A	812	CLA	C4D-ND	-3.11	1.33	1.37
18	5	615	CLA	CAB-C3B	-3.11	1.44	1.50
18	6	606	CLA	CAB-C3B	-3.11	1.44	1.50
18	7	607	CLA	C4D-ND	-3.10	1.33	1.37
18	6	616	CLA	CAB-C3B	-3.10	1.44	1.50
18	7	606	CLA	C4D-ND	-3.10	1.33	1.37
18	5	604	CLA	CAB-C3B	-3.10	1.44	1.50
18	8	603	CLA	CAB-C3B	-3.10	1.44	1.50
18	3	404	CLA	C4D-ND	-3.10	1.33	1.37
18	5	603	CLA	CAB-C3B	-3.09	1.44	1.50
18	5	615	CLA	C4D-ND	-3.09	1.33	1.37
18	A	804	CLA	C4D-ND	-3.09	1.33	1.37
18	B	802	CLA	C4D-ND	-3.09	1.33	1.37
18	B	809	CLA	C4D-ND	-3.09	1.33	1.37
18	5	616	CLA	C4D-ND	-3.09	1.33	1.37
18	A	834	CLA	C4D-ND	-3.09	1.33	1.37
18	7	612	CLA	C4D-ND	-3.08	1.33	1.37
18	A	810	CLA	C4D-ND	-3.08	1.33	1.37
18	A	839	CLA	C4D-ND	-3.08	1.33	1.37
18	B	819	CLA	C4D-ND	-3.08	1.33	1.37
18	A	838	CLA	C4D-ND	-3.08	1.33	1.37
18	7	610	CLA	C4D-ND	-3.08	1.33	1.37
18	A	828	CLA	C4D-ND	-3.08	1.33	1.37
18	1	613	CLA	CAB-C3B	-3.07	1.44	1.50
18	F	802	CLA	C3B-C4B	3.07	1.49	1.42
18	8	609	CLA	C4D-ND	-3.07	1.33	1.37
18	B	841	CLA	C4D-ND	-3.07	1.33	1.37
18	K	203	CLA	C4D-ND	-3.07	1.33	1.37
18	8	612	CLA	C4D-ND	-3.07	1.33	1.37
18	B	810	CLA	C4D-ND	-3.06	1.33	1.37
18	B	832	CLA	C4D-ND	-3.06	1.33	1.37
18	1	614	CLA	CAB-C3B	-3.06	1.44	1.50
18	8	614	CLA	CAB-C3B	-3.06	1.44	1.50
18	A	815	CLA	C4D-ND	-3.06	1.33	1.37
18	5	617	CLA	CAB-C3B	-3.06	1.44	1.50
18	A	811	CLA	C4D-ND	-3.06	1.33	1.37
18	A	830	CLA	C4D-ND	-3.06	1.33	1.37
18	1	604	CLA	CAB-C3B	-3.06	1.44	1.50
18	B	814	CLA	C4D-ND	-3.06	1.33	1.37
18	5	608	CLA	C4D-ND	-3.06	1.33	1.37
18	A	835	CLA	C3B-C4B	3.06	1.49	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	A	841	CLA	C4D-ND	-3.05	1.33	1.37
18	B	829	CLA	C4D-ND	-3.05	1.33	1.37
18	B	811	CLA	C4D-ND	-3.05	1.33	1.37
18	F	802	CLA	C4D-ND	-3.05	1.33	1.37
18	A	806	CLA	C4D-ND	-3.05	1.33	1.37
18	A	831	CLA	C4D-ND	-3.05	1.33	1.37
18	3	409	CLA	CAB-C3B	-3.05	1.44	1.50
18	8	615	CLA	CAB-C3B	-3.05	1.44	1.50
18	A	843	CLA	C4D-ND	-3.04	1.33	1.37
18	A	820	CLA	C4D-ND	-3.04	1.33	1.37
18	7	601	CLA	C4D-ND	-3.04	1.33	1.37
18	6	610	CLA	C4D-ND	-3.04	1.33	1.37
18	6	613	CLA	C4D-ND	-3.04	1.33	1.37
18	1	606	CLA	CAB-C3B	-3.04	1.44	1.50
18	B	833	CLA	C4D-ND	-3.04	1.33	1.37
18	6	603	CLA	CAB-C3B	-3.04	1.44	1.50
18	A	802	CLA	C4D-ND	-3.04	1.33	1.37
18	B	840	CLA	C4D-ND	-3.04	1.33	1.37
18	7	614	CLA	C4D-ND	-3.03	1.33	1.37
18	B	825	CLA	C4D-ND	-3.03	1.33	1.37
18	A	814	CLA	C4D-ND	-3.03	1.33	1.37
18	5	614	CLA	C4D-ND	-3.03	1.33	1.37
18	8	607	CLA	C4D-ND	-3.03	1.33	1.37
18	A	822	CLA	C4D-ND	-3.03	1.33	1.37
18	5	605	CLA	C4D-ND	-3.03	1.33	1.37
18	B	801	CLA	C1D-ND	3.03	1.41	1.37
18	1	608	CLA	CAB-C3B	-3.03	1.44	1.50
18	6	604	CLA	C4D-ND	-3.03	1.33	1.37
18	B	812	CLA	C3B-C4B	3.02	1.49	1.42
18	5	618	CLA	C4D-ND	-3.02	1.33	1.37
18	A	823	CLA	C4D-ND	-3.02	1.33	1.37
18	A	829	CLA	C4D-ND	-3.02	1.33	1.37
18	A	805	CLA	C4D-ND	-3.02	1.33	1.37
18	A	840	CLA	C4D-ND	-3.02	1.33	1.37
18	B	835	CLA	C4D-ND	-3.02	1.33	1.37
18	A	824	CLA	C4D-ND	-3.02	1.33	1.37
18	1	609	CLA	C4D-ND	-3.01	1.33	1.37
18	5	603	CLA	C4D-ND	-3.01	1.33	1.37
18	A	819	CLA	C4D-ND	-3.01	1.33	1.37
18	7	613	CLA	C4D-ND	-3.01	1.33	1.37
18	B	820	CLA	C4D-ND	-3.01	1.33	1.37
18	B	816	CLA	C2A-C1A	3.01	1.55	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	3	413	CLA	C4D-ND	-3.01	1.33	1.37
18	5	607	CLA	C4D-ND	-3.01	1.33	1.37
18	A	804	CLA	C3B-C4B	3.01	1.49	1.42
18	A	837	CLA	C4D-ND	-3.01	1.33	1.37
18	B	831	CLA	C4D-ND	-3.00	1.33	1.37
18	6	614	CLA	C4D-ND	-3.00	1.33	1.37
18	3	402	CLA	C4D-ND	-3.00	1.33	1.37
18	A	835	CLA	C4D-ND	-3.00	1.33	1.37
18	B	806	CLA	C3B-C4B	3.00	1.49	1.42
18	A	832	CLA	C4D-ND	-3.00	1.33	1.37
18	1	612	CLA	C4D-ND	-2.99	1.33	1.37
18	6	609	CLA	C4D-ND	-2.99	1.33	1.37
18	8	604	CLA	C4D-ND	-2.99	1.33	1.37
18	B	803	CLA	C3B-C4B	2.99	1.49	1.42
18	8	613	CLA	C4D-ND	-2.98	1.33	1.37
18	3	403	CLA	C4D-ND	-2.98	1.33	1.37
18	3	408	CLA	C3B-C4B	2.98	1.49	1.42
18	5	610	CLA	C3B-C4B	2.98	1.49	1.42
18	1	602	CLA	C4D-ND	-2.97	1.33	1.37
18	A	836	CLA	C4D-ND	-2.97	1.33	1.37
18	B	821	CLA	C4D-ND	-2.97	1.33	1.37
18	B	818	CLA	C4D-ND	-2.97	1.33	1.37
18	8	603	CLA	C4D-ND	-2.97	1.33	1.37
18	6	608	CLA	C3B-C4B	2.97	1.49	1.42
18	B	836	CLA	C4D-ND	-2.97	1.33	1.37
18	3	410	CLA	C4D-ND	-2.96	1.33	1.37
18	B	817	CLA	C4D-ND	-2.96	1.33	1.37
18	1	614	CLA	C4D-ND	-2.96	1.33	1.37
18	A	816	CLA	C4D-ND	-2.96	1.33	1.37
18	8	615	CLA	C4D-ND	-2.96	1.33	1.37
18	1	607	CLA	C4D-ND	-2.96	1.33	1.37
18	A	813	CLA	C4D-ND	-2.96	1.33	1.37
18	5	604	CLA	C4D-ND	-2.95	1.33	1.37
18	3	414	CLA	C4D-ND	-2.95	1.33	1.37
18	A	801	CLA	C4D-ND	-2.95	1.33	1.37
18	B	826	CLA	C4D-ND	-2.95	1.33	1.37
18	3	405	CLA	C4D-ND	-2.95	1.33	1.37
18	5	613	CLA	C4D-ND	-2.95	1.33	1.37
18	B	827	CLA	C3B-C4B	2.95	1.49	1.42
18	1	604	CLA	C4D-ND	-2.95	1.33	1.37
18	6	615	CLA	C4D-ND	-2.95	1.33	1.37
18	8	608	CLA	C4D-ND	-2.95	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	6	606	CLA	C4D-ND	-2.94	1.33	1.37
18	7	604	CLA	C4D-ND	-2.94	1.33	1.37
18	B	806	CLA	C4D-ND	-2.94	1.33	1.37
18	B	828	CLA	C4D-ND	-2.94	1.33	1.37
18	A	833	CLA	C4D-ND	-2.94	1.33	1.37
18	B	839	CLA	C4D-ND	-2.94	1.33	1.37
18	1	610	CLA	C4D-ND	-2.94	1.33	1.37
18	1	611	CLA	C4D-ND	-2.94	1.33	1.37
18	A	827	CLA	C3B-C4B	2.94	1.49	1.42
18	5	602	CLA	C4D-ND	-2.93	1.33	1.37
18	K	201	CLA	C4D-ND	-2.93	1.33	1.37
18	B	801	CLA	C4D-ND	-2.93	1.33	1.37
18	3	407	CLA	C4D-ND	-2.93	1.33	1.37
18	B	823	CLA	C4D-ND	-2.93	1.33	1.37
18	A	827	CLA	C4D-ND	-2.93	1.33	1.37
18	B	813	CLA	C4D-ND	-2.93	1.33	1.37
18	A	801	CLA	C3B-C4B	2.92	1.49	1.42
18	B	815	CLA	C4D-ND	-2.92	1.33	1.37
18	7	605	CLA	C4D-ND	-2.92	1.33	1.37
18	B	834	CLA	C3B-C4B	2.92	1.49	1.42
18	B	837	CLA	C3B-C4B	2.92	1.49	1.42
18	5	609	CLA	C4D-ND	-2.92	1.33	1.37
18	B	815	CLA	C3B-C4B	2.92	1.49	1.42
18	6	616	CLA	C4D-ND	-2.92	1.33	1.37
18	8	610	CLA	C4D-ND	-2.92	1.33	1.37
18	8	613	CLA	C3B-C4B	2.91	1.49	1.42
18	B	804	CLA	C4D-ND	-2.91	1.33	1.37
18	B	824	CLA	C4D-ND	-2.91	1.33	1.37
18	6	605	CLA	C4D-ND	-2.91	1.33	1.37
18	3	409	CLA	C4D-ND	-2.91	1.33	1.37
18	B	839	CLA	C3B-C4B	2.91	1.49	1.42
18	3	412	CLA	C4D-ND	-2.91	1.33	1.37
18	7	603	CLA	C4D-ND	-2.91	1.33	1.37
18	7	608	CLA	C4D-ND	-2.90	1.33	1.37
18	6	613	CLA	C3B-C4B	2.90	1.49	1.42
18	K	202	CLA	C4D-ND	-2.90	1.33	1.37
18	5	606	CLA	C4D-ND	-2.90	1.33	1.37
18	6	607	CLA	C4D-ND	-2.90	1.33	1.37
18	B	831	CLA	C3B-C4B	2.89	1.49	1.42
18	7	611	CLA	C4D-ND	-2.89	1.33	1.37
18	B	816	CLA	C3B-C4B	2.89	1.49	1.42
18	5	601	CLA	C3B-C4B	2.89	1.49	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	1	605	CLA	C3B-C4B	2.89	1.49	1.42
18	A	821	CLA	C4D-ND	-2.89	1.33	1.37
18	B	822	CLA	C4D-ND	-2.88	1.33	1.37
18	B	837	CLA	C4D-ND	-2.88	1.33	1.37
18	5	617	CLA	C4D-ND	-2.88	1.33	1.37
18	8	605	CLA	C4D-ND	-2.88	1.33	1.37
18	F	804	CLA	C4D-ND	-2.88	1.33	1.37
18	6	609	CLA	C3B-C4B	2.88	1.49	1.42
18	1	613	CLA	C4D-ND	-2.88	1.33	1.37
18	B	807	CLA	C3B-C4B	2.88	1.49	1.42
18	B	821	CLA	C3B-C4B	2.87	1.49	1.42
18	J	102	CLA	C4D-ND	-2.87	1.33	1.37
18	7	611	CLA	C3B-C4B	2.87	1.49	1.42
18	A	803	CLA	C3B-C4B	2.87	1.49	1.42
18	B	820	CLA	C3B-C4B	2.87	1.49	1.42
18	B	822	CLA	C3B-C4B	2.87	1.49	1.42
18	B	843	CLA	C4D-ND	-2.87	1.33	1.37
18	B	812	CLA	C4D-ND	-2.87	1.33	1.37
18	8	611	CLA	C4D-ND	-2.87	1.33	1.37
18	B	838	CLA	C4D-ND	-2.87	1.33	1.37
18	1	608	CLA	C4D-ND	-2.86	1.33	1.37
18	B	843	CLA	C3B-C4B	2.86	1.49	1.42
18	B	829	CLA	C3B-C4B	2.86	1.49	1.42
18	6	601	CLA	C4D-ND	-2.86	1.33	1.37
18	6	607	CLA	C3B-C4B	2.86	1.49	1.42
18	K	202	CLA	C3B-C4B	2.86	1.49	1.42
18	1	603	CLA	C3B-C4B	2.85	1.49	1.42
18	8	614	CLA	C4D-ND	-2.85	1.33	1.37
18	B	836	CLA	C3B-C4B	2.85	1.49	1.42
18	8	607	CLA	C3B-C4B	2.85	1.49	1.42
18	K	201	CLA	C3B-C4B	2.85	1.49	1.42
18	8	602	CLA	C3B-C4B	2.84	1.49	1.42
18	B	819	CLA	C3B-C4B	2.84	1.49	1.42
18	5	606	CLA	C3B-C4B	2.84	1.49	1.42
18	K	203	CLA	C3B-C4B	2.84	1.49	1.42
18	B	833	CLA	C3B-C4B	2.84	1.49	1.42
18	5	614	CLA	C3B-C4B	2.84	1.49	1.42
18	8	605	CLA	C3B-C4B	2.84	1.49	1.42
18	B	807	CLA	C4D-ND	-2.83	1.33	1.37
18	F	803	CLA	C4D-ND	-2.83	1.33	1.37
18	1	601	CLA	C3B-C4B	2.83	1.49	1.42
18	3	412	CLA	C3B-C4B	2.83	1.49	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	6	603	CLA	C4D-ND	-2.83	1.33	1.37
18	A	829	CLA	C3B-C4B	2.83	1.49	1.42
18	B	814	CLA	C3B-C4B	2.83	1.49	1.42
18	A	825	CLA	C4D-ND	-2.83	1.33	1.37
18	A	817	CLA	C3B-C4B	2.83	1.49	1.42
18	8	604	CLA	C3B-C4B	2.82	1.49	1.42
18	1	605	CLA	C4D-ND	-2.82	1.33	1.37
18	B	832	CLA	C3B-C4B	2.82	1.49	1.42
18	6	602	CLA	C3B-C4B	2.82	1.49	1.42
18	A	838	CLA	C3B-C4B	2.82	1.49	1.42
18	A	822	CLA	C3B-C4B	2.82	1.49	1.42
18	1	601	CLA	C4D-ND	-2.82	1.33	1.37
18	6	615	CLA	C3B-C4B	2.81	1.49	1.42
18	A	823	CLA	C3B-C4B	2.81	1.49	1.42
18	5	613	CLA	C3B-C4B	2.81	1.49	1.42
18	5	611	CLA	C3B-C4B	2.81	1.49	1.42
18	B	840	CLA	C3B-C4B	2.81	1.49	1.42
18	A	818	CLA	C3B-C4B	2.81	1.49	1.42
18	B	823	CLA	C3B-C4B	2.81	1.49	1.42
18	7	606	CLA	C3B-C4B	2.81	1.49	1.42
18	7	608	CLA	C3B-C4B	2.81	1.49	1.42
18	7	610	CLA	C3B-C4B	2.81	1.49	1.42
18	1	607	CLA	C3B-C4B	2.80	1.49	1.42
18	A	820	CLA	C3B-C4B	2.80	1.49	1.42
18	L	201	CLA	C4D-ND	-2.80	1.33	1.37
18	3	414	CLA	C3B-C4B	2.80	1.49	1.42
18	1	611	CLA	C3B-C4B	2.80	1.49	1.42
18	B	825	CLA	C3B-C4B	2.80	1.49	1.42
18	A	843	CLA	C3B-C4B	2.80	1.49	1.42
18	B	826	CLA	C3B-C4B	2.80	1.49	1.42
18	A	836	CLA	C3B-C4B	2.79	1.49	1.42
18	3	405	CLA	C3B-C4B	2.79	1.49	1.42
18	6	610	CLA	C3B-C4B	2.79	1.49	1.42
18	A	811	CLA	C3B-C4B	2.79	1.49	1.42
18	B	802	CLA	C3B-C4B	2.79	1.49	1.42
18	8	606	CLA	C4D-ND	-2.79	1.33	1.37
18	8	611	CLA	C3B-C4B	2.79	1.49	1.42
18	7	601	CLA	C3B-C4B	2.79	1.49	1.42
18	B	824	CLA	C3B-C4B	2.78	1.49	1.42
18	6	611	CLA	C4D-ND	-2.78	1.33	1.37
18	F	804	CLA	C3B-C4B	2.78	1.49	1.42
18	5	616	CLA	C3B-C4B	2.78	1.49	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	A	826	CLA	C3B-C4B	2.78	1.49	1.42
18	5	612	CLA	C3B-C4B	2.78	1.49	1.42
18	A	831	CLA	C3B-C4B	2.78	1.49	1.42
18	5	601	CLA	C4D-ND	-2.78	1.33	1.37
18	7	613	CLA	C3B-C4B	2.78	1.49	1.42
18	6	611	CLA	C3B-C4B	2.78	1.49	1.42
18	A	806	CLA	C3B-C4B	2.78	1.49	1.42
18	F	803	CLA	C3B-C4B	2.78	1.49	1.42
18	A	841	CLA	C3B-C4B	2.77	1.49	1.42
18	5	612	CLA	C4D-ND	-2.77	1.33	1.37
18	3	407	CLA	C3B-C4B	2.77	1.49	1.42
18	A	813	CLA	C3B-C4B	2.77	1.49	1.42
18	1	609	CLA	C3B-C4B	2.77	1.49	1.42
18	L	201	CLA	C3B-C4B	2.77	1.49	1.42
18	A	808	CLA	C3B-C4B	2.77	1.49	1.42
18	B	818	CLA	C3B-C4B	2.77	1.49	1.42
18	A	834	CLA	C3B-C4B	2.77	1.49	1.42
18	6	601	CLA	C3B-C4B	2.76	1.49	1.42
18	3	403	CLA	C3B-C4B	2.76	1.49	1.42
18	1	606	CLA	C4D-ND	-2.76	1.33	1.37
18	5	607	CLA	C3B-C4B	2.76	1.49	1.42
18	1	610	CLA	C3B-C4B	2.76	1.49	1.42
18	7	604	CLA	C3B-C4B	2.76	1.49	1.42
18	B	828	CLA	C3B-C4B	2.76	1.49	1.42
18	8	610	CLA	C3B-C4B	2.75	1.49	1.42
18	5	618	CLA	C3B-C4B	2.75	1.49	1.42
18	A	810	CLA	C3B-C4B	2.75	1.49	1.42
18	7	609	CLA	C3B-C4B	2.75	1.49	1.42
18	A	809	CLA	C3B-C4B	2.75	1.49	1.42
18	A	814	CLA	C3B-C4B	2.75	1.49	1.42
18	B	817	CLA	C3B-C4B	2.75	1.49	1.42
18	B	830	CLA	C3B-C4B	2.75	1.49	1.42
18	1	602	CLA	C1B-C2B	2.74	1.49	1.43
18	5	605	CLA	C3B-C4B	2.74	1.49	1.42
18	7	603	CLA	C3B-C4B	2.74	1.49	1.42
18	6	604	CLA	C3B-C4B	2.74	1.49	1.42
18	6	612	CLA	C3B-C4B	2.74	1.49	1.42
18	7	612	CLA	C3B-C4B	2.74	1.49	1.42
18	7	602	CLA	C3B-C4B	2.74	1.49	1.42
18	1	612	CLA	C3B-C4B	2.73	1.49	1.42
18	6	605	CLA	C3B-C4B	2.73	1.49	1.42
18	5	602	CLA	C3B-C4B	2.73	1.49	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	A	832	CLA	C3B-C4B	2.73	1.49	1.42
18	B	835	CLA	C3B-C4B	2.73	1.49	1.42
18	8	609	CLA	C3B-C4B	2.73	1.49	1.42
18	3	402	CLA	C3B-C4B	2.73	1.49	1.42
18	3	410	CLA	C3B-C4B	2.73	1.49	1.42
18	1	603	CLA	C4D-ND	-2.72	1.33	1.37
18	A	819	CLA	C3B-C4B	2.72	1.49	1.42
18	B	841	CLA	C3B-C4B	2.72	1.49	1.42
18	B	824	CLA	C1B-C2B	2.72	1.49	1.43
18	B	825	CLA	C1B-C2B	2.72	1.49	1.43
18	7	607	CLA	C3B-C4B	2.72	1.49	1.42
18	8	601	CLA	C3B-C4B	2.72	1.49	1.42
18	A	833	CLA	C3B-C4B	2.72	1.49	1.42
18	A	815	CLA	C3B-C4B	2.72	1.49	1.42
18	A	825	CLA	C3B-C4B	2.71	1.49	1.42
18	A	821	CLA	C3B-C4B	2.71	1.49	1.42
18	A	824	CLA	C3B-C4B	2.71	1.49	1.42
18	A	807	CLA	C3B-C4B	2.71	1.49	1.42
18	3	404	CLA	C3B-C4B	2.71	1.49	1.42
18	B	808	CLA	C3B-C4B	2.70	1.49	1.42
18	A	816	CLA	C3B-C4B	2.70	1.49	1.42
18	B	804	CLA	C3B-C4B	2.70	1.49	1.42
18	A	830	CLA	C3B-C4B	2.70	1.49	1.42
18	A	840	CLA	C3B-C4B	2.70	1.49	1.42
18	1	614	CLA	C1B-C2B	2.70	1.49	1.43
18	1	604	CLA	C1B-C2B	2.69	1.49	1.43
18	3	406	CLA	C3B-C4B	2.69	1.49	1.42
18	5	608	CLA	C3B-C4B	2.69	1.49	1.42
18	6	614	CLA	C3B-C4B	2.69	1.49	1.42
18	B	842	CLA	C3B-C4B	2.69	1.49	1.42
18	B	809	CLA	C3B-C4B	2.69	1.49	1.42
18	3	404	CLA	C1B-C2B	2.69	1.49	1.43
18	A	828	CLA	C3B-C4B	2.69	1.49	1.42
18	3	411	CLA	C3B-C4B	2.69	1.49	1.42
18	5	604	CLA	C1B-C2B	2.69	1.49	1.43
18	3	409	CLA	C1B-C2B	2.68	1.49	1.43
18	3	411	CLA	C1B-C2B	2.68	1.49	1.43
18	3	413	CLA	C3B-C4B	2.68	1.49	1.42
18	A	805	CLA	C3B-C4B	2.68	1.49	1.42
18	5	609	CLA	C3B-C4B	2.68	1.49	1.42
18	A	801	CLA	C1B-C2B	2.68	1.49	1.43
18	K	201	CLA	C1B-C2B	2.67	1.49	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	8	612	CLA	C3B-C4B	2.67	1.49	1.42
18	1	608	CLA	C4B-C3B	2.67	1.49	1.43
18	A	802	CLA	C3B-C4B	2.67	1.49	1.42
18	5	616	CLA	C1B-C2B	2.66	1.49	1.43
18	3	412	CLA	C1B-C2B	2.66	1.49	1.43
18	J	102	CLA	C1B-C2B	2.66	1.49	1.43
18	1	608	CLA	C1B-C2B	2.66	1.49	1.43
18	1	611	CLA	C1B-C2B	2.66	1.49	1.43
18	B	838	CLA	C3B-C4B	2.65	1.49	1.42
18	8	603	CLA	C1B-C2B	2.65	1.49	1.43
18	B	809	CLA	C1B-C2B	2.65	1.49	1.43
18	A	825	CLA	C1B-C2B	2.65	1.49	1.43
18	B	814	CLA	C1B-C2B	2.64	1.49	1.43
18	A	833	CLA	C1B-C2B	2.64	1.49	1.43
18	5	617	CLA	C1B-C2B	2.64	1.49	1.43
18	J	102	CLA	C3B-C4B	2.64	1.48	1.42
18	1	605	CLA	C1B-C2B	2.64	1.49	1.43
18	7	607	CLA	C1B-C2B	2.63	1.49	1.43
18	6	603	CLA	C4B-C3B	2.63	1.49	1.43
18	B	817	CLA	C1B-C2B	2.63	1.49	1.43
18	7	605	CLA	C3B-C4B	2.63	1.48	1.42
18	A	820	CLA	C1B-C2B	2.63	1.49	1.43
18	A	824	CLA	C1B-C2B	2.63	1.49	1.43
18	A	809	CLA	C1B-C2B	2.63	1.49	1.43
18	B	801	CLA	C4B-C3B	2.63	1.49	1.43
18	1	604	CLA	C4B-C3B	2.63	1.49	1.43
18	B	823	CLA	C1B-C2B	2.63	1.49	1.43
18	1	613	CLA	C4B-C3B	2.63	1.49	1.43
18	6	610	CLA	C1B-C2B	2.63	1.49	1.43
18	6	604	CLA	C1B-C2B	2.62	1.49	1.43
18	B	804	CLA	C1B-C2B	2.62	1.49	1.43
18	7	614	CLA	C1B-C2B	2.62	1.49	1.43
18	B	810	CLA	C3B-C4B	2.62	1.48	1.42
18	A	816	CLA	C1B-C2B	2.62	1.49	1.43
18	B	822	CLA	C1B-C2B	2.62	1.49	1.43
18	1	606	CLA	C1B-C2B	2.62	1.49	1.43
18	5	613	CLA	C1B-C2B	2.62	1.49	1.43
18	7	609	CLA	C1B-C2B	2.62	1.49	1.43
18	A	803	CLA	C4D-ND	-2.62	1.34	1.37
18	6	616	CLA	C4B-C3B	2.62	1.49	1.43
18	8	614	CLA	C4B-C3B	2.62	1.49	1.43
18	5	614	CLA	C1B-C2B	2.62	1.49	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	8	610	CLA	C1B-C2B	2.62	1.49	1.43
18	6	603	CLA	C1B-C2B	2.62	1.49	1.43
18	8	615	CLA	C4B-C3B	2.62	1.49	1.43
18	A	831	CLA	C1B-C2B	2.62	1.49	1.43
18	6	615	CLA	C1B-C2B	2.61	1.49	1.43
18	8	609	CLA	C1B-C2B	2.61	1.49	1.43
18	B	816	CLA	C3D-C4D	2.61	1.50	1.44
18	F	804	CLA	C1B-C2B	2.61	1.49	1.43
18	A	803	CLA	C1B-C2B	2.61	1.49	1.43
18	A	841	CLA	C1B-C2B	2.61	1.49	1.43
18	B	840	CLA	C1B-C2B	2.61	1.49	1.43
18	1	603	CLA	C1B-C2B	2.61	1.49	1.43
18	B	843	CLA	C1B-C2B	2.61	1.49	1.43
18	B	835	CLA	C1B-C2B	2.61	1.49	1.43
18	1	607	CLA	C1B-C2B	2.61	1.49	1.43
18	1	609	CLA	C1B-C2B	2.61	1.49	1.43
18	8	613	CLA	C1B-C2B	2.60	1.49	1.43
18	6	607	CLA	C1B-C2B	2.60	1.49	1.43
18	1	610	CLA	C1B-C2B	2.60	1.49	1.43
18	6	606	CLA	C4B-C3B	2.60	1.49	1.43
18	6	612	CLA	C1B-C2B	2.60	1.49	1.43
18	A	836	CLA	C1B-C2B	2.60	1.49	1.43
18	A	828	CLA	C1B-C2B	2.60	1.49	1.43
18	3	409	CLA	C4B-C3B	2.60	1.49	1.43
18	1	612	CLA	C1B-C2B	2.60	1.49	1.43
18	A	807	CLA	C1B-C2B	2.60	1.49	1.43
18	A	832	CLA	C1B-C2B	2.59	1.49	1.43
18	1	601	CLA	C1B-C2B	2.59	1.49	1.43
18	8	607	CLA	C1B-C2B	2.59	1.49	1.43
18	8	606	CLA	C4B-C3B	2.59	1.49	1.43
18	1	614	CLA	C4B-C3B	2.59	1.49	1.43
18	A	822	CLA	C1B-C2B	2.59	1.49	1.43
18	3	413	CLA	C1B-C2B	2.59	1.49	1.43
18	5	605	CLA	C1B-C2B	2.59	1.49	1.43
18	5	608	CLA	C1B-C2B	2.59	1.49	1.43
18	7	605	CLA	C1B-C2B	2.59	1.49	1.43
18	5	615	CLA	C1B-C2B	2.59	1.49	1.43
18	B	811	CLA	C3B-C4B	2.58	1.48	1.42
18	A	806	CLA	C1B-C2B	2.58	1.49	1.43
18	B	810	CLA	C1B-C2B	2.58	1.49	1.43
18	B	813	CLA	CAB-C3B	-2.58	1.44	1.50
18	5	606	CLA	C1B-C2B	2.58	1.49	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	B	833	CLA	C1B-C2B	2.58	1.49	1.43
18	8	612	CLA	C1B-C2B	2.58	1.49	1.43
18	B	812	CLA	C1B-C2B	2.58	1.49	1.43
18	7	608	CLA	C1B-C2B	2.58	1.49	1.43
18	A	843	CLA	C1B-C2B	2.58	1.49	1.43
18	B	832	CLA	C1B-C2B	2.58	1.49	1.43
18	6	611	CLA	C1B-C2B	2.58	1.49	1.43
18	K	202	CLA	C1B-C2B	2.58	1.49	1.43
18	1	606	CLA	C4B-C3B	2.58	1.49	1.43
18	B	816	CLA	C1B-C2B	2.58	1.49	1.43
18	B	838	CLA	C1B-C2B	2.58	1.49	1.43
18	B	821	CLA	C1B-C2B	2.57	1.49	1.43
18	K	203	CLA	C1B-C2B	2.57	1.49	1.43
18	B	842	CLA	CMB-C2B	-2.57	1.45	1.50
18	3	405	CLA	C1B-C2B	2.57	1.49	1.43
18	A	812	CLA	C1B-C2B	2.57	1.49	1.43
18	8	608	CLA	C3B-C4B	2.57	1.48	1.42
18	A	815	CLA	C1B-C2B	2.57	1.49	1.43
18	7	612	CLA	C1B-C2B	2.57	1.49	1.43
18	8	608	CLA	C1B-C2B	2.57	1.49	1.43
18	A	823	CLA	C1B-C2B	2.57	1.49	1.43
18	B	826	CLA	C1B-C2B	2.57	1.49	1.43
18	8	611	CLA	C1B-C2B	2.57	1.49	1.43
18	8	615	CLA	C1B-C2B	2.57	1.49	1.43
18	6	606	CLA	C1B-C2B	2.57	1.49	1.43
18	3	401	CLA	C1B-C2B	2.56	1.49	1.43
18	3	402	CLA	C1B-C2B	2.56	1.49	1.43
18	3	401	CLA	C3B-C4B	2.56	1.48	1.42
18	5	611	CLA	C1B-C2B	2.56	1.49	1.43
18	F	803	CLA	C1B-C2B	2.56	1.49	1.43
18	5	612	CLA	C1B-C2B	2.56	1.49	1.43
18	5	607	CLA	C1B-C2B	2.56	1.49	1.43
18	6	613	CLA	C1B-C2B	2.56	1.49	1.43
18	A	821	CLA	C1B-C2B	2.56	1.49	1.43
18	5	601	CLA	C1B-C2B	2.55	1.49	1.43
18	3	410	CLA	C1B-C2B	2.55	1.49	1.43
18	A	814	CLA	C1B-C2B	2.55	1.49	1.43
18	5	603	CLA	C1B-C2B	2.55	1.49	1.43
18	A	813	CLA	C1B-C2B	2.55	1.49	1.43
18	5	602	CLA	C1B-C2B	2.55	1.49	1.43
18	B	818	CLA	C1B-C2B	2.55	1.49	1.43
18	B	839	CLA	C1B-C2B	2.55	1.49	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	8	606	CLA	C1B-C2B	2.55	1.49	1.43
18	1	613	CLA	C1B-C2B	2.55	1.49	1.43
18	5	603	CLA	C4B-C3B	2.54	1.49	1.43
18	6	601	CLA	C1B-C2B	2.54	1.49	1.43
18	5	618	CLA	C1B-C2B	2.54	1.49	1.43
18	A	810	CLA	C1B-C2B	2.54	1.49	1.43
18	7	613	CLA	C1B-C2B	2.54	1.49	1.43
18	B	808	CLA	C1B-C2B	2.54	1.49	1.43
18	B	815	CLA	C1B-C2B	2.54	1.49	1.43
18	L	201	CLA	C1B-C2B	2.54	1.49	1.43
18	8	601	CLA	C1B-C2B	2.53	1.49	1.43
18	3	414	CLA	C1B-C2B	2.53	1.49	1.43
18	A	826	CLA	C1B-C2B	2.53	1.49	1.43
18	7	603	CLA	C1B-C2B	2.53	1.49	1.43
18	8	604	CLA	C1B-C2B	2.53	1.49	1.43
18	B	802	CLA	C1B-C2B	2.53	1.49	1.43
18	B	828	CLA	C1B-C2B	2.53	1.49	1.43
18	A	834	CLA	C1B-C2B	2.53	1.49	1.43
18	A	840	CLA	C1B-C2B	2.53	1.49	1.43
18	5	617	CLA	C4B-C3B	2.53	1.49	1.43
18	A	808	CLA	C1B-C2B	2.53	1.49	1.43
18	5	615	CLA	C4B-C3B	2.52	1.49	1.43
18	8	614	CLA	C1B-C2B	2.52	1.49	1.43
18	B	834	CLA	C4D-ND	-2.52	1.34	1.37
18	A	805	CLA	C1B-C2B	2.52	1.49	1.43
18	A	812	CLA	C4B-C3B	2.52	1.49	1.43
18	3	403	CLA	C1B-C2B	2.52	1.49	1.43
18	6	602	CLA	C1B-C2B	2.51	1.49	1.43
18	A	835	CLA	C1B-C2B	2.51	1.49	1.43
18	7	606	CLA	C1B-C2B	2.51	1.49	1.43
18	A	817	CLA	C1B-C2B	2.51	1.49	1.43
18	8	603	CLA	C4B-C3B	2.51	1.49	1.43
18	6	609	CLA	C1B-C2B	2.50	1.49	1.43
18	7	611	CLA	C1B-C2B	2.50	1.49	1.43
18	3	406	CLA	C1B-C2B	2.50	1.49	1.43
18	A	827	CLA	C1B-C2B	2.50	1.49	1.43
18	6	605	CLA	C1B-C2B	2.50	1.49	1.43
18	B	811	CLA	C1B-C2B	2.50	1.49	1.43
18	F	802	CLA	C1B-C2B	2.50	1.49	1.43
18	B	807	CLA	C1B-C2B	2.49	1.49	1.43
18	7	602	CLA	C1B-C2B	2.49	1.49	1.43
18	7	614	CLA	C4B-C3B	2.49	1.49	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	8	605	CLA	C1B-C2B	2.49	1.49	1.43
18	8	602	CLA	C1B-C2B	2.49	1.49	1.43
18	B	834	CLA	C1B-C2B	2.48	1.49	1.43
18	B	837	CLA	C1B-C2B	2.48	1.49	1.43
18	B	836	CLA	C1B-C2B	2.48	1.49	1.43
18	7	604	CLA	C1B-C2B	2.48	1.49	1.43
18	B	819	CLA	C1B-C2B	2.47	1.49	1.43
18	7	601	CLA	C1B-C2B	2.47	1.49	1.43
18	7	610	CLA	C1B-C2B	2.47	1.49	1.43
18	A	838	CLA	C1B-C2B	2.46	1.49	1.43
18	B	841	CLA	C1B-C2B	2.46	1.49	1.43
18	A	829	CLA	C1B-C2B	2.45	1.49	1.43
18	3	407	CLA	C1B-C2B	2.45	1.49	1.43
18	1	602	CLA	C3B-C4B	2.45	1.48	1.42
18	A	839	CLA	C1B-C2B	2.44	1.49	1.43
18	B	829	CLA	C1B-C2B	2.44	1.49	1.43
18	A	802	CLA	C1B-C2B	2.43	1.49	1.43
18	5	610	CLA	C1B-C2B	2.42	1.49	1.43
18	B	820	CLA	C1B-C2B	2.42	1.48	1.43
18	B	827	CLA	C1B-C2B	2.42	1.48	1.43
18	6	614	CLA	C1B-C2B	2.41	1.48	1.43
18	B	830	CLA	C1B-C2B	2.41	1.48	1.43
18	5	604	CLA	C4B-C3B	2.41	1.48	1.43
18	B	806	CLA	C1B-C2B	2.40	1.48	1.43
18	A	804	CLA	C1B-C2B	2.40	1.48	1.43
18	3	408	CLA	C1B-C2B	2.39	1.48	1.43
18	B	816	CLA	C4D-CHA	2.39	1.46	1.38
22	5	621	NEX	C7-C8	-2.38	1.28	1.32
18	6	616	CLA	C1B-C2B	2.38	1.48	1.43
18	B	830	CLA	CMD-C2D	-2.37	1.45	1.50
18	B	801	CLA	C1B-C2B	2.36	1.48	1.43
18	F	804	CLA	CMD-C2D	-2.34	1.45	1.50
18	B	832	CLA	CMD-C2D	-2.34	1.45	1.50
18	A	816	CLA	MG-NA	2.34	2.11	2.06
18	A	819	CLA	C1B-C2B	2.34	1.48	1.43
18	6	608	CLA	C1B-C2B	2.34	1.48	1.43
18	B	801	CLA	CMD-C2D	-2.34	1.45	1.50
18	A	801	CLA	CMD-C2D	-2.32	1.45	1.50
18	A	837	CLA	C1B-C2B	2.32	1.48	1.43
18	A	819	CLA	CMB-C2B	-2.30	1.45	1.50
18	B	838	CLA	CMC-C2C	-2.30	1.45	1.50
18	3	408	CLA	CMC-C2C	-2.30	1.45	1.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	5	609	CLA	C1B-C2B	2.29	1.48	1.43
18	5	609	CLA	CMB-C2B	-2.28	1.46	1.50
18	A	804	CLA	CHC-C1C	2.28	1.43	1.38
18	3	407	CLA	CMD-C2D	-2.28	1.46	1.50
18	B	803	CLA	C1B-C2B	2.28	1.48	1.43
18	A	818	CLA	C1B-C2B	2.28	1.48	1.43
18	5	604	CLA	CMB-C2B	-2.27	1.46	1.50
18	7	605	CLA	CMD-C2D	-2.27	1.46	1.50
18	F	802	CLA	CMC-C2C	-2.27	1.46	1.50
18	B	822	CLA	CMD-C2D	-2.26	1.46	1.50
18	3	412	CLA	CMD-C2D	-2.25	1.46	1.50
18	A	825	CLA	CMD-C2D	-2.25	1.46	1.50
18	6	608	CLA	CMC-C2C	-2.24	1.46	1.50
18	B	811	CLA	CMB-C2B	-2.24	1.46	1.50
18	A	811	CLA	CMB-C2B	-2.23	1.46	1.50
18	6	609	CLA	CMD-C2D	-2.23	1.46	1.50
18	B	803	CLA	CHC-C1C	2.23	1.43	1.38
18	B	805	CLA	CMC-C2C	-2.23	1.46	1.50
18	A	811	CLA	C1B-C2B	2.22	1.48	1.43
18	5	618	CLA	CMD-C2D	-2.22	1.46	1.50
18	8	609	CLA	CMC-C2C	-2.22	1.46	1.50
18	A	817	CLA	CMC-C2C	-2.22	1.46	1.50
18	B	831	CLA	CMC-C2C	-2.22	1.46	1.50
18	5	607	CLA	CMD-C2D	-2.21	1.46	1.50
18	A	835	CLA	CHC-C1C	2.20	1.43	1.38
18	B	806	CLA	CHC-C1C	2.20	1.43	1.38
18	6	613	CLA	CMD-C2D	-2.20	1.46	1.50
18	B	806	CLA	CMD-C2D	-2.19	1.46	1.50
18	A	827	CLA	CMC-C2C	-2.18	1.46	1.50
18	8	605	CLA	CHC-C1C	2.18	1.43	1.38
18	B	810	CLA	CMD-C2D	-2.18	1.46	1.50
18	B	804	CLA	CMD-C2D	-2.18	1.46	1.50
18	F	802	CLA	CMD-C2D	-2.18	1.46	1.50
18	7	613	CLA	CMD-C2D	-2.17	1.46	1.50
18	3	408	CLA	CHC-C1C	2.17	1.42	1.38
18	B	841	CLA	CMB-C2B	-2.17	1.46	1.50
18	3	411	CLA	CMD-C2D	-2.17	1.46	1.50
18	A	816	CLA	CMD-C2D	-2.17	1.46	1.50
18	B	807	CLA	CHC-C1C	2.16	1.42	1.38
18	1	614	CLA	CMD-C2D	-2.16	1.46	1.50
18	A	802	CLA	CMB-C2B	-2.16	1.46	1.50
18	A	805	CLA	CMB-C2B	-2.16	1.46	1.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	B	820	CLA	CMC-C2C	-2.16	1.46	1.50
18	6	608	CLA	CMB-C2B	-2.15	1.46	1.50
18	3	402	CLA	CMD-C2D	-2.15	1.46	1.50
18	5	607	CLA	CMC-C2C	-2.15	1.46	1.50
18	6	605	CLA	CMB-C2B	-2.15	1.46	1.50
18	A	805	CLA	CMC-C2C	-2.14	1.46	1.50
18	A	838	CLA	CMB-C2B	-2.14	1.46	1.50
18	5	602	CLA	CMC-C2C	-2.14	1.46	1.50
18	A	818	CLA	CHC-C1C	2.14	1.42	1.38
18	B	828	CLA	CMC-C2C	-2.14	1.46	1.50
18	8	608	CLA	CMD-C2D	-2.14	1.46	1.50
18	3	401	CLA	CMC-C2C	-2.14	1.46	1.50
18	5	610	CLA	CHC-C1C	2.14	1.42	1.38
18	B	805	CLA	CMD-C2D	-2.14	1.46	1.50
18	8	608	CLA	CMB-C2B	-2.13	1.46	1.50
18	A	821	CLA	CMB-C2B	-2.13	1.46	1.50
18	B	842	CLA	CMD-C2D	-2.13	1.46	1.50
18	B	827	CLA	CHC-C1C	2.13	1.42	1.38
18	3	409	CLA	CMD-C2D	-2.12	1.46	1.50
18	5	602	CLA	CMD-C2D	-2.12	1.46	1.50
18	6	603	CLA	CMD-C2D	-2.11	1.46	1.50
18	A	813	CLA	CMC-C2C	-2.11	1.46	1.50
18	A	829	CLA	CHC-C1C	2.11	1.42	1.38
18	7	603	CLA	CMD-C2D	-2.11	1.46	1.50
18	J	102	CLA	CMD-C2D	-2.11	1.46	1.50
18	6	608	CLA	CHC-C1C	2.11	1.42	1.38
18	3	406	CLA	CMB-C2B	-2.11	1.46	1.50
18	B	821	CLA	CMB-C2B	-2.11	1.46	1.50
18	B	830	CLA	CMC-C2C	-2.11	1.46	1.50
18	B	835	CLA	CMD-C2D	-2.11	1.46	1.50
18	A	820	CLA	CMD-C2D	-2.11	1.46	1.50
18	B	829	CLA	CMD-C2D	-2.11	1.46	1.50
18	B	830	CLA	CMB-C2B	-2.11	1.46	1.50
18	B	831	CLA	CMD-C2D	-2.11	1.46	1.50
18	8	613	CLA	CMD-C2D	-2.10	1.46	1.50
18	A	809	CLA	CMD-C2D	-2.10	1.46	1.50
18	8	606	CLA	CHC-C1C	2.10	1.42	1.38
18	B	812	CLA	CMD-C2D	-2.10	1.46	1.50
18	7	607	CLA	CMC-C2C	-2.10	1.46	1.50
18	A	840	CLA	CMD-C2D	-2.10	1.46	1.50
18	1	602	CLA	CMB-C2B	-2.10	1.46	1.50
18	A	828	CLA	CMC-C2C	-2.10	1.46	1.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	A	804	CLA	CMD-C2D	-2.10	1.46	1.50
18	B	811	CLA	CMD-C2D	-2.10	1.46	1.50
18	A	827	CLA	CHC-C1C	2.10	1.42	1.38
18	1	609	CLA	CMB-C2B	-2.10	1.46	1.50
18	7	601	CLA	CMB-C2B	-2.10	1.46	1.50
18	A	824	CLA	CMB-C2B	-2.10	1.46	1.50
18	8	602	CLA	CMD-C2D	-2.10	1.46	1.50
18	A	801	CLA	CMB-C2B	-2.10	1.46	1.50
18	A	834	CLA	CMD-C2D	-2.10	1.46	1.50
18	B	805	CLA	CHC-C1C	2.10	1.42	1.38
18	3	403	CLA	CMD-C2D	-2.10	1.46	1.50
18	5	615	CLA	CMB-C2B	-2.09	1.46	1.50
18	A	805	CLA	CMD-C2D	-2.09	1.46	1.50
18	B	839	CLA	CMD-C2D	-2.09	1.46	1.50
18	8	610	CLA	CMD-C2D	-2.09	1.46	1.50
18	B	831	CLA	CHC-C1C	2.09	1.42	1.38
18	5	610	CLA	CMD-C2D	-2.09	1.46	1.50
18	A	813	CLA	CMD-C2D	-2.09	1.46	1.50
18	A	831	CLA	CMD-C2D	-2.09	1.46	1.50
18	6	602	CLA	CHC-C1C	2.09	1.42	1.38
18	A	817	CLA	CMD-C2D	-2.09	1.46	1.50
18	A	824	CLA	CMD-C2D	-2.09	1.46	1.50
18	B	836	CLA	CHC-C1C	2.09	1.42	1.38
18	A	811	CLA	CMD-C2D	-2.09	1.46	1.50
18	B	820	CLA	CHC-C1C	2.09	1.42	1.38
18	3	407	CLA	CMB-C2B	-2.09	1.46	1.50
18	6	614	CLA	CMB-C2B	-2.08	1.46	1.50
18	7	605	CLA	CMB-C2B	-2.08	1.46	1.50
18	A	808	CLA	CMD-C2D	-2.08	1.46	1.50
18	B	807	CLA	CMC-C2C	-2.08	1.46	1.50
18	A	829	CLA	CMD-C2D	-2.08	1.46	1.50
18	B	839	CLA	CHC-C1C	2.08	1.42	1.38
18	B	822	CLA	CHC-C1C	2.08	1.42	1.38
18	B	840	CLA	CMD-C2D	-2.08	1.46	1.50
18	B	841	CLA	CMD-C2D	-2.08	1.46	1.50
18	5	602	CLA	MG-NB	-2.08	2.01	2.05
18	B	839	CLA	CMC-C2C	-2.08	1.46	1.50
18	7	602	CLA	CMD-C2D	-2.08	1.46	1.50
18	7	602	CLA	CHC-C1C	2.08	1.42	1.38
18	A	825	CLA	CMB-C2B	-2.08	1.46	1.50
18	B	801	CLA	CMB-C2B	-2.08	1.46	1.50
18	B	809	CLA	CMB-C2B	-2.08	1.46	1.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	A	807	CLA	CMD-C2D	-2.07	1.46	1.50
18	A	812	CLA	CMB-C2B	-2.07	1.46	1.50
18	B	804	CLA	CMB-C2B	-2.07	1.46	1.50
18	7	613	CLA	CMB-C2B	-2.07	1.46	1.50
18	A	830	CLA	CMC-C2C	-2.07	1.46	1.50
18	A	826	CLA	CHC-C1C	2.07	1.42	1.38
18	5	606	CLA	CMD-C2D	-2.07	1.46	1.50
18	3	406	CLA	CMD-C2D	-2.07	1.46	1.50
18	A	841	CLA	CMB-C2B	-2.07	1.46	1.50
18	B	817	CLA	CMD-C2D	-2.07	1.46	1.50
18	A	803	CLA	CMD-C2D	-2.07	1.46	1.50
18	B	829	CLA	CHC-C1C	2.07	1.42	1.38
18	K	201	CLA	CMD-C2D	-2.07	1.46	1.50
18	A	804	CLA	CMC-C2C	-2.07	1.46	1.50
18	A	826	CLA	CMD-C2D	-2.07	1.46	1.50
18	6	612	CLA	CMD-C2D	-2.07	1.46	1.50
18	7	610	CLA	CMD-C2D	-2.07	1.46	1.50
18	8	603	CLA	CMD-C2D	-2.07	1.46	1.50
18	3	401	CLA	CMB-C2B	-2.07	1.46	1.50
18	5	614	CLA	CMD-C2D	-2.07	1.46	1.50
18	B	824	CLA	CMB-C2B	-2.06	1.46	1.50
18	3	410	CLA	CMB-C2B	-2.06	1.46	1.50
18	7	601	CLA	CMC-C2C	-2.06	1.46	1.50
18	6	613	CLA	CHC-C1C	2.06	1.42	1.38
18	A	837	CLA	CMD-C2D	-2.06	1.46	1.50
18	B	843	CLA	CMD-C2D	-2.06	1.46	1.50
18	A	802	CLA	CMD-C2D	-2.06	1.46	1.50
18	B	833	CLA	CMD-C2D	-2.06	1.46	1.50
18	5	603	CLA	CMD-C2D	-2.06	1.46	1.50
18	6	601	CLA	CMD-C2D	-2.06	1.46	1.50
18	B	811	CLA	CBD-CAD	2.06	1.56	1.51
18	8	614	CLA	CMD-C2D	-2.06	1.46	1.50
18	A	805	CLA	CHC-C1C	2.06	1.42	1.38
18	8	601	CLA	CMB-C2B	-2.06	1.46	1.50
18	6	616	CLA	CMB-C2B	-2.06	1.46	1.50
18	B	819	CLA	CMB-C2B	-2.06	1.46	1.50
18	3	408	CLA	CMD-C2D	-2.06	1.46	1.50
18	A	833	CLA	CMD-C2D	-2.06	1.46	1.50
18	5	604	CLA	CMD-C2D	-2.06	1.46	1.50
18	B	815	CLA	CHC-C1C	2.06	1.42	1.38
18	A	819	CLA	CMD-C2D	-2.06	1.46	1.50
18	6	607	CLA	CHC-C1C	2.06	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	A	812	CLA	CMD-C2D	-2.06	1.46	1.50
18	A	819	CLA	CMC-C2C	-2.06	1.46	1.50
18	B	834	CLA	CMB-C2B	-2.06	1.46	1.50
18	B	810	CLA	CMB-C2B	-2.06	1.46	1.50
18	8	607	CLA	CHC-C1C	2.05	1.42	1.38
18	3	406	CLA	CMC-C2C	-2.05	1.46	1.50
18	5	617	CLA	CMD-C2D	-2.05	1.46	1.50
18	A	839	CLA	CMB-C2B	-2.05	1.46	1.50
18	3	411	CLA	CMB-C2B	-2.05	1.46	1.50
18	3	414	CLA	CMD-C2D	-2.05	1.46	1.50
18	B	812	CLA	CMB-C2B	-2.05	1.46	1.50
18	7	608	CLA	CHC-C1C	2.05	1.42	1.38
18	5	601	CLA	CMD-C2D	-2.05	1.46	1.50
18	A	806	CLA	CMB-C2B	-2.05	1.46	1.50
18	A	814	CLA	CMD-C2D	-2.05	1.46	1.50
18	8	602	CLA	CHC-C1C	2.05	1.42	1.38
18	6	609	CLA	CMC-C2C	-2.05	1.46	1.50
18	6	603	CLA	CMB-C2B	-2.05	1.46	1.50
18	B	803	CLA	CMD-C2D	-2.05	1.46	1.50
18	A	806	CLA	CMD-C2D	-2.05	1.46	1.50
18	A	823	CLA	CHC-C1C	2.05	1.42	1.38
18	3	414	CLA	CMB-C2B	-2.05	1.46	1.50
18	7	601	CLA	CMD-C2D	-2.05	1.46	1.50
18	A	828	CLA	CMD-C2D	-2.05	1.46	1.50
18	B	821	CLA	CHC-C1C	2.05	1.42	1.38
18	3	413	CLA	CMB-C2B	-2.05	1.46	1.50
18	7	612	CLA	CMD-C2D	-2.05	1.46	1.50
18	1	607	CLA	CMD-C2D	-2.05	1.46	1.50
18	A	820	CLA	CMB-C2B	-2.05	1.46	1.50
18	6	614	CLA	CMD-C2D	-2.05	1.46	1.50
18	B	807	CLA	CMD-C2D	-2.05	1.46	1.50
18	5	603	CLA	CMB-C2B	-2.05	1.46	1.50
18	F	803	CLA	CMD-C2D	-2.05	1.46	1.50
18	B	825	CLA	CMD-C2D	-2.05	1.46	1.50
18	A	818	CLA	CMB-C2B	-2.05	1.46	1.50
18	1	613	CLA	CMD-C2D	-2.05	1.46	1.50
18	A	821	CLA	CMD-C2D	-2.05	1.46	1.50
18	3	403	CLA	CMB-C2B	-2.04	1.46	1.50
18	8	602	CLA	CMB-C2B	-2.04	1.46	1.50
18	B	826	CLA	CHC-C1C	2.04	1.42	1.38
18	5	610	CLA	CMC-C2C	-2.04	1.46	1.50
18	7	603	CLA	CMB-C2B	-2.04	1.46	1.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	B	825	CLA	CMB-C2B	-2.04	1.46	1.50
18	B	834	CLA	CHC-C1C	2.04	1.42	1.38
18	8	604	CLA	CHC-C1C	2.04	1.42	1.38
18	7	604	CLA	CMB-C2B	-2.04	1.46	1.50
18	A	841	CLA	CMD-C2D	-2.04	1.46	1.50
18	B	808	CLA	CMD-C2D	-2.04	1.46	1.50
18	3	404	CLA	CHC-C1C	2.04	1.42	1.38
18	B	828	CLA	CMD-C2D	-2.04	1.46	1.50
18	1	608	CLA	CHC-C1C	2.04	1.42	1.38
18	5	602	CLA	CHC-C1C	2.04	1.42	1.38
18	7	614	CLA	CMB-C2B	-2.04	1.46	1.50
18	7	614	CLA	CMD-C2D	-2.04	1.46	1.50
18	3	410	CLA	CMD-C2D	-2.04	1.46	1.50
18	5	616	CLA	CMD-C2D	-2.04	1.46	1.50
18	5	605	CLA	CMD-C2D	-2.04	1.46	1.50
18	8	612	CLA	CMB-C2B	-2.04	1.46	1.50
18	A	830	CLA	CMD-C2D	-2.04	1.46	1.50
18	A	834	CLA	CMB-C2B	-2.04	1.46	1.50
18	B	802	CLA	CMB-C2B	-2.04	1.46	1.50
18	7	610	CLA	CHC-C1C	2.04	1.42	1.38
18	7	606	CLA	CMD-C2D	-2.04	1.46	1.50
18	B	827	CLA	CMD-C2D	-2.04	1.46	1.50
18	B	816	CLA	C4D-ND	-2.04	1.34	1.37
18	8	611	CLA	CMD-C2D	-2.04	1.46	1.50
18	A	810	CLA	CMD-C2D	-2.04	1.46	1.50
18	A	839	CLA	CMD-C2D	-2.04	1.46	1.50
18	A	837	CLA	CMB-C2B	-2.04	1.46	1.50
18	5	609	CLA	CMD-C2D	-2.03	1.46	1.50
18	A	816	CLA	CMB-C2B	-2.03	1.46	1.50
18	6	601	CLA	CHC-C1C	2.03	1.42	1.38
18	8	606	CLA	CMB-C2B	-2.03	1.46	1.50
18	8	614	CLA	CMB-C2B	-2.03	1.46	1.50
18	B	838	CLA	CMD-C2D	-2.03	1.46	1.50
18	8	601	CLA	CMD-C2D	-2.03	1.46	1.50
18	B	834	CLA	CMD-C2D	-2.03	1.46	1.50
18	K	203	CLA	CHC-C1C	2.03	1.42	1.38
18	1	605	CLA	CMD-C2D	-2.03	1.46	1.50
18	6	611	CLA	CMB-C2B	-2.03	1.46	1.50
18	A	829	CLA	CMB-C2B	-2.03	1.46	1.50
18	A	829	CLA	CMC-C2C	-2.03	1.46	1.50
18	B	837	CLA	CHC-C1C	2.03	1.42	1.38
18	5	612	CLA	CMB-C2B	-2.03	1.46	1.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	8	604	CLA	CMD-C2D	-2.03	1.46	1.50
18	B	842	CLA	C1B-C2B	2.03	1.48	1.43
18	B	823	CLA	CMD-C2D	-2.03	1.46	1.50
18	B	837	CLA	CMD-C2D	-2.03	1.46	1.50
18	8	615	CLA	CMD-C2D	-2.03	1.46	1.50
18	A	817	CLA	CHC-C1C	2.03	1.42	1.38
18	7	611	CLA	CMD-C2D	-2.03	1.46	1.50
18	6	609	CLA	CHC-C1C	2.03	1.42	1.38
18	6	610	CLA	CMD-C2D	-2.03	1.46	1.50
18	8	612	CLA	CMD-C2D	-2.03	1.46	1.50
18	A	827	CLA	CMD-C2D	-2.03	1.46	1.50
18	B	813	CLA	CHC-C1C	2.03	1.42	1.38
18	K	202	CLA	CMD-C2D	-2.02	1.46	1.50
18	6	601	CLA	CMB-C2B	-2.02	1.46	1.50
18	A	843	CLA	CMD-C2D	-2.02	1.46	1.50
18	B	815	CLA	CMD-C2D	-2.02	1.46	1.50
18	B	801	CLA	MG-ND	-2.02	2.01	2.05
18	A	833	CLA	CHC-C1C	2.02	1.42	1.38
18	7	609	CLA	CHC-C1C	2.02	1.42	1.38
18	A	809	CLA	CMB-C2B	-2.02	1.46	1.50
18	B	838	CLA	CMB-C2B	-2.02	1.46	1.50
18	5	615	CLA	CMD-C2D	-2.02	1.46	1.50
18	A	806	CLA	CMC-C2C	-2.02	1.46	1.50
18	1	606	CLA	CHC-C1C	2.02	1.42	1.38
18	7	602	CLA	CMC-C2C	-2.02	1.46	1.50
18	6	611	CLA	CMD-C2D	-2.02	1.46	1.50
18	3	405	CLA	CMB-C2B	-2.02	1.46	1.50
18	B	836	CLA	CMD-C2D	-2.02	1.46	1.50
18	1	605	CLA	CHC-C1C	2.02	1.42	1.38
18	7	611	CLA	CMC-C2C	-2.02	1.46	1.50
18	7	612	CLA	CMB-C2B	-2.02	1.46	1.50
18	B	806	CLA	CMC-C2C	-2.02	1.46	1.50
18	A	815	CLA	CMD-C2D	-2.02	1.46	1.50
18	5	606	CLA	CMB-C2B	-2.02	1.46	1.50
18	6	606	CLA	CMB-C2B	-2.02	1.46	1.50
18	A	813	CLA	CMB-C2B	-2.02	1.46	1.50
18	B	813	CLA	CMD-C2D	-2.02	1.46	1.50
18	6	610	CLA	CMB-C2B	-2.02	1.46	1.50
18	A	838	CLA	CMD-C2D	-2.02	1.46	1.50
18	B	840	CLA	CMB-C2B	-2.02	1.46	1.50
18	6	606	CLA	CHC-C1C	2.02	1.42	1.38
18	7	604	CLA	CMD-C2D	-2.02	1.46	1.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	B	835	CLA	CMC-C2C	-2.02	1.46	1.50
18	6	616	CLA	CHC-C1C	2.02	1.42	1.38
18	1	612	CLA	CMD-C2D	-2.02	1.46	1.50
18	A	835	CLA	CMD-C2D	-2.01	1.46	1.50
18	1	604	CLA	CHC-C1C	2.01	1.42	1.38
18	3	405	CLA	CMD-C2D	-2.01	1.46	1.50
18	1	611	CLA	CMD-C2D	-2.01	1.46	1.50
18	A	807	CLA	CMB-C2B	-2.01	1.46	1.50
18	7	606	CLA	CMB-C2B	-2.01	1.46	1.50
18	A	836	CLA	CMD-C2D	-2.01	1.46	1.50
18	A	840	CLA	CMB-C2B	-2.01	1.46	1.50
18	B	833	CLA	CMB-C2B	-2.01	1.46	1.50
18	F	802	CLA	CMB-C2B	-2.01	1.46	1.50
18	B	835	CLA	CMB-C2B	-2.01	1.46	1.50
18	A	812	CLA	CHC-C1C	2.01	1.42	1.38
18	5	607	CLA	CMB-C2B	-2.01	1.46	1.50
18	A	827	CLA	CMB-C2B	-2.01	1.46	1.50
18	1	613	CLA	CMB-C2B	-2.01	1.46	1.50
18	5	611	CLA	CMB-C2B	-2.01	1.46	1.50
18	5	612	CLA	CMD-C2D	-2.01	1.46	1.50
18	6	604	CLA	CMB-C2B	-2.01	1.46	1.50
18	A	831	CLA	CMB-C2B	-2.01	1.46	1.50
18	5	614	CLA	CHC-C1C	2.01	1.42	1.38
18	3	402	CLA	CMB-C2B	-2.01	1.46	1.50
18	B	818	CLA	CMD-C2D	-2.01	1.46	1.50
18	B	842	CLA	CAB-C3B	-2.01	1.42	1.47
18	1	613	CLA	CHC-C1C	2.01	1.42	1.38
18	8	603	CLA	CMB-C2B	-2.01	1.46	1.50
18	A	833	CLA	CMB-C2B	-2.01	1.46	1.50
18	B	824	CLA	CMD-C2D	-2.01	1.46	1.50
18	7	606	CLA	CHC-C1C	2.01	1.42	1.38
18	A	825	CLA	CMC-C2C	-2.01	1.46	1.50
18	6	608	CLA	CMD-C2D	-2.01	1.46	1.50
18	K	202	CLA	CMB-C2B	-2.01	1.46	1.50
18	B	818	CLA	CHC-C1C	2.01	1.42	1.38
18	7	609	CLA	CMC-C2C	-2.01	1.46	1.50
18	A	823	CLA	CMD-C2D	-2.01	1.46	1.50
18	B	828	CLA	CMB-C2B	-2.01	1.46	1.50
18	5	601	CLA	CHC-C1C	2.01	1.42	1.38
18	B	828	CLA	CHC-C1C	2.01	1.42	1.38
18	A	818	CLA	CMD-C2D	-2.00	1.46	1.50
18	8	606	CLA	CMD-C2D	-2.00	1.46	1.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	8	613	CLA	CMB-C2B	-2.00	1.46	1.50
18	B	809	CLA	CMD-C2D	-2.00	1.46	1.50
18	1	601	CLA	CHC-C1C	2.00	1.42	1.38
18	A	832	CLA	CMD-C2D	-2.00	1.46	1.50
18	B	826	CLA	CMD-C2D	-2.00	1.46	1.50
18	A	813	CLA	CHC-C1C	2.00	1.42	1.38
18	A	814	CLA	CMC-C2C	-2.00	1.46	1.50
18	5	617	CLA	CMB-C2B	-2.00	1.46	1.50
18	1	612	CLA	CMB-C2B	-2.00	1.46	1.50
18	7	614	CLA	CHC-C1C	2.00	1.42	1.38

All (1313) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	5	620	XAT	O24-C25-C24	9.27	120.34	113.38
22	5	621	NEX	O24-C25-C24	9.23	120.32	113.38
21	J	101	BCR	C7-C8-C9	-8.81	112.93	126.23
20	5	620	XAT	O4-C5-C4	8.49	119.76	113.38
20	8	616	XAT	O4-C5-C4	8.27	119.59	113.38
20	6	617	XAT	O24-C25-C24	8.23	119.56	113.38
20	6	617	XAT	O4-C5-C4	8.17	119.52	113.38
18	B	816	CLA	C4A-NA-C1A	8.01	110.31	106.71
20	3	416	XAT	O24-C25-C24	7.83	119.27	113.38
20	7	616	XAT	O24-C25-C24	7.15	118.75	113.38
20	8	616	XAT	O24-C25-C24	6.49	118.26	113.38
18	5	602	CLA	C4A-NA-C1A	6.23	109.51	106.71
18	B	834	CLA	C4A-NA-C1A	6.09	109.44	106.71
18	A	828	CLA	C4A-NA-C1A	5.94	109.38	106.71
18	A	825	CLA	C4A-NA-C1A	5.88	109.35	106.71
21	J	101	BCR	C11-C10-C9	-5.82	119.01	127.31
18	A	813	CLA	C4A-NA-C1A	5.81	109.32	106.71
20	3	416	XAT	O4-C5-C4	5.77	117.72	113.38
18	B	805	CLA	C4A-NA-C1A	5.74	109.29	106.71
18	5	606	CLA	C4A-NA-C1A	5.73	109.28	106.71
20	3	416	XAT	C6-C7-C8	-5.70	113.95	125.99
18	B	831	CLA	C4A-NA-C1A	5.64	109.24	106.71
18	3	401	CLA	C4A-NA-C1A	5.63	109.24	106.71
18	K	202	CLA	C4A-NA-C1A	5.63	109.23	106.71
18	6	607	CLA	C4A-NA-C1A	5.62	109.23	106.71
18	B	812	CLA	C4A-NA-C1A	5.62	109.23	106.71
21	A	847	BCR	C11-C10-C9	-5.62	119.29	127.31
18	1	606	CLA	C4A-NA-C1A	5.57	109.21	106.71

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	7	616	XAT	O4-C5-C4	5.55	117.55	113.38
20	3	416	XAT	C18-C5-C6	-5.52	113.01	122.26
18	A	830	CLA	C4A-NA-C1A	5.51	109.19	106.71
18	A	809	CLA	C4A-NA-C1A	5.48	109.17	106.71
18	5	617	CLA	C4A-NA-C1A	5.47	109.17	106.71
18	5	601	CLA	C4A-NA-C1A	5.44	109.15	106.71
18	B	820	CLA	C4A-NA-C1A	5.43	109.15	106.71
18	8	614	CLA	C4A-NA-C1A	5.42	109.14	106.71
18	B	840	CLA	C4A-NA-C1A	5.41	109.14	106.71
20	7	616	XAT	C18-C5-C6	-5.38	113.24	122.26
18	6	616	CLA	C4A-NA-C1A	5.34	109.11	106.71
18	A	836	CLA	C4A-NA-C1A	5.32	109.10	106.71
18	A	821	CLA	C4A-NA-C1A	5.28	109.08	106.71
20	3	416	XAT	C38-C25-C26	-5.28	113.41	122.26
18	B	828	CLA	C4A-NA-C1A	5.27	109.08	106.71
18	B	807	CLA	C4A-NA-C1A	5.26	109.07	106.71
20	3	416	XAT	C26-C27-C28	-5.24	114.91	125.99
18	1	603	CLA	C4A-NA-C1A	5.23	109.06	106.71
18	6	609	CLA	C4A-NA-C1A	5.22	109.05	106.71
18	A	820	CLA	C4A-NA-C1A	5.22	109.05	106.71
18	F	803	CLA	C4A-NA-C1A	5.20	109.04	106.71
18	A	829	CLA	C4A-NA-C1A	5.19	109.04	106.71
18	A	832	CLA	C4A-NA-C1A	5.19	109.04	106.71
18	6	602	CLA	C4A-NA-C1A	5.19	109.04	106.71
20	7	616	XAT	C38-C25-C26	-5.19	113.57	122.26
18	8	611	CLA	C4A-NA-C1A	5.19	109.04	106.71
20	5	620	XAT	C6-C7-C8	-5.18	115.04	125.99
18	A	812	CLA	C4A-NA-C1A	5.18	109.03	106.71
18	B	826	CLA	C4A-NA-C1A	5.17	109.03	106.71
18	A	835	CLA	C4A-NA-C1A	5.16	109.03	106.71
20	7	616	XAT	O4-C5-C18	5.14	121.22	115.06
18	A	833	CLA	C4A-NA-C1A	5.12	109.01	106.71
18	1	614	CLA	C4A-NA-C1A	5.12	109.01	106.71
18	B	801	CLA	C4A-NA-C1A	5.11	109.00	106.71
18	8	603	CLA	C4A-NA-C1A	5.10	109.00	106.71
18	3	403	CLA	C4A-NA-C1A	5.10	109.00	106.71
20	8	616	XAT	C38-C25-C26	-5.10	113.72	122.26
18	5	603	CLA	C4A-NA-C1A	5.08	108.99	106.71
18	A	824	CLA	C4A-NA-C1A	5.08	108.99	106.71
18	B	841	CLA	C4A-NA-C1A	5.07	108.99	106.71
21	F	801	BCR	C20-C21-C22	-5.06	120.09	127.31
21	3	417	BCR	C3-C4-C5	-5.05	105.05	114.08

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	1	610	CLA	C4A-NA-C1A	5.05	108.98	106.71
18	A	840	CLA	C4A-NA-C1A	5.05	108.98	106.71
18	5	612	CLA	C4A-NA-C1A	5.05	108.98	106.71
18	A	805	CLA	C4A-NA-C1A	5.00	108.95	106.71
18	A	810	CLA	C4A-NA-C1A	5.00	108.95	106.71
18	B	809	CLA	C4A-NA-C1A	4.99	108.95	106.71
18	6	604	CLA	C4A-NA-C1A	4.98	108.94	106.71
21	A	845	BCR	C7-C8-C9	-4.97	118.73	126.23
18	B	814	CLA	C4A-NA-C1A	4.96	108.94	106.71
18	B	839	CLA	C4A-NA-C1A	4.96	108.94	106.71
18	7	607	CLA	C4A-NA-C1A	4.96	108.93	106.71
18	B	802	CLA	C4A-NA-C1A	4.96	108.93	106.71
18	B	825	CLA	C4A-NA-C1A	4.95	108.93	106.71
20	6	617	XAT	C18-C5-C6	-4.95	113.96	122.26
18	7	603	CLA	C4A-NA-C1A	4.95	108.93	106.71
18	B	816	CLA	C2A-C1A-CHA	4.95	130.38	122.71
18	B	843	CLA	C4A-NA-C1A	4.94	108.93	106.71
20	8	616	XAT	C18-C5-C6	-4.93	114.00	122.26
21	A	847	BCR	C16-C17-C18	-4.93	120.28	127.31
18	7	604	CLA	C4A-NA-C1A	4.92	108.92	106.71
20	8	616	XAT	C35-C34-C33	-4.92	120.29	127.31
18	6	603	CLA	C4A-NA-C1A	4.90	108.91	106.71
18	A	829	CLA	CAA-C2A-C3A	-4.89	99.38	112.78
18	6	601	CLA	C4A-NA-C1A	4.88	108.90	106.71
18	A	808	CLA	C4A-NA-C1A	4.87	108.89	106.71
18	B	815	CLA	C4A-NA-C1A	4.86	108.89	106.71
18	A	841	CLA	C4A-NA-C1A	4.85	108.89	106.71
18	6	605	CLA	C4A-NA-C1A	4.84	108.88	106.71
20	3	416	XAT	O4-C5-C18	4.83	120.85	115.06
18	A	807	CLA	C4A-NA-C1A	4.83	108.88	106.71
20	6	617	XAT	C38-C25-C26	-4.82	114.17	122.26
18	8	604	CLA	C4A-NA-C1A	4.81	108.87	106.71
18	1	601	CLA	C4A-NA-C1A	4.80	108.87	106.71
18	B	835	CLA	C4A-NA-C1A	4.80	108.86	106.71
18	1	609	CLA	C4A-NA-C1A	4.79	108.86	106.71
22	5	621	NEX	C38-C25-C26	-4.78	114.24	122.26
18	A	827	CLA	C4A-NA-C1A	4.78	108.85	106.71
18	3	411	CLA	C4A-NA-C1A	4.77	108.85	106.71
18	B	808	CLA	C4A-NA-C1A	4.77	108.85	106.71
18	3	402	CLA	C4A-NA-C1A	4.76	108.85	106.71
21	A	847	BCR	C20-C21-C22	-4.75	120.53	127.31
18	B	842	CLA	C4A-NA-C1A	4.75	108.84	106.71

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	7	616	XAT	C6-C7-C8	-4.74	115.96	125.99
18	A	806	CLA	C4A-NA-C1A	4.74	108.84	106.71
18	3	405	CLA	C4A-NA-C1A	4.73	108.83	106.71
20	8	616	XAT	O24-C25-C38	4.73	120.72	115.06
18	8	610	CLA	C4A-NA-C1A	4.72	108.83	106.71
18	A	837	CLA	C4A-NA-C1A	4.72	108.83	106.71
18	B	817	CLA	C4A-NA-C1A	4.72	108.83	106.71
21	F	801	BCR	C24-C23-C22	-4.70	119.14	126.23
18	3	406	CLA	C4A-NA-C1A	4.70	108.82	106.71
22	5	621	NEX	C31-C30-C29	-4.70	120.61	127.31
18	8	603	CLA	CAA-C2A-C3A	-4.70	105.14	116.10
18	8	613	CLA	C4A-NA-C1A	4.69	108.81	106.71
18	7	609	CLA	C4A-NA-C1A	4.67	108.81	106.71
18	7	601	CLA	C4A-NA-C1A	4.67	108.81	106.71
18	A	802	CLA	C4A-NA-C1A	4.67	108.80	106.71
18	A	831	CLA	C4A-NA-C1A	4.67	108.80	106.71
18	7	614	CLA	C4A-NA-C1A	4.66	108.80	106.71
18	3	404	CLA	C4A-NA-C1A	4.66	108.80	106.71
18	8	609	CLA	C4A-NA-C1A	4.66	108.80	106.71
18	7	602	CLA	C4A-NA-C1A	4.64	108.79	106.71
18	5	605	CLA	C4A-NA-C1A	4.64	108.79	106.71
21	J	101	BCR	C15-C14-C13	-4.64	120.69	127.31
18	B	818	CLA	C4A-NA-C1A	4.63	108.79	106.71
18	6	610	CLA	C4A-NA-C1A	4.62	108.78	106.71
18	B	826	CLA	CAA-C2A-C3A	-4.62	105.32	116.10
18	1	606	CLA	CAA-C2A-C3A	-4.61	105.33	116.10
20	3	416	XAT	C15-C14-C13	-4.60	120.74	127.31
18	5	607	CLA	C4A-NA-C1A	4.60	108.77	106.71
18	A	815	CLA	C4A-NA-C1A	4.60	108.77	106.71
18	K	203	CLA	C4A-NA-C1A	4.57	108.76	106.71
18	5	608	CLA	C4A-NA-C1A	4.56	108.76	106.71
18	7	608	CLA	C4A-NA-C1A	4.55	108.75	106.71
18	1	612	CLA	C4A-NA-C1A	4.54	108.75	106.71
18	A	823	CLA	C4A-NA-C1A	4.53	108.74	106.71
18	5	614	CLA	C4A-NA-C1A	4.53	108.74	106.71
19	5	619	LUT	C35-C34-C33	-4.53	120.85	127.31
18	1	608	CLA	C4A-NA-C1A	4.51	108.73	106.71
18	A	822	CLA	C4A-NA-C1A	4.51	108.73	106.71
21	A	847	BCR	C15-C14-C13	-4.50	120.89	127.31
18	6	614	CLA	C4A-NA-C1A	4.50	108.73	106.71
18	A	837	CLA	CAA-C2A-C3A	-4.49	105.62	116.10
18	5	609	CLA	C4A-NA-C1A	4.49	108.72	106.71

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	B	821	CLA	C4A-NA-C1A	4.49	108.72	106.71
18	F	804	CLA	C4A-NA-C1A	4.49	108.72	106.71
18	6	606	CLA	C4A-NA-C1A	4.48	108.72	106.71
20	5	620	XAT	C38-C25-C26	-4.47	114.76	122.26
20	6	617	XAT	C6-C7-C8	-4.47	116.54	125.99
20	8	616	XAT	C26-C27-C28	-4.47	116.55	125.99
21	A	844	BCR	C15-C14-C13	-4.47	120.94	127.31
18	B	819	CLA	C4A-NA-C1A	4.47	108.71	106.71
18	K	201	CLA	C4A-NA-C1A	4.47	108.71	106.71
18	3	409	CLA	C4A-NA-C1A	4.46	108.71	106.71
18	7	612	CLA	C4A-NA-C1A	4.45	108.70	106.71
18	3	412	CLA	C4A-NA-C1A	4.44	108.70	106.71
18	3	413	CLA	C4A-NA-C1A	4.44	108.70	106.71
21	A	847	BCR	C7-C8-C9	-4.42	119.55	126.23
18	8	612	CLA	C4A-NA-C1A	4.42	108.69	106.71
18	5	604	CLA	C4A-NA-C1A	4.41	108.69	106.71
18	8	601	CLA	C4A-NA-C1A	4.41	108.69	106.71
18	B	803	CLA	C4A-NA-C1A	4.41	108.69	106.71
18	B	816	CLA	CBD-CHA-C1A	4.40	133.69	128.50
20	7	616	XAT	O24-C25-C38	4.39	120.32	115.06
21	J	101	BCR	C28-C27-C26	-4.39	106.24	114.08
18	6	608	CLA	C4A-NA-C1A	4.38	108.67	106.71
18	B	837	CLA	C4A-NA-C1A	4.38	108.67	106.71
21	3	417	BCR	C24-C23-C22	-4.38	119.62	126.23
18	A	817	CLA	C4A-NA-C1A	4.37	108.67	106.71
18	7	605	CLA	C4A-NA-C1A	4.36	108.67	106.71
18	A	826	CLA	C4A-NA-C1A	4.36	108.67	106.71
20	8	616	XAT	C6-C7-C8	-4.36	116.78	125.99
18	B	833	CLA	C4A-NA-C1A	4.34	108.66	106.71
20	7	616	XAT	C26-C27-C28	-4.34	116.82	125.99
18	1	604	CLA	C4A-NA-C1A	4.31	108.64	106.71
18	8	608	CLA	C4A-NA-C1A	4.31	108.64	106.71
18	B	810	CLA	C4A-NA-C1A	4.31	108.64	106.71
21	A	845	BCR	C16-C17-C18	-4.29	121.19	127.31
18	J	102	CLA	C4A-NA-C1A	4.28	108.63	106.71
18	6	615	CLA	C4A-NA-C1A	4.28	108.63	106.71
21	A	844	BCR	C24-C23-C22	-4.25	119.82	126.23
18	8	602	CLA	C4A-NA-C1A	4.25	108.61	106.71
18	1	607	CLA	C4A-NA-C1A	4.24	108.61	106.71
21	A	845	BCR	C11-C10-C9	-4.23	121.27	127.31
18	7	611	CLA	C4A-NA-C1A	4.23	108.61	106.71
18	6	613	CLA	C4A-NA-C1A	4.23	108.61	106.71

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	3	415	LUT	C35-C34-C33	-4.23	121.28	127.31
18	7	613	CLA	C4A-NA-C1A	4.22	108.60	106.71
18	B	830	CLA	C4A-NA-C1A	4.22	108.60	106.71
18	3	410	CLA	C4A-NA-C1A	4.21	108.60	106.71
18	B	811	CLA	C4A-NA-C1A	4.21	108.60	106.71
18	B	843	CLA	CAA-C2A-C3A	-4.20	106.29	116.10
18	1	605	CLA	C4A-NA-C1A	4.19	108.59	106.71
20	6	617	XAT	C26-C27-C28	-4.17	117.17	125.99
19	7	615	LUT	C35-C34-C33	-4.16	121.37	127.31
18	8	607	CLA	C4A-NA-C1A	4.16	108.58	106.71
20	5	620	XAT	C18-C5-C6	-4.16	115.29	122.26
18	7	606	CLA	C4A-NA-C1A	4.15	108.57	106.71
21	3	417	BCR	C16-C17-C18	-4.14	121.40	127.31
21	A	845	BCR	C15-C14-C13	-4.14	121.40	127.31
18	A	834	CLA	C4A-NA-C1A	4.11	108.55	106.71
18	6	612	CLA	C4A-NA-C1A	4.10	108.55	106.71
18	8	615	CLA	C4A-NA-C1A	4.09	108.55	106.71
21	A	844	BCR	C20-C21-C22	-4.08	121.48	127.31
18	A	838	CLA	C4A-NA-C1A	4.07	108.54	106.71
20	5	620	XAT	C26-C27-C28	-4.06	117.41	125.99
18	8	605	CLA	C4A-NA-C1A	4.05	108.53	106.71
22	5	621	NEX	C35-C34-C33	-4.05	121.53	127.31
20	8	616	XAT	O4-C5-C18	4.05	119.90	115.06
18	5	615	CLA	C4A-NA-C1A	4.02	108.51	106.71
21	F	801	BCR	C11-C10-C9	-4.02	121.57	127.31
18	5	613	CLA	C4A-NA-C1A	4.02	108.51	106.71
18	F	802	CLA	C4A-NA-C1A	4.00	108.50	106.71
18	B	824	CLA	C4A-NA-C1A	3.94	108.48	106.71
22	5	621	NEX	C11-C10-C9	-3.94	121.69	127.31
18	1	611	CLA	C4A-NA-C1A	3.93	108.47	106.71
18	A	818	CLA	C4A-NA-C1A	3.93	108.47	106.71
18	B	827	CLA	C4A-NA-C1A	3.92	108.47	106.71
20	5	620	XAT	C15-C14-C13	-3.91	121.73	127.31
18	5	612	CLA	CAA-C2A-C3A	-3.90	104.50	114.26
18	5	611	CLA	C4A-NA-C1A	3.90	108.46	106.71
21	F	801	BCR	C7-C8-C9	-3.89	120.35	126.23
18	B	836	CLA	C4A-NA-C1A	3.89	108.46	106.71
22	5	621	NEX	C27-C28-C29	-3.88	119.50	125.53
21	3	417	BCR	C20-C21-C22	-3.88	121.77	127.31
18	B	813	CLA	C4A-NA-C1A	3.87	108.45	106.71
19	5	619	LUT	C18-C5-C6	-3.87	120.18	124.53
18	6	611	CLA	C4A-NA-C1A	3.87	108.45	106.71

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	6	611	CLA	CAA-C2A-C3A	-3.86	104.62	114.26
18	3	414	CLA	C4A-NA-C1A	3.85	108.44	106.71
18	A	819	CLA	C4A-NA-C1A	3.85	108.44	106.71
18	B	838	CLA	C4A-NA-C1A	3.84	108.43	106.71
21	J	101	BCR	C20-C21-C22	-3.84	121.83	127.31
21	J	101	BCR	C16-C17-C18	-3.83	121.84	127.31
18	B	832	CLA	C4A-NA-C1A	3.81	108.42	106.71
18	L	201	CLA	C4A-NA-C1A	3.80	108.42	106.71
18	B	822	CLA	C4A-NA-C1A	3.80	108.42	106.71
22	5	621	NEX	C15-C14-C13	-3.80	121.89	127.31
21	A	847	BCR	C24-C23-C22	-3.79	120.51	126.23
18	A	814	CLA	C4A-NA-C1A	3.79	108.41	106.71
21	A	845	BCR	C4-C5-C6	-3.79	117.23	122.73
18	A	804	CLA	C4A-NA-C1A	3.78	108.41	106.71
18	7	610	CLA	C4A-NA-C1A	3.77	108.40	106.71
20	5	620	XAT	C35-C34-C33	-3.77	121.93	127.31
18	F	803	CLA	CBD-CHA-C1A	3.77	133.46	127.43
21	A	844	BCR	C7-C8-C9	-3.77	120.54	126.23
18	B	829	CLA	C4A-NA-C1A	3.75	108.39	106.71
20	3	416	XAT	C4-C3-C2	-3.74	103.55	110.77
21	A	845	BCR	C1-C6-C5	-3.73	117.36	122.61
22	5	621	NEX	O24-C25-C38	3.72	119.52	115.06
18	1	613	CLA	C4A-NA-C1A	3.72	108.38	106.71
19	3	415	LUT	C15-C14-C13	-3.72	122.00	127.31
21	J	101	BCR	C3-C4-C5	-3.71	107.46	114.08
21	3	417	BCR	C15-C14-C13	-3.70	122.03	127.31
18	A	821	CLA	O2D-CGD-O1D	-3.69	116.62	123.84
18	A	802	CLA	CAA-C2A-C3A	-3.68	105.08	114.26
18	3	408	CLA	C4A-NA-C1A	3.67	108.36	106.71
18	B	823	CLA	C4A-NA-C1A	3.67	108.36	106.71
18	5	603	CLA	CAA-C2A-C3A	-3.67	105.08	114.26
19	5	619	LUT	C15-C14-C13	-3.67	122.08	127.31
21	A	844	BCR	C11-C10-C9	-3.67	122.08	127.31
18	3	407	CLA	C4A-NA-C1A	3.66	108.35	106.71
18	1	602	CLA	C4A-NA-C1A	3.65	108.35	106.71
18	8	611	CLA	CAA-C2A-C3A	-3.65	105.14	114.26
18	B	816	CLA	C4D-CHA-C1A	-3.65	116.81	121.25
18	3	402	CLA	CAA-C2A-C3A	-3.62	105.21	114.26
18	A	839	CLA	C4A-NA-C1A	3.62	108.33	106.71
18	A	803	CLA	C4A-NA-C1A	3.61	108.33	106.71
20	5	620	XAT	C30-C31-C32	-3.60	111.98	123.22
19	5	619	LUT	C7-C8-C9	-3.59	120.81	126.23

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	6	617	XAT	O24-C25-C38	3.57	119.34	115.06
20	6	617	XAT	O4-C5-C18	3.57	119.33	115.06
20	3	416	XAT	O24-C25-C38	3.56	119.32	115.06
18	5	616	CLA	C4A-NA-C1A	3.55	108.30	106.71
21	A	844	BCR	C38-C26-C25	-3.55	120.54	124.53
18	B	806	CLA	C4A-NA-C1A	3.53	108.29	106.71
18	6	616	CLA	CBD-CHA-C1A	3.53	133.08	127.43
18	5	617	CLA	CAA-C2A-C3A	-3.52	105.46	114.26
18	B	816	CLA	CHB-C4A-NA	3.49	129.34	124.51
18	A	806	CLA	CAA-C2A-C3A	-3.49	105.55	114.26
18	A	827	CLA	O2D-CGD-O1D	-3.48	117.03	123.84
21	A	847	BCR	C38-C26-C25	-3.48	120.62	124.53
21	F	801	BCR	C3-C4-C5	-3.47	107.88	114.08
18	1	605	CLA	CBD-CHA-C1A	3.46	131.72	128.06
18	L	201	CLA	O2D-CGD-O1D	-3.46	117.07	123.84
21	A	844	BCR	C16-C17-C18	-3.44	122.40	127.31
18	A	811	CLA	C4A-NA-C1A	3.43	108.25	106.71
21	A	845	BCR	C20-C21-C22	-3.43	122.42	127.31
18	A	821	CLA	C2A-C3A-C4A	-3.41	102.51	106.26
20	3	416	XAT	C35-C34-C33	-3.40	122.45	127.31
18	B	831	CLA	O2D-CGD-O1D	-3.40	117.19	123.84
18	B	830	CLA	CMB-C2B-C1B	-3.40	120.19	125.37
20	6	617	XAT	C15-C14-C13	-3.39	122.47	127.31
18	5	614	CLA	C2A-C3A-C4A	-3.38	102.53	106.26
21	F	801	BCR	C38-C26-C25	-3.38	120.73	124.53
18	7	613	CLA	O2D-CGD-O1D	-3.38	117.23	123.84
18	B	838	CLA	CAA-C2A-C3A	-3.38	103.54	112.78
18	5	606	CLA	CAA-C2A-C3A	-3.36	105.86	114.26
20	7	616	XAT	C4-C3-C2	-3.35	104.30	110.77
20	6	617	XAT	C35-C34-C33	-3.35	122.53	127.31
18	6	612	CLA	CAA-C2A-C3A	-3.35	103.61	112.78
18	A	819	CLA	O2D-CGD-O1D	-3.34	117.30	123.84
20	8	616	XAT	C15-C14-C13	-3.34	122.54	127.31
18	B	837	CLA	CMB-C2B-C1B	-3.33	120.29	125.37
18	B	828	CLA	CAA-C2A-C3A	-3.33	105.93	114.26
21	F	801	BCR	C15-C14-C13	-3.33	122.56	127.31
20	5	620	XAT	O24-C25-C38	3.30	119.01	115.06
19	3	415	LUT	C31-C30-C29	-3.30	122.61	127.31
20	7	616	XAT	C30-C31-C32	-3.29	112.95	123.22
18	5	610	CLA	C4A-NA-C1A	3.29	108.19	106.71
18	B	801	CLA	CHB-C4A-NA	3.28	129.05	124.51
18	F	803	CLA	CAA-C2A-C3A	-3.28	106.07	114.26

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	F	801	BCR	C16-C15-C14	-3.27	116.78	123.47
18	B	842	CLA	O2D-CGD-O1D	-3.24	117.50	123.84
18	6	616	CLA	CAA-C2A-C3A	-3.23	106.18	114.26
18	K	202	CLA	CAA-C2A-C3A	-3.23	106.18	114.26
18	5	604	CLA	O2D-CGD-O1D	-3.23	117.52	123.84
18	B	802	CLA	O2D-CGD-O1D	-3.22	117.54	123.84
18	B	804	CLA	C4A-NA-C1A	3.21	108.15	106.71
18	A	816	CLA	O2D-CGD-O1D	-3.20	117.59	123.84
20	3	416	XAT	C30-C31-C32	-3.18	113.28	123.22
18	B	835	CLA	CAA-C2A-C3A	-3.18	108.68	116.10
18	1	611	CLA	CBD-CHA-C1A	3.17	132.23	128.50
18	B	842	CLA	CHB-C1B-NB	3.16	127.60	124.26
18	B	820	CLA	O2D-CGD-O1D	-3.15	117.68	123.84
18	5	613	CLA	O2D-CGD-O1D	-3.15	117.68	123.84
18	B	829	CLA	O2D-CGD-O1D	-3.14	117.70	123.84
20	6	617	XAT	C15-C35-C34	-3.14	117.05	123.47
18	8	606	CLA	C4A-NA-C1A	3.13	108.11	106.71
18	A	811	CLA	O2D-CGD-O1D	-3.13	117.72	123.84
18	8	609	CLA	O2D-CGD-O1D	-3.12	117.73	123.84
20	8	616	XAT	C10-C11-C12	-3.12	113.47	123.22
18	1	613	CLA	C2A-C3A-C4A	-3.12	102.82	106.26
18	K	203	CLA	CAA-C2A-C3A	-3.12	108.82	116.10
19	7	615	LUT	C31-C30-C29	-3.12	122.86	127.31
18	3	410	CLA	C2A-C1A-CHA	3.12	129.31	123.86
18	1	612	CLA	O2D-CGD-O1D	-3.12	117.75	123.84
18	B	805	CLA	CHB-C1B-C2B	-3.11	123.61	130.42
21	A	847	BCR	C33-C5-C6	-3.10	121.04	124.53
18	L	201	CLA	O2D-CGD-CBD	3.10	116.78	111.27
21	J	101	BCR	C33-C5-C6	-3.10	121.05	124.53
18	1	601	CLA	O2D-CGD-O1D	-3.09	117.07	124.09
18	5	601	CLA	CAA-C2A-C3A	-3.09	106.53	114.26
18	1	612	CLA	CBD-CHA-C1A	3.08	132.13	128.50
18	B	803	CLA	CMB-C2B-C1B	-3.08	120.68	125.37
21	A	845	BCR	C33-C5-C4	3.08	119.53	113.62
19	7	615	LUT	C15-C14-C13	-3.08	122.92	127.31
18	5	618	CLA	CAA-C2A-C3A	-3.07	108.94	116.10
18	6	611	CLA	C2A-C1A-CHA	3.05	129.19	123.86
18	7	611	CLA	CMB-C2B-C1B	-3.05	120.72	125.37
21	A	845	BCR	C24-C23-C22	-3.05	121.63	126.23
18	B	801	CLA	O2D-CGD-O1D	-3.04	117.89	123.84
18	7	612	CLA	O2D-CGD-O1D	-3.04	117.89	123.84
18	6	603	CLA	CHB-C4A-NA	3.04	128.72	124.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	B	812	CLA	CAA-C2A-C3A	-3.04	106.67	114.26
19	3	415	LUT	C3-C4-C5	-3.03	105.81	111.85
18	A	841	CLA	O2D-CGD-O1D	-3.03	117.92	123.84
18	7	610	CLA	O2D-CGD-O1D	-3.03	117.92	123.84
18	7	611	CLA	CAA-C2A-C3A	-3.02	104.50	112.78
18	3	403	CLA	O2D-CGD-O1D	-3.02	117.93	123.84
21	A	845	BCR	C28-C27-C26	-3.02	108.68	114.08
18	A	809	CLA	CAA-C2A-C3A	-3.02	109.05	116.10
18	B	831	CLA	CHB-C4A-NA	3.02	128.68	124.51
18	A	801	CLA	C4A-NA-C1A	3.01	108.06	106.71
18	B	841	CLA	O2D-CGD-O1D	-3.01	117.95	123.84
18	8	615	CLA	CBD-CHA-C1A	3.01	132.25	127.43
18	B	806	CLA	CHB-C4A-NA	3.01	128.67	124.51
18	7	609	CLA	O2D-CGD-O1D	-3.00	117.97	123.84
18	3	401	CLA	O2D-CGD-O1D	-3.00	117.97	123.84
18	7	603	CLA	CHB-C4A-NA	2.99	128.65	124.51
18	7	603	CLA	C2A-C1A-CHA	2.99	129.09	123.86
18	8	610	CLA	O2D-CGD-O1D	-2.99	118.00	123.84
18	A	803	CLA	O2D-CGD-O1D	-2.99	118.00	123.84
20	6	617	XAT	C30-C31-C32	-2.99	113.90	123.22
18	7	606	CLA	O2D-CGD-O1D	-2.98	118.00	123.84
18	A	803	CLA	CMB-C2B-C1B	-2.98	120.83	125.37
18	6	601	CLA	CAA-C2A-C3A	-2.98	109.15	116.10
18	1	602	CLA	O2D-CGD-O1D	-2.98	118.02	123.84
19	7	615	LUT	C10-C11-C12	-2.98	113.93	123.22
18	A	832	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
20	5	620	XAT	C10-C11-C12	-2.97	113.95	123.22
21	F	801	BCR	C38-C26-C27	2.97	119.32	113.62
18	8	614	CLA	CAA-C2A-C3A	-2.97	106.85	114.26
18	F	804	CLA	O2D-CGD-O1D	-2.97	118.04	123.84
21	A	845	BCR	C38-C26-C25	-2.97	121.20	124.53
19	7	615	LUT	C35-C15-C14	-2.97	117.40	123.47
21	A	844	BCR	C15-C16-C17	-2.97	117.40	123.47
18	B	818	CLA	O2D-CGD-O1D	-2.96	118.04	123.84
18	7	607	CLA	O2D-CGD-O1D	-2.96	118.04	123.84
18	5	618	CLA	O2D-CGD-O1D	-2.96	118.06	123.84
18	A	828	CLA	CHB-C4A-NA	2.96	128.60	124.51
18	B	808	CLA	CAA-C2A-C3A	-2.95	106.88	114.26
18	A	814	CLA	O2D-CGD-O1D	-2.95	118.07	123.84
18	B	843	CLA	O2D-CGD-O1D	-2.95	118.07	123.84
18	A	836	CLA	CMB-C2B-C1B	-2.95	120.88	125.37
18	8	603	CLA	CHB-C4A-NA	2.95	128.59	124.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	A	821	CLA	O2D-CGD-CBD	2.95	116.51	111.27
18	8	605	CLA	O2D-CGD-O1D	-2.95	118.07	123.84
18	B	809	CLA	O2D-CGD-O1D	-2.95	118.08	123.84
18	A	843	CLA	C4A-NA-C1A	2.94	108.03	106.71
18	A	830	CLA	O2D-CGD-O1D	-2.93	118.10	123.84
18	A	836	CLA	O2D-CGD-O1D	-2.93	118.10	123.84
18	B	834	CLA	O2D-CGD-O1D	-2.93	118.11	123.84
18	3	410	CLA	CAA-C2A-C3A	-2.93	104.75	112.78
18	A	838	CLA	O2D-CGD-O1D	-2.93	118.11	123.84
18	1	603	CLA	O2D-CGD-O1D	-2.93	118.11	123.84
18	A	818	CLA	O2D-CGD-O1D	-2.93	118.11	123.84
18	B	817	CLA	CAA-C2A-C3A	-2.92	109.28	116.10
18	7	611	CLA	O2D-CGD-O1D	-2.92	118.13	123.84
18	B	840	CLA	O2D-CGD-O1D	-2.92	118.13	123.84
20	6	617	XAT	C24-C23-C22	-2.92	105.13	110.77
21	A	847	BCR	C11-C12-C13	-2.92	118.22	126.42
18	A	820	CLA	O2D-CGD-O1D	-2.91	118.14	123.84
18	B	803	CLA	C2B-C1B-NB	2.91	112.18	110.23
18	B	804	CLA	O2D-CGD-O1D	-2.91	118.15	123.84
18	3	410	CLA	CHB-C4A-NA	2.91	128.54	124.51
18	A	834	CLA	O2D-CGD-O1D	-2.91	118.15	123.84
18	B	806	CLA	O2D-CGD-O1D	-2.91	118.15	123.84
18	B	809	CLA	CAA-C2A-C3A	-2.91	109.32	116.10
18	5	612	CLA	CHB-C4A-NA	2.91	128.53	124.51
18	8	611	CLA	CHB-C4A-NA	2.90	128.53	124.51
18	A	807	CLA	O2D-CGD-O1D	-2.90	118.16	123.84
18	B	814	CLA	O2D-CGD-O1D	-2.90	118.16	123.84
21	A	844	BCR	C33-C5-C6	-2.90	121.27	124.53
18	A	840	CLA	O2D-CGD-O1D	-2.90	118.17	123.84
20	5	620	XAT	C4-C3-C2	-2.90	105.17	110.77
18	A	812	CLA	O2D-CGD-O1D	-2.90	118.17	123.84
18	A	802	CLA	CHB-C4A-NA	2.90	128.52	124.51
18	B	820	CLA	CHB-C4A-NA	2.89	128.51	124.51
18	A	801	CLA	O2D-CGD-O1D	-2.89	118.19	123.84
20	6	617	XAT	C4-C3-C2	-2.89	105.20	110.77
20	7	616	XAT	C15-C14-C13	-2.89	123.19	127.31
18	8	606	CLA	O2D-CGD-O1D	-2.89	118.20	123.84
18	A	837	CLA	O2D-CGD-O1D	-2.89	118.20	123.84
20	6	617	XAT	C11-C10-C9	-2.88	123.19	127.31
21	J	101	BCR	C29-C30-C25	2.88	114.92	110.48
18	B	839	CLA	O2D-CGD-O1D	-2.88	118.21	123.84
18	6	616	CLA	CHB-C4A-NA	2.88	128.49	124.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	F	801	BCR	C16-C17-C18	-2.88	123.21	127.31
18	B	803	CLA	CMB-C2B-C3B	2.88	133.55	126.59
18	8	608	CLA	O2D-CGD-O1D	-2.88	118.22	123.84
18	B	810	CLA	CBD-CHA-C1A	2.87	131.88	128.50
18	A	816	CLA	CBD-CHA-C1A	2.87	131.88	128.50
18	6	603	CLA	O2D-CGD-O1D	-2.87	118.23	123.84
18	A	822	CLA	O2D-CGD-O1D	-2.87	118.23	123.84
18	F	803	CLA	CHB-C4A-NA	2.87	128.48	124.51
21	A	844	BCR	C33-C5-C4	2.87	119.12	113.62
18	A	815	CLA	CAA-C2A-C3A	-2.86	109.42	116.10
18	6	613	CLA	O2D-CGD-O1D	-2.86	118.24	123.84
18	B	811	CLA	CAA-C2A-C3A	-2.86	109.42	116.10
18	J	102	CLA	O2D-CGD-O1D	-2.86	118.24	123.84
18	A	819	CLA	O2D-CGD-CBD	2.86	116.35	111.27
18	6	610	CLA	O2D-CGD-O1D	-2.86	118.25	123.84
18	5	618	CLA	CHB-C4A-NA	2.86	128.46	124.51
18	A	835	CLA	O2D-CGD-O1D	-2.85	118.26	123.84
18	A	825	CLA	O2D-CGD-O1D	-2.85	118.27	123.84
21	J	101	BCR	C24-C23-C22	-2.85	121.93	126.23
18	5	602	CLA	O2D-CGD-O1D	-2.85	118.27	123.84
18	6	614	CLA	O2D-CGD-O1D	-2.85	118.27	123.84
21	J	101	BCR	C40-C30-C25	-2.84	105.69	110.30
18	A	830	CLA	CHB-C4A-NA	2.84	128.44	124.51
18	B	836	CLA	O2D-CGD-O1D	-2.84	118.29	123.84
18	8	603	CLA	C2A-C1A-CHA	2.84	128.81	123.85
18	A	815	CLA	O2D-CGD-O1D	-2.84	118.29	123.84
18	6	609	CLA	O2D-CGD-O1D	-2.84	118.29	123.84
18	3	406	CLA	O2D-CGD-O1D	-2.84	118.30	123.84
22	5	621	NEX	C26-C27-C28	-2.83	120.00	125.99
18	1	604	CLA	O2D-CGD-O1D	-2.83	118.30	123.84
18	6	616	CLA	CMB-C2B-C3B	2.83	130.93	123.59
18	B	819	CLA	O2D-CGD-O1D	-2.83	118.30	123.84
18	A	805	CLA	O2D-CGD-O1D	-2.83	118.30	123.84
18	5	606	CLA	CHB-C4A-NA	2.82	128.42	124.51
20	8	616	XAT	C24-C23-C22	-2.82	105.32	110.77
18	B	822	CLA	O2D-CGD-O1D	-2.82	118.33	123.84
18	B	825	CLA	O2D-CGD-O1D	-2.82	118.33	123.84
21	A	847	BCR	C20-C19-C18	-2.82	118.50	126.42
18	5	616	CLA	O2D-CGD-O1D	-2.82	118.33	123.84
18	5	608	CLA	O2D-CGD-O1D	-2.81	118.33	123.84
18	5	617	CLA	CHB-C4A-NA	2.81	128.40	124.51
18	A	835	CLA	CHB-C4A-NA	2.81	128.40	124.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	1	614	CLA	O2D-CGD-O1D	-2.81	118.34	123.84
18	3	408	CLA	CMB-C2B-C1B	-2.81	121.09	125.37
18	B	823	CLA	CHC-C1C-C2C	-2.81	123.09	129.77
18	B	833	CLA	O2D-CGD-O1D	-2.81	118.35	123.84
18	1	603	CLA	CHB-C4A-NA	2.81	128.39	124.51
18	B	829	CLA	O2D-CGD-CBD	2.81	116.25	111.27
18	A	828	CLA	O2D-CGD-O1D	-2.81	118.35	123.84
18	7	601	CLA	O2D-CGD-O1D	-2.81	118.35	123.84
18	A	826	CLA	O2D-CGD-O1D	-2.80	118.36	123.84
18	5	601	CLA	O2D-CGD-O1D	-2.80	118.36	123.84
18	5	613	CLA	CMB-C2B-C1B	-2.80	121.10	125.37
18	5	603	CLA	CHB-C4A-NA	2.80	128.38	124.51
18	B	815	CLA	O2D-CGD-O1D	-2.80	118.37	123.84
18	B	827	CLA	O2D-CGD-O1D	-2.80	118.37	123.84
18	8	603	CLA	O2D-CGD-O1D	-2.79	118.38	123.84
18	5	611	CLA	CHD-C1D-ND	-2.79	121.89	124.45
18	B	839	CLA	CMB-C2B-C1B	-2.79	121.12	125.37
18	A	839	CLA	O2D-CGD-O1D	-2.79	118.38	123.84
18	8	609	CLA	CAA-C2A-C3A	-2.79	109.59	116.10
18	A	804	CLA	O2D-CGD-O1D	-2.79	118.39	123.84
18	B	805	CLA	O2D-CGD-O1D	-2.79	118.39	123.84
18	3	404	CLA	O2D-CGD-O1D	-2.79	118.39	123.84
21	F	801	BCR	C30-C25-C26	-2.78	118.69	122.61
18	A	816	CLA	CHD-C1D-ND	-2.78	121.90	124.45
18	B	816	CLA	C3A-C4A-CHB	-2.78	116.69	124.01
18	B	824	CLA	O2D-CGD-O1D	-2.78	118.40	123.84
18	B	821	CLA	O2D-CGD-O1D	-2.78	118.40	123.84
18	B	832	CLA	O2D-CGD-O1D	-2.78	118.41	123.84
18	7	614	CLA	CBD-CHA-C1A	2.77	131.77	128.50
18	5	609	CLA	O2D-CGD-O1D	-2.77	118.42	123.84
18	7	612	CLA	CAA-C2A-C3A	-2.77	109.64	116.10
18	A	810	CLA	O2D-CGD-O1D	-2.77	118.43	123.84
18	1	608	CLA	CAA-C2A-C3A	-2.77	109.64	116.10
18	B	838	CLA	CHB-C4A-NA	2.77	128.34	124.51
18	3	402	CLA	CHB-C4A-NA	2.76	128.34	124.51
18	3	405	CLA	CHB-C4A-NA	2.76	128.33	124.51
18	A	806	CLA	CHB-C4A-NA	2.76	128.33	124.51
18	7	604	CLA	O2D-CGD-O1D	-2.76	118.44	123.84
18	B	810	CLA	O2D-CGD-O1D	-2.76	118.44	123.84
18	7	602	CLA	O2D-CGD-O1D	-2.76	118.44	123.84
18	B	837	CLA	O2D-CGD-O1D	-2.76	118.44	123.84
18	1	609	CLA	O2D-CGD-O1D	-2.76	118.44	123.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	B	835	CLA	O2D-CGD-O1D	-2.76	118.44	123.84
19	3	415	LUT	C35-C15-C14	-2.76	117.82	123.47
18	B	837	CLA	CMB-C2B-C3B	2.76	133.27	126.59
18	L	201	CLA	CAA-C2A-C3A	-2.76	109.66	116.10
18	B	817	CLA	O2D-CGD-O1D	-2.76	118.45	123.84
18	B	830	CLA	CAA-C2A-C3A	-2.76	109.67	116.10
18	B	813	CLA	CAB-C3B-C4B	-2.75	123.00	125.81
18	1	606	CLA	CHB-C4A-NA	2.75	128.32	124.51
18	A	824	CLA	O2D-CGD-O1D	-2.75	118.45	123.84
18	5	614	CLA	O2D-CGD-O1D	-2.75	118.46	123.84
18	7	611	CLA	CHB-C4A-NA	2.75	128.31	124.51
18	3	405	CLA	O2D-CGD-O1D	-2.74	117.86	124.09
19	3	415	LUT	C11-C10-C9	-2.74	123.40	127.31
18	8	613	CLA	O2D-CGD-O1D	-2.74	118.48	123.84
18	8	602	CLA	O2D-CGD-O1D	-2.74	118.48	123.84
18	8	612	CLA	O2D-CGD-O1D	-2.74	118.49	123.84
18	7	614	CLA	O2D-CGD-O1D	-2.73	118.49	123.84
21	3	417	BCR	C2-C1-C6	2.73	114.69	110.48
18	6	611	CLA	CHB-C4A-NA	2.73	128.29	124.51
18	6	605	CLA	O2D-CGD-O1D	-2.73	117.88	124.09
18	B	826	CLA	O2D-CGD-O1D	-2.73	118.50	123.84
18	5	607	CLA	O2D-CGD-O1D	-2.73	118.50	123.84
18	A	809	CLA	O2D-CGD-O1D	-2.73	118.50	123.84
18	B	812	CLA	O2D-CGD-O1D	-2.73	118.50	123.84
18	B	803	CLA	O2D-CGD-O1D	-2.73	118.50	123.84
18	B	838	CLA	O2D-CGD-O1D	-2.73	118.50	123.84
18	A	837	CLA	CHB-C4A-NA	2.73	128.28	124.51
18	6	601	CLA	O2D-CGD-O1D	-2.73	118.51	123.84
18	1	614	CLA	CAA-C2A-C3A	-2.72	109.75	116.10
18	7	607	CLA	CAA-C2A-C3A	-2.72	109.75	116.10
18	3	403	CLA	CHB-C4A-NA	2.72	128.28	124.51
18	F	804	CLA	CHB-C4A-NA	2.72	128.27	124.51
18	F	802	CLA	O2D-CGD-O1D	-2.72	118.52	123.84
18	K	202	CLA	O2D-CGD-O1D	-2.72	118.52	123.84
18	3	407	CLA	O2D-CGD-O1D	-2.72	118.53	123.84
20	3	416	XAT	C15-C35-C34	-2.71	117.92	123.47
18	A	821	CLA	C3A-C4A-CHB	-2.71	119.36	124.24
18	A	817	CLA	O2D-CGD-O1D	-2.71	118.54	123.84
18	B	807	CLA	CHB-C4A-NA	2.71	128.26	124.51
18	6	607	CLA	O2D-CGD-O1D	-2.71	118.55	123.84
18	B	834	CLA	CHB-C4A-NA	2.71	128.25	124.51
18	K	202	CLA	CHB-C4A-NA	2.71	128.25	124.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	B	834	CLA	CAA-C2A-C3A	-2.70	105.37	112.78
18	A	823	CLA	O2D-CGD-O1D	-2.70	118.55	123.84
18	8	601	CLA	O2D-CGD-O1D	-2.70	118.56	123.84
18	A	813	CLA	O2D-CGD-O1D	-2.70	118.56	123.84
20	7	616	XAT	C24-C23-C22	-2.70	105.56	110.77
18	6	604	CLA	CHB-C4A-NA	2.70	128.24	124.51
18	3	408	CLA	O2D-CGD-O1D	-2.70	118.56	123.84
18	7	605	CLA	O2D-CGD-O1D	-2.70	118.57	123.84
18	6	604	CLA	O2D-CGD-O1D	-2.69	118.57	123.84
18	A	806	CLA	O2D-CGD-O1D	-2.69	118.58	123.84
18	8	612	CLA	CAA-C2A-C3A	-2.69	109.82	116.10
18	1	611	CLA	O2D-CGD-O1D	-2.69	117.98	124.09
18	8	605	CLA	C3B-C4B-NB	-2.69	108.02	110.52
18	A	840	CLA	CHB-C4A-NA	2.69	128.23	124.51
19	3	415	LUT	C38-C25-C24	-2.68	117.82	123.56
18	A	831	CLA	O2D-CGD-O1D	-2.68	118.59	123.84
20	8	616	XAT	C35-C15-C14	-2.68	117.98	123.47
18	B	832	CLA	CAA-C2A-C3A	-2.68	109.85	116.10
18	6	606	CLA	O2D-CGD-O1D	-2.68	118.61	123.84
18	8	607	CLA	O2D-CGD-O1D	-2.68	118.61	123.84
18	1	609	CLA	CBD-CHA-C1A	2.67	131.65	128.50
18	6	613	CLA	CHB-C4A-NA	2.67	128.21	124.51
18	A	811	CLA	CMB-C2B-C1B	-2.67	121.30	125.37
18	6	608	CLA	CMB-C2B-C1B	-2.67	121.30	125.37
18	B	826	CLA	CHB-C4A-NA	2.67	128.20	124.51
18	5	607	CLA	CAA-C2A-C3A	-2.67	109.87	116.10
18	5	611	CLA	O2D-CGD-O1D	-2.67	118.62	123.84
18	3	414	CLA	O2D-CGD-O1D	-2.67	118.03	124.09
18	1	604	CLA	CHB-C4A-NA	2.67	128.20	124.51
18	A	825	CLA	CHB-C4A-NA	2.66	128.19	124.51
18	B	828	CLA	O2D-CGD-O1D	-2.66	118.64	123.84
20	7	616	XAT	C35-C34-C33	-2.66	123.52	127.31
19	3	415	LUT	C10-C11-C12	-2.66	114.93	123.22
18	A	803	CLA	CHD-C1D-ND	-2.65	122.02	124.45
18	B	808	CLA	O2D-CGD-O1D	-2.65	118.65	123.84
18	8	614	CLA	O2D-CGD-O1D	-2.65	118.65	123.84
18	A	819	CLA	CHB-C4A-NA	2.65	128.18	124.51
18	3	410	CLA	O2D-CGD-O1D	-2.65	118.65	123.84
20	6	617	XAT	C39-C29-C28	2.65	122.25	118.08
18	3	402	CLA	O2D-CGD-O1D	-2.65	118.66	123.84
18	5	608	CLA	CAA-C2A-C3A	-2.65	109.92	116.10
18	B	841	CLA	CHB-C4A-NA	2.65	128.17	124.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	K	201	CLA	CAA-C2A-C3A	-2.64	109.93	116.10
18	5	618	CLA	C4A-NA-C1A	2.64	107.89	106.71
18	3	409	CLA	O2D-CGD-O1D	-2.64	118.09	124.09
18	A	810	CLA	CHB-C4A-NA	2.64	128.16	124.51
21	A	845	BCR	C38-C26-C27	2.64	118.69	113.62
18	6	612	CLA	CHB-C4A-NA	2.64	128.16	124.51
20	8	616	XAT	C31-C30-C29	-2.63	123.55	127.31
18	6	601	CLA	CHB-C4A-NA	2.63	128.15	124.51
18	3	409	CLA	C3B-C4B-NB	-2.63	108.47	110.23
18	3	401	CLA	CHB-C4A-NA	2.63	128.15	124.51
18	6	607	CLA	CAA-C2A-C3A	-2.63	107.69	114.26
23	B	844	PQN	C11-C12-C13	-2.63	122.42	126.79
18	A	831	CLA	CHB-C4A-NA	2.63	128.14	124.51
18	3	411	CLA	O2D-CGD-O1D	-2.62	118.13	124.09
18	5	609	CLA	CHB-C4A-NA	2.62	128.14	124.51
18	B	828	CLA	CHB-C4A-NA	2.62	128.14	124.51
21	3	417	BCR	C10-C11-C12	-2.62	115.04	123.22
20	5	620	XAT	O4-C5-C18	2.62	118.19	115.06
18	8	608	CLA	CAA-C2A-C3A	-2.62	109.99	116.10
18	8	603	CLA	CHC-C4B-NB	2.61	127.03	124.26
18	1	601	CLA	CAA-C2A-C3A	-2.61	110.00	116.10
18	1	606	CLA	CAB-C3B-C2B	2.61	130.36	123.59
18	5	617	CLA	CAB-C3B-C2B	2.61	130.35	123.59
20	8	616	XAT	C4-C3-C2	-2.61	105.74	110.77
19	7	615	LUT	C21-C26-C27	-2.60	109.41	112.70
18	6	608	CLA	O2D-CGD-O1D	-2.60	118.75	123.84
18	A	813	CLA	CHB-C4A-NA	2.60	128.11	124.51
20	5	620	XAT	C15-C35-C34	-2.60	118.15	123.47
18	B	830	CLA	CMB-C2B-C3B	2.60	132.88	126.59
18	5	605	CLA	CHB-C4A-NA	2.60	128.11	124.51
18	B	842	CLA	CHB-C4A-NA	2.60	128.11	124.51
18	A	819	CLA	CHB-C1B-NB	2.60	127.01	124.26
18	6	616	CLA	CAB-C3B-C2B	2.60	130.32	123.59
21	A	847	BCR	C16-C15-C14	-2.60	118.15	123.47
18	B	827	CLA	CHD-C1D-ND	-2.60	122.07	124.45
18	A	802	CLA	O2D-CGD-O1D	-2.60	118.76	123.84
18	8	604	CLA	CHB-C4A-NA	2.59	128.10	124.51
18	A	802	CLA	C3B-C4B-NB	-2.59	108.11	110.52
18	3	412	CLA	O2D-CGD-O1D	-2.59	118.20	124.09
18	A	808	CLA	O2D-CGD-O1D	-2.59	118.78	123.84
18	5	604	CLA	CAA-C2A-C3A	-2.59	110.06	116.10
18	5	605	CLA	O2D-CGD-O1D	-2.59	118.22	124.09

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	7	608	CLA	CAA-C2A-C3A	-2.59	110.06	116.10
20	3	416	XAT	C10-C11-C12	-2.58	115.15	123.22
21	J	101	BCR	C38-C26-C25	-2.58	121.63	124.53
18	A	811	CLA	CAA-C2A-C3A	-2.58	110.08	116.10
18	1	606	CLA	O2D-CGD-O1D	-2.58	118.24	124.09
23	A	842	PQN	C11-C12-C13	-2.58	122.50	126.79
18	A	839	CLA	CHB-C1B-NB	2.57	126.98	124.26
18	8	615	CLA	C3B-C4B-NB	-2.57	108.51	110.23
18	B	825	CLA	CHB-C4A-NA	2.57	128.07	124.51
18	1	607	CLA	O2D-CGD-O1D	-2.57	118.25	124.09
18	B	827	CLA	CMB-C2B-C1B	-2.57	121.45	125.37
18	5	617	CLA	O2D-CGD-O1D	-2.57	118.25	124.09
18	3	406	CLA	CAA-C2A-C3A	-2.57	110.10	116.10
18	8	614	CLA	CHB-C4A-NA	2.57	128.06	124.51
18	3	413	CLA	CAA-C2A-C3A	-2.57	110.11	116.10
18	A	818	CLA	CHB-C4A-NA	2.57	128.06	124.51
18	1	608	CLA	O2D-CGD-O1D	-2.57	118.26	124.09
18	A	832	CLA	CHB-C4A-NA	2.56	128.05	124.51
18	8	604	CLA	O2D-CGD-O1D	-2.56	118.28	124.09
18	8	603	CLA	CAB-C3B-C2B	2.56	130.22	123.59
18	A	803	CLA	CHB-C4A-NA	2.56	128.05	124.51
20	3	416	XAT	C19-C9-C8	2.56	122.11	118.08
21	A	845	BCR	C16-C15-C14	-2.56	118.24	123.47
18	5	609	CLA	CHB-C1B-NB	2.56	126.96	124.26
18	B	805	CLA	CMB-C2B-C1B	-2.55	123.20	125.81
18	7	608	CLA	CHB-C4A-NA	2.55	128.04	124.51
18	A	804	CLA	C3B-C4B-NB	-2.55	108.15	110.52
18	1	604	CLA	CAB-C3B-C2B	2.55	130.20	123.59
18	1	613	CLA	CMB-C2B-C3B	2.55	130.20	123.59
18	A	824	CLA	CHB-C4A-NA	2.55	128.04	124.51
18	A	814	CLA	CHB-C4A-NA	2.55	128.03	124.51
18	F	804	CLA	CAA-C2A-C3A	-2.55	105.81	112.78
18	1	613	CLA	O2D-CGD-O1D	-2.55	118.31	124.09
18	7	611	CLA	CMB-C2B-C3B	2.54	132.75	126.59
18	7	604	CLA	CHB-C4A-NA	2.54	128.03	124.51
18	8	610	CLA	CHB-C4A-NA	2.54	128.03	124.51
18	5	615	CLA	CAB-C3B-C2B	2.54	130.18	123.59
18	A	818	CLA	CHB-C1B-NB	2.54	126.95	124.26
18	7	601	CLA	CHB-C4A-NA	2.54	128.03	124.51
18	B	836	CLA	CHB-C4A-NA	2.54	128.03	124.51
18	5	603	CLA	CAB-C3B-C2B	2.54	130.17	123.59
18	B	816	CLA	O2D-CGD-O1D	-2.54	118.87	123.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	A	804	CLA	CHB-C4A-NA	2.54	128.02	124.51
18	B	830	CLA	O2D-CGD-O1D	-2.54	118.33	124.09
18	A	813	CLA	CAA-C2A-C3A	-2.54	105.83	112.78
18	5	608	CLA	CHD-C1D-ND	-2.54	122.12	124.45
18	6	614	CLA	CAA-C2A-C3A	-2.54	110.18	116.10
18	3	407	CLA	CHB-C4A-NA	2.53	128.01	124.51
18	A	826	CLA	CAA-C2A-C3A	-2.53	110.19	116.10
18	3	404	CLA	CBD-CHA-C1A	2.53	131.48	128.50
18	8	611	CLA	O2D-CGD-O1D	-2.53	118.35	124.09
18	6	602	CLA	O2D-CGD-O1D	-2.53	118.89	123.84
18	7	614	CLA	CAB-C3B-C2B	2.53	130.14	123.59
18	B	816	CLA	C2B-C1B-NB	2.53	111.93	110.23
18	B	812	CLA	CHB-C4A-NA	2.53	128.01	124.51
18	B	818	CLA	CHB-C4A-NA	2.53	128.00	124.51
18	5	603	CLA	O2D-CGD-O1D	-2.52	118.90	123.84
18	5	608	CLA	CHB-C4A-NA	2.52	128.00	124.51
21	3	417	BCR	C11-C10-C9	-2.52	123.71	127.31
18	5	609	CLA	CMB-C2B-C1B	-2.52	121.53	125.37
18	1	614	CLA	CAB-C3B-C2B	2.52	130.12	123.59
18	6	611	CLA	O2D-CGD-O1D	-2.52	118.36	124.09
18	B	801	CLA	C3B-C4B-NB	-2.52	108.54	110.23
18	A	817	CLA	CHB-C4A-NA	2.52	128.00	124.51
18	A	843	CLA	O2D-CGD-O1D	-2.52	118.37	124.09
18	5	601	CLA	CHB-C4A-NA	2.52	128.00	124.51
18	B	837	CLA	CHB-C4A-NA	2.52	128.00	124.51
18	B	829	CLA	CMB-C2B-C1B	-2.52	121.53	125.37
18	A	833	CLA	O2D-CGD-O1D	-2.52	118.37	124.09
18	6	608	CLA	CHB-C1B-NB	2.52	126.92	124.26
18	3	411	CLA	CHB-C4A-NA	2.52	127.99	124.51
18	B	805	CLA	CHB-C4A-NA	2.52	127.99	124.51
18	1	613	CLA	CAB-C3B-C2B	2.52	130.11	123.59
18	B	814	CLA	CHB-C4A-NA	2.52	127.99	124.51
18	8	615	CLA	CHB-C4A-NA	2.51	127.99	124.51
18	3	413	CLA	O2D-CGD-O1D	-2.51	118.38	124.09
18	8	614	CLA	CMB-C2B-C3B	2.51	130.10	123.59
18	8	613	CLA	CHB-C4A-NA	2.51	127.99	124.51
18	A	816	CLA	CHB-C4A-NA	2.51	127.99	124.51
18	5	602	CLA	CHB-C4A-NA	2.51	127.99	124.51
19	5	619	LUT	C30-C31-C32	-2.51	115.38	123.22
18	1	606	CLA	CMB-C2B-C3B	2.51	130.09	123.59
18	8	615	CLA	CMB-C2B-C3B	2.51	130.09	123.59
18	K	201	CLA	O2D-CGD-O1D	-2.51	118.93	123.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	A	834	CLA	CHB-C4A-NA	2.51	127.98	124.51
18	K	203	CLA	CHB-C4A-NA	2.51	127.98	124.51
18	7	612	CLA	CHB-C4A-NA	2.51	127.98	124.51
18	B	837	CLA	CHB-C1B-NB	2.50	126.91	124.26
20	5	620	XAT	C35-C15-C14	-2.50	118.34	123.47
18	6	607	CLA	CHB-C4A-NA	2.50	127.97	124.51
18	B	840	CLA	CHB-C4A-NA	2.50	127.97	124.51
18	1	613	CLA	C3A-C4A-CHB	-2.50	119.73	124.24
18	6	606	CLA	CMB-C2B-C3B	2.50	130.07	123.59
18	B	830	CLA	CHB-C4A-NA	2.50	127.97	124.51
18	5	603	CLA	CMB-C2B-C3B	2.50	130.07	123.59
18	7	607	CLA	CHD-C1D-ND	-2.50	122.16	124.45
18	1	610	CLA	O2D-CGD-O1D	-2.50	118.41	124.09
18	A	823	CLA	CHB-C4A-NA	2.50	127.97	124.51
18	3	412	CLA	CAA-C2A-C3A	-2.50	110.27	116.10
18	A	841	CLA	CHB-C4A-NA	2.50	127.97	124.51
18	8	614	CLA	CAB-C3B-C2B	2.50	130.06	123.59
18	5	610	CLA	CHB-C4A-NA	2.50	127.96	124.51
18	5	615	CLA	CHB-C4A-NA	2.49	127.96	124.51
18	8	610	CLA	CAA-C2A-C3A	-2.49	110.28	116.10
18	5	613	CLA	CHB-C4A-NA	2.49	127.96	124.51
18	8	607	CLA	CAA-C2A-C3A	-2.49	110.29	116.10
18	1	601	CLA	CHB-C4A-NA	2.49	127.95	124.51
18	7	609	CLA	CHB-C4A-NA	2.49	127.95	124.51
18	3	409	CLA	CAB-C3B-C2B	2.49	130.04	123.59
18	B	823	CLA	O2D-CGD-O1D	-2.49	118.44	124.09
18	6	612	CLA	O2D-CGD-O1D	-2.49	118.98	123.84
18	A	829	CLA	O2D-CGD-O1D	-2.48	118.98	123.84
18	3	414	CLA	CAA-C2A-C3A	-2.48	110.31	116.10
18	5	615	CLA	CAA-C2A-C3A	-2.48	110.31	116.10
18	A	803	CLA	CMB-C2B-C3B	2.48	132.60	126.59
18	5	607	CLA	CHB-C4A-NA	2.48	127.94	124.51
18	7	607	CLA	CHB-C4A-NA	2.48	127.94	124.51
18	A	836	CLA	CHB-C4A-NA	2.48	127.94	124.51
18	8	606	CLA	CMB-C2B-C3B	2.48	130.02	123.59
18	5	610	CLA	O2D-CGD-O1D	-2.48	118.99	123.84
18	B	802	CLA	CHB-C4A-NA	2.48	127.94	124.51
18	8	605	CLA	CAA-C2A-C3A	-2.48	110.31	116.10
18	8	602	CLA	CHB-C4A-NA	2.48	127.94	124.51
18	B	807	CLA	O2D-CGD-O1D	-2.48	119.00	123.84
18	A	838	CLA	CHB-C4A-NA	2.48	127.94	124.51
18	B	804	CLA	CHC-C4B-NB	2.47	126.88	124.26

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	6	603	CLA	CAA-C2A-C3A	-2.47	106.00	112.78
18	B	801	CLA	CMB-C2B-C3B	2.47	130.00	123.59
18	7	603	CLA	CHC-C4B-NB	2.47	126.88	124.26
18	A	820	CLA	CHB-C4A-NA	2.47	127.93	124.51
18	B	813	CLA	O2D-CGD-O1D	-2.47	118.48	124.09
18	5	610	CLA	CHD-C1D-ND	-2.47	122.18	124.45
18	6	606	CLA	CHB-C4A-NA	2.47	127.93	124.51
18	K	201	CLA	CHB-C4A-NA	2.47	127.93	124.51
18	A	812	CLA	CAB-C3B-C2B	2.47	129.99	123.59
18	6	606	CLA	CAB-C3B-C2B	2.47	129.99	123.59
18	1	604	CLA	CMB-C2B-C3B	2.47	129.99	123.59
21	J	101	BCR	C11-C12-C13	-2.47	119.48	126.42
18	7	603	CLA	O2D-CGD-O1D	-2.47	118.49	124.09
18	8	615	CLA	CAB-C3B-C2B	2.47	129.98	123.59
18	3	408	CLA	CHB-C4A-NA	2.47	127.92	124.51
18	8	607	CLA	CHB-C4A-NA	2.47	127.92	124.51
21	3	417	BCR	C38-C26-C25	-2.47	121.76	124.53
18	5	610	CLA	CMB-C2B-C1B	-2.47	121.61	125.37
21	J	101	BCR	C33-C5-C4	2.47	118.35	113.62
18	6	610	CLA	CHB-C4A-NA	2.47	127.92	124.51
18	A	843	CLA	CAA-C2A-C3A	-2.46	110.35	116.10
18	A	821	CLA	CHB-C4A-NA	2.46	128.11	124.34
18	B	839	CLA	CHB-C4A-NA	2.46	127.92	124.51
18	6	603	CLA	CAB-C3B-C2B	2.46	129.97	123.59
18	6	615	CLA	CHB-C4A-NA	2.46	127.92	124.51
18	A	833	CLA	CHB-C4A-NA	2.46	127.92	124.51
18	3	404	CLA	CHB-C4A-NA	2.46	127.92	124.51
18	1	605	CLA	CHD-C1D-ND	-2.46	122.19	124.45
18	6	605	CLA	CHB-C4A-NA	2.46	127.91	124.51
18	B	820	CLA	O2A-CGA-O1A	-2.46	117.39	123.59
18	1	608	CLA	CMB-C2B-C3B	2.46	129.96	123.59
18	5	604	CLA	CAB-C3B-C2B	2.46	129.96	123.59
18	B	824	CLA	CHC-C4B-NB	2.46	126.86	124.26
18	3	413	CLA	CHB-C4A-NA	2.46	127.91	124.51
18	B	829	CLA	CMA-C3A-C2A	-2.46	110.37	116.10
18	7	610	CLA	CHC-C4B-NB	2.46	126.86	124.26
18	B	833	CLA	CHB-C4A-NA	2.45	127.90	124.51
18	8	609	CLA	CHB-C4A-NA	2.45	127.90	124.51
18	1	608	CLA	CHB-C4A-NA	2.45	127.90	124.51
18	8	606	CLA	CHB-C4A-NA	2.45	127.90	124.51
18	6	608	CLA	CHB-C4A-NA	2.45	127.89	124.51
18	7	613	CLA	CHB-C4A-NA	2.45	127.89	124.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	5	612	CLA	O2D-CGD-O1D	-2.45	118.54	124.09
18	6	602	CLA	CHB-C4A-NA	2.44	127.89	124.51
18	A	804	CLA	CMB-C2B-C1B	-2.44	121.65	125.37
18	3	412	CLA	CHB-C4A-NA	2.44	127.89	124.51
18	5	602	CLA	CAA-C2A-C3A	-2.44	106.09	112.78
18	1	608	CLA	CAB-C3B-C2B	2.44	129.92	123.59
18	6	606	CLA	C3B-C4B-NB	-2.44	108.59	110.23
18	1	614	CLA	CHB-C4A-NA	2.44	127.89	124.51
18	5	614	CLA	CHB-C4A-NA	2.44	128.07	124.34
18	7	602	CLA	CHB-C4A-NA	2.44	127.88	124.51
18	7	603	CLA	CAA-C2A-C1A	2.44	119.96	111.97
18	B	827	CLA	CHB-C4A-NA	2.44	127.88	124.51
18	A	812	CLA	C3B-C4B-NB	-2.44	108.60	110.23
18	3	414	CLA	CHB-C4A-NA	2.43	127.88	124.51
18	7	605	CLA	CHB-C4A-NA	2.43	127.88	124.51
18	A	809	CLA	CHD-C1D-ND	-2.43	122.22	124.45
18	8	606	CLA	CAB-C3B-C2B	2.43	129.89	123.59
18	B	813	CLA	CHB-C4A-NA	2.43	127.88	124.51
18	1	604	CLA	CAA-C2A-C3A	-2.43	110.43	116.10
18	5	604	CLA	CHB-C4A-NA	2.43	127.87	124.51
18	B	808	CLA	CHB-C4A-NA	2.43	127.87	124.51
18	A	816	CLA	CHB-C1B-NB	2.43	126.83	124.26
18	6	603	CLA	CMB-C2B-C3B	2.43	129.88	123.59
19	3	415	LUT	C30-C31-C32	-2.43	115.64	123.22
18	6	611	CLA	CHC-C4B-NB	2.43	126.83	124.26
20	3	416	XAT	C24-C23-C22	-2.43	106.09	110.77
19	5	619	LUT	C39-C29-C28	2.43	121.90	118.08
18	A	808	CLA	CHB-C4A-NA	2.43	127.87	124.51
18	A	829	CLA	C2A-C1A-CHA	2.42	128.10	123.86
18	A	807	CLA	CHB-C4A-NA	2.42	127.86	124.51
18	A	839	CLA	CHB-C4A-NA	2.42	127.86	124.51
18	5	602	CLA	C3B-C4B-NB	-2.42	108.27	110.52
18	5	617	CLA	CMB-C2B-C3B	2.42	129.86	123.59
18	B	821	CLA	CHB-C4A-NA	2.42	127.86	124.51
21	A	847	BCR	C3-C4-C5	-2.42	109.76	114.08
18	J	102	CLA	CHB-C4A-NA	2.42	127.86	124.51
21	A	844	BCR	C1-C6-C5	-2.42	119.21	122.61
20	3	416	XAT	C39-C29-C28	2.42	121.88	118.08
21	3	417	BCR	C28-C27-C26	-2.41	109.77	114.08
18	7	603	CLA	CAA-C2A-C3A	-2.41	106.17	112.78
18	7	613	CLA	CHD-C1D-ND	-2.41	122.24	124.45
18	A	812	CLA	CMB-C2B-C3B	2.41	129.84	123.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	3	415	LUT	C7-C8-C9	-2.41	122.59	126.23
18	A	843	CLA	CHB-C4A-NA	2.41	127.84	124.51
18	B	823	CLA	CHB-C4A-NA	2.41	127.84	124.51
18	B	807	CLA	CHD-C1D-ND	-2.41	122.24	124.45
19	5	619	LUT	C31-C30-C29	-2.41	123.88	127.31
18	7	606	CLA	CHB-C4A-NA	2.41	127.84	124.51
18	7	610	CLA	CHB-C1B-NB	2.41	126.80	124.26
18	B	822	CLA	CHB-C4A-NA	2.40	127.84	124.51
18	5	611	CLA	CHB-C1B-NB	2.40	126.80	124.26
20	8	616	XAT	C19-C9-C8	2.40	121.86	118.08
18	8	605	CLA	CHD-C1D-ND	-2.40	122.25	124.45
18	B	836	CLA	CHD-C1D-ND	-2.40	122.25	124.45
18	8	606	CLA	C3B-C4B-NB	-2.40	108.62	110.23
18	A	819	CLA	CHC-C4B-NB	2.40	126.80	124.26
18	A	812	CLA	CHB-C4A-NA	2.40	127.83	124.51
18	5	615	CLA	CMB-C2B-C3B	2.40	129.80	123.59
18	B	809	CLA	CHB-C4A-NA	2.40	127.83	124.51
18	5	613	CLA	CMB-C2B-C3B	2.40	132.39	126.59
18	5	614	CLA	C3A-C4A-CHB	-2.40	119.92	124.24
18	B	815	CLA	O2D-CGD-CBD	2.40	115.53	111.27
18	8	605	CLA	CHB-C4A-NA	2.40	127.82	124.51
18	5	611	CLA	CHB-C4A-NA	2.39	127.82	124.51
18	3	409	CLA	CAA-C2A-C3A	-2.39	110.52	116.10
18	B	817	CLA	CHB-C4A-NA	2.39	127.82	124.51
18	1	607	CLA	CHB-C4A-NA	2.39	127.82	124.51
18	3	409	CLA	CMB-C2B-C3B	2.39	129.79	123.59
21	A	847	BCR	C33-C5-C4	2.39	118.21	113.62
18	B	810	CLA	C3B-C4B-NB	-2.39	108.30	110.52
18	3	408	CLA	CMB-C2B-C3B	2.39	132.38	126.59
18	5	612	CLA	C2A-C1A-CHA	2.39	128.04	123.86
18	8	608	CLA	CHB-C4A-NA	2.39	127.81	124.51
18	B	839	CLA	CMB-C2B-C3B	2.39	132.37	126.59
18	A	804	CLA	CAA-C2A-C3A	-2.38	110.53	116.10
19	5	619	LUT	C35-C15-C14	-2.38	118.59	123.47
18	1	602	CLA	CHB-C4A-NA	2.38	127.81	124.51
20	7	616	XAT	C40-C33-C32	2.38	121.83	118.08
21	A	844	BCR	C8-C7-C6	-2.38	120.52	127.20
18	B	821	CLA	CAA-C2A-C3A	-2.38	110.55	116.10
18	5	606	CLA	O2D-CGD-O1D	-2.38	118.69	124.09
18	3	409	CLA	CHB-C4A-NA	2.38	127.80	124.51
18	5	616	CLA	CAA-C2A-C3A	-2.38	110.55	116.10
18	A	836	CLA	CMB-C2B-C3B	2.37	132.34	126.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	5	619	LUT	C8-C7-C6	-2.37	120.53	127.20
18	8	603	CLA	CMB-C2B-C3B	2.37	129.74	123.59
18	5	604	CLA	O2D-CGD-CBD	2.37	115.48	111.27
18	A	802	CLA	C2A-C1A-CHA	2.37	128.00	123.86
18	B	826	CLA	CMA-C3A-C2A	-2.37	110.57	116.10
19	7	615	LUT	C38-C25-C24	-2.37	118.49	123.56
18	A	827	CLA	CHB-C4A-NA	2.37	127.79	124.51
18	5	616	CLA	CHB-C4A-NA	2.36	127.78	124.51
18	3	406	CLA	CHD-C1D-ND	-2.36	122.28	124.45
18	3	408	CLA	CHD-C1D-ND	-2.36	122.28	124.45
18	3	406	CLA	CHB-C4A-NA	2.36	127.78	124.51
18	1	614	CLA	CMB-C2B-C3B	2.36	129.71	123.59
18	8	601	CLA	CHB-C4A-NA	2.36	127.77	124.51
18	B	815	CLA	CHD-C1D-ND	-2.36	122.29	124.45
18	A	804	CLA	CHB-C1B-NB	2.36	126.75	124.26
19	3	415	LUT	C8-C7-C6	-2.36	120.59	127.20
18	B	837	CLA	CAA-C2A-C3A	-2.35	110.61	116.10
18	6	614	CLA	CHB-C4A-NA	2.35	127.77	124.51
18	7	609	CLA	CHD-C1D-ND	-2.35	122.29	124.45
18	B	813	CLA	CHC-C4B-C3B	-2.35	125.27	130.42
18	A	802	CLA	CHC-C4B-NB	2.35	126.74	124.26
18	8	612	CLA	CHB-C4A-NA	2.35	127.76	124.51
18	A	815	CLA	CHB-C4A-NA	2.35	127.76	124.51
18	B	806	CLA	CAA-C2A-C3A	-2.34	110.63	116.10
18	B	827	CLA	CHB-C1B-NB	2.34	126.74	124.26
18	B	832	CLA	CHB-C4A-NA	2.34	127.75	124.51
18	1	610	CLA	CHB-C4A-NA	2.34	127.75	124.51
18	F	802	CLA	CHB-C4A-NA	2.34	127.75	124.51
21	A	845	BCR	C23-C24-C25	-2.34	120.63	127.20
18	L	201	CLA	CHB-C4A-NA	2.34	127.75	124.51
23	B	844	PQN	C14-C13-C15	2.34	118.65	115.98
18	A	822	CLA	CHD-C1D-ND	-2.34	122.31	124.45
18	B	819	CLA	CHB-C4A-NA	2.34	127.74	124.51
18	A	822	CLA	CHB-C4A-NA	2.34	127.74	124.51
18	B	822	CLA	C3B-C4B-NB	-2.33	108.35	110.52
18	7	614	CLA	CMB-C2B-C3B	2.33	129.64	123.59
18	6	611	CLA	CAA-C2A-C1A	2.33	117.31	112.14
18	A	827	CLA	CHB-C1B-NB	2.33	126.73	124.26
18	B	824	CLA	CHB-C4A-NA	2.33	127.74	124.51
18	A	827	CLA	CMB-C2B-C1B	-2.33	121.82	125.37
18	B	843	CLA	CHB-C4A-NA	2.33	127.73	124.51
18	5	603	CLA	C3B-C4B-NB	-2.33	108.67	110.23

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	A	826	CLA	CHD-C1D-ND	-2.33	122.32	124.45
18	6	604	CLA	CHD-C1D-ND	-2.32	122.32	124.45
18	A	809	CLA	CHB-C4A-NA	2.32	127.72	124.51
18	5	613	CLA	CHD-C1D-ND	-2.32	122.32	124.45
18	5	605	CLA	CHD-C1D-ND	-2.32	122.33	124.45
18	B	803	CLA	CAA-C2A-C3A	-2.32	108.47	114.26
19	5	619	LUT	C2-C3-C4	2.32	113.47	110.30
18	B	810	CLA	CHC-C4B-NB	2.31	126.71	124.26
18	B	827	CLA	CAA-C2A-C3A	-2.31	110.70	116.10
18	F	802	CLA	CHB-C1B-NB	2.31	126.70	124.26
18	8	602	CLA	C3B-C4B-NB	-2.31	108.37	110.52
19	7	615	LUT	C20-C13-C12	2.31	121.72	118.08
18	B	815	CLA	C3B-C4B-NB	-2.31	108.37	110.52
18	8	605	CLA	CHB-C1B-NB	2.31	126.70	124.26
18	A	802	CLA	CHB-C1B-NB	2.31	126.70	124.26
18	A	835	CLA	CHD-C1D-ND	-2.30	122.34	124.45
18	1	604	CLA	C3B-C4B-NB	-2.30	108.69	110.23
20	6	617	XAT	C11-C12-C13	-2.30	119.94	126.42
18	B	806	CLA	C3B-C4B-NB	-2.30	108.38	110.52
18	B	813	CLA	C3B-C4B-NB	-2.30	108.69	110.23
20	5	620	XAT	C31-C30-C29	-2.30	124.03	127.31
20	3	416	XAT	C18-C5-C4	2.30	116.87	114.28
18	A	807	CLA	CHD-C1D-ND	-2.29	122.35	124.45
18	B	837	CLA	CHD-C1D-ND	-2.29	122.35	124.45
18	3	410	CLA	CHA-C1A-NA	-2.29	121.15	126.40
20	5	620	XAT	C11-C10-C9	-2.29	124.04	127.31
18	B	811	CLA	CHB-C4A-NA	2.29	127.67	124.51
18	8	615	CLA	CAA-C2A-C3A	-2.29	110.76	116.10
18	8	607	CLA	CHD-C1D-ND	-2.29	122.35	124.45
18	A	816	CLA	CHC-C4B-NB	2.29	126.68	124.26
18	B	829	CLA	CHB-C1B-NB	2.28	126.68	124.26
20	5	620	XAT	C18-C5-C4	2.28	116.85	114.28
18	B	836	CLA	CMB-C2B-C1B	-2.28	121.89	125.37
18	A	818	CLA	C3B-C4B-NB	-2.28	108.40	110.52
19	7	615	LUT	C19-C9-C8	2.28	121.67	118.08
20	5	620	XAT	O24-C25-C26	-2.28	57.07	58.96
18	B	829	CLA	CHB-C4A-NA	2.28	127.66	124.51
21	A	844	BCR	C10-C11-C12	-2.28	116.11	123.22
18	3	411	CLA	CAA-C2A-C3A	-2.27	110.79	116.10
21	J	101	BCR	C15-C16-C17	-2.27	118.82	123.47
18	3	408	CLA	CAA-C2A-C3A	-2.27	110.80	116.10
18	7	603	CLA	O2A-CGA-O1A	-2.27	117.64	123.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	5	619	LUT	C1-C6-C5	-2.27	119.42	122.61
18	A	802	CLA	CHA-C1A-NA	-2.27	121.21	126.40
18	A	829	CLA	CHB-C4A-NA	2.27	127.65	124.51
18	A	811	CLA	CHB-C1B-NB	2.27	126.66	124.26
18	A	835	CLA	C3B-C4B-NB	-2.26	108.42	110.52
19	5	619	LUT	C10-C11-C12	-2.26	116.16	123.22
18	A	804	CLA	CMB-C2B-C3B	2.26	132.06	126.59
18	A	823	CLA	CHD-C1D-ND	-2.26	122.38	124.45
18	B	831	CLA	C2B-C1B-NB	2.26	111.75	110.23
21	3	417	BCR	C33-C5-C4	2.26	117.95	113.62
19	3	415	LUT	C19-C9-C8	2.26	121.63	118.08
18	B	815	CLA	CHB-C4A-NA	2.26	127.63	124.51
18	B	827	CLA	CMB-C2B-C3B	2.26	132.05	126.59
18	A	826	CLA	CHB-C4A-NA	2.25	127.63	124.51
18	1	612	CLA	CHD-C1D-ND	-2.25	122.38	124.45
18	1	610	CLA	CAA-C2A-C3A	-2.25	108.63	114.26
18	8	605	CLA	C1C-C2C-C3C	-2.25	105.01	107.07
21	A	847	BCR	C1-C6-C5	-2.25	119.44	122.61
18	B	813	CLA	CMA-C3A-C2A	-2.25	110.85	116.10
19	5	619	LUT	C38-C25-C24	-2.25	118.75	123.56
18	7	613	CLA	C3B-C4B-NB	-2.25	108.43	110.52
18	A	828	CLA	CHD-C1D-ND	-2.25	122.39	124.45
20	7	616	XAT	C11-C10-C9	-2.25	124.10	127.31
18	B	815	CLA	CAC-C3C-C4C	2.25	127.72	124.81
18	5	610	CLA	CAA-C2A-C3A	-2.25	110.86	116.10
18	1	609	CLA	CHD-C1D-ND	-2.24	122.39	124.45
18	A	834	CLA	CHD-C1D-ND	-2.24	122.39	124.45
18	B	829	CLA	CAA-C2A-C3A	-2.24	110.87	116.10
20	5	620	XAT	C39-C29-C28	2.24	121.61	118.08
18	A	801	CLA	CHB-C4A-NA	2.24	127.61	124.51
18	B	842	CLA	CHD-C1D-ND	-2.24	122.40	124.45
18	1	609	CLA	CHB-C4A-NA	2.23	127.60	124.51
18	B	807	CLA	C3B-C4B-NB	-2.23	108.44	110.52
18	3	408	CLA	CMA-C3A-C2A	-2.23	110.89	116.10
18	B	802	CLA	CHD-C1D-ND	-2.23	122.40	124.45
18	8	605	CLA	CHC-C4B-NB	2.23	126.62	124.26
18	3	408	CLA	CHB-C1B-NB	2.23	126.62	124.26
18	6	612	CLA	O2A-CGA-O1A	-2.23	117.96	123.59
18	1	607	CLA	CHD-C1D-ND	-2.23	122.41	124.45
18	B	836	CLA	CAA-C2A-C3A	-2.23	110.90	116.10
18	7	614	CLA	CHB-C4A-NA	2.23	127.59	124.51
18	A	838	CLA	CHD-C1D-ND	-2.23	122.41	124.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	K	203	CLA	CHD-C1D-ND	-2.23	122.41	124.45
18	6	615	CLA	CAA-C2A-C3A	-2.23	110.90	116.10
18	B	839	CLA	CHB-C1B-NB	2.23	126.61	124.26
18	B	811	CLA	CHB-C1B-NB	2.23	126.61	124.26
21	F	801	BCR	C4-C5-C6	-2.23	119.50	122.73
18	A	811	CLA	CHB-C4A-NA	2.23	127.59	124.51
18	7	610	CLA	CHB-C4A-NA	2.22	127.58	124.51
18	B	813	CLA	CAB-C3B-C2B	2.22	130.01	124.52
18	6	613	CLA	CHB-C1B-NB	2.22	126.61	124.26
18	6	616	CLA	C3B-C4B-NB	-2.22	108.74	110.23
18	B	824	CLA	CHD-C1D-ND	-2.22	122.41	124.45
18	B	820	CLA	CHB-C1B-NB	2.22	126.61	124.26
18	B	820	CLA	CHD-C1D-ND	-2.22	122.42	124.45
21	3	417	BCR	C7-C8-C9	-2.22	122.88	126.23
18	B	805	CLA	CMB-C2B-C3B	2.22	130.00	124.52
18	8	615	CLA	CHB-C1B-NB	2.22	126.60	124.26
18	B	810	CLA	CHB-C4A-NA	2.22	127.58	124.51
18	3	411	CLA	CHC-C4B-NB	2.21	126.60	124.26
18	B	822	CLA	CHB-C1B-NB	2.21	126.60	124.26
18	8	604	CLA	CHD-C1D-ND	-2.21	122.42	124.45
18	A	838	CLA	C3B-C4B-NB	-2.21	108.47	110.52
18	8	613	CLA	CHD-C1D-ND	-2.21	122.42	124.45
18	5	610	CLA	CMB-C2B-C3B	2.21	131.93	126.59
18	8	606	CLA	CHB-C1B-NB	2.21	126.59	124.26
18	B	813	CLA	C1B-C2B-C3B	-2.21	106.62	108.69
18	1	605	CLA	CHB-C4A-NA	2.20	127.56	124.51
18	3	401	CLA	CHD-C1D-ND	-2.20	122.43	124.45
18	A	811	CLA	CMB-C2B-C3B	2.20	131.92	126.59
18	A	805	CLA	CHB-C4A-NA	2.20	127.55	124.51
18	1	613	CLA	CHB-C4A-NA	2.20	127.71	124.34
18	B	814	CLA	CHD-C1D-ND	-2.19	122.44	124.45
18	A	838	CLA	CHB-C1B-NB	2.19	126.58	124.26
18	1	612	CLA	O2D-CGD-CBD	2.19	115.17	111.27
18	B	813	CLA	CAA-C2A-C3A	-2.19	110.98	116.10
19	3	415	LUT	C20-C13-C12	2.19	121.53	118.08
18	7	614	CLA	C3B-C4B-NB	-2.19	108.76	110.23
18	B	836	CLA	CHB-C1B-NB	2.19	126.58	124.26
18	B	820	CLA	CMB-C2B-C1B	-2.19	122.04	125.37
18	6	603	CLA	C2A-C1A-CHA	2.19	127.69	123.86
18	A	833	CLA	C3B-C4B-NB	-2.19	108.49	110.52
20	3	416	XAT	C28-C29-C30	-2.19	115.59	118.94
22	5	621	NEX	C35-C15-C14	-2.18	119.00	123.47

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	5	618	CLA	C2D-C1D-ND	-2.18	108.50	110.10
18	B	805	CLA	C1B-NB-C4B	2.18	107.89	106.33
18	A	843	CLA	CHD-C1D-ND	-2.18	122.45	124.45
18	B	839	CLA	CHD-C1D-ND	-2.18	122.45	124.45
18	A	818	CLA	CMB-C2B-C1B	-2.17	122.06	125.37
18	B	843	CLA	O2D-CGD-CBD	2.17	115.13	111.27
21	A	847	BCR	C38-C26-C27	2.17	117.79	113.62
18	3	405	CLA	CHD-C1D-ND	-2.17	122.46	124.45
18	A	843	CLA	CMB-C2B-C1B	-2.17	122.06	125.37
18	6	613	CLA	CHD-C1D-ND	-2.17	122.46	124.45
18	B	819	CLA	CHB-C1B-NB	2.17	126.56	124.26
21	A	844	BCR	C4-C5-C6	-2.17	119.58	122.73
18	6	613	CLA	CMB-C2B-C1B	-2.17	122.06	125.37
18	A	826	CLA	C3B-C4B-NB	-2.17	108.50	110.52
18	A	827	CLA	CHD-C1D-ND	-2.17	122.46	124.45
18	7	605	CLA	CHB-C1B-NB	2.17	126.55	124.26
18	7	612	CLA	CHD-C1D-ND	-2.17	122.46	124.45
18	A	823	CLA	C3B-C4B-NB	-2.17	108.50	110.52
18	B	804	CLA	CHB-C4A-NA	2.17	127.51	124.51
18	7	613	CLA	CHB-C1B-NB	2.17	126.55	124.26
20	5	620	XAT	C40-C33-C32	2.17	121.49	118.08
18	A	829	CLA	CAA-CBA-CGA	-2.17	106.93	113.25
18	A	818	CLA	CHD-C1D-ND	-2.16	122.47	124.45
18	A	828	CLA	C3B-C4B-NB	-2.16	108.51	110.52
18	B	833	CLA	C3B-C4B-NB	-2.16	108.51	110.52
18	7	603	CLA	CHA-C1A-NA	-2.16	121.45	126.40
18	A	843	CLA	CHB-C1B-NB	2.16	126.55	124.26
18	A	833	CLA	CHD-C1D-ND	-2.16	122.47	124.45
18	1	603	CLA	O2A-CGA-O1A	-2.16	117.92	123.30
18	7	606	CLA	C3B-C4B-NB	-2.16	108.51	110.52
18	B	833	CLA	CHB-C1B-NB	2.16	126.54	124.26
20	5	620	XAT	C19-C9-C8	2.16	121.48	118.08
21	F	801	BCR	C11-C12-C13	-2.16	120.36	126.42
18	B	834	CLA	O2A-CGA-O1A	-2.16	118.15	123.59
18	8	602	CLA	CHB-C1B-NB	2.15	126.54	124.26
18	A	829	CLA	CHA-C1A-NA	-2.15	121.47	126.40
18	B	833	CLA	CHD-C1D-ND	-2.15	122.48	124.45
20	3	416	XAT	C38-C25-C24	2.15	116.70	114.28
20	7	616	XAT	C35-C15-C14	-2.15	119.07	123.47
18	B	836	CLA	C3B-C4B-NB	-2.15	108.52	110.52
18	5	614	CLA	CHD-C1D-ND	-2.15	122.48	124.45
20	5	620	XAT	O4-C5-C6	-2.15	57.18	58.96

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	5	613	CLA	CAA-C2A-C3A	-2.15	111.08	116.10
18	1	614	CLA	CHD-C1D-ND	-2.15	122.48	124.45
18	B	801	CLA	O2A-CGA-O1A	-2.14	118.18	123.59
18	A	821	CLA	C3B-C4B-NB	-2.14	108.53	110.52
18	B	829	CLA	C3B-C4B-NB	-2.14	108.53	110.52
18	B	805	CLA	CAA-C2A-C3A	-2.14	111.10	116.10
18	8	607	CLA	CHB-C1B-NB	2.14	126.52	124.26
22	5	621	NEX	C39-C29-C30	-2.14	119.92	122.92
18	B	818	CLA	C3B-C4B-NB	-2.14	108.53	110.52
18	6	611	CLA	CHA-C1A-NA	-2.14	121.50	126.40
18	8	609	CLA	CMA-C3A-C2A	-2.14	111.11	116.10
18	B	841	CLA	CHB-C1B-NB	2.14	126.52	124.26
18	B	810	CLA	CHB-C1B-NB	2.14	126.52	124.26
18	A	831	CLA	CHD-C1D-ND	-2.13	122.49	124.45
18	8	611	CLA	C2A-C1A-CHA	2.13	127.59	123.86
20	5	620	XAT	C27-C28-C29	-2.13	122.22	125.53
18	B	829	CLA	CMB-C2B-C3B	2.13	131.75	126.59
21	A	845	BCR	C21-C20-C19	-2.13	116.57	123.22
18	A	814	CLA	CHD-C1D-ND	-2.13	122.50	124.45
18	A	805	CLA	C3B-C4B-NB	-2.13	108.54	110.52
19	5	619	LUT	C18-C5-C4	2.13	118.29	114.36
18	A	840	CLA	CHD-C1D-ND	-2.13	122.50	124.45
20	5	620	XAT	C20-C13-C12	2.12	121.42	118.08
18	B	803	CLA	CHB-C4A-NA	2.12	127.45	124.51
18	B	820	CLA	C3B-C4B-NB	-2.12	108.55	110.52
18	A	827	CLA	C3B-C4B-NB	-2.12	108.55	110.52
18	B	817	CLA	CHD-C1D-ND	-2.12	122.51	124.45
18	B	818	CLA	CHD-C1D-ND	-2.12	122.51	124.45
18	B	841	CLA	CHD-C1D-ND	-2.12	122.51	124.45
18	3	407	CLA	CHB-C1B-NB	2.12	126.50	124.26
18	A	805	CLA	CHB-C1B-NB	2.12	126.50	124.26
18	B	818	CLA	CHB-C1B-NB	2.12	126.50	124.26
18	6	614	CLA	CHB-C1B-NB	2.12	126.50	124.26
18	A	824	CLA	CHD-C1D-ND	-2.12	122.51	124.45
18	B	811	CLA	CHC-C4B-NB	2.11	126.50	124.26
18	6	608	CLA	CMB-C2B-C3B	2.11	131.71	126.59
18	5	610	CLA	CMA-C3A-C2A	-2.11	111.17	116.10
18	5	615	CLA	C3B-C4B-NB	-2.11	108.82	110.23
21	A	845	BCR	C30-C25-C26	-2.11	119.64	122.61
19	7	615	LUT	C30-C31-C32	-2.11	116.64	123.22
18	6	608	CLA	C3B-C4B-NB	-2.11	108.56	110.52
18	B	840	CLA	C3B-C4B-NB	-2.11	108.56	110.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	1	613	CLA	CHD-C1D-ND	-2.10	122.52	124.45
18	B	823	CLA	CHD-C1D-ND	-2.10	122.52	124.45
18	B	819	CLA	O2D-CGD-CBD	2.10	115.01	111.27
18	B	830	CLA	CHB-C1B-NB	2.10	126.48	124.26
18	A	837	CLA	CHB-C1B-NB	2.10	126.48	124.26
18	5	610	CLA	CHB-C1B-NB	2.10	126.48	124.26
18	8	613	CLA	C3B-C4B-NB	-2.10	108.57	110.52
18	B	842	CLA	CMB-C2B-C1B	-2.10	122.17	125.37
18	B	823	CLA	C4C-C3C-C2C	-2.10	106.56	108.89
18	3	401	CLA	O2D-CGD-CBD	2.10	115.00	111.27
18	1	603	CLA	C3B-C4B-NB	-2.10	108.57	110.52
18	5	612	CLA	C3B-C4B-NB	-2.10	108.57	110.52
20	7	616	XAT	C39-C29-C28	2.10	121.38	118.08
18	A	826	CLA	CHB-C1B-NB	2.10	126.47	124.26
18	8	603	CLA	CHA-C1A-NA	-2.09	121.60	126.40
18	7	606	CLA	CHB-C1B-NB	2.09	126.47	124.26
18	B	838	CLA	C2A-C1A-CHA	2.09	127.52	123.86
20	8	616	XAT	O4-C5-C6	-2.09	57.23	58.96
20	3	416	XAT	C8-C9-C10	-2.09	115.73	118.94
18	1	611	CLA	CHB-C4A-NA	2.09	127.40	124.51
18	B	815	CLA	CHB-C1B-NB	2.09	126.47	124.26
18	B	801	CLA	CAB-C3B-C2B	2.09	129.00	123.59
18	B	840	CLA	CHD-C1D-ND	-2.09	122.53	124.45
18	B	835	CLA	CHB-C4A-NA	2.09	127.40	124.51
22	5	621	NEX	C31-C32-C33	-2.09	120.56	126.42
18	7	611	CLA	C2A-C1A-CHA	2.09	127.51	123.86
18	3	409	CLA	CHC-C4B-NB	2.09	126.47	124.26
18	1	606	CLA	C3B-C4B-NB	-2.09	108.83	110.23
20	7	616	XAT	O4-C5-C6	-2.08	57.23	58.96
18	A	821	CLA	CHD-C1D-ND	-2.08	122.54	124.45
18	7	604	CLA	O2A-CGA-O1A	-2.08	118.34	123.59
19	3	415	LUT	C15-C35-C34	-2.08	119.21	123.47
18	3	406	CLA	C3B-C4B-NB	-2.08	108.58	110.52
18	1	603	CLA	CAA-C2A-C3A	-2.08	107.08	112.78
21	A	844	BCR	C3-C4-C5	-2.08	110.37	114.08
18	B	802	CLA	CHB-C1B-NB	2.08	126.45	124.26
18	3	404	CLA	C3B-C4B-NB	-2.08	108.59	110.52
21	A	844	BCR	C21-C20-C19	-2.08	116.74	123.22
18	B	831	CLA	O2A-CGA-O1A	-2.07	118.13	123.30
18	B	819	CLA	CHD-C1D-ND	-2.07	122.55	124.45
18	B	827	CLA	C3B-C4B-NB	-2.07	108.59	110.52
21	A	847	BCR	C34-C9-C10	-2.07	120.02	122.92

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	B	807	CLA	CMB-C2B-C1B	-2.07	122.21	125.37
18	5	613	CLA	CHB-C1B-NB	2.07	126.45	124.26
18	1	606	CLA	C2A-C1A-CHA	2.07	127.47	123.85
18	5	611	CLA	CHC-C4B-NB	2.07	126.45	124.26
20	8	616	XAT	O24-C25-C26	-2.07	57.25	58.96
19	7	615	LUT	C7-C8-C9	-2.07	123.11	126.23
18	A	805	CLA	CHC-C4B-NB	2.07	126.45	124.26
18	A	823	CLA	O2A-CGA-O1A	-2.07	118.14	123.30
18	B	804	CLA	C3B-C4B-NB	-2.07	108.60	110.52
18	6	609	CLA	CHB-C4A-NA	2.07	127.37	124.51
18	5	613	CLA	CHC-C4B-NB	2.07	126.44	124.26
18	3	401	CLA	C3B-C4B-NB	-2.07	108.60	110.52
18	7	609	CLA	O2A-CGA-O1A	-2.06	118.16	123.30
18	A	823	CLA	CHB-C1B-NB	2.06	126.44	124.26
18	3	404	CLA	CHB-C1B-NB	2.06	126.44	124.26
18	8	603	CLA	CAA-C2A-C1A	2.06	116.90	111.81
21	3	417	BCR	C4-C5-C6	-2.06	119.74	122.73
18	A	803	CLA	CHB-C1B-NB	2.06	126.44	124.26
18	6	614	CLA	CMB-C2B-C1B	-2.06	122.23	125.37
18	8	601	CLA	O1D-CGD-CBD	2.06	128.70	124.48
21	F	801	BCR	C28-C27-C26	-2.06	110.40	114.08
18	B	805	CLA	CAC-C3C-C4C	2.06	127.48	124.81
18	6	605	CLA	CHD-C1D-ND	-2.06	122.56	124.45
18	A	812	CLA	CHD-C1D-ND	-2.06	122.56	124.45
18	A	840	CLA	CHB-C1B-NB	2.06	126.43	124.26
18	A	827	CLA	O2D-CGD-CBD	2.06	114.92	111.27
18	A	833	CLA	CHC-C4B-NB	2.05	126.43	124.26
18	A	836	CLA	CHB-C1B-NB	2.05	126.43	124.26
18	5	604	CLA	CHD-C1D-ND	-2.05	122.57	124.45
20	3	416	XAT	C35-C15-C14	-2.05	119.27	123.47
18	5	604	CLA	CHC-C4B-NB	2.05	126.43	124.26
18	8	606	CLA	CHD-C1D-ND	-2.05	122.57	124.45
18	7	614	CLA	CHD-C1D-ND	-2.05	122.57	124.45
18	3	410	CLA	CHC-C4B-NB	2.05	126.43	124.26
19	3	415	LUT	C17-C1-C6	-2.05	106.97	110.30
18	6	602	CLA	CMB-C2B-C1B	-2.05	122.25	125.37
18	F	802	CLA	CAA-C2A-C3A	-2.05	111.32	116.10
18	A	828	CLA	CHC-C4B-NB	2.05	126.43	124.26
18	A	808	CLA	CHD-C1D-ND	-2.05	122.57	124.45
18	7	613	CLA	CHC-C4B-NB	2.05	126.42	124.26
18	B	835	CLA	CHD-C1D-ND	-2.05	122.57	124.45
18	5	614	CLA	C3B-C4B-NB	-2.04	108.62	110.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	A	845	BCR	C3-C4-C5	-2.04	110.43	114.08
18	7	601	CLA	O2D-CGD-CBD	2.04	114.90	111.27
18	F	803	CLA	C2A-C1A-CHA	2.04	127.43	123.86
18	6	606	CLA	CHB-C1B-NB	2.04	126.42	124.26
18	7	610	CLA	C3B-C4B-NB	-2.04	108.62	110.52
18	B	802	CLA	C3B-C4B-NB	-2.04	108.62	110.52
21	F	801	BCR	C33-C5-C4	2.04	117.54	113.62
18	A	830	CLA	O2A-CGA-O1A	-2.04	118.21	123.30
18	8	613	CLA	CHB-C1B-NB	2.04	126.42	124.26
18	B	803	CLA	CHD-C1D-ND	-2.04	122.58	124.45
18	B	813	CLA	CHD-C1D-ND	-2.04	122.58	124.45
18	8	604	CLA	C3B-C4B-NB	-2.04	108.62	110.52
18	B	834	CLA	C2A-C1A-CHA	2.04	127.42	123.86
18	A	839	CLA	CHD-C1D-ND	-2.04	122.58	124.45
18	A	814	CLA	CHC-C4B-NB	2.04	126.41	124.26
18	1	608	CLA	CHD-C1D-ND	-2.04	122.58	124.45
18	A	832	CLA	CHD-C1D-ND	-2.04	122.58	124.45
18	5	613	CLA	O2D-CGD-CBD	2.04	114.89	111.27
18	B	802	CLA	O2D-CGD-CBD	2.04	114.89	111.27
18	A	841	CLA	CHD-C1D-ND	-2.04	122.58	124.45
18	1	602	CLA	CHB-C1B-NB	2.04	126.41	124.26
18	B	818	CLA	CHC-C4B-NB	2.04	126.41	124.26
19	3	415	LUT	C18-C5-C4	2.03	118.12	114.36
18	8	608	CLA	CHC-C4B-NB	2.03	126.41	124.26
18	A	823	CLA	CHC-C4B-NB	2.03	126.41	124.26
19	3	415	LUT	C37-C21-C26	2.03	112.62	109.55
18	A	818	CLA	CMB-C2B-C3B	2.03	131.51	126.59
18	B	836	CLA	CMB-C2B-C3B	2.03	131.50	126.59
18	B	821	CLA	CHB-C1B-NB	2.03	126.40	124.26
18	B	836	CLA	CMA-C3A-C2A	-2.03	111.37	116.10
18	A	827	CLA	CMB-C2B-C3B	2.03	131.49	126.59
18	5	609	CLA	CMB-C2B-C3B	2.02	131.49	126.59
18	1	601	CLA	CHD-C1D-ND	-2.02	122.59	124.45
18	8	612	CLA	CHD-C1D-ND	-2.02	122.59	124.45
18	5	618	CLA	C2B-C1B-NB	2.02	111.59	110.23
20	3	416	XAT	C36-C21-C26	-2.02	104.59	110.05
18	7	603	CLA	CHB-C1B-NB	2.02	126.40	124.26
18	B	831	CLA	O2D-CGD-CBD	2.02	114.86	111.27
18	3	406	CLA	CMA-C3A-C2A	-2.02	111.38	116.10
18	B	839	CLA	O2A-CGA-O1A	-2.02	118.49	123.59
18	5	610	CLA	C3B-C4B-NB	-2.02	108.64	110.52
18	B	806	CLA	CHB-C1B-NB	2.02	126.39	124.26

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	A	837	CLA	C2A-C1A-CHA	2.02	127.38	123.85
18	1	611	CLA	CHD-C1D-ND	-2.02	122.60	124.45
18	A	810	CLA	CHD-C1D-ND	-2.02	122.60	124.45
21	3	417	BCR	C38-C26-C27	2.02	117.49	113.62
18	3	414	CLA	CHB-C1B-NB	2.02	126.39	124.26
22	5	621	NEX	C4-C3-C2	-2.01	106.88	110.77
18	A	813	CLA	O2A-CGA-O1A	-2.01	118.51	123.59
18	5	616	CLA	CHB-C1B-NB	2.01	126.39	124.26
18	8	607	CLA	C3B-C4B-NB	-2.01	108.65	110.52
18	B	820	CLA	CMB-C2B-C3B	2.01	131.46	126.59
21	3	417	BCR	C32-C1-C6	-2.01	107.03	110.30
22	5	621	NEX	O24-C25-C26	-2.01	57.29	58.96
18	F	803	CLA	C3B-C4B-NB	-2.01	108.65	110.52
18	5	612	CLA	CHA-C1A-NA	-2.01	121.80	126.40
18	6	616	CLA	C2A-C1A-CHA	2.01	127.37	123.86
18	5	612	CLA	CHB-C1B-NB	2.01	126.38	124.26
18	B	823	CLA	CHB-C1B-NB	2.01	126.38	124.26
18	1	608	CLA	C3B-C4B-NB	-2.01	108.89	110.23
18	B	809	CLA	CHD-C1D-ND	-2.01	122.61	124.45
18	7	608	CLA	CMA-C3A-C2A	-2.01	111.42	116.10
18	3	405	CLA	C3B-C4B-NB	-2.00	108.66	110.52
18	5	612	CLA	CHC-C4B-NB	2.00	126.38	124.26
18	B	840	CLA	CHB-C1B-NB	2.00	126.38	124.26
18	B	826	CLA	C3B-C4B-NB	-2.00	108.66	110.52
21	3	417	BCR	C16-C15-C14	-2.00	119.38	123.47

There are no chirality outliers.

All (1061) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
18	1	602	CLA	C1A-C2A-CAA-CBA
18	1	602	CLA	C3A-C2A-CAA-CBA
18	1	602	CLA	C2B-C3B-CAB-CBB
18	1	602	CLA	C4B-C3B-CAB-CBB
18	1	602	CLA	CHA-CBD-CGD-O1D
18	1	602	CLA	CHA-CBD-CGD-O2D
18	1	602	CLA	CBD-CGD-O2D-CED
18	1	603	CLA	C4B-C3B-CAB-CBB
18	1	603	CLA	CBD-CGD-O2D-CED
18	1	607	CLA	C2B-C3B-CAB-CBB
18	1	607	CLA	C4B-C3B-CAB-CBB
18	1	608	CLA	CAD-CBD-CGD-O2D

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	1	609	CLA	C4B-C3B-CAB-CBB
18	1	609	CLA	CBD-CGD-O2D-CED
18	1	610	CLA	C1A-C2A-CAA-CBA
18	1	610	CLA	C3A-C2A-CAA-CBA
18	1	610	CLA	C2B-C3B-CAB-CBB
18	1	610	CLA	C4B-C3B-CAB-CBB
18	1	611	CLA	C4B-C3B-CAB-CBB
18	1	614	CLA	CHA-CBD-CGD-O1D
18	1	614	CLA	CHA-CBD-CGD-O2D
18	3	401	CLA	C2B-C3B-CAB-CBB
18	3	401	CLA	C4B-C3B-CAB-CBB
18	3	401	CLA	CHA-CBD-CGD-O1D
18	3	402	CLA	C1A-C2A-CAA-CBA
18	3	403	CLA	CHA-CBD-CGD-O1D
18	3	403	CLA	CHA-CBD-CGD-O2D
18	3	404	CLA	CHA-CBD-CGD-O1D
18	3	404	CLA	CHA-CBD-CGD-O2D
18	3	405	CLA	C1A-C2A-CAA-CBA
18	3	405	CLA	C2B-C3B-CAB-CBB
18	3	405	CLA	C4B-C3B-CAB-CBB
18	3	406	CLA	CHA-CBD-CGD-O1D
18	3	406	CLA	CHA-CBD-CGD-O2D
18	3	406	CLA	CBD-CGD-O2D-CED
18	3	407	CLA	C2B-C3B-CAB-CBB
18	3	407	CLA	C4B-C3B-CAB-CBB
18	3	409	CLA	CAD-CBD-CGD-O2D
18	3	410	CLA	C1A-C2A-CAA-CBA
18	3	410	CLA	C2A-CAA-CBA-CGA
18	3	410	CLA	CHA-CBD-CGD-O1D
18	3	410	CLA	CHA-CBD-CGD-O2D
18	3	410	CLA	CAD-CBD-CGD-O1D
18	3	410	CLA	CAD-CBD-CGD-O2D
18	3	410	CLA	CBD-CGD-O2D-CED
18	3	412	CLA	C2B-C3B-CAB-CBB
18	3	412	CLA	C4B-C3B-CAB-CBB
18	5	601	CLA	C1A-C2A-CAA-CBA
18	5	601	CLA	C2B-C3B-CAB-CBB
18	5	601	CLA	C4B-C3B-CAB-CBB
18	5	602	CLA	CBD-CGD-O2D-CED
18	5	603	CLA	C1A-C2A-CAA-CBA
18	5	605	CLA	C1A-C2A-CAA-CBA
18	5	606	CLA	C1A-C2A-CAA-CBA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	5	606	CLA	C3A-C2A-CAA-CBA
18	5	607	CLA	C2B-C3B-CAB-CBB
18	5	607	CLA	C4B-C3B-CAB-CBB
18	5	607	CLA	CHA-CBD-CGD-O1D
18	5	607	CLA	CHA-CBD-CGD-O2D
18	5	607	CLA	CBD-CGD-O2D-CED
18	5	609	CLA	C1A-C2A-CAA-CBA
18	5	609	CLA	C3A-C2A-CAA-CBA
18	5	611	CLA	C1A-C2A-CAA-CBA
18	5	611	CLA	C3A-C2A-CAA-CBA
18	5	611	CLA	C2B-C3B-CAB-CBB
18	5	611	CLA	C4B-C3B-CAB-CBB
18	5	611	CLA	CHA-CBD-CGD-O1D
18	5	611	CLA	CHA-CBD-CGD-O2D
18	5	612	CLA	C1A-C2A-CAA-CBA
18	5	612	CLA	C2B-C3B-CAB-CBB
18	5	612	CLA	C4B-C3B-CAB-CBB
18	5	614	CLA	C2B-C3B-CAB-CBB
18	5	614	CLA	C4B-C3B-CAB-CBB
18	5	614	CLA	CHA-CBD-CGD-O1D
18	5	614	CLA	CHA-CBD-CGD-O2D
18	5	615	CLA	CHA-CBD-CGD-O2D
18	5	615	CLA	CAD-CBD-CGD-O2D
18	5	616	CLA	C4B-C3B-CAB-CBB
18	5	617	CLA	C1A-C2A-CAA-CBA
18	6	601	CLA	C2B-C3B-CAB-CBB
18	6	601	CLA	C4B-C3B-CAB-CBB
18	6	604	CLA	C1A-C2A-CAA-CBA
18	6	604	CLA	C3A-C2A-CAA-CBA
18	6	606	CLA	CHA-CBD-CGD-O1D
18	6	606	CLA	CHA-CBD-CGD-O2D
18	6	607	CLA	C2B-C3B-CAB-CBB
18	6	607	CLA	C4B-C3B-CAB-CBB
18	6	608	CLA	CHA-CBD-CGD-O1D
18	6	608	CLA	CHA-CBD-CGD-O2D
18	6	610	CLA	C2B-C3B-CAB-CBB
18	6	610	CLA	C4B-C3B-CAB-CBB
18	6	610	CLA	CBD-CGD-O2D-CED
18	6	611	CLA	C1A-C2A-CAA-CBA
18	6	615	CLA	C4B-C3B-CAB-CBB
18	7	601	CLA	C4B-C3B-CAB-CBB
18	7	601	CLA	CHA-CBD-CGD-O1D

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	7	601	CLA	CHA-CBD-CGD-O2D
18	7	601	CLA	CAD-CBD-CGD-O1D
18	7	603	CLA	C2B-C3B-CAB-CBB
18	7	603	CLA	C4B-C3B-CAB-CBB
18	7	604	CLA	C1A-C2A-CAA-CBA
18	7	604	CLA	C3A-C2A-CAA-CBA
18	7	604	CLA	CBD-CGD-O2D-CED
18	7	605	CLA	CHA-CBD-CGD-O1D
18	7	605	CLA	CHA-CBD-CGD-O2D
18	7	605	CLA	CBD-CGD-O2D-CED
18	7	606	CLA	C2B-C3B-CAB-CBB
18	7	606	CLA	C4B-C3B-CAB-CBB
18	7	606	CLA	CBD-CGD-O2D-CED
18	7	608	CLA	CHA-CBD-CGD-O2D
18	7	610	CLA	C1A-C2A-CAA-CBA
18	7	610	CLA	C3A-C2A-CAA-CBA
18	7	612	CLA	C2B-C3B-CAB-CBB
18	7	612	CLA	C4B-C3B-CAB-CBB
18	7	613	CLA	C2B-C3B-CAB-CBB
18	7	613	CLA	C4B-C3B-CAB-CBB
18	7	613	CLA	CBD-CGD-O2D-CED
18	7	614	CLA	CHA-CBD-CGD-O1D
18	7	614	CLA	CHA-CBD-CGD-O2D
18	8	601	CLA	C3A-C2A-CAA-CBA
18	8	601	CLA	C2B-C3B-CAB-CBB
18	8	601	CLA	C4B-C3B-CAB-CBB
18	8	601	CLA	CHA-CBD-CGD-O1D
18	8	601	CLA	CHA-CBD-CGD-O2D
18	8	602	CLA	C1A-C2A-CAA-CBA
18	8	602	CLA	C3A-C2A-CAA-CBA
18	8	603	CLA	CHA-CBD-CGD-O1D
18	8	603	CLA	CBD-CGD-O2D-CED
18	8	604	CLA	C1A-C2A-CAA-CBA
18	8	604	CLA	C3A-C2A-CAA-CBA
18	8	606	CLA	C1A-C2A-CAA-CBA
18	8	606	CLA	CHA-CBD-CGD-O1D
18	8	606	CLA	CHA-CBD-CGD-O2D
18	8	606	CLA	CBD-CGD-O2D-CED
18	8	606	CLA	O1D-CGD-O2D-CED
18	8	608	CLA	C2B-C3B-CAB-CBB
18	8	608	CLA	C4B-C3B-CAB-CBB
18	8	610	CLA	CHA-CBD-CGD-O1D

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	8	610	CLA	CHA-CBD-CGD-O2D
18	8	612	CLA	CBD-CGD-O2D-CED
18	8	613	CLA	C1A-C2A-CAA-CBA
18	8	613	CLA	CHA-CBD-CGD-O1D
18	8	613	CLA	CHA-CBD-CGD-O2D
18	A	801	CLA	C1A-C2A-CAA-CBA
18	A	801	CLA	C3A-C2A-CAA-CBA
18	A	801	CLA	CBD-CGD-O2D-CED
18	A	802	CLA	C2B-C3B-CAB-CBB
18	A	802	CLA	C4B-C3B-CAB-CBB
18	A	805	CLA	CBD-CGD-O2D-CED
18	A	806	CLA	C1A-C2A-CAA-CBA
18	A	806	CLA	C3A-C2A-CAA-CBA
18	A	806	CLA	C4B-C3B-CAB-CBB
18	A	807	CLA	C1A-C2A-CAA-CBA
18	A	807	CLA	C3A-C2A-CAA-CBA
18	A	810	CLA	C1A-C2A-CAA-CBA
18	A	811	CLA	CBD-CGD-O2D-CED
18	A	812	CLA	C1A-C2A-CAA-CBA
18	A	814	CLA	C1A-C2A-CAA-CBA
18	A	814	CLA	CHA-CBD-CGD-O1D
18	A	814	CLA	CHA-CBD-CGD-O2D
18	A	814	CLA	CAD-CBD-CGD-O1D
18	A	814	CLA	CBD-CGD-O2D-CED
18	A	816	CLA	C2B-C3B-CAB-CBB
18	A	816	CLA	C4B-C3B-CAB-CBB
18	A	816	CLA	CBD-CGD-O2D-CED
18	A	818	CLA	C2-C3-C5-C6
18	A	818	CLA	C4-C3-C5-C6
18	A	819	CLA	C1A-C2A-CAA-CBA
18	A	819	CLA	C3A-C2A-CAA-CBA
18	A	819	CLA	C2B-C3B-CAB-CBB
18	A	819	CLA	C4B-C3B-CAB-CBB
18	A	819	CLA	CHA-CBD-CGD-O1D
18	A	819	CLA	CHA-CBD-CGD-O2D
18	A	820	CLA	C3A-C2A-CAA-CBA
18	A	820	CLA	C2B-C3B-CAB-CBB
18	A	820	CLA	C4B-C3B-CAB-CBB
18	A	821	CLA	C2B-C3B-CAB-CBB
18	A	821	CLA	C4B-C3B-CAB-CBB
18	A	824	CLA	C1A-C2A-CAA-CBA
18	A	824	CLA	C2B-C3B-CAB-CBB

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	A	824	CLA	C4B-C3B-CAB-CBB
18	A	824	CLA	CHA-CBD-CGD-O1D
18	A	824	CLA	CHA-CBD-CGD-O2D
18	A	827	CLA	C1A-C2A-CAA-CBA
18	A	827	CLA	C3A-C2A-CAA-CBA
18	A	827	CLA	CBD-CGD-O2D-CED
18	A	828	CLA	C1A-C2A-CAA-CBA
18	A	828	CLA	CHA-CBD-CGD-O1D
18	A	828	CLA	CHA-CBD-CGD-O2D
18	A	828	CLA	CBD-CGD-O2D-CED
18	A	829	CLA	CBD-CGD-O2D-CED
18	A	830	CLA	CHA-CBD-CGD-O1D
18	A	830	CLA	CHA-CBD-CGD-O2D
18	A	831	CLA	C1A-C2A-CAA-CBA
18	A	831	CLA	CBD-CGD-O2D-CED
18	A	832	CLA	CBD-CGD-O2D-CED
18	A	834	CLA	C1A-C2A-CAA-CBA
18	A	834	CLA	C2B-C3B-CAB-CBB
18	A	834	CLA	C4B-C3B-CAB-CBB
18	A	835	CLA	C1A-C2A-CAA-CBA
18	A	835	CLA	CHA-CBD-CGD-O1D
18	A	835	CLA	CHA-CBD-CGD-O2D
18	A	835	CLA	CBD-CGD-O2D-CED
18	A	836	CLA	C1A-C2A-CAA-CBA
18	A	838	CLA	C1A-C2A-CAA-CBA
18	A	838	CLA	C2B-C3B-CAB-CBB
18	A	838	CLA	C4B-C3B-CAB-CBB
18	A	838	CLA	CHA-CBD-CGD-O1D
18	A	838	CLA	CHA-CBD-CGD-O2D
18	A	838	CLA	CAD-CBD-CGD-O1D
18	A	839	CLA	C1A-C2A-CAA-CBA
18	A	841	CLA	C1A-C2A-CAA-CBA
18	A	841	CLA	C2B-C3B-CAB-CBB
18	A	841	CLA	C4B-C3B-CAB-CBB
18	B	801	CLA	C1A-C2A-CAA-CBA
18	B	802	CLA	C1A-C2A-CAA-CBA
18	B	803	CLA	C1A-C2A-CAA-CBA
18	B	803	CLA	C3A-C2A-CAA-CBA
18	B	803	CLA	CBD-CGD-O2D-CED
18	B	804	CLA	C2B-C3B-CAB-CBB
18	B	804	CLA	C4B-C3B-CAB-CBB
18	B	804	CLA	CBD-CGD-O2D-CED

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	B	805	CLA	CBD-CGD-O2D-CED
18	B	805	CLA	O1D-CGD-O2D-CED
18	B	809	CLA	C2B-C3B-CAB-CBB
18	B	809	CLA	C4B-C3B-CAB-CBB
18	B	810	CLA	C2B-C3B-CAB-CBB
18	B	810	CLA	C4B-C3B-CAB-CBB
18	B	814	CLA	C1A-C2A-CAA-CBA
18	B	815	CLA	C1A-C2A-CAA-CBA
18	B	815	CLA	C3A-C2A-CAA-CBA
18	B	816	CLA	CBD-CGD-O2D-CED
18	B	817	CLA	CBD-CGD-O2D-CED
18	B	819	CLA	C4B-C3B-CAB-CBB
18	B	820	CLA	CHA-CBD-CGD-O1D
18	B	820	CLA	CHA-CBD-CGD-O2D
18	B	820	CLA	CAD-CBD-CGD-O1D
18	B	820	CLA	CAD-CBD-CGD-O2D
18	B	820	CLA	CBD-CGD-O2D-CED
18	B	821	CLA	CBD-CGD-O2D-CED
18	B	822	CLA	C2B-C3B-CAB-CBB
18	B	822	CLA	C4B-C3B-CAB-CBB
18	B	822	CLA	CBD-CGD-O2D-CED
18	B	823	CLA	C1A-C2A-CAA-CBA
18	B	823	CLA	C3A-C2A-CAA-CBA
18	B	825	CLA	C1A-C2A-CAA-CBA
18	B	825	CLA	C3A-C2A-CAA-CBA
18	B	826	CLA	C2B-C3B-CAB-CBB
18	B	826	CLA	C4B-C3B-CAB-CBB
18	B	828	CLA	C2B-C3B-CAB-CBB
18	B	828	CLA	C4B-C3B-CAB-CBB
18	B	828	CLA	CHA-CBD-CGD-O1D
18	B	828	CLA	CHA-CBD-CGD-O2D
18	B	829	CLA	CHA-CBD-CGD-O1D
18	B	829	CLA	CHA-CBD-CGD-O2D
18	B	831	CLA	C2A-CAA-CBA-CGA
18	B	831	CLA	CBD-CGD-O2D-CED
18	B	832	CLA	CHA-CBD-CGD-O1D
18	B	832	CLA	CHA-CBD-CGD-O2D
18	B	833	CLA	C2B-C3B-CAB-CBB
18	B	833	CLA	C4B-C3B-CAB-CBB
18	B	833	CLA	CHA-CBD-CGD-O1D
18	B	833	CLA	CHA-CBD-CGD-O2D
18	B	833	CLA	CBD-CGD-O2D-CED

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	B	833	CLA	O1D-CGD-O2D-CED
18	B	834	CLA	C4B-C3B-CAB-CBB
18	B	834	CLA	CHA-CBD-CGD-O1D
18	B	835	CLA	C2B-C3B-CAB-CBB
18	B	835	CLA	C4B-C3B-CAB-CBB
18	B	836	CLA	CHA-CBD-CGD-O1D
18	B	836	CLA	CHA-CBD-CGD-O2D
18	B	841	CLA	C1A-C2A-CAA-CBA
18	B	842	CLA	C1A-C2A-CAA-CBA
18	B	842	CLA	C2B-C3B-CAB-CBB
18	B	842	CLA	C4B-C3B-CAB-CBB
18	B	843	CLA	C2B-C3B-CAB-CBB
18	B	843	CLA	C4B-C3B-CAB-CBB
18	B	843	CLA	CHA-CBD-CGD-O1D
18	B	843	CLA	CHA-CBD-CGD-O2D
18	F	803	CLA	C2B-C3B-CAB-CBB
18	F	803	CLA	C4B-C3B-CAB-CBB
18	F	804	CLA	C1A-C2A-CAA-CBA
18	F	804	CLA	C3A-C2A-CAA-CBA
18	F	804	CLA	C2B-C3B-CAB-CBB
18	F	804	CLA	C4B-C3B-CAB-CBB
18	F	804	CLA	CBD-CGD-O2D-CED
18	J	102	CLA	C1A-C2A-CAA-CBA
18	J	102	CLA	C2B-C3B-CAB-CBB
18	J	102	CLA	C4B-C3B-CAB-CBB
18	K	201	CLA	C4B-C3B-CAB-CBB
18	K	201	CLA	CHA-CBD-CGD-O1D
18	K	201	CLA	CHA-CBD-CGD-O2D
18	K	202	CLA	C4B-C3B-CAB-CBB
19	5	619	LUT	C7-C8-C9-C10
19	5	619	LUT	C7-C8-C9-C19
20	3	416	XAT	O24-C26-C27-C28
20	6	617	XAT	C7-C8-C9-C10
20	6	617	XAT	C7-C8-C9-C19
20	8	616	XAT	O24-C26-C27-C28
21	A	844	BCR	C23-C24-C25-C30
21	J	101	BCR	C23-C24-C25-C30
22	5	621	NEX	C11-C12-C13-C20
22	5	621	NEX	C27-C28-C29-C30
22	5	621	NEX	C27-C28-C29-C39
23	B	844	PQN	C12-C13-C15-C16
23	B	844	PQN	C14-C13-C15-C16

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	1	603	CLA	O1D-CGD-O2D-CED
18	3	406	CLA	O1D-CGD-O2D-CED
18	5	601	CLA	O1D-CGD-O2D-CED
18	5	607	CLA	O1D-CGD-O2D-CED
18	5	613	CLA	O1D-CGD-O2D-CED
18	6	603	CLA	O1D-CGD-O2D-CED
18	6	613	CLA	O1D-CGD-O2D-CED
18	7	613	CLA	O1D-CGD-O2D-CED
18	A	801	CLA	O1D-CGD-O2D-CED
18	A	811	CLA	O1D-CGD-O2D-CED
18	A	822	CLA	O1D-CGD-O2D-CED
18	B	801	CLA	O1D-CGD-O2D-CED
18	B	803	CLA	O1D-CGD-O2D-CED
18	B	812	CLA	O1D-CGD-O2D-CED
18	B	824	CLA	O1D-CGD-O2D-CED
18	B	828	CLA	O1D-CGD-O2D-CED
18	B	831	CLA	O1D-CGD-O2D-CED
18	B	841	CLA	O1D-CGD-O2D-CED
18	1	604	CLA	O1D-CGD-O2D-CED
18	3	408	CLA	O1D-CGD-O2D-CED
18	6	610	CLA	O1D-CGD-O2D-CED
18	8	603	CLA	O1D-CGD-O2D-CED
18	A	809	CLA	O1D-CGD-O2D-CED
18	A	821	CLA	O1D-CGD-O2D-CED
18	A	832	CLA	O1D-CGD-O2D-CED
18	B	816	CLA	O1D-CGD-O2D-CED
18	B	837	CLA	O1D-CGD-O2D-CED
18	1	604	CLA	CBD-CGD-O2D-CED
18	3	402	CLA	CBD-CGD-O2D-CED
18	3	408	CLA	CBD-CGD-O2D-CED
18	5	601	CLA	CBD-CGD-O2D-CED
18	5	608	CLA	CBD-CGD-O2D-CED
18	5	613	CLA	CBD-CGD-O2D-CED
18	5	616	CLA	CBD-CGD-O2D-CED
18	5	618	CLA	CBD-CGD-O2D-CED
18	6	602	CLA	CBD-CGD-O2D-CED
18	6	603	CLA	CBD-CGD-O2D-CED
18	6	607	CLA	CBD-CGD-O2D-CED
18	6	613	CLA	CBD-CGD-O2D-CED
18	6	614	CLA	CBD-CGD-O2D-CED
18	7	607	CLA	CBD-CGD-O2D-CED
18	7	609	CLA	CBD-CGD-O2D-CED

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	7	610	CLA	CBD-CGD-O2D-CED
18	7	611	CLA	CBD-CGD-O2D-CED
18	8	602	CLA	CBD-CGD-O2D-CED
18	8	605	CLA	CBD-CGD-O2D-CED
18	8	608	CLA	CBD-CGD-O2D-CED
18	8	609	CLA	CBD-CGD-O2D-CED
18	A	803	CLA	CBD-CGD-O2D-CED
18	A	808	CLA	CBD-CGD-O2D-CED
18	A	809	CLA	CBD-CGD-O2D-CED
18	A	810	CLA	CBD-CGD-O2D-CED
18	A	812	CLA	CBD-CGD-O2D-CED
18	A	815	CLA	CBD-CGD-O2D-CED
18	A	821	CLA	CBD-CGD-O2D-CED
18	A	822	CLA	CBD-CGD-O2D-CED
18	A	834	CLA	CBD-CGD-O2D-CED
18	A	837	CLA	CBD-CGD-O2D-CED
18	A	840	CLA	CBD-CGD-O2D-CED
18	B	801	CLA	CBD-CGD-O2D-CED
18	B	812	CLA	CBD-CGD-O2D-CED
18	B	818	CLA	CBD-CGD-O2D-CED
18	B	824	CLA	CBD-CGD-O2D-CED
18	B	825	CLA	CBD-CGD-O2D-CED
18	B	828	CLA	CBD-CGD-O2D-CED
18	B	837	CLA	CBD-CGD-O2D-CED
18	B	841	CLA	CBD-CGD-O2D-CED
18	K	202	CLA	CBD-CGD-O2D-CED
18	3	402	CLA	O1D-CGD-O2D-CED
18	6	602	CLA	O1D-CGD-O2D-CED
18	6	607	CLA	O1D-CGD-O2D-CED
18	7	607	CLA	O1D-CGD-O2D-CED
18	7	610	CLA	O1D-CGD-O2D-CED
18	8	605	CLA	O1D-CGD-O2D-CED
18	8	612	CLA	O1D-CGD-O2D-CED
18	A	828	CLA	O1D-CGD-O2D-CED
18	A	831	CLA	O1D-CGD-O2D-CED
18	K	202	CLA	O1D-CGD-O2D-CED
18	1	602	CLA	O1D-CGD-O2D-CED
18	1	609	CLA	O1D-CGD-O2D-CED
18	5	602	CLA	O1D-CGD-O2D-CED
18	7	605	CLA	O1D-CGD-O2D-CED
18	8	608	CLA	O1D-CGD-O2D-CED
18	A	814	CLA	O1D-CGD-O2D-CED

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	A	816	CLA	O1D-CGD-O2D-CED
18	A	827	CLA	O1D-CGD-O2D-CED
18	A	835	CLA	O1D-CGD-O2D-CED
18	B	804	CLA	O1D-CGD-O2D-CED
18	B	820	CLA	O1D-CGD-O2D-CED
18	B	821	CLA	O1D-CGD-O2D-CED
18	F	804	CLA	O1D-CGD-O2D-CED
18	1	612	CLA	CBD-CGD-O2D-CED
18	1	614	CLA	CBD-CGD-O2D-CED
18	3	401	CLA	CBD-CGD-O2D-CED
18	3	404	CLA	CBD-CGD-O2D-CED
18	5	604	CLA	CBD-CGD-O2D-CED
18	6	609	CLA	CBD-CGD-O2D-CED
18	7	612	CLA	CBD-CGD-O2D-CED
18	A	820	CLA	CBD-CGD-O2D-CED
18	A	823	CLA	CBD-CGD-O2D-CED
18	A	825	CLA	CBD-CGD-O2D-CED
18	A	836	CLA	CBD-CGD-O2D-CED
18	B	834	CLA	CBD-CGD-O2D-CED
18	B	839	CLA	CBD-CGD-O2D-CED
18	B	834	CLA	O1A-CGA-O2A-C1
18	7	604	CLA	O1D-CGD-O2D-CED
18	A	805	CLA	O1D-CGD-O2D-CED
18	A	829	CLA	O1D-CGD-O2D-CED
18	B	817	CLA	O1D-CGD-O2D-CED
18	B	822	CLA	O1D-CGD-O2D-CED
18	3	410	CLA	O1D-CGD-O2D-CED
18	7	606	CLA	O1D-CGD-O2D-CED
18	5	614	CLA	CBD-CGD-O2D-CED
18	8	601	CLA	CBD-CGD-O2D-CED
18	6	612	CLA	C3-C5-C6-C7
18	B	839	CLA	C3-C5-C6-C7
18	6	614	CLA	O1D-CGD-O2D-CED
18	8	602	CLA	O1D-CGD-O2D-CED
18	A	834	CLA	O1D-CGD-O2D-CED
18	3	403	CLA	CBD-CGD-O2D-CED
18	A	818	CLA	C3-C5-C6-C7
18	A	826	CLA	CBD-CGD-O2D-CED
18	B	842	CLA	CBD-CGD-O2D-CED
18	1	603	CLA	C2A-CAA-CBA-CGA
18	7	603	CLA	C2A-CAA-CBA-CGA
18	A	808	CLA	C2A-CAA-CBA-CGA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	A	813	CLA	C2A-CAA-CBA-CGA
18	A	818	CLA	C2A-CAA-CBA-CGA
18	A	830	CLA	C2A-CAA-CBA-CGA
18	B	818	CLA	C3-C5-C6-C7
18	B	834	CLA	CBA-CGA-O2A-C1
18	A	810	CLA	O1D-CGD-O2D-CED
18	B	818	CLA	O1D-CGD-O2D-CED
18	B	827	CLA	CBD-CGD-O2D-CED
18	5	616	CLA	O1D-CGD-O2D-CED
18	7	609	CLA	O1D-CGD-O2D-CED
18	A	803	CLA	O1D-CGD-O2D-CED
18	A	815	CLA	O1D-CGD-O2D-CED
18	B	825	CLA	O1D-CGD-O2D-CED
18	A	813	CLA	CBD-CGD-O2D-CED
18	A	819	CLA	CBD-CGD-O2D-CED
18	A	824	CLA	CBD-CGD-O2D-CED
18	B	806	CLA	CBD-CGD-O2D-CED
18	B	819	CLA	CBD-CGD-O2D-CED
18	B	832	CLA	CBD-CGD-O2D-CED
18	B	836	CLA	CBD-CGD-O2D-CED
18	B	843	CLA	CBD-CGD-O2D-CED
18	A	808	CLA	O1D-CGD-O2D-CED
18	5	618	CLA	O1D-CGD-O2D-CED
18	7	611	CLA	O1D-CGD-O2D-CED
18	8	609	CLA	O1D-CGD-O2D-CED
18	A	837	CLA	O1D-CGD-O2D-CED
18	6	606	CLA	CBD-CGD-O2D-CED
18	6	612	CLA	CBD-CGD-O2D-CED
18	8	610	CLA	CBD-CGD-O2D-CED
18	A	802	CLA	CBD-CGD-O2D-CED
18	A	804	CLA	CBD-CGD-O2D-CED
18	A	806	CLA	CBD-CGD-O2D-CED
18	A	819	CLA	CBA-CGA-O2A-C1
18	B	839	CLA	CBA-CGA-O2A-C1
18	A	812	CLA	O1D-CGD-O2D-CED
18	A	840	CLA	O1D-CGD-O2D-CED
18	1	614	CLA	O1D-CGD-O2D-CED
18	5	608	CLA	O1D-CGD-O2D-CED
18	A	820	CLA	O1D-CGD-O2D-CED
18	A	836	CLA	O1D-CGD-O2D-CED
18	A	819	CLA	O1A-CGA-O2A-C1
18	B	839	CLA	O1A-CGA-O2A-C1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	7	612	CLA	O1D-CGD-O2D-CED
18	A	825	CLA	O1D-CGD-O2D-CED
18	B	839	CLA	O1D-CGD-O2D-CED
18	6	602	CLA	C3-C5-C6-C7
18	6	602	CLA	CBA-CGA-O2A-C1
18	7	604	CLA	CBA-CGA-O2A-C1
18	A	813	CLA	CBA-CGA-O2A-C1
18	F	804	CLA	CBA-CGA-O2A-C1
18	6	602	CLA	O1A-CGA-O2A-C1
18	3	404	CLA	O1D-CGD-O2D-CED
18	B	820	CLA	C2A-CAA-CBA-CGA
21	J	101	BCR	C7-C8-C9-C34
21	J	101	BCR	C7-C8-C9-C10
18	A	823	CLA	O1D-CGD-O2D-CED
18	A	813	CLA	O1A-CGA-O2A-C1
18	3	401	CLA	O1D-CGD-O2D-CED
18	A	825	CLA	C5-C6-C7-C8
18	5	604	CLA	O1D-CGD-O2D-CED
18	6	609	CLA	O1D-CGD-O2D-CED
18	1	612	CLA	O1D-CGD-O2D-CED
18	6	609	CLA	C2A-CAA-CBA-CGA
18	6	612	CLA	CBA-CGA-O2A-C1
18	5	614	CLA	O1D-CGD-O2D-CED
18	8	601	CLA	O1D-CGD-O2D-CED
18	B	834	CLA	O1D-CGD-O2D-CED
18	7	604	CLA	O1A-CGA-O2A-C1
18	B	810	CLA	CBD-CGD-O2D-CED
18	A	807	CLA	CBD-CGD-O2D-CED
18	A	829	CLA	C3-C5-C6-C7
18	3	403	CLA	O1D-CGD-O2D-CED
18	B	842	CLA	O1D-CGD-O2D-CED
18	A	817	CLA	C2A-CAA-CBA-CGA
18	A	826	CLA	O1D-CGD-O2D-CED
18	B	827	CLA	O1D-CGD-O2D-CED
18	A	840	CLA	C3-C5-C6-C7
23	A	842	PQN	C16-C17-C18-C19
18	A	813	CLA	O1D-CGD-O2D-CED
18	A	824	CLA	O1D-CGD-O2D-CED
18	B	836	CLA	O1D-CGD-O2D-CED
18	A	819	CLA	C11-C10-C8-C9
18	6	612	CLA	O1A-CGA-O2A-C1
19	5	619	LUT	C11-C12-C13-C20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
20	8	616	XAT	C27-C28-C29-C39
19	5	619	LUT	C11-C12-C13-C14
20	8	616	XAT	C27-C28-C29-C30
18	1	612	CLA	C4B-C3B-CAB-CBB
18	3	402	CLA	C4B-C3B-CAB-CBB
18	3	413	CLA	C4B-C3B-CAB-CBB
18	5	605	CLA	C4B-C3B-CAB-CBB
18	6	604	CLA	C4B-C3B-CAB-CBB
18	6	605	CLA	C4B-C3B-CAB-CBB
18	6	611	CLA	C4B-C3B-CAB-CBB
18	6	612	CLA	C4B-C3B-CAB-CBB
18	7	604	CLA	C4B-C3B-CAB-CBB
18	7	605	CLA	C4B-C3B-CAB-CBB
18	7	609	CLA	C4B-C3B-CAB-CBB
18	7	610	CLA	C4B-C3B-CAB-CBB
18	8	612	CLA	C4B-C3B-CAB-CBB
18	8	613	CLA	C4B-C3B-CAB-CBB
18	A	805	CLA	C4B-C3B-CAB-CBB
18	A	807	CLA	C4B-C3B-CAB-CBB
18	A	828	CLA	C4B-C3B-CAB-CBB
18	A	829	CLA	C4B-C3B-CAB-CBB
18	A	831	CLA	C4B-C3B-CAB-CBB
18	A	832	CLA	C4B-C3B-CAB-CBB
18	A	833	CLA	C4B-C3B-CAB-CBB
18	A	835	CLA	C4B-C3B-CAB-CBB
18	B	802	CLA	C4B-C3B-CAB-CBB
18	B	806	CLA	C4B-C3B-CAB-CBB
18	B	817	CLA	C4B-C3B-CAB-CBB
18	B	818	CLA	C4B-C3B-CAB-CBB
18	B	825	CLA	C4B-C3B-CAB-CBB
18	B	838	CLA	C4B-C3B-CAB-CBB
18	K	203	CLA	C4B-C3B-CAB-CBB
23	A	842	PQN	C16-C17-C18-C20
18	B	832	CLA	O1D-CGD-O2D-CED
18	B	819	CLA	O1D-CGD-O2D-CED
18	A	818	CLA	CBA-CGA-O2A-C1
18	B	843	CLA	O1D-CGD-O2D-CED
18	3	410	CLA	C3A-C2A-CAA-CBA
18	7	611	CLA	C3A-C2A-CAA-CBA
18	A	810	CLA	C3A-C2A-CAA-CBA
18	A	813	CLA	C3A-C2A-CAA-CBA
18	A	825	CLA	C3A-C2A-CAA-CBA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	B	824	CLA	C3A-C2A-CAA-CBA
18	B	838	CLA	C3A-C2A-CAA-CBA
18	A	820	CLA	CBA-CGA-O2A-C1
18	A	819	CLA	O1D-CGD-O2D-CED
18	A	802	CLA	O1D-CGD-O2D-CED
18	B	806	CLA	O1D-CGD-O2D-CED
18	B	818	CLA	C2-C3-C5-C6
18	A	804	CLA	O1D-CGD-O2D-CED
18	5	602	CLA	C2A-CAA-CBA-CGA
18	6	602	CLA	C2A-CAA-CBA-CGA
18	B	801	CLA	C2A-CAA-CBA-CGA
18	A	806	CLA	O1D-CGD-O2D-CED
18	F	804	CLA	O1A-CGA-O2A-C1
18	1	603	CLA	C2B-C3B-CAB-CBB
18	1	609	CLA	C2B-C3B-CAB-CBB
18	1	611	CLA	C2B-C3B-CAB-CBB
18	1	612	CLA	C2B-C3B-CAB-CBB
18	3	402	CLA	C2B-C3B-CAB-CBB
18	3	404	CLA	C2B-C3B-CAB-CBB
18	3	406	CLA	C2B-C3B-CAB-CBB
18	3	411	CLA	C2B-C3B-CAB-CBB
18	3	413	CLA	C2B-C3B-CAB-CBB
18	5	602	CLA	C2B-C3B-CAB-CBB
18	5	605	CLA	C2B-C3B-CAB-CBB
18	5	616	CLA	C2B-C3B-CAB-CBB
18	6	605	CLA	C2B-C3B-CAB-CBB
18	6	611	CLA	C2B-C3B-CAB-CBB
18	6	612	CLA	C2B-C3B-CAB-CBB
18	6	615	CLA	C2B-C3B-CAB-CBB
18	7	601	CLA	C2B-C3B-CAB-CBB
18	7	604	CLA	C2B-C3B-CAB-CBB
18	7	605	CLA	C2B-C3B-CAB-CBB
18	7	607	CLA	C2B-C3B-CAB-CBB
18	7	609	CLA	C2B-C3B-CAB-CBB
18	7	610	CLA	C2B-C3B-CAB-CBB
18	8	602	CLA	C2B-C3B-CAB-CBB
18	8	612	CLA	C2B-C3B-CAB-CBB
18	8	613	CLA	C2B-C3B-CAB-CBB
18	A	805	CLA	C2B-C3B-CAB-CBB
18	A	806	CLA	C2B-C3B-CAB-CBB
18	A	807	CLA	C2B-C3B-CAB-CBB
18	A	829	CLA	C2B-C3B-CAB-CBB

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	A	830	CLA	C2B-C3B-CAB-CBB
18	A	831	CLA	C2B-C3B-CAB-CBB
18	A	832	CLA	C2B-C3B-CAB-CBB
18	A	833	CLA	C2B-C3B-CAB-CBB
18	A	835	CLA	C2B-C3B-CAB-CBB
18	B	806	CLA	C2B-C3B-CAB-CBB
18	B	808	CLA	C2B-C3B-CAB-CBB
18	B	818	CLA	C2B-C3B-CAB-CBB
18	B	819	CLA	C2B-C3B-CAB-CBB
18	B	834	CLA	C2B-C3B-CAB-CBB
18	B	838	CLA	C2B-C3B-CAB-CBB
18	B	841	CLA	C2B-C3B-CAB-CBB
18	K	201	CLA	C2B-C3B-CAB-CBB
18	K	202	CLA	C2B-C3B-CAB-CBB
18	K	203	CLA	C2B-C3B-CAB-CBB
19	7	615	LUT	C1-C6-C7-C8
19	7	615	LUT	C5-C6-C7-C8
21	3	417	BCR	C23-C24-C25-C26
21	3	417	BCR	C23-C24-C25-C30
21	A	844	BCR	C23-C24-C25-C26
21	J	101	BCR	C23-C24-C25-C26
18	B	818	CLA	C4-C3-C5-C6
18	8	610	CLA	O1D-CGD-O2D-CED
18	A	819	CLA	C11-C10-C8-C7
18	A	818	CLA	O1A-CGA-O2A-C1
18	5	602	CLA	CBA-CGA-O2A-C1
18	7	609	CLA	C2A-CAA-CBA-CGA
18	A	828	CLA	C2A-CAA-CBA-CGA
18	6	606	CLA	O1D-CGD-O2D-CED
18	6	612	CLA	O1D-CGD-O2D-CED
18	5	602	CLA	C11-C10-C8-C9
18	B	839	CLA	C2A-CAA-CBA-CGA
18	B	839	CLA	C8-C10-C11-C12
22	5	621	NEX	C11-C12-C13-C14
18	7	609	CLA	C1A-C2A-CAA-CBA
18	A	808	CLA	C1A-C2A-CAA-CBA
18	A	820	CLA	C1A-C2A-CAA-CBA
18	A	823	CLA	C1A-C2A-CAA-CBA
18	A	825	CLA	C1A-C2A-CAA-CBA
18	A	830	CLA	C1A-C2A-CAA-CBA
18	B	818	CLA	C1A-C2A-CAA-CBA
18	B	824	CLA	C1A-C2A-CAA-CBA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	B	831	CLA	C1A-C2A-CAA-CBA
18	B	833	CLA	C1A-C2A-CAA-CBA
18	B	838	CLA	C1A-C2A-CAA-CBA
18	8	613	CLA	CBD-CGD-O2D-CED
18	3	402	CLA	C3A-C2A-CAA-CBA
18	5	601	CLA	C3A-C2A-CAA-CBA
18	5	603	CLA	C3A-C2A-CAA-CBA
18	5	612	CLA	C3A-C2A-CAA-CBA
18	5	617	CLA	C3A-C2A-CAA-CBA
18	6	611	CLA	C3A-C2A-CAA-CBA
18	7	606	CLA	C3A-C2A-CAA-CBA
18	8	611	CLA	C3A-C2A-CAA-CBA
18	A	805	CLA	C3A-C2A-CAA-CBA
18	A	838	CLA	C3A-C2A-CAA-CBA
18	A	839	CLA	C3A-C2A-CAA-CBA
18	6	613	CLA	C2A-CAA-CBA-CGA
18	7	602	CLA	C6-C7-C8-C9
18	5	602	CLA	O1A-CGA-O2A-C1
18	B	820	CLA	O2A-C1-C2-C3
18	3	401	CLA	C2A-CAA-CBA-CGA
18	7	602	CLA	C5-C6-C7-C8
18	A	825	CLA	C2-C1-O2A-CGA
18	5	602	CLA	C11-C10-C8-C7
18	B	834	CLA	C6-C7-C8-C10
18	A	829	CLA	C6-C7-C8-C9
18	B	834	CLA	C6-C7-C8-C9
21	A	847	BCR	C11-C12-C13-C35
18	B	810	CLA	O1D-CGD-O2D-CED
18	A	807	CLA	O1D-CGD-O2D-CED
18	1	601	CLA	C4B-C3B-CAB-CBB
18	3	403	CLA	C4B-C3B-CAB-CBB
18	3	404	CLA	C4B-C3B-CAB-CBB
18	3	406	CLA	C4B-C3B-CAB-CBB
18	3	410	CLA	C4B-C3B-CAB-CBB
18	3	411	CLA	C4B-C3B-CAB-CBB
18	3	414	CLA	C4B-C3B-CAB-CBB
18	5	602	CLA	C4B-C3B-CAB-CBB
18	5	606	CLA	C4B-C3B-CAB-CBB
18	5	608	CLA	C4B-C3B-CAB-CBB
18	5	609	CLA	C4B-C3B-CAB-CBB
18	5	618	CLA	C4B-C3B-CAB-CBB
18	6	608	CLA	C4B-C3B-CAB-CBB

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	6	609	CLA	C4B-C3B-CAB-CBB
18	6	614	CLA	C4B-C3B-CAB-CBB
18	7	602	CLA	C4B-C3B-CAB-CBB
18	7	607	CLA	C4B-C3B-CAB-CBB
18	7	608	CLA	C4B-C3B-CAB-CBB
18	8	602	CLA	C4B-C3B-CAB-CBB
18	8	604	CLA	C4B-C3B-CAB-CBB
18	8	605	CLA	C4B-C3B-CAB-CBB
18	8	607	CLA	C4B-C3B-CAB-CBB
18	8	609	CLA	C4B-C3B-CAB-CBB
18	8	610	CLA	C4B-C3B-CAB-CBB
18	8	611	CLA	C4B-C3B-CAB-CBB
18	A	801	CLA	C4B-C3B-CAB-CBB
18	A	808	CLA	C4B-C3B-CAB-CBB
18	A	809	CLA	C4B-C3B-CAB-CBB
18	A	810	CLA	C4B-C3B-CAB-CBB
18	A	813	CLA	C4B-C3B-CAB-CBB
18	A	817	CLA	C4B-C3B-CAB-CBB
18	A	818	CLA	C4B-C3B-CAB-CBB
18	A	822	CLA	C4B-C3B-CAB-CBB
18	A	823	CLA	C4B-C3B-CAB-CBB
18	A	826	CLA	C4B-C3B-CAB-CBB
18	A	830	CLA	C4B-C3B-CAB-CBB
18	A	840	CLA	C4B-C3B-CAB-CBB
18	B	808	CLA	C4B-C3B-CAB-CBB
18	B	811	CLA	C4B-C3B-CAB-CBB
18	B	815	CLA	C4B-C3B-CAB-CBB
18	B	816	CLA	C4B-C3B-CAB-CBB
18	B	821	CLA	C4B-C3B-CAB-CBB
18	B	823	CLA	C4B-C3B-CAB-CBB
18	B	824	CLA	C4B-C3B-CAB-CBB
18	B	832	CLA	C4B-C3B-CAB-CBB
18	B	840	CLA	C4B-C3B-CAB-CBB
18	B	841	CLA	C4B-C3B-CAB-CBB
18	L	201	CLA	C4B-C3B-CAB-CBB
18	5	615	CLA	CBD-CGD-O2D-CED
18	A	828	CLA	C3A-C2A-CAA-CBA
18	B	801	CLA	C3A-C2A-CAA-CBA
18	A	825	CLA	CAA-CBA-CGA-O2A
18	B	839	CLA	C5-C6-C7-C8
18	1	601	CLA	C2B-C3B-CAB-CBB
18	3	403	CLA	C2B-C3B-CAB-CBB

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	3	410	CLA	C2B-C3B-CAB-CBB
18	5	606	CLA	C2B-C3B-CAB-CBB
18	5	608	CLA	C2B-C3B-CAB-CBB
18	5	618	CLA	C2B-C3B-CAB-CBB
18	6	604	CLA	C2B-C3B-CAB-CBB
18	6	609	CLA	C2B-C3B-CAB-CBB
18	6	614	CLA	C2B-C3B-CAB-CBB
18	7	602	CLA	C2B-C3B-CAB-CBB
18	8	604	CLA	C2B-C3B-CAB-CBB
18	8	605	CLA	C2B-C3B-CAB-CBB
18	8	609	CLA	C2B-C3B-CAB-CBB
18	8	610	CLA	C2B-C3B-CAB-CBB
18	A	808	CLA	C2B-C3B-CAB-CBB
18	A	810	CLA	C2B-C3B-CAB-CBB
18	A	813	CLA	C2B-C3B-CAB-CBB
18	A	817	CLA	C2B-C3B-CAB-CBB
18	A	818	CLA	C2B-C3B-CAB-CBB
18	A	823	CLA	C2B-C3B-CAB-CBB
18	A	826	CLA	C2B-C3B-CAB-CBB
18	A	828	CLA	C2B-C3B-CAB-CBB
18	A	840	CLA	C2B-C3B-CAB-CBB
18	B	802	CLA	C2B-C3B-CAB-CBB
18	B	811	CLA	C2B-C3B-CAB-CBB
18	B	815	CLA	C2B-C3B-CAB-CBB
18	B	817	CLA	C2B-C3B-CAB-CBB
18	B	821	CLA	C2B-C3B-CAB-CBB
18	B	823	CLA	C2B-C3B-CAB-CBB
18	B	824	CLA	C2B-C3B-CAB-CBB
18	B	832	CLA	C2B-C3B-CAB-CBB
18	B	840	CLA	C2B-C3B-CAB-CBB
18	L	201	CLA	C2B-C3B-CAB-CBB
18	7	602	CLA	C2A-CAA-CBA-CGA
21	3	417	BCR	C5-C6-C7-C8
21	A	845	BCR	C5-C6-C7-C8
18	6	607	CLA	C1A-C2A-CAA-CBA
18	7	606	CLA	C1A-C2A-CAA-CBA
18	8	601	CLA	C1A-C2A-CAA-CBA
18	8	611	CLA	C1A-C2A-CAA-CBA
18	A	832	CLA	C1A-C2A-CAA-CBA
18	B	828	CLA	C1A-C2A-CAA-CBA
18	B	840	CLA	C1A-C2A-CAA-CBA
18	F	803	CLA	C1A-C2A-CAA-CBA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	K	202	CLA	C1A-C2A-CAA-CBA
21	A	847	BCR	C11-C12-C13-C14
18	B	818	CLA	C2-C1-O2A-CGA
18	A	829	CLA	C6-C7-C8-C10
18	A	813	CLA	C11-C10-C8-C7
18	6	607	CLA	CAD-CBD-CGD-O2D
18	7	602	CLA	CAD-CBD-CGD-O2D
18	7	609	CLA	CAD-CBD-CGD-O2D
18	7	612	CLA	CAD-CBD-CGD-O2D
18	8	608	CLA	CAD-CBD-CGD-O2D
18	A	813	CLA	CAD-CBD-CGD-O2D
18	A	814	CLA	CAD-CBD-CGD-O2D
18	A	816	CLA	CAD-CBD-CGD-O2D
18	A	826	CLA	CAD-CBD-CGD-O2D
18	A	832	CLA	CAD-CBD-CGD-O2D
18	A	834	CLA	CAD-CBD-CGD-O2D
18	A	838	CLA	CAD-CBD-CGD-O2D
18	B	802	CLA	CAD-CBD-CGD-O2D
18	B	804	CLA	CAD-CBD-CGD-O2D
18	B	805	CLA	CAD-CBD-CGD-O2D
18	B	812	CLA	CAD-CBD-CGD-O2D
18	B	814	CLA	CAD-CBD-CGD-O2D
18	B	827	CLA	CAD-CBD-CGD-O2D
18	F	802	CLA	CAD-CBD-CGD-O2D
18	A	820	CLA	O1A-CGA-O2A-C1
18	1	612	CLA	CHA-CBD-CGD-O1D
18	1	612	CLA	CHA-CBD-CGD-O2D
18	3	401	CLA	CHA-CBD-CGD-O2D
18	5	604	CLA	CHA-CBD-CGD-O1D
18	5	604	CLA	CHA-CBD-CGD-O2D
18	5	616	CLA	CHA-CBD-CGD-O1D
18	5	616	CLA	CHA-CBD-CGD-O2D
18	6	601	CLA	CHA-CBD-CGD-O1D
18	6	601	CLA	CHA-CBD-CGD-O2D
18	6	602	CLA	CHA-CBD-CGD-O1D
18	6	609	CLA	CHA-CBD-CGD-O1D
18	6	609	CLA	CHA-CBD-CGD-O2D
18	8	602	CLA	CHA-CBD-CGD-O1D
18	8	602	CLA	CHA-CBD-CGD-O2D
18	8	605	CLA	CHA-CBD-CGD-O1D
18	A	823	CLA	CHA-CBD-CGD-O1D
18	A	831	CLA	CHA-CBD-CGD-O1D

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	A	831	CLA	CHA-CBD-CGD-O2D
18	B	803	CLA	CHA-CBD-CGD-O1D
18	B	803	CLA	CHA-CBD-CGD-O2D
18	B	807	CLA	CHA-CBD-CGD-O1D
18	B	821	CLA	CHA-CBD-CGD-O1D
18	B	821	CLA	CHA-CBD-CGD-O2D
18	B	834	CLA	CHA-CBD-CGD-O2D
18	B	838	CLA	CHA-CBD-CGD-O1D
18	B	838	CLA	CHA-CBD-CGD-O2D
18	B	839	CLA	CHA-CBD-CGD-O1D
18	B	839	CLA	CHA-CBD-CGD-O2D
18	J	102	CLA	CHA-CBD-CGD-O1D
18	J	102	CLA	CHA-CBD-CGD-O2D
23	A	842	PQN	C13-C15-C16-C17
18	A	817	CLA	O2A-C1-C2-C3
18	8	613	CLA	O1D-CGD-O2D-CED
18	A	813	CLA	C11-C10-C8-C9
20	3	416	XAT	C31-C32-C33-C40
21	A	845	BCR	C7-C8-C9-C34
18	1	607	CLA	CHA-CBD-CGD-O2D
18	1	613	CLA	CHA-CBD-CGD-O2D
18	3	401	CLA	C1A-C2A-CAA-CBA
18	5	605	CLA	CHA-CBD-CGD-O2D
18	7	603	CLA	C1A-C2A-CAA-CBA
18	7	603	CLA	CHA-CBD-CGD-O2D
18	7	611	CLA	C1A-C2A-CAA-CBA
18	A	813	CLA	C1A-C2A-CAA-CBA
18	A	833	CLA	CHA-CBD-CGD-O2D
18	B	820	CLA	C1A-C2A-CAA-CBA
18	B	812	CLA	C4B-C3B-CAB-CBB
18	F	802	CLA	C4B-C3B-CAB-CBB
18	1	602	CLA	CAD-CBD-CGD-O1D
18	3	403	CLA	CAD-CBD-CGD-O1D
18	3	406	CLA	CAD-CBD-CGD-O1D
18	5	616	CLA	CAD-CBD-CGD-O1D
18	6	601	CLA	CAD-CBD-CGD-O1D
18	6	602	CLA	CAD-CBD-CGD-O1D
18	7	605	CLA	CAD-CBD-CGD-O1D
18	8	602	CLA	CAD-CBD-CGD-O1D
18	8	605	CLA	CAD-CBD-CGD-O1D
18	A	823	CLA	CAD-CBD-CGD-O1D
18	A	830	CLA	CAD-CBD-CGD-O1D

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	A	831	CLA	CAD-CBD-CGD-O1D
18	B	807	CLA	CAD-CBD-CGD-O1D
18	B	821	CLA	CAD-CBD-CGD-O1D
18	B	829	CLA	CAD-CBD-CGD-O1D
18	B	836	CLA	CAD-CBD-CGD-O1D
18	7	604	CLA	CAA-CBA-CGA-O2A
18	7	602	CLA	C3-C5-C6-C7
18	A	810	CLA	C2A-CAA-CBA-CGA
18	1	601	CLA	CAD-CBD-CGD-O2D
18	1	605	CLA	CBD-CGD-O2D-CED
18	A	818	CLA	C3A-C2A-CAA-CBA
18	A	819	CLA	C6-C7-C8-C10
18	A	843	CLA	CAD-CBD-CGD-O2D
18	B	828	CLA	C3A-C2A-CAA-CBA
18	1	608	CLA	CAD-CBD-CGD-O1D
18	1	610	CLA	CAD-CBD-CGD-O1D
18	3	409	CLA	CAD-CBD-CGD-O1D
18	A	843	CLA	CAD-CBD-CGD-O1D
18	B	834	CLA	C8-C10-C11-C12
18	7	602	CLA	C4-C3-C5-C6
18	A	829	CLA	C4-C3-C5-C6
18	1	605	CLA	C2B-C3B-CAB-CBB
18	3	414	CLA	C2B-C3B-CAB-CBB
18	5	609	CLA	C2B-C3B-CAB-CBB
18	6	602	CLA	C2B-C3B-CAB-CBB
18	6	608	CLA	C2B-C3B-CAB-CBB
18	7	608	CLA	C2B-C3B-CAB-CBB
18	8	607	CLA	C2B-C3B-CAB-CBB
18	8	611	CLA	C2B-C3B-CAB-CBB
18	A	801	CLA	C2B-C3B-CAB-CBB
18	A	809	CLA	C2B-C3B-CAB-CBB
18	A	811	CLA	C2B-C3B-CAB-CBB
18	A	814	CLA	C2B-C3B-CAB-CBB
18	A	822	CLA	C2B-C3B-CAB-CBB
18	A	825	CLA	C2B-C3B-CAB-CBB
18	B	807	CLA	C2B-C3B-CAB-CBB
18	B	814	CLA	C2B-C3B-CAB-CBB
18	B	816	CLA	C2B-C3B-CAB-CBB
18	B	820	CLA	C2B-C3B-CAB-CBB
18	B	825	CLA	C2B-C3B-CAB-CBB
18	F	802	CLA	C2B-C3B-CAB-CBB
18	A	829	CLA	C2A-CAA-CBA-CGA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
21	3	417	BCR	C1-C6-C7-C8
21	A	845	BCR	C1-C6-C7-C8
18	6	608	CLA	C2A-CAA-CBA-CGA
18	A	819	CLA	C6-C7-C8-C9
20	5	620	XAT	C9-C10-C11-C12
20	7	616	XAT	C7-C8-C9-C19
21	A	845	BCR	C36-C18-C19-C20
18	1	605	CLA	C4B-C3B-CAB-CBB
18	6	602	CLA	C4B-C3B-CAB-CBB
18	A	811	CLA	C4B-C3B-CAB-CBB
18	A	814	CLA	C4B-C3B-CAB-CBB
18	A	825	CLA	C4B-C3B-CAB-CBB
18	B	807	CLA	C4B-C3B-CAB-CBB
18	B	814	CLA	C4B-C3B-CAB-CBB
18	6	612	CLA	C4-C3-C5-C6
18	B	834	CLA	C5-C6-C7-C8
18	A	814	CLA	C3A-C2A-CAA-CBA
22	5	621	NEX	C39-C29-C30-C31
18	6	608	CLA	C1A-C2A-CAA-CBA
18	A	817	CLA	C1A-C2A-CAA-CBA
18	A	818	CLA	C1A-C2A-CAA-CBA
18	6	603	CLA	CAA-CBA-CGA-O1A
18	B	829	CLA	C2B-C3B-CAB-CBB
18	7	603	CLA	CAA-CBA-CGA-O2A
18	B	809	CLA	CBD-CGD-O2D-CED
22	5	621	NEX	C28-C29-C30-C31
20	3	416	XAT	C9-C10-C11-C12
18	6	603	CLA	CAA-CBA-CGA-O2A
18	B	809	CLA	O1D-CGD-O2D-CED
18	B	839	CLA	C2-C1-O2A-CGA
18	3	405	CLA	C3A-C2A-CAA-CBA
18	7	602	CLA	C2-C3-C5-C6
18	A	829	CLA	C2-C3-C5-C6
19	3	415	LUT	C1-C6-C7-C8
18	7	603	CLA	CAA-CBA-CGA-O1A
18	A	805	CLA	C1A-C2A-CAA-CBA
18	A	830	CLA	CAA-CBA-CGA-O2A
18	A	815	CLA	C4B-C3B-CAB-CBB
18	A	843	CLA	C4B-C3B-CAB-CBB
18	B	820	CLA	C4B-C3B-CAB-CBB
18	B	829	CLA	C4B-C3B-CAB-CBB
18	B	836	CLA	C4B-C3B-CAB-CBB

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
21	J	101	BCR	C9-C10-C11-C12
18	7	611	CLA	CAA-CBA-CGA-O2A
18	A	825	CLA	C8-C10-C11-C12
18	A	841	CLA	CBD-CGD-O2D-CED
18	6	608	CLA	C3A-C2A-CAA-CBA
18	7	601	CLA	C3A-C2A-CAA-CBA
18	1	609	CLA	CAD-CBD-CGD-O2D
18	3	407	CLA	CAD-CBD-CGD-O2D
18	6	614	CLA	CAD-CBD-CGD-O2D
18	7	606	CLA	CAD-CBD-CGD-O2D
18	7	610	CLA	CAD-CBD-CGD-O2D
18	7	611	CLA	CAD-CBD-CGD-O2D
18	7	613	CLA	CAD-CBD-CGD-O2D
18	8	609	CLA	CAD-CBD-CGD-O2D
18	A	801	CLA	CAD-CBD-CGD-O2D
18	A	802	CLA	CAD-CBD-CGD-O2D
18	A	805	CLA	CAD-CBD-CGD-O2D
18	A	811	CLA	CAD-CBD-CGD-O2D
18	A	815	CLA	CAD-CBD-CGD-O2D
18	A	817	CLA	CAD-CBD-CGD-O2D
18	A	818	CLA	CAD-CBD-CGD-O2D
18	A	839	CLA	CAD-CBD-CGD-O2D
18	A	841	CLA	CAD-CBD-CGD-O2D
18	B	810	CLA	CAD-CBD-CGD-O2D
18	B	824	CLA	CAD-CBD-CGD-O2D
18	B	826	CLA	CAD-CBD-CGD-O2D
18	B	840	CLA	CAD-CBD-CGD-O2D
18	B	842	CLA	CAD-CBD-CGD-O2D
18	F	804	CLA	CAD-CBD-CGD-O2D
18	L	201	CLA	CAD-CBD-CGD-O2D
18	6	602	CLA	C5-C6-C7-C8
18	7	611	CLA	CAA-CBA-CGA-O1A
21	A	845	BCR	C7-C8-C9-C10
21	F	801	BCR	C11-C12-C13-C14
20	3	416	XAT	O4-C6-C7-C8
20	5	620	XAT	O4-C6-C7-C8
18	7	601	CLA	CAA-CBA-CGA-O2A
18	7	609	CLA	CAA-CBA-CGA-O2A
18	B	801	CLA	O2A-C1-C2-C3
18	A	841	CLA	O1D-CGD-O2D-CED
18	1	603	CLA	CHA-CBD-CGD-O1D
18	1	603	CLA	CHA-CBD-CGD-O2D

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
18	5	601	CLA	CHA-CBD-CGD-O1D
18	5	603	CLA	CHA-CBD-CGD-O2D
18	5	613	CLA	CHA-CBD-CGD-O1D
18	5	613	CLA	CHA-CBD-CGD-O2D
18	6	602	CLA	CHA-CBD-CGD-O2D
18	6	603	CLA	CHA-CBD-CGD-O1D
18	6	603	CLA	CHA-CBD-CGD-O2D
18	6	613	CLA	CHA-CBD-CGD-O1D
18	6	613	CLA	CHA-CBD-CGD-O2D
18	8	603	CLA	CHA-CBD-CGD-O2D
18	8	605	CLA	CHA-CBD-CGD-O2D
18	8	607	CLA	CHA-CBD-CGD-O2D
18	A	804	CLA	CHA-CBD-CGD-O2D
18	A	806	CLA	CHA-CBD-CGD-O1D
18	A	806	CLA	CHA-CBD-CGD-O2D
18	A	808	CLA	CHA-CBD-CGD-O1D
18	A	813	CLA	CHA-CBD-CGD-O2D
18	A	820	CLA	CHA-CBD-CGD-O1D
18	A	822	CLA	CHA-CBD-CGD-O1D
18	A	823	CLA	CHA-CBD-CGD-O2D
18	A	836	CLA	CHA-CBD-CGD-O1D
18	A	836	CLA	CHA-CBD-CGD-O2D
18	B	801	CLA	CHA-CBD-CGD-O1D
18	B	801	CLA	CHA-CBD-CGD-O2D
18	B	806	CLA	CHA-CBD-CGD-O2D
18	B	807	CLA	CHA-CBD-CGD-O2D
18	B	825	CLA	CHA-CBD-CGD-O1D
18	B	825	CLA	CHA-CBD-CGD-O2D
18	B	841	CLA	CHA-CBD-CGD-O1D
18	B	841	CLA	CHA-CBD-CGD-O2D
19	5	619	LUT	C9-C10-C11-C12
18	A	830	CLA	CAA-CBA-CGA-O1A
18	5	609	CLA	O1D-CGD-O2D-CED
18	7	609	CLA	CAA-CBA-CGA-O1A
18	1	603	CLA	CAA-CBA-CGA-O1A
18	B	836	CLA	C2B-C3B-CAB-CBB
18	B	801	CLA	CAA-CBA-CGA-O2A
18	6	603	CLA	C2A-CAA-CBA-CGA
18	A	840	CLA	C2A-CAA-CBA-CGA
18	B	820	CLA	CBA-CGA-O2A-C1
18	6	612	CLA	C2-C3-C5-C6
20	3	416	XAT	C31-C32-C33-C34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
20	7	616	XAT	C7-C8-C9-C10
21	A	845	BCR	C17-C18-C19-C20
18	1	601	CLA	CHA-CBD-CGD-O2D
18	1	611	CLA	CHA-CBD-CGD-O2D
18	3	405	CLA	CHA-CBD-CGD-O2D
18	3	407	CLA	C1A-C2A-CAA-CBA
18	3	413	CLA	CHA-CBD-CGD-O2D
18	5	606	CLA	CHA-CBD-CGD-O2D
18	5	617	CLA	CHA-CBD-CGD-O2D
18	6	612	CLA	C1A-C2A-CAA-CBA
18	7	601	CLA	C1A-C2A-CAA-CBA
18	7	608	CLA	CAD-CBD-CGD-O2D
18	8	611	CLA	CHA-CBD-CGD-O2D
18	7	601	CLA	CAA-CBA-CGA-O1A
18	6	612	CLA	C2A-CAA-CBA-CGA
18	A	819	CLA	C2A-CAA-CBA-CGA
19	3	415	LUT	C5-C6-C7-C8
18	F	804	CLA	C2A-CAA-CBA-CGA
18	A	815	CLA	CAD-CBD-CGD-O1D
18	A	827	CLA	CAD-CBD-CGD-O1D
18	B	820	CLA	O1A-CGA-O2A-C1
18	1	603	CLA	CAA-CBA-CGA-O2A
18	1	601	CLA	CHA-CBD-CGD-O1D
18	1	607	CLA	CHA-CBD-CGD-O1D
18	1	610	CLA	CAD-CBD-CGD-O2D
18	1	611	CLA	CHA-CBD-CGD-O1D
18	1	611	CLA	CAD-CBD-CGD-O2D
18	1	613	CLA	CHA-CBD-CGD-O1D
18	3	405	CLA	CHA-CBD-CGD-O1D
18	3	411	CLA	CAD-CBD-CGD-O2D
18	5	605	CLA	CHA-CBD-CGD-O1D
18	6	612	CLA	C3A-C2A-CAA-CBA
18	7	603	CLA	CHA-CBD-CGD-O1D
18	A	829	CLA	C3A-C2A-CAA-CBA
18	A	833	CLA	CHA-CBD-CGD-O1D
18	B	813	CLA	CAD-CBD-CGD-O2D
18	B	801	CLA	CAA-CBA-CGA-O1A
18	A	823	CLA	CAA-CBA-CGA-O2A
18	A	817	CLA	CAA-CBA-CGA-O2A
18	B	839	CLA	CAA-CBA-CGA-O2A
18	A	823	CLA	CAA-CBA-CGA-O1A

There are no ring outliers.

96 monomers are involved in 136 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
18	A	813	CLA	2	0
18	B	810	CLA	1	0
18	B	833	CLA	1	0
19	3	415	LUT	2	0
18	A	835	CLA	1	0
18	1	609	CLA	1	0
18	7	605	CLA	1	0
18	B	826	CLA	1	0
18	A	818	CLA	3	0
18	B	825	CLA	1	0
20	8	616	XAT	2	0
18	3	404	CLA	1	0
18	8	607	CLA	1	0
21	3	417	BCR	1	0
21	A	847	BCR	5	0
18	A	832	CLA	1	0
18	B	806	CLA	2	0
18	B	839	CLA	1	0
21	A	844	BCR	1	0
20	3	416	XAT	4	0
18	B	824	CLA	1	0
18	B	807	CLA	3	0
18	7	603	CLA	1	0
18	6	613	CLA	2	0
18	B	809	CLA	3	0
18	3	405	CLA	1	0
18	5	613	CLA	1	0
18	B	832	CLA	1	0
22	5	621	NEX	2	0
18	B	812	CLA	1	0
19	5	619	LUT	1	0
18	F	802	CLA	1	0
18	A	834	CLA	1	0
18	A	828	CLA	2	0
19	7	615	LUT	2	0
18	1	605	CLA	1	0
18	B	804	CLA	2	0
18	3	402	CLA	1	0
18	7	604	CLA	1	0
23	A	842	PQN	1	0
18	A	817	CLA	1	0
18	B	843	CLA	1	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	6	617	XAT	2	0
18	1	612	CLA	2	0
18	A	820	CLA	2	0
18	A	836	CLA	1	0
18	A	825	CLA	1	0
18	K	201	CLA	1	0
18	B	818	CLA	2	0
18	6	615	CLA	2	0
18	7	606	CLA	1	0
18	A	802	CLA	2	0
24	C	102	SF4	2	0
18	A	808	CLA	4	0
18	A	803	CLA	5	0
18	B	815	CLA	1	0
18	5	607	CLA	2	0
18	6	602	CLA	1	0
21	J	101	BCR	4	0
18	B	811	CLA	1	0
18	B	819	CLA	2	0
18	7	602	CLA	2	0
20	5	620	XAT	2	0
18	B	836	CLA	1	0
18	1	603	CLA	1	0
18	7	601	CLA	2	0
18	6	607	CLA	1	0
18	8	601	CLA	1	0
18	6	608	CLA	1	0
21	A	845	BCR	2	0
18	8	602	CLA	1	0
18	A	819	CLA	4	0
18	5	604	CLA	1	0
18	6	609	CLA	2	0
18	A	837	CLA	2	0
18	J	102	CLA	1	0
18	1	602	CLA	1	0
18	A	838	CLA	1	0
18	B	828	CLA	2	0
18	B	801	CLA	3	0
18	B	834	CLA	1	0
18	B	829	CLA	1	0
18	3	407	CLA	2	0
18	A	807	CLA	1	0

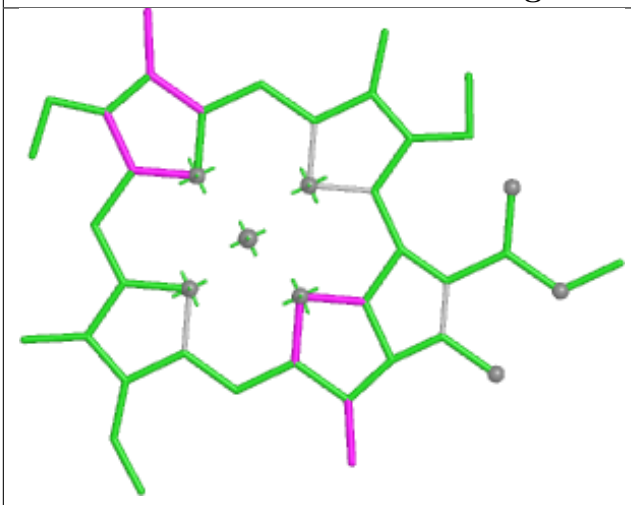
Continued on next page...

Continued from previous page...

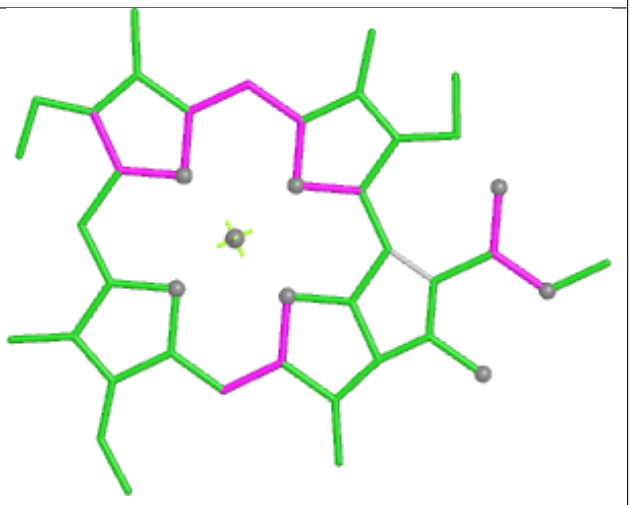
Mol	Chain	Res	Type	Clashes	Symm-Clashes
18	F	804	CLA	2	0
18	A	830	CLA	1	0
18	6	614	CLA	1	0
18	7	610	CLA	1	0
18	A	827	CLA	3	0
18	6	601	CLA	2	0
18	A	840	CLA	1	0
18	A	826	CLA	2	0
21	F	801	BCR	4	0
24	A	846	SF4	1	0
18	A	815	CLA	2	0
18	B	827	CLA	1	0

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.

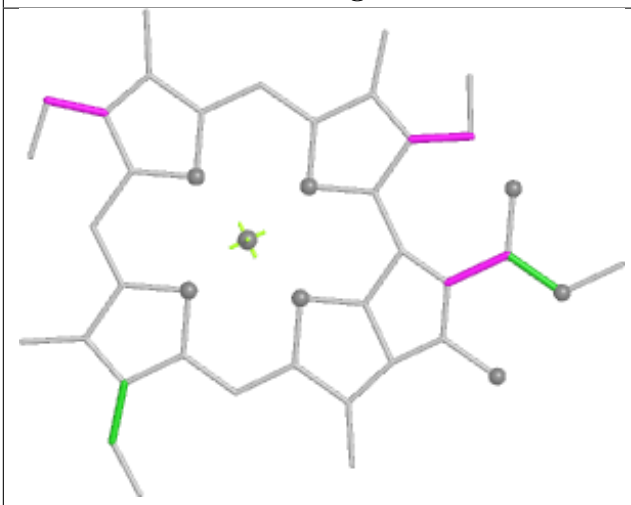
Ligand CLA B 840



Bond lengths



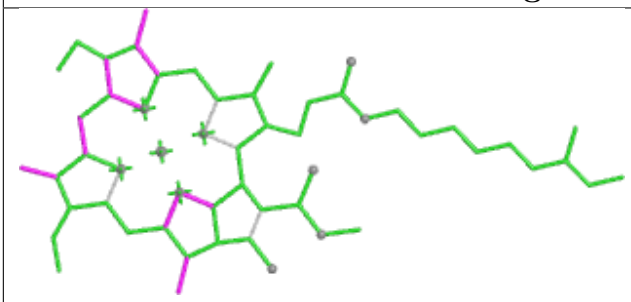
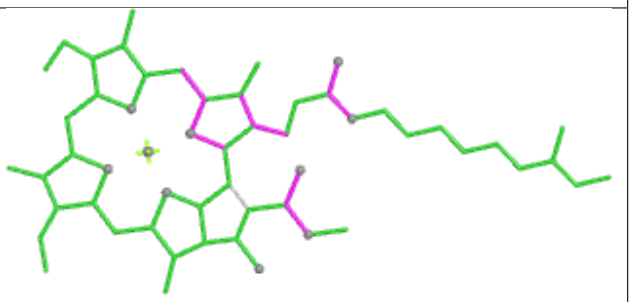
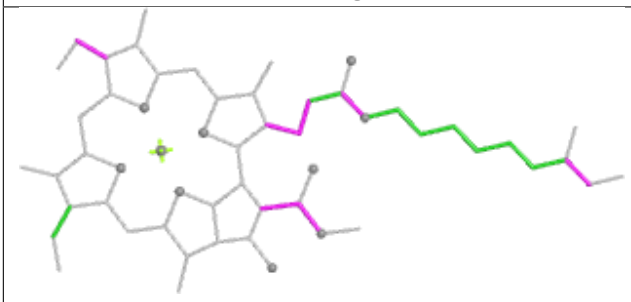
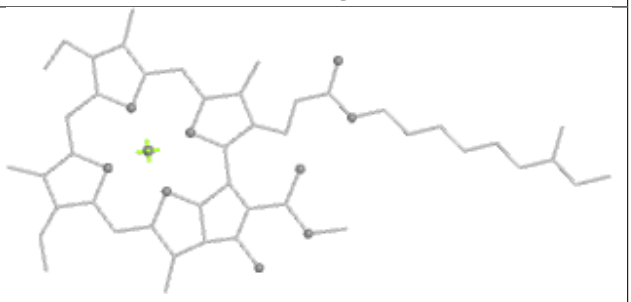
Bond angles



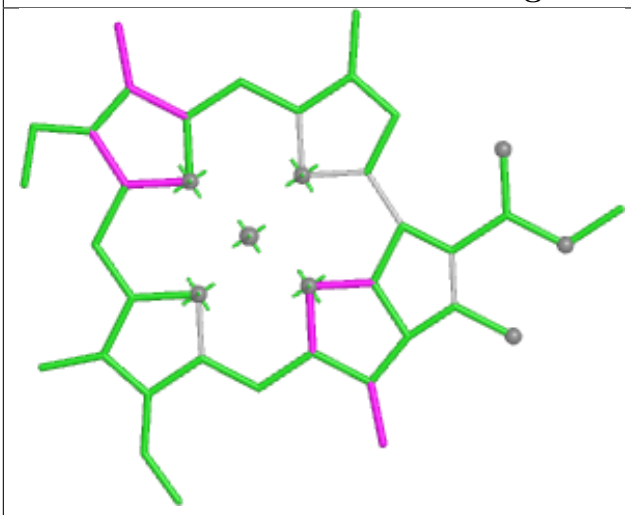
Torsions



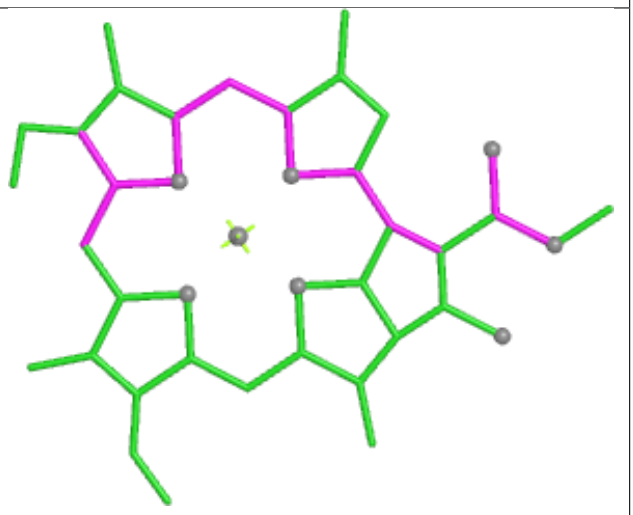
Rings

Ligand CLA A 813	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

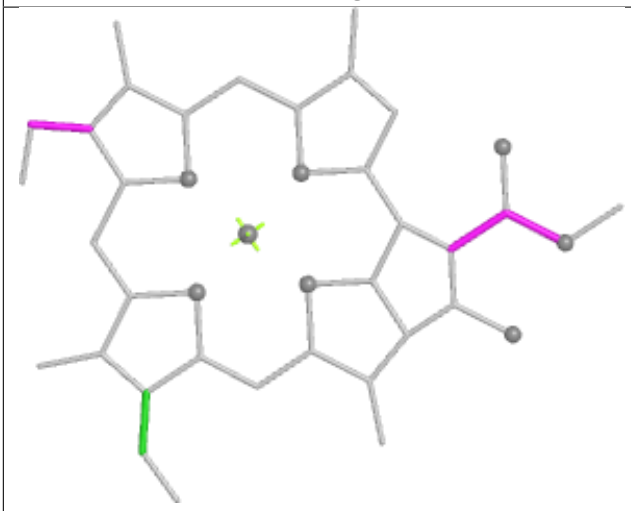
Ligand CLA B 810



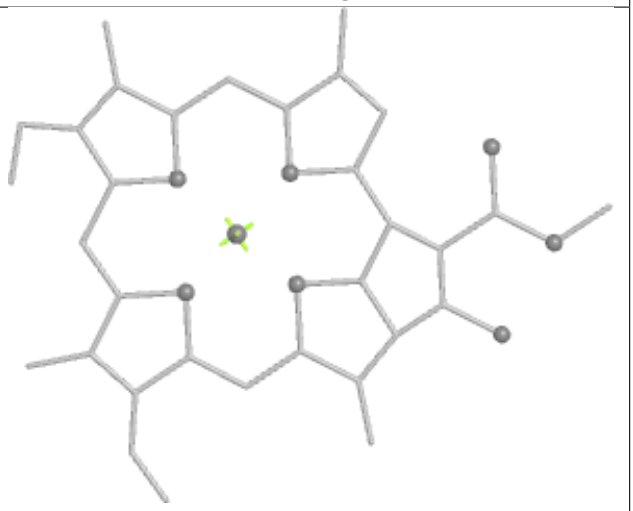
Bond lengths



Bond angles

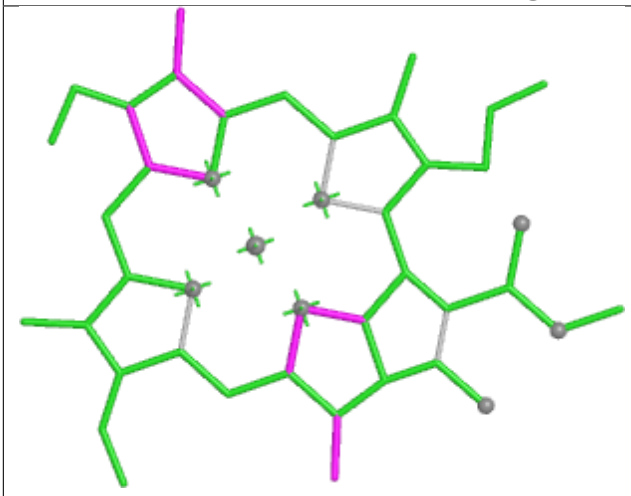


Torsions

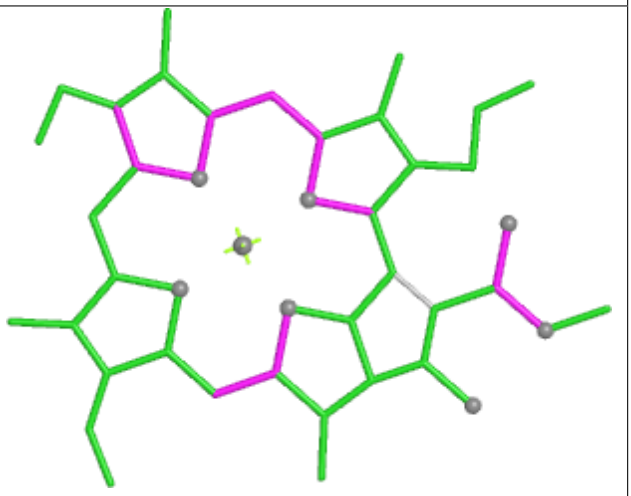


Rings

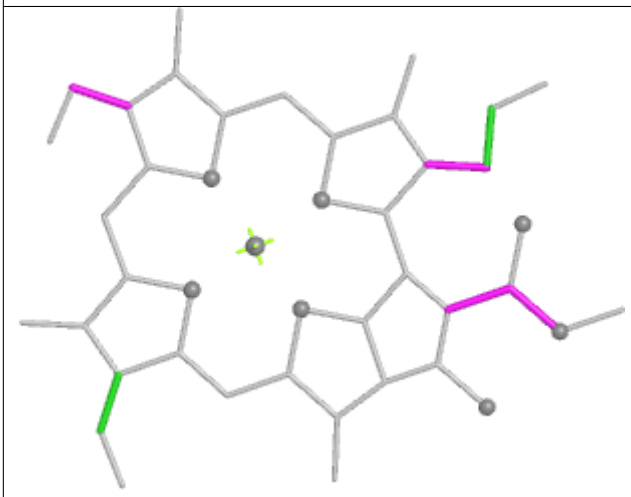
Ligand CLA B 833



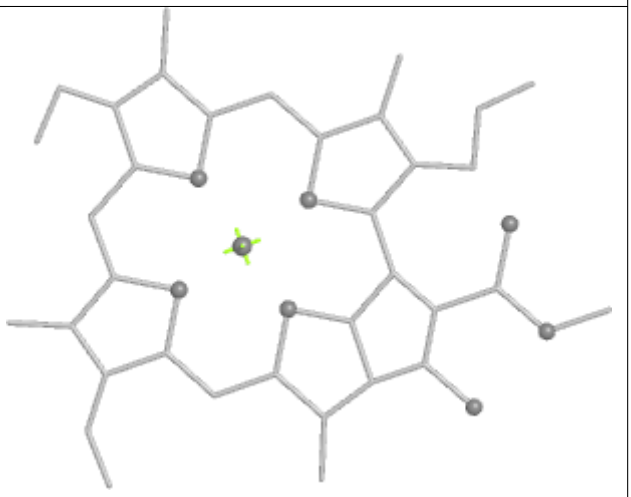
Bond lengths



Bond angles

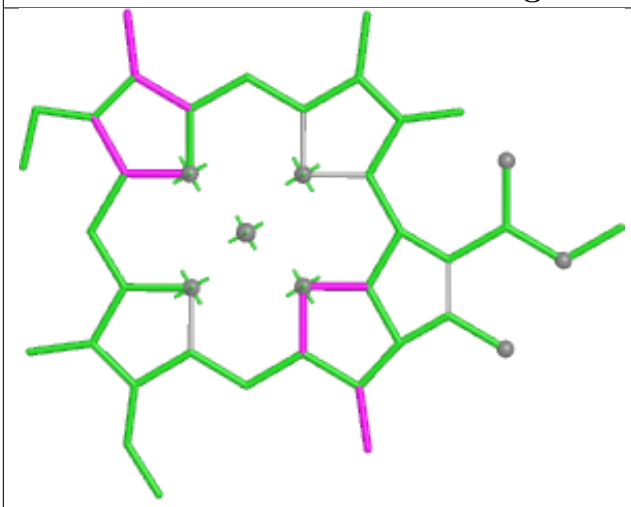


Torsions

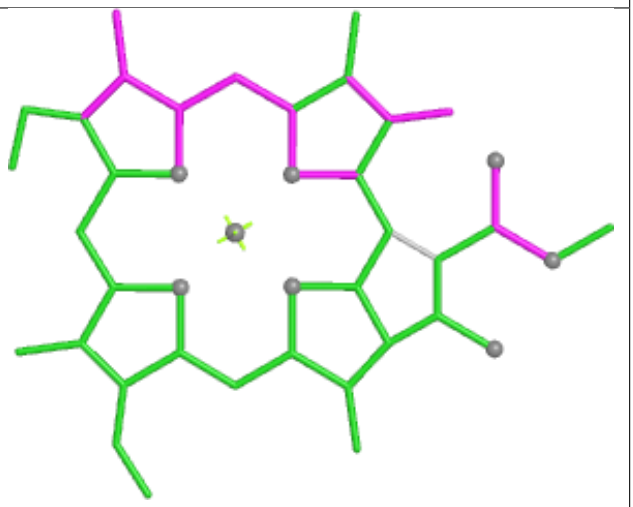


Rings

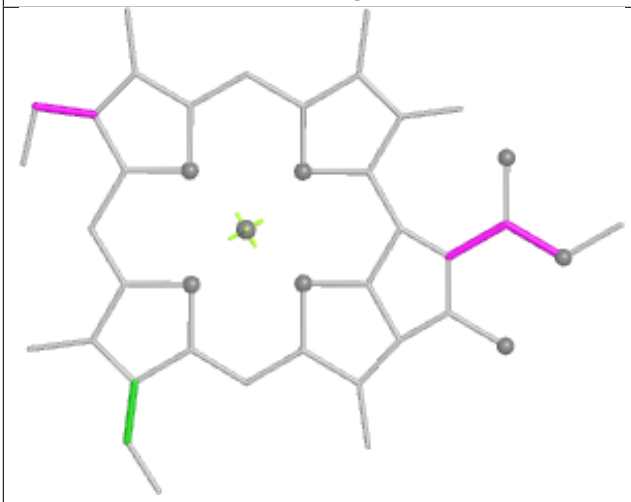
Ligand CLA A 811



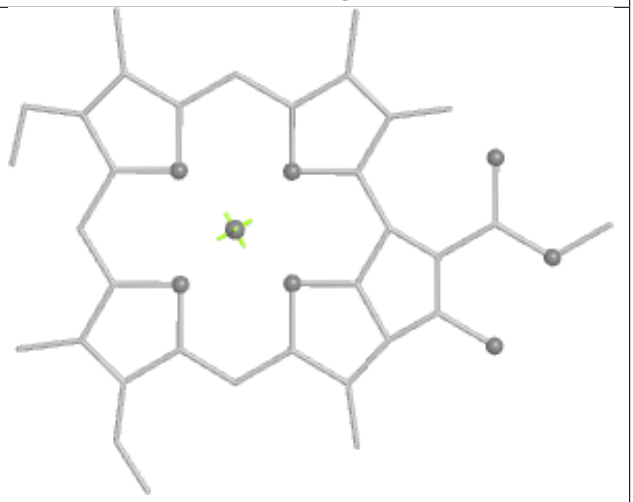
Bond lengths



Bond angles

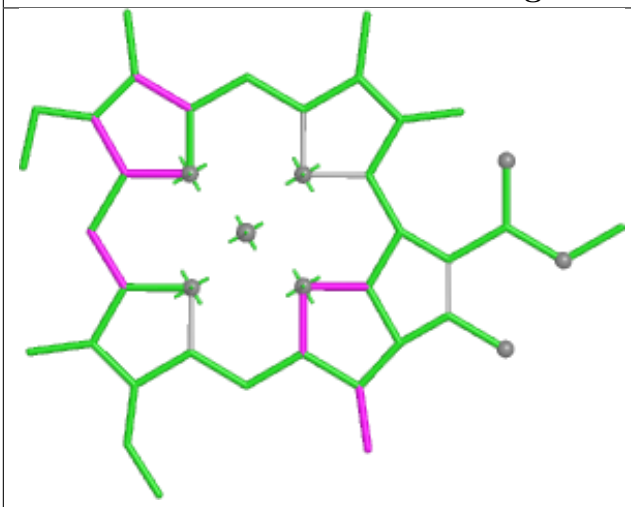


Torsions

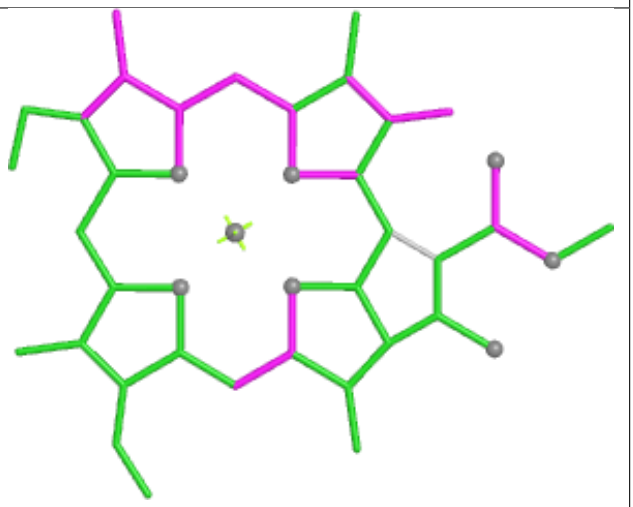


Rings

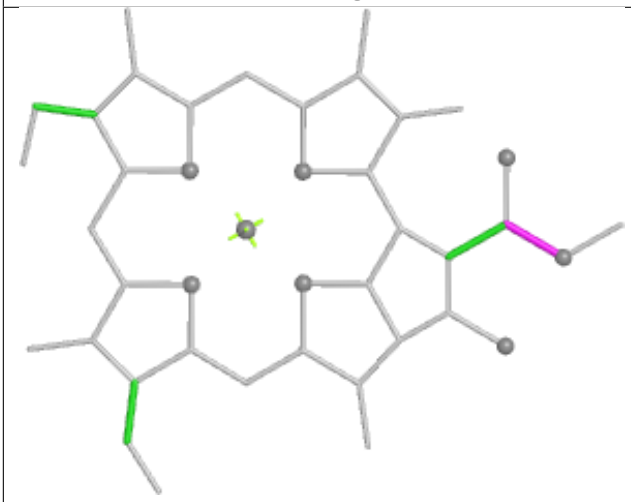
Ligand CLA B 837



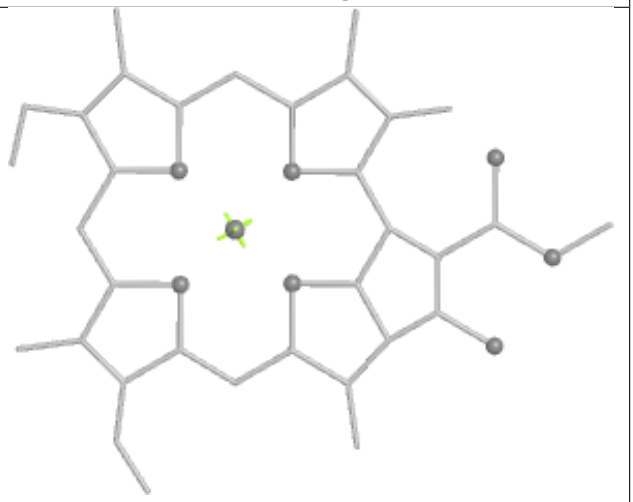
Bond lengths



Bond angles

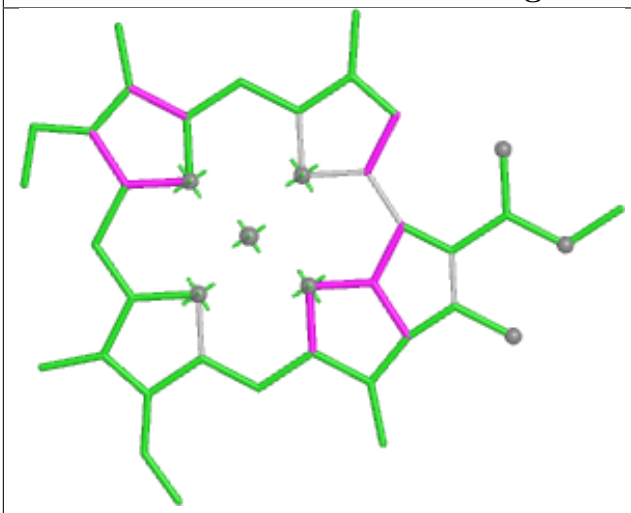


Torsions

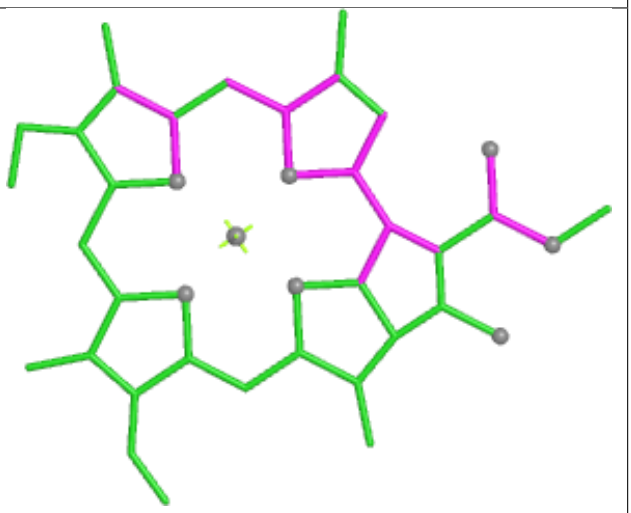


Rings

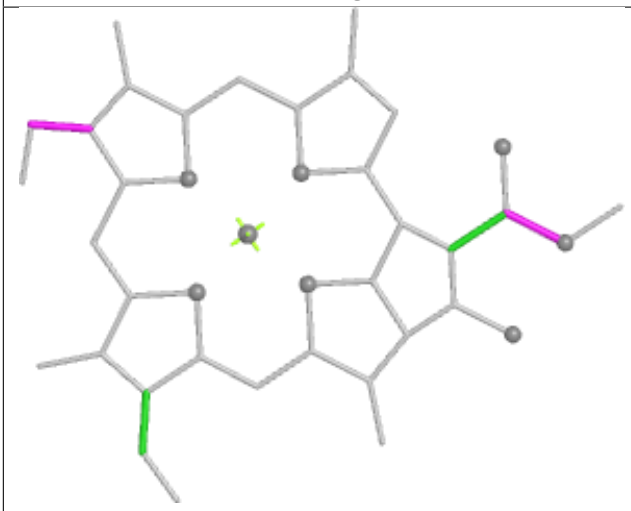
Ligand CLA B 816



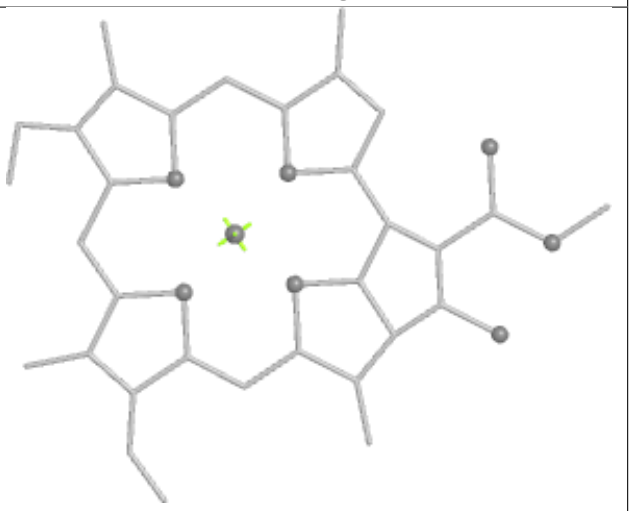
Bond lengths



Bond angles



Torsions



Rings

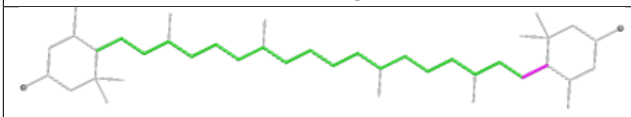
Ligand LUT 3 415



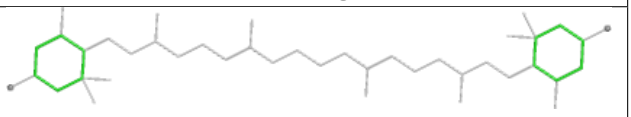
Bond lengths



Bond angles

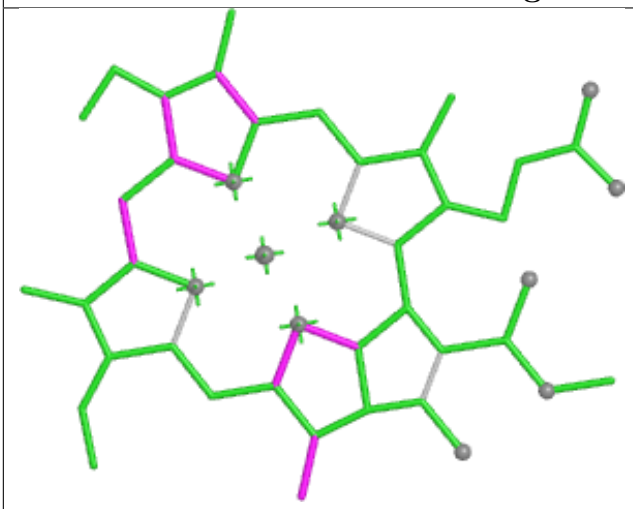


Torsions

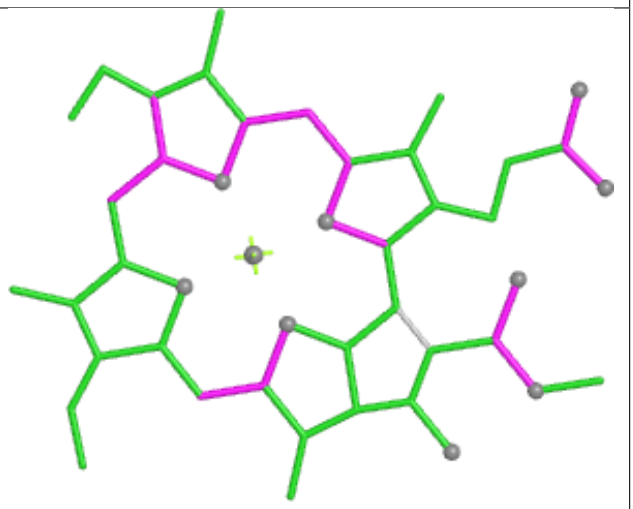


Rings

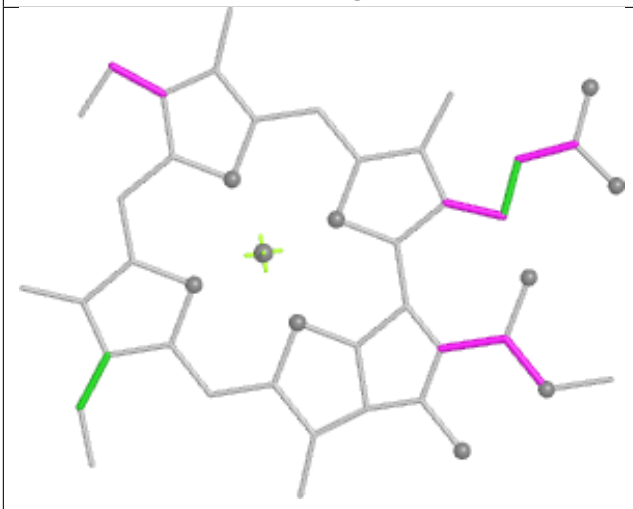
Ligand CLA A 823



Bond lengths



Bond angles

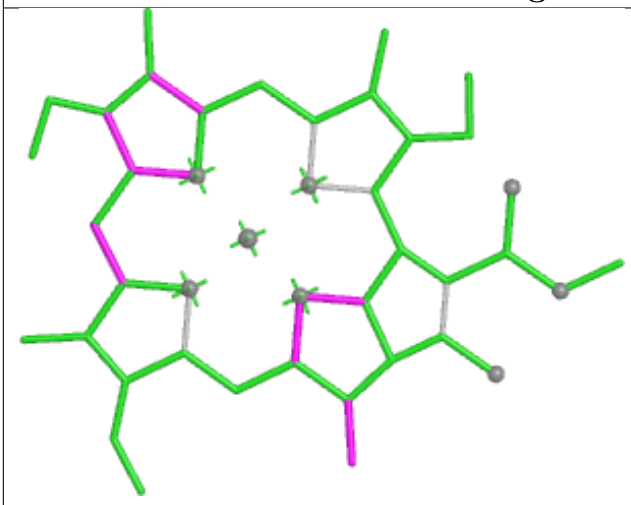


Torsions

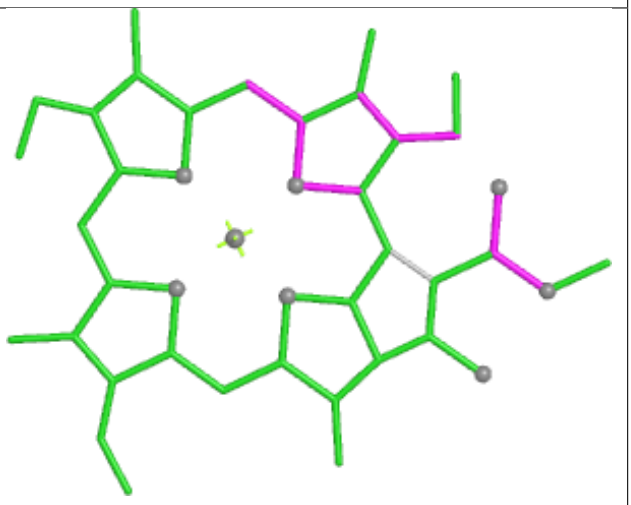


Rings

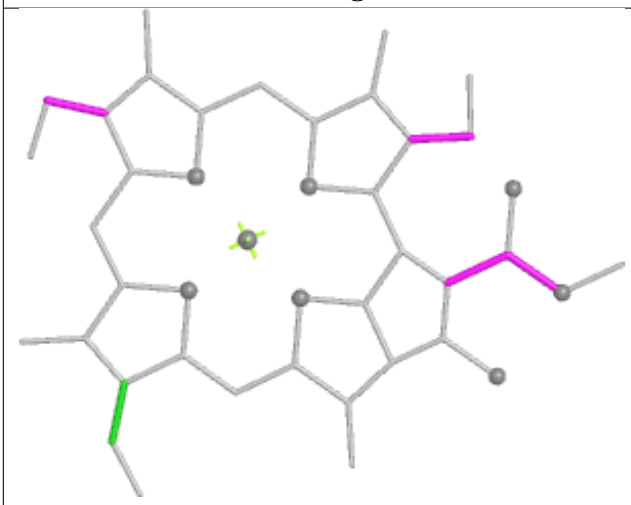
Ligand CLA 5 601



Bond lengths



Bond angles

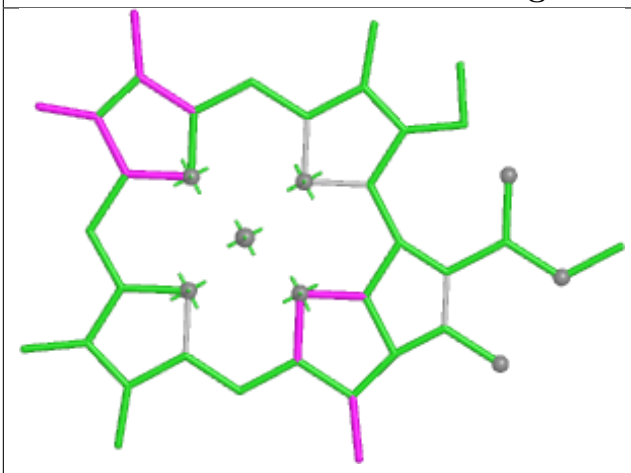


Torsions

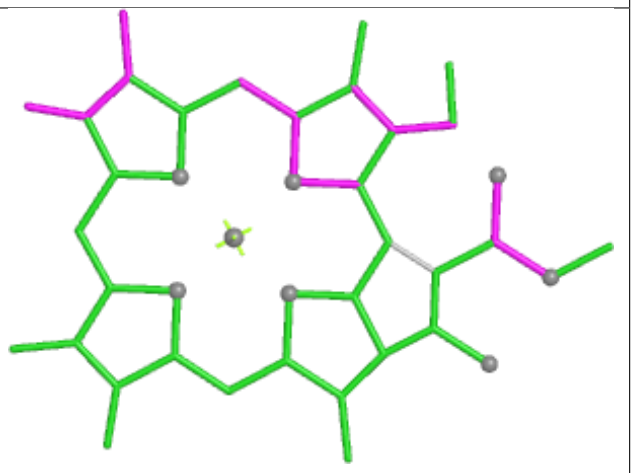


Rings

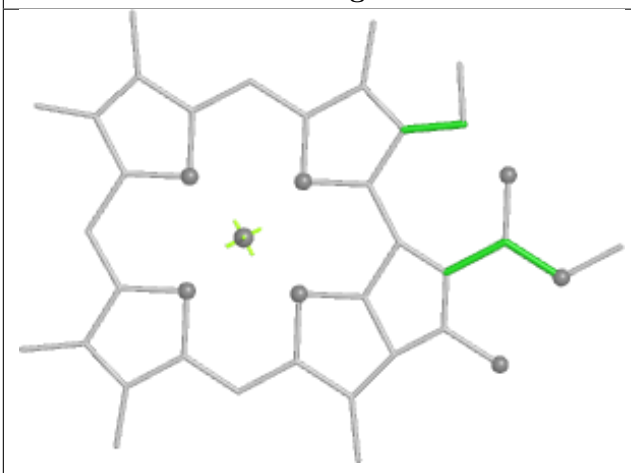
Ligand CLA 8 614



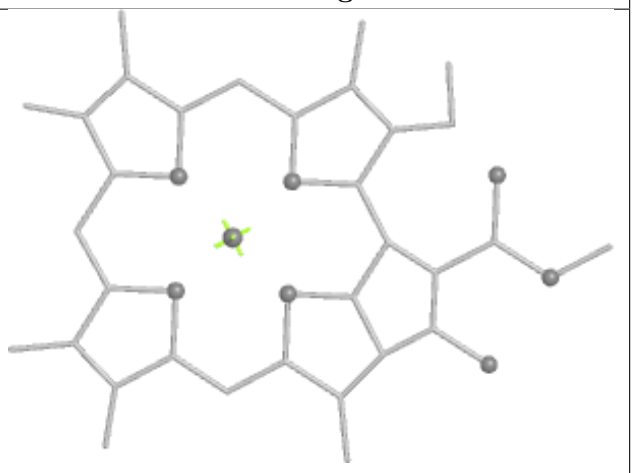
Bond lengths



Bond angles

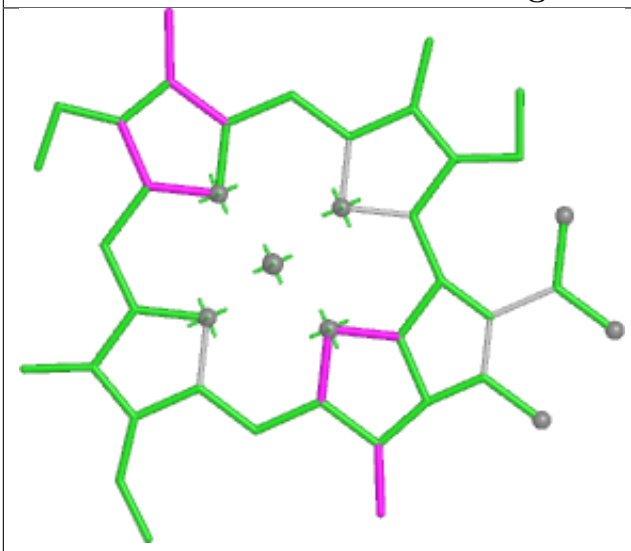


Torsions

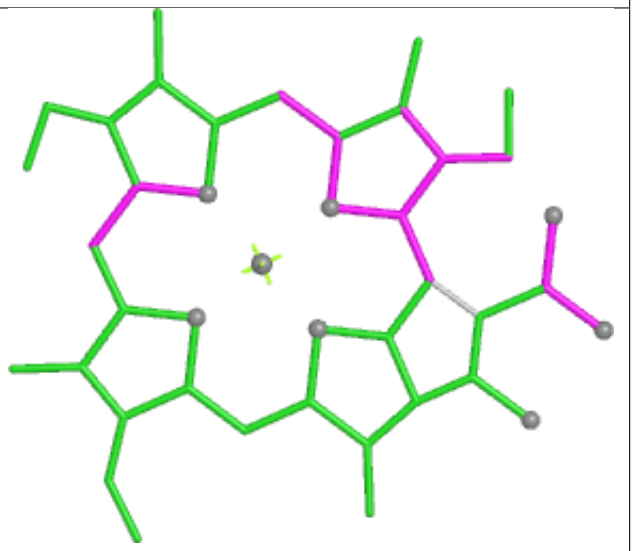


Rings

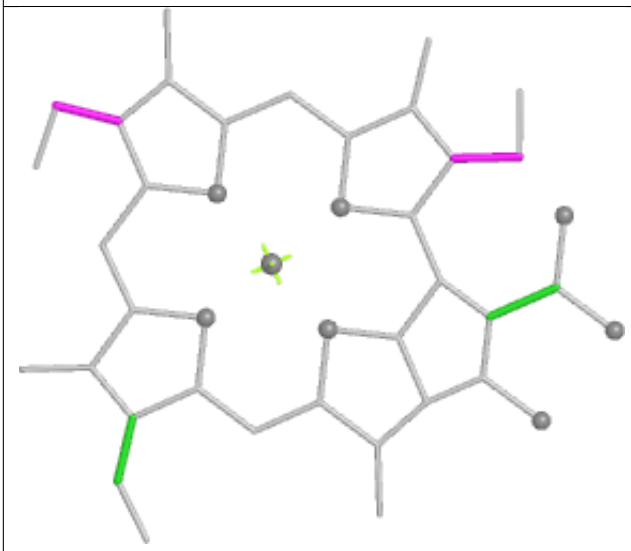
Ligand CLA 6 611



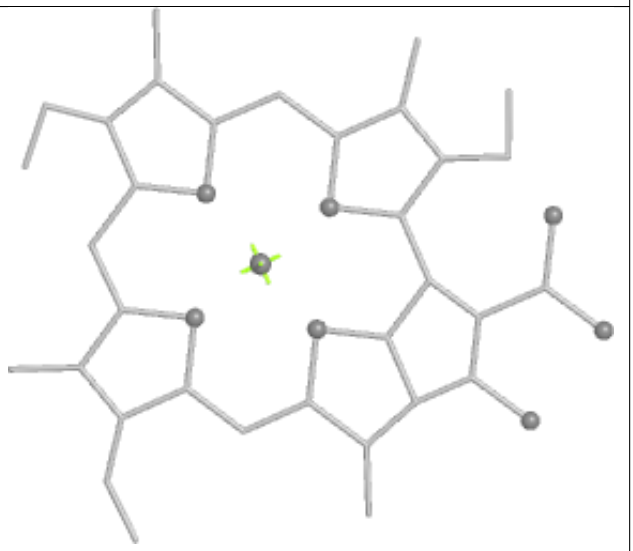
Bond lengths



Bond angles

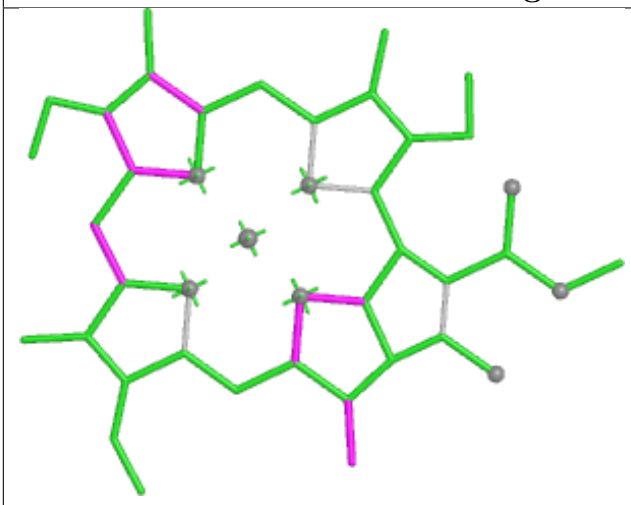


Torsions

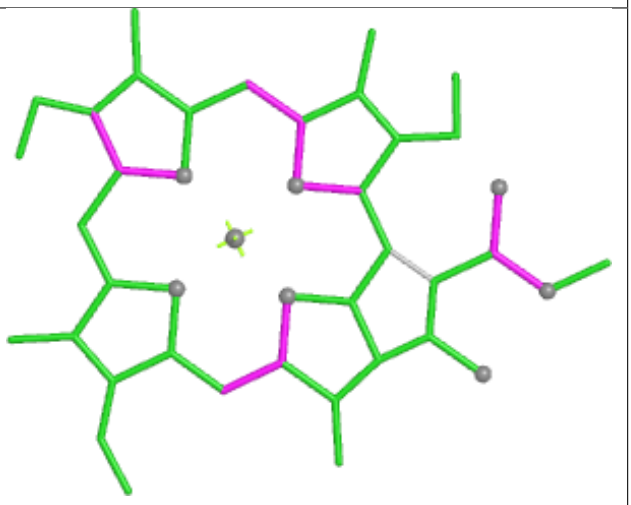


Rings

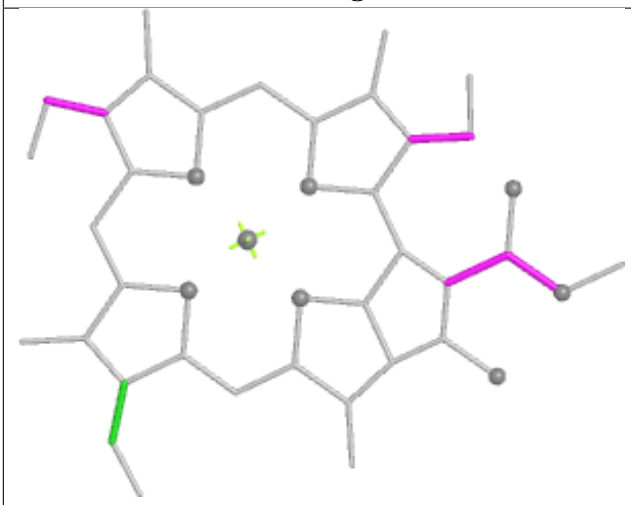
Ligand CLA A 835



Bond lengths



Bond angles

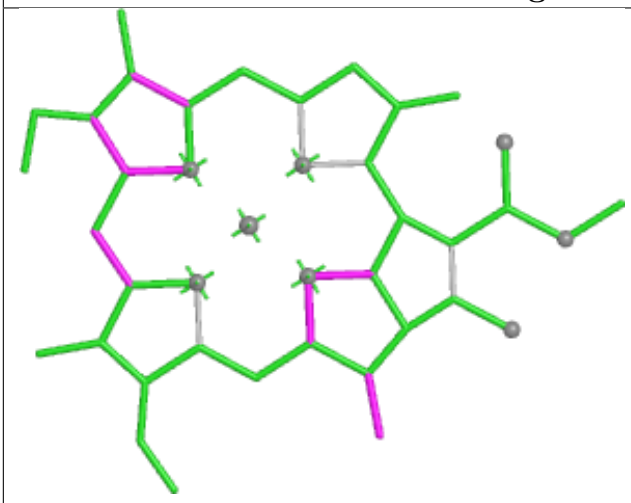


Torsions

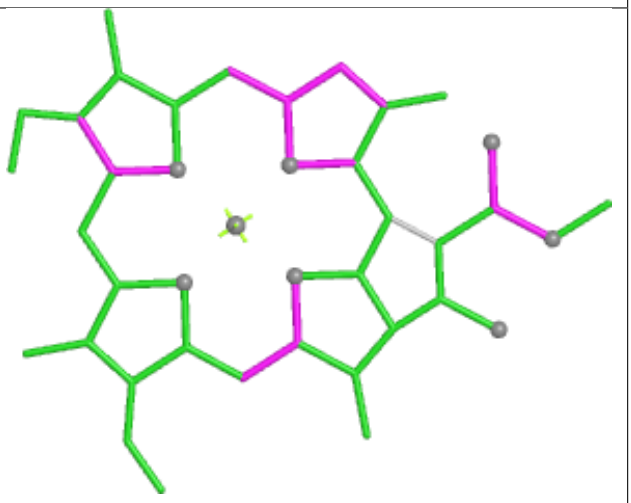


Rings

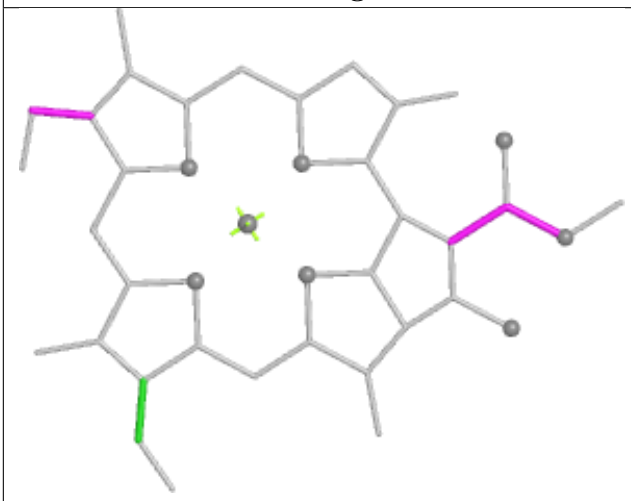
Ligand CLA 5 614



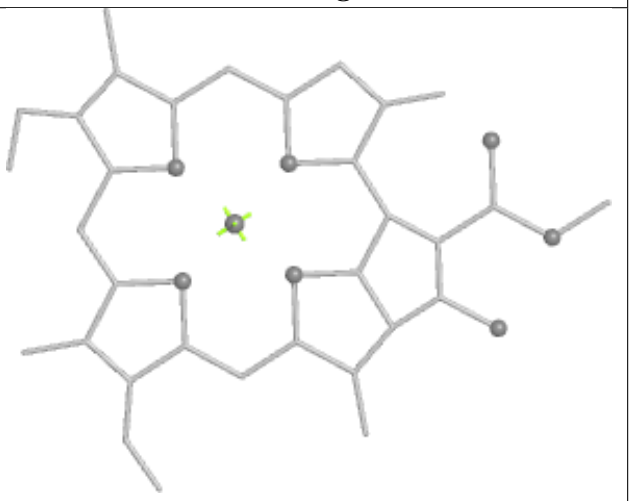
Bond lengths



Bond angles

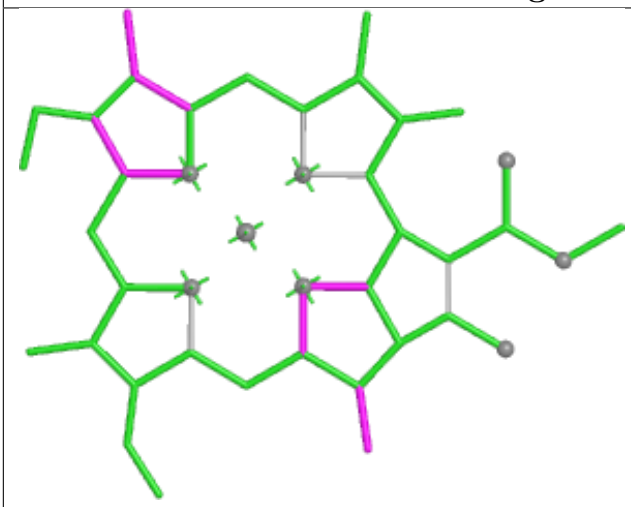


Torsions

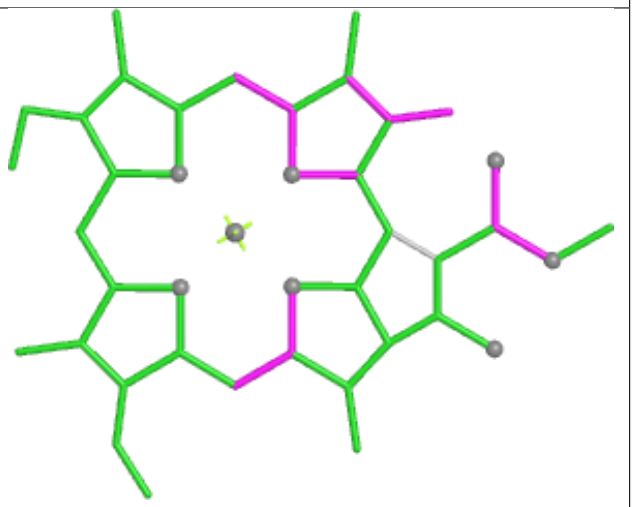


Rings

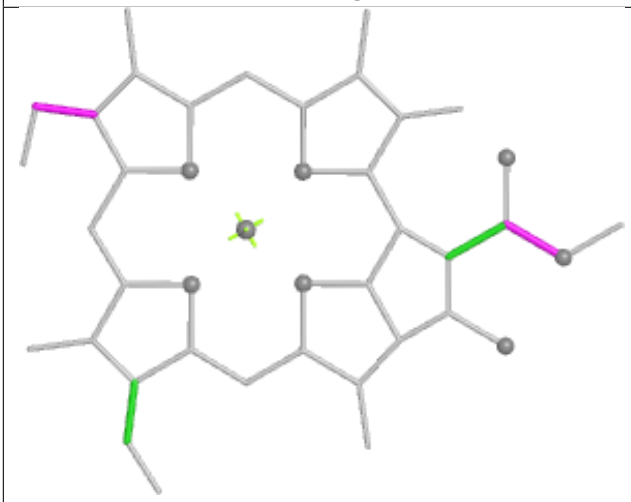
Ligand CLA 8 612



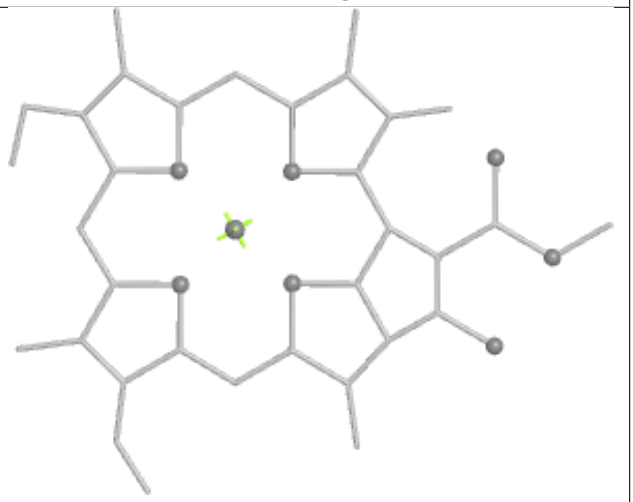
Bond lengths



Bond angles

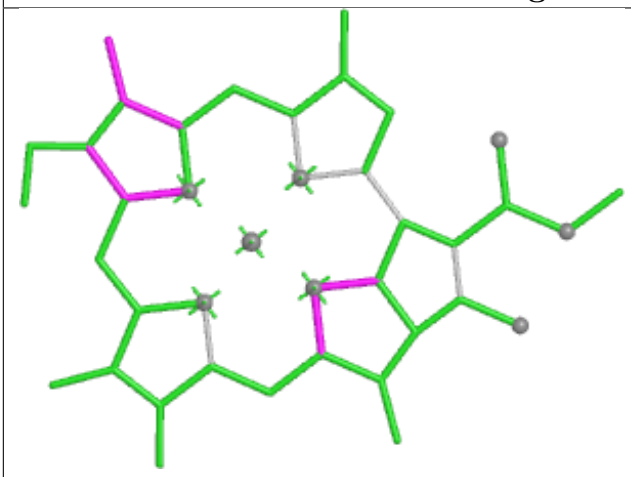


Torsions

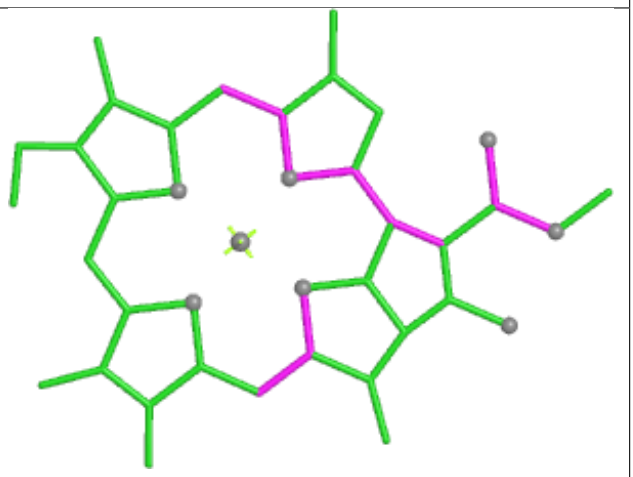


Rings

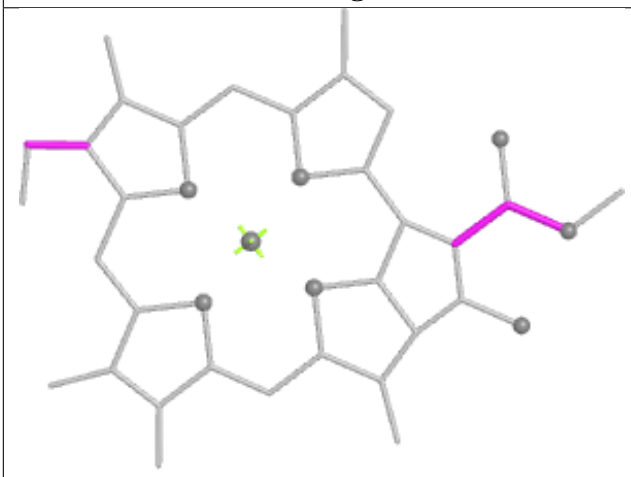
Ligand CLA 1 609



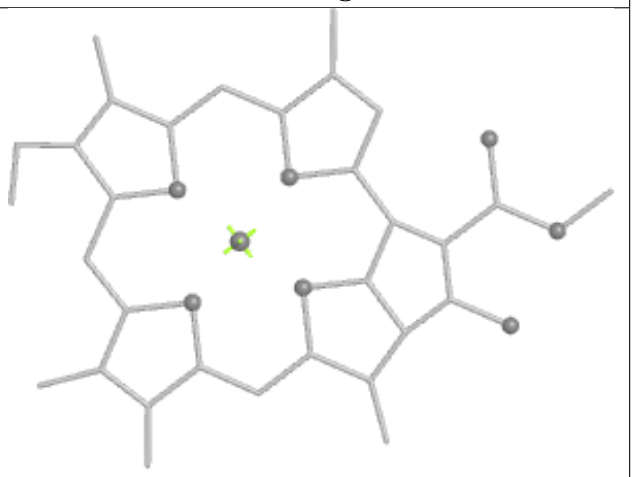
Bond lengths



Bond angles

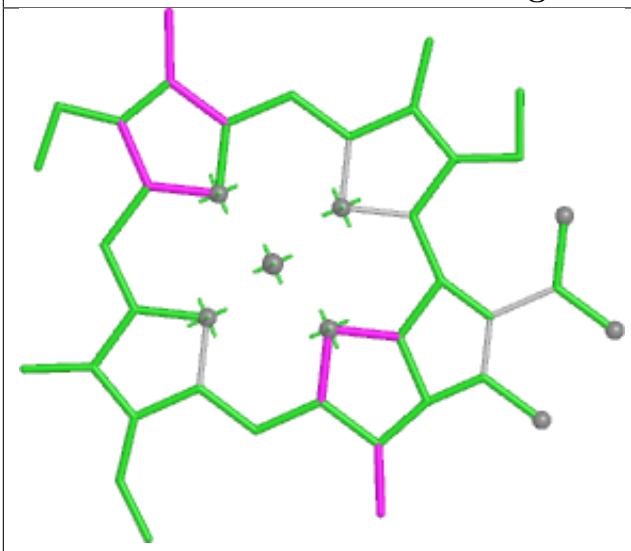


Torsions

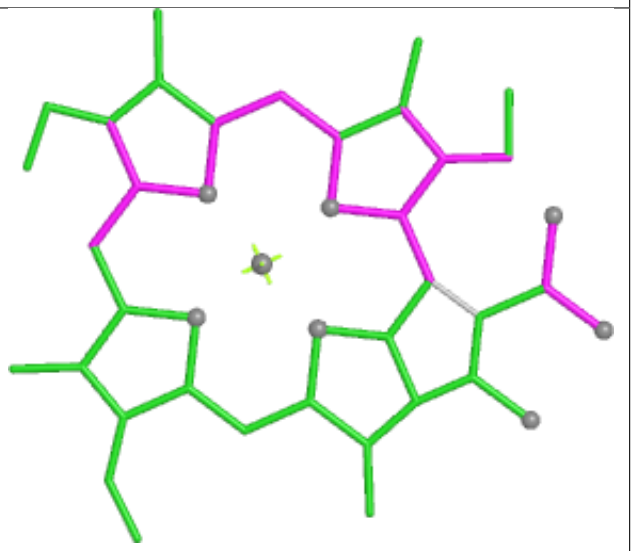


Rings

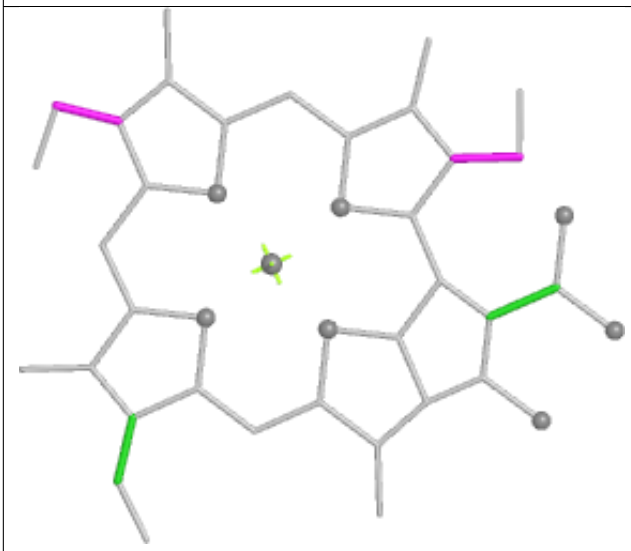
Ligand CLA 5 612



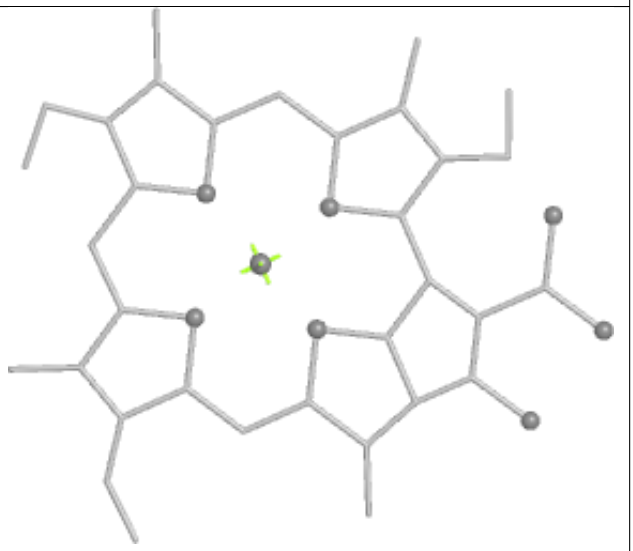
Bond lengths



Bond angles

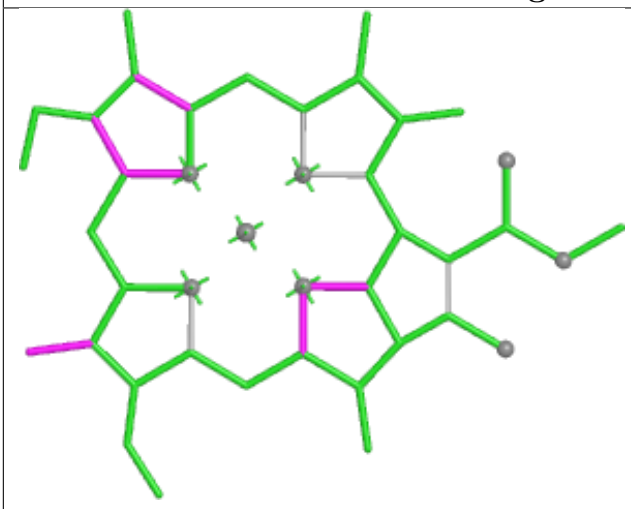


Torsions

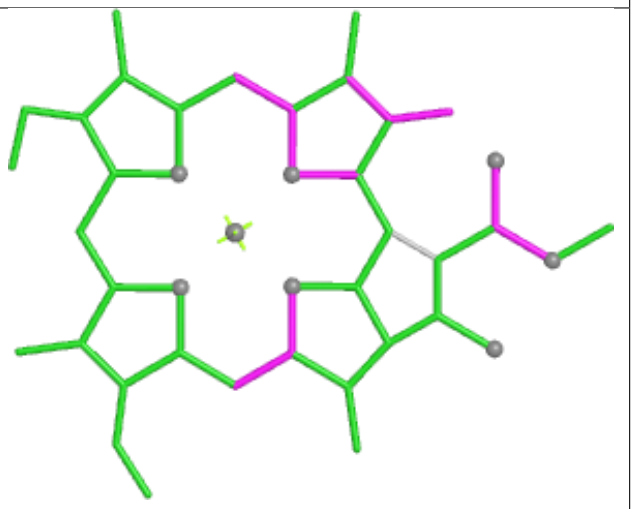


Rings

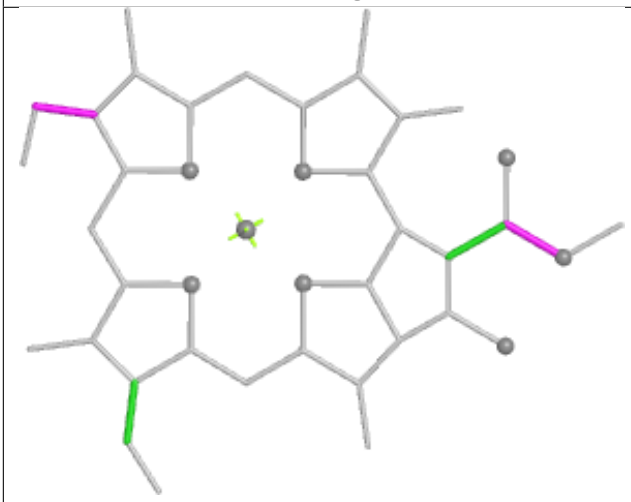
Ligand CLA 7 607



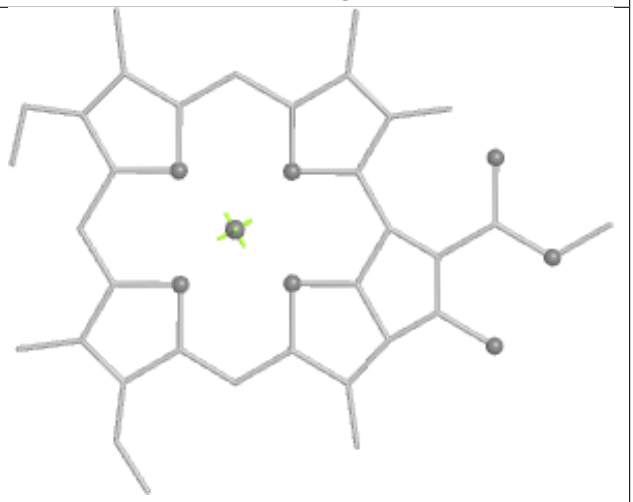
Bond lengths



Bond angles

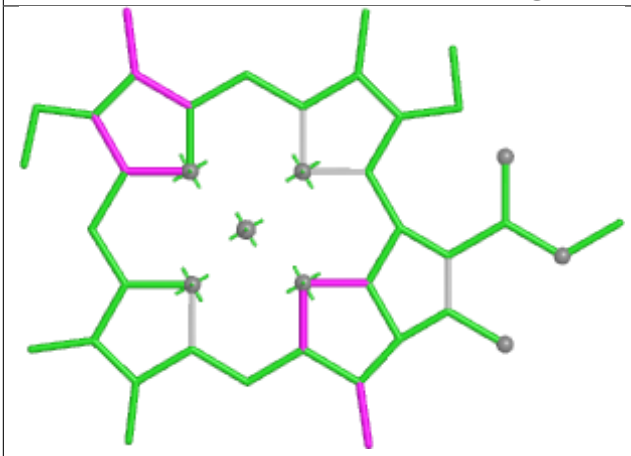


Torsions

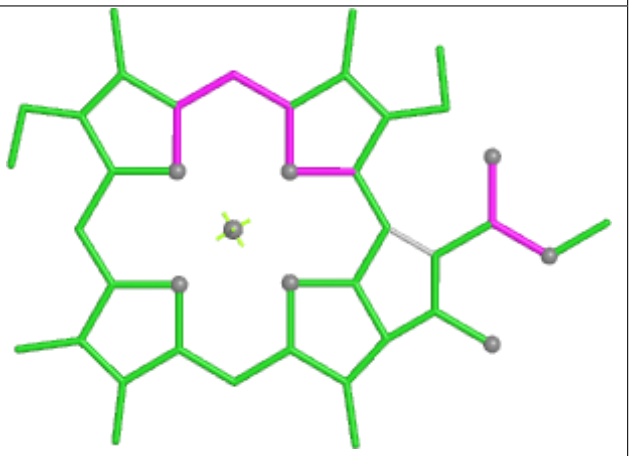


Rings

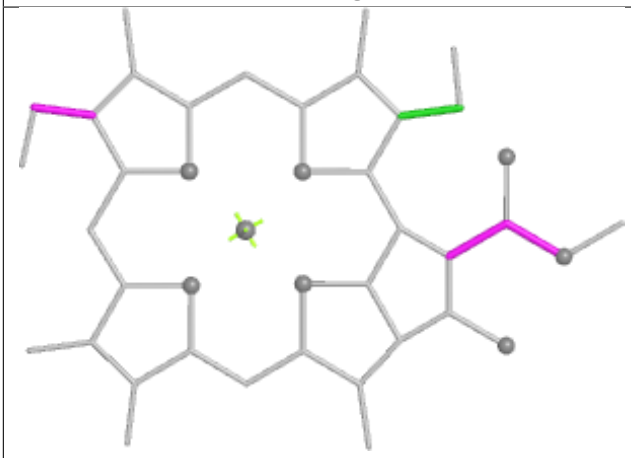
Ligand CLA 7 605



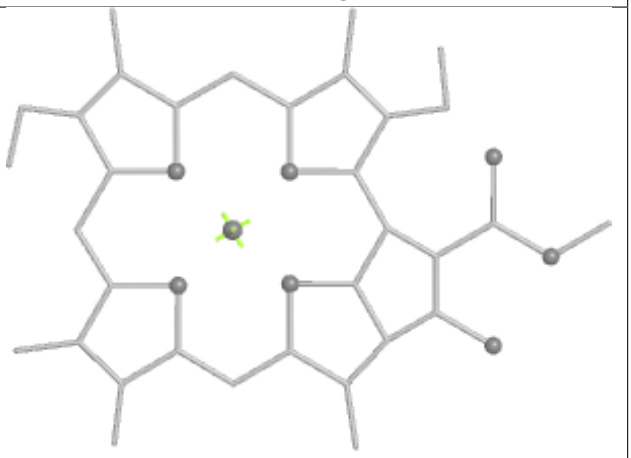
Bond lengths



Bond angles

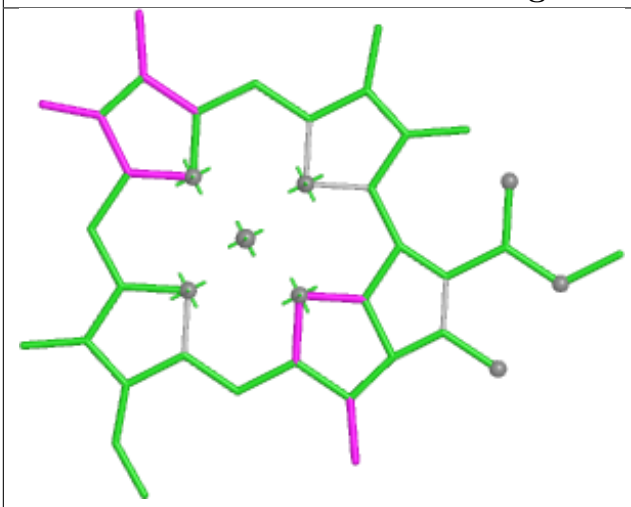


Torsions

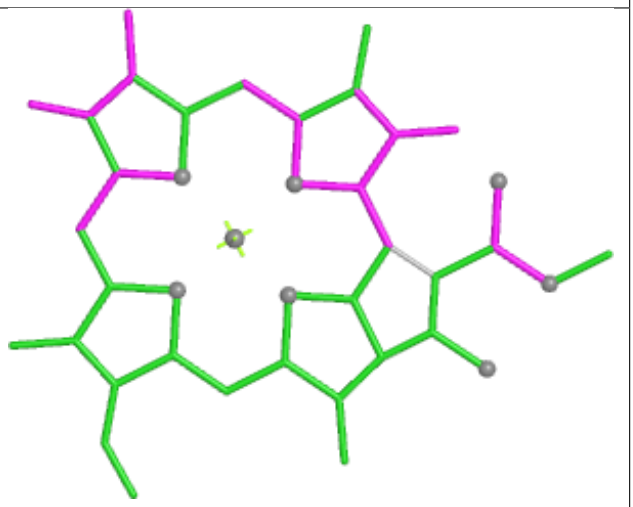


Rings

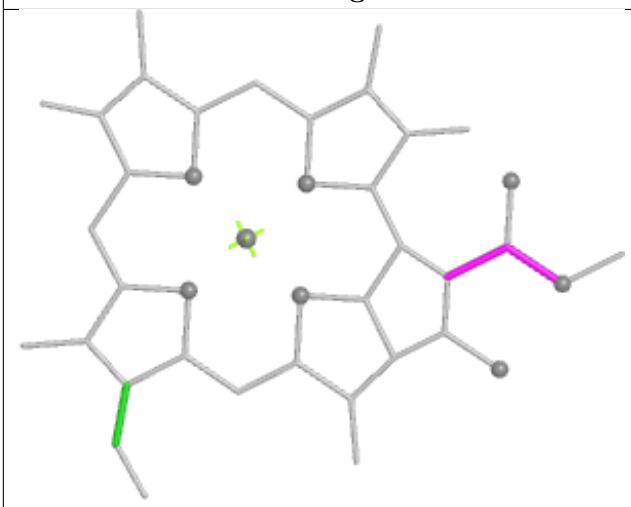
Ligand CLA 8 603



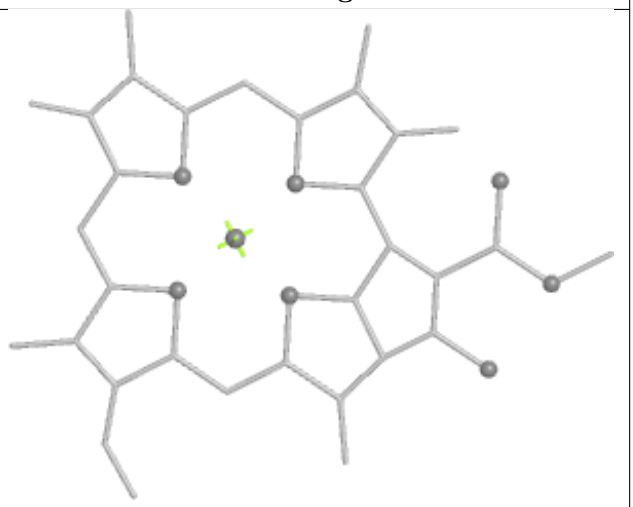
Bond lengths



Bond angles

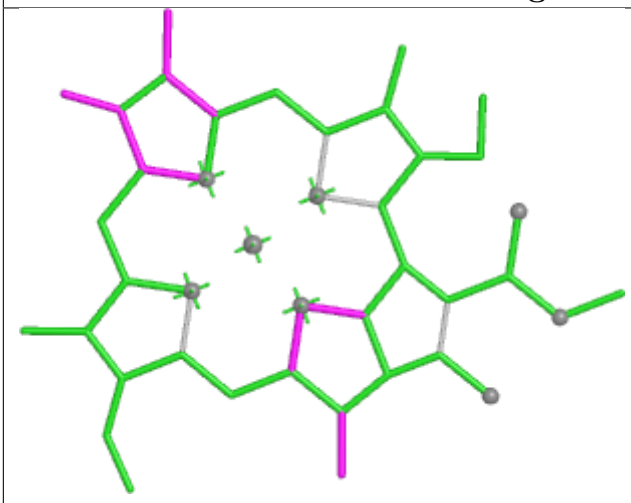


Torsions

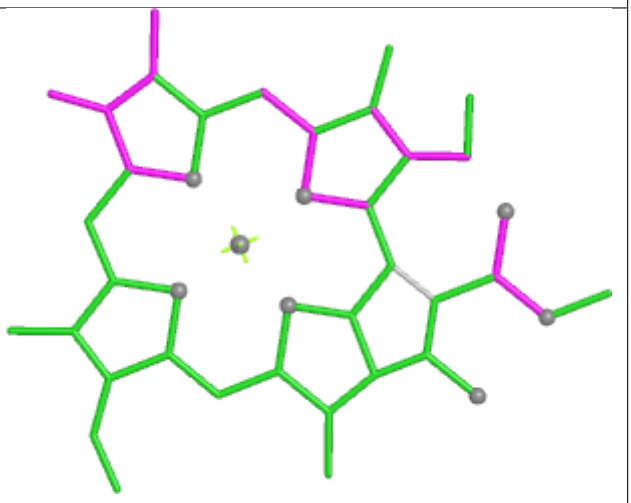


Rings

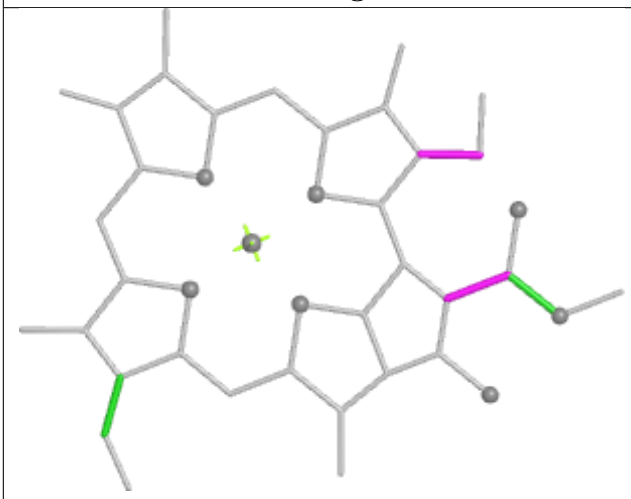
Ligand CLA 5 603



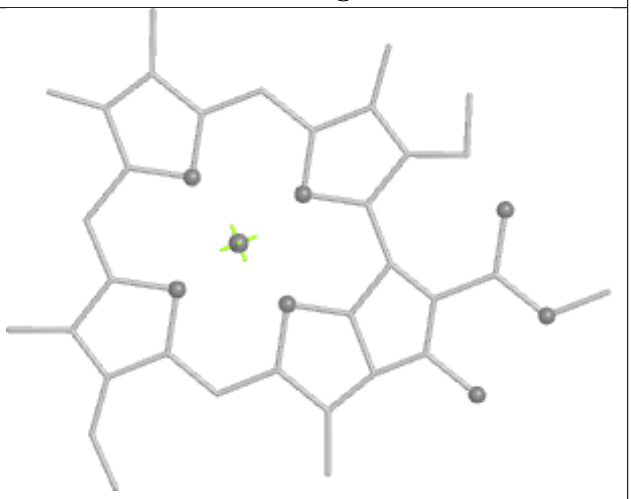
Bond lengths



Bond angles

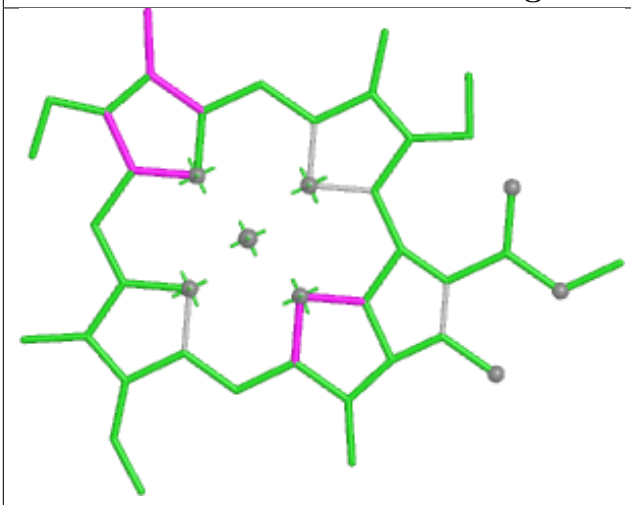


Torsions

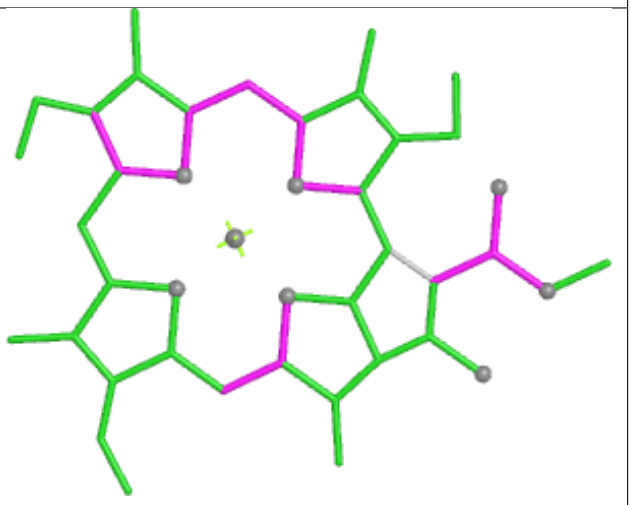


Rings

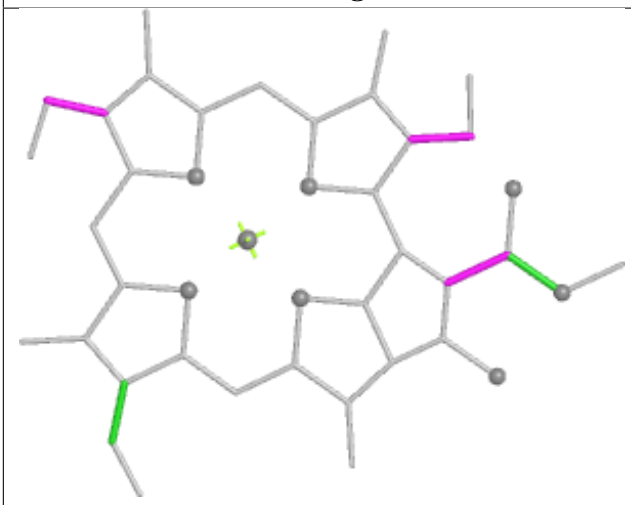
Ligand CLA B 802



Bond lengths



Bond angles

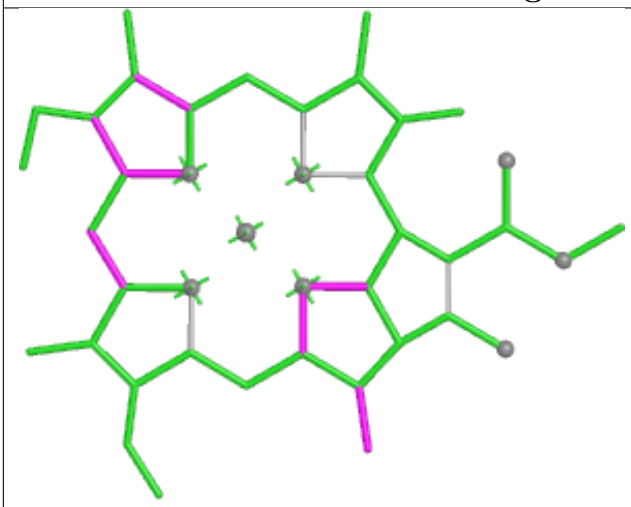


Torsions

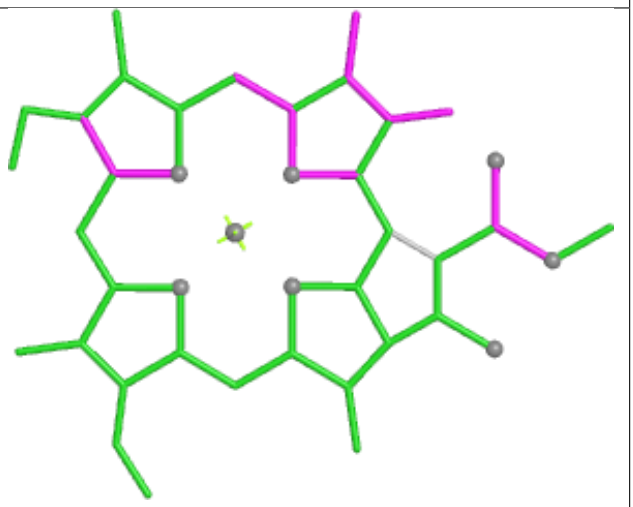


Rings

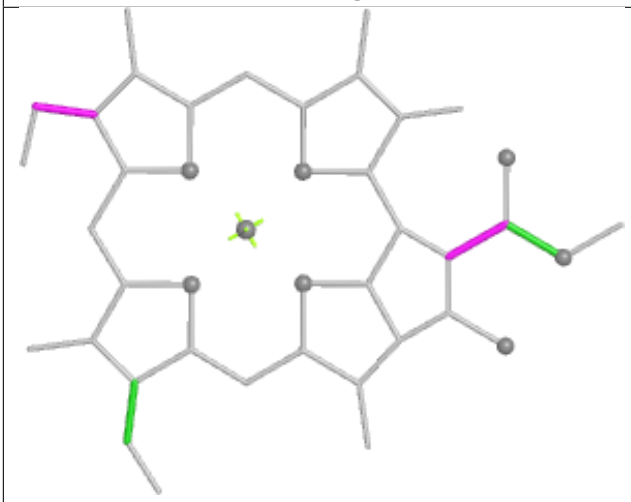
Ligand CLA B 826



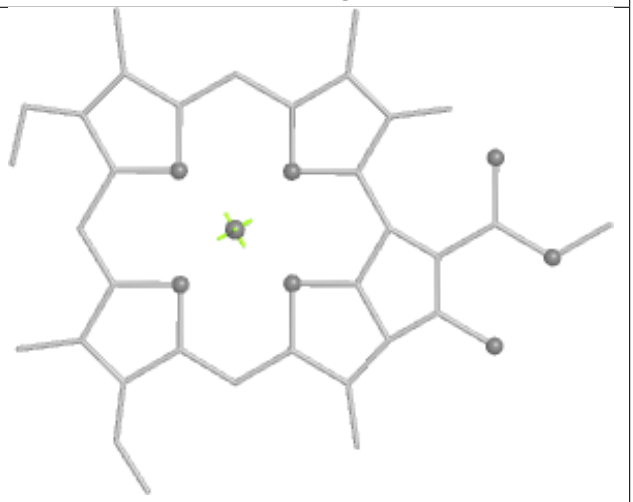
Bond lengths



Bond angles

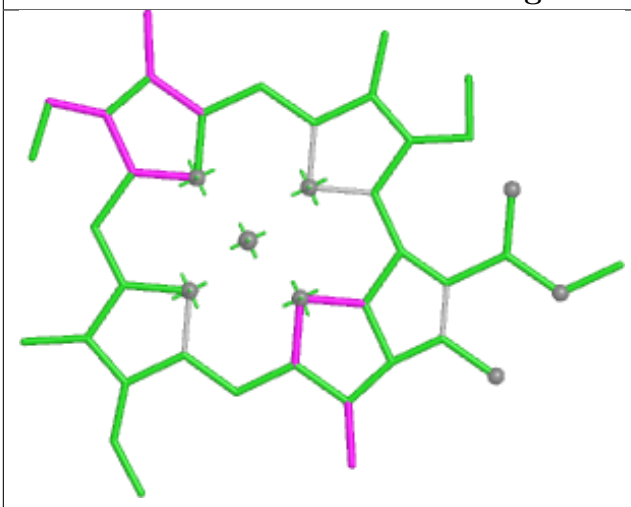


Torsions

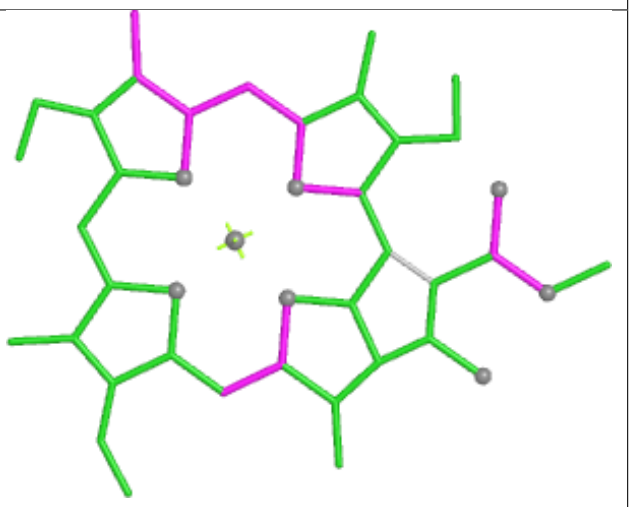


Rings

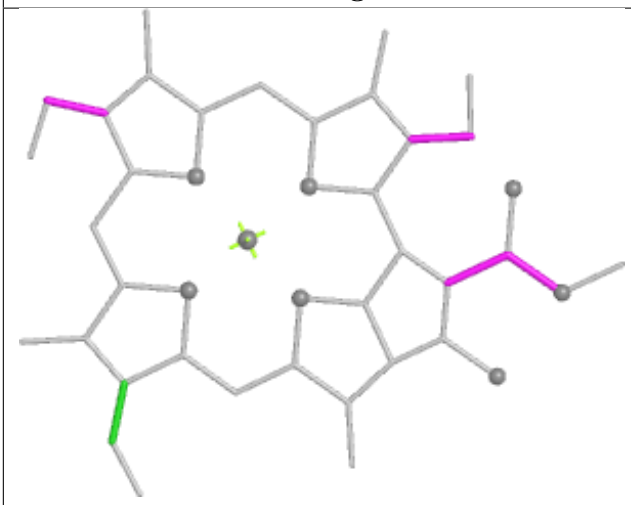
Ligand CLA B 842



Bond lengths



Bond angles

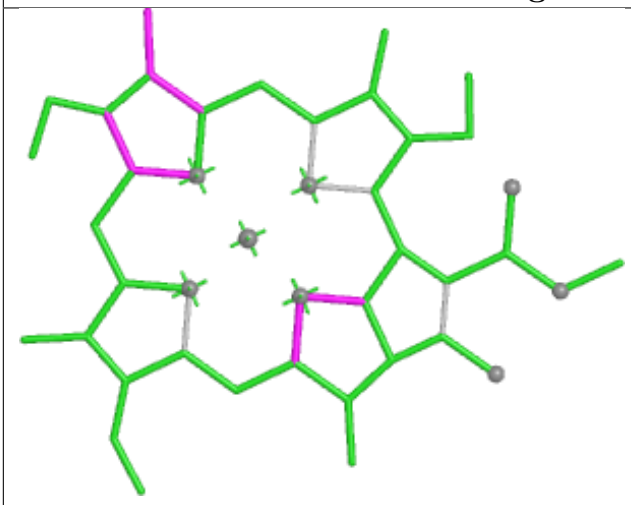


Torsions

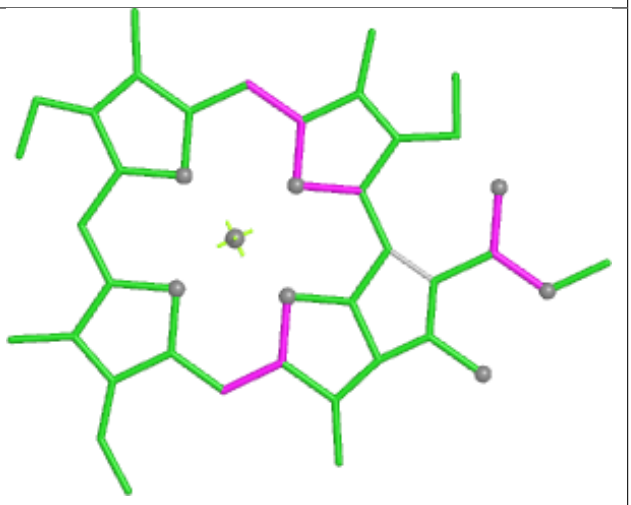


Rings

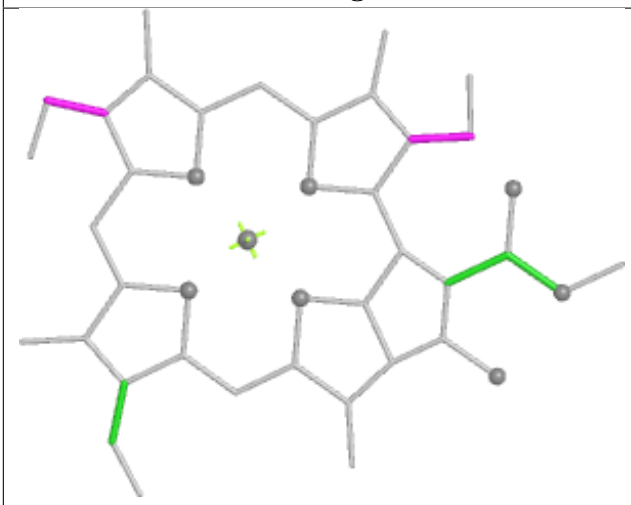
Ligand CLA 6 604



Bond lengths



Bond angles

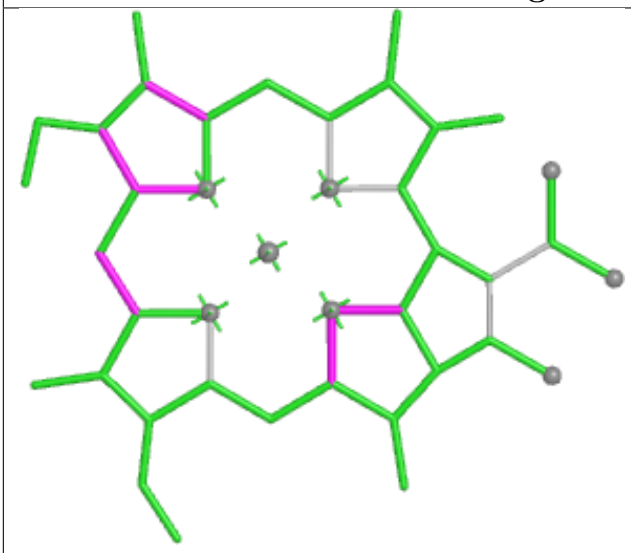


Torsions

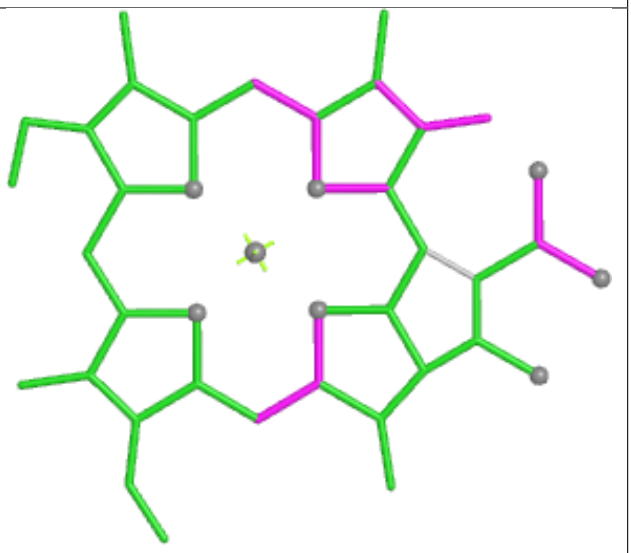


Rings

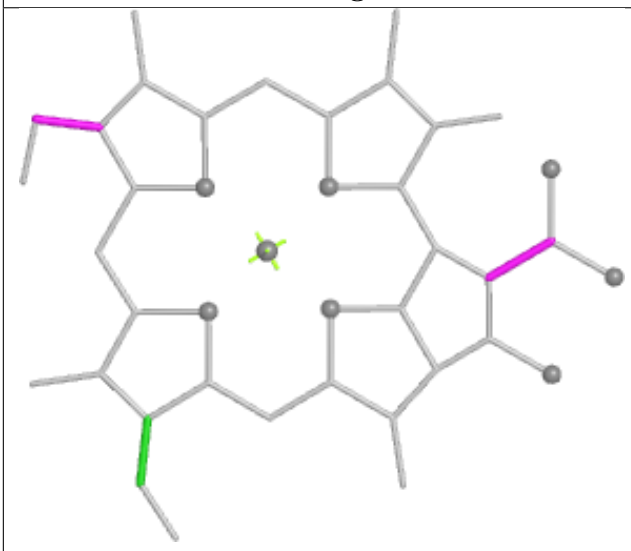
Ligand CLA 1 601



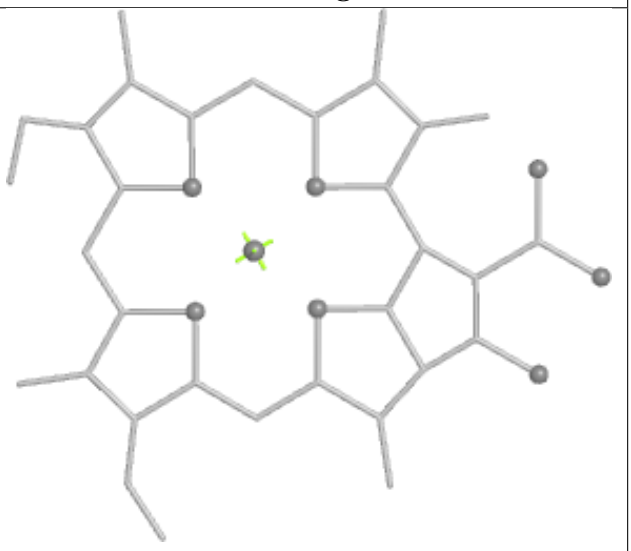
Bond lengths



Bond angles

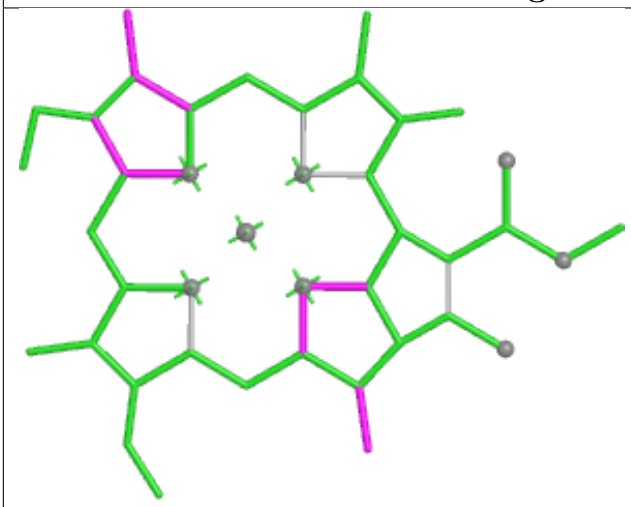


Torsions

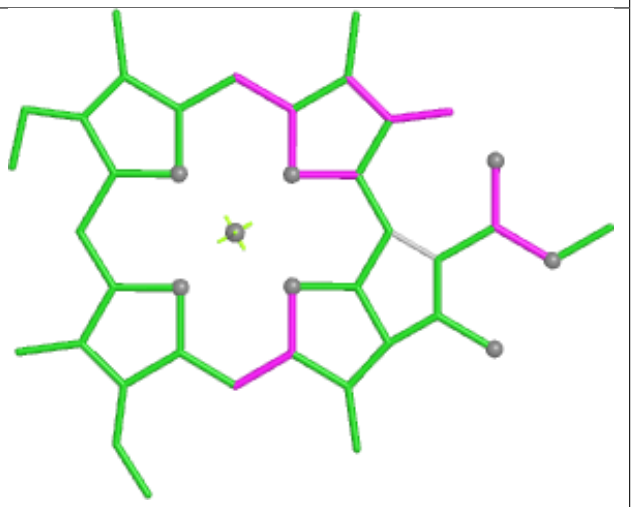


Rings

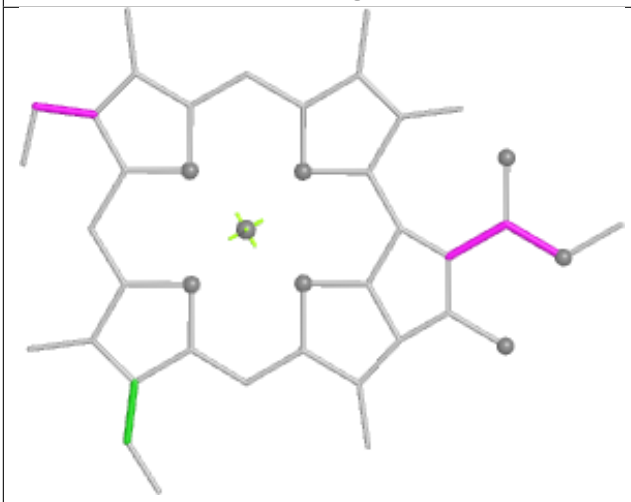
Ligand CLA 7 612



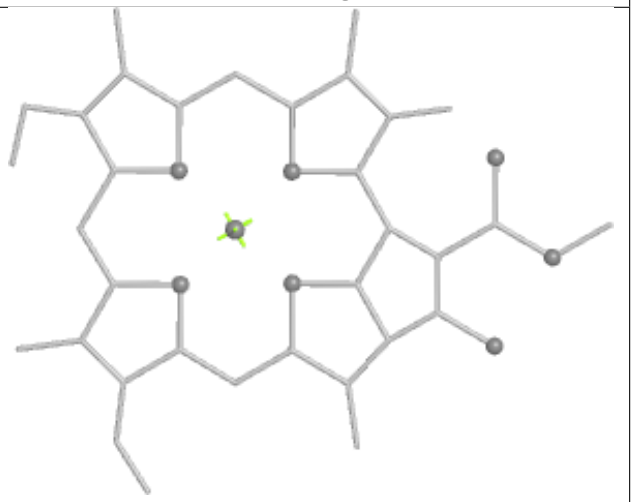
Bond lengths



Bond angles

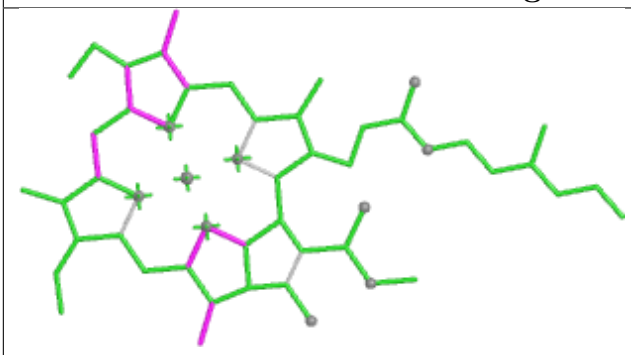


Torsions

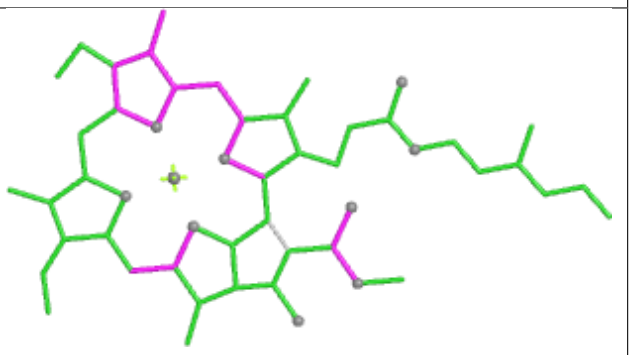


Rings

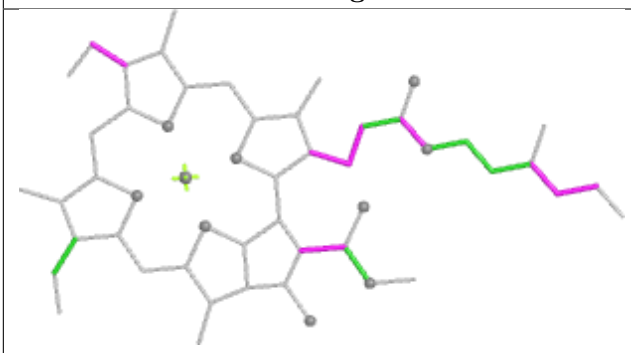
Ligand CLA A 818



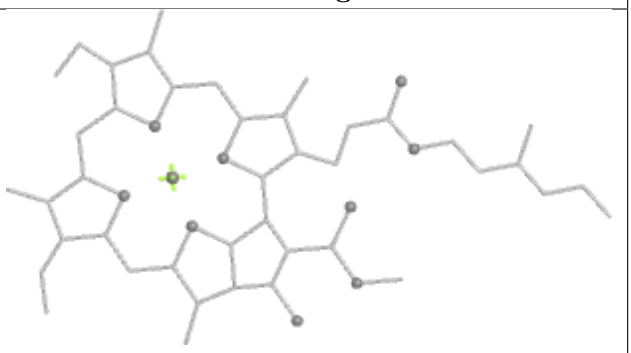
Bond lengths



Bond angles

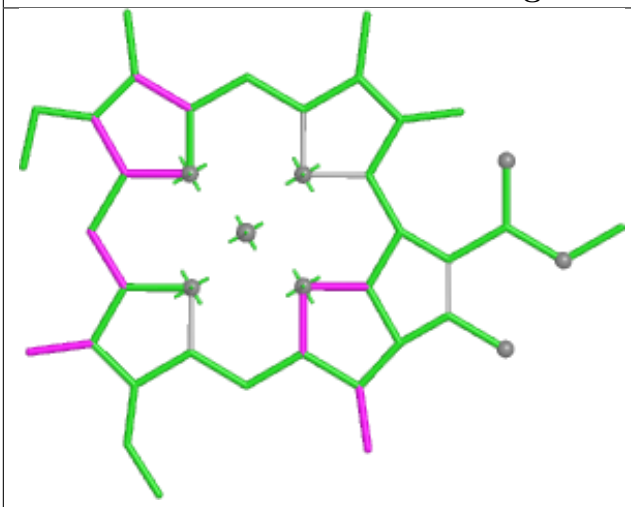


Torsions

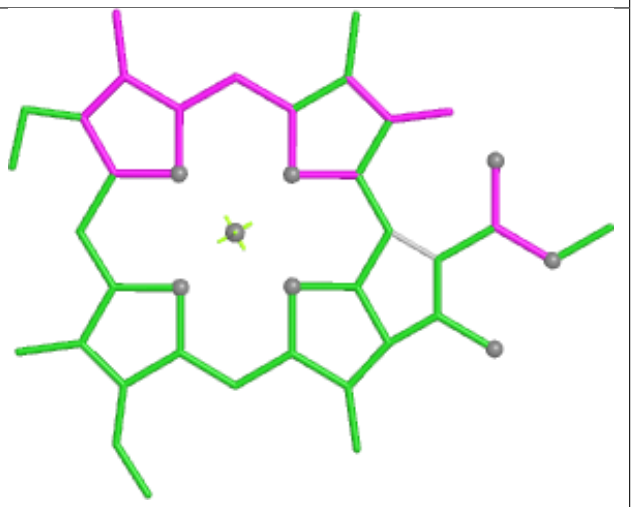


Rings

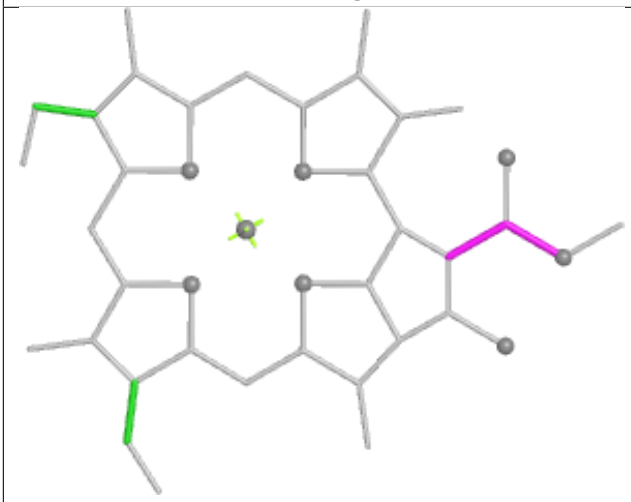
Ligand CLA A 804



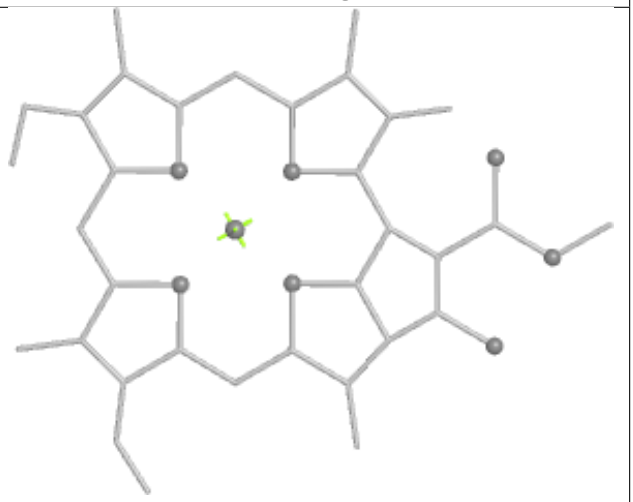
Bond lengths



Bond angles

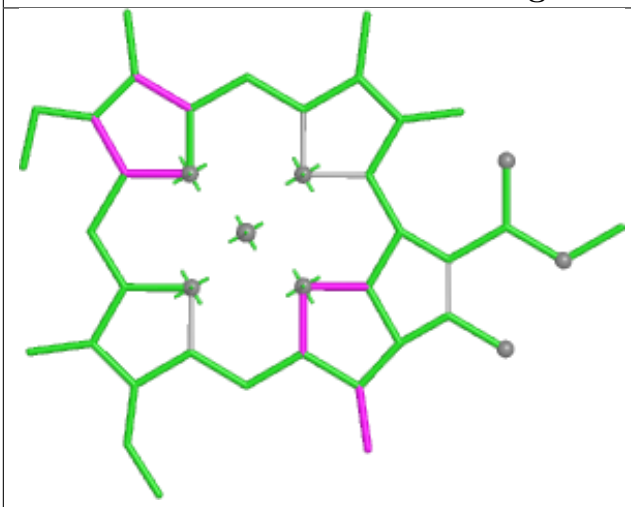


Torsions

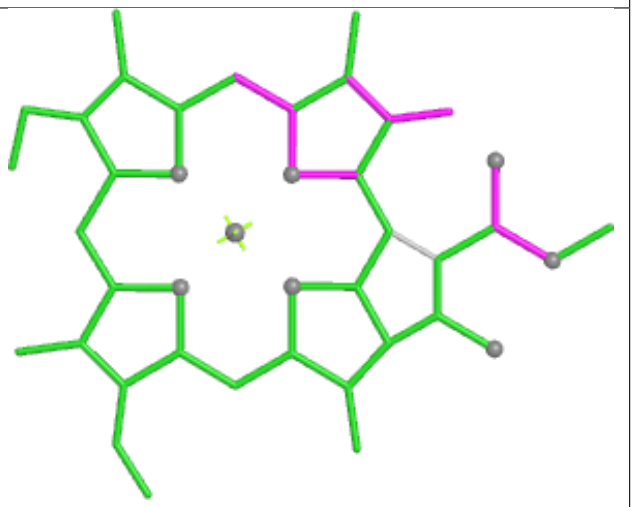


Rings

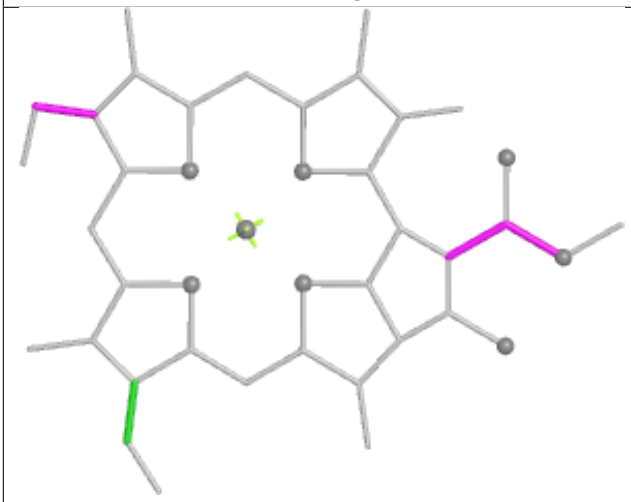
Ligand CLA 8 610



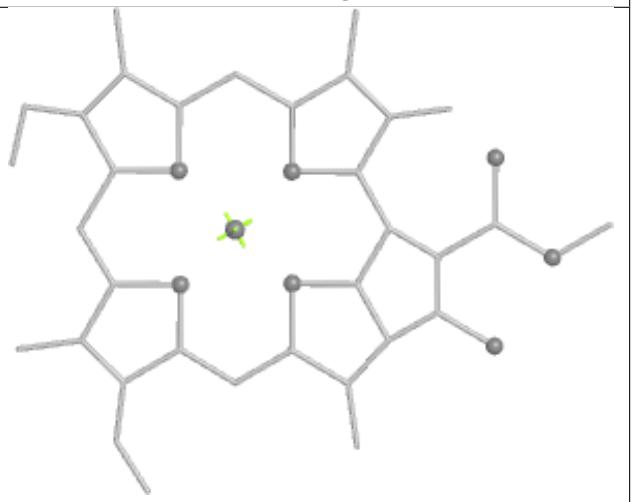
Bond lengths



Bond angles

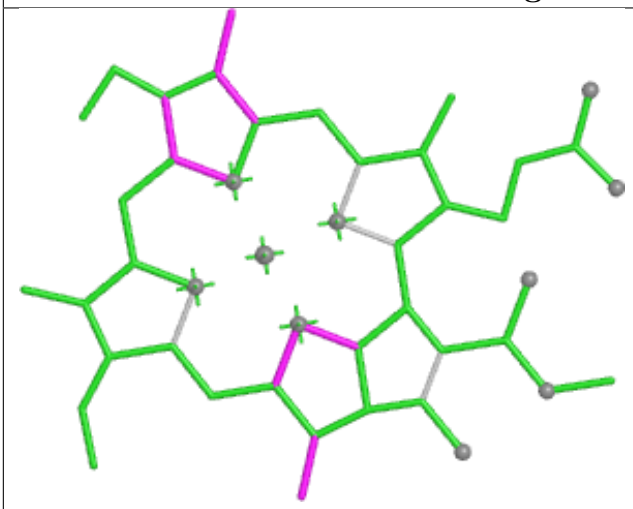


Torsions

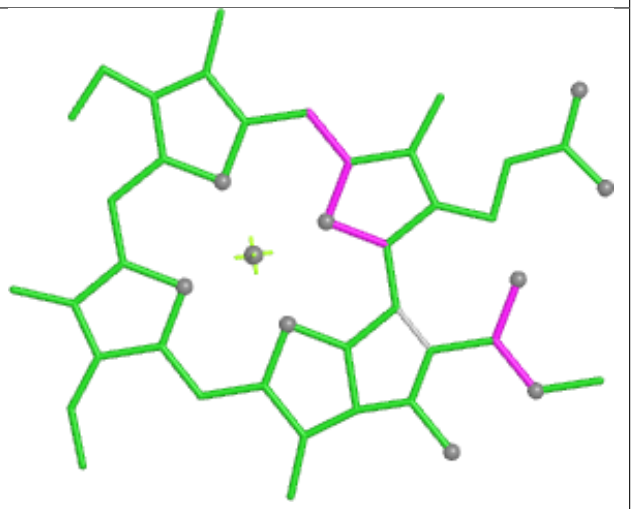


Rings

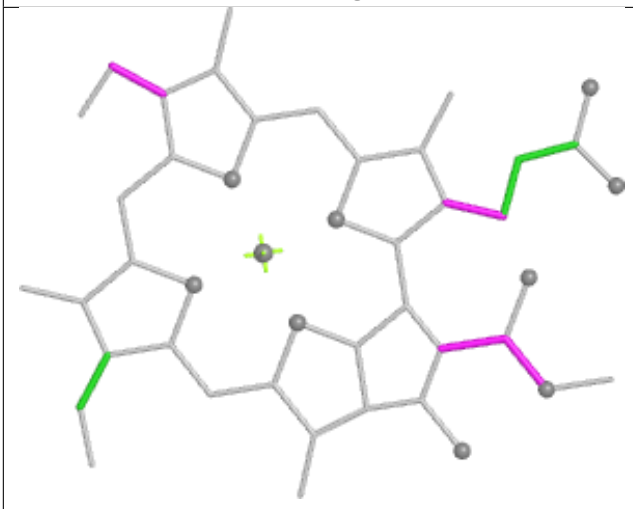
Ligand CLA B 825



Bond lengths



Bond angles

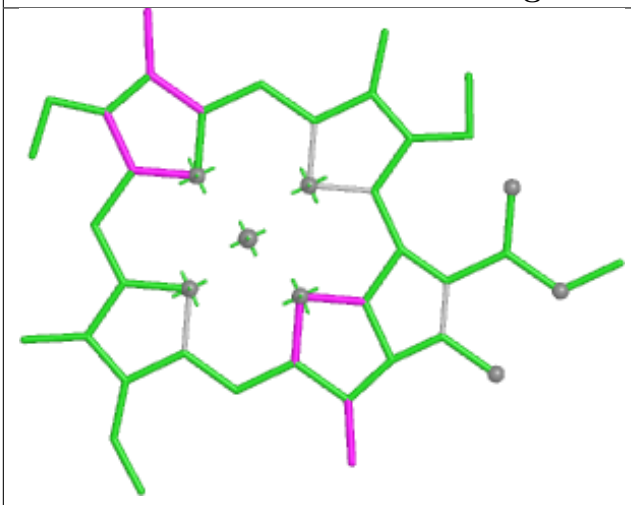


Torsions

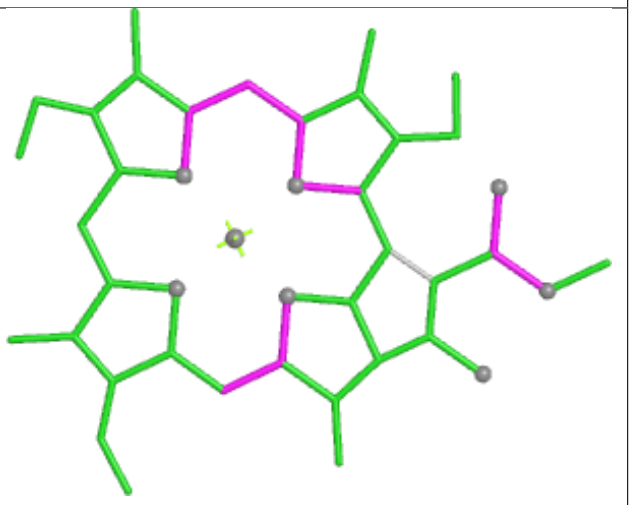


Rings

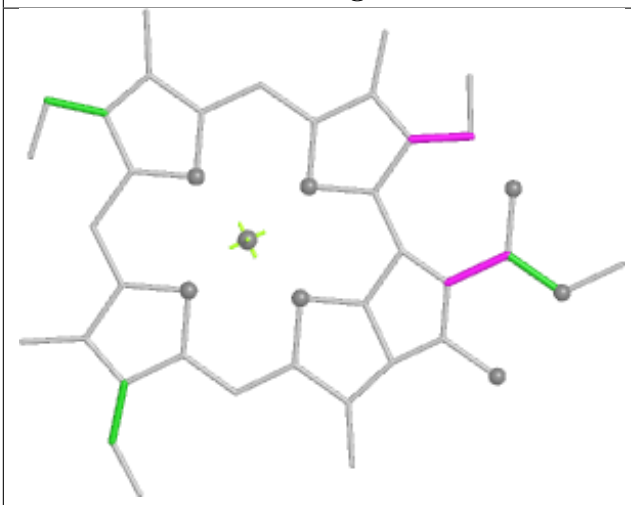
Ligand CLA A 839



Bond lengths



Bond angles

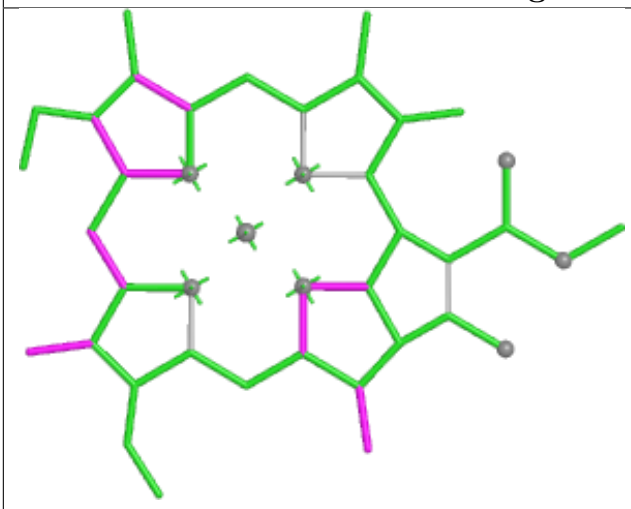


Torsions

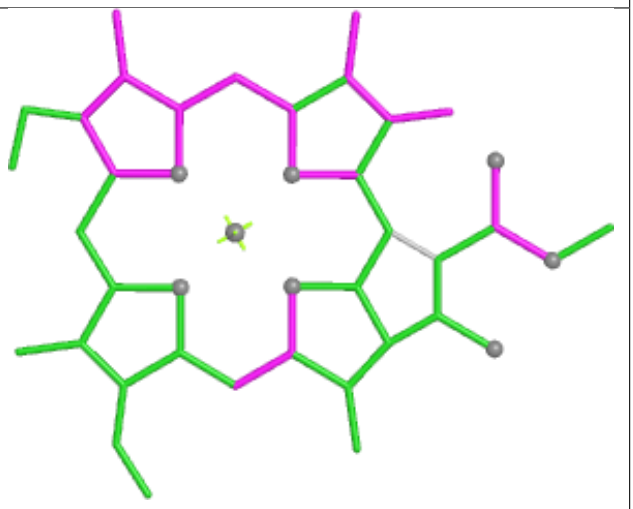


Rings

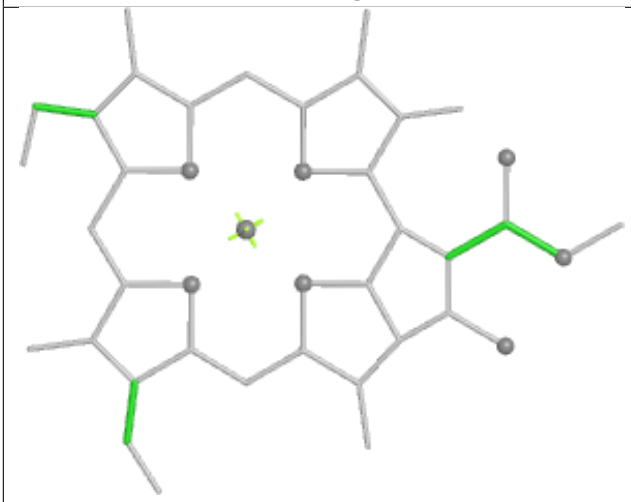
Ligand CLA 5 610



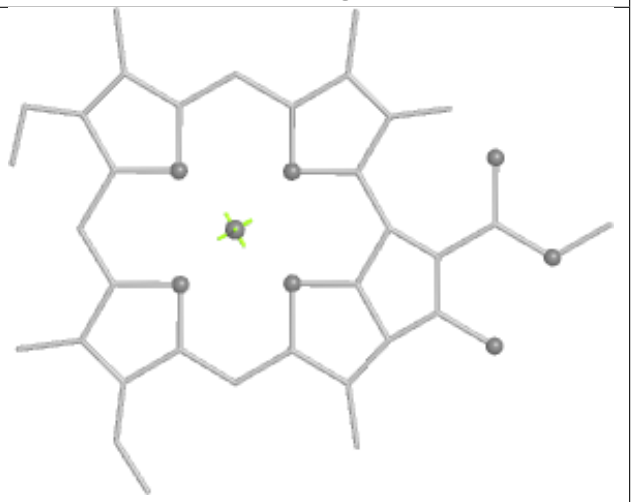
Bond lengths



Bond angles

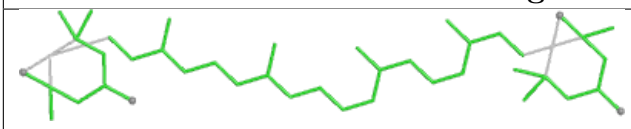


Torsions

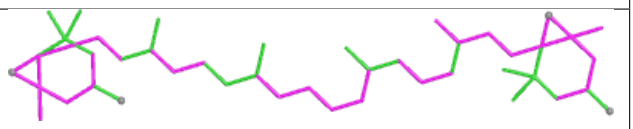


Rings

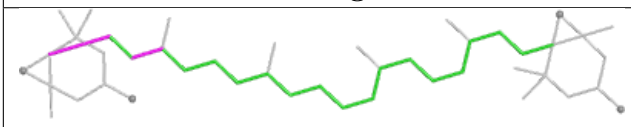
Ligand XAT 8 616



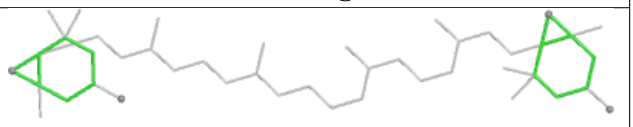
Bond lengths



Bond angles

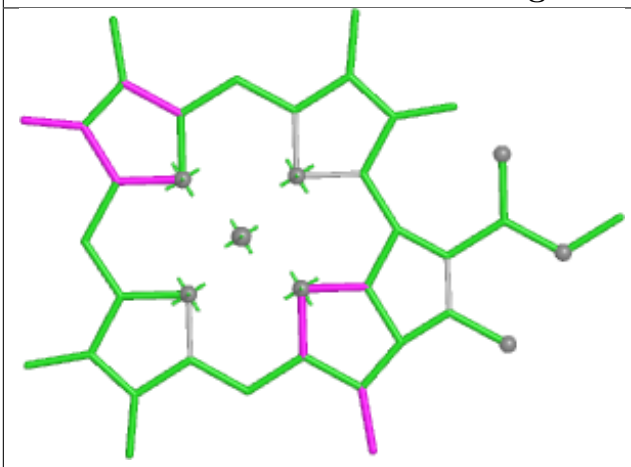


Torsions

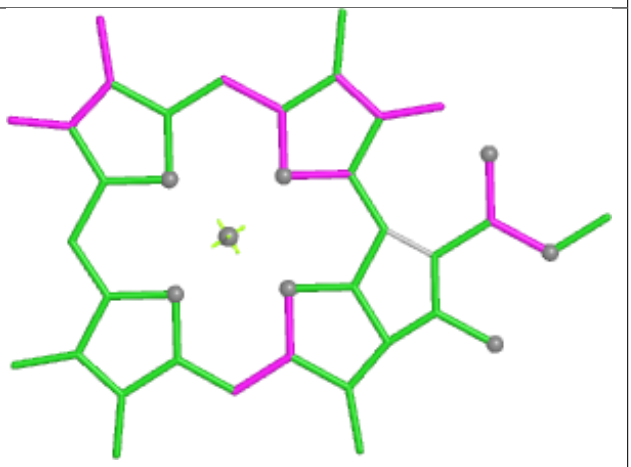


Rings

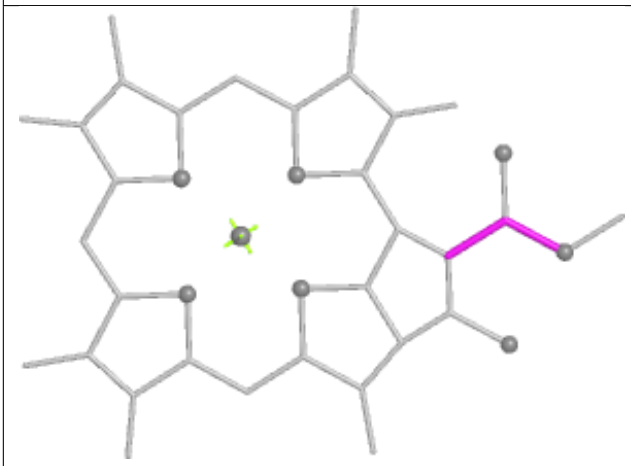
Ligand CLA 1 614



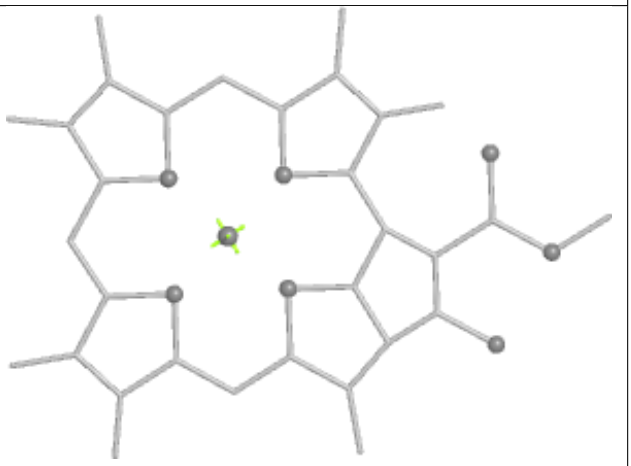
Bond lengths



Bond angles

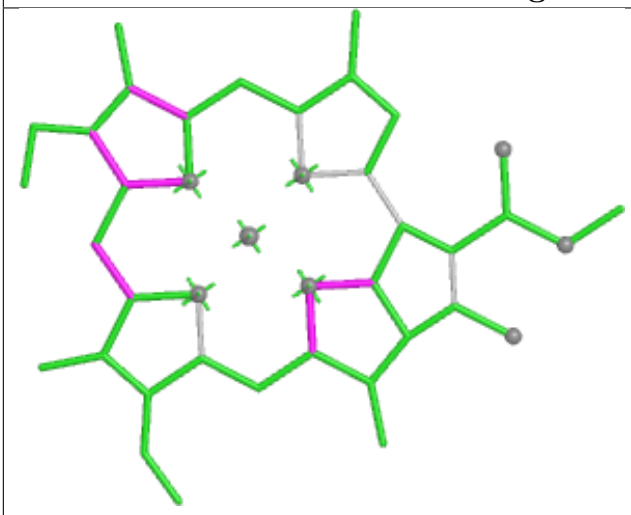


Torsions

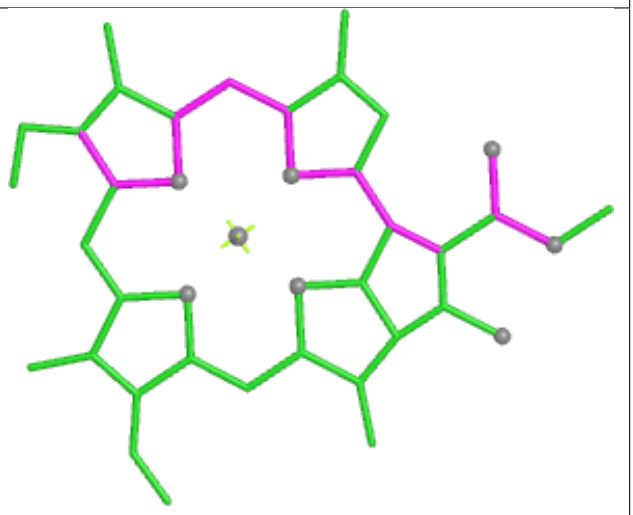


Rings

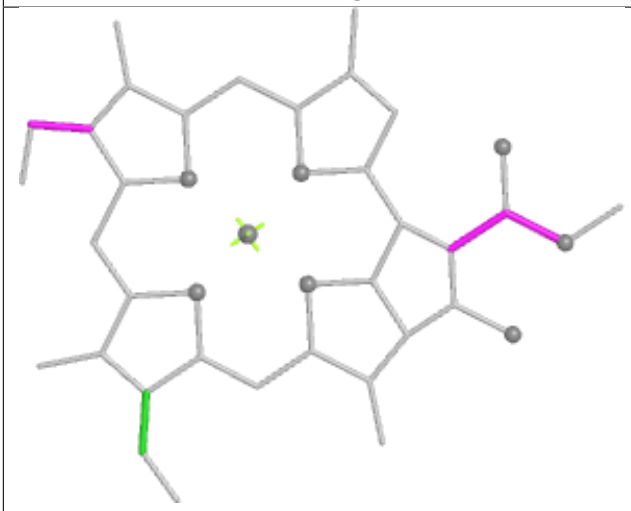
Ligand CLA 3 404



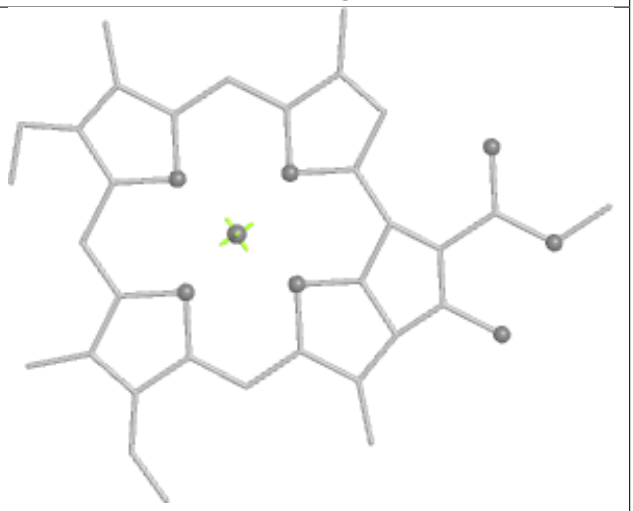
Bond lengths



Bond angles

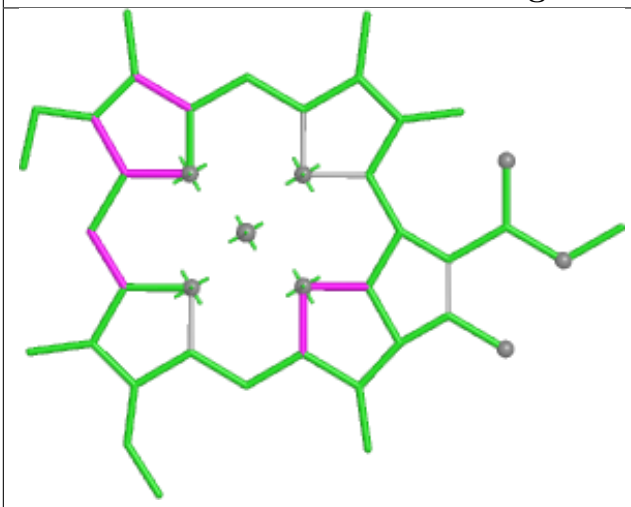


Torsions

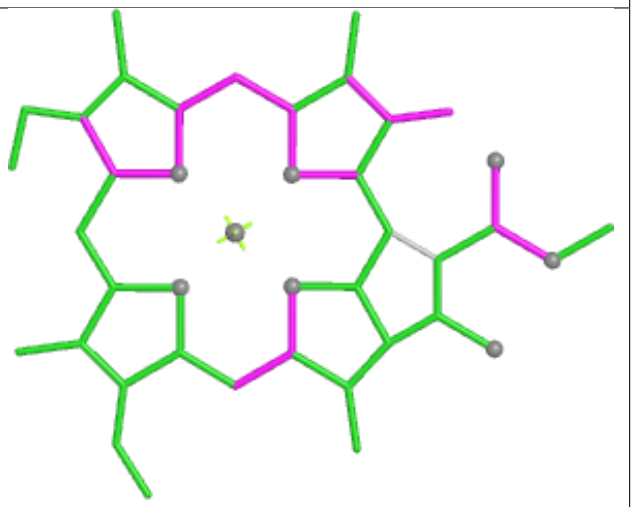


Rings

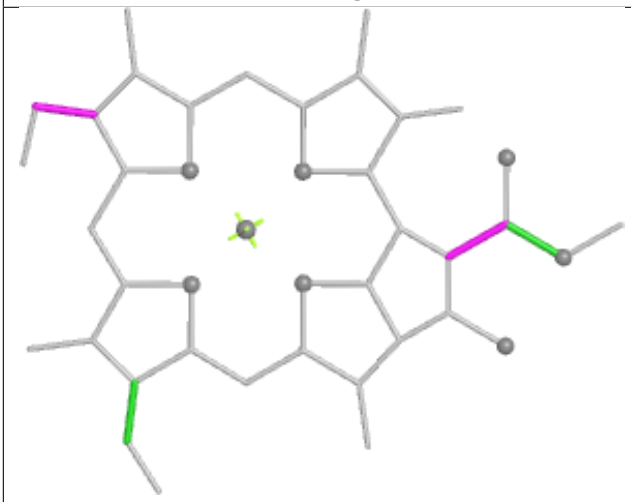
Ligand CLA 8 607



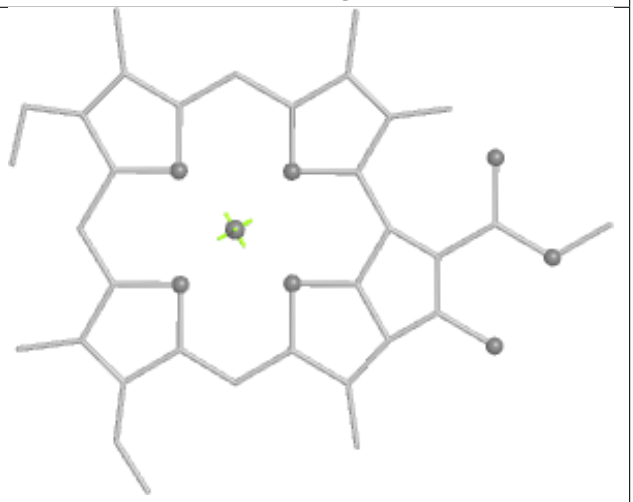
Bond lengths



Bond angles

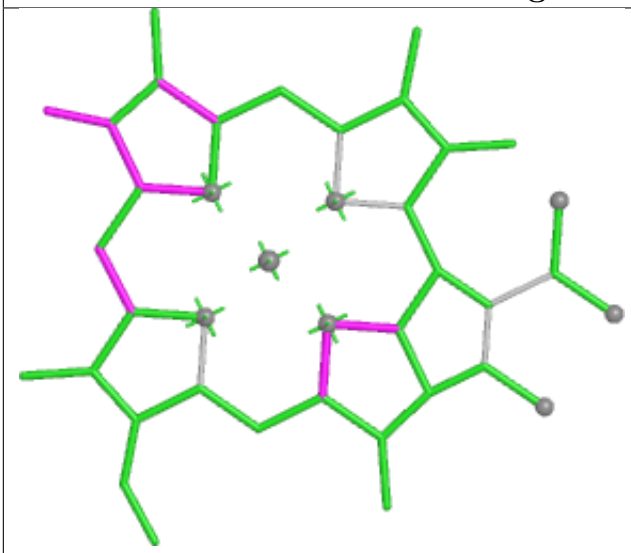


Torsions

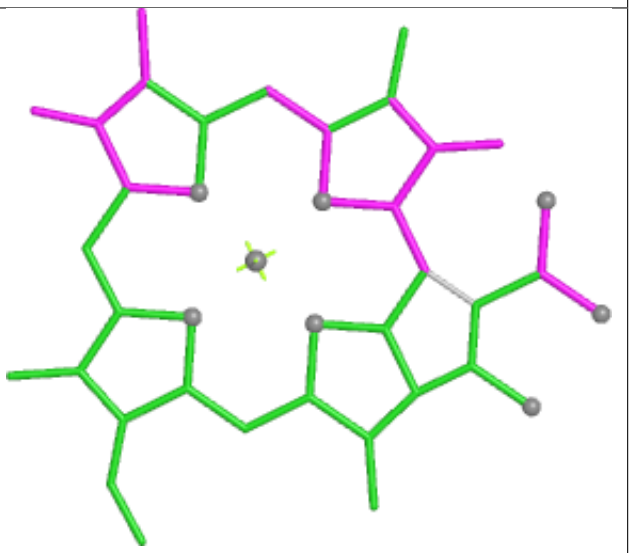


Rings

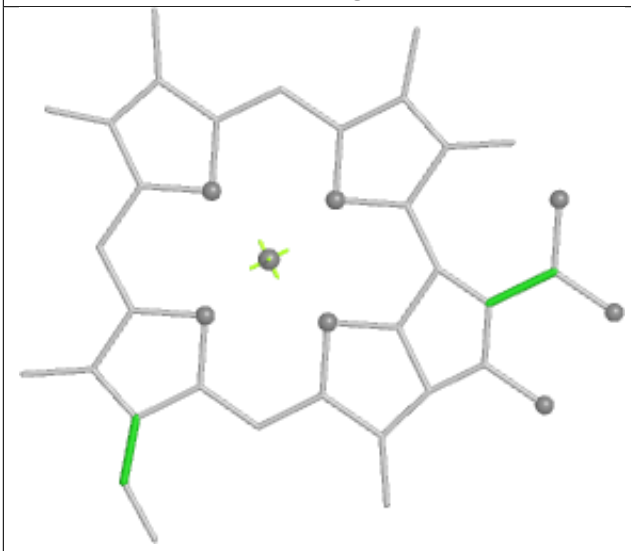
Ligand CLA 1 606



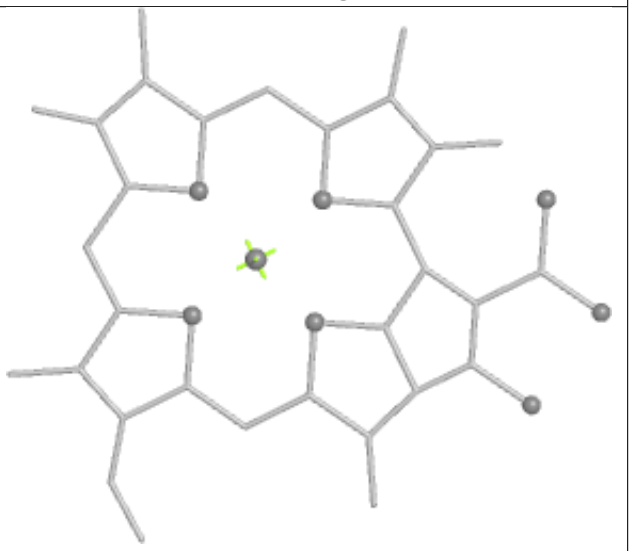
Bond lengths



Bond angles

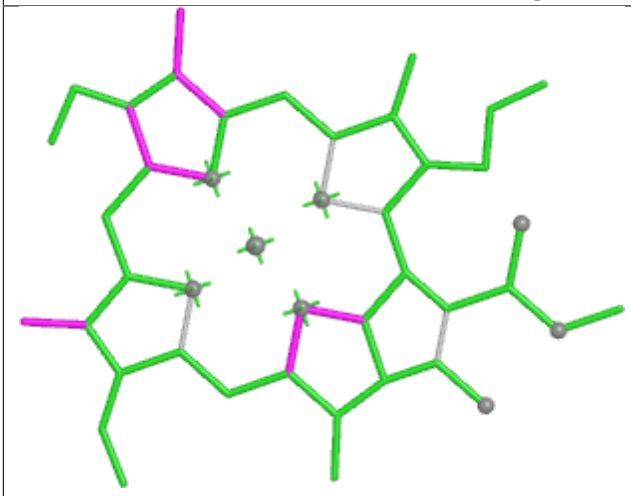


Torsions

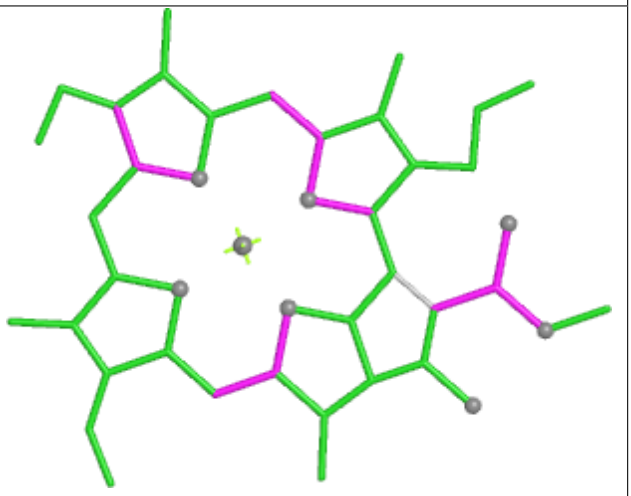


Rings

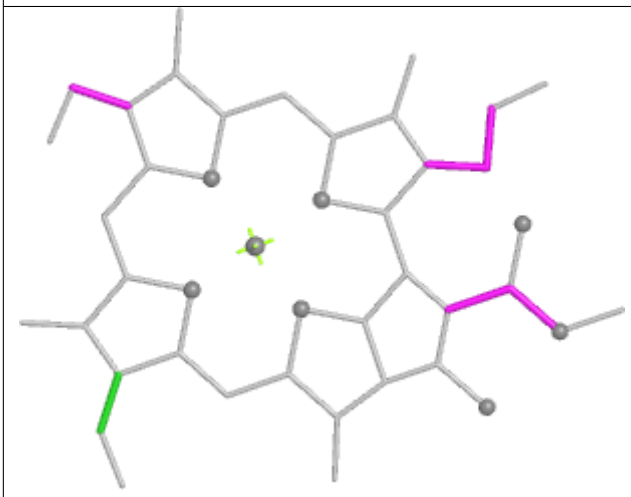
Ligand CLA 3 401



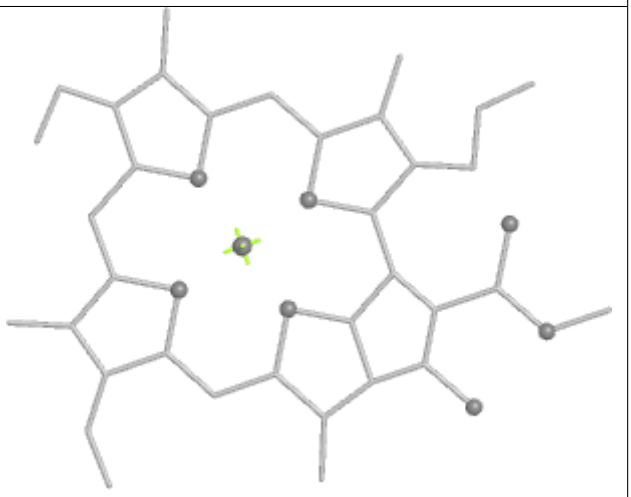
Bond lengths



Bond angles

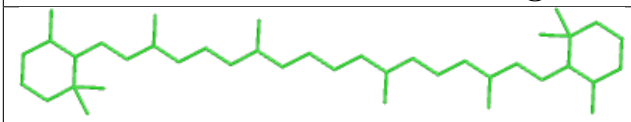


Torsions

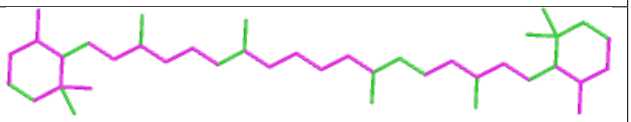


Rings

Ligand BCR 3 417



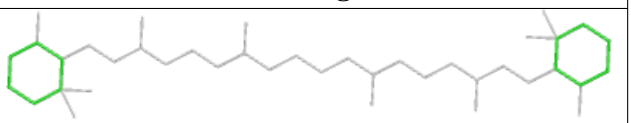
Bond lengths



Bond angles

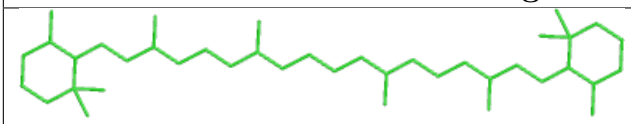


Torsions

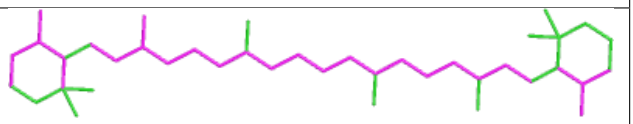


Rings

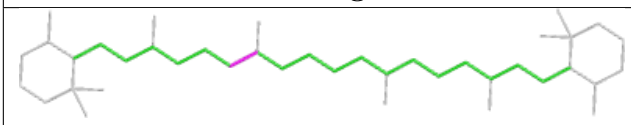
Ligand BCR A 847



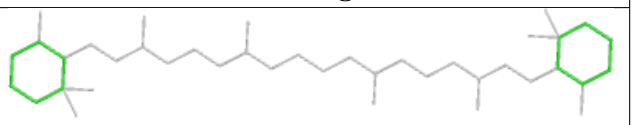
Bond lengths



Bond angles

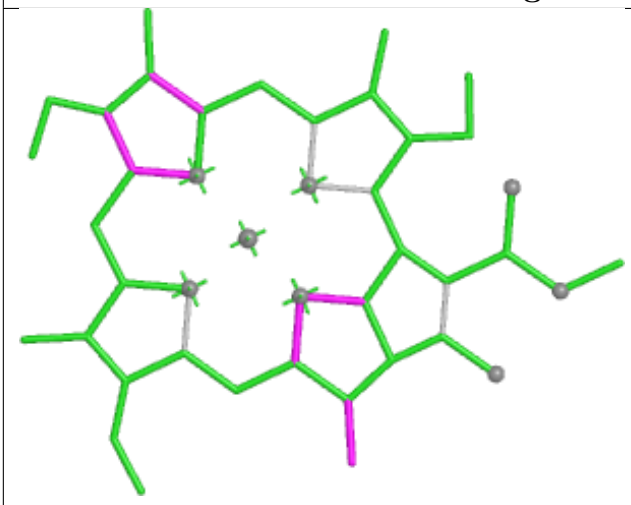


Torsions

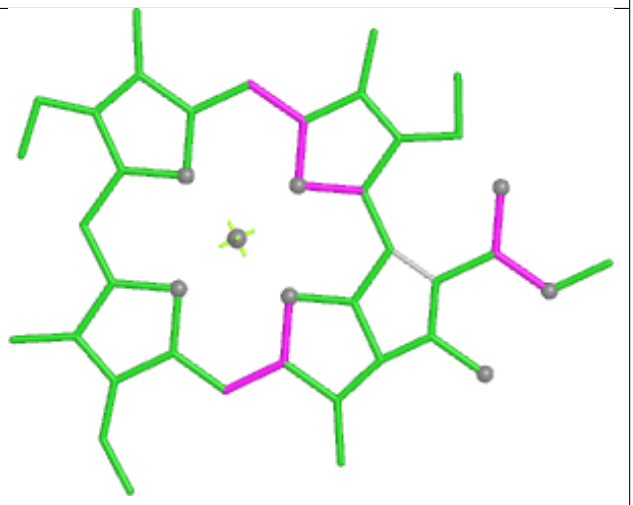


Rings

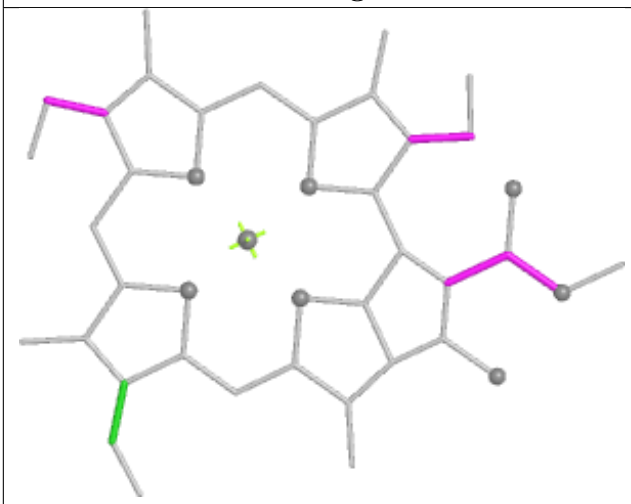
Ligand CLA A 832



Bond lengths



Bond angles

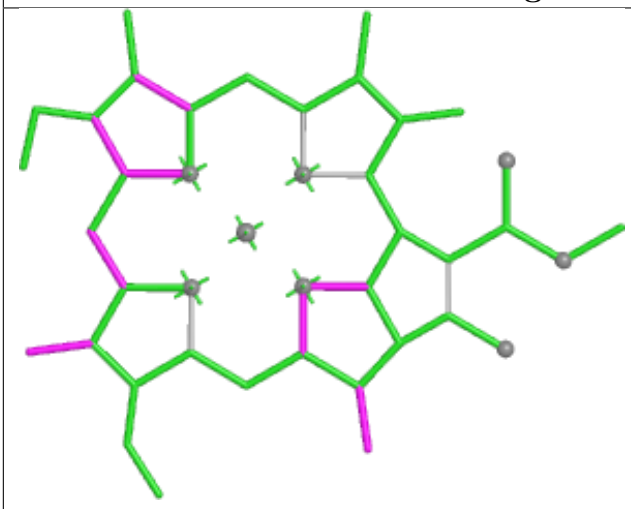


Torsions

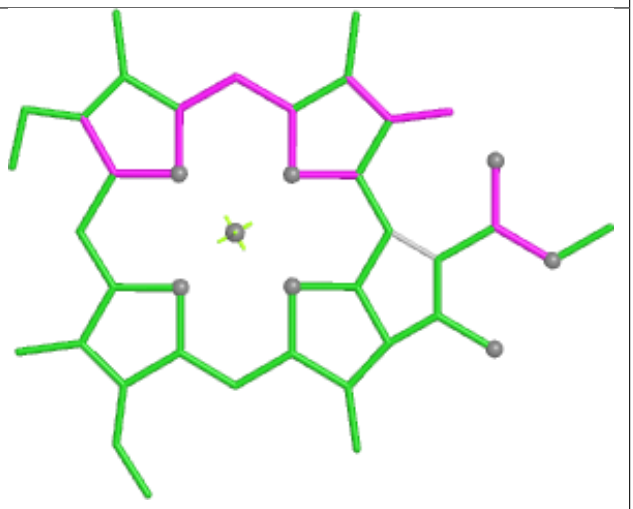


Rings

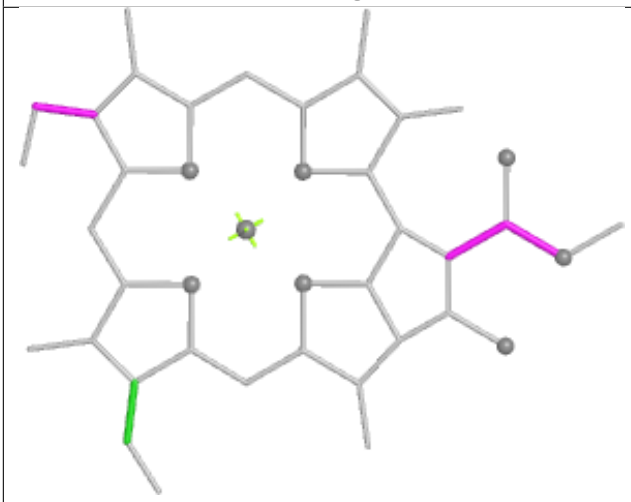
Ligand CLA B 806



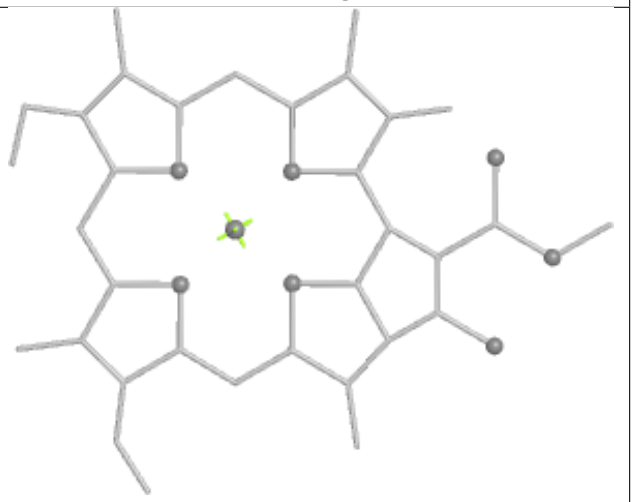
Bond lengths



Bond angles

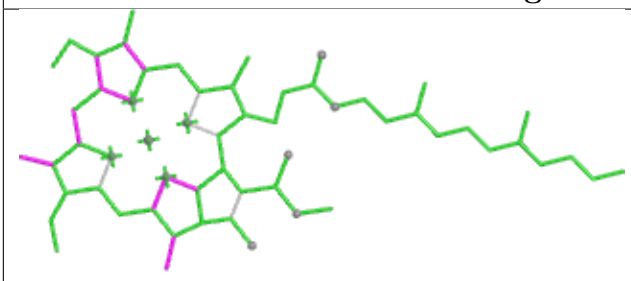


Torsions

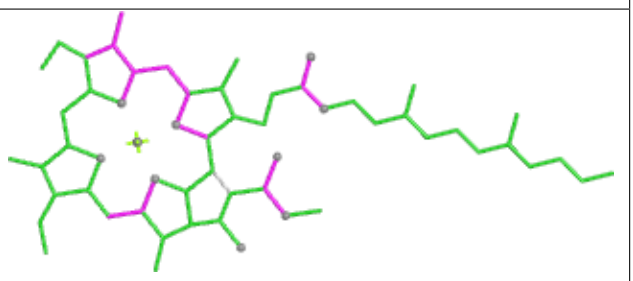


Rings

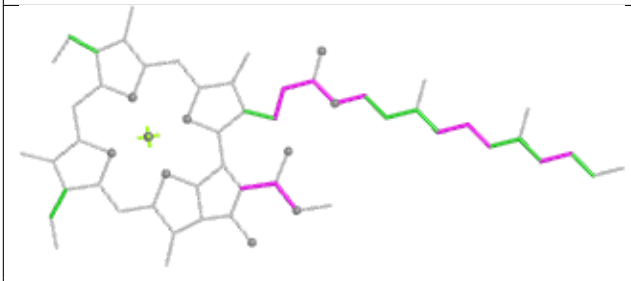
Ligand CLA B 839



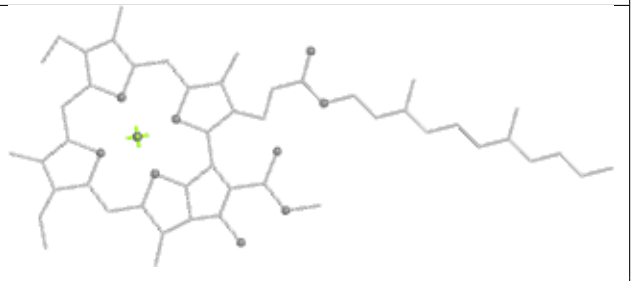
Bond lengths



Bond angles

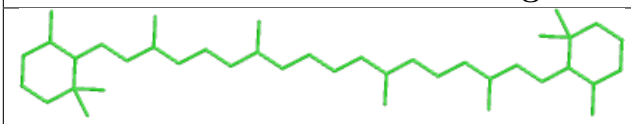


Torsions

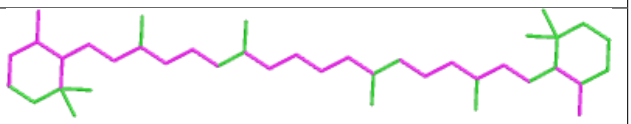


Rings

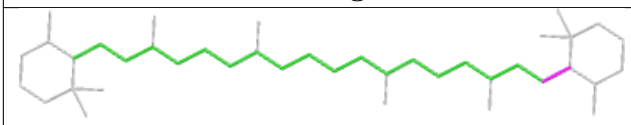
Ligand BCR A 844



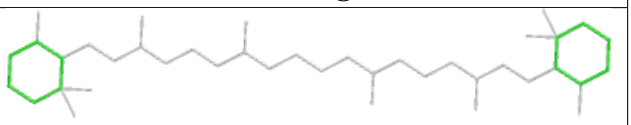
Bond lengths



Bond angles



Torsions

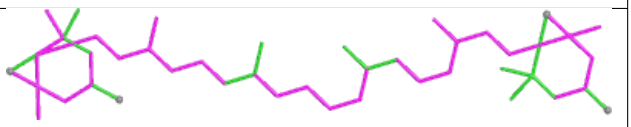


Rings

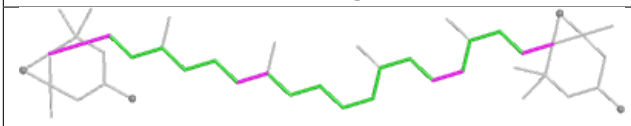
Ligand XAT 3 416



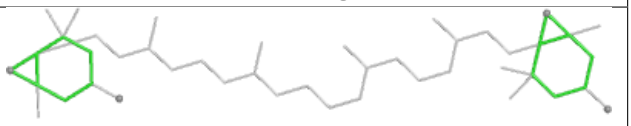
Bond lengths



Bond angles

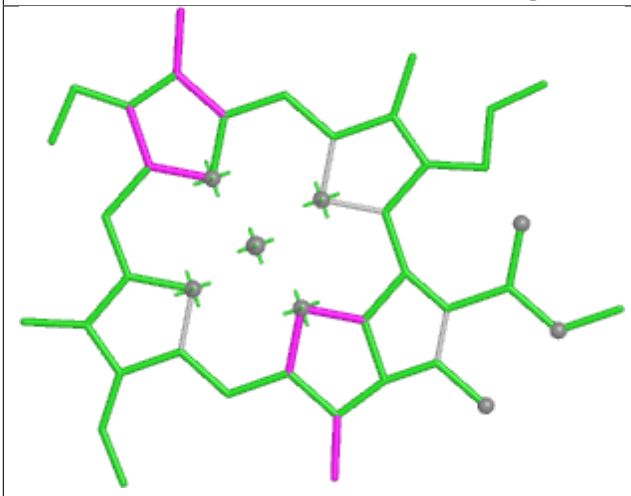


Torsions

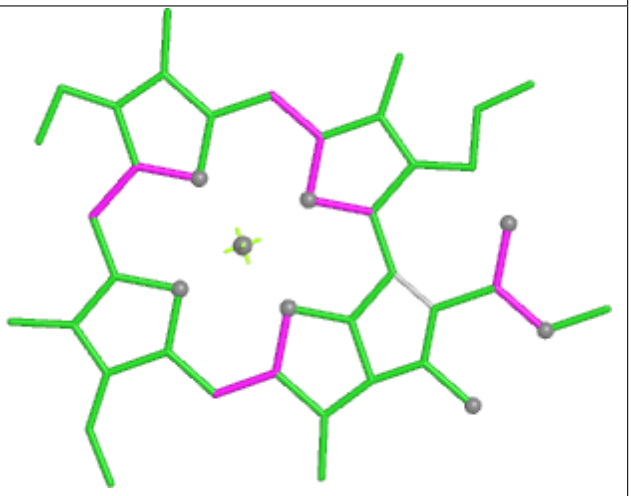


Rings

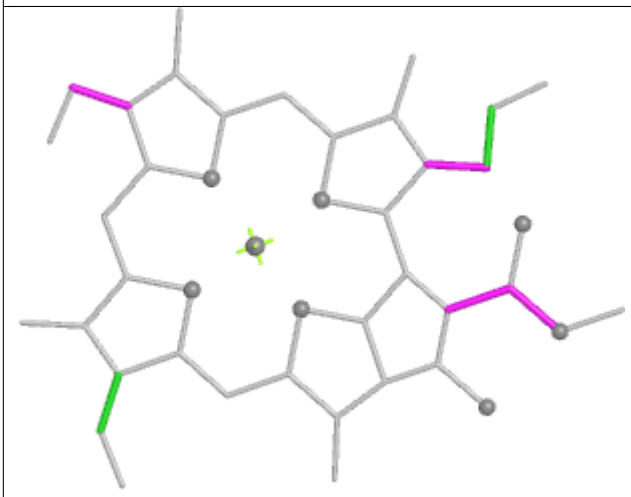
Ligand CLA B 824



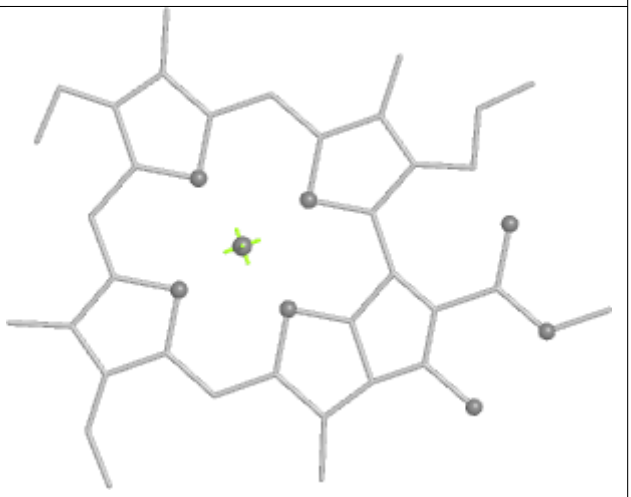
Bond lengths



Bond angles

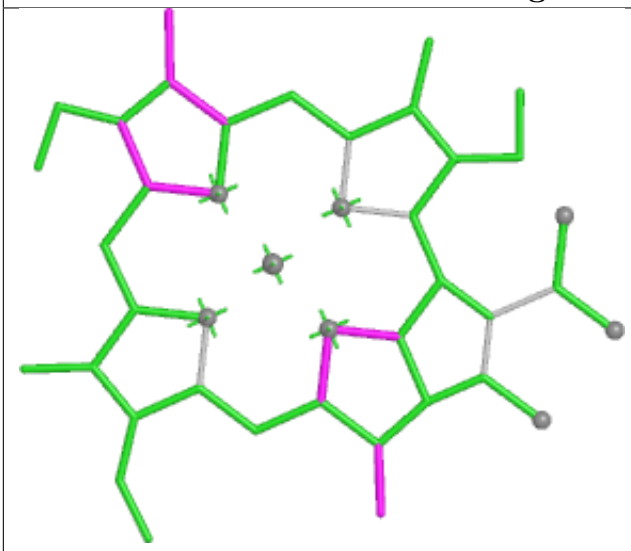


Torsions

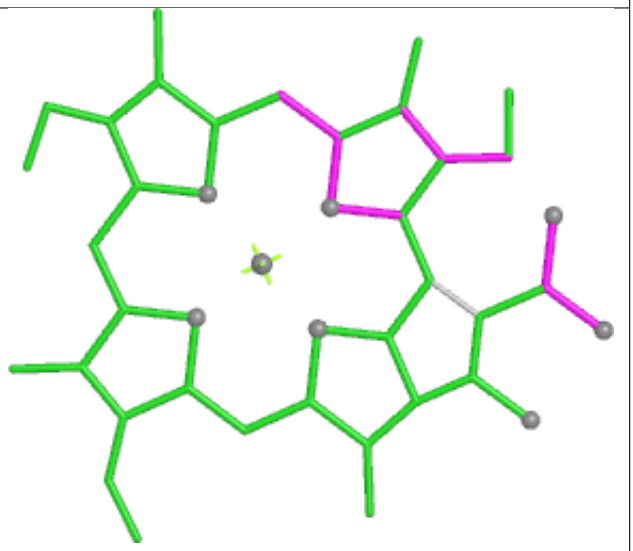


Rings

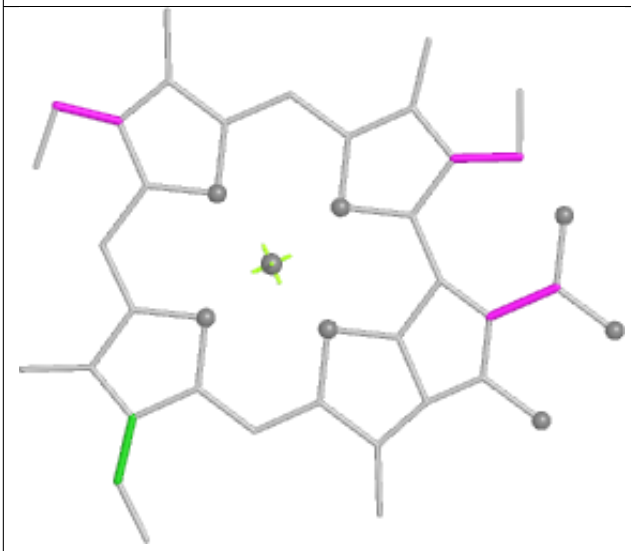
Ligand CLA 5 606



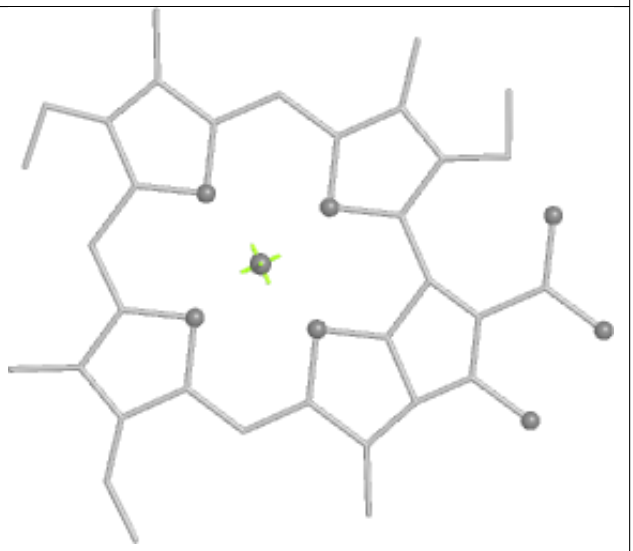
Bond lengths



Bond angles

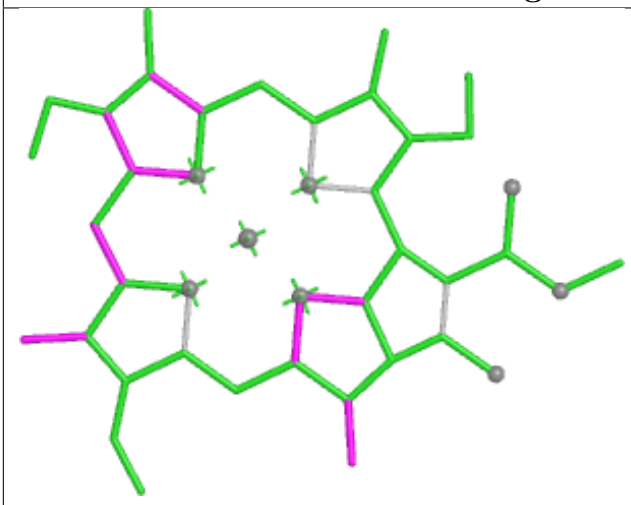


Torsions

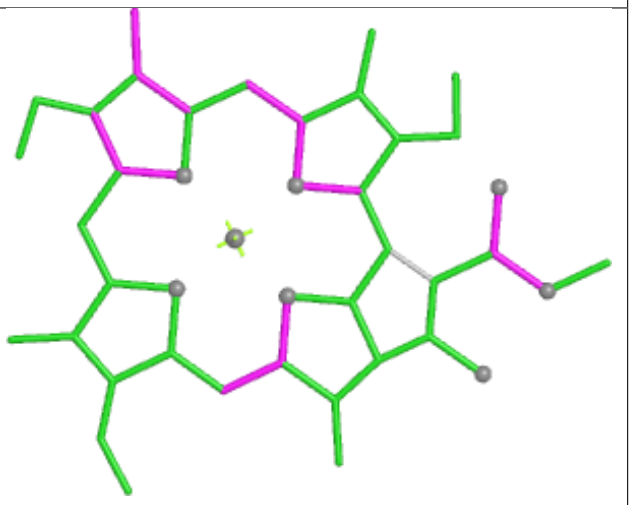


Rings

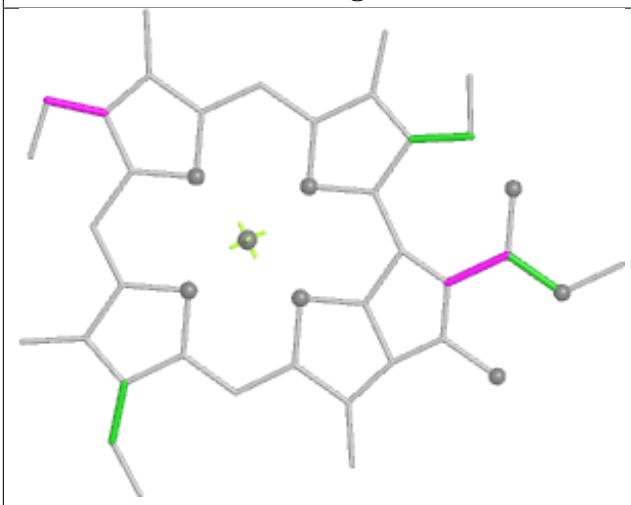
Ligand CLA B 807



Bond lengths



Bond angles

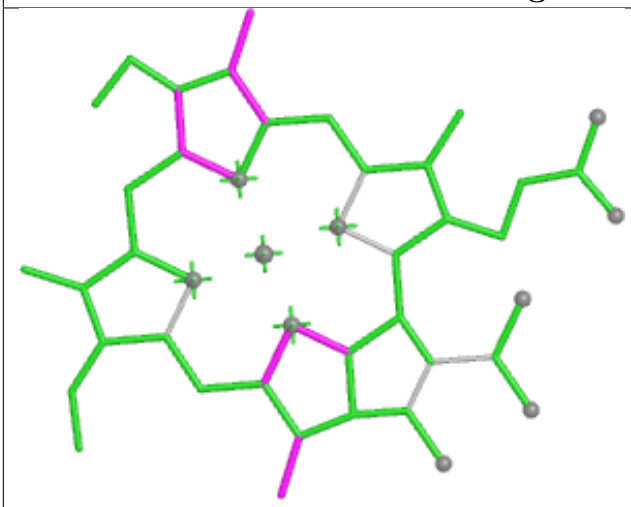


Torsions

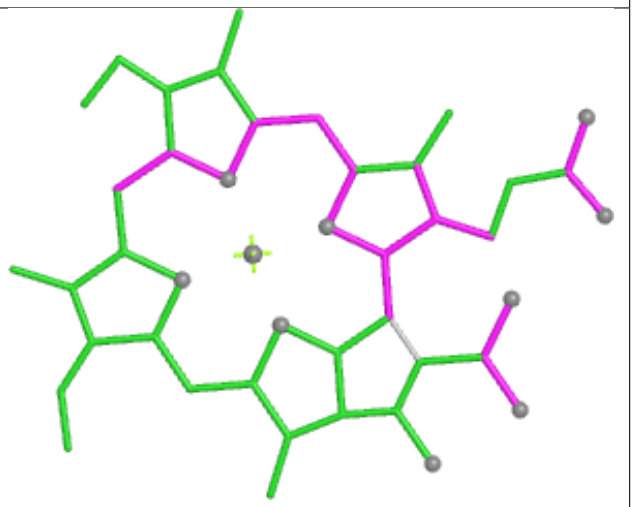


Rings

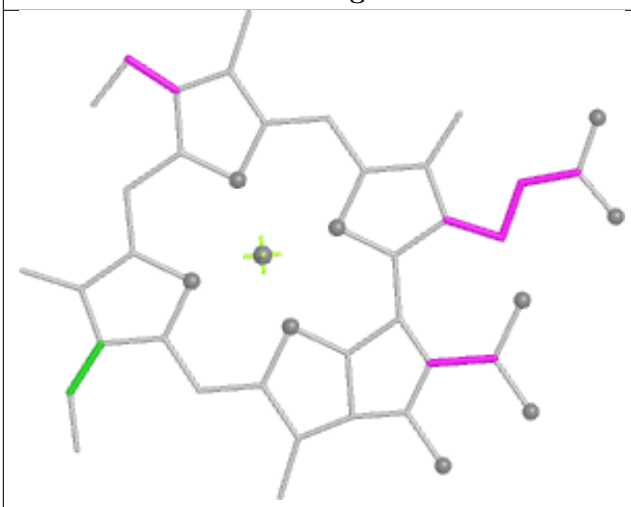
Ligand CLA 7 603



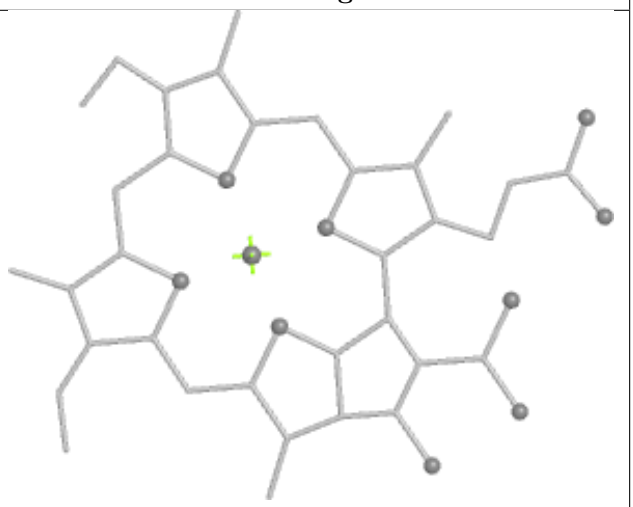
Bond lengths



Bond angles

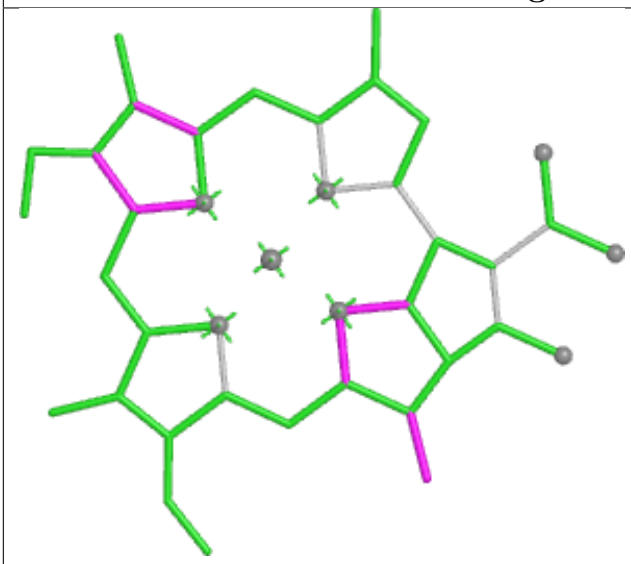


Torsions

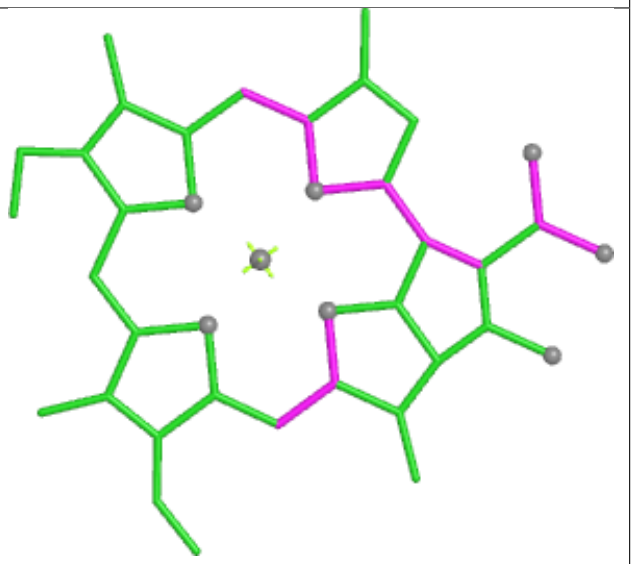


Rings

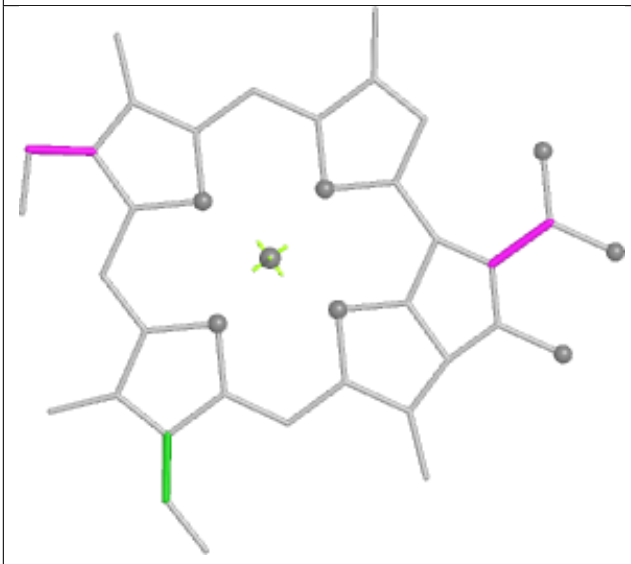
Ligand CLA 1 611



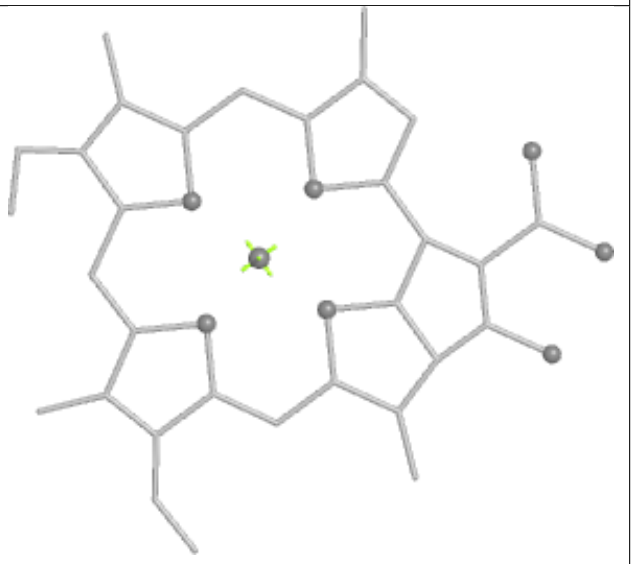
Bond lengths



Bond angles

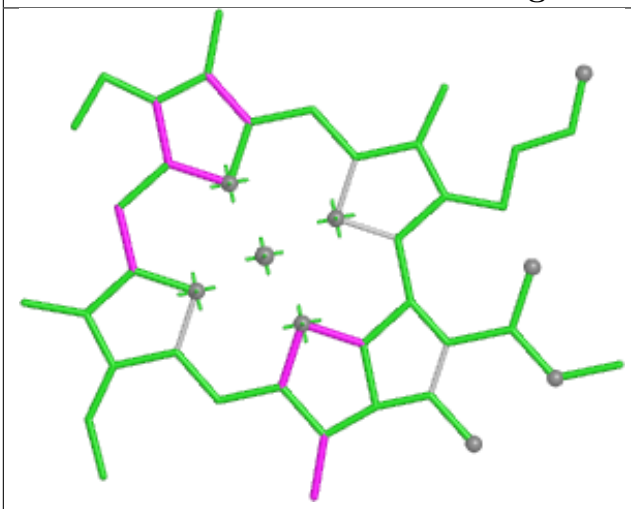


Torsions

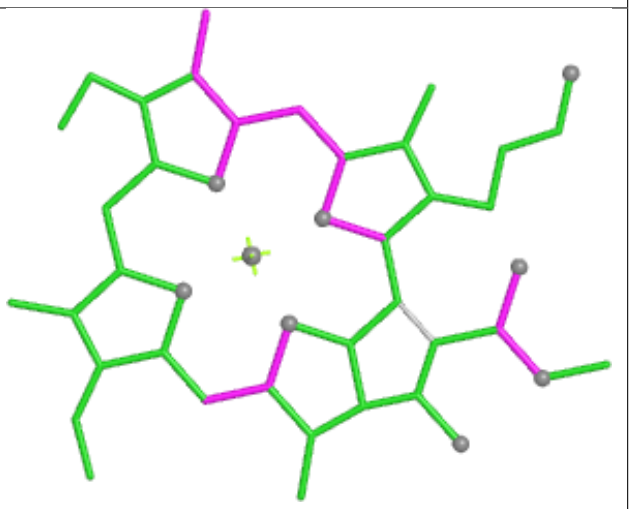


Rings

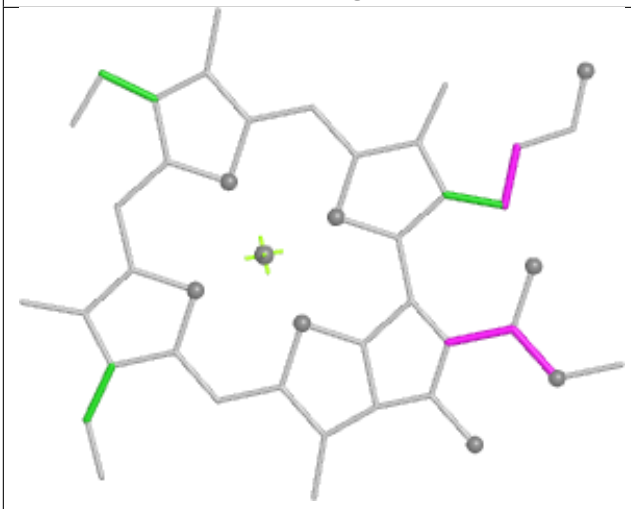
Ligand CLA 6 613



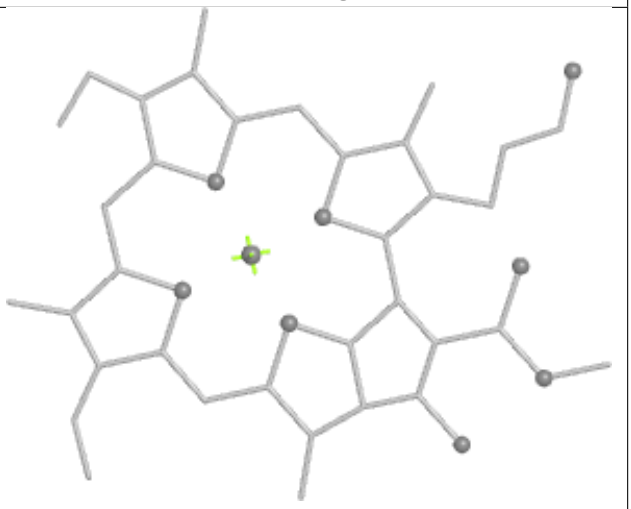
Bond lengths



Bond angles

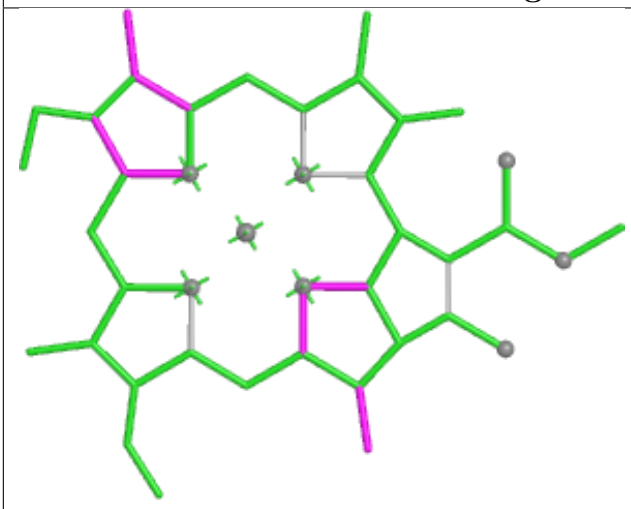


Torsions

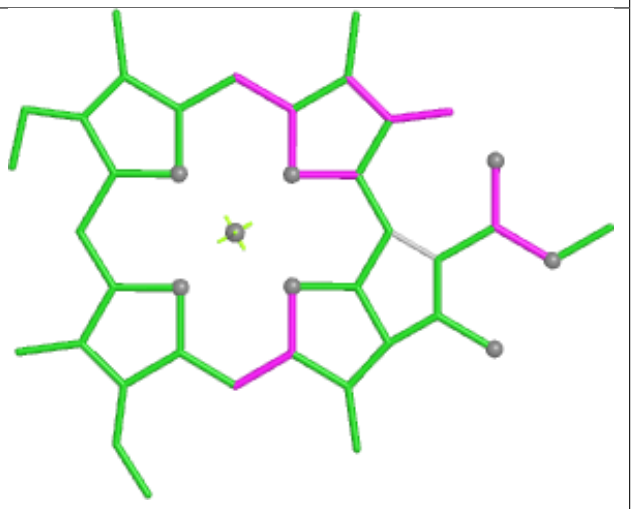


Rings

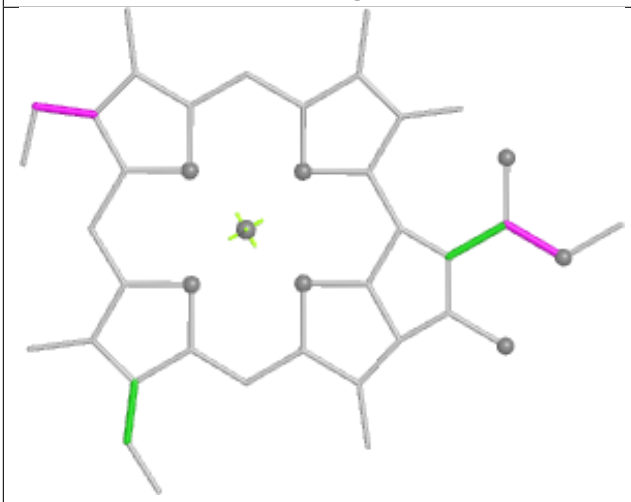
Ligand CLA B 809



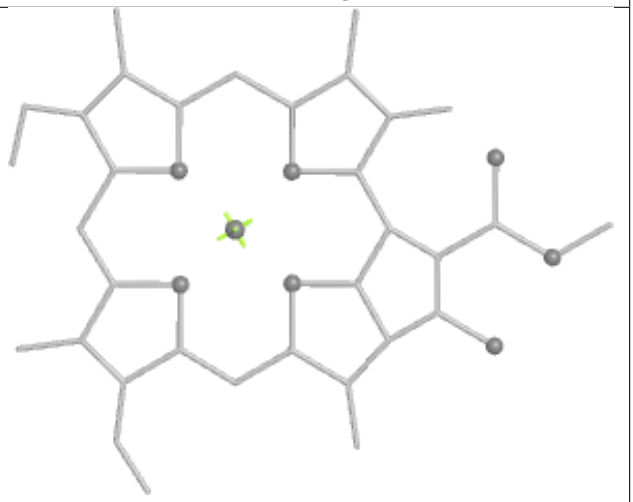
Bond lengths



Bond angles

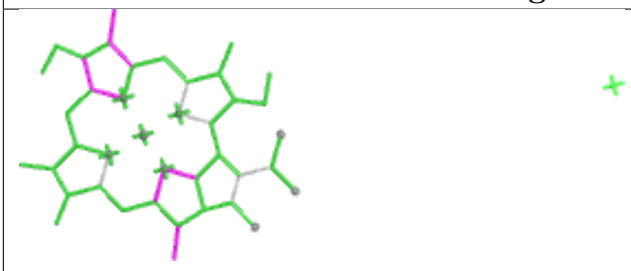


Torsions

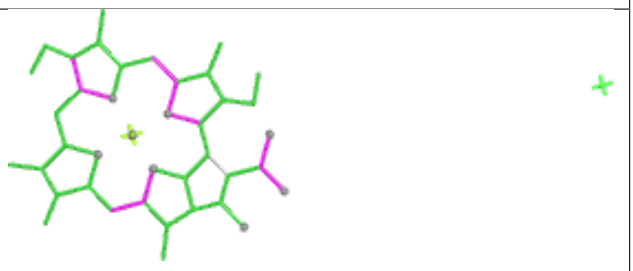


Rings

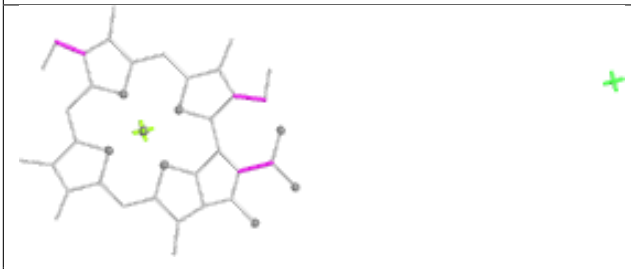
Ligand CLA 3 405



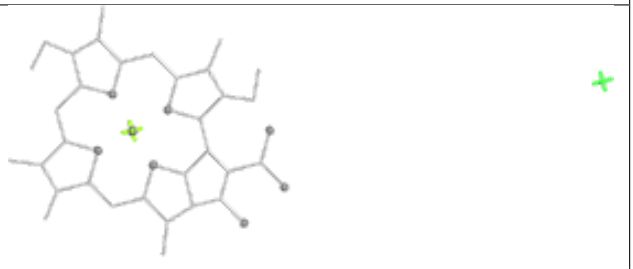
Bond lengths



Bond angles

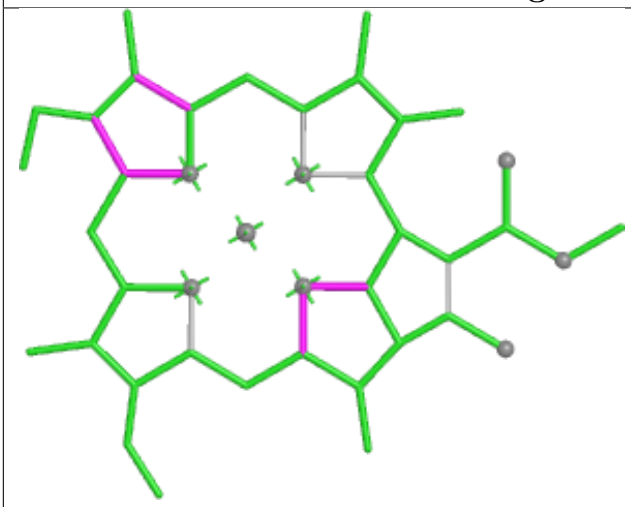


Torsions

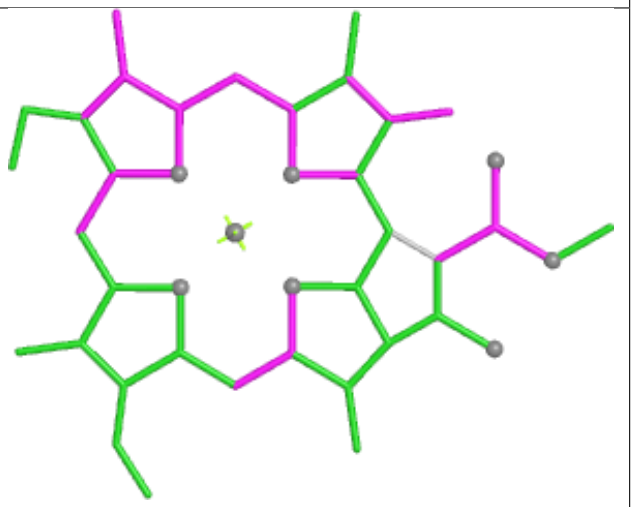


Rings

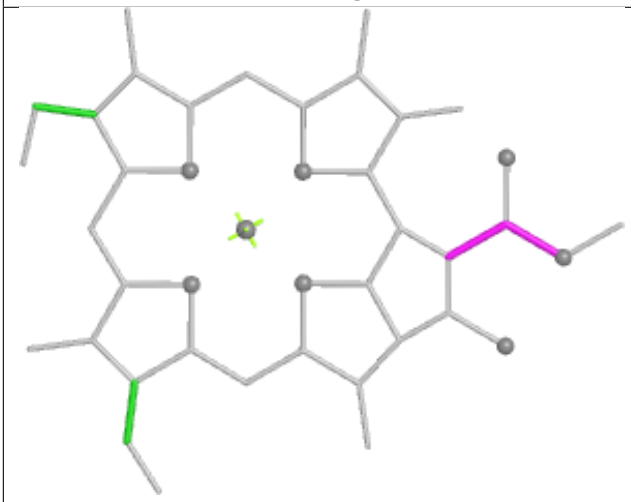
Ligand CLA 5 613



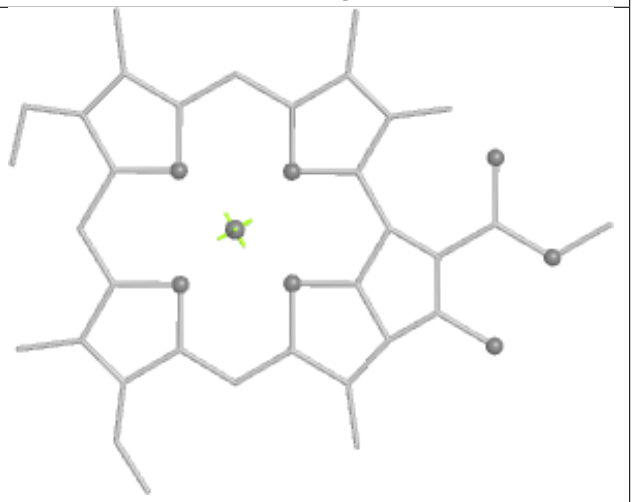
Bond lengths



Bond angles

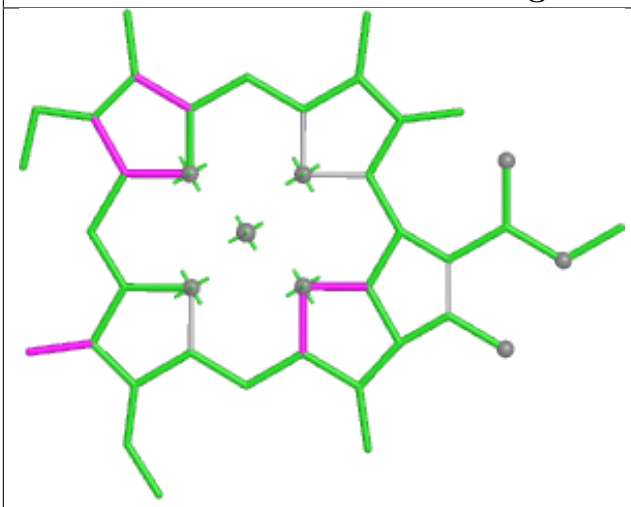


Torsions

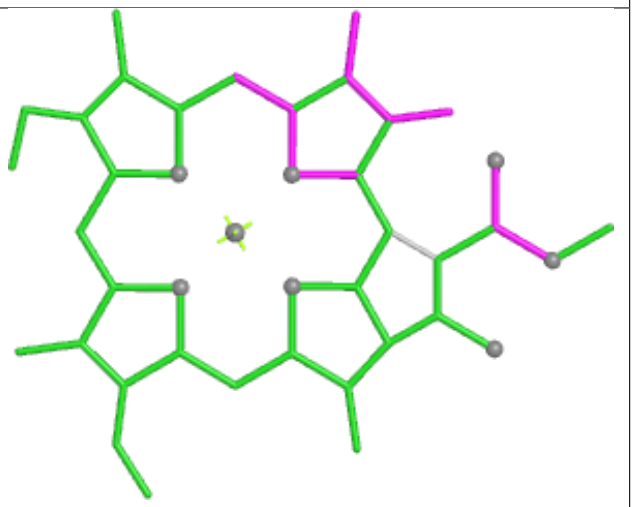


Rings

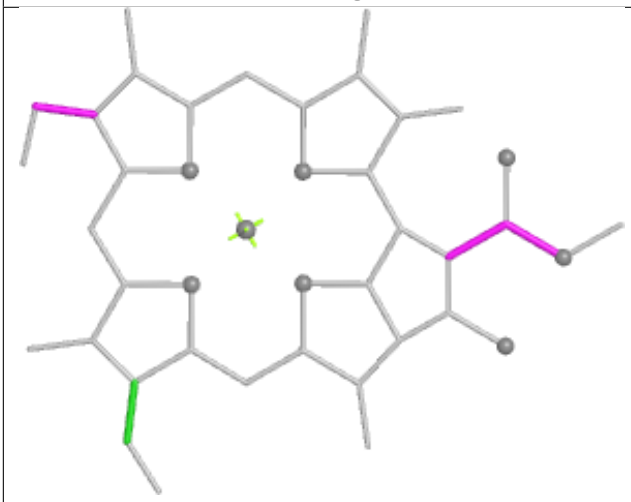
Ligand CLA 8 609



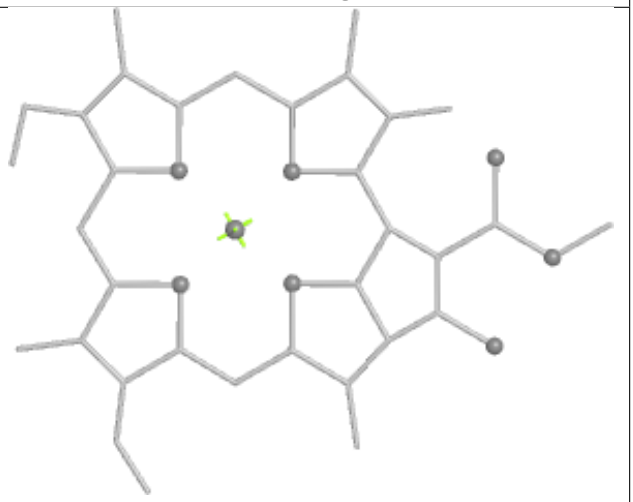
Bond lengths



Bond angles

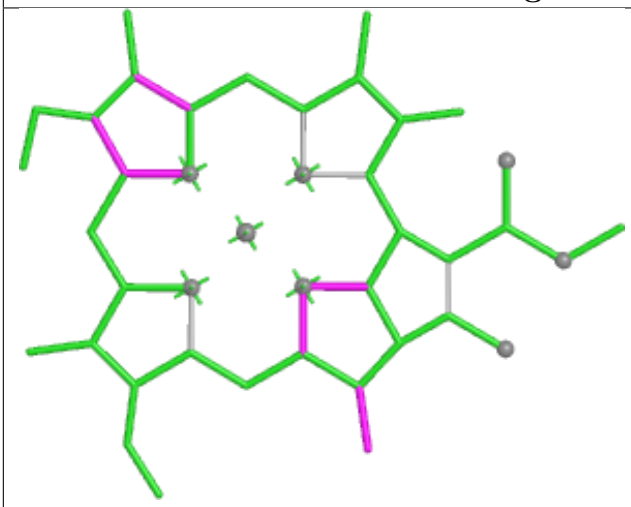


Torsions

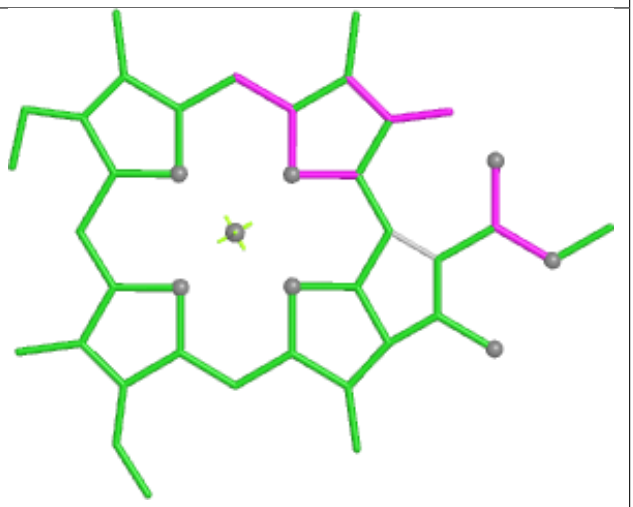


Rings

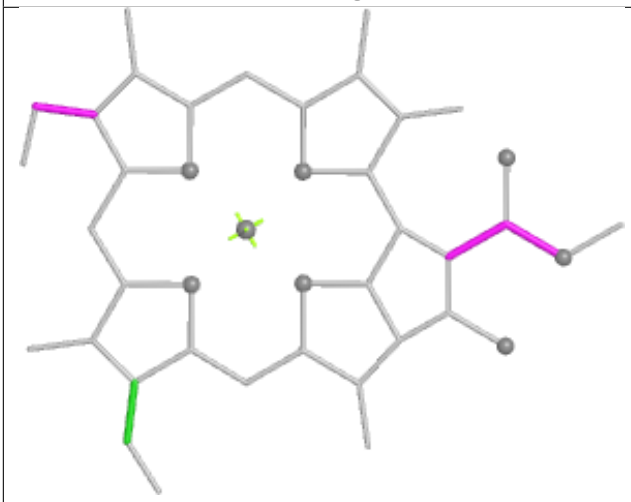
Ligand CLA B 832



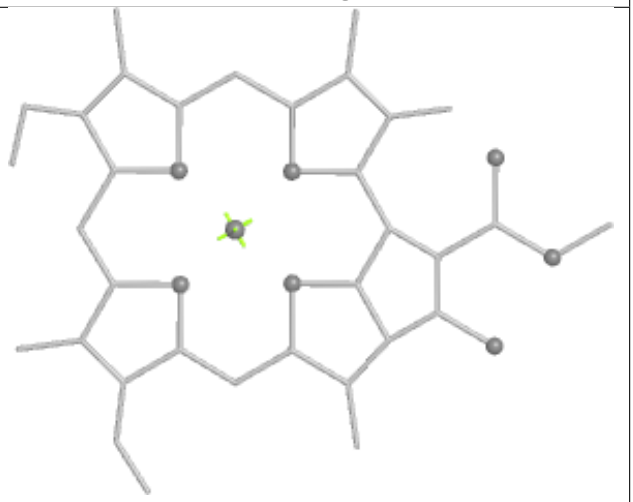
Bond lengths



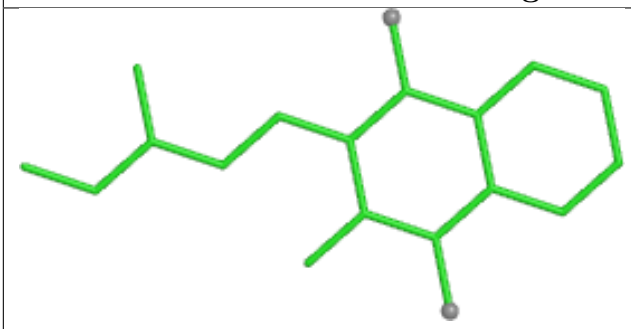
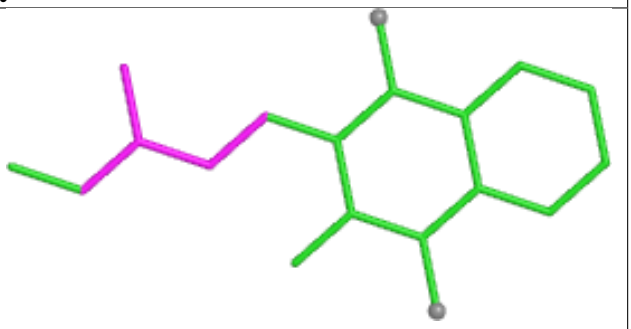
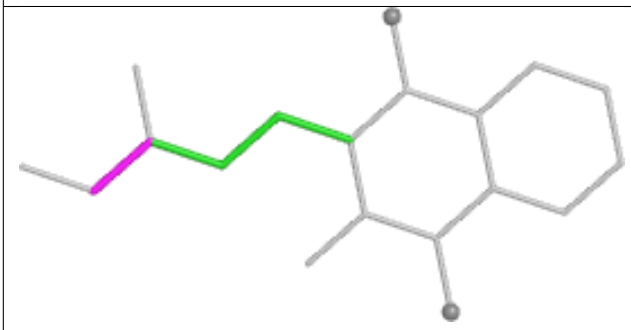
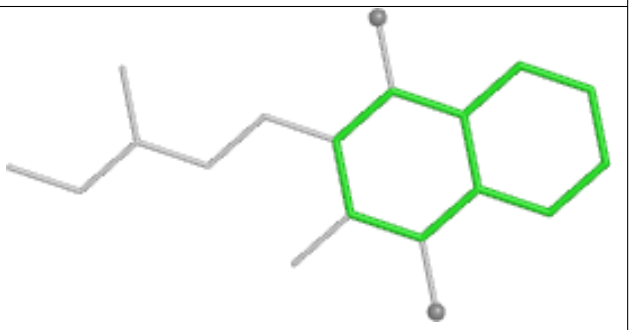
Bond angles



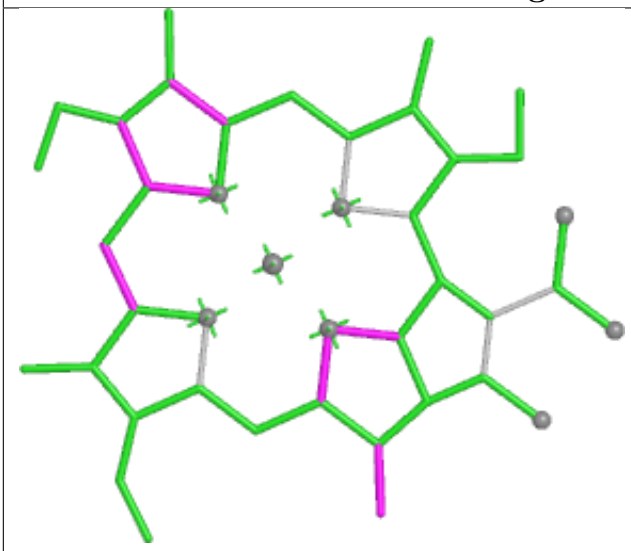
Torsions



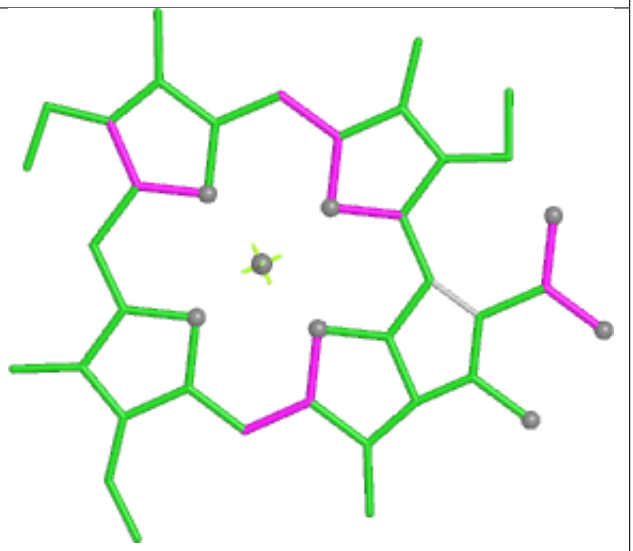
Rings

Ligand PQN B 844	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

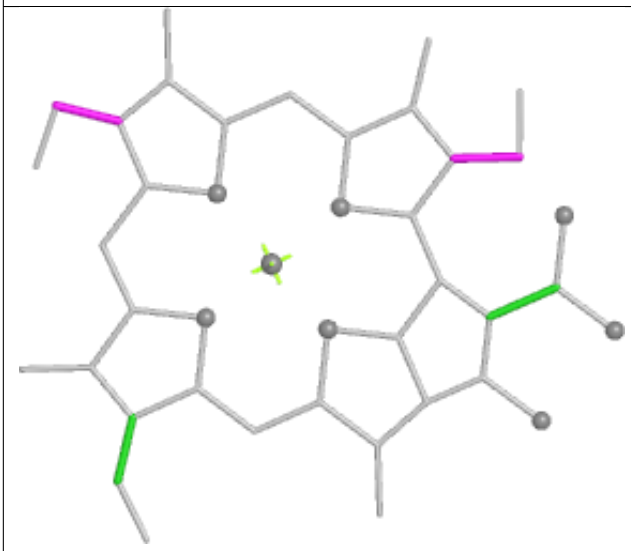
Ligand CLA 8 604



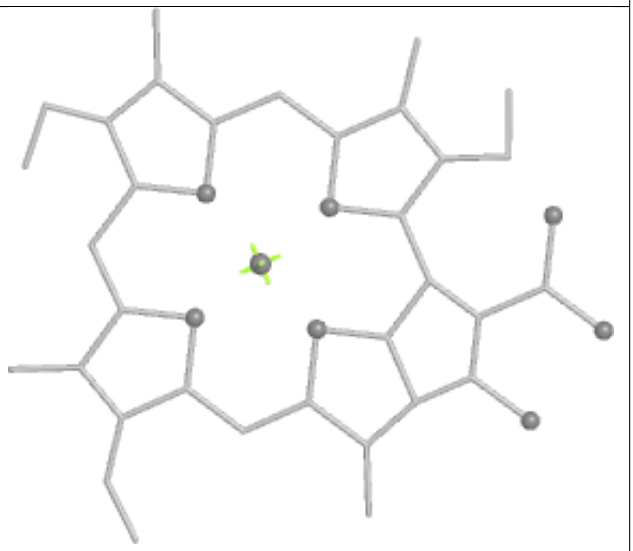
Bond lengths



Bond angles

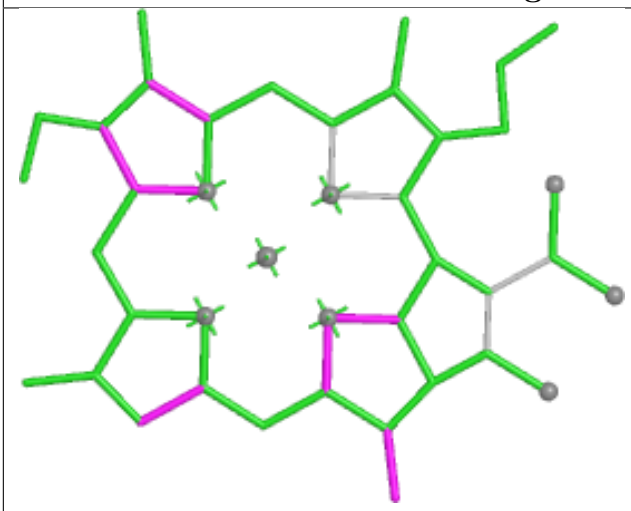


Torsions

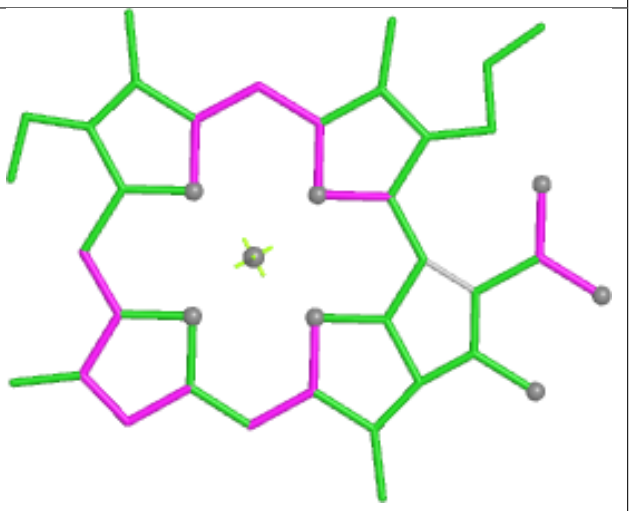


Rings

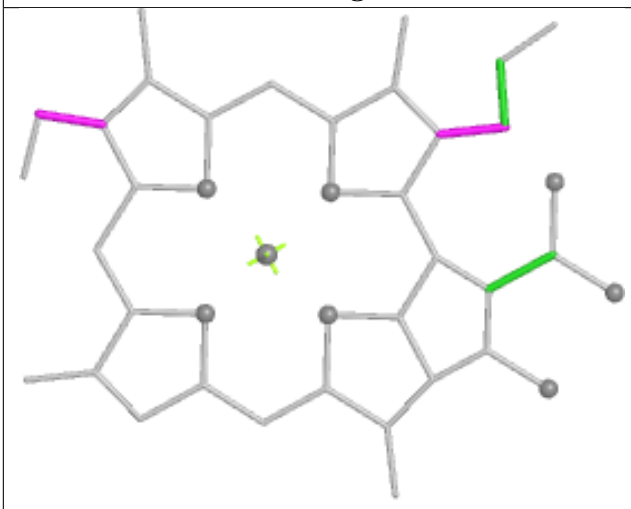
Ligand CLA B 823



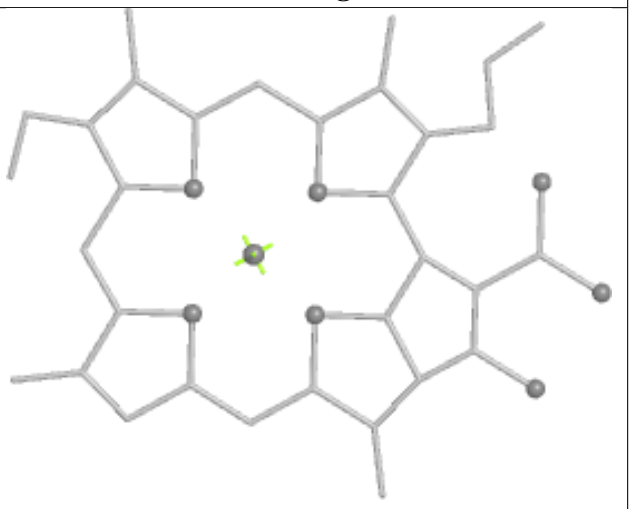
Bond lengths



Bond angles

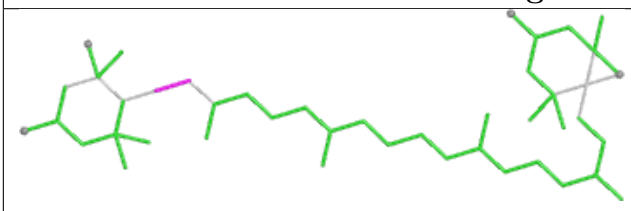


Torsions

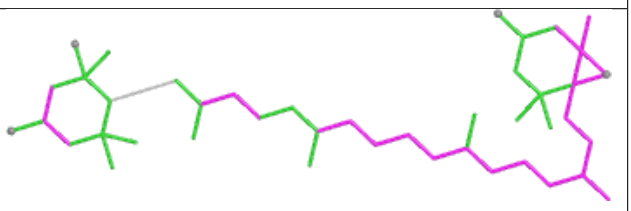


Rings

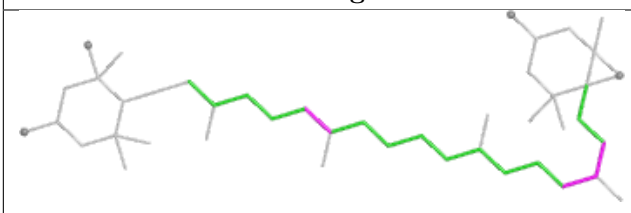
Ligand NEX 5 621



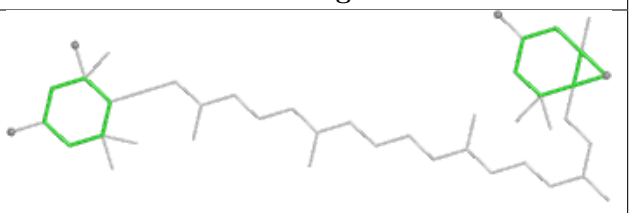
Bond lengths



Bond angles

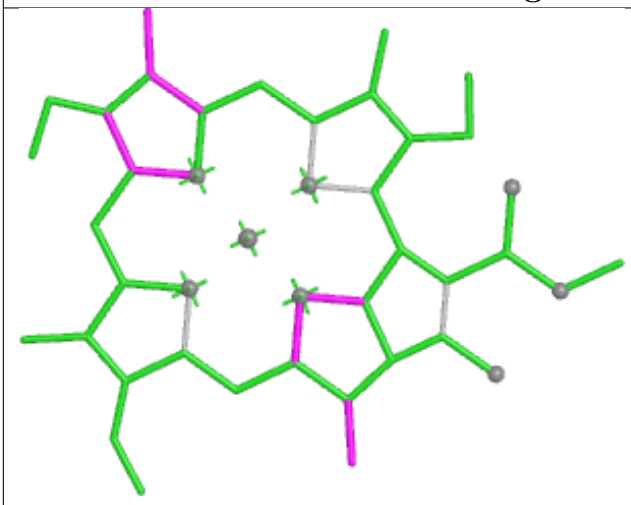


Torsions

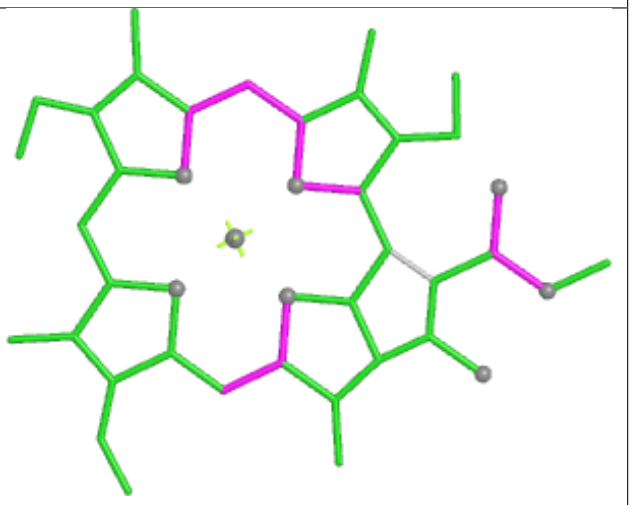


Rings

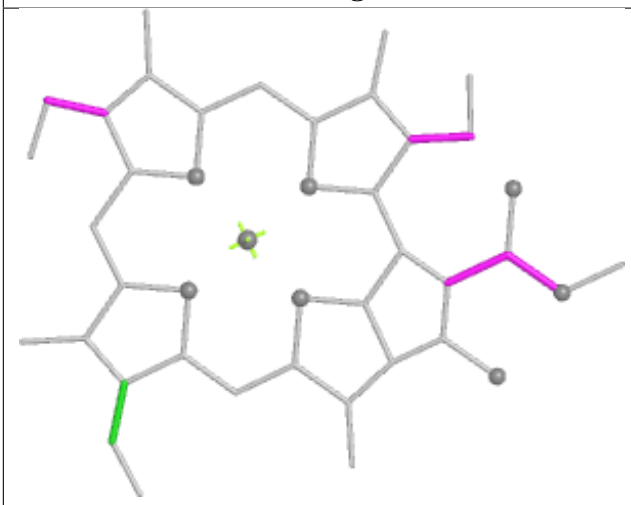
Ligand CLA B 841



Bond lengths



Bond angles

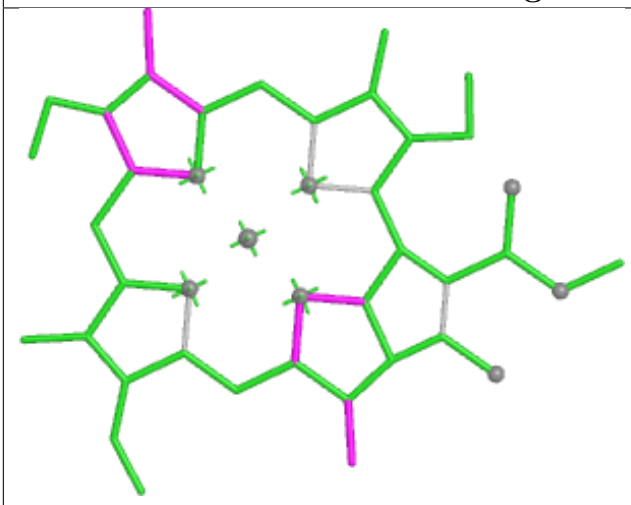


Torsions

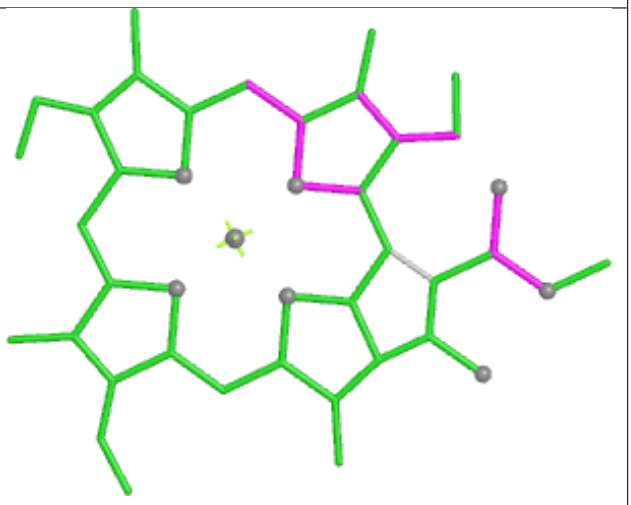


Rings

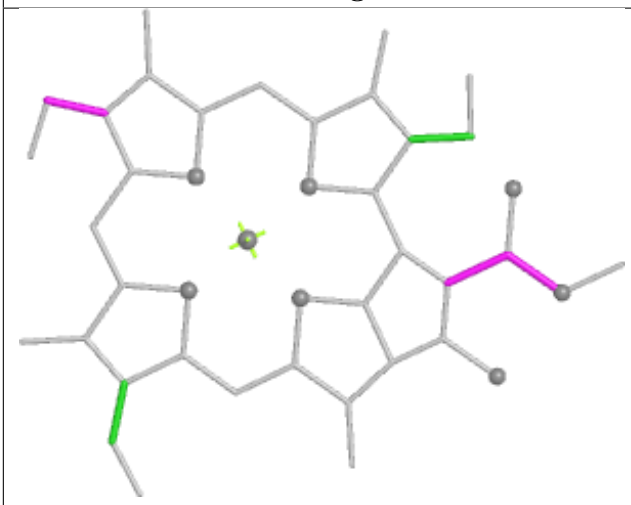
Ligand CLA B 812



Bond lengths



Bond angles

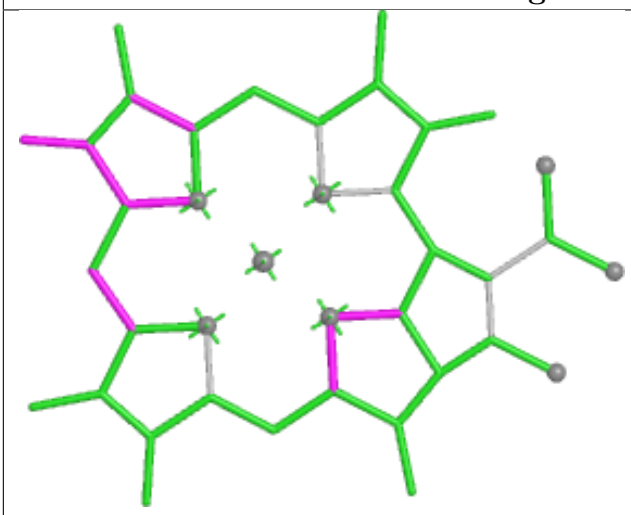


Torsions

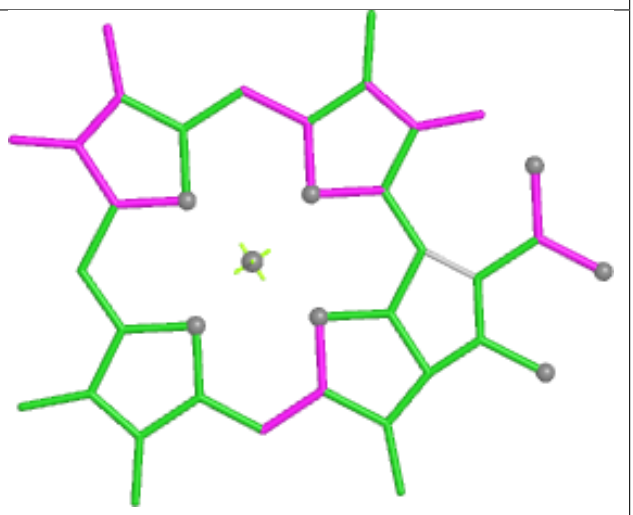


Rings

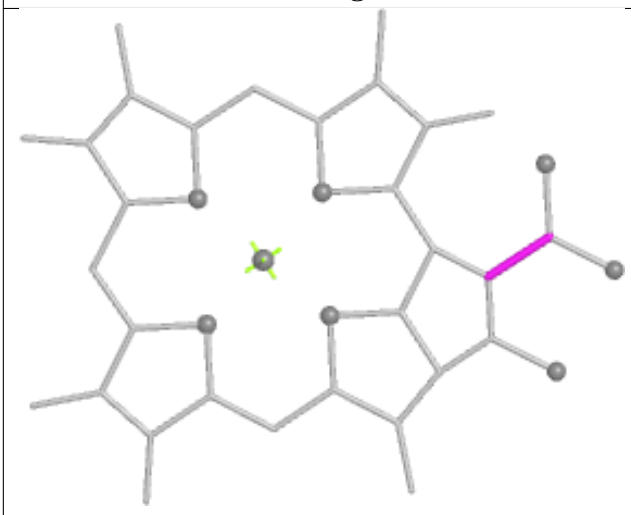
Ligand CLA 1 608



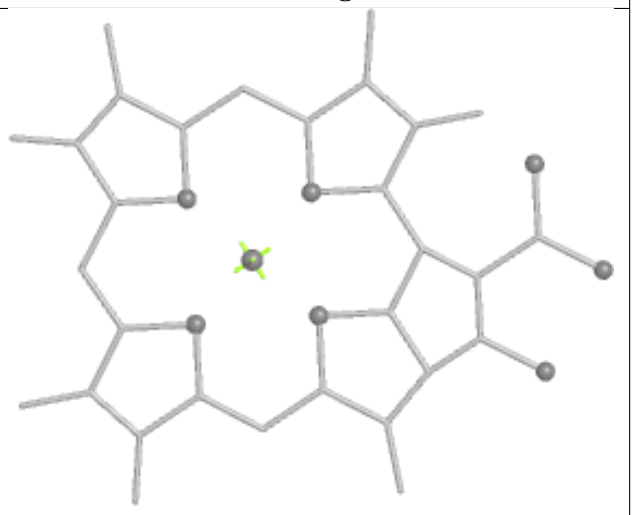
Bond lengths



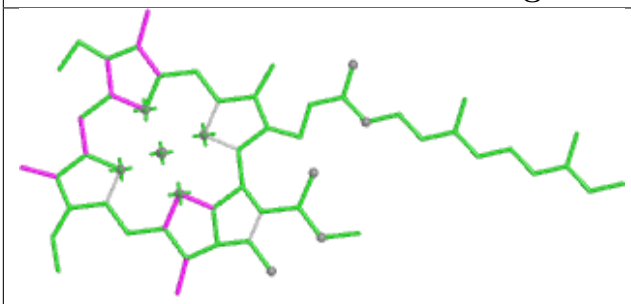
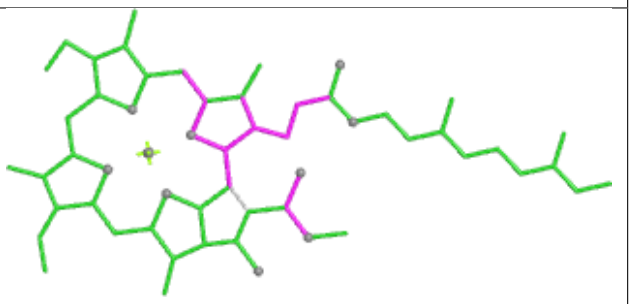
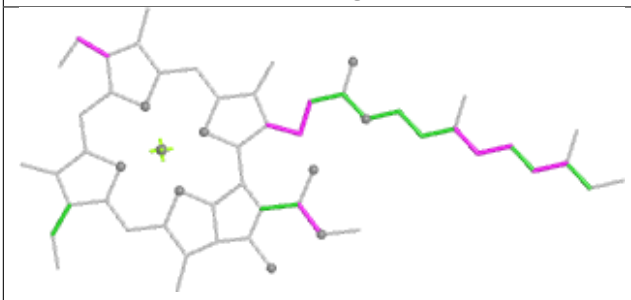
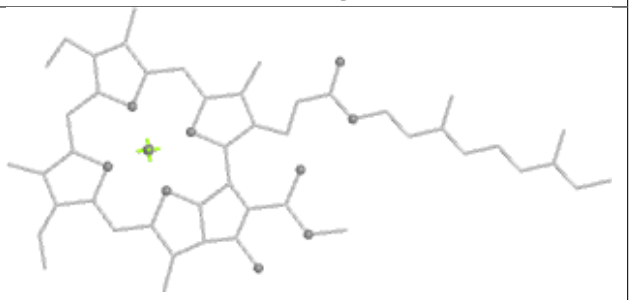
Bond angles



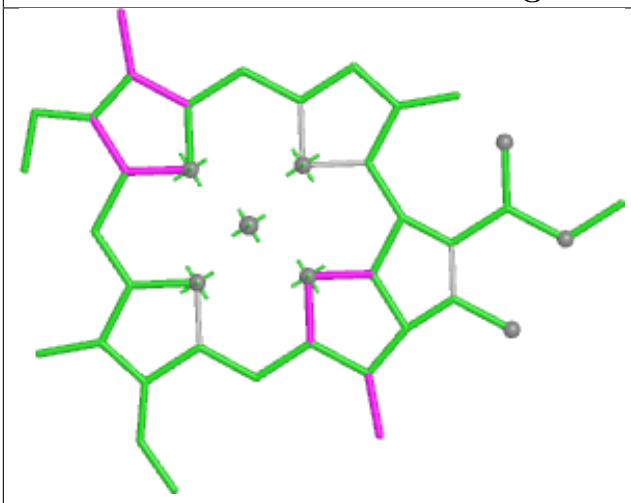
Torsions



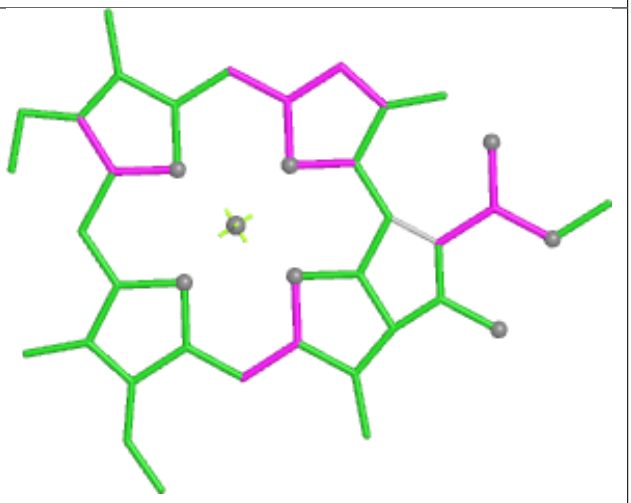
Rings

Ligand CLA A 829	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

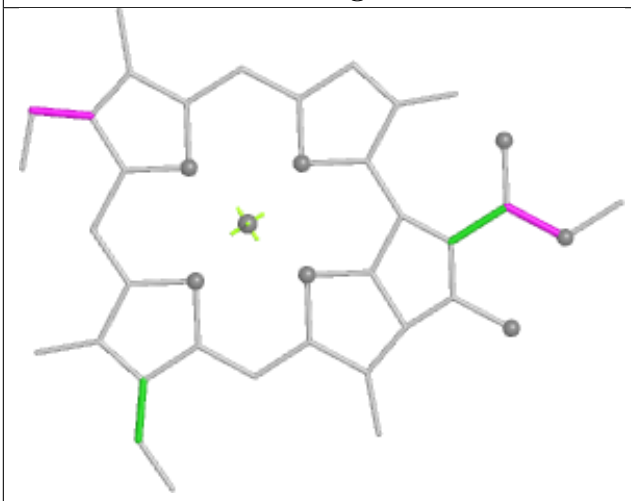
Ligand CLA A 821



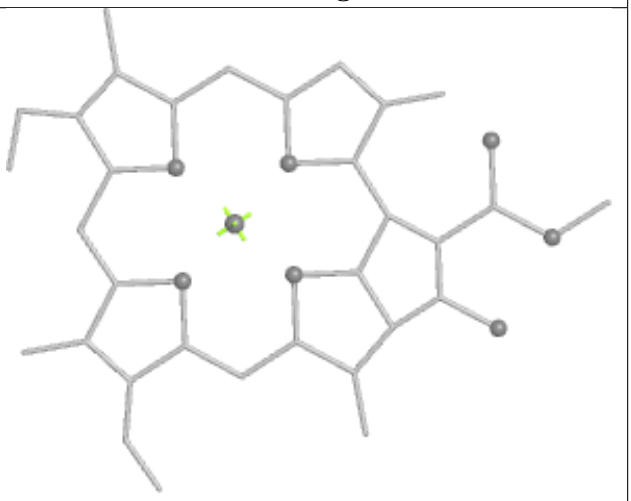
Bond lengths



Bond angles

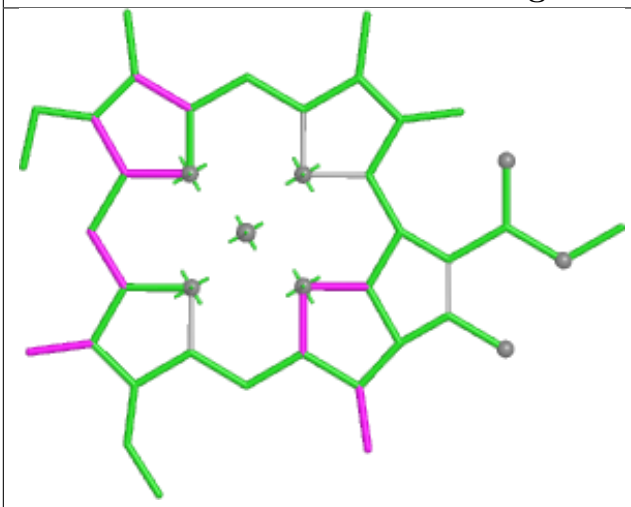


Torsions

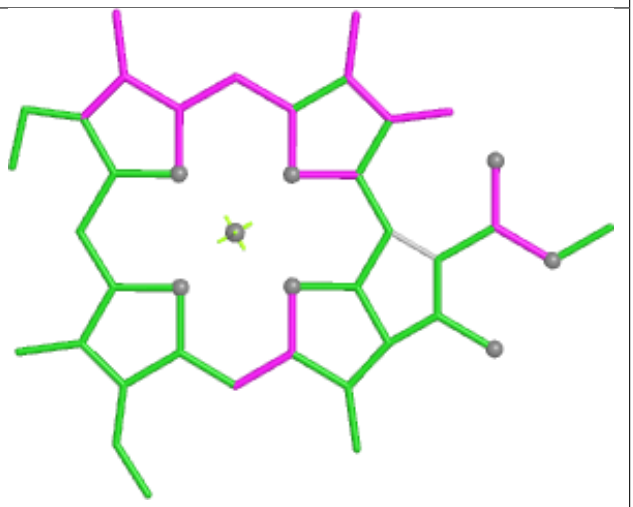


Rings

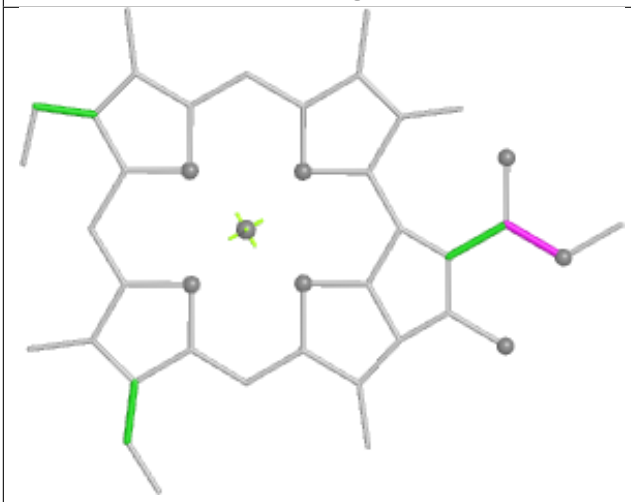
Ligand CLA 3 408



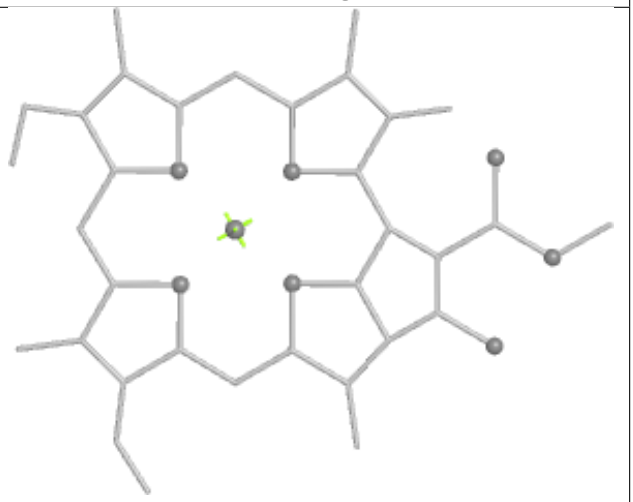
Bond lengths



Bond angles

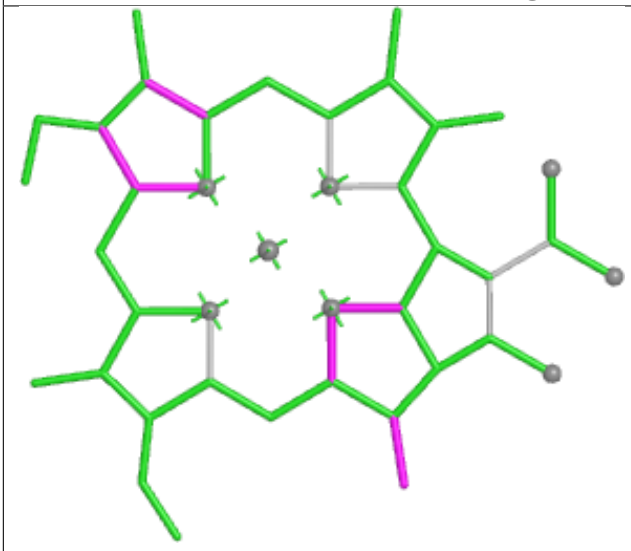


Torsions

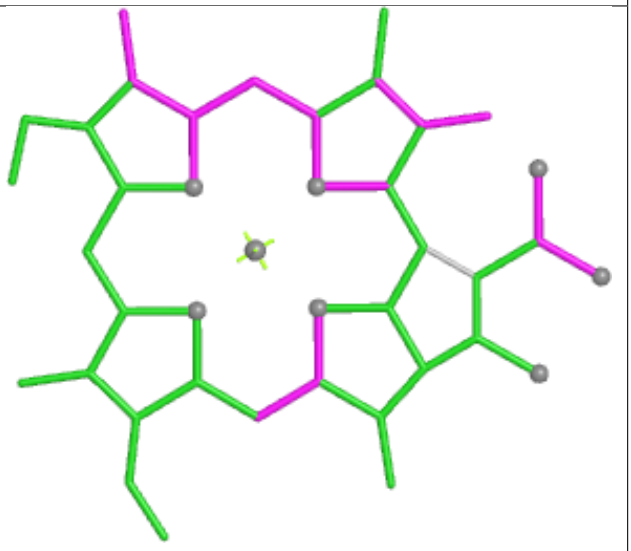


Rings

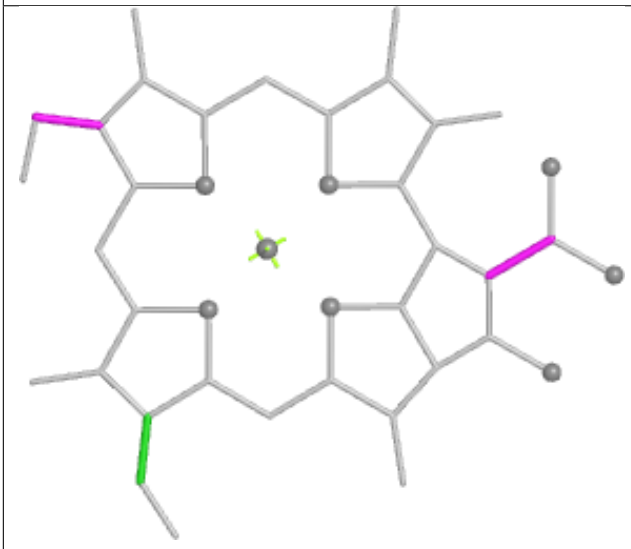
Ligand CLA A 843



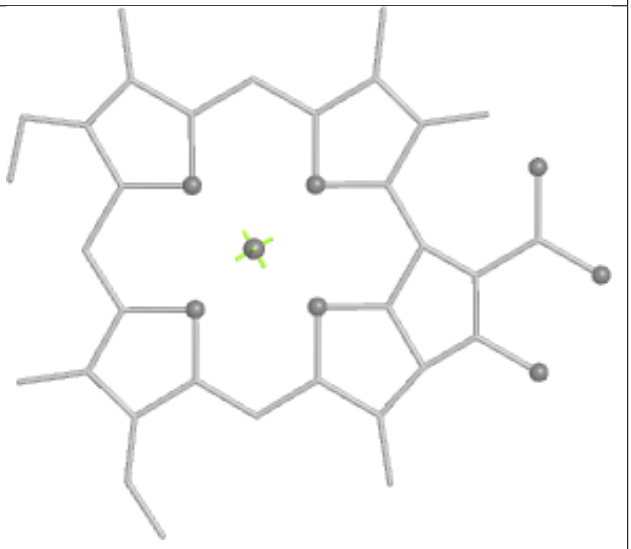
Bond lengths



Bond angles

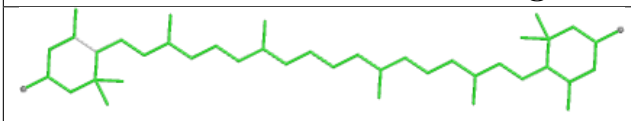


Torsions

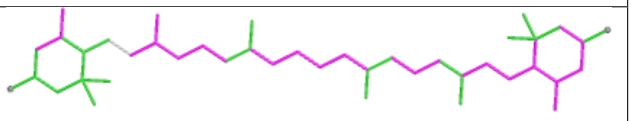


Rings

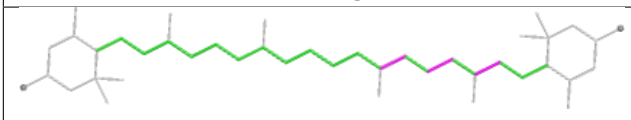
Ligand LUT 5 619



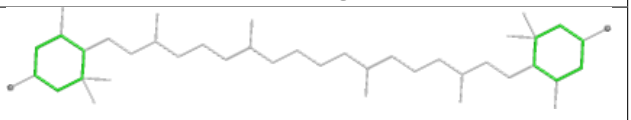
Bond lengths



Bond angles

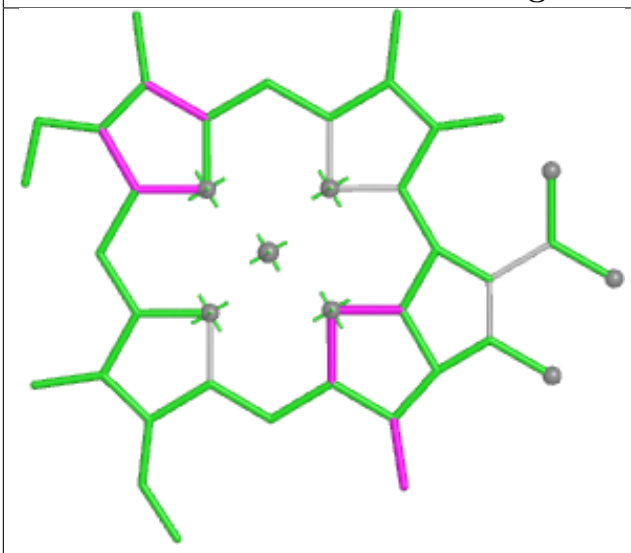


Torsions

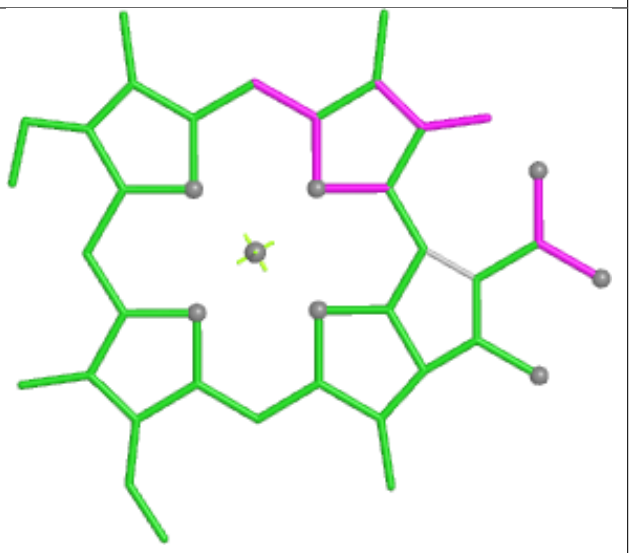


Rings

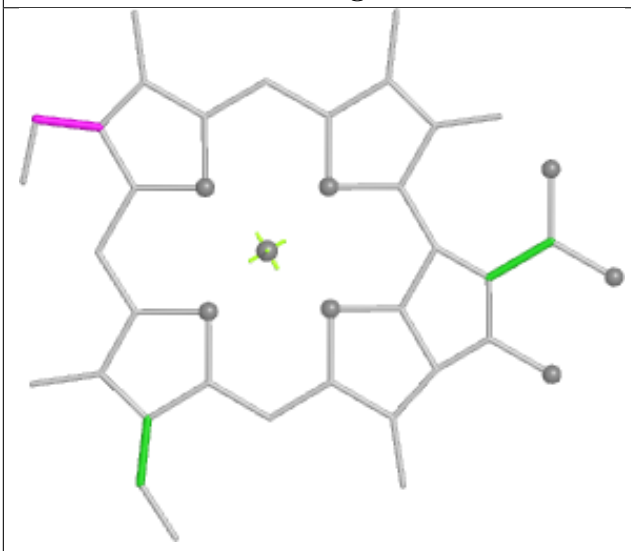
Ligand CLA 3 412



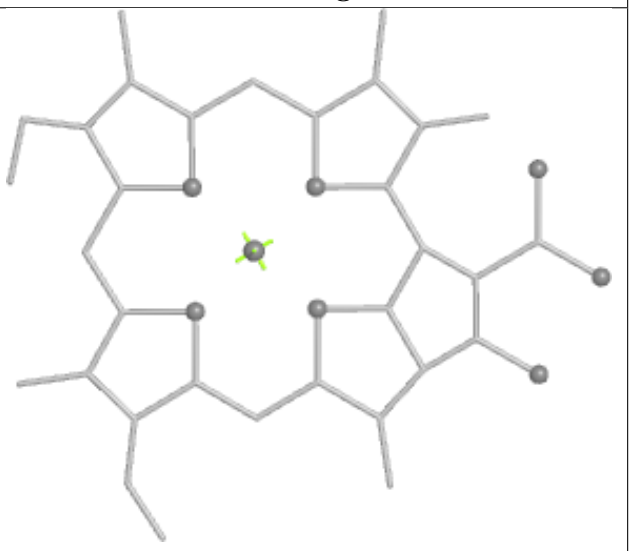
Bond lengths



Bond angles

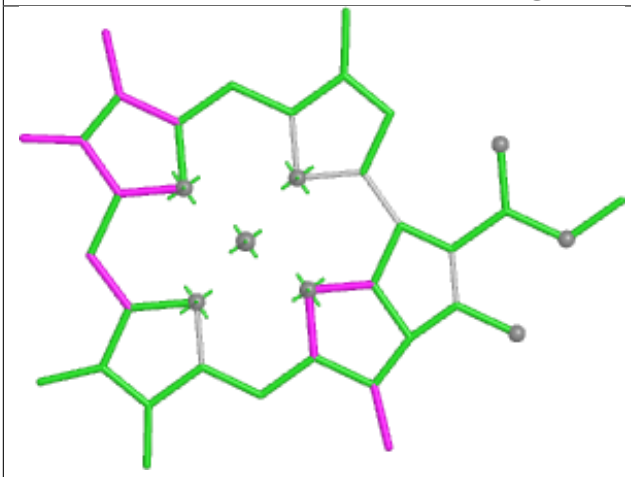


Torsions

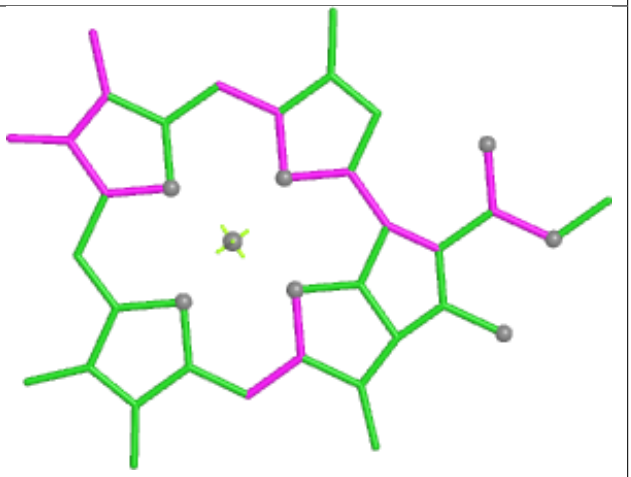


Rings

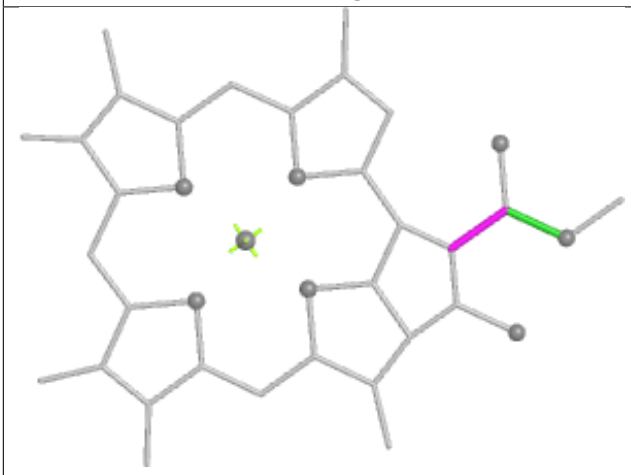
Ligand CLA 7 614



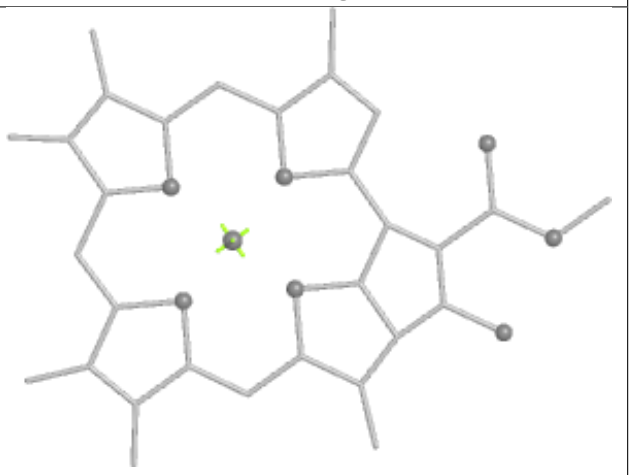
Bond lengths



Bond angles

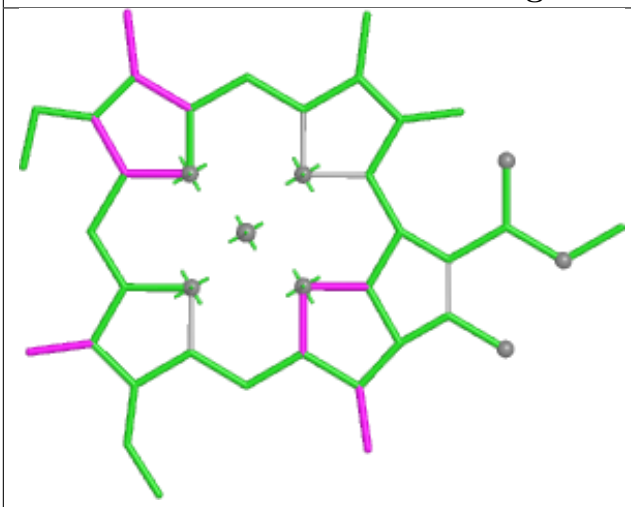


Torsions

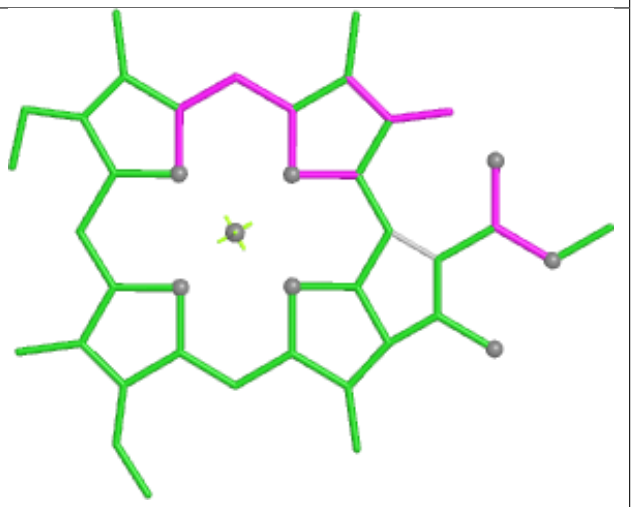


Rings

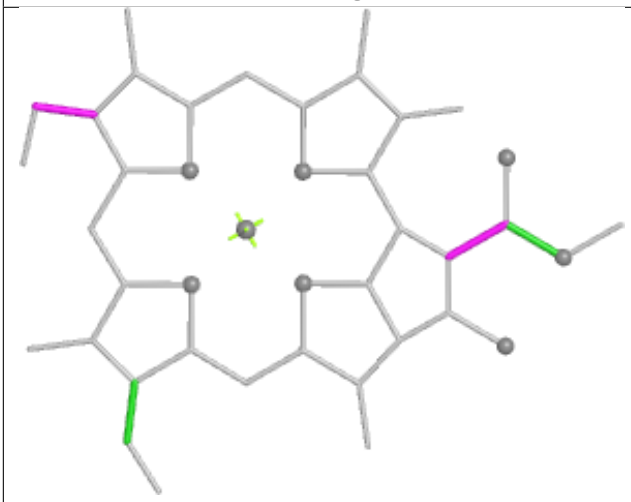
Ligand CLA F 802



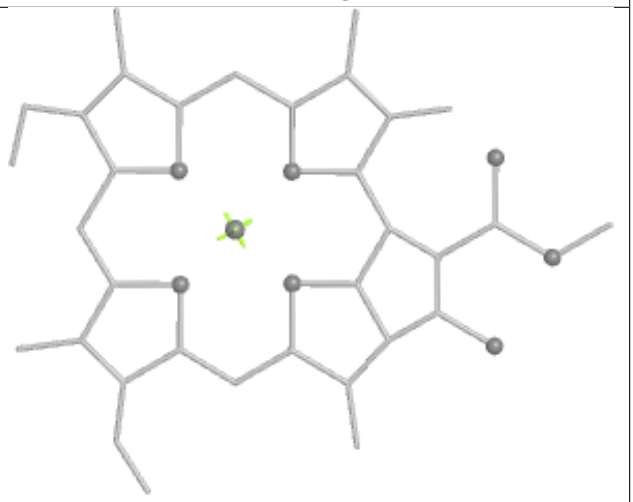
Bond lengths



Bond angles

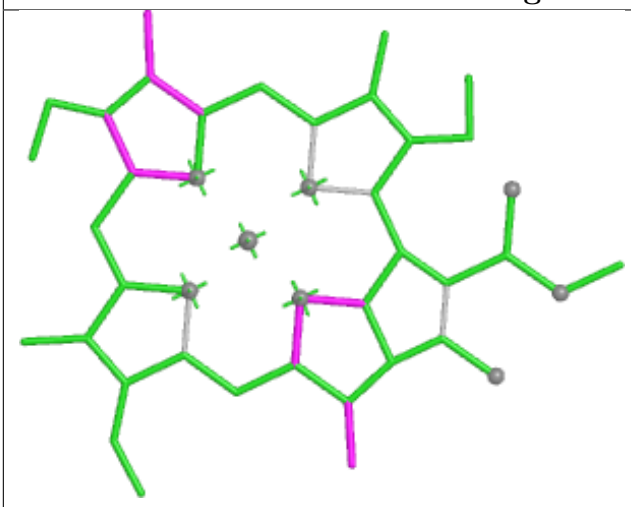


Torsions

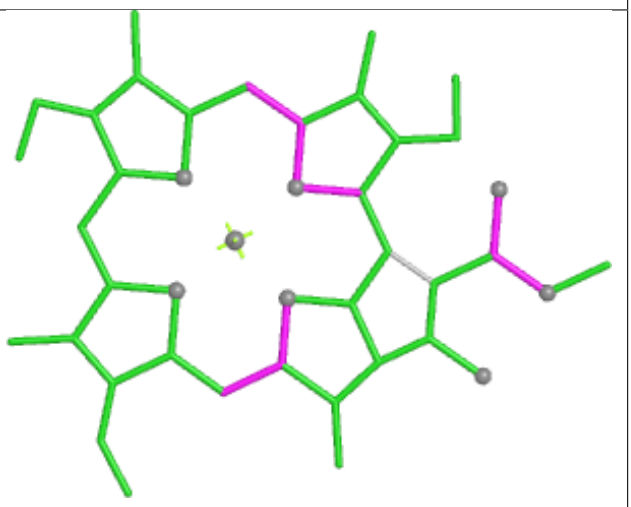


Rings

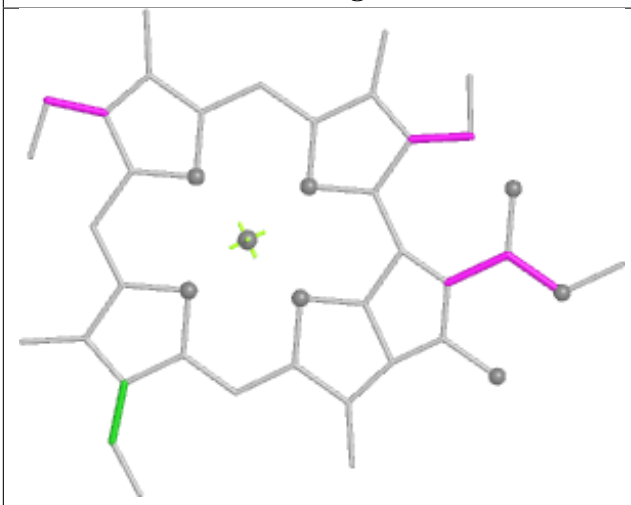
Ligand CLA A 834



Bond lengths



Bond angles

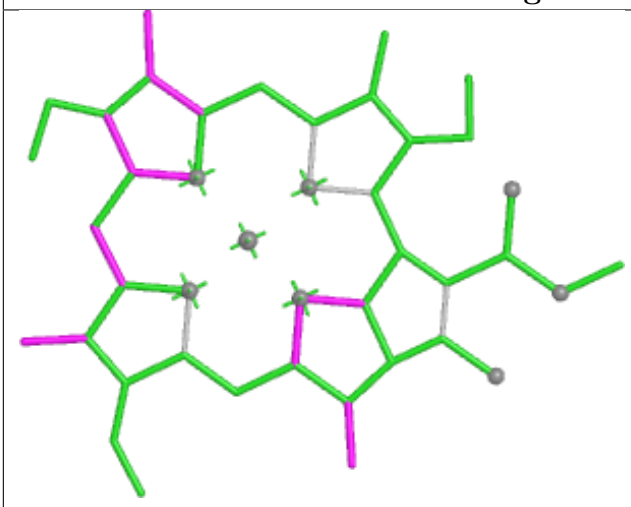


Torsions

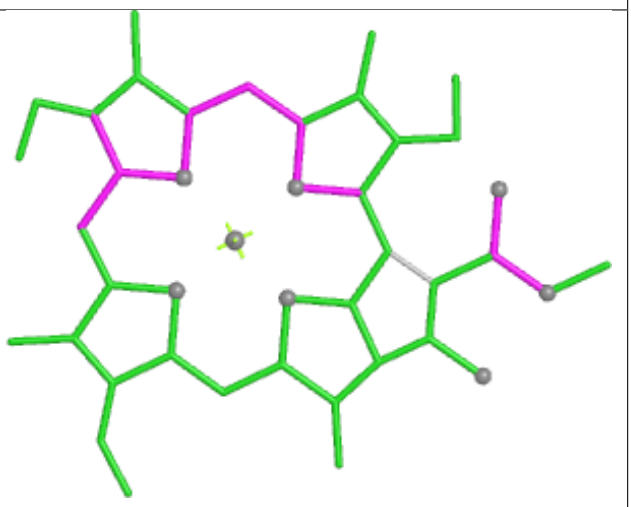


Rings

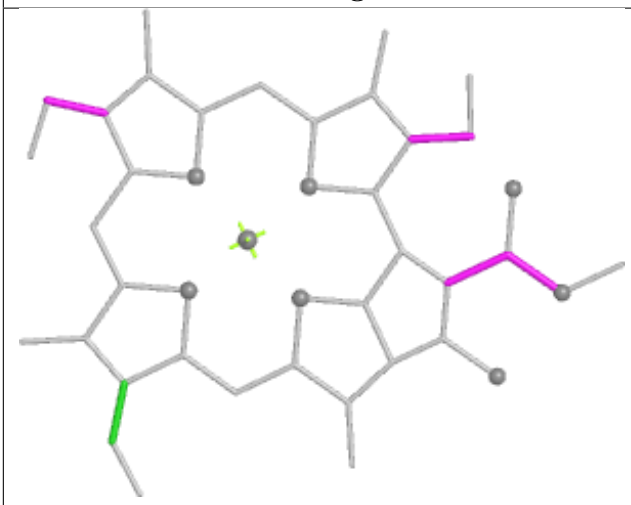
Ligand CLA A 805



Bond lengths



Bond angles

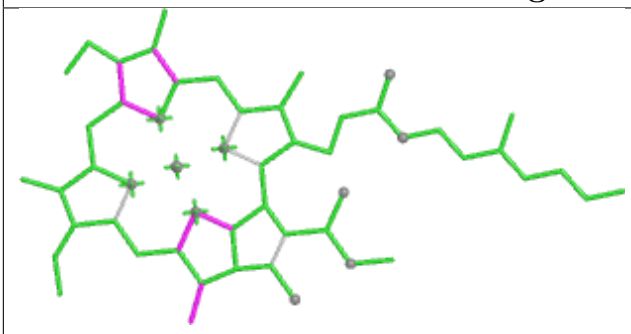


Torsions

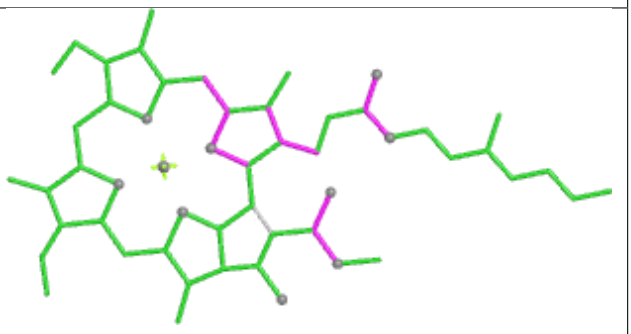


Rings

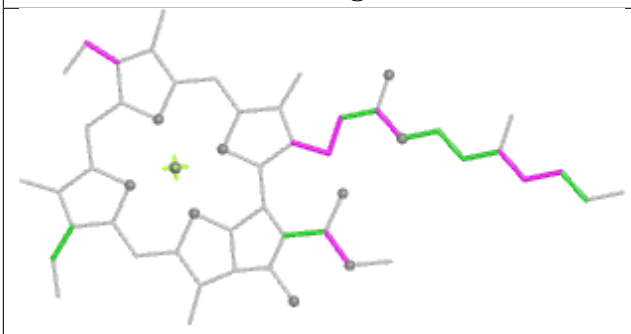
Ligand CLA 6 612



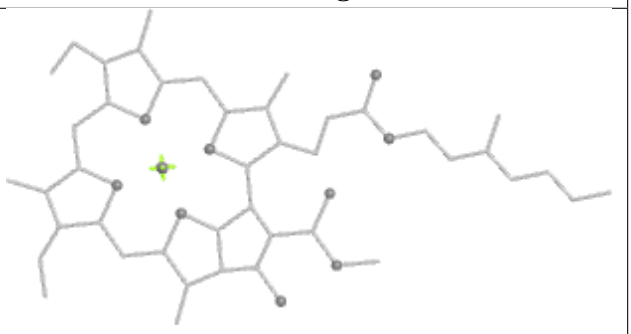
Bond lengths



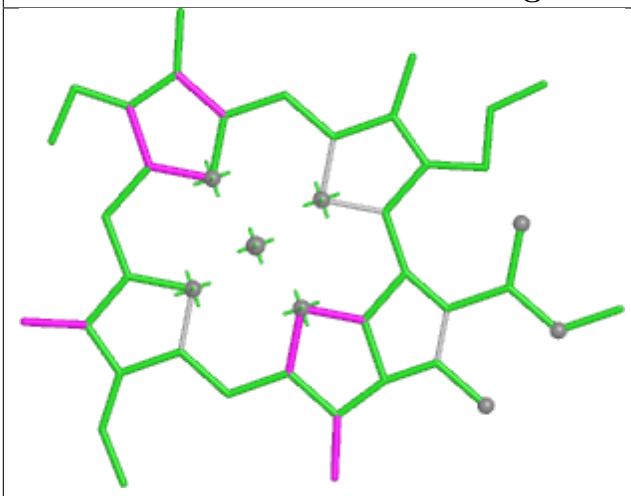
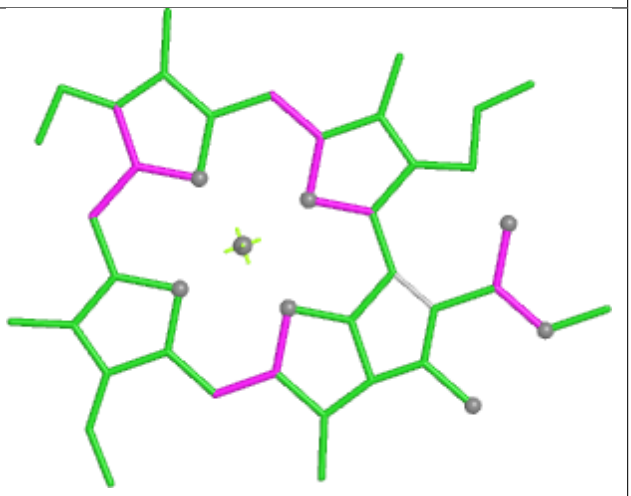
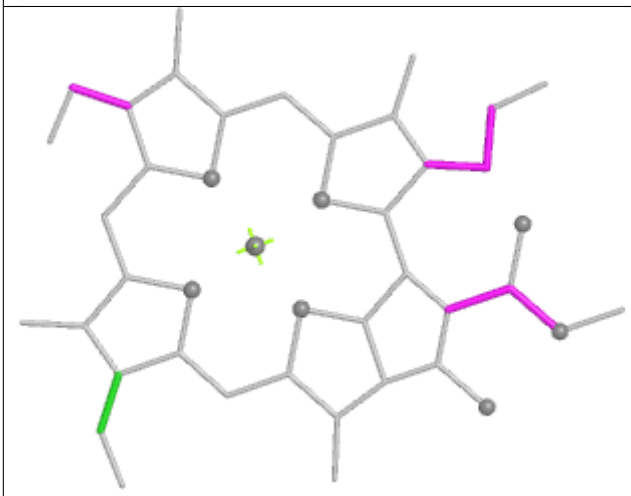
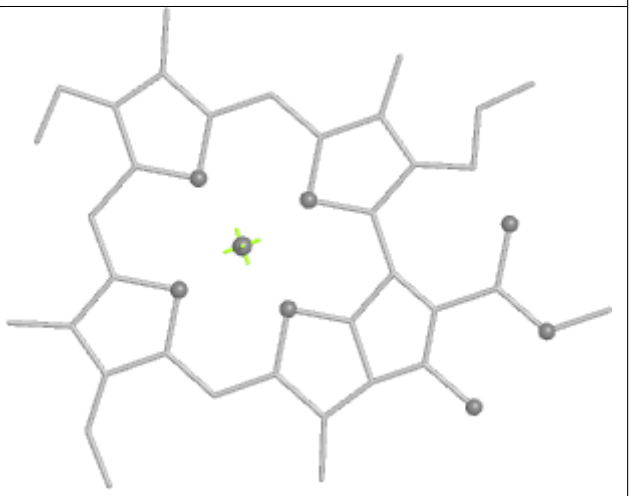
Bond angles

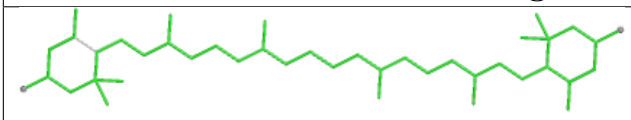
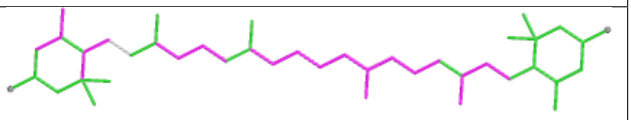
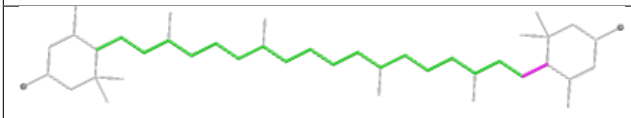
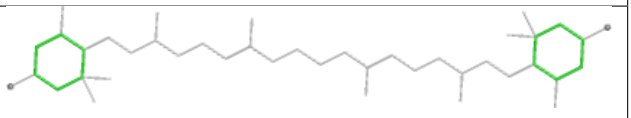


Torsions

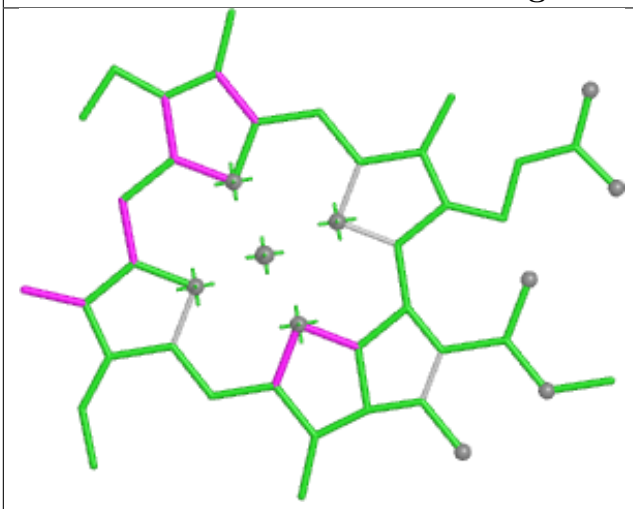


Rings

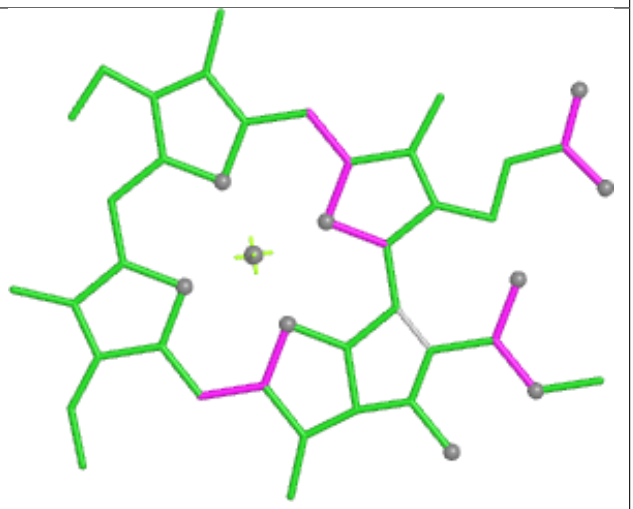
Ligand CLA A 828	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LUT 7 615	
 Bond lengths	 Bond angles
 Torsions	 Rings

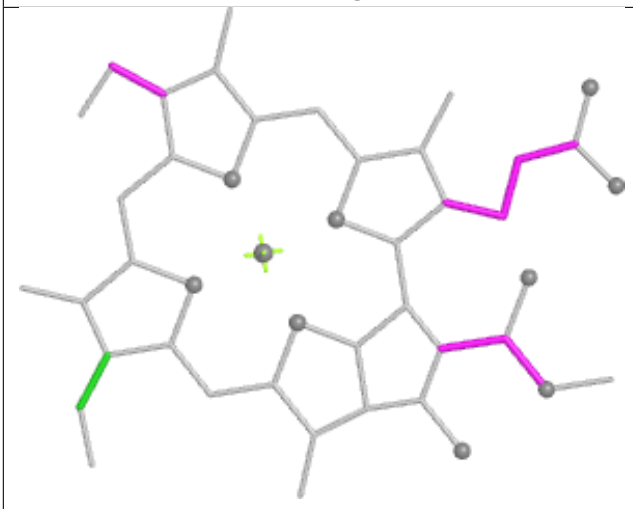
Ligand CLA 7 609



Bond lengths



Bond angles

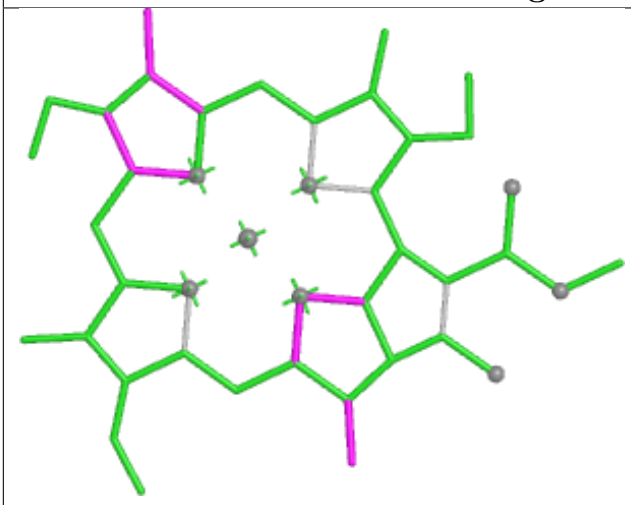


Torsions

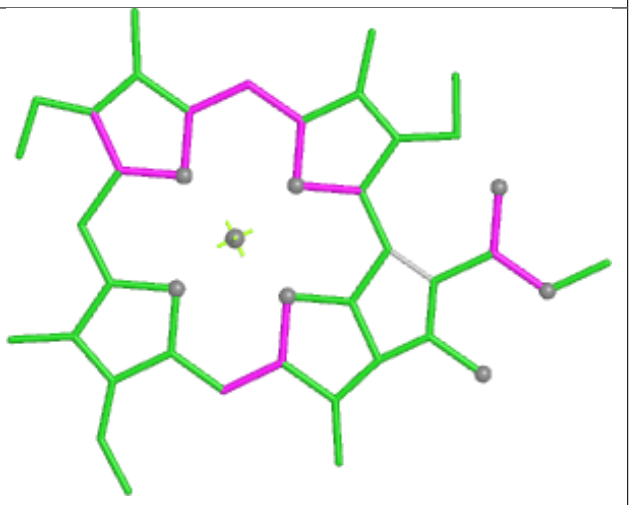


Rings

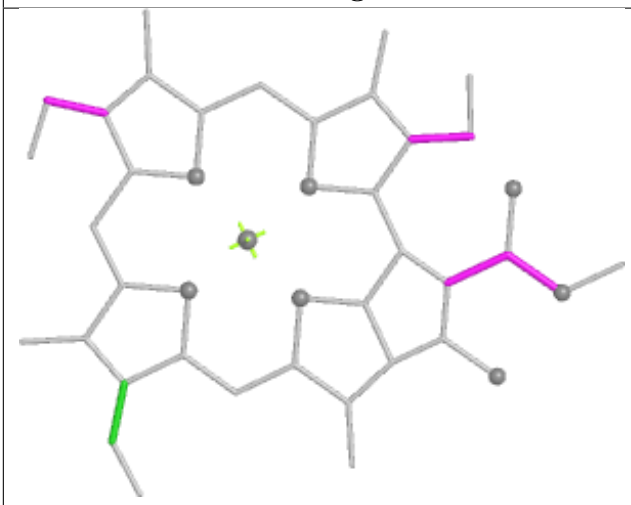
Ligand CLA 8 613



Bond lengths



Bond angles

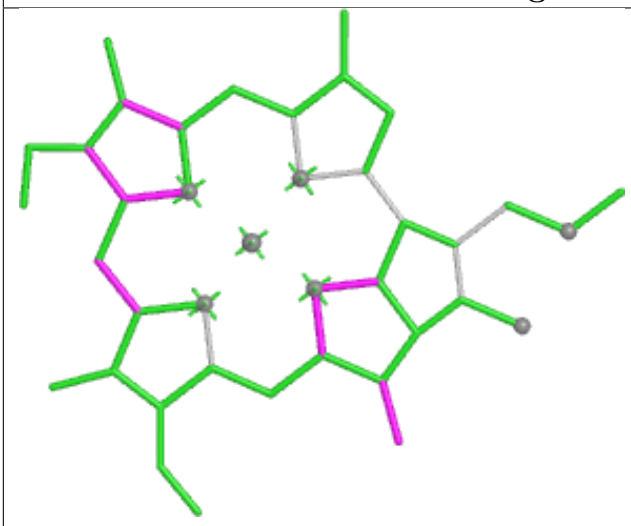


Torsions

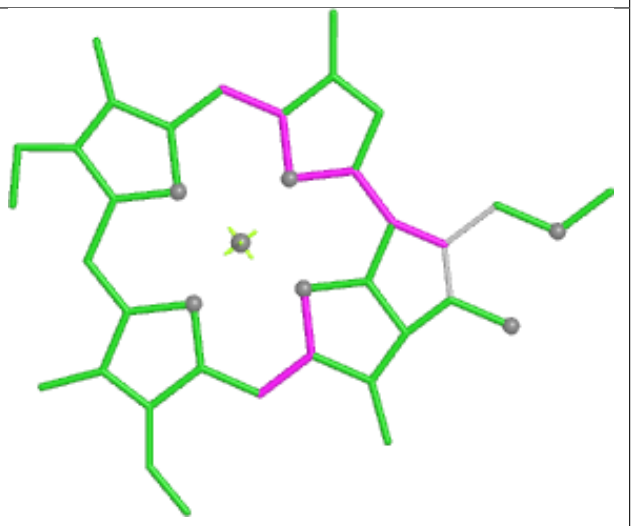


Rings

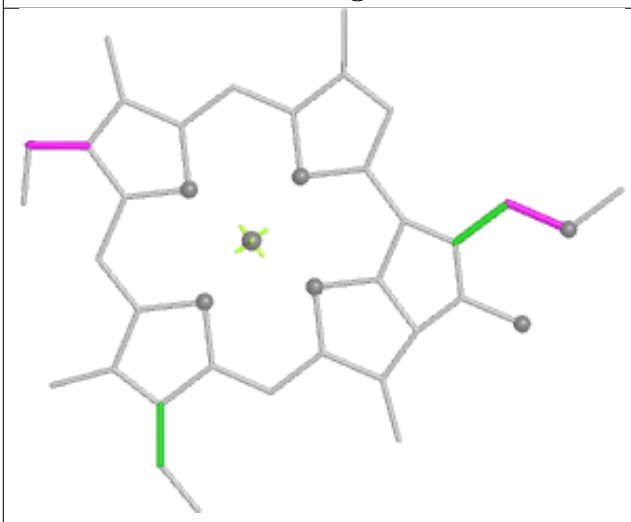
Ligand CLA 1 605



Bond lengths



Bond angles

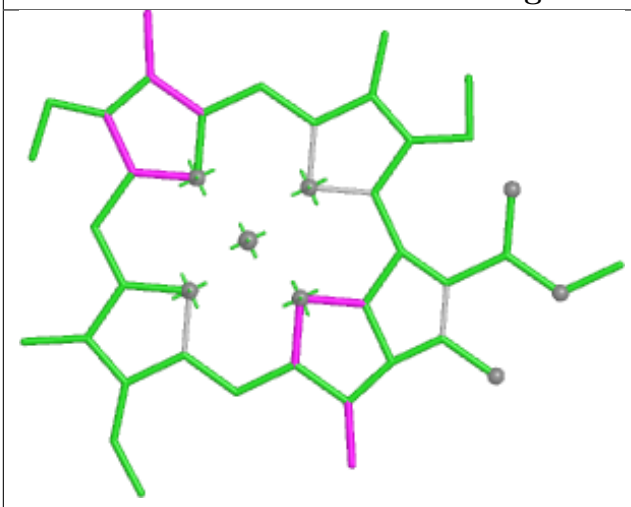


Torsions

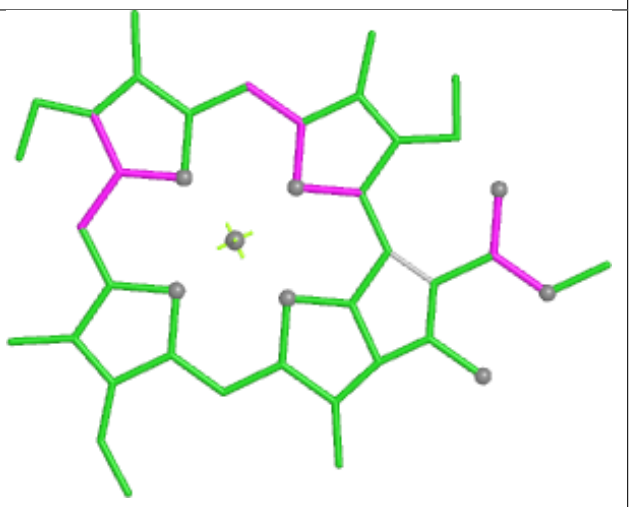


Rings

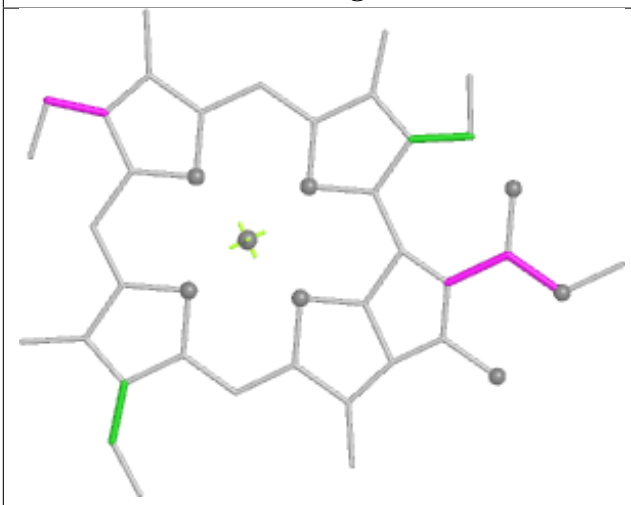
Ligand CLA B 804



Bond lengths



Bond angles

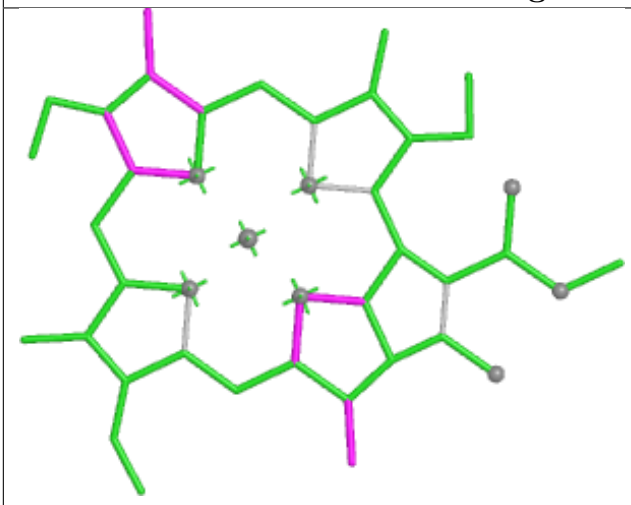


Torsions

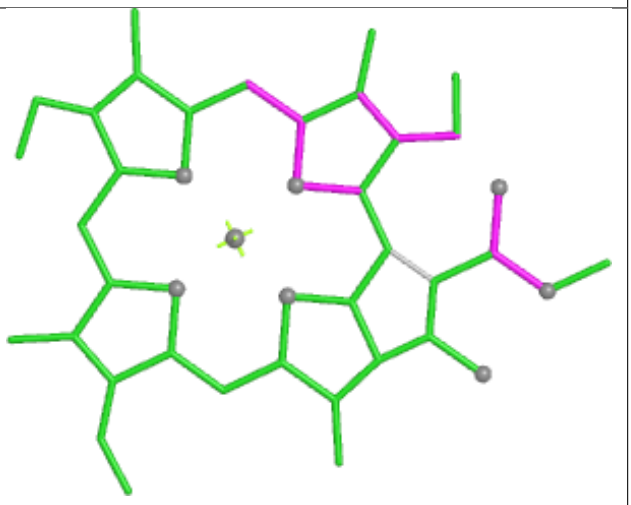


Rings

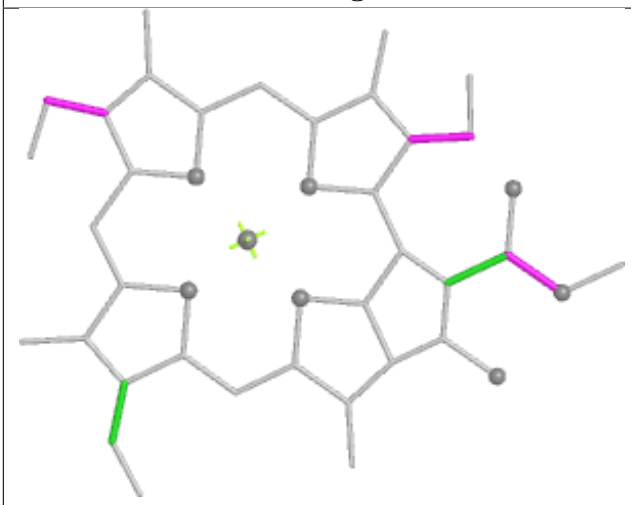
Ligand CLA 3 402



Bond lengths



Bond angles

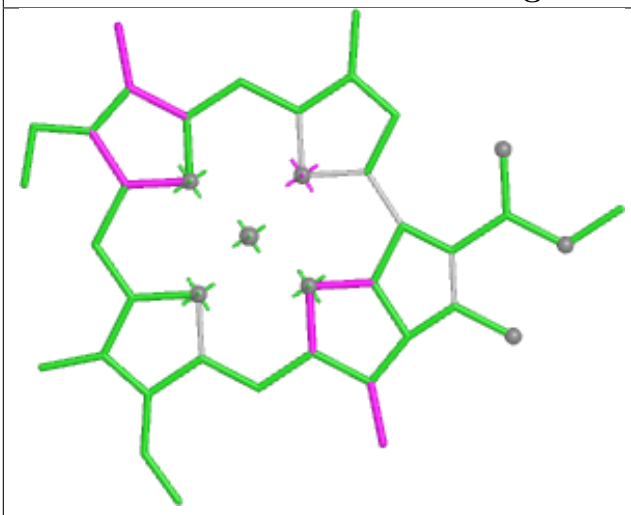


Torsions

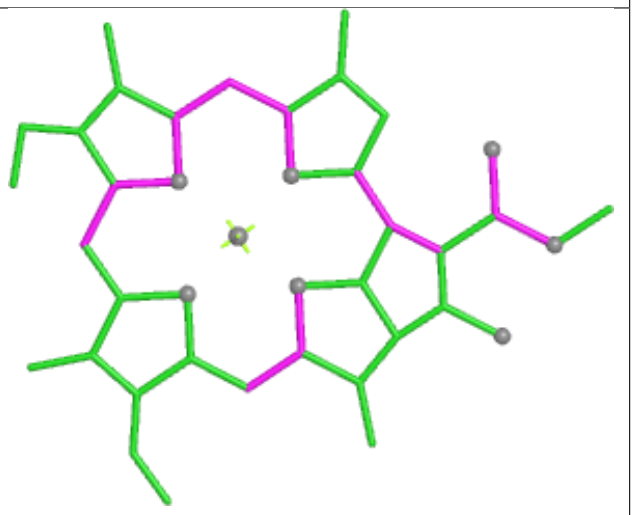


Rings

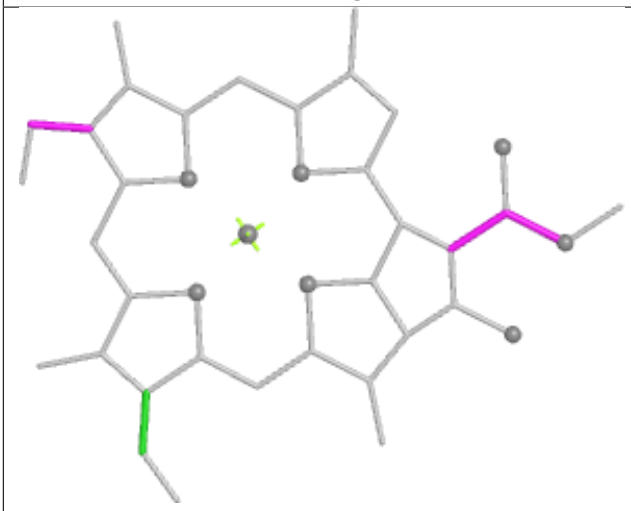
Ligand CLA A 816



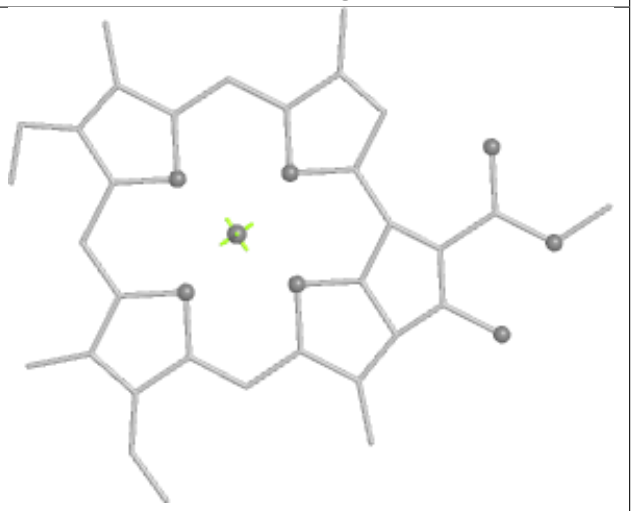
Bond lengths



Bond angles

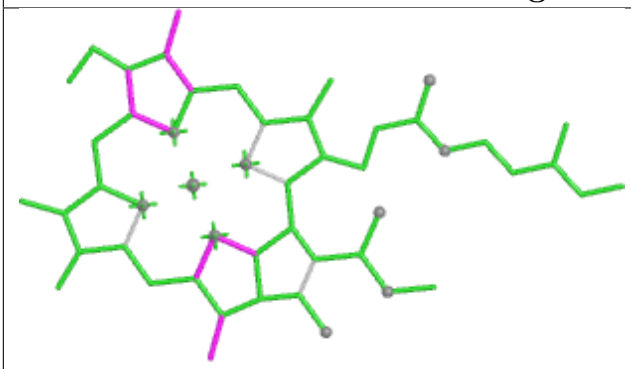


Torsions

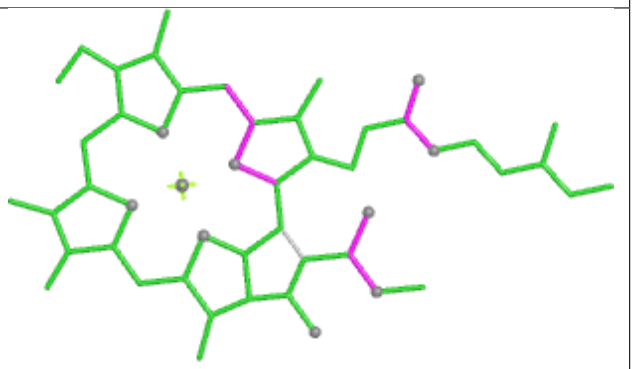


Rings

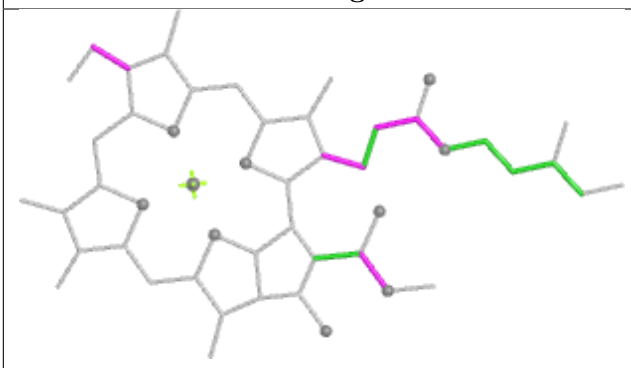
Ligand CLA 7 604



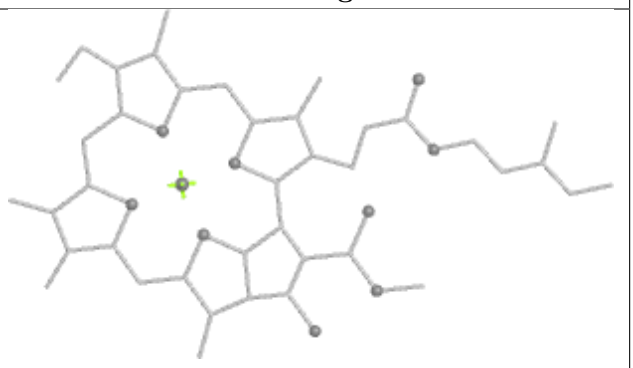
Bond lengths



Bond angles

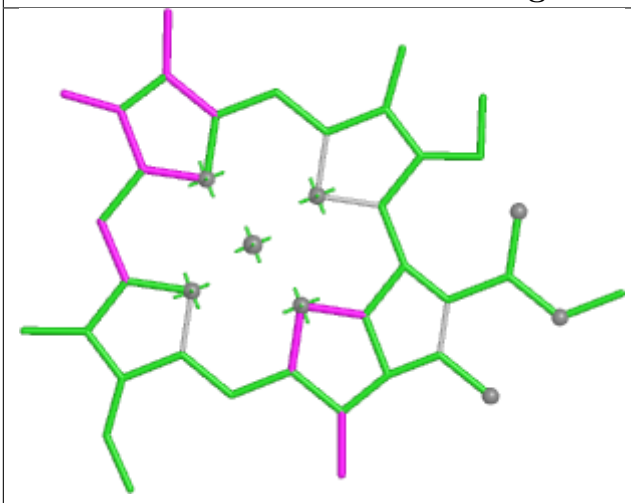


Torsions

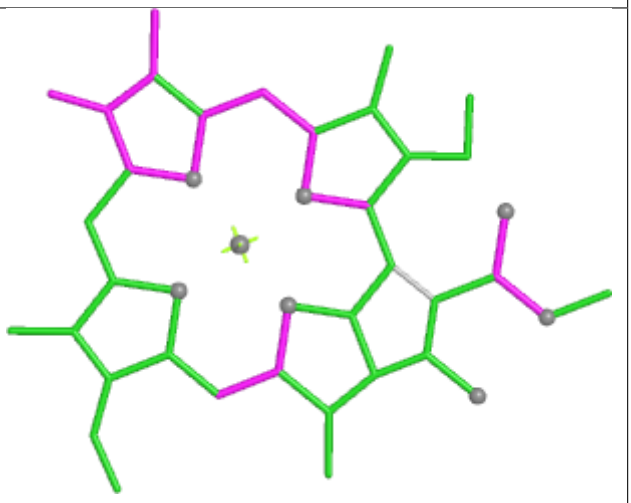


Rings

Ligand CLA 8 606



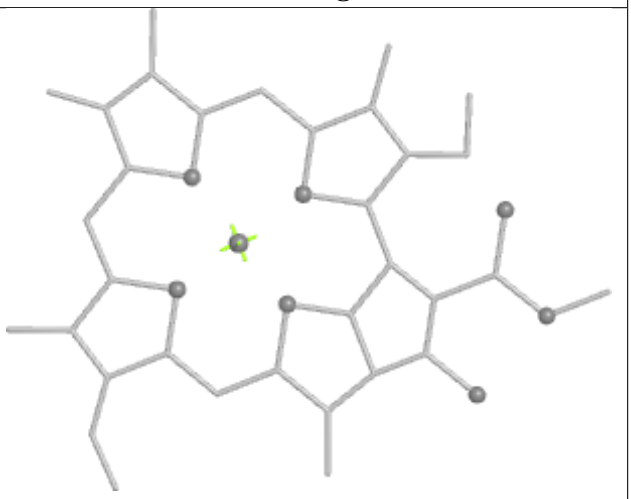
Bond lengths



Bond angles

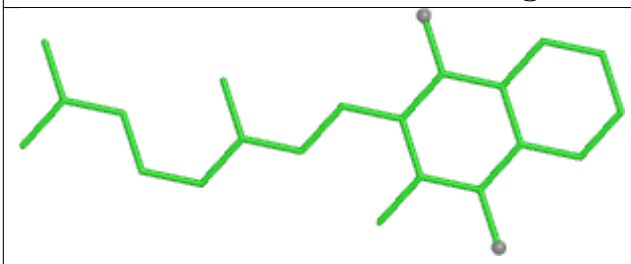


Torsions

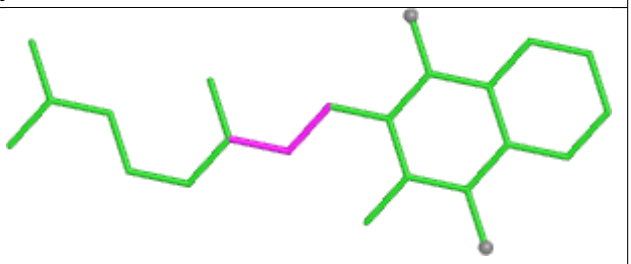


Rings

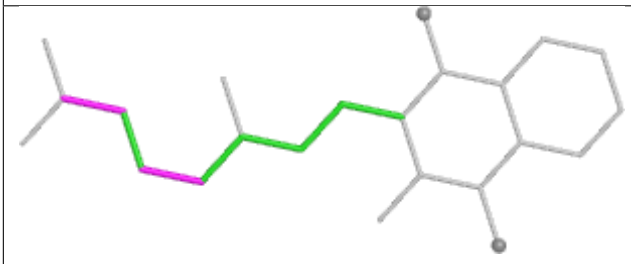
Ligand PQN A 842



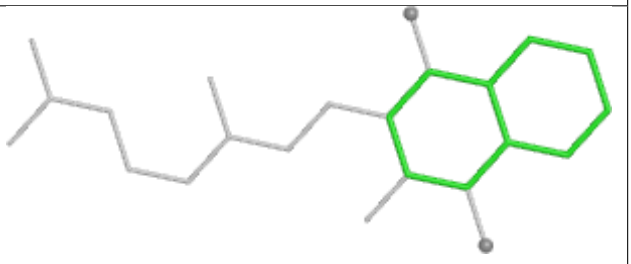
Bond lengths



Bond angles

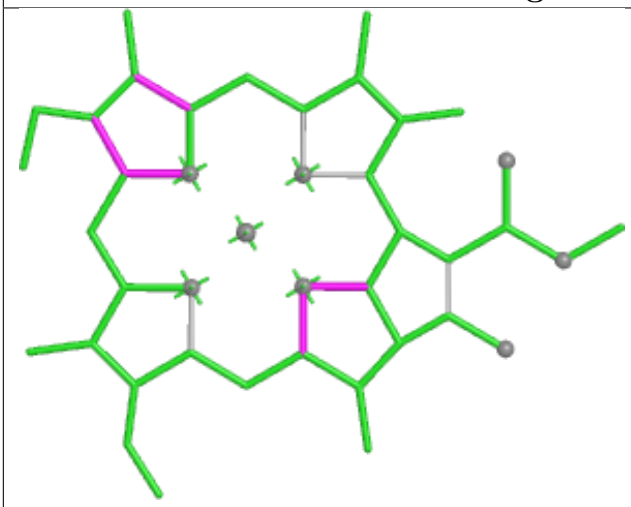


Torsions

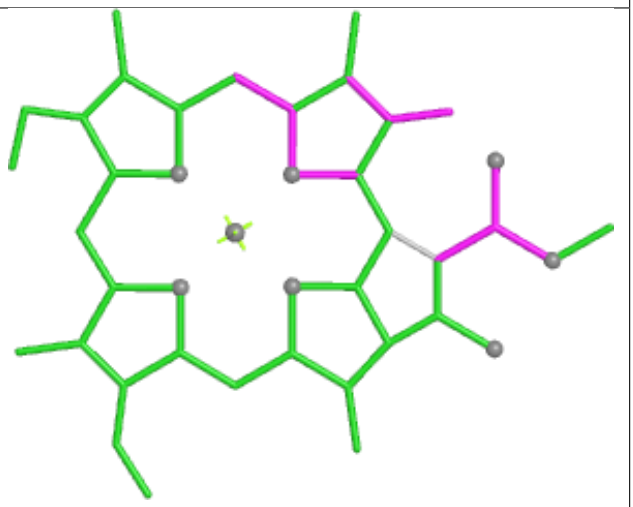


Rings

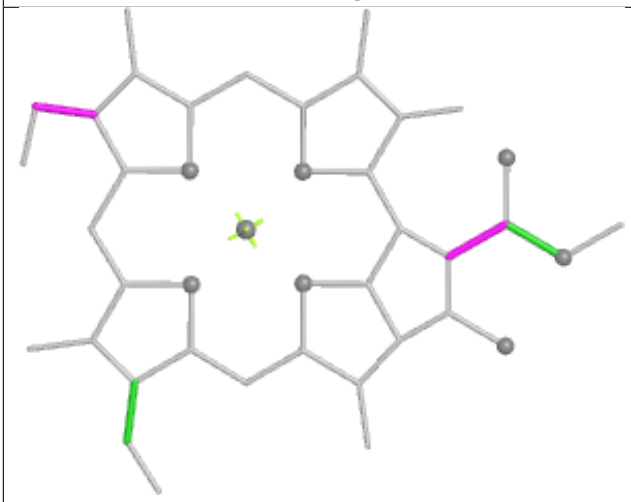
Ligand CLA L 201



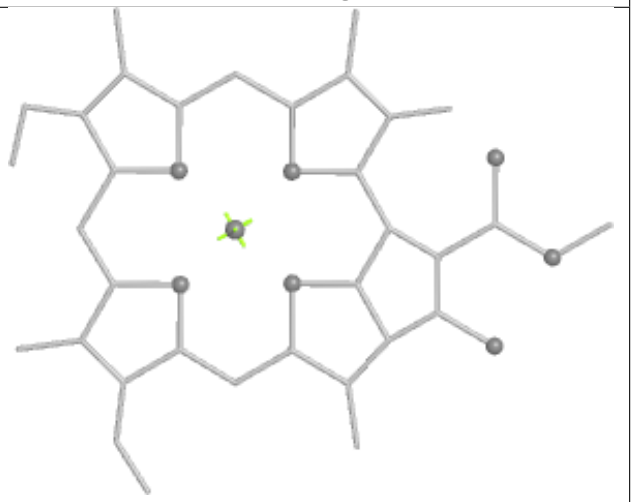
Bond lengths



Bond angles

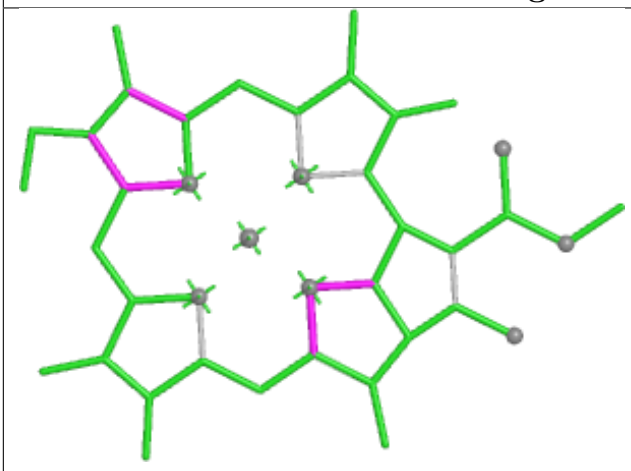


Torsions

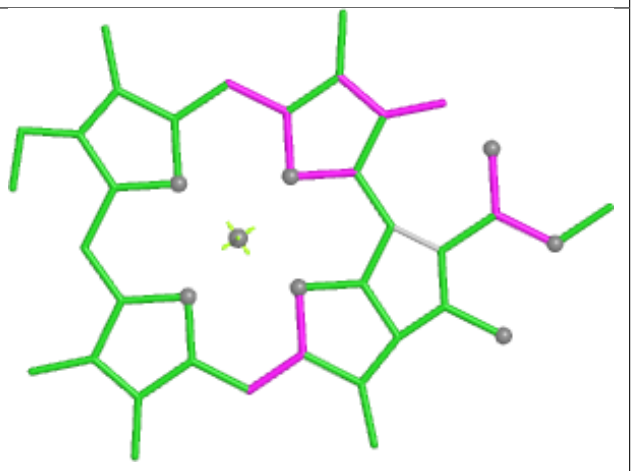


Rings

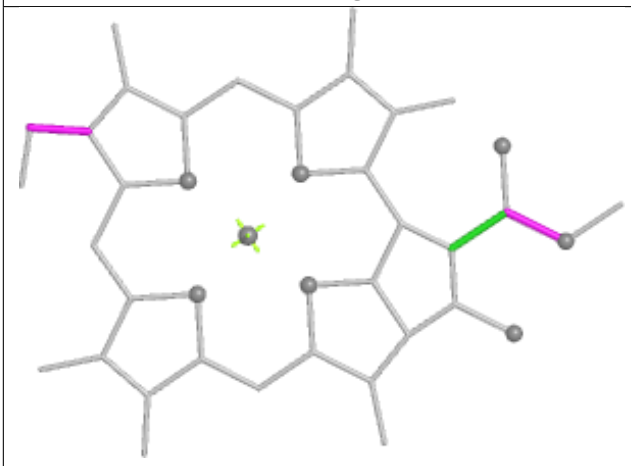
Ligand CLA 5 608



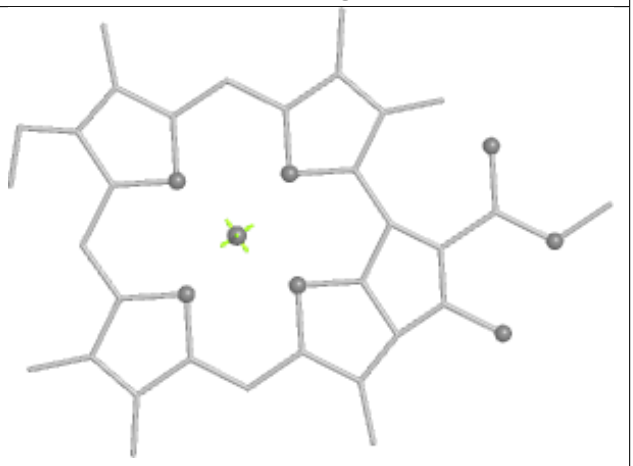
Bond lengths



Bond angles

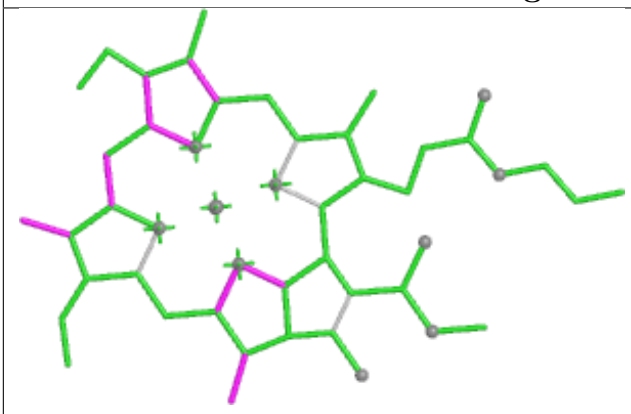


Torsions

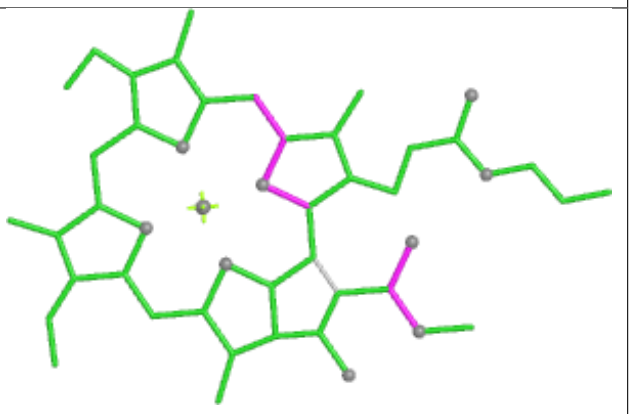


Rings

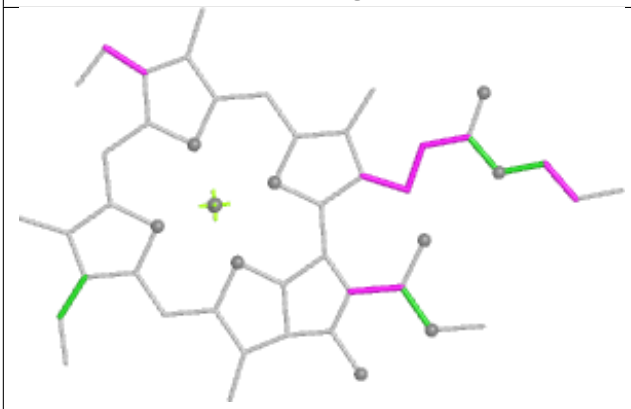
Ligand CLA A 817



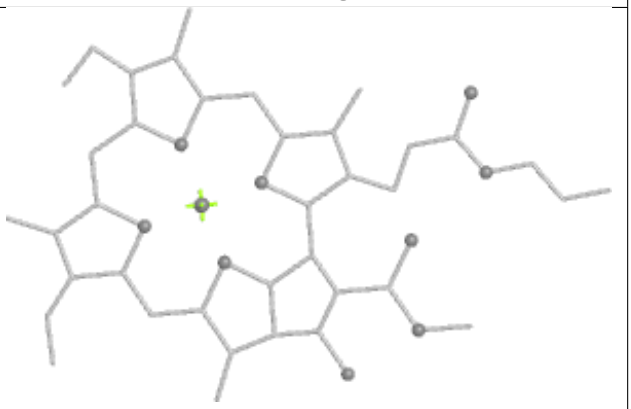
Bond lengths



Bond angles

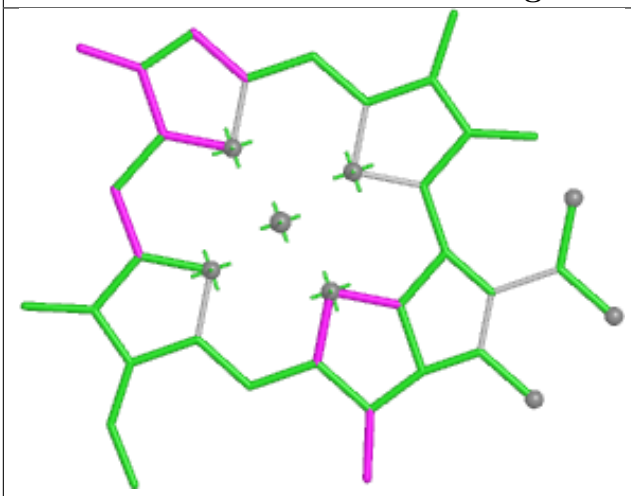


Torsions

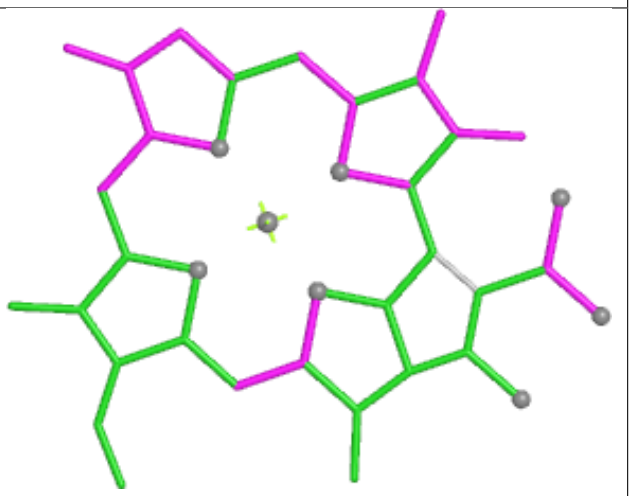


Rings

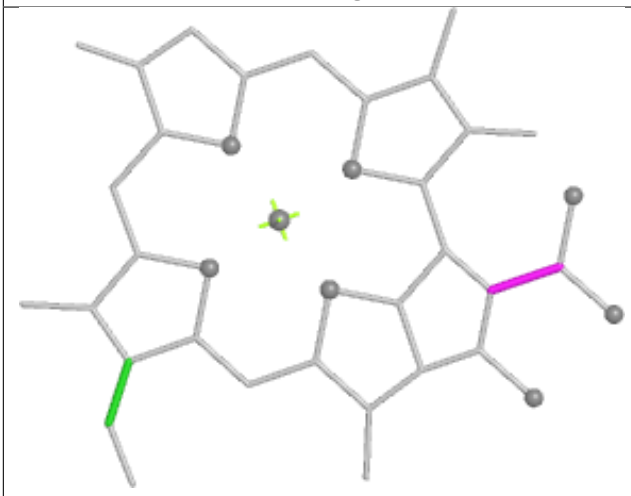
Ligand CLA B 813



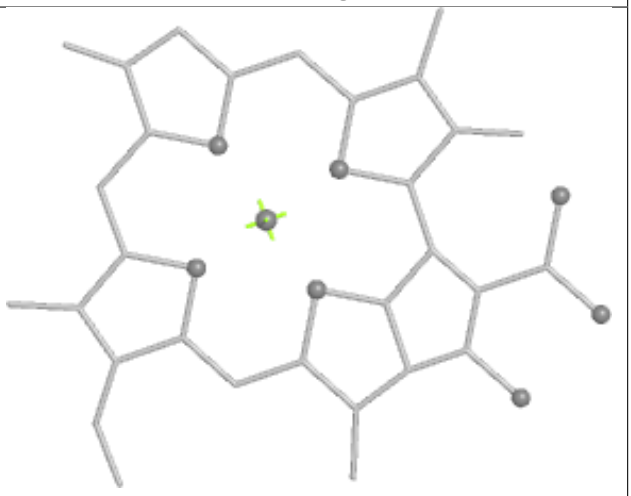
Bond lengths



Bond angles

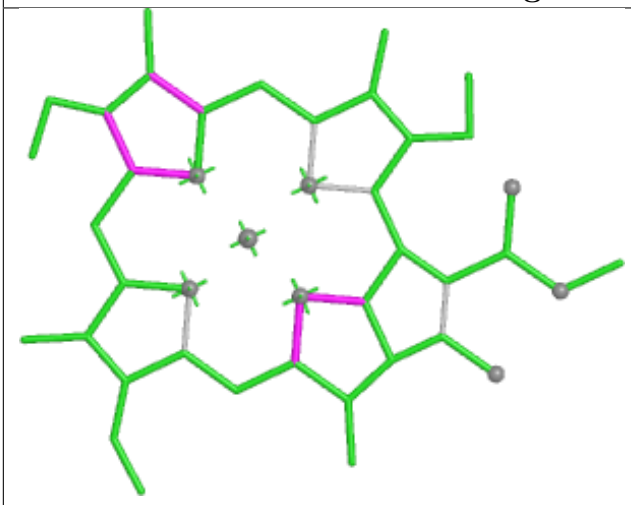


Torsions

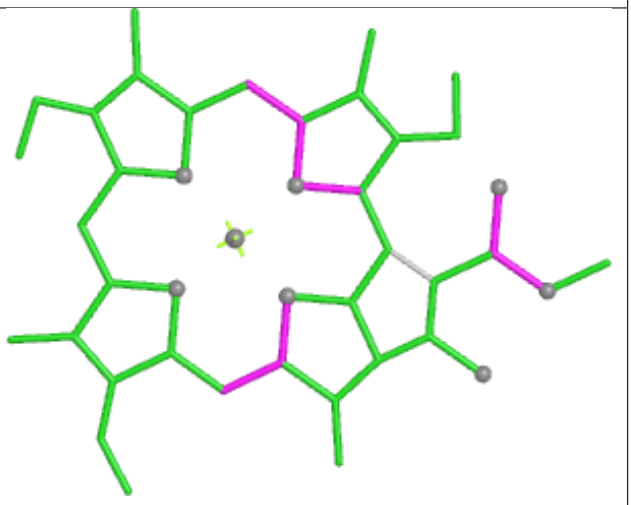


Rings

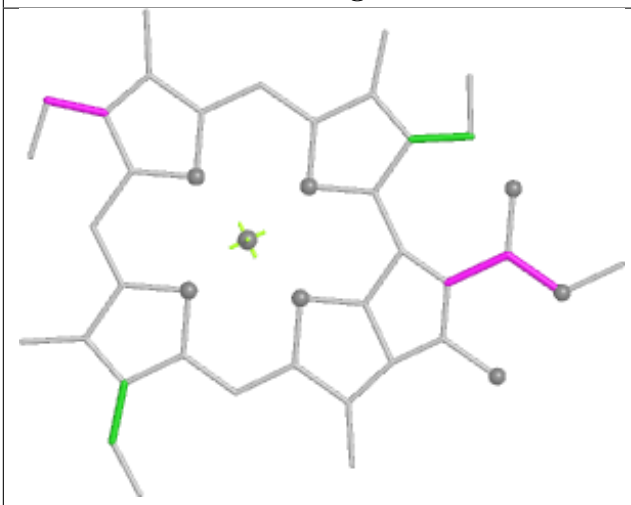
Ligand CLA A 822



Bond lengths



Bond angles

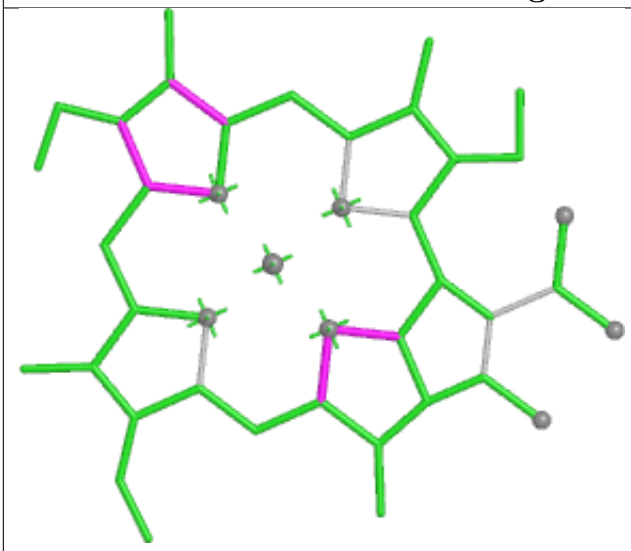


Torsions

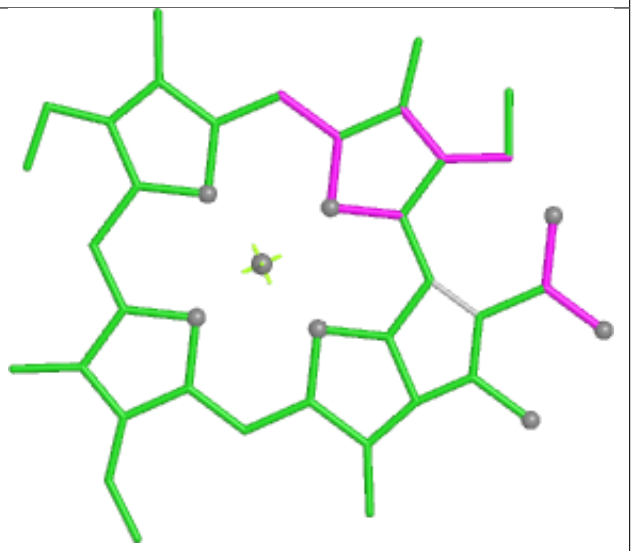


Rings

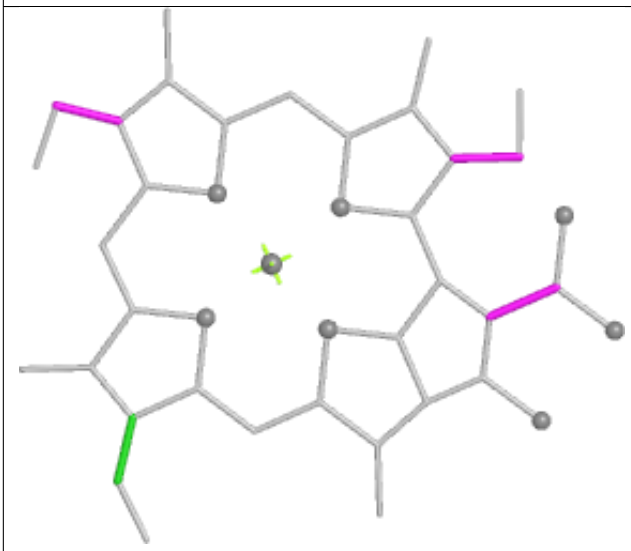
Ligand CLA 1 610



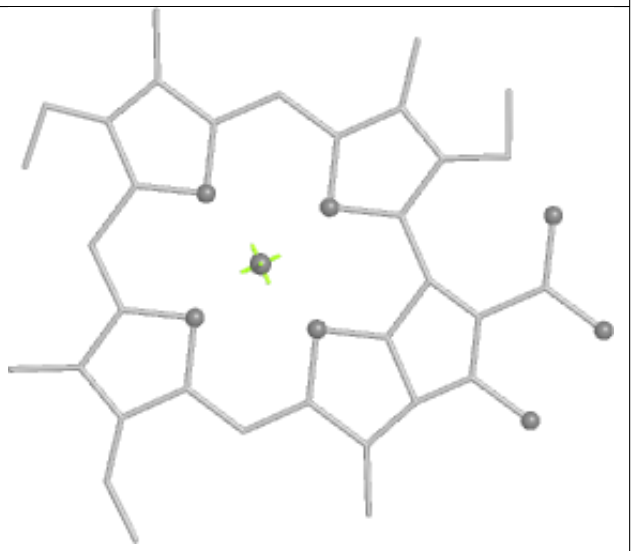
Bond lengths



Bond angles

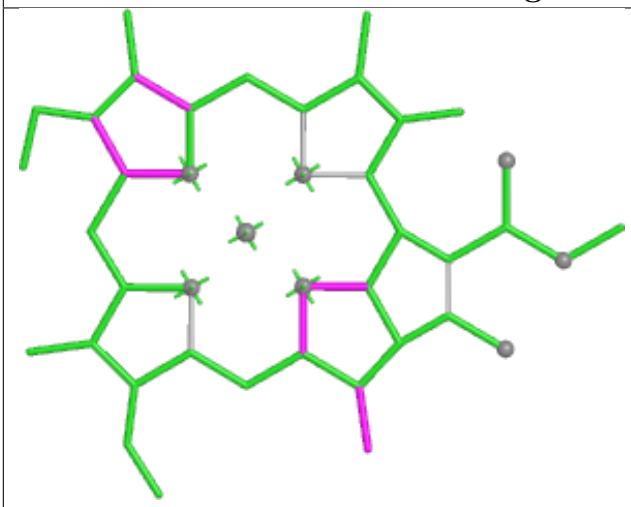


Torsions

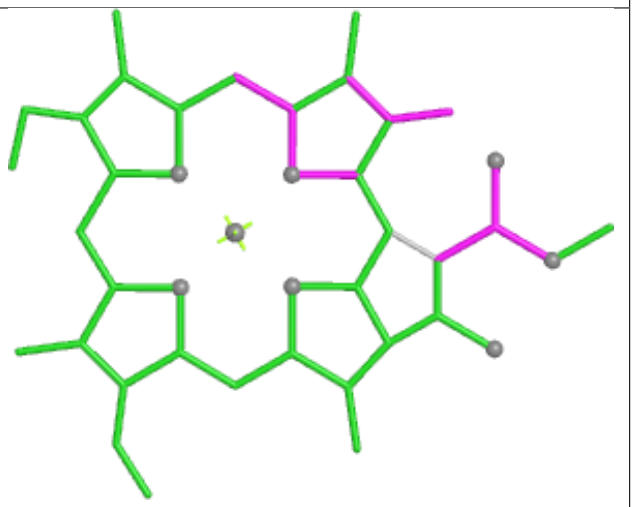


Rings

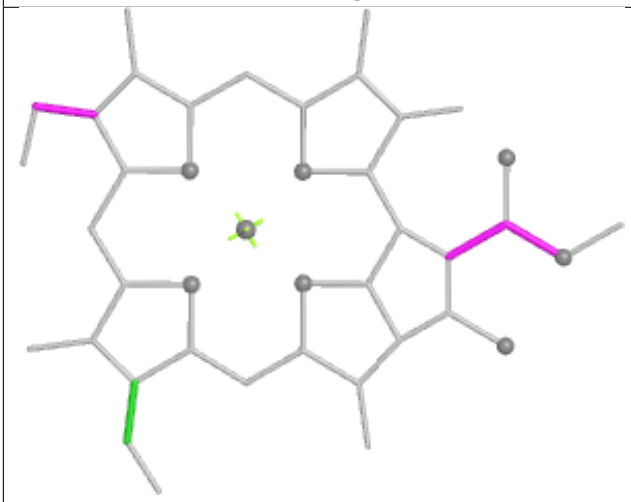
Ligand CLA B 843



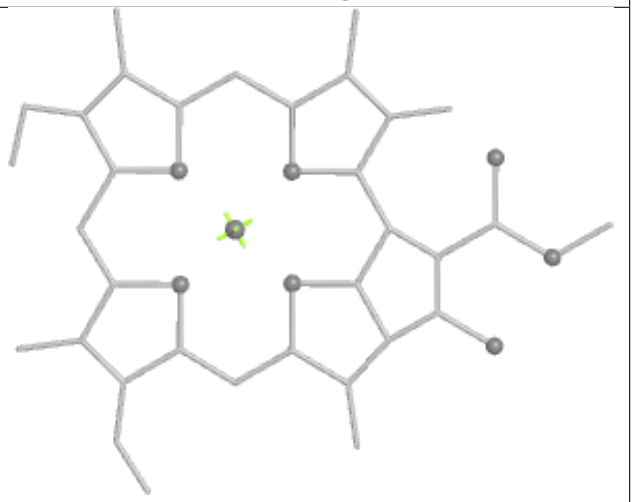
Bond lengths



Bond angles

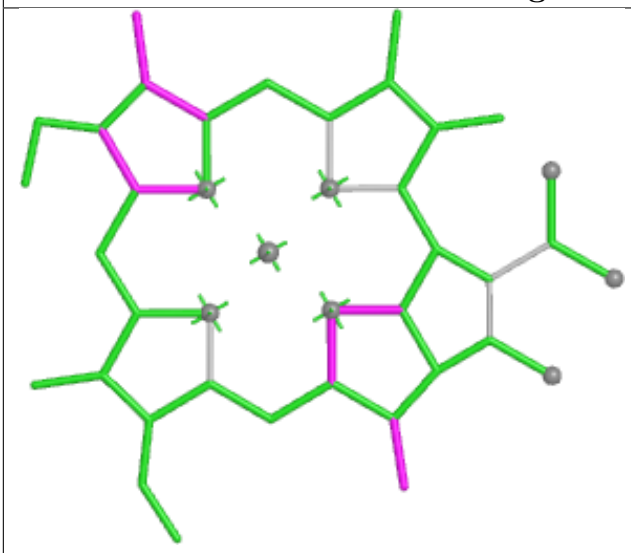


Torsions

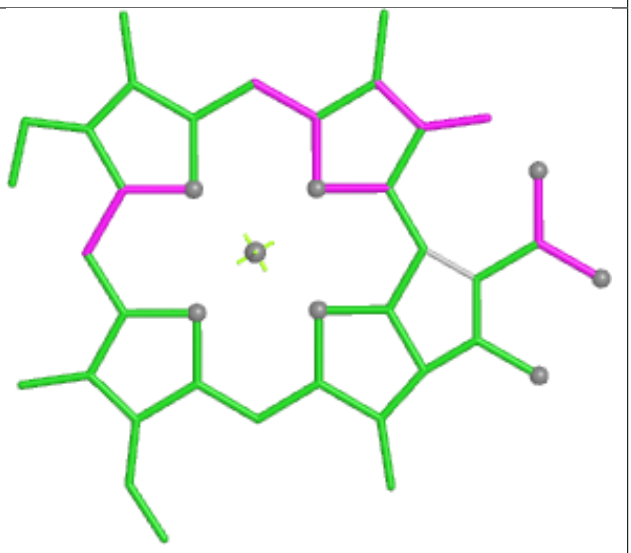


Rings

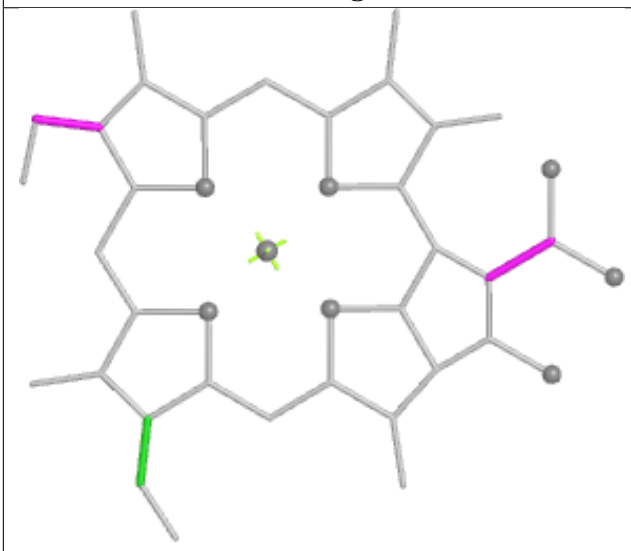
Ligand CLA 3 411



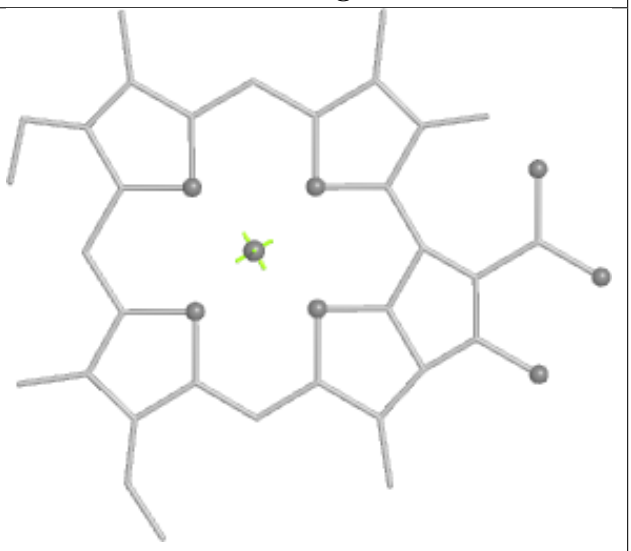
Bond lengths



Bond angles

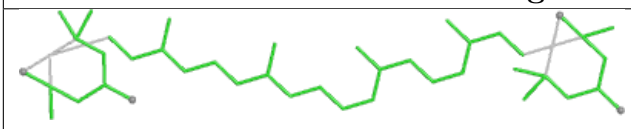


Torsions

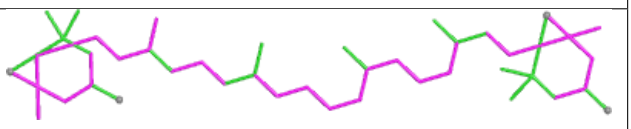


Rings

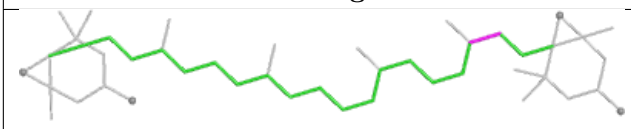
Ligand XAT 6 617



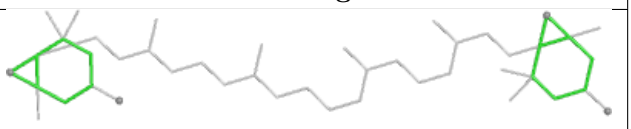
Bond lengths



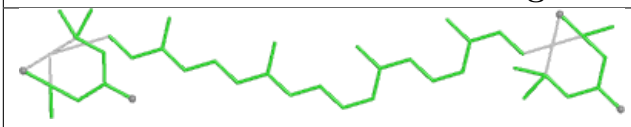
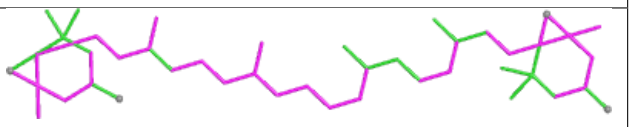
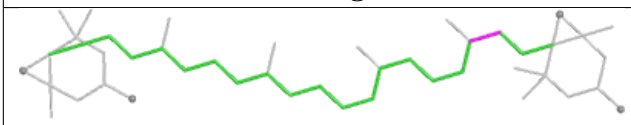
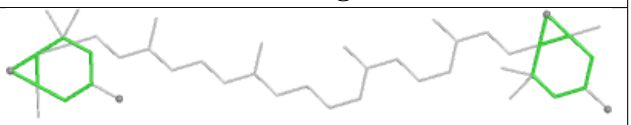
Bond angles

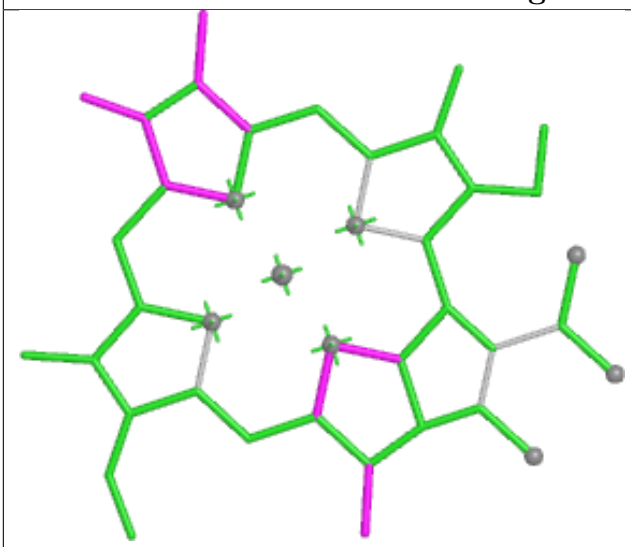
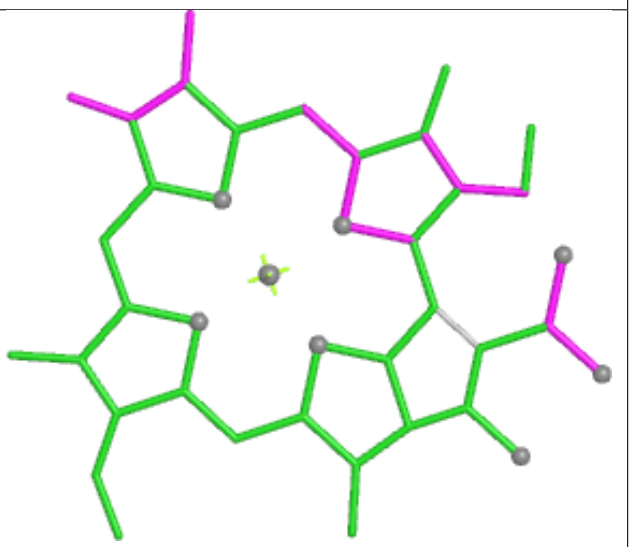
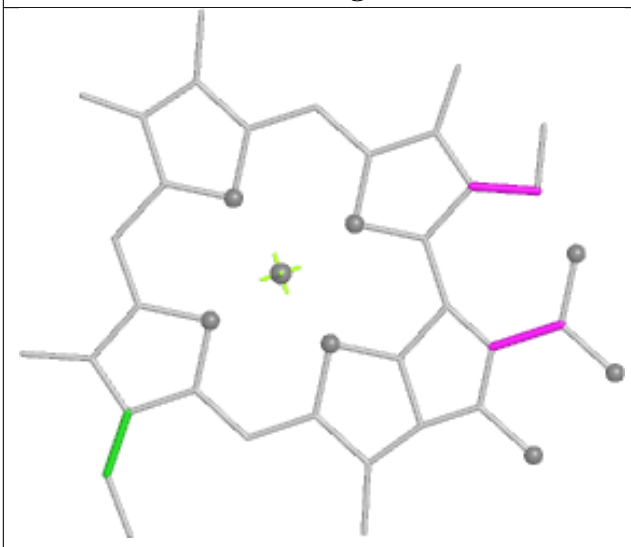
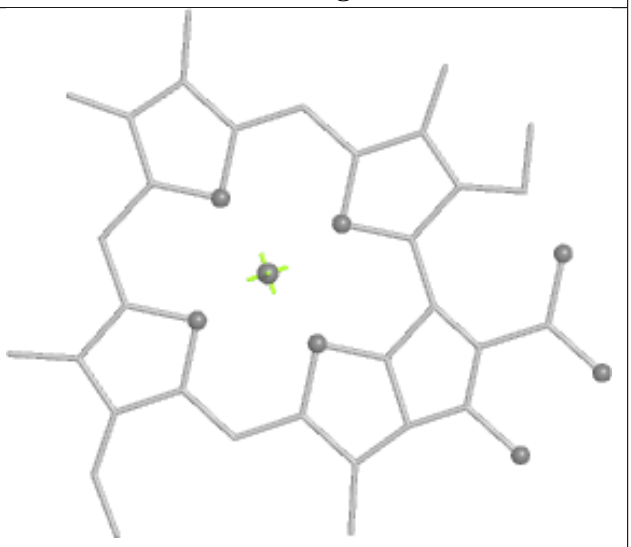


Torsions

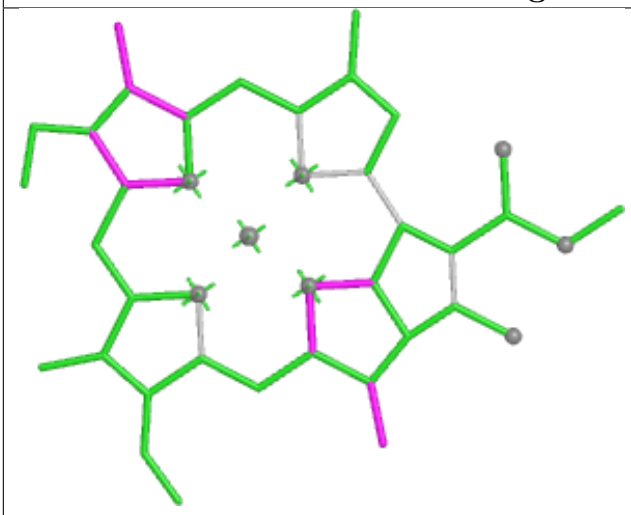


Rings

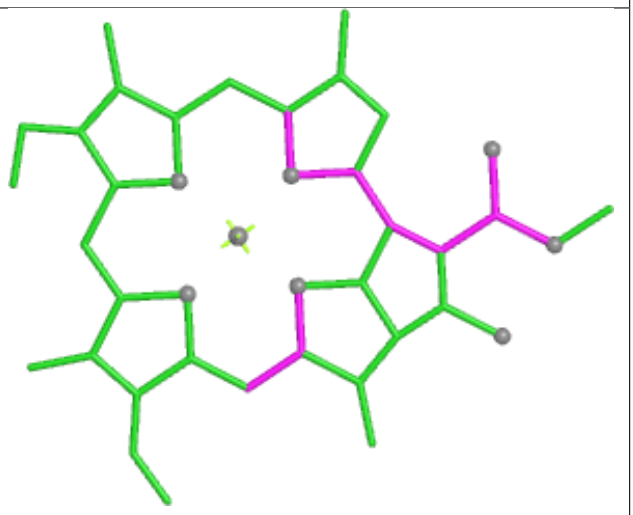
Ligand XAT 7 616	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 5 617	
 Bond lengths	 Bond angles
 Torsions	 Rings

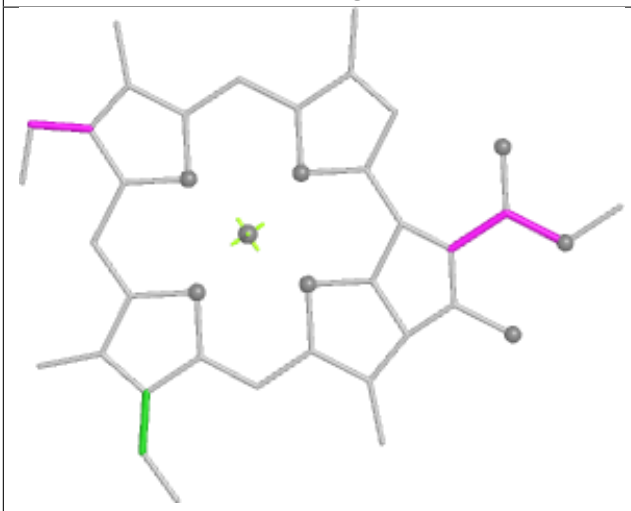
Ligand CLA 1 612



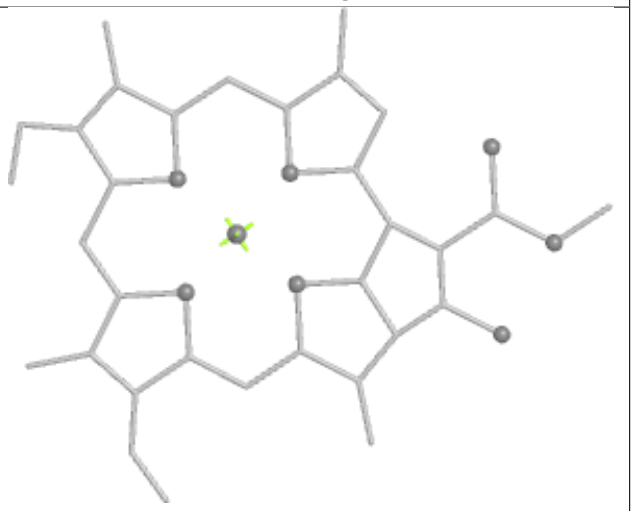
Bond lengths



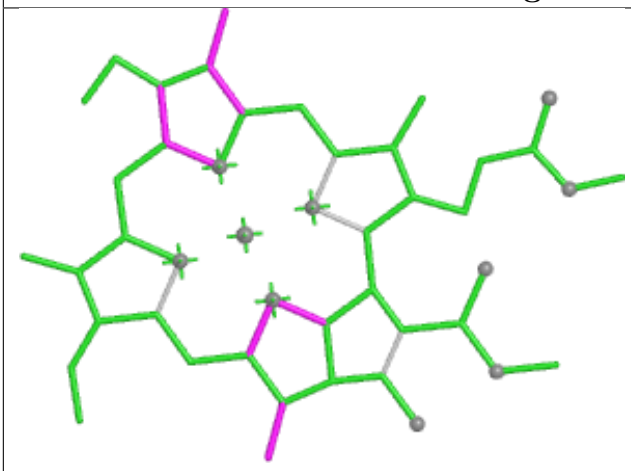
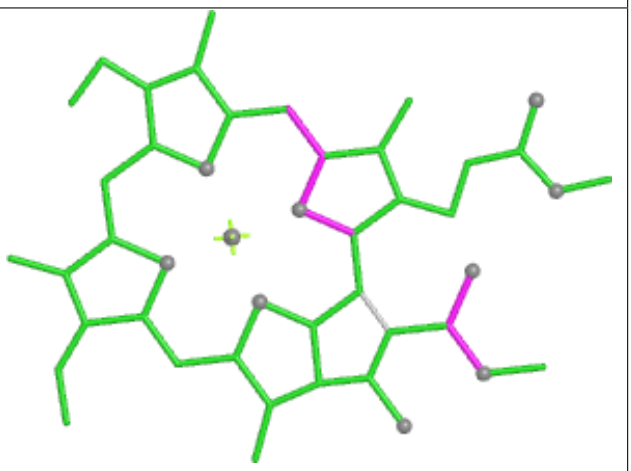
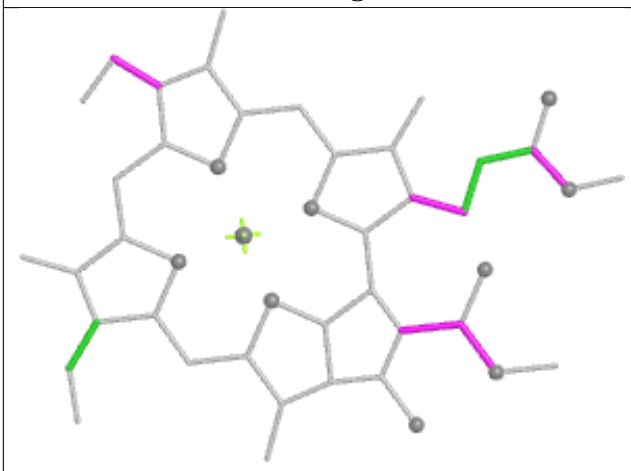
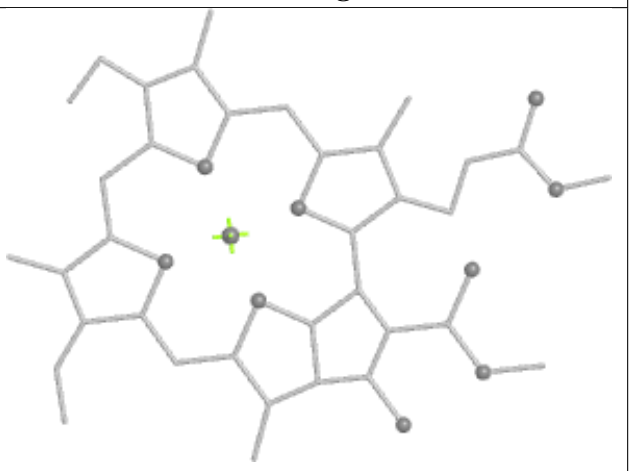
Bond angles



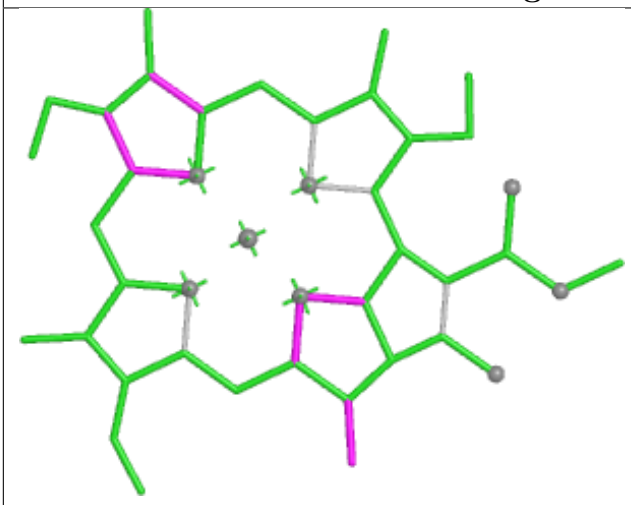
Torsions



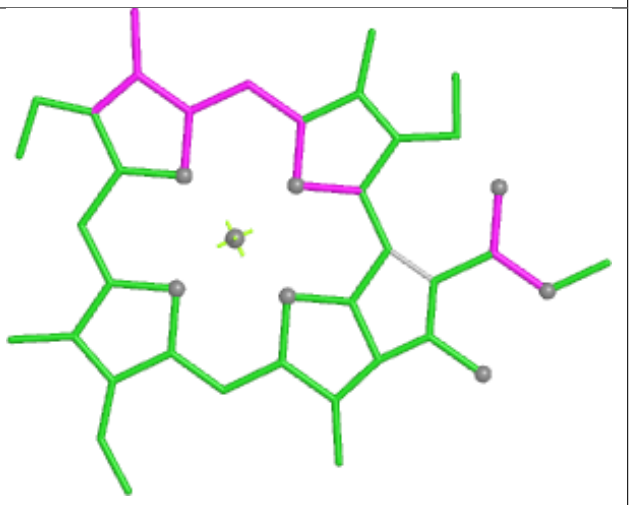
Rings

Ligand CLA A 820	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

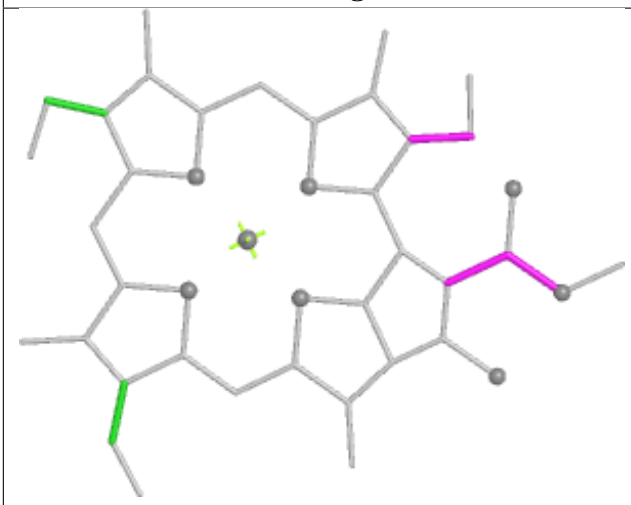
Ligand CLA A 836



Bond lengths



Bond angles

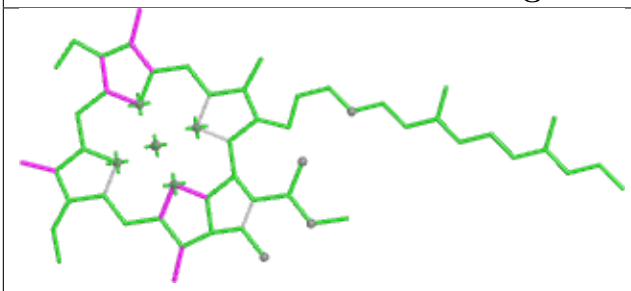


Torsions

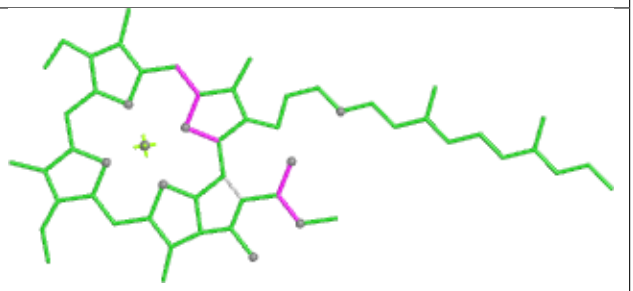


Rings

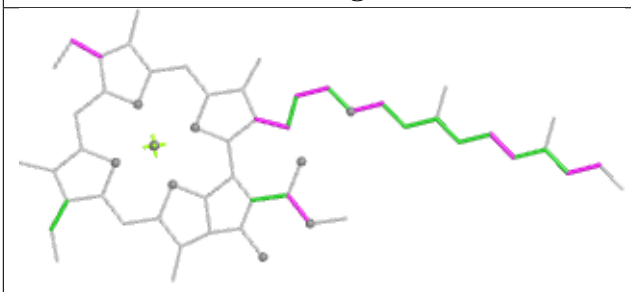
Ligand CLA A 825



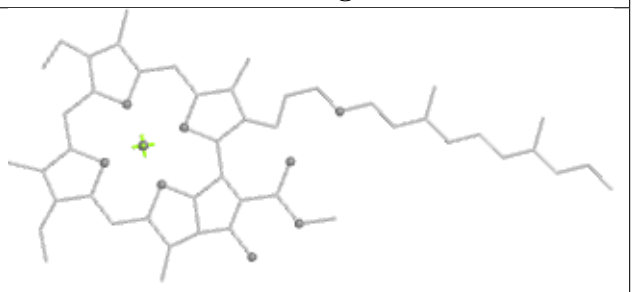
Bond lengths



Bond angles

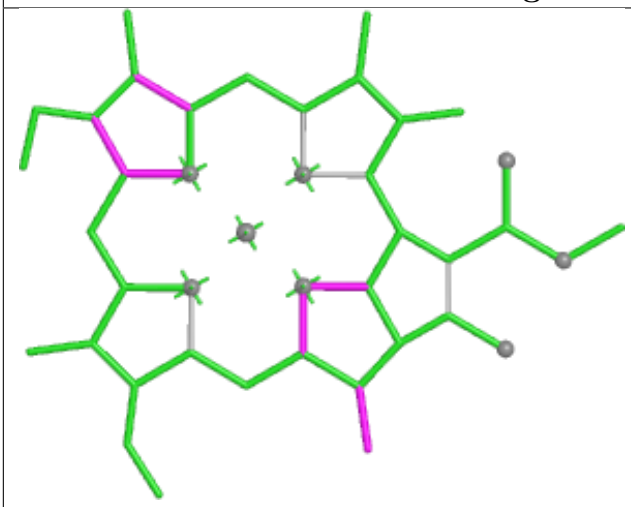


Torsions

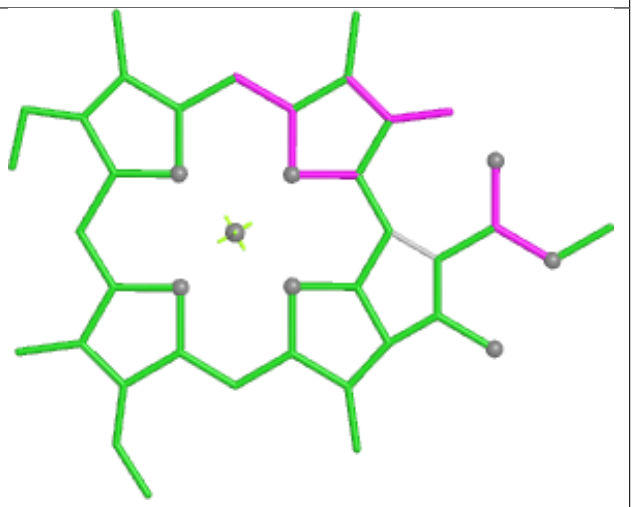


Rings

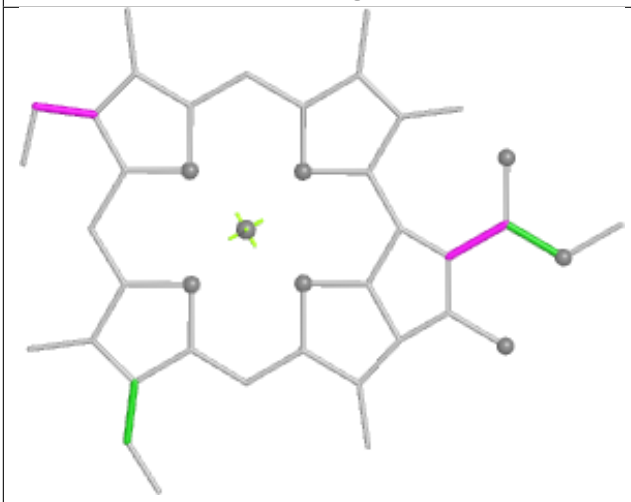
Ligand CLA K 201



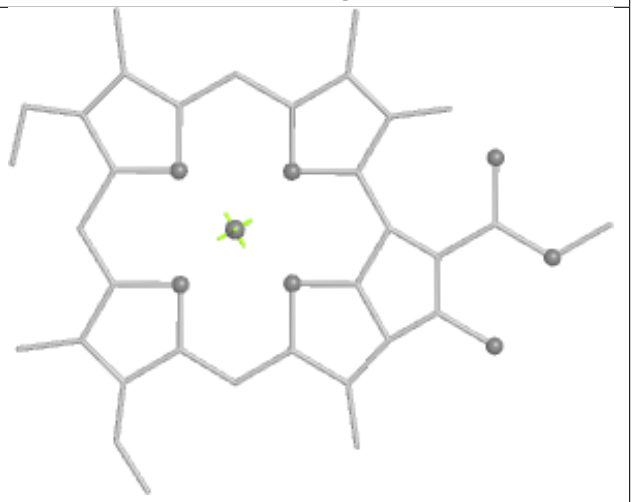
Bond lengths



Bond angles

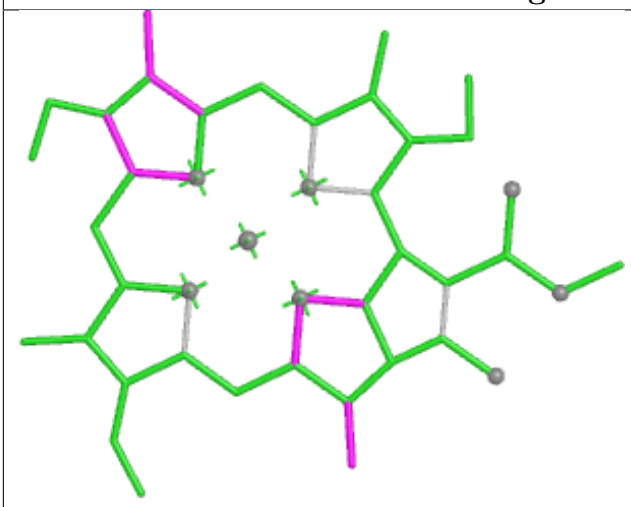


Torsions

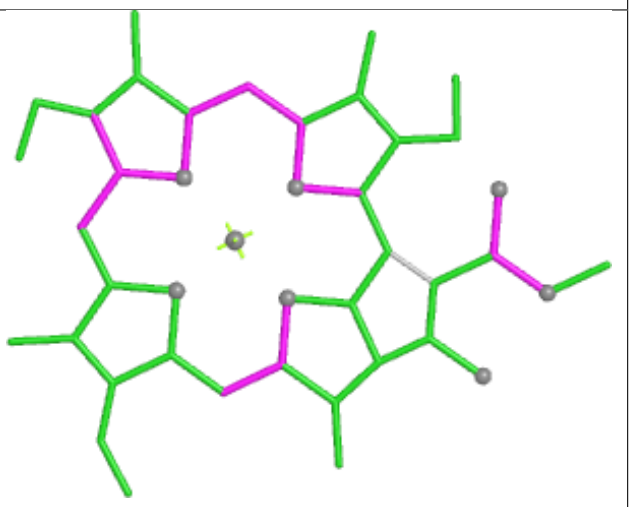


Rings

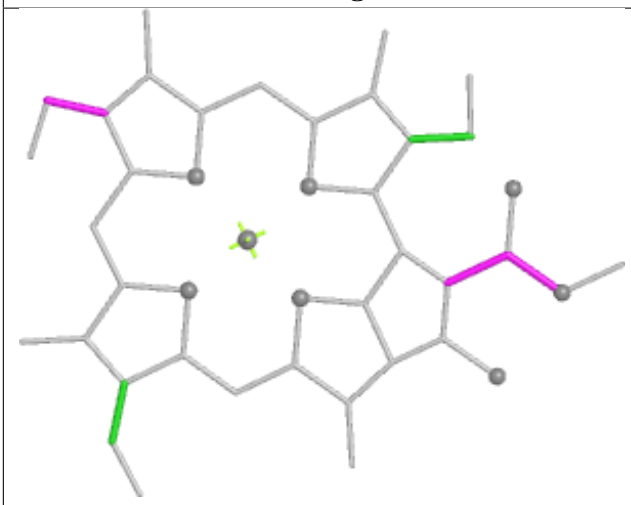
Ligand CLA 7 613



Bond lengths



Bond angles

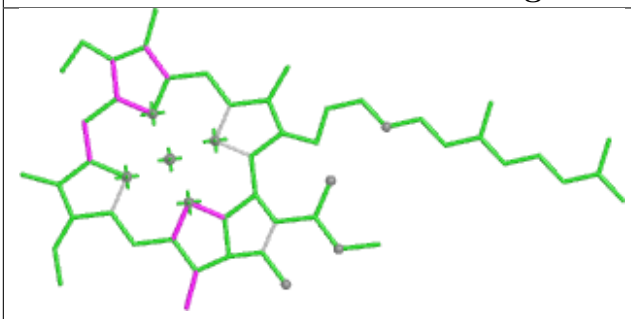


Torsions

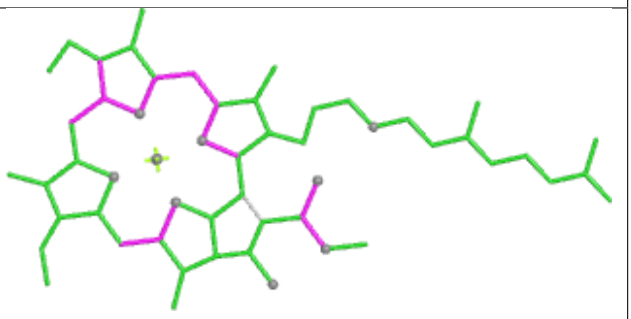


Rings

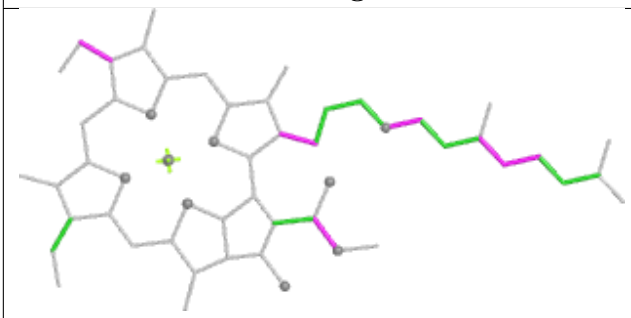
Ligand CLA B 818



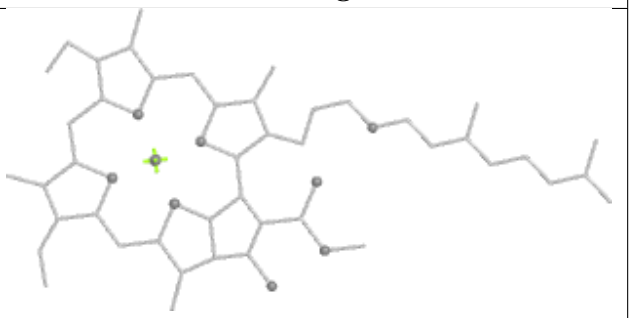
Bond lengths



Bond angles

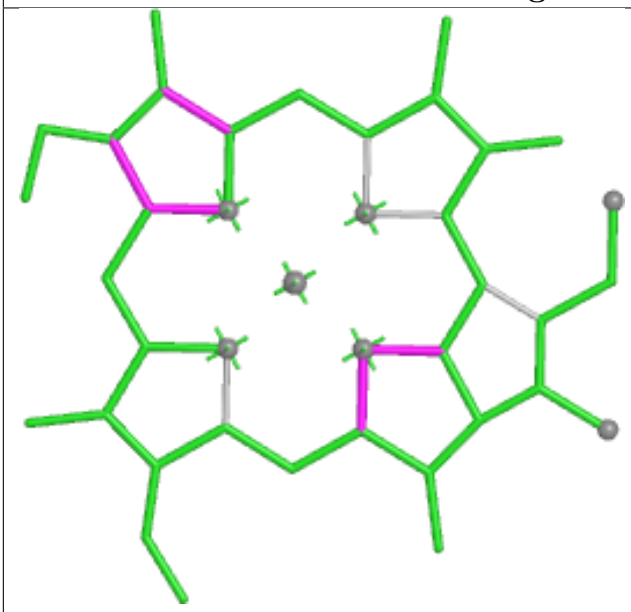


Torsions

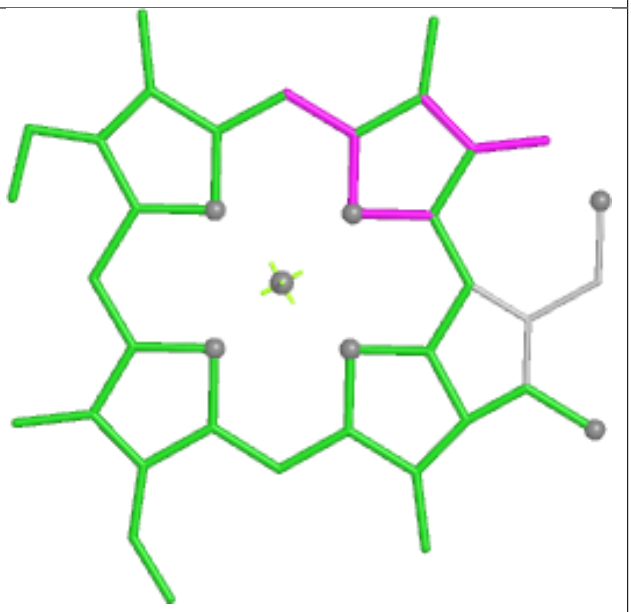


Rings

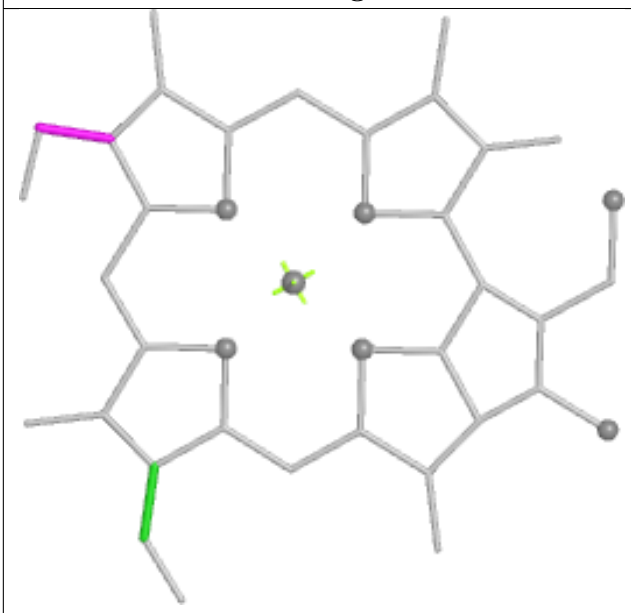
Ligand CLA 6 615



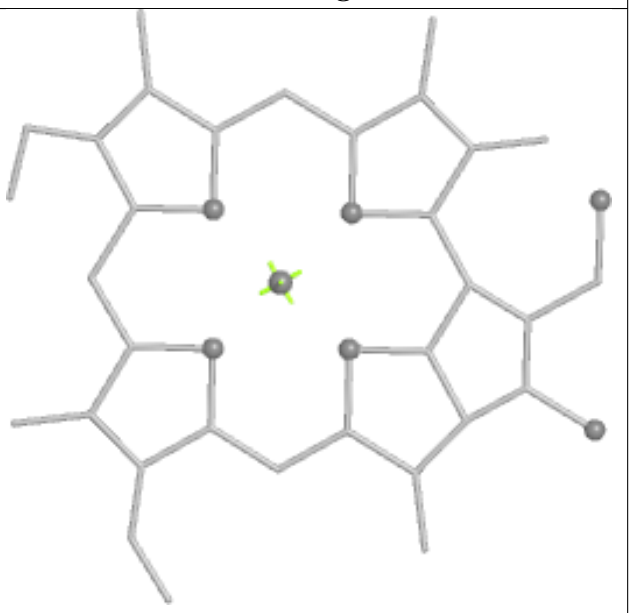
Bond lengths



Bond angles

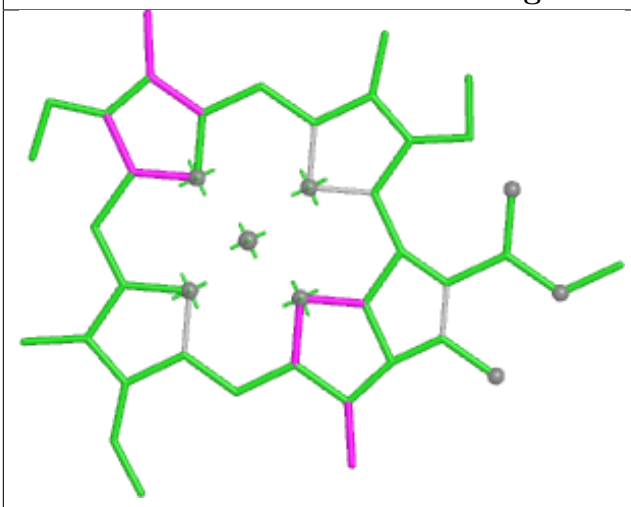


Torsions

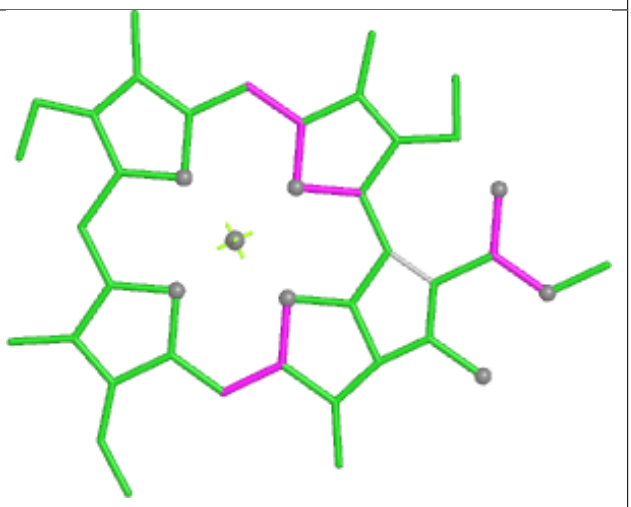


Rings

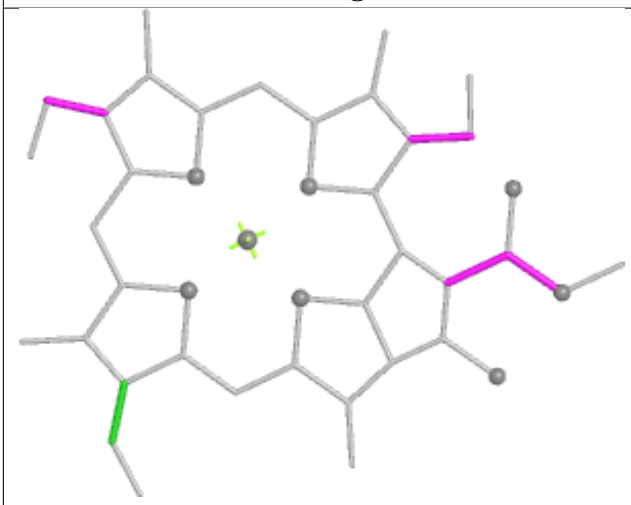
Ligand CLA A 831



Bond lengths



Bond angles

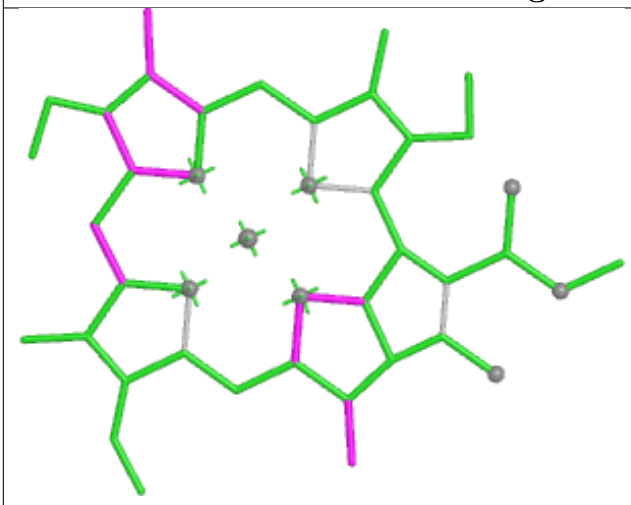


Torsions

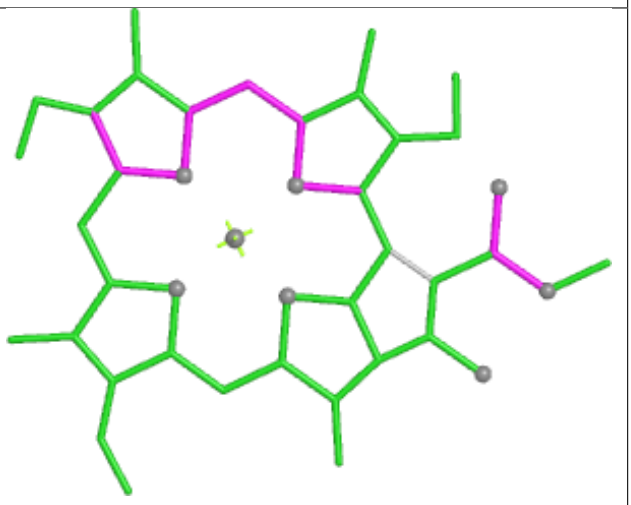


Rings

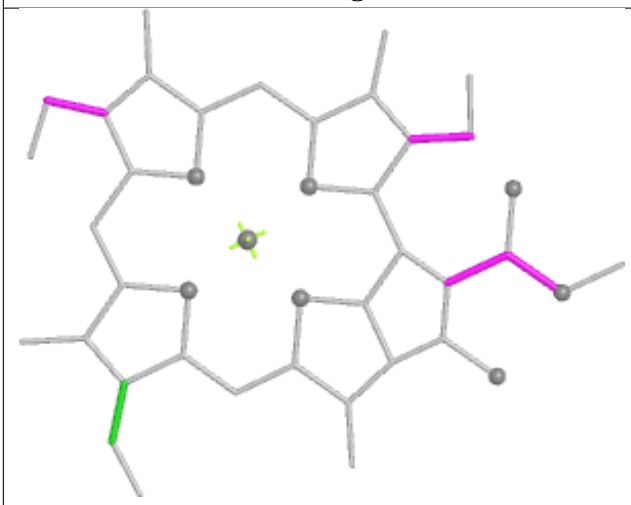
Ligand CLA 7 606



Bond lengths



Bond angles

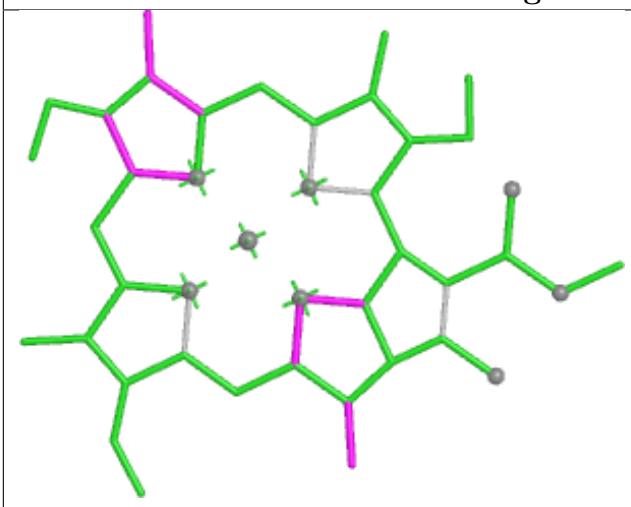


Torsions

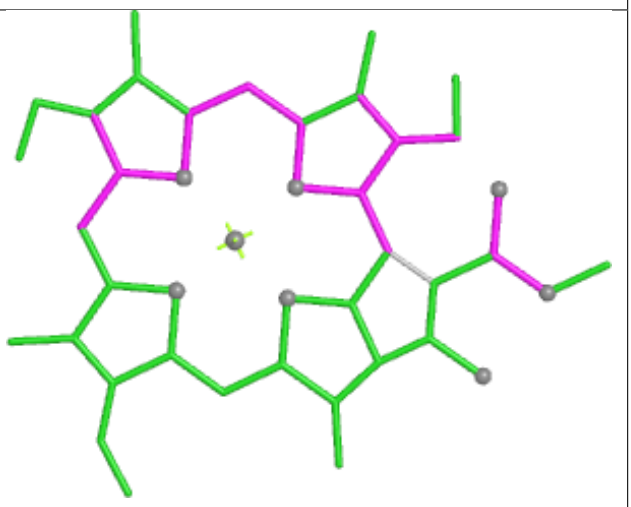


Rings

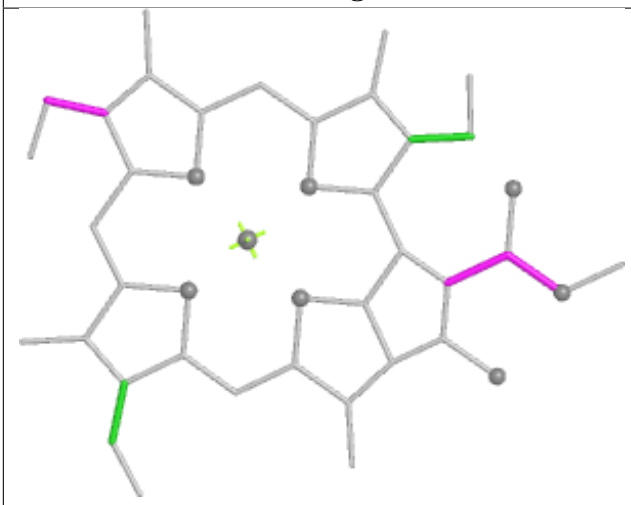
Ligand CLA A 802



Bond lengths



Bond angles

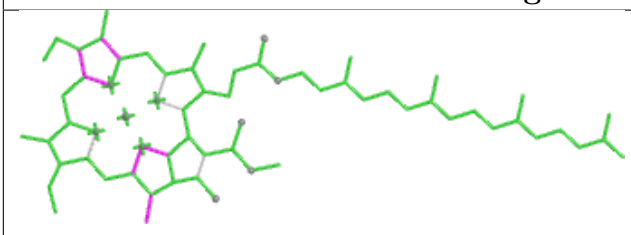


Torsions

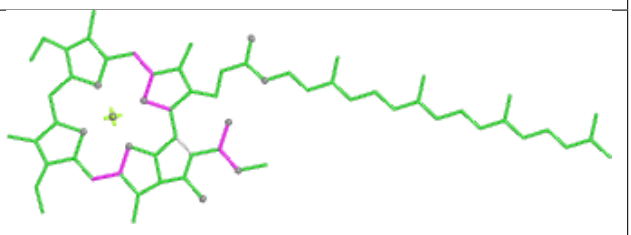


Rings

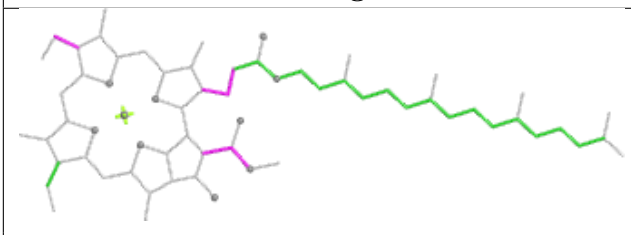
Ligand CLA A 808



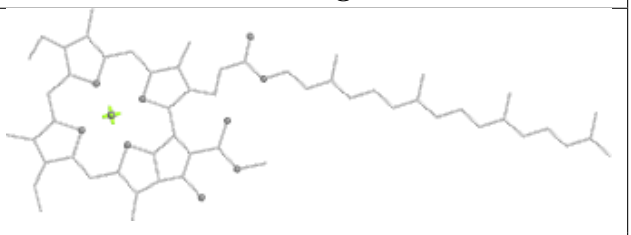
Bond lengths



Bond angles

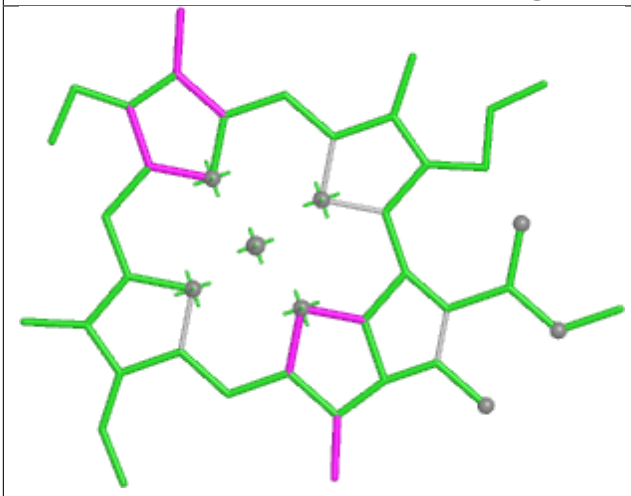


Torsions

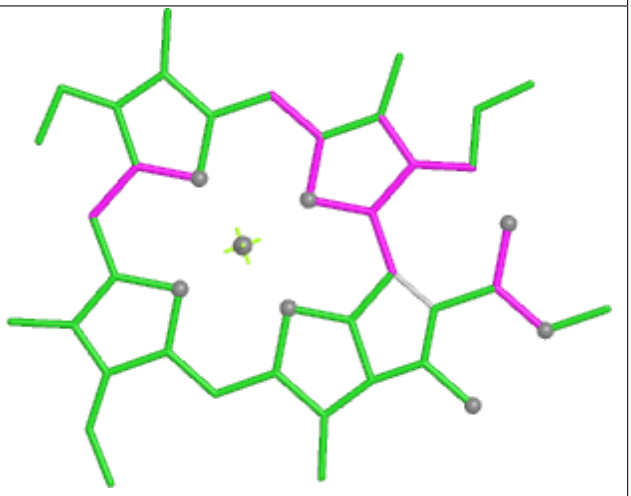


Rings

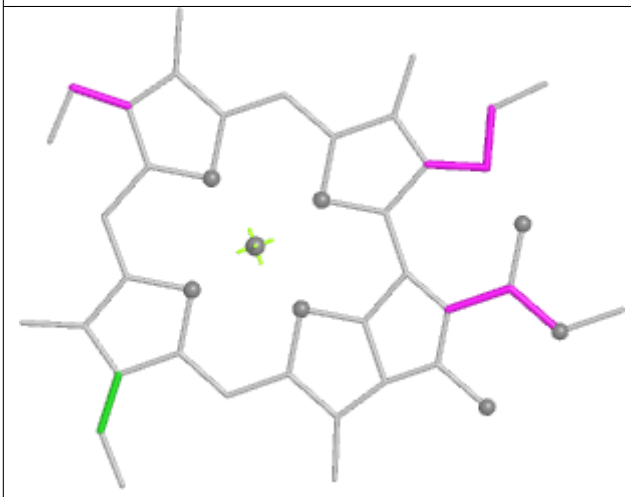
Ligand CLA 3 410



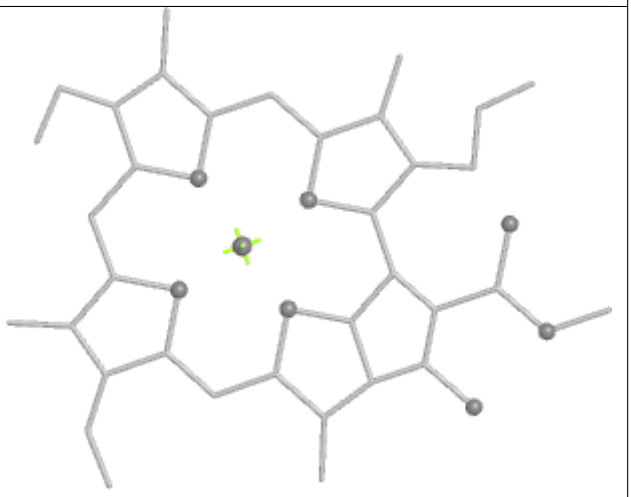
Bond lengths



Bond angles

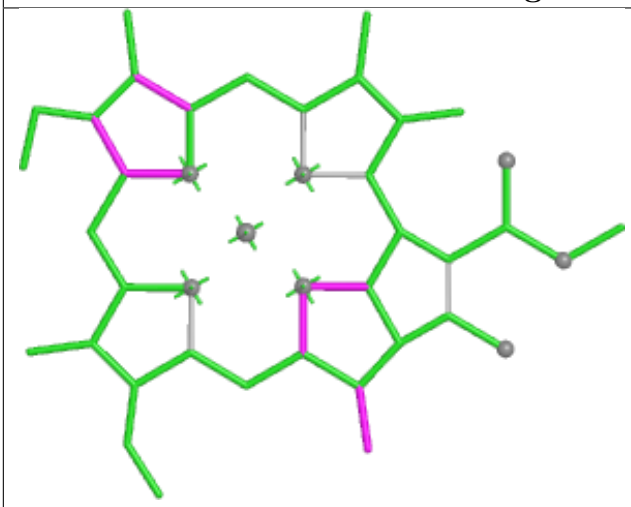


Torsions

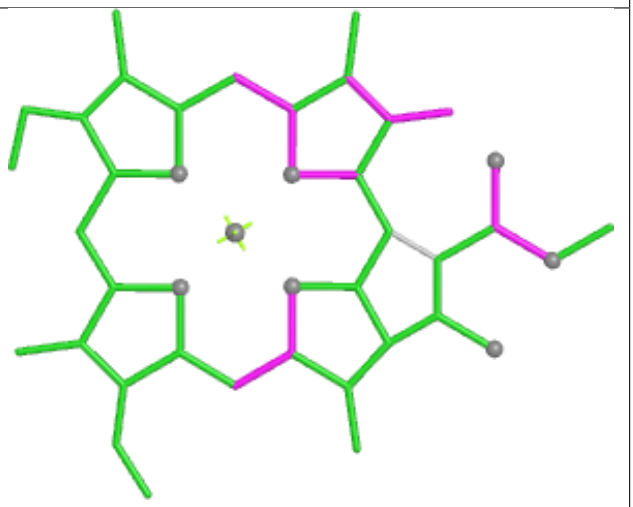


Rings

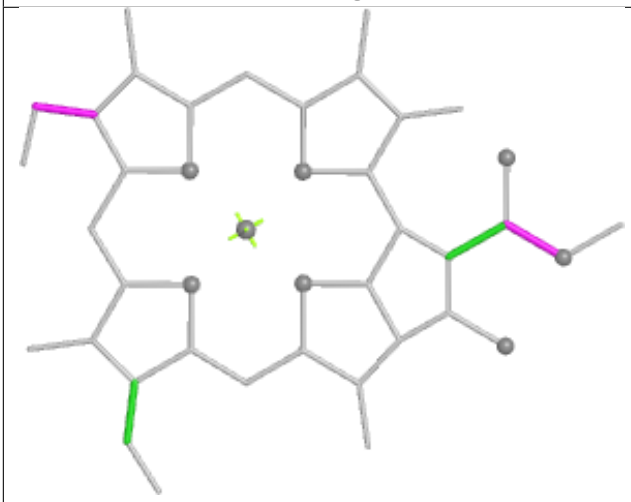
Ligand CLA B 817



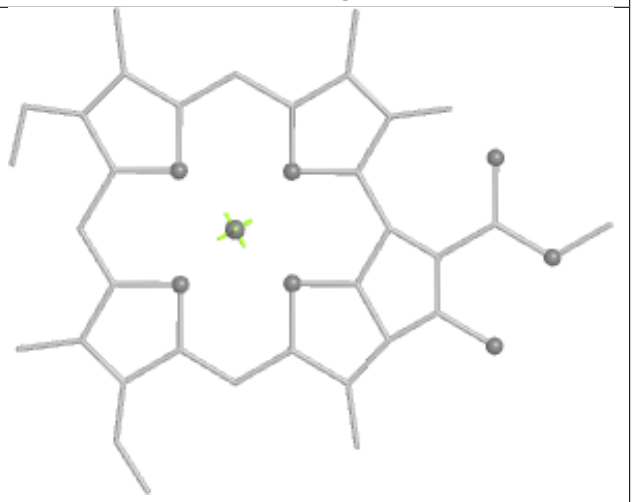
Bond lengths



Bond angles

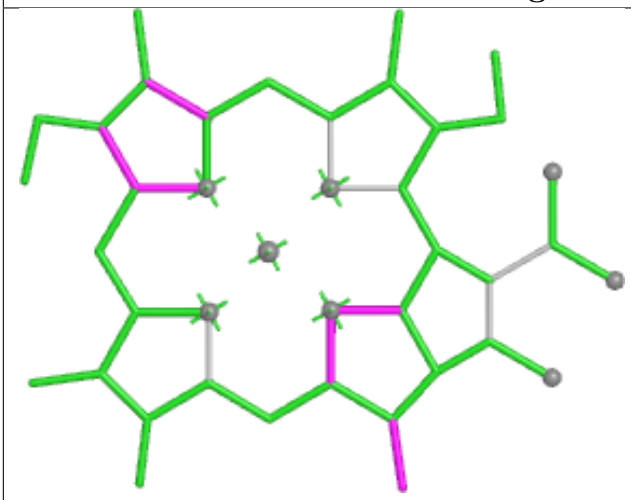


Torsions

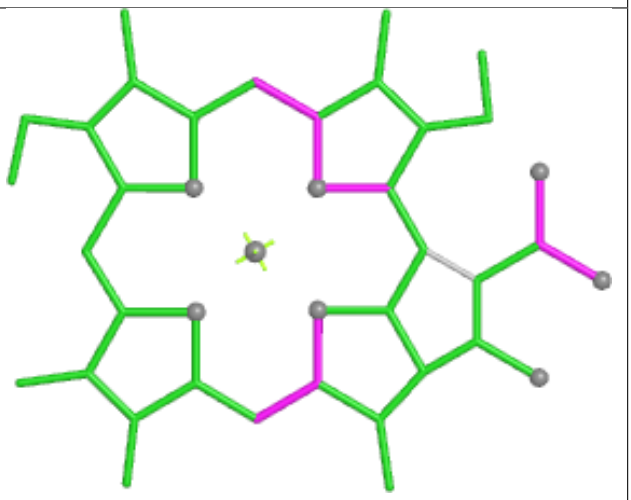


Rings

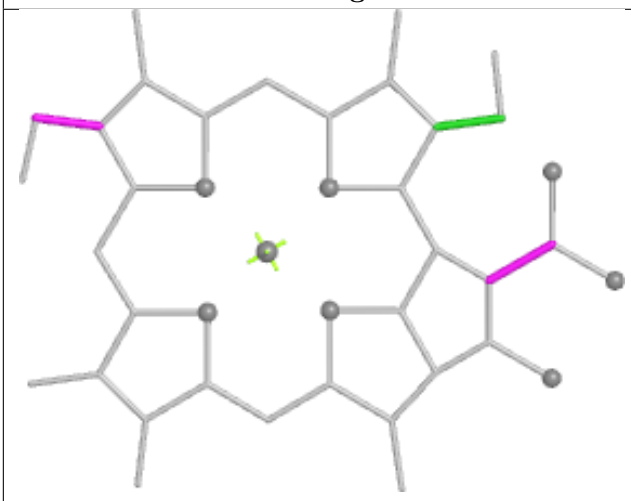
Ligand CLA 1 607



Bond lengths



Bond angles

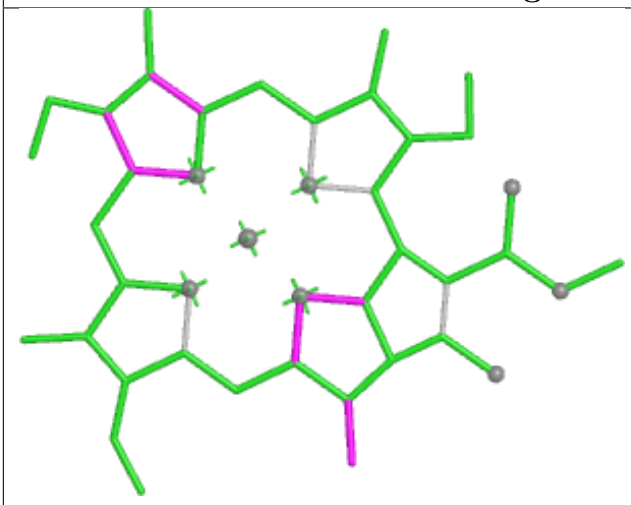


Torsions

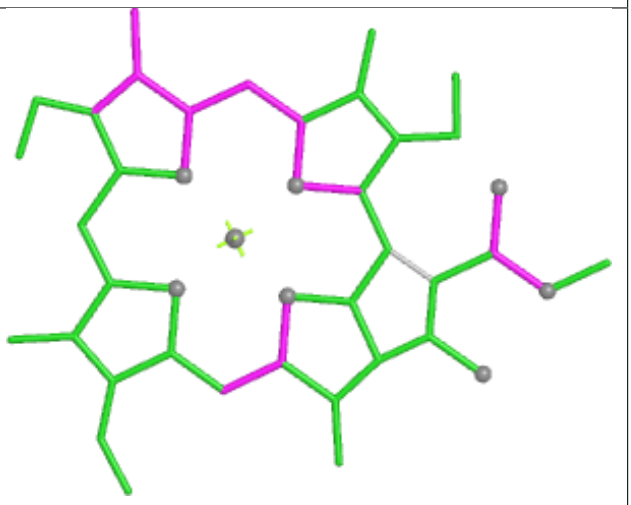


Rings

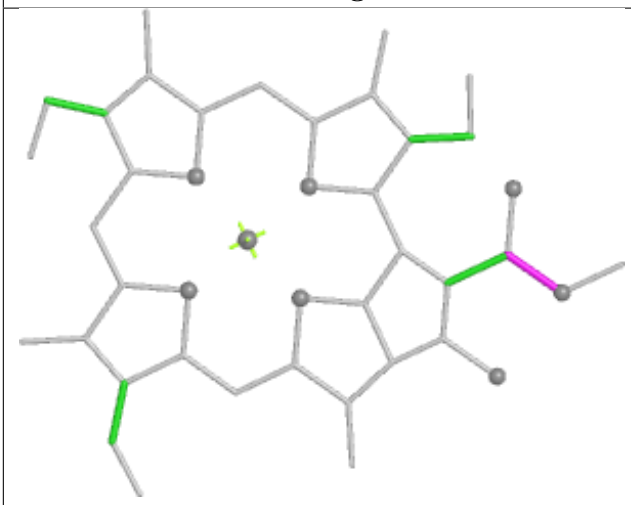
Ligand CLA A 803



Bond lengths



Bond angles

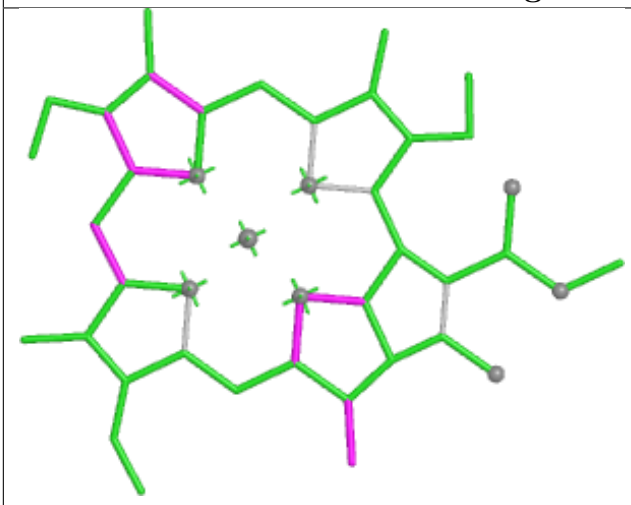


Torsions

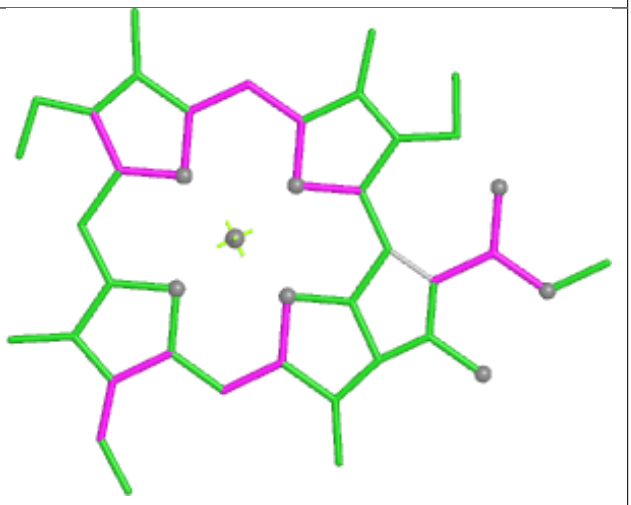


Rings

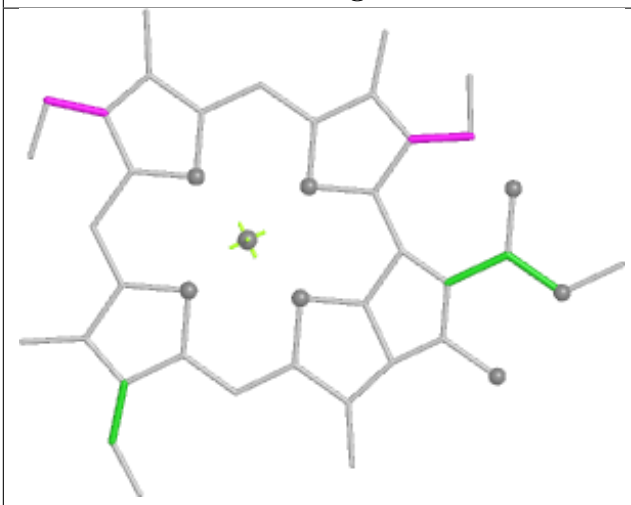
Ligand CLA B 815



Bond lengths



Bond angles

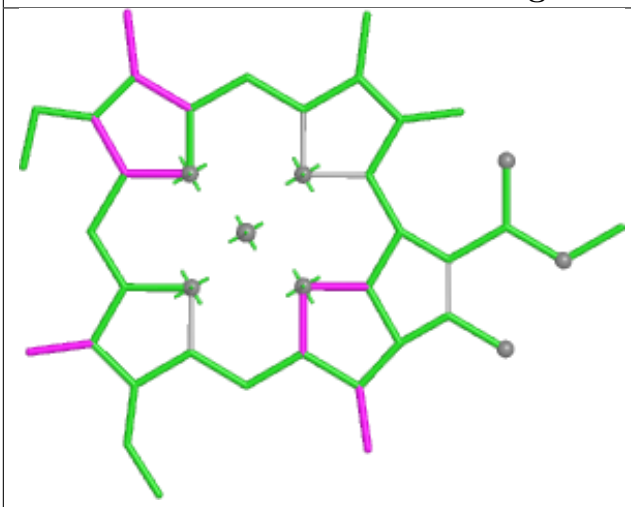


Torsions

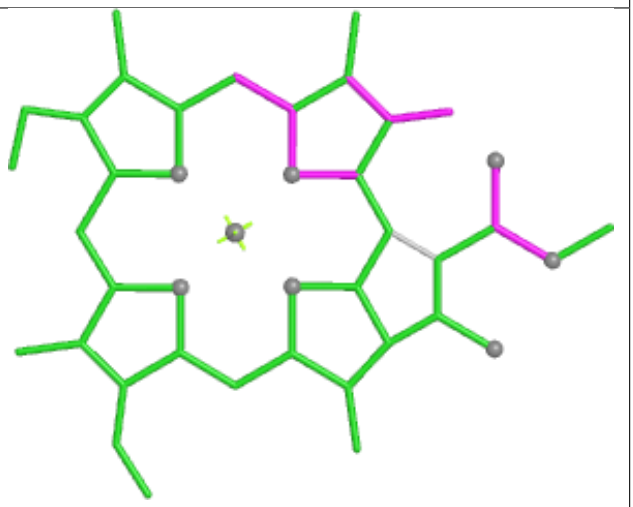


Rings

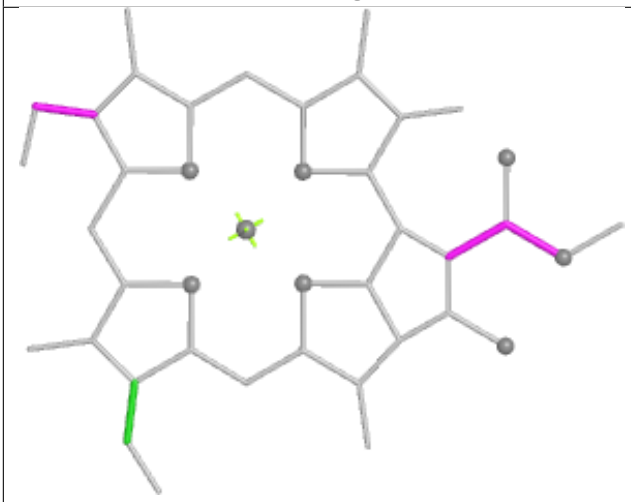
Ligand CLA 5 607



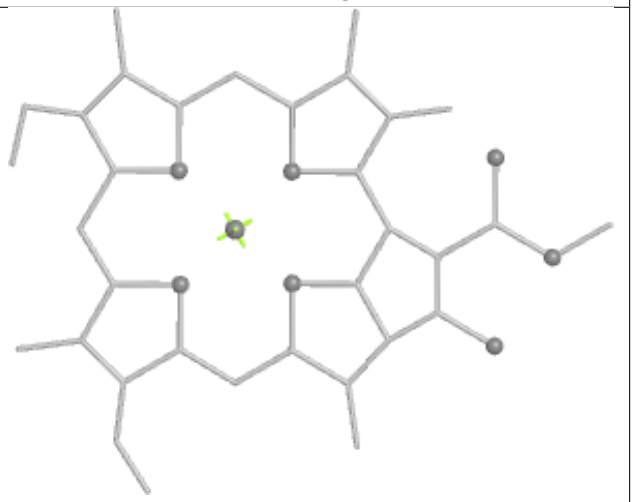
Bond lengths



Bond angles

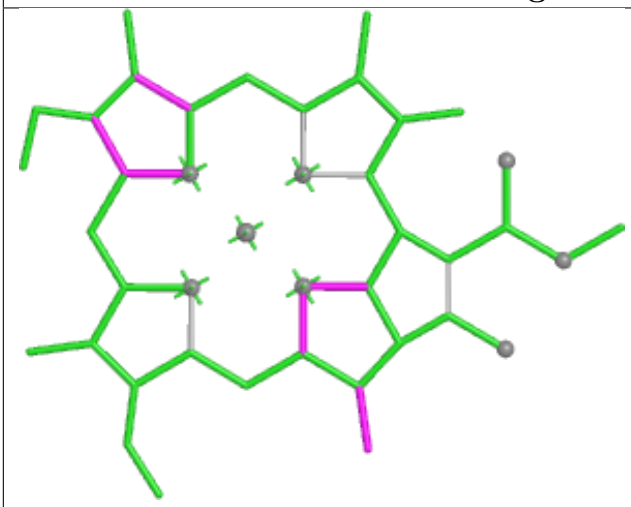


Torsions

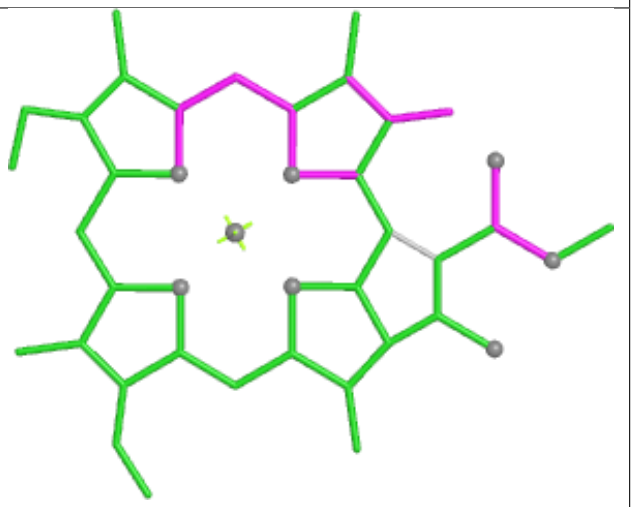


Rings

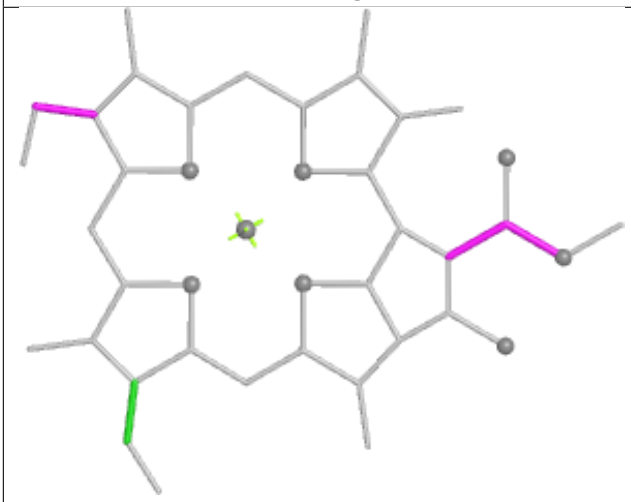
Ligand CLA 5 616



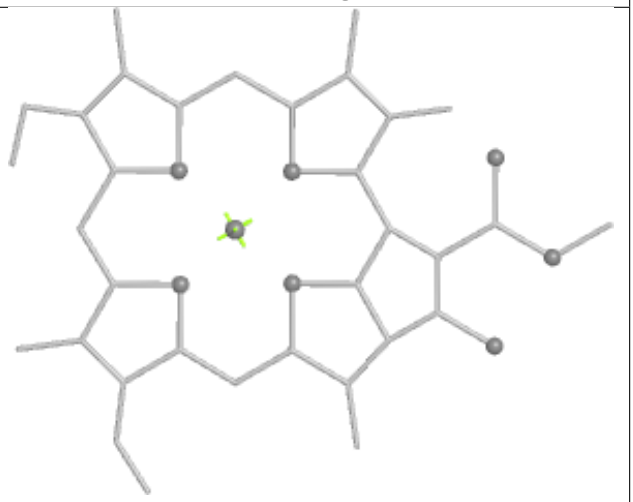
Bond lengths



Bond angles

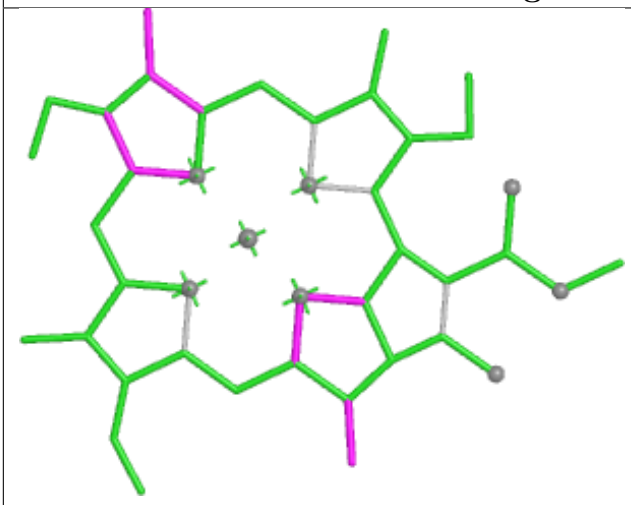


Torsions

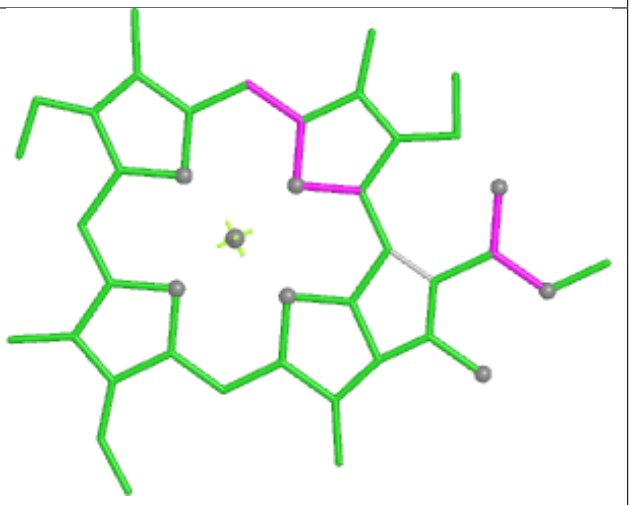


Rings

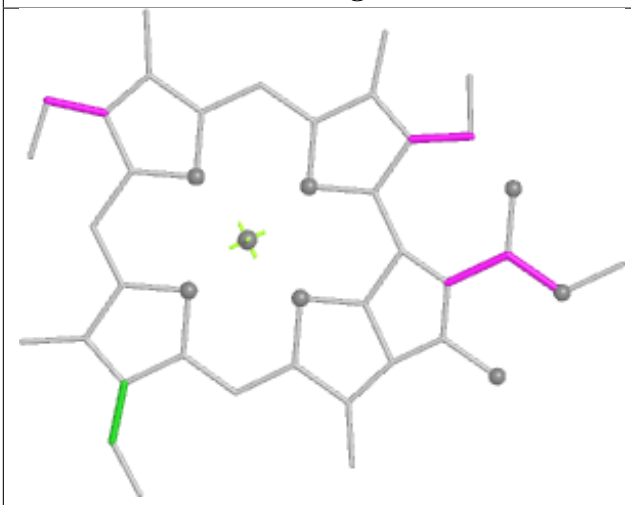
Ligand CLA A 801



Bond lengths



Bond angles

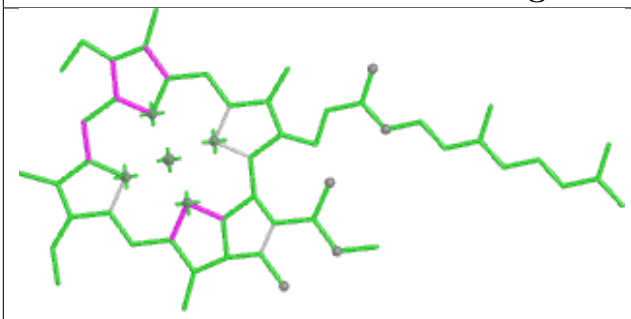


Torsions

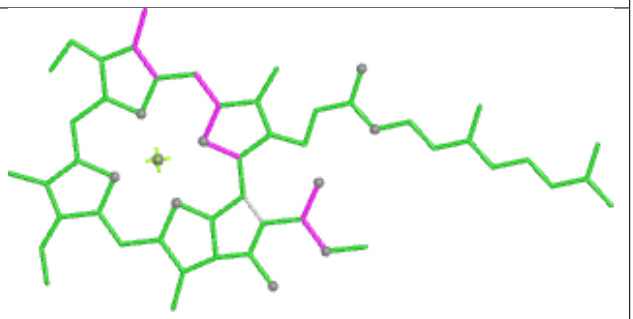


Rings

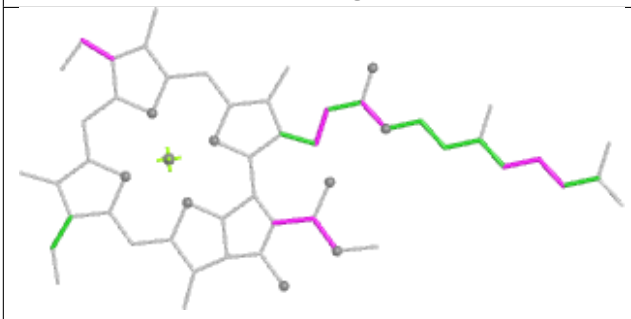
Ligand CLA 6 602



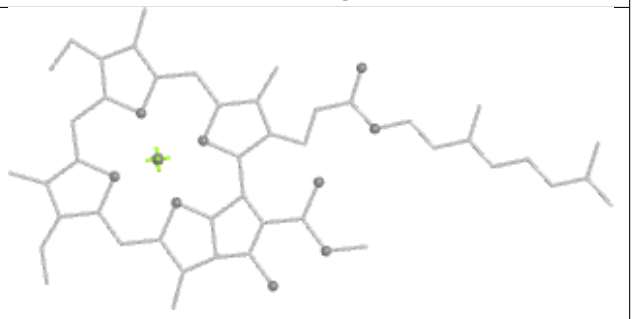
Bond lengths



Bond angles

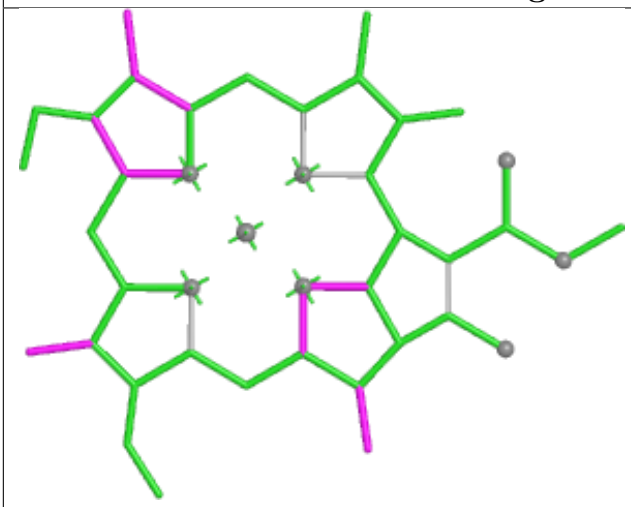


Torsions

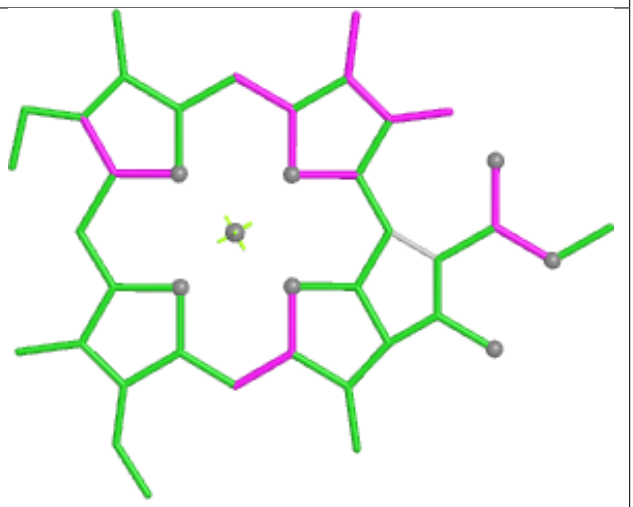


Rings

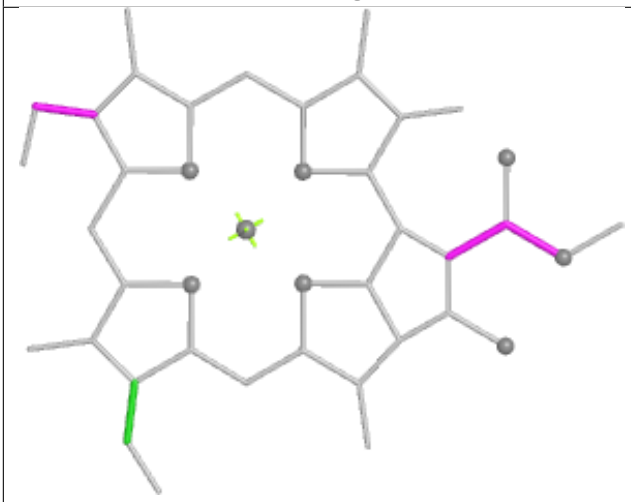
Ligand CLA 3 406



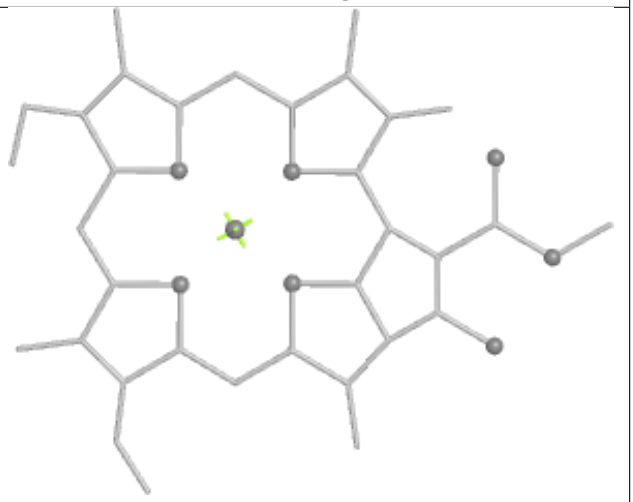
Bond lengths



Bond angles

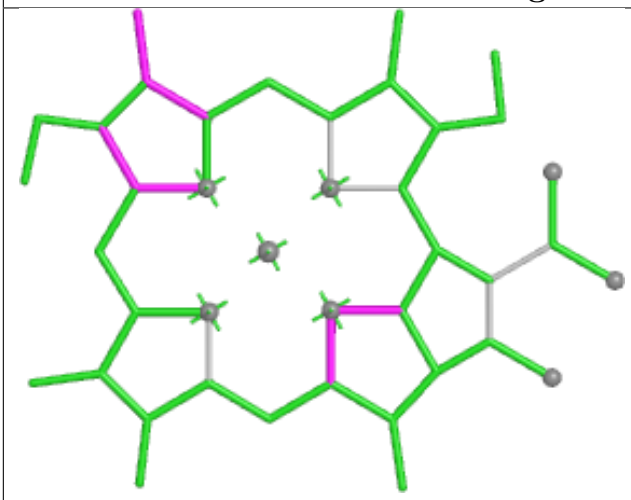


Torsions

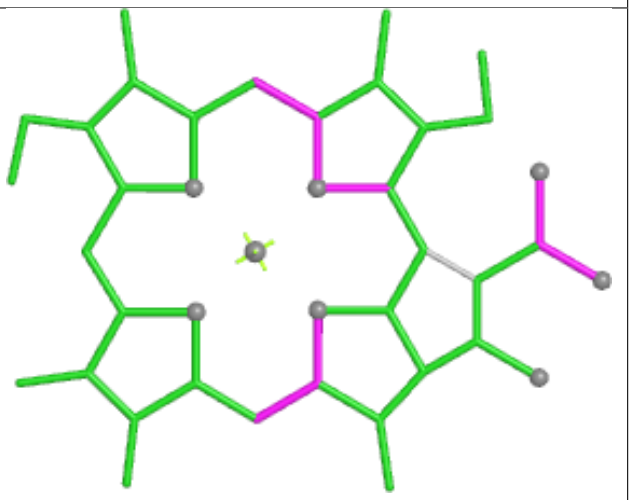


Rings

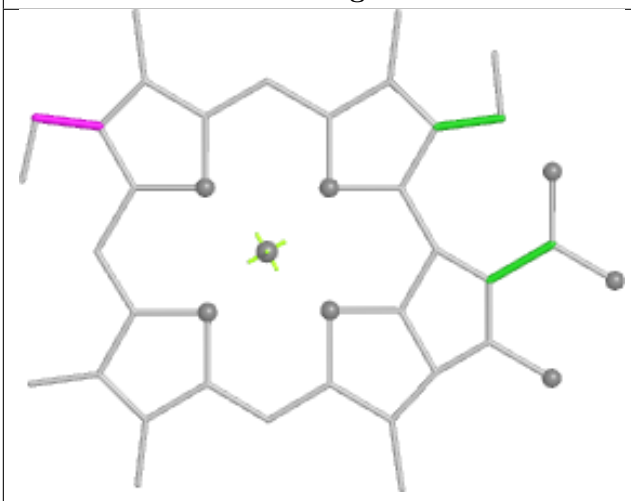
Ligand CLA 6 605



Bond lengths



Bond angles

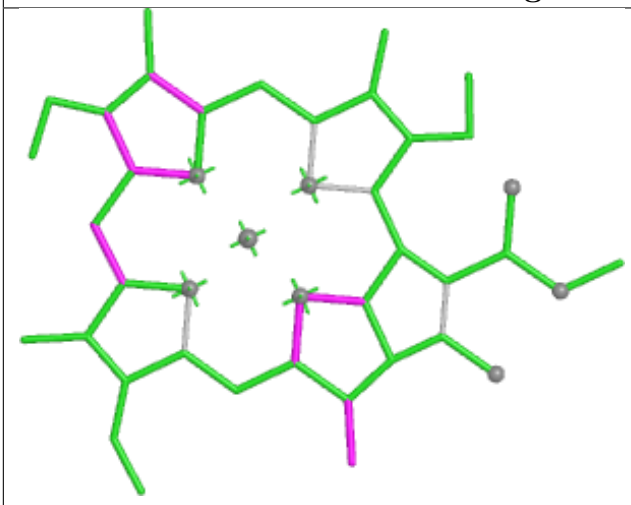


Torsions

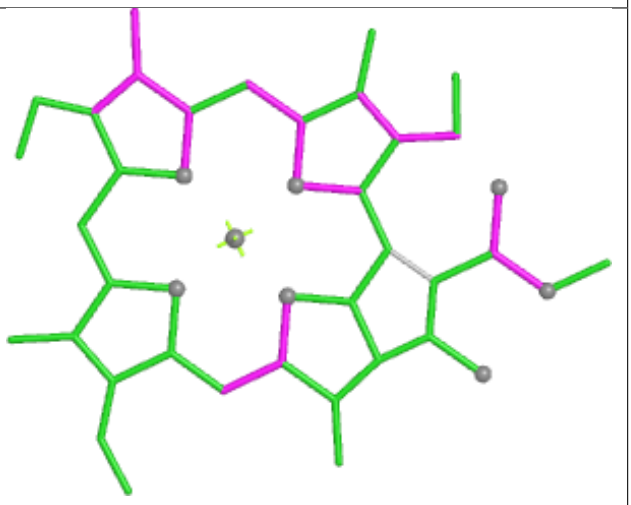


Rings

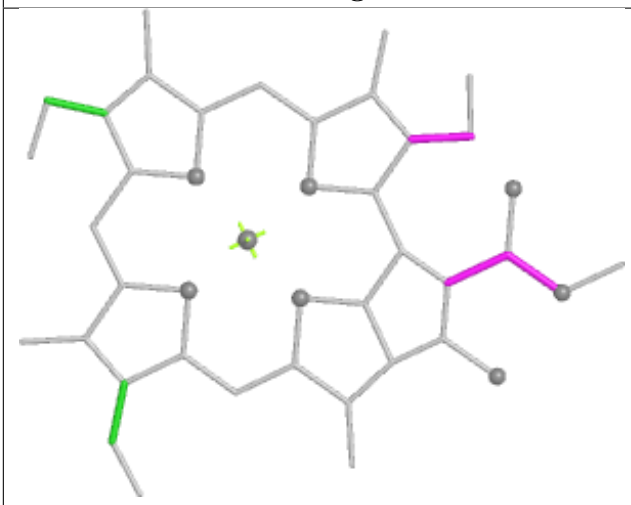
Ligand CLA B 803



Bond lengths



Bond angles



Torsions

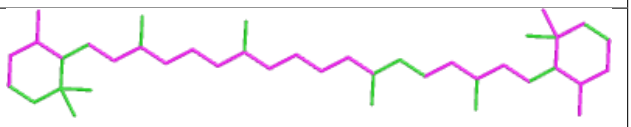


Rings

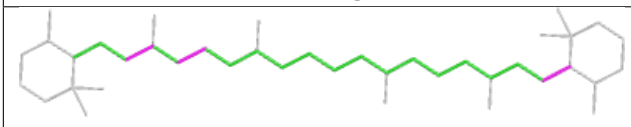
Ligand BCR J 101



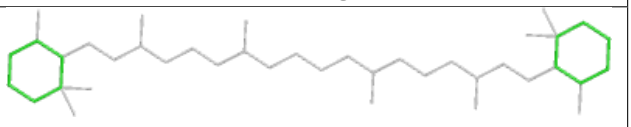
Bond lengths



Bond angles

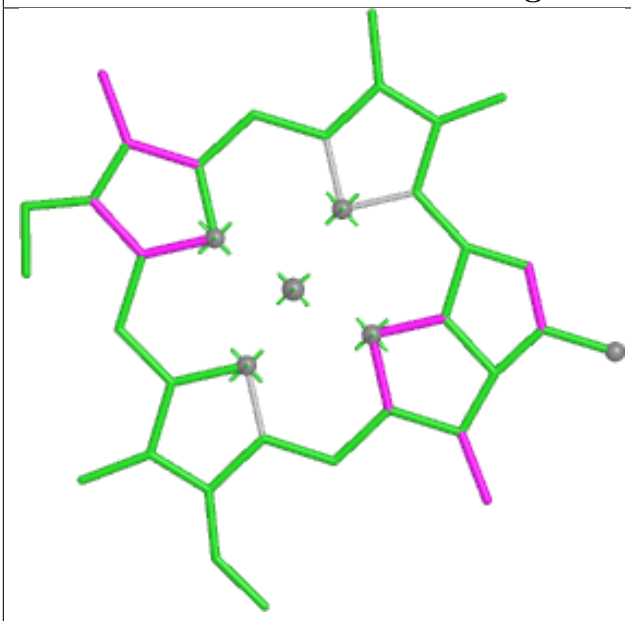


Torsions



Rings

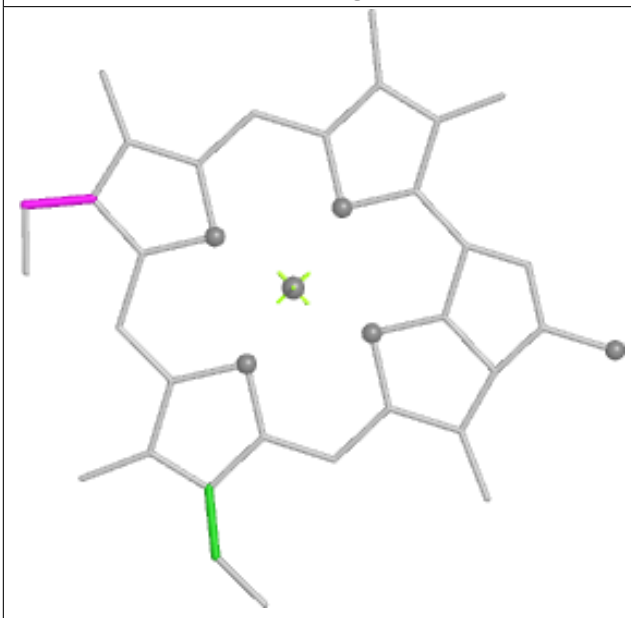
Ligand CLA B 811



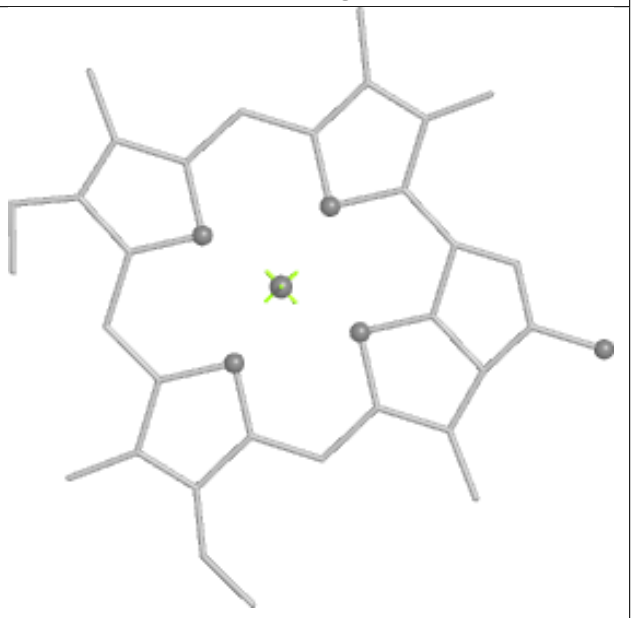
Bond lengths



Bond angles

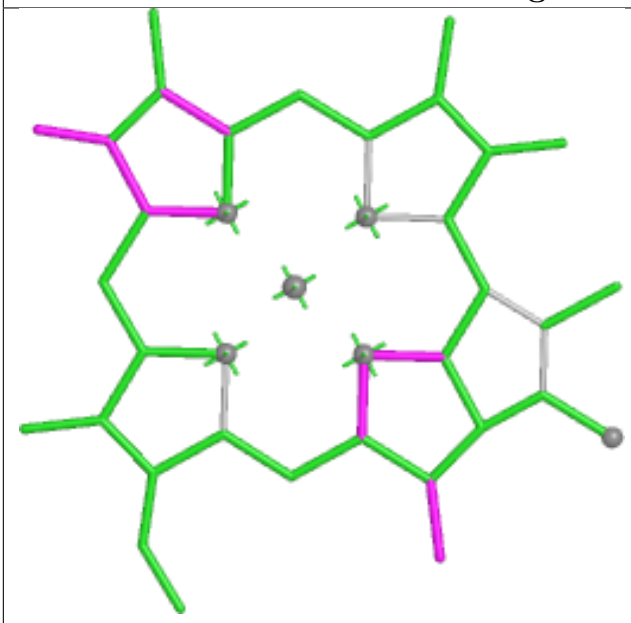


Torsions

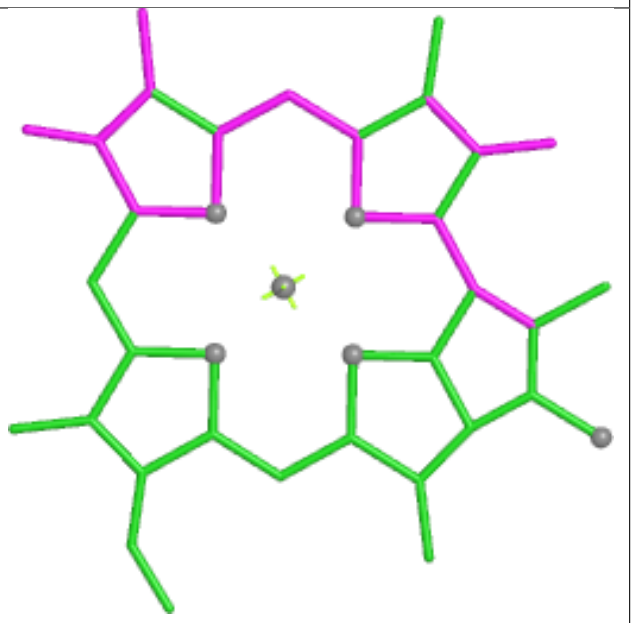


Rings

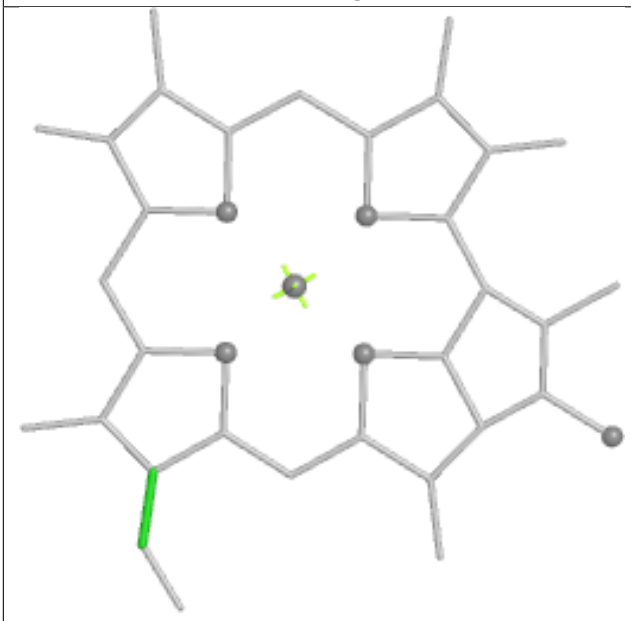
Ligand CLA 8 615



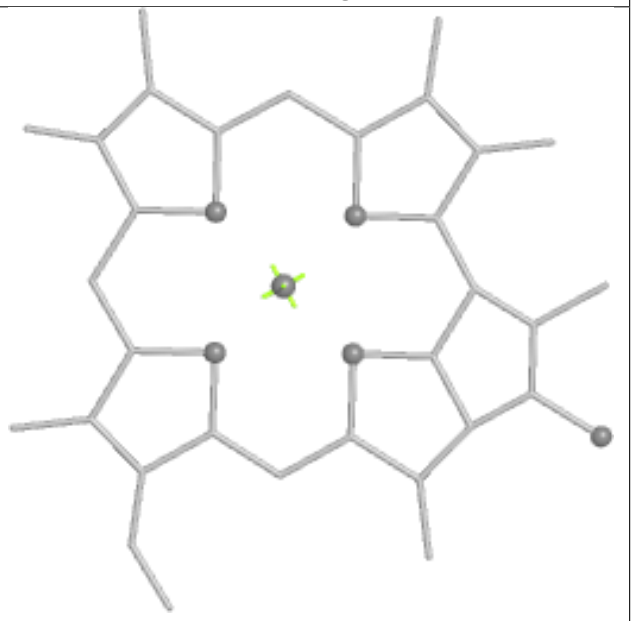
Bond lengths



Bond angles

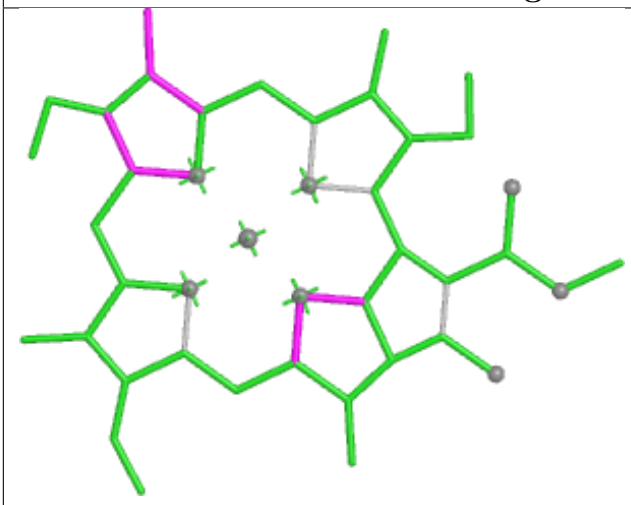


Torsions

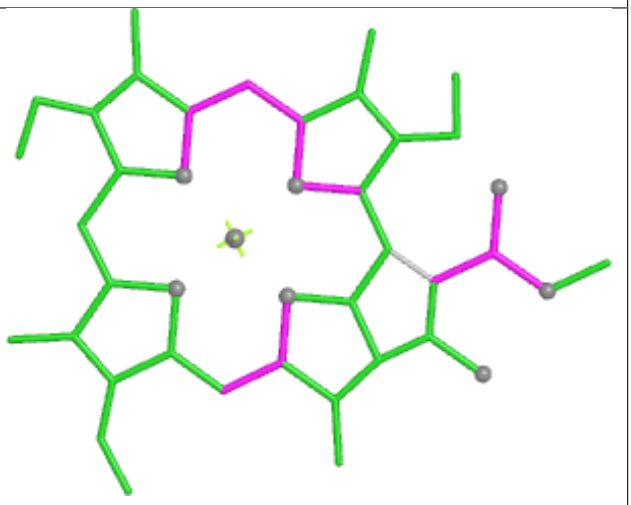


Rings

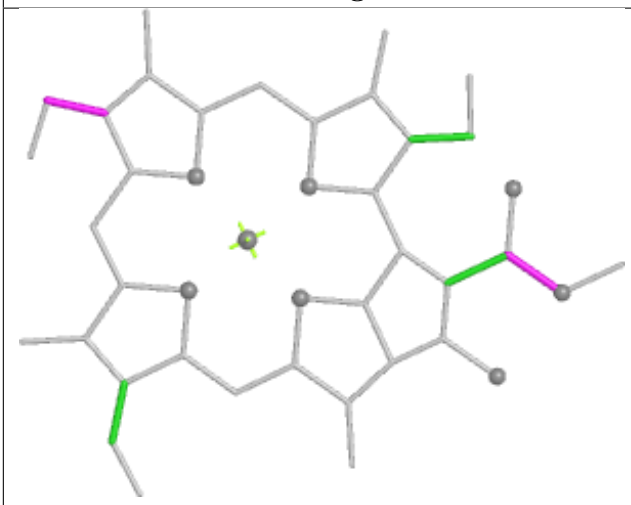
Ligand CLA B 819



Bond lengths



Bond angles

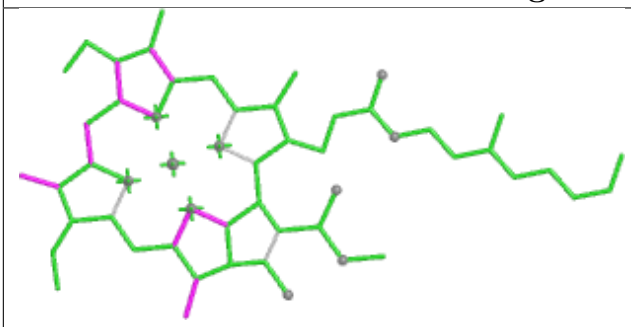


Torsions

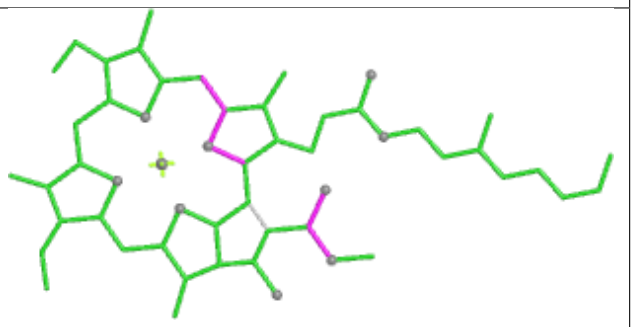


Rings

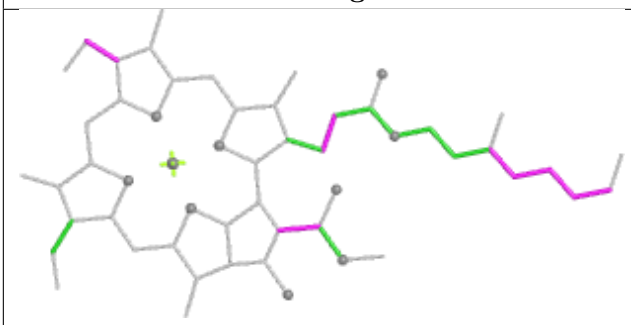
Ligand CLA 7 602



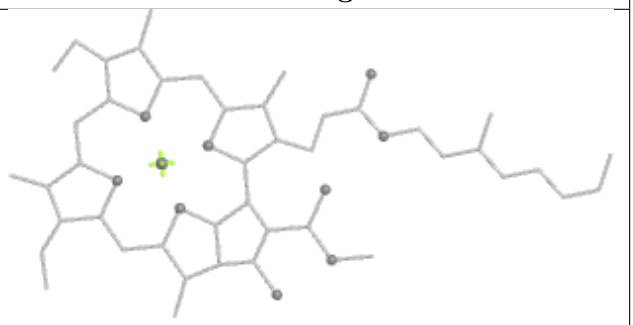
Bond lengths



Bond angles

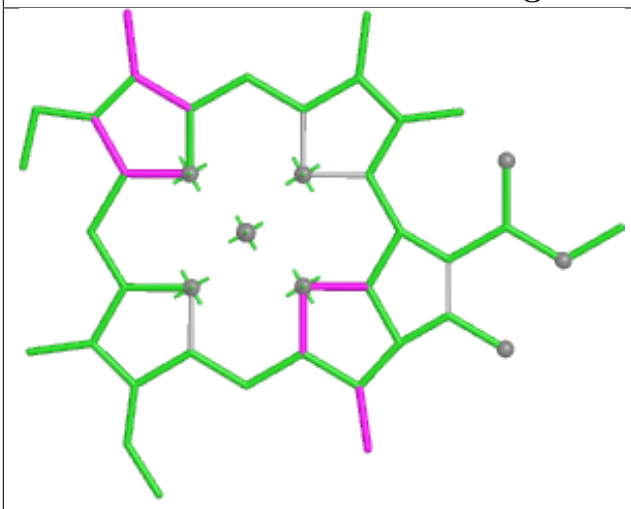


Torsions

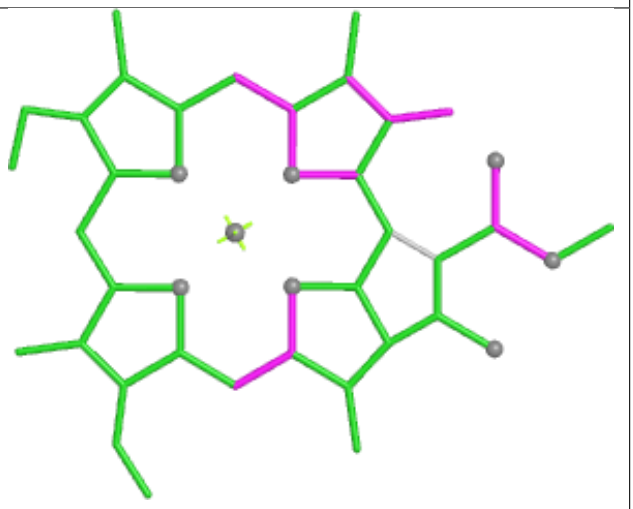


Rings

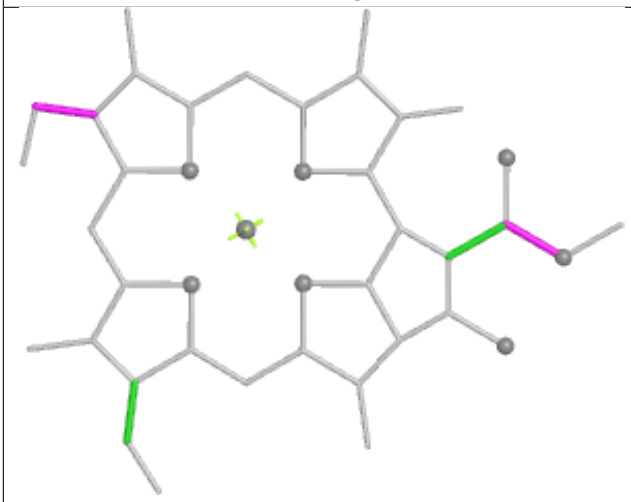
Ligand CLA A 809



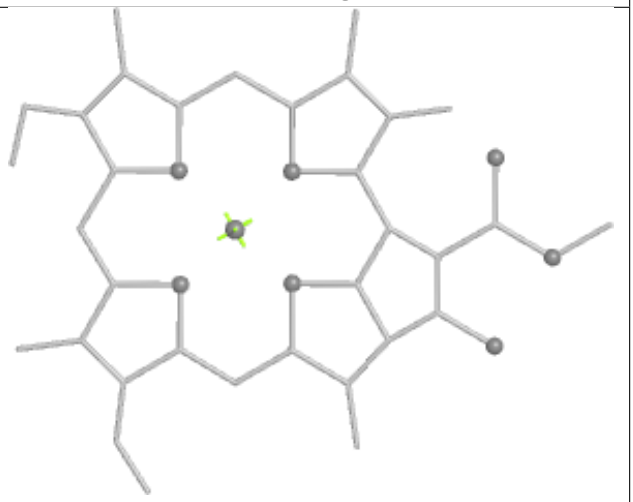
Bond lengths



Bond angles

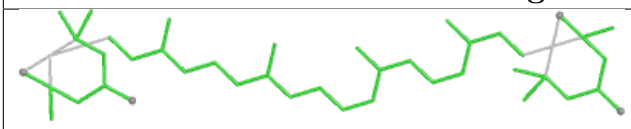


Torsions

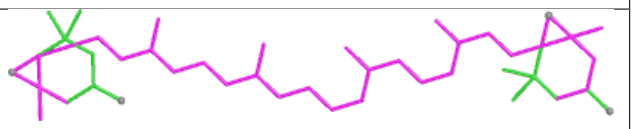


Rings

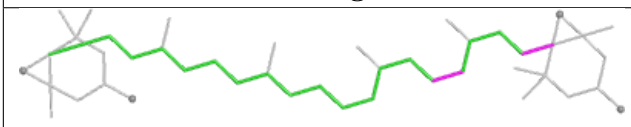
Ligand XAT 5 620



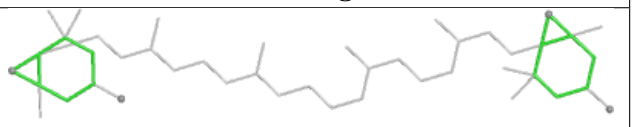
Bond lengths



Bond angles

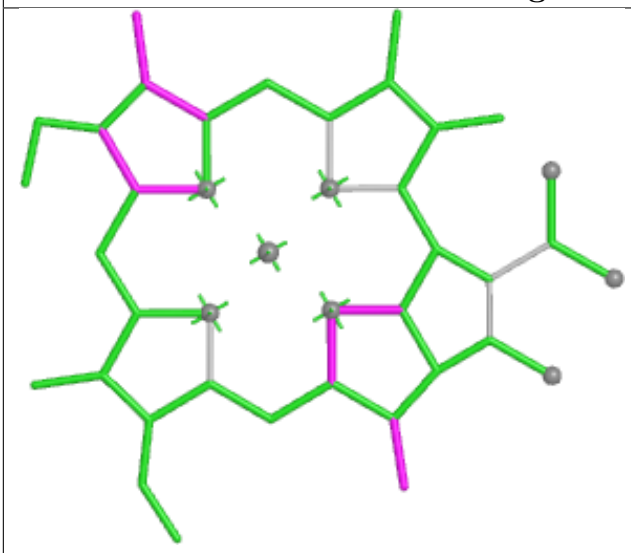


Torsions

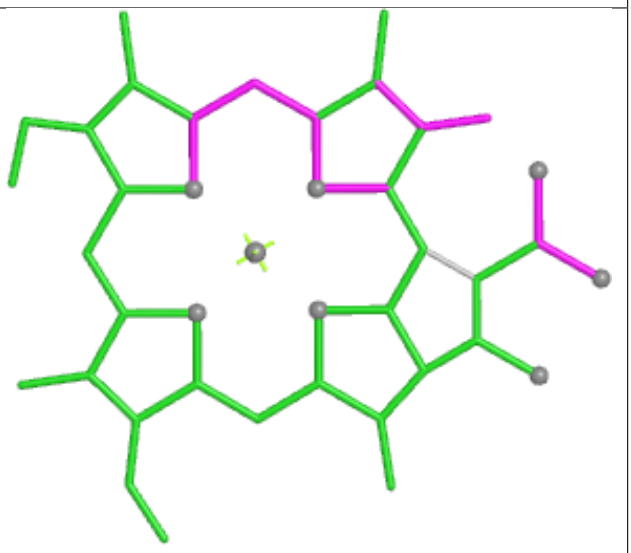


Rings

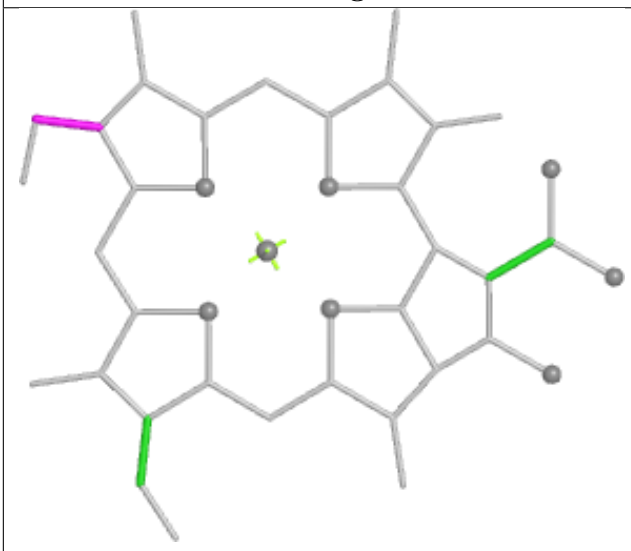
Ligand CLA 3 414



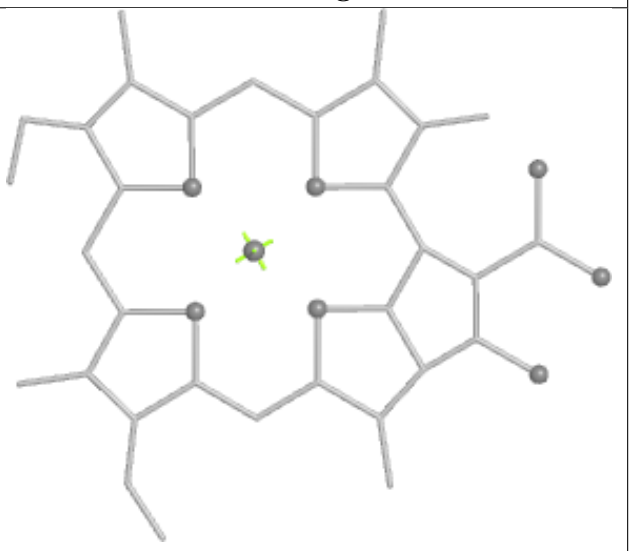
Bond lengths



Bond angles

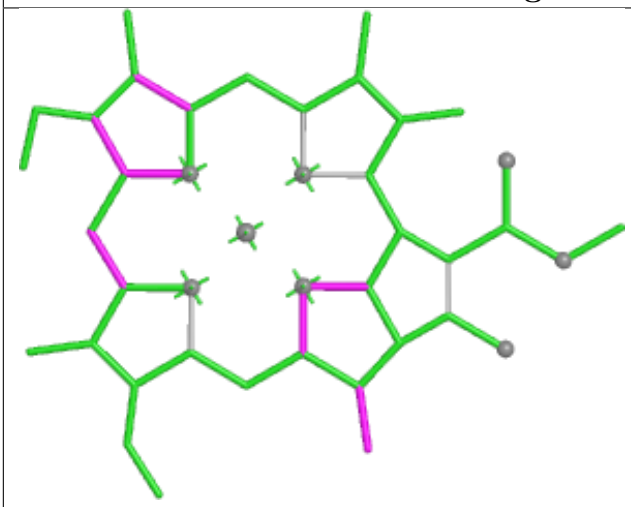


Torsions

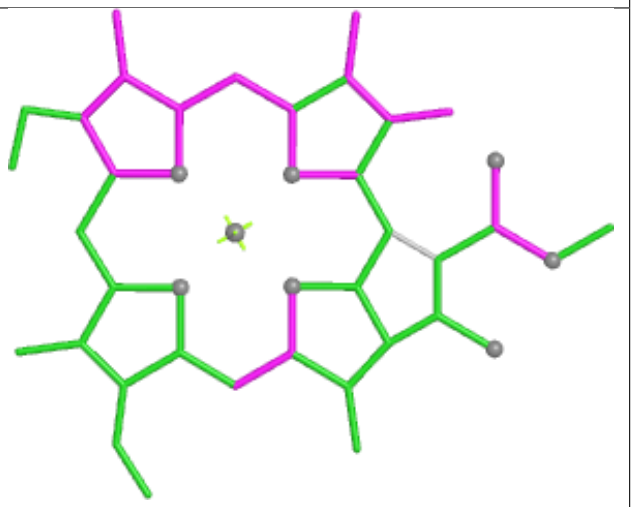


Rings

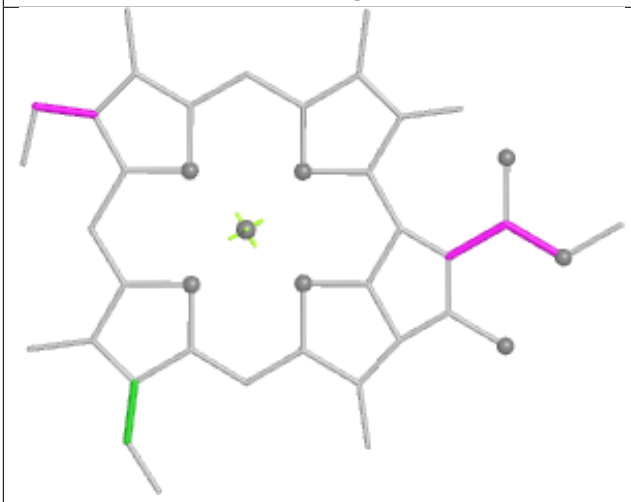
Ligand CLA B 836



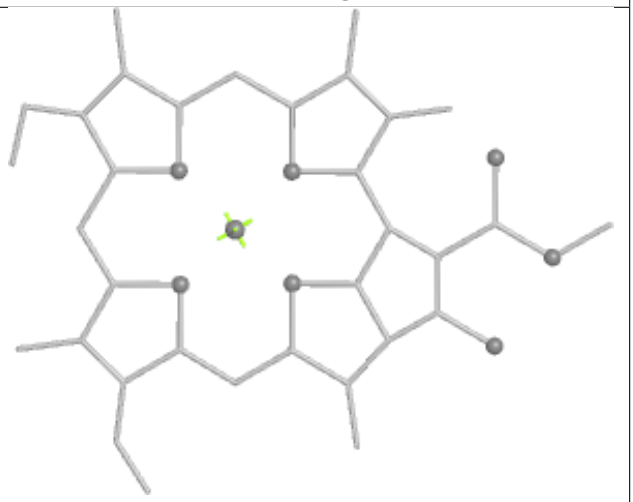
Bond lengths



Bond angles

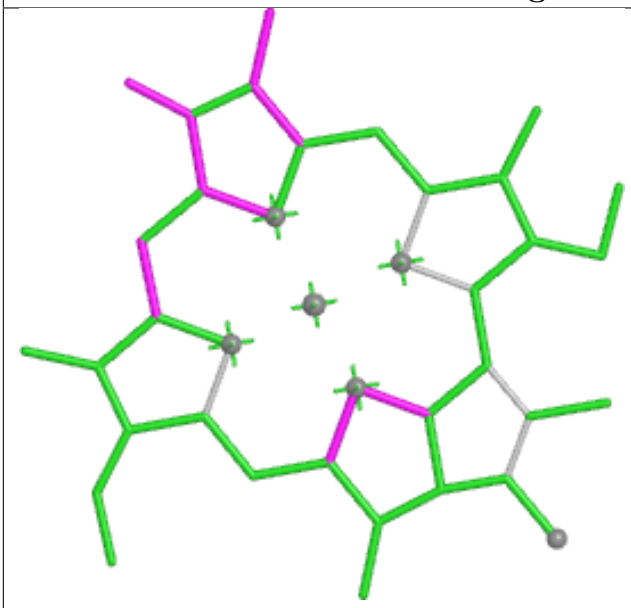


Torsions

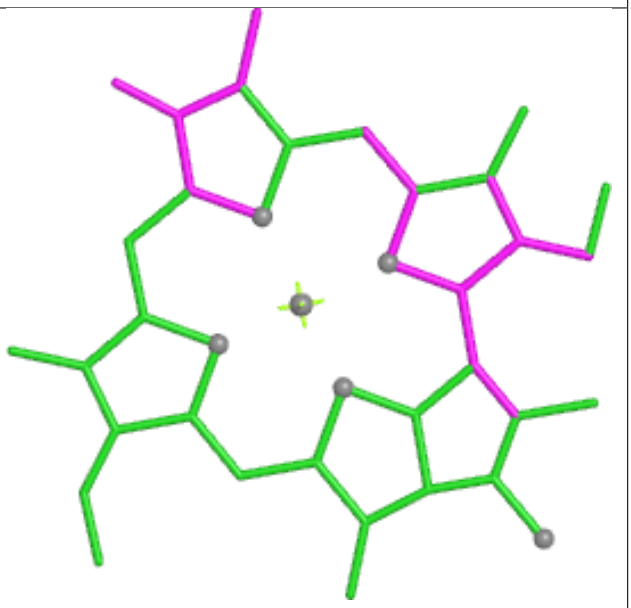


Rings

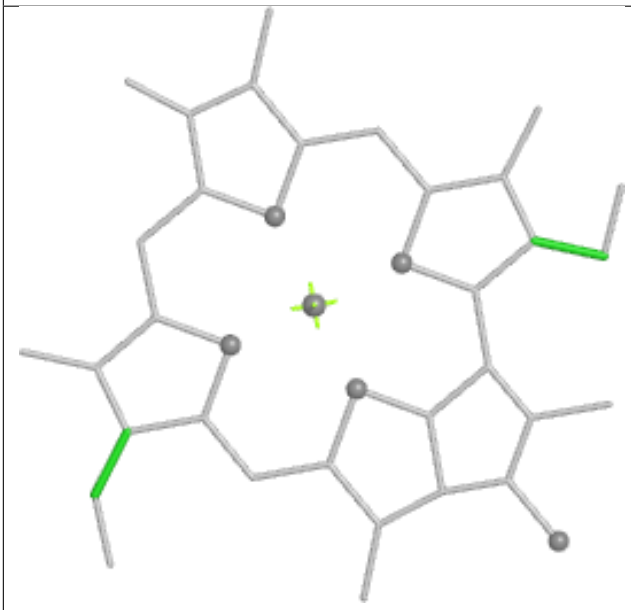
Ligand CLA 6 616



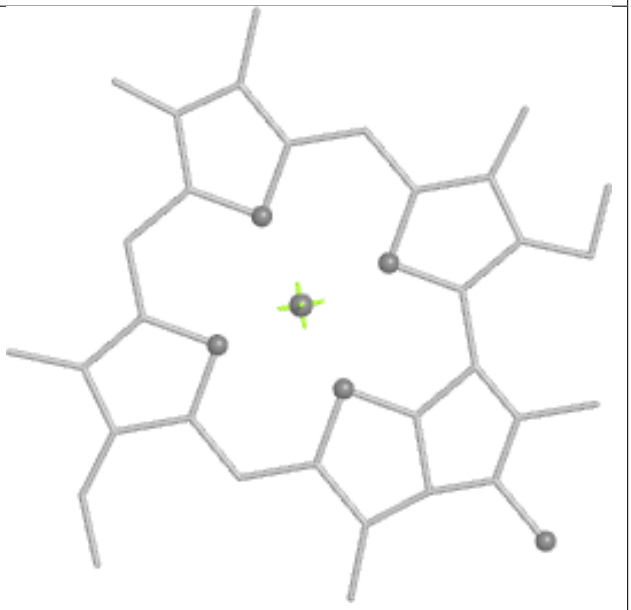
Bond lengths



Bond angles

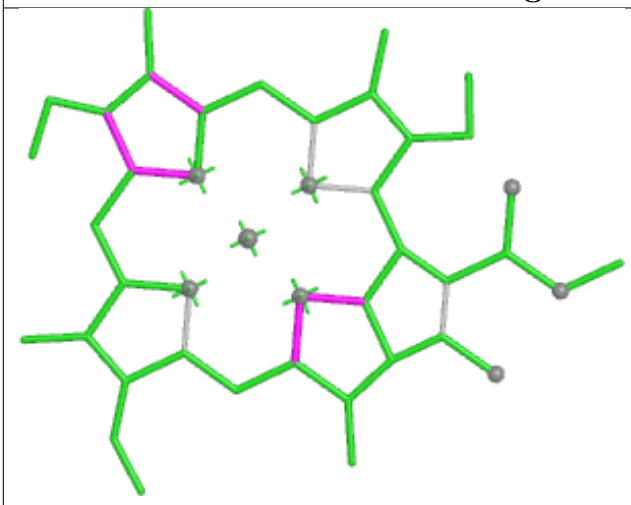


Torsions

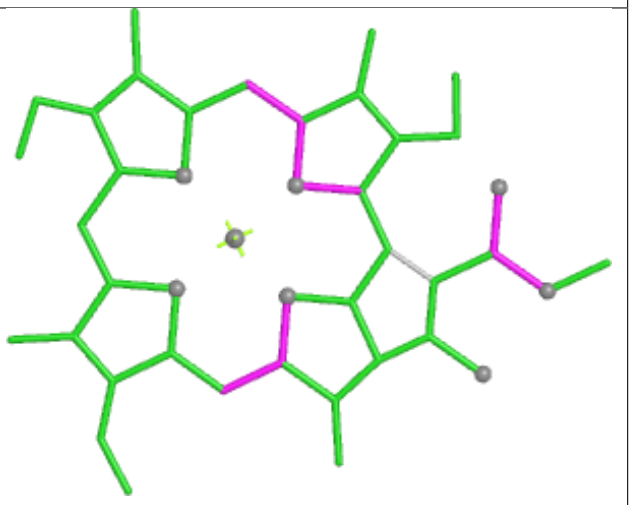


Rings

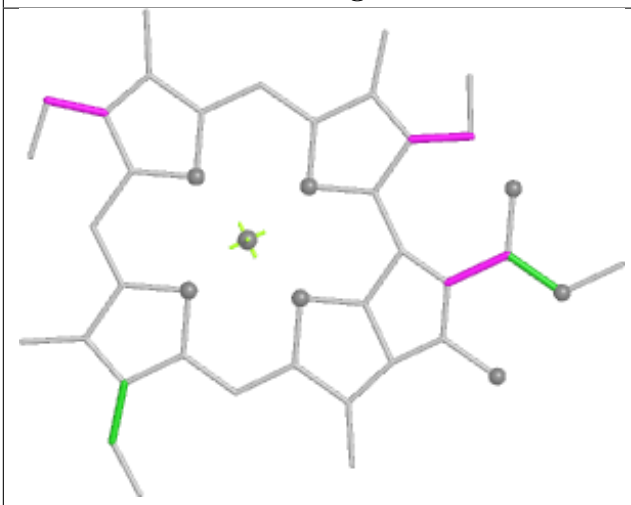
Ligand CLA B 814



Bond lengths



Bond angles

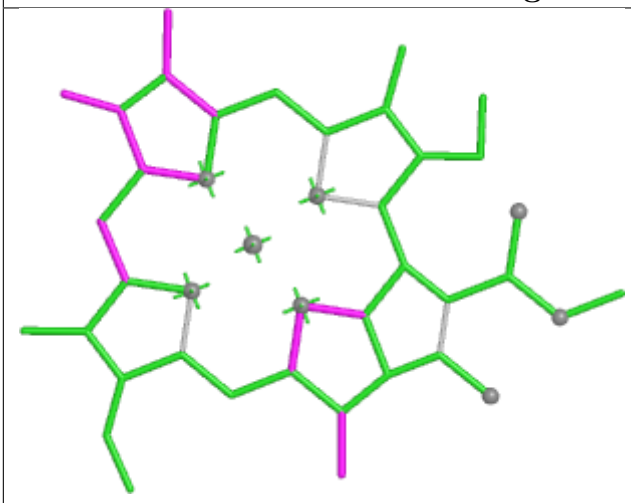


Torsions

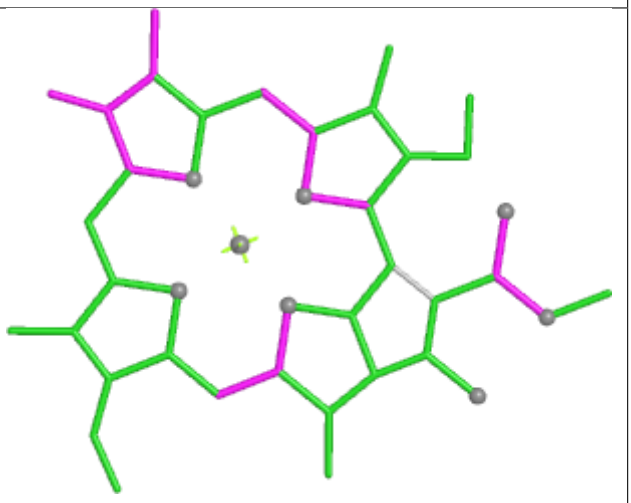


Rings

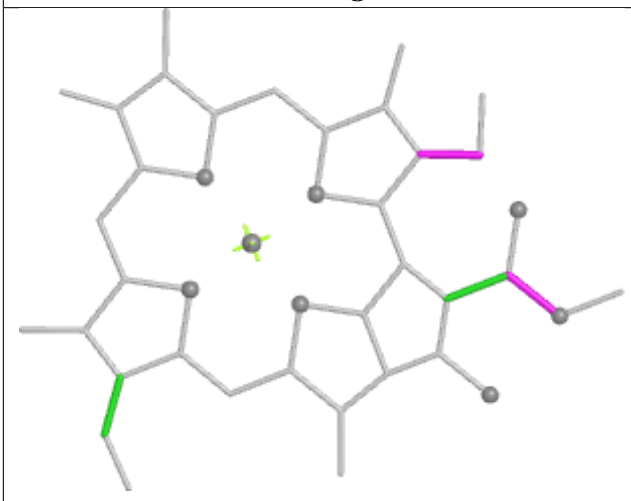
Ligand CLA A 812



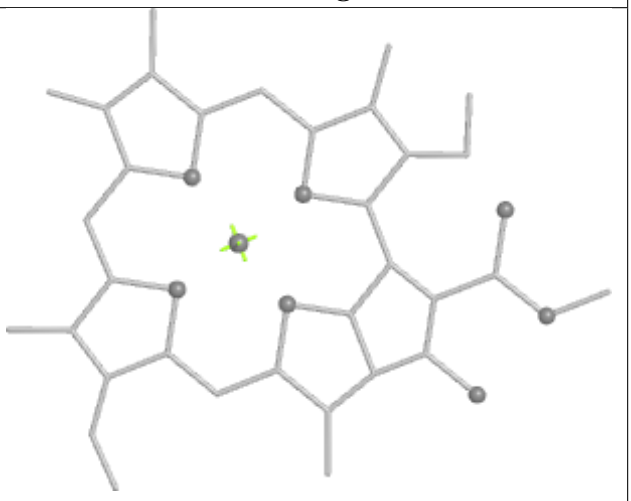
Bond lengths



Bond angles

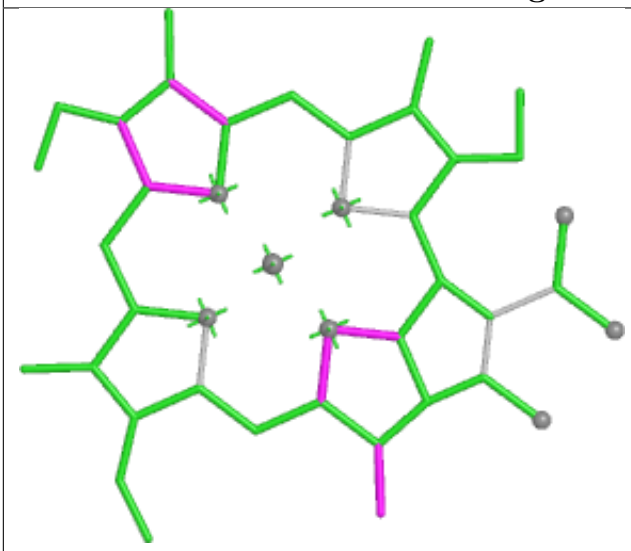


Torsions

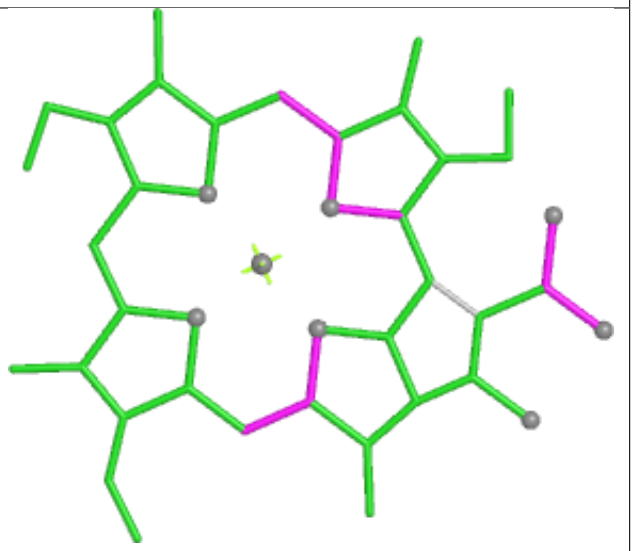


Rings

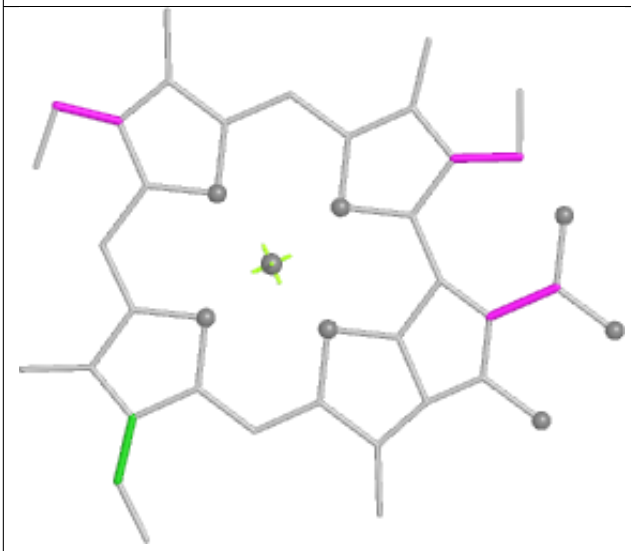
Ligand CLA 5 605



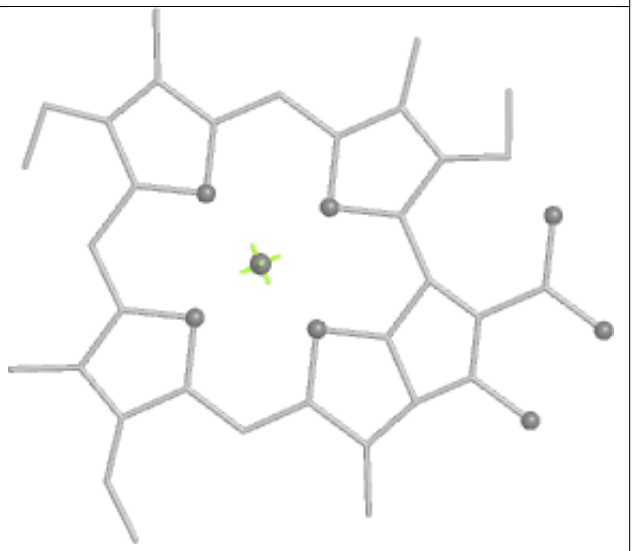
Bond lengths



Bond angles

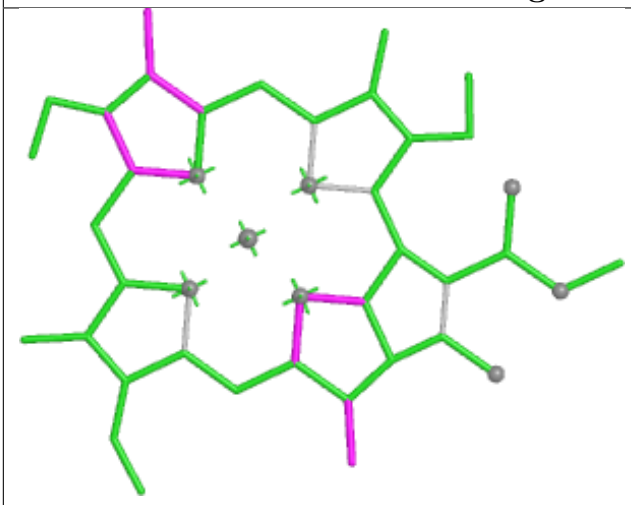


Torsions

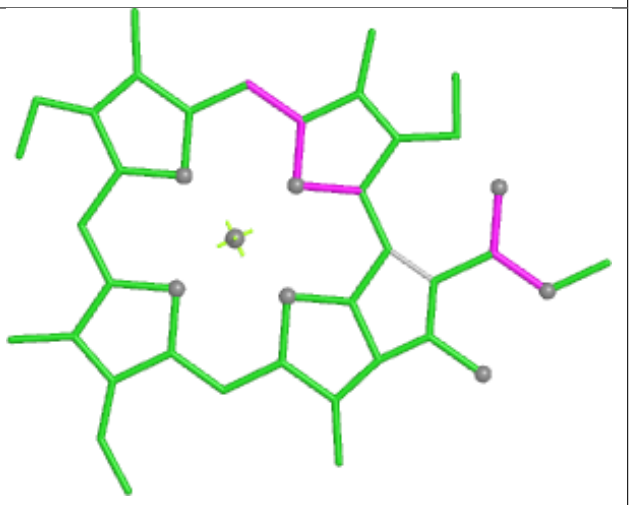


Rings

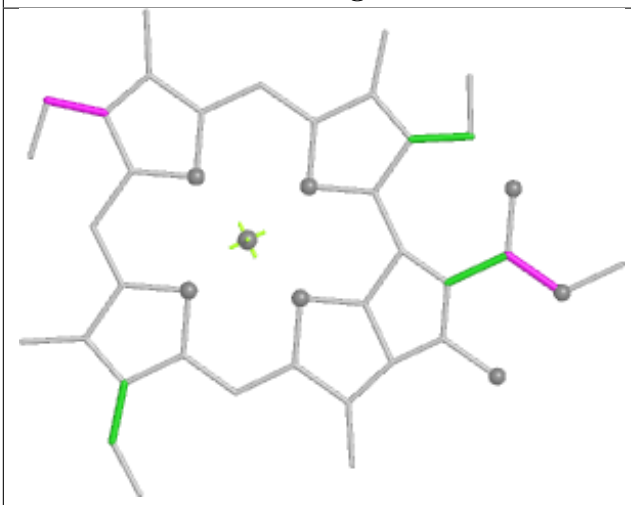
Ligand CLA 6 610



Bond lengths



Bond angles

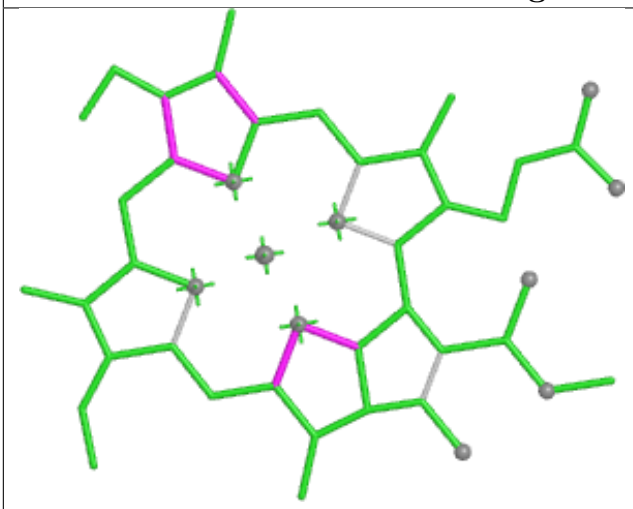


Torsions

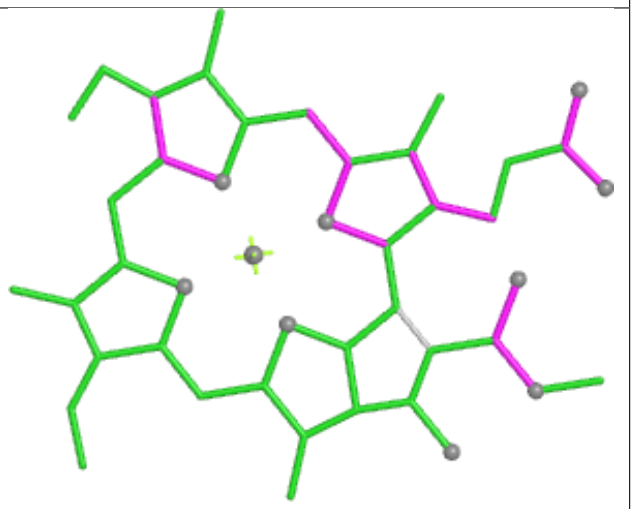


Rings

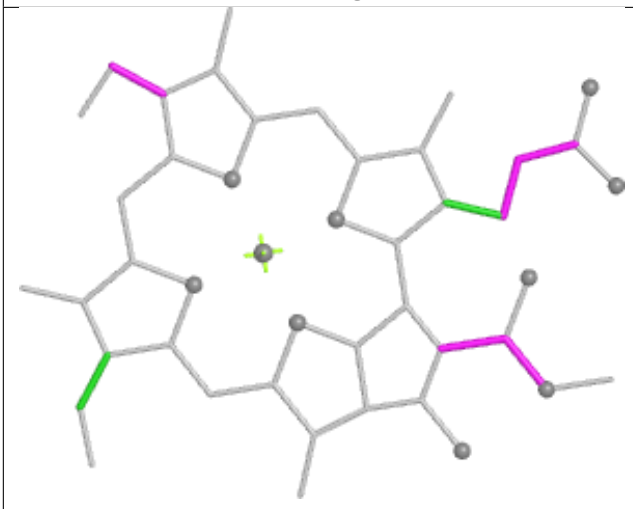
Ligand CLA 1 603



Bond lengths



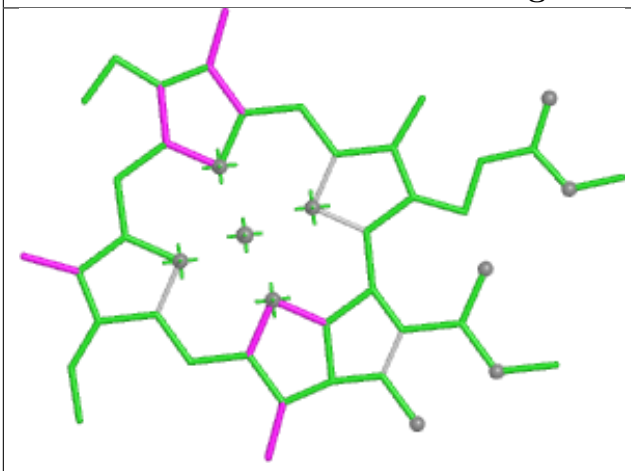
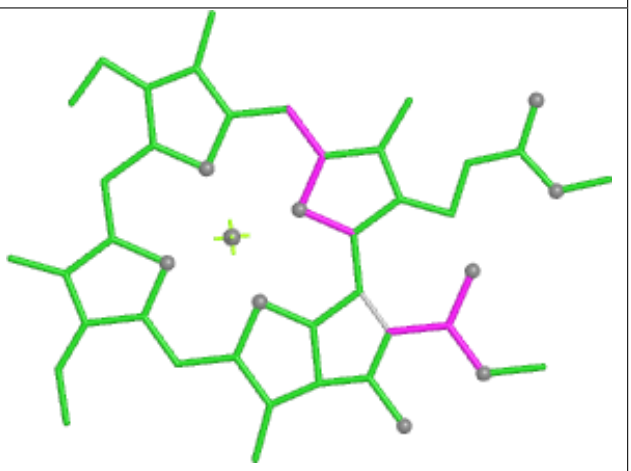
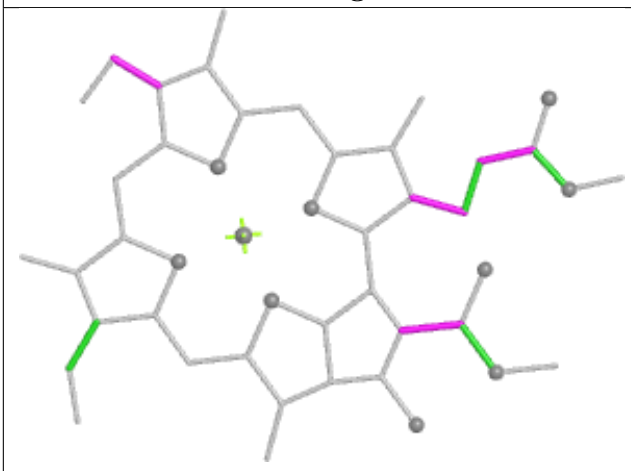
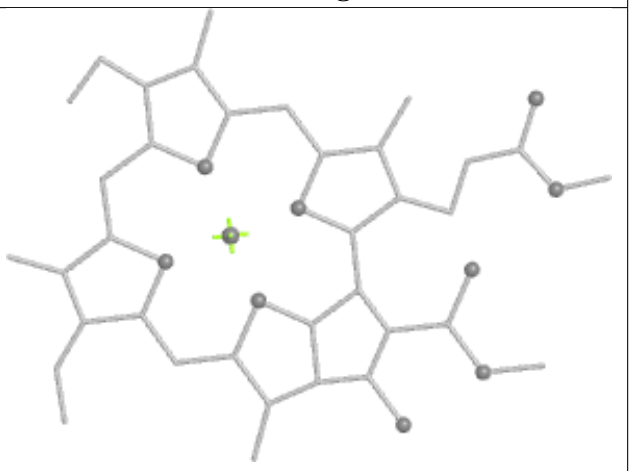
Bond angles



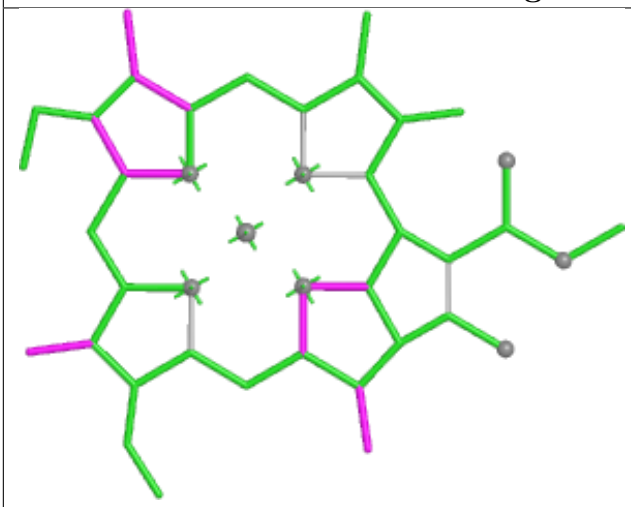
Torsions



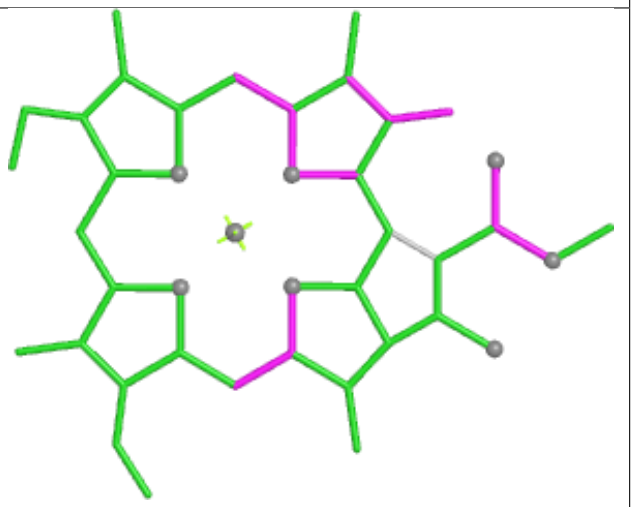
Rings

Ligand CLA 7 601	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

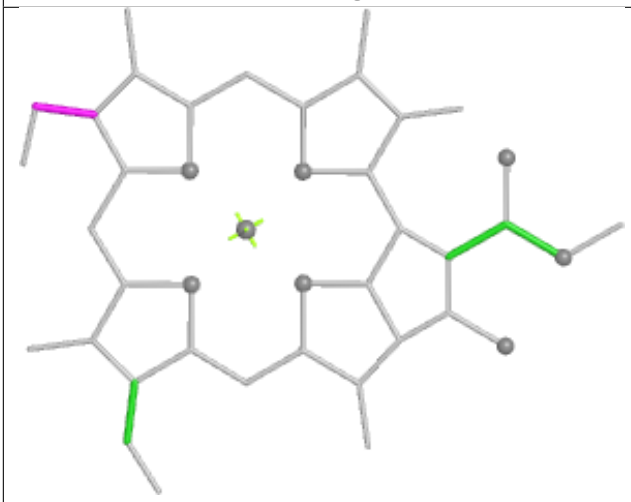
Ligand CLA B 835



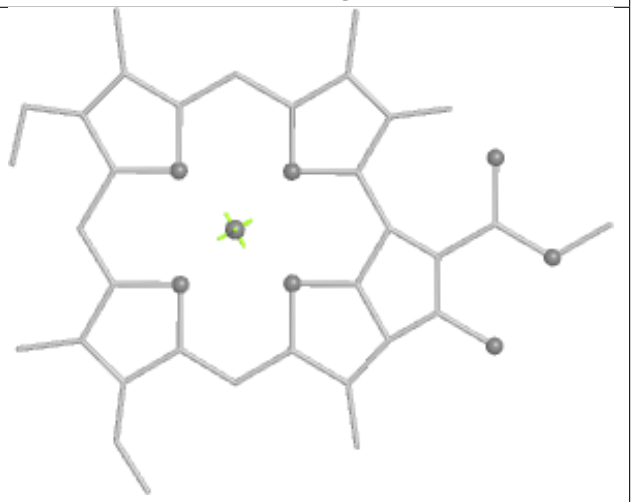
Bond lengths



Bond angles

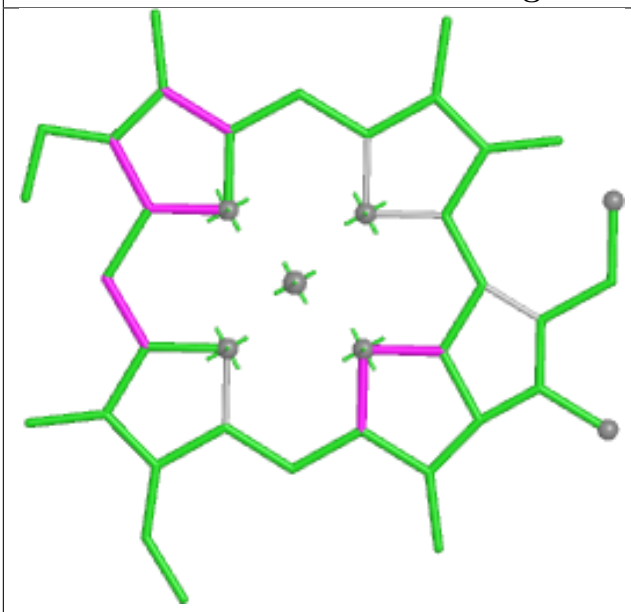


Torsions

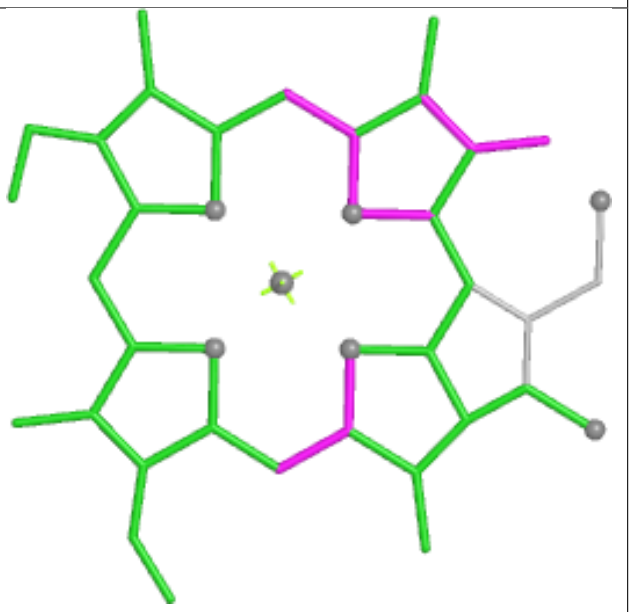


Rings

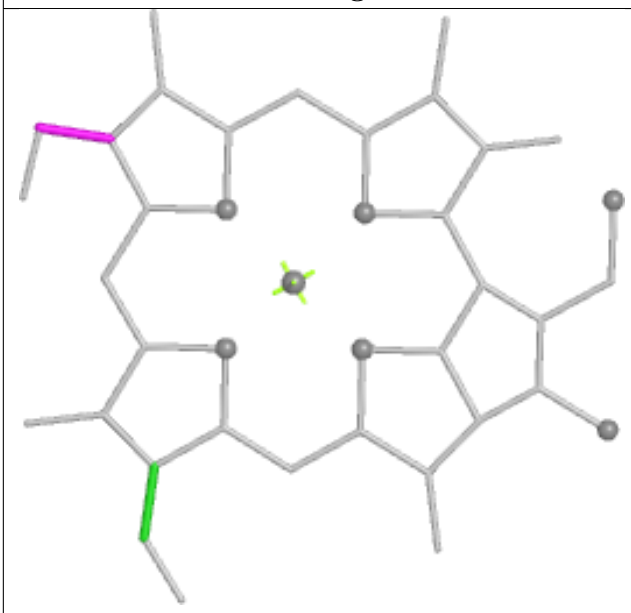
Ligand CLA K 203



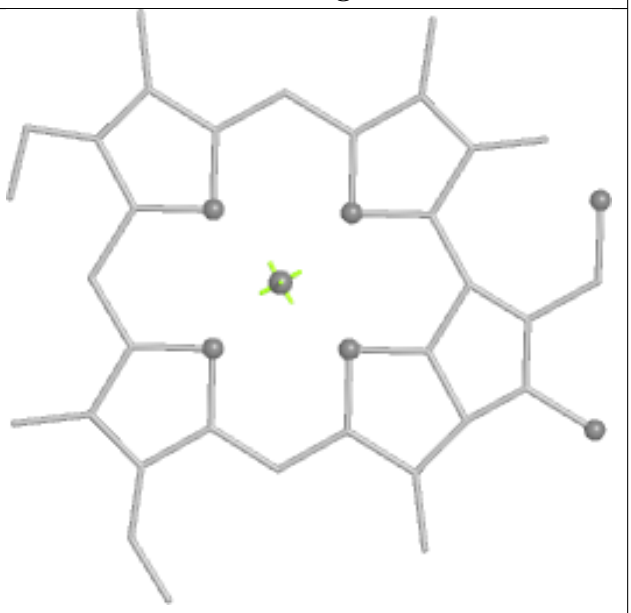
Bond lengths



Bond angles

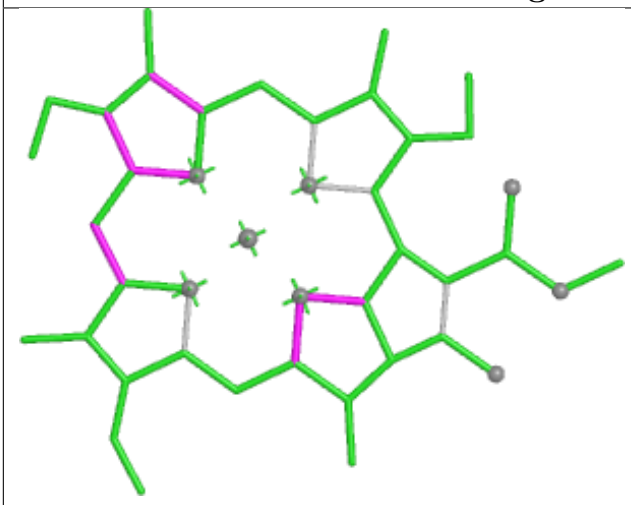


Torsions

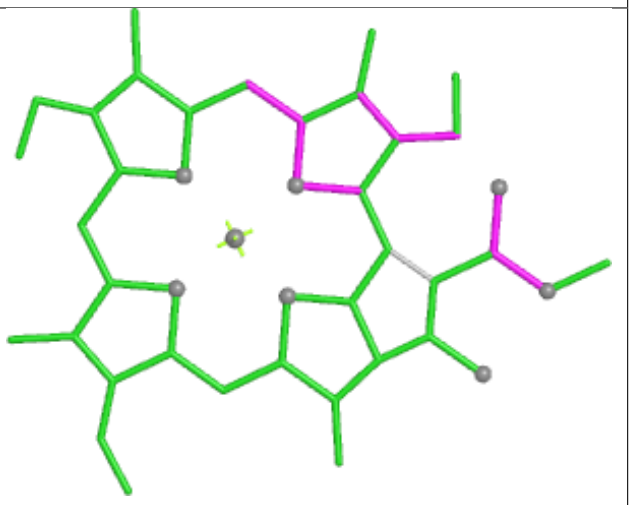


Rings

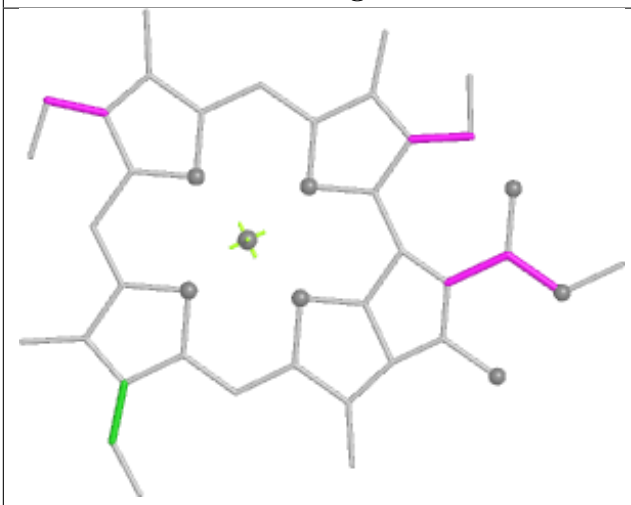
Ligand CLA 6 607



Bond lengths



Bond angles

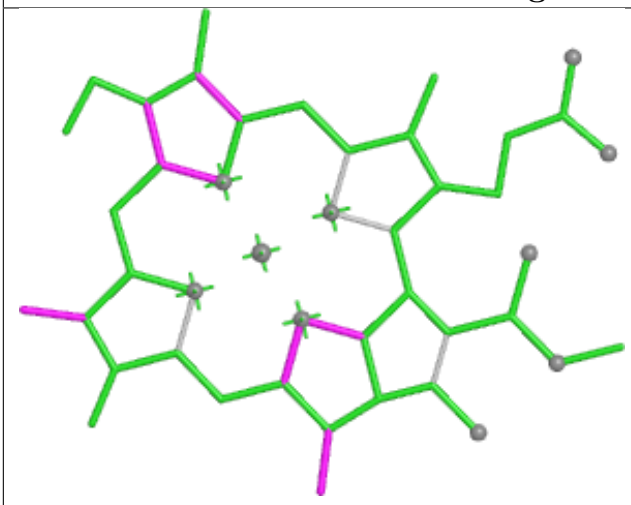


Torsions

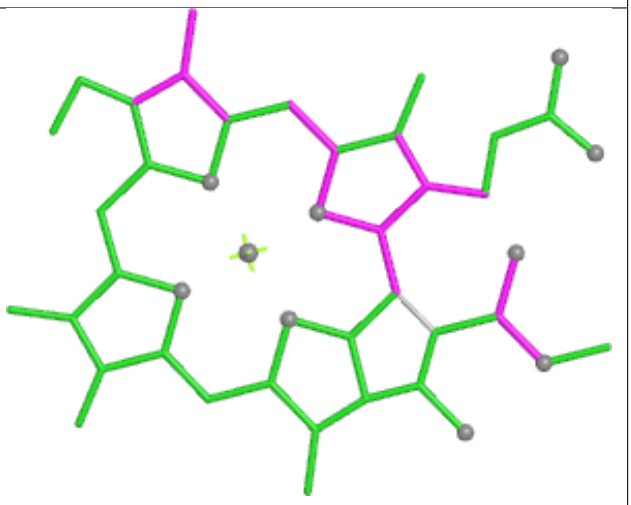


Rings

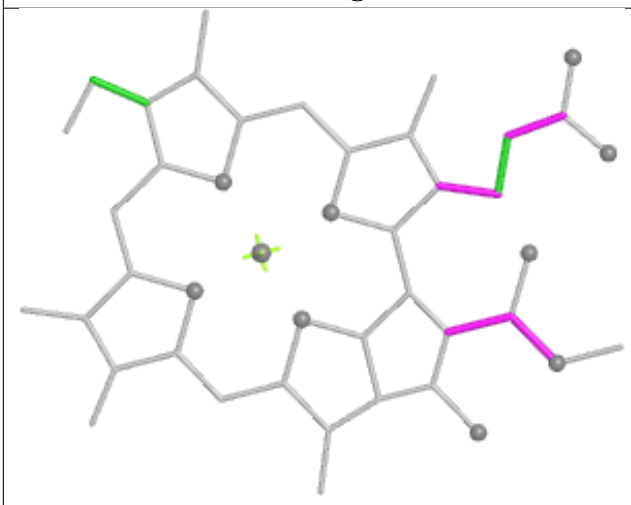
Ligand CLA 7 611



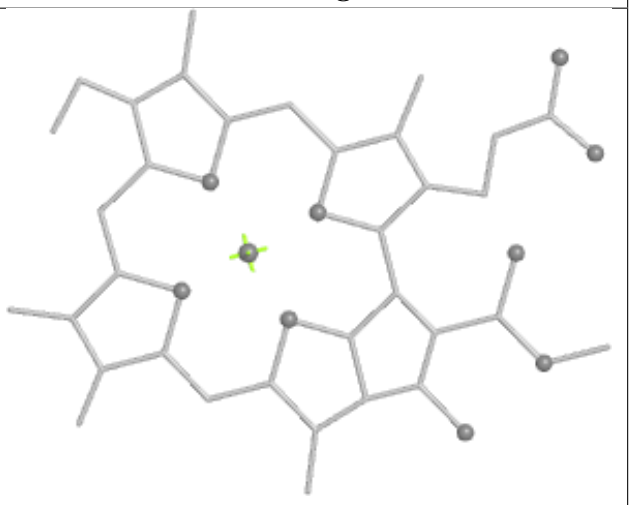
Bond lengths



Bond angles

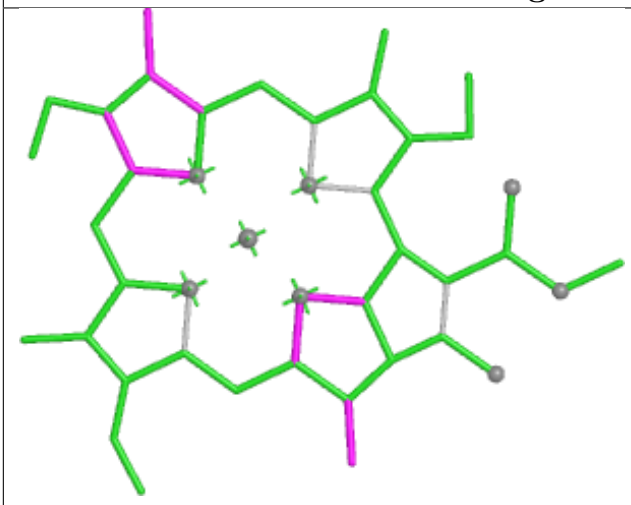


Torsions

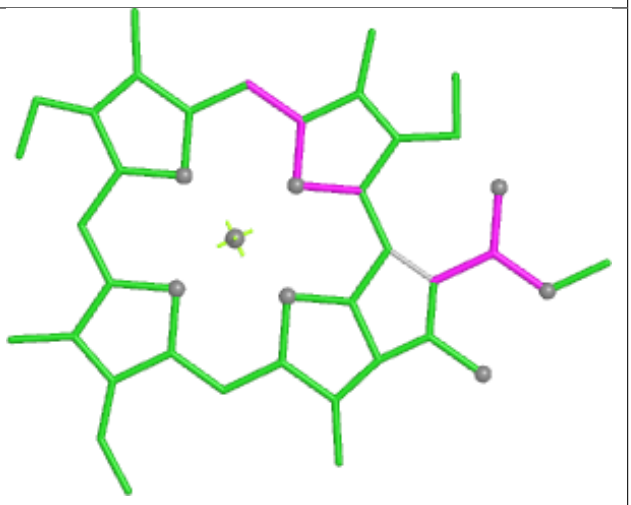


Rings

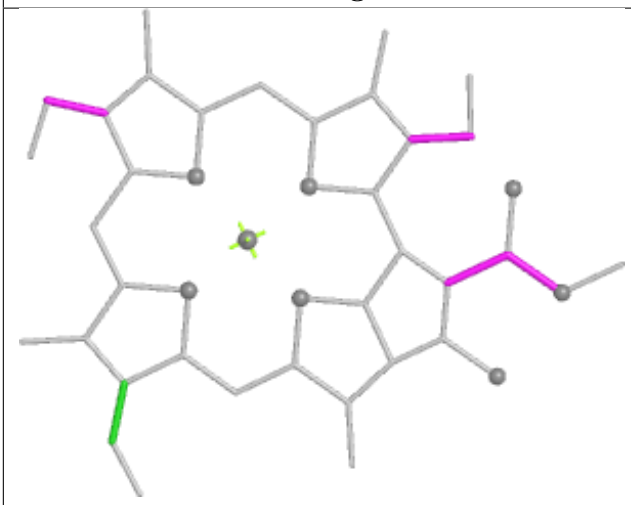
Ligand CLA 8 601



Bond lengths



Bond angles

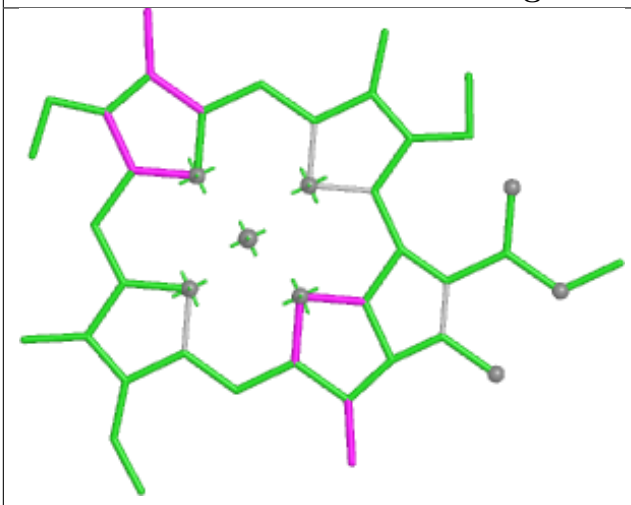


Torsions

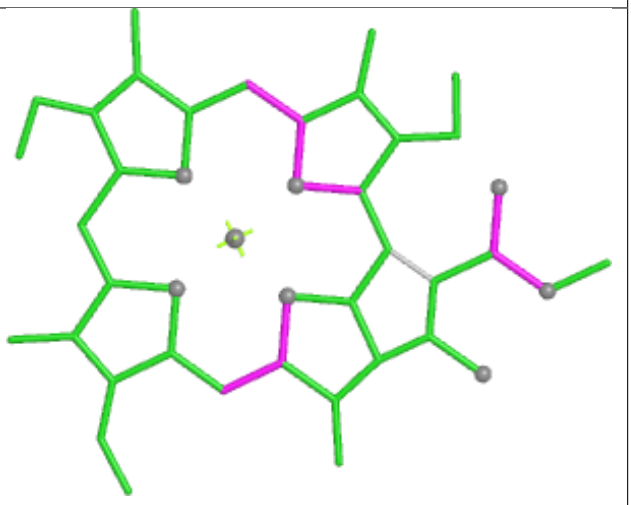


Rings

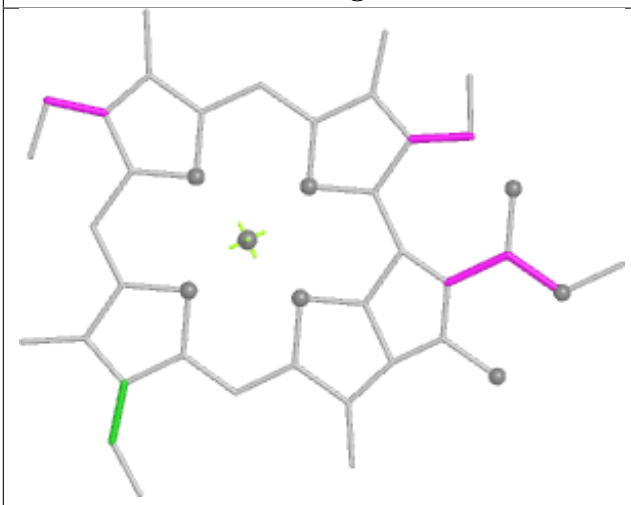
Ligand CLA A 824



Bond lengths



Bond angles

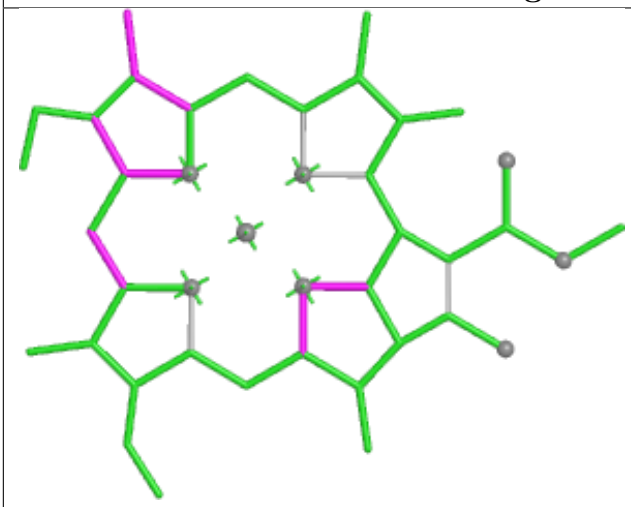


Torsions

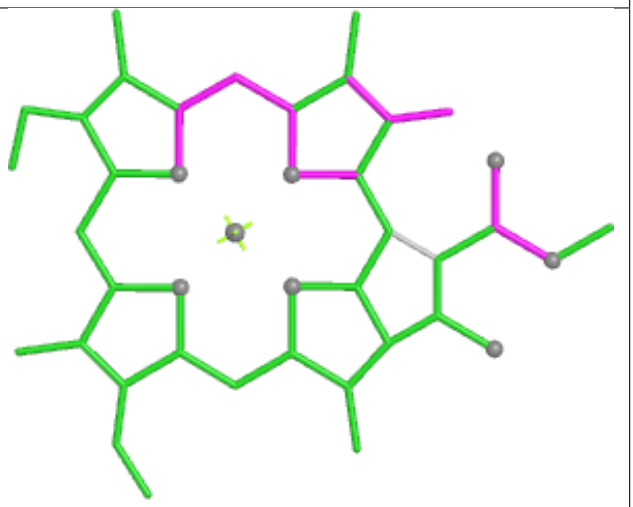


Rings

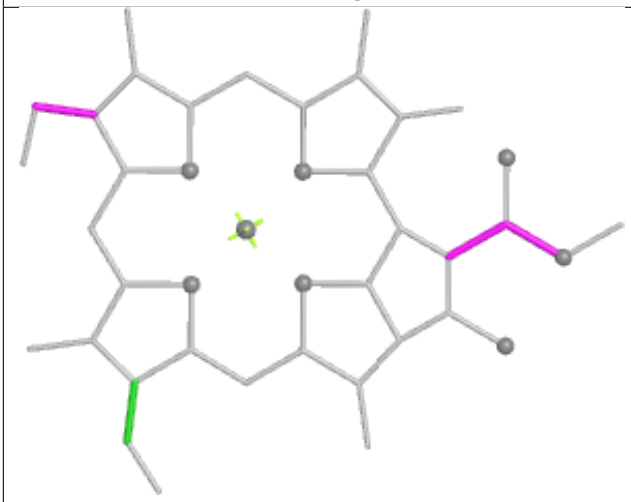
Ligand CLA B 821



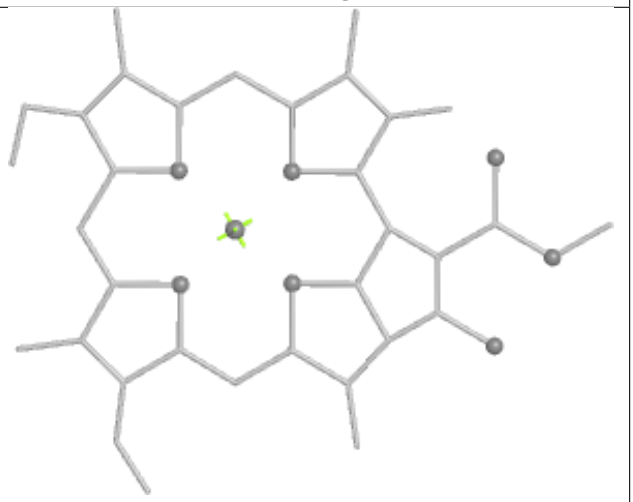
Bond lengths



Bond angles

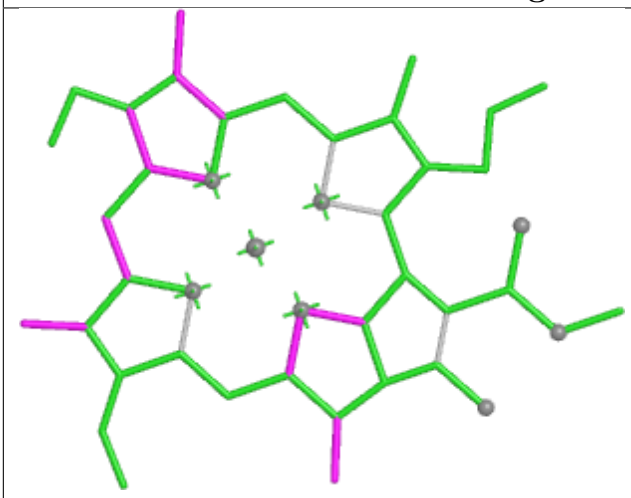


Torsions

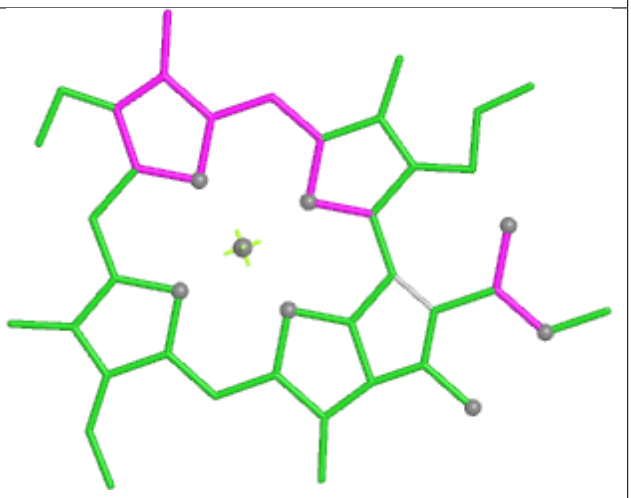


Rings

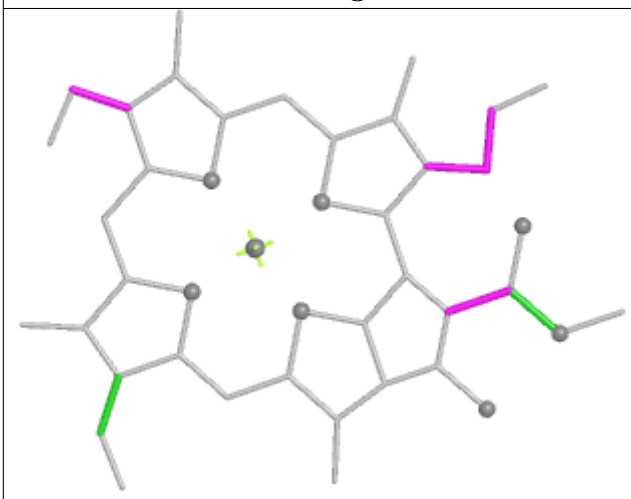
Ligand CLA 6 608



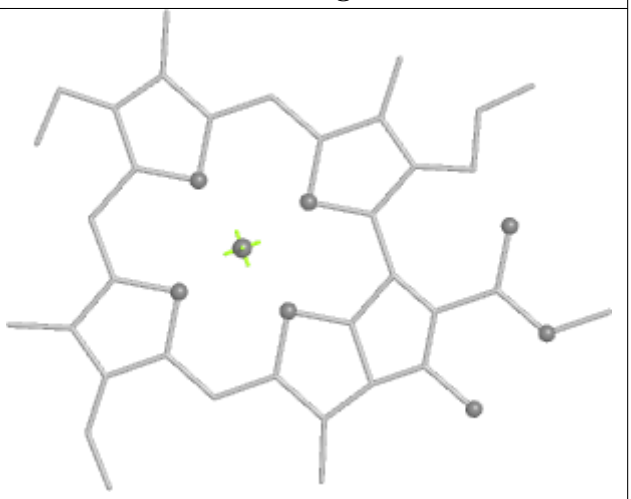
Bond lengths



Bond angles

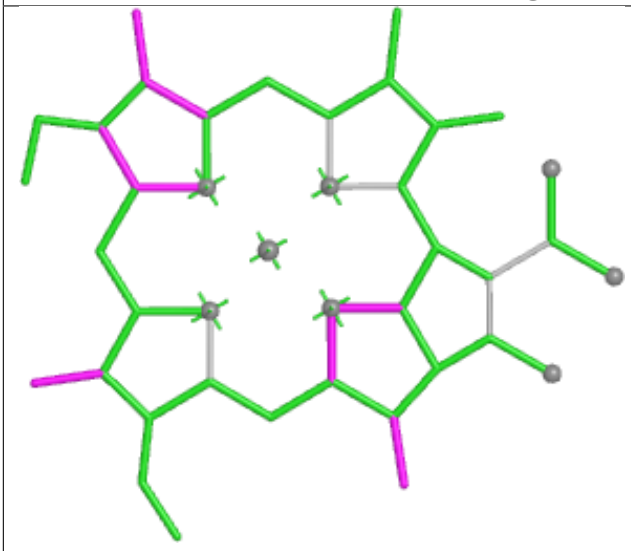


Torsions

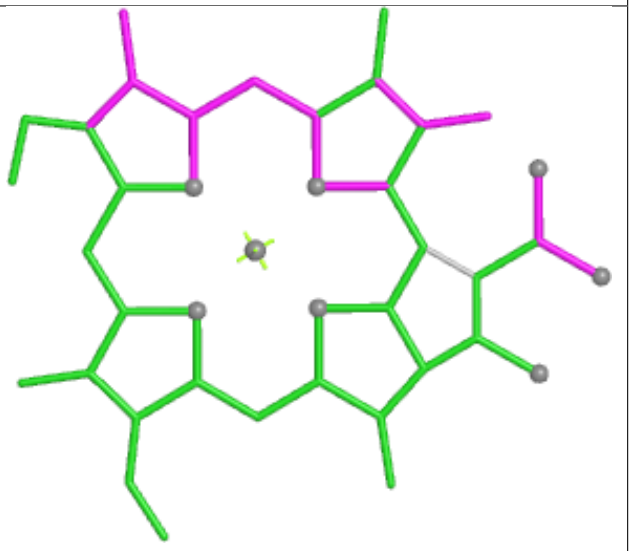


Rings

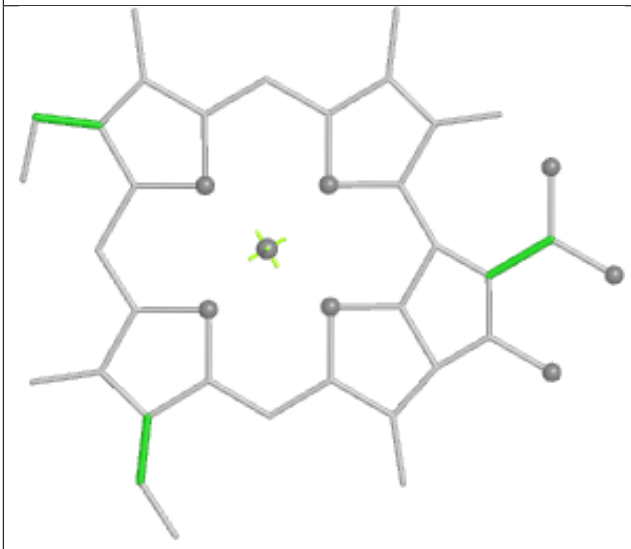
Ligand CLA B 830



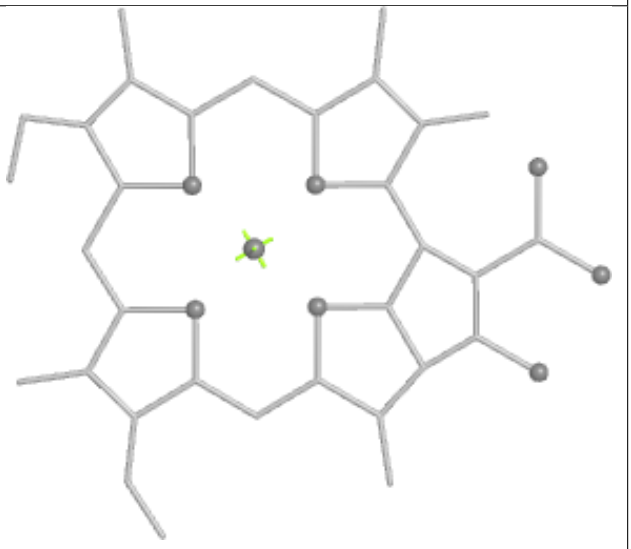
Bond lengths



Bond angles

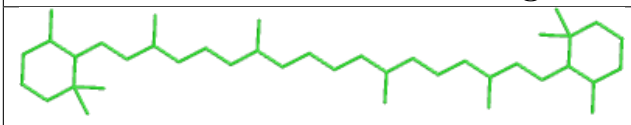


Torsions

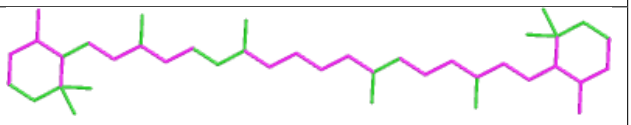


Rings

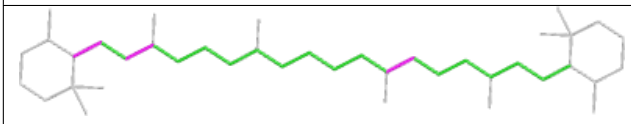
Ligand BCR A 845



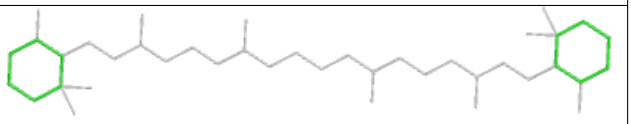
Bond lengths



Bond angles

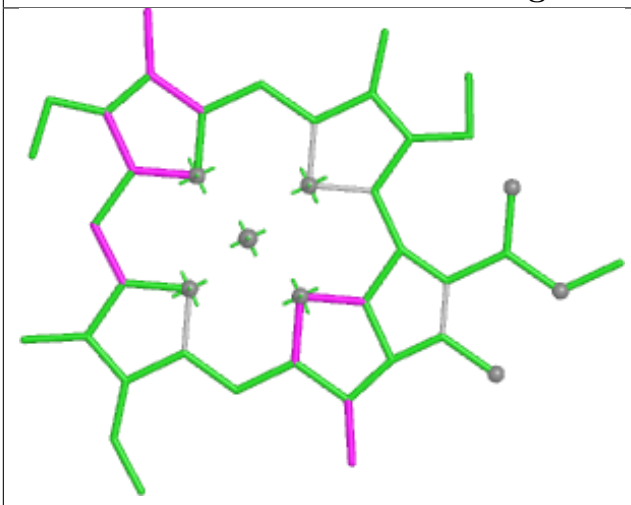


Torsions

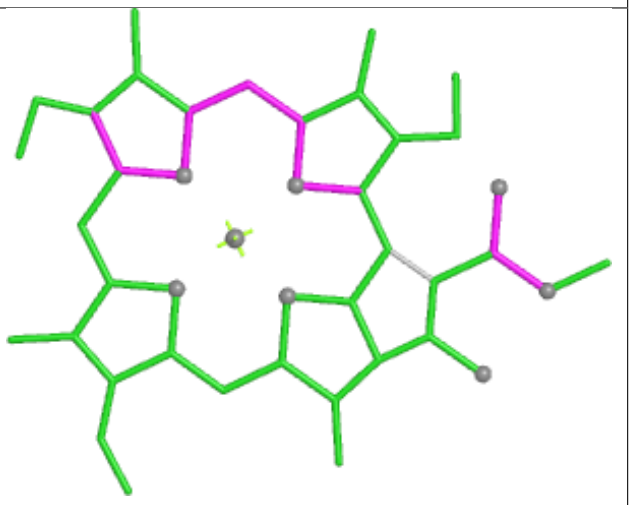


Rings

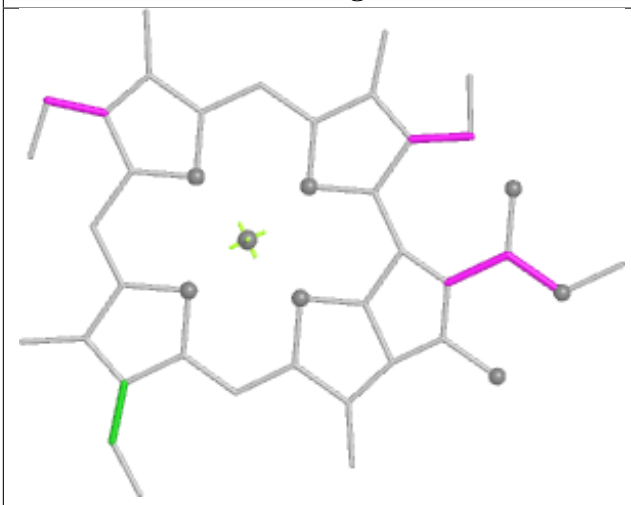
Ligand CLA 8 602



Bond lengths



Bond angles

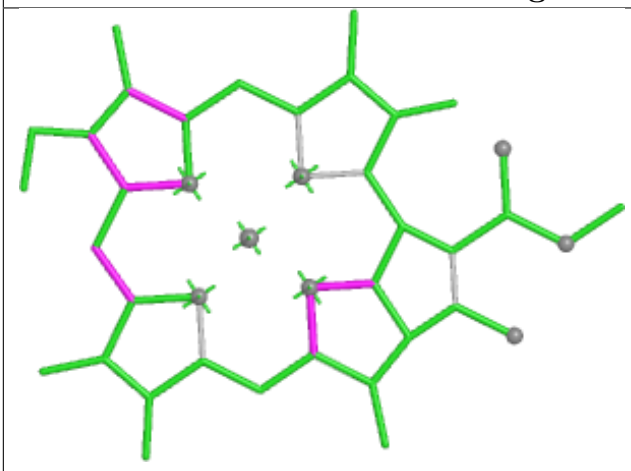


Torsions

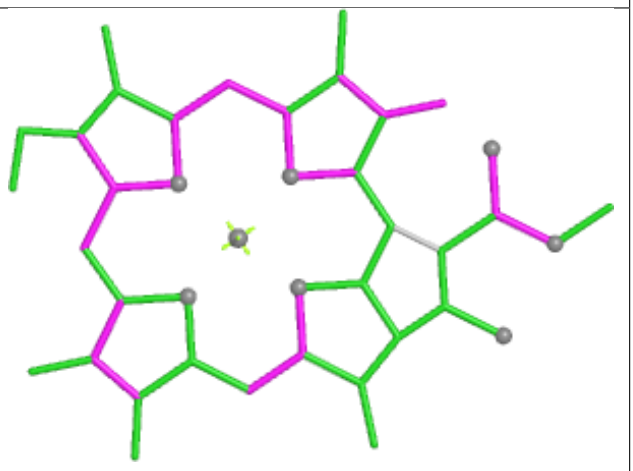


Rings

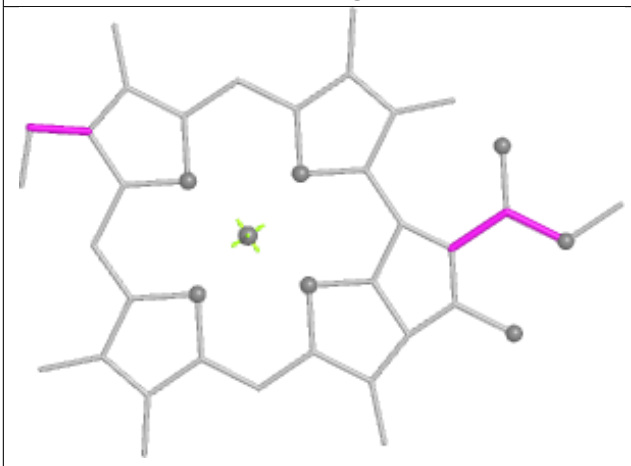
Ligand CLA 8 605



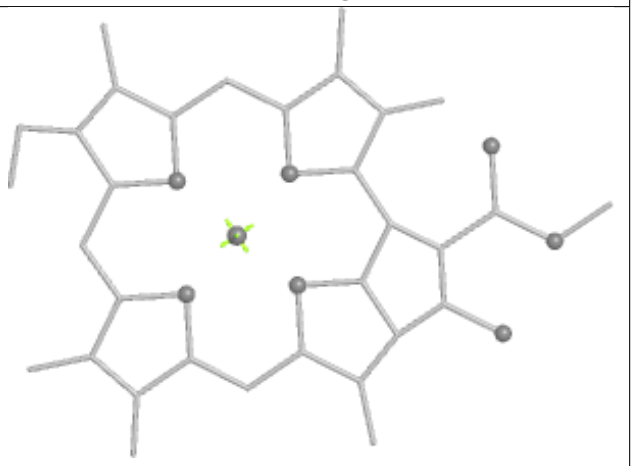
Bond lengths



Bond angles

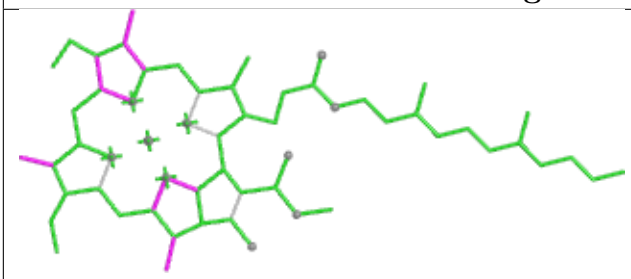


Torsions

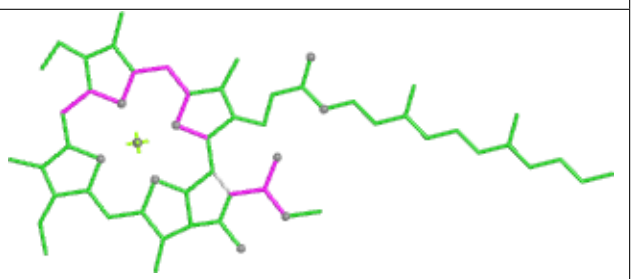


Rings

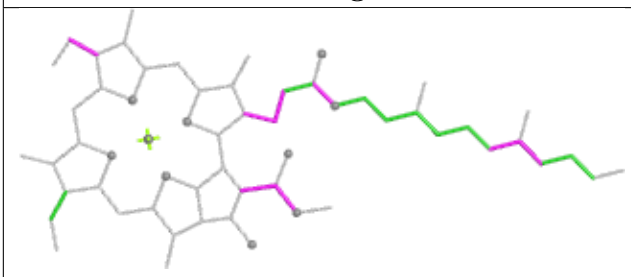
Ligand CLA A 819



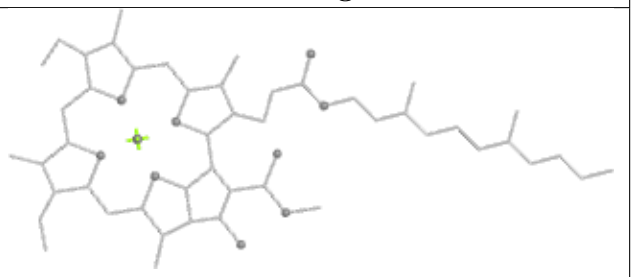
Bond lengths



Bond angles

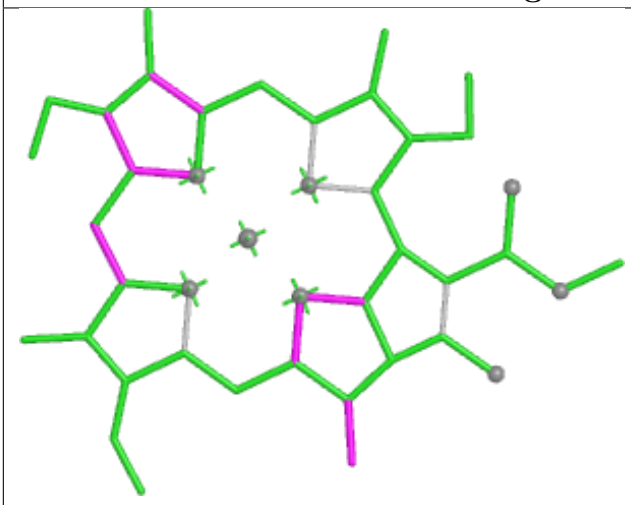


Torsions

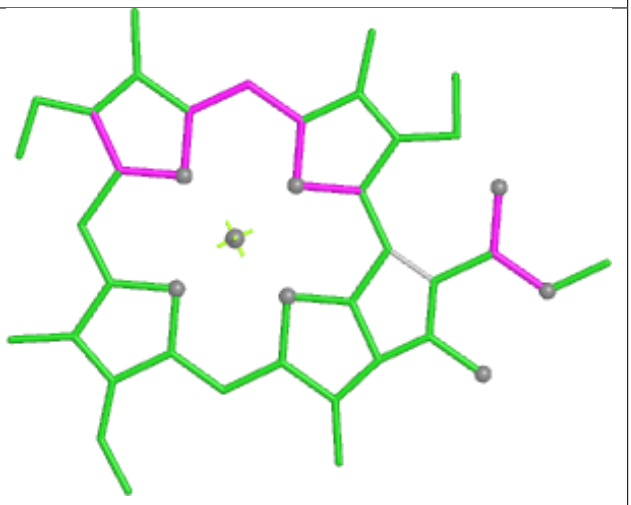


Rings

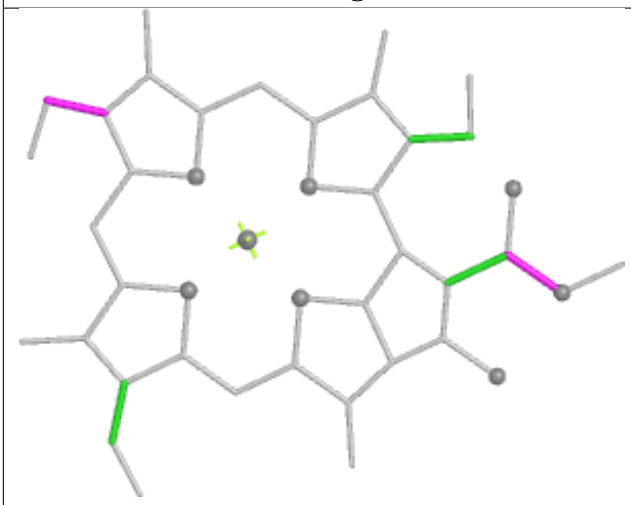
Ligand CLA B 822



Bond lengths



Bond angles

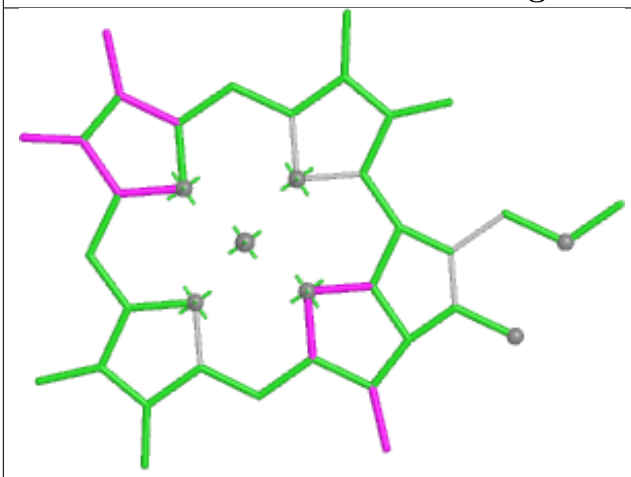


Torsions

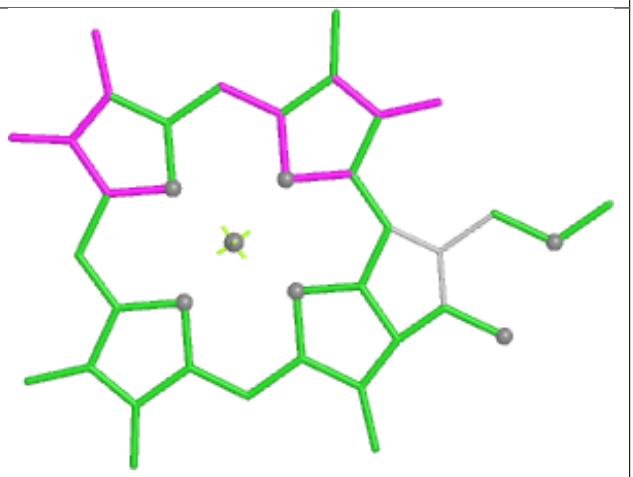


Rings

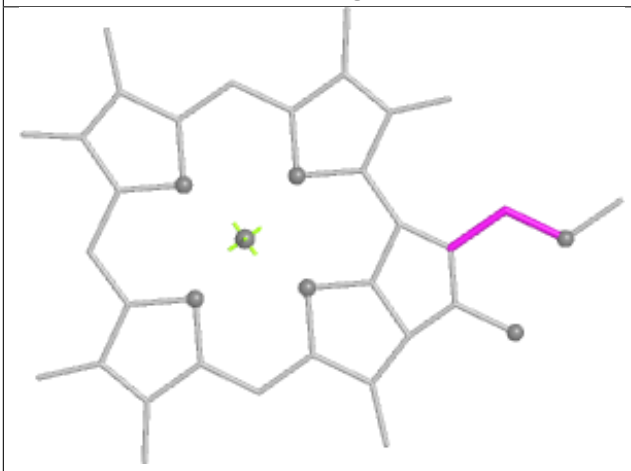
Ligand CLA 5 615



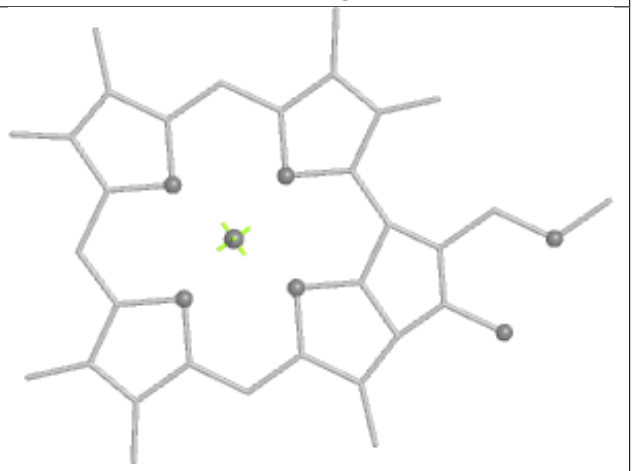
Bond lengths



Bond angles

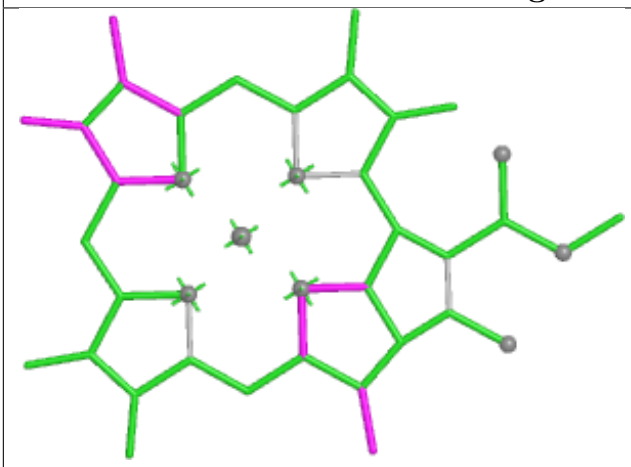


Torsions

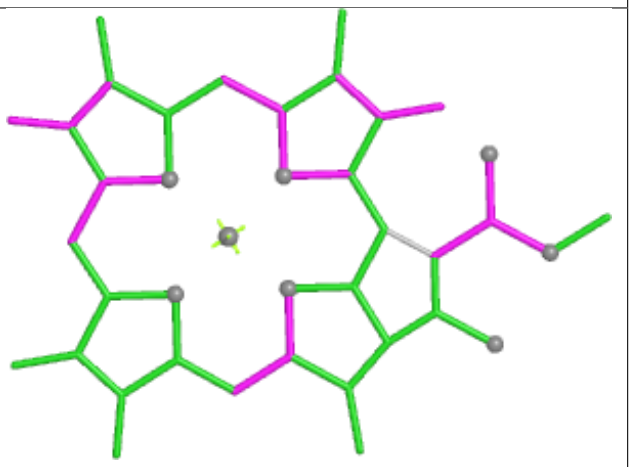


Rings

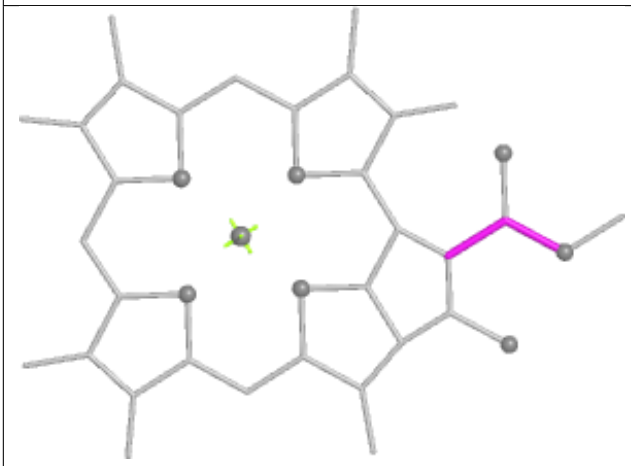
Ligand CLA 5 604



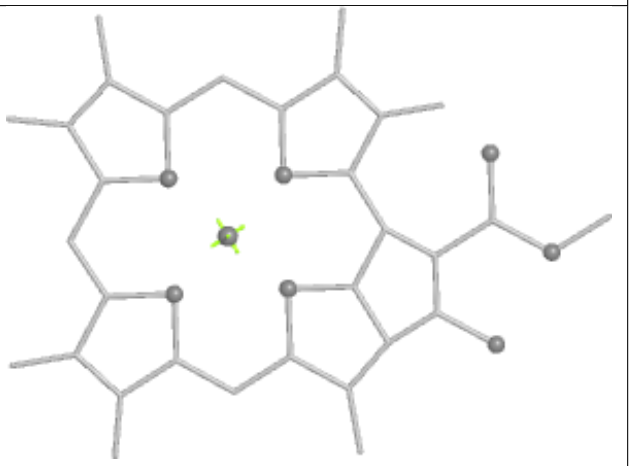
Bond lengths



Bond angles

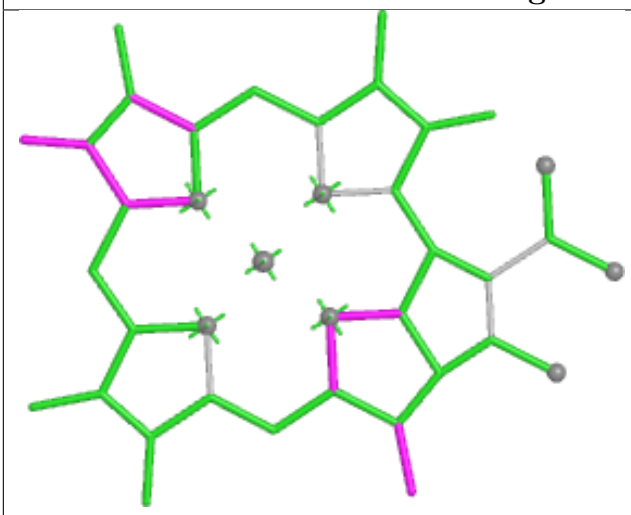


Torsions

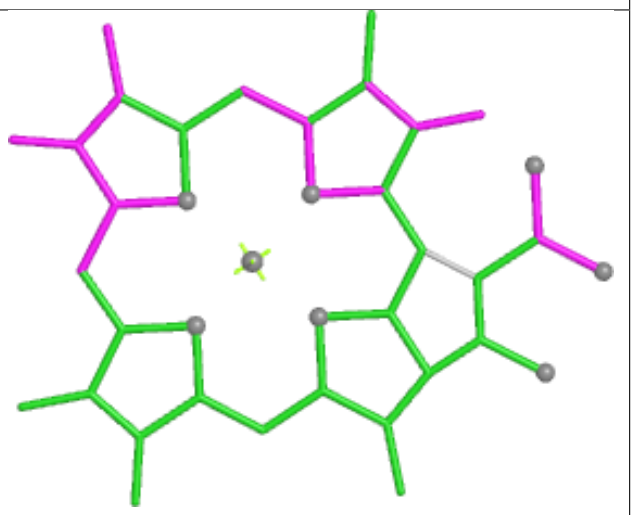


Rings

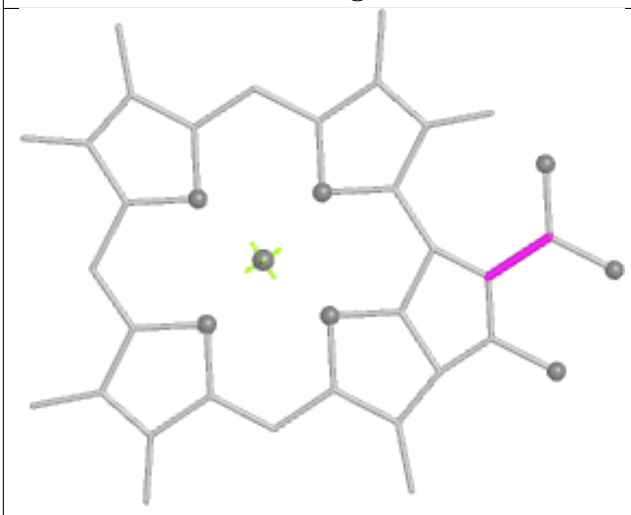
Ligand CLA 3 409



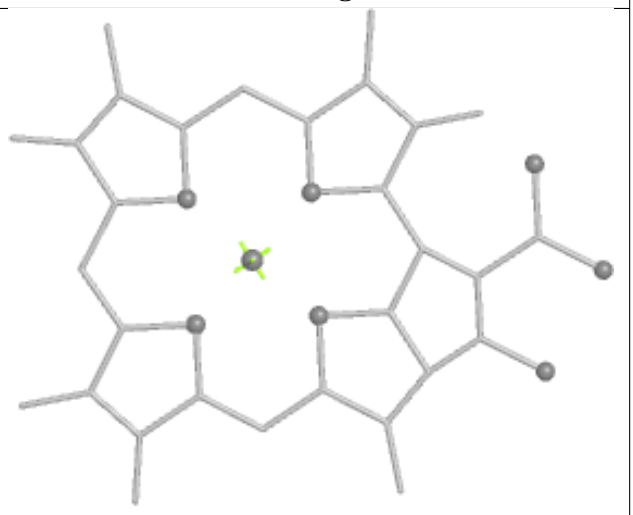
Bond lengths



Bond angles

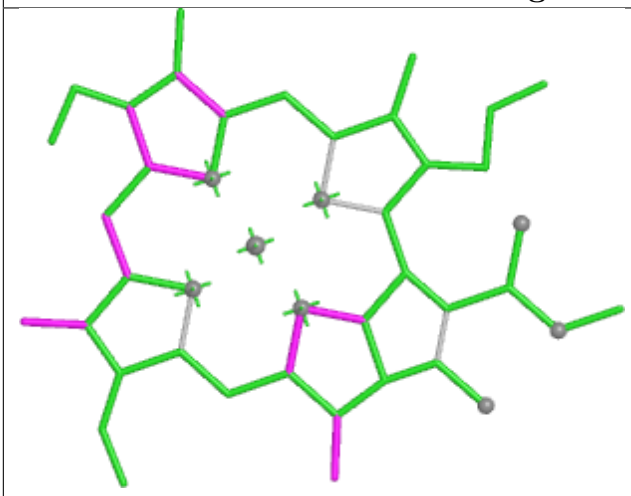


Torsions

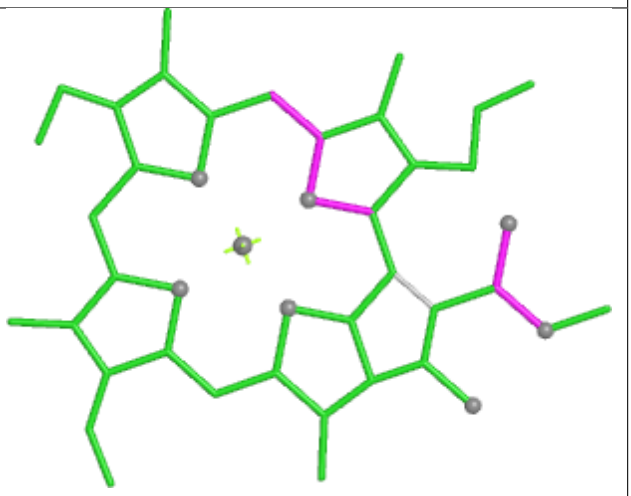


Rings

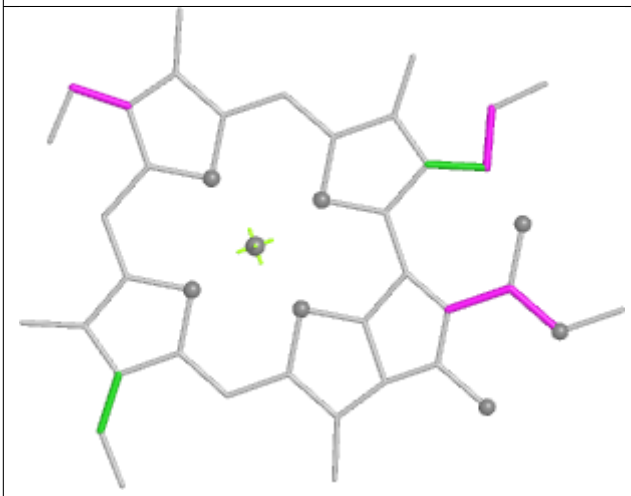
Ligand CLA 6 609



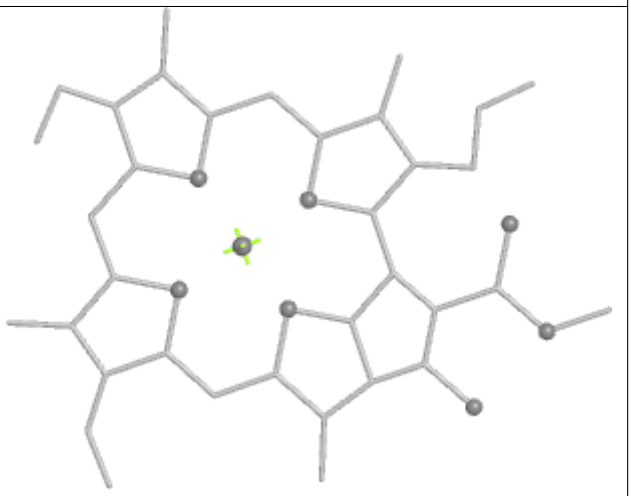
Bond lengths



Bond angles

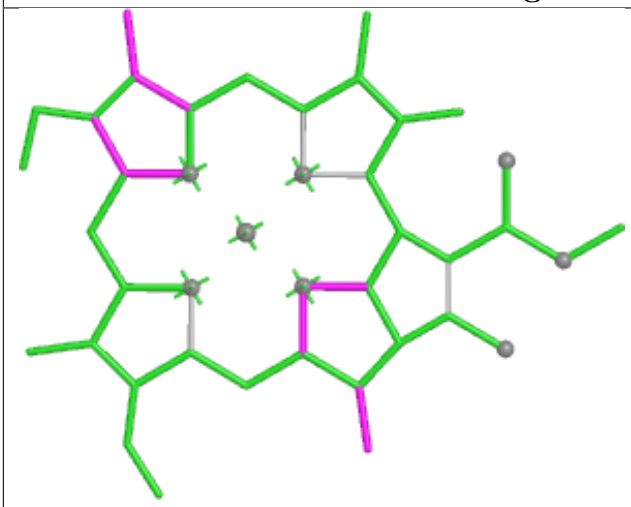


Torsions

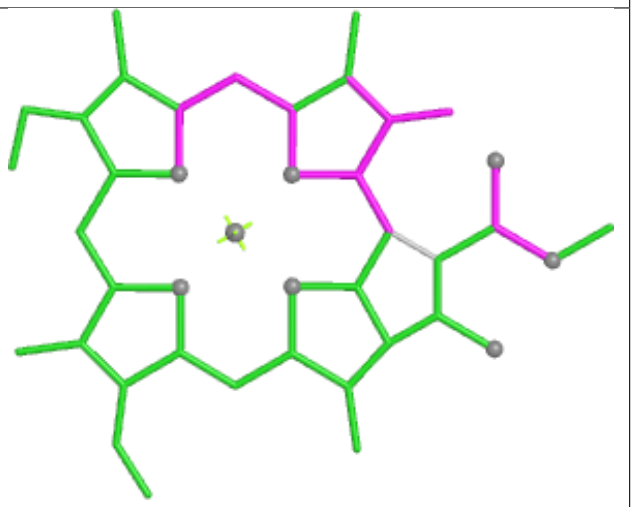


Rings

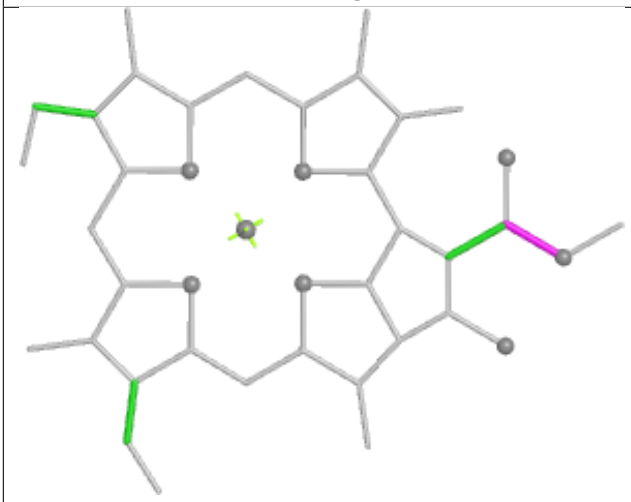
Ligand CLA A 837



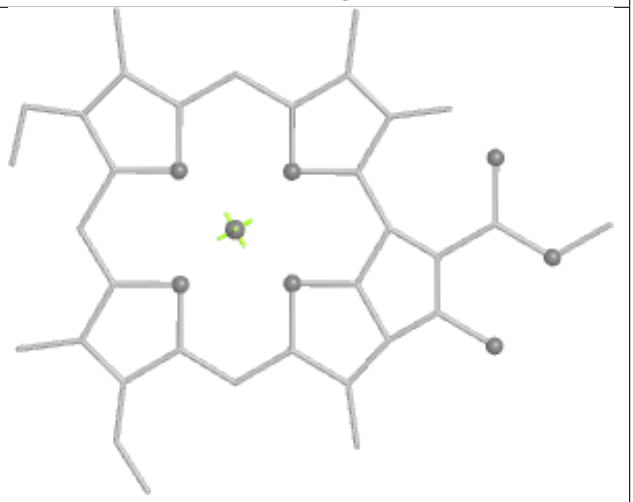
Bond lengths



Bond angles

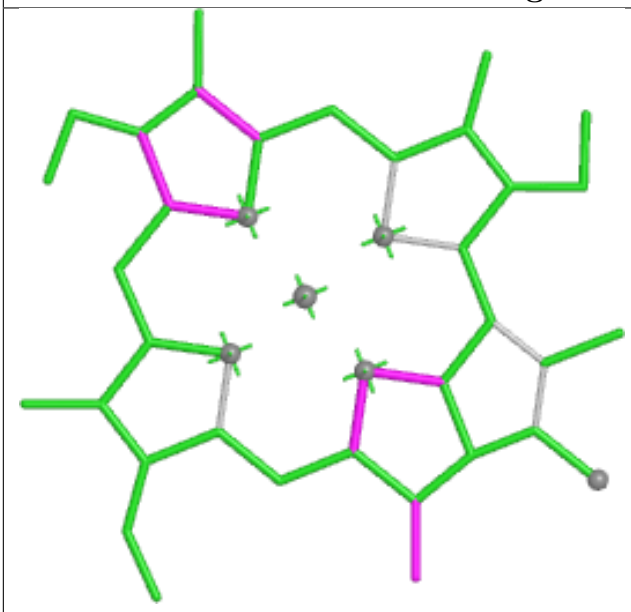


Torsions

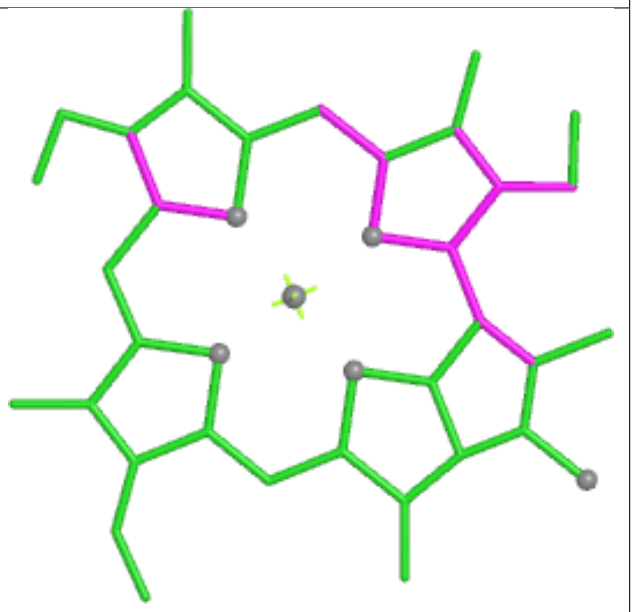


Rings

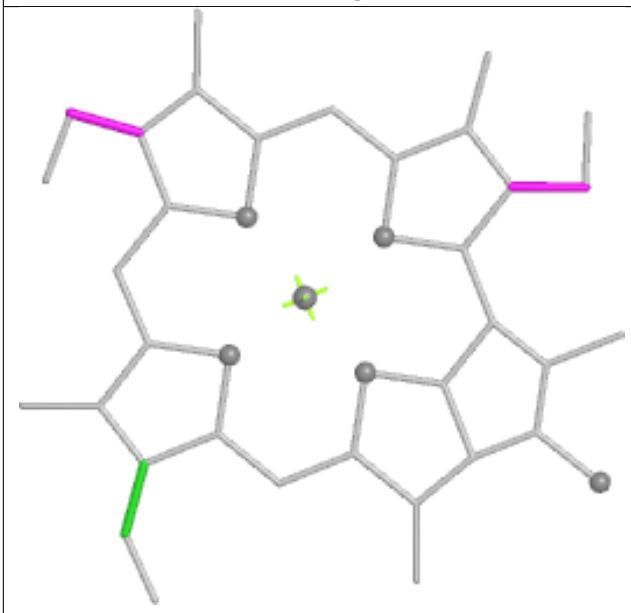
Ligand CLA F 803



Bond lengths



Bond angles

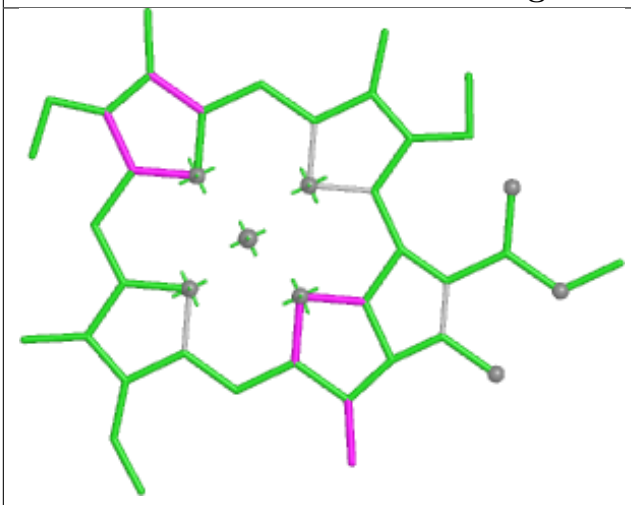


Torsions

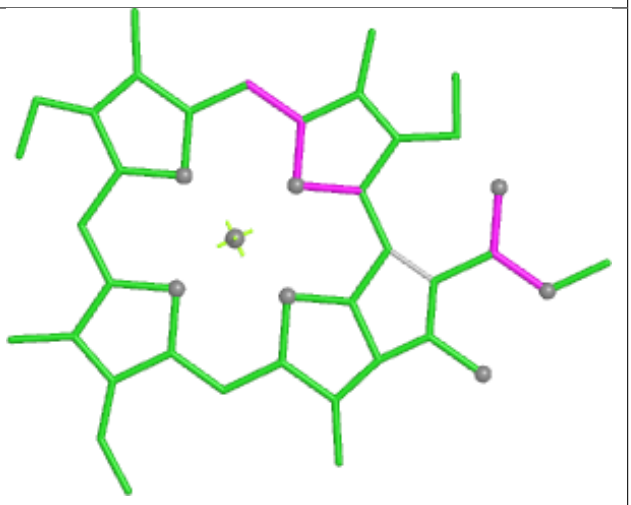


Rings

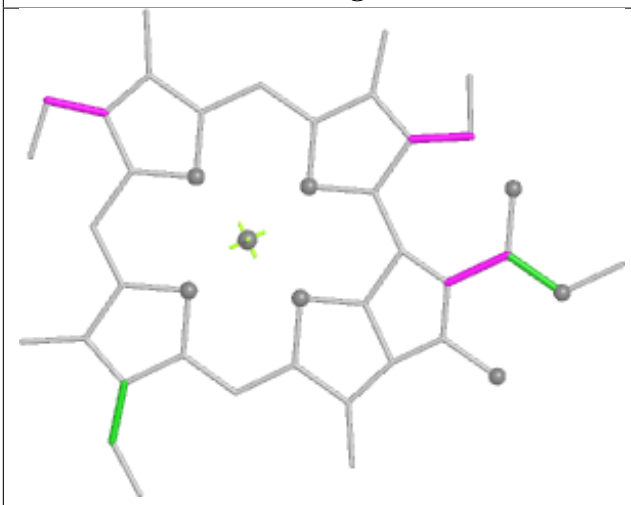
Ligand CLA J 102



Bond lengths



Bond angles

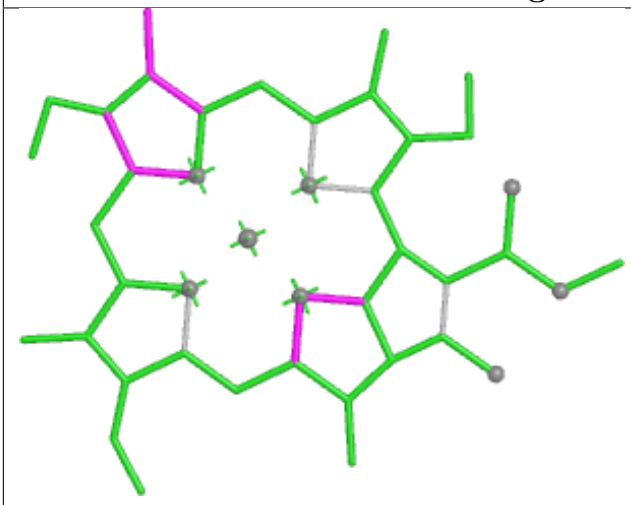


Torsions

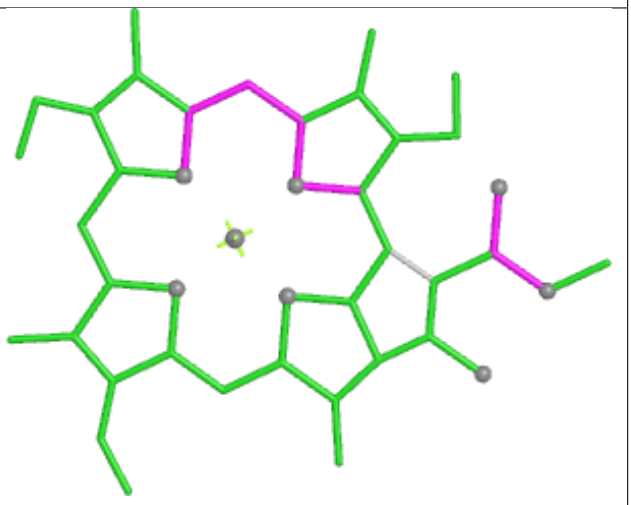


Rings

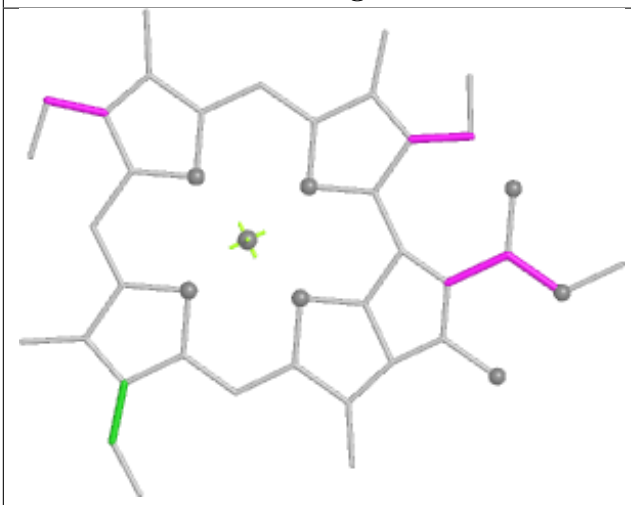
Ligand CLA 1 602



Bond lengths



Bond angles

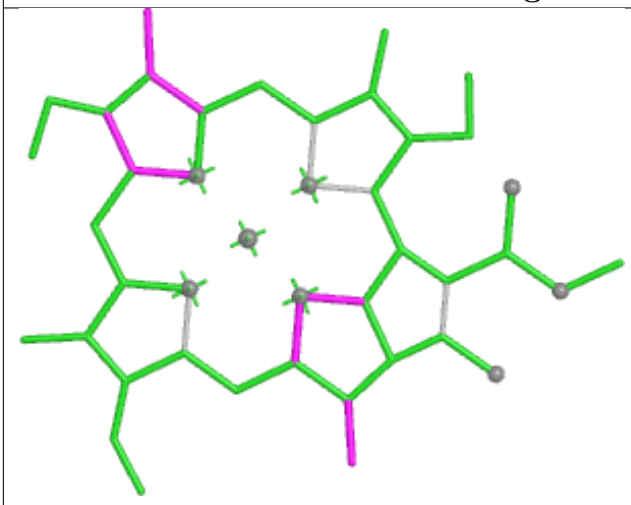


Torsions

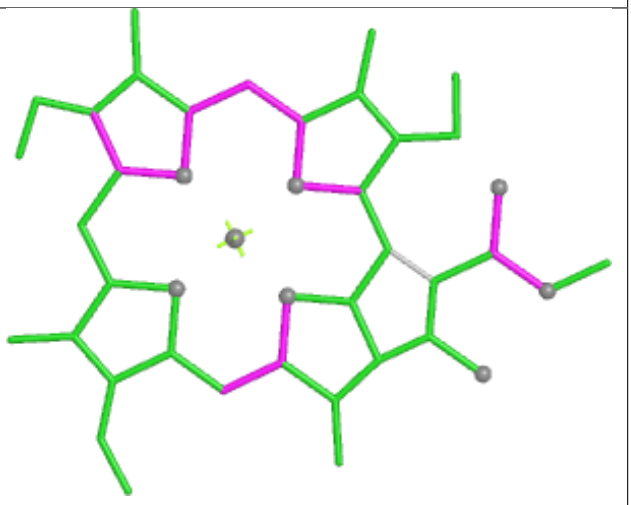


Rings

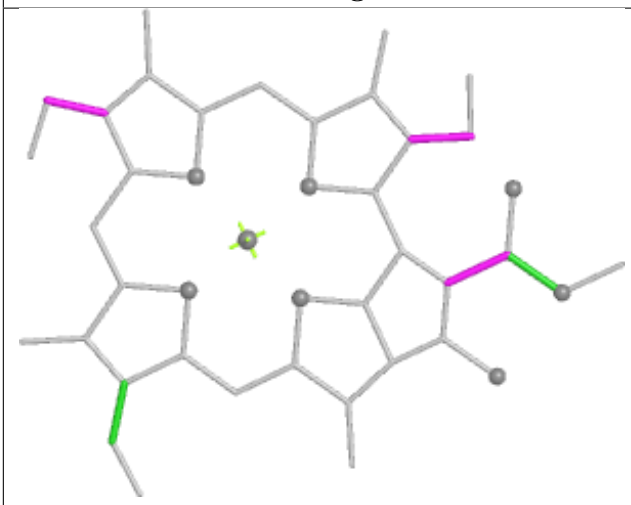
Ligand CLA A 838



Bond lengths



Bond angles

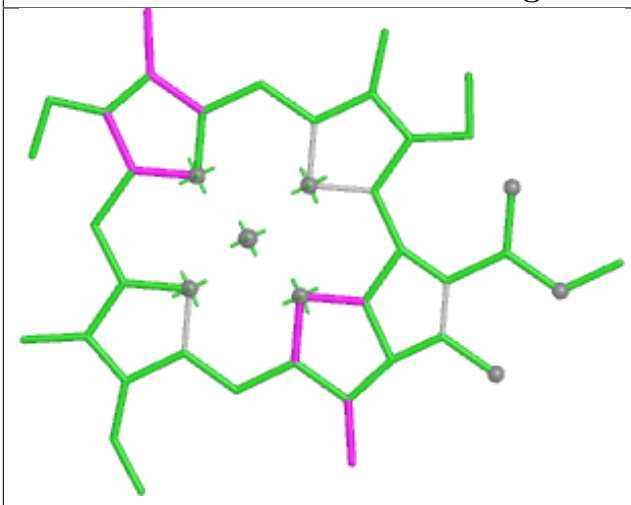


Torsions

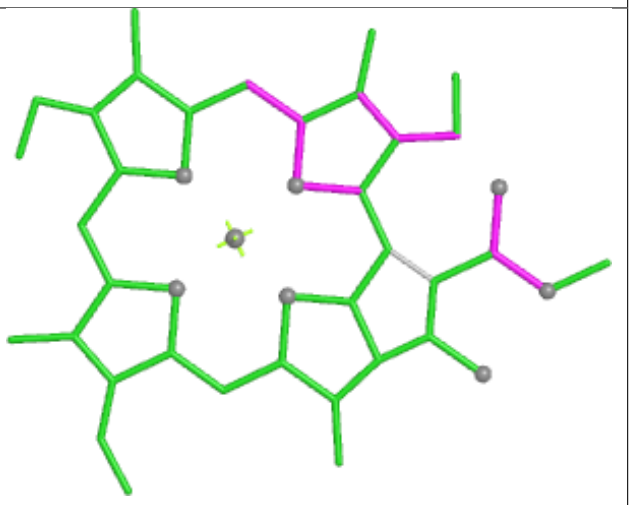


Rings

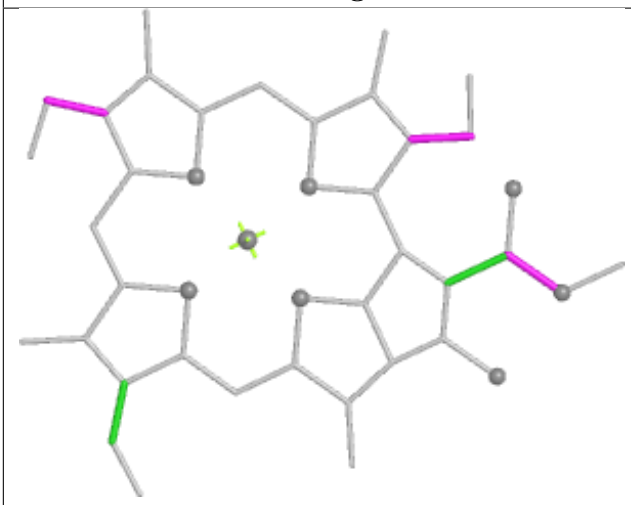
Ligand CLA K 202



Bond lengths



Bond angles

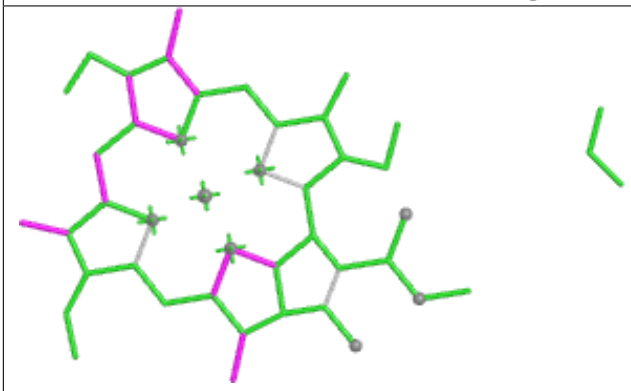


Torsions

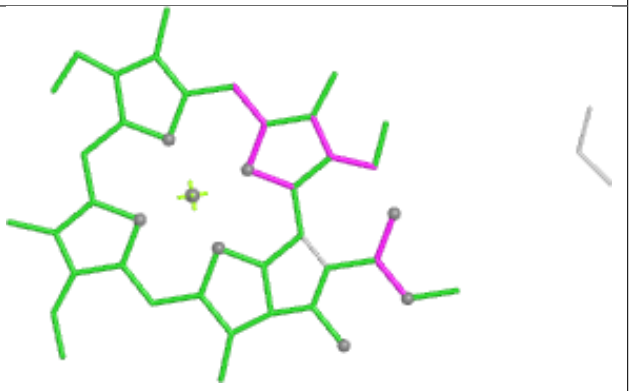


Rings

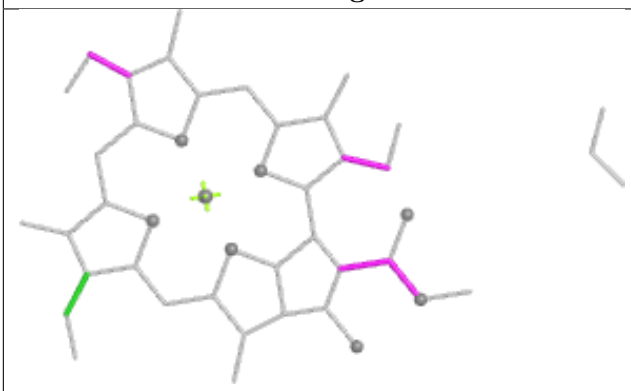
Ligand CLA B 828



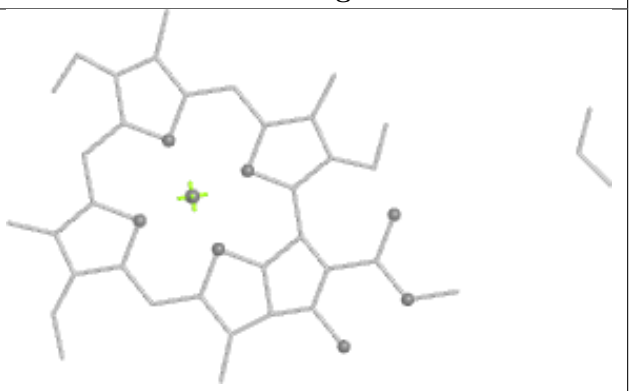
Bond lengths



Bond angles

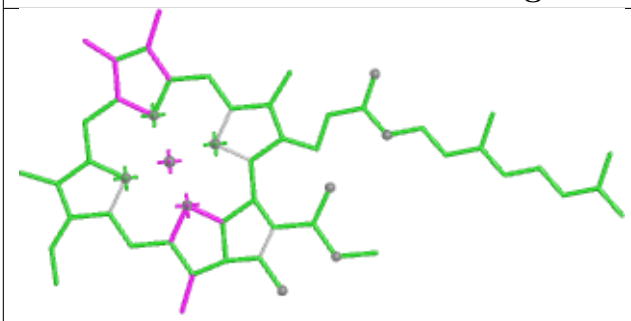


Torsions

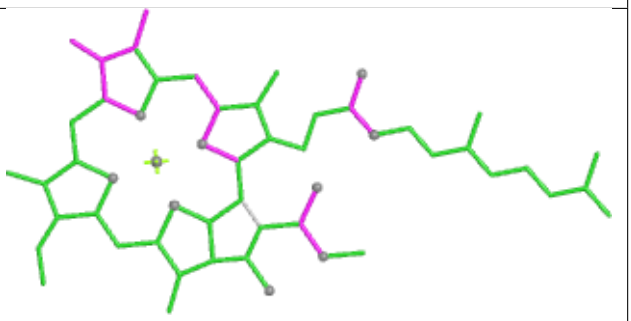


Rings

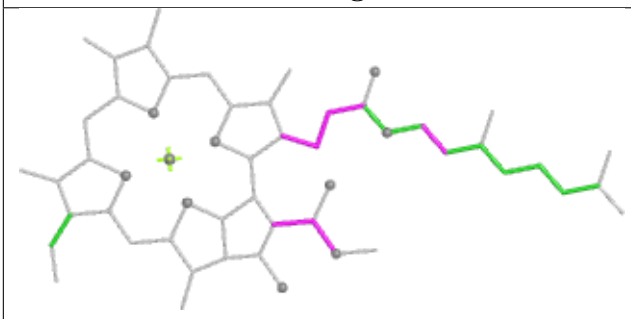
Ligand CLA B 801



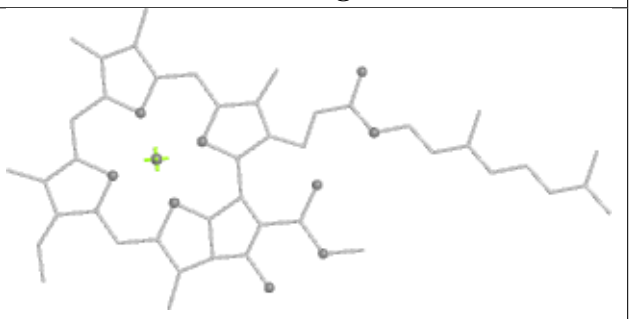
Bond lengths



Bond angles

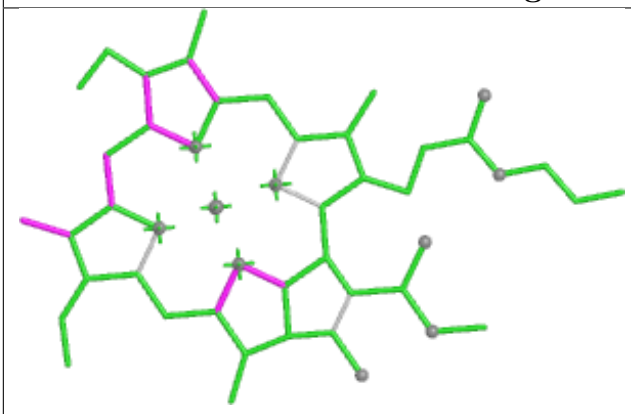


Torsions

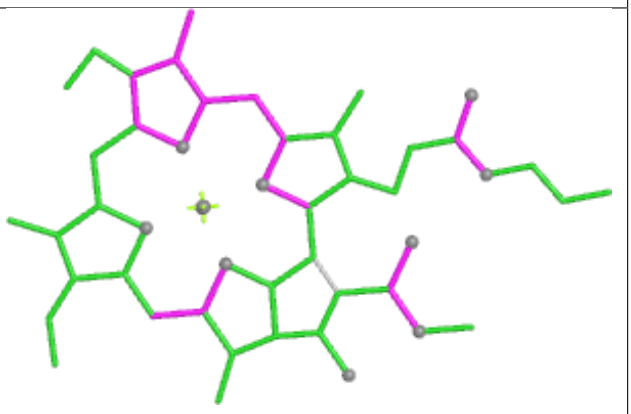


Rings

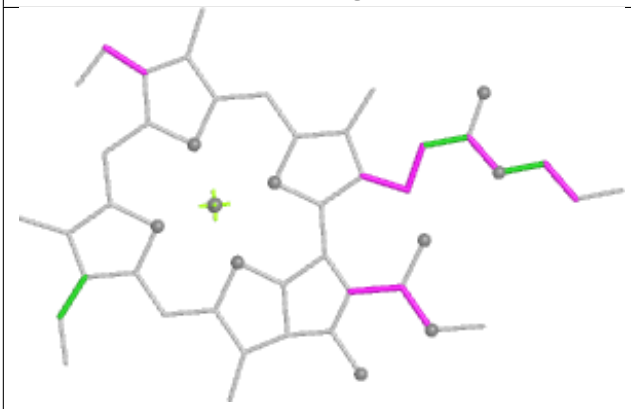
Ligand CLA B 820



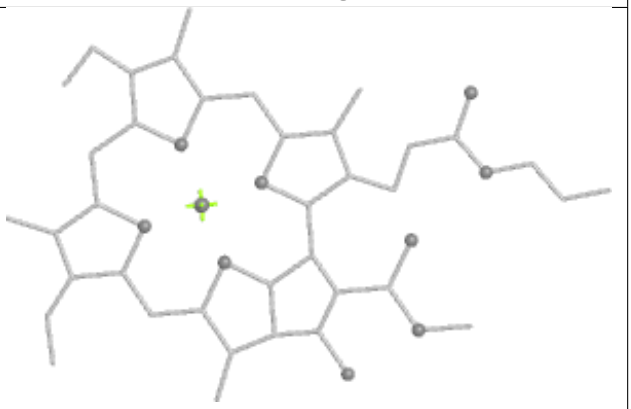
Bond lengths



Bond angles

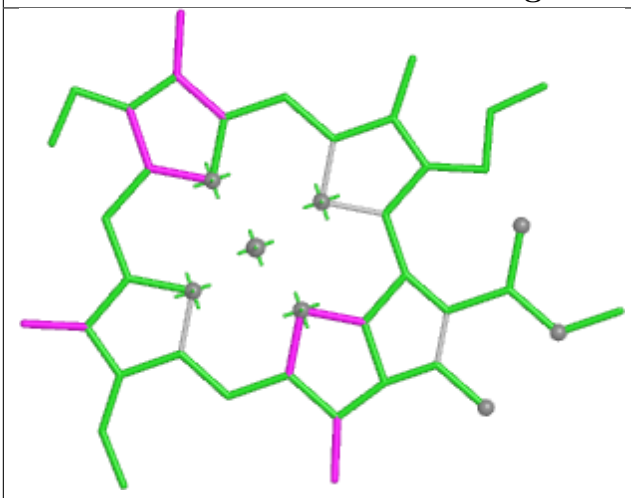


Torsions

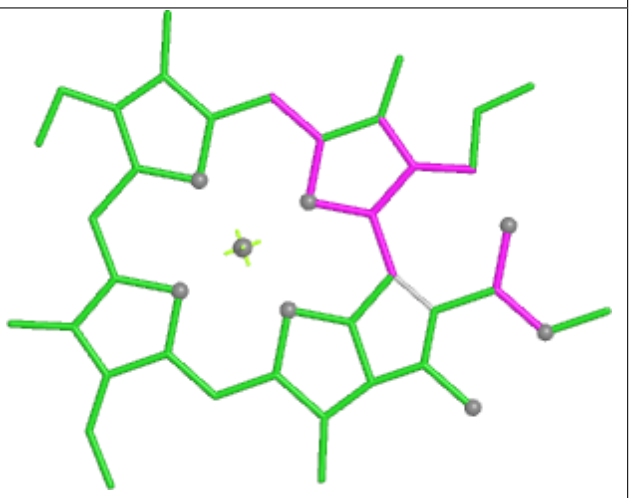


Rings

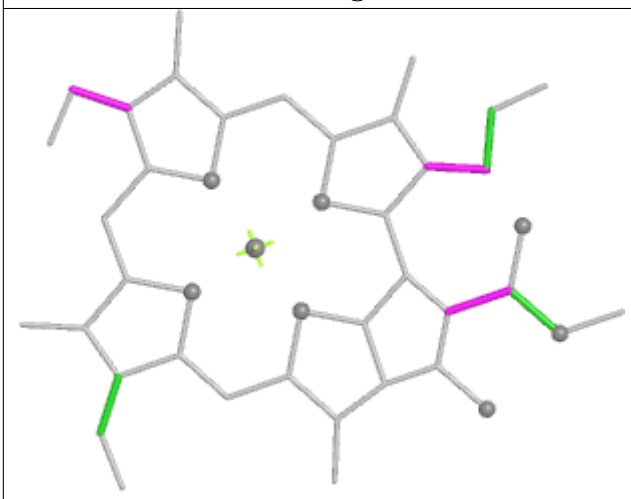
Ligand CLA B 838



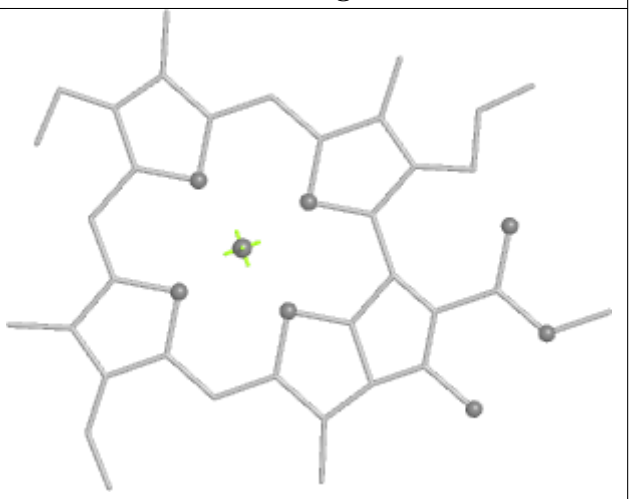
Bond lengths



Bond angles

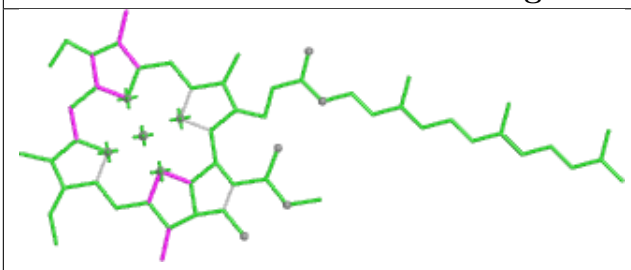


Torsions

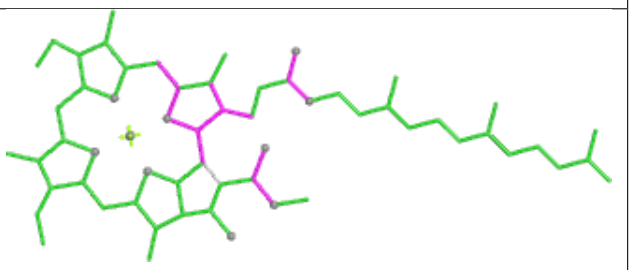


Rings

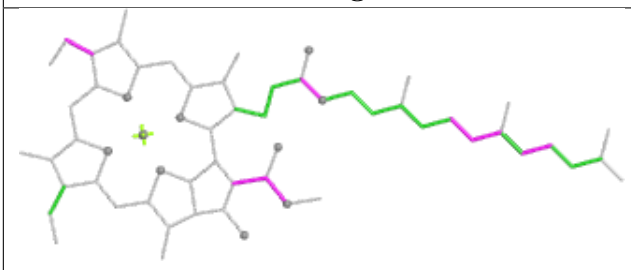
Ligand CLA B 834



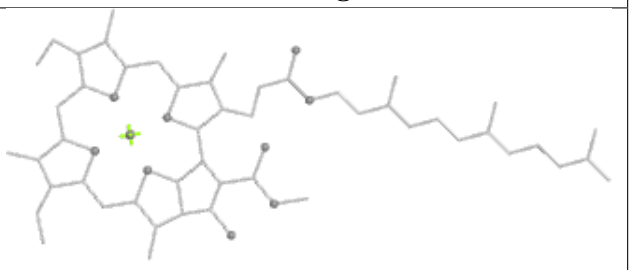
Bond lengths



Bond angles

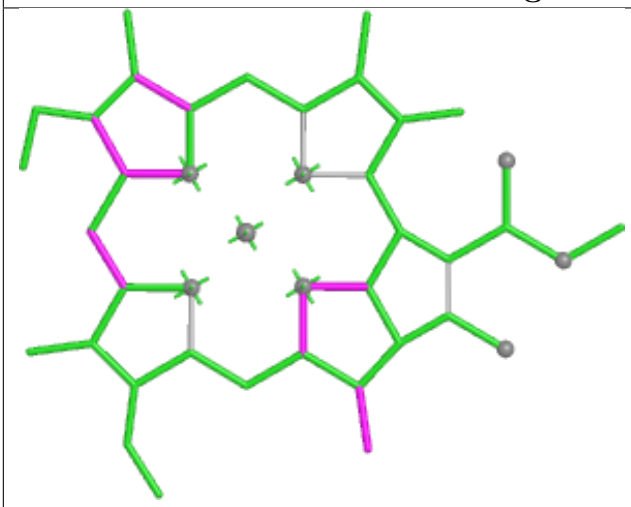


Torsions

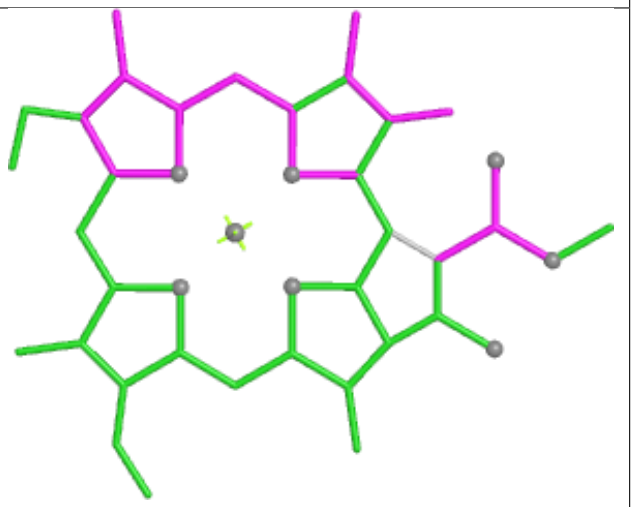


Rings

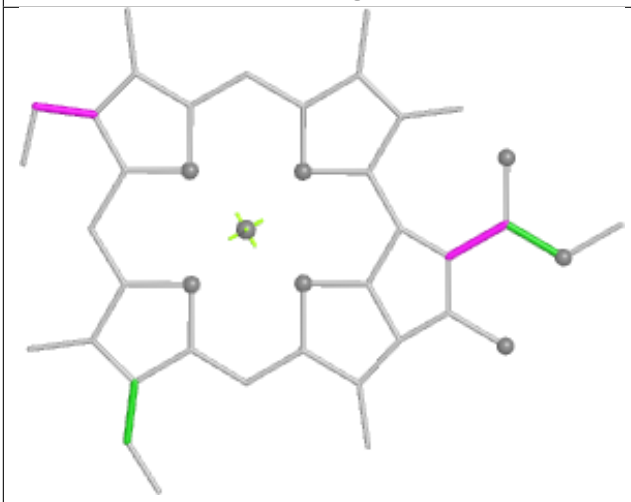
Ligand CLA B 829



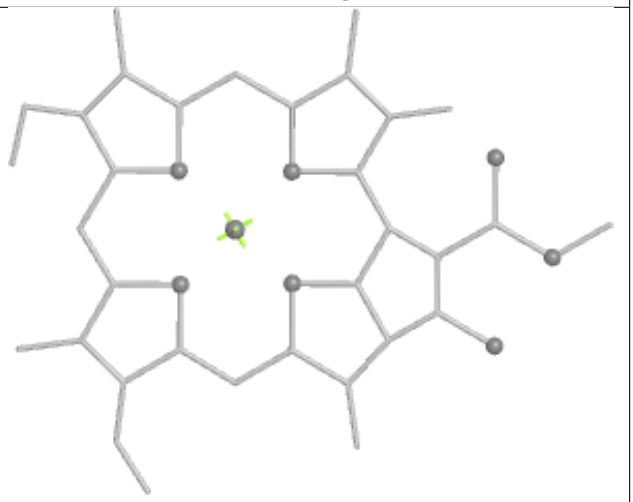
Bond lengths



Bond angles

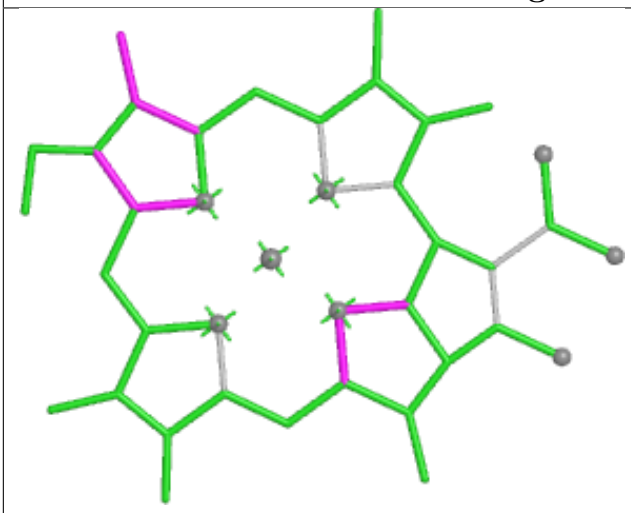


Torsions

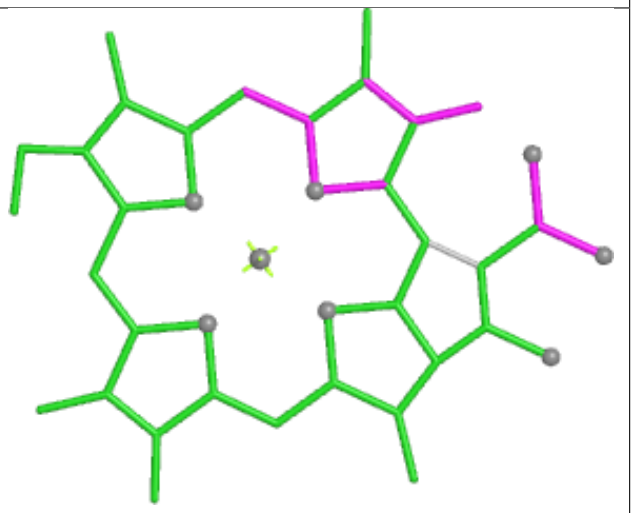


Rings

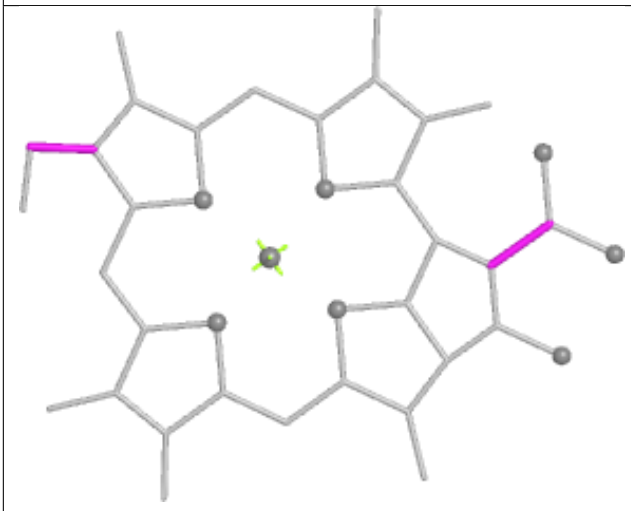
Ligand CLA 3 413



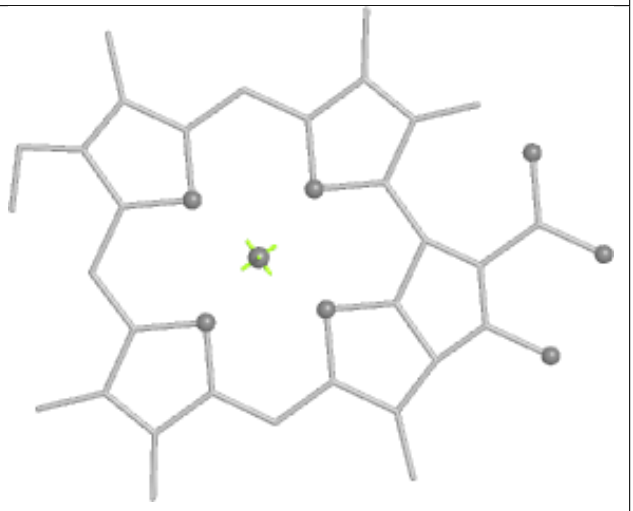
Bond lengths



Bond angles

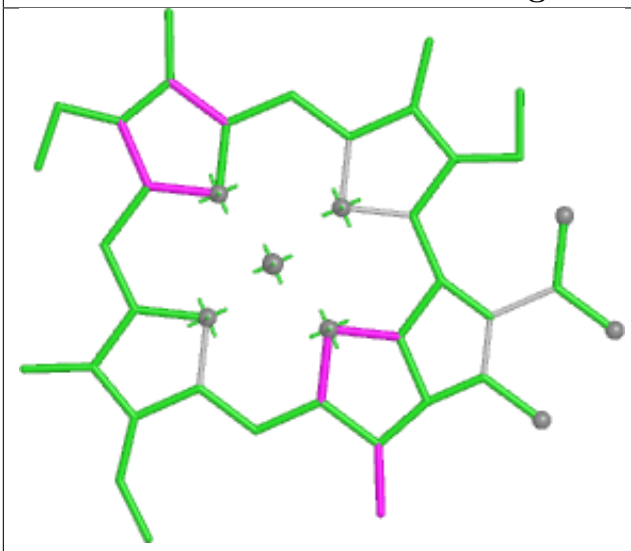


Torsions

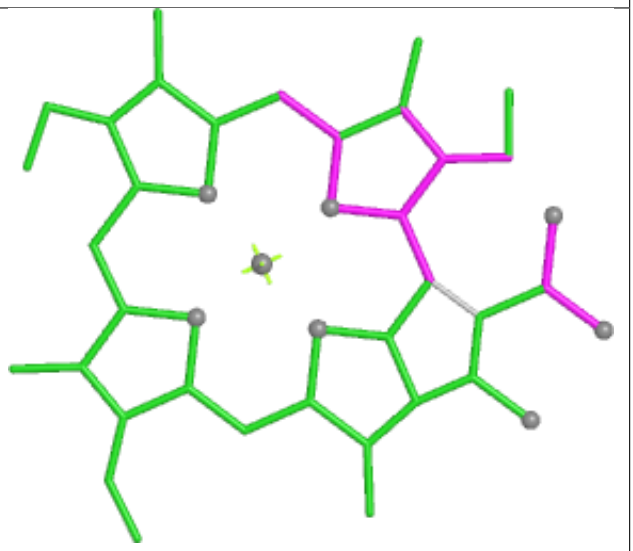


Rings

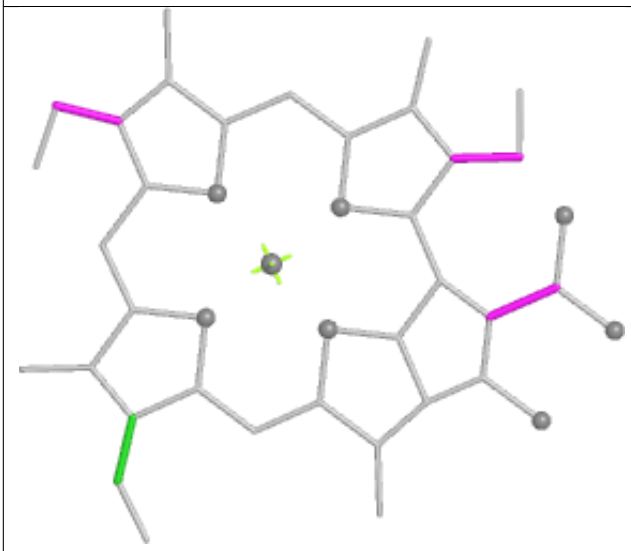
Ligand CLA 8 611



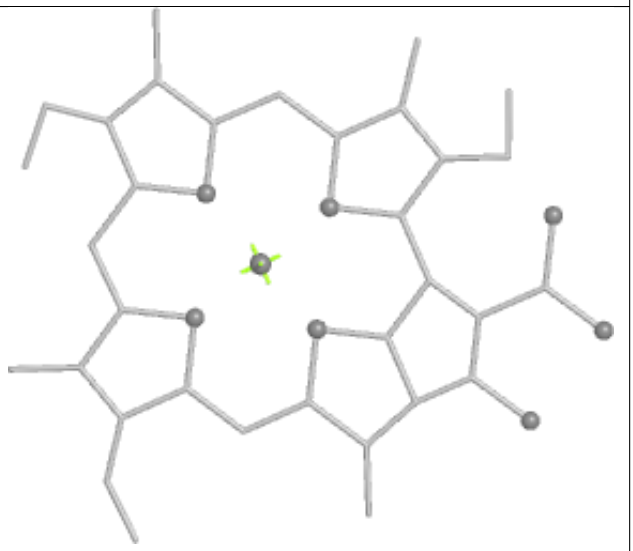
Bond lengths



Bond angles

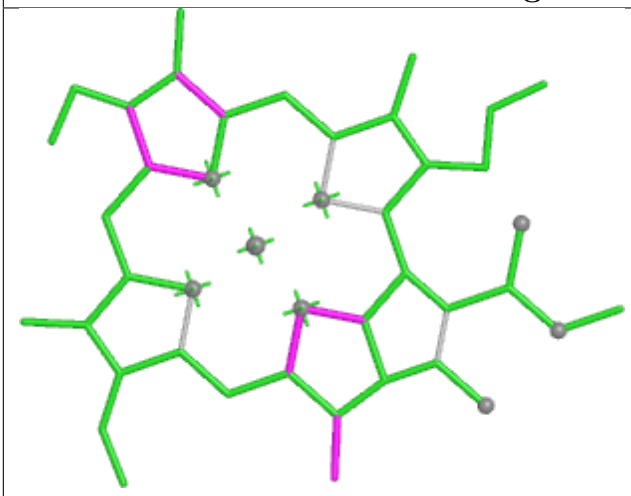


Torsions

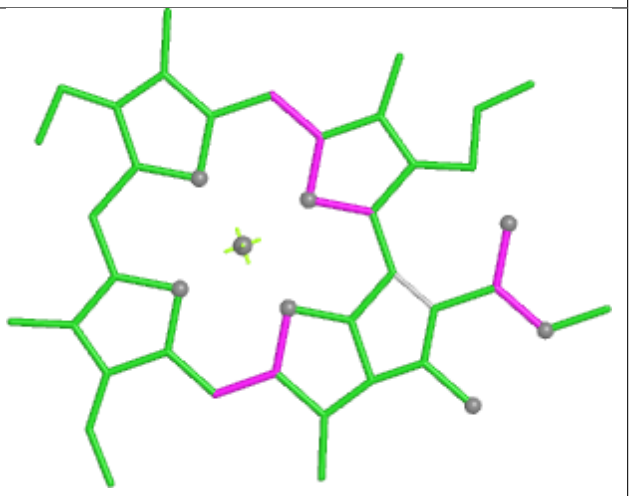


Rings

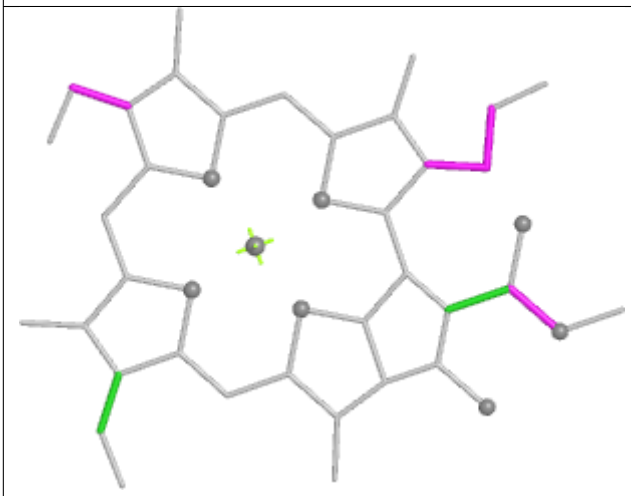
Ligand CLA A 810



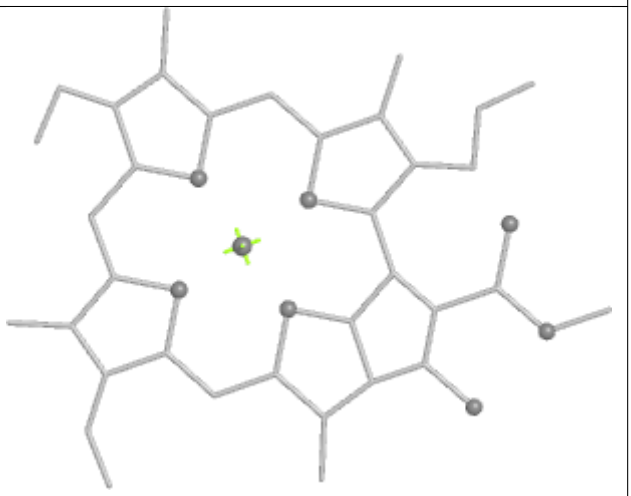
Bond lengths



Bond angles

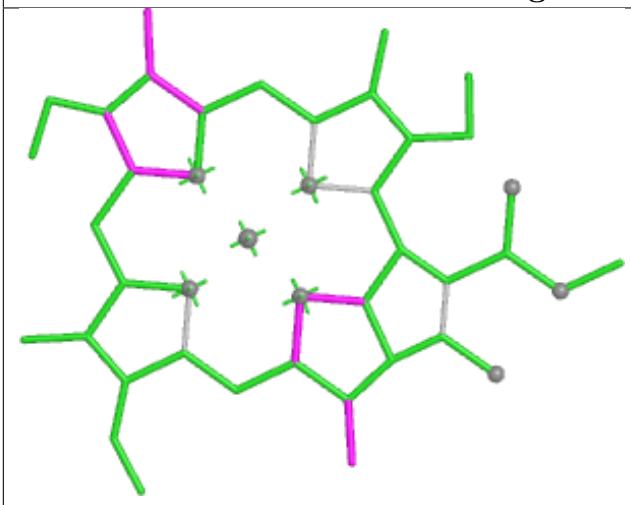


Torsions

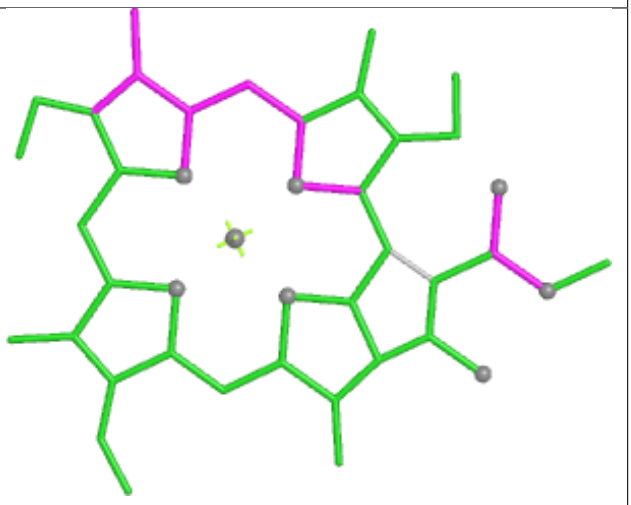


Rings

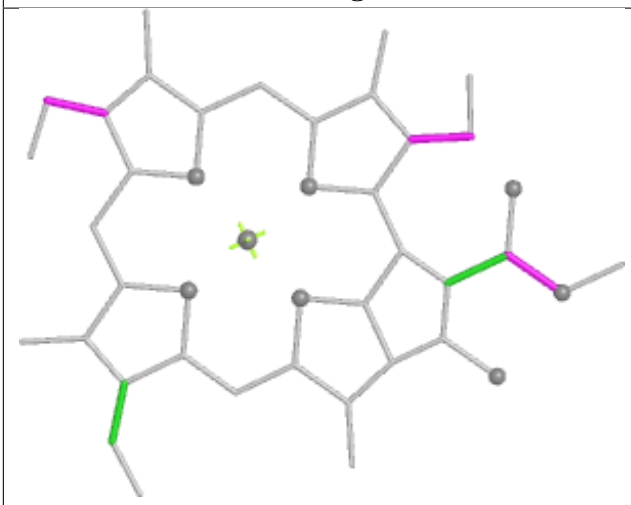
Ligand CLA 5 609



Bond lengths



Bond angles

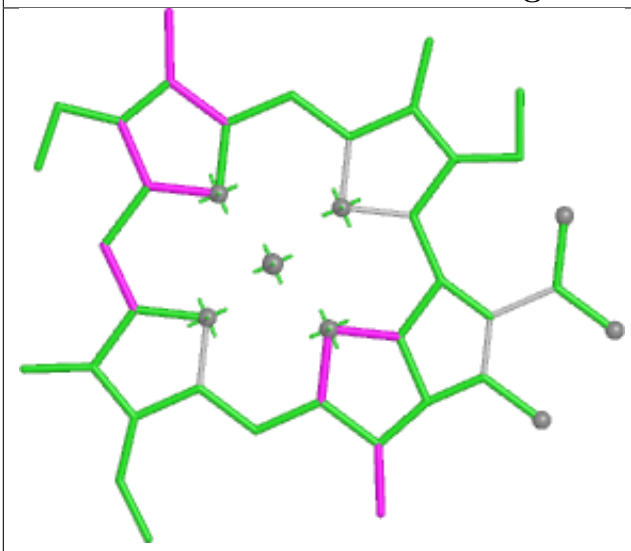


Torsions

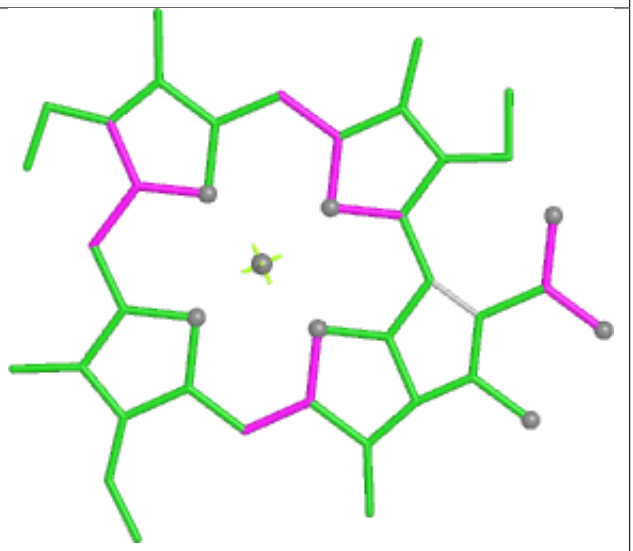


Rings

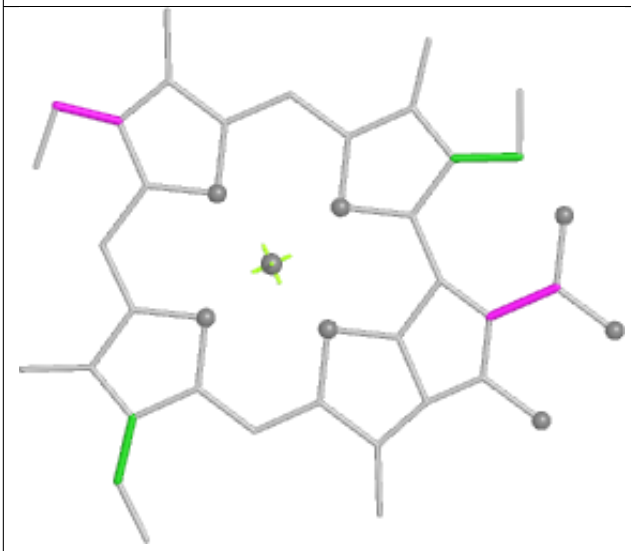
Ligand CLA A 833



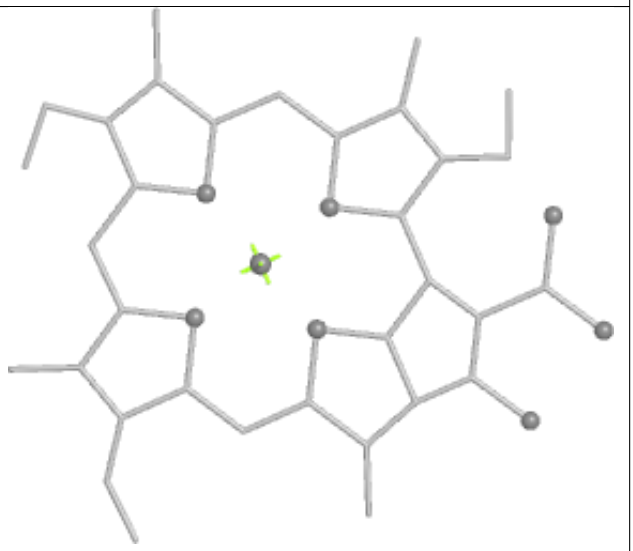
Bond lengths



Bond angles

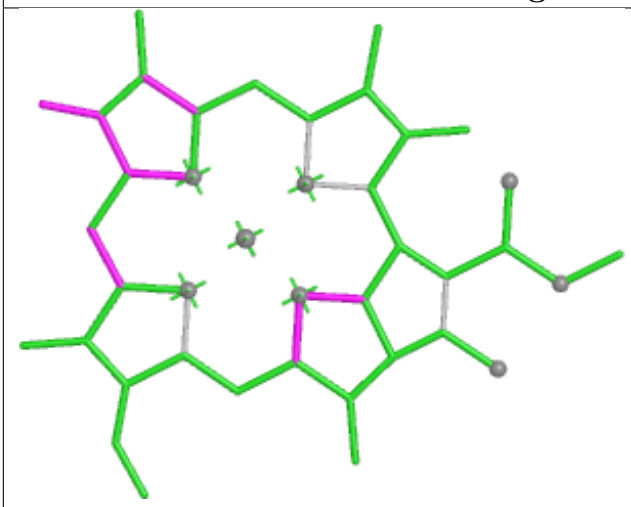


Torsions

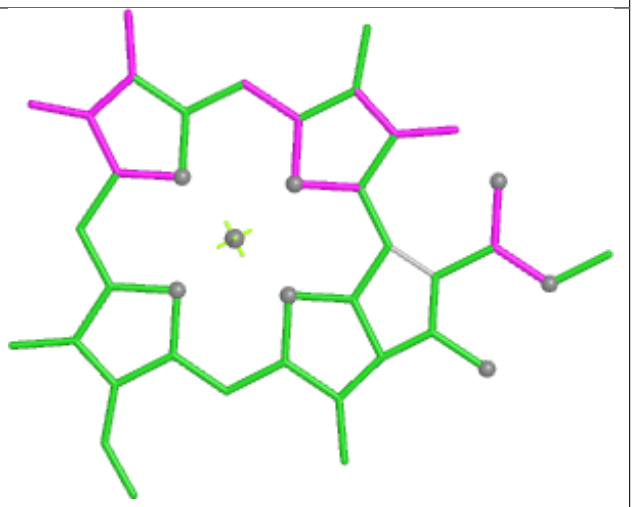


Rings

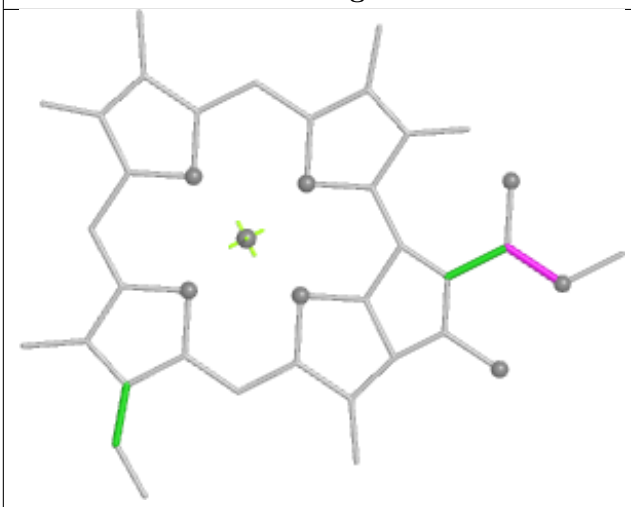
Ligand CLA 1 604



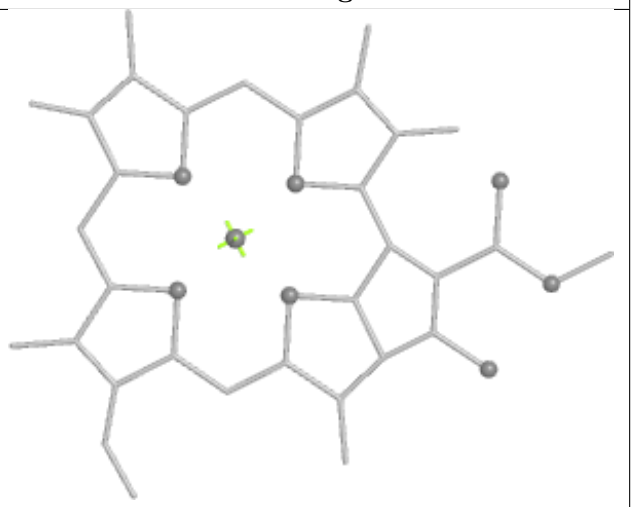
Bond lengths



Bond angles

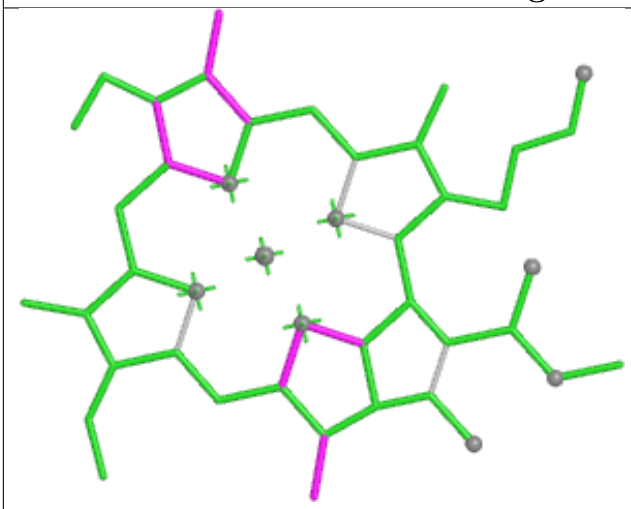


Torsions

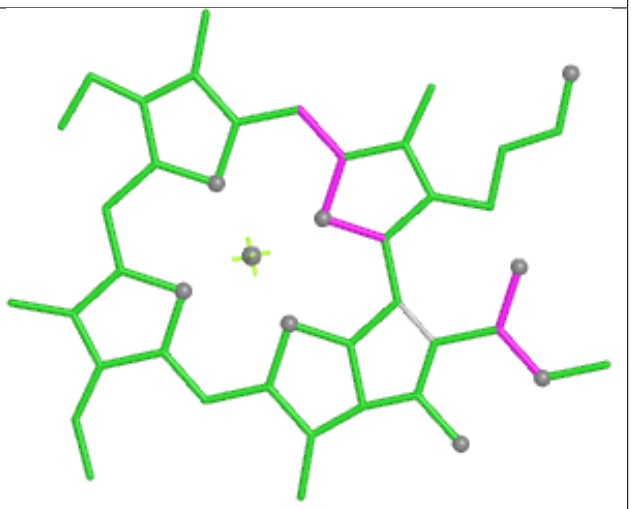


Rings

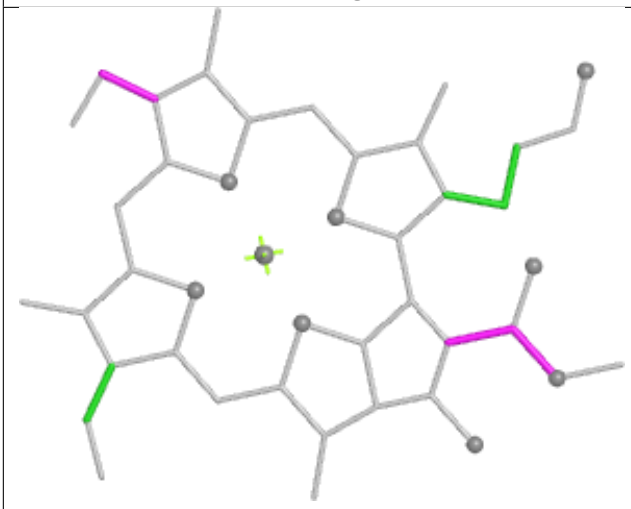
Ligand CLA 3 403



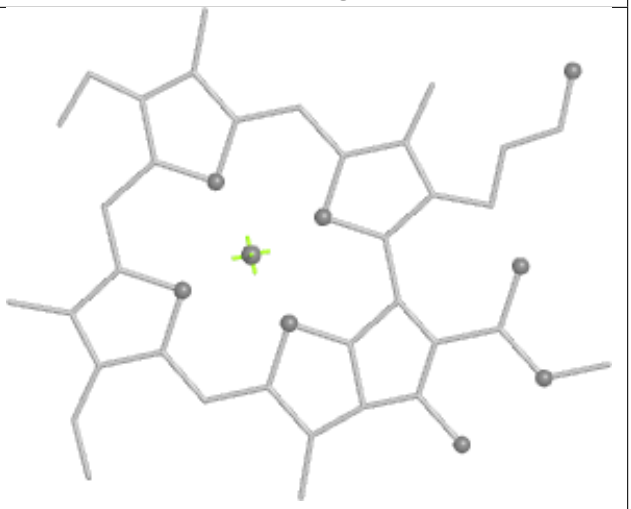
Bond lengths



Bond angles

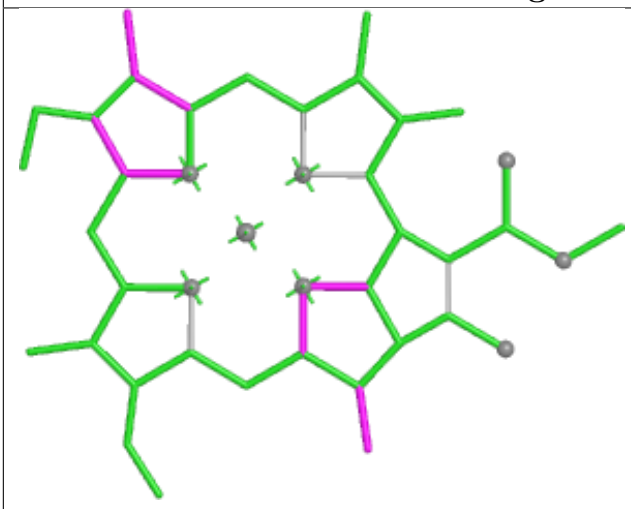


Torsions

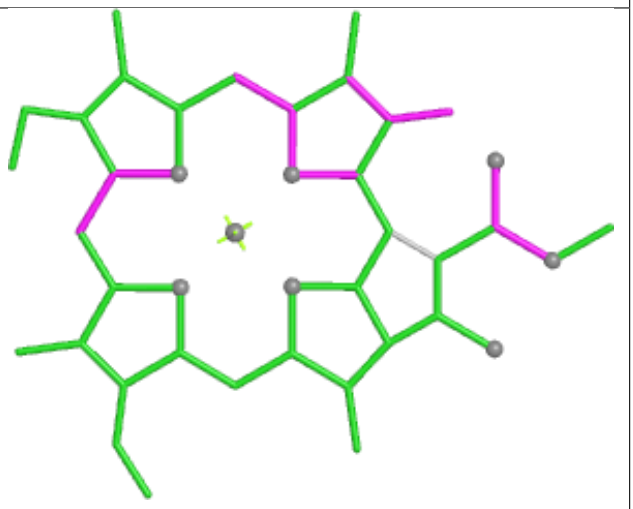


Rings

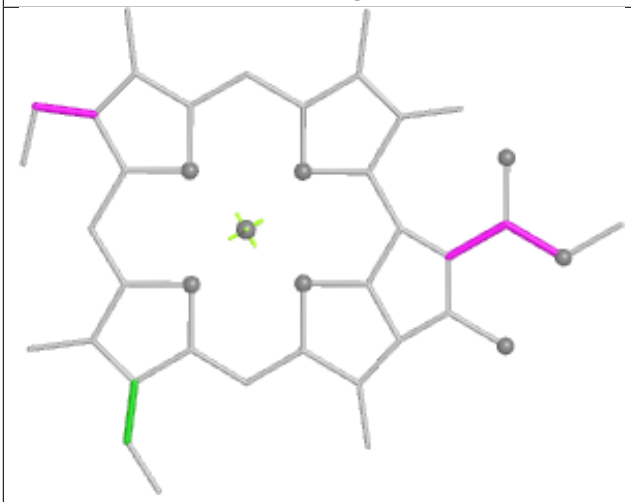
Ligand CLA 8 608



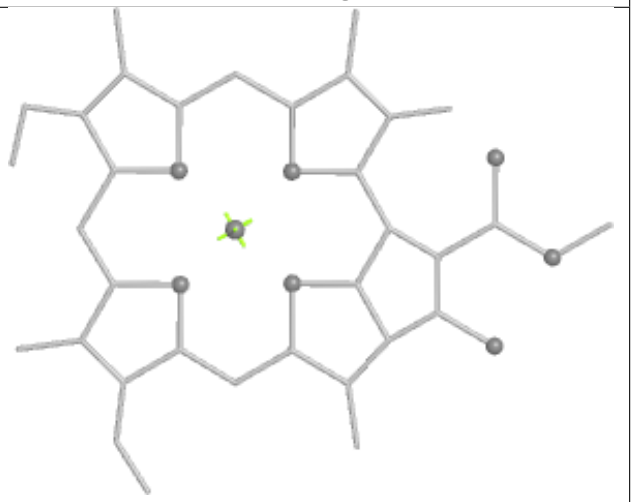
Bond lengths



Bond angles

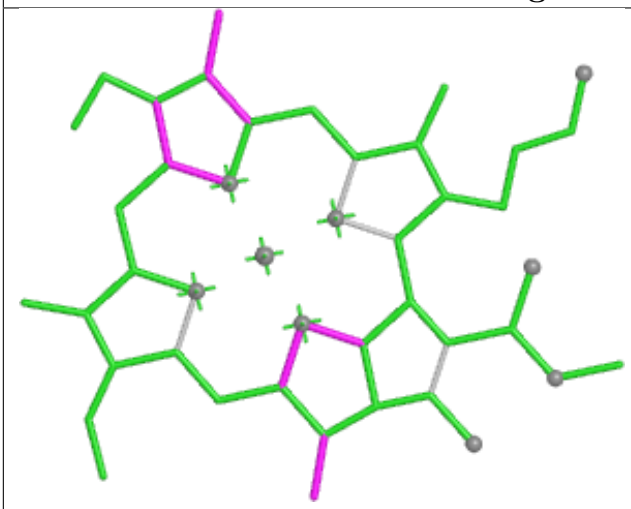


Torsions

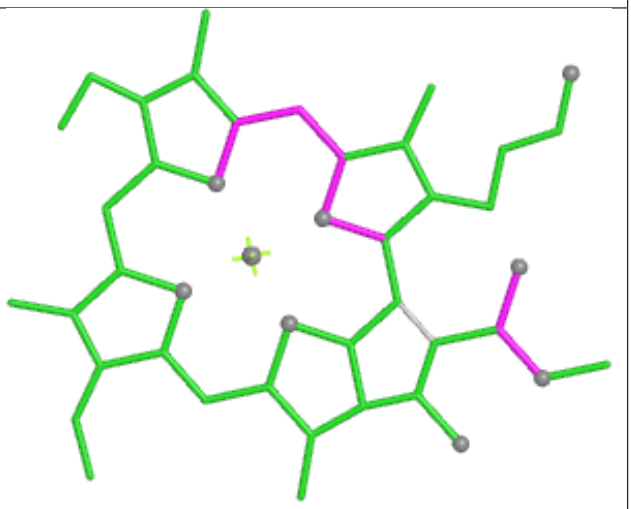


Rings

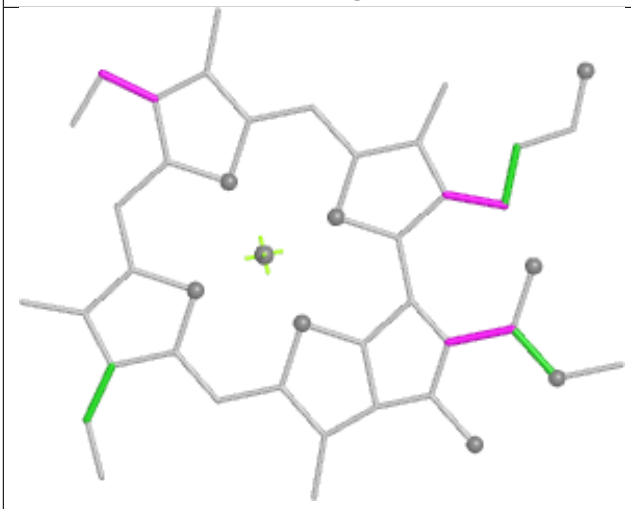
Ligand CLA 3 407



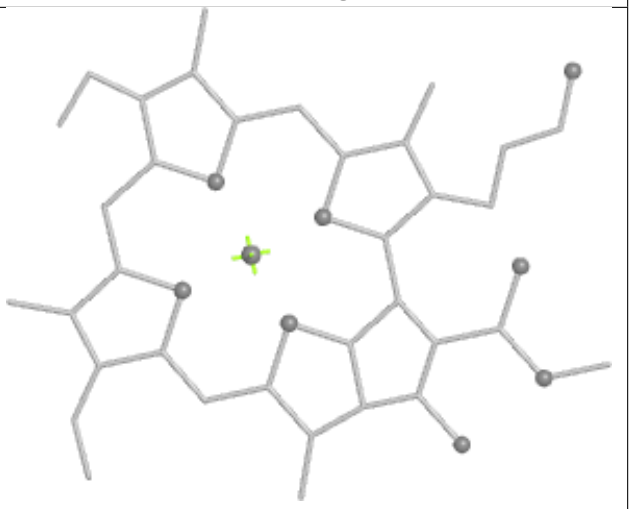
Bond lengths



Bond angles

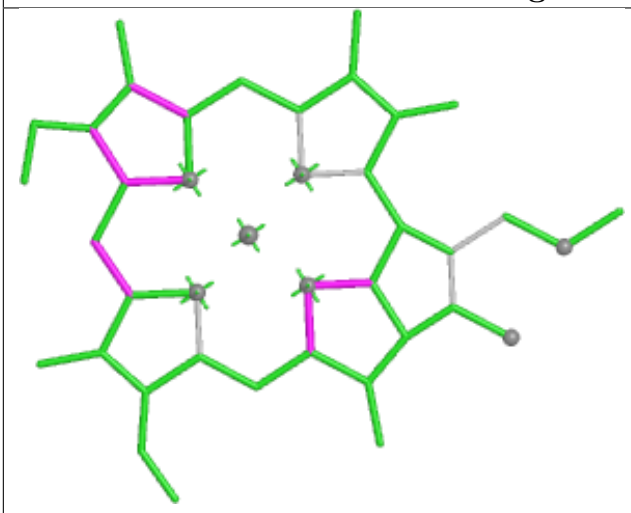


Torsions

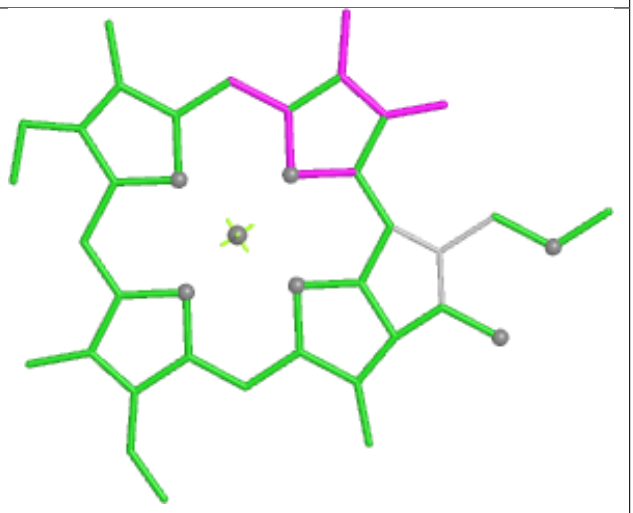


Rings

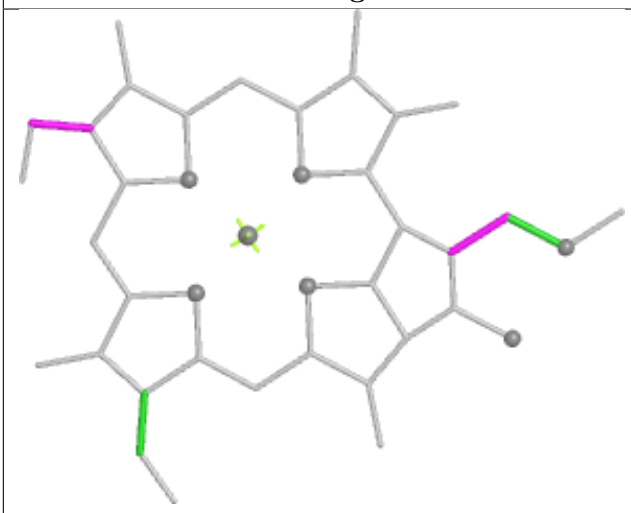
Ligand CLA 7 608



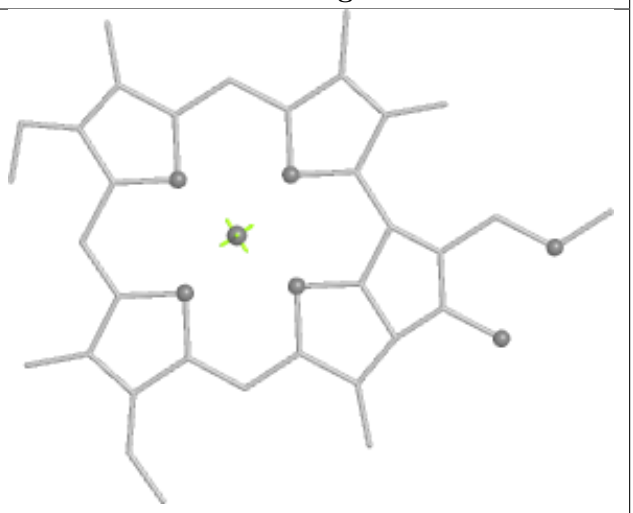
Bond lengths



Bond angles

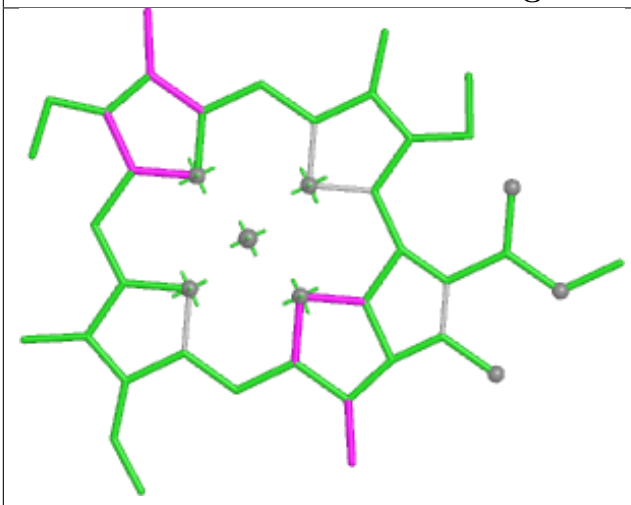


Torsions

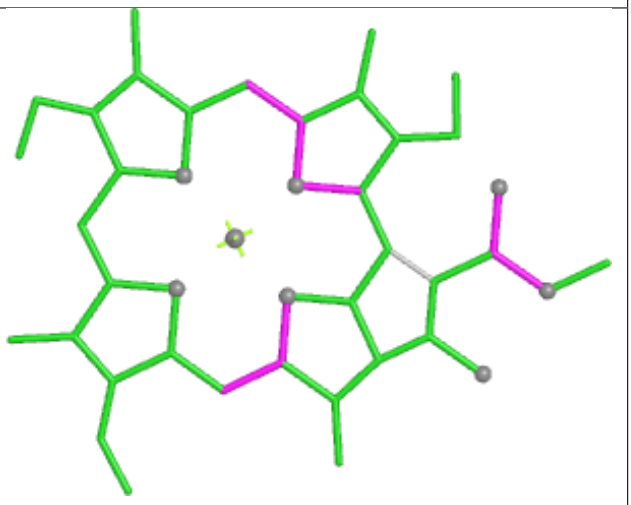


Rings

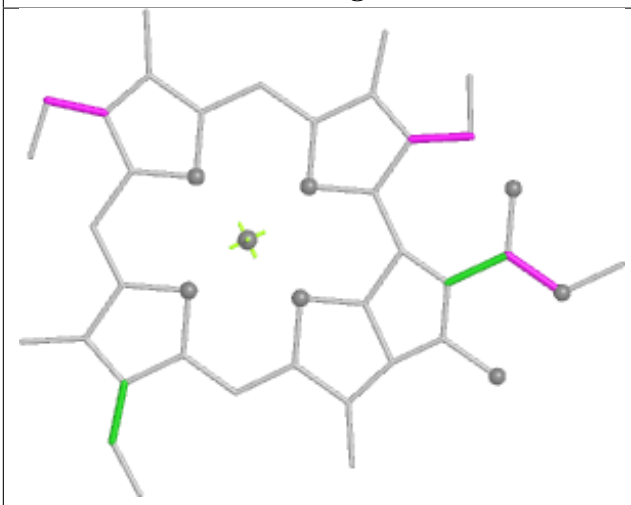
Ligand CLA A 807



Bond lengths



Bond angles

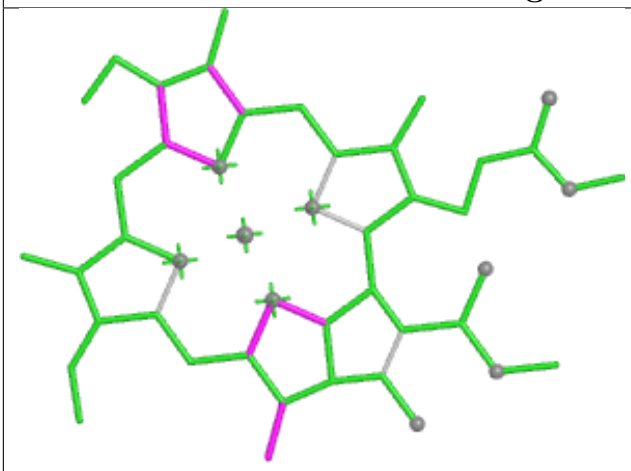


Torsions

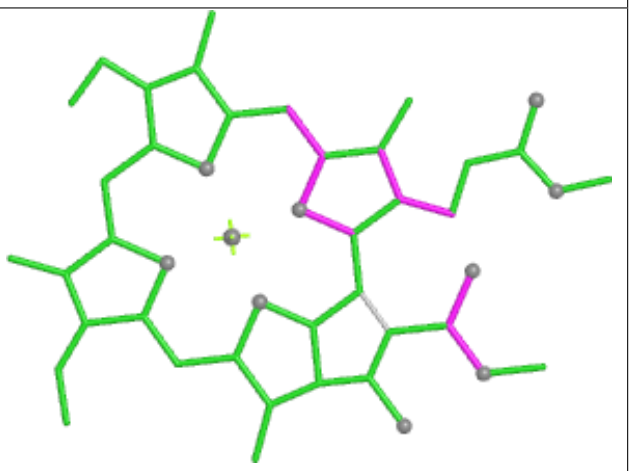


Rings

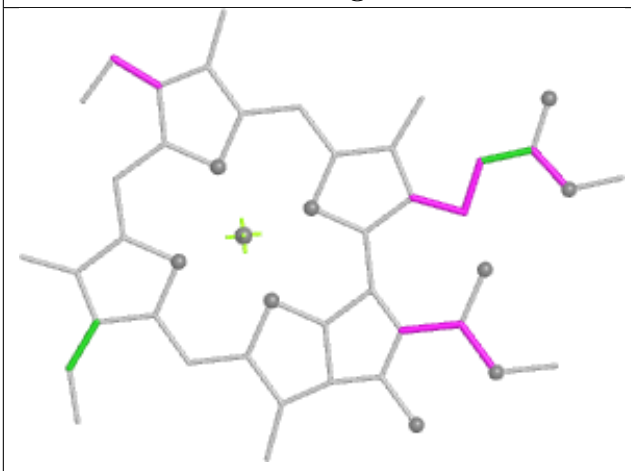
Ligand CLA F 804



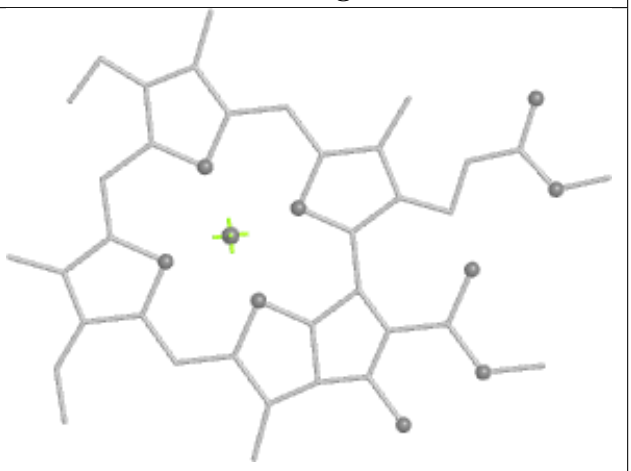
Bond lengths



Bond angles

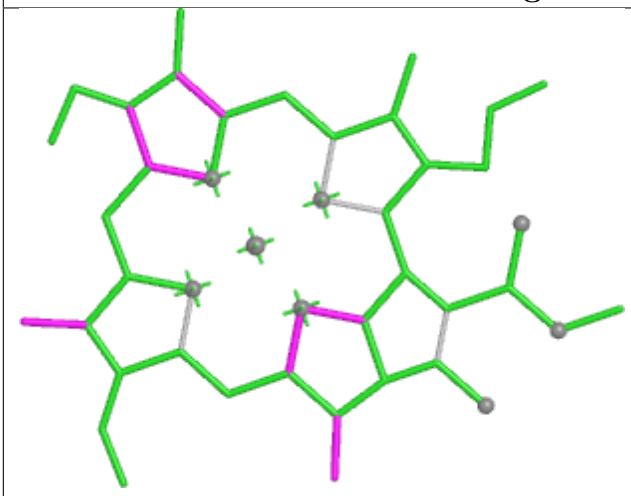


Torsions

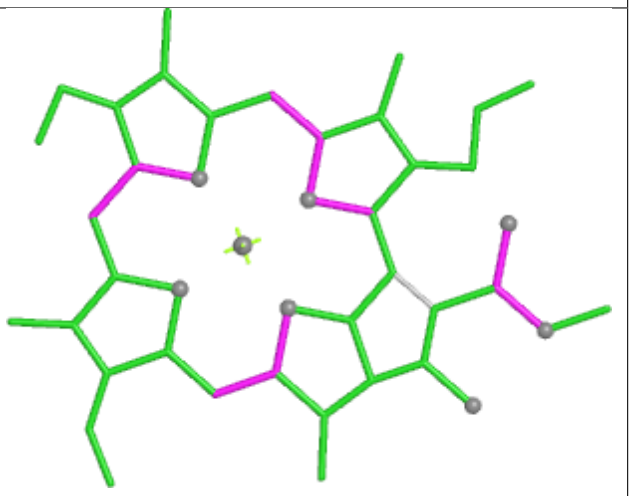


Rings

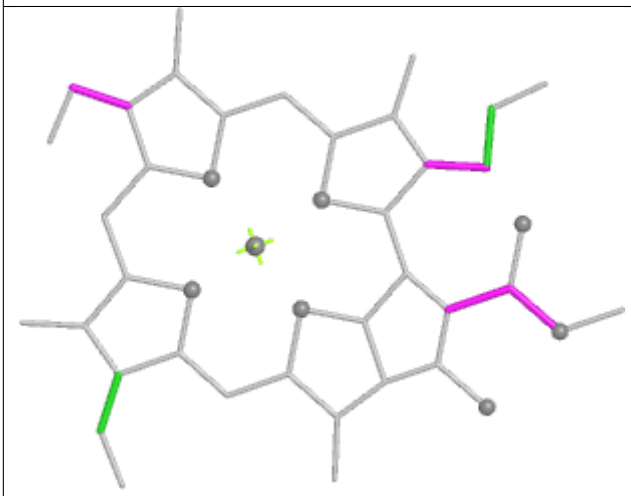
Ligand CLA A 814



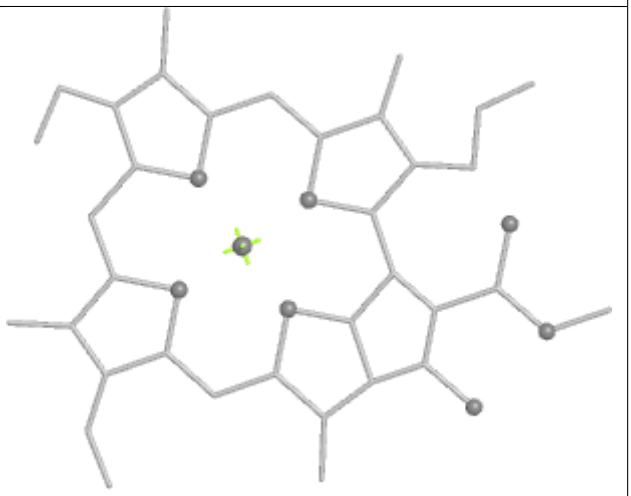
Bond lengths



Bond angles

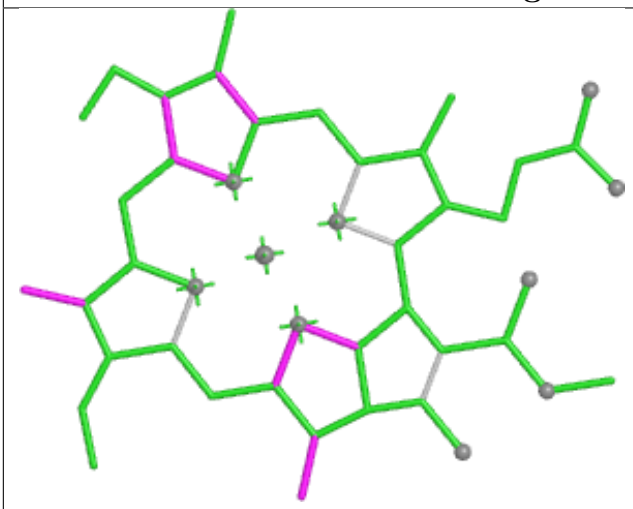


Torsions

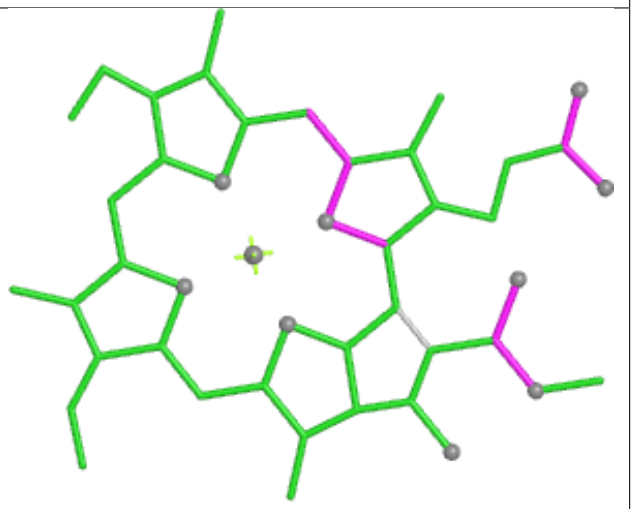


Rings

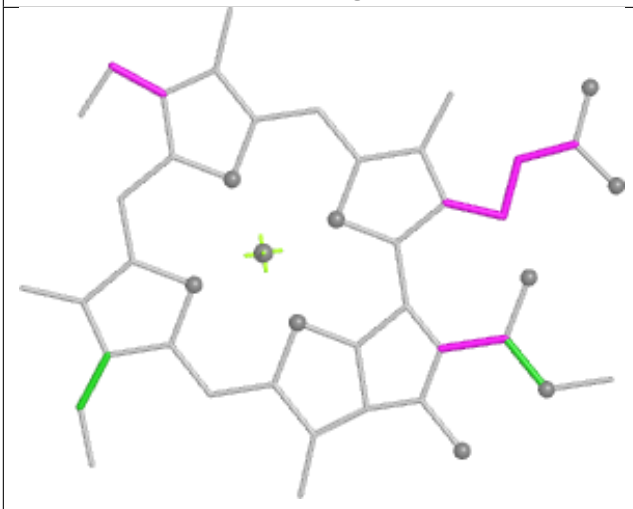
Ligand CLA A 830



Bond lengths



Bond angles

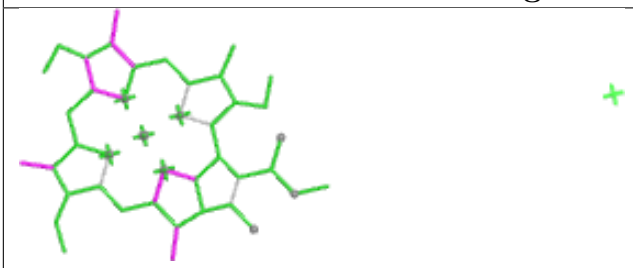


Torsions

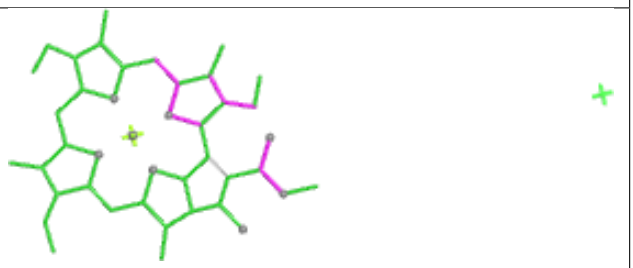


Rings

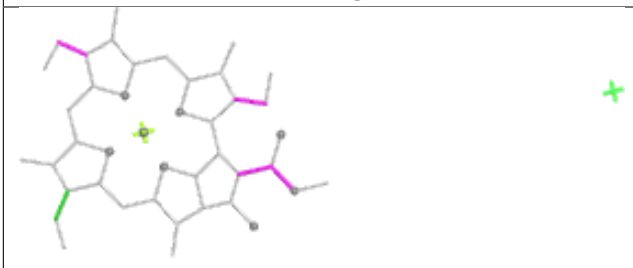
Ligand CLA A 806



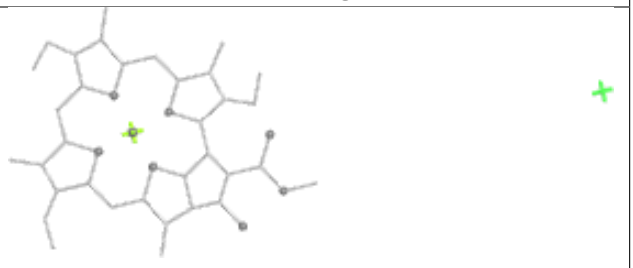
Bond lengths



Bond angles

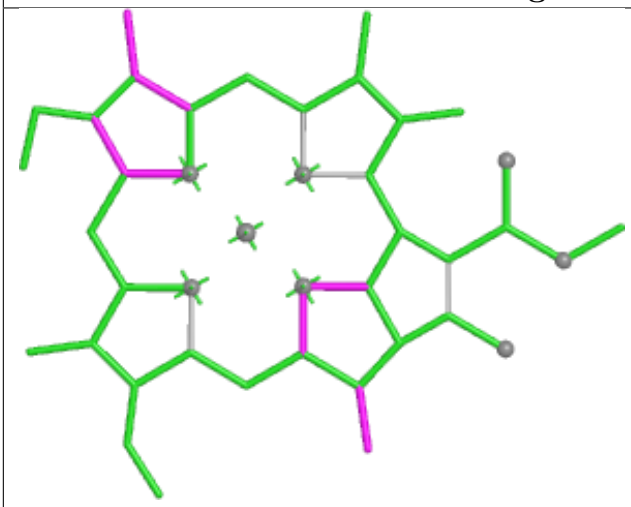


Torsions

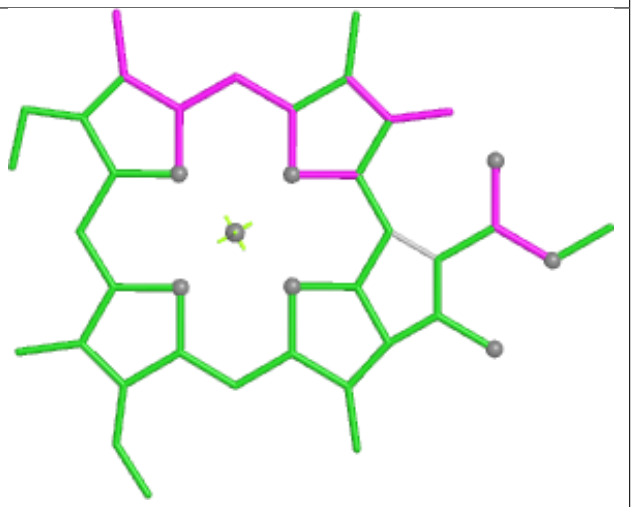


Rings

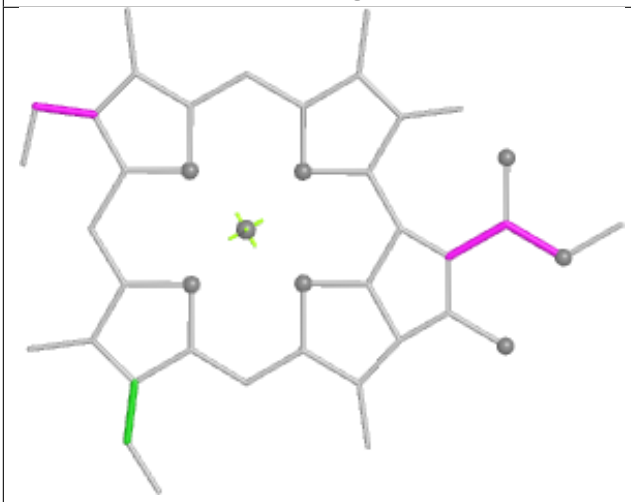
Ligand CLA 6 614



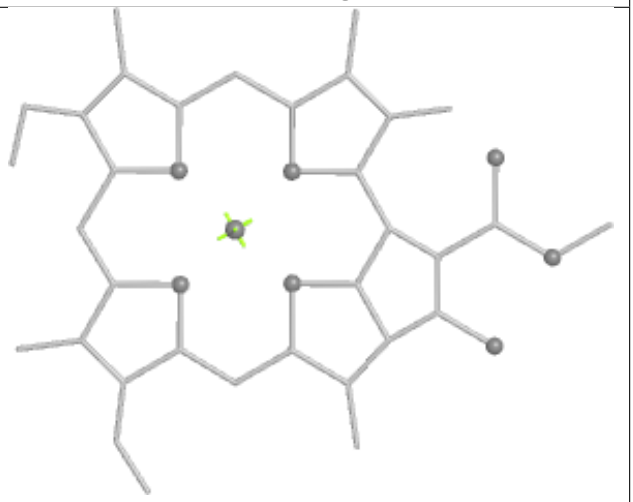
Bond lengths



Bond angles

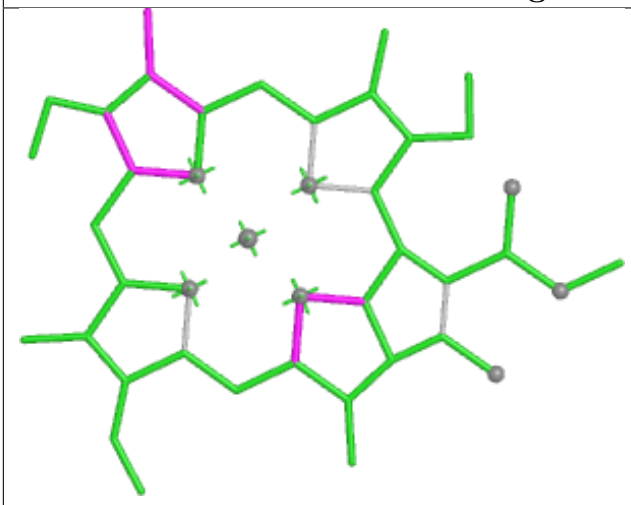


Torsions

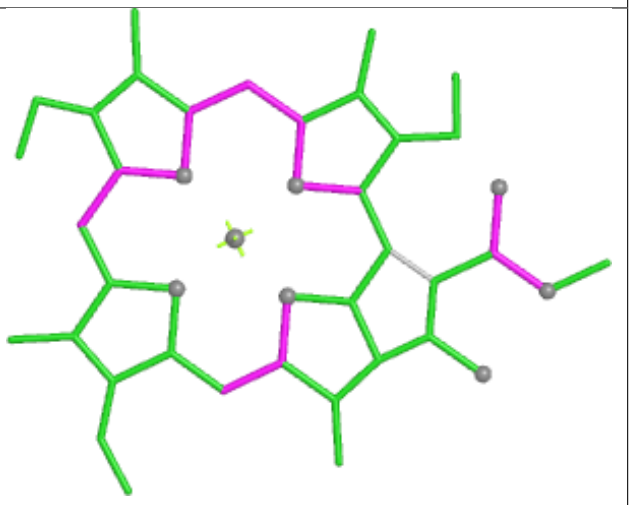


Rings

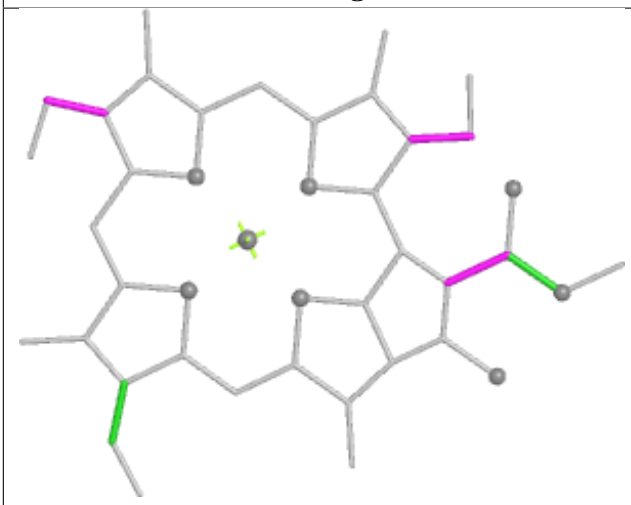
Ligand CLA 5 611



Bond lengths



Bond angles

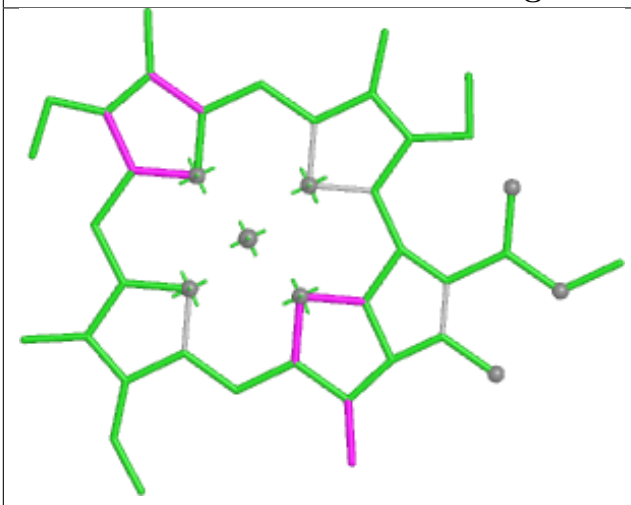


Torsions

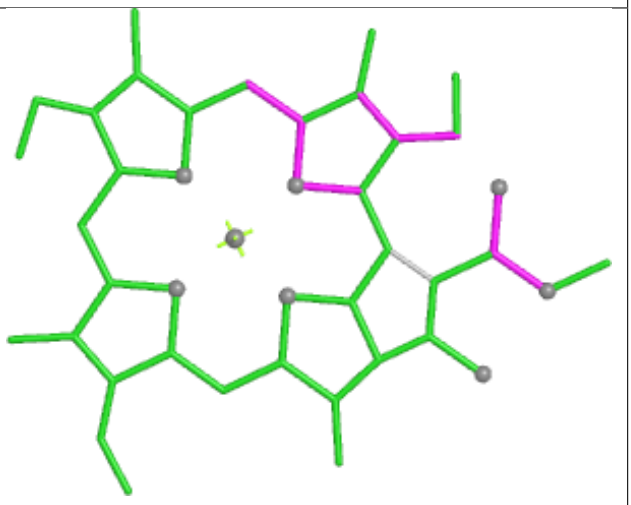


Rings

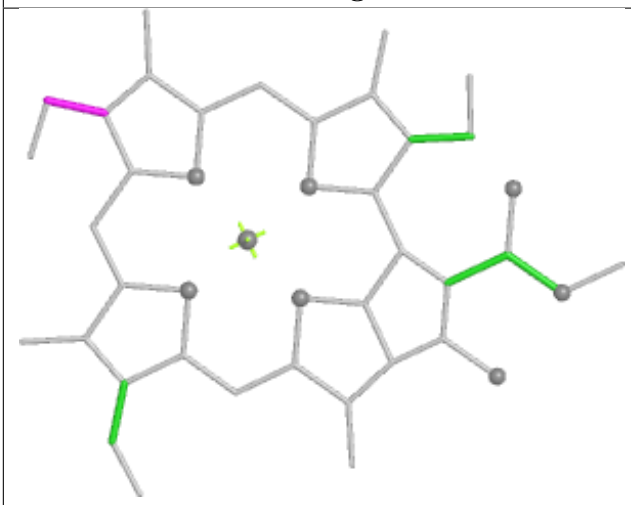
Ligand CLA B 808



Bond lengths



Bond angles

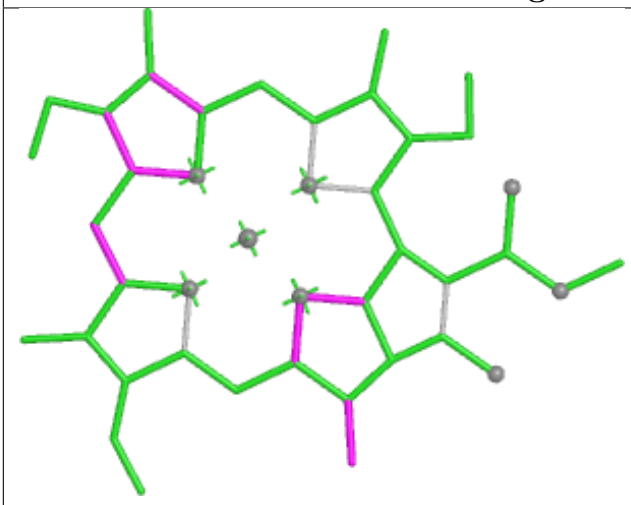


Torsions

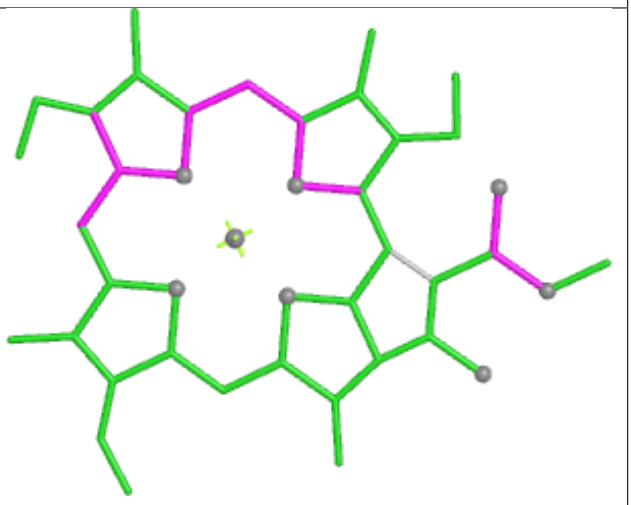


Rings

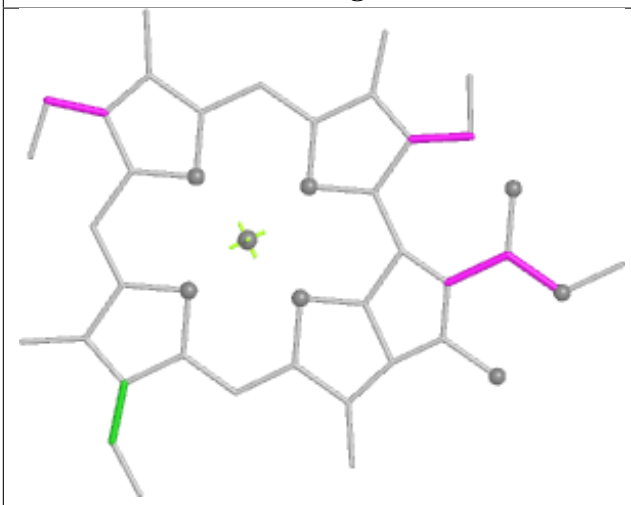
Ligand CLA 7 610



Bond lengths



Bond angles

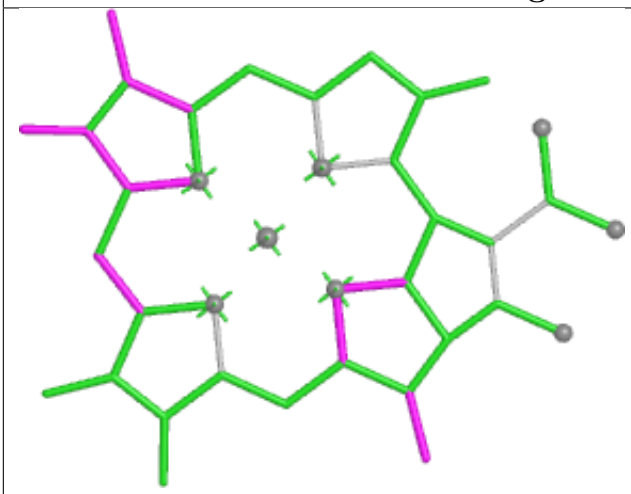


Torsions

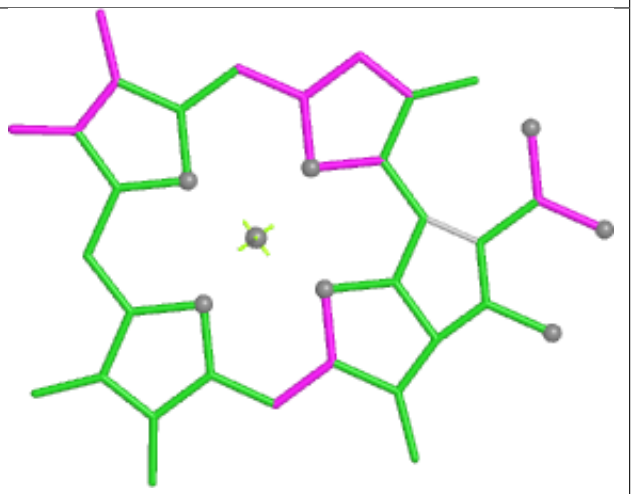


Rings

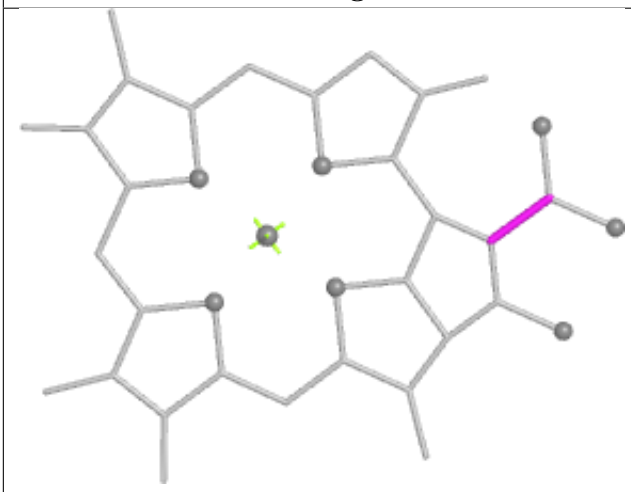
Ligand CLA 1 613



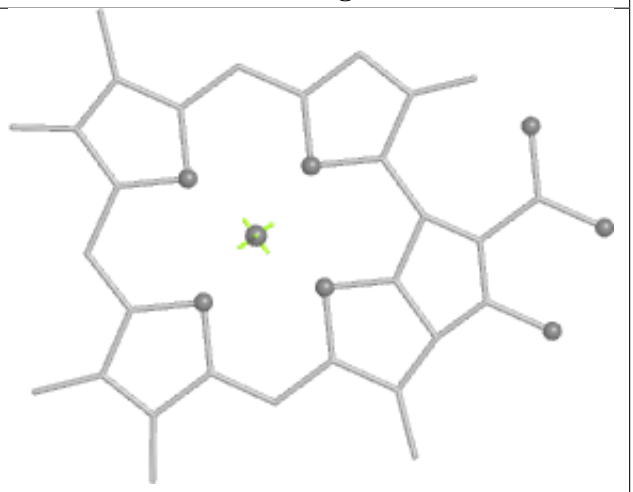
Bond lengths



Bond angles

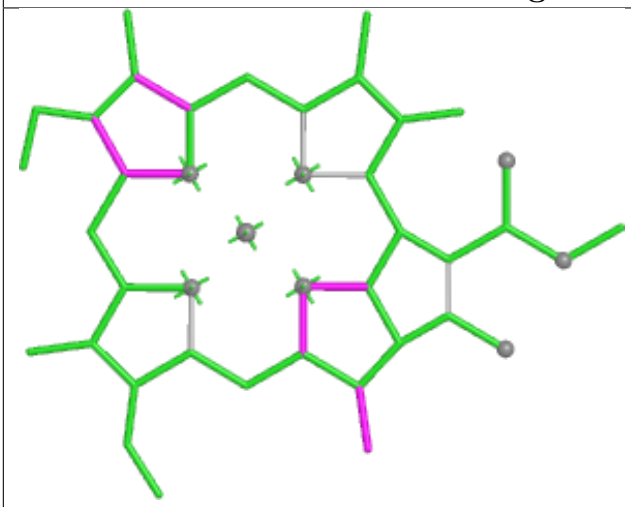


Torsions

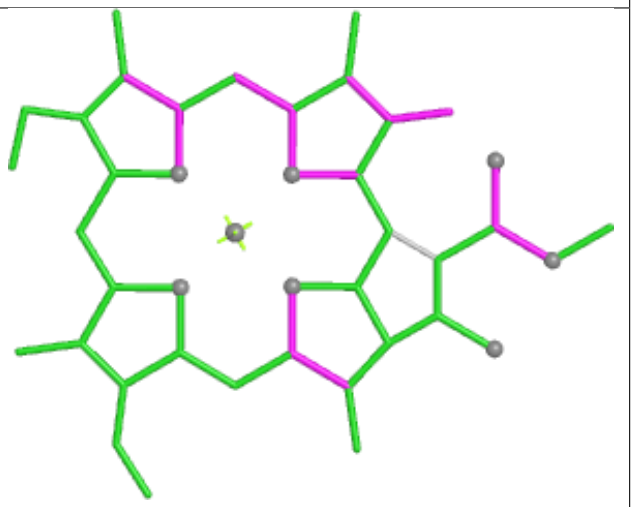


Rings

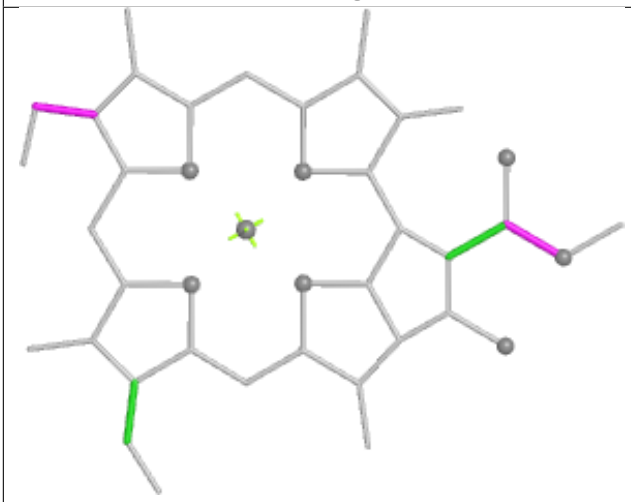
Ligand CLA 5 618



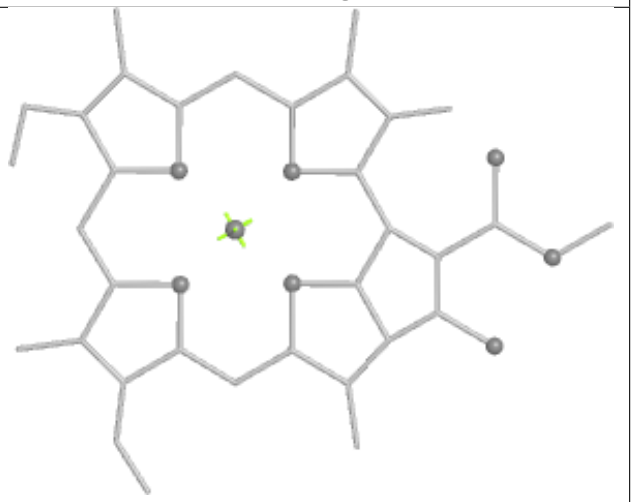
Bond lengths



Bond angles

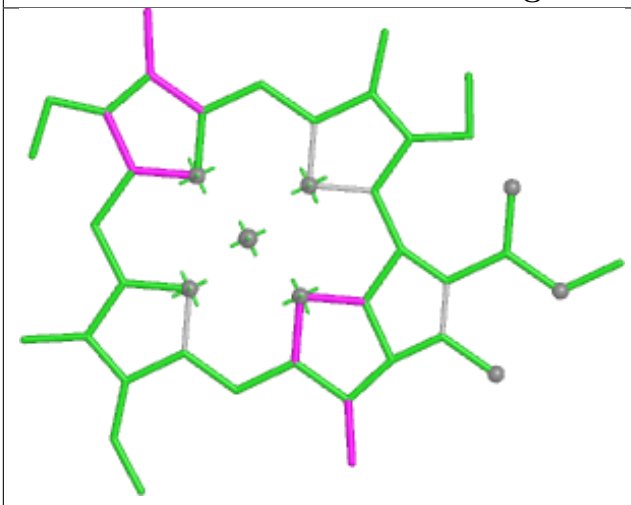


Torsions

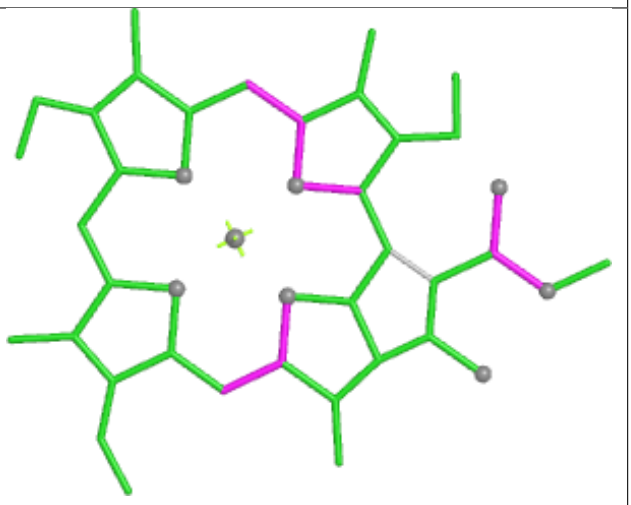


Rings

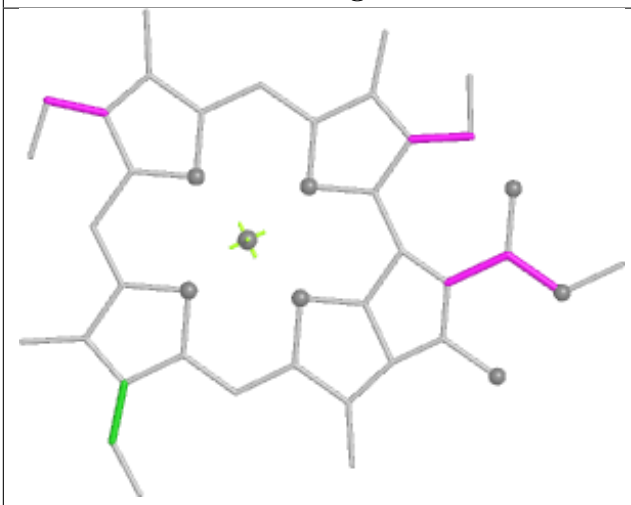
Ligand CLA A 841



Bond lengths



Bond angles

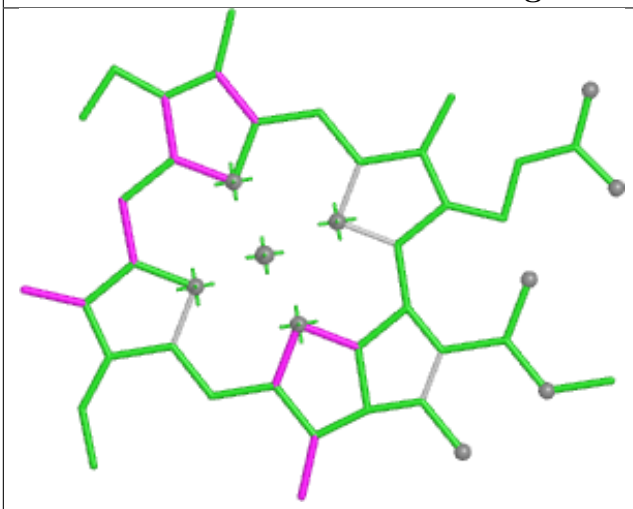


Torsions

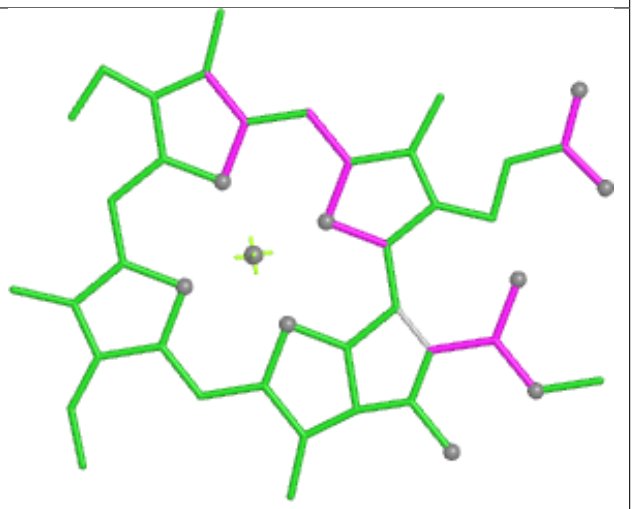


Rings

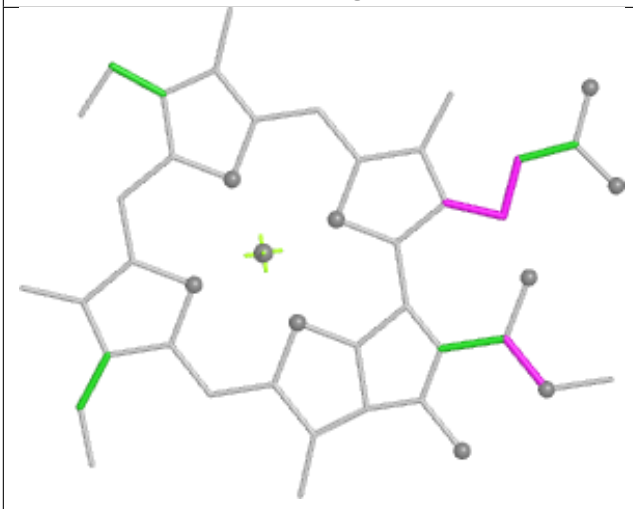
Ligand CLA B 831



Bond lengths



Bond angles

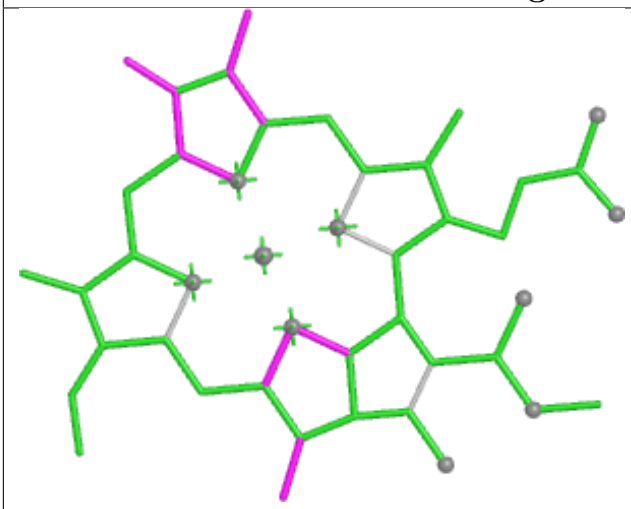


Torsions

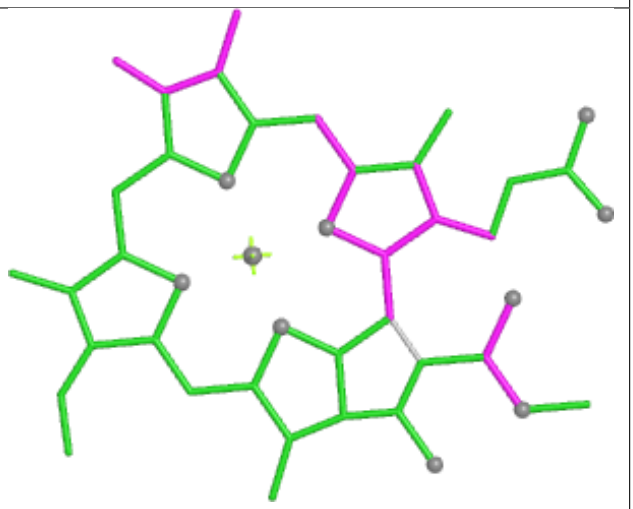


Rings

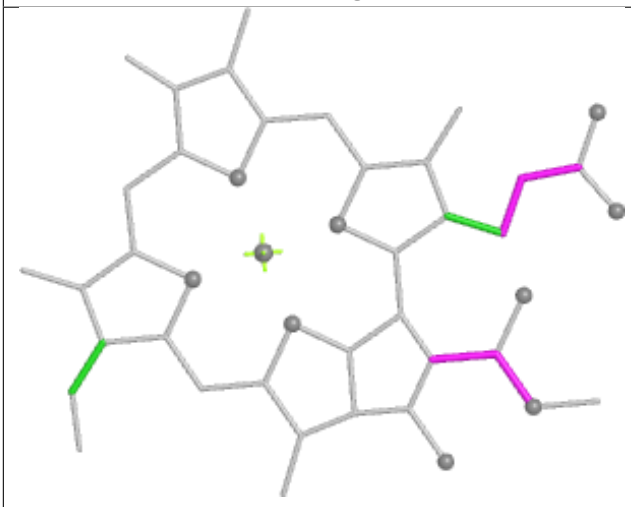
Ligand CLA 6 603



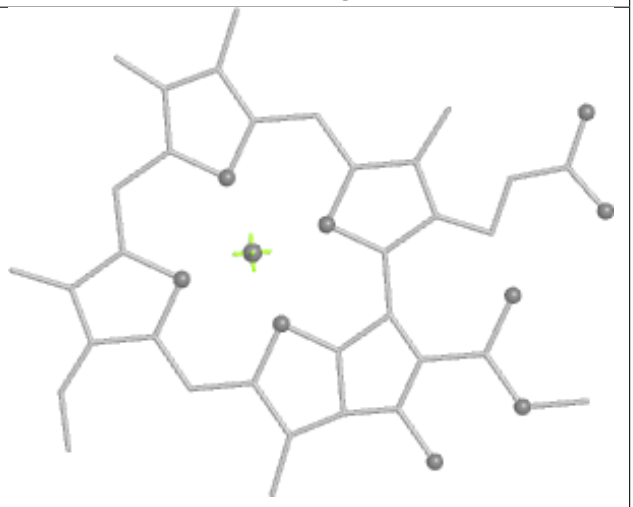
Bond lengths



Bond angles

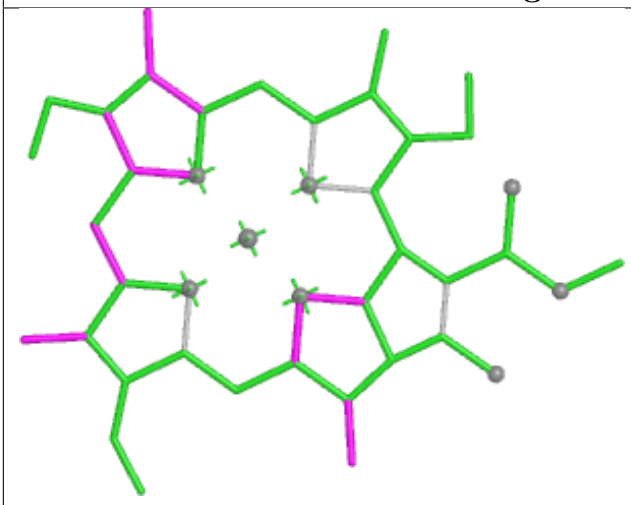


Torsions

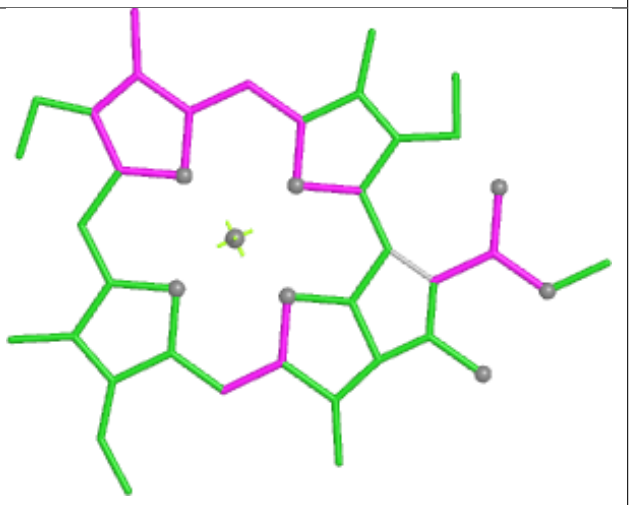


Rings

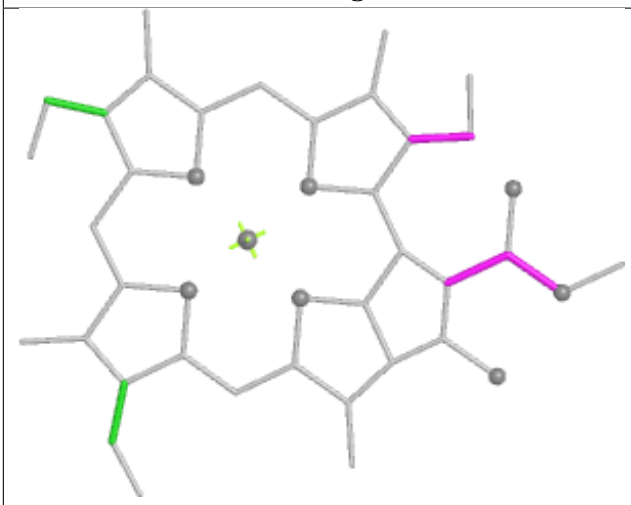
Ligand CLA A 827



Bond lengths



Bond angles

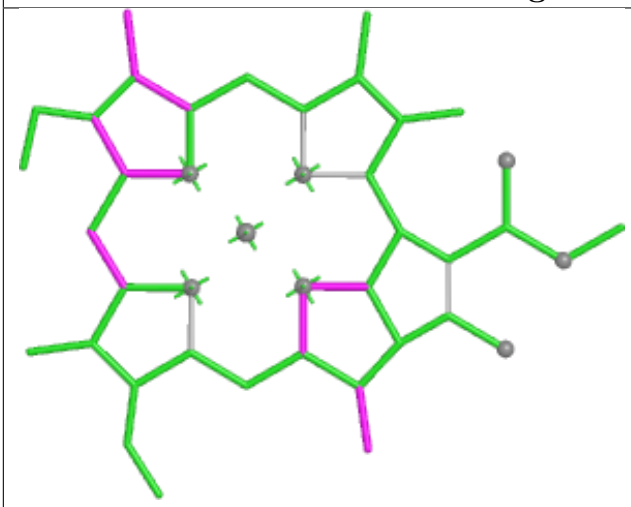


Torsions

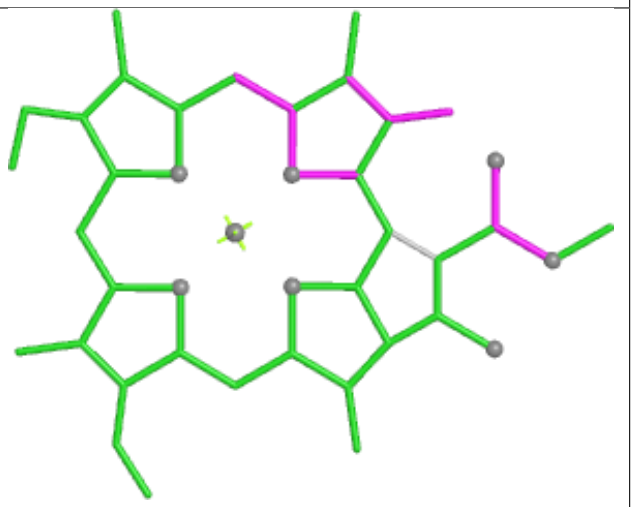


Rings

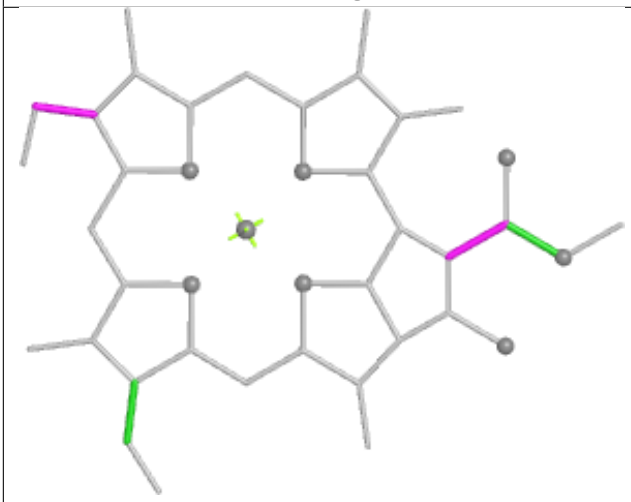
Ligand CLA 6 601



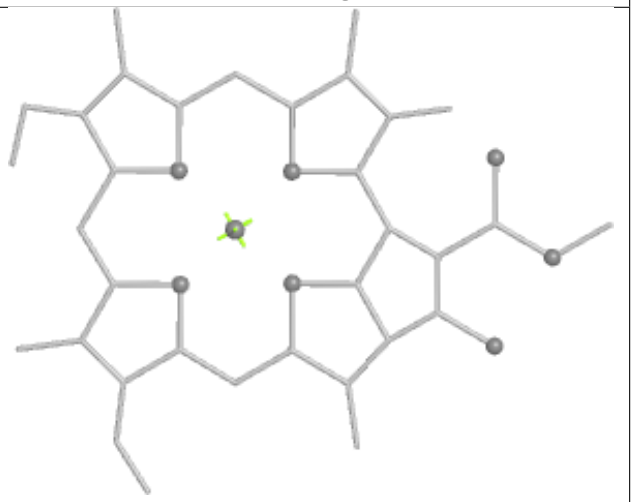
Bond lengths



Bond angles

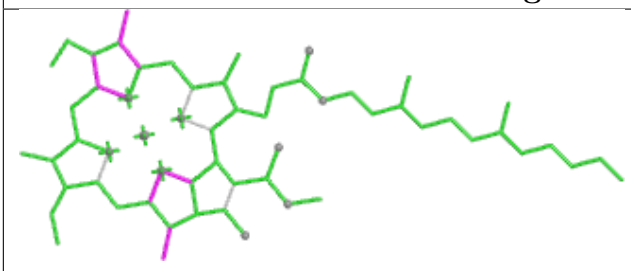


Torsions

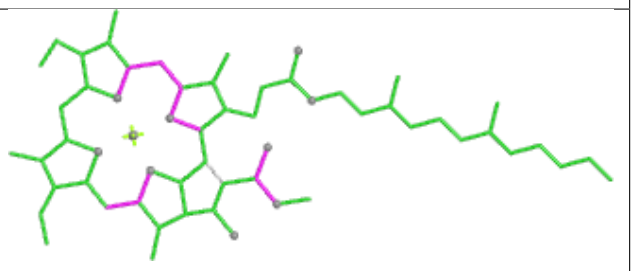


Rings

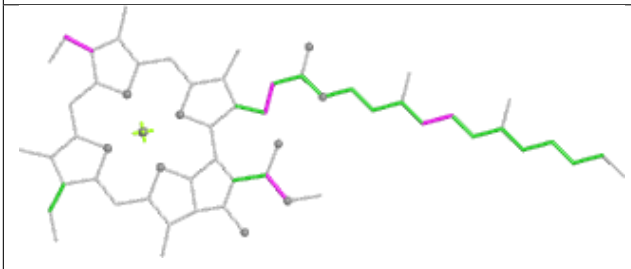
Ligand CLA A 840



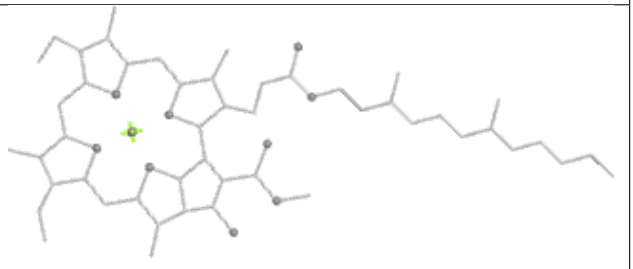
Bond lengths



Bond angles

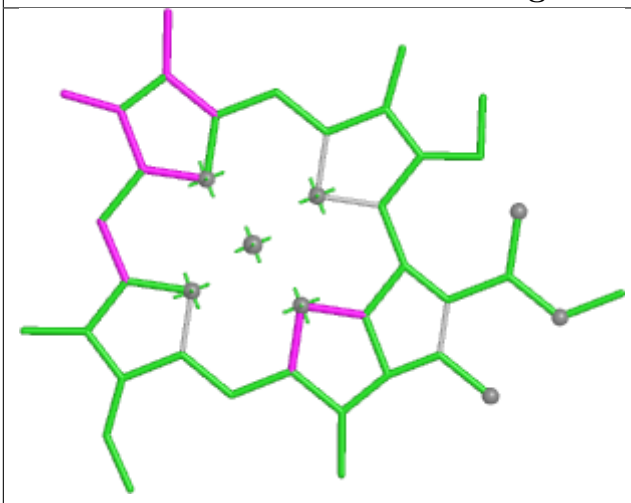


Torsions

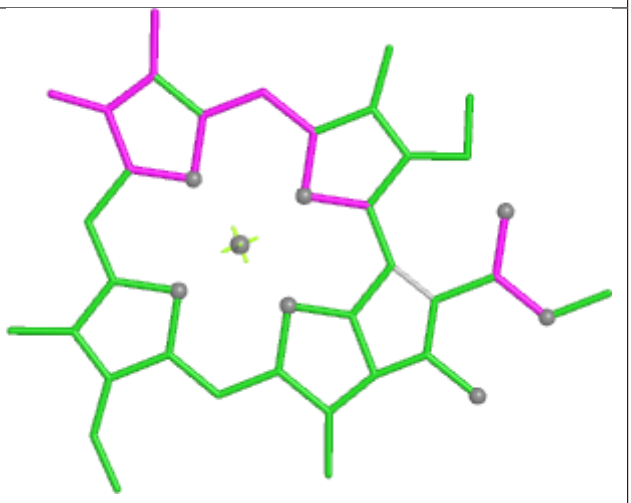


Rings

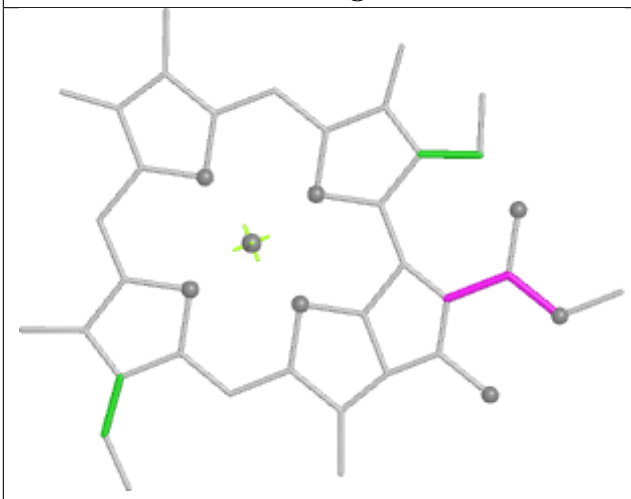
Ligand CLA 6 606



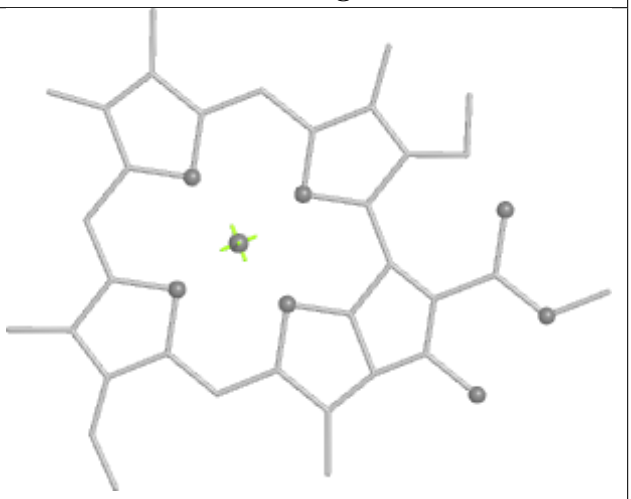
Bond lengths



Bond angles

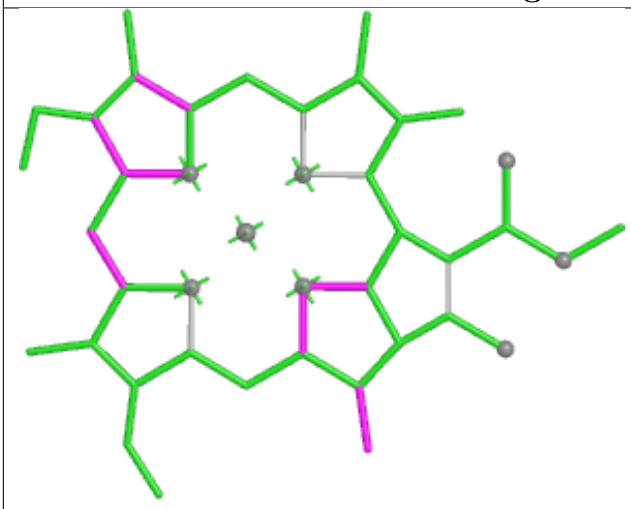


Torsions

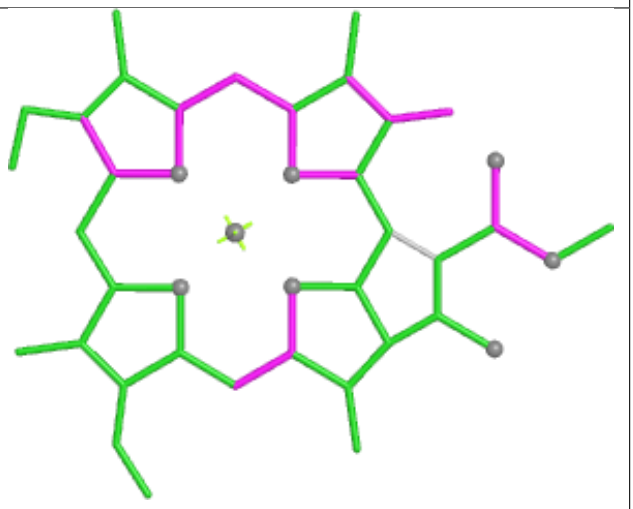


Rings

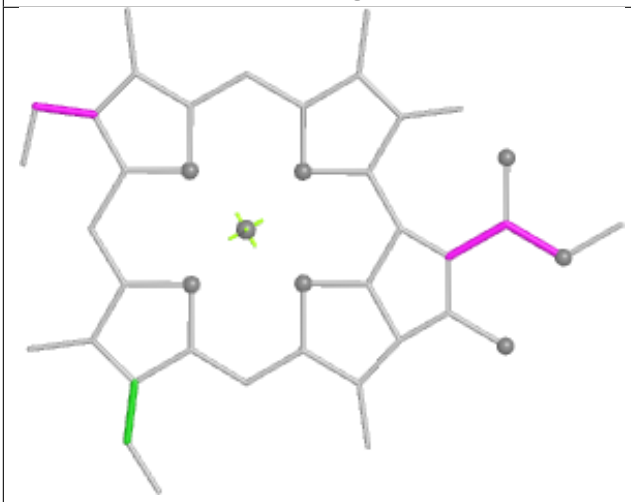
Ligand CLA A 826



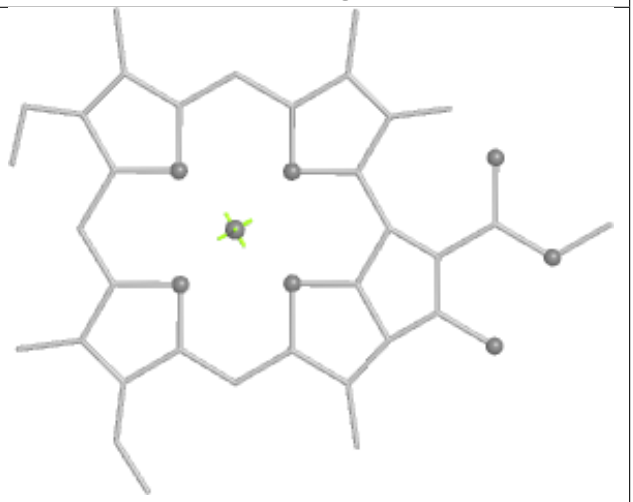
Bond lengths



Bond angles



Torsions

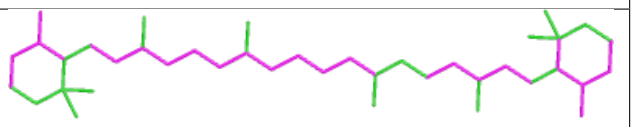


Rings

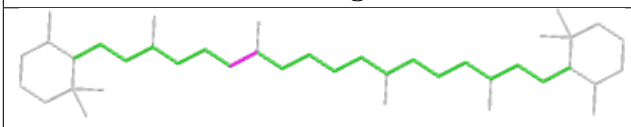
Ligand BCR F 801



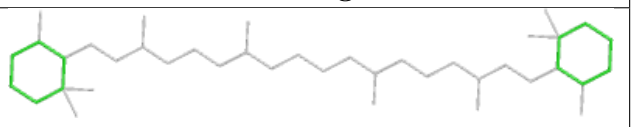
Bond lengths



Bond angles

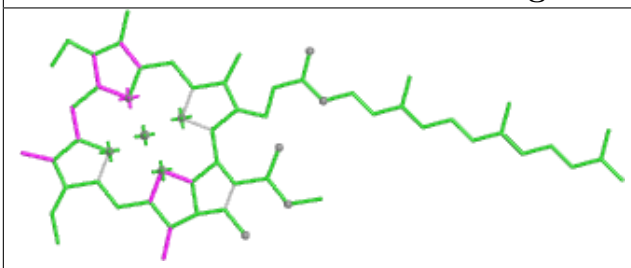


Torsions

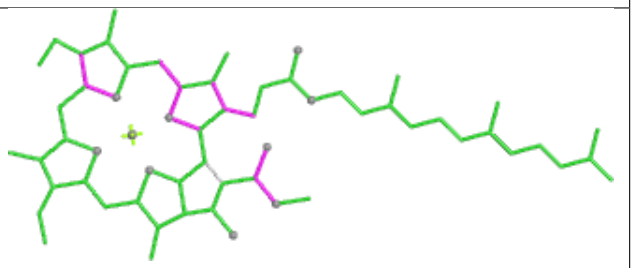


Rings

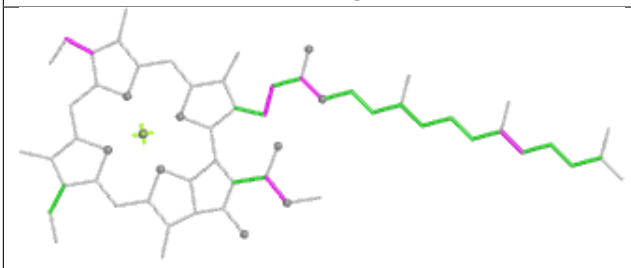
Ligand CLA 5 602



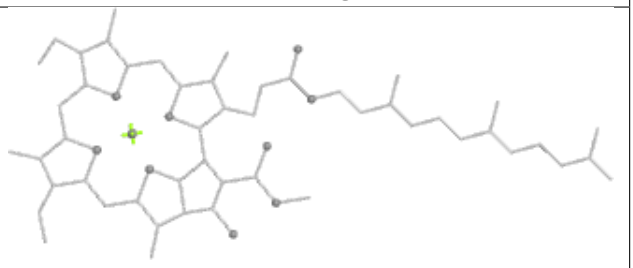
Bond lengths



Bond angles

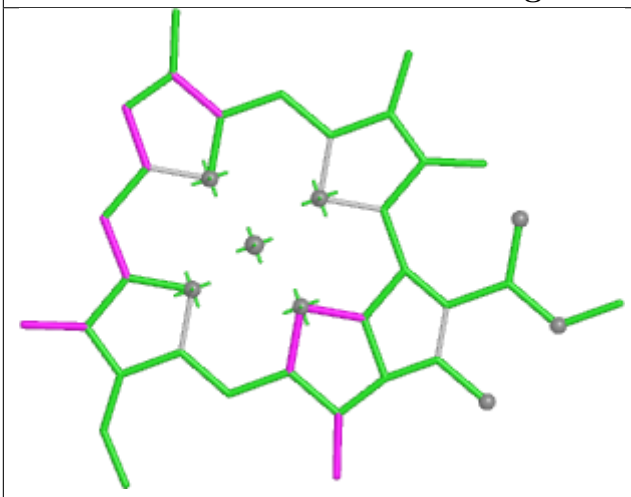


Torsions

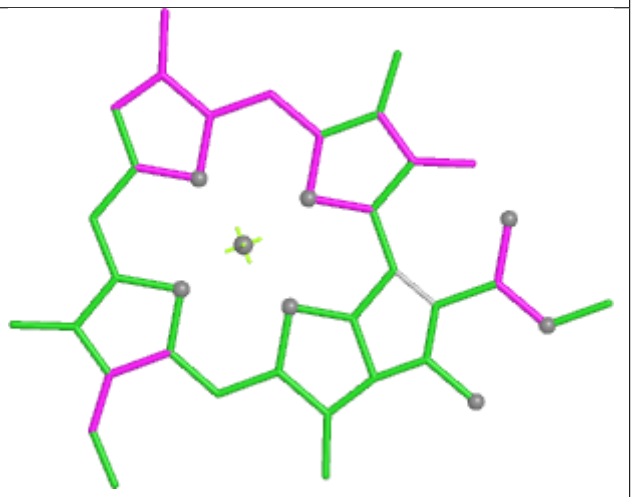


Rings

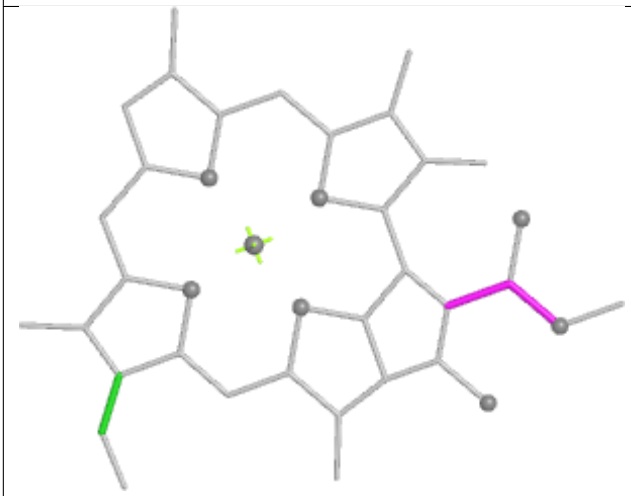
Ligand CLA B 805



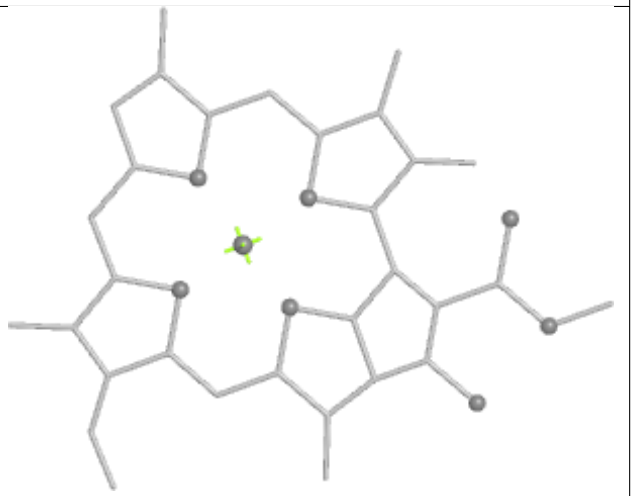
Bond lengths



Bond angles

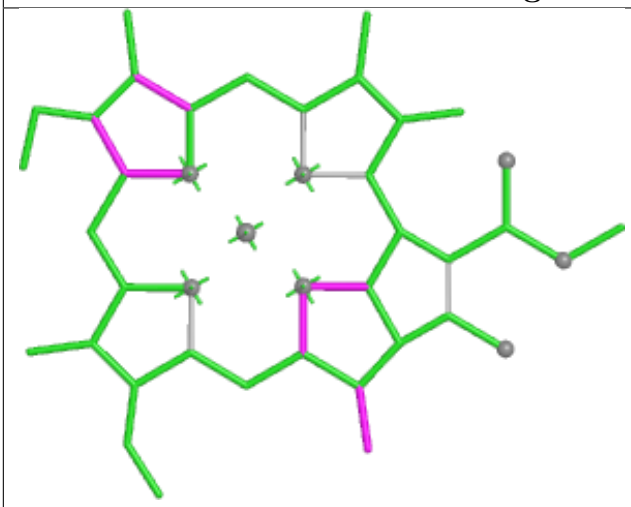


Torsions

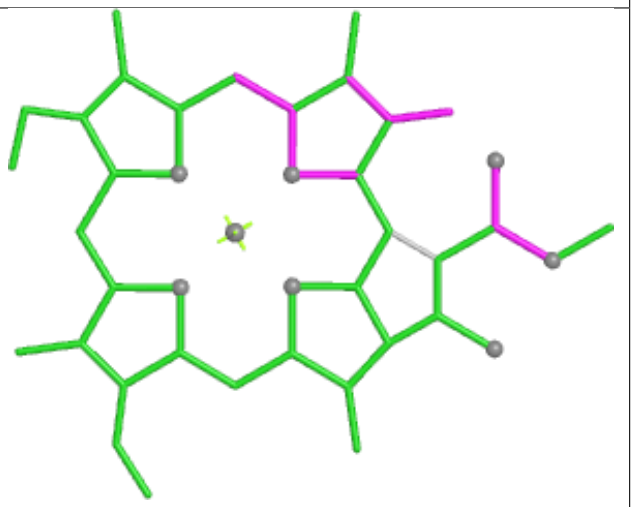


Rings

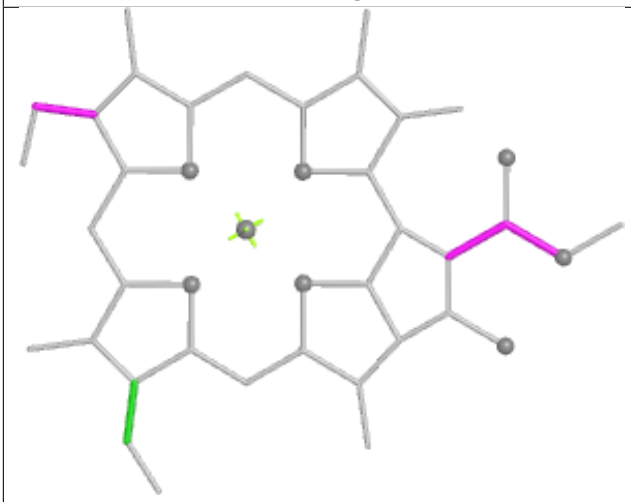
Ligand CLA A 815



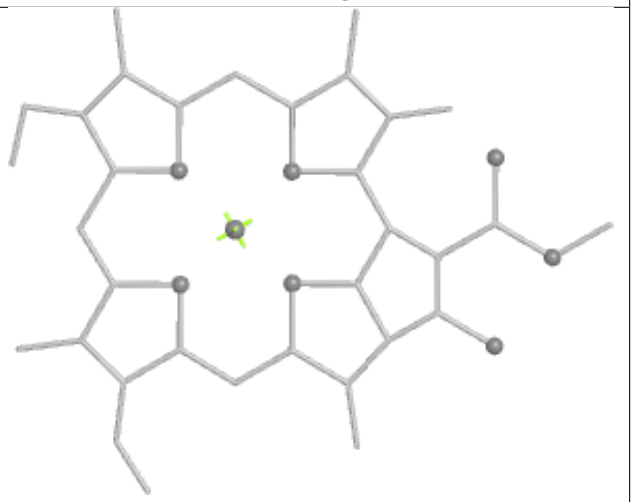
Bond lengths



Bond angles

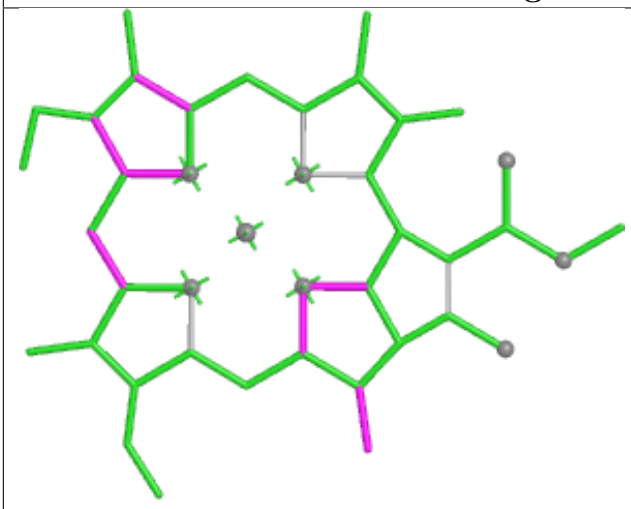


Torsions

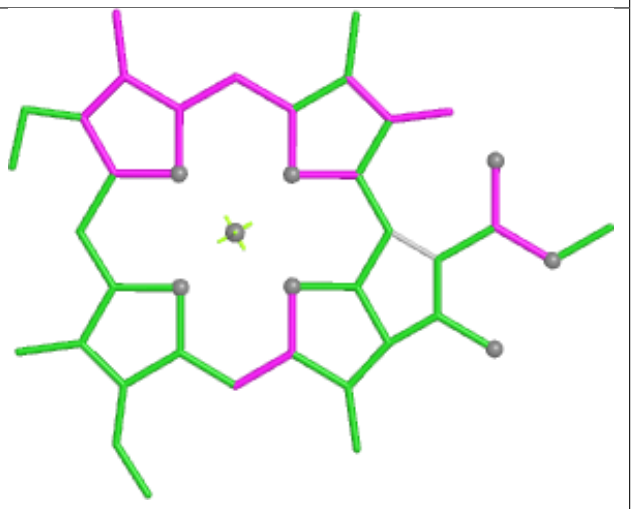


Rings

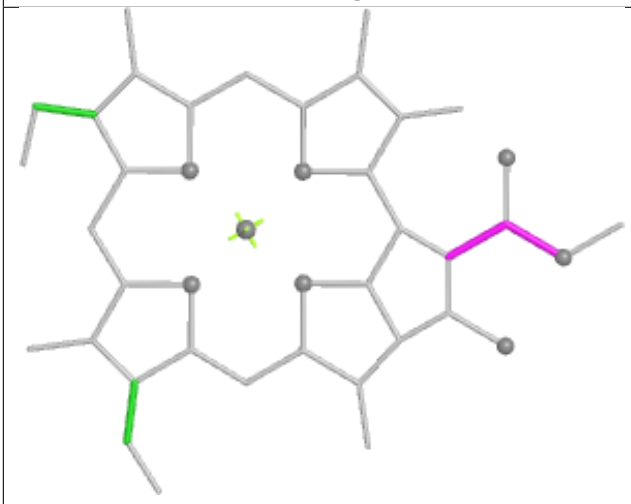
Ligand CLA B 827



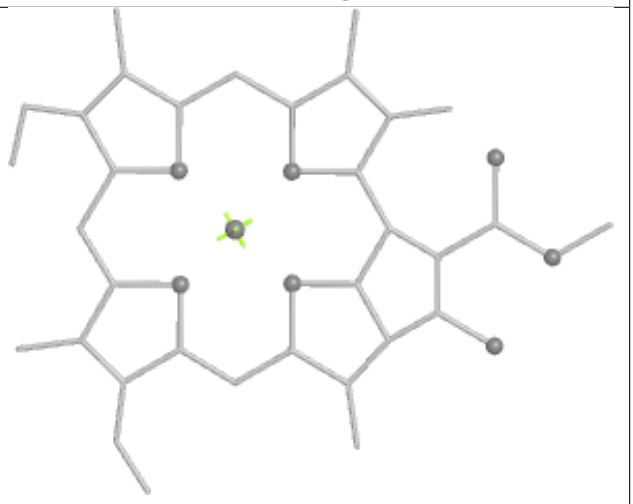
Bond lengths



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.

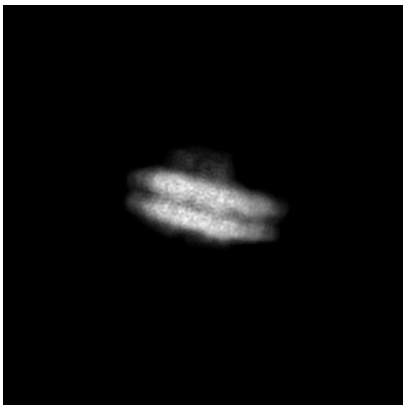
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-66562. These allow visual inspection of the internal detail of the map and identification of artifacts.

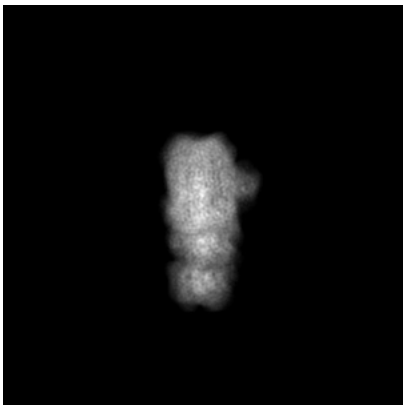
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

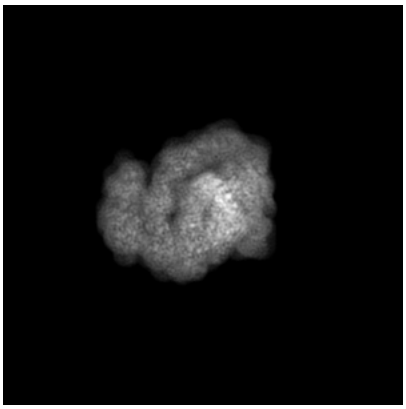
6.1.1 Primary map



X

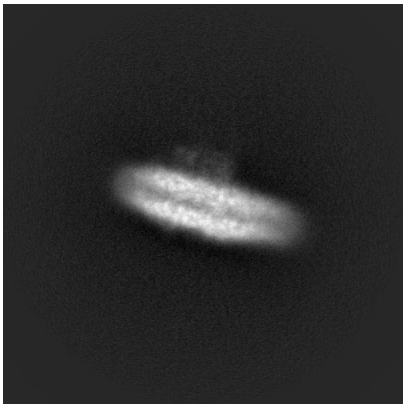


Y

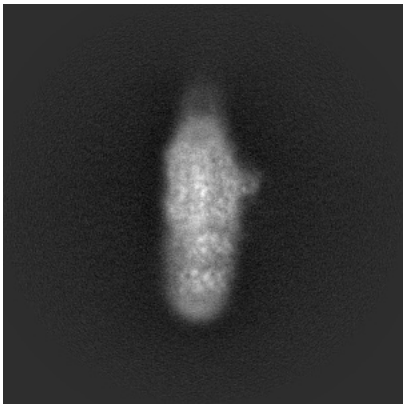


Z

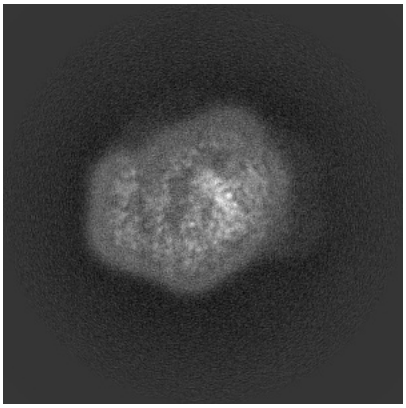
6.1.2 Raw map



X



Y

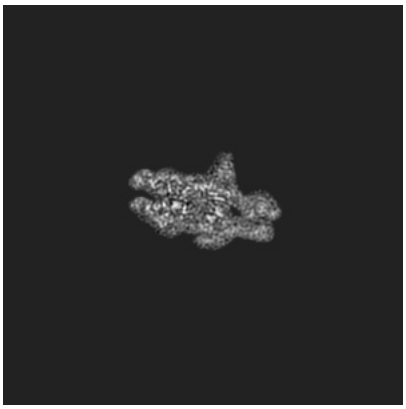


Z

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

6.2 Central slices (i)

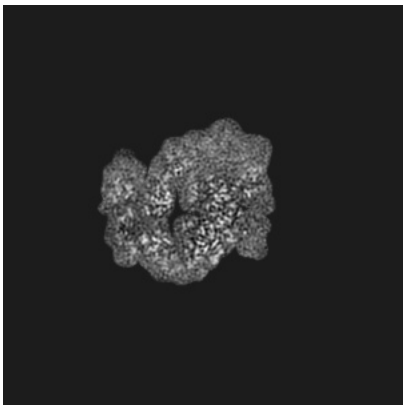
6.2.1 Primary map



X Index: 200

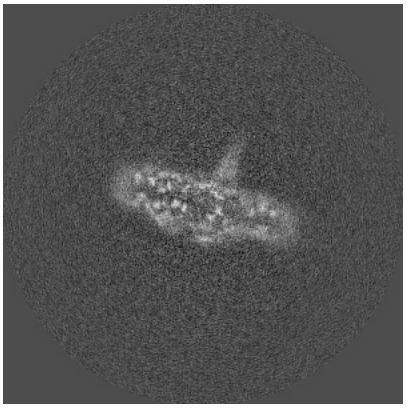


Y Index: 200

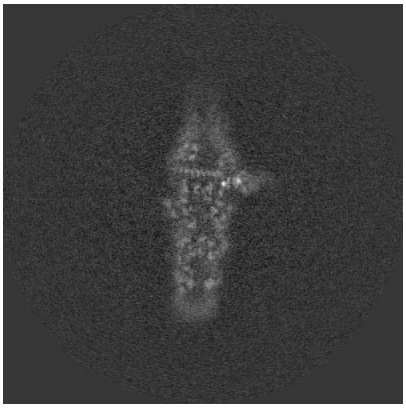


Z Index: 200

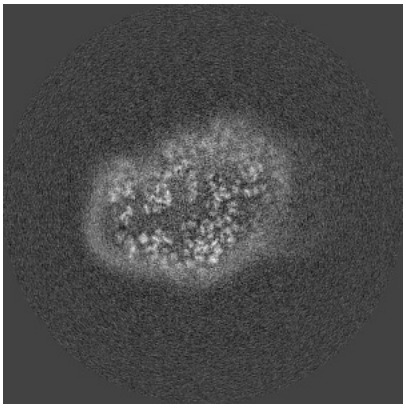
6.2.2 Raw map



X Index: 200



Y Index: 200

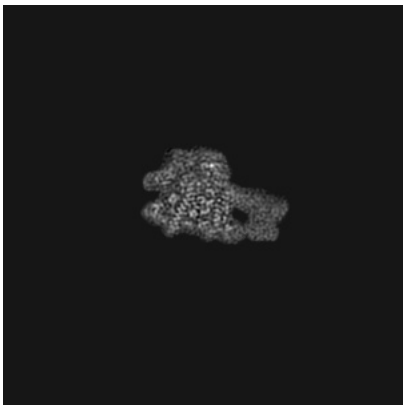


Z Index: 200

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

6.3 Largest variance slices (i)

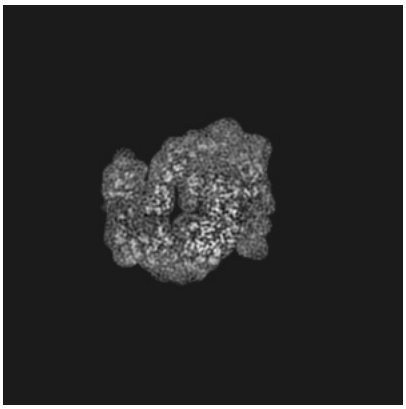
6.3.1 Primary map



X Index: 216

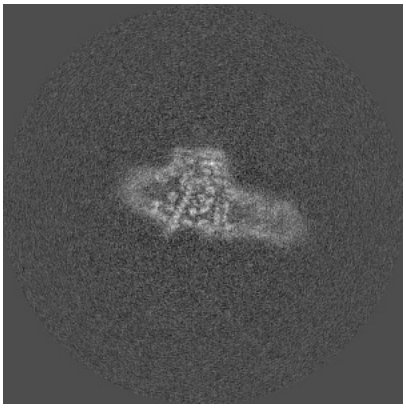


Y Index: 208

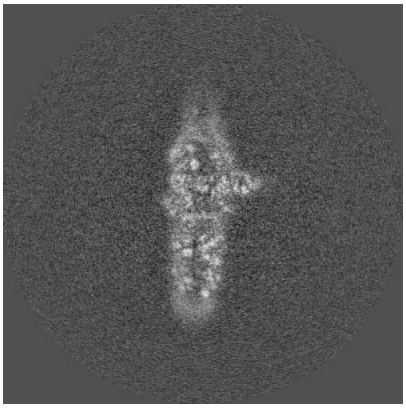


Z Index: 198

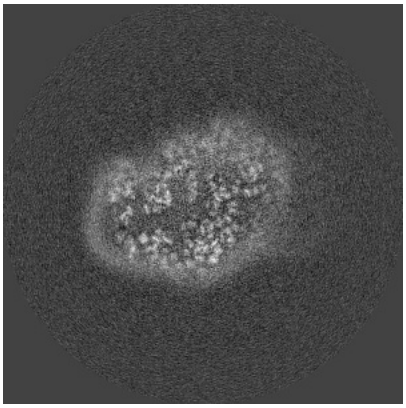
6.3.2 Raw map



X Index: 216



Y Index: 205

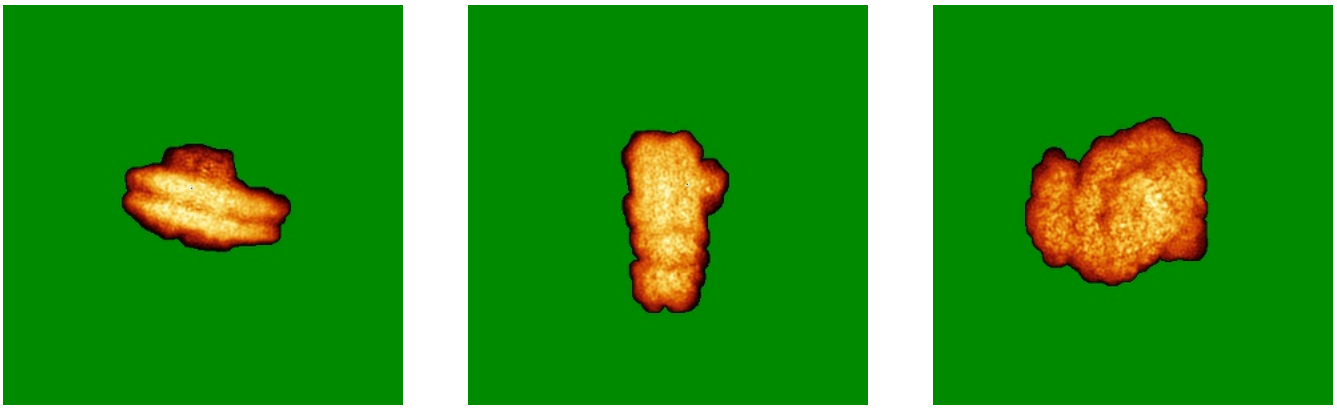


Z Index: 200

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

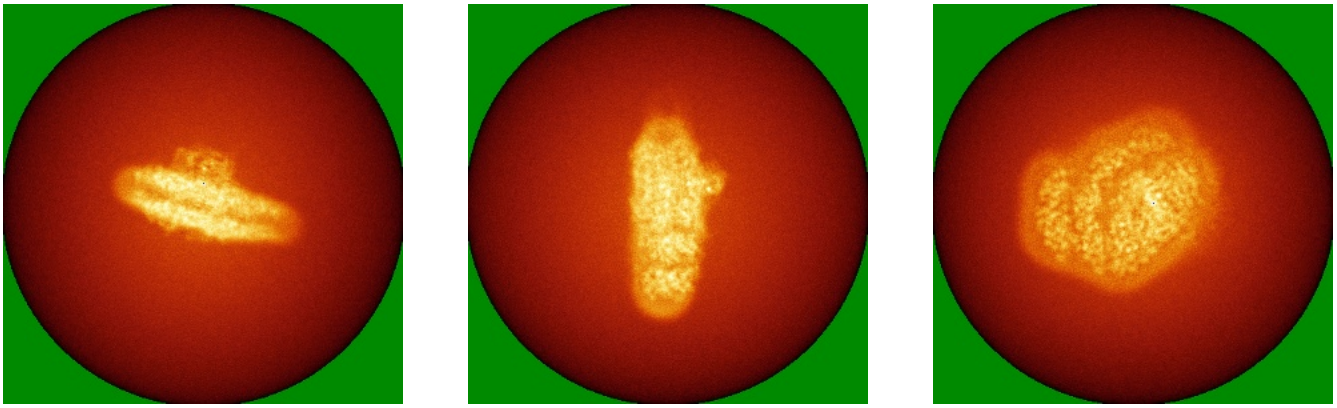
6.4 Orthogonal standard-deviation projections (False-color) (i)

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

6.5.2 Raw map



X Y Z

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

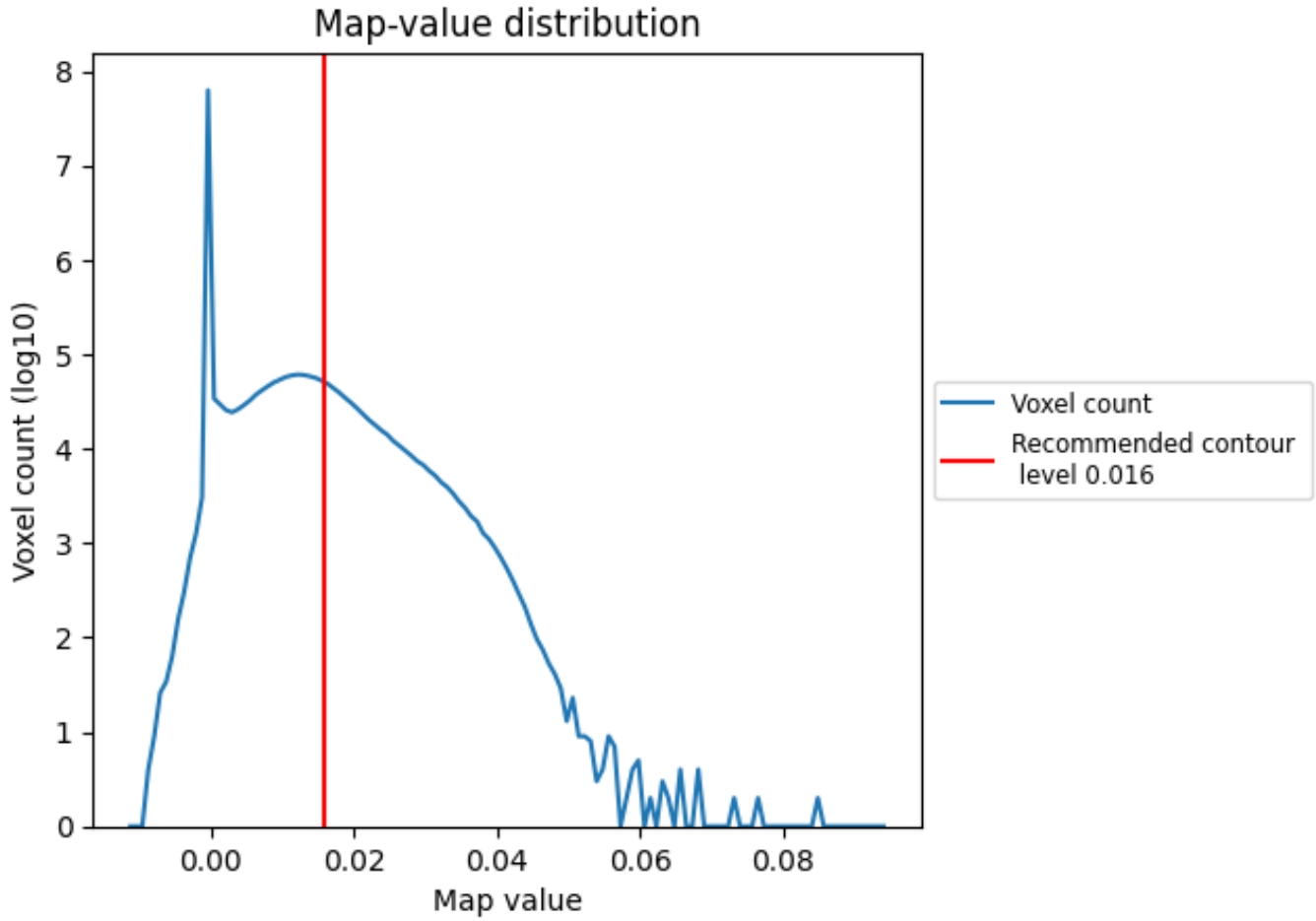
6.6 Mask visualisation (i)

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

7 Map analysis

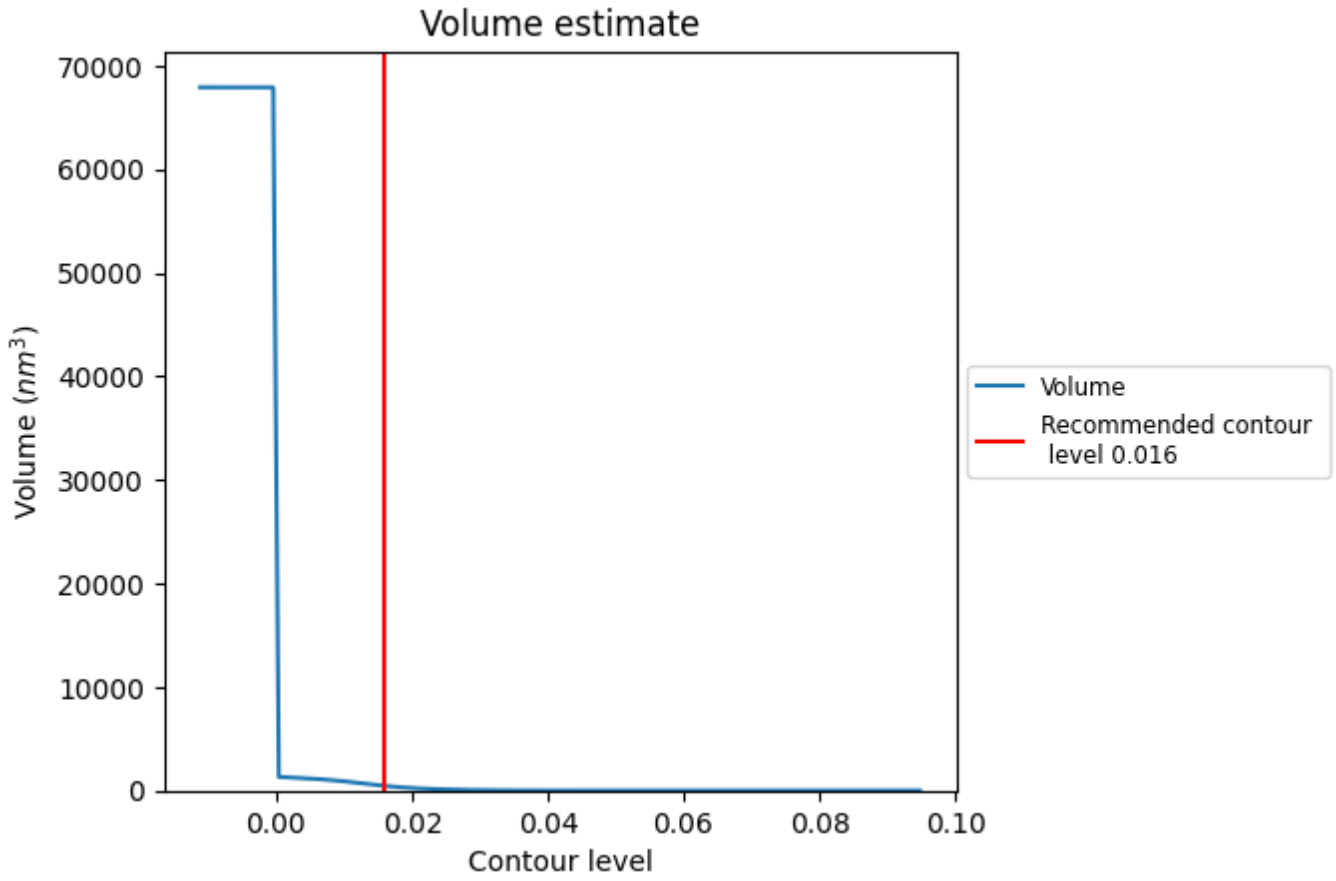
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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

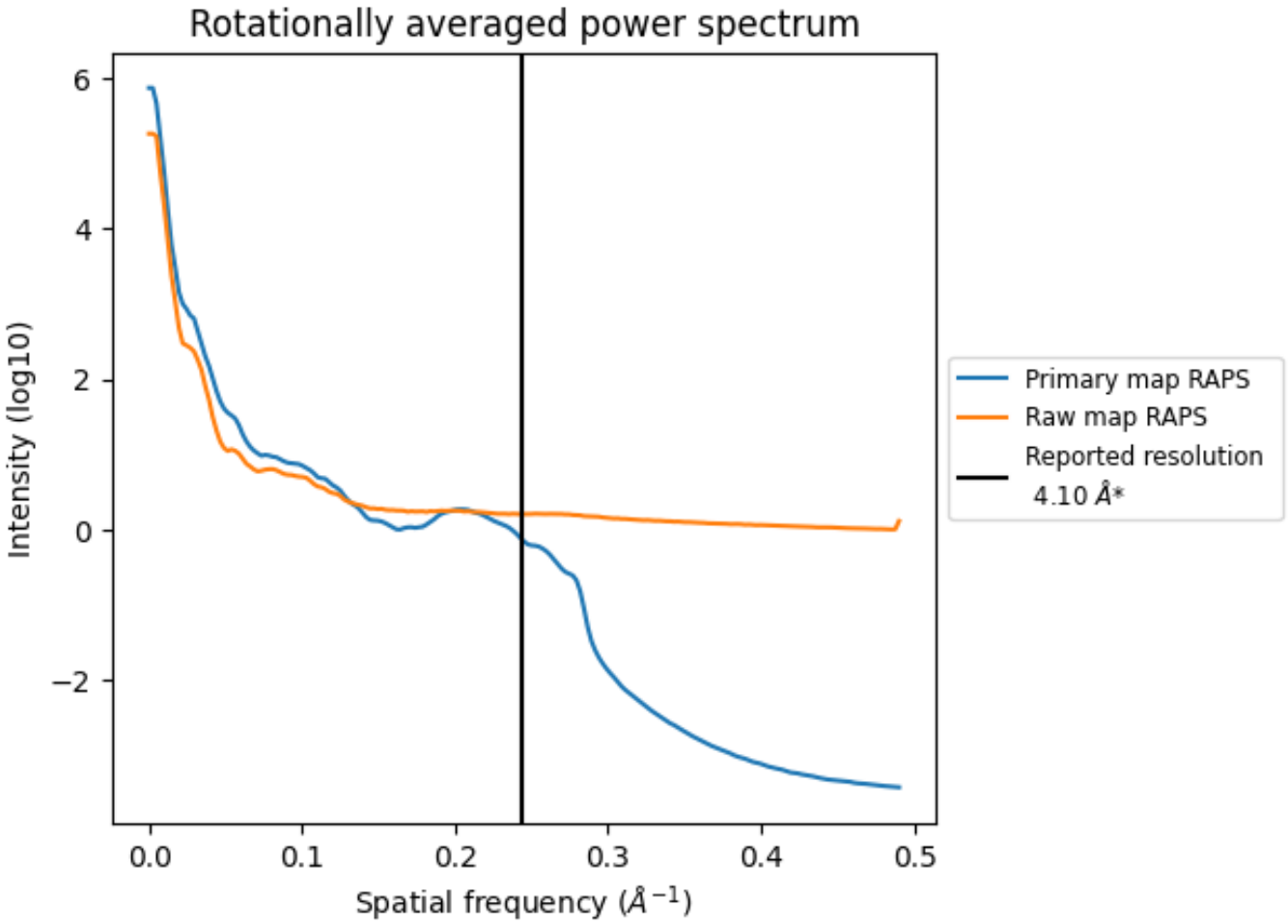
7.2 Volume estimate



The volume at the recommended contour level is 453 nm^3; this corresponds to an approximate mass of 409 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)

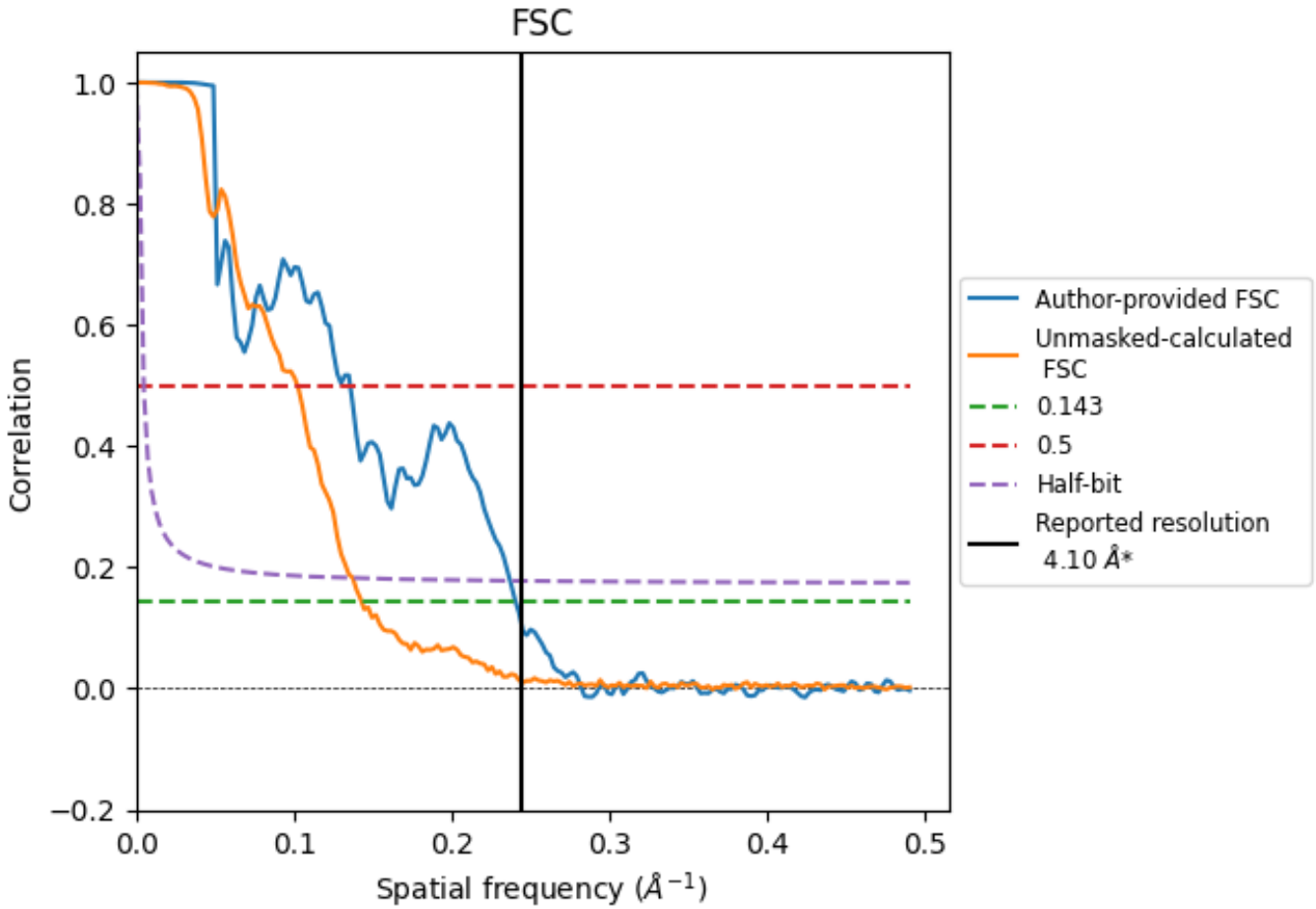


*Reported resolution corresponds to spatial frequency of 0.244 $Å^{-1}$

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 0.244 Å^{-1}

8.2 Resolution estimates (i)

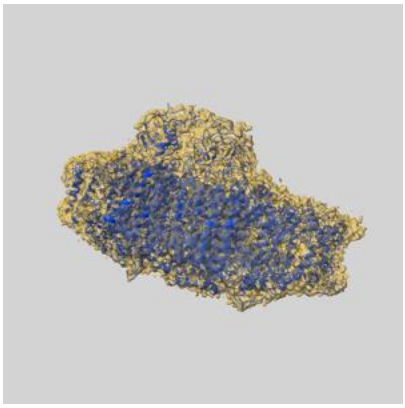
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	4.10	-	-
Author-provided FSC curve	4.16	7.37	4.22
Unmasked-calculated*	7.00	9.78	7.28

*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 7.00 differs from the reported value 4.1 by more than 10 %

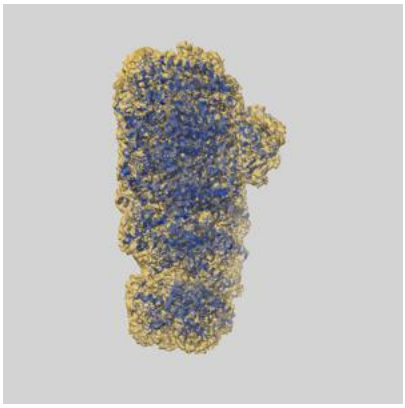
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-66562 and PDB model 9X4P. Per-residue inclusion information can be found in section 3 on page 20.

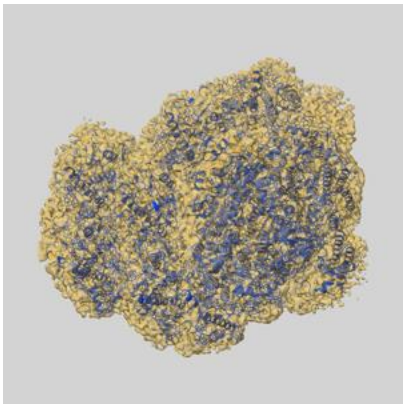
9.1 Map-model overlay



X



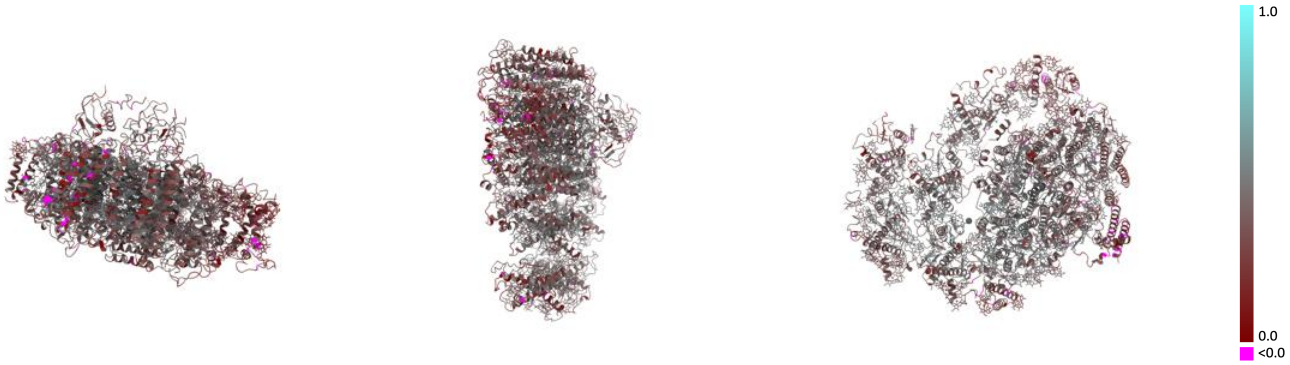
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.016 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

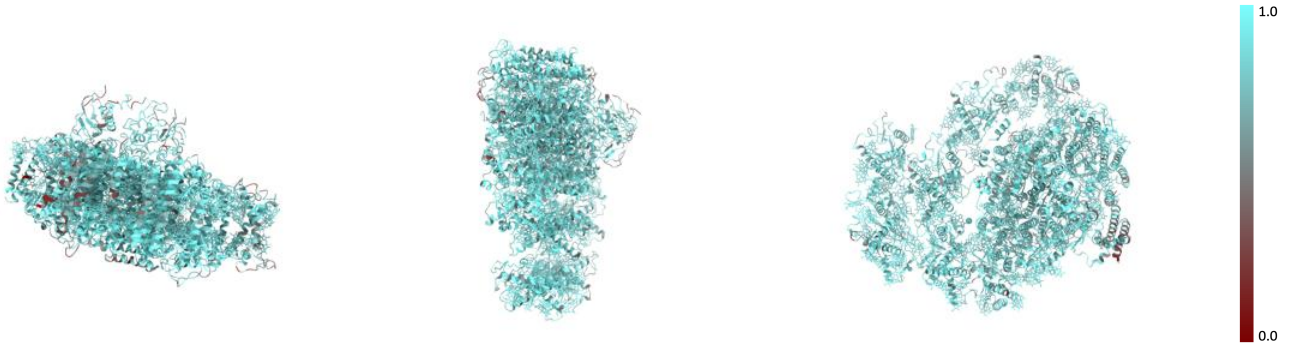
9.2 Q-score mapped to coordinate model (i)



X Y Z

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

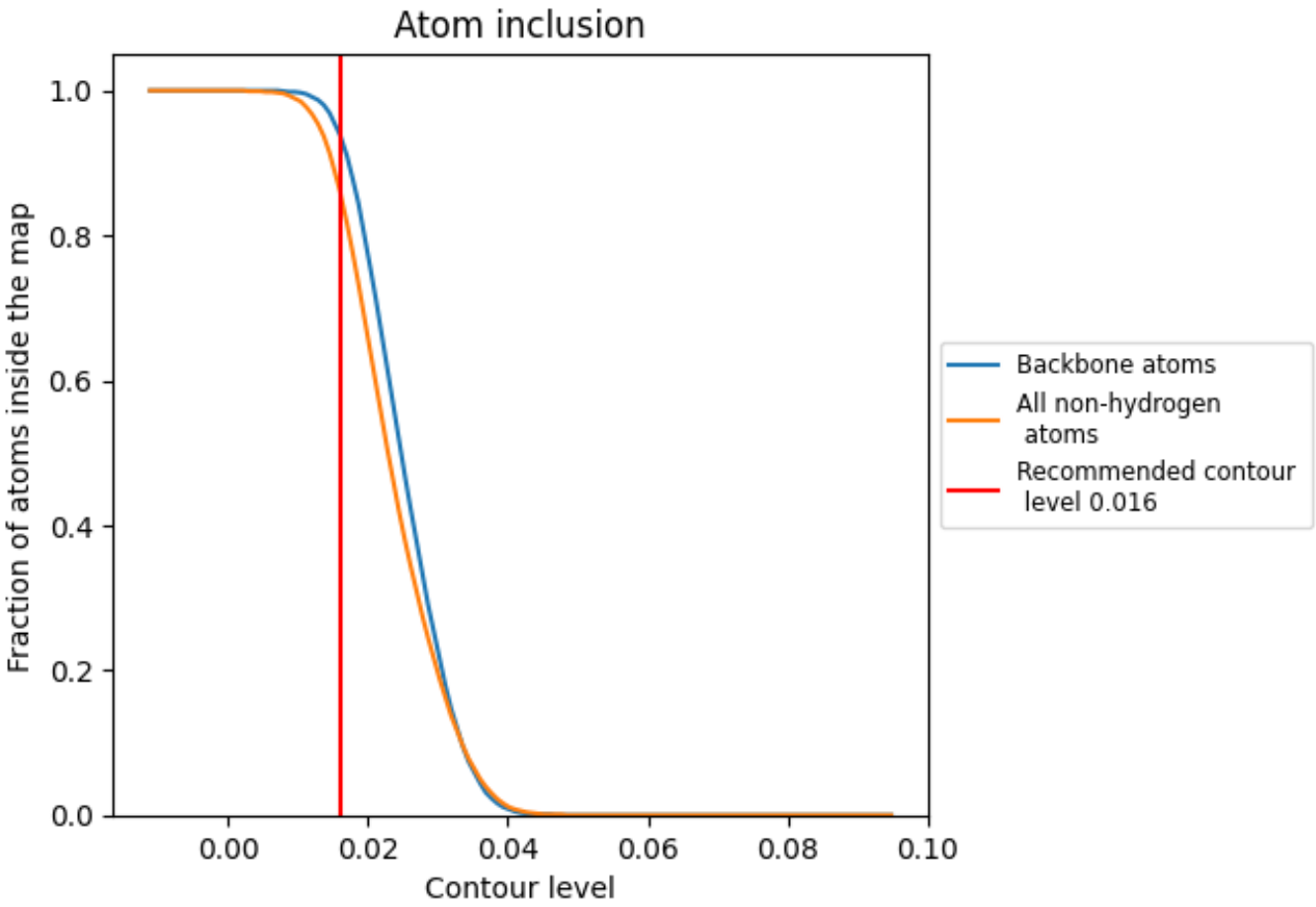
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.016).

9.4 Atom inclusion (i)



At the recommended contour level, 94% of all backbone atoms, 86% 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 (0.016) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8600	0.3750
1	0.7450	0.2290
3	0.8880	0.4050
5	0.8740	0.3820
6	0.8530	0.3400
7	0.9010	0.4110
8	0.8460	0.3500
A	0.9010	0.4300
B	0.8910	0.3910
C	0.8560	0.3670
D	0.7070	0.3120
E	0.7670	0.3230
F	0.8250	0.3480
I	0.7170	0.2700
J	0.9210	0.3930
K	0.8050	0.3070
L	0.6240	0.2190
M	0.7380	0.2710

